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factors on virus growth. Zell R, et al. **Virus Res** 1995 Dec; 39(2-3):87-103

IMMUNOLOGY

Chimeric rhinoviruses as tools for vaccine development and characterization of protein epitopes. Arnold GF, et al. **Intervirology** 1996;39(1-2):72-8 (38 ref.)

Chimaera and its modern virus-like descendants. Ulrich R, et al. **Intervirology** 1996;39(1-2):126-32 (107 ref.)

Studies on the molecular basis for loss of the ability of recent influenza A (H1N1) virus strains to agglutinate chicken erythrocytes. Morishita T, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2499-506

Serologic correlates of immunity in a tetravalent reassortant rotavirus vaccine trial. US Rotavirus Vaccine Efficacy Group. Ward RL, et al. **J Infect Dis** 1997 Sep;176(3):570-7

Rhesus macaques previously infected with simian/human immunodeficiency virus are protected from vaginal challenge with pathogenic SIVmac239. Miller CJ, et al. **J Virol** 1997 Mar;71(3):1911-21

Protective responses in mice to vaccination with multiply administered cold-adapted influenza vaccine reassortants and wild-type viruses. Romanova JR, et al. **Vaccine** 1997 Apr-May;15(6-7):653-8

Antigenic and genetic comparisons of Japanese and Australian Simbu serogroup viruses: evidence for the recovery of natural virus reassortants. Akashi H, et al. **Virus Res** 1997 Aug;50(2):205-13

PATHOGENICITY

Replication and cytopathogenicity of human immunodeficiency virus type 1 (HIV-1)/simian immunodeficiency virus agm3 chimeric viruses in human and monkey cells: the 5' half of the HIV-1 genome is responsible for virus cytopathogenicity. Jin M, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2427-31

Chimeric Sindbis-Ross River viruses to study interactions between alphavirus nonstructural and structural regions. Kuhn RJ, et al. **J Virol** 1996 Nov;70(11):7900-9

A chimeric simian/human immunodeficiency virus expressing a primary patient human immunodeficiency virus type 1 isolate env causes an AIDS-like disease after in vivo passage in rhesus monkeys. Reimann KA, et al. **J Virol** 1996 Oct;70(10):6922-8

Viral determinants of rotavirus pathogenicity in pigs: production of reassortants by asynchronous coinfection. Tauscher GI, et al. **J Virol** 1997 Jan;71(1):853-7

PHYSIOLOGY

A replication-competent promoter-trap retrovirus. Coulombe J, et al. **J Virol** 1996 Oct;70(10):6810-5

Chimeric Sindbis viruses dependent on the NS3 protease of hepatitis C virus. Filocamo G, et al. **J Virol** 1997 Feb; 71(2):1417-27

Replication-competent chimeric lenti-oncovirus with expanded host cell tropism. Reiprich S, et al. **J Virol** 1997 Apr;71(4):3328-31

Efficient multiplication of a Semliki Forest virus chimera containing Sindbis virus spikes. Smyth J, et al. **J Virol** 1997 Jan;71(1):818-23

Interactions between PE2, E1, and 6K required for assembly of alphaviruses studied with chimeric viruses. Yao JS, et al. **J Virol** 1996 Nov;70(11):7910-20

REC A PROTEIN

ANALYSIS

[Localization of RecA-like proteins in preparations of spread nuclei of mouse spermatocytes at meiotic prophase I] Loseva EF, et al. **Genetika** 1996 Apr;32(4):523-31 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

In vitro inhibition of RecA-mediated homologous pairing by UmuD'C proteins. Szpilewska H, et al. **Biochimie** 1995; 77(11):848-53

CHEMISTRY

cDNA cloning of a chick homologue of human ATPase complex subunit 4, quantitative tissue distribution and tertiary structure comparison of the ATPase domain to RecA. Singh I, et al. **Arch Biochem Biophys** 1996 Sep 1; 333(1):260-6

Roles of Tyr103 and Tyr264 in the regulation of RecA-DNA interactions by nucleotide cofactors. Morimatsu K, et al. **Eur J Biochem** 1996 Aug 15;240(1):91-7

Locations of functional domains in the RecA protein. Overlap of domains and regulation of activities. Takahashi M, et al. **Eur J Biochem** 1996 Nov 15;242(1):20-8 (84 ref.)

Effects of minor and major groove-binding drugs and intercalators on the DNA association of minor groove-binding proteins RecA and deoxyribonuclease I detected by flow linear dichroism. Tuite E, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):482-92

Periodicity in recA protein-DNA complexes. Volodin AA, et al. **FEBS Lett** 1997 May 5;407(3):325-8

A possible role of the C-terminal domain of the RecA protein. A gateway model for double-stranded DNA binding. Kurumizaka H, et al. **J Biol Chem** 1996 Dec 27; 271(52):33515-24

Mutant RecA proteins which form hexamer-sized oligomers. Logan KM, et al. **J Mol Biol** 1997 Feb 21;266(2):306-16

RecA protein filaments: end-dependent dissociation from ssDNA and stabilization by RecO and RecR proteins. Shan Q, et al. **J Mol Biol** 1997 Feb 7;265(5):519-40

A RecA/RAD51 homologue from a hyperthermophilic archaeon retains the major RecA domain only. Rashid N, et al. **Mol Gen Genet** 1996 Dec 13;253(3):397-400

The RecA hexamer is a structural homologue of ring helicases [letter] Yu X, et al. **Nat Struct Biol** 1997 Feb; 4(2):101-4

Characterization of a RecA/RAD51 homologue from the hyperthermophilic archaeon Pyrococcus sp. KOD1. Rashid N, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):719-26

An extended DNA structure through deoxyribose-base stacking induced by RecA protein. Nishinaka T, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6623-8

RecA protein: structure, function, and role in recombinational DNA repair. Roca AI, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:129-223 (428 ref.)

GENETICS

Identification of a recA homolog (recALP) on the conjugative lactococcal phage resistance plasmid pNP40: evidence of a role for chromosomally encoded recAL in abortive infection. Garvey P, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1244-51

Overcoming a defect in generalized recombination in the marine fish pathogen Vibrio anguillarum 775: construction of a recA mutant by marker exchange. Singer JT, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3727-31

Mutagenic specificity of N-methyl-N'-nitro-N-nitrosoguanidine in the tonB gene on the chromosome of Escherichia coli recA+ and recA- cells. Wang X, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):334-9

DNA strand exchange mediated by the Escherichia coli RecA protein initiates in the minor groove of double-stranded DNA. Zhou X, et al. **Biochemistry** 1997 Apr 15;36(15):4650-61

recA mutants of E. coli K12: a personal turning point. Clark AJ. **Bioessays** 1996 Sep;18(9):767-72 (31 ref.)

Isolation and characterization of rad51 orthologs from Coprinus cinereus and Lycopersicon esculentum, and phylogenetic analysis of eukaryotic recA homologs. Stassen NY, et al. **Curr Genet** 1997 Feb;31(2):144-57

Characterization of two Streptomyces ambofaciens recA mutants: identification of the RecA protein by immunoblotting. Aigle B, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):181-7

Cloning, sequencing and complementation analysis of the recA gene from Prevotella ruminicola [published erratum appears in FEMS Microbiol Lett 1996 Dec 15;145(3):473] Aminov RI, et al. **FEMS Microbiol Lett** 1996 Oct 15; 144(1):53-9

Cloning and characterization of the recA of Paracoccus denitrificans and construction of a recA-deficient mutant. Fernandez de Henestrosa AR, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):209-13

Evaluation of using a short region of the recA gene for rapid and sensitive speciation of dominant bifidobacteria in the human large intestine. Kullen MJ, et al. **FEMS Microbiol Lett** 1997 Sep 15;154(2):377-83

Cloning and manipulation of the Corynebacterium pseudotuberculosis recA gene for live vaccine vector development. Pogson CA, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2-3):139-45

Insertionally inactivated and inducible recA alleles for use in Neisseria. Seifert HS. **Gene** 1997 Apr 1;188(2):215-20

Cloning, characterization and expression of the recA gene of Aeromonas salmonicida. Umelo E, et al. **Gene** 1996 Oct 10;175(1-2):133-6

Stability of linear DNA in recA mutant Escherichia coli cells reflects ongoing chromosomal DNA degradation. Kuzminov A, et al. **J Bacteriol** 1997 Feb;179(3):880-8

Characterization of the recA gene regions of Spiroplasma citri and Spiroplasma melliferum. Marais A, et al. **J Bacteriol** 1996 Dec;178(23):7003-9

Determination of DNA sequences required for regulated Mycobacterium tuberculosis RecA expression in response to DNA-damaging agents suggests that two modes of regulation exist. Movahedzadeh F, et al. **J Bacteriol** 1997 Jun;179(11):3509-18

Characterization of the promoter of the Rhizobium etli recA gene. Tapias A, et al. **J Bacteriol** 1997 Mar;179(5):1573-9

Influence of disruption of the recA gene on genetic instability and genome rearrangement in Streptomyces lividans. Volff JN, et al. **J Bacteriol** 1997 Apr;179(7):2440-5

Quantitation of the inhibition of Hfr x F- recombination by the mutagenesis complex UmuD'C. Boudsocq F, et al. **J Mol Biol** 1997 Jul 11;270(2):201-11

Mutant RecA proteins which form hexamer-sized oligomers. Logan KM, et al. **J Mol Biol** 1997 Feb 21;266(2):306-16

Evolutionary comparisons of RecA-like proteins across all major kingdoms of living organisms. Brendel V, et al. **J Mol Evol** 1997 May;44(5):528-41

A comparison of the nucleotide sequences of the adk and recA genes of pathogenic and commensal Neisseria species: evidence for extensive interspecies recombination within adk. Feil E, et al. **J Mol Evol** 1996 Dec;43(6):631-40

Binding of Escherichia coli LexA repressor to the RecA operator. Shaner SL, et al. **J Mol Recognit** 1996 Sep-Dec; 9(5-6):468-73

The recA gene from Clostridium perfringens is induced by methyl methanesulphonate and contains an upstream Cheo box. Johnston JL, et al. **Microbiology** 1997 Mar;143 (Pt 3):885-90

recA-dependence of the response of Pseudomonas aeruginosa to UVA and UVB irradiation. Kidambi SP, et al. **Microbiology** 1996 Apr;142 (Pt 4):1033-40

The expression of the Acinetobacter calcoaceticus recA gene increases in response to DNA damage independently of RecA and of development of competence for natural transformation. Rauch PJ, et al. **Microbiology** 1996 Apr;142 (Pt 4):1025-32

The recA gene and cadmium toxicity in Escherichia coli K12. Shapiro N, et al. **Microbios** 1996;86(346):23-6

Cloning of an E. coli RecA and yeast RAD51 homolog, radA, an allele of the uvsC in Aspergillus nidulans and its mutator effects. Seong KY, et al. **Mol Cells** 1997 Apr 30;7(2):284-9

Functional analysis of the recA promoter of Rhodobacter capsulatus. Fernàndez de Henestrosa AR, et al. **Mol Gen Genet** 1997 Aug;255(5):487-94

Mutational analysis of the Streptomyces lividans recA gene suggests that only mutants with residual activity remain viable. Muth G, et al. **Mol Gen Genet** 1997 Jul;255(4):420-8

A recombinational defect in the C-terminal domain of Escherichia coli RecA2278-5 protein is compensated by protein binding to ATP. Alexseyev AA, et al. **Mol Microbiol** 1997 Jan;23(2):255-65

Mycobacterial recA is cotranscribed with a potential regulatory gene called recX. Papavinasasundaram KG, et al. **Mol Microbiol** 1997 Apr;24(1):141-53

Enhanced generation of A:T-->T:A transversions in a recA730 lexA51(Def) mutant of Escherichia coli. Watanabe-Akanuma M, et al. **Mutat Res** 1997 Jan 3; 373(1):61-6

IMMUNOLOGY

The mouse Kin-17 gene codes for a new protein involved in DNA transactions and is akin to the bacterial RecA protein. Tissier A, et al. **Biochimie** 1995;77(11):854-60

ISOLATION & PURIFICATION

Isolation, characterization, and magnesium-induced self-association kinetics of discrete aggregates of RecA protein from Escherichia coli. Budzynski DM, et al. **Biopolymers** 1996 Apr;38(4):471-91

METABOLISM

cDNA cloning of a chick homologue of human ATPase complex subunit 4, quantitative tissue distribution and tertiary structure comparison of the ATPase domain to RecA. Singh I, et al. **Arch Biochem Biophys** 1996 Sep 1; 333(1):260-6

Time-dependent inhibition of recA protein-catalyzed ATP hydrolysis by ATPgammaS: evidence for a rate-determining isomerization of the recA-ssDNA complex. Paulus BF, et al. **Biochemistry** 1997 Jun 24; 36(25):7832-8

The rate-determining step on the recA protein-catalyzed ssDNA-dependent ATP hydrolysis reaction pathway. Stole E, et al. **Biochemistry** 1997 Mar 25;36(12):3483-90

Second-site RecA-DNA interactions: lack of identical recognition. Wittung P, et al. **Biochemistry** 1996 Dec 3; 35(48):15349-55

Characterization of Reca Mediated homologous pairing on nitrocellulose membrane. Bertrand P, et al. **Biochimie** 1995; 77(11):840-7

Isolation, characterization, and magnesium-induced self-association kinetics of discrete aggregates of RecA protein from Escherichia coli. Budzynski DM, et al. **Biopolymers** 1996 Apr;38(4):471-91

The translocating RecBCD enzyme stimulates recombination by directing RecA protein onto ssDNA in a chi-regulated manner. Anderson DG, et al. **Cell** 1997 Jul 11;90(1):77-86

RecA-mediated Achilles' heel cleavage. Szybalski W. **Curr Opin Biotechnol** 1997 Feb;8(1):75-81 (64 ref.)

Roles of Tyr103 and Tyr264 in the regulation of RecA-DNA interactions by nucleotide cofactors. Morimatsu K, et al. **Eur J Biochem** 1996 Aug 15;240(1):91-7

Thermochemical and kinetic evidence for nucleotide-sequence-dependent RecA-DNA interactions. Wittung P, et al. **Eur J Biochem** 1997 May 1;245(3):715-9

The duplex DNA is very underwound in the three-stranded RecA protein-mediated synaptic complex. Voloshin ON, et al. **Genes Cells** 1997 May;2(5):303-14

Analysis of the region between amino acids 30 and 42 of intact UmuD by a monocysteine approach. Guzzo A, et al. **J Bacteriol** 1996 Dec;178(24):7295-303

Inhibition of RecA-mediated cleavage in covalent dimers of UmuD. Lee MH, et al. **J Bacteriol** 1996 Dec; 178(24):7304-7

Interactions of Escherichia coli UmuD with activated RecA analyzed by cross-linking UmuD monocysteine derivatives. Lee MH, et al. **J Bacteriol** 1996 Dec; 178(24):7285-94

Role of enzymes of homologous recombination in illegitimate plasmid recombination in Bacillus subtilis. Meima R, et al. **J Bacteriol** 1997 Feb;179(4):1219-29

Homologous recognition by RecA protein using

non-equivalent three DNA-strand-binding sites.
Kurumizaka H, et al. **J Biochem (Tokyo)** 1996 Feb; 119(2):216-23 (91 ref.)

Kinetic analysis of pairing and strand exchange catalyzed by RecA. Detection by fluorescence energy transfer. Bazemore LR, et al. **J Biol Chem** 1997 Jun 6; 272(23):14672-82

Interaction of Escherichia coli RecA protein with LexA repressor. II. Inhibition of DNA strand exchange by the uncleavable LexA S119A repressor argues that recombination and SOS induction are competitive processes. Harmon FG, et al. **J Biol Chem** 1996 Sep 27; 271(39):23874-83

RecA as a motor protein. Testing models for the role of ATP hydrolysis in DNA strand exchange. MacFarland KJ, et al. **J Biol Chem** 1997 Jul 11;272(28):17675-85

Interaction of Escherichia coli RecA protein with LexA repressor. I. LexA repressor cleavage is competitive with binding of a secondary DNA molecule. Rehrauer WM, et al. **J Biol Chem** 1996 Sep 27;271(39):23865-73

RecA filament dynamics during DNA strand exchange reactions. Shan Q, et al. **J Biol Chem** 1997 Apr 25; 272(17):11063-73

Characterization of a mutant RecA protein that facilitates homologous genetic recombination but not recombinational DNA repair: RecA423. Ishimori K, et al. **J Mol Biol** 1996 Dec 13;264(4):696-712

RecA protein assisted selection reveals a low fidelity of recognition of homology in a duplex DNA by an oligonucleotide. Malkov VA, et al. **J Mol Biol** 1997 Aug 15;271(2):168-77

RecA protein filaments: end-dependent dissociation from ssDNA and stabilization by RecO and RecR proteins. Shan Q, et al. **J Mol Biol** 1997 Feb 7;265(5):519-40

Targeting of a functional Escherichia coli RecA protein to the nucleus of plant cells. Reiss B, et al.
Mol Gen Genet 1997 Feb 27;253(6):695-702

Isolation of a dnaE mutation which enhances RecA-independent homologous recombination in the Escherichia coli chromosome. Bierne H, et al.
Mol Microbiol 1997 Jun;24(6):1225-34

Regulated expression of the dinR and recA genes during competence development and SOS induction in Bacillus subtilis. Haijema BJ, et al. **Mol Microbiol** 1996 Oct; 22(1):75-85

RecA relieves negative autoregulation of rdgA, which specifies a component of the RecA-Rdg regulatory circuit controlling pectin lyase production in Erwinia carotovora ssp. carotovora. Liu Y, et al. **Mol Microbiol** 1996 Dec; 22(5):909-18

Biological consequences of E.coli RecA protein expression in the repair defective pso4-1 and rad51::URA3 mutants of S. cerevisiae after treatment with N-methyl-N'-nitro-N-nitrosoguanidine. Slaninová M, et al. **Neoplasma** 1996;43(5):315-9

Interaction of the RecA protein of Escherichia coli with single-stranded oligodeoxyribonucleotides. Bianco PR, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4933-9

Interaction of oligonucleotides with a single stranded DNA binding site of RecA protein. Nakano S, et al.
Nucleic Acids Symp Ser 1995;(34):61-2

Resolution of an early RecA-recombination intermediate by a junction-specific endonuclease. Chiu SK, et al.
Proc Natl Acad Sci U S A 1997 Jun 10;94(12):6079-83

The specificity of the secondary DNA binding site of RecA protein defines its role in DNA strand exchange. Mazin AV, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10673-8

recA-independent DNA recombination between repetitive sequences: mechanisms and implications. Bi X, et al.
Prog Nucleic Acid Res Mol Biol 1996;54:253-92 (86 ref.)

RecA protein: structure, function, and role in recombinational DNA repair. Roca AI, et al.
Prog Nucleic Acid Res Mol Biol 1997;56:129-223 (428 ref.)

PHARMACOLOGY

Conformations of three-stranded DNA structures formed in presence and in absence of the RecA protein. Dagneaux C, et al. **J Biomol Struct Dyn** 1995 Dec;13(3):465-70

RECA PROTEIN see **REC A PROTEIN**

RECALL

Recall of awareness during cardiac anaesthesia: influence of feedback information to the anaesthesiologist. Ranta S, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):554-60

The claims of compensation for awareness with recall during general anaesthesia in Finland. Ranta S, et al.
Acta Anaesthesiol Scand 1997 Mar;41(3):356-9

A pilot evaluation of the EMBU Scale in Japan and the USA. Huang Y, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):445-8

Adding new word associations to semantic memory: evidence for two interactive learning components. Schrijnemakers JM, et al. **Acta Psychol (Amst)** 1997 Jun;96(1-2):103-32

The interaction of knowledge, aptitude, and strategies in children's memory performance. Bjorklund DF, et al.
Adv Child Dev Behav 1996;26:59-89 (98 ref.)

The role of schemata in children's memory. Davidson D.
Adv Child Dev Behav 1996;26:35-58 (70 ref.)

Informed consent: recall versus comprehension [letter; comment] Feinstein KA, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):312. Comment on: AJR Am J Roentgenol 1995 Nov;165(5):1139-42.

Verbal learning and memory in children with fetal alcohol syndrome. Mattson SN, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):810-6

The role of attention in a spatial memory task in Alzheimer disease patients. Simone PM, et al.
Alzheimer Dis Assoc Disord 1997 Sep;11(3):140-52

Deaf students' recall of Spanish vocabulary under three testing conditions [published erratum appears in Am Ann Deaf 1997 Mar;142(1):4] Ammons DK, et al.
Am Ann Deaf 1996 Dec;141(5):340-5

The relationship between memory, suggestibility and hypnotic responsivity. Eisen ML. **Am J Clin Hypn** 1996 Oct;39(2):126-37

Durability of posthypnotic suggestions: type of suggestion and difficulty level. Trussell JE, et al. **Am J Clin Hypn** 1996 Jul;39(1):37-47

Self-reports of diet: how children remember what they have eaten. Domel SB. **Am J Clin Nutr** 1997 Apr;65(4 Suppl):1148S-1152S (30 ref.)

Insights into dietary recall from a longitudinal study: accuracy over four decades. Dwyer JT, et al.
Am J Clin Nutr 1997 Apr;65(4 Suppl):1153S-1158S (27 ref.)

Re: "Reliability of alcohol intake as recalled from 10 years in the past" [letter; comment] Guggenmoos-Holzmann I, et al. **Am J Epidemiol** 1996 Dec 1;144(11):1086-7; discussion 1087-8. Comment on: Am J Epidemiol 1996 Jan 15;143(2):177-86.

Re: "Reliability of alcohol intake as recalled from 10 years in the past" [letter; comment] Russell M, et al.
Am J Epidemiol 1996 Dec 1;144(11):1087; discussion 1087-8 . Comment on: Am J Epidemiol 1996 Jan 15;143(2):177-86.

Reliability of retrospective chlorophenol exposure estimates over five decades. Teschke K, et al. **Am J Ind Med** 1996 Nov;30(5):616-22

Accuracy of Pap smear and mammogram self-reports in a southwestern Native American tribe. Johnson CS, et al.
Am J Prev Med 1995 Nov-Dec;11(6):360-3

A transfer of technique: from induced song recall to the induced recall of paintings. Díaz de Chumaceiro CL.
Am J Psychoanal 1996 Sep;56(3):331-6

Paired-associate learning and recall of high and low imagery words: moderating effects of hypnosis, hypnotic susceptibility level, and visualization abilities. Crawford HJ, et al. **Am J Psychol** 1996 Fall;109(3):353-72

Memory source confusions: effects of character rotation and sensory modality. Kahan TL. **Am J Psychol** 1996 Fall; 109(3):431-49

Improving text memory by organizing interfering text at retrieval. Mann T, et al. **Am J Psychol** 1996 Winter; 109(4):539-49

Feeling-of-knowing judgments from the subject's perspective. Widner RL Jr, et al. **Am J Psychol** 1996 Fall; 109(3):373-87

Cultural psychopathology and the false memory syndrome debates: a view from psychoanalysis [letter; comment] Daily LG. **Am J Psychother** 1997 Winter;51(1):137-40. Comment on: Am J Psychother 1996 Spring;50(2):167-77.

On the "true-false" memory syndrome: the problem of clinical evidence. Friedman S. **Am J Psychother** 1997 Winter; 51(1):102-22

Assessing children's ultraviolet radiation exposure: the use of parental recall via telephone interviews. Mayer JA, et al. **Am J Public Health** 1997 Jun;87(6):1046-9

Electroencephalographic bispectral index correlates with intraoperative recall and depth of propofol-induced sedation. Liu J, et al. **Anesth Analg** 1997 Jan;84(1):185-9

The importance of the postoperative anesthetic visit: do repeated visits improve patient satisfaction or physician recognition? [see comments] Zvara DA, et al.
Anesth Analg 1996 Oct;83(4):793-7. Comment in: Anesth Analg 1996 Oct;83(4):671-2.

Consistencies between recalled panic and lactate-induced panic. Goetz RR, et al. **Anxiety** 1994;1(1):31-6

Delayed recall of childhood sexual abuse: psychiatric nursing's responsibilities to clients [comment] Hall JM.
Arch Psychiatr Nurs 1996 Dec;10(6):342-6 (14 ref.). Comment on: Arch Psychiatr Nurs 1996 Apr;10(2):110-5.

Repressed memory and false memory [see comments] Lego S. **Arch Psychiatr Nurs** 1996 Apr;10(2):110-5. Comment in: Arch Psychiatr Nurs 1996 Dec;10(6):342-6.

False memory syndrome [letter; comment] Spragg GS.
Aust N Z J Psychiatry 1995 Dec;29(4):695-6. Comment on: Aust N Z J Psychiatry 1995 Sep;29(3):516-7.

Spatial orienting of attention in adult and aged rhesus monkeys. Baxter MG, et al. **Behav Neurosci** 1996 Oct; 110(5):898-904

Implicit memory bias in clinical and non-clinical depression. Bradley BP, et al. **Behav Res Ther** 1996 Nov-Dec; 34(11-12):865-79

Psychiatric symptomatology and the recall of positive and negative personality information. Furnham A, et al.
Behav Res Ther 1996 Sep;34(9):731-3

Memory and confidence in memory judgements among individuals with obsessive compulsive disorder and non-clinical controls. MacDonald PA, et al.
Behav Res Ther 1997 Jun;35(6):497-505

Anxiety and memory: a recall bias for threatening words in high anxiety. Reidy J, et al. **Behav Res Ther** 1997 Jun; 35(6):531-42

Spatial working memory deficits and their relationship to negative symptoms in unmedicated schizophrenia patients. Carter C, et al. **Biol Psychiatry** 1996 Nov 1;40(9):930-2

Monitoring the source of memory in detoxified alcoholics. Weingartner HJ, et al. **Biol Psychiatry** 1996 Jul 1; 40(1):43-53

Incidence and recall of influenza in a cohort of Glasgow healthcare workers during the 1993-4 epidemic: results of serum testing and questionnaire. Elder AG, et al. **BMJ** 1996 Nov 16;313(7067):1241-2

Absence of memory for intraoperative information during surgery under adequate general anaesthesia. Russell IF, et al. **Br J Anaesth** 1997 Jan;78(1):3-9

Autobiographical memory in obsessive-compulsive disorder. Wilhelm S, et al. **Br J Clin Psychol** 1997 Feb;36 (Pt 1):21-31

Testing hypotheses about working memory capacity. Gillett R. **Br J Math Stat Psychol** 1996 Nov;49 (Pt 2):241-52

False memory syndrome [letter; comment] Freyd P.
Br J Psychiatry 1996 Dec;169(6):794-5. Comment on: Br J Psychiatry 1996 Aug;169(2):131-4.

Recovered memories [letter; comment] [see comments] Merskey H. **Br J Psychiatry** 1996 Nov;169(5):665-6. Comment on: Br J Psychiatry 1996 Aug;169(2):131-4. Comment in: Br J Psychiatry 1997 Apr;170:388.

A comparison of the encoding of content and order in olfactory memory and in memory for visually presented verbal materials. White TL, et al. **Br J Psychol** 1997 Aug; 88 (Pt 3):459-72

Visuospatial ability of parkinsonians and elderly adults in location memory tasks. Giraudo MD, et al. **Brain Cogn** 1997 Jul;34(2):259-73

Lateralized changes in regional cerebral blood flow during performance of verbal and facial recognition tasks: correlations with performance and "effort". Gur RC, et al.
Brain Cogn 1997 Apr;33(3):388-414

Response imagery: aftereffects and reminiscence. Kohl RM, et al. **Brain Cogn** 1997 Apr;33(3):357-69

Encoding-retrieval interactions in mild Alzheimer's disease: the role of access to categorical information. Lipinska B, et al. **Brain Cogn** 1997 Jul;34(2):274-86

Word recall versus reading speed: evidence of preserved priming in head-injured patients. Vakil E, et al.
Brain Cogn 1996 Jun;31(1):75-89

Everyday memory following traumatic brain injury. Kinsella G, et al. **Brain Inj** 1996 Jul;10(7):499-507

Remediating production of tense morphology improves verb retrieval in chronic aphasia. Weinrich M, et al.
Brain Lang 1997 Jun 1;58(1):23-45

Recall after total intravenous anaesthesia due to an equipment misuse [see comments] Tong D, et al. **Can J Anaesth** 1997 Jan;44(1):73-7. Comment in: Can J Anaesth 1997 Jan;44(1):4-8.

Encoding operations and recognition memory for faces. McKelvie SJ. **Can J Exp Psychol** 1995 Dec;49(4):437-59

Negative priming without overt prime selection. Milliken B, et al. **Can J Exp Psychol** 1996 Dec;50(4):333-46

Choosing category or complementary relations: prior tendencies modulate instructional effects. Skwarchuk SL, et al. **Can J Exp Psychol** 1996 Dec;50(4):356-70

The extension of the interference effect to multiplication. Thibodeau MH, et al. **Can J Exp Psychol** 1996 Dec; 50(4):393-6

Orbital mnemonics. Ing EB, et al. **Can J Ophthalmol** 1996 Jun;31(4):193-4

Adult recovered memories of childhood sexual abuse [see comments] Blackshaw S, et al. **Can J Psychiatry** 1996 Jun; 41(5):305-8. Comment in: Can J Psychiatry 1996 Dec;41(10):665-6. **(Eng, Fre)**

Re: Recovered memories [letter] Gutowski WD.
Can J Psychiatry 1996 Oct;41(8):534-5

Re: Adult recovered memories of childhood sexual abuse [letter; comment] Keystone M. **Can J Psychiatry** 1996 Dec; 41(10):665-6. Comment on: Can J Psychiatry 1996 Jun;41(5):305-8.

False memory in schizophrenia [letter] Miyaoka H, et al.
Can J Psychiatry 1997 Mar;42(2):211

Re: Recovered memories [letter; comment] Stein E, et al.
Can J Psychiatry 1996 Oct;41(8):533-5. Comment on: Can J Psychiatry 1996 May;41(4):199-200.

Repressed memories: middle ground or no man's land? [letter; comment] [see comments] Mak AJ. **Can Med Assoc J** 1997 Feb 1;156(3):344-5. Comment on: Can Med Assoc J 1996 Sep 15;155(6):647-53. Comment in: Can Med Assoc J 1997 May 1;156(9):1265.

Repressed memories: middle ground or no man's land? [letter; comment] [see comments] Tyroler P. **Can Med Assoc J** 1997 Feb 1;156(3):344; discussion 345. Comment on: Can Med Assoc J 1996 Sep 15;155(6):647-53. Comment in: Can Med Assoc J 1997 May 1;156(9):1265.

Effects of panel experience on olfactory memory performance: influence of stimuli familiarity and labeling ability of subjects. Lesschaeve I, et al. **Chem Senses** 1996 Dec;21(6):699-709

Anatomically-neutral dolls: their effects on the memory and suggestibility of 4- to 6-year-old eyewitnesses [see comments] Samra J, et al. **Child Abuse Negl** 1996 Dec; 20(12):1261-72. Comment in: Child Abuse Negl 1996 Dec;20(12):1249-50.

Development of preterm and full-term infant ability on AB, recall memory, transparent barrier detour, and means-end tasks. Matthews A, et al. **Child Dev** 1996 Dec;67(6):2658-76

Children's memory of an occurrence of a repeated event:

effects of age, repetition, and retention interval across three question types. Powell MB, et al. **Child Dev** 1996 Oct; 67(5):1988–2004

Imitation and pantomime in high–functioning adolescents with autism spectrum disorders. Rogers SJ, et al. **Child Dev** 1996 Oct;67(5):2060–73

Memory and processing speed in preterm children at eleven years: a comparison with full–terms. Rose SA, et al. **Child Dev** 1996 Oct;67(5):2005–21

Traumatic intrusive imagery as an emotional memory phenomenon: a review of research and explanatory information processing theories. vanOyen Witvliet C. **Clin Psychol Rev** 1997;17(5):509–36 (150 ref.)

Gender differences in recalled parental childrearing behaviors and adult self–esteem. Conte HR, et al. **Compr Psychiatry** 1996 May–Jun;37(3):157–66

Continuing influences of to–be–forgotten information. Bjork EL, et al. **Conscious Cogn** 1996 Mar–Jun;5(1–2):176–96

Memory during general anesthesia: practical and methodological aspects [see comments] Bonebakker AE, et al. **Conscious Cogn** 1996 Dec;5(4):542–61. Comment in: Conscious Cogn 1996 Dec;5(4):525–41.

On assumptions of, relations between, and evaluations of some process dissociation measurement models [comment] [see comments] Buchner A, et al. **Conscious Cogn** 1996 Dec; 5(4):581–94. Comment on: Conscious Cogn 1996 Mar–Jun;5(1–2):232–54. Comment in: Conscious Cogn 1996 Dec;5(4):595–603.

Guessing strategies, aging, and bias effects in perceptual identification [see comments] Light LL, et al. **Conscious Cogn** 1996 Dec;5(4):463–99. Comment in: Conscious Cogn 1996 Dec;5(4):500–11.

Separating implicit from explicit retrieval processes in perceptual identification [see comments] McKoon G, et al. **Conscious Cogn** 1996 Dec;5(4):500–11; discussion 512–24 . Comment in: Conscious Cogn 1996 Dec;5(4):463–99.

Memory for unconsciously perceived events: evidence from anesthetized patients [see comments] Merikle PM, et al. **Conscious Cogn** 1996 Dec;5(4):525–41. Comment in: Conscious Cogn 1996 Dec;5(4):542–61.

Response bias correction in the process dissociation procedure: a reevaluation? [comment] Reingold EM, et al. **Conscious Cogn** 1996 Dec;5(4):595–603. Comment on: Conscious Cogn 1996 Dec;5(4):581–94.

Automatic retrieval of new associations under shallow encoding conditions. Reingold EM, et al. **Conscious Cogn** 1996 Mar–Jun;5(1–2):117–30

Two forms of sequential implicit learning. Seger CA. **Conscious Cogn** 1997 Mar;6(1):108–31

Blindsight in hindsight. Tapp TD. **Conscious Cogn** 1997 Mar; 6(1):67–74

Inhibition, contextual segregation, and subject strategies in list method directed forgetting. Whetstone T, et al. **Conscious Cogn** 1996 Dec;5(4):395–417

Signal–detection, threshold, and dual–process models of recognition memory: ROCs and conscious recollection. Yonelinas AP, et al. **Conscious Cogn** 1996 Dec;5(4):418–41

Noncriterial recollection: familiarity as automatic, irrelevant recollection. Yonelinas AP, et al. **Conscious Cogn** 1996 Mar–Jun;5(1–2):131–41

Cerebral pathways for calculation: double dissociation between rote verbal and quantitative knowledge of arithmetic. Dehaene S, et al. **Cortex** 1997 Jun;33(2):219–50

Autonomic and recognition indices of memory in amnesic and healthy control subjects. Diamond BJ, et al. **Cortex** 1996 Sep;32(3):439–59

Access to information about famous individuals in Alzheimer's disease. Dopkins S, et al. **Cortex** 1997 Jun; 33(2):333–9

Semantic memory following pediatric head injury: relationship to age, severity of injury, and MRI. Levin HS, et al. **Cortex** 1996 Sep;32(3):461–78

Distinguishing between patients with depression or very mild Alzheimer's disease using the Delayed–Word–Recall test. Coen RF, et al. **Dement Geriatr Cogn Disord** 1997 Jul–Aug; 8(4):244–7

How do children who are clumsy remember modelled movements? Skorji V, et al. **Dev Med Child Neurol** 1997 Jun;39(6):404–8

Classical conditioning in the fetal rat with a long delay between presentation of CS and US. Varlinskaya EI, et al. **Dev Psychobiol** 1997 Jan;30(1):49–59

Age differences in, and consequences of, multiple– and variable–strategy use on a multitrial sort–recall task. Coyle TR, et al. **Dev Psychol** 1997 Mar;33(2):372–80

Effects of attention on infants' preference for briefly exposed visual stimuli in the paired–comparison recognition–memory paradigm. Richards JE. **Dev Psychol** 1997 Jan;33(1):22–31

Mother–child participation in conversation about the past: relationships to preschoolers' theory of mind. Welch–Ross MK. **Dev Psychol** 1997 Jul;33(4):618–29

Deficits, delays, and distractions: an evaluation of symbolic play and memory in children with autism. McDonough L, et al. **Dev Psychopathol** 1997 Winter;9(1):17–41

The performance of several indicators in detecting recall bias. European Study Group on Infertility and Subfecundity. Basso O, et al. **Epidemiology** 1997 May;8(3):269–74

How accurate is the recall of bowel habits in children with defaecation disorders? van der Plas RN, et al. **Eur J Pediatr** 1997 Mar;156(3):178–81

Effects of division of attention during encoding and retrieval on age differences in episodic memory. Nyberg L, et al. **Exp Aging Res** 1997 Apr–Jun;23(2):137–43

Taking charge of remembering: locus of control and older adults' memory for speech. Riggs KM, et al. **Exp Aging Res** 1997 Jul–Sep;23(3):237–56

Non pharmacological treatment in Alzheimer's disease. Bianchetti A, et al. **Funct Neurol** 1997 May–Aug; 12(3–4):215–7

Comparison of the memory performances of young and old subjects with those of Alzheimer's disease patients: support for a discontinuity between natural and pathological aging. Caltagirone C. **Funct Neurol** 1997 May–Aug;12(3–4):213

Mental time travel and the evolution of the human mind. Suddendorf T, et al. **Genet Soc Gen Psychol Monogr** 1997 May;123(2):133–67 (190 ref.)

Memory for pain and the delayed effects of distraction. Christenfeld N. **Health Psychol** 1997 Jul;16(4):327–30

Comparison of responses to SF–36 Health Survey questions with one–week and four–week recall periods. Keller SD, et al. **Health Serv Res** 1997 Aug;32(3):367–84

Medication instruction design: younger and older adult schemas for taking medication. Morrow DG, et al. **Hum Factors** 1996 Dec;38(4):556–73

Illusory safeguards: legitimizing distortion in recall with guidelines for forensic hypnosis—two case reports. Karlin RA. **Int J Clin Exp Hypn** 1997 Jan;45(1):18–40

Admissibility and per se exclusion of hypnotically elicited recall in American courts of law. Perry C. **Int J Clin Exp Hypn** 1997 Jul;45(3):266–79 (27 ref.)

The effects of hypnosis, context reinstatement, and anxiety on eyewitness memory. Ready DJ, et al. **Int J Clin Exp Hypn** 1997 Jan;45(1):55–68

Task dependence in color–naming latency among dieters. Huon GF, et al. **Int J Eat Disord** 1996 May;19(4):405–10

"Recovered memory" therapy for eating disorders: implications of the Ramona verdict. Pope HG Jr, et al. **Int J Eat Disord** 1996 Mar;19(2):139–45

The repeatability of self–reported exposure after miscarriage. ALSPAC Study Team. Avon Longitudinal Study of Pregnancy and Childhood. Farrow A, et al. **Int J Epidemiol** 1996 Aug;25(4):797–806

Nurses' memory of patient's pain. McDonald DD. **Int J Nurs Stud** 1996 Oct;33(5):487–94

Accuracy of 1–, 5– and 10–year body weight recall given in a standard questionnaire. Olivarius NF, et al. **Int J Obes Relat Metab Disord** 1997 Jan;21(1):67–71

Recall and repetition of a severe childhood trauma. Adler H. **Int J Psychoanal** 1995 Oct;76 (Pt 5):927–43

Implicit memory performance of patients with Alzheimer's disease: a brief review. Jelicic M, et al. **Int Psychogeriatr** 1995 Fall;7(3):385–92 (36 ref.)

Use of the clock drawing task in the diagnosis of mild and very mild Alzheimer's disease. Lee H, et al. **Int Psychogeriatr** 1996 Fall;8(3):469–76

Self–reports of memory problems in relatives of patients with probable Alzheimer's disease. McPherson S, et al. **Int Psychogeriatr** 1995 Fall;7(3):367–76

Memory and attention test performance of young and elderly subjects after retest practice. Rockstroh S, et al. **Int Psychogeriatr** 1995 Fall;7(3):377–84

Role of autobiographical memory in social problem solving and depression. Goddard L, et al. **J Abnorm Psychol** 1996 Nov;105(4):609–16

Memory, repression, and child sexual abuse: forensic implications for the mental health professional. Corelli TB, et al. **J Am Acad Psychiatry Law** 1997;25(1):31–47 (62 ref.)

Photographs, reconstructions, and the psychoanalytic task: a clinical note. Castelnuovo–Tedesco P. **J Am Acad Psychoanal** 1996 Winter;24(4):661–73

Memoirs of a malpractice suit. Lowenkopf EL. **J Am Acad Psychoanal** 1995 Winter;23(4):731–48

"Reality" and countertransference in the treatment of sexual abuse patients: the false memory controversy. Perlman SD. **J Am Acad Psychoanal** 1996 Spring;24(1):115–35 (32 ref.)

"How do you remember you ate...?": a Delphi technique study to identify retrieval categories from fourth–grade children. Baxter SD, et al. **J Am Diet Assoc** 1997 Jan;97(1):31–6

Comparison of multiple–pass 24–hour recall estimates of energy intake with total energy expenditure determined by the doubly labeled water method in young children. Johnson RK, et al. **J Am Diet Assoc** 1996 Nov; 96(11):1140–4

Implicit and explicit memory in obsessive–compulsive disorder. Foa EB, et al. **J Anxiety Disord** 1997 Mar–Apr; 11(2):119–29

Effects of response cards during lesson closure on the academic performance of secondary students in an earth science course. Cavanaugh RA, et al. **J Appl Behav Anal** 1996 Fall;29(3):403–6

Organization of information in memory and the performance appraisal process: evidence from the field. DeNisi AS, et al. **J Appl Psychol** 1996 Dec;81(6):717–37

Identification of computer–generated facial composites. Kovera MB, et al. **J Appl Psychol** 1997 Apr;82(2):235–46

Would reading an account of an event refresh your memory? Magner ES, et al. **J Appl Psychol** 1996 Dec;81(6):769–76

Reaction time and assessments of cognitive effort as predictors of eyewitness memory accuracy and confidence. Robinson MD, et al. **J Appl Psychol** 1997 Jun;82(3):416–25

How effective is the presence–of–counsel safeguard? Attorney perceptions of suggestiveness, fairness, and correctability of biased lineup procedures. Stinson V, et al. **J Appl Psychol** 1996 Feb;81(1):64–75

Adults' understanding of young children's testimony. Sutherland R, et al. **J Appl Psychol** 1996 Dec;81(6):777–85

The reliability of recollections of family history: implications for the medical provider. Parent ME, et al. **J Cancer Educ** 1997 Summer;12(2):114–20

Precision, reliability and accuracy in the dating of symptom onsets in child and adolescent psychopathology. Angold A, et al. **J Child Psychol Psychiatry** 1996 Sep;37(6):657–64

Memories of childhood neglect and abuse: corroboration in a series of sisters. Bifulco A, et al. **J Child Psychol Psychiatry** 1997 Mar;38(3):365–74

Do children need concurrent prompts in order to use lexical analogies in reading? Savage RS. **J Child Psychol Psychiatry** 1997 Feb;38(2):235–46

Performance of children with ADHD on the Rey–Osterrieth complex figure: a pilot neuropsychological study. Seidman LJ, et al. **J Child Psychol Psychiatry** 1995 Nov; 36(8):1459–73

Precision and estimated accuracy of two short–term food frequency questionnaires compared with recalls and records. Eck LH, et al. **J Clin Epidemiol** 1996 Oct; 49(10):1195–200

Development and testing of a seven–day dietary recall. Dietary Assessment Working Group of the Worcester Area Trial for Counseling in Hyperlipidemia (WATCH). Hebert JR, et al. **J Clin Epidemiol** 1997 Aug;50(8):925–37

Demographics, health behaviors, and past drug use as predictors of recall accuracy for previous prescription medication use. West SL, et al. **J Clin Epidemiol** 1997 Aug; 50(8):975–80

Further validation of constructs from the selective reminding test. Beatty WW, et al. **J Clin Exp Neuropsychol** 1996 Feb; 18(1):52–5

Memory disturbance in multiple sclerosis: reconsideration of patterns of performance on the selective reminding test. Beatty WW, et al. **J Clin Exp Neuropsychol** 1996 Feb; 18(1):56–62

Prospective evaluation of verbal memory performance after cardiopulmonary bypass surgery. Vingerhoets G, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):187–96

Patient awareness during general anesthesia: a shocking outcome. Watkins–Pitchford M, et al. **J Clin Monit** 1997 Jan;13(1):51–2

Effects of stressful stimuli: a comparison between two time periods. Koslowsky M, et al. **J Clin Psychol** 1996 May; 52(3):279–83

Hiding and perspective taking in long–tailed macaques (Macaca fascicularis). Kummer H, et al. **J Comp Psychol** 1996 Mar;110(1):97–102

The relative importance of location and feature cues for homing pigeon (Columba livia) goal recognition. Strasser R, et al. **J Comp Psychol** 1996 Mar;110(1):77–87

Validation of recalled food intake in the past in a Japanese population. Takatsuka N, et al. **J Epidemiol** 1996 Mar; 6(1):9–13

Memory processes in delayed spatial discriminations: response intentions or response mediation? Urcuioli PJ, et al. **J Exp Anal Behav** 1997 May;67(3):323–36

Training and transfer–of–learning effects in disabled and normal readers: evidence of specific deficits. Benson NJ, et al. **J Exp Child Psychol** 1997 Mar;64(3):343–66

Infants' memory for context: timing effects of postevent information. Boller K, et al. **J Exp Child Psychol** 1996 Dec; 63(3):583–602

Serial recall of poor readers in two presentation modalities: combined effects of phonological similarity and word length. Irausquin RS, et al. **J Exp Child Psychol** 1997 Jun; 65(3):342–69

Means to the goal of remembering: developmental changes in awareness of strategy use—performance relations. Justice EM, et al. **J Exp Child Psychol** 1997 Jun;65(3):293–314

Direct and indirect measures of intentional forgetting in children and adults: evidence for retrieval inhibition and reinstatement. Lehman EB, et al. **J Exp Child Psychol** 1997 Feb;64(2):295–316

Developmental changes in the inhibition of previously relevant information. Lorsbach TC, et al. **J Exp Child Psychol** 1997 Mar;64(3):317–42

Props and children's event reports: the impact of a 1–year delay. Salmon K, et al. **J Exp Child Psychol** 1997 Jun; 65(3):261–92

The development of memory for ignored speech. Saults JS, et al. **J Exp Child Psychol** 1996 Oct;63(1):239–61

Rats use an ordinal timer in a daily time–place learning task. Carr JA, et al. **J Exp Psychol Anim Behav Process** 1997 Apr;23(2):232–47

Systematic nonlinearities in the memory representation of time. Crystal JD, et al. **J Exp Psychol Anim Behav Process** 1997 Jul;23(3):267–82

Blocking of subsequent and antecedent events. Esmoris–Arranz FJ, et al. **J Exp Psychol Anim Behav Process** 1997 Apr;23(2):145–56

Additivity of the effects of retention interval and context change on latent inhibition: toward resolution of the context forgetting paradox. Rosas JM, et al. **J Exp Psychol Anim Behav Process** 1997 Jul;23(3):283–94

Retroactive interference effects of surprising reward omission on serial spatial memory. Terry WS. **J Exp Psychol Anim Behav Process** 1996 Oct;22(4):472–9

On the nature and scope of featural representations of word meaning. McRae K, et al. **J Exp Psychol Gen** 1997 Jun;

126(2):99–130
The role of working memory capacity in retrieval. Rosen VM, et al. **J Exp Psychol Gen** 1997 Sep;126(3):211–27
Representational momentum and memory for luminance. Brehaut JC, et al. **J Exp Psychol Hum Percept Perform** 1996 Apr;22(2):480–501
Set size, novelty, and visual pop-out in infancy. Rovee-Collier C, et al.
J Exp Psychol Hum Percept Perform 1996 Oct; 22(5):1178–87
A comparison of group and individual remembering: does collaboration disrupt retrieval strategies? Basden BH, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1176–91
New evidence for phonological processing during visual word recognition: the case of Arabic. Bentin S, et al.
J Exp Psychol Learn Mem Cogn 1996 Mar;22(2):309–23
On the relation between skilled performance of simple division and multiplication. Campbell JI.
J Exp Psychol Learn Mem Cogn 1997 Sep;23(5):1140–59
Two loci of repetition priming in the recognition of familiar faces. Ellis AW, et al. **J Exp Psychol Learn Mem Cogn** 1996 Mar;22(2):295–308
Words and voices: episodic traces in spoken word identification and recognition memory [published erratum appears in J Exp Psychol Learn Mem Cogn 1997 Mar;23(2):279] Goldinger SD.
J Exp Psychol Learn Mem Cogn 1996 Sep;22(5):1166–83
Comparison of the retrieval of item versus spatial position information. Gronlund SD, et al.
J Exp Psychol Learn Mem Cogn 1997 Sep;23(5):1261–74
Separating habit and recollection: memory slips, process dissociations, and probability matching. Hay JF, et al.
J Exp Psychol Learn Mem Cogn 1996 Nov;22(6):1323–35
Role of memory strength in reality monitoring decisions: evidence from source attribution biases. Hoffman HG.
J Exp Psychol Learn Mem Cogn 1997 Mar;23(2):371–83
Semantic versus perceptual influences of color in object recognition. Joseph JE, et al.
J Exp Psychol Learn Mem Cogn 1996 Mar;22(2):407–29
Irrelevant speech, serial rehearsal, and temporal distinctiveness: a new approach to the irrelevant speech effect. LeCompte DC. **J Exp Psychol Learn Mem Cogn** 1996 Sep;22(5):1154–65
Recollections of faces: remembering differences and knowing similarities. Mäntylä T.
J Exp Psychol Learn Mem Cogn 1997 Sep;23(5):1203–16
The effects of perceptual interference at encoding on implicit memory, explicit memory, and memory for source. Mulligan NW. **J Exp Psychol Learn Mem Cogn** 1996 Sep; 22(5):1067–87
Implicit memory for nonverbal associations. Musen G, et al.
J Exp Psychol Learn Mem Cogn 1997 Sep;23(5):1192–202
Exemplar similarity and the development of automaticity. Palmeri TJ. **J Exp Psychol Learn Mem Cogn** 1997 Mar; 23(2):324–54
Situation models and abstract ownership relations. Radvansky GA, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1233–46
Perceptual effects on remembering: recollective processes in picture recognition memory. Rajaram S.
J Exp Psychol Learn Mem Cogn 1996 Mar;22(2):365–77
Some tests of an identical elements model of basic arithmetic skills. Rickard TC, et al.
J Exp Psychol Learn Mem Cogn 1996 Sep;22(5):1281–95
Activating representations in permanent memory: different benefits for pictures and words. Seifert LS.
J Exp Psychol Learn Mem Cogn 1997 Sep;23(5):1106–21
Contrast and illumination effects on explicit and implicit measures of memory. Srinivas K.
J Exp Psychol Learn Mem Cogn 1996 Sep;22(5):1123–35
Dissociations between familiarity processes in explicit recognition and implicit perceptual memory. Wagner AD, et al. **J Exp Psychol Learn Mem Cogn** 1997 Mar; 23(2):305–23
An investigation of cued recall of multiattribute stimuli. Ward G, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep; 23(5):1247–60
Collective memory: collaborative and individual processes in remembering. Weldon MS, et al.
J Exp Psychol Learn Mem Cogn 1997 Sep;23(5):1160–75
On the generality of the revelation effect. Westerman DL, et al. **J Exp Psychol Learn Mem Cogn** 1996 Sep; 22(5):1147–53
Memory for faces: evidence of retrieval-based impairment. Windschitl PD. **J Exp Psychol Learn Mem Cogn** 1996 Sep; 22(5):1101–22
Recognition of student names past: a longitudinal study with N = 1. Huang IN. **J Gen Psychol** 1997 Jan;124(1):35–47
Effect of modality in earwitness identification: memory for verbal and nonverbal auditory stimuli presented in two contexts. Huss MT, et al. **J Gen Psychol** 1996 Oct; 123(4):277–87
Effects of advance questions on reading comprehension. Kreiner DS. **J Gen Psychol** 1996 Oct;123(4):352–64
Implicit memory effects when using pictures with children and adults: hypermnesia too? Landrum RE.
J Gen Psychol 1997 Jan;124(1):5–17
Remembering details in stories about childhood sexual abuse. Lewis SF, et al. **J Genet Psychol** 1997 Sep;158(3):377–9
Children's and adults' visuospatial memory: the game concentration. Schumann-Hengsteler R.
J Genet Psychol 1996 Mar;157(1):77–92
Category superiority effects in young and elderly adults. Sharps MJ. **J Genet Psychol** 1997 Jun;158(2):165–71
Adult age-group differences in recall for the literal and interpretive meanings of narrative text. Adams C, et al.
J Gerontol B Psychol Sci Soc Sci 1997 Jul;52(4):P187–95
Adult age differences in source recall: a population-based study. Erngrund K, et al.
J Gerontol B Psychol Sci Soc Sci 1996 Nov;51(6):P335–45
Irrelevant speech effect in aging: an assessment of inhibitory processes in working memory. Rouleau N, et al.
J Gerontol B Psychol Sci Soc Sci 1996 Nov;51(6):P356–63
Covert versus overt self-recognition in late stage Alzheimer's disease. Bologna SM, et al. **J Int Neuropsychol Soc** 1997 Mar;3(2):195–8
Autobiographical memory in multiple sclerosis. Paul RH, et al. **J Int Neuropsychol Soc** 1997 May;3(3):246–51
The effects of behavioural relaxation on cognitive performance in adults with severe intellectual disabilities. Lindsay WR, et al. **J Intellect Disabil Res** 1996 Aug;40 (Pt 4):285–90
Re: Induced abortion and risk for breast cancer: reporting (recall) bias in a Dutch case-control study [letter; comment] Brind J, et al. **J Natl Cancer Inst** 1997 Apr 16;89(8):588–90 . Comment on: J Natl Cancer Inst 1996 Dec 4;88(23):1698–700. Comment on: J Natl Cancer Inst 1996 Dec 4;88(23):1759–64.
Induced abortion and risk for breast cancer: reporting (recall) bias in a Dutch case-control study [see comments] Rookus MA, et al. **J Natl Cancer Inst** 1996 Dec 4;88(23):1759–64 . Comment in: J Natl Cancer Inst 1996 Dec 4;88(23):1698–700. Comment in: J Natl Cancer Inst 1997 Apr 16;89(8):588–90.
Informed consent in head and neck surgery: how much do patients actually remember? Hekkenberg RJ, et al.
J Otolaryngol 1997 Jun;26(3):155–9
Rehearsal strategies and recall performance in boys with and without attention deficit hyperactivity disorder. O'Neill ME, et al. **J Pediatr Psychol** 1996 Feb;21(1):73–88
Conscious and unconscious retrieval in picture recognition: a framework for exploring gender differences. Anooshian LJ, et al. **J Pers Soc Psychol** 1996 Mar;70(3):637–45
Why listeners hear less than they are told: attentional load and the teller-listener extremity effect. Baron RS, et al.
J Pers Soc Psychol 1997 Apr;72(4):826–38
Personality, punishment, and procedural learning: a test of J.A. Gray's anxiety theory. Corr PJ, et al.
J Pers Soc Psychol 1997 Aug;73(2):337–44
Influence of overt head movements on memory for valenced words: a case of conceptual-motor compatibility. Förster J, et al. **J Pers Soc Psychol** 1996 Sep;71(3):421–30
Resolving the apparent discrepancy between the incongruency effect and the expectancy-based illusory correlation effect: the TRAP model. Garcia-Marques L, et al. **J Pers Soc Psychol** 1996 Nov;71(5):845–60
Does imitation enhance memory for faces? Four converging studies. Graziano WG, et al. **J Pers Soc Psychol** 1996 Nov; 71(5):874–87
Emotional expression and physical health: revising traumatic memories or fostering self-regulation? Greenberg MA, et al. **J Pers Soc Psychol** 1996 Sep;71(3):588–602
When expectancy meets desire: motivational effects in reconstructive memory. McDonald HE, et al.
J Pers Soc Psychol 1997 Jan;72(1):5–23
Memory for and experience of differential competitive behavior of individuals and groups. Pemberton MB, et al.
J Pers Soc Psychol 1996 Nov;71(5):953–66
Memories out of order: thought suppression and the disturbance of sequence memory. Wegner DM, et al.
J Pers Soc Psychol 1996 Oct;71(4):680–91
Retrospective reporting of childhood adversity: issues in assessing long-term recall. Maughan B, et al.
J Personal Disord 1997 Spring;11(1):19–33
Memory deficits in schizophrenia: inadequate assimilation or true amnesia? Findings from the Wechsler Memory Scale--revised. Hawkins KA, et al.
J Psychiatry Neurosci 1997 May;22(3):169–79 (24 ref.)
Working memory and on-line sentence comprehension in patients with Alzheimer's disease. Waters GS, et al.
J Psycholinguist Res 1997 Jul;26(4):377–400
Alexithymia and impoverished dream recall in asthmatic patients: evidence from self-report measures. Nielsen T, et al. **J Psychosom Res** 1997 Jan;42(1):53–9
A comparison of updating and explanation as causes of the incongruity effect on person memory. Trafimow D, et al.
J Soc Psychol 1997 Aug;137(4):412–20
Vigilance and iconic memory in children at high risk for alcoholism. Steinhauer SR, et al. **J Stud Alcohol** 1997 Jul; 58(4):428–34
Posttraumatic stress disorder, flashbacks, and pseudomemories in closed head injury. Bryant RA.
J Trauma Stress 1996 Jul;9(3):621–9
Authenticity of recovered sexual abuse memories: a Rorschach study. Leavitt F, et al. **J Trauma Stress** 1996 Jul;9(3):483–96
Attention, arousal, and memory in posttraumatic stress disorder. Litz BT, et al. **J Trauma Stress** 1996 Jul; 9(3):497–519
The counting method for ameliorating traumatic memories. Ochberg FM. **J Trauma Stress** 1996 Oct;9(4):873–80
The influences of patient characteristics and physician experience on case recall. Durante R, et al.
Med Decis Making 1997 Apr-Jun;17(2):199–207
Clinical practice guidelines in general practice: a national survey of recall, attitudes and impact [see comments] Gupta L, et al. **Med J Aust** 1997 Jan 20;166(2):69–72. Comment in: Med J Aust 1997 Jan 20;166(2):62.
The recall of physical activity: using a cognitive model of the question-answering process. Durante R, et al.
Med Sci Sports Exerc 1996 Oct;28(10):1282–91 (61 ref.)
Directed forgetting: further comparisons of the item and list methods. Basden BH, et al. **Memory** 1996 Nov;4(6):633–53
The effect of environmental context on recall and category clustering scores following relational and individual item processing: a test of the outshining hypothesis. Cousins R, et al. **Memory** 1996 Jan;4(1):79–90
Generation effects and the lack thereof: the role of transfer-appropriate processing. de Winstanley PA, et al.
Memory 1996 Jan;4(1):31–48
Memory for conversation. Miller JB, et al. **Memory** 1996 Nov;4(6):615–31
Distinctiveness and very short-term serial position effects. Neath I, et al. **Memory** 1996 May;4(3):225–42
Two approaches to learning a theatrical script. Noice H, et al. **Memory** 1996 Jan;4(1):1–17
Rehearsal strategies, test expectancy, and memory monitoring in free recall. Shimizu H. **Memory** 1996 May; 4(3):265–87
Routes to actions and their efficacy for remembering. Zimmer HD, et al. **Memory** 1996 Jan;4(1):59–78
Individual prediction of change in delayed recall of prose passages after left-sided anterior temporal lobectomy. Jokeit H, et al. **Neurology** 1997 Aug;49(2):481–7
Failure to recall (but not to remember): pure transient amnesia during nonconvulsive status epilepticus [see comments] Vuilleumier P, et al. **Neurology** 1996 Apr; 46(4):1036–9. Comment in: Neurology 1997 Jan;48(1):292; discussion 293. Comment in: Neurology 1997 Jan;48(1):292–3. Comment in: Neurology 1997 Jun;48(6):1736; discussion 1736–7.
The Medical College of Georgia Complex Figures: reliability and preliminary normative data using an intentional learning paradigm in older adults. Ingram F, et al.
Neuropsychiatry Neuropsychol Behav Neurol 1997 Apr; 10(2):144–6
Anosognosia and procedural learning in Alzheimer's disease. Starkstein SE, et al.
Neuropsychiatry Neuropsychol Behav Neurol 1997 Apr; 10(2):96–101
When implicit learning fails: amnesia and the problem of error elimination. Baddeley A, et al. **Neuropsychologia** 1994 Jan; 32(1):53–68
Word priming with brief multiple presentation technique: preservation in amnesia. Beauregard M, et al.
Neuropsychologia 1997 May;35(5):611–21
A comparison of implicit memory tasks in Korsakoff and alcoholic patients. Brunfaut E, et al. **Neuropsychologia** 1996 Dec;34(12):1143–50
Unconscious influences on amnesics' word-stem completion. Cermak LS, et al. **Neuropsychologia** 1997 May;35(5):605–10
The influence of semantic encoding on recognition memory in Alzheimer's disease. Dalla Barba G, et al.
Neuropsychologia 1996 Dec;34(12):1181–6
Priming arithmetic facts in amnesic patients. Delazer M, et al. **Neuropsychologia** 1997 May;35(5):623–34
Dissociation of visual and spatial processing in working memory. Hecker R, et al. **Neuropsychologia** 1997 May; 35(5):599–603
Is prefrontal cortex involved in cued recall? A neuropsychological test of PET findings. Swick D, et al.
Neuropsychologia 1996 Oct;34(10):1019–28
The effects of two matched memory tasks on concurrent finger tapping. Towell N, et al. **Neuropsychologia** 1994 Jan; 32(1):125–9
Memory performance under varying cueing conditions in patients with Parkinson's disease. van Spaendonck KP, et al. **Neuropsychologia** 1996 Dec;34(12):1159–64
Accuracy of children's pain memories. Zonneveld LN, et al. **Pain** 1997 Jul;71(3):297–302
Stimulus complexity in reminiscence therapy and scores on the Beck Depression Inventory of a small group of nursing-home residents. Bass BA, et al.
Percept Mot Skills 1996 Jun;82(3 Pt 1):973–4
Eyewitness accuracy and gender. Casiere DA, et al.
Percept Mot Skills 1996 Dec;83(3 Pt 1):914
Visual memory skills in Japanese and Caucasians. Flaherty M, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1319–29
Subvocal speech, reading rate, and comprehension. Freese AR. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1343–68
Allocation of attention during word recognition by good and poor readers. Gillund B, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):899–902
Categorization based on attribute versus relational similarity in 4- to 10-month-old infants. Greco-Vigorito C.
Percept Mot Skills 1996 Jun;82(3 Pt 1):915–27
Autobiographical recall and visual imagery. Huffman CM, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):1027–34
Test anxiety and working memory system. Ikeda M, et al.
Percept Mot Skills 1996 Jun;82(3 Pt 2):1223–31
Attachment style and recognition of emotionally-laden drawings. Kirsh SJ. **Percept Mot Skills** 1996 Oct; 83(2):607–10
Learning test on expressive phonetic symbolism. Langenmayr A, et al. **Percept Mot Skills** 1996 Aug;83(1):227–39
Odors as cues for the recall of words unrelated to odor.

Morgan CL. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1227–34

Background instrumental music and serial recall. Nittono H. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1307–13

Word recall in deaf students: the effects of different coding strategies. Novack LL, et al. **Percept Mot Skills** 1996 Oct; 83(2):627–39

Auditory and visual recall of forward and backward digit spans. Powell DH, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1099–103

The total-time hypothesis and the acquisition of connected discourse as a function of mode of presentation, presentation rate, and intelligence. Riley LR, et al. **Percept Mot Skills** 1996 Aug;83(1):279–87

Autogenic training and dream recall. Schredl M, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1305–6

Effects of practice on identification of multidimensional stimuli. Shieh KK, et al. **Percept Mot Skills** 1996 Oct; 83(2):435–48

The blocked-random effect in pictures and words. Toglia MP, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):976–8

Role of pictorial cues in young children's distinguishing self-performed from self-imagined actions. Vandermaas-Peeler M. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1375–8

Time estimation: effects of cognitive task, presentation rate, and delay. Vitulli WF, et al. **Percept Mot Skills** 1996 Dec; 83(3 Pt 2):1387–94

Only visual impressions are almost always present in long-term memories, and reported completeness, accuracy, and verbalizability of recollections increase with age. Westman AS, et al. **Percept Mot Skills** 1996 Oct;83(2):531–9

Earliest memories and recall by modality usually involve recollections of different memories: memories are not amodal. Westman AS, et al. **Percept Mot Skills** 1996 Jun; 82(3 Pt 2):1131–5

Measurement of autobiographical recall. White RT. **Percept Mot Skills** 1997 Feb;84(1):34

Nonspatial visual attention explained by spatial attention plus limited storage. de Haan E, et al. **Perception** 1996; 25(5):591–608

Prior experience of form and illusory figures: new demonstrations [see comments] Parks TE. **Perception** 1996; 25(3):353–4. Comment in: Perception 1997;26(1):97–100.

Sustained stress and fixed interval performance. Kant GJ, et al. **Physiol Behav** 1997 Feb;61(2):279–84

Remote and proximal US preexposure and aging effects in taste aversion learning in rats. Misanin JR, et al. **Physiol Behav** 1997 Feb;61(2):221–4

Sleep deprivation by the "flower pot" technique and spatial reference memory. Youngblood BD, et al. **Physiol Behav** 1997 Feb;61(2):249–56

Generating 'tiger' as an animal name or a word beginning with T: differences in brain activation [published erratum appears in Proc R Soc Lond B Biol Sci 1996 Dec 22;263(1377):1755–6] Mummery CJ, et al. **Proc R Soc Lond B Biol Sci** 1996 Aug 22;263(1373):989–95

Corroborating sexual abuse, revisited [letter; comment] Tyroler P. **Psychiatr Serv** 1996 Dec;47(12):1393. Comment on: Psychiatr Serv 1996 Jul;47(7):764–5.

Recovery of high speed memory scanning after transient global amnesia: a case report. Okura M, et al. **Psychiatry Clin Neurosci** 1996 Dec;50(6):317–21

Discrimination and response bias in memory: effects of depression severity and psychomotor retardation. Brébion G, et al. **Psychiatry Res** 1997 May 5;70(2):95–103

The analyst's use of the lost-and-found metaphor in psychoanalysis. Hymer S. **Psychoanal Rev** 1997 Feb; 84(1):129–47

Episodic remembering in a population-based sample of nonagenarians: does major depression exacerbate the memory deficits seen in Alzheimer's disease? Bäckman L, et al. **Psychol Aging** 1996 Dec;11(4):649–57

Age-related differences in absolute but not relative metamemory accuracy. Connor LT, et al. **Psychol Aging** 1997 Mar;12(1):50–71

Adult age differences in recall of performed and nonperformed items. Earles JL. **Psychol Aging** 1996 Dec; 11(4):638–48

Effects of memory training on the subjective memory functioning and mental health of older adults: a meta-analysis. Floyd M, et al. **Psychol Aging** 1997 Mar; 12(1):150–61

Aging, cognitive resources, and declarative learning. Kirasic KC, et al. **Psychol Aging** 1996 Dec;11(4):658–70

Mediators of long-term memory performance across the life span. Park DC, et al. **Psychol Aging** 1996 Dec;11(4):621–37

Fact retrieval in younger and older adults: the role of mental models. Radvansky GA, et al. **Psychol Aging** 1996 Jun; 11(2):258–71

False recollection induced by photographs: a comparison of older and younger adults. Schacter DL, et al. **Psychol Aging** 1997 Jun;12(2):203–15

State-dependent learning in older and younger adults. Schramke CJ, et al. **Psychol Aging** 1997 Jun;12(2):255–62

Characteristics of associative learning in younger and older adults: evidence from an episodic priming paradigm. Spieler DH, et al. **Psychol Aging** 1996 Dec;11(4):607–20

Differential age-related processing limitations in recall and recognition tasks. Whiting WL 4th, et al. **Psychol Aging** 1997 Jun;12(2):216–24

The self-reference effect in memory: a meta-analysis. Symons CS, et al. **Psychol Bull** 1997 May;121(3):371–94

Mechanisms underlying memory impairment in schizophrenia. Brébion G, et al. **Psychol Med** 1997 Mar; 27(2):383–93

Reliability of retrospective reports of perceived maternal acceptance-rejection in childhood. Cournoyer DE, et al. **Psychol Rep** 1996 Feb;78(1):147–50

Response bias in self-reported history of plaintiffs compared with nonlitigating patients. Lees-Haley PR, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):811–8

Word frequency affects hypermnesia. Macie KM, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1379–82

Recollections of their fathers by homosexual and heterosexual men. Phelan JE. **Psychol Rep** 1996 Dec;79(3 Pt 1):1027–34

Properties of word cues for autobiographical memory. Rubin DC, et al. **Psychol Rep** 1997 Aug;81(1):47–50

The role of positive and negative affect in flashbulb memory [see comments] Scott D, et al. **Psychol Rep** 1996 Oct; 79(2):467–73. Comment in: Psychol Rep 1996 Dec;79(3 Pt 2):1169–70.

Early memories and maladjustment. Spirrison CL, et al. **Psychol Rep** 1997 Aug;81(1):227–33

Increased self-reported dental anxiety following completion of a dental history questionnaire. Wilson JF, et al. **Psychol Rep** 1997 Aug;81(1):59–62

Comments on Scott and Ponsoda's (1996) positive and negative flashbulb memories [comment] Wright DB, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1169–70. Comment on: Psychol Rep 1996 Oct;79(2):467–73.

Measures of spatial memory and routes of learning. Wender KF, et al. **Psychol Res** 1997;59(4):269–78

A dual representation theory of posttraumatic stress disorder. Brewin CR, et al. **Psychol Rev** 1996 Oct;103(4):670–86 (190 ref.)

Processes of memory loss, recovery, and distortion. Estes WK. **Psychol Rev** 1997 Jan;104(1):148–69

The emergence and early development of autobiographical memory. Howe ML, et al. **Psychol Rev** 1997 Jul; 104(3):499–523 (290 ref.)

The capacity theory of comprehension: new frontiers of evidence and arguments [comment] Just MA, et al. **Psychol Rev** 1996 Oct;103(4):773–80. Comment on: Psychol Rev 1996 Oct;103(4):761–72.

Dissociations in infant memory: rethinking the development of implicit and explicit memory. Rovee-Collier C. **Psychol Rev** 1997 Jul;104(3):467–98 (360 ref.)

The capacity theory of sentence comprehension: critique of Just and Carpenter (1992) [comment] [see comments] Waters GS, et al. **Psychol Rev** 1996 Oct;103(4):761–72. Comment on: Psychol Rev 1992 Jan;99(1):122–49. Comment in: Psychol Rev 1996 Oct;103(4):773–80.

Visual marking: prioritizing selection for new objects by top-down attentional inhibition of old objects. Watson DG, et al. **Psychol Rev** 1997 Jan;104(1):90–122

Affect and memory in depression: evidence of better delayed recall of positive than negative affect words. Calev A. **Psychopathology** 1996;29(2):71–6

Delusional repetitiveness--a peculiar form of delusional remembrance. Nakaya M. **Psychopathology** 1997;30(1):36–8

Health outcomes and cognitive aspects of recalled negative life events. Suedfeld P, et al. **Psychosom Med** 1997 Mar-Apr;59(2):172–7

Does context discriminate recollection from familiarity in recognition memory? Perfect TJ, et al. **Q J Exp Psychol A** 1996 Aug;49(3):797–813

Irrelevant pictures in visual working memory. Quinn JG, et al. **Q J Exp Psychol A** 1996 Feb;49(1):200–15

Interference with rehearsal in spatial working memory in the absence of eye movements. Smyth MM. **Q J Exp Psychol A** 1996 Nov;49(4):940–9

The measurement of verbal working memory capacity and its relation to reading comprehension. Waters GS, et al. **Q J Exp Psychol A** 1996 Feb;49(1):51–75

The supposed effect of interactive imagery in paired associate learning. Wilton RN, et al. **Q J Exp Psychol A** 1996 Nov; 49(4):888–900

The topography of sexually conditioned behaviour: effects of a trace interval. Akins CK, et al. **Q J Exp Psychol B** 1996 Nov;49(4):346–56

Landmark stability: further studies pointing to a role in spatial learning. Biegler R, et al. **Q J Exp Psychol B** 1996 Nov; 49(4):307–45

Activation of locations in working memory in cats. Goulet S, et al. **Q J Exp Psychol B** 1996 Feb;49(1):81–92

Recalling demonstrated and guided movements using imaginary and verbal rehearsal strategies. Hall C, et al. **Res Q Exerc Sport** 1997 Jun;68(2):136–44

Aspects of short-term auditory memory as revealed by a recognition task on multi-tone sequences. Prosser S. **Scand Audiol** 1995;24(4):247–53

Serial position effects in visual short-term memory for words and abstract spatial patterns. Korsnes MS, et al. **Scand J Psychol** 1996 Mar;37(1):62–73

Memory dysfunction in mild aphasics. Rönnberg J, et al. **Scand J Psychol** 1996 Mar;37(1):46–61

Implicit and explicit associative memory in patients with schizophrenia. Bazin N, et al. **Schizophr Res** 1996 Dec 15; 22(3):241–8

Working memory capacity predicts language comprehension in schizophrenic patients. Condray R, et al. **Schizophr Res** 1996 May;20(1–2):1–13

Language processing and memory in ill and well siblings from multiplex families affected with schizophrenia. Shedlack K, et al. **Schizophr Res** 1997 May 3;25(1):43–52

How reliable are relatives' retrospective reports of terminal illness? Patients and relatives' accounts compared. Hinton J. **Soc Sci Med** 1996 Oct;43(8):1229–36

Accuracy of patient recall of opportunistic smoking cessation advice in general practice [see comments] Ward J, et al. **Tob Control** 1996 Summer;5(2):110–3. Comment in: Tob Control 1996 Summer;5(2):95–6.

[Derivational morphology and lexical access: prefixed and pseudo-prefixed verbs] Babin JP. **Can J Exp Psychol** 1996 Dec;50(4):371–85 (Eng. Abstr.) **(Fre)**

[Comparative study of normal subjects and obsessive compulsive subjects on intrusive thoughts and memory] Bouvard M, et al. **Encephale** 1997 May-Jun;23(3):175–9 (Eng. Abstr.) **(Fre)**

[Voice identification in the Dr. Schneider case. Problems in speaker identification by lay persons] Künzel HJ. **Arch Kriminol** 1996 Jul-Aug;198(1–2):1–10 (Eng. Abstr.) **(Ger)**

[Disorders of early information processing and vigilance as vulnerability markers for schizophrenia] Suslow T, et al. **Fortschr Neurol Psychiatr** 1996 Mar;64(3):90–104 (81 ref.) (Eng. Abstr.) **(Ger)**

[Can "cerebral training" prevent or at least modify age-related memory loss?] Stoppe G. **Internist (Berl)** 1996 Mar; 37(3):317–8 **(Ger)**

[Long-term patients also need their history. The socio-geographic reconstruction of the life history as social pedagogic method for work with long-term patients] Bosshard M, et al. **Psychiatr Prax** 1997 Jan;24(1):28–31 (Eng. Abstr.) **(Ger)**

[Trauma diagnosis: difficulty in differentiating between recall and fantasy] Person ES, et al. **Psychother Psychosom Med Psychol** 1997 Mar-Apr; 47(3–4):97–107 (31 ref.) (Eng. Abstr.) **(Ger)**

[Dream recall and sleep disorders] Schredl M, et al. **Psychother Psychosom Med Psychol** 1997 Mar-Apr; 47(3–4):108–16 (Eng. Abstr.) **(Ger)**

[Memory performance of Parkinson patients with and without sleep apnea syndrome] Schwalen S, et al. **Wien Med Wochenschr** 1996;146(13–14):294–5 (Eng. Abstr.) **(Ger)**

[Mental images and mental models] Klauer KC, et al. **Z Psychol Z Angew Psychol** 1996;204(1):41–54 (Eng. Abstr.) **(Ger)**

[Remembering and acting out] Anstadt T, et al. **Z Psychosom Med Psychoanal** 1996;42(1):34–55 (Eng. Abstr.) **(Ger)**

[The role of biography in psychoanalysis] Küchenhoff J. **Z Psychosom Med Psychoanal** 1996;42(1):1–24 (Eng. Abstr.) **(Ger)**

[Childhood memories and adult dreams] Schredl M, et al. **Z Psychosom Med Psychoanal** 1996;42(1):25–33 (Eng. Abstr.) **(Ger)**

[Patient education: what does the patient know, what does he want to know? Thrombosis and wound infection] Giebel GD, et al. **Zentralbl Chir** 1997;122(3):186–9 (Eng. Abstr.) **(Ger)**

[Clinical studies in working populations: value and significance of anamnestic findings, clinical tests and instrumental tests for the diagnosis of musculoskeletal disorders of the upper extremities] De Marco F, et al. **Med Lav** 1996 Nov-Dec;87(6):561–80 (Eng. Abstr.) **(Ita)**

[Clinical studies in working populations: a model for the anamnestic investigation of the pathology of the upper limbs and its practical application] Menoni O, et al. **Med Lav** 1996 Nov-Dec;87(6):549–60 (Eng. Abstr.) **(Ita)**

[An examination of two reporting methods of falls among the elderly living in the community] Haga H, et al. **Nippon Koshu Eisei Zasshi** 1996 Nov;43(11):983–8 (Eng. Abstr.) **(Jpn)**

[Nonlinearity of interference in recognition memory for multiple contexts] Terasawa T. **Shinrigaku Kenkyu** 1996 Jun;67(2):141–6 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

6-OHDA bilateral lesions to the central amygdala do not affect vasopressin improvement of recall in rats. Winnicka MM. **Acta Neurobiol Exp (Warsz)** 1996;56(4):943–8

Fetal alcohol exposure produces delay-dependent memory deficits in juvenile and adult rats. Nagahara AH, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):710–5

Fluoxetine and involuntary recall of remote memories. Robertson AR. **Aust N Z J Psychiatry** 1997 Feb; 31(1):128–30

Lead-induced changes in NMDA receptor complex binding: correlations with learning accuracy and with sensitivity to learning impairments caused by MK-801 and NMDA administration. Cory-Slechta DA, et al. **Behav Brain Res** 1997 May;85(2):161–74

GM1 ganglioside improves spatial learning and memory of aged rats. Fong TG, et al. **Behav Brain Res** 1997 May; 85(2):203–11

Strain-dependent effects of D2 dopaminergic and muscarinic-cholinergic agonists and antagonists on memory consolidation processes in mice. Gasbarri A, et al. **Behav Brain Res** 1997 Jun;86(1):97–104

Effects of selective catechol-O-methyltransferase inhibitors on single-trial passive avoidance retention in male rats. Khromova I, et al. **Behav Brain Res** 1997 Jun;86(1):49–57

The GABAB receptor antagonist CGP 36,742 and the

nootropic oxiracetam facilitate the formation of long-term memory. Mondadori C, et al. **Behav Brain Res** 1996 May; 77(1-2):223-5

CGP 36,742, an orally active GABAB receptor antagonist, facilitates memory in a social recognition test in rats. Mondadori C, et al. **Behav Brain Res** 1996 May; 77(1-2):227-9

The effects of extended training and acute administration of an anxiolytic on avoidance learning and intertrial responding in the Syracuse strains of rats. Gendron CM, et al. **Behav Genet** 1996 Nov;26(6):575-80

Primacy and recency effects in rhesus monkeys (Macaca mulatta) using a serial probe recognition task: II. Effects of atropine sulfate. Castro CA. **Behav Neurosci** 1997 Aug; 111(4):676-82

DHEA-S selectively impairs contextual-fear conditioning: support for the antiglucocorticoid hypothesis. Fleshner M, et al. **Behav Neurosci** 1997 Jun;111(3):512-7

Effects of ethanol on nonspatial working memory and attention in rats. Givens B, et al. **Behav Neurosci** 1997 Apr; 111(2):275-82

A dose of MK801 previously shown to impair spatial learning in the radial maze attenuates primed burst potentiation in the dentate gyrus of freely moving rats. Hargreaves EL, et al. **Behav Neurosci** 1997 Feb;111(1):35-48

Analyses of response patterns clarify lead effects in olfactory reversal and extradimensional shift tasks: assessment of inhibitory control, associative ability, and memory. Hilson JA, et al. **Behav Neurosci** 1997 Jun;111(3):532-42

Acute corticosterone replacement reinstates performance on spatial and nonspatial memory tasks 3 months after adrenalectomy despite degeneration in the dentate gyrus. McCormick CM, et al. **Behav Neurosci** 1997 Jun; 111(3):518-31

Analysis of galanin and the galanin antagonist M40 on delayed non-matching-to-position performance in rats lesioned with the cholinergic immunotoxin 192 IgG-saporin. McDonald MP, et al. **Behav Neurosci** 1997 Jun;111(3):552-63

Galanin receptor antagonist M40 blocks galanin-induced choice accuracy deficits on a delayed-nonmatching-to-position task. McDonald MP, et al. **Behav Neurosci** 1996 Oct;110(5):1025-32

Increased activation of indirect semantic associations under psilocybin. Spitzer M, et al. **Biol Psychiatry** 1996 Jun 15; 39(12):1055-7

Auditory event-related potentials, auditory digit span, and clinical symptoms in chronic schizophrenic men on neuroleptic medication. Stefánsson SB, et al. **Biol Psychiatry** 1996 Jul 1;40(1):19-27

Midazolam and awareness with recall during total intravenous anaesthesia. Miller DR, et al. **Can J Anaesth** 1996 Sep;43(9):946-53

Pupillometric assessment of compensatory effort in a memory search task under physical and pharmacologically-induced suboptimal states. Deijen JB, et al. **Can J Exp Psychol** 1995 Sep;49(3):387-96

Differential effects of D2- and D4-blocking neuroleptics on the procedural learning of schizophrenic patients. Bédard MA, et al. **Can J Psychiatry** 1996 Sep;41(7 Suppl 1):S21-4

Interaction of CCK-4 induced anxiety and post-cat exposure anxiety in rats. Cohen H, et al. **Depress Anxiety** 1996-97; 4(3):144-5

Spatial cognition in alcoholics: influence of concurrent abuse of other drugs. Beatty WW, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2-3):167-74

Effects of acute daily administration of diazepam on spatial learning and working memory. Nakamura-Palacios EM, et al. **Drug Alcohol Depend** 1997 Jul 4;46(3):181-90

Evidence that a positive modulator of AMPA-type glutamate receptors improves delayed recall in aged humans. Lynch G, et al. **Exp Neurol** 1997 May;145(1):89-92

Recall in the sedated ICU patient. Cheng EY. **J Clin Anesth** 1996 Dec;8(8):675-8 (30 ref.)

Methamphetamine psychosis: spontaneous recurrence of paranoid-hallucinatory states and monoamine neurotransmitter function. Yui K, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):34-43

Effects of the tranquillizer diazepam and the stimulant methylphenidate on alertness and memory. Unrug A, et al. **Neuropsychobiology** 1997;36(1):42-8

Nitric oxide synthase inhibition impairs delayed recall in mature monkeys. Prendergast MA, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):81-7

Effects of a single intraseptal injection of NGF on spatial learning in the water maze. Janis LS, et al. **Physiol Behav** 1997 Jul;62(1):69-76

Reduction of the scopolamine-induced impairment of passive-avoidance performance by sigma receptor agonist in mice. Senda T, et al. **Physiol Behav** 1997 Feb; 61(2):257-64

Beneficial effects of thiamine on recognition memory and P300 in abstinent cocaine-dependent patients. Easton CJ, et al. **Psychiatry Res** 1997 May 30;70(3):165-74

Dose-dependent suppression of adrenocortical activity with metyrapone: effects on emotion and memory. Roozendaal B, et al. **Psychoneuroendocrinology** 1996 Nov;21(8):681-93

Improvement in accuracy of delayed recall in aged and non-aged, mature monkeys after intramuscular or transdermal administration of the CNS nicotinic receptor agonist ABT-418. Prendergast MA, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):276-84

Trazodone and triazolam: acute subject-rated and performance-impairing effects in healthy volunteers. Rush CR, et al. **Psychopharmacology (Berl)** 1997 May;131(1):9-18

PHYSIOLOGY

6-OHDA bilateral lesions to the central amygdala do not affect vasopressin improvement of recall in rats. Winnicka MM. **Acta Neurobiol Exp (Warsz)** 1996;56(4):943-8

Saccadic and smooth pursuit eye movements in memory-impaired elderly people. Versino M, et al. **Acta Neurol Scand** 1996 Jan;93(1):39-43

The effects of foveal load and visual context on peripheral letter recognition. Salvemini AV, et al. **Acta Psychol (Amst)** 1996 Aug;92(3):309-21

Song synthesis: further neuropsychological assumptions of induced song recall. Díaz de Chumaceiro CL. **Am J Psychoanal** 1997 Jun;57(2):167-78

Opposite effects on two different measures of retention following unilateral inactivation of the amygdala. Coleman-Mesches K, et al. **Behav Brain Res** 1997 Jun; 86(1):17-23

Unilateral amygdala inactivation after training attenuates memory for reduced reward. Coleman-Mesches K, et al. **Behav Brain Res** 1996 May;77(1-2):175-80

Piriform cortex ablations block navigational map learning in homing pigeons. Gagliardo A, et al. **Behav Brain Res** 1997 Jul;86(2):143-8

Development of vicarious trial-and-error behavior in odor discrimination learning in the rat: relation to hippocampal function? Hu D, et al. **Behav Brain Res** 1997 Jun; 86(1):67-70

Rats with partial striatal dopamine depletions exhibit robust and long-lasting behavioral deficits in a simple fixed-ratio bar-pressing task. Lindner MD, et al. **Behav Brain Res** 1997 Jun;86(1):25-40

The primate temporal pole: its putative role in object recognition and memory. Nakamura K, et al. **Behav Brain Res** 1996 May;77(1-2):53-77 (290 ref.)

Role of hippocampal 5-HT1A receptors on elevated plus maze exploration after a single restraint experience. Netto SM, et al. **Behav Brain Res** 1996 May;77(1-2):215-8

Resistance of experientially-induced changes in murine plus-maze behaviour to altered retest conditions. Rodgers RJ, et al. **Behav Brain Res** 1997 Jun;86(1):71-7

Genetic markers associated with high versus low performance on episodic memory tasks. Nilsson LG, et al. **Behav Genet** 1996 Nov;26(6):555-62

Spatial learning and memory at defined points of the estrous cycle: effects on performance of a hippocampal-dependent task. Berry B, et al. **Behav Neurosci** 1997 Apr;111(2):267-74

Delayed spontaneous alternation in intact and cerebellectomized control and lurcher mutant mice: differential role of cerebellar cortex and deep cerebellar nuclei. Caston J, et al. **Behav Neurosci** 1997 Feb; 111(1):214-8

Hippocampal lesions impair contextual fear conditioning in two strains of mice. Chen C, et al. **Behav Neurosci** 1996 Oct;110(5):1177-80

Evidence for localized and discrete roles for enkephalins during memory formation in the chick. Colombo PJ, et al. **Behav Neurosci** 1997 Feb;111(1):114-22

Psychological stress impairs spatial working memory: relevance to electrophysiological studies of hippocampal function. Diamond DM, et al. **Behav Neurosci** 1996 Aug; 110(4):661-72

The effects of electrolytic lesion to the shell subterritory of the nucleus accumbens on delayed non-matching-to-sample and four-arm baited eight-arm radial-maze tasks. Gal G, et al. **Behav Neurosci** 1997 Feb; 111(1):92-103

Dissociable effects of selective lesions to hippocampal subsystems on exploratory behavior, contextual learning, and spatial learning. Good M, et al. **Behav Neurosci** 1997 Jun;111(3):487-93

Contextual control of conditioned responding in rats with dorsal hippocampal lesions. Hall G, et al. **Behav Neurosci** 1996 Oct;110(5):933-45

Intact perceptual memory in the absence of conscious memory. Hamann SB, et al. **Behav Neurosci** 1997 Aug; 111(4):850-4

Hippocampal lesions impair memory for location but not color in passerine birds. Hampton RR, et al. **Behav Neurosci** 1996 Aug;110(4):831-5

Hippocampus and memory in a food-storing and in a nonstoring bird species. Hampton RR, et al. **Behav Neurosci** 1996 Oct;110(5):946-64

Motor cortex lesions do not affect learning or performance of the eyeblink response in rabbits. Ivkovich D, et al. **Behav Neurosci** 1997 Aug;111(4):727-38

Lack of a temporal gradient of retrograde amnesia following NMDA-induced lesions of the basolateral amygdala assessed with the fear-potentiated startle paradigm. Lee Y, et al. **Behav Neurosci** 1996 Aug;110(4):836-9

Hippocampal lesions cause learning deficits in inbred mice in the Morris water maze and conditioned-fear task. Logue SF, et al. **Behav Neurosci** 1997 Feb;111(1):104-13

The effects of dorsal versus ventral hippocampal, total hippocampal, and parietal cortex lesions on memory for allocentric distance in rats. Long JM, et al. **Behav Neurosci** 1996 Oct;110(5):922-32

Redistribution of spatial representation in the hippocampus of aged rats performing a spatial memory task. Mizumori SJ, et al. **Behav Neurosci** 1996 Oct;110(5):1006-16

Cold shock before associative conditioning blocks memory retrieval, but cold shock after conditioning blocks memory retention in Caenorhabditis elegans. Morrison GE, et al. **Behav Neurosci** 1997 Jun;111(3):564-78

Learning and memory for hierarchical relationships in the monkey: effects of aging. Rapp PR, et al. **Behav Neurosci** 1996 Oct;110(5):887-97

Dissociable properties of memory systems: differences in the flexibility of declarative and nondeclarative knowledge. Reber PJ, et al. **Behav Neurosci** 1996 Oct;110(5):861-71

Impaired recognition memory in patients with lesions limited to the hippocampal formation. Reed JM, et al. **Behav Neurosci** 1997 Aug;111(4):667-75

Basolateral amygdala lesions block glucocorticoid-induced modulation of memory for spatial learning. Roozendaal B, et al. **Behav Neurosci** 1996 Oct;110(5):1074-83

Chorda tympani nerve transection disrupts taste aversion learning to potassium chloride, but not sodium chloride. St. John SJ, et al. **Behav Neurosci** 1997 Feb;111(1):188-94

Spatial learning and memory deficits after telencephalic ablation in goldfish trained in place and turn maze procedures. Salas C, et al. **Behav Neurosci** 1996 Oct; 110(5):965-80

Taste aversion learning in fyn mutant mice. Schafe GE, et al. **Behav Neurosci** 1996 Aug;110(4):845-8

Differential effects of selective immunotoxic lesions of medial septal cholinergic cells on spatial working and reference memory. Shen J, et al. **Behav Neurosci** 1996 Oct; 110(5):1181-6

Remembrance of odors past: enhancement by central facilitation of AMPA receptors. Stäubli U, et al. **Behav Neurosci** 1996 Oct;110(5):1067-73

Disruption of the dopamine beta-hydroxylase gene in mice suggests roles for norepinephrine in motor function, learning, and memory. Thomas SA, et al. **Behav Neurosci** 1997 Jun;111(3):579-89

Involvement of the dorsal periaqueductal gray in the loss of fear-potentiated startle accompanying high footshock training. Walker DL, et al. **Behav Neurosci** 1997 Aug; 111(4):692-702

Cooling the area postrema induces conditioned taste aversions in male rats and blocks acquisition of LiCl-induced aversions. Wang Y, et al. **Behav Neurosci** 1997 Aug;111(4):768-76

Spatial and nonspatial learning across the rat estrous cycle. Warren SG, et al. **Behav Neurosci** 1997 Apr;111(2):259-66

Mutations that prevent associative learning in C. elegans. Wen JY, et al. **Behav Neurosci** 1997 Apr;111(2):354-68

Dissociative storage systems in human evaluative conditioning. Fulcher EP, et al. **Behav Res Ther** 1997 Jan; 35(1):1-10

Effects of suppressing the urge to drink on the accessibility of alcohol outcome expectancies. Palfai TP, et al. **Behav Res Ther** 1997 Jan;35(1):59-65

Covariation bias for blood-injury stimuli and aversive outcomes. Pury CL, et al. **Behav Res Ther** 1997 Jan; 35(1):35-47

Visuospatial working memory in patients with schizophrenia. Fleming K, et al. **Biol Psychiatry** 1997 Jan 1;41(1):43-9

PET brain mapping study of auditory verbal supraspan memory versus visual fixation in schizophrenia. Ganguli R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):33-42

Memory and executive functions in amnesic and non-amnesic patients with aneurysms of the anterior communicating artery. Diamond BJ, et al. **Brain** 1997 Jun;120 (Pt 6):1015-25

Retrieval of old memories: the temporofrontal hypothesis. Kroll NE, et al. **Brain** 1997 Aug;120 (Pt 8):1377-99

Food storing and the hippocampus in Paridae. Healy SD, et al. **Brain Behav Evol** 1996;47(4):195-9

Neural mechanisms of behavioral plasticity: metamorphosis and learning in Manduca sexta. Weeks JC, et al. **Brain Behav Evol** 1997;50 Suppl 1:69-80 (60 ref.)

Confabulation, memory deficits, and frontal dysfunction. Johnson MK, et al. **Brain Cogn** 1997 Jul;34(2):189-206

Which brain regions are critically involved in the retrieval of old episodic memory? Markowitsch HJ. **Brain Res Brain Res Rev** 1995 Sep;21(2):117-27 (124 ref.)

An event-related potential study of word-stem cued recall. Allan K, et al. **Brain Res Cogn Brain Res** 1996 Nov; 4(4):251-62

Mental transformations in the motor cortex. Pellizzer G. **Brain Res Cogn Brain Res** 1996 Dec;5(1-2):123-30 (23 ref.)

Event-related potentials and the recollection of associative information. Rugg MD, et al. **Brain Res Cogn Brain Res** 1996 Nov;4(4):297-304

Recognition of the mother's face by six-month-old infants: a neurobehavioral study. de Haan M, et al. **Child Dev** 1997 Apr;68(2):187-210

Consciousness and cognition may be mediated by multiple independent coherent ensembles. John ER, et al. **Conscious Cogn** 1997 Mar;6(1):3-39; discussion 40-1, 50-5, 65-6

Neural coherence and the content of consciousness. Thatcher RW. **Conscious Cogn** 1997 Mar;6(1):42-9

Functional anatomy of object recognition in humans: evidence from positron emission tomography and functional magnetic resonance imaging. Bly BM, et al. **Curr Opin Neurol** 1997 Feb;10(1):5-9 (27 ref.)

Effect of repetition and inspection times on picture recall in patients with dementia of Alzheimer type. Heun R, et

al. **Dement Geriatr Cogn Disord** 1997 May-Jun;8(3):152-6
Role of GABA in memory and anxiety. Kalueff A, et al. **Depress Anxiety** 1996-97;4(3):100-10 (86 ref.)
Alteration of corticothalamic perfusion ratios during a PTSD flashback. Liberzon I, et al. **Depress Anxiety** 1996-97; 4(3):146-50
Cheiro-oral syndrome and vivid recollection of past in thalamic infarction. Kim JS. **Eur Neurol** 1997;37(4):253-4
Encoding and retrieval of episodic memories: role of cholinergic and GABAergic modulation in the hippocampus. Hasselmo ME, et al. **Hippocampus** 1996; 6(6):693-708 (107 ref.)
A theory of hippocampal function in memory. Rolls ET. **Hippocampus** 1996;6(6):601-20
Magnetic resonance imaging correlates of memory impairment in the healthy elderly: association with medial temporal lobe atrophy but not white matter lesions. O'Brien JT, et al. **Int J Geriatr Psychiatry** 1997 Mar;12(3):369-74
Improvement of projection-type associative memories by using a two-phase recalling procedure [letter] Lee DL, et al. **Int J Neural Syst** 1996 May;7(2):181-5
Treatment with weak electromagnetic fields restores dream recall in a parkinsonian patient. Sandyk R. **Int J Neurosci** 1997 Jun;90(1-2):75-86
Event-related desynchronization (ERD) and the Dm effect: does alpha desynchronization during encoding predict later recall performance? Klimesch W, et al. **Int J Psychophysiol** 1996 Nov;24(1-2):47-60
Evidence of the origin of specific spontaneous head turns during intertrial intervals. Korhonen T, et al. **Integr Physiol Behav Sci** 1997 Apr-Jun;32(2):123-30
Do recognition-free recall discrepancies detect retrieval deficits in closed-head injury? Demonstrating the inaccuracies of a reviewer's critique. Cicchetti DV. **J Clin Exp Neuropsychol** 1997 Feb;19(1):144-8
Failure of prospective memory after acquired brain damage: preliminary investigation and suggestions for future directions. Cockburn J. **J Clin Exp Neuropsychol** 1996 Apr; 18(2):304-9
Some critical remarks regarding Veiel's comment on Wilde et al. (1995). Fuerst DR. **J Clin Exp Neuropsychol** 1997 Feb;19(1):149-52
Forgetting rate and interference effects on a verbal memory distractor task in patients with temporal lobe epilepsy. Giovagnoli AR, et al. **J Clin Exp Neuropsychol** 1996 Apr; 18(2):259-64
Conceptual reasoning as a mediator of verbal recall in patients with multiple sclerosis. Troyer AK, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):211-9
CVLT recognition-recall discrepancies and retrieval deficits. A comment on Wilde et al. (1995). Veiel HO. **J Clin Exp Neuropsychol** 1997 Feb;19(1):141-3
Assessment of prose recall performance in chronic alcoholics: recall of essential versus detail propositions. Tivis LJ, et al. **J Clin Psychol** 1997 Apr;53(3):233-42
Information processing and affective distress in osteoarthritis patients. Calfas KJ, et al. **J Consult Clin Psychol** 1997 Aug; 65(4):576-81
Remember that? A comparison of real-time versus retrospective recall of smoking lapses. Shiffman S, et al. **J Consult Clin Psychol** 1997 Apr;65(2):292-300
Effort, interest, and recall: beliefs and behaviors of preschoolers. O'Sullivan JT. **J Exp Child Psychol** 1997 Apr; 65(1):43-67
Temporal distinctiveness and modality. Marks AR, et al. **J Exp Psychol Learn Mem Cogn** 1997 Jan;23(1):164-80
Individual patient prediction of seizure lateralization in temporal lobe epilepsy: a comparison between neuropsychological memory measures and the Intracarotid Amobarbital Procedure. Kneebone AC, et al. **J Int Neuropsychol Soc** 1997 Mar;3(2):159-68
Transcranial doppler assessment of cerebral flow velocity during perception and recognition of melodies. Matteis M, et al. **J Neurol Sci** 1997 Jul;149(1):57-61
Spatial memory and path integration studied by self-driven passive linear displacement. I. Basic properties. Israël I, et al. **J Neurophysiol** 1997 Jun;77(6):3180-92
Activation on the medial wall during remembered sequences of reaching movements in monkeys. Picard N, et al. **J Neurophysiol** 1997 Apr;77(4):2197-201
Positron emission tomography study of voluntary saccadic eye movements and spatial working memory. Sweeney JA, et al. **J Neurophysiol** 1996 Jan;75(1):454-68
Functional anatomic studies of memory retrieval for auditory words and visual pictures. Buckner RL, et al. **J Neurosci** 1996 Oct 1;16(19):6219-35
Age-related differences in neural activity during memory encoding and retrieval: a positron emission tomography study. Cabeza R, et al. **J Neurosci** 1997 Jan 1;17(1):391-400
Recalling routes around london: activation of the right hippocampus in taxi drivers. Maguire EA, et al. **J Neurosci** 1997 Sep 15;17(18):7103-10
A role for the right anterior temporal lobe in taste quality recognition. Small DM, et al. **J Neurosci** 1997 Jul 1; 17(13):5136-42
Differences in intentional retrieval during inclusion and exclusion tasks. De Houwer J. **Memory** 1997 May; 5(3):379-400
What brings intentions to mind? An in situ study of prospective memory. Sellen AJ, et al. **Memory** 1997 Jul; 5(4):483-507
Arousal-induced modulation of memory storage processes in humans. Nielson KA, et al. **Neurobiol Learn Mem** 1996 Sep;66(2):133-42
Living/non-living dissociation in a case of semantic dementia: a SPECT activation study. Cardebat D, et al. **Neuropsychologia** 1996 Dec;34(12):1175-9
Recency effect in anterograde amnesia: evidence for distinct memory stores underlying enhanced retrieval of terminal items in immediate and delayed recall paradigms. Carlesimo GA, et al. **Neuropsychologia** 1996 Mar;34(3):177-84
A fronto-parietal network for rapid visual information processing: a PET study of sustained attention and working memory. Coull JT, et al. **Neuropsychologia** 1996 Nov; 34(11):1085-95
False recognition after a right frontal lobe infarction: memory for general and specific information. Curran T, et al. **Neuropsychologia** 1997 Jul;35(7):1035-49
Human temporal lobe potentials in verbal learning and memory processes. Elger CE, et al. **Neuropsychologia** 1997 May;35(5):657-67
The effect of presentation rate on the comprehension and recall of speech after anterior temporal-lobe resection. Johnsrude I, et al. **Neuropsychologia** 1994 Jan;32(1):77-84
Effects of orbital frontal and anterior cingulate lesions on object and spatial memory in rhesus monkeys. Meunier M, et al. **Neuropsychologia** 1997 Jul;35(7):999-1015
Strategic retrieval and the frontal lobes: evidence from confabulation and amnesia. Moscovitch M, et al. **Neuropsychologia** 1997 Jul;35(7):1017-34
Differential impairments in recalling people's names: a case study in search of neuroanatomical correlates. Reinkemeier M, et al. **Neuropsychologia** 1997 May;35(5):677-84
The grammatical properties of mass nouns: an aphasia case study. Semenza C, et al. **Neuropsychologia** 1997 May; 35(5):669-75
Recall of frequency of occurrence of self-generated and examiner-provided words after frontal or temporal lobectomy. Smith ML. **Neuropsychologia** 1996 Jun; 34(6):553-63
Fragments of memory. Weiskrantz L. **Neuropsychologia** 1997 Jul;35(7):1051-7
Intact and impaired conceptual memory processes in amnesia. Keane MM, et al. **Neuropsychology** 1997 Jan;11(1):59-69
Odor learning, recall, and recognition memory in young and elderly adults. Murphy C, et al. **Neuropsychology** 1997 Jan; 11(1):126-37
A functional magnetic resonance imaging study of episodic memory. Busatto G, et al. **Neuroreport** 1997 Aug 18; 8(12):2671-5
Different roles of the left and right parahippocampal regions in verbal recognition: a PET study. Fujii T, et al. **Neuroreport** 1997 Mar 24;8(5):1113-7
Brain regions supporting intentional and incidental memory: a PET study. Rugg MD, et al. **Neuroreport** 1997 Mar 24; 8(5):1283-7
Differential effects of learning and recall of a spatial task on phosphoinositide hydrolysis induced by the metabotropic glutamate receptor agonist 1S,3R-ACPD (1S,3R-1-amino-cyclopentane-1,3-discarboxylic acid) in the hippocampus and the prefrontal cortex of rats. de Bruin JP, et al. **Neurosci Lett** 1996 Feb 2;204(1-2):57-60
Long-term consequences of subtle stimuli during the first twenty-four hours of seizure-induced brain injury. Cook LL, et al. **Percept Mot Skills** 1996 Oct;83(2):523-9
Demands during maze. learning in limbic epileptic rats: selective damage in the thalamus? Cook LL, et al. **Percept Mot Skills** 1996 Aug;83(1):323-9
Roles of the basolateral amygdala and hippocampus in social recognition in rats. Maaswinkel H, et al. **Physiol Behav** 1996 Jul;60(1):55-63
Behavioral differences between outbred Wistar, inbred Fischer 344, brown Norway, and hybrid Fischer 344 x brown Norway rats. van der Staay FJ, et al. **Physiol Behav** 1996 Jul;60(1):97-109
Positron-emission tomography imaging of long-term shape recognition challenges. Rosier A, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7627-32
Impaired episodic memory retrieval in a case of probable psychogenic amnesia. Markowitsch HJ, et al. **Psychiatry Res** 1997 May 16;74(2):119-26
Toward a theory of episodic memory: the frontal lobes and autonoetic consciousness. Wheeler MA, et al. **Psychol Bull** 1997 May;121(3):331-54 (155 ref.)
Performance on the delayed word recall test (DWR) fails to differentiate clearly between depression and Alzheimer's disease in the elderly. O'Carroll RE, et al. **Psychol Med** 1997 Jul;27(4):967-71
Context-dependent behavioral effects of interleukin-1 in the rhesus monkey (Macaca mulatta). Friedman EM, et al. **Psychoneuroendocrinology** 1996 Jul;21(5):455-68
Posttraumatic stress symptoms, intrusive thoughts, loss, and immune function after Hurricane Andrew [see comments] Ironson G, et al. **Psychosom Med** 1997 Mar-Apr; 59(2):128-41. Comment in: Psychosom Med 1997 Mar-Apr;59(2):142-3.
Separate neural bases of two fundamental memory processes in the human medial temporal lobe. Gabrieli JDE, et al. **Science** 1997 Apr 11;276(5310):264-6
[Effect of adenotomy on mental performance of children with adenoid vegetations] Paditz E, et al. **Wien Med Wochenschr** 1996;146(13-14):327-8 (Eng. Abstr.) **(Ger)**

RECEIVER OPERATING CHARACTERISTIC see **ROC CURVE**

RECEPTOR AGGREGATION

Local accumulation of alpha-spectrin-related protein under plasma membrane during capping and phagocytosis in Acanthamoeba. Kwiatkowska K, et al. **Cell Motil Cytoskeleton** 1997;36(3):253-65
Biochemical evidence that the phosphorylated tyrosines, serines, and threonines on the aggregated high affinity receptor for IgE are in the immunoreceptor tyrosine-based activation motifs. Pribluda VS, et al. **J Biol Chem** 1997 Apr 25;272(17):11185-92
Integrins can collaborate with growth factors for phosphorylation of receptor tyrosine kinases and MAP kinase activation: roles of integrin aggregation and occupancy of receptors. Miyamoto S, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1633-42
Aggregation of low affinity IgG receptors induces mast cell adherence to fibronectin: requirement for the common FcR gamma-chain. Dastych J, et al. **J Immunol** 1997 Feb 15; 158(4):1803-9
Effects of denervation on acetylcholine receptor clusters on frog cardiac ganglion neurons as revealed by quantitative laser scanning confocal microscopy. Horch HL, et al. **J Neurosci** 1996 Mar 1;16(5):1720-9
The role of an agrin-growth factor interaction in ACh receptor clustering. Daggett DF, et al. **Mol Cell Neurosci** 1996;8(4):272-85
Clustering of GABAA receptors by rapsyn/43kD protein in vitro. Yang SH, et al. **Mol Cell Neurosci** 1997;8(6):430-8
Immunons revisited: binding of multivalent antigens to B cells. Sulzer B, et al. **Mol Immunol** 1997 Jan;34(1):63-74 (24 ref.)
Heteromultimerization and NMDA receptor-clustering activity of Chapsyn-110, a member of the PSD-95 family of proteins. Kim E, et al. **Neuron** 1996 Jul;17(1):103-13
Cross-linking of concanavalin A receptors on cortical neurons induces programmed cell death. Cribbs DH, et al. **Neuroscience** 1996 Nov;75(1):173-85
Shuttling of initiating kinase between discrete aggregates of the high affinity receptor for IgE regulates the cellular response. Torigoe C, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1372-7

DRUG EFFECTS

Heparin inhibits acetylcholine receptor aggregation at two distinct steps in the agrin-induced pathway. Hopf C, et al. **Eur J Neurosci** 1997 Jun;9(6):1170-7

IMMUNOLOGY

Homotypic interactions mediated through LFA-1/ICAM-3 decrease the proliferative response of activated T cells. Green JM, et al. **Cell Immunol** 1996 Jul 10;171(1):126-31
Human killer cell activatory receptors for MHC class I molecules are included in a multimeric complex expressed by natural killer cells. Olcese L, et al. **J Immunol** 1997 Jun 1;158(11):5083-6

PHYSIOLOGY

Rac G, a small GTPase, regulates capping of surface receptors in Entamoeba histolytica. Guillen N, et al. **Arch Med Res** 1997;28 Spec No:129-31

RECEPTOR-CD3 COMPLEX, ANTIGEN, T-CELL

see related

SIGNAL TRANSDUCTION

[TCR CDR3 motif expression in PLP specific T cell from patients with multiple sclerosis] Kondo T, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):666-9 (8 ref.) **(Jpn)**
[Programmed thymic T cell death and negative selection via Fas and TCR/CD3 complex] Kishi S. **Nippon Rinsho** 1996 Jul;54(7):1760-7 (17 ref.) (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

The interchain disulfide bond between TCR alpha beta heterodimers on human T cells is not required for TCR-CD3 membrane expression and signal transduction. Arnaud J, et al. **Int Immunol** 1997 Apr;9(4):615-26
Degradation of T cell receptor (TCR)-CD3-zeta complexes after antigenic stimulation [see comments] Valitutti S, et al. **J Exp Med** 1997 May 19;185(10):1859-64. Comment in: J Exp Med 1997 May 19;185(10):1717-9.
Oxidative stress by tumor-derived macrophages suppresses the expression of CD3 zeta chain of T-cell receptor complex and antigen-specific T-cell responses. Otsuji M, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):13119-24
Felty's syndrome, pseudo-felty's syndrome, monoclonal or polyclonal CD3 lymphocytosis of undetermined significance. Masson C, et al. **Rev Rhum Engl Ed** 1996 Jan; 63(1):5-8 (32 ref.)
Expression and signal transduction of T-cell antigen receptor (TCR)/CD3 complexes on fresh or in vitro expanded T lymphocytes from patients with Hodgkin's and non-Hodgkin's lymphomas. Rubin B, et al.

Scand J Immunol 1997 Jun;45(6):715-25

CHEMISTRY

Functionally active T cell receptor/CD3 complexes are present at the surface of cloned cytotoxic T cells without fluorescence-immunological detectability. Staege MS, et al. **Cell Immunol** 1996 Jul 10;171(1):62-7

The T cell antigen receptor beta chain interacts with the extracellular domain of CD3-gamma. Manolios N, et al. **Immunol Cell Biol** 1995 Dec;73(6):532-6

DRUG EFFECTS

Influence on CD8 of TCR/CD3-generated signals in CTL clones and CTL precursor cells. Anel A, et al. **J Immunol** 1997 Jan 1;158(1):19-28

Tyrosine phosphorylation and recruitment of ZAP-70 to the CD3-TCR complex are defective after CD2 stimulation. Hubert P, et al. **J Immunol** 1996 Nov 15;157(10):4322-32

GENETICS

Susceptibility to actively-induced murine experimental allergic encephalomyelitis is not linked to genes of the T cell receptor or CD3 complexes. Livingstone KD, et al. **Autoimmunity** 1995;21(3):195-201

Functions of TCR and pre-TCR subunits: lessons from gene ablation. Malissen B, et al. **Curr Opin Immunol** 1996 Jun; 8(3):383-93 (69 ref.)

Isolation of T cell receptor gamma/delta chain constant genes from minke whale. Zhang XM, et al. **Exp Clin Immunogenet** 1995;12(4):245-52

In vitro translation and assembly of a complete T cell receptor-CD3 complex. Huppa JB, et al. **J Exp Med** 1997 Aug 4;186(3):393-403

IMMUNOLOGY

Cell cycle control of T cell apoptosis induced by activation through the T cell antigen receptor. Chalupny NJ, et al. **Adv Exp Med Biol** 1996;406:57-67 (31 ref.)

Interaction between cell-surface-expressed 70-kilodalton heat shock protein-like antigen and CD3(+)4(-)8(-) killer T cells. Takashima S, et al. **Artif Organs** 1996 Aug; 20(8):857-61

TcR zeta/CD3 signal transduction in T-cells: downstream signalling via ZAP-70, SLP-76 and FYB. da Silva AJ, et al. **Biochem Soc Trans** 1997 May;25(2):361-6

Transfer of the interleukin-2 gene into human cancer cells induces specific antitumor recognition and restores the expression of CD3/T-cell receptor associated signal transduction molecules. Guarini A, et al. **Blood** 1997 Jan 1;89(1):212-8

T10B9 (MEDI-500) mediated immunosuppression: studies on the mechanism of action. Brown SA, et al. **Clin Transplant** 1996 Dec;10(6 Pt 2):607-13

T cell receptors and T cell development. Chen CH, et al. **Curr Top Microbiol Immunol** 1996;212:37-53 (88 ref.)

Analysis of T-cell receptor beta of the T-cell clones reactive to the human PDC-E2 163-176 peptide in the context of HLA-DR53 in patients with primary biliary cirrhosis. Ichiki Y, et al. **Hepatology** 1997 Sep;26(3):728-33

Regulation of Vav-SLP-76 binding by ZAP-70 and its relevance to TCR zeta/CD3 induction of interleukin-2. Raab M, et al. **Immunity** 1997 Feb;6(2):155-64

Early T-cell development in CD3-deficient mice. Tanaka Y, et al. **Immunol Rev** 1995 Dec;148:171-99 (89 ref.)

Enhancement of CD3-mediated thymocyte apoptosis by the cross-linkage of heat-stable antigen. Hitsumoto Y, et al. **Immunology** 1996 Oct;89(2):200-4

Selective contact during TCR recognition. Feng MH, et al. **Int Immunol** 1996 Jan;8(1):45-55

Convergence of Schiff base costimulatory signaling and TCR signaling at the level of mitogen-activated protein kinase ERK2. Chen H, et al. **J Immunol** 1997 Sep 1;159(5):2274-81

MHC class I ligation of human T cells activates the ZAP70 and p56lck tyrosine kinases, leads to an alternative phenotype of the TCR/CD3 zeta-chain, and induces apoptosis. Skov S, et al. **J Immunol** 1997 Apr 1; 158(7):3189-96

Different CD3/T cell receptor monoclonal antibodies have distinct capacities to induce adhesion of T lymphocytes to endothelium. Buysmann S, et al. **J Lab Clin Med** 1997 Jul;130(1):91-101

An alpha-chain TCR CDR3 peptide can enhance EAE induced by myelin basic protein or proteolipid protein. Yamamura T, et al. **J Neurosci Res** 1996 Sep 15; 45(6):706-13

Differential ability of T cell subsets to undergo activation-induced cell death. Varadhachary AS, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5778-83

Role of polymorphic Fc receptor Fc gammaRIIa in cytokine release and adverse effects of murine IgG1 anti-CD3/T cell receptor antibody (WT31). Tax WJ, et al. **Transplantation** 1997 Jan 15;63(1):106-12

METABOLISM

Distribution of T-cell signalling molecules in human myeloma. Bianchi A, et al. **Br J Haematol** 1997 Jun; 97(4):815-20

Association of murine splenocyte CD3 complex to the cytoskeleton: absence of modulation by exogenous fatty acids. Peck MD, et al. **Cell Biol Int** 1996 Aug;20(8):531-7

Cross-linking the TCR complex induces apoptosis in CD4+8+ thymocytes in the presence of cyclosporin A. Poetschke HL, et al. **Dev Immunol** 1996;5(1):1-15

Differential interaction of the CD2 extracellular and intracellular domains with the tyrosine phosphatase CD45 and the zeta chain of the TCR/CD3/zeta complex. Verhagen AM, et al. **Eur J Immunol** 1996 Dec; 26(12):2841-9

Physical and functional association of CD45 and CD3-TCR complex on CD1+ human thymocytes. Evidence that the engagement of CD45 molecules can prevent CD1+ thymocytes from apoptosis. Poggi A, et al. **Int Immunol** 1996 Dec;8(12):1947-53

In vitro translation and assembly of a complete T cell receptor-CD3 complex. Huppa JB, et al. **J Exp Med** 1997 Aug 4;186(3):393-403

Tyrosine phosphorylation and recruitment of ZAP-70 to the CD3-TCR complex are defective after CD2 stimulation. Hubert P, et al. **J Immunol** 1996 Nov 15;157(10):4322-32

Tyrosine and serine protein kinase activities associated with ligand-induced internalized TCR/CD3 complexes. Luton F, et al. **J Immunol** 1997 Apr 1;158(7):3140-7

Splenocyte glutathione and CD3-mediated cell proliferation are reduced in mice fed a protein-deficient diet. Taylor CG, et al. **J Nutr** 1997 Jan;127(1):44-50

Expression and catalytic activities of protein tyrosine kinases (PTKs) Fyn and Lck in peripheral blood T cells from elderly humans stimulated through the T cell receptor (TCR)/CD3 complex. Whisler RL, et al. **Mech Ageing Dev** 1997 Oct;98(1):57-73

PHYSIOLOGY

CD2 rescues T cells from T-cell receptor/CD3 apoptosis: a role for the Fas/Fas-L system. Ayroldi E, et al. **Blood** 1997 May 15;89(10):3717-26

Functionally active T cell receptor/CD3 complexes are present at the surface of cloned cytotoxic T cells without fluorescence-immunological detectability. Staege MS, et al. **Cell Immunol** 1996 Jul 10;171(1):62-7

Functions of TCR and pre-TCR subunits: lessons from gene ablation. Malissen B, et al. **Curr Opin Immunol** 1996 Jun; 8(3):383-93 (69 ref.)

Characterization of H4: a mouse T lymphocyte activation molecule functionally associated with the CD3/T cell receptor. Redoglia V, et al. **Eur J Immunol** 1996 Nov; 26(11):2781-9

HIV glycoprotein gp120 inhibits TCR-CD3-mediated activation of fyn and lck. Morio T, et al. **Int Immunol** 1997 Jan;9(1):53-64

Regulation of interleukin-2 transcription by inducible stable expression of dominant negative and dominant active mitogen-activated protein kinase kinase kinase in jurkat T cells. Evidence for the importance of Ras in a pathway that is controlled by dual receptor stimulation. Faris M, et al. **J Biol Chem** 1996 Nov 1;271(44):27366-73

[Mechanism of activation of T-lymphocytes by CD3-receptor T complex] Hubert P. **Rev Med Interne** 1996;17(11):954-6 **(Fre)**

RECEPTOR, COMPLEMENT 3 see **MACROPHAGE-1 ANTIGEN**

RECEPTOR-MEDIATED SIGNAL TRANSDUCTION see **SIGNAL TRANSDUCTION**

RECEPTOR PROTEIN-TYROSINE KINASE

see related

PROTO-ONCOGENE PROTEINS C-KIT

[Receptors for factors of the VEGF (Vascular Endothelial Growth Family)] Fournier E, et al. **Bull Cancer** 1997 Apr; 84(4):397-405 (61 ref.) (Eng. Abstr.) **(Fre)**

AGONISTS

Specificity determinants in neurotrophin-3 and design of nerve growth factor-based trkC agonists by changing central beta-strand bundle residues to their neurotrophin-3 analogs. Urfer R, et al. **Biochemistry** 1997 Apr 22; 36(16):4775-81

Growth, differentiation and survival of HC11 mammary epithelial cells: diverse effects of receptor tyrosine kinase-activating peptide growth factors. Merlo GR, et al. **Eur J Cell Biol** 1996 Jun;70(2):97-105

ANALYSIS

Hepatocyte growth factor. A cytokine mediating endothelial migration in inflammatory arthritis. Koch AE, et al. **Arthritis Rheum** 1996 Sep;39(9):1566-75

Expression of scatter factor and c-met receptor in benign and malignant breast tissue. Jin L, et al. **Cancer** 1997 Feb 15;79(4):749-60

Does receptor-'Ck' deficiency initiate leukaemia? Kaul D, et al. **Cancer Lett** 1997 Jan 30;112(2):199-202

Enhanced expression of hepatocyte growth factor/c-Met by myocardial ischemia and reperfusion in a rat model [see comments] Ono K, et al. **Circulation** 1997 Jun 3; 95(11):2552-8. Comment in: Circulation 1997 Jun 3;95(11):2471-2.

Identification by polymerase chain reaction of the G protein-coupled receptor kinases expressed in the mouse gonadotropic alpha T3-1 cell line. Neill JD, et al. **Endocrinology** 1996 Sep;137(9):3942-7

Detection of MET oncogene/hepatocyte growth factor receptor in lymph node metastases from head and neck squamous cell carcinomas. Galeazzi E, et al. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S138-43

Molecular analysis of the RET proto-oncogene in patients with sporadic medullary thyroid carcinoma: a novel point mutation in the extracellular cysteine-rich domain. Bugalho MJ, et al. **Eur J Endocrinol** 1997 Apr;136(4):423-6

A paracrine role for myoepithelial cell-derived FGF2 in the normal human breast. Gomm JJ, et al. **Exp Cell Res** 1997 Jul 10;234(1):165-73

Hepatocyte growth factor and c-MET in benign and malignant peripheral nerve sheath tumors. Rao UN, et al. **Hum Pathol** 1997 Sep;28(9):1066-70

Prognostic value of vascular endothelial growth factor and its receptor Flt-1 in squamous cell lung cancer. Volm M, et al. **Int J Cancer** 1997 Feb 20;74(1):64-8

Tyrosine kinase receptors concentrated in caveolae-like domains from neuronal plasma membrane. Wu C, et al. **J Biol Chem** 1997 Feb 7;272(6):3554-9

Visualization of several binding sites for basic fibroblast growth factor (FGF-2) on fibroblasts by photoaffinity labeling: evidence for intracellular complexes. Gannoun-Zaki L, et al. **J Cell Biochem** 1996 Aug; 62(2):240-50

Developmental expression and distinctive tyrosine phosphorylation of the Eph-related receptor tyrosine kinase Cek9. Soans C, et al. **J Cell Biol** 1996 Nov; 135(3):781-95

Correlation between expression of vascular endothelial growth factor and tumor vascularity, and patient outcome in human gastric carcinoma. Tanigawa N, et al. **J Clin Oncol** 1997 Feb;15(2):826-32

Cellular localization of Pan-trk immunoreactivity and trkC mRNA in the enteric nervous system. Sternini C, et al. **J Comp Neurol** 1996 May 13;368(4):597-607

Immunohistochemical detection of p140trkA and p75LNGFR neurotrophin receptors in neuroblastoma. Dominici C, et al. **J Neurooncol** 1997 Jan;31(1-2):57-64

ret Proto-oncogene product is a useful marker of lineage determination in the development of the enteric nervous system in rats. Watanabe Y, et al. **J Pediatr Surg** 1997 Jan; 32(1):28-33

Neurotrophin-3 and trkC-immunoreactive neurons in rat dorsal root ganglia correlate by distribution and morphology. Chen C, et al. **Neurochem Res** 1996 Jul; 21(7):809-14

Differential distribution of BDNF and TRKB in regenerating dorsal column axons. Cameron AA. **Neuroreport** 1997 Aug 18;8(12):2655-9

trk-like immunoreactivity in the human trigeminal ganglion and subnucleus caudalis. Quartu M, et al. **Neuroreport** 1996 Apr 10;7(5):1013-9

Immunodetection of c-met-oncogene's protein product in renal cell neoplasia. Nakopoulou L, et al. **Pathol Res Pract** 1997;193(4):299-304

Trk-like proteins during the post-hatching growth of the avian bursa of Fabricius. Ciriaco E, et al. **Vet Immunol Immunopathol** 1997 Mar;55(4):313-20

[The molecular pathology of RET protooncogene in families with multiple endocrine neoplasia type 2A] Biarnés J, et al. **Med Clin (Barc)** 1996 Sep 21;107(9):321-5 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

A radioactive binding assay for inhibitors of trkA kinase. Knight E Jr, et al. **Anal Biochem** 1997 May 1;247(2):376-81

Phosphorylation site-specific inhibition of platelet-derived growth factor beta-receptor autophosphorylation by the receptor blocking tyrphostin AG1296. Kovalenko M, et al. **Biochemistry** 1997 May 27;36(21):6260-9

Interleukin-1 blocks insulin and insulin-like growth factor-stimulated growth in MCF-7 human breast cancer cells by inhibiting receptor tyrosine kinase activity. Costantino A, et al. **Endocrinology** 1996 Oct;137(10):4100-7

Selective inhibition of platelet-derived growth factor (PDGF) receptor autophosphorylation and PDGF-mediated cellular events by a quinoline derivative. Yagi M, et al. **Exp Cell Res** 1997 Aug 1;234(2):285-92

CEP-751 inhibits TRK receptor tyrosine kinase activity in vitro OFF exhibits anti-tumor activity. Camoratto AM, et al. **Int J Cancer** 1997 Aug 7;72(4):673-9

Inhibition of G protein-coupled receptor kinase subtypes by Ca2+/calmodulin. Chuang TT, et al. **J Biol Chem** 1996 Nov 8;271(45):28691-6

Structure-activity relationships for a novel series of pyrido[2,3-d]pyrimidine tyrosine kinase inhibitors. Hamby JM, et al. **J Med Chem** 1997 Jul 18;40(15):2296-303

Suppression of p140trkA does not abolish nerve growth factor-mediated rescue of serum-free PC12 cells. Taglialatela G, et al. **J Neurochem** 1996 May;66(5):1826-35

Inhibition of the erbB-2 tyrosine kinase receptor in breast cancer cells by phosphoromonothioate and phosphorodithioate antisense oligonucleotides. Vaughn JP, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4558-64

Angiopoietin-2, a natural antagonist for Tie2 that disrupts in vivo angiogenesis [see comments] Maisonpierre PC, et al. **Science** 1997 Jul 4;277(5322):55-60. Comment in: Science 1997 Jul 4;277(5322):48-50.

BIOSYNTHESIS

Coexpression of flt-3 ligand/flt-3 and SCF/c-kit signal transduction system in bile-duct-ligated SI and W mice. Omori M, et al. **Am J Pathol** 1997 Apr;150(4):1179-87

Molecular cloning of two rat GRK6 splice variants. Firsov D, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C953-61

Differentially regulated epithelial expression of an Eph family tyrosine kinase (fHek2) during tracheal surface airway and submucosal gland development. Presente A, et al. **Am J Respir Cell Mol Biol** 1997 Jan;16(1):53-61

Neurotrophin receptors expression in the developing mouse retina: an immunohistochemical study. Llamosas MM, et al. **Anat Embryol (Berl)** 1997 Apr;195(4):337-44

Expression of the receptor protein tyrosine kinase myk-1/htk in normal and malignant mammary epithelium. Berclaz G, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):869-75

Ontogeny of hepatocyte growth factor and c-met/hgf receptor in rat pancreas. Calvo EL, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):257-63

Expression of a kinase-defective Eph-like receptor in the normal human brain. Matsuoka H, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):487-92

Identification of a putative G protein-coupled receptor kinase in Schizosaccharomyces pombe. Watson P, et al. **Biochem Soc Trans** 1997 May;25(2):226S

Hepatocyte growth factor and its receptor c-met in multiple myeloma. Börset M, et al. **Blood** 1996 Nov 15; 88(10):3998-4004

Expression of the RET receptor tyrosine kinase and GDNFR-alpha in normal and leukemic human hematopoietic cells and stromal cells of the bone marrow microenvironment. Gattei V, et al. **Blood** 1997 Apr 15; 89(8):2925-37

Selective expression of the receptor tyrosine kinase, HTK, on human erythroid progenitor cells. Inada T, et al. **Blood** 1997 Apr 15;89(8):2757-65

Functional and phenotypic characterization of cord blood and bone marrow subsets expressing FLT3 (CD135) receptor tyrosine kinase. Rappold I, et al. **Blood** 1997 Jul 1;90(1):111-25

Expression of functional TrkA receptor tyrosine kinase in the HMC-1 human mast cell line and in human mast cells. Tam SY, et al. **Blood** 1997 Sep 1;90(5):1807-20

FLT3 receptor expression on the surface of normal and malignant human hematopoietic cells. Turner AM, et al. **Blood** 1996 Nov 1;88(9):3383-90

Regulation of tie receptor expression on human endothelial cells by protein kinase C-mediated release of soluble tie. Yabkowitz R, et al. **Blood** 1997 Jul 15;90(2):706-15

Clinical relevance of TRKA expression on neuroblastoma: comparison with N-MYC amplification and CD44 expression. Combaret V, et al. **Br J Cancer** 1997; 75(8):1151-5

Overexpression and activation of hepatocyte growth factor/scatter factor in human non-small-cell lung carcinomas. Olivero M, et al. **Br J Cancer** 1996 Dec; 74(12):1862-8

1,25-Dihydroxyvitamin D3 regulates the expression of the low-affinity neurotrophin receptor. Naveilhan P, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):259-68

Over expression of vascular endothelial growth factor and its receptor during the development of estrogen-induced rat pituitary tumors may mediate estrogen-initiated tumor angiogenesis. Banerjee SK, et al. **Carcinogenesis** 1997 Jun; 18(6):1155-61

Induction of met proto-oncogene (hepatocyte growth factor receptor) expression during human monocyte-macrophage differentiation. Chen Q, et al. **Cell Growth Differ** 1996 Jun; 7(6):821-32

Presence of physiologically stimulated RET in adult rat brain: induction of RET expression during nerve regeneration. Colucci-D'Amato GL, et al. **Cell Growth Differ** 1996 Aug; 7(8):1081-6

Expression of the avian VEGF receptor homologues Quek1 and Quek2 in blood-vascular and lymphatic endothelial and non-endothelial cells during quail embryonic development. Wilting J, et al. **Cell Tissue Res** 1997 May; 288(2):207-23

The cellular patterns of BDNF and trkB expression suggest multiple roles for BDNF during Xenopus visual system development. Cohen-Cory S, et al. **Dev Biol** 1996 Oct 10; 179(1):102-15

Distinct and overlapping expression patterns of ligands for Eph-related receptor tyrosine kinases during mouse embryogenesis. Flenniken AM, et al. **Dev Biol** 1996 Nov 1;179(2):382-401

Regulation and function of SF/HGF during migration of limb muscle precursor cells in chicken. Heymann S, et al. **Dev Biol** 1996 Dec 15;180(2):566-78

Reciprocal expression of the Eph receptor Cek5 and its ligand(s) in the early retina. Holash JA, et al. **Dev Biol** 1997 Feb 15;182(2):256-69

Eph family receptors and their ligands distribute in opposing gradients in the developing mouse retina. Marcus RC, et al. **Dev Biol** 1996 Dec 15;180(2):786-9

A receptor tyrosine kinase, Sky, and its ligand Gas 6 are expressed in gonads and support primordial germ cell growth or survival in culture. Matsubara N, et al. **Dev Biol** 1996 Dec 15;180(2):499-510

Novel expression gradients of Eph-like receptor tyrosine kinases in the developing chick retina. Sefton M, et al. **Dev Biol** 1997 Aug 15;188(2):363-8

Disruption of cell adhesion in Xenopus embryos by Pagliaccio, an Eph-class receptor tyrosine kinase. Winning RS, et al. **Dev Biol** 1996 Nov 1;179(2):309-19

Regulation of flt-1 expression during mouse embryogenesis suggests a role in the establishment of vascular endothelium. Fong GH, et al. **Dev Dyn** 1996 Sep; 207(1):1-10

Expression of neurotrophin trk and p75 receptors in quail embryos undergoing gastrulation and neurulation. Zhang D, et al. **Dev Dyn** 1996 Feb;205(2):150-61

Function of the Drosophila POU domain transcription factor drifter as an upstream regulator of breathless receptor tyrosine kinase expression in developing trachea. Anderson MG, et al. **Development** 1996 Dec;122(12):4169-78

Cloning of m-ehk2 from the murine inner ear, an eph family receptor tyrosine kinase expressed in the developing and adult cochlea. Lee AM, et al. **DNA Cell Biol** 1996 Oct; 15(10):817-25

Sympathetic neuron survival and TrkA expression in NT3-deficient mouse embryos. Wyatt S, et al. **EMBO J** 1997 Jun 2;16(11):3115-23

Overexpression of nerve growth factor in skin increases sensory neuron size and modulates Trk receptor expression. Goodness TP, et al. **Eur J Neurosci** 1997 Aug;9(8):1574-85

AL-1-induced growth cone collapse of rat cortical neurons is correlated with REK7 expression and rearrangement of the actin cytoskeleton. Meima L, et al. **Eur J Neurosci** 1997 Jan;9(1):177-88

Timing and regulation of trkB and BDNF mRNA expression in placode-derived sensory neurons and their targets. Robinson M, et al. **Eur J Neurosci** 1996 Nov;8(11):2399-406

Reciprocal changes in expression of mRNA for nerve growth factor and its receptors TrkA and LNGFR in brain of aged rats in relation to maze learning deficits. Hasenöhrl RU, et al. **Exp Brain Res** 1997 Apr;114(2):205-13

Cellular hybridization for BDNF, trkB, and NGF mRNAs and BDNF-immunoreactivity in rat forebrain after pilocarpine-induced status epilepticus. Schmidt-Kastner R, et al. **Exp Brain Res** 1996;107(3):331-47

Reduction in p140-TrkA receptor protein within the nucleus basalis and cortex in Alzheimer's disease. Mufson EJ, et al. **Exp Neurol** 1997 Jul;146(1):91-103

Effect of ethanol on DNA synthesis and c-met induction in Chang liver cells with long-term culture. Ohira H, et al. **Fukushima J Med Sci** 1995 Dec;41(2):103-10

Differential expression of fibroblast growth factor receptors during rat lens morphogenesis and growth. de Iongh RU, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1688-99

A novel Drosophila receptor tyrosine kinase expressed specifically in the nervous system. Unique structural features and implication in developmental signaling. Oishi I, et al. **J Biol Chem** 1997 May 2;272(18):11916-23

Cell type-specific inhibition of keratinocyte collagenase-1 expression by basic fibroblast growth factor and keratinocyte growth factor. A common receptor pathway. Pilcher BK, et al. **J Biol Chem** 1997 Jul 18;272(29):18147-54

Expression of human p140trk receptors in p140trk-deficient, PC12/endothelial cells results in nerve growth factor-induced signal transduction and DNA synthesis. Jiang H, et al. **J Cell Biochem** 1997 Aug 1;66(2):229-44

Expression of neurotrophins and trk receptors in the avian retina. Hallböök F, et al. **J Comp Neurol** 1996 Jan 22; 364(4):664-76

Nerve growth factor receptor TrkA is down-regulated during postnatal development by a subset of dorsal root ganglion neurons. Molliver DC, et al. **J Comp Neurol** 1997 May 19;381(4):428-38

B61, a ligand for the Eck receptor protein-tyrosine kinase, exhibits neurotrophic activity in cultures of rat spinal cord neurons. Magal E, et al. **J Neurosci Res** 1996 Mar 15; 43(6):735-44

Uterine smooth muscle cells express functional receptors (flt-1 and KDR) for vascular permeability factor/vascular endothelial growth factor. Brown LF, et al. **Lab Invest** 1997 Feb;76(2):245-55

Thyroid-stimulating hormone promotes growth of thyroid carcinomas in transgenic mice with targeted expression of the ret/PTC1 oncogene [see comments] Sagartz JE, et al. **Lab Invest** 1997 Mar;76(3):307-18. Comment in: Lab Invest 1997 Mar;76(3):301-5.

Expression of tie receptor tyrosine kinase in human leukemia cell lines. Bredoux C, et al. **Leuk Res** 1997 Jul;21(7):595-601

Exclusive expression of the receptor tyrosine kinase MDK4 in skeletal muscle and the decidua. Besser J, et al. **Mech Dev** 1996 Sep;59(1):41-52

The receptor tyrosine kinase, Cek8, is transiently expressed on subtypes of motoneurons in the spinal cord during development. Ohta K, et al. **Mech Dev** 1996 Jan;54(1):59-69

A role for notochord in axial vascular development revealed by analysis of phenotype and the expression of VEGR-2 in zebrafish flh and ntl mutant embryos. Sumoy L, et al. **Mech Dev** 1997 Apr;63(1):15-27

The melanoma-specific XMEL antigen is expressed in dysplastic naevi. Tron VA, et al. **Melanoma Res** 1997 Jun; 7(3):209-13

Early expression of the nerve growth factor receptor ctrkA in chick sympathetic and sensory ganglia. Schröpel A, et al. **Mol Cell Neurosci** 1995 Dec;6(6):544-66

H-RYK, an unusual receptor kinase: isolation and analysis of expression in ovarian cancer. Wang XC, et al. **Mol Med** 1996 Mar;2(2):189-203

Expression of mRNAs for neurotrophic factors (NGF, BDNF, NT-3, and GDNF) and their receptors (p75NGFR, trkA, trkB, and trkC) in the adult human peripheral nervous system and nonneural tissues. Yamamoto M, et al. **Neurochem Res** 1996 Aug;21(8):929-38

Induction of TrkA receptor by retinoic acid in leukaemia cell lines. Xie P, et al. **Neuroreport** 1997 Mar 24; 8(5):1067-70

Induction of brain-derived neurotrophic factor (BDNF) and the receptor trk B mRNA following middle cerebral artery occlusion in rat. Arai S, et al. **Neurosci Lett** 1996 Jun 14; 211(1):57-60

Ligand-induced down-regulation of Trk messenger RNA, protein and tyrosine phosphorylation in rat cortical neurons. Knusel B, et al. **Neuroscience** 1997 Jun; 78(3):851-62

Seizure-induced differential expression of messenger RNAs for neurotrophins and their receptors in genetically fast and slow kindling rats. Kokaia Z, et al. **Neuroscience** 1996 Nov;75(1):197-207

The expression of RET and its multiple splice forms in developing human kidney. Ivanchuk SM, et al. **Oncogene** 1997 Apr 17;14(15):1811-8

Interleukin 1 induces an autocrine loop hepatocyte growth factor/c-Met in murine Kaposi-like spindle cells. Maier J, et al. **Oncogene** 1996 Sep 5;13(5):1009-15

The Eek receptor, a member of the Eph family of tyrosine protein kinases, can be activated by three different Eph family ligands. Park S, et al. **Oncogene** 1997 Feb 6; 14(5):533-42

Coexpression of hepatocyte growth factor and its receptor (c-met oncogene) in HGL4 glioblastoma cells. Shiota G, et al. **Oncology** 1996 Nov-Dec;53(6):511-6

Pigmented peripheral nerve sheath tumor of the oral cavity with expression of AP-2 beta and c-RET: a case report. Dammer R, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):40-4

c-met expression in pancreatic cancer and effects of hepatocyte growth factor on pancreatic cancer cell growth. Kiehne K, et al. **Pancreas** 1997 Jul;15(1):35-40

Expression of hepatocyte growth factor/scatter factor and its receptor, MET, suggests roles in human embryonic organogenesis. Kolatsi-Joannou M, et al. **Pediatr Res** 1997 May;41(5):657-65

Hypoxia and cobalt stimulate vascular endothelial growth factor receptor gene expression in rats. Sandner P, et al. **Pflugers Arch** 1997 Apr;433(6):803-8

Ligand-dependent development of the endothelial and hemopoietic lineages from embryonic mesodermal cells expressing vascular endothelial growth factor receptor 2. Eichmann A, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5141-6

Constitutive receptor activation by Crouzon syndrome mutations in fibroblast growth factor receptor (FGFR)2 and FGFR2/Neu chimeras. Galvin BD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7894-9

Suppression of trkB expression by antisense oligonucleotides alters a neuronal phenotype in the rod pathway of the developing rat retina. Rickman DW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12564-9

Synergistic effects of hepatocyte growth factor on human cord blood CD34+ progenitor cells are the result of c-met receptor expression. Goff JP, et al. **Stem Cells** 1996 Sep; 14(5):592-602

[The overexpression of c-met oncogene correlation with gastric mucosal lesion] Wang J, et al. **Chung Hua I Hsueh Tsa Chih** 1996 May;76(5):359-62 (Eng. Abstr.) **(Chi)**

BLOOD

Activation of p38 in stimulated human neutrophils: phosphorylation of the oxidase component p47phox by p38 and ERK but not by JNK. El Benna J, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):395-400

[Hepatocyte growth factor in pediatric hepatoblastoma] von Schweinitz D, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:37-40 (Eng. Abstr.) **(Ger)**

CHEMISTRY

Identification of the extracellular domains of Flt-1 that mediate ligand interactions. Cunningham SA, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):596-9

Substitution of two variant residues in the protein tyrosine phosphatase-like PTP35/IA-2 sequence reconstitutes catalytic activity. Magistrelli G, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):581-8

Lipid modifications of G-protein-coupled receptor kinases. Inglese J, et al. **Biochem Soc Trans** 1996 Aug;24(3):714-7 (33 ref.)

Identification of a putative G protein-coupled receptor kinase in Schizosaccharomyces pombe. Watson P, et al. **Biochem Soc Trans** 1997 May;25(2):226S

Sequential cis/trans autophosphorylation in TrkB tyrosine kinase. Iwasaki Y, et al. **Biochemistry** 1997 Mar 4; 36(9):2694-700

Molecular characterization of the B-box protein-protein interaction motif of the ETS-domain transcription factor Elk-1. Ling Y, et al. **EMBO J** 1997 May 1;16(9):2431-40

The biology of vascular endothelial growth factor. Ferrara

N, et al. **Endocr Rev** 1997 Feb;18(1):4–25 (250 ref.)

Identification and chromosomal localization of a processed pseudogene of human GRK6. Gagnon AW, et al. **Gene** 1997 Jan 3;184(1):13–9

Structure and expression of a murine homologue of sky receptor tyrosine kinase gene. Sasaki M, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):264–70

Effect of dimerization on signal transduction and biological function of oncogenic Ros, insulin, and insulin-like growth factor I receptors. Chan JL, et al. **J Biol Chem** 1997 Jan 3;272(1):146–53

Interactions between brain-derived neurotrophic factor and the TRKB receptor. Identification of two ligand binding domains in soluble TRKB by affinity separation and chemical cross-linking. Haniu M, et al. **J Biol Chem** 1997 Oct 3;272(40):25296–303

The interaction of an epidermal growth factor/transforming growth factor alpha tail chimera with the human epidermal growth factor receptor reveals unexpected complexities. Puddicombe SM, et al. **J Biol Chem** 1996 Nov 29; 271(48):30392–7

G protein-coupled receptor kinase GRK4. Molecular analysis of the four isoforms and ultrastructural localization in spermatozoa and germinal cells. Sallese M, et al. **J Biol Chem** 1997 Apr 11;272(15):10188–95

Growth and survival signals transmitted via two distinct NPXY motifs within leukocyte tyrosine kinase, an insulin receptor-related tyrosine kinase. Ueno H, et al. **J Biol Chem** 1996 Nov 1;271(44):27707–14

Vascular endothelial growth factor and its receptors in normal human testicular tissue. Ergün S, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):9–20

The Eek receptor, a member of the Eph family of tyrosine protein kinases, can be activated by three different Eph family ligands. Park S, et al. **Oncogene** 1997 Feb 6; 14(5):533–42

CLASSIFICATION

Unified nomenclature for Eph family receptors and their ligands, the ephrins. Eph Nomenclature Committee [letter] **Cell** 1997 Aug 8;90(3):403–4

DEFICIENCY

Does receptor-'Ck' deficiency initiate leukaemia? Kaul D, et al. **Cancer Lett** 1997 Jan 30;112(2):199–202

Characterization of a mast cell line that lacks the extracellular domain of membrane c-kit. Mekori YA, et al. **Immunology** 1997 Apr;90(4):518–25

Expression of human p140trk receptors in p140trk-deficient, PC12/endothelial cells results in nerve growth factor-induced signal transduction and DNA synthesis. Jiang H, et al. **J Cell Biochem** 1997 Aug 1;66(2):229–44

Reduced acetylcholinesterase (AChE) activity in adrenal medulla and loss of sympathetic preganglionic neurons in TrkA-deficient, but not TrkB-deficient, mice. Schober A, et al. **J Neurosci** 1997 Feb 1;17(3):891–903

DRUG EFFECTS

Effects of phorbol ester on phospholipase D and mitogen-activated protein kinase activities in T-lymphocyte cell lines. Bradshaw CD, et al. **Immunol Lett** 1996 Nov;53(2–3):69–76

Modulation of fibroblast growth factor-2 receptor binding, dimerization, signaling, and angiogenic activity by a synthetic heparin-mimicking polyanionic compound. Miao HQ, et al. **J Clin Invest** 1997 Apr 1;99(7):1565–75

The neurotrophin receptor p75 binds neurotrophin-3 on sympathetic neurons with high affinity and specificity. Dechant G, et al. **J Neurosci** 1997 Jul 15;17(14):5281–7

Induction of trk receptors by retinoic acid in a human embryonal carcinoma cell line. Cheung WM, et al. **Neuroreport** 1996 Apr 26;7(6):1204–8

Cell-surface perturbations of the epidermal growth factor and vascular endothelial growth factor receptors by phosphorothioate oligodeoxynucleotides. Rockwell P, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6523–8

GENETICS

Anti-angiogenic gene therapy of malignant glioma. Stratmann A, et al. **Acta Neurochir Suppl (Wien)** 1997; 68:105–10 (30 ref.)

Prevalence and parental origin of de novo RET mutations in multiple endocrine neoplasia type 2A and familial medullary thyroid carcinoma. Le Groupe d'Etude des Tumeurs a Calcitonine [letter] Schuffenecker I, et al. **Am J Hum Genet** 1997 Jan;60(1):233–7

Familial medullary thyroid carcinoma: not a distinct entity? Genotype-phenotype correlation in a large family. Moers AM, et al. **Am J Med** 1996 Dec;101(6):635–41

Exclusion of linkage between RET and neuronal intestinal dysplasia type B. Barone V, et al. **Am J Med Genet** 1996 Mar 15;62(2):195–8

Congenital central hypoventilation syndrome: mutation analysis of the receptor tyrosine kinase RET. Bolk S, et al. **Am J Med Genet** 1996 Jun 28;63(4):603–9

FGFR2 mutation in clinically nonclassifiable autosomal dominant craniosynostosis with pronounced phenotypic variation. Steinberger D, et al. **Am J Med Genet** 1996 Dec 2;66(1):81–6

Lumpers, splitters, and FGFRs [letter; comment] [see comments] Winter RM, et al. **Am J Med Genet** 1996 Jun 14;63(3):501–2. Comment on: Am J Med Genet 1995 Apr 10;56(3):334–9. Comment in: Am J Med Genet 1996 Jun 14;63(3):503–4.

Primary structure of rat HGF receptor and induced expression in glomerular mesangial cells. Liu Y, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F679–88

Genetic screening for RET mutations in families with multiple endocrine neoplasia 2 syndromes. Alevizaki M, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:383–8 (23 ref.)

Genetic testing for familial cancer. Consequences of RET proto-oncogene mutation analysis in multiple endocrine neoplasia, type 2. Learoyd DL, et al. **Arch Surg** 1997 Sep; 132(9):1022–5

Human chondrocyte expression of growth-arrest-specific gene 6 and the tyrosine kinase receptor axl: potential role in autocrine signaling in cartilage. Loeser RF, et al. **Arthritis Rheum** 1997 Aug;40(8):1455–65

A member of the Met/HGF-receptor family is expressed in a BMP-4-like pattern in the ectoderm of Xenopus gastrulae. Aberger F, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):191–5

Expression of a kinase-defective Eph-like receptor in the normal human brain. Matsuoka H, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):487–92

Expression of vascular endothelial growth factor (VEGF) and VEGF-receptor messenger ribonucleic acids in the peri-implantation rabbit uterus. Das SK, et al. **Biol Reprod** 1997 Jun;56(6):1390–9

Differentially regulated expression of the G-protein-coupled receptor kinases, betaARK and GRK6, during myelomonocytic cell development in vitro. Loudon RP, et al. **Blood** 1996 Dec 15;88(12):4547–57

Biochemical and genetic characterization of multiple splice variants of the Flt3 ligand. McClanahan T, et al. **Blood** 1996 Nov 1;88(9):3371–82

Extensive splice variation and localization of the EHK-1 receptor tyrosine kinase in adult human brain and glial tumors. Miescher GC, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):17–24

Localization of novel receptor tyrosine kinase genes of the eph family, MDK1 and its splicing variant, in the developing mouse nervous system. Mori T, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):154–60

Presence and localization of neurotrophin receptor tyrosine kinase (TrkA, TrkB, TrkC) mRNAs in visceral afferent neurons of the nodose and petrosal ganglia. Zhuo H, et al. **Brain Res Mol Brain Res** 1996 May;38(1):63–70

The different RET-activating capability of mutations of cysteine 620 or cysteine 634 correlates with the multiple endocrine neoplasia type 2 disease phenotype. Carlomagno F, et al. **Cancer Res** 1997 Feb 1;57(3):391–5

Biological properties of Ret with cysteine mutations correlate with multiple endocrine neoplasia type 2A, familial medullary thyroid carcinoma, and Hirschsprung's disease phenotype. Ito S, et al. **Cancer Res** 1997 Jul 15; 57(14):2870–2

Somatic mutations of the RET proto-oncogene are not required for tumor development in multiple endocrine neoplasia type 2 (MEN 2) gene carriers. Landsvater RM, et al. **Cancer Res** 1996 Nov 1;56(21):4853–5

Distinct pattern of ret oncogene rearrangements in morphological variants of radiation-induced and sporadic thyroid papillary carcinomas in children. Nikiforov YE, et al. **Cancer Res** 1997 May 1;57(9):1690–4

The CLAVATA1 gene encodes a putative receptor kinase that controls shoot and floral meristem size in Arabidopsis. Clark SE, et al. **Cell** 1997 May 16;89(4):575–85

A requirement for Flk1 in primitive and definitive hematopoiesis and vasculogenesis. Shalaby F, et al. **Cell** 1997 Jun 13;89(6):981–90

Polymorphism in the immunoglobulin-like domains of the receptor tyrosine kinase from the sponge Geodia cydonium. Pancer Z, et al. **Cell Adhes Commun** 1996 Nov; 4(4–5):327–39

Cloning and functional characterization of the chicken c-ros promoter. Chen J, et al. **Cell Growth Differ** 1995 Dec; 6(12):1523–30

Immunochemical localization of the phylogenetically oldest receptor tyrosine kinase: existence in the marine sponge Geodia cydonium. Skorokhod A, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jun;43(4):509–19

Characterization of the endothelium-specific murine vascular endothelial growth factor receptor-2 (Flk-1) promoter. Rönicke V, et al. **Circ Res** 1996 Aug;79(2):277–85

Ret and trk proto-oncogene activation in thyroid papillary carcinomas in French patients from the Champagne-Ardenne region. Delvincourt C, et al. **Clin Biochem** 1996 Jun;29(3):267–71

Does phaster mean better? [editorial; comment] Angrist M. **Clin Chem** 1997 Mar;43(3):424–6. Comment on: Clin Chem 1997 Mar;43(3):453–7.

Rapid, nonradioactive screening for mutations in exons 10, 11, and 16 of the RET protooncogene associated with inherited medullary thyroid carcinoma [see comments] Siegelman M, et al. **Clin Chem** 1997 Mar;43(3):453–7. Comment in: Clin Chem 1997 Mar;43(3):424–6.

Mutation of RET codon 768 is associated with the FMTC phenotype. Boccia LM, et al. **Clin Genet** 1997 Feb; 51(2):81–5

A Cys634Gly substitution of the RET proto-oncogene in a family with recurrence of multiple endocrine neoplasia type 2A and cutaneous lichen amyloidosis. Seri M, et al. **Clin Genet** 1997 Feb;51(2):86–90

Human breast cancer: genetic alterations in the MET gene region. Tougas L, et al. **Clin Invest Med** 1996 Aug; 19(4):222–30

The receptor tyrosine kinase MuSK is required for neuromuscular junction formation and is a functional receptor for agrin. Glass DJ, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:435–44 (65 ref.)

RET oncogene. Mak YF, et al. **Curr Opin Genet Dev** 1996 Feb;6(1):82–6 (45 ref.)

Novel gene families involved in neural pathfinding. Müller BK, et al. **Curr Opin Genet Dev** 1996 Aug;6(4):469–74 (61 ref.)

Familial neuroendocrine tumors as a model of hereditary cancer. Anderson RJ, et al. **Curr Opin Oncol** 1997 Jan; 9(1):45–54 (85 ref.)

RET mutations in multiple endocrine neoplasia type 2 and Hirschsprung disease. Reynolds LF, et al. **Curr Opin Pediatr** 1995 Dec;7(6):702–9 (63 ref.)

Assignment of PTK7 encoding a receptor protein tyrosine kinase-like molecule to human chromosome 6p21.1-->p12.2 by fluorescence in situ hybridization. Banga SS, et al. **Cytogenet Cell Genet** 1997;76(1–2):43–4

Novel Eph-family receptor tyrosine kinase is widely expressed in the developing zebrafish nervous system. Bovenkamp DE, et al. **Dev Dyn** 1997 Jun;209(2):166–81

Mouse ret finger protein (rfp) proto-oncogene is expressed at specific stages of mouse spermatogenesis. Cao T, et al. **Dev Genet** 1996;19(4):309–20

Flk-1 expression defines a population of early embryonic hematopoietic precursors. Kabrun N, et al. **Development** 1997 May;124(10):2039–48

The zebrafish gene cloche acts upstream of a flk-1 homologue to regulate endothelial cell differentiation. Liao W, et al. **Development** 1997 Jan;124(2):381–9

Activation of TRK genes in Ewing's sarcoma. Trk A receptor expression linked to neural differentiation. Nogueira E, et al. **Diagn Mol Pathol** 1997 Feb;6(1):10–6

Lack of hepatocyte growth factor receptor (c-met) gene expression in fulminant hepatic failure livers before transplantation. Ljubimova JY, et al. **Dig Dis Sci** 1997 Aug; 42(8):1675–80

Transgenic expression in the liver of truncated Met blocks apoptosis and permits immortalization of hepatocytes. Amicone L, et al. **EMBO J** 1997 Feb 3;16(3):495–503

Aberrant axonal projections in mice lacking EphA8 (Eek) tyrosine protein kinase receptors. Park S, et al. **EMBO J** 1997 Jun 2;16(11):3106–14

Absence of mutations at codon 768 of the RET proto-oncogene in sporadic and hereditary pheochromocytomas. Yoshimoto K, et al. **Endocr J** 1996 Feb;43(1):109–14

Only the substitution of methionine 918 with a threonine and not with other residues activates RET transforming potential. Cirafici AM, et al. **Endocrinology** 1997 Apr; 138(4):1450–5

Tie2 receptor expression and phosphorylation in cultured cells and mouse tissues. Koblizek TI, et al. **Eur J Biochem** 1997 Mar 15;244(3):774–9

RET receptor tyrosine kinase gene mutations: molecular biological, physiological and clinical aspects. Höppener JW, et al. **Eur J Clin Invest** 1996 Aug;26(8):613–24 (88 ref.)

Molecular analysis of the RET proto-oncogene in patients with sporadic medullary thyroid carcinoma: a novel point mutation in the extracellular cysteine-rich domain. Bugalho MJ, et al. **Eur J Endocrinol** 1997 Apr;136(4):423–6

Diagnosis and management of pheochromocytomas in patients with multiple endocrine neoplasia type 2-relevance of specific mutations in the RET proto-oncogene. Frank-Raue K, et al. **Eur J Endocrinol** 1996 Aug; 135(2):222–5

Spectrum of craniosynostosis phenotypes associated with novel mutations at the fibroblast growth factor receptor 2 locus. Pulleyn LJ, et al. **Eur J Hum Genet** 1996; 4(5):283–91

Mapping of the tyrosine kinase receptors trkA (NTRK1), trkB (NTRK2) and trkC(NTRK3) to human chromosomes 1q22, 9q22 and 15q25 by fluorescence in situ hybridization. Valent A, et al. **Eur J Hum Genet** 1997 Mar-Apr;5(2):102–4

Prevalence and parental origin of de novo RET mutations in Hirschsprung's disease. Yin L, et al. **Eur J Hum Genet** 1996;4(6):356–8

Neurotrophins and their receptors in the adult hypo- and hyperthyroid rat after kainic acid injection: an in situ hybridization study. Calzà L, et al. **Eur J Neurosci** 1996 Sep;8(9):1873–81

Differential regulation of mRNAs for GDNF and its receptors Ret and GDNFR alpha after sciatic nerve lesion in the mouse. Naveilhan P, et al. **Eur J Neurosci** 1997 Jul; 9(7):1450–60

Cellular and developmental patterns of expression of Ret and glial cell line-derived neurotrophic factor receptor alpha mRNAs. Nosrat CA, et al. **Exp Brain Res** 1997 Jul; 115(3):410–22

Decreased TrkA gene expression in cholinergic neurons of the striatum and basal forebrain of patients with Alzheimer's disease. Boissiere F, et al. **Exp Neurol** 1997 May;145(1):245–52

Receptor protein tyrosine kinase DDR is up-regulated by p53 protein. Sakuma S, et al. **FEBS Lett** 1996 Dec 2;

398(2-3):165-9
Molecular cloning of Quek 1 and 2, two quail vascular endothelial growth factor (VEGF) receptor-like molecules. Eichmann A, et al. **Gene** 1996 Sep 26;174(1):3-8
Chromosome 1 rearrangements involving the genes TPR and NTRK1 produce structurally different thyroid-specific TRK oncogenes. Greco A, et al.
Genes Chromosomes Cancer 1997 Jun;19(2):112-23
Characterization of maternal and zygotic D-raf proteins: dominant negative effects on Torso signal transduction. Radke K, et al. **Genetics** 1997 Jan;145(1):163-71
The Xmrk oncogene promoter is derived from a novel amplified locus of unusual organization. Förnzler D, et al. **Genome Res** 1996 Feb;6(2):102-13
The genomic structure of discoidin receptor tyrosine kinase. Playford MP, et al. **Genome Res** 1996 Jul;6(7):620-7
Chromosomal mapping of the mouse and rat brt genes. Matsuda Y, et al. **Genomics** 1997 Feb 15;40(1):181-4
Localization of the human Ror1 gene (NTRKR1) to chromosome 1p31-p32 by fluorescence in situ hybridization and somatic cell hybrid analysis. Reddy UR, et al.
Genomics 1997 Apr 15;41(2):283-5
Characterization of the promoter region for flt-1 tyrosine kinase gene, a receptor for vascular endothelial growth factor. Ikeda T, et al. **Growth Factors** 1996;13(3-4):151-62
Evidence for autocrine basis of transformation in NIH-3T3 cells transfected with met/HGF receptor gene. Kochhar KS, et al. **Growth Factors** 1995;12(4):303-13
Co-expression and regulation of Met and Ron proto-oncogenes in human hepatocellular carcinoma tissues and cell lines. Chen Q, et al. **Hepatology** 1997 Jul; 26(1):59-66
Immortalizing hepatocytes with truncated MET: a little bit of gene goes a long way. Sirica AE. **Hepatology** 1997 Aug; 26(2):510-2
Expression of hepatocyte growth factor and its receptor c-met proto-oncogene in hepatocellular carcinoma. Ueki T, et al. **Hepatology** 1997 Apr;25(4):862-6
RET proto-oncogene mutations in multiple endocrine neoplasia type 2 and medullary thyroid carcinoma. Marsh DJ, et al. **Horm Res** 1997;47(4-6):168-78 (105 ref.)
Genetic alterations of the RET proto-oncogene in familial and sporadic pheochromocytomas. Rodien P, et al.
Horm Res 1997;47(4-6):263-8
Mutation detection in FGFR2 craniosynostosis syndromes. Hollway GE, et al. **Hum Genet** 1997 Feb;99(2):251-5
Trp290Cys mutation in exon IIIa of the fibroblast growth factor receptor 2 (FGFR2) gene is associated with Pfeiffer syndrome. Tartaglia M, et al. **Hum Genet** 1997 May; 99(5):602-6
A duplication of 12 bp in the critical cysteine rich domain of the RET proto-oncogene results in a distinct phenotype of multiple endocrine neoplasia type 2A. Höppner W, et al. **Hum Mol Genet** 1997 Apr;6(4):587-90
Mechanism of ret dysfunction by Hirschsprung mutations affecting its extracellular domain. Iwashita T, et al.
Hum Mol Genet 1996 Oct;5(10):1577-80
Genotype-phenotype correlation for nucleotide substitutions in the IgII-IgIII linker of FGFR2. Oldridge M, et al.
Hum Mol Genet 1997 Jan;6(1):137-43
Genetic predisposition to phaeochromocytoma: analysis of candidate genes GDNF, RET and VHL. Woodward ER, et al. **Hum Mol Genet** 1997 Jul;6(7):1051-6
Mutations of the RET proto-oncogene in the multiple endocrine neoplasia type 2 syndromes, related sporadic tumours, and hirschsprung disease. Eng C, et al.
Hum Mutat 1997;9(2):97-109 (105 ref.)
Diagnosis of multiple endocrine neoplasia [MEN] 2A, 2B and familial medullary thyroid cancer [FMTC] by multiplex PCR and heteroduplex analyses of RET proto-oncogene mutations. Kambouris M, et al.
Hum Mutat 1996;8(1):64-70
Identification of a novel somatic mutation in the RET proto-oncogene in a patient with sporadic medullary thyroid carcinoma. Matias-Guiu X, et al. **Hum Mutat** 1997; 9(5):476
Cys 618 Arg mutation in the RET proto-oncogene associated with familial medullary thyroid carcinoma and maternally transmitted Hirschsprung's disease suggesting a role for imprinting. Peretz H, et al. **Hum Mutat** 1997;10(2):155-9
Frequency of RET mutations in long- and short-segment Hirschsprung disease. Seri M, et al. **Hum Mutat** 1997; 9(3):243-9
Crouzon syndrome: previously unrecognized deletion, duplication, and point mutation within FGFR2 gene. Steinberger D, et al. **Hum Mutat** 1996;8(4):386-90
Loss of expression of receptor tyrosine kinase family genes PTK7 and SEK in metastatic melanoma. Easty DJ, et al.
Int J Cancer 1997 Jun 11;71(6):1061-5
Characterisation of Cek-11, a member of the EPH-receptor family in the chick embryo. Araujo M, et al.
Int J Dev Biol 1996;Suppl 1:157S-158S
Catalytic and non-catalytic forms of the neurotrophin receptor xTrkB mRNA are expressed in a pseudo-segmental manner within the early Xenopus central nervous system. Islam N, et al. **Int J Dev Biol** 1996 Oct; 40(5):973-83
Expression of the DTK receptor tyrosine kinase during zebrafish development. Jansa Perez M, et al.
Int J Dev Biol 1996;Suppl 1:101S-102S
Cloning of a new chicken trkC extracellular isoform and its mRNA expression in E9 sensory and autonomic ganglia. Bäckström A, et al. **Int J Dev Neurosci** 1997 Jun; 15(3):275-84
Absence of RET proto-oncogene mutations in a father and son with pheochromocytoma and pancreatic islet cell tumor. Kawasaki T, et al. **Int J Urol** 1997 Mar;4(2):169-71
The RET proto-oncogene in sporadic pheochromocytomas. Takaya K, et al. **Intern Med** 1996 Jun;35(6):449-52
Characterization of the human full-length PTK7 cDNA encoding a receptor protein tyrosine kinase-like molecule closely related to chick KLG. Park SK, et al.
J Biochem (Tokyo) 1996 Feb;119(2):235-9
Structure and expression of a murine homologue of sky receptor tyrosine kinase gene. Sasaki M, et al.
J Biochem (Tokyo) 1996 Aug;120(2):264-70
Activation of transcription of the melanoma inducing Xmrk oncogene by a GC box element [published erratum appears in J Biol Chem 1997 Mar 14;272(11):7565] Baudler M, et al. **J Biol Chem** 1997 Jan 3;272(1):131-7
Rek, a gene expressed in retina and brain, encodes a receptor tyrosine kinase of the Axl/Tyro3 family. Biscardi JS, et al. **J Biol Chem** 1996 Nov 15;271(46):29049-59
Concomitant expression of hepatocyte growth factor/scatter factor and the receptor c-MET in human myeloma cell lines. Borset M, et al. **J Biol Chem** 1996 Oct 4; 271(40):24655-61
Differential transcriptional regulation of the two vascular endothelial growth factor receptor genes. Flt-1, but not Flk-1/KDR, is up-regulated by hypoxia. Gerber HP, et al. **J Biol Chem** 1997 Sep 19;272(38):23659-67
Differential signaling to glycogen synthesis by the intracellular domain of the insulin versus the insulin-like growth factor-1 receptor. Evidence from studies of TrkC-chimeras. Kalloo-Hosein HE, et al. **J Biol Chem** 1997 Sep 26;272(39):24325-32
Nuclear protein interactions with the human KDR/flk-1 promoter in vivo. Regulation of Sp1 binding is associated with cell type-specific expression. Patterson C, et al.
J Biol Chem 1997 Mar 28;272(13):8410-6
A cAMP response element and an Ets motif are involved in the transcriptional regulation of flt-1 tyrosine kinase (vascular endothelial growth factor receptor 1) gene. Wakiya K, et al. **J Biol Chem** 1996 Nov 29;271(48):30823-8
Prevalence, significance, and biological behavior of ret/PTC1 associated papillary thyroid carcinoma [letter; comment] Cetta F. **J Clin Endocrinol Metab** 1997 May; 82(5):1650. Comment on: J Clin Endocrinol Metab 1996 Sep;81(9):3360-5.
Extensive mutation scanning of RET in sporadic medullary thyroid carcinoma and of RET and VHL in sporadic pheochromocytoma reveals involvement of these genes in only a minority of cases. Hofstra RM, et al.
J Clin Endocrinol Metab 1996 Aug;81(8):2881-4
RET proto-oncogene point mutations in sporadic neuroendocrine tumors. Komminoth P, et al.
J Clin Endocrinol Metab 1996 Jun;81(6):2041-6
ret/PTC-1, -2, and -3 oncogene rearrangements in human thyroid carcinomas: implications for metastatic potential? [letter; comment] Mayr B, et al.
J Clin Endocrinol Metab 1997 Apr;82(4):1306-7. Comment on: J Clin Endocrinol Metab 1996 Sep;81(9):3360-5.
Relevance of RET proto-oncogene mutations in sporadic medullary thyroid carcinoma. Wohllk N, et al.
J Clin Endocrinol Metab 1996 Oct;81(10):3740-5
Differential screening of a human chromosome 3 library identifies hepatocyte growth factor-like/macrophage-stimulating protein and its receptor in injured lung. Possible implications for neuroendocrine cell survival. Willett CG, et al.
J Clin Invest 1997 Jun 15;99(12):2979-91
Cellular localization of Pan-trk immunoreactivity and trkC mRNA in the enteric nervous system. Sternini C, et al.
J Comp Neurol 1996 May 13;368(4):597-607
Prenatal molecular diagnosis of RET proto-oncogene mutation in multiple endocrine neoplasia type 2A. Huang SM, et al. **J Formos Med Assoc** 1997 Jul;96(7):542-4
Expression of HGF, its receptor c-met, c-myc, and albumin in cirrhotic and neoplastic human liver tissue. Ljubimova JY, et al. **J Histochem Cytochem** 1997 Jan;45(1):79-87
Mutations in the RET proto-oncogene and the von Hippel-Lindau disease tumour suppressor gene in sporadic and syndromic phaeochromocytomas. Eng C, et al.
J Med Genet 1995 Dec;32(12):934-7
Genomic organization of the extracellular coding region of the human FGFR4 and FLT4 genes: evolution of the genes encoding receptor tyrosine kinases with immunoglobulin-like domains. Agnès F, et al.
J Mol Evol 1997 Jul;45(1):43-9
Experimental indication in favor of the introns-late theory: the receptor tyrosine kinase gene from the sponge Geodia cydonium. Gamulin V, et al. **J Mol Evol** 1997 Mar; 44(3):242-52
Expression of the RET proto-oncogene in normal human tissues, pheochromocytomas, and other tumors of neural crest origin. Takaya K, et al. **J Mol Med** 1996 Oct; 74(10):617-21
Ganglioside GM1 enhances induction by nerve growth factor of a putative dimer of TrkA. Farooqui T, et al.
J Neurochem 1997 Jun;68(6):2348-55
Neurotrophin-3-like immunoreactivity and Trk C expression in human spinal motoneurones in amyotrophic lateral sclerosis. Duberley RM, et al. **J Neurol Sci** 1997 May 1; 148(1):33-40
Expression of TrkA, TrkB and TrkC in human neuroblastomas. Brodeur GM, et al. **J Neurooncol** 1997 Jan; 31(1-2):49-55
Expression of hepatocyte growth factor/scatter factor, its receptor, c-met, and tissue-type plasminogen activator during development of the murine olfactory system. Thewke DP, et al. **J Neurosci** 1996 Nov 1;16(21):6933-44
Complementary and overlapping expression of glial cell line-derived neurotrophic factor (GDNF), c-ret proto-oncogene, and GDNF receptor-alpha indicates multiple mechanisms of trophic actions in the adult rat CNS. Trupp M, et al. **J Neurosci** 1997 May 15; 17(10):3554-67
Detection of ligands in regions anatomically connected to neurons expressing the Eph receptor Bsk: potential roles in neuron-target interaction. Zhang JH, et al.
J Neurosci 1996 Nov 15;16(22):7182-92
Altered RET gene mRNA expression in Hirschsprung's disease. Kusafuka T, et al. **J Pediatr Surg** 1997 Apr; 32(4):600-4
Transforming activity of retroviral genomes encoding Gag-Axl fusion proteins. Zhang QK, et al. **J Virol** 1996 Nov;70(11):8089-97
The relationship between specific RET proto-oncogene mutations and disease phenotype in multiple endocrine neoplasia type 2. International RET mutation consortium analysis. Eng C, et al. **JAMA** 1996 Nov 20;276(19):1575-9
A novel somatic mutation in the RET proto-oncogene in familial medullary thyroid carcinoma with a germline codon 768 mutation. Miyauchi A, et al.
Jpn J Cancer Res 1997 Jun;88(6):527-31
Molecular mechanisms of the development of human disease caused by RET mutations. Romeo G.
Jpn J Cancer Res 1997 Jan;88(1):Inside front cover
A nationwide clinical survey of patients with multiple endocrine neoplasia type 2 and familial medullary thyroid carcinoma in Japan. Iihara M, et al. **Jpn J Clin Oncol** 1997 Jun;27(3):128-34
Treatment of minute medullary thyroid carcinoma in multiple endocrine neoplasia 2A families first diagnosed by DNA analysis of RET proto-oncogene mutations: a case report. Yamashita T, et al. **Jpn J Clin Oncol** 1997 Feb;27(1):42-5
Induction of VEGF and VEGF receptor gene expression by hypoxia: divergent regulation in vivo and in vitro. Sandner P, et al. **Kidney Int** 1997 Feb;51(2):448-53
Expression of the RET/PTC fusion gene as a marker for papillary carcinoma in Hashimoto's thyroiditis.
Wirtschafter A, et al. **Laryngoscope** 1997 Jan;107(1):95-100
Tandem duplications of the FLT3 receptor gene are associated with leukemic transformation of myelodysplasia. Horiike S, et al. **Leukemia** 1997 Sep;11(9):1442-6
Internal tandem duplication of FLT3 associated with leukocytosis in acute promyelocytic leukemia. Leukemia Study Group of the Ministry of Health and Welfare (Kohseisho). Kiyoi H, et al. **Leukemia** 1997 Sep; 11(9):1447-52
Internal tandem duplication of the flt3 gene found in acute myeloid leukemia. Nakao M, et al. **Leukemia** 1996 Dec; 10(12):1911-8
Internal tandem duplication of the FLT3 gene is preferentially seen in acute myeloid leukemia and myelodysplastic syndrome among various hematological malignancies. A study on a large series of patients and cell lines. Yokota S, et al. **Leukemia** 1997 Oct;11(10):1605-9
Chromosomal localization of rat hepatocyte growth factor (Hgf) and HGF receptor (Met) and characterization of HGF receptor cDNA. Wallenius VR, et al.
Mamm Genome 1997 Sep;8(9):661-7
Survival of inner ear sensory neurons in trk mutant mice. Schimmang T, et al. **Mech Dev** 1997 Jun;64(1-2):77-85
Identification by PCR of genes encoding multiple response regulators. Morel-Deville F, et al. **Microbiology** 1997 May; 143 (Pt 5):1513-20
Multiple interdependent sequence elements control splicing of a fibroblast growth factor receptor 2 alternative exon. Del Gatto F, et al. **Mol Cell Biol** 1997 Sep;17(9):5106-16
Constitutive activation of the RON gene promotes invasive growth but not transformation [published erratum appears in Mol Cell Biol 1997 Mar;17(3):1758] Santoro MM, et al. **Mol Cell Biol** 1996 Dec;16(12):7072-83
Vascular endothelial growth factor and its receptors in normal human testicular tissue. Ergün S, et al.
Mol Cell Endocrinol 1997 Jul 4;131(1):9-20
The sigmaE-mediated response to extracytoplasmic stress in Escherichia coli is transduced by RseA and RseB, two negative regulators of sigmaE. De Las Peñas A, et al.
Mol Microbiol 1997 Apr;24(2):373-85
Modulation of the Escherichia coli sigmaE (RpoE) heat-shock transcription-factor activity by the RseA, RseB and RseC proteins. Missiakas D, et al. **Mol Microbiol** 1997 Apr;24(2):355-71
The role of the ret proto-oncogene in human disease. Takahashi M. **Nagoya J Med Sci** 1997 Mar;60(1-2):23-30 (49 ref.)
Immunoglobulin-like domains define the nerve growth factor binding site of the TrkA receptor. Holden PH, et al.
Nat Biotechnol 1997 Jul;15(7):668-72
Germline mutations in glial cell line-derived neurotrophic factor (GDNF) and RET in a Hirschsprung disease patient. Angrist M, et al. **Nat Genet** 1996 Nov;14(3):341-4
Identical mutations in three different fibroblast growth factor receptor genes in autosomal dominant craniosynostosis

syndromes. Bellus GA, et al. **Nat Genet** 1996 Oct; 14(2):174–6

Germline and somatic mutations in the tyrosine kinase domain of the MET proto-oncogene in papillary renal carcinomas. Schmidt L, et al. **Nat Genet** 1997 May; 16(1):68–73

BDNF and trkB mRNA expression in neurons of the neonatal mouse barrel field cortex: normal development and plasticity after cauterizing facial vibrissae. Singh TD, et al. **Neurochem Res** 1997 Jul;22(7):791–7

Expression of messenger RNA coding for the nerve growth factor receptor trkA in the hippocampus of the adult rat. Cellerino A. **Neuroscience** 1996 Feb;70(3):613–16

Oncogenic activation of the tyrosine kinase domain of the human trk proto-oncogene by fusion to a cell adhesion molecule. Albor A, et al. **Oncogene** 1996 Oct 17; 13(8):1755–63

A complex nine base pair deletion in RET exon 11 common in sporadic medullary thyroid carcinoma. Alemi M, et al. **Oncogene** 1997 May 1;14(17):2041–5

Somatic in frame deletions not involving juxtamembranous cysteine residues strongly activate the RET proto-oncogene. Ceccherini I, et al. **Oncogene** 1997 May 29;14(21):2609–12

Characterization of murine Flt4 ligand/VEGF-C. Fitz LJ, et al. **Oncogene** 1997 Jul 31;15(5):613–8

Molecular and biochemical analysis of RET/PTC4, a novel oncogenic rearrangement between RET and ELE1 genes, in a post-Chernobyl papillary thyroid cancer. Fugazzola L, et al. **Oncogene** 1996 Sep 5;13(5):1093–7

Ets up-regulates MET transcription. Gambarotta G, et al. **Oncogene** 1996 Nov 7;13(9):1911–7

Genomic organization of the human NTRK1 gene. Greco A, et al. **Oncogene** 1996 Dec 5;13(11):2463–6

Novel germline RET proto-oncogene mutations associated with medullary thyroid carcinoma (MTC): mutation analysis in Japanese patients with MTC. Kitamura Y, et al. **Oncogene** 1997 Jun 26;14(25):3103–6

A new form of RET rearrangement in thyroid carcinomas of children after the Chernobyl reactor accident. Klugbauer S, et al. **Oncogene** 1996 Sep 5;13(5):1099–1102

Detailed deletion mapping with a refined physical map of 7q31 localizes a putative tumor suppressor gene for breast cancer in the region of MET. Lin JC, et al. **Oncogene** 1996 Nov 7;13(9):2001–8

The zebrafish homologue of the ret receptor and its pattern of expression during embryogenesis. Marcos-Gutiérrez CV, et al. **Oncogene** 1997 Feb 27;14(8):879–89

Development of mammary and cutaneous gland tumors in transgenic mice carrying the RET/PTC1 oncogene. Portella G, et al. **Oncogene** 1996 Nov 7;13(9):2021–6

Human neural tissues express a truncated Ror1 receptor tyrosine kinase, lacking both extracellular and transmembrane domains. Reddy UR, et al. **Oncogene** 1996 Oct 3;13(7):1555–9

Distinct biological properties of two RET isoforms activated by MEN 2A and MEN 2B mutations. Rossel M, et al. **Oncogene** 1997 Jan 23;14(3):265–75

Germline mutation of RET codon 883 in two cases of de novo MEN 2B. Smith DP, et al. **Oncogene** 1997 Sep 4; 15(10):1213–7

RET protooncogene mutational analysis in multiple endocrine neoplasia syndrome type 2B: case report and review of the literature. Kahn MA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Sep;82(3):288–94 (21 ref.)

Role of c-kit receptor tyrosine kinase in the development, survival and neoplastic transformation of mast cells. Tsujimura T. **Pathol Int** 1996 Dec;46(12):933–8 (35 ref.)

Pediatric brain tumors express multiple receptor tyrosine kinases including novel cell adhesion kinases. Weiner HL, et al. **Pediatr Neurosurg** 1996 Aug;25(2):64–71; discussion 71–2

The RET proto-oncogene: a challenge to our understanding of disease pathogenesis. Kusafuka T, et al. **Pediatr Surg Int** 1997;12(1):11–8 (99 ref.)

Hirschsprung's disease as a neurochristopathy. Martucciello G. **Pediatr Surg Int** 1997;12(1):2–10 (74 ref.)

A putative receptor protein kinase gene in Ipomoea trifida. Kowyama Y, et al. **Plant Cell Physiol** 1996 Jul;37(5):681–5

Constitutive receptor activation by Crouzon syndrome mutations in fibroblast growth factor receptor (FGFR)2 and FGFR2/Neu chimeras. Galvin BD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7894–9

FRAG1, a gene that potently activates fibroblast growth factor receptor by C-terminal fusion through chromosomal rearrangement. Lorenzi MV, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8956–61

Development of medullary thyroid carcinoma in transgenic mice expressing the RET protooncogene altered by a multiple endocrine neoplasia type 2A mutation. Michiels FM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1; 94(7):3330–5

Inhibitory effect of hepatocyte growth factor on metastasis of hepatocellular carcinoma in transgenic mice. Shiota G, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jan; 91(1):33–9

Multiple endocrine neoplasia type 2A in a black South African family. Hopley M, et al. **S Afr Med J** 1997 Mar; 87(3 Suppl):371–2

Multiple endocrine neoplasia type 2 and the RET receptor—a disease spectrum comes of age [editorial] Soule S, et al. **S Afr Med J** 1997 Mar;87(3 Suppl):357–8

Hepatocyte growth factor/scatter factor expression and c-met in primary breast cancer. Nagy J, et al. **Surg Oncol** 1996 Feb;5(1):15–21

"Cold" single-strand conformational variants for mutation analysis of the RET protooncogene. Musholt PB, et al. **Surgery** 1997 Aug;122(2):363–70; discussion 370–1

Expression and regulation of G protein-coupled receptor kinase 5 and beta-arrestin-1 in rat thyroid FRTL5 cells. Nagayama Y, et al. **Thyroid** 1996 Dec;6(6):627–31

RET mutations in human disease. Pasini B, et al. **Trends Genet** 1996 Apr;12(4):138–44 (60 ref.)

The GDNF-RET signalling partnership. Robertson K, et al. **Trends Genet** 1997 Jan;13(1):1–3 (36 ref.)

The coming of age of the GDNF family and its receptors: gene delivery in a rat Parkinson model may have clinical implications. Olson L. **Trends Neurosci** 1997 Jul;20(7):277–9 (22 ref.)

Enhanced gene expression of transforming growth factor-alpha and c-met in rat urinary bladder cancer. Inui M, et al. **Urol Res** 1996;24(1):55–60

The RET proto-oncogene in medullary and papillary thyroid carcinoma. Molecular features, pathophysiology and clinical implications. Komminoth P. **Virchows Arch** 1997 Jul;431(1):1–9 (109 ref.)

Participation of nerve growth factor in the regulation of ovarian function. Dissen GA, et al. **Zygote** 1996 Nov; 4(4):309–12 (38 ref.)

[Gene expression of HGF and its receptor in experimental hepatomas] Luo Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Nov;76(11):822–5 (Eng. Abstr.) **(Chi)**

[Ret proto-oncogene mutation found in the Czech population and its predictive value for offspring of patients with medullary carcinoma of the thyroid gland] Mazura I, et al. **Vnitr Lek** 1996 Nov;42(11):751–6 (Eng. Abstr.) **(Cze)**

[Correlation of neovascularization and vascular endothelial growth factor in human renal cell carcinoma] Sato K, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(4):389–94 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Expression of HGF and c-met/HGF receptor mRNA in brains of normal rats and in phaeochromocytoma cells PC-12 of rats treated with NGF] Ukita H, et al. **No To Shinkei** 1997 Mar;49(3):252–9 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Tat-human immunodeficiency virus-1 induces human monocyte chemotaxis by activation of vascular endothelial growth factor receptor-1. Mitola S, et al. **Blood** 1997 Aug 15;90(4):1365–72

ret receptor tyrosine kinase immunoreactivity is altered in glial cell line-derived neurotrophic factor-responsive neurons following lesions of the nigrostriatal and septohippocampal pathways. Araujo DM, et al. **Neuroscience** 1997 Sep;80(1):9–16

METABOLISM

Vascular growth factors and receptors in capillary hemangioblastomas and hemangiopericytomas. Hatva E, et al. **Am J Pathol** 1996 Mar;148(3):763–75

Expression of Met/hepatocyte growth factor receptor gene and malignant behavior of musculoskeletal tumors. Scotlandi K, et al. **Am J Pathol** 1996 Oct;149(4):1209–19

Met -/- kidneys express epithelial cells that chemotax and form tubules in response to EGF receptor ligands. Kjelsberg C, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):F222–8

VEGF, flk-1, and flt-1 expression in a rat myocardial infarction model of angiogenesis. Li J, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1803–11

Primary structure of rat HGF receptor and induced expression in glomerular mesangial cells. Liu Y, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F679–88

In vivo and in vitro evidence for increased expression of HGF receptor in kidney of diabetic rat. Liu Y, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1202–10

Adenylyl cyclase and G protein receptor kinase expression during development of heart failure. Ping P, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H707–17

Evidence that embryonic kidney cells expressing flk-1 are intrinsic, vasculogenic angioblasts. Robert B, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F744–53

Activation of ERK and JNK1 MAP kinases in cultured lung tissue. Shapiro P, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):L459–67

Sensory epithelium of the vomeronasal organ express TrkA-like and epidermal growth factor receptor in adulthood. An immunohistochemical study in the horse. Garcia-Suarez O, et al. **Anat Rec** 1997 Mar;247(3):299–306

Marked age-dependent neuroprotection by brain-derived neurotrophic factor against neonatal hypoxic-ischemic brain injury. Cheng Y, et al. **Ann Neurol** 1997 Apr; 41(4):521–9

Lack of rearranged Tpr-met mRNA expression in human gastric cancer cell lines and gastric mucosa and carcinoma. Osaki M, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2881–4

Vascular endothelial growth factor and its receptor correlate with angiogenesis and survival in pulmonary adenocarcinoma. Takanami I, et al. **Anticancer Res** 1997 Jul-Aug;17(4A):2811–4

Expression of multiple forms of fetal liver kinase-2 (flk-2/flt-3) ligand in cultured human keratinocytes. Morita E, et al. **Arch Dermatol Res** 1997 Feb;289(3):177–9

Endothelial cell tyrosine kinase receptor and G protein-coupled receptor activation involves distinct protein kinase C isoforms. Haller H, et al. **Arterioscler Thromb Vasc Biol** 1996 May;16(5):678–86

Expression of VEGF receptors in arteries after endothelial injury and lack of increased endothelial regrowth in response to VEGF. Lindner V, et al. **Arterioscler Thromb Vasc Biol** 1996 Nov;16(11):1399–405

PDGF receptor protein tyrosine kinase expression in the balloon-injured rat carotid artery. Panek RL, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1283–8

Activation of Met tyrosine kinase by hepatocyte growth factor is essential for internal organogenesis in Xenopus embryo. Aoki S, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):8–14

Characterization of Ret-Shc-Grb2 complex induced by GDNF, MEN 2A, and MEN 2B mutations. Ohiwa M, et al. **Biochem Biophys Res Commun** 1997 Aug 28; 237(3):747–51

The phosphorylated 1169-tyrosine containing region of flt-1 kinase (VEGFR-1) is a major binding site for PLCgamma. Sawano A, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):487–91

Fas-signaling and effects on receptor tyrosine kinase signal transduction in human breast epithelial cells. Shen K, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):89–93

DDT stimulates c-erbB2, c-met, and STATS tyrosine phosphorylation, Grb2-Sos association, MAPK phosphorylation, and proliferation of human breast epithelial cells. Shen K, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):17–21

Analysis of mitogen-activated protein kinase activation by naturally occurring splice variants of TrkC, the receptor for neurotrophin-3. Gunn-Moore FJ, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):193–8

Sequential cis/trans autophosphorylation in TrkB tyrosine kinase. Iwasaki Y, et al. **Biochemistry** 1997 Mar 4; 36(9):2694–700

Endosomes, receptor tyrosine kinase internalization and signal transduction. Bergeron JJ, et al. **Biosci Rep** 1995 Dec;15(6):411–8 (41 ref.)

Characterization of signal transduction pathways in human bone marrow endothelial cells. Liu ZY, et al. **Blood** 1997 Sep 15;90(6):2253–9

Flt3 ligand level reflects hematopoietic progenitor cell function in aplastic anemia and chemotherapy-induced bone marrow aplasia. Wodnar-Filipowicz A, et al. **Blood** 1996 Dec 15;88(12):4493–9

Expression of the nerve growth factor receptor c-TRK in human myeloid leukaemia cells. Kaebisch A, et al. **Br J Haematol** 1996 Oct;95(1):102–9

Analysis of Tie receptor tyrosine kinase in haemopoietic progenitor and leukaemia cells. Kukk E, et al. **Br J Haematol** 1997 Jul;98(1):195–203

VEGF mRNA levels in placentae from pregnancies complicated by pre-eclampsia [see comments] Cooper JC, et al. **Br J Obstet Gynaecol** 1996 Dec;103(12):1191–6. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):972.

Trk receptor alterations in Alzheimer's disease. Connor B, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):1–17

mRNAS for one, two or three members of trk receptor family are expressed in single rat trigeminal ganglion neurons. Moshnyakov M, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):141–8

Developmental and denervation changes in c-ret proto-oncogene expression in chick motoneurons. Nakamura M, et al. **Brain Res Mol Brain Res** 1996 Jul; 39(1-2):1–11

Dynamic expression suggests multiple roles of the eph family receptor brain-specific kinase (Bsk) during mouse neurogenesis. Zhang JH, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1-2):202–14

G-protein-coupled receptor regulation: role of G-protein-coupled receptor kinases and arrestins. Ferguson SS, et al. **Can J Physiol Pharmacol** 1996 Oct; 74(10):1095–110 (137 ref.)

Participation of c-met in the progression of human gastric cancers: anti-c-met oligonucleotides inhibit proliferation or invasiveness of gastric cancer cells. Kaji M, et al. **Cancer Gene Ther** 1996 Nov-Dec;3(6):393–404

Compensatory modulation of GAP activity in response to oncogenic stimulation. Trouba KJ, et al. **Cancer Lett** 1996 Dec 3;109(1-2):211–5

Biological properties of VEGF/VPF receptors. Terman BI, et al. **Cancer Metastasis Rev** 1996 Jun;15(2):159–63 (42 ref.)

Up-regulation of flk-1/vascular endothelial growth factor receptor 2 by its ligand in a cerebral slice culture system. Kremer C, et al. **Cancer Res** 1997 Sep 1;57(17):3852–9

Detection of activated platelet-derived growth factor receptors in human meningioma. Shamah SM, et al. **Cancer Res** 1997 Sep 15;57(18):4141–7

Protein tyrosine kinase receptors. Heldin CH. **Cancer Surv** 1996;27:7–24 (82 ref.)

Insulin-induced tyrosine phosphorylation of a M(r) 70,000 protein revealed by association with the Src homology 2 (SH2) and SH3 domains of p120GAP and Grb2. Medema JP, et al. **Cell Growth Differ** 1996 Apr;7(4):543–50

Flt-1 but not KDR/Flk-1 tyrosine kinase is a receptor for placenta growth factor, which is related to vascular endothelial growth factor. Sawano A, et al. **Cell Growth Differ** 1996 Feb;7(2):213–21

Activation of extracellular signal-regulated kinase (ERK) by mitogenic stimuli is repressed in v-Src-transformed cells. Stofega MR, et al. **Cell Growth Differ** 1997 Jan;8(1):113-9

Functional upregulation of the vascular endothelial growth factor receptor KDR by hypoxia [see comments] Waltenberger J, et al. **Circulation** 1996 Oct 1;94(7):1647-54 . Comment in: Circulation 1996 Oct 1;94(7):1496-8.

Receptor signalling: to sevenless, a daughter. MacDougall LK, et al. **Curr Biol** 1996 Oct 1;6(10):1250-3 (12 ref.)

LERK-7: a ligand of the Eph-related kinases is developmentally regulated in the brain. Kozlosky CJ, et al. **Cytokine** 1997 Aug;9(8):540-9

Trk neurotrophin receptors in cholinergic neurons of patients with Alzheimer's disease. Boissière F, et al. **Dement Geriatr Cogn Disord** 1997 Jan-Feb;8(1):1-8

The nonreceptor protein tyrosine phosphatase corkscrew functions in multiple receptor tyrosine kinase pathways in Drosophila. Perkins LA, et al. **Dev Biol** 1996 Nov 25; 180(1):63-81

Two Eph receptor tyrosine kinase ligands control axon growth and may be involved in the creation of the retinotectal map in the zebrafish. Brennan C, et al. **Development** 1997 Feb;124(3):655-64

derailed is required for muscle attachment site selection in Drosophila. Callahan CA, et al. **Development** 1996 Sep; 122(9):2761-7

VEGF-C receptor binding and pattern of expression with VEGFR-3 suggests a role in lymphatic vascular development. Kukk E, et al. **Development** 1996 Dec; 122(12):3829-37

Cell autonomous functions of the receptor tyrosine kinase TIE in a late phase of angiogenic capillary growth and endothelial cell survival during murine development. Partanen J, et al. **Development** 1996 Oct;122(10):3013-21

Timing of neuronal death in trkA, trkB and trkC mutant embryos reveals developmental changes in sensory neuron dependence on Trk signalling. Piñon LG, et al. **Development** 1996 Oct;122(10):3255-61

Lack of hepatocyte growth factor receptor (c-met) gene expression in fulminant hepatic failure livers before transplantation. Ljubimova JY, et al. **Dig Dis Sci** 1997 Aug; 42(8):1675-80

HGF receptor associates with the anti-apoptotic protein BAG-1 and prevents cell death. Bardelli A, et al. **EMBO J** 1996 Nov 15;15(22):6205-12

The second immunoglobulin-like domain of the VEGF tyrosine kinase receptor Flt-1 determines ligand binding and may initiate a signal transduction cascade. Davis-Smyth T, et al. **EMBO J** 1996 Sep 16;15(18):4919-27

Association of muscle-specific kinase MuSK with the acetylcholine receptor in mammalian muscle. Fuhrer C, et al. **EMBO J** 1997 Aug 15;16(16):4951-60

Juxtamembrane tyrosine residues couple the Eph family receptor EphB2/Nuk to specific SH2 domain proteins in neuronal cells. Holland SJ, et al. **EMBO J** 1997 Jul 1; 16(13):3877-88

STK/RON receptor tyrosine kinase mediates both apoptotic and growth signals via the multifunctional docking site conserved among the HGF receptor family. Iwama A, et al. **EMBO J** 1996 Nov 1;15(21):5866-75

Proteolytic processing regulates receptor specificity and activity of VEGF-C. Joukov V, et al. **EMBO J** 1997 Jul 1;16(13):3898-911

Dephosphorylation of receptor tyrosine kinases as target of regulation by radiation, oxidants or alkylating agents. Knebel A, et al. **EMBO J** 1996 Oct 1;15(19):5314-25

The N-terminal globular domain of Eph receptors is sufficient for ligand binding and receptor signaling. Labrador JP, et al. **EMBO J** 1997 Jul 1;16(13):3889-97

Sek4 and Nuk receptors cooperate in guidance of commissural axons and in palate formation. Orioli D, et al. **EMBO J** 1996 Nov 15;15(22):6035-49

Activation of the JNK pathway is essential for transformation by the Met oncogene. Rodrigues GA, et al. **EMBO J** 1997 May 15;16(10):2634-45

Unique signal transduction of Eyk: constitutive stimulation of the JAK-STAT pathway by an oncogenic receptor-type tyrosine kinase. Zong C, et al. **EMBO J** 1996 Sep 2; 15(17):4515-25

The path less traveled by [editorial; comment] Baserga R. **Endocrinology** 1997 Jun;138(6):2217-8 (9 ref.). Comment on: Endocrinology 1997 Jun;138(6):2219-26.

Tie2 receptor expression and phosphorylation in cultured cells and mouse tissues. Koblizek TI, et al. **Eur J Biochem** 1997 Mar 15;244(3):774-9

Stimulation of Sky tyrosine phosphorylation by bovine protein S--domains involved in the receptor-ligand interaction. Nyberg P, et al. **Eur J Biochem** 1997 May 15; 246(1):147-54

Postnatal changes in the expression of the trkA high-affinity NGF receptor in primary sensory neurons. Bennett DL, et al. **Eur J Neurosci** 1996 Oct;8(10):2204-8

Analysis of neurotrophin/receptor interactions with a gD-flag-modified quantitative kinase receptor activation (gD.KIRA) enzyme-linked immunosorbent assay. Sadick MD, et al. **Exp Cell Res** 1997 Aug 1;234(2):354-61

Loss of flk-2/flt3 expression during commitment of multipotent mouse hematopoietic progenitor cells to the mast cell lineage. Pharr PN, et al. **Exp Hematol** 1997 Jul; 25(7):620-8

Amino-terminal sequence determinants for substrate recognition by platelet-derived growth factor receptor tyrosine kinase. Chan PM, et al. **FEBS Lett** 1996 Sep 30; 394(2):121-5

Detection of ERK activation by a novel monoclonal antibody. Yung Y, et al. **FEBS Lett** 1997 May 26; 408(3):292-6

Growth factor ligands of tyrosine kinase receptors activate the Rous sarcoma virus promoter by a Ras- and Raf-dependent mechanism. Cosgaya JM, et al. **Gene** 1997 Apr 1;188(2):291-3

cDNA cloning, chromosomal localization, and expression pattern of EPLG8, a new member of the EPLG gene family encoding ligands of EPH-related protein-tyrosine kinase receptors. Tang XX, et al. **Genomics** 1997 Apr 1; 41(1):17-24

Localisation of hepatocyte growth factor and its receptor (c-met) protein and mRNA in human term placenta. Kilby MD, et al. **Growth Factors** 1996;13(1-2):133-9

Hepatocyte growth factor and c-met expression in Long-Evans Cinnamon rats with spontaneous hepatitis and hepatoma. Nakayama N, et al. **Hepatology** 1996 Sep; 24(3):596-602

Expression of hepatocyte growth factor and its receptor, the c-met proto-oncogene, in hepatocellular carcinoma. Ueki T, et al. **Hepatology** 1997 Mar;25(3):619-23

De novo mutation of GDNF, ligand for the RET/GDNFR-alpha receptor complex, in Hirschsprung disease. Ivanchuk SM, et al. **Hum Mol Genet** 1996 Dec; 5(12):2023-6

Effects of phorbol ester on phospholipase D and mitogen-activated protein kinase activities in T-lymphocyte cell lines. Bradshaw CD, et al. **Immunol Lett** 1996 Nov;53(2-3):69-76

Expression of fibroblast growth factor binding protein HBp17 in normal and tumor cells [letter] Okamoto T, et al. **In Vitro Cell Dev Biol Anim** 1996 Feb;32(2):69-71

Expression of the c-Met/HGF receptor in human breast carcinoma: correlation with tumor progression. Beviglia L, et al. **Int J Cancer** 1997 Jun 20;74(3):301-9

The role of EPH receptor tyrosine kinase CEK5 and its ligand Cek5-L/ELF-2/LERK2/hElk-L in the development of the chick retina. Sefton M, et al. **Int J Dev Biol** 1996;Suppl 1:143S-144S

p75 and Trk oncoproteins expression is developmentally regulated in the inner ear of human embryos. Vazquez E, et al. **Int J Dev Biol** 1996;Suppl 1:77S-78S

Mice with a targeted disruption of the neurotrophin receptor trkB lose their gustatory ganglion cells early but do develop taste buds. Fritzsch B, et al. **Int J Dev Neurosci** 1997 Jul; 15(4-5):563-76

Molecular cloning of the Xenopus c-met/hepatocyte growth factor receptor and its regional expression during early development. Aoki S, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):961-8

Mapping of the sites for ligand binding and receptor dimerization at the extracellular domain of the vascular endothelial growth factor receptor FLT-1. Barleon B, et al. **J Biol Chem** 1997 Apr 18;272(16):10382-8

Cell-cell adhesion mediated by binding of membrane-anchored ligand LERK-2 to the EPH-related receptor human embryonal kinase 2 promotes tyrosine kinase activity. Böhme B, et al. **J Biol Chem** 1996 Oct 4; 271(40):24747-52

Autophosphorylation of activation loop tyrosines regulates signaling by the TRK nerve growth factor receptor. Cunningham ME, et al. **J Biol Chem** 1997 Apr 18; 272(16):10957-67

Agonistic and antagonistic variants of ciliary neurotrophic factor (CNTF) reveal functional differences between membrane-bound and soluble CNTF alpha-receptor. Di Marco A, et al. **J Biol Chem** 1997 Sep 12;272(37):23069-75

Phosphorylation and desensitization of human endothelin A and B receptors. Evidence for G protein-coupled receptor kinase specificity. Freedman NJ, et al. **J Biol Chem** 1997 Jul 11;272(28):17734-43

Both p140(trk) and p75(NGFR) nerve growth factor receptors mediate nerve growth factor-stimulated calcium uptake. Jiang H, et al. **J Biol Chem** 1997 Mar 14; 272(11):6835-7

Downstream signaling molecules bind to different phosphorylated immunoreceptor tyrosine-based activation motif (ITAM) peptides of the high affinity IgE receptor. Kimura T, et al. **J Biol Chem** 1996 Nov 1;271(44):27962-8

Lysosomal targeting of epidermal growth factor receptors via a kinase-dependent pathway is mediated by the receptor carboxyl-terminal residues 1022-1123. Kornilova E, et al. **J Biol Chem** 1996 Nov 29;271(48):30340-6

Two restricted sites on the surface of the nerve growth factor molecule independently determine specific TrkA receptor binding and activation. Kullander K, et al. **J Biol Chem** 1997 Apr 4;272(14):9300-7

Ligand for EPH-related kinase (LERK) 7 is the preferred high affinity ligand for the HEK receptor. Lackmann M, et al. **J Biol Chem** 1997 Jun 27;272(26):16521-30

GAS6 mediates adhesion of cells expressing the receptor tyrosine kinase Axl. McCloskey P, et al. **J Biol Chem** 1997 Sep 12;272(37):23285-91

Identification of the product of growth arrest-specific gene 6 as a common ligand for Axl, Sky, and Mer receptor tyrosine kinases. Nagata K, et al. **J Biol Chem** 1996 Nov 22;271(47):30022-7

Association of the multisubstrate docking protein Gab1 with the hepatocyte growth factor receptor requires a functional Grb2 binding site involving tyrosine 1356. Nguyen L, et al. **J Biol Chem** 1997 Aug 15;272(33):20811-9

Functional characterization of an epidermal growth factor receptor/RET chimera. Pandit SD, et al. **J Biol Chem** 1997 Jan 24;272(4):2199-206

Phosphatidylinositol 4,5-bisphosphate (PIP2)-enhanced G protein-coupled receptor kinase (GRK) activity. Location, structure, and regulation of the PIP2 binding site distinguishes the GRK subfamilies. Pitcher JA, et al. **J Biol Chem** 1996 Oct 4;271(40):24907-13

Extracellular cleavage of the vascular endothelial growth factor 189-amino acid form by urokinase is required for its mitogenic effect. Plouët J, et al. **J Biol Chem** 1997 May 16;272(20):13390-6

Regulation of the G protein-coupled receptor kinase GRK5 by protein kinase C. Pronin AN, et al. **J Biol Chem** 1997 Feb 7;272(6):3806-12

Sustained activation of the extracellular signal-regulated kinase/mitogen-activated protein kinase pathway is required for megakaryocytic differentiation of K562 cells. Racke FK, et al. **J Biol Chem** 1997 Sep 12;272(37):23366-70

Ligand stimulation of a Ret chimeric receptor carrying the activating mutation responsible for the multiple endocrine neoplasia type 2B. Rizzo C, et al. **J Biol Chem** 1996 Nov 15;271(46):29497-501

Heparin binding and oligomerization of hepatocyte growth factor/scatter factor isoforms. Heparan sulfate glycosaminoglycan requirement for Met binding and signaling. Sakata H, et al. **J Biol Chem** 1997 Apr 4; 272(14):9457-63

The hepatocyte growth factor receptor kinase-mediated phosphorylation of lipocortin-1 transduces the proliferating signal of the hepatocyte growth factor. Skouteris GG, et al. **J Biol Chem** 1996 Nov 1;271(44):27266-73

A lymphocyte-specific Ltk tyrosine kinase isoform is retained in the endoplasmic reticulum in association with calnexin. Snijders AJ, et al. **J Biol Chem** 1997 Jan 10;272(2):1297-301

Ligand activation of ELK receptor tyrosine kinase promotes its association with Grb10 and Grb2 in vascular endothelial cells. Stein E, et al. **J Biol Chem** 1996 Sep 20; 271(38):23588-93

Growth and survival signals transmitted via two distinct NPXY motifs within leukocyte tyrosine kinase, an insulin receptor-related tyrosine kinase. Ueno H, et al. **J Biol Chem** 1996 Nov 1;271(44):27707-14

Macrophage stimulating protein (MSP) binds to its receptor via the MSP beta chain. Wang MH, et al. **J Biol Chem** 1997 Jul 4;272(27):16999-7004

A dominant role of the juxtamembrane region of the TrkA nerve growth factor receptor during neuronal cell differentiation. Yoon SO, et al. **J Biol Chem** 1997 Sep 12; 272(37):23231-8

Effect of tumor necrosis factor-alpha on the phosphorylation of tyrosine kinase receptors is associated with dynamic alterations in specific protein-tyrosine phosphatases. Ahmad F, et al. **J Cell Biochem** 1997 Jan;64(1):117-27

A natural hepatocyte growth factor/scatter factor autocrine loop in myoblast cells and the effect of the constitutive Met kinase activation on myogenic differentiation. Anastasi S, et al. **J Cell Biol** 1997 Jun 2;137(5):1057-68

NGF and neurotrophin-3 both activate TrkA on sympathetic neurons but differentially regulate survival and neuritogenesis. Belliveau DJ, et al. **J Cell Biol** 1997 Jan 27;136(2):375-88

Transmembrane domain sequence requirements for activation of the p185c-neu receptor tyrosine kinase. Chen LI, et al. **J Cell Biol** 1997 May 5;137(3):619-31

Ezrin is an effector of hepatocyte growth factor-mediated migration and morphogenesis in epithelial cells. Crepaldi T, et al. **J Cell Biol** 1997 Jul 28;138(2):423-34

Two peptides derived from the nerve growth factor precursor are biologically active. Dicou E, et al. **J Cell Biol** 1997 Jan 27;136(2):389-98

Integrins can collaborate with growth factors for phosphorylation of receptor tyrosine kinases and MAP kinase activation: roles of integrin aggregation and occupancy of receptors. Miyamoto S, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1633-42

Rapid retrograde tyrosine phosphorylation of trkA and other proteins in rat sympathetic neurons in compartmented cultures. Senger DL, et al. **J Cell Biol** 1997 Jul 28; 138(2):411-21

Disruption of integrin alpha 5 beta 1 signaling does not impair PDGF-BB-mediated stimulation of the extracellular signal-regulated kinase pathway in smooth muscle cells. Hedin UL, et al. **J Cell Physiol** 1997 Jul;172(1):109-16

Mutation associated with Crouzon syndrome causes ligand-independent dimerization and activation of FGF receptor-2. Mangasarian K, et al. **J Cell Physiol** 1997 Jul; 172(1):117-25

Cytosolic phospholipase A2 is activated by the hepatocyte growth factor receptor-kinase in Madin Darby canine kidney cells. Skouteris GG, et al. **J Cell Sci** 1997 Jul;110 (Pt 14):1655-63

C-Met signalling in an HGF/SF-insensitive variant MDCK cell line with constitutive motile/invasive behaviour. Webb CP, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2371-81

Negative/low expression of the Met/hepatocyte growth factor receptor identifies papillary thyroid carcinomas with high risk of distant metastases. Belfiore A, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2322-8

The differential expression of hepatocyte growth factor and

met in human placenta. Kauma S, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):949–54

Increased pressure on G protein–coupled receptor kinases [editorial; comment] Bouvier M. **J Clin Invest** 1997 May 1;99(9):2060–1. Comment on: J Clin Invest 1997 May 1;99(9):2087–93.

G-protein–coupled receptor kinase activity is increased in hypertension [see comments] Gros R, et al. **J Clin Invest** 1997 May 1;99(9):2087–93. Comment in: J Clin Invest 1997 May 1;99(9):2060–1.

TRK and p75 neurotrophin receptor systems in the developing human brain. Chen EY, et al. **J Comp Neurol** 1996 Jun 10;369(4):591–618

Hepatocyte growth factor/scatter factor and its receptor c-met: localisation and expression in the human placenta throughout pregnancy. Clark DE, et al. **J Endocrinol** 1996 Dec;151(3):459–67

Differential stimulation of ERK and JNK activities by ultraviolet B irradiation and epidermal growth factor in human keratinocytes. Assefa Z, et al. **J Invest Dermatol** 1997 Jun;108(6):886–9

Suramin is a potent inhibitor of vascular endothelial growth factor. A contribution to the molecular basis of its antiangiogenic action. Waltenberger J, et al. **J Mol Cell Cardiol** 1996 Jul;28(7):1523–9

Ganglioside GM1 enhances induction by nerve growth factor of a putative dimer of TrkA. Farooqui T, et al. **J Neurochem** 1997 Jun;68(6):2348–55

Transient association of the phosphotyrosine phosphatase SHP-2 with TrkA is induced by nerve growth factor. Goldsmith BA, et al. **J Neurochem** 1997 Sep;69(3):1014–9

Localization of Trk neurotrophin receptor–like proteins in avian primary lymphoid organs (thymus and bursa of Fabricius). Ciriaco E, et al. **J Neuroimmunol** 1996 Sep; 69(1–2):73–83

Distribution of NGF receptors in normal and pathologic human lymphoid tissues. Labouyrie E, et al. **J Neuroimmunol** 1997 Aug;77(2):161–73

Tie endothelial cell–specific receptor tyrosine kinase is upregulated in the vasculature of arteriovenous malformations. Hatva E, et al. **J Neuropathol Exp Neurol** 1996 Nov;55(11):1124–33

Calcium controls gene expression via three distinct pathways that can function independently of the Ras/mitogen-activated protein kinases (ERKs) signaling cascade. Johnson CM, et al. **J Neurosci** 1997 Aug 15; 17(16):6189–202

Optimal nerve growth factor trophic signals mediated by synergy of TrkA and p75 receptor–specific ligands. Maliartchouk S, et al. **J Neurosci** 1997 Aug 15; 17(16):6031–7

Flk-1, a receptor for vascular endothelial growth factor (VEGF), is expressed by retinal progenitor cells. Yang K, et al. **J Neurosci** 1996 Oct 1;16(19):6089–99

Structural determinants of Trk receptor specificities using BDNF–based neurotrophin chimeras. Lai KO, et al. **J Neurosci Res** 1996 Dec 1;46(5):618–29

Corticosterone regulates expression of BDNF and trkB but not NT-3 and trkC mRNA in the rat hippocampus. Schaaf MJ, et al. **J Neurosci Res** 1997 May 15;48(4):334–41

BDNF/NT4-5 receptor TrkB and cadherin participate in cell–cell adhesion. Zhou H, et al. **J Neurosci Res** 1997 Aug 1;49(3):281–91

Tyrosine phosphorylation of L1 family adhesion molecules: implication of the Eph kinase Cek5. Zisch AH, et al. **J Neurosci Res** 1997 Mar 15;47(6):655–65

Immunoreactivity for hepatocyte growth factor/scatter factor and its receptor, met, in human lung carcinomas and malignant mesotheliomas. Harvey P, et al. **J Pathol** 1996 Dec;180(4):389–94

Expression of Met protein in thyroid tumours. Ruco LP, et al. **J Pathol** 1996 Nov;180(3):266–70

Alterations in neurotrophin and neurotrophin-receptor localization in Hirschsprung's disease. Hoehner JC, et al. **J Pediatr Surg** 1996 Nov;31(11):1524–9

Expression of c-met/HGF receptor in human non–small cell lung carcinomas in vitro and in vivo and its prognostic significance. Ichimura E, et al. **Jpn J Cancer Res** 1996 Oct; 87(10):1063–9

ELK and LERK-2 in developing kidney and microvascular endothelial assembly. Daniel TO, et al. **Kidney Int Suppl** 1996 Dec;57:S73–81

Uterine smooth muscle cells express functional receptors (flt-1 and KDR) for vascular permeability factor/vascular endothelial growth factor. Brown LF, et al. **Lab Invest** 1997 Feb;76(2):245–55

Expression of FLT4 and its ligand VEGF-C in acute myeloid leukemia. Fielder W, et al. **Leukemia** 1997 Aug; 11(8):1234–7

Receptor tyrosine kinases involved in hematopoietic progenitor cells. Suda T, et al. **Leukemia** 1997 Apr;11 Suppl 3:451–3

Survival of inner ear sensory neurons in trk mutant mice. Schimmang T, et al. **Mech Dev** 1997 Jun;64(1–2):77–85

Expression of c-met proto-oncogene product (c-MET) in benign and malignant bone tumors. Naka T, et al. **Mod Pathol** 1997 Aug;10(8):832–8

Positive and negative tissue-specific signaling by a nematode epidermal growth factor receptor. Lesa GM, et al. **Mol Biol Cell** 1997 May;8(5):779–93

A splicing variant of the RON transcript induces constitutive tyrosine kinase activity and an invasive phenotype [published erratum appears in Mol Cell Biol 1997 Jan;17(1):528] Collesi C, et al. **Mol Cell Biol** 1996 Oct; 16(10):5518–26

Degradation of the Met tyrosine kinase receptor by the ubiquitin–proteasome pathway. Jeffers M, et al. **Mol Cell Biol** 1997 Feb;17(2):799–808

Enhanced signaling and morphological transformation by a membrane-localized derivative of the fibroblast growth factor receptor 3 kinase domain. Webster MK, et al. **Mol Cell Biol** 1997 Oct;17(10):5739–47

Role of p38 and JNK mitogen-activated protein kinases in the activation of ternary complex factors. Whitmarsh AJ, et al. **Mol Cell Biol** 1997 May;17(5):2360–71

Telling axons where to grow: a role for Eph receptor tyrosine kinases in guidance. Brambilla R, et al. **Mol Cell Neurosci** 1995 Dec;6(6):487–95 (65 ref.)

Similarities and differences in the way transmembrane-type ligands interact with the Elk subclass of Eph receptors. Brambilla R, et al. **Mol Cell Neurosci** 1996;8(2–3):199–209

The Eph kinase ligand AL-1 is expressed by rostral muscles and inhibits outgrowth from caudal neurons. Donoghue MJ, et al. **Mol Cell Neurosci** 1996;8(2–3):185–98

The receptor encoded by the human C-MET oncogene is expressed in testicular tissue and on human spermatozoa. Depuydt CE, et al. **Mol Hum Reprod** 1996 Jan;2(1):2–8

The sigmaE–mediated response to extracytoplasmic stress in Escherichia coli is transduced by RseA and RseB, two negative regulators of sigmaE. De Las Peñas A, et al. **Mol Microbiol** 1997 Apr;24(2):373–85

Modulation of the Escherichia coli sigmaE (RpoE) heat-shock transcription-factor activity by the RseA, RseB and RseC proteins. Missiakas D, et al. **Mol Microbiol** 1997 Apr;24(2):355–71

Inhibition by toxin B of inositol phosphate formation induced by G protein–coupled and tyrosine kinase receptors in N1E-115 neuroblastoma cells: involvement of Rho proteins. Zhang C, et al. **Mol Pharmacol** 1996 Oct; 50(4):864–9

Immunoglobulin-like domains define the nerve growth factor binding site of the TrkA receptor. Holden PH, et al. **Nat Biotechnol** 1997 Jul;15(7):668–72

Direct demonstration of MuSK involvement in acetylcholine receptor clustering through identification of agonist ScFv [see comments] Xie MH, et al. **Nat Biotechnol** 1997 Aug; 15(8):768–71. Comment in: Nat Biotechnol 1997 Aug;15(8):721–2.

The angiogenesis induced by HIV-1 tat protein is mediated by the Flk-1/KDR receptor on vascular endothelial cells. Albini A, et al. **Nat Med** 1996 Dec;2(12):1371–5

X-ray structure of glial cell–derived neurotrophic factor at 1.9 A resolution and implications for receptor binding [letter] Eigenbrot C, et al. **Nat Struct Biol** 1997 Jun; 4(6):435–8

Neurturin responsiveness requires a GPI-linked receptor and the Ret receptor tyrosine kinase. Buj-Bello A, et al. **Nature** 1997 Jun 12;387(6634):721–4

Bidirectional signalling through the EPH-family receptor Nuk and its transmembrane ligands. Holland SJ, et al. **Nature** 1996 Oct 24;383(6602):722–5

A family of proteins that inhibit signalling through tyrosine kinase receptors. Kharitonenkov A, et al. **Nature** 1997 Mar 13;386(6621):181–6

A GPI-linked protein that interacts with Ret to form a candidate neurturin receptor. Klein RD, et al. **Nature** 1997 Jun 12;387(6634):717–21

Interaction between Gab1 and the c-Met receptor tyrosine kinase is responsible for epithelial morphogenesis. Weidner KM, et al. **Nature** 1996 Nov 14;384(6605):173–6

Constitutive phosphorylation of TrkC receptors in cultured cerebellar granule neurons might be responsible for the inability of NT-3 to increase neuronal survival and to activate p21 Ras. Zirrgiebel U, et al. **Neurochem Res** 1996 Jul;21(7):851–9

Eph receptors and ligands comprise two major specificity subclasses and are reciprocally compartmentalized during embryogenesis. Gale NW, et al. **Neuron** 1996 Jul;17(1):9–19

trkA and trkC expression is increased in human diabetic skin. Terenghi G, et al. **Neurosci Lett** 1997 May 30;228(1):33–6

ret receptor tyrosine kinase immunoreactivity is altered in glial cell line–derived neurotrophic factor–responsive neurons following lesions of the nigrostriatal and septohippocampal pathways. Araujo DM, et al. **Neuroscience** 1997 Sep;80(1):9–16

Identification of Shc docking site on Ret tyrosine kinase. Arighi E, et al. **Oncogene** 1997 Feb 20;14(7):773–82

Intracellular signaling of the Ufo/Axl receptor tyrosine kinase is mediated mainly by a multi-substrate docking-site. Braunger J, et al. **Oncogene** 1997 Jun 5;14(22):2619–31

Identification of Gas6 as a ligand for Mer, a neural cell adhesion molecule related receptor tyrosine kinase implicated in cellular transformation. Chen J, et al. **Oncogene** 1997 May 1;14(17):2033–9

Identification of Elf-1 and B61 as high affinity ligands for the receptor tyrosine kinase MDK1. Ciossek T, et al. **Oncogene** 1997 Jan 9;14(1):35–43

Decreased expression of keratinocyte growth factor receptor in a subset of human transitional cell bladder carcinomas. Diez de Medina SG, et al. **Oncogene** 1997 Jan 23; 14(3):323–30

Characterization of murine Flt4 ligand/VEGF-C. Fitz LJ, et al. **Oncogene** 1997 Jul 31;15(5):613–8

Elk-L3, a novel transmembrane ligand for the Eph family of receptor tyrosine kinases, expressed in embryonic floor plate, roof plate and hindbrain segments. Gale NW, et al. **Oncogene** 1996 Sep 19;13(6):1343–52

Activated ras and ret oncogenes induce over–expression of c-met (hepatocyte growth factor receptor) in human thyroid epithelial cells. Ivan M, et al. **Oncogene** 1997 May 22;14(20):2417–23

RET alternate splicing influences the interaction of activated RET with the SH2 and PTB domains of Shc, and the SH2 domain of Grb2. Lorenzo MJ, et al. **Oncogene** 1997 Feb 20;14(7):763–71

P53 associates with trk tyrosine kinase. Montano X. **Oncogene** 1997 Jul 17;15(3):245–56

Oncogenic activation of RET by two distinct FMTC mutations affecting the tyrosine kinase domain. Pasini A, et al. **Oncogene** 1997 Jul 24;15(4):393–402

The phosphatidylinositol 3' kinase pathway is required for the survival signal of leukocyte tyrosine kinase. Ueno H, et al. **Oncogene** 1997 Jun 26;14(25):3067–72

Oncogenic activation of the alphaPDGFR defines a domain that negatively regulates receptor dimerization. Uren A, et al. **Oncogene** 1997 Jan 16;14(2):157–62

Cell scattering of SK-N-MC neuroepithelioma cells in response to Ret and FGF receptor tyrosine kinase activation is correlated with sustained ERK2 activation. van Puijenbroek AA, et al. **Oncogene** 1997 Mar 13; 14(10):1147–57

Requirement of phosphatidylinositol-3 kinase for epithelial cell migration activated by human macrophage stimulating protein. Wang MH, et al. **Oncogene** 1996 Nov 21; 13(10):2167–75

Hepatoblastoma in an adult associated with c-met proto–oncogene imbalance. Kuniyasu H, et al. **Pathol Int** 1996 Dec;46(12):1005–10

Rhythmic Cl- current and physiological roles of the intestinal c-kit–positive cells. Tokutomi N, et al. **Pflugers Arch** 1995 Dec;431(2):169–77

Signal transduction by the oncogenic receptor tyrosine kinase Xmrk in melanoma formation of Xiphophorus. Wellbrock C, et al. **Pigment Cell Res** 1997 Feb–Apr;10(1–2):34–40 (60 ref.)

Inhibitory receptors abound? [comment] Cambier JC. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):5993–5 (24 ref.). Comment on: Proc Natl Acad Sci U S A 1997 May 13;94(10):5261–6.

Receptor and G betagamma isoform–specific interactions with G protein–coupled receptor kinases. Daaka Y, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2180–5

Kinase domain of the muscle-specific receptor tyrosine kinase (MuSK) is sufficient for phosphorylation but not clustering of acetylcholine receptors: required role for the MuSK ectodomain? Glass DJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8848–53

A signaling organelle containing the nerve growth factor–activated receptor tyrosine kinase, TrkA. Grimes ML, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9909–14

Vascular endothelial growth factor: crystal structure and functional mapping of the kinase domain receptor binding site. Muller YA, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7192–7

Glial cell line–derived neurotrophic factor–dependent RET activation can be mediated by two different cell–surface accessory proteins. Sanicola M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6238–43

Computer modelling of the receptor–binding domains of VEGF and PlGF. Walsh TP, et al. **Protein Eng** 1997 Apr; 10(4):389–98

Tyrosine phosphorylation of transmembrane ligands for Eph receptors. Brückner K, et al. **Science** 1997 Mar 14; 275(5306):1640–3

Signaling vascular morphogenesis and maintenance [comment] Hanahan D. **Science** 1997 Jul 4;277(5322):48–50 . Comment on: Science 1997 Jul 4;277(5322):55–60.

An NGF–TrkA–mediated retrograde signal to transcription factor CREB in sympathetic neurons [see comments] Riccio A, et al. **Science** 1997 Aug 22;277(5329):1097–100 . Comment in: Science 1997 Aug 22;277(5329):1037.

VEGF and flt. Expression time kinetics in rat brain infarct. Kovács Z, et al. **Stroke** 1996 Oct;27(10):1865–72; discussion 1872–3

Not all Shc's roads lead to Ras. Bonfini L, et al. **Trends Biochem Sci** 1996 Jul;21(7):257–61 (51 ref.)

The GDNF-RET signalling partnership. Robertson K, et al. **Trends Genet** 1997 Jan;13(1):1–3 (36 ref.)

[The molecular determinants of receptors and GTP–binding proteins that define the specificity of the interactions between them] Shpakov AO. **Zh Evol Biokhim Fiziol** 1996 Jul–Aug;32(4):488–510 (127 ref.) **(Rus)**

PHARMACOLOGY

In vitro expansion of hematopoietic progenitors and maintenance of stem cells: comparison between FLT3/FLK-2 ligand and KIT ligand. Yonemura Y, et al. **Blood** 1997 Mar 15;89(6):1915–21

[The effect of STK-1 receptor (FLK2/FLT3) ligand on human erythropoiesis in vitro. Clinical implications] Ratajczak J, et al. **Pol Arch Med Wewn** 1995 Nov; 94(5):418–24 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Retrograde transport of acidic fibroblast growth factor as a part of the growth factor signaling. Więdłocha A. **Arch Immunol Ther Exp (Warsz)** 1996;44(4):201–7 (64 ref.)

Hepatocyte growth factor is a paracrine regulator of rat prostate epithelial growth. Kasai S, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):646–52

On the tyrosine kinase mechanism of the novel effect of insulin and insulinlike growth factor I. Stimulation of the adenylyl cyclase system in muscle tissues. Pertseva MN, et al. **Biochem Pharmacol** 1996 Dec 24;52(12):1867–74

G–protein–coupled receptor kinases and arrestins: regulators of G–protein–coupled receptor sequestration. Ferguson SS, et al. **Biochem Soc Trans** 1996 Nov;24(4):953–9 (49 ref.)

Receptor tyrosine kinase–dependent neural crest migration in response to differentially localized growth factors. Wehrle-Haller B, et al. **Bioessays** 1997 Apr;19(4):337–45 (73 ref.)

Increased recruitment of hematopoietic progenitor cells underlies the ex vivo expansion potential of FLT3 ligand. Haylock DN, et al. **Blood** 1997 Sep 15;90(6):2260–72

Expression and function of murine receptor tyrosine kinases, TIE and TEK, in hematopoietic stem cells. Yano M, et al. **Blood** 1997 Jun 15;89(12):4317–26

TrkA expression decreases the in vivo aggressiveness of C6 glioma cells. Lachyankar MB, et al. **Cancer Res** 1997 Feb 1;57(3):532–6

Role of epidermal growth factor receptor and STAT–3 activation in autonomous proliferation of SUM–102PT human breast cancer cells. Sartor CI, et al. **Cancer Res** 1997 Mar 1;57(5):978–87

Uncoupling of Grb2 from the Met receptor in vivo reveals complex roles in muscle development. Maina F, et al. **Cell** 1996 Nov 1;87(3):531–42

Hepatocyte growth factor/scatter factor–Met signaling induces proliferation, migration, and morphogenesis of pancreatic oval cells. Jeffers M, et al. **Cell Growth Differ** 1996 Dec;7(12):1805–13

Receptor tyrosine kinase signaling in vascular development. Merenmies J, et al. **Cell Growth Differ** 1997 Jan;8(1):3–10 (93 ref.)

Interactions of Eph–related receptors and ligands confer rostrocaudal pattern to trunk neural crest migration. Krull CE, et al. **Curr Biol** 1997 Aug 1;7(8):571–80

The EphA4 and EphB1 receptor tyrosine kinases and ephrin–B2 ligand regulate targeted migration of branchial neural crest cells. Smith A, et al. **Curr Biol** 1997 Aug 1; 7(8):561–70

Novel mechanisms of RTK signal generation. Weiss FU, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):80–6 (50 ref.)

Signalling through the neurotrophin receptor p75NTR. Dechant G, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):413–8 (58 ref.)

Vascular endothelial growth factor and its receptors. Klagsbrun M, et al. **Cytokine Growth Factor Rev** 1996 Oct; 7(3):259–70 (136 ref.)

Comparative role of phosphotyrosine kinase domains of c–ros and c–ret protooncogenes in metanephric development with respect to growth factors and matrix morphogens. Liu ZZ, et al. **Dev Biol** 1996 Aug 25;178(1):133–48

Neither the homeodomain nor the activation domain of Bicoid is specifically required for its down–regulation by the Torso receptor tyrosine kinase cascade. Bellaïche Y, et al. **Development** 1996 Nov;122(11):3499–508

EGF receptor signaling induces pointed P1 transcription and inactivates Yan protein in the Drosophila embryonic ventral ectoderm. Gabay L, et al. **Development** 1996 Nov; 122(11):3355–62

STK/RON receptor tyrosine kinase mediates both apoptotic and growth signals via the multifunctional docking site conserved among the HGF receptor family. Iwama A, et al. **EMBO J** 1996 Nov 1;15(21):5866–75

Involvement of nerve growth factor in the ovulatory cascade: trkA receptor activation inhibits gap junctional communication between thecal cells. Mayerhofer A, et al. **Endocrinology** 1996 Dec;137(12):5662–70

Key elements involved in the negative regulation of the TSH receptor: G protein–coupled receptor kinases, arrestin and inducible cAMP early repressor. Kopp P. **Eur J Endocrinol** 1997 Mar;136(3):269–70

Vascular permeability factor/vascular endothelial growth factor: a multifunctional angiogenic cytokine. Brown LF, et al. **EXS** 1997;79:233–69 (133 ref.)

Vascular endothelial growth factor: basic biology and clinical implications. Ferrara N, et al. **EXS** 1997;79:209–32 (142 ref.)

Developmental expression and functionality of hepatocyte growth factor and c–Met in human fetal digestive tissues. Kermorgant S, et al. **Gastroenterology** 1997 May; 112(5):1635–47

The HGF receptor family: unconventional signal transducers for invasive cell growth. Comoglio PM, et al. **Genes Cells** 1996 Apr;1(4):347–54 (70 ref.)

Regulated Breathless receptor tyrosine kinase activity required to pattern cell migration and branching in the Drosophila tracheal system. Lee T, et al. **Genes Dev** 1996 Nov 15;10(22):2912–21

Interactions between brain–derived neurotrophic factor and the TRKB receptor. Identification of two ligand binding domains in soluble TRKB by affinity separation and chemical cross–linking. Haniu M, et al. **J Biol Chem** 1997 Oct 3;272(40):25296–303

Glial cell line–derived neurotrophic factor induces Ret–mediated lamellipodia formation. van Weering DH, et al. **J Biol Chem** 1997 Jan 3;272(1):249–54

Glial cell line–derived neurotrophic factor signals through the RET receptor and activates mitogen–activated protein kinase. Worby CA, et al. **J Biol Chem** 1996 Sep 27; 271(39):23619–22

Fibroblast growth factor receptor signalling has a role in lobuloalveolar development of the mammary gland. Jackson D, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1261–8

The hepatocyte growth factor/scatter factor (HGF/SF) receptor, met, transduces a morphogenetic signal in renal glomerular fibromuscular mesangial cells. Kolatsi–Joannou M, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3703–14

Role of macrophage–stimulating protein and its receptor, RON tyrosine kinase, in ciliary motility. Sakamoto O, et al. **J Clin Invest** 1997 Feb 15;99(4):701–9

Paracrine regulation of germinal center B cell adhesion through the c–met–hepatocyte growth factor/scatter factor pathway. van der Voort R, et al. **J Exp Med** 1997 Jun 16;185(12):2121–31

Basophil priming by neurotrophic factors. Activation through the trk receptor. Bürgi B, et al. **J Immunol** 1996 Dec 15;157(12):5582–8

Differential effects of Flk–2/Flt–3 ligand and stem cell factor on murine thymic progenitor cells. Moore TA, et al. **J Immunol** 1997 May 1;158(9):4187–92

The flt3 ligand promotes the survival of primitive hemopoietic progenitor cells with myeloid as well as B lymphoid potential. Suppression of apoptosis and counteraction by TNF–alpha and TGF–beta. Veiby OP, et al. **J Immunol** 1996 Oct 1;157(7):2953–60

Targeting G protein–coupled receptor kinases to their receptor substrates. Stoffel RH 3rd, et al. **J Membr Biol** 1997 May 1;157(1):1–8 (49 ref.)

A kinase insert isoform of rat TrkA supports nerve growth factor–dependent cell survival but not neurite outgrowth. Meakin SO, et al. **J Neurochem** 1997 Sep;69(3):954–67

Interleukin–6 induces expression of peripherin and cooperates with Trk receptor signaling to promote neuronal differentiation in PC12 cells. Sterneck E, et al. **J Neurochem** 1996 Oct;67(4):1365–74

Trk receptors function as rapid retrograde signal carriers in the adult nervous system. Bhattacharyya A, et al. **J Neurosci** 1997 Sep 15;17(18):7007–16

TrkA, but not TrkC, receptors are essential for survival of sympathetic neurons in vivo. Fagan AM, et al. **J Neurosci** 1996 Oct 1;16(19):6208–18

Calcium influx via the NMDA receptor induces immediate early gene transcription by a MAP kinase/ERK–dependent mechanism. Xia Z, et al. **J Neurosci** 1996 Sep 1; 16(17):5425–36

Role of VEGF receptor–1 (Flt–1) in mediating calcium–dependent nitric oxide release and limiting DNA synthesis in human trophoblast cells. Ahmed A, et al. **Lab Invest** 1997 Jun;76(6):779–91

Recent progress on the role of Axl, a receptor tyrosine kinase, in malignant transformation of myeloid leukemias. Neubauer A, et al. **Leuk Lymphoma** 1997 Mar;25(1–2):91–6 (23 ref.)

Altered beta–adrenergic receptor signaling in heart failure, in vivo gene transfer via adeno and adeno–associated virus. Ping P, et al. **Microcirculation** 1996 Jun;3(2):225–8

Modifications of the hepatocyte growth factor/c–met pathway by constitutive expression of transforming growth factor–alpha in rat liver epithelial cells. Presnell SC, et al. **Mol Carcinog** 1997 Apr;18(4):244–55

The GDNF receptor: recent progress and unanswered questions. Mason I. **Mol Cell Neurosci** 1996;8(2–3):112–9 (46 ref.)

Nerve growth factor controls proliferation and progression of human prolactinoma cell lines through an autocrine mechanism. Missale C, et al. **Mol Endocrinol** 1996 Mar; 10(3):272–85

Agonist activation of delta–opioid receptor but not mu–opioid receptor potentiates fetal calf serum or tyrosine kinase receptor–mediated cell proliferation in a cell–line–specific manner. Law PY, et al. **Mol Pharmacol** 1997 Jan;51(1):152–60

scFvs get down to basics: how MuSK makes synapses [news; comment] Wallace B. **Nat Biotechnol** 1997 Aug;15(8):721–2 . Comment on: Nat Biotechnol 1997 Aug;15(8):768–71.

Neurotrophin–3 knocks heart off Trk. Srivastava D, et al. **Nat Med** 1996 Oct;2(10):1069–71 (17 ref.)

Rapsyn is required for MuSK signaling and recruits synaptic components to a MuSK–containing scaffold. Apel ED, et al. **Neuron** 1997 Apr;18(4):623–35

TrnR2, a novel receptor that mediates neurturin and GDNF signaling through Ret. Baloh RH, et al. **Neuron** 1997 May; 18(5):793–802

Neuregulins and their receptors: a versatile signaling module in organogenesis and oncogenesis. Burden S, et al. **Neuron** 1997 Jun;18(6):847–55 (48 ref.)

GDNF in a bind with known orphan: accessory implicated in new twist. Lindsay RM, et al. **Neuron** 1996 Oct; 17(4):571–4 (28 ref.)

Regulation of the urokinase–type plasminogen activator gene by the oncogene Tpr–Met involves GRB2. Besser D, et al. **Oncogene** 1997 Feb 13;14(6):705–11

Activation of FGF receptors by mutations in the transmembrane domain. Li Y, et al. **Oncogene** 1997 Mar 27;14(12):1397–406

Ligand–independent activation of fibroblast growth factor receptor–2 by carboxyl terminal alterations. Lorenzi MV, et al. **Oncogene** 1997 Aug 14;15(7):817–26

N–Shc: a neural–specific adapter molecule that mediates signaling from neurotrophin/Trk to Ras/MAPK pathway. Nakamura T, et al. **Oncogene** 1996 Sep 19;13(6):1111–21

The 230 kDa mature form of KDR/Flk–1 (VEGF receptor–2) activates the PLC–gamma pathway and partially induces mitotic signals in NIH3T3 fibroblasts. Takahashi T, et al. **Oncogene** 1997 May 1;14(17):2079–89

Relationship of p215BRCA1 to tyrosine kinase signaling pathways and the cell cycle in normal and transformed cells. Zhang HT, et al. **Oncogene** 1997 Jun 19;14(24):2863–9

New insights into the control of cell growth; the role of the AxI family. Crosier KE, et al. **Pathology** 1997 May; 29(2):131–5 (43 ref.)

Possible involvement of VEGF–FLT tyrosine kinase receptor system in normal and tumor angiogenesis. Shibuya M, et al. **Princess Takamatsu Symp** 1994;24:162–70 (23 ref.)

Cancer–stromal interaction through growth factor/cytokine networks implicated in growth of stomach cancer. Tahara E. **Princess Takamatsu Symp** 1994;24:187–94 (19 ref.)

A potential pathogenetic mechanism for multiple endocrine neoplasia type 2 syndromes involves ret–induced impairment of terminal differentiation of neuroepithelial cells. Califano D, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7933–7

Neurturin shares receptors and signal transduction pathways with glial cell line–derived neurotrophic factor in sympathetic neurons. Creedon DJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):7018–23

Hepatocyte growth factor is a coupling factor for osteoclasts and osteoblasts in vitro. Grano M, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7644–8

Neurotrophin regulation of ionic currents and cell size depends on cell context. Sherwood NT, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5917–22

Glial cell line–derived neurotrophic factor activates the receptor tyrosine kinase RET and promotes kidney morphogenesis. Vega QC, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10657–61

Regulatory roles of the ligand for Flk2/Flt3 tyrosine kinase receptor on human hematopoiesis. Namikawa R, et al. **Stem Cells** 1996 Jul;14(4):388–95 (69 ref.)

FLT3/FLK–2 (STK–1) Ligand does not stimulate human megakaryopoiesis in vitro. Ratajczak MZ, et al. **Stem Cells** 1996 Jan;14(1):146–50

Angiogenesis in embryos and ischemic diseases. Breier G, et al. **Thromb Haemost** 1997 Jul;78(1):678–83 (70 ref.)

The Eph receptor family: axonal guidance by contact repulsion. Orioli D, et al. **Trends Genet** 1997 Sep; 13(9):354–9 (49 ref.)

p75NTR and apoptosis: Trk–dependent and Trk–independent effects. Bredesen DE, et al. **Trends Neurosci** 1997 Jul; 20(7):287–90 (36 ref.)

URINE

Mechanisms of proteinuria: vascular permeability factor in congenital nephrotic syndrome of the Finnish type. Haltia A, et al. **Pediatr Res** 1996 Nov;40(5):652–7

RECEPTOR TYROSINE KINASE see **RECEPTOR PROTEIN–TYROSINE KINASE**

RECEPTORS, ACETYLCHOLINE see **RECEPTORS, CHOLINERGIC**

RECEPTORS, ACTH see **RECEPTORS, CORTICOTROPIN**

RECEPTORS, ADENOSINE see **RECEPTORS, PURINERGIC P1**

RECEPTORS, ADP see **RECEPTORS, PURINERGIC P2**

RECEPTORS, ADRENERGIC

Protection of the myocardium by ischaemic preconditioning: mechanisms and therapeutic implications. Millar CG, et al. **Pharmacol Ther** 1996;69(2):143–51 (89 ref.)

[Adrenaline receptor and dopamine receptor] Kurose H. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):316–26 (42 ref.) **(Jpn)**

AGONISTS see ADRENERGIC AGONISTS

ANALYSIS

Pulmonary and cardiac beta–adrenoceptor density in vivo in asthmatic subjects. Qing F, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1130–4

The influence of chronic hypokalemia on myocardial adrenergic receptor densities: enhanced sensitivity to epinephrine–induced arrhythmias. Miletich DJ, et al. **Anesth Analg** 1997 Apr;84(4):734–9

Norepinephrine content in primary and secondary lymphoid organs is altered in rats with adjuvant–induced arthritis. Lorton D, et al. **Mech Ageing Dev** 1997 Mar;94(1–3):145–63

Comparison of adrenoceptor subtype expression in porcine and human bladder and prostate. Goepel M, et al. **Urol Res** 1997;25(3):199–206

RECEPTORS, ADRENERGIC

ANTAGONISTS & INHIBITORS see ADRENERGIC ANTAGONISTS

BIOSYNTHESIS

Production of adrenergic receptors in yeast. Sizmann D, et al. **Receptors Channels** 1996;4(3):197–203

CHEMISTRY

[Adrenergic receptors and alpha 2 agonists—1) Molecular biological study of adrenoceptors] Mizobe T. **Masui** 1997 May;46(5):650–7 (18 ref.) (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Chronic adrenergic receptor blockade does not prevent hyperinsulinemia-induced hypertension in rats. Keen HL, et al. **Am J Hypertens** 1996 Dec;9(12 Pt 1):1192–9

(–)-CGP 12177-induced increase of human atrial contraction through a putative third beta-adrenoceptor. Kaumann AJ. **Br J Pharmacol** 1996 Jan;117(1):93–8

Receptor-mediated effects of clonidine on need-induced 3% NaCl and water intake. Yada MM, et al. **Brain Res Bull** 1997;42(3):205–9

Venlafaxine: a novel antidepressant that has a dual mechanism of action. Andrews JM, et al. **Depression** 1996; 4(2):48–56 (40 ref.)

Pentadecapeptide BPC 157 interactions with adrenergic and dopaminergic systems in mucosal protection in stress. Sikirić P, et al. **Dig Dis Sci** 1997 Mar;42(3):661–71

The effects of mirtazapine on central noradrenergic and serotonergic neurotransmission [published erratum appears in Int Clin Psychopharmacol 1996 Jun;11(2):153] de Boer T. **Int Clin Psychopharmacol** 1995 Dec;10 Suppl 4:19–23 (33 ref.)

Noradrenergic modulation of central serotonergic neurotransmission: acute and long-term actions of mirtazapine [published erratum appears in Int Clin Psychopharmacol 1996 Jun;11(2):153] Haddjeri N, et al. **Int Clin Psychopharmacol** 1995 Dec;10 Suppl 4:11–7 (30 ref.)

Changes in cholinergic and purinergic neurotransmission in pathologic bladder of chronic spinal rabbit. Yokota T, et al. **J Urol** 1996 Nov;156(5):1862–6

Non-muscarinic- and non-adrenergic-mediated effects of lindane on phosphoinositide hydrolysis in rat brain cortex slices. Pajuelo L, et al. **Neurochem Res** 1997 Jan;22(1):57–62

Adrenergic mechanisms in the control of gastrointestinal motility: from basic science to clinical applications. De Ponti F, et al. **Pharmacol Ther** 1996;69(1):59–78 (378 ref.)

Opposite influences of different adrenoceptors on baclofen-induced antinociception in mice. Sabetkasai M, et al. **Pharmacol Toxicol** 1997 Jan;80(1):6–10

GENETICS

Production of adrenergic receptors in yeast. Sizmann D, et al. **Receptors Channels** 1996;4(3):197–203

METABOLISM

Adrenergic, dopaminergic, and muscarinic receptor stimulation leads to PKA phosphorylation of Na-K-ATPase. Beguin P, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 1):C131–7

Adrenergic receptors in the forehead microcirculation. Drummond PD. **Clin Auton Res** 1996 Feb;6(1):23–7

Interaction of metals with muscarinic cholinoceptor and adrenoceptor binding, and agonist-stimulated inositol phospholipid hydrolysis in rat brain. Rajanna B, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Feb;116(2):111–6

Effect of adrenergic receptor ligands on metaiodobenzylguanidine uptake and storage in neuroblastoma cells. Babich JW, et al. **Eur J Nucl Med** 1997 May;24(5):538–43

Noradrenaline in basic models of depression. Leonard BE. **Eur Neuropsychopharmacol** 1997 Apr;7 Suppl 1:S11–6; discussion S71–3 (17 ref.)

Characterization of adrenoceptor types and subtypes in American bullfrogs acclimated to warm or cold temperature. Herman CA, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):168–78

Chiral recognition in adrenergic receptor binding mimics prepared by molecular imprinting. Ramström O, et al. **J Mol Recognit** 1996 Sep–Dec;9(5–6):691–6

Adrenergic receptors in Alzheimer's disease brain: selective increases in the cerebella of aggressive patients. Russo-Neustadt A, et al. **J Neurosci** 1997 Jul 15; 17(14):5573–80

Autonomic nervous system and adrenergic receptors in chronic hypotensive haemodialysis patients. Esforzado Armengol N, et al. **Nephrol Dial Transplant** 1997 May; 12(5):939–44

Effects of monocular enucleation on receptor binding and innervation pattern of the noradrenergic system in the superior colliculus of the pigmented rat. Muguruma K, et al. **Neurosci Res** 1997 Aug;28(4):311–24

PHYSIOLOGY

Norepinephrine and serotonin receptors in the paraventricular nucleus interactively modulate ethanol consumption. Hodge CW, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1669–74

Role of adrenoceptors in the hypertensive response to feeding in the conscious calf. Bowman EC, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R607–14

Cardiac function in genetically engineered mice with altered adrenergic receptor signaling. Rockman HA, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1553–9 (46 ref.)

Desensitization of norepinephrine receptor function is associated with G protein uncoupling in the rat aorta. Seasholtz TM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H279–85

Noradrenergic alterations in posttraumatic stress disorder. Southwick SM, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:125–41 (115 ref.)

Adrenergic regulation of brown adipocyte differentiation. Cannon B, et al. **Biochem Soc Trans** 1996 May;24(2):407–12 (29 ref.)

Adrenoceptor- and cholinoceptor-mediated mechanisms in the regulation of 5-hydroxytryptamine release from isolated tracheae of newborn rabbits. Freitag A, et al. **Br J Pharmacol** 1996 Sep;119(1):91–8

Role of the alpha 1-, and alpha 2- and beta-adrenoceptors of the median preoptic area on the water intake, renal excretion, and arterial pressure induced by ANG II. da Silva RK, et al. **Brain Res** 1996 Apr 22;717(1–2):38–43

Cuneiform nucleus stimulation-induced sympathoexcitation: role of adrenoceptors, excitatory amino acid and serotonin receptors in rat spinal cord. Lam W, et al. **Brain Res** 1997 May 23;757(2):191–201

Prenatal nicotine effects on memory in rats: pharmacological and behavioral challenges. Levin ED, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):207–15

Sympathoadrenergic overactivity and lipid metabolism. Grynberg A, et al. **Cardiovasc Drugs Ther** 1996 Jun;10 Suppl 1:223–30

Adrenergic activation confers cardioprotection mediated by adenosine, but is not required for ischemic preconditioning. Haessler R, et al. **Coron Artery Dis** 1996 Apr;7(4):305–14

Brain ischemia and gastric mucosal damage in spontaneously hypertensive rats: the role of arterial vagal adrenoceptors. Kawakubo K, et al. **Dig Dis Sci** 1996 Dec;41(12):2383–91

Adrenergic modulation of hepatotoxicity. Roberts SM, et al. **Drug Metab Rev** 1997 Feb–May;29(1–2):329–53 (56 ref.)

Adrenergic and serotoninergic receptors mediate the immunological activation of corticosterone secretion in male rats. Guo AL, et al. **Gynecol Endocrinol** 1996 Jun; 10(3):149–54

Role of angiotensin-converting enzyme, adrenergic receptors, and blood pressure in cardiac gene expression of spontaneously hypertensive rats during development. Ohta K, et al. **Hypertension** 1996 Oct;28(4):627–34

Gender differences in adrenergic regulation of lipid mobilization during exercise. Hellström L, et al. **Int J Sports Med** 1996 Aug;17(6):439–47

Variation in adrenergic regulation of lipolysis between omental and subcutaneous adipocytes from obese and non-obese men. Hoffstedt J, et al. **J Lipid Res** 1997 Apr; 38(4):795–804

Adrenergic receptor activation hyperpolarizes the caudal neurosecretory cells of the flounder, Platichthys flesus. Hubbard PC, et al. **J Neuroendocrinol** 1996 Feb;8(2):153–9

Temporal regulation by adrenergic receptor stimulation of macrophage (M phi)-derived tumor necrosis factor (TNF) production post-LPS challenge. Ignatowski TA, et al. **J Neuroimmunol** 1996 Apr;65(2):107–17

Adrenoreceptor subtype mediating sympathetic-sensory coupling in injured sensory neurons. Chen Y, et al. **J Neurophysiol** 1996 Dec;76(6):3721–30

Adrenergic neural connections between the bilateral supraoptic nuclei of the rat hypothalamus. Tsushima H, et al. **Jpn J Pharmacol** 1996 May;71(1):73–9

Adrenergic and purinergic receptors-mediated calcium responses in brown adipocytes. Omatsu-Kanbe M, et al. **Jpn J Physiol** 1997;47 Suppl 1:S47–8

Capillary adrenoceptors in rat skeletal muscle. Yu J, et al. **Microvasc Res** 1997 May;53(3):235–44

Responses of the rat lower oesophageal sphincter (LOS) to vagal efferent activation. Kawahara H, et al. **Neurogastroenterol Motil** 1997 Jun;9(2):85–97

Cell surface adrenergic receptor stimulation modifies the endothelial response to SIRS. Systemic Inflammatory Response Syndrome. Tighe D, et al. **New Horiz** 1996 Nov; 4(4):426–42 (104 ref.)

Loss of the adrenoceptor-mediated secretory drive on the rat parotid gland during eating and the effect on parasympathetic substance P and VIP. Ekström J, et al. **Regul Pept** 1996 Oct 22;66(3):211–2

Effects of hyperbaric oxygen exposure on non-adrenergic non-cholinergic responses of rat trachea. Matera MG, et al. **Res Commun Mol Pathol Pharmacol** 1997 Jan; 95(1):105–8

Emptying against outflow obstruction—pharmacological aspects. Andersson KE. **Scand J Urol Nephrol Suppl** 1997; 184:77–84 (83 ref.)

[Cardiovascular alpha-, beta 1- and beta 2-adrenoceptor functions in neurogenic orthostatic hypotension] Tamura N, et al. **Rinsho Shinkeigaku** 1995 Oct;35(10):1120–4 (Eng. Abstr.) **(Jpn)**

[Genetic and ontogenetic variability in the noradrenergic regulation of adrenocortical function] Dygalo NN, et al. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):15–20 (Eng. Abstr.) **(Rus)**

[The smooth-muscle adrenoreceptors of rat and guinea pig tracheas] Fedin AN, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun;82(5–6):87–94 (Eng. Abstr.) **(Rus)**

[The molecular physiology of the adrenergic receptors] Shishkina GT, et al. **Usp Fiziol Nauk** 1997 Jan–Mar; 28(1):61–74 (121 ref.) (Eng. Abstr.) **(Rus)**

[The role of the interaction of serotonin- and noradrenergic systems in regulating behavior] Semenova TP. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar–Apr; 47(2):358–61 (21 ref.) (Eng. Abstr.) **(Rus)**

RECEPTORS, ADRENERGIC, ALPHA

[Molecular function of subtype and subunit drug receptors] Kimura M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep; 108(3):155–6 (0 ref.) **(Jpn)**

AGONISTS see ADRENERGIC ALPHA-AGONISTS

ANALYSIS

Longitudinal study of beta- and alpha-adrenergic receptor properties during human pregnancy. Pantuck CB, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):234–42

Immunocytochemical localization of muscarinic, adrenergic and AT1 receptors. Schulze W, et al. **Blood Press Suppl** 1996;3:15–8

Intrinsic cardiac neurons involved in cardiac regulation possess alpha 1-, alpha 2-, beta 1- and beta 2-adrenoceptors. Armour JA. **Can J Cardiol** 1997 Mar; 13(3):277–84

Detection of alpha 1-adrenoceptor subtypes in human hypertrophied prostate by in situ hybridization. Moriyama N, et al. **Histochem J** 1996 Apr;28(4):283–8

Thyroid hormone modulates inotropic responses, alpha-adrenoceptor density and catecholamine concentrations in the rat heart. Zwaveling J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):755–64

ANTAGONISTS & INHIBITORS see ADRENERGIC ALPHA-ANTAGONISTS

BIOSYNTHESIS

Cardiac alpha-adrenergic receptor expression is regulated by thyroid hormone during a critical developmental period. Metz LD, et al. **J Mol Cell Cardiol** 1996 May;28(5):1033–44

Transient expression of alpha-1B adrenoceptor messenger ribonucleic acids in the rat superior cervical ganglion during postnatal development. Vidovic M, et al. **Neuroscience** 1997 Apr;77(3):841–8

CHEMISTRY

Phenylalanine in the second membrane-spanning domain of alpha 1A-adrenergic receptor determines subtype selectivity of dihydropyridine antagonists. Hamaguchi N, et al. **Biochemistry** 1996 Nov 12;35(45):14312–7

CLASSIFICATION

Subtype determination of soma-dendritic alpha2-autoreceptors in slices of rat locus coeruleus. Nörenberg W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):159–65

DRUG EFFECTS

Regulation of alpha 1-, beta 1-, and beta 2-adrenergic receptors in rat heart by norepinephrine. Zhao M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1762–8

Platelet function and adrenoceptors during and after induced hypotension using nitroprusside. Dietrich GV, et al. **Anesthesiology** 1996 Dec;85(6):1334–40

Interaction of halothane with alpha- and beta-adrenoceptor stimulations in rat myocardium. Hanouz JL, et al. **Anesthesiology** 1997 Jan;86(1):147–59

Cell-density-dependent expression of the alpha(2)-adrenergic response by epidermal growth factor (EGF) in primary cultures of adult rat hepatocytes. Ogihara M. **Biol Pharm Bull** 1996 Apr;19(4):518–24

A prospective study of the effects of prolonged timolol therapy on alpha- and beta-adrenoceptor and angiotensin II receptor mediated responses in normal subjects. Ferro A, et al. **Br J Clin Pharmacol** 1997 Mar;43(3):301–8

Sources of calcium and alpha 1-adrenoceptor-mediated contraction in rat tail artery. Tabernero A, et al. **Br J Pharmacol** 1996 Aug;118(8):2067–72

Intrinsic cardiac neurons involved in cardiac regulation possess alpha 1-, alpha 2-, beta 1- and beta 2-adrenoceptors. Armour JA. **Can J Cardiol** 1997 Mar; 13(3):277–84

Intracoronary administration of the alpha 1-receptor agonist, methoxamine, does not reproduce the infarct-limiting effect of ischemic preconditioning in dogs. Sebbag L, et al. **Cardiovasc Res** 1996 Nov;32(5):830–8

Endotoxin differentially impairs cyclic guanosine monophosphate-mediated relaxation in the pulmonary and systemic circulations. McIntyre RC Jr, et al. **Crit Care Med** 1997 Feb;25(2):318–23

Influence of prolonged fasting and thyroid hormone on the alpha 2-adrenergic response in isolated epididymal adipocytes of Wistar rats. Ben Cheikh R, et al.

Eur J Endocrinol 1997 Feb;136(2):223–9

A tyrosine kinase regulates alpha–adrenoceptor–stimulated contraction and phospholipase D activation in the rat aorta. Jinsi A, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):183–90

KMD–3213, a novel alpha1A–adrenoceptor antagonist, potently inhibits the functional alpha1–adrenoceptor in human prostate. Moriyama N, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):39–42

The alpha–adrenoceptor–mediated actions of chloroethylclonidine. Docherty JR, et al. **Gen Pharmacol** 1997 Feb;28(2):197–201 (36 ref.)

Androgens modulate the alpha–adrenergic responsiveness of vascular smooth muscle in the corpus cavernosum. Reilly CM, et al. **J Androl** 1997 Jan–Feb;18(1):26–31

Pharmacological characterization of adrenoceptors in horse corpus cavernosum penis. Recio P, et al. **J Auton Pharmacol** 1997 Jun;17(3):191–8

Noradrenaline increases the expression of the proenkephalin gene in cultured astroglial cells by acting on beta 1– and alpha 1–adrenoceptors. Hildebrand B, et al. **J Neurochem** 1996 May;66(5):1860–7

alpha–Adrenergic activity and cardiovascular effects of besipirdine HCl (HP 749) and metabolite P7480 in vitro and in the conscious rat and dog. Hubbard JW, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):337–46

Urodynamic analysis of age–related changes of alpha 1–adrenoceptor responsiveness in female beagle dogs. Takahashi S, et al. **J Urol** 1996 Oct;156(4):1485–8

Amitraz depresses cardiovascular responses to bilateral carotid occlusion. Reynoldson JA, et al. **J Vet Pharmacol Ther** 1996 Feb;19(1):22–6

Comparison of post–junctional alpha–adrenoceptors in iris dilator muscle of humans, and albino and pigmented rabbits. Ishikawa H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):765–72

Basal forebrain cholinergic immunolesion by 192IgG–saporin: evidence for a presynaptic location of subpopulations of alpha 2– and beta–adrenergic as well as 5–HT2A receptors on cortical cholinergic terminals. Heider M, et al. **Neurochem Res** 1997 Aug;22(8):957–66

Noradrenergic receptor sensitivity in obsessive compulsive disorder: II. Cortisol response to acute clonidine administration. Brambilla F, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):163–8

[Morphologic effect of adrenaline and insulin on bone capillaries after receptor blockade. Functional transmission electron microscopy analysis] Döhler JR, et al. **Langenbecks Arch Chir** 1997;382(3):164–6 (Eng. Abstr.) **(Ger)**

GENETICS

Oxygen modulates alpha 1B–adrenergic receptor gene expression by arterial but not venous vascular smooth muscle. Eckhart AD, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1599–608

Regulation of alpha 2A–adrenergic receptor mRNA in rat astroglial cultures: role of cyclic AMP and protein kinase C. Reutter MA, et al. **J Neurochem** 1997 Jan;68(1):47–57

Estradiol regulation of alpha 1b–adrenoceptor mRNA in female rat hypothalamus–preoptic area. Karkanias GB, et al. **J Neuroendocrinol** 1996 Jun;8(6):449–55

Co–localization of alpha1D adrenergic receptor mRNA with mineralocorticoid and glucocorticoid receptor mRNA in rat hippocampus. Williams AM, et al. **J Neuroendocrinol** 1997 Feb;9(2):113–9

Alpha–adrenergic, neurokinin and muscarinic receptors in rat mesenteric artery; an mRNA study during postnatal development. Phillips JK, et al. **Mech Ageing Dev** 1996 Dec 20;92(2–3):235–46

Expression of alpha 2 adrenoceptors during rat brain development––I. Alpha 2A messenger RNA expression. Winzer–Serhan UH, et al. **Neuroscience** 1997 Jan; 76(1):241–60

Expression of alpha 2 adrenoceptors during rat brain development––II. Alpha 2C messenger RNA expression and [3H]rauwolscine binding. Winzer–Serhan UH, et al. **Neuroscience** 1997 Jan;76(1):261–72

METABOLISM

Developmental changes in alpha 1–adrenergic receptors, IP3 responses, and NE–induced contraction in cerebral arteries. Longo LD, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2313–9

Change from beta– to alpha–adrenergic glycogenolysis induced by corticosteroids in female rat liver. Moriyama M, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R153–60

Hypoxic pHi and function modulation by Na+/H+ exchange and alpha–adrenoreceptor inhibition in heart in vivo. Portman MA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2664–70

High altitude–induced changes in alpha1–adrenergic receptors and Ins(1,4,5)P3 responses in cerebral arteries. Ueno N, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R669–74

Functional study of the excitatory alpha–adrenoceptor in guinea pig ileum, in relation to the hypothesis of an atypical receptor. Bricola A, et al. **Ann N Y Acad Sci** 1997 May 30;812:189–92

Functional classification of non–competitive antagonism in vas deferens. Martini LC, et al. **Ann N Y Acad Sci** 1997 May 30;812:196–9

Adrenergic stimulation of lipoprotein lipase gene expression in rat brown adipocytes differentiated in culture: mediation via beta3– and alpha1–adrenergic receptors. Kuusela P, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):759–67

Interactions of the alpha2A–adrenoceptor with multiple Gi–family G–proteins: studies with pertussis toxin–resistant G–protein mutants [published erratum appears in Biochem J 1997 May 1;323 (Pt 3):864] Wise A, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):721–8

Brain alpha–adrenoceptors in depressed suicides. De Paermentier F, et al. **Brain Res** 1997 May 16;757(1):60–8

Alterations of cardiac alpha 1–adrenoceptor subtypes in hypothyroid rats. Zhang Y, et al. **Clin Exp Pharmacol Physiol** 1997 Jul;24(7):481–6

Influence of prolonged fasting and thyroid hormone on the alpha 2–adrenergic response in isolated epididymal adipocytes of Wistar rats. Ben Cheikh R, et al. **Eur J Endocrinol** 1997 Feb;136(2):223–9

The alpha–adrenoceptor antagonist properties of the enantiomers of doxazosin in the human prostate. Hatano A, et al. **Eur J Pharmacol** 1996 Oct 10;313(1–2):135–43

Role of noradrenaline uptake inhibition and alpha–adrenoceptors in reperfusion ventricular arrhythmias in vivo and in vitro. Shekher A, et al. **Indian J Exp Biol** 1996 Nov;34(11):1085–90

Lipolytic catecholamine resistance linked to alpha 2–adrenoceptor sensitivity––a metabolic predictor of weight loss in obese subjects. Hellström L, et al. **Int J Obes Relat Metab Disord** 1997 Apr;21(4):314–20

Variation in mRNA expression of alpha–adrenergic, neurokinin and muscarinic receptors amongst four arteries of the rat. Phillips JK, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):85–93

Distinct functions of Gq and G11 proteins in coupling alpha1–adrenoreceptors to Ca2+ release and Ca2+ entry in rat portal vein myocytes. Macrez–Leprêtre N, et al. **J Biol Chem** 1997 Feb 21;272(8):5261–8

Alpha 2A–adrenergic receptors are expressed by diverse cell types in the fetal primate cerebral wall. Wang F, et al. **J Comp Neurol** 1997 Feb 24;378(4):493–507

Effects of aging and food restriction on alpha 1–adrenergic receptors and G–protein in the rat parotid gland. Chen C, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar; 52(2):B103–10

Pharmacological options in the treatment of benign prostatic hyperplasia. Kenny B, et al. **J Med Chem** 1997 Apr 25; 40(9):1293–315 (146 ref.)

Synthesis and structure–activity relationships of a new model of arylpiperazines. 2. Three–dimensional quantitative structure–activity relationships of hydantoin–phenylpiperazine derivatives with affinity for 5–HT1A and alpha 1 receptors. A comparison of CoMFA models. López–Rodríguez ML, et al. **J Med Chem** 1997 May 23;40(11):1648–56

Betaine generation in cardiac myocytes after adrenergic activation of phosphatidylcholine hydrolysis. Meister A, et al. **J Mol Cell Cardiol** 1996 May;28(5):1109–18

Cholera toxin induces cyclic AMP–independent down–regulation of Gs alpha and sensitization of alpha 2–autoreceptors in chick sympathetic neurons. Boehm S, et al. **J Neurochem** 1996 Mar;66(3):1019–26

Expression and in–vivo modulation of alpha– and beta–adrenoceptors on human natural killer (CD16+) cells. Jetschmann JU, et al. **J Neuroimmunol** 1997 Apr; 74(1–2):159–64

Actions of imidazolines on bovine ciliary artery. Ishikawa H, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):313–22

Characterization of alpha–adrenoceptor activity in the preterm piglet mesentery. Hoang TV, et al. **J Pediatr Surg** 1996 Dec;31(12):1659–62

The pattern of testosterone replacement influences the recovery of the stimulatory effect of clonidine on growth hormone (GH) secretion in orchidectomized rats. Tena–Sempere M, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):533–8

Desensitization of alpha 1–, beta– and glucagon receptors in rat hepatocytes: influence of ageing. Van Ermen A, et al. **Mech Ageing Dev** 1994 Jul;75(1):45–58

Stabilization of the B–type natriuretic peptide mRNA in cardiac myocytes by alpha–adrenergic receptor activation: potential roles for protein kinase C and mitogen–activated protein kinase. Hanford DS, et al. **Mol Endocrinol** 1996 Dec;10(12):1719–27

Alpha2–adrenoceptors in opossum kidney cells couple to stimulation of mitogen–activated protein kinase independently of adenylyl cyclase inhibition. Kribben A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):225–32

Densities of I2–imidazoline receptors, alpha 2–adrenoceptors and monoamine oxidase B in brains of suicide victims. Sastre M, et al. **Neurochem Int** 1997 Jan;30(1):63–72

Expression of alpha 2 adrenoceptors during rat brain development––I. Alpha 2A messenger RNA expression. Winzer–Serhan UH, et al. **Neuroscience** 1997 Jan; 76(1):241–60

Expression of alpha 2 adrenoceptors during rat brain development––II. Alpha 2C messenger RNA expression and [3H]rauwolscine binding. Winzer–Serhan UH, et al. **Neuroscience** 1997 Jan;76(1):261–72

Pharmacology of tamsulosin: saturation–binding isotherms and competition analysis using cloned alpha 1–adrenergic receptor subtypes. Richardson CD, et al. **Prostate** 1997 Sep 15;33(1):55–9

The distribution and significance of CNS adrenoceptors examined with in situ hybridization. Nicholas AP, et al. **Trends Pharmacol Sci** 1996 Jul;17(7):245–55 (64 ref.)

[Age–related alteration of inhibitory effects of isradipine on alpha 1–adrenoceptor mediated responses] Kanai S, et al. **Yakugaku Zasshi** 1996 Oct;116(10):792–802 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Alpha–adrenoceptor activation induces rhythmic contractile activity in carotid arteries from young, not adult, rats. Eddinger TJ, et al. **Acta Physiol Scand** 1997 Feb; 159(2):123–9

Longitudinal study of beta– and alpha–adrenergic receptor properties during human pregnancy. Pantuck CB, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):234–42

Mechanisms of alpha2–adrenoceptor–mediated inhibition in rabbit carotid body. Almaraz L, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C628–37

Preoptic recess alpha–adrenoceptors control cardiovascular responses to hyperosmolality. Bealer SL. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1283–9

Ischemic preconditioning of human myocardium: protein kinase C mediates a permissive role for alpha 1–adrenoceptors. Cleveland JC Jr, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H902–8

Central lipopolysaccharide elevates plasma IL–6 concentration by an alpha–adrenoreceptor–mediated mechanism. Finck BN, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1880–7

Alpha–adrenoceptor activation of a chloride conductance in rat iris arterioles. Gould DJ, et al. **Am J Physiol** 1996 Dec; 271(6 Pt 2):H2469–76

Impact of aging on adenosine levels, A1/A2 responses, arrhythmogenesis, and energy metabolism in rat heart. Headrick JP. **Am J Physiol** 1996 Mar;270(3 Pt 2):H897–906

Limitation of cardiac output by a coronary alpha 1–constrictor tone during exercise in dogs. Kim SJ, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1125–31

Nitric oxide and nitroglycerin reversal of pulmonary vasoconstriction induced by alpha–activation during exercise. Koizumi T, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H875–80

Different alpha–adrenoceptor subtypes mediate constriction of arterioles and venules. Leech CJ, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H710–22

Hemorrhage induces acute cardioadaptation to ischemia–reperfusion by an alpha1–adrenoceptor–mediated, protein synthesis–independent mechanism. Meldrum DR, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R718–25

Alpha 1–adrenoceptor subtypes mediating inotropic and electrophysiological effects in mammalian myocardium. Nagashima M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1423–32

Mechanism of negative lusitropic effect of alpha 1–adrenoceptor stimulation in cat papillary muscles. Vila–Petroff M, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H701–9

Alpha 1–adrenergic stimulation induces cardiac tolerance to hypoxia via induction and activation of Mn–SOD. Yamashita N, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1356–62

Alpha–adrenergic stimulation of thermogenesis in a rat kangaroo (Marsupialia, Bettongia gaimardi). Ye JM, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R586–92

Alpha–adrenergic mechanisms of thermoregulation in humans. Frank SM, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:101–10

Alpha–adrenergic bronchoconstriction in man. Marcelle R. **Arch Physiol Biochem** 1996 Dec;104(7):851–4

Effects of dietary lipid modification on adrenoceptor–mediated cardiovascular responsiveness and baroreflex sensitivity in normotensive subjects. Straznicky NE, et al. **Blood Press** 1997 Mar;6(2):96–102

Contribution of alpha–adrenoceptors to depolarization and contraction evoked by continuous asynchronous sympathetic nerve activity in rat tail artery. Brock JA, et al. **Br J Pharmacol** 1997 Apr;120(8):1513–21

Alpha–adrenoceptor mediated responses of the cauda epididymis of the guinea–pig. Haynes JM, et al. **Br J Pharmacol** 1996 Nov;119(6):1203–10

alpha 2A subtype of presynaptic alpha 2–adrenoceptors modulates the release of [3H]–noradrenaline from rat spinal cord. Umeda E, et al. **Brain Res Bull** 1997;42(2):129–32

alpha–Adrenergic receptors may contribute to the hypertriglyceridemia associated with tumour growth. López–Soriano J, et al. **Cancer Lett** 1996 Dec 20; 110(1–2):213–6

Alpha 1–adrenergic activation inhibits beta–adrenergic–stimulated unitary Ca2+ currents in cardiac ventricular myocytes. Chen L, et al. **Circ Res** 1996 Aug;79(2):184–93

alpha–Adrenoceptor mechanisms of thermoregulation during cold challenge in humans. Frank SM, et al. **Clin Sci (Colch)** 1996 Nov;91(5):627–31

alpha2–Adrenoceptor stimulation promotes actin polymerization and focal adhesion in 3T3F442A and BFC–1beta preadipocytes. Bétuing S, et al. **Endocrinology** 1996 Dec;137(12):5220–9

Differential beta– and alpha–adrenergic activation during psychological stress. Montoya P, et al.

Eur J Appl Physiol 1997;75(3):256–62

Functional evidence for an alpha 1B–adrenoceptor mediating contraction of the mouse spleen. Eltze M. **Eur J Pharmacol** 1996 Sep 12;311(2–3):187–98

alpha–Adrenergic regulation of human renal function. Michel MC, et al. **Fundam Clin Pharmacol** 1996;10(6):493–503 (108 ref.)

Response of large and small vessels to alpha and beta adrenoceptor stimulation in heart failure: effect of angiotensin converting enzyme inhibition. Mulder P, et al. **Fundam Clin Pharmacol** 1997;11(3):221–30

Effect of left ventricular pressure and volume overload on alpha–adrenoceptor activity in patients with rheumatic heart valvular disease. Dzimiri N, et al. **Gen Pharmacol** 1996 Apr;27(3):539–43

Norepinephrine–induced contraction of isolated rabbit bronchial artery: role of alpha 1– and alpha 2–adrenoceptor activation. Zschauer AO, et al. **J Appl Physiol** 1997 Jun; 82(6):1918–25

Age–related changes in the reactivity of postsynaptic adrenoceptors in the rat vas deferens: differences between the epididymal and prostatic portion. Markus RP, et al. **J Auton Pharmacol** 1997 Jun;17(3):147–54

Developmental changes in modulation of cardiac repolarization by sympathetic stimulation: the role of beta– and alpha–adrenergic receptors. Cua M, et al. **J Cardiovasc Electrophysiol** 1997 Aug;8(8):865–71

From alpha and beta to 11: an overview of sympathetic receptors involved in blood pressure control targets for drug treatment. van Zwieten PA. **J Cardiovasc Pharmacol** 1996;27 Suppl 3:S5–10 (36 ref.)

Inhibition of milk ejection in cows by oxytocin receptor blockade, alpha–adrenergic receptor stimulation and in unfamiliar surroundings. Bruckmaier RM, et al. **J Dairy Res** 1997 Aug;64(3):315–25

Neuronal regulation of interleukin 6 secretion in murine spleen: adrenergic and opioidergic control. Straub RH, et al. **J Neurochem** 1997 Apr;68(4):1633–9

Characterization of alpha–adrenoceptor activity in term–newborn piglet mesentery. Ferrara JJ, et al. **J Pharm Pharmacol** 1996 Dec;48(12):1298–301

Chronic septicemia alters alpha–adrenergic mechanisms in the coronary circulation. Wang SY, et al. **J Surg Res** 1997 Apr;69(1):61–6

Role of spinal and peripheral alpha 2 adrenoceptors in micturition in normal conscious rats. Ishizuka O, et al. **J Urol** 1996 Nov;156(5):1853–7

Urodynamic analysis of age–related changes of alpha 1–adrenoceptor responsiveness in female beagle dogs. Takahashi S, et al. **J Urol** 1996 Oct;156(4):1485–8

Adrenoceptor–mediated regulation of the contractility in horse penile resistance arteries. Simonsen U, et al. **J Vasc Res** 1997 Mar–Apr;34(2):90–102

alpha–adrenoceptor subtype in the hypothalamic paraventricular nucleus involved in the regulation of urine production: comparison between Wistar Kyoto and spontaneously hypertensive rats. Tsushima H, et al. **Jpn J Pharmacol** 1997 May;74(1):95–8

Alpha 1– and beta–adrenergic and muscarinic–cholinergic regulation in the spontaneous beating and Ca2+ oscillations in cultured neonatal rat cardiac myocytes. Takemura H, et al. **Life Sci** 1996;59(14):PL221–6

Characterisation of pre– and post–synaptic alpha–adrenoceptors in modulation of the rat ileum longitudinal and circular muscle activities. Liu L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):248–56

Effects of imidazolines on noradrenaline release in brain: an investigation into their relationship to imidazoline, alpha 2 and H3 receptors. Schlicker E, et al. **Neurochem Int** 1997 Jan;30(1):73–83

Involvement of amygdalar alpha adrenoceptors in hypothalamo–pituitary–adrenocortical responses. Feldman S, et al. **Neuroreport** 1996 Nov 25;7(18):3055–7

Agmatine does not have activity at alpha 2–adrenoceptors which modulate the firing rate of locus coeruleus neurones: an electrophysiological study in rat. Pineda J, et al. **Neurosci Lett** 1996 Nov 22;219(2):103–6

Effects of spinal alpha 1–adrenoceptor antagonism on bladder activity induced by apomorphine in conscious rats with and without bladder outlet obstruction. Ishizuka O, et al. **Neurourol Urodyn** 1997;16(3):191–200

Peripheral alpha–adrenoreceptors are involved in the development of capsaicin induced ongoing and stimulus evoked pain in humans. Kinnman E, et al. **Pain** 1997 Jan; 69(1–2):79–85

Differences in alpha2–adrenoceptor modulation of calcium channels in vascular smooth muscle cells of male and female rats. Song J, et al. **Pflugers Arch** 1996 Nov–Dec; 433(1–2):212–4

Prostatic and extraprostatic alpha–adrenoceptors—contributions to the lower urinary tract symptoms in benign prostatic hyperplasia. Andersson KE. **Scand J Urol Nephrol Suppl** 1996;179:105–11

Hyper– and hypocardiodynamic states are associated with externalization and internalization, respectively, of alpha–adrenergic receptors in rat heart during sepsis. Wu LL, et al. **Shock** 1997 May;7(5):318–23

The effect of detomidine and its antagonism with tolazoline on stress–related hormones, metabolites, physiologic responses, and behavior in awake ponies. Carroll GL, et al. **Vet Surg** 1997 Jan–Feb;26(1):69–77

[Chronotropic effects of alpha–agonist on the rat isolated right atria] Nakano K. **Nippon Ika Daigaku Zasshi** 1996 Dec;63(6):473–80 (Eng. Abstr.) **(Jpn)**

[Characteristics of the stimulatory adrenergic reaction of isolated chick embryo amnion] Bolko OV, et al. **Dokl Akad Nauk** 1997 Mar;353(3):411–4 **(Rus)**

[The effect of adrenoreceptors on the lysosomes of neutrophilic granulocytes during the development of the adaptation syndrome] Vovk SV, et al. **Fiziol Zh** 1996; 42(1–2):83–90 (Eng. Abstr.) **(Ukr)**

RECEPTORS, ADRENERGIC, ALPHA–1

Recent advances in the molecular pharmacology of the alpha 1–adrenergic receptors. Guarino RD, et al. **Cell Signal** 1996 Aug;8(5):323–33 (136 ref.)

Prostatic alpha 1–adrenoceptors and uroselectivity. Andersson KE, et al. **Prostate** 1997 Feb 15;30(3):202–15 (132 ref.)

AGONISTS

A constitutively active mutant of the alpha 1B–adrenergic receptor can cause greater agonist–dependent down–regulation of the G–proteins G9 alpha and G11 alpha than the wild–type receptor. Lee TW, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):79–86

Functional evidence of inverse agonism in vascular smooth muscle. Noguera MA, et al. **Br J Pharmacol** 1996 Sep; 119(1):158–64

Okadaic acid enhances prepulse facilitation of cardiac alpha 1–subunit but not endogenous calcium channel currents in Xenopus laevis oocytes. Chahine M, et al. **Can J Physiol Pharmacol** 1996 Oct;74(10):1149–56

Gene regulation of brain natriuretic peptide in cardiocyte hypertrophy by alpha1–adrenergic stimulation. Nakagawa O, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S183–5

SDZ NVI 085, an alpha 1A–adrenoceptor agonist with 5–HT2A receptor antagonist properties. Lachnit WG, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):83–6

Intracellular Ca2+ and contractile responses to alpha 1–adrenoceptor subtype activation in rat aortic vascular smooth muscle. Tognarini DP, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):31–6

Amino acids of the alpha1B–adrenergic receptor involved in agonist binding: differences in docking catecholamines to receptor subtypes. Cavalli A, et al. **FEBS Lett** 1996 Dec 9;399(1–2):9–13

Rilmenidine activates postjunctional alpha 1– and alpha 2–adrenoceptors in the canine saphenous vein. Marsault R, et al. **Fundam Clin Pharmacol** 1996;10(4):379–86

Endothelin–1–induced modulation of contractile responses elicited by an alpha 1–adrenergic agonist on human corpus cavernosum smooth muscle. Kim DC, et al. **Int J Impot Res** 1996 Mar;8(1):17–24

Alpha 1 adrenoceptor activation potentiates taurine response mediated by protein kinase C in substantia nigra neurons. Nabekura J, et al. **J Neurophysiol** 1996 Oct;76(4):2455–60

Regulation of the expression of the proenkephalin gene in cultured meningeal fibroblasts: opposite effects of alpha 1– and beta 2–adrenoceptors. Hildebrand B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):404–10

Activation of alpha 1–adrenoceptors to lower cerebrocortical neuropeptide Y (NPY)–like immunoreactivity in rats receiving pargyline treatment. Chang TK, et al. **Neurosci Lett** 1996 Nov 8;218(3):161–4

The alpha–1 adrenergic agonist, cirazoline, impairs spatial working memory performance in aged monkeys. Arnsten AF, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):55–9

ANALYSIS

Expressed alpha 1–adrenoceptors in adult rat brown adipocytes are primarily of alpha 1A subtype. Costain WJ, et al. **Can J Physiol Pharmacol** 1996 Mar;74(3):234–40

Pharmacological characterization of alpha 1–adrenoceptors in porcine uterine artery. Nair R, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):45–51

Quantification of mRNAs for three alpha 1–adrenoceptor subtypes in rat aorta by solution hybridization. Xu K, et al. **Life Sci** 1996;59(21):PL343–7

Localization of alpha 1–adrenoceptors in rat and human hearts by immunocytochemistry. Schulze W, et al. **Mol Cell Biochem** 1996 Oct–Nov;163–164:159–65

ANTAGONISTS & INHIBITORS

Neither physical exercise nor alpha 1– and beta–adrenergic blockade affect plasma endothelin concentrations. Cosenzi A, et al. **Am J Hypertens** 1996 Aug;9(8):819–22

Alpha 1–adrenoceptor subtype selectivity: molecular modelling and theoretical quantitative structure–affinity relationships. De Benedetti PG, et al. **Bioorg Med Chem** 1997 May;5(5):809–16

The effects of SB 216469, an antagonist which discriminates between the alpha 1A–adrenoceptor and the human prostatic alpha 1–adrenoceptor. Chess–Williams R, et al. **Br J Pharmacol** 1996 Nov;119(6):1093–100

The effect of S–(+)–boldine on the alpha 1–adrenoceptor of the guinea–pig aorta. Chuliá S, et al. **Br J Pharmacol** 1996 Dec;119(7):1305–12

A possible structural determinant of selectivity of boldine and derivatives for the alpha 1A–adrenoceptor subtype. Madrero Y, et al. **Br J Pharmacol** 1996 Dec;119(8):1563–8

The effects of tamsulosin, a high affinity antagonist at functional alpha 1A– and alpha 1D–adrenoceptor subtypes. Noble AJ, et al. **Br J Pharmacol** 1997 Jan;120(2):231–8

Analysis of the effects of alpha 1–adrenoceptor antagonists on noradrenaline–mediated contraction of rat small mesenteric artery. Van der Graaf PH, et al. **Br J Pharmacol** 1996 Jul;118(5):1308–16

Alpha1–adrenergic receptor blockade blocks LH secretion but not LHRH cFos activation. Le WW, et al. **Brain Res** 1997 Feb 7;747(2):236–45

REM sleep inhibition by desipramine: evidence for an alpha–1 adrenergic mechanism. Ross RJ, et al. **Brain Res** 1995 Dec 1;701(1–2):129–34

Effects of DC–015, a novel potent and selective alpha 1–adrenoceptor antagonist on plasma lipid and vascular reactivity in hyperlipidaemic rats. Sheu JR, et al. **Clin Exp Pharmacol Physiol** 1996 Mar;23(3):207–13

Interaction of 5–methyl–urapidil with alpha 1–adrenoceptors in canine blood vessels: impact of pacing–induced heart failure. Forster C. **Eur J Pharmacol** 1996 Dec 27; 318(1):55–63

Alpha 1–adrenoceptor subtypes involved in increased 86Rb+ influx rate and inositol 1,4,5–trisphosphate mass in adult rat cardiomyocytes. Viko H, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):269–75

(+/–)–tamsulosin, an alpha 1A–adrenoceptor antagonist, inhibits the positive inotropic effect but not the accumulation of inositol phosphates in rabbit heart. Yang HT, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):281–91

Alpha 1–adrenoceptor subtype involved in the positive and negative inotropic responses to phenylephrine in rat papillary muscle. Nagashima M, et al. **Gen Pharmacol** 1997 May;28(5):721–5

Effect of the alpha–1 adrenoceptor blocker on tissue norepinephrine contents in human benign prostatic hyperplasia. Ishigooka M, et al. **Int Urol Nephrol** 1997; 29(2):195–200

Alpha 1D–adrenoceptors do not contribute to inotropic responses of neonatal rat myocardium. Deng XF, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):57–60

Pharmacological studies on a new antihypertensive agent, S–2150, a benzothiazepine derivative: 2. Hypotensive effects in normotensive and hypertensive rats. Kawakami M, et al. **J Cardiovasc Pharmacol** 1996 Nov;28(5):695–702

Pharmacophore development for antagonists at alpha 1 adrenergic receptor subtypes. Bremner JB, et al. **J Comput Aided Mol Des** 1996 Dec;10(6):545–57

LPS–induced blood neutrophilia is inhibited by alpha 1–adrenoceptor antagonists: a role for catecholamines. Altenburg SP, et al. **J Leukoc Biol** 1997 Jun;61(6):689–94

N–arylpiperazinyl–N'–propylamino derivatives of heteroaryl amides as functional uroselective alpha 1–adrenoceptor antagonists. Elworthy TR, et al. **J Med Chem** 1997 Aug 15;40(17):2674–87

Synthesis and biological profile of the enantiomers of [4–(4–amino–6,7–dimethoxyquinazolin–2–yl)–cis–octahydroquinoxalin– 1–yl]furan–2–ylmethanone (cyclazosin), a potent competitive alpha 1B– adrenoceptor antagonist. Giardinà D, et al. **J Med Chem** 1996 Nov 8; 39(23):4602–7

Alpha 1–adrenoceptor blockade increases behavioral deficits in traumatic brain injury. Dunn–Meynell AA, et al. **J Neurotrauma** 1997 Jan;14(1):43–52

Determination of alpha 1–adrenoceptor antagonists in plasma by radioreceptor assay. Yamada S, et al. **J Pharm Biomed Anal** 1996 Jan;14(3):289–94

(+/–)–Govadine and (+/–)–THP, two tetrahydroprotoberberine alkaloids, as selective alpha 1–adrenoceptor antagonists in vascular smooth muscle cells. Ko FN, et al. **J Pharm Pharmacol** 1996 Jun; 48(6):629–34

Comparative alpha–1 adrenoceptor subtype selectivity and functional uroselectivity of alpha–1 adrenoceptor antagonists. Martin DJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):228–35

In vitro and in vivo characterization of the dopamine D4 receptor, serotonin 5–HT2A receptor and alpha–1 adrenoceptor antagonist (R)–(+)–2–amino–4–(4–fluorophenyl)–5–[1–[4–(4–fluorophenyl)–4–oxobutyl] pyrrolidin–3–yl]thiazole (NRA0045). Okuyama S, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):56–63

Pharmacological evaluation of ocoteine, isolated from Cassytha filiformis, as an alpha 1–adrenoceptor antagonist in rat thoracic aorta. Chang CW, et al. **Jpn J Pharmacol** 1997 Mar;73(3):207–14

Doxazosin–alpha–1–adrenergic antagonists drug in the long–term (3 years). Management of benign prostatic hyperplasia. Dutkiewicz S. **Mater Med Pol** 1996 Jul–Sep; 28(3):93–102

Identification of critical extracellular loop residues involved in alpha 1–adrenergic receptor subtype–selective antagonist binding. Zhao MM, et al. **Mol Pharmacol** 1996 Nov; 50(5):1118–26

Regulation of the expression of the proenkephalin gene in cultured meningeal fibroblasts: opposite effects of alpha 1– and beta 2–adrenoceptors. Hildebrand B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):404–10

Stimulation of bladder activity by volume, L-dopa and capsaicin in normal conscious rats--effects of spinal alpha 1-adrenoceptor blockade. Ishizuka O, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):787-93

Influence of blockade of alpha 1-adrenoceptors, beta 1-adrenoceptors and vasopressin V1A receptors on the cardiovascular effects of gamma 2-melanocyte-stimulating hormone (gamma 2-MSH). Van Bergen P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):720-6

Effects of the alpha 1a-adrenoceptor antagonist RS-17053 on phenylpropanolamine-induced anorexia in rats. Wellman PJ, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):281-4

Naturally occurring clavines: antagonism/partial agonism at 5-HT2A receptors and antagonism at alpha 1-adrenoceptors in blood vessels. Pertz H. **Planta Med** 1996 Oct;62(5):387-92

[Treatment of benign prostatic hyperplasia with alpha 1-adrenoreceptor antagonists] Heimbach D, et al. **Urologe A** 1997 Jan;36(1):18-34 (157 ref.) (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Differential regulation of the expression of alpha1-adrenergic receptor subtype genes in brown adipose tissue. Kikuchi-Utsumi K, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):417-24

Distribution of alpha1A adrenergic receptor mRNA in the rat brain visualized by in situ hybridization. Domyancic AV, et al. **J Comp Neurol** 1997 Sep 29;386(3):358-78

Transcriptional regulation of alpha(1b) adrenergic receptors (alpha(1b)AR) by nuclear factor 1 (NF1): a decline in the concentration of NF1 correlates with the downregulation of alpha(1b)AR gene expression in regenerating liver. Gao B, et al. **Mol Cell Biol** 1996 Nov;16(11):5997-6008

Transient expression of alpha-1B adrenoceptor messenger ribonucleic acids in the rat superior cervical ganglion during postnatal development. Vidovic M, et al. **Neuroscience** 1997 Apr;77(3):841-8

CHEMISTRY

Alpha 1-adrenoceptor subtype selectivity: molecular modelling and theoretical quantitative structure-affinity relationships. De Benedetti PG, et al. **Bioorg Med Chem** 1997 May;5(5):809-16

Modeling and mutagenesis of the human alpha 1a-adrenoceptor: orientation and function of transmembrane helix V sidechains. Wetzel JM, et al. **Receptors Channels** 1996;4(3):165-77

CLASSIFICATION

Pharmacological evidence that different alpha 1 adrenoceptor subtypes mediate contraction in rabbit prostate and hypogastric artery. Delaflotte S, et al. **Acta Physiol Scand** 1996 Nov;158(3):241-51

Characterization of alpha 1 D-adrenoceptor subtype in rat myocardium, aorta and other tissues. Deng XF, et al. **Br J Pharmacol** 1996 Sep;119(2):269-76

Pharmacological pleiotropism of the human recombinant alpha1A-adrenoceptor: implications for alpha1-adrenoceptor classification. Ford AP, et al. **Br J Pharmacol** 1997 Jul;121(6):1127-35

Different subtypes of alpha 1A-adrenoceptor mediating contraction of rat epididymal vas deferens, rat hepatic portal vein and human prostate distinguished by the antagonist RS 17053. Marshall I, et al. **Br J Pharmacol** 1996 Sep;119(2):407-15

Rat pineal alpha 1-adrenoceptor subtypes: studies using radioligand binding and reverse transcription-polymerase chain reaction analysis. Sugden D, et al. **Br J Pharmacol** 1996 Jul;118(5):1246-52

Pharmacophore development for antagonists at alpha 1 adrenergic receptor subtypes. Bremner JB, et al. **J Comput Aided Mol Des** 1996 Dec;10(6):545-57

Coupling efficiencies of human alpha 1-adrenergic receptor subtypes: titration of receptor density and responsiveness with inducible and repressible expression vectors. Theroux TL, et al. **Mol Pharmacol** 1996 Nov;50(5):1376-87

Subclassification and nomenclature of alpha 1- and alpha 2-adrenoceptors. Hieble JP, et al. **Prog Drug Res** 1996; 47:81-130 (207 ref.)

Alpha-1 adrenoceptor subtypes (high, low) in human benign prostatic hypertrophy tissue according to the affinities for prazosin. Takeda M, et al. **Prostate** 1997 Jun 1;31(4):216-22

Alpha 1-adrenoceptor subtype distribution and the coupling to phosphoinositide hydrolysis in rat and rabbit ventricular myocardium. Hattori Y, et al. **Res Commun Mol Pathol Pharmacol** 1996 Sep;93(3):319-29

DRUG EFFECTS

The alpha-1 adrenergic blocking agent urapidil counteracts postrotational atherectomy "elastic recoil" where nitrates have failed. Gregorini L, et al. **Am J Cardiol** 1997 Apr 15;79(8):1100-3

Pharmacological pleiotropism of the human recombinant alpha1A-adrenoceptor: implications for alpha1-adrenoceptor classification. Ford AP, et al. **Br J Pharmacol** 1997 Jul;121(6):1127-35

Phosphorylation of the third intracellular loop of the mouse alpha1b-adrenergic receptor by cAMP-dependent protein kinase. Alonso-Llamazares A, et al. **Brain Res Bull** 1997; 42(6):427-30

Differences of desensitization and hypersensitization between alpha 1A- and alpha 1B-adrenoceptors in rat isolated blood vessels. Dong ED, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):481-4

In functional experiments, risperidone is selective, not for the B, but for the A subtype of alpha 1-adrenoceptors. Eltze M. **Eur J Pharmacol** 1996 Jan 4;295(1):69-73

Alpha 1D-adrenoceptors play little role in the positive inotropic action of phenylephrine. Wang SN, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):39-43

Effect of KMD-3213, an alpha 1a-adrenoceptor-selective antagonist, on the contractions of rabbit prostate and rabbit and rat aorta. Yamagishi R, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):73-9

Regulation of hamster alpha 1B-adrenoceptors expressed in Chinese hamster ovary cells. Zhu SJ, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):205-12

Brain alpha 1-adrenoceptor in the cardiovascular responses to BHT-920 and phenylephrine. Ricci D, et al. **Gen Pharmacol** 1996 Mar;27(2):299-304

Pharmacological characterization of alpha 1-adrenoceptor subtype mediating regulation of arterial pressure and urethral perfusion pressure in the anaesthetized rat. Guilmard C, et al. **J Auton Pharmacol** 1996 Aug; 16(4):197-203

Effects of catecholamines on isolated human colonic smooth muscle. MacDonald A, et al. **J Auton Pharmacol** 1996 Aug; 16(4):213-20

Characterization of alpha-adrenoceptor subtype(s) mediating vasoconstriction in the perfused rabbit ovarian vascular bed. Yousif M, et al. **J Auton Pharmacol** 1996 Aug; 16(4):221-7

Serotonin-induced vasoconstriction in rabbit femoral artery: mediation by both 5-HT2 serotonergic and alpha 1-adrenoceptors. Grandaw PP, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):854-60

Evidence for the involvement of protein kinase C isoforms in alpha-1 adrenergic activation of phospholipase A2 in FRTL-5 thyroid cells. Wang XD, et al. **J Investig Med** 1996 Dec;44(9):566-74

The effect of chronic administration of amitriptyline on the effects of subsequent electroconvulsive treatment on responsiveness of alpha 1-and beta-adrenoceptors in the rat cortical slices. Vetulani J, et al. **J Neural Transm** 1996; 103(3):363-76

Pharmacological characterization of the uroselective alpha-1 antagonist Rec 15/2739 (SB 216469): role of the alpha-1L adrenoceptor in tissue selectivity, part I. Leonardi A, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1272-83

alpha 1-adrenoceptor-mediated negative inotropy of adrenaline in rat myocardium. Kissling G, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):195-205

Drug receptor mechanisms in smooth muscle: beta-chloroethylamine-sensitive and -resistant receptor mechanisms. Takayanagi I, et al. **Jpn J Pharmacol** 1997 Jan;73(1):1-22 (89 ref.)

Tetrandrine, a calcium antagonist of Chinese herbal origin, interacts with vascular muscle alpha 1-adrenoceptor. Kwan CY, et al. **Life Sci** 1996;59(23):PL 359-64

Effect of several antidepressant drugs on isolated rat vas deferens in vitro. Velasco A, et al. **Methods Find Exp Clin Pharmacol** 1996 Oct;18(8):507-11

Identification of alpha 1-adrenoceptor subtypes in the human prostatic urethra. Taniguchi N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):412-6

The role of 5-HT1A autoreceptors and alpha 1-adrenoceptors in the inhibition of 5-HT release--II NAN-190 and SDZ 216-525. Sharp T, et al. **Neuropharmacology** 1996 Jun;35(6):735-41

Noradrenaline activates vasopressin neurons via alpha1-receptor-mediated Ca2+ signaling pathway. Shioda S, et al. **Neurosci Lett** 1997 May 2;226(3):210-2

Activation of P2-purino-, alpha 1-adreno and H1-histamine receptors triggers cytoplasmic calcium signalling in cerebellar Purkinje neurons. Kirischuk S, et al. **Neuroscience** 1996 Aug;73(3):643-7

Alpha(1)- and beta-adrenoceptor-mediated increase in 86Rb(+)-uptake in isolated cardiomyocytes from adult rat heart: evidence for interaction between the two receptor systems. Viko H, et al. **Pharmacol Toxicol** 1996 Dec; 79(6):287-92

Effects of stimulation of alpha 1-adrenergic and NMDA/glycine-B receptors on learning defects in aged rats. Riekkinen M, et al. **Psychopharmacology (Berl)** 1997 May;131(1):49-56

[Potentiating effect of ethanol on alpha 1 adrenergic receptor mediated contraction of thoracic aorta from guinea pig] Masui H, et al. **Nihon Arukoru Yakubutsu Igakkai Zasshi** 1997 Apr; 32(2):107-21 (Eng. Abstr.) **(Jpn)**

GENETICS

Cloning, functional expression and tissue distribution of rabbit alpha 1d-adrenoceptor. Suzuki F, et al. **Biochim Biophys Acta** 1997 Jan 14;1323(1):6-11

Quantification and distribution of alpha 1-adrenoceptor subtype mRNAs in human prostate: comparison of benign hypertrophied tissue and non-hypertrophied tissue. Nasu K, et al. **Br J Pharmacol** 1996 Nov;119(5):797-803

Alpha 1a-adrenoceptor polymorphism: pharmacological characterization and association with benign prostatic hypertrophy. Shibata K, et al. **Br J Pharmacol** 1996 Jul; 118(6):1403-8

Cross talk between angiotensin AT1 and alpha 1-adrenergic receptors: angiotensin II downregulates alpha 1a-adrenergic receptor subtype mRNA and density in neonatal rat cardiac myocytes. Li HT, et al. **Circ Res** 1997 Sep;81(3):396-403

Alterations of mRNA levels of alpha 1-adrenoceptor subtypes with maturation and ageing in different rat blood vessels. Xu KM, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):415-7

Sp1-mediated transcriptional activation from the dominant promoter of the rat alpha1B adrenergic receptor gene in DDT1MF-2 cells. Chen J, et al. **J Biol Chem** 1997 Sep 12;272(37):23144-50

Distribution of alpha 1a-, alpha 1b- and alpha 1d-adrenergic receptor mRNA in the rat brain and spinal cord. Day HE, et al. **J Chem Neuroanat** 1997 Jul;13(2):115-39

Insulin and insulin-like growth factor I differentially induce alpha1-adrenergic receptor subtype expression in rat vascular smooth muscle cells. Hu ZW, et al. **J Clin Invest** 1996 Oct 15;98(8):1826-34

Upregulation of alpha1A- and alpha1B-adrenergic receptor mRNAs in the heart of cardiomyopathic hamsters. Beaulieu M, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):111-9

Transfection with c-Ha rasEJ modulates alpha-actin and alpha 1B-adrenoceptor gene expression in vascular smooth muscle cells. Lundberg MS, et al. **J Mol Cell Cardiol** 1997 Jun;29(6):1695-702

Localization of mRNA and receptor binding sites for the alpha 1a-adrenoceptor subtype in the rat, monkey and human urinary bladder and prostate. Walden PD, et al. **J Urol** 1997 Mar;157(3):1032-8

Distribution of alpha 1B-adrenergic receptor mRNA expression along rat nephron segments. Umemura S, et al. **Kidney Int** 1997 May;51(5):1548-52

Cloning, functional expression and tissue distribution of rabbit alpha1a-adrenoceptor. Miyamoto S, et al. **Life Sci** 1997; 60(23):2069-74

Characterization of the alpha1B-adrenergic receptor gene promoter region and hypoxia regulatory elements in vascular smooth muscle. Eckhart AD, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9487-92

Modeling and mutagenesis of the human alpha 1a-adrenoceptor: orientation and function of transmembrane helix V sidechains. Wetzel JM, et al. **Receptors Channels** 1996;4(3):165-77

IMMUNOLOGY

Alpha 1-adrenergic receptor antibodies in patients with primary hypertension. Luther HP, et al. **Hypertension** 1997 Feb;29(2):678-82

Role of nitric oxide in the development of vascular alpha 1-adrenoreceptor desensitization and pressure diuresis in conscious rats. Minami N, et al. **Hypertension** 1997 Apr; 29(4):969-75

METABOLISM

Alpha 1-adrenergic receptors in the mammalian cochlea. Liu SY, et al. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):710-3

Functional change of the balance between alpha 1A and alpha 1B adrenoceptor populations after transplantation of the vas deferens to the intestine. Pupo AS, et al. **Ann N Y Acad Sci** 1997 May 30;812:193-5

Structure-activity relationship studies of CNS agents, Part 32: Effect of structural modifications in 1-arylpiperazine derivatives on alpha(1) -adrenoreceptor affinity. Mokrosz MJ, et al. **Arch Pharm (Weinheim)** 1997 Jun;330(6):177-80

Protective effect of citalopram against the attenuation of the alpha 1-potentiation of cAMP formation in Fischer 344 strain rats. Izumi J, et al. **Behav Brain Res** 1997 Feb; 83(1-2):209-12

Up-regulation of the levels of expression and function of a constitutively active mutant of the hamster alpha1B-adrenoceptor by ligands that act as inverse agonists. Lee TW, et al. **Biochem J** 1997 Aug 1;325 (Pt 3):733-9

Synergism of constitutive activity in alpha 1-adrenergic receptor activation. Hwa J, et al. **Biochemistry** 1997 Jan 21;36(3):633-9

Cloning, functional expression and tissue distribution of rabbit alpha 1d-adrenoceptor. Suzuki F, et al. **Biochim Biophys Acta** 1997 Jan 14;1323(1):6-11

Effects of chronic administration of bopindolol on the binding characteristics of cardiac alpha 1H-, alpha 1L-, beta 1- and beta 2-adrenoceptor subtypes in cardiac muscles of spontaneously hypertensive rats (SHR). Hosohata Y, et al. **Biol Pharm Bull** 1996 Jul;19(7):932-5

The role of diacylglycerol and activation of protein kinase C in alpha 1A-adrenoceptor-mediated contraction to noradrenaline of rat isolated epididymal vas deferens. Burt RP, et al. **Br J Pharmacol** 1996 Jan;117(1):224-30

Modulation of the hepatic alpha 1-adrenoceptor responsiveness by colchicine: dissociation of free cytosolic Ca(2+)-dependent and independent responses. Butta N, et al. **Br J Pharmacol** 1996 Aug;118(7):1797-805

Evaluation of the pharmacological selectivity profile of alpha

1 adrenoceptor antagonists at prostatic alpha 1 adrenoceptors: binding, functional and in vivo studies. Kenny BA, et al. **Br J Pharmacol** 1996 Jun;118(4):871–8

Radioligand-binding analysis of human prostatic alpha-1 adrenoreceptor density following transurethral microwave therapy. Bdesha AS, et al. **Br J Urol** 1996 Dec;78(6):886–92

mRNA and protein expression of nitric oxide synthase and adrenoceptor alpha 1 in young and old rat penile tissues. Dahiya R, et al. **Br J Urol** 1997 Aug;80(2):300–6

Phosphorylation of the third intracellular loop of the mouse alpha1b-adrenergic receptor by cAMP-dependent protein kinase. Alonso-Llamazares A, et al. **Brain Res Bull** 1997; 42(6):427–30

Role of different subtypes of adrenoceptors in pressor responses to catecholamines released from sympathetic nerve endings. Dóda M. **Brain Res Bull** 1997;42(1):51–7

No evidence for mediation of ischemic preconditioning by alpha 1-adrenergic signal transduction pathway or protein kinase C in the isolated rat heart. Moolman JA, et al. **Cardiovasc Drugs Ther** 1996 May;10(2):125–36

Alpha 1-adrenoceptor subtypes in rat aorta and mesenteric small arteries are preserved during left ventricular dysfunction post-myocardial infarction. Stassen FR, et al. **Cardiovasc Res** 1997 Mar;33(3):706–13

Cross talk between angiotensin AT1 and alpha 1-adrenergic receptors: angiotensin II downregulates alpha 1a-adrenergic receptor subtype mRNA and density in neonatal rat cardiac myocytes. Li HT, et al. **Circ Res** 1997 Sep;81(3):396–403

Alterations of mRNA levels of alpha 1-adrenoceptor subtypes with maturation and ageing in different rat blood vessels. Xu KM, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):415–7

Coexpression of alpha 1A- and alpha 1B-adrenoceptors in the liver of the rhesus monkey (Macaca mulatta). García-Sáinz JA, et al. **Eur J Pharmacol** 1996 Sep 12; 311(2–3):277–83

Evidence for an age-dependent functional expression of alpha 1D-adrenoceptors in the rat vasculature. Ibarra M, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):221–4

[3H]R-terazosin binds selectively to alpha1-adrenoceptors over alpha2-adrenoceptors - comparison with racemic [3H]terazosin and [3H]prazosin. Ireland LM, et al. **Eur J Pharmacol** 1997 May 26;327(1):79–86

Functional characterisation of alpha 1-adrenoceptor subtypes mediating noradrenaline-induced inositol phosphate formation in rat thalamus slices. Trejo F, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):175–84

Characterization of alpha 1-adrenoceptor subtypes in rat spinal cord. Wada T, et al. **Eur J Pharmacol** 1996 Sep 26; 312(2):263–6

Regulation of hamster alpha 1B-adrenoceptors expressed in Chinese hamster ovary cells. Zhu SJ, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):205–12

Coexistence of alpha1 and beta adrenergic receptors in the liver of the frog Rana esculenta, the toad Bufo bufo, the lizard Podarcis sicula campestris, and the turtle Pseudemys picta elegans. Fabbri E, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):351–8

Stimulation of P2U purinergic or alpha 1A adrenergic receptors mobilizes Ca2+ in lens cells. Churchill GC, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):855–65

Studies on the platelet alpha-adrenoceptor subtypes in diabetes mellitus [see comments] Das T, et al. **J Assoc Physicians India** 1996 May;44(5):307–9. Comment in: J Assoc Physicians India 1996 May;44(5):301–2.

Platelet adrenoceptors in health and disease [editorial; comment] Thomas M, et al. **J Assoc Physicians India** 1996 May;44(5):301–2. Comment on: J Assoc Physicians India 1996 May;44(5):307–9.

Transgenic mice with cardiac overexpression of alpha1B-adrenergic receptors. In vivo alpha1-adrenergic receptor-mediated regulation of beta-adrenergic signaling. Akhter SA, et al. **J Biol Chem** 1997 Aug 22;272(34):21253–9

Activation of the alpha1b-adrenergic receptor is initiated by disruption of an interhelical salt bridge constraint. Porter JE, et al. **J Biol Chem** 1996 Nov 8;271(45):28318–23

The MEKK-JNK pathway is stimulated by alpha1-adrenergic receptor and ras activation and is associated with in vitro and in vivo cardiac hypertrophy. Ramirez MT, et al. **J Biol Chem** 1997 May 30; 272(22):14057–61

Rho is required for Galphaq and alpha1-adrenergic receptor signaling in cardiomyocytes. Dissociation of Ras and Rho pathways. Sah VP, et al. **J Biol Chem** 1996 Dec 6; 271(49):31185–90

Characterization of bunazosin-sensitive alpha1-adrenoceptors in human renal medulla. Yasuda G, et al. **J Cardiovasc Pharmacol** 1997 Aug;30(2):163–8

Effects of tamsulosin metabolites at alpha-1 adrenoceptor subtypes. Taguchi K, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):1–5

Alpha 1-adrenoceptor activation of a non-selective cation current in rabbit portal vein by 1,2-diacyl-sn-glycerol. Helliwell RM, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):417–28

Fenamates potentiate the alpha 1-adrenoceptor-activated nonselective cation channels in rabbit portal vein smooth muscle. Yamada K, et al. **Jpn J Pharmacol** 1996 Jan; 70(1):81–4

Expression of alpha 1 adrenergic receptor subtype mRNAs in the rat cardiovascular system with aging. Miller JW, et al. **Mech Ageing Dev** 1996 Jun 7;87(2):75–89

Inositol-1,4,5-trisphosphate mass content in isolated perfused rat heart during alpha-1-adrenoceptor stimulation. Hanem S, et al. **Mol Cell Biochem** 1996 Oct-Nov;163–164:167–72

Regulation of pineal alpha1B-adrenergic receptor mRNA: day/night rhythm and beta-adrenergic receptor/cyclic AMP control. Coon SL, et al. **Mol Pharmacol** 1997 Apr; 51(4):551–7

Selective up-regulation of alpha1a-adrenergic receptor protein and mRNA in brown adipose tissue by neural and beta3-adrenergic stimulation. Granneman JG, et al. **Mol Pharmacol** 1997 Apr;51(4):644–50

A mutation in the hamster alpha1B-adrenergic receptor that differentiates two steps in the pathway of receptor internalization. Wang J, et al. **Mol Pharmacol** 1997 Aug; 52(2):306–13

Identification of critical extracellular loop residues involved in alpha 1-adrenergic receptor subtype-selective antagonist binding. Zhao MM, et al. **Mol Pharmacol** 1996 Nov; 50(5):1118–26

Capacitative Ca2+ entry associated with alpha1-adrenoceptors in rat aorta. Noguera MA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):83–9

Pharmacokinetic and alpha 1-adrenoceptor antagonistic properties of two cyanine-type inhibitors of extraneuronal monoamine transport. Russ H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):268–74

Sustained increase in rat myocardial alpha 1A-adrenoceptors induced by 6-hydroxydopamine treatment involves a decelerated receptor turnover. Sallés J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Mar; 353(4):408–16

Is alpha1D-adrenoceptor protein detectable in rat tissues? Yang M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr;355(4):438–46

Noradrenaline-induced inositol phosphate formation in rat striatum is mediated by alpha 1A-adrenoceptors. Arias-Montaño JA, et al. **Neuropharmacology** 1996; 35(11):1605–13

Adenosine A1 receptor-dopamine D1 receptor interaction in the rat limbic system: modulation of dopamine D1 receptor antagonist binding sites. Ferre S, et al. **Neurosci Lett** 1996 Apr 19;208(2):109–12

Possible involvement of alpha 1-adrenoceptors in the modulation of [3H]noradrenaline release in rat brain cortical and hippocampal synaptosomes. Pastor C, et al. **Neurosci Lett** 1996 Oct 4;216(3):187–90

alpha1B adrenoceptors in rat paraventricular nucleus overlap with, but do not mediate, the induction of c-Fos expression by osmotic or restraint stress. Williams AM, et al. **Neuroscience** 1997 Feb;76(3):901–13

A critical period for the role of thyroid hormone in development of renal alpha-adrenergic receptors. Tan JP, et al. **Pediatr Res** 1997 Jul;42(1):93–102

The activation process of the alpha1B-adrenergic receptor: potential role of protonation and hydrophobicity of a highly conserved aspartate. Scheer A, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):808–13

Effects of hypertonic sucrose and potassium depletion on the binding properties of beta and alpha 1 adrenergic receptors measured on intact cells. Zhu SJ, et al. **Recept Signal Transduct** 1996;6(3–4):131–40

Alpha 1-adrenoceptor mediated activation of Na/K/2Cl cotransport and K+ channels in the rat heart involves different receptor subtypes. Andersen GO, et al. **Res Commun Mol Pathol Pharmacol** 1997 Jun;96(3):329–40

Alpha 1-adrenoceptor subtype distribution and the coupling to phosphoinositide hydrolysis in rat and rabbit ventricular myocardium. Hattori Y, et al. **Res Commun Mol Pathol Pharmacol** 1996 Sep;93(3):319–29

[A quantitative study on alpha-1 adrenergic receptor in the liver of Wistar rats during the process of CCl4-induced hepatic cirrhosis] Zhang Y, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Oct;33(10):630–2 (Eng. Abstr.) **(Chi)**

[Effect of aging on alpha-1 receptor-mediated, phenylephrine-induced contraction and pressor response: relationship with the amount of receptors] Koike K, et al. **J Smooth Muscle Res** 1995 Dec;31(6):396–7 **(Jpn)**

[Significance of various types of adrenergic receptors for tolerance of the brain to complete ischemia] Kulinskiĭ VI, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):156–8 **(Rus)**

PHYSIOLOGY

alpha 1-adrenoceptor stimulation is able to reverse halothane-induced cardiac depression in isolated rat hearts. Okuyama T, et al. **Acta Anaesthesiol Scand** 1997 Aug; 41(7):939–44

Pharmacological evidence that different alpha 1 adrenoceptor subtypes mediate contraction in rabbit prostate and hypogastric artery. Delaflotte S, et al. **Acta Physiol Scand** 1996 Nov;158(3):241–51

Evidence for increased beta-adrenoreceptor responsiveness induced by 14 days of simulated microgravity in humans. Convertino VA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R93–9

Role of Ca(2+)-independent PKC in alpha 1-adrenoceptor-mediated inotropic responses of neonatal rat hearts. Deng XF, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1113–8

Hypoxia/reoxygenation selectively impairs alpha 1b-adrenoceptor function in small mesenteric arteries. Gao H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G820–3

Sympathetic stimulation elicits increased or decreased VO2 in the perfused rat hindlimb via alpha 1-adrenoceptors. Hall JL, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2146–53

Effects of long-term high-altitude hypoxemia on alpha 1-adrenergic receptors in the ovine uterine artery. Hu XQ, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H1001–7

Differential activation of PKC-delta and -zeta by alpha 1-adrenergic stimulation in human airway epithelial cells. Liedtke CM, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C937–43

NE-induced contraction, alpha 1-adrenergic receptors, and Ins(1,4,5)P3 responses in cerebral arteries. Longo LD, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H915–23

Estrogen replacement attenuates resistance artery adrenergic sensitivity via endothelial vasodilators. Meyer MC, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2264–70

Modulation of K channels by coexpressed human alpha1C-adrenoceptor in Xenopus oocytes. Tseng GN, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1275–86

Alpha 1 adrenergic bronchomotor tone in guinea-pigs. Marcelle R. **Arch Physiol Biochem** 1996 Dec;104(7):814–8

A constitutively active mutant of the alpha 1B-adrenergic receptor can cause greater agonist-dependent down-regulation of the G-proteins G9 alpha and G11 alpha than the wild-type receptor. Lee TW, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):79–86

Molecular mechanisms underlying the activation and regulation of the alpha 1B-adrenergic receptor. Cotecchia S, et al. **Biochem Soc Trans** 1996 Nov;24(4):959–63 (21 ref.)

Characterization of alpha 1 D-adrenoceptor subtype in rat myocardium, aorta and other tissues. Deng XF, et al. **Br J Pharmacol** 1996 Sep;119(2):269–76

Pharmacological classification of alpha 1-adrenoceptors mediating contractions of rabbit isolated ear artery: comparison with rat isolated thoracic aorta. Fagura MS, et al. **Br J Pharmacol** 1997 Jan;120(2):247–58

Pharmacological characterization of an alpha 1A-adrenoceptor mediating contractile responses to noradrenaline in isolated caudal artery of rat. Lachnit WG, et al. **Br J Pharmacol** 1997 Mar;120(5):819–26

The involvement of reactive oxygen species and arachidonic acid in alpha 1-adrenoceptor-induced smooth muscle cell proliferation and migration. Nishio E, et al. **Br J Pharmacol** 1997 Jun;121(4):665–70

Involvement of adrenoceptors in the ovarian vascular pedicle in the regulation of counter current transfer of steroid hormones to the arterial blood supplying the oviduct and uterus of pigs. Stefańczyk-Krzymowska S, et al. **Br J Pharmacol** 1997 Mar;120(5):763–8

Endothelial modulation of alpha 1-adrenoceptor contractile responses in the tail artery of spontaneously hypertensive rats. Tabernero A, et al. **Br J Pharmacol** 1996 Oct; 119(4):765–71

Alpha 1-adrenoceptor vasoconstriction in the tail artery during ageing. Vila E, et al. **Br J Pharmacol** 1997 Jul; 121(5):1017–23

Localization of neuronal nitric oxide synthase-immunoreactivity within sub-populations of noradrenergic A1 and A2 neurons in the rat. Simonian SX, et al. **Brain Res** 1996 Sep 2;732(1–2):247–52

Rapamycin inhibits alpha 1-adrenergic receptor-stimulated cardiac myocyte hypertrophy but not activation of hypertrophy-associated genes. Evidence for involvement of p70 S6 kinase. Boluyt MO, et al. **Circ Res** 1997 Aug; 81(2):176–86

Norepinephrine induces the raf-1 kinase/mitogen-activated protein kinase cascade through both alpha 1- and beta-adrenoceptors. Yamazaki T, et al. **Circulation** 1997 Mar 4;95(5):1260–8

alpha1-Adrenoceptor subtypes mediating the contraction of arteries in spontaneously hypertensive rats. Fujimoto S, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S91–3

Costimulation of adenylyl cyclase and phospholipase C by a mutant alpha 1B-adrenergic receptor transgene promotes malignant transformation of thyroid follicular cells. Ledent C, et al. **Endocrinology** 1997 Jan;138(1):369–78

Alpha 1-adrenergic stimulation inhibits 3,5,3'-triiodothyronine-induced expression of the rat heart sarcoplasmic reticulum Ca2+ adenosine triphosphatase gene. Wu PS, et al. **Endocrinology** 1997 Jan;138(1):114–20

Calcium signalling in mouse Bergmann glial cells mediated by alpha1-adrenoreceptors and H1 histamine receptors. Kirischuk S, et al. **Eur J Neurosci** 1996 Jun;8(6):1198–208

Involvement of alpha1B-adrenoceptors in the positive inotropic effect of endogenous noradrenaline in rabbit myocardium. Hattori Y, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):165–8

Contribution of peripheral alpha 1A-adrenoceptors to pain induced by formalin or by alpha-methyl-5-hydroxytryptamine plus noradrenaline. Hong Y, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):41–8

Heterogeneity and complexity of alpha 1-adrenoceptors in the ovine uterine artery and umbilical vein. Hu XQ, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):67–75

Alpha 1B-adrenoceptor-mediated excitation of piriform cortical interneurons. Marek GJ, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):95–100

Short-term aortic barodenervation diminishes alpha

1-adrenoceptor reactivity in rat aortic smooth muscle. el-Mas MM, et al. **Eur J Pharmacol** 1997 Mar 19; 322(2-3):201-10

NS-49, an alpha 1A-adrenoceptor agonist, selectively increases intraurethral pressure in dogs. Taniguchi N, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):117-22

Analysis of alpha1-adrenoceptors in rabbit lower urinary tract and mesenteric artery. Van der Graaf PH, et al. **Eur J Pharmacol** 1997 May 26;327(1):25-32

Alpha 1D- and alpha 1A-adrenoceptors mediate contraction in rat renal artery. Villalobos-Molina R, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):225-7

Vascular alpha 1D-adrenoceptors have a role in the pressor response to phenylephrine in the pithed rat. Zhou L, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):173-6

Characterization of subtype of alpha1-adrenoceptor mediating vasoconstriction in perfused rat hind limb. Zhu W, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):55-61

Effect of mechanical loading on vascular alpha 1D- and alpha 1B-adrenergic receptor expression. Clements ML, et al. **Hypertension** 1997 May;29(5):1156-64

Mechanical load opposes angiotensin-mediated decrease in vascular alpha 1-adrenoceptors. Clements ML, et al. **Hypertension** 1997 May;29(5):1165-72

Alpha1-adrenergic receptor signaling via Gh is subtype specific and independent of its transglutaminase activity. Chen S, et al. **J Biol Chem** 1996 Dec 13;271(50):32385-91

Responses to norepinephrine of normal and "ischemic" canine Purkinje fibers are consistent with activation of different alpha 1-receptor subtypes. Anyukhovsky EP, et al. **J Cardiovasc Electrophysiol** 1997 Jun;8(6):658-66

Influence of alpha-adrenergic-receptor activation on junctional conductance in heart cells: interaction with beta-adrenergic adrenergic agonists. De Mello WC. **J Cardiovasc Pharmacol** 1997 Feb;29(2):273-7

alpha1-adrenergic stimulation induces early afterdepolarizations in ferret Purkinje fibers. Drouin E, et al. **J Cardiovasc Pharmacol** 1996 Mar;27(3):320-6

Norepinephrine-induced sustained myocardial adaptation to ischemia is dependent on alpha 1-adrenoceptors and protein synthesis. Meng X, et al. **J Mol Cell Cardiol** 1996 Sep;28(9):2017-25

Facilitative interactions between noradrenergic and purinergic signaling during preconditioning of the rat heart. Winter CB, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):163-73

Functional alpha 1-adrenergic receptors on leukocytes of patients with polyarticular juvenile rheumatoid arthritis. Heijnen CJ, et al. **J Neuroimmunol** 1996 Dec;71(1-2):223-6

Circadian variation of alpha 1-adrenoceptor-mediated pressor response to phenylephrine in man. Tham TC, et al. **J Pharm Pharmacol** 1996 May;48(5):526-8

Comparison between alpha-1 adrenoceptor-mediated and beta adrenoceptor-mediated inotropic components elicited by norepinephrine in failing human ventricular muscle. Skomedal T, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):721-9

Stimulation of alpha 1-adrenoceptors and protein kinase C-mediated activation of ecto-5'-nucleotidase in rat hearts in vivo. Sato T, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):119-27

Role of D1 and alpha1 receptors in the enhanced locomotor response to dopamine D2-like receptor stimulation induced by repeated electroconvulsive shock. D'Aquila PS, et al. **J Psychopharmacol (Oxf)** 1997;11(1):41-4

Stimulation and blockade of alpha1 adrenoceptors affect behavioural activity, but not spatial working memory assessed by delayed non-matching to position task in rats. Puumala T, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):45-51

Alpha-adrenergic activation of myocardial NF kappa B during hemorrhage. Meldrum DR, et al. **J Surg Res** 1997 May;69(2):268-76

Myocardial alpha1-adrenoceptor: inotropic effect and physiologic and pathologic implications. Li K, et al. **Life Sci** 1997;60(16):1305-18 (127 ref.)

Coronary alpha 1-adrenergic constrictor tone varies with intensity of exercise. Dodd-o JM, et al. **Med Sci Sports Exerc** 1996 Jan;28(1):62-71

Differential regulation of the mitogen-activated protein and stress-activated protein kinase cascades by adrenergic agonists in quiescent and regenerating adult rat hepatocytes. Spector MS, et al. **Mol Cell Biol** 1997 Jul; 17(7):3556-65

Role of G proteins in alpha1-adrenergic inhibition of the beta-adrenergically activated chloride current in cardiac myocytes. Hool LC, et al. **Mol Pharmacol** 1997 May; 51(5):853-60

Coupling efficiencies of human alpha 1-adrenergic receptor subtypes: titration of receptor density and responsiveness with inducible and repressible expression vectors. Theroux TL, et al. **Mol Pharmacol** 1996 Nov;50(5):1376-87

Alpha1D-adrenergic receptors and mitogen-activated protein kinase mediate increased protein synthesis by arterial smooth muscle. Xin X, et al. **Mol Pharmacol** 1997 May;51(5):764-75

Exposure to the n-3 polyunsaturated fatty acid docosahexaenoic acid impairs alpha 1-adrenoceptor-mediated contractile responses and inositol phosphate formation in rat cardiomyocytes. Reithmann C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):109-19

The differential involvement of adrenoceptors in challenges of different intensities. Haller J, et al. **Neurobiology (Bp)** 1996;4(1-2):111-3

Cardiac alpha(1)-adrenoceptors that regulate contractile function: subtypes and subcellular signal transduction mechanisms. Endoh M. **Neurochem Res** 1996 Feb; 21(2):217-29 (100 ref.)

Subtyping of alpha1-adrenoceptors responsible for the contractile response in the rat corpus cavernosum. Tong YC, et al. **Neurosci Lett** 1997 Jun 13;228(3):159-62

On the mechanism of alpha 1-adrenergic modulation of the inwardly-rectifying potassium channel gating in the human heart. Koumi S, et al. **Nippon Ika Daigaku Zasshi** 1996 Apr;63(2):165-8

Modulation of vigilance and behavioral activation by alpha-1 adrenoceptors in the rat. Puumala T, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):705-12

Inotropic response of rat heart papillary muscle to alpha 1- and beta-adrenoceptor stimulation in relation to dietary n-6 and n-3 polyunsaturated fatty acids (PUFA) and age. Skúladóttir GV, et al. **Pharmacol Toxicol** 1997 Feb; 80(2):85-90

The actions of alpha-methylnorepinephrine on the rat aorta. Castillo EF, et al. **Proc West Pharmacol Soc** 1996;39:33-5

Alpha 1 adrenergic receptor activation of proto-oncogene expression in arterial smooth muscle: regulation by nitric oxide and vascular injury. Okazaki M, et al. **Recept Signal Transduct** 1996;6(3-4):165-78

Adrenoceptor mechanism involved in thiopental-induced potentiation of halothane-epinephrine arrhythmias in dogs. Kamibayashi T, et al. **Res Commun Mol Pathol Pharmacol** 1996 Aug;93(2):225-34

The Na+/K+ATPase mediates the alpha 1-adrenoceptor stimulated increase in 86Rb(+)-uptake in isolated ventricular cardiomyocytes from adult rat heart. Viko H, et al. **Res Commun Mol Pathol Pharmacol** 1997 Apr; 96(1):89-106

Report of a unique meeting between the alpha-blocker subcommittee and the pharmaceutical industry. McGrath JC, et al. **Urology** 1996 Nov;48(5):665-7

[Effect of extracellular Na+ on the alpha-1-adrenergic contractile reaction of the rat vas deferens] Berdysheva LV. **Dokl Akad Nauk** 1997 Mar;353(3):408-10 **(Rus)**

RECEPTORS, ADRENERGIC, ALPHA-2

AGONISTS

Mivazerol, a new alpha 2-adrenergic agonist, blunts cardiovascular effects following surgical stress in pentobarbital-anesthetized rats. Zhang X, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):694-700

Antinociceptive interaction of intrathecal alpha2-adrenergic agonists, tizanidine and clonidine, with lidocaine in rats. Kawamata T, et al. **Anesthesiology** 1997 Aug;87(2):436-48

Sympatholytic and minimum anesthetic concentration-sparing responses are preserved in rats rendered tolerant to the hypnotic and analgesic action of dexmedetomidine, a selective alpha(2)-adrenergic agonist. Rabin BC, et al. **Anesthesiology** 1996 Sep;85(3):565-73

Alpha-2 adrenoceptor agonists decrease cyclic guanosine 3',5'-monophosphate in the mouse brain [see comments] Vulliemoz Y, et al. **Anesthesiology** 1996 Sep;85(3):544-50 . Comment in: Anesthesiology 1996 Sep;85(3):457-9.

Do cardiovascular mechanisms participate in thermoregulatory activity of alpha 2-adrenoceptor agonists and antagonists in rabbits? Szreder Z. **Ann N Y Acad Sci** 1997 Mar 15;813:512-25

The inhibitory effects of alpha(2)-adrenoceptor agonists on gastrointestinal transit during croton oil-induced intestinal inflammation. Pol O, et al. **Br J Pharmacol** 1996 Dec; 119(8):1649-55

Alpha 2 adrenoceptor agonists in the horse--a review. England GC, et al. **Br Vet J** 1996 Nov;152(6):641-57 (105 ref.)

The alpha 2 adrenoreceptor agonist clonidine suppresses seizures, whereas the alpha 2 adrenoreceptor antagonist idazoxan promotes seizures: pontine microinfusion studies of amygdala-kindled kittens. Shouse MN, et al. **Brain Res** 1996 Aug 26;731(1-2):203-7

Alpha-2 adrenergic agonists. Kamibayashi T, et al. **Can J Anaesth** 1997 May;44(5 Pt 2):R13-22 (50 ref.) **(Eng, Fre)**

The role of clonidine and alpha 2-agonists for postoperative analgesia [editorial; comment] Sandler AN. **Can J Anaesth** 1996 Dec;43(12):1191-4. Comment on: Can J Anaesth 1996 Dec;43(12):1195-202.

Effects of imidazoline antagonists of alpha 2-adrenoceptors on endogenous adrenaline-induced inhibition of insulin release. Hiyoshi Y, et al. **Eur J Pharmacol** 1995 Dec 27; 294(1):117-23

Rilmenidine activates postjunctional alpha 1- and alpha 2-adrenoceptors in the canine saphenous vein. Marsault R, et al. **Fundam Clin Pharmacol** 1996;10(4):379-86

Characterization of the sympathetic nerve responses to amphetamine: role of central alpha 2-adrenergic receptors. Liu W, et al. **J Cardiovasc Pharmacol** 1996 Nov; 28(5):712-22

Endothelium-dependent relaxation by alpha 2-adrenoceptor agonists in spontaneously hypertensive rat aorta. Sunano S, et al. **J Cardiovasc Pharmacol** 1996 May;27(5):733-9

Synthesis and evaluation of 2-(arylamino)imidazoles as alpha 2-adrenergic agonists. Munk SA, et al. **J Med Chem** 1997 Jan 3;40(1):18-23

Effect of sleep deprivation on the growth hormone response to the alpha-3 adrenergic receptor agonist, clonidine, in normal subjects. Lal S, et al. **J Neural Transm** 1997; 104(2-3):291-8

Acetylcholine release in the rat prefrontal cortex in vivo: modulation by alpha 2-adrenoceptor agonists and antagonists. Tellez S, et al. **J Neurochem** 1997 Feb; 68(2):778-85

Determination of dexmedetomidine in rat plasma by a sensitive [3H]clonidine radioreceptor assay. Bol CJ, et al. **J Pharm Sci** 1997 Jul;86(7):822-6

Dexmedetomidine inhibits osmotic water permeability in the rat cortical collecting duct. Rouch AJ, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):62-9

alpha2-adrenergic agonist-induced inhibition of cyclic AMP formation in transfected cell lines using a microtiter-based scintillation proximity assay. Hancock AA, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):557-79

Effects of optical isomers of ephedrine and methylephedrine on the twitch response in the isolated rat vas deferens and the involvement of alpha 2-adrenoceptors. Kawasuji T, et al. **J Smooth Muscle Res** 1996 Aug;32(4):155-63

Alpha 2C-adrenoceptors mediate contractile responses to noradrenaline in the human saphenous vein. Gavin KT, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):406-11

The novel alpha 2-adrenoceptor agonist [3H]mivazerol binds to non-adrenergic binding sites in human striatum membranes that are distinct from imidazoline receptors. Flamez A, et al. **Neurochem Int** 1997 Jul;31(1):125-9

Alpha 2-adrenoceptor agonists and stress-induced analgesia in rats: influence of stressors and methods of analysis. De Kock M, et al. **Pharmacol Biochem Behav** 1997 Sep; 58(1):109-17

Dissociation of hypnotic-anesthetic actions of alpha 2 agonists from cyclic AMP in the rat. Rabin BC, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):23-9

Chronic treatment with dexmedetomidine desensitizes alpha 2-adrenergic signal transduction. Reid K, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):63-71

Dexmedetomidine reduces response tendency, but not accuracy of rats in attention and short-term memory tasks. Ruotsalainen S, et al. **Pharmacol Biochem Behav** 1997 Jan; 56(1):31-40

[The in vitro effect of alpha-2 agonists on thrombocyte function and density of thrombocyte alpha-2 receptors] Heesen M, et al. **Anaesthesist** 1996 Mar;45(3):255-8 (Eng. Abstr.) **(Ger)**

[Usefulness of alpha 2-adrenoceptor agonists and practical problems associated with their use in clinical anesthesia--II. Effects in regional anesthesia and analgesic effects for pain relief] Nishikawa T, et al. **Masui** 1997 Jan;46(1):64-72 (209 ref.) (Eng. Abstr.) **(Jpn)**

[Usefulness of alpha 2-adrenoceptor agonists and practical problems associated with their use in clinical anesthesia--I. Premedication, anesthetic adjuvants, and hemodynamic effects] Nishikawa T, et al. **Masui** 1996 Dec; 45(12):1490-502 (113 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

alpha 2A/D-Adrenoceptor subtype predominates also in the neonatal rat spinal cord. Savola MK, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):106-8

Characterization of alpha 2-adrenoceptor subtypes in the porcine eye: identification of alpha 2A-adrenoceptors in the choroid, ciliary body and iris, and alpha 2A- and alpha 2C-adrenoceptors in the retina. Wikberg-Matsson A, et al. **Exp Eye Res** 1996 Jul;63(1):57-66

Distribution of alpha 2C-adrenergic receptor-like immunoreactivity in the rat central nervous system. Rosin DL, et al. **J Comp Neurol** 1996 Aug 12;372(1):135-65

Distribution of alpha 2A-adrenergic receptor-like immunoreactivity in the rat central nervous system. Talley EM, et al. **J Comp Neurol** 1996 Aug 12;372(1):111-34

Mechanism of down-regulation of alpha-2 adrenergic receptor subtypes. Heck DA, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1219-27

Regional study of spinal alpha 2-adrenoceptor densities after intraspinal noradrenergic-rich implants on adult rats bearing complete spinal cord transection or selective chemical noradrenergic denervation. Roudet C, et al. **Neurosci Lett** 1996 Apr 19;208(2):89-92

ANTAGONISTS & INHIBITORS

Do cardiovascular mechanisms participate in thermoregulatory activity of alpha 2-adrenoceptor agonists and antagonists in rabbits? Szreder Z. **Ann N Y Acad Sci** 1997 Mar 15;813:512-25

Clonidine-induced increase in osmolar clearance and free water clearance via activation of two distinct alpha 2-adrenoceptor sites. Intengan HD, et al. **Br J Pharmacol** 1996 Oct;119(4):663-70

A comparative study of the reversal by different alpha 2-adrenoceptor antagonists of the central sympatho-inhibitory effect of clonidine. Vayssettes-Courchay C, et al. **Br J Pharmacol** 1996 Feb; 117(3):587-593

alpha 2-, alpha 2A-, alpha 2B/2C-Adrenoceptor subtype

antagonists prevent lipopolysaccharide-induced fever response in rabbits. Bencsics A, et al. **Brain Res** 1995 Dec 24;705(1-2):302-6

Effects of alpha 2-adrenoceptor antagonists and imidazoline2-receptor ligands on neuronal damage in global ischaemia in the rat. Craven JA, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):204-7

Effect of delequamine (RS15385) on female sexual behaviour in the rat. Gonzalez MI, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):1-6

Effects of imidazoline antagonists of alpha 2-adrenoceptors on endogenous adrenaline-induced inhibition of insulin release. Hiyoshi Y, et al. **Eur J Pharmacol** 1995 Dec 27; 294(1):117-23

The subtype-selective alpha 2-adrenoceptor antagonists BRL 44408 and ARC 239 also recognize 5-HT1A receptors in the rat brain. Meana JJ, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):385-8

Effect of buflomedil on the neutrophil-endothelial cell interaction under inflammatory and hypoxia conditions. Boisseau MR, et al. **Haemostasis** 1996 Oct;26 Suppl 4:182-8

The effects of mirtazapine on central noradrenergic and serotonergic neurotransmission [published erratum appears in Int Clin Psychopharmacol 1996 Jun;11(2):153] de Boer T. **Int Clin Psychopharmacol** 1995 Dec;10 Suppl 4:19-23 (33 ref.)

Structure-activity studies for a novel series of N-(arylethyl)-N-(1,2,3,4-tetrahydronaphthalen-1-ylmethyl)-N-methylamine s possessing dual 5-HT uptake inhibiting and alpha2-antagonistic activities. Meyer MD, et al. **J Med Chem** 1997 Mar 28;40(7):1049-62

Acetylcholine release in the rat prefrontal cortex in vivo: modulation by alpha 2-adrenoceptor agonists and antagonists. Tellez S, et al. **J Neurochem** 1997 Feb; 68(2):778-85

Effects of optical isomers of ephedrine and methylephedrine on the twitch response in the isolated rat vas deferens and the involvement of alpha 2-adrenoceptors. Kawasuji T, et al. **J Smooth Muscle Res** 1996 Aug;32(4):155-63

Effects of long-term treatment with the alpha 2-adrenoceptor antagonist mirtazapine on 5-HT neurotransmission. Haddjeri N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):20-9

The stimulatory effect of clonidine on locus coeruleus neurons of rats with inactivated alpha 2-adrenoceptors: involvement of imidazoline receptors located in the nucleus paragigantocellularis. Ruiz-Ortega JA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):288-94

Presynaptic alpha 2A/D-autoreceptors in the brain cortex of Cercopithecus aethiops. Trendelenburg AU, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):341-6

Gender differences in brain metabolic and plasma catecholamine responses to alpha 2-adrenoceptor blockade. Schmidt ME, et al. **Neuropsychopharmacology** 1997 Apr; 16(4):298-310

Increased potency of neuropeptide Y to antagonize alpha2-adrenoceptor function in the nucleus tractus solitarii of the spontaneously hypertensive rat. Yang SN, et al. **Neuroscience** 1997 Jun;78(3):803-13

Effect of yohimbine on the development of morphine dependence in the rat: lack of involvement of cortical beta-adrenoceptor modifications. Ambrosio E, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):487-91

Effects of RU 52583, an alpha 2-antagonist, on memory in rats with excitotoxic damage to the septal area. M'Harzi M, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):649-55

alpha2-Adrenoceptor antagonists reverse the 5-HT2 receptor antagonist suppression of head-twitch behavior in mice. Matsumoto K, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):417-22

Responses to alpha 2-adrenoceptor blockade by idazoxan in healthy male and female volunteers. Schmidt ME, et al. **Psychoneuroendocrinology** 1997 Apr;22(3):177-88

Acute alpha 2 blockade by idazoxan increases insulin and lowers plasma glucose during positron emission tomography. Schmidt ME, et al. **Psychopharmacol Bull** 1997;33(2):253-9

The effect of alpha 2 adrenoceptor blockers on aggressive behavior in mice: implications for the actions of adrenoceptor agents. Haller J, et al. **Psychopharmacology (Berl)** 1996 Aug;126(4):345-50

Cytochrome P4501A (CYP1A) induction in rat and man by the benzodioxino derivative, fluparoxan. Beresford AP, et al. **Xenobiotica** 1997 Feb;27(2):159-73

BIOSYNTHESIS

CRE-like response element regulates expression of rat alpha 2D-adrenergic receptor gene in vascular smooth muscle. Yang N, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H85-95

Alpha2B adrenoceptor mRNA expression during rat brain development. Winzer-Serhan UH, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):90-100

Naloxone-precipitated withdrawal in morphine-dependent rats increases the expression of alpha 2a-adrenoceptor mRNA in brain. Busquets X, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):154-8

Expression of functional alpha2-adrenergic receptor subtypes in human corpus cavernosum and in cultured trabecular smooth muscle cells. Traish AM, et al. **Recept Signal Transduct** 1997;7(1):55-67

BLOOD

Effects of high-altitude chronic hypoxia on platelet alpha 2-receptors in man. Zaccaria M, et al. **Eur J Clin Invest** 1997 Apr;27(4):316-21

CHEMISTRY

The second intracellular loop of the alpha2-adrenergic receptors determines subtype-specific coupling to cAMP production. Näsman J, et al. **J Biol Chem** 1997 Apr 11; 272(15):9703-8

[Adrenergic receptor and alpha 2 agonist--2: Structure-function relationship of adrenoceptors] Mizobe T. **Masui** 1997 Jun;46(6):770-6 (14 ref.) (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Presynaptic alpha 2-autoreceptors in mouse heart atria: evidence for the alpha 2D subtype. Wahl CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):253-61

Expression of alpha 2-adrenergic receptor subtypes in the mouse brain: evaluation of spatial and temporal information imparted by 3 kb of 5' regulatory sequence for the alpha 2A AR-receptor gene in transgenic animals. Wang R, et al. **Neuroscience** 1996 Sep;74(1):199-218

Subclassification and nomenclature of alpha 1- and alpha 2-adrenoceptors. Hieble JP, et al. **Prog Drug Res** 1996; 47:81-130 (207 ref.)

DRUG EFFECTS

Postoperative alpha 2-adrenergic stimulation attenuates protein catabolism: effects of clonidine on growth hormone secretion [letter; comment] De Kock M. **Anesth Analg** 1996 Nov;83(5):1134; discussion 1135. Comment on: Anesth Analg 1996 Feb;82(2):258-63.

Preserved sympathetic response to hypotension despite perioperative alpha2 agonist administration. Dodd-o JM, et al. **Anesth Analg** 1997 Jun;84(6):1208-10

Postoperative alpha 2-adrenergic stimulation attenuates protein catabolism: effects of clonidine on growth hormone secretion [letter; comment] Klis R, et al. **Anesth Analg** 1996 Nov;83(5):1135. Comment on: Anesth Analg 1996 Feb;82(2):258-63.

Antinociceptive response to nitrous oxide is mediated by supraspinal opiate and spinal alpha 2 adrenergic receptors in the rat. Guo TZ, et al. **Anesthesiology** 1996 Oct; 85(4):846-52

Evidence for functional alpha 2D-adrenoceptors in the rat intestine. Liu L, et al. **Br J Pharmacol** 1996 Mar; 117(5):787-92

Modelling the changes induced by chronic desipramine treatment on the factors governing the agonism at prejunctional alpha 2-adrenoceptors. Sallés J, et al. **Br J Pharmacol** 1996 Mar;117(6):1286-92

Clozapine-induced hypersalivation and the alpha-2 adrenoceptor [letter; comment] Szabadi E. **Br J Psychiatry** 1996 Sep;169(3):380-1. Comment on: Br J Psychiatry 1995 Sep;167(3):412.

Medetomidine, alpha 2 adrenoceptors and small animal practice [editorial; comment] Hall LW. **Br Vet J** 1996 Sep; 152(5):493-5. Comment on: Br Vet J 1996 Sep;152(5):519-35.

Modulation of catecholamine release by alpha 2-adrenoceptors and I1-imidazoline receptors in rat brain. Meana JJ, et al. **Brain Res** 1997 Jan 9;744(2):216-26

Psychopharmacology of imidazoline and alpha 2-adrenergic receptors: implications for depression. Piletz JE, et al. **Crit Rev Neurobiol** 1994;9(1):29-66 (300 ref.)

Inhibition of N-type calcium channels: the only mechanism by which presynaptic alpha 2-autoreceptors control sympathetic transmitter release. Boehm S, et al. **Eur J Neurosci** 1996 Sep;8(9):1924-31

[3H]RX821002 (2-methoxyidazoxan) binds to alpha 2-adrenoceptor subtypes and a non-adrenoceptor imidazoline binding site in rat kidney. Callado LF, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):359-68

Prejunctional actions of K+ channel blockers in rat vas deferens. Docherty JR, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):287-93

Early administration of 17beta-estradiol partially masculinizes song control regions and alpha2-adrenergic receptor distribution in European starlings (Sturnus vulgaris). Casto JM, et al. **Horm Behav** 1996 Dec; 30(4):387-406

Characterization of alpha-adrenoceptor subtype(s) mediating vasoconstriction in the perfused rabbit ovarian vascular bed. Yousif M, et al. **J Auton Pharmacol** 1996 Aug; 16(4):221-7

Changes in noradrenergic sensitivity to tumor necrosis factor-alpha in brains of rats administered clonidine. Ignatowski TA, et al. **J Neuroimmunol** 1996 Oct; 70(1):55-63

Characterization of alpha-2D adrenergic receptor subtypes in bovine ocular tissue homogenates. Bylund DB, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1171-7

Alpha-adrenoceptor-mediated prejunctional effects of chloroethylclonidine in the canine saphenous vein. Guimarães S, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1326-30

Alpha-2a/d adrenoceptor subtype stimulation by guanfacine increases osmolar clearance. Intengan HD, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):48-53

S 15535, a novel benzodioxopiperazine ligand of serotonin (5-HT)1A receptors: I. Interaction with cloned human (h)5-HT1A, dopamine hD2/hD3 and h alpha2A-adrenergic receptors in relation to modulation of cortical monoamine release and activity in models of potential antidepressant activity. Millan MJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):132-47

Activation of alpha-2 adrenergic receptors inhibits norepinephrine release by a pertussis toxin-insensitive pathway independent of changes in cytosolic calcium in cultured rat sympathetic neurons. Schwartz DD. **J Pharmacol Exp Ther** 1997 Jul;282(1):248-55

Participation of AT1 and AT2 receptors in the differential interaction between angiotensin II or III and alpha-2 adrenoceptors in the nucleus reticularis gigantocellularis in cardiovascular regulation and antinociception in rats. Yang CH, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):795-802

Effect of phenylethanolamine N-methyltransferase inhibitor, CGS19281A, on the alpha-2-adrenoceptor function in the hypothalamus of rats in comparison with SKF29661, SKF64139 and yohimbine. Atobe M, et al. **Neuropsychobiology** 1996;34(2):82-9

Effect of a phenylethanolamine N-methyltransferase inhibitor, 2,3-dichloro-alpha-methylbenzylamine, on the alpha-2-adrenoceptor function in the hypothalamus in rats. Kuboia M, et al. **Neuropsychobiology** 1996;33(3):132-7

The non-peptide neuropeptide Y Y1 receptor antagonist BIBP3226 blocks the [Leu31,Pro34]neuropeptide Y-induced modulation of alpha 2-adrenoceptors in the nucleus tractus solitarii of the rat. Yang SN, et al. **Neuroreport** 1996 Nov 4;7(15-17):2701-5

Insulin-dependent attenuation in alpha 2-adrenoreceptor-mediated nociception in experimental diabetes. Bitar MS, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):15-20

Evaluation of agonist efficacy and receptor reserve for alpha 2D-adrenergic receptor regulated G protein activation in PC12 cell membranes. Tian WN, et al. **Pharmacology** 1996 Apr;52(4):252-62

Noradrenergic receptor sensitivity in obsessive-compulsive disorders: I. Growth hormone response to clonidine stimulation. Brambilla F, et al. **Psychiatry Res** 1997 Mar 24;69(2-3):155-62

The influence of chronic treatment with clonidine, yohimbine and idazoxan on morphine withdrawal. El-Kadi AO, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):67-73

Four cases of amitraz poisoning in humans. Kennel O, et al. **Vet Hum Toxicol** 1996 Feb;38(1):28-30 (26 ref.)

[Sexual behavior and alpha-2 adrenoreceptors in the neocortex of male rats after castration and testosterone administration] Shishkina GT, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):592-6 (Eng. Abstr.) **(Rus)**

GENETICS

Cloning and functional expression of guinea pig atrial alpha 2-adrenergic receptor subtypes. Svensson SP, et al. **Ann N Y Acad Sci** 1997 May 30;812:171-3

alpha 2-Adrenergic receptors in human spinal cord: specific localized expression of mRNA encoding alpha 2-adrenergic receptor subtypes at four distinct levels. Smith MS, et al. **Brain Res Mol Brain Res** 1995 Dec 1; 34(1):109-17

Differential expression of alpha 2-adrenoceptor subtypes in purified rat pancreatic islet A- and B-cells. Chan SL, et al. **Cell Signal** 1997 Jan;9(1):71-8

MspI identifies a biallelic polymorphism in the promoter region of the alpha 2A-adrenergic receptor gene. Lario S, et al. **Clin Genet** 1997 Feb;51(2):129-30

Polymorphisms of the human alpha 2A-adrenergic receptor gene in a Catalan population: description of a new polymorphism in the promoter region. Bono M, et al. **Gene Geogr** 1996 Aug;10(2):151-9

The 3'-untranslated region of the alpha2C-adrenergic receptor mRNA impedes translation of the receptor message. Yang Q, et al. **J Biol Chem** 1997 Jun 13; 272(24):15466-73

Molecular and pharmacological identity of the alpha 2D-adrenergic receptor subtype in bovine retina and its photoreceptors. Venkataraman V, et al. **Mol Cell Biochem** 1996 Jun 21;159(2):129-38

Analysis of the alpha2C-adrenergic receptor gene promoter and its cell-type-specific activity. Saulnier-Blache JS, et al. **Mol Pharmacol** 1996 Dec;50(6):1432-42

Characterization of the regulatory regions of murine alpha 2C2 adrenoceptor subtype gene. Chen WM, et al. **Neurosci Lett** 1996 May 24;210(1):33-6

Regulation of alpha 2A-adrenergic receptor expression in the human colon carcinoma cell line HT29: SCFA-induced enterocytic differentiation results in an inhibition of alpha 2C10 gene transcription. Devedjian JC, et al. **Proc Assoc Am Physicians** 1996 Jul;108(4):334-44

Platelet alpha 2-adrenoreceptors, catecholamines, hemodynamic variables, and anxiety in panic patients and their asymptomatic relatives. Cameron OG, et al. **Psychosom Med** 1996 Jul-Aug;58(4):289-301

Gene targeting--homing in on alpha 2-adrenoceptor-subtype

function. MacDonald E, et al. **Trends Pharmacol Sci** 1997 Jun;18(6):211-9 (48 ref.)

IMMUNOLOGY

Subtype specific recognition of human alpha2C2 adrenergic receptor using monoclonal antibodies against the third intracellular loop. Liitti S, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):166-72

METABOLISM

[3H]-RS-79948-197, a high affinity radioligand selective for alpha 2-adrenoceptor subtypes. Milligan CM, et al. **Ann N Y Acad Sci** 1997 May 30;812:176-7

Measurement of agonist-induced guanine nucleotide turnover by the G-protein Gi1alpha when constrained within an alpha2A-adrenoceptor-Gi1alpha fusion protein. Wise A, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):17-21

Role of the amino terminus of the third intracellular loop in agonist-promoted downregulation of the alpha2A-adrenergic receptor. Jewell-Motz EA, et al. **Biochemistry** 1997 Jul 22;36(29):8858-63

Alpha2-adrenergic receptor-mediated Ca2+ influx and release in porcine myometrial cells. ZhuGe R, et al. **Biol Reprod** 1997 May;56(5):1343-50

Renal alpha 2a/d-adrenoceptor subtype function: Wistar as compared to spontaneously hypertensive rats. Intengan HD, et al. **Br J Pharmacol** 1997 Jul;121(5):861-6

3,4-Diaminopyridine masks the inhibition of noradrenaline release from chick sympathetic neurons via presynaptic alpha 2-adrenoceptors: insights into the role of N- and L-type calcium channels. Doležal V, et al. **Brain Res** 1996 May 20;721(1-2):101-10

Distribution of alpha 2-adrenoceptors in the human locus coeruleus. Klimek V, et al. **Brain Res** 1996 Nov 25; 741(1-2):263-74

Role of different subtypes of adrenoceptors in pressor responses to catecholamines released from sympathetic nerve endings. Dóda M. **Brain Res Bull** 1997;42(1):51-7

Reduced expression of alpha2C-adrenoceptors in rat striatum following antisense oligodeoxynucleotide infusion. Lu L, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1-2):267-74

Monoamine receptors in the prefrontal cortex of Tupaia belangeri during chronic psychosocial stress. Flügge G, et al. **Cell Tissue Res** 1997 Apr;288(1):1-10

Ontogenesis of the alpha2-adrenergic receptor system in the hypothalamo-limbic system of the Pekin duck. Müller AR, et al. **Cell Tissue Res** 1997 Jan;287(1):61-8

Platelet alpha 2-adrenergic receptors in hypercholesterolemia: relationship between binding studies and epinephrine-induced platelet aggregation. Baldassarre D, et al. **Clin Pharmacol Ther** 1997 Jun;61(6):684-91

A comparative study of alpha2- and beta-adrenoceptor distribution in pigeon and chick brain. Fernández-López A, et al. **Eur J Neurosci** 1997 May;9(5):871-83

Evaluation in rat of RS-79948-197 as a potential PET ligand for central alpha 2-adrenoceptors. Hume SP, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):67-73

[3H]R-terazosin binds selectively to alpha1-adrenoceptors over alpha2-adrenoceptors - comparison with racemic [3H]terazosin and [3H]prazosin. Ireland LM, et al. **Eur J Pharmacol** 1997 May 26;327(1):79-86

Human adipocytes express alpha 2-adrenergic receptor of the alpha 2A-subtype only: pharmacological and genetic evidence. Castan I, et al. **Fundam Clin Pharmacol** 1995; 9(6):569-75

Effect of prolonged feeding of a sucrose-rich diet to normal rats on their hypothalamic alpha-2 adrenergic receptors. Etchegoyen GS, et al. **Horm Metab Res** 1997 Feb; 29(2):84-5

Cultured human trabecular meshwork cells express functional alpha 2A adrenergic receptors. Stamer WD, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2426-33

Studies on the platelet alpha-adrenoceptor subtypes in diabetes mellitus [see comments] Das T, et al. **J Assoc Physicians India** 1996 May;44(5):307-9. Comment in: J Assoc Physicians India 1996 May;44(5):301-2.

Platelet adrenoceptors in health and disease [editorial; comment] Thomas M, et al. **J Assoc Physicians India** 1996 May;44(5):301-2. Comment on: J Assoc Physicians India 1996 May;44(5):307-9.

Rescue of functional interactions between the alpha2A-adrenoreceptor and acylation-resistant forms of Gi1alpha by expressing the proteins from chimeric open reading frames. Wise A, et al. **J Biol Chem** 1997 Sep 26; 272(39):24673-8

Interaction of arrestins with intracellular domains of muscarinic and alpha2-adrenergic receptors. Wu G, et al. **J Biol Chem** 1997 Jul 11;272(28):17836-42

Making sense out of antisense for the study of drug receptors [editorial; comment] Michel MC, et al. **J Clin Invest** 1996 Sep 1;98(5):1074-5. Comment on: J Clin Invest 1996 Sep 1;98(5):1076-87.

Antisense technology reveals the alpha2A adrenoceptor to be the subtype mediating the hypnotic response to the highly selective agonist, dexmedetomidine, in the locus coeruleus of the rat [see comments] Mizobe T, et al. **J Clin Invest** 1996 Sep 1;98(5):1076-80. Comment in: J Clin Invest 1996 Sep 1;98(5):1074-5.

Cellular and subcellular distribution of alpha 2A-adrenergic receptors in the visual cortex of neonatal and adult rats. Venkatesan C, et al. **J Comp Neurol** 1996 Jan 29; 365(1):79-95

Medetomidine analogs as alpha 2-adrenergic ligands. 3. Synthesis and biological evaluation of a new series of medetomidine analogs and their potential binding interactions with alpha 2-adrenoceptors involving a "methyl pocket". Zhang X, et al. **J Med Chem** 1997 Sep 12;40(19):3014-24

Ectopic alpha2-adrenoceptors couple to N-type Ca2+ channels in axotomized rat sensory neurons. Abdulla FA, et al. **J Neurosci** 1997 Mar 1;17(5):1633-41

Buffers differentially alter the binding of [3H]rauwolscine and [3H]RX821002 to the alpha-2 adrenergic receptor subtypes. Deupree JD, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1215-27

Comparison of ligand binding affinities at human I1-imidazoline binding sites and the high affinity state of alpha-2 adrenoceptor subtypes. Piletz JE, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):694-702

Receptor reserve and turnover of alpha-2 adrenoceptors that mediate the clonidine-induced inhibition of rat locus coeruleus neurons in vivo. Pineda J, et al. **J Pharmacol Exp Ther** 1997 May;281(2):690-8

HepG2 and SK-N-MC: two human models to study alpha-2 adrenergic receptors of the alpha-2C subtype. Schaak S, et al. **J Pharmacol Exp Ther** 1997 May;281(2):983-91

The actions of medetomidine may not be mediated exclusively by alpha 2-adrenoceptors in the equine saphenous vein. Bryant CE, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):124-9

Molecular and pharmacological identity of the alpha 2D-adrenergic receptor subtype in bovine retina and its photoreceptors. Venkataraman V, et al. **Mol Cell Biochem** 1996 Jun 21;159(2):129-38

Subtype-specific intracellular trafficking of alpha2-adrenergic receptors. Daunt DA, et al. **Mol Pharmacol** 1997 May;51(5):711-20

Inhibition of cyclic AMP-dependent chloride secretion by PP receptors and alpha 2-adrenoceptors in a human colonic epithelial cell line. Holliday ND, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):183-9

Modulation of neurotransmitter release by opioid mu- and kappa-receptors from adrenergic terminals in the myenteric plexus of the guinea-pig colon: effect of alpha 2-autoreceptor blockade. Cosentino M, et al. **Neurosci Lett** 1997 Jan 31;222(2):75-8

Alterations in the central nervous alpha 2-adrenoceptor system under chronic psychosocial stress. Flügge G. **Neuroscience** 1996 Nov;75(1):187-96

Expression of alpha 2-adrenergic receptor subtypes in the mouse brain: evaluation of spatial and temporal information imparted by 3 kb of 5' regulatory sequence for the alpha 2A AR-receptor gene in transgenic animals. Wang R, et al. **Neuroscience** 1996 Sep;74(1):199-218

5-Hydroxytryptamine1B and alpha 2 adrenaline receptors in the brain of rats prenatally treated with methylazoxymethanol. Watanabe M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):69-73

Alpha 2-adrenergic receptor subtypes in rat dorsal root and superior cervical ganglion neurons. Gold MS, et al. **Pain** 1997 Jan;69(1-2):179-90

alpha 2-Adrenoceptors take centre stage at Nashville meeting. Graham RM, et al. **Trends Pharmacol Sci** 1996 Mar;17(3):90-4

[The in vitro effect of alpha-2 agonists on thrombocyte function and density of thrombocyte alpha-2 receptors] Heesen M, et al. **Anaesthesist** 1996 Mar;45(3):255-8 (Eng. Abstr.) **(Ger)**

[Changes in alpha 2-adrenoceptor binding nature in guinea-pig brain following the development of morphine dependence] Ohta S, et al. **Masui** 1997 May;46(5):640-3 (Eng. Abstr.) **(Jpn)**

[Significance of various types of adrenergic receptors for tolerance of the brain to complete ischemia] Kulinskiĭ VI, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):156-8 **(Rus)**

PHYSIOLOGY

Presynaptic alpha2-adrenoceptors inhibit excitatory synaptic transmission in rat brain stem. Bertolino M, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G654-61

Effects of blood and crystalloid cardioplegia on adrenergic and myogenic vascular mechanisms. Wang SY, et al. **Ann Thorac Surg** 1997 Jan;63(1):41-9

Functional consequences of constitutively active alpha2A-adrenergic receptor expression in 3T3F442A preadipocytes and adipocytes. Bétuing S, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):765-73

Alpha 2A-adrenergic receptor stimulated calcium release is transduced by Gi-associated G(beta gamma)-mediated activation of phospholipase C. Dorn GW 2nd, et al. **Biochemistry** 1997 May 27;36(21):6415-23

A cysteine-3 to serine mutation of the G-protein Gi1 alpha abrogates functional activation by the alpha 2A-adrenoceptor but not interactions with the beta gamma complex. Wise A, et al. **Biochemistry** 1997 Sep 2; 36(35):10620-9

Role of alpha 2-adrenoceptors in the regulation of intestinal water transport. Liu L, et al. **Br J Pharmacol** 1997 Mar; 120(5):892-8

Effects of electroconvulsive therapy on peripheral adrenoceptors, plasma, noradrenaline, MHPG and cortisol in depressed patients. Werstiuk ES, et al. **Br J Psychiatry** 1996 Dec;169(6):758-65

Localization of neuronal nitric oxide synthase-immunoreactivity within sub-populations of noradrenergic A1 and A2 neurons in the rat. Simonian SX, et al. **Brain Res** 1996 Sep 2;732(1-2):247-52

Regulation of ion transport by P2u purinoceptors and alpha 2A adrenoceptors in HT29 cells. Zhang W, et al. **Cell Biol Int** 1997 Apr;21(4):195-200

Endogenous nitric oxide masks alpha 2-adrenergic coronary vasoconstriction during exercise in the ischemic heart. Ishibashi Y, et al. **Circ Res** 1997 Feb;80(2):196-207

Role of baroreflex and central alpha2-adrenergic receptor systems in the diurnal variation of blood pressure and heart rate in normotensive and hypertensive rats. Yoneda Y, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S64-6

Rilmenidine-induced ocular hypotension: role of imidazoline1 and alpha 2 receptors. Chu TC, et al. **Curr Eye Res** 1996 Sep;15(9):943-50

The alpha2-adrenergic receptor is more effective than the galanin receptor in activating G-proteins in RINm5F beta-cell membranes. Gillison SL, et al. **Diabetes** 1997 Mar; 46(3):401-7

Investigation of the subtype of alpha 2-adrenoceptor mediating pressor responses in the pithed rat. Gavin K, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):81-7

Different roles of alpha 2-adrenoceptors of the medulla versus the spinal cord in modulation of mustard oil-induced central hyperalgesia in rats. Mansikka H, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):19-26

The central sympatho-inhibitory effect of 5,6-dihydroxy-2-dimethylaminotetralin (M7) is mediated by alpha 2-adrenoceptors. Vayssettes-Courchay C, et al. **Eur J Pharmacol** 1997 Feb 12;320(2-3):151-9

Reconstitution of alpha2D-adrenergic receptor coupling to phospholipase D in a PC12 cell lysate. Jinsi-Parimoo A, et al. **J Biol Chem** 1997 Jun 6;272(23):14556-61

Neurons and receptors in the rostroventrolateral medulla mediating the antihypertensive actions of drugs acting at imidazoline receptors. Reis DJ. **J Cardiovasc Pharmacol** 1996;27 Suppl 3:S11-18 (65 ref.)

Binding of alpha-adrenergic receptors stimulates the anti-mycobacterial activity of murine peritoneal macrophages. Miles BA, et al. **J Neuroimmunol** 1996 Dec; 71(1-2):19-24

Alpha 2 adrenoceptor potentiates glycine receptor-mediated taurine response through protein kinase A in rat substantia nigra neurons. Nabekura J, et al. **J Neurophysiol** 1996 Oct; 76(4):2447-54

The alpha2a adrenergic receptor subtype mediates spinal analgesia evoked by alpha2 agonists and is necessary for spinal adrenergic-opioid synergy. Stone LS, et al. **J Neurosci** 1997 Sep 15;17(18):7157-65

Blockade of alpha-2 adrenergic receptors in the rostral ventrolateral medulla attenuates the sympathoinhibitory response to cocaine. Abrahams TP, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):967-74

Alpha-2 adrenoceptor subtype causing nitric oxide-mediated vascular relaxation in rats. Bockman CS, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1235-43

Hippocampal noradrenaline release in awake, freely moving rats is regulated by alpha-2 adrenoceptors but not by adenosine receptors. Carter AJ. **J Pharmacol Exp Ther** 1997 May;281(2):648-54

Synergistic behavioral interaction between ethanol and clonidine in rats: role of alpha-2 adrenoceptors. Mao L, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):443-9

Interaction between histamine H3 receptors and other prejunctional receptor systems in the isolated guinea pig duodenum. Poli E, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):393-9

Spinal morphine/clonidine antinociceptive synergism: involvement of G proteins and N-type voltage-dependent calcium channels. Wei ZY, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1392-407

Differential targeting and retention of G protein-coupled receptors in polarized epithelial cells. Wozniak M, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):373-83 (15 ref.)

Prejunctional alpha 2-adrenoceptors inhibit nitrergic neurotransmission in horse penile resistance arteries. Simonsen U, et al. **J Urol** 1997 Jun;157(6):2356-60

Effects of alpha 2-adrenergic agonism, imidazolines, and G-protein on insulin secretion in beta cells. Hirose H, et al. **Metabolism** 1997 Oct;46(10):1146-9

Genetic alteration of alpha 2C-adrenoceptor expression in mice: influence on locomotor, hypothermic, and neurochemical effects of dexmedetomidine, a subtype-nonselective alpha 2-adrenoceptor agonist. Sallinen J, et al. **Mol Pharmacol** 1997 Jan;51(1):36-46

The differential involvement of adrenoceptors in challenges of different intensities. Haller J, et al. **Neurobiology (Bp)** 1996;4(1-2):111-3

Determination on functional basis of presynaptic alpha 2-adrenoceptor subtypes in guinea-pig duodenum. Colucci R, et al. **Neurosci Lett** 1996 May 24;210(1):29-32

A somatostatin receptor inhibits noradrenaline release from chick sympathetic neurons through pertussis toxin-sensitive mechanisms: comparison with the action of alpha 2-adrenoceptors. Boehm S, et al. **Neuroscience** 1996 Jul; 73(2):595-604

Social isolation in the rat enhances alpha 2-autoreceptor

function in the hippocampus in vivo. Fulford AJ, et al. **Neuroscience** 1997 Mar;77(1):57–64

Aortic barodenervation up-regulates alpha2-adrenoceptors in the nucleus tractus solitarius and rostral ventrolateral medulla: an autoradiographic study. El-Mas MM, et al. **Neuroscience** 1997 Jul;79(2):581–90

Substitution of a mutant alpha2a-adrenergic receptor via "hit and run" gene targeting reveals the role of this subtype in sedative, analgesic, and anesthetic-sparing responses in vivo. Lakhlani PP, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9950–5

A view on noradrenergic, hypothalamic-pituitary-adrenal axis and extrahypothalamic corticotrophin-releasing factor function in anxiety and affective disorders: the reduced growth hormone response to clonidine. Coplan JD, et al. **Psychopharmacol Bull** 1997;33(2):193–204 (93 ref.)

Involvement of the alpha2-adrenergic system in polydipsia in schizophrenic patients: a pilot study. Hayashi T, et al. **Psychopharmacology (Berl)** 1997 Apr;130(4):382–6

[Sexual behavior and alpha-2 adrenoreceptors in the neocortex of male rats after castration and testosterone administration] Shishkina GT, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):592–6 (Eng. Abstr.) **(Rus)**

RECEPTORS, ADRENERGIC, BETA

[Molecular function of subtype and subunit drug receptors] Kimura M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep; 108(3):155–6 (0 ref.) **(Jpn)**

[Indicator of adrenoreceptors in cell membranes: reference values and informative validity in the assessment of the functional state of the cardiovascular system] Dlusskaia IG, et al. **Aviakosm Ekolog Med** 1996;30(4):46–51 (Eng. Abstr.) **(Rus)**

AGONISTS see ADRENERGIC BETA-AGONISTS

ANALYSIS

Longitudinal study of beta- and alpha-adrenergic receptor properties during human pregnancy. Pantuck CB, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):234–42

Autoradiographic mapping of beta-adrenoceptors in human skin. Steinkraus V, et al. **Arch Dermatol Res** 1996 Aug; 288(9):549–53

Intrinsic cardiac neurons involved in cardiac regulation possess alpha 1-, alpha 2-, beta 1- and beta 2-adrenoceptors. Armour JA. **Can J Cardiol** 1997 Mar; 13(3):277–84

Characterisation of beta-adrenoceptors in equine digital veins: implications of the modes of vasodilatory action of isoxsuprine. Elliott J, et al. **Equine Vet J Suppl** 1995 Sep; (19):101–7

Myocardial beta adrenoceptor density in primary and secondary left ventricular hypertrophy. Choudhury L, et al. **Eur Heart J** 1996 Nov;17(11):1703–9

Beta adrenoceptor density in patients with left-sided valvular regurgitation. Dzimiri N, et al. **Fundam Clin Pharmacol** 1996;10(6):547–53

Effects of different left ventricular load conditions on myocardial beta-adrenoceptor density in patients with rheumatic heart valvular disease. Dzimiri N, et al. **Gen Pharmacol** 1996 Sep;27(6):1019–23

Influence of nutritional weaning on porcine adipocyte beta-adrenergic and adenosine A1 receptors. Mersmann HJ, et al. **J Anim Sci** 1997 Sep;75(9):2368–77

Changes in beta-adrenoceptors and G-proteins during the transition from cardiac hypertrophy to heart failure. Flesch M, et al. **J Card Fail** 1996 Dec;2(4 Suppl):S35–43 (64 ref.)

Imaging beta-adrenoceptors in the human brain with (S)-1'-[18F]fluorocarazolol. van Waarde A, et al. **J Nucl Med** 1997 Jun;38(6):934–9

Characterization of pulmonary and myocardial beta-adrenoceptors with S-1'-[fluorine-18]fluorocarazolol. Visser TI, et al. **J Nucl Med** 1997 Feb;38(2):169–74

Biphasic alterations in cardiac beta-adrenoceptor signal transduction mechanism due to oxyradicals. Persad S, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1623–31

Agonist potency at the cloned human beta-3 adrenoceptor depends on receptor expression level and nature of assay. Wilson S, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):214–21

Brain beta-adrenergic receptor binding in rats with obesity induced by a beef tallow diet. Matsuo T, et al. **Metabolism** 1997 Jan;46(1):18–22

Evidence for functional beta-adrenoceptor subtypes in CG-5 breast cancer cell. Badino GR, et al. **Pharmacol Res** 1996 Apr-May;33(4-5):255–60

Reduced beta adrenoceptor density in vivo in human lung tumours: a preliminary study with positron emission tomography. Qing F, et al. **Thorax** 1996 Jul;51(7):727–32

[Adrenoreceptors of cell membranes as indicators of strain of the cardiovascular system] Dlusskaia IG, et al. **Med Tr Prom Ekol** 1996;(6):28–30 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS see ADRENERGIC BETA-ANTAGONISTS

BIOSYNTHESIS

IL-1 beta alters beta-adrenergic receptor adenylyl cyclase system function in human airway epithelial cells. Kelsen SG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L694–700

Expression of leptin and beta 3-adrenergic receptors in rat adipose tissue in altered thyroid states. Fain JN, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):145–50

Propranolol therapy in experimental heart failure in rabbits improves cardiac response to catecholamines without beta-adrenoceptor up-regulation. Xiong L, et al. **Fundam Clin Pharmacol** 1995;9(6):522–30

Beta 1-adrenoceptor autoimmunity in cardiomyopathy. Magnusson Y, et al. **Int J Cardiol** 1996 May;54(2):137–41 (23 ref.)

Expression of beta3-adrenoceptor and stimulation of glucose transport by beta3-agonists in brown adipocyte primary culture. Nikami H, et al. **J Biochem (Tokyo)** 1996 Jan; 119(1):120–5

Expression of beta3-adrenoceptors with low lipolytic action in human subcutaneous white adipocytes. Tavernier G, et al. **J Lipid Res** 1996 Jan;37(1):87–97

Sino-aortic denervation causes right atrial beta adrenoceptor down-regulation. Zanesco A, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):677–85

BLOOD

Circulating noradrenaline and beta-adrenergic receptors in children with congestive heart failure. Wu JR, et al. **Acta Paediatr** 1996 Aug;85(8):923–7

Allosteric equilibrium model explains steady-state coupling of beta-adrenergic receptors to adenylate cyclase in turkey erythrocyte membranes. Ugur O, et al. **Biochem J** 1997 May 1;323 (Pt 3):765–76

CHEMISTRY

Structure and function of the beta 3-adrenergic receptor. Strosberg AD. **Annu Rev Pharmacol Toxicol** 1997; 37:421–50 (76 ref.)

Stereoselective modification of circular dichroism spectra of rat lung beta-adrenoceptor protein preparation by enantiomers of epinephrine. Patil PN, et al. **Chirality** 1996; 8(7):463–5

Predictive quantitative structure-activity relationships (QSAR) analysis of beta 3-adrenergic ligands. Blin N, et al. **Drug Des Discov** 1995 Apr;12(4):297–311

CLASSIFICATION

Beta-adrenoceptor subtype expression and function in rat white adipocytes. Germack R, et al. **Br J Pharmacol** 1997 Jan;120(2):201–10

DRUG EFFECTS

Review article: beta 3-adrenoceptor agonists--future anti-inflammatory drugs for the gastrointestinal tract? Anthony A. **Aliment Pharmacol Ther** 1996 Dec; 10(6):859–63 (45 ref.)

Cocaine and beta-adrenergic receptor function in pregnant myometrium. Wang FL, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1651–3

Chronic effects of catecholamines on the beta 2-adrenoreceptor system in cultured human airway epithelial cells. Kelsen SG, et al. **Am J Physiol** 1997 May; 272(5 Pt 1):L916–24

Regulation of alpha 1-, beta 1-, and beta 2-adrenergic receptors in rat heart by norepinephrine. Zhao M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1762–8

Glucocorticoids induce beta2-adrenergic receptor function in human nasal mucosa. Baraniuk JN, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):704–10

In vivo quantification of human pulmonary beta-adrenoceptors: effect of beta-agonist therapy. Hayes MJ, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1277–83

Interaction of halothane with alpha- and beta-adrenoceptor stimulations in rat myocardium. Hanouz JL, et al. **Anesthesiology** 1997 Jan;86(1):147–59

Stereoselective action of (R*,R*)-(+/-)-methyl-4-[2-[2-hydroxy-2-(3-chlorophenyl)ethylamino] propyl]-phenoxyacetic acid (BRL37344) on beta-adrenoceptors and metabolic chiral inversion. Ida K, et al. **Biochem Pharmacol** 1996 Nov 22; 52(10):1521–7

Beta-adrenergic regulation of renin expression in differentiated U-937 monocytic cells. Jikihara H, et al. **Biochem Pharmacol** 1997 Jun 15;53(12):1883–8

A prospective study of the effects of prolonged timolol therapy on alpha- and beta-adrenoceptor and angiotensin II receptor mediated responses in normal subjects. Ferro A, et al. **Br J Clin Pharmacol** 1997 Mar;43(3):301–8

Clinical pharmacology of beta 3-adrenoceptors. Lipworth BJ. **Br J Clin Pharmacol** 1996 Sep;42(3):291–300 (70 ref.)

Comparison of the profiles of agonists as stimulants of the beta 3-adrenoceptor in vitro with their gastroprotective effects in the conscious rat. Bahl AK, et al. **Br J Pharmacol** 1996 Feb;117(3):580–586

Impaired activation of adenylyl cyclase in lung of the Basenji-greyhound model of airway hyperresponsiveness: decreased numbers of high affinity beta-adrenoceptors. Emala CW, et al. **Br J Pharmacol** 1996 Aug;118(8):2009–16

Differences between the third cardiac beta-adrenoceptor and the colonic beta 3-adrenoceptor in the rat. Kaumann AJ, et al. **Br J Pharmacol** 1996 Aug;118(8):2085–98

Stimulation of cyclic AMP-dependent protein kinase in rat atria by (-)-CGP 12177 through an atypical beta-adrenoceptor. Kaumann AJ, et al. **Br J Pharmacol** 1997 Apr;120(7):1187–9

Increased interleukin-8 release by beta-adrenoceptor activation in human transformed bronchial epithelial cells. Lindén A. **Br J Pharmacol** 1996 Sep;119(2):402–6

Mediation of the positive chronotropic effect of CGP 12177 and cyanopindolol in the pithed rat by atypical beta-adrenoceptors, different from beta 3-adrenoceptors. Malinowska B, et al. **Br J Pharmacol** 1996 Mar;117(5):943–9

Effects of (-)-RO363 at human atrial beta-adrenoceptor subtypes, the human cloned beta 3-adrenoceptor and rodent intestinal beta 3-adrenoceptors. Molenaar P, et al. **Br J Pharmacol** 1997 Jan;120(2):165–76

Ontogeny of beta-adrenoceptor/adenylyl cyclase desensitization mechanisms: the role of neonatal innervation. Slotkin TA, et al. **Brain Res** 1996 Dec 2; 742(1-2):317–28

Down-regulation of rat beta-adrenoceptors by clenbuterol or desipramine does not require chronic treatment: [3H] CGP-12177 binding reveals rapid (24 hour) modulation. Newman-Tancredi A, et al. **Brain Res Bull** 1996;41(2):93–6

Intrinsic cardiac neurons involved in cardiac regulation possess alpha 1-, alpha 2-, beta 1- and beta 2-adrenoceptors. Armour JA. **Can J Cardiol** 1997 Mar; 13(3):277–84

Expression of functional beta-adrenoceptors and polyploidy development in cultured vascular smooth muscle cells from spontaneously hypertensive rats. Conyers RB, et al. **Can J Physiol Pharmacol** 1997 May;75(5):375–82

Differentiation of binding sites of CGP12177, a beta 3-adrenoceptor partial agonist, and carteolol, a beta 1/beta 2-adrenoceptor partial agonist, to the beta-adrenoceptors in guinea-pig taenia caecum. Koike K, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):928–33

Beta-adrenergic responsiveness of papillary muscles in the rat postinfarction model. Qi X, et al. **Can J Physiol Pharmacol** 1996 Oct;74(10):1166–70

Effects of the beta 3-adrenoceptor agonist BRL 37344 on lipomobilization and plasma glucose levels in conscious fasted rabbits. Reverte M, et al. **Can J Physiol Pharmacol** 1996 Mar;74(3):251–6

Cardiac beta-adrenoreceptor activation and ventricular fibrillation under normal and ischemic conditions. Bui-Xuan B, et al. **Cardiovasc Res** 1996 Dec;32(6):1056–63

Paradoxical down-regulation and desensitization of beta2-adrenoceptors by exogenous progesterone in female asthmatics [see comments] Tan KS, et al. **Chest** 1997 Apr; 111(4):847–51. Comment in: Chest 1997 Apr;111(4):840–2.

Stereoselective modification of circular dichroism spectra of rat lung beta-adrenoceptor protein preparation by enantiomers of epinephrine. Patil PN, et al. **Chirality** 1996; 8(7):463–5

Myocardial and vascular adrenergic alterations in a rat model of endotoxin shock: reversal by an anti-tumor necrosis factor-alpha monoclonal antibody. Boillot A, et al. **Crit Care Med** 1997 Mar;25(3):504–11

Pharmacological activities of trimetoquinol and 1-benzyl halogen-substituted analogues on rat beta-adrenoceptor subtypes. Konkar AA, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):63–71

The antiaggressive potency of (-)-penbutolol involves both 5-HT1A and 5-HT1B receptors and beta-adrenoceptors. Sánchez C, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):1–8

Molecular characterization of pharmacological properties of T-0509 for beta-adrenoceptors. Sato Y, et al. **Eur J Pharmacol** 1996 Nov 21;315(3):363–7

Triiodothyronine and amiodarone effects on beta 3-adrenoceptor density and lipolytic response to the beta 3-adrenergic agonist BRL 37344 in rat white adipocytes. Germack R, et al. **Fundam Clin Pharmacol** 1996; 10(3):289–97

Glucocorticoid modulation of muscarinic and beta-adrenergic receptors in guinea pig lung. Scherrer D, et al. **Fundam Clin Pharmacol** 1997;11(2):111–6

Effects of renin-angiotensin blockade on sympathetic reactivity and beta-adrenergic pathway in the spontaneously hypertensive rat. K.-Laflamme A, et al. **Hypertension** 1997 Aug;30(2 Pt 1):278–87

Lack of correlation between arterial and venous beta-adrenergic receptor sensitivity. Stein CM, et al. **Hypertension** 1997 Jun;29(6):1273–7

Beta-adrenoceptor responsiveness of splenic macrophages in normotensive and hypertensive rats. Serio M, et al. **Immunopharmacol Immunotoxicol** 1996 May;18(2):247–65

Loss of [125I]-pindolol binding to beta-adrenoceptors on rat nodose ganglion after chronic isoprenaline treatment. Watkins DJ, et al. **J Auton Nerv Syst** 1996 Aug 27; 60(1-2):12–6

Effects of catecholamines on isolated human colonic smooth muscle. MacDonald A, et al. **J Auton Pharmacol** 1996 Aug; 16(4):213–20

Pharmacological characterization of adrenoceptors in horse corpus cavernosum penis. Recio P, et al. **J Auton Pharmacol** 1997 Jun;17(3):191–8

Uncoupling protein-3 is a mediator of thermogenesis regulated by thyroid hormone, beta3-adrenergic agonists, and leptin. Gong DW, et al. **J Biol Chem** 1997 Sep 26; 272(39):24129–32

Are patients chronically treated with beta 1-adrenoceptor antagonists in fact beta-blocked? Yndgaard S, et al. **J Cardiothorac Vasc Anesth** 1997 Feb;11(1):32–6

Tocolytic therapy with fenoterol induces selective down-regulation of beta-adrenergic receptors in human myometrium. Engelhardt S, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1235-42

The effect of chronic administration of amitriptyline on the effects of subsequent electroconvulsive treatment on responsiveness of alpha 1-and beta-adrenoceptors in the rat cortical slices. Vetulani J, et al. **J Neural Transm** 1996; 103(3):363-76

Noradrenaline increases the expression of the proenkephalin gene in cultured astroglial cells by acting on beta 1- and alpha 1-adrenoceptors. Hildebrand B, et al. **J Neurochem** 1996 May;66(5):1860-7

Beta adrenergic receptor stimulated prostacyclin synthesis in rabbit coronary endothelial cells is mediated by selective activation of phospholipase D: inhibition by adenosine 3'5'-cyclic monophosphate. Ruan Y, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1038-46

Novel glial-neuronal signalling by coactivation of metabotropic glutamate and beta-adrenergic receptors in rat hippocampus. Winder DG, et al. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):743-55

Effect of chronic digoxin on beta-adrenergic receptors in rabbits with heart failure. Albajinai W, et al. **Jpn Heart J** 1997 Mar;38(2):263-72

Beta 2-adrenoceptor activation by zinterol causes protein phosphorylation, contractile effects and relaxant effects through a cAMP pathway in human atrium. Kaumann AJ, et al. **Mol Cell Biochem** 1996 Oct-Nov;163-164:113-23

Basal forebrain cholinergic immunolesion by 192IgG-saporin: evidence for a presynaptic location of subpopulations of alpha 2- and beta-adrenergic as well as 5-HT2A receptors on cortical cholinergic terminals. Heider M, et al. **Neurochem Res** 1997 Aug;22(8):957-66

Beta-adrenoceptors regulate myoelectric activity in the small intestine of rats: stimulation by beta 2 and inhibition by beta 3 subtypes. Thollander M, et al. **Neurogastroenterol Motil** 1996 Jun;8(2):143-51

Effects of valproic acid on beta-adrenergic receptors, G-proteins, and adenylyl cyclase in rat C6 glioma cells. Chen G, et al. **Neuropsychopharmacology** 1996 Sep; 15(3):271-80

Beta-adrenoceptor-linked protein kinase A (PKA) activity in human fibroblasts from normal subjects and from patients with major depression. Manier DH, et al. **Neuropsychopharmacology** 1996 Dec;15(6):555-61

Development of radioligands for the imaging of cardiac beta-adrenoceptors using SPECT. Part II: Pharmacological characterization in vitro and in vivo of new 123I-labeled beta-adrenoceptor antagonists. Dubois EA, et al. **Nucl Med Biol** 1997 Jan;24(1):9-13

Ontogeny of beta-adrenergic desensitization in rabbit tracheal smooth muscle. Omlor GJ, et al. **Pediatr Pulmonol** 1996 Oct;22(4):255-62

Synthesis and beta-adrenergic activities of R-fluoronaphthyloxypropanolamine. Adejare A, et al. **Pharm Res** 1997 Apr;14(4):533-6

8-bromo-cAMP and 8-CPT-cAMP increase the density of beta-adrenoceptors in hepatocytes by a mechanism not mimicking the effect of cAMP. Sandnes D, et al. **Pharmacol Toxicol** 1996 Jul;79(1):15-22

Agonist and antagonist properties of beta 3-adrenoceptors in human omental and mouse 3T3-L1 adipocytes. Shimizu M, et al. **Pharmacol Toxicol** 1996 Apr;78(4):254-63

Alpha(1)- and beta-adrenoceptor-mediated increase in 86Rb(+)-uptake in isolated cardiomyocytes from adult rat heart: evidence for interaction between the two receptor systems. Viko H, et al. **Pharmacol Toxicol** 1996 Dec; 79(6):287-92

Central beta-adrenoceptor involvement in neural control of blood glucose in pigeons. Souza WF, et al. **Physiol Behav** 1996 Sep;60(3):889-94

Rapid down-regulation of beta-adrenergic receptors evoked by combined forced swimming test and CGP 37849--a competitive antagonist of NMDA receptors. Wędzony K, et al. **Pol J Pharmacol** 1995 Nov-Dec;47(6):537-40

Behavioral stimulation without alteration of beta and 5-HT receptors and adenylate cyclase activity in rat brain after chronic sertraline administration. Tadokoro C, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):124-30

Cocaine downregulates beta-adrenergic receptors in pregnant sheep myometrium. Wang FL, et al. **Reprod Toxicol** 1996 Mar-Apr;10(2):119-23

Pharmacological criteria for the detection of beta 3-adrenoceptors [letter; comment] De Ponti F. **Trends Pharmacol Sci** 1997 Feb;18(2):52-3 (14 ref.). Comment on: Trends Pharmacol Sci 1996 Oct;17(10):373-81.

Four beta-adrenoceptor subtypes in the mammalian heart. Kaumann AJ. **Trends Pharmacol Sci** 1997 Mar;18(3):70-6 (61 ref.)

Pharmacological properties of beta 3-adrenoceptors [letter] Nisoli E, et al. **Trends Pharmacol Sci** 1997 Jul;18(7):257-8 (9 ref.)

Effects of clenbuterol as a repartitioning agent on beta-adrenoceptor concentrations in heart, bronchi and brain of veal calves. Re G, et al. **Vet J** 1997 Jan; 153(1):63-70

[Morphologic effect of adrenaline and insulin on bone capillaries after receptor blockade. Functional transmission electron microscopy analysis] Döhler JR, et al. **Langenbecks Arch Chir** 1997;382(3):164-6 (Eng. Abstr.) **(Ger)**

[Beta receptors and beta blockers in heart failure] Heinzl S. **Med Monatsschr Pharm** 1997 Jun;20(6):146-8 (4 ref.) **(Ger)**

[The adrenergic reactions to isopropylnoradrenaline in white rats during the development of experimental hyperthyroidism] Soboliev VI, et al. **Fiziol Zh** 1997; 43(3-4):93-100 (Eng. Abstr.) **(Ukr)**

GENETICS

Trp64Arg mutation of beta3-adrenergic receptor in essential hypertension: insulin resistance and the adrenergic system. Fujisawa T, et al. **Am J Hypertens** 1997 Jan;10(1):101-5

Beta3-adrenergic receptor gene studies in patients with Prader-Willi syndrome [letter] Butler MG, et al. **Am J Med Genet** 1997 Oct 3;72(1):115-6

Association of a genetic variation in the beta 3-adrenergic receptor gene with coronary heart disease among Japanese. Higashi K, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):728-30

Agonist regulation of adenylate cyclase activity in neuroblastoma x glioma hybrid NG108-15 cells transfected to co-express adenylate cyclase type II and the beta 2-adrenoceptor. Evidence that adenylate cyclase is the limiting component for receptor-mediated stimulation of adenylate cyclase activity. MacEwan DJ, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):1033-9

Decreased transcript expression coincident with impaired glycosylation in the beta2-adrenergic receptor gene does not result from differences in the primary sequence. Hughes RJ, et al. **Biochim Biophys Acta** 1997 May 27; 1356(3):281-91

Expression of beta 3-adrenoceptor mRNA in rat tissues. Evans BA, et al. **Br J Pharmacol** 1996 Jan;117(1):210-6

Obesity genes. Beales PL, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):373-8 (50 ref.)

The beta 3-adrenergic receptor gene Trp64Arg mutation is overrepresented in obese women. Effects on weight, BMI, abdominal fat, blood pressure, and reproductive history in an elderly Australian population. Kurabayashi T, et al. **Diabetes** 1996 Oct;45(10):1358-63

Polymorphism of the beta3-adrenergic receptor gene affects basal metabolic rate in obese Finns. Sipiläinen R, et al. **Diabetes** 1997 Jan;46(1):77-80

The Trp64Arg polymorphism of the beta 3-Adrenergic receptor gene. Lack of association with NIDDM and features of insulin resistance syndrome. Rissanen J, et al. **Diabetes Care** 1997 Aug;20(8):1319-23

Genetic variation in the beta 3-adrenergic receptor in Japanese NIDDM patients [letter; comment] Sakane N, et al. **Diabetes Care** 1996 Sep;19(9):1034-5. Comment on: Diabetes Care 1996 Mar;19(3):271-2.

Beta 3-adrenergic receptor gene polymorphism is not a major genetic determinant of obesity and diabetes in Japanese general population. Yuan X, et al. **Diabetes Res Clin Pract** 1997 Jul;37(1):1-7

Beta 3-adrenergic receptor gene polymorphisms and determination of adiposity and fat distribution in normal female twins [letter] Keen RW, et al. **Diabetologia** 1997 Jan;40(1):122-3

A mutation of the beta 3-adrenergic receptor is associated with visceral obesity but decreased serum triglyceride. Kim-Motoyama H, et al. **Diabetologia** 1997 Apr; 40(4):469-72

Association of Trp64Arg mutation of the beta 3-adrenergic receptor gene with NIDDM [letter; comment] Knowler WC. **Diabetologia** 1996 Nov;39(11):1411-2. Comment on: Diabetologia 1996 Mar;39(3):349-52.

Phenotypic characterization of the Trp64Arg polymorphism in the beta 3-adrenergic receptor gene in normal weight and obese subjects. Li LS, et al. **Diabetologia** 1996 Jul; 39(7):857-60

Beta 3-adrenergic-receptor polymorphism: a genetic marker for visceral fat obesity and the insulin resistance syndrome. Sakane N, et al. **Diabetologia** 1997 Feb;40(2):200-4

No effect of the Trp64Arg beta 3-adrenoceptor variant on in vivo lipolysis in subcutaneous adipose tissue. Snitker S, et al. **Diabetologia** 1997 Jul;40(7):838-42

Beta 3-adrenergic receptor gene variant and lipid metabolism in Pima Indians [letter] Tataranni PA, et al. **Diabetologia** 1997 Jan;40(1):123-4

Association of Trp64Arg mutation of the beta 3-adrenergic receptor gene with NIDDM, current and maximal body mass index [letter; comment] Yoshioka K, et al. **Diabetologia** 1996 Nov;39(11):1410-1. Comment on: Diabetologia 1996 Mar;39(3):349-52.

UKPDS 19: heterogeneity in NIDDM: separate contributions of IRS-1 and beta 3-adrenergic-receptor mutations to insulin resistance and obesity respectively with no evidence for glycogen synthase gene mutations. UK Prospective Diabetes Study. Zhang Y, et al. **Diabetologia** 1996 Dec; 39(12):1505-11

Adrenalectomy after weaning restores beta3-adrenergic receptor expression in white adipocytes from C57BL/6J-ob/ob mice. Gettys TW, et al. **Endocrinology** 1997 Jul;138(7):2697-704

Isolation, expression and characterization of the gene for an ADP-ribosylation factor from the human malaria parasite, Plasmodium falciparum. Stafford WH, et al. **Eur J Biochem** 1996 Nov 15;242(1):104-13

Cell type-specific regulation of beta2-adrenoceptor mRNA by agonists. Danner S, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):73-8

The beta3-adrenergic receptor in the obesity and diabetes prone rhesus monkey is very similar to human and contains arginine at codon 64. Walston J, et al. **Gene** 1997 Apr 1; 188(2):207-13

Additive effect of A-->G (-3826) variant of the uncoupling protein gene and the Trp64Arg mutation of the beta 3-adrenergic receptor gene on weight gain in morbid obesity. Clément K, et al. **Int J Obes Relat Metab Disord** 1996 Dec;20(12):1062-6

Polymorphisms of uncoupling protein (UCP) and beta 3 adrenoreceptor genes in obese people submitted to a low calorie diet. Fumeron F, et al. **Int J Obes Relat Metab Disord** 1996 Dec;20(12):1051-4

Beta 3-adrenergic-receptor allele distributions in children, adolescents and young adults with obesity, underweight or anorexia nervosa. Hinney A, et al. **Int J Obes Relat Metab Disord** 1997 Mar;21(3):224-30

Polymorphism of the beta 3-adrenergic receptor gene in morbid obesity. Oksanen L, et al. **Int J Obes Relat Metab Disord** 1996 Dec;20(12):1055-61

Exercise-induced changes in beta-adrenergic-receptor mRNA level measured by competitive RT-PCR. Fujii N, et al. **J Appl Physiol** 1997 Jun;82(6):1926-31

Down-regulation of beta3 adrenoreceptor gene expression in brown fat cells is transient and recovery is dependent upon a short-lived protein factor. Bengtsson T, et al. **J Biol Chem** 1996 Dec 27;271(52):33366-75

Differential regulation by tumor necrosis factor-alpha of beta1-, beta2-, and beta3-adrenoreceptor gene expression in 3T3-F442A adipocytes. Hadri KE, et al. **J Biol Chem** 1997 Sep 26;272(39):24514-21

Role of the beta 3-adrenergic receptor locus in obesity and noninsulin-dependent diabetes among members of Caucasian families with a diabetic sibling pair. Elbein SC, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4422-7

Lack of association between the Trp64 Arg mutation in the beta 3-adrenergic receptor gene and obesity in Japanese men: a longitudinal analysis. Nagase T, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1284-7

Molecular scanning for mutations in the beta 3-adrenergic receptor gene in Nauruans with obesity and noninsulin-dependent diabetes mellitus. Silver K, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4155-8

The Trp64Arg mutation of the beta3 adrenergic receptor gene has no effect on obesity phenotypes in the Québec Family Study and Swedish Obese Subjects cohorts. Gagnon J, et al. **J Clin Invest** 1996 Nov 1;98(9):2086-93

Dissociation of beta-adrenoceptor numbers from mRNA levels during acute ischemia in rat myocardium. Nakamura K, et al. **Jpn J Pharmacol** 1997 Jan;73(1):23-8

Beta 3-adrenergic receptor gene variant and Japanese NIDDM: a pitfall in meta-analysis [letter; comment] Odawara M, et al. **Lancet** 1996 Sep 28;348(9031):896-7. Comment on: Lancet 1996 Jul 20;348(9021):199.

Beta 3-adrenoceptor gene variant in obesity and insulin resistance [letter; comment] Shuldiner AR, et al. **Lancet** 1996 Dec 7;348(9041):1584-5. Comment on: Lancet 1996 Sep 14;348(9029):698-9.

Beta 3-adrenoceptor gene variant in obesity and insulin resistance [letter; comment] Strosberg AD, et al. **Lancet** 1996 Dec 7;348(9041):1585. Comment on: Lancet 1996 Sep 14;348(9029):698-9.

Prevalence of the Trp64Arg missense mutation of the beta3-adrenergic receptor gene in Japanese subjects. Ueda K, et al. **Metabolism** 1997 Feb;46(2):199-202

Gene expression of catecholamine synthesizing enzymes and beta adrenoceptor subtypes during rat embryogenesis. Fujinaga M, et al. **Neurosci Lett** 1997 Aug 8;231(2):108-12

Effects of age on beta adrenergic subtype activation of adenylyl cyclase in brown adipose tissue. Scarpace PJ, et al. **Proc Soc Exp Biol Med** 1996 Dec;213(3):262-7

Beta 2 adrenoceptor polymorphisms [letter; comment] Drazen JM, et al. **Thorax** 1996 Nov;51(11):1168. Comment on: Thorax 1996 Apr;51(4):351-3.

[Genetic analysis of bronchial asthma in Japanese population--Fc epsilon RI beta gene and beta 2 adrenergic receptor gene] Hizawa N, et al. **Nippon Rinsho** 1996 Feb; 54(2):539-43 (23 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Activation of cyclic AMP-dependent protein kinase in cardiomyocytes by anti-beta 1-adrenoceptor autoantibodies from patients with idiopathic dilated cardiomyopathy. Krause EG, et al. **Blood Press Suppl** 1996; 3:37-40

Agonistic effects of anti-peptide antibodies and autoantibodies directed against adrenergic and cholinergic receptors: absence of desensitization. Wallukat G, et al. **Blood Press Suppl** 1996;3:31-6

METABOLISM

Cardiac beta receptors' density or affinity modified by different Trypanosoma cruzi amount. Fernández AR, et al. **Acta Physiol Pharmacol Ther Latinoam** 1996; 46(2):139-43

Uncoupling of changes in skeletal muscle beta-adrenergic receptor density and aerobic capacity during the aging process. Farrar RP, et al. **Aging (Milano)** 1997 Feb-Apr; 9(1-2):153-8

Cocaine and beta-adrenergic receptor function in pregnant myometrium. Wang FL, et al. **Am J Obstet Gynecol** 1996

Dec;175(6):1651–3
Beta 3–adrenoceptor in guinea pig brown and white adipocytes: low expression and lack of function. Atgié C, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1729–38
Skeletal muscle beta–adrenoreceptors and phosphate metabolism abnormalities in heart failure in rats. Chati Z, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1739–45
Response to cardiac sympathetic activation in transgenic mice overexpressing beta 2–adrenergic receptor. Du XJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H630–6
Molecular and functional identification of beta–adrenergic receptors in distal convoluted tubule cells. Gesek FA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):F712–20
Chronic effects of catecholamines on the beta 2–adrenoreceptor system in cultured human airway epithelial cells. Kelsen SG, et al. **Am J Physiol** 1997 May; 272(5 Pt 1):L916–24
Decreased heart rate variability in transgenic mice overexpressing atrial beta 1–adrenoceptors. Mansier P, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1465–72
Change from beta– to alpha–adrenergic glycogenolysis induced by corticosteroids in female rat liver. Moriyama M, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R153–60
Modulation of beta–adrenergic receptor–stimulated lipolysis in the heart by prostaglandins. Ruan Y, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E556–62
Initial externalization followed by internalization of beta–adrenergic receptors in rat heart during sepsis. Tang C, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R254–63
The beta 1– and beta 2–adrenoceptor subtypes in cultured rat inner medullary collecting duct cells. Yasuda G, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F762–9
Atypical beta–adrenoceptors in the rat vasculature. Sooch S, et al. **Ann N Y Acad Sci** 1997 May 30;812:211–2
Beta–adrenergic–induced calcium efflux in rat parotid gland. Is mitochondrial Na+/Ca2+ exchange involved? Dreux C, et al. **Arch Physiol Biochem** 1997 Apr;105(2):197–202
Role of G–proteins in altered beta–adrenergic responsiveness in the failing and hypertrophied myocardium. Böhm M, et al. **Basic Res Cardiol** 1996;91 Suppl 2:47–51 (30 ref.)
Beta–adrenergic receptors in failing human myocardium. Brodde OE. **Basic Res Cardiol** 1996;91 Suppl 2:35–40 (39 ref.)
Acceleration of contraction by beta–adrenoceptor stimulation is greater in ventricular myocytes from failing than non–failing human hearts. Harding SE, et al. **Basic Res Cardiol** 1996;91 Suppl 2:53–6
Mechanisms of beta–adrenergic receptor desensitization: from molecular biology to heart failure. Lohse MJ, et al. **Basic Res Cardiol** 1996;91 Suppl 2:29–34 (62 ref.)
Down–regulation of beta3–adrenergic receptor expression in rat adipose tissue during the fasted/fed transition: evidence for a role of insulin. Hadri KE, et al. **Biochem J** 1997 Apr 15;323 (Pt 2):359–64
Agonist regulation of adenylate cyclase activity in neuroblastoma x glioma hybrid NG108–15 cells transfected to co–express adenylate cyclase type II and the beta 2–adrenoceptor. Evidence that adenylate cyclase is the limiting component for receptor–mediated stimulation of adenylate cyclase activity. MacEwan DJ, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):1033–9
Dissociation between beta–adrenoceptor–mediated cyclic AMP accumulation and inhibition of histamine–stimulated phosphoinositide metabolism in airways smooth muscle. Chilvers ER, et al. **Biochem Pharmacol** 1997 May 15; 53(10):1565–8
Evidence for the shuttle model for Gs alpha activation of adenylyl cyclase. Krumins AM, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):43–59
Examination of the effects of increasing Gs protein on beta2–adrenergic receptor, Gs, and adenylyl cyclase interactions. Krumins AM, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):61–72
cAMP–dependent phosphorylation of the cardiac L–type Ca channel: a missing link? Charnet P, et al. **Biochimie** 1995; 77(12):957–62 (46 ref.)
Prenatal hypoxia alters the postnatal development of beta–adrenoceptors in the rat myocardium. Roigas J, et al. **Biol Neonate** 1996;69(6):383–8
Assessment of beta 2– and beta 3–adrenoceptors in rat white adipose tissues by radioligand binding assay. Kubo S, et al. **Biol Pharm Bull** 1997 Feb;20(2):142–8
Effect of transmembrane Ca2+ gradient on the coupling of beta–adrenergic receptors and adenylyl cyclase. Fan GF, et al. **Biosci Rep** 1996 Aug;16(4):327–41
Binding of [125I]iodocyanopindolol by rat harderian gland crude membranes: kinetic characteristics and day–night variations. Harmouch A, et al. **Biosci Rep** 1996 Oct; 16(5):369–77
Respective degree of expression of beta 1–, beta 2– and beta 3–adrenoceptors in human brown and white adipose tissues. Deng C, et al. **Br J Pharmacol** 1996 Jun;118(4):929–34
Functional identification of rat atypical beta–adrenoceptors by the first beta 3–selective antagonists, aryloxypropanolaminotetralins. Manara L, et al. **Br J Pharmacol** 1996 Feb;117(3):435–442
Differentiation of binding sites of CGP12177, a beta 3–adrenoceptor partial agonist, and carteolol, a beta 1/beta 2–adrenoceptor partial agonist, to the beta–adrenoceptors in guinea–pig taenia caecum. Koike K, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):928–33
Coronary artery stenosis in rats affects beta–adrenergic receptor signaling in myocytes. Meggs LG, et al. **Cardiovasc Res** 1997 Jan;33(1):98–109
Cardiac sympathetic neuronal function in left ventricular volume and pressure overload. Somsen GA, et al. **Cardiovasc Res** 1996 Jan;31(1):132–8
Functional evidence for the regulation of cytosolic Ca2+ activity via V1A–receptors and beta–adrenoceptors in rat CCD. Ankorina–Stark I, et al. **Cell Calcium** 1997 Feb; 21(2):163–71
5–Hydroxytryptamine and beta–adrenoceptors in rat isolated atria. Davy M, et al. **Cell Mol Life Sci** 1997 Mar;53(3):263–6
Endogenous beta 3– but not beta 1–adrenergic receptors are resistant to agonist–mediated regulation in human SK–N–MC neurotumor cells. Curran PK, et al. **Cell Signal** 1996 Aug;8(5):355–64
Monoamine receptors in the prefrontal cortex of Tupaia belangeri during chronic psychosocial stress. Flügge G, et al. **Cell Tissue Res** 1997 Apr;288(1):1–10
The mechanisms underlying heart stimulation by dopamine, with special reference to direct and indirect beta adrenoceptor stimulation. Habuchi Y, et al. **Clin Exp Hypertens** 1997 Jan–Feb;19(1–2):141–54
Relationship between alterations in lymphocyte and myocardial beta–adrenoceptor density in patients with left heart valvular disease. Dzimiri N, et al. **Clin Exp Pharmacol Physiol** 1996 Jun–Jul;23(6–7):498–502
Regulation of beta 2–adrenergic receptors on mononuclear leukocytes in patients with acute ischemic heart disease. Prengel AW, et al. **Crit Care Med** 1997 Apr;25(4):646–51
Stimulation of adipose tissue lipolysis following insulin–induced hypoglycaemia: evidence of increased beta–adrenoceptor–mediated lipolytic response in IDDM. Bolinder J, et al. **Diabetologia** 1996 Jul;39(7):845–53
Adipocyte lipolysis in normal weight subjects with obesity among first–degree relatives. Hellström L, et al. **Diabetologia** 1996 Aug;39(8):921–8
The metabolic syndrome is related to beta 3–adrenoceptor sensitivity in visceral adipose tissue. Hoffstedt J, et al. **Diabetologia** 1996 Jul;39(7):838–44
Distribution of beta–adrenoceptor subtypes in gastrointestinal tract of nondiabetic and diabetic BB rats. A longitudinal study. Yu O, et al. **Dig Dis Sci** 1997 Jun;42(6):1146–53
The biochemical effect of the naturally occurring Trp64—>Arg mutation on human beta3–adrenoceptor activity. Piétri–Rouxel F, et al. **Eur J Biochem** 1997 Aug 1;247(3):1174–9
Effects of metoprolol on myocardial beta–adrenoceptors and Gi alpha–proteins in patients with congestive heart failure. Sigmund M, et al. **Eur J Clin Pharmacol** 1996;51(2):127–32
A comparative study of alpha2– and beta–adrenoceptor distribution in pigeon and chick brain. Fernández–López A, et al. **Eur J Neurosci** 1997 May;9(5):871–83
Differential changes of myocardial beta–adrenoceptor subtypes and G–proteins in dogs with right–sided congestive heart failure. Lai LP, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):201–8
Localisation and expression of beta–adrenoceptor subtype mRNAs in human lung. Mak JC, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):215–21
beta–Adrenergic stimulation of interleukin–1alpha and interleukin–6 expression in mouse brown adipocytes. Burýsek L, et al. **FEBS Lett** 1997 Jul 7;411(1):83–6
Coexistence of alpha1 and beta adrenergic receptors in the liver of the frog Rana esculenta, the toad Bufo bufo, the lizard Podarcis sicula campestris, and the turtle Pseudemys picta elegans. Fabbri E, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):351–8
Characteristics of [3H]CGP12177 binding sites at beta 2– and beta 3–adrenoceptors in the guinea pig taenia caecum. Koike K, et al. **Gen Pharmacol** 1997 Jan;28(1):73–6
Beta–adrenoceptor responsiveness of splenic macrophages in normotensive and hypertensive rats. Serio M, et al. **Immunopharmacol Immunotoxicol** 1996 May;18(2):247–65
Antiadrenergic and muscarinic receptor antibodies in Chagas' cardiomyopathy. Borda ES, et al. **Int J Cardiol** 1996 May; 54(2):149–56 (38 ref.)
Response and level of beta–adrenergic, vasoactive intestinal peptide, and PACAP receptors during the circadian cycle. Hirota A, et al. **Invest Ophthalmol Vis Sci** 1997 Aug; 38(9):1708–18
Chronic beta–blockade increases skeletal muscle beta–adrenergic–receptor density and enhances contractile force. Murphy RJL, et al. **J Appl Physiol** 1997 Aug; 83(2):459–65
Spaceflight effects on beta–adrenoceptor and metabolic properties in rat plantaris. Ohira Y, et al. **J Appl Physiol** 1996 Jul;81(1):152–5
Beta–Adrenergic receptors in rat fat cells and their relationship with lipolysis. Okuda H, et al. **J Biochem (Tokyo)** 1996 May;119(5):852–6
Transgenic mice with cardiac overexpression of alpha1B–adrenergic receptors. In vivo alpha1–adrenergic receptor–mediated regulation of beta–adrenergic signaling. Akhter SA, et al. **J Biol Chem** 1997 Aug 22;272(34):21253–9
Mechanism of beta–adrenergic receptor desensitization in cardiac hypertrophy is increased beta–adrenergic receptor kinase. Choi DJ, et al. **J Biol Chem** 1997 Jul 4; 272(27):17223–9
Beta3–adrenergic receptors on white and brown adipocytes mediate beta3–selective agonist–induced effects on energy expenditure, insulin secretion, and food intake. A study using transgenic and gene knockout mice. Grujic D, et al. **J Biol Chem** 1997 Jul 11;272(28):17686–93
Arfaptin 1, a putative cytosolic target protein of ADP–ribosylation factor, is recruited to Golgi membranes. Kanoh H, et al. **J Biol Chem** 1997 Feb 28;272(9):5421–9
Heterogeneity in beta–adrenergic receptor kinase expression in the lung accounts for cell–specific desensitization of the beta2–adrenergic receptor. McGraw DW, et al. **J Biol Chem** 1997 Mar 14;272(11):7338–44
Beta–adrenergic receptor kinase (GRK2) colocalizes with beta–adrenergic receptors during agonist–induced receptor internalization. Ruiz–Gómez A, et al. **J Biol Chem** 1997 Apr 11;272(15):9601–4
Human immortalized brown adipocytes express functional beta3–adrenoceptor coupled to lipolysis. Zilberfarb V, et al. **J Cell Sci** 1997 Apr;110 (Pt 7):801–7
Quantification of the beta–adrenoceptor ligand S–1'–[18F]fluorocarazolol in plasma of humans, rats and sheep. van Waarde A, et al. **J Chromatogr B Biomed Appl** 1996 Apr 12;678(2):253–60
Elevated blood pressure and enhanced myocardial contractility in mice with severe IGF–1 deficiency. Lembo G, et al. **J Clin Invest** 1996 Dec 1;98(11):2648–55
1,25–Dihydroxyvitamin D3 increased beta–adrenergic adenylate cyclase response of fetal rat keratinizing epidermal cells (FRSK cells). Takahashi H, et al. **J Dermatol Sci** 1996 Feb;11(2):121–8
Iodinated analogs of trimetoquinol as highly potent and selective beta 2–adrenoceptor ligands. De Los Angeles JE, et al. **J Med Chem** 1996 Sep 13;39(19):3701–11
Cardioprotective actions of verapamil on the beta–adrenergic receptor complex in acute canine Chagas' disease. Chen G, et al. **J Mol Cell Cardiol** 1996 May;28(5):931–41
Sympathetic modulation of the effect of nifedipine on myocardial contraction and Ca current in the rat. Legssyer AK, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):579–91
Beta–adrenoceptor–linked signal transduction in ischemic–reperfused heart and scavenging of oxyradicals. Persad S, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):545–58
Beta–adrenergic receptor signalling in stunned myocardium of conscious pigs. Sato S, et al. **J Mol Cell Cardiol** 1997 May;29(5):1387–400
The effect of alterations to action potential duration on beta–adrenoceptor–mediated aftercontractions in human and guinea–pig ventricular myocytes. Tweedie D, et al. **J Mol Cell Cardiol** 1997 May;29(5):1457–67
Ontogeny of regulatory mechanisms for beta–adrenoceptor control of rat cardiac adenylyl cyclase: targeting of G–proteins and the cyclase catalytic subunit. Zeiders JL, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):603–15
Myocardial beta–adrenergic receptor signaling in vivo: insights from transgenic mice. Rockman HA, et al. **J Mol Med** 1996 Sep;74(9):489–95 (32 ref.)
Heterogeneity of beta–adrenoceptors in guinea–pig brain: radioligand binding and cyclic nucleotide generation. Neil KE, et al. **J Neurochem** 1997 Jun;68(6):2610–7
Expression and in–vivo modulation of alpha– and beta–adrenoceptors on human natural killer (CD16+) cells. Jetschmann JU, et al. **J Neuroimmunol** 1997 Apr; 74(1–2):159–64
Beta adrenergic sensitization of gamma–aminobutyric acid receptors to ethanol involves a cyclic AMP/protein kinase A second–messenger mechanism. Freund RK, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1192–200
Age–related deficits in the cerebellar beta adrenergic signal transduction cascade in Fischer 344 rats. Gould TJ, et al. **J Pharmacol Exp Ther** 1997 May;281(2):965–71
Stimulation of anion secretion by beta–adrenoceptors in the mouse endometrial epithelium. Chan HC, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):517–25
Relationship between beta adrenoceptor occupancy and receptor down–regulation induced by beta antagonists with intrinsic sympathomimetic activity. Lima JJ. **J Recept Signal Transduct Res** 1996 Sep–Nov; 16(5–6):357–72
Anomalous behavior of CGP 12177A on beta 1–adrenergic receptors. Pak MD, et al. **J Recept Signal Transduct Res** 1996 Jan–Mar;16(1–2):1–23
Abnormal beta–adrenergic transmembrane signaling in rabbits with adriamycin–induced cardiomyopathy. Nagami K, et al. **Jpn Circ J** 1997 Mar;61(3):249–55
Angiotensin–converting enzyme inhibitor up–regulates cardiac beta–receptors in cultured neonatal rat myocytes. Yonemochi H, et al. **Jpn Circ J** 1997 Feb;61(2):170–9
Beta–3 adrenoceptor (beta–3AR) expression in leptin treated OB/OB mice. Breslow MJ, et al. **Life Sci** 1997;61(1):59–64
Characterization of beta–adrenergic receptors of freshly isolated astrocytes and neurons from rat brain. Morin D, et al. **Life Sci** 1997;60(4–5):315–24
Desensitization of alpha 1–, beta– and glucagon receptors in rat hepatocytes: influence of ageing. Van Ermen A, et al. **Mech Ageing Dev** 1994 Jul;75(1):45–58
Brain beta–adrenergic receptor binding in rats with obesity induced by a beef tallow diet. Matsuo T, et al. **Metabolism** 1997 Jan;46(1):18–22
Characterization of binding sites for beta–adrenergic agonists and vasoactive intestinal peptide in the rat harderian gland. Guerrero JM, et al. **Microsc Res Tech** 1996 Jun 1; 34(2):139–43
Regulation of beta–adrenoceptor properties and the lipid milieu in heart muscle membranes during stress. Gudbjarnason S, et al. **Mol Cell Biochem** 1996 Oct–Nov; 163–164:137–43

Beta-adrenoreceptor coupling to GS protein in alcohol dependence, panic disorder, and patients with both conditions. Gurguis GN, et al. **Neuropsychopharmacology** 1997 Jan;16(1):69–76

Decreased beta-adrenoceptor-stimulated adenylyl cyclase activity in lymphocytes from Alzheimer's disease patients. Garlind A, et al. **Neurosci Lett** 1997 Apr 18;226(1):37–40

G protein subunit levels in fibroblasts from familial Alzheimer's disease patients: lower levels of high molecular weight Gs alpha isoform in patients with decreased beta-adrenergic receptor stimulated cAMP formation. Shanahan C, et al. **Neurosci Lett** 1997 Aug 22;232(1):33–6

(S,S)- and (S,R)-1'-[18F]fluorocarazolol, ligands for the visualization of pulmonary beta-adrenergic receptors with PET. Elsinga PH, et al. **Nucl Med Biol** 1996 Feb; 23(2):159–67

Growth hormone treatment of hypophysectomized rats increases catecholamine-induced lipolysis and the number of beta-adrenergic receptors in adipocytes: no differences in the effects of growth hormone on different fat depots. Yang S, et al. **Obes Res** 1996 Sep;4(5):471–8

Glaucoma, capillaries and pericytes. 4. Beta-adrenergic activation of cultured retinal pericytes. Zschauer AO, et al. **Ophthalmologica** 1996;210(5):276–9

Right ventricular infundibular beta-adrenoceptor complex in tetralogy of Fallot patients. Sun LS, et al. **Pediatr Res** 1997 Jul;42(1):12–6

The effect of acute, chronic and chronic intermittent stress on the central noradrenergic system. Hellriegel ET, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):207–14

A match between binding to beta-adrenoceptors and stimulation of adenylyl cyclase parameters of (-)isoproterenol and salbutamol on rat brain. Garnier V, et al. **Pharmacol Res** 1997 Apr;35(4):303–12

Potentiation of beta-adrenergic signaling by gene transfer. Drazner MH, et al. **Proc Assoc Am Physicians** 1997 May; 109(3):220–7 (54 ref.)

Nongenomic effect of triiodothyronine on cell surface beta-adrenoceptors in cultured embryonic cardiac myocytes. Vassy R, et al. **Proc Soc Exp Biol Med** 1997 Apr;214(4):352–8

Pharmacological sequestration of a chimeric beta 3/beta 2 adrenergic receptor occurs without a corresponding amount of receptor internalization. Mostafapour S, et al. **Recept Signal Transduct** 1996;6(3-4):151–63

Effects of hypertonic sucrose and potassium depletion on the binding properties of beta and alpha 1 adrenergic receptors measured on intact cells. Zhu SJ, et al. **Recept Signal Transduct** 1996;6(3-4):131–40

The effect of methylprednisolone on myocardial beta-adrenergic receptors and cardiovascular function in shock patients. Saito T, et al. **Shock** 1996 Apr;5(4):241–6

The distribution and significance of CNS adrenoceptors examined with in situ hybridization. Nicholas AP, et al. **Trends Pharmacol Sci** 1996 Jul;17(7):245–55 (64 ref.)

[Early changes in cardiac function and beta-ARs in heart after severe scalds in rat] Sun J, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):180–2 (Eng. Abstr.) **(Chi)**

[Beta adrenergic signal transduction and heart adenyl cyclase] Mercadier JJ, et al. **C R Seances Soc Biol Fil** 1996; 190(2-3):207–18 (23 ref.) (Eng. Abstr.) **(Fre)**

[Effectiveness of NKH477, a novel forskolin derivative, in rat cardiac preparations with desensitized beta-adrenoceptors] Ishizuka O, et al. **Nippon Yakurigaku Zasshi** 1996 Jul;108(1):23–30 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Influence of beta-adrenergic and vagal activity on the effect of exogenous adenosine on supraventricular tachycardia termination. Tai CT, et al. **Am J Cardiol** 1997 Jun 15; 79(12):1628–31

Longitudinal study of beta- and alpha-adrenergic receptor properties during human pregnancy. Pantuck CB, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):234–42

beta 1-and beta 2-adrenergic receptors exhibit differing susceptibility to muscarinic accentuated antagonism. Aprigliano O, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2726–35

Beta 3-adrenoceptor in guinea pig brown and white adipocytes: low expression and lack of function. Atgié C, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1729–38

Beta-blockade reduces effects of adenosine and carbachol by transregulation of inhibitory receptors and Gi proteins. Borst MM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1672–9

Age-related differences in beta-adrenergic regulation of repolarization in canine epicardial myocytes. Charpentier F, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1174–81

Evidence for increased beta-adrenoreceptor responsiveness induced by 14 days of simulated microgravity in humans. Convertino VA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R93–9

Evidence of functional beta-adrenoceptors in the cutaneous vasculature. Crandall CG, et al. **Am J Physiol** 1997 Aug; 273(2 Pt 2):H1038–43

Desensitization of beta-adrenergic receptors in adipocytes causes increased insulin sensitivity of glucose transport. Green A, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E271–6

Beta 2-adrenergic dilation of conductance coronary arteries involves flow-dependent NO formation in conscious dogs. Hamdad N, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1926–37

beta-Adrenergic modulation of Ba2+ currents and K+ contractures in frog slow skeletal muscle fibers. Huerta M, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C77–81

Beta 2-adrenergic receptors enhance contractility by stimulating HCO3(-)-dependent intracellular alkalinization. Jiang T, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H1044–7

beta-Adrenergic regulation of cAMP and protein phosphorylation in phospholamban-knockout mouse hearts. Kiss E, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H785–90

Inhibitory effects of Gs on desensitization of beta-adrenergic receptors in tracheal smooth muscle. Kume H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L556–64

Characterization of a beta 3-adrenoceptor stimulating gastrin and somatostatin secretions in rat antrum. Levasseur S, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1000–6

beta 3-Adrenergic-mediated suppression of leptin gene expression in rats. Li H, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E1031–6

Beta-adrenergic regulation of cholecystokinin secretion in STC-1 cells. Scott L, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):G291–7

Role of protein kinase C in beta 2-adrenoceptor function in cultured rat proximal tubule epithelial cells. Singh H, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F193–9

Beta-adrenoceptor-mediated hyperpolarization in lymphatic smooth muscle of guinea pig mesentery. Von der Weid PY, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1687–95

Opioid peptide receptor stimulation reverses beta-adrenergic effects in rat heart cells. Xiao RP, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H797–805

Identification of beta-adrenergic receptor subtypes mediating relaxation in isolated equine ileum. Re G, et al. **Am J Vet Res** 1997 Jun;58(6):621–5

Thermoregulation with age: role of beta-adrenergic signal transduction. Scarpace PJ. **Ann N Y Acad Sci** 1997 Mar 15;813:111–6

Open field-induced rise in body temperature and plasma IL-6 is mediated by beta-adrenoceptors in the brain. Soszynski D, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:413–9

Regulation of Ca2+ mobilization by beta-adrenergic receptor in Jurkat human leukemia T-cells. Takemura H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:489–91

Intermittent warm blood cardioplegia preserves myocardial beta-adrenergic receptor function. Chello M, et al. **Ann Thorac Surg** 1997 Mar;63(3):683–8

Effects of blood and crystalloid cardioplegia on adrenergic and myogenic vascular mechanisms. Wang SY, et al. **Ann Thorac Surg** 1997 Jan;63(1):41–9

Brown adipose tissue, beta 3-adrenergic receptors, and obesity. Lowell BB, et al. **Annu Rev Med** 1997;48:307–16 (67 ref.)

beta-adrenergic modulation of male sexual behavior elicited from the medial preoptic area in rats. Mallick H, et al. **Behav Brain Res** 1996 Jan;74(1-2):181–7

Rapid inhibition of ob gene expression and circulating leptin levels in lean mice by the beta 3-adrenoceptor agonists BRL 35135A and ZD2079. Trayhurn P, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):605–10

Of mice and women: the beta 3-adrenergic receptor leptin and obesity. Bégin-Heick N. **Biochem Cell Biol** 1996; 74(5):615–22 (67 ref.)

Beta 3-adrenoceptors and the regulation of metabolism in adipose tissues. Arch JR, et al. **Biochem Soc Trans** 1996 May;24(2):412–8 (51 ref.)

Beta-andrenoceptors in the hearts of diabetic-hypertensive rats: radioligand binding and functional experiments. Beenen OH, et al. **Blood Press** 1997 Jan;6(1):44–51

Effects of dietary lipid modification on adrenoceptor-mediated cardiovascular responsiveness and baroreflex sensitivity in normotensive subjects. Straznicky NE, et al. **Blood Press** 1997 Mar;6(2):96–102

In situ assessment of the role of the beta 1-, beta 2- and beta 3-adrenoceptors in the control of lipolysis and nutritive blood flow in human subcutaneous adipose tissue. Barbe P, et al. **Br J Pharmacol** 1996 Mar;117(5):907–13

Beta-adrenoceptor mediated facilitation of noradrenaline and adenosine 5'-triphosphate release from sympathetic nerves supplying the rat tail artery. Brock JA, et al. **Br J Pharmacol** 1997 Mar;120(5):769–76

Influence of adrenodemedullation on beta 2- and beta 3-adrenoceptors mediating relaxation of oesophageal smooth muscle of spontaneously hypertensive rats. de Boer RE, et al. **Br J Pharmacol** 1996 Dec;119(7):1355–60

The effect of the protein phosphatases inhibitor cantharidin on beta-adrenoceptor-mediated vasorelaxation. Knapp J, et al. **Br J Pharmacol** 1997 Feb;120(3):421–8

Increased interleukin-8 release by beta-adrenoceptor activation in human transformed bronchial epithelial cells. Lindén A. **Br J Pharmacol** 1996 Sep;119(2):402–6

Functional and molecular evidence for beta 1-, beta 2- and beta 3- adrenoceptors in human colon. Roberts SJ, et al. **Br J Pharmacol** 1997 Apr;120(8):1527–35

Pharmacological characterization of the receptors involved in the beta-adrenoceptor-mediated stimulation of the L-type Ca2+ current in frog ventricular myocytes. Skeberdis VA, et al. **Br J Pharmacol** 1997 Aug; 121(7):1277–86

Alterations of central noradrenergic transmission in Ts65Dn mouse, a model for Down syndrome. Dierssen M, et al. **Brain Res** 1997 Feb 28;749(2):238–44

Beta-adrenoceptor control of cardiac adenylyl cyclase during development: agonist pretreatment in the neonate uniquely causes heterologous sensitization, not desensitization. Giannuzzi CE, et al. **Brain Res** 1995 Oct 2;694(1-2):271–8

Estimating the synaptic concentration of norepinephrine in dentate gyrus which produces beta-receptor mediated long-lasting potentiation in vivo using microdialysis and intracerebroventricular norepinephrine. Harley CW, et al. **Brain Res** 1996 Feb 26;710(1-2):293–8

Down-regulation of beta-adrenergic receptor following long-term monocular deprivation in cat visual cortex. Muguruma K, et al. **Brain Res** 1996 Nov 18;740(1-2):131–40

Beta-adrenoceptor function changes with age of subject in myocytes from non-failing human ventricle. Davies CH, et al. **Cardiovasc Res** 1996 Jan;31(1):152–6

Changes in receptor function by oxidative stress in guinea pig tracheal smooth muscle. van Hoof IH, et al. **Cent Eur J Public Health** 1996;4 Suppl:3–5

Alpha 1-adrenergic activation inhibits beta-adrenergic-stimulated unitary Ca2+ currents in cardiac ventricular myocytes. Chen L, et al. **Circ Res** 1996 Aug;79(2):184–93

Effects of thyroid hormone on cardiac beta-adrenergic responsiveness in conscious baboons. Hoit BD, et al. **Circulation** 1997 Jul 15;96(2):592–8

Regional hyperinsulinemia does not modulate beta-adrenergic vasodilator action [letter; comment] Tack CJ, et al. **Circulation** 1997 Jan 21;95(2):532–4. Comment on: Circulation 1996 Apr 1;93(7):1403–10.

Norepinephrine induces the raf-1 kinase/mitogen-activated protein kinase cascade through both alpha 1- and beta-adrenoceptors. Yamazaki T, et al. **Circulation** 1997 Mar 4;95(5):1260–8

Strain-specific response to beta 3-adrenergic receptor agonist treatment of diet-induced obesity in mice. Collins S, et al. **Endocrinology** 1997 Jan;138(1):405–13

Effects of beta-adrenoceptor subtype stimulation on obese gene messenger ribonucleic acid and on leptin secretion in mouse brown adipocytes differentiated in culture. Deng C, et al. **Endocrinology** 1997 Feb;138(2):548–52

The beta 3-adrenergic receptor inhibits insulin-stimulated leptin secretion from isolated rat adipocytes. Gettys TW, et al. **Endocrinology** 1996 Sep;137(9):4054–7

Characterisation of beta-adrenoceptors in equine digital veins: implications of the modes of vasodilatory action of isoxsuprine. Elliott J, et al. **Equine Vet J Suppl** 1995 Sep; (19):101–7

Differential beta- and alpha-adrenergic activation during psychological stress. Montoya P, et al. **Eur J Appl Physiol** 1997;75(3):256–62

Obesity and diabetes and the beta-3 adrenergic receptor [comment] Danforth E Jr, et al. **Eur J Endocrinol** 1997 Apr;136(4):362–5. Comment on: Eur J Endocrinol 1997 Apr;136(4):429–37.

Developmental expression and functional activity of beta 1- and beta 3-adrenoceptors in murine 3T3-F442A differentiating adipocytes. El Hadri K, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):107–19

Raphe 5-HT1A autoreceptors, but not postsynaptic 5-HT1A receptors or beta-adrenoceptors, restrain the citalopram-induced increase in extracellular 5-hydroxytryptamine in vivo. Hjorth S, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):43–7

Pharmacological study of atypical beta-adrenoceptors in rat esophageal smooth muscle. Lezama EJ, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):69–80

Beta-adrenergic dysfunction exacerbates impairment of working memory induced by hippocampal NMDA receptor blockade in rats. Ohno M, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):21–6

A post-receptor defect of adenylyl cyclase in severely failing myocardium from children with congenital heart disease. Reithmann C, et al. **Eur J Pharmacol** 1997 Jul 2; 330(1):79–86

beta-Adrenergic stimulation induces activation of protein kinase C and inositol 1,4,5-trisphosphate increase in epidermis. Koizumi H, et al. **Exp Dermatol** 1997 Jun; 6(3):128–32

Suppression of insulin-stimulated phosphatidylinositol 3-kinase activity by the beta3-adrenoceptor agonist CL316243 in rat adipocytes. Ohsaka Y, et al. **FEBS Lett** 1997 Feb 3;402(2-3):246–50

Response of large and small vessels to alpha and beta adrenoceptor stimulation in heart failure: effect of angiotensin converting enzyme inhibition. Mulder P, et al. **Fundam Clin Pharmacol** 1997;11(3):221–30

Nitric oxide-mediated beta 2-adrenoceptor relaxation is impaired in mesenteric veins from portal-hypertensive rats. Martínez-Cuesta MA, et al. **Gastroenterology** 1996 Sep; 111(3):727–35

Beta-adrenergic regulation of voltage-dependent calcium currents in cultured skeletal myocytes of the frog Rana temporaria. Lukyanenko V, et al. **Gen Physiol Biophys** 1995 Dec;14(6):515–23

Beta-adrenergic receptors regulate astrogliosis and cell proliferation in the central nervous system in vivo. Hodges-Savola C, et al. **Glia** 1996 May;17(1):52–62

Role of the beta3-adrenoceptor in the control of leptin expression. Giacobino JP. **Horm Metab Res** 1996 Dec; 28(12):633–7 (58 ref.)

RECEPTORS, ADRENERGIC, BETA

Catecholamines stimulate steroid secretion of dispersed fowl adrenocortical cells, acting through the beta-receptor subtype. Mazzocchi G, et al. **Horm Metab Res** 1997 Apr; 29(4):190–2

The cardiac beta-adrenoceptor-mediated signaling pathway and its alterations in hypertensive heart disease. Castellano M, et al. **Hypertension** 1997 Mar;29(3):715–22 (52 ref.)

Experimental allergic encephalomyelitis, beta-adrenergic receptors and interferon gamma-secreting cells in beta-adrenergic agonist-treated rats. Muthyala S, et al. **Int J Immunopharmacol** 1995 Nov;17(11):895–901

Cardiac contractility: modulation of myofibrillar calcium sensitivity by beta-adrenergic stimulation. Kögler H, et al. **Isr J Med Sci** 1997 Jan;33(1):1–7 (32 ref.)

Myocardial sympathetic denervation prevents chamber-specific alteration of beta-adrenergic transmembrane signaling in rabbits with heart failure. Anzai T, et al. **J Am Coll Cardiol** 1996 Nov 1;28(5):1314–22

Prolonged exercise alters beta-adrenergic responsiveness in healthy sedentary humans. Eysmann SB, et al. **J Appl Physiol** 1996 Feb;80(2):616–22

Enhanced beta-adrenergic-mediated cardiovascular responses in endurance athletes. Hopkins MG, et al. **J Appl Physiol** 1996 Feb;80(2):516–21

Functional deficits in medial gastrocnemius grafts in rats: relation to muscle metabolism and beta-AR regulation. Larkin LM, et al. **J Appl Physiol** 1997 Jul;83(1):67–73

Beta 3-adrenoceptors mediating relaxation of the oesophageal tunica muscularis mucosae and distal colon in the rat: comparative pharmacology and their desensitization by BRL 37344. Kelly J, et al. **J Auton Pharmacol** 1996 Aug;16(4):205–11

Beta(3)-adrenoceptors mediate smooth muscle relaxation in the rat lower oesophageal sphincter. Oriowo MA. **J Auton Pharmacol** 1997 Jun;17(3):175–82

beta-Adrenoceptor regulation in rat heart, lung and skin after chronic treatment with (−)-tertatolol or (−)-propranolol. Tan YY, et al. **J Auton Pharmacol** 1995 Dec;15(6):421–36

cAMP-dependent facilitation of glutamate release by beta-adrenergic receptors in cerebrocortical nerve terminals. Herrero I, et al. **J Biol Chem** 1996 Nov 29; 271(48):30554–60

Developmental changes in modulation of cardiac repolarization by sympathetic stimulation: the role of beta- and alpha-adrenergic receptors. Cua M, et al. **J Cardiovasc Electrophysiol** 1997 Aug;8(8):865–71

From alpha and beta to I1: an overview of sympathetic receptors involved in blood pressure control targets for drug treatment. van Zwieten PA. **J Cardiovasc Pharmacol** 1996;27 Suppl 3:S5–10 (36 ref.)

In vivo increase in beta-adrenergic lipolytic response in subcutaneous adipose tissue of obese subjects submitted to a hypocaloric diet. Barbe P, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):63–9

Beta 3-adrenergic receptor-mediated lipolysis and oxygen consumption in brown adipocytes from cynomolgus monkeys. Meyers DS, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):395–401

Growth inhibition of new human thyroid carcinoma cell lines by activation of adenylate cyclase through the beta-adrenergic receptor. Ohta K, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2633–8

Mechanisms of impaired beta-adrenoceptor-induced airway relaxation by interleukin-1beta in vivo in the rat. Koto H, et al. **J Clin Invest** 1996 Oct 15;98(8):1780–7

Targeted gene disruption reveals a leptin-independent role for the mouse beta3-adrenoceptor in the regulation of body composition. Revelli JP, et al. **J Clin Invest** 1997 Sep 1; 100(5):1098–106

Lipid metabolism and intake behavior of dairy cows: effects of intravenous lipid and beta-adrenergic supplementation. Bareille N, et al. **J Dairy Sci** 1996 Jul;79(7):1209–20

Adrenergic responses of R. ridibunda red cells. Kaloyianni M, et al. **J Exp Zool** 1996 Oct 15;276(3):175–85

Effects of altered cardiac membrane fluidity on beta-adrenergic receptor signalling in rats with cirrhotic cardiomyopathy. Ma Z, et al. **J Hepatol** 1997 Apr; 26(4):904–12

The role of Gi-proteins and beta-adrenoceptors in the age-related decline of contraction in guinea-pig ventricular myocytes. Ferrara N, et al. **J Mol Cell Cardiol** 1997 Feb; 29(2):439–48

Mechanism of cardiac involvement in the WBN/Kob rat. Tsuruta S, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):247–53

Beta-adrenergic stimulation selectively inhibits long-lasting L-type calcium channel facilitation in hippocampal pyramidal neurons. Cloues RK, et al. **J Neurosci** 1997 Sep 1;17(17):6493–503

Pharmacologic characterization in vitro and in vivo of iodine 123-labeled derivatives of the beta-adrenoceptor antagonist CGP12177, designed for the imaging of cardiac beta-receptors. Dubois EA, et al. **J Nucl Cardiol** 1996 May-Jun;3(3):242–52

Impaired contractile response to beta adrenoceptor stimulation in diabetic rat hearts: alterations in beta adrenoceptors-G protein-adenylate cyclase system and phospholamban phosphorylation. Gando S, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):475–84

Differences in beta 3-adrenergic receptor cardiovascular regulation in conscious primates, rats and dogs. Shen YT, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1435–43

Comparison between alpha-1 adrenoceptor-mediated and beta adrenoceptor-mediated inotropic components elicited by norepinephrine in failing human ventricular muscle. Skomedal T, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):721–9

Characterization of a beta-adrenergically inhibited K+ current in rat cardiac ventricular cells. Scamps F. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):81–97

Indices of brain beta-adrenergic receptor signal transduction in the learned helplessness animal model of depression. Gurguis GN, et al. **J Psychiatr Res** 1996 Mar-Apr; 30(2):135–46

Beta-adrenergic stimulation down-regulates neutrophil priming for superoxide generation, but not elastase release. Barnett CC Jr, et al. **J Surg Res** 1997 Jul 1;70(2):166–70

Adrenoceptor-mediated regulation of the contractility in horse penile resistance arteries. Simonsen U, et al. **J Vasc Res** 1997 Mar-Apr;34(2):90–102

Enhancement of the cardiac beta-adrenergic system at an early diabetic state in spontaneously diabetic Chinese hamsters. Uekita K, et al. **Jpn Circ J** 1997 Jan;61(1):64–73

Exercise-induced change in beta-adrenergic receptor number in lymphocytes from trained and untrained men. Fujii N, et al. **Jpn J Physiol** 1996 Oct;46(5):389–95

Primary afferent nerves mediate in part beta-adrenoceptor stimulation-induced mesenteric hyperemia in rats. Seno K, et al. **Life Sci** 1996;59(15):1203–9

Alpha 1- and beta-adrenergic and muscarinic-cholinergic regulation in the spontaneous beating and Ca2+ oscillations in cultured neonatal rat cardiac myocytes. Takemura H, et al. **Life Sci** 1996;59(14):PL221–6

Altered beta-adrenergic receptor signaling in heart failure, in vivo gene transfer via adeno and adeno-associated virus. Ping P, et al. **Microcirculation** 1996 Jun;3(2):225–8

Selective up-regulation of alpha1a-adrenergic receptor protein and mRNA in brown adipose tissue by neural and beta3-adrenergic stimulation. Granneman JG, et al. **Mol Pharmacol** 1997 Apr;51(4):644–50

Contribution of ATP-sensitive potassium channels to beta-adrenoceptor-mediated responses. Hüsken BC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):97–102

Modulation of human cardiac function through 4 beta-adrenoceptor populations. Kaumann AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):667–81 (114 ref.)

Beta-adrenergic regulation of synaptic NMDA receptors by cAMP-dependent protein kinase. Raman IM, et al. **Neuron** 1996 Feb;16(2):415–21

Activity-dependent beta-adrenergic modulation of low frequency stimulation induced LTP in the hippocampal CA1 region. Thomas MJ, et al. **Neuron** 1996 Sep; 17(3):475–82

Beta-adrenergic modulation of GABAergic inhibition in the deep cerebellar nuclei of F344 rats. Gould TJ, et al. **Neuropharmacology** 1997 Jan;36(1):75–81

LTP in the lateral perforant path is beta-adrenergic receptor-dependent. Bramham CR, et al. **Neuroreport** 1997 Feb 10;8(3):719–24

Pathway specificity of l-isoproterenol indicates beta-adrenergic modulation of the Schaffer collateral pathway in field CA1 in the rat hippocampal slice. Nejtek V, et al. **Neuroreport** 1997 Feb 10;8(3):745–9

Relationship between the striatal regulation of the temporal organization of behavior and the state of beta-adrenergic mechanisms. Arushanyan EB, et al. **Neurosci Behav Physiol** 1996 Nov-Dec;26(6):539–44

Do beta-adrenoceptors and serotonin 5-HT1A receptors have similar functions in the control of intraocular pressure in the rabbit? Osborne NN, et al. **Ophthalmologica** 1996; 210(5):308–14 (40 ref.)

Effect of yohimbine on the development of morphine dependence in the rat: lack of involvement of cortical beta-adrenoceptor modifications. Ambrosio E, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):487–91

Role of medial preoptic area beta adrenoceptors in the regulation of sleep-wakefulness. Sood S, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):1–5

Inotropic response of rat heart papillary muscle to alpha 1- and beta-adrenoceptor stimulation in relation to dietary n-6 and n-3 polyunsaturated fatty acids (PUFA) and age. Skúladóttir GV, et al. **Pharmacol Toxicol** 1997 Feb; 80(2):85–90

Peripheral beta-adrenoreceptors and stress-induced hypercholesterolemia in rats. Brennan FX Jr, et al. **Physiol Behav** 1996 Nov;60(5):1307–10

Social confrontation and tumor metastasis in rats: defeat and beta-adrenergic mechanisms. Stefanski V, et al. **Physiol Behav** 1996 Jul;60(1):277–82

Modulation of electroconvulsive treatment induced beta-adrenergic down-regulation by previous chronic imipramine administration: the involvement of protein kinase C. Nalepa I, et al. **Pol J Pharmacol** 1996 Sep-Oct; 48(5):489–94

Stimulation of amyloid precursor protein synthesis by adrenergic receptors coupled to cAMP formation. Lee RKK, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):5422–6

Lack of pineal beta-adrenergic receptor alterations in suicide victims with major depression. Little KY, et al. **Psychoneuroendocrinology** 1997 Jan;22(1):53–62

Adrenoceptor mechanism involved in thiopental-induced potentiation of halothane-epinephrine arrhythmias in dogs. Kamibayashi T, et al. **Res Commun Mol Pathol Pharmacol** 1996 Aug;93(2):225–34

Role of beta-adrenergic and cholinergic systems in acclimatization to hypoxia in the rat. Clancy RL, et al. **Respir Physiol** 1997 Jan;107(1):75–84

Regulation of right atrial beta-adrenoceptors after cardiopulmonary resuscitation in pigs. Prengel AW, et al. **Resuscitation** 1996 Jun;31(3):271–8

Changes in neuroreceptor function of tracheal smooth muscle following acute ozone exposure of guinea pigs. van Hoof HJ, et al. **Toxicology** 1997 Jul 11;120(3):159–69

On criteria for functional beta 3-adrenoceptors [letter] Molenaar P, et al. **Trends Pharmacol Sci** 1997 Jul;18(7):258

Function and regulation of the beta 3-adrenoceptor [see comments] Strosberg AD, et al. **Trends Pharmacol Sci** 1996 Oct;17(10):373–81 (64 ref.). Comment in: Trends Pharmacol Sci 1997 Feb;18(2):52–3.

[Endogenous blocker of beta-adrenoreceptors] Tsirkin VI, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):248–52 **(Rus)**

[Characteristics of the stimulatory adrenergic reaction of isolated chick embryo amnion] Boĭko OV, et al. **Dokl Akad Nauk** 1997 Mar;353(3):411–4 **(Rus)**

[Adrenomodulating effects of human blood, cerebrospinal fluid, urine, saliva, and amniotic fluid] Tsirkin VI, et al. **Dokl Akad Nauk** 1997 Jan;352(1):124–6 **(Rus)**

[Increase in beta-adrenoreactivity of coronary arteries exposed to blood serum] Tsirkin VI, et al. **Dokl Akad Nauk** 1996 Dec;351(4):565–6 **(Rus)**

[New perspectives in obesity (editorial)] Martínez Murado P, et al. **Rev Clin Esp** 1997 May;197(5):303–5 **(Spa)**

[The effect of adrenoreceptors on the lysosomes of neutrophilic granulocytes during the development of the adaptation syndrome] Vovk SV, et al. **Fiziol Zh** 1996; 42(1-2):83–90 (Eng. Abstr.) **(Ukr)**

RADIATION EFFECTS

Transcranial magnetic stimulation downregulates beta-adrenoreceptors in rat cortex. Fleischmann A, et al. **J Neural Transm** 1996;103(11):1361–6

RECEPTORS, ADRENERGIC, BETA-1

AGONISTS

Effects of (-)-RO363 at human atrial beta-adrenoceptor subtypes, the human cloned beta 3-adrenoceptor and rodent intestinal beta 3-adrenoceptors. Molenaar P, et al. **Br J Pharmacol** 1997 Jan;120(2):165–76

Endogenous beta 3- but not beta 1-adrenergic receptors are resistant to agonist-mediated regulation in human SK-N-MC neurotumor cells. Curran PK, et al. **Cell Signal** 1996 Aug;8(5):355–64

Partial beta 2-agonists and their impartial assessment [editorial] Dickey BF, et al. **Chest** 1996 Nov;110(5):1131–2

Adaptation of myocardial blood flow to increased metabolic demand is not dependent on endothelial vasodilators in the rat heart. Tiefenbacher CP, et al. **Heart** 1997 Feb; 77(2):147–53

Prolongation of the life span of cardiomyopathic hamster by the adrenergic beta 1-selective partial agonist denopamine. Kurosawa H, et al. **Jpn J Pharmacol** 1996 Dec;72(4):325–33

Modulation of L-type Ca current by denopamine, a nonparenteral partial beta 1 stimulant, in rabbit ventricular cells. Habuchi Y, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):437–43

ANALYSIS

Probing human beta 1- and beta 2-adrenoceptors with domain-specific fusion protein antibodies. Jahns R, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):111–21

Characteristics of beta-adrenergic receptors in longitudinal muscle membranes of rat uterus: changes in kinetic properties of the receptor during gestation. Kaneko Y, et al. **J Mol Recognit** 1996 May-Jun;9(3):233–8

ANTAGONISTS & INHIBITORS

Acute effects of celiprolol on muscle blood flow and insulin sensitivity: studies using [15O]-water, [18F]-fluorodeoxyglucose and positron emission tomography. Malminiemi K, et al. **Eur J Clin Pharmacol** 1997;52(1):19–26

Influence of blockade of alpha 1-adrenoceptors, beta 1-adrenoceptors and vasopressin V1A receptors on the cardiovascular effects of gamma 2-melanocyte-stimulating hormone (gamma 2-MSH). Van Bergen P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):720–6

Blockade of effect of stress on risk assessment behavior in mice by a beta-1 adrenoceptor antagonist. Stone EA, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):215–7

Delayed arousal from anesthesia: a further similarity between stress and beta-1 adrenoceptor blockade. Stone EA, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):131–3

BIOSYNTHESIS

Chronic hypoxia increases beta 1-adrenergic receptor mRNA and density but not signaling in neonatal rat cardiac

myocytes. Li HT, et al. **Circulation** 1996 Dec 15; 94(12):3303–10

Early locus coeruleus lesions increase the density of beta-adrenergic receptors in the main olfactory bulb of rats. Woo CC, et al. **Int J Dev Neurosci** 1996 Nov: 14(7–8):913–9

beta-Adrenergic and muscarinic receptor expression are regulated in opposite ways during senescence in rat left ventricle. Hardouin S, et al. **J Mol Cell Cardiol** 1997 Jan; 29(1):309–19

Promoter analysis of the rat beta1-adrenergic receptor gene identifies sequences involved in basal expression. Bahouth SW, et al. **Mol Pharmacol** 1997 Apr;51(4):620–9

DRUG EFFECTS

Chronotropic effects of optical isomers of ephedrine and methylephedrine in the isolated rat right atria and in vitro assessment of direct and indirect actions on beta 1-adrenoceptors. Kawasuji T, et al. **Biol Pharm Bull** 1996 Nov;19(11):1423–8

Implication of beta 1- and beta 2-adrenergic receptors in the antinociceptive effect of tricyclic antidepressants. Micó JA, et al. **Eur Neuropsychopharmacol** 1997 May;7(2):139–45

Celiprolol: agonist and antagonist effects at cardiac beta 1- and vascular beta 2-adrenoceptors determined under in vivo conditions in the rat. Alvarez-Guerra M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):689–98

GENETICS

Beta-adrenergic receptor subtype gene expression in timed-pregnant rat myometrium. Principe D, et al. **Am J Obstet Gynecol** 1997 Feb;176(2):349–57

Localization and diurnal expression of mRNA encoding the beta1-adrenoceptor in the rat pineal gland: an in situ hybridization study. Moller M, et al. **Cell Tissue Res** 1997 May;288(2):279–84

Post-transcriptional induction of beta 1-adrenergic receptor by retinoic acid, but not triiodothyronine, in C6 glioma cells expressing thyroid hormone receptors [see comments] López-Barahona M, et al. **Eur J Endocrinol** 1996 Dec; 135(6):709–15. Comment in: Eur J Endocrinol 1996 Dec;135(6):651–2.

Molecular cloning of the dog beta 1 and beta 2 adrenergic receptors. Huang RR, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):599–607

Promoter analysis of the rat beta1-adrenergic receptor gene identifies sequences involved in basal expression. Bahouth SW, et al. **Mol Pharmacol** 1997 Apr;51(4):620–9

Effects of age on beta adrenergic subtype activation of adenylyl cyclase in brown adipose tissue. Scarpace PJ, et al. **Proc Soc Exp Biol Med** 1996 Dec;213(3):262–7

Identification of a glucocorticoid repressor domain in the rat beta 1-adrenergic receptor gene. Bahouth SW, et al. **Recept Signal Transduct** 1996;6(3–4):141–9

IMMUNOLOGY

Short-term hemodynamic effects of immunoadsorption in dilated cardiomyopathy [see comments] Dörffel WV, et al. **Circulation** 1997 Apr 15;95(8):1994–7. Comment in: Circulation 1997 Apr 15;95(8):1979–80.

Structural and functional analysis of the B cell epitopes recognized by anti-receptor autoantibodies in patients with Chagas' disease. Elies R, et al. **J Immunol** 1996 Nov 1; 157(9):4203–11

Peptides derived from cardiovascular G-protein-coupled receptors induce morphological cardiomyopathic changes in immunized rabbits. Matsui S, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):641–55

METABOLISM

Modulation of pacemaker activity in sheep cardiac Purkinje fibers by stimulation of beta-adrenoceptor subtypes. Thome U, et al. **Basic Res Cardiol** 1997 Feb;92(1):25–34

Effects of chronic administration of bopindolol on the binding characteristics of cardiac alpha 1H-, alpha 1L-, beta 1- and beta 2-adrenoceptor subtypes in cardiac muscles of spontaneously hypertensive rats (SHR). Hosohata Y, et al. **Biol Pharm Bull** 1996 Jul;19(7):932–5

Receptor density in the rat heart following ischaemia and prolonged reperfusion. de Jong W, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S279–80

Comparison of R-, S-, and RS-albuterol interaction with human beta 1- and beta 2-adrenergic receptors. Penn RB, et al. **Clin Rev Allergy Immunol** 1996 Spring;14(1):37–45

Antibodies from Trypanosoma cruzi infected mice recognize the second extracellular loop of the beta 1-adrenergic and M2-muscarinic receptors and regulate calcium channels in isolated cardiomyocytes. Mijares A, et al. **Mol Cell Biochem** 1996 Oct-Nov;163–164:107–12

Identification of a glucocorticoid repressor domain in the rat beta 1-adrenergic receptor gene. Bahouth SW, et al. **Recept Signal Transduct** 1996;6(3–4):141–9

Selective desensitization of beta 1- and beta 2-andrenergic receptors in C6 glioma cells. Effects on catecholamine responsiveness. Guerrero SW, et al. **Receptor** 1995; 5(4):185–95

GTP synthases. Proton pumping and phosphorylation in ligand-receptor-G alpha-protein complexes. Nederkoorn PH, et al. **Receptors Channels** 1996;4(2):111–28

PHYSIOLOGY

Beta-adrenoceptor-mediated effects in rat cultured thymic epithelial cells. Kurz B, et al. **Br J Pharmacol** 1997 Apr; 120(8):1401–8

'Cross talk' between opioid peptide and adrenergic receptor signaling in isolated rat heart. Pepe S, et al. **Circulation** 1997 Apr 15;95(8):2122–9

Developmental expression and functional activity of beta 1- and beta 3-adrenoceptors in murine 3T3-F442A differentiating adipocytes. El Hadri K, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):107–19

Activation of protein kinase C by angiotensin II decreases beta 1-adrenergic receptor responsiveness in the rat heart. Schwartz DD, et al. **J Cardiovasc Pharmacol** 1997 Feb; 29(2):257–64

Identification and functional role of beta-adrenergic receptor subtypes in primate and rodent: in vivo versus isolated myocytes. Cui Y, et al. **J Mol Cell Cardiol** 1996 Jun; 28(6):1307–17

Deletion of the N-terminus of a K+ channel brings about short-term modulation by cAMP and beta 1-adrenergic receptor activation. Levin G, et al. **J Mol Neurosci** 1996 Winter;7(4):269–76

Modulation of forebrain electroencephalographic activity in halothane-anesthetized rat via actions of noradrenergic beta-receptors within the medial septal region. Berridge CW, et al. **J Neurosci** 1996 Nov 1;16(21):7010–20

Enhancement of behavioral and electroencephalographic indices of waking following stimulation of noradrenergic beta-receptors within the medial septal region of the basal forebrain. Berridge CW, et al. **J Neurosci** 1996 Nov 1; 16(21):6999–7009

beta1-Adrenoceptor-mediated relaxation by norepinephrine in dog hepatic arteries. Shiraishi S, et al. **Jpn J Pharmacol** 1997 Jan;73(1):101–3

Beta 1-adrenoreceptors regulate resting metabolic rate. Lamont LS, et al. **Med Sci Sports Exerc** 1997 Jun; 29(6):769–74

Transgenic mice overexpressing the beta 1-adrenergic receptor in adipose tissue are resistant to obesity. Soloveva V, et al. **Mol Endocrinol** 1997 Jan;11(1):27–38

Beta 2- but not beta 1-adrenoceptors mediate the adrenergic component of reflex tracheal dilatation during bronchoconstriction in guinea pigs in vivo. Takahashi Y, et al. **Res Commun Mol Pathol Pharmacol** 1996 Sep; 93(3):301–18

[Mechanisms of the regulation of adrenergic beta-receptors] Lohse MJ. **Z Kardiol** 1996;85 Suppl 7:1–3 (12 ref.) (Eng. Abstr.) **(Ger)**

RECEPTORS, ADRENERGIC, BETA-2

[Beta-2 agonists in the therapy of obstructive airway diseases (editorial)] Solèr M. **Schweiz Rundsch Med Prax** 1996 Sep 17;85(38):1159–61 **(Ger)**

AGONISTS

Anabolic effects of a range of beta 2-adrenoceptor agonists in a clonal G8.P8 cell line. Blackburn SJ, et al. **Biochem Soc Trans** 1996 May;24(2):214S

Agonist stimulation increases the turnover rate of beta 2AR-bound palmitate and promotes receptor depalmitoylation. Loisel TP, et al. **Biochemistry** 1996 Dec 10;35(49):15923–32

The involvement of ATP-sensitive potassium channels in beta 2-adrenoceptor agonist-induced vasodilatation on rat diaphragmatic microcirculation. Chang HY. **Br J Pharmacol** 1997 Jul;121(5):1024–30

Differential contribution of two serine residues of wild type and constitutively active beta2-adrenoceptors to the interaction with beta2-selective agonists. Kikkawa H, et al. **Br J Pharmacol** 1997 Jul;121(6):1059–64

Beta 2-adrenoceptor agonist-mediated inhibition of human airway smooth muscle cell proliferation: importance of the duration of beta 2-adrenoceptor stimulation. Stewart AG, et al. **Br J Pharmacol** 1997 Jun;121(3):361–8

Terbutaline inhalation suppresses fentanyl-induced coughing. Lui PW, et al. **Can J Anaesth** 1996 Dec;43(12):1216–9

Potent inhibition of spontaneous rhythmic contraction by a novel beta 2-adrenoceptor agonist, HSR-81, in pregnant rat uterus. Ohashi T, et al. **Eur J Pharmacol** 1996 Jul 4; 307(3):315–22

Interactions of glucocorticoids and beta 2-agonists. Adcock IM, et al. **Eur Respir J** 1996 Jan;9(1):160–8 (82 ref.)

Potentiation of the relaxing action of isoproterenol by forskolin in rabbit aortic rings: the involvement of beta 2-adrenoceptors. Satake N, et al. **Gen Pharmacol** 1997 May; 28(5):753–6

Effects of beta 2-agonist administration and exercise on contractile activation of skeletal muscle fibers. Lynch GS, et al. **J Appl Physiol** 1996 Oct;81(4):1610–8

Bioanalysis of beta 2-agonists by hyphenated chromatographic and mass spectrometric techniques. Polettini A. **J Chromatogr B Biomed Appl** 1996 Dec 6; 687(1):27–42 (58 ref.)

Hyphenation of coupled-column liquid chromatography and thermospray tandem mass spectrometry for the rapid determination of beta 2-agonist residues in bovine urine using direct large-volume sample injection. Set-up of single-residue methods for clenbuterol and salbutamol. Hogendoorn EA, et al. **J Mass Spectrom** 1996 Apr; 31(4):418–26

Kinetic studies of desensitization and resensitization of the relaxation response to beta-2 adrenoceptor agonists in isolated guinea pig trachea. Wachsman DE, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):332–45

Regulation of the expression of the proenkephalin gene in cultured meningeal fibroblasts: opposite effects of alpha 1- and beta 2-adrenoceptors. Hildebrand B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):404–10

Interaction of beta 2-adrenoceptor agonists with native cyclodextrins: application to the development of chiral assays for terbutaline. Boulton DW, et al. **Pharm Acta Helv** 1996 Oct;71(4):293–6

Pharmacological characteristics of BDTI, a new isoquinoline-derived beta 2-adrenoceptor agonist, in canine trachea and rat heart. Lin CH, et al. **Pharmacology** 1996 Jul;53(1):19–27

Vanidilol: a vanilloid-type vasorelaxant and ocular hypotensive beta-adrenoceptor blocker with partial beta-2-agonist activity. Sheu MM, et al. **Pharmacology** 1997 Apr;54(4):211–24

Premenstrual asthma: the effect of estrogen on symptoms, pulmonary function, and beta 2-receptors. Chandler MH, et al. **Pharmacotherapy** 1997 Mar-Apr;17(2):224–34

Isolated, electrically-stimulated airway preparations--their use in determining beta-adrenoceptor agonist activity. Coleman RA, et al. **Pulm Pharmacol** 1996 Apr;9(2):107–17

Exosites: their current status, and their relevance to the duration of action of long-acting beta 2-adrenoceptor agonists [see comments] Coleman RA, et al. **Trends Pharmacol Sci** 1996 Sep;17(9):324–30 (52 ref.). Comment in: Trends Pharmacol Sci 1997 May;18(5):149–51.

Phosphodiesterase 4 and tolerance to beta 2-adrenoceptor agonists in asthma. Giembycz MA. **Trends Pharmacol Sci** 1996 Sep;17(9):331–6 (62 ref.)

ANALYSIS

Probing human beta 1- and beta 2-adrenoceptors with domain-specific fusion protein antibodies. Jahns R, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):111–21

beta 2-adrenoreceptor immunoreactivity in cardiac ganglia of the guinea pig. Haberberger R, et al. **Histochem J** 1996 Nov;28(11):827–33

Beta-adrenergic and muscarinic cholinergic receptor densities in the human sinoatrial node: identification of a high beta 2-adrenergic receptor density. Rodefeld MD, et al. **J Cardiovasc Electrophysiol** 1996 Nov;7(11):1039–49

Characteristics of beta-adrenergic receptors in longitudinal muscle membranes of rat uterus: changes in kinetic properties of the receptor during gestation. Kaneko Y, et al. **J Mol Recognit** 1996 May-Jun;9(3):233–8

ANTAGONISTS & INHIBITORS

Beta2-adrenergic receptor antagonists protect against ventricular fibrillation: in vivo and in vitro evidence for enhanced sensitivity to beta2-adrenergic stimulation in animals susceptible to sudden death. Billman GE, et al. **Circulation** 1997 Sep 16;96(6):1914–22

Up-regulation of a constitutively active form of the beta2-adrenoceptor by sustained treatment with inverse agonists but not antagonists. MacEwan DJ, et al. **FEBS Lett** 1996 Dec 9;399(1–2):108–12

Determination of the binding of a beta 2-blocker drug, frusemide and ceftriaxone to serum proteins by capillary zone electrophoresis. Quaglia MG, et al. **J Pharm Biomed Anal** 1997 May;15(8):1033–9

Inverse agonist-induced up-regulation of the human beta2-adrenoceptor in transfected neuroblastoma X glioma hybrid cells. MacEwan DJ, et al. **Mol Pharmacol** 1996 Dec; 50(6):1479–86

Effects of clenbuterol and ICI118551, a selective beta 2-antagonist, on the growth of skeletal muscle of suckling rats. Morton RH, et al. **Pflugers Arch** 1995 Dec; 431(2):237–43

BIOSYNTHESIS

Early locus coeruleus lesions increase the density of beta-adrenergic receptors in the main olfactory bulb of rats. Woo CC, et al. **Int J Dev Neurosci** 1996 Nov; 14(7–8):913–9

Structural instability of a constitutively active G protein-coupled receptor. Agonist-independent activation due to conformational flexibility. Gether U, et al. **J Biol Chem** 1997 Jan 31;272(5):2587–90

Expression of beta 2-adrenoceptors in halobacteria. Söhlemann P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):150–60

CHEMISTRY

Ligand stabilization of the beta 2 adrenergic receptor: effect of DTT on receptor conformation monitored by circular dichroism and fluorescence spectroscopy. Lin S, et al. **Biochemistry** 1996 Nov 19;35(46):14445–51

Structural instability of a constitutively active G protein-coupled receptor. Agonist-independent activation due to conformational flexibility. Gether U, et al. **J Biol Chem** 1997 Jan 31;272(5):2587–90

Sustained activation of a G protein-coupled receptor via "anchored" agonist binding. Molecular localization of the salmeterol exosite within the 2-adrenergic receptor. Green SA, et al. **J Biol Chem** 1996 Sep 27;271(39):24029-35

[Adrenergic receptor and alpha 2 agonist--2: Structure-function relationship of adrenoceptors] Mizobe T. **Masui** 1997 Jun;46(6):770-6 (14 ref.) (Eng. Abstr.) **(Jpn)**

DEFICIENCY

Defects of beta 2-adrenergic signal transduction in chronic lymphocytic leukaemia: relationship to disease progression. Kamp T, et al. **Eur J Clin Invest** 1997 Feb;27(2):121-7

DRUG EFFECTS

Synthesis and pharmacological properties of 1,2,3,4-tetrahydroisoquinoline derivatives. Brzezińska E. **Acta Pol Pharm** 1996 Jan-Feb;53(1):25-9

Dobutamine increases alveolar liquid clearance in ventilated rats by beta-2 receptor stimulation. Tibayan FA, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):438-44

Structure-affinity relationships and stereospecificity of several homologous series of local anesthetics for the beta2-adrenergic receptor. Butterworth J, et al. **Anesth Analg** 1997 Aug;85(2):336-42

Beta 2-receptor density on mononuclear blood cells in patients suffering from neuroleptic-induced akathisia (NIA). Botschev C, et al. **Biol Psychiatry** 1996 Aug 1; 40(3):203-7

Airway subsensitivity with long-acting beta 2-agonists. Is there cause for concern? Lipworth BJ. **Drug Saf** 1997 May; 16(5):295-308 (60 ref.)

Effect of exogenous female sex-steroid hormones on beta 2-adrenoceptors in healthy males. Tan KS, et al. **Eur J Clin Pharmacol** 1997;52(4):281-3

Elimination of palmitoylation sites in the human dopamine D1 receptor does not affect receptor-G protein interaction. Jin H, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):109-16

Effect of short- and long-acting beta 2-adrenoceptor agonists on pulmonary beta 2-adrenoceptor expression in human lung. Nishikawa M, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):123-9

Implication of beta 1- and beta 2-adrenergic receptors in the antinociceptive effect of tricyclic antidepressants. Micó JA, et al. **Eur Neuropsychopharmacol** 1997 May;7(2):139-45

Chronic morphine treatment increases stimulatory beta-2 adrenoceptor signaling in A431 cells stably expressing the mu opioid receptor. Ammer H, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):512-20

Is inhibition of oxygen radical production of neutrophils by sympathomimetics mediated via beta-2 adrenoceptors? Weiss M, et al. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1105-13

Relationship between desensitization and downregulation of beta-adrenoceptors in cardiac tissues after prolonged in vivo infusion of T-0509, a beta 1-adrenoceptor agonist. Sato Y, et al. **Jpn J Pharmacol** 1997 Apr;73(4):325-32

Celiprolol: agonist and antagonist effects at cardiac beta 1- and vascular beta 2-adrenoceptors determined under in vivo conditions in the rat. Alvarez-Guerra M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):689-98

The interaction between salmeterol and the beta 2-adrenoceptor protein [letter; comment] Jack D. **Trends Pharmacol Sci** 1997 May;18(5):149-51. Comment on: Trends Pharmacol Sci 1996 Sep;17(9):324-30.

GENETICS

Beta-adrenergic receptor subtype gene expression in timed-pregnant rat myometrium. Principe D, et al. **Am J Obstet Gynecol** 1997 Feb;176(2):349-57

DNA elements and protein factors involved in the transcription of the beta 2-adrenergic receptor gene in rat liver. The negative regulatory role of C/EBP alpha. Jiang L, et al. **Biochemistry** 1996 Oct 8;35(40):13136-46

pH is critical to the regulation of expression of the beta 2-adrenergic receptor gene in hypoxia. Schmedtje JF Jr, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1-2):25-33

Association of the Gln 27 beta 2-adrenoceptor polymorphism and IgE variability in asthmatic families. Dewar J, et al. **Chest** 1997 Jun;111(6 Suppl):78S-79S

Transgenic mice carrying the human beta 2-adrenergic receptor gene with its own promoter overexpress beta 2-adrenergic receptors in liver. André C, et al. **Eur J Biochem** 1996 Oct 15;241(2):417-24

Non-isotopic competitive reverse transcription polymerase chain reaction coupled with high performance liquid chromatography to measure beta 2-receptor messenger RNA in the human heart. Höhnel K, et al. **Eur J Clin Chem Clin Biochem** 1996 May;34(5):411-7

Mutations of Tyr326 in the beta 2-adrenoceptor disrupt multiple receptor functions. Gabilondo AM, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):243-50

Preliminary evidence of linkage of salt sensitivity in black Americans at the beta 2-adrenergic receptor locus. Svetkey LP, et al. **Hypertension** 1997 Apr;29(4):918-22

Human beta2-adrenergic receptor/GS alpha fusion protein, expressed in 2 ras-dependent murine carcinoma cell lines, prevents tumor growth in syngeneic mice. Bertin B, et al. **Int J Cancer** 1997 Jun 11;71(6):1029-34

The glutamine 27 beta2-adrenoceptor polymorphism is associated with elevated IgE levels in asthmatic families. Dewar JC, et al. **J Allergy Clin Immunol** 1997 Aug; 100(2):261-5

Rapid communication: cloning and sequencing of a canine beta 2-adrenergic receptor cDNA. Emala CW, et al. **J Anim Sci** 1996 Sep;74(9):2285

A 20-nucleotide (A + U)-rich element of beta2-adrenergic receptor (beta2AR) mRNA mediates binding to beta2AR-binding protein and is obligate for agonist-induced destabilization of receptor mRNA. Tholanikunnel BG, et al. **J Biol Chem** 1997 Apr 25; 272(17):11471-8

Potentiation of beta-adrenergic signaling by adenoviral-mediated gene transfer in adult rabbit ventricular myocytes. Drazner MH, et al. **J Clin Invest** 1997 Jan 15;99(2):288-96

Molecular cloning of the dog beta 1 and beta 2 adrenergic receptors. Huang RR, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):599-607

Beta 2-adrenoceptor polymorphisms and asthma. Hall IP. **Monogr Allergy** 1996;33:153-67 (42 ref.)

Myocardial signaling defects and impaired cardiac function of a human beta 2-adrenergic receptor polymorphism expressed in transgenic mice. Turki J, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10483-8

IMMUNOLOGY

Some alterations of the leucocyte beta2-adrenoceptor/cAMP-system in patients with seasonal allergic rhinoconjunctivitis are related to disease activity. Haen E, et al. **Clin Exp Allergy** 1997 Jul; 27(7):787-95

Anti-peptide antibodies sensitive to the 'active' state of the beta2-adrenergic receptor. Mijares A, et al. **FEBS Lett** 1996 Dec 9;399(1-2):188-91

Structural and functional analysis of the B cell epitopes recognized by anti-receptor autoantibodies in patients with Chagas' disease. Elies R, et al. **J Immunol** 1996 Nov 1; 157(9):4203-11

Immunoaffinity purification of epitope-tagged human beta 2-adrenergic receptor to homogeneity. Kwatra MM, et al. **Protein Expr Purif** 1995 Dec;6(6):717-21

ISOLATION & PURIFICATION

Improved membrane isolation in the purification of beta 2-adrenoceptors from transgenic Escherichia coli. Hill RA, et al. **Protein Expr Purif** 1997 Jun;10(1):162-7

Immunoaffinity purification of epitope-tagged human beta 2-adrenergic receptor to homogeneity. Kwatra MM, et al. **Protein Expr Purif** 1995 Dec;6(6):717-21

METABOLISM

Comments on the study by Bono et al [letter; comment] Blankesteijn WM, et al. **Am J Hypertens** 1996 Jul;9(7):708-9 . Comment on: Am J Hypertens 1995 May;8(5 Pt 1):487-93.

UVB irradiation induces decreased expression of beta 2-adrenergic receptors in cultured keratinocytes. Chai CY, et al. **Arch Dermatol Res** 1996 Dec;289(1):55-6

Modulation of pacemaker activity in sheep cardiac Purkinje fibers by stimulation of beta-adrenoceptor subtypes. Thome U, et al. **Basic Res Cardiol** 1997 Feb;92(1):25-34

3-Hydroxybutyrate decreases noradrenaline affinity for rat erythrocyte ghost beta 2-adrenergic receptors. Gómez G, et al. **Biochem Mol Biol Int** 1996 Oct;40(2):373-8

Effects of chronic administration of bopindolol on the binding characteristics of cardiac alpha 1H-, alpha 1L-, beta 1- and beta 2-adrenoceptor subtypes in cardiac muscles of spontaneously hypertensive rats (SHR). Hosohata Y, et al. **Biol Pharm Bull** 1996 Jul;19(7):932-5

Assessment of beta 2- and beta 3-adrenoceptors in rat white adipose tissues by radioligand binding assay. Kubo S, et al. **Biol Pharm Bull** 1997 Feb;20(2):142-8

Protection by dexamethasone of the functional desensitization to beta 2-adrenoceptor-mediated responses in human lung mast cells. Chong LK, et al. **Br J Pharmacol** 1997 Jun; 121(4):717-22

Agonist regulation of beta-adrenergic receptors: immunoblotting and indirect immunofluorescence reveal agonist-induced lateral sequestration and loss of binding. Wang HY, et al. **Chin J Physiol** 1996;39(2):83-93

Receptor density in the rat heart following ischaemia and prolonged reperfusion. de Jong W, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S279-80

Comparison of R-, S-, and RS-albuterol interaction with human beta 1- and beta 2-adrenergic receptors. Penn RB, et al. **Clin Rev Allergy Immunol** 1996 Spring;14(1):37-45

Characterization of the beta 2 adrenoceptors of dog liver. García-Sáinz JA, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1996 Sep;115(1):61-5

Defects of beta 2-adrenergic signal transduction in chronic lymphocytic leukaemia: relationship to disease progression. Kamp T, et al. **Eur J Clin Invest** 1997 Feb;27(2):121-7

Influence of receptor density on the patterns of beta2-adrenocepter desensitization. Rousseau G, et al. **Eur J Pharmacol** 1997 May 12;326(1):75-84

Characteristics of [3H]CGP12177 binding sites at beta 2- and beta 3-adrenoceptors in the guinea pig taenia caecum. Koike K, et al. **Gen Pharmacol** 1997 Jan;28(1):73-6

beta2-adrenergic receptor desensitization, internalization, and phosphorylation in response to full and partial agonists. January B, et al. **J Biol Chem** 1997 Sep 19;272(38):23871-9

Constitutive activation of the beta2 adrenergic receptor alters the orientation of its sixth membrane-spanning segment. Javitch JA, et al. **J Biol Chem** 1997 Jul 25;272(30):18546-9

Insulin-like growth factor receptor-1 stimulates phosphorylation of the beta2-adrenergic receptor in vivo on sites distinct from those phosphorylated in response to insulin. Karoor V, et al. **J Biol Chem** 1996 Nov 15; 271(46):29347-52

A novel interaction between adrenergic receptors and the alpha-subunit of eukaryotic initiation factor 2B. Klein U, et al. **J Biol Chem** 1997 Aug 1;272(31):19099-102

Potentiation of beta-adrenergic signaling by adenoviral-mediated gene transfer in adult rabbit ventricular myocytes. Drazner MH, et al. **J Clin Invest** 1997 Jan 15;99(2):288-96

Effect of pregnancy on rat myometrial beta 2-adrenoceptor mRNA and isoproterenol-induced relaxation of isolated uterine strips. Engstrøm T, et al. **J Endocrinol** 1997 Jun; 153(3):393-9

Differential expression of the beta2-adrenergic receptor by Th1 and Th2 clones: implications for cytokine production and B cell help. Sanders VM, et al. **J Immunol** 1997 May 1;158(9):4200-10

Three-dimensional models for agonist and antagonist complexes with beta 2 adrenergic receptor. Kontoyianni M, et al. **J Med Chem** 1996 Oct 25;39(22):4406-20

Beta 2-adrenergic activation enhances interleukin-8 production by human monocytes. Kavelaars A, et al. **J Neuroimmunol** 1997 Aug;77(2):211-6

Modeling of sequestration and down regulation in cells containing beta2-adrenergic receptors. Barak LS, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):677-90

Detection of heterologous Gs-coupled receptor activity in LLC-PK1 cells based on expression of urokinase-type plasminogen activator. Catanzariti L, et al. **Methods Mol Biol** 1997;63:219-25

Internal trafficking and surface mobility of a functionally intact beta2-adrenergic receptor-green fluorescent protein conjugate. Barak LS, et al. **Mol Pharmacol** 1997 Feb; 51(2):177-84

The stability of the agonist beta2-adrenergic receptor-Gs complex: evidence for agonist-specific states. Krumins AM, et al. **Mol Pharmacol** 1997 Jul;52(1):144-54

Synergistic regulation of beta2-adrenergic receptor sequestration: intracellular complement of beta-adrenergic receptor kinase and beta-arrestin determine kinetics of internalization. Ménard L, et al. **Mol Pharmacol** 1997 May; 51(5):800-8

Beta-arrestin acts as a clathrin adaptor in endocytosis of the beta2-adrenergic receptor. Goodman OB Jr, et al. **Nature** 1996 Oct 3;383(6599):447-50

Role of central nicotinic and beta-adrenergic receptors in the onset and further development of tail-tremor induced by repeated nicotine administration to rats. Suemaru K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):571-5

T lymphocyte beta 2-adrenergic receptor function and density after acute myocardial infarction. McCoy RA, et al. **Pharmacotherapy** 1997 Mar-Apr;17(2):357-62

Involvement of Asn-293 in stereospecific agonist recognition and in activation of the beta 2-adrenergic receptor. Wieland K, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9276-81

Pharmacological sequestration of a chimeric beta 3/beta 2 adrenergic receptor occurs without a corresponding amount of receptor internalization. Mostafapour S, et al. **Recept Signal Transduct** 1996;6(3-4):151-63

Selective desensitization of beta 1- and beta 2-andrenergic receptors in C6 glioma cells. Effects on catecholamine responsiveness. Guerrero SW, et al. **Receptor** 1995; 5(4):185-95

Beta 2-adrenergic receptor regulation of the cardiac L-type Ca2+ channel coexpressed in a fibroblast cell line. Masaki H, et al. **Receptor** 1995;5(4):219-31

Activation of a beta 2-adrenergic receptor/Gs alpha fusion protein elicits a desensitization-resistant cAMP signal capable of inhibiting proliferation of two cancer cell lines. Bertin B, et al. **Receptors Channels** 1997;5(1):41-51

Excitatory prejunctional beta 2-adrenoceptor distribution within equine airway cholinergic nerves. Zhang XY, et al. **Respir Physiol** 1996 Oct;106(1):81-90

Loss of normal cyclical beta 2 adrenoceptor regulation and increased premenstrual responsiveness to adenosine monophosphate in stable female asthmatic patients [see comments] Tan KS, et al. **Thorax** 1997 Jul;52(7):608-11. Comment in: Thorax 1997 Jul;52(7):591-2.

PHYSIOLOGY

Effects of inflammation and acute beta-agonist inhalation on beta 2-AR signaling in human airways. Penn RB, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):L601-8

Localized cAMP-dependent signaling mediates beta 2-adrenergic modulation of cardiac excitation-contraction coupling. Zhou YY, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1611-8

Salmeterol reduces early- and late-phase plasma leakage and leukocyte adhesion in rat airways. Bolton PB, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1428-35

Allergen challenge of passively sensitized human bronchi alters M2 and beta2 receptor function. Song P, et al.

Am J Respir Crit Care Med 1997 Apr;155(4):1230–4

Influence of adrenodemedullation on beta 2- and beta 3-adrenoceptors mediating relaxation of oesophageal smooth muscle of spontaneously hypertensive rats. de Boer RE, et al. **Br J Pharmacol** 1996 Dec;119(7):1355–60

Beta-adrenoceptor-mediated effects in rat cultured thymic epithelial cells. Kurz B, et al. **Br J Pharmacol** 1997 Apr; 120(8):1401–8

The duration of action of non-beta 2-adrenoceptor mediated responses to salmeterol. Nials AT, et al. **Br J Pharmacol** 1997 Mar;120(5):961–7

Effects of electroconvulsive therapy on peripheral adrenoceptors, plasma, noradrenaline, MHPG and cortisol in depressed patients. Werstiuk ES, et al. **Br J Psychiatry** 1996 Dec;169(6):758–65

The role of sequestration in G protein-coupled receptor resensitization. Regulation of beta2-adrenergic receptor dephosphorylation by vesicular acidification. Krueger KM, et al. **J Biol Chem** 1997 Jan 3;272(1):5–8

Functional analysis of myocardial performance in murine hearts overexpressing the human beta 2-adrenergic receptor. Bittner HB, et al. **J Mol Cell Cardiol** 1997 Mar; 29(3):961–7

Identification and functional role of beta-adrenergic receptor subtypes in primate and rodent: in vivo versus isolated myocytes. Cui Y, et al. **J Mol Cell Cardiol** 1996 Jun; 28(6):1307–17

Enhancement of behavioral and electroencephalographic indices of waking following stimulation of noradrenergic beta-receptors within the medial septal region of the basal forebrain. Berridge CW, et al. **J Neurosci** 1996 Nov 1; 16(21):6999–7009

Modulation of forebrain electroencephalographic activity in halothane-anesthetized rat via actions of noradrenergic beta-receptors within the medial septal region. Berridge CW, et al. **J Neurosci** 1996 Nov 1;16(21):7010–20

Dexamethasone increases beta 2-adrenoceptor-regulated phosphatidylcholine secretion in rat alveolar type II cells. Isohama Y, et al. **Jpn J Pharmacol** 1997 Feb;73(2):163–9

Differential regulation of the mitogen-activated protein and stress-activated protein kinase cascades by adrenergic agonists in quiescent and regenerating adult rat hepatocytes. Spector MS, et al. **Mol Cell Biol** 1997 Jul; 17(7):3556–65

Agonist-induced modulation of inverse agonist efficacy at the beta 2-adrenergic receptor. Chidiac P, et al. **Mol Pharmacol** 1996 Sep;50(3):662–9

An efficacy-dependent effect of cardiac overexpression of beta2-adrenoceptor on ligand affinity in transgenic mice. Gürdal H, et al. **Mol Pharmacol** 1997 Aug;52(2):187–94

Repetitive endocytosis and recycling of the beta 2-adrenergic receptor during agonist-induced steady state redistribution. Morrison KJ, et al. **Mol Pharmacol** 1996 Sep;50(3):692–9

Functional evidence against the existence of beta 2-adrenoceptors mediating positive intropic effects in guinea-pig right ventricular myocardium. Mügge A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):74–8

Ligand-induced overexpression of a constitutively active beta2-adrenergic receptor: pharmacological creation of a phenotype in transgenic mice. Samama P, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):137–41

Myocardial signaling defects and impaired cardiac function of a human beta 2-adrenergic receptor polymorphism expressed in transgenic mice. Turki J, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10483–8

Plasma catecholamine and lymphocyte beta 2-adrenergic receptor alterations in elderly Alzheimer caregivers under stress. Mills PJ, et al. **Psychosom Med** 1997 May-Jun; 59(3):251–6

Beta 2- but not beta 1-adrenoceptors mediate the adrenergic component of reflex tracheal dilatation during bronchoconstriction in guinea pigs in vivo. Takahashi Y, et al. **Res Commun Mol Pathol Pharmacol** 1996 Sep; 93(3):301–18

[Mechanisms of the regulation of adrenergic beta-receptors] Lohse MJ. **Z Kardiol** 1996;85 Suppl 7:1–3 (12 ref.) (Eng. Abstr.) **(Ger)**

RECEPTORS, ADRENOCORTICOTROPIC HORMONE see **RECEPTORS, CORTICOTROPIN**

RECEPTORS, AH see **RECEPTORS, ARYL HYDROCARBON**

RECEPTORS, ALBUMIN

ANALYSIS

[The detection of microalbuminuria by using a recombinant albumin receptor] Gupalova TV, et al. **Klin Lab Diagn** 1997 Feb;(2):14–6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Characteristics of albumin binding to opossum kidney cells and identification of potential receptors. Brunskill NJ, et al. **Pflugers Arch** 1997 Feb;433(4):497–504

METABOLISM

Identification of albumin-binding proteins of thymocyte plasmalemma [published erratum appears in Biosci Rep 1996 Dec;16(6):529] Dobrila L, et al. **Biosci Rep** 1996 Oct; 16(5):425–38

RECEPTORS, ALDOSTERONE

ANALYSIS

[3H]-aldosterone binding sites (type I receptors) in the lateral wall of the cochlea: distribution assessment by quantitative autoradiography. Sinha PK, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):643–7

RECEPTORS, ALPHA-ADRENERGIC see **RECEPTORS, ADRENERGIC, ALPHA**

RECEPTORS, ALPHA-1 ADRENERGIC see **RECEPTORS, ADRENERGIC, ALPHA-1**

RECEPTORS, ALPHA-2 ADRENERGIC see **RECEPTORS, ADRENERGIC, ALPHA-2**

RECEPTORS, AMINO ACID

ANTAGONISTS & INHIBITORS

Transneuronal regulation of ribosomes after blockade of ionotropic excitatory amino acid receptors. Hyson RL. **Brain Res** 1997 Feb 21;749(1):61–70

NMDA and non-NMDA receptor antagonists protect against excitotoxic injury in the rat spinal cord. Liu S, et al. **Brain Res** 1997 May 9;756(1-2):160–7

Antinociceptive effects of NMDA and non-NMDA receptor antagonists in the tail flick test in mice. Lutfy K, et al. **Pain** 1997 Mar;70(1):31–40

CHEMISTRY

Probing the structure of the cytoplasmic domain of the aspartate receptor by targeted disulfide cross-linking. Chen X, et al. **Biochemistry** 1997 Sep 30;36(39):11858–64

Oligomers of the cytoplasmic fragment from the Escherichia coli aspartate receptor dissociate through an unfolded transition state. Seeley SK, et al. **Biochemistry** 1996 Dec 17;35(50):16336–45

Solid-state REDOR NMR distance measurements at the ligand site of a bacterial chemotaxis membrane receptor. Wang J, et al. **Biochemistry** 1997 Feb 18;36(7):1699–703

Reversible binding interactions between the tryptophan enantiomers and albumins of different animal species as determined by novel high performance liquid chromatographic methods: an attempt to localize the D- and L-tryptophan binding sites on the human serum albumin polypeptide chain by using protein fragments. Soltés L, et al. **Chirality** 1997;9(4):373–9

The structural basis of negative cooperativity: receptors and enzymes. Koshland DE Jr. **Curr Opin Struct Biol** 1996 Dec; 6(6):757–61 (24 ref.)

Apo structure of the ligand-binding domain of aspartate receptor from Escherichia coli and its comparison with ligand-bound or pseudoligand-bound structures. Chi YI, et al. **FEBS Lett** 1997 Sep 8;414(2):327–32

High-resolution structures of the ligand binding domain of the wild-type bacterial aspartate receptor. Yeh JI, et al. **J Mol Biol** 1996 Sep 20;262(2):186–201

DRUG EFFECTS

Comparison of the autoradiographic binding distribution of [3H]-gabapentin with excitatory amino acid receptor and amino acid uptake site distributions in rat brain. Thurlow RJ, et al. **Br J Pharmacol** 1996 Jun;118(3):457–65

Simultaneous determination of binding of a variety of radioligands related to ionotropic excitatory amino acid receptors in fetal and neonatal rat brains. Enomoto R, et al. **Brain Res** 1996 Jun 3;723(1-2):100–9

GABAB receptors, monoamine receptors, and postsynaptic inositol trisphosphate-induced Ca2+ release are involved in the induction of long-term potentiation at visual cortical inhibitory synapses. Komatsu Y. **J Neurosci** 1996 Oct 15; 16(20):6342–52

GENETICS

Producing positive, negative, and no cooperativity by mutations at a single residue located at the subunit interface in the aspartate receptor of Salmonella typhimurium. Kolodziej AF, et al. **Biochemistry** 1996 Nov 26; 35(47):14782–92

METABOLISM

Oligomers of the cytoplasmic fragment from the Escherichia coli aspartate receptor dissociate through an unfolded transition state. Seeley SK, et al. **Biochemistry** 1996 Dec 17;35(50):16336–45

Evidence of distinct amino acid and bile salt receptors in the olfactory system of the zebrafish, Danio rerio. Michel WC, et al. **Brain Res** 1997 Aug 1;764(1-2):179–87

Distinct localization of two serine-threonine kinase receptors for activin and TGF-beta in the rat brain and down-regulation of type I activin receptor during peripheral nerve regeneration. Morita N, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):263–71

Cerebellar grafts partially reverse amino acid receptor changes observed in the cerebellum of mice with hereditary ataxia: quantitative autoradiographic studies. Stasi K, et al. **Cell Transplant** 1997 May-Jun;6(3):347–59

Apo structure of the ligand-binding domain of aspartate receptor from Escherichia coli and its comparison with ligand-bound or pseudoligand-bound structures. Chi YI, et al. **FEBS Lett** 1997 Sep 8;414(2):327–32

An aspartate/insulin receptor chimera mitogenically activates fibroblasts. Biemann HP, et al. **J Biol Chem** 1996 Nov 1; 271(44):27927–30

Characterization of protein kinase A and protein kinase C phosphorylation of the N-methyl-D-aspartate receptor NR1 subunit using phosphorylation site-specific antibodies. Tingley WG, et al. **J Biol Chem** 1997 Feb 21;272(8):5157–66

Differential localization of putative amino acid receptors in taste buds of the channel catfish, Ictalurus punctatus. Finger TE, et al. **J Comp Neurol** 1996 Sep 9;373(1):129–38

Immunoreceptor tyrosine-based activation motif (ITAM), a unique module linking antigen and Fc receptors to their signaling cascades. Isakov N. **J Leukoc Biol** 1997 Jan; 61(1):6–16 (123 ref.)

Expression of serine/threonine kinase receptors in traumatic brain injury. Lewén A, et al. **Neuroreport** 1997 Jan 20; 8(2):475–9

Size-related properties of vestibular afferent fibers in the frog: differential synaptic activation of N-methyl-D-aspartate and non-N-methyl-D-aspartate receptors. Straka H, et al. **Neuroscience** 1996 Feb; 70(3):697–707

Modulatory role of dopamine on excitatory amino acid receptors. Gandolfi O, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 May; 20(4):659–71

[The participation of the serotoninergic system in regulating the activity of the central glutamatergic/aspartatergic and GABA-ergic synapses] Grigor'ev IP, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug-Sep;82(8-9):22–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

NMDA as well as non-NMDA receptors in phrenic nucleus mediate respiratory effects of carotid chemoreflex. Chitravanshi VC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R302–10

Role of excitatory amino acid receptors in cardiorespiratory coupling in ventrolateral medulla. Miyawaki T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1221–30

Role of Ca+2 and other second messengers in excitatory amino acid receptor mediated neurodegeneration: clinical perspectives. Schousboe A, et al. **Clin Neurosci** 1997; 4(4):194–8 (87 ref.)

Non-NMDA and NMDA receptor-mediated excitotoxic neuronal deaths in adult brain are morphologically distinct: further evidence for an apoptosis-necrosis continuum. Portera-Cailliau C, et al. **J Comp Neurol** 1997 Feb 3; 378(1):88–104

Differential modulation by zinc and copper of amino acid receptors from rat olfactory bulb neurons. Trombley PQ, et al. **J Neurophysiol** 1996 Oct;76(4):2536–46

RECEPTORS, AMPA

AGONISTS

Response to repetitive stimulation of AMPA receptors in patches excised from fields CA1 and CA3 of the hippocampus. Arai A, et al. **Brain Res** 1996 Apr 15; 716(1-2):202–6

AMPA receptor agonists: resolution, configurational assignment, and pharmacology of (+)-(S)- and (-)-(R)-2-amino-3-[3-hydroxy-5-(2-pyridyl)-isoxazol-4-yl]-propionic acid (2-Py-AMPA). Johansen TN, et al. **Chirality** 1997;9(3):274–80

Glutamate receptor agonist injections into the dorsal striatum cause contralateral turning in the rat: involvement of kainate and AMPA receptors. Smith ID, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):7–17

Different characteristics of AMPA receptor agonists acting at AMPA receptors expressed in Xenopus oocytes. Wahl P, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):211–8

Evidence that a positive modulator of AMPA-type glutamate receptors improves delayed recall in aged humans. Lynch G, et al. **Exp Neurol** 1997 May;145(1):89–92

AMPA receptor agonists: synthesis, protolytic properties, and pharmacology of 3-isothiazolol bioisosteres of glutamic acid. Matzen L, et al. **J Med Chem** 1997 Feb 14;40(4):520–7

Comparison of the agonist binding site of homomeric, heteromeric, and chimeric GluR1(o) and GluR3(o) AMPA receptors. Banke TG, et al. **J Neurosci Res** 1997 Jul 15; 49(2):176–85

Effects of a centrally active benzoylpyrrolidine drug on AMPA receptor kinetics. Arai A, et al. **Neuroscience** 1996 Nov;75(2):573–85

ANALYSIS

Developmental changes of glutamate receptors in the rat cerebral cortex and hippocampus. Arai Y, et al. **Anat Embryol (Berl)** 1997 Jan;195(1):65–70

Heterogeneity of AMPA receptors in the dorsal column nuclei of the rat. Popratiloff A, et al. **Brain Res** 1997 Apr 18;754(1-2):333–9

Glutamate receptor subtypes localize to patches in the

developing striatum. Snyder-Keller A, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):246–50

Glutamate AMPA receptors in the fascia dentata of human and kainate rat hippocampal epilepsy. Babb TL, et al. **Epilepsy Res** 1996 Dec;26(1):193–205

Differential localization of AMPA glutamate receptor subunits in the two segments of the globus pallidus and the substantia nigra pars reticulata in the squirrel monkey. Paquet M, et al. **Eur J Neurosci** 1996 Jan;8(1):229–33

AMPA receptors in cultured vestibular ganglion neurons: detection and activation. Rabejac D, et al. **Eur J Neurosci** 1997 Feb;9(2):221–8

Neurochemical characterization of AMPA receptor-containing neurons in the mediolateral septal area of the rat. Varoqueaux F, et al. **Exp Brain Res** 1997 May; 114(3):454–60

Synaptic distribution of the AMPA-GluR2 subunit and its colocalization with calcium-binding proteins in rat cerebral cortex: an immunohistochemical study using a GluR2-specific monoclonal antibody. Vissavajjhala P, et al. **Exp Neurol** 1996 Dec;142(2):296–312

Laminar distribution of MK-801, kainate, AMPA, and muscimol binding sites in cat visual cortex: a developmental study. Gordon B, et al. **J Comp Neurol** 1996 Feb 12; 365(3):466–78

Differential distribution of AMPA receptors and glutamate during pre- and postnatal development in the visual cortex of ferrets. Herrmann K. **J Comp Neurol** 1996 Nov 4; 375(1):1–17

Species differences in the distribution of the glutamate receptor subunit, GluR1, in the rat and monkey entorhinal cortex. He Y, et al. **J Hirnforsch** 1997;38(1):27–33

Kainate/AMPA receptors expressed on human fetal astrocytes in long-term culture. Cauley K, et al. **J Neurosci Res** 1997 Feb 1;47(3):311–21

Regional disease in AMPA receptor density in mice infected with the LP-BM5 murine leukemia virus. Kustova Y, et al. **Neuroreport** 1997 Mar 24;8(5):1243–7

Analysis of AMPA receptor subunit mRNA expression in control and ALS spinal cord. Virgo L, et al. **Neuroreport** 1996 Nov 4;7(15–17):2507–11

Hypothalamo-septal enkephalinergic fibers terminate on AMPA receptor-containing neurons in the rat lateral septal area. Varoqueaux F, et al. **Synapse** 1997 Mar;25(3):263–71

Localization of AMPA-selective glutamate receptor subunits in the adult cat visual cortex. Gutiérrez-Igarza K, et al. **Vis Neurosci** 1996 Jan–Feb;13(1):61–72

ANTAGONISTS & INHIBITORS

Extended studies on the effect of glutamate antagonists on ischemic CA-1 damage. Diemer NH, et al. **Acta Neurochir Suppl (Wien)** 1996;66:73–5

Effects of ventrolateral medullary AMPA-receptor antagonism on pressor response during muscle contraction. Kobayashi T, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2774–81

Allosteric interactions between cyclothiazide and AMPA/kainate receptor antagonists. Yamada KA, et al. **Br J Pharmacol** 1996 Apr;117(8):1663–72

NMDA-but not AMPA-receptor antagonists augment scopolamine-induced spatial cognitive deficit of rats in a radial maze task. Li HB, et al. **Brain Res** 1996 Jul 1; 725(2):268–71

AMPA receptor antagonist, YM90K, reduces infarct volume in thrombotic distal middle cerebral artery occlusion in spontaneously hypertensive rats. Yao H, et al. **Brain Res** 1997 Apr 4;753(1):80–5

Characterization of YM90K, a selective and potent antagonist of AMPA receptors, in rat cortical mRNA-injected Xenopus oocytes. Okada M, et al. **Eur J Pharmacol** 1996 Aug 15;309(3):299–306

Delayed antagonism of AMPA/kainate receptors reduces long-term functional deficits resulting from spinal cord trauma. Wrathall JR, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):565–73

Blockade of AMPA receptors by nickel in cultured rat astrocytes. Telgkamp P, et al. **Glia** 1996 Feb;16(2):140–6

Effects of the AMPA-receptor antagonist, NBQX, on neuron loss in dentate hilus of the hippocampal formation after 8, 10, or 12 min of cerebral ischemia in the rat. Hu P, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):147–52

1-Aryl-3,5-dihydro-4H-2,3-benzodiazepin-4-ones: novel AMPA receptor antagonists. Chimirri A, et al. **J Med Chem** 1997 Apr 11;40(8):1258–69

Synthesis of racemic 6,7,8,9-tetrahydro-3-hydroxy-1H-1-benzazepine-2,5-diones as antagonists of N-methyl-d-aspartate (NMDA) and alpha-amino-3-hydroxy-5-methylisoxazole-4-propionic acid (AMPA) receptors. Guzikowski AP, et al. **J Med Chem** 1997 Jul 18;40(15):2424–9

8-(1H-imidazol-1-yl)-7-nitro-4(5H)-imidazo[1,2-alpha]quinoxalinone and related compounds: synthesis and structure-activity relationships for the AMPA-type non-NMDA receptor. Ohmori J, et al. **J Med Chem** 1997 Jun 20;40(13):2053–63

Novel AMPA receptor antagonists: synthesis and structure-activity relationships of 1-hydroxy-7-(1H-imidazol-1-yl)-6-nitro-2,3(1H,4H)-quinoxalinedione and related compounds. Ohmori J, et al. **J Med Chem** 1996 Sep 27;39(20):3971–9

Selective protection against AMPA- and kainate-evoked neurotoxicity by (3S,4aR,6R,8aR)-6-[2-(1(2)H-tetrazole-5-yl) ethyl]decahyd roisoquinoline- 3-carboxylic acid (LY293558) and its racemate (LY215490). Schoepp DD, et al. **J Neural Transm** 1996;103(8–9):905–16

Antagonism of NMDA receptors but not AMPA/kainate receptors blocks bursting in dopaminergic neurons induced by electrical stimulation of the prefrontal cortex. Tong ZY, et al. **J Neural Transm** 1996;103(8–9):889–904

Effects of LY215490, a competitive alpha-amino-3-hydroxy-5-methylisoxazole-4-propionic acid (AMPA) receptor antagonist, on the micturition reflex in the rat. Yoshiyama M, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):894–904

Voltage-dependent blockage of Ca(2+)-permeable AMPA receptors by joro spider toxin in cultured rat hippocampal neurones. Iino M, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):431–7

Evans blue antagonizes both alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate and kainate receptors and modulates receptor desensitization. Price CJ, et al. **Mol Pharmacol** 1996 Dec; 50(6):1665–71

A selective AMPA antagonist, LY293558, suppresses morphine withdrawal-induced activation of locus coeruleus neurons and behavioral signs of morphine withdrawal. Rasmussen K, et al. **Neuropsychopharmacology** 1996 Nov;15(5):497–505

Competitive antagonism of recombinant AMPA/kainate receptors by N-methyl-D-aspartate and analogues. Magazanik LG, et al. **Neuroreport** 1996 Dec 20;8(1):257–9

Studies of synaptic transmission in vivo: indirect versus direct effects of (RS)-alpha-amino-3-hydroxy-5-methyl-4-isoxazole-propionic acid/kainate antagonists on rat spinal sensory responses. Cumberbatch MJ, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):33–6

Interactions of the dye Evans Blue and GYKI 52466, a 2,3-benzodiazepine, with (S)-alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors in cultured rat cortical neurons: electrophysiological evidence for at least two different binding sites for non-competitive antagonists. Weiser T, et al. **Neurosci Lett** 1996 Sep 20;216(1):29–32

NMDA but not AMPA receptor antagonists impair the delay-interposed radial maze performance of rats. Li HB, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):249–53

New developments in the molecular pharmacology of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate and kainate receptors. Fletcher EJ, et al. **Pharmacol Ther** 1996;70(1):65–89 (251 ref.)

Some central effects of GYKI 52466, a non-competitive AMPA receptor antagonist. Maj J, et al. **Pol J Pharmacol** 1995 Nov-Dec;47(6):501–7

Antagonism of non-NMDA receptors in the dorsal periaqueductal grey induces anxiolytic effect in the elevated plus maze. Matheus MG, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):14–8

Differential interaction of competitive NMDA and AMPA antagonists with selective dopamine D-1 and D-2 agonists in a rat model of Parkinson's disease. Löschmann PA, et al. **Synapse** 1997 Aug;26(4):381–91

[The effect of blockade of the AMPA/kainate receptors of the nucleus accumbens on synaptic dopamine release during an emotional conditioned response] Saul'skaia NB, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May-Jun; 46(3):533–8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Expression of the alpha 1 and alpha 2 subunits of the AMPA-selective glutamate receptor channel in insect cells using a baculovirus vector. Kawamoto S, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:460–2

Immunohistochemical localization of metabotropic and ionotropic glutamate receptors in the mouse brain. Ryo Y, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:554–6

Calcium-permeable alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid receptors: a molecular determinant of selective vulnerability in amyotrophic lateral sclerosis. Williams TL, et al. **Ann Neurol** 1997 Aug;42(2):200–7

Localization of CAM II kinase-alpha, GAD, GluR2 and GABA(A) receptor subunit mRNAs in the human entorhinal cortex. Longson D, et al. **Eur J Neurosci** 1997 Apr;9(4):662–75

Expression of ionotropic glutamate receptor subunits in glial cells of the hippocampal CA1 area following transient forebrain ischemia. Gottlieb M, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):290–300

Synchronized overproduction of AMPA, kainate, and NMDA glutamate receptors during human spinal cord development. Kalb RG, et al. **J Comp Neurol** 1997 Jul 28; 384(2):200–10

Regional gene expression of the glutamate receptor subtypes GluR1, GluR2, and GluR3 in human postmortem brain. Breese CR, et al. **J Mol Neurosci** 1996 Winter;7(4):277–89

Stable expression of recombinant AMPA receptor subunits: binding affinities and effects of allosteric modulators. Hennegriff M, et al. **J Neurochem** 1997 Jun;68(6):2424–34

Combinations of AMPA receptor subunit expression in individual cortical neurons correlate with expression of specific calcium-binding proteins. Kondo M, et al. **J Neurosci** 1997 Mar 1;17(5):1570–81

Expression and subcellular distribution of glutamate receptor subunits 2/3 in the developing cerebellar cortex. Bergmann M, et al. **J Neurosci Res** 1996 Jan 1;43(1):78–86

Dimensions and ion selectivity of recombinant AMPA and kainate receptor channels and their dependence on Q/R site residues. Burnashev N, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):165–73

Diversity of glutamate receptors in neocortical neurons: implications for synaptic plasticity. Audinat E, et al. **J Physiol Paris** 1996;90(5–6):331–2

Human metabotropic glutamate receptor 1: mRNA distribution, chromosome localization and functional expression of two splice variants. Stephan D, et al. **Neuropharmacology** 1996;35(12):1649–60

Quantitation of AMPA receptor surface expression in cultured hippocampal neurons. Hall RA, et al. **Neuroscience** 1997 May;78(2):361–71

Splice variants of glutamate receptor subunits 2 and 3 in striatal projection neurons. Tallaksen-Greene SJ, et al. **Neuroscience** 1996 Dec;75(4):1057–64

Repeated amphetamine administration alters the expression of mRNA for AMPA receptor subunits in rat nucleus accumbens and prefrontal cortex. Lu W, et al. **Synapse** 1997 Jul;26(3):269–80

CHEMISTRY

A study of the oligomeric state of the alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid-preferring glutamate receptors in the synaptic junctions of porcine brain. Wu TY, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):731–9

Expression of AMPA-glutamate receptor B subunit in rat hippocampal GABAergic neurons. Racca C, et al. **Eur J Neurosci** 1996 Aug;8(8):1580–90

Flip and flop isoforms of chick brain AMPA receptor subunits: cloning and analysis of expression patterns. Ravindranathan A, et al. **Neuroreport** 1996 Nov 4; 7(15–17):2707–11

Localization of glutamate receptor subunits of the alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) type in the pancreas of newborn guinea pigs. Liu HP, et al. **Pancreas** 1997 May;14(4):360–8

DRUG EFFECTS

Interactions of 2,3-benzodiazepines and cyclothiazide at AMPA receptors: patch clamp recordings in cultured neurones and area CA1 in hippocampal slices. Rammes G, et al. **Br J Pharmacol** 1996 Mar;117(6):1209–21

Differential modulation of AMPA receptor mediated currents by evans blue in postnatal rat hippocampal neurones. Schürmann B, et al. **Br J Pharmacol** 1997 May; 121(2):237–47

Effects of external calcium on zinc modulation of AMPA receptors. Dreixler JC, et al. **Brain Res** 1997 Mar 28; 752(1–2):170–4

Effects of an AMPA receptor modulator on methamphetamine-induced hyperactivity in rats. Larson J, et al. **Brain Res** 1996 Nov 4;738(2):353–6

Clozapine and haloperidol differentially affect AMPA and kainate receptor subunit mRNA levels in rat cortex and striatum. Healy DJ, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):331–8

Comparison of the effects of an ampakine with those of methamphetamine on aggregate neuronal activity in cortex versus striatum. Palmer LC, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):127–35

Comparative antagonism of kainate-activated kainate and AMPA receptors in hippocampal neurons. Paternain AV, et al. **Eur J Neurosci** 1996 Oct;8(10):2129–36

Stable expression of homomeric AMPA-selective glutamate receptors in BHK cells. Andersen PH, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):95–100

Effects of thiocyanate and AMPA receptor ligands on (S)-5-fluorowillardiine, (S)-AMPA and (R,S)-AMPA binding. Hawkinson JE, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):213–21

Chronic treatment with typical and atypical antipsychotics increases the AMPA-preferring form of AMPA receptor in rat brain. McCoy L, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):41–5

Enhancement by an ampakine of memory encoding in humans. Ingvar M, et al. **Exp Neurol** 1997 Aug;146(2):553–9

AMPA receptor heterogeneity in rat hippocampal neurons revealed by differential sensitivity to cyclothiazide. Fleck MW, et al. **J Neurophysiol** 1996 Jun;75(6):2322–33

AMPA receptor facilitation accelerates fear learning without altering the level of conditioned fear acquired. Rogan MT, et al. **J Neurosci** 1997 Aug 1;17(15):5928–35

A novel allosteric potentiator of AMPA receptors: 4--2-(phenylsulfonylamino)ethylthio--2,6-difluoro-phenoxyaceta mide. Sekiguchi M, et al. **J Neurosci** 1997 Aug 1;17(15):5760–71

Pathophysiology of oligodendroglial excitotoxicity. Yoshioka A, et al. **J Neurosci Res** 1996 Nov 15;46(4):427–37

Increased responsiveness of ventral tegmental area dopamine neurons to glutamate after repeated administration of cocaine or amphetamine is transient and selectively involves AMPA receptors. Zhang XF, et al. **J Pharmacol Exp Ther** 1997 May;281(2):699–706

Further evidence for the subsensitivity of striatal AMPA

receptors, induced by chronic haloperidol administration: an autoradiographic study. Ossowska K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):384-8

Zinc changes AMPA receptor properties: results of binding studies and patch clamp recordings. Bresink I, et al. **Neuropharmacology** 1996 Apr;35(4):503-9

Inhibition of AMPA receptor-stimulated 57Co2+ influx by D- and L-2-amino-4-phosphonobutanoic acid (D- and L-AP4) and L-serine-O-phosphate (L-SOP) in cultured cerebellar granule cells. Toms NJ, et al. **Neuropharmacology** 1997 Mar;36(3):335-43

Effects of pharmacologically facilitating glutamatergic transmission in the trisynaptic intrahippocampal circuit. Sirvio J, et al. **Neuroscience** 1996 Oct;74(4):1025-35

GENETICS

CDNA cloning of chick brain alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors reveals conservation of structure, function and post-transcriptional processes with mammalian receptors. Paperna T, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):101-13

Expression of glutamate receptors in the human and rat basal ganglia: effect of the dopaminergic denervation on AMPA receptor gene expression in the striatopallidal complex in Parkinson's disease and rat with 6-OHDA lesion. Bernard V, et al. **J Comp Neurol** 1996 May 13;368(4):553-68

Kainic acid induced excitotoxicity and cfos expression in fibroblasts transfected with glutamate receptor subunit, GluR1. Gahring LC, et al. **J Neurobiol** 1996 Sep; 31(1):56-66

Surface expression of the AMPA receptor subunits GluR1, GluR2, and GluR4 in stably transfected baby hamster kidney cells. Hall RA, et al. **J Neurochem** 1997 Feb; 68(2):625-30

Stable expression of recombinant AMPA receptor subunits: binding affinities and effects of allosteric modulators. Hennegriff M, et al. **J Neurochem** 1997 Jun;68(6):2424-34

Dramatic increase of the RNA editing for glutamate receptor subunits during terminal differentiation of clonal human neurons. Lai F, et al. **J Neurochem** 1997 Jul;69(1):43-52

Global ischemia induces downregulation of Glur2 mRNA and increases AMPA receptor-mediated Ca2+ influx in hippocampal CA1 neurons of gerbil. Gorter JA, et al. **J Neurosci** 1997 Aug 15;17(16):6179-88

Combinations of AMPA receptor subunit expression in individual cortical neurons correlate with expression of specific calcium-binding proteins. Kondo M, et al. **J Neurosci** 1997 Mar 1;17(5):1570-81

AMPA receptor flip/flop mutants affecting deactivation, desensitization, and modulation by cyclothiazide, aniracetam, and thiocyanate. Partin KM, et al. **J Neurosci** 1996 Nov 1;16(21):6634-47

Single-channel properties of recombinant AMPA receptors depend on RNA editing, splice variation, and subunit composition. Swanson GT, et al. **J Neurosci** 1997 Jan 1; 17(1):58-69

Differential regulation of hippocampal AMPA and kainate receptor subunit expression by haloperidol and clozapine [see comments] Meador-Woodruff JH, et al. **Mol Psychiatry** 1996 Mar;1(1):41-53. Comment in: Mol Psychiatry 1996 Mar;1(1):16-7.

Analysis of molecular determinants in native AMPA receptors. Melcher T, et al. **Neurochem Int** 1996 Feb; 28(2):141-4

Enhanced LTP in mice deficient in the AMPA receptor GluR2. Jia Z, et al. **Neuron** 1996 Nov;17(5):945-56

Human metabotropic glutamate receptor 1: mRNA distribution, chromosome localization and functional expression of two splice variants. Stephan D, et al. **Neuropharmacology** 1996;35(12):1649-60

Sensitization to morphine induced by viral-mediated gene transfer. Carlezon WA Jr, et al. **Science** 1997 Aug 8; 277(5327):812-4

IMMUNOLOGY

Neurones projecting to the hypothalamus from the brainstem A1 catecholaminergic cell group express glutamate-R2,3 receptor immunoreactivity. Larsen PJ, et al. **Brain Res** 1995 Dec 24;705(1-2):209-15

Identification of amino acids in the glutamate receptor, GluR3, important for antibody-binding and receptor-specific activation. Carlson NG, et al. **J Biol Chem** 1997 Apr 25;272(17):11295-301

Autoantibodies to glutamate receptor subunit GluR2 in nonfamilial olivopontocerebellar degeneration. Gahring LC, et al. **Neurology** 1997 Feb;48(2):494-500

[Autoantibodies to glutamate receptor subtypes--markers of functional brain damage: their diagnostic significance for detecting paroxysmal activity and ischemia] Dambinova SA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar-Apr;47(2):439-46 (48 ref.) (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purification and biochemical characterization of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid/kainate-sensitive L-glutamate receptors of pig brain. Chang YC, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):49-57

METABOLISM

A serum factor potentiates ACh and AMPA receptor currents via differential signal transduction pathways. Nishizaki T, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):565-8

A study of the oligomeric state of the alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid-preferring glutamate receptors in the synaptic junctions of porcine brain. Wu TY, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):731-9

Immunoautoradiographic evidence for a loss of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate-preferring non-N-methyl-D-aspartate glutamate receptors within the medial temporal lobe in schizophrenia. Eastwood SL, et al. **Biol Psychiatry** 1997 Mar 15;41(6):636-43

Desensitization of AMPA receptors and AMPA-NMDA receptor interaction: an in vivo cyclic GMP microdialysis study in rat cerebellum. Fedele E, et al. **Br J Pharmacol** 1996 Mar;117(6):1133-8

Response to repetitive stimulation of AMPA receptors in patches excised from fields CA1 and CA3 of the hippocampus. Arai A, et al. **Brain Res** 1996 Apr 15; 716(1-2):202-6

Distribution of NMDA and AMPA receptors in the cerebellar cortex of rhesus macaques. Garyfallou VT, et al. **Brain Res** 1996 Apr 15;716(1-2):22-8

Sialic acid residues indirectly modulate the binding properties of AMPA-type glutamate receptors. Hoffman KB, et al. **Brain Res** 1997 Apr 11;753(2):309-14

Distribution of AMPA receptor subunits in the nucleus basalis of Meynert in aged humans: implications for selective neuronal degeneration. Ikonomovic MD, et al. **Brain Res** 1996 Apr 15;716(1-2):229-32

Distribution of AMPA-selective glutamate receptor subunits in the cat retina. Qin P, et al. **Brain Res** 1996 Feb 26; 710(1-2):303-7

Changes in [3H]AMPA and [3H]kainate binding in rat caudate-putamen and nucleus accumbens after 6-hydroxydopamine lesions of the medial forebrain bundle: an autoradiographic study. Zavitsanou K, et al. **Brain Res** 1996 Aug 26;731(1-2):132-40

GluR2 glutamate receptor subunit flip and flop isoforms are decreased in the hippocampal formation in schizophrenia: a reverse transcriptase-polymerase chain reaction (RT-PCR) study. Eastwood SL, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):92-8

Calcium- and calmodulin-dependent phosphorylation of AMPA type glutamate receptor subunits by endogenous protein kinases in the post-synaptic density. Hayashi Y, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):338-42

Expression of the AMPA-selective receptor subunits in the vestibular nuclei of the chinchilla. Popper P, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):21-30

AMPA receptor subunits expressed by single astrocytes in the juvenile mouse hippocampus. Seifert G, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1-2):286-94

Distribution of AMPA receptor subunit mRNAs in the human basal ganglia: an in situ hybridization study. Tomiyama M, et al. **Brain Res Mol Brain Res** 1997 Jun; 46(1-2):281-9

Transient expression of NMDA receptors during rearrangement of AMPA-receptor-expressing fibers in the developing inner ear. Knipper M, et al. **Cell Tissue Res** 1997 Jan;287(1):23-41

Gonadal steroids target AMPA glutamate receptor-containing neurons in the rat hypothalamus, septum and amygdala: a morphological and biochemical study. Diano S, et al. **Endocrinology** 1997 Feb;138(2):778-89

Developmental expression and self-regulation of Ca2+ entry via AMPA/KA receptors in the embryonic chick retina. Allcorn S, et al. **Eur J Neurosci** 1996 Dec;8(12):2499-510

A differential and time-dependent decrease in AMPA-type glutamate receptor subunits in spinal motoneurons after sciatic nerve injury. Kennis JH, et al. **Exp Neurol** 1997 Sep;147(1):18-27

Activation of AMPA and kainate glutamate receptors impairs the viability of oligodendrocytes in vitro. Sanchez-Gomez MV, et al. **Int J Dev Biol** 1996;Suppl 1:187S-188S

Editing of GluR2 RNA in the gerbil hippocampus after global cerebral ischemia. Rump A, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1362-5

Development of MK-801, kainate, AMPA, and muscimol binding sites and the effect of dark rearing in rat visual cortex. Gordon B, et al. **J Comp Neurol** 1997 Jun 23; 383(1):73-81

Species differences in the distribution of the glutamate receptor subunit, GluR1, in the rat and monkey entorhinal cortex. He Y, et al. **J Hirnforsch** 1997;38(1):27-33

Synthesis of chiral 1-(2'-amino-2'-carboxyethyl)-1,4-dihydro-6,7-quinoxaline-2,3-diones: alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate receptor agonists and antagonists. Sun G, et al. **J Med Chem** 1996 Oct 25;39(22):4430-8

Characterization of calpain-mediated proteolysis of GluR1 subunits of alpha-amino-3-hydroxy-5-methylisoxazole-4-propionate receptors in rat brain. Bi X, et al. **J Neurochem** 1997 Apr; 68(4):1484-94

NMDA receptor-mediated regulation of AMPA receptor properties in organotypic hippocampal slice cultures. Gellerman DM, et al. **J Neurochem** 1997 Jul;69(1):131-6

The loss of GluR2(3) immunoreactivity precedes neurofibrillary tangle formation in the entorhinal cortex and hippocampus of Alzheimer brains. Ikonomovic MD, et al. **J Neuropathol Exp Neurol** 1997 Sep;56(9):1018-27

Ca2+ ion permeability properties of (R,S) alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) receptors in isolated interneurons from the olfactory bulb of the rat. Jardemark K, et al. **J Neurophysiol** 1997 Feb;77(2):702-8

Subunit composition, kinetic, and permeation properties of AMPA receptors in single neocortical nonpyramidal cells. Angulo MC, et al. **J Neurosci** 1997 Sep 1;17(17):6685-96

Growth factor-induced transcription of GluR1 increases functional AMPA receptor density in glial progenitor cells. Chew LJ, et al. **J Neurosci** 1997 Jan 1;17(1):227-40

Functional properties of AMPA and NMDA receptors expressed in identified types of basal ganglia neurons. Götz T, et al. **J Neurosci** 1997 Jan 1;17(1):204-15

Direct measurement of AMPA receptor desensitization induced by glutamatergic synaptic transmission. Otis T, et al. **J Neurosci** 1996 Dec 1;16(23):7496-504

AMPA and NMDA glutamate receptor subunits in midbrain dopaminergic neurons in the squirrel monkey: an immunohistochemical and in situ hybridization study. Paquet M, et al. **J Neurosci** 1997 Feb 15;17(4):1377-96

AMPA-selective glutamate receptor subtype immunoreactivity in the hippocampal dentate gyrus of patients with Alzheimer disease. Evidence for hippocampal plasticity. Armstrong DM, et al. **Mol Chem Neuropathol** 1996 May-Aug;28(1-3):59-64

Non-NMDA glutamate receptor binding in canine brain after global cerebral ischemia and reperfusion. Wei H, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):37-52

GRIP: a synaptic PDZ domain-containing protein that interacts with AMPA receptors [see comments] Dong H, et al. **Nature** 1997 Mar 20;386(6622):279-84. Comment in: Nature 1997 Mar 20;386(6622):221, 223.

AMPA receptor-mediated regulation of a Gi-protein in cortical neurons. Wang Y, et al. **Nature** 1997 Oct 2; 389(6650):502-4

AMPA receptors modulate extracellular 5-hydroxytryptamine concentration and metabolism in rat striatum in vivo. Maione S, et al. **Neurochem Int** 1997 Mar; 30(3):299-304

Analysis of molecular determinants in native AMPA receptors. Melcher T, et al. **Neurochem Int** 1996 Feb; 28(2):141-4

AMPA receptors modulate dopamine release in the striatum, as measured by brain microdialysis. Sakai K, et al. **Neurochem Int** 1997 Mar;30(3):329-36

Ultraviolet radiation, thiol reagents, and solubilization enhance AMPA receptor binding affinity via a common mechanism. Hall RA, et al. **Neurochem Res** 1996 Aug; 21(8):963-8

Loss of [3H]kainate and of NMDA-displaceable [3H]glutamate binding sites in brain in thiamine deficiency: results of a quantitative autoradiographic study. Peterson C, et al. **Neurochem Res** 1995 Oct;20(10):1155-60

Glutathione is an endogenous ligand of rat brain N-methyl-D-aspartate (NMDA) and 2-amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) receptors. Varga V, et al. **Neurochem Res** 1997 Sep;22(9):1165-71

Characterisation of the interaction between guanyl nucleotides and AMPA receptors in rat brain. Dev KK, et al. **Neuropharmacology** 1996;35(11):1583-93

Distribution of Ca(2+)-permeable AMPA receptors among cultured rat cerebellar granule cells. Savidge JR, et al. **Neuroreport** 1997 May 27;8(8):1877-82

Recombinant AMPA receptors with low Ca2+ permeability increase intracellular Ca2+ in HEK 293 cells. Utz AL, et al. **Neuroreport** 1997 May 27;8(8):1975-80

Effects of heparin on the properties of solubilized and reconstituted rat brain AMPA receptors. Hall RA, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):179-83

mu-Opioid receptor-mediated reduction of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid-activated current in dorsal horn neurons. Kolaj M, et al. **Neurosci Lett** 1996 Feb 2;204(1-2):133-7

Localization of AMPA glutamate receptor subunits in subpopulations of non-pyramidal neurons in the rat basolateral amygdala. McDonald AJ. **Neurosci Lett** 1996 Apr 26;208(3):175-8

NMDA receptor-mediated calcium entry in the absence of AMPA receptor activation in rat dorsal horn neurons. Reichling DB, et al. **Neurosci Lett** 1996 Feb 2; 204(1-2):17-20

Unilateral eyeball enucleation differentially alters AMPA-, NMDA- and kainate glutamate receptor binding in the newborn rat brain. Kiyosawa M, et al. **Neurosci Res** 1996 Nov;26(3):215-24

Distinct distributions of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) receptor subunits and a related 53,000 M(R) antigen (GR53) in brain tissue. Bahr BA, et al. **Neuroscience** 1996 Oct;74(3):707-21

Glutamate receptors in the olfactory bulb synaptic circuitry: heterogeneity and synaptic localization of N-methyl-D-aspartate receptor subunit 1 and AMPA receptor subunit 1. Giustetto M, et al. **Neuroscience** 1997 Feb;76(3):787-98

RECEPTORS, AMPA

AMPA receptors in the rat and primate hippocampus: a possible absence of GluR2/3 subunits in most interneurons. Leranth C, et al. **Neuroscience** 1996 Feb;70(3):631–52

In contrast to kindled seizures, the frequency of spontaneous epilepsy in the limbic status model correlates with greater aberrant fascia dentata excitatory and inhibitory axon sprouting, and increased staining for N-methyl-D-aspartate, AMPA and GABA(A) receptors. Mathern GW, et al. **Neuroscience** 1997 Apr;77(4):1003–19

In vitro autoradiography of ionotropic glutamate receptors in hippocampus and striatum of aged Long-Evans rats: relationship to spatial learning. Nicolle MM, et al. **Neuroscience** 1996 Oct;74(3):741–56

Expression of non-N-methyl-D-aspartate glutamate receptor subunits in the olfactory epithelium. Thukral V, et al. **Neuroscience** 1997 Jul;79(2):411–24

Differential regional distribution of AMPA receptor subunit messenger RNAs in the human spinal cord as visualized by in situ hybridization. Tomiyama M, et al. **Neuroscience** 1996 Dec;75(3):901–15

An immunocytochemical study of the distribution of AMPA selective glutamate receptor subunits in the normal human motor system. Williams TL, et al. **Neuroscience** 1996 Sep; 74(1):185–98

Developmental variation of the permeability to Ca2+ of AMPA receptors in presumed hilar glial precursor cells. Backus KH, et al. **Pflugers Arch** 1995 Dec;431(2):244–52

7-Chloro-3-methyl-3,4-dihydro-2H-1,2,4-benzothiadiazine S,S-dioxide: a partial modulator of AMPA receptor desensitization devoid of neurotoxicity. Impagnatiello F, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):7053–8

Glutamate receptor-mediated toxicity in optic nerve oligodendrocytes. Matute C, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8830–5

Kainate and AMPA receptors in the rat brain in thioacetamide-induced hepatic encephalopathy. Oja SS, et al. **Proc West Pharmacol Soc** 1996;39:15–7

Acute mechanical hyperalgesia in the rat can be produced by coactivation of spinal ionotropic AMPA and metabotropic glutamate receptors, activation of phospholipase A2 and generation of cyclooxygenase products. Meller ST, et al. **Prog Brain Res** 1996;110:177–92 (69 ref.)

Regulatory phosphorylation of AMPA-type glutamate receptors by CaM-KII during long-term potentiation [see comments] Barria A, et al. **Science** 1997 Jun 27; 276(5321):2042–5. Comment in: Science 1997 Jun 27;276(5321):2001–2.

Learning mechanisms: the case for CaM-KII [see comments] Lisman J, et al. **Science** 1997 Jun 27;276(5321):2001–2. Comment in: Science 1997 Jun 27;276(5321):2042–5.

Rapid AMPA receptor desensitization in catfish cone horizontal cells. Eliasof S, et al. **Vis Neurosci** 1997 Jan-Feb; 14(1):13–8

PHYSIOLOGY

Role of NMDA and AMPA glutamatergic transmission in spinal c-fos expression after urinary tract irritation. Kakizaki H, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R990–6

Role of spinal NMDA and AMPA receptors in episodic hypertension in conscious spinal rats. Maiorov DN, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1266–74

Role of AMPA/kainate receptors in transmission of the sympathetic baroreflex in rat CVLM. Miyawaki T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R800–12

Remembrance of odors past: enhancement by central facilitation of AMPA receptors. Stäubli U, et al. **Behav Neurosci** 1996 Oct;110(5):1067–73

Dominant negative mutant of ionotropic glutamate receptor subunit GluR3: implications for the role of a cysteine residue for its channel activity and pharmacological properties. Watase K, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):385–91

A role for presynaptic AMPA receptors in the enhancement of neuronal glutamate release by kainic acid. Patel DR, et al. **Biochem Soc Trans** 1996 Aug;24(3):431S

Analytical description of the activation of multi-state receptors by continuous neurotransmitter signals at brain synapses. Uteshev VV, et al. **Biophys J** 1997 Mar; 72(3):1127–34

Time-related roles of excitatory amino acid receptors during persistent noxiously evoked responses of rat dorsal horn neurones. Chapman V, et al. **Brain Res** 1995 Dec 12; 703(1–2):45–50

Early and late components of AMPA-receptor mediated field potentials in hippocampal slices. Kolta A, et al. **Brain Res** 1996 Oct 21;737(1–2):133–45

AMPA/kainate receptors mediate sympathetic chemoreceptor reflex in the rostral ventrolateral medulla. Miyawaki T, et al. **Brain Res** 1996 Jul 8;726(1–2):64–8

Developmental changes in depolarization-mediated AMPA receptor modifications and potassium-induced long-term potentiation. Chabot C, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1–2):70–5

Distribution of AMPA-type glutamate receptor subunits in the chick visual system. Pires RS, et al. **Braz J Med Biol Res** 1997 Jan;30(1):73–7

4(R)- and 4(S)-(5-phenylpentyl)-glutamic acids attenuate excitatory postsynaptic potential on hippocampus without inhibiting postsynaptic NMDA and AMPA receptors. Tyan SH, et al. **Chin J Physiol** 1996;39(2):131–7

The GluR2 hypothesis: Ca(++)-permeable AMPA receptors in delayed neurodegeneration. Bennett MV, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:373–84 (29 ref.)

Activity-dependent decay of early LTP revealed by dual EPSP recording in hippocampal slices from young rats. Xiao MY, et al. **Eur J Neurosci** 1996 Sep;8(9):1916–23

Subthreshold receptive fields and baseline excitability of "silent" S1 callosal neurons in awake rabbits: contributions of AMPA/kainate and NMDA receptors. Swadlow HA, et al. **Exp Brain Res** 1997 Jul;115(3):403–9

Enhancement by an ampakine of memory encoding in humans. Ingvar M, et al. **Exp Neurol** 1997 Aug;146(2):553–9

AMPA/kainate receptor activation blocks K+ currents via internal Na+ increase in mouse cultured stellate astrocytes. Robert A, et al. **Glia** 1997 May;20(1):38–50

Apoptosis induced via AMPA-selective glutamate receptors in cultured murine cortical neurons. Larm JA, et al. **J Neurochem** 1997 Aug;69(2):617–22

Blocking GABA(A) inhibition reveals AMPA- and NMDA-receptor-mediated polysynaptic responses in the CA1 region of the rat hippocampus. Crépel V, et al. **J Neurophysiol** 1997 Apr;77(4):2071–82

AMPA-preferring receptors mediate excitatory synaptic inputs to retinal ganglion cells. Lukasiewicz PD, et al. **J Neurophysiol** 1997 Jan;77(1):57–64

Nitric oxide and cGMP modulate retinal glutamate receptors. McMahon DG, et al. **J Neurophysiol** 1996 Oct; 76(4):2307–15

Evidence for functional metabotropic glutamate receptors in the dorsal cochlear nucleus. Molitor SC, et al. **J Neurophysiol** 1997 Apr;77(4):1889–905

Motor neurons are selectively vulnerable to AMPA/kainate receptor-mediated injury in vitro. Carriedo SG, et al. **J Neurosci** 1996 Jul 1;16(13):4069–79

Prevention of normally occurring and deafferentation-induced neuronal death in chick brainstem auditory neurons by periodic blockade of AMPA/kainate receptors. Solum D, et al. **J Neurosci** 1997 Jun 15; 17(12):4744–51

Single-channel properties of recombinant AMPA receptors depend on RNA editing, splice variation, and subunit composition. Swanson GT, et al. **J Neurosci** 1997 Jan 1; 17(1):58–69

Phasic and long-term depression in brainstem nucleus tractus solitarius neurons: differing roles of AMPA receptor desensitization. Zhou Z, et al. **J Neurosci** 1997 Jul 15; 17(14):5349–56

A crucial role of the alpha-amino-3-hydroxy-5-methylisoxazole-4-propionic acid subtype of glutamate receptors in piriform and perirhinal cortex for the initiation and propagation of limbic motor seizures. Tortorella A, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1401–5

Possible roles of AMPA/KA receptor in cultured Müller cells. Kawasaki I, et al. **Jpn J Ophthalmol** 1996;40(2):158–66

Cortical neurones exhibiting kainate-activated Co2+ uptake are selectively vulnerable to AMPA/kainate receptor-mediated toxicity. Turetsky DM, et al. **Neurobiol Dis** 1994 Dec;1(3):101–10

Cortical neurones with Ca2+ permeable AMPA/kainate channels display distinct receptor immunoreactivity and are GABAergic. Yin Hz, et al. **Neurobiol Dis** 1994 Nov; 1(1–2):43–9

Extrasynaptic glutamate spillover in the hippocampus: dependence on temperature and the role of active glutamate uptake. Asztely F, et al. **Neuron** 1997 Feb;18(2):281–93

Submillisecond AMPA receptor-mediated signaling at a principal neuron-interneuron synapse. Geiger JR, et al. **Neuron** 1997 Jun;18(6):1009–23

LTP of AMPA and NMDA receptor-mediated signals: evidence for presynaptic expression and extrasynaptic glutamate spill-over. Kullmann DM, et al. **Neuron** 1996 Sep;17(3):461–74

Long-term potentiation of glial synaptic currents in cerebellar culture. Linden DJ. **Neuron** 1997 Jun; 18(6):983–94

Activity of 2,3-benzodiazepines at native rat and recombinant human glutamate receptors in vitro: stereospecificity and selectivity profiles. Bleakman D, et al. **Neuropharmacology** 1996;35(12):1689–702

Effect of the AMPA receptor modulator IDRA 21 on LTP in hippocampal slices. Arai A, et al. **Neuroreport** 1996 Sep 2;7(13):2211–5

Fast increases of AMPA receptor sensitivity following tetanus-induced potentiation in the CA1 region of the rat hippocampus. Fedorov NB, et al. **Neuroreport** 1997 Jan 20;8(2):411–4

Spermine blocks synaptic transmission mediated by Ca(2+)-permeable AMPA receptors. Isa T, et al. **Neuroreport** 1996 Feb 29;7(3):689–92

AMPA-selective glutamate receptor subunits and their relation to glutamate- and GABA-like immunoreactive terminals in the nucleus submedius of the rat. Hamlin L, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):149–52

Effects of pharmacologically facilitating glutamatergic transmission in the trisynaptic intrahippocampal circuit. Sirvio J, et al. **Neuroscience** 1996 Oct;74(4):1025–35

Glycine-induced long-term potentiation is associated with structural and functional modifications of alpha-amino-3-hydroxyl-5-methyl-4-isoxazolepropionic acid receptors. Musleh W, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9451–6

Distinct short-term plasticity at two excitatory synapses in the hippocampus. Salin PA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13304–9

N-methyl-D-aspartate (NMDA) and alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) glutamate-receptor antagonists have different interactions with the discriminative stimuli of abused drugs. Jackson A, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):320–7

Sensitization to morphine induced by viral-mediated gene transfer. Carlezon WA Jr, et al. **Science** 1997 Aug 8; 277(5327):812–4

Maturation of a central glutamatergic synapse. Wu G, et al. **Science** 1996 Nov 8;274(5289):972–6

Characterization of ionotropic glutamate receptor-mediated nitric oxide production in vivo in rats. Bhardwaj A, et al. **Stroke** 1997 Apr;28(4):850–6; discussion 856–7

ULTRASTRUCTURE

EM colocalization of AMPA and NMDA receptor subunits at synapses in rat cerebral cortex. Kharazia VN, et al. **Neurosci Lett** 1996 May 24;210(1):37–40

NMDA and AMPA receptors in the lateral nucleus of the amygdala are postsynaptic to auditory thalamic afferents. Farb CR, et al. **Synapse** 1997 Oct;27(2):106–21

RECEPTORS, ANDROGEN

The androgen receptor in prostate cancer. Trapman J, et al. **Pathol Res Pract** 1996 Jul;192(7):752–60 (79 ref.)

[Androgen receptor] Shimazaki J, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:553–7 (10 ref.) **(Jpn)**

ANALYSIS

Immunocytochemical demonstration of androgen receptors in Leydig cells of the bank vole (Clethrionomys glareolus, Schreber): an in vitro study. Bilińska B, et al. **Acta Histochem** 1996 Apr;98(2):157–64

Androgen receptor status of the oral sebaceous glands. Whitaker SB, et al. **Am J Dermatopathol** 1997 Aug; 19(4):415–8

Immunolocalization of androgen receptor and estrogen receptor in the developing testis and excurrent ducts of goats. Goyal HO, et al. **Anat Rec** 1997 Sep;249(1):54–62

Immunohistochemical localization of androgen receptor in mouse testicular germ cells during fetal and postnatal development. Zhou X, et al. **Anat Rec** 1996 Jul; 245(3):509–18

Effect of microwave oven heating times on androgen receptor antigen retrieval from paraffin-embedded prostatic adenocarcinoma. Magi-Galluzzi C, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2931–6

Immunolocalization of receptors for androgen and estrogen in male caprine reproductive tissues: unique distribution of estrogen receptors in efferent ductule epithelium. Goyal HO, et al. **Biol Reprod** 1997 Jan;56(1):90–101

Expression of the androgen receptor and an androgen-responsive protein, apolipoprotein D, in human breast cancer. Hall RE, et al. **Br J Cancer** 1996 Oct; 74(8):1175–80

Androgen receptor-like immunoreactivity in the Brazilian opossum brain and pituitary: distribution and effects of castration and testosterone replacement in the adult male. Iqbal J, et al. **Brain Res** 1995 Dec 12;703(1–2):1–18

Co-localization of androgen receptor and nitric oxide synthase in the ventral premammillary nucleus of the newborn rat: an immunohistochemical study. Yokosuka M, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):226–33

Sex steroid receptor expression in 'carcinoid' tumours of the breast. Birsak CA, et al. **Breast Cancer Res Treat** 1996; 40(3):243–9

Membrane receptors for estrogen, progesterone, and testosterone in the rat brain: fantasy or reality. Ramirez VD, et al. **Cell Mol Neurobiol** 1996 Apr;16(2):175–98

Steroid receptors and subfertility. Suri NK. **East Afr Med J** 1996 Jul;73(7):479–83

Immunohistochemical localization of androgen receptor (AR) in rat ovary. Słomczyńska M, et al. **Folia Histochem Cytobiol** 1997;35(2):101–2

Androgen receptor in rat Harderian and submandibular glands. Zhuang YH, et al. **Histochem J** 1996 Jul; 28(7):477–83

Location and developmental regulation of androgen receptor in primate ovary. Hillier SG, et al. **Hum Reprod** 1997 Jan; 12(1):107–11

Use of PG-21 immunocytochemistry to detect androgen receptors in the songbird brain. Smith GT, et al. **J Histochem Cytochem** 1996 Sep;44(9):1075–80

Different levels of 5alpha-reductase type I and II, aromatase, and androgen receptor in hair follicles of women and men with androgenetic alopecia. Sawaya ME, et al. **J Invest Dermatol** 1997 Sep;109(3):296–300

Localization of androgen receptor in nitric oxide synthase- and vasoactive intestinal peptide-containing neurons of the major pelvic ganglion innervating the rat penis. Schirar A, et al. **J Neuroendocrinol** 1997 Feb;9(2):141–50

Quantification of androgen receptor mRNA in tissues by competitive co-amplification of a template in reverse transcription-polymerase chain reaction. Malucelli A, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):563–8

Colocalization of neuronal nitric oxide synthase and androgen receptor immunoreactivity in the premammillary nucleus in rats. Yokosuka M, et al. **Neurosci Res** 1996 Nov; 26(3):309–14

Androgen receptor immunoreactivity and mating-induced Fos expression in forebrain and midbrain structures in the male rat. Gréco B, et al. **Neuroscience** 1996 Nov; 75(1):161–71

Elevated levels of testosterone receptors in keloid tissue: an experimental investigation. Schierle HP, et al. **Plast Reconstr Surg** 1997 Aug;100(2):390–5; discussion 396

[Immunohistochemical study of androgen receptor in adenocarcinoma of the human prostatic cancer] Yoshikawa H, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Jul; 87(7):956–63 (Eng. Abstr.) **(Jpn)**

[Sex hormone receptors in the gastric mucosa in gastric precancer and cancer] Iushkov PV. **Arkh Patol** 1997 May-Jun;59(3):24–7 (Eng. Abstr.) **(Rus)**

[Androgen receptors in the cytosol fraction of prostatic neoplasms and their clinical significance] Kushlinskiĭ NE, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):432–6 **(Rus)**

ANTAGONISTS & INHIBITORS

Androgen-receptor blockade does not impair bone mineral density in adolescent females. Bertelloni S, et al. **Calcif Tissue Int** 1997 Jul;61(1):1–5

The challenge posed by endocrine-disrupting chemicals. Ashby J, et al. **Environ Health Perspect** 1997 Feb; 105(2):164–9 (44 ref.)

Combined androgen blockade: the gold standard for metastatic prostate cancer. McLeod DG, et al. **Eur Urol** 1997;32 Suppl 3:70–7 (43 ref.)

4-Methyl-3-oxo-4-aza-5alpha-androst-1-ene-17beta-N-aryl-carboxamides: an approach to combined androgen blockade [5alpha-reductase inhibition with androgen receptor binding in vitro]. Tolman RL, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):303–9

Effects of steroid 5alpha-reductase inhibitor ONO-9302 and anti-androgen allylestrenol on the prostatic growth, and plasma and prostatic hormone levels in rats. Yasuda N, et al. **Jpn J Pharmacol** 1997 Jul;74(3):243–52

BIOSYNTHESIS

Polymerase chain reaction analysis of oestrogen and androgen receptor expression in human gingival and periodontal tissue. Parkar MH, et al. **Arch Oral Biol** 1996 Oct;41(10):979–83

Induction of apoptosis and altered nuclear/cytoplasmic distribution of the androgen receptor and prostate-specific antigen by 1alpha,25-dihydroxyvitamin D3 in androgen-responsive LNCaP cells. Hsieh T, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):539–44

Regulation of androgen receptor (AR) and prostate specific antigen (PSA) expression in the androgen-responsive human prostate LNCaP cells by ethanolic extracts of the Chinese herbal preparation, PC-SPES. Hsieh T, et al. **Biochem Mol Biol Int** 1997 Jul;42(3):535–44

Ontogeny of androgen receptor-like immunoreactivity in the reproductive tract of male Monodelphis domestica. Sonea IM, et al. **Biol Reprod** 1997 Apr;56(4):852–60

Photoperiod-induced changes in androgen receptor expression in testes and accessory sex glands of the bank vole, Clethrionomys glareolus. Tähkä KM, et al. **Biol Reprod** 1997 Apr;56(4):898–908

Regulation of androgen receptor mRNA expression in hamster facial motoneurons: differential effects of non-aromatizable and aromatizable androgens. Drengler SM, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):8–15

Expression of androgen receptor and its implication in hepatoma cells. Cho H, et al. **Cancer Lett** 1997 May 19; 115(2):135–40

Transcriptional up-regulation of the human androgen receptor by androgen in bone cells. Wiren KM, et al. **Endocrinology** 1997 Jun;138(6):2291–300

Androgen receptors in untreated and treated prostatic intraepithelial neoplasia. van der Kwast TH, et al. **Eur Urol** 1996;30(2):265–8

Second messenger up-regulation of androgen receptor gene transcription is absent in androgen insensitive human prostatic carcinoma cell lines, PC-3 and DU-145. Stubbs AP, et al. **FEBS Lett** 1996 Apr 1;383(3):237–40

Expression of epidermal growth factor and androgen receptors in ovarian cancer. Ilekis JV, et al. **Gynecol Oncol** 1997 Aug;66(2):250–4

Expression of androgen receptors in astrocytoma. Chung YG, et al. **J Korean Med Sci** 1996 Dec;11(6):517–21

Transcriptional activation and transient expression of the human androgen receptor. Gao T, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):9–20

Autoregulation of androgen receptor in rat ventral prostate: involvement of c-fos as a negative regulator. Mora GR, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):111–20

The ontogeny of the canary HVC revealed by the expression of androgen and oestrogen receptors. Gahr M, et al. **Neuroreport** 1996 Dec 20;8(1):311–5

Brain-derived neurotrophic factor regulates expression of androgen receptors in perineal motoneurons. Al-Shamma HA, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1521–6

Androgen-repressed phenotype in human prostate cancer. Zhau HY, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15152–7

CHEMISTRY

Functional role of a conformationally flexible homopurine/homopyrimidine domain of the androgen receptor gene promoter interacting with Sp1 and a pyrimidine single strand DNA-binding protein. Chen S, et al. **Mol Endocrinol** 1997 Jan;11(1):3–15

Androgen receptor-associated protein complex binds upstream of the androgen-responsive elements in the promoters of human prostate-specific antigen and kallikrein 2 genes. Sun Z, et al. **Nucleic Acids Res** 1997 Aug 15; 25(16):3318–25

DEFICIENCY

Molecular analysis of androgen resistance syndromes in Egyptian patients. Essawi M, et al. **Dis Markers** 1997 Apr; 13(2):99–105

DRUG EFFECTS

Hormonal regulation of androgen receptor messenger RNA in the medial preoptic area of the male rat. Handa RJ, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):57–67

Environmental xenobiotics may disrupt normal endocrine function by interfering with the binding of physiological ligands to steroid receptors and binding proteins. Danzo BJ. **Environ Health Perspect** 1997 Mar;105(3):294–301

Neoadjuvant therapy prior to radiotherapy for clinically localized prostate cancer. Roach M 3rd. **Eur Urol** 1997;32 Suppl 3:48–54 (34 ref.)

Androgen spares androgen-insensitive motoneurons from apoptosis in the spinal nucleus of the bulbocavernosus in rats. Freeman LM, et al. **Horm Behav** 1996 Dec; 30(4):424–33

The antigonadotropic activity of progestins (19-nortestosterone and 19-norprogesterone derivatives) is not mediated through the androgen receptor. Couzinet B, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4218–23

The effect of testosterone on androgen receptors and human penile growth. Baskin LS, et al. **J Urol** 1997 Sep;158(3 Pt 2):1113–8

Hydroxyflutamide may not always be a pure antiandrogen [letter] Yeh S, et al. **Lancet** 1997 Mar 22;349(9055):852–3

In vitro binding of 16-methylated C18 and C19 steroid derivatives to the androgen receptor. Tóth I, et al. **Pharmacol Res** 1995 Oct;32(4):217–21

Effect of sustained estradiol release in the intact male rat: correlation of estradiol serum levels with actions on body weight, serum testosterone, and peripheral androgen-dependent tissues. Brewster ME, et al. **Physiol Behav** 1997 Feb;61(2):225–9

The suppressive effects of testosterone on growth in young chickens appears to be mediated via a peripheral androgen receptor; studies of the anti-androgen ICI 176,334. Fennell MJ, et al. **Poult Sci** 1996 Jun;75(6):763–6

Evaluation of chemicals with endocrine modulating activity in a yeast-based steroid hormone receptor gene transcription assay. Gaido KW, et al. **Toxicol Appl Pharmacol** 1997 Mar;143(1):205–12

Vinclozolin and p,p'-DDE alter androgen-dependent gene expression: in vivo confirmation of an androgen receptor-mediated mechanism. Kelce WR, et al. **Toxicol Appl Pharmacol** 1997 Jan;142(1):192–200

GENETICS

Prediction of therapy-related acute myelogenous leukemia (AML) and myelodysplastic syndrome (MDS) after autologous bone marrow transplant (ABMT) for lymphoma. Legare RD, et al. **Am J Hematol** 1997 Sep; 56(1):45–51

Germ-line and somatic mosaicism in the androgen insensitivity syndrome: implications for genetic counseling [letter] Boehmer AL, et al. **Am J Hum Genet** 1997 Apr; 60(4):1003–6

Evidence for clonal origin of neoplastic neuronal and glial cells in gangliogliomas. Zhu JJ, et al. **Am J Pathol** 1997 Aug;151(2):565–71

Desmoid tumor is a clonal cellular proliferation: PCR amplification of HUMARA for analysis of patterns of X-chromosome inactivation. Lucas DR, et al. **Am J Surg Pathol** 1997 Mar;21(3):306–11

Phenotypic diversity in siblings with partial androgen insensitivity syndrome. Evans BA, et al. **Arch Dis Child** 1997 Jun;76(6):529–31 (27 ref.)

Role of transcription factors in the age-dependent regulation of the androgen receptor gene in rat liver. Supakar PC, et al. **Biol Signals** 1996 May-Jun;5(3):170–9 (37 ref.)

Skewed X-inactivation in carriers of X-linked dyskeratosis congenita. Vulliamy TJ, et al. **Blood** 1997 Sep 15; 90(6):2213–6

Androgen receptor gene amplification: a possible molecular mechanism for androgen deprivation therapy failure in prostate cancer. Koivisto P, et al. **Cancer Res** 1997 Jan 15;57(2):314–9

Polymorphic repeats in the androgen receptor gene: molecular markers of prostate cancer risk. Stanford JL, et al. **Cancer Res** 1997 Mar 15;57(6):1194–8

Androgen receptor mutations in prostate cancer. Gelmann EP. **Cancer Treat Res** 1996;87:285–302 (84 ref.)

Reduced expression and normal nucleotide sequence of androgen receptor gene coding and promoter regions in a family with partial androgen insensitivity syndrome. Choong CS, et al. **Clin Endocrinol (Oxf)** 1997 Mar; 46(3):281–8

Clinical and biochemical investigations and molecular analysis of subjects with mutations in the androgen receptor gene. Weidemann W, et al. **Clin Endocrinol (Oxf)** 1996 Dec; 45(6):733–9

A Stu I polymorphism in the human androgen receptor gene (AR). Lu J, et al. **Clin Genet** 1996 Jun;49(6):323–4

Rapid detection of a mutation hot-spot in the human androgen receptor. Malmgren H, et al. **Clin Genet** 1996 Oct;50(4):202–5

Mitotic and meiotic stability of the CAG repeat in the X-linked spinal and bulbar muscular atrophy gene. Watanabe M, et al. **Clin Genet** 1996 Sep;50(3):133–7

Molecular cytogenetics of prostate cancer. Koivisto PA. **Crit Rev Oncog** 1996;7(3–4):143–50 (67 ref.)

Age-dependent expression of the androgen receptor gene in the prostate and its implication in glandular differentiation and hyperplasia. Prins GS, et al. **Dev Genet** 1996;18(2):99–106

Molecular analysis of androgen resistance syndromes in Egyptian patients. Essawi M, et al. **Dis Markers** 1997 Apr; 13(2):99–105

Androgen receptor gene mutations in prostate cancer. Implications for disease progression and therapy. Culig Z, et al. **Drugs Aging** 1997 Jan;10(1):50–8 (69 ref.)

Androgen-induced inhibition of proliferation in human breast cancer MCF7 cells transfected with androgen receptor. Szelei J, et al. **Endocrinology** 1997 Apr;138(4):1406–12

Androgen receptor gene expression in rat granulosa cells: the role of follicle-stimulating hormone and steroid hormones. Tetsuka M, et al. **Endocrinology** 1996 Oct; 137(10):4392–7

Altered mRNA expression due to insertion or substitution of thymine at position +3 of two splice-donor sites in the androgen receptor gene. Trifiro MA, et al. **Eur J Hum Genet** 1997 Jan-Feb;5(1):50–8

Human androgen receptor expression in prostate cancer following androgen ablation. de Vere White R, et al. **Eur Urol** 1997;31(1):1–6

Androgen receptor gene amplification in a recurrent prostate cancer after monotherapy with the nonsteroidal potent antiandrogen Casodex (bicalutamide) with a subsequent favorable response to maximal androgen blockade. Palmberg C, et al. **Eur Urol** 1997;31(2):216–9

A genetic sequence change in the 3'-noncoding region of the androgen receptor gene in prostate carcinoma. Paz A, et al. **Eur Urol** 1997;31(2):209–15

Effects of axotomy and testosterone on androgen receptor mRNA expression in hamster facial motoneurons. Drengler SM, et al. **Exp Neurol** 1997 Aug;146(2):374–9

Complete androgen insensitivity syndrome: clinical and anatomopathological findings in 23 patients. Alvarez-Nava F, et al. **Genet Couns** 1997;8(1):7–12

Molecular analysis of the androgen receptor gene in Kennedy's disease. Report of two families and review of the literature. Lumbroso S, et al. **Horm Res** 1997;47(1):23–9 (44 ref.)

Abnormalities of sex differentiation. Nawata H, et al. **Horm Res** 1996;46 Suppl 1:15–9

Functional analysis of six androgen receptor mutations identified in patients with partial androgen insensitivity syndrome. Bevan CL, et al. **Hum Mol Genet** 1996 Feb; 5(2):265–73

Mutations of the androgen receptor gene in patients with complete androgen insensitivity. Jakubiczka S, et al. **Hum Mutat** 1997;9(1):57–61

Giant cell tumor of tendon sheath is a polyclonal cellular proliferation. Vogrincic GS, et al. **Hum Pathol** 1997 Jul; 28(7):815–9

Identification of an exon 3 deletion splice variant androgen receptor mRNA in human breast cancer. Zhu X, et al. **Int J Cancer** 1997 Aug 7;72(4):574–80

Identification and characterization of a novel androgen response element composed of a direct repeat. Zhou Z, et al. **J Biol Chem** 1997 Mar 28;272(13):8227–35

Androgen receptor CAG repeat lengths in prostate cancer: correlation with age of onset. Hardy DO, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4400–5

Different phenotypes in a family with androgen insensitivity caused by the same M780I point mutation in the androgen receptor gene. Rodien P, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2994–8

A novel missense mutation in the amino-terminal domain of the human androgen receptor gene in a family with partial androgen insensitivity syndrome causes reduced efficiency of protein translation. Choong CS, et al. **J Clin Invest** 1996 Sep 15;98(6):1423–31

Analysis of clonality by X chromosome inactivation in uterine cervix cancer. Ko HM, et al. **J Korean Med Sci** 1997 Aug;12(4):322–6

De novo der(X)t(X;10)(q26;q21) with features of distal trisomy 10q: case report of paternal origin identified by late replication with BrdU and the human androgen receptor assay (HAR). Garcia-Heras J, et al. **J Med Genet** 1997 Mar;34(3):242–5

Sequences in the ligand-binding domains of the human androgen and progesterone receptors which determine their distinct ligand identities. Vivat V, et al. **J Mol Endocrinol** 1997 Apr;18(2):147–60

Androgen and vitamin D receptor gene polymorphisms: the long and short of prostate cancer risk [editorial; comment] Feldman D. **J Natl Cancer Inst** 1997 Jan 15;89(2):109–11 . Comment on: J Natl Cancer Inst 1997 Jan 15;89(2):166–70.

Association of prostate cancer risk with genetic polymorphisms in vitamin D receptor and androgen receptor [see comments] Ingles SA, et al. **J Natl Cancer Inst** 1997 Jan 15;89(2):166–70. Comment in: J Natl Cancer Inst 1997 Jan 15;89(2):109–11.

Androgen receptor mRNA expression in Xenopus laevis CNS: sexual dimorphism and regulation in laryngeal motor nucleus. Pérez J, et al. **J Neurobiol** 1996 Aug;30(4):556–68

Spinal and bulbar muscular atrophy: androgen receptor dysfunction caused by a trinucleotide repeat expansion. MacLean HE, et al. **J Neurol Sci** 1996 Feb;135(2):149–57

Transcriptional activation by the androgen receptor in X-linked spinal and bulbar muscular atrophy. Nakajima H, et al. **J Neurol Sci** 1996 Oct;142(1–2):12–6

The reduction of androgen receptor mRNA in motoneurons of X-linked spinal and bulbar muscular atrophy. Nakamura M, et al. **J Neurol Sci** 1997 Sep 10;150(2):161–5

Intrahypothalamic implantation of progesterone in castrated male whiptail lizards (Cnemidophorus inornatus) elicits courtship and copulatory behavior and affects androgen receptor- and progesterone receptor-mRNA expression in the brain. Crews D, et al. **J Neurosci** 1996 Nov 15; 16(22):7347–52

Trophic effects of androgen: receptor expression and the survival of laryngeal motor neurons after axotomy. Pérez J, et al. **J Neurosci** 1996 Nov 1;16(21):6625–33

DNA analysis of the androgen receptor gene in two cases with complete androgen insensitivity syndrome. Komori S, et al. **J Obstet Gynaecol Res** 1997 Jun;23(3):277–81

Complete androgen insensitivity syndrome. Molecular characterization in two Chinese women. Ko TM, et al. **J Reprod Med** 1997 Jul;42(7):424–8

Molecular basis of androgen insensitivity. Brüggenwirth HT, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):569–75

Induction of cell-free, in vitro transcription by recombinant androgen receptor peptides. Snoek R, et al. **J Steroid Biochem Mol Biol** 1996 Nov;59(3–4):243–50

Identification of two germline point mutations in the 5'UTR of the androgen receptor gene in men with prostate cancer. Crocitto LE, et al. **J Urol** 1997 Oct;158(4):1599–601

Androgen receptor point mutations as the underlying molecular defect in 2 patients with androgen insensitivity syndrome. Radmayr C, et al. **J Urol** 1997 Oct;158(4):1553–6

Occurrence of androgen and estrogen receptor mRNAs in the harderian gland: a comparative survey. Varriale B. **Microsc Res Tech** 1996 Jun 1;34(2):97–103 (33 ref.)

Androgen and glucocorticoid regulation of androgen receptor cDNA expression. Burnstein KL, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):177–86

Trafficking of the androgen receptor in living cells with fused green fluorescent protein-androgen receptor. Georget V, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):17–26

A novel splice site mutation in the androgen receptor gene results in exon skipping and a non-functional truncated protein. Lim J, et al. **Mol Cell Endocrinol** 1997 Aug 8; 131(2):205–10

CAG-repeat expansion in androgen receptor in Kennedy's disease is not a loss of function mutation. Neuschmid-Kaspar F, et al. **Mol Cell Endocrinol** 1996 Mar 25;117(2):149–56

Functional and structural analysis of R607Q and R608K androgen receptor substitutions associated with male breast cancer. Poujol N, et al. **Mol Cell Endocrinol** 1997 Jun 20; 130(1–2):43–51

Functional analysis of the human androgen receptor promoter. Takane KK, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):83–93

Clonal X-inactivation analysis of human tumours using the human androgen receptor gene (HUMARA) polymorphism: a non-radioactive and semiquantitative strategy applicable to fresh and archival tissue. Kopp P, et al. **Mol Cell Probes** 1997 Jun;11(3):217–28

Reduced androgen receptor gene expression with first exon CAG repeat expansion. Choong CS, et al. **Mol Endocrinol** 1996 Dec;10(12):1527–35

Two androgen response elements in the androgen receptor coding region are required for cell-specific up-regulation of receptor messenger RNA. Dai JL, et al. **Mol Endocrinol** 1996 Dec;10(12):1582–94

Dehydroepiandrosterone activates mutant androgen receptors expressed in the androgen-dependent human prostate cancer xenograft CWR22 and LNCaP cells. Tan J, et al. **Mol Endocrinol** 1997 Apr;11(4):450–9

Mutant and wild-type androgen receptors exhibit cross-talk on androgen-, glucocorticoid-, and progesterone-mediated transcription [published erratum appears in Mol Endocrinol 1997 Mar;11(3):391–2] Yen PM, et al. **Mol Endocrinol** 1997 Feb;11(2):162–71

Paternal X-chromosome inactivation in human trophoblastic cells. Goto T, et al. **Mol Hum Reprod** 1997 Jan;3(1):77–80

Androgen receptor mutations in prostate cancer. Barrack ER. **Mt Sinai J Med** 1996 Oct–Nov;63(5–6):403–12 (61 ref.)

Monoclonal origin of multicentric Kaposi's sarcoma lesions [see comments] Rabkin CS, et al. **N Engl J Med** 1997 Apr 3;336(14):988–93. Comment in: N Engl J Med 1997 Aug 21;337(8):570–1; discussion 571–2. Comment in: N Engl J Med 1997 Aug 21;337(8):571–2.

Characterization of an expanded glutamine repeat androgen receptor in a neuronal cell culture system. Brooks BP, et al. **Neurobiol Dis** 1997;3(4):313–23

Effects of androgen receptor polyglutamine tract expansion on proliferation of NG108-15 cells. Nakajima H, et al. **Neurosci Lett** 1997 Jan 31;222(2):83–6

The androgen receptor gene mutations database. Gottlieb B, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):158–62

The CAG repeat within the androgen receptor gene and its relationship to prostate cancer [published erratum appears in Proc Natl Acad Sci U S A 1997 Jul 22;94(15):8272] Giovannucci E, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3320–3

Interaction of the human androgen receptor transactivation function with the general transcription factor TFIIF. McEwan IJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8485–90

Androgen independence of primary epithelial cultures of the prostate is associated with a down-regulation of androgen receptor gene expression. Grant ES, et al. **Prostate** 1996 Dec;29(6):339–49

Codon 877 mutation in the androgen receptor gene in advanced prostate cancer: relation to antiandrogen withdrawal syndrome. Suzuki H, et al. **Prostate** 1996 Sep; 29(3):153–8

Androgen receptor gene amplification: a novel molecular mechanism for endocrine therapy resistance in human prostate cancer. Koivisto P, et al. **Scand J Clin Lab Invest Suppl** 1996;226:57–63 (19 ref.)

A clinician looks at androgen resistance. Balducci R, et al. **Steroids** 1996 Apr;61(4):205–11 (66 ref.)

Molecular basis of androgen insensitivity. Brinkmann A, et al. **Steroids** 1996 Apr;61(4):172–5 (30 ref.)

Androgenic up-regulation of androgen receptor cDNA expression in androgen-independent prostate cancer cells. Dai JL, et al. **Steroids** 1996 Sep;61(9):531–9

Determination of CAG repeat length in the androgen-receptor gene using frozen serum. Sartor O, et al. **Urology** 1997 Feb;49(2):301–4

Androgen-receptor gene structure and function in prostate cancer. Hakimi JM, et al. **World J Urol** 1996;14(5):329–37 (46 ref.)

[Mutations of the androgen receptor gene a possible role in prostate cancer] Mowszowicz I, et al. **Bull Cancer** 1997 Feb;84(2):183–8 (37 ref.) (Eng. Abstr.) **(Fre)**

[Androgen receptor gene mutations in prostate cancer] Wang C, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 May; 88(5):550–6 (Eng. Abstr.) **(Jpn)**

[Androgen receptor gene structure and protein function. Gene structural defects that promote androgen resistance in men] Pino AM. **Rev Med Chil** 1996 Sep;124(9):1127–36 (32 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Selective colocalization of immunoreactivity for intracellular gonadal hormone receptors and tyrosine hydroxylase in the ventral tegmental area, substantia nigra, and retrorubral fields in the rat. Kritzer MF. **J Comp Neurol** 1997 Mar 10;379(2):247–60

Use of PG-21 immunocytochemistry to detect androgen receptors in the songbird brain. Smith GT, et al. **J Histochem Cytochem** 1996 Sep;44(9):1075–80

ISOLATION & PURIFICATION

[Immunohistochemical identification of androgen receptors in the liver of mature male rats] Kovtun IV, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):193–6 **(Rus)**

METABOLISM

X inactivation in human testicular tumors. XIST expression and androgen receptor methylation status. Looijenga LH, et al. **Am J Pathol** 1997 Aug;151(2):581–90

Functional in vivo interaction between the amino-terminal, transactivation domain and the ligand binding domain of the androgen receptor. Doesburg P, et al. **Biochemistry** 1997 Feb 4;36(5):1052–64

Expression of androgen receptors and steroidogenic enzymes in relation to follicular growth and atresia following ovulation in pigs. Garrett WM, et al. **Biol Reprod** 1996 Nov;55(5):949–55

Absence of androgen-mediated transcriptional effects in osteoblastic cells despite presence of androgen receptors. Czerwiec FS, et al. **Bone** 1997 Jul;21(1):49–56

Molecular and cellular biology of the prostate: is it clinically relevant? Habib FK, et al. **Br J Urol** 1996 Oct;78(4):546–51 (55 ref.)

Axotomy transiently down-regulates androgen receptors in motoneurons of the spinal nucleus of the bulbocavernosus. Lubischer JL, et al. **Brain Res** 1995 Oct 2;694(1–2):61–8

Hormonal regulation of androgen receptor messenger RNA in the medial preoptic area of the male rat. Handa RJ, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):57–67

Estrogen, progesterone and testosterone receptors in human fetal cartilaginous tissue: immunohistochemical studies. Ben-Hur H, et al. **Calcif Tissue Int** 1997 Jun;60(6):520–6

Down-regulation of prostate-specific antigen expression by finasteride through inhibition of complex formation between androgen receptor and steroid receptor-binding consensus in the promoter of the PSA gene in LNCaP cells. Wang LG, et al. **Cancer Res** 1997 Feb 15;57(4):714–9

Incomplete testicular feminization syndrome: studies on androgen receptor(AR) function, AR gene analysis, and aromatase activities at puberty and long-term observations of clinical and hormonal features from infancy to puberty. Isurugi K, et al. **Endocr J** 1996 Oct;43(5):557–64

Androgen receptor phosphorylation. Blok LJ, et al. **Endocr Res** 1996 Aug;22(3):197–219 (37 ref.)

Immunohistochemical analysis of androgen effects on androgen receptor expression in developing Leydig and Sertoli cells. Shan LX, et al. **Endocrinology** 1997 Mar; 138(3):1259–66

The clinical significance of androgen receptors in breast cancer and their relation to histological and cell biological parameters. Kuenen-Boumeester V, et al. **Eur J Cancer** 1996 Aug;32A(9):1560–5

Androgen receptor content in human endometrium. Mertens HJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Dec; 70(1):11–3

Functional assessment and clinical classification of androgen sensitivity in patients with mutations of the androgen receptor gene. German Collaborative Intersex Study Group. Sinnecker GH, et al. **Eur J Pediatr** 1997 Jan; 156(1):7–14

A time course study on the "in vitro" effects of T3 and testosterone on androgen and estrogen receptors in peripuberal primary rat Sertoli cells. Sisci D, et al. **Exp Clin Endocrinol Diabetes** 1997;105(4):218–24

Testosterone induces Ca2+ influx via non-genomic surface receptors in activated T cells. Benten WP, et al. **FEBS Lett** 1997 Apr 28;407(2):211–4

The presence of a transcription activation function in the hormone-binding domain of androgen receptor is revealed by studies in yeast cells. Moilanen A, et al. **FEBS Lett** 1997 Jul 28;412(2):355–8

Immunolocalization of aromatase- and androgen receptor-positive neurons in the goldfish brain. Gelinas D, et al. **Gen Comp Endocrinol** 1997 May;106(2):155–68

Physiological levels of testosterone kill salmonid leukocytes in vitro. Slater CH, et al. **Gen Comp Endocrinol** 1997 Apr; 106(1):113–9

Hyperactive androgen receptor in prostate cancer: what does it mean for new therapy concepts? Culig Z, et al. **Histol Histopathol** 1997 Jul;12(3):781–6 (55 ref.)

Immunodetection of androgen receptor in human urinary bladder cancer. Zhuang YH, et al. **Histopathology** 1997 Jun;30(6):556–62

Actions of testosterone in prepubertal and postpubertal male hamsters: dissociation of effects on reproductive behavior and brain androgen receptor immunoreactivity. Meek LR, et al. **Horm Behav** 1997 Feb;31(1):75–88

Functional analysis of six androgen receptor mutations identified in patients with partial androgen insensitivity syndrome. Bevan CL, et al. **Hum Mol Genet** 1996 Feb; 5(2):265–73

Location and developmental regulation of androgen receptor in primate ovary. Hillier SG, et al. **Hum Reprod** 1997 Jan; 12(1):107–11

The effects of spinal cord injury on the status of messenger ribonucleic acid for TRPM 2 and androgen receptor in the prostate of the rat. Huang HF, et al. **J Androl** 1997 May-Jun;18(3):250–6

Androgen receptor immunoexpression in the testes of subfertile men. Van Roijen JH, et al. **J Androl** 1995 Nov-Dec;16(6):510–6

Androgen-dependent protein interactions within an intron 1 regulatory region of the 20-kDa protein gene. Avellar MC, et al. **J Biol Chem** 1997 Jul 11;272(28):17623–31

Delineation of two distinct type 1 activation functions in the androgen receptor amino-terminal domain. Chamberlain NL, et al. **J Biol Chem** 1996 Oct 25;271(43):26772–8

Androgen and glucocorticoid receptor heterodimer formation. A possible mechanism for mutual inhibition of transcriptional activity. Chen Sy, et al. **J Biol Chem** 1997 May 30;272(22):14087–92

Hsp90 regulates androgen receptor hormone binding affinity in vivo. Fang Y, et al. **J Biol Chem** 1996 Nov 8; 271(45):28697–702

Interaction of androgen receptors with androgen response element in intact cells. Roles of amino- and carboxyl-terminal regions and the ligand. Karvonen U, et al. **J Biol Chem** 1997 Jun 20;272(25):15973–9

Estradiol activates the prostate androgen receptor and prostate-specific antigen secretion through the intermediacy of sex hormone-binding globulin. Nakhla AM, et al. **J Biol Chem** 1997 Mar 14;272(11):6838–41

Immunohistochemical localization of gonadotropin and gonadal steroid receptors in human pineal glands [see comments] Luboshitzky R, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):977–81. Comment in: J Clin Endocrinol Metab 1997 Aug;82(8):2756–7.

Neuroanatomical distribution of androgen and estrogen receptor-immunoreactive cells in the brain of the male roughskin newt. Davis GA, et al. **J Comp Neurol** 1996 Aug 19;372(2):294–308

Ontogeny of androgen receptor immunoreactivity in lumbar motoneurons and in the sexually dimorphic levator ani muscle of male rats. Jordan CL, et al. **J Comp Neurol** 1997 Mar 3;379(1):88–98

Distribution and hormonal regulation of androgen receptor immunoreactivity in the forebrain of the male European ferret. Kashon ML, et al. **J Comp Neurol** 1996 Dec 23; 376(4):567–86

Androgen receptors in prostate cancer. Bentel JM, et al. **J Endocrinol** 1996 Oct;151(1):1–11 (91 ref.)

Ontogeny of anti-müllerian hormone, 3 beta-hydroxysteroid dehydrogenase and androgen receptor expression during ovine total gonadal development. Sweeney T, et al. **J Endocrinol** 1997 Apr;153(1):27–32

Inhibition of growth and induction of TGF-beta 1 in human hepatocellular carcinoma with androgen receptor by cyproterone acetate in male nude mice. Nagasue N, et al. **J Hepatol** 1996 Oct;25(4):554–62

Sequences in the ligand-binding domains of the human androgen and progesterone receptors which determine their distinct ligand identities. Vivat V, et al. **J Mol Endocrinol** 1997 Apr;18(2):147–60

Why do African-American men suffer more prostate cancer? [news] McIntosh H. **J Natl Cancer Inst** 1997 Feb 5; 89(3):188–9

Sex differences in cytosolic androgen receptors in gonadectomized male and female rats. McGinnis MY, et al. **J Neuroendocrinol** 1996 Mar;8(3):193–7

Androgenic regulation of androgen receptor immunoreactivity in motoneurons of the spinal nucleus of the bulbocavernosus of male rats. Matsumoto A, et al. **J Neuroendocrinol** 1996 Jul;8(7):553–9

7 alpha-iodine-125-iodo-5 alpha-dihydrotestosterone: a radiolabeled ligand for the androgen receptor. Labaree DC, et al. **J Nucl Med** 1997 Mar;38(3):402–9

Wide variation in androgen receptor dysfunction in complete androgen insensitivity syndrome. Bevan CL, et al. **J Steroid Biochem Mol Biol** 1997 Apr;61(1–2):19–26

Effects of androgen on brain and pituitary androgen receptors and LH secretion of male guinea pigs. Choate JV, et al. **J Steroid Biochem Mol Biol** 1996 Nov;59(3–4):315–22

5alpha-reduction of norethisterone enhances its binding affinity for androgen receptors but diminishes its androgenic potency. Lemus AE, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):121–9

Autoregulation of androgen receptor protein and messenger RNA in rat ventral prostate is protein synthesis dependent. Mora GR, et al. **J Steroid Biochem Mol Biol** 1996 Aug; 58(5–6):539–49

Spermatogenesis in the vitamin A-deficient rat: possible interplay between retinoic acid receptors, androgen receptor and inhibin alpha-subunit. Zhuang YH, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):67–76

Molecular study of sex steroid receptor gene expression in human colon and in colorectal carcinomas. Waliszewski P, et al. **J Surg Oncol** 1997 Jan;64(1):3–11

An overview of animal toxicology studies with bicalutamide (ICI 176,334). Iswaran TJ, et al. **J Toxicol Sci** 1997 May; 22(2):75–88 (38 ref.)

Urothelial transformation into functional glandular tissue in situ by instructive mesenchymal induction. Lipschutz JH, et al. **Kidney Int** 1996 Jan;49(1):59–66

Heterogeneity in androgen receptor levels and growth response to dihydrotestosterone in sublines derived from human hepatocellular carcinoma line (KYN-1). Yu L, et al. **Liver** 1997 Feb;17(1):35–40

Heterogeneity of androgen receptor content in advanced prostate cancer. Magi-Galluzzi C, et al. **Mod Pathol** 1997 Aug;10(8):839–45

Androgen deprivation causes up-regulation of androgen receptor transcript in the rat prostate. Kumar VL, et al. **Mol Cell Biochem** 1997 Jun;171(1–2):133–8

Trafficking of the androgen receptor in living cells with fused green fluorescent protein-androgen receptor. Georget V, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):17–26

Androgen insensitivity syndrome due to new mutations in the DNA-binding domain of the androgen receptor. Imasaki K, et al. **Mol Cell Endocrinol** 1996 Jun 18; 120(1):15–24

A novel splice site mutation in the androgen receptor gene results in exon skipping and a non-functional truncated protein. Lim J, et al. **Mol Cell Endocrinol** 1997 Aug 8; 131(2):205–10

A and B forms of the androgen receptor are expressed in a variety of human tissues. Wilson CM, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):51–7

Reduced androgen receptor gene expression with first exon CAG repeat expansion. Choong CS, et al. **Mol Endocrinol** 1996 Dec;10(12):1527–35

Two androgen response elements in the androgen receptor coding region are required for cell-specific up-regulation of receptor messenger RNA. Dai JL, et al. **Mol Endocrinol** 1996 Dec;10(12):1582–94

Identification of a functional androgen-response element in the exon 1-coding sequence of the cystatin-related protein gene crp2. Devos A, et al. **Mol Endocrinol** 1997 Jul; 11(8):1033–43

Transcriptional repression of the alpha-subunit gene by androgen receptor occurs independently of DNA binding but requires the DNA-binding and ligand-binding domains of the receptor. Heckert LL, et al. **Mol Endocrinol** 1997 Sep;11(10):1497–506

Androgen receptor-immunoreactive cells in ram hypothalamus: distribution and co-localization patterns with gonadotropin-releasing hormone, somatostatin and tyrosine hydroxylase. Herbison AE, et al. **Neuroendocrinology** 1996 Feb;63(2):120–31

Quantitative estimation of estrogen and androgen receptor-immunoreactive cells in the forebrain of neonatally estrogen-deprived male rats. Bakker J, et al. **Neuroscience** 1997 Apr;77(3):911–9

Identification of two novel cis-elements in the promoter of the prostate-specific antigen gene that are required to enhance androgen receptor-mediated transactivation. Zhang J, et al. **Nucleic Acids Res** 1997 Aug 1; 25(15):3143–50

Biochemical selection of prepubertal patients with androgen insensitivity syndrome by sex hormone-binding globulin response to the human chorionic gonadotropin test. Bertelloni S, et al. **Pediatr Res** 1997 Feb;41(2):266–71

Expression of maspin in prostate cells is regulated by a positive ets element and a negative hormonal responsive element site recognized by androgen receptor. Zhang M, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5673–8

Synergistic activation of androgen receptor by androgen and luteinizing hormone-releasing hormone in prostatic carcinoma cells. Culig Z, et al. **Prostate** 1997 Jul 1; 32(2):106–14

Androgen receptor expression in prostatic dysplasia (prostatic intraepithelial neoplasia) in the human prostate: an immunohistochemical and in situ hybridization study. Leav I, et al. **Prostate** 1996 Sep;29(3):137–45

Enantioselective binding of Casodex to the androgen receptor. Mukherjee A, et al. **Xenobiotica** 1996 Feb; 26(2):117–22

[Study of androgen receptor expression and neuronal vulnerability in X-linked spinal and bulbar muscular atrophy] Matsuura T. **Hokkaido Igaku Zasshi** 1996 Nov; 71(6):785–99 (Eng. Abstr.) **(Jpn)**

[Sex steroid-binding globulin, free serum testosterone, and androgen receptors in the skin during papulo-pustulosa and conglobate forms of acne vulgaris] Kushlinskii NE, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):188–91 **(Rus)**

PHYSIOLOGY

Activation of two mutant androgen receptors from human prostatic carcinoma by adrenal androgens and metabolic derivatives of testosterone. Culig Z, et al. **Cancer Detect Prev** 1995;20(1):68–75

Androgen receptor-mediated antagonism of estrogen-dependent low density lipoprotein receptor transcription in cultured hepatocytes. Croston GE, et al. **Endocrinology** 1997 Sep;138(9):3779–86

Effects of mitogens on androgen receptor-mediated transactivation. Reinikainen P, et al. **Endocrinology** 1996 Oct;137(10):4351–7

Androgens, androgen receptors, antiandrogens and the treatment of prostate cancer. Griffiths K, et al. **Eur Urol** 1997;32 Suppl 3:24–40 (82 ref.)

Treatment of metastatic prostate cancer. Lessons from the androgen receptor. Bubley GJ, et al. **Hematol Oncol Clin North Am** 1996 Jun;10(3):713–25 (57 ref.)

Sites of androgenic regulation of cavernosal blood pressure during penile erection in the rat. Mills TM, et al. **Int J Impot Res** 1996 Mar;8(1):29–34

c-Jun can mediate androgen receptor-induced transactivation. Bubulya A, et al. **J Biol Chem** 1996 Oct 4;271(40):24583–9

Mutual transcriptional interference between RelA and androgen receptor. Palvimo JJ, et al. **J Biol Chem** 1996 Sep 27;271(39):24151–6

Androgen receptor-Ets protein interaction is a novel mechanism for steroid hormone-mediated down-modulation of matrix metalloproteinase expression. Schneikert J, et al. **J Biol Chem** 1996 Sep 27; 271(39):23907–13

Assessment of androgen receptor function in genital skin fibroblasts using a recombinant adenovirus to deliver an androgen-responsive reporter gene [published erratum appears in J Clin Endocrinol Metab 1997 Aug;82(8):2670] McPhaul MJ, et al. **J Clin Endocrinol Metab** 1997 Jun; 82(6):1944–8

Molecular biology and function of the androgen receptor in genital development. Wiener JS, et al. **J Urol** 1997 Apr; 157(4):1377–86 (121 ref.)

Activation of androgen receptor in epidermal growth factor modulation of fetal mouse sexual differentiation. Gupta C, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):89–95

Androgen-dependent cell cycle arrest and apoptotic death in PC-3 prostatic cell cultures expressing a full-length human androgen receptor. Heisler LE, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):59–73

Repression of cAMP-induced expression of the mouse P450 17 alpha-hydroxylase/C17-20 lyase gene (Cyp17) by androgens. Burgos-Trinidad M, et al. **Mol Endocrinol** 1997 Jan;11(1):87–96

Androgen-receptor gene structure and function in prostate cancer. Hakimi JM, et al. **World J Urol** 1996;14(5):329–37 (46 ref.)

RECEPTORS, ANF see **RECEPTORS, ATRIAL NATRIURETIC FACTOR**

RECEPTORS, ANGIOTENSIN

Physiologic and pharmacologic implications of AT1 versus AT2 receptors. Chung O, et al. **Blood Press Suppl** 1996; 2:47–52 (48 ref.)

Angiotensin AT1 Receptors: From Molecular Physiology to Therapeutics. Proceedings of a symposium. Melbourne, Australia, December 1995. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S57–154

[Significance of the angiotensin-II receptor AT1 in the pathogenesis of arterial hypertension and arteriosclerosis] Nickenig G, et al. **Dtsch Med Wochenschr** 1997 Aug 15; 122(33):1009–13 (21 ref.) **(Ger)**

[Molecular biology of angiotensin II receptor and clinical application of the antagonist] Hiwada K. **Nippon Naika Gakkai Zasshi** 1994 Jan 10;83(1):143–8 (15 ref.) **(Jpn)**

[Angiotensin receptor] Nakahashi T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:546–8 (12 ref.) **(Jpn)**

AGONISTS

Structure-activity relationship of the agonist-antagonist transition on the type 1 angiotensin II receptor; the search for inverse agonists. Pérodin J, et al. **Adv Exp Med Biol** 1996;396:131–43

Stimulation of angiotensin II AT1 receptors in rat median eminence increases phosphoinositide hydrolysis. Seltzer AM, et al. **Brain Res** 1995 Dec 24;705(1–2):24–30

Molecular determinants of peptide and non-peptide binding to the AT1 receptor. Karnik SS, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S58–66 (35 ref.)

Angiotensin II activates endothelial constitutive nitric oxide synthase via AT1 receptors. Saito S, et al. **Hypertens Res** 1996 Sep;19(3):201–6

Design, synthesis, and biological activities of four angiotensin II receptor ligands with gamma-turn mimetics replacing amino acid residues 3–5. Schmidt B, et al. **J Med Chem** 1997 Mar 14;40(6):903–19

Interactions between angiotensin II and delta opioid receptor subtype agonists upon water intake in rats. Yu WZ, et al. **Peptides** 1997;18(2):241–5

ANALYSIS

Angiotensin II receptor content within the subfornical organ and organum vasculosum lamina terminalis increases after experimental subarachnoid haemorrhage in rats. Açikgöz B, et al. **Acta Neurochir (Wien)** 1996;138(4):460–5

Immunohistochemical localization of ANG II AT1 receptor in adult rat kidney using a monoclonal antibody. Harrison-Bernard LM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):F170–7

Angiotensin II receptors, AT1 and AT2 in the rat epididymis. Immunocytochemical and electrophysiological studies. Leung PS, et al. **Biochim Biophys Acta** 1997 Jun 5; 1357(1):65–72

Immunocytochemical localization of muscarinic, adrenergic and AT1 receptors. Schulze W, et al. **Blood Press Suppl** 1996;3:15–8

Angiotensin II receptor expression and inhibition in the chronically hypoxic rat lung. Zhao L, et al. **Br J Pharmacol** 1996 Nov;119(6):1217–22

Intracellular staining of angiotensin receptors in the PVN and SON of the rat. Pfister J, et al. **Brain Res** 1997 Apr 18;754(1–2):307–10

AT1 angiotensin II receptor subtype in the human larynx and squamous laryngeal carcinoma. Marsigliante S, et al. **Cancer Lett** 1996 Dec 20;110(1–2):19–27

A study of angiotensin II receptors after chronic inhibition of nitric oxide synthase in the spontaneously hypertensive rat. Yang Y, et al. **Clin Exp Pharmacol Physiol** 1996 May; 23(5):441–3

Immunohistochemical analysis of AT1 receptor versus P450c17 and 3 beta HSD expression in ovine adrenals. Bird IM, et al. **Endocr Res** 1996 Nov;22(4):349–53

Angiotensin II receptors in the human adrenal gland. Breault L, et al. **Endocr Res** 1996 Nov;22(4):355–61

Pregnancy induces an increase in angiotensin II type-1 receptor expression in uterine but not systemic artery endothelium. Bird IM, et al. **Endocrinology** 1997 Jan; 138(1):490–8

Angiotensin II-receptor subtypes in human atria and evidence for alterations in patients with cardiac dysfunction [see comments] Rogg H, et al. **Eur Heart J** 1996 Jul; 17(7):1112–20. Comment in: Eur Heart J 1996 Jul;17(7):978–80.

Bovine aortic endothelial cells contain an angiotensin-(1-7) receptor. Tallant EA, et al. **Hypertension** 1997 Jan;29(1 Pt 2):388–93

Type 2 angiotensin II receptor is expressed in human myometrium and uterine leiomyoma and is down-regulated during pregnancy. Matsumoto T, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4366–72

Localization of angiotensin II receptor subtypes AT1 and AT2 in the pancreas of rodents. Leung PS, et al. **J Endocrinol** 1997 May;153(2):269–74

Immunolocalisation of angiotensin II receptors in icefish (Chionodraco hamatus) tissues. Marsigliante S, et al. **J Endocrinol** 1997 Aug;154(2):193–200

Hepatic angiotensin II nuclear receptors and transcription of growth-related factors. Eggena P, et al. **J Hypertens** 1996 Aug;14(8):961–8

Localization of the angiotensin II receptor subtypes in the human atrium. Brink M, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1789–99

Expression of angiotensin II type-I receptor and phospholipase C-linked G alpha q/11 protein in the human placenta. Petit A, et al. **J Soc Gynecol Investig** 1996 Nov-Dec;3(6):316–21

Evidence for angiotensin IV receptors in human collecting duct cells. Czekalski S, et al. **Kidney Int** 1996 Oct; 50(4):1125–31

Immunohistochemical localization of type-II (AT2) angiotensin receptors with a polyclonal antibody against a peptide from the C-terminal tail. Yiu AK, et al. **Regul Pept** 1997 May 14;70(1):15-21

ANTAGONISTS & INHIBITORS

Structure-activity relationship of the agonist-antagonist transition on the type 1 angiotensin II receptor; the search for inverse agonists. Pérodin J, et al. **Adv Exp Med Biol** 1996;396:131-43

The role of vasopressin and angiotensin II in the hemodynamic response to dynamic exercise. Symons JD, et al. **Adv Exp Med Biol** 1995;381:215-21

Rationale, background, and design of the randomized angiotensin receptor antagonist--angiotensin-converting enzyme inhibitor study (RAAS). Pitt B, et al. **Am J Cardiol** 1996 Nov 15;78(10):1129-31

Effects of angiotensin-converting enzyme inhibition and angiotensin II AT1 receptor antagonism on cardiac parameters in left ventricular hypertrophy. Zhu YC, et al. **Am J Cardiol** 1997 Aug 4;80(3A):110A-117A (65 ref.)

Effects of SC-52458, an angiotensin AT1 receptor antagonist, in the dog. McMahon EG, et al. **Am J Hypertens** 1997 Jun;10(6):671-7

The effects of angiotensin II receptor blockade with losartan on systemic blood pressure and renal and extrarenal prostaglandin synthesis in women with essential hypertension. Smith MC, et al. **Am J Hypertens** 1995 Dec; 8(12 Pt 1):1177-83

Effects of UP269-6, a new angiotensin II receptor antagonist, and captopril on the progression of rat diabetic nephropathy. Villa E, et al. **Am J Hypertens** 1997 Mar; 10(3):275-81

The renoprotective properties of angiotensin-converting enzyme inhibitors in a chronic model of membranous nephropathy are solely due to the inhibition of angiotensin II: evidence based on comparative studies with a receptor antagonist. Zoja C, et al. **Am J Kidney Dis** 1997 Feb; 29(2):254-64

In vivo angiotensin II receptor blockade and converting enzyme inhibition on canine aortic viscoelasticity. Barra JG, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H859-68

Central infusion of the AT1 receptor antagonist losartan inhibits thirst but not sodium appetite in cattle. Blair-West JR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1940-5

Effect of angiotensin II receptor blockade on proximal tubular fluid reabsorption. Leyssac PP, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R510-7

Chronic effects of ANG II antagonist in heart failure: improvement of cGMP generation from ANP. Maeda Y, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2139-45

Renal hemodynamics in rats with myocardial infarction: selective antagonism of angiotensin receptor subtypes. Mento PF, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2306-12

Pressure-independent effects of AT1-receptor antagonism on cardiovascular remodeling in aortic-banded rats. Regan CP, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2131-8

Renal resistance to ANF in salt-depleted rats is independent of sympathetic or ANG-aldosterone systems. Veress AT, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F545-50

Role of brain angiotensin II in thirst and sodium appetite of sheep. Weisinger RS, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R187-96

AT1 receptor blockade and the sympathoadrenal response to insulin-induced hypoglycemia in humans. Worck RH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):E415-21

Angiotensin II receptor antagonists: the prototype losartan. Schaefer KL, et al. **Ann Pharmacother** 1996 Jun; 30(6):625-36 (81 ref.)

Angiotensin II receptor inhibition. A new therapeutic principle. Messerli FH, et al. **Arch Intern Med** 1996 Sep 23;156(17):1957-65 (100 ref.)

Bimodal effects of angiotensin II on migration of human and rat smooth muscle cells. Direct stimulation and indirect inhibition via transforming growth factor-beta 1. Liu G, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1251-7

LDL apheresis with dextran sulfate and angiotension receptor antagonist (Losartan). Elicio N, et al. **Artif Organs** 1997 Apr;21(4):334-5

Pharmacological profile of valsartan, a non-peptide angiotensin II type 1 receptor antagonist. 4th communication: improvement of heart failure of rats with myocardial infarction by valasartan. Hayashi N, et al. **Arzneimittelforschung** 1997 May;47(5):625-9

Pharmacological profile of valsartan, a non-peptide angiotensin II type 1 receptor antagonist. 3rd communication: hemodynamic effects of valsartan in rats and dogs. Hayashi N, et al. **Arzneimittelforschung** 1997 May;47(5):620-5

General pharmacological properties of the new angiotensin II receptor antagonist (+/-)-1-(cyclohexyloxycarbonyloxy) ethyl 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl) biphenyl-4-yl] methyl]-1 H-benzimidazole-7-carboxylate. Part II: Effect on cardiovascular system and renal functions. Kito G, et al. **Arzneimittelforschung** 1996 Jul;46(7):681-6

Pharmacological profile of valsartan, a non-peptide angiotensin II type 1 receptor antagonist. 2nd communication: valsartan prevents end-organ damage in spontaneously hypertensive stroke-prone rats during 1-year treatment. Kometani M, et al. **Arzneimittelforschung** 1997 May;47(5):613-9

Pharmacological profile of valsartan, a non-peptide angiotensin II type 1 receptor antagonist. 1st communication: antihypertensive effects of valsartan in hypertensive models. Yamamoto S, et al. **Arzneimittelforschung** 1997 May;47(5):604-12

Pharmacological profile of valsartan, a non-peptide angiotensin II type 1 receptor antagonist. 5th communication: hemodynamic effects of valsartan in dog heart failure models. Yamamoto S, et al. **Arzneimittelforschung** 1997 May;47(5):630-4

Myocardial electrophysiological properties in the presence of an AT1 angiotensin II receptor antagonist. Cox MH, et al. **Basic Res Cardiol** 1997 Jun;92(3):129-38

The angiotensin-II receptor antagonist, losartan, inhibits LDL lipid peroxidation and atherosclerosis in apolipoprotein E-deficient mice. Keidar S, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):622-5

On the mechanism of the losartan-mediated inhibition of phosphatidylcholine biosynthesis in H9c2 cells. Hatch GM, et al. **Biochim Biophys Acta** 1997 Aug 16;1347(2-3):183-90

Localization of a novel non-peptide angiotensin II type 1 receptor antagonist, E4177, in rat adrenal glomerulosa. Kakiki M, et al. **Biol Pharm Bull** 1996 Oct;19(10):1357-61

3N-methylbiphenylsulfonylurea and -carbamate substituted imidazo[4,5-b]pyridines. Potent antagonists of the ANG II AT1 receptors. Heitsch H, et al. **Bioorg Med Chem** 1997 Apr;5(4):673-8

The conformation and activity relationship of benzofuran derivatives as angiotensin II receptor antagonists. Yoo SE, et al. **Bioorg Med Chem** 1997 Feb;5(2):445-59

Marked hepatotoxicity associated with losartan treatment. Nygaard B, et al. **Blood Press** 1996 May;5(3):190-1

Antihypertensive efficacy of the angiotensin II AT1-receptor antagonist losartan: results of a randomized, double-blind, placebo-controlled, parallel-group trial using 24-hour blood pressure monitoring. Ambulatory Blood Pressure Monitoring Study Group. Byyny RL. **Blood Press Suppl** 1996;2:71-7

Angiotensin II antagonism: a new avenue of hypertension management. Gavras H. **Blood Press Suppl** 1997;1:42-6 (24 ref.)

Global efficacy and tolerability of losartan, an angiotensin II subtype 1-receptor antagonist, in the treatment of hypertension. Mallion JM, et al. **Blood Press Suppl** 1996; 2:82-6 (14 ref.)

The clinical efficacy and tolerability of the angiotensin II-receptor antagonist losartan in Japanese patients with hypertension. Ogihara T, et al. **Blood Press Suppl** 1996; 2:78-81 (9 ref.)

Angiotensin II-receptor (AT1) blockade in the human forearm. Ritter JM, et al. **Blood Press Suppl** 1996;2:67-70 (31 ref.)

The diversified pharmacology of angiotensin II-receptor blockade. Timmermans PB, et al. **Blood Press Suppl** 1996; 2:53-61 (112 ref.)

Historical development of losartan (DuP 753) and angiotensin II receptor subtypes. Wong PC, et al. **Blood Press Suppl** 1996;3:11-4 (29 ref.)

Effect of the non peptide angiotensin II antagonist, GR117289C on the vasoconstrictor actions of angiotensin II in the human forearm. Lyons D, et al. **Br J Clin Pharmacol** 1997 Mar;43(3):323-6

Angiotensin II receptors involved in the enhancement of noradrenergic transmission in the caudal artery of the spontaneously hypertensive rat. Cox SL, et al. **Br J Pharmacol** 1996 Nov;119(5):965-75

Comparison of angiotensin II type 1 receptor blockade and angiotensin-converting enzyme inhibition in pregnant sheep during late gestation. Forhead AJ, et al. **Br J Pharmacol** 1996 Sep;119(2):393-401

Further investigations into the mechanism of the antihypertensive activity of the angiotensin AT1 receptor antagonist, GR138950. Hilditch A, et al. **Br J Pharmacol** 1996 Jun;118(3):711-9

Interaction of biphenylimidazole and imidazoleacrylic acid nonpeptide antagonists with valine 108 in TM III of the AT1 angiotensin receptor. Nirula V, et al. **Br J Pharmacol** 1996 Dec;119(8):1505-7

Assessment of the role of the renin-angiotensin system in cardiac contractility utilizing the renin inhibitor remikiren. van Kats JP, et al. **Br J Pharmacol** 1996 Mar;117(5):891-901

In vitro and in vivo effects of UP 269-6, a new potent orally active nonpeptide angiotensin II receptor antagonist, on vascular smooth muscle cell proliferation. Virone-Oddos A, et al. **Br J Pharmacol** 1997 Feb;120(3):488-94

Distribution of Fos-immunoreactivity in rat brain following a dipsogenic dose of captopril and effects of angiotensin receptor blockade. McKinley MJ, et al. **Brain Res** 1997 Jan 30;747(1):43-51

Lateral hypothalamic stimulation inhibits dentate granule cell LTP: direct connections. Wayner MJ, et al. **Brain Res Bull** 1997;43(1):5-15

Paraventricular nucleus administration of DuP753 or PD123319 inhibits the effects of angiotensin on water and sodium intake. do-Prado MH, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1499-502

Effects of losartan on neuroleptic-induced catalepsy in mice. Pires JG, et al. **Braz J Med Biol Res** 1996 Aug;29(8):1045-7

Effect of a non-peptide angiotensin receptor antagonist on water intake caused by centrally administered carbachol in the rat. Reis LC, et al. **Braz J Med Biol Res** 1996 Feb; 29(2):245-7

Effect of angiotensin receptor blockade in the rabbit aorta: influence of the endothelium. le Tran Y, et al. **Can J Physiol Pharmacol** 1996 Dec;74(12):1277-86

What can angiotensin antagonists do that converting-enzyme inhibition can't: the case of post-angioplastic restenosis. Pham D, et al. **Can J Physiol Pharmacol** 1996 Jul; 74(7):867-77

Pharmacodynamic, pharmacokinetic and clinical profile of the first orally active angiotensin II receptor antagonist. Reid JL. **Cardiologia** 1995 Dec;40(12 Suppl 1):187

Losartan and reversible psychosis [letter] Ahmad S. **Cardiology** 1996 Nov-Dec;87(6):569-70

Pathologic consequences of increased angiotensin II activity. Ferrario CM, et al. **Cardiovasc Drugs Ther** 1996 Nov; 10(5):511-8 (100 ref.)

Renin inhibitors: cardiovascular drugs of the future? Wood JM, et al. **Cardiovasc Drugs Ther** 1996 Jul;10(3):309-12 (31 ref.)

Effects of losartan on vasoconstrictor responses to angiotensin II in the forearm vascular bed of healthy volunteers. Baan J Jr, et al. **Cardiovasc Res** 1996 Nov; 32(5):973-9

Haemodynamic and endocrine effects of type 1 angiotensin II receptor blockade in patients with hypoxaemic cor pulmonale. Kiely DG, et al. **Cardiovasc Res** 1997 Jan; 33(1):201-8

Use of pulsed-wave Doppler echocardiography to measure changes in MPAP. Is further validation required? [letter; comment] Morrell NW. **Chest** 1997 May;111(5):1469-70. Comment on: Chest 1996 Sep;110(3):584-5. Comment on: Chest 1996 Sep;110(3):698-703.

Combined inhibition of endothelin and angiotensin II receptors blocks volume load-induced cardiac hormone release. Leskinen H, et al. **Circ Res** 1997 Jan;80(1):114-23

Opposite effects of angiotensin AT1 and AT2 receptor antagonists on recovery of mechanical function after ischemia-reperfusion in isolated working rat hearts. Ford WR, et al. **Circulation** 1996 Dec 15;94(12):3087-9

Angiotensin AT1 receptor inhibition. Effects on hypertrophic remodeling and ACE expression in rats with pressure-overload hypertrophy due to ascending aortic stenosis. Weinberg EO, et al. **Circulation** 1997 Mar 18; 95(6):1592-600

Differential effects of kinins on cardiomyocyte hypertrophy and interstitial collagen matrix in the surviving myocardium after myocardial infarction in the rat. Wollert KC, et al. **Circulation** 1997 Apr 1;95(7):1910-7

Angiotensin-II-receptors: new targets for antihypertensive therapy. Oliverio MI, et al. **Clin Cardiol** 1997 Jan;20(1):3-6 (19 ref.)

Nonpeptide angiotensin II receptor antagonists: in vivo inhibition of [125I-Sar1,Ile8]angiotensin II binding by losartan, EXP597 and L-159,282 in rats. Wong PC, et al. **Clin Exp Hypertens** 1996 Feb;18(2):189-200

Remodelling of resistance arteries in genetically hypertensive rats by treatment with valsartan, an angiotensin II receptor antagonist. Ledingham JM, et al. **Clin Exp Pharmacol Physiol** 1996 Jun-Jul;23(6-7):576-8

Angiotensin receptors and development: the kidney. Alcorn D, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S88-92 (55 ref.)

Transgenic rats: tools to study the function of the renin-angiotensin system. Bader M, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S81-7 (80 ref.)

Endogenous angiotensin II levels and the mechanism of action of angiotensin-converting enzyme inhibitors and angiotensin receptor type 1 antagonists. Campbell DJ. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S125-31 (68 ref.)

Human type-1 angiotensin II (AT1) receptor gene structure and function. Curnow KM. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S67-73 (40 ref.)

Functions of angiotensin peptides in the rostral ventrolateral medulla. Dampney RA, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S105-11 (65 ref.)

Role of nitric oxide in impaired coronary circulation and improvement by angiotensin II receptor antagonist in spontaneously hypertensive rats. Fujita H, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S148-50

Angiotensin II and the adrenal. Giacchetti G, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S119-24 (49 ref.)

Role of AT1 receptors in the central control of sympathetic vasomotor function. Head GA. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S93-8

Effect of an angiotensin II receptor antagonist, TCV-116, on neointimal formation following balloon injury in the SHR carotid artery. Kino H, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S360-2

Physiological actions of angiotensin II mediated by AT1 and AT2 receptors in the brain. McKinley MJ, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S99-104 (69 ref.)

Effect of chronic treatment with ME3221 on blood pressure and mortality in aged stroke-prone spontaneously hypertensive rats. Nagura J, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S363-5

Molecular mechanisms of angiotensin II (AT1A) receptor endocytosis. Thomas WG, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S74-80 (60 ref.)

Presence of angiotensin II AT2 receptor binding sites in the adventitia of human kidney vasculature. Zhuo J, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S147-54

Valsartan, a new angiotensin II antagonist for the treatment

of essential hypertension: a comparative study of the efficacy and safety against amlodipine. Corea L, et al. **Clin Pharmacol Ther** 1996 Sep;60(3):341–6

DuP 532, an angiotensin II receptor antagonist: first administration and comparison with losartan. Goldberg MR, et al. **Clin Pharmacol Ther** 1997 Jan;61(1):59–69

The angiotensin II type 1 receptor blocker losartan in clinical practice: a review. Gavras HP, et al. **Clin Ther** 1996 Nov–Dec;18(6):1058–67; discussion 1057 (10 ref.)

Losartan (Cozaar). Baldinger S. **Conn Med** 1996 May; 60(5):281–4

A risk–benefit assessment of losartan potassium in the treatment of hypertension. Burrell LM. **Drug Saf** 1997 Jan; 16(1):56–65 (33 ref.)

Angiotensin II receptor antagonists. Potential in elderly patients with cardiovascular disease. Burrell LM, et al. **Drugs Aging** 1997 Jun;10(6):421–34 (65 ref.)

Angiotensin–responsive adrenal glomerulosa cell proteins: characterization by protease mapping, species comparison, and specific angiotensin receptor antagonists. Elliott ME, et al. **Endocrinology** 1997 Jun;138(6):2530–6

Combined heart failure treatment with ACE inhibition and AT1–receptor blockade [letter] Willenheimer R, et al. **Eur Heart J** 1996 Nov;17(11):1768–9

Absolute bioavailability and pharmacokinetics of valsartan, an angiotensin II receptor antagonist, in man. Flesch G, et al. **Eur J Clin Pharmacol** 1997;52(2):115–20

A new angiotensin–II– receptor blocker, CGP 48933: local tolerance and effect on intraocular pressure. A pilot study. Kaiser HJ, et al. **Eur J Ophthalmol** 1997 Jan–Mar;7(1):35–9

Gastric acid secretion after blockade of angiotensin AT1 receptors in the Na(+)–depleted rat. Chow L, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):309–17

Blockade of angiotensin converting enzyme but not of angiotensin AT1 receptors improves glucose tolerance. Chow L, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):77–83

In vitro pharmacological characterization of a new selective angiotensin AT1 receptor antagonist, UR–7280. De Arriba AF, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):341–7

Candesartan (CV–11974) dissociates slowly from the angiotensin AT1 receptor. Ojima M, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):137–46

Receptor subtypes mediating spinal cardiovascular effects of angiotensin II in rat using losartan and PD 123319. Park PD, et al. **Eur J Pharmacol** 1997 May 20;326(2–3):139–45

Functional evidence for the ability of angiotensin AT1 receptor antagonists to cross the blood–brain barrier in rats. Polidori C, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):259–67

Renal effects of angiotensin II receptor blockade and angiotensin–converting enzyme inhibition in healthy subjects. Burnier M, et al. **Exp Nephrol** 1996;4 Suppl 1:41–6 (41 ref.)

Selective antagonism of the AT1 receptor inhibits the effect of angiotensin II on DNA and protein synthesis of rat proximal tubular cells. Weerackody RP, et al. **Exp Nephrol** 1997 May–Jun;5(3):253–62

From converting enzyme inhibition to angiotensin II receptor blockade: new insight on angiotensin II receptor subtypes in the kidney. Wolf G, et al. **Exp Nephrol** 1996;4 Suppl 1:8–19 (133 ref.)

Changes in the maternal and fetal renin–angiotensin systems in response to angiotensin II type 1 receptor blockade and angiotensin–converting enzyme inhibition in pregnant sheep during late gestation. Forhead AJ, et al. **Exp Physiol** 1997 Jul;82(4):761–76

Nonpeptide angiotensin II receptor antagonists: synthesis and biological activity of 1H–imidazo and 1H–[1,2,3]–triazolo fused derivatives. Delgado F, et al. **Farmaco** 1997 Mar; 52(3):147–55

Identification of nonconserved amino acids in the AT1 receptor which comprise a general binding site for biphenylimidazole antagonists. Nirula V, et al. **FEBS Lett** 1996 Oct 7;394(3):361–4

Characterization of the high sensitivity of rabbits to the effects of TCV–116, an angiotensin II receptor antagonist. Sato K, et al. **Fundam Appl Toxicol** 1997 Jan;35(1):49–54

Effects of SC–52458, a new nonpeptide angiotensin II receptor antagonist, on increase in cytoplasmic Ca2+ concentrations and contraction induced by angiotensin II and K(+)–depolarization in guinea–pig taenia coli. Usune S, et al. **Gen Pharmacol** 1996 Oct;27(7):1179–85

The effect of angiotensin II receptor antagonists on diethylstilbestrol–induced vascular changes in the rat anterior pituitary gland: a quantitative evaluation. Pawlikowski M, et al. **Histol Histopathol** 1996 Oct; 11(4):909–13

Effects of angiotensin AT1 receptor antagonist on volume overload–induced cardiac gene expression in rats. Kim S, et al. **Hypertens Res** 1997 Jun;20(2):133–42

Cardiac and vascular effects of long–term losartan treatment in stroke–prone spontaneously hypertensive rats. Gohlke P, et al. **Hypertension** 1996 Sep;28(3):397–402

Heme oxygenase–1 is regulated by angiotensin II in rat vascular smooth muscle cells. Ishizaka N, et al. **Hypertension** 1997 Mar;29(3):790–5

Improvement in baroreflex function by an oral angiotensin receptor antagonist in rats with myocardial infarction. Nishizawa M, et al. **Hypertension** 1997 Jan;29(1 Pt 2):458–63

Enalapril and losartan reduced cardiac mass and improved coronary hemodynamics in SHR. Nunez E, et al. **Hypertension** 1997 Jan;29(1 Pt 2):519–24

Nerve–mediated antidiuresis and antinatriuresis after air–jet stress is modulated by angiotensin II. Veelken R, et al. **Hypertension** 1996 Nov;28(5):825–32

Sodium intake, angiotensin II receptor blockade, and baroreflex function in conscious rats. Xu L, et al. **Hypertension** 1997 Jan;29(1 Pt 2):450–7

Angiotensin–converting enzyme inhibitors, angiotensin II receptor antagonists and calcium channel blocking agents: a review of potential benefits and possible adverse reactions. Moser M. **J Am Coll Cardiol** 1997 Jun; 29(7):1414–21 (46 ref.)

Angiotensin II and calcium blockers prevent glomerular phenotypic changes in remnant kidney model. Hamaguchi A, et al. **J Am Soc Nephrol** 1996 May;7(5):687–93

Angiotensin receptor 1 blockade does not prevent physiological cardiac hypertrophy in the adult rat. Geenen DL, et al. **J Appl Physiol** 1996 Aug;81(2):816–21

Effects of the angiotensin AT1 receptor antagonist GR138950 on haemodynamic function in dogs. Hunt AA, et al. **J Auton Pharmacol** 1997 Feb;17(1):1–11

Effects of angiotensin II receptor blockade on N–terminal proatrial natriuretic factor plasma levels in chronic heart failure. Klinge R, et al. **J Card Fail** 1997 Jun;3(2):75–81

Effects of losartan on renal function in patients with essential hypertension. Fauvel JP, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):259–63

SC–52458, an orally active angiotensin II–receptor antagonist: inhibition of blood pressure response to angiotensin II challenges and pharmacokinetics in normal volunteers. Hagmann M, et al. **J Cardiovasc Pharmacol** 1997 Apr;29(4):444–50

The pharmacologic profile of 606A, a novel angiotensin II receptor antagonist. Hashimoto Y, et al. **J Cardiovasc Pharmacol** 1997 Feb;29(2):284–90

Effect of repeated administration of KT3–671, a nonpeptide AT1 receptor antagonist, on diurnal variation in blood pressure, heart rate, and locomotor activity in stroke–prone spontaneously hypertensive rats as determined by radiotelemetry. Kawashima K, et al. **J Cardiovasc Pharmacol** 1996 Mar;27(3):411–6

Effect of AT1 angiotensin–receptor blockade on structure and function of small arteries in SHR. Li JS, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):75–83

Comparative vasoconstrictor effects of angiotensin II, III, and IV in human isolated saphenous vein. Li Q, et al. **J Cardiovasc Pharmacol** 1997 Apr;29(4):451–6

Interactions of nonpeptide angiotensin II receptor antagonists at imidazoline/guanidinium receptor sites in rat forebrain. Li Z, et al. **J Cardiovasc Pharmacol** 1996 Sep;28(3):425–31

Dose–ranging study of the angiotensin II receptor antagonist irbesartan (SR 47436/BMS–186295) on blood pressure and neurohormonal effects in salt–deplete men. McIntyre M, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):101–6

Effect of captopril and losartan on blood pressure and accumulation of LDL and fibrinogen by aortic wall and other tissues in normotensive and hypertensive rats. Medina R, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):125–9

Clinical and hormonal effects of the new angiotensin II receptor antagonist LRB081. Noël B, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):252–8

Effects of angiotensin II receptor blockade during exercise: comparison of losartan and saralasin. Symons JD, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):223–31

Glibenclamide, a specific inhibitor of ATP–sensitive K+ channels, inhibits coronary vasodilation induced by angiotensin II–receptor antagonists. Tada H, et al. **J Cardiovasc Pharmacol** 1997 Sep;30(3):313–9

Autoregulation of total and zonal glomerular filtration rate in spontaneously hypertensive rats during antihypertensive therapy. Wang X, et al. **J Cardiovasc Pharmacol** 1996 Dec; 28(6):833–41

Determination of XR510, a balanced angiotensin II receptor antagonist, in dog and rat plasma by combined liquid–liquid/solid–phase extraction and high–performance liquid chromatography. Enm TA, et al. **J Chromatogr B Biomed Appl** 1996 Jan 26;675(2):273–8

Quantitation of a new potent angiotensin II receptor antagonist, TCV–116, and its metabolites in human serum and urine. Miyabayashi T, et al. **J Chromatogr B Biomed Appl** 1996 Feb 23;677(1):123–32

Determination of angiotensin II receptor antagonist (E4177) in human plasma and urine by high–performance liquid chromatography. Seki T, et al. **J Chromatogr B Biomed Appl** 1997 Jan 10;688(1):101–6

Effects of angiotensin–converting enzyme inhibitors and angiotensin II type 1 receptor antagonists in rats with heart failure. Role of kinins and angiotensin II type 2 receptors. Liu YH, et al. **J Clin Invest** 1997 Apr 15;99(8):1926–35

Effects of treatment with angiotensin–converting enzyme inhibitor (ACEI) or angiotensin II receptor antagonist (AIIRA) on renal function and glomerular injury in subtotal nephrectomized rats. Yamamoto M, et al. **J Clin Lab Anal** 1997;11(1):53–62

Angiotensin receptor antagonists--a new class of antihypertensive drug. Gibbs CR, et al. **J Clin Pharm Ther** 1996 Jun;21(3):127–30 (25 ref.)

Valsartan, a new angiotensin II receptor antagonist: a double–blind study comparing the incidence of cough with lisinopril and hydrochlorothiazide. Benz J, et al. **J Clin Pharmacol** 1997 Feb;37(2):101–7

Losartan: first of a new class of angiotensin antagonists for the management of hypertension. Carr AA, et al. **J Clin Pharmacol** 1996 Jan;36(1):3–12 (34 ref.)

Protein binding in plasma of valsartan, a new angiotensin II receptor antagonist. Colussi DM, et al. **J Clin Pharmacol** 1997 Mar;37(3):214–21

A 3D QSAR CoMFA study of non–peptide angiotensin II receptor antagonists. Belvisi L, et al. **J Comput Aided Mol Des** 1996 Dec;10(6):567–82

Angiotensin II receptor antagonists, elite drugs (or not) for patients with heart failure or hypertension? Beevers DG, et al. **J Hum Hypertens** 1997 Jun;11(6):329–30

Commentary: do angiotensin II receptor antagonists regress left ventricular hypertrophy? Lip GY. **J Hum Hypertens** 1996 Nov;10(11):725–7 (28 ref.)

A comparison of the hypotensive and hypoglycaemic actions of an angiotensin converting enzyme inhibitor, an AT1a antagonist and troglitazone. Chen S, et al. **J Hypertens** 1996 Nov;14(11):1325–30

Midwall left ventricular performance in salt–loaded Dahl rats: effect of AT1 angiotensin II inhibition. de Simone G, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1808–12

Effects of chronic losartan treatment on vascular reactivity in normotensive rats. Dowell FJ, et al. **J Hypertens** 1997 May;15(5):523–9

Long–term inhibition of the renin–angiotensin system in genetic hypertension: analysis of the impact on blood pressure and cardiovascular structural changes. Lundie MJ, et al. **J Hypertens** 1997 Apr;15(4):339–48 (104 ref.)

The effect of angiotensin II receptor antagonism with losartan on glucose metabolism and insulin sensitivity. Moan A, et al. **J Hypertens** 1996 Sep;14(9):1093–7

Effects of chronic treatment with losartan on blood pressure, endothelin–like immunoreactivity and nitric oxide in normotensive rats. Sacerdote A, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1670–3

Effects of losartan on cerebral arteries in stroke–prone spontaneously hypertensive rats. Vacher E, et al. **J Hypertens** 1996 Nov;14(11):1341–8

The effect of central amino acid neurotransmitters on the antihypertensive response to angiotensin blockade in spontaneous hypertension. Yamada K, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1624–30

Angiotensin II receptor blockade and myocardial fibrosis of the infarcted rat heart. De Carvalho Frimm C, et al. **J Lab Clin Med** 1997 Apr;129(4):439–46

Characterization of conjugated metabolites of a new angiotensin II receptor antagonist, candesartan cilexetil, in rats by liquid chromatography/electrospray tandem mass spectrometry following chemical derivatization. Kondo T, et al. **J Mass Spectrom** 1996 Aug;31(8):873–8

Synthesis and structure–activity relationship of a new series of potent AT1 selective angiotensin II receptor antagonists: 5–(biphenyl–4–ylmethyl)pyrazoles. Almansa C, et al. **J Med Chem** 1997 Feb 14;40(4):547–58

Synthesis and angiotensin II receptor antagonistic activities of benzimidazole derivatives bearing acidic heterocycles as novel tetrazole bioisosteres. Kohara Y, et al. **J Med Chem** 1996 Dec 20;39(26):5228–35

Selective blockade of AT1 angiotensin II receptors abolishes ischemic preconditioning in isolated rabbit hearts. Diaz RJ, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):129–39

Regression of hypertrophy after myocardial infarction is produced by the chronic blockade of angiotensin type 1 receptor in rats. Makino N, et al. **J Mol Cell Cardiol** 1996 Mar;28(3):507–17

An improved method for the simultaneous determination of losartan and its major metabolite, EXP3174, in human plasma and urine by high–performance liquid chromatography with fluorescence detection. Ritter MA, et al. **J Pharm Biomed Anal** 1997 Apr;15(7):1021–9

Comparative cardiovascular effects of the angiotensin II type 1 receptor antagonists ZD 7155 and losartan in the rat. Junggren IL, et al. **J Pharm Pharmacol** 1996 Aug; 48(8):829–33

Pharmacological and pharmacokinetic evaluation of EXP3312, an orally–active non–peptide angiotensin II–receptor antagonist. Wong YN, et al. **J Pharm Pharmacol** 1996 May;48(5):492–7

Prodrugs of BMS–183920: metabolism and permeability considerations. Obermeier MT, et al. **J Pharm Sci** 1996 Aug;85(8):828–33

Effects of a nonpeptide endothelin–1 ETA antagonist on neurovascular function in diabetic rats: interaction with the renin–angiotensin system. Cameron NE, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1262–8

HR 720, a novel angiotensin receptor antagonist inhibits the angiotensin II–induced trophic effects, fibronectin release and fibronectin–EIIIA+ expression in rat aortic vascular smooth muscle cells in vitro. Dunn FW, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):447–53

Losartan, a selective inhibitor of subtype AT1 receptors for angiotensin II, inhibits the binding of N–formylmethionyl–leucyl–phenylalanine to neutrophil receptors. Raiden S, et al. **J Pharmacol Exp Ther** 1997 May; 281(2):624–8

Effects of prolonged blockade of the renin angiotensin system on striated muscle microcirculation of spontaneously hypertensive rats. Scheidegger KJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1276–81

Losartan exerts antiarrhythmic activity independent of angiotensin II receptor blockade in simulated ventricular ischemia and reperfusion. Thomas GP, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1090–7

The effect of central angiotensin II receptor blockade on interleukin-1beta- and prostaglandin E-induced fevers in rats: possible involvement of brain angiotensin II receptor in fever induction. Watanabe T, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):873-81

The effect of angiotensin converting enzyme inhibition and angiotensin II receptor antagonism on obstructed rat bladder. Palmer LS, et al. **J Urol** 1997 Sep;158(3 Pt 2):1100-4

Regional hemodynamic effects of candesartan cilexetil (TCV-116), an angiotensin II AT1-receptor antagonist, in conscious spontaneously hypertensive rats. Kanagawa R, et al. **Jpn J Pharmacol** 1997 Mar;73(3):185-90

ME3221, a surmountable angiotensin AT1-receptor antagonist, prevents hypertensive complications in aged stroke-prone spontaneously hypertensive rats. Nagura J, et al. **Jpn J Pharmacol** 1996 May;71(1):39-49

Antihypertensive effect of repeatedly administered YM358, an angiotensin AT1-receptor antagonist, in stroke-prone spontaneously hypertensive rats. Yamaguchi N, et al. **Jpn J Pharmacol** 1997 Jan;73(1):83-91

Lack of a beneficial effect of PD123319, an AT2-angiotensin receptor antagonist, on the course of ablation nephropathy in the rat. Cervenka L, et al. **Kidney Blood Press Res** 1996; 19(5):241-4

Renal effects of angiotensin II receptor blockade in normotensive subjects. Burnier M, et al. **Kidney Int** 1996 Jun;49(6):1787-90 (32 ref.)

Selective antagonism of the AT1 receptor inhibits angiotensin II stimulated DNA and protein synthesis in primary cultures of human proximal tubular cells. Chatterjee PK, et al. **Kidney Int** 1997 Sep;52(3):699-705

Will angiotensin II receptor antagonists be renoprotective in humans? Ichikawa I. **Kidney Int** 1996 Aug;50(2):684-92 (53 ref.)

Pharmacokinetic-pharmacodynamic relationships of three angiotensin II receptor antagonists in normal volunteers. Burnier M, et al. **Kidney Int Suppl** 1996 Jun;55:S24-9 (20 ref.)

The angiotensin receptor antagonist, irbesartan, reduces renal injury in experimental chronic renal failure. Ziai F, et al. **Kidney Int Suppl** 1996 Dec;57:S132-6

Losartan versus captopril in elderly patients with heart failure [letter; comment] Ball SG. **Lancet** 1997 May 17; 349(9063):1474; discussion 1475. Comment on: Lancet 1997 Mar 15;349(9054):747-52.

Increased left-ventricular mass after losartan treatment [letter] Cheung B. **Lancet** 1997 Jun 14;349(9067):1743-4

Losartan versus captopril in elderly patients with heart failure [letter; comment] Fournier A, et al. **Lancet** 1997 May 17; 349(9063):1473-4; discussion 1475. Comment on: Lancet 1997 Mar 15;349(9054):747-52.

Angiotensin receptor antagonists [letter; comment] Goldsmith DJ. **Lancet** 1997 Apr 26;349(9060):1255. Comment on: Lancet 1997 Mar 1;349(9052):620.

Losartan versus captopril in elderly patients with heart failure [letter; comment] Jensen BV, et al. **Lancet** 1997 May 17; 349(9063):1473; discussion 1475. Comment on: Lancet 1997 Mar 15;349(9054):747-52.

Randomised trial of losartan versus captopril in patients over 65 with heart failure (Evaluation of Losartan in the Elderly Study, ELITE) [see comments] Pitt B, et al. **Lancet** 1997 Mar 15;349(9054):747-52. Comment in: Lancet 1997 May 17;349(9063):1473; discussion 1475. Comment in: Lancet 1997 May 17;349(9063):1473-4; discussion 1475. Comment in: Lancet 1997 May 17;349(9063):1474; discussion 1475. Comment in: ACP J Club 1997 Sep-Oct;127(2):29.

Losartan versus captopril in elderly patients with heart failure [letter; comment] Sechi LA, et al. **Lancet** 1997 May 17; 349(9063):1474; discussion 1475. Comment on: Lancet 1997 Mar 15;349(9054):747-52.

Angiotensin II, via an action at AT1 receptors, may modulate the behavioural effects of ET-1 in conscious rats. D'Amico M, et al. **Life Sci** 1996;59(22):PL355-8

Antinociceptive effects of angiotensin-converting enzyme inhibitors and an angiotensin II receptor antagonist in mice. Takai S, et al. **Life Sci** 1996;59(21):PL331-6

Reduction of cardiac hypertrophy in TGR(mREN2)27 by angiotensin II receptor blockade. Böhm M, et al. **Mol Cell Biochem** 1996 Oct-Nov;163-164:217-21

Effects of angiotensin-receptor antagonists on erythrocytosis after renal transplantation [letter] [see comments] Ducloux D, et al. **Nephrol Dial Transplant** 1996 Aug;11(8):1668. Comment in: Nephrol Dial Transplant 1997 Mar;12(3):626-7.

Treatment of post-transplant erythrocytosis by angiotensin II type I receptor antagonists [letter] Eustace JA, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2373-4

Are angiotensin II receptor blockers superior to angiotensin converting enzyme inhibitors with regard to their renoprotective effect? [editorial] Geiger H. **Nephrol Dial Transplant** 1997 Apr;12(4):640-2 (15 ref.)

ACE inhibitors, AT1 receptor blockers, and the kidney [editorial] Hollenberg NK. **Nephrol Dial Transplant** 1997 Mar;12(3):381-3

Losartan reduces albuminuria in patients with essential hypertension. An enalapril controlled 3 months study. Nielsen S, et al. **Nephrol Dial Transplant** 1997;12 Suppl 2:19-23

Effects of non-peptide angiotensin II-receptor antagonists on pentylenetetrazol kindling in mice. Georgiev VP, et al. **Neuropeptides** 1996 Oct;30(5):401-4

Effects of an angiotensin II antagonist on reperfusion arrhythmias in dogs. Matsuo K, et al. **Pacing Clin Electrophysiol** 1997 Apr;20(4 Pt 1):938-45

Nitric oxide and angiotensin II regulation of renal hemodynamics in the developing piglet. Solhaug MJ, et al. **Pediatr Res** 1996 Mar;39(3):527-33

Improved activity of a new angiotensin receptor antagonist by an injectable spray-dried polymer microsphere preparation. Lacasse FX, et al. **Pharm Res** 1997 Jul; 14(7):887-91

Effects of structural modifications on the intestinal permeability of angiotensin II receptor antagonists and the correlation of in vitro, in situ, and in vivo absorption. Ribadeneira MD, et al. **Pharm Res** 1996 Feb;13(2):227-33

Losartan influences behavioural effects of angiotensin II in rats. Kułakowska A, et al. **Pharmacol Res** 1996 Sep-Oct; 34(3-4):109-15

Nonpeptide angiotensin II receptor antagonist: pharmacokinetics and pharmacodynamics in rats of EXP3174, an active metabolite of losartan. Wong PC, et al. **Pharmacology** 1996 Jan;52(1):25-9

A new class of antihypertensive therapy: angiotensin II receptor antagonists. Ellis ML, et al. **Pharmacotherapy** 1996 Sep-Oct;16(5):849-60 (55 ref.)

The development of nonpeptide angiotensin II receptor antagonists: a success story. Höltje HD, et al. **Pharmazie** 1997 Feb;52(2):83-6 (22 ref.)

Blockade of AT1 receptors by specific antibody attenuated hypertension development in young spontaneously hypertensive rats. Zelezná B, et al. **Physiol Res** 1996; 45(6):475-7

Drug-induced antisynthetase syndrome. Thickett DR, et al. **Postgrad Med J** 1997 Mar;73(857):165-6

Effects of the selective angiotensin II receptor antagonists losartan and PD123177 in animal models of anxiety and memory. Shepherd J, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):206-18

Effects of intracerebroventricular injections of losartan or PD123319 on arterial pressure and heart rate of sodium replete and sodium deplete rats. De Luca LA Jr, et al. **Regul Pept** 1996 Oct 8;66(1-2):31-5

The effect of losartan on drinking and NaCl intake in the rat in response to hyperosmotic and hypovolaemic stimuli: effect of route of administration and strain of rat. Findlay AL. **Regul Pept** 1996 Oct 8;66(1-2):95-100

Modulation of renal glomerular angiotensin II receptors by ace inhibition and AT1 receptor antagonism. Haddad G, et al. **Regul Pept** 1997 Jan 29;68(2):111-7

Characterization of the binding properties and physiological action of divalinal-angiotensin IV, a putative AT4 receptor antagonist. Krebs LT, et al. **Regul Pept** 1996 Dec 3; 67(2):123-30

Angiotensin II receptor subtype antagonists can both stimulate and inhibit salt appetite in rats. Liénard F, et al. **Regul Pept** 1996 Oct 8;66(1-2):87-94

Centrally administered losartan inhibits the reduction in plasma renin concentration caused by intracerebroventricular hypertonic saline in Na-depleted sheep. McKinley MJ, et al. **Regul Pept** 1996 Oct 8; 66(1-2):37-40

Angioedema associated with angiotensin II receptor antagonist losartan. Sharma PK, et al. **South Med J** 1997 May;90(5):552-3

Benefit of angiotensin II receptor blockade in the treatment of posttransplant polycythemia in renal transplant recipients. Kupin W, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):207-8

Localization and disposition of a non-peptide angiotensin II type 1 receptor antagonist, and its glucuronide metabolite, in rat. Kakiki M, et al. **Xenobiotica** 1997 Jul;27(7):723-32

The medicine of the month. Losartan (Cozaar)] Scheen AJ. **Rev Med Liege** 1997 May;52(5):367-9 (8 ref.) **(Fre)**

[Irbesartan--a new AT1-receptor antagonist (AT1-blocker). Angiotensin-II-receptor antagonists: perspectives of a new therapeutic principle, Wiesbaden, 6 April 1997] **Dtsch Med Wochenschr** 1997 Sep;122(37 Suppl):1-4 **(Ger)**

[AT1 receptor antagonists in treatment of hypertension] Franz IW. **Fortschr Med** 1997 Jul 10;115(19):38-40 **(Ger)**

[What is the benefit of the new AT1 receptor antagonists?] Unger T. **Fortschr Med** 1997 Feb 28;115(6):31-3 **(Ger)**

[Angiotensin II receptor antagonists] Chung O, et al. **Internist (Berl)** 1996 May;37(5):534-8; discussion 538 (34 ref.) **(Ger)**

[Angiotensin II--receptor antagonists: a new action group for an established active principle] Pfaffendorf M. **Pharm Unserer Zeit** 1996 Jan;25(1):10-6 (15 ref.) **(Ger)**

[Inhibition of the renin-angiotensin system: ACE inhibitors and angiotensin II receptor blockers] Pichler M, et al. **Wien Med Wochenschr** 1996;146(11):228-31 (35 ref.) (Eng. Abstr.) **(Ger)**

[Pathophysiological mechanisms of the renin-angiotensin system and its pharmacologic modification by ACE inhibitors or angiotensin II (type 1) receptor blockers in cardiovascular diseases] Huber K, et al. **Z Kardiol** 1997 Apr;86(4):239-50 (124 ref.) (Eng. Abstr.) **(Ger)**

[Angiotensin-2 receptor blockade--new therapeutic approach to treatment of hypertension] Zimlichman R. **Harefuah** 1996 Jul;131(1-2):43-5 (27 ref.) **(Heb)**

[History of the pharmacologic therapy of arterial hypertension: from diuretics to angiotensin II receptor antagonists] Salvetti A, et al. **Cardiologia** 1995 Dec;40(12 Suppl 1):181-6 (30 ref.) **(Ita)**

[The first clinical experience in Italy with angiotensin II receptor antagonists: results of a multicenter study on the efficacy and tolerance in arterial hypertension] Trimarco B. **Cardiologia** 1995 Dec;40(12 Suppl 1):193-5 **(Ita)**

[The therapy of arterial hypertension: a comparison between ACE inhibitors and angiotensin-II-receptor antagonists] Rossi F, et al. **Clin Ter** 1996 Oct;147(10):475-88 (54 ref.) (Eng. Abstr.) **(Ita)**

[Molecular biology of angiotensin II receptor and clinical application of the antagonist] Hiwada K. **Nippon Naika Gakkai Zasshi** 1994 Jan 10;83(1):143-8 (15 ref.) **(Jpn)**

[Angiotensin-II receptor blockers in the treatment of arterial hypertension] Ol'binskaia LI, et al. **Eksp Klin Farmakol** 1996 Sep-Oct;59(5):76-80 **(Rus)**

[Losartan, an angiotensin II receptor blocker: a new trend in cardiovascular chemotherapy] Krasnikova TL. **Klin Med (Mosk)** 1996;74(3):17-21 (38 ref.) **(Rus)**

[Angiotensin-II receptor blockers] Metelitsa VI. **Ter Arkh** 1996;68(8):64-7 **(Rus)**

BIOSYNTHESIS

Targeting deletion of angiotensin type 1B receptor gene in the mouse. Chen X, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):F299-304

Water deprivation upregulates ANG II AT1 binding and mRNA in rat subfornical organ and anterior pituitary. Sanvitto GL, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E156-63

Resistance to mineralocorticoids in Wistar-Furth rats. Ullian ME, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1454-61

Angiotensin II type 1 receptor expression in human breast tissues. Inwang ER, et al. **Br J Cancer** 1997;75(9):1279-83

Expression of a novel angiotensin II receptor subtype in gerbil brain. de Oliveira AM, et al. **Brain Res** 1995 Dec 24;705(1-2):177-87

Cloning and expression of angiotensin II type 2 (AT2) receptors from murine neuroblastoma N1E-115 cells: evidence for AT2 receptor heterogeneity. Yee DK, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):108-16

Mechanical stretch induces enhanced expression of angiotensin II receptor subtypes in neonatal rat cardiac myocytes. Kijima K, et al. **Circ Res** 1996 Oct;79(4):887-97

Selective downregulation of the angiotensin II AT1-receptor subtype in failing human ventricular myocardium [see comments] Asano K, et al. **Circulation** 1997 Mar 4; 95(5):1193-200. Comment in: Circulation 1997 Mar 4;95(5):1104-7.

AT1 and AT2 angiotensin receptor gene expression in human heart failure. Haywood GA, et al. **Circulation** 1997 Mar 4;95(5):1201-6

Downregulation of angiotensin II receptor type 1 in heart failure. A process of adaptation or deterioration? [editorial; comment] Kurabayashi M, et al. **Circulation** 1997 Mar 4; 95(5):1104-7 (30 ref.). Comment on: Circulation 1997 Mar 4;95(5):1193-200.

Down-regulation of angiotensin II receptors in hypertrophied human myocardium. Nozawa Y, et al. **Clin Exp Pharmacol Physiol** 1996 Jun-Jul;23(6-7):514-8

Differential expression of angiotensin receptor subtypes in the myocardium: a hypothesis [editorial; comment] Dzau VJ, et al. **Eur Heart J** 1996 Jul;17(7):978-80. Comment on: Eur Heart J 1996 Jul;17(7):1112-20.

Regulation of the angiotensin AT1 receptor expression by hypercholesterolemia. Nickenig G, et al. **Eur J Med Res** 1997 Jul 28;2(7):285-9

Interferon regulatory factor-1 up-regulates angiotensin II type 2 receptor and induces apoptosis. Horiuchi M, et al. **J Biol Chem** 1997 May 2;272(18):11952-8

Differential inducibility of angiotensin II AT2 receptor between SHR and WKY vascular smooth muscle cells. Ichiki T, et al. **Kidney Int Suppl** 1996 Jun;55:S14-7

Overexpression of angiotensin AT1 receptor transgene in the mouse myocardium produces a lethal phenotype associated with myocyte hyperplasia and heart block. Hein L, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6391-6

Effect of renin-angiotensin inhibition on glomerular injuries in DOCA-salt hypertensive rats. Oishi T, et al. **Regul Pept** 1996 Apr 23;62(2-3):89-95

BLOOD

Platelet angiotensin II receptor status during pregnancy in Chinese women at high-risk of developing pregnancy-induced hypertension. Rogers MS, et al. **Gynecol Obstet Invest** 1996;42(2):88-94

CHEMISTRY

The active state of the AT1 angiotensin receptor is generated by angiotensin II induction. Noda K, et al. **Biochemistry** 1996 Dec 24;35(51):16435-42

Structure of the C-terminal fragment 300-320 of the rat angiotensin II AT1A receptor and its relevance with respect to G-protein coupling. Franzoni L, et al. **J Biol Chem** 1997 Apr 11;272(15):9734-41

A review of mutagenesis studies of angiotensin II type 1 receptor, the three-dimensional receptor model in search of the agonist and antagonist binding site and the hypothesis of a receptor activation mechanism. Inoue Y, et al. **J Hypertens** 1997 Jul;15(7):703-14 (91 ref.)

Immunological analysis of angiotensin AT2 receptors in peripheral tissues of neonatal and adult rats. Reagan LP, et al. **Regul Pept** 1996 Sep 9;65(2):159–64

CLASSIFICATION

Angiotensin receptor subtypes in the uterine artery during ovine pregnancy. Burrell JH, et al. **Eur J Pharmacol** 1997 Jul 9;330(2–3):257–67

From converting enzyme inhibition to angiotensin II receptor blockade: new insight on angiotensin II receptor subtypes in the kidney. Wolf G, et al. **Exp Nephrol** 1996;4 Suppl 1:8–19 (133 ref.)

DEFICIENCY

Angiotensin II responses in AT1A receptor-deficient mice: a role for AT1B receptors in blood pressure regulation. Oliverio MI, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F515–20

Absence of tubuloglomerular feedback responses in AT1A receptor-deficient mice. Schnermann JB, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F315–20

DRUG EFFECTS

Modulation of angiotensin II type 2 receptor mRNA in rat hypothalamus and brainstem neuronal cultures by growth factors. Huang XC, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):229–36

Effects of chronic blockade of angiotensin II receptor on the maintenance of hypertension and vascular changes in spontaneously hypertensive rats. Gillies LK, et al. **Can J Physiol Pharmacol** 1996 Sep;74(9):1061–9

Effect of angiotensin receptor blockade in the rabbit aorta: influence of the endothelium. le Tran Y, et al. **Can J Physiol Pharmacol** 1996 Dec;74(12):1277–86

Diastolic properties in canine hypertensive left ventricular hypertrophy: effects of angiotensin converting enzyme inhibition and angiotensin II type-1 receptor blockade. Hayashida W, et al. **Cardiovasc Res** 1997 Jan;33(1):54–62

The effect of valsartan on the angiotensin II pressor response in healthy normotensive male subjects. Morgan JM, et al. **Clin Pharmacol Ther** 1997 Jan;61(1):35–44

Desensitization of AT1 receptor-mediated cellular responses requires long term receptor down-regulation in bovine adrenal glomerulosa cells. Richard DE, et al. **Endocrinology** 1997 Sep;138(9):3828–35

Growth hormone regulates AT-1a angiotensin receptors in astrocytes. Wyse B, et al. **Endocrinology** 1997 Oct; 138(10):4176–80

Angiotensin II-induced renal responses in anesthetized rabbits: effects of N omega-nitro-L-arginine methyl ester and losartan. Adachi Y, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):165–71

Evidence against a role for protein kinase C in the regulation of the angiotensin II (AT1A) receptor. Thomas WG, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):119–22

Losartan reduces phenylephrine constrictor response in aortic rings from spontaneously hypertensive rats. Role of nitric oxide and angiotensin II type 2 receptors. Maeso R, et al. **Hypertension** 1996 Dec;28(6):967–72

Respiration during acute hypoxia: angiotensin- and vasopressin-receptor blocks. Overgaard CB, et al. **J Appl Physiol** 1996 Mar;80(3):810–7

Down-regulation of angiotensin AT1 receptor by progesterone in human placenta. Kalenga MK, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):998–1002

Regulation of angiotensin II receptor AT1 subtypes in renal afferent arterioles during chronic changes in sodium diet. Ruan X, et al. **J Clin Invest** 1997 Mar 1;99(5):1072–81

Regulation of [Ca++]i in human neuroblastoma (SH-SY5Y) cells expressing recombinant rat angiotensin1A receptors by angiotensin II and carbachol. McDonald RL, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1257–63

AT1 receptors mediate pressor responses induced by angiotensin II in the periaqueductal gray area of rats. D'Amico M, et al. **Life Sci** 1997;61(1):PL17–20

Stimulation of the angiotensin II type I receptor on bovine adrenal glomerulosa cells activates a temperature-sensitive internalization-recycling pathway. Richard DE, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):209–18

Dual agonistic and antagonistic property of nonpeptide angiotensin AT1 ligands: susceptibility to receptor mutations. Perlman S, et al. **Mol Pharmacol** 1997 Feb; 51(2):301–11

Angiotensin III and IV activation of the brain AT1 receptor subtype in cardiovascular function. Wright JW, et al. **Peptides** 1996;17(8):1365–71

GENETICS

Heterogeneity of rat angiotensin II AT2 receptor. Ciuffo GM, et al. **Adv Exp Med Biol** 1996;396:189–97 (31 ref.)

Molecular cloning and expression of angiotensin II type 2 receptor gene. Ichiki T, et al. **Adv Exp Med Biol** 1996; 396:145–52 (53 ref.)

Molecular cloning of the human AT2 receptor. Martin MM, et al. **Adv Exp Med Biol** 1996;396:153–65 (58 ref.)

Regulation of gene transcription of angiotensin II receptor subtypes in the heart. Matsubara H, et al. **Adv Exp Med Biol** 1996;396:23–32

Characterization of a cis-regulatory element and trans-acting protein that regulates transcription of the angiotensin II type 1a receptor gene. Murasawa S, et al. **Adv Exp Med Biol** 1996;396:1–10

Antisense oligonucleotides for in vivo studies of angiotensin receptors. Phillips MI, et al. **Adv Exp Med Biol** 1996; 396:79–92 (42 ref.)

Heterogeneity of angiotensin type 2 (AT2) receptors. Reagan LP, et al. **Adv Exp Med Biol** 1996;396:199–208 (25 ref.)

Human AT1 receptor gene regulation. Su B, et al. **Adv Exp Med Biol** 1996;396:11–21 (43 ref.)

Time course of inhibition of hypertension by antisense oligonucleotides targeted to AT1 angiotensin receptor mRNA in spontaneously hypertensive rats. Gyurko R, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):56S–62S

Regulation of ANG II-receptor subtype and its gene expression in adrenal gland. Du Y, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H440–6

Protein kinase C-dependent regulation of the human AT1 promoter in vascular smooth muscle cells. Holzmeister J, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H655–64

Expression of AT1A and AT1B angiotensin II receptor messenger RNA in forebrain of 2-wk-old rats. Jöhren O, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E104–12

Regulation of angiotensin II AT1 and AT2 receptors in neonatal ureteral obstruction. Yoo KH, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R503–9

Significance of angiotensin I-converting enzyme and angiotensin II type 1 receptor gene polymorphisms as risk factors for coronary heart disease. Nakauchi Y, et al. **Atherosclerosis** 1996 Sep 6;125(2):161–9

Myocardial angiotensin receptor type 1 gene expression in a rat model of cardiac volume overload. Bauer P, et al. **Basic Res Cardiol** 1997 Jun;92(3):139–46

Angiotensin type-1 (AT1) receptor gene expression in primarily cultured human arterial umbilical endothelial cells. Ko Y, et al. **Biochem Pharmacol** 1997 Feb 7; 53(3):417–21

Down-regulation of aortic and cardiac AT1 receptor gene expression in transgenic (mRen-2) 27 rats. Nickenig G, et al. **Br J Pharmacol** 1997 May;121(1):134–40

Comparative expression of vasopressin and angiotensin type-1 receptor mRNA in rat hypothalamic nuclei: a double in situ hybridization study. Lenkei Z, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):135–42

Angiotensin receptor type 1 mRNA in human right ventricular endomyocardial biopsies: downregulation in heart failure. Regitz-Zagrosek V, et al. **Cardiovasc Res** 1997 Jul;35(1):99–105

Upregulation of vascular angiotensin II receptor gene expression by low-density lipoprotein in vascular smooth muscle cells. Nickenig G, et al. **Circulation** 1997 Jan 21; 95(2):473–8

Mapping of angiotensin II receptor subtypes in peripheral tissues of spontaneously hypertensive rats by in vitro autoradiography. Song K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S17–9

A DNA polymorphism at the angiotensin II type 1 receptor (AT1R) locus and myocardial infarction. Berge KE, et al. **Clin Genet** 1997 Aug;52(2):71–6

Association of angiotensin II type 1 receptor gene polymorphism with essential hypertension. Wang WY, et al. **Clin Genet** 1997 Jan;51(1):31–4

Genetics of the renin-angiotensin system and renal disease: a progress report. Schmidt S, et al. **Curr Opin Nephrol Hypertens** 1997 Mar;6(2):146–51 (57 ref.)

Multiple signal transduction systems regulate angiotensin II type 1 (AT1) receptor mRNA expression in bovine adrenocortical cells. Dell GC, et al. **Endocr Res** 1996 Nov; 22(4):363–8

The role of genetic variants in angiotensin I converting enzyme, angiotensinogen and the angiotensin II type-1 receptor in the pathophysiology of heart muscle disease. Raynolds MV, et al. **Eur Heart J** 1995 Nov;16 Suppl K:23–30 (85 ref.)

Zonal expression of angiotensin II-AT1-receptor genes in rat kidneys. Schmid C, et al. **Exp Nephrol** 1996 Nov–Dec; 4(6):322–9

Molecular cloning, expression and tissue distribution of a chicken angiotensin II receptor. Kempf H, et al. **FEBS Lett** 1996 Dec 16;399(3):198–202

Association of angiotensin converting enzyme and angiotensin II type 1 receptor genotypes with left ventricular function and mass in patients with angiographically normal coronary arteries [see comments] Hamon M, et al. **Heart** 1997 Jun;77(6):502–5. Comment in: Heart 1997 Jun;77(6):489–90.

Genetic polymorphisms of the renin-angiotensin system and angiographic extent and severity of coronary artery disease: the CORGENE study. Jeunemaitre X, et al. **Hum Genet** 1997 Jan;99(1):66–73

Down-regulation by cAMP of angiotensin II type 2 receptor gene expression in PC12 cells. Murasawa S, et al. **Hypertens Res** 1996 Dec;19(4):271–9

Influence of the angiotensin II type 1 receptor gene polymorphism on the effects of perindopril and nitrendipine on arterial stiffness in hypertensive individuals. Benetos A, et al. **Hypertension** 1996 Dec;28(6):1081–4

Angiotensin II type 1 receptor A/C1166 polymorphism. Relationships with blood pressure and cardiovascular structure. Castellano M, et al. **Hypertension** 1996 Dec; 28(6):1076–80

Translational regulation of angiotensin II type 1A receptor. Role of upstream AUG triplets. Mori Y, et al. **Hypertension** 1996 Nov;28(5):810–7

Prolonged reduction of high blood pressure with an in vivo, nonpathogenic, adeno-associated viral vector delivery of AT1-R mRNA antisense. Phillips MI, et al. **Hypertension** 1997 Jan;29(1 Pt 2):374–80

Regulation of vascular type 1 angiotensin receptors by cytokines. Sasamura H, et al. **Hypertension** 1997 Jul;30(1 Pt 1):35–41

Dietary salt intake modulates angiotensin II type 1 receptor gene expression. Schmid C, et al. **Hypertension** 1997 Apr; 29(4):923–9

Tissue-specific regulation of type 1 angiotensin II receptor mRNA levels in the rat. Sechi LA, et al. **Hypertension** 1996 Sep;28(3):403–8

Distinct mechanisms of modulation of angiotensin II type I receptor gene expression in heart and aorta. Wang DH, et al. **Hypertension** 1997 May;29(5):1104–8

The angiotensin II type 1 receptor gene polymorphism is associated with coronary artery vasoconstriction. Amant C, et al. **J Am Coll Cardiol** 1997 Mar 1;29(3):486–90

Somatic mutations of the angiotensin II (AT1) receptor gene are not present in aldosterone-producing adenoma. Davies E, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):611–5

Chimeric mice carrying 'regional' targeted deletion of the angiotensin type 1A receptor gene. Evidence against the role for local angiotensin in the in vivo feedback regulation of renin synthesis in juxtaglomerular cells. Matsusaka T, et al. **J Clin Invest** 1996 Oct 15;98(8):1867–77

Distribution of angiotensin II type-2 receptor (AT2) mRNA expression in the adult rat brain. Lenkei Z, et al. **J Comp Neurol** 1996 Sep 23;373(3):322–39

A review of mutagenesis studies of angiotensin II type 1 receptor, the three-dimensional receptor model in search of the agonist and antagonist binding site and the hypothesis of a receptor activation mechanism. Inoue Y, et al. **J Hypertens** 1997 Jul;15(7):703–14 (91 ref.)

Regulation of type 1 angiotensin II receptor and its subtype gene expression in kidney by sodium loading and angiotensin II infusion. Wang DH, et al. **J Hypertens** 1996 Dec;14(12):1409–15

Developmental regulation of angiotensin type 1 and 2 receptor gene expression and heart growth. Everett AD, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):141–8

AT1 receptor gene regulation in cardiac myocytes and fibroblasts. Everett AD, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1727–36

Reduced atrial angiotensin receptor type 1 mRNA content in end-stage human heart failure: assessment by a novel quantitative PCR-ELISA technique. Bauer P, et al. **J Mol Med** 1996 Aug;74(8):447–54

Mouse angiotensin receptor genes Agtr1a and Agtr1b map to chromosomes 13 and 3. MacTaggart TE, et al. **Mamm Genome** 1997 Apr;8(4):294–5

Regulation of the gene-encoding angiotensin II receptor in vascular tissue. Wang DH, et al. **Microcirculation** 1996 Jun; 3(2):237–9 (22 ref.)

Genomic organization and polymorphism of human angiotensin II type 2 receptor: no evidence for its gene mutation in two families of human premature ovarian failure syndrome. Katsuya T, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):221–8

Angiotensin-II type 1 receptor gene polymorphism and diabetic microangiopathy. Tarnow L, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1019–23

Ontogenic expression of renal and hepatic angiotensin II receptor genes in the rat. Griffin CA, et al. **Nephron** 1997; 76(1):103–10

Uptake and efflux of intact antisense phosphorothioate deoxyoligonucleotide directed against angiotensin receptors in bovine adrenal cells. Li B, et al. **Neurochem Int** 1997 Sep;31(3):393–403

Gene expression of angiotensin II receptor subtypes in the cerebellar cortex of young rats. Jöhren O, et al. **Neuroreport** 1996 May 31;7(8):1349–52

Angiotensin II type1a receptor gene expression in the heart: AP-1 and GATA-4 participate in the response to pressure overload. Herzig TC, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7543–8

Local stress, not systemic factors, regulate gene expression of the cardiac renin-angiotensin system in vivo: a comprehensive study of all its components in the dog. Lee YA, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):11035–40

IMMUNOLOGY

Recognition of tissue- and subtype-specific modulation of angiotensin II receptors using antibodies against AT1 and AT2 receptors. Rakugi H, et al. **Hypertens Res** 1997 Mar; 20(1):51–5

Blockade of AT1 receptors by specific antibody attenuated hypertension development in young spontaneously hypertensive rats. Železná B, et al. **Physiol Res** 1996; 45(6):475–7

METABOLISM

Regulation of the hypothalmic-pituitary-adrenal axis and vasopressin secretion. Role of angiotensin II. Aguilera G, et al. **Adv Exp Med Biol** 1996;396:105–12 (29 ref.)

Characterization and regulation of angiotensin II receptors in rat adipose tissue. Angiotensin receptors in adipose tissue.

Cassis LA, et al. **Adv Exp Med Biol** 1996;396:39–47

Angiotensin receptor heterogeneity in the dorsal medulla oblongata as defined by angiotensin-(1–7). Diz DI, et al. **Adv Exp Med Biol** 1996;396:225–35 (65 ref.)

Functional aspects of angiotensin type 2 receptor. Horiuchi M. **Adv Exp Med Biol** 1996;396:217–24 (39 ref.)

Angiotensin II stimulates protein phosphatase 2A activity in cultured neuronal cells via type 2 receptors in a pertussis toxin sensitive fashion. Huang XC, et al. **Adv Exp Med Biol** 1996;396:209–15 (25 ref.)

Changes in angiotensin AT1 receptor density during hypertension in fructose-fed rats. Iyer SN, et al. **Adv Exp Med Biol** 1996;396:49–58

Molecular and functional characterization of angiotensin II AT2 receptor in neuroblastoma N1E-115 cells. Nahmias C, et al. **Adv Exp Med Biol** 1996;396:167–73 (42 ref.)

AT2 receptor expression in ovaries: a review. Nielsen AH, et al. **Adv Exp Med Biol** 1996;396:183–7 (26 ref.)

AT1-receptors and cellular actions of angiotensin II in neuronal cultures of stroke prone-spontaneously hypertensive rat brain. Raizada MK, et al. **Adv Exp Med Biol** 1996;396:71–8

Brain angiotensin II and related receptors: new developments. Saavedra JM, et al. **Adv Exp Med Biol** 1996; 396:247–52 (24 ref.)

Atypical (non-AT1, non-AT2) angiotensin receptors. Smith RD. **Adv Exp Med Biol** 1996;396:237–45 (80 ref.)

Identification of AT1 receptors on cultured astrocytes. Tallant EA, et al. **Adv Exp Med Biol** 1996;396:121–9 (42 ref.)

Characterization of the AT2 receptor on rat ovarian granulosa cells. Tanaka M, et al. **Adv Exp Med Biol** 1996; 396:175–82 (27 ref.)

Sodium induced regulation of angiotensin receptor 1A and 1B in rat kidney. Wang DH, et al. **Adv Exp Med Biol** 1996; 396:33–7

Differential regulation of renal glomerular and preglomerular vascular angiotensin II receptors. Amiri F, et al. **Am J Physiol** 1996 May;270(5 Pt 1):E810–5

Immortalized rabbit cortical collecting duct cells express AT1 angiotensin II receptors. Burns KD, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1147–57

Changes in angiotensin II receptor density and calcium handling during proliferation in SHR aortic myocytes. Côrtes SF, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2330–8

Acute depressor actions of angiotensin II in the nucleus of the solitary tract are mediated by substance P. Diz DI, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R28–34

Regulation of ANG II-receptor subtype and its gene expression in adrenal gland. Du Y, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H440–6

Hypercholesterolemia is associated with enhanced angiotensin AT1-receptor expression. Nickenig G, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2701–7

Differential expression of angiotensin II receptors during early renal morphogenesis. Norwood VF, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R662–8

Properties of AT1a and AT1b angiotensin receptors expressed in adrenocortical Y-1 cells. Tian Y, et al. **Am J Physiol** 1996 May;270(5 Pt 1):E831–9

Renin and angiotensin II receptor expression in the brains of DES-treated Syrian hamsters. Dodge AH, et al. **Anat Rec** 1997 Jul;248(3):442–6

Myocardial angiotensin II (Ang II) receptors in diabetic rats. Khatter JC, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:466–72

Development of [11C]L-159,884: a radiolabelled, nonpeptide angiotensin II antagonist that is useful for angiotensin II, AT1 receptor imaging. Hamill TG, et al. **Appl Radiat Isot** 1996 Feb;47(2):211–8

Subtype 2 and atypical angiotensin receptors in the human heart. Regitz-Zagrosek V, et al. **Basic Res Cardiol** 1996; 91 Suppl 2:73–7 (18 ref.)

Angiotensin II type 1 receptor induced signal-transduction pathways as new targets for pharmacological treatment of the renin-angiotensin system. Schorb W, et al. **Basic Res Cardiol** 1996;91 Suppl 2:91–6 (35 ref.)

Angiotensin II stimulates proliferation of primary human keratinocytes via a non-AT1, non-AT2 angiotensin receptor. Steckelings UM, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):329–33

Angiotensin II type 2 receptors mediate inhibition of mitogen-activated protein kinase cascade and functional activation of SHP-1 tyrosine phosphatase. Bedecs K, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):449–54

Lung angiotensin receptor binding characteristics during the development of monocrotaline-induced pulmonary hypertension. Cassis L, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):27–31

Receptor-mediated endocytosis of angiotensin II in rat myometrial cells. Lázári MF, et al. **Biochem Pharmacol** 1997 Aug 1;54(3):399–408

The active state of the AT1 angiotensin receptor is generated by angiotensin II induction. Noda K, et al. **Biochemistry** 1996 Dec 24;35(51):16435–42

Angiotensin II receptor type 1 on granulosa and thecal cells of rabbit preovulatory follicles. Féral C, et al. **Biochim Biophys Acta** 1996 Oct 23;1284(2):221–6

Atypical angiotensin II receptors coupled to phosphoinositide turnover/calcium signalling in catfish hepatocytes. Olivares-Reyes JA, et al. **Biochim Biophys Acta** 1997 Jun 27;1357(2):201–8

Expression of basic fibroblast growth factor, endothelial mitogenic activity, and angiotensin II type-1 receptors in the ovine placenta during the third trimester of pregnancy. Zheng J, et al. **Biol Reprod** 1997 May;56(5):1189–97

Modulation by locally produced luminal angiotensin II of proximal tubular sodium reabsorption via an AT1 receptor. Hiranyachattada S, et al. **Br J Pharmacol** 1996 Oct; 119(4):617–8

Sequential development of angiotensin receptors and angiotensin I converting enzyme during angiogenesis in the rat subcutaneous sponge granuloma. Walsh DA, et al. **Br J Pharmacol** 1997 Apr;120(7):1302–11

Upregulation of angiotensin II AT1 receptors in the mouse nucleus accumbens by chronic haloperidol treatment. Jenkins TA, et al. **Brain Res** 1997 Feb 14;748(1-2):137–42

Localization of angiotensin-converting enzyme, angiotensin II, angiotensin II receptor subtypes, and vasopressin in the mouse hypothalamus. Jöhren O, et al. **Brain Res** 1997 May 23;757(2):218–27

Localization of angiotensin IV binding sites to motor and sensory neurons in the sheep spinal cord and hindbrain. Moeller I, et al. **Brain Res** 1995 Dec 1;701(1-2):301–6

Localization of AT2 angiotensin II receptor gene expression in rat brain by in situ hybridization histochemistry. Jöhren O, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1-2):192–200

The angiotensin II subtype 2 (AT2) receptor is linked to protein kinase C but not cAMP-dependent pathways in the cardiomyocyte. Rabkin SW. **Can J Physiol Pharmacol** 1996 Feb;74(2):125–31

Modulation of membrane potential and ionic currents by the AT1 and AT2 receptors of angiotensin II. Chorvatova A, et al. **Cell Signal** 1996 Dec;8(8):525–32 (90 ref.)

Cross talk between angiotensin AT1 and alpha 1-adrenergic receptors: angiotensin II downregulates alpha 1a-adrenergic receptor subtype mRNA and density in neonatal rat cardiac myocytes. Li HT, et al. **Circ Res** 1997 Sep;81(3):396–403

Increase in angiotensin II type 1 receptor expression immediately after ischemia-reperfusion in isolated rat hearts. Yang BC, et al. **Circulation** 1997 Aug 5;96(3):922–6

AT1 receptor density changes during development of hypertension in hyperinsulinemic rats. Iyer SN, et al. **Clin Exp Hypertens** 1996 Aug;18(6):793–810

Angiotensin II receptors and renin in the porcine uterus: myometrial AT2 and endometrial AT1 receptors are down-regulated during gestation. Nielsen AH, et al. **Clin Exp Pharmacol Physiol** 1997 May;24(5):309–14

Differences in cultured cardiac fibroblast populations isolated from SHR and WKY rats. Klett CP, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S265–7

Angiotensin II receptor subtypes AT1 and AT2 are down-regulated by angiotensin II through AT1 receptor by different mechanisms. Ouali R, et al. **Endocrinology** 1997 Feb;138(2):725–33

Growth hormone regulates AT-1a angiotensin receptors in astrocytes. Wyse B, et al. **Endocrinology** 1997 Oct; 138(10):4176–80

Angiotensin receptor subtypes in the uterine artery during ovine pregnancy. Burrell JH, et al. **Eur J Pharmacol** 1997 Jul 9;330(2-3):257–67

Candesartan (CV-11974) dissociates slowly from the angiotensin AT1 receptor. Ojima M, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):137–46

The presence of angiotensin II receptors in elasmobranchs. Tierney M, et al. **Gen Comp Endocrinol** 1997 Jan; 105(1):9–17

Stimulation of angiotensin subtype 2 receptor reduces basal cGMP levels in the neointima of rat aorta after balloon injury. Moroi M, et al. **Gen Pharmacol** 1997 Jan;28(1):113–7

Renal immunocytochemical distribution and pharmacological properties of the dual angiotensin II/AVP receptor. Gonzalez CB, et al. **Hypertension** 1997 Apr;29(4):957–61

Angiotensin II stimulates secretion of endogenous ouabain from bovine adrenocortical cells via angiotensin type 2 receptors. Laredo J, et al. **Hypertension** 1997 Jan;29(1 Pt 2):401–7

Acute and chronic mechanisms for regulating proximal tubule angiotensin II receptor expression. Harris RC, et al. **J Am Soc Nephrol** 1997 Feb;8(2):306–13 (86 ref.)

Dependence on the motif YIPP for the physical association of Jak2 kinase with the intracellular carboxyl tail of the angiotensin II AT1 receptor. Ali MS, et al. **J Biol Chem** 1997 Sep 12;272(37):23382–8

The conformational change responsible for AT1 receptor activation is dependent upon two juxtaposed asparagine residues on transmembrane helices III and VII. Balmforth AJ, et al. **J Biol Chem** 1997 Feb 14;272(7):4245–51

Mutation of Asn111 in the third transmembrane domain of the AT1A angiotensin II receptor induces its constitutive activation. Groblewski T, et al. **J Biol Chem** 1997 Jan 17; 272(3):1822–6

Angiotensin type 2 receptor dephosphorylates Bcl-2 by activating mitogen-activated protein kinase phosphatase-1 and induces apoptosis. Horiuchi M, et al. **J Biol Chem** 1997 Jul 25;272(30):19022–6

Angiotensin II induction of neurite outgrowth by AT2 receptors in NG108-15 cells. Effect counteracted by the AT1 receptors. Laflamme L, et al. **J Biol Chem** 1996 Sep 13;271(37):22729–35

A betagamma dimer derived from G13 transduces the angiotensin AT1 receptor signal to stimulation of Ca2+ channels in rat portal vein myocytes. Macrez N, et al. **J Biol Chem** 1997 Sep 12;272(37):23180–5

G protein heterotrimer Galpha13beta1gamma3 couples the angiotensin AT1A receptor to increases in cytoplasmic Ca2+ in rat portal vein myocytes. Macrez-Leprêtre N, et al. **J Biol Chem** 1997 Apr 11;272(15):10095–102

A domain for G protein coupling in carboxyl-terminal tail of rat angiotensin II receptor type 1A. Sano T, et al. **J Biol Chem** 1997 Sep 19;272(38):23631–6

Identification of angiotensin II-binding domains in the rat AT2 receptor with photolabile angiotensin analogs. Servant G, et al. **J Biol Chem** 1997 Mar 28;272(13):8653–9

The angiotensin AT2 receptor is present in the human fetal adrenal gland throughout the second trimester of gestation. Breault L, et al. **J Clin Endocrinol Metab** 1996 Nov; 81(11):3914–22

Down-regulation of angiotensin AT1 receptor by progesterone in human placenta. Kalenga MK, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):998–1002

Angiotensin II receptors in cortical and medullary adrenal tumors. Opocher G, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):865–9

Regulation of angiotensin II receptor AT1 subtypes in renal afferent arterioles during chronic changes in sodium diet. Ruan X, et al. **J Clin Invest** 1997 Mar 1;99(5):1072–81

The subtype 2 (AT2) angiotensin receptor mediates renal production of nitric oxide in conscious rats. Siragy HM, et al. **J Clin Invest** 1997 Jul 15;100(2):264–9

Tissue-specific changes in angiotensin II receptors in streptozotocin-diabetic rats. Brown L, et al. **J Endocrinol** 1997 Aug;154(2):355–62

Characterization of the AT1 angiotensin II receptor expressed in guinea pig liver. García-Sáinz JA, et al. **J Endocrinol** 1997 Jul;154(1):133–8

Agonist-induced internalisation of the angiotensin II-binding sites from plasma membranes of isolated rat hepatocytes. Montiel M, et al. **J Endocrinol** 1997 Mar;152(3):407–12

On the existence of functional angiotensin II receptors on vascular sympathetic nerve terminals in the human forearm. Chang PC, et al. **J Hypertens** 1995 Nov;13(11):1275–84

Cytosolic calcium changes induced by angiotensin II in human peripheral blood mononuclear cells are mediated via angiotensin II subtype 1 receptors. Lijnen P, et al. **J Hypertens** 1997 Aug;15(8):871–6

Acute renal excretory actions of losartan in spontaneously hypertensive rats: role of AT2 receptors, prostaglandins, kinins and nitric oxide. Munoz-Garcia R, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1779–84

Alterations of angiotensin II Receptor levels in sutured wounds in rat skin. Abiko M, et al. **J Invest Surg** 1996 Nov-Dec;9(6):447–53

Angiotensin II receptors: localization of type I and type II in rat epididymides of different developmental stages. Leung PS, et al. **J Membr Biol** 1997 May 1;157(1):97–103

Effect of angiotensin-converting enzyme two-week inhibition on renal angiotensin II receptors and renal vascular reactivity in SHR. Haddad G, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):813–22

The type I angiotensin II receptor couples to Stat1 and Stat3 activation through Jak2 kinase in neonatal rat cardiac myocytes. McWhinney CD, et al. **J Mol Cell Cardiol** 1997 Sep;29(9):2513–24

The angiotensin type 2 receptor mediates RNA synthesis in A10 vascular smooth muscle cells. Saward L, et al. **J Mol Cell Cardiol** 1996 Mar;28(3):499–506

Angiotensin II receptors in the gill of sea water- and freshwater-adapted eel. Marsigliante S, et al. **J Mol Endocrinol** 1997 Feb;18(1):67–76

Meet the "other" angiotensins [comment] Luft FC. **J Mol Med** 1997 Mar;75(3):157–9. Comment on: J Mol Med 1997 Mar;75(3):217–22.

Decreased expression of ventricular angiotensin receptor type 1 mRNA after human heart transplantation. Regitz-Zagrosek V, et al. **J Mol Med** 1996 Dec; 74(12):777–82

The globin fragment LVV-hemorphin-7 is an endogenous ligand for the AT4 receptor in the brain. Moeller I, et al. **J Neurochem** 1997 Jun;68(6):2530–7

Differentiation of NG108-15 neuroblastoma cells by serum starvation or dimethyl sulfoxide results in marked differences in angiotensin II receptor subtype expression. Seidman KJ, et al. **J Neurochem** 1996 Mar;66(3):1011–8

Presynaptic or postsynaptic location of receptors for angiotensin II and substance P in the medial solitary tract nucleus. Qu L, et al. **J Neurophysiol** 1996 Jun;75(6):2220–8

Effect of glucose, pyruvate, and insulin on type 1 angiotensin II receptor expression in SV40-immortalized rabbit proximal tubule epithelial cells. Becker BN, et al. **Kidney Int** 1997 Jul;52(1):87–92

Ontogeny of angiotensin II receptors, types 1 and 2, in ovine mesonephros and metanephros. Butkus A, et al. **Kidney Int** 1997 Sep;52(3):628–36

A potential mechanism for proximal tubule angiotensin II-mediated sodium flux associated with receptor-mediated endocytosis and arachidonic acid release. Becker BN, et al. **Kidney Int Suppl** 1996 Dec;57:S66–72

The angiotensin II AT2 receptor inhibits proliferation and promotes differentiation in PC12W cells. Meffert S, et al. **Mol Cell Endocrinol** 1996 Aug 30;122(1):59–67

Intracellular trafficking of angiotensin II and its AT1 and AT2 receptors: evidence for selective sorting of receptor and ligand. Hein L, et al. **Mol Endocrinol** 1997 Aug; 11(9):1266–77

Type 1 angiotensin II receptors in human endometrium. Saridogan E, et al. **Mol Hum Reprod** 1996 Sep;2(9):659–64
Enhanced angiotensin receptor type 1 mRNA degradation and induction of polyribosomal mRNA binding proteins by angiotensin II in vascular smooth muscle cells. Nickenig G, et al. **Mol Pharmacol** 1996 Oct;50(4):743–51
Transient upregulation of the AT2 receptor mRNA level after global ischemia in the rat brain. Makino I, et al. **Neuropeptides** 1996 Dec;30(6):596–601
Electrophysiological properties of paraventricular magnocellular neurons in rat brain slices: modulation of IA by angiotensin II. Li Z, et al. **Neuroscience** 1996 Mar; 71(1):133–45
Receptor binding radiotracers for the angiotensin II receptor: radioiodinated [Sar1, Ile8]Angiotensin II. Gibson RE, et al. **Nucl Med Biol** 1994 May;21(4):593–600
Central ANG II receptor involved in carotid sinus reflex resetting in chronically stressed rats. Qian ZM, et al. **Physiol Behav** 1997 Aug;62(2):241–7
Angiotensin II receptor expression in the conduction system and arterial duct of neonatal and adult rat hearts. Bastien NR, et al. **Regul Pept** 1996 May 7;63(1):9–16
Modulation of renal glomerular angiotensin II receptors by ace inhibition and AT1 receptor antagonism. Haddad G, et al. **Regul Pept** 1997 Jan 29;68(2):111–7
Angiotensin II– and IV–induced changes in cerebral blood flow. Roles of AT1, AT2, and AT4 receptor subtypes. Kramár EA, et al. **Regul Pept** 1997 Jan 29;68(2):131–8
Variation of intrarenal angiotensin II and angiotensin II receptors by acute renal ischemia in the aged rat. Lü X, et al. **Ren Fail** 1996 Jan;18(1):19–29
The ligand binding site of the angiotensin AT1 receptor. Hunyady L, et al. **Trends Pharmacol Sci** 1996 Apr; 17(4):135–40 (52 ref.)

PHYSIOLOGY

Cardiac effects of AII. AT1A receptor signaling, desensitization, and internalization. Thomas WG, et al. **Adv Exp Med Biol** 1996;396:59–69 (60 ref.)
Angiotensins stimulate catecholamine release from the chromaffin tissue of the rainbow trout. Bernier NJ, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R49–57
Exaggerated tubuloglomerular feedback activity in genetic hypertension is mediated by ANG II and AT1 receptors. Brännström K, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F749–55
Forebrain angiotensin type 1 receptors and parabrachial serotonin in the control of NaCl and water intake. Colombari DS, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1470–6
CGP–42112 partially activates human monocytes and reduces their stimulation by lipopolysaccharides. Egidy G, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C826–33
Effect of sympathetic and angiotensin–aldosterone systems on renal salt conservation in the rat. Honrath U, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F538–44
Role of paraventricular angiotensin AT1 receptors in salt–sensitive hypertension in mRen–2 transgenic rats. Li P, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1178–81
Increased cardiomyocyte apoptosis during the transition to heart failure in the spontaneously hypertensive rat. Li Z, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2313–9
Involvement of AT2 receptors at NRVL in tonic baroreflex suppression by endogenous angiotensins. Lin KS, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2204–10
Angiotensin II stimulates T–type Ca2+ channel currents via activation of a G protein, Gi. Lu HK, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1340–9
Effects of angiotensin II on cultured rat renomedullary interstitial cells are mediated by AT1A receptors. Maric C, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1020–8
Angiotensin II type 1 receptor–mediated activation of Ras in cultured rat vascular smooth muscle cells. Okuda M, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H595–601
Angiotensin II responses in AT1A receptor–deficient mice: a role for AT1B receptors in blood pressure regulation. Oliverio MI, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F515–20
Role of central ANG II receptors in stress–induced cardiovascular and hyperthermic responses in rats. Saiki Y, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R26–33
Role of endogenous ANG II and AT1 receptors in regulating arterial baroreflex responses in newborn lambs. Segar JL, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1862–73
The subtype 2 angiotensin receptor regulates renal prostaglandin F2 alpha formation in conscious rats. Siragy HM, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1103–7
Angiotensin II type 1 receptor modulation of neuronal K+ and Ca2+ currents: intracellular mechanisms. Sumners C, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C154–63
AT1 and TxA2/PGH2 receptors maintain hypertension throughout 2K,1C Goldblatt hypertension in the rat. Wilcox CS, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R891–6
Modulation of K+ and Ca2+ currents in cultured neurons by an angiotensin II type 1a receptor peptide. Zhu M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C1040–8
Angiotensin II–receptor stimulation of cytosolic calcium concentration in cultured renal resistance arterioles. Zhu Z, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1239–47
The role of angiotensin receptors in cardiovascular diseases. Helin K, et al. **Ann Med** 1997 Feb;29(1):23–9 (67 ref.)
Biological functions of angiotensin and its receptors. Matsusaka T, et al. **Annu Rev Physiol** 1997;59:395–412 (99 ref.)
Differential roles of AT1 and AT2 receptor subtypes in vascular trophic and phenotypic changes in response to stimulation with angiotensin II. Sabri A, et al. **Arterioscler Thromb Vasc Biol** 1997 Feb;17(2):257–64
The angiotensin II type 2 receptor primarily inhibits cell growth via pertussis toxin–sensitive G proteins. Ozawa Y, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):328–33
Inhibition of cell proliferation and activation of protein tyrosine phosphatase mediated by angiotensin II type 2 (AT2) receptor in R3T3 cells. Tsuzuki S, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):825–30
The potential role of nitric oxide in angiotensin II–receptor blockade. Cachofeiro V, et al. **Blood Press Suppl** 1996; 2:29–35 (49 ref.)
Distribution and signal transduction of angiotensin II AT1 and AT2 receptors. Capponi AM. **Blood Press Suppl** 1996; 2:41–6 (55 ref.)
Angiotensin II receptors and renal hemodynamics and function. Ichikawa I. **Blood Press Suppl** 1996;2:19–21 (7 ref.)
Aortic collagen, aortic stiffness, and AT1 receptors in experimental and human hypertension. Benetos A, et al. **Can J Physiol Pharmacol** 1996 Jul;74(7):862–6 (30 ref.)
Angiotensin II type 2 receptor–mediated regulation of rat neuronal K+ channels. Martens JR, et al. **Circ Res** 1996 Aug;79(2):302–9
Load–induced growth responses in isolated adult rat hearts. Role of the AT1 receptor. Thienelt CD, et al. **Circulation** 1997 Jun 17;95(12):2677–83
AT1 receptors and cell proliferation in rat adrenals: effects of angiotensin infusion, low sodium diet and losartan. McEwan PE, et al. **Endocr Res** 1996 Nov;22(4):369–71
Functional interactions between neuronal AT1 and AT2 receptors. Gelband CH, et al. **Endocrinology** 1997 May; 138(5):2195–8
Desensitization of AT1 receptor–mediated cellular responses requires long term receptor down–regulation in bovine adrenal glomerulosa cells. Richard DE, et al. **Endocrinology** 1997 Sep;138(9):3828–35
Cardiac angiotensin II receptors: studies on functional coupling in Sprague–Dawley rats and TGR(alphaMHC–hAT1) transgenic rats. Rosenkranz S, et al. **Eur J Pharmacol** 1997 Jul 2;330(1):35–46
The arterial wall: a new pharmacological and therapeutic target. Laurent S, et al. **Fundam Clin Pharmacol** 1996; 10(3):243–57 (95 ref.)
Role of type 1 and type 2 angiotensin receptors in angiotensin II–induced cardiomyocyte hypertrophy. Booz GW, et al. **Hypertension** 1996 Oct;28(4):635–40
Opposite feedback control of renin and aldosterone biosynthesis in the adrenal cortex by angiotensin II AT1–subtype receptors. Gigante B, et al. **Hypertension** 1997 Sep;30(3 Pt 2):563–8
Angiotensin II type 2 receptor subtype mediates phospholipase A2–dependent signaling in rabbit proximal tubular epithelial cells. Jacobs LS, et al. **Hypertension** 1996 Oct;28(4):663–8
Angiotensin II type 2 receptor inhibits cell proliferation and activates tyrosine phosphatase. Tsuzuki S, et al. **Hypertension** 1996 Nov;28(5):916–8
Angiotensin II type 1 (AT1) receptor–mediated accumulation of angiotensin II in tissues and its intracellular half–life in vivo. van Kats JP, et al. **Hypertension** 1997 Jul;30(1 Pt 1):42–9
Receptor–mediated intrarenal angiotensin II augmentation in angiotensin II–infused rats. Zou LX, et al. **Hypertension** 1996 Oct;28(4):669–77
Angiotensin II increases macrophage–mediated modification of low density lipoprotein via a lipoxygenase–dependent pathway. Scheidegger KJ, et al. **J Biol Chem** 1997 Aug 22;272(34):21609–15
Angiotensin II stimulates expression of the chemokine RANTES in rat glomerular endothelial cells. Role of the angiotensin type 2 receptor. Wolf G, et al. **J Clin Invest** 1997 Sep 1;100(5):1047–58
Expression cloning of type 2 angiotensin II receptor reveals a unique class of seven–transmembrane receptors. Curnow KM. **J Endocrinol Invest** 1995 Jul–Aug;18(7):566–70
Osmotically induced natriuresis and blood pressure response involves angiotensin AT1 receptors in the subfornical organ. Rohmeiss P, et al. **J Hypertens** 1995 Dec;13(12 Pt 1):1399–404
Angiotensin receptors. Unger T, et al. **J Hypertens Suppl** 1996 Dec;14(5):S95–103 (86 ref.)
Angiotensin II receptor type I–regulated anion secretion in cystic fibrosis pancreatic duct cells. Chan HC, et al. **J Membr Biol** 1997 Apr 1;156(3):241–9
Cardiac collagen remodeling in the cardiomyopathic Syrian hamster and the effect of losartan. Dixon IM, et al. **J Mol Cell Cardiol** 1997 Jul;29(7):1837–50
Characterization of angiotensin receptors on human skin fibroblasts [see comments] Nickenig G, et al. **J Mol Med** 1997 Mar;75(3):217–22. Comment in: J Mol Med 1997 Mar;75(3):157–9.
Participation of AT1 and AT2 receptors in the differential interaction between angiotensin II or III and alpha–2 adrenoceptors in the nucleus reticularis gigantocellularis in cardiovascular regulation and antinociception in rats. Yang CH, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):795–802
Renin angiotensin system in rabbit corpus cavernosum: functional characterization of angiotensin II receptors. Park JK, et al. **J Urol** 1997 Aug;158(2):653–8
The role of angiotensin II and prostaglandins in arcade formation in a developing microvascular network. le Noble FA, et al. **J Vasc Res** 1996 Nov–Dec;33(6):480–8
Peptidase inhibitor–induced antidiuresis mediated through angiotensin and opioid receptors in the rat hypothalamus. Tsushima H, et al. **Jpn J Pharmacol** 1996 May;71(1):61–71
Slit–pore mechanism to control flow through a filter membrane. Gatzek WJ. **Med Hypotheses** 1996 Dec; 47(6):481
Angiotensin II stimulates rapid serine phosphorylation of transcription factor Stat3. Bhat GJ, et al. **Mol Cell Biochem** 1997 May;170(1–2):171–6
Angiotensin II type 1 receptor signals through Raf–1 by a protein kinase C–dependent, Ras–independent mechanism. Arai H, et al. **Mol Pharmacol** 1996 Sep;50(3):522–8
The angiotensin AT2 receptor down–regulates neurofilament M in PC12W cells. Gallinat S, et al. **Neurosci Lett** 1997 May 9;227(1):29–32
Dependence of agonist activation on a conserved apolar residue in the third intracellular loop of the AT1 angiotensin receptor. Hunyady L, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10040–5
Blockade of central angiotensin II type 1 and type 2 receptors suppresses adrenalectomy–induced NaCl intake in rats. Galaverna O, et al. **Regul Pept** 1996 Oct 8;66(1–2):47–50

RECEPTORS, ANTIGEN

ANALYSIS

A tunicate (Botryllus schlosseri) cDNA reveals similarity to vertebrate antigen receptors. Pancer Z, et al. **Immunogenetics** 1996;45(1):69–72

ANTAGONISTS & INHIBITORS

Preventing allograft rejection with CTLA4IG: effect of donor–specific transfusion route or timing. Bolling SF, et al. **J Heart Lung Transplant** 1996 Sep;15(9):928–35

CHEMISTRY

Interaction of Salmonella phage P22 with its O–antigen receptor studied by X–ray crystallography. Steinbacher S, et al. **Biol Chem** 1997 Mar–Apr;378(3–4):337–43

DRUG EFFECTS

Regulation of antigen receptor signal transduction by protein tyrosine kinases. Chan AC, et al. **Curr Opin Immunol** 1996 Jun;8(3):394–401 (61 ref.)

GENETICS

Role of the Ku autoantigen in V(D)J recombination and double–strand break repair. Chu G. **Curr Top Microbiol Immunol** 1996;217:113–32 (60 ref.)
The cell cycle and V(D)J recombination. Desiderio S, et al. **Curr Top Microbiol Immunol** 1996;217:45–59 (60 ref.)
Characterization of Chinese hamster cell lines that are x–ray–sensitive, impaired in DNA double–strand break repair and defective for V(D)J recombination. Lee SE, et al. **Curr Top Microbiol Immunol** 1996;217:133–42
Identification of the XRCC4 gene: complementation of the DSBR and V(D)J recombination defects of XR–1 cells. Li Z, et al. **Curr Top Microbiol Immunol** 1996;217:143–50 (25 ref.)
A new view of V(D)J recombination. Gellert M. **Genes Cells** 1996 Mar;1(3):269–75 (40 ref.)
Essential and perilous: V(D)J recombination and DNA damage checkpoints in lymphocyte precursors. Danska JS, et al. **Semin Immunol** 1997 Jun;9(3):199–206 (81 ref.)
V(D)J recombination moves in vitro. Schatz DG. **Semin Immunol** 1997 Jun;9(3):149–59 (67 ref.)
Accessibility and the developmental regulation of V(D)J recombination. Schlissel MS, et al. **Semin Immunol** 1997 Jun;9(3):161–70 (65 ref.)
The end–joining reaction in V(D)J recombination. Smider V, et al. **Semin Immunol** 1997 Jun;9(3):189–97 (76 ref.)
[Developmental regulation of V(D)J type recombination in the antigen receptor genes in lymphocytes] Sakano H. **Seikagaku** 1996 Aug;68(8):1470–4 (18 ref.) **(Jpn)**

IMMUNOLOGY

Receptor analysis of idiotype antibodies derived from MALT type B–cell lymphoma hybridomas. Haedicke W, et al. **Hum Antibodies** 1997;8(1):33–6
Intracellular CD22 rapidly moves to the cell surface in a tyrosine kinase–dependent manner following antigen receptor stimulation. Sherbina NV, et al. **J Immunol** 1996 Nov 15;157(10):4390–8

METABOLISM

Activation of protein–tyrosine phosphatase SH–PTP2 by a tyrosine–based activation motif of a novel brain molecule. Ohnishi H, et al. **J Biol Chem** 1996 Oct 11;271(41):25569–74
The counterreceptor binding site of human CD2 exhibits an extended surface patch with multiple conformations fluctuating with millisecond to microsecond motions. Wyss DF, et al. **Protein Sci** 1997 Mar;6(3):534–42

RECEPTORS, ANTIGEN

PHYSIOLOGY

Protein tyrosine phosphatase roles in the regulation of lymphocyte signaling. Pani G, et al.
Clin Immunol Immunopathol 1997 Jul;84(1):1–16 (110 ref.)

Differential effects of the integrins alpha9beta1, alphavbeta3, and alphavbeta6 on cell proliferative responses to tenascin. Roles of the beta subunit extracellular and cytoplasmic domains. Yokosaki Y, et al. **J Biol Chem** 1996 Sep 27; 271(39):24144–50

[Analysis of the mechanism of antigen receptor transmission by gene targeting] Kitamura D.
Nihon Rinsho Meneki Gakkai Kaishi 1996 Dec;19(6):637–9 **(Jpn)**

RECEPTORS, ANTIGEN, B-CELL

[Function of HS1 protein in B-cell antigen-receptor signaling and induction of apoptosis] Kitamura D. **Nippon Rinsho** 1996 Jul;54(7):1773–8 (23 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

CD79 alpha expression in acute myeloid leukemia. High frequency of expression in acute promyelocytic leukemia. Arber DA, et al. **Am J Pathol** 1996 Oct;149(4):1105–10

ANTAGONISTS & INHIBITORS

Protein-tyrosine phosphatase SHP-1 is dispensable for FcgammaRIIB-mediated inhibition of B cell antigen receptor activation. Nadler MJS, et al. **J Biol Chem** 1997 Aug 8;272(32):20038–43

BIOSYNTHESIS

The two membrane isoforms of human IgE assemble into functionally distinct B cell antigen receptors. Batista FD, et al. **J Exp Med** 1996 Dec 1;184(6):2197–205

The immunoglobulin (Ig)alpha and Igbeta cytoplasmic domains are independently sufficient to signal B cell maturation and activation in transgenic mice. Teh YM, et al. **J Exp Med** 1997 May 19;185(10):1753–8

The CD5/CD72 receptor system is coexpressed with several functionally relevant counterstructures on human B cells and delivers a critical signaling activity. Cerutti A, et al. **J Immunol** 1996 Sep 1;157(5):1854–62

Intracellular signaling for inducible antigen receptor-mediated Fas resistance in B cells. Foote LC, et al. **J Immunol** 1996 Sep 1;157(5):1878–85

Roles of calnexin and Ig-alpha beta interactions with membrane Igs in the surface expression of the B cell antigen receptor of the IgM and IgD classes. Wu Y, et al.
J Immunol 1997 Mar 15;158(6):2762–70

BLOOD

The antigen receptor complex on cord B lymphocytes. Macardle PJ, et al. **Immunology** 1997 Mar;90(3):376–82

Antigen receptor function in chronic lymphocytic leukemia B cells. Lankester AC, et al. **Leuk Lymphoma** 1996 Dec; 24(1-2):27–33 (22 ref.)

CHEMISTRY

Biochemistry of antigen receptor signaling in mature and developing B lymphocytes. Bireland ML, et al.
Crit Rev Immunol 1997;17(3–4):353–85 (228 ref.)

Structural aspects of signal transduction in B-cells. Vihinen M, et al. **Crit Rev Immunol** 1996;16(3):251–75 (254 ref.)

Composition and function of T-cell receptor and B-cell receptor complexes on precursor lymphocytes. Borst J, et al. **Curr Opin Immunol** 1996 Apr;8(2):181–90 (64 ref.)

Compartmentalization of B-cell antigen receptor functions. Lankester AC, et al. **Mol Immunol** 1996 Jun;33(9):769–75 (94 ref.)

Characterization of components of the murine B cell receptor complex and their role in anti-Ig stimulation. Vogel L, et al. **Scand J Immunol** 1997 Mar;45(3):287–93

CLASSIFICATION

Surface Ig on B lymphocytes from cattle and sheep. Naessens J. **Int Immunol** 1997 Mar;9(3):349–54

DRUG EFFECTS

Antigen receptor-mediated B cell death is blocked by signaling via CD72 or treatment with dextran sulfate and is defective in autoimmunity-prone mice. Nomura T, et al. **Int Immunol** 1996 Jun;8(6):867–75

GENETICS

Recent advances in understanding V(D)J recombination. Gellert M. **Adv Immunol** 1997;64:39–64 (108 ref.)

The origins of V(D)J recombination. Lewis SM, et al.
Cell 1997 Jan 24;88(2):159–62 (20 ref.)

Initiation of V(D)J recombinations in a cell-free system by RAG1 and RAG2 proteins. van Gent DC, et al.
Curr Top Microbiol Immunol 1996;217:1–10 (22 ref.)

Pax-5 (BSAP) recruits Ets proto-oncogene family proteins to form functional ternary complexes on a B-cell-specific promoter. Fitzsimmons D, et al. **Genes Dev** 1996 Sep 1; 10(17):2198–211

Coding joint formation in a cell-free V(D)J recombination system. Leu TM, et al. **Immunity** 1997 Aug;7(2):303–14

The novel variants of mb-1 and B29 transcripts generated by alternative mRNA splicing. Koyama M, et al.
Immunol Lett 1995 Sep;47(3):151–6

The influence of IL-7 V(D)J recombination. Döbbeling U. **Immunology** 1996 Dec;89(4):569–72

Can receptor editing play an important role in normal B-cell development? Nemazee D. **J Autoimmun** 1996 Apr; 9(2):259–61 (26 ref.)

B cells are exquisitely sensitive to central tolerance and receptor editing induced by ultralow affinity, membrane-bound antigen. Lang J, et al. **J Exp Med** 1996 Nov 1;184(5):1685–97

A functional B cell receptor transgene allows efficient IL-7-independent maturation of B cell precursors. Melamed D, et al. **J Immunol** 1997 Aug 1;159(3):1233–9

Regulatory elements of the mb-1 gene encoding the Ig-alpha component of the human B-cell antigen receptor. Leduc I, et al. **Mol Immunol** 1996 Dec;33(17–18):1277–86

Reuse of B lymphocytes in germinal centers [comment] Liu YJ. **Science** 1997 Oct 10;278(5336):238–9. Comment on: Science 1997 Oct 10;278(5336):298–301. Comment on: Science 1997 Oct 10;278(5336):301–5.

Molecular cloning of bovine mb-1 cDNA. Youn HY, et al.
Vet Immunol Immunopathol 1996 Jul;52(3):191–200

Genomic structure of the bovine mb-1 gene encoding the Ig-alpha subunit of the B cell antigen receptor complex. Youn HY, et al. **Vet Immunol Immunopathol** 1997 May; 56(3–4):247–57

IMMUNOLOGY

B-cell epitopes: fact and fiction. Benjamin DC.
Adv Exp Med Biol 1995;386:95–108 (30 ref.)

In vivo consequences of B cell superantigen immunization. Silverman GJ, et al. **Ann N Y Acad Sci** 1997 Apr 5; 815:105–10

Telomerase activity is induced in human peripheral B lymphocytes by the stimulation to antigen receptor. Igarashi H, et al. **Blood** 1997 Feb 15;89(4):1299–307

B-cell antigen receptor-induced apoptosis requires both Ig alpha and Ig beta. Tseng J, et al. **Blood** 1997 Mar 1; 89(5):1513–20

The V4-34 encoded anti-i autoantibodies recognize a large subset of human and mouse B-cells. Silberstein LE, et al. **Blood Cells Mol Dis** 1996;22(2):126–38

MHC class I is functionally associated with antigen receptors in human T and B lymphomas. Pedersen AE, et al.
Cell Immunol 1996 Nov 1;173(2):295–302

Structural aspects of signal transduction in B-cells. Vihinen M, et al. **Crit Rev Immunol** 1996;16(3):251–75 (254 ref.)

The two-headed antigen. B-cell co-receptors. DeFranco AL. **Curr Biol** 1996 May 1;6(5):548–50 (12 ref.)

Molecular mechanisms in B cell antigen receptor signaling. Kurosaki T. **Curr Opin Immunol** 1997 Jun;9(3):309–18 (84 ref.)

Acceleration of intracellular targeting of antigen by the B-cell antigen receptor: importance depends on the nature of the antigen-antibody interaction. Aluvihare VR, et al. **EMBO J** 1997 Jun;16(12):3553–62

Antigen endocytosis and presentation mediated by human membrane IgG1 in the absence of the Ig(alpha)/Ig(beta) dimer. Knight AM, et al. **EMBO J** 1997 Jul 1; 16(13):3842–50

Antigen receptor-induced apoptosis of human germinal center B cells is targeted to a centrocytic subset. Billian G, et al. **Eur J Immunol** 1997 Feb;27(2):405–14

Receptor editing, immune diversification, and self-tolerance. Radic MZ, et al. **Immunity** 1996 Dec;5(6):505–11 (50 ref.)

Membrane-bound ezrin is involved in B-cell receptor-mediated signaling: potential role of an ITAM-like ezrin motif. Rozsnyay Z, et al.
Immunol Lett 1996 Dec;54(2–3):163–9

Integration of activatory and inhibitory signals in human B-cells. Sármay G, et al. **Immunol Lett** 1996 Dec; 54(2–3):93–100

Lipopolysaccharide prevents apoptosis and induces responsiveness to antigen receptor cross-linking in immature B cells. Wechsler-Reya RJ, et al. **Immunology** 1996 Nov;89(3):356–62

Immature B cells from neonatal mice show a selective inability to up-regulate MHC class II expression in response to antigen receptor ligation. Tasker L, et al.
Int Immunol 1997 Apr;9(4):475–84

B cell antigen receptor signaling links biochemical changes in the class II peptide-loading compartment to enhanced processing. Xu X, et al. **Int Immunol** 1996 Dec; 8(12):1867–76

Intracellular signaling for inducible antigen receptor-mediated Fas resistance in B cells. Foote LC, et al. **J Immunol** 1996 Sep 1;157(5):1878–85

Overexpression of c-Fos induces apoptosis of CD43+ pro-B cells. Hu L, et al. **J Immunol** 1996 Nov 1;157(9):3804–11

Desensitization of the antigen receptor primes B cells for activation by superstimulatory influenza virus. Rott O, et al. **J Inflamm** 1995–96;46(1):51–60

Self-antigen does not accelerate immature B cell apoptosis, but stimulates receptor editing as a consequence of developmental arrest. Melamed D, et al.
Proc Natl Acad Sci U S A 1997 Aug 19;94(17):9267–72

Effect of transmembrane and cytoplasmic domains of IgE on the IgE response. Achatz G, et al. **Science** 1997 Apr 18;276(5311):409–11

The roles of gamma1 heavy chain membrane expression and cytoplasmic tail in IgG1 responses. Kaisho T, et al.
Science 1997 Apr 18;276(5311):412–5

Antigen presentation by memory B cells: the sting is in the tail. Tarlinton D. **Science** 1997 Apr 18;276(5311):374–5

B-cell development and differentiation. Duchosal MA.
Semin Hematol 1997 Jan;34(1 Suppl 1):2–12 (146 ref.)

Key differentiation steps in normal B cells and in myeloma cells. Zubler RH. **Semin Hematol** 1997 Jan;34(1 Suppl 1):13–22 (52 ref.)

METABOLISM

Expression of the tyrosine kinase Lyn during B cell receptor engagement and apoptosis. Huck S, et al.
Ann N Y Acad Sci 1997 Apr 5;815:122–3

Initiation and processing of signals from the B cell antigen receptor. Reth M, et al. **Annu Rev Immunol** 1997;15:453–79 (138 ref.)

CD22, a B lymphocyte-specific adhesion molecule that regulates antigen receptor signaling. Tedder TF, et al.
Annu Rev Immunol 1997;15:481–504 (98 ref.)

An 'antigenic ligand competition' model for antigen receptor-mediated lymphocyte selection. Seledtsov VI, et al. **Biomed Pharmacother** 1996;50(3–4):170–7

Genetic evidence for involvement of type 1, type 2 and type 3 inositol 1,4,5-trisphosphate receptors in signal transduction through the B-cell antigen receptor. Sugawara H, et al. **EMBO J** 1997 Jun 2;16(11):3078–88

Engagement of the B lymphocyte antigen receptor induces presentation of intrinsic immunoglobulin peptides on major histocompatibility complex class II molecules. Bartnes K, et al. **Eur J Immunol** 1997 May;27(5):1124–30

BCR ligation induces receptor editing in IgM+IgD- bone marrow B cells in vitro. Hertz M, et al. **Immunity** 1997 Apr;6(4):429–36

CD22 is both a positive and negative regulator of B lymphocyte antigen receptor signal transduction: altered signaling in CD22-deficient mice. Sato S, et al.
Immunity 1996 Dec;5(6):551–62

Superstimulatory influenza virus and highly organized BCR-ligands act synergistically on B cell activation. Rott O, et al. **Immunobiology** 1996;196(4):332–49

Regulation of signalling through B-lymphocyte antigen receptors by cell-cell interaction molecules. Law CL, et al. **Immunol Rev** 1996 Oct;153:123–54 (200 ref.)

Modulation of CD72 by ligation of B cell receptor complex molecules on CD5+ B cells. Jamin C, et al.
Int Immunol 1997 Jul;9(7):1001–9

Cross-linking of B cell antigen receptor-related structure of pre-B cell lines induces tyrosine phosphorylation of p85 and p110 subunits and activation of phosphatidylinositol 3-kinase. Kuwahara K, et al. **Int Immunol** 1996 Aug; 8(8):1273–85

Immature B cells from neonatal mice show a selective inability to up-regulate MHC class II expression in response to antigen receptor ligation. Tasker L, et al.
Int Immunol 1997 Apr;9(4):475–84

Selective modulation of the major histocompatibility complex class II antigen presentation pathway following B cell receptor ligation and protein kinase C activation. Barois N, et al. **J Biol Chem** 1997 Feb 7;272(6):3641–7

Syk activation and dissociation from the B-cell antigen receptor is mediated by phosphorylation of tyrosine 130. Keshvara LM, et al. **J Biol Chem** 1997 Apr 18; 272(16):10377–81

Transphosphorylation of Bruton's tyrosine kinase on tyrosine 551 is critical for B cell antigen receptor function. Kurosaki T, et al. **J Biol Chem** 1997 Jun 20;272(25):15595–8

Alteration of B-cell antigen receptor signaling by CD19 co-ligation. A study with bispecific antibodies. Lankester AC, et al. **J Biol Chem** 1996 Sep 13;271(37):22326–30

Involvement of p130(Cas) and p105(HEF1), a novel Cas-like docking protein, in a cytoskeleton-dependent signaling pathway initiated by ligation of integrin or antigen receptor on human B cells. Manié SN, et al. **J Biol Chem** 1997 Feb 14;272(7):4230–6

Exogenous antigens gain access to the major histocompatibility complex class I processing pathway in B cells by receptor-mediated uptake. Ke Y, et al.
J Exp Med 1996 Sep 1;184(3):1179–84

Role of tyrosine phosphorylation of HS1 in B cell antigen receptor-mediated apoptosis. Yamanashi Y, et al.
J Exp Med 1997 Apr 7;185(7):1387–92

Secretion of soluble pre-B cell receptors by pre-B cells. Bornemann KD, et al. **J Immunol** 1997 Mar 15; 158(6):2551–7

B cell receptor cross-linking prevents Fas-induced cell death by inactivating the IL-1 beta-converting enzyme protease and regulating Bcl-2/Bcl-x expression. Brás A, et al.
J Immunol 1997 Oct 1;159(7):3168–77

Membrane IgM-induced tyrosine phosphorylation of CD19 requires a CD19 domain that mediates association with components of the B cell antigen receptor complex. Carter RH, et al. **J Immunol** 1997 Apr 1;158(7):3062–9

A novel complex, p40/42, is constitutively associated with the B cell antigen receptor and phosphorylated upon receptor stimulation. Lee YJ, et al. **J Immunol** 1996 Nov 1;157(9):3828–37

IL-10 inhibits lipopolysaccharide-induced murine B cell proliferation and cross-linking of surface antigen receptors or ligation of CD40 restores the response. Marcelletti JF.
J Immunol 1996 Oct 15;157(8):3323–33

Differential activation of the ERK, JNK, and p38

mitogen-activated protein kinases by CD40 and the B cell antigen receptor. Sutherland CL, et al. **J Immunol** 1996 Oct 15;157(8):3381-90

B cell antigen receptor desensitization: disruption of receptor coupling to tyrosine kinase activation. Vilen BJ, et al. **J Immunol** 1997 Jul 1;159(1):231-43

Regulatory elements of the mb-1 gene encoding the Ig-alpha component of the human B-cell antigen receptor. Leduc I, et al. **Mol Immunol** 1996 Dec;33(17-18):1277-86

Immunons revisited: binding of multivalent antigens to B cells. Sulzer B, et al. **Mol Immunol** 1997 Jan;34(1):63-74 (24 ref.)

Cloning and characterization of APS, an adaptor molecule containing PH and SH2 domains that is tyrosine phosphorylated upon B-cell receptor stimulation. Yokouchi M, et al. **Oncogene** 1997 Jul 3;15(1):7-15

Endosomal targeting by the cytoplasmic tail of membrane immunoglobulin [retracted by Weiser P, Müller R, Braun U, Reth M. In: Science 1997 Jul 4;277(5322):20-1] Weiser P, et al. **Science** 1997 Apr 18;276(5311):407-9

PHYSIOLOGY

Positive and negative signal co-operativity in the immune system: the BCR, Fc gamma RIIB, CR2 paradigm. Cambier JC. **Biochem Soc Trans** 1997 May;25(2):441-5 (21 ref.)

Antigen receptor signaling gives lymphocytes a long life [comment] Neuberger MS. **Cell** 1997 Sep 19;90(6):971-3 (8 ref.). Comment on: Cell 1997 Sep 19;90(6):1073-83.

Expansion or elimination of B cells in vivo: dual roles for CD40- and Fas (CD95)-ligands modulated by the B cell antigen receptor. Rathmell JC, et al. **Cell** 1996 Oct 18; 87(2):319-29

Biochemistry of antigen receptor signaling in mature and developing B lymphocytes. Bireland ML, et al. **Crit Rev Immunol** 1997;17(3-4):353-85 (228 ref.)

CD22 is a negative regulator of B-cell receptor signalling. Nitschke L, et al. **Curr Biol** 1997 Feb 1;7(2):133-43

Composition and function of T-cell receptor and B-cell receptor complexes on precursor lymphocytes. Borst J, et al. **Curr Opin Immunol** 1996 Apr;8(2):181-90 (64 ref.)

The complexity of signaling pathways activated by the BCR. DeFranco AL. **Curr Opin Immunol** 1997 Jun;9(3):296-308 (120 ref.)

Differential modulation of cyclin-dependent kinase inhibitor p27Kip1 by negative signaling via the antigen receptor of B cells and positive signaling via CD40. Han H, et al. **Eur J Immunol** 1996 Oct;26(10):2425-32

Germinal center B cells rescued from apoptosis by CD40 ligation or attachment to follicular dendritic cells, but not by engagement of surface immunoglobulin or adhesion receptors, become resistant to CD95-induced apoptosis. Koopman G, et al. **Eur J Immunol** 1997 Jan;27(1):1-7

Tuning antigen receptor signaling by CD22: integrating cues from antigens and the microenvironment. Cyster JG, et al. **Immunity** 1997 May;6(5):509-17 (72 ref.)

Induction of somatic mutation in a human B cell line in vitro. Denépoux S, et al. **Immunity** 1997 Jan;6(1):35-46

Different nuclear signals are activated by the B cell receptor during positive versus negative signaling. Healy JI, et al. **Immunity** 1997 Apr;6(4):419-28

Protein kinase C mu (PKC mu) associates with the B cell antigen receptor complex and regulates lymphocyte signaling. Sidorenko SP, et al. **Immunity** 1996 Oct; 5(4):353-63

Superstimulatory influenza virus and highly organized BCR-ligands act synergistically on B cell activation. Rott O, et al. **Immunobiology** 1996;196(4):332-49

The roles of preB cell receptor in early B cell development and its signal transduction. Karasuyama H, et al. **Immunol Cell Biol** 1997 Apr;75(2):209-16

Signal transduction through mu kappa B-cell receptors expressed on pre-B cells is different from that through B-cell receptors on mature B cells. Nakamura T, et al. **Immunology** 1996 Aug;88(4):593-9

The related adhesion focal tyrosine kinase is tyrosine-phosphorylated after beta1-integrin-stimulation in B cells and binds to p130cas. Astier A, et al. **J Biol Chem** 1997 Jan 3;272(1):228-32

Regulation of ITAM signaling by specific sequences in Ig-beta B cell antigen receptor subunit. Cassard S, et al. **J Biol Chem** 1996 Sep 27;271(39):23786-91

Cyclin G2 is up-regulated during growth inhibition and B cell antigen receptor-mediated cell cycle arrest. Horne MC, et al. **J Biol Chem** 1997 May 9;272(19):12650-61

B cell antigen receptor signaling induces the formation of complexes containing the Crk adapter proteins. Ingham RJ, et al. **J Biol Chem** 1996 Dec 13;271(50):32306-14

Defective signaling through the B cell antigen receptor in Epstein-Barr virus-transformed ataxia-telangiectasia cells. Khanna KK, et al. **J Biol Chem** 1997 Apr 4;272(14):9489-95

Syk is required for BCR-mediated activation of p90Rsk, but not p70S6k, via a mitogen-activated protein kinase-independent pathway in B cells. Li HL, et al. **J Biol Chem** 1997 Jul 18;272(29):18200-8

Human type II Fcgamma receptors inhibit B cell activation by interacting with the p21(ras)-dependent pathway. Sármay G, et al. **J Biol Chem** 1996 Nov 29; 271(48):30499-504

B cells from patients with systemic lupus erythematosus display abnormal antigen receptor-mediated early signal transduction events. Liossis SN, et al. **J Clin Invest** 1996 Dec 1;98(11):2549-57

Outer periarteriolar lymphoid sheath arrest and subsequent differentiation of both naive and tolerant immunoglobulin transgenic B cells is determined by B cell receptor occupancy. Cook MC, et al. **J Exp Med** 1997 Aug 29; 186(5):631-43

Differential effects of B cell receptor and B cell receptor-FcgammaRIIB1 engagement on docking of Csk to GTPase-activating protein (GAP)-associated p62. Vuica M, et al. **J Exp Med** 1997 Jul 21;186(2):259-67

The Vav binding site (Y315) in ZAP-70 is critical for antigen receptor-mediated signal transduction. Wu J, et al. **J Exp Med** 1997 May 19;185(10):1877-82

The CD5/CD72 receptor system is coexpressed with several functionally relevant counterstructures on human B cells and delivers a critical signaling activity. Cerutti A, et al. **J Immunol** 1996 Sep 1;157(5):1854-62

Delayed tyrosine phosphorylation and nuclear expression of STAT1 following antigen receptor stimulation of B lymphocytes. Karras JG, et al. **J Immunol** 1996 Sep 15; 157(6):2299-309

Induction of germinal center B cell markers in vitro by activated CD4+ T lymphocytes: the role of CD40 ligand, soluble factors, and B cell antigen receptor cross-linking. Lahvis GP, et al. **J Immunol** 1997 Aug 15;159(4):1783-93

Syk, but not Lyn, recruitment to B cell antigen receptor and activation following stimulation of CD45- B cells. Pao LI, et al. **J Immunol** 1997 Mar 15;158(6):2663-9

Molecular targets of CD45 in B cell antigen receptor signal transduction. Pao LI, et al. **J Immunol** 1997 Feb 1; 158(3):1116-24

Negative signaling in B cells causes reduced Ras activity by reducing Shc-Grb2 interactions. Tridandapani S, et al. **J Immunol** 1997 Feb 1;158(3):1125-32

Immunoreceptor tyrosine-based activation motif (ITAM), a unique module linking antigen and Fc receptors to their signaling cascades. Isakov N. **J Leukoc Biol** 1997 Jan; 61(1):6-16 (123 ref.)

Involvement of the cyclin-dependent kinase inhibitor p27Kip1 in negative signaling through the antigen-receptor of B lymphocytes. Han H, et al. **Leukemia** 1997 Apr;11 Suppl 3:367-9

Shc contains two Grb2 binding sites needed for efficient formation of complexes with SOS in B lymphocytes. Harmer SL, et al. **Mol Cell Biol** 1997 Jul;17(7):4087-95

Compartmentalization of B-cell antigen receptor functions. Lankester AC, et al. **Mol Immunol** 1996 Jun;33(9):769-75 (94 ref.)

Evidence for a preformed transducer complex organized by the B cell antigen receptor. Wienands J, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7865-70

BAP-135, a target for Bruton's tyrosine kinase in response to B cell receptor engagement. Yang W, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):604-9

Characterization of components of the murine B cell receptor complex and their role in anti-Ig stimulation. Vogel L, et al. **Scand J Immunol** 1997 Mar;45(3):287-93

CD5-mediated negative regulation of antigen receptor-induced growth signals in B-1 B cells. Bikah G, et al. **Science** 1996 Dec 13;274(5294):1906-9

The immunoreceptor tyrosine-based activation motif of Epstein-Barr virus LMP2A is essential for blocking BCR-mediated signal transduction. Fruehling S, et al. **Virology** 1997 Sep 1;235(2):241-51

RECEPTORS, ANTIGEN, T-CELL

see related
ANTIGENS, CD3
GENE REARRANGEMENT, T-LYMPHOCYTE

Chimeric T-cell receptors: highly specific tools to target cytotoxic T-lymphocytes to tumour cells. Abken H, et al. **Cancer Treat Rev** 1997 Mar;23(2):97-112 (42 ref.)

The T cell receptor (TCR) in HLA-B27-restricted T cell responses--an introduction. Märker-Hermann E, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:86-90 (28 ref.)

Identification of multiprotein complexes containing DNA replication factors by native immunoblotting of HeLa cell protein preparations with T-antigen-dependent SV40 DNA replication activity. Tom TD, et al. **J Cell Biochem** 1996 Dec 1;63(3):259-67

Soluble T-lymphocyte antigen-specific immunoproteins: a progress report. Cone RE. **Proc Soc Exp Biol Med** 1997 Mar;214(3):204-9 (39 ref.)

Study of the T cell receptor repertoire in viral immunodeficiency disease. Ciurli C, et al. **Springer Semin Immunopathol** 1996;17(4):319-32 (87 ref.)

[T cell receptor V beta repertoire in Crohn's disease] Matsumoto T, et al. **Nippon Rinsho** 1996 Apr;54(4):1182-7 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Molecular biological characterization of intestinal intraepithelial lymphocytes and their receptors] Nagura H, et al. **Nippon Rinsho** 1996 Apr;54(4):1162-9 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Molecular mechanisms of allergy] Totsuka M, et al. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):1055-62 (33 ref.) **(Jpn)**

ANALYSIS

T-cell receptor zeta-chain expression on tumor-infiltrating lymphocytes from renal cell carcinoma. Cardi G, et al. **Cancer Res** 1997 Aug 15;57(16):3517-9

Absence of restricted T cell receptor V beta repertoire in skin lesions of a patient with both psoriasis vulgaris and lichen planus. Yamamoto T, et al. **Dermatology** 1996; 192(1):67-9

Enteropathy associated T cell lymphoma presenting as an isolated CNS lymphoma three years after diagnosis of coeliac disease: T cell receptor polymerase chain reaction studies failed to show the original enteropathy to be a clonal disorder. Tutt AN, et al. **Gut** 1997 Jun;40(6):801-3

Self-reactive forbidden clones are confined to pathways of intermediate T-cell receptor cell differentiation even under immunosuppressive conditions. Moroda T, et al. **Immunology** 1997 May;91(1):88-94

Altered expression of various receptors on T cells in young and old mice after mitogenic stimulation: a flow cytometric analysis. Wakikawa A, et al. **Mech Ageing Dev** 1997 Mar; 94(1-3):113-22

[TCR repertoire of autoreactive T cells in autoimmune disorders] Sumida T, et al. **Nippon Rinsho** 1997 Jun; 55(6):1410-8 (13 ref.) (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Antigen analogs as therapeutic agents. Alexander J, et al. **Adv Exp Med Biol** 1995;386:109-18 (24 ref.)

T cell antigen receptor dependent signalling in human lymphocytes: cholera toxin inhibits interleukin-2 receptor expression but not interleukin-2 synthesis by preventing activation of a protein kinase C isotype, PKC-alpha. Szamel M, et al. **Biochim Biophys Acta** 1997 Apr 24; 1356(2):237-48

Antigen-specific T cell receptor antagonism by antigen-presenting cells treated with the hemolysin of Listeria monocytogenes: a novel type of immune escape. Darji A, et al. **Eur J Immunol** 1997 Jul;27(7):1696-703

Opposing functions of activatory T-cell receptors and inhibitory NK-cell receptors on cytotoxic T cells. Ciccone E, et al. **Immunol Today** 1996 Oct;17(10):450-3 (9 ref.)

Presentation of a T cell receptor antagonist peptide by immunoglobulins ablates activation of T cells by a synthetic peptide or proteins requiring endocytic processing. Legge KL, et al. **J Exp Med** 1997 Mar 17;185(6):1043-53

Perturbation of the expression of the catalytic subunit C alpha of cyclic AMP-dependent protein kinase inhibits TCR-triggered secretion of IL-2 by T helper hybridoma cells. Sugiyama H, et al. **J Immunol** 1997 Jan 1;158(1):171-9

Anti-T cell receptor antibody treatment of mice with lupus-like graft versus host disease: suppression of glomerulonephritis without reduction in anti-DNA antibody levels. Maeda T, et al. **J Rheumatol** 1995 Dec; 22(12):2259-65

A T cell receptor antagonist peptide induces T cells that mediate bystander suppression and prevent autoimmune encephalomyelitis induced with multiple myelin antigens. Nicholson LB, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9279-84

Antigen analogs as tools to study T-cell activation function and activation. Sette A, et al. **Semin Immunol** 1996 Apr; 8(2):103-8 (29 ref.)

BIOSYNTHESIS

Heterogeneity of rearranged T cell receptor V alpha and V beta gene transcripts in synovial fluid T cells of HLA-B27 positive reactive arthritis patients. Verjans GM, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:91-6

A novel subset of adult gamma delta thymocytes that secretes a distinct pattern of cytokines and expresses a very restricted T cell receptor repertoire. Azuara V, et al. **Eur J Immunol** 1997 Feb;27(2):544-53

Absolute dependence of T cell receptor(hi) cell generation and relative dependence of T cell receptor(int) cell generation on the thymus. Tsukahara A, et al. **Eur J Immunol** 1997 Feb;27(2):361-7

CD4+ and CD8+ circulating alpha/beta T-cell repertoires are equally complex and are characterized by different levels of steady-state TCR expression. Naumov YN, et al. **Hum Immunol** 1996 Jun-Jul;48(1-2):52-62

The related molecular chaperones calnexin and calreticulin differentially associate with nascent T cell antigen receptor proteins within the endoplasmic reticulum. Van Leeuwen JEM, et al. **J Biol Chem** 1996 Oct 11;271(41):25345-9

Selective expansion of specific T cell receptors in the inflamed colon of Crohn's disease. Gulwani-Akolkar B, et al. **J Clin Invest** 1996 Sep 15;98(6):1344-54

Sequestration of p56(lck) by gp120, a model for TCR desensitization. Goldman F, et al. **J Immunol** 1997 Mar 1;158(5):2017-24

Tumor-induced suppression of antitumor reactivity and depression of TCRzeta expression in tumor-draining lymph node lymphocytes: possible relationship to the Th2 pathway. Fu EJ, et al. **J Immunother** 1997 Mar;20(2):111-22

Age-related changes in CD4 T cells of T cell receptor transgenic mice. Haynes L, et al. **Mech Ageing Dev** 1997 Feb;93(1-3):95-105 (44 ref.)

Oxidative stress by tumor-derived macrophages suppresses the expression of CD3 zeta chain of T-cell receptor complex and antigen-specific T-cell responses. Otsuji M, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):13119-24

Tolerant cells infiltrating class I mismatched swine kidney allografts lack the CD4 single positive subset and down regulate TCR gene expression. Giangrande I, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1164

RECEPTORS, ANTIGEN, T-CELL

BLOOD

MHC-restriction, cytokine profile, and immunoregulatory effects of human T cells specific for TCR V beta CDR2 peptides: comparison with myelin basic protein-specific T cells. Chou YK, et al. **J Neurosci Res** 1996 Sep 15; 45(6):838–51

Stimulatory roles of muscarinic acetylcholine receptors on T cell antigen receptor/CD3 complex-mediated interleukin-2 production in human peripheral blood lymphocytes. Fujino H, et al. **Mol Pharmacol** 1997 Jun; 51(6):1007–14

CHEMISTRY

Computational biochemistry of antibodies and T-cell receptors. Novotny J, et al. **Adv Protein Chem** 1996; 49:149–260 (492 ref.)

The structure of the T cell antigen receptor. Bentley GA, et al. **Annu Rev Immunol** 1996;14:563–90 (110 ref.)

Use of T cell receptor/HLA-DRB1*04 molecular modeling to predict site-specific interactions for the DR shared epitope associated with rheumatoid arthritis. Penzotti JE, et al. **Arthritis Rheum** 1997 Jul;40(7):1316–26

Characterization of T cell receptor repertoire and anti-Ro/SSA autoantibodies in relation to sialadenitis of NOD mice. Skarstein K, et al. **Autoimmunity** 1995; 22(1):9–16

MHC restriction in three dimensions: a view of T cell receptor/ligand interactions. Bjorkman PJ. **Cell** 1997 Apr 18;89(2):167–70 (14 ref.)

T cell receptor biochemistry, repertoire selection and general features of TCR and Ig structure. Davis MM, et al. **Ciba Found Symp** 1997;204:94–100; discussion 100–4 (21 ref.)

T-cell receptors: feeling out the complex. Padlan EA, et al. **Curr Biol** 1997 Jan 1;7(1):R17–20

Composition and function of T-cell receptor and B-cell receptor complexes on precursor lymphocytes. Borst J, et al. **Curr Opin Immunol** 1996 Apr;8(2):181–90 (64 ref.)

Studying interactions involving the T-cell antigen receptor by surface plasmon resonance. Margulies DH, et al. **Curr Opin Immunol** 1996 Apr;8(2):262–70 (56 ref.)

T-cell epitope determination. Walden P. **Curr Opin Immunol** 1996 Feb;8(1):68–74 (60 ref.)

Cross-linking of T-cell receptors on double-positive thymocytes induces a cytokine-mediated stromal activation process linked to cell death. Lerner A, et al. **EMBO J** 1996 Nov 1;15(21):5876–87

Noncovalent associations of T lymphocyte surface proteins. Cerný J, et al. **Eur J Immunol** 1996 Oct;26(10):2335–43

Major histocompatibility complex recognition by immune receptors: differences among T cell receptor versus antibody interactions with the VSV8/H-2Kb complex. Witte T, et al. **Eur J Immunol** 1997 Jan;27(1):227–33

A tightly regulated high level expression vector that utilizes a thermosensitive lac repressor: production of the human T cell receptor V beta 5.3 in Escherichia coli. Andrews B, et al. **Gene** 1996 Dec 5;182(1–2):101–9

Hierarchy of T cell antigen receptor assembly. Manolios N. **Immunol Cell Biol** 1995 Dec;73(6):544–8

Structure and function of the T-cell receptor: insights from X-ray crystallography. Fields BA, et al. **Immunol Today** 1996 Jul;17(7):330–6 (50 ref.)

T cell receptor CDR3 sequences and recombinant T cell receptors. Prerequisites for developing ligands to interfere with T cell receptor binding to the MHC/peptide complex. Sowka S, et al. **Int Arch Allergy Immunol** 1997 May-Jul; 113(1–3):170–2

Crystallization of a deglycosylated T cell receptor (TCR) complexed with an anti-TCR Fab fragment. Liu J, et al. **J Biol Chem** 1996 Dec 27;271(52):33639–46

A three-domain T cell receptor is biologically active and specifically stains cell surface MHC/peptide complexes. Plaksin D, et al. **J Immunol** 1997 Mar 1;158(5):2218–27

Dual conformations of a T cell receptor V alpha homodimer: implications for variability in V alpha V beta domain association. Li H, et al. **J Mol Biol** 1997 Jun 13; 269(3):385–94

Structure of the complex between human T-cell receptor, viral peptide and HLA-A2 [comment] Garboczi DN, et al. **Nature** 1996 Nov 14;384(6605):134–41. Comment on: Nature 1996 Nov 14;384(6605):109–10.

Ligand-specific oligomerization of T-cell receptor molecules. Reich Z, et al. **Nature** 1997 Jun 5; 387(6633):617–20

Development and function of T cells in T cell antigen receptor/CD3 zeta knockout mice reconstituted with Fc epsilon RI gamma. Liu CP, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):616–21

Changes in arrangement and in conformation of molecular components of peripheral T-cell antigen receptor complex after ligand binding: analyses by co-precipitation profiles. Osono E, et al. **Scand J Immunol** 1997 May;45(5):487–93

Superantigens as immunomodulators: recent structural insights. Papageorgiou AC, et al. **Structure** 1997 Aug 15; 5(8):991–6 (37 ref.)

[The T-cell receptor] Bozhkov B. **Mol Med (Sofia)** 1996; 1(1):8–13 (9 ref.) **(Bul)**

CLASSIFICATION

T cell receptor V beta repertoire subsets in psoriasis vulgaris and vitiligo [letter] Yamamoto T, et al. **Int J Dermatol** 1996 Feb;35(2):151

MHC class I ligation of human T cells activates the ZAP70 and p56lck tyrosine kinases, leads to an alternative phenotype of the TCR/CD3 zeta-chain, and induces apoptosis. Skov S, et al. **J Immunol** 1997 Apr 1; 158(7):3189–96

DEFICIENCY

TCR-gamma delta cells in CD3 zeta-deficient mice contain Fc epsilon RI gamma in the receptor complex but are specifically unresponsive to antigen. Khattri R, et al. **J Immunol** 1996 Sep 15;157(6):2320–7

A shift from negative to positive selection of autoreactive T cells by the reduced level of TCR signal in TCR-transgenic CD3 zeta-deficient mice. Yamazaki T, et al. **J Immunol** 1997 Feb 15;158(4):1634–40

DRUG EFFECTS

Activation by estrogen of the number and function of forbidden T-cell clones in intermediate T-cell receptor cells. Nakayama M, et al. **Cell Immunol** 1996 Sep 15; 172(2):163–71

Agonist-induced T cell receptor down-regulation: molecular requirements and dissociation from T cell activation. Salio M, et al. **Eur J Immunol** 1997 Jul;27(7):1769–73

GENETICS

Recent advances in understanding V(D)J recombination. Gellert M. **Adv Immunol** 1997;64:39–64 (108 ref.)

Ethanol ingestion inhibits cell-mediated immune responses of unprimed T-cell receptor transgenic mice. Schodde H, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):890–9

Accessibility control of antigen-receptor variable-region gene assembly: role of cis-acting elements. Sleckman BP, et al. **Annu Rev Immunol** 1996;14:459–81 (116 ref.)

Interaction between the SH2 domains of ZAP-70 and the tyrosine-based activation motif 1 sequence of the zeta subunit of the T-cell receptor. Labadia ME, et al. **Arch Biochem Biophys** 1997 Jun 1;342(1):117–25

Oligoclonality of CD8+ T cells in multiple sclerosis. Monteiro J, et al. **Autoimmunity** 1996;23(2):127–38

Frequency analysis of amino acids in the recognition regions of T-cell receptors. Lara-Ochoa F, et al. **Biosystems** 1996; 39(1):77–85

CD2 regulates the positive selection and function of antigen-specific CD4- CD8+ T cells. Teh SJ, et al. **Blood** 1997 Feb 15;89(4):1308–18

Transrearrangements as biomarkers for risk of lymphoid malignancy. Kirsch IR, et al. **Cancer Surv** 1996;28:311–27 (81 ref.)

Mechanism of V(D)J recombination. Zhu C, et al. **Cancer Surv** 1996;28:295–309 (69 ref.)

The origins of V(D)J recombination. Lewis SM, et al. **Cell** 1997 Jan 24;88(2):159–62 (20 ref.)

Short-term dexamethasone treatment modulates the expression of the murine TCR zeta gene locus. Ronchetti S, et al. **Cell Immunol** 1997 Jun 15;178(2):124–31

Human T-cell receptor zeta chain gene Map position 1q23.1. Stacey M, et al. **Chromosome Res** 1997 Jun;5(4):279

Mechanism of V(D)J recombination. Boguc M, et al. **Curr Opin Immunol** 1996 Apr;8(2):175–80 (51 ref.)

Functions of TCR and pre-TCR subunits: lessons from gene ablation. Malissen B, et al. **Curr Opin Immunol** 1996 Jun; 8(3):383–93 (69 ref.)

Double-strand breaks, DNA hairpins, and the mechanism of V(D)J recombination. Steen SB, et al. **Curr Top Microbiol Immunol** 1996;217:61–77 (60 ref.)

Tolerance in TCR/cognate antigen double-transgenic mice mediated by incomplete thymic deletion and peripheral receptor downregulation. Mamalaki C, et al. **Dev Immunol** 1996;4(4):299–315

Initiation of V(D)J recombination in vivo: role of recombination signal sequences in formation of single and paired double-strand breaks. Steen SB, et al. **EMBO J** 1997 May 15;16(10):2656–64

Stimulation of V(D)J cleavage by high mobility group proteins. van Gent DC, et al. **EMBO J** 1997 May 15; 16(10):2665–70

Restricted appearance of self-reactive clones into T cell receptor intermediate cells in neonatally thymectomized mice with autoimmune disease. Moroda T, et al. **Eur J Immunol** 1996 Dec;26(12):3084–91

Normal thymic selection, normal viability and decreased lymphoproliferation in T cell receptor-transgenic CTLA-4-deficient mice. Waterhouse P, et al. **Eur J Immunol** 1997 Aug;27(8):1887–92

Positive and negative thymic selection in T cell receptor-transgenic mice correlate with Nur77 mRNA expression. Xue Y, et al. **Eur J Immunol** 1997 Aug; 27(8):2048–56

Molecular analysis of antigen receptor variable region repertoires in T lymphocytes infiltrating the intrathyroidal and extrathyroidal manifestations in patients with Graves' disease. Heufelder AE, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:84–7

The 12/23 rule is enforced at the cleavage step of V(D)J recombination in vivo. Steen SB, et al. **Genes Cells** 1996 Jun;1(6):543–53

A phase I/II pilot study of the safety of the adoptive transfer of syngeneic gene-modified cytotoxic T lymphocytes in HIV-infected identical twins. Walker RE. **Hum Gene Ther** 1996 Feb 10;7(3):367–400

Oligoclonality of CD8+ T cells in health and disease: aging, infection, or immune regulation? Batliwalla F, et al. **Hum Immunol** 1996 Jun-Jul;48(1–2):68–76 (37 ref.)

Diverse usage of human T-cell receptor gene segments in HLA-DR1 allospecific T-cell clones. Ota M, et al. **Hum Immunol** 1996 Sep 1;49(2):122–9

Establishment and application of a novel T cell clonality analysis using single-strand conformation polymorphism of T cell receptor messenger signals. Yamamoto K, et al. **Hum Immunol** 1996 Jun-Jul;48(1–2):23–31

IL-7 receptor and VDJ recombination: trophic versus mechanistic actions. Candéias S, et al. **Immunity** 1997 May; 6(5):501–8 (104 ref.)

Quantitation of the cell surface level of Ld resulting in positive versus negative selection of the 2C transgenic T cell receptor in vivo. Cook JR, et al. **Immunity** 1997 Aug; 7(2):233–41

Coding joint formation in a cell-free V(D)J recombination system. Leu TM, et al. **Immunity** 1997 Aug;7(2):303–14

Peptide-induced positive selection of TCR transgenic thymocytes in a coreceptor-independent manner. Sebzda E, et al. **Immunity** 1997 May;6(5):643–53

Mutation in splicing consensus sequences causes lack of TCR membrane expression due to exon excision. Arnaud J, et al. **Immunogenetics** 1997;45(5):311–9

Obeying V(D)J rules in vitro. Eastman QM, et al. **Immunol Today** 1996 May;17(5):205

The influence of IL-7 V(D)J recombination. Döbbeling U. **Immunology** 1996 Dec;89(4):569–72

Role of thymic selection in the development of thymic lymphomas in TCR transgenic mice. Strzadala L, et al. **Int Immunol** 1997 Jan;9(1):127–38

Antigen receptor variable region repertoires expressed by T cells infiltrating thyroid, retroorbital, and pretibial tissue in Graves' disease. Heufelder AE, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3733–9

Genetic control of T cell receptor BJ gene expression in peripheral lymphocytes of normal and rheumatoid arthritis monozygotic twins. Nanki T, et al. **J Clin Invest** 1996 Oct 1;98(7):1594–601

Junctional diversity in signal joints from T cell receptor beta and delta loci via terminal deoxynucleotidyl transferase and exonucleolytic activity. Candéias S, et al. **J Exp Med** 1996 Nov 1;184(5):1919–26

Ku70 is required for DNA repair but not for T cell antigen receptor gene recombination In vivo. Ouyang H, et al. **J Exp Med** 1997 Sep 15;186(6):921–9

V(D)J recombination: modulation of RAG1 and RAG2 cleavage activity on 12/23 substrates by whole cell extract and DNA-bending proteins. Sawchuk DJ, et al. **J Exp Med** 1997 Jun 2;185(11):2025–32

Age-associated thymic atrophy in the mouse is due to a deficiency affecting rearrangement of the TCR during intrathymic T cell development. Aspinall R. **J Immunol** 1997 Apr 1;158(7):3037–45

Triggers of autoimmune disease in a murine TCR-transgenic model for multiple sclerosis. Brabb T, et al. **J Immunol** 1997 Jul 1;159(1):497–507

Definition of a large region of RAG1 that is important for coimmunoprecipitation of RAG2. McMahan CJ, et al. **J Immunol** 1997 Mar 1;158(5):2202–10

High dose oral tolerance in ovalbumin TCR-transgenic mice: systemic neutralization of IL-12 augments TGF-beta secretion and T cell apoptosis. Marth T, et al. **J Immunol** 1996 Sep 15;157(6):2348–57

Normal junctional diversification of immune receptors in p53-deficient mice. Wang C, et al. **J Immunol** 1997 Jul 15;159(2):757–62

A shift from negative to positive selection of autoreactive T cells by the reduced level of TCR signal in TCR-transgenic CD3 zeta-deficient mice. Yamazaki T, et al. **J Immunol** 1997 Feb 15;158(4):1634–40

T cell receptor V beta gene usage in Guillain-Barré syndrome. Khalili-Shirazi A, et al. **J Neurol Sci** 1997 Feb 12;145(2):169–76

Adaptation of TCR expression vectors for the construction of mouse-human chimeric MBP-specific TCR transgenes. Baker AM, et al. **J Neurosci Res** 1996 Aug 15;45(4):487–91

Induction of myelin basic protein-specific experimental autoimmune encephalomyelitis in C57BL/6 mice: mapping of T cell epitopes and T cell receptor V beta gene segment usage. Shaw MK, et al. **J Neurosci Res** 1996 Sep 15; 45(6):690–9

Biased expression of T cell receptor genes characterizes activated T cells in multiple sclerosis cerebrospinal fluid. Usuku K, et al. **J Neurosci Res** 1996 Sep 15;45(6):829–37

T-cell receptor V beta usage by lesional lymphocytes in oral lichen planus. Thomas DW, et al. **J Oral Pathol Med** 1997 Mar;26(3):105–9

Evolution of the T cell receptor beta repertoire from synovial fluid T cells of patients with juvenile onset rheumatoid arthritis. Zhang H, et al. **J Rheumatol** 1997 Jul; 24(7):1396–402

SWR: an inbred strain suitable for generating transgenic mice. Osman GE, et al. **Lab Anim Sci** 1997 Apr;47(2):167–71

Unusual feature of the T-cell receptor genes in T-lineage acute lymphoblastic leukemia. Yamanaka K, et al. **Leuk Res** 1997 Jul;21(7):667–74

Designing PCR primers to amplify specific members or subgroups of multigene families. Horton RM, et al. **Methods Mol Biol** 1997;67:459–79

Characterization of excised DNA intermediates associated with V(D)J recombination at the T-cell receptor delta locus. Nakajima PB, et al. **Mol Cell Biol** 1997 May; 17(5):2631-41

Pre-thymic transcription of TCR genes by adult murine bone marrow cells. Wang TG, et al. **Mol Immunol** 1996 Aug; 33(11-12):957-64

Overexpression of select T cell receptor V beta gene families within CD4+ and CD8+ T cell subsets of myasthenia gravis patients: a role for superantigen(s)? Gigliotti D, et al. **Mol Med** 1996 Jul;2(4):452-9

Stimulated rapid expression in vitro for early detection of in vivo T-cell receptor mutations induced by radiation exposure. Ishioka N, et al. **Mutat Res** 1997 May 23; 390(3):269-82

Comparison of the frequency of T-cell receptor mutants and thioguanine resistance induced by X-rays and ethylnitrosourea in cultured human blood T-lymphocytes [published erratum appears in Mutat Res 1997 Mar 4;374(1):151] Mei N, et al. **Mutat Res** 1996 Oct 25; 357(1-2):191-7

T-cell receptor alpha, beta, gamma, and delta chain gene microsatellites show no association with multiple sclerosis. Droogan AG, et al. **Neurology** 1996 Oct;47(4):1049-53

IMGT, the international ImMunoGeneTics database. Giudicelli V, et al. **Nucleic Acids Res** 1997 Jan 1; 25(1):206-11

A complex of RAG-1 and RAG-2 proteins persists on DNA after single-strand cleavage at V(D)J recombination signal sequences. Grawunder U, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1375-82

The presence of direct repeats does not influence coding joint formation during V(D)J recombination. Nourrit F, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):3968-73

The evolutionary origins of immunoglobulins and T-cell receptors. 65th forum in immunology. **Res Immunol** 1996 May;147(4):197-266

The evolutionary origins of immunoglobulins and T-cell receptors: possibilities and probabilities. Langman RE. **Res Immunol** 1996 May;147(4):214-7 (2 ref.)

The organization and structure of immunoglobulin and T-cell receptor genes in the most phylogenetically distant jawed vertebrates: evolutionary implications. Litman GW, et al. **Res Immunol** 1996 May;147(4):226-33 (36 ref.)

Occam's Razor, invertebrate allorecognition and Ig superfamily evolution. Mokady O. **Res Immunol** 1996 May; 147(4):241-6 (20 ref.)

The origin of immunoglobulins and T-cell receptors is likely to be the cell death sensor of macrophages. Ohno S. **Res Immunol** 1996 May;147(4):247-52 (12 ref.)

CD4 dependence of activation threshold and TCR signalling in mouse T lymphocytes. Feito MJ, et al. **Scand J Immunol** 1997 Feb;45(2):166-74

[Analysis of T-cell repertory in peripheral blood of patients with autoimmune disease] Kamisaka H, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):652 **(Jpn)**

[TCR CDR3 motif expression in PLP specific T cell from patients with multiple sclerosis] Kondo T, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):666-9 (8 ref.) **(Jpn)**

[Intra-hepatic infiltrating T cell clonality analysis in patients with autoimmune hepatitis and the clinical significance] Takahashi H, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):708-12 (9 ref.) **(Jpn)**

IMMUNOLOGY

Detection of CD8 T-cell expansions with restricted T-cell receptor V gene usage in infants vertically infected by HIV-1. Halapi E, et al. **AIDS** 1996 Dec;10(14):1621-6

Ethanol ingestion inhibits cell-mediated immune responses of unprimed T-cell receptor transgenic mice. Schodde H, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):890-9

Antigen receptor signalling. Monteseirin J, et al. **Allergol Immunopathol (Madr)** 1996 Sep-Oct;24(5):185-92 (9 ref.)

Ig-specific T cells regulate the fate of the B cells during the immune response in a TCR transgenic mouse model. Granucci F, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:119-21

Fine specificity analysis of autoantibodies to T cell receptor CDR1 segments in rheumatoid arthritis. Landsperger WJ, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:459-61

Fine specificity of myelin basic protein reactive T-cells: implications for T-cell receptor antagonism. Anderton SM, et al. **Biochem Soc Trans** 1997 May;25(2):659-61 (14 ref.)

TcR zeta/CD3 signal transduction in T-cells: downstream signalling via ZAP-70, SLP-76 and FYB. da Silva AJ, et al. **Biochem Soc Trans** 1997 May;25(2):361-6

Single-chain Fv/folate conjugates mediate efficient lysis of folate-receptor-positive tumor cells. Cho BK, et al. **Bioconjug Chem** 1997 May-Jun;8(3):338-46

T-cell receptor in Sjögren's syndrome. Sumida T, et al. **Br J Rheumatol** 1997 Jun;36(6):622-9 (52 ref.)

Immunotherapy II: Antigens, receptors and costimulation. Searle PF, et al. **Cancer Metastasis Rev** 1996 Sep; 15(3):329-49 (103 ref.)

The MHC reactivity of the T cell repertoire prior to positive and negative selection. Zerrahn J, et al. **Cell** 1997 Mar 7; 88(5):627-36

MHC class I is functionally associated with antigen receptors in human T and B lymphomas. Pedersen AE, et al. **Cell Immunol** 1996 Nov 1;173(2):295-302

Identification of MHC class II and TCR binding residues in the type II collagen immunodominant determinant mediating collagen-induced arthritis. Rosloniec EF, et al. **Cell Immunol** 1996 Aug 25;172(1):21-8

Accessory molecule and costimulation requirements for CD4 T cell response. Croft M, et al. **Crit Rev Immunol** 1997; 17(1):89-118 (159 ref.)

T-cell receptors: is the repertoire inherently MHC-specific? Janeway CA, et al. **Curr Biol** 1997 May 1;7(5):R299-300 (11 ref.)

T-cell repertoire: political correctness in the immune system. Lucas B, et al. **Curr Biol** 1996 Jul 1;6(7):783-7 (12 ref.)

Immunology: why the baby isn't thrown out.... Simpson E. **Curr Biol** 1996 Jan 1;6(1):43-4 (6 ref.)

Interactions of TCRs with MHC-peptide complexes: a quantitative basis for mechanistic models. Margulies DH. **Curr Opin Immunol** 1997 Jun;9(3):390-5 (56 ref.)

T cell clonal anergy. Schwartz RH. **Curr Opin Immunol** 1997 Jun;9(3):351-7 (44 ref.)

TCR zeta chain in T cell development and selection. Shores EW, et al. **Curr Opin Immunol** 1997 Jun;9(3):380-9 (96 ref.)

Altered peptide ligands: prospects for immune intervention in autoimmune disease. Fairchild PJ. **Eur J Immunogenet** 1997 Apr;24(2):155-67 (65 ref.)

Major histocompatibility complex and T cell receptor interaction of the P91A tum- peptide. McCormick D, et al. **Eur J Immunol** 1996 Dec;26(12):2895-902

Restricted appearance of self-reactive clones into T cell receptor intermediate cells in neonatally thymectomized mice with autoimmune disease. Moroda T, et al. **Eur J Immunol** 1996 Dec;26(12):3084-91

Identification and cellular distribution of the rat interleukin-2 receptor beta chain: induction of the IL-2R alpha- beta+ phenotype by major histocompatibility complex class I recognition during T cell development in vivo and by T cell receptor stimulation of CD4+8+ immature thymocytes in vitro. Park JH, et al. **Eur J Immunol** 1996 Oct;26(10):2371-5

Prospective study of T cell receptor utilization following the induction of murine thyroiditis. Nakashima M, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:46-51

T cell targeting of TAG72+ tumor cells by a chimeric receptor with antibody-like specificity for a carbohydrate epitope. Hombach A, et al. **Gastroenterology** 1997 Oct; 113(4):1163-70

Molecular features of the hepatitis B virus nucleocapsid T-cell epitope 18-27: interaction with HLA and T-cell receptor. Bertoletti A, et al. **Hepatology** 1997 Oct; 26(4):1027-34

Anti-T cell receptor antibody prolongs transgene expression and reduces lung inflammation after adenovirus-mediated gene transfer. Zsengellér ZK, et al. **Hum Gene Ther** 1997 May 20;8(8):935-41

Human immunology special issue: T-cell receptors [editorial] Gorski J. **Hum Immunol** 1996 Jun-Jul;48(1-2):1-2

The diversity of antigen-specific TCR repertoires reflects the relative complexity of epitopes recognized. Maryanski JL, et al. **Hum Immunol** 1997 May;54(2):117-28 (50 ref.)

CD4+ and CD8+ circulating alpha/beta T-cell repertoires are equally complex and are characterized by different levels of steady-state TCR expression. Naumov YN, et al. **Hum Immunol** 1996 Jun-Jul;48(1-2):52-62

Binding of ALA-substituted analogs of HA306-320 to DR1101, DR1301, and DR0402 molecules: correlation of DR-peptide interactions with recognition by a single TCR. Zeliszewski D, et al. **Hum Immunol** 1996 Sep 15;50(1):61-9

Production and characterization of a novel monoclonal antibody against phosphorylated T cell receptor zeta chain. Conrad PJ, et al. **Hybridoma** 1997 Apr;16(2):167-73

In thymic selection, peptide diversity gives and takes away. Bevan MJ. **Immunity** 1997 Aug;7(2):175-8 (16 ref.)

Regulation of Vav-SLP-76 binding by ZAP-70 and its relevance to TCR zeta/CD3 induction of interleukin-2. Raab M, et al. **Immunity** 1997 Feb;6(2):155-64

How did the primordial T cell receptor and MHC molecules function initially? Kurosawa Y, et al. **Immunol Cell Biol** 1997 Apr;75(2):193-6

Collaboration of TCR-, CD4- and CD28-mediated signalling in antigen-specific MHC class II-restricted T-cells. Gogolák P, et al. **Immunol Lett** 1996 Dec; 54(2-3):135-44

Diversity of a human CD4+ T cell repertoire recognizing one TCR ligand. Matsushita S, et al. **Immunol Lett** 1996 Jul;51(3):191-4

Mice lacking terminal deoxynucleotidyl transferase: adult mice with a fetal antigen receptor repertoire. Gilfillan S, et al. **Immunol Rev** 1995 Dec;148:201-19 (85 ref.)

Alloreactivity, antigen recognition and T-cell selection: three diverse T-cell recognition problems with a common solution. Joyce S, et al. **Immunol Rev** 1996 Dec;154:59-103 (251 ref.)

Use of adoptive transfer of T-cell-antigen-receptor-transgenic T cell for the study of T-cell activation in vivo. Pape KA, et al. **Immunol Rev** 1997 Apr;156:67-78 (59 ref.)

Opposing functions of activatory T-cell receptors and inhibitory NK-cell receptors on cytotoxic T cells. Ciccone E, et al. **Immunol Today** 1996 Oct;17(10):450-3 (9 ref.)

Apoptosis in a Fas-resistant, T-cell receptor-sensitive human leukaemic T-cell clone. Delehanty LL, et al. **Immunology** 1997 Mar;90(3):383-7

Flexibility in T-cell receptor ligand repertoires depends on MHC and T-cell receptor clonotype. Geluk A, et al. **Immunology** 1997 Mar;90(3):370-5

Development and cytolytic function of intestinal intraepithelial T lymphocytes in antigen-minimized mice. Kawaguchi-Miyashita M, et al. **Immunology** 1996 Oct; 89(2):268-73

Protein kinase C isotypes theta, delta and eta in human lymphocytes: differential responses to signalling through the T-cell receptor and phorbol esters. Keenan C, et al. **Immunology** 1997 Apr;90(4):557-63

The antigen receptors on mature and immature T lymphocytes are coupled to phosphatidylcholine-specific phospholipase D activation. Reid PA, et al. **Immunology** 1997 Feb;90(2):250-6

TCR-independent CD28-mediated gene expression in peripheral blood lymphocytes from donors chronically infected with HIV-1. Wong JG, et al. **Immunology** 1997 Feb;90(2):281-5

TCR- and IL-1-mediated co-stimulation reveals an IL-4-independent way of Th2 cell proliferation. Huber M, et al. **Int Immunol** 1996 Aug;8(8):1257-63

Solvent exposed side chains of peptides bound to HLA A*1101 have similar effects on the reactivity of alloantibodies and specific TCR. Zhang QJ, et al. **Int Immunol** 1996 Jun;8(6):927-38

Inhibitory receptors for HLA class I molecules on cytolytic T lymphocytes. Functional relevance and implications for anti-tumor immune responses. Mingari MC, et al. **Int J Clin Lab Res** 1997;27(2):87-94 (57 ref.)

Stress down-regulates experimental allergic encephalomyelitis (EAE) but permits activation and localization of autoreactive V beta 8.2+ T cells. Owhashi M, et al. **Int J Neurosci** 1997 Feb;89(3-4):177-88

T cell receptor (TCR) repertoire in alloimmune responses. Finn OJ, et al. **Int Rev Immunol** 1996;13(3):187-207 (131 ref.)

Significance of antigen-specific T cell clones in collagen diseases: analyses with a novel T cell clonality evaluation system. Yamamoto K. **Intern Med** 1997 Apr;36(4):242-7 (29 ref.)

A structural model for TCR recognition of the HLA class II shared epitope sequence implicated in susceptibility to rheumatoid arthritis. Penzotti JE, et al. **J Autoimmun** 1996 Apr;9(2):287-93

Immunodominance of a low-affinity major histocompatibility complex-binding myelin basic protein epitope (residues 111-129) in HLA-DR4 (B1*0401) subjects is associated with a restricted T cell receptor repertoire. Muraro PA, et al. **J Clin Invest** 1997 Jul 15;100(2):339-49

Asynchronous coreceptor downregulation after positive thymic selection: prolonged maintenance of the double positive state in CD8 lineage differentiation due to sustained biosynthesis of the CD4 coreceptor. Barthlott T, et al. **J Exp Med** 1997 Jan 20;185(2):357-62

Epitope-dependent selection of highly restricted or diverse T cell receptor repertoires in response to persistent infection by Epstein-Barr virus. Campos-Lima PO, et al. **J Exp Med** 1997 Jul 7;186(1):83-9

Systemic T cell-independent tumor immunity after transplantation of universal receptor-modified bone marrow into SCID mice. Hege KM, et al. **J Exp Med** 1996 Dec 1;184(6):2261-9

Immunization with soluble BDC 2.5 T cell receptor-immunoglobulin chimeric protein:antibody specificity and protection of nonobese diabetic mice against adoptive transfer of diabetes by maternal immunization. McKeever U, et al. **J Exp Med** 1996 Nov 1;184(5):1755-68

The efficiency of CD4 recruitment to ligand-engaged TCR controls the agonist/partial agonist properties of peptide-MHC molecule ligands. Madrenas J, et al. **J Exp Med** 1997 Jan 20;185(2):219-29

Induction of apoptosis and T helper 2 (Th2) responses correlates with peptide affinity for the major histocompatibility complex in self-reactive T cell receptor transgenic mice. Pearson CI, et al. **J Exp Med** 1997 Feb 17;185(4):583-99

Altered hapten ligands antagonize trinitrophenyl-specific cytotoxic T cells and block internalization of hapten-specific receptors [see comments] Preckel T, et al. **J Exp Med** 1997 May 19;185(10):1803-13. Comment in: J Exp Med 1997 May 19;185(10):1717-9.

Commitment of immature CD4+8+ thymocytes to the CD4 lineage requires CD3 signaling but does not require expression of clonotypic T cell receptor (TCR) chains. Suzuki H, et al. **J Exp Med** 1997 Jul 7;186(1):17-23

A single T cell receptor recognizes structurally distinct MHC/peptide complexes with high specificity. Tallquist MD, et al. **J Exp Med** 1996 Sep 1;184(3):1017-26

Thymus-derived glucocorticoids regulate antigen-specific positive selection. Vacchio MS, et al. **J Exp Med** 1997 Jun 2;185(11):2033-8

Impaired signaling in alloantigen-specific CD8+ T cells tolerized in vivo: employing a model of Ld-specific TCR transgenic mice transplanted with allogenic hearts under the cover of a short-term rapamycin treatment. Chen H, et al. **J Immunol** 1996 Nov 15;157(10):4297-308

Response of a human T cell clone to a large panel of altered peptide ligands carrying single residue substitutions in an antigenic peptide: characterization and frequencies of TCR agonism and TCR antagonism with or without partial activation. Chen YZ, et al. **J Immunol** 1996 Nov 1;

157(9):3783–90
Clonal expansion of CD8+ T cells in Kawasaki disease. Choi IH, et al. **J Immunol** 1997 Jul 1;159(1):481–6
Sequential development of structural and functional alterations in T cells from tumor-bearing mice. Correa MR, et al. **J Immunol** 1997 Jun 1;158(11):5292–6
Defective TCR stimulation in anergized type 2 T helper cells correlates with abrogated p56(lck) and ZAP-70 tyrosine kinase activities. Faith A, et al. **J Immunol** 1997 Jul 1; 159(1):53–60
Mechanisms of tolerance induction: splenocytes from total lymphoid irradiated mice inhibit the IL-2 pathway in TCR-activated CD4 cells. Field EH, et al. **J Immunol** 1996 Nov 1;157(9):3796–803
Migration and activation of antigen-specific CD8+ T cells upon in vivo stimulation with allogeneic tumor. Kedl RM, et al. **J Immunol** 1997 Jul 15;159(2):650–63
Inactivation of lck and loss of TCR-mediated signaling upon persistent engagement with complexes of peptide:MHC molecules. Lee JE, et al. **J Immunol** 1997 Jul 1;159(1):61–9
Overexpression of the heat shock protein 70 enhances the TCR/CD3- and Fas/Apo-1/CD95-mediated apoptotic cell death in Jurkat T cells. Liossis SN, et al. **J Immunol** 1997 Jun 15;158(12):5668–75
Differential contact of disparate class I/peptide complexes as the basis for epitope cross-recognition by a single T cell receptor. Loftus DJ, et al. **J Immunol** 1997 Apr 15; 158(8):3651–8
Defective TCR-mediated signaling in synovial T cells in rheumatoid arthritis. Maurice MM, et al. **J Immunol** 1997 Sep 15;159(6):2973–8
The role of protein kinase C in CD8+ T lymphocyte effector responses. Nesic D, et al. **J Immunol** 1997 Jul 15; 159(2):582–90
Fc epsilonRI gamma can support T cell development and function in mice lacking endogenous TCR zeta-chain. Shores E, et al. **J Immunol** 1997 Jul 1;159(1):222–30
Induction of IL-4-producing CD4+ T cells by antigenic peptides altered for TCR binding. Tao X, et al. **J Immunol** 1997 May 1;158(9):4237–44
Functional mapping of the orientation for TCR recognition of an H2-Kb-restricted ovalbumin peptide suggests that the beta-chain subunit can dominate the determination of peptide side chain specificity. Turner SJ, et al. **J Immunol** 1997 Sep 1;159(5):2312–7
Structurally similar TCRs differ in their efficiency of positive selection. Yelon D, et al. **J Immunol** 1997 Jun 1; 158(11):5219–28
V beta CDR3 motifs associated with BP recognition are enriched in OX-40+ spinal cord T cells of Lewis rats with EAE. Buenafe AC, et al. **J Neurosci Res** 1996 Jun 15; 44(6):562–7
Treatment of rat hemiparkinson model with xenogeneic neural transplantation: tolerance induction by anti-T-cell antibodies. Okura Y, et al. **J Neurosci Res** 1997 Jun 1; 48(5):385–96
Regulation of T-cell antigen receptor signalling by Syk tyrosine protein kinase. Latour S, et al. **Mol Cell Biol** 1997 Aug;17(8):4434–41
Pictures of MHC restriction [news; comment] Parham P. **Nature** 1996 Nov 14;384(6605):109–10. Comment on: Nature 1996 Nov 14;384(6605):134–41. Comment on: Nature 1996 Nov 14;384(6605):188–92.
Molecular basis for the recognition of two structurally different major histocompatibility complex/peptide complexes by a single T-cell receptor. Brock R, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13108–13
Transfected Drosophila cells as a probe for defining the minimal requirements for stimulating unprimed CD8+ T cells. Cai Z, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14736–41
Thymocyte development is normal in CTLA-4-deficient mice. Chambers CA, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9296–301
Antigen receptor engagement delivers a stop signal to migrating T lymphocytes. Dustin ML, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3909–13
Tuning of activation thresholds explains flexibility in the selection and development of T cells in the thymus. Grossman Z, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14747–52
Functional differentiation of T cells in the intestine of T cell receptor transgenic mice. Hurst SD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3920–5
Shared fine specificity between T-cell receptors and an antibody recognizing a peptide/major histocompatibility class I complex. Stryhn A, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10338–42
Pseudo-felty's syndrome. Report of a case with no symptoms for at least 15 years. Claudepierre P, et al. **Rev Rhum Engl Ed** 1996 Jan;63(1):56–8
Positive selection of T cells induced by viral delivery of neopeptides to the thymus. Nakano N, et al. **Science** 1997 Jan 31;275(5300):678–83
Key differentiation steps in normal B cells and in myeloma cells. Zubler RH. **Semin Hematol** 1997 Jan;34(1 Suppl 1):13–22 (52 ref.)
Introduction: T-cell recognition of variant ligands. Allen PM. **Semin Immunol** 1996 Apr;8(2):61 (7 ref.)
Responses of T cells to ligands for the T-cell receptor. Janeway CA Jr, et al. **Semin Immunol** 1996 Apr; 8(2):108–115 (28 ref.)
Variant TCR ligands: new insights into the molecular basis of antigen-dependent signal transduction and T-cell activation. Madrenas J, et al. **Semin Immunol** 1996 Apr; 8(2):83–101 (99 ref.)
Cross-talk between the T cell antigen receptor and the glucocorticoid receptor regulates thymocyte development. Ashwell JD, et al. **Stem Cells** 1996 Sep;14(5):490–500 (58 ref.)
T-cell receptor usage in alloreactivity against HLA-B*2703 reveals significant conservation of the antigenic structure of B*2705. Barber DF, et al. **Tissue Antigens** 1996 Jun; 47(6):478–84
Low expression of T-cell receptor-CD3 complex: a case with a clinical presentation resembling humoral immunodeficiency. Sanal O, et al. **Turk J Pediatr** 1996 Jan-Mar;38(1):81–4
[The T-cell receptor—its participation in the pathological immune response] Bozhkov B. **Mol Med (Sofia)** 1996; 1(2):9–15 (20 ref.) (Eng. Abstr.) **(Bul)**
[T cell vaccination—induction of anti-idiotypic immune response against TCR and shift of Th1/Th2 balance] Kakimoto K, et al. **Nippon Rinsho** 1997 Jun;55(6):1512–8 (18 ref.) (Eng. Abstr.) **(Jpn)**
[TCR peptide vaccination for autoimmune diseases: involvement of T-T interaction between autoimmune T cells presenting TCR peptide and CD4-CD8- regulatory T cells] Yamamura T. **Nippon Rinsho** 1997 Jun; 55(6):1519–24 (14 ref.) (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Purification of the T-cell receptor zeta-chain: covalent modification by 4-(2-aminoethyl)-benzenesulfonyl fluoride. Sweeney B, et al. **Anal Biochem** 1997 Feb 1; 245(1):107–9

METABOLISM

Antigen-specific T-cell receptors and their reactions with complexes formed by peptides with major histocompatibility complex proteins. Eisen HN, et al. **Adv Protein Chem** 1996;49:1–56 (227 ref.)
T cell receptor usage by cytotoxic T lymphocytes against autologous human melanoma. Leong SP, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3355–61
An 'antigenic ligand competition' model for antigen receptor-mediated lymphocyte selection. Seledtsov VI, et al. **Biomed Pharmacother** 1996;50(3–4):170–7
Functional interactions between the thrombin receptor and the T-cell antigen receptor in human T-cell lines. Joyce DE, et al. **Blood** 1997 Sep 1;90(5):1893–901
Differential tyrosine phosphorylation of zeta chain dimers in mouse CD4 T lymphocytes: effect of age. Garcia GG, et al. **Cell Immunol** 1997 Jan 10;175(1):51–7
T cell antigen receptor signal transduction. Qian D, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):205–12 (71 ref.)
Studying interactions involving the T-cell antigen receptor by surface plasmon resonance. Margulies DH, et al. **Curr Opin Immunol** 1996 Apr;8(2):262–70 (56 ref.)
The Syk protein tyrosine kinase can function independently of CD45 or Lck in T cell antigen receptor signaling. Chu DH, et al. **EMBO J** 1996 Nov 15;15(22):6251–61
T-cell receptor ligation by peptide/MHC induces activation of a caspase in immature thymocytes: the molecular basis of negative selection. Clayton LK, et al. **EMBO J** 1997 May 1;16(9):2282–93
S-acylation of LCK protein tyrosine kinase is essential for its signalling function in T lymphocytes. Kabouridis PS, et al. **EMBO J** 1997 Aug 15;16(16):4983–98
Reconstitution of T cell antigen receptor-induced Erk2 kinase activation in Lck-negative JCaM1 cells by Syk. Williams S, et al. **Eur J Biochem** 1997 Apr 1;245(1):84–90
T cell receptor and CD8-dependent tyrosine phosphorylation events in cytotoxic T lymphocytes: activation of p56lck by CD8 binding to class I protein. Anel A, et al. **Eur J Immunol** 1996 Oct;26(10):2310–9
The intensity of T cell receptor engagement determines the cytokine pattern of human allergen-specific T helper cells. Carballido JM, et al. **Eur J Immunol** 1997 Feb;27(2):515–21
Differential T cell receptor-mediated signaling in naive and memory CD4 T cells. Farber DL, et al. **Eur J Immunol** 1997 Aug;27(8):2094–101
Ligation of the T cell antigen receptor induces tyrosine phosphorylation of p105CasL, a member of the p130Cas-related docking protein family, and its subsequent binding to the Src homology 2 domain of c-Crk. Kanda H, et al. **Eur J Immunol** 1997 Aug;27(8):2113–7
Agonist-induced T cell receptor down-regulation: molecular requirements and dissociation from T cell activation. Salio M, et al. **Eur J Immunol** 1997 Jul;27(7):1769–73
Differential interaction of the CD2 extracellular and intracellular domains with the tyrosine phosphatase CD45 and the zeta chain of the TCR/CD3/zeta complex. Verhagen AM, et al. **Eur J Immunol** 1996 Dec; 26(12):2841–9
Engagement of a T cell receptor by major histocompatibility complex irrespective of peptide. Vessey SJ, et al. **Eur J Immunol** 1997 Apr;27(4):879–85
CD4+ T-cell population mediates development of inflammatory bowel disease in T-cell receptor alpha chain-deficient mice. Takahashi I, et al. **Gastroenterology** 1997 Jun;112(6):1876–86
Signals from lymphocytes in colon cancer [comment] Kiessling R. **Gut** 1997 Jan;40(1):153–4. Comment on: Gut 1997 Jan;40(1):113–9.
T cell receptor-zeta and granzyme B expression in mononuclear cell infiltrates in normal colon mucosa and colon carcinoma [see comments] Mulder WM, et al. **Gut** 1997 Jan;40(1):113–9. Comment in: Gut 1997 Jan;40(1):153–4.
Fc gammaRIIB1 inhibition of BCR-mediated phosphoinositide hydrolysis and Ca2+ mobilization is integrated by CD19 dephosphorylation. Hippen KL, et al. **Immunity** 1997 Jul;7(1):49–58
Altered T cell receptor ligands trigger a subset of early T cell signals. Rabinowitz JD, et al. **Immunity** 1996 Aug; 5(2):125–35
Correlation between the number of T cell receptors required for T cell activation and TCR-ligand affinity. Schodin BA, et al. **Immunity** 1996 Aug;5(2):137–46
A high affinity T cell receptor? Alberti S. **Immunol Cell Biol** 1996 Jun;74(3):292–7 (38 ref.)
Molecular analysis of the fyn-complex: cloning of SKAP55 and SLAP-130, two novel adaptor proteins which associate with fyn and may participate in the regulation of T cell receptor-mediated signaling. Schraven B, et al. **Immunol Lett** 1997 Jun 1;57(1–3):165–9 (26 ref.)
Tyrosine phosphorylation of the CD3-epsilon subunit of the T cell antigen receptor mediates enhanced association with phosphatidylinositol 3-kinase in Jurkat T cells. de Aós I, et al. **J Biol Chem** 1997 Oct 3;272(40):25310–8
Molecular cloning of SLAP-130, an SLP-76-associated substrate of the T cell antigen receptor-stimulated protein tyrosine kinases. Musci MA, et al. **J Biol Chem** 1997 May 2;272(18):11674–7
STAT3 is a serine kinase target in T lymphocytes. Interleukin 2 and T cell antigen receptor signals converge upon serine 727. Ng J, et al. **J Biol Chem** 1997 Sep 26;272(39):24542–9
The role of a lymphoid-restricted, Grb2-like SH3-SH2-SH3 protein in T cell receptor signaling. Trüb T, et al. **J Biol Chem** 1997 Jan 10;272(2):894–902
Differential and multiple binding of signal transducing molecules to the ITAMs of the TCR-zeta chain. Zenner G, et al. **J Cell Biochem** 1996 Oct;63(1):94–103
ZAP-70 protein tyrosine kinase is constitutively targeted to the T cell cortex independently of its SH2 domains. Huby RDJ, et al. **J Cell Biol** 1997 Jun 30;137(7):1639–49
IL-7 upregulates T cell receptor/CD3 expression by cultured dendritic epidermal T cells. Ono M, et al. **J Dermatol Sci** 1996 Feb;11(2):89–96
RANTES induces tyrosine kinase activity of stably complexed p125FAK and ZAP-70 in human T cells. Bacon KB, et al. **J Exp Med** 1996 Sep 1;184(3):873–82
Requirement for p56lck tyrosine kinase activation in T cell receptor-mediated thymic selection. Hashimoto K, et al. **J Exp Med** 1996 Sep 1;184(3):931–43
Single cell analysis reveals regulated hierarchical T cell antigen receptor signaling thresholds and intraclonal heterogeneity for individual cytokine responses of CD4+ T cells. Itoh Y, et al. **J Exp Med** 1997 Aug 29;186(5):757–66
Structural basis for T cell recognition of altered peptide ligands: a single T cell receptor can productively recognize a large continuum of related ligands. Kersh GJ, et al. **J Exp Med** 1996 Oct 1;184(4):1259–68
Effects of epitope modification on T cell receptor-ligand binding and antigen recognition by seven H-2Kd-restricted cytotoxic T lymphocyte clones specific for a photoreactive peptide derivative. Kessler BM, et al. **J Exp Med** 1997 Feb 17;185(4):629–40
Tyrosine phosphorylation of Pyk2 is selectively regulated by Fyn during TCR signaling. Qian D, et al. **J Exp Med** 1997 Apr 7;185(7):1253–9
Role of the multiple T cell receptor (TCR)-zeta chain signaling motifs in selection of the T cell repertoire. Shores EW, et al. **J Exp Med** 1997 Mar 3;185(5):893–900
Reconstitution of T cell receptor signaling in ZAP-70-deficient cells by retroviral transduction of the ZAP-70 gene. Taylor N, et al. **J Exp Med** 1996 Nov 1; 184(5):2031–6
p95vav associates with tyrosine-phosphorylated SLP-76 in antigen-stimulated T cells. Tuosto L, et al. **J Exp Med** 1996 Sep 1;184(3):1161–6
Naive and effector CD4 T cells differ in their requirements for T cell receptor versus costimulatory signals. Dubey C, et al. **J Immunol** 1996 Oct 15;157(8):3280–9
TCR-mediated adhesion of T cell hybridomas to planar bilayers containing purified MHC class II/peptide complexes and receptor shedding during detachment. Dustin ML, et al. **J Immunol** 1996 Sep 1;157(5):2014–21
Sequestration of p56(lck) by gp120, a model for TCR desensitization. Goldman F, et al. **J Immunol** 1997 Mar 1;158(5):2017–24
TCR engagement of CD4+CD8+ thymocytes in vitro induces early aspects of positive selection, but not apoptosis. Groves T, et al. **J Immunol** 1997 Jan 1; 158(1):65–75
The Lck SH2 phosphotyrosine binding site is critical for efficient TCR-induced processive tyrosine phosphorylation of the zeta-chain and IL-2 production. Lewis LA, et al. **J Immunol** 1997 Sep 1;159(5):2292–300
Role of CD3gamma and CD3delta cytoplasmic domains in cytolytic T lymphocyte functions and TCR/CD3 down-modulation. Luton F, et al. **J Immunol** 1997 May 1;158(9):4162–70
Altered TCR ligands affect antigen-presenting cell responses:

up-regulation of IL-12 by an analogue peptide. Matsuoka T, et al. **J Immunol** 1996 Dec 1;157(11):4837-43
Expression and role in apoptosis of the alpha- and beta-chains of the IFN-gamma receptor on human Th1 and Th2 clones. Novelli F, et al. **J Immunol** 1997 Jul 1; 159(1):206-13
Deficient expression of p56(lck) in Th2 cells leads to partial TCR signaling and a dysregulation in lymphokine mRNA levels. al-Ramadi BK, et al. **J Immunol** 1996 Dec 1; 157(11):4751-61
A residue in the center of peptide QL9 affects binding to both Ld and the T cell receptor. Schlueter CJ, et al. **J Immunol** 1996 Nov 15;157(10):4478-85
Alloreactive T cell recognition of MHC class I molecules: the T cell receptor interacts with limited regions of the MHC class I long alpha helices. Smith KD, et al. **J Immunol** 1997 Mar 15;158(6):2805-12
A new 12-kilodalton dimer associated with pre-TCR complex and clonotype-independent CD3 complex on immature thymocytes. Takase K, et al. **J Immunol** 1997 Jul 15;159(2):741-7
Regulation of signal transduction through the T cell antigen receptor. Zhao H, et al. **J Lab Clin Med** 1997 Aug; 130(2):126-31 (56 ref.)
Dual conformations of a T cell receptor V alpha homodimer: implications for variability in V alpha V beta domain association. Li H, et al. **J Mol Biol** 1997 Jun 13; 269(3):385-94
Nonactivated astrocytes downregulate T cell receptor expression and reduce antigen-specific proliferation and cytokine production of myelin basic protein (MBP)-reactive T cells. Sun D, et al. **J Neuroimmunol** 1997 Sep;78(1-2):69-78
Cytokine-independent proliferation of IL-2-nonproducing CTL clones in association with high TCR-signal transduction responses. Nagase F, et al. **Microbiol Immunol** 1996;40(7):505-11
Role of non-anchor residues of Db-restricted peptides in class I binding and TCR triggering. Sigal LJ, et al. **Mol Immunol** 1996 Dec;33(17-18):1323-33
Hold your enemies closer [editorial] **Nat Struct Biol** 1996 Nov;3(11):895-6
Immunology. Two faces are better than one [news; comment] Malissen B. **Nature** 1996 Dec 12;384(6609):518-9. Comment on: Nature 1996 Dec 12;384(6609):577-81.
Mechanism of activation for Zap-70 catalytic activity. LoGrasso PV, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12165-70
Differential cytosolic tail dependence and intracellular fate of T-cell receptors internalized upon activation with superantigen or phorbol ester. Niedergang F, et al. **Res Immunol** 1997 May;148(4):231-45
Changes in arrangement and in conformation of molecular components of peripheral T-cell antigen receptor complex after ligand binding: analyses by co-precipitation profiles. Osono E, et al. **Scand J Immunol** 1997 May;45(5):487-93
Introduction: T-cell recognition of variant ligands. Allen PM. **Semin Immunol** 1996 Apr;8(2):61 (7 ref.)
Variant TCR ligands: new insights into the molecular basis of antigen-dependent signal transduction and T-cell activation. Madrenas J, et al. **Semin Immunol** 1996 Apr; 8(2):83-101 (99 ref.)
Identifying the molecular control of T-cell death; on the hunt for killer genes. Wong B, et al. **Semin Immunol** 1997 Feb;9(1):7-16 (53 ref.)

PHYSIOLOGY

Differential signaling by lymphocyte antigen receptors. Alberola-Ila J, et al. **Annu Rev Immunol** 1997;15:125-54 (203 ref.)
T cell antigen receptor signal transduction pathways. Cantrell D. **Annu Rev Immunol** 1996;14:259-74 (91 ref.)
CD28 co-receptor signal transduction in T-cell activation. Blair PJ, et al. **Biochem Soc Trans** 1997 May;25(2):651-7 (57 ref.)
Theileria annulata "superantigen" activity--TCB usage by responding bovine CD4+ cells from uninfected donors. Campbell JD, et al. **Biochem Soc Trans** 1997 May; 25(2):277S
Tyrosine phosphatases in T-cell development and signalling. Conroy LA, et al. **Biochem Soc Trans** 1997 May; 25(2):445-51 (41 ref.)
T-cell antigen receptor signal transduction in CD45-/- thymocytes. Stone JD, et al. **Biochem Soc Trans** 1997 May; 25(2):302S
Lovastatin inhibits T-cell antigen receptor signaling independent of its effects on ras. Goldman F, et al. **Blood** 1996 Dec 15;88(12):4611-9
T cell antigen receptor signal transduction pathways. Cantrell DA. **Cancer Surv** 1996;27:165-75 (165 ref.)
T lymphocyte migration: the influence of interactions via adhesion molecules, the T cell receptor, and cytokines. Hauzenberger D, et al. **Crit Rev Immunol** 1995; 15(3-4):285-316 (310 ref.)
A negative role for phosphoinositide 3-kinase in T-cell antigen receptor function. Reif K, et al. **Curr Biol** 1997 May 1;7(5):285-93
Composition and function of T-cell receptor and B-cell receptor complexes on precursor lymphocytes. Borst J, et al. **Curr Opin Immunol** 1996 Apr;8(2):181-90 (64 ref.)
Functions of TCR and pre-TCR subunits: lessons from gene ablation. Malissen B, et al. **Curr Opin Immunol** 1996 Jun; 8(3):383-93 (69 ref.)
Separable functions of Nef disrupt two aspects of T cell receptor machinery: CD4 expression and CD3 signaling. Iafrate AJ, et al. **EMBO J** 1997 Feb 17;16(4):673-84
Cross-linking of T-cell receptors on double-positive thymocytes induces a cytokine-mediated stromal activation process linked to cell death. Lerner A, et al. **EMBO J** 1996 Nov 1;15(21):5876-87
T cell receptor and CD8-dependent tyrosine phosphorylation events in cytotoxic T lymphocytes: activation of p56lck by CD8 binding to class I protein. Anel A, et al. **Eur J Immunol** 1996 Oct;26(10):2310-9
Signals through CD8 or CD4 can induce commitment to the CD4 lineage in the thymus. Bommhardt U, et al. **Eur J Immunol** 1997 May;27(5):1152-63
Thymic stromal organization is regulated by the specificity of T cell receptor/major histocompatibility complex interactions. Brabb T, et al. **Eur J Immunol** 1997 Jan; 27(1):136-46
A transgenic T cell receptor restores thymocyte differentiation in interleukin-7 receptor alpha chain-deficient mice. Crompton T, et al. **Eur J Immunol** 1997 Jan;27(1):100-4
Qualitatively distinct signaling through T cell antigen receptor subunits. Jensen WA, et al. **Eur J Immunol** 1997 Mar;27(3):707-16
Induction of interleukin-2 unresponsiveness and down-regulation of the JAK-STAT system upon activation through the T cell receptor. Miyatake S, et al. **Eur J Immunol** 1997 Jul;27(7):1816-23
CD28-mediated induction of proliferation in resting T cells in vitro and in vivo without engagement of the T cell receptor: evidence for functionally distinct forms of CD28. Tacke M, et al. **Eur J Immunol** 1997 Jan;27(1):239-47
Surface molecules that drive T cell development in vitro in the absence of thymic epithelium and in the absence of lineage-specific signals. Cibotti R, et al. **Immunity** 1997 Mar;6(3):245-55
Correlation between the number of T cell receptors required for T cell activation and TCR-ligand affinity. Schodin BA, et al. **Immunity** 1996 Aug;5(2):137-46
Peptide-induced positive selection of TCR transgenic thymocytes in a coreceptor-independent manner. Sebzda E, et al. **Immunity** 1997 May;6(5):643-53
Making the T cell receptor go the distance: a topological view of T cell activation. Shaw AS, et al. **Immunity** 1997 Apr;6(4):361-9 (58 ref.)
A spontaneously arising mutation in the DLAARN motif of murine ZAP-70 abrogates kinase activity and arrests thymocyte development. Wiest DL, et al. **Immunity** 1997 Jun;6(6):663-71
The T-cell receptor associated zeta-chain is required but not sufficient for CD26 (dipeptidylpeptidase IV) mediated signaling. von Bonin A, et al. **Immunol Lett** 1997 Mar; 55(3):179-82
Thymic stromal cell specialization and the T-cell receptor repertoire. Lo D, et al. **Immunol Res** 1997 Feb;16(1):3-14 (46 ref.)
Structure and function of the T-cell receptor: insights from X-ray crystallography. Fields BA, et al. **Immunol Today** 1996 Jul;17(7):330-6 (50 ref.)
TCR signaling regulates thymic organization: lessons from TCR-transgenic mice. Goverman J, et al. **Immunol Today** 1997 May;18(5):204-8 (22 ref.)
Serial triggering of TCRs: a basis for the sensitivity and specificity of antigen recognition. Valitutti S, et al. **Immunol Today** 1997 Jun;18(6):299-304 (38 ref.)
Preferential requirement of CD3 zeta-mediated signals for development of immature rather than mature thymocytes. Aoe T, et al. **Int Immunol** 1996 Jul;8(7):1055-66
Superantigens. Rosen H. **Int J Dermatol** 1997 Jan;36(1):14-6
Insights into T cell development and signal transduction provided by TCR-zeta chain deficient mice. Shores EW, et al. **Int Rev Immunol** 1996;13(4):301-15 (97 ref.)
Interaction between Sam68 and Src family tyrosine kinases, Fyn and Lck, in T cell receptor signaling. Fusaki N, et al. **J Biol Chem** 1997 Mar 7;272(10):6214-9
Mutation of tyrosines 492/493 in the kinase domain of ZAP-70 affects multiple T-cell receptor signaling pathways. Mège D, et al. **J Biol Chem** 1996 Dec 20; 271(51):32644-52
T cell receptor-induced phosphorylation of Sos requires activity of CD45, Lck, and protein kinase C, but not ERK. Zhao H, et al. **J Biol Chem** 1997 Aug 22;272(34):21625-34
Chronic tumor necrosis factor alters T cell responses by attenuating T cell receptor signaling. Cope AP, et al. **J Exp Med** 1997 May 5;185(9):1573-84
Signaling capacity of the T cell antigen receptor is negatively regulated by the PTP1C tyrosine phosphatase. Pani G, et al. **J Exp Med** 1996 Sep 1;184(3):839-52
Nonmitogenic anti-CD3 monoclonal antibodies deliver a partial T cell receptor signal and induce clonal anergy. Smith JA, et al. **J Exp Med** 1997 Apr 21;185(8):1413-22
Antigenic cancer cells grow progressively in immune hosts without evidence for T cell exhaustion or systemic anergy. Wick M, et al. **J Exp Med** 1997 Jul 21;186(2):229-38
The Vav binding site (Y315) in ZAP-70 is critical for antigen receptor-mediated signal transduction. Wu J, et al. **J Exp Med** 1997 May 19;185(10):1877-82
Class I- and class II-reactive TCRs coexpressed on CD4+ T cells both trigger CD4/CD8-shared and CD4-unique functions. Asnagli H, et al. **J Immunol** 1997 May 15; 158(10):4533-42
Activated T cells from draining lymph nodes and an effector site differ in their responses to TCR stimulation. Baumgarth N, et al. **J Immunol** 1997 Aug 1;159(3):1182-91
T cell receptor engagement induces tyrosine phosphorylation of FAK and Pyk2 and their association with Lck. Berg NN, et al. **J Immunol** 1997 Aug 15;159(4):1753-7
T cell antigen receptor-induced IL-2 production and apoptosis have different requirements for Lck activities. Chung CD, et al. **J Immunol** 1997 Aug 15;159(4):1758-66
Peptide antagonists inhibit proliferation and the production of IL-4 and/or IFN-gamma in T helper 1, T helper 2, and T helper 0 clones bearing the same TCR. Dittel BN, et al. **J Immunol** 1997 May 1;158(9):4065-73
TCR-mediated adhesion of T cell hybridomas to planar bilayers containing purified MHC class II/peptide complexes and receptor shedding during detachment. Dustin ML, et al. **J Immunol** 1996 Sep 1;157(5):2014-21
ZAP-70 tyrosine kinase is required for the up-regulation of Fas ligand in activation-induced T cell apoptosis. Eischen CM, et al. **J Immunol** 1997 Aug 1;159(3):1135-9
Tyrosines 113, 128, and 145 of SLP-76 are required for optimal augmentation of NFAT promoter activity. Fang N, et al. **J Immunol** 1996 Nov 1;157(9):3769-73 (16 ref.)
Synergistic induction of CTLA-4 expression by costimulation with TCR plus CD28 signals mediated by increased transcription and messenger ribonucleic acid stability. Finn PW, et al. **J Immunol** 1997 May 1; 158(9):4074-81
Lck is necessary and sufficient for Fas-ligand expression and apoptotic cell death in mature cycling T cells. Gonzalez-Garcia A, et al. **J Immunol** 1997 May 1; 158(9):4104-12
Activation of nuclear factor-kappaB via T cell receptor requires a Raf kinase and Ca2+ influx. Functional synergy between Raf and calcineurin. Kanno T, et al. **J Immunol** 1996 Dec 15;157(12):5277-83
Sezary lineage cells can be induced to proliferate via CD28-mediated costimulation. McCusker ME, et al. **J Immunol** 1997 May 15;158(10):4984-91
Impaired survival and proliferation in IL-7 receptor-deficient peripheral T cells. Maraskovsky E, et al. **J Immunol** 1996 Dec 15;157(12):5315-23
TCR triggering of anergic CD4 T cells in murine AIDS induces apoptosis rather than cytokine synthesis and proliferation. Muralidhar G, et al. **J Immunol** 1996 Jul 15; 157(2):625-35
Surface expression of hemopoietic cell phosphatase fails to complement CD45 deficiency and inhibits TCR-mediated signal transduction in a Jurkat T cell clone. Musci MA, et al. **J Immunol** 1997 Feb 15;158(4):1565-71
Prevention of autoimmune diabetes by linomide in nonobese diabetic (NOD) mice is associated with up-regulation of the TCR-mediated activation of p21(ras). Rapoport MJ, et al. **J Immunol** 1996 Nov 15;157(10):4721-5
Phosphatidylinositol-based glycolipid-anchored proteins enhance proximal TCR signaling events. Romagnoli P, et al. **J Immunol** 1997 Jun 15;158(12):5757-64
Wortmannin, a phosphatidylinositol 3-kinase inhibitor, blocks antigen-mediated, but not CD3 monoclonal antibody-induced, activation of murine CD4+ T cells. Shi J, et al. **J Immunol** 1997 May 15;158(10):4688-95
Aberrant TCR-mediated signaling in CD45-null thymocytes involves dysfunctional regulation of Lck, Fyn, TCR-zeta, and ZAP-70. Stone JD, et al. **J Immunol** 1997 Jun 15; 158(12):5773-82
Altered T cell ligands derived from a major house dust mite allergen enhance IFN-gamma but not IL-4 production by human CD4+ T cells. Tsitoura DC, et al. **J Immunol** 1996 Sep 1;157(5):2160-5
Role of reactive oxygen intermediates in TCR-induced death of T cell blasts and hybridomas. Williams MS, et al. **J Immunol** 1996 Sep 15;157(6):2395-402
Immunoreceptor tyrosine-based activation motif (ITAM), a unique module linking antigen and Fc receptors to their signaling cascades. Isakov N. **J Leukoc Biol** 1997 Jan; 61(1):6-16 (123 ref.)
Diminished TCR signaling in cutaneous T cell lymphoma is associated with decreased activities of Zap70, Syk and membrane-associated Csk. Fargnoli MC, et al. **Leukemia** 1997 Aug;11(8):1338-46
CSK associates with the TCR zeta and epsilon chains via its SH2 domain; a mechanism for turning off TCR signaling. Catipović B. **Lijec Vjesn** 1996 Nov-Dec; 118(11-12):264-71
Evidence for phosphatidylinositol 3-kinase-dependent T cell antigen receptor (TCR) signal transduction. Exley M, et al. **Mol Immunol** 1997 Feb;34(3):221-6
The role of CD4-Lck in T-cell receptor antagonism: evidence for negative signaling. Racioppi L, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10360-5
Regulation of T cell apoptosis via T cell receptors and steroid receptors. Iwata M, et al. **Stem Cells** 1996 Nov;14(6):632-41 (66 ref.)

RECEPTORS, ANTIGEN, T-CELL, ALPHA-BETA

see related
GENE REARRANGEMENT, ALPHA-CHAIN T-CELL ANTIGEN RECEPTOR
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RECEPTORS, ANTIGEN, T-CELL, ALPHA-BETA

ANTIGEN RECEPTOR

Expansion of natural (NK1+) T cells that express alpha beta T cell receptors in transporters associated with antigen presentation-1 null and thymus leukemia antigen positive mice. Joyce S, et al. **J Exp Med** 1996 Oct 1;184(4):1579–84

ANALYSIS

T-cell receptor V beta expression is restricted in dermatitis herpetiformis skin. Garioch JJ, et al.
Acta Derm Venereol 1997 May;77(3):184–6

Preferential expression of T-cell receptor V beta-chains in atopic eczema. Neuber K, et al. **Acta Derm Venereol** 1996 May;76(3):214–8

Altered intrathymic T-cell repertoire in human myasthenia gravis. Truffault F, et al. **Ann Neurol** 1997 Jun;41(6):731–41

Antibody screening for secreted proteins expressed in Pichia pastoris. Wung JL, et al. **Biotechniques** 1996 Nov;21(5):808, 810, 812

Oligoclonal CD4+ CD57+ T-cell expansions contribute to the imbalanced T-cell receptor repertoire of rheumatoid arthritis patients. Imberti L, et al. **Blood** 1997 Apr 15; 89(8):2822–32

Thymus ontogeny and the development of TCR alpha beta intestinal intraepithelial lymphocytes. Lin T, et al.
Cell Immunol 1996 Jul 10;171(1):132–9

Peripheral blood T cell expansions in patients with Behcet's disease. Esin S, et al. **Clin Exp Immunol** 1997 Mar; 107(3):520–7

Long lasting immunological effects of ethanol after withdrawal. Laso FJ, et al. **Cytometry** 1996 Dec 15; 26(4):275–80

Association between alphabetaTCR+CD4-CD8- T-cell deficiency and IDDM in NOD/Lt mice. Baxter AG, et al. **Diabetes** 1997 Apr;46(4):572–82

Cytotoxic reactivity of gut lamina propria CD4+ alpha beta T cells in SCID mice with colitis. Bonhagen K, et al.
Eur J Immunol 1996 Dec;26(12):3074–83

TCR alpha/beta and TCR gamma/delta CD4-/CD8-HLA-DR alloreactive CTL clones do not use Fas/Fas ligand pathway to lyse their specific target cells. Mami-Chouaib F, et al. **Hum Immunol** 1996 Nov; 51(1):13–22

Comparative sequence analysis of the human T cell receptor TCRA and TCRB CDR3 regions. Moss PA, et al.
Hum Immunol 1996 Jun-Jul;48(1-2):32–8

CD4+ and CD8+ circulating alpha/beta T-cell repertoires are equally complex and are characterized by different levels of steady-state TCR expression. Naumov YN, et al. **Hum Immunol** 1996 Jun-Jul;48(1-2):52–62

Assessment of T-cell receptor beta-chain diversity by heteroduplex analysis. Sottini A, et al. **Hum Immunol** 1996 Jun-Jul;48(1-2):12–22

Development of CD8 alpha/beta + TCR alpha beta intestinal intraepithelial lymphocytes in athymic nu/nu mice and participation in regional immune responses. Emoto M, et al. **Immunology** 1996 Aug;88(4):531–6

Mouse hepatitis viral infection induces an extrathymic differentiation of the specific intrahepatic alpha beta-TCRintermediate LFA-1high T-cell population. Lamontagne L, et al. **Immunology** 1997 Mar;90(3):402–11

Localization of alpha/beta and gamma/delta T lymphocytes in Cryptosporidium parvum-infected tissues in naive and immune calves. Abrahamsen MS, et al. **Infect Immun** 1997 Jun;65(6):2428–33

TCR analysis reveals significant repertoire selection during in vitro lymphocyte culture. Dietrich PY, et al.
Int Immunol 1997 Aug;9(8):1073–83

TCR repertoire to proteolipid protein (PLP) in multiple sclerosis (MS): homologies between PLP-specific T cells and MS-associated T cells in TCR junctional sequences. Kondo T, et al. **Int Immunol** 1996 Jan;8(1):123–30

Requirement of IL-7 for IL-4-producing potential of MHC class I-selected CD4-CD8-TCR alpha beta+ thymocytes. Leite-de-Moraes MC, et al. **Int Immunol** 1997 Jan;9(1):73–9

TCRB junctional regions from HLA-B27-restricted T cells and HLA-B27 binding peptides display conserved hydropathy profiles in the absence of primary sequence homology. May E, et al. **Int Immunol** 1996 Nov; 8(11):1815–23

Herpesvirus saimiri immortalization of alpha beta and gamma delta human T-lineage cells derived from CD34+ intrathymic precursors in vitro. Pacheco-Castro A, et al.
Int Immunol 1996 Nov;8(11):1797–805

Memory TCR repertoires analyzed long-term reflect those selected during the primary response. Walker PR, et al.
Int Immunol 1996 Jul;8(7):1131–8

V alpha 14+ NK T cells: a novel lymphoid cell lineage with regulatory function. Taniguchi M, et al.
J Allergy Clin Immunol 1996 Dec;98(6 Pt 2):S263–9

Flow cytometric study of T cell development in NOD mice reveals a deficiency in alphabetaTCR+CDR-CD8-thymocytes. Godfrey DI, et al. **J Autoimmun** 1997 Jun; 10(3):279–85

TCR V beta usage by acetylcholine receptor-specific CD4+ T cells in myasthenia gravis. Raju R, et al.
J Autoimmun 1997 Apr;10(2):203–17

T-cell receptor beta variable region (V beta) usage in cutaneous T-cell lymphomas (CTCL) in comparison to normal and eczematous skin. Potoczna N, et al.
J Cutan Pathol 1996 Aug;23(4):298–305

Selective expansions of T cells expressing V beta 8 and V beta 13 in skin lesions of patients with chronic cutaneous lupus erythematosus. Furukawa F, et al. **J Dermatol** 1996 Oct;23(10):670–6

Close phenotypic and functional similarities between human and murine alphabeta T cells expressing invariant TCR alpha-chains. Davodeau F, et al. **J Immunol** 1997 Jun 15; 158(12):5603–11

CD8 alphabeta+ TCR alphabeta(intermediate) lymphocytes expressing skewed TCRVbeta repertoire in the liver of aged athymic nu/nu mice. Emoto M, et al. **J Immunol** 1997 Feb 1;158(3):1041–50

Superantigen-mediated deletion of specific T cell receptor V beta subsets in the SCID-hu Thy/Liv mouse is induced by staphylococcal enterotoxin B, but not HIV-1. Komanduri KV, et al. **J Immunol** 1997 Jan 15;158(2):544–9

Highly restricted TCR-alpha beta usage by autoreactive human T cell clones specific for DNA topoisomerase I: recognition of an immunodominant epitope. Kuwana M, et al. **J Immunol** 1997 Jan 1;158(1):485–91

Peptide antigen or superantigen-induced down-regulation of TCRs involves both stimulated and unstimulated receptors. Niedergang F, et al. **J Immunol** 1997 Aug 15;159(4):1703–10

Involvement of IL-4-producing Vbeta8.2+ CD4+ CD62L-CD45RB- T cells in non-MHC gene-controlled predisposition toward skewing into T helper type-2 immunity in BALB/c mice. Nishimura T, et al.
J Immunol 1997 Jun 15;158(12):5698–706

Development of CD4-CD8- alpha beta TCR+NK1.1+ T lymphocytes: thymic selection by self antigen. Schulz RJ, et al. **J Immunol** 1996 Nov 15;157(10):4379–89

T cell receptor of Fas-sensitive T cells in rheumatoid synovium. Sumida T, et al. **J Immunol** 1997 Feb 15; 158(4):1965–70

TCR in Fas-sensitive T cells from labial salivary glands of patients with Sjögren's syndrome. Sumida T, et al.
J Immunol 1997 Jan 15;158(2):1020–5

A rapid method for semiquantitative analysis of the human V beta-repertoire using TaqManR PCR. Lang R, et al.
J Immunol Methods 1997 Apr 25;203(2):181–92

Mouse IL-17: a cytokine preferentially expressed by alpha beta TCR + CD4-CD8-T cells. Kennedy J, et al.
J Interferon Cytokine Res 1996 Aug;16(8):611–7

Apoptosis of V beta 8.2+ T lymphocytes in the spinal cord during recovery from experimental autoimmune encephalomyelitis induced in Lewis rats by inoculation with myelin basic protein. McCombe PA, et al.
J Neurol Sci 1996 Jul;139(1):1–6

T cell antigen receptor expression by intra-epithelial lymphocytes in oral lichen planus. Walton LJ, et al.
J Oral Pathol Med 1996 Nov;25(10):534–7

Predominant T-cell receptor Vbeta usage of intraepithelial lymphocytes during the immune response to enteric reovirus infection. Chen D, et al. **J Virol** 1997 May; 71(5):3431–6

Extrathymic generation and antigen recognition of IL3-induced CD4-CD8 alpha beta T cells. Kubota H.
Jpn J Vet Res 1996 Aug;44(2):131–2

Restricted T cell V beta repertoire in renal allografts during acute and chronic rejection. Barth C, et al. **Kidney Int** 1996 Dec;50(6):2020–6

Expansion of a recurrent V beta 5.3+ T-cell population in newly diagnosed and untreated HLA-DR2 multiple sclerosis patients. Musette P, et al.
Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12461–6

T-cell receptor alpha beta and gamma delta T cells in rat and human skin--are they equivalent? Elbe A, et al.
Semin Immunol 1996 Dec;8(6):341–9 (82 ref.)

T cell independence of macrophage and natural killer cell infiltration, cytokine production, and endothelial activation during delayed xenograft rejection. Candinas D, et al.
Transplantation 1996 Dec 27;62(12):1920–7

Expansion of intermediate T cell receptor cells expressing interleukin-2 receptor alpha- beta+, CD8alpha+ beta+, and lymphocyte function-associated antigen-1+ in the liver in association with intrahepatic islet xenograft rejection from rat to mouse: prevention of rejection with anti-interleukin-2 receptor beta monoclonal antibody treatment. Ohtsuka K, et al. **Transplantation** 1997 Aug 27; 64(4):633–9

[Alpha/beta and gamma/delta T-cell receptors--analysis of conjunctival tissue of patients with ocular pemphigoid] Bialasiewicz AA, et al. **Ophthalmologe** 1997 Mar; 94(3):197–201 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Expression of T-cell receptor V beta 2 and type 1 helper T-cell-related cytokine mRNA in streptococcal pyrogenic exotoxin-C-activated human peripheral blood mononuclear cells. Ohara-Nemoto Y, et al.
Can J Microbiol 1996 Nov;42(11):1104–11

Dominant TCR alpha-chain clonotypes and interferon-gamma are expressed in the pancreas of patients with recent-onset insulin-dependent diabetes mellitus. Yamagata K, et al. **Diabetes Res Clin Pract** 1996 Sep; 34(1):37–46

Dual T cell receptor T cells have a decreased sensitivity to physiological ligands due to reduced density of each T cell receptor. Blichfeldt E, et al. **Eur J Immunol** 1996 Dec;26(12):2876–84

RAG1, RAG2 and pre-T cell receptor alpha chain expression by adult human hepatic T cells: evidence for extrathymic T cell maturation. Collins C, et al.
Eur J Immunol 1996 Dec;26(12):3114–8

Bias toward use of T-cell receptor variable regions in the lung: research tool or clinically useful technique? [editorial; comment] Semenzato G. **Eur Respir J** 1997 Apr;10(4):767–9 (33 ref.). Comment on: Eur Respir J 1997 Apr;10(4):772–9.

Lung and blood T-cell receptor repertoire in extrinsic allergic alveolitis [see comments] Wahlström J, et al.
Eur Respir J 1997 Apr;10(4):772–9. Comment in: Eur Respir J 1997 Apr;10(4):767–71.

Analysis of T-cell receptor beta of the T-cell clones reactive to the human PDC-E2 163-176 peptide in the context of HLA-DR53 in patients with primary biliary cirrhosis. Ichiki Y, et al. **Hepatology** 1997 Sep;26(3):728–33

Human T cells expressing an invariant V alpha 24-J alpha Q TCR alpha are CD4- and heterogeneous with respect to TCR beta expression. Porcelli S, et al.
Hum Immunol 1996 Jun-Jul;48(1-2):63–7

TCR expression and clonality analysis in pulmonary sarcoidosis. Vissinga C, et al. **Hum Immunol** 1996 Jun-Jul; 48(1-2):98–106

Unexpectedly complex regulation of CD4/CD8 coreceptor expression supports a revised model for CD4+CD8+ thymocyte differentiation. Lucas B, et al. **Immunity** 1996 Nov;5(5):461–77

Enhanced prevalence of T cell receptor V beta 7 gene family expression in human intestine-associated T lymphocytes. Esin S, et al. **Immunol Lett** 1996 Jul;51(3):149–55

TCR V alpha chain expression'influences reactivity to the hapten TNP. Dieli F, et al. **Int Immunol** 1997 Jan;9(1):1–8

Evidence for heterogeneous TCR V beta repertoire expression in mercury-induced immune disorders in rats. Fillion J, et al. **Int Immunol** 1997 Feb;9(2):263–71

In vitro effects of HgCl2 on murine lymphocytes. II. Selective activation of T cells expressing certain V beta TCR. Jiang Y, et al. **Int Immunol** 1996 Nov;8(11):1729–36

Evidence for down-regulation of highly expressed TCR by CD4 and CD45 on non-selected CD4+CD8+ thymocytes. Sato T, et al. **Int Immunol** 1996 Oct; 8(10):1529–35

Analysis of function, specificity and T cell receptor expression of cloned mucosal T cell lines in Crohn's disease. Prindiville TP, et al. **J Autoimmun** 1996 Apr;9(2):193–204

Correlation between clonotypic T-cell receptor beta chain variable region (TCR-V beta) gene expression and aberrant T-cell antigen expression in cutaneous T-cell lymphoma. Finn DT, et al. **J Cutan Pathol** 1996 Aug;23(4):306–11

Proliferation kinetics associated with T cell receptor-beta chain selection of fetal murine thymocytes. Falk I, et al.
J Exp Med 1996 Dec 1;184(6):2327–39

T cell receptor (TCR) mini-gene mRNA expression regulated by nonsense codons: a nuclear-associated translation-like mechanism [published erratum appears in J Exp Med 1997 May 19;185(10):1883] Li S, et al.
J Exp Med 1997 Mar 17;185(6):985–92

Lineage commitment in the thymus: only the most differentiated (TCRhibcl-2hi) subset of CD4+CD8+ thymocytes has selectively terminated CD4 or CD8 synthesis. Punt JA, et al. **J Exp Med** 1996 Dec 1; 184(6):2091–9

Alleles of highly homologous rat T cell receptor beta-chain variable segments 8.2 and 8.4: strain-specific expression, reactivity to superantigens, and binding of the mAb R78. Asmuss A, et al. **J Immunol** 1996 Nov 15;157(10):4436–41

TCR gene recombination and alpha beta-gamma delta lineage divergence: productive TCR-beta rearrangement is neither exclusive nor preclusive of gamma delta cell development. Burtrum DB, et al. **J Immunol** 1996 Nov 15;157(10):4293–6

Phenotypes and invariant alpha beta TCR expression of peripheral V alpha 14+ NK T cells. Masuda K, et al.
J Immunol 1997 Mar 1;158(5):2076–82

Acceleration of spontaneous diabetes in TCR-beta-transgenic nonobese diabetic mice by beta-cell cytotoxic CD8+ T cells expressing identical endogenous TCR-alpha chains. Verdaguer J, et al. **J Immunol** 1996 Nov 15;157(10):4726–35

High-level production of a secreted, heterodimeric alpha beta murine T-cell receptor in Escherichia coli. Golden A, et al. **J Immunol Methods** 1997 Aug 7;206(1-2):163–9

Analysis of T cell receptor AV and BV chain gene expression by infiltrating lymphocytes in Spitz naevi and in halo naevi. Birck A, et al. **Melanoma Res** 1997 Feb;7(1):49–57

Biased VH family usage in primary gastric B cell lymphoma of mucosa-associated lymphoid tissue-type and the selected V beta expression of T cells infiltrating into the lymphoma cells. Shibata T, et al. **Pathol Int** 1996 Dec;46(12):984–91

Analysis of germline and expressed T cell receptor variable region genes in Crohn's disease. Thurley C, et al.
Pathol Res Pract 1996 Oct;192(10):1022–30

Dual-receptor T cells expressing one self-restricted TCR. Smiley ST, et al. **Scand J Immunol** 1997 Jun;45(6):726–30

TCR V beta repertoire in LEW.1W heart allografts acutely rejected by LEW.1A recipients is restricted and comprises a public response. Douillard P, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1054

Heterogeneous V beta gene usage in mercury-induced immune disorders in rats. Fillion J, et al.
Transplant Proc 1997 May;29(3):1673–4

Characterization of the V alpha/V beta autoreactive T-cell repertoire in syngeneic graft-vs-host disease. Hess A, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):709–11

Deletion of T-cell receptor V beta families following human renal transplantation. Owens CD, et al. **Transplant Proc**

1997 Feb-Mar;29(1-2):1141-2

BLOOD

Comparison of the Vbeta repertoire in peripheral blood and in lymph nodes of HIV-infected subjects reveals skewed usage predominantly in CD8+ T cells. Carbonari M, et al. **Clin Immunol Immunopathol** 1996 Nov;81(2):200-9

CHEMISTRY

Structure and function of the pre-T cell receptor. von Boehmer H, et al. **Annu Rev Immunol** 1997;15:433-52 (53 ref.)

Endogenous antigen presentation by autoantigen-transfected Epstein-Barr virus-lymphoblastoid cells: T cell receptor N-region hydrophobicity relates to thyroid antigen recognition [published erratum appears in Autoimmunity 1996;23(1):75] Martin A, et al. **Autoimmunity** 1995; 21(4):223-30

Biophysical studies of T-cell receptors and their ligands. Fremont DH, et al. **Curr Opin Immunol** 1996 Feb; 8(1):93-100 (80 ref.)

Biophysical and structural studies of TCRs and ligands: implications for T cell signaling. Ward ES, et al. **Curr Opin Immunol** 1997 Feb;9(1):97-106 (59 ref.)

The three-dimensional structure of a T-cell antigen receptor V alpha V beta heterodimer reveals a novel arrangement of the V beta domain. Housset D, et al. **EMBO J** 1997 Jul 16;16(14):4205-16

Restoration of thymopoiesis in pT alpha-/- mice by anti-CD3epsilon antibody treatment or with transgenes encoding activated Lck or tailless pT alpha. Fehling HJ, et al. **Immunity** 1997 Jun;6(6):703-14

Structure and diversity of the T-cell receptor alpha chain in the Mexican axolotl. Fellah JS, et al. **Immunogenetics** 1997;45(4):235-41

Diversity of alpha and beta subunits of T-cell receptors specific for the H4 minor histocompatibility antigen. Johnston SL, et al. **Immunogenetics** 1997;46(1):17-28

The T cell antigen receptor beta chain interacts with the extracellular domain of CD3-gamma. Manolios N, et al. **Immunol Cell Biol** 1995 Dec;73(6):532-6

Structural mutations in the constant region of the T-cell antigen receptor (TCR)beta chain and their effect on TCR alpha and beta chain interaction. Li ZG, et al. **Immunology** 1996 Aug;88(4):524-30

The interchain disulfide bond between TCR alpha beta heterodimers on human T cells is not required for TCR-CD3 membrane expression and signal transduction. Arnaud J, et al. **Int Immunol** 1997 Apr;9(4):615-26

Apoptosis but not other activation events is inhibited by a mutation in the transmembrane domain of T cell receptor beta that impairs CD3zeta association. Rodriguez-Tarduchy G, et al. **J Biol Chem** 1996 Nov 29; 271(48):30417-25

A T cell receptor V alpha domain expressed in bacteria: does it dimerize in solution? Plaksin D, et al. **J Exp Med** 1996 Oct 1;184(4):1251-8

Influence of the NH2-terminal amino acid of the T cell receptor alpha chain on major histocompatibility complex (MHC) class II + peptide recognition. Seibel JL, et al. **J Exp Med** 1997 Jun 2;185(11):1919-27

Functional characterization of the interaction between the superantigen staphylococcal enterotoxin A and the TCR. Antonsson P, et al. **J Immunol** 1997 May 1;158(9):4245-51

TCR recognition of the Hb(64-76)/I-Ek determinant: single conservative amino acid changes in the complementarity-determining region 3 dramatically alter antigen fine specificity. Hsu BL, et al. **J Immunol** 1996 Sep 15;157(6):2291-8

Recombinant soluble alphabeta T cell receptors protect T cells from immune suppression: requirement for aggregated multimeric, disulfide-linked alphabeta heterodimers. Paliwal V, et al. **J Immunol** 1997 Aug 15;159(4):1718-27

Topology of T cell receptor-peptide/class I MHC interaction defined by charge reversal complementation and functional analysis. Chang HC, et al. **J Mol Biol** 1997 Aug 15; 271(2):278-93

Restricted T cell receptor repertoire for acetylcholine receptor in murine myasthenia gravis. Kraig E, et al. **J Neuroimmunol** 1996 Dec;71(1-2):87-95

Binding properties and solubility of single-chain T cell receptors expressed in E. coli. Schodin BA, et al. **Mol Immunol** 1996 Jun;33(9):819-29

Crystal structure of a T-cell receptor beta-chain complexed with a superantigen [see comments] Fields BA, et al. **Nature** 1996 Nov 14;384(6605):188-92. Comment in: Nature 1996 Nov 14;384(6605):109-10.

An alphabeta T cell receptor structure at 2.5 A and its orientation in the TCR-MHC complex [see comments] Garcia KC, et al. **Science** 1996 Oct 11;274(5285):209-19. Comment in: Science 1996 Oct 11;274(5285):176-7.

Close-up of a killer [news; comment] Service RF. **Science** 1996 Oct 11;274(5285):176-7. Comment on: Science 1996 Oct 11;274(5285):209-19.

Not just another Fab: the crystal structure of a TcR-MHC-peptide complex. Jardetzky T. **Structure** 1997 Feb 15;5(2):159-63 (17 ref.)

DEFICIENCY

T cell receptor-alpha beta-deficient mice fail to develop colitis in the absence of a microbial environment. Dianda L, et al. **Am J Pathol** 1997 Jan;150(1):91-7

Gamma/delta T cells from tolerized alpha/beta-TCR-deficient mice antigen specifically inhibit contact sensitivity in vivo and IFN-gamma production in vitro. Szczepanik M, et al. **Int Arch Allergy Immunol** 1997 May-Jul;113(1-3):373-5

Gamma delta T cells from tolerized alpha beta T cell receptor (TCR)-deficient mice inhibit contact sensitivity-effector T cells in vivo, and their interferon-gamma production in vitro. Szczepanik M, et al. **J Exp Med** 1996 Dec 1; 184(6):2129-39

Accelerated inflammatory bowel disease of TCR-alpha-deficient mice persistently infected with Cryptosporidium parvum. Waters WR, et al. **J Parasitol** 1997 Jun;83(3):460-4

Role of cytokines in the early stages of chronic colitis in TCR alpha-mutant mice. Mizoguchi E, et al. **Lab Invest** 1997 Mar;76(3):385-97

DRUG EFFECTS

In vivo the environmental pollutants lead and mercury induce oligoclonal T cell responses skewed toward type-2 reactivities. Heo Y, et al. **Cell Immunol** 1997 Aug 1; 179(2):185-95

Evidence for down-regulation of highly expressed TCR by CD4 and CD45 on non-selected CD4+CD8+ thymocytes. Sato T, et al. **Int Immunol** 1996 Oct; 8(10):1529-35

GENETICS

V region T cell receptor repertoire in Parkinson's disease. Fiszer U, et al. **Acta Neurol Scand** 1996 Jan;93(1):25-9

Diversity of human T cell receptor sequences of T cell clones with specificity for Bet v 1 peptide/MHC II complexes. Breiteneder H, et al. **Adv Exp Med Biol** 1996;409:365-74

Non random usage of T cell receptor alpha gene expression in atopy using anchored PCR. Mansur AH, et al. **Adv Exp Med Biol** 1996;409:381-9

T-cell receptors in immune responses. Robinson MA. **Adv Exp Med Biol** 1995;386:121-32 (37 ref.)

Association of IgA nephropathy with T-cell receptor constant alpha chain gene polymorphism. Li PK, et al. **Am J Kidney Dis** 1997 Aug;30(2):260-4

T cell receptor-alpha beta-deficient mice fail to develop colitis in the absence of a microbial environment. Dianda L, et al. **Am J Pathol** 1997 Jan;150(1):91-7

T cell receptor alpha-chain and beta-chain junctional region homology in clonal CD3+, CD8+ T lymphocyte expansions in Felty's syndrome. Bowman SJ, et al. **Arthritis Rheum** 1997 Apr;40(4):615-23

Association of rheumatoid arthritis with an amino acid allelic variation of the T cell receptor. Cornélis F, et al. **Arthritis Rheum** 1997 Aug;40(8):1387-90

Restriction fragment length polymorphism of the T cell receptor beta-chain gene in Chinese patients with thyrotoxic hypokaleamic periodic paralysis and Graves' disease. Lee BW, et al. **Autoimmunity** 1995;21(4):241-4

Susceptibility to actively-induced murine experimental allergic encephalomyelitis is not linked to genes of the T cell receptor or CD3 complexes. Livingstone KD, et al. **Autoimmunity** 1995;21(3):195-201

Endogenous antigen presentation by autoantigen-transfected Epstein-Barr virus-lymphoblastoid cells: T cell receptor N-region hydrophobicity relates to thyroid antigen recognition [published erratum appears in Autoimmunity 1996;23(1):75] Martin A, et al. **Autoimmunity** 1995; 21(4):223-30

Individuals from multiplex insulin dependent diabetes mellitus families express higher levels of TCRBV2S1 than controls. Paul T, et al. **Biochem Soc Trans** 1997 May;25(2):314S

Method of data analysis that elucidates contributions to the T-cell receptor repertoire. Daniel ES, et al. **Biotechniques** 1997 Jul;23(1):78-82

Quantitation of T-cell receptor transcripts using a wet agarose gel method. Daniel ES, et al. **Biotechniques** 1996 Sep;21(3):374-6, 378

Mechanism for cotolerance in nonlethally conditioned mixed chimeras: negative selection of the Vbeta T-cell receptor repertoire by both host and donor bone marrow-derived cells. Colson YL, et al. **Blood** 1996 Dec 15;88(12):4601-10

Monoclonal origin of concordant T-cell malignancy in identical twins. Ford AM, et al. **Blood** 1997 Jan 1; 89(1):281-5

Limits of the human-PBL-SCID mice model: severe restriction of the V beta T-cell repertoire of engrafted human T cells. Garcia S, et al. **Blood** 1997 Jan 1; 89(1):329-36

A chromosome 14q11/TCR alpha/delta specific yeast artificial chromosome improves the detection rate and characterization of chromosome abnormalities in T-lymphoproliferative disorders. Rack KA, et al. **Blood** 1997 Aug 1;90(3):1233-40

Intrauterine transfusions affect fetal T-cell immunity. Viëtor HE, et al. **Blood** 1997 Sep 15;90(6):2492-501

T-cell receptor beta chain variability in bone marrow and peripheral blood in severe acquired aplastic anemia. Manz CY, et al. **Blood Cells Mol Dis** 1997;23(1):110-22

TCR-beta transgenic mice fail to mediate a GVHR due to defects of allorecognition and subsequent IL-2 generation. Rimm IJ, et al. **Bone Marrow Transplant** 1996 May; 17(5):835-42

Analysis of T-cell clonality in bone marrow of patients with acquired aplastic anaemia. Melenhorst JJ, et al. **Br J Haematol** 1997 Jan;96(1):85-91

Oligoclonal accumulation of T cells in peripheral blood from patients with idiopathic thrombocytopenic purpura. Shimomura T, et al. **Br J Haematol** 1996 Dec;95(4):732-7

T-cell receptor repertoire of infiltrating T cells in lachrymal glands, salivary glands and kidneys from alymphoplasia (aly) mutant mice: a new model for Sjögren's syndrome. Furukawa M, et al. **Br J Rheumatol** 1996 Dec; 35(12):1223-30

T cell receptor V alpha and V beta gene usage by tumour-infiltrating lymphocytes in oral squamous cell carcinoma. Mouri T, et al. **Cancer Immunol Immunother** 1996 Sep;43(1):10-8

Notch activity influences the alphabeta versus gammadelta T cell lineage decision. Washburn T, et al. **Cell** 1997 Mar 21;88(6):833-43

Application of rearrangements of T cell receptor gene in the diagnosis of mediastinal T-lymphoblastic lymphoma: a case report. Change KE, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Feb;59(2):132-5

Non-restricted T cell receptor (TCR)-V alpha and -V beta gene usage in patients with pulmonary sarcoidosis. Hoshino T, et al. **Clin Exp Immunol** 1997 Jun;108(3):529-38

A bias in the alphabeta T cell receptor variable region gene usage in Takayasu's arteritis. Nityanand S, et al. **Clin Exp Immunol** 1997 Feb;107(2):261-8

T cell receptor (TCR) BV gene repertoires and clonal expansions of CD4 cells in patients with HIV infections. Roglic M, et al. **Clin Exp Immunol** 1997 Jan;107(1):21-30

Biased expression of T cell receptor V beta genes in periodontitis patients. Yamazaki K, et al. **Clin Exp Immunol** 1996 Nov;106(2):329-35

The programmed cell death of an immature thymocyte cell line transgenic for an alpha beta TCR and the c-myc proto-oncogene. Murdjeva M, et al. **Dev Immunol** 1996; 4(4):279-88

CD3 delta deficiency arrests development of the alpha beta but not the gamma delta T cell lineage. Dave VP, et al. **EMBO J** 1997 Mar 17;16(6):1360-70

Adjacent DNA elements dominantly restrict the ubiquitous activity of a novel chromatin-opening region to specific tissues. Ortiz BD, et al. **EMBO J** 1997 Aug 15; 16(16):5037-45

Molecular analysis of the T-cell receptor beta-chain repertoire in early rheumatoid arthritis: heterogeneous TCRBV gene usage with shared amino acid profiles in CDR3 regions of T lymphocytes in multiple synovial tissue needle biopsies from the same joint. Struyk L, et al. **Eur J Clin Invest** 1996 Dec;26(12):1092-102

No linkage or association of telomeric and centromeric T-cell receptor beta-chain markers with susceptibility to type 1 insulin-dependent diabetes in HLA-DR4 multiplex families. McDermott MF, et al. **Eur J Immunogenet** 1996 Oct;23(5):361-70

T-cell receptor alpha, delta, and gamma chain genes in insulin-dependent diabetes mellitus. Martínez-Naves E, et al. **Eur J Immunogenet** 1993 Oct;20(5):317-25

Dual T cell receptor T cells have a decreased sensitivity to physiological ligands due to reduced density of each T cell receptor. Blichfeldt E, et al. **Eur J Immunol** 1996 Dec;26(12):2876-84

The T cell receptor beta genes of Xenopus. Chretien I, et al. **Eur J Immunol** 1997 Mar;27(3):763-71

Characterization of T cell receptor single-chain Fv fragments secreted by myeloma cells. Grégoire C, et al. **Eur J immunol** 1996 Oct;26(10):2410-6

T cell receptor alpha gene rearrangement and transcription in adult thymic gamma delta cells. Mertsching E, et al. **Eur J Immunol** 1997 Feb;27(2):389-96

Single-cell analyses of CD4+ T cells from alpha beta T cell receptor-transgenic mice: a distinct mucosal cytokine phenotype in the absence of transgene-specific antigen. Saparov A, et al. **Eur J Immunol** 1997 Jul;27(7):1774-81

Deregulated TCR alpha beta T cell population provokes extramedullary hematopoiesis in mice deficient in the common gamma chain. Sharara LI, et al. **Eur J Immunol** 1997 Apr;27(4):990-8

Lack of directed V alpha 14-J alpha 281 rearrangements in NK1+ T cells. Shimamura M, et al. **Eur J Immunol** 1997 Jun;27(6):1576-9

Germ-line transcription and methylation status of the TCR-J alpha locus in its accessible configuration. Villey I, et al. **Eur J Immunol** 1997 Jul;27(7):1619-25

An HMG I/Y-containing repressor complex and supercoiled DNA topology are critical for long-range enhancer-dependent transcription in vitro. Bagga R, et al. **Genes Dev** 1997 Mar 1;11(5):629-39

ALY, a context-dependent coactivator of LEF-1 and AML-1, is required for TCRalpha enhancer function. Bruhn L, et al. **Genes Dev** 1997 Mar 1;11(5):640-53

Distinct roles for P-CREB and LEF-1 in TCR alpha enhancer assembly and activation on chromatin templates in vitro. Mayall TP, et al. **Genes Dev** 1997 Apr 1; 11(7):887-99

Analysis of the 1.1-Mb human alpha/delta T-cell receptor locus with bacterial artificial chromosome clones. Boysen C, et al. **Genome Res** 1997 Apr;7(4):330-8

Repertoire and organization of human T-cell receptor alpha region variable genes. Wei S, et al. **Genomics** 1996 Dec 15;38(3):442-5

Molecular analysis of T cell receptor beta variability in a patient with orofacial granulomatosis. Lim SH, et al. **Gut** 1997 May;40(5):683–6

T-cell receptor Vbeta gene utilization in primary biliary cirrhosis. Mayo MJ, et al. **Hepatology** 1996 Nov; 24(5):1148–55

T cell receptor beta chain RFLP in Chinese, Indians and Malays from Singapore. Tan JA, et al. **Hum Hered** 1996 Jul–Aug;46(4):236–8

T cell receptor clonal diversity following allogeneic marrow grafting. Akatsuka Y, et al. **Hum Immunol** 1996 Jun–Jul; 48(1–2):125–34

Mitogens, superantigens, and nominal antigens elicit distinctive patterns of TCRB CDR3 diversity. Currier JR, et al. **Hum Immunol** 1996 Jun–Jul;48(1–2):39–51

T-cell receptor biases and clonal proliferations in blood and pleural effusions of patients with lung cancer. Duncan SR, et al. **Hum Immunol** 1997 Mar;53(1):39–48

T-cell receptor BV6S1 null alleles and HLA-DR1 haplotypes in polyarticular outcome juvenile rheumatoid arthritis. Grom AA, et al. **Hum Immunol** 1996 Feb; 45(2):152–6

Clonal predominance, but preservation of a polyclonal reservoir, in the normal alpha beta T-cell repertoire. Lantelme E, et al. **Hum Immunol** 1997 Mar;53(1):49–56

Allelic variants of human TCR BV17S1 defined by restriction fragment length polymorphism, single strand conformation polymorphism, and amplification refractory mutation system analyses. Li Y, et al. **Hum Immunol** 1996 Sep 1; 49(2):85–95

Restriction of V beta gene usage of liver-derived lymphocytes in chronic hepatitis B and C. Pham BN, et al. **Hum Immunol** 1996 Aug;49(1):56–63

Assessment of T-cell receptor beta-chain diversity by heteroduplex analysis. Sottini A, et al. **Hum Immunol** 1996 Jun–Jul;48(1–2):12–22

Interaction between certain major histocompatibility complex class II and T-cell receptor V beta alleles promotes the antibody production to extractable nuclear antigen-related peptides. Youinou P, et al. **Hum Immunol** 1997 Jan;52(1):12–21

Restricted T-cell antigen receptor repertoire in bronchoalveolar T cells from normal humans. Yurovsky VV, et al. **Hum Immunol** 1996 Sep 15;50(1):22–37

The alpha beta T cell receptor can replace the gamma delta receptor in the development of gamma delta lineage cells. Bruno L, et al. **Immunity** 1996 Oct;5(4):343–52

alpha, beta, gamma, and delta T cell antigen receptor genes arose early in vertebrate phylogeny. Rast JP, et al. **Immunity** 1997 Jan;6(1):1–11

alpha beta T cell development is abolished in mice lacking both Lck and Fyn protein tyrosine kinases. van Oers NS, et al. **Immunity** 1996 Nov;5(5):429–36

Defect in rearrangement of the 5' TCR-J alpha following targeted deletion of T early alpha (TEA): implications for TCR alpha locus accessibility. Villey I, et al. **Immunity** 1996 Oct;5(4):331–42

CD8+ tumor-specific Tc cells primed in vivo or in vitro against the BALB/c plasmacytoma ADJ-PC-5 use the same TcR V beta families but display distinct TC1 or TC2 characteristics. Becker C, et al. **Immunobiology** 1997 Jun; 197(1):16–30

Unrepresentative behavior of T cell receptor-transgenic CD4+ T cells upon adoptive transfer: lack of need for priming and an extended booster dose-response. Schuhbauer D, et al. **Immunobiology** 1996 Jul;195(2):152–9

The T-cell receptor beta chain-encoding gene repertoire of a New World primate species, the cotton-top tamarin. Allen TM, et al. **Immunogenetics** 1996;45(2):151–60

Mutation in splicing consensus sequences causes lack of TCR membrane expression due to exon excision. Arnaud J, et al. **Immunogenetics** 1997;45(5):311–9

Characterization of the mouse Tcra-V22 gene subfamily. Dattamajumdar AK, et al. **Immunogenetics** 1996; 44(6):432–40

Structure and diversity of the T-cell receptor alpha chain in the Mexican axolotl. Fellah JS, et al. **Immunogenetics** 1997;45(4):235–41

Cloning of T-cell antigen receptor beta chain cDNAs from Atlantic salmon (Salmo salar). Hordvik I, et al. **Immunogenetics** 1996;45(1):9–14

Identification of a predominant sequence variant of the T-cell receptor TCRBC1 gene. MacLean SJ, et al. **Immunogenetics** 1997;45(3):223–5

Germline TCR-A restriction of immunoglobulin E responses to allergen. Moffatt MF, et al. **Immunogenetics** 1997; 46(3):226–30

The T-cell receptor beta chain CDR3 region of BV8S1/BJ1S5 transcripts in type 1 diabetes. Naserke HE, et al. **Immunogenetics** 1996;45(2):87–96

A highly conserved apoptotic suppressor gene is located near the chicken T-cell receptor alpha chain constant region. Wang K, et al. **Immunogenetics** 1997;46(5):376–82

Organization, polymorphism, and expression of the human T-cell receptor AV1 subfamily. Wei S, et al. **Immunogenetics** 1997;45(6):405–12

Specific transcription of the unrearranged TCR V beta 8.2 gene in lymphoid tissues occurs independently of V(D)J rearrangement. Jolly CJ, et al. **Immunol Cell Biol** 1997 Feb; 75(1):13–20

Enhanced prevalence of T cell receptor V beta 7 gene family expression in human intestine-associated T lymphocytes. Esin S, et al. **Immunol Lett** 1996 Jul;51(3):149–55

Cloning of an unidentified T-cell receptor alpha chain gene from a vesicular stomatitis virus-specific helper T-cell clone. Ghelardi E, et al. **Immunol Lett** 1996 Oct;53(1):31–9

TCR usage in human and experimental demyelinating disease. Hafler DA, et al. **Immunol Today** 1996 Apr;17(4):152–9 (71 ref.)

Rejection of cardiac allografts by T cells expressing a restricted repertoire of T-cell receptor V beta genes. Shirwan H, et al. **Immunology** 1997 Apr;90(4):572–8

Limited heterogeneity of biased T-cell receptor V beta gene usage in lung but not blood T cells in active pulmonary sarcoidosis. Silver RF, et al. **Immunology** 1996 Aug; 88(4):516–23

Conserved TCR usage by HLA-Cw* 1601-restricted T cell clones recognizing melanoma antigens. Farina C, et al. **Int Immunol** 1996 Sep;8(9):1463–6

Plasmodium falciparum-specific T cell clones from non-exposed and exposed donors are highly diverse in TCR beta chain V segment usage. Fell AH, et al. **Int Immunol** 1996 Dec;8(12):1877–87

Skewing of TCR V genes to CD4+ and CD8+ subsets of T lymphocytes is not determined by amino acid composition of CDR3. Hawes GE, et al. **Int Immunol** 1997 Aug;9(8):1103–10

Transcription and demethylation of TCR beta gene initiate prior to the gene rearrangement in c-kit+ thymocytes with CD3 expression: evidence of T cell commitment in the thymus. Hozumi K, et al. **Int Immunol** 1996 Oct; 8(10):1473–81

Comparison of thymocyte development in normal and invariant chain-deficient mice provides evidence that maturation-related changes in TCR and co-receptor levels play a critical role in cell fate. Huang LY, et al. **Int Immunol** 1996 Sep;8(9):1429–40

Clonal dominance of human autologous cytotoxic T lymphocytes against gastric carcinoma: molecular stability of the CDR3 structure of the TCR alphabeta gene. Ikeda H, et al. **Int Immunol** 1996 Jan;8(1):75–82

Alteration of a polyclonal to an oligoclonal immune response to cecal aerobic bacterial antigens in TCR alpha mutant mice with inflammatory bowel disease. Mizoguchi A, et al. **Int Immunol** 1996 Sep;8(9):1387–94

Selective usage of defined TCRBV genes in response to filarial antigens. Sartono E, et al. **Int Immunol** 1997 Jul; 9(7):955–62

In vitro positive selection of alpha beta TCR transgenic thymocytes by a conditionally immortalized cortical epithelial clone. Tanaka Y, et al. **Int Immunol** 1997 Mar; 9(3):381–93

Cytotoxic T-lymphocyte responses against mutated p21 ras peptides: an analysis of specific T-cell-receptor gene usage. Juretic A, et al. **Int J Cancer** 1996 Nov 15;68(4):471–8

Increased expression of V beta 1.2 T cells in the cerebrospinal fluid of patients with multiple sclerosis [letter] Perrella O, et al. **Ital J Neurol Sci** 1996 Dec;17(6):441–2

T-cell receptor V beta gene segment expression in diisocyanate-induced occupational asthma. Bernstein JA, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):245–50

T cell receptor gene polymorphisms associated with anti-insulin, autoimmune T cells in diabetes-prone NOD mice. Simone EA, et al. **J Autoimmun** 1997 Jun; 10(3):317–21

Molecular identification of T cells that respond in a primary bulk culture to a peptide derived from a platelet glycoprotein implicated in neonatal alloimmune thrombocytopenia. Maslanka K, et al. **J Clin Invest** 1996 Oct 15;98(8):1802–8

Alopecia areata but not androgenetic alopecia is characterized by a restricted and oligoclonal T-cell receptor-repertoire among infiltrating lymphocytes. Dressel D, et al. **J Cutan Pathol** 1997 Mar;24(3):164–8

Correlation between clonotypic T-cell receptor beta chain variable region (TCR-V beta) gene expression and aberrant T-cell antigen expression in cutaneous T-cell lymphoma. Finn DT, et al. **J Cutan Pathol** 1996 Aug;23(4):306–11

Role of staphylococcal enterotoxins in pathogenesis of atopic dermatitis: growth and expression of T cell receptor V beta of peripheral blood mononuclear cells stimulated by enterotoxins A and B. Yudate T, et al. **J Dermatol Sci** 1996 Oct;13(1):63–70

Increased interleukin 4 and immunoglobulin E production in transgenic mice overexpressing NK1 T cells. Bendelac A, et al. **J Exp Med** 1996 Oct 1;184(4):1285–93

Identification of a DNA segment exhibiting rearrangement modifying effects upon transgenic delta-deleting elements. Janowski KM, et al. **J Exp Med** 1997 Jul 7;186(1):91–100

Allelic exclusion in pTalpha-deficient mice: no evidence for cell surface expression of two T cell receptor (TCR)-beta chains, but less efficient inhibition of endogeneous Vbeta--> (D)Jbeta rearrangements in the presence of a functional TCR-beta transgene. Krotkova A, et al. **J Exp Med** 1997 Aug 29;186(5):767–75

Developmental regulation of VDJ recombination by the core fragment of the T cell receptor alpha enhancer. Roberts JL, et al. **J Exp Med** 1997 Jan 6;185(1):131–40

T cell receptor (TCR)-beta gene recombination: dissociation from cell cycle regulation and developmental progression during T cell ontogeny. Tourigny MR, et al. **J Exp Med** 1997 May 5;185(9):1549–56

Preferential V beta3 usage by hepatic T lymphocytes in patients with primary sclerosing cholangitis. Broomé U, et al. **J Hepatol** 1997 Mar;26(3):527–34

Analysis of T-cell receptor Vbeta repertoire in liver-infiltrating lymphocytes in chronic hepatitis C. Kashii Y, et al. **J Hepatol** 1997 Mar;26(3):462–70

Alleles of highly homologous rat T cell receptor beta-chain variable segments 8.2 and 8.4: strain-specific expression, reactivity to superantigens, and binding of the mAb R78. Asmuss A, et al. **J Immunol** 1996 Nov 15;157(10):4436–41

TCR gene recombination and alpha beta-gamma delta lineage divergence: productive TCR-beta rearrangement is neither exclusive nor preclusive of gamma delta cell development. Burtrum DB, et al. **J Immunol** 1996 Nov 15;157(10):4293–6

Molecular interactions between transfected human TCR, immunodominant myelin basic protein peptide 152–165, and HLA-DR13. Hastings AE, et al. **J Immunol** 1996 Oct 15;157(8):3460–71

Experimental autoimmune myasthenia gravis in B10.BV8S2 transgenic mice: preferential usage of TCRAV1 gene by lymphocytes responding to acetylcholine receptor. Kaul R, et al. **J Immunol** 1997 Jun 15;158(12):6006–12

TCR expression in human fetal intestine and identification of an early T cell receptor beta-chain transcript. Koningsberger JC, et al. **J Immunol** 1997 Aug 15; 159(4):1775–82

Highly restricted TCR-alpha beta usage by autoreactive human T cell clones specific for DNA topoisomerase I: recognition of an immunodominant epitope. Kuwana M, et al. **J Immunol** 1997 Jan 1;158(1):485–91

Local-clonal expansion of infiltrating T lymphocytes in chronic encephalitis of Rasmussen. Li Y, et al. **J Immunol** 1997 Feb 1;158(3):1428–37

Concurrent or sequential delta and beta TCR gene rearrangement during thymocyte development: individual thymi follow distinct pathways. Margolis D, et al. **J Immunol** 1997 Jul 15;159(2):529–33

Phenotypes and invariant alpha beta TCR expression of peripheral V alpha 14+ NK T cells. Masuda K, et al. **J Immunol** 1997 Mar 1;158(5):2076–82

Specific clonal T cell accumulation in intestinal lesions of Crohn's disease. Nakajima A, et al. **J Immunol** 1996 Dec 15;157(12):5683–8

V alpha 3.2 selection in MHC class I mutant mice: evidence for an alternate orientation of TCR-MHC class I interaction. Sim BC, et al. **J Immunol** 1997 Oct 1; 159(7):3322–9

CD28/B7 interactions deliver a unique signal to naive T cells that regulates cell survival but not early proliferation. Sperling AI, et al. **J Immunol** 1996 Nov 1;157(9):3909–17

Functional mapping of the orientation for TCR recognition of an H2-Kb-restricted ovalbumin peptide suggests that the beta-chain subunit can dominate the determination of peptide side chain specificity. Turner SJ, et al. **J Immunol** 1997 Sep 1;159(5):2312–7

TCR alpha-chain usage can determine antigen-selected TCR beta-chain repertoire diversity. Turner SJ, et al. **J Immunol** 1996 Dec 1;157(11):4979–85

Characterization of the TCRB chain repertoire in the New World monkey Callithrix jacchus. Uccelli A, et al. **J Immunol** 1997 Feb 1;158(3):1201–7

T cells bearing Vbeta8 are preferentially infected with exogenous mouse mammary tumor virus. Upragarin N, et al. **J Immunol** 1997 Sep 1;159(5):2189–95

Restricted TCR repertoire and long-term persistence of donor-derived antigen-experienced CD4+ T cells in allogeneic bone marrow transplantation recipients. Vavassori M, et al. **J Immunol** 1996 Dec 15;157(12):5739–47

Dichotomy of blood- and skin-derived IL-4-producing allergen-specific T cells and restricted V beta repertoire in nickel-mediated contact dermatitis. Werfel T, et al. **J Immunol** 1997 Mar 1;158(5):2500–5

Shared TCR Vbeta gene expression by the pancreas and salivary gland in immunodeficient alymphoplasic mice. Yamamichi M, et al. **J Immunol** 1997 Jul 1;159(1):427–32

Identification of a novel, spliced variant of CREB that is preferentially expressed in the thymus. Yang L, et al. **J Immunol** 1997 Mar 15;158(6):2522–5

High-level production of a secreted, heterodimeric alpha beta murine T-cell receptor in Escherichia coli. Golden A, et al. **J Immunol Methods** 1997 Aug 7;206(1–2):163–9

A rapid method for semiquantitative analysis of the human V beta-repertoire using TaqManR PCR. Lang R, et al. **J Immunol Methods** 1997 Apr 25;203(2):181–92

Quantitative analysis of the usage of human T cell receptor alpha and beta chain variable regions by reverse dot blot hybridization. Yoshioka T, et al. **J Immunol Methods** 1997 Feb 28;201(2):145–55

Identification of a T-cell receptor from a therapeutic murine T-cell clone. Shilyansky J, et al. **J Immunother** 1997 Jul; 20(4):247–55

Detection of clonal T cell populations with closely related T cell receptor junctional sequences in persons at high risk for human immunodeficiency virus (HIV) infection and in patients acutely infected with HIV. Bettinardi A, et al. **J Infect Dis** 1997 Feb;175(2):272–82

Selective amplification of T-cell receptor variable region species is demonstrable but not essential in early lesions of psoriasis vulgaris: analysis by anchored polymerase chain reaction and hypervariable region size spectratyping [see comments] Vekony MA, et al. **J Invest Dermatol** 1997 Jul; 109(1):5–13. Comment in: J Invest Dermatol 1997 Jul;109(1):1–4.

Profile of numbers of sequence differences among V-genes coding for the variable regions of T cell receptor for antigen alpha and beta chains. Johnson G, et al. **J Mol Evol** 1997 Mar;44(3):253–7

Corticosteroid treatment of experimental autoimmune encephalomyelitis in the Lewis rat results in loss of V beta 8.2+ and myelin basic protein-reactive cells from the spinal cord, with increased total T-cell apoptosis but reduced apoptosis of V beta 8.2+ cells. McCombe PA, et al. **J Neuroimmunol** 1996 Nov;70(2):93–101

Myelin basic protein-specific and TCR V beta 8.2-specific T-cell lines from TCR V beta 8.2 transgenic mice utilize the same V alpha and V beta genes: specificity associated with the V alpha CDR3-J alpha region. Buenafe AC, et al. **J Neurosci Res** 1997 Mar 1;47(5):489–99

Analysis of T cell receptor beta chains in the rat: I. Allelic polymorphism of V beta 8.2 is not a predisposing genetic factor in susceptibility to experimental allergic encephalomyelitis. Gold DP, et al. **J Neurosci Res** 1996 Sep 15;45(6):700–5

OX-40 antibody enhances for autoantigen specific V beta 8.2+ T cells within the spinal cord of Lewis rats with autoimmune encephalomyelitis. Weinberg AD, et al. **J Neurosci Res** 1996 Jan 1;43(1):42–9

Dominant T cell receptor rearrangements in interleukin 2 expanded lymphocytes from rheumatoid nodules suggest antigen driven T cell activation in situ. De Keyser F, et al. **J Rheumatol** 1997 Sep;24(9):1685–9

Interaction between genes in the T cell receptor-alpha locus and HLA-DR4 in rheumatoid arthritis susceptibility. Ibberson M, et al. **J Rheumatol** 1997 Jan;24(1):223

The use of transgenic mice to generate high affinity p53 specific cytolytic T cells. Yu Z, et al. **J Surg Res** 1997 May;69(2):337–43

Association between susceptibility to Theiler's virus-induced demyelination and T-cell receptor Jbeta1-Cbeta1 polymorphism rather than Vbeta deletion. Bahk YY, et al. **J Virol** 1997 May;71(5):4181–5

The prognostic significance of T cell receptor beta gene rearrangements and idiotype-reactive T cells in multiple myeloma. Brown RD, et al. **Leukemia** 1997 Aug; 11(8):1312–7

Lack of linkage between anti-nuclear antibody or clinical features of systemic lupus erythematosus (SLE) and TCR-A/Vbeta loci in families of subjects with SLE. Huang Q, et al. **Lupus** 1997;6(6):527–32

Double-negative BV8S3 T cells expanded in MRL lpr/lpr lymph nodes conserve TCRBJ gene usage of single-positive BV8S3 T cells. Fan J, et al. **Microbiol Immunol** 1997;41(3):253–60

A conserved tissue-specific structure at a human T-cell receptor beta-chain core promoter. Halle JP, et al. **Mol Cell Biol** 1997 Aug;17(8):4220–9

A targeted mutation at the T-cell receptor alpha/delta locus impairs T-cell development and reveals the presence of the nearby antiapoptosis gene Dad1. Hong NA, et al. **Mol Cell Biol** 1997 Apr;17(4):2151–7

Sequence comparisons of the CDR3 hyper-variable loops of human T cell receptors specific for three major T cell epitopes of the birch pollen allergen Bet v 1. Breiteneder H, et al. **Mol Immunol** 1996 Sep;33(13):1039–48

A T cell clone with three potential TCR alpha chain rearrangements expresses only one receptor combination at the cell surface. Hayball JD, et al. **Mol Immunol** 1996 Oct;33(15):1177–81

Binding properties and solubility of single-chain T cell receptors expressed in E. coli. Schodin BA, et al. **Mol Immunol** 1996 Jun;33(9):819–29

Additional TCRV beta primers and minor method modifications improve detection of clonal T-cell populations by RT-PCR. Lynas C, et al. **Mol Pathol** 1997 Feb;50(1):53–5

Evolution and selection of primate T cell antigen receptor BV8 gene subfamily. Funkhouser W, et al. **Mol Phylogenet Evol** 1997 Aug;8(1):51–64

Indictment of the microglia as the villain in multiple sclerosis. Sriram S, et al. **Neurology** 1997 Feb;48(2):464–70 (69 ref.)

Bcl-2 reduces lymphomagenesis in deltaV-TCRbeta transgenic mice. Acton D, et al. **Oncogene** 1997 May 29; 14(21):2497–501

A fas antigen receptor mutation allows development of toxic shock syndrome toxin-1-induced lethal shock in V beta 8.2 T-cell receptor transgenic mice. Cullen CM, et al. **Pathobiology** 1995;63(6):293–304

Analysis of germline and expressed T cell receptor variable region genes in Crohn's disease. Thurley C, et al. **Pathol Res Pract** 1996 Oct;192(10):1022–30

Gene-targeted deletion and replacement mutations of the T-cell receptor beta-chain enhancer: the role of enhancer elements in controlling V(D)J recombination accessibility. Bories JC, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23; 93(15):7871–6

Deletion of the mouse T-cell receptor beta gene enhancer blocks alphabeta T-cell development. Bouvier G, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7877–81

Beta cell apoptosis in T cell-mediated autoimmune diabetes. Kurrer MO, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):213–8

The qualitative nature of the primary immune response to HIV infection is a prognosticator of disease progression independent of the initial level of plasma viremia. Pantaleo G, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):254–8

T-cell alpha beta + and gamma delta + deficient mice display abnormal but distinct phenotypes toward a natural, widespread infection of the intestinal epithelium. Roberts SJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11774–9

T cell receptor restriction of diabetogenic autoimmune NOD T cells. Simone E, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2518–21

An enhancer-blocking element between alpha and delta gene segments within the human T cell receptor alpha/delta locus. Zhong XP, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5219–24

RT-PCR topography of chronic psoriasis skin based on analysis of T-cell receptor B variable region gene usage. Ahangari G, et al. **Scand J Immunol** 1997 May;45(5):534–40

RT-PCR based analysis of T-cell receptor B variable region gene usage in normal human breast skin resident T lymphocytes (SRT). Ahangari G, et al. **Scand J Immunol** 1996 Oct;44(4):330–4

HIV antigens and T-cell receptor variable beta chain families. Jason J, et al. **Scand J Immunol** 1997 Jan; 45(1):81–90

Analysis of the T-cell receptor V beta usage in monozygotic and dizygotic twins living in a Plasmodium falciparum endemic area in west Africa. Troye-Blomberg M, et al. **Scand J Immunol** 1997 May;45(5):541–5

Alloreactive anti-HLA-B7 cytolytic T cell clones use restricted T cell receptor genes. Li YY, et al. **Transplantation** 1996 Oct 15;62(7):954–61

Selective T cell receptor Vbeta gene usage by alloreactive T cells responding to defined HLA-DR alleles. Lobashevsky A, et al. **Transplantation** 1996 Nov 15; 62(9):1332–40

B-haplotype control of CD4/CD8 subsets and TCR V beta usage in chicken T lymphocytes. Ewald SJ, et al. **Vet Immunol Immunopathol** 1996 Oct;53(3–4):285–301

Restriction fragment length polymorphism of the T-cell receptor beta-chain gene in dogs. Tipold A, et al. **Vet Immunol Immunopathol** 1996 Jun 1;51(3–4):225–33

[Analysis of lymphocyte-T receptor in autoimmune diseases (editorial)] Lunardi C, et al. **Recenti Prog Med** 1997 Feb; 88(2):82–4 **(Ita)**

[Analysis of T-cell receptor repertoire in lesions of patients with autoimmune diseases] Kato T, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):651 **(Jpn)**

[T-cell receptor repertoire in patients with primary biliary cirrhosis] Omoto M, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):660–3 **(Jpn)**

[Analysis of infiltrating T-cell receptor in multiple organ lesions of patients with Sjogren's syndrome] Sumida T, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec; 18(6):653–9 (20 ref.) **(Jpn)**

[Intra-hepatic infiltrating T cell clonality analysis in patients with autoimmune hepatitis and the clinical significance] Takahashi H, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):708–12 (9 ref.) **(Jpn)**

[T-cell antigen receptor repertoire in patients with inflammatory bowel diseases] Tanaka A, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):665 **(Jpn)**

[T-cell antigen receptor repertoire in patients with pulmonary sarcoidosis] Usui H. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):664 **(Jpn)**

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Skewing of the T-cell receptor repertoire in the lung of patients with HIV-1 infection. Trentin L, et al. **AIDS** 1996 Jun;10(7):729–37

Failure of anti-T-cell receptor V beta antibodies to consistently identify a malignant T-cell clone in Sézary syndrome. Bigler RD, et al. **Am J Pathol** 1996 Nov; 149(5):1477–83

Murine T cell determination of pregnancy outcome: I. Effects of strain, alphabeta T cell receptor, gammadelta T cell receptor, and gammadelta T cell subsets. Arck PC, et al. **Am J Reprod Immunol** 1997 Jun;37(6):492–502

T-cells with two T-cell receptors: are they important in autoimmunity? Stockinger B, et al. **Biochem Soc Trans** 1997 May;25(2):617–20 (22 ref.)

In vitro negative selection of viral superantigen-reactive thymocytes by thymic dendritic cells. Ferrero I, et al. **Blood** 1997 Sep 1;90(5):1943–51

Association of erythrodermic cutaneous T-cell lymphoma, superantigen-positive Staphylococcus aureus, and oligoclonal T-cell receptor V beta gene expansion [see comments] [published erratum appears in Blood 1997 May 1;89(9):3496] Jackow CM, et al. **Blood** 1997 Jan 1; 89(1):32–40. Comment in: Blood 1997 Jul 1;90(1):472–3.

Preferential usage of T cell receptor (TCR) V beta by allogeneic T cells recognizing myeloid leukemia cells: implications for separating graft-versus-leukemia effect from graft-versus-host disease. Jiang YZ, et al. **Bone Marrow Transplant** 1997 May;19(9):899–903

A relationship between the generation of burn-associated type 2 T cells and their antagonistic cells in thermally injured mice. Utsunomiya T, et al. **Burns** 1997 Jun; 23(4):281–7

The immunogenicity of experimental tumors is strongly biased by the expression of dominant viral cytotoxic T-lymphocyte epitopes. Iezzi G, et al. **Cancer Res** 1997 Jul 1;57(13):2564–8

A novel HLA class II-independent TCR-mediated T cell activation mechanism is distinguished by the V beta specificity of the proliferating oligoclones and their capacity to generate interleukin-2. Dennig D, et al. **Cell Immunol** 1996 Aug 1;171(2):200–10

Acquired resistance to experimental autoimmune encephalomyelitis is independent of V beta usage. Johnson BD, et al. **Cell Immunol** 1997 Jul 10;179(1):55–65

Effects of vaccination against different T cell receptors on maintenance of immune function during murine retrovirus infection. Liang B, et al. **Cell Immunol** 1996 Aug 25; 172(1):126–34

T cell receptor V beta usage in murine experimental autoimmune thyroiditis. McMurray RW, et al. **Cell Immunol** 1996 Aug 25;172(1):1–9

TCR alpha beta+ anti-tumor cytolytic T lymphocytes express NKR-P1 whilethe anti-tumor activity of TCR gamma delta+ T lymphocytes is not correlated to NKR-P1 expression. Yrlid U, et al. **Cell Immunol** 1996 Nov 1;173(2):287–94

Establishment and characterization of cloned CD4- CD8- alphabeta-T cell receptor (TCR)-bearing autoreactive T cells from autoimmune NZB x NZW F1 mice. Chen YC, et al. **Clin Exp Immunol** 1997 Apr;108(1):52–7

Streptozotocin-induced diabetes in mice lacking alphabeta T cells. Elliott JI, et al. **Clin Exp Immunol** 1997 Jul; 109(1):116–20

Analysis of autoantibodies to T-cell receptors among HIV-infected individuals: epitope analysis and time course. Marchalonis JJ, et al. **Clin Immunol Immunopathol** 1997 Feb;82(2):174–89

T cell receptors and T cell development. Chen CH, et al. **Curr Top Microbiol Immunol** 1996;212:37–53 (88 ref.)

T cell migration during ontogeny and T cell repertoire generation. Dunon D, et al. **Curr Top Microbiol Immunol** 1996;212:79–93 (45 ref.)

Immunophenotypic analysis of the T cell receptor V beta repertoire in CD4+ and CD8+ lymphocytes from normal peripheral blood. McCoy JP Jr, et al. **Cytometry** 1996 Jun 15;26(2):148–53

Inhibition of diabetes by an insulin-reactive CD4 T-cell clone in the nonobese diabetic mouse. Zekzer D, et al. **Diabetes** 1997 Jul;46(7):1124–32

HLA-DQ associations and T-cell receptor V-gene usage in peripheral blood of Swedish myasthenia gravis patients. Hjelmström P, et al. **Eur J Immunogenet** 1997 Jun; 24(3):179–89

Delineation of the minimal encephalitogenic epitope within the immunodominant region of myelin oligodendrocyte glycoprotein: diverse V beta gene usage by T cells recognizing the core epitope encephalitogenic for T cell receptor V beta b and T cell receptor V beta a H-2b mice. Mendel Kerlero de Rosbo N, et al. **Eur J Immunol** 1996 Oct;26(10):2470–9

CD5- CD8 alpha beta intestinal intraepithelial lymphocytes (IEL) are induced to express CD5 upon antigen-specific activation: CD5- and CD5+ CD8 alpha beta IEL do not represent separate T cell lineages. Müller S, et al. **Eur J Immunol** 1997 Jul;27(7):1756–61

Comparative analysis of alpha beta and gamma delta T cell activation by Mycobacterium tuberculosis and isopentenyl pyrophosphate. Wesch D, et al. **Eur J Immunol** 1997 Apr; 27(4):952–6

Autoantibodies to T-cell receptor beta chains in human heart transplantation: epitope and spectrotype analyses and kinetics of response. Marchalonis JJ, et al. **Exp Clin Immunogenet** 1996;13(3–4):181–91

T-cell subsets and T-cell receptor V beta utilization by Igh-1-congenic mice in herpetic retinal necrosis. Berra A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S83–8

Alpha/beta- and gamma/delta-T-cell-receptor-positive lymphocytes in healthy and inflamed human conjunctiva. Bialasiewicz AA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul;234(7):467–71

T cell receptor clonal diversity following allogeneic marrow grafting. Akatsuka Y, et al. **Hum Immunol** 1996 Jun-Jul; 48(1–2):125–34

Mitogens, superantigens, and nominal antigens elicit distinctive patterns of TCRB CDR3 diversity. Currier JR, et al. **Hum Immunol** 1996 Jun-Jul;48(1–2):39–51

Diversity in the human T cell receptor beta chain. LaRocque R, et al. **Hum Immunol** 1996 Jun-Jul;48(1–2):3–11 (51 ref.)

Comparative sequence analysis of the human T cell receptor TCRA and TCRB CDR3 regions. Moss PA, et al. **Hum Immunol** 1996 Jun-Jul;48(1–2):32–8

Restriction of V beta gene usage of liver-derived lymphocytes in chronic hepatitis B and C. Pham BN, et al. **Hum Immunol** 1996 Aug;49(1):56–63

Restricted T-cell antigen receptor repertoire in bronchoalveolar T cells from normal humans. Yurovsky VV, et al. **Hum Immunol** 1996 Sep 15;50(1):22–37

IL-4 rapidly produced by V beta 4 V alpha 8 CD4+ T cells instructs Th2 development and susceptibility to Leishmania major in BALB/c mice. Launois P, et al. **Immunity** 1997 May;6(5):541–9

V beta specificity of superantigen TSST-1 plus CD28 costimulation without APCs. Hu WG, et al. **Immunol Invest** 1996 Sep-Nov;25(5–6):405–11

V beta 8+CD4-CD8- subpopulation induced by staphylococcal enterotoxin B. Chou MC, et al. **Immunol Lett** 1997 Feb;55(2):85-91

Defective depletion of CD45-null thymocytes by the Staphylococcus aureus enterotoxin B superantigen. Conroy LA, et al. **Immunol Lett** 1996 Dec;54(2-3):119-22

Constitutive biological activity of thymus-independent TCR-alpha-beta+ intestinal intraepithelial lymphocytes in TCR-alpha-/- gene disruption mice. Neuhaus O, et al. **Immunol Lett** 1996 Dec 1;54(1):53-7

Role of the T cell receptor alpha-chain in superantigen recognition. Blackman MA, et al. **Immunol Res** 1996; 15(2):98-113 (84 ref.)

Aspects of cytotoxic T cell memory. Müllbacher A, et al. **Immunol Rev** 1996 Apr;150:113-27 (70 ref.)

Microbial colonization influences composition and T-cell receptor V beta repertoire of intraepithelial lymphocytes in rat intestine. Helgeland L, et al. **Immunology** 1996 Dec; 89(4):494-501

Elimination of T-cell-receptor beta-chain diversity in transgenic mice restricts antigen-specific but not alloreactive responses. O'Brien DP, et al. **Immunology** 1997 Jul;91(3):375-82

Importance of beta2-microglobulin in murine resistance to mucosal and systemic candidiasis. Balish E, et al. **Infect Immun** 1996 Dec;64(12):5092-7

Effect of superantigens on human thymocytes: selective proliferation of V beta 2+ cells in response to toxic shock syndrome toxin-1 and their deletion upon secondary stimulation. Mingari MC, et al. **Int Immunol** 1996 Feb; 8(2):203-9

Selective usage of defined TCRBV genes in response to filarial antigens. Sartono E, et al. **Int Immunol** 1997 Jul; 9(7):955-62

Memory TCR repertoires analyzed long-term reflect those selected during the primary response. Walker PR, et al. **Int Immunol** 1996 Jul;8(7):1131-8

Dominant TCRB-V-J chain usage and clonal expansion of sarcoma-reactive CD4+ HLA-DR-restricted T cells suggest a limited set of immunodominant sarcoma antigens. Heike M, et al. **Int J Cancer** 1997 Jul 29;72(3):403-7

V alpha 14+ NK T cells: a novel lymphoid cell lineage with regulatory function. Taniguchi M, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S263-9

Direct, MHC-dependent presentation of the drug sulfamethoxazole to human alphabeta T cell clones. Schnyder B, et al. **J Clin Invest** 1997 Jul 1;100(1):136-41

T-cell receptor beta variable region (V beta) usage in cutaneous T-cell lymphomas (CTCL) in comparison to normal and eczematous skin. Potoczna N, et al. **J Cutan Pathol** 1996 Aug;23(4):298-305

Overlapping cases with psoriasis and Sjögren syndrome: a study of lymphocyte response to staphylococcal enterotoxin B. Yamamoto T, et al. **J Dermatol Sci** 1996 Dec;13(3):212-8

Requirements for CD1d recognition by human invariant Valpha24+ CD4-CD8- T cells. Exley M, et al. **J Exp Med** 1997 Jul 7;186(1):109-20

Domains of the TCR beta-chain required for early thymocyte development. Jacobs H, et al. **J Exp Med** 1996 Nov 1;184(5):1833-43

Inactivation of T cell receptor peptide-specific CD4 regulatory T cells induces chronic experimental autoimmune encephalomyelitis (EAE). Kumar V, et al. **J Exp Med** 1996 Nov 1;184(5):1609-17

Regulatory T cells specific for the same framework 3 region of the Vbeta8.2 chain are involved in the control of collagen II-induced arthritis and experimental autoimmune encephalomyelitis. Kumar V, et al. **J Exp Med** 1997 May 19;185(10):1725-33

The single positive T cells found in CD3-zeta/eta-/- mice overtly react with self-major histocompatibility complex molecules upon restoration of normal surface density of T cell receptor-CD3 complex. Lin SY, et al. **J Exp Med** 1997 Feb 17;185(4):707-15

Thymocytes can become mature T cells without passing through the CD4+ CD8+, double-positive stage. Liu CP, et al. **J Exp Med** 1996 Nov 1;184(5):1619-30

A truncated T cell receptor repertoire reveals underlying immunogenicity of an antigenic determinant. Nanda NK, et al. **J Exp Med** 1996 Sep 1;184(3):1037-43

Replacement of pre-T cell receptor signaling functions by the CD4 coreceptor. Norment AM, et al. **J Exp Med** 1997 Jan 6;185(1):121-30

Influence of the NH2-terminal amino acid of the T cell receptor alpha chain on major histocompatibility complex (MHC) class II + peptide recognition. Seibel JL, et al. **J Exp Med** 1997 Jun 2;185(11):1919-27

Development of Epstein-Barr virus-specific memory T cell receptor clonotypes in acute infectious mononucleosis. Silins SL, et al. **J Exp Med** 1996 Nov 1;184(5):1815-24

Type 1 versus type 2 cytokine release by Vbeta T cell subpopulations determines in vivo antitumor reactivity: IL-10 mediates a suppressive role. Aruga A, et al. **J Immunol** 1997 Jul 15;159(2):664-73

Immunodominant CD4+ T cell receptor Vbeta repertoires involved in graft-versus-host disease responses to minor histocompatibility antigens. Berger MA, et al. **J Immunol** 1997 Jul 1;159(1):77-85

A TCR V alpha CDR3-specific motif associated with Lewis rat autoimmune encephalomyelitis and basic protein-specific T cell clones. Buenafe AC, et al. **J Immunol** 1997 Jun 1;158(11):5472-83

Sequential development of structural and functional alterations in T cells from tumor-bearing mice. Correa MR, et al. **J Immunol** 1997 Jun 1;158(11):5292-6

CD44 activation and associated primary adhesion is inducible via T cell receptor stimulation. DeGrendele HC, et al. **J Immunol** 1997 Sep 15;159(6):2549-53

Gene transfer directly demonstrates a role for TCR V alpha elements in superantigen recognition. Donson D, et al. **J Immunol** 1997 Jun 1;158(11):5229-36

TCR recognition of the Hb(64-76)/I-Ek determinant: single conservative amino acid changes in the complementarity-determining region 3 dramatically alter antigen fine specificity. Hsu BL, et al. **J Immunol** 1996 Sep 15;157(6):2291-8

T cell receptor diversity in CTLs specific for the CTT-1 and CTT-2 minor histocompatibility antigens. Johnston SL, et al. **J Immunol** 1997 Sep 15;159(6):2606-15

Restricted TCR V alpha repertoire in the T cell response to a tolerogenic determinant of type II collagen. Kawamura S, et al. **J Immunol** 1997 Jun 15;158(12):6013-8

Deviated overexpression of TCR-beta, TCR-gamma, CD4, and CD8 on thymic lymphomas induced by 1-propyl-1-nitrosourea: destruction of the allelic exclusion of TCR-beta and expression of functional TCR-betagamma heterodimer on a lymphoma, cFTL53. Kinebuchi M, et al. **J Immunol** 1997 Jul 15;159(2):748-56

Induction of thymocyte deletion by purified single peptide/major histocompatibility complex ligands. Lesage S, et al. **J Immunol** 1997 Sep 1;159(5):2078-81

TCR beta-chain variable region-driven selection and massive expansion of HLA-class I-restricted antitumor CTL lines from HLA-A*0201+ melanoma patients. Maccalli C, et al. **J Immunol** 1997 Jun 15;158(12):5902-13

Staphylococcal enterotoxin B induces an early and transient state of immunosuppression characterized by V beta-unrestricted T cell unresponsiveness and defective antigen-presenting cell functions. Muraille E, et al. **J Immunol** 1997 Mar 15;158(6):2638-47

Mutations in the MHC class II binding domains of staphylococcal enterotoxin A differentially affect T cell receptor Vbeta specificity. Newton DW, et al. **J Immunol** 1996 Nov 1;157(9):3988-94

alpha beta T cell regulation and CD40 ligand dependence in murine systemic autoimmunity. Peng SL, et al. **J Immunol** 1997 Mar 1;158(5):2464-70

Cytotoxic gammadelta or alphabeta T cells with a natural killer cell marker, CD56, induced from human peripheral blood lymphocytes by a combination of IL-12 and IL-2. Satoh M, et al. **J Immunol** 1996 Nov 1;157(9):3886-92

NK 1+ CD4- CD8- alphabeta T cells in the peritoneal cavity: specific T cell receptor-mediated cytotoxicity and selective IFN-gamma production against B cell leukemia and myeloma cells. Sugie T, et al. **J Immunol** 1996 Nov 1;157(9):3925-35

Functional responses and apoptosis of CD25 (IL-2R alpha)-deficient T cells expressing a transgenic antigen receptor. Van Parijs L, et al. **J Immunol** 1997 Apr 15; 158(8):3738-45

Acceleration of spontaneous diabetes in TCR-beta-transgenic nonobese diabetic mice by beta-cell cytotoxic CD8+ T cells expressing identical endogenous TCR-alpha chains. Verdaguer J, et al. **J Immunol** 1996 Nov 15;157(10):4726-35

HEL-Flu: an influenza virus containing the hen egg lysozyme epitope recognized by CD4+ T cells from mice transgenic for an alphabeta TCR. Walker WS, et al. **J Immunol** 1997 Sep 15;159(6):2563-6

The repertoire of T cell antigen receptor beta-chain variable regions associated with psoriasis vulgaris [see comments] Moss P, et al. **J Invest Dermatol** 1997 Jul;109(1):14-9. Comment in: J Invest Dermatol 1997 Jul;109(1):1-4.

Results of a phase I clinical trial of a T-cell receptor vaccine in patients with multiple sclerosis. II. Comparative analysis of TCR utilization in CSF T-cell populations before and after vaccination with a TCRV beta 6 CDR2 peptide. Gold DP, et al. **J Neuroimmunol** 1997 Jun;76(1-2):29-38

Longitudinal study of myelin basic protein-specific T-cell receptors during the course of multiple sclerosis. Lovett-Racke AE, et al. **J Neuroimmunol** 1997 Sep; 78(1-2):162-71

Results of a phase I clinical trial of a T-cell receptor peptide vaccine in patients with multiple sclerosis. I. Analysis of T-cell receptor utilization in CSF cell populations. Wilson DB, et al. **J Neuroimmunol** 1997 Jun;76(1-2):15-28

Possible mechanism for the TCR beta-chain associated EAE resistance of LER rats. Bourque MM, et al. **J Neurosci Res** 1996 Sep 15;45(6):714-22

Treatment of relapsing autoimmune encephalomyelitis with T cell receptor V beta-specific antibodies when proteolipid protein is the autoantigen. Whitham RH, et al. **J Neurosci Res** 1996 Jul 15;45(2):104-16

Role of alpha beta T cells and gamma delta T cells in protective immunity to Actinobacillus actinomycetemcomitans in mutant mice by targeted gene disruption. Takahashi I, et al. **J Periodontal Res** 1996 Nov; 31(8):589-95

Physical and epitope analysis of a recombinant human T-cell receptor V alpha/V beta construct support the similarity to immunoglobulin. Lake DF, et al. **J Protein Chem** 1997 May;16(4):309-20

V beta 17 T cell receptor peptide vaccination in rheumatoid arthritis: results of phase I dose escalation study. Moreland LW, et al. **J Rheumatol** 1996 Aug;23(8):1353-62

CD4- CD8- TCR alpha/beta+ suppressor T cells demonstrated in mice 1 day after thermal injury. Matsuo R, et al. **J Trauma** 1997 Apr;42(4):635-40

Functional phenotype of transformed human alphabeta and gammadelta T cells determined by different subgroup C strains of herpesvirus Saimiri. Fickenscher H, et al. **J Virol** 1997 Mar;71(3):2252-63

Abscess formation in Listeria monocytogenes-infected gamma delta T cell deficient mouse mutants involves alpha beta T cells. Thoma-Uszynski S, et al. **Microb Pathog** 1997 Feb;22(2):123-8

Analysis of cytokine producing activity of intestinal intraepithelial T cells from TCR beta-chain and delta-chain mutant mice. Kohyama M, et al. **Microbiol Immunol** 1997;41(4):353-9

The MHC class II-restricted T cell response of C57BL/6 mice to human C-reactive protein: homology to self and the selection of T cell epitopes and T cell receptors. Döffinger R, et al. **Mol Immunol** 1997 Feb;34(2):115-24

Subtype-specific interactions of type C staphylococcal enterotoxins with the T-cell receptor. Deringer JR, et al. **Mol Microbiol** 1996 Nov;22(3):523-34

Analysis of the interaction between the bacterial superantigen streptococcal pyrogenic exotoxin A (SpeA) and the human T-cell receptor. Kline JB, et al. **Mol Microbiol** 1997 Apr; 24(1):191-202

Immunotherapy for multiple sclerosis: from theory to practice [comment] Antel JP, et al. **Nat Med** 1996 Oct; 2(10):1074-5. Comment on: Nat Med 1996 Oct;2(10):1109-15.

Treatment of multiple sclerosis with T-cell receptor peptides: results of a double-blind pilot trial [see comments] [published erratum appears in Nat Med 1997 Feb;3(2):240] Vandenbark AA, et al. **Nat Med** 1996 Oct;2(10):1109-15. Comment in: Nat Med 1996 Oct;2(10):1074-5.

Murine Th1 clone defines a 60 kD tachyzoite antigen of Toxoplasma gondii. Reichmann G, et al. **Parasite Immunol** 1997 May;19(5):229-34

Selective increase of V beta 2+ T cells in the small intestinal mucosa in Kawasaki disease. Yamashiro Y, et al. **Pediatr Res** 1996 Feb;39(2):264-6

Influence of the rheumatoid arthritis-associated shared epitope on T-cell receptor repertoire formation. Kohsaka H, et al. **Proc Assoc Am Physicians** 1996 Jul;108(4):323-8

The Syk and ZAP-70 SH2-containing tyrosine kinases are implicated in pre-T cell receptor signaling. Cheng AM, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9797-801

Generation of NK1.1+ T cell antigen receptor alpha/beta+ thymocytes associated with intact thymic structure [published erratum appears in Proc Natl Acad Sci U S A 1997 May 27;94(11):5979] Nakagawa K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2472-7

Expression of a second receptor rescues self-specific T cells from thymic deletion and allows activation of autoreactive effector function. Zal T, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9102-7

Retrovirally induced mouse anti-TCR monoclonals can synergize the in vitro proliferative T cell response to bacterial superantigens. Dehghanpisheh K, et al. **Scand J Immunol** 1997 Jun;45(6):645-54

The alpha beta T cell receptor clustering upon superantigen/MHC recognition. Mazda O, et al. **Scand J Immunol** 1997 Sep;46(3):262-7

T cell receptor (V beta) bias in the response of rheumatoid arthritis synovial fluid T cells to connective tissue antigens. Cuesta IA, et al. **Scand J Rheumatol** 1997;26(3):166-73

Dominant clones in immortalized T-cell lines from rheumatoid arthritis synovial membranes. Saadawi AM, et al. **Tissue Antigens** 1997 May;49(5):431-7

Evidence for V beta restricted recognition of HLA-DR alleles. Kotb M, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):1005-7

In vivo longitudinal analysis of a dominant TCR repertoire selected in human response to influenza virus. Prevost-Blondel A, et al. **Virology** 1997 Jun 23; 233(1):93-104

Deletion of CD4+ T cells by mouse mammary tumor virus (FM) superantigen with broad specificity of T cell receptor beta-chain variable region. Yoshimoto T, et al. **Virology** 1996 Sep 15;223(2):387-91

ISOLATION & PURIFICATION

Identification of a committed T cell precursor population in adult human peripheral blood. Bruno L, et al. **J Exp Med** 1997 Mar 3;185(5):875-84

METABOLISM

Loss of T cell receptor Vbeta repertoires in HIV type 1-infected SCID-hu mice. Boldt-Houle DM, et al. **AIDS Res Hum Retroviruses** 1997 Jan 20;13(2):125-34

Restrictions of T cell receptor beta chain repertoire in the peripheral blood of patients with systemic lupus erythematosus. Holbrook MR, et al. **Ann Rheum Dis** 1996 Sep;55(9):627-31

Structure and function of the pre-T cell receptor. von Boehmer H, et al. **Annu Rev Immunol** 1997;15:433-52 (53 ref.)

V beta activation by HIV Nef protein: detection by a simple amplification procedure. Tanabe T, et al.

Biochem Biophys Res Commun 1997 Jan 23;230(3):509–13
Treatment of malignancy by direct gene transfer of a foreign MHC class I molecule. DeBruyne L.
Cancer Immunol Immunother 1996 Nov;43(3):180–9 (107 ref.)
Direct transfer of a foreign MHC gene into human melanoma alters T cell receptor V beta usage by tumor-infiltrating lymphocytes. DeBruyne LA, et al.
Cancer Immunol Immunother 1996 Sep;43(1):49–58
V alpha domain modulates the multiple topologies of mouse T cell receptor V beta20/staphylococcal enterotoxins A and E complexes. Bravo de Alba Y, et al.
Eur J Immunol 1997 Jan;27(1):92–9
Dominance of the BV17 element in nickel-specific human T cell receptors relates to severity of contact sensitivity. Vollmer J, et al. **Eur J Immunol** 1997 Aug;27(8):1865–74
The alpha chain of the T cell antigen receptor is degraded in the cytosol. Huppa JB, et al. **Immunity** 1997 Jul; 7(1):113–22
TCR beta-independent development of CD4+ CD8+ thymocytes observed in a strain of scid mice. Shibata S, et al. **Immunol Cell Biol** 1997 Apr;75(2):154–60
Increased division of alpha beta TCR+ and gamma delta TCR+ intestinal intraepithelial lymphocytes after oral administration of cholera toxin. Penney I, et al.
Immunology 1996 Sep;89(1):54–8
Flow-cytometric analysis of T-cell receptor expression in peripheral blood lymphocytes. Liebers V, et al.
Int Arch Allergy Immunol 1997 Feb;112(2):133–9
V beta 6-bearing T cells are involved in resistance to Trypanosoma cruzi infection in XID mice. Cordeiro da Silva A, et al. **Int Immunol** 1996 Aug;8(8):1213–9
Transcription and demethylation of TCR beta gene initiate prior to the gene rearrangement in c-kit+ thymocytes with CD3 expression: evidence of T cell commitment in the thymus. Hozumi K, et al. **Int Immunol** 1996 Oct; 8(10):1473–81
Differential roles of T cell receptor alpha and beta chains in ligand binding among H-2Kd-restricted cytolytic T lymphocyte clones specific for a photoreactive Plasmodium berghei circumsporozoite peptide derivative. Anjuère F, et al. **J Biol Chem** 1997 Mar 28;272(13):8505–14
Phosphorylation of extracellular domains of T-lymphocyte surface proteins. Constitutive serine and threonine phosphorylation of the T cell antigen receptor ectodomains. Apasov SG, et al. **J Biol Chem** 1996 Oct 11; 271(41):25677–83
Reglucosylation of N-linked glycans is critical for calnexin assembly with T cell receptor (TCR) alpha proteins but not TCRbeta proteins. Van Leeuwen JE, et al.
J Biol Chem 1997 Feb 14;272(7):4179–86
Cytosolic degradation of T-cell receptor alpha chains by the proteasome. Yu H, et al. **J Biol Chem** 1997 Aug 15; 272(33):20800–4
Analysis of the T cell receptor V alpha repertoire in Hashimoto's thyroiditis: evidence for the restricted accumulation of CD8+ T cells in the absence of CD4+ T cell restriction. McIntosh RS, et al.
J Clin Endocrinol Metab 1997 Apr;82(4):1140–6
Normalization of the peripheral blood T cell receptor V beta repertoire after cultured postnatal human thymic transplantation in DiGeorge syndrome. Davis CM, et al. **J Clin Immunol** 1997 Mar;17(2):167–75
Candida albicans induces selective expansion of human T lymphocytes expressing the T-cell receptor variable region V beta 5.1. Walsh P, et al. **J Dermatol Sci** 1996 Jun; 12(2):140–6
Requirements for peptide-induced T cell receptor downregulation on naive CD8+ T cells. Cai Z, et al.
J Exp Med 1997 Feb 17;185(4):641–51
TCR binding differs for a bacterial superantigen (SEE) and a viral superantigen (Mtv-9). Liao L, et al. **J Exp Med** 1996 Oct 1;184(4):1471–82
Induction of apoptosis by anti-CD3 epsilon F(ab')2 in antigen receptor transgenic murine T cells activated by specific peptide. Yu XZ, et al. **J Immunol** 1996 Oct 15;157(8):3420–9
Topology of T cell receptor-peptide/class I MHC interaction defined by charge reversal complementation and functional analysis. Chang HC, et al. **J Mol Biol** 1997 Aug 15; 271(2):278–93
Physical and epitope analysis of a recombinant human T-cell receptor V alpha/V beta construct support the similarity to immunoglobulin. Lake DF, et al. **J Protein Chem** 1997 May;16(4):309–20
Clonal accumulation of V beta 5.1-positive cells in the liver of a patient with autoimmune cholangiopathy. Shimizu Y, et al. **Liver** 1997 Feb;17(1):7–12
Affinity and kinetics of the interactions between an alphabeta T-cell receptor and its superantigen and class II-MHC/peptide ligands. Khandekar SS, et al.
Mol Immunol 1997 Apr;34(6):493–503
H-2Ld-alloreactive T cell hybridomas utilize diverse V alpha and V beta T cell receptor chains. Louie KA, et al.
Mol Immunol 1996 Jun;33(9):747–58
Bacterial superantigens induce V beta-specific T cell receptor internalization. Makida R, et al. **Mol Immunol** 1996 Jul;33(10):891–900
T-cell antigen receptor transmembrane peptides modulate T-cell function and T cell-mediated disease. Manolios N, et al. **Nat Med** 1997 Jan;3(1):84–8
CD8 enhances formation of stable T-cell receptor/MHC class I molecule complexes [see comments] [published erratum appears in Nature 1997 Jun 5;387(6633):634] Garcia KC, et al. **Nature** 1996 Dec 12;384(6609):577–81. Comment in: Nature 1996 Dec 12;384(6609):518–9.
Human CD8+ T lymphocyte subsets that express HLA class I-specific inhibitory receptors represent oligoclonally or monoclonally expanded cell populations. Mingari MC, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12433–8
Essential requirement of an invariant V alpha 14 T cell antigen receptor expression in the development of natural killer T cells. Taniguchi M, et al.
Proc Natl Acad Sci U S A 1996 Oct 1;93(20):11025–8
Events that regulate differentiation of alpha beta TCR+ and gamma delta TCR+ T cells from a common precursor. Kang J, et al. **Semin Immunol** 1997 Jun;9(3):171–9 (60 ref.)
The expression of CD4 and CD8 molecules conditions the behavior of V beta + murine thymocytes upon superantigenic challenge. Fattorossi A, et al. **Thymus** 1997; 24(3):133–45

PHYSIOLOGY

Skewed T-cell receptor Vbeta8.2 expression in transgenic CD2-myc induced thymic lymphoma: a role for antigen stimulation in tumour development? Webster G, et al.
Br J Cancer 1997;76(6):739–46
Biophysical and structural studies of TCRs and ligands: implications for T cell signaling. Ward ES, et al.
Curr Opin Immunol 1997 Feb;9(1):97–106 (59 ref.)
T cell receptor alpha-chain tail is required for protein kinase C-mediated down-regulation, but not for signaling. Bäckström BT, et al. **Eur J Immunol** 1997 Jun; 27(6):1433–41
Differential response of CD4+ V7+ and CD4+ V7- T cells to T cell receptor-dependent signals: CD4+ V7+ T cells are co-stimulation independent and anti-V7 antibody blocks the induction of anergy by bacterial superantigen. Soares LR, et al. **Eur J Immunol** 1997 Jun;27(6):1413–21
A motif within the T cell receptor alpha chain constant region connecting peptide domain controls antigen responsiveness. Bäckström BT, et al. **Immunity** 1996 Nov; 5(5):437–47
T-cell development in the absence of the pre-T-cell receptor. Buer J, et al. **Immunol Lett** 1997 Jun 1;57(1–3):5–8
CD95 (Fas) may control the expansion of activated T cells after elimination of bacteria in murine listeriosis. Fuse Y, et al. **Infect Immun** 1997 May;65(5):1883–91
Role of alphabeta and gammadelta T cells in the host response to Salmonella infection as demonstrated in T-cell-receptor-deficient mice of defined Ity genotypes. Weintraub BC, et al. **Infect Immun** 1997 Jun;65(6):2306–12
TCR-mediated target cell lysis by CD4+NK1+ liver T lymphocytes. Emoto M, et al. **Int Immunol** 1997 Apr; 9(4):563–71
Regulation of CD40 ligand expression on naive CD4 T cells: a role for TCR but not co-stimulatory signals. Jaiswal AI, et al. **Int Immunol** 1996 Feb;8(2):275–85
Cloning, functional activities and in vivo tissue distribution of rat NKR-P1+ TCR alpha beta + cells. Knudsen E, et al. **Int Immunol** 1997 Jul;9(7):1043–51
Lck-independent triggering of T-cell antigen receptor signal transduction by staphylococcal enterotoxins. Yamasaki S, et al. **J Biol Chem** 1997 Jun 6;272(23):14787–91
Role of different T cell receptors in the development of pre-T cells. Buer J, et al. **J Exp Med** 1997 May 5; 185(9):1541–7
A regulatory role for TRAF1 in antigen-induced apoptosis of T cells. Speiser DE, et al. **J Exp Med** 1997 May 19; 185(10):1777–83
Recombinant soluble alphabeta T cell receptors protect T cells from immune suppression: requirement for aggregated multimeric, disulfide-linked alphabeta heterodimers. Paliwal V, et al. **J Immunol** 1997 Aug 15;159(4):1718–27
Mice lacking alpha beta + T cells are resistant to the induction of experimental autoimmune encephalomyelitis. Elliott JI, et al. **J Neuroimmunol** 1996 Nov;70(2):139–44
T cell receptor specificities of Toxoplasma gondii-reactive mouse CD4+ T lymphocytes and Th1 clones. Reichmann G, et al. **Med Microbiol Immunol (Berl)** 1997 Jun; 186(1):25–30
Prevention of retrovirus-induced aberrant cytokine secretion, excessive lipid peroxidation, and tissue vitamin E deficiency by T cell receptor peptide treatments in C57BL/6 mice. Liang B, et al. **Proc Soc Exp Biol Med** 1997 Jan; 214(1):87–94
Role of a limited T-cell receptor V beta repertoire in alloantigen recognition and allograft rejection. Shirwan H, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):1050–1
[Role of TCR V alpha 24 J alpha Q+ T cells in autoimmune diseases] Oishi Y, et al. **Nippon Rinsho** 1997 Jun; 55(6):1425–30 (20 ref.) (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Thymocyte differentiation in gamma-irradiated severe-combined immunodeficient mice: characterization of intermediates and products of V(D)J recombination at the T cell receptor alpha locus. Zhu C, et al.
Eur J Immunol 1996 Dec;26(12):2859–65

ULTRASTRUCTURE

Assembly, specific binding, and crystallization of a human TCR-alphabeta with an antigenic Tax peptide from human T lymphotropic virus type 1 and the class I MHC molecule HLA-A2. Garboczi DN, et al. **J Immunol** 1996 Dec 15; 157(12):5403–10

RECEPTORS, ANTIGEN, T-CELL, GAMMA-DELTA

see related
GENE REARRANGEMENT, DELTA-CHAIN T-CELL ANTIGEN RECEPTOR
GENE REARRANGEMENT, GAMMA-CHAIN T-CELL ANTIGEN RECEPTOR

Selective compartmentalization of gammadelta-T lymphocytes in human breastmilk. Lindstrand A, et al.
Acta Paediatr 1997 Aug;86(8):890–1
Clinical and pathological heterogeneity in cutaneous gamma-delta T-cell lymphoma: a report of three cases and a review of the literature. Munn SE, et al.
Br J Dermatol 1996 Dec;135(6):976–81 (17 ref.)
Gamma delta T cell help of B cells is induced by repeated parasitic infection, in the absence of other T cells. Pao W, et al. **Curr Biol** 1996 Oct 1;6(10):1317–25
Autocrine nitric oxide modulates CD95-induced apoptosis in gammadelta T lymphocytes. Sciorati C, et al.
J Biol Chem 1997 Sep 12;272(37):23211–5
An anti-inflammatory role for gamma delta T lymphocytes in acquired immunity to Mycobacterium tuberculosis. D'Souza CD, et al. **J Immunol** 1997 Feb 1;158(3):1217–21
Heat shock protein 65 induced by gammadelta T cells prevents apoptosis of macrophages and contributes to host defense in mice infected with Toxoplasma gondii. Hisaeda H, et al. **J Immunol** 1997 Sep 1;159(5):2375–81
Propagation and regulation of systemic autoimmunity by gammadelta T cells. Peng SL, et al. **J Immunol** 1996 Dec 15;157(12):5689–98
Clinical and hematological characteristics of hepatosplenic T gamma/delta lymphoma with isochromosome for long arm of chromosome 7. Yao M, et al. **Leuk Lymphoma** 1996 Aug;22(5–6):495–500
An unusual case of a splenic gamma/delta T-cell lymphoma with angiocentric tendency and haemophagocytic syndrome. Zabernigg A, et al. **Leuk Lymphoma** 1996 Nov; 23(5–6):631–4
TCR gamma delta+ cells expressing Vgamma 9V delta2, which normally predominate the blood, are found in the spleens of patients with hairy cell leukemia. van de Corput L, et al. **Leukemia** 1997 Jan;11(1):106–9

ANALYSIS

Increased expression of cell surface markers on endometrial gamma delta T-cell receptor+ intraepithelial lymphocytes induced by the local presence of the sheep conceptus. Liu WJ, et al. **Am J Reprod Immunol** 1997 Feb;37(2):199–205
Expression of gamma delta T cells and adhesion molecules in endometriotic tissue in patients with endometriosis and adenomyosis. Ota H, et al. **Am J Reprod Immunol** 1996 May;35(5):477–82
Active fulminant myocarditis characterized by T-lymphocytes expressing the gamma-delta T-cell receptor: a new disease entity? Eck M, et al.
Am J Surg Pathol 1997 Sep;21(9):1109–12
Hepatosplenic T-cell lymphoma: a distinct clinicopathologic entity of cytotoxic gamma delta T-cell origin [see comments] Cooke CB, et al. **Blood** 1996 Dec 1; 88(11):4265–74. Comment in: Blood 1997 May 1;89(9):3490–1.
Characterisation of gamma delta T cells in renal cell carcinoma patients by polymerase chain reaction analysis of T cell receptor transcripts. Olive C, et al.
Cancer Immunol Immunother 1997 Mar;44(1):27–34
An increased gamma delta T cell population in the intestine of thymus-leukemia antigen transgenic mice. Sharma P, et al. **Cell Immunol** 1997 Mar 15;176(2):153–7
Mycobacterium tuberculosis induces apoptosis in gamma/delta T lymphocytes from patients with advanced clinical forms of active tuberculosis. Duarte R, et al.
Clin Diagn Lab Immunol 1997 Jan;4(1):14–8
Density of gamma/delta+ T cells in the jejunal epithelium of patients with coeliac disease and dermatitis herpetiformis is increased with age. Savilahti E, et al.
Clin Exp Immunol 1997 Sep;109(3):464–7
Streptococcal toxic shock syndrome associated with marked gamma delta T cell expansion: case report. Arvand M, et al. **Clin Infect Dis** 1996 Feb;22(2):362–5
The number and proportion of Vgamma9 Vdelta2 T cells rise significantly in the peripheral blood of patients after the onset of acute Coxiella burnetii infection. Schneider T, et al. **Clin Infect Dis** 1997 Feb;24(2):261–4
An innate view of gamma delta T cells. Boismenu R, et al.
Curr Opin Immunol 1997 Feb;9(1):57–63 (73 ref.)
Long lasting immunological effects of ethanol after withdrawal. Laso FJ, et al. **Cytometry** 1996 Dec 15; 26(4):275–80
A novel subset of adult gamma delta thymocytes that secretes a distinct pattern of cytokines and expresses a very restricted T cell receptor repertoire. Azuara V, et al.
Eur J Immunol 1997 Feb;27(2):544–53
T cell receptor alpha gene rearrangement and transcription in adult thymic gamma delta cells. Mertsching E, et al.
Eur J Immunol 1997 Feb;27(2):389–96
Interleukin-12 activates human gamma delta T cells: synergistic effect of tumor necrosis factor-alpha. Ueta C,

et al. **Eur J Immunol** 1996 Dec;26(12):3066–73

Intraepithelial lymphocytes bearing the gamma/delta receptor in the oral and jejunal mucosa in patients with dermatitis herpetiformis. Patinen P, et al. **Eur J Oral Sci** 1997 Apr;105(2):130–5

TCR alpha/beta and TCR gamma/delta CD4–/CD8–HLA–DR alloreactive CTL clones do not use Fas/Fas ligand pathway to lyse their specific target cells. Mami–Chouaib F, et al. **Hum Immunol** 1996 Nov; 51(1):13–22

Peripheral CD4+ CD8– gammadelta T cell lymphoma: a case report with multiparameter analyses. Ichinohasama R, et al. **Hum Pathol** 1996 Dec;27(12):1370–7

Sentinel function of broadly reactive human gamma delta T cells. De Libero G. **Immunol Today** 1997 Jan;18(1):22–6 (37 ref.)

TCR gamma delta+ cells are prominent in normal bovine skin and express a diverse repertoire of antigen receptors. Hein WR, et al. **Immunology** 1997 May;91(1):58–64

Contribution of extrathymic gamma delta T cells to the expression of heat–shock protein and to protective immunity in mice infected with Toxoplasma gondii. Hisaeda H, et al. **Immunology** 1996 Aug;88(4):551–7

Afferent lymph veiled cells stimulate proliferative responses in allogeneic CD4+ and CD8+ T cells but not gamma delta TCR+ T cells. Howard CJ, et al. **Immunology** 1996 Aug;88(4):558–64

The response of gamma delta T cells to Plasmodium falciparum is dependent on activated CD4+ T cells and the recognition of MHC class I molecules. Jones SM, et al. **Immunology** 1996 Nov;89(3):405–12

Reconstitution of SCID mice with haemopoietic precursors: a detailed analysis of gamma delta T–cell reconstitution. Kelly KA, et al. **Immunology** 1997 May;91(1):65–72

Increase of heat–shock protein and induction of gamma/delta T cells in peritoneal exudate of mice after injection of live Fusobacterium nucleatum. Saito K, et al. **Immunology** 1997 Feb;90(2):229–35

Localization of alpha/beta and gamma/delta T lymphocytes in Cryptosporidium parvum–infected tissues in naive and immune calves. Abrahamsen MS, et al. **Infect Immun** 1997 Jun;65(6):2428–33

The gamma/delta T–cell response to Plasmodium falciparum malaria in a population in which malaria is endemic. Hviid L, et al. **Infect Immun** 1996 Oct;64(10):4359–62

Identification of the complete expressed human TCR V gamma repertoire by flow cytometry. Hinz T, et al. **Int Immunol** 1997 Aug;9(8):1065–72

Clonal expansion and decreased occurrence of peripheral blood gamma delta T cells of the V delta 2J delta 3 lineage in multiple sclerosis patients. Liedtke W, et al. **Int Immunol** 1997 Jul;9(7):1031–41

Herpesvirus saimiri immortalization of alpha beta and gamma delta human T–lineage cells derived from CD34+ intrathymic precursors in vitro. Pacheco–Castro A, et al. **Int Immunol** 1996 Nov;8(11):1797–805

Single–cell cytokine analysis of gamma delta T cell responses to nonpeptide mycobacterial antigens. García VE, et al. **J Immunol** 1997 Aug 1;159(3):1328–35

The TCR–delta repertoire in human intestine undergoes characteristic changes during fetal to adult development. Holtmeier W, et al. **J Immunol** 1997 Jun 15;158(12):5632–41

Evidence for B cell–mediated activation of V delta 1+ T lymphocytes during progression of HIV infection. Hyjek EM, et al. **J Immunol** 1997 Jan 1;158(1):464–74

Extrathymic origin of human gamma delta T cells during fetal development. McVay LD, et al. **J Immunol** 1996 Oct 1;157(7):2873–82

Gamma delta T cells of human early pregnancy decidua: evidence for local proliferation, phenotypic heterogeneity, and extrathymic differentiation. Mincheva–Nilsson L, et al. **J Immunol** 1997 Oct 1;159(7):3266–77

Activation of gammadelta T cells in malaria: interaction of cytokines and a schizont–associated Plasmodium falciparum antigen. Pichyangkul S, et al. **J Infect Dis** 1997 Jul;176(1):233–41

Functional roles for granzymes in murine epidermal gamma(delta) T–cell–mediated killing of tumor targets. Mohamadzadeh M, et al. **J Invest Dermatol** 1996 Nov; 107(5):738–42

T cell antigen receptor expression by intra–epithelial lymphocytes in oral lichen planus. Walton LJ, et al. **J Oral Pathol Med** 1996 Nov;25(10):534–7

Functional gamma delta T–lymphocyte defect associated with human immunodeficiency virus infections. Wallace M, et al. **Mol Med** 1997 Jan;3(1):60–71

Bovine gamma/delta TcR+ T lymphocytes are stimulated to proliferate by autologous Theileria annulata–infected cells in the presence of interleukin–2. Collins RA, et al. **Scand J Immunol** 1996 Nov;44(5):444–52

T–cell receptor alpha beta and gamma delta T cells in rat and human skin—are they equivalent? Elbe A, et al. **Semin Immunol** 1996 Dec;8(6):341–9 (82 ref.)

Thymic development of V gamma 3 cells. Leclercq G, et al. **Semin Immunol** 1996 Dec;8(6):315–21 (63 ref.)

Gamma/delta cells in tissue from patients with sarcoidosis. Wilsher ML, et al. **Thorax** 1996 Nov;51(11):1123–6

Analysis of monoclonal antibodies specific for the gamma delta TcR. Davis WC, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):275–83

gamma/delta T cell/endothelial cell interactions. Jutila MA. **Vet Immunol Immunopathol** 1996 Nov;54(1–4):105–10

Identification of gamma delta T lymphocyte subsets that populate calf ileal mucosa after birth. Wyatt CR, et al. **Vet Immunol Immunopathol** 1996 Jun 15;52(1–2):91–103

Gamma/delta T lymphocytes in the BCG granulomatous lesions. Kim DS, et al. **Yonsei Med J** 1996 Oct;37(5):319–24

[Alpha/beta and gamma/delta T–cell receptors—analysis of conjunctival tissue of patients with ocular pemphigoid] Bialasiewicz AA, et al. **Ophthalmologe** 1997 Mar; 94(3):197–201 (Eng. Abstr.) **(Ger)**

[Immunohistological study of the nasal mucosa with reference to gamma delta–T cells] Tsurumoto H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 May;100(5):512–7 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Regulation of gamma T–cell antigen receptor expression by intracellular calcium in acute lymphoblastic leukemia cell line DND41. Peralta–Zaragoza O, et al. **Arch Med Res** 1996 Autumn;27(3):305–10

Functional expression of the NKB1 killer cell inhibitory receptors on agammadelta CTL clone. Nakajima H, et al. **Immunogenetics** 1997;45(3):226–8

TCR gene recombination and alpha beta–gamma delta lineage divergence: productive TCR–beta rearrangement is neither exclusive nor preclusive of gamma delta cell development. Burtrum DB, et al. **J Immunol** 1996 Nov 15;157(10):4293–6

The T cell receptor repertoire of intestinal intraepithelial gammadelta T lymphocytes is influenced by genes linked to the major histocompatibility complex and to the T cell receptor loci. Pereira P, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5761–6

Characterization of avian T–cell receptor gamma genes. Six A, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15329–34

Autologous mixed leucocyte reaction and the polyclonal activation of bovine gamma/delta T cells. Hanby–Flarida MD, et al. **Res Vet Sci** 1996 Jul;61(1):65–71

Origin and development of the gamma delta T–cell system in sheep: a critical role for the thymus in the generation of TcR diversity and tissue tropism. Cahill RN, et al. **Semin Immunol** 1996 Dec;8(6):351–60 (61 ref.)

BLOOD

Gamma delta T cells are decreased in the blood of children with Bordetella pertussis infection. Bertotto A, et al. **Acta Paediatr** 1997 Jan;86(1):114–5

V delta 1 T cells expanded in the blood throughout HIV infection display a cytotoxic activity and are primed for TNF–alpha and IFN–gamma production but are not selected in lymph nodes. Boullier S, et al. **J Immunol** 1997 Oct 1;159(7):3629–37

Comparison of E–selectin–binding glycoprotein ligands on human lymphocytes, neutrophils, and bovine gamma delta T cells. Jones WM, et al. **J Immunol** 1997 Oct 1; 159(7):3574–83

CHEMISTRY

Modulation of experimental allergic encephalomyelitis in mice by immunization with a peptide specific for the gamma delta T cell receptor. Olive C. **Immunol Cell Biol** 1997 Feb;75(1):102–6

DEFICIENCY

TCR–gamma delta cells in CD3 zeta–deficient mice contain Fc epsilon RI gamma in the receptor complex but are specifically unresponsive to antigen. Khattri R, et al. **J Immunol** 1996 Sep 15;157(6):2320–7

GENETICS

Detection of T–cell receptor delta gene rearrangement in T–cell malignancies by clonal specific polymerase chain reaction and its application to detect minimal residual disease. Chan DW, et al. **Am J Hematol** 1996 Jul; 52(3):171–7

Molecular analysis of T–cell clonality in ulcerative jejunitis and enteropathy–associated T–cell lymphoma. Ashton–Key M, et al. **Am J Pathol** 1997 Aug;151(2):493–8

Detection of clonally rearranged T–cell–receptor gamma chain genes from T–cell malignancies and acute inflammatory rheumatic disease using PCR amplification, PAGE, and automated analysis. Witzens M, et al. **Ann Hematol** 1997 Mar;74(3):123–30

Susceptibility to actively–induced murine experimental allergic encephalomyelitis is not linked to genes of the T cell receptor or CD3 complexes. Livingstone KD, et al. **Autoimmunity** 1995;21(3):195–201

Detectable molecular residual disease at the beginning of maintenance therapy indicates poor outcome in children with T–cell acute lymphoblastic leukemia. Dibenedetto SP, et al. **Blood** 1997 Aug 1;90(3):1226–32

A chromosome 14q11/TCR alpha/delta specific yeast artificial chromosome improves the detection rate and characterization of chromosome abnormalities in T–lymphoproliferative disorders. Rack KA, et al. **Blood** 1997 Aug 1;90(3):1233–40

Cytotoxic T–lymphocyte differentiation and cytogenetic alterations in gammadelta hepatosplenic T–cell lymphoma and posttransplant lymphoproliferative disorders [letter; comment] Salhany KE, et al. **Blood** 1997 May 1; 89(9):3490–1. Comment on: Blood 1996 Nov 1;88(9):3626–33. Comment on: Blood 1996 Dec 1;88(11):4265–74.

Notch activity influences the alphabeta versus gammadelta T cell lineage decision. Washburn T, et al. **Cell** 1997 Mar 21;88(6):833–43

Selective gamma–chain T–cell receptor gene rearrangements in a patient with Omenn's syndrome: absence of V–II subgroup (V gamma 9) transcripts. Mathioudakis G, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):616–9

Distinct delta T cell receptor repertoires in monozygotic twins concordant for coeliac disease. Holtmeier W, et al. **Clin Exp Immunol** 1997 Jan;107(1):148–57

Single–cell analysis of T–cell receptor–gamma rearrangements in large–cell anaplastic lymphoma. Lorenzen J, et al. **Diagn Mol Pathol** 1996 Mar;5(1):10–9

32P–incorporation PCR for the detection of rearrangements at the TCR–gamma locus [see comments] Short MA, et al. **Diagn Mol Pathol** 1996 Mar;5(1):26–32. Comment in: Diagn Mol Pathol 1996 Dec;5(4):297–8.

CD3 delta deficiency arrests development of the alpha beta but not the gamma delta T cell lineage. Dave VP, et al. **EMBO J** 1997 Mar 17;16(6):1360–70

T–cell receptor alpha, delta, and gamma chain genes in insulin–dependent diabetes mellitus. Martínez–Naves E, et al. **Eur J Immunogenet** 1993 Oct;20(5):317–25

T cell receptor delta locus polymorphism in rheumatoid arthritis. Vandevyver C, et al. **Eur J Immunogenet** 1994 Dec;21(6):479–83

The canonical T cell receptor of dendritic epidermal gamma delta T cells is highly conserved between rats and mice. Kühnlein P, et al. **Eur J Immunol** 1996 Dec;26(12):3092–7

Isolation of T cell receptor gamma/delta chain constant genes from minke whale. Zhang XM, et al. **Exp Clin Immunogenet** 1995;12(4):245–52

A realistic approach to the sensitivity of PCR–DGGE and its application as a sensitive tool for the detection of clonality in cutaneous T–cell proliferations. Meyer JC, et al. **Exp Dermatol** 1997 Jun;6(3):122–7

Evolution of T–cell receptor gamma and delta constant region and other T–cell–related proteins in the human–rodent–artiodactyl triplet. Ciccarese S, et al. **Genetics** 1997 Feb;145(2):409–19

Analysis of the 1.1–Mb human alpha/delta T–cell receptor locus with bacterial artificial chromosome clones. Boysen C, et al. **Genome Res** 1997 Apr;7(4):330–8

Detection of clonality by heteroduplex analysis of amplified junctional region of T–cell receptor gamma in patients with T–cell acute lymphoblastic leukemias. Martinelli G, et al. **Haematologica** 1997 Mar–Apr;82(2):161–5

Pattern of T–cell receptor delta gene rearrangement by Southern blotting and polymerase chain reaction technique in Hong Kong Chinese patients with non–T–cell hematological malignancies. Chan DW, et al. **Hematol Oncol** 1996 Jun;14(2):57–66

Construction of retroviral vectors carrying human CD3 gamma cDNA and reconstitution of CD3 gamma expression and T cell receptor surface expression and function in a CD3 gamma–deficient mutant T cell line. Sun JY, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1041–8

Genetic variations at the T cell receptor gamma locus in circulating peripheral blood mononuclear cells of clinically categorised leprosy patients. Sachdeva G, et al. **Hum Genet** 1997 Jul;100(1):30–4

The alpha beta T cell receptor can replace the gamma delta receptor in the development of gamma delta lineage cells. Bruno L, et al. **Immunity** 1996 Oct;5(4):343–52

alpha, beta, gamma, and delta T cell antigen receptor genes arose early in vertebrate phylogeny. Rast JP, et al. **Immunity** 1997 Jan;6(1):1–11

Nucleotide sequence of cattle FcGRIII: its identification in gammadelta T cells. Collins RA, et al. **Immunogenetics** 1997;45(6):440–3

Expression of the T cell receptor delta–chain repertoire in mouse lymph node. Olive C. **Immunol Cell Biol** 1996 Aug; 74(4):313–7

Rearrangement and expression of Vzeta1, Vzeta2 and Vzeta3 TCR zeta genes in C57BL/6 mice. Pereira P, et al. **Int Immunol** 1996 Jan;8(1):83–90

Analysis of gamma delta T–cell receptor repertoire in the human nasal mucosa. Takeuchi K, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):251–3

Gamma delta T lymphocytosis associated with common variable immunodeficiency. Katial RK, et al. **J Clin Immunol** 1997 Jan;17(1):34–42

Identification of a DNA segment exhibiting rearrangement modifying effects upon transgenic delta–deleting elements. Janowski KM, et al. **J Exp Med** 1997 Jul 7;186(1):91–100

Regulation of T cell receptor delta gene rearrangement by CBF/PEBP2. Lauzurica P, et al. **J Exp Med** 1997 Apr 7;185(7):1193–201

Developmental regulation of VDJ recombination by the core fragment of the T cell receptor alpha enhancer. Roberts JL, et al. **J Exp Med** 1997 Jan 6;185(1):131–40

TCR gene recombination and alpha beta–gamma delta lineage divergence: productive TCR–beta rearrangement is neither exclusive nor preclusive of gamma delta cell development. Burtrum DB, et al. **J Immunol** 1996 Nov 15;157(10):4293–6

Disease–specific changes in gammadelta T cell repertoire and function in patients with pulmonary tuberculosis. Li B, et al. **J Immunol** 1996 Nov 1;157(9):4222–9

Concurrent or sequential delta and beta TCR gene rearrangement during thymocyte development: individual thymi follow distinct pathways. Margolis D, et al. **J Immunol** 1997 Jul 15;159(2):529–33

Inhibition of gamma delta T cell development and early thymocyte maturation in IL-7 -/- mice. Moore TA, et al. **J Immunol** 1996 Sep 15;157(6):2366–73

Developmentally ordered V-J recombination in mouse T cell receptor gamma locus is not perturbed by targeted deletion of the Vgamma4 gene. Sunaga S, et al. **J Immunol** 1997 May 1;158(9):4223–8

Preferential rearrangements of the T cell receptor-delta-deleting elements in human T cells. Verschuren MC, et al. **J Immunol** 1997 Feb 1; 158(3):1208–16

TCR-delta gene rearrangement and selection during fetal thymocyte development. Wilbert OM, et al. **J Immunol** 1997 Oct 1;159(7):3338–46

Inverse PCR amplification of low-abundancy message of gamma delta T cell receptor genes. Weber-Arden J, et al. **J Immunol Methods** 1996 Oct 16;197(1-2):187–92

Role of T cell receptor delta gene in susceptibility to celiac disease. Roschmann E, et al. **J Mol Med** 1996 Feb; 74(2):93–8

Analysis of T cell receptor gamma transcripts in right and left knee synovial fluids of patients with rheumatoid arthritis. Doherty PJ, et al. **J Rheumatol** 1996 Jul; 23(7):1143–50

A targeted mutation at the T-cell receptor alpha/delta locus impairs T-cell development and reveals the presence of the nearby antiapoptosis gene Dad1. Hong NA, et al. **Mol Cell Biol** 1997 Apr;17(4):2151–7

Enhancer control of local accessibility to V(D)J recombinase. McMurry MT, et al. **Mol Cell Biol** 1997 Aug;17(8):4553–61

High incidence of a T nucleotide at the second position of codon 97 in Vdelta2-(D)-Jdelta1 junctional sequences of human normal skin gamma delta T-cells. Alaibac M, et al. **Mol Immunol** 1996 Sep;33(13):1035–8

T-cell alpha beta + and gamma delta + deficient mice display abnormal but distinct phenotypes toward a natural, widespread infection of the intestinal epithelium. Roberts SJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11774–9

Characterization of avian T-cell receptor gamma genes. Six A, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15329–34

An enhancer-blocking element between alpha and delta gene segments within the human T cell receptor alpha/delta locus. Zhong XP, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5219–24

Cloning, expression, and crystallization of the V delta domain of a human gamma delta T-cell receptor. Lebedeva MI, et al. **Protein Sci** 1996 Dec;5(12):2638–42

IMMUNOLOGY

A role for gamma delta T lymphocytes in the development of advanced clinical forms of tuberculosis in HIV-infected patients [letter] Duarte R, et al. **AIDS** 1997 Jan;11(1):130–2

Enhanced expression of activation antigens HLA-DR and CD69 on gamma delta T cells but impaired interleukin-2-induced upregulation in HIV-1 infection [letter] Gröttrup-Wolfers E, et al. **AIDS** 1997 May; 11(6):838–9

Regulation of abortion by gamma delta T cells. Arck PC, et al. **Am J Reprod Immunol** 1997 Jan;37(1):87–93

Murine T cell determination of pregnancy outcome: I. Effects of strain, alphabeta T cell receptor, gammadelta T cell receptor, and gammadelta T cell subsets. Arck PC, et al. **Am J Reprod Immunol** 1997 Jun;37(6):492–502

Decidua as a site of extrathymic V gamma I T-cell differentiation. Hayakawa S, et al. **Am J Reprod Immunol** 1996 Mar;35(3):233–8

Recognition by gamma/delta T cells. Chien YH, et al. **Annu Rev Immunol** 1996;14:511–32 (75 ref.)

Are gamma delta T lymphocytes involved in intravesical bacillus Calmette-Guerin immunotherapy of bladder cancer? Alexandroff AB, et al. **Biochem Soc Trans** 1997 May;25(2):363S

Clonal expansion of Vgamma3/Vdelta3-expressing gammadelta T cells in an HIV-1/2-negative patient with CD4 T-cell deficiency. Kabelitz D, et al. **Br J Haematol** 1997 Feb;96(2):266–71

Requirement for CD4+ T cells in the gammadelta T cell proliferative response to Daudi Burkitt's lymphoma. Burns J, et al. **Cell Immunol** 1996 Nov 25;174(1):19–24

Extrathymic development of self-reactive gamma(delta) T cells in athymic BALB/c nu/nu mice. Matsuzaki G, et al. **Cell Immunol** 1996 Oct 10;173(1):49–54

TCR alpha beta+ anti-tumor cytolytic T lymphocytes express NKR-P1 whilethe anti-tumor activity of TCR gamma delta+ T lymphocytes is not correlated to NKR-P1 expression. Yrlid U, et al. **Cell Immunol** 1996 Nov 1;173(2):287–94

Immune effector cells induced by complete Freund's adjuvant exert an inhibitory effect on antigen-specific type 2 T helper responses. Chuang YH, et al. **Clin Exp Allergy** 1997 Mar;27(3):315–24

Stimulation of peripheral blood lymphocytes with Campylobacter jejuni generates a gammadelta T cell response in patients with Guillain-Barrésyndrome. Ben-Smith A, et al. **Clin Exp Immunol** 1997 Jul; 109(1):121–6

Abundance of intraepithelial gamma delta T cells in hypertrophic obstructive but not in chronically infected adenoids. Olofsson K, et al. **Clin Exp Immunol** 1996 Nov; 106(2):396–403

Lymphocyte activation and subset redistribution in the peripheral blood in acute malaria illness: distinct gammadelta+ T cell patterns in Plasmodium falciparum and P. vivax infections. Worku S, et al. **Clin Exp Immunol** 1997 Apr;108(1):34–41

Reactivity of a population of armadillo lymphocytes with an antibody to human gamma,delta T-cells. Lathrop G, et al. **Clin Immunol Immunopathol** 1997 Jan;82(1):68–72

T cell subsets and the activation of gamma delta T cells. Arstila TP. **Curr Top Microbiol Immunol** 1996;212:71–7 (36 ref.)

T cell receptors and T cell development. Chen CH, et al. **Curr Top Microbiol Immunol** 1996;212:37–53 (88 ref.)

T cell migration during ontogeny and T cell repertoire generation. Dunon D, et al. **Curr Top Microbiol Immunol** 1996;212:79–93 (45 ref.)

Chicken gamma delta T cells. Sanchez-Garcia FJ, et al. **Curr Top Microbiol Immunol** 1996;212:55–69 (79 ref.)

Comparative analysis of alpha beta and gamma delta T cell activation by Mycobacterium tuberculosis and isopentenyl pyrophosphate. Wesch D, et al. **Eur J Immunol** 1997 Apr; 27(4):952–6

Bronchial gamma delta T-lymphocytes and expression of heat shock proteins in mild asthma. Fajac I, et al. **Eur Respir J** 1997 Mar;10(3):633–8

Alpha/beta- and gamma/delta-T-cell-receptor-positive lymphocytes in healthy and inflamed human conjunctiva. Bialasiewicz AA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul;234(7):467–71

CD48 may serve as an accessory molecule for the activation of a subset of human gamma/delta T cells. Flament C, et al. **Hum Immunol** 1996 Apr;46(2):82–92

Depletion of IFN-gamma, CD8+ or Tcr gamma delta+ cells in vivo during primary infection with an enteric parasite (Trichostrongylus colubriformis) enhances protective immunity. McClure SJ, et al. **Immunol Cell Biol** 1995 Dec;73(6):552–5

Modulation of experimental allergic encephalomyelitis in mice by immunization with a peptide specific for the gamma delta T cell receptor. Olive C. **Immunol Cell Biol** 1997 Feb;75(1):102–6

Activated gamma/delta T lymphocytes infiltrating renal cell carcinoma. Kowalczyk D, et al. **Immunol Lett** 1996 Oct; 53(1):15–8

Activation features of intraepithelial gamma delta T-cells of the murine vagina. Rakasz E, et al. **Immunol Lett** 1996 Dec;54(2-3):129–34

Contribution of 65-kDa heat shock protein induced by gamma and delta T cells to protection against Toxoplasma gondii infection. Himeno K, et al. **Immunol Res** 1996; 15(3):258–64 (25 ref.)

T-cell receptor gamma--delta lymphocytes and Eimeria vermiformis infection. Rose ME, et al. **Infect Immun** 1996 Nov;64(11):4854–8

Gamma delta T cells of the murine vagina: T cell response in vivo in the absence of the expression of CD2 and CD28 molecules. Rakasz E, et al. **Int Immunol** 1997 Jan;9(1):161–7

Gamma delta + T cells in Wilson's disease. Fiszer U, et al. **Int J Clin Lab Res** 1996;26(1):51–4

Gamma delta T cells: their immunobiology and role in malaria infections. Rzepczyk CM, et al. **Int J Parasitol** 1997 Feb;27(2):191–200 (74 ref.)

Functional inactivation in the whole population of human V gamma 9/V delta 2 T lymphocytes induced by a nonpeptidic antagonist. Bürk MR, et al. **J Exp Med** 1997 Jan 6;185(1):91–7

The recognition of the nonclassical major histocompatibility complex (MHC) class I molecule, T10, by the gammadelta T cell, G8. Crowley MP, et al. **J Exp Med** 1997 Apr 7; 185(7):1223–30

Aerosol insulin induces regulatory CD8 gamma delta T cells that prevent murine insulin-dependent diabetes. Harrison LC, et al. **J Exp Med** 1996 Dec 1;184(6):2167–74

T cell receptor-gamma/delta cells protect mice from herpes simplex virus type 1-induced lethal encephalitis. Sciammas R, et al. **J Exp Med** 1997 Jun 2;185(11):1969–75

Gamma delta T cells from tolerized alpha beta T cell receptor (TCR)-deficient mice inhibit contact sensitivity-effector T cells in vivo, and their interferon-gamma production in vitro. Szczepanik M, et al. **J Exp Med** 1996 Dec 1; 184(6):2129–39

Apoptosis of Fashigh CD4+ synovial T cells by borrelia-reactive Fas-ligand(high) gamma delta T cells in Lyme arthritis. Vincent MS, et al. **J Exp Med** 1996 Dec 1;184(6):2109–17

Role of gamma delta TCR+ lymphocytes in the augmented resistance of trehalose 6,6'-dimycolate-treated mice to influenza virus infection. Hoq MM, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1597–603

Increased frequency of TCR gamma delta + T cells in disease-free survivors following T cell-depleted, partially mismatched, related donor bone marrow transplantation for leukemia. Lamb LS Jr, et al. **J Hematother** 1996 Oct; 5(5):503–9

Sequential development of structural and functional alterations in T cells from tumor-bearing mice. Correa MR, et al. **J Immunol** 1997 Jun 1;158(11):5292–6

Human gamma delta T cell subset-proliferative response to malarial antigen in vitro depends on CD4+ T cells or cytokines that signal through components of the IL-2R. Elloso MM, et al. **J Immunol** 1996 Sep 1;157(5):2096–102

Gamma delta TCR+ hybridomas derived from mice preimmunized via the portal vein adoptively transfer increased skin allograft survival in vivo. Gorczynski RM, et al. **J Immunol** 1996 Jul 15;157(2):574–81

Induction of gammadelta T cells during acute murine infection with Toxoplasma gondii. Kasper LH, et al. **J Immunol** 1996 Dec 15;157(12):5521–7

Gamma delta T lymphocytes regulate the induction and maintenance of oral tolerance. Ke Y, et al. **J Immunol** 1997 Apr 15;158(8):3610–8

Deviated overexpression of TCR-beta, TCR-gamma, CD4, and CD8 on thymic lymphomas induced by 1-propyl-1-nitrosourea: destruction of the allelic exclusion of TCR-beta and expression of functional TCR-betagamma heterodimer on a lymphoma, cFTL53. Kinebuchi M, et al. **J Immunol** 1997 Jul 15;159(2):748–56

Activation of human gamma delta T cells by Mycobacterium tuberculosis and Daudi lymphoma cells: differential regulatory effect of IL-10 and IL-12. Marx S, et al. **J Immunol** 1997 Mar 15;158(6):2842–8

The role of gammadelta T lymphocytes in lipopolysaccharide-induced eosinophil accumulation into the mouse pleural cavity. Penido C, et al. **J Immunol** 1997 Jul 15;159(2):853–60

Cytotoxic gammadelta or alphabeta T cells with a natural killer cell marker, CD56, induced from human peripheral blood lymphocytes by a combination of IL-12 and IL-2. Satoh M, et al. **J Immunol** 1996 Nov 1;157(9):3886–92

Selective expansion of Vgamma2-Vdelta7 TCR gammadelta cells in C57BL/6 mice is postnatal and extrathymic. Sperling AI, et al. **J Immunol** 1997 Jul 1;159(1):86–91

Bacterial antigen activation of Vdelta1 and Vdelta2 gammadelta T cells of persons infected with human immunodeficiency virus type 1. Chervenak KA, et al. **J Infect Dis** 1997 Feb;175(2):429–33

Low-molecular-weight protein ligands from Onchocerca volvulus preferentially stimulate the human gammadelta T cell Vdelta1+ subset. Munk ME, et al. **J Infect Dis** 1996 Dec;174(6):1309–15

Aggravation of murine experimental allergic encephalomyelitis by administration of T-cell receptor gammadelta-specific antibody. Kobayashi Y, et al. **J Neuroimmunol** 1997 Mar;73(1-2):169–74

Role of alpha beta T cells and gamma delta T cells in protective immunity to Actinobacillus actinomycetemcomitans in mutant mice by targeted gene disruption. Takahashi I, et al. **J Periodontal Res** 1996 Nov; 31(8):589–95

TCR gamma delta + T cells in peripheral blood of patients with adult Still's disease. Hoshino T, et al. **J Rheumatol** 1996 Jan;23(1):124–9

Functional phenotype of transformed human alphabeta and gammadelta T cells determined by different subgroup C strains of herpesvirus Saimiri. Fickenscher H, et al. **J Virol** 1997 Mar;71(3):2252–63

Phenotypical characterization of lymphocytes infiltrating regressing papillomas. Knowles G, et al. **J Virol** 1996 Dec; 70(12):8451–8

Analysis of cytokine producing activity of intestinal intraepithelial T cells from TCR beta-chain and delta-chain mutant mice. Kohyama M, et al. **Microbiol Immunol** 1997;41(4):353–9

Stimulation of gamma delta T cells by phosphoantigens. Fournié JJ, et al. **Res Immunol** 1996 Jun;147(5):338–47 (60 ref.)

Direct presentation of non-peptide prenyl pyrophosphate antigens to human gamma delta T cells. Morita CT, et al. **Res Immunol** 1996 Jun;147(5):347–53 (44 ref.)

Inhibition by CsA and FK506 of the in vitro proliferative response of gamma delta T cells on stimulation with anti-TCR delta monoclonal antibody. Chen BG, et al. **Transpl Immunol** 1996 Jun;4(2):158–62

Gamma delta TCR+, type-2 cytokine produced by hybridoma cells produced in mice given portal vein pretransplant immunization and allogeneic grafts can increase graft survival on adoptive transfer. Gorczynski R, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):865–6

Gamma delta TCR+ cells regulate rejection of small intestinal allografts in rats. Gorczynski RM, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):863–4

A role for gamma(delta)TCR+ cells in regulation of rejection of small intestinal allografts in rats. Gorczynski RM, et al. **Transplantation** 1996 Sep 27;62(6):844–51

Analysis of monoclonal antibodies specific for the gamma delta TcR. Davis WC, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):275–83

gamma delta T-lymphocytes and anti-heat shock protein reactivity in bovine leukemia virus infected cattle. Ungar-Waron H, et al. **Vet Immunol Immunopathol** 1996 May;51(1-2):79–87

Role of a distinct population of bovine gamma delta T cells in the immune response to viral agents. Amadori M, et al. **Viral Immunol** 1995;8(2):81–91

[Selective increase of gamma delta T lymphocytes in peripheral blood of patients with pulmonary tuberculosis according to the kind and stage of disease] Mróz RM, et al. **Pneumonol Alergol Pol** 1996;64(11-12):723–8 (Eng. Abstr.) **(Pol)**

[Cellular immunity in tuberculosis particularly the role of

gamma delta T lymphocytes] Mróz RM, et al. **Pneumonol Alergol Pol** 1996;64(11-12):815-20 (33 ref.) **(Pol)**

ISOLATION & PURIFICATION

Isolation of T cell receptor gamma/delta chain constant genes from minke whale. Zhang XM, et al. **Exp Clin Immunogenet** 1995;12(4):245-52

METABOLISM

Construction of retroviral vectors carrying human CD3 gamma cDNA and reconstitution of CD3 gamma expression and T cell receptor surface expression and function in a CD3 gamma-deficient mutant T cell line. Sun JY, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1041-8

Hepatosplenic gammadelta T-cell lymphoma: ultrastructural, immunophenotypic, and functional evidence for cytotoxic T lymphocyte differentiation. Salhany KE, et al. **Hum Pathol** 1997 Jun;28(6):674-85

Intrathymic delta selection events in gammadelta cell development. Passoni L, et al. **Immunity** 1997 Jul;7(1):83-95

Activation of human gamma delta T-cells by heat-treated mistletoe plant extracts. Fischer S, et al. **Immunol Lett** 1996 Sep;52(2-3):69-72

Rapid determination of gamma delta T-cell stimulation by microfluorimetry. Schoel B, et al. **Immunol Lett** 1996 Nov; 53(2-3):135-9

Increased division of alpha beta TCR+ and gamma delta TCR+ intestinal intraepithelial lymphocytes after oral administration of cholera toxin. Penney I, et al. **Immunology** 1996 Sep;89(1):54-8

Antigen-driven shedding of L-selectin from human gamma delta T cells. Sanchez-Garcia J, et al. **Immunology** 1996 Oct;89(2):213-9

Phenotypic and functional maturation of TCR gammadelta cells in the human thymus. Offner F, et al. **J Immunol** 1997 May 15;158(10):4634-41

"Normal" development of Vgamma3 dendritic epidermal T cells in CD45-deficient mice? [letter; comment] Kawai K, et al. **J Invest Dermatol** 1997 Aug;109(2):250-1. Comment on: J Invest Dermatol 1997 Jan;108(1):49-52.

CD45 molecule in gammadelta T-cell generation: disruption of CD45 exon 6 does not affect Vgamma3 dendritic epidermal T-cell development [see comments] Wang B, et al. **J Invest Dermatol** 1997 Jan;108(1):49-52. Comment in: J Invest Dermatol 1997 Aug;109(2):250-1.

gamma delta T-cell-human glial cell interactions. I. In vitro induction of gammadelta T-cell expansion by human glial cells. Freedman MS, et al. **J Neuroimmunol** 1997 Apr; 74(1-2):135-42

gamma delta T-cell-human glial cell interactions. II. Relationship between heat shock protein expression and susceptibility to cytolysis. Freedman MS, et al. **J Neuroimmunol** 1997 Apr;74(1-2):143-8

Changes in human mucosal gamma delta T cell repertoire and function associated with the disease process in inflammatory bowel disease. McVay LD, et al. **Mol Med** 1997 Mar;3(3):183-203

Events that regulate differentiation of alpha beta TCR+ and gamma delta TCR+ T cells from a common precursor. Kang J, et al. **Semin Immunol** 1997 Jun;9(3):171-9 (60 ref.)

PHYSIOLOGY

Donor gamma delta T lymphocytes promote allogeneic engraftment across the major histocompatibility barrier in mice. Drobyski WR, et al. **Blood** 1997 Feb 1;89(3):1100-9

Role of gammadelta T lymphocytes in the development of Behçet's disease. Yamashita N, et al. **Clin Exp Immunol** 1997 Feb;107(2):241-7

Patterns of lymphokine secretion amongst mouse gamma delta T cell clones. Duhindan N, et al. **Eur J Immunol** 1997 Jul;27(7):1704-12

T-cell development in the absence of the pre-T-cell receptor. Buer J, et al. **Immunol Lett** 1997 Jun 1;57(1-3):5-8

CD95 (Fas) may control the expansion of activated T cells after elimination of bacteria in murine listeriosis. Fuse Y, et al. **Infect Immun** 1997 May;65(5):1883-91

Role of alphabeta and gammadelta T cells in the host response to Salmonella infection as demonstrated in T-cell-receptor-deficient mice of defined Ity genotypes. Weintraub BC, et al. **Infect Immun** 1997 Jun;65(6):2306-12

Gamma/delta T cells from tolerized alpha/beta-TCR-deficient mice antigen specifically inhibit contact sensitivity in vivo and IFN-gamma production in vitro. Szczepanik M, et al. **Int Arch Allergy Immunol** 1997 May-Jul;113(1-3):373-5

Role of different T cell receptors in the development of pre-T cells. Buer J, et al. **J Exp Med** 1997 May 5; 185(9):1541-7

A pathogenic role for gamma delta T cells in relapsing-remitting experimental allergic encephalomyelitis in the SJL mouse. Rajan AJ, et al. **J Immunol** 1996 Jul 15;157(2):941-9

Gammadelta T cell activation or anergy during infections: the role of nonpeptidic TCR ligands and HLA class I molecules. Poccia F, et al. **J Leukoc Biol** 1997 Sep; 62(3):287-91

Mechanisms of HSP65 expression induced by gamma delta T cells in murine Toxoplasma gondii infection. Hisaeda H, et al. **Pathobiology** 1996;64(4):198-203

Gamma delta T cells in bacterial infections. Ferrick DA, et al. **Res Immunol** 1996 Oct-Dec;147(8-9):532-41 (74 ref.)

Human gamma delta T cells in tuberculosis. Poquet Y, et al. **Res Immunol** 1996 Oct-Dec;147(8-9):542-9 (52 ref.)

Origin and development of the gamma delta T-cell system in sheep: a critical role for the thymus in the generation of TcR diversity and tissue tropism. Cahill RN, et al. **Semin Immunol** 1996 Dec;8(6):351-60 (61 ref.)

RECEPTORS, ARYL HYDROCARBON

[Structure and function of PAS proteins: Ah receptor, Arnt, and others] Sogawa K, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1288-96 (47 ref.) **(Jpn)**

AGONISTS

Substituted flavones as aryl hydrocarbon (Ah) receptor agonists and antagonists. Lu YF, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1077-87

Tryptanthrins: a novel class of agonists of the aryl hydrocarbon receptor. Schrenk D, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):165-71

Assessing the estrogenic and dioxin-like activities of chemicals and complex mixtures using in vitro recombinant receptor-reporter gene assays. Balaguer P, et al. **Can J Physiol Pharmacol** 1996 Feb;74(2):216-22

Metabolism of the aryl hydrocarbon receptor agonist 3,3',4,4'-tetrachlorobiphenyl by the marine fish scup (Stenotomus chrysops) in vivo and in vitro. White RD, et al. **Drug Metab Dispos** 1997 May;25(5):564-72

ANALYSIS

Selective centrilobular expression of the aryl hydrocarbon receptor in rat liver. Lindros KO, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):506-11

ANTAGONISTS & INHIBITORS

Indole-3-carbinol and diindolylmethane as aryl hydrocarbon (Ah) receptor agonists and antagonists in T47D human breast cancer cells. Chen I, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1069-76

Analysis of structural requirements for Ah receptor antagonist activity: ellipticines, flavones, and related compounds. Gasiewicz TA, et al. **Biochem Pharmacol** 1996 Dec 13;52(11):1787-803

Substituted flavones as aryl hydrocarbon (Ah) receptor agonists and antagonists. Lu YF, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1077-87

BIOSYNTHESIS

Aryl hydrocarbon receptor mRNA levels in different tissues of 2,3,7,8-Tetrachlorodibenzo-p-dioxin-responsive and nonresponsive mice. Döhr O, et al. **Adv Exp Med Biol** 1996; 387:447-59

Absolute requirement of aryl hydrocarbon receptor nuclear translocator protein for gene activation by hypoxia. Salceda S, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):389-94

Expression of the aryl hydrocarbon receptor is regulated by serum and mitogenic growth factors in murine 3T3 fibroblasts. Vaziri C, et al. **J Biol Chem** 1996 Oct 18; 271(42):25921-7

Coexpression of Ah receptor and CYP1A1 in hepatocytes of C57BL/6J and DBA/2J mice. Forkert PG. **Toxicol Appl Pharmacol** 1997 Jan;142(1):69-78

Expression of the aryl hydrocarbon receptor (AhR) and AhR nuclear translocator during chick cardiogenesis is consistent with 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced heart defects. Walker MK, et al. **Toxicol Appl Pharmacol** 1997 Apr; 143(2):407-19

CHEMISTRY

Mapping the 90 kDa heat shock protein binding region of the Ah receptor. Perdew GH, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):589-93

DEFICIENCY

Abnormal angiogenesis and responses to glucose and oxygen deprivation in mice lacking the protein ARNT. Maltepe E, et al. **Nature** 1997 Mar 27;386(6623):403-7

Aryl-hydrocarbon receptor-deficient mice are resistant to 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced toxicity. Fernandez-Salguero PM, et al. **Toxicol Appl Pharmacol** 1996 Sep;140(1):173-9

DRUG EFFECTS

Identification of c-Src as the integral component of the cytosolic Ah receptor complex, transducing the signal of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) through the protein phosphorylation pathway. Enan E, et al. **Biochem Pharmacol** 1996 Nov 22;52(10):1599-612

Identification of CYP1A5 as the CYP1A enzyme mainly responsible for uroporphyrinogen oxidation induced by AH receptor ligands in chicken liver and kidney. Sinclair PR, et al. **Drug Metab Dispos** 1997 Jul;25(7):779-83

Cytokine gene expression during ontogeny in murine thymus on activation of the aryl hydrocarbon receptor by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Lai ZW, et al. **Mol Pharmacol** 1997 Jul;52(1):30-7

Dioxins and the Ah receptor: probes to uncover processes in neuroendocrine development. Gasiewicz TA. **Neurotoxicology** 1997;18(2):393-413 (162 ref.)

Ah-receptor-dependent modulation of gene expression by aged and diluted sidestream cigarette smoke. Gebremichael A, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):76-83

Dioxin induces transcription of fos and jun genes by Ah receptor-dependent and -independent pathways. Hoffer A, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):238-47

Role of the aromatic hydrocarbon receptor in the suppression of cytochrome P-450 2C11 by polycyclic aromatic hydrocarbons. Safa B, et al. **Toxicol Lett** 1997 Feb 7; 90(2-3):163-75

GENETICS

Differential regulation of mouse Ah receptor gene expression in cell lines of different tissue origins. FitzGerald CT, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):170-8

Characterization of the aromatic hydrocarbon receptor gene and its expression in Atlantic tomcod. Roy NK, et al. **Arch Biochem Biophys** 1997 Aug 15;344(2):373-86

Uroporphyria induced by 5-aminolaevulinic acid alone in Ahrd SWR mice. Constantin D, et al. **Biochem Pharmacol** 1996 Nov 8;52(9):1407-13

Retinoic acid affects the expression rate of the differentiation-related genes aryl hydrocarbon receptor, ARNT and keratin 4 in proliferative keratinocytes only. Wanner R, et al. **Biochim Biophys Acta** 1996 Nov 15; 1317(2):105-11

Effect of transforming growth factor-beta1 on expression of aryl hydrocarbon receptor and genes of Ah gene battery: clues for independent down-regulation in A549 cells. Döhr O, et al. **Mol Pharmacol** 1997 May;51(5):703-10

Piperonyl butoxide and acenaphthylene induce cytochrome P450 1A2 and 1B1 mRNA in aromatic hydrocarbon-responsive receptor knock-out mouse liver. Ryu DY, et al. **Mol Pharmacol** 1996 Sep;50(3):443-6

Basis for the loss of aryl hydrocarbon receptor gene expression in clones of a mouse hepatoma cell line. Zhang J, et al. **Mol Pharmacol** 1996 Dec;50(6):1454-62

Human Ah receptor (AHR) gene: localization to 7p15 and suggestive correlation of polymorphism with CYP1A1 inducibility. Micka J, et al. **Pharmacogenetics** 1997 Apr; 7(2):95-101

Identification of a cell-specific transcription activation domain within the human Ah receptor nuclear translocator. Corton JC, et al. **Toxicol Appl Pharmacol** 1996 Aug; 139(2):272-80

[The strategic use of genetic polymorphisms in carcinogen metabolizing enzyme for prevention of cancer] Ikawa S. **Gan To Kagaku Ryoho** 1997 Feb;24(4):454-9 (15 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

DNA binding and transcriptional enhancement by purified TCDD.Ah receptor complex. Henry EC, et al. **Arch Biochem Biophys** 1997 Mar 15;339(2):305-14

Inhibitors of serine/threonine-specific protein phosphatases stimulate transcription by the Ah receptor/Arnt dimer by affecting a step subsequent to XRE binding. Li SY, et al. **Arch Biochem Biophys** 1997 Apr 1;340(1):73-82

Characterization of the aryl hydrocarbon receptor complex in human B lymphocytes: evidence for a distinct nuclear DNA-binding form. Masten SA, et al. **Arch Biochem Biophys** 1996 Dec 15;336(2):297-308

Brevetoxin-6 (PbTx-6), a nonaromatic marine neurotoxin, is a ligand of the aryl hydrocarbon receptor. Washburn BS, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):149-56

Identification of c-Src as the integral component of the cytosolic Ah receptor complex, transducing the signal of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) through the protein phosphorylation pathway. Enan E, et al. **Biochem Pharmacol** 1996 Nov 22;52(10):1599-612

The homodimeric form of glycine N-methyltransferase acts as a polycyclic aromatic hydrocarbon-binding receptor. Bhat R, et al. **Biochemistry** 1997 Aug 12;36(32):9906-10

Ah receptor nuclear translocator protein heterogeneity is altered after heterodimerization with the Ah receptor. Tsai JC, et al. **Biochemistry** 1997 Jul 22;36(29):9066-72

Interactions of procarcinogenic heterocyclic amines and indolocarbazoles with the dioxin receptor. Kleman M, et al. **Biol Chem** 1996 Nov;377(11):741-62 (270 ref.)

Expression of CYP1B1 in human adult and fetal tissues and differential inducibility of CYP1B1 and CYP1A1 by Ah receptor ligands in human placenta and cultured cells. Hakkola J, et al. **Carcinogenesis** 1997 Feb;18(2):391-7

A pathway of multi-chaperone interactions common to diverse regulatory proteins: estrogen receptor, Fes tyrosine kinase, heat shock transcription factor Hsf1, and the aryl hydrocarbon receptor. Nair SC, et al. **Cell Stress Chaperones** 1996 Dec;1(4):237-50

Binding of 2,3,7,8-tetrachlorodibenzo-p-dioxin to AH receptor in placentas from normal versus abnormal pregnancy outcomes. Okey AB, et al. **Chemosphere** 1997 Mar-Apr;34(5-7):1535-47

A QSAR evaluation of Ah receptor binding of halogenated aromatic xenobiotics. Mekenyan OG, et al. **Environ Health Perspect** 1996 Dec;104(12):1302-10

A point mutation responsible for defective function of the aryl-hydrocarbon-receptor nuclear translocator in mutant Hepa-1c1c7 cells. Numayama-Tsuruta K, et al.

Eur J Biochem 1997 Jun 1;246(2):486–95

Expression of aryl hydrocarbon receptor (AhR) and aryl hydrocarbon receptor nuclear translocator (Arnt) in adult rabbits known to be non-responsive to cytochrome P-450 1A1 (CYP1A1) inducers. Takahashi Y, et al. **Eur J Biochem** 1996 Dec 15;242(3):512–8

Chemical-activated luciferase gene expression (CALUX): a novel in vitro bioassay for Ah receptor active compounds in sediments and pore water. Murk AJ, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):149–60

Ligand-dependent interaction of the aryl hydrocarbon receptor with a novel immunophilin homolog in vivo. Carver LA, et al. **J Biol Chem** 1997 Apr 25;272(17):11452–6

Protein kinase C modulates regulation of the CYP1A1 gene by the aryl hydrocarbon receptor. Chen YH, et al. **J Biol Chem** 1996 Oct 18;271(42):26261–6

Regulation of dioxin receptor function by omeprazole. Dzeletovic N, et al. **J Biol Chem** 1997 May 9; 272(19):12705–13

A nuclear localization signal of human aryl hydrocarbon receptor nuclear translocator/hypoxia-inducible factor 1beta is a novel bipartite type recognized by the two components of nuclear pore-targeting complex. Eguchi H, et al. **J Biol Chem** 1997 Jul 11;272(28):17640–7

Characterization of a subset of the basic-helix-loop-helix-PAS superfamily that interacts with components of the dioxin signaling pathway. Hogenesch JB, et al. **J Biol Chem** 1997 Mar 28;272(13):8581–93

A novel cytoplasmic protein that interacts with the Ah receptor, contains tetratricopeptide repeat motifs, and augments the transcriptional response to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Ma Q, et al. **J Biol Chem** 1997 Apr 4;272(14):8878–84

Mapping the protein/DNA contact sites of the Ah receptor and Ah receptor nuclear translocator. Swanson HI, et al. **J Biol Chem** 1996 Dec 6;271(49):31657–65

Activation of the aryl hydrocarbon receptor/transcription factor and bone marrow stromal cell-dependent preB cell apoptosis. Yamaguchi K, et al. **J Immunol** 1997 Mar 1; 158(5):2165–73

Downregulation of aryl hydrocarbon receptor function and cytochrome P450 1A1 induction by expression of Ha-ras oncogenes. Reiners JJ Jr, et al. **Mol Carcinog** 1997 Jun; 19(2):91–100

Determination of aryl hydrocarbon receptor nuclear translocator protein concentration and subcellular localization in hepatic and nonhepatic cell culture lines: development of quantitative Western blotting protocols for calculation of aryl hydrocarbon receptor and aryl hydrocarbon receptor nuclear translocator protein in total cell lysates. Holmes JL, et al. **Mol Pharmacol** 1997 Aug; 52(2):202–11

Trans-activation by the human aryl hydrocarbon receptor and aryl hydrocarbon receptor nuclear translocator proteins: direct interactions with basal transcription factors. Rowlands JC, et al. **Mol Pharmacol** 1996 Sep;50(3):538–48

Biologically bounded risk assessment for receptor-mediated nongenotoxic carcinogens. Gastel JA, et al. **Regul Toxicol Pharmacol** 1995 Dec;22(3):273–82

Carbaryl induces CYP1A1 gene expression in HepG2 and HaCaT cells but is not a ligand of the human hepatic Ah receptor. Ledirac N, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):177–82

Induction of the rat hepatic cytosolic arylamine oxidase by a series of polychlorinated biphenyls: association with the Ah locus. Marczylo T, et al. **Toxicol Lett** 1997 Jul 21; 92(2):81–91

Diaminonaphthalenes and related aminocompounds: mutagenicity, CYP1A induction and interaction with the Ah receptor. Cheung YL, et al. **Toxicology** 1997 Mar 28; 118(2–3):115–27

[The Anders Jahres Prize. Intracellular signal transmission via dioxin receptors] Poellinger L. **Nord Med** 1996 Feb; 111(2):45–8 (15 ref.) (Eng. Abstr.) **(Swe)**

PHYSIOLOGY

Ah receptor signaling pathways. Schmidt JV, et al. **Ann Rev Cell Dev Biol** 1996;12:55–89 (142 ref.)

Ah receptor-dependent CYP1A induction by two carotenoids, canthaxanthin and beta-apo-8'-carotenal, with no affinity for the TCDD binding site. Gradelet S, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):307–15

How knockout mouse lines will be used to study the role of drug-metabolizing enzymes and their receptors during reproduction and development, and in environmental toxicity, cancer, and oxidative stress. Nebert DW, et al. **Biochem Pharmacol** 1997 Feb 7;53(3):249–54 (44 ref.)

Aryl hydrocarbon receptor knockout mice (AHR-/-) exhibit liver retinoid accumulation and reduced retinoic acid metabolism. Andreola F, et al. **Cancer Res** 1997 Jul 15; 57(14):2835–8

Aryl hydrocarbon receptor-mediated signal transduction. Rowlands JC, et al. **Crit Rev Toxicol** 1997 Mar;27(2):109–34 (223 ref.)

Protective action of dehydroascorbic acid on the Ah receptor-dependent and receptor-independent induction of lipid peroxidation in adipose tissue of male guinea pig caused by TCDD administration. Ashida H, et al. **J Biochem Toxicol** 1996;11(6):269–78

A benzo[a]pyrene-induced cell cycle checkpoint resulting in p53-independent G1 arrest in 3T3 fibroblasts. Vaziri C, et al. **J Biol Chem** 1997 Jan 31;272(5):2762–9

The role of the aryl hydrocarbon receptor in animal development, physiological homeostasis and toxicity of TCDD. Gonzalez FJ, et al. **J Toxicol Sci** 1996 Dec; 21(5):273–7 (9 ref.)

Functional interference between hypoxia and dioxin signal transduction pathways: competition for recruitment of the Arnt transcription factor. Gradin K, et al. **Mol Cell Biol** 1996 Oct;16(10):5221–31

Transactivation domains facilitate promoter occupancy for the dioxin-inducible CYP1A1 gene in vivo. Ko HP, et al. **Mol Cell Biol** 1997 Jul;17(7):3497–507

Role of the aromatic hydrocarbon receptor in the suppression of cytochrome P-450 2C11 by polycyclic aromatic hydrocarbons. Safa B, et al. **Toxicol Lett** 1997 Feb 7; 90(2–3):163–75

RECEPTORS, ATP see **RECEPTORS, PURINERGIC P2**

RECEPTORS, ATRIAL NATRIURETIC FACTOR

[Pathophysiological significance of natriuretic peptide receptor] Naruse M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:549–52 (10 ref.) **(Jpn)**

ANALYSIS

Type B atrial natriuretic peptide receptor in cardiac myocyte caveolae. Doyle DD, et al. **Circ Res** 1997 Jul;81(1):86–91

Immunocytochemical localization of atrial natriuretic factor and autoradiographic distribution of atrial natriuretic factor binding sites in the brain of the African lungfish, Protopterus annectens. Vallarino M, et al. **J Comp Neurol** 1996 Nov 18;375(3):345–62

Receptors for natriuretic peptides in a human cortical collecting duct cell line [published erratum appears in Kidney Int 1997 Mar;51(3):979] Millul V, et al. **Kidney Int** 1997 Jan;51(1):281–7

ANTAGONISTS & INHIBITORS

The atrial natriuretic peptide receptor antagonist HS 142-1 improves cardiovascular filling and mean arterial pressure in a hyperdynamic ovine model of sepsis. Hinder F, et al. **Crit Care Med** 1997 May;25(5):820–6

Thrombin inhibits atrial natriuretic peptide receptor activity in cultured bovine endothelial cells. Zlock DW, et al. **Hypertension** 1997 Jan;29(1 Pt 1):83–90

BIOSYNTHESIS

Dexamethasone upregulates ANP C-receptor protein in human mesangial cells without affecting mRNA. Ardaillou N, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F440–6

Stimulation of atrial natriuretic peptide receptor/guanylyl cyclase- A signaling pathway antagonizes the activation of protein kinase C-alpha in murine Leydig cells. Kumar R, et al. **Biochim Biophys Acta** 1997 Apr 24;1356(2):221–8

Alternative splicing of natriuretic peptide A and B receptor transcripts in the rat brain. Francoeur F, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S172–4

Altered gene expression of natriuretic peptide receptor subtypes in the kidney of stroke-prone spontaneously hypertensive rats. Goto M, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S177–9

Elevated glucose concentration and natriuretic peptides receptor response on vascular smooth muscle of spontaneously hypertensive rats. Yasunari K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S180–2

Gene expression of vascular natriuretic peptide receptor in the aorta of hypertensive rats. Yoshimoto T, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S175–6

Expression and glucocorticoid regulation of natriuretic peptide clearance receptor (NPR-C) mRNA in rat brain and choroid plexus. Herman JP, et al. **J Chem Neuroanat** 1996 Oct;11(4):257–65

Localization of mRNA coding for the three subtypes of atrial natriuretic factor (ANF) receptors in rat anterior pituitary gland cells. Grandclément B, et al. **J Neuroendocrinol** 1995 Dec;7(12):939–48

CHEMISTRY

Characterization of natriuretic peptide receptors in the rat parotid. Nashida T, et al. **Biochem Mol Biol Int** 1996 Sep; 40(1):111–8

Localization by photoaffinity labeling of natriuretic peptide receptor-A binding domain. McNicoll N, et al. **Biochemistry** 1996 Oct 1;35(39):12950–6

High-yield affinity alkylation of the atrial natriuretic factor receptor binding site. He X, et al. **Bioconjug Chem** 1995 Sep-Oct;6(5):541–8

CLASSIFICATION

Quantitative discrimination of ANF receptor subtypes in portal hypertension [letter; comment] Gerbes AL. **J Hepatol** 1997 Feb;26(2):450–1. Comment on: J Hepatol 1996 Feb;24(2):185–93.

DEFICIENCY

The guanylyl cyclase-deficient mouse defines differential pathways of natriuretic peptide signaling. Lopez MJ, et al. **J Biol Chem** 1997 Sep 12;272(37):23064–8

DRUG EFFECTS

Renal alterations of atrial natriuretic peptide receptors by chronic moderate ethanol treatment. Guillaume P, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F107–16

GENETICS

Downregulation of renal atrial natriuretic factor receptors and receptor mRNAs during rat pregnancy. Omer S, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F87–93

Structural analysis of natriuretic peptide receptor-C by truncation and site-directed mutagenesis. Itakura M, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):585–90

The three subtypes of atrial natriuretic peptide (ANP) receptors are expressed in the rat adrenal gland. Grandclément B, et al. **Biol Cell** 1997 Mar;89(1):29–41

Atrial natriuretic factor (ANF) and ANF receptor C gene expression and localization in the respiratory system: effects induced by hypoxia and hemodynamic overload. Di Nardo P, et al. **Endocrinology** 1996 Oct;137(10):4339–50

Physical mapping of the human connexin 40 (GJA5), flavin-containing monooxygenase 5, and natriuretic peptide receptor a genes on 1q21. Gelb BD, et al. **Genomics** 1997 Feb 1;39(3):409–11

Change in the expression of C-type natriuretic peptide and its receptor, B-type natriuretic peptide receptor, during dedifferentiation of chondrocytes into fibroblast-like cells. Hagiwara H, et al. **J Biochem (Tokyo)** 1996 Feb; 119(2):264–7

Expression of natriuretic peptide receptors in human adipose and other tissues. Sarzani R, et al. **J Endocrinol Invest** 1996 Oct;19(9):581–5

Receptors for natriuretic peptides in a human cortical collecting duct cell line [published erratum appears in Kidney Int 1997 Mar;51(3):979] Millul V, et al. **Kidney Int** 1997 Jan;51(1):281–7

Genetic mapping of the C-type natriuretic peptide receptor (Npr2) gene to mouse chromosome 4. Nuglozeh E, et al. **Mamm Genome** 1997 Aug;8(8):624–5

IMMUNOLOGY

Production and characterization of monoclonal antibodies against human natriuretic peptide receptor-A or -B. Kitano K, et al. **Immunol Lett** 1995 Sep;47(3):215–22

METABOLISM

Modulation of ANF-R2/ANP-C receptors by angiotensin II in vascular smooth muscle cells. Palaparti A, et al. **Am J Hypertens** 1996 Sep;9(9):930–4

Comparison of ANP binding and sensitivity in brains from hypertensive and normotensive rats. Grove KL, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1344–53

Renal alterations of atrial natriuretic peptide receptors by chronic moderate ethanol treatment. Guillaume P, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F107–16

Alteration of lung atrial natriuretic peptide receptors in genetic cardiomyopathy. Mukaddam-Daher S, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L38–45

Downregulation of renal atrial natriuretic factor receptors and receptor mRNAs during rat pregnancy. Omer S, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F87–93

Stimulation by retinoids of the natriuretic peptide system of osteoblastic MC3T3-E1 cells. Inoue A, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):182–6

Differential regulation of natriuretic peptide receptors on ciliary body epithelial cells. Crook RB, et al. **Biochem J** 1997 May 15;324 (Pt 1):49–55

Structural analysis of natriuretic peptide receptor-C by truncation and site-directed mutagenesis. Itakura M, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):585–90

C-type natriuretic peptide and the guanylyl cyclase receptors in the rat ovary are modulated by the estrous cycle. Jankowski M, et al. **Biol Reprod** 1997 Jan;56(1):59–66

Characterization of human platelet receptors for atrial natriuretic peptide: evidence for clearance receptors. Blaise V, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec; 42(8):1173–9

Natriuretic peptide receptors on human trabecular meshwork cells. Chang AT, et al. **Curr Eye Res** 1996 Feb;15(2):137–43

Characterization of the atrial natriuretic peptide system in the oviduct. Kim SH, et al. **Endocrinology** 1997 Jun; 138(6):2410–6

Particulate ANP-sensitive guanylyl cyclase in blood and bone marrow cells of patients with acute leukemia. Knau B, et al. **Eur J Med Res** 1997 Mar 24;2(3):101–5

Mutations in B-type natriuretic peptide mediating receptor-A selectivity. Schoenfeld JR, et al. **FEBS Lett** 1997 Sep 8;414(2):263–7

Distribution and characterization of natriuretic peptide receptors in the gills of the spiny dogfish, Squalus acanthias. Donald JA, et al. **Gen Comp Endocrinol** 1997 Jun; 106(3):338–47

Differential gene expression of the three natriuretic peptides and natriuretic peptide receptor subtypes in human liver [see comments] Vollmar AM, et al. **Gut** 1997 Jan; 40(1):145–50. Comment in: Gut 1997 Jan;40(1):151–2.

Differential expression and autoradiographic localization of atrial natriuretic peptide receptor in spontaneously hypertensive and normotensive rat testes: diminution of testosterone in hypertension. Kapasi AA, et al. **Hypertension** 1996 Nov;28(5):847–53

RECEPTORS, ATRIAL NATRIURETIC FACTOR

Expression of guanylyl cyclase-A/atrial natriuretic peptide receptor blocks the activation of protein kinase C in vascular smooth muscle cells. Role of cGMP and cGMP-dependent protein kinase. Kumar R, et al. **Hypertension** 1997 Jan;29(1 Pt 2):414-21

Natriuretic peptide B receptor and C-type natriuretic peptide in the rat kidney. Lohe A, et al. **J Am Soc Nephrol** 1995 Dec;6(6):1552-8

Regulation of atrial natriuretic factor receptors in portal hypertensive rabbits [see comments] Cahill PA, et al. **J Hepatol** 1996 Feb;24(2):185-93. Comment in: J Hepatol 1997 Feb;26(2):450-1.

Atrial natriuretic peptide-C receptor and membrane signalling in hypertension. Anand-Srivastava MB. **J Hypertens** 1997 Aug;15(8):815-26 (134 ref.)

Fasting inhibits natriuretic peptides clearance receptor expression in rat adipose tissue. Sarzani R, et al. **J Hypertens** 1995 Nov;13(11):1241-6

Glycosylation is critical for natriuretic peptide receptor-B function. Fenrick R, et al. **Mol Cell Biochem** 1996 Dec 20;165(2):103-9

The H295R human adrenocortical cell line contains functional atrial natriuretic peptide receptors that inhibit aldosterone biosynthesis. Bodart V, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1-2):137-44

Characteristics of ANP-binding sites in the adrenal capsules of term-pregnant rats. Forcier I, et al. **Mol Cell Endocrinol** 1996 Mar 25;117(2):189-94

Detection of C-type natriuretic peptide (CNP) and atrial natriuretic peptide (ANP-B) receptor mRNAs in rat inner ear. Suzuki M, et al. **Neuroreport** 1997 Jan 20;8(2):439-43

Atrial natriuretic peptide (ANP)-induced inhibition of glucagon secretion: mechanism of action in isolated rat pancreatic islets. Verspohl EJ, et al. **Peptides** 1996; 17(6):1023-9

A mutation of the atrial natriuretic peptide (guanylyl cyclase-A) receptor results in a constitutively hyperactive enzyme. Wedel BJ, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):459-62

PHYSIOLOGY

Clearance receptors and endopeptidase 24.11: equal role in natriuretic peptide metabolism in conscious sheep. Charles CJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R373-80

Atrial natriuretic peptide (ANP) inhibits its own secretion via ANP(A) receptors: altered effect in experimental hypertension. Leskinen H, et al. **Endocrinology** 1997 May; 138(5):1893-902

Natriuretic peptide receptors mediate different responses in rat renal microvessels. Endlich K, et al. **Kidney Int** 1997 Jul;52(1):202-7

Regulation of the atrial natriuretic peptide receptor guanylyl cyclase. Chinkers M. **Proc Soc Exp Biol Med** 1996 Nov; 213(2):105-8 (25 ref.)

Functional properties and dynamics of natriuretic peptide receptors. Maack T, et al. **Proc Soc Exp Biol Med** 1996 Nov;213(2):109-16 (32 ref.)

RECEPTORS, ATRIOPEPTIN see **RECEPTORS, ATRIAL NATRIURETIC FACTOR**

RECEPTORS, BENZODIAZEPINE see **RECEPTORS, GABA-A**

RECEPTORS, BENZODIAZEPINE-GABA see **RECEPTORS, GABA-A**

RECEPTORS, BETA-ADRENERGIC see **RECEPTORS, ADRENERGIC, BETA**

RECEPTORS, BETA-1 ADRENERGIC see **RECEPTORS, ADRENERGIC, BETA-1**

RECEPTORS, BETA-2 ADRENERGIC see **RECEPTORS, ADRENERGIC, BETA-2**

RECEPTORS, BIOGENIC AMINE

ANTAGONISTS & INHIBITORS

Similarities in the pharmacology of spontaneous and DOI-induced head-shakes suggest 5HT2A receptors are active under physiological conditions. Dursun SM, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):198-205

DRUG EFFECTS

Neurobiological correlates of acute neuroleptic treatment. Sedvall GC. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:41-6 (20 ref.)

Molecular cloning and pharmacological characterization of a molluscan octopamine receptor. Gerhardt CC, et al. **Mol Pharmacol** 1997 Feb;51(2):293-300

Age-related effects of cardiac sympathetic denervation on the responses to cardiopulmonary receptor stimulation in piglets. Tong S, et al. **Pediatr Res** 1997 Jan;41(1):72-7

GENETICS

Cloning of biogenic amine receptors from moths (Bombyx mori and Heliothis virescens). von Nickisch-Rosenegk E, et al. **Insect Biochem Mol Biol** 1996 Sep-Oct; 26(8-9):817-27

METABOLISM

Regional CNS densities of monoamine receptors in alcohol-naive alcohol-preferring P and -nonpreferring NP rats. McBride WJ, et al. **Alcohol** 1997 Mar-Apr;14(2):141-8

Cloning and expression of a complementary DNA encoding a molluscan octopamine receptor that couples to chloride channels in HEK293 cells. Gerhardt CC, et al. **J Biol Chem** 1997 Mar 7;272(10):6201-7

Mutagenesis reveals structure-activity parallels between human A2A adenosine receptors and biogenic amine G protein-coupled receptors. Jiang Q, et al. **J Med Chem** 1997 Aug 1;40(16):2588-95

PHYSIOLOGY

[The sexual dimorphism of the monoaminergic system of the brain: the effects of prenatal stress and neonatal androgenization in rats] Nosenko ND. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):46-53 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[The monoaminergic innervation of the mediastinal pleura in human fetuses] Motavkin PA, et al. **Morfologiia** 1997; 111(1):43-6 (Eng. Abstr.) **(Rus)**

RECEPTORS, BOMBESIN

AGONISTS

Agonist binding and protein kinase C activation stimulate phosphorylation of the gastrin-releasing peptide receptor at distinct sites. Williams BY, et al. **Mol Pharmacol** 1996 Oct;50(4):716-27

Discovery of high affinity bombesin receptor subtype 3 agonists. Wu JM, et al. **Mol Pharmacol** 1996 Nov; 50(5):1355-63

ANALYSIS

Autoradiographic distribution of bombesin/gastrin-releasing peptide receptors in fetal cortex transplants. Moody TW, et al. **Exp Neurol** 1996 Nov;142(1):195-201

Detection of naturally expressed receptors for gastrin-releasing peptide and tachykinins using cyanine 3-labelled neuropeptides. Bunnett NW, et al. **Histochem J** 1996 Nov;28(11):811-26

GRP receptors are present in non small cell lung cancer cells. Moody TW, et al. **J Cell Biochem Suppl** 1996;24:247-56

ANTAGONISTS & INHIBITORS

Bombesin receptor antagonists. de Castiglione R, et al. **Crit Rev Oncol Hematol** 1996 Oct;24(2):117-51 (215 ref.)

Role of endogenous bombesin-peptides during vagal stimulation of gastric acid secretion in the rat. Weigert N, et al. **Neuropeptides** 1996 Dec;30(6):521-7

BW 1023U90: a new GRP receptor antagonist for small-cell lung cancer cells. Moody TW, et al. **Peptides** 1996; 17(8):1337-43

JMV641: a potent bombesin receptor antagonist that inhibits Swiss 3T3 cell proliferation. Azay J, et al. **Regul Pept** 1996 Aug 27;65(1):91-7

BIOSYNTHESIS

Localization of iodine-125-mIP-Des-Met14-bombesin (7-13)NH2 in ovarian carcinoma induced to express the gastrin releasing peptide receptor by adenoviral vector-mediated gene transfer [see comments] Rogers BE, et al. **J Nucl Med** 1997 Aug;38(8):1221-9. Comment in: J Nucl Med 1997 Aug;38(8):1230-3.

Expression and characterization of gastrin-releasing peptide receptor in normal and cancerous pancreas. Hajri A, et al. **Pancreas** 1996 Jan;12(1):25-35

CHEMISTRY

Comparison of the peptide structural requirements for high affinity interaction with bombesin receptors. Lin JT, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):55-69

CLASSIFICATION

Bombesin-like peptide receptor subtypes promote mitogenesis, which requires persistent receptor signaling. Feldman RI, et al. **Mol Pharmacol** 1996 Nov;50(5):1346-54

DRUG EFFECTS

Expression of mRNA for gastrin-releasing peptide receptor by human bronchial epithelial cells. Association with prolonged tobacco exposure and responsiveness to bombesin-like peptides. Siegfried JM, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):358-66

GENETICS

Cloning and expression of the neuromedin B receptor and the third subtype of bombesin receptor genes in the mouse. Ohki-Hamazaki H, et al. **Brain Res** 1997 Jul 11; 762(1-2):165-72

Identification and mapping of a putative bombesin receptor gene on human chromosome 17q21.3+. Kelavkar U, et al. **Genet Anal** 1996 Oct;13(4):99-103

Expression of gastrin-releasing peptide (GRP) and GRP receptors in the pregnant human uterus at term. Whitley JC, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3944-50

METABOLISM

The gastrin-releasing peptide receptor is differentially coupled to adenylate cyclase and phospholipase C in different tissues. Garcia LJ, et al. **Biochim Biophys Acta** 1997 May 27;1356(3):343-54

Expression of receptors for gut peptides in human pancreatic adenocarcinoma and tumour-free pancreas. Tang C, et al. **Br J Cancer** 1997;75(10):1467-73

Comparison of the peptide structural requirements for high affinity interaction with bombesin receptors. Lin JT, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):55-69

Identification of four amino acids in the gastrin-releasing peptide receptor that are required for high affinity agonist binding. Akeson M, et al. **J Biol Chem** 1997 Jul 11; 272(28):17405-9

Genetic analysis of receptor-Galphaq coupling selectivity. Kostenis E, et al. **J Biol Chem** 1997 Sep 19; 272(38):23675-81

Bombesin receptor structure and expression in human lung carcinoma cell lines. Fathi Z, et al. **J Cell Biochem Suppl** 1996;24:237-46

Clinical correlates of bombesin-like peptide receptor subtype expression in human lung cancer cells. Toi-Scott M, et al. **Lung Cancer** 1996 Nov;15(3):341-54

Functional expression of bombesin receptor in most adult and pediatric human glioblastoma cell lines; role in mitogenesis and in stimulating the mitogen-activated protein kinase pathway. Sharif TR, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1-2):119-30

Effect of gastrin-releasing peptide receptor number on receptor affinity, coupling, degradation, and modulation. Tsuda T, et al. **Mol Pharmacol** 1997 May;51(5):721-32

Agonist binding and protein kinase C activation stimulate phosphorylation of the gastrin-releasing peptide receptor at distinct sites. Williams BY, et al. **Mol Pharmacol** 1996 Oct;50(4):716-27

Location and characterization of the human GRP receptor expressed by gastrointestinal epithelial cells. Ferris HA, et al. **Peptides** 1997;18(5):663-72

Bombesin-like peptide receptors in human bronchial epithelial cells. Kane MA, et al. **Peptides** 1996;17(1):111-8

Reduction in receptors for bombesin and epidermal growth factor in xenografts of human small-cell lung cancer after treatment with bombesin antagonist RC-3095. Halmos G, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):956-60

Selective reconstitution of gastrin-releasing peptide receptor with G alpha q. Hellmich MR, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):751-6

Calcium signaling in prostate cancer cells: evidence for multiple receptors and enhanced sensitivity to bombesin/GRP. Wasilenko WJ, et al. **Prostate** 1997 Feb 15;30(3):167-73

PHYSIOLOGY

Caudal hindbrain neuromedin B-preferring receptors participate in the control of food intake. Ladenheim EE, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R433-7

Identification of functional GRP-preferring bombesin receptors on human melanoma cells. Pansky A, et al. **Eur J Clin Invest** 1997 Jan;27(1):69-76

Pharmacological profiles of two bombesin analogues in cells transfected with human neuromedin B receptors. Ryan RR, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):307-14

Bombesin specifically induces intracellular calcium mobilization via gastrin-releasing peptide receptors in human prostate cancer cells. Aprikian AG, et al. **J Mol Endocrinol** 1996 Jun;16(3):297-306

Bombesin-like peptide receptor subtypes promote mitogenesis, which requires persistent receptor signaling. Feldman RI, et al. **Mol Pharmacol** 1996 Nov;50(5):1346-54

ULTRASTRUCTURE

Expression of gastrin-releasing peptide receptor in human skin. Staniek V, et al. **Acta Derm Venereol** 1996 Jul; 76(4):282-6

RECEPTORS, BRADYKININ

Kinin '95. Proceedings of the 14th International Symposium on Bradykinin and Related Kinins. Denver, Colorado, 10-15 September 1995. **Immunopharmacology** 1996 Jun; 33(1-3):1-390

Kinin '95. Proceedings of the 14th International Symposium on bradykinin and related kinins. Denver, Colorado, 10-15 September 1995. **Immunopharmacology** 1996 May; 32(1-3):1-182

AGONISTS

The role of B1 and B2 kinin receptors in oedema formation after long-term treatment with Mycobacterium bovis bacillus Calmette-Guérin (BCG). Campos MM, et al. **Br J Pharmacol** 1997 Feb;120(3):502-8

Induction of bradykinin B1 hypotensive receptors in rats by lipopolysaccharide. Nicolau M, et al. **Can J Physiol Pharmacol** 1996 Mar;74(3):337-40

The agonist selectivity of a mouse B1 bradykinin receptor differs from human and rabbit B1 receptors. Hess JF, et

al. **Immunopharmacology** 1996 Jun;33(1-3):1-8
Cardiovascular effects of Sar-[D-Phe8]des-Arg9-bradykinin, a metabolically protected agonist of B1 receptor for kinins, in the anesthetized rabbit pretreated with a sublethal dose of bacterial lipopolysaccharide. Audet R, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):6-15
Nonpeptide mimic of bradykinin with long-acting properties at the bradykinin B2 receptor. Aramori I, et al. **Mol Pharmacol** 1997 Jul;52(1):16-20

ANALYSIS

Modulation of bradykinin receptor ligand binding affinity and its coupled G-proteins by nitric oxide. Miyamoto A, et al. **J Biol Chem** 1997 Aug 1;272(31):19601-8
Kinin receptors on human neurones. Raidoo DM, et al. **J Neuroimmunol** 1997 Jul;77(1):39-44

ANTAGONISTS & INHIBITORS

Beneficial effects of bradykinin on myocardial energy metabolism and infarct size. Linz W, et al. **Am J Cardiol** 1997 Aug 4;80(3A):118A-123A (111 ref.)
Bradykinin B2 receptor antagonist increases chloride and water absorption in rat medullary collecting duct. Mukai H, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R352-60
Effects of HOE 140 on some renal functions in type I diabetic mice. Zuccollo A, et al. **Arch Physiol Biochem** 1996; 104(2):252-4
A comparative NMR and molecular dynamics study of the conformations of bradykinin B1 and B2, B2, and B1-specific receptor antagonists B-9430, B-9436, and B-9858. Sejbal J, et al. **Biopolymers** 1997 Oct 15; 42(5):521-35
The identification of an orally active, nonpeptide bradykinin B2 receptor antagonist, FR173657. Asano M, et al. **Br J Pharmacol** 1997 Feb;120(4):617-24
Antinociceptive profile of the pseudopeptide B2 bradykinin receptor antagonist NPC 18688 in mice. Corrêa CR, et al. **Br J Pharmacol** 1996 Feb;117(3):552-558
Effects of FR173657, a non-peptide B2 antagonist, on kinin-induced hypotension, visceral and peripheral oedema formation and bronchoconstriction. Griesbacher T, et al. **Br J Pharmacol** 1997 Mar;120(5):933-9
Effects of the non-peptide B2 antagonist FR173657 on kinin-induced smooth muscle contraction and relaxation, vasoconstriction and prostaglandin release. Griesbacher T, et al. **Br J Pharmacol** 1997 Jun;121(3):469-76
Effects of an orally active non-peptide bradykinin B2 receptor antagonist, FR173657, on plasma exudation in rat carrageenin-induced pleurisy. Majima M, et al. **Br J Pharmacol** 1997 Jun;121(4):723-30
Effect of a bradykinin antagonist on the local inflammatory response following thermal injury. Nwariaku FE, et al. **Burns** 1996 Jun;22(4):324-7
Effects of B1 and B2 kinin receptor antagonists in diabetic mice. Zuccollo A, et al. **Can J Physiol Pharmacol** 1996 May;74(5):586-9
Preischemic bradykinin and ischaemic preconditioning in functional recovery of the globally ischaemic rat heart. Starkopf J, et al. **Cardiovasc Res** 1997 Jan;33(1):63-70
Role of bradykinin in mediating vascular effects of angiotensin-converting enzyme inhibitors in humans. Hornig B, et al. **Circulation** 1997 Mar 4;95(5):1115-8
Differential effects of kinins on cardiomyocyte hypertrophy and interstitial collagen matrix in the surviving myocardium after myocardial infarction in the rat. Wollert KC, et al. **Circulation** 1997 Apr 1;95(7):1910-7
The contribution of peripheral bradykinin B2 receptors to carrageenan-evoked oedema and spinal c-Fos expression in rats. Buritova J, et al. **Eur J Pharmacol** 1997 Feb 5; 320(1):73-80
Characterization of des-Arg9-bradykinin-induced contraction in guinea-pig gallbladder in vitro. Cabrini DA, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):31-8
Role of tachykinin and bradykinin receptors and mast cells in gaseous formaldehyde-induced airway microvascular leakage in rats. Ito K, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):291-8
Effect of the bradykinin B2 receptor antagonist Hoe140 in experimental pneumococcal meningitis in the rat. Lorenzl S, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):335-41
Bradykinin receptors. Hall JM. **Gen Pharmacol** 1997 Jan; 28(1):1-6 (32 ref.)
Structure-activity studies of B1 receptor-related peptides. Antagonists. Gobeil F, et al. **Hypertension** 1996 Nov; 28(5):833-9
Blockade of bradykinin B2 receptors prevents the increase in capillary density induced by chronic angiotensin-converting enzyme inhibitor treatment in stroke-prone spontaneously hypertensive rats. Gohlke P, et al. **Hypertension** 1997 Jan;29(1 Pt 2):478-82
FR 173657: a new, potent, nonpeptide kinin B2 receptor antagonist. An in vitro study. Rizzi A, et al. **Hypertension** 1997 Apr;29(4):951-6
Bradykinin B2 receptor modulates renal prostaglandin E2 and nitric oxide. Siragy HM, et al. **Hypertension** 1997 Mar; 29(3):757-62
Efficacy and tolerability of Icatibant (Hoe 140) in patients with moderately severe chronic bronchial asthma. Akbary AM, et al. **Immunopharmacology** 1996 Jun;33(1-3):238-42
Cyclosporine A decreases kallikrein and BK2 mRNA expression in the rat renal cortex. Bompart G, et al. **Immunopharmacology** 1996 May;32(1-3):99-101
Novel bradykinin receptor antagonists from a structurally directed non-peptide combinatorial library. Chakravarty S, et al. **Immunopharmacology** 1996 Jun;33(1-3):61-7
In vivo pharmacological profile of novel, potent, stable BK antagonists at B1 and B2 receptors. Hanson WL, et al. **Immunopharmacology** 1996 Jun;33(1-3):191-3
A new type of bradykinin B2 receptor antagonists: bradykinin analogs with N-alkyl amino acids at position 2. Reissmann S, et al. **Immunopharmacology** 1996 Jun;33(1-3):73-80
Effect of combined B1 and B2 kinin receptor blockade in porcine endotoxin shock. Siebeck M, et al. **Immunopharmacology** 1996 Jun;33(1-3):81-4
Development of hyperthermia and hyperalgesia following intracerebroventricular administration of endotoxin in the rat: effect of kinin B1 and B2 receptor antagonists. Walker K, et al. **Immunopharmacology** 1996 Jun;33(1-3):264-9
Relative contribution of angiotensin II, bradykinin, and prostaglandins to the renal effects of converting enzyme inhibition in rats after chronic myocardial infarction. Deck CC, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):167-74
Treatment of severe systemic inflammatory response syndrome and sepsis with a novel bradykinin antagonist, deltibant (CP-0127). Results of a randomized, double-blind, placebo-controlled trial. CP-0127 SIRS and Sepsis Study Group. Fein AM, et al. **JAMA** 1997 Feb 12; 277(6):482-7
Novel subtype-selective nonpeptide bradykinin receptor antagonists FR167344 and FR173657. Aramori I, et al. **Mol Pharmacol** 1997 Feb;51(2):171-6
Effects of the bradykinin B1 receptor antagonist des-Arg9[Leu8]bradykinin and genetic disruption of the B2 receptor on nociception in rats and mice. Rupniak NM, et al. **Pain** 1997 May;71(1):89-97
Stimulus properties and antinociceptive effects of selective bradykinin B1 and B2 receptor antagonists in rats. Sufka KJ, et al. **Pain** 1996 Jul;66(1):99-103
Hyperalgesia in rats following intracerebroventricular administration of endotoxin: effect of bradykinin B1 and B2 receptor antagonist treatment. Walker K, et al. **Pain** 1996 May-Jun;65(2-3):211-9
Effects of a bradykinin receptor antagonist (HOE140) on taurocholate-induced acute pancreatitis in rats. Kanbe T, et al. **Pancreas** 1996 Oct;13(3):283-8
Effects of bradykinin receptor antagonist on the release of beta-endorphin and bradykinin and on hemodynamic changes in a canine model of experimental acute pancreatitis. Satake K, et al. **Pancreas** 1996 Jan;12(1):92-7
Effects of captopril and Icatibant on bradykinin (BK) and des [Arg9] BK in carrageenan-induced edema. Decarie A, et al. **Peptides** 1996;17(6):1009-15
CP-0597, a selective bradykinin B2 receptor antagonist, inhibits brain injury in a rat model of reversible middle cerebral artery occlusion. Relton JK, et al. **Stroke** 1997 Jul;28(7):1430-6
Bradykinin receptor inhibition affects the rod b-wave in the cat electroretinogram. Jacobi PC, et al. **Vision Res** 1996 Dec;36(23):3843-9

BIOSYNTHESIS

Salt intake modulates the developmental expression of renal kallikrein and bradykinin B2 receptors. el-Dahr S, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F425-31
Cytokines increase B1 bradykinin receptor mRNA and protein levels in human lung fibroblasts. Phagoo SB, et al. **Biochem Soc Trans** 1997 Feb;25(1):43S
Upregulation of B1 receptor mediating des-Arg9-BK-induced rat paw oedema by systemic treatment with bacterial endotoxin. Campos MM, et al. **Br J Pharmacol** 1996 Mar;117(5):793-8
In vivo evidence for B1-receptor synthesis induction by heat stress in the rat. Lagneux C, et al. **Br J Pharmacol** 1997 Jul;121(6):1045-6
Induction of bradykinin B1 receptors in rat colonic epithelium. Teather S, et al. **Br J Pharmacol** 1997 Jul; 121(5):1005-11
Cyclosporine A decreases kallikrein and BK2 mRNA expression in the rat renal cortex. Bompart G, et al. **Immunopharmacology** 1996 May;32(1-3):99-101
Analysis of an exon 1 polymorphism of the B2 bradykinin receptor gene and its transcript in normal subjects and patients with C1 inhibitor deficiency. Lung CC, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):134-46
Localization of bradykinin type II receptor mRNA in human endometrium. Shams M, et al. **Mol Hum Reprod** 1996 Jan; 2(1):35-9
Bradykinin receptors in cultured rat dorsal root ganglion cells: influence of length of time in culture. Segond von Banchet G, et al. **Neuroscience** 1996 Dec;75(4):1211-8

CHEMISTRY

On the structure of the amino-terminal domain ED1 of the B2 receptor. Abd Alla S, et al. **Immunopharmacology** 1996 Oct;35(1):23-6
On the structure of the amino-terminal domain ED1 of the B2 receptor. Abd Alla S, et al. **Immunopharmacology** 1996 Jun;33(1-3):42-5
The N-terminal amino group of [Tyr8]bradykinin is bound adjacent to analogous amino acids of the human and rat B2 receptor. AbdAlla S, et al. **J Biol Chem** 1996 Nov 1; 271(44):27382-7
The sixth transmembrane domains of the human B1 and B2 bradykinin receptors are structurally compatible and involved in discriminating between subtype-selective agonists. Leeb T, et al. **J Biol Chem** 1997 Jan 3;272(1):311-7
Effects of intracellular tyrosine residue mutation and carboxyl terminus truncation on signal transduction and internalization of the rat bradykinin B2 receptor. Prado GN, et al. **J Biol Chem** 1997 Jun 6;272(23):14638-42
Comparative evaluation of the synthesis and purification of transmembrane peptide fragments. Rat bradykinin receptor fragment 64-97 as model. Oliveira E, et al. **J Pept Res** 1997 Apr;49(4):300-7

DEFICIENCY

Effect of high salt intake in mutant mice lacking bradykinin-B2 receptors. Alfie ME, et al. **Hypertension** 1997 Jan;29(1 Pt 2):483-7

DRUG EFFECTS

Central involvement of kinin B1 and B2 receptors in the febrile response induced by endotoxin in rats. Coelho MM, et al. **Br J Pharmacol** 1997 May;121(2):296-302
Substance P and capsaicin-induced mechanical hyperalgesia in the rat knee joint; the involvement of bradykinin B1 and B2 receptors. Davis AJ, et al. **Br J Pharmacol** 1996 Aug;118(8):2206-12
Pharmacological and functional characterization of bradykinin receptors in canine cultured tracheal epithelial cells. Luo SF, et al. **Br J Pharmacol** 1996 Sep;119(2):439-45
The longitudinal muscle of rat ileum as a sensitive monoreceptor assay for bradykinin B1 receptors. Meini S, et al. **Br J Pharmacol** 1996 Apr;117(8):1619-24
Central B2 receptor involvement in the antinociceptive effect of bradykinin in rats. Pelá IR, et al. **Br J Pharmacol** 1996 Jul;118(6):1488-92
The expression of functionally-coupled B2-bradykinin receptors in human corneal epithelial cells and their pharmacological characterization with agonists and antagonists. Wiernas TK, et al. **Br J Pharmacol** 1997 Jun; 121(4):649-56
In vitro and in vivo characterization of bradykinin B2 receptors in the rabbit and the guinea pig. Gobeil F, et al. **Can J Physiol Pharmacol** 1996 Feb;74(2):137-44
Role of bradykinin B2 receptors and mast cells in the bradykinin-induced skin response in the rat. Morishita M, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):149-54
Bradykinin B1 receptors in human umbilical vein. Sardi SP, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):33-8
Interaction between growth factors and kinins in arterial smooth muscle cells. Dixon BS, et al. **Immunopharmacology** 1996 Jun;33(1-3):16-23
Potentiation of the biological efficacy of bradykinin by ACE inhibitors: a shift in the affinity of the B2 receptor? Hecker M, et al. **Immunopharmacology** 1996 Jun;33(1-3):93-4
Bradykinin dilates rat middle cerebral artery and its large branches via endothelial B2 receptors and release of nitric oxide. Görlach C, et al. **Peptides** 1996;17(8):1373-8

GENETICS

Hypotension in transgenic mice overexpressing human bradykinin B2 receptor. Wang DZ, et al. **Hypertension** 1997 Jan;29(1 Pt 2):488-93
Nociception and inflammatory hyperalgesia in B2 bradykinin receptor knockout mice. Boyce S, et al. **Immunopharmacology** 1996 Jun;33(1-3):333-5
Polymorphisms in the gene for the human B2-bradykinin receptor. New tools in assessing a genetic risk for bradykinin-associated diseases. Braun A, et al. **Immunopharmacology** 1996 Jun;33(1-3):32-5
The agonist selectivity of a mouse B1 bradykinin receptor differs from human and rabbit B1 receptors. Hess JF, et al. **Immunopharmacology** 1996 Jun;33(1-3):1-8
Exon 1 sequence of the human B2 bradykinin receptor gene and its transcript. Lung CC, et al. **Immunopharmacology** 1996 Jun;33(1-3):90-2
RT-PCR microlocalization of bradykinin B2 receptor mRNA in microdissected rat nephron segments. Marin Castaño ME, et al. **Immunopharmacology** 1996 Jun; 33(1-3):171-3
Transcriptional regulatory elements in the rat bradykinin B2 receptor gene. Pesquero JB, et al. **Immunopharmacology** 1996 Jun;33(1-3):36-41
Cellular localization of bradykinin B1 receptor mRNA in the human kidney. Wang DZ, et al. **Immunopharmacology** 1996 Jun;33(1-3):151-6
Analysis of an exon 1 polymorphism of the B2 bradykinin receptor gene and its transcript in normal subjects and patients with C1 inhibitor deficiency. Lung CC, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):134-46
Mutations in the B2 bradykinin receptor reveal a different pattern of contacts for peptidic agonists and peptidic antagonists. Jarnagin K, et al. **J Biol Chem** 1996 Nov 8; 271(45):28277-86
Effects of the bradykinin B1 receptor antagonist des-Arg9[Leu8]bradykinin and genetic disruption of the B2 receptor on nociception in rats and mice. Rupniak NM, et al. **Pain** 1997 May;71(1):89-97

RECEPTORS, BRADYKININ

METABOLISM

Characterization of a B2-bradykinin receptor in human glomerular podocytes. Ardaillou N, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F754-61

Bradykinin B2 receptor-induced and inositol tetrakisphosphate-evoked Ca2+ entry is sensitive to a protein tyrosine phosphorylation inhibitor in ras-transformed NIH/3T3 fibroblasts. Hashii M, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):649-56

Bradykinin antagonists in human systems: correlation between receptor binding, calcium signalling in isolated cells, and functional activity in isolated ileum. Wieczorek M, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):283-91

Na+ ions binding to the bradykinin B2 receptor suppress agonist-independent receptor activation. Quitterer U, et al. **Biochemistry** 1996 Oct 15;35(41):13368-77

Ca2+ release and Ca2+ influx in Chinese hamster ovary cells expressing the cloned mouse B2 bradykinin receptor: tyrosine kinase inhibitor-sensitive and- insensitive processes. Taketo M, et al. **Biochim Biophys Acta** 1997 Jan 10;1355(1):89-98

B1 bradykinin receptors and sensory neurones. Davis CL, et al. **Br J Pharmacol** 1996 Jul;118(6):1469-76

Characterization of the bradykinin receptor in the human nasal airway using the binding of [125I]-Hoe 140. Dear JW, et al. **Br J Pharmacol** 1996 Nov;119(5):1054-62

Selective labelling of bradykinin receptor subtypes in WI38 human lung fibroblasts. Phagoo SB, et al. **Br J Pharmacol** 1996 Nov;119(5):863-8

Two distinct Ca2+ influx pathways activated by the bradykinin B2 receptor. AbdAlla S, et al. **Eur J Biochem** 1996 Oct 15;241(2):498-506

An NMR study of the interaction of 15N-labelled bradykinin with an antibody mimic of the bradykinin B2 receptor. Ottleben H, et al. **Eur J Biochem** 1997 Mar 1;244(2):471-8

Protein kinases A and C rapidly modulate expression of human lung fibroblast B2 bradykinin receptor affinity forms. Dalemar LR, et al. **Eur J Cell Biol** 1996 Mar; 69(3):236-44

Characterization and localization of bradykinin B2 receptors in the guinea-pig using a radioiodinated HOE140 analogue. Murone C, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1-3):237-47

In vivo and in vitro homologous desensitization of rat glomerular bradykinin B2 receptors. Praddaude F, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):173-82

Characterisation of bradykinin receptors from juvenile pig coronary artery. Pruneau D, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):53-60

Bradykinin-induced knee joint incapacitation involves bradykinin B2 receptor mediated hyperalgesia and bradykinin B1 receptor-mediated nociception. Tonussi CR, et al. **Eur J Pharmacol** 1997 May 12;326(1):61-5

Pharmacological characterization of bradykinin receptors coupled to phosphoinositide turnover in SV40-immortalized human trabecular meshwork cells. Sharif NA, et al. **Exp Eye Res** 1996 Dec;63(6):631-7

Comparative profile of novel potent bradykinin antagonists at human B1 and B2 receptors. Burkard M, et al. **Immunopharmacology** 1996 Jun;33(1-3):186-90

Involvement of bradykinin B1 and B2 receptors in human PMN elastase release and increase in endothelial cell monolayer permeability. Carl VS, et al. **Immunopharmacology** 1996 Jun;33(1-3):325-9

Immunolocalisation of the kinin moiety and bradykinin (B2) receptors on synovial fluid neutrophils in rheumatoid arthritis. Cassim B, et al. **Immunopharmacology** 1996 Jun; 33(1-3):321-4

Interaction between growth factors and kinins in arterial smooth muscle cells. Dixon BS, et al. **Immunopharmacology** 1996 Jun;33(1-3):16-23

Rat bradykinin B2 receptor: immunochemical characterization and immunovizualization in epithelial and smooth muscle cells. Figueroa CD, et al. **Immunopharmacology** 1996 Jun;33(1-3):85-9

New bradykinin antagonists having very high potency at B1 receptors. Gera L, et al. **Immunopharmacology** 1996 Jun; 33(1-3):183-5

Potentiation of the biological efficacy of bradykinin by ACE inhibitors: a shift in the affinity of the B2 receptor? Hecker M, et al. **Immunopharmacology** 1996 Jun;33(1-3):93-4

Human lung fibroblasts express multiple means for enhanced activity of bradykinin receptor pathways. Jong YJ, et al. **Immunopharmacology** 1996 Jun;33(1-3):9-15

Localization of bradykinin B2 receptors in sheep uterus. Murone C, et al. **Immunopharmacology** 1996 Jun; 33(1-3):108-12

Immunoreactive B1 receptors in human transbronchial tissue. Nadar R, et al. **Immunopharmacology** 1996 Jun; 33(1-3):317-20

The status of B2 receptors in acute renal transplant rejection. Naidoo S, et al. **Immunopharmacology** 1996 Jun; 33(1-3):157-60

Visualisation of bradykinin B2 receptors on human brain neurons. Raidoo DM, et al. **Immunopharmacology** 1996 Jun; 33(1-3):104-7

Receptors for kinins: from classical pharmacology to molecular biology. Regoli D, et al. **Immunopharmacology** 1996 Jun;33(1-3):116-22

Receptors for kinins: from classical pharmacology to molecular biology. Regoli D, et al. **Immunopharmacology** 1996 Jun;33(1-3):24-31

The B2 receptor on cultured human decidua cells: release of arachidonic acid by bradykinin. Rehbock J, et al. **Immunopharmacology** 1996 Jun;33(1-3):164-6

Autoradiographic visualization of B1 bradykinin receptors in porcine vascular tissues in the presence or absence of inflammation. Schremmer-Danninger E, et al. **Immunopharmacology** 1996 Jun;33(1-3):95-100

Cellular distribution and fate of the bradykinin antagonist HOE 140 in the rat kidney. Colocalization with the bradykinin B2 receptor. Vio CP, et al. **Immunopharmacology** 1996 Jun;33(1-3):146-50

Inducible bradykinin B1 receptor in isolated human ileum. Zuzack JS, et al. **Immunopharmacology** 1996 Jun; 33(1-3):113-5

Captopril potentiates the myocardial infarct size-limiting effect of ischemic preconditioning through bradykinin B2 receptor activation. Miki T, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1616-22

Postnatal maturation of the Kallikrein-kinin system in the rat kidney: from enzyme activity to receptor gene expression. Bascands JL, et al. **J Am Soc Nephrol** 1996 Jan;7(1):81-9

The N-terminal amino group of [Tyr8]bradykinin is bound adjacent to analogous amino acids of the human and rat B2 receptor. AbdAlla S, et al. **J Biol Chem** 1996 Nov 1; 271(44):27382-7

Stable expression of the human kinin B1 receptor in Chinese hamster ovary cells. Characterization of ligand binding and effector pathways. Austin CE, et al. **J Biol Chem** 1997 Apr 25;272(17):11420-5

Ligand-induced phosphorylation/dephosphorylation of the endogenous bradykinin B2 receptor from human fibroblasts. Blaukat A, et al. **J Biol Chem** 1996 Dec 13; 271(50):32366-74

Bradykinin sequesters B2 bradykinin receptors and the receptor-coupled Galpha subunits Galphaq and Galphai in caveolae in DDT1 MF-2 smooth muscle cells. de Weerd WF, et al. **J Biol Chem** 1997 Jul 11;272(28):17858-66

The N terminus of bradykinin when bound to the human bradykinin B2 receptor is adjacent to extracellular Cys20 and Cys277 in the receptor. Herzig MC, et al. **J Biol Chem** 1996 Nov 22;271(47):29746-51

Cloning and functional characterization of the ornithokinin receptor. Recognition of the major kinin receptor antagonist, HOE140, as a full agonist. Schroeder C, et al. **J Biol Chem** 1997 May 9;272(19):12475-81

Regulation of bradykinin B2 receptors by the ras oncogene: evidence for multiple mechanisms. Hembree TN, et al. **J Cell Physiol** 1996 Nov;169(2):248-55

Distribution of bradykinin B2 receptors in sheep brain and spinal cord visualized by in vitro autoradiography. Murone C, et al. **J Comp Neurol** 1997 May 5;381(2):203-18

Inositol trisphosphate/Ca2+ as messengers of bradykinin B2 and muscarinic acetylcholine m1-m4 receptors in neuroblastoma-derived hybrid cells. Noda M, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):175-85 (44 ref.)

Acute regulation of the receptor-mediated phosphoinositide signal transduction pathway. Willars GB, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):157-68 (35 ref.)

Bradykinin B2-receptor-mediated stimulation of exocytotic noradrenaline release from cardiac sympathetic neurons. Kurz T, et al. **J Mol Cell Cardiol** 1997 Sep;29(9):2561-9

Ontogeny of bradykinin B2 receptors in the rat kidney: implications for segmental nephron maturation. el-Dahr SS, et al. **Kidney Int** 1997 Mar;51(3):739-49

Renal bradykinin and vasopressin receptors: ligand selectivity and classification. Howl J, et al. **Kidney Int** 1996 Aug; 50(2):586-92

Expression of B1 and B2 bradykinin receptor mRNA and their functional roles in sympathetic ganglia and sensory dorsal root ganglia neurones from wild-type and B2 receptor knockout mice. Seabrook GR, et al. **Neuropharmacology** 1997 Jul;36(7):1009-17

Characteristics of nerve growth factor induced hyperalgesia in adult rats: dependence on enhanced bradykinin-1 receptor activity but not neurokinin-1 receptor activation. Rueff A, et al. **Pain** 1996 Aug;66(2-3):359-72

A role for B1 and B2 kinin receptors in the modulation of T-kininogen during the acute phase response of inflammation. Raymond P, et al. **Peptides** 1996; 17(7):1163-70

Bradykinin decreases T-kininogen synthesis in a rat hepatoma cell line: evidence of bradykinin B2-type receptors. Raymond P, et al. **Peptides** 1996;17(7):1171-6

[Age differences in topic concentrations and activity of H2- and B2-receptors in the larynx and trachea] Aslanian GG. **Vestn Otorinolaringol** 1997;(1):36-9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of trout bradykinin on the motility of the trout stomach and intestine: evidence for a receptor distinct from mammalian B1 and B2 subtypes. Jensen J, et al. **Br J Pharmacol** 1997 Jun;121(3):526-30

Pharmacological and functional characterization of bradykinin receptors in canine cultured tracheal epithelial cells. Luo SF, et al. **Br J Pharmacol** 1996 Sep;119(2):439-45

Bradykinin-induced contractions of canine saphenous veins: mediation by B2 receptors and involvement of eicosanoids. Marsault R, et al. **Br J Pharmacol** 1997 Jan;120(2):215-20

Role of bradykinin receptors in the renal effects of inhibition of angiotensin converting enzyme and endopeptidases 24.11 and 24.15 in conscious rabbits. Tomoda F, et al. **Br J Pharmacol** 1996 Sep;119(2):365-73

Role of activation of bradykinin B2 receptors in disruption of the blood-brain barrier during acute hypertension. Mayhan WG. **Brain Res** 1996 Nov 4;738(2):337-41

Kinin B1 and B2 receptors in the mouse. Allogho SN, et al. **Can J Physiol Pharmacol** 1995 Dec;73(12):1759-64

Characterization of des-Arg9-bradykinin-induced contraction in guinea-pig gallbladder in vitro. Cabrini DA, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):31-8

Epicardial bradykinin B2 receptors elicit a sympathoexcitatory reflex in rats. Veelken R, et al. **Hypertension** 1996 Oct;28(4):615-21

Role of kinins in the cardioprotective effect of preconditioning: study of myocardial ischemia/reperfusion injury in B2 kinin receptor knockout mice and kininogen-deficient rats. Yang XP, et al. **Hypertension** 1997 Sep;30(3 Pt 2):735-40

Nociception and inflammatory hyperalgesia in B2 bradykinin receptor knockout mice. Boyce S, et al. **Immunopharmacology** 1996 Jun;33(1-3):333-5

In vivo characterization of B2 receptors mediating hypotension in anesthetized rabbits and guinea pigs. Gobeil F, et al. **Immunopharmacology** 1996 Jun;33(1-3):284-6

Induction of a B1-receptor mediating hypotensive response in young brown Norway rats. Oh-ishi S, et al. **Immunopharmacology** 1996 Jun;33(1-3):101-3

Angiotensin-converting enzyme inhibitors potentiate preconditioning through bradykinin B2 receptor activation in human heart. Morris SD, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1599-606

Role of bradykinin B2 receptors in neonatal kidney growth. Yosipiv IV, et al. **J Am Soc Nephrol** 1997 Jun;8(6):920-8

Effects of intracellular tyrosine residue mutation and carboxyl terminus truncation on signal transduction and internalization of the rat bradykinin B2 receptor. Prado GN, et al. **J Biol Chem** 1997 Jun 6;272(23):14638-42

Kinin-induced prolongation of action-potential duration in right ventricular muscle from rat: involvement of B1 and B2 receptors. Gouin L, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):337-43

Mechanisms of kinin B1-receptor-induced hypotension in the anesthetized dog. Lamontagne D, et al. **J Cardiovasc Pharmacol** 1996 Nov;28(5):645-50

Bradykinin stimulates NF-kappaB activation and interleukin 1beta gene expression in cultured human fibroblasts. Pan ZK, et al. **J Clin Invest** 1996 Nov 1;98(9):2042-9

Different B1 kinin receptor expression and pharmacology in endothelial cells of different origins and species. Wohlfart P, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1109-16

Bradykinin increases catecholamine release via B2 receptors. Dendorfer A, et al. **Pflugers Arch** 1996;432(3 Suppl):R99-106

Bradykinin B2 receptors and signal transduction analyzed in NG108-15 neuroblastoma x glioma hybrid cells, B2 receptor-transformed CHO cells and ras-transformed NIH/3T3 fibroblasts. Higashida H, et al. **Prog Brain Res** 1996;113:215-30 (82 ref.)

Bradykinin receptors and receptor ligands (with special emphasis on vascular receptors). Regoli D, et al. **Regul Pept** 1996 Aug 27;65(1):83-9 (51 ref.)

RECEPTORS, C3B see **RECEPTORS, COMPLEMENT 3B**

RECEPTORS, C3D see **RECEPTORS, COMPLEMENT 3D**

RECEPTORS, CAERULEIN see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, CALCITONIN

AGONISTS

Structure/function relationships of calcitonin analogues as agonists, antagonists, or inverse agonists in a constitutively activated receptor cell system. Pozvek G, et al. **Mol Pharmacol** 1997 Apr;51(4):658-65

ANTAGONISTS & INHIBITORS

Structure/function relationships of calcitonin analogues as agonists, antagonists, or inverse agonists in a constitutively activated receptor cell system. Pozvek G, et al. **Mol Pharmacol** 1997 Apr;51(4):658-65

BIOSYNTHESIS

Homologous regulation of the rat C1a calcitonin receptor (CTR) in nonosteoclastic cells is independent of CTR messenger ribonucleic acid changes and cyclic adenosine 3',5'-monophosphate-dependent protein kinase activation. Findlay DM, et al. **Endocrinology** 1996 Nov; 137(11):4576-85

Effects of continuous calcitonin treatment on osteoclast-like cell development and calcitonin receptor expression in mouse bone marrow cultures. Ikegame M, et al. **J Bone Miner Res** 1996 Apr;11(4):456-65

CHEMISTRY

Electrophoretic mobility and glycosylation characteristics of heterogeneously expressed calcitonin receptors [see comments] Quiza M, et al. **Endocrinology** 1997 Feb; 138(2):530-9. Comment in: Endocrinology 1997 Feb;138(2):519-20.

The deletion of 14 amino acids in the seventh transmembrane domain of a naturally occurring calcitonin receptor isoform alters ligand binding and selectively abolishes coupling to phospholipase C. Shyu JF, et al. **J Biol Chem** 1996 Dec 6;271(49):31127–34

GENETICS

Regulation by calcitonin and glucocorticoids of calcitonin receptor gene expression in mouse osteoclasts [see comments] Wada S, et al. **Endocrinology** 1997 Feb; 138(2):521–9. Comment in: Endocrinology 1997 Feb;138(2):519–20.

Receptors of calciotropic hormones. Findlay DM, et al. **Horm Metab Res** 1997 Mar;29(3):128–34 (77 ref.)

Allelic variants of human calcitonin receptor in the Japanese population. Nakamura M, et al. **Hum Genet** 1997 Jan; 99(1):38–41

Cloning, characterization, and expression of a calcitonin receptor from guinea pig brain. Sarkar A, et al. **J Neurochem** 1997 Aug;69(2):455–64

METABOLISM

Iodocalcitonin binds to human calcitonin receptors with higher affinity than calcitonin. Cohen DP, et al. **Endocrinology** 1996 Oct;137(10):4507–10

There's something fishy and perhaps even fowl about the mammalian calcitonin receptor and its ligand [editorial; comment] Deftos LJ. **Endocrinology** 1997 Feb; 138(2):519–20. Comment on: Endocrinology 1997 Feb;138(2):521–9. Comment on: Endocrinology 1997 Feb;138(2):530–9.

Intracellular retention and rapid degradation of human calcitonin receptors overexpressed in COS cells. Dermer SJ, et al. **Endocrinology** 1996 Dec;137(12):5502–8

Characterization of amylin and calcitonin receptor binding in the mouse alpha-thyroid-stimulating hormone thyrotroph cell line. Perry KJ, et al. **Endocrinology** 1997 Aug;138(8):3486–96

Determinants for calcitonin analog interaction with the calcitonin receptor N-terminus and transmembrane-loop regions. Stroop SD, et al. **Endocrinology** 1996 Nov; 137(11):4752–6

Full activation of chimeric receptors by hybrids between parathyroid hormone and calcitonin. Evidence for a common pattern of ligand-receptor interaction. Bergwitz C, et al. **J Biol Chem** 1996 Oct 25;271(43):26469–72

PHYSIOLOGY

Human calcitonin receptors exhibit agonist-independent (constitutive) signaling activity. Cohen DP, et al. **Endocrinology** 1997 Apr;138(4):1400–5

Functional coupling of endogenous serotonin (5-HT1B) and calcitonin (C1a) receptors in CHO cells to a cyclic AMP-responsive luciferase reporter gene. George SE, et al. **J Neurochem** 1997 Sep;69(3):1278–85

RECEPTORS, CALCITONIN GENE-RELATED PEPTIDE

Calcitonin gene-related peptide and its receptors: molecular genetics, physiology, pathophysiology, and therapeutic potentials. Wimalawansa SJ. **Endocr Rev** 1996 Oct; 17(5):533–85 (655 ref.)

ANALYSIS

Calcitonin gene-related peptide in the hamster seminal vesicle and coagulating gland: an immunohistochemical, autoradiographical, and pharmacological study. Afonso F, et al. **Peptides** 1996;17(7):1189–95

ANTAGONISTS & INHIBITORS

The selectivity and structural determinants of peptide antagonists at the CGRP receptor of rat, L6 myocytes. Howitt SG, et al. **Br J Pharmacol** 1997 Jul;121(5):1000–4

Modulation of synovial blood flow by the calcitonin gene-related peptide (CGRP) receptor antagonist, CGRP(8–37). McMurdo L, et al. **Br J Pharmacol** 1997 Jul; 121(6):1075–80

Structural comparison of alanine-substituted analogues of the calcitonin gene-related peptide 8–37. Importance of the C-terminal segment for antagonistic activity. Boulanger Y, et al. **Int J Pept Protein Res** 1996 Jun;47(6):477–83

DRUG EFFECTS

Multiple receptors for calcitonin gene-related peptide and amylin on guinea-pig ileum and vas deferens. Tomlinson AE, et al. **Br J Pharmacol** 1996 Mar;117(6):1362–8

Characterization of the receptor mediating the effect of calcitonin gene-related peptide in the frog adrenal gland. Esneu M, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):187–93

GENETICS

Expression of calcitonin gene-related peptide1 receptor mRNA in human trigeminal ganglia and cerebral arteries. Edvinsson L, et al. **Neurosci Lett** 1997 Jul 4;229(3):209–11

METABOLISM

The calcitonin gene-related peptide (CGRP) receptor in rat smooth muscles. Wisskirchen F, et al. **Ann N Y Acad Sci** 1997 May 30;812:205–6

Effect of calcitonin gene-related peptide on sodium absorption through isolated skin of Rana esculenta. Castronuovo G, et al. **Arch Physiol Biochem** 1996; 104(2):142–7

Vasodilator effects of adrenomedullin on small pulmonary arteries and veins in anaesthetized cats. Shirai M, et al. **Br J Pharmacol** 1997 Jun;121(4):679–86

The interaction of CGRP and adrenomedullin with a receptor expressed in the rat pulmonary vascular endothelium. Han ZQ, et al. **J Mol Endocrinol** 1997 Jun; 18(3):267–72

Characterisation and molecular identification of adrenomedullin binding sites in the rat spinal cord: a comparison with calcitonin gene-related peptide receptors. Owji AA, et al. **J Neurochem** 1996 Nov;67(5):2172–9

Calcitonin gene-related peptide in the cardiovascular system: characterization of receptor populations and their (patho)physiological significance. Bell D, et al. **Pharmacol Rev** 1996 Jun;48(2):253–88 (302 ref.)

Calcitonin gene-related peptide receptor in human placental syncytiotrophoblast brush-border and basal plasma membranes. Lafond J, et al. **Placenta** 1997 Mar–Apr; 18(2–3):181–8

PHYSIOLOGY

Vasodilation and glomerular binding of adrenomedullin in rabbit kidney are not CGRP receptor mediated. Hjelmqvist H, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R716–24

Pharmacological coupling and functional role for CGRP receptors in the vasodilation of rat pial arterioles. Hong KW, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H317–23

Adrenomedullin inhibits feeding in the rat by a mechanism involving calcitonin gene-related peptide receptors. Taylor GM, et al. **Endocrinology** 1996 Aug;137(8):3260–4

Structure-activity studies on position 14 of human alpha-calcitonin gene-related peptide. Li J, et al. **J Med Chem** 1997 Sep 12;40(19):3071–6

NK1 and CGRP receptor-mediated dilatation of the carotid arterial bed of the anaesthetized rabbit. Perren MJ, et al. **Neuropeptides** 1996 Apr;30(2):141–8

Evidence for a physiological role of central calcitonin gene-related peptide (CGRP) receptors in the control of food intake in rats. Lutz TA, et al. **Neurosci Lett** 1997 Jul 25;230(3):159–62

RECEPTORS, CALCITRIOL

Antiproliferative effects of the biologically active metabolite of vitamin D3 (1,25 [OH]2 D3) on head and neck squamous cell carcinoma cell lines. Kornfehl J, et al. **Eur Arch Otorhinolaryngol** 1996;253(6):341–4

[Vitamin D receptor] Wei S, et al. **Nippon Rinsho** 1997 Apr; 55 Suppl 2:512–5 (9 ref.) **(Jpn)**

ANALYSIS

An enzyme-linked immunoassay for the 1,25-dihydroxyvitamin D3 receptor protein. Uhland-Smith A, et al. **J Bone Miner Res** 1996 Dec;11(12):1921–5

Novel and sensitive detection systems for the vitamin D receptor—in situ-reverse transcriptase-polymerase chain reaction and immunogold cytochemistry. Mee AP, et al. **J Mol Endocrinol** 1996 Apr;16(2):183–95

Vitamin D receptor in endometrial carcinoma and the differentiation-inducing effect of 1,25-dihydroxyvitamin D3 on endometrial carcinoma cell lines. Yabushita H, et al. **J Obstet Gynaecol Res** 1996 Dec;22(6):529–39

Phylloid breast tumors and three steroid hormone receptors. Lang BA, et al. **Neoplasma** 1997;44(1):53–7

Abnormalities of the vitamin D receptor in uraemia. Kumar R. **Nephrol Dial Transplant** 1996;11 Suppl 3:6–10 (77 ref.)

Immunohistochemical detection of 1,25-dihydroxyvitamin D3 receptors (VDR) in human skin. A comparison of five antibodies. Reichrath J, et al. **Pathol Res Pract** 1996 Mar; 192(3):281–9

Transitional cell carcinoma express vitamin D receptors. Hermann GG, et al. **Scand J Urol Nephrol** 1997 Apr; 31(2):161–6

BIOSYNTHESIS

Functional analysis of vitamin D response elements in the parathyroid hormone gene and a comparison with the osteocalcin gene. Hawa NS, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):352–7

Cloning and characterization of the vitamin D receptor from Xenopus laevis. Li YC, et al. **Endocrinology** 1997 Jun; 138(6):2347–53

Expression of the vitamin D and the retinoid X receptors in Saccharomyces cerevisiae: alternative in vivo models for ligand-induced transactivation. Berghöfer-Hochheimer Y, et al. **J Cell Biochem** 1997 Aug 1;66(2):184–96

Requirements for induction of vitamin D-mediated gene regulation in normal human B lymphocytes. Morgan JW, et al. **J Immunol** 1996 Oct 1;157(7):2900–8

Vitamin D receptor expression is required for growth modulation by 1 alpha,25-dihydroxyvitamin D3 in the human prostatic carcinoma cell line ALVA-31. Hedlund TE, et al. **J Steroid Biochem Mol Biol** 1996 Jun; 58(3):277–88

CHEMISTRY

Conformational studies of human vitamin-D receptor by antipeptide antibodies, partial proteolytic digestion and ligand binding. Väisänen S, et al. **Eur J Biochem** 1997 Aug 15;248(1):156–62

Vitamin D receptor interactions with the murine osteopontin response element. Koszewski NJ, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):377–88

Distinct conformations of vitamin D receptor/retinoid X receptor-alpha heterodimers are specified by dinucleotide differences in the vitamin D-responsive elements of the osteocalcin and osteopontin genes. Staal A, et al. **Mol Endocrinol** 1996 Nov;10(11):1444–56

The high affinity ligand binding conformation of the nuclear 1,25-dihydroxyvitamin D3 receptor is functionally linked to the transactivation domain 2 (AF-2). Nayeri S, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4513–8

The vitamin D receptor—structure and transcriptional activation. Strugnell SA, et al. **Proc Soc Exp Biol Med** 1997 Jul;215(3):223–8 (56 ref.)

DRUG EFFECTS

A new analog of 1,25-(OH)2D3, 19-NOR-1,25-(OH)2D2, suppresses serum PTH and parathyroid gland growth in uremic rats without elevation of intestinal vitamin D receptor content. Takahashi F, et al. **Am J Kidney Dis** 1997 Jul;30(1):105–12

1 alpha, 25-dihydroxyvitamin D3 and all-trans-retinoic acid inhibit the growth of a lung cancer cell line. Higashimoto Y, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2653–9

Upregulation of vitamin D receptor levels by 1,25(OH)2 vitamin D3 in cultured human keratinocytes. Sølvsten H, et al. **Arch Dermatol Res** 1997 May;289(6):367–72

Consequences of vitamin D receptor regulation for the 1,25-dihydroxyvitamin D3-induced 24-hydroxylase activity in osteoblast-like cells: initiation of the C24-oxidation pathway. Staal A, et al. **Bone** 1997 Mar; 20(3):237–43

Prevention of preneoplastic mammary lesion development by a novel vitamin D analogue, 1alpha-hydroxyvitamin D5 [see comments] Mehta RG, et al. **J Natl Cancer Inst** 1997 Feb 5;89(3):212–8. Comment in: J Natl Cancer Inst 1997 Feb 5;89(3):182–5.

1,25-dihydroxyvitamin D3 and 22-oxacalcitriol prevent the decrease in vitamin D receptor content in the parathyroid glands of uremic rats. Denda M, et al. **Kidney Int** 1996 Jul;50(1):34–9

Vitamin D receptors from patients with resistance to 1,25-dihydroxyvitamin D3: point mutations confer reduced transactivation in response to ligand and impaired interaction with the retinoid X receptor heterodimeric partner. Whitfield GK, et al. **Mol Endocrinol** 1996 Dec; 10(12):1617–31

GENETICS

Relations between calcium intake, calcitriol, polymorphisms of the vitamin D receptor gene, and calcium absorption in premenopausal women. Wishart JM, et al. **Am J Clin Nutr** 1997 Mar;65(3):798–802

RT-PCR microlocalization of mRNAs for calbindin D28k and vitamin D receptor in the murine nephron. Liu L, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):F677–81

Cloning and origin of the two forms of chicken vitamin D receptor. Lu Z, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):99–106

Association of early osteoarthritis of the knee with a Taq I polymorphism of the vitamin D receptor gene. Keen RW, et al. **Arthritis Rheum** 1997 Aug;40(8):1444–9

Vitamin D receptor alleles b, a, and T: risk factors for sporadic primary hyperparathyroidism (HPT) but not HPT of uremia or MEN 1. Carling T, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):329–32

Vitamin D receptor: no evidence for allele-specific mRNA stability in cells which are heterozygous for the Taq I restriction enzyme polymorphism. Verbeek W, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):77–80

Bone mineral density and bone markers in relation to vitamin D receptor gene polymorphisms in Chinese men and women. Tsai KS, et al. **Bone** 1996 Nov;19(5):513–8

Vitamin D receptor polymorphism and treatment of psoriasis with calcipotriol [letter] Kontula K, et al. **Br J Dermatol** 1997 Jun;136(6):977–8

Vitamin D increases expression of the tyrosine hydroxylase gene in adrenal medullary cells. Puchacz E, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):193–6

Polymorphisms of the vitamin D receptor, infant growth, and adult bone mass. Keen RW, et al. **Calcif Tissue Int** 1997 Mar;60(3):233–5

Effect of vitamin D receptor genotypes on calcium absorption, duodenal vitamin D receptor concentration, and serum 1,25 dihydroxyvitamin D levels in normal women. Kinyamu HK, et al. **Calcif Tissue Int** 1997 Jun; 60(6):491–5

Vitamin D receptor genotype is not associated with bone mineral density in three ethnic/regional groups. Spotila LD, et al. **Calcif Tissue Int** 1996 Oct;59(4):235–7

Correlation between vitamin D receptor genotypes and bone mineral density in Japanese patients with osteoporosis. Tamai M, et al. **Calcif Tissue Int** 1997 Mar;60(3):229–32

Common polymorphism of the vitamin D receptor gene is associated with variation of peak bone mass in young finns.

Viitanen A, et al. **Calcif Tissue Int** 1996 Oct;59(4):231–4

Strength of linkage disequilibrium between two vitamin D receptor markers in five ethnic groups: implications for association studies. Ingles SA, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Feb;6(2):93–8

Vitamin D receptor gene polymorphism in men and its effect on bone density and calcium absorption. Francis RM, et al. **Clin Endocrinol (Oxf)** 1997 Jan;46(1):83–6

Vitamin D receptor gene variants: implications for therapy. Eisman JA. **Curr Opin Genet Dev** 1996 Jun;6(3):361–5 (53 ref.)

In situ investigation of vitamin D receptor, alkaline phosphatase, and osteocalcin gene expression in oro–facial mineralized tissues. Davideau JL, et al. **Endocrinology** 1996 Aug;137(8):3577–85

Vitamin D receptor genotypes are related to bone size and bone density in men. Need AG, et al. **Eur J Clin Invest** 1996 Sep;26(9):793–6

Fracture rate, pre– and postmenopausal bone mass and early and late postmenopausal bone loss are not associated with vitamin D receptor genotype in a high–endemic area of osteoporosis. Berg JP, et al. **Eur J Endocrinol** 1996 Jul; 135(1):96–100

Of bone and genes: vitamin D receptor polymorphism and primary hyperparathyroidism. Hofbauer LC, et al. **Eur J Endocrinol** 1996 Jun;134(6):685–6

Vitamin D receptor genotypes and changes of bone density in physically active German women with high calcium intake. Rauch F, et al. **Exp Clin Endocrinol Diabetes** 1997; 105(2):103–8

Identification of a novel vitamin D response element from the rat genome. Sakoda K, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):89–94

A vitamin D receptor gene polymorphism in the translation initiation codon: effect on protein activity and relation to bone mineral density in Japanese women. Arai H, et al. **J Bone Miner Res** 1997 Jun;12(6):915–21

Are vitamin D receptor polymorphisms associated with bone mineral density? A meta–analysis [see comments] Cooper GS, et al. **J Bone Miner Res** 1996 Dec;11(12):1841–9. Comment in: J Bone Miner Res 1996 Dec;11(12):1835–40.

Vitamin D receptor gene polymorphisms are not related to bone turnover, rate of bone loss, and bone mass in postmenopausal women: the OFELY Study. Garnero P, et al. **J Bone Miner Res** 1996 Jun;11(6):827–34

The presence of a polymorphism at the translation initiation site of the vitamin D receptor gene is associated with low bone mineral density in postmenopausal Mexican–American women [see comments] Gross C, et al. **J Bone Miner Res** 1996 Dec;11(12):1850–5. Comment in: J Bone Miner Res 1996 Dec;11(12):1835–40.

The vitamin D receptor start codon polymorphism (FokI) and bone mineral density in premenopausal American black and white women. Harris SS, et al. **J Bone Miner Res** 1997 Jul;12(7):1043–8

The BsmI vitamin D receptor restriction fragment length polymorphism (bb) influences the effect of calcium intake on bone mineral density. Kiel DP, et al. **J Bone Miner Res** 1997 Jul;12(7):1049–57

Vitamin D receptor polymorphisms, bone mineral density, and bone metabolism in postmenopausal Mexican–American women. McClure L, et al. **J Bone Miner Res** 1997 Feb;12(2):234–40

Quantification of vitamin D receptor mRNA by competitive polymerase chain reaction in PBMC: lack of correspondence with common allelic variants. Mocharla H, et al. **J Bone Miner Res** 1997 May;12(5):726–33

Direct haplotyping at the vitamin D receptor locus improves genetic resolution [letter; comment] Peltekova VD, et al. **J Bone Miner Res** 1997 Mar;12(3):494–5. Comment on: J Bone Miner Res 1996 Jul;11(7):1003–9.

Determinants of premenopausal bone mineral density: the interplay of genetic and lifestyle factors. Salamone LM, et al. **J Bone Miner Res** 1996 Oct;11(10):1557–65

Vitamin D receptor alleles, bone mineral density and turnover in premenopausal Japanese women [see comments] Tokita A, et al. **J Bone Miner Res** 1996 Jul; 11(7):1003–9. Comment in: J Bone Miner Res 1997 Mar;12(3):494–5.

A large–scale population–based study of the association of vitamin D receptor gene polymorphisms with bone mineral density. Uitterlinden AG, et al. **J Bone Miner Res** 1996 Sep;11(9):1241–8

Influence of the vitamin D receptor gene alleles on bone mineral density in postmenopausal and osteoporotic women. Vandevyver C, et al. **J Bone Miner Res** 1997 Feb; 12(2):241–7

Expression of the vitamin D and the retinoid X receptors in Saccharomyces cerevisiae: alternative in vivo models for ligand–induced transactivation. Berghöfer–Hochheimer Y, et al. **J Cell Biochem** 1997 Aug 1;66(2):184–96

High activity, soluble, bacterially expressed human vitamin D receptor and its ligand binding domain. Mottershead DG, et al. **J Cell Biochem** 1996 Jun 1;61(3):325–37

High–affinity nuclear receptor binding of 20–epi analogues of 1,25–dihydroxyvitamin D3 correlates well with gene activation. Nayeri S, et al. **J Cell Biochem** 1996 Sep 1; 62(3):325–33

Vitamin D receptor polymorphisms correlate to parathyroid cell function in primary hyperparathyroidism. Carling T, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1772–5

Mutations in the vitamin D receptor gene in three kindreds associated with hereditary vitamin D resistant rickets. Cockerill FJ, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):3156–60

Lack of relationship between vitamin D receptor genotype and forearm bone gain in healthy children, adolescents, and young adults. Gunnes M, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):851–5

Association between vitamin D receptor gene polymorphism and sex–dependent growth during the first two years of life. Suarez F, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):2966–70

Vitamin D receptor gene polymorphisms are associated with osteoporosis in Japanese women [letter; comment] Yanagi H, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4179–81 . Comment on: J Clin Endocrinol Metab 1995 Dec;80(12):3677–81.

Hereditary vitamin D resistant rickets caused by a novel mutation in the vitamin D receptor that results in decreased affinity for hormone and cellular hyporesponsiveness. Malloy PJ, et al. **J Clin Invest** 1997 Jan 15;99(2):297–304

Vitamin D receptor genotype is associated with radiographic osteoarthritis at the knee. Uitterlinden AG, et al. **J Clin Invest** 1997 Jul 15;100(2):259–63

Nucleotide sequence of the bovine vitamin D3 receptor. Neibergs HL, et al. **J Dairy Sci** 1996 Aug;79(8):1313–5

Novel and sensitive detection systems for the vitamin D receptor––in situ–reverse transcriptase–polymerase chain reaction and immunogold cytochemistry. Mee AP, et al. **J Mol Endocrinol** 1996 Apr;16(2):183–95

Androgen and vitamin D receptor gene polymorphisms: the long and short of prostate cancer risk [editorial; comment] Feldman D. **J Natl Cancer Inst** 1997 Jan 15;89(2):109–11 . Comment on: J Natl Cancer Inst 1997 Jan 15;89(2):166–70.

Association of prostate cancer risk with genetic polymorphisms in vitamin D receptor and androgen receptor [see comments] Ingles SA, et al. **J Natl Cancer Inst** 1997 Jan 15;89(2):166–70. Comment in: J Natl Cancer Inst 1997 Jan 15;89(2):109–11.

Vitamin D receptor gene expression in human pituitary gland. Pérez–Fernandez R, et al. **Life Sci** 1997;60(1):35–42

Genotypes of the vitamin–D–receptor gene and bone mineral density in Caucasoid postmenopausal females [published erratum appears in Maturitas 1996 Aug;25(1):84] Boschitsch E, et al. **Maturitas** 1996 May;24(1–2):91–6

Vitamin D receptor alleles do not correlate with bone mineral density in premenopausal Caucasian women from the southeastern United States. Alahari KD, et al. **Metabolism** 1997 Feb;46(2):224–6

Integrity of the 1,25–dihydroxyvitamin D3 receptor in bone, lung, and other cancers. Miller CW, et al. **Mol Carcinog** 1997 Aug;19(4):254–7

Vitamin D receptor content and transcriptional activity do not fully predict antiproliferative effects of vitamin D in human prostate cancer cell lines. Zhuang SH, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):83–90

Human vitamin D receptor–dependent transactivation in Saccharomyces cerevisiae requires retinoid X receptor. Jin CH, et al. **Mol Endocrinol** 1996 Feb;10(2):196–205

Structural organization of the human vitamin D receptor chromosomal gene and its promoter. Miyamoto K, et al. **Mol Endocrinol** 1997 Jul;11(8):1165–79

Vitamin D receptors from patients with resistance to 1,25–dihydroxyvitamin D3: point mutations confer reduced transactivation in response to ligand and impaired interaction with the retinoid X receptor heterodimeric partner. Whitfield GK, et al. **Mol Endocrinol** 1996 Dec; 10(12):1617–31

Osteopenia in 37 members of seven families: analysis based on a model of dominant inheritance. Spotila LD, et al. **Mol Med** 1996 May;2(3):313–24

Vitamin D–receptor genotypes and bone density [editorial; comment] Riggs BL. **N Engl J Med** 1997 Jul 10; 337(2):125–6. Comment on: N Engl J Med 1997 Jul 10;337(2):77–82.

Vitamin D–receptor gene polymorphisms and bone density in prepubertal American girls of Mexican descent [see comments] Sainz J, et al. **N Engl J Med** 1997 Jul 10; 337(2):77–82. Comment in: N Engl J Med 1997 Jul 10;337(2):125–6.

The BsmI vitamin D–receptor polymorphism and secondary hyperparathyroidism [letter] Schmidt S, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1771–2

Polymorphisms of the vitamin D receptor gene do not predict quantitative ultrasound of the calcaneus or hip axis length. Arden NK, et al. **Osteoporos Int** 1996;6(4):334–7

Cloning and characterization of the mouse vitamin D receptor promoter. Jehan F, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10138–43

Targeted ablation of the vitamin D receptor: an animal model of vitamin D–dependent rickets type II with alopecia. Li YC, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9831–5

The vitamin D receptor––structure and transcriptional activation. Strugnell SA, et al. **Proc Soc Exp Biol Med** 1997 Jul;215(3):223–8 (56 ref.)

Genetic markers of bone metabolism and bone disease. Ralston SH. **Scand J Clin Lab Invest Suppl** 1997;227:114–21 (46 ref.)

Vitamin D receptor gene polymorphisms and osteoporosis. van Leeuwen JP, et al. **Steroids** 1996 Apr;61(4):154–6 (28 ref.)

[Vitamin D receptor genotypes in patients with primary and secondary hyperparathyroidism] Kaun M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:773–5 (Eng. Abstr.) **(Ger)**

[The determination of BB genotype of vitamin D receptors identifies patients at risk for osteoporosis] Pacini S, et al. **Radiol Med (Torino)** 1996 Nov;92(5):520–4 (Eng. Abstr.) **(Ita)**

[Effect of vitamin D receptor gene polymorphism on vitamin D therapy for postmenopausal bone loss] Owada M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Sep; 48(9):799–805 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Immunohistochemical detection and distribution of the 1,25–dihydroxyvitamin D3 receptor in rat reproductive tissues. Johnson JA, et al. **Histochem Cell Biol** 1996 Jan; 105(1):7–15

METABOLISM

Evidence for a vitamin D paracrine system regulating maturation of developing rat lung epithelium. Nguyen TM, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):L392–9

Analysis of binding of the 1,25–dihydroxyvitamin D3 receptor to positive and negative vitamin D response elements. Darwish HM, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):223–34

Salt concentration determines 1,25–dihydroxyvitamin D3 dependency of vitamin D receptor–retinoid X receptor––vitamin D–responsive element complex formation. Kimmel–Jehan C, et al. **Arch Biochem Biophys** 1997 May 1;341(1):75–80

Upregulation of vitamin D receptor levels by 1,25(OH)2 vitamin D3 in cultured human keratinocytes. Sølvsten H, et al. **Arch Dermatol Res** 1997 May;289(6):367–72

ERC–55, a binding protein for the papilloma virus E6 oncoprotein, specifically interacts with vitamin D receptor among nuclear receptors. Imai T, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):765–9

A 65–kilodalton nuclear protein binds to the human vitamin D receptor: a bacterial–expressed histidine–tagged receptor study. Nakajima S, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):806–9

Zinc binding properties of the DNA binding domain of the 1,25–dihydroxyvitamin D3 receptor. Craig TA, et al. **Biochemistry** 1997 Aug 26;36(34):10482–91

Growth plate chondrocyte vitamin D receptor number and affinity are reduced in avian tibial dyschondroplastic lesions. Berry JL, et al. **Bone** 1996 Aug;19(2):197–203

1,25–Dihydroxyvitamin D(3) receptors in developing dorsal root ganglia of fetal rats. Johnson JA, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):120–4

Immunochemical identification of the 1,25–dihydroxyvitamin D3 receptor protein in human heart. O'Connell TD, et al. **Cell Biol Int** 1996 Sep;20(9):621–4

Vitamin D3– and retinoic acid–induced monocytic differentiation: interactions between the endogenous vitamin D3 receptor, retinoic acid receptors, and retinoid X receptors in U–937 cells. Botling J, et al. **Cell Growth Differ** 1996 Sep;7(9):1239–49

1.25–Dihydroxyvitamin D3 receptor is partly colocalized with oxytocin immunoreactivity in neurons of the male rat hypothalamus. Prüfer K, et al. **Cell Mol Biol (Noisy–le–grand)** 1997 Jun;43(4):543–8

Reduced bone resorption in toothless (osteopetrotic) rats––an abnormality of osteoblasts related to their inability to activate osteoclast activity in vitro. Hermey DC, et al. **Connect Tissue Res** 1996;35(1–4):273–8

Association of 1 alpha,25–dihydroxyvitamin D3–occupied vitamin D receptors with cellular membrane acceptance sites. Kim YS, et al. **Endocrinology** 1996 Sep;137(9):3649–58

Vitamin D receptor genotypes and changes of bone density in physically active German women with high calcium intake. Rauch F, et al. **Exp Clin Endocrinol Diabetes** 1997; 105(2):103–8

Human TAF(II)135 potentiates transcriptional activation by the AF–2s of the retinoic acid, vitamin D3, and thyroid hormone receptors in mammalian cells. Mengus G, et al. **Genes Dev** 1997 Jun 1;11(11):1381–95

Vitamin D receptor expression in chicken muscle tissue and cultured myoblasts. Zanello SB, et al. **Horm Metab Res** 1997 May;29(5):231–6

Secondary hyperparathyroidism and vitamin D receptor binding to vitamin D response elements in rats with incipient renal failure. Sawaya BP, et al. **J Am Soc Nephrol** 1997 Feb;8(2):271–8

Subcellular distribution of normal and mutant vitamin D receptors in living cells. Studies with a novel fluorescent ligand. Barsony J, et al. **J Biol Chem** 1997 Feb 28; 272(9):5774–82

Mutations in the 1,25–dihydroxyvitamin D3 receptor identifying C–terminal amino acids required for transcriptional activation that are functionally dissociated from hormone binding, heterodimeric DNA binding, and interaction with basal transcription factor IIB, in vitro. Jurutka PW, et al. **J Biol Chem** 1997 Jun 6;272(23):14592–9

Differential interaction of 1alpha,25–dihydroxyvitamin D3 analogues and their 20–epi homologues with the vitamin D receptor. Liu YY, et al. **J Biol Chem** 1997 Feb 7; 272(6):3336–45

Cloning of the human phospholipase C–gamma1 promoter and identification of a DR6–type vitamin D–responsive

element. Xie Z, et al. **J Biol Chem** 1997 Mar 7; 272(10):6573–7

A vitamin D receptor gene polymorphism in the translation initiation codon: effect on protein activity and relation to bone mineral density in Japanese women. Arai H, et al. **J Bone Miner Res** 1997 Jun;12(6):915–21

Ontogeny of the 1,25–dihydroxyvitamin D3 receptor in fetal rat bone. Johnson JA, et al. **J Bone Miner Res** 1996 Jan; 11(1):56–61

Association between intestinal vitamin D receptor, calcium absorption, and serum 1,25 dihydroxyvitamin D in normal young and elderly women. Kinyamu HK, et al. **J Bone Miner Res** 1997 Jun;12(6):922–8

Vitamin D receptor polymorphisms, bone mineral density, and bone metabolism in postmenopausal Mexican–American women. McClure L, et al. **J Bone Miner Res** 1997 Feb;12(2):234–40

High activity, soluble, bacterially expressed human vitamin D receptor and its ligand binding domain. Mottershead DG, et al. **J Cell Biochem** 1996 Jun 1;61(3):325–37

A 20–epi side chain restores growth–regulatory and transcriptional activities of an A ring–modified hybrid analog of 1 alpha, 25–dihydroxyvitamin D3 without increasing its affinity to the vitamin D receptor. Peleg S, et al. **J Cell Biochem** 1996 Nov 1;63(2):149–61

Identification of a vitamin D3 response element in the fibronectin gene that is bound by a vitamin D3 receptor homodimer [published erratum appears in J Cell Biochem 1996 Jul;62(1):142] Polly P, et al. **J Cell Biochem** 1996 Mar 1;60(3):322–33

A–ring analogues of 1, 25–(OH)2D3 with low affinity for the vitamin D receptor modulate chondrocytes via membrane effects that are dependent on cell maturation. Greising DM, et al. **J Cell Physiol** 1997 Jun;171(3):357–67

Hereditary vitamin D resistant rickets caused by a novel mutation in the vitamin D receptor that results in decreased affinity for hormone and cellular hyporesponsiveness. Malloy PJ, et al. **J Clin Invest** 1997 Jan 15;99(2):297–304

Thyroid hormone, vitamin D and retinoid receptor expression and signalling in primary cultures of rat osteoblastic and immortalised osteosarcoma cells. Bland R, et al. **J Endocrinol** 1997 Jul;154(1):63–74

Quantification of vitamin D receptor mRNA in tissue sections demonstrates the relative limitations of in situ–reverse transcriptase–polymerase chain reaction. Mee AP, et al. **J Pathol** 1997 May;182(1):22–8

Vitamin D receptor interactions with the murine osteopontin response element. Koszewski NJ, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):377–88

In vitro binding of vitamin D receptor occupied by 24R,25–dihydroxyvitamin D3 to vitamin D responsive element of human osteocalcin gene. Uchida M, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3–4):181–7

Vitamin D receptor and growth inhibition by 1,25–dihydroxyvitamin D3 in human malignant melanoma cell lines. Evans SR, et al. **J Surg Res** 1996 Feb 15; 61(1):127–33

Parathyroid hormone prevents 1,25 (OH)2D3 induced down–regulation of the vitamin D receptor in growth plate chondrocytes in vitro. Klaus G, et al. **Kidney Int** 1997 Jul; 52(1):45–51

Effect of glucose on the function of the calcitriol receptor and vitamin D metabolism. Patel SR, et al. **Kidney Int** 1997 Jul;52(1):79–86

Effect of glyoxylate on the function of the calcitriol receptor and vitamin D metabolism. Patel SR, et al. **Kidney Int** 1997 Jul;52(1):39–44

Effect of Schiff base formation on the function of the calcitriol receptor. Patel SR, et al. **Kidney Int** 1996 Nov; 50(5):1539–45

Retinoid X receptor:vitamin D3 receptor heterodimers promote stable preinitiation complex formation and direct 1,25–dihydroxyvitamin D3–dependent cell–free transcription. Lemon BD, et al. **Mol Cell Biol** 1997 Apr; 17(4):1923–37

The noncalcemic vitamin D analogues EB1089 and 22–oxacalcitriol interact with the vitamin D receptor and suppress parathyroid hormone–related peptide gene expression. Falzon M. **Mol Cell Endocrinol** 1997 Mar 14; 127(1):99–108

Vitamin D receptor content and transcriptional activity do not fully predict antiproliferative effects of vitamin D in human prostate cancer cell lines. Zhuang SH, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):83–90

Characterization of a response element in the 5'–flanking region of the avian (chicken) PTH gene that mediates negative regulation of gene transcription by 1,25–dihydroxyvitamin D3 and binds the vitamin D3 receptor. Liu SM, et al. **Mol Endocrinol** 1996 Feb; 10(2):206–15

Vitamin D receptor binding to the negative human parathyroid hormone vitamin D response element does not require the retinoid x receptor. Mackey SL, et al. **Mol Endocrinol** 1996 Mar;10(3):298–305

The N–terminal domain of transcription factor IIB is required for direct interaction with the vitamin D receptor and participates in vitamin D–mediated transcription. Masuyama H, et al. **Mol Endocrinol** 1997 Feb;11(2):218–28

Evidence for ligand–dependent intramolecular folding of the AF–2 domain in vitamin D receptor–activated transcription and coactivator interaction. Masuyama H, et al. **Mol Endocrinol** 1997 Sep;11(10):1507–17

Analysis of vitamin D analog–induced heterodimerization of vitamin D receptor with retinoid X receptor using the yeast two–hybrid system. Zhao XY, et al. **Mol Endocrinol** 1997 Mar;11(3):366–78

More on hyperparathyroidism and the vitamin D receptor [letter; comment] Tsukamoto Y, et al. **Nat Med** 1996 Nov; 2(11):1162. Comment on: Nat Med 1996 Aug;2(8):834.

Immunocytochemical detection of a reduction in 1,25 dihyroxyvitamin D3 receptor expression in uraemic parathyroid tissue. Fletcher S, et al. **Nephrol Dial Transplant** 1997 Jan;12(1):93–6

Developmental expression of calcitriol receptors, 9–kilodalton calcium–binding protein, and calcidiol 24–hydroxylase in human intestine. Delvin EE, et al. **Pediatr Res** 1996 Nov;40(5):664–70

Dietary 1,25–dihydroxycholecalciferol has variable effects on the incidences of leg abnormalities, plasma vitamin D metabolites, and vitamin D receptors in chickens divergently selected for tibial dyschondroplasia. Mitchell RD, et al. **Poult Sci** 1997 Feb;76(2):338–45

YY1 regulates vitamin D receptor/retinoid X receptor mediated transactivation of the vitamin D responsive osteocalcin gene. Guo B, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):121–6

PHYSIOLOGY

1,25–dihydroxyvitamin D3 induction of nerve growth factor in L929 mouse fibroblasts: effect of vitamin D receptor regulation and potency of vitamin D3 analogs. Musiol IM, et al. **Endocrinology** 1997 Jan;138(1):12–8

Functional assessment of two vitamin D–responsive elements in the rat 25–hydroxyvitamin D3 24–hydroxylase gene. Ohyama Y, et al. **J Biol Chem** 1996 Nov 29;271(48):30381–5

Transcriptional activation and dimerization functions in the human vitamin D receptor. Jin CH, et al. **Mol Endocrinol** 1996 Aug;10(8):945–57

Mice lacking the vitamin D receptor exhibit impaired bone formation, uterine hypoplasia and growth retardation after weaning. Yoshizawa T, et al. **Nat Genet** 1997 Aug; 16(4):391–6

ULTRASTRUCTURE

Conformational change and enhanced stabilization of the vitamin D receptor by the 1,25–dihydroxyvitamin D3 analog KH1060. van den Bemd GC, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10685–90

RECEPTORS, CALCIUM CHANNEL BLOCKER see **CALCIUM CHANNELS**

RECEPTORS, CATECHOLAMINE

The 8th International Catecholamine Symposium. Pacific Grove, California, October 13–18, 1996, Abstracts. **Exp Neurol** 1997 Jun;145(2 Pt 2):S1–173

DRUG EFFECTS

Effect of corticosterone on serotonin and catecholamine receptors and uptake sites in rat frontal cortex. Crayton JW, et al. **Brain Res** 1996 Jul 29;728(2):260–2

METABOLISM

Modulation of brain catecholamine absorbing proteins by dopaminergic agents. Modi PI, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):213–20

The energetics of ligand binding at catecholamine receptors. Strange PG. **Trends Pharmacol Sci** 1996 Jul;17(7):238–44 (51 ref.)

7TM receptors: 'locks' and 'keys'? [letter; comment] Strange PG. **Trends Pharmacol Sci** 1996 Oct;17(10):346–7. Comment on: Trends Pharmacol Sci 1996 Jun;17(6):213–6.

RADIATION EFFECTS

[The catecholaminergic system in the hypothalamus in the chronic gamma irradiation of rats] Slozhenikina LV, et al. **Radiats Biol Radioecol** 1997 Jan–Feb;37(1):25–9 (Eng. Abstr.) **(Rus)**

RECEPTORS, CCK see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, CD4 see **ANTIGENS, CD4**

RECEPTORS, CELL–ADHESION PROTEIN see **INTEGRINS**

RECEPTORS, CELL SURFACE

Tools for the study of receptor immunity. Hoebeke J. **Blood Press Suppl** 1996;3:56–8 (18 ref.)

G protein coupled R7G receptors. Strosberg AD. **Cancer Surv** 1996;27:65–83 (44 ref.)

Scavenger receptors in innate immunity. Pearson AM. **Curr Opin Immunol** 1996 Feb;8(1):20–8 (92 ref.)

Mitogenic signaling via G protein–coupled receptors. van Biesen T, et al. **Endocr Rev** 1996 Dec;17(6):698–714 (272 ref.)

Expression cloning of type 2 angiotension II receptor reveals a unique class of seven–transmembrane receptors. Curnow KM. **J Endocrinol Invest** 1995 Jul–Aug;18(7):566–70

Proceedings of the 6th Swiss Workshop of Methodology in Receptor Research. Verbier, April 10–14, 1994. **J Recept Signal Transduct Res** 1995 Jan–Mar;15(1–4):1–713

1997 Receptor and ion channel nomenclature supplement. **Trends Pharmacol Sci** 1997;Suppl:1–84

1996 Receptor and ion channel nomenclature supplement. **Trends Pharmacol Sci** 1996;Suppl:1–81

[Signalling by Notch family receptors] Schweisguth F, et al. **C R Seances Soc Biol Fil** 1997;191(1):55–75 (71 ref.) (Eng. Abstr.) **(Fre)**

[Physiological roles of Fas, an apoptosis inductor cell surface receptor molecule] Yonehara N. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):581–2 (0 ref.) **(Jpn)**

[Receptor diseases and their evaluation methods] Miyachi Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:435–43 (7 ref.) **(Jpn)**

[Diphtheria toxin receptor complex] Mekada E, et al. **Nippon Saikingaku Zasshi** 1996 Aug;51(3):853–62 (15 ref.) **(Jpn)**

AGONISTS

Activation of nucleotide receptors inhibits high–threshold calcium currents in NG108–15 neuronal hybrid cells. Filippov AK, et al. **Eur J Neurosci** 1996 Jun;8(6):1149–55

Efficacy. I: A new method for estimating relative efficacy of full agonists via a newly defined efficacy related parameter. Venter DP. **Eur J Pharmacol** 1997 Feb 12; 320(2–3):223–31

Efficacy. II. Estimation of a newly defined efficacy related parameter. Venter DP. **Eur J Pharmacol** 1997 Feb 12; 320(2–3):233–40

Modulation of the receptor for urokinase–type plasminogen activator in macrophage–like U937 cells by inflammatory mediators. Yoshida E, et al. **Inflammation** 1996 Jun; 20(3):319–26

Rational design of receptor partial agonists and possible mechanisms of receptor partial activation: a theory. Zhu BT. **J Theor Biol** 1996 Aug 7;181(3):273–91

ANALYSIS

Urokinase type plasminogen activator receptor is a novel prognostic factor in breast cancer. Kim SJ, et al. **Anticancer Res** 1997 Mar–Apr;17(2B):1373–8

Cytokine expression in otitis media with effusion. Tumor necrosis factor soluble receptor. Maxwell K, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):984–8

A mutant cell line resistant to Vibrio parahaemolyticus thermostable direct hemolysin (TDH): its potential in identification of putative receptor for TDH. Tang G, et al. **Biochim Biophys Acta** 1997 May 24;1360(3):277–82

Removing Monolayer cells from culture dishes by incubation with EDTA in studies of cell surface receptors. Hu X, et al. **Biotechniques** 1996 Nov;21(5):784, 786

Localization of the Rev–ErbA orphan receptors in the brain. Kainu T, et al. **Brain Res** 1996 Dec 16;743(1–2):315–9

Influence of the extraction procedure on plasminogen activator inhibitor–2 (PAI–2) and urokinase receptor (uPAR) assays in breast cancer tissues. Bouchet–Bernet C, et al. **Breast Cancer Res Treat** 1996;41(2):141–6

Quantification of uPA receptor expression in human breast cancer cell lines by cRT–PCR. Sliutz G, et al. **Breast Cancer Res Treat** 1996;40(3):257–63

The significance of urokinase– type plasminogen activator, its inhibitors, and its receptor in ascites of patients with epithelial ovarian cancer. Chambers SK, et al. **Cancer** 1995 Apr 1;75(7):1627–33

Differential expression of apoptosis receptors on diffuse and intestinal type stomach carcinoma. Vollmers HP, et al. **Cancer** 1997 Feb 1;79(3):433–40

Surface localization of the sea urchin egg receptor for sperm. Giusti AF, et al. **Dev Biol** 1997 Apr 1;184(1):10–24

The prothoracicotropic hormone bombyxin has specific receptors on insect ovarian cells. Fullbright G, et al. **Eur J Biochem** 1997 May 1;245(3):774–80

Compartmental analysis of asialoglycoprotein receptor scintigraphy for quantitative measurement of liver function: a multicentre study. Ha–Kawa SK, et al. **Eur J Nucl Med** 1997 Feb;24(2):130–7

A novel putative G–protein–coupled receptor expressed in lung, heart and lymphoid tissue. Kvingedal AM, et al. **FEBS Lett** 1997 Apr 21;407(1):59–62

Autoradiographical and immunohistochemical analysis of receptor localization in the central nervous system. Chabot JG, et al. **Histochem J** 1996 Nov;28(11):729–45 (110 ref.)

Localization and analysis of receptors [editorial] Wharton J. **Histochem J** 1996 Nov;28(11):727–8

Expression and serologic activity of a soluble recombinant Plasmodium vivax Duffy binding protein. Fraser T, et al. **Infect Immun** 1997 Jul;65(7):2772–7

Characterization of ficolins as novel elastin–binding proteins and molecular cloning of human ficolin–1. Harumiya S, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):745–51

The difference of means of two indirect unpaired groups in receptor autoradiography. Nishimura Y, et al. **J Biopharm Stat** 1997 Jul;7(3):441–52

The localisation and characterisation of insulin–like growth factor–I receptors and the investigation of melatonin receptors on the hair follicles of seasonal and non–seasonal fibre–producing goats. Dicks P, et al. **J Endocrinol** 1996 Oct;151(1):55–63

Identification of a novel inducible cell-surface ligand of CD5 on activated lymphocytes. Biancone L, et al. **J Exp Med** 1996 Sep 1;184(3):811–9

Detection of the receptor for the human urokinase-type plasminogen activator using fluoresceinated uPA. Ciccocioppo R, et al. **J Histochem Cytochem** 1997 Sep; 45(9):1307–13

Monoclonal antibodies against the human mannose receptor as a specific marker in flow cytometry and immunohistochemistry for macrophages. Noorman F, et al. **J Leukoc Biol** 1997 Jan;61(1):63–72

Transcobalamin II receptor imaging via radiolabeled diethylene-triaminepentaacetate cobalamin analogs. Collins DA, et al. **J Nucl Med** 1997 May;38(5):717–23

Melatonin receptors in red deer fetuses (Cervus elaphus). Williams LM, et al. **J Reprod Fertil** 1997 May;110(1):145–51

Stromal expression of MMP-9 and urokinase receptor is inversely associated with liver metastasis and with infiltrating growth in human colorectal cancer: a novel approach from immune/inflammatory aspect. Takeha S, et al. **Jpn J Cancer Res** 1997 Jan;88(1):72–81

The G alpha protein GL2 alpha improves the ability to detect the subthreshold expressions of receptors linked to phospholipase C in Xenopus oocytes. Yamashita S, et al. **Jpn J Physiol** 1997 Feb;47(1):67–72

Different expression of the plasminogen activation system in renal thrombotic microangiopathy and the normal human kidney. Xu Y, et al. **Kidney Int** 1996 Dec; 50(6):2011–9

Endocrine characterization of primary mediastinal lymphoma. Romaguera JE, et al. **Leuk Lymphoma** 1996 Nov;23(5–6):613–5

Levels of plasminogen activator inhibitor type 1 and urokinase plasminogen activator receptor in non-small cell lung cancer as measured by quantitative ELISA and semiquantitative immunohistochemistry. Pappot H, et al. **Lung Cancer** 1997 Jul;17(2–3):197–209

Immunocytochemical methods for investigating receptor localization. Fonseca MI, et al. **Methods Mol Biol** 1997; 83:91–106 (16 ref.)

Analysis of data from "cold saturation" radioligand binding experiments. Jeffries WB, et al. **Methods Mol Biol** 1997; 73:331–42

In situ hybridization. Mak JC, et al. **Methods Mol Biol** 1997; 83:81–9 (17 ref.)

Radiolabeled peptides and other ligands for receptors overexpressed in tumor cells for imaging neoplasms. McAfee JG, et al. **Nucl Med Biol** 1996 Aug;23(6):673–6 (36 ref.)

Expression of p53 and bcl-2 in correlation to clinicopathological parameters, hormone receptor status and DNA ploidy in breast cancers. Friedrich K, et al. **Pathol Res Pract** 1995 Nov;191(11):1114–21

Male breast cancer: a retrospective study with immunohistochemical analysis of hormone receptor expression. Tan PH, et al. **Pathology** 1997 Feb;29(1):2–6

Improved receptor analysis in PET using a priori information from in vitro binding assays. Litton JE, et al. **Phys Med Biol** 1997 Aug;42(8):1653–60

Mesotocin binding to receptors in hen kidney plasma membranes. Takahashi T, et al. **Poult Sci** 1996 Jul; 75(7):910–4

Lectin-like receptor for alpha 1-acid glycoprotein in the epithelium of the rat prostate gland and seminal vesicles. Andersen UO, et al. **Prostate** 1996 Dec;29(6):356–61

Can receptors be imaged with MRI agents? Nunn AD, et al. **Q J Nucl Med** 1997 Jun;41(2):155–62 (33 ref.)

Identification of vitellogenin receptors in the ovary of a teleost fish, the Mediterranean sea bass (Dicentrarchus labrax). Mañanós EL, et al. **Reprod Nutr Dev** 1997; 37(1):51–61

Significance of the expression of hormone receptors and of p53 protein in breast carcinomas. Roşianu A, et al. **Rom J Morphol Embryol** 1996 Jan–Jun;42(1–2):63–71

Fluorescent ligands for the study of receptors. McGrath JC, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):393–9 (42 ref.)

[Importance of determination of proliferation markers and hormone receptors in breast carcinoma] Skálová A, et al. **Cas Lek Cesk** 1997 Jul 30;136(15):473–8 (Eng. Abstr.) **(Cze)**

[Development of a new method to detect bacterial receptors by using TLC blotting and its application to the causative agents of oral infections] Isobe T, et al. **Kokubyo Gakkai Zasshi** 1997 Mar;64(1):158 **(Jpn)**

[Subpopulations of peripheral blood neutrophils and lymphocytes in children with immune neutropenia] Akk AM, et al. **Gematol Transfuziol** 1996 Mar–Apr;41(2):21–4 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Interactions between propofol and lipid mediator receptors: inhibition of lysophosphatidate signaling. Rossi MA, et al. **Anesth Analg** 1996 Nov;83(5):1090–6

Lysophosphatidylcholine inhibits receptor-mediated Ca2+ mobilization in intact endothelial cells of rabbit aorta. Miwa Y, et al. **Arterioscler Thromb Vasc Biol** 1997 Aug; 17(8):1561–7

Suppression of the protein tyrosine phosphatase LAR reduces apolipoprotein B secretion by McA-RH7777 rat hepatoma cells. Phung TL, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):367–71

Inhibition of the interaction of urokinase-type plasminogen activator (uPA) with its receptor (uPAR) by synthetic peptides. Bürgle M, et al. **Biol Chem** 1997 Mar–Apr; 378(3–4):231–7

AR4–2J cells: a model to study polypeptide hormone receptors. Dietrich JB. **Biosci Rep** 1996 Aug;16(4):273–88 (88 ref.)

Inhibition of prostate cancer neovascularization and growth by urokinase-plasminogen activator receptor blockade. Evans CP, et al. **Cancer Res** 1997 Aug 15;57(16):3594–9

Prevention of breast cancer growth, invasion, and metastasis by antiestrogen tamoxifen alone or in combination with urokinase inhibitor B-428. Xing RH, et al. **Cancer Res** 1997 Aug 15;57(16):3585–93

In vitro effects of the platelet glycoprotein IIb/IIIa receptor antagonist c7E3 Fab on the activated clotting time. Ammar T, et al. **Circulation** 1997 Feb 4;95(3):614–7

Antagonists of the mannose receptor and the LDL receptor-related protein dramatically delay the clearance of tissue plasminogen activator. Biessen EA, et al. **Circulation** 1997 Jan 7;95(1):46–52

New thoughts on strategies for modulating platelet function through the inhibition of surface receptors. Nurden AT. **Haemostasis** 1996 Oct;26 Suppl 4:78–88 (36 ref.)

The function of steroid hormone receptors is inhibited by the hsp90-specific compound geldanamycin. Segnitz B, et al. **J Biol Chem** 1997 Jul 25;272(30):18694–701

Inhibitors of lipid phosphatidate receptors: N-palmitoyl-serine and N-palmitoyl-tyrosine phosphoric acids. Bittman R, et al. **J Lipid Res** 1996 Feb;37(2):391–8

Synergy between suppressor of Hairless and Notch in regulation of Enhancer of split m gamma and m delta expression. Eastman DS, et al. **Mol Cell Biol** 1997 Sep; 17(9):5620–8

N-palmitoyl-serine and N-palmitoyl-tyrosine phosphoric acids are selective competitive antagonists of the lysophosphatidic acid receptors. Liliom K, et al. **Mol Pharmacol** 1996 Sep;50(3):616–23

Melatonin receptor antagonists that differentiate between the human Mel1a and Mel1b recombinant subtypes are used to assess the pharmacological profile of the rabbit retina ML1 presynaptic heteroreceptor. Dubocovich ML, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):365–75

Receptor inactivation by dye-neuropeptide conjugates: 2. Characterization of the quantum yield of singlet oxygen generated by irradiation of dye-neuropeptide conjugates. Feigenbaum JJ, et al. **Peptides** 1996;17(7):1213–7

Conjunctive use of platelet glycoprotein IIb/IIIa antagonists and thrombolytic therapy for acute myocardial infarction. Moliterno DJ, et al. **Thromb Haemost** 1997 Jul;78(1):214–9 (41 ref.)

Clinical trials with glycoprotein IIb/IIIa receptor antagonists in acute coronary syndromes. Van de Werf F. **Thromb Haemost** 1997 Jul;78(1):210–3 (22 ref.)

BIOSYNTHESIS

Kaposi's sarcoma cells express the macrophage-associated antigen mannose receptor and develop in peripheral blood cultures of Kaposi's sarcoma patients. Uccini S, et al. **Am J Pathol** 1997 Mar;150(3):929–38

Salt intake modulates the developmental expression of renal kallikrein and bradykinin B2 receptors. el-Dahr S, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F425–31

Cloning, expression, and tissue localization of the calcium-sensing receptor in chicken (Gallus domesticus). Diaz R, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1008–16

A generic method for the production of cell lines expressing high levels of 7-transmembrane receptors. Koller KJ, et al. **Anal Biochem** 1997 Jul 15;250(1):51–60

Effect of sperm viability, plasmalemma integrity, and capacitation on patterns of expression of mannose-binding sites on human sperm. Youssef HM, et al. **Arch Androl** 1997 Jan–Feb;38(1):67–74

Cloning of human cDNA encoding a novel heptahelix receptor expressed in Burkitt's lymphoma and widely distributed in brain and peripheral tissues. Owman C, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):285–92

Stimulation of atrial natriuretic peptide receptor/guanylyl cyclase- A signaling pathway antagonizes the activation of protein kinase C-alpha in murine Leydig cells. Kumar R, et al. **Biochim Biophys Acta** 1997 Apr 24;1356(2):221–8

Expression of the asialoglycoprotein receptor in cultured rat hepatocytes is modulated by cell density. Massimi M, et al. **Biosci Rep** 1996 Dec;16(6):477–84

Enhanced expression of urokinase plasminogen activator and its receptor in pancreatic carcinoma. Cantero D, et al. **Br J Cancer** 1997;75(3):388–95

Bone matrix degradation by the plasminogen activation system. Possible mechanism of bone destruction in arthritis. Ronday HK, et al. **Br J Rheumatol** 1997 Jan;36(1):9–15

Calcium-sensing receptor in the rat hippocampus: a developmental study. Chattopadhyay N, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):13–21

Circulating immunoglobulin-secreting cells are heterogeneous in their expression of maturation markers and homing receptors. Kantele JM, et al. **Clin Exp Immunol** 1996 Jun;104(3):525–30

Dispase-mediated basal detachment of cultured keratinocytes induces urokinase-type plasminogen activator (uPA) and its receptor (uPA-R, CD87). Schaefer BM, et al. **Exp Cell Res** 1996 Nov 1;228(2):246–53

Expression of urokinase-type plasminogen activator, its receptor and type-1 plasminogen activator inhibitor is differently regulated by inhibitors of protein synthesis in human cancer cell lines. Lund LR. **FEBS Lett** 1996 Apr 1;383(3):139–44

Endothelial and macrophage upregulation of urokinase receptor expression in human renal cell carcinoma. Xu Y, et al. **Hum Pathol** 1997 Feb;28(2):206–13

Biosynthesis of human ficolin, an Escherichia coli-binding protein, by monocytes: comparison with the synthesis of two macrophage-specific proteins, C1q and the mannose receptor. Lu J, et al. **Immunology** 1996 Oct;89(2):289–94

Secretagogues increase the expression of surfactant protein A receptors on lung type II cells. Chen Q, et al. **J Biol Chem** 1996 Oct 11;271(41):25277–83

Cytoplasmic protein mRNA interaction mediates cGMP-modulated translational control of the asialoglycoprotein receptor. Stockert RJ, et al. **J Biol Chem** 1997 Apr 4;272(14):9161–5

Integrin-dependent induction of functional urokinase receptors in primary T lymphocytes. Bianchi E, et al. **J Clin Invest** 1996 Sep 1;98(5):1133–41

Altered expression of epithelial integrins and extracellular matrix receptors in oral erythema multiforme. Mirowsk GW, et al. **J Cutan Pathol** 1996 Oct;23(5):473–8

Epithelial marker genes are expressed in cultured embryonic rat lung and in vivo with similar spatial and temporal patterns. Meneghetti A, et al. **J Histochem Cytochem** 1996 Oct;44(10):1173–82

Interleukin-13 induces human monocyte/macrophage fusion and macrophage mannose receptor expression. DeFife KM, et al. **J Immunol** 1997 Apr 1;158(7):3385–90

Monocyte response to bacterial toxins, expression of cell surface receptors, and release of anti-inflammatory cytokines during sepsis. Astiz M, et al. **J Lab Clin Med** 1996 Dec;128(6):594–600

Vitamin A metabolism and mRNA expression of retinoid-binding protein and receptor genes in human epidermal melanocytes and melanoma cells. Rosdahl I, et al. **Melanoma Res** 1997 Aug;7(4):267–74

Are nuclear receptors involved in pituitary responsiveness to melatonin? Hazlerigg DG, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):53–9

A novel yeast gene, RHK1, is involved in the synthesis of the cell wall receptor for the HM-1 killer toxin that inhibits beta-1,3-glucan synthesis. Kimura T, et al. **Mol Gen Genet** 1997 Mar 26;254(2):139–47

The Mel1a melatonin receptor gene is expressed in human suprachiasmatic nuclei. Weaver DR, et al. **Neuroreport** 1996 Dec 20;8(1):109–12

Embryonic expression pattern of H218, a G-protein coupled receptor homolog, suggests roles in early mammalian nervous system development. Maclennan AJ, et al. **Neuroscience** 1997 Jul;79(1):217–24

Ethylene receptor expression is regulated during fruit ripening, flower senescence and abscission. Payton S, et al. **Plant Mol Biol** 1996 Sep;31(6):1227–31

Monoclonal antibodies reveal receptor specificity among G-protein-coupled receptor kinases. Oppermann M, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7649–54

Regulating expression and function of G-protein-linked receptors. Karoor V, et al. **Prog Neurobiol** 1996 Apr; 48(6):555–68 (155 ref.)

Thrombospondin-1 and transforming growth factor-beta 1 promote breast tumor cell invasion through up-regulation of the plasminogen/plasmin system. Albo D, et al. **Surgery** 1997 Aug;122(2):493–9; discussion 499–500

Distinct patterns of urokinase receptor (uPAR) expression by leukemic cells and peripheral blood cells. Jardí M, et al. **Thromb Haemost** 1996 Dec;76(6):1009–19

BLOOD

Elevated plasma levels of urokinase plasminogen activator receptor in non-small cell lung cancer patients. Pappot H, et al. **Eur J Cancer** 1997 May;33(6):867–72

Excess soluble urokinase-type plasminogen activator receptor in the plasma of patients with paroxysmal nocturnal hemoglobinuria inhibits cell-associated fibrinolytic activity. Ninomiya H, et al. **Int J Hematol** 1997 Apr;65(3):285–91

Circadian variation of plasma cobalamin, transcobalamin-bound cobalamin and unsaturated binding capacity of transcobalamin and haptocorrin in healthy elderly. Björkstén KS, et al. **J Affect Disord** 1995 Dec 24; 36(1–2):37–42

Identification of functional endothelial protein C receptor in human plasma. Kurosawa S, et al. **J Clin Invest** 1997 Jul 15;100(2):411–8

Quantitation of soluble E-receptor of T lymphocytes in serum from HIV-1 positive patients. Nuñez G, et al. **J Clin Lab Anal** 1997;11(1):69–72

Anti-atherosclerotic properties of antihypertensive drugs: effect of antihypertensive therapy on platelet receptors for von Willebrand factor and for fibrinogen [letter] Liani M, et al. **Nephron** 1996;73(2):361–2

Characterization of cellular binding sites and interactive regions within reactants required for enhancement of plasminogen activation by tPA on the surface of leukocytic cells. Félez J, et al. **Thromb Haemost** 1996 Oct;76(4):577–84

CHEMISTRY

Metal-ion sites as structural and functional probes of helix-helix interactions in 7TM receptors. Elling CE, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:142-51 (57 ref.)

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP-1, and other members of their new family of G protein-linked receptors: structure-function relationship with special reference to the human VIP-1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94-109; discussion 110-1 (64 ref.)

Speculations on the mechanism of hormone-receptor interactions of the secretin/glucagon family of polypeptide hormones derived from computational structural studies. Momany FA, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:172-81; discussion 181-3 (18 ref.)

Molecular cloning and tissue expression of a novel orphan G protein-coupled receptor from rat lung. Bonini JA, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):190-3

Biochemical characterization of the phagocytic giant cell receptor for Dictyostelium discoideum amoebae: identification by cell blotting. Lewis KE, et al. **Biochem Biophys Res Commun** 1997 Jan 23;230(3):505-8

Cloning of human cDNA encoding a novel heptahelix receptor expressed in Burkitt's lymphoma and widely distributed in brain and peripheral tissues. Owman C, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):285-92

Altered ligand dissociation rates in thyrotropin-releasing hormone receptors mutated in glutamine 105 of transmembrane helix III. del Camino D, et al. **Biochemistry** 1997 Mar 18;36(11):3308-18

The central domain of colicin N possesses the receptor recognition site but not the binding affinity of the whole toxin. Evans LJ, et al. **Biochemistry** 1996 Dec 3; 35(48):15143-8

Globoside as a membrane receptor: a consideration of oligosaccharide communication with the hydrophobic domain. Jones DH, et al. **Biochemistry** 1997 Jul 15; 36(28):8539-47

Three-dimensional structure of the cytoplasmic face of the G protein receptor rhodopsin. Yeagle PL, et al. **Biochemistry** 1997 Aug 12;36(32):9649-54

Methylglyoxal-modified arginine residues--a signal for receptor-mediated endocytosis and degradation of proteins by monocytic THP-1 cells. Westwood ME, et al. **Biochim Biophys Acta** 1997 Mar 27;1356(1):84-94

Characterization of a vitellogenin receptor in white perch (Morone americana). Tao Y, et al. **Biol Reprod** 1996 Sep; 55(3):646-56

How hormone receptor-DNA binding affects nucleosomal DNA: the role of symmetry. Bishop TC, et al. **Biophys J** 1997 May;72(5):2056-67

Receptor signaling: dimerization and beyond. Stock J. **Curr Biol** 1996 Jul 1;6(7):825-7 (18 ref.)

Natural killer cell receptors specific for MHC class I molecules [published erratum appears in Curr Opin Immunol 1996 Jun;8(3):419] Colonna M. **Curr Opin Immunol** 1996 Feb;8(1):101-7 (60 ref.)

Bacterial chemotaxis: a field in motion. Stock AM, et al. **Curr Opin Struct Biol** 1995 Dec;5(6):744-51 (56 ref.)

Recognition at the cell surface: recent structural insights. Stuart DI, et al. **Curr Opin Struct Biol** 1995 Dec;5(6):735-43 (50 ref.)

Flow cytometric detection of the association between cell surface receptors and the cytoskeleton. Nebe B, et al. **Cytometry** 1997 May 1;28(1):66-73

Site-directed mutagenesis of highly conserved amino acids in the first cytoplasmic loop of Drosophila Rh1 opsin blocks rhodopsin synthesis in the nascent state. Bentrop J, et al. **EMBO J** 1997 Apr 1;16(7):1600-9

Identification of a novel contactin-associated transmembrane receptor with multiple domains implicated in protein-protein interactions. Peles E, et al. **EMBO J** 1997 Mar 3;16(5):978-88

Animal lectins. Gabius HJ. **Eur J Biochem** 1997 Feb 1; 243(3):543-76 (500 ref.)

Engineering of metal-ion sites as distance constraints in structural and functional analysis of 7TM receptors. Elling CE, et al. **Fold Des** 1997;2(4):S76-80 (41 ref.)

Sea urchin egg receptor for sperm: the oligosaccharide chains stabilize sperm binding. Dhume ST, et al. **Glycobiology** 1996 Jan;6(1):59-64

Evolution of a family of receptors containing multiple C-type carbohydrate-recognition domains [letter] Taylor ME. **Glycobiology** 1997 Apr;7(3):v-viii (14 ref.)

Renaturation and ligand blotting of the major subunit of the rat asialoglycoprotein receptor after denaturing polyacrylamide gel electrophoresis. Zeng FY, et al. **Glycobiology** 1996 Apr;6(3):247-55

Aglycone modulation of glycolipid receptor function. Lingwood CA. **Glycoconj J** 1996 Aug;13(4):495-503 (114 ref.)

Phosphorous carbohydrates on chimeric CD22, CD44 and CD62L. Jönsson G, et al. **Immunol Lett** 1996 Aug; 52(1):31-5

The oligomerization domain of the asialoglycoprotein receptor preferentially forms 2:2 heterotetramers in vitro. Bider MD, et al. **J Biol Chem** 1996 Dec 13; 271(50):31996-2001

Effect of disulfide bonds of transcobalamin II receptor on its activity and basolateral targeting in human intestinal epithelial Caco-2 cells. Bose S, et al. **J Biol Chem** 1997 Aug 15;272(33):20920-8

AM67, a secretory component of the guinea pig sperm acrosomal matrix, is related to mouse sperm protein sp56 and the complement component 4-binding proteins. Foster JA, et al. **J Biol Chem** 1997 May 9;272(19):12714-22

Molecular characterization of a novel human hybrid-type receptor that binds the alpha2-macroglobulin receptor-associated protein. Jacobsen L, et al. **J Biol Chem** 1996 Dec 6;271(49):31379-83

CORCEMA evaluation of the potential role of intermolecular transferred NOESY in the characterization of ligand-receptor complexes. Curto EV, et al. **J Comput Aided Mol Des** 1996 Oct;10(5):361-71

Hidden Markov Models of the G-protein-coupled receptor family. Baldi P, et al. **J Comput Biol** 1994 Winter; 1(4):311-36

Immunocytochemical phenotyping of disseminated tumor cells in bone marrow by uPA receptor and CK18: investigation of sensitivity and specificity of an immunogold/alkaline phosphatase double staining protocol. Allgayer H, et al. **J Histochem Cytochem** 1997 Feb;45(2):203-12

Conservation of structural features reveals the existence of a large family of inhibitory cell surface receptors and noninhibitory/activatory counterparts. Vély F, et al. **J Immunol** 1997 Sep 1;159(5):2075-7 (27 ref.)

An alpha-carbon template for the transmembrane helices in the rhodopsin family of G-protein-coupled receptors. Baldwin JM, et al. **J Mol Biol** 1997 Sep 12;272(1):144-64

Interaction of the receptor binding domains of Pseudomonas aeruginosa pili strains PAK, PAO, KB7 and P1 to a cross-reactive antibody and receptor analog: implications for synthetic vaccine design. Campbell AP, et al. **J Mol Biol** 1997 Mar 28;267(2):382-402

Conformational changes of three periplasmic receptors for bacterial chemotaxis and transport: the maltose-, glucose/galactose- and ribose-binding proteins. Shilton BH, et al. **J Mol Biol** 1996 Nov 29;264(2):350-63

Composition, antigenic properties and hepatocyte surface expression of the woodchuck asialoglycoprotein receptor. Diao J, et al. **J Recept Signal Transduct Res** 1996 Sep-Nov; 16(5-6):243-71

Expression of a new G protein-coupled receptor X-msr is associated with an endothelial lineage in Xenopus laevis. Devic E, et al. **Mech Dev** 1996 Oct;59(2):129-40

Rationally designed non-peptides: variously substituted piperazine libraries for the discovery of bradykinin antagonists and other G-protein-coupled receptor ligands. Goodfellow VS, et al. **Mol Divers** 1996 Oct;2(1-2):97-102

Molecular cloning, structural analysis, and expression of carp ZP2 gene. Chang YS, et al. **Mol Reprod Dev** 1997 Mar; 46(3):258-67

Identification of bovine zona pellucida glycoproteins. Topper EK, et al. **Mol Reprod Dev** 1997 Mar;46(3):344-50

Inhibitory receptors abound? [comment] Cambier JC. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):5993-5 (24 ref.). Comment on: Proc Natl Acad Sci U S A 1997 May 13;94(10):5261-6.

Identification of sulfated oligosialic acid units in the O-linked glycan of the sea urchin egg receptor for sperm. Kitazume-Kawaguchi S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3650-5

Evolutionarily conserved Galphabetagamma binding surfaces support a model of the G protein-receptor complex. Lichtarge O, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7507-11

Structural studies of receptor binding by cholera toxin mutants. Merritt EA, et al. **Protein Sci** 1997 Jul; 6(7):1516-28

Dynamic receptor superstructures at the plasma membrane. Damjanovich S, et al. **Q Rev Biophys** 1997 Feb; 30(1):67-106 (165 ref.)

Automated modelling of the transmembrane region of G-protein coupled receptor by Swiss-model. Peitsch MC, et al. **Receptors Channels** 1996;4(3):161-4 (12 ref.)

Crystal structures of murine polyomavirus in complex with straight-chain and branched-chain sialyloligosaccharide receptor fragments. Stehle T, et al. **Structure** 1996 Feb 15; 4(2):183-94

Internet resources on G-protein-coupled receptors. Edvardsen O, et al. **Trends Biochem Sci** 1997 Jun; 22(6):226-7

[7TM receptors--from the olfactory system and new hormones against HIV infection] Schwartz TW. **Ugeskr Laeger** 1997 Feb 24;159(9):1239-45 (34 ref.) (Eng. Abstr.) **(Dan)**

CLASSIFICATION

Protein structures in receptor classification. Barnard EA. **Ann N Y Acad Sci** 1997 May 30;812:14-28 (69 ref.)

Criteria for the classification of hormone receptors with implications for nomenclature. An impossible task? Lomasney J. **Ann N Y Acad Sci** 1997 May 30;812:48-54 (5 ref.)

Is promiscuity of G protein interaction an issue in the classification of receptors? Milligan G. **Ann N Y Acad Sci** 1997 May 30;812:126-32 (31 ref.)

The alpha and omega of G protein-coupled receptors. A novel method for classification. Moereels H, et al. **Ann N Y Acad Sci** 1997 May 30;812:147-8 (3 ref.)

The classification of bioamine receptors. How helpful are molecular phylogenies? Vernier P, et al. **Ann N Y Acad Sci** 1997 May 30;812:141-3 (1 ref.)

Analogues of diverse structure are unable to differentiate native melatonin receptors in the chicken retina, sheep pars tuberalis and Xenopus melanophores. Pickering H, et al. **Br J Pharmacol** 1996 Sep;119(2):379-87

Factors to consider in the naming of a G protein-coupled receptor subtype. Watson SP. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):5-17, discussion 19-21 (14 ref.)

The classification of seven transmembrane receptors in recombinant expression systems. Kenakin T. **Pharmacol Rev** 1996 Sep;48(3):413-63 (569 ref.)

DEFICIENCY

Functional impairment in protein kinase C by RACK1 (receptor for activated C kinase 1) deficiency in aged rat brain cortex. Pascale A, et al. **J Neurochem** 1996 Dec; 67(6):2471-7

DRUG EFFECTS

Regulation of mesothelial cell mitogenesis by antisense oligonucleotides for the urokinase receptor. Shetty S, et al. **Antisense Res Dev** 1995 Winter;5(4):307-14

Differential effect of vanadate on receptor-mediated endocytosis of the asialoglycoprotein receptor in hepatocytes from normal and diabetic rats. Dahmane A, et al. **Biochem Pharmacol** 1997 Aug 1;54(3):349-55

Guanosine 5'-O-(3-thiotriphosphate) and cations regulate melatonin receptors, and melatonin inhibits cyclic AMP production in the spinal cord. Wan Q, et al. **Biol Signals** 1997 Mar-Apr;6(2):67-76

Analogues of diverse structure are unable to differentiate native melatonin receptors in the chicken retina, sheep pars tuberalis and Xenopus melanophores. Pickering H, et al. **Br J Pharmacol** 1996 Sep;119(2):379-87

Midkine stimulates Wilms' tumor cell proliferation via its signaling receptor. Ratovitski EA, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 May;43(3):425-31

Inactivation of melatonin receptors by protein kinase C in human prostate epithelial cells. Gilad E, et al. **Endocrinology** 1997 Oct;138(10):4255-61

2-[125I]iodo-5-methoxycarbonylamino-N-acetyltryptamine: a selective radioligand for the characterization of melatonin ML2 binding sites. Molinari EJ, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):159-68

Perspectives in receptor research. Angeli P, et al. **Farmaco** 1996 Feb;51(2):97-106

Serotonin and N-acetylserotonin effects on pigment cells of the toad Bufo ictericus: pharmacological characterization of melatonin receptors. Filadelfi AM, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):192-9

Enhancement of macrophage-mediated bactericidal activity by macrophage-mannose receptor-ligand interaction. Lefkowitz DL, et al. **Immunol Cell Biol** 1997 Apr; 75(2):136-41

Receptor-mediated endocytosis of antigens overcomes the requirement for HLA-DM in class II-restricted antigen presentation. Ma C, et al. **J Immunol** 1997 Jan 1;158(1):1-4

Brain and pituitary melatonin receptors in male rat during post-natal and pubertal development and the effect of pinealectomy and testosterone manipulation. Zitouni M, et al. **J Neuroendocrinol** 1996 Aug;8(8):571-7

Substance P contributes to rapidly adapting receptor responses to pulmonary venous congestion in rabbits. Bonham AC, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):229-38

Challenges of high throughput screening against cell surface receptors. Major JS. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):595-607 (5 ref.)

Cardiovascular receptors as drug targets. Eur omega Conferences' Cardiovascular receptors as drug targets. Institut Pasteur, Paris, France, 3-4 October 1996. Maack T. **Moi Med Today** 1997 Mar;3(3):101-2

Actions of moguisteine on cough and pulmonary rapidly adapting receptor activity in the guinea pig. Morikawa T, et al. **Pharmacol Res** 1997 Feb;35(2):113-8

Selective inhibition of receptor-mediated pulmonary vasorelaxation in endotoxin-induced acute lung injury. McIntyre RC Jr, et al. **Shock** 1997 Jan;7(1):36-41

GENETICS

The molecular biology of hormone and growth factor receptors in meningiomas. Black P, et al. **Acta Neurochir Suppl (Wien)** 1996;65:50-3

Hormone receptors in vestibular schwannomas. Carroll RS, et al. **Acta Neurochir (Wien)** 1997;139(3):188-92; discussion 193

Neonatal severe hyperparathyroidism, secondary hyperparathyroidism, and familial hypocalciuric hypercalcemia: multiple different phenotypes associated with an inactivating Alu insertion mutation of the calcium-sensing receptor gene. Cole DE, et al. **Am J Med Genet** 1997 Aug 8;71(2):202-10

Gene transfer into hepatoma cell lines via the serpin enzyme complex receptor. Ziady AG, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G545-52

Induction of urokinase-type plasminogen activator receptor by IL-1 beta. Hasegawa T, et al. **Am J Respir Cell Mol Biol** 1997 Jun;16(6):683-92

A genome-based receptor nomenclature. Hartig PR. **Ann N Y Acad Sci** 1997 May 30;812:85-91 (30 ref.)

How receptor mutagenesis may confirm or confuse receptor classification. Schwartz TW, et al. **Ann N Y Acad Sci** 1997 May 30;812:71–84 (41 ref.)

Cloning of a mouse smoothened cDNA and expression patterns of hedgehog signalling molecules during chondrogenesis and cartilage differentiation in clonal mouse EC cells, ATDC5. Akiyama H, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):142–7

Molecular cloning of the human Edg2 protein and its identification as a functional cellular receptor for lysophosphatidic acid. An S, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):619–22

Molecular cloning and tissue expression of a novel orphan G protein–coupled receptor from rat lung. Bonini JA, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):190–3

Molecular cloning of a bovine renal G–protein coupled receptor gene (bRGR): regulation of bRGR mRNA levels by amino acid availability. Ferrer–Martínez A, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):107–12

Cloning of a human heptahelical receptor closely related to the P2Y5 receptor. Janssens R, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):106–12

Discovery of a novel human G protein–coupled receptor gene (GPR25) located on chromosome 1. Jung BP, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):69–72

The divergent 5' termini of the alpha human folate receptor (hFR) mRNAs originate from two tissue–specific promoters and alternative splicing: characterization of the alpha hFR gene structure. Elwood PC, et al. **Biochemistry** 1997 Feb 11;36(6):1467–78

Cloning and functional analysis of a polymorphic variant of the ovine Mel 1a melatonin receptor. Barrett P, et al. **Biochim Biophys Acta** 1997 May 27;1356(3):299–307

Phage display shot–gun cloning of ligand–binding domains of prokaryotic receptors approaches 100% correct clones. Jacobsson K, et al. **Biotechniques** 1996 Jun;20(6):1070–6, 1078, 1080–1

Calcium–receptor–regulated parathyroid and renal function. Brown EM, et al. **Bone** 1997 Apr;20(4):303–9 (50 ref.)

The human thrombin receptor and proteinase activated receptor–2 genes are tightly linked on chromosome 5q13. Schmidt VA, et al. **Br J Haematol** 1997 Jun;97(3):523–9

Identification and characterisation of 2–[125I]iodomelatonin binding and Mel1a melatonin receptor expression in the human fetal leptomeninges. Drew JE, et al. **Brain Res** 1997 Jun 27;761(1):87–92

Distributional characteristics of the mRNA for retinoid Z receptor beta (RZR beta), a putative nuclear melatonin receptor, in the rat brain and spinal cord. Park HT, et al. **Brain Res** 1997 Feb 7;747(2):332–7

Molecular defects in the Bernard–Soulier syndrome: assessment of receptor genes, transcripts and proteins. Roth GJ. **C R Acad Sci III** 1996 Sep;319(9):819–26 (61 ref.)

Intracellular cleavage of Notch leads to a heterodimeric receptor on the plasma membrane. Blaumueller CM, et al. **Cell** 1997 Jul 25;90(2):281–91

Deleted in Colorectal Cancer (DCC) encodes a netrin receptor. Keino–Masu K, et al. **Cell** 1996 Oct 18; 87(2):175–85

Calcium–sensing receptor mutations in familial hypocalciuric hypercalcaemia with recurrent pancreatitis. Pearce SH, et al. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):675–80

Inhibition of in vivo tumorigenicity and invasiveness of a human glioblastoma cell line transfected with antisense uPAR vectors. Go Y, et al. **Clin Exp Metastasis** 1997 Jul; 15(4):440–6

Reexamination of the sequence of the sea urchin egg receptor for sperm: implications with respect to its properties. Just ML, et al. **Dev Biol** 1997 Apr 1;184(1):25–30

Identification of a 97–kDa heat shock protein from S. franciscanus ovaries with 94% amino acid identity to the S. purpuratus egg surface receptor for sperm. Mauk R, et al. **Dev Biol** 1997 Apr 1;184(1):31–7

A goldfish Notch–3 homologue is expressed in neurogenic regions of embryonic, adult, and regenerating brain and retina. Sullivan SA, et al. **Dev Genet** 1997;20(3):208–23

Cloning of a human epididymis–specific mRNA, HE6, encoding a novel member of the seven transmembrane–domain receptor superfamily. Osterhoff C, et al. **DNA Cell Biol** 1997 Apr;16(4):379–89

Structure, characterization, and expression of the gene encoding the mouse Mel1a melatonin receptor [published erratum appears in Endocrinology 1997 Jun;138(6):2307] Roca AL, et al. **Endocrinology** 1996 Aug;137(8):3469–77

Cloning of the growth hormone secretagogues receptor cDNA: new evidence for a third endocrine pathway controlling growth hormone release. Bertherat J. **Eur J Endocrinol** 1997 Jan;136(1):37–8

Cloning of novel immunoglobulin superfamily receptors expressed on human myeloid and lymphoid cells: structural evidence for new stimulatory and inhibitory pathways. Samaridis J, et al. **Eur J Immunol** 1997 Mar;27(3):660–5

Expression of the Mel1a–melatonin receptor mRNA in T and B subsets of lymphocytes from rat thymus and spleen. Pozo D, et al. **FASEB J** 1997 May;11(6):466–73

Molecular cloning of a new member of the putative G protein–coupled receptor gene from barnacle Balanus amphitrite. Isoai A, et al. **Gene** 1996 Oct 10;175(1–2):95–100

Cloning and chromosomal mapping of four putative novel human G–protein–coupled receptor genes. O'Dowd BF, et al. **Gene** 1997 Mar 10;187(1):75–81

A novel member of an ancient superfamily: sponge (Geodia cydonium, Porifera) putative protein that features scavenger receptor cysteine–rich repeats. Pancer Z, et al. **Gene** 1997 Jul 9;193(2):211–8

Molecular identification of a G protein–coupled receptor family which is expressed in planarians. Saitoh O, et al. **Gene** 1997 Aug 11;195(1):55–61

Molecular cloning of a novel receptor–type protein tyrosine phosphatase from murine fetal liver. Yoneya T, et al. **Gene** 1997 Jul 31;194(2):241–7

The Caenorhabditis elegans gene lin–17, which is required for certain asymmetric cell divisions, encodes a putative seven–transmembrane protein similar to the Drosophila frizzled protein. Sawa H, et al. **Genes Dev** 1996 Sep 1; 10(17):2189–97

Analysis of dominant enhancers and suppressors of activated Notch in Drosophila. Verheyen EM, et al. **Genetics** 1996 Nov;144(3):1127–41

Genetic and molecular analysis of smooth, a quantitative trait locus affecting bristle number in Drosophila melanogaster. zur Lage P, et al. **Genetics** 1997 Jun;146(2):607–18

Intron 17 of the human retinoblastoma susceptibility gene encodes an actively transcribed G protein–coupled receptor gene. Herzog H, et al. **Genome Res** 1996 Sep; 6(9):858–61

Cloning and chromosomal localization of a gene (GPR18) encoding a novel seven transmembrane receptor highly expressed in spleen and testis. Gantz I, et al. **Genomics** 1997 Jun 15;42(3):462–6

Identification and characterization of a seven transmembrane hormone receptor using differential display. Lin HH, et al. **Genomics** 1997 May 1;41(3):301–8

The structural integrity of ROR alpha isoforms is mutated in staggerer mice: cerebellar coexpression of ROR alpha1 and ROR alpha4. Matysiak–Scholze U, et al. **Genomics** 1997 Jul 1;43(1):78–84

Localization of the human Ror1 gene (NTRKR1) to chromosome 1p31–p32 by fluorescence in situ hybridization and somatic cell hybrid analysis. Reddy UR, et al. **Genomics** 1997 Apr 15;41(2):283–5

Chromosomal localization of TIL, a gene encoding a protein related to the Drosophila transmembrane receptor Toll, to human chromosome 4p14. Taguchi T, et al. **Genomics** 1996 Mar 15;32(3):486–8

Assignment of the human nuclear hormone receptor, NUC1 (PPARD), to chromosome 6p21.1–p21.2. Yoshikawa T, et al. **Genomics** 1996 Aug 1;35(3):637–8

Isolation and chromosomal localization of GPR31, a human gene encoding a putative G protein–coupled receptor. Zingoni A, et al. **Genomics** 1997 Jun 15;42(3):519–23

Co–expression and regulation of Met and Ron proto–oncogenes in human hepatocellular carcinoma tissues and cell lines. Chen Q, et al. **Hepatology** 1997 Jul; 26(1):59–66

Expression of urokinase–type plasminogen activator receptor in hepatocellular carcinoma. Morita Y, et al. **Hepatology** 1997 Apr;25(4):856–61

Mutations in the Ca(2+)–sensing receptor gene cause autosomal dominant and sporadic hypoparathyroidism. Baron J, et al. **Hum Mol Genet** 1996 May;5(5):601–6

A novel human homologue of the Drosophila frizzled wnt receptor gene binds wingless protein and is in the Williams syndrome deletion at 7q11.23. Wang YK, et al. **Hum Mol Genet** 1997 Mar;6(3):465–72

Cloning of novel kinectin splice variants with alternative C–termini: structure, distribution and evolution of mouse kinectin. Leung E, et al. **Immunol Cell Biol** 1996 Oct; 74(5):421–33

Regulation of the ecdysone receptor, USP, E75 and MHR3 mRNAs by 20–hydroxyecdysone in the GV1 cell line of the tobacco hornworm, Manduca sexta. Lan Q, et al. **Insect Mol Biol** 1997 Feb;6(1):3–10

Co–expression of urokinase–type plasminogen activator and its receptor in human gastric–cancer cell lines correlates with their invasiveness and tumorigenicity. Park IK, et al. **Int J Cancer** 1997 May 29;71(5):867–73

Differential expression of BMP receptors in early mouse development. Roelen BA, et al. **Int J Dev Biol** 1997 Aug; 41(4):541–9

Rapid communication: bovine calcium–sensing receptor gene resides on bovine chromosome1. Neibergs HL, et al. **J Anim Sci** 1996 Oct;74(10):2555

Siderophore–mediated iron uptake in Aicaligenes eutrophus CH34 and identification of aleB encoding the ferric iron–alcaligin E receptor. Gilis A, et al. **J Bacteriol** 1996 Sep;178(18):5499–507

The Bradyrhizobium japonicum fegA gene encodes an iron–regulated outer membrane protein with similarity to hydroxamate–type siderophore receptors [published erratum appears in J Bacteriol 1997 Aug;179(16):5246] LeVier K, et al. **J Bacteriol** 1996 Dec;178(24):7265–75

Rapid identification and cloning of bacterial transferrin and lactoferrin receptor protein genes. Ogunnariwo JA, et al. **J Bacteriol** 1996 Dec;178(24):7326–8

Cloning and characterization of the gene (farA) encoding the receptor for an extracellular regulatory factor (IM–2) from Streptomyces sp. strain FRI–5. Waki M, et al. **J Bacteriol** 1997 Aug;179(16):5131–7

Anti–angiogenin activity of the peptides complementary to the receptor–binding site of angiogenin. Gho YS, et al. **J Biol Chem** 1997 Sep 26;272(39):24294–9

Requirement of an upstream AP–1 motif for the constitutive and phorbol ester–inducible expression of the urokinase–type plasminogen activator receptor gene. Lengyel E, et al. **J Biol Chem** 1996 Sep 20;271(38):23176–84

Biochemical and functional characterization of DNA complexes capable of targeting genes to hepatocytes via the asialoglycoprotein receptor. Perales JC, et al. **J Biol Chem** 1997 Mar 14;272(11):7398–407

Molecular and functional characterization of the urokinase receptor on human mast cells. Sillaber C, et al. **J Biol Chem** 1997 Mar 21;272(12):7824–32

An antisense oligonucleotide to the notch ligand jagged enhances fibroblast growth factor–induced angiogenesis in vitro. Zimrin AB, et al. **J Biol Chem** 1996 Dec 20; 271(51):32499–502

Is plasminogen activator inhibitor–1 the molecular switch that governs urokinase receptor–mediated cell adhesion and release? Deng G, et al. **J Cell Biol** 1996 Sep;134(6):1563–71

Ventricular zone gene–1 (vzg–1) encodes a lysophosphatidic acid receptor expressed in neurogenic regions of the developing cerebral cortex. Hecht JH, et al. **J Cell Biol** 1996 Nov;135(4):1071–83

Molecular cloning and functional characterization of the receptor for Clostridium perfringens enterotoxin. Katahira J, et al. **J Cell Biol** 1997 Mar 24;136(6):1239–47

Sporadic hypoparathyroidism caused by de Novo gain–of–function mutations of the Ca(2+)–sensing receptor. De Luca F, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2710–5

Two novel missense mutations in calcium–sensing receptor gene associated with neonatal severe hyperparathyroidism. Kobayashi M, et al. **J Clin Endocrinol Metab** 1997 Aug; 82(8):2716–9

Markedly reduced activity of mutant calcium–sensing receptor with an inserted Alu element from a kindred with familial hypocalciuric hypercalcemia and neonatal severe hyperparathyroidism. Bai M, et al. **J Clin Invest** 1997 Apr 15;99(8):1917–25

In vivo and in vitro characterization of neonatal hyperparathyroidism resulting from a de novo, heterozygous mutation in the Ca2+–sensing receptor gene: normal maternal calcium homeostasis as a cause of secondary hyperparathyroidism in familial benign hypocalciuric hypercalcemia. Bai M, et al. **J Clin Invest** 1997 Jan 1;99(1):88–96

Cloning, characterization, and functional studies of a nonintegrin platelet receptor for type I collagen. Chiang TM, et al. **J Clin Invest** 1997 Aug 1;100(3):514–21

Differential screening of a human chromosome 3 library identifies hepatocyte growth factor–like/macrophage–stimulating protein and its receptor in injured lung. Possible implications for neuroendocrine cell survival. Willett CG, et al. **J Clin Invest** 1997 Jun 15;99(12):2979–91

Molecular identification of a novel family of human Ig superfamily members that possess immunoreceptor tyrosine–based inhibition motifs and homology to the mouse gp49B1 inhibitory receptor. Arm JP, et al. **J Immunol** 1997 Sep 1;159(5):2342–9

Receptor specificities of variant Gal(alpha1–4)Gal–binding PapG adhesins of uropathogenic Escherichia coli as assessed by hemagglutination phenotypes. Johnson JR, et al. **J Infect Dis** 1997 Feb;175(2):373–81

Inborn errors of signal transduction: mutations in G proteins and G protein–coupled receptors as a cause of disease. Spiegel AM. **J Inherit Metab Dis** 1997 Jun;20(2):113–21 (20 ref.)

Genomic organization of the extracellular coding region of the human FGFR4 and FLT4 genes: evolution of the genes encoding receptor tyrosine kinases with immunoglobulin–like domains. Agnès F, et al. **J Mol Evol** 1997 Jul;45(1):43–9

Cloning of a cDNA encoding a novel interleukin–1 receptor related protein (IL 1R–rp2). Lovenberg TW, et al. **J Neuroimmunol** 1996 Nov;70(2):113–22

Expression of the activation marker urokinase plasminogen–activator receptor in cultured human central nervous system microglia. Washington RA, et al. **J Neurosci Res** 1996 Aug 15;45(4):392–9

A molecular perspective of the genetic relationships of G–protein coupled melatonin receptor subtypes. Shiu SY, et al. **J Pineal Res** 1996 May;20(4):198–204

Mutations and diseases of G protein coupled receptors. Birnbaumer M. **J Recept Signal Transduct Res** 1995 Jan–Mar;15(1–4):131–60 (74 ref.)

The expression and localization of zona pellucida glycoproteins and mRNA in cynomolgus monkeys (Macaca fascicularis). Martinez ML, et al. **J Reprod Fertil Suppl** 1996;50:35–41

Genomic organization of the gene for pig zona pellucida glycoprotein ZP1 and its expression in mammalian cells. Yamasaki N, et al. **J Reprod Fertil Suppl** 1996;50:19–23

The detection of nucleotide sequences with strong similarity to hormone responsive elements in the genome of eubacteria and archaebacteria and their possible relation to similar sequences present in the mitochondrial genome. Hatzoglou E, et al. **J Theor Biol** 1997 Feb 7;184(3):339–44

Kaposi's sarcoma–associated herpesvirus contains G protein–coupled receptor and cyclin D homologs which are expressed in Kaposi's sarcoma and malignant lymphoma. Cesarman E, et al. **J Virol** 1996 Nov; 70(11):8218–23

Identification and characterization of a G protein–coupled receptor homolog encoded by murine cytomegalovirus.

Davis-Poynter NJ, et al. **J Virol** 1997 Feb;71(2):1521-9
Transduction of Notch2 in feline leukemia virus-induced thymic lymphoma. Rohn JL, et al. **J Virol** 1996 Nov; 70(11):8071-80
Transforming activity of retroviral genomes encoding Gag-Axl fusion proteins. Zhang QK, et al. **J Virol** 1996 Nov;70(11):8089-97
Mapping of the melatonin receptor 1a (MTNR1A) gene in pigs, sheep, and cattle. Messer LA, et al. **Mamm Genome** 1997 May;8(5):368-70
Mapping of the novel G protein-coupled receptor Gpr18 to distal mouse chromosome 14. Samuelson LC, et al. **Mamm Genome** 1996 Dec;7(12):920-1
Expression of the Notch 3 intracellular domain in mouse central nervous system progenitor cells is lethal and leads to disturbed neural tube development. Lardelli M, et al. **Mech Dev** 1996 Oct;59(2):177-90
Heterologous expression of receptors and signaling proteins in adult mammalian sympathetic neurons by microinjection. Ikeda SR. **Methods Mol Biol** 1997;83:191-202 (15 ref.)
Regulation of receptor expression. Analysis of receptor mRNA and gene transcription. Iredale PA, et al. **Methods Mol Biol** 1997;83:251-72 (15 ref.)
An iron-regulated outer-membrane protein specific to Bordetella bronchiseptica and homologous to ferric siderophore receptors. Beall B, et al. **Microbiology** 1997 Jan;143 (Pt 1):135-45
Identification by PCR of genes encoding multiple response regulators. Morel-Deville F, et al. **Microbiology** 1997 May; 143 (Pt 5):1513-20
Genetic polymorphism of the Duffy receptor binding domain of Plasmodium vivax in Colombian wild isolates. Ampudia E, et al. **Mol Biochem Parasitol** 1996 Jun;78(1-2):269-72
Constitutive activation of the RON gene promotes invasive growth but not transformation [published erratum appears in Mol Cell Biol 1997 Mar;17(3):1758] Santoro MM, et al. **Mol Cell Biol** 1996 Dec;16(12):7072-83
Posttranscriptional regulation of urokinase receptor mRNA: identification of a novel urokinase receptor mRNA binding protein in human mesothelioma cells. Shetty S, et al. **Mol Cell Biol** 1997 Mar;17(3):1075-83
Cloning of PL33: a novel probable serpentine membrane receptor associated with human cytotrophoblast and lineage-specific HL-60 cell differentiation. Morrish DW, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):147-51
Regulation of the Mel 1a melatonin receptor mRNA and protein levels in the ovine pars tuberalis: evidence for a cyclic adenosine 3',5'-monophosphate-independent Mel 1a receptor coupling and an autoregulatory mechanism of expression. Barrett P, et al. **Mol Endocrinol** 1996 Jul; 10(7):892-902
Novel isoforms of Mel1c melatonin receptors modulating intracellular cyclic guanosine 3',5'-monophosphate levels. Jockers R, et al. **Mol Endocrinol** 1997 Jul;11(8):1070-81
Molecular analysis of rat pituitary and hypothalamic growth hormone secretagogue receptors. McKee KK, et al. **Mol Endocrinol** 1997 Apr;11(4):415-23
Nature's knockout: the Mel1b receptor is not necessary for reproductive and circadian responses to melatonin in Siberian hamsters. Weaver DR, et al. **Mol Endocrinol** 1996 Nov;10(11):1478-87
A novel yeast gene, RHK1, is involved in the synthesis of the cell wall receptor for the HM-1 killer toxin that inhibits beta-1,3-glucan synthesis. Kimura T, et al. **Mol Gen Genet** 1997 Mar 26;254(2):139-47
Expression of plasminogen activator and inhibitor, urokinase receptor and inhibin subunits in rhesus monkey testes. Zhang T, et al. **Mol Hum Reprod** 1997 Mar;3(3):223-31
Conserved structure and adjacent location of the thrombin receptor and protease-activated receptor 2 genes define a protease-activated receptor gene cluster. Kahn M, et al. **Mol Med** 1996 May;2(3):349-57
The effect of receptor rapid-internalization signals on diphtheria toxin endocytosis and cell sensitivity. Almond BD, et al. **Mol Microbiol** 1995 Nov;18(4):623-30
YbtA, an AraC-type regulator of the Yersinia pestis pesticin/yersiniabactin receptor. Fetherston JD, et al. **Mol Microbiol** 1996 Oct;22(2):315-25
Alagille syndrome--a notch up for the Notch receptor [news; comment] Artavanis-Tsakonas S. **Nat Genet** 1997 Jul; 16(3):212-3. Comment on: Nat Genet 1997 Jul;16(3):235-42. Comment on: Nat Genet 1997 Jul;16(3):243-51.
DMBT1, a new member of the SRCR superfamily, on chromosome 10q25.3-26.1 is deleted in malignant brain tumours. Mollenhauer J, et al. **Nat Genet** 1997 Sep; 17(1):32-9
The tumour-suppressor gene patched encodes a candidate receptor for Sonic hedgehog [see comments] Stone DM, et al. **Nature** 1996 Nov 14;384(6605):129-34. Comment in: Nature 1996 Nov 14;384(6605):119-20.
Parathyroid gland calcium receptor gene expression is not regulated by increased dietary phosphorus in normal and renal failure rats. Hernández A, et al. **Nephrol Dial Transplant** 1996;11 Suppl 3:11-4
Molecular dissection of two distinct actions of melatonin on the suprachiasmatic circadian clock. Liu C, et al. **Neuron** 1997 Jul;19(1):91-102
Mapping the receptor site for hanatoxin, a gating modifier of voltage-dependent K+ channels. Swartz KJ, et al. **Neuron** 1997 Apr;18(4):675-82
The Mel1a melatonin receptor gene is expressed in human suprachiasmatic nuclei. Weaver DR, et al. **Neuroreport** 1996 Dec 20;8(1):109-12
Developmental expression of 'RZR beta, a putative nuclear-melatonin receptor' mRNA in the suprachiasmatic nucleus of the rat. Park HT, et al. **Neurosci Lett** 1996 Oct 11;217(1):17-20
Characterization of murine Flt4 ligand/VEGF-C. Fitz LJ, et al. **Oncogene** 1997 Jul 31;15(5):613-8
In vitro inhibition of human glioblastoma cell line invasiveness by antisense uPA receptor. Mohanam S, et al. **Oncogene** 1997 Mar 20;14(11):1351-9
Human neural tissues express a truncated Ror1 receptor tyrosine kinase, lacking both extracellular and transmembrane domains. Reddy UR, et al. **Oncogene** 1996 Oct 3;13(7):1555-9
Molecular cloning and expression of the hot pepper ERabp1 gene encoding auxin-binding protein. Choi SY. **Plant Mol Biol** 1996 Dec;32(5):995-7
Characterization of two cDNAs encoding auxin-binding proteins in Nicotiana tabacum. Leblanc N, et al. **Plant Mol Biol** 1997 Mar;33(4):679-89
Pollination-enhanced expression of a receptor-like protein kinase related gene in tobacco styles. Li HY, et al. **Plant Mol Biol** 1997 Mar;33(4):653-65
Molecular cloning of a high-affinity receptor for the growth factor-like lipid mediator lysophosphatidic acid from Xenopus oocytes. Guo Z, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14367-72
Molecular characterization of the mosquito vitellogenin receptor reveals unexpected high homology to the Drosophila yolk protein receptor. Sappington TW, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8934-9
Calcium sensing receptor gene: analysis of polymorphism frequency. Rubin LA, et al. **Scand J Clin Lab Invest Suppl** 1997;227:122-5
Characterization of the gene encoding mouse platelet glycoprotien Ib beta. Kitaguchi T, et al. **Thromb Res** 1997 Jul 15;87(2):235-44
Identification of the human cytomegalovirus G protein-coupled receptor homologue encoded by UL33 in infected cells and enveloped virus particles. Margulies BJ, et al. **Virology** 1996 Nov 1;225(1):111-25
Thrombotic tendency in 75 symptomatic, unrelated patients with APC resistance. Melichart M, et al. **Wien Klin Wochenschr** 1996;108(19):607-10
[Signalling by Notch family receptors] Schweisguth F, et al. **C R Seances Soc Biol Fil** 1997;191(1):55-75 (71 ref.) (Eng. Abstr.) **(Fre)**
[Activated protein C resistance--an evaluation of current status (see comments)] Hopmeier P. **Wien Klin Wochenschr** 1996;108(19):599-606 (93 ref.) (Eng. Abstr.). Comment in: Wien Klin Wochenschr 1996;108(19):595-8. **(Ger)**
[Detection of functional abnormalities of hormone receptors by gene diagnosis] Amino N, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:450-6 (7 ref.) **(Jpn)**

IMMUNOLOGY

Epitope-mapped monoclonal antibodies as tools for functional and morphological analyses of the human urokinase receptor in tumor tissue. Luther T, et al. **Am J Pathol** 1997 Apr;150(4):1231-44
Identification of epitopes of monoclonal antibodies to porcine zona pellucida 3 beta glycoprotein, a homologue of the mouse/human sperm receptor. Afzalpurkar A, et al. **Am J Reprod Immunol** 1997 Jul;38(1):26-32
Plasminogen activation in bullous pemphigoid immunohistology reveals urokinase type plasminogen activator, its receptor and plasminogen activator inhibitor type-2 in lesional epidermis. Schaefer BM, et al. **Autoimmunity** 1996;23(3):155-64
Tools for the study of receptor immunity. Hoebeke J. **Blood Press Suppl** 1996;3:56-8 (18 ref.)
Distribution of serum autoantibodies against G-protein-coupled cardiovascular receptors in Japanese patients with cardiomyopathy. Matsui S, et al. **Blood Press Suppl** 1996;3:28-30
Antibodies targeting the calcium sensing receptor: acquired hypoparathyroidism--an autoimmune disease at last? Hofbauer LC, et al. **Eur J Endocrinol** 1996 Aug; 135(2):172-3 (8 ref.)
Preferential recognition of the very low-density lipoprotein receptor ligand binding site by antibodies from phage display libraries. Pfistermueller DM, et al. **FEBS Lett** 1996 Oct 28;396(1):14-20
A human antibody binds to alpha-galactose receptors and mimics the effects of Clostridium difficile toxin A in rat colon. Pothoulakis C, et al. **Gastroenterology** 1996 Jun; 110(6):1704-12
Virus-induced anti-asialoglycoprotein receptor autoimmunity in experimental hepadnaviral hepatitis. Diao J, et al. **Hepatology** 1997 Mar;25(3):689-96
Dissociation of multivalent antibody-antigen interactions [letter; comment] Hubble J. **Immunol Today** 1997 Jun; 18(6):305-6. Comment on: Immunol Today 1996 Feb;17(2):77-80.
Ubiquitin-like epitopes associated with Candida albicans cell surface receptors. Sepulveda P, et al. **Infect Immun** 1996 Oct;64(10):4406-8
The domain on the Duffy blood group antigen for binding Plasmodium vivax and P. knowlesi malarial parasites to erythrocytes. Chitnis CE, et al. **J Exp Med** 1996 Oct 1; 184(4):1531-6
Preferential interaction of a novel tumor surface protein (p38.5) with naive natural killer cells. Das B, et al. **J Exp Med** 1997 May 19;185(10):1735-42
Comparative structural and antigenic properties of zona pellucida glycoproteins. Hedrick JL. **J Reprod Fertil Suppl** 1996;50:9-17 (32 ref.)
Studies on the epitope of pig zona pellucida recognized by a fertilization-blocking monoclonal antibody. Koyama K, et al. **J Reprod Fertil Suppl** 1996;50:135-42
Molecular biology approaches to evaluate species variation in immunogenicity and antigenicity of zona pellucida proteins. Prasad SV, et al. **J Reprod Fertil Suppl** 1996; 50:143-9
The generation of receptor-selective antibodies. Mackrill JJ. **Methods Mol Biol** 1997;83:65-79 (14 ref.)
Identification of the Fy6 epitope recognized by two monoclonal antibodies in the N-terminal extracellular portion of the Duffy antigen receptor for chemokines. Waśniowska K, et al. **Mol Immunol** 1996 Aug; 33(11-12):917-23
Enhanced expression of lipocortin-1 as a new immunosuppressive protein in cancer patients and its influence on reduced in vitro peripheral blood lymphocyte response to mitogens. Koseki H, et al. **Surg Today** 1997; 27(1):30-9
Monoclonal antibodies against the human mannose receptor that inhibit the binding of tissue-type plasminogen activator. Barrett-Bergshoeff M, et al. **Thromb Haemost** 1997 Apr;77(4):718-24
Anti asialoglycoprotein receptor antibodies and soluble interleukin-2 receptor levels as marker for inflammation in autoimmune hepatitis. Dejica D, et al. **Z Gastroenterol** 1997 Jan;35(1):15-21

ISOLATION & PURIFICATION

Immunohistochemical analysis of murine CD95/Fas/Apo-1 receptor and its ultrastructural distribution in the thymus. Ramos P, et al. **APMIS** 1997 Aug;105(8):597-602
Identification and isolation of a 45-kDa calcium-dependent lactoferrin receptor from rat hepatocytes. Bennatt DJ, et al. **Biochemistry** 1997 Jul 8;36(27):8359-66
Enhancement of tissue-type plasminogen activator (t-PA) activity by purified t-PA receptor expressed in human endothelial cells. Fukao H, et al. **Biochim Biophys Acta** 1997 Mar 27;1356(1):111-20
Inhibition of human immunodeficiency virus type 1 infectivity by secretory leukocyte protease inhibitor occurs prior to viral reverse transcription. McNeely TB, et al. **Blood** 1997 Aug 1;90(3):1141-9
Natural killer cell receptors specific for MHC class I molecules [published erratum appears in Curr Opin Immunol 1996 Jun;8(3):419] Colonna M. **Curr Opin Immunol** 1996 Feb;8(1):101-7 (60 ref.)
Further studies on the identification of the phagocytosis receptor of rat retinal pigment epithelial cells. Hall MO, et al. **Exp Eye Res** 1996 Sep;63(3):255-64
Blood coagulation factor IX-binding protein from the venom of Trimeresurus flavoviridis: purification and characterization. Atoda H, et al. **J Biochem (Tokyo)** 1995 Nov;118(5):965-73
Neuronal pentraxin receptor, a novel putative integral membrane pentraxin that interacts with neuronal pentraxin 1 and 2 and taipoxin-associated calcium-binding protein 49. Dodds DC, et al. **J Biol Chem** 1997 Aug 22; 272(34):21488-94
Isolation of the SO4-4-GalNAcbeta1,4GlcNAcbeta1,2Manalpha-specific receptor from rat liver. Fiete D, et al. **J Biol Chem** 1997 Jun 6;272(23):14629-37
Effect of ligand orientation on hepatocyte attachment onto the poly(N-p-vinylbenzyl-o-beta-D-galactopyranosyl-D-gluconamide) as a model ligand of asialoglycoprotein. Cho CS, et al. **J Biomater Sci Polym Ed** 1996;7(12):1097-104
Purification, membrane expression, and interactions of transcobalamin II receptor. Bose S, et al. **Methods Enzymol** 1997;281:281-9
Purification of membrane proteins. Ohlendieck K. **Methods Mol Biol** 1996;59:313-22
Preparation of a membrane fraction for receptor studies and solubilization of receptor proteins with retention of biological activity. Wheatley M, et al. **Methods Mol Biol** 1997;73:305-22
Purification and characterization of receptors for activated protein kinase C from rat hepatocytes. Robles-Flores M, et al. **Protein Expr Purif** 1997 Jun;10(1):32-7

METABOLISM

Structure and function of phospholipase A2 receptor. Hanasaki K, et al. **Adv Exp Med Biol** 1996;416:315-9 (29 ref.)
Rat calcium-sensing receptor is regulated by vitamin D but not by calcium. Brown AJ, et al. **Am J Physiol** 1996 Mar; 270(3 Pt 2):F454-60
Expression of LAR-PTP2 in rat lung is confined to proliferating epithelia lining the airways and air sacs. Kim H, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):L566-76
Localization of the extracellular Ca(2+)-sensing receptor and PTH/PTHrP receptor in rat kidney. Riccardi D, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F951-6

Coupling of oxytocin receptor to G proteins in rat myometrium during labor: Gi receptor interaction. Strakova Z, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E870–6

Receptors in the Pseudomonas aeruginosa adherence to injured and repairing airway epithelium. de Bentzmann S, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S155–62 (54 ref.)

Uniqueness of physically reasonable root for the polynomial characterizing the multisite binding model. Wang ZX. **Anal Biochem** 1997 Apr 5;247(1):177–8

Controlling receptor/ligand trafficking: effects of cellular and molecular properties on endosomal sorting. French AR, et al. **Ann Biomed Eng** 1997 Jul–Aug;25(4):690–707

Stress-induced cardioadaptation reveals a code linking hormone receptors and spatial redistribution of PKC isoforms. Banerjee A, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:226–39

To what extent can binding studies allow the quantification of affinity and efficacy? Birdsall NJ, et al. **Ann N Y Acad Sci** 1997 May 30;812:41–7 (33 ref.)

Do recombinant receptor assays provide affinity and potency estimates? Bockaert J, et al. **Ann N Y Acad Sci** 1997 May 30;812:55–70 (27 ref.)

Metal-ion sites as structural and functional probes of helix-helix interactions in 7TM receptors. Elling CE, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:142–51 (57 ref.)

Hematopoietic receptor complexes. Wells JA, et al. **Annu Rev Biochem** 1996;65:609–34 (103 ref.)

Delivery of oligoribonucleotides to human hepatoma cells using cationic lipid particles conjugated to ferric protoporphyrin IX (heme). Takle GB, et al. **Antisense Nucleic Acid Drug Dev** 1997 Jun;7(3):177–85

Response of Neisseria meningitidis to iron limitation. Pettersson A, et al. **Antonie Van Leeuwenhoek** 1997 Feb; 71(1–2):129–36 (34 ref.)

Ligand specificity and affinity of BT-R1, the Bacillus thuringiensis Cry1A toxin receptor from Manduca sexta, expressed in mammalian and insect cell cultures. Keeton TP, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3419–25

Ingestion of Candida albicans down-regulates mannose receptor expression on rat macrophages. Shepherd VL, et al. **Arch Biochem Biophys** 1997 Aug 15;344(2):350–6

Elastin receptor and cell-matrix interactions in heart transplant-associated arteriosclerosis. Hinek A. **Arch Immunol Ther Exp (Warsz)** 1997;45(1):15–29 (114 ref.)

Contrasting effects of plasminogen activators, urokinase receptor, and LDL receptor-related protein on smooth muscle cell migration and invasion. Okada SS, et al. **Arterioscler Thromb Vasc Biol** 1996 Oct;16(10):1269–76

Heparan sulfate proteoglycans. Essential co-factors in receptor-mediated processes with relevance to the biology of the vascular wall. David G, et al. **Atherosclerosis** 1995 Dec;118 Suppl:S57–67 (75 ref.)

Melatonin receptors in the mammalian suprachiasmatic nucleus. Dubocovich ML, et al. **Behav Brain Res** 1996; 73(1–2):141–7 (79 ref.)

Expression of extracellular calcium-sensing receptor by human lens epithelial cells. Chattopadhyay N, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):801–5

Occurrence of sex steroid hormones and their binding proteins in Octopus vulgaris lam [published erratum appears in Biochem Biophys Res Commun 1996 Dec 4;229(1):361] D'Aniello A, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):782–8

Calcium-dependent c-myc proto-oncogene expression and proliferation of Caco-2 cells: a role for a luminal extracellular calcium-sensing receptor. Kállay E, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):80–3

Method for identifying ligands activating either excitatory or inhibitory G-protein-coupled receptors by functional coexpression in Xenopus oocytes. Owman C, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):853–6

Palmitoylation: a post-translational modification that regulates signalling from G-protein coupled receptors. Morello JP, et al. **Biochem Cell Biol** 1996;74(4):449–57 (70 ref.)

Trypsin stimulates proteinase-activated receptor-2-dependent and -independent activation of mitogen-activated protein kinases. Belham CM, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):939–46

Selective binding of N-acetylglucosamine to the chicken hepatic lectin. Burrows L, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):673–80

Isolated rat hepatocytes differentially bind and internalize bovine lactoferrin N- and C-lobes. Sitaram MP, et al. **Biochem J** 1997 May 1;323 (Pt 3):815–22

Characterization of high-affinity protein D binding sites on the surface of rat epididymal spermatozoa. Hall JC, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):1003–10

Impairment of the asialoglycoprotein receptor by ethanol oxidation. Clemens DL, et al. **Biochem Pharmacol** 1996 Nov 22;52(10):1499–505

Localization signals in proteins internalized from the cell surface. Banting G. **Biochem Soc Trans** 1996 May; 24(2):531–4 (29 ref.)

Determinants of steroid hormone bioavailability. Hammond GL. **Biochem Soc Trans** 1997 May;25(2):577–82 (51 ref.)

Interaction of urokinase-type plasminogen activator with its receptor rapidly induces activation of glucose transporters. Anichini E, et al. **Biochemistry** 1997 Mar 18;36(11):3076–83

Isolated rat hepatocytes bind lactoferrins by the RHL-1 subunit of the asialoglycoprotein receptor in a galactose-independent manner. Bennatt DJ, et al. **Biochemistry** 1997 Jul 8;36(27):8367–76

The serine chemoreceptor from Escherichia coli is methylated through an inter-dimer process. Li J, et al. **Biochemistry** 1997 Sep 30;36(39):11851–7

Altered sialylation of osteopontin prevents its receptor-mediated binding on the surface of oncogenically transformed tsB77 cells. Shanmugam V, et al. **Biochemistry** 1997 May 13;36(19):5729–38

Identification of amino acid residues that determine the differential ligand specificities of folate receptors alpha and beta. Shen F, et al. **Biochemistry** 1997 May 20; 36(20):6157–63

The human ENO1 gene product (recombinant human alpha-enolase) displays characteristics required for a plasminogen binding protein. Andronicos NM, et al. **Biochim Biophys Acta** 1997 Jan 4;1337(1):27–39

Enhancement of tissue-type plasminogen activator (t-PA) activity by purified t-PA receptor expressed in human endothelial cells. Fukao H, et al. **Biochim Biophys Acta** 1997 Mar 27;1356(1):111–20

Specificity of interaction between receptor and G protein: use of antisense techniques to relate G-protein subunits to function. Kalkbrenner F, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):125–39 (78 ref.)

A receptor for the oocyte maturation-inducing hormone 17alpha,20beta,21-trihydroxy-4-pregnen-3-one on ovarian membranes of striped bass. King W 5th, et al. **Biol Reprod** 1997 Jan;56(1):266–71

Lysis of surface-localized fibrin clots by adsorbed plasminogen in the presence of tissue plasminogen activator. Woodhouse KA, et al. **Biomaterials** 1996 Jan; 17(1):75–7

Iron uptake and intracellular metal transfer in mycobacteria mediated by xenosiderophores. Matzanke BF, et al. **Biometals** 1997 Jul;10(3):193–203

The high affinity melatonin binding site probed with conformationally restricted ligands--II. Homology modeling of the receptor. Grol CJ, et al. **Bioorg Med Chem** 1996 Aug;4(8):1333–9

The high affinity melationin binding site probed with conformationally restricted ligand--I. Pharmacophore and minireceptor models. Jansen JM, et al. **Bioorg Med Chem** 1996 Aug;4(8):1321–32

Influence of diffusion to fractal surfaces on the binding kinetics for antibody-antigen, analyte-receptor, and analyte-receptorless (protein) systems. Sadana A, et al. **Biophys Chem** 1997 Mar 27;65(1):29–44

Characterization of the folate receptor in human molar placenta. Holm J, et al. **Biosci Rep** 1996 Oct;16(5):379–89

Characterization of signal transduction pathways in human bone marrow endothelial cells. Liu ZY, et al. **Blood** 1997 Sep 15;90(6):2253–9

Type 2M:Milwaukee-1 von Willebrand disease: an in-frame deletion in the Cys509-Cys695 loop of the von Willebrand factor A1 domain causes deficient binding of von Willebrand factor to platelets. Mancuso DJ, et al. **Blood** 1996 Oct 1;88(7):2559–68

Receptor specificity of clinical Plasmodium falciparum isolates: nonadherence to cell-bound E-selectin and vascular cell adhesion molecule-1. Udomsangpetch R, et al. **Blood** 1996 Oct 1;88(7):2754–60

Homozygous patients with APC resistance may remain paucisymptomatic or asymptomatic during oral contraception. Girolami A, et al. **Blood Coagul Fibrinolysis** 1996 Sep;7(6):590–4

Use of the direct RNA amplification technique NASBA to detect factor V Leiden, a point mutation associated with APC resistance. Reitsma PH, et al. **Blood Coagul Fibrinolysis** 1996 Sep;7(6):659–63

Fate of the GPIb/IX receptor complex following activation of human platelets. White JG, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):262–5

Proceedings of the 1st International Meeting on Immunology of Cardiovascular Receptors. Taiyuan, China, May 24–26, 1995. **Blood Press Suppl** 1996;3:4–64

Expression and localization of bone morphogenetic proteins (BMPs) and BMP receptors in ossification of the ligamentum flavum. Hayashi K, et al. **Bone** 1997 Jul; 21(1):23–30

Relationship between folate-binding protein expression and cisplatin sensitivity in ovarian carcinoma cell lines. Ottone F, et al. **Br J Cancer** 1997;76(1):77–82

Inhibitory effects of omega-3 polyunsaturated fatty acids on receptor-mediated non-selective cation currents in rat A7r5 vascular smooth muscle cells. Asano M, et al. **Br J Pharmacol** 1997 Apr;120(7):1367–75

Rat proteinase-activated receptor-2 (PAR-2): cDNA sequence and activity of receptor-derived peptides in gastric and vascular tissue. Saifeddine M, et al. **Br J Pharmacol** 1996 Jun;118(3):521–30

Evidence of distinct amino acid and bile salt receptors in the olfactory system of the zebrafish, Danio rerio. Michel WC, et al. **Brain Res** 1997 Aug 1;764(1–2):179–87

The melatonin receptor in the human brain: cloning experiments and distribution studies. Mazzucchelli C, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):117–26

Expression of the orphan receptor steroidogenic factor-1 mRNA in the rat medial basal hypothalamus. Roselli CE, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):66–72

Sex steroid binding protein receptor (SBP-R) is related to a reduced proliferation rate in human breast cancer. Catalano MG, et al. **Breast Cancer Res Treat** 1997 Feb; 42(3):227–34

Cellular localisation by in situ hybridisation of cathepsin D, stromelysin 3, and urokinase plasminogen activator RNAs in breast cancer. Escot C, et al. **Breast Cancer Res Treat** 1996;38(2):217–26

Subtle differences in the mitogenic effects of recombinant human bone morphogenetic proteins -2 to -7 on DNA synthesis on primary bone-forming cells and identification of BMP-2/4 receptor. Mayer H, et al. **Calcif Tissue Int** 1996 Apr;58(4):249–55

Urokinase plasminogen activator receptor (uPA-R): one potential characteristic of metastatic phenotypes in minimal residual tumor disease. Allgayer H, et al. **Cancer Res** 1997 Apr 1;57(7):1394–9

Urokinase-type plasminogen activator receptors associate with beta1 and beta3 integrins of fibrosarcoma cells: dependence on extracellular matrix components. Xue W, et al. **Cancer Res** 1997 May 1;57(9):1682–9

Lectin-deficient ricin toxin intoxicates cells bearing the D-mannose receptor. Frankel AE, et al. **Carbohydr Res** 1997 May 16;300(3):251–8

Mannose receptor dependent uptake of ricin A1 and A2 chains by macrophages. Riccobono F, et al. **Carbohydr Res** 1996 Mar 18;282(2):285–92

Intracellular cleavage of Notch leads to a heterodimeric receptor on the plasma membrane. Blaumueller CM, et al. **Cell** 1997 Jul 25;90(2):281–91

Neuropilin is a receptor for the axonal chemorepellent Semaphorin III. He Z, et al. **Cell** 1997 Aug 22;90(4):739–51

Neuropilin is a semaphorin III receptor. Kolodkin AL, et al. **Cell** 1997 Aug 22;90(4):753–62

Differential regulation of human keratinocyte growth and differentiation by a novel family of protease-activated receptors. Derian CK, et al. **Cell Growth Differ** 1997 Jul; 8(7):743–9

Midkine stimulates Wilms' tumor cell proliferation via its signaling receptor. Ratovitski EA, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 May;43(3):425–31

Mechanistic hypotheses for the activation of G-protein-coupled receptors. Fong TM. **Cell Signal** 1996 Mar;8(3):217–24 (74 ref.)

Identification of urokinase-type plasminogen activator receptor in human endothelial cells and its modulation by phorbol myristate acetate. Matsumoto H, et al. **Cell Struct Funct** 1995 Dec;20(6):429–37

Synthesis and characterization of bivalent peptide ligands targeted to G-protein-coupled receptors. Carrithers MD, et al. **Chem Biol** 1996 Jul;3(7):537–42

A new class of models for computing receptor-ligand binding affinities. Gilson MK, et al. **Chem Biol** 1997 Feb;4(2):87–92 (78 ref.)

Nuclear hormone receptors: ligand-activated regulators of transcription and diverse cell responses. Katzenellenbogen JA, et al. **Chem Biol** 1996 Jul;3(7):529–36 (52 ref.)

Two distinct binding sites for globotriaosyl ceramide on verotoxins: identification by molecular modelling and confirmation using deoxy analogues and a new glycolipid receptor for all verotoxins [published erratum appears in Chem Biol 1996 Jan;3(1):503] Nyholm PG, et al. **Chem Biol** 1996 Apr;3(4):263–75

Getting it together: signal transduction in G-protein coupled receptors by association of receptor domains. Underwood DJ, et al. **Chem Biol** 1997 Apr;4(4):239–48 (81 ref.)

P2 purinoceptors and pyrimidinoceptors of catecholamine-producing cells and immunocytes. Illes P, et al. **Ciba Found Symp** 1996;198:110–25; discussion 125–9 (59 ref.)

Urokinase-type plasminogen activator receptor in gastric cancer: tissue expression and prognostic role. Plebani M, et al. **Clin Exp Metastasis** 1997 Jul;15(4):418–25

Structures, assays and receptors for locust adipokinetic hormones. Goldsworthy GJ, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Aug; 117(4):483–96 (136 ref.)

Yersiniabactin/pesticin receptor: a component of an iron uptake system of highly pathogenic Yersinia. Rakin A, et al. **Contrib Microbiol Immunol** 1995;13:244–7

Animal membrane receptors and adhesive molecules. Kubrycht J, et al. **Crit Rev Biotechnol** 1997;17(2):123–47 (160 ref.)

Targeting of drugs to cell surface receptors. Říhová B. **Crit Rev Biotechnol** 1997;17(2):149–69 (147 ref.)

The aimless RasGEF is required for processing of chemotactic signals through G-protein-coupled receptors in Dictyostelium. Insall RH, et al. **Curr Biol** 1996 Jun 1; 6(6):719–29

Cell-cell signalling: Wingless lands at last. Orsulic S, et al. **Curr Biol** 1996 Nov 1;6(11):1363–7 (28 ref.)

Receptor signaling: dimerization and beyond. Stock J. **Curr Biol** 1996 Jul 1;6(7):825–7 (18 ref.)

Physical interaction between a novel domain of the receptor Notch and the transcription factor RBP-J kappa/Su(H). Tamura K, et al. **Curr Biol** 1995 Dec 1;5(12):1416–23

How receptors talk to trimeric G proteins. Bourne HR. **Curr Opin Cell Biol** 1997 Apr;9(2):134–42 (66 ref.)

Receptor-regulated ion channels. Jan LY, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):155–60 (60 ref.)

Presynaptic ionotropic receptors. McGehee DS, et al. **Curr Opin Neurobiol** 1996 Jun;6(3):342–9 (96 ref.)

Specific in vitro interaction between recombinant

Strongylocentrotus purpuratus bindin and a recombinant 45A fragment of the putative bindin receptor. Cameron RA, et al. **Dev Biol** 1996 Nov 25;180(1):348–52

Impaired mammary gland development and function in mice lacking LAR receptor–like tyrosine phosphatase activity. Schaapveld RQ, et al. **Dev Biol** 1997 Aug 1;188(1):134–46

Mapping sperm binding domains on the sea urchin egg receptor for sperm. Stears RL, et al. **Dev Biol** 1997 Jul 15;187(2):200–8

Xenopus laevis sperm–egg adhesion is regulated by modifications in the sperm receptor and the egg vitelline envelope. Tian J, et al. **Dev Biol** 1997 Jul 15;187(2):143–53

Developmental restriction of Mash–2 expression in trophoblast correlates with potential activation of the notch–2 pathway. Nakayama H, et al. **Dev Genet** 1997; 21(1):21–30

The developmental and circadian variation of melatonin receptors in the chicken spinal cord. Wan Q, et al. **Dev Neurosci** 1997;19(2):196–201

VEGF–C receptor binding and pattern of expression with VEGFR–3 suggests a role in lymphatic vascular development. Kukk E, et al. **Development** 1996 Dec; 122(12):3829–37

lin–12 and glp–1 are required zygotically for early embryonic cellular interactions and are regulated by maternal GLP–1 signaling in Caenorhabditis elegans. Moskowitz IP, et al. **Development** 1996 Dec;122(12):4105–17

Mothers against dpp participates in a DDP/TGF–beta responsive serine–threonine kinase signal transduction cascade. Newfeld SJ, et al. **Development** 1997 Aug; 124(16):3167–76

Recycling of the urokinase receptor upon internalization of the uPA:serpin complexes. Nykjaer A, et al. **EMBO J** 1997 May 15;16(10):2610–20

Sek4 and Nuk receptors cooperate in guidance of commissural axons and in palate formation. Orioli D, et al. **EMBO J** 1996 Nov 15;15(22):6035–49

Unique signal transduction of Eyk: constitutive stimulation of the JAK–STAT pathway by an oncogenic receptor–type tyrosine kinase. Zong C, et al. **EMBO J** 1996 Sep 2; 15(17):4515–25

The effect of cyclic adenosine monophosphate on the mitogen–activated protein kinase pathway depends on both the cell type and the type of tyrosine kinase–receptor. Calleja V, et al. **Endocrinology** 1997 Mar;138(3):1111–20

Relationships among sex steroids, oxytocin, and their receptors in the rat uterus during late gestation and at parturition. Fang X, et al. **Endocrinology** 1996 Aug; 137(8):3213–9

Expression of a calcium–sensing receptor in a human medullary thyroid carcinoma cell line and its contribution to calcitonin secretion. Freichel M, et al. **Endocrinology** 1996 Sep;137(9):3842–8

Inactivation of melatonin receptors by protein kinase C in human prostate epithelial cells. Gilad E, et al. **Endocrinology** 1997 Oct;138(10):4255–61

Expression of urokinase–type plasminogen activator and its receptor during ovarian follicular development. Li M, et al. **Endocrinology** 1997 Jul;138(7):2790–9

Cell–surface acceleration of urokinase–catalyzed receptor cleavage. Høyer–Hansen G, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):21–6

Kinetics of reciprocal pro–urokinase/plasminogen activation––stimulation by a template formed by the urokinase receptor bound to poly(D–lysine). Petersen LC. **Eur J Biochem** 1997 Apr 15;245(2):316–23

Plasminogen activation by pro–urokinase in complex with its receptor––dependence on a tripeptide (Spectrozyme plasmin). Wang J, et al. **Eur J Biochem** 1997 Jul 1; 247(1):256–61

Aminopeptidase N from Bombyx mori as a candidate for the receptor of Bacillus thuringiensis Cry1Aa toxin. Yaoi K, et al. **Eur J Biochem** 1997 Jun 15;246(3):652–7

The VPS8 gene is required for localization and trafficking of the CPY sorting receptor in Saccharomyces cerevisiae. Chen YJ, et al. **Eur J Cell Biol** 1996 Aug;70(4):289–97

Quantitative analysis of clustering on biological membranes: methodology and application to ligand–induced asialoglycoprotein receptor redistribution on rat hepatocytes. Van Der Smissen P, et al. **Eur J Cell Biol** 1996 Jan;69(1):45–54

Melatonin receptors in the chicken kidney are up–regulated by pinealectomy and linked to adenylate cyclase. Song Y, et al. **Eur J Endocrinol** 1996 Jul;135(1):128–33

Melatonin receptors are present in adult rat Leydig cells and are coupled through a pertussis toxin–sensitive G–protein. Valenti S, et al. **Eur J Endocrinol** 1997 Jun;136(6):633–9

Localization of 2–[125I]iodomelatonin binding sites in visual areas of the turtle brain. Larson–Prior LJ, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):181–5

A rhodopsin–based model for melatonin recognition at its G protein–coupled receptor. Navajas C, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):173–83

Increased neutrophil respiratory burst in myeloproliferative disorders: selective enhancement of superoxide release triggered by receptor–mediated agonists and low responsiveness to in vitro cytokine stimulation. Iki S, et al. **Exp Hematol** 1997 Jan;25(1):26–33

Receptor based chemical sensing. Sugawara M, et al. **EXS** 1997;80:121–31

Studies of the renal action of melatonin: evidence that the effects are mediated by 37 kDa receptors of the Mel1a subtype localized primarily to the basolateral membrane of the proximal tubule. Song Y, et al. **FASEB J** 1997 Jan; 11(1):93–100

The Hill equation revisited: uses and misuses. Weiss JN. **FASEB J** 1997 Sep;11(11):835–41

G–protein–coupled receptors: molecular mechanisms involved in receptor activation and selectivity of G–protein recognition. Wess J. **FASEB J** 1997 Apr;11(5):346–54 (87 ref.)

Effect of purified, soluble urokinase receptor on the plasminogen–prourokinase activation system. Behrendt N, et al. **FEBS Lett** 1996 Sep 9;393(1):31–6

Reply to comment on 'Effect of purified, soluble urokinase receptor on the plasminogen–prourokinase activation system' (A. A–R. Higazi) [comment] Behrendt N, et al. **FEBS Lett** 1997 Feb 3;402(2–3):293–4. Comment on: FEBS Lett 1997 Feb 3;402(2–3):291–2.

Identification of Mel1a melatonin receptors in the human embryonic kidney cell line HEK293: evidence of G protein–coupled melatonin receptors which do not mediate the inhibition of stimulated cyclic AMP levels. Conway S, et al. **FEBS Lett** 1997 Apr 21;407(1):121–6

Plant cell pH–static circuit mediated by fusicoccin–binding proteins. Drabkin AV, et al. **FEBS Lett** 1997 Mar 24; 405(2):145–7

Commentary on: 'Effect of purified soluble urokinase receptor on the plasminogen prourokinase activation system' by N. Behrendt and K. Dano, FEBS Letters, 393 (1996) 31–36 [see comments] Higazi AA. **FEBS Lett** 1997 Feb 3;402(2–3):291–2. Comment in: FEBS Lett 1997 Feb 3;402(2–3):293–4.

Defective cell migration in an ovarian cancer cell line is associated with impaired urokinase–induced tyrosine phosphorylation. Mirshahi SS, et al. **FEBS Lett** 1997 Jul 14;411(2–3):322–6

Preferential recognition of the very low–density lipoprotein receptor ligand binding site by antibodies from phage display libraries. Pfistermueller DM, et al. **FEBS Lett** 1996 Oct 28;396(1):14–20

Specific binding of [3H]GppNHp to extracellular membrane receptors in chick cerebellum: possible involvement of kainic acid receptors. Ramos M, et al. **FEBS Lett** 1997 Apr 7;406(1–2):114–8

Elemental iron does repress transferrin, haemopexin and haemoglobin receptor expression in Haemophilus influenzae. Hasan AA, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):19–26

Central melatonin receptors in red deer (Cervus elaphus). Williams LM, et al. **Gen Comp Endocrinol** 1996 Oct; 104(1):1–6

Molecular identification of a G protein–coupled receptor family which is expressed in planarians. Saitoh O, et al. **Gene** 1997 Aug 11;195(1):55–61

Chemoreceptors expressed in taste, olfactory and male reproductive tissues. Thomas MB, et al. **Gene** 1996 Oct 31;178(1–2):1–5

Cell surface receptor function of amyloid precursor protein that activates Ser/Thr kinases. Murayama Y, et al. **Gerontology** 1996;42 Suppl 1:2–11

Differential ligand binding by two subunits of the rat liver asialoglycoprotein receptor. Ruiz NI, et al. **Glycobiology** 1996 Jul;6(5):551–9

Characterization of a 180 kDa molecule apparently reactive with recombinant L–selectin. Kawashima H, et al. **Glycoconj J** 1997 Apr;14(3):321–30

Inner ear DNA receptors in MRL/lpr autoimmune mice: potential 30 and 70 kDa link between autoimmune disease and hearing loss. Trune DR, et al. **Hear Res** 1997 Mar; 105(1–2):57–64

Receptor–mediated delivery of hepatitis B virus DNA and antisense oligodeoxynucleotides to avian liver cells. Madon J, et al. **Hepatology** 1996 Sep;24(3):474–81

Hepatic lobar differences in progression of chronic liver disease: correlation of asialoglycoprotein scintigraphy and hepatic functional reserve. Matsuzaki S, et al. **Hepatology** 1997 Apr;25(4):828–32

Sites of urokinase–type plasminogen activator expression and distribution of its receptor in the normal human kidney. Wagner SN, et al. **Histochem Cell Biol** 1996 Jan; 105(1):53–60

Radioimagers as an alternative to film autoradiography for in situ quantitative analysis of 125I–ligand receptor binding and pharmacological studies. Crumeyrolle–Arias M, et al. **Histochem J** 1996 Nov;28(11):801–9

Sex steroid–binding protein and its membrane receptor in estrogen–dependent breast cancer: biological and pathophysiological impact. Fortunati N, et al. **Horm Res** 1996;45(3–5):202–6 (16 ref.)

Growth hormone– and prolactin–binding proteins: soluble forms of receptors. Postel–Vinay MC. **Horm Res** 1996; 45(3–5):178–81 (33 ref.)

Hormone receptors in breast carcinomas. Mandal AK. **Indian J Pathol Microbiol** 1995 Jan;38(1):109–18 (17 ref.)

Host cell heparan sulfate proteoglycans mediate attachment and entry of Listeria monocytogenes, and the listerial surface protein ActA is involved in heparan sulfate receptor recognition. Alvarez–Dominguez C, et al. **Infect Immun** 1997 Jan;65(1):78–88

Specific binding of Haemophilus influenzae to minor gangliosides of human respiratory epithelial cells. Fakih MG, et al. **Infect Immun** 1997 May;65(5):1695–700

Brief heat shock treatment induces a long–lasting alteration in the glycolipid receptor binding specificity and growth rate of Haemophilus influenzae. Hartmann E, et al. **Infect Immun** 1997 May;65(5):1729–33

Microbial adherence to and invasion through proteoglycans. Rostand KS, et al. **Infect Immun** 1997 Jan;65(1):1–8 (114 ref.)

Insect storage proteins: gene families and receptors. Haunerland NH. **Insect Biochem Mol Biol** 1996 Sep–Oct; 26(8–9):755–65 (60 ref.)

Receptors for the vasodilator maxadilan are expressed on selected neural crest and smooth muscle–derived cells. Moro O, et al. **Insect Biochem Mol Biol** 1996 Dec; 26(10):1019–25

Specific binding sites for 1–O–alkyl–sn–glyceryl–3–phosphorylcholine on intact human blood neutrophils. Korth RM. **Int Arch Allergy Immunol** 1997 Aug;113(4):460–4

ELISA for complexes between urokinase–type plasminogen activator and its receptor in lung cancer tissue extracts. de Witte H, et al. **Int J Cancer** 1997 Jul 29;72(3):416–23

Overexpression of folate binding protein in ovarian cancers. Toffoli G, et al. **Int J Cancer** 1997 Apr 22;74(2):193–8

The entire gamma–carboxyglutamic acid– and helical stack–domains of human coagulation factor IX are required for optimal binding to its endothelial cell receptor. Prorok M, et al. **Int J Pept Protein Res** 1996 Sep;48(3):281–5

Vitellogenin receptors: oocyte–specific members of the low–density lipoprotein receptor supergene family. Schneider WJ. **Int Rev Cytol** 1996;166:103–37 (119 ref.)

Macrophage receptors for lumican. A corneal keratan sulfate proteoglycan. Funderburgh JL, et al. **Invest Ophthalmol Vis Sci** 1997 May;38(6):1159–67

The Tla protein of Porphyromonas gingivalis W50: a homolog of the RI protease precursor (PrpRI) is an outer membrane receptor required for growth on low levels of hemin. Aduse–Opoku J, et al. **J Bacteriol** 1997 Aug; 179(15):4778–88

A fragment liberated from the Escherichia coli CheA kinase that blocks stimulatory, but not inhibitory, chemoreceptor signaling. Morrison TB, et al. **J Bacteriol** 1997 Sep; 179(17):5543–50

Cloning and characterization of the gene (farA) encoding the receptor for an extracellular regulatory factor (IM–2) from Streptomyces sp. strain FRI–5. Waki M, et al. **J Bacteriol** 1997 Aug;179(16):5131–7

Developmental changes of neutral glycosphingolipids as receptors for pulmonary surfactant protein SP–A in the alveolar epithelium of murine lung. Momoeda K, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1189–95

Activation–dependent exposure of the inter–EGF sequence Leu83–Leu88 in factor Xa mediates ligand binding to effector cell protease receptor–1. Ambrosini G, et al. **J Biol Chem** 1997 Mar 28;272(13):8340–5

Loss of folic acid exporter function with markedly augmented folate accumulation in lipophilic antifolate–resistant mammalian cells. Assaraf YG, et al. **J Biol Chem** 1997 Jul 11;272(28):17460–6

Domain interplay in the urokinase receptor. Requirement for the third domain in high affinity ligand binding and demonstration of ligand contact sites in distinct receptor domains. Behrendt N, et al. **J Biol Chem** 1996 Sep 13; 271(37):22885–94

Lysine–based cluster mannosides that inhibit ligand binding to the human mannose receptor at nanomolar concentration. Biessen EAL, et al. **J Biol Chem** 1996 Nov 8;271(45):28024–30

Bipolar functional expression of transcobalamin II receptor in human intestinal epithelial Caco–2 cells. Bose S, et al. **J Biol Chem** 1997 Feb 7;272(6):3538–43

Effector cell protease receptor–1, a platelet activation–dependent membrane protein, regulates prothrombinase–catalyzed thrombin generation. Bouchard BA, et al. **J Biol Chem** 1997 Apr 4;272(14):9244–51

A truncated form of RGS3 negatively regulates G protein–coupled receptor stimulation of adenylyl cyclase and phosphoinositide phospholipase C. Chatterjee TK, et al. **J Biol Chem** 1997 Jun 13;272(24):15481–7

Sorting determinants in the transmembrane domain of p24 proteins. Fiedler K, et al. **J Biol Chem** 1997 Oct 3; 272(40):24739–42

Isolation of the SO4–4–GalNAcbeta1,4GlcNAcbeta1,2Manalpha–specific receptor from rat liver. Fiete D, et al. **J Biol Chem** 1997 Jun 6;272(23):14629–37

Functional reconstitution in situ of 5–hydroxytryptamine2c (5HT2c) receptors with alphaq and inverse agonism of 5HT2c receptor antagonists. Hartman JL IV, et al. **J Biol Chem** 1996 Sep 13;271(37):22591–7

Soluble human urokinase receptor is composed of two active units. Higazi AAR, et al. **J Biol Chem** 1997 Feb 21; 272(8):5348–53

Uncoupling of ligand–binding affinity of the bacterial serine chemoreceptor from methylation– and temperature–modulated signaling states. Iwama T, et al. **J Biol Chem** 1997 May 23;272(21):13810–5

Regulation of plasminogen receptor expression on monocytoid cells by beta1–integrin–dependent cellular adherence to extracellular matrix proteins. Kim SO, et al. **J Biol Chem** 1996 Sep 27;271(39):23761–7

The N–terminal extension of Galphaq is critical for constraining the selectivity of receptor coupling. Kostenis E, et al. **J Biol Chem** 1997 Aug 1;272(31):19107–10

Direct demonstration of mechanically induced release of cellular UTP and its implication for uridine nucleotide receptor activation. Lazarowski ER, et al. **J Biol Chem** 1997 Sep 26;272(39):24348–54

GAS6 mediates adhesion of cells expressing the receptor tyrosine kinase Axl. McCloskey P, et al. **J Biol Chem** 1997 Sep 12;272(37):23285–91

Quantitative analysis of bacterial toxin affinity and specificity for glycolipid receptors by surface plasmon resonance. MacKenzie CR, et al. **J Biol Chem** 1997 Feb 28; 272(9):5533–8

Lipoxin A4 stable analogs are potent mimetics that stimulate human monocytes and THP–1 cells via a G–protein–linked lipoxin A4 receptor. Maddox JF, et al. **J Biol Chem** 1997 Mar 14;272(11):6972–8

A p56(lck) ligand serves as a coactivator of an orphan nuclear hormone receptor. Marcus SL, et al. **J Biol Chem** 1996 Nov 1;271(44):27197–200

Identification of the membrane receptor binding domain of thyroglobulin. Insights into quality control of thyroglobulin biosynthesis. Mezgrhani H, et al. **J Biol Chem** 1997 Sep 12;272(37):23340–6

Interactions of mast cell tryptase with thrombin receptors and PAR–2. Molino M, et al. **J Biol Chem** 1997 Feb 14; 272(7):4043–9

Endothelial cell thrombin receptors and PAR–2. Two protease–activated receptors located in a single cellular environment. Molino M, et al. **J Biol Chem** 1997 Apr 25; 272(17):11133–41

Mechanism of Ca2+ and monosaccharide binding to a C–type carbohydrate–recognition domain of the macrophage mannose receptor. Mullin NP, et al. **J Biol Chem** 1997 Feb 28;272(9):5668–81

Amino–terminal processing of cell surface heparin–binding epidermal growth factor–like growth factor up–regulates its juxtacrine but not its paracrine growth factor activity. Nakagawa T, et al. **J Biol Chem** 1996 Nov 29; 271(48):30858–63

Effector cell protease receptor–1 is a vascular receptor for coagulation factor Xa. Nicholson AC, et al. **J Biol Chem** 1996 Nov 8;271(45):28407–13

Localization of structural elements of bee venom phospholipase A2 involved in N–type receptor binding and neurotoxicity. Nicolas JP, et al. **J Biol Chem** 1997 Mar 14;272(11):7173–81

Biphasic binding kinetics between FepA and its ligands. Payne MA, et al. **J Biol Chem** 1997 Aug 29;272(35):21950–5

Delayed activation of the mannose receptor following synthesis. Requirement for exit from the endoplasmic reticulum. Pontow SE, et ál. **J Biol Chem** 1996 Nov 29; 271(48):30736–40

Regulation of G protein–coupled receptor kinases by calmodulin and localization of the calmodulin binding domain. Pronin AN, et al. **J Biol Chem** 1997 Jul 18; 272(29):18273–80

The synaptobrevin–related domains of Bos1p and Sec22p bind to the syntaxin–like region of Sed5p. Sacher M, et al. **J Biol Chem** 1997 Jul 4;272(27):17134–8

Disruption of microtubules reveals two independent apical targeting mechanisms for G–protein–coupled receptors in polarized renal epithelial cells. Saunders C, et al. **J Biol Chem** 1997 Jul 25;272(30):19035–45

Association between receptor protein–tyrosine phosphatase RPTPalpha and the Grb2 adaptor. Dual Src homology (SH) 2/SH3 domain requirement and functional consequences. Su J, et al. **J Biol Chem** 1996 Nov 8; 271(45):28086–96

Close association of the first and fourth extracellular domains of the Duffy antigen/receptor for chemokines by a disulfide bond is required for ligand binding. Tournamille C, et al. **J Biol Chem** 1997 Jun 27;272(26):16274–80

Macrophage stimulating protein (MSP) binds to its receptor via the MSP beta chain. Wang MH, et al. **J Biol Chem** 1997 Jul 4;272(27):16999–7004

Embryonic fibroblasts that are genetically deficient in low density lipoprotein receptor–related protein demonstrate increased activity of the urokinase receptor system and accelerated migration on vitronectin. Weaver AM, et al. **J Biol Chem** 1997 May 30;272(22):14372–9

Elements of neural adhesion molecules and a yeast vacuolar protein sorting receptor are present in a novel mammalian low density lipoprotein receptor family member. Yamazaki H, et al. **J Biol Chem** 1996 Oct 4;271(40):24761–8

Sphingosine 1–phosphate induces platelet activation through an extracellular action and shares a platelet surface receptor with lysophosphatidic acid. Yatomi Y, et al. **J Biol Chem** 1997 Feb 21;272(8):5291–7

Requirement of receptor–bound urokinase–type plasminogen activator for integrin alphavbeta5–directed cell migration. Yebra M, et al. **J Biol Chem** 1996 Nov 15;271(46):29393–9

Molecular cloning of a novel human CC chemokine EBI1–ligand chemokine that is a specific functional ligand for EBI1, CCR7. Yoshida R, et al. **J Biol Chem** 1997 May 23;272(21):13803–9

Protein–tyrosine phosphatase SHP2 is positively linked to proteinase–activated receptor 2–mediated mitogenic pathway. Yu Z, et al. **J Biol Chem** 1997 Mar 14; 272(11):7519–24

Fatty acylation of the rat and human asialoglycoprotein receptors. A conserved cytoplasmic cysteine residue is acylated in all receptor subunits. Zeng FY, et al. **J Biol Chem** 1996 Dec 13;271(50):32454–60

Daily and photoperiodic melatonin binding changes in the suprachiasmatic nuclei, paraventricular thalamic nuclei, and pars tuberalis of the female Siberian hamster (Phodopus sungorus). Recio J, et al. **J Biol Rhythms** 1996 Dec; 11(4):325–32

Dynamic measurement of the pH of the Golgi complex in living cells using retrograde transport of the verotoxin receptor. Kim JH, et al. **J Cell Biol** 1996 Sep;134(6):1387–99

Multiple determinants direct the orientation of signal–anchor proteins: the topogenic role of the hydrophobic signal domain. Wahlberg JM, et al. **J Cell Biol** 1997 May 5; 137(3):555–62

Lack of association between receptor protein tyrosine phosphatase RPTP mu and cadherins. Zondag GC, et al. **J Cell Biol** 1996 Sep;134(6):1513–7

Human umbilical vein endothelial cells express high affinity receptors for factor Xa. Bono F, et al. **J Cell Physiol** 1997 Jul;172(1):36–43

Tumor cell–conditioned medium stimulates expression of the urokinase receptor in vascular endothelial cells. Seghezzi G, et al. **J Cell Physiol** 1996 Nov;169(2):300–8

Regulated localization confers multiple functions on the protease urokinase plasminogen activator. Wells JM, et al. **J Cell Physiol** 1997 May;171(2):217–25

Evidence of a non–conventional role for the urokinase tripartite complex (uPAR/uPA/PAI–1) in myogenic cell fusion. Bonavaud S, et al. **J Cell Sci** 1997 May;110 (Pt 9):1083–9

Proteinase–activated receptor–2: expression by human neutrophils. Howells GL, et al. **J Cell Sci** 1997 Apr;110 (Pt 7):881–7

Molecular design using the minireceptor concept. Jansen JM, et al. **J Chem Inf Comput Sci** 1997 Jul–Aug;37(4):812–8

Prediction of ligand–receptor binding thermodynamics by free energy force field (FEFF) 3D–QSAR analysis: application to a set of peptidometic renin inhibitors. Tokarski JS, et al. **J Chem Inf Comput Sci** 1997 Jul–Aug; 37(4):792–811

Constructing protein models for ligand–receptor binding thermodynamic simulations: an application to a set of peptidometic renin inhibitors. Tokarski JS, et al. **J Chem Inf Comput Sci** 1997 Jul–Aug;37(4):779–91

Markedly reduced activity of mutant calcium–sensing receptor with an inserted Alu element from a kindred with familial hypocalciuric hypercalcemia and neonatal severe hyperparathyroidism. Bai M, et al. **J Clin Invest** 1997 Apr 15;99(8):1917–25

Selectin ligands: will the real ones please stand up? Varki A. **J Clin Invest** 1997 Jan 15;99(2):158–62 (74 ref.)

Receptor–mediated cellular entry of nuclear localizing anti–DNA antibodies via myosin 1. Yanase K, et al. **J Clin Invest** 1997 Jul 1;100(1):25–31

Chronic ethanol administration to rats decreases receptor–operated mobilization of intracellular ionic calcium in cultured hepatocytes and inhibits 1,4,5–inositol trisphosphate production: relevance to impaired liver regeneration. Zhang BH, et al. **J Clin Invest** 1996 Sep 1; 98(5):1237–44

Differential expression of the urokinase receptor (CD87) in arthritic and normal synovial tissues. Szekanecz Z, et al. **J Clin Pathol** 1997 Apr;50(4):314–9

Ca2+ receptor mRNA and protein increase in the rat parathyroid gland with advancing age. Autry CP, et al. **J Endocrinol** 1997 Jun;153(3):437–44

Fc chimeric protein containing the cysteine–rich domain of the murine mannose receptor binds to macrophages from splenic marginal zone and lymph node subcapsular sinus and to germinal centers. Martínez–Pomares L, et al. **J Exp Med** 1996 Nov 1;184(5):1927–37

Putative melatonin receptors in the blind mole rat harderian gland. Gilad E, et al. **J Exp Zool** 1997 Apr 15;277(6):435–41

Vitellogenin receptors during vitellogenesis in the rainbow trout Oncorhynchus mykiss. Nuñez Rodriguez J, et al. **J Exp Zool** 1996 Feb 15;274(3):163–70

Primary cultured normal human hepatocytes for hepatitis B virus receptor studies. Mabit H, et al. **J Hepatol** 1996 Apr; 24(4):403–12

Counter–receptors on human basophils for endothelial cell adhesion molecules. Bochner BS, et al. **J Immunol** 1996 Jul 15;157(2):844–50

Cathepsin G binds to human lymphocytes. Yamazaki T, et al. **J Leukoc Biol** 1997 Jan;61(1):73–9

Regulatory effects of lipoprotein lipase on proliferative and cytotoxic activity of NK cells. De Sanctis JB, et al. **J Lipid Res** 1996 Sep;37(9):1987–2000

Interaction of a recombinant form of apolipoprotein[a] with human fibroblasts and with the human hepatoma cell line HepG2. Tam SP, et al. **J Lipid Res** 1996 Mar;37(3):518–33

A statistical theory for flow cytometry profiles in terms of the binding of ligands to cell surface receptors and changes in gene expression. Bardsley WG, et al. **J Math Biol** 1996; 34(3):271–96

Three–dimensional quantitative structure–activity relationship of melatonin receptor ligands: a comparative molecular field analysis study. Sicsic S, et al. **J Med Chem** 1997 Feb 28;40(5):739–48

Conformationally restrained melatonin analogues: synthesis, binding affinity for the melatonin receptor, evaluation of the biological activity, and molecular modeling study. Spadoni G, et al. **J Med Chem** 1997 Jun 20; 40(13):1990–2002

Clustering of GPI–anchored folate receptor independent of both cross–linking and association with caveolin. Wu M, et al. **J Membr Biol** 1997 Sep 15;159(2):137–47

Receptor–independent activation of cardiac adenylyl cyclase by GDP and membrane–associated nucleoside diphosphate kinase. A new cardiotonic mechanism? Niroomand F, et al. **J Mol Cell Cardiol** 1997 May;29(5):1479–86

Two lectin–like receptors for alpha 1–acid glycoprotein in mouse testis. Andersen UO, et al. **J Mol Recognit** 1996 Sep–Dec;9(5–6):364–7

Urokinase–type plasminogen activator and its receptor in bladder cancer [editorial; comment] Hasui Y, et al. **J Natl Cancer Inst** 1997 May 21;89(10):678–9 (19 ref.). Comment on: J Natl Cancer Inst 1997 May 21;89(10):709–17.

Urokinase and the urokinase receptor: association with in vitro invasiveness of human bladder cancer cell lines [see comments] Hudson MA, et al. **J Natl Cancer Inst** 1997 May 21;89(10):709–17. Comment in: J Natl Cancer Inst 1997 May 21;89(10):678–9.

Influence of maternal melatonin on melatonin receptors in rat offspring. Zitouni M, et al. **J Neural Transm Gen Sect** 1995;100(2):111–22

Identification of a neuronal cell surface receptor for a growth inhibitory chondroitin sulfate proteoglycan (NG2). Dou CL, et al. **J Neurochem** 1997 Mar;68(3):1021–30

Serotonergic modulation of photically induced increase in melatonin receptor density and Fos immunoreactivity in the suprachiasmatic nuclei of the rat. Recio J, et al. **J Neuroendocrinol** 1996 Nov;8(11):839–45

Melatonin receptors are present in non–optic regions of the brain of a deep–sea fish living in the absence of solar light. Smith A, et al. **J Neuroendocrinol** 1996 Sep;8(9):655–8

Melatonin receptors in the brain and pituitary gland of hypothalamo–pituitary disconnected Soay rams. Williams LM, et al. **J Neuroendocrinol** 1997 Aug;9(8):639–43

Differential expression of bone morphogenetic proteins in the developing vestibular and auditory sensory organs. Oh SH, et al. **J Neurosci** 1996 Oct 15;16(20):6463–75

Murine astrocytes express a functional chemokine receptor. Tanabe S, et al. **J Neurosci** 1997 Sep 1;17(17):6522–8

Studies on the role of fibroblast growth factor signaling in neurogenesis using conjugated/aged animal caps and dorsal ectoderm–grafted embryos. Xu RH, et al. **J Neurosci** 1997 Sep 15;17(18):6892–8

Comparison of binding mechanisms at cholinergic, serotonergic, glycinergic and GABAergic receptors. Aprison MH, et al. **J Neurosci Res** 1996 Jan 15;43(2):127–36 (39 ref.)

Differential regulation of adrenocorticoid receptors in the hippocampus and spinal cord of adrenalectomized rats. Marlier LN, et al. **J Neurosci Res** 1996 Mar 1;43(5):526–34

Circadian photic regulation of melatonin receptor density in rat suprachiasmatic nuclei: comparison with light induction of fos–related protein. Masson–Pevet M, et al. **J Neurosci Res** 1996 Mar 1;43(5):632–7

Interaction of 68–kDa TAR RNA–binding protein and other cellular proteins with prion protein–RNA stem–loop. Scheffer U, et al. **J Neurovirol** 1995 Dec;1(5–6):391–8

Automatic preparation of radiopharmacokinetic data for in vivo estimation of receptor biochemistry. Xu JC, et al. **J Nucl Med** 1996 Nov;37(11):1896–902

Histochemical study of the influence of transplanted teeth with periodontal ligament of the binding of peanut agglutinin in rat dorsal skin. Abe Y, et al. **J Periodontal Res** 1997 Feb;32(2):249–55

Deactivation and desensitization of non–NMDA receptors in patches and the time course of EPSCs in rat cerebellar granule cells [published erratum appears in J Physiol (Lond) 1996 Nov 1;496(Pt 3):891] Silver RA, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):167–73

CGP 52608–induced cyst formation in dinoflagellates: possible involvement of a nuclear receptor for melatonin. Tslm ST, et al. **J Pineal Res** 1996 Sep;21(2):101–7

Challenges of high throughput screening against cell surface receptors. Major JS. **J Recept Signal Transduct Res** 1995 Jan–Mar;15(1–4):595–607 (5 ref.)

Biochemical approaches to examine the specificity of interactions between receptors and guanine nuclotide binding proteins. Milligan G, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):253–65 (35 ref.)

Identification of neuronal calcium sensor (NCS–1) possibly involved in the regulation of receptor phosphorylation. Nef S, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):365–78

Multiple receptor populations: binding isotherms and their numerical analysis. Pliska V. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):651–75 (36 ref.)

Thermodynamic parameters of ligand–receptor interactions: computation and error margins [published erratum appears in J Recept Signal Transduct Res 1997 Jul;17(4):667] Pliška V. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):495–510 (22 ref.)

Constitutively active G protein–coupled receptors: potential mechanisms of receptor activation. Scheer A, et al. **J Recept Signal Transduct Res** 1997 Jan–May;17(1–3):57–73 (46 ref.)

Structure and function of the N–linked carbohydrate chains of pig zona pellucida glycoproteins. Nakano M, et al. **J Reprod Fertil Suppl** 1996;50:25–34 (40 ref.)

Pattern formation by lateral inhibition with feedback: a

mathematical model of delta-notch intercellular signalling. Collier JR, et al. **J Theor Biol** 1996 Dec 21;183(4):429–46

Seven helix receptors are enzymes catalysing G protein activation. What is the agonist Kact? Waelbroeck M, et al. **J Theor Biol** 1997 Jul 7;187(1):15–37

Sendai virus efficiently infects cells via the asialoglycoprotein receptor and requires the presence of cleaved F0 precursor proteins for this alternative route of cell entry. Bitzer M, et al. **J Virol** 1997 Jul;71(7):5481–6

Epstein–Barr virus immortalization: Notch2 interacts with CBF1 and blocks differentiation. Hsieh JJ, et al. **J Virol** 1997 Mar;71(3):1938–45

Functional uncoupling between the receptor and G-protein as the result of PKC activation, observed in Aplysia neurons. Sasaki K, et al. **Jpn J Physiol** 1997 Jun;47(3):241–9

Elevation of [Ca2+]i of renal proximal tubular cells and down-regulation of mRNA of PTH–PTHrP, V1a and AT1 receptors in kidney of diabetic rats. Marcinkowski W, et al. **Kidney Int** 1997 Jun;51(6):1950–5

Specific receptor binding of renin on human mesangial cells in culture increases plasminogen activator inhibitor-1 antigen. Nguyen G, et al. **Kidney Int** 1996 Dec; 50(6):1897–903

Expression of FLT4 and its ligand VEGF-C in acute myeloid leukemia. Fielder W, et al. **Leukemia** 1997 Aug; 11(8):1234–7

Expression of receptor protein-tyrosine phosphatase alpha mRNA and protein during mouse embryogenesis. den Hertog J, et al. **Mech Dev** 1996 Aug;58(1–2):89–101

What is the role of the gamma-hydroxybutyrate receptor? Cash CD. **Med Hypotheses** 1996 Dec;47(6):455–9 (41 ref.)

Are phosphorylated tyrosine residues of certain receptors involved in inducing transitory covalent protein cross-linking? Hawtrey AO, et al. **Med Hypotheses** 1997 Jan;48(1):77–81

Influenza A virus hemagglutinin is a B cell–superstimulatory lectin. Rott O, et al. **Med Microbiol Immunol (Berl)** 1996 Feb;184(4):185–93

Protein–glycosaminoglycan interactions: infectiological aspects. Sawitzky D. **Med Microbiol Immunol (Berl)** 1996 Feb;184(4):155–61 (78 ref.)

Purification, membrane expression, and interactions of transcobalamin II receptor. Bose S, et al. **Methods Enzymol** 1997;281:281–9

Assay of G protein-coupled receptor kinase activity by rhodopsin phosphorylation. Gagnon AW, et al. **Methods Mol Biol** 1997;83:235–42 (14 ref.)

Agonist-induced high-affinity GTP hydrolysis as an index of receptor-mediated G protein activation in mammalian brain membranes. Odagaki Y, et al. **Methods Mol Biol** 1997; 83:133–41 (15 ref.)

Interaction of the C-polysaccharide of Streptococcus pneumoniae with the receptor asialo-GM1. Sundberg-Kövamees M, et al. **Microb Pathog** 1996 Oct; 21(4):223–34

Defect in export and synthesis of the periplasmic galactose receptor MglB in dnaK mutants of Escherichia coli, and decreased stability of the mglB mRNA. el Yaagoubi A, et al. **Microbiology** 1996 Sep;142 (Pt 9):2595–602

A sorting nexin-1 homologue, Vps5p, forms a complex with Vps17p and is required for recycling the vacuolar protein-sorting receptor. Horazdovsky BF, et al. **Mol Biol Cell** 1997 Aug;8(8):1529–41

Receptor-mediated endocytosis of fucosylated neoglycoprotein by macrophages. Sarkar K, et al. **Mol Cell Biochem** 1996 Mar 23;156(2):109–16

A splicing variant of the RON transcript induces constitutive tyrosine kinase activity and an invasive phenotype [published erratum appears in Mol Cell Biol 1997 Jan;17(1):528] Collesi C, et al. **Mol Cell Biol** 1996 Oct; 16(10):5518–26

Chicken ovalbumin upstream promoter transcription factors act as auxiliary cofactors for hepatocyte nuclear factor 4 and enhance hepatic gene expression. Ktistaki E, et al. **Mol Cell Biol** 1997 May;17(5):2790–7

Regulation of the Mel 1a melatonin receptor mRNA and protein levels in the ovine pars tuberalis: evidence for a cyclic adenosine 3',5'-monophosphate–independent Mel 1a receptor coupling and an autoregulatory mechanism of expression. Barrett P, et al. **Mol Endocrinol** 1996 Jul; 10(7):892–902

Novel isoforms of Mel1c melatonin receptors modulating intracellular cyclic guanosine 3',5'-monophosphate levels. Jockers R, et al. **Mol Endocrinol** 1997 Jul;11(8):1070–81

Identification of a new G-protein–linked receptor for growth hormone secretagogues. Pong SS, et al. **Mol Endocrinol** 1996 Jan;10(1):57–61

Identification of the Fy6 epitope recognized by two monoclonal antibodies in the N-terminal extracellular portion of the Duffy antigen receptor for chemokines. Wańniowska K, et al. **Mol Immunol** 1996 Aug; 33(11–12):917–23

Methylation segments are not required for chemotactic signalling by cytoplasmic fragments of Tsr, the methyl-accepting serine chemoreceptor of Escherichia coli. Ames P, et al. **Mol Microbiol** 1996 Feb;19(4):737–46

Phenylalanine 30 plays an important role in receptor binding of verotoxin-1. Clark C, et al. **Mol Microbiol** 1996 Feb; 19(4):891–9

Adherence of Porphyromonas gingivalis to matrix proteins via a fimbrial cryptic receptor exposed by its own arginine-specific protease. Kontani M, et al. **Mol Microbiol** 1997 Jun;24(6):1179–87

Role of amino- and carboxyl-terminal regions of G(alphaZ) in the recognition of Gi-coupled receptors. Tsu RC, et al. **Mol Pharmacol** 1997 Jul;52(1):38–45

A new member of the frizzled family from Drosophila functions as a Wingless receptor. Bhanot P, et al. **Nature** 1996 Jul 18;382(6588):225–30

Neurturin responsiveness requires a GPI-linked receptor and the Ret receptor tyrosine kinase. Buj-Bello A, et al. **Nature** 1997 Jun 12;387(6634):721–4

Diabetes: Breaking the curse of the AGEs [news; comment] Drickamer K. **Nature** 1996 Jul 18;382(6588):211–2. Comment on: Nature 1996 Jul 18;382(6588):275–8.

Human Genetics. Notch, stroke and dementia [news; comment] Gridley T. **Nature** 1996 Oct 24;383(6602):673. Comment on: Nature 1996 Oct 24;383(6602):707–10.

A GPI-linked protein that interacts with Ret to form a candidate neurturin receptor. Klein RD, et al. **Nature** 1997 Jun 12;387(6634):717–21

Biochemical evidence that patched is the Hedgehog receptor [see comments] Marigo V, et al. **Nature** 1996 Nov 14; 384(6605):176–9. Comment in: Nature 1996 Nov 14;384(6605):119–20.

Patching up Hedgehog [news; comment] Nusse R. **Nature** 1996 Nov 14;384(6605):119–20. Comment on: Nature 1996 Nov 14;384(6605):129–34. Comment on: Nature 1996 Nov 14;384(6605):178–9.

Calcium signalling by G protein–coupled sphingolipid receptors in bovine aortic endothelial cells. Meyer zu Heringdrof D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):397–403

Differential regulation of melatonin receptors in sheep, chicken and lizard brains by cholera and pertussis toxins and guanine nucleotides. Morgan PJ, et al. **Neurochem Int** 1996 Mar;28(3):259–69

Axons turn as netrins find their receptor. Keynes R, et al. **Neuron** 1996 Dec;17(6):1031–4 (25 ref.)

Melatonin receptors activate heteromeric G-protein coupled Kir3 channels. Nelson CS, et al. **Neuroreport** 1996 Feb 29; 7(3):717–20

Melatonin receptors in the suprachiasmatic nuclei and pars tuberalis of testosterone induced photoresponsive rats. Recio J, et al. **Neurosci Lett** 1996 Aug 16;214(1):53–6

Localization and characterization of melatonin receptors in the rabbit spinal cord. Wan Q, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):77–80

A 27-kDa matrix receptor from rat brain synaptosomes: selective recognition of the Arg-Gly-Asp-Ser domain and unique resistance to calcium-dependent proteolysis. Capaldi D, et al. **Neurosci Res** 1997 Jul;28(3):275–9

In vitro receptor imaging for characterization of human solid tumors. Del Vecchio S, et al. **Nucl Med Biol** 1994 Jul; 21(5):771–4

The application of receptor theory to receptor-binding and enzyme-binding oncologic radiopharmaceuticals. Eckelman WC. **Nucl Med Biol** 1994 Jul;21(5):759–69 (81 ref.)

Cell density- and membrane region–dependent mobility of anionic residue–containing molecules in 3T3 and transformed 3T3 cell surfaces. Kawai N. **Okajimas Folia Anat Jpn** 1996 Dec;73(5):273–81

Characterization of murine Flt4 ligand/VEGF-C. Fitz LJ, et al. **Oncogene** 1997 Jul 31;15(5):613–8

Elevated urokinase-type plasminogen activator receptor expression in a colon cancer cell line is due to a constitutively activated extracellular signal-regulated kinase-1-dependent signaling cascade. Lengyel E, et al. **Oncogene** 1997 May 29;14(21):2563–73

Requirement of phosphatidylinositol-3 kinase for epithelial cell migration activated by human macrophage stimulating protein. Wang MH, et al. **Oncogene** 1996 Nov 21; 13(10):2167–75

Peptides and growth factors in non-small cell lung cancer. Moody TW. **Peptides** 1996;17(3):545–55 (151 ref.)

SV2proteoglycan: a potential synaptic vesicle transporter and nerve terminal extracellular matrix receptor. Carlson SS. **Perspect Dev Neurobiol** 1996;3(4):373–86 (79 ref.)

Oilseed isocitrate lyases lacking their essential type 1 peroxisomal targeting signal are piggybacked to glyoxysomes. Lee MS, et al. **Plant Cell** 1997 Feb; 9(2):185–97

Mesotocin binding to receptors in hen kidney plasma membranes. Takahashi T, et al. **Poult Sci** 1996 Jul; 75(7):910–4

Functional analysis of retinoid Z receptor beta, a brain-specific nuclear orphan receptor. Greiner EF, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10105–10

Luminal trypsin may regulate enterocytes through proteinase-activated receptor 2. Kong W, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8884–9

Double mutagenesis of a positive charge cluster in the ligand-binding site of the ferric enterobactin receptor, FepA. Newton SM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4560–5

Direct interaction of gbetagamma with a C-terminal gbetagamma-binding domain of the Ca2+ channel alpha1 subunit is responsible for channel inhibition by G protein–coupled receptors. Qin N, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8866–71

Cell surface expression of mouse macrosialin and human CD68 and their role as macrophage receptors for oxidized low density lipoprotein. Ramprasad MP, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14833–8

Lectin-like receptor for alpha 1-acid glycoprotein in the epithelium of the rat prostate gland and seminal vesicles. Andersen UO, et al. **Prostate** 1996 Dec;29(6):356–61

A database of mutants and effects of site-directed mutagenesis experiments on G protein–coupled receptors. Kristiansen K, et al. **Proteins** 1996 Sep;26(1):81–94

Pharmacokinetic considerations in the PET and SPECT evaluation of CNS receptors. Mazière B, et al. **Q J Nucl Med** 1997 Jun;41(2):119–26

Receptor ligands. Signore A. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):83–5 (8 ref.)

Laryngeal CO2 receptors: influence of systemic PCO2 and carbonic anhydrase inhibition. Coates EL, et al. **Respir Physiol** 1996 Apr–May;104(1):53–61

Transduction dynamics of intrapulmonary CO2 receptors. Tallman RD Jr, et al. **Respir Physiol** 1996 Nov; 106(2):115–25

Attractant signaling by an aspartate chemoreceptor dimer with a single cytoplasmic domain [see comments] Gardina PJ, et al. **Science** 1996 Oct 18;274(5286):425–6. Comment in: Science 1996 Oct 18;274(5286):370–1.

A member of the Frizzled protein family mediating axis induction by Wnt-5A. He X, et al. **Science** 1997 Mar 14; 275(5306):1652–4

Ligand-specific opening of a gated-porin channel in the outer membrane of living bacteria. Jiang X, et al. **Science** 1997 May 23;276(5316):1261–4

Hedgehog's patterning call is patched through, smoothly [news] Roush W. **Science** 1996 Nov 22;274(5291):1304–5

Putative cancer gene shows up in development instead [news] Roush W. **Science** 1997 Apr 25;276(5312):534–5

Signaling across membranes: a one and a two and a... [comment] Stock J. **Science** 1996 Oct 18;274(5286):370–1 (10 ref.). Comment on: Science 1996 Oct 18;274(5286):423–5. Comment on: Science 1996 Oct 18;274(5286):425–6.

Signaling by the Escherichia coli aspartate chemoreceptor Tar with a single cytoplasmic domain per dimer [see comments] Tatsuno I, et al. **Science** 1996 Oct 18; 274(5286):423–5. Comment in: Science 1996 Oct 18;274(5286):370–1.

Changes in markers, receptors and adhesion molecules expressed on murine hemopoietic stem cells after a single injection of 5-fluorouracil. Nishio N, et al. **Stem Cells** 1996 Sep;14(5):584–91

Protease-activated G protein–coupled receptors on human platelets and endothelial cells. Brass LF, et al. **Thromb Haemost** 1997 Jul;78(1):234–41 (89 ref.)

Tissue factor (TF) and urokinase plasminogen activator receptor (uPAR) and bleeding complications in leukemic patients. López-Pedrera C, et al. **Thromb Haemost** 1997 Jan;77(1):62–70

The urokinase-receptor (CD87) is expressed in cells of the megakaryoblastic lineage. Wohn KD, et al. **Thromb Haemost** 1997 Mar;77(3):540–7

Proteolytic activation of a putative receptor leading to vasoconstriction and platelet aggregation. Carbini LA, et al. **Thromb Res** 1997 Jan 1;85(1):33–44

Regulation of single chain urokinase by small peptides. Higazi A al-R, et al. **Thromb Res** 1996 Nov 15;84(4):243–52

Influence of ionized calcium on thrombin-induced down regulation of GPIb/IX receptors on human platelets. Rao GH, et al. **Thromb Res** 1997 Jan 1;85(1):23–31

Trypsin induced von Willebrand factor release from human endothelial cells in mediated by PAR-2 activation. Storck J, et al. **Thromb Res** 1996 Dec 15;84(6):463–73

Multivalent binding of toxin A from Clostridium difficile to carbohydrate receptors. Wolfhagen MJ, et al. **Toxicon** 1994 Jan;32(1):129–32

Asialoglycoprotein/asialoglycoprotein receptor (AGP-AGPr) interaction is an important mechanism for the uptake of FK506 by hepatocytes. Marks WH, et al. **Transplantation** 1997 Jan 27;63(2):293–8

Bacterial lipopolysaccharide binding to host receptors [letter; comment] Hazlett LD. **Trends Microbiol** 1996 Nov; 4(11):418. Comment on: Trends Microbiol 1996 Oct;4(10):408–9.

G protein–coupled receptors: heterologous regulation of homologous desensitization and its implications. Chuang TT, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):416–21 (51 ref.)

G16 as a universal G protein adapter: implications for agonist screening strategies. Milligan G, et al. **Trends Pharmacol Sci** 1996 Jul;17(7):235–7 (26 ref.)

Melatonin receptors step into the light: cloning and classification of subtypes. Reppert SM, et al. **Trends Pharmacol Sci** 1996 Mar;17(3):100–2 (20 ref.)

7TM receptors: 'locks' and 'keys'? [letter; comment] Strange PG. **Trends Pharmacol Sci** 1996 Oct;17(10):346–7. Comment on: Trends Pharmacol Sci 1996 Jun;17(6):213–6.

Solving inconsistencies in the analysis of receptor–ligand interactions. Tuk B, et al. **Trends Pharmacol Sci** 1996 Nov; 17(11):403–9 (22 ref.)

Receptors for carbohydrate ligands including heparin on the cell surface of Leishmania and other trypanosomatids. Kock NP, et al. **Trop Med Int Health** 1997 Sep;2(9):863–74

Binding of the influenza A virus to cell-surface receptors: structures of five hemagglutinin–sialyloligosaccharide complexes determined by X-ray crystallography. Eisen MB, et al. **Virology** 1997 May 26;232(1):19–31

[A family of receptors for secretory phospholipases A2] Lambeau G, et al. **C R Seances Soc Biol Fil** 1996; 190(4):425–35 (42 ref.) (Eng. Abstr.) **(Fre)**

[Cellular information and communication: receptors coupled to g-proteins] Corvol P. **Nucl Med Biol** 1994 Apr; 21(3):287–95 (Eng. Abstr.) **(Fre)**

[The change of the amount of receptors on the cell surface after differentiation of human granulocyte cell line HL-60] Ohse T. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Oct; 19(5):460–7 (Eng. Abstr.) **(Jpn)**

[Receptor diseases and their evaluation methods] Miyachi Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:435–43 (7 ref.) **(Jpn)**

[Analysis and characterization of ligand-receptor binding systems] Ogawa N. **Nippon Rinsho** 1997 Apr;55 Suppl 2:444–9 (14 ref.) **(Jpn)**

[Quantitative evaluation of pharmacological effects and adverse effects based on receptor occupancy theory] Sawada Y, et al. **Yakugaku Zasshi** 1997 Feb;117(2):65–90 (47 ref.) (Eng. Abstr.) **(Jpn)**

[Specific binding of 3n-melatonin with plasma cell membrane in rats thyroid gland] Rom-Bugoslavskaia ES, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):706–8 **(Rus)**

[Isolation and properties of kidney receptor protein binding nucleic acids] Iakubov LA, et al. **Dokl Akad Nauk** 1996 Sep;350(3):414–7 **(Rus)**

[The catabolic products of the cell receptors in chronic liver diseases] Iakhontova OI, et al. **Klin Med (Mosk)** 1996; 74(2):46–8 **(Rus)**

PHYSIOLOGY

Mannose receptors are implicated in the Candida albicans killing activity of epidermal cells [letter] Dobozy A, et al. **Acta Microbiol Immunol Hung** 1996;43(1):93–5

Structure and function of leukocyte chemoattractant receptors. Ye RD, et al. **Adv Pharmacol** 1997;39:221–89 (360 ref.)

Eosinophil receptors. Monteseirín J, et al. **Allergol Immunopathol (Madr)** 1996 Sep–Oct;24(5):226–34 (82 ref.)

Epitope-mapped monoclonal antibodies as tools for functional and morphological analyses of the human urokinase receptor in tumor tissue. Luther T, et al. **Am J Pathol** 1997 Apr;150(4):1231–44

Specific coupling of a cation-sensing receptor to G protein alpha-subunits in MDCK cells. Arthur JM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):F129–35

Melatonin directly constricts rat cerebral arteries through modulation of potassium channels. Geary GG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1530–6

Turning off the signal: mechanisms that attenuate signaling by G protein-coupled receptors. Grady EF, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G586–601 (132 ref.)

Ca2+ entry through conductive pathway modulates receptor-mediated increase in microvessel permeability. He P, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2377–87

Ins(3,4,5,6)P4 specifically inhibits a receptor-mediated Ca2+-dependent Cl- current in CFPAC-1 cells. Ho MW, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1160–8

Kinetic analysis of receptor-mediated endocytosis of G-CSF derivative, nartograstim, in rat bone marrow cells. Kuwabara T, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E73–84

G protein-coupled receptors control vascular smooth muscle cell proliferation via pp60c-src and p21ras. Schieffer B, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C2019–30

SP-A enhances uptake of bacillus Calmette-Guérin by macrophages through a specific SP-A receptor. Weikert LF, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L989–95

Do recent operational studies indicate that a single state model is no longer applicable to G protein-coupled receptors? Bond RA. **Ann N Y Acad Sci** 1997 May 30; 812:92–7 (24 ref.)

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP-1, and other members of their new family of G protein-linked receptors: structure-function relationship with special reference to the human VIP-1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94–109; discussion 110–1 (64 ref.)

Transduction is a major factor influencing receptor characterization. Spedding M, et al. **Ann N Y Acad Sci** 1997 May 30;812:29–40 (49 ref.)

Rac G, a small GTPase, regulates capping of surface receptors in Entamoeba histolytica. Guillen N, et al. **Arch Med Res** 1997;28 Spec No:129–31

Virus-host interactions in African swine fever: the attachment to cellular receptors. Angulo A, et al. **Arch Virol Suppl** 1993;7:169–83 (48 ref.)

Lysophosphatidylcholine inhibits receptor-mediated Ca2+ mobilization in intact endothelial cells of rabbit aorta. Miwa Y, et al. **Arterioscler Thromb Vasc Biol** 1997 Aug; 17(8):1561–7

Aging of the vascular wall and atherogenesis: role of the elastin-laminin receptor [published erratum appears in Atherosclerosis 1996 Sep 27;126(1):173] Robert L. **Atherosclerosis** 1996 Jun;123(1–2):169–79 (56 ref.)

Adenosine acts through a novel extracellular receptor to inhibit granule exocytosis by natural killer cells. Williams BA, et al. **Biochem Biophys Res Commun** 1997 Feb 13; 231(2):264–9

Regulatory mechanisms that modulate signalling by G-protein-coupled receptors. Böhm SK, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):1–18 (237 ref.)

Mechanistic model of G-protein signal transduction. Determinants of efficacy and effect of precoupled receptors. Shea L, et al. **Biochem Pharmacol** 1997 Feb 21; 53(4):519–30

Nuclear hormone receptors and the Drosophila ecdysone response. Russell SR. **Biochem Soc Symp** 1996;62:111–21 (56 ref.)

Enhancement of HLA class II restricted antigen presentation by mannose-receptor-mediated uptake. Koning F. **Biochem Soc Trans** 1997 May;25(2):664–5

cAMP and 'death signals' in a myeloid leukaemia cell: from membrane receptors to nuclear responses: a review. Ruchaud S, et al. **Biochem Soc Trans** 1997 May;25(2):410–5 (56 ref.)

Expression of an olfactory receptor in Escherichia coli: purification, reconstitution, and ligand binding. Kiefer H, et al. **Biochemistry** 1996 Dec 17;35(50):16077–84

Sphingosine 1-phosphate regulates melanoma cell motility through a receptor-coupled extracellular action and in a pertussis toxin-insensitive manner. Yamamura S, et al. **Biochemistry** 1997 Sep 2;36(35):10751–9

Wnt meeting 1996. Cadigan KM, et al. **Biochim Biophys Acta** 1997 Feb 22;1332(1):R1–5

Biological roles of the non-integrin elastin/laminin receptor. Hinek A. **Biol Chem** 1996 Jul–Aug;377(7–8):471–80 (76 ref.)

Simulation of detachment of specifically bound particles from surfaces by shear flow. Kuo SC, et al. **Biophys J** 1997 Jul; 73(1):517–31

Vascular smooth muscle cells potentiate plasmin generation by both urokinase and tissue plasminogen activator-dependent mechanisms: evidence for a specific tissue-type plasminogen activator receptor on these cells. Ellis V, et al. **Blood** 1997 Sep 15;90(6):2312–22

From malaria to chemokine receptor: the emerging physiologic role of the Duffy blood group antigen. Hadley TJ, et al. **Blood** 1997 May 1;89(9):3077–91 (129 ref.)

Mac-1 (CD11b/CD18) and the urokinase receptor (CD87) form a functional unit on monocytic cells. Simon DI, et al. **Blood** 1996 Oct 15;88(8):3185–94

Bone morphogenetic protein receptors. Yamashita H, et al. **Bone** 1996 Dec;19(6):569–74 (52 ref.)

Receptor localization in the mammalian dorsal horn and primary afferent neurons. Coggeshall RE, et al. **Brain Res Brain Res Rev** 1997 Jun;24(1):28–66 (341 ref.)

The role of receptor protein tyrosine phosphatase alpha in neuronal differentiation of embryonic stem cells. van Inzen WG, et al. **Brain Res Dev Brain Res** 1996 Feb 26; 91(2):304–7

Mathematical modeling of adhesion of bacteria to host cell lines. Gálvez J, et al. **Bull Math Biol** 1997 Sep;59(5):833–56

Metalloprotease-disintegrins: links to cell adhesion and cleavage of TNF alpha and Notch. Blobel CP. **Cell** 1997 Aug 22;90(4):589–92 (17 ref.)

UNC-40, a C. elegans homolog of DCC (Deleted in Colorectal Cancer), is required in motile cells responding to UNC-6 netrin cues. Chan SS, et al. **Cell** 1996 Oct 18; 87(2):187–95

Dual roles for patched in sequestering and transducing Hedgehog. Chen Y, et al. **Cell** 1996 Nov 1;87(3):553–63

frazzled encodes a Drosophila member of the DCC immunoglobulin subfamily and is required for CNS and motor axon guidance. Kolodziej PA, et al. **Cell** 1996 Oct 18;87(2):197–204

The emerging field of receptor-mediated inhibitory signaling: SHP or SHIP? Scharenberg AM, et al. **Cell** 1996 Dec 13; 87(6):961–4 (16 ref.)

Effects of dipeptides containing the amino acid, proline on the chemotaxis of Tetrahymena pyriformis. Evolutionary conclusions on the formation of hormone receptors and hormones. Köhidai L, et al. **Cell Biol Int** 1997 Jun; 21(6):341–5

Clearance of circulating gamma-glutamyltransferase by the asialoglycoprotein receptor. Enzyme forms with different sialic acid content are eliminated at different clearance rates and without apparent desialylation. Mortensen B, et al. **Clin Chim Acta** 1997 Feb 3;258(1):47–58

Regulation and role of urokinase plasminogen activator in vascular remodelling. Tkachuk V, et al. **Clin Exp Pharmacol Physiol** 1996 Sep;23(9):759–65 (75 ref.)

Visualizing signal transduction: receptors, G-proteins, and adenylate cyclases [published erratum appears in Clin Sci (Colch) 1997 Feb;92(2):223] Dessauer CW, et al. **Clin Sci (Colch)** 1996 Nov;91(5):527–37 (56 ref.)

Targeted delivery of peptides, proteins, and genes by receptor-mediated endocytosis. Kato Y, et al. **Crit Rev Ther Drug Carrier Syst** 1997;14(3):287–331 (156 ref.)

Axon guidance: netrin receptors are revealed. Guthrie S. **Curr Biol** 1997 Jan 1;7(1):R6–9 (19 ref.)

Bud10p directs axial cell polarization in budding yeast and resembles a transmembrane receptor. Halme A, et al. **Curr Biol** 1996 May 1;6(5):570–9

Receptor function at the junction. Cell-cell communication. Lambie EJ. **Curr Biol** 1996 Sep 1;6(9):1089–91 (16 ref.)

Linking cargo to vesicle formation: receptor tail interactions with coat proteins. Kirchhausen T, et al. **Curr Opin Cell Biol** 1997 Aug;9(4):488–95 (59 ref.)

Expression and function of decapentaplegic and thick veins during the differentiation of the veins in the Drosophila wing. de Celis JF. **Development** 1997 Mar;124(5):1007–18

Competition and cooperation among receptor tyrosine phosphatases control motoneuron growth cone guidance in Drosophila. Desai CJ, et al. **Development** 1997 May; 124(10):1941–52

BMP signaling during bone pattern determination in the developing limb. Kawakami Y, et al. **Development** 1996 Nov;122(11):3557–66

Expression of constitutively active Notch arrests follicle cells at a precursor stage during Drosophila oogenesis and disrupts the anterior-posterior axis of the oocyte. Larkin MK, et al. **Development** 1996 Nov;122(11):3639–50

STK/RON receptor tyrosine kinase mediates both apoptotic and growth signals via the multifunctional docking site conserved among the HGF receptor family. Iwama A, et al. **EMBO J** 1996 Nov 1;15(21):5866–75

The Mel1a melatonin receptor is coupled to parallel signal transduction pathways. Godson C, et al. **Endocrinology** 1997 Jan;138(1):397–404

Resistance of the dopamine D2L receptor to desensitization accompanies the up-regulation of receptors on to the surface of Sf9 cells. Ng GY, et al. **Endocrinology** 1997 Oct; 138(10):4199–206

Differences between fluid-phase endocytosis (pinocytosis) and receptor-mediated endocytosis in isolated rat hepatocytes. Strømhaug PE, et al. **Eur J Cell Biol** 1997 May;73(1):28–39

GP55 inhibits both cell adhesion and growth of neurons, but not non-neuronal cells, via a G-protein-coupled receptor. Clarke GA, et al. **Eur J Neurosci** 1997 Feb;9(2):334–41

Receptor-mediated endocytosis of alpha 2macroglobulin-protease complexes by fibroblasts in culture. Competitive inhibition by bacitracin. Van Leuven F, et al. **FEBS Lett** 1981 Nov 2;134(1):83–7

New insights on the functions of the guanylyl cyclase receptors. Wedel BJ, et al. **FEBS Lett** 1997 Jun 23; 410(1):29–33 (32 ref.)

In vivo modulated N-acyl side chain of N-acetylneuraminic acid modulates the cell contact-dependent inhibition of growth. Wieser JR, et al. **FEBS Lett** 1996 Oct 21; 395(2–3):170–3

Membrane sex-steroid receptors in the brain. Ramirez VD, et al. **Front Neuroendocrinol** 1996 Oct;17(4):402–39 (200 ref.)

Co-receptors explain cell-specific HIV infection: GI implications [news] **Gastroenterology** 1997 May;112(5):1433

The HGF receptor family: unconventional signal transducers for invasive cell growth. Comoglio PM, et al. **Genes Cells** 1996 Apr;1(4):347–54 (70 ref.)

An anteroposterior Dorsal gradient in the Drosophila embryo. Huang AM, et al. **Genes Dev** 1997 Aug 1; 11(15):1963–73

Role of natriuretic peptide receptor type C in Dahl salt-sensitive hypertensive rats. Nagase M, et al. **Hypertension** 1997 Aug;30(2 Pt 1):177–83

TRAMP, a novel apoptosis-mediating receptor with sequence homology to tumor necrosis factor receptor 1 and Fas(Apo-1/CD95). Bodmer JL, et al. **Immunity** 1997 Jan;6(1):79–88

The mannose receptor delivers lipoglycan antigens to endosomes for presentation to T cells by CD1b molecules. Prigozy TI, et al. **Immunity** 1997 Feb;6(2):187–97

uPA, uPAR, PAI-1: key intersection of proteolytic, adhesive and chemotactic highways? Blasi F. **Immunol Today** 1997 Sep;18(9):415–7 (24 ref.)

alpha 2-macroglobulin stimulation of protein tyrosine phosphorylation in macrophages via the mannose receptor for Fc gamma receptor-mediated phagocytosis activation. Murai M, et al. **Immunology** 1996 Nov;89(3):436–41

Specific binding of Haemophilus influenzae to minor gangliosides of human respiratory epithelial cells. Fakih MG, et al. **Infect Immun** 1997 May;65(5):1695–700

Brief heat shock treatment induces a long-lasting alteration in the glycolipid receptor binding specificity and growth rate of Haemophilus influenzae. Hartmann E, et al. **Infect Immun** 1997 May;65(5):1729–33

Involvement of mannose receptor in cytokine interleukin-1beta (IL-1beta), IL-6, and granulocyte-macrophage colony-stimulating factor responses, but not in chemokine macrophage inflammatory protein 1beta (MIP-1beta), MIP-2, and KC responses, caused by attachment of Candida albicans to macrophages. Yamamoto Y, et al. **Infect Immun** 1997 Mar;65(3):1077–82

Melanoma cell migration on vitronectin: regulation by components of the plasminogen activation system. Stahl A, et al. **Int J Cancer** 1997 Mar 28;71(1):116–22

Protease activated receptors modulate aortic vascular tone. Magazine HI, et al. **Int J Cardiol** 1996 Apr 26;53 Suppl:S75–80

The receptor mosaic hypothesis of the engram: possible relevance of Boolean network modeling. Zoli M, et al. **Int J Neural Syst** 1996 Sep;7(4):363–8 (40 ref.)

Ion channels and membrane receptors in follicle-enclosed Xenopus oocytes. Arellano RO, et al. **Ion Channels** 1996; 4:203–59 (130 ref.)

Ras-dependent mitogen-activated protein kinase activation by G protein-coupled receptors. Convergence of Gi- and Gq-mediated pathways on calcium/calmodulin, Pyk2, and Src kinase. Della Rocca GJ, et al. **J Biol Chem** 1997 Aug 1;272(31):19125–32

Cell-surface cytokeratin 8 is the major plasminogen receptor on breast cancer cells and is required for the accelerated activation of cell-associated plasminogen by tissue-type plasminogen activator. Hembrough TA, et al.

J Biol Chem 1996 Oct 11;271(41):25684–91
The role of sequestration in G protein–coupled receptor resensitization. Regulation of beta2–adrenergic receptor dephosphorylation by vesicular acidification. Krueger KM, et al. **J Biol Chem** 1997 Jan 3;272(1):5–8
Calpain regulation of cytoskeletal signaling complexes in von Willebrand factor–stimulated platelets. Distinct roles for glycoprotein Ib–V–IX and glycoprotein IIb–IIIa (integrin alphaIIbbeta3) in von Willebrand factor–induced signal transduction. Yuan Y, et al. **J Biol Chem** 1997 Aug 29; 272(35):21847–54
A distinct cation–sensing mechanism in MC3T3–E1 osteoblasts functionally related to the calcium receptor. Quarles LD, et al. **J Bone Miner Res** 1997 Mar; 12(3):393–402
Phosphorylation of human pro–urokinase on Ser138/303 impairs its receptor–dependent ability to promote myelomonocytic adherence and motility. Franco P, et al. **J Cell Biol** 1997 May 5;137(3):779–91
Reduction in surface urokinase receptor forces malignant cells into a protracted state of dormancy. Yu W, et al. **J Cell Biol** 1997 May 5;137(3):767–77
Receptor–mediated adhesive and anti–adhesive functions of chondroitin sulfate proteoglycan preparations from embryonic chicken brain. Ernst H, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3807–16
The role of macrophage receptors in adhesion and uptake of Leishmania mexicana amastigotes. Peters C, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3715–24
More inflammatory effects of protease receptors [editorial; comment] Edgington T. **J Clin Invest** 1997 May 15; 99(10):2299. Comment on: J Clin Invest 1997 May 15;99(10):2446–51.
Functional characterization of calcium–sensing receptor mutations expressed in human embryonic kidney cells. Pearce SH, et al. **J Clin Invest** 1996 Oct 15;98(8):1860–6
Role of macrophage–stimulating protein and its receptor, RON tyrosine kinase, in ciliary motility. Sakamoto O, et al. **J Clin Invest** 1997 Feb 15;99(4):701–9
Apical extracellular calcium/polyvalent cation–sensing receptor regulates vasopressin–elicited water permeability in rat kidney inner medullary collecting duct. Sands JM, et al. **J Clin Invest** 1997 Mar 15;99(6):1399–405
Identification of rat yolk sac target protein of teratogenic antibodies, gp280, as intrinsic factor–cobalamin receptor. Seetharam B, et al. **J Clin Invest** 1997 May 15; 99(10):2317–22
Plasmin and plasminogen activator inhibitor type 1 promote cellular motility by regulating the interaction between the urokinase receptor and vitronectin. Waltz DA, et al. **J Clin Invest** 1997 Jul 1;100(1):58–67
Role of the Ca(2+)–sensing receptor in divalent mineral ion homeostasis. Hebert SC, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):295–302 (73 ref.)
Bafilomycin A1, a specific inhibitor of vacuolar–type H(+)–ATPases, inhibits the receptor–mediated endocytosis of asialoglycoproteins in isolated rat hepatocytes. Harada M, et al. **J Hepatol** 1996 May; 24(5):594–603
Differences in mannose receptor–mediated uptake of lipoarabinomannan from virulent and attenuated strains of Mycobacterium tuberculosis by human macrophages. Schlesinger LS, et al. **J Immunol** 1996 Nov 15; 157(10):4568–75
Chitin particle–induced cell–mediated immunity is inhibited by soluble mannan: mannose receptor–mediated phagocytosis initiates IL–12 production. Shibata Y, et al. **J Immunol** 1997 Sep 1;159(5):2462–7
Relationship between extra– and intracellular calcium in distal segments of the renal tubule. Role of the Ca2+ receptor RaKCaR. Champigneulle A, et al. **J Membr Biol** 1997 Mar 15;156(2):117–29
Regulation of gene expression by nuclear hormone receptors. Meier CA. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):319–35 (45 ref.)
Tissue plasminogen activator increases canine endothelial cell proliferation rate through a plasmin–independent, receptor–mediated mechanism. Welling TH, et al. **J Surg Res** 1996 Nov;66(1):36–42
The cubic ternary complex receptor–occupancy model. III. resurrecting efficacy. Weiss JM, et al. **J Theor Biol** 1996 Aug 21;181(4):381–97
Vascular effects of proteinase–activated receptor 2 agonist peptide. Emilsson K, et al. **J Vasc Res** 1997 Jul–Aug; 34(4):267–72
Efficient infection of cells in culture by type O foot–and–mouth disease virus requires binding to cell surface heparan sulfate. Jackson T, et al. **J Virol** 1996 Aug; 70(8):5282–7
Extracellular calcium–sensing receptor: implications for calcium and magnesium handling in the kidney. Hebert SC. **Kidney Int** 1996 Dec;50(6):2129–39 (97 ref.)
Mechanisms of action of sex steroid hormones: basic concepts and clinical correlations. Tuohimaa P, et al. **Maturitas** 1996 May;23 Suppl:S3–12 (75 ref.)
A graded response to BMP–4 spatially coordinates patterning of the mesoderm and ectoderm in the zebrafish. Neave B, et al. **Mech Dev** 1997 Mar;62(2):183–95
Mitogenesis, cell migration, and loss of focal adhesions induced by tenascin–C interacting with its cell surface receptor, annexin II. Chung CY, et al. **Mol Biol Cell** 1996 Jun;7(6):883–92
Second–messenger regulation of receptor association with clathrin–coated pits: a novel and selective mechanism in the control of CD4 endocytosis. Foti M, et al. **Mol Biol Cell** 1997 Jul;8(7):1377–89
The role of Notch in lateral inhibition and cell fate specification [corrected and republished with original paging, article originally printed in Mol Cell Neurosci 1995 Aug;6(4):311–21] Chitnis AB. **Mol Cell Neurosci** 1995 Dec; 6(6):311–21 (73 ref.)
Netrin and netrin receptor expression in the embryonic mammalian nervous system suggests roles in retinal, striatal, nigral, and cerebellar development. Livesey FJ, et al. **Mol Cell Neurosci** 1997;8(6):417–29
Maltose–binding protein interacts simultaneously and asymmetrically with both subunits of the Tar chemoreceptor. Gardina PJ, et al. **Mol Microbiol** 1997 Mar; 23(6):1181–91
Carboxyl–terminal mutations of Gq alpha and Gs alpha that alter the fidelity of receptor activation. Conklin BR, et al. **Mol Pharmacol** 1996 Oct;50(4):885–90
A dominant mutant receptor from Arabidopsis confers ethylene insensitivity in heterologous plants. Wilkinson JQ, et al. **Nat Biotechnol** 1997 May;15(5):444–7
Vertebrate homologues of C. elegans UNC–5 are candidate netrin receptors. Leonardo ED, et al. **Nature** 1997 Apr 24;386(6627):833–8
G–protein–coupled receptors in normal human erythroid progenitor cells. Porzig H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):11–20
Bone morphogenetic proteins promote astroglial lineage commitment by mammalian subventricular zone progenitor cells. Gross RE, et al. **Neuron** 1996 Oct;17(4):595–606
alpha–Latrotoxin stimulates exocytosis by the interaction with a neuronal G–protein–coupled receptor. Krasnoperov VG, et al. **Neuron** 1997 Jun;18(6):925–37
Microglial cells internalize aggregates of the Alzheimer's disease amyloid beta–protein via a scavenger receptor. Paresce DM, et al. **Neuron** 1996 Sep;17(3):553–65
PDZs and receptor/channel clustering: rounding up the latest suspects [comment] Sheng M. **Neuron** 1996 Oct;17(4):575–8 (19 ref.). Comment on: Neuron 1996 Oct;17(4):759–67.
Cell surface adrenergic receptor stimulation modifies the endothelial response to SIRS. Systemic Inflammatory Response Syndrome. Tighe D, et al. **New Horiz** 1996 Nov; 4(4):426–42 (104 ref.)
Integrin receptors, the cytoskeleton, and glomerular cell function. Schnaper HW. **Pediatr Nephrol** 1996 Aug; 10(4):523–8 (11 ref.)
Notch signaling in development. Simpson P. **Perspect Dev Neurobiol** 1997;4(4):297–304 (67 ref.)
Diverse roles for the Notch receptor in the development of D. melanogaster. Young MW, et al. **Perspect Dev Neurobiol** 1997;4(4):345–55 (77 ref.)
Multisite regulation of insulin secretion by cAMP–increasing agonists: evidence that glucagon–like peptide 1 and glucagon act via distinct receptors. Gromada J, et al. **Pflugers Arch** 1997 Sep;434(5):515–24
Inhibitory receptors abound? [comment] Cambier JC. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):5993–5 (24 ref.). Comment on: Proc Natl Acad Sci U S A 1997 May 13;94(10):5261–6.
Neurturin shares receptors and signal transduction pathways with glial cell line–derived neurotrophic factor in sympathetic neurons. Creedon DJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):7018–23
A putative angiogenin receptor in angiogenin–responsive human endothelial cells. Hu GF, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2204–9
UDP activates a mucosal–restricted receptor on human nasal epithelial cells that is distinct from the P2Y2 receptor. Lazarowski ER, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2599–603
Cell–surface receptors for retroviruses and implications for gene transfer. Miller AD. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11407–13 (52 ref.)
The endothelial cell protein C receptor augments protein C activation by the thrombin–thrombomodulin complex. Stearns–Kurosawa DJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10212–6
The role of G–protein coupled receptor kinases in the regulation of muscarinic cholinergic receptors. Hosey MM, et al. **Prog Brain Res** 1996;109:169–79 (64 ref.)
Evolutionary significance of the hormone recognition capacity in unicellular organisms. Development of hormone receptors. Csaba G. **Prog Mol Subcell Biol** 1996; 17:1–28 (106 ref.)
Animal lectins as cell surface receptors: current status for invertebrate species. Vasta GR, et al. **Prog Mol Subcell Biol** 1996;17:158–82 (137 ref.)
Membrane receptors and hormones. Barbarino A, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):78–82 (25 ref.)
How jet–lag hormone does double duty in the brain [news] Barinaga M. **Science** 1997 Jul 25;277(5325):480
Signal transduction by DR3, a death domain–containing receptor related to TNFR–1 and CD95. Chinnaiyan AM, et al. **Science** 1996 Nov 8;274(5289):990–2
Force–carrying web pervades living cell [news] Glanz J. **Science** 1997 May 2;276(5313):678–9
The urokinase receptor and cell migration. Blasi F. **Semin Thromb Hemost** 1996;22(6):513–6 (36 ref.)
The protein C pathway: new insights. Esmon CT, et al. **Thromb Haemost** 1997 Jul;78(1):70–4
Pathophysiology of platelet thrombin receptors. Jamieson GA. **Thromb Haemost** 1997 Jul;78(1):242–6 (49 ref.)
Signaling through chemoattractant receptors in Dictyostelium. Chen MY, et al. **Trends Genet** 1996 Feb; 12(2):52–7 (43 ref.)
The role of anchoring protein RACK1 in PKC activation in the ageing rat brain. Battaini F, et al. **Trends Neurosci** 1997 Sep;20(9):410–5 (72 ref.)
Endocytosis and recycling of G protein–coupled receptors. Koenig JA, et al. **Trends Pharmacol Sci** 1997 Aug; 18(8):276–87 (59 ref.)
Metastatic behavior of prostatic tumor as influenced by the hematopoietic and hematogenous factors. Bhatti RA, et al. **Tumour Biol** 1997;18(1):1–5
[Vesicular flow in epithelial cells: physiopathologic importance of two multiligand receptors] Verroust PJ, et al. **Bull Acad Natl Med** 1996 Jun–Jul;180(6):1187–97; discussion 1197–8 (Eng. Abstr.) **(Fre)**
[Endocytosis and receptors: molecular and physiological aspects] Verroust PJ, et al. **Nephrologie** 1996;17(7):359–64 (49 ref.) (Eng. Abstr.) **(Fre)**
[Role of the Notch receptors in intercellular communication] Seugnet L, et al. **Pathol Biol (Paris)** 1996 Apr;44(4):282–6 (43 ref.) (Eng. Abstr.) **(Fre)**
[Cell membrane receptors and intracellular signalling. Characterization in cultivated, contractile and endothelial cells] Briner V. **Fortschr Med** 1996 Oct 20;114(29):384–6 (18 ref.) (Eng. Abstr.) **(Ger)**
[Development and experimental use of receptor–specific MR contrast media] Reimer P, et al. **Radiologe** 1996 Feb; 36(2):153–63 (77 ref.) (Eng. Abstr.) **(Ger)**
[An "orphan" receptor looks for its function] Enmark E, et al. **Lakartidningen** 1996 Oct 9;93(41):3585–9 (14 ref.) **(Swe)**

RADIATION EFFECTS

Serotonergic modulation of photically induced increase in melatonin receptor density and Fos immunoreactivity in the suprachiasmatic nuclei of the rat. Recio J, et al. **J Neuroendocrinol** 1996 Nov;8(11):839–45
Circadian photic regulation of melatonin receptor density in rat suprachiasmatic nuclei: comparison with light induction of fos–related protein. Masson–Pevet M, et al. **J Neurosci Res** 1996 Mar 1;43(5):632–7

RECEPTORS, CGRP see **RECEPTORS, CALCITONIN GENE–RELATED PEPTIDE**

RECEPTORS, CHOLECYSTOKININ

[The promiscuous receptor] Rehfeld JF. **Ugeskr Laeger** 1996 Dec 16;158(51):7422 **(Dan)**
[Gastrin and gastrin receptor] Chiba T. **Nippon Rinsho** 1996 Apr;54(4):1083–6 (18 ref.) (Eng. Abstr.) **(Jpn)**
[Cholecystokinin and cholecystokinin receptor] Funakoshi A. **Nippon Rinsho** 1996 Apr;54(4):1097–1103 (20 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

Use of the chemical structure of peptides as the starting point to design nonpeptide agonists and antagonists at peptide receptors: examples with cholecystokinin and tachykinins. Horwell DC. **Bioorg Med Chem** 1996 Oct;4(10):1573–6 (24 ref.)
Pharmacological evaluation of IQM–95,333, a highly selective CCKA receptor antagonist with anxiolytic–like activity in animal models. Ballaz S, et al. **Br J Pharmacol** 1997 Jun;121(4):759–67
Intracerebroventricular infusion of the CCKB receptor agonist pentagastrin potentiates acoustic startle. Frankland PW, et al. **Brain Res** 1996 Sep 9;733(1):129–32
The increased satiating potency of CCK–8 by estradiol is not mediated by upregulation of NTS CCK receptors. Geary N, et al. **Brain Res** 1996 May 6;719(1–2):179–86
Alternate drug delivery routes for A–71623, a potent cholecystokinin–A receptor agonist tetrapeptide. Cannon JB, et al. **J Drug Target** 1996;4(2):69–78
Structure–based design of new constrained cyclic agonists of the cholecystokinin CCK–B receptor. Blommaert AG, et al. **J Med Chem** 1997 Feb 28;40(5):647–58
Optimization of 3–(1H–indazol–3–ylmethyl)–1,5–benzodiazepines as potent, orally active CCK–A agonists. Henke BR, et al. **J Med Chem** 1997 Aug 15;40(17):2706–25
Discovery of 1,5–benzodiazepines with peripheral cholecystokinin (CCK–A) receptor agonist activity (II): Optimization of the C3 amino substituent. Hirst GC, et al. **J Med Chem** 1996 Dec 20;39(26):5236–45
Differences in partial agonist action at cholecystokinin receptors of mouse and rat are dependent on parameters extrinsic to receptor structure: molecular cloning, expression and functional characterization of the mouse type A cholecystokinin receptor. Ghanekar D, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1206–12
Cholecystokinin–8S increases dynorphin B, aspartate and glutamate release in the fronto–parietal cortex of the rat via different receptor subtypes. You ZB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):576–81
Neostriatal neurons of rats can be influenced by

cholecystokinin-A receptor agonists. Davidowa H, et al. **Neuropeptides** 1997 Jun;31(3):231-5

Nitric oxide mediates caerulein-induced suppression of locomotor activity. Volke V, et al. **Neuropeptides** 1996 Aug;30(4):323-6

Effects of cholecystokinin agonists on striatal neurons are reduced by acetylcholine. Davidowa H, et al. **Peptides** 1997;18(4):541-5

The trophic response of rat pancreas to sulfated cholecystokinin-8 is dose- and time-dependent and not affected by vagotomy or atropine. Nylander AG, et al. **Pharmacol Toxicol** 1997 Mar;80(3):142-6

Effects of cholecystokinin receptor agonist and antagonists on morphine dependence in mice. Zarrindast MR, et al. **Pharmacol Toxicol** 1995 Dec;77(6):360-4

Characterization of CCKA receptor mediated pepsinogen secretion in porcine chief cells. Meyer G, et al. **Pharmacology** 1996 Jul;53(1):48-59

Characterization of novel peptoid agonists for the CCK-A receptor. Hughes J, et al. **Regul Pept** 1996 Aug 27; 65(1):15-21

Are radioligand antagonist/agonist binding ratios in rat pancreas predictive of functional efficacy of cholecystokinin receptor agonists and antagonists? Patel S, et al. **Regul Pept** 1996 Aug 27;65(1):29-35

Novel CCK-B receptor agonists: diketopiperazine analogues derived for CCK4 bioactive conformation. Weng JH, et al. **Regul Pept** 1996 Aug 27;65(1):3-9

ANALYSIS

Immunohistochemical localization of gastrin/CCK-B receptors in the dog and guinea-pig stomach. Helander HF, et al. **Acta Physiol Scand** 1997 Apr;159(4):313-20

On the distribution of cholecystokinin B receptors in monkey brain. Mercer LD, et al. **Brain Res** 1996 Nov 4;738(2):313-8

Does the human pancreas have a type A or B personality? [editorial; comment] Miller LJ. **Gastroenterology** 1996 Dec; 111(6):1767-70. Comment on: Gastroenterology 1996 Dec;111(6):1621-6.

Cholecystokinin receptors in human pancreas and gallbladder muscle: a comparative study [see comments] Tang C, et al. **Gastroenterology** 1996 Dec;111(6):1621-6. Comment in: Gastroenterology 1996 Dec;111(6):1767-70.

CCK-X receptors in the endothermic mako shark (Isurus oxyrinchus). Oliver AS, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):61-73

Cholecystokinin, dopamine D2 and N-methyl-D-aspartate binding sites in the nucleus of the solitary tract of the rat: possible relationship to ingestive behavior. Qian M, et al. **Neuroscience** 1997 Apr;77(4):1077-89

Autoradiographic localization of cholecystokinin (CCK) receptor expression during the development of azaserine-induced rat pancreatic carcinoma. Tsuei BJ, et al. **Pancreas** 1996 Nov;13(4):401-6

Cholecystokinin peptides in cerebrospinal fluid: a study in healthy male subjects. Gunnarsson T, et al. **Regul Pept** 1997 Jan 15;68(1):57-61

ANTAGONISTS & INHIBITORS

Spontaneous preference for ethanol in naive rats is influenced by cholecystokinin A receptor antagonism. Crespi F, et al. **Alcohol** 1997 Jul-Aug;14(4):327-32

Effect of dexloxiglumide and spiroglumide, two new CCK-receptor antagonists, on gastric emptying and secretion in the rat: evaluation of their receptor selectivity in vivo. Scarpignato C, et al. **Aliment Pharmacol Ther** 1996 Jun;10(3):411-9

YF476 is a new potent and selective gastrin/cholecystokinin-B receptor antagonist in vitro and in vivo. Takinami Y, et al. **Aliment Pharmacol Ther** 1997 Feb;11(1):113-20

Effect of cholecystokinin-A receptor blockade on lipid-induced gastric relaxation in humans. Mesquita MA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G118-23

Single-site findings in a study of the safety and efficacy of a CCKB receptor antagonist, CI-988, in the treatment of generalized anxiety disorder [letter] Sramek JJ, et al. **Anxiety** 1994-95;1(5):242-3

Pilot study of a CCKB antagonist in patients with panic disorder: preliminary findings. Sramek JJ, et al. **Anxiety** 1994-95;1(3):141-3

YM022
[(R)-1-[2,3-dihydro-1-(2'-methylphenacyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-3-(3-methylphenyl)urea]: an irreversible cholecystokinin type-B receptor antagonist. Dunlop J, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):81-5

Effect of CI-988, a cholecystokinin-B receptor antagonist, on lactate-induced panic. Cowley DS, et al. **Biol Psychiatry** 1996 Sep 15;40(6):550-2

Effect of the cholecystokinin-B receptor antagonist L-365,260 on lactate-induced panic attacks in panic disorder patients. van Megen HJ, et al. **Biol Psychiatry** 1996 Oct 15;40(8):804-6

Cholecystokinin B antagonists. Synthesis and quantitative structure-activity relationships of a series of C-terminal analogues of CI-988. Augelli-Szafran CE, et al. **Bioorg Med Chem** 1996 Oct;4(10):1733-45

Use of the chemical structure of peptides as the starting point to design nonpeptide agonists and antagonists at peptide receptors: examples with cholecystokinin and tachykinins. Horwell DC. **Bioorg Med Chem** 1996 Oct;4(10):1573-6 (24 ref.)

Time-course of deactivation of rat stomach ECL cells following cholecystokinin B/gastrin receptor blockade. Ding XQ, et al. **Br J Pharmacol** 1997 Sep;122(1):1-6

Analysis of variation in L-365,260 competition curves in radioligand binding assays. Harper EA, et al. **Br J Pharmacol** 1996 Aug;118(7):1717-26

Analysis of the variation in the action of L-365,260 at CCKB/gastrin receptors in rat, guinea-pig and mouse isolated gastric tissue assays. Roberts SP, et al. **Br J Pharmacol** 1996 Aug;118(7):1779-89

Evidence for CCK(A) receptor involvement in the acquisition of conditioned activity produced by cocaine in rats. Josselyn SA, et al. **Brain Res** 1997 Jul 18; 763(1):93-102

Devazepide (L-364718) inhibits growth and increases expression of tumor markers in HT29-S-B6 cells. Forgue-Lafitte ME, et al. **C R Acad Sci III** 1996 Dec; 319(12):1133-8

Recovery from TPA inhibition of receptor-mediated Ca2+ mobilization is paralleled by down-regulation of protein kinase C-alpha in CHO cells expressing the CCK-A receptor. Smeets RL, et al. **Cell Calcium** 1996 Jul;20(1):1-9

Synthesis and biological evaluation of a new reversely linked type of dual histamine H2 and gastrin receptor antagonist. Kawanishi Y, et al. **Chem Pharm Bull (Tokyo)** 1997 Jan; 45(1):116-24

Dose dependent in vivo inhibition of human colorectal cancer (LoVo) by the gastrin receptor antagonist, CI-988. Romani R, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):438-40

YM022, a potent and selective gastrin/CCK-B receptor antagonist, inhibits peptone meal-induced gastric acid secretion in Heidenhain pouch dogs. Yuki H, et al. **Dig Dis Sci** 1997 Apr;42(4):707-14

A cholecystokinin-B receptor antagonist potentiates GABAergic and glycinergic inhibition in the nucleus of the solitary tract of the rat. McLean HA, et al. **Eur J Neurosci** 1996 Jun;8(6):1078-84

Antidepressant-like effects of CCK(B) receptor antagonists: involvement of the opioid system. Hernando F, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):221-9

In mononeuropathic rats, the enhancement of morphine antinociception by L-365,260, a selective CCK(B) receptor antagonist, depends on the dose of systemic morphine and stimulus characteristics. Idänpään-Heikkilä JJ, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):155-64

Modulation of the in vivo actions of morphine by the mixed CCKA/B receptor antagonist PD 142898. Singh L, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):283-9

Pharmacological profile of T-0632, a novel potent and selective CCKA receptor antagonist, in vitro. Taniguchi H, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):147-54

Pharmacological profile of T-0632, a novel potent and selective CCKA receptor antagonist, in vivo. Taniguchi H, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):227-33

Camostate- and caerulein-induced delay of gastric emptying in the rat: effect of CCK receptor antagonists. Varga G, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):153-9

Synthesis and receptor binding affinity of cholecystokinin receptor ligands: 2-and 1-indolyl derivatives of PD134308. Araldi G, et al. **Farmaco** 1996 Jul;51(7):471-6

'Targeted' molecular diversity: design and development of non-peptide antagonists for cholecystokinin and tachykinin receptors. Horwell D, et al. **Immunopharmacology** 1996 Jun; 33(1-3):68-72 (14 ref.)

Gastrin and gastrin receptor antagonists bind to both N- and C-terminal halves of the 78 kDa gastrin-binding protein. Murphy VJ, et al. **Int J Biochem Cell Biol** 1996 Nov; 28(11):1233-40

Effect of a cholecystokinin receptor antagonist (loxiglumide) on gallbladder contractile function in guinea pigs. Tsubo K, et al. **J Gastroenterol** 1996 Aug;31(4):578-81

(3R)-N-(1-(tert-butylcarbonylmethyl)-2,3-dihydro-2-oxo-5-(2-pyridyl)-1H-1,4-benzodiazepin-3-yl)-N'-(3-(methylamino)phenyl)urea (YF476): a potent and orally active gastrin/CCK-B antagonist. Semple G, et al. **J Med Chem** 1997 Jan 31;40(3):331-41

Antinociceptive effects of RB101, a complete inhibitor of enkephalin-catabolizing enzymes, are enhanced by a cholecystokinin type B receptor antagonist, as revealed by noxiously evoked spinal c-Fos expression in rats. Honore P, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):208-17

Prevention of tolerance to the antinociceptive effects of systemic morphine by a selective cholecystokinin-B receptor antagonist in a rat model of peripheral neuropathy. Idänpään-Heikkilä JJ, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1366-72

Pharmacological profile of a new serine derivative cholecystokinin receptor antagonist TP-680 on pancreatic, biliary and gastric function. Tachibana I, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1404-12

The effects of cholecystokinin A and B receptor antagonists, devazepide and L 365260, on citalopram-induced decrease of exploratory behaviour in rat. Matto V, et al. **J Physiol Pharmacol** 1996 Dec;47(4):661-9

Effects of a specific CCK-A antagonist, Loxiglumide, on postprandial mood and sleepiness. Wells AS, et al. **J Psychopharmacol (Oxf)** 1997;11(3):241-6

Antagonistic effect of YM022, an antiulcer agent in rats, on human cholecystokinin (CCK)B/gastrin receptor. Koizumi T, et al. **Jpn J Pharmacol** 1996 Aug;71(4):307-13

Effect of T-0632, a cholecystokininA receptor antagonist, on experimental acute pancreatitis. Taniguchi H, et al. **Jpn J Pharmacol** 1997 Feb;73(2):105-12

Effects of KSG-504, a new cholecystokinin-A-receptor antagonist, on pancreatic exocrine and endocrine secretions in rats. Yamazaki Y, et al. **Jpn J Pharmacol** 1996 Feb; 70(2):183-90

The effects of central administration of the CCK-B receptor agonist pentagastrin on feeding and cortisol release in sheep. Ebenezer IS, et al. **Methods Find Exp Clin Pharmacol** 1996 May;18(4):235-8

Electrophysiological studies of the cholecystokininA receptor antagonists SR27897B and PD140548 in the rat isolated nodose ganglion. Beart PM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):693-7

Association of enkephalin catabolism inhibitors and CCK-B antagonists: a potential use in the management of pain and opioid addiction. Roques BP, et al. **Neurochem Res** 1996 Nov;21(11):1397-410 (116 ref.)

CI 988, an antagonist of the cholecystokinin-B receptor, potentiates endogenous opioid-mediated antinociception at spinal level. Xu XJ, et al. **Neuropeptides** 1997 Jun; 31(3):287-91

L-740,093, a new antagonist of the CCK-B receptor, potentiates the antinociceptive effect of morphine: electrophysiological and behavioural studies. Xu XJ, et al. **Neuropeptides** 1996 Apr;30(2):203-6

The effects of cholecystokinin A and B receptor antagonists on exploratory behaviour in the elevated zero-maze in rat. Matto V, et al. **Neuropharmacology** 1997 Mar;36(3):389-96

The CCK-B antagonist LY288513 blocks the effects of nicotine withdrawal on auditory startle. Rasmussen K, et al. **Neuroreport** 1996 Apr 10;7(5):1050-2

Antiallodynic effects of a CCKB antagonist in rats with nerve ligation injury: role of endogenous enkephalins. Nichols ML, et al. **Neurosci Lett** 1996 Sep 13;215(3):161-4

Cholecystokinin B receptor antagonists enhance the locomotor response to the N-methyl-D-aspartate antagonists phencyclidine and dizocilpine maleate. Blacker D, et al. **Neuroscience** 1997 Feb;76(4):1057-67

Clinical evaluation and safety of loxiglumide (CCK-A receptor antagonist) in nonresectable pancreatic cancer patients. Italian Pancreatic Cancer Study Group. Militello C, et al. **Pancreas** 1997 Apr;14(3):222-8

Comparison of the effects of the M1-receptor antagonist telenzepine and the CCK-receptor antagonist loxiglumide on the pancreatic secretory response to intraduodenal tryptophan in dogs. Teyssen S, et al. **Pancreas** 1996 Nov; 13(4):407-16

Relationship between gallbladder bile concentration and motility in conscious dogs: role of cholecystokinin. Muramatsu S, et al. **Peptides** 1997;18(1):111-8

Individual differences in the feeding response to CCKB antagonists: role of the nucleus accumbens. Sills TL, et al. **Peptides** 1996;17(4):593-9

Cholecystokinin-induced antinociception is not blocked by CCK-A or CCK-B receptor antagonists. Williams CL, et al. **Peptides** 1997;18(3):409-14

Central nervous system characterization of the new cholecystokininB antagonist LY288513. Helton DR, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):493-502

Acquisition of conditioned reward blocked by intra-accumbens infusion of PD-140548, a CCKA receptor antagonist. Josselyn SA, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):439-44

Cholecystokinin-B/gastrin receptor blockade suppresses the activity of rat stomach ECL cells. Ding XQ, et al. **Pharmacol Toxicol** 1997 Jul;81(1):19-25

Effect of cholecystokinin-B/gastrin receptor blockade on gastric acid secretion in conscious rats. Ding XQ, et al. **Pharmacol Toxicol** 1996 Dec;79(6):324-30

Evaluation of the specificity and potency of a series of cholecystokinin-B/gastrin receptor antagonists in vivo. Ding XQ, et al. **Pharmacol Toxicol** 1996 Sep;79(3):124-30

Effects of cholecystokinin receptor agonist and antagonists on morphine dependence in mice. Zarrindast MR, et al. **Pharmacol Toxicol** 1995 Dec;77(6):360-4

Cholecystokinin A receptor antagonist inhibits feed memory in Japanese quail. Berthelot V, et al. **Physiol Behav** 1996 Aug;60(2):575-9

Cholecystokinin receptors do not mediate the behavioral effects of lipopolysaccharide in mice. Bluthé RM, et al. **Physiol Behav** 1997 Aug;62(2):385-9

The effect of centrally administered CCK-receptor antagonists on food intake in rats. Corp ES, et al. **Physiol Behav** 1997 Jun;61(6):823-7

Lack of interaction between devazepide and 8-OH-DPAT-induced hyperphagia in the rat. Francis J, et al. **Physiol Behav** 1996 Nov;60(5):1337-40

Devazepide, a CCKA receptor antagonist, impairs the acquisition of conditioned reward and conditioned activity. Josselyn SA, et al. **Psychopharmacology (Berl)** 1996 Jan; 123(2):131-43

The CCKB antagonist PD-134,308 facilitates rewarding effects of endogenous enkephalins but does not induce place preference in rats. Valverde O, et al. **Psychopharmacology (Berl)** 1996 Jan;123(2):119-26

The attenuation of morphine-conditioned place preference following chronic mild stress is reversed by a CCKB receptor antagonist. Valverde O, et al. **Psychopharmacology (Berl)** 1997 May;131(1):79-85

Comparison of the effects of two cholecystokinin-receptor antagonists, loxiglumide and L-364,718, on the pancreatic secretory response to intraduodenal tryptophan in dogs. Niebergall-Roth E, et al. **Scand J Gastroenterol** 1996 Jul; 31(7):723-32

Current Perspectives in Acid Inhibitory Therapy. Proceedings of a meeting. New Haven, Connecticut, November 17-19, 1995. **Yale J Biol Med** 1996 May-Jun; 69(3):203-316

CCKB/gastrin receptor antagonists: recent advances and potential uses in gastric secretory disorders. Jensen RT. **Yale J Biol Med** 1996 May-Jun;69(3):245-59 (106 ref.)

[Studies on the synthesis of cholecystokinin A receptor antagonists. IV. Synthesis and cholecystokinin A receptor inhibitory activities of benzimidazole derivatives] Ajisawa Y, et al. **Yakugaku Zasshi** 1996 Sep;116(9):735-47 (Eng. Abstr.) **(Jpn)**

[Studies on the synthesis of cholecystokinin A receptor antagonists. III. Synthesis and cholecystokinin A receptor inhibitory activities of naphthyl sulfone derivatives] Ajisawa Y, et al. **Yakugaku Zasshi** 1996 Aug;116(8):647-56 (Eng. Abstr.) **(Jpn)**

[Studies on the synthesis of cholecystokinin A receptor antagonists. II. Synthesis and cholecystokinin A receptor inhibitory activities of sulfur-containing amide-carboxylic acid derivatives] Ajisawa Y, et al. **Yakugaku Zasshi** 1996 May;116(5):396-410 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Pharmacological and biochemical evidence for the simultaneous expression of CCKB/gastrin and CCKA receptors in the pig pancreas. Philippe C, et al. **Br J Pharmacol** 1997 Feb;120(3):447-54

Cholecystokinin A and B receptors are differentially expressed in normal pancreas and pancreatic adenocarcinoma. Weinberg DS, et al. **J Clin Invest** 1997 Aug 1;100(3):597-603

Developmental gene expression of gastrin receptor in rat stomach. Wang HY, et al. **Regul Pept** 1997 Jun 18; 70(2-3):183-9

CHEMISTRY

Characterization of CCK receptors in stomach smooth muscle: evidence for two subtypes. de Weerth A, et al. **Biochim Biophys Acta** 1997 Jul 25;1327(2):213-21

Mapping of ligand binding sites of the cholecystokinin-B/gastrin receptor with lipo-gastrin peptides and molecular modeling. Lutz J, et al. **Biopolymers** 1997 Jun;41(7):799-817

Molecular modelling of CCK-A receptors. Van Der Bent A, et al. **Drug Des Discov** 1994 Nov;12(2):129-48

His381 of the rat CCKB receptor is essential for CCKB versus CCKA receptor antagonist selectivity. Jagerschmidt A, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):97-106

Identification of membrane insertion sequences of the rabbit gastric cholecystokinin-A receptor by in vitro translation. Bayle D, et al. **J Biol Chem** 1997 Aug 8;272(32):19697-707

Identification of two amino acids of the human cholecystokinin-A receptor that interact with the N-terminal moiety of cholecystokinin. Kennedy K, et al. **J Biol Chem** 1997 Jan 31;272(5):2920-6

Ligand-induced internalization of cholecystokinin receptors. Demonstration of the importance of the carboxyl terminus for ligand-induced internalization of the rat cholecystokinin type B receptor but not the type A receptor. Pohl M, et al. **J Biol Chem** 1997 Jul 18; 272(29):18179-84

Basic amino acids at the C-terminus of the third intracellular loop are required for the activation of phospholipase C by cholecystokinin-B receptors. Wang HL. **J Neurochem** 1997 Apr;68(4):1728-35

Relationship between native and recombinant cholecystokinin receptors: role of differential glycosylation. Hadac EM, et al. **Pancreas** 1996 Aug;13(2):130-9

DEFICIENCY

Abnormal gastric histology and decreased acid production in cholecystokinin-B/gastrin receptor-deficient mice. Langhans N, et al. **Gastroenterology** 1997 Jan;112(1):280-6

DRUG EFFECTS

Pharmacological analysis of the CCKB/gastrin receptors mediating pentagastrin-stimulated gastric acid secretion in the isolated stomach of the immature rat. Hills DM, et al. **Br J Pharmacol** 1996 Dec;119(7):1401-10

Interleukin-1 increases activity of the gastric vagal afferent nerve partly via stimulation of type A CCK receptor in anesthetized rats. Kurosawa M, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1-2):72-8

Cardiovascular effects of cholecystokinin-4 are mediated by the cholecystokinin-B receptor subtype in the conscious guinea pig and dog. Fossa AA, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):180-7

The effect of drugs acting on CCK receptors and rat free exploration in the exploration box. Matto V, et al. **J Physiol Pharmacol** 1997 Jun;48(2):239-51

Expression of two different cholecystokinin receptors in Xenopus oocytes injected with mRNA from rabbit pancreas and rat hippocampus. Shigeri Y, et al. **Jpn J Pharmacol** 1996 Sep;72(1):9-15

Direct contractile effect of cholecystokinin octapeptide on caecal circular smooth muscle cells of guinea pig via both CCK-A and CCK-B/gastrin receptors. Motomura Y, et al. **Life Sci** 1997;60(7):499-504

Antagonist-stimulated internalization of the G protein-coupled cholecystokinin receptor. Roettger BF, et al. **Mol Pharmacol** 1997 Mar;51(3):357-62

Different molecular forms of cholecystokinin and CCKB receptor binding in the rat brain after chronic antidepressant treatment. Harro J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):57-63

PD-135158, a CCKB receptor antagonist, microinjected into the nucleus accumbens and the expression of conditioned rewarded behavior. Josselyn SA, et al. **Neurosci Lett** 1996 May 10;209(2):85-8

Pharmacological characterization of CCKB receptors in human brain: no evidence for receptor heterogeneity. Kinze S, et al. **Neurosci Lett** 1996 Oct 11;217(1):45-9

Effect of L364.718 during suckling on the sensitivity to the hypophagic effect of cholecystokinin in adult rats. Voits M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan;21(1):183-92

Ethological analysis of cholecystokinin (CCKA and CCKB) receptor ligands in the elevated plus-maze test of anxiety in mice. Johnson NJ, et al. **Psychopharmacology (Berl)** 1996 Apr;124(4):355-64

CCKB/gastrin receptor antagonists: recent advances and potential uses in gastric secretory disorders. Jensen RT. **Yale J Biol Med** 1996 May-Jun;69(3):245-59 (106 ref.)

GENETICS

Investigation of genetic risk factors associated with alcoholism. Harada S, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9 Suppl):293A-296A

Missense mutation of the cholecystokinin B receptor gene: lack of association with panic disorder. Kato T, et al. **Am J Med Genet** 1996 Jul 26;67(4):401-5

Molecular structure of the mouse CCK-A receptor gene. Lacourse KA, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):630-5

Evaluation of cholecystokinin, gastrin, CCK-A receptor, and CCK-B/gastrin receptor gene expressions in gastric cancer. Okada N, et al. **Cancer Lett** 1996 Sep 10; 106(2):257-62

Gastric emptying in OLETF rats not expressing CCK-A receptor gene. Shoji E, et al. **Dig Dis Sci** 1997 May; 42(5):915-9

Intraduodenal lipid does not inhibit acid secretion in OLETF rats not expressing CCK-A receptor gene. Shoji E, et al. **Dig Dis Sci** 1996 Nov;41(11):2174-9

Regulation of cholecystokinin release and transcription in a rat without gene expression of cholecystokinin-A receptor. Miyasaka K, et al. **Digestion** 1997;58(2):104-10

Mutational analysis of the putative devazepide binding site of the CCK(A) receptor. Smeets RL, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):93-9

Mouse cholecystokinin type-A receptor gene and its structural analysis. Takata Y, et al. **Gene** 1997 Mar 18; 187(2):267-71

Human cholecystokinin type A receptor gene: cytogenetic localization, physical mapping, and identification of two missense variants in patients with obesity and non-insulin-dependent diabetes mellitus (NIDDM). Inoue H, et al. **Genomics** 1997 Jun 1;42(2):331-5

Regulation of pancreatic exocrine function in Otsuka Long-Evans Tokushima Fatty (OLETF) rats without gene expression of cholecystokinin-A receptor. Funakoshi A, et al. **Intern Med** 1996 Apr;35(4):249-56

In vitro effects of cholecystokinin fragments on human gallbladders. Evidence for an altered CCK-receptor structure in a subgroup of patients with gallstones. Schneider H, et al. **J Hepatol** 1997 May;26(5):1063-8

The human gastrin/cholecystokinin receptors: type B and type C expression in colonic tumors and cell lines. Biagini P, et al. **Life Sci** 1997;61(10):1009-18

mRNAs encoding CCKB but not CCKA receptors are expressed in human T lymphocytes and Jurkat lymphoblastoid cells. Cuq P, et al. **Life Sci** 1997; 61(5):543-55

Pharmacological characterization of a Chinese hamster ovary cell line transfected with the human CCK-B receptor gene. Dunlop J, et al. **Neuropeptides** 1996 Aug;30(4):359-63

Decrease in exploratory behavior in naturally occurring cholecystokinin (CCK)-A receptor gene knockout rats. Kobayashi S, et al. **Neurosci Lett** 1996 Aug 16;214(1):61-4

Apoptosis in the pancreas of genetically diabetic rats with a disrupted cholecystokinin (CCK-A) receptor gene. Jimi A, et al. **Pancreas** 1997 Mar;14(2):109-12

Retardation of pancreatic regeneration after partial pancreatectomy in a strain of rats without CCK-A receptor gene expression. Miyasaka K, et al. **Pancreas** 1997 May; 14(4):391-9

Increased expression of cholecystokinin-A receptor mRNA in pancreas and cholecystokinin-B receptor mRNA in oxyntic mucosa after porta-caval shunting in rats. Nylander AG, et al. **Pharmacol Toxicol** 1997 Mar;80(3):147-51

Developmental gene expression of gastrin receptor in rat stomach. Wang HY, et al. **Regul Pept** 1997 Jun 18; 70(2-3):183-9

[Cholecystokinin-B/gastrin receptor is a novel molecular probe for human small cell lung cancer] Matsumori Y, et al. **Nippon Rinsho** 1996 Feb;54(2):507-12 (14 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Cellular handling of unoccupied and agonist-stimulated cholecystokinin receptor determined by immunolocalization. Fischer de Toledo C, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G488-97

Pig pancreatic acinar cells possess predominantly the CCK-B receptor subtype. Morisset J, et al. **Am J Physiol** 1996 Aug; 271(2 Pt 1):E397-402

Characterization of the CCK-B/gastrin-like receptor in human colon cancer. Smith JP, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R797-805

Quantitative dynamic multicompartmental analysis of cholecystokinin receptor movement in a living cell using dual fluorophores and reconstruction of confocal images. Go WY, et al. **Anal Biochem** 1997 May 1;247(2):210-5

Cholesterol as modulator of receptor function. Gimpl G, et al. **Biochemistry** 1997 Sep 9;36(36):10959-74

Mapping of ligand binding sites of the cholecystokinin-B/gastrin receptor with lipo-gastrin peptides and molecular modeling. Lutz J, et al. **Biopolymers** 1997 Jun;41(7):799-817

Expression of receptors for gut peptides in human pancreatic adenocarcinoma and tumour-free pancreas. Tang C, et al. **Br J Cancer** 1997;75(10):1467-73

A site-directed mutagenesis study on the conserved alanine residue in the distal third intracellular loops of cholecystokininB and neurotensin receptors. Wang HL. **Br J Pharmacol** 1997 May;121(2):310-6

Ontogeny of cholecystokinin binding sites in the hindbrain of the laboratory rat. Kuehl-Kovarik MC, et al. **Brain Behav Evol** 1996;47(5):246-56

Regulation of dopamine D2 receptor affinity by cholecystokinin octapeptide in fibroblast cells cotransfected with human CCKB and D2L receptor cDNAs. Dasgupta S, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):292-9

Cholecystokinin(CCK)-A and CCK-B/gastrin receptors in human tumors. Reubi JC, et al. **Cancer Res** 1997 Apr 1; 57(7):1377-86

Expression of receptors for gut peptides in pancreata of BOP-treated and control hamsters. Tang C, et al. **Carcinogenesis** 1996 Oct;17(10):2171-5

Endocytosis of gastrin in cancer cells expressing gastrin/CCK-B receptor. Tarasova NI, et al. **Cell Tissue Res** 1997 Feb;287(2):325-33

Biology of gut cholecystokinin and gastrin receptors. Shulkes A, et al. **Clin Exp Pharmacol Physiol** 1997 Mar-Apr; 24(3-4):209-16 (98 ref.)

Phosphorylation and desensitization of the pancreatic cholecystokinin-A receptor. Willems PH, et al. **Digestion** 1997;58 Suppl 2:75-80 (33 ref.)

Molecular cloning, developmental expression and pharmacological characterization of the CCKB/gastrin receptor in the calf pancreas. Dufresne M, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):165-79

Cytosolic Ca2+ evaluation in rabbit parietal cells: a novel method to screen gastrin receptor antagonists. Letari O, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):325-33

Mutational analysis of the putative devazepide binding site of the CCK(A) receptor. Smeets RL, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):93-9

2,5-Diketopiperidine derivatives as non-peptide ligands for cholecystokinin receptors. González-Muñiz RG, et al. **Farmaco** 1997 Apr;52(4):243-6

Localization of cholecystokinin A and cholecystokinin B-gastrin receptors in the human stomach. Reubi JC, et al. **Gastroenterology** 1997 Apr;112(4):1197-205

CCK-A- and CCK-B-like receptors in the gallbladder and stomach of the alligator (Alligator mississippiensis). Oliver AS, et al. **Gen Comp Endocrinol** 1997 Jan;105(1):91-101

Direct identification of a distinct site of interaction between the carboxyl-terminal residue of cholecystokinin and the type A cholecystokinin receptor using photoaffinity labeling. Ji Z, et al. **J Biol Chem** 1997 Sep 26; 272(39):24393-401

Identification of two amino acids of the human cholecystokinin-A receptor that interact with the N-terminal moiety of cholecystokinin. Kennedy K, et al. **J Biol Chem** 1997 Jan 31;272(5):2920-6

Ligand-induced internalization of cholecystokinin receptors. Demonstration of the importance of the carboxyl terminus for ligand-induced internalization of the rat cholecystokinin type B receptor but not the type A receptor. Pohl M, et al. **J Biol Chem** 1997 Jul 18; 272(29):18179-84

First intracellular loop of the human cholecystokinin-A receptor is essential for cyclic AMP signaling in transfected HEK-293 cells. Wu V, et al. **J Biol Chem** 1997 Apr 4; 272(14):9037-42

The use of topographical constraints in receptor mapping: investigation of the topographical requirements of the tryptophan 30 residue for receptor binding of Asp-Tyr-D-Phe-Gly-Trp-(N-Me)Nle-Asp-Phe-NH2 (SNF 9007), a cholecystokinin (26-33) analogue that binds to both CCK-B and delta-opioid receptors. Boteju LW, et al. **J Med Chem** 1996 Sep 27;39(20):4120-4

5-(Piperidin-2-yl)- and 5-(homopiperidin-2-yl)-1,4-benzodiazepines: high-affinity, basic ligands for the cholecystokinin-B receptor. Castro JL, et al. **J Med Chem** 1997 Aug 1;

40(16):2491-501
Minor structural differences in Boc-CCK-4 derivatives dictate affinity and selectivity for CCK-A and CCK-B receptors. Shiosaki K, et al. **J Med Chem** 1997 Mar 28; 40(7):1169-72
Cholecystokinin peptides and receptor binding in Alzheimer's disease. Löfberg C, et al. **J Neural Transm Gen Sect** 1996; 103(7):851-60
Dual modulation of dopamine release from anterior nucleus accumbens through cholecystokinin-B receptor subsites. Léna I, et al. **J Neurochem** 1997 Jan;68(1):162-8
Cholecystokinin-induced desensitization, receptor phosphorylation, and internalization in the CHP212 neuroblastoma cell line. Rao RV, et al. **J Neurochem** 1997 Jun;68(6):2356-62
On the mechanism of hormone recognition and binding by the CCK-B/gastrin receptor. Moroder L. **J Pept Sci** 1997 Jan-Feb;3(1):1-14
Synthesis and biological evaluation of new 3-aralkylamino-2-aryl-2H-1, 2,4-pyridothiadiazine 1,1-dioxides as potential CCK-receptor ligands. De Tullio P, et al. **J Pharm Pharmacol** 1997 May;49(5):463-71
[3H]-SR 27897B: a selective probe for autoradiographic labelling of CCK-A receptors in the brain. Zajac JM, et al. **J Recept Signal Transduct Res** 1996 Jan-Mar; 16(1-2):93-113
Time-dependent changes of serum gastrin and gastrin receptors in the rat oxyntic mucosa after proximal gastric vagotomy. Reina AJ, et al. **J Surg Res** 1997 Feb 1; 67(2):186-92
Roles of cholecystokinin receptor phosphorylation in agonist-stimulated desensitization of pancreatic acinar cells and receptor-bearing Chinese hamster ovary cholecystokinin receptor cells. Rao RV, et al. **Mol Pharmacol** 1997 Feb;51(2):185-92
Cholecystokinin peptides and receptors in the rat brain during stress. Harro J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jun; 354(1):59-66
Histochemistry in rat brain and spinal cord with an antibody directed at the cholecystokininA receptor. Mercer LD, et al. **Neurosci Lett** 1997 Apr 4;225(2):97-100
Characterization of cholecystokininA and cholecystokininB receptors expressed by vagal afferent neurons. Moriarty P, et al. **Neuroscience** 1997 Aug;79(3):905-13
Relationship between native and recombinant cholecystokinin receptors: role of differential glycosylation. Hadac EM, et al. **Pancreas** 1996 Aug;13(2):130-9
Visualization and characterization of CCK receptors in exocrine pancreas of rat with storage phosphor autoradiography. Tang C, et al. **Pancreas** 1996 Oct; 13(3):311-5
Several roles of CCKA and CCKB receptor subtypes in CCK-8-induced and LiCl-induced taste aversion conditioning. Mosher JT, et al. **Peptides** 1996;17(3):483-8
Characterization of CCKA receptor mediated pepsinogen secretion in porcine chief cells. Meyer G, et al. **Pharmacology** 1996 Jul;53(1):48-59
Nucleotides regulate the binding affinity of the recombinant type A cholecystokinin receptor in CHO K1 cells. Blevins GT, et al. **Regul Pept** 1996 Feb 22;61(2):87-93
Design of novel cholecystokinin-B receptor ligands based on the 'double-ring system' approach. Lowe JA 3rd, et al. **Regul Pept** 1996 Aug 27;65(1):11-4
The influence of guanyl nucleotide on agonist and antagonist affinity at guinea-pig CCK-B/gastrin receptors: binding studies using [3H]PD140376. Suman-Chauhan N, et al. **Regul Pept** 1996 Aug 27;65(1):37-43

PHYSIOLOGY

Role of gastrin/CCK-B receptors in meal-stimulated acid secretion in rats. Aurang K, et al. **Am J Physiol** 1997 May; 272(5 Pt 1):G1243-8
Cholecystokinin depolarizes guinea pig sphincter of Oddi neurons by activating CCK-A receptors. Gokin AP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1365-71
Soybean lectin stimulates pancreatic exocrine secretion via CCK-A receptors in rats. Jordinson M, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):G653-9
High-affinity CCK-A receptors on the vagus nerve mediate CCK-stimulated pancreatic secretion in rats. Li Y, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G679-85
Effect of a cholecystokinin-A receptor blocker on protein-induced food intake suppression in rats. Trigazis L, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1826-33
Blockade of CCK(B) but not CCK(A) receptors before and after the stress of predator exposure prevents lasting increases in anxiety-like behavior: implications for anxiety associated with posttraumatic stress disorder. Adamec RE, et al. **Behav Neurosci** 1997 Apr;111(2):435-49
Wortmannin-sensitive activation of p70S6-kinase and MAP-kinase by the G protein-coupled receptor, G/CCKB. Seva C, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):202-6
Autocrine loop through cholecystokinin-B/gastrin receptors involved in growth of human leukemia cells. Iwata N, et al. **Blood** 1996 Oct 1;88(7):2683-9
Recovery from TPA inhibition of receptor-mediated Ca2+ mobilization is paralleled by down-regulation of protein kinase C-alpha in CHO cells expressing the CCK-A receptor. Smeets RL, et al. **Cell Calcium** 1996 Jul;20(1):1-9
Gastrin and colon cancer: a unifying hypothesis. Joshi SN, et al. **Dig Dis** 1996 Nov-Dec;14(6):334-44 (78 ref.)
Role of gastrin/CCK-B receptor in the regulation of gastric acid secretion in rat. Tari A, et al. **Dig Dis Sci** 1997 Sep; 42(9):1901-7
Involvement of a CCK-dependent capsaicin-sensitive afferent pathway in the inhibitory effect of pinaverium bromide on the colonic motor response to eating in rats. Fioramonti J, et al. **Fundam Clin Pharmacol** 1997; 11(3):231-6
Transfected cholecystokinin receptors mediate growth inhibitory effects on human pancreatic cancer cell lines. Detjen K, et al. **Gastroenterology** 1997 Mar;112(3):952-9
Visualization of G protein-coupled receptor trafficking with the aid of the green fluorescent protein. Endocytosis and recycling of cholecystokinin receptor type A. Tarasova NI, et al. **J Biol Chem** 1997 Jun 6;272(23):14817-24
Activation of amygdala cholecystokininB receptors potentiates the acoustic startle response in the rat. Frankland PW, et al. **J Neurosci** 1997 Mar 1;17(5):1838-47
CholecystokininB receptor from human Jurkat lymphoblastic T cells is involved in activator protein-1-responsive gene activation. Oiry C, et al. **Mol Pharmacol** 1997 Aug; 52(2):292-9
Paracrine stimulation of cell growth by cholecystokinin/gastrin through cholecystokinin-B receptor on GH3 cells in vitro. Xu Y, et al. **Neuroendocrinology** 1996 Oct;64(4):280-5
Involvement of supraspinal and spinal CCK receptors in the modulation of antinociception induced by cold water swimming stress in the mouse. Suh HW, et al. **Neuropeptides** 1996 Aug;30(4):379-84
Evidence for cholecystokininA receptors in bovine adrenal chromaffin cells. Aarnisalo AM, et al. **Neuroreport** 1996 Sep 2;7(13):2167-70
Evidence for a differential cholecystokinin-B and -A receptor regulation of GABA release in the rat nucleus accumbens mediated via dopaminergic and cholinergic mechanisms. Ferraro L, et al. **Neuroscience** 1996 Aug; 73(4):941-50
Modulation of neurotransmitter release by cholecystokinin in the neostriatum and substantia nigra of the rat: regional and receptor specificity. You ZB, et al. **Neuroscience** 1996 Oct;74(3):793-804
Role of the cholecystokinin (CCK)-A receptor in pancreatic growth in rats during the suckling period: a study in a naturally occurring CCK-A receptor gene "knockout" rat [letter] Miyasaka K, et al. **Pancreas** 1997 Jan;14(1):103-5
Role of endogenous cholecystokinin and cholecystokinin-A receptors in the development of acute pancreatitis in rats. Tachibana I, et al. **Pancreas** 1997 Mar;14(2):113-21
Selective activation of CCK-B receptors does not induce sleep and does not affect EEG slow-wave activity and brain temperature in rats. Chang HY, et al. **Physiol Behav** 1997 Jul;62(1):175-9
G protein-coupled cholecystokinin-B/gastrin receptors are responsible for physiological cell growth of the stomach mucosa in vivo. Nagata A, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11825-30
CCK-B receptors in the limbic system modulate the antidepressant-like effects induced by endogenous enkephalins. Smadja C, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):227-36
[Postprandial gallbladder contraction and the role of CCK receptors in conscious dogs] Sonobe K, et al. **J Smooth Muscle Res** 1995 Dec;31(6):417-21 **(Jpn)**

RECEPTORS, CHOLINERGIC

Transient hepatocellular injury during attacks of cholinergic urticaria. Niv Y, et al. **Isr J Med Sci** 1997 Jan;33(1):50-2
Acetylcholine receptor antibodies and single-fiber EMG in first-degree relatives of children with myasthenia gravis [letter] Anlar B, et al. **Neuropediatrics** 1995 Dec;26(6):335-6
[Acetylcholine receptor] Ebihara T, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):275-84 (70 ref.) **(Jpn)**

AGONISTS see CHOLINERGIC AGONISTS

ANALYSIS

TCR V beta usage by acetylcholine receptor-specific CD4+ T cells in myasthenia gravis. Raju R, et al. **J Autoimmun** 1997 Apr;10(2):203-17
Non-neural agrin codistributes with acetylcholine receptors during early differentiation of Torpedo electrocytes. Cartaud A, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1837-46
Evidence for the existence of galanin receptors on cultured astrocytes of rat CNS: colocalization with cholinergic receptors. Hösli E, et al. **J Chem Neuroanat** 1997 Jul; 13(2):95-103
Spatial relationships of utrophin, dystrophin, beta-dystroglycan and beta-spectrin to acetylcholine receptor clusters during postnatal maturation of the rat neuromuscular junction. Bewick GS, et al. **J Neurocytol** 1996 Jul;25(7):367-79
A novel in situ double-labeling method for simultaneous detection of mRNA and expressed protein or two different mRNAs. Chiu KP, et al. **J Neurosci Methods** 1996 Jun; 66(2):69-79
Further studies of brain cholinesterase: cholinergic receptor ratios in the diagnosis of acute lethal poisoning of birds by anticholinesterase pesticides. Burn JD, et al. **J Wildl Dis** 1996 Apr;32(2):216-24
Measurement of functional cholinergic innervation in rat heart with a novel vesamicol receptor ligand. Coffeen PR, et al. **Nucl Med Biol** 1996 Oct;23(7):923-6
Radioiodinated (-)-2-[4-(3-iodophenyl) piperidino] cyclohexanol: a potential radioligand for mapping presynaptic cholinergic neurons. Shiba K, et al. **Nucl Med Commun** 1996 Jun;17(6):485-92

ANTAGONISTS & INHIBITORS see CHOLINERGIC ANTAGONISTS

BIOSYNTHESIS

Identification of an element required for acetylcholine receptor-inducing activity (ARIA)-induced expression of the acetylcholine receptor epsilon subunit gene. Si J, et al. **J Biol Chem** 1997 Apr 18;272(16):10367-71
Structural organization of developing acetylcholine receptor aggregates. Kunkel DD, et al. **J Neurobiol** 1997 Jun 5; 32(6):613-26
Induction by agrin of ectopic and functional postsynaptic-like membrane in innervated muscle. Jones G, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18; 94(6):2654-9
Acetylcholine receptor epsilon-subunit deletion causes muscle weakness and atrophy in juvenile and adult mice. Witzemann V, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13286-91
The influence of Pb2+ on expression of acetylcholinesterase and the acetylcholine receptor. Luo ZD, et al. **Toxicol Appl Pharmacol** 1997 Aug;145(2):237-45

CHEMISTRY

N-glycosylation at the conserved sites ensures the expression of properly folded functional ACh receptors. Gehle VM, et al. **Brain Res Mol Brain Res** 1997 May;45(2):219-29
A conserved disulfide loop facilitates conformational maturation in the subunits of the acetylcholine receptor. Walcott EC, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1-2):289-300
The role of the cystine loop in acetylcholine receptor assembly. Green WN, et al. **J Biol Chem** 1997 Aug 15; 272(33):20945-53
Beta subunit heterogeneity in neuronal L-type Ca2+ channels. Pichler M, et al. **J Biol Chem** 1997 May 23; 272(21):13877-82
Neuronal-type acetylcholine receptors and regulation of alpha 7 gene expression in vertebrate skeletal muscle. Romano SJ, et al. **J Neurobiol** 1997 Jan;32(1):69-80
Localization of histidine residues relevant for the binding of alpha-bungarotoxin to the acetylcholine receptor alpha-subunit in V8-proteolytic fragments. Lacorazza HD, et al. **Neurochem Int** 1996 May-Jun;28(5-6):557-67
Predicted structure of the extracellular region of ligand-gated ion-channel receptors shows SH2-like and SH3-like domains forming the ligand-binding site. Gready JE, et al. **Protein Sci** 1997 May;6(5):983-98

CLASSIFICATION

Localisation of two classes of acetylcholine receptor-like molecules in sperms of different animal species. Baccetti B, et al. **Zygote** 1995 Aug;3(3):207-17
[New approaches to determining the type classification of presynaptic acetylcholine receptors] Kosmachev AB, et al. **Eksp Klin Farmakol** 1996 Sep-Oct;59(5):3-5 (Eng. Abstr.) **(Rus)**

DEFICIENCY

End-plate acetylcholine receptor deficiency due to nonsense mutations in the epsilon subunit. Engel AG, et al. **Ann Neurol** 1996 Nov;40(5):810-7
Utrophin abundance is reduced at neuromuscular junctions of patients with both inherited and acquired acetylcholine receptor deficiencies. Slater CR, et al. **Brain** 1997 Sep;120 (Pt 9):1513-31

DRUG EFFECTS

Anticholinergic effects on acquisition of place learning in the Morris water task: spatial mapping deficit or inability to inhibit nonplace strategies? Day LB, et al. **Behav Neurosci** 1996 Oct;110(5):998-1005
Analysis of galanin and the galanin antagonist M40 on delayed non-matching-to-position performance in rats lesioned with the cholinergic immunotoxin 192 IgG-saporin. McDonald MP, et al. **Behav Neurosci** 1997 Jun;111(3):552-63
Differential response of rapid eye movement sleep to cholinergic blockade by scopolamine in currently depressed, remitted, and normal control subjects. Poland RE, et al. **Biol Psychiatry** 1997 May 1;41(9):929-38
Volatile general anaesthetic actions on recombinant nACh alpha 7, 5-HT3 and chimeric nACh alpha 7-5-HT3 receptors expressed in Xenopus oocytes. Zhang L, et al. **Br J Pharmacol** 1997 Feb;120(3):353-5
Block of the endplate acetylcholine receptor channel by the sympathomimetic agents ephedrine, pseudoephedrine, and albuterol. Milone M, et al. **Brain Res** 1996 Nov 18; 740(1-2):346-52
Interferon-gamma alters nerve-induced redistribution of acetylcholine receptors in cultured rat skeletal muscle cells.

Kelić S, et al. **Brain Res Bull** 1997;43(2):155–61
Perinatal exposure to methadone affects central cholinergic activity in the weanling rat. Robinson SE, et al. **Drug Alcohol Depend** 1996 Jun;41(2):119–26
Heparin inhibits acetylcholine receptor aggregation at two distinct steps in the agrin-induced pathway. Hopf C, et al. **Eur J Neurosci** 1997 Jun;9(6):1170–7
Melatonin modulates cholinergic transmission by blocking nicotinic channels in the guinea-pig submucous plexus. Barajas-López C, et al. **Eur J Pharmacol** 1996 Oct 3; 312(3):319–25
Positive allosteric action of eburnamonine on cardiac muscarinic acetylcholine receptors. Proška J, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):201–5
Differences in cholinergic responses from outer hair cells of rat and guinea pig. Chen C, et al. **Hear Res** 1996 Sep 1;98(1–2):9–17
Mutation in the M1 domain of the acetylcholine receptor alpha subunit decreases the rate of agonist dissociation. Wang HL, et al. **J Gen Physiol** 1997 Jun;109(6):757–66
Effects of neonatal clomipramine on cholinergic receptor sensitivity and passive avoidance behavior in adult rats. Prathiba J, et al. **J Neural Transm Gen Sect** 1995; 100(2):93–9
Effects of 6R-L-erythro-5,6,7,8-tetrahydrobiopterin on the dopaminergic and cholinergic receptors as evaluated by positron emission tomography in the Rhesus monkey. Tani Y, et al. **J Neural Transm Gen Sect** 1995;102(3):189–208
Pathophysiology of the intermediate syndrome of organophosphorus poisoning [letter] Sedgwick EM, et al. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):201–2
Influence of subunit composition on desensitization of neuronal acetylcholine receptors at low concentrations of nicotine. Fenster CP, et al. **J Neurosci** 1997 Aug 1; 17(15):5747–59
Influence of endothelin-1 on cholinergic nerve-mediated contractions and acetylcholine release in rat isolated tracheal smooth muscle. Knott PG, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1142–7
Chronic nicotine treatment up-regulates alpha3 and alpha7 acetylcholine receptor subtypes expressed by the human neuroblastoma cell line SH-SY5Y. Peng X, et al. **Mol Pharmacol** 1997 May;51(5):776–84
Synaptic currents generated by neuronal acetylcholine receptors sensitive to alpha-bungarotoxin. Zhang ZW, et al. **Neuron** 1996 Dec;17(6):1231–40
Cholinergic rebound and rapid onset psychosis following abrupt clozapine withdrawal. Shiovitz TM, et al. **Schizophr Bull** 1996;22(4):591–5
Chronic stimulation of acetylcholine receptors: differential effects on Na,K-ATPase isoforms in a myogenic cell line. Kragenbrink R, et al. **Synapse** 1996 Jul;23(3):219–23
The influence of Pb2+ on expression of acetylcholinesterase and the acetylcholine receptor. Luo ZD, et al. **Toxicol Appl Pharmacol** 1997 Aug;145(2):237–45
[Mode of action and effects of botulinum neurotoxin A] Périé S, et al. **Ann Otolaryngol Chir Cervicofac** 1996;113(2):73–8 (Eng. Abstr.) **(Fre)**
[The effect of affinity on the type of action of ammonium compounds on skeletal muscle cholinoreceptors] Danilov AF, et al. **Eksp Klin Farmakol** 1996 Nov-Dec;59(6):10–2 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular evolution of ion channels in central nervous system: possible primitive mRNA segments conserved in glutamate and acetylcholine receptor channel genes. Ohnishi K. **Ann N Y Acad Sci** 1993 Dec 20;707:524–8
End-plate acetylcholine receptor deficiency due to nonsense mutations in the epsilon subunit. Engel AG, et al. **Ann Neurol** 1996 Nov;40(5):810–7
Functional effects on the acetylcholine receptor of multiple mutations of gamma Asp174 and delta Asp180. Martin MD, et al. **Biochemistry** 1997 Sep 2;36(35):10742–50
Utrophin abundance is reduced at neuromuscular junctions of patients with both inherited and acquired acetylcholine receptor deficiencies. Slater CR, et al. **Brain** 1997 Sep;120 (Pt 9):1513–31
Heregulin-stimulated acetylcholine receptor gene expression in muscle: requirement for MAP kinase and evidence for a parallel inhibitory pathway independent of electrical activity. Altiok N, et al. **EMBO J** 1997 Feb 17;16(4):717–25
Mutations in different functional domains of the human muscle acetylcholine receptor alpha subunit in patients with the slow-channel congenital myasthenic syndrome. Croxen R, et al. **Hum Mol Genet** 1997 May;6(5):767–74
New mutations in acetylcholine receptor subunit genes reveal heterogeneity in the slow-channel congenital myasthenic syndrome. Engel AG, et al. **Hum Mol Genet** 1996 Sep; 5(9):1217–27
Congenital myasthenic syndromes due to heteroallelic nonsense/missense mutations in the acetylcholine receptor epsilon subunit gene: identification and functional characterization of six new mutations. Ohno K, et al. **Hum Mol Genet** 1997 May;6(5):753–66
Human muscle acetylcholine receptor alpha-subunit gene (CHRNA1) association with autoimmune myasthenia gravis in black, mixed-ancestry and Caucasian subjects. Heckmann JM, et al. **J Autoimmun** 1996 Apr;9(2):175–80
An engineered Tetrahymena tRNAGln for in vivo incorporation of unnatural amino acids into proteins by nonsense suppression. Saks ME, et al. **J Biol Chem** 1996 Sep 20;271(38):23169–75
Identification of an element required for acetylcholine receptor-inducing activity (ARIA)-induced expression of the acetylcholine receptor epsilon subunit gene. Si J, et al. **J Biol Chem** 1997 Apr 18;272(16):10367–71
Mutation in the M1 domain of the acetylcholine receptor alpha subunit decreases the rate of agonist dissociation. Wang HL, et al. **J Gen Physiol** 1997 Jun;109(6):757–66
Expression of acetylcholine receptor genes in human thymic epithelial cells: implications for myasthenia gravis. Wakkach A, et al. **J Immunol** 1996 Oct 15;157(8):3752–60
Neuronal-type acetylcholine receptors and regulation of alpha 7 gene expression in vertebrate skeletal muscle. Romano SJ, et al. **J Neurobiol** 1997 Jan;32(1):69–80
No evidence for an association of AChR beta-subunit gene (CHRNB1) with myasthenia gravis. Djabiri F, et al. **J Neuroimmunol** 1997 Sep;78(1–2):86–9
Slow-channel myasthenic syndrome caused by enhanced activation, desensitization, and agonist binding affinity attributable to mutation in the M2 domain of the acetylcholine receptor alpha subunit. Milone M, et al. **J Neurosci** 1997 Aug 1;17(15):5651–65
A novel in situ double-labeling method for simultaneous detection of mRNA and expressed protein or two different mRNAs. Chiu KP, et al. **J Neurosci Methods** 1996 Jun; 66(2):69–79
Genetic manipulations of cholinergic communication reveal trans-acting control mechanisms over acetylcholine receptors. Broide RS, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1–3):279–91 (27 ref.)
Localization of protease nexin-1 gene Spi4 between villin and acetylcholine receptor gamma genes on mouse Chromosome 1. Voss GC, et al. **Mamm Genome** 1996 Feb; 7(2):167–8
"Orphan" alpha6 nicotinic AChR subunit can form a functional heteromeric acetylcholine receptor. Gerzanich V, et al. **Mol Pharmacol** 1997 Feb;51(2):320–7
Congenital myasthenic syndrome caused by decreased agonist binding affinity due to a mutation in the acetylcholine receptor epsilon subunit. Ohno K, et al. **Neuron** 1996 Jul;17(1):157–70
Ephedrine blocks wild-type and long-lived mutant acetylcholine receptor channels. Bouzat C. **Neuroreport** 1996 Dec 20;8(1):317–21
Acetylcholine receptor epsilon-subunit deletion causes muscle weakness and atrophy in juvenile and adult mice. Witzemann V, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13286–91

IMMUNOLOGY

Acetylcholine receptor expression in human extraocular muscles and their susceptibility to myasthenia gravis [see comments] MacLennan C, et al. **Ann Neurol** 1997 Apr; 41(4):423–31. Comment in: Ann Neurol 1997 Apr;41(4):419–20.
Heterogeneity and immunotherapy of specific T-cells in myasthenia gravis. Bond A, et al. **Biochem Soc Trans** 1997 May;25(2):665–70 (44 ref.)
Thymocyte Fas expression is dysregulated in myasthenia gravis patients with anti-acetylcholine receptor antibody. Moulian N, et al. **Blood** 1997 May 1;89(9):3287–95
Lewis rats given antibodies against denatured acetylcholine receptor become resistant to induction of experimental autoimmune myasthenia gravis. Krolick KA, et al. **Cell Immunol** 1996 Aug 25;172(1):10–20
Modified and improved anti-acetylcholine receptor (AchR) antibody assay: comparison of analytical and clinical performance with conventional anti-AChR antibody assay. Ferrero B, et al. **Clin Chem** 1997 May;43(5):824–31
Expression of human-Torpedo hybrid acetylcholine receptor (AChR) for analysing the subunit specificity of antibodies in sera from patients with myasthenia gravis (MG). Loutrari H, et al. **Clin Exp Immunol** 1997 Sep;109(3):538–46
Myasthenia gravis. Somnier FE. **Dan Med Bull** 1996 Feb; 43(1):1–10 (126 ref.)
Construction and application of a new class of sequential oligopeptide carriers (SOCn) for multiple anchoring of antigenic peptides--application to the acetylcholine receptor (AChR) main immunogenic region. Tsikaris V, et al. **Int J Biol Macromol** 1996 Oct;19(3):195–205
Amyotrophic lateral sclerosis with anti-acetylcholine receptor antibody. Okuyama Y, et al. **Intern Med** 1997 Apr; 36(4):312–5
Induction of tolerance in experimental autoimmune myasthenia gravis with solubilized MHC class II:acetylcholine receptor peptide complexes. Spack EG, et al. **J Autoimmun** 1995 Dec;8(6):787–807
The functional architecture of an acetylcholine receptor-mimicking antibody. Mérienne K, et al. **J Biol Chem** 1997 Sep 19;272(38):23775–83
Association of arthrogryposis multiplex congenita with maternal antibodies inhibiting fetal acetylcholine receptor function. Riemersma S, et al. **J Clin Invest** 1996 Nov 15; 98(10):2358–63
Experimental autoimmune myasthenia gravis in B10.BV8S2 transgenic mice: preferential usage of TCRAV1 gene by lymphocytes responding to acetylcholine receptor. Kaul R, et al. **J Immunol** 1997 Jun 15;158(12):6006–12
Tolerance to a dominant T cell epitope in the acetylcholine receptor molecule induces epitope spread and suppresses murine myasthenia gravis. Wu B, et al. **J Immunol** 1997 Sep 15;159(6):3016–23
Synthesis of anti-acetylcholine receptor antibodies by CD5- B cells from peripheral blood of myasthenia gravis patients. Heidenreich F, et al. **J Neurol** 1996 Jan;243(1):57–62
Indirect quenching fluororeceptor assay of anti-AChR antibodies. Messripour M, et al. **Mol Chem Neuropathol** 1997 May;31(1):43–51
Acetylcholine receptor antibodies as a marker of treatable fatigue in HIV-1 infected individuals. Cupler EJ, et al. **Muscle Nerve** 1996 Sep;19(9):1186–8
Isolation of a nuclease-resistant decoy RNA that can protect human acetylcholine receptors from myasthenic antibodies. Lee SW, et al. **Nat Biotechnol** 1997 Jan;15(1):41–5
The fetal/adult acetylcholine receptor antibody ratio in mothers with myasthenia gravis as a marker for transfer of the disease to the newborn. Gardnerova M, et al. **Neurology** 1997 Jan;48(1):50–4
Reactivity of T cells from seronegative patients with myasthenia gravis to T cell epitopes of the human acetylcholine receptor. Karni A, et al. **Neurology** 1997 Jun; 48(6):1638–42
Th1 epitope repertoire on the alpha subunit of human muscle acetylcholine receptor in myasthenia gravis. Wang ZY, et al. **Neurology** 1997 Jun;48(6):1643–53
Acetylcholine receptor autoantibody secretion by thymocytes: relationship to myasthenia gravis. Yoshikawa H, et al. **Neurology** 1997 Aug;49(2):562–7
Clinical heterogeneity of seronegative myasthenia gravis. Evoli A, et al. **Neuromuscul Disord** 1996 May;6(3):155–61
Altered peptide ligands of a myasthenogenic epitope as modulators of specific T-cell responses. Kirshner SL, et al. **Scand J Immunol** 1996 Nov;44(5):512–21
Anti-idiotypic T cells in early stages of myasthenia gravis: increase in the number and prevalence correlated to clinical improvement in patients. Yi Q, et al. **Scand J Immunol** 1996 Dec;44(6):630–7
[Receptor function and monoclonal antibody] Ueno S. **Nippon Rinsho** 1997 Apr;55 Suppl 2:457–62 (15 ref.) **(Jpn)**

METABOLISM

Muscarinic acetylcholine receptors on human lymphocytes in patients with Menière's disease. Masuyama K, et al. **Acta Otolaryngol (Stockh)** 1996 May;116(3):369–73
Ca2+ entry through acetylcholine receptor channel in dysgenic myotubes. Melliti K, et al. **Arch Physiol Biochem** 1996;104(1):57–61
Alterations in acetylcholine, NMDA, benzodiazepine receptors and protein kinase C in the brain of the senescence-accelerated mouse: an animal model useful for studies on cognitive enhancers. Nomura Y, et al. **Behav Brain Res** 1997 Feb;83(1–2):51–5
Agonist binding to the Torpedo acetylcholine receptor. 1. Complexities revealed by dissociation kinetics. Dunn SM, et al. **Biochemistry** 1997 Apr 1;36(13):3846–53
Agonist binding to the Torpedo acetylcholine receptor. 2. Complexities revealed by association kinetics. Dunn SM, et al. **Biochemistry** 1997 Apr 1;36(13):3854–63
The 9-arginine residue of alpha-conotoxin GI is responsible for its selective high affinity for the alphagamma agonist site on the electric organ acetylcholine receptor. Hann RM, et al. **Biochemistry** 1997 Jul 22;36(29):9051–6
Synthesis of a novel [125I]neonicotinoid photoaffinity probe for the Drosophila nicotinic acetylcholine receptor. Latli B, et al. **Bioconjug Chem** 1997 Jan-Feb;8(1):7–14
A muscarinic acetylcholine receptor, present in the epithelial cell line from Chironomus tentans. Wegener S, et al. **Biol Chem** 1996 Dec;377(12):819–24
Synaptic transmission at visualized sympathetic boutons: stochastic interaction between acetylcholine and its receptors. Bennett MR, et al. **Biophys J** 1997 Apr; 72(4):1595–606
Inhibition by nociceptin of the light-evoked release of ACh from retinal cholinergic neurones. Neal MJ, et al. **Br J Pharmacol** 1997 Apr;120(8):1399–400
Role of the cholinergic system in the regulation of neurotrophin synthesis. Yu J, et al. **Brain Res** 1995 Dec 24;705(1–2):247–52
Lymphocyte muscarinic cholinergic activity and PGE2 involvement in experimental Trypanosoma cruzi infection. Sterin-Borda L, et al. **Clin Immunol Immunopathol** 1996 Nov;81(2):122–8
Nuclear magnetic resonance (NMR) analysis of ligand receptor interactions: the cholinergic system—a model. Fraenkel Y, et al. **Crit Rev Biochem Mol Biol** 1996; 31(4):273–301 (149 ref.)
Association of muscle-specific kinase MuSK with the acetylcholine receptor in mammalian muscle. Fuhrer C, et al. **EMBO J** 1997 Aug 15;16(16):4951–60
Identification of a determinant of acetylcholine receptor gating kinetics in the extracellular portion of the gamma subunit. Fucile S, et al. **Eur J Neurosci** 1996 Dec; 8(12):2564–70
Selective loss of cholinergic receptors following unilateral intracortical injection of volkensin. Chessell IP, et al. **Exp Neurol** 1997 Sep;147(1):183–91
Cloning and expression of full length mouse utrophin: the differential association of utrophin and dystrophin with AChR clusters. Guo WX, et al. **FEBS Lett** 1996 Dec 2; 398(2–3):259–64
The EGF-like domain of chick acetylcholine receptor-inducing activity (ARIA) contains its full

biological activity. Yang JF, et al. **FEBS Lett** 1997 Feb 17;403(2):163–7

Inhibition of agrin–mediated acetylcholine receptor clustering by utrophin C–terminal peptides. Namba T, et al. **Genes Cells** 1996 Aug;1(8):755–64

The hair cell acetylcholine receptors: a synthesis. Guth PS, et al. **Hear Res** 1996 Sep 1;98(1–2):1–8 (68 ref.)

Mutations in different functional domains of the human muscle acetylcholine receptor alpha subunit in patients with the slow–channel congenital myasthenic syndrome. Ohno K, et al. **Hum Mol Genet** 1997 May;6(5):753–66

Congenital myasthenic syndromes due to heteroallelic nonsense/missense mutations in the acetylcholine receptor epsilon subunit gene: identification and functional characterization of six new mutations. Ohno K, et al. **Hum Mol Genet** 1997 May;6(5):753–66

Antiadrenergic and muscarinic receptor antibodies in Chagas' cardiomyopathy. Borda ES, et al. **Int J Cardiol** 1996 May; 54(2):149–56 (38 ref.)

Na+ channel and acetylcholine receptor changes in muscle at sites distant from burns do not simulate denervation. Nosek MT, et al. **J Appl Physiol** 1997 Apr;82(4):1333–9

Mimicry between receptors and antibodies. Identification of snake toxin determinants recognized by the acetylcholine receptor and an acetylcholine receptor–mimicking monoclonal antibody. Ducancel F, et al. **J Biol Chem** 1996 Dec 6;271(49):31345–53

Functional interaction of Src family kinases with the acetylcholine receptor in C2 myotubes. Fuhrer C, et al. **J Biol Chem** 1996 Dec 13;271(50):32474–81

Involvement of the chaperone protein calnexin and the acetylcholine receptor beta–subunit in the assembly and cell surface expression of the receptor. Keller SH, et al. **J Biol Chem** 1996 Sep 13;271(37):22871–7

Molecular dissection of subunit interfaces in the acetylcholine receptor. Identification of residues that determine agonist selectivity. Prince RJ, et al. **J Biol Chem** 1996 Oct 18; 271(42):25770–7

Stabilization of acetylcholine receptors by exogenous ATP and its reversal by cAMP and calcium. O'Malley JP, et al. **J Cell Biol** 1997 Jul 14;138(1):159–65

A 17–Mer self–peptide of acetylcholine receptor binds to B cell MHC class II, activates helper T cells, and stimulates autoantibody production and electrophysiologic signs of myasthenia gravis. Yoshikawa H, et al. **J Immunol** 1997 Aug 1;159(3):1570–7

Phospholipid metabolism in Alzheimer's disease and in a human cholinergic cell. Kanfer JN, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):361–3 (7 ref.)

Expression of neuronal acetylcholine nicotinic receptor alpha 4 and beta 2 subunits during postnatal development of the rat brain. Cimino M, et al. **J Neural Transm Gen Sect** 1995; 100(2):77–92

Effects of neonatal clomipramine on cholinergic receptor sensitivity and passive avoidance behavior in adult rats. Prathiba J, et al. **J Neural Transm Gen Sect** 1995; 100(2):93–9

Acetylcholine receptor clustering associates with proteoglycan biosynthesis in C2 variant and heterkaryon muscle cells. Mook–Jung I, et al. **J Neurobiol** 1996 Oct; 31(2):210–8

Anti–agrin staining is absent at abandoned synaptic sites of frog neuromuscular junctions. Werle MJ, et al. **J Neurobiol** 1996 Jun;30(2):293–302

Macrophage infiltration at the neuromuscular junction does not contribute to AChR loss and age–related resistance to EAMG. Hoedemaekers A, et al. **J Neuroimmunol** 1997 May;75(1–2):147–55

Age–related diminution of dopamine antagonist–stimulated vesamicol receptor binding. Efange SM, et al. **J Nucl Med** 1996 Jul;37(7):1192–7

Neuromuscular blockade: offset anomalies. Are they simply potency–related receptor bonding effects? Midgley JM, et al. **J Pharm Pharmacol** 1997 Apr;49(4):416–20 (42 ref.)

Genetics, neuroleptic response and the organization of cholinergic neurons in the mouse striatum. Dains K, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1430–8

Nicotinic actions on neurones of the central autonomic area in rat spinal cord slices. Bordey A, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):175–87

Regional age–related alterations in cholinergic and GABAergic receptors in the rat brain. Araki T, et al. **Mech Ageing Dev** 1996 Jul 5;88(1–2):49–60

gamma–AChR/epsilon–AChR switch at agrin–induced postsynaptic–like apparatus in skeletal muscle. Rimer M, et al. **Mol Cell Neurosci** 1997;9(4):254–63

Acetylcholine receptor and calcium leakage activity in nondystrophic and dystrophic myotubes (MDX) Carlson CG. **Muscle Nerve** 1996 Oct;19(10):1258–67

Isolation of a nuclease–resistant decoy RNA that can protect human acetylcholine receptors from myasthenic antibodies. Lee SW, et al. **Nat Biotechnol** 1997 Jan;15(1):41–5

Direct demonstration of MuSK involvement in acetylcholine receptor clustering through identification of agonist ScFv [see comments] Xie MH, et al. **Nat Biotechnol** 1997 Aug; 15(8):768–71. Comment in: Nat Biotechnol 1997 Aug;15(8):721–2.

A transfected human muscle cell line expressing the adult subtype of the human muscle acetylcholine receptor for diagnostic assays in myasthenia gravis. Beeson D, et al. **Neurology** 1996 Dec;47(6):1552–5

Localization of temporal lobe epileptic foci with iodine–123 iododexetimide cholinergic neuroreceptor single–photon emission computed tomography. Boundy KL, et al. **Neurology** 1996 Oct;47(4):1015–20

Corticosterone modifies the murine muscle acetylcholine receptor channel kinetics. Nurowska E, et al. **Neuroreport** 1996 Dec 20;8(1):77–80

Absence of nerve–dependent conversion of rapidly degrading to stable acetylcholine receptors at adult innervated endplates. Stiles JR, et al. **Neuroscience** 1997 Jun; 78(3):895–901

Kinase domain of the muscle–specific receptor tyrosine kinase (MuSK) is sufficient for phosphorylation but not clustering of acetylcholine receptors: required role for the MuSK ectodomain? Glass DJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8848–53

Maintenance of acetylcholine receptor number by neuregulins at the neuromuscular junction in vivo. Sandrock AW Jr, et al. **Science** 1997 Apr 25; 276(5312):599–603

Activation of the G protein Gq/11 through tyrosine phosphorylation of the alpha subunit. Umemori H, et al. **Science** 1997 Jun 20;276(5320):1878–81

Cardiovascular collapse through non–cholinergic mechanism after intravenous injection of N–methylcarbamate insecticide in rabbits. Futagawa H, et al. **Toxicology** 1997 Feb 28;117(2–3):163–70

Is the input to a GABAergic or cholinergic synapse the sole asymmetry in rabbit's retinal directional selectivity? Grzymacz NM, et al. **Vis Neurosci** 1997 Jan–Feb; 14(1):39–54

PHYSIOLOGY

The pharmacology of (–)–nicotine and novel cholinergic channel modulators. Brioni JD, et al. **Adv Pharmacol** 1997; 37:153–214 (298 ref.)

The initiation of the muscle action potential. Neumann E, et al. **Arch Physiol Biochem** 1996 Oct;104(6):731–44

Human placental cholinergic system. Sastry BV. **Biochem Pharmacol** 1997 Jun 1;53(11):1577–86 (116 ref.)

Functional effects on the acetylcholine receptor of multiple mutations of gamma Asp174 and delta Asp180. Martin MD, et al. **Biochemistry** 1997 Sep 2;36(35):10742–50

Electrostatics of a simple membrane model using Green's functions formalism. von Kitzing E, et al. **Biophys J** 1996 Aug;71(2):795–810

Influence of respiratory tract viral infection on endothelin–1–induced potentiation of cholinergic nerve–mediated contraction in mouse trachea. Carr MJ, et al. **Br J Pharmacol** 1996 Nov;119(5):891–8

Adrenoceptor– and cholinoceptor–mediated mechanisms in the regulation of 5–hydroxytryptamine release from isolated tracheae of newborn rabbits. Freitag A, et al. **Br J Pharmacol** 1996 Sep;119(1):91–8

Role of kappa opioid receptors in modulating cholinergic twitches in the circular muscle of guinea–pig colon. Giuliani S, et al. **Br J Pharmacol** 1996 Nov;119(5):985–9

N–glycosylation at the conserved sites ensures the expression of properly folded functional ACh receptors. Gehle VM, et al. **Brain Res Mol Brain Res** 1997 May;45(2):219–29

Common molecular mechanisms in field– and agrin–induced acetylcholine receptor clustering. Sabrina F, et al. **Cell Mol Neurobiol** 1997 Apr;17(2):207–25

Maturation of the acetylcholine receptor in skeletal muscle: regulation of the AChR gamma–to–epsilon switch. Missias AC, et al. **Dev Biol** 1996 Oct 10;179(1):223–38

Interactive processing between glutamatergic and cholinergic systems involved in inhibitory avoidance learning of rats. Ohno M, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):145–7

The human lens possesses acetylcholine receptors that are functional throughout life [letter] Thomas GR, et al. **Exp Eye Res** 1997 May;64(5):849–52

Effects of acetylcholine on a slow voltage–activated non–selective cation current mediated by non–nicotinic receptors on isolated Ascaris muscle bags. Martin RJ, et al. **Exp Physiol** 1996 Nov;81(6):909–25

Manipulation of the cholinergic system. Geroldi C, et al. **Funct Neurol** 1997 May–Aug;12(3–4):187–91 (23 ref.)

Signaling from G protein–coupled receptors to the c–jun promoter involves the MEF2 transcription factor. Evidence for a novel c–jun amino–terminal kinase–independent pathway. Coso OA, et al. **J Biol Chem** 1997 Aug 15;272(33):20691–7

Interferon gamma (IFN–gamma) is necessary for the genesis of acetylcholine receptor–induced clinical experimental autoimmune myasthenia gravis in mice. Balasa B, et al. **J Exp Med** 1997 Aug 4;186(3):385–91

Potassium inward rectifier and acetylcholine receptor channels in embryonic Xenopus muscle cells in culture. Hancock S, et al. **J Neurobiol** 1996 Mar;29(3):354–66

Cholinergic and GABAergic receptors on fly tangential cells and their role in visual motion detection. Brotz TM, et al. **J Neurophysiol** 1996 Sep;76(3):1786–99

Physiology, pharmacology, and topography of cholinergic neocortical oscillations in vitro. Lukatch HS, et al. **J Neurophysiol** 1997 May;77(5):2427–45

Effects of denervation on acetylcholine receptor clusters on frog cardiac ganglion neurons as revealed by quantitative laser scanning confocal microscopy. Horch HL, et al. **J Neurosci** 1996 Mar 1;16(5):1720–9

Heterologous retinal cultured neurons and cell adhesion molecules induce clustering of acetylcholine receptors and polynucleation in mouse muscle BC3H–1 clonal cell line. Politi LE, et al. **J Neurosci Res** 1996 Mar 15;43(6):639–51

Voltage dependence of mouse acetylcholine receptor gating: different charge movements in di–, mono– and unliganded receptors. Auerbach A, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):155–70

The role of an agrin–growth factor interaction in ACh receptor clustering. Daggett DF, et al. **Mol Cell Neurosci** 1996;8(4):272–85

Intercellular communication that mediates formation of the neuromuscular junction. Daniels MP. **Mol Neurobiol** 1997 Jun;14(3):143–70 (225 ref.)

End–plate electromyography: use of spectral analysis of end–plate noise. Maselli RA. **Muscle Nerve** 1997 Jan; 20(1):52–8

The acetylcholine receptor ligand–gated channel as a molecular target of disease and therapeutic agents. Barrantes FJ. **Neurochem Res** 1997 Apr;22(4):391–400 (68 ref.)

Synaptic currents generated by neuronal acetylcholine receptors sensitive to alpha–bungarotoxin. Zhang ZW, et al. **Neuron** 1996 Dec;17(6):1231–40

Studies of the role of the brain cholinergic system in the mechanisms of dissociative learning. Azarashvili AA. **Neurosci Behav Physiol** 1997 Jul–Aug;27(4):341–6

No synthase and guanylate cyclase inhibitors block modulation of the plasticity of common snail cholinoreceptors by 15–hydroxy–eicosatetraenoic acid. Pivovarov AS, et al. **Neurosci Behav Physiol** 1996 Sep–Dec;26(5):428–34

Nicotine increases [Ca2+]i and regulates electrical activity in insect neurosecretory cells (DUM neurons) via an acetylcholine receptor with 'mixed' nicotinic–muscarinic pharmacology. Grolleau F, et al. **Neurosci Lett** 1996 Dec 13;220(2):142–6

Combined cholinergic and 5–HT2 receptor activation suppresses thalamocortical oscillations in aged rats. Jäkälä P, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):713–8

Involvement of the cholinergic system and periaqueductal gray matter in the modulation of tonic immobility in the guinea pig. Monassi CR, et al. **Physiol Behav** 1997 Jul; 62(1):53–9

Cholinergic agonists stimulate secretion of soluble full–length amyloid precursor protein in neuroendocrine cells. Efthimiopoulos S, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8046–50

Rapid chemical kinetic techniques for investigations of neurotransmitter receptors expressed in Xenopus oocytes. Niu L, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12964–8

Proceedings of the 9th International Cholinergic Symposium. Cholinergic mechanisms: from molecular biology to clinical significance. Mainz, Germany, June 7–10, 1995. **Prog Brain Res** 1996;109:xi–xviii, 1–378

The Otto Loewi Lecture. Loewi's discovery and the XXI century. Karczmar AG. **Prog Brain Res** 1996;109:1–27, xvii (108 ref.)

Immunolesion by 192IgG–saporin of rat basal forebrain cholinergic system: a useful tool to produce cortical cholinergic dysfunction. Schliebs R, et al. **Prog Brain Res** 1996;109:253–64 (57 ref.)

Absence of central cholinergic deficits in ApoE knockout mice. Anderson R, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):135–44

Effects of hyperbaric oxygen exposure on non–adrenergic non–cholinergic responses of rat trachea. Matera MG, et al. **Res Commun Mol Pathol Pharmacol** 1997 Jan; 95(1):105–8

[Immune system and diseases that vary with circumstance and physical condition] Abo T, et al. **Rinsho Byori** 1997 Jan;45(1):3–12 (Eng. Abstr.) **(Jpn)**

[The significance of motor activity in regulating the cholinergic sensitivity of cat muscle spindles] Arutiunian RS. **Fiziol Zh Im I M Sechenova** 1996 Dec;82(12):35–40 (Eng. Abstr.) **(Rus)**

[The role of the cholinergic system of the brain in the mechanisms of dissociated learning] Azarashvili AA. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Mar–Apr; 46(2):309–16 (Eng. Abstr.) **(Rus)**

[The cholinergic system of the striatum: its participation in the motor and sensory components of motor behavior] Shapovalova KB. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar–Apr;47(2):393–411 (50 ref.) (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Quantal transmitter release onto different patterns of receptor distributions at somatic neuromuscular junctions. Bennett MR, et al. **J Theor Biol** 1996 Nov 21;183(2):231–6

[Current concepts of the neuromorphology and neurochemistry of the striatal cholinergic system and its role in regulating movement] Shapovalova KB. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul–Aug; 46(4):656–73 (145 ref.) (Eng. Abstr.) **(Rus)**

RECEPTORS, CHORIONIC GONADOTROPIN see **RECEPTORS, LH**

RECEPTORS, COLONY-STIMULATING FACTOR

ANTAGONISTS & INHIBITORS

Suppression or overexpression of genes encoding myeloid growth factors or their receptors. Metcalf D. **Hematol Cell Ther** 1997 Apr;39(2):98-101 (26 ref.)

BIOSYNTHESIS

Localization and expression of CSF-1 receptor in rat dental follicle cells. Wise GE, et al. **J Dent Res** 1997 Jun; 76(6):1244-9

BLOOD

Differential expression of receptors for hemopoietic growth factors on subsets of CD34+ hemopoietic cells. Wognum AW, et al. **Leuk Lymphoma** 1996 Dec;24(1-2):11-25 (92 ref.)

GENETICS

Genes located in and near the human pseudoautosomal region are located in the X-Y pairing region in dog and sheep. Toder R, et al. **Chromosome Res** 1997 Aug;5(5):301-6

Suppression or overexpression of genes encoding myeloid growth factors or their receptors. Metcalf D. **Hematol Cell Ther** 1997 Apr;39(2):98-101 (26 ref.)

Transcriptional control of the expression of the c-fms gene encoding the receptor for macrophage colony-stimulating factor (CSF-1). Yue X, et al. **Immunobiology** 1996 Oct; 195(4-5):461-76 (59 ref.)

Molecular understanding of hematopoietin/cytokine receptor signaling defects in hematopoietic disorders. Soede-Bobok AA, et al. **J Mol Med** 1997 Jul;75(7):470-7 (80 ref.)

METABOLISM

G-CSF-mobilized peripheral blood progenitor cells: in vitro growth pattern and hematopoietic growth factor receptor profile. Roberts AW, et al. **Exp Hematol** 1997 Apr; 25(4):298-305

PHYSIOLOGY

Increasing c-FMS (CSF-1 receptor) expression decreases retinoic acid concentration needed to cause cell differentiation and retinoblastoma protein hypophosphorylation. Yen A, et al. **Cancer Res** 1997 May 15;57(10):2020-8

Receptors for hematopoietic regulatory cytokines: overview of structure and function. Gullberg U, et al. **Cancer Treat Res** 1995;80:1-24 (118 ref.)

Selection versus instruction? **Ciba Found Symp** 1997;204:33-9 (4 ref.)

Test tube data and in vivo realities. **Ciba Found Symp** 1997; 204:88-93 (5 ref.)

CSF-1 receptor/insulin receptor chimera permits CSF-1-dependent differentiation of 3T3-L1 preadipocytes. Chaika OV, et al. **J Biol Chem** 1997 May 2; 272(18):11968-74

RECEPTORS, COMPLEMENT

7E3 F(ab')2, a monoclonal antibody to the platelet GPIIb/IIIa receptor, protects against microangiopathic hemolytic anemia and microvascular thrombotic renal failure in baboons treated with C4b binding protein and a sublethal infusion of Escherichia coli. Taylor FB, et al. **Blood** 1997 Jun 1;89(11):4078-84

[Effect of complement modulation with the soluble complement receptor sCR1 on survival and function of kidney xenotransplant. An experimental study with a new guinea pig to rate transplant model] Chrupcala M, et al. **Urologe A** 1996 Nov;35(6):478-84 (Eng. Abstr.) **(Ger)**

AGONISTS

Identification of casoxin C, an ileum-contracting peptide derived from bovine kappa-casein, as an agonist for C3a receptors. Takahashi M, et al. **Peptides** 1997;18(3):329-36

Studies on the ileum-contracting mechanisms and identification as a complement C3a receptor agonist of oryzatensin, a bioactive peptide derived from rice albumin. Takahashi M, et al. **Peptides** 1996;17(1):5-12

ANALYSIS

C5a receptors are detectable on mast cells in normal human skin and in psoriatic plaques but not in weal and flare reactions or in uticaria pigmentosa by immunohistochemistry. Werfel T, et al. **Arch Dermatol Res** 1997 Jan;289(2):83-6

CR1, CD35 in synovial fluid from patients with inflammatory joint diseases. Sadallah S, et al. **Arthritis Rheum** 1997 Mar; 40(3):520-6

cDNA cloning and primary structure analysis of C1qR(P), the human C1q/MBL/SPA receptor that mediates enhanced phagocytosis in vitro. Nepomuceno RR, et al. **Immunity** 1997 Feb;6(2):119-29

Complement-regulatory proteins in ovarian malignancies. Bjørge L, et al. **Int J Cancer** 1997 Jan 6;70(1):14-25

The human C3a receptor is expressed on neutrophils and monocytes, but not on B or T lymphocytes. Martin U, et al. **J Exp Med** 1997 Jul 21;186(2):199-207

Antisense homology boxes in C5a receptor and C5a anaphylatoxin: a new method for identification of potentially active peptides. Baranyi L, et al. **J Immunol** 1996 Nov 15;157(10):4591-601

Intracellular localization of the human receptor for the globular domains of C1q. van den Berg RH, et al. **J Immunol** 1997 Apr 15;158(8):3909-16

Enhanced expression of chemotactic receptors in multiple sclerosis lesions. Müller-Ladner U, et al. **J Neurol Sci** 1996 Dec;144(1-2):135-41

ANTAGONISTS & INHIBITORS

Selective receptor blockade during phagocytosis does not alter the survival and growth of Mycobacterium tuberculosis in human macrophages. Zimmerli S, et al. **Am J Respir Cell Mol Biol** 1996 Dec;15(6):760-70

Surfactant prevents quartz induced down-regulation of complement receptor 1 in human granulocytes. Zetterberg G, et al. **Inflammation** 1997 Feb;21(1):83-92

Solution structure of a unique C5a semi-synthetic antagonist: implications in receptor binding. Zhang X, et al. **Protein Sci** 1997 Jan;6(1):65-72

Complement activation in vitro by the red cell substitute, liposome-encapsulated hemoglobin: mechanism of activation and inhibition by soluble complement receptor type 1. Szebeni J, et al. **Transfusion** 1997 Feb;37(2):150-9

BIOSYNTHESIS

Expression of the receptor for complement C5a (CD88) is up-regulated on reactive astrocytes, microglia, and endothelial cells in the inflamed human central nervous system. Gasque P, et al. **Am J Pathol** 1997 Jan;150(1):31-41

Production of the rat complement regulator, Crry, as an active soluble protein in Pichia pastoris. He C, et al. **Arch Biochem Biophys** 1997 May 15;341(2):347-52

Characterization of complement receptor type 1 and type 3 mRNA expression on polymorphonuclear leucocytes (neutrophils) in gingival crevicular fluid from periodontitis-affected patients. Sugita N, et al. **Arch Oral Biol** 1997 Feb;42(2):113-20

Febrile infection changes the expression of IgG Fc receptors and complement receptors in human neutrophils in vivo. Leino L, et al. **Clin Exp Immunol** 1997 Jan;107(1):37-43

Anaphylatoxin C5a receptor mRNA is strongly expressed in Kupffer and stellate cells and weakly in sinusoidal endothelial cells but not in hepatocytes of normal rat liver. Schieferdecker HL, et al. **FEBS Lett** 1997 Apr 14; 406(3):305-9

Binding of the 68-kilodalton protein of Mycobacterium avium to alpha(v)beta3 on human monocyte-derived macrophages enhances complement receptor type 3 expression. Hayashi T, et al. **Infect Immun** 1997 Apr; 65(4):1211-6

Altered expression of IgG and complement receptors indicates a significant role of phagocytes in atopic dermatitis. Isolauri E, et al. **J Allergy Clin Immunol** 1997 May;99(5):707-13

TNF-alpha-mediated expression of the receptor for anaphylatoxin C5a on neurons in experimental Listeria meningoencephalitis. Stahel PF, et al. **J Immunol** 1997 Jul 15;159(2):861-9

Complement-binding proteins are strongly expressed by human preimplantation blastocysts and cumulus cells as well as gametes. Taylor CT, et al. **Mol Hum Reprod** 1996 Jan;2(1):52-9

Meltspun cellulose diacetate and polysulfone membranes have the same effect on complement activation and expression of leukocyte adhesion molecules and complement receptors. Dameche L, et al. **Nephrol Dial Transplant** 1995;10 Suppl 10:33-8

BLOOD

Cleavage of the human C5A receptor by proteinases derived from Porphyromonas gingivalis: cleavage of leukocyte C5a receptor. Jagels MA, et al. **Adv Exp Med Biol** 1996; 389:155-64

Relation of C4b-binding protein to athero-sclerosis of the descending thoracic aorta. Kimoto K, et al. **Artery** 1996; 22(2):101-14

Modulation of C4b-binding protein isoforms during the acute phase response caused by orthopedic surgery. Criado-García O, et al. **Haemostasis** 1997 Jan-Feb; 27(1):25-34

Effects of LDL-apheresis on serum lipoprotein (a), C4b binding protein, protein C, protein S, and complement components. Yoshidome H, et al. **J Atheroscler Thromb** 1994;1(2):103-7

[Effect of macrophage colony-stimulating factor on complement receptors and complement regulatory proteins on human peripheral white blood cells] Nakahara R, et al. **Arerugi** 1996 Dec;45(12):1256-61 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

The amino-terminal module of the C4b-binding protein alpha-chain is crucial for C4b binding and factor I-cofactor function. Härdig Y, et al. **Biochem J** 1997 Apr 15;323 (Pt 2):469-75

Recombinant soluble human complement receptor type 1 inhibits antisperm antibody- and neutrophil-mediated injury to human sperm. Cruz OJ, et al. **Biol Reprod** 1996 Jun;54(6):1217-28

The C1q-binding cell membrane proteins cC1q-R and gC1q-R are released from activated cells: subcellular distribution and immunochemical characterization. Peterson KL, et al. **Clin Immunol Immunopathol** 1997 Jul; 84(1):17-26

A region of vitamin K-dependent protein S that binds to C4b binding protein (C4BP) identified using bacteriophage peptide display libraries. Linse S, et al. **J Biol Chem** 1997 Jun 6;272(23):14658-65

C5aR ligand peptide 3D QSAR study performed with an applied linear conformation. Anderson CY, et al. **J Pept Res** 1997 Jun;49(6):476-83

Folding and conformational studies on SCR1-3 domains of human complement receptor 1. Clark NS, et al. **Protein Eng** 1996 Oct;9(10):877-84

Comparative modeling of the three CP modules of the beta-chain of C4BP and evaluation of potential sites of interaction with protein S. Villoutreix BO, et al. **Protein Eng** 1995 Dec;8(12):1253-8

DRUG EFFECTS

Changes in immunologic cell surface markers during cocaine withdrawal in pregnant women. Johnson TR, et al. **Brain Behav Immun** 1996 Dec;10(4):324-36

Chemoattractant receptors for interleukin-8 and C5a: expression on peripheral blood leukocytes and differential regulation on HL-60 and AML-193 cells by vitamin D3 and all-trans retinoic acid. Zahn S, et al. **Eur J Immunol** 1997 Apr;27(4):935-40

Surfactant prevents quartz induced down-regulation of complement receptor 1 in human granulocytes. Zetterberg G, et al. **Inflammation** 1997 Feb;21(1):83-92

TNF-alpha suppresses IL-1 alpha and IL-6 upregulation of C4b-binding protein in HepG-2 hepatoma cells. Phillips DJ, et al. **Thromb Res** 1996 Feb 1;81(3):307-14

GENETICS

Assignment of C1QBP encoding the C1q globular domain binding protein (gC1q-R) to human chromosome 17 band p13.3 by in situ hybridization. Guo N, et al. **Cytogenet Cell Genet** 1997;77(3-4):283-4

Molecular evolution of the N-formyl peptide and C5a receptors in non-human primates. Alvarez V, et al. **Immunogenetics** 1996;44(6):446-52

Overexpression of Crry protects mesangial cells from complement-mediated injury. Nangaku M, et al. **J Am Soc Nephrol** 1997 Feb;8(2):223-33

Molecular cloning of rat C4b binding protein alpha- and beta-chains: structural and functional relationships among human, bovine, rabbit, mouse, and rat proteins. Hillarp A, et al. **J Immunol** 1997 Feb 1;158(3):1315-23

The mouse anaphylatoxin C3a receptor: molecular cloning, genomic organization, and functional expression. Tornetta MA, et al. **J Immunol** 1997 Jun 1;158(11):5277-82

cDNA cloning and characterization of rat C5a anaphylatoxin receptor. Akatsu H, et al. **Microbiol Immunol** 1997; 41(7):575-80

IMMUNOLOGY

Effects of complement inhibition with soluble complement receptor-1 on vascular injury and inflammation during renal allograft rejection in the rat. Pratt JR, et al. **Am J Pathol** 1996 Dec;149(6):2055-66

Immune complexes bound to the primate erythrocyte complement receptor (CR1) via anti-CR1 mAbs are cleared simultaneously with loss of CR1 in a concerted reaction in a rhesus monkey model. Taylor RP, et al. **Clin Immunol Immunopathol** 1997 Jan;82(1):49-59

Impaired inflammatory responses in the reverse arthus reaction through genetic deletion of the C5a receptor. Höpken UE, et al. **J Exp Med** 1997 Aug 29;186(5):749-56

Bispecific monoclonal antibody complexes bound to primate erythrocyte complement receptor 1 facilitate virus clearance in a monkey model. Taylor RP, et al. **J Immunol** 1997 Jan 15;158(2):842-50

A possible mechanism for host-specific pathogenesis of Salmonella serovars. Ishibashi Y, et al. **Microb Pathog** 1996 Dec;21(6):435-46

Histopathology and immunocytochemical study of type 3 and type 4 complement receptors in the liver and spleen of dogs naturally and experimentally infected with Leishmania (Leishmania) chagasi. Tafuri WL, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar-Apr;38(2):81-9

Allograft immune response with sCR1 intervention. Pratt JR, et al. **Transpl Immunol** 1996 Mar;4(1):72-5

Inhibition of complement, evoked antibody, and cellular response prevents rejection of pig-to-primate cardiac xenografts. Davis EA, et al. **Transplantation** 1996 Oct 15; 62(7):1018-23

Effect of continuous complement inhibition using soluble complement receptor type 1 on survival of pig-to-primate cardiac xenografts. Pruitt SK, et al. **Transplantation** 1997 Mar 27;63(6):900-2

Interaction of platelet fc and complement receptors with circulating immune complexes involving the AB0 system. Heal JM, et al. **Vox Sang** 1996;71(4):205-11

[The effect of a vaccinal strain of the plague microbe on C3-receptor expression on the surfaces of peritoneal and alveolar macrophages] Vasil'eva GI, et al. **Mikrobiol Z**

1994 Jul-Sep;56(4):25-9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Identification of functional domains on gC1Q-R, a cell surface protein that binds to the globular "heads" of C1Q, using monoclonal antibodies and synthetic peptides. Ghebrehiwet B, et al. **Hybridoma** 1996 Oct;15(5):333-42

METABOLISM

Effects of complement inhibition with soluble complement receptor-1 on vascular injury and inflammation during renal allograft rejection in the rat. Pratt JR, et al. **Am J Pathol** 1996 Dec;149(6):2055-66

Distribution of receptors of collagen and globular domains of C1q in human lung fibroblasts. Narayanan AS, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):84-90

Expression and characterization of a recombinant C4b-binding protein lacking the beta-chain. Härdig Y, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):795-800

Binding site for C4b-binding protein in vitamin K-dependent protein S fully contained in carboxy-terminal laminin-G-type repeats. A study using recombinant factor IX-protein S chimeras and surface plasmon resonance. He X, et al. **Biochemistry** 1997 Mar 25;36(12):3745-54

The N-formyl methionyl peptide, formyl-methionyl-leucyl phenylalanine (fMLF) increases the lateral diffusion of complement receptor 1 (CR1/CD35) in human neutrophils; a causative role for oxidative metabolites? Rasmusson BJ, et al. **Biosci Rep** 1996 Oct;16(5):391-404

Altered surface expression of effector cell molecules on neutrophils in myelodysplastic syndromes. Ohsaka A, et al. **Br J Haematol** 1997 Jul;98(1):108-13

Cytotoxic effect of radiolabeled C5a on U937 cells in vitro. Hetland G, et al. **Cancer Lett** 1996 Dec 20;110(1-2):97-103

The C1q-binding cell membrane proteins cC1q-R and gC1q-R are released from activated cells: subcellular distribution and immunochemical characterization. Peterson KL, et al. **Clin Immunol Immunopathol** 1997 Jul; 84(1):17-26

Immune complexes bound to the primate erythrocyte complement receptor (CR1) via anti-CR1 mAbs are cleared simultaneously with loss of CR1 in a concerted reaction in a rhesus monkey model. Taylor RP, et al. **Clin Immunol Immunopathol** 1997 Jan;82(1):49-59

The C terminus of the human C5a receptor (CD88) is required for normal ligand-dependent receptor internalization. Bock D, et al. **Eur J Immunol** 1997 Jun; 27(6):1522-9

Chemoattractant receptors for interleukin-8 and C5a: expression on peripheral blood leukocytes and differential regulation on HL-60 and AML-193 cells by vitamin D3 and all-trans retinoic acid. Zahn S, et al. **Eur J Immunol** 1997 Apr;27(4):935-40

Expression of complement receptors and regulatory proteins on alveolar CD4+ lymphocytes from human immunodeficiency virus-1 infected individuals. Aries SP, et al. **Eur Respir J** 1997 Aug;10(8):1736-41

Kininogen binding protein p33/gC1qR is localized in the vesicular fraction of endothelial cells. Dedio J, et al. **FEBS Lett** 1996 Dec 16;399(3):255-8

Localisation of the C1q binding site within C1q receptor/calreticulin. Stuart GR, et al. **FEBS Lett** 1996 Nov 18;397(2-3):245-9

A selection system to study C5a-C5a-receptor interactions: phage display of a novel C5a anaphylatoxin, Fos-C5aAla27. Hennecke M, et al. **Gene** 1997 Jan 15; 184(2):263-72

cDNA cloning and primary structure analysis of C1qR(P), the human C1q/MBL/SPA receptor that mediates enhanced phagocytosis in vitro. Nepomuceno RR, et al. **Immunity** 1997 Feb;6(2):119-29

Expression and modulation of C5a receptor (CD88) on skin dendritic cells. Chemotactic effect of C5a on skin migratory dendritic cells. Morelli A, et al. **Immunology** 1996 Sep; 89(1):126-34

Bordetella pertussis binds the human complement regulator C4BP: role of filamentous hemagglutinin. Berggård K, et al. **Infect Immun** 1997 Sep;65(9):3638-43

Nonopsonic binding of Mycobacterium tuberculosis to human complement receptor type 3 expressed in Chinese hamster ovary cells. Cywes C, et al. **Infect Immun** 1996 Dec;64(12):5373-83

Both IgG- and C1q-receptors play a role in the enhanced binding of IgG complexes to human mesangial cells. van den Dobbelsteen ME, et al. **J Am Soc Nephrol** 1996 Apr; 7(4):573-81

The binding protein for globular heads of complement C1q, gC1qR. Functional expression and characterization as a novel vitronectin binding factor. Lim BL, et al. **J Biol Chem** 1996 Oct 25;271(43):26739-44

A region of vitamin K-dependent protein S that binds to C4b binding protein (C4BP) identified using bacteriophage peptide display libraries. Linse S, et al. **J Biol Chem** 1997 Jun 6;272(23):14658-65

Binding of human complement component C4b-binding protein (C4BP) to Streptococcus pyogenes involves the C4b-binding site. Accardo P, et al. **J Immunol** 1996 Dec 1;157(11):4935-9

Differential regulation of the C3a and C5a receptors (CD88) by IFN-gamma and PMA in U937 cells and related myeloblastic cell lines. Burg M, et al. **J Immunol** 1996 Dec 15;157(12):5574-81

Evidence that the two C1q binding membrane proteins, gC1q-R and cC1q-R, associate to form a complex. Ghebrehiwet B, et al. **J Immunol** 1997 Aug 1; 159(3):1429-36

Human umbilical vein endothelial cells possess binding sites for the globular domain of C1q. Peerschke EI, et al. **J Immunol** 1996 Nov 1;157(9):4154-8

Bispecific monoclonal antibody complexes bound to primate erythrocyte complement receptor 1 facilitate virus clearance in a monkey model. Taylor RP, et al. **J Immunol** 1997 Jan 15;158(2):842-50

Undifferentiated U937 cells transfected with chemoattractant receptors: a model system to investigate chemotactic mechanisms and receptor structure/function relationships. Kew RR, et al. **J Leukoc Biol** 1997 Mar;61(3):329-37

Biologically active conformer of the effector region of human C5a and modulatory effects of N-terminal receptor binding determinants on activity. Finch AM, et al. **J Med Chem** 1997 Mar 14;40(6):877-84

cDNA cloning and characterization of rat C5a anaphylatoxin receptor. Akatsu H, et al. **Microbiol Immunol** 1997; 41(7):575-80

Reduced C4b-binding protein in preeclampsia. Schjetlein R, et al. **Thromb Res** 1997 Jan 15;85(2):153-8

P32/TAP, a cellular protein that interacts with EBNA-1 of Epstein-Barr virus. Wang Y, et al. **Virology** 1997 Sep 15;236(1):18-29

PHYSIOLOGY

Complement activation and thromboxane secretion by liposome-encapsulated hemoglobin in rats in vivo: inhibition by soluble complement receptor type 1. Szebeni J, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jul;25(4):347-55

Positive and negative signal co-operativity in the immune system: the BCR, Fc gamma RIIB, CR2 paradigm. Cambier JC. **Biochem Soc Trans** 1997 May;25(2):441-5 (21 ref.)

The C terminus of the human C5a receptor (CD88) is required for normal ligand-dependent receptor internalization. Bock D, et al. **Eur J Immunol** 1997 Jun; 27(6):1522-9

In Xenopus oocytes the human C3a and C5a receptors elicit a promiscuous response to the anaphylatoxins. Ames RS, et al. **FEBS Lett** 1996 Oct 21;395(2-3):157-9

Identification of functional domains on gC1Q-R, a cell surface protein that binds to the globular "heads" of C1Q, using monoclonal antibodies and synthetic peptides. Ghebrehiwet B, et al. **Hybridoma** 1996 Oct;15(5):333-42

Binding of Cryptococcus neoformans to heterologously expressed human complement receptors. Levitz SM, et al. **Infect Immun** 1997 Mar;65(3):931-5

P. falciparum rosetting mediated by a parasite-variant erythrocyte membrane protein and complement-receptor 1. Rowe JA, et al. **Nature** 1997 Jul 17;388(6639):292-5

In U-937 promonocytes, misteltoe lectin I increases basal [Ca2+]i, enhances histamine H1- and complement C5a-receptor-mediated rises in [Ca2+]i, and induces cell death. Wenzel-Seifert K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):190-7

Soluble complement receptor type 1 inhibits experimental autoimmune neuritis in Lewis rats. Jung S, et al. **Neurosci Lett** 1995 Nov 24;200(3):167-70

Identification of casoxin C, an ileum-contracting peptide derived from bovine kappa-casein, as an agonist for C3a receptors. Takahashi M, et al. **Peptides** 1997;18(3):329-36

Solution structure of a unique C5a semi-synthetic antagonist: implications in receptor binding. Zhang X, et al. **Protein Sci** 1997 Jan;6(1):65-72

Effect of repetitive high-dose treatment with soluble complement receptor type 1 and cobra venom factor on discordant xenograft survival. Candinas D, et al. **Transplantation** 1996 Aug 15;62(3):336-42

Protection of porcine endothelial cells from complement-mediated cytotoxicity by the human complement regulators CD59, C1 inhibitor, and soluble complement receptor type 1. Analysis in a pig-to-human in vitro model relevant to hyperacute xenograft rejection. Heckl-Ostreicher B, et al. **Transplantation** 1996 Dec 15; 62(11):1693-6

Adherence of Salmonella typhimurium to murine peritoneal macrophages is mediated by lipopolysaccharide and complement receptors. al-Bahry SN, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):83-92

RECEPTORS, COMPLEMENT 3B

Soluble complement receptor type 1 inhibited the systemic organ injury caused by acid instillation into a lung. Nishizawa H, et al. **Anesthesiology** 1996 Nov;85(5):1120-8

Overcoming rejection in pig-to-primate cardiac xenotransplantation. Davis EA, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):938-9

Soluble complement receptor type 1 and antithrombin-III combination therapy prolongs xenograft survival: the role of thrombin and prostacyclin in hyperacute rejection. Fujiwara I, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):935-7

ANALYSIS

CR1 stump peptide and terminal complement complexes are found in the glomeruli of lupus nephritis patients. Teixeira JE, et al. **Clin Exp Immunol** 1996 Sep;105(3):497-503

X-irradiation does not affect the levels of complement regulatory proteins, CD35 (CR1), CD55 (DAF) and CD59 on concentrated red cells [letter] Fukumori Y, et al. **Vox Sang** 1996;71(4):243-4

ANTAGONISTS & INHIBITORS

Reduction in erythrocyte complement receptor 1 (CR1, CD35) and decay accelerating factor (DAF, CD55) during normal pregnancy. Imrie HJ, et al. **J Reprod Immunol** 1996 Oct;31(3):221-7

BIOSYNTHESIS

CR1 density polymorphism and expression on erythrocytes of patients with systemic lupus erythematosus. Kiss E, et al. **Autoimmunity** 1996;25(1):53-8

Progression of HIV disease is associated with increased expression of Fc gammaRI and CR1 on alveolar macrophages. Gilbody J, et al. **Clin Exp Immunol** 1997 Jan; 107(1):31-6

Mouse complement receptors type 1 (CR1;CD35) and type 2 (CR2;CD21): expression on normal B cell subpopulations and decreased levels during the development of autoimmunity in MRL/lpr mice. Takahashi K, et al. **J Immunol** 1997 Aug 1;159(3):1557-69

Construction, function and in vivo expression of a complement receptor type 1 containing recombinant adenovirus for use in xenotransplantation. Tabei I, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):933-4

BLOOD

The primate erythrocyte complement receptor (CR1) as a privileged site: binding of immunoglobulin G to erythrocyte CR1 does not target erythrocytes for phagocytosis. Reinagel ML, et al. **Blood** 1997 Feb 1; 89(3):1068-77

Complement-dependent binding of C-reactive protein complexes to human erythrocyte CR1. Mold C, et al. **Clin Immunol Immunopathol** 1996 Nov;81(2):153-60

Reduction in erythrocyte complement receptor 1 (CR1, CD35) and decay accelerating factor (DAF, CD55) during normal pregnancy. Imrie HJ, et al. **J Reprod Immunol** 1996 Oct;31(3):221-7

Bovine cells infected in vivo with Theileria annulata express CD11b, the C3bi complement receptor. Forsyth LM, et al. **Vet Res Commun** 1997 May;21(4):249-63

CHEMISTRY

The baboon erythrocyte complement receptor is a glycophosphatidylinositol-linked protein encoded by a homologue of the human CR1-like genetic element. Birmingham DJ, et al. **J Immunol** 1996 Sep 15; 157(6):2586-92

Primary sequence of baboon CR1 demonstrates concerted evolution within the CR1 gene. Clemenza L, et al. **Mol Immunol** 1997 Mar;34(4):297-304

GENETICS

The baboon erythrocyte complement receptor is a glycophosphatidylinositol-linked protein encoded by a homologue of the human CR1-like genetic element. Birmingham DJ, et al. **J Immunol** 1996 Sep 15; 157(6):2586-92

Changes of expression of complement 3bi receptors on granulocytes after physical exercise in rats. Hashimoto Y, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):275-80

Primary sequence of baboon CR1 demonstrates concerted evolution within the CR1 gene. Clemenza L, et al. **Mol Immunol** 1997 Mar;34(4):297-304

Overexpression in Escherichia coli, folding, purification, and characterization of the first three short consensus repeat modules of human complement receptor type 1. Dodd I, et al. **Protein Expr Purif** 1995 Dec;6(6):727-36

IMMUNOLOGY

Do plasma anti phospholipid antibodies in patients with autoimmune haemolytic anaemia correlate with reduced levels of erythrocyte complement receptor 1? Jones DR, et al. **Autoimmunity** 1996;23(1):45-51

The effect of soluble complement receptor 1 (sCR1) and human thyroid antibodies on the course of experimental autoimmune thyroiditis in rats. Metcalfe RA, et al. **Autoimmunity** 1996;23(1):1-8

The role of complement receptor type 1 (CR1, CD35) in determining the cellular distribution of opsonized immune complexes between whole blood cells: kinetic analysis of the buffering capacity of erythrocytes. Nielsen CH, et al. **Immunology** 1997 Jan;90(1):129-37

Low expression of erythrocyte complement receptor type 1 in chronic hepatitis C patients. Kanto T, et al. **J Med Virol** 1996 Oct;50(2):126-34

Soluble complement receptor 1 (sCR1) protects against experimental autoimmune myasthenia gravis. Piddlesden SJ, et al. **J Neuroimmunol** 1996 Dec;71(1-2):173-7

A possible mechanism for host-specific pathogenesis of Salmonella serovars. Ishibashi Y, et al. **Microb Pathog** 1996

Dec;21(6):435–46
Flow cytometry and immunoblotting analysis of monoclonal antibodies directed to complement regulatory proteins. Blanchard D, et al. **Transfus Clin Biol** 1997;4(1):131–4
Antibodies to complement regulatory proteins. Daniels G, et al. **Transfus Clin Biol** 1997;4(1):127–9
Complement regulatory proteins of human and non-human primates. Moulds JM, et al. **Transfus Clin Biol** 1997; 4(1):121–3
Coordinator's report: complement regulatory proteins. Moulds JM, et al. **Transfus Clin Biol** 1997;4(1):117–9
Analysis of Knops blood group antigens on CR1 (CD35) by the MAIEA test and by immunoblotting. Petty AC, et al. **Transfus Med** 1997 Mar;7(1):55–62
Complement-activating antibodies in sera from infected individuals and vaccinated volunteers that target human immunodeficiency virus type 1 to complement receptor type 1 (CR1, CD35). Zhou J, et al. **Virology** 1996 Dec 1;226(1):13–21
[Erythrocyte immunity and regulating factors in mice infected with Plasmodium berghei ANKA strain] Zhan Z, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1995;13(4):260–3 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Isolation and characterization of complement receptor type 1 (CR1) storage vesicles from human neutrophils using antibodies to the cytoplasmic tail of CR1. Kumar A, et al. **Blood** 1997 Jun 15;89(12):4555–65
Rapid purification of human complement receptor type 1 (CD35, CR1). Seya T, et al.
J Biochem Biophys Methods 1996 May 14;32(2):69–76
Characterization of C3-binding proteins on mouse neutrophils and platelets. Quigg RJ, et al. **J Immunol** 1997 Sep 1;159(5):2438–44
Overexpression in Escherichia coli, folding, purification, and characterization of the first three short consensus repeat modules of human complement receptor type 1. Dodd I, et al. **Protein Expr Purif** 1995 Dec;6(6):727–36

METABOLISM

Complement coating of erythrocytes is reduced following their interaction with neutrophils in vitro without loss of complement receptor 1 (CR1). Imrie HJ, et al.
Clin Exp Immunol 1997 Jul;109(1):217–22
Expression and quantification of the iC3b-binding protein in different Candida albicans strains and their morphological stages. Bujdáková H, et al.
FEMS Immunol Med Microbiol 1997 Jul;18(3):147–52
Proteolytic cleavage of leukocyte membrane proteins: lessons from CRI [letter; comment] Sadallah S, et al.
Immunol Today 1996 Jul;17(7):345. Comment on: Immunol Today 1995 Mar;16(3):135–40.

PHYSIOLOGY

Ligation of CR1 (C3b receptor, CD35) on CD4+ T lymphocytes enhances viral replication in HIV-infected cells. Mouhoub A, et al. **Clin Exp Immunol** 1996 Nov; 106(2):297–303
Selective inhibition of the alternative complement pathway by sCR1[desLHR-A] protects the rabbit isolated heart from human complement-mediated damage. Gralinski MR, et al. **Immunopharmacology** 1996 Sep;34(2–3):79–88

RECEPTORS, COMPLEMENT 3D

ANALYSIS

Ruminant cluster CD21. Sopp P.
Vet Immunol Immunopathol 1996 Aug;52(4):249

BIOSYNTHESIS

A plasmid for the quantification of the CD21 human interferon-alpha receptor expression by PCR. Illges H, et al. **Eur Cytokine Netw** 1996 Sep;7(3):375–6
Follicular dendritic cells specifically express the long CR2/CD21 isoform. Liu YJ, et al. **J Exp Med** 1997 Jan 6;185(1):165–70
Mouse complement receptors type 1 (CR1;CD35) and type 2 (CR2;CD21): expression on normal B cell subpopulations and decreased levels during the development of autoimmunity in MRL/lpr mice. Takahashi K, et al.
J Immunol 1997 Aug 1;159(3):1557–69
Pathways controlling the expression of surface CD21 (CR2) and CD23 (Fc(epsilon)IIR) proteins in human malignant B cells. Shubinsky G, et al. **Leuk Lymphoma** 1997 May; 25(5–6):521–30

GENETICS

Expression of the murine CD21 gene is regulated by promoter and intronic sequences. Hu H, et al.
J Immunol 1997 May 15;158(10):4758–68
EBV binds to lymphocytes of transgenic mice that express the human CR2 gene. Kearns-Jonker M, et al.
Virus Res 1997 Jul;50(1):85–94

IMMUNOLOGY

Pairs of surface molecules involved in human IgE regulation: CD23-CD21 and CD40-CD40L. Bonnefoy JY, et al.
Eur Respir J Suppl 1996 Aug;22:63s–66s (48 ref.)
The CD19-CD21 complex regulates signal transduction thresholds governing humoral immunity and autoimmunity. Tedder TF, et al. **Immunity** 1997 Feb;6(2):107–18 (94 ref.)
Membrane and soluble forms of CD21 (the C3dg/EBV receptor). Frémeaux-Bacchi V, et al. **Immunol Lett** 1996 Dec;54(2–3):201–4 (25 ref.)
Epstein-Barr virus binding to CD21, the virus receptor, activates resting B cells via an intracellular pathway that is linked to B cell infection. Roberts ML, et al.
J Gen Virol 1996 Dec;77 (Pt 12):3077–85
A novel mechanism of alternative pathway complement activation accounts for the deposition of C3 fragments on CR2-expressing homologous cells. Schwendinger MG, et al. **J Immunol** 1997 Jun 1;158(11):5455–63
Ruminant cluster CD21. Sopp P.
Vet Immunol Immunopathol 1996 Aug;52(4):249

ISOLATION & PURIFICATION

Characterization of C3-binding proteins on mouse neutrophils and platelets. Quigg RJ, et al. **J Immunol** 1997 Sep 1;159(5):2438–44
Complex interaction between different proteinaceous components within the cell-wall structure of Candida albicans. Lopez-Ribot JL, et al. **Mycopathologia** 1995 Nov; 132(2):87–93

METABOLISM

Epstein-Barr virus binding to CD21 activates the initial viral promoter via NF-kappaB induction. Sugano N, et al.
J Exp Med 1997 Aug 29;186(5):731–7
Epstein-Barr virus infection of human gastric carcinoma cells: implication of the existence of a new virus receptor different from CD21. Yoshiyama H, et al. **J Virol** 1997 Jul;71(7):5688–91
EBV binds to lymphocytes of transgenic mice that express the human CR2 gene. Kearns-Jonker M, et al.
Virus Res 1997 Jul;50(1):85–94

PHYSIOLOGY

CD21 augments antigen presentation in immune individuals. Boackle SA, et al. **Eur J Immunol** 1997 Jan;27(1):122–9
Complement: instructing the acquired immune system through the CD21/CD19 complex. Dempsey PW, et al. **Res Immunol** 1996 Feb;147(2):71–5; discussion 119–20 (34 ref.)

RECEPTORS, CONCANAVALIN A

METABOLISM

Microheterogeneity with concanavalin A affinity of serum transferrin in patients with alcoholic liver disease. Inoue T, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9 Suppl):363A–365A
Local accumulation of alpha-spectrin-related protein under plasma membrane during capping and phagocytosis in Acanthamoeba. Kwiatkowska K, et al.
Cell Motil Cytoskeleton 1997;36(3):253–65
Dictyostelium myosin II null mutant can still cap Con A receptors. Aguado-Velasco C, et al.
Proc Natl Acad Sci U S A 1997 Sep 2;94(18):9684–6

PHYSIOLOGY

Cross-linking of concanavalin A receptors on cortical neurons induces programmed cell death. Cribbs DH, et al. **Neuroscience** 1996 Nov;75(1):173–85

RECEPTORS, CORTICOSTEROID see **RECEPTORS, STEROID**

RECEPTORS, CORTICOTROPIN

Melanocortin receptors: identification and characterization by melanotropic peptide agonists and antagonists. Hadley ME, et al. **Pigment Cell Res** 1996 Oct;9(5):213–34 (117 ref.)
[ACTH receptor] Hiroi N, et al. **Nippon Rinsho** 1997 Apr; 55 Suppl 2:476–9 (17 ref.) **(Jpn)**

AGONISTS

Discovery of prototype peptidomimetic agonists at the human melanocortin receptors MC1R and MC4R. Haskell-Luevano C, et al. **J Med Chem** 1997 Jul 4; 40(14):2133–9

ANALYSIS

Human epidermal melanocyte and keratinocyte melanocortin receptors: visualization by melanotropic peptide conjugated microspheres (latex beads). Jiang J, et al.
Pigment Cell Res 1996 Oct;9(5):240–7

ANTAGONISTS & INHIBITORS

ART (protein product of agouti-related transcript) as an antagonist of MC-3 and MC-4 receptors. Fong TM, et al. **Biochem Biophys Res Commun** 1997 Aug 28; 237(3):629–31
Melanocortin antagonists define two distinct pathways of cardiovascular control by alpha- and gamma-melanocyte-stimulating hormones. Li SJ, et al.
J Neurosci 1996 Aug 15;16(16):5182–8
Dynorphin peptides: antagonists of melanocortin receptors. Quillan JM, et al. **Pharm Res** 1997 Jun;14(6):713–9
Antagonism of central melanocortin receptors in vitro and in vivo by agouti-related protein. Ollmann MM, et al.
Science 1997 Oct 3;278(5335):135–8

BIOSYNTHESIS

Evidence for the differential expression of the functional alpha-melanocyte-stimulating hormone receptor MC-1 on human monocytes. Bhardwaj R, et al. **J Immunol** 1997 Apr 1;158(7):3378–84
Postnatal expression of melanocortin-3 receptor in rat diencephalon and mesencephalon. Xia Y, et al.
Neuropharmacology 1997 Feb;36(2):217–24

CHEMISTRY

Glutamine235 and arginine272 in human melanocortin 5 receptor determines its low affinity to MSH. Frändberg PA, et al. **Biochem Biophys Res Commun** 1997 Jul 18; 236(2):489–92
Three-dimensional molecular models of the hMC1R melanocortin receptor: complexes with melanotropin peptide agonists. Haskell-Luevano C, et al.
Drug Des Discov 1996 Dec;14(3):197–211

DRUG EFFECTS

Antipyretic role of endogenous melanocortins mediated by central melanocortin receptors during endotoxin-induced fever. Huang QH, et al. **J Neurosci** 1997 May 1; 17(9):3343–51
Effects of recombinant agouti-signaling protein on melanocortin action. Yang YK, et al. **Mol Endocrinol** 1997 Mar;11(3):274–80
Structure-based search for peptide ligands that cross-react with melanocortin receptors. Quillan JM, et al.
Pharm Res 1996 Nov;13(11):1624–30

GENETICS

Genomic structure and promoter characterization of the human ACTH receptor gene. Naville D, et al.
Biochem Biophys Res Commun 1997 Jan 3;230(1):7–12
Presence of multiple functional polyadenylation signals in the 3'-untranslated region of human corticotropin receptor cDNA. Penhoat A, et al. **Biochim Biophys Acta** 1997 May 27;1356(3):249–52
Localization of ACTH receptor mRNA by in situ hybridization in mouse adrenal gland. Xia Y, et al.
Cell Tissue Res 1996 Oct;286(1):63–8
Expression of adrenocorticotrophic hormone receptor mRNA in human adrenocortical neoplasms: correlation with P450scc expression. Reincke M, et al.
Clin Endocrinol (Oxf) 1997 May;46(5):619–26
Expression of the mouse ACTH receptor gene and characterisation of its promoter. Clark AJ, et al.
Endocr Res 1996 Nov;22(4):333–5 (3 ref.)
Characterization of the human ACTH receptor gene and in vitro expression. Naville D, et al. **Endocr Res** 1996 Nov; 22(4):337–48
Decline in adrenocorticotropin receptor messenger ribonucleic acid expression in the baboon fetal adrenocortical zone in the second half of pregnancy. Aberdeen GW, et al. **Endocrinology** 1997 Apr; 138(4):1634–41
Inhibition of fetal adrenal adrenocorticotropin receptor messenger ribonucleic acid expression by betamethasone administration to the baboon fetus in late gestation. Leavitt MG, et al. **Endocrinology** 1997 Jul;138(7):2705–12
Alternative translation initiation codon for the human melanocortin MC3 receptor does not affect the ligand binding. Schiöth HB, et al. **Eur J Pharmacol** 1996 Oct 31; 314(3):381–4
Deletions of the N-terminal regions of the human melanocortin receptors. Schiöth HB, et al. **FEBS Lett** 1997 Jun 30;410(2–3):223–8
Genomic organization of the mouse adrenocorticotropin receptor. Shimizu C, et al. **Gene** 1997 Mar 25;188(1):17–21
Adrenocorticotropin receptor and adrenal disorders. Allolio B, et al. **Horm Res** 1997;47(4–6):273–8 (42 ref.)
Homologous pigmentation mutations in human, mouse and other model organisms. Jackson IJ. **Hum Mol Genet** 1997; 6(10):1613–24 (122 ref.)
Insulin-like growth factors enhance steroidogenic enzyme and corticotropin receptor messenger ribonucleic acid levels and corticotropin steroidogenic responsiveness in cultured human adrenocortical cells. l'Allemand D, et al.
J Clin Endocrinol Metab 1996 Nov;81(11):3892–7
Deletion of the adrenocorticotropin receptor gene in human adrenocortical tumors: implications for tumorigenesis. Reincke M, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):3054–8
Production of POMC, CRH-R1, MC1, and MC2 receptor mRNA and expression of tyrosinase gene in relation to hair cycle and dexamethasone treatment in the C57BL/6 mouse skin. Ermak G, et al. **J Invest Dermatol** 1997 Feb; 108(2):160–5
Glucocorticoids enhance corticotropin receptor mRNA levels in ovine adrenocortical cells. Picard-Hagen N, et al. **J Mol Endocrinol** 1997 Aug;19(1):29–36
Familial glucocorticoid deficiency: one syndrome, but more

than one gene. Clark AJ, et al. **J Mol Med** 1997 Jun; 75(6):394–9 (17 ref.)

Stable expression of normal and mutant human ACTH receptor: study of ACTH binding and coupling to adenylate cyclase. Naville D, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):83–90

Characterisation of D117A and H260A mutations in the melanocortin 1 receptor. Schiöth HB, et al. **Mol Cell Endocrinol** 1997 Feb 7;126(2):213–9

The mouse adrenocorticotropin receptor gene: cloning and characterization of its promoter and evidence for a role for the orphan nuclear receptor steroidogenic factor 1. Cammas FM, et al. **Mol Endocrinol** 1997 Jun;11(7):867–76

Mutations to forskolin resistance result in loss of adrenocorticotropin receptors and consequent reductions in levels of G protein alpha-subunits. Qiu R, et al. **Mol Endocrinol** 1996 Dec;10(12):1708–18

[Mutations of ACTH receptor gene and familial syndrome of glucocorticoid deficiency] Naville D, et al. **Ann Endocrinol (Paris)** 1996;57(2):101–6 (Eng. Abstr.) **(Fre)**

[The genomic organization of the mouse adrenocorticotropin receptor] Saeki T. **Hokkaido Igaku Zasshi** 1996 Sep; 71(5):661–70 (Eng. Abstr.) **(Jpn)**

METABOLISM

Evidence indicating that the TM4, EL2, and TM5 of the melanocortin 3 receptor Do not participate in ligand binding. Schiöth HB, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):687–92

Distribution of cDNA for melanocortin receptor subtypes in human tissues. Chhajlani V. **Biochem Mol Biol Int** 1996 Feb;38(1):73–80

Mutations in the carboxyl terminus of the agouti protein decrease agouti inhibition of ligand binding to the melanocortin receptors. Kiefer LL, et al. **Biochemistry** 1997 Feb 25;36(8):2084–90

Region- and stage-specific patterns of melanocortin receptor ontogeny in rat central nervous system, cranial nerve ganglia and sympathetic ganglia. Lichtensteiger W, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):93–110

Three-dimensional molecular models of the hMC1R melanocortin receptor: complexes with melanotropin peptide agonists. Haskell-Luevano C, et al. **Drug Des Discov** 1996 Dec;14(3):197–211

Agonist and receptor binding properties of adrenocorticotropin peptides using the cloned mouse adrenocorticotropin receptor expressed in a stably transfected HeLa cell line. Kapas S, et al. **Endocrinology** 1996 Aug;137(8):3291–4

Binding of cyclic and linear MSH core peptides to the melanocortin receptor subtypes. Schiöth HB, et al. **Eur J Pharmacol** 1997 Jan 29;319(2–3):369–73

Deletions of the N-terminal regions of the human melanocortin receptors. Schiöth HB, et al. **FEBS Lett** 1997 Jun 30;410(2–3):223–8

Molecular basis for the interaction of [Nle4,D-Phe7]melanocyte stimulating hormone with the human melanocortin-1 receptor. Yang Yk, et al. **J Biol Chem** 1997 Sep 12;272(37):23000–10

Biological and conformational examination of stereochemical modifications using the template melanotropin peptide, Ac-Nle-c[Asp-His-Phe-Arg-Trp-Ala-Lys]-NH2, on human melanocortin receptors. Haskell-Luevano C, et al. **J Med Chem** 1997 May 23;40(11):1738–48

Receptor binding affinities and biological activities of linear and cyclic melanocortins in B16 murine melanoma cells expressing the native MC1 receptor. Sahm UG, et al. **J Pharm Pharmacol** 1996 Feb;48(2):197–200

Stable expression of normal and mutant human ACTH receptor: study of ACTH binding and coupling to adenylate cyclase. Naville D, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):83–90

Cycloheximide enhances ACTH-receptor mRNA through transcriptional and post-transcriptional mechanisms in bovine adrenocortical cells. Penhoat A, et al. **Mol Cell Endocrinol** 1996 Jul 23;121(1):57–63

Role of melanocortinergic neurons in feeding and the agouti obesity syndrome [see comments] Fan W, et al. **Nature** 1997 Jan 9;385(6612):165–8. Comment in: Nature 1997 Jan 9;385(6612):119–20.

Selectivity of [Phe-I7], [Ala6], and [D-Ala4,Gln5,Tyr6] substituted ACTH(4–10) analogues for the melanocortin receptors. Schiöth HB, et al. **Peptides** 1997;18(5):761–3

Characterisation of the melanocortin 4 receptor by radioligand binding. Schiöth HB, et al. **Pharmacol Toxicol** 1996 Sep;79(3):161–5

Obesity sheds its secrets [news] Gura T. **Science** 1997 Feb 7;275(5301):751–3

PHYSIOLOGY

Agouti regulation of intracellular calcium: role of melanocortin receptors. Kim JH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):E379–84

Melanocortin receptors mediate alpha-MSH-induced stimulation of neurite outgrowth in neuro 2A cells. Adan RA, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):37–44

Obesity, diabetes and functions for proopiomelanocortin-derived peptides. Mountjoy KG, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):171–7 (51 ref.)

Receptor biology of the melanocortins, a family of neuroimmunomodulatory peptides. Tatro JB. **Neuroimmunomodulation** 1996 Sep–Oct;3(5):259–84 (224 ref.)

RECEPTORS, CORTICOTROPIN-RELEASING HORMONE

[CRH receptor: evaluation of the receptor functions] Horiba N, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:472–5 (10 ref.) **(Jpn)**

AGONISTS

[D-Pro5]Corticotropin-releasing factor analogs as selective agonists at corticotropin-releasing factor receptors. Wei ET, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):161–4

Differential regulation of corticotropin-releasing factor1 receptor expression by stress and agonist treatments in brain and cultured cells. Iredale PA, et al. **Mol Pharmacol** 1996 Nov;50(5):1103–10

ANALYSIS

Autocrine-paracrine role of ovarian corticotropin-releasing hormone. Mastorakos G, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:27–41

Characterization of corticotropin-releasing hormone binding sites in the human placenta. Saeed BO, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):647–66

ANTAGONISTS & INHIBITORS

CRF receptor antagonist attenuates immobilization stress-induced norepinephrine release in the prefrontal cortex in rats. Smagin GN, et al. **Brain Res Bull** 1997; 42(6):431–4

In vivo and in vitro characterization of antalarmin, a nonpeptide corticotropin-releasing hormone (CRH) receptor antagonist: suppression of pituitary ACTH release and peripheral inflammation. Webster EL, et al. **Endocrinology** 1996 Dec;137(12):5747–50

A non peptidic corticotropin releasing factor receptor antagonist attenuates fever and exhibits anxiolytic-like activity. Lundkvist J, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):195–200

Antidepressant-like effects of CP-154,526, a selective CRF1 receptor antagonist. Mansbach RS, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):21–6

Design and synthesis of a series of non-peptide high-affinity human corticotropin-releasing factor1 receptor antagonists. Chen C, et al. **J Med Chem** 1996 Oct 25;39(22):4358–60

Synthesis and oral efficacy of a 4-(butylethylamino)pyrrolo[2,3-d]pyrimidine: a centrally active corticotropin-releasing factor1 receptor antagonist. Chen YL, et al. **J Med Chem** 1997 May 23;40(11):1749–54

Rapid microscale synthesis, a new method for lead optimization using robotics and solution phase chemistry: application to the synthesis and optimization of corticotropin-releasing factor1 receptor antagonists. Whitten JP, et al. **J Med Chem** 1996 Oct 25;39(22):4354–7

BIOSYNTHESIS

Regulation of corticotropin-releasing factor type 1 (CRF1) receptor messenger ribonucleic acid in the paraventricular nucleus of rat hypothalamus by exogenous CRF. Mansi JA, et al. **Endocrinology** 1996 Nov;137(11):4619–29

Expression of corticotropin-releasing factor and its receptors in the brain of lean and obese Zucker rats. Richard D, et al. **Endocrinology** 1996 Nov;137(11):4786–95

The temporal and spatial development of corticotropin-releasing factor (CRF) binding sites and CRF afferents in the opossum cerebellum. Madtes PC Jr, et al. **J Chem Neuroanat** 1996 Oct;11(4):231–41

Neural regulation of corticotropin releasing hormone (CRH) and CRH receptor mRNA in the hypothalamic paraventricular nucleus in the rat. Kiss A, et al. **J Neuroendocrinol** 1996 Feb;8(2):103–12

Modulation of CRF-R1 mRNA in rat anterior pituitary by dexamethasone: correlation with POMC mRNA. Zhou Y, et al. **Peptides** 1996;17(3):435–41

The distribution of corticotropin-releasing factor (CRF), CRF binding sites and CRF1 receptor mRNA in the mouse cerebellum. King JS, et al. **Prog Brain Res** 1997;114:55–66

DRUG EFFECTS

Differential regulation of type-1 and type-2alpha corticotropin-releasing hormone receptor mRNA in the hypothalamic paraventricular nucleus of the rat. Makino S, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):170–6

Glucocorticoid regulation of corticotropin-releasing factor1 receptor expression in pituitary-derived AtT-20 cells. Iredale PA, et al. **Mol Pharmacol** 1997 May;51(5):794–9

Corticotrophin-releasing factor receptors: from molecular biology to drug design. Chalmers DT, et al. **Trends Pharmacol Sci** 1996 Apr;17(4):166–72 (46 ref.)

GENETICS

A new functional isoform of the human CRF2 receptor for corticotropin-releasing factor. Valdenaire O, et al. **Biochim Biophys Acta** 1997 May 30;1352(2):129–32

Effect of dexfenfluramine on the transcriptional activation of CRF and its type 1 receptor within the paraventricular nucleus of the rat hypothalamus. Laflamme N, et al. **Br J Pharmacol** 1996 Mar;117(6):1021–34

Developmental profile of messenger RNA for the corticotropin-releasing hormone receptor in the rat limbic system. Avishai-Eliner S, et al. **Brain Res Dev Brain Res** 1996 Feb 26;91(2):159–63

Corticotropin-releasing factor up-regulates its own receptor mRNA in the paraventricular nucleus of the hypothalamus. Imaki T, et al. **Brain Res Mol Brain Res** 1996 May; 38(1):166–70

Endotoxin decreases corticotropin-releasing factor receptor 1 messenger ribonucleic acid levels in the rat pituitary. Aubry JM, et al. **Endocrinology** 1997 Apr;138(4):1621–6

Regulation of messenger ribonucleic acid for corticotropin releasing hormone receptor in the pituitary during stress. Rabadan-Diehl C, et al. **Endocrinology** 1996 Sep; 137(9):3808–14

Localization of the human CRF2 receptor to 7p21–p15 by radiation hybrid mapping and FISH analysis. Meyer AH, et al. **Genomics** 1997 Feb 15;40(1):189–90

Expression of genes encoding corticotropin-releasing factor (CRF), type 1 CRF receptor, and CRF-binding protein and localization of the gene products in the human ovary. Asakura H, et al. **J Clin Endocrinol Metab** 1997 Aug; 82(8):2720–5

Expression of corticotropin-releasing hormone and its R1 receptor in human endometrial stromal cells. Di Blasio AM, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1594–7

Corticotropin-releasing factor up-regulates its own receptor gene expression in corticotropic adenoma cells in vitro. Asakura Y, et al. **J Clin Endocrinol Metab** 1997 Apr; 82(4):1229–34

Production of POMC, CRH-R1, MC1, and MC2 receptor mRNA and expression of tyrosinase gene in relation to hair cycle and dexamethasone treatment in the C57BL/6 mouse skin. Ermak G, et al. **J Invest Dermatol** 1997 Feb; 108(2):160–5

Regulation of corticotropin-releasing factor receptor function in human Y-79 retinoblastoma cells: rapid and reversible homologous desensitization but prolonged recovery. Hauger RL, et al. **J Neurochem** 1997 Jun; 68(6):2308–16

Corticotropin-releasing factor and type 1 corticotropin-releasing factor receptor messenger RNAs in rat brain and pituitary during "binge"-pattern cocaine administration and chronic withdrawal. Zhou Y, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):351–8

Endotoxin regulates corticotropin-releasing hormone receptor 2 in heart and skeletal muscle. Heldwein KA, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):167–72

Localization of ligand-binding domains of human corticotropin-releasing factor receptor: a chimeric receptor approach. Liaw CW, et al. **Mol Endocrinol** 1997 Jun; 11(7):980–5

Effects of continuous infusion of interleukin 1 beta on corticotropin-releasing hormone (CRH), CRH receptors, proopiomelanocortin gene expression and secretion of corticotropin, beta-endorphin and corticosterone. Parsadaniantz SM, et al. **Neuroendocrinology** 1997 Jan; 65(1):53–63

Rapid generation of stable cell lines expressing corticotropin-releasing hormone receptor for drug discovery. Horlick RA, et al. **Protein Expr Purif** 1997 Apr; 9(3):301–8

IMMUNOLOGY

Corticotrophin-releasing hormone receptor type 1: generation and characterization of polyclonal antipeptide antibodies and their localization in pituitary cells and cortical neurones in vitro. Castro MG, et al. **J Neuroendocrinol** 1996 Jul;8(7):521–31

ISOLATION & PURIFICATION

Affinity purification of 61- and 65-kDa rat brain corticotropin-releasing factor receptors and receptor-associated G proteins. Gibbins JM, et al. **Int J Biochem Cell Biol** 1996 Sep;28(9):1017–29

METABOLISM

Homologous desensitization of human corticotropin-releasing factor1 receptor in stable transfected mouse fibroblast cells. Dieterich KD, et al. **Brain Res** 1996 Feb 26;710(1–2):287–92

Functional corticotropin-releasing factor receptors in human neuroblastoma cells. Dieterich KD, et al. **Brain Res** 1996 Sep 9;733(1):113–8

Brain corticotropin-releasing factor immunoreactivity and receptors in five inbred rat strains: relationship to forced swimming behaviour. Lahmame A, et al. **Brain Res** 1997 Mar 7;750(1–2):285–92

Importance of pituitary and brain receptors for corticotrophin-releasing factor in modulating alcohol-induced ACTH secretion in the rat. Rivier C, et al. **Brain Res** 1996 May 20;721(1–2):83–90

Age-related changes in the expression of corticotropin-releasing hormone receptor mRNA in the rat pituitary. Ceccatelli S, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):175–80

Corticotropin-releasing hormone receptor expression and functional coupling in neonatal cardiac myocytes and AT-1

cells. Heldwein KA, et al. **Endocrinology** 1996 Sep; 137(9):3631–9
The human neuroblastoma cell line, IMR–32, expresses functional corticotropin–releasing factor receptors. Hogg JE, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):257–61
Corticotropin–releasing factor–like peptides increase cytosolic [Ca2+] in human epidermoid A–431 cells. Kiang JG. **Eur J Pharmacol** 1997 Jun 25;329(2–3):237–44
Steady–state methadone in rats does not change mRNA levels of corticotropin–releasing factor, its pituitary receptor or proopiomelanocortin. Zhou Y, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):31–5
Differential regulation of hypothalamic pituitary corticotropin releasing hormone receptors during development of adjuvant–induced arthritis in the rat. Aguilera G, et al. **J Endocrinol** 1997 May;153(2):185–91
Identification, characterization and localization of corticotropin–releasing hormone receptors in human placenta. Hatzoglou A, et al. **Life Sci** 1996;59(22):1871–9
125I–Tyr0–hCRH labelling characteristics of corticotropin–releasing hormone receptors: differences between normal and adenomatous corticotrophs. Abs R, et al. **Neurochem Int** 1997 Mar;30(3):291–7
Synthesis and characterization of a photoactivatable analog of corticotropin–releasing factor for specific receptor labeling. Rühmann A, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10609–13
CP–154,526: a potent and selective nonpeptide antagonist of corticotropin releasing factor receptors. Schulz DW, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10477–82
Corticotropin–releasing factor (CRF) and endocrine responses to stress: CRF receptors, binding protein, and related peptides. Turnbull AV, et al. **Proc Soc Exp Biol Med** 1997 May;215(1):1–10 (114 ref.)
Regional binding to corticotropin releasing factor receptors in brain of rats exposed to chronic cocaine and cocaine withdrawal. Ambrosio E, et al. **Synapse** 1997 Mar; 25(3):272–6
Corticotrophin–releasing factor receptors: from molecular biology to drug design. Chalmers DT, et al. **Trends Pharmacol Sci** 1996 Apr;17(4):166–72 (46 ref.)

PHYSIOLOGY

Corticotropin–releasing factor receptors: an overview. Dieterich KD, et al. **Exp Clin Endocrinol Diabetes** 1997; 105(2):65–82 (210 ref.)
Presence of functional receptors for corticotropin releasing hormone in caecal circular smooth muscle cells of guinea pig. Iwakiri Y, et al. **Life Sci** 1997;60(11):857–64
125I–Tyro–sauvagine: a novel high affinity radioligand for the pharmacological and biochemical study of human corticotropin–releasing factor 2 alpha receptors. Grigoriadis DE, et al. **Mol Pharmacol** 1996 Sep; 50(3):679–86
Differential regulation of corticotropin–releasing factor1 receptor expression by stress and agonist treatments in brain and cultured cells. Iredale PA, et al. **Mol Pharmacol** 1996 Nov;50(5):1103–10
Neurobiology of corticotropin releasing factor (CRF) receptors and CRF–binding protein: implications for the treatment of CNS disorders [see comments] Behan DP, et al. **Mol Psychiatry** 1996 Sep;1(4):265–77 (113 ref.). Comment in: Mol Psychiatry 1996 Sep;1(4):300–1.
Corticotropin–releasing factor receptors: physiology, pharmacology, biochemistry and role in central nervous system and immune disorders. De Souza EB. **Psychoneuroendocrinology** 1995;20(8):789–819 (144 ref.)

RECEPTORS, CR1 see **RECEPTORS, COMPLEMENT 3B**

RECEPTORS, CR2 see **RECEPTORS, COMPLEMENT 3D**

RECEPTORS, CRH see **RECEPTORS, CORTICOTROPIN–RELEASING HORMONE**

RECEPTORS, CYCLIC AMP

see related
CYCLIC AMP–DEPENDENT PROTEIN KINASES
CYCLIC AMP RECEPTOR PROTEIN

CHEMISTRY

Mapping conformational changes in a protein: application of a protein footprinting technique to cAMP–induced conformational changes in cAMP receptor protein. Baichoo N, et al. **Biochemistry** 1997 Sep 9;36(36):10830–6
Stability and kinetics of unfolding and refolding of cAMP receptor protein from Escherichia coli. Małecki J, et al. **Eur J Biochem** 1997 Feb 1;243(3):660–9
The cyclic AMP receptor promoter DNA complex: a comparison of crystal and solution structure by quantitative molecular electrooptics. Meyer–Almes FJ, et al. **J Mol Biol** 1997 Jun 27;269(5):842–50

DRUG EFFECTS

Butyrate alters activity of specific cAMP–receptor proteins in a transgenic mouse colonic cell line. Aukema HM, et al. **J Nutr** 1997 Jan;127(1):18–24

GENETICS

Maximization of transcription of the serC (pdxF)–aroA multifunctional operon by antagonistic effects of the cyclic AMP (cAMP) receptor protein–cAMP complex and Lrp global regulators of Escherichia coli K–12. Man TK, et al. **J Bacteriol** 1997 Jun;179(11):3458–69
The cyclic AMP receptor protein is the main activator of pectinolysis genes in Erwinia chrysanthemi. Reverchon S, et al. **J Bacteriol** 1997 Jun;179(11):3500–8
Random mutagenesis of the cAMP chemoattractant receptor, cAR1, of Dictyostelium. Mutant classes that cause discrete shifts in agonist affinity and lock the receptor in a novel activational intermediate. Kim JY, et al. **J Biol Chem** 1997 Jan 24;272(4):2060–8
Random mutagenesis of the cAMP chemoattractant receptor, cAR1, of Dictyostelium. Evidence for multiple states of activation. Milne JL, et al. **J Biol Chem** 1997 Jan 24; 272(4):2069–76
Spectrum of spontaneous mutations in the cyclic AMP receptor protein gene on chromosomal DNA of Escherichia coli. Takimoto K, et al. **J Radiat Res (Tokyo)** 1997 Mar;38(1):27–36

METABOLISM

Influence of the location of the cAMP receptor protein binding site on the geometry of a transcriptional activation complex in Escherichia coli. Eichenberger P, et al. **Biochemistry** 1996 Dec 3;35(48):15302–12
Role of macromolecular hydration in the binding of the Escherichia coli cyclic AMP receptor to DNA. Vossen KM, et al. **Biochemistry** 1997 Sep 30;36(39):11640–7
Stability and kinetics of unfolding and refolding of cAMP receptor protein from Escherichia coli. Małecki J, et al. **Eur J Biochem** 1997 Feb 1;243(3):660–9
Autonomous and nonautonomous regulation of axis formation by antagonistic signaling via 7–span cAMP receptors and GSK3 in Dictyostelium. Ginsburg GT, et al. **Genes Dev** 1997 Aug 15;11(16):2112–23
Identification of sigma S–regulated genes in Salmonella typhimurium: complementary regulatory interactions between sigma S and cyclic AMP receptor protein. Fang FC, et al. **J Bacteriol** 1996 Sep;178(17):5112–20
Identification of detergent–resistant plasma membrane microdomains in dictyostelium: enrichment of signal transduction proteins. Xiao Z, et al. **Mol Biol Cell** 1997 May;8(5):855–69

PHYSIOLOGY

Phospholipase–C–independent inositol 1,4,5–trisphosphate formation in Dictyostelium cells. Activation of a plasma–membrane–bound phosphatase by receptor–stimulated Ca2+ influx. Van Dijken P, et al. **Eur J Biochem** 1997 Feb 15;244(1):113–9
Cyclic AMP receptor protein functions as a repressor of the osmotically inducible promoter proP P1 in Escherichia coli. Xu J, et al. **J Bacteriol** 1997 Apr;179(7):2410–7

RECEPTORS, CYTOADHESIN

METABOLISM

Patterns of changes in neutrophil adhesion molecules during normothermic cardiopulmonary bypass. A clinical study. Le Deist F, et al. **Eur J Cardiothorac Surg** 1996; 10(4):279–83

PHYSIOLOGY

Adhesive interactions in peri–implantation morphogenesis and placentation. Damsky Ch, et al. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):367–75

RECEPTORS, CYTOKINE

Macrophage tropism of human immunodeficiency virus type 1 and utilization of the CC–CKR5 coreceptor. Cheng–Mayer C, et al. **J Virol** 1997 Feb;71(2):1657–61
Chemokines and HIV–1 second receptors. Confluence of two fields generates optimism in AIDS research. D'Souza MP, et al. **Nat Med** 1996 Dec;2(12):1293–300 (79 ref.)
[Chemokines and HIV–1 second receptors] Murakami T, et al. **Tanpakushitsu Kakusan Koso** 1997 Jul;42(9):1427–34 (35 ref.) **(Jpn)**

ANALYSIS

Cytokines and soluble receptor changes in the transition from primary to early chronic HIV type 1 infection. Barcellini W, et al. **AIDS Res Hum Retroviruses** 1996 Mar 1; 12(4):325–31
STRL22 is a receptor for the CC chemokine MIP–3alpha. Liao F, et al. **Biochem Biophys Res Commun** 1997 Jul 9; 236(1):212–7
Cytokine receptor expression on hematopoietic stem and progenitor cells. McKinstry WJ, et al. **Blood** 1997 Jan 1; 89(1):65–71
Cytokine production and cytokine receptor expression by cells of the human first trimester placental–uterine interface. Jokhi PP, et al. **Cytokine** 1997 Feb;9(2):126–37
Expression of autocrine motility factor receptor in cutaneous malignant melanoma. Nagai Y, et al. **Dermatology** 1996; 192(1):8–11
AMF–R tubules concentrate in a pericentriolar microtubule domain after MSV transformation of epithelial MDCK cells. Nabi IR, et al. **J Histochem Cytochem** 1997 Oct; 45(10):1351–63
Receptor expression and responsiveness of human dendritic cells to a defined set of CC and CXC chemokines. Sozzani S, et al. **J Immunol** 1997 Aug 15;159(4):1993–2000
Immunolocalization of cytokines and their receptors in adhesive capsulitis of the shoulder. Rodeo SA, et al. **J Orthop Res** 1997 May;15(3):427–36
Primitive cytokines and cytokine receptors in invertebrates: the sea star Asterias rubens as a model of study. Legac E, et al. **Scand J Immunol** 1996 Oct;44(4):375–80

ANTAGONISTS & INHIBITORS

Effect of a CC chemokine receptor antagonist on collagen induced arthritis in DBA/1 mice. Plater–Zyberk C, et al. **Immunol Lett** 1997 Jun 1;57(1–3):117–20
Human RANTES acts as a receptor antagonist for guinea pig eotaxin in vitro and in vivo. Marleau S, et al. **J Immunol** 1996 Nov 1;157(9):4141–6
Inhibition of acute peritoneal inflammation in rats by a cytokine–induced neutrophil chemoattractant receptor antagonist. Zagorski J, et al. **J Immunol** 1997 Aug 1; 159(3):1059–62
Chemokine inhibitors for HIV [news] Eccleston A. **Nat Biotechnol** 1997 Aug;15(8):709, 710
Exploiting the HIV–chemokine nexus [news] Cohen J. **Science** 1997 Feb 28;275(5304):1261–4
Potent inhibition of HIV–1 infectivity in macrophages and lymphocytes by a novel CCR5 antagonist. Simmons G, et al. **Science** 1997 Apr 11;276(5310):276–9

BIOSYNTHESIS

Modulation of macrophage inflammatory protein–1alpha and its receptors in human B–cell lines derived from patients with acquired immunodeficiency syndrome and Burkitt's lymphoma. Sharma V, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):576–81
Presence of mRNAs encoding the soluble D–factor/LIF receptor in human choriocarcinoma cells and production of the soluble receptor. Tomida M. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):427–31
Expression of the human immunodeficiency virus type–1 coreceptors CXCR–4 (fusin, LESTR) and CKR–5 in CD34+ hematopoietic progenitor cells. Deichmann M, et al. **Blood** 1997 May 15;89(10):3522–8
Abnormal expression of the B–cell homing chemokine receptor BLR1 during the progression of acquired immunodeficiency syndrome. Förster R, et al. **Blood** 1997 Jul 15;90(2):520–5
Interleukin–10 is a growth factor for human myeloma cells by induction of an oncostatin M autocrine loop. Gu ZJ, et al. **Blood** 1996 Nov 15;88(10):3972–86
Expression of autocrine motility factor receptor correlates with disease progression in human gastric cancer. Hirono Y, et al. **Br J Cancer** 1996 Dec;74(12):2003–7
In vivo cytokine and receptor gene expression during the rat hair growth cycle. Analysis by semi–quantitative RT–PCR. Little JC, et al. **Exp Dermatol** 1996 Aug; 5(4):202–12
Isolation and characterization of the human gp130 promoter. Regulation by STATS. O'Brien CA, et al. **J Biol Chem** 1997 Jun 6;272(23):15003–10
Bacterial lipopolysaccharide rapidly inhibits expression of C–C chemokine receptors in human monocytes. Sica A, et al. **J Exp Med** 1997 Mar 3;185(5):969–74
The involvement of interleukin (IL)–15 in regulating the differentiation of granulated metrial gland cells in mouse pregnant uterus. Ye W, et al. **J Exp Med** 1996 Dec 1; 184(6):2405–10
Expression of chemokine receptors by subsets of neurons in the central nervous system. Horuk R, et al. **J Immunol** 1997 Mar 15;158(6):2882–90
IL–2–regulated expression of the monocyte chemotactic protein–1 receptor (CCR2) in human NK cells: characterization of a predominant 3.4–kilobase transcript containing CCR2B and CCR2A sequences. Polentarutti N, et al. **J Immunol** 1997 Mar 15;158(6):2689–94
Yeast expression of the cytokine receptor domain of the soluble interleukin–6 receptor. Vollmer P, et al. **J Immunol Methods** 1996 Nov 29;199(1):47–54
Regulation of cytokine and cytokine receptor expression by glucocorticoids. Almawi WY, et al. **J Leukoc Biol** 1996 Nov;60(5):563–72 (166 ref.)
MCP–1 and CCR2 in HIV infection: regulation of agonist and receptor expression. Sozzani S, et al. **J Leukoc Biol** 1997 Jul;62(1):30–3 (23 ref.)
Preparation of specific polyclonal antibodies to a C–C chemokine receptor, CCR1, and determination of CCR1 expression on various types of leukocytes. Su SB, et al. **J Leukoc Biol** 1996 Nov;60(5):658–66
Pleiotropic expression of heterologous cytokine/receptor genes in HTLV–1 associated diseases: candidate TRS for chimeric gene therapy. Greenberg SJ, et al. **Leukemia** 1997 Apr;11 Suppl 3:79–81
Complementary tissue–specific expression of LIF and LIF–receptor mRNAs in early mouse embryogenesis. Nichols J, et al. **Mech Dev** 1996 Jul;57(2):123–31
Expression of leukaemia inhibitory factor receptor subunits LIFR beta and gp130 in human oocytes and

preimplantation embryos. van Eijk MJ, et al. **Mol Hum Reprod** 1996 May;2(5):355–60

Expression of leptin receptor mRNA in the hypothalamic arcuate nucleus--relationship with NPY neurones. Håkansson ML, et al. **Neuroreport** 1996 Nov 25; 7(18):3087–92

A functional interleukin 12 receptor complex is composed of two beta-type cytokine receptor subunits. Presky DH, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14002–7

BLOOD

Decreased plasma levels of factor II + VII + X correlate with increased levels of soluble cytokine receptors in patients with malaria and meningococcal infections. Bygbjerg IC, et al. **APMIS** 1997 Feb;105(2):150–6

Identification and characterization of receptor for cytokine-induced neutrophil chemoattractant-3 on rat neutrophils. Murakami K, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):562–7

Prognostic value of anti-Plasmodium falciparum-specific immunoglobulin G3, cytokines, and their soluble receptors in West African patients with severe malaria. Sarthou JL, et al. **Infect Immun** 1997 Aug;65(8):3271–6

Effects of clozapine on plasma cytokine and soluble cytokine receptor levels. Pollmächer T, et al. **J Clin Psychopharmacol** 1996 Oct;16(5):403–9

CHEMISTRY

Identification and characterization of receptor for cytokine-induced neutrophil chemoattractant-3 on rat neutrophils. Murakami K, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):562–7

Regions in beta-chemokine receptors CCR5 and CCR2b that determine HIV-1 cofactor specificity. Rucker J, et al. **Cell** 1996 Nov 1;87(3):437–46

Leukemia inhibitory factor (LIF) and oncastsin M (OSM) high affinity binding require additional receptor subunits besides GP130 and GP190. Heymann D, et al. **Cytokine** 1996 Mar;8(3):197–205

Chemokine receptors: structure, function and role in microbial pathogenesis. Murphy PM. **Cytokine Growth Factor Rev** 1996 Jun;7(1):47–64 (174 ref.)

The signal transducer gp130--bacterial expression, refolding and properties of the carboxy-terminal domain of the cytokine-binding module. Müller-Newen G, et al. **Eur J Biochem** 1997 Jul 1;247(1):425–31

Comparative study on the phosphotyrosine motifs of different cytokine receptors involved in STAT5 activation. May P, et al. **FEBS Lett** 1996 Sep 30;394(2):221–6

The second extracellular loop of CCR5 is the major determinant of ligand specificity. Samson M, et al. **J Biol Chem** 1997 Oct 3;272(40):24934–41

IL-2-regulated expression of the monocyte chemotactic protein-1 receptor (CCR2) in human NK cells: characterization of a predominant 3.4-kilobase transcript containing CCR2B and CCR2A sequences. Polentarutti N, et al. **J Immunol** 1997 Mar 15;158(6):2689–94

Refolding of soluble leukemia inhibitory factor receptor fusion protein (gp 190 sol DAF) from urea. Liu H, et al. **Mol Cell Biochem** 1997 Apr;169(1-2):43–50

Template-based docking of a prolactin receptor proline-rich motif octapeptide to FKBP12: implications for cytokine receptor signaling. Soman KV, et al. **Protein Sci** 1997 May; 6(5):999–1008

DEFICIENCY

Deregulated TCR alpha beta T cell population provokes extramedullary hematopoiesis in mice deficient in the common gamma chain. Sharara LI, et al. **Eur J Immunol** 1997 Apr;27(4):990–8

DRUG EFFECTS

Monocyte chemotactic protein-4: tissue-specific expression and signaling through CC chemokine receptor-2. Godiska R, et al. **J Leukoc Biol** 1997 Mar;61(3):353–60

Biological response modifiers may yield a new class of drugs to treat arthritis [news] Skolnick AA. **JAMA** 1997 Jan 22-29;277(4):276–8

Phorbol ester PMA induces expression of the thrombopoietin receptor MPL in leukemia cells. Graf G, et al. **Leuk Lymphoma** 1996 Dec;24(1-2):149–57

[Serum cytokines and cytokine receptors in children after small or larger surgical interventions with halothane anesthesia] Burkhardt U, et al. **Anaesthesiol Reanim** 1997; 22(2):50–4 (Eng. Abstr.) **(Ger)**

GENETICS

CC-chemokine receptor 5 genotypes and in vitro susceptibility to HIV-1 of a cohort of British HIV-exposed uninfected homosexual men [letter] Aarons E, et al. **AIDS** 1997 Apr;11(5):688–9

Homozygous delta 32 deletion of the CCR-5 chemokine receptor gene in an HIV-1-infected patient. Balotta C, et al. **AIDS** 1997 Aug;11(10):F67–71

Heterozygosity for a deletion in the CKR-5 gene leads to prolonged AIDS-free survival and slower CD4 T-cell decline in a cohort of HIV-seropositive individuals. Eugen-Olsen J, et al. **AIDS** 1997 Mar;11(3):305–10

Early protective effect of CCR-5 delta 32 heterozygosity on HIV-1 disease progression: relationship with viral load. The SEROCO Study Group. Meyer L, et al. **AIDS** 1997 Sep;11(11):F73–8

Intact CCR-5 coreceptors in HIV-1-infected chimpanzees [letter] ten Haaft PJ, et al. **AIDS** 1997 Aug;11(10):1291–3

Amino acid variants in the human leptin receptor: lack of association to juvenile onset obesity. Echwald SM, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):248–52

Localization of leptin receptor mRNA splice variants in murine peripheral tissues by RT-PCR and in situ hybridization. Hoggard N, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):383–7

Presence of mRNAs encoding the soluble D-factor/LIF receptor in human choriocarcinoma cells and production of the soluble receptor. Tomida M. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):427–31

Molecular cloning and RNA expression of two new human chemokine receptor-like genes [published erratum appears in Biochem Biophys Res Commun 1997 Feb 13;231(2):519–20] Zaballos A, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):846–53

Molecular cloning of a gene from 'chromosome 3 specific' genomic library that encodes a novel CC-chemokine receptor like isotype. Gupta SK, et al. **Biochem Mol Biol Int** 1996 Oct;40(3):551–60

Role of interleukin-2 (IL-2), IL-7, and IL-15 in natural killer cell differentiation from cord blood hematopoietic progenitor cells and from gamma c transduced severe combined immunodeficiency X1 bone marrow cells. Cavazzana-Calvo M, et al. **Blood** 1996 Nov 15; 88(10):3901–9

Activating mutations in cytokine receptors: implications for receptor function and role in disease. Gonda TJ, et al. **Blood** 1997 Jan 15;89(2):355–69 (138 ref.)

Cytokine-receptors repertoire in a pre-osteoclast cell line [letter; comment] Gattei V, et al. **Br J Haematol** 1997 Jun; 97(4):934–6. Comment on: Br J Haematol 1997 Jan;96(1):64–9.

A putative chemokine receptor, BLR1, directs B cell migration to defined lymphoid organs and specific anatomic compartments of the spleen. Förster R, et al. **Cell** 1996 Dec 13;87(6):1037–47

Differentiation induced by the c-Mpl cytokine receptor is blocked by mutant Shc adaptor protein. Hill RJ, et al. **Cell Growth Differ** 1996 Sep;7(9):1125–34

Regulation of autocrine motility factor receptor expression in tumor cell locomotion and metastasis. Silletti S, et al. **Curr Top Microbiol Immunol** 1996;213 (Pt 2):137–69 (153 ref.)

Molecular cloning of a novel receptor (CMKLR1) with homology to the chemotactic factor receptors. Gantz I, et al. **Cytogenet Cell Genet** 1996;74(4):286–90

Host genes and HIV: the role of the chemokine receptor gene CCR5 and its allele. McNicholl JM, et al. **Emerg Infect Dis** 1997 Jul-Sep;3(3):261–71 (62 ref.)

Molecular cloning and chromosomal mapping of a novel human gene, ChemR1, expressed in T lymphocytes and polymorphonuclear cells and encoding a putative chemokine receptor. Samson M, et al. **Eur J Immunol** 1996 Dec;26(12):3021–8

CRF2-4: isolation of cDNA clones encoding the human and mouse proteins. Gibbs VC, et al. **Gene** 1997 Feb 20; 186(1):97–101

Mapping of the OB receptor to 1p in a region of nonconserved gene order from mouse and rat to human. Chung WK, et al. **Genome Res** 1996 May;6(5):431–8

The beta-chemokine receptor genes CCR1 (CMKBR1), CCR2 (CMKBR2), and CCR3 (CMKBR3) cluster within 285 kb on human chromosome 3p21. Daugherty BL, et al. **Genomics** 1997 Apr 15;41(2):294–5

Cloning of STRL22, a new human gene encoding a G-protein-coupled receptor related to chemokine receptors and located on chromosome 6q27. Liao F, et al. **Genomics** 1997 Feb 15;40(1):175–80

Cloning of cDNA encoding a putative chemoattractant receptor. Owman C, et al. **Genomics** 1996 Oct 15; 37(2):187–94

The genes encoding the human CC-chemokine receptors CC-CKR1 to CC-CKR5 (CMKBR1-CMKBR5) are clustered in the p21.3-p24 region of chromosome 3. Samson M, et al. **Genomics** 1996 Sep 15;36(3):522–6

Identification of microsatellite markers linked to the human leptin receptor gene on chromosome 1. Winick JD, et al. **Genomics** 1996 Aug 15;36(1):221–2

Isolation and chromosomal localization of GPR31, a human gene encoding a putative G protein-coupled receptor. Zingoni A, et al. **Genomics** 1997 Jun 15;42(3):519–23

B-cell-negative severe combined immunodeficiency associated with a common gamma chain mutation. Jones AM, et al. **Hum Genet** 1997 May;99(5):677–80

Chemokine receptors and HIV resistance: the story so far. **Immunol Today** 1996 Oct;17(10):447

Structure of the gene encoding the human differentiation-stimulating factor/leukemia inhibitory factor receptor. Tomida M, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):201–5

Identification of two rat genes orthologous to the human interleukin-8 receptors. Dunstan CAN, et al. **J Biol Chem** 1996 Dec 20;271(51):32770–6

Dual oncostatin M (OSM) receptors. Cloning and characterization of an alternative signaling subunit conferring OSM-specific receptor activation. Mosley B, et al. **J Biol Chem** 1996 Dec 20;271(51):32635–43

Cloning and characterization of a novel murine beta chemokine receptor, D6. Comparison to three other related macrophage inflammatory protein-1alpha receptors, CCR-1, CCR-3, and CCR-5. Nibbs RJB, et al. **J Biol Chem** 1997 May 9;272(19):12495–504

Isolation and characterization of the human gp130 promoter. Regulation by STATS. O'Brien CA, et al. **J Biol Chem** 1997 Jun 6;272(23):15003–10

Regulation of expression of the human monocyte chemotactic protein-1 receptor (hCCR2) by cytokines. Tangirala RK, et al. **J Biol Chem** 1997 Mar 21;272(12):8050–6

Organization and differential expression of the human monocyte chemoattractant protein 1 receptor gene. Evidence for the role of the carboxyl-terminal tail in receptor trafficking. Wong LM, et al. **J Biol Chem** 1997 Jan 10;272(2):1038–45

Antigen-driven C-C chemokine-mediated HIV-1 suppression by CD4(+) T cells from exposed uninfected individuals expressing the wild-type CCR-5 allele. Furci L, et al. **J Exp Med** 1997 Aug 4;186(3):455–60

CCR6, a CC chemokine receptor that interacts with macrophage inflammatory protein 3alpha and is highly expressed in human dendritic cells. Greaves DR, et al. **J Exp Med** 1997 Sep 15;186(6):837–44

Cloning and characterization of a specific receptor for the novel CC chemokine MIP-3alpha from lung dendritic cells. Power CA, et al. **J Exp Med** 1997 Sep 15;186(6):825–35

Identification of CCR8: a human monocyte and thymus receptor for the CC chemokine I-309. Tiffany HL, et al. **J Exp Med** 1997 Jul 7;186(1):165–70

Molecular cloning of TER1, a chemokine receptor-like gene expressed by lymphoid tissues. Napolitano M, et al. **J Immunol** 1996 Oct 1;157(7):2759–63

Molecular understanding of hematopoietin/cytokine receptor signaling defects in hematopoietic disorders. Soede-Bobok AA, et al. **J Mol Med** 1997 Jul;75(7):470–7 (80 ref.)

Localization of mRNA for leukemia inhibitory factor receptor in the adult rat brain. Yamakuni H, et al. **J Neuroimmunol** 1996 Oct;70(1):45–53

Mouse astrocytes respond to the chemokines MCP-1 and KC, but reverse transcriptase-polymerase chain reaction does not detect mRNA for the KC or new MCP-1 receptor. Heesen M, et al. **J Neurosci Res** 1996 Aug 15; 45(4):382–91

Chemokine receptor CCR5 genotype influences the kinetics of human immunodeficiency virus type 1 infection in human PBL-SCID mice. Picchio GR, et al. **J Virol** 1997 Sep;71(9):7124–7

Dual effect of CCR5 delta 32 gene deletion in HIV-1-infected patients. Copenhagen AIDS Study Group [letter] Garred P, et al. **Lancet** 1997 Jun 28;349(9069):1884

CCR5-delta 32 gene deletion in HIV-1 infected patients [letter] Michael NL, et al. **Lancet** 1997 Sep 6; 350(9079):741–2

HIV-1 infection in a man homozygous for CCR5 delta 32 [letter] O'Brien TR, et al. **Lancet** 1997 Apr 26; 349(9060):1219

32 bp CCR-5 gene deletion and resistance to fast progression in HIV-1 infected heterozygotes [letter] Rappaport J, et al. **Lancet** 1997 Mar 29;349(9056):922–3

CKR-5 deletion heterozygotes progress slower to AIDS [news] Rowe PM. **Lancet** 1996 Oct 5;348(9032):947

CCR5-delta 32 gene deletion in HIV-1 infected patients [letter] Smith MW, et al. **Lancet** 1997 Sep 6;350(9079):741; discussion 742

HIV-1 infection in an individual homozygous for CCR5 delta 32. Seroco Study Group [letter] Theodorou I, et al. **Lancet** 1997 Apr 26;349(9060):1219–20

CCR5-delta 32 gene deletion in HIV-1 infected patients [letter] Wang B, et al. **Lancet** 1997 Sep 6;350(9079):742

Expression of thrombopoietin and thrombopoietin receptor MPL in human leukemia-lymphoma and solid tumor cell lines. Graf G, et al. **Leuk Res** 1996 Oct;20(10):831–8

The leptin receptor gene (LEPR) maps to porcine chromosome 6. Ernst CW, et al. **Mamm Genome** 1997 Mar; 8(3):226

The leptin receptor (LEPR) gene maps to bovine chromosome 3q33. Pfister-Genskow M, et al. **Mamm Genome** 1997 Mar;8(3):227

Inherited resistance to HIV-1 conferred by an inactivating mutation in CC chemokine receptor 5: studies in populations with contrasting clinical phenotypes, defined racial background, and quantified risk. Zimmerman PA, et al. **Mol Med** 1997 Jan;3(1):23–36

The extent of genetic variation in the CCR5 gene [letter] Ansari-Lari MA, et al. **Nat Genet** 1997 Jul;16(3):221–2

Global distribution of the CCR5 gene 32-basepair deletion. Martinson JJ, et al. **Nat Genet** 1997 May;16(1):100–3

Nonsense mutation of leptin receptor in the obese spontaneously hypertensive Koletsky rat [letter] Takaya K, et al. **Nat Genet** 1996 Oct;14(2):130–1

HIV-1 infection in an individual homozygous for the CCR5 deletion allele [letter; comment] Biti R, et al. **Nat Med** 1997 Mar;3(3):252–3. Comment on: Nat Med 1996 Nov;2(11):1240–3.

The role of a mutant CCR5 allele in HIV-1 transmission and disease progression [see comments] Huang Y, et al. **Nat Med** 1996 Nov;2(11):1240–3. Comment in: Nat Med 1997 Mar;3(3):252–3.

The role of viral phenotype and CCR-5 gene defects in HIV-1 transmission and disease progression. Michael NL, et al. **Nat Med** 1997 Mar;3(3):338–40

HIV CCR5 resistance incomplete [news] Smith O. **Nat Med** 1997 Apr;3(4):372–3

Human herpesvirus KSHV encodes a constitutively active G–protein–coupled receptor linked to cell proliferation [see comments] Arvanitakis L, et al. **Nature** 1997 Jan 23; 385(6614):347–50. Comment in: Nature 1997 Jan 23;385(6614):296–7, 299.

Pirated genes in Kaposi's sarcoma [news; comment] Murphy PM. **Nature** 1997 Jan 23;385(6614):296–7, 299. Comment on: Nature 1997 Jan 23;385(6614):347–50.

Recent evolutionary acquisition of alternative pre–mRNA splicing and 3' processing regulations induced by intronic B2 SINE insertion. Michel D, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3228–34

Molecular cloning and characterization of a murine pre–B–cell growth–stimulating factor/stromal cell–derived factor 1 receptor, a murine homolog of the human immunodeficiency virus 1 entry coreceptor fusin. Nagasawa T, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14726–9

In search of AIDS–resistance genes. O'Brien SJ, et al. **Sci Am** 1997 Sep;277(3):44–51

Ethics of AIDS study [letter; comment] Gomperts ED, et al. **Science** 1996 Dec 6;274(5293):1596. Comment on: Science 1996 Sep 27;273(5283):1797–8.

HIV experts vs. sequencers in patent race [news] Marshall E. **Science** 1997 Feb 28;275(5304):1263

Contrasting genetic influence of CCR2 and CCR5 variants on HIV–1 infection and disease progression. Hemophilia Growth and Development Study (HGDS), Multicenter AIDS Cohort Study (MACS), Multicenter Hemophilia Cohort Study (MHCS), San Francisco City Cohort (SFCC), ALIVE Study. Smith MW, et al. **Science** 1997 Aug 15;277(5328):959–65

Characterization of a chemokine receptor–related gene in human herpesvirus 8 and its expression in Kaposi's sarcoma. Guo HG, et al. **Virology** 1997 Feb 17;228(2):371–8

[Tracking down natural resistance to HIV. Defective cellular receptor prevents entrance of virus into the cell] Hobom B. **Fortschr Med** 1996 Oct 20;114(29):12, 14 **(Ger)**

[Effects of in vivo instillation of genes coding for cytokines on pulmonary fibrosis] Hayashi S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec;34 Suppl:190–4 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Analysis of self–renewal mechanism of hematopoietic stem cells using transgenic mice expressing cytokine receptors] Takagi M, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1297–305 (27 ref.) **(Jpn)**

IMMUNOLOGY

Heatstroke: community prevention and prospective immunotherapeutic interventions [editorial; comment] Farmer JC. **Crit Care Med** 1997 Aug;25(8):1263–4. Comment on: Crit Care Med 1997 Aug;25(8):1314–9.

Common cytokine receptor gamma chain (gamma c)–dependent cytokines: understanding in vivo functions by gene targeting. Di Santo JP, et al. **Immunol Rev** 1995 Dec;148:19–34 (60 ref.)

Role of the common cytokine receptor gamma chain in cytokine signaling and lymphoid development. Leonard WJ, et al. **Immunol Rev** 1995 Dec;148:97–114 (77 ref.)

The unusual species cross–reactivity of the leukemia inhibitory factor receptor alpha–chain is determined primarily by the immunoglobulin–like domain. Owczarek CM, et al. **J Biol Chem** 1997 Sep 19;272(38):23976–85

Efficient interaction of HIV–1 with purified dendritic cells via multiple chemokine coreceptors. Granelli–Piperno A, et al. **J Exp Med** 1996 Dec 1;184(6):2433–8

Polarization of chemokine receptors to the leading edge during lymphocyte chemotaxis. Nieto M, et al. **J Exp Med** 1997 Jul 7;186(1):153–8

Production and characterization of monoclonal antibodies against the leukemia inhibitory factor low affinity receptor, gp190. Pitard V, et al. **J Immunol Methods** 1997 Jul 14; 205(2):177–90

Upregulation of Th–2 cytokine receptors in atopy– and nonatopy–associated chronic sinusitis. Kotsimbos TC, et al. **J Otolaryngol** 1996 Oct;25(5):317–21

CD4, CXCR–4, and CCR–5 dependencies for infections by primary patient and laboratory–adapted isolates of human immunodeficiency virus type 1. Kozak SL, et al. **J Virol** 1997 Feb;71(2):873–82

Utilization of C–C chemokine receptor 5 by the envelope glycoproteins of a pathogenic simian immunodeficiency virus, SIVmac239. Marcon L, et al. **J Virol** 1997 Mar; 71(3):2522–7

Chemokine receptors: gateways to inflammation and infection. Premack BA, et al. **Nat Med** 1996 Nov; 2(11):1174–8 (39 ref.)

Scientists confirm natural resistance to HIV–1 [news] **Oncology (Huntingt)** 1996 Dec;10(12):1879–80

Differential utilization of CCR5 by macrophage and T cell tropic simian immunodeficiency virus strains. Edinger AL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4005–10

Antibodies to several conformation–dependent epitopes of gp120/gp41 inhibit CCR–5–dependent cell–to–cell fusion mediated by the native envelope glycoprotein of a primary macrophage–tropic HIV–1 isolate. Verrier FC, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9326–31

ISOLATION & PURIFICATION

A death–domain–containing receptor that mediates apoptosis. Kitson J, et al. **Nature** 1996 Nov 28;384(6607):372–5

METABOLISM

Improved prognosis assessment for patients with bladder carcinoma. Otto T, et al. **Am J Pathol** 1997 Jun; 150(6):1919–23

Integrin stimulation regulates polymorphonuclear leukocytes inflammatory cytokine expression. Simms HH, et al. **Ann Surg** 1997 Jun;225(6):757–63; discussion 763–5

Hematopoietic receptor complexes. Wells JA, et al. **Annu Rev Biochem** 1996;65:609–34 (103 ref.)

STRL22 is a receptor for the CC chemokine MIP–3alpha. Liao F, et al. **Biochem Biophys Res Commun** 1997 Jul 9; 236(1):212–7

A short form of leptin receptor performs signal transduction. Murakami T, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):26–9

Distinct but overlapping epitopes for the interaction of a CC–chemokine with CCR1, CCR3 and CCR5. Pakianathan DR, et al. **Biochemistry** 1997 Aug 12;36(32):9642–8

The extracellular region of granulocyte colony–stimulating factor receptor in solution has multiple oligomerization states without ligand. Hiraoka O, et al. **Biomed Pharmacother** 1996;50(6–7):309–14

Human immunodeficiency virus–1 entry into purified blood dendritic cells through CC and CXC chemokine coreceptors. Ayehunie S, et al. **Blood** 1997 Aug 15; 90(4):1379–86

The structural and functional basis of cytokine receptor activation: lessons from the common beta subunit of the granulocyte–macrophage colony–stimulating factor, interleukin–3 (IL–3), and IL–5 receptors. Bagley CJ, et al. **Blood** 1997 Mar 1;89(5):1471–82 (87 ref.)

Oncostatin M and leukemia inhibitory factor do not use the same functional receptor in mice. Ichihara M, et al. **Blood** 1997 Jul 1;90(1):165–73

A novel approach to investigating the erythroid lineage, using both receptor analysis and haemoglobin detection. McGuckin CP, et al. **Br J Haematol** 1996 Dec;95(3):457–60

Localization of molecules involved in cytokine receptor signaling in the rat trigeminal ganglion. Mizuno M, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):163–6

A metalloproteinase inhibitor blocks the shedding of soluble cytokine receptors and processing of transmembrane cytokine precursors in human monocytic cells. Gallea–Robache S, et al. **Cytokine** 1997 May;9(5):340–6

Leukemia inhibitory factor (LIF) and oncastsin M (OSM) high affinity binding require additional receptor subunits besides GP130 and GP190. Heymann D, et al. **Cytokine** 1996 Mar;8(3):197–205

Effects of repeated administration of granulocyte colony–stimulating factor (G–CSF) on neutrophil counts, plasma cytokine, and cytokine receptor levels. Pollmächer T, et al. **Cytokine** 1996 Oct;8(10):799–803

Molecular mechanism of desensitization of the chemokine receptor CCR–5: receptor signaling and internalization are dissociable from its role as an HIV–1 co–receptor. Aramori I, et al. **EMBO J** 1997 Aug 1;16(15):4606–16

HIV–1–induced cell fusion is mediated by multiple regions within both the viral envelope and the CCR–5 co–receptor. Bieniasz PD, et al. **EMBO J** 1997 May 15;16(10):2599–609

Uncoupling of stem cell inhibition from monocyte chemoattraction in MIP–1alpha by mutagenesis of the proteoglycan binding site. Graham GJ, et al. **EMBO J** 1996 Dec 2;15(23):6506–15

Proinflammatory cytokines and their corresponding receptor proteins in eccrine sweat glands in normal and cutaneous leishmaniasis human skin. An immunohistochemical study. Ahmed AA, et al. **Exp Dermatol** 1996 Aug;5(4):230–5

The role of serine/threonine phosphorylation in hematopoietic cytokine receptor signal transduction. Mufson RA. **FASEB J** 1997 Jan;11(1):37–44 (56 ref.)

Leptin receptor (OB–R) oligomerizes with itself but not with its closely related cytokine signal transducer gp130. Nakashima K, et al. **FEBS Lett** 1997 Feb 10;403(1):79–82

Overlapping and distinct signals through leptin receptor (OB–R) and a closely related cytokine signal transducer, gp130. Nakashima K, et al. **FEBS Lett** 1997 Jan 13; 401(1):49–52

Monocyte chemoattractant protein–2 can exert its effects through the MCP–1 receptor (CC CKR2B). Yamagami S, et al. **FEBS Lett** 1997 Jan 6;400(3):329–32

Distinct expression levels of cytokines and soluble cytokine receptors in seminal plasma of fertile and infertile men. Huleihel M, et al. **Fertil Steril** 1996 Jul;66(1):135–9

CRF2–4: isolation of cDNA clones encoding the human and mouse proteins. Gibbs VC, et al. **Gene** 1997 Feb 20; 186(1):97–101

Leptin: genes, concepts and clinical perspective. Considine RV, et al. **Horm Res** 1996;46(6):249–56 (70 ref.)

Pattern of cytokine receptors expressed by human dendritic cells migrated from dermal explants. Larregina AT, et al. **Immunology** 1997 Jun;91(2):303–13

Soluble receptors for cytokines and growth factors. Müller–Newen G, et al. **Int Arch Allergy Immunol** 1996 Oct;111(2):99–106 (58 ref.)

Characteristic distribution of circulating autoantibodies against G–protein coupled cardiovascular receptors in patients with idiopathic dilated and hypertrophic cardiomyopathy. Matsui S, et al. **Int J Cardiol** 1996 May; 54(2):143–7 (28 ref.)

Changes in the early differentiation pathway of monoparental embryonic stem cells is not affected by the expression of LIF receptors. Garcia Tobalina R, et al. **Int J Dev Biol** 1996;Suppl 1:213S–214S

CC chemokine receptor 5–mediated signaling and HIV–1 Co–receptor activity share common structural determinants. Critical residues in the third extracellular loop support HIV–1 fusion. Alkhatib G, et al. **J Biol Chem** 1997 Aug 8;272(32):19771–6

Signaling of type II oncostatin M receptor. Auguste P, et al. **J Biol Chem** 1997 Jun 20;272(25):15760–4

A single STAT recruitment module in a chimeric cytokine receptor complex is sufficient for STAT activation. Behrmann I, et al. **J Biol Chem** 1997 Feb 21;272(8):5269–74

Cloning, in vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP–4) that binds and signals through the CC chemokine receptor 2B. Berkhout TA, et al. **J Biol Chem** 1997 Jun 27;272(26):16404–13

Agonistic and antagonistic variants of ciliary neurotrophic factor (CNTF) reveal functional differences between membrane–bound and soluble CNTF alpha–receptor. Di Marco A, et al. **J Biol Chem** 1997 Sep 12;272(37):23069–75

HIV–1 entry and macrophage inflammatory protein–1beta–mediated signaling are independent functions of the chemokine receptor CCR5. Farzan M, et al. **J Biol Chem** 1997 Mar 14;272(11):6854–7

Monocyte chemotactic protein–2 (MCP–2) uses CCR1 and CCR2B as its functional receptors. Gong X, et al. **J Biol Chem** 1997 May 2;272(18):11682–5

The T cell–directed CC chemokine TARC is a highly specific biological ligand for CC chemokine receptor 4. Imai T, et al. **J Biol Chem** 1997 Jun 6;272(23):15036–42

Influence of subunit combinations on signaling by receptors for oncostatin M, leukemia inhibitory factor, and interleukin–6. Kuropatwinski KK, et al. **J Biol Chem** 1997 Jun 13;272(24):15135–44

The amino–terminal domain of CCR2 is both necessary and sufficient for high affinity binding of monocyte chemoattractant protein 1. Receptor activation by a pseudo–tethered ligand. Monteclaro FS, et al. **J Biol Chem** 1997 Sep 12;272(37):23186–90

Signaling of the cardiotrophin–1 receptor. Evidence for a third receptor component. Robledo O, et al. **J Biol Chem** 1997 Feb 21;272(8):4855–63

Identification of CCR8, the receptor for the human CC chemokine I–309. Roos RS, et al. **J Biol Chem** 1997 Jul 11;272(28):17251–4

The second extracellular loop of CCR5 is the major determinant of ligand specificity. Samson M, et al. **J Biol Chem** 1997 Oct 3;272(40):24934–41

Receptor–mediated endocytosis of CC–chemokines. Solari R, et al. **J Biol Chem** 1997 Apr 11;272(15):9617–20

Distinct roles for leukemia inhibitory factor receptor alpha–chain and gp130 in cell type–specific signal transduction. Starr R, et al. **J Biol Chem** 1997 Aug 8; 272(32):19982–6

Chemokine receptor usage by human eosinophils. The importance of CCR3 demonstrated using an antagonistic monoclonal antibody. Heath H, et al. **J Clin Invest** 1997 Jan 15;99(2):178–84

CCR6, a CC chemokine receptor that interacts with macrophage inflammatory protein 3alpha and is highly expressed in human dendritic cells. Greaves DR, et al. **J Exp Med** 1997 Sep 15;186(6):837–44

Chemokine receptor specific for IP10 and mig: structure, function, and expression in activated T–lymphocytes [see comments] Loetscher M, et al. **J Exp Med** 1996 Sep 1; 184(3):963–9. Comment in: J Exp Med 1996 Sep 1;184(3):799–802.

CCR5 levels and expression pattern correlate with infectability by macrophage–tropic HIV–1, in vitro. Wu L, et al. **J Exp Med** 1997 May 5;185(9):1681–91

Regulation of polymorphonuclear leukocyte cytokine receptor expression: the role of altered oxygen tensions and matrix proteins. Simms H, et al. **J Immunol** 1996 Oct 15;157(8):3605–16

Serum cytokine and cytokine receptor levels in patients with giant cell arteritis during corticotherapy. Roblot P, et al. **J Rheumatol** 1996 Feb;23(2):408–10

Genetically divergent strains of simian immunodeficiency virus use CCR5 as a coreceptor for entry. Chen Z, et al. **J Virol** 1997 Apr;71(4):2705–14

Two distinct CCR5 domains can mediate coreceptor usage by human immunodeficiency virus type 1. Doranz BJ, et al. **J Virol** 1997 Sep;71(9):6305–14

Envelope glycoproteins from human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus can use human CCR5 as a coreceptor for viral entry and make direct CD4–dependent interactions with this chemokine receptor. Hill CM, et al. **J Virol** 1997 Sep;71(9):6296–304

Simian immunodeficiency virus variants with differential T–cell and macrophage tropism use CCR5 and an unidentified cofactor expressed in CEMx174 cells for efficient entry. Kirchhoff F, et al. **J Virol** 1997 Sep; 71(9):6509–16

Multiple extracellular domains of CCR–5 contribute to human immunodeficiency virus type 1 entry and fusion. Picard L, et al. **J Virol** 1997 Jul;71(7):5003–11

Chemokine receptor CCR5 genotype influences the kinetics

of human immunodeficiency virus type 1 infection in human PBL-SCID mice. Picchio GR, et al. **J Virol** 1997 Sep;71(9):7124-7

Primary, syncytium-inducing human immunodeficiency virus type 1 isolates are dual-tropic and most can use either Lestr or CCR5 as coreceptors for virus entry. Simmons G, et al. **J Virol** 1996 Dec;70(12):8355-60

Selective employment of chemokine receptors as human immunodeficiency virus type 1 coreceptors determined by individual amino acids within the envelope V3 loop. Speck RF, et al. **J Virol** 1997 Sep;71(9):7136-9

2-Chlorodeoxyadenosine therapy for idiopathic hypereosinophilic syndrome [letter] Ueno NT, et al. **Leukemia** 1997 Aug;11(8):1386-90

Control of thrombopoietin-induced megakaryocytic differentiation by the mitogen-activated protein kinase pathway. Rouyez MC, et al. **Mol Cell Biol** 1997 Sep; 17(9):4991-5000

The leptin receptor activates janus kinase 2 and signals for proliferation in a factor-dependent cell line. Ghilardi N, et al. **Mol Endocrinol** 1997 Apr;11(4):393-9

Expanding the range of cytokines and cytokine receptors in the brain [news] Dantzer R. **Mol Psychiatry** 1996 May; 1(2):98

Rat LCR1: cloning and cellular distribution of a putative chemokine receptor in brain. Wong ML, et al. **Mol Psychiatry** 1996 May;1(2):133-40

HIV-1--co-receptors binding [letter; comment] [published erratum appears in Nat Med 1997 Aug;3(8):817] Jiang S. **Nat Med** 1997 Apr;3(4):367-8. Comment on: Nat Med 1996 Nov;2(11):1244-7.

A new SIV co-receptor, STRL33 [letter] [see comments] Alkhatib G, et al. **Nature** 1997 Jul 17;388(6639):238. Comment in: Nature 1997 Jul 17;388(6639):230-1.

HIV-1 tropism and co-receptor use [letter] Dittmar MT, et al. **Nature** 1997 Feb 6;385(6616):495-6

CCR3 and CCR5 are co-receptors for HIV-1 infection of microglia. He J, et al. **Nature** 1997 Feb 13;385(6617):645-9

CD4-dependent, antibody-sensitive interactions between HIV-1 and its co-receptor CCR-5 [see comments] Trkola A, et al. **Nature** 1996 Nov 14;384(6605):184-7. Comment in: Nature 1996 Nov 14;384(6605):117-8.

HIV. One on one meets two [news; comment] Wain-Hobson S. **Nature** 1996 Nov 14;384(6605):117-8. Comment on: Nature 1996 Nov 14;384(6605):179-83. Comment on: Nature 1996 Nov 14;384(6605):184-7.

CD4-induced interaction of primary HIV-1 gp120 glycoproteins with the chemokine receptor CCR-5 [see comments] Wu L, et al. **Nature** 1996 Nov 14; 384(6605):179-83. Comment in: Nature 1996 Nov 14;384(6605):117-8.

HIV-1 subtype and second-receptor use [letter] Zhang L, et al. **Nature** 1996 Oct 31;383(6603):768

The HIV coreceptors CXCR4 and CCR5 are differentially expressed and regulated on human T lymphocytes [see comments] Bleul CC, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1925-30. Comment in: Proc Natl Acad Sci U S A 1997 Mar 4;94(5):1615-7.

Identification of ciliary neurotrophic factor (CNTF) residues essential for leukemia inhibitory factor receptor binding and generation of CNTF receptor antagonists. Di Marco A, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9247-52

Multiple extracellular elements of CCR5 and HIV-1 entry: dissociation from response to chemokines. Atchison RE, et al. **Science** 1996 Dec 13;274(5294):1924-6

A broad-spectrum chemokine antagonist encoded by Kaposi's sarcoma-associated herpesvirus. Kledal TN, et al. **Science** 1997 Sep 12;277(5332):1656-9

Coreceptors: implications for HIV pathogenesis and therapy. Moore JP. **Science** 1997 Apr 4;276(5309):51-2 (19 ref.)

Selective expression of the eotaxin receptor CCR3 by human T helper 2 cells. Sallusto F, et al. **Science** 1997 Sep 26; 277(5334):2005-7

AIDS: the process of discovery [letter; comment] Varmus H, et al. **Science** 1997 Jan 10;275(5297):141; discussion 142 . Comment on: Science 1996 Dec 20;274(5295):1988-9.

Chemokines and HIV: a remarkable synergism. Moser B. **Trends Microbiol** 1997 Mar;5(3):88-90 (33 ref.)

HIV-1 coreceptor activity of CCR5 and its inhibition by chemokines: independence from G protein signaling and importance of coreceptor downmodulation. Alkhatib G, et al. **Virology** 1997 Aug 4;234(2):340-8

CD4-independent infection by HIV-2 (ROD/B): use of the 7-transmembrane receptors CXCR-4, CCR-3, and V28 for entry. Reeves JD, et al. **Virology** 1997 Apr 28;231(1):130-4

Indicator cell lines for detection of primary strains of human and simian immunodeficiency viruses. Vodicka MA, et al. **Virology** 1997 Jun 23;233(1):193-8

PHYSIOLOGY

Regulation of HIV-1 infection by chemokine receptors. Dikić I. **Acta Med Croatica** 1996;50(4-5):163-8

Soluble cytokine receptors: their roles in immunoregulation, disease, and therapy. Fernandez-Botran R, et al. **Adv Immunol** 1996;63:269-336 (325 ref.)

Chemokine receptors and HIV-2 [letter] Heredia A, et al. **AIDS** 1997 Jul 15;11(9):1198-9

HIV type 1 coreceptors, neutralization serotypes, and vaccine development. Moore J, et al. **AIDS Res Hum Retroviruses** 1997 Jun 10;13(9):733-6 (35 ref.)

Cytokine receptor signal transduction and the control of hematopoietic cell development. Watowich SS, et al. **Ann Rev Cell Dev Biol** 1996;12:91-128 (280 ref.)

The interleukin-2 receptor gamma chain: its role in the multiple cytokine receptor complexes and T cell development in XSCID. Sugamura K, et al. **Annu Rev Immunol** 1996;14:179-205 (120 ref.)

Multiple use of a signal transduction pathway in tumor cell invasion. Tímár J, et al. **Anticancer Res** 1996 Nov-Dec; 16(6A):3299-306

Cytokine receptor signal transduction through Jak tyrosine kinases and Stat transcription factors. Silvennoinen O, et al. **APMIS** 1997 Jul;105(7):497-509 (67 ref.)

Evidence for two putative receptors mediating chemotactic activity of cytokine-induced neutrophil chemoattractants (CINCs) for rat neutrophils. al-Mokdad M, et al. **Biol Pharm Bull** 1996 Jun;19(6):879-81

Inhibition of immature erythroid progenitor cell proliferation by macrophage inflammatory protein-1alpha by interacting mainly with a C-C chemokine receptor, CCR1. Su S, et al. **Blood** 1997 Jul 15;90(2):605-11

Oncostatin M-specific receptor mediates inhibition of breast cancer cell growth and down-regulation of the c-myc proto-oncogene. Liu J, et al. **Cell Growth Differ** 1997 Jun; 8(6):667-76

Chemokine receptors - the new frontier for AIDS research. Wells TN, et al. **Chem Biol** 1996 Aug;3(8):603-9 (35 ref.)

Roles of the JAK-STAT system in signal transduction via cytokine receptors. Watanabe S, et al. **Curr Opin Genet Dev** 1996 Oct;6(5):587-96 (54 ref.)

Regulation of signal transducer, GP130 and the LIF receptor in acute inflammation in vivo. Geisterfer M, et al. **Cytokine** 1996 Apr;8(4):283-7

Trans-signaling by cytokine and growth factor receptors. Castellino AM, et al. **Cytokine Growth Factor Rev** 1996 Dec;7(4):297-302 (56 ref.)

Cardiotrophin-1: a multifunctional cytokine that signals via LIF receptor-gp 130 dependent pathways. Pennica D, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):81-91 (63 ref.)

Chemokine-leukocyte interactions. The voodoo that they do so well. Taub DD. **Cytokine Growth Factor Rev** 1996 Dec; 7(4):355-76 (162 ref.)

Tyrosine-599 of the c-Mpl receptor is required for Shc phosphorylation and the induction of cellular differentiation. Alexander WS, et al. **EMBO J** 1996 Dec 2;15(23):6531-40

Selective upregulation of cytokine receptor subchain and their intracellular signalling molecules after peripheral nerve injury. Yao GL, et al. **Eur J Neurosci** 1997 May; 9(5):1047-54

Functional analysis of the cytoplasmic domain of the human Mpl receptor for tyrosine-phosphorylation of the signaling molecules, proliferation and differentiation. Morita H, et al. **FEBS Lett** 1996 Oct 21;395(2-3):228-34

Pro-thymocyte expansion by c-kit and the common cytokine receptor gamma chain is essential for repertoire formation. Rodewald HR, et al. **Immunity** 1997 Mar;6(3):265-72

Chemokine receptors as fusion cofactors for human immunodeficiency virus type 1 (HIV-1). Doranz BJ, et al. **Immunol Res** 1997 Feb;16(1):15-28 (79 ref.)

Chemokine receptors and chemokine-inducing molecules of lymphotropic herpesviruses [letter] Meinl E, et al. **Immunol Today** 1996 Apr;17(4):199

Soluble receptors for cytokines and growth factors. Müller-Newen G, et al. **Int Arch Allergy Immunol** 1996 Oct;111(2):99-106 (58 ref.)

Determinants of HIV-1 coreceptor function on CC chemokine receptor 3. Importance of both extracellular and transmembrane/cytoplasmic regions. Alkhatib G, et al. **J Biol Chem** 1997 Aug 15;272(33):20420-6

Dissociation of chemotaxis from agonist-induced receptor internalization in a lymphocyte cell line transfected with CCR2B. Evidence that directed migration does not require rapid modulation of signaling at the receptor level. Arai H, et al. **J Biol Chem** 1997 Oct 3;272(40):25037-42

Identification of CCR6, the specific receptor for a novel lymphocyte-directed CC chemokine LARC. Baba M, et al. **J Biol Chem** 1997 Jun 6;272(23):14893-8

Box 3-independent signaling mechanisms are involved in leukemia inhibitory factor receptor alpha- and gp130-mediated stimulation of mitogen-activated protein kinase. Evidence for participation of multiple signaling pathways which converge at Ras. Schiemann WP, et al. **J Biol Chem** 1997 Jun 27;272(26):16631-6

The leptin receptor. Tartaglia LA. **J Biol Chem** 1997 Mar 7;272(10):6093-6 (59 ref.)

Roles of gp130 signaling pathways in cardiac myocytes: recent advances and implications for cardiovascular disease. Yamauchi-Takihara K, et al. **J Card Fail** 1996 Dec; 2(4 Suppl):S63-8 (44 ref.)

The amino-terminal domain of the CCR2 chemokine receptor acts as coreceptor for HIV-1 infection. Frade JMR, et al. **J Clin Invest** 1997 Aug 1;100(3):497-502

High expression of the chemokine receptor CCR3 in human blood basophils. Role in activation by eotaxin, MCP-4, and other chemokines. Uguccioni M, et al. **J Clin Invest** 1997 Sep 1;100(5):1137-43

Distinct roles for signals relayed through the common cytokine receptor gamma chain and interleukin 7 receptor alpha chain in natural T cell development. Boesteanu A, et al. **J Exp Med** 1997 Jul 21;186(2):331-6

Eotaxin-2, a novel CC chemokine that is selective for the chemokine receptor CCR3, and acts like eotaxin on human eosinophil and basophil leukocytes. Forssmann U, et al. **J Exp Med** 1997 Jun 16;185(12):2171-6

Impaired host defense, hematopoiesis, granulomatous inflammation and type 1-type 2 cytokine balance in mice lacking CC chemokine receptor 1. Gao JL, et al. **J Exp Med** 1997 Jun 2;185(11):1959-68

STRL33, A novel chemokine receptor-like protein, functions as a fusion cofactor for both macrophage-tropic and T cell line-tropic HIV-1. Liao F, et al. **J Exp Med** 1997 Jun 2;185(11):2015-23

Chemokine receptors and T cell chemotaxis [comment] Mackay CR. **J Exp Med** 1996 Sep 1;184(3):799-802. Comment on: J Exp Med 1996 Sep 1;184(3):963-9. Comment on: J Exp Med 1996 Sep 1;184(3):1101-9.

The common cytokine receptor gamma chain plays an essential role in regulating lymphoid homeostasis. Nakajima H, et al. **J Exp Med** 1997 Jan 20;185(2):189-95

Phosphorylation by a G protein-coupled kinase inhibits signaling and promotes internalization of the monocyte chemoattractant protein-1 receptor. Critical role of carboxyl-tail serines/threonines in receptor function. Franci C, et al. **J Immunol** 1996 Dec 15;157(12):5606-12

Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3. Garcia-Zepeda EA, et al. **J Immunol** 1996 Dec 15;157(12):5613-26

Disruption of cytokine signaling in lymphoid development: unique contributions of the common cytokine gamma chain and the Jak3 kinase. Eynon EE, et al. **J Interferon Cytokine Res** 1996 Sep;16(9):677-84 (32 ref.)

Chemokine receptors and HIV. Broder CC, et al. **J Leukoc Biol** 1997 Jul;62(1):20-9 (84 ref.)

Signaling by IL-2 and related cytokines: JAKs, STATs, and relationship to immunodeficiency. Johnston JA, et al. **J Leukoc Biol** 1996 Oct;60(4):441-52 (153 ref.)

Monocyte chemoattractant protein-1: receptor interactions and calcium signaling mechanisms. Needham M, et al. **J Leukoc Biol** 1996 Dec;60(6):793-803

Coreceptor usage of primary human immunodeficiency virus type 1 isolates varies according to biological phenotype. Björndal A, et al. **J Virol** 1997 Oct;71(10):7478-87

Role of CCR5 in infection of primary macrophages and lymphocytes by macrophage-tropic strains of human immunodeficiency virus: resistance to patient-derived and prototype isolates resulting from the delta ccr5 mutation. Rana S, et al. **J Virol** 1997 Apr;71(4):3219-27

Cytokine regulation: an overview. Miyajima A. **Leukemia** 1997 Apr;11 Suppl 3:413-5 (5 ref.)

Eotaxin triggers eosinophil-selective chemotaxis and calcium flux via a distinct receptor and induces pulmonary eosinophilia in the presence of interleukin 5 in mice. Rothenberg ME, et al. **Mol Med** 1996 May;2(3):334-48

Immunodeficiency viruses. Spoilt for choice of co-receptors [news; comment] Clapham PR, et al. **Nature** 1997 Jul 17; 388(6639):230-1. Comment on: Nature 1997 Jul 17;388(6639):238. Comment on: Nature 1997 Jul 17;388(6639):296-300.

Host factors and the pathogenesis of HIV-induced disease. Fauci AS. **Nature** 1996 Dec 12;384(6609):529-34 (113 ref.)

Chemokines and their receptors in leukocyte trafficking and renal inflammation [editorial] Cockwell P, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1307-10

Neuropsychiatric aspects of cytokines research: an overview. Malek-Ahmadi P. **Neurosci Biobehav Rev** 1996 Autumn; 20(3):359-65 (89 ref.)

Expression and function of members of the cytokine receptor superfamily on breast cancer cells. Douglas AM, et al. **Oncogene** 1997 Feb 13;14(6):661-9

Molecular uncoupling of C-C chemokine receptor 5-induced chemotaxis and signal transduction from HIV-1 coreceptor activity. Gosling J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5061-6

Cytokines which signal through the LIF receptor and their actions in the nervous system. Murphy M, et al. **Prog Neurobiol** 1997 Aug;52(5):355-78 (196 ref.)

Template-based docking of a prolactin receptor proline-rich motif octapeptide to FKBP12: implications for cytokine receptor signaling. Soman KV, et al. **Protein Sci** 1997 May; 6(5):999-1008

Leukemia inhibitory factor induces a hypertrophic response mediated by gp130 in murine cardiac myocytes. Matsui H, et al. **Res Commun Mol Pathol Pharmacol** 1996 Aug; 93(2):149-62

New hope in HIV disease [news] [see comments] Balter M. **Science** 1996 Dec 20;274(5295):1988-9. Comment in: Science 1997 Jan 10;275(5297):141; discussion 142.

Does a common virus give HIV a helping hand? [news; comment] Balter M. **Science** 1997 Jun 20;276(5320):1794. Comment on: Science 1997 Jun 20;276(5320):1874-8.

Breakthroughs of the year, 1996 [editorial] Bloom FE. **Science** 1996 Dec 20;274(5295):1987

AIDS: the process of discovery [letter; comment] Gallo R. **Science** 1997 Jan 10;275(5297):141; discussion 142. Comment on: Science 1996 Dec 20;274(5295):1988-9.

Identification of a chemokine receptor encoded by human cytomegalovirus as a cofactor for HIV-1 entry [see comments] Pleskoff O, et al. **Science** 1997 Jun 20; 276(5320):1874-8. Comment in: Science 1997 Jun

20;276(5320):1794.
Unwelcomed guests with master keys: how HIV uses chemokine receptors for cellular entry. Doms RW, et al. **Virology** 1997 Sep 1;235(2):179–90 (108 ref.)
[Mechanism of HIV infection (news)] **Schweiz Rundsch Med Prax** 1997 Apr 23;86(17):692, 699 **(Ger)**
[Cytokine network in the brain] Sawada M. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):504–11 (49 ref.) **(Jpn)**
[Biology of thrombopoietin and its receptors] Robak T. **Postepy Hig Med Dosw** 1996;50(6):649–63 (57 ref.) (Eng. Abstr.) **(Pol)**
[Cytokine receptors: functional asymmetry of subunits in the receptor complex] Nesmeianov VA. **Bioorg Khim** 1997 Jan; 23(1):78–80 **(Rus)**

RECEPTORS, CYTOPLASMIC AND NUCLEAR

see related
TRANSCRIPTION FACTORS
Structure and function of inositol 1,4,5–trisphosphate receptor. Yoshida Y, et al. **Jpn J Pharmacol** 1997 Jun; 74(2):125–37 (119 ref.)
Nuclear receptor coactivators and corepressors. Horwitz KB, et al. **Mol Endocrinol** 1996 Oct;10(10):1167–77 (87 ref.)
[Adipocyte differentiation and nuclear receptor] Hirose T, et al. **Nippon Rinsho** 1997 Jun;55(6):1596–604 (30 ref.) (Eng. Abstr.) **(Jpn)**
[Inositol 1,4,5–trisphosphate receptor (IP3 receptor)] Mikoshiba K. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):224–9 (33 ref.) **(Jpn)**
[Signal transduction of steroids and vitamins mediated by nuclear receptor proteins] Umesono K. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1265–72 (37 ref.) **(Jpn)**

AGONISTS
Up–regulation of UCP–2 gene expression by PPAR agonists in preadipose and adipose cells. Aubert J, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):606–11
Rapid kinetic measurements of 45Ca2+ mobilization reveal that Ins(2,4,5)P3 is a partial agonist at hepatic InsP3 receptors. Marchant JS, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):573–6
IP3 receptor–ligand. 2: Synthesis and molecular mechanics calculation of adenophostin A. Hotoda H, et al. **Nucleic Acids Symp Ser** 1995;(34):163–4

ANALYSIS
Characterization of inositol hexakisphosphate (InsP6)–mediated priming in human neutrophils: lack of extracellular [3H]–InsP6 receptors. Kitchen E, et al. **Br J Pharmacol** 1996 Mar;117(5):979–85
Localization of the Rev–ErbA orphan receptors in the brain. Kainu T, et al. **Brain Res** 1996 Dec 16;743(1–2):315–9
Nuclear membrane dynamics and reassembly in living cells: targeting of an inner nuclear membrane protein in interphase and mitosis. Ellenberg J, et al. **J Cell Biol** 1997 Sep 22;138(6):1193–206
The localisation and characterisation of insulin–like growth factor–I receptors and the investigation of melatonin receptors on the hair follicles of seasonal and non–seasonal fibre–producing goats. Dicks P, et al. **J Endocrinol** 1996 Oct;151(1):55–63
Co–distribution of calmodulin–dependent protein kinase II and inositol trisphosphate receptors in an apical domain of gastrointestinal mucosal cells. Matovcik LM, et al. **J Histochem Cytochem** 1996 Nov;44(11):1243–50
Subtype–specific expression patterns of inositol 1,4,5–trisphosphate receptors in rat airway epithelial cells. Sugiyama T, et al. **J Histochem Cytochem** 1996 Nov; 44(11):1237–42
Intracellular localization of the human receptor for the globular domains of C1q. van den Berg RH, et al. **J Immunol** 1997 Apr 15;158(8):3909–16
Comparative distribution of NURR1 and NUR77 nuclear receptors in the mouse central nervous system. Saucedo–Cardenas O, et al. **J Mol Neurosci** 1996 Spring; 7(1):51–63
Comparison of type 2 inositol 1,4,5–trisphosphate receptor distribution and subcellular Ca2+ release sites that support Ca2+ waves in cultured astrocytes. Sheppard CA, et al. **J Neurochem** 1997 Jun;68(6):2317–27
Melatonin receptors in red deer fetuses (Cervus elaphus). Williams LM, et al. **J Reprod Fertil** 1997 May;110(1):145–51
Inositol 1,4,5–trisphosphate receptors in endocrine cells: localization and association in hetero– and homotetramers. Nucifora FC Jr, et al. **Mol Biol Cell** 1996 Jun;7(6):949–60
Yeast hormone response element assays detect and characterize GRIP1 coactivator–dependent activation of transcription by thyroid and retinoid nuclear receptors. Walfish PG, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3697–702

ANTAGONISTS & INHIBITORS
Inhibition of hepatic inositol 1,4,5–trisphosphate receptor function by ethanol and other short chain alcohols. Renard–Rooney DC, et al. **Cell Calcium** 1997 May; 21(5):387–98
Cloning and identification of rat deoxyuridine triphosphatase as an inhibitor of peroxisome proliferator–activated receptor alpha. Chu R, et al. **J Biol Chem** 1996 Nov 1; 271(44):27670–6
Melatonin receptor antagonists that differentiate between the human Mel1a and Mel1b recombinant subtypes are used to assess the pharmacological profile of the rabbit retina ML1 presynaptic heteroreceptor. Dubocovich ML, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):365–75
Inhibition of the inositol triphosphate receptor increases endotoxin–mediated nitric oxide synthesis in macrophages. Schroeder RA, et al. **Transplant Proc** 1997 Sep; 29(6):2569–70

BIOSYNTHESIS
The peroxisome proliferator–activated receptor alpha (PPAR alpha) regulates the plasma thiobarbituric acid–reactive substance (TBARS) level. Inoue I, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):606–10
The thiazolidinedione insulin sensitiser, BRL 49653, increases the expression of PPAR–gamma and aP2 in adipose tissue of high–fat–fed rats. Pearson SL, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):752–7
Isolation of a new peroxisome–deficient CHO cell mutant defective in peroxisome targeting signal–1 receptor. Tsukamoto T, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):402–6
Differential expression of PPAR gamma1 and gamma2 isoforms in human adipose tissue. Yanase T, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):320–4
Developmental and nutritional changes of ob and PPAR gamma 2 gene expression in rat white adipose tissue. Rousseau V, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):451–6
Modulation of muscle creatine kinase promoter activity by the inducible orphan nuclear receptor TIS1. Yang WL, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):281–7
The characterisation of expression of three murine peroxisome proliferator activated receptor genes. Bell AR, et al. **Biochem Soc Trans** 1996 May;24(2):166S
Localization of a 42–kDa inositol 1,3,4,5–tetrakisphosphate receptor protein in retina and change in expression after optic nerve injury. Kreutz MR, et al. **Brain Res Mol Brain Res** 1997 May;45(2):283–93
Developmental expression of the inositol 1,4,5–trisphosphate receptor and structural changes in the endoplasmic reticulum during oogenesis and meiotic maturation of Xenopus laevis. Kume S, et al. **Dev Biol** 1997 Feb 15; 182(2):228–39
Redistribution and increase in cortical inositol 1,4,5–trisphosphate receptors after meiotic maturation of the mouse oocyte. Mehlmann LM, et al. **Dev Biol** 1996 Dec 15;180(2):489–98
Characterization of germ cell–specific expression of the orphan nuclear receptor, germ cell nuclear factor. Katz D, et al. **Endocrinology** 1997 Oct;138(10):4364–72
Transforming growth factor–beta1 inhibits type I inositol 1,4,5–trisphosphate receptor expression and enhances its phosphorylation in mesangial cells. Sharma K, et al. **J Biol Chem** 1997 Jun 6;272(23):14617–23
Peroxisome proliferator–activated receptor gene expression in human tissues. Effects of obesity, weight loss, and regulation by insulin and glucocorticoids. Vidal–Puig AJ, et al. **J Clin Invest** 1997 May 15;99(10):2416–22
Expression of the estrogen–related receptor 1 (ERR–1) orphan receptor during mouse development. Bonnelye E, et al. **Mech Dev** 1997 Jul;65(1–2):71–85
Are nuclear receptors involved in pituitary responsiveness to melatonin? Hazlerigg DG, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):53–9
Chronic ethanol on mRNA levels of IP3R1, IP3 3–kinase and mGluR1 in mouse Purkinje neurons. Simonyi A, et al. **Neuroreport** 1996 Sep 2;7(13):2115–8
The Mel1a melatonin receptor gene is expressed in human suprachiasmatic nuclei. Weaver DR, et al. **Neuroreport** 1996 Dec 20;8(1):109–12
Frequent association of alternative splicing of NER, a nuclear hormone receptor gene in cancer tissues. Saito H, et al. **Oncogene** 1997 Feb 6;14(5):617–21
SMRT isoforms mediate repression and anti–repression of nuclear receptor heterodimers. Chen JD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7567–71
Expression, purification, and functional analysis of the DNA binding domain of the nuclear receptor Rev–erb beta. Terenzi H, et al. **Protein Expr Purif** 1996 Nov;8(3):313–8

CHEMISTRY
The visualization of peroxisomal proteins containing a C–terminal targeting sequence on western blot by using the biotinylated PTS1–receptor [published erratum appears in Anal Biochem 1997 Mar 15;246(2):270] Fransen M, et al. **Anal Biochem** 1996 Nov 1;242(1):26–30
Structure and function of inositol 1,4,5–trisphosphate receptor. Mikoshiba K, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:178–97 (65 ref.)
Conformational changes in plant Ins(1,4,5)P3 receptor on interaction with different myo–inositol trisphosphates and its effect on Ca2+ release from microsomal fraction and liposomes. Dasgupta S, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):355–60
Inhibition of hepatic inositol 1,4,5–trisphosphate receptor function by ethanol and other short chain alcohols. Renard–Rooney DC, et al. **Cell Calcium** 1997 May; 21(5):387–98
Transcriptional control: how nuclear receptors get turned on. Schwabe JW. **Curr Biol** 1996 Apr 1;6(4):372–4 (13 ref.)
Thiazolidinediones produce a conformational change in peroxisomal proliferator–activated receptor–gamma: binding and activation correlate with antidiabetic actions in db/db mice. Berger J, et al. **Endocrinology** 1996 Oct; 137(10):4189–95
IP3 receptor antagonist heparin uncompetitively inhibits [3H](+)–SKF–10047 binding to sigma receptors. Tsao LI, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):R1–2
Defining the minimal structural requirements for partial agonism at the type I myo–inositol 1,4,5–trisphosphate receptor. Wilcox RA, et al. **FEBS Lett** 1997 Feb 3; 402(2–3):241–5
Ligand–induced peroxisome proliferator–activated receptor alpha conformational change. Dowell P, et al. **J Biol Chem** 1997 Jan 17;272(3):2013–20
Functional domains of the nuclear receptor hepatocyte nuclear factor 4. Hadzopoulou–Cladaras M, et al. **J Biol Chem** 1997 Jan 3;272(1):539–50
NMR spectroscopic studies of the DNA–binding domain of the monomer–binding nuclear orphan receptor, human estrogen related receptor–2. The carboxyl–terminal extension to the zinc–finger region is unstructured in the free form of the protein. Sem DS, et al. **J Biol Chem** 1997 Jul 18;272(29):18038–43
Taxonomy of nuclear receptors and SERPINS by multivariate analysis of amino–acid composition. Ojasoo T, et al. **J Steroid Biochem Mol Biol** 1996 May;58(2):167–81
A nuclear hormone receptor corepressor mediates transcriptional silencing by receptors with distinct repression domains. Zamir I, et al. **Mol Cell Biol** 1996 Oct; 16(10):5458–65
Crystal structure of the NG domain from the signal–recognition particle receptor FtsY. Montoya G, et al. **Nature** 1997 Jan 23;385(6614):365–8
Expression, purification, and functional analysis of the DNA binding domain of the nuclear receptor Rev–erb beta. Terenzi H, et al. **Protein Expr Purif** 1996 Nov;8(3):313–8
Expression, crystallization and preliminary X–ray diffraction study of FtsY, the docking protein of the signal recognition particle of E. coli. Montoya G, et al. **Proteins** 1997 Jun; 28(2):285–8
[The homology of the primary structure of the third cytoplasmic domains in rhodopsin–type receptors and of the cytoplasmic tail in the beta–subunit of the acetylcholine receptor] Shpakov AO. **Tsitologiia** 1996;38(11):1179–90 (Eng. Abstr.) **(Rus)**

CLASSIFICATION
Analogues of diverse structure are unable to differentiate native melatonin receptors in the chicken retina, sheep pars tuberalis and Xenopus melanophores. Pickering H, et al. **Br J Pharmacol** 1996 Sep;119(2):379–87
Orphan nuclear receptors—the first eight years. Enmark E, et al. **Mol Endocrinol** 1996 Nov;10(11):1293–307 (155 ref.)

DEFICIENCY
Recent update on the PPAR alpha–null mouse. Gonzalez FJ. **Biochimie** 1997 Feb–Mar;79(2–3):139–44
T cells deficient in inositol 1,4,5–trisphosphate receptor are resistant to apoptosis. Jayaraman T, et al. **Mol Cell Biol** 1997 Jun;17(6):3005–12
A mouse model for Zellweger syndrome. Baes M, et al. **Nat Genet** 1997 Sep;17(1):49–57

DRUG EFFECTS
Ca2+ differentially regulates the ligand–affinity states of type 1 and type 3 inositol 1,4,5–trisphosphate receptors. Yoneshima H, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):591–6
Guanosine 5'–O–(3–thiotriphosphate) and cations regulate melatonin receptors, and melatonin inhibits cyclic AMP production in the spinal cord. Wan Q, et al. **Biol Signals** 1997 Mar–Apr;6(2):67–76
Analogues of diverse structure are unable to differentiate native melatonin receptors in the chicken retina, sheep pars tuberalis and Xenopus melanophores. Pickering H, et al. **Br J Pharmacol** 1996 Sep;119(2):379–87
The rat galanin–gene promoter: response to members of the nuclear hormone receptor family, phorbol ester and forskolin. Corness JD, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):11–23
Stereoselective effects of chiral clofibric acid analogs on rat peroxisome proliferator–activated receptor alpha (rPPAR alpha) activation and peroxisomal fatty acid beta–oxidation. Rangwala SM, et al. **Chirality** 1997;9(1):37–47
Thiazolidinediones produce a conformational change in peroxisomal proliferator–activated receptor–gamma: binding and activation correlate with antidiabetic actions in db/db mice. Berger J, et al. **Endocrinology** 1996 Oct; 137(10):4189–95
Inactivation of melatonin receptors by protein kinase C in human prostate epithelial cells. Gilad E, et al. **Endocrinology** 1997 Oct;138(10):4255–61
2–[125I]iodo–5–methoxycarbonylamino–N–acetyltryptamine: a selective radioligand for the characterization of melatonin ML2 binding sites. Molinari

EJ, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):159-68

Serotonin and N-acetylserotonin effects on pigment cells of the toad Bufo ictericus: pharmacological characterization of melatonin receptors. Filadelfi AM, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):192-9

Regulation of triglyceride metabolism by PPARs: fibrates and thiazolidinediones have distinct effects. Auwerx J, et al. **J Atheroscler Thromb** 1996;3(2):81-9 (71 ref.)

Brain and pituitary melatonin receptors in male rat during post-natal and pubertal development and the effect of pinealectomy and testosterone manipulation. Zitouni M, et al. **J Neuroendocrinol** 1996 Aug;8(8):571-7

Peroxisome proliferator-activated receptor-gamma activation by thiazolidinediones induces adipogenesis in bone marrow stromal cells. Gimble JM, et al. **Mol Pharmacol** 1996 Nov;50(5):1087-94

Age-related decreases in mRNA for brain nuclear receptors and target genes are reversed by retinoic acid treatment. Enderlin V, et al. **Neurosci Lett** 1997 Jun 27;229(2):125-9

GENETICS

Localization of TEC to 9q22.3-q31 by fluorescence in situ hybridization. Kleinfinger P, et al. **Ann Genet** 1996; 39(4):233-5

Structural requirements of chiral clofibric acid analogs for activation of the rat peroxisome proliferator-activated receptor alpha. Feller DR, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:713-5

Targeted disruption of the peroxisome proliferator-activated receptor alpha gene, PPAR alpha. Lee SS, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:524-9

Chromosomal localization and partial genomic structure of the human peroxisome proliferator activated receptor-gamma (hPPAR gamma) gene. Beamer BA, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):756-9

Retinoic acids differentially regulate NOR-1 and its closely related orphan nuclear receptor genes in breast cancer cell line MCF-7. Maruyama K, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):417-20

A 13-kDa protein with a helix-turn-helix motif is encoded by bacterial operons related to the SRP pathway. Samuelsson T, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):839-43

Isoform diversity of the inositol trisphosphate receptor in cell types of mouse origin. De Smedt H, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):575-83

Developmental and nutritional changes of ob and PPAR gamma 2 gene expression in rat white adipose tissue. Rousseau V, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):451-6

Cloning and functional analysis of a polymorphic variant of the ovine Mel 1a melatonin receptor. Barrett P, et al. **Biochim Biophys Acta** 1997 May 27;1356(3):299-307

cDNA cloning of two closely related forms of human germ cell nuclear factor (GCNF). Kapelle M, et al. **Biochim Biophys Acta** 1997 May 2;1352(1):13-7

An orphan nuclear receptor lacking a zinc-finger DNA-binding domain: interaction with several nuclear receptors. Masuda N, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):27-32

Identification of a gene in the euryarchaeal Thermococcus species AN1 encoding a protein homologous to the alpha subunit of the eukaryal signal recognition particle (SRP) receptor. Ronimus RS, et al. **Biochim Biophys Acta** 1997 Mar 20;1351(1-2):1-8

Characterization of the human germ cell nuclear factor gene. Süsens U, et al. **Biochim Biophys Acta** 1996 Dec 11; 1309(3):179-82

Identification and characterisation of 2-[125I]iodomelatonin binding and Mel1a melatonin receptor expression in the human fetal leptomeninges. Drew JE, et al. **Brain Res** 1997 Jun 27;761(1):87-92

Distributional characteristics of the mRNA for retinoid Z receptor beta (RZR beta), a putative nuclear melatonin receptor, in the rat brain and spinal cord. Park HT, et al. **Brain Res** 1997 Feb 7;747(2):332-7

Orphan nuclear receptor ROR alpha gene: isoform-specific spatiotemporal expression during postnatal development of brain. Sashihara S, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):109-17

Inositol 1,4,5-trisphosphate receptor expression in mammalian olfactory tissue. Smutzer G, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):347-54

The Caenorhabditis elegans orphan nuclear hormone receptor gene nhr-2 functions in early embryonic development. Sluder AE, et al. **Dev Biol** 1997 Apr 15; 184(2):303-19

Tissue distribution and quantification of the expression of mRNAs of peroxisome proliferator-activated receptors and liver X receptor-alpha in humans: no alteration in adipose tissue of obese and NIDDM patients. Auboeuf D, et al. **Diabetes** 1997 Aug;48(8):1319-27

PPAR-gamma gene expression is elevated in skeletal muscle of obese and type II diabetic subjects. Park KS, et al. **Diabetes** 1997 Jul;46(7):1230-4

PPARalpha and PPARgamma activators direct a distinct tissue-specific transcriptional response via a PPRE in the lipoprotein lipase gene. Schoonjans K, et al. **EMBO J** 1996 Oct 1;15(19):5336-48

Characterization of germ cell-specific expression of the orphan nuclear receptor, germ cell nuclear factor. Katz D, et al. **Endocrinology** 1997 Oct;138(10):4364-72

Peroxisome proliferator-activated receptor gamma1 expression is induced during cyclic adenosine monophosphate-stimulated differentiation of alveolar type II pneumonocytes. Michael LF, et al. **Endocrinology** 1997 Sep;138(9):3695-703

Structure, characterization, and expression of the gene encoding the mouse Mel1a melatonin receptor [published erratum appears in Endocrinology 1997 Jun;138(6):2307] Roca AL, et al. **Endocrinology** 1996 Aug;137(8):3469-77

Positive and negative thymic selection in T cell receptor-transgenic mice correlate with Nur77 mRNA expression. Xue Y, et al. **Eur J Immunol** 1997 Aug; 27(8):2048-56

Regional variation in expression of calbindin and inositol 1,4,5-trisphosphate receptor type 1 mRNAs in the cerebellum of the staggerer mutant mouse. Nakagawa S, et al. **Eur J Neurosci** 1996 Jul;8(7):1401-7

Role of the peroxisome proliferator-activated receptor in cytochrome P450 4A gene regulation. Johnson EF, et al. **FASEB J** 1996 Sep;10(11):1241-8 (67 ref.)

Expression of the Mel1a-melatonin receptor mRNA in T and B subsets of lymphocytes from rat thymus and spleen. Pozo D, et al. **FASEB J** 1997 May;11(6):466-73

TNF-alpha downregulates the peroxisome proliferator activated receptor-alpha and the mRNAs encoding peroxisomal proteins in rat liver. Beier K, et al. **FEBS Lett** 1997 Jul 28;412(2):385-7

cDNA cloning of porcine p42IP4, a membrane-associated and cytosolic 42 kDa inositol(1,3,4,5)tetrakisphosphate receptor from pig brain with similarly high affinity for phosphatidylinositol (3,4,5)P3. Stricker R, et al. **FEBS Lett** 1997 Mar 24;405(2):229-36

A putative signal recognition particle receptor alpha subunit (SR alpha) homologue is expressed in the hyperthermophilic crenarchaeon Sulfolobus acidocaldarius. Moll R, et al. **FEMS Microbiol Lett** 1996 Mar 15; 137(1):51-6

Cloning of a cDNA encoding the murine orphan receptor RZR/ROR gamma and characterization of its response element. Medvedev A, et al. **Gene** 1996 Nov 28; 181(1-2):199-206

Transcriptional regulation of a Purkinje cell-specific gene through a functional interaction between ROR alpha and RAR. Matsui T. **Genes Cells** 1997 Apr;2(4):263-72

The Drosophila Eip78C gene is not vital but has a role in regulating chromosome puffs. Russell SR, et al. **Genetics** 1996 Sep;144(1):159-70

Organization, sequence, chromosomal localization, and promoter identification of the mouse orphan nuclear receptor Nurr1 gene. Castillo SO, et al. **Genomics** 1997 Apr 15;41(2):250-7

The structural integrity of ROR alpha isoforms is mutated in staggerer mice: cerebellar coexpression of ROR alpha1 and ROR alpha4. Matysiak-Scholze U, et al. **Genomics** 1997 Jul 1;43(1):78-84

Chromosomal assignment of human nuclear envelope protein genes LMNA, LMNB1, and LBR by fluorescence in situ hybridization. Wydner KL, et al. **Genomics** 1996 Mar 15; 32(3):474-8

Assignment of the human nuclear hormone receptor, NUC1 (PPARD), to chromosome 6p21.1-p21.2. Yoshikawa T, et al. **Genomics** 1996 Aug 1;35(3):637-8

cDNA cloning of nuclear localization signal binding protein NBP60, a rat homologue of lamin B receptor, and identification of binding sites of human lamin B receptor for nuclear localization signals and chromatin. Kawahire S, et al. **J Biochem (Tokyo)** 1997 May;121(5):881-9

The organization, promoter analysis, and expression of the human PPARgamma gene. Fajas L, et al. **J Biol Chem** 1997 Jul 25;272(30):18779-89

Cloning and characterization of the type I inositol 1,4,5-trisphosphate receptor gene promoter. Regulation by 17beta-estradiol in osteoblasts. Kirkwood KL, et al. **J Biol Chem** 1997 Sep 5;272(36):22425-31

Inositol trisphosphate receptor gene expression and hormonal regulation in osteoblast-like cell lines and primary osteoblastic cell cultures. Kirkwood KL, et al. **J Bone Miner Res** 1996 Dec;11(12):1889-96

Multiple PEX genes are required for proper subcellular distribution and stability of Pex5p, the PTS1 receptor: evidence that PTS1 protein import is mediated by a cycling receptor. Dodt G, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1763-74

Transportin-mediated nuclear import of heterogeneous nuclear RNP proteins. Siomi MC, et al. **J Cell Biol** 1997 Sep 22;138(6):1181-92

Regional and age-related differences in mRNA composition of intracellular Ca(2+)-release channels of rat cardiac myocytes. Gorza L, et al. **J Mol Cell Cardiol** 1997 Mar; 29(3):1023-36

Cloning of the human orphan receptor germ cell nuclear factor/retinoid receptor-related testis-associated receptor and its differential regulation during embryonal carcinoma cell differentiation. Lei W, et al. **J Mol Endocrinol** 1997 Apr;18(2):167-76

Molecular cloning and brain localization of HZF-2 alpha, a new member of the Rev-erb subfamily of orphan nuclear receptors. Peña-de-Ortiz S, et al. **J Neurobiol** 1997 Mar; 32(3):341-58

Functional expression of the type 1 inositol 1,4,5-trisphosphate receptor promoter-lacZ fusion genes in transgenic mice. Furutama D, et al. **J Neurochem** 1996 May;66(5):1793-801

Demonstration of an E-box and its CNS-related binding factors for transcriptional regulation of the mouse type 1 inositol 1,4,5-trisphosphate receptor gene. Konishi Y, et al. **J Neurochem** 1997 Aug;69(2):476-84

A molecular perspective of the genetic relationships of G-protein coupled melatonin receptor subtypes. Shiu SY, et al. **J Pineal Res** 1996 May;20(4):198-204

Mechanical agitation induces gene expression of NOR-1 and its closely related orphan nuclear receptors in leukemic cell lines. Bandoh S, et al. **Leukemia** 1997 Sep;11(9):1453-8

Mouse orphan nuclear receptor Rev-erb beta sequences are localized on chromosomes 19 and 14. Cassia R, et al. **Mamm Genome** 1996 Mar;7(3):243

Genetic mapping of gene encoding the farnesoid receptor, Fxr, to mouse Chromosome 10. Kozak CA, et al. **Mamm Genome** 1996 Feb;7(2):164-5

Mapping of the melatonin receptor 1a (MTNR1A) gene in pigs, sheep, and cattle. Messer LA, et al. **Mamm Genome** 1997 May;8(5):368-70

Expression of the estrogen-related receptor 1 (ERR-1) orphan receptor during mouse development. Bonnelye E, et al. **Mech Dev** 1997 Jul;65(1-2):71-85

xGCNF, a nuclear orphan receptor is expressed during neurulation in Xenopus laevis. Joos TO, et al. **Mech Dev** 1996 Nov;60(1):45-57

Targeted disruption of specific cytochromes P450 and xenobiotic receptor genes. Fernandez-Salguero PM, et al. **Methods Enzymol** 1996;272:412-30

GRIP1, a transcriptional coactivator for the AF-2 transactivation domain of steroid, thyroid, retinoid, and vitamin D receptors. Hong H, et al. **Mol Cell Biol** 1997 May;17(5):2735-44

Antagonism between Nur77 and glucocorticoid receptor for control of transcription. Philips A, et al. **Mol Cell Biol** 1997 Oct;17(10):5952-9

MCF-7 and T47D human breast cancer cells contain a functional peroxisomal response. Kilgore MW, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):229-35

Regulation of the Mel 1a melatonin receptor mRNA and protein levels in the ovine pars tuberalis: evidence for a cyclic adenosine 3',5'-monophosphate-independent Mel 1a receptor coupling and an autoregulatory mechanism of expression. Barrett P, et al. **Mol Endocrinol** 1996 Jul; 10(7):892-902

The ERR-1 orphan receptor is a transcriptional activator expressed during bone development. Bonnelye E, et al. **Mol Endocrinol** 1997 Jun;11(7):905-16

Novel isoforms of Mel1c melatonin receptors modulating intracellular cyclic guanosine 3',5'-monophosphate levels. Jockers R, et al. **Mol Endocrinol** 1997 Jul;11(8):1070-81

RIP 140 enhances nuclear receptor-dependent transcription in vivo in yeast. Joyeux A, et al. **Mol Endocrinol** 1997 Feb; 11(2):193-202

Nature's knockout: the Mel1b receptor is not necessary for reproductive and circadian responses to melatonin in Siberian hamsters. Weaver DR, et al. **Mol Endocrinol** 1996 Nov;10(11):1478-87

Negative regulation of peroxisome proliferator-activated receptor-gamma gene expression contributes to the antiadipogenic effects of tumor necrosis factor-alpha. Zhang B, et al. **Mol Endocrinol** 1996 Nov;10(11):1457-66

A mouse model for Zellweger syndrome. Baes M, et al. **Nat Genet** 1997 Sep;17(1):49-57

Human PEX7 encodes the peroxisomal PTS2 receptor and is responsible for rhizomelic chondrodysplasia punctata. Braverman N, et al. **Nat Genet** 1997 Apr;15(4):369-76

Rhizomelic chondrodysplasia punctata is a peroxisomal protein targeting disease caused by a non-functional PTS2 receptor. Motley AM, et al. **Nat Genet** 1997 Apr; 15(4):377-80

Rhizomelic chondrodysplasia punctata is caused by deficiency of human PEX7, a homologue of the yeast PTS2 receptor. Purdue PE, et al. **Nat Genet** 1997 Apr;15(4):381-4

PEX genes on the rise [news] Subramani S. **Nat Genet** 1997 Apr;15(4):331-3

Molecular dissection of two distinct actions of melatonin on the suprachiasmatic circadian clock. Liu C, et al. **Neuron** 1997 Jul;19(1):91-102

The Mel1a melatonin receptor gene is expressed in human suprachiasmatic nuclei. Weaver DR, et al. **Neuroreport** 1996 Dec 20;8(1):109-12

Developmental expression of 'RZR beta, a putative nuclear-melatonin receptor 'mRNA in the suprachiasmatic nucleus of the rat. Park HT, et al. **Neurosci Lett** 1996 Oct 11;217(1):17-20

The Nuclear Receptor Resource Project. Martinez E, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):163-5

Ligand binding was acquired during evolution of nuclear receptors. Escriva H, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6803-8

Coordination of Drosophila metamorphosis by two ecdysone-induced nuclear receptors. White KP, et al. **Science** 1997 Apr 4;276(5309):114-7

METABOLISM

Expression of inositol 1,4,5-trisphosphate receptors changes the Ca2+ signal of Xenopus oocytes. DeLisle S, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1255-61

Ins(1,4,5)P3 receptors in cerebral arteries: changes with development and high-altitude hypoxia. Zhou L, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1954-9

Further characterization of the human peroxisomal

C-terminal targeting signal protein import receptor. Fransen M, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:672-3

Context dependency of the PTS1 motif in human alanine: glyoxylate aminotransferase 1. Oatey PB, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:652-3

Peb1p (Pas7p) is an intra-peroxisomal receptor for the N-terminal, type 2, peroxisomal targeting signal of thiolase. Zhang JW, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:654-5

The role of the hsp90-based chaperone system in signal transduction by nuclear receptors and receptors signaling via MAP kinase. Pratt WB. **Annu Rev Pharmacol Toxicol** 1997;37:297-326 (183 ref.)

Transcriptional control of triglyceride metabolism: fibrates and fatty acids change the expression of the LPL and apo C-III genes by activating the nuclear receptor PPAR. Auwerx J, et al. **Atherosclerosis** 1996 Jul;124 Suppl:S29-37 (59 ref.)

Melatonin receptors in the mammalian suprachiasmatic nucleus. Dubocovich ML, et al. **Behav Brain Res** 1996; 73(1-2):141-7 (79 ref.)

Inhibitors of preadipocyte differentiation induce COUP-TF binding to a PPAR/RXR binding sequence. Brodie AE, et al. **Biochem Biophys Res Commun** 1996 Nov 21; 228(3):655-61

DNA binding preferences of PPAR alpha/RXR alpha heterodimers. Castelein H, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):91-5

Transcriptional regulation by competition between ELP isoforms and nuclear receptors. Kotomura N, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):407-12

PPAR alpha mediates peroxisome proliferator-induced transcriptional repression of nonperoxisomal gene expression in mouse. Motojima K, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):155-8

The metastasis suppressor candidate nucleotide diphosphate kinase NM23 specifically interacts with members of the ROR/RZR nuclear orphan receptor subfamily. Paravicini G, et al. **Biochem Biophys Res Commun** 1996 Oct 3; 227(1):82-7

Determination of specificity of a high-affinity inositol 1,3,4,5-tetrakisphosphate binding site at a 42 kDa receptor protein, p42IP4: comparison of affinities of all inositoltris-,-tetrakis-, and -pentakisphosphate regioisomers. Stricker R, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):596-604

The transcription of the human fructose-bisphosphate aldolase C gene is activated by nerve-growth-factor-induced B factor in human neuroblastoma cells. Buono P, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):245-50

Conformational changes in plant Ins(1,4,5)P3 receptor on interaction with different myo-inositol trisphosphates and its effect on Ca2+ release from microsomal fraction and liposomes. Dasgupta S, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):355-60

Thyromimetic mode of action of peroxisome proliferators: activation of 'malic' enzyme gene transcription. Hertz R, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):241-8

Signal-transduction-pathway-specific desensitization of expression of orphan nuclear receptor TIS1. Lim RW, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):785-9

Stable overexpression of the type-1 inositol 1,4,5-trisphosphate receptor in L fibroblasts: subcellular distribution and functional consequences. Mackrill JJ, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):871-8

Intracellular targeting and homotetramer formation of a truncated inositol 1,4,5-trisphosphate receptor-green fluorescent protein chimera in Xenopus laevis oocytes: evidence for the involvement of the transmembrane spanning domain in endoplasmic reticulum targeting and homotetramer complex formation. Sayers LG, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):273-80

Binding and translocation of glucokinase in hepatocytes. Agius L, et al. **Biochem Soc Trans** 1997 Feb;25(1):145-50 (28 ref.)

TIF1 alpha: a chromatin-specific mediator for the ligand-dependent activation function AF-2 of nuclear receptors? Le Douarin B, et al. **Biochem Soc Trans** 1997 May;25(2):605-12 (39 ref.)

Specific cardiolipin binding interferes with labeling of sulfhydryl residues in the adenosine diphosphate/adenosine triphosphate carrier protein from beef heart mitochondria. Beyer K, et al. **Biochemistry** 1996 Dec 10;35(49):15784-90

Regulation of the human long chain acyl-CoA dehydrogenase gene by nuclear hormone receptor transcription factors. Zhang Z, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):53-64

Decreased inositol 1,4,5-trisphosphate-specific binding in platelets from alcoholic subjects. Saito H, et al. **Biol Psychiatry** 1996 Nov 1;40(9):886-91

The high affinity melatonin binding site probed with conformationally restricted ligands--II. Homology modeling of the receptor. Grol CJ, et al. **Bioorg Med Chem** 1996 Aug;4(8):1333-9

The high affinity melationin binding site probed with conformationally restricted ligand--I. Pharmacophore and minireceptor models. Jansen JM, et al. **Bioorg Med Chem** 1996 Aug;4(8):1321-32

Quantal Ca2+ release and inactivation in a model of the inositol 1,4,5-trisphosphate receptor involving transformation of the ligand by the receptor. Kaimachnikov NP, et al. **Biosci Rep** 1996 Oct;16(5):405-13

Binding sites for alpha-trinositol (inositol 1,2,6-trisphosphate) in porcine tissues; comparison with Ins(1,4,5)P3 and Ins(1,3,4,5)P4-binding sites. Stricker R, et al. **Br J Pharmacol** 1996 Mar;117(5):919-25

Distribution of the inositol trisphosphate receptor in the catfish retina. Micci MA, et al. **Brain Res** 1996 May 13; 720(1-2):139-47

The melatonin receptor in the human brain: cloning experiments and distribution studies. Mazzucchelli C, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1-2):117-26

Pex14p, a peroxisomal membrane protein binding both receptors of the two PTS-dependent import pathways. Albertini M, et al. **Cell** 1997 Apr 4;89(1):83-92

Nuclear receptor coactivator ACTR is a novel histone acetyltransferase and forms a multimeric activation complex with P/CAF and CBP/p300. Chen H, et al. **Cell** 1997 Aug 8;90(3):569-80

Nuclear receptor repression mediated by a complex containing SMRT, mSin3A, and histone deacetylase. Nagy L, et al. **Cell** 1997 May 2;89(3):373-80

A novel receptor-mediated nuclear protein import pathway. Pollard VW, et al. **Cell** 1996 Sep 20;86(6):985-94

Empty site forms of the SRP54 and SR alpha GTPases mediate targeting of ribosome-nascent chain complexes to the endoplasmic reticulum [see comments] Rapiejko PJ, et al. **Cell** 1997 May 30;89(5):703-13. Comment in: Cell 1997 May 30;89(5):673-6.

The E. coli signal recognition particle is required for the insertion of a subset of inner membrane proteins. Ulbrandt ND, et al. **Cell** 1997 Jan 24;88(2):187-96

Binding and activity of the nine possible regioisomers of myo-inositol tetrakisphosphate at the inositol 1,4,5-trisphosphate receptor. Burford NT, et al. **Cell Calcium** 1997 Apr;21(4):301-10

Type 3 inositol 1,4,5-trisphosphate receptor and capacitative calcium entry. Putney JW Jr. **Cell Calcium** 1997 Mar; 21(3):257-61 (41 ref.)

Identification and characterization of inositol 1,4,5-trisphosphate receptors in rat testis. Tovey SC, et al. **Cell Calcium** 1997 Apr;21(4):311-9

Nuclear hormone receptors: ligand-activated regulators of transcription and diverse cell responses. Katzenellenbogen JA, et al. **Chem Biol** 1996 Jul;3(7):529-36 (52 ref.)

Characterization of the yeast and human receptors for the carboxy-terminal tripeptide peroxisomal targeting signal. Wiemer EA, et al. **Cold Spring Harb Symp Quant Biol** 1995; 60:637-48

Interrelationships between nuclear structure and ligand-activated intracellular receptors. Ruh MF, et al. **Crit Rev Eukaryot Gene Expr** 1996;6(2-3):271-83 (105 ref.)

Inositol 1,4,5-trisphosphate receptors and calcium signaling. Michikawa T, et al. **Crit Rev Neurobiol** 1996;10(1):39-55 (117 ref.)

Cooperative activation of IP3 receptors by sequential binding of IP3 and Ca2+ safeguards against spontaneous activity. Marchant JS, et al. **Curr Biol** 1997 Jul 1;7(7):510-8

Transcriptional control: how nuclear receptors get turned on. Schwabe JW. **Curr Biol** 1996 Apr 1;6(4):372-4 (13 ref.)

Nuclear receptor coactivators. Glass CK, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):222-32 (50 ref.)

Peroxisome proliferator-activated receptor gamma and the control of adipogenesis. Brun RP, et al. **Curr Opin Lipidol** 1997 Aug;8(4):212-8 (55 ref.)

Control of the differentiation commitment by nuclear hormone receptors in chicken erythrocytic progenitor cells. Samarut J. **Curr Top Microbiol Immunol** 1996;212:163-73 (35 ref.)

Localization of a putative inositol 1,4,5-triphosphate receptor in the Limulus granulocyte. Solon E, et al. **Dev Comp Immunol** 1997 May-Jun;21(3):277-85

The developmental and circadian variation of melatonin receptors in the chicken spinal cord. Wan Q, et al. **Dev Neurosci** 1997;19(2):196-201

Minimal requirements for calcium oscillations driven by the IP3 receptor. Hajnóczky G, et al. **EMBO J** 1997 Jun; 16(12):3533-43

A possible involvement of TIF1 alpha and TIF1 beta in the epigenetic control of transcription by nuclear receptors. Le Douarin B, et al. **EMBO J** 1996 Dec 2;15(23):6701-15

Co-translational protein targeting catalyzed by the Escherichia coli signal recognition particle and its receptor. Powers T, et al. **EMBO J** 1997 Aug 15;16(16):4880-6

The lamin B receptor (LBR) provides essential chromatin docking sites at the nuclear envelope. Pyrpasopoulou A, et al. **EMBO J** 1996 Dec 16;15(24):7108-19

Genetic evidence for involvement of type 1, type 2 and type 3 inositol 1,4,5-trisphosphate receptors in signal transduction through the B-cell antigen receptor. Sugawara H, et al. **EMBO J** 1997 Jun 2;16(11):3078-88

Inactivation of melatonin receptors by protein kinase C in human prostate epithelial cells. Gilad E, et al. **Endocrinology** 1997 Oct;138(10):4255-61

Decreased expression of murine PPARgamma in adipose tissue during endotoxemia. Hill MR, et al. **Endocrinology** 1997 Jul;138(7):3073-6

TNF alpha-mediated inhibition and reversal of adipocyte differentiation is accompanied by suppressed expression of PPARgamma without effects on Pref-1 expression. Xing H, et al. **Endocrinology** 1997 Jul;138(7):2776-83

Dimeric binding of the mouse germ cell nuclear factor. Borgmeyer U. **Eur J Biochem** 1997 Feb 15;244(1):120-7

Melatonin receptors in the chicken kidney are up-regulated by pinealectomy and linked to adenylate cyclase. Song Y, et al. **Eur J Endocrinol** 1996 Jul;135(1):128-33

Melatonin receptors are present in adult rat Leydig cells and are coupled through a pertussis toxin-sensitive G-protein. Valenti S, et al. **Eur J Endocrinol** 1997 Jun;136(6):633-9

Localization of 2-[125I]iodomelatonin binding sites in visual areas of the turtle brain. Larson-Prior LJ, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):181-5

A rhodopsin-based model for melatonin recognition at its G protein-coupled receptor. Navajas C, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):173-83

Transportin: nuclear transport receptor of a novel nuclear protein import pathway. Nakielny S, et al. **Exp Cell Res** 1996 Dec 15;229(2):261-6

Studies of the renal action of melatonin: evidence that the effects are mediated by 37 kDa receptors of the Mel1a subtype localized primarily to the basolateral membrane of the proximal tubule. Song Y, et al. **FASEB J** 1997 Jan; 11(1):93-100

Identification of Mel1a melatonin receptors in the human embryonic kidney cell line HEK293: evidence of G protein-coupled melatonin receptors which do not mediate the inhibition of stimulated cyclic AMP levels. Conway S, et al. **FEBS Lett** 1997 Apr 21;407(1):121-6

Human mitochondrial import receptor, Tom20p. Use of glutathione to reveal specific interactions between Tom20-glutathione S-transferase and mitochondrial precursor proteins. Schleiff E, et al. **FEBS Lett** 1997 Mar 10;404(2-3):314-8

Possible roles of inositol 1,4,5-trisphosphate 3-kinase B in calcium homeostasis. Soriano S, et al. **FEBS Lett** 1997 Feb 10;403(1):1-4

Central melatonin receptors in red deer (Cervus elaphus). Williams LM, et al. **Gen Comp Endocrinol** 1996 Oct; 104(1):1-6

Development of a functional assay for Ca2+ release activity of IP3R and expression of an IP3R gene fragment in the baculovirus-insect cell system. Raghu P, et al. **Gene** 1997 Apr 29;190(1):151-6

Cloning and identification of mouse steroid receptor coactivator-1 (mSRC-1), as a coactivator of peroxisome proliferator-activated receptor gamma. Zhu Y, et al. **Gene Expr** 1996;6(3):185-95

Identification of an extended half-site motif required for the function of peroxisome proliferator-activated receptor alpha. Osada S, et al. **Genes Cells** 1997 May;2(5):315-27

Unique requirements for retinoid-dependent transcriptional activation by the orphan receptor LXR. Willy PJ, et al. **Genes Dev** 1997 Feb 1;11(3):289-98

Stoichiometric and steric principles governing repression by nuclear hormone receptors. Zamir I, et al. **Genes Dev** 1997 Apr 1;11(7):835-46

Transcriptional activation by peroxisome proliferator-activated receptor gamma is inhibited by phosphorylation at a consensus mitogen-activated protein kinase site. Adams M, et al. **J Biol Chem** 1997 Feb 21; 272(8):5128-32

Preferential binding of poly(A)-binding protein 1 to an inhibitory RNA element in the human immunodeficiency virus type 1 gag mRNA. Afonina E, et al. **J Biol Chem** 1997 Jan 24;272(4):2307-11

Glycine N-methyltransferase is an example of functional diversity. Role as a polycyclic aromatic hydrocarbon-binding receptor. Bhat R, et al. **J Biol Chem** 1997 Aug 22;272(34):21221-6

Angiotensin II-induced down-regulation of inositol trisphosphate receptors in WB rat liver epithelial cells. Evidence for involvement of the proteasome pathway. Bokkala S, et al. **J Biol Chem** 1997 May 9;272(19):12454-61

Characterization of the human cytochrome P4502D6 promoter. A potential role for antagonistic interactions between members of the nuclear receptor family. Cairns W, et al. **J Biol Chem** 1996 Oct 11;271(41):25269-76

Regulation of peroxisome proliferator-activated receptor gamma activity by mitogen-activated protein kinase. Camp HS, et al. **J Biol Chem** 1997 Apr 18;272(16):10811-6

Differential transactivation by two isoforms of the orphan nuclear hormone receptor CAR. Choi HS, et al. **J Biol Chem** 1997 Sep 19;272(38):23565-71

Analysis of the carboxyl-terminal peroxisomal targeting signal 1 in a homologous context in Saccharomyces cerevisiae. Elgersma Y, et al. **J Biol Chem** 1996 Oct 18; 271(42):26375-82

Utilization of recombinant adenovirus and dominant negative mutants to characterize hepatocyte nuclear factor 4-regulated apolipoprotein AI and CIII expression. Fraser JD, et al. **J Biol Chem** 1997 May 23;272(21):13892-8

Functional antagonism between CCAAT/Enhancer binding protein-alpha and peroxisome proliferator-activated receptor-gamma on the leptin promoter. Hollenberg AN, et al. **J Biol Chem** 1997 Feb 21;272(8):5283-90

Polarity and specific sequence requirements of peroxisome proliferator-activated receptor (PPAR)/retinoid X receptor heterodimer binding to DNA. A functional analysis of the malic enzyme gene PPAR response element. IJpenberg A, et al. **J Biol Chem** 1997 Aug 8; 272(32):20108-17

Membrane insertion, glycosylation, and oligomerization of inositol trisphosphate receptors in a cell-free translation system. Joseph SK, et al. **J Biol Chem** 1997 Jan 17; 272(3):1579-88

Peroxisome proliferator-activated receptors alpha and

gamma are activated by indomethacin and other non-steroidal anti-inflammatory drugs. Lehmann JM, et al. **J Biol Chem** 1997 Feb 7;272(6):3406-10

Activation of the nuclear receptor LXR by oxysterols defines a new hormone response pathway. Lehmann JM, et al. **J Biol Chem** 1997 Feb 7;272(6):3137-40

A p56(lck) ligand serves as a coactivator of an orphan nuclear hormone receptor. Marcus SL, et al. **J Biol Chem** 1996 Nov 1;271(44):27197-200

Identification of the membrane receptor binding domain of thyroglobulin. Insights into quality control of thyroglobulin biosynthesis. Mezghrani H, et al. **J Biol Chem** 1997 Sep 12;272(37):23340-6

Inhibition of peroxisome proliferator signaling pathways by thyroid hormone receptor. Competitive binding to the response element. Miyamoto T, et al. **J Biol Chem** 1997 Mar 21;272(12):7752-8

Identification, characterization, and tissue distribution of human peroxisome proliferator-activated receptor (PPAR) isoforms PPARgamma2 versus PPARgamma1 and activation with retinoid X receptor agonists and antagonists. Mukherjee R, et al. **J Biol Chem** 1997 Mar 21;272(12):8071-6

Mitotic phosphorylation of the lamin B receptor by a serine/arginine kinase and p34(cdc2). Nikolakaki E, et al. **J Biol Chem** 1997 Mar 7;272(10):6208-13

Identification and functional reconstitution of the type 2 inositol 1,4,5-trisphosphate receptor from ventricular cardiac myocytes. Perez PJ, et al. **J Biol Chem** 1997 Sep 19;272(38):23961-9

Receptor-mediated ribosome binding to liposomes depends on lipid composition. Savitz AJ, et al. **J Biol Chem** 1997 May 16;272(20):13140-5

Chicken ovalbumin upstream promoter transcription factor, a transcriptional activator of HIV-1 gene expression in human brain cells. Sawaya BE, et al. **J Biol Chem** 1996 Sep 20;271(38):23572-6

FtsY, the prokaryotic signal recognition particle receptor homologue, is essential for biogenesis of membrane proteins. Seluanov A, et al. **J Biol Chem** 1997 Jan 24; 272(4):2053-5

NMR spectroscopic studies of the DNA-binding domain of the monomer-binding nuclear orphan receptor, human estrogen related receptor-2. The carboxyl-terminal extension to the zinc-finger region is unstructured in the free form of the protein. Sem DS, et al. **J Biol Chem** 1997 Jul 18;272(29):18038-43

Characterization of a cytosolic and a luminal Ca2+ binding site in the type I inositol 1,4,5-trisphosphate receptor. Sienaert I, et al. **J Biol Chem** 1996 Oct 25;271(43):27005-12

High density distribution of endoplasmic reticulum proteins and mitochondria at specialized Ca2+ release sites in oligodendrocyte processes. Simpson PB, et al. **J Biol Chem** 1997 Sep 5;272(36):22654-61

Activation of the nuclear receptor peroxisome proliferator-activated receptor gamma promotes brown adipocyte differentiation. Tai TAC, et al. **J Biol Chem** 1996 Nov 22;271(47):29909-14

Differential interaction of nuclear receptors with the putative human transcriptional coactivator hTIF1. Thénot S, et al. **J Biol Chem** 1997 May 2;272(18):12062-8

Ligand-independent activation domain in the N terminus of peroxisome proliferator-activated receptor gamma (PPARgamma). Differential activity of PPARgamma1 and -2 isoforms and influence of insulin. Werman A, et al. **J Biol Chem** 1997 Aug 8;272(32):20230-5

Characterization of the response element and DNA binding properties of the nuclear orphan receptor germ cell nuclear factor/retinoid receptor-related testis-associated receptor. Yan ZH, et al. **J Biol Chem** 1997 Apr 18;272(16):10565-72

Domain-specific interactions of human HP1-type chromodomain proteins and inner nuclear membrane protein LBR. Ye Q, et al. **J Biol Chem** 1997 Jun 6; 272(23):14983-9

Evidence that zymogen granules are not a physiologically relevant calcium pool. Defining the distribution of inositol 1,4,5-trisphosphate receptors in pancreatic acinar cells. Yule DI, et al. **J Biol Chem** 1997 Apr 4;272(14):9093-8

Insulin- and mitogen-activated protein kinase-mediated phosphorylation and activation of peroxisome proliferator-activated receptor gamma. Zhang B, et al. **J Biol Chem** 1996 Dec 13;271(50):31771-4

Daily and photoperiodic melatonin binding changes in the suprachiasmatic nuclei, paraventricular thalamic nuclei, and pars tuberalis of the female Siberian hamster (Phodopus sungorus). Recio J, et al. **J Biol Rhythms** 1996 Dec; 11(4):325-32

Chloroquine, quinine and quinidine inhibit calcium release from macrophage intracellular stores by blocking inositol 1,4,5-trisphosphate binding to its receptor. Misra UK, et al. **J Cell Biochem** 1997 Feb;64(2):225-32

Organization of the receptor-mediated phosphoinositide cycle: relationship between receptor occupancy and accession of phosphatidylinositol. Monaco ME, et al. **J Cell Biochem** 1997 Mar 1;64(3):382-9

Targeting of membranes to sea urchin sperm chromatin is mediated by a lamin B receptor-like integral membrane protein. Collas P, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1715-25

The SH3 domain of the Saccharomyces cerevisiae peroxisomal membrane protein Pex13p functions as a docking site for Pex5p, a mobile receptor for the import PTS1-containing proteins. Elgersma Y, et al. **J Cell Biol** 1996 Oct;135(1):97-109

Identification of Pex13p a peroxisomal membrane receptor for the PTS1 recognition factor. Erdmann R, et al. **J Cell Biol** 1996 Oct;135(1):111-21

Pex13p is an SH3 protein of the peroxisome membrane and a docking factor for the predominantly cytoplasmic PTs1 receptor. Gould SJ, et al. **J Cell Biol** 1996 Oct;135(1):85-95

Transportin-mediated nuclear import of heterogeneous nuclear RNP proteins. Siomi MC, et al. **J Cell Biol** 1997 Sep 22;138(6):1181-92

Ligands for orphan receptors? Soontjens CD, et al. **J Endocrinol** 1996 Sep;150 Suppl:S241-57

Regulation of oxytocin, oestradiol and progesterone receptor concentrations in different uterine regions by oestradiol, progesterone and oxytocin in ovariectomized ewes. Wathes DC, et al. **J Endocrinol** 1996 Dec;151(3):375-93

Putative melatonin receptors in the blind mole rat harderian gland. Gilad E, et al. **J Exp Zool** 1997 Apr 15;277(6):435-41

Single-channel kinetics, inactivation, and spatial distribution of inositol trisphosphate (IP3) receptors in Xenopus oocyte nucleus. Mak DO, et al. **J Gen Physiol** 1997 May; 109(5):571-87

The inositol 1,4,5-trisphosphate receptor of cerebellum. Mn2+ permeability and regulation by cytosolic Mn2+. Striggow F, et al. **J Gen Physiol** 1996 Aug;108(2):115-24

Three-dimensional quantitative structure-activity relationship of melatonin receptor ligands: a comparative molecular field analysis study. Sicsic S, et al. **J Med Chem** 1997 Feb 28;40(5):739-48

Conformationally restrained melatonin analogues: synthesis, binding affinity for the melatonin receptor, evaluation of the biological activity, and molecular modeling study. Spadoni G, et al. **J Med Chem** 1997 Jun 20; 40(13):1990-2002

Cloning of the human orphan receptor germ cell nuclear factor/retinoid receptor-related testis-associated receptor and its differential regulation during embryonal carcinoma cell differentiation. Lei W, et al. **J Mol Endocrinol** 1997 Apr;18(2):167-76

Autoradiographic characterization of [3H]inositol (1,4,5) trisphosphate and [3H]inositol (1,3,4,5) tetrakisphosphate binding sites in human brain. Kurumatani T, et al. **J Neural Transm** 1997;104(2-3):175-89

Influence of maternal melatonin on melatonin receptors in rat offspring. Zitouni M, et al. **J Neural Transm Gen Sect** 1995;100(2):111-22

Molecular cloning and brain localization of HZF-2 alpha, a new member of the Rev-erb subfamily of orphan nuclear receptors. Peña-de-Ortiz S, et al. **J Neurobiol** 1997 Mar; 32(3):341-58

Serotonergic modulation of photically induced increase in melatonin receptor density and Fos immunoreactivity in the suprachiasmatic nuclei of the rat. Recio J, et al. **J Neuroendocrinol** 1996 Nov;8(11):839-45

Melatonin receptors are present in non-optic regions of the brain of a deep-sea fish living in the absence of solar light. Smith A, et al. **J Neuroendocrinol** 1996 Sep;8(9):655-8

Melatonin receptors in the brain and pituitary gland of hypothalamo-pituitary disconnected Soay rams. Williams LM, et al. **J Neuroendocrinol** 1997 Aug;9(8):639-43

Circadian photic regulation of melatonin receptor density in rat suprachiasmatic nuclei: comparison with light induction of fos-related protein. Masson-Pevet M, et al. **J Neurosci Res** 1996 Mar 1;43(5):632-7

Limulus ventral photoreceptors contain two functionally dissimilar inositol triphosphate-induced calcium release mechanisms. Levy S, et al. **J Photochem Photobiol B** 1996 Aug;35(1-2):97-103

CGP 52608-induced cyst formation in dinoflagellates: possible involvement of a nuclear receptor for melatonin. Tslm ST, et al. **J Pineal Res** 1996 Sep;21(2):101-7

In vitro and in vivo interactions between nuclear receptors at estrogen response elements. Joyeux A, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5-6):507-15

Evidence that renal and chorionic tissues contain similar nuclear binding proteins that recognize the human renin promoter. Konoshita T, et al. **Kidney Int** 1996 Nov; 50(5):1515-24

Identification of fatty acid methyl ester as naturally occurring transcriptional regulators of the members of the peroxisome proliferator-activated receptor family. Schmidt A, et al. **Lipids** 1996 Nov;31(11):1115-24

xGCNF, a nuclear orphan receptor is expressed during neurulation in Xenopus laevis. Joos TO, et al. **Mech Dev** 1996 Nov;60(1):45-57

Peroxisome proliferator-activated receptors and retinoic acid receptors differentially control the interactions of retinoid X receptor heterodimers with ligands, coactivators, and corepressors. DiRenzo J, et al. **Mol Cell Biol** 1997 Apr; 17(4):2166-76

Differential regulation of the N-myc proto-oncogene by ROR alpha and RVR, two orphan members of the superfamily of nuclear hormone receptors. Dussault I, et al. **Mol Cell Biol** 1997 Apr;17(4):1860-7

AF-2 activity and recruitment of steroid receptor coactivator 1 to the estrogen receptor depend on a lysine residue conserved in nuclear receptors. Henttu PM, et al. **Mol Cell Biol** 1997 Apr;17(4):1832-9

RIP-140 interacts with multiple nuclear receptors by means of two distinct sites. L'Horset F, et al. **Mol Cell Biol** 1996 Nov;16(11):6029-36

Novel dimeric Nur77 signaling mechanism in endocrine and lymphoid cells. Philips A, et al. **Mol Cell Biol** 1997 Oct; 17(10):5946-51

The orphan nuclear receptor estrogen-related receptor alpha is a transcriptional regulator of the human medium-chain acyl coenzyme A dehydrogenase gene. Sladek R, et al. **Mol Cell Biol** 1997 Sep;17(9):5400-9

Identification of COUP-TFII as a peroxisome proliferator response element binding factor using genetic selection in yeast: COUP-TFII activates transcription in yeast but antagonizes PPAR signaling in mammalian cells. Marcus SL, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):31-9

Regulation of the Mel 1a melatonin receptor mRNA and protein levels in the ovine pars tuberalis: evidence for a cyclic adenosine 3',5'-monophosphate-independent Mel 1a receptor coupling and an autoregulatory mechanism of expression. Barrett P, et al. **Mol Endocrinol** 1996 Jul; 10(7):892-902

Novel isoforms of Mel1c melatonin receptors modulating intracellular cyclic guanosine 3',5'-monophosphate levels. Jockers R, et al. **Mol Endocrinol** 1997 Jul;11(8):1070-81

Estrogen-related receptor alpha 1 functionally binds as a monomer to extended half-site sequences including ones contained within estrogen-response elements. Johnston SD, et al. **Mol Endocrinol** 1997 Mar;11(3):342-52

Fatty acids, eicosanoids, and hypolipidemic agents identified as ligands of peroxisome proliferator-activated receptors by coactivator-dependent receptor ligand assay. Krey G, et al. **Mol Endocrinol** 1997 Jun;11(6):779-91

Ffh and FtsY in a Mycoplasma mycoides signal-recognition particle pathway: SRP RNA and M domain of Ffh are not required for stimulation of GTPase activity in vitro. Macao B, et al. **Mol Microbiol** 1997 May;24(3):523-34

Enantiomers of myo-inositol-1,3,4-trisphosphate and myo-inositol-1,4,6 -trisphosphate: stereospecific recognition by cerebellar and platelet myo-inositol-1,4,5-trisphosphate receptors. Murphy CT, et al. **Mol Pharmacol** 1996 Nov;50(5):1223-30

The PPARalpha-leukotriene B4 pathway to inflammation control [see comments] Devchand PR, et al. **Nature** 1996 Nov 7;384(6604):39-43. Comment in: Nature 1996 Nov 7;384(6604):23-4.

Tom5 functionally links mitochondrial preprotein receptors to the general import pore [see comments] Dietmeier K, et al. **Nature** 1997 Jul 10;388(6638):195-200. Comment in: Nature 1997 Jul 10;388(6638):121-2.

The nuclear receptor homologue Ftz-F1 and the homeodomain protein Ftz are mutually dependent cofactors. Guichet A, et al. **Nature** 1997 Feb 6; 385(6616):548-52

A signature motif in transcriptional co-activators mediates binding to nuclear receptors [see comments] Heery DM, et al. **Nature** 1997 Jun 12;387(6634):733-6. Comment in: Nature 1997 Jun 12;387(6634):654-5.

An oxysterol signalling pathway mediated by the nuclear receptor LXR alpha. Janowski BA, et al. **Nature** 1996 Oct 24;383(6602):728-31

Transcriptional activation. Something new to hang your HAT on [news; comment] Montminy M. **Nature** 1997 Jun 12;387(6634):654-5. Comment on: Nature 1997 Jun 12;387(6634):677-84. Comment on: Nature 1997 Jun 12;387(6634):733-6.

Inflammation. Signalling the fat controller [news; comment] Serhan CN. **Nature** 1996 Nov 7;384(6604):23-4. Comment on: Nature 1996 Nov 7;384(6604):39-43.

The transcriptional co-activator p/CIP binds CBP and mediates nuclear-receptor function [see comments] Torchia J, et al. **Nature** 1997 Jun 12;387(6634):677-84. Comment in: Nature 1997 Jun 12;387(6634):654-5.

The nuclear hormone receptor Ftz-F1 is a cofactor for the Drosophila homeodomain protein Ftz. Yu Y, et al. **Nature** 1997 Feb 6;385(6616):552-5

Differential regulation of melatonin receptors in sheep, chicken and lizard brains by cholera and pertussis toxins and guanine nucleotides. Morgan PJ, et al. **Neurochem Int** 1996 Mar;28(3):259-69

Decreased inositol (1,4,5)-trisphosphate receptor levels in Alzheimer's disease cerebral cortex: selectivity of changes and possible correlation to pathological severity. Haug LS, et al. **Neurodegeneration** 1996 Jun;5(2):169-76

Melatonin receptors activate heteromeric G-protein coupled Kir3 channels. Nelson CS, et al. **Neuroreport** 1996 Feb 29; 7(3):717-20

Polygodial induces inositol phosphate turnover in human neuroblastoma SH-SY5Y cells. Forsby A, et al. **Neurosci Lett** 1996 Oct 11;217(1):50-4

Melatonin receptors in the suprachiasmatic nuclei and pars tuberalis of testosterone induced photoresponsive rats. Recio J, et al. **Neurosci Lett** 1996 Aug 16;214(1):53-6

Localization and characterization of melatonin receptors in the rabbit spinal cord. Wan Q, et al. **Neurosci Lett** 1996 Feb 2;204(1-2):77-80

Prominent expression of nuclear hormone receptor ROR alpha in Purkinje cells from early development. Nakagawa S, et al. **Neurosci Res** 1997 Jun;28(2):177-84

Two receptor interaction domains in the corepressor, N-CoR/RIP13, are required for an efficient interaction with Rev-erbA alpha and RVR: physical association is dependent on the E region of the orphan receptors. Downes M, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4379-86

Binding of type II nuclear receptors and estrogen receptor

to full and half-site estrogen response elements in vitro. Klinge CM, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1903–12

IP3 receptor-ligand. 2: Synthesis and molecular mechanics calculation of adenophostin A. Hotoda H, et al. **Nucleic Acids Symp Ser** 1995;(34):163–4

Ligand-dependent interaction of nuclear receptors with potential transcriptional intermediary factors (mediators). Le Douarin B, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 Apr 29; 351(1339):569–78 (45 ref.)

Importin alpha from Arabidopsis thaliana is a nuclear import receptor that recognizes three classes of import signals. Smith HM, et al. **Plant Physiol** 1997 Jun;114(2):411–7

Karyopherin beta2 mediates nuclear import of a mRNA binding protein. Bonifaci N, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5055–60

Hypolipidemic drugs, polyunsaturated fatty acids, and eicosanoids are ligands for peroxisome proliferator-activated receptors alpha and delta. Forman BM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4312–7

Functional analysis of retinoid Z receptor beta, a brain-specific nuclear orphan receptor. Greiner EF, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10105–10

Fatty acids and eicosanoids regulate gene expression through direct interactions with peroxisome proliferator-activated receptors alpha and gamma. Kliewer SA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4318–23

Coexpression of nuclear receptor partners increases their solubility and biological activities. Li C, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2278–83

A role for Sp and nuclear receptor transcription factors in a cardiac hypertrophic growth program. Sack MN, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6438–43

Terminal differentiation of human liposarcoma cells induced by ligands for peroxisome proliferator-activated receptor gamma and the retinoid X receptor. Tontonoz P, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):237–41

The NG domain of the prokaryotic signal recognition particle receptor, FtsY, is fully functional when fused to an unrelated integral membrane polypeptide. Zelazny A, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6025–9

Inhibition of adipogenesis through MAP kinase-mediated phosphorylation of PPARgamma. Hu E, et al. **Science** 1996 Dec 20;274(5295):2100–3

Coordination of Drosophila metamorphosis by two ecdysone-induced nuclear receptors. White KP, et al. **Science** 1997 Apr 4;276(5309):114–7

Hormone-activated phosphorylation of human beta1 thyroid hormone nuclear receptor. Ting YT, et al. **Thyroid** 1997 Jun;7(3):463–9

Melatonin receptors step into the light: cloning and classification of subtypes. Reppert SM, et al. **Trends Pharmacol Sci** 1996 Mar;17(3):100–2 (20 ref.)

[Specific binding of 3n-melatonin with plasma cell membrane in rats thyroid gland] Rom-Bugoslavskaia ES, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):706–8 **(Rus)**

PHYSIOLOGY

Effects of tryptophan related compounds on nuclear regulatory control. Possible role in the eosinophilia-myalgia syndrome. Sidransky H, et al. **Adv Exp Med Biol** 1996;398:343–50 (47 ref.)

Melatonin directly constricts rat cerebral arteries through modulation of potassium channels. Geary GG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1530–6

The peroxisome proliferator-activated receptors: ligands and activators. Forman BM, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:266–75 (42 ref.)

The peroxisome proliferator-activated receptor: transcriptional activation of the CYP4A6 gene. Johnson EF, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:373–86

Studies on the role of PPAR in the fibrate-modulated gene expression of apolipoprotein A-I, plasminogen activator inhibitor 1, and fibrinogen in primary hepatocyte cultures from cynomolgus monkey. Kockx M, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:711–2

PPAR tissue distribution and interactions with other hormone-signaling pathways. Lemberger T, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:231–51

Structure and function of inositol 1,4,5-trisphosphate receptor. Mikoshiba K, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:178–97 (65 ref.)

Peroxisome proliferator-activated receptors: structures and function. Tugwood JD, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:252–65

Discovery of ligands for the nuclear peroxisome proliferator-activated receptors. Willson TM, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:276–83

Interplay of the peroxisome proliferator-activated receptor and the thyroid hormone receptor-signaling pathways in regulating peroxisome proliferator-responsive genes. Winrow CJ, et al. **Ann N Y Acad Sci** 1996 Dec 27; 804:214–30

Peb1p (Pas7p) is an intra-peroxisomal receptor for the N-terminal, type 2, peroxisomal targeting signal of thiolase. Zhang JW, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:654–5

Peroxisome proliferator-activated receptors: a nuclear receptor signaling pathway in lipid physiology. Lemberger T, et al. **Ann Rev Cell Dev Biol** 1996;12:335–63 (116 ref.)

Rapid kinetic measurements of 45Ca2+ mobilization reveal that Ins(2,4,5)P3 is a partial agonist at hepatic InsP3 receptors. Marchant JS, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):573–6

Modulation of muscle creatine kinase promoter activity by the inducible orphan nuclear receptor TIS1. Yang WL, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):281–7

Peroxisome proliferators and peroxisome proliferator activated receptors (PPARs) as regulators of lipid metabolism. Latruffe N, et al. **Biochimie** 1997 Feb-Mar; 79(2-3):81–94 (162 ref.)

Peroxisome proliferator-activated receptor (PPAR)-dependent and -independent transcriptional modulation of several non-peroxisomal genes by peroxisome proliferators. Motojima K. **Biochimie** 1997 Feb-Mar;79(2-3):101–6

PPAR gamma and the control of adipogenesis. Spiegelman BM, et al. **Biochimie** 1997 Feb-Mar;79(2-3):111–2 (4 ref.)

The effects of fibrates and thiazolidinediones on plasma triglyceride metabolism are mediated by distinct peroxisome proliferator activated receptors (PPARs). Staels B, et al. **Biochimie** 1997 Feb-Mar;79(2-3):95–9 (39 ref.)

The function of inositol high polyphosphate binding proteins. Fukuda M, et al. **Bioessays** 1997 Jul;19(7):593–603 (85 ref.)

Dueling orphans—interacting nuclear receptors coordinate Drosophila metamorphosis. Thummel CS. **Bioessays** 1997 Aug;19(8):669–72 (26 ref.)

Nuclear receptors in Sicily: all in the famiglia. Perlmann T, et al. **Cell** 1997 Aug 8;90(3):391–7 (31 ref.)

Stereoselective effects of chiral clofibric acid analogs on rat peroxisome proliferator-activated receptor alpha (rPPAR alpha) activation and peroxisomal fatty acid beta-oxidation. Rangwala SM, et al. **Chirality** 1997;9(1):37–47

Protein secretion: puzzling receptors. Thiele C, et al. **Curr Biol** 1997 Aug 1;7(8):R496–500 (25 ref.)

Disruption of the IP3 receptor gene of Drosophila affects larval metamorphosis and ecdysone release. Venkatesh K, et al. **Curr Biol** 1997 Jul 1;7(7):500–9

Lipid metabolism [editorial] Poisson JP. **Curr Opin Lipidol** 1997 Apr;8(2):U20–1 (5 ref.)

Peroxisome proliferator-activated receptors, orphans with ligands and functions. Schoonjans K, et al. **Curr Opin Lipidol** 1997 Jun;8(3):159–66 (101 ref.)

The two intracellular Ca2+ release channels, ryanodine receptor and inositol 1,4,5-trisphosphate receptor, play different roles during fertilization in ascidians. Albrieux M, et al. **Dev Biol** 1997 Sep 15;189(2):174–85

Coordination of larval and prepupal gene expression by the DHR3 orphan receptor during Drosophila metamorphosis. Lam GT, et al. **Development** 1997 May;124(9):1757–69

The Mel1a melatonin receptor is coupled to parallel signal transduction pathways. Godson C, et al. **Endocrinology** 1997 Jan;138(1):397–404

The peroxisome proliferator-activated receptor alpha is a phosphoprotein: regulation by insulin. Shalev A, et al. **Endocrinology** 1996 Oct;137(10):4499–502

Nuclear hormone receptors inhibit matrix metalloproteinase (MMP) gene expression through diverse mechanisms. Schroen DJ, et al. **Gene Expr** 1996;6(4):197–207 (95 ref.)

PPARgamma induces cell cycle withdrawal: inhibition of E2F/DP DNA-binding activity via down-regulation of PP2A. Altiok S, et al. **Genes Dev** 1997 Aug 1; 11(15):1987–98

Multilayered control of intracellular receptor function. Yamamoto KR. **Harvey Lect** 1995–96;91:1–19 (63 ref.)

Making waves: regulation of inositol trisphosphate receptors and propagation of calcium signals in the liver. Joseph SK. **Hepatology** 1997 Sep;26(3):799–801

Inositol 1,4,5-trisphosphate and calcium regulate the calcium channel function of the hepatic inositol 1,4,5-trisphosphate receptor. Dufour JF, et al. **J Biol Chem** 1997 Jan 31; 272(5):2675–81

Regulating adipogenesis. Mandrup S, et al. **J Biol Chem** 1997 Feb 28;272(9):5367–70 (56 ref.)

Regulation of human immunodeficiency virus type 1 gene transcription by nuclear receptors in human brain cells. Sawaya BE, et al. **J Biol Chem** 1996 Sep 13; 271(37):22895–900

Peroxisome proliferator activated receptor gamma, CCAAT/enhancer-binding protein alpha, and cell cycle status regulate the commitment to adipocyte differentiation. Shao D, et al. **J Biol Chem** 1997 Aug 22;272(34):21473–8

Transcriptional regulation of apolipoprotein A-I gene expression by the nuclear receptor RORalpha. Vu-Dac N, et al. **J Biol Chem** 1997 Sep 5;272(36):22401–4

Activators of the nuclear hormone receptors PPARalpha and FXR accelerate the development of the fetal epidermal permeability barrier. Hanley K, et al. **J Clin Invest** 1997 Aug 1;100(3):705–12

Role of the peroxisome proliferator-activated receptor (PPAR) in mediating the effects of fibrates and fatty acids on gene expression. Schoonjans K, et al. **J Lipid Res** 1996 May;37(5):907–25 (193 ref.)

CGP 52608-induced cyst formation in dinoflagellates: possible involvement of a nuclear receptor for melatonin. Tslm ST, et al. **J Pineal Res** 1996 Sep;21(2):101–7

Nuclear receptor corepressors activate rather than suppress basal transcription of genes that are negatively regulated by thyroid hormone. Tagami T, et al. **Mol Cell Biol** 1997 May;17(5):2642–8

A nuclear hormone receptor corepressor mediates transcriptional silencing by receptors with distinct repression domains. Zamir I, et al. **Mol Cell Biol** 1996 Oct; 16(10):5458–65

Are nuclear receptors involved in pituitary responsiveness to melatonin? Hazlerigg DG, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):53–9

Retinoid X receptor and peroxisome proliferator-activated receptor activate an estrogen responsive gene independent of the estrogen receptor. Nuñez SB, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):27–40

Orphan nuclear receptors—the first eight years. Enmark E, et al. **Mol Endocrinol** 1996 Nov;10(11):1293–307 (155 ref.)

Peroxisome proliferator-activated receptor-gamma activation by thiazolidinediones induces adipogenesis in bone marrow stromal cells. Gimble JM, et al. **Mol Pharmacol** 1996 Nov;50(5):1087–94

InsP3 receptor is essential for growth and differentiation but not for vision in Drosophila. Acharya JK, et al. **Neuron** 1997 Jun;18(6):881–7

Transcriptional repression by the orphan steroid receptor RVR/Rev-erb beta is dependent on the signature motif and helix 5 in the E region: functional evidence for a biological role of RVR in myogenesis. Burke L, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3481–9

Adipocyte differentiation is regulated by a prostaglandin liganded to the nuclear peroxisome proliferator-activated receptor. Wolf G. **Nutr Rev** 1996 Sep;54(9):290–2 (9 ref.)

How jet-lag hormone does double duty in the brain [news] Barinaga M. **Science** 1997 Jul 25;277(5325):480

Nuclear receptor superfamily reunion. Keystone Symposium Nuclear Receptor Superfamily, Lake Tahoe, California, USA. 17–23 March 1996. Parker MG. **Trends Genet** 1996 Jul;12(7):277–8

RADIATION EFFECTS

Serotonergic modulation of photically induced increase in melatonin receptor density and Fos immunoreactivity in the suprachiasmatic nuclei of the rat. Recio J, et al. **J Neuroendocrinol** 1996 Nov;8(11):839–45

Circadian photic regulation of melatonin receptor density in rat suprachiasmatic nuclei: comparison with light induction of fos-related protein. Masson-Pevet M, et al. **J Neurosci Res** 1996 Mar 1;43(5):632–7

ULTRASTRUCTURE

Native structure and arrangement of inositol-1,4,5-trisphosphate receptor molecules in bovine cerebellar Purkinje cells as studied by quick-freeze deep-etch electron microscopy [published erratum appears in EMBO J 1996 Dec 16;15(24):7188] Katayama E, et al. **EMBO J** 1996 Sep 16;15(18):4844–51

RECEPTORS, DELTA see **RECEPTORS, OPIOID, DELTA**

RECEPTORS, DELTA OPIOID see **RECEPTORS, OPIOID, DELTA**

RECEPTORS, DIAZEPAM see **RECEPTORS, GABA-A**

RECEPTORS, DIIODOTYROSINE see **RECEPTORS, THYROID HORMONE**

RECEPTORS, DIOXIN see **RECEPTORS, ARYL HYDROCARBON**

RECEPTORS, DOPAMINE

Molecular attributes of dopamine receptors: new potential for antipsychotic drug development. Hartman DS, et al. **Ann Med** 1996 Jun;28(3):211–9 (77 ref.)

Substituted hexahydrobenzo[f]thieno[c]quinolines as dopamine D1-selective agonists: synthesis and biological evaluation in vitro and in vivo. Michaelides MR, et al. **J Med Chem** 1997 May 23;40(11):1585–99

[Adrenaline receptor and dopamine receptor] Kurose H. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):316–26 (42 ref.) **(Jpn)**

AGONISTS see DOPAMINE AGONISTS

ANALYSIS

Quantitative analysis of dopamine receptor messages in the mouse cochlea. Karadaghy AA, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):151–6

Synaptic connections between spiny neurons of the direct and indirect pathways in the neostriatum of the rat: evidence from dopamine receptor and neuropeptide immunostaining. Yung KK, et al. **Eur J Neurosci** 1996 May; 8(5):861–9

Co-expression of receptor mRNA and protein: striatal dopamine and excitatory amino acid subtypes. Noblett KL, et al. **J Neurosci Methods** 1996 May;66(1):61–7

SPECT imaging of dopamine receptors [editorial; comment] Ichise M, et al. **J Nucl Med** 1996 Oct;37(10):1591–5. Comment on: J Nucl Med 1996 Oct;37(10):1589–91.

Brain dopamine transporter in spontaneously hypertensive rats. Watanabe Y, et al. **J Nucl Med** 1997 Mar;38(3):470–4

Autoradiographic localisation of D3-dopamine receptors in the human brain using the selective D3-dopamine receptor agonist (+)-[3H]PD 128907. Hall H, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):240–7

RECEPTORS, DOPAMINE

ANTAGONISTS & INHIBITORS see DOPAMINE ANTAGONISTS

BIOSYNTHESIS

Expression of dopamine receptors in immune organs and circulating immune cells. Ricci A, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):59-71

Age-related decrease in responsiveness to L-DOPA is not due to changes in dopamine receptor mRNAs or G protein mRNAs. Murata M, et al. **J Neural Transm** 1996; 103(3):343-8

Dopamine receptor subtypes: differential regulation after 8 months treatment with antipsychotic drugs. Florijn WJ, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):561-9

Coexpression of striatal dopamine receptor subtypes and excitatory amino acid subunits. Ariano MA, et al. **Synapse** 1997 Aug;26(4):400-14

BLOOD

Elevated lymphocyte spiperone binding: a vulnerability factor for affective psychosis? Fartaçek R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):107-10

CHEMISTRY

Theoretical study on the interaction between dopamine and its receptor by ab initio molecular orbital calculation. Nishihira J, et al. **J Theor Biol** 1997 Mar 21;185(2):157-63

Dopamine and serotonin receptors: amino acid sequences, and clinical role in neuroleptic parkinsonism. Seeman P, et al. **Jpn J Pharmacol** 1996 Jul;71(3):187-204 (140 ref.)

CLASSIFICATION

Current concepts in the molecular diversity and pharmacology of dopamine receptors. Kulkarni SK, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov;18(9):599-613 (116 ref.)

DRUG EFFECTS

Dopaminergic and opiate agonists and antagonists differentially decrease multiple schedule responding maintained by sucrose/ethanol and sucrose. Slawecki CJ, et al. **Alcohol** 1997 May-Jun;14(3):281-94

Spontaneous movement after propofol: relationship to dopamine receptors [letter; comment] Akpek EA. **Anaesthesia** 1997 Apr;52(4):390-1. Comment on: Anaesthesia 1996 Jul;51(7):663-6.

Spontaneous movement, propofol and dopamine receptors [letter] Borgeat A, et al. **Anaesthesia** 1997 Aug;52(8):808-9

The effects of prenatal cocaine exposure on dopaminergic challenge and receptor binding in Wistar rats. Benson KA, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:289-300

Effects of reserpine treatment on the dopamine receptor binding of [3H/11C]nemonapride in the mouse and rat brain. Ishiwata K, et al. **Ann Nucl Med** 1997 Feb;11(1):21-6

Effect of the haloperidol tetrahydropyridine metabolite 4-(4-chlorophenyl)-1-[4-(4-fluorophenyl)-4-oxobutyl]-1,2,3,6- tetrahydropyridine on dopamine receptor and transporter binding. A nonhuman primate 123I-iodobenzamide and 2 beta-carbomethoxy-3 beta-(4-iodophenyl)tropane single photon emission computed tomographic study. Oliver DW, et al. **Arzneimittelforschung** 1997 Jun;47(6):692-9

Behavioral sensitization to cocaine, but not cocaine-conditioned behavior, is associated with increased dopamine occupation of its receptors in the nucleus accumbens. Burechailo L, et al. **Behav Neurosci** 1996 Dec; 110(6):1388-96

Role of dopamine in the inhibitory control of growth hormone and prolactin release by gastrin-releasing peptide. Kentroti S, et al. **Brain Res Bull** 1996;39(4):201-4

Ibogaine and cocaine abuse: pharmacological interactions at dopamine and serotonin receptors. Sershen H, et al. **Brain Res Bull** 1997;42(3):161-8 (77 ref.)

Regulation of dopamine D2 receptor affinity by cholecystokinin octapeptide in fibroblast cells cotransfected with human CCKB and D2L receptor cDNAs. Dasgupta S, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):292-9

Dopamine, cardiovascular dopamine receptors and chronic heart failure. Brodde OE. **Cardiologia** 1995 Dec;40(12 Suppl 1):125-9

Pentadecapeptide BPC 157 interactions with adrenergic and dopaminergic systems in mucosal protection in stress. Sikirić P, et al. **Dig Dis Sci** 1997 Mar;42(3):661-71

Perinatal delta 9-tetrahydrocannabinol exposure in rats modifies the responsiveness of midbrain dopaminergic neurons in adulthood to a variety of challenges with dopaminergic drugs. García L, et al. **Drug Alcohol Depend** 1996 Nov;42(3):155-66

Chronic administration of l-sulpiride at low doses reduces A10 but not A9 somatodentritic dopamine autoreceptor sensitivity. Diana M, et al. **Eur J Pharmacol** 1996 Sep 26; 312(2):179-81

Tolerance to nicotine's effects on striatal dopamine metabolism in nicotine-withdrawn mice. Pietilä K, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):17-22

Dopamine affects the in vitro basal secretion of rat placenta opioids in an opioid and dopamine receptor type-specific manner. Stratakis CA, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):53-8

Enhancement of the behavioral response to apomorphine administration following repeated treatment in the 6-hydroxydopamine-lesioned rat is temporally correlated with a rise in striatal preproenkephalin-B, but not preproenkephalin-A, gene expression. Duty S, et al. **Exp Neurol** 1997 Apr;144(2):423-32

An in vivo battery for identifying endocrine modulators that are estrogenic or dopamine regulators. O'Connor JC, et al. **Fundam Appl Toxicol** 1996 Oct;33(2):182-95

Effects of 6R-L-erythro-5,6,7,8-tetrahydrobiopterin on the dopaminergic and cholinergic receptors as evaluated by positron emission tomography in the Rhesus monkey. Tani Y, et al. **J Neural Transm Gen Sect** 1995;102(3):189-208

Spontaneous and drug-stimulated locomotor activity after the administration of pertussis toxin into the ventral tegmental area. Narayanan S, et al. **J Psychiatry Neurosci** 1996 May;21(3):172-80

Treatment with haloperidol or clozapine causes changes in dopamine receptors but not adenylate cyclase or protein kinase C in the rat forebrain. Wan DC, et al. **Life Sci** 1996; 59(23):2001-8

Antisense strategies in dopamine receptor pharmacology. Weiss B, et al. **Life Sci** 1997;60(7):433-55 (110 ref.)

Effects of central dopaminergic stimulation by apomorphine on swallowing disorders in Parkinson's disease. Tison F, et al. **Mov Disord** 1996 Nov;11(6):729-32

Short-term levodopa test assessed by movement time accurately predicts dopaminergic responsiveness in Parkinson's disease. Zappia M, et al. **Mov Disord** 1997 Jan; 12(1):103-6

Functional regulation by dopamine receptors of serotonin release from the rat hippocampus: in vivo microdialysis study. Matsumoto M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):621-9

Further evidence for the subsensitivity of striatal AMPA receptors, induced by chronic haloperidol administration: an autoradiographic study. Ossowska K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):384-8

Effect of cocaine on dopamine transporter receptors depends on routes of chronic cocaine administration. Hitri A, et al. **Neuropsychopharmacology** 1996 Mar;14(3):205-10

Dopaminergic reduction of excitability in nucleus accumbens neurons recorded in vitro. O'Donnell P, et al. **Neuropsychopharmacology** 1996 Jul;15(1):87-97

Enhancement of postsynaptic sensitivity to dopaminergic agonists induced by neonatal hippocampal lesions. Wan RQ, et al. **Neuropsychopharmacology** 1997 Apr;16(4):259-68

Effects of nicotine withdrawal on central dopaminergic systems. Fung YK, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):635-40

Inhibition by MK-801 of morphine-induced conditioned place preference and postsynaptic dopamine receptor supersensitivity in mice. Kim HS, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):11-7

Involvement of dopamine receptors in the antipsychotic profile of (-) eticlopride. Giuliani D, et al. **Physiol Behav** 1997 Apr;61(4):563-7

Dopamine receptor diversity: molecular and pharmacological perspectives. Hartman DS, et al. **Prog Drug Res** 1997; 48:173-94 (126 ref.)

Mechanisms of action of atypical antipsychotic drugs: a critical analysis. Kinon BJ, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):2-34 (517 ref.)

Cocaine toxicity: concurrent influence of dopaminergic, muscarinic and sigma receptors in mediating cocaine-induced lethality. Ritz MC, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):311-21

D2L, D2S, and D3 dopamine receptors stably transfected into NG108-15 cells couple to a voltage-dependent potassium current via distinct G protein mechanisms. Liu LX, et al. **Synapse** 1996 Oct;24(2):156-64

["Luigi Pettinati" study award] Manno M, et al. **Med Lav** 1996 Jul-Aug;87(4):361-3 **(Ita)**

[The effect of a low dose of piracetam on the activity of the dopaminergic system in the rat striatum] Budygin EA, et al. **Eksp Klin Farmakol** 1996 Mar-Apr;59(2):6-8 (Eng. Abstr.) **(Rus)**

[The contribution of presynaptic dopaminergic receptors to the mechanism of the reactivating influences of blockade of the GABA-benzodiazepine-ionophor complex] Dubrovina NI, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan-Feb; 47(1):117-22 (Eng. Abstr.) **(Rus)**

GENETICS

Utilising molecular biological and histopathological techniques to study the dopaminergic system in patients with melancholia. Hickie I, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):27-35 (36 ref.)

The dopamine D4 receptor gene (DRD4) is not associated with alcoholism in three Taiwanese populations: six polymorphisms tested separately and as haplotypes. Chang FM, et al. **Biol Psychiatry** 1997 Feb 15;41(4):394-405

Association study between dopamine D1, D2, D3, and D4 receptor genes and schizophrenia defined by several diagnostic systems. Dollfus S, et al. **Biol Psychiatry** 1996 Sep 1;40(5):419-21

Dopamine-related genes and their relationships to monoamine metabolites in CSF. Jönsson E, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1032-43

Antipsychotic regulation of hippocampal dopamine receptor messenger RNA expression. Ritter LM, et al. **Biol Psychiatry** 1997 Aug 1;42(3):155-64

Effects of in utero cocaine exposure on the expression of mRNAS encoding the dopamine transporter and the D1, D2 and D5 dopamine receptor subtypes in fetal rhesus monkey. Choi WS, et al. **Brain Res Dev Brain Res** 1996 Oct 23;96(1-2):249-60

Opioidergic and dopaminergic gene expression in the caudate-putamen and accumbens of the mutant mouse, tottering (tg/tg). De Bartolomeis A, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):321-4

Comparative expression of vasopressin and angiotensin type-1 receptor mRNA in rat hypothalamic nuclei: a double in situ hybridization study. Lenkei Z, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):135-42

Application of quantitative RT-PCR to the analysis of dopamine receptor mRNA levels in rat striatum. Vrana SL, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):127-34

Lack of expression of dopamine D2 receptors in malignant melanoma: evidence for interaction of iodobenzofurans with melanin. Böni R, et al. **Dermatology** 1996; 193(3):198-202

Polymorphism of dopamine receptors and transporter genes in neuropsychiatric diseases. Fujiwara Y, et al. **Eur Neurol** 1997;38 Suppl 1:6-10

Co-expression of receptor mRNA and protein: striatal dopamine and excitatory amino acid subtypes. Noblett KL, et al. **J Neurosci Methods** 1996 May;66(1):61-7

Effects of repeated methamphetamine administration on dopamine D1 receptor, D2 receptor and adenylate cyclase type V mRNA levels in the rat striatum. Shishido T, et al. **Neurosci Lett** 1997 Feb 7;222(3):175-8

METABOLISM

Decreases in dopamine receptors but not in dopamine transporters in alcoholics. Volkow ND, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1594-8

Adrenergic, dopaminergic, and muscarinic receptor stimulation leads to PKA phosphorylation of Na-K-ATPase. Beguin P, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 1):C131-7

PET study of competition between intravenous cocaine and [11C]raclopride at dopamine receptors in human subjects [see comments] Schlaepfer TE, et al. **Am J Psychiatry** 1997 Sep;154(9):1209-13. Comment in: Am J Psychiatry 1997 Sep;154(9):1195-7.

Effects of reserpine treatment on the dopamine receptor binding of [3H/11C]nemonapride in the mouse and rat brain. Ishiwata K, et al. **Ann Nucl Med** 1997 Feb;11(1):21-6

Dopamine receptor affinities in vitro and stereotypic activities in vivo of cabergoline in rats. Miyagi M, et al. **Biol Pharm Bull** 1996 Sep;19(9):1210-3

Quantitative electroencephalographic frequencies and relative neuroleptic receptor affinities in schizophrenia. Small JG, et al. **Biol Psychiatry** 1996 Jun 1;39(11):986-8

Development of dopamine receptors in the forebrain of the domestic chick in relation to auditory imprinting. An autoradiographic study. Schnabel R, et al. **Brain Res** 1996 May 13;720(1-2):120-30

Renal dopamine receptors: mechanisms of action and developmental aspects. Cheung PY, et al. **Cardiovasc Res** 1996 Jan;31(1):2-6 (54 ref.)

Light microscope autoradiography of peripheral dopamine receptor subtypes. Amenta F. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):27-41 (30 ref.)

Comparative hypertensionology-renal dopaminergic activity in experimental hypertensive rats. Iimura O, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):117-30 (26 ref.)

High-level expression of rat D1A dopamine receptor cDNA in mouse fibroblast LTK- cells by n-butyrate. Horiuchi A, et al. **Clin Exp Pharmacol Physiol** 1996 Feb;23(2):150-4

DA uptake sites, D1 and D2 receptors, D2 and preproenkephalin mRNAs and Fos immunoreactivity in rat striatal subregions after partial dopaminergic degeneration. Chritin M, et al. **Eur J Neurosci** 1996 Dec;8(12):2511-20

Milestones [editorial; comment] Ell PJ. **Eur J Nucl Med** 1996 Nov;23(11):1441. Comment on: Eur J Nucl Med 1996 Nov;23(11):1527-30.

In vitro affinity of piribedil for dopamine D3 receptor subtypes, an autoradiographic study. Cagnotto A, et al. **Eur J Pharmacol** 1996 Oct 10;313(1-2):63-7

Dopamine receptor gene expression in hippocampus is differentially regulated by the NMDA receptor antagonist MK-801. Healy DJ, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1-3):257-64

Iloperidone binding to human and rat dopamine and 5-HT receptors. Kongsamut S, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):417-23

Dopamine synthesis, uptake, metabolism, and receptors: relevance to gene therapy of Parkinson's disease. Elsworth JD, et al. **Exp Neurol** 1997 Mar;144(1):4-9 (44 ref.)

Dopaminergic control of prolactin secretion in the turkey. Youngren OM, et al. **Gen Comp Endocrinol** 1996 Nov; 104(2):225-30

The D3 receptor and its relevance in psychiatry. Schwartz JC, et al. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:15-20 (43 ref.)

Changes in retinal dopaminergic cells and dopamine rhythmic metabolism during the development of a glaucoma-like disorder in quails. Dkhissi O, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2335-44

Kinetic modeling of [11C]raclopride: combined PET-microdialysis studies. Endres CJ, et al. **J Cereb Blood Flow Metab** 1997 Sep;17(9):932–42

Synthesis, resolution, and preliminary evaluation of trans-2-amino-6(5)-hydroxy-1-phenyl-2,3-dihydro-1H-indenes and related derivatives as dopamine receptors ligands. Claudi F, et al. **J Med Chem** 1996 Oct 11; 39(21):4238–46

Preferential vulnerability of nucleus accumbens dopamine binding sites to low-level lead exposure: time course of effects and interactions with chronic dopamine agonist treatments. Pokora MJ, et al. **J Neurochem** 1996 Oct; 67(4):1540–50

Age-dependent changes in the expression of dopamine receptor subtypes in human peripheral blood lymphocytes. Barili P, et al. **J Neuroimmunol** 1996 Dec;71(1–2):45–50

Dopamine receptor binding predicts clinical and pharmacological potencies of antischizophrenic drugs. Creese I, et al. **J Neuropsychiatry Clin Neurosci** 1996 Spring;8(2):223–6

Pathophysiology of schizophrenia: dopamine hypothesis. Neylan TC. **J Neuropsychiatry Clin Neurosci** 1996 Spring; 8(2):222

Coordinated expression of dopamine receptors in neostriatal medium spiny neurons. Surmeier DJ, et al. **J Neurosci** 1996 Oct 15;16(20):6579–91

Quantitation of neuroreceptors: a need to increase imaging resolution? [letter; comment] Kuikka JT. **J Nucl Med** 1996 Nov;37(11):1911–2. Comment on: J Nucl Med 1995 Jul;36(7):1175–81.

Interactions of (+)- and (-)-8- and 7-hydroxy-2-(di-n-propylamino)tetralin at human (h)D3, hD2 and h serotonin1A receptors and their modulation of the activity of serotoninergic and dopaminergic neurones in rats. Lejeune F, et al. **J Pharmacol Exp Ther** 1997 Mar; 280(3):1241–9

Transient loss of dopamine autoreceptor control in the presence of highly potent dopamine agonists. Mao A, et al. **Life Sci** 1996;59(21):PL317–24

Mechanism of modulation of [3H]raclopride binding to dopaminergic receptors in rat striatal membranes by sodium ions. Lepiku M, et al. **Neurochem Int** 1997 Jun;30(6):575–81

Kinetic evidence for isomerization of the dopamine receptor-raclopride complex. Lepiku M, et al. **Neurochem Int** 1996 May-Jun;28(5–6):591–5

GABA-dopamine receptor-receptor interactions in neostriatal membranes of the rat. Pérez de la Mora M, et al. **Neurochem Res** 1997 Aug;22(8):1051–4

Reduced striatal dopamine receptors in Alzheimer's disease: single photon emission tomography study with the D2 tracer [123I]-IBZM. Pizzolato G, et al. **Neurology** 1996 Oct;47(4):1065–8

Dopamine receptor mRNA expression in human striatum and neocortex. Meador-Woodruff JH, et al. **Neuropsychopharmacology** 1996 Jul;15(1):17–29

Increased density of dopamine D5 receptor in peripheral blood lymphocytes of migraineurs: a marker for migraine? Barbanti P, et al. **Neurosci Lett** 1996 Mar 29;207(2):73–6

Reduction in number of dopamine uptake sites but unchanged number of piperazine-acceptor/CYP450IID6 binding sites in the human caudate nucleus in aging. Norlén M, et al. **Neurosci Lett** 1996 May 17;209(3):161–4

Localization of dopamine receptors and associated mRNA in transplants of human fetal striatal tissue in rodents with experimental Huntington's disease. Pundt LL, et al. **Neurosci Res** 1997 Apr;27(4):305–15

Effect of prenatal cocaine on dopamine receptor-G protein coupling in mesocortical regions of the rabbit brain. Friedman E, et al. **Neuroscience** 1996 Feb;70(3):739–47

Dopamine and GABA receptors in cultured substantia nigra neurons: correlation of electrophysiology and immunocytochemistry. Kim KM, et al. **Neuroscience** 1997 Jun;78(3):759–69

Evidence for aspartate-immunoreactive neurons in the neostriatum of the rat: modulation by the mesencephalic dopamine pathway via D1-subtype of receptor. Pettersson E, et al. **Neuroscience** 1996 Sep;74(1):51–66

Pharmacokinetics, toxicity, side effects, receptor affinities and in vitro radiosensitizing effects of the novel metoclopramide formulations, sensamide and neu-sensamide. Pero RW, et al. **Pharmacol Toxicol** 1997 May;80(5):231–9

Alcohol withdrawal and dopamine receptor sensitivity after prolonged abstinence. Wiesbeck GA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1171–80

Stress, depression and the mesolimbic dopamine system. Cabib S, et al. **Psychopharmacology (Berl)** 1996 Dec; 128(4):331–42 (100 ref.)

Dopamine and depression--striatal dopamine D2 receptor SPECT before and after antidepressant therapy. Ebert D, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):91–4

Risperidone compared with new and reference antipsychotic drugs: in vitro and in vivo receptor binding. Schotte A, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):57–73

Regulation of ionotropic glutamate receptors following subchronic and chronic treatment with typical and atypical antipsychotics. Tarazi FI, et al. **Psychopharmacology (Berl)** 1996 Dec;128(4):371–9

The secretory trypsin inhibitor like-peptide, PEC-60 increases dopamine D2 receptor agonist induced inhibition of GABA release in the dorsolateral neostriatum of the awake freely moving rat. An in vivo microdialysis study. Rimondini R, et al. **Regul Pept** 1996 Feb 22;61(2):111–7

Distribution of dopamine D1-D4 receptor subtypes in human dorsal vagal complex. Hyde TM, et al. **Synapse** 1996 Nov; 24(3):224–32

A neural substrate of hyperactivity in borna disease: changes in brain dopamine receptors. Solbrig MV, et al. **Virology** 1996 Aug 15;222(2):332–8

PHYSIOLOGY

Dopamine receptors in the medial prefrontal cortex influence ethanol and sucrose-reinforced responding. Hodge CW, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1631–8

Dopaminergic receptors and angiotensinogen gene expression in opossum kidney cells. Wang TT, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R519–27

Psychopathological and behavioral correlates of dopaminergic sensitivity in alcohol-dependent patients. Heinz A, et al. **Arch Gen Psychiatry** 1996 Dec; 53(12):1123–8

Complexity of dopaminergic function in the retinal dark-light switch. Morgan IG, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):56–8 (13 ref.)

Unilateral frontal cortex ablation producing neglect causes time-dependent changes in striatal glutamate receptors. Vargo JM, et al. **Behav Brain Res** 1996 May;77(1–2):189–99

Dopamine receptor-mediated regulation of corticotropin-releasing hormone neurons in the hypothalamic paraventricular nucleus. Eaton MJ, et al. **Brain Res** 1996 Oct 28;738(1):60–6

Nicotinic, muscarinic and dopaminergic actions in the ventral hippocampus and the nucleus accumbens: effects on spatial working memory in rats. Kim JS, et al. **Brain Res** 1996 Jul 1;725(2):231–40

Is binding to nicotinic acetylcholine and dopamine receptors related to working memory in rats? Levin ED, et al. **Brain Res Bull** 1997;43(3):295–304

Differential regulation of mRNA levels encoding for the two isoforms of glutamate decarboxylase (GAD65 and GAD67) by dopamine receptors in the rat striatum. Laprade N, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):65–74

Transgenic mice to study the role of dopamine receptors in cardiovascular function. Jose PA, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1–2):15–25 (61 ref.)

Renal and intestinal autocrine monoaminergic systems: dopamine versus 5-hydroxytryptamine. Vieira-Coelho MA, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1–2):43–58 (22 ref.)

The use of dopamine in acute renal failure [letter] Harper L, et al. **Clin Nephrol** 1997 May;47(5):347–9 (29 ref.)

Dopaminergic receptor-mediated effects in the mesenteric vasculature and renal vasculature of the chronically instrumented newborn piglet. Pearson RJ, et al. **Crit Care Med** 1996 Oct;24(10):1706–12

What we can learn from the selective manipulation of dopaminergic receptors about the pathogenesis and treatment of hypertension? Jose PA, et al. **Curr Opin Nephrol Hypertens** 1996 Sep;5(5):447–51 (62 ref.)

Mazindol and lidocaine are antinociceptives in the mouse formalin model: involvement of dopamine receptor. Bittencourt AL, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2–3):109–13

(+)-SKF-10,047 and dextromethorphan ameliorate conditioned fear stress via dopaminergic systems linked to phenytoin-regulated sigma 1 sites. Kamei H, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):149–58

Dopamine-N-methyl-D-aspartate interactions in the modulation of locomotor activity and memory consolidation in mice. Mele A, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):1–12

Treadmill running induces striatal Fos expression via NMDA glutamate and dopamine receptors. Liste I, et al. **Exp Brain Res** 1997 Jul;115(3):458–68

Lineweaver-Burk analysis for the blocking effects of mammalian dopamine receptor antagonists on dopamine-induced currents in Achatina giant neurones. Emaduddin M, et al. **Gen Pharmacol** 1996 Oct; 27(7):1209–13

Catecholamines in ADHD: a postscript [letter; comment] Pliszka SR, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):869–70. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Mar;35(3):264–72.

Ultrastructural view of central catecholaminergic transmission: immunocytochemical localization of synthesizing enzymes, transporters and receptors. Pickel VM, et al. **J Neurocytol** 1996 Dec;25(12):843–56 (141 ref.)

Characterization of dopamine receptors mediating inhibition of excitatory synaptic transmission in the rat hippocampal slice. Hsu KS. **J Neurophysiol** 1996 Sep;76(3):1887–95

Dopaminergic modulation of glutamate-induced excitations of neurons in the neostriatum and nucleus accumbens of awake, unrestrained rats. Kiyatkin EA, et al. **J Neurophysiol** 1996 Jan;75(1):142–53

Dopaminergic regulation of progesterone receptors: brain D5 dopamine receptors mediate induction of lordosis by D1-like agonists in rats. Apostolakis EM, et al. **J Neurosci** 1996 Aug 15;16(16):4823–34

The response of subthalamic nucleus neurons to dopamine receptor stimulation in a rodent model of Parkinson's disease. Kreiss DS, et al. **J Neurosci** 1997 Sep 1; 17(17):6807–19

Limbic circuits and monoamine receptors: dissecting the effects of antipsychotics from disease processes. Joyce JN, et al. **J Psychiatr Res** 1997 Mar-Apr;31(2):197–217 (70 ref.)

Influence of dopaminergic transmission on severity of withdrawal syndrome in alcoholism. Heinz A, et al. **J Stud Alcohol** 1996 Sep;57(5):471–4

Dopamine and serotonin receptors: amino acid sequences, and clinical role in neuroleptic parkinsonism. Seeman P, et al. **Jpn J Pharmacol** 1996 Jul;71(3):187–204 (140 ref.)

Current concepts in the molecular diversity and pharmacology of dopamine receptors. Kulkarni SK, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov;18(9):599–613 (116 ref.)

Dopamine receptors influence vasoactive intestinal peptide release from turkey hypothalamic explants. Chaiseha Y, et al. **Neuroendocrinology** 1997 Jun;65(6):423–9

Dopamine receptors and brain function. Jaber M, et al. **Neuropharmacology** 1996;35(11):1503–19 (205 ref.)

Dopaminergic modulation of semantic network activation. Kischka U, et al. **Neuropsychologia** 1996 Nov; 34(11):1107–13

Functional and molecular differentiation of the dopamine system induced by neonatal denervation. Joyce JN, et al. **Neurosci Biobehav Rev** 1996 Autumn;20(3):453–86 (285 ref.)

Dopamine-glutamate interactions in the striatum: behaviourally relevant modification of excitotoxicity by dopamine receptor-mediated mechanisms. Garside S, et al. **Neuroscience** 1996 Dec;75(4):1065–74

Molecular mechanisms of the brain reward system. **NIDA Res Monogr** 1996;162:34–6

Two distinct receptors operate the cAMP cascade to up-regulate L-type Ca channels. Lukyanetz EA, et al. **Pflugers Arch** 1996 Jun;432(2):174–81

D2L, D2S, and D3 dopamine receptors stably transfected into NG108-15 cells couple to a voltage-dependent potassium current via distinct G protein mechanisms. Liu LX, et al. **Synapse** 1996 Oct;24(2):156–64

[The effect of renal dopamtne receptor blockade on natriuresis induced by volume expansion and intracerebroventricular injection of hypertonic saline in rabbits] Xu YJ, et al. **Sheng Li Hsueh Pao** 1995 Dec; 47(6):580–8 (Eng. Abstr.) **(Chi)**

[The central dopaminergic system and depression] Ebert D, et al. **Nervenarzt** 1997 Jul;68(7):545–55 (89 ref.) (Eng. Abstr.) **(Ger)**

[The renal dopaminergic system and arterial hypertension] Pestana M, et al. **Rev Port Cardiol** 1996 Dec;15(12):893–902 (66 ref.) **(Por)**

[The brain dopaminergic systems: receptor heterogeneity, functional role and pharmacological regulation] Raevskii KS, et al. **Usp Fiziol Nauk** 1996 Oct-Dec;27(4):3–29 (144 ref.) (Eng. Abstr.) **(Rus)**

[The morphochemical characteristics of the reaction of the motor structures of the brain to hyper- and hypofunction of the dopaminergic system] Gershtein LM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):49–53 (Eng. Abstr.) **(Rus)**

[A comparison of serotonin- and dopaminergic neuronal systems in sexually mature and juvenile terrestrial mollusks of the genera Helix and Eobania] Ierusalimskii VN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):563–76 (Eng. Abstr.) **(Rus)**

[Dopamine receptor subtypes] Janković SM, et al. **Med Pregl** 1996;49(7–8):281–5 (40 ref.) (Eng. Abstr.) **(Scr)**

ULTRASTRUCTURE

[Projections of the amygdaloid body and dopaminergic mesencephalic formations to the entopeduncular nucleus of the cat brain] Gorbachevskaia AI. **Morfologiia** 1996; 109(3):19–21 (Eng. Abstr.) **(Rus)**

RECEPTORS, DOPAMINE D1

Molecular modeling of interactions between tetrahydroprotoberberines and dopamine receptors. Tang Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan;17(1):8–12

AGONISTS

Neurophysin expression is stimulated by dopamine D1 agonist in dispersed hypothalamic cultures. Mathiasen JR, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R404–12

Synthesis and autoradiographic localization of the dopamine D-1 agonists [11C]SKF 75670 and [11C]SKF 82957 as potential PET radioligands. DaSilva JN, et al. **Appl Radiat Isot** 1996 Mar;47(3):279–84

Involvement of receptor reserve in D1 agonistic action of (-)-stepholidine in lesioned rats. Zou LL, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):233–40

Stimulation of the rat mesolimbic dopaminergic system produces a pressor response which is mediated by dopamine D-1 and D-2 receptor activation and the release of vasopressin. Cornish JL, et al. **Brain Res** 1995 Dec 1; 701(1-2):28–38

Dyskinesias and tolerance induced by chronic treatment with a D1 agonist administered in pulsatile or continuous mode do not correlate with changes of putaminal D1 receptors in drug-naive MPTP monkeys. Goulet M, et al. **Brain Res** 1996 May 6;719(1–2):129–37

Cerebrocortical Fos expression following dopaminergic stimulation: D1/D2 synergism and its breakdown. LaHoste GJ, et al. **Brain Res** 1996 Jul 22;728(1):97–104

A D1 dopamine agonist stimulates acetylcholine release from dissociated striatal cholinergic neurons. Login IS, et al. **Brain Res** 1996 Jul 15;727(1-2):162-8

Intrastriatal AP5 differentially affects behaviors induced by local infusions of D1 vs. D2 dopamine agonists. McPherson RJ, et al. **Brain Res** 1996 Nov 11;739(1-2):19-25

Synergistic interaction between an adenosine antagonist and a D1 dopamine agonist on rotational behavior and striatal c-Fos induction in 6-hydroxydopamine-lesioned rats. Pollack AE, et al. **Brain Res** 1996 Dec 16;743(1-2):124-30

D2 and D1 dopaminergic activity of 7-OH-DPAT. Sethy VH, et al. **Brain Res** 1996 Sep 9;733(1):41-5

Selective full dopamine D1-like (SKF-82958) and D2-like (N-0923) agonist combination in the MPTP monkey model of hemiparkinsonism. Domino EF. **Brain Res Bull** 1997; 43(1):93-5

Blockade of A2a adenosine receptors positively modulates turning behaviour and c-Fos expression induced by D1 agonists in dopamine-denervated rats. Pinna A, et al. **Eur J Neurosci** 1996 Jun;8(6):1176-81

Stimulating dopamine D1 receptors increases the locomotor activity of developing rats. Shieh GJ, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):103-7

Hyperactivity and behavioral seizures in rodents following treatment with the dopamine D1 receptor agonists A-86929 and ABT-431. Shiosaki K, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):183-90

Chronic repeated cocaine administration increases dopamine D1 receptor-mediated signal transduction. Unterwald EM, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):31-5

Renal effect of YM435, a new dopamine D1 receptor agonist, in anesthetized dogs. Yatsu T, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):45-53

Differential therapeutic effects of dopamine D1 and D2 agonists in MPTP-induced parkinsonian monkeys: clinical implications. Kuno S. **Eur Neurol** 1997;38 Suppl 1:18-22

Attenuation of oxidative neuronal necrosis by a dopamine D1 agonist in mouse cortical cell cultures. Noh JS, et al. **Exp Neurol** 1997 Aug;146(2):604-8

Role of arachidonic acid and calmodulin in mediating dopamine D1- and GnRH-stimulated growth hormone release in goldfish pituitary cells. Chang JP, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):88-101

Hemodynamic characterization of YM435, a novel dopamine DA1 receptor agonist, in anesthetized dogs. Yatsu T, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):382-8

Further definition of the D1 dopamine receptor pharmacophore: synthesis of trans-6,6a,7,8,9,13b-hexahydro-5H-benzo[d]naphth[2,1-b]azepines as rigid analogues of beta-phenyldopamine. Negash K, et al. **J Med Chem** 1997 Jul 4;40(14):2140-7

Effects of dopamine D-1 and D-2 receptors on intraocular pressure in conscious rabbits. Prünte C, et al. **J Neural Transm** 1997;104(2-3):111-23

Time course and regional basis of Pb-induced changes in MK-801 binding: reversal by chronic treatment with the dopamine agonist apomorphine but not the D1 agonist SKF-82958. Cory-Slechta DA, et al. **J Neurochem** 1997 May;68(5):2012-23

D1 dopamine receptor agonist (SKF-38393) induction of Fos immunoreactivity in progestin receptor-containing areas of female rat brain. Meredith JM, et al. **J Neuroendocrinol** 1997 May;9(5):385-94

Dopaminergic regulation of progesterone receptors: brain D5 dopamine receptors mediate induction of lordosis by D1-like agonists in rats. Apostolakis EM, et al. **J Neurosci** 1996 Aug 15;16(16):4823-34

Agonist-specific coupling of a cloned Drosophila melanogaster D1-like dopamine receptor to multiple second messenger pathways by synthetic agonists. Reale V, et al. **J Neurosci** 1997 Sep 1;17(17):6545-53

The selective dopamine D1 receptor agonist A-86929 maintains efficacy with repeated treatment in rodent and primate models of Parkinson's disease. Asin KE, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):454-9

The full D1 dopamine receptor agonist SKF-82958 induces neuropeptide mRNA in the normosensitive striatum of rats: regulation of D1/D2 interactions by muscarinic receptors. Wang JQ, et al. **J Pharmacol Exp Ther** 1997 May; 281(2):972-82

Neurotransmitters activate the human estrogen receptor in a neuroblastoma cell line. Gangolli EA, et al. **J Steroid Biochem Mol Biol** 1997 Apr;61(1-2):1-9

Biphasic effects of D3-receptor agonists, 7-OH-DPAT and PD128907, on the D1-receptor agonist-induced hyperactivity in mice. Mori T, et al. **Jpn J Pharmacol** 1997 Mar;73(3):251-4

Dual actions of (-)-stepholidine on the dopamine receptor-mediated adenylate cyclase activity in rat corpus striatum. Dong ZJ, et al. **Life Sci** 1997;61(4):465-72

Potential therapeutic use of the selective dopamine D1 receptor agonist, A-86929: an acute study in parkinsonian levodopa-primed monkeys. Grondin R, et al. **Neurology** 1997 Aug;49(2):421-6

Responses of substantia nigra pars reticulata neurons to intrastriatal D1 and D2 dopaminergic agonist injections in the rat. Akkal D, et al. **Neurosci Lett** 1996 Jul 26; 213(1):66-70

Evidence for a tachykinin/cholinergic mediation of D1 agonist-induced turning in mice. Poncelet M, et al. **Neurosci Lett** 1996 Mar 1;205(3):185-8

Adenosine A1 receptor blockade selectively potentiates the motor effects induced by dopamine D1 receptor stimulation in rodents. Popoli P, et al. **Neurosci Lett** 1996 Nov 8; 218(3):209-13

Conditioned grooming induced by the dopamine D1-like receptor agonist SKF 38393 in rats. Page SJ, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):829-33

Self-administration of D1 receptor agonists by squirrel monkeys. Grech DM, et al. **Psychopharmacology (Berl)** 1996 May;125(2):97-104

Self-administration of the D1 agonist SKF 82958 is mediated by D1, not D2, receptors. Self DW, et al. **Psychopharmacology (Berl)** 1996 Feb;123(4):303-6

Effects of AMPA and D1 receptor activation on striatal and nigral GABA efflux. Byrnes EM, et al. **Synapse** 1997 Jul; 26(3):254-68

DAD1- and DAD2-like agonist effects on motor activity of C57 mice: differences compared to rats. Halberda JP, et al. **Synapse** 1997 May;26(1):81-92

Differential interaction of competitive NMDA and AMPA antagonists with selective dopamine D-1 and D-2 agonists in a rat model of Parkinson's disease. Löschmann PA, et al. **Synapse** 1997 Aug;26(4):381-91

Amphetamine-induced release of dendritic dopamine in substantia nigra pars reticulata: D1-mediated behavioral and electrophysiological effects. Timmerman W, et al. **Synapse** 1996 Aug;23(4):280-91

ANALYSIS

Quantitative autoradiographic analysis of D1 and D2 dopamine receptors in rat brain in early and late pregnancy. Bakowska JC, et al. **Brain Res** 1995 Dec 12; 703(1-2):191-200

Localization of D1 dopamine receptors on live cultured striatal neurons by quantitative fluorescence microscopy. Hoyt KR, et al. **Brain Res** 1996 Aug 26;731(1-2):21-30

Immunohistochemistry localization of dopamine D1 receptors in rat retina. Veruki ML, et al. **Eur J Neurosci** 1996 Nov;8(11):2286-97

Localization of the dopamine D1 receptor protein in the human heart and kidney. Ozono R, et al. **Hypertension** 1997 Sep;30(3 Pt 2):725-9

Dopaminergic transmission in the rat retina: evidence for volume transmission. Bjelke B, et al. **J Chem Neuroanat** 1996 Nov;12(1):37-50

Immunocytochemical localization of dopamine D1 receptors in the retina of mammals. Nguyen-Legros J, et al. **Vis Neurosci** 1997 May-Jun;14(3):545-51

ANTAGONISTS & INHIBITORS

Antagonism of the discriminative stimulus properties of cocaine with the combination of a dopamine D1 and D2 antagonist. Meert TF, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(4):897-905

Discriminative stimulus properties of CGS 10746B: similarity to dopamine D1 receptor antagonists. Meehan SM, et al. **Behav Brain Res** 1996 Jan;74(1-2):199-205

A synergistic interaction between dopamine D1 and D2 receptor subtypes in the memory impairments induced by concussive brain injury (CBI) in mice. Tang YP, et al. **Behav Brain Res** 1997 Feb;83(1-2):189-93

Dopamine D1 and D2 antagonists block L-DOPA-induced air-stepping in decerebrate neonatal rats. McCrea AE, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):130-2

Sensitivity to the motoric effects of a dopamine receptor antagonist differs as a function of age at the time of dopamine depletion. Sandstrom MI, et al. **Dev Psychobiol** 1997 May;30(4):293-300

Evidence for dopamine 'D1-like' receptor subtypes in the behavioural effects of two new selective antagonists, LY 270411 and BW 737C. Deveney AM, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):175-81

Dopamine receptor antagonists block nerve growth factor-induced hyperactivity. Kobayashi S, et al. **Eur J Pharmacol** 1997 May 12;326(1):1-5

SDZ GLC 756, a novel octahydrobenzo[g]quinoline derivative exerts opposing effects on dopamine D1 and D2 receptors. Markstein R, et al. **J Neural Transm** 1996; 103(1-2):17-30

SDZ PSD 958, a novel D1 receptor antagonist with potential limbic selectivity. Markstein R, et al. **J Neural Transm** 1996; 103(3):261-76

Effects of dopamine D-1 and D-2 receptors on intraocular pressure in conscious rabbits. Prünte C, et al. **J Neural Transm** 1997;104(2-3):111-23

Behavioral and neurochemical recovery from partial 6-hydroxydopamine lesions of the substantia nigra is blocked by daily treatment with D1/D5, but not D2, dopamine receptor antagonists. Emmi A, et al. **J Neurosci** 1997 May 15;17(10):3840-6

Topical SDZ GLC-756, a novel dopamine D-1 antagonist and D-2 agonist, lowers intraocular pressure in conscious rabbits. Prünte C, et al. **Jpn J Ophthalmol** 1996;40(2):167-73

Impairments of movement initiation and execution induced by a blockade of dopamine D1 or D2 receptors are reversed by a blockade of N-methyl-D-aspartate receptors. Hauber W. **Neuroscience** 1996 Jul;73(1):121-30

11C- and 76Br-labelled NNC 22-0010, selective dopamine D1 receptor radioligands for PET. Foged C, et al. **Nucl Med Biol** 1996 Aug;23(6):837-44

The novel dopamine D-1 antagonist and D-2 agonist, SDZ GLC-756, lowers intraocular pressure in healthy human volunteers and in patients with glaucoma. Prünte C, et al. **Ophthalmology** 1995 Sep;102(9):1291-7

A role for D2, but not D1, dopamine receptors in the response-reinstating effects of food reinforcement. Chausmer AL, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):681-5

Dopamine D1/D2 antagonist combinations as antagonists of the discriminative stimulus effects of cocaine. Geter-Douglass B, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):439-51

Different effects of dopamine antagonists on spontaneous and NMDA-induced motor activity in mice. Giménez-Llort L, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):549-53

Effects of 5-HT3, D1 and D2 receptor antagonists on ethanol- and cocaine-induced locomotion. Lê AD, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):325-32

The effects of dopamine D1 and D2 receptor antagonists on the rewarding effects of delta 1 and delta 2 opioid receptor agonists in mice. Suzuki T, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):211-8

Reduction of red-green discrimination by dopamine D1 receptor antagonists and retinal dopamine depletion. Mora-Ferrer C, et al. **Vision Res** 1996 Dec;36(24):4035-44

BIOSYNTHESIS

Acid stress induces a D1-like dopamine receptor in pituitary MSH cells of Oreochromis mossambicus. Lamers AE, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R387-92

Dopamine D1 and D2 receptor gene expression in the striatum in Huntington's disease. Augood SJ, et al. **Ann Neurol** 1997 Aug;42(2):215-21

DA1 and DA2 receptor regulation in the striatum of young and old rats after peripheral vestibular lesion. Giardino L, et al. **Brain Res** 1996 Oct 14;736(1-2):111-7

Differential effects of clozapine and haloperidol on dopamine receptor mRNA expression in rat striatum and cortex Damask SP, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1-2):241-9

Transient expression of an atypical D1-like dopamine receptor system during avian retina differentiation. de Mello MC, et al. **Braz J Med Biol Res** 1996 Aug; 29(8):1035-44

Two distinct promoters drive transcription of the human D1A dopamine receptor gene. Lee SH, et al. **J Biol Chem** 1996 Oct 11;271(41):25292-9

D1 dopamine receptors are not expressed in human melanoma. Böni R, et al. **Melanoma Res** 1997 Apr; 7(2):117-9

Transcription of dopamine D1A receptor mRNAs in rat heart. Zhang H, et al. **Methods Find Exp Clin Pharmacol** 1996 Apr;18(3):183-7

Changes of D1 and D2 dopamine receptor mRNA in the brains of monkeys lesioned with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine: correction with chronic administration of L-3,4-dihydroxyphenylalanine. Morissette M, et al. **Mol Pharmacol** 1996 Nov;50(5):1073-9

The effect of aging on rat striatal D1 receptor mRNA-containing neurons. Zhang L, et al. **Neurobiol Aging** 1997 Mar-Apr;18(2):251-5

Distribution and postnatal ontogeny of adenosine A2A receptors in rat brain: comparison with dopamine receptors. Johansson B, et al. **Neuroscience** 1997 Oct;80(4):1187-207

Expression of the D3 dopamine receptor in peptidergic neurons of the nucleus accumbens: comparison with the D1 and D2 dopamine receptors. Le Moine C, et al. **Neuroscience** 1996 Jul;73(1):131-43

A novel nonneuronal catecholaminergic system: exocrine pancreas synthesizes and releases dopamine. Mezey E, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10377-82

Regulation of striatal D1A dopamine receptor gene transcription by Brn-4. Okazawa H, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11933-8

DEFICIENCY

Modulatory actions of dopamine on NMDA receptor-mediated responses are reduced in D1A-deficient mutant mice. Levine MS, et al. **J Neurosci** 1996 Sep 15; 16(18):5870-82

D1 dopamine receptor-deficient mouse: cocaine-induced regulation of immediate-early gene and substance P expression in the striatum. Drago J, et al. **Neuroscience** 1996 Oct;74(3):813-23

DRUG EFFECTS

Effects of maternal ethanol consumption and buspirone treatment on dopamine and norepinephrine reuptake sites and D1 receptors in offspring. Gillespie RA, et al. **Alcohol Clin Exp Res** 1997 May;21(3):452-9

A genetic approach to study mechanisms of cocaine action. Xu M, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:51-63

Differential influence of D1 and D2 dopamine receptors on acute opiate withdrawal in guinea-pig isolated ileum. Capasso A, et al. **Br J Pharmacol** 1997 Mar;120(6):1001-6

The D1 receptor-mediated effects of the ergoline derivative LEK-8829 in rats with unilateral 6-hydroxydopamine lesions. Zivin M, et al. **Br J Pharmacol** 1996 Nov; 119(6):1187-96

Consequences of transient focal cerebral ischaemia for second messenger and neurotransmitter binding in the rat: quantitative autoradiographic analysis of forskolin,

dopamine D1 receptor binding and cerebral blood flow changes. Gartshore G, et al. **Eur J Neurosci** 1996 Mar; 8(3):486–93

Pharmacological characterization and autoradiographic localization of dopamine receptors in the rat adrenal medulla. Barili P, et al. **Eur J Pharmacol** 1996 Aug 29; 310(2–3):129–35

Regulation of tyrosine hydroxylase and aromatic L–amino acid decarboxylase by dopaminergic drugs. Cho S, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):149–57

Priming of 6–hydroxydopamine–lesioned rats with L–DOPA or quinpirole results in an increase in dopamine D1 receptor–dependent cyclic AMP production in striatal tissue. Pinna A, et al. **Eur J Pharmacol** 1997 Jul 16; 331(1):23–6

Behavioural evidence for cholecystokinin–dopamine D1 receptor interactions in the rat. Van Kampen J, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):7–15

Inhibitory action of dopamine involves a subthreshold Cs(+)–sensitive conductance in neostriatal neurons. Pacheco–Cano MT, et al. **Exp Brain Res** 1996 Jul; 110(2):205–11

Differential human renal tubular responses to dopamine type 1 receptor stimulation are determined by blood pressure status. O'Connell DP, et al. **Hypertension** 1997 Jan;29(1 Pt 1):115–22

Dopamine D1–like receptor stimulation inhibits hypertrophy induced by platelet–derived growth factor in cultured rat renal vascular smooth muscle cells. Yasunari K, et al. **Hypertension** 1997 Jan;29(1 Pt 2):350–5

Dynorphin regulates D1 dopamine receptor–mediated responses in the striatum: relative contributions of pre– and postsynaptic mechanisms in dorsal and ventral striatum demonstrated by altered immediate–early gene induction. Steiner H, et al. **J Comp Neurol** 1996 Dec 23;376(4):530–41

Prolonged and extrasynaptic excitatory action of dopamine mediated by D1 receptors in the rat striatum in vivo. Gonon F. **J Neurosci** 1997 Aug 1;17(15):5972–8

D1 receptor–activation enhances evoked discharge in neostriatal medium spiny neurons by modulating an L–type Ca2+ conductance. Hernández–López S, et al. **J Neurosci** 1997 May 1;17(9):3334–42

Down–regulation of the D1 and D5 dopamine receptors in the primate prefrontal cortex by chronic treatment with antipsychotic drugs. Lidow MS, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):597–603

Dopamine D1–like receptor–mediated presynaptic inhibition of excitatory transmission onto rat magnocellular basal forebrain neurones. Momiyama T, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):97–106

Characteristic upregulation of dopamine D1–receptor in rat striatum after 6–hydroxydopamine treatment. Iwata S, et al. **Jpn J Pharmacol** 1996 Jul;71(3):255–8

Effect of the putative dopamine D1 agonist and D2 antagonist FCE 23884 on Parkinson's disease. Metman LV, et al. **Mov Disord** 1996 May;11(3):257–60

The effects of chronic levodopa treatment on pre– and postsynaptic markers of dopaminergic function in striatum of parkinsonian monkeys. Rioux L, et al. **Mov Disord** 1997 Mar;12(2):148–58

Improved models for pharmacological null experiments: calculation of drug efficacy at recombinant D1A dopamine receptors stably expressed in clonal cell lines. Mak CK, et al. **Neuropharmacology** 1996 May;35(5):549–70

The neurotensin antagonist SR 48692 fails to modify the behavioural responses to a dopamine D1 receptor agonist in the rat. Stoessl AJ, et al. **Neuropharmacology** 1997 Jan; 36(1):93–9

Do D1/D2 interactions regulate prepulse inhibition in rats? Wan FJ, et al. **Neuropsychopharmacology** 1996 Apr; 14(4):265–74

In utero cocaine exposure decreases dopamine D1 receptor modulation of hippocampal long–term potentiation in the rabbit. Little JZ, et al. **Neurosci Lett** 1996 Sep 13; 215(3):157–60

The corticosterone synthesis inhibitor metyrapone decreases dopamine D1 receptors in the rat brain. Czyrak A, et al. **Neuroscience** 1997 Jul;79(2):489–95

Histamine H3 receptor activation selectively inhibits dopamine D1 receptor–dependent [3H]GABA release from depolarization–stimulated slices of rat substantia nigra pars reticulata. Garcia M, et al. **Neuroscience** 1997 Sep; 80(1):241–9

Continuous or pulsatile chronic D2 dopamine receptor agonist (U91356A) treatment of drug–naive 4–phenyl–1,2,3,6–tetrahydropyridine monkeys differentially regulates brain D1 and D2 receptor expression: in situ hybridization histochemical analysis. Goulet M, et al. **Neuroscience** 1997 Jul;79(2):497–507

Activation of dopaminergic D1 receptors promotes morphogenesis of developing striatal neurons. Schmidt U, et al. **Neuroscience** 1996 Sep;74(2):453–60

Lead–induced changes in dopamine D1 sensitivity: modulation by drug discrimination training. Cory–Slechta DA, et al. **Neurotoxicology** 1996 Summer;17(2):445–57

Is TISCH a suitable tracer for in vivo study of modifications of the dopamine D–1 receptor? Pellevoisin C, et al. **Nucl Med Biol** 1996 Jan;23(1):75–8

Comparison of the stimulus properties of a pre– vs. a putative postsynaptic dose of quinpirole. Cory–Slechta DA, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):423–32

Chronic lithium attenuates dopamine D1–receptor mediated increases in acetylcholine release in rat frontal cortex. Acquas E, et al. **Psychopharmacology (Berl)** 1996 May; 125(2):162–7

Comparison of the new atypical antipsychotics olanzapine and ICI 204,636 with clozapine on behavioural responses to the selective "D1–like" dopamine receptor agonist A 68930 and selective "D2–like" agonist RU 24213. Deveney AM, et al. **Psychopharmacology (Berl)** 1996 Mar; 124(1–2):40–9

Chronic nicotine working and reference memory effects in the 16–arm radial maze: interactions with D1 agonist and antagonist drugs. Levin ED, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):25–30

D1 dopamine receptor stimulation inhibits firing activity of midbrain dopamine neurons in reserpine treated rats: an effect eliminated after hemitransection of diencephalon. Sun BC, et al. **Synapse** 1996 Sep;24(1):29–38

GENETICS

Lack of allelic association of dopamine D1 and D2 (TaqIA) receptor gene polymorphisms with reduced dopaminergic sensitivity to alcoholism. Heinz A, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):1109–13

Linkage study of the dopamine D5 receptor gene and Gilles de la Tourette syndrome. Barr CL, et al. **Am J Med Genet** 1997 Feb 21;74(1):58–61

Systematic screening for mutations in the 5'–regulatory region of the human dopamine D1 receptor (DRD1) gene in patients with schizophrenia and bipolar affective disorder. Cichon S, et al. **Am J Med Genet** 1996 Jul 26; 67(4):424–8

Cellular distribution of the rat D1B receptor in central nervous system using anti–receptor antisera. Ariano MA, et al. **Brain Res** 1997 Jan 23;746(1–2):141–50

The temporal evolution of striatal dopamine receptor binding and mRNA expression following hypoxia–ischemia in the neonatal rat. Filloux FM, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):81–91

Development of striatal dopaminergic function. II: Dopaminergic regulation of transcription of the immediate early gene zif268 and of D1 (D1a) and D2 (D2a) receptors during pre– and postnatal development. Jung AB, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):121–32

Regulation of dopamine–1A (D1A) receptor gene transcription. Healy DP, et al. **Clin Exp Hypertens** 1997 Jan–Feb;19(1–2):1–13

Autoregulation of the human D1A dopamine receptor gene by cAMP. Minowa MT, et al. **DNA Cell Biol** 1996 Sep; 15(9):759–67

Localization of dopamine D1A receptor protein and messenger ribonucleic acid in rat adrenal cortex. Aherne AM, et al. **Endocrinology** 1997 Mar;138(3):1282–8

Dopamine D1A receptors and renin release in rat juxtaglomerular cells. Yamaguchi I, et al. **Hypertension** 1997 Apr;29(4):962–8

Early emergence of three dopamine D1 receptor subtypes in vertebrates. Molecular phylogenetic, pharmacological, and functional criteria defining D1A, D1B, and D1C receptors in European eel Anguilla anguilla. Cardinaud B, et al. **J Biol Chem** 1997 Jan 31;272(5):2778–87

Two distinct promoters drive transcription of the human D1A dopamine receptor gene. Lee SH, et al. **J Biol Chem** 1996 Oct 11;271(41):25292–9

Identification and localization of dopamine receptor subtypes in rat olfactory mucosa and bulb: a combined in situ hybridization and ligand binding radioautographic approach. Coronas V, et al. **J Chem Neuroanat** 1997 May; 12(4):243–57

Ontogeny of the striatal neurons expressing the D1 dopamine receptor in humans. Brana C, et al. **J Comp Neurol** 1996 Jun 17;370(1):23–34

Studies of the potential role of the dopamine D1 receptor gene in addictive behaviors. Comings DE, et al. **Mol Psychiatry** 1997 Jan;2(1):44–56

Quantification of dopamine D1 and D2 receptor mRNA levels associated with the development of behavioral sensitization in amphetamine treated rats. Richtand NM, et al. **Neurochem Int** 1997 Jul;31(1):131–7

A polymorphic dinucleotide repeat in the human dopamine D5 receptor gene promoter. Beischlag TV, et al. **Neurosci Lett** 1996 Mar 1;205(3):173–6

D1 dopamine receptor–deficient mouse: cocaine–induced regulation of immediate–early gene and substance P expression in the striatum. Drago J, et al. **Neuroscience** 1996 Oct;74(3):813–23

Dopamine D1, dopamine D2, and prolactin receptor messenger ribonucleic acid expression by the polymerase chain reaction in human meningiomas. Carroll RS, et al. **Neurosurgery** 1996 Feb;38(2):367–75

Cellular responses to psychomotor stimulant and neuroleptic drugs are abnormal in mice lacking the D1 dopamine receptor. Moratalla R, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14928–33

Association between schizophrenia and a microsatellite polymorphism at the dopamine D5 receptor gene. Williams NM, et al. **Psychiatr Genet** 1997 Summer;7(2):83–5

IMMUNOLOGY

Cellular distribution of the rat D1B receptor in central nervous system using anti–receptor antisera. Ariano MA, et al. **Brain Res** 1997 Jan 23;746(1–2):141–50

METABOLISM

Renal dopamine DA1 receptor coupling with G(S) and G(q/11) proteins in spontaneously hypertensive rats. Hussain T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):F339–46

Alterations in dopamine DA1 receptor and G proteins in renal proximal tubules of old rats. Kansra V, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):F53–9

Localization of D1 dopamine receptors in the chicken retina. Firth SI, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S64–6

GTP regulation of (–)–stepholidine binding to R(H) of D1 dopamine receptors in calf striatum. Dong ZJ, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):227–32

A postmortem study of frontal cortical dopamine D1 receptors in schizophrenics, psychiatric controls, and normal controls. Knable MB, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1191–9

PET study of the pre– and post–synaptic dopaminergic markers for the neurodegenerative process in Huntington's disease. Ginovart N, et al. **Brain** 1997 Mar;120 (Pt 3):503–14

Dopamine D1 and D2 receptor binding sites in brain samples from depressed suicides and controls. Bowden C, et al. **Brain Res** 1997 Mar 28;752(1–2):227–33

Ultrastructural localization of D1 dopamine receptor immunoreactivity in rat striatonigral neurons and its relation with dopaminergic innervation. Caillé I, et al. **Brain Res** 1996 Aug 19;730(1–2):17–31

Right–left asymmetry of D1– and D2–receptor density is lost in the basal ganglia of old rats. Giardino L. **Brain Res** 1996 May 13;720(1–2):235–8

Differences among mouse strains in the regulation by mu, delta 1 and delta 2 opioid receptors of striatal adenylyl cyclases activated by dopamine D1 or adenosine A2a receptors. Noble F, et al. **Brain Res** 1996 Apr 15; 716(1–2):107–17

Effect of aging on vulnerability of striatal D1 and D2 dopamine receptor–containing neurons to kainic acid. Zhang L, et al. **Brain Res** 1997 Jul 25;763(2):264–6

Development of striatal dopaminergic function. I. Pre– and postnatal development of mRNAs and binding sites for striatal D1 (D1a) and D2 (D2a) receptors. Jung AB, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):109–20

Dopamine–1 receptor G–protein coupling and the involvement of phospholipase A2 in dopamine–1 receptor mediated cellular signaling mechanisms in the proximal tubules of SHR. Hussain T, et al. **Clin Exp Hypertens** 1997 Jan–Feb;19(1–2):131–40 (31 ref.)

Prediction of drug–induced catalepsy based on dopamine D1, D2, and muscarinic acetylcholine receptor occupancies. Haraguchi K, et al. **Drug Metab Dispos** 1997 Jun; 25(6):675–84

Localization of dopamine D1A receptor protein and messenger ribonucleic acid in rat adrenal cortex. Aherne AM, et al. **Endocrinology** 1997 Mar;138(3):1282–8

Effects of cerebral ischemia on dopamine receptors in the gerbil striatum. Araki T, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):73–9

Elimination of palmitoylation sites in the human dopamine D1 receptor does not affect receptor–G protein interaction. Jin H, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):109–16

Perinatal asphyxia induces long–term changes in dopamine D1, D2, and D3 receptor binding in the rat brain. Chen Y, et al. **Exp Neurol** 1997 Jul;146(1):74–80

Increase in aqueous humor production following D1 receptors activation by means of ibopamine. Virno M, et al. **Int Ophthalmol** 1996–97;20(1–3):141–6

Silencing of the constitutive activity of the dopamine D1B receptor. Reciprocal mutations between D1 receptor subtypes delineate residues underlying activation properties. Charpentier S, et al. **J Biol Chem** 1996 Nov 8;271(45):28071–6

Increased expression of inhibitory guanine nucleotide binding proteins in membranes from renal proximal tubules, but not brain striata, of the normotensive and the spontaneously hypertensive rat. White BH, et al. **J Hypertens** 1996 Nov; 14(11):1281–5

Striatal dopaminergic D1 and D2 receptors after intracerebroventricular application of alloxan and streptozocin in rat. Salković M, et al. **J Neural Transm Gen Sect** 1995;100(2):137–45

Zinc allosterically modulates antagonist binding to cloned D1 and D2 dopamine receptors. Schetz JA, et al. **J Neurochem** 1997 May;68(5):1990–7

Localization and characterization of dopamine D1 receptors in sheep hypothalamus and striatum. Colthorpe KL, et al. **J Neuroendocrinol** 1996 Jul;8(7):561–8

Effect of aging on dopaminergic receptors and uptake sites in the rat brain studied by receptor autoradiography. Araki T, et al. **J Neurol Sci** 1997 May 29;148(2):131–7

Agonist–specific coupling of a cloned Drosophila melanogaster D1–like dopamine receptor to multiple second messenger pathways by synthetic agonists. Reale V, et al. **J Neurosci** 1997 Sep 1;17(17):6545–53

Effects of binge pattern cocaine administration on dopamine D1 and D2 receptors in the rat brain: an in vivo study using positron emission tomography. Tsukada H, et al. **J Neurosci** 1996 Dec 1;16(23):7670–7

Self–injurious behavior and dopaminergic neuron system in neonatal 6–hydroxydopamine–lesioned rat: 1. Dopaminergic neurons and receptors. Yokoyama C, et al.

J Pharmacol Exp Ther 1997 Feb;280(2):1016–30

D1 dopamine receptor activity of anti–parkinsonian drugs. Fici GJ, et al. **Life Sci** 1997;60(18):1597–603

Synergistic effect of D1 and D2 dopamine receptors on AP–1 DNA–binding activity in the striatum and globus pallidus of the rat with a unilateral 6–OHDA lesion of the medical forebrain bundle. Kashihara K, et al. **Life Sci** 1996; 59(20):1683–93

Evolution of dopamine receptors in the rat after neonatal hypoxia–ischemia: autoradiographic studies. Zouakia A, et al. **Life Sci** 1997;60(2):151–62

Postnatal development of dopamine D1–like and D2–like receptors in the rat kidney: a radioligand binding study. Tenore G, et al. **Mech Ageing Dev** 1997 Apr;95(1–2):1–11

Inhibition of the T–type Ca2+ current by the dopamine D1 receptor in rat adrenal glomerulosa cells: requirement of the combined action of the G betagamma protein subunit and cyclic adenosine 3',5'–monophosphate. Drolet P, et al. **Mol Endocrinol** 1997 Apr;11(4):503–14

Schizophrenia. An emerging pathophysiology [news; comment] Nestler EJ. **Nature** 1997 Feb 13;385(6617):578–9 . Comment on: Nature 1997 Feb 13;385(6617):634–6.

Decreased prefrontal dopamine D1 receptors in schizophrenia revealed by PET [see comments] Okubo Y, et al. **Nature** 1997 Feb 13;385(6617):634–6. Comment in: Nature 1997 Feb 13;385(6617):578–9.

Alterations in the turnover rate of dopamine D1 but not D2 receptors in the adult rat neostriatum after a neonatal dopamine denervation. Dewar KM, et al. **Neurochem Int** 1997 Jun;30(6):613–21

Effects of chronic neuroleptic treatments on dopamine D1 and D2 receptors: homogenate binding and autoradiographic studies. Huang N, et al. **Neurochem Int** 1997 Mar;30(3):277–90

In vivo studies on striatal dopamine D1 and D2 site binding in L–dopa–treated Parkinson's disease patients with and without dyskinesias. Turjanski N, et al. **Neurology** 1997 Sep;49(3):717–23

Effects of chronic ethanol treatment and ethanol withdrawal on [3H]SCH23390 binding to rat striatal membranes. Gili–Martín E, et al. **Neuropharmacology** 1997 Jan; 36(1):101–6

In vivo striatal binding of the D1 antagonist SCH 23390 is not modified by changes in dopaminergic transmission. Thibaut F, et al. **Neuropharmacology** 1996 Mar;35(3):267–72

Sex differences in dopamine receptor overproduction and elimination. Andersen SL, et al. **Neuroreport** 1997 Apr 14; 8(6):1495–8

Levels of stimulatory G protein are increased in the rat striatum after neonatal lesion of dopamine neurons. Penit–Soria J, et al. **Neuroreport** 1997 Mar 3;8(4):829–33

Adenosine A1 receptor–dopamine D1 receptor interaction in the rat limbic system: modulation of dopamine D1 receptor antagonist binding sites. Ferre S, et al. **Neurosci Lett** 1996 Apr 19;208(2):109–12

Co–localization of the D1 dopamine receptor in a subset of DARPP–32–containing neurons in rat caudate–putamen. Langley KC, et al. **Neuroscience** 1997 Jun;78(4):977–83

Differential regulation of dopamine receptors after chronic typical and atypical antipsychotic drug treatment. Tarazi FI, et al. **Neuroscience** 1997 Jun;78(4):985–96

11C– and 76Br–labelled NNC 22–0010, selective dopamine D1 receptor radioligands for PET. Foged C, et al. **Nucl Med Biol** 1996 Aug;23(6):837–44

Is TISCH a suitable tracer for in vivo study of modifications of the dopamine D–1 receptor? Pellevoisin C, et al. **Nucl Med Biol** 1996 Jan;23(1):75–8

Fluorinated benzazepines: 1. Synthesis, radiosynthesis and biological evaluation of a series of substituted benzazepines as potential radiotracers for positron emission tomographic studies of dopamine D–1 receptors. Yang ZY, et al. **Nucl Med Biol** 1996 Aug;23(6):793–805

D1 and D2 dopamine receptors in perinatal and adult basal ganglia. Boyson SJ, et al. **Pediatr Res** 1997 Jun;41(6):822–31

Presence of dopamine DA–1 receptors in human decidua. Yanagawa T, et al. **Placenta** 1997 Mar–Apr;18(2–3):169–72

Interhemispheric modulation of dopamine receptor interactions in unilateral 6–OHDA rodent model. Lawler CP, et al. **Synapse** 1995 Dec;21(4):299–311

Expression of D1 receptor mRNA in projections from the forebrain to the ventral tegmental area. Lu XY, et al. **Synapse** 1997 Feb;25(2):205–14

Functional D1 and D5 dopamine receptors are expressed in the suprachiasmatic, supraoptic, and paraventricular nuclei of primates. Rivkees SA, et al. **Synapse** 1997 May; 26(1):1–10

The energetics of ligand binding at catecholamine receptors. Strange PG. **Trends Pharmacol Sci** 1996 Jul;17(7):238–44 (51 ref.)

[Dopamine slows phagocytosis of rods from bovine pigment epithelium in vitro trough D1 receptor] Masri H, et al. **C R Acad Sci III** 1996 Aug;319(8):687–91 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Dopamine and diltiazem–induced natriuresis in the spontaneously hypertensive rat. Eisner GM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R317–23

Absence of DA1/DA2 dopamine receptor interactions in proximal tubules of spontaneously hypertensive rats. Vachvanichsanong P, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F98–105

Effect of MK 801 on priming of D1–dependent contralateral turning and its relationship to c–fos expression in the rat caudate–putamen. Morelli M, et al. **Behav Brain Res** 1996 Sep;79(1–2):93–100

Dopamine receptor sub–types involvement in nucleus accumbens and ventral tegmentum but not in medial prefrontal cortex: on self–stimulation of lateral hypothalamus and ventral mesencephalon. Singh J, et al. **Behav Brain Res** 1997 Jul;86(2):171–9

D1 dopamine receptor mediation of social and nonsocial emotional reactivity in mice: effects of housing and strain difference in motor activity. Gendreau PL, et al. **Behav Neurosci** 1997 Apr;111(2):424–34

Prefrontal cortex dysfunction in Borna disease virus (BDV)—infected rats. Solbrig MV, et al. **Biol Psychiatry** 1996 Oct 1;40(7):629–36

A lateral hypothalamic D1 dopaminergic mechanism in conditioned taste aversion. Caulliez R, et al. **Brain Res** 1996 Aug 12;729(2):234–45

A critical role for D1 receptors in the 5–HT1A–mediated facilitation of in vivo acetylcholine release in rat frontal cortex. Consolo S, et al. **Brain Res** 1996 Jan 29;707(2):320–3

Medial prefrontal cortical D1 receptor modulation of the meso–accumbens dopamine response to stress: an electrochemical study in freely–behaving rats. Doherty MD, et al. **Brain Res** 1996 Apr 9;715(1–2):86–97

Differential role of dopamine receptors on motor asymmetries of nigro–striatal lesioned animals that are REM sleep deprived. Durán–Vázquez A, et al. **Brain Res** 1997 Jan 2;744(1):171–4

Roles of dopamine D1 receptors in delta 9–tetrahydrocannabinol–induced expression of Fos protein in the rat brain. Miyamoto A, et al. **Brain Res** 1996 Feb 26;710(1–2):234–40

D1 dopamine receptors influence Fos immunoreactivity in the globus pallidus and subthalamic nucleus of intact and nigrostriatal–lesioned rats. Ruskin DN, et al. **Brain Res** 1995 Dec 12;703(1–2):156–64

Role of dopamine D1– and NMDA receptors in regulating neurotensin release in the striatum and nucleus accumbens. Wagstaff JD, et al. **Brain Res** 1997 Feb 14;748(1–2):241–4

Interactive effects of stimulation of D1 and D2 dopamine receptors on Fos expression in the lateral habenula. Wirtshafter D, et al. **Brain Res** 1997 Mar 7;750(1–2):245–50

Regulation of dopamine D1 and D2 receptors on striatal acetylcholine release in rats. Ikarashi Y, et al. **Brain Res Bull** 1997;43(1):107–15

Interactions between D1 and muscarinic receptors in the induction of striatal c–fos in rats depleted of dopamine as neonates. Sandstrom MI, et al. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):148–58

Developmental plasticity in the D1– and D2–mediation of motor behavior in rats depleted of dopamine as neonates. Byrnes EM, et al. **Dev Psychobiol** 1996 Dec;29(8):653–66

Dopamine D1 receptor–mediated facilitation of GABAergic neurotransmission in the rat strioentopenduncular pathway and its modulation by adenosine A1 receptor–mediated mechanisms. Ferre S, et al. **Eur J Neurosci** 1996 Jul; 8(7):1545–53

Dopamine D1 receptor desensitization profile in MPTP–lesioned primates. Blanchet PJ, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):13–20

8–OH–DPAT–induced release of hippocampal noradrenaline in vivo: evidence for a role of both 5–HT1A and dopamine D1 receptors. Hajós–Korcsok E, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):285–91

Stimulation of adenosine A1 receptors prevents the EEG arousal due to dopamine D1 receptor activation in rabbits. Popoli P, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):123–6

Turning behavior in rats with unilateral lesions of the subthalamic nucleus: synergism between D1 and D2 receptors. Murer MG, et al. **J Neural Transm Gen Sect** 1995;100(2):123–35

A phosphorylation cascade in the basal ganglia of the mammalian brain: regulation by the D–1 dopamine receptor. A mathematical model of known biochemical reactions. Kebabian JW. **J Neural Transm Suppl** 1997; 49:145–53 (14 ref.)

Differential inhibition of secretagogue–stimulated sodium uptake in adrenal chromaffin cells by activation of D4 and D5 dopamine receptors. Dahmer MK, et al. **J Neurochem** 1996 Nov;67(5):1960–4

Comparison of [3H]phosphatidylinositol and [3H]phosphatidylinositol 4,5–bisphosphate hydrolysis in postmortem human brain membranes and characterization of stimulation by dopamine D1 receptors. Pacheco MA, et al. **J Neurochem** 1997 Aug;69(2):639–44

A novel regulation of expression of the alpha–subunit of the G stimulatory protein by dopamine via D1 dopamine receptors. Sidhu A, et al. **J Neurochem** 1997 Jan; 68(1):187–94

A postsynaptic interaction between dopamine D1 and NMDA receptors promotes presynaptic inhibition in the rat nucleus accumbens via adenosine release. Harvey J, et al. **J Neurosci** 1997 Jul 15;17(14):5271–80

Modulation of inhibitory transmission by dopamine in rat basal forebrain nuclei: activation of presynaptic D1–like dopaminergic receptors. Momiyama T, et al. **J Neurosci** 1996 Dec 1;16(23):7505–12

Psychostimulants depress excitatory synaptic transmission in the nucleus accumbens via presynaptic D1–like dopamine receptors. Nicola SM, et al. **J Neurosci** 1996 Mar 1; 16(5):1591–604

D1/D5 dopamine receptor activation increases the magnitude of early long–term potentiation at CA1 hippocampal synapses. Otmakhova NA, et al. **J Neurosci** 1996 Dec 1; 16(23):7478–86

D1–D2 interaction in feedback control of midbrain dopamine neurons. Shi WX, et al. **J Neurosci** 1997 Oct 15; 17(20):7988–94

Dopamine D1 receptor actions in layers V–VI rat prefrontal cortex neurons in vitro: modulation of dendritic–somatic signal integration. Yang CR, et al. **J Neurosci** 1996 Mar 1;16(5):1922–35

Nonstriatal dopamine D1 receptors regulate striatal acetylcholine release in vivo. Acquas E, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):360–8

The inhibition of ganglionic transmission via presynaptic dopamine DA1 and postsynaptic DA2 receptor activation in the canine cardiac sympathetic ganglia. Mukai M, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):822–9

Endogenous and exogenous dopamine depress EPSCs in rat nucleus accumbens in vitro via D1 receptors activation. Harvey J, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):143–54

Role of D1 and alpha1 receptors in the enhanced locomotor response to dopamine D2–like receptor stimulation induced by repeated electroconvulsive shock. D'Aquila PS, et al. **J Psychopharmacol (Oxf)** 1997;11(1):41–4

Mutagenesis of residues adjacent to transmembrane prolines alters D1 dopamine receptor binding and signal transduction. Cho W, et al. **Mol Pharmacol** 1996 Nov; 50(5):1338–45

D1–like dopaminergic activation of phosphoinositide hydrolysis is independent of D1A dopamine receptors: evidence from D1A knockout mice. Friedman E, et al. **Mol Pharmacol** 1997 Jan;51(1):6–11

Possible role of dopamine D1 receptors in schizophrenia [news] Okubo Y, et al. **Mol Psychiatry** 1997 Jul;2(4):291–2

Threshold of dopamine content and D1 receptor stimulation necessary for the expression of rotational behavior induced by D2 receptor stimulation under normo and supersensitive conditions. Dziewczapolski G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):30–5

Morphine–induced increase in D–1 receptor regulated signal transduction in rat striatal neurons and its facilitation by glucocorticoid receptor activation: possible role in behavioral sensitization. Schoffelmeer AN, et al. **Neurochem Res** 1996 Nov;21(11):1417–23

D1–class dopamine receptors influence cocaine–induced persistent expression of Fos–related proteins in striatum. Moratalla R, et al. **Neuroreport** 1996 Dec 20;8(1):1–5

D1–D2 dopamine receptor interaction: an in vivo single unit electrophysiological study. Murer MG, et al. **Neuroreport** 1997 Feb 10;8(3):783–7

Dopamine enhances glutamate–induced excitation of rat striatal neurons by cooperative activation of D1 and D2 class receptors. Hu XT, et al. **Neurosci Lett** 1997 Mar 7; 224(1):61–5

Pre/postnatal dopamine D1 receptor stimulation induces a differential reduction of serotonin levels in hippocampus and superior colliculus of puber rats. Sajnani GG, et al. **Neurosci Lett** 1997 Jul 18;230(2):121–4

Role of the parafascicular thalamic nucleus and N–methyl–D–aspartate transmission in the D1–dependent control of in vivo acetylcholine release in rat striatum. Consolo S, et al. **Neuroscience** 1996 Mar;71(1):157–65

Excitatory effects of dopamine released by impulse flow in the rat nucleus accumbens in vivo. Gonon F, et al. **Neuroscience** 1996 Nov;75(1):13–8

Role of dopamine receptors in the short– and long–term regulation of corticostriatal transmission. Calabresi P, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):101–4 (25 ref.)

DA D2 receptors in the ventral striatum: multiple effects or receptor subtypes? White FJ, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):91–5 (29 ref.)

D1 and D2 dopamine and opiate receptors are involved in the restraint stress–induced sensitization to the psychostimulant effects of amphetamine. Díaz–Otañez CS, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):9–14

Contralateral turning elicited by unilateral stimulation of dopamine D2 and D1 receptors in the nucleus accumbens of rats is due to stimulation of these receptors in the shell, but not the core, of this nucleus. Koshikawa N, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):185–90

Roles of dopamine receptors in long–term depression: enhancement via D1 receptors and inhibition via D2 receptors. Chen Z, et al. **Receptors Channels** 1996;4(1):1–8

NMDA and D1 receptors regulate the phosphorylation of CREB and the induction of c–fos in striatal neurons in primary culture. Das S, et al. **Synapse** 1997 Mar; 25(3):227–33

Intermittent morphine administration induces a long–lasting synergistic effect of corticosterone on dopamine D1 receptor functioning in rat striatal GABA neurons. Schoffelmeer AN, et al. **Synapse** 1997 Apr;25(4):381–8

[D1 receptor mediates dopamine–induced enhancement of electroretinographic oscillatory potentials] Tagawa S, et al. **Nippon Ganka Gakkai Zasshi** 1996 Feb;100(2):139–44 (Eng. Abstr.) **(Jpn)**

RECEPTORS, DOPAMINE D2

Molecular modeling of interactions between tetrahydroprotoberberines and dopamine receptors. Tang Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan;17(1):8–12

AGONISTS

Cabergoline treatment in a case of macroprolactinoma after delivery. Falsetti L. **Acta Eur Fertil** 1995 May–Jun; 26(3):105–7

Effect of cabergoline, a long–acting dopamine D2 agonist, on reserpine–treated rodents. Miyagi M, et al. **Biol Pharm Bull** 1996 Nov;19(11):1499–502

Stimulation of the rat mesolimbic dopaminergic system produces a pressor response which is mediated by dopamine D–1 and D–2 receptor activation and the release of vasopressin. Cornish JL, et al. **Brain Res** 1995 Dec 1; 701(1–2):28–38

Dopamine D3 agonists disrupt social behavior in rats. Kagaya T, et al. **Brain Res** 1996 May 20;721(1–2):229–32

Cerebrocortical Fos expression following dopaminergic stimulation: D1/D2 synergism and its breakdown. LaHoste GJ, et al. **Brain Res** 1996 Jul 22;728(1):97–104

Intrastriatal AP5 differentially affects behaviors induced by local infusions of D1 vs. D2 dopamine agonists. McPherson RJ, et al. **Brain Res** 1996 Nov 11;739(1–2):19–25

D2 and D1 dopaminergic activity of 7–OH–DPAT. Sethy VH, et al. **Brain Res** 1996 Sep 9;733(1):41–5

Selective full dopamine D1–like (SKF–82958) and D2–like (N–0923) agonist combination in the MPTP monkey model of hemiparkinsonism. Domino EF. **Brain Res Bull** 1997; 43(1):93–5

The locomotor effects of a putative dopamine D3 receptor agonist in developing rats. Frantz K, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):1–6

Anti–tremor activity of talipexole produced by selective dopamine D2 receptor stimulation in cynomolgus monkeys with unilateral lesions in the ventromedial tegmentum. Kohno Y, et al. **Eur J Pharmacol** 1997 Jan 29; 319(2–3):197–205

Behavioural effects of 7–OH–DPAT are solely due to stimulation of dopamine D2 receptors in the shell of the nucleus accumbens; turning behaviour. Koshikawa N, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):235–41

Behavioural effects of 7–OH–DPAT are solely due to stimulation of dopamine D2 receptors in the shell of the nucleus accumbens; jaw movements. Koshikawa N, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):227–34

Affinities and intrinsic activities of dopamine receptor agonists for the hD21 and hD4.4 receptors. Lahti RA, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):R11–3

The behavioural effects of pramipexole, a novel dopamine receptor agonist. Maj J, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):31–7

Noradrenaline and adrenaline are high affinity agonists at dopamine D4 receptors. Newman–Tancredi A, et al. **Eur J Pharmacol** 1997 Jan 29;319(2–3):379–83

Inhibition of dopamine neuron firing by pramipexole, a dopamine D3 receptor–preferring agonist: comparison to other dopamine receptor agonists. Piercey MF, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):35–44

Pharmacology of U–91356A, an agonist for the dopamine D2 receptor subtype. Piercey MF, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):29–38

Further evidence for clozapine as a dopamine D1 receptor agonist. Salmi P, et al. **Eur J Pharmacol** 1996 Jun 20; 307(1):27–31

Locomotor inhibition, yawning and vacuous chewing induced by a novel dopamine D2 post–synaptic receptor agonist. Smith HP, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):27–36

Effects of the dopamine D3 receptor agonist, R(+)–7–hydroxy–N,N–di–n–propyl–2–aminotetralin, on memory processes in mice. Ukai M, et al. **Eur J Pharmacol** 1997 Apr 18;324(2–3):147–51

Differential therapeutic effects of dopamine D1 and D2 agonists in MPTP–induced parkinsonian monkeys: clinical implications. Kuno S. **Eur Neurol** 1997;38 Suppl 1:18–22

Effects of a dopaminergic agonist in the guinea pig cochlea. d'Aldin C, et al. **Hear Res** 1995 Oct;90(1–2):202–11

Substituted [(4–phenylpiperazinyl)–methyl]benzamides: selective dopamine D4 agonists. Glase SA, et al. **J Med Chem** 1997 Jun 6;40(12):1771–2

3–[[(4–Aryl–1–piperazinyl)alkyl]cyclohexyl]–1H–indoles as dopamine D2 partial agonists and autoreceptor agonists. Wustrow DJ, et al. **J Med Chem** 1997 Jan 17;40(2):250–9

Antipsychotics with inverse agonist activity at the dopamine D3 receptor. Griffon N, et al. **J Neural Transm** 1996; 103(10):1163–75

SDZ GLC 756, a novel octahydrobenzo[g]quinoline derivative exerts opposing effects on dopamine D1 and D2 receptors. Markstein R, et al. **J Neural Transm** 1996; 103(1–2):17–30

Effects of dopamine D–1 and D–2 receptors on intraocular pressure in conscious rabbits. Prünte C, et al. **J Neural Transm** 1997;104(2–3):111–23

Dopamine agonist–induced inhibition of neurotransmitter release from the awake squirrel monkey putamen as measured by microdialysis. Davis MD, et al. **J Neurochem** 1997 Feb;68(2):659–66

Epinephrine and norepinephrine act as potent agonists at the recombinant human dopamine D4 receptor. Lanau F, et al. **J Neurochem** 1997 Feb;68(2):804–12

Dopamine D3 receptor agonists partially reproduce the discriminative stimulus effects of cocaine in squirrel monkeys. Spealman RD. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1128–37

Prolonged exposure of chicks to light or darkness differentially affects the quinpirole–evoked suppression of serotonin N–acetyltransferase activity in chick retina: an impact on dopamine D4–like receptor. Zawilska JB, et al. **J Pineal Res** 1997 Mar;22(2):59–64

Topical SDZ GLC–756, a novel dopamine D–1 antagonist and D–2 agonist, lowers intraocular pressure in conscious rabbits. Prünte C, et al. **Jpn J Ophthalmol** 1996;40(2):167–73

Biphasic effects of D3–receptor agonists, 7–OH–DPAT and PD128907, on the D1–receptor agonist–induced hyperactivity in mice. Mori T, et al. **Jpn J Pharmacol** 1997 Mar;73(3):251–4

Long–term neuroleptic treatments counteract dopamine D2 agonist inhibition of adenylate cyclase but do not affect pertussis toxin ADP–ribosylation in the rat brain. Okada F, et al. **Neurochem Int** 1996 Feb;28(2):161–8

Evidence to suggest that agonist modulation of hyperlocomotion is via post–synaptic dopamine D2 or D3 receptors. Thorn L, et al. **Neuropharmacology** 1997 Jun; 36(6):787–92

Responses of substantia nigra pars reticulata neurons to intrastriatal D1 and D2 dopaminergic agonist injections in the rat. Akkal D, et al. **Neurosci Lett** 1996 Jul 26; 213(1):66–70

Effects of ritanserin on haloperidol–induced dopamine (D2) receptor up–regulation in the rat. Szczepanik AM, et al. **Neurosci Lett** 1997 Aug 8;231(2):91–4

The novel dopamine D–1 antagonist and D–2 agonist, SDZ GLC–756, lowers intraocular pressure in healthy human volunteers and in patients with glaucoma. Prünte C, et al. **Ophthalmology** 1995 Sep;102(9):1291–7

Effects of a D2 receptor agonist RO 41–9067 alone and with clonidine on sleep parameters in the rat. Python A, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):291–6

Self–administration of the D1 agonist SKF 82958 is mediated by D1, not D2, receptors. Self DW, et al. **Psychopharmacology (Berl)** 1996 Feb;123(4):303–6

DAD1– and DAD2–like agonist effects on motor activity of C57 mice: differences compared to rats. Halberda JP, et al. **Synapse** 1997 May;26(1):81–92

Differential interaction of competitive NMDA and AMPA antagonists with selective dopamine D–1 and D–2 agonists in a rat model of Parkinson's disease. Löschmann PA, et al. **Synapse** 1997 Aug;26(4):381–91

Electrophysiological pharmacology of the autoreceptor–mediated responses of dopaminergic cells to antiparkinsonian drugs. Mercuri NB, et al. **Trends Pharmacol Sci** 1997 Jul;18(7):232–5 (34 ref.)

ANALYSIS

Disrupted pattern of D2 dopamine receptors in the temporal lobe in schizophrenia. A postmortem study. Goldsmith SK, et al. **Arch Gen Psychiatry** 1997 Jul;54(7):649–58

Mesolimbic dopamine D3 receptors and use of antipsychotics in patients with schizophrenia. A postmortem study. Gurevich EV, et al. **Arch Gen Psychiatry** 1997 Mar; 54(3):225–32

D2–like dopamine receptors are not detectable on human peripheral blood lymphocytes. Vile JM, et al. **Biol Psychiatry** 1996 Nov 1;40(9):881–5

Quantitative autoradiographic analysis of D1 and D2 dopamine receptors in rat brain in early and late pregnancy. Bakowska JC, et al. **Brain Res** 1995 Dec 12; 703(1–2):191–200

Ultrastructural immunocytochemical localization of the dopamine D2 receptor within GABAergic neurons of the rat striatum. Delle Donne KT, et al. **Brain Res** 1997 Jan 23;746(1–2):239–55

Postnatal ontogeny of dopamine D3 receptors in the mouse brain: autoradiographic evidence for a transient cortical expression. Demotes–Mainard J, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):166–74

Distribution of D4 dopamine receptor in rat brain with sequence–specific antibodies. Defagot MC, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):1–12

In vivo imaging of pituitary tumours using a radiolabelled dopamine D2 receptor radioligand. de Herder WW, et al. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):755–67

Multivariate cluster analysis of dynamic iodine–123 iodobenzamide SPET dopamine D2 receptor images in schizophrenia. Acton PD, et al. **Eur J Nucl Med** 1997 Feb; 24(2):111–8

Striatal and extrastriatal imaging of dopamine D2 receptors in the living human brain with [123I]epidepride single–photon emission tomography. Kuikka JT, et al. **Eur J Nucl Med** 1997 May;24(5):483–7

Dementia with lewy bodies: a study of post–synaptic dopaminergic receptors with iodine–123 iodobenzamide single–photon emission tomography. Walker Z, et al. **Eur J Nucl Med** 1997 Jun;24(6):609–14

Quantification of neuroreceptors in the living human brain: III. D2–like dopamine receptors: theory, validation, and changes during normal aging. Wong DF, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):316–30

Quantification of neuroreceptors in the living human brain: IV. Effect of aging and elevations of D2–like receptors in schizophrenia and bipolar illness. Wong WF, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):331–42

Dopaminergic transmission in the rat retina: evidence for volume transmission. Bjelke B, et al. **J Chem Neuroanat** 1996 Nov;12(1):37–50

Ultrastructural immunocytochemical localization of neurotensin and the dopamine D2 receptor in the rat nucleus accumbens. Delle Donne KT, et al. **J Comp Neurol** 1996 Aug 5;371(4):552–66

Noninvasive quantification of dopamine D2 receptors with iodine–123–IBF SPECT. Ichise M, et al. **J Nucl Med** 1996 Mar;37(3):513–20

Comparison of iodine–123–epidepride and iodine–123–IBZM for dopamine D2 receptor imaging [see comments] Leslie WD, et al. **J Nucl Med** 1996 Oct;37(10):1589–91. Comment in: J Nucl Med 1996 Oct;37(10):1591–5.

Dopamine D2 receptor imaging in pituitary adenomas using iodine–123–epidepride and SPECT. Pirker W, et al. **J Nucl Med** 1996 Dec;37(12):1931–7

D2–like dopamine receptor density in Tourette syndrome measured by PET. Wong DF, et al. **J Nucl Med** 1997 Aug; 38(8):1243–7

Autoradiographic localization of the putative D4 dopamine receptor in rat brain. Defagot MC, et al. **Neurochem Res** 1997 Apr;22(4):401–7

Cholecystokinin, dopamine D2 and N–methyl–D–aspartate binding sites in the nucleus of the solitary tract of the rat: possible relationship to ingestive behavior. Qian M, et al. **Neuroscience** 1997 Apr;77(4):1077–89

SPET investigations in extrapyramidal diseases using specific ligands. Staffen W, et al. **Nucl Med Commun** 1997 Feb; 18(2):159–63

In schizophrenia, some dopamine D2–like receptors are still elevated [letter; comment] Gjedde A, et al. **Psychiatry Res** 1996 Jul 31;67(2):159–62. Comment on: Psychiatry Res 1995 Aug 8;61(2):67–83.

Striatal dopamine D2 receptor quantification and superior temporal gyrus: volume determination in 14 chronic schizophrenic subjects. Tune L, et al. **Psychiatry Res** 1996 Jul 31;67(2):155–8

[Striatal dopamine D2 receptor in Parkinson disease and its related disorders assessed by C–11 NMSP and PET] Momose T, et al. **Nippon Rinsho** 1997 Jan;55(1):227–32 (4 ref.) (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Antagonism of the discriminative stimulus properties of cocaine with the combination of a dopamine D1 and D2 antagonist. Meert TF, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(4):897–905

Domperidone as a tool to assess the role of dopamine within carotid body chemoreception. Zapata P, et al. **Adv Exp Med Biol** 1996;410:291–7 (36 ref.)

A synergistic interaction between dopamine D1 and D2 receptor subtypes in the memory impairments induced by concussive brain injury (CBI) in mice. Tang YP, et al. **Behav Brain Res** 1997 Feb;83(1–2):189–93

Antagonist binding characteristics of the Ser311–>Cys variant of human dopamine D2 receptor in vivo and in vitro. Pohjalainen T, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):143–6

Antagonism of the effects of (+)–PD 128907 on midbrain dopamine neurones in rat brain slices by a selective D2 receptor antagonist L–741,626. Bowery BJ, et al. **Br J Pharmacol** 1996 Dec;119(7):1491–7

The atypical antipsychotic profile of NRA0045, a novel dopamine D4 and 5–hydroxytryptamine2A receptor antagonist, in rats. Okuyama S, et al. **Br J Pharmacol** 1997 Jun;121(3):515–25

Dopamine D1 and D2 antagonists block L–DOPA–induced air–stepping in decerebrate neonatal rats. McCrea AE, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):130–2

Differential effects of D2– and D4–blocking neuroleptics on the procedural learning of schizophrenic patients. Bédard MA, et al. **Can J Psychiatry** 1996 Sep;41(7 Suppl 1):S21–4

Tyrosine hydroxylase–negative, dopaminergic neurons are targets for transmitter–depleting action of haloperidol in the snail brain. Sakharov DA, et al. **Cell Mol Neurobiol** 1996 Aug;16(4):451–61

Augmentation of dopamine release by (–)–stepholidine from rabbit and rat caudate slices. Dong ZJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):497–501

Sensitivity to the motoric effects of a dopamine receptor antagonist differs as a function of age at the time of dopamine depletion. Sandstrom MI, et al. **Dev Psychobiol** 1997 May;30(4):293–300

Motor depressant effects mediated by dopamine D2 and adenosine A2A receptors in the nucleus accumbens and the caudate–putamen. Hauber W, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):127–31

Dopamine receptor antagonists block nerve growth factor–induced hyperactivity. Kobayashi S, et al. **Eur J Pharmacol** 1997 May 12;326(1):1–5

The dopamine D3 receptor antagonist, (+)–S 14297, blocks the cataleptic properties of haloperidol in rats. Millan MJ, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):R7–9

Effects of SM–9018, a novel 5–HT2 and D2 receptor antagonist, on electrically–evoked [3H]acetylcholine release from rat striatal slices. Ishida K, et al. **Gen Pharmacol** 1996 Oct;27(7):1203–7

Picogram determination of a novel dopamine D4 receptor antagonist in human plasma and urine by liquid chromatography with atmospheric pressure chemical

ionization tandem mass spectrometry. Chavez-Eng CM, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28; 691(1):77-85

Serotonin 5-HT2 receptor, dopamine D2 receptor, and alpha 1 adrenoceptor antagonists. Conformationally flexible analogues of the atypical antipsychotic sertindole. Andersen K, et al. **J Med Chem** 1996 Sep 13;39(19):3723-38

GRID/GOLPE 3D quantitative structure-activity relationship study on a set of benzamides and naphthamides, with affinity for the dopamine D3 receptor subtype. Nilsson J, et al. **J Med Chem** 1997 Mar 14;40(6):833-40

2-Phenyl-4(5)-[[4-(pyrimidin-2-yl)piperazin-1-yl]methyl]imidazole. A highly selective antagonist at cloned human D4 receptors. Thurkauf A, et al. **J Med Chem** 1997 Jan 3;40(1):1-3

Chromeno[3,4-c]pyridin-5-ones: selective human dopamine D4 receptor antagonists as potential antipsychotic agents. Unangst PC, et al. **J Med Chem** 1997 Aug 15; 40(17):2688-93

Effects of dopamine D-1 and D-2 receptors on intraocular pressure in conscious rabbits. Prünte C, et al. **J Neural Transm** 1997;104(2-3):111-23

Behavioral and neurochemical recovery from partial 6-hydroxydopamine lesions of the substantia nigra is blocked by daily treatment with D1/D5, but not D2, dopamine receptor antagonists. Emmi A, et al. **J Neurosci** 1997 May 15;17(10):3840-6

Effect of haloperidol dose on iodine-123-IBZM brain SPECT imaging in schizophrenic patients. Vallabhajosula S, et al. **J Nucl Med** 1997 Feb;38(2):203-7

Pharmacological characterization of U-101387, a dopamine D4 receptor selective antagonist. Merchant KM, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1392-403

In vitro and in vivo characterization of the dopamine D4 receptor, serotonin 5-HT2A receptor and alpha-1 adrenoceptor antagonist (R)-(+)-2-amino-4-(4-fluorophenyl)-5-[1-[4-(4-fluorophenyl)-4-oxobutyl] pyrrolidin-3-yl]thiazole (NRA0045). Okuyama S, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):56-63

Psychopharmacological profile of amisulpride: an antipsychotic drug with presynaptic D2/D3 dopamine receptor antagonist activity and limbic selectivity. Perrault G, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):73-82

Neurochemical characteristics of amisulpride, an atypical dopamine D2/D3 receptor antagonist with both presynaptic and limbic selectivity. Schoemaker H, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):83-97

I. NGD 94-1: identification of a novel, high-affinity antagonist at the human dopamine D4 receptor. Tallman JF, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):1011-9

Dual actions of (-)-stepholidine on the dopamine receptor-mediated adenylate cyclase activity in rat corpus striatum. Dong ZJ, et al. **Life Sci** 1997;61(4):465-72

D4 receptors and their antagonists. Hadley MS. **Med Res Rev** 1996 Nov;16(6):507-26 (82 ref.)

Effect of the putative dopamine D1 agonist and D2 antagonist FCE 23884 on Parkinson's disease. Metman LV, et al. **Mov Disord** 1996 May;11(3):257-60

Developmental differences in dopamine synthesis inhibition by (+/-)-7-OH-DPAT. Anderson SL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):173-81

Dopamine D2 receptor blockade alters the primary and cognitive components of visual evoked potentials in the monkey, Macaca fascicularis. Antal A, et al. **Neurosci Lett** 1997 Sep 5;232(3):179-81

Impairments of movement initiation and execution induced by a blockade of dopamine D1 or D2 receptors are reversed by a blockade of N-methyl-D-aspartate receptors. Hauber W. **Neuroscience** 1996 Jul;73(1):121-30

A role for D2, but not D1, dopamine receptors in the response-reinstating effects of food reinforcement. Chausmer AL, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):681-5

Dopamine D1/D2 antagonist combinations as antagonists of the discriminative stimulus effects of cocaine. Geter-Douglass B, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):439-51

Different effects of dopamine antagonists on spontaneous and NMDA-induced motor activity in mice. Giménez-Llort L, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):549-53

Effects of 5-HT3, D1 and D2 receptor antagonists on ethanol- and cocaine-induced locomotion. Lê AD, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):325-32

Bidirectional effects of dopamine D2 receptor antagonists on responding for a conditioned reinforcer. Smith JK, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):843-9

Blockade of phencyclidine-induced hyperlocomotion by olanzapine, clozapine and serotonin receptor subtype selective antagonists in mice. Gleason SD, et al. **Psychopharmacology (Berl)** 1997 Jan;129(1):79-84

The effects of dopamine D1 and D2 receptor antagonists on the rewarding effects of delta 1 and delta 2 opioid receptor agonists in mice. Suzuki T, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):211-8

Effects of D2 dopamine receptor antagonists on Fos protein expression in the striatal complex and entorhinal cortex of the nonhuman primate. Deutch AY, et al. **Synapse** 1996 Jul;23(3):182-91

Schizophrenia and L-745,870, a novel dopamine D4 receptor antagonist. Bristow LJ, et al. **Trends Pharmacol Sci** 1997 Jun;18(6):186-8 (11 ref.)

BIOSYNTHESIS

Dopamine in schizophrenia. Hietala J, et al. **Ann Med** 1996 Dec;28(6):557-61 (43 ref.)

Dopamine D1 and D2 receptor gene expression in the striatum in Huntington's disease. Augood SJ, et al. **Ann Neurol** 1997 Aug;42(2):215-21

DA1 and DA2 receptor regulation in the striatum of young and old rats after peripheral vestibular lesion. Giardino L, et al. **Brain Res** 1996 Oct 14;736(1-2):111-7

Differential effects of clozapine and haloperidol on dopamine receptor mRNA expression in rat striatum and cortex. Damask SP, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1-2):241-9

Up-regulation of D3 dopamine receptor mRNA in the nucleus accumbens of human cocaine fatalities. Segal DM, et al. **Brain Res Mol Brain Res** 1997 May;45(2):335-9

Adaptive changes in the proenkephalin and D2 dopamine receptor mRNA expression after chronic cocaine in the nucleus accumbens and striatum of the rat. Przewłocka B, et al. **Eur Neuropsychopharmacol** 1995 Dec;5(4):465-9

Antennal lobe neurons of the honey bee, Apis mellifera, express a D2-like dopamine receptor in vitro. Kirchhof BS, et al. **J Comp Neurol** 1997 Jun 30;383(2):189-98

Changes of D1 and D2 dopamine receptor mRNA in the brains of monkeys lesioned with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine: correction with chronic administration of L-3,4-dihydroxyphenylalanine. Morissette M, et al. **Mol Pharmacol** 1996 Nov;50(5):1073-9

D2 dopamine receptor antisense increases the activity and mRNA of tyrosine hydroxylase and aromatic L-amino acid decarboxylase in mouse brain. Hadjiconstantinou M, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):105-8

D3 receptor expression within the basal ganglia is not affected by Parkinson's disease. Hurley MJ, et al. **Neurosci Lett** 1996 Aug 23;214(2-3):75-8

Distribution and postnatal ontogeny of adenosine A2A receptors in rat brain: comparison with dopamine receptors. Johansson B, et al. **Neuroscience** 1997 Oct;80(4):1187-207

Expression of the D3 dopamine receptor in peptidergic neurons of the nucleus accumbens: comparison with the D1 and D2 dopamine receptors. Le Moine C, et al. **Neuroscience** 1996 Jul;73(1):131-43

Cellular expression of adenosine A2A receptor messenger RNA in the rat central nervous system with special reference to dopamine innervated areas. Svenningsson P, et al. **Neuroscience** 1997 Oct;80(4):1171-85

Up-regulation of D3 dopamine receptor mRNA by neuroleptics. Wang W, et al. **Synapse** 1996 Jul;23(3):232-5

BLOOD

Improvement of schizophrenic symptoms and changes in plasma HVA concentrations, plasma anti-D2 and anti-5-HT2 receptor activities with clozapine. Yamada K, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):291-4

CHEMISTRY

Dopamine D2 receptor model explains binding affinity of neuroleptics: piquindone and its structure activity relationships. Teeter MM, et al. **Drug Des Discov** 1996 Apr; 13(3-4):49-62

Dynamic modelling of the binding of substances to the conserved membrane-adjacent heptapeptide of the 15-residue C-terminal cytoplasmic fragment of mammalian dopamine D2 receptors. Roberts E, et al. **Neurochem Res** 1996 Feb;21(2):177-200

DEFICIENCY

Dopamine D2 receptor plays a critical role in cell proliferation and proopiomelanocortin expression in the pituitary. Yamaguchi H, et al. **Genes Cells** 1996 Feb; 1(2):253-68

Abnormal synaptic plasticity in the striatum of mice lacking dopamine D2 receptors. Calabresi P, et al. **J Neurosci** 1997 Jun 15;17(12):4536-44

DRUG EFFECTS

Mesolimbic dopamine D3 receptors and use of antipsychotics in patients with schizophrenia. A postmortem study. Gurevich EV, et al. **Arch Gen Psychiatry** 1997 Mar; 54(3):225-32

Strain-dependent effects of D2 dopaminergic and muscarinic-cholinergic agonists and antagonists on memory consolidation processes in mice. Gasbarri A, et al. **Behav Brain Res** 1997 Jun;86(1):97-104

Differential behavioral response to dopamine D2 agonists by sexually naive, sexually active, and sexually inactive male rats. Giuliani D, et al. **Behav Neurosci** 1996 Aug; 110(4):802-8

Differential influence of D1 and D2 dopamine receptors on acute opiate withdrawal in guinea-pig isolated ileum. Capasso A, et al. **Br J Pharmacol** 1997 Mar;120(6):1001-6

Evidence that antipsychotic drugs are inverse agonists at D2 dopamine receptors. Hall DA, et al. **Br J Pharmacol** 1997 Jun;121(4):731-6

Characterization of the effect of dopamine D3 receptor stimulation on locomotion and striatal dopamine levels. De Boer P, et al. **Brain Res** 1997 May 30;758(1-2):83-91

Dopamine D2, receptor-mediated modulation of the GABAergic inhibition of substantia nigra pars reticulata neurons. Martin LP, et al. **Brain Res** 1996 Aug 12; 729(2):156-69

Synthesis and affinities for dopamine (D2) and 5-hydroxytryptamine (5-HT2A) receptors of 1-(benzoylpropyl)-4-(1-oxocycloalkyl-2-ethyl)-piperazines as cyclic butyrophenone derivatives. Raviña E, et al. **Chem Pharm Bull (Tokyo)** 1996 Mar;44(3):534-41

The importance of dopamine D4 receptors in the action and development of antipsychotic agents [published erratum appears in Drugs 1996 Mar;51(3):505] Reynolds GP. **Drugs** 1996 Jan;51(1):7-11 (35 ref.)

Resistance of the dopamine D2L receptor to desensitization accompanies the up-regulation of receptors on to the surface of Sf9 cells. Ng GY, et al. **Endocrinology** 1997 Oct; 138(10):4199-206

D2-dopamine-receptor occupancy during treatment with haloperidol decanoate. Scherer J, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(2):104-6

Pharmacological characterization and autoradiographic localization of dopamine receptors in the rat adrenal medulla. Barili P, et al. **Eur J Pharmacol** 1996 Aug 29; 310(2-3):129-35

Regulation of tyrosine hydroxylase and aromatic L-amino acid decarboxylase by dopaminergic drugs. Cho S, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):149-57

Behavioural sensitization of mesolimbic dopamine D2 receptors in chronic fluoxetine-treated rats. Collu M, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):123-7

Dizocilpine prevents the enhanced locomotor response to quinpirole induced by repeated electroconvulsive shock. D'Aquila PS, et al. **Eur J Pharmacol** 1997 Jul 2;330(1):11-4

Adenosine A2A receptors modulate the binding characteristics of dopamine D2 receptors in stably cotransfected fibroblast cells. Dasgupta S, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):325-31

Aripiprazole, a novel antipsychotic drug, inhibits quinpirole-evoked GTPase activity but does not up-regulate dopamine D2 receptor following repeated treatment in the rat striatum. Inoue A, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):105-11

Dopamine D2 receptors play a role in the (-)-apomorphine-like discriminative stimulus effects of (+)-PD 128907. Kleven MS, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):1-4

Substituted 4-aminopiperidines having high in vitro affinity and selectivity for the cloned human dopamine D4 receptor. Schlachter SK, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):283-6

Inhibitory action of dopamine involves a subthreshold Cs(+)-sensitive conductance in neostriatal neurons. Pacheco-Cano MT, et al. **Exp Brain Res** 1996 Jul; 110(2):205-11

Positron emission tomography studies on D2 dopamine receptor occupancy and plasma antipsychotic drug levels in man. Nyberg S, et al. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:81-5

Amisulpride: from animal pharmacology to therapeutic action. Scatton B, et al. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S29-36 (45 ref.)

Dopamine D2 receptor imaging and neuroleptic drug response. Heinz A, et al. **J Clin Psychiatry** 1996;57 Suppl 11:84-8; discussion 89-93

Pharmacological modifications in dopaminergic neurotransmission affect the quinpirole-evoked suppression of serotonin N-acetyltransferase activity in chick retina: an impact on dopamine D4-like receptors. Zawilska JB, et al. **J Neural Transm** 1996;103(12):1405-14

Effects on locomotor activity after local application of D3 preferring compounds in discrete areas of the rat brain. Kling-Petersen T, et al. **J Neural Transm Gen Sect** 1995; 102(3):209-20

D2 dopamine receptors reduce N-type Ca2+ currents in rat neostriatal cholinergic interneurons through a membrane-delimited, protein-kinase-C-insensitive pathway. Yan Z, et al. **J Neurophysiol** 1997 Feb; 77(2):1003-15

PET measurement of dopamine D2 receptor-mediated changes in striatopallidal function. Black KJ, et al. **J Neurosci** 1997 May 1;17(9):3168-77

Concurrent stimulation of cannabinoid CB1 and dopamine D2 receptors augments cAMP accumulation in striatal neurons: evidence for a Gs linkage to the CB1 receptor. Glass M, et al. **J Neurosci** 1997 Jul 15;17(14):5327-33

PET measurement of neuroreceptor occupancy by typical and atypical neuroleptics. Goyer PF, et al. **J Nucl Med** 1996 Jul;37(7):1122-7

S 15535, a novel benzodioxopiperazine ligand of serotonin (5-HT)1A receptors: I. Interaction with cloned human (h)5-HT1A, dopamine hD2/hD3 and h alpha2A-adrenergic receptors in relation to modulation of cortical monoamine release and activity in models of potential antidepressant activity. Millan MJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):132-47

Review the role of dopamine D4 receptors in schizophrenia and antipsychotic action. Sanyal S, et al. **J Psychiatr Res** 1997 Mar-Apr;31(2):219-32 (85 ref.)

Dopaminergic regulation of gonadotrophin secretion in seasonally anoestrous mares. Besognet B, et al. **J Reprod Fertil** 1996 Sep;108(1):55-61

Limbic selectivity of clozapine [letter] Pilowsky LS, et al.

Lancet 1997 Aug 16;350(9076):490–1
Regulation of D2 dopamine receptors by amiloride and amiloride analogs. Hoare SR, et al. **Mol Pharmacol** 1996 Nov;50(5):1295–308
Identification and pharmacological characterization of [125I]L–750,667, a novel radioligand for the dopamine D4 receptor. Patel S, et al. **Mol Pharmacol** 1996 Dec; 50(6):1658–64
D3 receptor binding in human brain during cocaine overdose [comment] Mash DC. **Mol Psychiatry** 1997 Jan;2(1):5–6. Comment on: Mol Psychiatry 1997 Jan;2(1):7–8.
Mechanism of action of clozapine–induced modification of motor behavior in an animal model of the "super–off" phenomenon. Dziewczapolski G, et al. **Mov Disord** 1997 Mar;12(2):159–66
Imaging of dopamine receptors with [123I]iodobenzamide single–photon emission–computed tomography in neuroleptic malignant syndrome. Jauss M, et al. **Mov Disord** 1996 Nov;11(6):726–8
Characterization of [125I]S(–)5–OH–PIPAT binding to dopamine D2–like receptors expressed in cell lines. Vessotskie JM, et al. **Neuropharmacology** 1997 Jul; 36(7):999–1007
The D2 receptor occupancy profile of loxapine determined using PET. Kapur S, et al. **Neuropsychopharmacology** 1996 Dec;15(6):562–6
Effects of YM–43611, a novel dopamine D2–like receptor antagonist, on immediate early gene expression in the rat forebrain. Kurokawa K, et al. **Neuropsychopharmacology** 1997 Jul;17(1):27–33
In vivo occupancy of D2 dopamine receptors by nafadotride. Levant B, et al. **Neuropsychopharmacology** 1997 Aug; 17(2):67–71
Inverse agonism at dopamine D2 receptors. Haloperidol–induced prolactin release from GH4C1 cells transfected with the human D2 receptor is antagonized by R(–)–n–propylnorapomorphine, raclopride, and phenoxybenzamine. Nilsson CL, et al. **Neuropsychopharmacology** 1996 Jul;15(1):53–61
Atypical neuroleptics have low affinity for dopamine D2 receptors or are selective for D4 receptors. Seeman P, et al. **Neuropsychopharmacology** 1997 Feb;16(2):93–110; discussion 111–35 (136 ref.)
Do D1/D2 interactions regulate prepulse inhibition in rats? Wan FJ, et al. **Neuropsychopharmacology** 1996 Apr; 14(4):265–74
D3 receptor test in vitro predicts decreased cocaine self–administration in rats. Caine SB, et al. **Neuroreport** 1997 Jul 7;8(9–10):2373–7
PTX–sensitive regulation of neurite outgrowth by the dopamine D3 receptor. Swarzenski BC, et al. **Neuroreport** 1996 Jan 31;7(2):573–6
Dopamine D4 receptor in human peripheral blood lymphocytes: a radioligand binding assay study. Ricci A, et al. **Neurosci Lett** 1997 Jun 27;229(2):130–4
Continuous or pulsatile chronic D2 dopamine receptor agonist (U91356A) treatment of drug–naive 4–phenyl–1,2,3,6–tetrahydropyridine monkeys differentially regulates brain D1 and D2 receptor expression: in situ hybridization histochemical analysis. Goulet M, et al. **Neuroscience** 1997 Jul;79(2):497–507
Loss of autoreceptor function in dopaminergic neurons from dopamine D2 receptor deficient mice. Mercuri NB, et al. **Neuroscience** 1997 Jul;79(2):323–7
Synthesis, in vitro binding profile and biodistribution of a 125I–labeled N–benzyl pyrrolidinyl benzamide derivative: a potential radioligand for mapping dopamine D2 receptors. Saji H, et al. **Nucl Med Biol** 1996 Feb;23(2):121–7
Comparison of the stimulus properties of a pre– vs. a putative postsynaptic dose of quinpirole. Cory–Slechta DA, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):423–32
Inhibitory effects of putative dopamine D3 receptor agonists, 7–OH–DPAT and quinpirole, on prolactin secretion in rats. Kurashima M, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):379–83
The prokinetic effect of domperidone in gallbladder––not upon dopaminergic receptors. Tankurt E, et al. **Pharmacol Res** 1996 Sep–Oct;34(3–4):153–6
Cloning, expression and characterization of a human dopamine D4.2 receptor (CHO K1 cells) and various D4.2/D2L chimeras (COS–7 cells). Shih YH, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan; 21(1):153–67
Improvement of schizophrenic symptoms and changes in plasma HVA concentrations, plasma anti–D2 and anti–5–HT2 receptor activities with clozapine. Yamada K, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):291–4
Striatal dopamine–2 receptor occupancy in psychotic patients treated with risperidone. Küfferle B, et al. **Psychiatry Res** 1996 Nov 25;68(1):23–30
Measuring age–related changes in dopamine D2 receptors with 11C–raclopride and 18F–N–methylspiroperidol. Volkow ND, et al. **Psychiatry Res** 1996 May 31;67(1):11–6
Self–administration of the GABAA antagonist bicuculline into the ventral tegmental area in mice: dependence on D2 dopaminergic mechanisms. David V, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):85–90
Comparison of the new atypical antipsychotics olanzapine and ICI 204,636 with clozapine on behavioural responses to the selective "D1–like" dopamine receptor agonist A 68930 and selective "D2–like" agonist RU 24213. Deveney AM, et al. **Psychopharmacology (Berl)** 1996 Mar; 124(1–2):40–9
The relationship between D2 receptor occupancy and plasma levels on low dose oral haloperidol: a PET study. Kapur S, et al. **Psychopharmacology (Berl)** 1997 May;131(2):148–52
Discriminative stimulus effects of apomorphine and 7–OH–DPAT: a potential role for dopamine D3 receptors. Sanger DJ, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(4):387–95
Serotonergic modulation of striatal D2 dopamine receptor binding in humans measured with positron emission tomography. Tiihonen J, et al. **Psychopharmacology (Berl)** 1996 Aug;126(4):277–80
In vivo occupancy of D2 dopamine receptors by 7–OH–DPAT. Levant B, et al. **Synapse** 1996 Sep;24(1):60–4
Evaluation of d–amphetamine effects on the binding of dopamine D–2 receptor radioligand, 18F–fallypride in nonhuman primates using positron emission tomography. Mukherjee J, et al. **Synapse** 1997 Sep;27(1):1–13
Iodolisuride and iodobenzamide, two ligands for SPECT exploration of the dopaminergic D2 receptors: a comparative study. Pellevoisin C, et al. **Synapse** 1996 Sep; 24(1):79–86
Repeated intravenous cocaine administration: locomotor activity and dopamine D2/D3 receptors. Wallace DR, et al. **Synapse** 1996 Jul;23(3):152–63

GENETICS

Dopamine D2 receptor mRNA isoforms expression in the carotid body and petrosal ganglion of developing rabbits. Bairam A, et al. **Adv Exp Med Biol** 1996;410:285–9
Polymorphisms of the D2 dopamine receptor gene and alcoholism and other substance use disorders. Noble EP. **Alcohol Alcohol Suppl** 1994;2:35–43 (61 ref.)
No association of the structural dopamine D2 receptor (DRD2) variant 311Cys with alcoholism. Finckh U, et al. **Alcohol Clin Exp Res** 1996 May;20(3):528–32
Tyrosine hydroxylase and dopamine D4 receptor allelic distribution in Scandinavian chronic alcoholics. Geijer T, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):35–9
Lack of allelic association of dopamine D1 and D2 (TaqIA) receptor gene polymorphisms with reduced dopaminergic sensitivity to alcoholism. Heinz A, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):1109–13
DRD2 haplotypes containing the TaqI A1 allele: implications for alcoholism research. Kidd KK, et al. **Alcohol Clin Exp Res** 1996 Jun;20(4):697–705
Nonreplication of linkage disequilibrium between the dopamine D4 receptor locus and Tourette syndrome [letter; comment] Hebebrand J, et al. **Am J Hum Genet** 1997 Jul; 61(1):238–9. Comment on: Am J Hum Genet 1996 Sep;59(3):644–52.
No evidence for a major gene effect of the dopamine D4 receptor gene in the susceptibility to Gilles de la Tourette syndrome in five Canadian families. Barr CL, et al. **Am J Med Genet** 1996 May 31;67(3):301–5
Rapid molecular haplotyping of the first exon of the human dopamine D4 receptor gene by heteroduplex analysis. Chang FM, et al. **Am J Med Genet** 1997 Feb 21;74(1):91–4
Further evidence of no association between Ser9Gly polymorphism of dopamine D3 receptor gene and schizophrenia. Chen CH, et al. **Am J Med Genet** 1997 Feb 21;74(1):40–3
No association of dopamine D2 receptor molecular variant Cys311 and schizophrenia in Chinese patients. Chen CH, et al. **Am J Med Genet** 1996 Jul 26;67(4):418–20
Lack of association between TaqI A1 allele of dopamine D2 receptor gene and alcohol–use disorders in atayal natives of Taiwan. Chen CH, et al. **Am J Med Genet** 1996 Sep 20;67(5):488–90
Dopamine D2 receptor gene and alcoholism among four aboriginal groups and Han in Taiwan. Chen WJ, et al. **Am J Med Genet** 1997 Apr 18;74(2):129–36
Polygenic inheritance of Tourette syndrome, stuttering, attention deficit hyperactivity, conduct, and oppositional defiant disorder: the additive and subtractive effect of the three dopaminergic genes––DRD2, D beta H, and DAT1. Comings DE, et al. **Am J Med Genet** 1996 May 31; 67(3):264–88
Dopamine DRD2/Cys311 is not associated with chronic schizophrenia. Crawford F, et al. **Am J Med Genet** 1996 Sep 20;67(5):483–4
5–HT2C (HTR2C) serotonin receptor gene polymorphism associated with the human personality trait of reward dependence: interaction with dopamine D4 receptor (D4DR) and dopamine D3 receptor (D3DR) polymorphisms. Ebstein RP, et al. **Am J Med Genet** 1997 Feb 21;74(1):65–72
Assessment of association of D3 dopamine receptor MscI polymorphism with schizophrenia: analysis of symptom ratings, family history, age at onset, and movement disorders. Gaitonde EJ, et al. **Am J Med Genet** 1996 Sep 20;67(5):455–8
Lack of association between alcohol–dependence and D3 dopamine receptor gene in three independent samples. Gorwood P, et al. **Am J Med Genet** 1995 Dec 18; 60(6):529–31
No evidence of association between structural polymorphism at the dopamine D3 receptor locus and alcoholism in the Japanese. Higuchi S, et al. **Am J Med Genet** 1996 Jul 26; 67(4):412–4
Association study of dopamine D3 receptor gene and schizophrenia. Kennedy JL, et al. **Am J Med Genet** 1995 Dec 18;60(6):558–62
Association between early–onset alcoholism and the dopamine D2 receptor gene. Kono Y, et al. **Am J Med Genet** 1997 Apr 18;74(2):179–82
Association study of schizophrenia and the dopamine D3 receptor gene locus in two independent samples. Nimgaonkar VL, et al. **Am J Med Genet** 1996 Nov 22; 67(6):505–14
D2 dopamine receptor polymorphism and brain regional glucose metabolism. Noble EP, et al. **Am J Med Genet** 1997 Apr 18;74(2):162–6
Analysis of the tyrosine hydroxylase and dopamine D4 receptor genes in a Croatian sample of bipolar I and unipolar patients. Oruč L, et al. **Am J Med Genet** 1997 Apr 18;74(2):176–8
No association between polymorphisms in the human dopamine D3 and D4 receptors genes and alcoholism. Parsian A, et al. **Am J Med Genet** 1997 May 31;74(3):281–5
No evidence of association between dopamine D3 receptor gene and bipolar affective disorder. Piccardi MP, et al. **Am J Med Genet** 1997 Apr 18;74(2):137–9
No evidence for association of dopamine D2 receptor variant (Ser311/Cys311) with major psychosis. Sasaki T, et al. **Am J Med Genet** 1996 Jul 26;67(4):415–7
Analysis of clozapine response and polymorphisms of the dopamine D4 receptor gene (DRD4) in schizophrenic patients. Shaikh S, et al. **Am J Med Genet** 1995 Dec 18; 60(6):541–5
Association study of bipolar disorder with candidate genes involved in catecholamine neurotransmission: DRD2, DRD3, DAT1, and TH genes. Souery D, et al. **Am J Med Genet** 1996 Nov 22;67(6):551–5
Lack of association between dopamine D4 receptor gene and schizophrenia. Tanaka T, et al. **Am J Med Genet** 1995 Dec 18;60(6):580–2
Association study between schizophrenia and dopamine D3 receptor gene polymorphism. Tanaka T, et al. **Am J Med Genet** 1996 Jul 26;67(4):366–8
Lack of evidence for allelic association between personality traits and the dopamine D4 receptor gene polymorphisms. Jönsson EG, et al. **Am J Psychiatry** 1997 May;154(5):697–9
Expression of dopamine D2–receptor mRNA isoforms at the peripheral chemoreflex afferent pathway in developing rabbits. Bairam A, et al. **Am J Respir Cell Mol Biol** 1996 Sep;15(3):374–81
Dopamine D2 receptor (DRD2) genotype differentiates intravenous drug abusers from alcoholics and non–abusers. Foley PF, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:409–14
D2 dopamine receptor A1 allele in Alzheimer disease and aging. Small GW, et al. **Arch Neurol** 1997 Mar;54(3):281–5
The D2 dopamine receptor (DRD2) gene and family stress; interactive effects on cognitive functions in children. Berman SM, et al. **Behav Genet** 1997 Jan;27(1):33–43
No association between general cognitive ability and the A1 allele of the D2 dopamine receptor gene. Petrill SA, et al. **Behav Genet** 1997 Jan;27(1):29–31
Cloning and characterization of the 5'–flanking region of the human dopamine D4 receptor gene. Kamakura S, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):321–6
Dopamine D2 receptor gene polymorphisms and vulnerability to substance abuse in African Americans. Berrettini WH, et al. **Biol Psychiatry** 1996 Jul 15; 40(2):144–7
Association of TaqI A polymorphism of dopamine D2 receptor gene and tardive dyskinesia in schizophrenia. Chen CH, et al. **Biol Psychiatry** 1997 Apr 1;41(7):827–9
Dopamine D2 receptor (DRD2) gene and susceptibility to posttraumatic stress disorder: a study and replication. Comings DE, et al. **Biol Psychiatry** 1996 Sep 1;40(5):368–72
Association of the D2 dopamine receptor A1 allele with alcoholism: medical severity of alcoholism and type of controls. Lawford BR, et al. **Biol Psychiatry** 1997 Feb 15; 41(4):386–93
D2 dopamine receptor gene TaqI A1 and B1 restriction fragment length polymorphisms: enhanced frequencies in psychostimulant–preferring polysubstance abusers. Persico AM, et al. **Biol Psychiatry** 1996 Oct 15;40(8):776–84
A genetic linkage study of the D2 dopamine receptor locus in heavy drinking and alcoholism. Cook CC, et al. **Br J Psychiatry** 1996 Aug;169(2):243–8
Childhood/early adolescence–onset and adult–onset schizophrenia. Heterogeneity at the dopamine D3 receptor gene. Maziade M, et al. **Br J Psychiatry** 1997 Jan;170:27–30
[3H]naloxone binding in the human brain: alcoholism and the TaqI A D2 dopamine receptor polymorphism. Ritchie T, et al. **Brain Res** 1996 Apr 29;718(1–2):193–7
Alterations in the spontaneous release of dopamine and the density of the DA D2 receptor mRNA after chronic postnatal exposure to cocaine. Howard SG, et al. **Brain Res Bull** 1997;43(1):101–6
The temporal evolution of striatal dopamine receptor binding and mRNA expression following hypoxia–ischemia in the neonatal rat. Filloux FM, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):81–91
Development of striatal dopaminergic function. II: Dopaminergic regulation of transcription of the immediate early gene zif268 and of D1 (D1a) and D2 (D2a) receptors during pre– and postnatal development. Jung AB, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):121–32
Interaction of nuclear factors from young and old rat brain regions with regulatory sequences of the D2 dopamine receptor gene promoter. Chernak JM, et al.

Brain Res Mol Brain Res 1997 Feb;44(1):113–24
Effects of L-DOPA-therapy on dopamine D2 receptor mRNA expression in the striatum of MPTP-intoxicated parkinsonian monkeys. Herrero MT, et al.
Brain Res Mol Brain Res 1996 Nov;42(1):149–55
Mice lacking dopamine D4 receptors are supersensitive to ethanol, cocaine, and methamphetamine. Rubinstein M, et al. **Cell** 1997 Sep 19;90(6):991–1001
Allele-specific PCR for simultaneous amplification of both alleles of a deletion polymorphism in intron 6 of the human dopamine 2 receptor gene (DRD2). Finckh U, et al.
DNA Seq 1996;6(2):87–94
Dopamine D4 receptor gene polymorphisms: relation to ethnicity, no association with schizophrenia and response to clozapine in Israeli subjects. Kohn Y, et al.
Eur Neuropsychopharmacol 1997 Feb;7(1):39–43
Dopamine D2 receptor gene (DRD2) haplotypes in Caucasians. Finckh U, et al. **Gene** 1996 Nov 14;179(2):251–5
BalI and MspI polymorphisms of the dopamine D3 receptor gene in African Blacks and Caucasians. Crocq MA, et al. **Hum Hered** 1996 Jan-Feb;46(1):58–60
Evidence for an association between the dopamine D3 receptor gene DRD3 and schizophrenia. Ebstein RP, et al. **Hum Hered** 1997 Jan-Feb;47(1):6–16
A functional polymorphism in the promoter region of the dopamine D2 receptor gene is associated with schizophrenia. Arinami T, et al. **Hum Mol Genet** 1997 Apr; 6(4):577–82
Dopamine D2, D3 and D4 receptor and transporter gene polymorphisms and mood disorders. Manki H, et al.
J Affect Disord 1996 Sep 9;40(1–2):7–13
Functional analysis of the human D2 dopamine receptor missense variants. Cravchik A, et al. **J Biol Chem** 1996 Oct 18;271(42):26013–7
Identification and localization of dopamine receptor subtypes in rat olfactory mucosa and bulb: a combined in situ hybridization and ligand binding radioautographic approach. Coronas V, et al. **J Chem Neuroanat** 1997 May; 12(4):243–57
Association between alcoholism and the dopamine D4 receptor gene. Muramatsu T, et al. **J Med Genet** 1996 Feb; 33(2):113–5
Uptake and distribution of fluorescein-labeled D2 dopamine receptor antisense oligodeoxynucleotide in mouse brain. Zhang SP, et al. **J Mol Neurosci** 1996 Spring;7(1):13–28
Low levels of mRNA for dopamine D4 receptor in human cerebral cortex and striatum. Matsumoto M, et al.
J Neurochem 1996 Mar;66(3):915–9
Concomitant up-regulation of proopiomelanocortin and dopamine D2-receptor gene expression in the pituitary intermediate lobe of the spontaneously hypertensive rat. Autelitano DJ, et al. **J Neuroendocrinol** 1997 Apr; 9(4):255–62
Identification of dopamine D4 receptor mRNA in circulating human lymphocytes using nested polymerase chain reaction. Bondy B, et al. **J Neuroimmunol** 1996 Dec; 71(1–2):139–44
Selective expression of dopamine D3 receptor mRNA in proliferative zones during embryonic development of the rat brain. Diaz J, et al. **J Neurosci** 1997 Jun 1;17(11):4282–92
Enhanced cleavage of an atypical intron of dopamine D3-receptor pre-mRNA in chronic schizophrenia. Schmauss C. **J Neurosci** 1996 Dec 15;16(24):7902–9
High-level expression of G protein-coupled receptors with the aid of the Semliki Forest virus expression system. Lundstrom K, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1–4):23–32
Linkage, association and mutational analysis of the dopamine D3 receptor gene in schizophrenia. Asherson P, et al.
Mol Psychiatry 1996 May;1(2):125–32
Association of polymorphisms of dopamine D2 receptor (DRD2), and dopamine transporter (DAT1) genes with schizoid/avoidant behaviors (SAB). Blum K, et al.
Mol Psychiatry 1997 May;2(3):239–46
Genetic variants of the human obesity (OB) gene: association with body mass index in young women, psychiatric symptoms, and interaction with the dopamine D2 receptor (DRD2) gene. Comings DE, et al. **Mol Psychiatry** 1996 Sep;1(4):325–35
Schizophrenia, tardive dyskinesia, and a D3 receptor gene variant: a new twist on dyskinesias? [news; comment] Jeste DV, et al. **Mol Psychiatry** 1997 Mar;2(2):86–8. Comment on: Mol Psychiatry 1997 Mar;2(2):139–45.
Excess dopamine D4 receptor (D4DR) exon III seven repeat allele in opioid-dependent subjects. Kotler M, et al.
Mol Psychiatry 1997 May;2(3):251–4
Dopamine D4 receptor gene polymorphism is associated with attention deficit hyperactivity disorder [see comments] LaHoste GJ, et al. **Mol Psychiatry** 1996 May;1(2):121–4. Comment in: Mol Psychiatry 1996 May;1(2):83–4.
The association between the dopamine D4 receptor (D4DR) 16 amino acid repeat polymorphism and novelty seeking. Malhotra AK, et al. **Mol Psychiatry** 1996 Nov;1(5):388–91
DRD2, DRD3 and 5HT2A receptor genes polymorphisms in obsessive-compulsive disorder. Nicolini H, et al.
Mol Psychiatry 1996 Dec;1(6):461–5
Dopamine D3-receptor gene variant and susceptibility to tardive dyskinesia in schizophrenic patients [see comments] Steen VM, et al. **Mol Psychiatry** 1997 Mar;2(2):139–45. Comment in: Mol Psychiatry 1997 Mar;2(2):86–8.
Quantification of dopamine D1 and D2 receptor mRNA levels associated with the development of behavioral sensitization in amphetamine treated rats. Richtand NM, et al. **Neurochem Int** 1997 Jul;31(1):131–7
Intrastriatal administration of an oligodeoxynucleotide antisense to the D2 dopamine receptor mRNA inhibits D2 dopamine receptor-mediated behavior and D2 dopamine receptors in normal mice and in mice lesioned with 6-hydroxydopamine. Zhou LW, et al. **Neurochem Int** 1996 Dec;29(6):583–95
Clinical susceptibility to migraine with aura is modified by dopamine D2 receptor (DRD2) NcoI alleles. Peroutka SJ, et al. **Neurology** 1997 Jul;49(1):201–6
Evaluation of four candidate genes encoding proteins of the dopamine pathway in familial and sporadic Parkinson's disease: evidence for association of a DRD2 allele. Planté-Bordeneuve V, et al. **Neurology** 1997 Jun; 48(6):1589–93
Pituitary lactotroph hyperplasia and chronic hyperprolactinemia in dopamine D2 receptor-deficient mice. Kelly MA, et al. **Neuron** 1997 Jul;19(1):103–13
Antiproliferative role of dopamine: loss of D2 receptors causes hormonal dysfunction and pituitary hyperplasia. Saiardi A, et al. **Neuron** 1997 Jul;19(1):115–26
Efficacy and side-effects of clozapine: testing for association with allelic variation in the dopamine D4 receptor gene. Rietschel M, et al. **Neuropsychopharmacology** 1996 Nov; 15(5):491–6
Increased prevalence of the seven-repeat variant of the dopamine D4 receptor gene in patients with obsessive-compulsive disorder with tics. Cruz C, et al.
Neurosci Lett 1997 Aug 1;231(1):1–4
Homozygosity at the dopamine D3 receptor gene in schizophrenic patients. Durany N, et al. **Neurosci Lett** 1996 Dec 20;220(3):151–4
Low stringency hybridization study of the dopamine D4 receptor revealed D4-like mRNA distribution of the orphan seven-transmembrane receptor, APJ, in human brain. Matsumoto M, et al. **Neurosci Lett** 1996 Nov 22; 219(2):119–22
No difference in the expression of the D4 gene in post-mortem frontal cortex from controls and schizophrenics. Mulcrone J, et al. **Neurosci Lett** 1996 Nov 29;219(3):163–6
Dopamine D1, dopamine D2, and prolactin receptor messenger ribonucleic acid expression by the polymerase chain reaction in human meningiomas. Carroll RS, et al. **Neurosurgery** 1996 Feb;38(2):367–75
Genetic factors in drug abuse and dependence [see comments] Comings DE. **NIDA Res Monogr** 1996;159:16–38; discussion 39–48. Comment in: NIDA Res Monogr 1996;159:123–8.
Increased prevalence of the Taq I A1 allele of the dopamine receptor gene (DRD2) in obesity with comorbid substance use disorder: a preliminary report. Blum K, et al.
Pharmacogenetics 1996 Aug;6(4):297–305
A study of the dopamine D2 receptor gene in pathological gambling. Comings DE, et al. **Pharmacogenetics** 1996 Jun; 6(3):223–34
Influence of the dopamine D2 receptor (DRD2) genotype on neuroadaptive effects of alcohol and the clinical outcome of alcoholism. Finckh U, et al.
Pharmacogenetics 1997 Aug;7(4):271–81
Induction of dopamine D3 receptor expression as a mechanism of behavioral sensitization to levodopa. Bordet R, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3363–7
Association study of a null mutation in the dopamine D4 receptor gene in Italian patients with obsessive-compulsive disorder, bipolar mood disorder and schizophrenia. Di Bella D, et al. **Psychiatr Genet** 1996 Fall;6(3):119–21
Alcoholism and gene polymorphisms related to central dopaminergic transmission in the Japanese population. Dobashi I, et al. **Psychiatr Genet** 1997 Summer;7(2):87–91
No association between particular DRD3 and DAT gene polymorphisms and manic-depressive illness in a Spanish sample. Gómez-Casero E, et al. **Psychiatr Genet** 1996 Winter;6(4):209–12
No association between the dopamine D2 receptor gene and Korean alcoholism. Lee MS, et al. **Psychiatr Genet** 1997 Summer;7(2):93–5
Association study between bipolar disorder and candidate genes involved in dopamine-serotonin metabolism and GABAergic neurotransmission: a preliminary report [letter] Oruč L, et al. **Psychiatr Genet** 1996 Winter;6(4):213–7 (40 ref.)
A PstI restriction fragment length polymorphism in the 5' untranslated region of DRD4 is not associated with schizophrenia. Paterson AD, et al. **Psychiatr Genet** 1996 Winter;6(4):191–3
Dopamine D3 receptor Gly9/Ser9 polymorphism and schizophrenia: no increased frequency of homozygosity in German familial cases. Rietschel M, et al.
Schizophr Res 1996 May;20(1–2):181–6
The relative abundance of dopamine D4 receptor mRNA in post mortem brains of schizophrenics and controls. Roberts DA, et al. **Schizophr Res** 1996 May;20(1–2):171–4
No association of the Ser/Cys311 DRD2 molecular variant with schizophrenia using a classical case control study and the haplotype relative risk. Verga M, et al.
Schizophr Res 1997 May 24;25(2):117–21

METABOLISM

SPECT studies of D2 occupancy in low-dose haloperidol treatment [letter; comment] Hirschowitz J, et al.
Am J Psychiatry 1997 May;154(5):715–6. Comment on: Am J Psychiatry 1996 Jul;153(7):948–50.
Individual variation in D2 dopamine receptor occupancy in clozapine-treated patients. Pickar D, et al.
Am J Psychiatry 1996 Dec;153(12):1571–8
Effects of methylphenidate on regional brain glucose metabolism in humans: relationship to dopamine D2 receptors. Volkow ND, et al. **Am J Psychiatry** 1997 Jan; 154(1):50–5
Chimeric D2/D3 dopamine receptor coupling to adenylyl cyclase. Lachowicz JE, et al.
Biochem Biophys Res Commun 1997 Aug 18;237(2):394–9
Dopamine D2 receptor dimers and receptor-blocking peptides. Ng GY, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):200–4
In vivo reconstitution of dopamine D2S receptor-mediated G protein activation in baculovirus-infected insect cells: preferred coupling to Gi1 versus Gi2. Grünewald S, et al. **Biochemistry** 1996 Dec 3;35(48):15162–73
Glycosylation, palmitoylation, and localization of the human D2S receptor in baculovirus-infected insect cells. Grünewald S, et al. **Biochemistry** 1996 Dec 3; 35(48):15149–61
Dopamine D2 receptors quantified in vivo in human narcolepsy. MacFarlane JG, et al. **Biol Psychiatry** 1997 Feb 1;41(3):305–10
Polymorphisms of dopamine D2-like (D2, D3, and D4) receptors in schizophrenia. Ohara K, et al.
Biol Psychiatry 1996 Dec 15;40(12):1209–17
Pharmacological analysis of dopamine stimulation of [35S]-GTP gamma S binding via human D2short and D2long dopamine receptors expressed in recombinant cells. Gardner B, et al. **Br J Pharmacol** 1996 Jul;118(6):1544–50
In vitro pharmacological profile of YM-43611, a novel D2-like receptor antagonist with high affinity and selectivity for dopamine D3 and D4 receptors. Hidaka K, et al. **Br J Pharmacol** 1996 Apr;117(8):1625–32
Striatal glucose metabolism and dopamine D2 receptor binding in asymptomatic gene carriers and patients with Huntington's disease. Antonini A, et al. **Brain** 1996 Dec; 119 (Pt 6):2085–95
PET study of the pre- and post-synaptic dopaminergic markers for the neurodegenerative process in Huntington's disease. Ginovart N, et al. **Brain** 1997 Mar;120 (Pt 3):503–14
Cellular distribution of the rat D4 dopamine receptor protein in the CNS using anti-receptor antisera. Ariano MA, et al. **Brain Res** 1997 Mar 28;752(1–2):26–34
Dopamine D1 and D2 receptor binding sites in brain samples from depressed suicides and controls. Bowden C, et al.
Brain Res 1997 Mar 28;752(1–2):227–33
Right-left asymmetry of D1- and D2-receptor density is lost in the basal ganglia of old rats. Giardino L. **Brain Res** 1996 May 13;720(1–2):235–8
Dopamine D3 receptors in the basal ganglia of the common marmoset and following MPTP and L-DOPA treatment. Hurley MJ, et al. **Brain Res** 1996 Feb 19;709(2):259–64
D2 dopamine receptor activation inhibits basal and forskolin-evoked acetylcholine release from dissociated striatal cholinergic interneurons. Login IS. **Brain Res** 1997 Feb 21;749(1):147–51
[3H]naloxone binding in the human brain: alcoholism and the TaqI A D2 dopamine receptor polymorphism. Ritchie T, et al. **Brain Res** 1996 Apr 29;718(1–2):193–7
Rats bred for enhanced apomorphine susceptibility have elevated tyrosine hydroxylase mRNA and dopamine D2-receptor binding sites in nigrostriatal and tuberoinfundibular dopamine systems. Rots NY, et al.
Brain Res 1996 Feb 26;710(1–2):189–96
Effect of aging on vulnerability of striatal D1 and D2 dopamine receptor-containing neurons to kainic acid. Zhang L, et al. **Brain Res** 1997 Jul 25;763(2):264–6
Development of striatal dopaminergic function. I. Pre- and postnatal development of mRNAs and binding sites for striatal D1 (D1a) and D2 (D2a) receptors. Jung AB, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):109–20
Dopamine D3 receptors in rat juxtaglomerular cells. Sanada H, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1–2):93–105
Alteration of dopamine D2 receptors in human malignant stomach tissue. Basu S, et al. **Dig Dis Sci** 1997 Jun; 42(6):1260–4
Prediction of drug-induced catalepsy based on dopamine D1, D2, and muscarinic acetylcholine receptor occupancies. Haraguchi K, et al. **Drug Metab Dispos** 1997 Jun; 25(6):675–84
Localization of dopamine D2 receptor in rat spinal cord identified with immunocytochemistry and in situ hybridization. van Dijken H, et al. **Eur J Neurosci** 1996 Mar;8(3):621–8
Dopaminergic neurons in the rat retina express dopamine D2/3 receptors. Veruki ML. **Eur J Neurosci** 1997 May; 9(5):1096–100
Effects of cerebral ischemia on dopamine receptors in the gerbil striatum. Araki T, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):73–9
In vivo evidence for preferential role of dopamine D3 receptor in the presynaptic regulation of dopamine release but not synthesis. Gainetdinov RR, et al.
Eur J Pharmacol 1996 Jul 25;308(3):261–9
Decrease in sigma but no increase in striatal dopamine D4 sites in schizophrenic brains. Helmeste DM, et al.
Eur J Pharmacol 1996 Oct 31;314(3):R3–5

The naphtosultam derivative RP 62203 (fananserin) has high affinity for the dopamine D4 receptor. Heuillet E, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):229-33

Effects of serotonergic agents on the up-regulation of dopamine D2 receptors induced by haloperidol in rat striatum. Ishikane T, et al. **Eur J Pharmacol** 1997 Feb 26; 321(2):163-9

Antidepressant drugs given repeatedly change the binding of the dopamine D2 receptor agonist, [3H]N-0437, to dopamine D2 receptors in the rat brain. Maj J, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):49-54

Critical reevaluation of spiperone and benzamide binding to dopamine D2 receptors: evidence for identical binding sites. Malmberg A, et al. **Eur J Pharmacol** 1996 May 6; 303(1-2):123-8

Dopamine D3 receptor density elevation in aged Fischer-344 x Brown-Norway (F1) rats. Wallace DR, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):283-5

Perinatal asphyxia induces long-term changes in dopamine D1, D2, and D3 receptor binding in the rat brain. Chen Y, et al. **Exp Neurol** 1997 Jul;146(1):74-80

(E)-(methyloxyimino)acetamides as analogues of neuroleptic benzamides: synthesis and D2-dopaminergic binding affinity. Lapucci A, et al. **Farmaco** 1996 Jan;51(1):33-9

Endogenous dopamine limits the binding of antipsychotic drugs to D3 receptors in the rat brain: a quantitative autoradiographic study. Schotte A, et al. **Histochem J** 1996 Nov;28(11):791-9

D2 occupancy, extrapyramidal side effects and antipsychotic drug treatment: a pilot study with sertindole in healthy subjects. Farde L, et al. **Int Clin Psychopharmacol** 1997 Feb;12 Suppl 1:S3-7

In vivo kinetics of [18F](N-methyl)benperidol: a novel PET tracer for assessment of dopaminergic D2-like receptor binding. Moerlein SM, et al. **J Cereb Blood Flow Metab** 1997 Aug;17(8):833-45

Striatal D2 receptor binding in sleep bruxism: a controlled study with iodine-123-iodobenzamide and single-photon-emission computed tomography. Lobbezoo F, et al. **J Dent Res** 1996 Oct;75(10):1804-10

Dopaminergic regulation of pituitary function in the late-gestation fetal sheep. Matthews SG, et al. **J Endocrinol** 1996 Aug;150(2):187-94

4-Heterocyclylpiperidines as selective high-affinity ligands at the human dopamine D4 receptor. Rowley M, et al. **J Med Chem** 1997 Jul 18;40(15):2374-85

Affinity for dopamine D2, D3, and D4 receptors of 2-aminotetralins. Relevance of D2 agonist binding for determination of receptor subtype selectivity. van Vliet LA, et al. **J Med Chem** 1996 Oct 11;39(21):4233-7

Dopamine D2 receptor binding is reduced in Wilson's disease: correlation of neurological deficits with striatal 123I-iodobenzamide binding. Oder W, et al. **J Neural Transm** 1996;103(8-9):1093-103

Difference in response of D2 receptor binding between 11C-N-methylspiperone and 11C-raclopride against anesthetics in rhesus monkey brain. Kobayashi K, et al. **J Neural Transm Gen Sect** 1995;100(2):147-51

Striatal dopaminergic D1 and D2 receptors after intracerebroventricular application of alloxan and streptozocin in rat. Salkovic M, et al. **J Neural Transm Gen Sect** 1995;100(2):137-45

Two intracellular signaling pathways for the dopamine D3 receptor: opposite and synergistic interactions with cyclic AMP. Griffon N, et al. **J Neurochem** 1997 Jan;68(1):1-9

Zinc allosterically modulates antagonist binding to cloned D1 and D2 dopamine receptors. Schetz JA, et al. **J Neurochem** 1997 May;68(5):1990-7

Low striatal D2 receptor binding as assessed by [123I]IBZM SPECT in patients with writer's cramp [letter] Horstink CA, et al. **J Neurol Neurosurg Psychiatry** 1997 Jun; 62(6):672-3

Effect of aging on dopaminergic receptors and uptake sites in the rat brain studied by receptor autoradiography. Araki T, et al. **J Neurol Sci** 1997 May 29;148(2):131-7

Enhanced amphetamine sensitivity and increased expression of dopamine D2 receptors in postpubertal rats after neonatal excitotoxic lesions of the medial prefrontal cortex. Flores G, et al. **J Neurosci** 1996 Nov 15;16(22):7366-75

Adaptive increase in D3 dopamine receptors in the brain reward circuits of human cocaine fatalities. Staley JK, et al. **J Neurosci** 1996 Oct 1;16(19):6100-6

Dynamic changes in striatal dopamine D2 and D3 receptor protein and mRNA in response to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) denervation in baboons. Todd RD, et al. **J Neurosci** 1996 Dec 1;16(23):7776-82

Effects of binge pattern cocaine administration on dopamine D1 and D2 receptors in the rat brain: an in vivo study using positron emission tomography. Tsukada H, et al. **J Neurosci** 1996 Dec 1;16(23):7670-7

Simplified quantification and reproducibility studies of dopamine D2-receptor binding with iodine-123-IBF SPECT in healthy subjects. Ichise M, et al. **J Nucl Med** 1997 Jan;38(1):31-7

[35S]Guanosine-5'-O-(3-thio)triphosphate binding as a measure of efficacy at human recombinant dopamine D4.4 receptors: actions of antiparkinsonian and antipsychotic agents. Newman-Tancredi A, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):181-91

II. Localization and characterization of dopamine D4 binding sites in rat and human brain by use of the novel, D4 receptor-selective ligand [3H]NGD 94-1. Primus RJ, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):1020-7

The full D1 dopamine receptor agonist SKF-82958 induces neuropeptide mRNA in the normosensitive striatum of rats: regulation of D1/D2 interactions by muscarinic receptors. Wang JQ, et al. **J Pharmacol Exp Ther** 1997 May; 281(2):972-82

Self-injurious behavior and dopaminergic neuron system in neonatal 6-hydroxydopamine-lesioned rat: 1. Dopaminergic neurons and receptors. Yokoyama C, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1016-30

Dopamine (D2) receptor regulation of intracellular calcium and membrane capacitance changes in rat melanotrophs. Lee AK. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):627-40

A method to estimate in vivo D2 receptor occupancy by antipsychotic drugs. Roemer RA, et al. **J Psychiatry Neurosci** 1996 Nov;21(5):325-33

Distinct binding patterns of [3H]raclopride and [3H]spiperone at dopamine D2 receptors in vivo in rat brain. Implications for pet studies. Bischoff S, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):419-31

In vitro receptor binding characteristics of the new dopamine D2 antagonist [125I]NCQ-298: methodological considerations of high affinity binding. Jerning E, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):503-15

Functional coupling of human D2, D3, and D4 dopamine receptors in HEK293 cells. McAllister G, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):267-81

Synergistic effect of D1 and D2 dopamine receptors on AP-1 DNA-binding activity in the striatum and globus pallidus of the rat with a unilateral 6-OHDA lesion of the medical forebrain bundle. Kashihara K, et al. **Life Sci** 1996; 59(20):1683-93

Characterization of a novel iodinated ligand, IPMPP, for human dopamine D4 receptors expressed in CHO cells. Kung MP, et al. **Life Sci** 1997;60(2):91-100

Clozapine occupies high levels of dopamine D2 receptors. Seeman P, et al. **Life Sci** 1997;60(12):PL 207-16

Interaction of D2-dopamine receptor with two pertussis toxin sensitive G proteins in human placenta. Vaillancourt C, et al. **Life Sci** 1997;60(16):1365-75

Evolution of dopamine receptors in the rat after neonatal hypoxia-ischemia: autoradiographic studies. Zouakia A, et al. **Life Sci** 1997;60(2):151-62

Postnatal development of dopamine D1-like and D2-like receptors in the rat kidney: a radioligand binding study. Tenore G, et al. **Mech Ageing Dev** 1997 Apr;95(1-2):1-11

Regulation of D2 dopamine receptors by amiloride and amiloride analogs. Hoare SR, et al. **Mol Pharmacol** 1996 Nov;50(5):1295-308

A new look at dopamine D3 receptors [news] Accili D, et al. **Mol Psychiatry** 1996 May;1(2):93-4

The dopamine D4 receptor and attention deficit hyperactivity disorder [editorial; comment] Licinio J. **Mol Psychiatry** 1996 May;1(2):83-4. Comment on: Mol Psychiatry 1996 May;1(2):121-4.

Alterations in the turnover rate of dopamine D1 but not D2 receptors in the adult rat neostriatum after a neonatal dopamine denervation. Dewar KM, et al. **Neurochem Int** 1997 Jun;30(6):613-21

Effects of chronic neuroleptic treatments on dopamine D1 and D2 receptors: homogenate binding and autoradiographic studies. Huang N, et al. **Neurochem Int** 1997 Mar;30(3):277-90

Kinetic evidence for isomerization of the dopamine receptor-raclopride complex. Lepiku M, et al. **Neurochem Int** 1996 May-Jun;28(5-6):591-5

In vivo studies on striatal dopamine D1 and D2 site binding in L-dopa-treated Parkinson's disease patients with and without dyskinesias. Turjanski N, et al. **Neurology** 1997 Sep;49(3):717-23

A PET study of 5-HT2 and D2 dopamine receptor occupancy induced by olanzapine in healthy subjects. Nyberg S, et al. **Neuropsychopharmacology** 1997 Jan; 16(1):1-7

The effect of streptozotocin-induced diabetes on dopamine2, serotonin1A and serotonin2A receptors in the rat brain. Sumiyoshi T, et al. **Neuropsychopharmacology** 1997 Mar; 16(3):183-90

Dopamine D2 receptor availability in opiate-dependent subjects before and after naloxone-precipitated withdrawal. Wang GJ, et al. **Neuropsychopharmacology** 1997 Feb; 16(2):174-82

Sex differences in dopamine receptor overproduction and elimination. Andersen SL, et al. **Neuroreport** 1997 Apr 14; 8(6):1495-8

D2-type dopamine receptors in postmortem human brain sections from normal and schizophrenic subjects. Lahti RA, et al. **Neuroreport** 1996 Aug 12;7(12):1945-8

Molecular basis of the activity of the dopamine synapse in the mechanisms of learning and amnesia. Podgornaya EK, et al. **Neurosci Behav Physiol** 1997 Mar-Apr;27(2):131-6

Codistribution of the dopamine D3 receptor and glucocorticoid receptor mRNAs during striatal prenatal development in the rat. Diaz R, et al. **Neurosci Lett** 1997 May 16;227(2):119-22

Neurotensin and dopamine D2 activation oppositely regulate the same K+ conductance in rat midbrain dopaminergic neurons. Farkas RH, et al. **Neurosci Lett** 1997 Aug 1; 231(1):21-4

Possible involvement of G-proteins in the regulation of striatal dopamine D2 receptor affinity by cholecystokinin octapeptide. Li XM, et al. **Neurosci Lett** 1997 Jun 13; 228(3):171-4

Chronic cocaine administration increases tyrosine hydroxylase activity in the ventral tegmental area through glutaminergic- and dopaminergic D2-receptor mechanisms. Masserano JM, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):73-6

Low stringency hybridization study of the dopamine D4 receptor revealed D4-like mRNA distribution of the orphan seven-transmembrane receptor, APJ, in human brain. Matsumoto M, et al. **Neurosci Lett** 1996 Nov 22; 219(2):119-22

High affinity binding for pramipexole, a dopamine D3 receptor ligand, in rat striatum. Piercey MF, et al. **Neurosci Lett** 1996 Nov 22;219(2):138-40

Agonist-induced [35S]GTPgammaS binding in the membranes of Spodoptera frugiperda insect cells expressing the human D3 dopamine receptor. Pregenzer JF, et al. **Neurosci Lett** 1997 Apr 25;226(2):91-4

Dopamine D4 receptor in human peripheral blood lymphocytes: a radioligand binding assay study. Ricci A, et al. **Neurosci Lett** 1997 Jun 27;229(2):130-4

Ontogeny of dopamine D3 receptors in the nucleus accumbens of the rat. Stanwood GD, et al. **Neurosci Lett** 1997 Feb 14;223(1):13-6

Developmental expression of tyrosine hydroxylase, D2-dopamine receptor and substance P genes in the carotid body of the rat. Gauda EB, et al. **Neuroscience** 1996 Dec; 75(3):969-77

Dopamine D2 receptors are organized in bands in normal human temporal cortex. Goldsmith SK, et al. **Neuroscience** 1996 Sep;74(2):435-51

Differential regulation of dopamine receptors after chronic typical and atypical antipsychotic drug treatment. Tarazi FI, et al. **Neuroscience** 1997 Jun;78(4):985-96

Pharmacokinetics of the three radioiodinated dopamine D2 receptor ligands [123I]IBF, [123I]epidepride and [123I]2'-ISP in nonhuman primates. Baldwin RM, et al. **Nucl Med Biol** 1994 Oct;21(7):969-76

Radiochemical synthesis of [123I]2-iodo-lisuride for dopamine D2-receptor studies. Bier D, et al. **Nucl Med Biol** 1996 Apr;23(3):373-6

Synthesis and biodistribution of [5-131I]iodotropapride: a potential D2 dopamine receptor imaging agent. Cantineau R, et al. **Nucl Med Biol** 1994 Feb;21(2):255-62

Fluorine-18-labelled NCQ 115, a selective dopamine D-2 receptor ligand. Preparation and positron emission tomography. Halldin C, et al. **Nucl Med Biol** 1994 May; 21(4):627-31

Preparation of [76Br]FLB 457 and [76Br]FLB 463 for examination of striatal and extrastriatal dopamine D-2 receptors with PET. Loc'h C, et al. **Nucl Med Biol** 1996 Aug;23(6):813-9

Comparison of three high affinity SPECT radiotracers for the dopamine D2 receptor. al-Tikriti MS, et al. **Nucl Med Biol** 1994 Feb;21(2):179-88

Human biodistribution and dosimetry of the SPECT D2 dopamine receptor radioligand [123I]IBF. van Dyck CH, et al. **Nucl Med Biol** 1996 Jan;23(1):9-16

D1 and D2 dopamine receptors in perinatal and adult basal ganglia. Boyson SJ, et al. **Pediatr Res** 1997 Jun;41(6):822-31

Regional brain patterns of dopamine, metabolites and D2 receptors in memory. Galkina OV, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):453-60

Effects of intermittent and continuous subchronic administration of raclopride on motor activity, dopamine turnover and receptor occupancy in the rat. Ericson H, et al. **Pharmacol Toxicol** 1996 Dec;79(6):277-86

Test-retest reliability of central [11C]raclopride binding at high D2 receptor occupancy. A PET study in haloperidol-treated patients. Nyberg S, et al. **Psychiatry Res** 1996 Oct 7;67(3):163-71

Central 5-HT2A and D2 dopamine receptor occupancy after sublingual administration of ORG 5222 in healthy men. Andrée B, et al. **Psychopharmacology (Berl)** 1997 Jun; 131(4):339-45

The time course of binding to striatal dopamine D2 receptors by the neuroleptic ziprasidone (CP-88,059-01) determined by positron emission tomography. Bench CJ, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):141-7

Effect of chronic treatment with typical and atypical neuroleptics on the expression of dopamine D2 and D3 receptors in rat brain. Hurley MJ, et al. **Psychopharmacology (Berl)** 1996 Dec;128(4):362-70

In vivo characteristics of dopamine D2 receptor occupancy by amisulpride in schizophrenia. Martinot JL, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):154-8

Dopamine D2 receptor occupancy in vivo by the novel atypical antipsychotic olanzapine--a 123I IBZM single photon emission tomography (SPET) study. Pilowsky LS, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):148-53

In vivo effects on striatal dopamine D2 receptor binding by the novel atypical antipsychotic drug sertindole--a 123I IBZM single photon emission tomography (SPET) study. Pilowsky LS, et al. **Psychopharmacology (Berl)** 1997 Mar; 130(2):152-8

Prolactin plasma levels and D2-dopamine receptor occupancy measured with IBZM-SPECT. Schlegel S, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):285-7

RECEPTORS, DOPAMINE D2

Effect of reserpine-induced depletion of synaptic dopamine on [11C]raclopride binding to D2-dopamine receptors in the monkey brain. Ginovart N, et al. **Synapse** 1997 Apr; 25(4):321-5

Autoradiographic localization of extrastriatal D2-dopamine receptors in the human brain using [125I]epidepride. Hall H, et al. **Synapse** 1996 Jun;23(2):115-23

Interhemispheric modulation of dopamine receptor interactions in unilateral 6-OHDA rodent model. Lawler CP, et al. **Synapse** 1995 Dec;21(4):299-311

In vivo occupancy of D2 dopamine receptors by 7-OH-DPAT. Levant B, et al. **Synapse** 1996 Sep;24(1):60-4

Dopamine D2-like sites in schizophrenia, but not in Alzheimer's, Huntington's, or control brains, for [3H]benzquinoline. Seeman P, et al. **Synapse** 1997 Feb; 25(2):137-46

The energetics of ligand binding at catecholamine receptors. Strange PG. **Trends Pharmacol Sci** 1996 Jul;17(7):238-44 (51 ref.)

[PET study of dopamine metabolism and dopamine D2 receptor in juvenile parkinsonism] Tanji H, et al. **Nippon Rinsho** 1997 Jan;55(1):89-94 (25 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

D2-dopamine receptor-mediated stimulation of inositol trisphosphate formation in chick retina. Zawilska JB, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(4):961

Platelet monoamine oxidase-B activity in alcoholics with lowered dopamine D2 receptor activity [letter] Farren CK, et al. **Alcohol Alcohol** 1996 May;31(3):307-8

Dopamine inhibits AVP-dependent Na+ transport and water permeability in rat CCD via a D4-like receptor. Sun D, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F391-400

Absence of DA1/DA2 dopamine receptor interactions in proximal tubules of spontaneously hypertensive rats. Vachvanichsanong P, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F98-105

Social stress, depression, and brain dopamine in female cynomolgus monkeys. Shively CA, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:574-7

Dopamine and opioid regulation of the memory retrieval recovery in mice. Dubrovina NI, et al. **Behav Brain Res** 1996 Sep;79(1-2):23-9

Dopamine receptor sub-types involvement in nucleus accumbens and ventral tegmentum but not in medial prefrontal cortex: on self-stimulation of lateral hypothalamus and ventral mesencephalon. Singh J, et al. **Behav Brain Res** 1997 Jul;86(2):171-9

D2 dopamine receptor involvement in the rough-and-tumble play behavior of juvenile rats. Siviy SM, et al. **Behav Neurosci** 1996 Oct;110(5):1168-76

Reduced dopaminergic function in alcoholics is related to severe dependence. Schmidt LG, et al. **Biol Psychiatry** 1996 Feb 1;39(3):193-8

Prefrontal cortex dysfunction in Borna disease virus (BDV)--infected rats. Solbrig MV, et al. **Biol Psychiatry** 1996 Oct 1;40(7):629-36

Evidence for a functional role of the dopamine D3 receptors in the cerebellum. Barik S, et al. **Brain Res** 1996 Oct 21; 737(1-2):347-50

Extracellular levels of glutamate and aspartate in the entopeduncular nucleus of the rat determined by microdialysis: regulation by striatal dopamine D2 receptors via the indirect striatal output pathway? Biggs CS, et al. **Brain Res** 1997 Apr 4;753(1):163-75

Evidence that D2 receptor-mediated activation of hypothalamic tuberoinfundibular dopaminergic neurons in the male rat occurs via inhibition of tonically active afferent dynorphinergic neurons. Durham RA, et al. **Brain Res** 1996 Sep 2;732(1-2):113-20

Excitation of type II anterior caudate neurons by stimulation of dopamine D3 receptors. Piercey MF, et al. **Brain Res** 1997 Jul 11;762(1-2):19-28

Dopamine D2-receptors regulate neurotensin release from nucleus accumbens and striatum as measured by in vivo microdialysis. Wagstaff JD, et al. **Brain Res** 1996 May 20; 721(1-2):196-203

Interactive effects of stimulation of D1 and D2 dopamine receptors on Fos expression in the lateral habenula. Wirtshafter D, et al. **Brain Res** 1997 Mar 7;750(1-2):245-50

Regulation of dopamine D1 and D2 receptors on striatal acetylcholine release in rats. Ikarashi Y, et al. **Brain Res Bull** 1997;43(1):107-15

Signal transduction pathways modulated by the D2 subfamily of dopamine receptors. Huff RM. **Cell Signal** 1996 Sep; 8(6):453-9 (91 ref.)

Dopamine D2 receptors in signal transduction and behavior. Picetti R, et al. **Crit Rev Neurobiol** 1997;11(2-3):121-42 (130 ref.)

Developmental plasticity in the D1- and D2-mediation of motor behavior in rats depleted of dopamine as neonates. Byrnes EM, et al. **Dev Psychobiol** 1996 Dec;29(8):653-66

Resistance of the dopamine D2L receptor to desensitization accompanies the up-regulation of receptors on to the surface of Sf9 cells. Ng GY, et al. **Endocrinology** 1997 Oct; 138(10):4199-206

Dopamine D4 receptor-mediated inhibition of cyclic adenosine 3',5'-monophosphate production does not affect prolactin regulation. Sanyal S, et al. **Endocrinology** 1997 May;138(5):1871-8

A search for association between schizophrenia and dopamine-related alleles. Jönsson E, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(6):297-304

Dopamine autoreceptor reserve in vitro: possible role of dopamine D3 receptors. Aretha CW, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):119-22

Spontaneous release of acetylcholine in striatum is preferentially regulated by inhibitory dopamine D2 receptors. DeBoer P, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):257-62

Dopamine D3 receptors are not involved in the induction of c-fos mRNA by neuroleptic drugs: comparison of the dopamine D3 receptor antagonist GR103691 with typical and atypical neuroleptics. Hurley MJ, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):283-93

Involvement of dopamine D3 receptors in the area postrema in R(+)-7-OH-DPAT-induced emesis in the ferret. Yoshikawa T, et al. **Eur J Pharmacol** 1996 Apr 22; 301(1-3):143-9

The rat D4 dopamine receptor couples to cone transducin (Galphat2) to inhibit forskolin-stimulated cAMP accumulation. Yamaguchi I, et al. **J Biol Chem** 1997 Jun 27;272(26):16599-602

Turning behavior in rats with unilateral lesions of the subthalamic nucleus: synergism between D1 and D2 receptors. Murer MG, et al. **J Neural Transm Gen Sect** 1995;100(2):123-35

Differential inhibition of secretagogue-stimulated sodium uptake in adrenal chromaffin cells by activation of D4 and D5 dopamine receptors. Dahmer MK, et al. **J Neurochem** 1996 Nov;67(5):1960-4

Dopamine D3 (auto) receptors inhibit dopamine release in the frontal cortex of freely moving rats in vivo. Gobert A, et al. **J Neurochem** 1996 May;66(5):2209-12

Dopamine inhibits melatonin synthesis in photoreceptor cells through a D2-like receptor subtype in the rat retina: biochemical and histochemical evidence. Nguyen-Legros J, et al. **J Neurochem** 1996 Dec;67(6):2514-20

D2 dopamine receptor-mediated inhibition of a hyperpolarization-activated current in rod photoreceptors. Akopian A, et al. **J Neurophysiol** 1996 Sep;76(3):1828-35

D1-D2 interaction in feedback control of midbrain dopamine neurons. Shi WX, et al. **J Neurosci** 1997 Oct 15; 17(20):7988-94

Dopamine induces apoptosis in cultured rat striatal neurons; possible mechanism of D2-dopamine receptor neuron loss during aging. Shinkai T, et al. **J Neurosci Res** 1997 Feb 15;47(4):393-9

The inhibition of ganglionic transmission via presynaptic dopamine DA1 and postsynaptic DA2 receptor activation in the canine cardiac sympathetic ganglia. Mukai M, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):822-9

A single photon emission computed tomography scan study of striatal dopamine D2 receptor binding with 123I-epidepride in patients with schizophrenia and controls. Tibbo P, et al. **J Psychiatry Neurosci** 1997 Jan; 22(1):39-45

Role of D1 and alpha1 receptors in the enhanced locomotor response to dopamine D2-like receptor stimulation induced by repeated electroconvulsive shock. D'Aquila PS, et al. **J Psychopharmacol (Oxf)** 1997;11(1):41-4

Role of dopamine D2, D4 and serotonin(2A) receptors in antipsychotic and anticataleptic action. Seeman P, et al. **J Psychopharmacol (Oxf)** 1997;11(1):15-7

Evidence for the occurrence of depressant EEG effects after stimulation of dopamine D3 receptors: a computerized study in rabbits. Popoli P, et al. **Life Sci** 1996; 59(21):1755-61

Selective inhibition of adenylyl cyclase type V by the dopamine D3 receptor. Robinson SW, et al. **Mol Pharmacol** 1997 Sep;52(3):508-14

Activation of type II adenylate cyclase by D2 and D4 but not D3 dopamine receptors. Watts VJ, et al. **Mol Pharmacol** 1997 Aug;52(2):181-6

Sensitization of endogenous and recombinant adenylate cyclase by activation of D2 dopamine receptors. Watts VJ, et al. **Mol Pharmacol** 1996 Oct;50(4):966-76

Are neuroadaptations in D3 dopamine receptors linked to the development of cocaine dependence? [news; comment] Mash DC. **Mol Psychiatry** 1997 Jan;2(1):7-8. Comment on: Mol Psychiatry 1997 Jan;2(1):5-6.

Long-term changes of striatal dopamine D2 receptors in patients with Parkinson's disease: a study with positron emission tomography and [11C]raclopride. Antonini A, et al. **Mov Disord** 1997 Jan;12(1):33-8

D2 be or not to be? Robertson MM. **Nat Med** 1996 Oct; 2(10):1076-7

D2 dopamine receptors and personality traits [letter] Farde L, et al. **Nature** 1997 Feb 13;385(6617):590

Absence of opiate rewarding effects in mice lacking dopamine D2 receptors. Maldonado R, et al. **Nature** 1997 Aug 7;388(6642):586-9

On the involvement of a tonic dopamine D2-autoinhibition in the regulation of pulse-to-pulse-evoked dopamine release in the rat striatum in vivo. Dugast C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):716-9

Threshold of dopamine content and D1 receptor stimulation necessary for the expression of rotational behavior induced by D2 receptor stimulation under normo and supersensitive conditions. Dziewczapolski G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):30-5

Adenosine-dopamine receptor interactions in the isolated rat nodose ganglion but not in membranes of dorsal vagal complex. Lawrence AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):303-8

Suppression of cholinergic activity via the dopamine D2 receptor in the rat striatum. Ikarashi Y, et al. **Neurochem Int** 1997 Feb;30(2):191-7

Involvement of dopamine D2 receptors in the effect of cocaine on sexual behaviour and stretching-yawning of male rats. Ferrari F, et al. **Neuropharmacology** 1997 Jun; 36(6):769-77

Linking the family of D2 receptors to neuronal circuits in human brain: insights into schizophrenia. Joyce JN, et al. **Neuropsychopharmacology** 1997 Jun;16(6):375-84 (78 ref.)

Involvement of the presynaptic dopamine D2 receptor in the depression of spinal reflex by apomorphine. Gajendiran M, et al. **Neuroreport** 1996 Jan 31;7(2):513-6

Co-alteration of dopamine D2 receptor and muscarinic acetylcholine receptor binding in rat striatum after circling training. Ibarra GR, et al. **Neuroreport** 1996 Nov 4; 7(15-17):2491-4

D1-D2 dopamine receptor interaction: an in vivo single unit electrophysiological study. Murer MG, et al. **Neuroreport** 1997 Feb 10;8(3):783-7

NMDA and dopamine D2L receptor interaction in human neuroblastoma SH-SY5Y cells involves tyrosine kinase and phosphatase. Nair VD, et al. **Neuroreport** 1996 Nov 25; 7(18):2937-40

Dopamine enhances glutamate-induced excitation of rat striatal neurons by cooperative activation of D1 and D2 class receptors. Hu XT, et al. **Neurosci Lett** 1997 Mar 7; 224(1):61-5

Morphologically distinct subpopulations of neurotensin-immunoreactive striatal neurons observed in rat following dopamine depletions and D2 receptor blockade project to the globus pallidus. Brog JS, et al. **Neuroscience** 1996 Oct;74(3):805-12

Dopaminergic modulation of mitral cell activity in the frog olfactory bulb: a combined radioligand binding-electrophysiological study. Duchamp-Viret P, et al. **Neuroscience** 1997 Jul;79(1):203-16

Apomorphine priming alters the response of striatal outflow pathways to D2 agonist stimulation in 6-hydroxydopamine-lesioned rats. Pollack AE, et al. **Neuroscience** 1997 Jul;79(1):79-93

The dopamine D4 receptor. Van Tol HH. **NIDA Res Monogr** 1996;161:20-38 (50 ref.)

Role of dopamine receptors in the short- and long-term regulation of corticostriatal transmission. Calabresi P, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):101-4 (25 ref.)

D2 receptor activation in distinct striatal neurons in comparison with D3 receptors. Sasa M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):97-100

Do D2-like dopamine receptors mediate neuronal excitation or inhibition: some functional-behavioural implications. Waddington JL. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):111-2 (16 ref.)

DA D2 receptors in the ventral striatum: multiple effects or receptor subtypes? White FJ, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):91-5 (29 ref.)

Influence of the dopamine D2 receptor (DRD2) genotype on neuroadaptive effects of alcohol and the clinical outcome of alcoholism. Finckh U, et al. **Pharmacogenetics** 1997 Aug;7(4):271-81

D1 and D2 dopamine and opiate receptors are involved in the restraint stress-induced sensitization to the psychostimulant effects of amphetamine. Díaz-Otañez CS, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):9-14

Contralateral turning elicited by unilateral stimulation of dopamine D2 and D1 receptors in the nucleus accumbens of rats is due to stimulation of these receptors in the shell, but not the core, of this nucleus. Koshikawa N, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):185-90

Roles of dopamine receptors in long-term depression: enhancement via D1 receptors and inhibition via D2 receptors. Chen Z, et al. **Receptors Channels** 1996;4(1):1-8

Effects of intrastriatal infusion of D2 receptor antisense oligonucleotide on apomorphine-induced behaviors in the rat. Rajakumar N, et al. **Synapse** 1997 Jul;26(3):199-208

[Dopamine D2 and serotonin 5HT2 receptors: functions, interactions and clinical consequences in schizophrenia] Guise S, et al. **Encephale** 1997 Apr;23 Spec No 2:10-6 (20 ref.) (Eng. Abstr.) **(Fre)**

RECEPTORS, DRUG

Endogenous cannabinoid ligands--chemical and biological studies. Mechoulam R, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):45-9 (23 ref.)

Imidazoline receptors. Bousquet P. **Neurochem Int** 1997 Jan; 30(1):3-7 (68 ref.)

Molecular Approaches to Drug Abuse Research. Proceedings of a conference. Bethesda, Maryland, March 22-23, 1994. **NIDA Res Monogr** 1996;161:1-219

1996 Receptor and ion channel nomenclature supplement. **Trends Pharmacol Sci** 1996;Suppl:1-81

1997 Receptor and ion channel nomenclature supplement.

Trends Pharmacol Sci 1997;Suppl:1–84
[Sulfonylurea receptor] Yamada Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:590–3 (6 ref.) **(Jpn)**
[Pharmacological studies on drug receptor mechanisms] Takayanagi I. **Yakugaku Zasshi** 1996 Jun;116(6):417–40 (77 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

Segmental effects on motor function following different intrathecal receptor agonists and antagonists in rabbits. Borgbjerg FM, et al. **Acta Anaesthesiol Scand** 1997 May; 41(5):586–94
Biosynthesis, release and degradation of the novel endogenous cannabimimetic metabolite 2-arachidonoylglycerol in mouse neuroblastoma cells. Bisogno T, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):671–7
Rilmenidine and reflex renal sympathetic nerve activation in Wistar and hypertensive rats. Zhang T, et al. **Br J Pharmacol** 1996 Nov;119(6):1248–54
Nutritional disorders: a target for sympathetic outflow–regulating drugs (imidazoline I1 receptor agonists) [editorial] Rupp H. **Cardiovasc Drugs Ther** 1996 Jun;10 Suppl 1:213–4
delta 9–Tetrahydrocannabinol is a partial agonist of cannabinoid receptors in mouse brain. Burkey TH, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):R3–4
Examination of the effect of the cannabinoid receptor agonist, CP 55,940, on electrically evoked transmitter release from rat brain slices. Gifford AN, et al. **Eur J Pharmacol** 1997 Apr 18;324(2–3):187–92
Agonist–antagonist characterization of 6'–cyanohex–2'–yne–delta 8–tetrahydrocannabinol in two isolated tissue preparations. Pertwee RG, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):195–201
Isolation and measurement of the endogenous cannabinoid receptor agonist, anandamide, in brain and peripheral tissues of human and rat. Felder CC, et al. **FEBS Lett** 1996 Sep 16;393(2–3):231–5
Pharmacology of moxonidine, an I1–imidazoline receptor agonist. Ziegler D, et al. **J Cardiovasc Pharmacol** 1996;27 Suppl 3:S26–37 (52 ref.)
Liquid chromatographic–atmospheric pressure chemical ionization mass spectrometric determination of anandamide and its analogs in rat brain and peripheral tissues. Koga D, et al. **J Chromatogr B Biomed Appl** 1997 Mar 7; 690(1–2):7–13
Imidazoline receptor agonist drugs: a new approach to the treatment of systemic hypertension. Yu A, et al. **J Clin Pharmacol** 1996 Feb;36(2):98–111 (100 ref.)
Imidazoline I1 receptor agonists: new data on hypertension and related pathologies: introduction. Fernandez–Cruz A. **J Hypertens Suppl** 1997 Jan;15(1):S1–2
Considerations in the treatment of insulin resistance and related disorders with a new sympatholytic agent. Lithell HO. **J Hypertens Suppl** 1997 Jan;15(1):S39–42 (30 ref.)
The use of moxonidine in the treatment of hypertension. Prichard BN, et al. **J Hypertens Suppl** 1997 Jan; 15(1):S47–55 (50 ref.)
Experimental benefit of moxonidine on glucose metabolism and insulin secretion in the fructose–fed rat. Rösen P, et al. **J Hypertens Suppl** 1997 Jan;15(1):S31–8
Analysis of agonist–agonist interactions: the crucial influence of curve shape. Scaramellini C, et al. **J Pharmacol Toxicol Methods** 1997 Apr;37(3):167–78
Calculation of agonist efficacy, apparent affinity, and receptor population changes after administration of insurmountable antagonists: comparison of different analytical approaches. Zernig G, et al. **J Pharmacol Toxicol Methods** 1996 Aug;35(4):223–37
Renal denervation altered the hemodynamic and renal effects following intracerebroventricular administration of the I1–imidazoline receptor agonist, rilmenidine, in pentobarbital anaesthetized rats. Penner SB, et al. **Neurochem Int** 1997 Jan;30(1):55–62
Antisense oligodeoxynucleotide treatment to the brain cannabinoid receptor inhibits antinociception. Edsall SA, et al. **Neuroreport** 1996 Jan 31;7(2):593–6
delta9–Tetrahydrocannabinol excites rat VTA dopamine neurons through activation of cannabinoid CB1 but not opioid receptors. French ED. **Neurosci Lett** 1997 May 2; 226(3):159–62
Inhibition of the natriuretic action of the imidazoline receptor agonist moxonidine by indometacin in the rat. Darkwa FK, et al. **Pharmacology** 1995 Dec;51(6):347–55
Natriuresis following central and peripheral administration of agmatine in the rat. Penner SB, et al. **Pharmacology** 1996 Sep;53(3):160–9
The two–state model of agonist action: challenges to pharmacological receptor theory. Leff P. **Proc West Pharmacol Soc** 1996;39:67–8 (17 ref.)
[Long–term antihypertensive therapy with moxonidine (cynt) in patients with insulin–independent diabetes mellitus] Lazebnik LB, et al. **Ter Arkh** 1997;69(6):59–64 **(Rus)**

ANALYSIS

Membrane localization and guanine nucleotide sensitivity of medullary I1–imidazoline binding sites. Ernsberger P, et al. **Neurochem Int** 1997 Jan;30(1):17–23

ANTAGONISTS & INHIBITORS

Segmental effects on motor function following different intrathecal receptor agonists and antagonists in rabbits. Borgbjerg FM, et al. **Acta Anaesthesiol Scand** 1997 May; 41(5):586–94
Sulfonylurea KATP blockade in type II diabetes and preconditioning in cardiovascular disease. Time for reconsideration. Engler RL, et al. **Circulation** 1996 Nov 1;94(9):2297–301 (66 ref.)
Agonist–antagonist characterization of 6'–cyanohex–2'–yne–delta 8–tetrahydrocannabinol in two isolated tissue preparations. Pertwee RG, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):195–201
SR 141716A, a cannabinoid receptor antagonist, produces hyperalgesia in untreated mice. Richardson JD, et al. **Eur J Pharmacol** 1997 Jan 29;319(2–3):R3–4
MgADP antagonism to Mg2+–independent ATP binding of the sulfonylurea receptor SUR1. Ueda K, et al. **J Biol Chem** 1997 Sep 12;272(37):22983–6
The selective capsaicin antagonist capsazepine abolishes the antinociceptive action of eugenol and guaiacol. Ohkubo T, et al. **J Dent Res** 1997 Apr;76(4):848–51
Relative importance of central imidazoline receptors for the antihypertensive effects of moxonidine and rilmenidine. Chan CK, et al. **J Hypertens** 1996 Jul;14(7):855–64
Dependence on delta 9–tetrahydrocannabinol: studies on precipitated and abrupt withdrawal. Aceto MD, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1290–5
Calculation of agonist efficacy, apparent affinity, and receptor population changes after administration of insurmountable antagonists: comparison of different analytical approaches. Zernig G, et al. **J Pharmacol Toxicol Methods** 1996 Aug;35(4):223–37
AM630 is a competitive cannabinoid receptor antagonist in the guinea pig brain. Hosohata K, et al. **Life Sci** 1997; 61(9):PL115–8
Acute administration of the CB1 cannabinoid receptor antagonist SR 141716A induces anxiety–like responses in the rat. Navarro M, et al. **Neuroreport** 1997 Jan 20; 8(2):491–6
Characterisation of the rat cerebella CB1 receptor using SR141716A, a central cannabinoid receptor antagonist. Hirst RA, et al. **Neurosci Lett** 1996 Dec 13;220(2):101–4
Capsazepine, a vanilloid receptor antagonist, inhibits nicotinic acetylcholine receptors in rat trigeminal ganglia. Liu L, et al. **Neurosci Lett** 1997 May 30;228(1):29–32
Cannabinoids: receptors, endogenous ligands and a newly synthesized antagonist. **NIDA Res Monogr** 1996;162:52–3
Selective inhibition of sucrose and ethanol intake by SR 141716, an antagonist of central cannabinoid (CB1) receptors. Arnone M, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):104–6
Effects of the cannabinoid CB1 receptor antagonist SR141716A on the behavior of pigeons and rats. Mansbach RS, et al. **Psychopharmacology (Berl)** 1996 Apr; 124(4):315–22
Improvement of memory in rodents by the selective CB1 cannabinoid receptor antagonist, SR 141716. Terranova JP, et al. **Psychopharmacology (Berl)** 1996 Jul;126(2):165–72

BIOSYNTHESIS

Cannabinoid receptor expression in immune cells. Pettit DA, et al. **Adv Exp Med Biol** 1996;402:119–29
Bioreactor cultivation of the nematode Caenorhabditis elegans: large scale production of biologically active drug receptors for pharmaceutical research. Gbewonyo K, et al. **Biotechnol Genet Eng Rev** 1997;14:37–49 (35 ref.)
Effects of calcium–modulating hormones on thiazide receptor density. Blakely P, et al. **J Am Soc Nephrol** 1996 Jul; 7(7):1052–7
Cannabinoid receptors CB1 and CB2: a characterization of expression and adenylate cyclase modulation within the immune system. Schatz AR, et al. **Toxicol Appl Pharmacol** 1997 Feb;142(2):278–87

BLOOD

Platelet I1–imidazoline binding sites are elevated in depression but not generalized anxiety disorder. Piletz JE, et al. **J Psychiatr Res** 1996 May–Jun;30(3):147–68
Platelet imidazoline receptors and regulatory G proteins in patients with major depression. García–Sevilla JA, et al. **Neuroreport** 1996 Dec 20;8(1):169–72

CHEMISTRY

A receptor protein–based bioassay for quantitative determination of paclitaxel. Suye S, et al. **Anal Chem** 1997 Sep 1;69(17):3633–5
2–D and 3–D modeling of imidazoline receptor ligands: insights into pharmacophore. Carrieri A, et al. **Bioorg Med Chem** 1997 May;5(5):843–56
Structure–activity relationships defining the ACD–tricyclic cannabinoids: cannabinoid receptor binding and analgesic activity. Melvin LS, et al. **Drug Des Discov** 1995 Nov; 13(2):155–66
Molecular recognition of phenobarbital in plasticizers equilibrium investigations on the solubility of the barbiturate artificial receptor and its binding to phenobarbital in plasticizers. Valenta JN, et al. **J Chromatogr A** 1996 Jan 26;722(1–2):47–57
Structure–activity relationships of cannabinoids: a joint CoMFA and pseudoreceptor modelling study. Schmetzer S, et al. **J Comput Aided Mol Des** 1997 May;11(3):278–92
Computer modelling of G protein–coupled receptors: promises and drawbacks. Maigret B. **J Pharm Belg** 1997 Mar–Apr;52(2):102
Capsaicin–, resiniferatoxin–, and lactic acid–evoked vascular effects in the pig nasal mucosa in vivo with reference to characterization of the vanilloid receptor. Rinder J, et al. **Pharmacol Toxicol** 1996 May;78(5):327–35
[Can drugs be designed on a computer?] Holzgrabe U. **Pharm Unserer Zeit** 1996 Nov;25(6):322–5 (17 ref.) **(Ger)**

CLASSIFICATION

Pharmacological and molecular discrimination of brain I2–imidazoline receptor subtypes. Olmos G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):709–16
Romancing receptor research at Verona classification meeting. Bond RA, et al. **Trends Pharmacol Sci** 1996 Mar; 17(3):85–9

DRUG EFFECTS

Time course of the effects of different cannabimimetics on prolactin and gonadotrophin secretion: evidence for the presence of CB1 receptors in hypothalamic structures and their involvement in the effects of cannabimimetics. Fernández–Ruiz JJ, et al. **Biochem Pharmacol** 1997 Jun 15; 53(12):1919–27
Imidazoline receptors: qualitative structure–activity relationships and discovery of tracizoline and benazoline. Two ligands with high affinity and unprecedented selectivity. Pigini M, et al. **Bioorg Med Chem** 1997 May; 5(5):833–41
Comparison of drug binding sites on rat and human serum albumins using immobilized–protein stationary phases as a tool for the selection of suitable animal models in pharmacological studies. Massolini G, et al. **Boll Chim Farm** 1996 Jun;135(6):382–6
Antagonism by idazoxan at low dose but not high dose, of the natriuretic action of moxonidine. Allan DR, et al. **Br J Pharmacol** 1996 Jan;117(1):29–34
Pharmacological modulation of immunoreactive imidazoline receptor proteins in rat brain: relationship with non–adrenoceptor [3H]–idazoxan binding sites. Escribá PV, et al. **Br J Pharmacol** 1996 Aug;118(8):2029–36
Inhibition of exocytotic noradrenaline release by presynaptic cannabinoid CB1 receptors on peripheral sympathetic nerves. Ishac EJ, et al. **Br J Pharmacol** 1996 Aug; 118(8):2023–8
Effect of capsaicin and analogues on potassium and calcium currents and vanilloid receptors in Xenopus embryo spinal neurones. Kuenzi FM, et al. **Br J Pharmacol** 1996 Sep; 119(1):81–90
Inhibition of monoamine oxidase A and B activities by imidazol(ine)/guanidine drugs, nature of the interaction and distinction from I2–imidazoline receptors in rat liver. Ozaita A, et al. **Br J Pharmacol** 1997 Jul;121(5):901–12
Evidence for the presence of cannabinoid CB1 receptors in mouse urinary bladder. Pertwee RG, et al. **Br J Pharmacol** 1996 Aug;118(8):2053–8
The stimulation of capsaicin–sensitive neurones in a vanilloid receptor–mediated fashion by pungent terpenoids possessing an unsaturated 1,4–dialdehyde moiety. Szallasi A, et al. **Br J Pharmacol** 1996 Sep;119(2):283–90
Vanilloid receptor loss is independent of the messenger plasticity that follows systemic resiniferatoxin administration. Farkas–Szallasi T, et al. **Brain Res** 1996 May 6;719(1–2):213–8
Modulation of catecholamine release by alpha 2–adrenoceptors and I1–imidazoline receptors in rat brain. Meana JJ, et al. **Brain Res** 1997 Jan 9;744(2):216–26
Vanilloid (capsaicin) receptors in the rat: distribution in the brain, regional differences in the spinal cord, axonal transport to the periphery, and depletion by systemic vanilloid treatment. Szallasi A, et al. **Brain Res** 1995 Dec 12;703(1–2):175–83
Effects of chronic exposure to delta9–tetrahydrocannabinol on cannabinoid receptor binding and mRNA levels in several rat brain regions. Romero J, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):100–8
Central imidazoline receptors and centrally acting anti–hypertensive agents. Head GA, et al. **Clin Exp Hypertens** 1997 Jul–Aug;19(5–6):591–605
Current status of putative imidazoline (I1) receptors and renal mechanisms in relation to their antihypertensive therapeutic potential. Evans RG. **Clin Exp Pharmacol Physiol** 1996 Oct–Nov;23(10–11):845–54 (90 ref.)
Characterization of anandamide–induced tolerance: comparison to delta 9–THC–induced interactions with dynorphinergic systems. Welch SP. **Drug Alcohol Depend** 1997 Apr 14;45(1–2):39–45
Meeting report: receptor–acting xenobiotics and their risk assessment. Poland AD. **Drug Metab Dispos** 1996 Dec; 24(12):1385–8
Agmatine is not a good candidate as endogenous ligand for imidazoline sites of pancreatic B cells and vascular bed. Berdeu D, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):301–4
Activation of the cannabinoid receptor by delta 9–tetrahydrocannabinol reduces gamma–aminobutyric acid uptake in the globus pallidus. Maneuf YP, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):161–4
Clonidine and ST–91 may activate imidazoline binding sites in the heart to release atrial natriuretic peptide.

Mukaddam-Daher S, et al. **Hypertension** 1997 Jul;30(1 Pt 1):83-7

Stimulation of imidazoline receptors inhibits proliferation of human coronary artery vascular smooth muscle cells. Regunathan S, et al. **Hypertension** 1997 Aug;30(2 Pt 1):295-300

Neurons and receptors in the rostroventrolateral medulla mediating the antihypertensive actions of drugs acting at imidazoline receptors. Reis DJ. **J Cardiovasc Pharmacol** 1996;27 Suppl 3:S11-18 (65 ref.)

Perhydrogenation of tabersonine, ans Aspidiosperma indole alkaloid. Lewin G, et al. **J Nat Prod** 1997 Apr;60(4):419-20

Concurrent stimulation of cannabinoid CB1 and dopamine D2 receptors augments cAMP accumulation in striatal neurons: evidence for a Gs linkage to the CB1 receptor. Glass M, et al. **J Neurosci** 1997 Jul 15;17(14):5327-33

From molecular recognition to medicinal chemistry. Diederich F. **J Pharm Belg** 1997 Mar-Apr;52(2):86-7

Pharmacological characterization of the vanilloid receptor in the rat isolated vas deferens. Wardle KA, et al. **J Pharm Pharmacol** 1996 Mar;48(3):285-91

Cannabinoid-induced hypotension and bradycardia in rats mediated by CB1-like cannabinoid receptors. Lake KD, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1030-7

Platelet I1-imidazoline binding sites are decreased by two dissimilar antidepressant agents in depressed patients. Piletz JE, et al. **J Psychiatr Res** 1996 May-Jun;30(3):169-84

Presynaptic imidazoline receptors and alpha 2-adrenoceptors in the human heart: discrimination by clonidine and moxonidine. Likungu J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):689-92

Membrane localization and guanine nucleotide sensitivity of medullary I1-imidazoline binding sites. Ernsberger P, et al. **Neurochem Int** 1997 Jan;30(1):17-23

Chronic imipramine treatment upregulates IR2-imidazoline receptive sites in rat brain. Zhu H, et al. **Neurochem Int** 1997 Jan;30(1):101-7

An I2 imidazoline ligand, RS 45041, potentiates hyperalgesia in acute arthritis. Houghton AK, et al. **Neuroreport** 1996 Jun 17;7(9):1497-501

Biochemical and pharmacological characterization of cannabinoid binding sites using [3H]SR141716A. Petitet F, et al. **Neuroreport** 1996 Feb 29;7(3):789-92

Decreased density of I2-imidazoline receptors in the postmortem brain of heroin addicts. Sastre M, et al. **Neuroreport** 1996 Jan 31;7(2):509-12

Cannabinoid receptors: pharmacology, second messenger systems and endogenous ligands. **NIDA Res Monogr** 1994; 140:55-60

Vanilloid receptors: new insights enhance potential as a therapeutic target. Szallasi A, et al. **Pain** 1996 Dec; 68(2-3):195-208 (172 ref.)

Changes in rat spleen cannabinoid receptors after chronic CP-55,940: an autoradiographic study. Massi P, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):73-8

Platelet serotonergic indices in major depression: up-regulation of 5-HT2A receptors unchanged by antidepressant treatment. Hrdina PD, et al. **Psychiatry Res** 1997 Feb 7;66(2-3):73-85

Delta 9-tetrahydrocannabinol impairs spatial memory through a cannabinoid receptor mechanism. Lichtman AH, et al. **Psychopharmacology (Berl)** 1996 Jul;126(2):125-31

GENETICS

Isolation and expression of a mouse CB1 cannabinoid receptor gene. Comparison of binding properties with those of native CB1 receptors in mouse brain and N18TG2 neuroblastoma cells. Abood ME, et al. **Biochem Pharmacol** 1997 Jan 24;53(2):207-14

Genetic studies of the sulfonylurea receptor gene locus in NIDDM and in morbid obesity among French Caucasians. Hani EH, et al. **Diabetes** 1997 Apr;46(4):688-94

The 31-cM region of chromosome 11 including the obesity gene tubby and ATP-sensitive potassium channel genes, SUR1 and Kir6.2, does not contain a major susceptibility locus for NIDDM in 127 non-Hispanic white affected sibships. Lindner T, et al. **Diabetes** 1997 Jul;46(7):1227-9

Induction of interleukin-2 receptor alpha gene by delta9-tetrahydrocannabinol is mediated by nuclear factor kappaB and CB1 cannabinoid receptor. Daaka Y, et al. **DNA Cell Biol** 1997 Mar;16(3):301-9

Developmental and tissue-specific sulfonylurea receptor gene expression. Hernández-Sánchez C, et al. **Endocrinology** 1997 Feb;138(2):705-11

Expression of a brain-type cannabinoid receptor (CB1) in alveolar Type II cells in the lung: regulation by hydrocortisone. Rice W, et al. **Eur J Pharmacol** 1997 May 30;327(2-3):227-32

Molecular cloning, expression pattern, and chromosomal localization of the human Na-Cl thiazide-sensitive cotransporter (SLC12A3). Mastroianni N, et al. **Genomics** 1996 Aug 1;35(3):486-93

Molecular cloning of two cannabinoid type 1-like receptor genes from the puffer fish Fugu rubripes. Yamaguchi F, et al. **Genomics** 1996 Aug 1;35(3):603-5

Mutations in the sulonylurea receptor gene are associated with familial hyperinsulinism in Ashkenazi Jews. Nestorowicz A, et al. **Hum Mol Genet** 1996 Nov; 5(11):1813-22

Gitelman's syndrome (Bartter's variant) maps to the thiazide-sensitive cotransporter gene locus on chromosome 16q13 in a large kindred. Pollak MR, et al. **J Am Soc Nephrol** 1996 Oct;7(10):2244-8

An autosomal dominant form of familial persistent hyperinsulinemic hypoglycemia of infancy, not linked to the sulfonylurea receptor locus. Kukuvitis A, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1192-4

The genes encoding the peripheral cannabinoid receptor and alpha-L-fucosidase are located near a newly identified common virus integration site, Evi11. Valk PJ, et al. **J Virol** 1997 Sep;71(9):6796-804

Physical and genetic localization of the bovine cannabinoid receptor (CNR1) gene to bovine chromosome 9. Pfister-Genskow M, et al. **Mamm Genome** 1997 Apr; 8(4):301-2

The gene encoding the central cannabinoid receptor is located in proximal mouse Chromosome 4. Stubbs L, et al. **Mamm Genome** 1996 Feb;7(2):165-6

Cannabinoid receptor gene (CNR1): association with i.v. drug use. Comings DE, et al. **Mol Psychiatry** 1997 Mar; 2(2):161-8

Association between the cannabinoid receptor gene (CNR1) and the P300 event-related potential. Johnson JP, et al. **Mol Psychiatry** 1997 Mar;2(2):169-71

Familial persistent hyperinsulinemic hypoglycemia of infancy and mutations in the sulfonylurea receptor. Dunne MJ, et al. **N Engl J Med** 1997 Mar 6;336(10):703-6

Molecular and biochemical evidence for receptors for drugs of abuse on immune cells. **NIDA Res Monogr** 1996;162:37-9

Cannabinoid receptor genes. Onaivi ES, et al. **Prog Neurobiol** 1996 Mar-Apr;48(4-5):275-305 (117 ref.)

ISOLATION & PURIFICATION

The mitochondrial sulfonylurea receptor: identification and characterization. Szewczyk A, et al. **Biochem Biophys Res Commun** 1997 Jan 23;230(3):611-5

METABOLISM

Abnormal reabsorption of Na+/Cl- by the thiazide-inhibitable transporter of the distal convoluted tubule in Gitelman's syndrome. Colussi G, et al. **Am J Nephrol** 1997;17(2):103-11

Amylin, calcitonin gene-related peptide, and adrenomedullin: effects on thiazide receptor and calcium. Blakely P, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):F410-5

Metabolic acid-base influences on renal thiazide receptor density. Fanestil DD, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R2004-8

Localization of bumetanide- and thiazide-sensitive Na-K-Cl cotransporters along the rat nephron. Yang T, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F931-9

Fatty acid sulfonyl fluorides inhibit anandamide metabolism and bind to the cannabinoid receptor. Deutsch DG, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):217-21

Insulin secretagogues with an imidazoline structure inhibit arginine-induced secretion from isolated glucagon secretion from isolated rat islets of Langerhans. Mourtada M, et al. **Biochem Biophys Res Commun** 1997 Jul 9; 236(1):162-6

2-Arachidonoylglycerol, a putative endogenous cannabinoid receptor ligand, induces rapid, transient elevation of intracellular free Ca2+ in neuroblastoma x glioma hybrid NG108-15 cells. Sugiura T, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):58-64

The high-affinity sulfonylurea receptor: distribution, glycosylation, purification, and immunoprecipitation of two forms from endocrine and neuroendocrine cell lines. Nelson DA, et al. **Biochemistry** 1996 Nov 26;35(47):14793-9

Activation of brain-type cannabinoid receptors interferes with preimplantation mouse embryo development. Yang ZM, et al. **Biol Reprod** 1996 Oct;55(4):756-61

2-D and 3-D modeling of imidazoline receptor ligands: insights into pharmacophore. Carrieri A, et al. **Bioorg Med Chem** 1997 May;5(5):843-56

Imidazoline receptors: qualitative structure-activity relationships and discovery of tracizoline and benazoline. Two ligands with high affinity and unprecedented selectivity. Pigini M, et al. **Bioorg Med Chem** 1997 May; 5(5):833-41

Anandamide, a natural ligand for the peripheral cannabinoid receptor is a novel synergistic growth factor for hematopoietic cells. Valk P, et al. **Blood** 1997 Aug 15; 90(4):1448-57

Onset of the neuromuscular block simulated in an anatomical model. Nigrovic V, et al. **Br J Clin Pharmacol** 1997 Jan; 43(1):55-63

The effect of the putative endogenous imidazoline receptor ligand, clonidine-displacing substance, on insulin secretion from rat and human islets of Langerhans. Chan SL, et al. **Br J Pharmacol** 1997 Mar;120(5):926-32

Pharmacological characterization of the sulphonylurea receptor in rat isolated aorta. Löffler C, et al. **Br J Pharmacol** 1997 Feb;120(3):476-80

Presynaptic imidazoline receptors and non-adrenoceptor [3H]-idazoxan binding sites in human cardiovascular tissues. Molderings GJ, et al. **Br J Pharmacol** 1997 Sep; 122(1):43-50

Further evidence for the presence of cannabinoid CB1 receptors in guinea-pig small intestine. Pertwee RG, et al. **Br J Pharmacol** 1996 Aug;118(8):2199-205

Pharmacological characterization of the vanilloid receptor in the rat dorsal spinal cord. Wardle KA, et al. **Br J Pharmacol** 1997 Jul;121(5):1012-6

Differential effects of diet and obesity on high and low affinity sulfonylurea binding sites in the rat brain. Levin BE, et al. **Brain Res** 1996 Nov 11;739(1-2):293-300

Identification and characterization of the leech CNS cannabinoid receptor: coupling to nitric oxide release. Stefano GB, et al. **Brain Res** 1997 Apr 11;753(2):219-24

Synergy between tamoxifen and cisplatin in human melanoma cells is dependent on the presence of antiestrogen-binding sites. Jones JA, et al. **Cancer Res** 1997 Jul 1;57(13):2657-60

Effects of alpha 2-adrenoceptor antagonists and imidazoline2-receptor ligands on neuronal damage in global ischaemia in the rat. Craven JA, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):204-7

Current status of putative imidazoline (I1) receptors and renal mechanisms in relation to their antihypertensive therapeutic potential. Evans RG. **Clin Exp Pharmacol Physiol** 1996 Oct-Nov;23(10-11):845-54 (90 ref.)

Polyclonal anti-idiotypic antibodies to idazoxan and their interaction with human brain imidazoline binding sites. Bennai F, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1-3):211-8

Identification and characterization of imidazoline-binding sites from calf striatum. Czerwiec E, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):99-109

123I-labeled AM251: a radioiodinated ligand which binds in vivo to mouse brain cannabinoid CB1 receptors. Gatley SJ, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):331-8

[3H]2-(2-benzofuranyl)-2-imidazoline: a new selective high affinity radioligand for the study of rabbit brain imidazoline I2 receptors. Lione LA, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):221-9

Heterogeneous levamisole receptors: a single-channel study of nicotinic acetylcholine receptors from Oesophagostomum dentatum. Martin RJ, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):249-57

Further evidence for the presence of cannabinoid CB1 receptors in mouse vas deferens. Pertwee RG, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):169-72

Imidazoline binding sites in Huntington's and Parkinson's disease putamen. Reynolds GP, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):R19-21

A novel agonist, phorbol 12-phenylacetate 13-acetate 20-homovanillate, abolishes positive cooperativity of binding by the vanilloid receptor. Szallasi A, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):221-8

Evidence for a 65 kDa sulfonylurea receptor in rat pancreatic zymogen granule membranes. Braun M, et al. **FEBS Lett** 1997 Jul 14;411(2-3):255-9

Overlapping distribution of K(ATP) channel-forming Kir6.2 subunit and the sulfonylurea receptor SUR1 in rodent brain. Karschin C, et al. **FEBS Lett** 1997 Jan 13;401(1):59-64

Further biochemical characterization of imidazoline binding sites from the human brainstem. Greney H, et al. **Fundam Clin Pharmacol** 1997;11(1):63-7

Partial characterization of binding sites of VA-045, a novel apovincaminic acid derivative, in rat brain membranes. Shirasaki T, et al. **Gen Pharmacol** 1996 Mar;27(2):279-84

Use of receptors immobilized on microspheres to identify ligand binding sites in tissue sections: detection of lymph node ligands for L-Selectin. Huang X, et al. **Histochem Cell Biol** 1997 Jan;107(1):57-64

A selective inverse agonist for central cannabinoid receptor inhibits mitogen-activated protein kinase activation stimulated by insulin or insulin-like growth factor 1. Evidence for a new model of receptor/ligand interactions. Bouaboula M, et al. **J Biol Chem** 1997 Aug 29; 272(35):22330-9

A novel sulfonylurea receptor forms with BIR (Kir6.2) a smooth muscle type ATP-sensitive K+ channel. Isomoto S, et al. **J Biol Chem** 1996 Oct 4;271(40):24321-4

N-arachidonoylethanolamine (anandamide), an endogenous cannabinoid receptor ligand, and related lipid molecules in the nervous tissues. Sugiura T, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):51-6 (20 ref.)

Unsaturated side chain beta-11-hydroxyhexahydrocannabinol analogs. Busch-Petersen J, et al. **J Med Chem** 1996 Sep 13; 39(19):3790-6

Synthesis and pharmacology of a very potent cannabinoid lacking a phenolic hydroxyl with high affinity for the CB2 receptor. Huffman JW, et al. **J Med Chem** 1996 Sep 27; 39(20):3875-7

Head group analogs of arachidonylethanolamide, the endogenous cannabinoid ligand. Khanolkar AD, et al. **J Med Chem** 1996 Oct 25;39(22):4515-9

Structural requirements for binding of anandamide-type compounds to the brain cannabinoid receptor. Sheskin T, et al. **J Med Chem** 1997 Feb 28;40(5):659-67

Burst kinetics of co-expressed Kir6.2/SUR1 clones: comparison of recombinant with native ATP-sensitive K+ channel behavior. Alekseev AE, et al. **J Membr Biol** 1997 Sep 15;159(2):161-8

Constituents from the stem wood of Euphorbia quinquecostata with phorbol dibutyrate receptor-binding inhibitory activity. Mbwambo ZH, et al. **J Nat Prod** 1996 Nov;59(11):1051-5

Characterization of CB1 receptors on rat neuronal cell cultures: binding and functional studies using the selective receptor antagonist SR 141716A. Jung M, et al. **J Neurochem** 1997 Jan;68(1):402-9

Actions of imidazolines on bovine ciliary artery. Ishikawa

H, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):313–22
Computer modelling of G protein–coupled receptors: promises and drawbacks. Maigret B. **J Pharm Belg** 1997 Mar–Apr;52(2):102
Regional differences in cannabinoid receptor/G–protein coupling in rat brain. Breivogel CS, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1632–42
Comparison of ligand binding affinities at human I1–imidazoline binding sites and the high affinity state of alpha–2 adrenoceptor subtypes. Piletz JE, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):694–702
Evaluation of binding in a transfected cell line expressing a peripheral cannabinoid receptor (CB2): identification of cannabinoid receptor subtype selective ligands. Showalter VM, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):989–99
Sulphonylurea receptor 2B and Kir6.1 form a sulphonylurea–sensitive but ATP–insensitive K+ channel. Yamada M, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):715–20
Euphorbium: modern research on its active principle, resiniferatoxin, revives an ancient medicine. Appendino G, et al. **Life Sci** 1997;60(10):681–96 (87 ref.)
Receptor mediation in cannabinoid stimulated arachidonic acid mobilization and anandamide synthesis. Hunter SA, et al. **Life Sci** 1997;60(18):1563–73
Predominant expression of monoamine oxidase B isoform in rabbit renal proximal tubule: regulation by I2 imidazoline ligands in intact cells. Gargalidis–Moudanos C, et al. **Mol Pharmacol** 1997 Apr;51(4):637–43
Sweet news for hypoglycemic babies [news; comment] Ashcroft FM. **Nat Med** 1996 Dec;2(12):1301–2. Comment on: Nat Med 1996 Dec;2(12):1344–7.
Truncation of Kir6.2 produces ATP–sensitive K+ channels in the absence of the sulphonylurea receptor. Tucker SJ, et al. **Nature** 1997 May 8;387(6629):179–83
Labelling of I2B–imidazoline receptors by [3H]2–(2–benzofuranyl)–2–imidazoline (2–BFI) in rat brain and liver: characterization, regulation and relation to monoamine oxidase enzymes. Alemany R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):39–47
[3H]2–(2–Benzofuranyl)–2–imidazoline, a highly selective radioligand for I2–imidazoline receptor binding sites. Studies in rabbit kidney membranes. Hosseini AR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):131–8
Cannabinoid CB1 receptor–mediated inhibition of the neurogenic vasopressor response in the pithed rat. Malinowska B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):197–202
The stimulatory effect of clonidine on locus coeruleus neurons of rats with inactivated alpha 2–adrenoceptors: involvement of imidazoline receptors located in the nucleus paragigantocellularis. Ruiz–Ortega JA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):288–94
Binding of new cirazoline derivative to imidazoline receptors from human brain. Dontenwill M, et al. **Neurochem Int** 1997 Jan;30(1):9–16
Pharmacological characterization of I1 and I2 imidazoline receptors in human striatum. Flamez A, et al. **Neurochem Int** 1997 Jan;30(1):25–9
The novel alpha 2–adrenoceptor agonist [3H]mivazerol binds to non–adrenergic binding sites in human striatum membranes that are distinct from imidazoline receptors. Flamez A, et al. **Neurochem Int** 1997 Jul;31(1):125–9
I2–imidazoline binding sites and monoamine oxidase activity in human postmortem brain from patients with Parkinson's disease. Gargalidis–Moudanos C, et al. **Neurochem Int** 1997 Jan;30(1):31–6
Identification of ligands selective for central I2–imidazoline binding sites. Hudson AL, et al. **Neurochem Int** 1997 Jan; 30(1):47–53
Relationship between imidazoline/guanidinium receptive sites and monoamine oxidase A and B. Raddatz R, et al. **Neurochem Int** 1997 Jan;30(1):109–17
Densities of I2–imidazoline receptors, alpha 2–adrenoceptors and monoamine oxidase B in brains of suicide victims. Sastre M, et al. **Neurochem Int** 1997 Jan;30(1):63–72
A series of novel imidazoline I2–receptor selective Schiff bases of 1–(benzylidenamino)–3,3–dimethylguanidine. Wikberg JE, et al. **Neurochem Int** 1997 Jan;30(1):95–9
Chronic imipramine treatment upregulates IR2–imidazoline receptive sites in rat brain. Zhu H, et al. **Neurochem Int** 1997 Jan;30(1):101–7
Increased density of I2–imidazoline receptors in human glioblastomas. Martín–Gómez JI, et al. **Neuroreport** 1996 May 31;7(8):1393–6
Biochemical and pharmacological characterization of cannabinoid binding sites using [3H]SR141716A. Petitet F, et al. **Neuroreport** 1996 Feb 29;7(3):789–92
Determination of the cannabinoid receptors in mouse x rat hybridoma NG108–15 cells and rat GH4C1 cells. Ho BY, et al. **Neurosci Lett** 1996 Jul 12;212(2):123–6
Evidence against the association of the sulphonylurea receptor with endogenous Kir family members other than KATP in coronary vascular smooth muscle. Wellman GC, et al. **Pflugers Arch** 1996 Jun;432(2):355–7
Regulation of glibenclamide receptors in cultured chick cardiomyocytes. Lu C, et al. **Pharmacol Res** 1995 Sep; 32(3):149–53
Cerebrodiene, arachidonyl–ethanolamide, and hybrid structures: potential for interaction with brain cannabinoid receptors. Boring DL, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Sep; 55(3):207–10
Atypical location of cannabinoid receptors in white matter areas during rat brain development. Romero J, et al. **Synapse** 1997 Jul;26(3):317–23
Two–point kinetic experiments to quantify allosteric effects on radioligand dissociation [comment] Kostenis E, et al. **Trends Pharmacol Sci** 1996 Aug;17(8):280–3 (22 ref.). Comment on: Trends Pharmacol Sci 1996 Dec;17(12):443–4.
[Localization of cAMP–selective phosphodiesterase in the mammalian eye by (3H)–rolipram] Liekfeld A, et al. **Ophthalmologe** 1996 Oct;93(5):581–5 (Eng. Abstr.) **(Ger)**
[Isolation and receptor binding properties of alkaloids and lignans from Valeriana officialis L.] Bodesheim U, et al. **Pharmazie** 1997 May;52(5):386–91 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Alterations of local cerebral blood flow, phorbol 12,13–dibutyrate binding activity, and histological damage during acute focal ischaemia in rat brain. A pathophysiology of acute focal ischaemia: Part 1. Inoue N, et al. **Acta Neurochir (Wien)** 1996;138(9):1118–24; discussion 1124–5
Differential effects of CB1 and CB2 agonists on cAMP levels and MAP kinase activation in human peripheral blood mononuclear cells. Makda AA, et al. **Biochem Soc Trans** 1997 May;25(2):217S
The stimulation of capsaicin–sensitive neurones in a vanilloid receptor–mediated fashion by pungent terpenoids possessing an unsaturated 1,4–dialdehyde moiety. Szallasi A, et al. **Br J Pharmacol** 1996 Sep;119(2):283–90
The involvement of pertussis toxin–sensitive G proteins in the post receptor mechanism of central I1–imidazoline receptors. Takada K, et al. **Br J Pharmacol** 1997 Apr; 120(8):1575–81
Activation of phosphatidylcholine–selective phospholipase C by I1–imidazoline receptors in PC12 cells and rostral ventrolateral medulla. Separovic D, et al. **Brain Res** 1997 Feb 28;749(2):335–9
Imidazoline binding sites and signal transduction pathways. Musgrave IF, et al. **Clin Exp Pharmacol Physiol** 1996 Oct–Nov;23(10–11):990–4 (35 ref.)
Molecular aspects of cannabinoid receptors. Matsuda LA. **Crit Rev Neurobiol** 1997;11(2–3):143–66 (154 ref.)
Rilmenidine–induced ocular hypotension: role of imidazoline1 and alpha 2 receptors. Chu TC, et al. **Curr Eye Res** 1996 Sep;15(9):943–50
A role for central cannabinoid and opioid systems in peripheral delta 9–tetrahydrocannabinol–induced analgesia in mice. Reche I, et al. **Eur J Pharmacol** 1996 Apr 22; 301(1–3):75–81
Differences in G–protein activation by mu– and delta–opioid, and cannabinoid, receptors in rat striatum. Sim LJ, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):97–105
Receptors and medicinal chemistry: new methods and perspectives. Recanatini M. **Farmaco** 1996 Jan;51(1):5–12 (47 ref.)
Are imidazoline receptors involved in sympathetic neurotransmission in rat vas deferens? Avellar MC, et al. **Gen Pharmacol** 1996 Oct;27(7):1273–8
Stimulation of imidazoline receptors inhibits proliferation of human coronary artery vascular smooth muscle cells. Regunathan S, et al. **Hypertension** 1997 Aug;30(2 Pt 1):295–300
Molecular neurobiology of the cannabinoid receptor. Abood ME, et al. **Int Rev Neurobiol** 1996;39:197–221 (97 ref.)
From alpha and beta to I1: an overview of sympathetic receptors involved in blood pressure control targets for drug treatment. van Zwieten PA. **J Cardiovasc Pharmacol** 1996;27 Suppl 3:S5–10 (36 ref.)
The I1–imidazoline receptor: from binding site to therapeutic target in cardiovascular disease. Ernsberger P, et al. **J Hypertens Suppl** 1997 Jan;15(1):S9–23 (102 ref.)
Influence of cannabinoids on electrically evoked dopamine release and cyclic AMP generation in the rat striatum. Cadogan AK, et al. **J Neurochem** 1997 Sep;69(3):1131–7
Cannabinoid receptor–mediated inhibition of dopamine release in the retina. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):791–5
Effects of imidazolines on noradrenaline release in brain: an investigation into their relationship to imidazoline, alpha 2 and H3 receptors. Schlicker E, et al. **Neurochem Int** 1997 Jan;30(1):73–83
Evidence against cannabinoid receptor involvement in intraocular pressure effects of cannabinoids in rabbits. Hodges LC, et al. **Ophthalmic Res** 1997;29(1):1–5
Towards a cannabinoid hypothesis of schizophrenia: cognitive impairments due to dysregulation of the endogenous cannabinoid system. Emrich HM, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):803–7
Capsaicin–, resiniferatoxin–, and lactic acid–evoked vascular effects in the pig nasal mucosa in vivo with reference to characterization of the vanilloid receptor. Rinder J, et al. **Pharmacol Toxicol** 1996 May;78(5):327–35
Inducible receptors. Donaldson LF, et al. **Trends Pharmacol Sci** 1997 May;18(5):171–81 (36 ref.)
[Development and experimental use of receptor–specific MR contrast media] Reimer P, et al. **Radiologe** 1996 Feb; 36(2):153–63 (77 ref.) (Eng. Abstr.) **(Ger)**

RECEPTORS, EICOSANOID

ANTAGONISTS & INHIBITORS

Effects of eicosanoids on parameters in isolated rat hepatocytes and isolated rat hepatocyte couplets: protective effects of eicosanoid receptor antagonists. Hutchinson SM, et al. **J Lipid Mediat Cell Signal** 1997 Mar;15(3):249–54

CHEMISTRY

[Molecular structures of eicosanoid receptors] Negishi M, et al. **Nippon Rinsho** 1996 Feb;54(2):423–8 (10 ref.) (Eng. Abstr.) **(Jpn)**

RECEPTORS, ENDOGENOUS SUBSTANCES see **RECEPTORS, CELL SURFACE**

RECEPTORS, ENDORPHIN see **RECEPTORS, OPIOID**

RECEPTORS, ENDOTHELIN

[Endothelin receptor] Tsujino M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:581–5 (10 ref.) **(Jpn)**

AGONISTS

The effect of big endothelin–1 in the proximal tubule of the rat kidney. Beara–Lasić L, et al. **Br J Pharmacol** 1997 Feb; 120(4):625–30
The induction of a biphasic bronchospasm by the ETB agonist, IRL 1620, due to thromboxane A2 generation and endothelin–1 release in guinea–pigs. Noguchi S, et al. **Br J Pharmacol** 1996 Jul;118(6):1397–402
Characterization of the endothelin receptor selective agonist, BQ3020 and antagonists BQ123, FR139317, BQ788, 50235, Ro462005 and bosentan in the heart. Peter MG, et al. **Br J Pharmacol** 1996 Feb;117(3):455–462
Characterization of endothelin receptor subtypes mediating Ca2+ mobilization and contractile response in rabbit iris dilator muscle. Satoh M, et al. **Br J Pharmacol** 1996 Mar; 117(6):1277–85
Modulation of human neutrophil chemotaxis by the endothelin–B receptor agonist sarafotoxin S6c. Elferink JG, et al. **Chem Biol Interact** 1996 Sep 6;101(3):165–74
Cardiovascular responses mediated by two types of endothelin ET(B) receptor in spontaneously hypertensive and Wistar–Kyoto rats. Kuwahara M, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):55–63
Endothelin–1–induced modulation of contractile responses elicited by an alpha 1–adrenergic agonist on human corpus cavernosum smooth muscle. Kim DC, et al. **Int J Impot Res** 1996 Mar;8(1):17–24
Cardiovascular and renal effects of endothelin B receptor selective agonists in spontaneously hypertensive rats. Bird JE, et al. **J Cardiovasc Pharmacol** 1996 Sep;28(3):381–4
The effects of ETB receptor–selective agonist on IOP and blood–aqueous barrier in rabbit eyes: role of cyclooxygenase products. Haque MS, et al. **Jpn J Ophthalmol** 1995;39(4):360–7

ANALYSIS

Endothelin receptors in human coronary artery and aorta. Bacon CR, et al. **Br J Pharmacol** 1996 Mar;117(5):986–92
The endothelin ETA receptor exists in the caudal solitary tract nucleus of the rat brain. Shibata S, et al. **Cell Mol Neurobiol** 1997 Feb;17(1):151–6
Endothelin receptors in rat pituitary gland. Shibata S, et al. **Cell Mol Neurobiol** 1997 Feb;17(1):89–100
Distribution and functional significance of the endothelin receptor subtypes in the rat adrenal gland. Belloni AS, et al. **Cell Tissue Res** 1997 May;288(2):345–52
Endothelin peptide and receptors in human atherosclerotic coronary artery and aorta. Bacon CR, et al. **Circ Res** 1996 Oct;79(4):794–801
Distribution of endothelin and endothelin–A receptor in the lacrimal glands of the monkey (Macaca fuscata). Matsumoto Y, et al. **Exp Eye Res** 1997 Feb;64(2):127–32
Hepatic stellate cells and intralobular innervation in human liver cirrhosis. Ueno T, et al. **Hum Pathol** 1997 Aug; 28(8):953–9
Endothelin–1–like immunoreactivity and endothelin receptors in the human placenta from normotensive and hypertensive pregnancies. Hasegawa M, et al. **J Perinat Med** 1996;24(5):451–60
Gene expression and autoradiographic localization of endothelin–1 and its receptors A and B in the different zones of the normal human prostate. Prayer–Galetti T, et al. **J Urol** 1997 Jun;157(6):2334–9
High resolution localization of endothelin receptors in rat renal medulla. Yukimura T, et al. **Kidney Int** 1996 Jul; 50(1):135–47
Localization of endothelin receptors in human uterus throughout the menstrual cycle. Collett GP, et al. **Mol Hum Reprod** 1996 Jun;2(6):439–44
Localization of endothelin–1 and endothelin–receptors A and B in human epididymis. Harneit S, et al. **Mol Hum Reprod** 1997 Jul;3(7):579–84
Regular immunohistochemical localization of endothelin–1 and endothelin–B receptor in normal, hyperplastic and

neoplastic human adrenocortical cells. Hiraki H, et al. **Pathol Int** 1997 Feb-Mar;47(2-3):117-25

ANTAGONISTS & INHIBITORS

The effect of endothelin receptor blockade on the development of the Sephadex-induced inflammation in the rat lung. Andersson SE, et al. **Acta Physiol Scand** 1996 Oct;158(2):189-93

Renal and vascular effects of chronic endothelin receptor antagonism in malignant hypertensive rats. Li JS, et al. **Am J Hypertens** 1996 Aug;9(8):803-11

Endothelin receptor A antagonism prevents hypoxia-induced intrauterine growth restriction in the rat. Thaete LG, et al. **Am J Obstet Gynecol** 1997 Jan;176(1 Pt 1):73-6

Endothelin-A receptor antagonist BQ-610 blocks cigarette smoke-induced mitogenesis in rat airways and vessels. Dadmanesh F, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L614-8

Protective effects of BQ-123, an ETA receptor antagonist, against leukotoxin-induced injury in rat lungs. Ishizaki T, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):L459-63

Endothelin production and effects of endothelin antagonism during experimental airway inflammation. Finsnes F, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1404-12

Endothelin receptor antagonists inhibit antigen-induced lung inflammation in mice. Fujitani Y, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1890-4

Increased endothelin-1 in bleomycin-induced pulmonary fibrosis and the effect of an endothelin receptor antagonist. Park SH, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):600-8

ETA receptor mediates the signaling of endothelin-1 in osteoblast-like cells. Suzuki A, et al. **Bone** 1997 Aug; 21(2):143-6

Inhibitory effects of TAK-044 on endothelin induced vasoconstriction in various canine arteries and porcine coronary arteries: a comparison with selective ETA and ETB receptor antagonists. Awane-Igata Y, et al. **Br J Pharmacol** 1997 Feb;120(3):516-22

Comparison of endothelin B (ETB) receptors in rabbit isolated pulmonary artery and bronchus. Hay DW, et al. **Br J Pharmacol** 1996 Jul;118(5):1209-17

Renal vascular effects of the selective endothelin receptor antagonists in anaesthetized rats. Matsuura T, et al. **Br J Pharmacol** 1997 Sep;122(1):81-6

Pharmacology of two novel mixed ETA/ETB receptor antagonists, BQ-928 and 238, in the carotid and pulmonary arteries and the perfused kidney of the rabbit. Maurice MC, et al. **Br J Pharmacol** 1997 Jan;120(2):319-25

Effect of endothelin antagonists on the responses to prostanoid endothelium-derived contracting factor. Moreau P, et al. **Br J Pharmacol** 1996 Jul;118(6):1429-32

Characterization of the endothelin receptor selective agonist, BQ3020 and antagonists BQ123, FR139317, BQ788, 50235, Ro462005 and bosentan in the heart. Peter MG, et al. **Br J Pharmacol** 1996 Feb;117(3):455-462

The increase in human plasma immunoreactive endothelin but not big endothelin-1 or its C-terminal fragment induced by systemic administration of the endothelin antagonist TAK-044. Plumpton C, et al. **Br J Pharmacol** 1996 Sep; 119(2):311-4

Effect of chronic ETA-selective endothelin receptor antagonism on blood pressure in experimental and genetic hypertension in rats. Schiffrin EL, et al. **Br J Pharmacol** 1997 Jul;121(5):935-40

Reduction of burn-induced gastric mucosal injury by an endothelin receptor antagonist in rats. Battal NM, et al. **Burns** 1997 Jun;23(4):295-9

Acute and short-term effects of the nonpeptide endothelin-1 receptor antagonist bosentan in humans. Sütsch G, et al. **Cardiovasc Drugs Ther** 1997 Jan;10(6):717-25

Cyclic pentapeptide endothelin A receptor antagonists with attenuated in vivo clearance. Fukami T, et al. **Chem Pharm Bull (Tokyo)** 1996 Mar;44(3):609-14

Endothelin receptor antagonist triterpenoid, myriceric acid A, isolated from Myrica cerifera, and structure activity relationships of its derivatives. Sakurawi K, et al. **Chem Pharm Bull (Tokyo)** 1996 Feb;44(2):343-51

Combined inhibition of endothelin and angiotensin II receptors blocks volume load-induced cardiac hormone release. Leskinen H, et al. **Circ Res** 1997 Jan;80(1):114-23

Additional hypotensive effect of endothelin-1 receptor antagonism in hypertensive dogs under angiotensin-converting enzyme inhibition. Donckier JE, et al. **Circulation** 1997 Aug 19;96(4):1250-6

Vasodilator effects of endothelin-converting enzyme inhibition and endothelin ETA receptor blockade in chronic heart failure patients treated with ACE inhibitors. Love MP, et al. **Circulation** 1996 Nov 1;94(9):2131-7

Angiotensin II increases tissue endothelin and induces vascular hypertrophy: reversal by ET(A)-receptor antagonist. Moreau P, et al. **Circulation** 1997 Sep 2; 96(5):1593-7

Concomitant endothelin receptor subtype-A blockade during the progression of pacing-induced congestive heart failure in rabbits. Beneficial effects on left ventricular and myocyte function [see comments] Spinale FG, et al. **Circulation** 1997 Apr 1;95(7):1918-29. Comment in: Circulation 1997 Apr 1;95(7):1752-4.

Vascular endothelin-1 gene expression and effect on blood pressure of chronic ETA endothelin receptor antagonism after nitric oxide synthase inhibition with L-NAME in normal rats. Sventek P, et al. **Circulation** 1997 Jan 7; 95(1):240-4

Reversing congestive heart failure with endothelin receptor antagonists [editorial; comment] Yazaki Y, et al. **Circulation** 1997 Apr 1;95(7):1752-4. Comment on: Circulation 1997 Apr 1;95(7):1918-29.

Effects of sarafotoxin S6c on renal haemodynamics and urine formation in anaesthetized dogs. Matsuo G, et al. **Clin Exp Pharmacol Physiol** 1997 Jul;24(7):487-91

Pharmacokinetics and pharmacodynamics of the endothelin-receptor antagonist bosentan in healthy human subjects. Weber C, et al. **Clin Pharmacol Ther** 1996 Aug; 60(2):124-37

Endothelin-1-induced contraction of pulmonary arteries from endotoxemic rats is attenuated by the endothelin-A receptor antagonist, BQ123. Curzen NP, et al. **Crit Care Med** 1996 Dec;24(12):2007-13

The endothelin receptor antagonist, bosentan, in combination with the cyclooxygenase inhibitor, diclofenac, counteracts pulmonary hypertension in porcine endotoxin shock. Wanecek M, et al. **Crit Care Med** 1997 May;25(5):848-57

Gastric mucosal injury induced by local ischemia-reperfusion in rats. Role of endogenous endothelin-1 and free radical. Hassan M, et al. **Dig Dis Sci** 1997 Jul;42(7):1375-80

Estimation of blood levels of endothelin and neurokinin receptor antagonists at the rat portal and jugular veins after oral administration as a tool in peptide drug design. Paladino J, et al. **Drug Des Discov** 1994 Nov;12(2):121-8

The clinical potential of endothelin receptor antagonists in cardiovascular medicine. Ferro CJ, et al. **Drugs** 1996 Jan; 51(1):12-27 (188 ref.)

Effects of Ro 47-0203 and PD155080 on the plasma kinetics, receptor binding and vascular effects of endothelin in the pig. Hemsén A, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2-3):369-76

An orally active non-selective endothelin receptor antagonist, bosentan, markedly reduces injury in a rat model of colitis. Hogaboam CM, et al. **Eur J Pharmacol** 1996 Aug 15;309(3):261-9

The endothelin ETB receptor antagonist BQ-788 reduces the pulmonary vasodilator effect of endothelin-1 during acute hypoxia in pigs. Holm P, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):83-7

Effects of endothelin ETA receptor antagonism with PD 156707 on hemodynamics and renal vascular resistance in rabbits. Ignasiak DP, et al. **Eur J Pharmacol** 1997 Mar 5; 321(3):295-300

Effects of a new endothelin receptor antagonist, TAK-044, on myocardial stunning in dogs. Kitayoshi T, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):137-43

Pharmacological characterization of cardiovascular responses induced by endothelin-1 in the perfused rat heart. Kusumoto K, et al. **Eur J Pharmacol** 1996 Jan 18; 296(1):65-74

The effects of bosentan on cerebral blood flow and histopathology following middle cerebral artery occlusion in the rat. McAuley MA, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):171-81

Antagonist activity of [Thr18,gamma-methylleucine19]endothelin-1 in human endothelin receptors. Masuda Y, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):263-70

Ameliorating effect of an endothelin ETA receptor antagonist on renal function of DOCA-salt hypertensive rats. Matsumura Y, et al. **Eur J Pharmacol** 1997 Jan 14; 319(1):65-9

Contraction of human airway smooth muscle by endothelin-1 and IRL 1620: effect of bosentan. Takahashi T, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):219-22

The selective endothelin ETA receptor antagonist FR139317 inhibits neointimal thickening in the rat. Takiguchi Y, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):59-62

Hepatoprotective effect of the endothelin receptor antagonist TAK-044 against ischemia-reperfusion injury in the canine liver. Kitayama Y, et al. **Hepatology** 1997 Apr;25(4):938-42

Effects of chronic ETA-receptor blockade in angiotensin II-induced hypertension. d'Uscio LV, et al. **Hypertension** 1997 Jan;29(1 Pt 2):435-41

Endogenous endothelin modulates blood pressure, plasma volume, and albumin escape after systemic nitric oxide blockade. Filep JG. **Hypertension** 1997 Jul;30(1 Pt 1):22-8

Blood pressure and vascular effects of endothelin blockade in chronic nitric oxide-deficient hypertension. Moreau P, et al. **Hypertension** 1997 Mar;29(3):763-9

Role for endothelin-1 in angiotensin II-mediated hypertension. Rajagopalan S, et al. **Hypertension** 1997 Jul; 30(1 Pt 1):29-34

Effects of an angiotensin-converting enzyme inhibitor, a calcium antagonist, and an endothelin receptor antagonist on renal afferent arteriolar structure. Skov K, et al. **Hypertension** 1996 Sep;28(3):464-71 (62 ref.)

Pulmonary hypertension caused by congestive heart failure is ameliorated by long-term application of an endothelin receptor antagonist. Increased expression of endothelin-1 messenger ribonucleic acid and endothelin-1-like immunoreactivity in the lung in congestive heart failure in rats. Sakai S, et al. **J Am Coll Cardiol** 1996 Nov 15; 28(6):1580-8

Renal protection by a dual ETA/ETB endothelin antagonist, L-754,142, after aortic cross-clamping in the dog. Krause SM, et al. **J Am Soc Nephrol** 1997 Jul;8(7):1061-71

ETA receptor blockade prevents hypertension associated with exogenous endothelin-1 but not renal mass reduction in the rat. Pollock DM, et al. **J Am Soc Nephrol** 1997 Jul; 8(7):1054-60

Endothelin-receptor antagonist FR 139317 reduces infarct size in a rabbit model when given before, but not after, coronary artery occlusion. Burke SE, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):87-92

Selective antagonism of the ET(A) receptor reduces neointimal hyperplasia after balloon-induced vascular injury in pigs. Burke SE, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):33-41

The orally active nonpeptide endothelin A-receptor antagonist A-127722 prevents and reverses hypoxia-induced pulmonary hypertension and pulmonary vascular remodeling in Sprague-Dawley rats. Chen SJ, et al. **J Cardiovasc Pharmacol** 1997 Jun;29(6):713-25

Effects of endothelin-receptor antagonism with PD156707 on myocardial stunning in swine. McClanahan TB, et al. **J Cardiovasc Pharmacol** 1996 Nov;28(5):679-86

Role of endothelin in a rabbit model of acute myocardial infarction: effects of receptor antagonists. Vitola JV, et al. **J Cardiovasc Pharmacol** 1996 Dec;28(6):774-83

Prolonged endothelin A receptor blockade attenuates chronic pulmonary hypertension in the ovine fetus. Ivy DD, et al. **J Clin Invest** 1997 Mar 15;99(6):1179-86

Bosentan, a novel synthetic mixed-type endothelin receptor antagonist, attenuates acute gastric mucosal lesions induced by indomethacin and HCl in the rat: role of endogenous endothelin-1. Matsumaru K, et al. **J Gastroenterol** 1997 Apr;32(2):164-70

5-Bromo-2'-deoxyuridine stimulates the pituitary-adrenal axis in the rat: an effect blocked partially by endothelin-receptor antagonists. Malendowicz LK, et al. **J Int Med Res** 1996 Jul-Aug;24(4):363-8

Effect of the endothelin receptor antagonist bosentan on postischemic oxygen supply of the liver. Spiegel HU, et al. **J Invest Surg** 1996 Nov-Dec;9(6):439-45

New non-peptide endothelin-A receptor antagonists: synthesis, biological properties, and structure-activity relationships of 5-(dimethylamino)-N-pyridyl-,-N-pyrimidinyl-,-N-pyridazinyl-, and -N-pyrazinyl-1-naphthalenesulfonamides. Bradbury RH, et al. **J Med Chem** 1997 Mar 14;40(6):996-1004

Design of a potent combined pseudopeptide endothelin-A/endothelin-B receptor antagonist, Ac-DBhg16-Leu-Asp-Ile-[NMe]Ile-Trp21 (PD 156252): examination of its pharmacokinetic and spectral properties. Cody WL, et al. **J Med Chem** 1997 Jul 4;40(14):2228-40

Potent and selective non-benzodioxole-containing endothelin-A receptor antagonists. Tasker AS, et al. **J Med Chem** 1997 Jan 31;40(3):322-30

Structure-activity relationships of N2-aryl-3-(isoxazolylsulfamoyl)-2-thiophenecarboxamides as selective endothelin receptor-A antagonists. Wu C, et al. **J Med Chem** 1997 May 23; 40(11):1682-9

Discovery of TBC11251, a potent, long acting, orally active endothelin receptor-A selective antagonist. Wu C, et al. **J Med Chem** 1997 May 23;40(11):1690-7

Effects of endothelin B antagonist RES-701-1 on endothelin-induced contractile responses in-vivo and in-vitro in guinea-pigs. Ikemura T, et al. **J Pharm Pharmacol** 1996 Jan;48(1):100-5

Effects of a nonpeptide endothelin-1 ETA antagonist on neurovascular function in diabetic rats: interaction with the renin-angiotensin system. Cameron NE, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1262-8

Nonpeptide endothelin receptor antagonists. IX. Characterization of endothelin receptors in guinea pig bronchus with SB 209670 and other endothelin receptor antagonists. Hay DW, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):959-65

Receptor binding and antagonist properties of a novel endothelin receptor antagonist, TAK-044 [cyclo[D-alpha-aspartyl-3-[(4-phenylpiperazin-1-yl) carbonyl]-L-alanyl-L-alpha-aspartyl-D-2-(2-thienyl) glycyl-L-leucyl-D-tryptophyl]disodium salt], in human endothelinA and endothelinB receptors. Masuda Y, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):675-85

The orally active ET(A) receptor antagonist (+)-(S)-2-(4,6-dimethoxy-pyrimidin-2-yloxy)-3-methoxy-3,3-diphe nyl-propionic acid (LU 135252) prevents the development of pulmonary hypertension and endothelial metabolic dysfunction in monocrotaline-treated rats. Prié S, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1312-8

Nonpeptide endothelin receptor antagonists. VIII: attentuation of acute hypoxia-induced pulmonary hypertension in the dog. Willette RN, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):695-701

Endothelin receptor antagonists: effect of serum albumin on potency and comparison of pharmacological characteristics. Wu-Wong JR, et al. **J Pharmacol Exp Ther** 1997 May;281(2):791-8

Hepatoprotective effect of a nonselective endothelin receptor antagonist (TAK-044) in the transplanted liver. Yamanaka N, et al. **J Surg Res** 1997 Jul 1;70(2):156-60

The endothelin antagonist bosentan: hemodynamic effects during normoxia and hypoxic pulmonary hypertension in pigs. Holm P, et al. **J Thorac Cardiovasc Surg** 1996 Oct; 112(4):890-7

Selective blockade of endothelin receptor subtypes on systemic and renal vascular responses to endothelin-1 and IRL1620, a selective endothelin ETB-receptor agonist, in anesthetized rats. Matsuura T, et al. **Jpn J Pharmacol** 1996 Jul;71(3):213-22

An orally active ETA/ETB receptor antagonist ameliorates proteinuria and glomerular lesions in rats with proliferative nephritis. Gómez-Garre D, et al. **Kidney Int** 1996 Sep; 50(3):962-72

Endothelin antagonists in renal disease. Hendry BM, et al. **Lancet** 1997 Aug 9;350(9075):381-2

Inhibition by bosentan, an endothelin antagonist, of the hypersensitivity to Ca2+ channel activator evoked by salt-loading in basilar artery of stroke-prone spontaneously hypertensive rats. Salomone S, et al. **Life Sci** 1996; 59(16):PL247-53

Endothelin receptors: receptor classification, novel receptor antagonists, and potential therapeutic targets. Ohlstein EH, et al. **Med Res Rev** 1996 Jul;16(4):365-90 (155 ref.)

Renoprotective effects of a combined endothelin type A/type B receptor antagonist in experimental malignant hypertension. Kohno M, et al. **Metabolism** 1997 Sep; 46(9):1032-8

Inhibition of myocardial endothelin pathway improves long-term survival in heart failure. Sakai S, et al. **Nature** 1996 Nov 28;384(6607):353-5

Effects of an orally effective endothelin-A receptor antagonist in dogs with pacing-induced heart failure. McConnell PI, et al. **Nebr Med J** 1996 Nov;81(11):349-55

Effect of a specific endothelin receptor A antagonist and an angiotensin-converting enzyme inhibitor on glomerular mRNA levels for extracellular matrix components, metalloproteinases (MMP) and a tissue inhibitor of MMP in aminonucleoside nephrosis. Ebihara I, et al. **Nephrol Dial Transplant** 1997 May;12(5):1001-6

Alteration of growth-related proto-oncogene expression in diabetic glomeruli by a specific endothelin receptor A antagonist. Nakamura T, et al. **Nephrol Dial Transplant** 1996 Aug;11(8):1528-31

Effect of a specific endothelin receptor A antagonist on glomerulonephritis of ddY mice with IgA nephropathy. Nakamura T, et al. **Nephron** 1996;72(3):454-60

Correlation between guanine nucleotide effect and reversible binding property of endothelin analogs. Nambi P, et al. **Neuropeptides** 1996 Feb;30(1):109-14

Endothelin-induced calcium signaling in cultured mouse microglial cells is mediated through ETB receptors. Möller T, et al. **Neuroreport** 1997 Jul 7;8(9-10):2127-31

Endothelin receptor blockade does not alter the increase in pulmonary blood flow due to oxygen ventilation in fetal lambs. Winters JW, et al. **Pediatr Res** 1996 Jul;40(1):152-7

Functional characterization of endothelin receptors in the bovine retractor penis muscle and penile artery. Parkkisenniemi UM, et al. **Pharmacol Toxicol** 1996 Aug; 79(2):73-9

Reduction of progressive burn injury by using a new nonselective endothelin-A and endothelin-B receptor antagonist, TAK-044: an experimental study in rats. Battal MN, et al. **Plast Reconstr Surg** 1997 May;99(6):1610-9

Effect of an endothelin-1 antagonist, BQ-485, on cerebral oxygen metabolism after complete global cerebral ischemia in dogs. Takasu A, et al. **Resuscitation** 1997 Feb;34(1):65-9

Cardiopulmonary dysfunction during porcine endotoxin shock is effectively counteracted by the endothelin receptor antagonist bosentan. Wanecek M, et al. **Shock** 1997 May; 7(5):364-70

Effect of BQ-123 and tissue plasminogen activator on vasospasm after subarachnoid hemorrhage in monkeys. Kim CJ, et al. **Stroke** 1996 Sep;27(9):1629-33

Change in serum levels of endothelin-1 in porcine liver transplantation and efficacy of ET-1 antagonist to protect damage to liver grafts. Fujioka H, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):869-70

Attenuation of ischemic liver injury by a non-selective endothelin receptor antagonist. Jin MB, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1335

Postischemic improvement of hepatic microhemodynamics by a mixed ETA-, ETB-receptor antagonist (RO-47-0203). Koeppel TA, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1365-6

Effect of the endothelin receptor antagonist bosentan on postischemic liver microcirculation. Spiegel HU, et al. **Zentralbl Chir** 1996;121(9):788-93

[Improvement in ischemia-reperfusion damage to the liver. Blockade of endothelin receptors inhibits vasoconstriction] Uhlmann D. **Fortschr Med** 1997 Apr 30;115(12):48 **(Ger)**

[Endothelin A receptor antagonists reduce endothelin-1-induced alterations in intestinal microcirculation] Massberg S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:687-90 (Eng. Abstr.) **(Ger)**

[Endothelial receptor antagonists] Bornkessel B. **Med Monatsschr Pharm** 1997 Jul;20(7):174-6 (3 ref.) **(Ger)**

[Prevention of cerebral vasospasms after experimental subarachnoid hemorrhage by the endothelin receptor antagonist RO 47-0203] Zimmermann M, et al. **Zentralbl Neurochir** 1996;57(3):143-9 (Eng. Abstr.) **(Ger)**

[Anterior chamber inflammation after the injection of endothelin-1 into the vitreous and the effect of ETA receptor antagonist] Shoji N, et al. **Nippon Ganka Gakkai Zasshi** 1997 Apr;101(4):305-11 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Endothelin receptor changes in hypoxia-induced pulmonary hypertension in the newborn piglet. Gosselin R, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):L72-9

Osteogenic protein-1 downregulates endothelin A receptors in primary rat osteoblasts. Kitten AM, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E967-75

Augmented expression of the endothelin-A receptor gene in cultured mesangial cells from stroke-prone spontaneously hypertensive rats. Hiraoka J, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S191-2

Expression of endothelin-B receptors by glia in vivo is increased after CNS injury in rats, rabbits, and humans. Rogers SD, et al. **Exp Neurol** 1997 May;145(1):180-95

Molecular characterization of a novel human endothelin receptor splice variant. Elshourbagy NA, et al. **J Biol Chem** 1996 Oct 11;271(41):25300-7

Role of endothelin-1 in astrocyte responses after acute brain damage. Hama H, et al. **J Neurosci Res** 1997 Mar 15; 47(6):590-602

Increased endothelin ET(A) receptor expression in rat carotid arteries after balloon injury. Viswanathan M, et al. **Peptides** 1997;18(2):247-55

CHEMISTRY

Molecular characterization of a novel human endothelin receptor splice variant. Elshourbagy NA, et al. **J Biol Chem** 1996 Oct 11;271(41):25300-7

Identification of conventional and novel endothelin receptors in sheep choroid plexus cells. Angelova K, et al. **Mol Cell Biochem** 1996 Jun 7;159(1):65-72

CLASSIFICATION

Endothelins contract guinea-pig pulmonary artery and enhance its adrenergic response via ET(A) receptors. Matsuda H, et al. **Clin Exp Pharmacol Physiol** 1996 May; 23(5):379-85

Endothelin receptors: receptor classification, novel receptor antagonists, and potential therapeutic targets. Ohlstein EH, et al. **Med Res Rev** 1996 Jul;16(4):365-90 (155 ref.)

DRUG EFFECTS

Autocrine effects of endothelin-1 on leukocyte-endothelial interaction: stimulation of endothelin B receptor subtype reduces endothelial adhesiveness via a nitric oxide-dependent mechanism. Murohara T, et al. **Blood** 1996 Nov 15;88(10):3894-900

Characterization of endothelin receptors in the human umbilical artery and vein. Bogoni G, et al. **Br J Pharmacol** 1996 Dec;119(8):1600-4

Comparison of the contractile effects and binding kinetics of endothelin-1 and sarafotoxin S6b in rat isolated renal artery. Devadason PS, et al. **Br J Pharmacol** 1997 May; 121(2):253-63

EndothelinB (ETB) receptor-activated potentiation of cholinergic nerve-mediated contraction in human bronchus. Fernandes LB, et al. **Br J Pharmacol** 1996 Aug; 118(8):1873-4

Necessity of dual blockade of endothelin ETA and ETB receptor subtypes for antagonism of endothelin-1-induced contraction in human bronchi. Fukuroda T, et al. **Br J Pharmacol** 1996 Mar;117(6):995-9

Activation of endothelin ETA receptors masks the constrictor role of endothelin ETB receptors in rat isolated small mesenteric arteries. Mickley EJ, et al. **Br J Pharmacol** 1997 Apr;120(7):1376-82

Analysis of two pharmacologically predicted endothelin B receptor subtypes by using the endothelin B receptor gene knockout mouse. Mizuguchi T, et al. **Br J Pharmacol** 1997 Apr;120(8):1427-30

Endothelins-induce cyclicAMP formation in the guinea-pig trachea through an ETA receptor- and cyclooxygenase-dependent mechanism. el-Mowafy AM, et al. **Br J Pharmacol** 1996 Jun;118(3):531-6

Cyclosporine A-induced increase in glomerular cyclic GMP in rats and the involvement of the endothelinB receptor. Tack I, et al. **Br J Pharmacol** 1997 Jun;121(3):433-40

Characterization of [125I]-endothelin-1 and [125I]-BQ3020 binding to rat cerebellar endothelin receptors. Widdowson PS, et al. **Br J Pharmacol** 1996 Aug;118(8):2126-30

Endothelin receptors mediating vasoconstriction in rat pressurized small arteries. Sharifi AM, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):934-9

Endothelins contract guinea-pig pulmonary artery and enhance its adrenergic response via ET(A) receptors. Matsuda H, et al. **Clin Exp Pharmacol Physiol** 1996 May; 23(5):379-85

Effects of mixed ETA and ETB-receptor antagonist (Ro-47-0203) on hepatic microcirculation after warm ischemia. Koeppel TA, et al. **Dig Dis Sci** 1997 Jun; 42(6):1316-21

Endothelins promote the activation of astrocytes in rat neostriatum through ET(B) receptors. Ishikawa N, et al. **Eur J Neurosci** 1997 May;9(5):895-901

Effects of Ro 47-0203 on endothelin-1 and sarafotoxin S6c-induced contractions of human bronchus and guinea-pig trachea. Gater PR, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):123-8

Activation of BK(Ca) channel via endothelin ET(A) receptors in porcine coronary artery smooth muscle cells. Hu S, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):277-82

The significant role of endothelin-3 in potentiating electrically stimulated contractions in the rat iris sphincter. Shinkai-Goromaru M, et al. **Gen Pharmacol** 1997 Mar; 28(3):365-9

Involvement of nitric oxide in endothelin ETB receptor-mediated inhibitory actions on antidiuresis and norepinephrine overflow induced by stimulation of renal nerves in anesthetized dogs. Matsuo G, et al. **J Cardiovasc Pharmacol** 1997 Sep;30(3):325-31

ETB-type receptors mediate endothelin-stimulated contraction in the aortic vascular smooth muscle of the spiny dogfish shark, Squalus acanthias. Evans DH, et al. **J Comp Physiol [B]** 1996;165(8):659-64

Excitatory gastric motor and cardiovascular effects of endothelins in the dorsal vagal complex are mediated through ET(A) receptors. Krowicki ZK, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):535-42

Endothelin ETA and ETB receptors mediate endothelin-1-induced apamin-sensitive relaxation in the guinea pig ileum. Shan LH, et al. **Jpn J Pharmacol** 1996 Mar;70(3):259-67

Cerebrovascular effects of endothelin-3: modulation of contraction by nitric oxide is independent of endothelin B receptor activation. Schilling L, et al. **Neurol Res** 1996 Jun;18(3):281-5

Heterologous desensitization of the human endothelin A and neurokinin A receptors in Xenopus laevis oocytes. Cyr CR, et al. **Recept Signal Transduct** 1996;6(2):99-109

[Blockade of endothelin receptors in cardiovascular diseases. A possible therapeutic alternative in the future] Pernow J, et al. **Lakartidningen** 1997 Mar 19;94(12):1069-73 (70 ref.) **(Swe)**

GENETICS

Endothelin receptor type A and B gene expression in human nonpregnant, term pregnant, and preeclamptic uterus. Wolff K, et al. **Am J Obstet Gynecol** 1996 Nov; 175(5):1295-300

Bromodeoxyuridine-induced expression of endothelin A in A375 human melanoma cells. Ohtani T, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):526-30

A novel endothelin receptor type-B-like gene enriched in the brain. Zeng Z, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):559-67

Methylation of the 5'CpG island of the endothelin B receptor gene is common in human prostate cancer. Nelson JB, et al. **Cancer Res** 1997 Jan 1;57(1):35-7

Bergmann glial cells in situ express endothelinB receptors linked to cytoplasmic calcium signals. Tuschick S, et al. **Cell Calcium** 1997 Jun;21(6):409-19

Augmented expression of the endothelin-A receptor gene in cultured mesangial cells from stroke-prone spontaneously hypertensive rats. Hiraoka J, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S191-2

A mutation in endothelin-B receptor gene causes myenteric aganglionosis and coat color spotting in rats. Kunieda T, et al. **DNA Res** 1996 Apr 30;3(2):101-5

Sequence of the 5'-flanking and 5'-UTR regions of the rat endothelin-A receptor gene. Dimondo JP, et al. **DNA Seq** 1996;6(5):285-91

Characterization of human endothelin B receptor and mutant receptors expressed in insect cells. Doi T, et al. **Eur J Biochem** 1997 Aug 15;248(1):139-48

Expression and signal transduction pathways of endothelin receptors in neuroendocrine cells. Stojilkovic SS, et al. **Front Neuroendocrinol** 1996 Jul;17(3):327-69 (224 ref.)

Heterozygous endothelin receptor B (EDNRB) mutations in isolated Hirschsprung disease. Amiel J, et al. **Hum Mol Genet** 1996 Mar;5(3):355-7

Endothelin-B receptor mutations in patients with isolated Hirschsprung disease from a non-inbred population. Auricchio A, et al. **Hum Mol Genet** 1996 Mar;5(3):351-4

Endothelin receptor-mediated signaling in hirschsprung disease. Chakravarti A. **Hum Mol Genet** 1996 Mar; 5(3):303-7 (36 ref.)

Novel mutations of the endothelin-B receptor gene in isolated patients with Hirschsprung's disease. Kusafuka T, et al. **Hum Mol Genet** 1996 Mar;5(3):347-9

Increased expression of endothelin B receptor mRNA following subarachnoid hemorrhage in monkeys. Hino A, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):688-97

Mutation analysis of the RET, the endothelin-B receptor, and the endothelin-3 genes in sporadic cases of Hirschsprung's disease. Kusafuka T, et al. **J Pediatr Surg** 1997 Mar;32(3):501-4

Absence of ET(B)-mediated contraction in Piebald-lethal mice. Giller T, et al. **Life Sci** 1997;61(3):255-63

Physical mapping of the endothelin receptor type B to bovine chromosome 12. Schläpfer J, et al. **Mamm Genome** 1997 May;8(5):380-1

Localization of endothelin-1 and endothelin-receptors A and B in human epididymis. Harneit S, et al. **Mol Hum Reprod** 1997 Jul;3(7):579-84

Selective downregulation of ETA receptor mRNA in renal transplant recipients on cyclosporin A revealed by quantitative RT-PCR. Karet FE, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):1976-82

Mutations of the endothelin-B receptor and endothelin-3

genes in Hirschsprung's disease. Kusafuka T, et al. **Pediatr Surg Int** 1997;12(1):19–23 (38 ref.)

Characteristics of endothelin receptors in acutely rejecting transplanted lungs. Kim HK, et al. **Transplantation** 1997 Jul 27;64(2):209–14

METABOLISM

Increased levels of endothelin-1 and differential endothelin type A and B receptor expression in scleroderma-associated fibrotic lung disease. Abraham DJ, et al. **Am J Pathol** 1997 Sep;151(3):831–41

Endothelin receptors are modulated in association with endogenous fluctuations in estrogen. Barber DA, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1999–2006

Chronic increases in blood flow upregulate endothelin-B receptors in arterial smooth muscle. Barber DA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H65–71

Functional comparison of endothelin receptors in human and rat pulmonary artery smooth muscle. Bialecki RA, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L211–8

Role of tyrosine kinase pathways in ETB receptor activation of NHE3. Chu TS, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C763–71

Endothelin receptors and activity differ in human, dog, and rabbit lung. McKay KO, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):L37–43

Thrombin-induced vascular reactivity is modulated by ETB receptor-coupled nitric oxide release in rat aorta. Magazine HI, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C923–8

Pregnancy increases ET-1-induced contraction and changes receptor subtypes in uterine smooth muscle in humans. Osada K, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R541–8

ETA and ETB receptors cooperate in DNA synthesis via opposing regulations of cAMP in human lung cell line. Takimoto M, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):L366–73

ICAM-1 expression on cardiac myocytes and aortic endothelial cells via their specific endothelin receptor subtype. Hayasaki Y, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):817–24

Bromodeoxyuridine-induced expression of endothelin A in A375 human melanoma cells. Ohtani T, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):526–30

Characterization of endothelin receptors in streptozotocin-induced diabetic rat vas deferens. Saito M, et al. **Biochem Pharmacol** 1996 Nov 22;52(10):1593–8

Interaction of endothelin-1 with cloned bovine ETA receptors: biochemical parameters and functional consequences. Desmarets J, et al. **Biochemistry** 1996 Nov 26;35(47):14868–75

Activation of the endothelin B receptor causes a dose-dependent accumulation of cyclic GMP in human platelets. Dockrell ME, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):178–80

ETA receptor mediates the signaling of endothelin-1 in osteoblast-like cells. Suzuki A, et al. **Bone** 1997 Aug; 21(2):143–6

Time course of changes in ETB receptor density and function in tracheal airway smooth muscle during respiratory tract viral infection in mice. Carr MJ, et al. **Br J Pharmacol** 1996 Mar;117(6):1222–8

Characterization of the binding of endothelin ETB selective ligands in human and rat heart. Russell FD, et al. **Br J Pharmacol** 1996 Oct;119(4):631–6

Endothelin receptors and their cellular signal transduction mechanism in human cultured prostatic smooth muscle cells. Saita Y, et al. **Br J Pharmacol** 1997 Jun;121(4):687–94

Localization of endothelin ETB receptors on the myenteric plexus of guinea-pig ileum and the receptor-mediated release of acetylcholine. Yoshimura M, et al. **Br J Pharmacol** 1996 Jul;118(5):1171–6

Expression of endothelin receptors and nitric oxide synthase in the brain of stroke-prone spontaneously hypertensive rats with cerebral apoplexy. Sakurai-Yamashita Y, et al. **Brain Res** 1997 May 9;756(1–2):61–7

Endothelin binding to NG108-15 cells: evidence for conventional ETA and ETB receptor subtypes and super-high affinity binding components. Angelova K, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1243–57

Cellular localization of endothelin receptor subtypes in the rat kidney following in vitro labelling. Dean R, et al. **Clin Exp Pharmacol Physiol** 1996 Jun-Jul;23(6–7):524–31

Gender differences in response to endothelin-1 in coronary arteries: transcription, receptors and calcium regulation. Miller VM, et al. **Clin Exp Pharmacol Physiol** 1996 Mar; 23(3):256–9

ETA and ETB receptors on vascular smooth muscle cells from mesenteric vessels of spontaneously hypertensive rats. Schiffrin EL, et al. **Clin Exp Pharmacol Physiol Suppl** 1995; 1:S193–4

Endothelin peptides and receptors in human kidney. Karet FE. **Clin Sci (Colch)** 1996 Sep;91(3):267–73

Endothelin peptides. Hirata Y. **Curr Opin Nephrol Hypertens** 1996 Jan;5(1):12–5 (16 ref.)

Neurovascular [125I]-ET-1 binding sites on human peripheral nerve. Dashwood MR, et al. **Endothelium** 1997; 5(2):119–23

Characterization of human endothelin B receptor and mutant receptors expressed in insect cells. Doi T, et al. **Eur J Biochem** 1997 Aug 15;248(1):139–48

Presence and localization of endothelin receptor in the rat ovary and its regulation by pituitary gonadotropins [see comments] Otani H, et al. **Eur J Endocrinol** 1996 Oct; 135(4):449–54. Comment in: Eur J Endocrinol 1996 Oct;135(4):391–3.

Conversion of big-endothelin-1 elicits an endothelin ETA receptor-mediated response in endothelial cells. N'Diaye N, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):387–96

Effect of experimental diabetes on rat prostate endothelin receptors. Saito M, et al. **Eur J Pharmacol** 1996 Aug 29; 310(2–3):197–200

Rat striatum contains pure population of ETB receptors. Tayag EC, et al. **Eur J Pharmacol** 1996 Apr 11;300(3):261–5

Dual control of seminiferous tubule contractility mediated by ETA and ETB endothelin receptor subtypes. Tripiciano A, et al. **FASEB J** 1997 Mar;11(4):276–86

Studies on endothelin receptors in the zonae fasciculata/reticularis of the rat adrenal cortex: contrast with the zona glomerulosa. Kapas S, et al. **FEBS Lett** 1996 Nov 18;397(2–3):186–90

Differential distribution of endothelin peptides and receptors in human adrenal gland. Davenport AP, et al. **Histochem J** 1996 Nov;28(11):779–89

Endothelin receptor-mediated signaling in hirschsprung disease. Chakravarti A. **Hum Mol Genet** 1996 Mar; 5(3):303–7 (36 ref.)

Endothelin receptor-mediated Ca2+ signaling and isoform expression in bovine corneal epithelial cells. Tao W, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):130–41

Pulmonary clearance of circulating endothelin-1 in dogs in vivo: exclusive role of ETB receptors. Dupuis J, et al. **J Appl Physiol** 1996 Oct;81(4):1510–5

Coexpression studies with endothelin receptor subtypes indicate the existence of intracellular cross-talk between ET(A) and ET(B) receptors. Ozaki S, et al. **J Biochem (Tokyo)** 1997 Mar;121(3):440–7

Activation of multiple mitogen-activated protein kinase signal transduction pathways by the endothelin B receptor requires the cytoplasmic tail. Aquilla E, et al. **J Biol Chem** 1996 Dec 6;271(49):31572–9

Phosphorylation and desensitization of human endothelin A and B receptors. Evidence for G protein-coupled receptor kinase specificity. Freedman NJ, et al. **J Biol Chem** 1997 Jul 11;272(28):17734–43

Palmitoylation of human endothelinB. Its critical role in G protein coupling and a differential requirement for the cytoplasmic tail by G protein subtypes. Okamoto Y, et al. **J Biol Chem** 1997 Aug 22;272(34):21589–96

Endothelin-1 and ETA receptor expression in vascular smooth muscle cells from human placenta: a new ETA receptor messenger ribonucleic acid is generated by alternative splicing of exon 3. Bourgeois C, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):3116–23

In vitro expression of endothelin-1 (ET-1) and the ETA and ETB ET receptors by the prostatic epithelium and stroma. Grant ES, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):508–13

Microtubule dynamics regulates the level of endothelin-B receptor in rat cultured astrocytes. Ozawa F, et al. **J Neurochem** 1997 Aug;69(2):562–9

The quasi-irreversible nature of endothelin binding and G protein-linked signaling in cardiac myocytes. Hilal-Dandan R, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):267–73

Affinity and selectivity of PD156707, a novel nonpeptide endothelin antagonist, for human ET(A) and ET(B) receptors. Maguire JJ, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1102–8

Localization of endothelin ETA and ETB receptor-mediated constriction in the renal microcirculation of rats. Endlich K, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):211–8

Characterization of endothelin receptors in human varicose veins. Barber DA, et al. **J Vasc Surg** 1997 Jul;26(1):61–9

Cardiac angiotensin converting enzyme and endothelin receptor in rats with chronic myocardial infarction. Kohzuki M, et al. **Jpn Circ J** 1996 Dec;60(12):972–80

Comparison of endothelin binding sites in cultured aortic smooth muscle cells from spontaneously hypertensive and normotensive rats. Lu MH, et al. **Jpn Circ J** 1997 Feb; 61(2):145–50

Activation of ET(A) receptors is partially responsible for the rapid increase in haematocrit induced by bacterial lipopolysaccharide in the rat. Allcock GH, et al. **Life Sci** 1997;60(19):PL 271–6

Stimulatory action of endothelin-1 on rat Leydig cells: involvement of endothelin-A subtype receptor and phospholipase A2-arachidonate metabolism system. Romanelli F, et al. **Life Sci** 1997;61(5):557–66

Pharmacological characteristics of endothelin receptors in the rabbit ventricular myocardium: the nonselective endothelin receptor antagonist PD 145065 antagonizes the positive inotropic effect of endothelin-3 but not of endothelin-1. Norota I, et al. **Mol Cell Biochem** 1996 Jul-Aug;160–161:67–74

Immortalized schwann cells express endothelin receptors coupled to adenylyl cyclase and phospholipase C. Wilkins PL, et al. **Neurochem Res** 1997 Apr;22(4):409–18

Correlation between guanine nucleotide effect and reversible binding property of endothelin analogs. Nambi P, et al. **Neuropeptides** 1996 Feb;30(1):109–14

Identification of ETB receptor subtypes using linear and truncated analogs of ET. Nambi P, et al. **Neuropeptides** 1995 Dec;29(6):331–6

Developmental changes in endothelin A and endothelin B receptor subtypes in embryonic chick brains. Jeng AY, et al. **Neurosci Lett** 1996 Apr 26;208(3):208–10

Endothelin B receptor-like immunoreactivity is associated with LHRH-immunoreactive fibers in the rat hypothalamus. Yamamoto T, et al. **Neurosci Lett** 1997 Feb 21;223(2):117–20

Chronic intrauterine pulmonary hypertension alters endothelin receptor activity in the ovine fetal lung. Ivy DD, et al. **Pediatr Res** 1996 Mar;39(3):435–42

Pharmacological characterization of the ETA receptor in the vascular smooth muscle comparing its analogous distribution in the rat mesenteric artery and in the arterial mesenteric bed. Donoso MV, et al. **Peptides** 1996; 17(7):1145–53

Endothelin receptor synthetic N-terminal fragment interacts with the receptor itself. Mendre C, et al. **Peptides** 1996; 17(3):521–6

Differential distribution of endothelin receptor subtypes in placentae from normal and growth-restricted pregnancies. Kohnen G, et al. **Placenta** 1997 Mar-Apr;18(2–3):173–80

Influence of endothelin ET(A) and ET(B) receptor antagonists on endothelin-induced contractions of the guinea pig isolated gall bladder. Cardozo AM, et al. **Regul Pept** 1997 Mar 12;69(1):15–23

Endothelin-A and -B receptors in human coronary arteries and veins. Opgaard OS, et al. **Regul Pept** 1996 Jul 5; 63(2–3):149–56

Endothelium-dependent relaxation counteracting the contractile action of endothelin-1 is partly due to ETB receptor activation. Feger GI, et al. **Res Exp Med (Berl)** 1997;196(6):327–37

[Pre-synaptic M2 receptor and ET receptor in tracheal smooth muscle] Sano M, et al. **J Smooth Muscle Res** 1995 Dec;31(6):475–8 **(Jpn)**

PHYSIOLOGY

ETB receptor mediating pulmonary hypertension and bronchoconstriction induced by endothelin-1 in the guinea pig. del Basso P, et al. **Acta Physiol Hung** 1996;84(3):259–60

Vasoactivity mediated by endothelin ETA and ETB receptors in isolated porcine ophthalmic artery. White LR, et al. **Acta Physiol Scand** 1996 Jun;157(2):245–52

The role of endothelin in the pathogenesis of atherosclerosis. Kowala MC. **Adv Pharmacol** 1997;37:299–318 (159 ref.)

ET-1 induces mitogenesis in ovine airway smooth muscle cells via ETA and ETB receptors. Carratu P, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L1021–4

Endothelin-1 production by hepatic endothelial cells: characterization and augmentation by endotoxin exposure. Eakes AT, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G605–11

Pharmacological heterogeneity of constrictions mediated by endothelin receptors in rat pulmonary arteries. Higashi T, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L287–93

Endothelin ETA receptor regulates signaling and ANF gene expression via multiple G protein-linked pathways. Hilal-Dandan R, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H130–7

Endothelin stimulates osteoblastic production of IL-6 but not macrophage colony-stimulating factor. Perkins SL, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):E461–8

Endothelin-1 limits increases in blood flow to native and collateral-dependent myocardium. Symons JD, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R41–8

Role of ET(A) and ET(B) receptors in endothelin-1-induced adrenal catecholamine secretion in vivo. Yamaguchi N. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1290–7

Endothelin-1 acts through ETA receptors to stimulate aldosterone secretion by the rat adrenal gland. Hinson JP, et al. **Biochem Soc Trans** 1997 Feb;25(1):116S

Plasticity of contractile endothelin-B receptors in human arteries after organ culture. Adner M, et al. **Br J Pharmacol** 1996 Nov;119(6):1159–66

Comparison of endothelin B (ETB) receptors in rabbit isolated pulmonary artery and bronchus. Hay DW, et al. **Br J Pharmacol** 1996 Jul;118(5):1209–17

Influence of parainfluenza-1 respiratory tract viral infection on endothelin receptor-effector systems in mouse and rat tracheal smooth muscle. Knott PG, et al. **Br J Pharmacol** 1996 Sep;119(2):291–8

EndothelinB receptor-mediated contraction in human pulmonary resistance arteries. McCulloch KM, et al. **Br J Pharmacol** 1996 Nov;119(6):1125–30

Activation of endothelin ETA receptors masks the constrictor role of endothelin ETB receptors in rat isolated small mesenteric arteries. Mickley EJ, et al. **Br J Pharmacol** 1997 Apr;120(7):1376–82

Cerebral postischemic hypoperfusion is mediated by ETA receptors. Spatz M, et al. **Brain Res** 1996 Jul 8; 726(1–2):242–6

Intrastriatal injection of endothelin evokes dopaminergic turning behaviour in rats through activation of the ETB receptor. Webber KM, et al. **Brain Res** 1996 Jun 17; 724(2):180–5

Endothelin receptors mediating vasoconstriction in rat pressurized small arteries. Sharifi AM, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):934–9

Endothelin, vascular hypertrophy, and hypertension. Rosendorff C. **Cardiovasc Drugs Ther** 1997 Jan; 10(6):795–802 (80 ref.)

Enhanced phosphoinositide turnover signalling stimulated by endothelin B-type receptor in endothelial cells from

spontaneously hypertensive rats. Yokokawa K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S195-6

Effect of endothelin-1 on corticosteroid secretion by the frog adrenal gland is mediated by an endothelinA receptor. Cartier F, et al. **Endocrinology** 1997 Oct;138(10):4358-63

Endothelins stimulate deoxyribonucleic acid synthesis and cell proliferation in rat adrenal zona glomerulosa, acting through an endothelin A receptor coupled with protein kinase C- and tyrosine kinase-dependent signaling pathways. Mazzocchi G, et al. **Endocrinology** 1997 Jun; 138(6):2333-7

Endothelin-A receptor-mediated prostanoid secretion via autocrine and deoxyribonucleic acid synthesis via paracrine signaling in human bronchial epithelial cells. Takimoto M, et al. **Endocrinology** 1996 Nov;137(11):4542-50

Endothelin receptors and gonadal function: an invited commentary [comment] Stojilkovic SS. **Eur J Endocrinol** 1996 Oct;135(4):391-3 (18 ref.). Comment on: Eur J Endocrinol 1996 Oct;135(4):449-54.

A role for endothelin ETA receptors in regulation of renal function in spontaneously hypertensive rats. Bird JE, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):183-9

Coronary vasoconstriction by endothelin-1 in anesthetized goats: role of endothelin receptors, nitric oxide and prostanoids. García JL, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):179-86

Functional role of endothelin ETA and ETB receptors in venous and arterial smooth muscle. Lodge NJ, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):279-85

Transcriptional regulated plasticity of vascular contractile endothelin ET(B) receptors after organ culture. Möller S, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):69-77

Endothelin receptor mediated constriction and dilatation in feline cerebral resistance arterioles in vivo. Patel TR, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):41-8

Lack of endothelin ETB receptor-mediated smooth muscle hyperpolarization in rat mesenteric resistance arteries. Waldron GJ, et al. **Eur J Pharmacol** 1996 Dec 27; 318(1):89-92

Role of ET(B) receptors in local clearance of endothelin-1 in rat heart: studies with the antagonists PD 155080 and BQ-788. Brunner F, et al. **FEBS Lett** 1996 Nov 4; 396(2-3):238-42

Expression and signal transduction pathways of endothelin receptors in neuroendocrine cells. Stojilkovic SS, et al. **Front Neuroendocrinol** 1996 Jul;17(3):327-69 (224 ref.)

The arterial wall: a new pharmacological and therapeutic target. Laurent S, et al. **Fundam Clin Pharmacol** 1996; 10(3):243-57 (95 ref.)

Constriction of mouse hepatic venules and sinusoids by endothelins through ETB receptor subtype. Ito Y, et al. **Int J Microcirc Clin Exp** 1996 Sep-Oct;16(5):250-8

Effects of endothelin in radiocontrast-induced nephropathy in rats are mediated through endothelin-A receptors. Bird JE, et al. **J Am Soc Nephrol** 1996 Aug;7(8):1153-7

Role of endothelin receptor subtypes in the systemic and renal responses to endothelin-1 in humans. Kaasjager KA, et al. **J Am Soc Nephrol** 1997 Jan;8(1):32-9

ET-1-induced bronchoconstriction is mediated via ETB receptor in mice. Nagase T, et al. **J Appl Physiol** 1997 Jul;83(1):46-51

Cardiovascular and renal actions of the endothelin(B) receptor in pigs. Cirino M, et al. **J Cardiovasc Pharmacol** 1997 Jun;29(6):704-12

Involvement of endothelin (ET)A and ETB receptors in the hypertrophic effects of ET-1 in rabbit ventricular cardiomyocytes. Mullan DM, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):350-9

Characterization of endothelin receptors in the cerebral vasculature and their lack of effect on spreading depression. Goadsby PJ, et al. **J Cereb Blood Flow Metab** 1996 Jul; 16(4):698-704

ETB-type receptors mediate endothelin-stimulated contraction in the aortic vascular smooth muscle of the spiny dogfish shark, Squalus acanthias. Evans DH, et al. **J Comp Physiol [B]** 1996;165(8):659-64

Endothelin-1 induces liver vasoconstriction through both ETA and ETB receptors. Zhang B, et al. **J Hepatol** 1997 May;26(5):1104-10

Human monocyte adhesion is modulated by endothelin B receptor-coupled nitric oxide release. King JM, et al. **J Immunol** 1997 Jan 15;158(2):880-6

Effects of endothelin A and B receptors on aqueous humor dynamics in the rabbit eye. Taniguchi T, et al. **J Ocul Pharmacol Ther** 1996 Summer;12(2):123-30

Endothelin-A receptors mediate vascular smooth-muscle response to moderate acidosis in the canine tibial nutrient artery. Coessens BC, et al. **J Orthop Res** 1996 Sep; 14(5):818-22

Significance of endothelinB receptors for myocardial contractility and myocardial energy metabolism. Beyer ME, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1228-34

Endothelin receptor coupling to potassium and chloride channels in isolated rat pulmonary arterial myocytes. Salter KJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):1053-62

Cardiopulmonary bypass and circulatory arrest increase endothelin-1 production and receptor expression in the lung. Kirshbom PM, et al. **J Thorac Cardiovasc Surg** 1997 Apr;113(4):777-83

Absence of ET(B)-mediated contraction in Piebald-lethal mice. Giller T, et al. **Life Sci** 1997;61(3):255-63

Non-epithelial endothelin-A receptors activate adenylate cyclase in rat trachea: biochemical mechanisms and physiological implications. El-Mowafy AM, et al. **Life Sci** 1997;61(15):1529-38

Voltage-insensitive Ca2+ channels and Ca2+/calmodulin-dependent protein kinases propagate signals from endothelin-1 receptors to the c-fos promoter. Wang Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5915-23

Presence of contractile endothelin-A and dilatory endothelin-B receptors in human cerebral arteries. Nilsson T, et al. **Neurosurgery** 1997 Feb;40(2):346-51; discussion 351-3

Relaxation of human temporal artery by endothelin ETB receptors. Lucas GA, et al. **Peptides** 1996;17(7):1139-44

Different endothelin receptor subtypes are involved in phospholipid signalling in the proximal tubule of rat kidney. Knotek M, et al. **Pflugers Arch** 1996 Jun;432(2):165-73

Evidence that both ETA and ETB receptor subtypes are involved in the in vivo aldosterone secretagogue effect of endothelin-1 in rats. Mazzocchi G, et al. **Res Exp Med (Berl)** 1996;196(3):145-52

[Endothelin-1 triggers formation of severe acute pancreatitis] Foitzik T, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:749-53 (Eng. Abstr.) **(Ger)**

[Role of endothelin-B receptors in the pulmonary circulation] Hayashi A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 May;35(5):481-90 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Detection of endothelin receptors in human coronary artery vascular smooth muscle cells but not endothelial cells by using electron microscope autoradiography. Russell FD, et al. **J Cardiovasc Pharmacol** 1997 Jun;29(6):820-6

RECEPTORS, ENDOTHELIUM-DERIVED VASOCONSTRICTOR FACTOR see **RECEPTORS, ENDOTHELIN**

RECEPTORS, ENKEPHALIN see **RECEPTORS, OPIOID**

RECEPTORS, EPIDERMAL GROWTH FACTOR-UROGASTRONE

Growth factor receptors as molecular targets for cancer diagnosis and therapy. Zalutsky MR. **Q J Nucl Med** 1997 Jun;41(2):71-7

AGONISTS

Neu differentiation factor induces ErbB2 down-regulation and apoptosis of ErbB2-overexpressing breast tumor cells. Daly JM, et al. **Cancer Res** 1997 Sep 1;57(17):3804-11

Regulation and interactions of transforming growth factor-beta with cardiovascular cells: implications for development and disease. Saltis J, et al. **Clin Exp Pharmacol Physiol** 1996 Mar;23(3):193-200 (94 ref.)

Binding of erythroagglutinating phytohemagglutinin lectin from Phaseolus vulgaris to the epidermal growth factor receptor inhibits receptor function in the human glioma cell line, U373 MG. Rebbaa A, et al. **J Neurochem** 1996 Dec;67(6):2265-72

ANALYSIS

Expression of c-Myc, TGF-alpha and EGF-receptor in sporadic medullary thyroid carcinoma. Wang W, et al. **Acta Oncol** 1997;36(4):407-11

Epidermal growth factor receptor, c-erbB-2 and p53 overexpressions in epithelial hyperplastic lesions of the larynx. Gale N, et al. **Acta Otolaryngol Suppl (Stockh)** 1997; 527:105-10

Expression of ER-D5 and EGFr in laryngeal carcinoma and pre-malignant epithelium. Maiorano E, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;527:95-9

Plasma membrane phosphotyrosine, Her2-NEU, and epidermal growth factor receptor in human breast cancer. A comparative study. Heffelfinger SC, et al. **Am J Clin Oncol** 1996 Dec;19(6):552-7

Molecular profile of advanced-stage transitional cell carcinoma of the ovary. Gershenson DM, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):120-5

Options of flow cytometric three-colour DNA measurements to quantitate EGFR in subpopulations of human bladder cancer. Brockhoff G, et al. **Anal Cell Pathol** 1996 Jun; 11(1):55-70

Epidermal growth factor receptor in adult human dorsal root ganglia. Huerta JJ, et al. **Anat Embryol (Berl)** 1996 Sep; 194(3):253-7

EGF-R expression in ductal breast cancer: proliferation and prognostic implications. Bucci B, et al. **Anticancer Res** 1997 Jan-Feb;17(1B):769-74

Significance of urinary epidermal growth factor and its receptor expression in human bladder cancer. Chow NH, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1293-6

Biological characteristics of adrenocortical carcinoma: a study of p53, IGF, EGF-r, Ki-67 and PCNA in 17 adrenocortical carcinomas. Edgren M, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1303-9

Multivariate analysis of DNA ploidy, p53, c-erbB-2 proteins, EGFR, and steroid hormone receptors for prediction of poor short term prognosis in breast cancer. Eissa S, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1417-23

EGFR and steroid receptors in ovarian carcinoma: comparison with prognostic parameters and outcome of patients. Fischer-Colbrie J, et al. **Anticancer Res** 1997 Jan-Feb;17(1B):613-9

Epidermal growth factor receptor-immunohistochemical detection and clinical significance for treatment of primary breast cancer. Schroeder W, et al. **Anticancer Res** 1997 Jul-Aug;17(4A):2799-802

In vivo study of a technetium labelled anti-EGFr MoAB. Scopinaro F, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1761-5

Monitoring of tumor cell purging after highly efficient immunomagnetic selection of CD34 cells from leukapheresis products in breast cancer patients: comparison of immunocytochemical tumor cell staining and reverse transcriptase-polymerase chain reaction. Mapara MY, et al. **Blood** 1997 Jan 1;89(1):337-44

E-cadherin relates to EGFR expression and lymph node metastasis in primary breast carcinoma. Jones JL, et al. **Br J Cancer** 1996 Oct;74(8):1237-41

Quantitative immunohistochemical analysis of transforming growth factor-alpha and epidermal growth factor receptor in patients with squamous cell carcinoma of the head and neck. Grandis JR, et al. **Cancer** 1996 Sep 15;78(6):1284-92

Simultaneous quantitative analyses of c-erbB-2 protein, epidermal growth factor receptor, cathepsin D, and hormone receptors in breast cancer. Iwase H, et al. **Cancer Detect Prev** 1997;21(1):29-35

Specific oncological contribution of cathepsin D and pS2 in human breast cancer: their relationship with TNM status, estradiol receptors, epidermal growth factor receptor and neu amplification. Bolufer P, et al. **Clin Chim Acta** 1996 Mar 29;247(1-2):89-103

Correction for antibody crosstalk [letter; comment] Shackney SE. **Cytometry** 1996 Sep 1;25(1):109-10. Comment on: Cytometry 1995 Sep 1;21(1):6-13.

Immunohistochemical localization of the epidermal growth factor, transforming growth factor alpha, and their receptor in the human mesonephros and metanephros. Bernardini N, et al. **Dev Dyn** 1996 Jul;206(3):231-8

The significance of epidermal growth factor receptor and matrix metalloproteinase-3 in squamous cell carcinoma of the oral cavity. Kusukawa J, et al. **Eur J Cancer B Oral Oncol** 1996 Jul;32B(4):217-21

Overexpression and relationships of HER-2/neu, epidermal growth factor receptor, p53, Ki-67, and tumor necrosis factor alpha in epithelial ovarian cancer. Goff BA, et al. **Eur J Gynaecol Oncol** 1996;17(6):487-92

Epidermal growth factor is a motility factor for microglial cells in vitro: evidence for EGF receptor expression. Nolte C, et al. **Eur J Neurosci** 1997 Aug;9(8):1690-8

The epidermal growth factor receptor (EGF-R) is present on the basolateral, but not the apical, surface of enterocytes in the human gastrointestinal tract. Playford RJ, et al. **Gut** 1996 Aug;39(2):262-6

Expression of cathepsin-D, CA125 and epidermal growth factor receptor in imprint smears of ovarian carcinoma. Athanassiadou P, et al. **Gynecol Obstet Invest** 1997; 43(2):125-30

Expression of a truncated epidermal growth factor receptor-like protein (TEGFR) in ovarian cancer. Ilekis JV, et al. **Gynecol Oncol** 1997 Apr;65(1):36-41

DNA ploidy, proliferative index and EGF-R status in 130 cases of resected gastric cancer--a multivariate analysis. Santoro E, et al. **Hepatogastroenterology** 1997 May-Jun; 44(15):826-37

Immunocytochemical localization of transforming growth factor alpha, epidermal growth factor and epidermal growth factor receptor in the cat endometrium and placenta. Boomsma RA, et al. **Histochem J** 1997 Jun; 29(6):495-504

EGF-receptors in human normal and pathological thyroid tissue. Westermark K, et al. **Histopathology** 1996 Mar; 28(3):221-7

Quantitative determination of the epidermal growth factor receptor in cervical cancer and normal cervical epithelium by 2-color flow cytometry: evidence for down-regulation in cervical cancer. Kimmig R, et al. **Int J Cancer** 1997 Aug 22;74(4):365-73

Increased estrogen receptor and epidermal growth factor receptor gene product co-expression in surgically resected gastric adenocarcinomas. Koullias GJ, et al. **J Surg Oncol** 1996 Nov;63(3):166-71

Expression of epidermal growth factor receptors and c-erbB-2 proteins in human astrocytic tumors. Hwang SL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jul; 13(7):417-24

Human lens epithelial cells proliferate in response to exogenous EGF and have EGF and EGF receptor. Majima K. **Ophthalmic Res** 1995;27(6):356-65

Epidermal growth factor receptor immunoreactivity in gallbladder and extrahepatic biliary tract tumours. Lee CS, et al. **Pathol Res Pract** 1995 Nov;191(11):1087-91

Epidermal growth factor receptor immunoreactivity in human laryngeal squamous cell carcinoma. Lee CS, et al. **Pathology** 1997 Aug;29(3):251-4

Relationship between receptors for epidermal growth factor and steroid hormones in normal, dysplastic and neoplastic canine mammary tissues. Donnay I, et al. **Res Vet Sci** 1996 May;60(3):251-4

Cellular and subcellular localization of transforming growth

factor-alpha and epidermal growth factor receptor in normal and diseased human and hamster pancreas. Tomioka T, et al. **Teratog Carcinog Mutagen** 1995;15(5):231-50

Expression patterns of erbB receptor family in normal urothelium and transitional cell carcinoma. An immunohistochemical study. Chow NH, et al. **Virchows Arch** 1997 Jun;430(6):461-6

Epidermal growth factor receptor status in hyperparathyroidism: immunocytochemical and In situ hybridization study. Sadler GP, et al. **World J Surg** 1996 Sep;20(7):736-42; discussion 742-3

[Immunoenzymatic assays of c-erbB-2 oncoprotein and epidermal growth factor receptor in breast cancer: correlation with clinical and biological parameters] Métayé T, et al. **Ann Biol Clin (Paris)** 1996;54(3-4):131-8 (Eng. Abstr.) **(Fre)**

ANTAGONISTS & INHIBITORS

A cell and mechanism-based approach for the selection of EGF receptor inhibitors. Lanzi C, et al. **Anticancer Drug Des** 1997 Sep;12(6):515-24

Nitric oxide reversibly inhibits the epidermal growth factor receptor tyrosine kinase. Estrada C, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):369-76

Epidermal growth factor receptor signaling cascade as target for tyrphostin (RG 50864) in epithelial cells. Paradoxical effects on mitogen-activated protein kinase kinase and mitogen-activated protein kinase activities. Nowak F, et al. **Biochem Pharmacol** 1997 Feb 7;53(3):287-98

Cytoskeletal and morphological changes associated with the specific suppression of the epidermal growth factor receptor tyrosine kinase activity in A431 human epidermoid carcinoma. Nelson JM, et al. **Exp Cell Res** 1997 Jun 15; 233(2):383-90

Ganglioside GM3 inhibition of EGF receptor mediated signal transduction. Rebbaa A, et al. **Glycobiology** 1996 Jun; 6(4):399-406

Cytolytic and cytostatic properties of an anti-human Fc gammaRI (CD64) x epidermal growth factor bispecific fusion protein. Goldstein J, et al. **J Immunol** 1997 Jan 15; 158(2):872-9

Tyrosine kinase inhibitors. 12. Synthesis and structure-activity relationships for 6-substituted 4-(phenylamino)pyrimido[5,4-d]pyrimidines designed as inhibitors of the epidermal growth factor receptor. Rewcastle GW, et al. **J Med Chem** 1997 Jun 6; 40(12):1820-6

Antitumor activity of combined blockade of epidermal growth factor receptor and protein kinase A. Ciardiello F, et al. **J Natl Cancer Inst** 1996 Dec 4;88(23):1770-6

Protein kinase C inhibits epidermal growth factor receptor phosphorylation in enterocytes. Summers ST, et al. **J Surg Res** 1997 Apr;69(1):208-11

Inhibition of epidermal growth factor receptor-associated tyrosine kinase blocks glioblastoma invasion of the brain. Penar PL, et al. **Neurosurgery** 1997 Jan;40(1):141-51

Clinical trial to evaluate antitumor activity of epidermal growth factor in breast cancer [news] **Oncology (Huntingt)** 1996 May;10(5):709

Rational design for the development of epidermal growth factor receptor antagonists. van Zoelen EJ, et al. **Pathol Res Pract** 1996 Jul;192(7):761-7 (25 ref.)

[Recent advances in development of antitumor tyrosine kinase inhibitors] Uehara Y. **Gan To Kagaku Ryoho** 1997 Sep;24(11):1536-40 (12 ref.) (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Reversal of lung lesions in transgenic transforming growth factor alpha mice by expression of mutant epidermal growth factor receptor. Hardie WD, et al. **Am J Respir Cell Mol Biol** 1996 Oct;15(4):499-508

External beam radiation enhances antibody mediated radiocytotoxicity in human glioma cells in vitro. Bender H, et al. **Anticancer Res** 1997 May-Jun;17(3B):1797-802

The epidermal growth factor receptor is involved in autocrine growth of human bladder carcinoma cell lines. Ruck A, et al. **Anticancer Res** 1997 May-Jun; 17(3C):1925-31

Localization of aberrant messenger RNA of epidermal growth factor receptor (EGFR) in malignant glioma. Tsugu A, et al. **Anticancer Res** 1997 May-Jun; 17(3C):2225-32

EGF receptor expression and growth of psoriatic and normal human keratinocytes are modulated by 1.25 (OH)2-vitamin D3 ex vivo. Boisseau-Garsaud AM, et al. **Arch Dermatol Res** 1996 Jul;288(8):453-7

The product of the MLD gene is a member of the membrane fatty acid desaturase family: overexpression of MLD inhibits EGF receptor biosynthesis. Cadena DL, et al. **Biochemistry** 1997 Jun 10;36(23):6960-7

Mutation of Di-leucine residues in the juxtamembrane region alters EGF receptor expression. Morrison P, et al. **Biochemistry** 1996 Nov 19;35(46):14618-24

Multifactorial mechanism for the potentiation of cisplatin (CDDP) cytotoxicity by all-trans retinoic acid (ATRA) in human ovarian carcinoma cell lines. Caliaro MJ, et al. **Br J Cancer** 1997;75(3):333-40

Overexpression of the EGF receptor and p53 mutations are mutually exclusive in the evolution of primary and secondary glioblastomas. Watanabe K, et al. **Brain Pathol** 1996 Jul;6(3):217-23; discussion 23-4

Epidermal growth factor receptor and c-erbB-2 expression in normal breast tissue during the menstrual cycle. Gompel A, et al. **Breast Cancer Res Treat** 1996;38(2):227-35

EGF-receptor RNA metabolism in the nucleus of A431 cells. Sibon OC, et al. **Eur J Cell Biol** 1996 Sep;71(1):45-52

Prognostic significance of epidermal growth factor receptor (EGFR) and c-erbB-2 protein overexpression in adenocarcinoma of the uterine cervix. Altavilla G, et al. **Eur J Gynaecol Oncol** 1996;17(4):267-70

Epidermal growth factor receptor in vulvar malignancies and its relationship to metastasis and patient survival. Johnson GA, et al. **Gynecol Oncol** 1997 Jun;65(3):425-9

Quantitative determination of the epidermal growth factor receptor in cervical cancer and normal cervical epithelium by 2-color flow cytometry: evidence for down-regulation in cervical cancer. Kimmig R, et al. **Int J Cancer** 1997 Aug 22;74(4):365-73

Expression of a truncated EGF receptor is associated with inhibition of pancreatic cancer cell growth and enhanced sensitivity to cisplatinum. Wagner M, et al. **Int J Cancer** 1996 Dec 11;68(6):782-7

Expression of epidermal growth factor-related proteins and epidermal growth factor receptor in common epithelial ovarian tumors. Niikura H, et al. **Int J Gynecol Pathol** 1997 Jan;16(1):60-8

The enhanced tumorigenic activity of a mutant epidermal growth factor receptor common in human cancers is mediated by threshold levels of constitutive tyrosine phosphorylation and unattenuated signaling. Huang HS, et al. **J Biol Chem** 1997 Jan 31;272(5):2927-35

Down-regulation of epidermal growth factor receptors by nerve growth factor in PC12 cells is p140(trk)-, Ras-, and Src-dependent. Lazarovici P, et al. **J Biol Chem** 1997 Apr 25;272(17):11026-34

Enhanced tumorigenic behavior of glioblastoma cells expressing a truncated epidermal growth factor receptor is mediated through the Ras-Shc-Grb2 pathway. Prigent SA, et al. **J Biol Chem** 1996 Oct 11;271(41):25639-45

Aberrant expression and regulation of hepatic epidermal growth factor receptor in a c-myc transgenic mouse model. Woitach JT, et al. **J Cell Biochem** 1997 Mar 15;64(4):651-60

Epidermal growth factor receptor mRNA and protein are expressed in progenitor cells of the olfactory epithelium. Krishna NS, et al. **J Comp Neurol** 1996 Sep 16; 373(2):297-307

Abrogation of cisplatin-induced programmed cell death in human breast cancer cells by epidermal growth factor antisense RNA [see comments] Dixit M, et al. **J Natl Cancer Inst** 1997 Mar 5;89(5):365-73. Comment in: J Natl Cancer Inst 1997 Mar 5;89(5):341-3.

Effect of epidermal growth factor on placental amino acid transport and regulation of epidermal growth factor receptor expression of hepatocyte in rat. Masuyama H, et al. **J Perinat Med** 1996;24(3):213-20

Inverse regulation of oestrogen receptor and epidermal growth factor receptor gene expression in MCF-7 breast cancer cells treated with phorbol ester. Lee CS, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):267-75

Expression of transforming growth factor alpha and epidermal growth factor receptor in human hepatocellular carcinoma. Kira S, et al. **Liver** 1997 Aug;17(4):177-82

Transforming growth factor-alpha, epidermal growth factor receptor, and MiB-1 expression in Barrett's-associated neoplasia: correlation with prognosis. Yacoub L, et al. **Mod Pathol** 1997 Feb;10(2):105-12

Mitogenic signaling from the egf receptor is attenuated by a phospholipase C-gamma/protein kinase C feedback mechanism. Chen P, et al. **Mol Biol Cell** 1996 Jun; 7(6):871-81

Altered gene expression in spontaneous hepatocellular carcinomas from male B6C3F1 mice. Romach EH, et al. **Mol Carcinog** 1997 May;19(1):31-8

Enhanced sensitivity to tumor growth and development in multistage skin carcinogenesis by transforming growth factor-alpha-induced epidermal growth factor receptor activation but not p53 inactivation. Shibata MA, et al. **Mol Carcinog** 1997 Mar;18(3):160-70

Transcriptional activation of the human epidermal growth factor receptor promoter by human p53. Ludes-Meyers JH, et al. **Mol Cell Biol** 1996 Nov;16(11):6009-19

Progressive upregulation of metastasis-related genes in human colon cancer cells implanted into the cecum of nude mice. Takahashi Y, et al. **Oncol Res** 1996;8(4):163-9

Expression analyses of epidermal growth factor receptor and HER-2/neu: no advantage of prediction of recurrence or survival in breast cancer patients. Beckmann MW, et al. **Oncology** 1996 Nov-Dec;53(6):441-7

Suramin inhibits the growth of non-small-cell lung cancer cells that express the epidermal growth factor receptor. Fujiuchi S, et al. **Oncology** 1997 Mar-Apr;54(2):134-40

Studies of the expression of epidermal growth factor receptor in human renal cell carcinoma: a comparison of immunohistochemical method versus ligand binding assay. Yoshida K, et al. **Oncology** 1997 May-Jun;54(3):220-5

c-myc, c-erbB-1 and c-erbB-2 expressions in urothelial carcinoma. Onodera T, et al. **Pathol Int** 1997 Apr; 47(4):209-16

Relative expression of epidermal growth factor receptor in placental cytotrophoblasts and choriocarcinoma cell lines. Filla MS, et al. **Placenta** 1997 Jan;18(1):17-27

Spatial and temporal patterns of expression of epidermal growth factor, transforming growth factor alpha and transforming growth factor beta 1-3 and their receptors in mouse jejunum after radiation treatment. Ruifrok AC, et al. **Radiat Res** 1997 Jan;147(1):1-12

Expression of the epidermal growth factor receptor gene in human intestinal metaplasia: a preliminary report. Granelli P, et al. **Scand J Gastroenterol** 1997 May;32(5):485-9

[Expression of transforming growth factor alpha and p53 in non-small cell lung cancer by immunohistochemical study] Wang H, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Mar; 18(2):84-7 (Eng. Abstr.) **(Chi)**

[Clinical value of the study of proliferation and cell activation antigens with flow cytometry in bladder cancer] Lacombe L, et al. **Prog Urol** 1996 Dec;6(6):907-12 (Eng. Abstr.) **(Fre)**

BLOOD

Detection of epidermal growth factor receptor in the serum of gastric carcinoma patients. Choi JH, et al. **Cancer** 1997 May 15;79(10):1879-83

CHEMISTRY

Transmembrane region of the epidermal growth factor receptor: behavior and interactions via 2H NMR. Rigby AC, et al. **Biochemistry** 1996 Sep 24;35(38):12591-601

Two EGF molecules contribute additively to stabilization of the EGFR dimer. Lemmon MA, et al. **EMBO J** 1997 Jan 15;16(2):281-94

Expression of a truncated epidermal growth factor receptor-like protein (TEGFR) in ovarian cancer. Ilekis JV, et al. **Gynecol Oncol** 1997 Apr;65(1):36-41

Ligand-binding enhances the affinity of dimerization of the extracellular domain of the epidermal growth factor receptor. Odaka M, et al. **J Biochem (Tokyo)** 1997 Jul; 122(1):116-21

Secondary dimerization between members of the epidermal growth factor receptor family. Gamett DC, et al. **J Biol Chem** 1997 May 2;272(18):12052-6

The interaction of an epidermal growth factor/transforming growth factor alpha tail chimera with the human epidermal growth factor receptor reveals unexpected complexities. Puddicombe SM, et al. **J Biol Chem** 1996 Nov 29; 271(48):30392-7

Design and synthesis of novel tyrosine kinase inhibitors using a pharmacophore model of the ATP-binding site of the EGF-R. Traxler P, et al. **J Pharm Belg** 1997 Mar-Apr; 52(2):88-96 (26 ref.)

A 1.8 kb alternative transcript from the human epidermal growth factor receptor gene encodes a truncated form of the receptor. Reiter JL, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4050-6

The SH3p4/Sh3p8/SH3p13 protein family: binding partners for synaptojanin and dynamin via a Grb2-like Src homology 3 domain. Ringstad N, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8569-74

CLASSIFICATION

Subsets of epidermal growth factor receptors during activation and endocytosis. Emlet DR, et al. **J Biol Chem** 1997 Feb 14;272(7):4079-86

DRUG EFFECTS

Effects of high glucose culture on EGF effects and EGF receptors in the LLC-PK1 cells. Yang ML, et al. **Am J Nephrol** 1997;17(2):193-8

Modulation of EGF receptor by tumor necrosis factor-alpha in human hepatocellular carcinoma HepG2 cells. Wang D, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):3001-6

ATP- and EGF-stimulated phosphatidulinositol synthesis by two different pathways, phospholipase D and diacylglycerol kinase, in A-431 epidermoid carcinoma cells. Hosoi K, et al. **Biochem Cell Biol** 1996;74(2):197-209

Carcinogen-induced alteration in liver epidermal growth factor receptor distribution during the promotion stage of hepatocarcinogenesis in rat. DeCicco LA, et al. **Cancer Lett** 1997 Jan 1;111(1-2):149-56

Asbestos causes stimulation of the extracellular signal-regulated kinase 1 mitogen-activated protein kinase cascade after phosphorylation of the epidermal growth factor receptor. Zanella CL, et al. **Cancer Res** 1996 Dec 1;56(23):5334-8

EGF/EGF-R system and benign breast disease during and following the treatment of gynaecological pathologies with an analogue of LH-RH. Di Lieto A, et al. **Clin Exp Obstet Gynecol** 1996;23(4):220-8

Structure-activity relationships for 4-anilinoquinazolines as potent inhibitors at the ATP binding site of the epidermal growth factor receptor in vitro. Denny WA, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):424-7

The epidermal growth factor receptor and its ligands as therapeutic targets in human tumors. Rusch V, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):133-41 (64 ref.)

Cytotoxic activity of ribonucleolytic toxin restrictocin-based chimeric toxins targeted to epidermal growth factor receptor. Rathore D, et al. **FEBS Lett** 1997 May 5; 407(3):275-9

Transmodulation of EGF receptor by interferon-gamma in human hepatocellular carcinoma HepG2 cells. Wang D, et al. **In Vivo** 1997 Mar-Apr;11(2):141-6

Amphiregulin antisense oligonucleotide inhibits the growth of T3M4 human pancreatic cancer cells and sensitizes the

cells to EGF receptor–targeted therapy. Funatomi H, et al. **Int J Cancer** 1997 Jul 29;72(3):512–7

The linoleic acid metabolite, (13S)–hydroperoxyoctadecadienoic acid, augments the epidermal growth factor receptor signaling pathway by attenuation of receptor dephosphorylation. Differential response in Syrian hamster embryo tumor suppressor phenotypes. Glasgow WC, et al. **J Biol Chem** 1997 Aug 1;272(31):19269–76

Effects of dibutyryl cyclic adenosine monophosphate on nucleolar organizer regions and epidermal growth factor receptor of Dunn osteosarcoma cells. Kanamori M, et al. **J Exp Clin Cancer Res** 1997 Jun;16(2):135–9

Design and synthesis of novel tyrosine kinase inhibitors using a pharmacophore model of the ATP–binding site of the EGF–R. Traxler P, et al. **J Pharm Belg** 1997 Mar–Apr; 52(2):88–96 (26 ref.)

Cell–surface perturbations of the epidermal growth factor and vascular endothelial growth factor receptors by phosphorothioate oligodeoxynucleotides. Rockwell P, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6523–8

Mechanism of toxic action of 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD) in cultured human luteinized granulosa cells. Enan E, et al. **Reprod Toxicol** 1996 Nov–Dec;10(6):497–508

Methoxychlor mimics the action of 17 beta–estradiol on induction of uterine epidermal growth factor receptors in immature female rats. Metcalf JL, et al. **Reprod Toxicol** 1996 Sep–Oct;10(5):393–9

Down regulation of epidermal growth factor receptors in rat hepatocytes treated with clofibric acid. Tanaka K, et al. **Toxicol Lett** 1997 Mar 14;91(1):25–30

Time–dependent alteration of epidermal growth factor receptor in rat stomach by ethanol feeding. Wang SL, et al. **Toxicol Lett** 1997 Feb 7;90(2–3):115–23

GENETICS

Genetically null mice reveal a central role for epidermal growth factor receptor in the differentiation of the hair follicle and normal hair development. Hansen LA, et al. **Am J Pathol** 1997 Jun;150(6):1959–75

EGF receptor mRNA and protein in rat lacrimal acinar cells: evidence of its EGF–dependent phosphotyrosilation. Marechal H, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1164–74

In vivo and in vitro effects of epidermal growth factor on its receptor gene expression in rat dental follicle cells. Lin F, et al. **Arch Oral Biol** 1996 May;41(5):485–91

Epidermal growth factor and epidermal growth factor–receptor expression in the mouse dental follicle during tooth eruption. Shroff B, et al. **Arch Oral Biol** 1996 Jun;41(6):613–7

Efficient gene transfer to EGF receptor overexpressing cancer cells by means of EGF–labeled cationic liposomes. Kikuchi A, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):666–71

Association of EGFR gene amplification and CDKN2 (p16/MTS1) gene deletion in glioblastoma multiforme. Hayashi Y, et al. **Brain Pathol** 1997 Jul;7(3):871–5

Antisense estrogen receptor RNA expression increases epidermal growth factor receptor gene expression in breast cancer cells. deFazio A, et al. **Cell Growth Differ** 1997 Aug; 8(8):903–11

Stepwise transformation of astrocytes by simian virus 40 large T antigen and epidermal growth factor receptor overexpression. Frisa PS, et al. **Cell Growth Differ** 1996 Feb;7(2):223–33

The EGFR gene family in embryonic cell activities. Adamson ED, et al. **Curr Top Dev Biol** 1997;35:71–120 (321 ref.)

The m1 muscarinic acetylcholine receptor transactivates the EGF receptor to modulate ion channel activity. Tsai W, et al. **EMBO J** 1997 Aug 1;16(15):4597–605

The stability of truncated epidermal growth factor receptor mRNA is higher than that of the full–length receptor mRNA in rat hepatoma cells. Satoh Y, et al. **Endocr J** 1997 Jun;44(3):403–8

Role of the Drosophila EGF receptor in determination of the dorsoventral domains of escargot expression during primary neurogenesis. Yagi Y, et al. **Genes Cells** 1997 Jan; 2(1):41–53

Vein is a novel component in the Drosophila epidermal growth factor receptor pathway with similarity to the neuregulins. Schnepp B, et al. **Genes Dev** 1996 Sep 15; 10(18):2302–13

Mutational analysis of the nucleotide binding site of the epidermal growth factor receptor and v–Src protein–tyrosine kinases. Chan CI, et al. **J Biol Chem** 1996 Sep 13;271(37):22619–23

The enhanced tumorigenic activity of a mutant epidermal growth factor receptor common in human cancers is mediated by threshold levels of constitutive tyrosine phosphorylation and unattenuated signaling. Huang HS, et al. **J Biol Chem** 1997 Jan 31;272(5):2927–35

Epidermal growth factor, epidermal growth factor receptor, and transforming growth factor–alpha in human hyperplastic prostate tissue: expression and cellular localization. De Bellis A, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4148–54

In vivo estrogen regulation of epidermal growth factor receptor in human endometrium. McBean JH, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1467–71

Analysis of p53 mutation and epidermal growth factor receptor amplification in recurrent gliomas with malignant progression. Reifenberger J, et al. **J Neuropathol Exp Neurol** 1996 Jul;55(7):822–31

Determination of p53 mutations, EGFR overexpression, and loss of p16 expression in pediatric glioblastomas. Sure U, et al. **J Neuropathol Exp Neurol** 1997 Jul;56(7):782–9

The significance of Ras guanine nucleotide exchange factor, son of sevenless protein, in renal cell carcinoma cell lines. Shinohara N, et al. **J Urol** 1997 Sep;158(3 Pt 1):908–11

Combined immunocytochemistry and PRINS DNA synthesis for simultaneous detection of phenotypic and genomic parameters in cells. Speel EJ, et al. **Methods Mol Biol** 1997; 71:53–9 (15 ref.)

Transcriptional activation of the human epidermal growth factor receptor promoter by human p53. Ludes–Meyers JH, et al. **Mol Cell Biol** 1996 Nov;16(11):6009–19

RT–PCR–based method to localize the spatial expression of genes in the mouse blastocyst. Brison DR, et al. **Mol Reprod Dev** 1996 Jun;44(2):171–8

A 1.8 kb alternative transcript from the human epidermal growth factor receptor gene encodes a truncated form of the receptor. Reiter JL, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4050–6

Epidermal growth factor receptor gene and c–erbB–2 gene amplification in ovarian cyst fluid. Reimer T, et al. **Obstet Gynecol** 1996 Dec;88(6):967–72

D–Cbl, the Drosophila homologue of the c–Cbl proto–oncogene, interacts with the Drosophila EGF receptor in vivo, despite lacking C–terminal adaptor binding sites. Hime GR, et al. **Oncogene** 1997 Jun 5; 14(22):2709–19

Identification of an additional p53–responsive site in the human epidermal growth factor receptor gene promotor. Sheikh MS, et al. **Oncogene** 1997 Aug 28;15(9):1095–101

Expression of the epidermal growth factor receptor gene in human intestinal metaplasia: a preliminary report. Granelli P, et al. **Scand J Gastroenterol** 1997 May;32(5):485–9

The expression of receptors for estrogen and epithelial growth factor in the male rabbit prostate and prostatic urethra following castration. Bødker A, et al. **Scand J Urol Nephrol** 1997 Feb;31(1):15–8

Developmental expression and CORT–regulation of TGF–beta and EGF receptor mRNA during mouse palatal morphogenesis: correlation between CORT–induced cleft palate and TGF–beta 2 mRNA expression. Jaskoll T, et al. **Teratology** 1996 Jul;54(1):34–44

[Detection of an "autocrine loop" between EGF receptor and TGF–alpha in head–neck carcinomas] Issing WJ. **Laryngorhinootologie** 1997 Jul;76(7):415–20 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

The effect of ionizing radiation on signal transduction: antibodies to EGF receptor sensitize A431 cells to radiation. Balaban N, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):147–56

Immunoconjugates made of an anti–EGF receptor monoclonal antibody and type 1 ribosome–inactivating proteins from Saponaria ocymoides or Vaccaria pyramidata. Di Massimo AM, et al. **Br J Cancer** 1997; 75(6):822–8

Construction and functional characterization of scFv(14E1)–ETA – a novel, highly potent antibody–toxin specific for the EGF receptor. Schmidt M, et al. **Br J Cancer** 1997;75(11):1575–84

Intratumoral infusion of the monoclonal antibody, mAb 425, against the epidermal–growth–factor receptor in patients with advanced malignant glioma. Wersäll P, et al. **Cancer Immunol Immunother** 1997 May;44(3):157–64

A naturally occurring mutant human epidermal growth factor receptor as a target for peptide vaccine immunotherapy of tumors. Moscatello DK, et al. **Cancer Res** 1997 Apr 15;57(8):1419–24

Improved targeting of an anti–epidermal growth factor receptor variant III monoclonal antibody in tumor xenografts after labeling using N–succinimidyl 5–iodo–3–pyridinecarboxylate. Reist CJ, et al. **Cancer Res** 1997 Apr 15;57(8):1510–5

Radioiodination of internalizing monoclonal antibodies using N–succinimidyl 5–iodo–3–pyridinecarboxylate. Reist CJ, et al. **Cancer Res** 1996 Nov 1;56(21):4970–7

Anti–tumor activity of monoclonal antibody CIBCNSH3 generated to the human EGF receptor. Udayachander M, et al. **Hum Antibodies** 1997;8(2):60–4

Monoclonal antibodies specific for peptide epitopes of the epidermal growth factor receptor's extracellular domain. Baron AT, et al. **Hybridoma** 1997 Jun;16(3):259–71

Biodistribution of 125I–MAb 425 in a human glioma xenograft model: effect of chloroquine. Emrich JG, et al. **Hybridoma** 1997 Feb;16(1):93–100

Humanization of a mouse monoclonal antibody that blocks the epidermal growth factor receptor: recovery of antagonistic activity. Mateo C, et al. **Immunotechnology** 1997 Mar;3(1):71–81

Cross–reaction between antibodies raised against the last 20 C–terminal amino acids of BRCA 1 (C–20) and human EGF and EGF–R in MCF 10a human mammary epithelial cell line [letter] Bernard–Gallon DJ, et al. **Int J Cancer** 1997 Mar 28;71(1):123–6

Cytolytic and cytostatic properties of an anti–human Fc gammaRI (CD64) x epidermal growth factor bispecific fusion protein. Goldstein J, et al. **J Immunol** 1997 Jan 15; 158(2):872–9

A model system for detection and isolation of a tumor cell surface antigen using antibody phage display. Pereira S, et al. **J Immunol Methods** 1997 Apr 11;203(1):11–24

The biologic effects of C225, a chimeric monoclonal antibody to the EGFR, on human prostate carcinoma. Prewett M, et al. **J Immunother Emphasis Tumor Immunol** 1996 Nov; 19(6):419–27

A phase I study of an anti–epidermal growth factor receptor monoclonal antibody for the treatment of malignant gliomas. Faillot T, et al. **Neurosurgery** 1996 Sep; 39(3):478–83

Recombinant immunotoxins specific for a mutant epidermal growth factor receptor: targeting with a single chain antibody variable domain isolated by phage display. Lorimer IA, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14815–20

Transforming growth factor–alpha (TGF–alpha) and epidermal growth factor–receptor (EGF–R) immunoreactivity in normal and pathologic brain. Ferrer I, et al. **Prog Neurobiol** 1996 Jun;49(2):99–123 (110 ref.)

METABOLISM

Chronic ethanol feeding alters the structure and function of the epidermal growth factor receptor in rat stomach. Wang SL, et al. **Alcohol** 1996 Sep–Oct;13(5):461–6

Expression of nerve growth factor and epidermal growth factor receptors in neural nevi with nevic corpuscles. Argenyi ZB, et al. **Am J Dermatopathol** 1996 Oct; 18(5):460–4

Genetically null mice reveal a central role for epidermal growth factor receptor in the differentiation of the hair follicle and normal hair development. Hansen LA, et al. **Am J Pathol** 1997 Jun;150(6):1959–75

Distribution of epidermal growth factor receptor and ligands during bronchiolar epithelial repair from naphthalene–induced Clara cell injury in the mouse. Van Winkle LS, et al. **Am J Pathol** 1997 Aug;151(2):443–59

Met –/– kidneys express epithelial cells that chemotax and form tubules in response to EGF receptor ligands. Kjelsberg C, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):F222–8

TGF–beta isoforms differentially attenuate EGF mitogenicity and receptor activity in fetal lung mesenchymal cells. Lee M, et al. **Am J Physiol** 1997 Aug; 273(2 Pt 1):L374–81

The epidermal growth factor receptor network in type 2 pneumocytes exposed to hyperoxia in vitro. Nici L, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):L242–50

Identification of an EGF/TGF–alpha receptor in primary cultures of guinea pig gastric mucous epithelial cells. Rutten MJ, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):G604–12

EGF receptor ligands are a large fraction of in vitro branching morphogens secreted by embryonic kidney. Sakurai H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F463–72

Increased expression of EGFR in gastric mucosa of aged rats. Tureaud J, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G389–98

Immunohistochemical expression of transforming growth factor alpha and epidermal growth factor receptor in gastrointestinal carcinoids. Krishnamurthy S, et al. **Am J Surg Pathol** 1997 Mar;21(3):327–33

Immunohistochemical studies on the expression and estrogen dependency of EGF and its receptor and C–fos proto–oncogene in the uterus and vagina of normal and neonatally estrogen–treated mice. Falck L, et al. **Anat Rec** 1996 Jul;245(3):459–71

Sensory epithelium of the vomeronasal organ express TrkA–like and epidermal growth factor receptor in adulthood. An immunohistochemical study in the horse. Garcia–Suarez O, et al. **Anat Rec** 1997 Mar;247(3):299–306

Transient exposure to cytarabine increases peptide growth factor receptor expression and tumorigenicity of melanoma cells. Caraglia M, et al. **Anticancer Res** 1997 Jul–Aug; 17(4A):2369–75

Overexpression of EGF receptor is associated with spontaneous metastases of a human melanoma cell line in nude mice. Huang TS, et al. **Anticancer Res** 1996 Nov–Dec; 16(6B):3557–63

A new function for phospholipase C–gamma1: coupling to the adaptor protein GRB2. Pei Z, et al. **Arch Biochem Biophys** 1997 Sep 1;345(1):103–10

The EGF receptor binding of recombinant heregulinbeta1/EGF hybrids is blocked by heregulin residue glutamate 195. Chau BN, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):882–6

Changes in the binding capacity of hepatic membranes for epidermal growth factor during multistage hepatocarcinogenesis in rats. DeCicco LA, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):69–74

The mitogenic response to EGF of rat hepatocytes cultured on laminin–rich gels (EHS) is blocked downstream of receptor tyrosine–phosphorylation. Gardner MJ, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):238–45

Epidermal growth factor receptor stimulation of diacylglycerol kinase. Montgomery RB, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):111–6

The protein tyrosine phosphatase LAR has a major impact on insulin receptor dephosphorylation. Mooney RA, et al.

Biochem Biophys Res Commun 1997 Jun 27;235(3):709–12
Receptor dimerization is not a factor in the signalling activity of a transforming variant epidermal growth factor receptor (EGFRvIII). Chu CT, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):855–61
Identification of ErbB3-stimulated genes using modified representational difference analysis. Edman CF, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):113–8
Signal transduction through epidermal growth factor receptor is altered in HeLa monolayer cells during mitosis. Klein S, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):937–46
Characterization of the C-terminal domain of ras-GTPase-activating protein (ras-GAP) as substrate for epidermal growth factor receptor and p60c-src kinase. Borowski P, et al. **Biochem Mol Biol Int** 1996 Jun; 39(3):635–46
A comparison of epidermal growth factor receptor-mediated mitogenic signaling in response to transforming growth factor alpha and epidermal growth factor in cultured fetal rat hepatocytes. Lipeski LE, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):975–83
Decreased binding and autophosphorylation of the epidermal growth factor receptor in ethanol-fed rats. O'Rourke MF, et al. **Biochem Pharmacol** 1997 May 15;53(10):1445–50
Tyrosine dephosphorylation in the gut. King MJ, et al. **Biochem Soc Trans** 1996 May;24(2):298S
Insufficiency of self-phosphorylation for the activation of epidermal growth factor receptor. Sherrill JM. **Biochemistry** 1997 May 13;36(19):5677–84
Inhibition of tyrosine kinase activity decreases expression of surfactant protein A in a human lung adenocarcinoma cell line independent of epidermal growth factor receptor. Klein JM, et al. **Biochim Biophys Acta** 1997 Mar 1; 1355(3):218–30
Phosphorylation of calmodulin by permeabilized fibroblasts overexpressing the human epidermal growth factor receptor. De Frutos T, et al. **Biol Chem** 1997 Jan; 378(1):31–7
A tyrosine-phosphorylated protein of 140 kD is constitutively associated with the phosphotyrosine binding domain of Shc and the SH3 domains of Grb2 in acute myeloid leukemia cells. Jücker M, et al. **Blood** 1997 Mar 15;89(6):2024–35
An enhanced and sensitive autocrine stimulation by transforming growth factor-alpha is acquired in the brain metastatic variant of a human non-small-cell lung cancer cell line. Fang K. **Br J Cancer** 1996 Dec;74(11):1776–82
MDM2 and p53 expression in gliomas: a multivariate survival analysis including proliferation markers and epidermal growth factor receptor. Korkolopoulou P, et al. **Br J Cancer** 1997;75(9):1269–78
Prognostic significance of epidermal growth factor receptor in laryngeal squamous cell carcinoma. Maurizi M, et al. **Br J Cancer** 1996 Oct;74(8):1253–7
Epidermal growth factor (EGF) and EGF receptor in hypospadias. el-Galley RE, et al. **Br J Urol** 1997 Jan; 79(1):116–9
Epidermal growth factor receptor in human hepatocellular carcinoma. Hamazaki K, et al. **Cancer Detect Prev** 1997; 21(4):355–60
Two- and three-dimensional cell structures govern epidermal growth factor survival function in human bladder carcinoma cell lines. Dangles V, et al. **Cancer Res** 1997 Aug 15;57(16):3360–4
Wilms' tumor 1-KTS isoforms induce p53-independent apoptosis that can be partially rescued by expression of the epidermal growth factor receptor or the insulin receptor. Menke AL, et al. **Cancer Res** 1997 Apr 1; 57(7):1353–63
Coexpression of Grb7 with epidermal growth factor receptor or Her2/erbB2 in human advanced esophageal carcinoma. Tanaka S, et al. **Cancer Res** 1997 Jan 1;57(1):28–31
Cell surface localization and density of the tumor-associated variant of the epidermal growth factor receptor, EGFRvIII. Wikstrand CJ, et al. **Cancer Res** 1997 Sep 15; 57(18):4130–40
Reiterative use of the EGF receptor triggers differentiation of all cell types in the Drosophila eye. Freeman M. **Cell** 1996 Nov 15;87(4):651–60
Heregulin (HRG)-induced mitogenic signaling and cytotoxic activity of a HRG/PE40 ligand toxin in human breast cancer cells. Fiddes RJ, et al. **Cell Growth Differ** 1995 Dec; 6(12):1567–77
Association of p120 ras GAP with endocytic components and colocalization with epidermal growth factor (EGF) receptor in response to EGF stimulation. Wang Z, et al. **Cell Growth Differ** 1996 Jan;7(1):123–33
Prognostic significance of c-erbB-2/neu amplification and epidermal growth factor receptor (EGFR) in primary breast cancer and their relation to estradiol receptor (ER) status. Torregrosa D, et al. **Clin Chim Acta** 1997 Jun 27; 262(1-2):99–119
EGF receptor signaling enhances in vivo invasiveness of DU-145 human prostate carcinoma cells. Turner T, et al. **Clin Exp Metastasis** 1996 Sep;14(4):409–18
Elevated epidermal growth factor receptor levels in hypertensive Lyon rat kidney and aorta. Swaminathan N, et al. **Clin Exp Pharmacol Physiol** 1996 Sep;23(9):793–6
Fibroblast growth factor and epidermal growth factor receptors in ligament healing. Panossian V, et al. **Clin Orthop** 1997 Sep;(342):173–80
Multiple forms of an inositol polyphosphate 5-phosphatase form signaling complexes with Shc and Grb2. Kavanaugh WM, et al. **Curr Biol** 1996 Apr 1;6(4):438–45
Immunolocalization of transforming growth factor-alpha and its receptor in the normal and hyperoxia-exposed neonatal rat retina. Powers MR, et al. **Curr Eye Res** 1997 Mar; 16(3):177–82
The epidermal growth factor receptor and its ligands as therapeutic targets in human tumors. Rusch V, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):133–41 (64 ref.)
Pointed, an ETS domain transcription factor, negatively regulates the EGF receptor pathway in Drosophila oogenesis. Morimoto AM, et al. **Development** 1996 Dec; 122(12):3745–54
Kinase-negative mutant epidermal growth factor receptor (EGFR) expression during embryonal stem cell differentiation favours EGFR-independent lineages. Wu JX, et al. **Development** 1996 Oct;122(10):3331–42
Immunohistochemical studies on EGF family growth factors in normal and ulcerated human gastric mucosa. Abe S, et al. **Dig Dis Sci** 1997 Jun;42(6):1199–209
Suppression of constitutive cytochrome P450 gene expression by epidermal growth factor receptor ligands in cultured rat hepatocytes. Ching KZ, et al. **Drug Metab Dispos** 1996 May;24(5):542–6
Opposite effects of the p52shc/p46shc and p66shc splicing isoforms on the EGF receptor-MAP kinase-fos signalling pathway. Migliaccio E, et al. **EMBO J** 1997 Feb 17; 16(4):706–16
The m1 muscarinic acetylcholine receptor transactivates the EGF receptor to modulate ion channel activity. Tsai W, et al. **EMBO J** 1997 Aug 1;16(15):4597–605
Changes in expression of epidermal growth factor receptors by anterior pituitary cells during the estrous cycle: cyclic expression by gonadotropes. Armstrong J, et al. **Endocrinology** 1997 May;138(5):1903–8
Expression of epidermal growth factor, epidermal growth factor receptor and transforming growth factor-alpha in the human fetal inner ear. Yamashita H, et al. **Eur Arch Otorhinolaryngol** 1996;253(8):494–7
Identification of an ubiquitin-ligation system for the epidermal-growth-factor receptor--herbimycin A induces in vitro ubiquitination in rabbit-reticulocyte lysate. Mori S, et al. **Eur J Biochem** 1997 Aug 1;247(3):1190–6
A comparison of epidermal growth factor receptor levels and other prognostic parameters in non-small cell lung cancer. Fujino S, et al. **Eur J Cancer** 1996 Nov; 32A(12):2070–4
Epidermal growth factor family and renal cell carcinoma: expression and prognostic impact. Hofmockel G, et al. **Eur Urol** 1997;31(4):478–84
Aging affects epidermal growth factor receptor phosphorylation and traffic kinetics. Reenstra WR, et al. **Exp Cell Res** 1996 Sep 15;227(2):252–5
The actin binding domain of the epidermal growth factor receptor is required for EGF-stimulated tissue invasion. van der Heyden MA, et al. **Exp Cell Res** 1997 Aug 1; 234(2):521–6
Upregulation of epidermal growth factor and its receptor in the kidneys of rats with streptozotocin-induced diabetes. Sayed-Ahmed N, et al. **Exp Nephrol** 1996 Nov-Dec; 4(6):330–9
The ErbB signaling network in embryogenesis and oncogenesis: signal diversification through combinatorial ligand-receptor interactions. Alroy I, et al. **FEBS Lett** 1997 Jun 23;410(1):83–6 (47 ref.)
Identification of an intracellular domain of the EGF receptor required for high-affinity binding of EGF. Van der Heyden MA, et al. **FEBS Lett** 1997 Jun 30;410(2-3):265–8
Vein is a novel component in the Drosophila epidermal growth factor receptor pathway with similarity to the neuregulins. Schnepp B, et al. **Genes Dev** 1996 Sep 15; 10(18):2302–13
Mutation in Sos1 dominantly enhances a weak allele of the EGFR, demonstrating a requirement for Sos1 in EGFR signaling and development. Wang DZ, et al. **Genes Dev** 1997 Feb 1;11(3):309–20
Analysis of the glycosylation patterns of the extracellular domain of the epidermal growth factor receptor expressed in Chinese hamster ovary fibroblasts. Smith KD, et al. **Growth Factors** 1996;13(1-2):121–32
Influence of goserelin depot therapy on epidermal growth factor receptor expression in pelvic endometriosis. Di Lieto A, et al. **Gynecol Endocrinol** 1997 Feb;11(1):17–20
Relationship between c-erbB-2 oncoprotein, epidermal growth factor receptor, and estrogen receptor expression in patients with ductal breast carcinoma. Association with tumor phenotypes. Harłozińska A, et al. **In Vivo** 1996 Mar-Apr;10(2):217–22
mRNA expression of ligands of the epidermal-growth-factor-receptor in the uterus. Pfeiffer D, et al. **Int J Cancer** 1997 Aug 7;72(4):581–6
Binding, internalization and degradation of EGF-dextran conjugates in two human bladder-cancer cell lines. Sjöström A, et al. **Int J Cancer** 1997 Feb 7;70(4):383–9
Induction of EGF receptor and erbB-2 during endotoxin-induced alveolar type II cell proliferation in the rat lung. Tesfaigzi J, et al. **Int J Exp Pathol** 1996 Aug; 77(4):143–54
Detection of EGF-induced EGF receptor degradation and tyrosine phosphorylation in intact cells. Yang EB, et al. **J Biochem Biophys Methods** 1996 May 14;32(2):97–108
Ligand-binding enhances the affinity of dimerization of the extracellular domain of the epidermal growth factor receptor. Odaka M, et al. **J Biochem (Tokyo)** 1997 Jul; 122(1):116–21
Phosphorylation of Cbl following stimulation with interleukin-3 and its association with Grb2, Fyn, and phosphatidylinositol 3-kinase. Anderson SM, et al. **J Biol Chem** 1997 Jan 10;272(2):739–45
Unliganded epidermal growth factor receptor dimerization induced by direct interaction of quinazolines with the ATP binding site. Arteaga CL, et al. **J Biol Chem** 1997 Sep 12; 272(37):23247–54
Efficient cellular transformation by the Met oncoprotein requires a functional Grb2 binding site and correlates with phosphorylation of the Grb2-associated proteins, Cbl and Gab1. Fixman ED, et al. **J Biol Chem** 1997 Aug 8; 272(32):20167–72
Secondary dimerization between members of the epidermal growth factor receptor family. Gamett DC, et al. **J Biol Chem** 1997 May 2;272(18):12052–6
A raf-independent epidermal growth factor receptor autocrine loop is necessary for Ras transformation of rat intestinal epithelial cells. Gangarosa LM, et al. **J Biol Chem** 1997 Jul 25;272(30):18926–31
Ultraviolet B-induced activated protein-1 activation does not require epidermal growth factor receptor but is blocked by a dominant negative PKClambda/iota. Huang C, et al. **J Biol Chem** 1996 Dec 6;271(49):31262–8
Enhancement of guanine-nucleotide exchange activity of C3G for Rap1 by the expression of Crk, CrkL, and Grb2. Ichiba T, et al. **J Biol Chem** 1997 Aug 29;272(35):22215–20
Signaling inositol polyphosphate-5-phosphatase. Characterization of activity and effect of GRB2 association. Jefferson AB, et al. **J Biol Chem** 1997 Feb 28;272(9):5983–8
Regulation of phosphatidic acid phosphohydrolase by epidermal growth factor. Reduced association with the EGF receptor followed by increased association with protein kinase Cepsilon. Jiang Y, et al. **J Biol Chem** 1996 Nov 22;271(47):29529–32
Mitosis-specific negative regulation of epidermal growth factor receptor, triggered by a decrease in ligand binding and dimerization, can be overcome by overexpression of receptor. Kiyokawa N, et al. **J Biol Chem** 1997 Jul 25; 272(30):18656–65
Lysosomal targeting of epidermal growth factor receptors via a kinase-dependent pathway is mediated by the receptor carboxyl-terminal residues 1022–1123. Kornilova E, et al. **J Biol Chem** 1996 Nov 29;271(48):30340–6
Gastrin stimulates tyrosine phosphorylation of insulin receptor substrate 1 and its association with Grb2 and the phosphatidylinositol 3-kinase. Kowalski-Chauvel A, et al. **J Biol Chem** 1996 Oct 18;271(42):26356–61
Tyrosine phosphorylation of GSalpha and inhibition of bradykinin-induced activation of the cyclic AMP pathway in A431 cells by epidermal growth factor receptor. Liebmann C, et al. **J Biol Chem** 1996 Dec 6; 271(49):31098–105
SH3 domain-dependent association of huntingtin with epidermal growth factor receptor signaling complexes. Liu YF, et al. **J Biol Chem** 1997 Mar 28;272(13):8121–4
Gbetagamma subunits mediate Src-dependent phosphorylation of the epidermal growth factor receptor. A scaffold for G protein-coupled receptor-mediated Ras activation. Luttrell LM, et al. **J Biol Chem** 1997 Feb 14; 272(7):4637–44
NMR study of the transforming growth factor-alpha (TGF-alpha)-epidermal growth factor receptor complex. Visualization of human TGF-alpha binding determinants through nuclear Overhauser enhancement analysis. McInnes C, et al. **J Biol Chem** 1996 Dec 13; 271(50):32204–11
Functional characterization of an epidermal growth factor receptor/RET chimera. Pandit SD, et al. **J Biol Chem** 1997 Jan 24;272(4):2199–206
Gene transfection-mediated overexpression of beta1,4-N-acetylglucosamine bisecting oligosaccharides in glioma cell line U373 MG inhibits epidermal growth factor receptor function. Rebbaa A, et al. **J Biol Chem** 1997 Apr 4;272(14):9275–9
Functional roles of the Shc phosphotyrosine binding and Src homology 2 domains in insulin and epidermal growth factor signaling. Ricketts WA, et al. **J Biol Chem** 1996 Oct 18; 271(42):26165–9
Controlling epidermal growth factor (EGF)-stimulated Ras activation in intact cells by a cell-permeable peptide mimicking phosphorylated EGF receptor. Rojas M, et al. **J Biol Chem** 1996 Nov 1;271(44):27456–61
The juxtamembrane, cytosolic region of the epidermal growth factor receptor is involved in association with alpha-subunit of Gs. Sun H, et al. **J Biol Chem** 1997 Feb 28;272(9):5413–20
Both SH2 domains are involved in interaction of SHP-1 with the epidermal growth factor receptor but cannot confer receptor-directed activity to SHP-1/SHP-2 chimera. Tenev T, et al. **J Biol Chem** 1997 Feb 28;272(9):5966–73
Differential utilization of ShcA tyrosine residues and functional domains in the transduction of epidermal growth factor-induced mitogen-activated protein kinase activation in 293T cells and nerve growth factor-induced neurite outgrowth in PC12 cells. Identification of a new Grb2.Sos1 binding site. Thomas D, et al. **J Biol Chem** 1997 Aug 29; 272(35):22293–9
Epidermal growth factor induces ubiquitination of Eps15.

van Delft S, et al. **J Biol Chem** 1997 May 30; 272(22):14013–6

Saturation of the endocytic pathway for the transferrin receptor does not affect the endocytosis of the epidermal growth factor receptor. Warren RA, et al. **J Biol Chem** 1997 Jan 24;272(4):2116–21

Structural aspects of the epidermal growth factor receptor required for transmodulation of erbB–2/neu. Worthylake R, et al. **J Biol Chem** 1997 Mar 28;272(13):8594–601

A dominant role of the juxtamembrane region of the TrkA nerve growth factor receptor during neuronal cell differentiation. Yoon SO, et al. **J Biol Chem** 1997 Sep 12; 272(37):23231–8

Expression of epidermal growth factor receptor in gestational trophoblastic diseases. Balaram P, et al. **J Cancer Res Clin Oncol** 1997;123(3):161–6

Cytoskeletal association of epidermal growth factor receptor and associated signaling proteins is regulated by cell density in IEC–6 intestinal cells. Bedrin MS, et al. **J Cell Physiol** 1997 Jul;172(1):126–36

Immunohistochemical localization of transforming growth factor–alpha, epidermal growth factor (EGF), and EGF receptor in the human fetal ovary. Bennett RA, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3073–6

Epidermal growth factor receptors in uteroplacental tissues in term pregnancy before and after the onset of labor. Gargiulo AR, et al. **J Clin Endocrinol Metab** 1997 Jan; 82(1):113–7

EGF receptor activation stimulates endogenous gastrin gene expression in canine G cells and human gastric cell cultures. Ford MG, et al. **J Clin Invest** 1997 Jun 1;99(11):2762–71

Prenatal ontogeny of the epidermal growth factor receptor and its ligand, transforming growth factor alpha, in the rat brain. Kornblum HI, et al. **J Comp Neurol** 1997 Apr 7;380(2):243–61

c–neu oncoprotein in developing rostral cerebral cortex: relationship to epidermal growth factor receptor. Kuhn PE, et al. **J Comp Neurol** 1996 Aug 19;372(2):189–203

Effects of dibutyryl cyclic adenosine monophosphate on nucleolar organizer regions and epidermal growth factor receptor of Dunn osteosarcoma cells. Kanamori M, et al. **J Exp Clin Cancer Res** 1997 Jun;16(2):135–9

Ligand activation of overexpressed epidermal growth factor receptor results in loss of epithelial phenotype and impaired RGD–sensitive integrin function in HSC–1 cells. Fujii K. **J Invest Dermatol** 1996 Aug;107(2):195–202

Increased epidermal growth factor receptor in fsn/fsn mice. Nanney LB, et al. **J Invest Dermatol** 1996 Jun; 106(6):1169–74

Ganglioside effects on basic fibroblast and epidermal growth factor receptors in retinal glial cells. Meuillet E, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):277–88

Inhibition of apolipoprotein B secretion by IL–6 is mediated by EGF or an EGF–like molecule in CaCo–2 cells. Murthy S, et al. **J Lipid Res** 1997 Feb;38(2):206–16

Structure–based design of a potent, selective, and irreversible inhibitor of the catalytic domain of the erbB receptor subfamily of protein tyrosine kinases. Singh J, et al. **J Med Chem** 1997 Mar 28;40(7):1130–5

Cochliobolic acid, a novel metabolite produced by Cochliobolus lunatus, inhibits binding of TGF–alpha to the EGF receptor in a SPA assay. Robinson N, et al. **J Nat Prod** 1997 Jan;60(1):6–8

Expression of epidermal growth factor receptor and human papillomavirus E6/E7 proteins in cervical carcinoma cells [see comments] Hu G, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1271–6. Comment in: J Natl Cancer Inst 1997 Sep 3;89(17):1243–6.

Expression and activation of epidermal growth factor receptors in meningiomas. Carroll RS, et al. **J Neurosurg** 1997 Aug;87(2):315–23

Lack of prognostic relevance of alterations in the epidermal growth factor receptor–transforming growth factor–alpha pathway in human astrocytic gliomas. Waha A, et al. **J Neurosurg** 1996 Oct;85(4):634–41

Urinary epidermal growth factor (EGF) levels and epidermal growth factor receptor (EGF–R) expression in human cerebral tumors. Clinical considerations. Bello L. **J Neurosurg Sci** 1996 Sep–Dec;40(3–4):167–82

Myofibroblasts of palmar fibromatosis co–express transforming growth factor–alpha and epidermal growth factor receptor. Magro G, et al. **J Pathol** 1997 Feb; 181(2):213–7

Regulation of epidermal growth factor receptor synthesis by ovarian steroids in human endometrial cells in culture. Watson H, et al. **J Reprod Fertil** 1996 Jul;107(2):199–205

Epidermal growth factor and transforming growth factor alpha mRNA expression in human breast cancer biopsies; analysis in relation to estradiol, progesterone and EGF receptor content. Artagaveytia N, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3–4):221–8

A defective EGF–receptor in waved–2 mice attenuates intestinal adaptation. Helmrath MA, et al. **J Surg Res** 1997 Apr;69(1):76–80

Epidermal growth factor receptor expression following small bowel resection. Warner BW, et al. **J Surg Res** 1997 Jul 1;70(2):171–7

Epstein–Barr virus LMP1 induction of the epidermal growth factor receptor is mediated through a TRAF signaling pathway distinct from NF–kappaB activation. Miller WE, et al. **J Virol** 1997 Jan;71(1):586–94

Immunohistochemical study of estradiol, epidermal growth factor, transforming growth factor alpha and epidermal growth factor receptor in endometrial neoplasia. Yokoyama Y, et al. **Jpn J Clin Oncol** 1996 Dec;26(6):411–6

Regulation of renal EGF receptor expression is normal in Denys–Drash syndrome. Vicanek C, et al. **Kidney Int** 1997 Sep;52(3):614–9

Differential requirement for EGF–like ligands in Drosophila wing development. Simcox A. **Mech Dev** 1997 Feb; 62(1):41–50

Enhanced expression of bcl–2 following antisense oligonucleotide mediated growth factor deprivation. Rubenstein M, et al. **Med Oncol** 1997 Mar;14(1):23–9

Interactions of Drosophila Cbl with epidermal growth factor receptors and role of Cbl in R7 photoreceptor cell development. Meisner H, et al. **Mol Cell Biol** 1997 Apr; 17(4):2217–25

Modulatory action of epidermal growth factor on differentiated human granulosa lutein cells: cross–talk between ligand activated receptors for EGF and gonadotropin. Budnik LT, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):141–50

Cellular distribution of EGF, TGFalpha and their receptor during postnatal development and spermatogenesis of the boar testis. Caussanel V, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):61–9

Autocrine mechanism of epidermal growth factor in choriocarcinoma cell proliferation. Nomura S, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):63–9

Response diversity and the timing of progenitor cell maturation are regulated by developmental changes in EGFR expression in the cortex. Burrows RC, et al. **Neuron** 1997 Aug;19(2):251–67

A simple luciferase assay for signal transduction activity detection of epidermal growth factor displayed on phage. Souriau C, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1585–90

Coupling of the murine protein tyrosine phosphatase PEST to the epidermal growth factor (EGF) receptor through a Src homology 3 (SH3) domain–mediated association with Grb2. Charest A, et al. **Oncogene** 1997 Apr 10; 14(14):1643–51

Induction of apoptosis by EGF receptor in rat mammary adenocarcinoma cells coincides with enhanced spontaneous tumour metastasis. Kaufmann AM, et al. **Oncogene** 1996 Dec 5;13(11):2349–58

Radiation–induced proliferation of the human A431 squamous carcinoma cells is dependent on EGFR tyrosine phosphorylation. Schmidt–Ullrich RK, et al. **Oncogene** 1997 Sep 4;15(10):1191–7

Induction of tyrosine phosphorylation and association of beta–catenin with EGF receptor upon tryptic digestion of quiescent cells at confluence. Takahashi K, et al. **Oncogene** 1997 Jul 3;15(1):71–8

EGF receptor binding and transformation by v–cbl is ablated by the introduction of a loss–of–function mutation from the Caenorhabditis elegans sli–1 gene. Thien CB, et al. **Oncogene** 1997 May 8;14(18):2239–49

The RIalpha subunit of protein kinase A (PKA) binds to Grb2 and allows PKA interaction with the activated EGF–receptor. Tortora G, et al. **Oncogene** 1997 Feb 27; 14(8):923–8

Activation of erbB2 and c–src in phorbol ester–treated mouse epidermis: possible role in mouse skin tumor promotion. Xian W, et al. **Oncogene** 1997 Mar 27;14(12):1435–44

Growth factors and their receptors in the anterior chamber. Absence of epidermal growth factor and transforming growth factor alpha in human aqueous humor. van Setten GB, et al. **Ophthalmic Res** 1996;28(6):361–4

Expression and localization of epidermal growth factor, transforming growth factor–alpha, and localization of their common receptor in fetal human lung development. Ruocco S, et al. **Pediatr Res** 1996 Mar;39(3):448–55

Impact of receptor downregulation on clearance of two human EGFs with different receptor binding activity. Sizemore N, et al. **Peptides** 1996;17(7):1229–36

Principles of receptor–based inhibition of erbB family receptor kinases: prospects for new therapies for human cancers. O'Rourke DM, et al. **Proc Assoc Am Physicians** 1997 May;109(3):209–19 (78 ref.)

Epidermal growth factor receptor activation induces nuclear targeting of cyclooxygenase–2, basolateral release of prostaglandins, and mitogenesis in polarizing colon cancer cells. Coffey RJ, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):657–62

Reduction in receptors for bombesin and epidermal growth factor in xenografts of human small–cell lung cancer after treatment with bombesin antagonist RC–3095. Halmos G, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):956–60

CrkII signals from epidermal growth factor receptor to Ras. Kizaka–Kondoh S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12177–82

Trans receptor inhibition of human glioblastoma cells by erbB family ectodomains. O'Rourke DM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3250–5

Effects of epidermal growth factor (EGF) and prolactin on EGF receptor cytoskeletal association in mammary epithelial cells. Prusheik K, et al. **Proc Soc Exp Biol Med** 1997 Sep;215(4):393–8

The functional importance of Leu15 of human epidermal growth factor in receptor binding and activation. Nandagopal K, et al. **Protein Eng** 1996 Sep;9(9):781–8

In situ activation pattern of Drosophila EGF receptor pathway during development. Gabay L, et al. **Science** 1997 Aug 22;277(5329):1103–6

Ultraviolet light and osmotic stress: activation of the JNK cascade through multiple growth factor and cytokine receptors. Rosette C, et al. **Science** 1996 Nov 15; 274(5290):1194–7

Control of EGF receptor signaling by clathrin–mediated endocytosis. Vieira AV, et al. **Science** 1996 Dec 20; 274(5295):2086–9

Epidermal growth factor receptor in the vesical urothelium of paraplegic and tetraplegic patients: an immunohistochemical study. van Velzen D, et al. **Spinal Cord** 1996 Oct;34(10):578–86

Epidermal growth factor receptors in rat ovarian tissue. Moreno–Cuevas J, et al. **Tissue Cell** 1997 Feb;29(1):55–62

Transforming growth factor–alpha, epidermal growth factor, and epidermal growth factor receptor in human testis obtained from biopsy and castration: immunohistochemical study. Nakazumi H, et al. **Tohoku J Exp Med** 1996 Apr; 178(4):381–8

Not all Shc's roads lead to Ras. Bonfini L, et al. **Trends Biochem Sci** 1996 Jul;21(7):257–61 (51 ref.)

Immunoreactivity of bcl–2, p53 and EGFr is associated with tumor stage, grade and cell proliferation in superficial bladder cancer. Finnbladder III Group. Liukkonen TJ, et al. **Urol Res** 1997;25(1):1–7

Evaluation of epidermal growth factor receptor, transforming growth factor alpha, epidermal growth factor and c–erbB2 in the progression of invasive bladder cancer. Ravery V, et al. **Urol Res** 1997;25(1):9–17

[Relationship between cellular DNA and expression of epidermal growth factor receptor in pleomorphic adenoma of lacrimal gland] Zheng L, et al. **Chung Hua Yen Ko Tsa Chih** 1996 Mar;32(2):133–5 (Eng. Abstr.) **(Chi)**

[Epidermal growth factor and estrogen receptors in the primary bone neoplasms] Kushlinskii NE, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):78–82 **(Rus)**

[The dependence of the type of endocytosis of EGF receptor complexes on the basal level of tyrosine kinase activity in the epidermal growth factor receptor] Avrov KO, et al. **Tsitologiia** 1996;38(10):1084–91 (Eng. Abstr.) **(Rus)**

[The association of a protein regulator of intracellular Rab7 membrane transport with endosomes containing an epidermal growth factor receptor with activated and inactivated tyrosine kinase] Blagoveshchenskaia AD, et al. **Tsitologiia** 1996;38(8):854–62 (Eng. Abstr.) **(Rus)**

[The association of specific RNPs with the EGF receptor in A–431 cells] Konstantinova IM, et al. **Tsitologiia** 1996; 38(10):1103–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Epithelial induction in dermatofibroma: a role for the epidermal growth factor (EGF) receptor. Morgan MB, et al. **Am J Dermatopathol** 1997 Feb;19(1):35–40

Expression of transforming growth factor–alpha and epidermal growth factor receptor in middle ear cholesteatoma. Ergün S, et al. **Am J Otol** 1996 May; 17(3):393–6

Stearate inhibition of breast cancer cell proliferation. A mechanism involving epidermal growth factor receptor and G–proteins. Wickramasinghe NS, et al. **Am J Pathol** 1996 Mar;148(3):987–95

Epidermal growth factor receptor binding and biological activity in the ovary of goldfish, Carassius auratus. Pati D, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1065–72

MDA468 growth inhibition by EGF is associated with the induction of the cyclin–dependent kinase inhibitor p21WAF1. Xie W, et al. **Anticancer Res** 1997 Jul–Aug; 17(4A):2627–33

Growth inhibition of human lung adenocarcinoma cells by antibodies against epidermal growth factor receptor and by ganglioside GM3: involvement of receptor–directed protein tyrosine phosphatase(s). Suarez Pestana E, et al. **Br J Cancer** 1997;75(2):213–20

Epidermal growth factor receptor tyrosine kinase inhibitors as potential cancer chemopreventives. Kelloff GJ, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Aug;5(8):657–66 (108 ref.)

Targeted disruption of the epidermal growth factor receptor impairs growth of squamous papillomas expressing the v–ras(Ha) oncogene but does not block in vitro keratinocyte responses to oncogenic ras. Dlugosz AA, et al. **Cancer Res** 1997 Aug 1;57(15):3180–8

A common mutant epidermal growth factor receptor confers enhanced tumorigenicity on human glioblastoma cells by increasing proliferation and reducing apoptosis. Nagane M, et al. **Cancer Res** 1996 Nov 1;56(21):5079–86

Role of epidermal growth factor receptor and STAT–3 activation in autonomous proliferation of SUM–102PT human breast cancer cells. Sartor CI, et al. **Cancer Res** 1997 Mar 1;57(5):978–87

E–cadherin transfection down–regulates the epidermal growth factor receptor and reverses the invasive phenotype of human papilloma virus–transfected keratinocytes. Wilding J, et al. **Cancer Res** 1996 Nov 15;56(22):5285–92

Involvement of transforming growth factor alpha (TGFalpha) and epidermal growth factor receptor (EGFR) in sex hormone–induced prostatic dysplasia and the growth of an androgen–independent transplantable carcinoma of the prostate. Kaplan PJ, et al. **Carcinogenesis** 1996 Dec; 17(12):2571–9

There must be 50 ways to rule the signal: the case of the Drosophila EGF receptor. Perrimon N, et al. **Cell** 1997 Apr 4;89(1):13–6 (18 ref.)

Use of transgenic mice to study autocrine–paracrine signaling in lung morphogenesis and differentiation. Whitsett JA, et al. **Clin Perinatol** 1996 Dec;23(4):753–69 (54 ref.)

Drosophila development: a receptor for ommatidial recruitment [comment] Klämbt C. **Curr Biol** 1997 Mar 1; 7(3):R132–5. Comment on: Curr Biol 1997 Mar 1;7(3):166–75.

Requirement for EGF receptor signalling in neural recruitment during formation of Drosophila chordotonal sense organ clusters [see comments] Lage P, et al. **Curr Biol** 1997 Mar 1;7(3):166–75. Comment in: Curr Biol 1997 Mar 1;7(3):132–5.

Impaired lung branching morphogenesis in the absence of functional EGF receptor. Miettinen PJ, et al. **Dev Biol** 1997 Jun 15;186(2):224–36

EGF receptor signaling induces pointed P1 transcription and inactivates Yan protein in the Drosophila embryonic ventral ectoderm. Gabay L, et al. **Development** 1996 Nov; 122(11):3355–62

The Drosophila embryonic midline is the site of Spitz processing, and induces activation of the EGF receptor in the ventral ectoderm. Golembo M, et al. **Development** 1996 Nov;122(11):3363–70

Antagonism between EGFR and Wingless signalling in the larval cuticle of Drosophila. Szüts D, et al. **Development** 1997 Aug;124(16):3209–19

Epidermal growth factor induces glucose storage in transgenic 3T3–L1 adipocytes overexpressing epidermal growth factor receptors. Van Epps–Fung M, et al. **Diabetes** 1996 Nov;45(11):1619–25

Inhibition of parietal cell acid secretion is mediated by the classical epidermal growth factor receptor. Joshi V, et al. **Dig Dis Sci** 1997 Jun;42(6):1194–8

Adaptation of esophageal mucosa to acid– and pepsin–induced damage: role of nitric oxide and epidermal growth factor. Lanas AI, et al. **Dig Dis Sci** 1997 May; 42(5):1003–12

Overexpression of the epidermal growth factor receptor contributes to enhanced ligand–mediated motility in keratinocyte cell lines. McCawley LJ, et al. **Endocrinology** 1997 Jan;138(1):121–7

The epidermal growth factor receptor is not required for tumor necrosis factor–alpha action in normal mammary epithelial cells. Varela LM, et al. **Endocrinology** 1997 Sep; 138(9):3891–900

Induction of steroidogenic enzymes by potassium in cultured rat zona glomerulosa cells depends on calcium influx and intact protein synthesis. Yagci A, et al. **Endocrinology** 1996 Oct;137(10):4331–8

Induction of metalloproteinase (MMP1) expression by epidermal growth factor (EGF) receptor stimulation and serum deprivation in human breast tumour cells. Nutt JE, et al. **Eur J Cancer** 1996 Nov;32A(12):2127–35

The role of maternally derived epidermal growth factor and the epidermal growth factor receptor during organogenesis in the rat embryo. Tebbs CA, et al. **J Anat** 1997 May;190 (Pt 4):491–503

Epidermal growth factor (EGF)–induced generation of hydrogen peroxide. Role in EGF receptor–mediated tyrosine phosphorylation. Bae YS, et al. **J Biol Chem** 1997 Jan 3;272(1):217–21

The relationship between human epidermal growth–like factor receptor expression and cellular transformation in NIH3T3 cells. Cohen BD, et al. **J Biol Chem** 1996 Nov 29;271(48):30897–903

Interactions between Src homology (SH) 2/SH3 adapter proteins and the guanylnucleotide exchange factor SOS are differentially regulated by insulin and epidermal growth factor. Okada S, et al. **J Biol Chem** 1996 Oct 11; 271(41):25533–8

Divergence in signal transduction pathways of platelet–derived growth factor (PDGF) and epidermal growth factor (EGF) receptors. Involvement of sphingosine 1–phosphate in PDGF but not EGF signaling. Rani CS, et al. **J Biol Chem** 1997 Apr 18;272(16):10777–83

Differential Ca2+ signaling induced by activation of the epidermal growth factor and nerve growth factor receptors. Tinhofer I, et al. **J Biol Chem** 1996 Nov 29; 271(48):30505–9

Antisense repression of proto–oncogene c–Cbl enhances activation of the JAK–STAT pathway but not the ras pathway in epidermal growth factor receptor signaling. Ueno H, et al. **J Biol Chem** 1997 Mar 28;272(13):8739–43

Critical role of calcium– dependent epidermal growth factor receptor transactivation in PC12 cell membrane depolarization and bradykinin signaling. Zwick E, et al. **J Biol Chem** 1997 Oct 3;272(40):24767–70

EGF–R dependent regulation of keratinocyte survival. Rodeck U, et al. **J Cell Sci** 1997 Jan;110 (Pt 2):113–21

Interferon gamma induces prostaglandin G/H synthase–2 through an autocrine loop via the epidermal growth factor receptor in human bronchial epithelial cells. Asano K, et al. **J Clin Invest** 1997 Mar 1;99(5):1057–63

Heparin–binding ligands mediate autocrine epidermal growth factor receptor activation In skin organ culture. Stoll S, et al. **J Clin Invest** 1997 Sep 1;100(5):1271–81

Cell proliferation and expression of EGF, TGF–alpha, and EGF receptor in the developing primary palate. Iamaroon A, et al. **J Dent Res** 1996 Aug;75(8):1534–9

Activation of ribosomal protein S6 kinase in psoriatic lesions and cultured human keratinocytes by epidermal growth factor receptor ligands. Choi JH, et al. **J Invest Dermatol** 1997 Jan;108(1):98–102

Epidermal growth factor receptor family and chemosensitization [editorial; comment] Mendelsohn J, et al. **J Natl Cancer Inst** 1997 Mar 5;89(5):341–3 (45 ref.). Comment on: J Natl Cancer Inst 1997 Mar 5;89(5):365–73.

Binding of erythroagglutinating phytohemagglutinin lectin from Phaseolus vulgaris to the epidermal growth factor receptor inhibits receptor function in the human glioma cell line, U373 MG. Rebbaa A, et al. **J Neurochem** 1996 Dec;67(6):2265–72

Protein from chromaffin granules promotes survival of mesencephalic dopaminergic neurons by an EGF–receptor ligand–mediated mechanism. Krieglstein K, et al. **J Neurosci Res** 1997 Apr 1;48(1):18–30

Role of tyrosine specific phosphorylation of cellular proteins, especially EGF receptor and p125FAK in human lung cancer cells. Imaizumi M, et al. **Lung Cancer** 1997 May; 17(1):69–84

Fast receptor–induced formation of glycerophosphoinositol–4–phosphate, a putative novel intracellular messenger in the Ras pathway. Falasca M, et al. **Mol Biol Cell** 1997 Mar;8(3):443–53

A hierarchical network of interreceptor interactions determines signal transduction by Neu differentiation factor/neuregulin and epidermal growth factor. Tzahar E, et al. **Mol Cell Biol** 1996 Oct;16(10):5276–87

EGF–induced sustained tyrosine phosphorylation and decreased rate of down–regulation of EGF receptor in PC12h–R cells which show neuronal differentiation in response to EGF. Yamada M, et al. **Neurochem Res** 1996 Jul;21(7):815–22

A role for epidermal growth factor receptor, c–Src and focal adhesion kinase in an in vitro model for the progression of colon cancer. Brunton VG, et al. **Oncogene** 1997 Jan 23;14(3):283–93

Signal transduction through atypical PKCs, but not the EGF receptor, is necessary for UVC–induced AP–1 activation in immortal murine cells. Huang C, et al. **Oncogene** 1997 Apr 24;14(16):1945–54

Inhibition of epidermal growth factor receptor gene expression and function decreases proliferation of head and neck squamous carcinoma but not normal mucosal epithelial cells. Rubin Grandis J, et al. **Oncogene** 1997 Jul 24;15(4):409–16

Role of steroid hormone and growth factor receptors and proto–oncogenes in the behavior of human mammary epithelial cancer cells in vitro. Saxena S, et al. **Pathobiology** 1997;65(2):75–82

Insights into the physiology of TGF alpha and signaling through the EGF receptor revealed by gene targeting and acts of nature. Dunn AR, et al. **Princess Takamatsu Symp** 1994;24:276–89 (63 ref.)

Regulation of Bcl–xL expression in human keratinocytes by cell–substratum adhesion and the epidermal growth factor receptor. Rodeck U, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5067–72

A thousand and one roles for the Drosophila EGF receptor. Schweitzer R, et al. **Trends Genet** 1997 May;13(5):191–6 (56 ref.)

The antibody–neutralisation of PDGF, CSF–1, TGFb2,3, EGF and EGF–receptor in utero in pre–implantation mice. Holmes PV, et al. **Ups J Med Sci** 1997;102(1):41–8

RADIATION EFFECTS

UVB radiation affects the mobility of epidermal growth factor receptors in human keratinocytes and fibroblasts. Lirvall M, et al. **Biosci Rep** 1996 Jun;16(3):227–38

RECEPTORS, EPINEPHRINE see **RECEPTORS, ADRENERGIC**

RECEPTORS, ERYTHROPOIETIN

[Erythropoietin receptor] Komatsu N. **Nippon Rinsho** 1997 Apr;55 Suppl 2:508–11 (9 ref.) **(Jpn)**

[Role of c–jun in the inhibition of apoptosis through the erythropoietin receptor] Shimizu R, et al. **Rinsho Ketsueki** 1996 Jul;37(7):526–30 (5 ref.) **(Jpn)**

[Polycythemia's victory (letter)] Halvorsen S. **Tidsskr Nor Laegeforen** 1997 Feb 10;117(4):562–3 **(Nor)**

AGONISTS

Activation of the erythropoietin (EPO) receptor by bivalent anti–EPO receptor antibodies. Elliott S, et al. **J Biol Chem** 1996 Oct 4;271(40):24691–7

ANALYSIS

Lack of relationship between soluble erythropoietin receptor levels and erythroid parameters in anemic patients [letter; comment] Yoshida S, et al. **Blood** 1996 Oct 15;88(8):3246–7 . Comment on: Blood 1993 Oct 1;82(7):2088–95.

Erythropoietin receptors are expressed in the central nervous system of mid–trimester human fetuses. Li Y, et al. **Pediatr Res** 1996 Sep;40(3):376–80

BIOSYNTHESIS

Selective expression of mRNA coding for the truncated form of erythropoietin receptor in hematopoietic cells and its decrease in patients with polycythemia vera. Chiba S, et al. **Blood** 1997 Jul 1;90(1):97–104

CIS, a cytokine inducible SH2 protein, is a target of the JAK–STAT5 pathway and modulates STAT5 activation. Matsumoto A, et al. **Blood** 1997 May 1;89(9):3148–54

The erythropoietin receptor: biogenesis, dimerization, and intracellular signal transduction. Lodish HF, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:93–104 (59 ref.)

Role of alternative splicing of the rat erythropoietin receptor gene in normal and erythroleukemia cells. Fujita M, et al. **Leukemia** 1997 Apr;11 Suppl 3:444–5

Coexpression of Kit and the receptors for erythropoietin, interleukin 6 and GM–CSF on hemopoietic cells. de Jong MO, et al. **Stem Cells** 1997;15(4):275–85

CHEMISTRY

Conserved region of the cytoplasmic domain is not essential for erythropoietin–dependent growth. Hilton CJ, et al. **Growth Factors** 1995;12(4):263–76

Changes in conformation and stability upon formation of complexes of erythropoietin (EPO) and soluble EPO receptor. Narhi LO, et al. **J Protein Chem** 1997 Apr; 16(3):213–25

Refolding, purification, and characterization of human erythropoietin binding protein produced in Escherichia coli. Johnson DL, et al. **Protein Expr Purif** 1996 Feb; 7(1):104–13

DEFICIENCY

Thrombopoietin rescues in vitro erythroid colony formation from mouse embryos lacking the erythropoietin receptor. Kieran MW, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9126–31

DRUG EFFECTS

Erythropoietin activates Raf1 by an Shc–independent pathway in CTLL–EPO–R cells. Barber DL, et al. **Blood** 1997 Jan 1;89(1):55–64

Erythropoietin–induced erythroid differentiation of the human erythroleukemia cell line TF–1 correlates with impaired STAT5 activation. Chrétien S, et al. **EMBO J** 1996 Aug 15;15(16):4174–81

Effect of the interaction between transforming growth factor beta and erythropoietin on the proliferation of normal erythroid progenitors and leukemic UT–7 cells: action of transforming growth factor beta on the erythropoietin receptor. Leveque E, et al. **Hematol Oncol** 1996 Sep; 14(3):137–46

GENETICS

Familial erythrocytosis associated with a short deletion in the erythropoietin receptor gene. Arcasoy MO, et al. **Blood** 1997 Jun 15;89(12):4628–35

Ectopic expression of the erythropoietin receptor in a murine interleukin–6–dependent plasmacytoma cell line (TEPC–2027) confers proliferative responsiveness to erythropoietin. Féger F, et al. **Blood** 1997 Jan 15; 89(2):435–45

Cell–cycle–dependent regulation of erythropoietin receptor gene. Komatsu N, et al. **Blood** 1997 Feb 15;89(4):1182–8

Two new EPO receptor mutations: truncated EPO receptors are most frequently associated with primary familial and congenital polycythemias. Kralovics R, et al. **Blood** 1997 Sep 1;90(5):2057–61

Regulation of expression of the human erythropoietin receptor gene. Winter SS, et al. **Blood Cells Mol Dis** 1996; 22(3):214–24; discussion 224a

Alternative splicing of the erythropoietin receptor gene correlates with erythroid differentiation in rat hematopoietic and leukemic cells. Fujita M, et al. **Cancer Lett** 1997 Jan 15;112(1):47–55

Mutagenesis studies of the human erythropoietin receptor. Establishment of structure–function relationships. Barbone FP, et al. **J Biol Chem** 1997 Feb 21;272(8):4985–92

Chimeric erythropoietin–interferon gamma receptors reveal differences in functional architecture of intracellular domains for signal transduction. Muthukumaran G, et al. **J Biol Chem** 1997 Feb 21;272(8):4993–9

Transgenic mice containing the human erythropoietin receptor gene exhibit correct hematopoietic and neural expression. Liu C, et al. **Proc Assoc Am Physicians** 1996 Nov;108(6):449–54

Erythropoietin receptor mutations and human disease. Gregg XT, et al. **Semin Hematol** 1997 Jan;34(1):70–6 (46 ref.)

ISOLATION & PURIFICATION

Refolding, purification, and characterization of human erythropoietin binding protein produced in Escherichia coli. Johnson DL, et al. **Protein Expr Purif** 1996 Feb; 7(1):104–13

METABOLISM

Physical and functional interactions between Stat5 and the tyrosine–phosphorylated receptors for erythropoietin and interleukin–3. Chin H, et al. **Blood** 1996 Dec 15; 88(12):4415–25

The beta chain of the interleukin–3 receptor functionally associates with the erythropoietin receptor. Jubinsky PT,

et al. **Blood** 1997 Sep 1;90(5):1867–73

Homodimerization of erythropoietin receptor by a bivalent monoclonal antibody triggers cell proliferation and differentiation of erythroid precursors. Schneider H, et al. **Blood** 1997 Jan 15;89(2):473–82

Interferon gamma downregulates stem cell factor and erythropoietin receptors but not insulin-like growth factor-I receptors in human erythroid colony-forming cells. Taniguchi S, et al. **Blood** 1997 Sep 15;90(6):2244–52

Erythropoietin receptor expression on human bone marrow erythroid precursor cells by a newly-devised quantitative flow-cytometric assay. Shinjo K, et al. **Br J Haematol** 1997 Mar;96(3):551–8

Regulation of the erythropoietin receptor and involvement of JAK2 in differentiation of J2E erythroid cells. Tilbrook PA, et al. **Cell Growth Differ** 1996 Apr;7(4):511–20

Signaling by chimeric erythropoietin-TGF-beta receptors: homodimerization of the cytoplasmic domain of the type I TGF-beta receptor and heterodimerization with the type II receptor are both required for intracellular signal transduction. Luo K, et al. **EMBO J** 1996 Sep 2; 15(17):4485–96

Internal autocrine regulation by erythropoietin of erythroleukemic cell proliferation. Stage-Marroquín B, et al. **Exp Hematol** 1996 Sep;24(11):1322–6

Conserved region of the cytoplasmic domain is not essential for erythropoietin-dependent growth. Hilton CJ, et al. **Growth Factors** 1995;12(4):263–76

Epo-induced hemoglobinization of SKT6 cells is mediated by minimal cytoplasmic domains of the Epo or prolactin receptors without modulation of GATA-1 or EKLF. Reese TT, et al. **Growth Factors** 1997;14(2–3):161–76

STAT5 activation correlates with erythropoietin receptor-mediated erythroid differentiation of an erythroleukemia cell line. Iwatsuki K, et al. **J Biol Chem** 1997 Mar 28;272(13):8149–52

Mitogenic signaling and inhibition of apoptosis via the erythropoietin receptor Box-1 domain. Joneja B, et al. **J Biol Chem** 1997 Apr 25;272(17):11176–84

Association of JAK2 and STAT5 with erythropoietin receptors. Role of receptor phosphorylation in erythropoietin signal transduction. Sawyer ST, et al. **J Biol Chem** 1996 Dec 13;271(50):32430–7

Cell surface organization of the erythropoietin receptor complex differs depending on its mode of activation. Tarr K, et al. **J Biol Chem** 1997 Apr 4;272(14):9099–107

Activation of the JAK1-STAT5 pathway by binding of the Friend virus gp55 glycoprotein to the erythropoietin receptor. Yamamura Y, et al. **Leukemia** 1997 Apr;11 Suppl 3:432–4

Isolation of fetal erythroid cells from maternal blood based on expression of erythropoietin receptors. Valerio D, et al. **Mol Hum Reprod** 1997 May;3(5):451–5

The beta c component of the granulocyte-macrophage colony-stimulating factor (GM-CSF)/interleukin 3 (IL-3)/IL-5 receptor interacts with a hybrid GM-CSF/erythropoietin receptor to influence proliferation and beta-globin mRNA expression. Jubinsky PT, et al. **Mol Med** 1996 Nov;2(6):766–73

Erythropoietin receptor is expressed in rat hippocampal and cerebral cortical neurons, and erythropoietin prevents in vitro glutamate-induced neuronal death. Morishita E, et al. **Neuroscience** 1997 Jan;76(1):105–16

A proliferation switch for genetically modified cells. Blau CA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1; 94(7):3076–81

Identification of a novel pathway important for proliferation and differentiation of primary erythroid progenitors. Klingmüller U, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3016–21

Functional interaction of erythropoietin and stem cell factor receptors is essential for erythroid colony formation. Wu H, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4; 94(5):1806–10

PHYSIOLOGY

Clonal variability in beta-globin mRNA content in an interleukin-3-dependent bone marrow cell line transfected with the erythropoietin receptor before and after stimulation with erythropoietin. Ishiguro K, et al. **Blood** 1997 Sep 15;90(6):2273–81

Receptors that induce erythroid differentiation of Ba/F3 cells: structural requirements and effect on STAT5 binding. Pless M, et al. **Blood** 1997 May 1;89(9):3175–85

Eph receptor tyrosine kinases and their ligands in neural development. Friedman GC, et al. **Curr Opin Neurobiol** 1996 Feb;6(1):127–33 (72 ref.)

Interleukin-3 (IL-3) inhibits erythropoietin-induced differentiation in Ba/F3 cells via the IL-3 receptor alpha subunit. Krosl J, et al. **J Biol Chem** 1996 Nov 1; 271(44):27432–7

The prolactin receptor and severely truncated erythropoietin receptors support differentiation of erythroid progenitors. Socolovsky M, et al. **J Biol Chem** 1997 May 30; 272(22):14009–12

The role of erythropoietin receptor tyrosine phosphorylation in erythropoietin-induced proliferation. Damen JE, et al. **Leukemia** 1997 Apr;11 Suppl 3:423–5

[Physiological and pathological roles of the truncated erythropoietin receptor] Nakamura Y, et al. **Rinsho Ketsueki** 1997 Mar;38(3):200–2 (5 ref.) **(Jpn)**

[Signal transduction of the erythropoietin receptor] Yoshimura A, et al. **Rinsho Ketsueki** 1997 Mar;38(3):196–9 (10 ref.) **(Jpn)**

RECEPTORS, ESTRADIOL

ANALYSIS

Improvement of quality control for steroid receptor measurements: analysis of distributions in more than 40000 primary breast cancers. French Study Group on Tissue and Molecular Biopathology. Romain S, et al. **Breast Cancer Res Treat** 1996;41(2):131–9

Specific oncological contribution of cathepsin D and pS2 in human breast cancer: their relationship with TNM status, estradiol receptors, epidermal growth factor receptor and neu amplification. Bolufer P, et al. **Clin Chim Acta** 1996 Mar 29;247(1–2):89–103

Estradiol and progesterone endometrial receptors and body fat distribution in obese women. Morán C, et al. **Gynecol Obstet Invest** 1996;42(2):117–9

Retrieval of estradiol receptor in paraffin sections of resting porcine uteri by microwave treatment. Immunostaining patterns obtained with different primary antibodies. Sierralta WD, et al. **Histochem Cell Biol** 1996 May; 105(5):357–63

[Immunohistochemical detection of estradiol and progesterone receptors in paraffin sections after treatment with microwaves. Comparison with biochemical assay of receptors in a series of 123 breast cancers with determination of the threshold of optimal positivity] Vilain MO, et al. **Ann Pathol** 1997 Apr;17(2):82–8 **(Fre)**

DRUG EFFECTS

Environmental xenobiotics may disrupt normal endocrine function by interfering with the binding of physiological ligands to steroid receptors and binding proteins. Danzo BJ. **Environ Health Perspect** 1997 Mar;105(3):294–301

GENETICS

An AvaI and a MspA1I polymorphism at the porcine oestrogen receptor (ESR) gene. Drögemüller C, et al. **Anim Genet** 1997 Feb;28(1):59

METABOLISM

Synergistic responses of steroidal estrogens in vitro (yeast) and in vivo (turtles). Arnold SF, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):336–42

Prognostic significance of c-erbB-2/neu amplification and epidermal growth factor receptor (EGFR) in primary breast cancer and their relation to estradiol receptor (ER) status. Torregrosa D, et al. **Clin Chim Acta** 1997 Jun 27; 262(1–2):99–119

Altered endometrial progesterone/oestrogen receptor ratio in luteal phase defect. Abd-el-Maeboud KH, et al. **Dis Markers** 1997 Apr;13(2):107–16

Estradiol receptors and metastasis in human breast cancer. Görlich M, et al. **Folia Biol (Praha)** 1996;42(1–2):3–10 (65 ref.)

Membrane binding sites and non-genomic effects of estrogen in cultured human pre-osteoclastic cells. Fiorelli G, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):233–40

Uterine estradiol and progesterone receptor concentration, activities of certain antioxidant enzymes and dehydrogenases and histoarchitecture in relation to time of secretion of nidatory estrogen and high endometrial sensitivity in rat. Singh MM, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):215–24

[Effects of levonorgestrel subdermal implants on estradiol and progesterone receptors of endometrium and ovarian tissues in rats] Sun A, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Sep;31(9):530–2 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Steroidogenic factor 1 and estradiol receptor act in synergism to regulate the expression of the salmon gonadotropin II beta subunit gene. Drean YL, et al. **Mol Endocrinol** 1996 Mar;10(3):217–29

RECEPTORS, ESTROGEN

Estrogen and progesterone receptors in endometrial cancer. Clinicopathological correlations and prognostic significance. Nyholm HC. **APMIS Suppl** 1996;65:5–33 (186 ref.)

A new actor in the estrogen receptor drama--enter ER-beta [editorial] Katzenellenbogen BS, et al. **Endocrinology** 1997 Mar;138(3):861–2 (22 ref.)

Megestrol acetate and aminoglutethimide/hydrocortisone in sequence or in combination as second-line endocrine therapy of estrogen receptor-positive metastatic breast cancer: a Southwest Oncology Group phase III trial. Russell CA, et al. **J Clin Oncol** 1997 Jul;15(7):2494–501

Randomized trial of two versus five years of adjuvant tamoxifen for postmenopausal early stage breast cancer. Swedish Breast Cancer Cooperative Group [see comments] **J Natl Cancer Inst** 1996 Nov 6;88(21):1543–9. Comment in: J Natl Cancer Inst 1996 Nov 6;88(21):1510–2. Comment in: J Natl Cancer Inst 1997 May 7;89(9):659–60.

Five versus more than five years of tamoxifen therapy for breast cancer patients with negative lymph nodes and estrogen receptor-positive tumors [see comments] Fisher B, et al. **J Natl Cancer Inst** 1996 Nov 6;88(21):1529–42. Comment in: J Natl Cancer Inst 1996 Nov 6;88(21):1510–2.

[Examination of estrogen receptor and its significance] Onouchi T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:558–61 (10 ref.) **(Jpn)**

[Identification of a tumor antigen associated to the estrogen receptor in axillary lymph nodes of breast cancer patients] Laguens G, et al. **Medicina (B Aires)** 1996;56(3):269–72 (Eng. Abstr.) **(Spa)**

AGONISTS

Agonistic effect of tamoxifen is dependent on cell type, ERE-promoter context, and estrogen receptor subtype: functional difference between estrogen receptors alpha and beta. Watanabe T, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):140–5

Assessing the estrogenic and dioxin-like activities of chemicals and complex mixtures using in vitro recombinant receptor-reporter gene assays. Balaguer P, et al. **Can J Physiol Pharmacol** 1996 Feb;74(2):216–22

The challenge posed by endocrine-disrupting chemicals. Ashby J, et al. **Environ Health Perspect** 1997 Feb; 105(2):164–9 (44 ref.)

Estrogenicity of resin-based composites and sealants in dentistry [letter; comment] Habib CM, et al. **Environ Health Perspect** 1996 Aug;104(8):808. Comment on: Environ Health Perspect 1996 Mar;104(3):298–305.

Estrogenicity of resin-based composites and sealants used in dentistry [see comments] Olea N, et al. **Environ Health Perspect** 1996 Mar;104(3):298–305. Comment in: Environ Health Perspect 1996 Aug;104(8):808. Comment in: Environ Health Perspect 1997 Apr;105(4):362.

Raloxifene analog (LY117018 HCL) ameliorates cyclosporin A-induced osteopenia in oophorectomized rats. Bowman AR, et al. **J Bone Miner Res** 1996 Aug;11(8):1191–8

Discovery and synthesis of [6-hydroxy-3-[4-[2-(1-piperidinyl)ethoxy]phenoxy]-2-(4-hydroxyphenyl)]b enzo[b]thiophene: a novel, highly potent, selective estrogen receptor modulator. Palkowitz AD, et al. **J Med Chem** 1997 May 9;40(10):1407–16

Antagonistic and agonistic effects of tamoxifen: significance in human cancer. Gallo MA, et al. **Semin Oncol** 1997 Feb; 24(1 Suppl 1):S1-71–S1-80 (72 ref.)

ANALYSIS

Immunohistochemical assessment of steroid hormone receptors in tissues of the anal canal. Implications for anal incontinence? Franz HB, et al. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):892–5

Immunohistochemical analysis of distribution of estrogen receptors and progesterone receptors in the postmenopausal endometrium. Koshiyama M, et al. **Acta Obstet Gynecol Scand** 1996 Sep;75(8):702–6

Long-term prognostic impact of immunohistochemical estrogen receptor determinations compared with biochemical receptor determination in primary breast cancer. Blomqvist C, et al. **Acta Oncol** 1997;36(5):530–2

Ki-67, p53, Er-receptors, ploidy and S-phase as prognostic factors in T1 node negative breast cancer. Railo M, et al. **Acta Oncol** 1997;36(4):369–74

Expression of ER-D5 and EGFr in laryngeal carcinoma and pre-malignant epithelium. Maiorano E, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;527:95–9

Automated immunohistochemical assay for estrogen receptor status in breast cancer using monoclonal antibody CC4-5 on the Ventana ES. Nichols GE, et al. **Am J Clin Pathol** 1996 Sep;106(3):332–8

Differential sensitivity of estrogen/progesterone receptors and BRST-2 markers in metastatic ductal and lobular breast carcinoma to the skin. Wallace ML, et al. **Am J Dermatopathol** 1996 Jun;18(3):241–7

Vascular expression of E-selectin is increased in estrogen-receptor-negative breast cancer: a role for tumor-cell-secreted interleukin-1 alpha. Nguyen M, et al. **Am J Pathol** 1997 Apr;150(4):1307–14

Nuclear areas in breast cancer: relationship with estrogen and progesterone receptor expression. Maiorana A, et al. **Anal Cell Pathol** 1996 Aug;11(3):199–209

Quantitative measurement of estrogen and progesterone receptors in breast lumps using image cytometry. Sarker SK, et al. **Anal Quant Cytol Histol** 1997 Feb;19(1):87–91

Reproducibility of subjective immunoscoring of steroid receptors in breast cancer. van Diest PJ, et al. **Anal Quant Cytol Histol** 1996 Oct;18(5):351–4

Immunolocalization of androgen receptor and estrogen receptor in the developing testis and excurrent ducts of goats. Goyal HO, et al. **Anat Rec** 1997 Sep;249(1):54–62

Clinical significance of cyclin D1 expression in patients with node-positive breast carcinoma treated with adjuvant therapy. Pelosio P, et al. **Ann Oncol** 1996 Sep;7(7):695–703

Phenylacetic acid halides inhibit estrogen receptor (ER)-positive MCF-7 cells, but not ER-negative human breast cancer cells or normal breast epithelial cells. Johnson DE, et al. **Anticancer Drugs** 1996 May;7(3):288–92

Interobserver reproducibility of immunocytochemical estrogen- and progesterone receptor status assessment in breast cancer. Biesterfeld S, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2497–500

Multivariate analysis of DNA ploidy, p53, c-erbB-2 proteins,

EGFR, and steroid hormone receptors for prediction of poor short term prognosis in breast cancer. Eissa S, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1417-23

EGFR and steroid receptors in ovarian carcinoma: comparison with prognostic parameters and outcome of patients. Fischer-Colbrie J, et al. **Anticancer Res** 1997 Jan-Feb;17(1B):613-9

The development of estrogen and progestin radiopharmaceuticals for imaging breast cancer. Katzenellenbogen JA, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1573-6

Tamoxifen mediated human endometrial carcinogenesis may not involve estrogenic pathways: a preliminary note. Kuwashima Y, et al. **Anticancer Res** 1996 Sep-Oct; 16(5A):2993-6

CD44 expression in human breast cancer cell lines is related to oestrogen receptor (ER) status and confluency in vitro. Bolodeoku J, et al. **Biochem Soc Trans** 1997 May;25(2):356S

Immunocytochemical detection of estrogen receptors in bone cells using flow cytometry. Stulc T, et al. **Biochim Biophys Acta** 1997 Mar 27;1356(1):95-100

Immunolocalization of receptors for androgen and estrogen in male caprine reproductive tissues: unique distribution of estrogen receptors in efferent ductule epithelium. Goyal HO, et al. **Biol Reprod** 1997 Jan;56(1):90-101

Immunohistochemical determination of oestrogen receptor: comparison of different methods of assessment of staining and correlation with clinical outcome of breast cancer patients [see comments] Barnes DM, et al. **Br J Cancer** 1996 Nov;74(9):1445-51. Comment in: Br J Cancer 1996 Nov;74(9):1329-30.

Modulation of transforming growth factor beta expression and induction of apoptosis by tamoxifen in ER positive and ER negative breast cancer cells [letter; comment] Benson JR, et al. **Br J Cancer** 1996 Sep;74(6):993-4. Comment on: Br J Cancer 1995 Dec;72(6):1441-6.

Comparison of a new microplate oestrogen receptor (ER) enzyme immunoassay with other ER detection methods. Delage V, et al. **Br J Cancer** 1997;76(4):519-25

How best to express oestrogen receptor activity [editorial; comment] [see comments] Hawkins RA. **Br J Cancer** 1996 Nov;74(9):1329-30. Comment on: Br J Cancer 1996 Nov;74(9):1445-51. Comment in: Br J Cancer 1997;76(3):418-9.

Cyclin E overexpression, a negative prognostic factor in breast cancer with strong correlation to oestrogen receptor status. Nielsen NH, et al. **Br J Cancer** 1996 Sep;74(6):874-80

Time-varying prognostic impact of tumour biological factors urokinase (uPA), PAI-1 and steroid hormone receptor status in primary breast cancer. Schmitt M, et al. **Br J Cancer** 1997;76(3):306-11

Sex steroid receptor expression in 'carcinoid' tumours of the breast. Birsak CA, et al. **Breast Cancer Res Treat** 1996; 40(3):243-9

Reverse transcription-polymerase chain reaction (RT-PCR) assays of estrogen and progesterone receptors in breast cancer. Chevillard S, et al. **Breast Cancer Res Treat** 1996; 41(1):81-9

Estrogen receptors, progesterone receptors, and cell proliferation in human breast cancer. Fanelli MA, et al. **Breast Cancer Res Treat** 1996;37(3):217-28

Captopril modulates hormone receptor concentration and inhibits proliferation of human mammary ductal carcinoma cells in culture. Small W Jr, et al. **Breast Cancer Res Treat** 1997 Jul;44(3):217-24

Tamoxifen aziridine labeling of the estrogen receptor-potential utility in detecting biologically aggressive breast tumors. Trivedi S, et al. **Breast Cancer Res Treat** 1996;40(3):231-41

Simultaneous expression of nitric oxide synthase and estrogen receptor in human breast cancer cell lines. Zeillinger R, et al. **Breast Cancer Res Treat** 1996;40(2):205-7

Adenocarcinoma of the cervix. Expression and clinical significance of estrogen and progesterone receptors. Fujiwara H, et al. **Cancer** 1997 Feb 1;79(3):505-12

Intra nuclear estrogen receptor status and its clinicopathological correlation in breast cancer patients. Khanna HD, et al. **Cancer Biochem Biophys** 1996 Apr; 15(3):141-9

Simultaneous quantitative analyses of c-erbB-2 protein, epidermal growth factor receptor, cathepsin D, and hormone receptors in breast cancer. Iwase H, et al. **Cancer Detect Prev** 1997;21(1):29-35

Detection of different estrogen receptor forms in breast cancer cytosol by enzyme immunoassay. Dittadi R, et al. **Cancer Res** 1997 Mar 15;57(6):1066-72

A functional assay in yeast for the human estrogen receptor displays wild-type and variant estrogen receptor messenger RNAs present in breast carcinoma. van Dijk MA, et al. **Cancer Res** 1997 Aug 15;57(16):3478-85

Expression of estrogen receptors in a normal human breast epithelial cell type with luminal and stem cell characteristics and its neoplastically transformed cell lines. Kang KS, et al. **Carcinogenesis** 1997 Feb;18(2):251-7

Membrane receptors for estrogen, progesterone, and testosterone in the rat brain: fantasy or reality. Ramirez VD, et al. **Cell Mol Neurobiol** 1996 Apr;16(2):175-98

Microtiter plate immunoenzymometric assay for estrogen receptor. Delage V, et al. **Clin Chem** 1996 Dec; 42(12):1955-60

Quantitative immunological detection of total estrogen receptor (cytosolic and nuclear) in term decidua of preeclampsia: a preliminary study. Eissa S, et al. **Clin Chem** 1997 Feb;43(2):405-6

Endometrial glandular proliferation and estrogen receptor content during the normal menstrual cycle. Felix JC, et al. **Contraception** 1997 Jan;55(1):19-22

Estrogen and progesterone receptors in breast cancer: comparison between enzyme immunoassay and computer-assisted image analysis of immunocytochemical assay. Cavaliere A, et al. **Cytometry** 1996 Sep 15; 26(3):204-8

Distribution of estrogen receptor heterogeneity in growing MCF-7 cells measured by quantitative microscopy. Palmari J, et al. **Cytometry** 1997 Jan 1;27(1):26-35

Expression of estrogen and progesterone receptors in cytologic specimens using various fixatives. Hudock JA, et al. **Diagn Cytopathol** 1996 Jul;15(1):78-83

Preoperative assessment of proliferative activity and hormonal receptor status in carcinoma of the breast: a comparison of needle aspiration and needle-core biopsies to the surgical specimen. Railo M, et al. **Diagn Cytopathol** 1996 Sep;15(3):205-10

In situ hybridization of chromosome 6 on fine-needle aspirates from breast carcinomas: comparison of numerical abnormalities and ER/PgR status and staining pattern. Sauer T, et al. **Diagn Cytopathol** 1997 May;16(5):420-4

Immunostaining of estrogen receptor, progesterone receptor, MIB1 antigen, and c-erbB-2 oncoprotein in cytologic specimens: a simplified method with formalin fixation. Suthipintawong C, et al. **Diagn Cytopathol** 1997 Aug; 17(2):127-33

Elevated expression of retinoic acid receptor-alpha (RAR alpha) in estrogen-receptor-positive breast carcinomas as detected by immunohistochemistry. Han QX, et al. **Diagn Mol Pathol** 1997 Feb;6(1):42-8

Immunohistochemical localization of estrogen receptor in the normal canine female genital tract. De Cock H, et al. **Domest Anim Endocrinol** 1997 May;14(3):133-47

Steroid receptors and subfertility. Suri NK. **East Afr Med J** 1996 Jul;73(7):479-83

Expression of estrogen receptor beta in rat bone. Onoe Y, et al. **Endocrinology** 1997 Oct;138(10):4509-12

Estrogenic activity of a dieldrin/toxaphene mixture in the mouse uterus, MCF-7 human breast cancer cells, and yeast-based estrogen receptor assays: no apparent synergism. Ramamoorthy K, et al. **Endocrinology** 1997 Apr; 138(4):1520-7

Hyperestrogenemia and presence of estrogen receptors associated with an epithelial ovarian tumor of low malignant potential. Ben-Hur H, et al. **Eur J Gynaecol Oncol** 1996;17(4):260-3

Colocalization of oestrogen receptor immunoreactivity and preproenkephalin mRNA expression to neurons in the superficial laminae of the spinal and medullary dorsal horn of rats. Amandusson A, et al. **Eur J Neurosci** 1996 Nov; 8(11):2440-5

Immunohistochemical detection of oestrogen receptors in ductal carcinoma in situ of the breast. Karayiannakis AJ, et al. **Eur J Surg Oncol** 1996 Dec;22(6):578-82

Relationship between DNA ploidy and functional estrogen receptors in operable prostate cancer. Nativ O, et al. **Eur Urol** 1997;32(1):96-9

Expression of estrogen and progesterone receptors in endometrium and peritoneal endometriosis: an immunohistochemical and in situ hybridization study. Fujishita A, et al. **Fertil Steril** 1997 May;67(5):856-64

In situ hybridization study of messenger RNA for estrogen receptor and immunohistochemical detection of estrogen and progesterone receptors in the human ovary. Revelli A, et al. **Gynecol Endocrinol** 1996 Jun;10(3):177-86

Biochemical and histological effects of vaginal estriol and estradiol applications on the endometrium, myometrium and vagina of postmenopausal women. van Haaften M, et al. **Gynecol Endocrinol** 1997 Jun;11(3):175-85

Regional distribution of proliferating cells and hormone receptors in the mammary gland of surgically postmenopausal macaques. Cline JM, et al. **Gynecol Obstet Invest** 1997;44(1):41-6

Immunohistochemical localization of tenascin, estrogen receptor and transforming growth factor-beta 1 in human endometrial carcinoma. Doi D, et al. **Gynecol Obstet Invest** 1996;41(1):61-6

Chorion villosum does not express progesterone and estrogen receptors during the first trimester of pregnancy. Taddei G, et al. **Gynecol Obstet Invest** 1996;42(2):77-9

Estrogen and progesterone receptors in the endometrium of postmenopausal breast cancer patients treated with tamoxifen and progestogens. Cohen I, et al. **Gynecol Oncol** 1997 Apr;65(1):83-8

Relationship between hormone receptor levels and cell-kinetics in human colorectal cancer. Korenaga D, et al. **Hepatogastroenterology** 1997 Jan-Feb;44(13):78-83

Pericardial myolipoma: a tumour presenting as a mediastinal mass and containing oestrogen receptors. Ben-Izhak O, et al. **Histopathology** 1996 Aug;29(2):184-6

Immunolocalization of oestrogen and progesterone receptors in prostatic hyperplasia and carcinoma. Hiramatsu M, et al. **Histopathology** 1996 Feb;28(2):163-8

Rapid and irreversible loss of estrogen receptor in human osteoblast-like cells following culture in phenol red-free medium [letter] Nasir J, et al. **In Vitro Cell Dev Biol Anim** 1997 Apr;33(4):240-2

Steroid receptor measurement in breast cancers: comparison between ligand binding and enzyme-immunoassay in cytosolic and nuclear extracts. Luqmani YA, et al. **Int J Cancer** 1997 May 16;71(4):526-38

Body-size indicators and risk of breast cancer according to menopause and estrogen-receptor status. Männistö S, et al. **Int J Cancer** 1996 Sep 27;68(1):8-13

Reduced survival in patients with stage-I non-small-cell lung cancer associated with DNA-replication errors. Rosell R, et al. **Int J Cancer** 1997 Jun 20;74(3):330-4

Quantitative analysis of p185(HER-2/neu) protein in breast cancer and its association with other prognostic factors. Valerón PF, et al. **Int J Cancer** 1997 Apr 22;74(2):175-9

The effect of body mass index and oestrogen receptor level on survival of breast cancer patients. Newman SC, et al. **Int J Epidemiol** 1997 Jun;26(3):484-90

Immunohistochemical expressions of estrogen and progesterone receptors in human epididymis at different ages--a preliminary study. Misao R, et al. **Int J Fertil Womens Med** 1997 Jan-Feb;42(1):39-42

Estrogen and progesterone receptor expression in endometrial polyps. Mittal K, et al. **Int J Gynecol Pathol** 1996 Oct;15(4):345-8

Minimal deviation adenocarcinoma of the uterine cervix has abnormal expression of sex steroid receptors, CA125, and gastric mucin. Toki T, et al. **Int J Gynecol Pathol** 1997 Apr;16(2):111-6

The forensic value of the immunohistochemical detection of oestrogen receptors in vaginal epithelium. Hausmann R, et al. **Int J Legal Med** 1996;109(1):10-3

Loss of estrogen receptor in recurrent breast cancer is associated with poor response to endocrine therapy [see comments] Kuukasjärvi T, et al. **J Clin Oncol** 1996 Sep; 14(9):2584-9. Comment in: J Clin Oncol 1997 Feb;15(2):862.

Breast cancer: relevance of estrogen receptor determination at relapse [letter; comment] Spataro V, et al. **J Clin Oncol** 1997 Feb;15(2):862. Comment on: J Clin Oncol 1996 Sep;14(9):2584-9.

The hormonal receptor status of uterine carcinosarcomas (mixed müllerian tumours): an immunohistochemical study. Ansink AC, et al. **J Clin Pathol** 1997 Apr;50(4):328-31

Immunolocalisation of oestrogen receptor-alpha within the testis and excurrent ducts of the rat and marmoset monkey from perinatal life to adulthood. Fisher JS, et al. **J Endocrinol** 1997 Jun;153(3):485-95

Assessment of hormone dependence of comedo ductal carcinoma in situ of the breast [see comments] Holland PA, et al. **J Natl Cancer Inst** 1997 Jul 16;89(14):1059-65 . Comment in: J Natl Cancer Inst 1997 Jul 16;89(14):991-3.

A subset of estrogen receptor-containing neurons project to the median eminence in the ewe. Jansen HT, et al. **J Neuroendocrinol** 1996 Dec;8(12):921-7

Efferent projections from the ovarian steroid receptor-containing area of the ventrolateral hypothalamus in female guinea pigs. Ricciardi KH, et al. **J Neuroendocrinol** 1996 Sep;8(9):673-85

Estrogen receptor-immunoreactive neurons are present in the female rat lumbosacral spinal cord. Williams SJ, et al. **J Neurosci Res** 1996 Nov 15;46(4):492-501

Progesterone and estrogen receptors in meningiomas: prognostic considerations. Hsu DW, et al. **J Neurosurg** 1997 Jan;86(1):113-20

Changes in the subcellular distribution of the rat uterus oestrogen receptor as induced by oestradiol, tamoxifen and ZD 182,780. Mendes AF, et al. **J Pharm Pharmacol** 1996 Mar;48(3):302-5

Biochemical characterization and novel isolation of pure estrogen receptor hormone-binding domain. Coffer A, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5-6):467-77

Synthesis, structure and biological properties of Z-17alpha-(2-iodovinyl)-11beta-chloromethyl estradiol-17beta (Z-CMIV), a high affinity ligand for the characterization of estrogen receptor-positive tumors. Quivy J, et al. **J Steroid Biochem Mol Biol** 1996 Sep; 59(1):103-17

Influence of blockers for the estrogen receptor (ER) and type 1 IGF-receptor on the levels of ER, ER mRNA and IGF-I mRNA in the rat uterus. Sahlin L, et al. **J Steroid Biochem Mol Biol** 1996 Jul;58(4):359-65

Estrogen receptor, growth factor receptor and protooncogene protein activities and possible signal transduction crosstalk in estrogen dependent and independent breast cancer cell lines. Mohamood AS, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):1-17

Increased estrogen receptor and epidermal growth factor receptor gene product co-expression in surgically resected gastric adenocarcinomas. Koullias GJ, et al. **J Surg Oncol** 1996 Nov;63(3):166-71

Estrogen response in buccal mucosa -- a cytological and immunohistological assay. Leimola-Virtanen R, et al. **Maturitas** 1997 May;27(1):41-5

Sex-steroid hormone receptors in human medullary thyroid carcinoma. Colomer A, et al. **Mod Pathol** 1996 Jan; 9(1):68-72

Estrogen and progesterone receptors and anti-gross cystic disease fluid protein 15 (BRST-2) fail to distinguish metastatic breast carcinoma from eccrine neoplasms. Wallace ML, et al. **Mod Pathol** 1995 Dec;8(9):897-901

Hepatobiliary and pancreatic mucinous cystadenocarcinomas with mesenchymal stroma: analysis of estrogen receptors/progesterone receptors and expression of tumor-associated antigens. Weihing RR, et al.

Mod Pathol 1997 Apr;10(4):372–9

Estrogen and progesterone receptors and estrogen receptor–related antigen (ER–D5) in human epididymis. Ergün S, et al. **Mol Reprod Dev** 1997 Aug;47(4):448–55

Estrogen receptor protein and mRNA expression in the ovary of sheep. Tomanek M, et al. **Mol Reprod Dev** 1997 Sep; 48(1):53–62

Phylloid breast tumors and three steroid hormone receptors. Lang BA, et al. **Neoplasma** 1997;44(1):53–7

Estrogen and progesterone receptor expression in neuroendocrine and related neurons of the pubertal female monkey hypothalamus. Goldsmith PC, et al. **Neuroendocrinology** 1997 May;65(5):325–34

Expression of estrogen and progesterone receptors in glutamate and GABA neurons of the pubertal female monkey hypothalamus. Thind KK, et al. **Neuroendocrinology** 1997 May;65(5):314–24

Convergence of substance P and estrogen receptor immunoreactivity in the midbrain central gray of female guinea pigs. Turcotte JC, et al. **Neuroendocrinology** 1997 Jul;66(1):28–37

The pelvic floor muscles: muscle thickness in healthy and urinary-incontinent women measured by perineal ultrasonography with reference to the effect of pelvic floor training. Estrogen receptor studies. Bernstein IT. **Neurourol Urodyn** 1997;16(4):237–75 (145 ref.)

Analysis of blood clearance and labeled metabolites for the estrogen receptor tracer [F-18]-16 alpha-fluoroestradiol (FES). Mankoff DA, et al. **Nucl Med Biol** 1997 May; 24(4):341–8

Estrogen and progesterone receptors in the uterosacral ligament. Mokrzycki ML, et al. **Obstet Gynecol** 1997 Sep; 90(3):402–4

Comparison of oestrogen receptor assessment in frozen and paraffin sections. Fee M, et al. **Pathol Res Pract** 1996 Sep; 192(9):919–24

Immunohistological detection of estrogen and progesterone receptors in multiple and well differentiated leiomyomatous lung tumors in women with uterine leiomyomas (so-called benign metastasizing leiomyomas). A report on 5 cases. Jautzke G, et al. **Pathol Res Pract** 1996 Mar;192(3):215–23 (77 ref.)

Correlation of alpha 2 beta 1 integrin expression with histological type and hormonal receptor status in breast carcinomas. Lanzafame S, et al. **Pathol Res Pract** 1996 Oct; 192(10):1031–8

Proliferative activity in breast carcinoma evaluated by BrdU and PCNA. Correlation with expression of p53, c-erbB-2, estrogen receptor and P-glycoprotein. Moriki T, et al. **Pathol Res Pract** 1995 Nov;191(11):1122–32

Comparison of two monoclonal antibodies for the detection of estrogen receptors in primary breast carcinomas. Nedergaard L, et al. **Pathol Res Pract** 1996 Oct; 192(10):983–8

Immunocytochemical identification of the oestrogen receptor in the nuclei of cultured human placental syncytiotrophoblasts. Billiar RB, et al. **Placenta** 1997 May; 18(4):365–70

Relationship between receptors for epidermal growth factor and steroid hormones in normal, dysplastic and neoplastic canine mammary tissues. Donnay I, et al. **Res Vet Sci** 1996 May;60(3):251–4

Female sex hormone receptor status in advanced hepatocellular carcinoma and outcome after surgical resection. Jonas S, et al. **Surgery** 1997 Apr;121(4):456–61

[Importance of determination of proliferation markers and hormone receptors in breast carcinoma] Skálová A, et al. **Cas Lek Cesk** 1997 Jul 30;136(15):473–8 (Eng. Abstr.) **(Cze)**

[Value of detection of hormone receptors by biochemical and immunochemical methods in therapeutic decision for breast cancer] Goussard J. **Bull Cancer** 1996 Dec; 83(12):1031–6 (Eng. Abstr.) **(Fre)**

[A comparative study of hormone receptors in breast cancer with quantitative immunocytochemistry and biochemistry] Marcot I, et al. **Bull Cancer** 1997 Jun;84(6):613–8 (27 ref.) (Eng. Abstr.) **(Fre)**

[Breast carcinoma: evaluation of hormone receptors and pS2, erb-B2, P-glycoprotein and Ki-67 markers] Abadjian G, et al. **J Med Liban** 1996;44(1):10–5 (Eng. Abstr.) **(Fre)**

[Prognostic significance of estrogen receptor status in hepatocellular carcinomas] Jonas S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:329–33 (Eng. Abstr.) **(Ger)**

[Current questions about estrogen receptor determination and hormone dependence (does estrogen receptor positivity equal estrogen dependence?)] Kahán Z. **Orv Hetil** 1996 Oct 20;137(42):2305–8 (35 ref.) (Eng. Abstr.) **(Hun)**

[Dna synthesis and expression of steroid receptors in cells of human breast carcinoma] Simone G, et al. **Pathologica** 1996 Apr;88(2):111–6 (Eng. Abstr.) **(Ita)**

[Analysis of steroid hormone receptors in endometrial cancer] Kędzia W. **Ginekol Pol** 1996 May;67(5):254–8 (Eng. Abstr.) **(Pol)**

[Sex hormone receptors in the gastric mucosa in gastric precancer and cancer] Iushkov PV. **Arkh Patol** 1997 May-Jun;59(3):24–7 (Eng. Abstr.) **(Rus)**

[Tamoxifen: modern drug therapy of estrogen-dependent breast tumors] Jovanović-Mićić D, et al. **Med Pregl** 1996; 49(7–8):287–90 (20 ref.) (Eng. Abstr.) **(Scr)**

[Estradiol receptors in cervical intraepithelial neoplasia and cervico-uterine cancer] González-Sánchez JL, et al. **Ginecol Obstet Mex** 1996 Oct;64:438–42 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

The inhibition of estrogen receptor-mediated responses by chloro-S-triazine-derived compounds is dependent on estradiol concentration in yeast. Tran DQ, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):140–6

Dissection of the molecular mechanism of action of GW5638, a novel estrogen receptor ligand, provides insights into the role of estrogen receptor in bone. Willson TM, et al. **Endocrinology** 1997 Sep;138(9):3901–11

Antagonistic and agonistic effects of tamoxifen: significance in human cancer. Gallo MA, et al. **Semin Oncol** 1997 Feb; 24(1 Suppl 1):S1-71–S1-80 (72 ref.)

Vinclozolin does not alter progesterone receptor (PR) function in vivo despite inhibition of PR binding by its metabolites in vitro. Laws SC, et al. **Toxicology** 1996 Sep 2;112(3):173–82

BIOSYNTHESIS

Polymerase chain reaction analysis of oestrogen and androgen receptor expression in human gingival and periodontal tissue. Parkar MH, et al. **Arch Oral Biol** 1996 Oct;41(10):979–83

Effects of organochlorine pesticides on DNA synthesis of cultured oviductal and uterine cells and on estrogen receptor of uterine tissue from heifers. Tiemann U, et al. **Arch Toxicol** 1996;70(8):490–6

Quantification of estrogen receptor messenger RNA by quantitative polymerase chain reaction using internal standard fragment. Kagami I, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):358–64

Presence of exon 5-deleted oestrogen receptor in human breast cancer: functional analysis and clinical significance. Desai AJ, et al. **Br J Cancer** 1997;75(8):1173–84

Sociosexual stimuli affect ER- and PR-mRNA abundance in the hypothalamus of all-female whiptail lizards. Hartman V, et al. **Brain Res** 1996 Nov 25;741(1–2):344–7

Cell cycle expression of estrogen receptors determined by image analysis on human breast cancer cells in vitro and in vivo. Rostagno P, et al. **Breast Cancer Res Treat** 1996; 39(2):147–54

Stage-specific localization of the small heat shock protein Hsp27 during oogenesis in Drosophila melanogaster. Marin R, et al. **Chromosoma** 1996 Sep;105(3):142–9

Estrogen receptor mRNA in mineralized tissues of rainbow trout: calcium mobilization by estrogen. Armour KJ, et al. **FEBS Lett** 1997 Jul 7;411(1):145–8

Epithelial and stromal estrogen and progesterone receptor expression in endometrial cancer: true color computer-assisted image analysis versus subjective scoring. Kohlberger PD, et al. **Gynecol Oncol** 1997 Mar; 64(3):404–10

Overexpression of cyclin D1 in epithelial ovarian cancers [see comments] Worsley SD, et al. **Gynecol Oncol** 1997 Feb;64(2):189–95. Comment in: Gynecol Oncol 1997 Feb;64(2):187–8.

Immunohistochemical analysis of endometrial adenocarcinoma for bcl-2 and p53 in relation to expression of sex steroid receptor and proliferative activity [published erratum appears in Int J Gynecol Pathol 1996 Oct;15(4):369] Yamauchi N, et al. **Int J Gynecol Pathol** 1996 Jul;15(3):202–8

Vascular estrogen receptors and endothelium-derived nitric oxide production in the mouse aorta. Gender difference and effect of estrogen receptor gene disruption. Rubanyi GM, et al. **J Clin Invest** 1997 May 15;99(10):2429–37

An analysis of the uterine lymphocyte-derived hybridoma cell line GWM 1-2 for expression of receptors for estrogen, progesterone and interleukin 2. van den Heuvel M, et al. **J Reprod Immunol** 1996 Aug;31(1–2):37–50

Zebra finch estrogen receptor cDNA: cloning and mRNA expression. Jacobs EC, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):135–45

Inverse regulation of oestrogen receptor and epidermal growth factor receptor gene expression in MCF-7 breast cancer cells treated with phorbol ester. Lee CS, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):267–75

Gonadal sex differentiation in chicken embryos: expression of estrogen receptor and aromatase genes. Smith CA, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):295–302

Expression of the estrogen-related receptor 1 (ERR-1) orphan receptor during mouse development. Bonnelye E, et al. **Mech Dev** 1997 Jul;65(1–2):71–85

Accelerated onset of uterine tumors in transgenic mice with aberrant expression of the estrogen receptor after neonatal exposure to diethylstilbestrol. Couse JF, et al. **Mol Carcinog** 1997 Aug;19(4):236–42

Insulin-like growth factors control the regulation of oestrogen and progesterone receptor expression by oestrogens. Clayton SJ, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):57–68

Erratum to "The first contiguous estrogen receptor gene from a fish, Oreochromis aureus: evidence for multiple transcripts" [Mol. Cell. Endocrinol. 120 (1996) 186–188]. Tan NS, et al. **Mol Cell Endocrinol** 1996 Oct 14; 123(1):107–10

Oligonucleotide squelching reveals the mechanism of estrogen receptor autologous down-regulation. Santagati S, et al. **Mol Endocrinol** 1997 Jun;11(7):938–49

Estrogen receptors are expressed in a subset of tyrosine hydroxylase-positive neurons of the anterior preoptic region in the rainbow trout. Linard B, et al. **Neuroendocrinology** 1996 Feb;63(2):156–65

The ontogeny of the canary HVC revealed by the expression of androgen and oestrogen receptors. Gahr M, et al. **Neuroreport** 1996 Dec 20;8(1):311–5

Differential expression of estrogen receptor and neuropeptide Y by brainstem A1 and A2 noradrenaline neurons. Simonian SX, et al. **Neuroscience** 1997 Jan;76(2):517–29

Generation of packaging cell lines for pseudotyped retroviral vectors of the G protein of vesicular stomatitis virus by using a modified tetracycline inducible system. Chen ST, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10057–62

Effects of interferon-tau and progesterone on oestrogen-stimulated expression of receptors for oestrogen, progesterone and oxytocin in the endometrium of ovariectomized ewes. Spencer TE, et al. **Reprod Fertil Dev** 1996;8(5):843–53

Estradiol or methoxychlor stimulates estrogen receptor (ER) expression in uteri. Eroschenko VP, et al. **Reprod Toxicol** 1996 Jul-Aug;10(4):265–71

The estrogenic and antiestrogenic activities of phytochemicals with the human estrogen receptor expressed in yeast. Collins BM, et al. **Steroids** 1997 Apr; 62(4):365–72

[Expression of the specific estrogen-binding protein in the liver of the androgenized mature female rats during liver regeneration after CCl4 intoxication] Shchelkunova TA, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):28–31 **(Rus)**

BLOOD

Use of new biologic markers in the ovulation induction. Silvestri A, et al. **Acta Eur Fertil** 1995 Jul-Aug;26(4):137–9

CHEMISTRY

Expression of estrogen receptor variant messenger RNAs and determination of estrogen receptor status in human breast cancer. Huang A, et al. **Am J Pathol** 1997 May; 150(5):1827–33

Identification and characterization of estrogen and progesterone receptors from the oviduct of the American alligator (Alligator mississippiensis). Vonier PM, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):308–12

Binding of the estrogen receptor to DNA. The role of waters. Kosztin D, et al. **Biophys J** 1997 Aug;73(2):557–70

Different residues of the human estrogen receptor are involved in the recognition of structurally diverse estrogens and antiestrogens. Ekena K, et al. **J Biol Chem** 1997 Feb 21;272(8):5069–75

Different regions in activation function-1 of the human estrogen receptor required for antiestrogen- and estradiol-dependent transcription activation. McInerney EM, et al. **J Biol Chem** 1996 Sep 27;271(39):24172–8

NMR spectroscopic studies of the DNA-binding domain of the monomer-binding nuclear orphan receptor, human estrogen related receptor-2. The carboxyl-terminal extension to the zinc-finger region is unstructured in the free form of the protein. Sem DS, et al. **J Biol Chem** 1997 Jul 18;272(29):18038–43

Mutational analysis of the estrogen receptor ligand-binding domain: influence of ligand structure and stereochemistry on transactivation. Kohno H, et al. **J Mol Endocrinol** 1996 Jun;16(3):277–85

Stability of the ligand-estrogen receptor interaction depends on estrogen response element flanking sequences and cellular factors. Anolik JH, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):413–29

Mechanistic aspects of estrogen receptor activation probed with constitutively active estrogen receptors: correlations with DNA and coregulator interactions and receptor conformational changes. Lazennec G, et al. **Mol Endocrinol** 1997 Aug;11(9):1375–86

Identification of a third autonomous activation domain within the human estrogen receptor. Norris JD, et al. **Mol Endocrinol** 1997 Jun;11(6):747–54

Ligand-activated site-specific recombination in mice. Feil R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10887–90

The estradiol pharmacophore: ligand structure-estrogen receptor binding affinity relationships and a model for the receptor binding site. Anstead GM, et al. **Steroids** 1997 Mar;62(3):268–303 (248 ref.)

Estrogen receptors in the cardiovascular system. Perrot-Applanat M. **Steroids** 1996 Apr;61(4):212–5

Binding of site-directed monoclonal antibodies to an epitope located in the A/B region (amino acids 140–154) of human estrogen receptor-induced conformational changes in an epitope in the DNA-binding domain. Traish AM, et al. **Steroids** 1996 Sep;61(9):549–56

Intact noncovalent dimer of estrogen receptor ligand-binding domain can be detected by electrospray ionization mass spectrometry. Witkowska HE, et al. **Steroids** 1996 Jul; 61(7):433–8

DEFICIENCY

Oestrogen receptor deficiency: consequences for growth. Smith EP, et al. **Acta Paediatr Suppl** 1996 Oct;417:39–43; discussion 44 (52 ref.)

Stromal estrogen receptors mediate mitogenic effects of

estradiol on uterine epithelium. Cooke PS, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6535–40

Behavioral effects of estrogen receptor gene disruption in male mice. Ogawa S, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1476–81

DRUG EFFECTS

Adjuvant cyclophosphamide, methotrexate and fluorouracil in node–negative and estrogen receptor–negative breast cancer. Updated results. Zambetti M, et al. **Ann Oncol** 1996 Jul;7(5):481–5

Inhibition of LDL oxidation and myeloperoxidase dependent tyrosyl radical formation by the selective estrogen receptor modulator raloxifene (LY139481 HCL). Zuckerman SH, et al. **Atherosclerosis** 1996 Sep 27;126(1):65–75

The anti–estrogenic activity of selected polynuclear aromatic hydrocarbons in yeast expressing human estrogen receptor. Tran DQ, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):101–8

Failure of cannabinoid compounds to stimulate estrogen receptors. Ruh MF, et al. **Biochem Pharmacol** 1997 Jan 10;53(1):35–41

Mechanism of action of interferon on oestrogen receptor function. Flint AP, et al. **Biochem Soc Trans** 1996 Aug; 24(3):366S

In utero and lactational exposure of female Holtzman rats to 2,3,7,8–tetrachlorodibenzo–p–dioxin: modulation of the estrogen signal. Chaffin CL, et al. **Biol Reprod** 1996 Jul; 55(1):62–7

Oestrogen increases S–phase fraction and oestrogen and progesterone receptors in human cervical cancer in vivo. Bhattacharya D, et al. **Br J Cancer** 1997;75(4):554–8

Sex differences in estrogen receptor and progestin receptor induction in the guinea pig hypothalamus and preoptic area. Brown TJ, et al. **Brain Res** 1996 Jun 24;725(1):37–48

Effects of melatonin on estrogen receptor expression in the forebrain of outbred (Lak.LVG) golden hamsters. Hill SM, et al. **Brain Res** 1996 Dec 2;742(1–2):107–14

Tamoxifen–induced estrogen receptor up–regulation in mammary tumor cells is not related to growth inhibition. Legros N, et al. **Cancer Chemother Pharmacol** 1997; 39(4):380–2

Antiestrogen–estrogen receptor interactions. Parker MG. **Cancer Treat Res** 1996;83:213–24 (52 ref.)

Clomiphene citrate therapy and unexplained subfertility. Suri NK. **East Afr Med J** 1996 Nov;73(11):724–6

In vitro synergistic interaction of alligator and human estrogen receptors with combinations of environmental chemicals. Arnold SF, et al. **Environ Health Perspect** 1997 Apr;105 Suppl 3:615–8

Environmental endocrinology: hidden, but potent ways of activating the estrogen receptor. Heufelder AE, et al. **Eur J Endocrinol** 1996 Dec;135(6):653–4 (7 ref.)

Failure of chloro–S–triazine–derived compounds to induce estrogen receptor–mediated responses in vivo and in vitro. Connor K, et al. **Fundam Appl Toxicol** 1996 Mar; 30(1):93–101

An in vivo battery for identifying endocrine modulators that are estrogenic or dopamine regulators. O'Connor JC, et al. **Fundam Appl Toxicol** 1996 Oct;33(2):182–95

Contraceptive treatment increases the affinity of uterine estrogen receptor in adult rat: perinatal gestagen treatment changes the reaction. Csaba G, et al. **Horm Metab Res** 1996 Jan;28(1):16–9

Environmental endocrine modulators--where toxicology meets epidemiology. Wilks MF, et al. **Hum Exp Toxicol** 1996 Aug;15(8):692–3

Non–competitive anti–oestrogenic actions of progesterone antagonists in primate endometrium: enhancement of oestrogen and progesterone receptors with blockade of post–receptor proliferative mechanisms. Neulen J, et al. **Hum Reprod** 1996 Jul;11(7):1533–7

Interaction of chemopreventive agents with hormone receptors. Wiseman H. **IARC Sci Publ** 1996;(139):159–64 (20 ref.)

Vitamin D and gonadal steroid–resistant New World primate cells express an intracellular protein which competes with the estrogen receptor for binding to the estrogen response element. Chen H, et al. **J Clin Invest** 1997 Feb 15; 99(4):669–75

Structure–activity relationships of selective estrogen receptor modulators: modifications to the 2–arylbenzothiophene core of raloxifene. Grese TA, et al. **J Med Chem** 1997 Jan 17;40(2):146–67

Could the rising levels of estrogen receptor in breast cancer be due to estrogenic pollutants? [letter] Dewailly E, et al. **J Natl Cancer Inst** 1997 Jun 18;89(12):888–9

Next generation of SERMs being seen in clinic [news] Smigel K. **J Natl Cancer Inst** 1997 Jul 2;89(13):913

Hypocholesterolemic activity of raloxifene (LY139481): pharmacological characterization as a selective estrogen receptor modulator. Kauffman RF, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):146–53

Inhibition of estrogen–stimulated growth of uterine leiomyomas by selective estrogen receptor modulators. Fuchs–Young R, et al. **Mol Carcinog** 1996 Nov;17(3):151–9

Synergy between synthetic oestrogens? [letter] Ashby J, et al. **Nature** 1997 Feb 6;385(6616):494

Regulation of estrogen receptor concentrations in the rat brain: effects of sustained androgen and estrogen exposure. Brown TJ, et al. **Neuroendocrinology** 1996 Jan;63(1):53–60

Antagonism by progesterone of diethylstilbestrol–induced pituitary tumorigenesis in Fischer 344 rats: effects on sex steroid receptors and tyrosine hydroxylase mRNA. Piroli GG, et al. **Neuroendocrinology** 1996 Jun;63(6):530–9

Exogenous estrogen acts differently on production of estrogen receptor in the preoptic area and the mediobasal hypothalamic nuclei in the newborn rat. Orikasa C, et al. **Neurosci Res** 1996 Jul;25(3):247–54

Effects of OK–432 (picibanil) on the estrogen receptors of MCF–7 cells and potentiation of antiproliferative effects of tamoxifen in combination with OK–432. Aoyagi H, et al. **Oncology** 1997 Sep–Oct;54(5):414–23

Synergy paper questioned at toxicology meeting [news] Kaiser J. **Science** 1997 Mar 28;275(5308):1879

Hydroxylated polychlorinated biphenyls (PCBs) as estrogens and antiestrogens: structure–activity relationships. Connor K, et al. **Toxicol Appl Pharmacol** 1997 Jul;145(1):111–23

Evaluation of chemicals with endocrine modulating activity in a yeast–based steroid hormone receptor gene transcription assay. Gaido KW, et al. **Toxicol Appl Pharmacol** 1997 Mar;143(1):205–12

In ovo 2,3,7,8–tetrachlorodibenzo–p–dioxin exposure in three avian species. 2. Effects on estrogen receptor and plasma sex steroid hormones during the perinatal period. Janz DM, et al. **Toxicol Appl Pharmacol** 1996 Aug;139(2):292–300

Antiestrogenic activity of hydroxylated polychlorinated biphenyl congeners identified in human serum. Moore M, et al. **Toxicol Appl Pharmacol** 1997 Jan;142(1):160–8

The molecular pharmacology of ovarian steroid receptors. Vegeto E, et al. **Vitam Horm** 1996;52:99–128 (129 ref.)

[Selected estrogen receptor modulators--new possibilities in prevention and therapy of osteoporosis?] Dören M. **Med Klin** 1996 Feb 15;91 Suppl 1:44–5 **(Ger)**

GENETICS

Analysis of estrogen receptor messenger RNA in breast carcinomas from archival specimens is predictive of tumor biology. Carmeci C, et al. **Am J Pathol** 1997 May; 150(5):1563–70

Expression of estrogen receptor variant messenger RNAs and determination of estrogen receptor status in human breast cancer. Huang A, et al. **Am J Pathol** 1997 May; 150(5):1827–33

Brief communication: comparative mapping of the human estrogen receptor (ESR) and the Kallmann (KAL) regions to the chromosomes of the great apes. Samonte RV, et al. **Am J Phys Anthropol** 1997 Aug;103(4):561–3

Quantitation of estrogen receptor mRNA and its alternatively spliced mRNAs in breast tumor cells and tissues. Fasco MJ. **Anal Biochem** 1997 Feb 15;245(2):167–78

Oestrogen receptor variants and mutations in human breast cancer. Murphy LC, et al. **Ann Med** 1997 Jun;29(3):221–34 (82 ref.)

Transcriptional activation of the human estrogen receptor by DDT isomers and metabolites in yeast and MCF–7 cells. Chen CW, et al. **Biochem Pharmacol** 1997 Apr 25; 53(8):1161–72

Ontogeny of estrogen receptor messenger ribonucleic acid expression in the postnatal rat uterus. Fishman RB, et al. **Biol Reprod** 1996 Dec;55(6):1221–30

Estradiol up–regulates estrogen receptor and progesterone receptor gene expression in specific ovine uterine cells. Ing NH, et al. **Biol Reprod** 1997 May;56(5):1205–15

Estrogen enhances endometrial estrogen receptor gene expression by a posttranscriptional mechanism in the ovariectomized ewe. Ing NH, et al. **Biol Reprod** 1996 Mar; 54(3):591–9

Effects of glucocorticoids on estrogen receptor messenger ribonucleic acid in the pregnant ovine myometrium in vivo and in vitro. Wu WX, et al. **Biol Reprod** 1996 Jan; 54(1):230–41

Regulation of the estrogen receptor and its messenger ribonucleic acid in the ovariectomized sheep myometrium and endometrium: the role of estradiol and progesterone. Wu WX, et al. **Biol Reprod** 1996 Oct;55(4):762–8

Estrogen receptor messenger ribonucleic acid changes during Leydig cell development. Zhai J, et al. **Biol Reprod** 1996 Oct;55(4):782–8

Demonstration of estrogen receptor mRNA in bone using in situ reverse–transcriptase polymerase chain reaction. Hoyland JA, et al. **Bone** 1997 Feb;20(2):87–92

Developmental profile and regulation of estrogen receptor (ER) mRNA expression in the preoptic area of prenatal rats. DonCarlos LL. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):224–33

Expression of the estrogen receptor gene in developing and adult human breast. Boyd M, et al. **Breast Cancer Res Treat** 1996;37(3):243–51

Effects of short–term antiestrogen treatment of primary breast cancer on estrogen receptor mRNA and protein expression and on estrogen–regulated genes. McClelland RA, et al. **Breast Cancer Res Treat** 1996;41(1):31–41

Characterization of the estrogen receptor transfected MCF10A breast cell line 139B6. Pilat MJ, et al. **Breast Cancer Res Treat** 1996;37(3):253–66

A point mutation in the human estrogen receptor gene is associated with the expression of an abnormal estrogen receptor mRNA containing a 69 novel nucleotide insertion. Wang M, et al. **Breast Cancer Res Treat** 1997 Jun; 44(2):145–51

Sequence variants of the estrogen receptor (ER) gene found in breast cancer patients with ER negative and progesterone receptor positive tumors. Iwase H, et al. **Cancer Lett** 1996 Nov 29;108(2):179–84

Identification of sequence alterations in the upstream regulatory region of the estrogen receptor gene in an ER–negative breast cancer cell line. Sullivan JA, et al. **Cancer Lett** 1997 Feb 26;113(1–2):131–9

Prevalence of estrogen receptor variant messenger RNAs in human breast cancer. Leygue E, et al. **Cancer Res** 1996 Oct 1;56(19):4324–7

Estrogen receptor messenger RNA splice variants are not involved in antiestrogen resistance in sublines of MCF–7 human breast cancer cells. Madsen MW, et al. **Cancer Res** 1997 Feb 15;57(4):585–9

An estrogen receptor mutant with strong hormone–independent activity from a metastatic breast cancer. Zhang QX, et al. **Cancer Res** 1997 Apr 1; 57(7):1244–9

Effect of toxaphene on estrogen receptor functions in human breast cancer cells. Bonefeld Jørgensen EC, et al. **Carcinogenesis** 1997 Aug;18(8):1651–4

Two promoters in expression of estrogen receptor messenger RNA in human breast cancer. Hayashi S, et al. **Carcinogenesis** 1997 Mar;18(3):459–64

Antisense estrogen receptor RNA expression increases epidermal growth factor receptor gene expression in breast cancer cells. deFazio A, et al. **Cell Growth Differ** 1997 Aug; 8(8):903–11

Effect of gonadotropin–releasing hormone on estrogen receptor messenger ribonucleic acid level in perifused pituitary cells. Demay F, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):397–402

Estrogenic effects of nonylphenol on pS2, ER and MUC1 gene expression in human breast cancer cells–MCF–7. Ren L, et al. **Chem Biol Interact** 1997 Apr 18;104(1):55–64

Dimethyl formamide (DMFA) and ethylene glycol (EG) are estrogenic in rainbow trout. Ren L, et al. **Chem Biol Interact** 1996 Sep 27;102(1):63–7 (6 ref.)

Sequence analysis of the DNA binding domain of the estrogen receptor gene in ER (+)/PR (–) breast cancer. Mies C, et al. **Diagn Mol Pathol** 1996 Mar;5(1):39–44

Ligand–independent activation of the oestrogen receptor by mutation of a conserved tyrosine. White R, et al. **EMBO J** 1997 Mar 17;16(6):1427–35

Steroid regulation of estrogen and progestin receptor messenger ribonucleic acid in monkey hypothalamus and pituitary. Bethea CL, et al. **Endocrinology** 1996 Oct; 137(10):4372–83

Targeted disruption of the estrogen receptor gene in male mice causes alteration of spermatogenesis and infertility. Eddy EM, et al. **Endocrinology** 1996 Nov;137(11):4796–805

Disruption of estrogen receptor gene prevents 17 beta estradiol–induced angiogenesis in transgenic mice. Johns A, et al. **Endocrinology** 1996 Oct;137(10):4511–3

Sexual dimorphism of steroid hormone receptor messenger ribonucleic acid expression and hormonal regulation in rat vascular tissue. Knauthe R, et al. **Endocrinology** 1996 Aug; 137(8):3220–7

Comparison of the ligand binding specificity and transcript tissue distribution of estrogen receptors alpha and beta. Kuiper GG, et al. **Endocrinology** 1997 Mar;138(3):863–70

Neonatal estrogen exposure up–regulates estrogen receptor expression in the developing and adult rat prostate lobes. Prins GS, et al. **Endocrinology** 1997 May;138(5):1801–9

Transcriptional activities of estrogen and glucocorticoid receptors are functionally integrated at the AP–1 response element. Uht RM, et al. **Endocrinology** 1997 Jul; 138(7):2900–8

Evaluation of a recombinant yeast cell estrogen screening assay. Coldham NG, et al. **Environ Health Perspect** 1997 Jul;105(7):734–42

Oestrogen receptor mutants and variants in breast cancer. Dowsett M, et al. **Eur J Cancer** 1997 Jul;33(8):1177–83 (67 ref.)

The untranslated first exon 'exon 0S' of the rat estrogen receptor (ER) gene. Hirata S, et al. **FEBS Lett** 1996 Oct 7;394(3):371–3

Association between family history of cancer and breast cancer defined by estrogen and progesterone receptor status. Tutera AM, et al. **Genet Epidemiol** 1996;13(2):207–21

Differential expression of oestrogen receptor and oestrogen inducible genes in gastric mucosa and cancer. Singh S, et al. **Gut** 1997 Apr;40(4):516–20

Expression of estrogen receptor wild type and exon 5 splicing variant mRNAs in normal and endometriotic endometria during the menstrual cycle. Fujimoto J, et al. **Gynecol Endocrinol** 1997 Feb;11(1):11–6

Expression of estrogen and progesterone receptors and their mRNAs in ovarian endometriosis. Misao R, et al. **Gynecol Endocrinol** 1996 Oct;10(5):303–10

In situ hybridization study of messenger RNA for estrogen receptor and immunohistochemical detection of estrogen and progesterone receptors in the human ovary. Revelli A, et al. **Gynecol Endocrinol** 1996 Jun;10(3):177–86

Mutations of the estrogen receptor in endometrial carcinoma: evidence of an association with high tumor grade. Assikis VJ, et al. **Gynecol Oncol** 1996 Nov;63(2):192–9

Estrogen receptor mRNA splice variants in pre– and postmenopausal human endometrium and endometrial carcinoma. Rice LW, et al. **Gynecol Oncol** 1997 Apr; 65(1):149–57

Progesterone inhibits female–typical receptive behavior and decreases hypothalamic estrogen and progesterone receptor messenger ribonucleic acid levels in whiptail lizards (genus

Cnemidophorus). Godwin J, et al. **Horm Behav** 1996 Jun; 30(2):138–44

Reproductive functions illustrating direct and indirect effects of genes on behavior. Ogawa S, et al. **Horm Behav** 1996 Dec;30(4):487–94

Estrogen receptor function as revealed by knockout studies: neuroendocrine and behavioral aspects. Rissman EF, et al. **Horm Behav** 1997 Jun;31(3):232–43 (90 ref.)

Screening for ESR mutations in breast and ovarian cancer patients. Anderson TI, et al. **Hum Mutat** 1997;9(6):531–6

Screening of 229 family cancer patients for a germline estrogen receptor gene (ESR) base mutation [letter] Zelada-Hedman M, et al. **Hum Mutat** 1997;9(3):289

Oestrogen receptor gene polymorphisms and ovarian stimulation for in-vitro fertilization. Georgiou I, et al. **Hum Reprod** 1997 Jul;12(7):1430–3

Estrogen receptors alpha and beta form heterodimers on DNA. Cowley SM, et al. **J Biol Chem** 1997 Aug 8; 272(32):19858–62

Transcriptional regulation of the hepatocyte growth factor gene by the nuclear receptors chicken ovalbumin upstream promoter transcription factor and estrogen receptor. Jiang JG, et al. **J Biol Chem** 1997 Feb 14;272(7):3928–34

Association of bone mineral density with polymorphism of the estrogen receptor gene. Kobayashi S, et al. **J Bone Miner Res** 1996 Mar;11(3):306–11

Estrogen response in the hFOB 1.19 human fetal osteoblastic cell line stably transfected with the human estrogen receptor gene. Harris SA, et al. **J Cell Biochem** 1995 Oct; 59(2):193–201

Tumor-specific expression of alternatively spliced estrogen receptor messenger ribonucleic acid variants in human pituitary adenomas. Chaidarun SS, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1058–65

Nonassociation of estrogen receptor genotypes with bone mineral density and estrogen responsiveness to hormone replacement therapy in Korean postmenopausal women [see comments] Han KO, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):991–5. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):989–90.

Activation of estrogen receptor-mediated gene transcription by IGF-I in human breast cancer cells. Lee AV, et al. **J Endocrinol** 1997 Jan;152(1):39–47

Increased expression of the cardiac L-type calcium channel in estrogen receptor-deficient mice. Johnson BD, et al. **J Gen Physiol** 1997 Aug;110(2):135–40

The 5' flank of the rat estrogen receptor gene: structural characterization and evidence for tissue- and species-specific promoter utilization. Freyschuss B, et al. **J Mol Endocrinol** 1996 Dec;17(3):197–206

Presence of a variant form of the estrogen receptor in peripheral blood mononuclear cells from normal individuals and lupus patients. Wilson KB, et al. **J Reprod Immunol** 1996 Oct;31(3):199–208

An analysis of tamoxifen-stimulated human carcinomas for mutations in the AF-2 region of the estrogen receptor. Bilimoria MM, et al. **J Steroid Biochem Mol Biol** 1996 Aug; 58(5–6):479–88

Expression of estrogen receptor exon 5 splicing variant (ER E5SV) mRNA in gynaecological cancers. Fujimoto J, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):25–30

Both estradiol and tamoxifen decrease proliferation and invasiveness of cancer cells transfected with a mutated estrogen receptor. Garcia M, et al. **J Steroid Biochem Mol Biol** 1997 Apr;61(1–2):11–7

Estrogenic activity is increased for an antiestrogen by a natural mutation of the estrogen receptor. Levenson AS, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):261–8

Analysis of ligand dependence and hormone response element synergy in transcription by estrogen receptor. Mattick S, et al. **J Steroid Biochem Mol Biol** 1997 Mar; 60(5–6):285–94

Multiple splicing variants of the estrogen receptor are present in individual human breast tumors. Zhang QX, et al. **J Steroid Biochem Mol Biol** 1996 Nov;59(3–4):251–60

Endothelial dysfunction in a man with disruptive mutation in oestrogen-receptor gene [letter] Sudhir K, et al. **Lancet** 1997 Apr 19;349(9059):1146–7

Expression of the estrogen-related receptor 1 (ERR-1) orphan receptor during mouse development. Bonnelye E, et al. **Mech Dev** 1997 Jul;65(1–2):71–85

Occurrence of androgen and estrogen receptor mRNAs in the harderian gland: a comparative survey. Varriale B. **Microsc Res Tech** 1996 Jun 1;34(2):97–103 (33 ref.)

Expression of Pit-1 and estrogen receptor messenger RNA in prolactin-producing pituitary adenomas. Sanno N, et al. **Mod Pathol** 1996 May;9(5):526–33

Probing the structure and function of the estrogen receptor ligand binding domain by analysis of mutants with altered transactivation characteristics. Eng FC, et al. **Mol Cell Biol** 1997 Aug;17(8):4644–53

Prebending the estrogen response element destabilizes binding of the estrogen receptor DNA binding domain. Kim J, et al. **Mol Cell Biol** 1997 Jun;17(6):3173–80

The nuclear orphan receptors COUP-TF and ARP-1 positively regulate the trout estrogen receptor gene through enhancing autoregulation. Lazennec G, et al. **Mol Cell Biol** 1997 Sep;17(9):5053–66

A transcriptional enhancer required for the differential expression of the human estrogen receptor in breast cancers. Tang Z, et al. **Mol Cell Biol** 1997 Mar; 17(3):1274–80

Transcriptional and post-transcriptional regulation of rainbow trout estrogen receptor and vitellogenin gene expression. Flouriot G, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):173–83

Specific modulation of estrogen receptor mRNA isoforms in rat pituitary throughout the estrous cycle and in response to steroid hormones. Friend KE, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):147–55

Expression of estrogen receptor variants in normal and neoplastic human uterus. Hu C, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):173–9

Characterization of a nontumorigenic human breast epithelial cell line stably transfected with the human estrogen receptor (ER) cDNA. Lundholt BK, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):47–59

The sheep estrogen receptor: cloning and regulation of expression in the hypothalamo-pituitary axis. Madigou T, et al. **Mol Cell Endocrinol** 1996 Aug 9;121(2):153–63

Transcription regulatory signals in the 5' and 3' regions of Oreochromis aureus ER gene. Tan NS, et al. **Mol Cell Endocrinol** 1996 Oct 30;123(2):149–61

Erratum to "The first contiguous estrogen receptor gene from a fish, Oreochromis aureus: evidence for multiple transcripts" [Mol. Cell. Endocrinol. 120 (1996) 186–188]. Tan NS, et al. **Mol Cell Endocrinol** 1996 Oct 14; 123(1):107–10

The first contiguous estrogen receptor gene from a fish, Oreochromis aureus: evidence for multiple transcripts. Tan NS, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):177–92

Molecular cloning and characterization of Japanese eel estrogen receptor cDNA. Todo T, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):37–45

The ERR-1 orphan receptor is a transcriptional activator expressed during bone development. Bonnelye E, et al. **Mol Endocrinol** 1997 Jun;11(7):905–16

Estrogen receptor-beta mRNA expression in rat ovary: down-regulation by gonadotropins. Byers M, et al. **Mol Endocrinol** 1997 Feb;11(2):172–82

Identification of the sequences within the human complement 3 promoter required for estrogen responsiveness provides insight into the mechanism of tamoxifen mixed agonist activity [published erratum appears in Mol Endocrinol 1997 Mar;11(3):341] Fan JD, et al. **Mol Endocrinol** 1996 Dec; 10(12):1605–16

RIP 140 enhances nuclear receptor-dependent transcription in vivo in yeast. Joyeux A, et al. **Mol Endocrinol** 1997 Feb; 11(2):193–202

A transcriptionally active estrogen receptor mutant is a novel type of dominant negative inhibitor of estrogen action. McInerney EM, et al. **Mol Endocrinol** 1996 Dec; 10(12):1519–26

Human estrogen receptor ligand activity inversion mutants: receptors that interpret antiestrogens as estrogens and estrogens as antiestrogens and discriminate among different antiestrogens. Montano MM, et al. **Mol Endocrinol** 1996 Mar;10(3):230–42

Estrogen receptor affinity and location of consensus and imperfect estrogen response elements influence transcription activation of simplified promoters. Nardulli AM, et al. **Mol Endocrinol** 1996 Jun;10(6):694–704

FLP recombinase/estrogen receptor fusion proteins require the receptor D domain for responsiveness to antagonists, but not agonists. Nichols M, et al. **Mol Endocrinol** 1997 Jun;11(7):950–61

Effects of wild type and mutant estrogen receptors on DNA flexibility, DNA bending, and transcription activation. Potthoff SJ, et al. **Mol Endocrinol** 1996 Sep;10(9):1095–106

Coactivator and corepressor regulation of the agonist/antagonist activity of the mixed antiestrogen, 4-hydroxytamoxifen. Smith CL, et al. **Mol Endocrinol** 1997 Jun;11(6):657–66

Two separate mechanisms for ligand-independent activation of the estrogen receptor. El-Tanani MK, et al. **Mol Endocrinol** 1997 Jun;11(7):928–37

Human estrogen receptor (ER) gene promoter-P1: estradiol-independent activity and estradiol inducibility in ER+ and ER- cells. Treilleux, et al. **Mol Endocrinol** 1997 Aug;11(9):1319–31

Cloning, chromosomal localization, and functional analysis of the murine estrogen receptor beta. Tremblay GB, et al. **Mol Endocrinol** 1997 Mar;11(3):353–65

Constitutively active human estrogen receptors containing amino acid substitutions for tyrosine 537 in the receptor protein. Weis KE, et al. **Mol Endocrinol** 1996 Nov; 10(11):1388–98

Uterine preparation for implantation in the mouse is associated with coordinate expression of estrogen-responsive finger protein and estrogen receptor. Das N, et al. **Mol Reprod Dev** 1997 Apr;46(4):499–506

Estrogenic effect on the expression of estrogen receptor, COUP-TF, and lactoferrin mRNA in developing mouse tissues. Shigeta H, et al. **Mol Reprod Dev** 1996 Sep; 45(1):21–30

Reversal of sex roles in genetic female mice by disruption of estrogen receptor gene. Ogawa S, et al. **Neuroendocrinology** 1996 Dec;64(6):467–70

Transient neonatal elevation in hypothalamic estrogen receptor mRNA in prenatally-stressed male rats. Henry C, et al. **Neurosci Lett** 1996 Sep 27;216(2):141–5

Enhancement of estrogen receptor gene expression in the mediobasal hypothalamus during anestrus in the beagle bitch. Tani H, et al. **Neurosci Lett** 1997 May 23; 227(3):149–52

Prognostic factors and variant estrogen receptor RNAs in clinical breast cancer. Auchus RJ, et al. **Nucl Med Biol** 1994 Apr;21(3):449–54 (15 ref.)

COBRA: a sensitive and quantitative DNA methylation assay. Xiong Z, et al. **Nucleic Acids Res** 1997 Jun 15; 25(12):2532–4

Identification of ERF-1 as a member of the AP2 transcription factor family. McPherson LA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4342–7

Regulation of estrogen receptor transcriptional enhancement by the cyclin A/Cdk2 complex. Trowbridge JM, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10132–7

Estrogen and thyroid hormone interaction on regulation of gene expression. Zhu YS, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12587–92

The expression of receptors for estrogen and epithelial growth factor in the male rabbit prostate and prostatic urethra following castration. Bødker A, et al. **Scand J Urol Nephrol** 1997 Feb;31(1):15–8

Use of the yeast one-hybrid system to screen for mutations in the ligand-binding domain of the estrogen receptor. Bush SM, et al. **Steroids** 1996 Mar;61(3):102–9

Two transcription activation functions in the amino terminus of the mouse estrogen receptor that are affected by the carboxy terminus. Gandini O, et al. **Steroids** 1997 Jul; 62(7):508–15

The distribution of estrogen receptor-beta mRNA in the rat hypothalamus. Shughrue PJ, et al. **Steroids** 1996 Dec; 61(12):678–81

HISTORY

How best to express oestrogen receptor activity [letter; comment] Benson JR. **Br J Cancer** 1997;76(3):418–9. Comment on: Br J Cancer 1996 Nov;74(9):1329–30.

IMMUNOLOGY

Effect of fasting and immobilization stress on estrogen receptor immunoreactivity in the brain in ovariectomized female rats. Estacio MA, et al. **Brain Res** 1996 Apr 22; 717(1–2):55–61

The perinatal ontogeny of estrogen receptor-immunoreactivity in the developing male and female rat hypothalamus. Pasterkamp RJ, et al. **Brain Res Dev Brain Res** 1996 Feb 26;91(2):300–3

The effect of a selective estrogen receptor modulator on the progression of spontaneous autoimmune disease in MRL lpr/lpr mice. Apelgren LD, et al. **Cell Immunol** 1996 Oct 10;173(1):55–63

Tumors of the uterine isthmus: clinicopathologic features and immunohistochemical characterization of p53 expression and hormone receptors. Jacques SM, et al. **Int J Gynecol Pathol** 1997 Jan;16(1):38–44

Selective colocalization of immunoreactivity for intracellular gonadal hormone receptors and tyrosine hydroxylase in the ventral tegmental area, substantia nigra, and retrorubral fields in the rat. Kritzer MF. **J Comp Neurol** 1997 Mar 10;379(2):247–60

Cutaneous leiomyomas lack estrogen and progesterone receptor immunoreactivity. McGinley KM, et al. **J Cutan Pathol** 1997 Apr;24(4):241–5

Site-directed estrogen receptor antibodies stabilize 4-hydroxytamoxifen ligand, but not estradiol, and indicate ligand-specific differences in the recognition of estrogen response element DNA in vitro. Klinge CM, et al. **Steroids** 1996 May;61(5):278–89

Binding of site-directed monoclonal antibodies to an epitope located in the A/B region (amino acids 140–154) of human estrogen receptor-induced conformational changes in an epitope in the DNA-binding domain. Traish AM, et al. **Steroids** 1996 Sep;61(9):549–56

ISOLATION & PURIFICATION

Two populations of the estrogen receptor separated and characterized using aqueous two-phase partitioning. Fritsch M, et al. **Biochemistry** 1997 May 20;36(20):6230–42

Cloning and characterization of a 77-kDa oestrogen receptor isolated from a human breast cancer cell line. Pink JJ, et al. **Br J Cancer** 1997;75(1):17–27

Novel estrogen receptor discovered [news] **Environ Health Perspect** 1996 Dec;104(12):1273–4

Presence of a variant form of the estrogen receptor in peripheral blood mononuclear cells from normal individuals and lupus patients. Wilson KB, et al. **J Reprod Immunol** 1996 Oct;31(3):199–208

Lack of relationship between the expression of Hsp27 heat shock estrogen receptor-associated protein and estrogen receptor or progesterone receptor status in male breast carcinoma. Muñoz de Toro MM, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):277–84

METABOLISM

Expression of pS2 protein and estrogen and progesterone receptor status in breast cancer. Ioakim-Liossi A, et al. **Acta Cytol** 1997 May-Jun;41(3):713–6

Mechanisms of tamoxifen resistance in the treatment of advanced breast cancer. Lykkesfeldt AE. **Acta Oncol** 1996; 35 Suppl 5:9–14 (60 ref.)

Changes in radiation sensitivity and steroid receptor content induced by hormonal agents and ionizing radiation in breast

cancer cells in vitro. Paulsen GH, et al. **Acta Oncol** 1996; 35(8):1011–9

Effect of perinatal triiodothyronine (T3) treatment on thymic glucocorticoid and estrogen receptors and uterus estrogen receptors. Receptor selectivity during hormonal imprinting. Csaba G, et al. **Acta Physiol Hung** 1996; 84(1):19–23

Breast cancer risk factors according to combined estrogen and progesterone receptor status: a case–control analysis. Yoo KY, et al. **Am J Epidemiol** 1997 Aug 15;146(4):307–14

Interaction with type II estrogen binding sites and antiproliferative activity of tamoxifen and quercetin in human non–small–cell lung cancer. Caltagirone S, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):51–9

Estrogen and progesterone receptors in the endometrium. Moutsatsou P, et al. **Ann N Y Acad Sci** 1997 Jun 17; 816:99–115 (70 ref.)

Aggressive behaviors of transgenic estrogen–receptor knockout male mice. Ogawa S, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:384–5

Papillary cystic tumors of the pancreas: assessment of malignant potential by analysis of progesterone receptor, flow cytometry, and ras oncogene mutation. Lee WY, et al. **Anticancer Res** 1997 Jul–Aug;17(4A):2587–91

Expression of estrogen and progesterone receptors in non–small–cell lung cancer: immunohistochemical study. Su JM, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3803–6

Cellular targets of the anti–breast cancer agent Z–1,1–dichloro–2,3–diphenylcyclopropane: type II estrogen binding sites and tubulin. ter Haar E, et al. **Anticancer Res** 1997 May–Jun;17(3C):1861–9

Sex hormones and the thymus in relation to thymocyte proliferation and maturation. Seiki K, et al. **Arch Histol Cytol** 1997 Mar;60(1):29–38 (25 ref.)

4',17–dioxo–5'H–estra–1(10),4–dieno[3,2–b]furan: synthesis, binding affinity to the estrogen receptor, uterotrophic and antiimplantation activities. Mohsen A, et al. **Arch Pharm (Weinheim)** 1996 Feb;329(2):61–5

Levels of serum steroids, aromatase activity, and estrogen receptors in preoptic area, hypothalamus, and amygdala of B6D2F1 male house mice that differ in the display of copulatory behavior after castration. Sinchak K, et al. **Behav Neurosci** 1996 Jun;110(3):593–602

Expression of 112–kDa estrogen receptor in mouse brain cortex and its autoregulation with age. Asaithambi A, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):683–5

Calmodulin decreases the estrogen binding capacity of the estrogen receptor. Bouhoute A, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):651–7

Regulation of Cre recombinase activity by mutated estrogen receptor ligand–binding domains. Feil R, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):752–7

Evaluation of clinical and environmental anti–estrogens with human estrogen receptor expressed in Saccharomyces cerevisiae: a novel role for ABC–cassette transporters in mediating anti–estrogenic activity. Tran DQ, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):669–74

Antagonism of estrogen receptor and calmodulin association by antiestrogens is not dependent on an interaction with calmodulin. Rowlands MG, et al. **Biochem Pharmacol** 1997 Jan 24;53(2):241–4

Mechanism of action of interferon on oestrogen receptor function. Flint AP, et al. **Biochem Soc Trans** 1996 Aug; 24(3):366S

17 alpha (haloacetamidoalkyl) estradiols alkylate the human estrogen receptor at cysteine residues 417 and 530. Aliau S, et al. **Biochemistry** 1997 May 13;36(19):5861–7

Stromal cell progesterone and estrogen receptors during proliferation and regression of the decidua basalis in the pregnant rat. Ogle TF, et al. **Biol Reprod** 1997 Sep; 57(3):495–506

Oestrogen receptors and breast cancer [editorial] Elledge RM, et al. **BMJ** 1997 Jun 28;314(7098):1843–4

Expression of oestrogen receptor and oestrogen–inducible genes in pancreatic cancer. Singh S, et al. **Br J Surg** 1997 Aug;84(8):1085–9

Expression of estrogen receptor–like immunoreactivity by different subgroups of basal forebrain cholinergic neurons in gonadectomized male and female rats. Gibbs RB. **Brain Res** 1996 May 13;720(1–2):61–8

The development of a species difference in the local distribution of brain estrogen receptive cells. Gahr M, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):182–9

Levels of estrogen receptor immunoreactivity are altered in behaviorally–relevant brain regions in female rats during pregnancy. Wagner CK, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):328–36

TGF–beta 1 mRNA expression in clinical breast cancer and its relationship to ER mRNA expression. Amoils KD, et al. **Breast Cancer Res Treat** 1997 Jan;42(2):95–101

CD44 variant expression and estrogen receptor status in breast cancer. Hole AK, et al. **Breast Cancer Res Treat** 1997 Apr;43(2):165–73

Estrogen, progesterone and testosterone receptors in human fetal cartilaginous tissue: immunohistochemical studies. Ben–Hur H, et al. **Calcif Tissue Int** 1997 Jun;60(6):520–6

Influence of BRCA1 mutations on nuclear grade and estrogen receptor status of breast carcinoma in Ashkenazi Jewish women. Karp SE, et al. **Cancer** 1997 Aug 1;80(3):435–41

Antiestrogenic activity of DP–TAT–59, an active metabolite of TAT–59 against human breast cancer. Toko T, et al. **Cancer Chemother Pharmacol** 1997;39(5):390–8

Expression of Fas–estrogen receptor fusion protein induces cell death in pancreatic cancer cell lines. Kawaguchi Y, et al. **Cancer Lett** 1997 Jun 3;116(1):53–9

Inhibition of proliferation of estrogen receptor–positive MCF–7 human breast cancer cells by flavonoids in the presence and absence of excess estrogen. So FV, et al. **Cancer Lett** 1997 Jan 30;112(2):127–33

Retinoic acid receptor alpha expression correlates with retinoid–induced growth inhibition of human breast cancer cells regardless of estrogen receptor status. Fitzgerald P, et al. **Cancer Res** 1997 Jul 1;57(13):2642–50

Comparison of estrogen receptor DNA binding in untreated and acquired antiestrogen–resistant human breast tumors. Johnston SR, et al. **Cancer Res** 1997 Sep 1;57(17):3723–7

An estrogen receptor mutant with strong hormone–independent activity from a metastatic breast cancer. Zhang QX, et al. **Cancer Res** 1997 Apr 1; 57(7):1244–9

Depletion of hepatocyte nuclear estrogen receptor expression is associated with promotion of tamoxifen induced GST–P foci to tumours in rat liver. Carthew P, et al. **Carcinogenesis** 1997 May;18(5):1109–12

CDK–independent activation of estrogen receptor by cyclin D1. Zwijsen RM, et al. **Cell** 1997 Feb 7;88(3):405–15

The expression of estrogen receptor and estrogen effect in MBA–15 marrow stromal osteoblasts. Shamay A, et al. **Cell Biol Int** 1996 Jun;20(6):401–5

Cell–specific mechanisms of estrogen receptor in the pituitary gland. Demay F, et al. **Cell Biol Toxicol** 1996 Dec; 12(4–6):317–24 (45 ref.)

A pathway of multi–chaperone interactions common to diverse regulatory proteins: estrogen receptor, Fes tyrosine kinase, heat shock transcription factor Hsf1, and the aryl hydrocarbon receptor. Nair SC, et al. **Cell Stress Chaperones** 1996 Dec;1(4):237–50

Establishment of a human endometrial cell culture system and characterization of its polarized hormone responsive epithelial cells. Classen–Linke I, et al. **Cell Tissue Res** 1997 Jan;287(1):171–85

Estrogen and progestin cytosol receptor concentrations in patients with endometriosis and their changes after gossypol therapy. Zhang Y, et al. **Chin Med J (Engl)** 1996 Oct;109(10):814–6

Expression of an estrogen receptor by human coronary artery and umbilical vein endothelial cells. Kim–Schulze S, et al. **Circulation** 1996 Sep 15;94(6):1402–7

The estrogen receptor activity cycle: dependence on multiple protein–protein interactions. Lieberman BA. **Crit Rev Eukaryot Gene Expr** 1997;7(1–2):43–59 (147 ref.)

Sequence analysis of the DNA binding domain of the estrogen receptor gene in ER (+)/PR (–) breast cancer. Mies C, et al. **Diagn Mol Pathol** 1996 Mar;5(1):39–44

Induction of apoptosis by the transcription factor c–Jun. Bossy–Wetzel E, et al. **EMBO J** 1997 Apr 1;16(7):1695–709

Ligand–independent activation of the oestrogen receptor by mutation of a conserved tyrosine. White R, et al. **EMBO J** 1997 Mar 17;16(6):1427–35

Effects of RU486 on estrogen, progesterone, oxytocin, and their receptors in the rat uterus during late gestation. Fang X, et al. **Endocrinology** 1997 Jul;138(7):2763–8

Comparison of the ligand binding specificity and transcript tissue distribution of estrogen receptors alpha and beta. Kuiper GG, et al. **Endocrinology** 1997 Mar;138(3):863–70

Regulation of estrogen receptor concentration and activity by an erbB/HER ligand in breast carcinoma cell lines. Saceda M, et al. **Endocrinology** 1996 Oct;137(10):4322–30

Effects of photoperiod on estrogen receptor, tyrosine hydroxylase, neuropeptide Y, and beta–endorphin immunoreactivity in the ewe hypothalamus. Skinner DC, et al. **Endocrinology** 1997 Jun;138(6):2585–95

The role of transforming growth factor–beta in the regulation of estrogen receptor expression in the MCF–7 breast cancer cell line. Stoica A, et al. **Endocrinology** 1997 Apr; 138(4):1498–505

QSAR models for binding of estrogenic compounds to estrogen receptor alpha and beta subtypes. Tong W, et al. **Endocrinology** 1997 Sep;138(9):4022–5

Extracellular matrix regulates ovarian hormone–dependent proliferation of mouse mammary epithelial cells. Xie J, et al. **Endocrinology** 1997 Jun;138(6):2466–73

In vitro synergistic interaction of alligator and human estrogen receptors with combinations of environmental chemicals. Arnold SF, et al. **Environ Health Perspect** 1997 Apr;105 Suppl 3:615–8

Relative binding affinity–serum modified access (RBA–SMA) assay predicts the relative in vivo bioactivity of the xenoestrogens bisphenol A and octylphenol. Nagel SC, et al. **Environ Health Perspect** 1997 Jan;105(1):70–6

Interaction of environmental chemicals with the estrogen and progesterone receptors from the oviduct of the American alligator. Vonier PM, et al. **Environ Health Perspect** 1996 Dec;104(12):1318–22

Oestrogen and progesterone receptors in gastrointestinal cancer cell lines. Jacobs E, et al. **Eur J Cancer** 1996 Dec; 32A(13):2348–53

Oestrogen and progestogen receptor content in human endometrium. Snijders M, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Dec;70(1):9–10

A time course study on the "in vitro" effects of T3 and testosterone on androgen and estrogen receptors in peripuberal primary rat Sertoli cells. Sisci D, et al. **Exp Clin Endocrinol Diabetes** 1997;105(4):218–24

Synthesis, estrogen receptor binding affinity and biological evaluation of some 2–substituted estrone derivatives. Omar AM, et al. **Farmaco** 1997 Apr;52(4):219–25

Putative regulatory sequence in human papillomavirus type 16 E2 open reading frame. Kitasato H, et al. **Folia Biol (Praha)** 1997;43(1):41–4

Changes in localization of ovarian immunoreactive estrogen receptor during follicular development in hens. Yoshimura Y, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):368–71

Ligand–dependent interaction between the estrogen receptor and the human homologues of SWI2/SNF2. Ichinose H, et al. **Gene** 1997 Mar 25;188(1):95–100

Estrogen and progesterone receptor status as prognostic indicators in patients with optimally cytoreduced stage IIIc serous cystadenocarcinoma of the ovary. Geisler JP, et al. **Gynecol Oncol** 1996 Mar;60(3):424–7 (18 ref.)

Estrogen receptor immunocytochemistry in endometrial carcinoma: a prognostic marker for survival. Pertschuk LP, et al. **Gynecol Oncol** 1996 Oct;63(1):28–33

Vascular endothelial growth factor in primate endometrium is regulated by oestrogen–receptor and progesterone–receptor ligands in vivo. Greb RR, et al. **Hum Reprod** 1997 Jun;12(6):1280–92

Immunohistochemical characterization of proliferation, oestrogen receptor and progesterone receptor expression in endometriosis: comparison of eutopic and ectopic endometrium with normal cycling endometrium. Jones RK, et al. **Hum Reprod** 1995 Dec;10(12):3272–9

Non–competitive anti–oestrogenic actions of progesterone antagonists in primate endometrium: enhancement of oestrogen and progesterone receptors with blockade of post–receptor proliferative mechanisms. Neulen J, et al. **Hum Reprod** 1996 Jul;11(7):1533–7

Endometrial vascular smooth muscle oestrogen and progesterone receptor distribution in women with and without menorrhagia. Rogers PA, et al. **Hum Reprod** 1996 Sep;11(9):2003–8

Relationship between c–erbB–2 oncoprotein, epidermal growth factor receptor, and estrogen receptor expression in patients with ductal breast carcinoma. Association with tumor phenotypes. Harłozińska A, et al. **In Vivo** 1996 Mar–Apr;10(2):217–22

Study of oestrogen and progesterone receptors in meningiomas by a technique utilizing the binding hormones in a polymerized state. Kumar S, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):189–92

Genomic deletions in the BRCA1, BRCA2 and TP53 regions associate with low expression of the estrogen receptor in sporadic breast carcinoma. Schmutzler RK, et al. **Int J Cancer** 1997 Jun 20;74(3):322–5

Estrogen receptors are present in the epididymis of the rooster. Kwon S, et al. **J Androl** 1997 Jul–Aug;18(4):378–84

Selective interaction of hsp90 with an estrogen receptor ligand–binding domain containing a point mutation. Aumais JP, et al. **J Biol Chem** 1997 May 2;272(18):12229–35

Functional interactions between the estrogen receptor and the transcription activator Sp1 regulate the estrogen–dependent transcriptional activity of the vitellogenin A1 io promoter. Batistuzzo de Medeiros SR, et al. **J Biol Chem** 1997 Jul 18;272(29):18250–60

Cooperativity and dimerization of recombinant human estrogen receptor hormone–binding domain. Brandt ME, et al. **J Biol Chem** 1997 Feb 21;272(8):4843–9

Estrogen receptor ligands modulate its interaction with DNA. Cheskis BJ, et al. **J Biol Chem** 1997 Apr 25; 272(17):11384–91

A subpopulation of estrogen receptors are modified by O–linked N–acetylglucosamine. Jiang MS, et al. **J Biol Chem** 1997 Jan 24;272(4):2421–8

Hormone–dependent transactivation by estrogen receptor chimeras that do not interact with hsp90. Evidence for transcriptional repressors. Lee HS, et al. **J Biol Chem** 1996 Oct 18;271(42):25727–30

The 27–kDa heat shock protein facilitates basic fibroblast growth factor release from endothelial cells. Piotrowicz RS, et al. **J Biol Chem** 1997 Mar 14;272(11):7042–7

NMR spectroscopic studies of the DNA–binding domain of the monomer–binding nuclear orphan receptor, human estrogen related receptor–2. The carboxyl–terminal extension to the zinc–finger region is unstructured in the free form of the protein. Sem DS, et al. **J Biol Chem** 1997 Jul 18;272(29):18038–43

Differential interaction of nuclear receptors with the putative human transcriptional coactivator hTIF1. Thénot S, et al. **J Biol Chem** 1997 May 2;272(18):12062–8

Estrogen inhibits interleukin–6 production and gene expression in a human osteoblastic cell line with high levels of estrogen receptors. Kassem M, et al. **J Bone Miner Res** 1996 Feb;11(2):193–9

Evidence of a correlation of estrogen receptor level and avian osteoclast estrogen responsiveness. Pederson L, et al. **J Bone Miner Res** 1997 May;12(5):742–52

Effect of oestradiol and insulin on the proliferative pattern and on oestrogen and progesterone receptor contents in MCF–7 cells. Panno ML, et al. **J Cancer Res Clin Oncol** 1996;122(12):745–9

NDF induces expression of a novel 46 kD protein in estrogen receptor positive breast cancer cells. Kumar R, et al. **J Cell Biochem** 1996 Jul;62(1):102–12

Mutational analysis of Hsp90 alpha dimerization and subcellular localization: dimer disruption does not impede "in vivo' interaction with estrogen receptor. Meng X, et

al. **J Cell Sci** 1996 Jul;109 (Pt 7):1677–87

Analysis of receptor phenotypes in operated breast cancer. Cherubini M, et al. **J Chemother** 1997 Apr;9(2):117–8

Expression of estrogen receptor–beta in human breast tumors. Dotzlaw H, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2371–4

Thyroid hormone and estrogen receptor expression in normal pituitary and nonfunctioning tumors of the anterior pituitary. Gittoes NJ, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1960–7

Immunohistochemical localization of gonadotropin and gonadal steroid receptors in human pineal glands [see comments] Luboshitzky R, et al.
J Clin Endocrinol Metab 1997 Mar;82(3):977–81. Comment in: J Clin Endocrinol Metab 1997 Aug;82(8):2756–7.

Imaging of estrogen receptors in primary and metastatic breast cancer patients with iodine–123–labeled Z–MIVE. Rijks LJ, et al. **J Clin Oncol** 1997 Jul;15(7):2536–45

Prognostic role of oestrogen and progesterone receptors in patients with breast cancer: relation to age and lymph node status. Collett K, et al. **J Clin Pathol** 1996 Nov;49(11):920–5

Oestrogen and progesterone receptor assessment in core biopsy specimens of breast carcinoma. Zidan A, et al.
J Clin Pathol 1997 Jan;50(1):27–9

Neuroanatomical distribution of androgen and estrogen receptor–immunoreactive cells in the brain of the male roughskin newt. Davis GA, et al. **J Comp Neurol** 1996 Aug 19;372(2):294–308

17 beta–hydroxysteroid oxidoreductase activity in intact cells significantly differs from classical enzymology analysis. Castagnetta LA, et al. **J Endocrinol** 1996 Sep;150 Suppl:S73–8

Steroid hormone receptors and antineoplastic chemotherapy in human breast cancer. Görlich M, et al.
J Exp Clin Cancer Res 1997 Mar;16(1):95–103 (59 ref.)

(S)–(+)–4–[7–(2,2–dimethyl–1–oxopropoxy)–4–methyl–2–[4–[2–(1–piperidinyl)–ethoxy]phenyl]–2H–1–benzopyran–3–yl]–phenyl 2,2–dimethylpropanoate (EM–800): a highly potent, specific, and orally active nonsteroidal antiestrogen. Gauthier S, et al. **J Med Chem** 1997 Jul 4;40(14):2117–22

Steroidal affinity labels of the estrogen receptor. 3. Estradiol 11 beta–n–alkyl derivatives bearing a terminal electrophilic group: antiestrogenic and cytotoxic properties. Lobaccaro C, et al. **J Med Chem** 1997 Jul 4;40(14):2217–27

Estrogenic triarylethylene acetic acids: effect of structural variation on estrogen receptor affinity and estrogenic potency and efficacy in MCF–7 cells. Ruenitz PC, et al. **J Med Chem** 1996 Nov 22;39(24):4853–9

Mutational analysis of the estrogen receptor ligand–binding domain: influence of ligand structure and stereochemistry on transactivation. Kohno H, et al. **J Mol Endocrinol** 1996 Jun;16(3):277–85

Nerve growth factor (NGF) regulation of estrogen receptors in explant cultures of the developing forebrain. Miranda R, et al. **J Neurobiol** 1996 Sep;31(1):77–87

Ovarian steroid regulation of estrogen and progesterone receptor messenger ribonucleic acid in the anteroventral periventricular nucleus of the rat. Simerly RB, et al.
J Neuroendocrinol 1996 Jan;8(1):45–56

Inhibition of proliferation of estrogen receptor–negative MDA–MB–435 and –positive MCF–7 human breast cancer cells by palm oil tocotrienols and tamoxifen, alone and in combination. Guthrie N, et al. **J Nutr** 1997 Mar; 127(3):544S–548S

Immunohistochemical assay for oestrogen receptors in paraffin wax sections of breast carcinoma using a new monoclonal antibody. Huang A, et al. **J Pathol** 1996 Oct; 180(2):223–7

Ligand specificity of uterine oestrogen and progesterone receptors in the subadult African elephant, Loxodonta africana. Greyling MD, et al. **J Reprod Fertil** 1997 Mar; 109(2):199–204

Stability of the ligand–estrogen receptor interaction depends on estrogen response element flanking sequences and cellular factors. Anolik JH, et al.
J Steroid Biochem Mol Biol 1996 Dec;59(5–6):413–29

Up–regulation of the estrogen receptor by triiodothyronine in rat pituitary cell lines. Fujimoto N, et al.
J Steroid Biochem Mol Biol 1997 Apr;61(1–2):79–85

Neurotransmitters activate the human estrogen receptor in a neuroblastoma cell line. Gangolli EA, et al.
J Steroid Biochem Mol Biol 1997 Apr;61(1–2):1–9

In vitro and in vivo interactions between nuclear receptors at estrogen response elements. Joyeux A, et al.
J Steroid Biochem Mol Biol 1996 Aug;58(5–6):507–15

Characterization of mechanisms of interleukin–6 gene repression by estrogen receptor. Kurebayashi S, et al.
J Steroid Biochem Mol Biol 1997 Jan;60(1–2):11–7

Prognostic factors for fibromatoses: a correlation of proliferation index, estrogen receptor, p53, retinoblastoma, and src gene products and clinical features with outcome. Moffatt EJ, et al. **J Surg Oncol** 1997 Jun;65(2):117–22

Molecular study of sex steroid receptor gene expression in human colon and in colorectal carcinomas. Waliszewski P, et al. **J Surg Oncol** 1997 Jan;64(1):3–11

Glucocorticoid and estrogen receptors have elevated activity in human endometrial and ovarian tumors as compared to the adjacent normal tissues and recognize sequence elements of the H–ras proto–oncogene. Zachos G, et al.
Jpn J Cancer Res 1996 Sep;87(9):916–22

Binding affinity and quantity of estrogen receptor in peripheral blood monocytes of patients with systemic lupus erythematosus. Suenaga R, et al. **Lupus** 1996 Jun; 5(3):227–31

Estrogen receptor status of breast cancer: a marker of different stages of tumor or different entities of the disease? Zhu K, et al. **Med Hypotheses** 1997 Jul;49(1):69–75 (61 ref.)

Investigation of oestrogen receptors, sex steroids and soluble adhesion molecules in the progression of malignant melanoma. Miller JG, et al. **Melanoma Res** 1997 Jun; 7(3):197–208

Probing the structure and function of the estrogen receptor ligand binding domain by analysis of mutants with altered transactivation characteristics. Eng FC, et al.
Mol Cell Biol 1997 Aug;17(8):4644–53

AF–2 activity and recruitment of steroid receptor coactivator 1 to the estrogen receptor depend on a lysine residue conserved in nuclear receptors. Henttu PM, et al.
Mol Cell Biol 1997 Apr;17(4):1832–9

Cyclin D1 stimulation of estrogen receptor transcriptional activity independent of cdk4. Neuman E, et al.
Mol Cell Biol 1997 Sep;17(9):5338–47

The orphan nuclear receptor estrogen–related receptor alpha is a transcriptional regulator of the human medium–chain acyl coenzyme A dehydrogenase gene. Sladek R, et al.
Mol Cell Biol 1997 Sep;17(9):5400–9

Evidence for estrogen receptor–mediated regulation of human gonadotropin–releasing hormone promoter activity in human placental cells. Dong KW, et al.
Mol Cell Endocrinol 1996 Mar 25;117(2):241–6

Putative intestinal estrogen receptor: evidence for regional differences. Salih MA, et al. **Mol Cell Endocrinol** 1996 Jul 23;121(1):47–55

Estradiol–binding mechanism and binding capacity of the human estrogen receptor is regulated by tyrosine phosphorylation. Arnold SF, et al. **Mol Endocrinol** 1997 Jan;11(1):48–53

Estrogen receptor residues required for stereospecific ligand recognition and activation. Bocchinfuso WP, et al.
Mol Endocrinol 1997 May;11(5):587–94

Identification of the sequences within the human complement 3 promoter required for estrogen responsiveness provides insight into the mechanism of tamoxifen mixed agonist activity [published erratum appears in Mol Endocrinol 1997 Mar;11(3):341] Fan JD, et al. **Mol Endocrinol** 1996 Dec; 10(12):1605–16

Estrogen–related receptor alpha 1 functionally binds as a monomer to extended half–site sequences including ones contained within estrogen–response elements. Johnston SD, et al. **Mol Endocrinol** 1997 Mar;11(3):342–52

Cooperation between the human estrogen receptor (ER) and MCF–7 cell–specific transcription factors elicits high activity of an estrogen–inducible enhancer from the trout ER gene promoter. Lazennec G, et al. **Mol Endocrinol** 1996 Sep;10(9):1116–26

Mechanistic aspects of estrogen receptor activation probed with constitutively active estrogen receptors: correlations with DNA and coregulator interactions and receptor conformational changes. Lazennec G, et al.
Mol Endocrinol 1997 Aug;11(9):1375–86

A transcriptionally active estrogen receptor mutant is a novel type of dominant negative inhibitor of estrogen action. McInerney EM, et al. **Mol Endocrinol** 1996 Dec; 10(12):1519–26

Estrogen receptor affinity and location of consensus and imperfect estrogen response elements influence transcription activation of simplified promoters. Nardulli AM, et al. **Mol Endocrinol** 1996 Jun;10(6):694–704

Mouse estrogen receptor beta forms estrogen response element–binding heterodimers with estrogen receptor alpha. Pettersson K, et al. **Mol Endocrinol** 1997 Sep; 11(10):1486–96

Role of estrogen receptor/Sp1 complexes in estrogen–induced heat shock protein 27 gene expression. Porter W, et al. **Mol Endocrinol** 1996 Nov;10(11):1371–8

Effects of wild type and mutant estrogen receptors on DNA flexibility, DNA bending, and transcription activation. Potthoff SJ, et al. **Mol Endocrinol** 1996 Sep;10(9):1095–106

Human estrogen receptor (ER) gene promoter–P1: estradiol–independent activity and estradiol inducibility in ER+ and ER– cells. Treilleux, et al. **Mol Endocrinol** 1997 Aug;11(9):1319–31

High–mobility group (HMG) protein HMG–1 and TATA–binding protein–associated factor TAF(II)30 affect estrogen receptor–mediated transcriptional activation. Verrier CS, et al. **Mol Endocrinol** 1997 Jul;11(8):1009–19

Constitutively active human estrogen receptors containing amino acid substitutions for tyrosine 537 in the receptor protein. Weis KE, et al. **Mol Endocrinol** 1996 Nov; 10(11):1388–98

Proto–oncogenes c–jun and c–fos are down–regulated in human endometrium during pregnancy: relationship to oestrogen receptor status. Salmi A, et al.
Mol Hum Reprod 1996 Dec;2(12):979–84

Rapid loss of oestrogen and progesterone receptors in human leiomyoma and myometrial explant cultures. Severino MF, et al. **Mol Hum Reprod** 1996 Nov;2(11):823–8

Regulation of estrogen receptor concentrations in the rat brain: effects of sustained androgen and estrogen exposure. Brown TJ, et al. **Neuroendocrinology** 1996 Jan;63(1):53–60

Sex– and cell–specific expression of an estrogen receptor isoform in the pituitary gland. Demay F, et al.
Neuroendocrinology 1996 Jun;63(6):522–9

Distribution of estrogen receptor–beta–like immunoreactivity in rat forebrain. Li X, et al. **Neuroendocrinology** 1997 Aug; 66(2):63–7

Developmental changes in the distribution of oestrogen receptor mRNA expressing cells in the forebrain of female, male and masculinized female zebra finches. Gahr M.
Neuroreport 1996 Nov 4;7(15–17):2469–73

Quantitative estimation of estrogen and androgen receptor–immunoreactive cells in the forebrain of neonatally estrogen–deprived male rats. Bakker J, et al.
Neuroscience 1997 Apr;77(3):911–9

Identification of estrogen receptor–containing neurons projecting to the rat supraoptic nucleus. Voisin DL, et al.
Neuroscience 1997 May;78(1):215–28

The Z–isomer of 11 beta–methoxy–17 alpha–[123I]iodovinylestradiol is a promising radioligand for estrogen receptor imaging in human breast cancer. Rijks LJ, et al. **Nucl Med Biol** 1997 Jan;24(1):65–75

Synthesis, estrogen receptor binding, and tissue distribution of [18F]fluorodoisynolic acids. Scribner AW, et al.
Nucl Med Biol 1997 Apr;24(3):209–24

Radioimaging of human breast carcinoma xenografts in mice by [123I]–labeled Z–17 alpha–iodovinyl–11 beta–chloromethyl–estradiol. Zeicher M, et al.
Nucl Med Biol 1996 Jan;23(1):69–73

Estrogen receptor impairs interleukin–6 expression by preventing protein binding on the NF–kappaB site. Galien R, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2424–9

Binding of type II nuclear receptors and estrogen receptor to full and half–site estrogen response elements in vitro. Klinge CM, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1903–12

Carotenoids, vitamin A, and estrogen receptor status in breast cancer. Rock CL, et al. **Nutr Cancer** 1996;25(3):281–96

Reliability of estrogen receptors in predicting response to antiestrogens. Valavaara R. **Oncology (Huntingt)** 1997 May; 11(5 Suppl 4):14–8 (49 ref.)

Estrogen and progesterone receptors in vernal keratoconjunctivitis. Bonini S, et al. **Ophthalmology** 1995 Sep;102(9):1374–9

Proliferation marker MIB–1 correlates well with proliferative activity evaluated by BrdU in breast cancer: an immunohistochemical study including correlation with PCNA, p53, c–erbB–2 and estrogen receptor status. Moriki T, et al. **Pathol Int** 1996 Dec;46(12):953–61

p300 is a component of an estrogen receptor coactivator complex. Hanstein B, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11540–5

Estrogen–induced transcription of the progesterone receptor gene does not parallel estrogen receptor occupancy. Lee YJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15180–4

Analysis of estrogen receptor transcriptional enhancement by a nuclear hormone receptor coactivator. McInerney EM, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10069–73

The quinone reductase gene: a unique estrogen receptor–regulated gene that is activated by antiestrogens. Montano MM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2581–6

Synthesis and biological activity of DNA damaging agents that form decoy binding sites for the estrogen receptor. Rink SM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15063–8

AIB1, a steroid receptor coactivator amplified in breast and ovarian cancer. Anzick SL, et al. **Science** 1997 Aug 15; 277(5328):965–8

Activation of estrogen receptors [letter; comment] Joffe M. **Science** 1996 Nov 22;274(5291):1285–6. Comment on: Science 1996 Jun 7;272(5267):1489–92.

Differential ligand activation of estrogen receptors ERalpha and ERbeta at AP1 sites [see comments] Paech K, et al. **Science** 1997 Sep 5;277(5331):1508–10. Comment in: Science 1997 Sep 5;277(5331):1439.

The estradiol pharmacophore: ligand structure–estrogen receptor binding affinity relationships and a model for the receptor binding site. Anstead GM, et al. **Steroids** 1997 Mar;62(3):268–303 (248 ref.)

Two transcription activation functions in the amino terminus of the mouse estrogen receptor that are affected by the carboxy terminus. Gandini O, et al. **Steroids** 1997 Jul; 62(7):508–15

Stereochemical probes for the estrogen receptor: synthesis and receptor binding of (17 alpha,20E/Z)–21–phenyl–19–norpregna–1,3,5(10), 20–tetraene–3,17 beta–diols. Hanson RN, et al. **Steroids** 1996 Dec;61(12):718–22

Carboxymethylation of the human estrogen receptor ligand–binding domain–estradiol complex: HPLC/ESMS peptide mapping shows that cysteine 447 does not react with iodoacetic acid. Hegy GB, et al. **Steroids** 1996 Jun; 61(6):367–73

Synthesis and estrogen receptor binding of (17 alpha, 20E)– and (17 alpha, 20Z)–21–phenylthio– and 21–phenylseleno–19–norpregna–1,3,5(10),20–tetraene–3,17 beta–diols. Napolitano E, et al. **Steroids** 1996 Jun; 61(6):384–9

Crystal structure, receptor binding, and gene regulation of 2– and 4–nitroestradiols. Palomino E, et al. **Steroids** 1996 Nov;61(11):670–6

The distribution of estrogen receptor–beta mRNA in the rat hypothalamus. Shughrue PJ, et al. **Steroids** 1996 Dec;

61(12):678–81

Intact noncovalent dimer of estrogen receptor ligand–binding domain can be detected by electrospray ionization mass spectrometry. Witkowska HE, et al. **Steroids** 1996 Jul; 61(7):433–8

Effect of sex hormones on the tissue localization of nuclear estrogen receptor positively stained cells in the seminal vesicle of immature castrated rats. Yuasa H, et al. **Tohoku J Exp Med** 1997 Feb;181(2):297–309

[Diagnostic algorithm for the evaluation of estrogen receptor function in breast carcinoma] Kolář Z. **Cesk Patol** 1997 Feb;33(1):4–8 (Eng. Abstr.) **(Cze)**

[The prognostic significance of progesterone receptor level in endometrial cancer] Nyholm HC, et al. **Ugeskr Laeger** 1997 Jan 27;159(5):601–4 (Eng. Abstr.) **(Dan)**

[Establishment of an estrogen receptor positive 3'-methyl-4-dimethylaminoazobenzene induced hepatoma cell line of rat and investigation of hormonal therapy] **Kameda H. Hokkaido Igaku Zasshi** 1996 Nov;71(6):711–26 (Eng. Abstr.) **(Jpn)**

[Epidermal growth factor and estrogen receptors in the primary bone neoplasms] Kushlinskiĭ NE, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):78–82 **(Rus)**

[Expression of pS2 protein in breast cancer and its relationship with estrogen and progesterone receptors] Díez Gibert O, et al. **Med Clin (Barc)** 1996 Jun 15; 107(3):90–2 (Eng. Abstr.) **(Spa)**

[Gallbladder cancer: immunohistochemical expression of the protein related to estrogen receptor (p29) and of the protein induced by estrogen (pS2)] Roa I, et al. **Rev Med Chil** 1995 Nov;123(11):1333–40 (Eng. Abstr.) **(Spa)**

[Breast cancer: comparison between biochemical and immunohistochemical determination of estrogen receptors] Roa JC, et al. **Rev Med Chil** 1996 Mar;124(3):307–12 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Estrogen receptor–mediated transcriptional activation by 17 beta–estradiol and its analogs. Oda T, et al. **Biol Pharm Bull** 1996 Aug;19(8):1018–22

Increase of oxytocin–induced oscillatory contractions by 4–hydroxy–2',4',6'–trichlorobiphenyl is estrogen receptor mediated. Tsai ML, et al. **Biol Reprod** 1997 Feb;56(2):341–7

Irreversible loss of the oestrogen receptor in T47D breast cancer cells following prolonged oestrogen deprivation [published erratum appears in Br J Cancer 1997;75(10):1557] Pink JJ, et al. **Br J Cancer** 1996 Oct; 74(8):1227–36

The growth inhibitory effect of conjugated linoleic acid on MCF–7 cells is related to estrogen response system. Durgam VR, et al. **Cancer Lett** 1997 Jun 24;116(2):121–30

Mechanism of vascular smooth muscle relaxation by estrogen in depolarized rat and mouse aorta. Role of nuclear estrogen receptor and Ca2+ uptake. Freay AD, et al. **Circ Res** 1997 Aug;81(2):242–8

Estrogen–receptor–mediated inhibition of human endothelial cell apoptosis. Estradiol as a survival factor. Spyridopoulos I, et al. **Circulation** 1997 Mar 18;95(6):1505–14

Oestrogen receptors and cardiovascular disease. Baysal K, et al. **Clin Exp Pharmacol Physiol** 1996 Jun–Jul; 23(6–7):537–48 (82 ref.)

Estrogen receptor is not primarily responsible for altered responsiveness of ovalbumin mRNA induction in the oviduct from genetically selected high– and low–albumen chicken lines. Muramatsu T, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Apr; 116(4):391–6

The estrogen/neurotrophin connection during neural development: is co–localization of estrogen receptors with the neurotrophins and their receptors biologically relevant? Toran–Allerand CD. **Dev Neurosci** 1996;18(1–2):36–48 (105 ref.)

Estrogen receptor expression and growth–promoting function in human choriocarcinoma cells. Jiang SW, et al. **DNA Cell Biol** 1997 Aug;16(8):969–77

Estrogen receptors are essential for female sexual receptivity. Rissman EF, et al. **Endocrinology** 1997 Jan;138(1):507–10

Dissection of the molecular mechanism of action of GW5638, a novel estrogen receptor ligand, provides insights into the role of estrogen receptor in bone. Willson TM, et al. **Endocrinology** 1997 Sep;138(9):3901–11

The novel estrogen receptor–beta subtype: potential role in the cell– and promoter–specific actions of estrogens and anti–estrogens. Kuiper GG, et al. **FEBS Lett** 1997 Jun 23; 410(1):87–90 (32 ref.)

Repression of interleukin–6 gene expression by 17 beta–estradiol: inhibition of the DNA–binding activity of the transcription factors NF–IL6 and NF–kappa B by the estrogen receptor. Ray P, et al. **FEBS Lett** 1997 Jun 2; 409(1):79–85

Activation of the human estrogen receptor by estrogenic and antiestrogenic compounds in Saccharomyces cerevisiae: a positive selection system. Shiau SP, et al. **Gene** 1996 Nov 14;179(2):205–10

Morphometric study of the gubernaculum in male estrogen receptor mutant mice. Donaldson KM, et al. **J Androl** 1996 Mar–Apr;17(2):91–5

17beta–estradiol potently suppresses cAMP–induced insulin–like growth factor–I gene activation in primary rat osteoblast cultures. McCarthy TL, et al. **J Biol Chem** 1997 Jul 18;272(29):18132–9

Steroids conjugated to bovine serum albumin as tools to demonstrate specific steroid neuronal membrane binding sites. Zheng J, et al. **J Psychiatry Neurosci** 1996 May; 21(3):187–97

Effect of growth factors on estrogen receptor mediated gene expression. Hafner F, et al. **J Steroid Biochem Mol Biol** 1996 Jul;58(4):385–93

Cells transformed by a v–Myb–estrogen receptor fusion differentiate into multinucleated giant cells. Engelke U, et al. **J Virol** 1997 May;71(5):3760–6

Brca1 is expressed independently of hormonal stimulation in the mouse ovary. Phillips KW, et al. **Lab Invest** 1997 Mar;76(3):419–25

Synergism in estrogen–regulated gene expression. Arnold SF, et al. **Mol Cell Endocrinol** 1996 Oct 30;123(2):119–22 (14 ref.)

Role of estrogen receptor–alpha in the anterior pituitary gland. Scully KM, et al. **Mol Endocrinol** 1997 Jun; 11(6):674–81

Modulation of G protein–coupled receptors by an estrogen receptor that activates protein kinase A. Lagrange AH, et al. **Mol Pharmacol** 1997 Apr;51(4):605–12

Estrogen receptor beta––getting in on the action? [news] Gustafsson JA. **Nat Med** 1997 May;3(5):493–4

Estrogen inhibits the vascular injury response in estrogen receptor alpha–deficient mice. Iafrati MD, et al. **Nat Med** 1997 May;3(5):545–8

Placental abnormalities in mouse embryos lacking the orphan nuclear receptor ERR–beta. Luo J, et al. **Nature** 1997 Aug 21;388(6644):778–82

Variations in steroid hormone receptor content throughout age and menopausal periods, and menstrual cycle in breast cancer patients. Nikolić–Vukosavljević D, et al. **Neoplasma** 1996;43(3):163–9

Sex steroid receptors and human parturition. Rezapour M, et al. **Obstet Gynecol** 1997 Jun;89(6):918–24

Analysis of the molecular pharmacology of estrogen receptor agonists and antagonists provides insights into the mechanism of action of estrogen in bone. McDonnell DP, et al. **Osteoporos Int** 1997;7 Suppl 1:S29–34 (43 ref.)

Steroid receptor specificity with reference to the estrogen receptor. Williams GH. **Osteoporos Int** 1997;7 Suppl 1:S35–9 (21 ref.)

Role of steroid hormone and growth factor receptors and proto–oncogenes in the behavior of human mammary epithelial cancer cells in vitro. Saxena S, et al. **Pathobiology** 1997;65(2):75–82

Stromal estrogen receptors mediate mitogenic effects of estradiol on uterine epithelium. Cooke PS, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6535–40

Physiological coupling of growth factor and steroid receptor signaling pathways: estrogen receptor knockout mice lack estrogen–like response to epidermal growth factor. Curtis SW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12626–30

An estrogen receptor pathway regulates the telogen–anagen hair follicle transition and influences epidermal cell proliferation. Oh HS, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12525–30

Differing roles found for estrogen's two receptors [news; comment] Pennisi E. **Science** 1997 Sep 5;277(5331):1439. Comment on: Science 1997 Sep 5;277(5331):1508–10.

Estrogen receptors in the cardiovascular system. Perrot–Applanat M. **Steroids** 1996 Apr;61(4):212–5

RADIATION EFFECTS

Cellular and subcellular studies of the radiation effects of Auger electron–emitting estrogens. DeSombre ER, et al. **Acta Oncol** 1996;35(7):833–40

ULTRASTRUCTURE

Localization of estrogen receptor protein and estrogen receptor messenger RNA in peripheral autonomic and sensory neurons. Papka RE, et al. **Neuroscience** 1997 Aug; 79(4):1153–63

RECEPTORS, EXCITATORY AMINO ACID see **RECEPTORS, GLUTAMATE**

RECEPTORS, EXTRACELLULAR MATRIX GLYCOPROTEIN see **RECEPTORS, CYTOADHESIN**

RECEPTORS, FC

ANALYSIS

Glomerular Fc alphaR expression and disease activity in IgA nephropathy. Kashem A, et al. **Am J Kidney Dis** 1997 Sep; 30(3):389–96

Characterization of Fc gamma receptors on human megakaryocytes. Wu Z, et al. **Thromb Haemost** 1996 Apr; 75(4):661–7

BIOSYNTHESIS

Multiple transcripts of human IgA Fc receptor CD89 in neutrophils, eosinophils and the monocyte–like cell line THP–1. Pleass RJ, et al. **Biochem Soc Trans** 1997 May; 25(2):327S

Complement in IgA immune–complex–induced neutrophil activation. Zhang W, et al. **Biochem Soc Trans** 1997 May; 25(2):462–6 (28 ref.)

Rhamnogalacturonan II from the leaves of Panax ginseng C.A. Meyer as a macrophage Fc receptor expression–enhancing polysaccharide. Shin KS, et al. **Carbohydr Res** 1997 May 16;300(3):239–49

Expression and function of Fc receptors in the thymus. Leclercq G, et al. **Crit Rev Immunol** 1995;15(3–4):215–33 (151 ref.)

Ontogenetic development and distribution of antibody transport and Fc receptor mRNA expression in rat intestine. Martín MG, et al. **Dig Dis Sci** 1997 May; 42(5):1062–9

Characterization of IgG Fc receptors on CD34 antigen–expressing cell lines (KG–1 and KG–1a). Wu Z, et al. **Immunol Cell Biol** 1996 Feb;74(1):57–64

Mast cell Fc epsilonRI expression in the rat intestinal mucosa and tongue is enhanced during Nippostrongylus brasiliensis infection and can be up–regulated by in vivo administration of IgE. Shaikh N, et al. **J Immunol** 1997 Apr 15; 158(8):3805–12

Effect of recombinant human IL–4 on tryptase, chymase, and Fc epsilon receptor type I expression in recombinant human stem cell factor–dependent fetal liver–derived human mast cells. Xia HZ, et al. **J Immunol** 1997 Sep 15; 159(6):2911–21

Functional characteristics of enhanced Fc receptor expression of beta 2 integrin–deficient bovine mononuclear phagocytes. Nagahata H, et al. **Microbiol Immunol** 1996; 40(5):389–95

CHEMISTRY

The polymeric immunoglobulin receptor: structure and synthesis. Kaetzel CS, et al. **Biochem Soc Trans** 1997 May; 25(2):475–80 (50 ref.)

Structure and function of human IgA Fc receptors (Fc alpha R). Morton HC, et al. **Crit Rev Immunol** 1996;16(4):423–40 (155 ref.)

Biochemical and functional characterization of soluble multivalent MHC L(d)/Fc gamma 1 and L(d)/Fc mu chimeric proteins loaded with specific peptides. Lepley DM, et al. **Transplantation** 1997 Mar 15;63(5):765–74

CLASSIFICATION

Building up the family of ITIM–bearing negative coreceptors. Daëron M. **Immunol Lett** 1996 Dec; 54(2–3):73–6

DRUG EFFECTS

Anti–inflammatory properties of human serum IgA: induction of IL–1 receptor antagonist and Fc alpha R (CD89)–mediated down–regulation of tumour necrosis factor–alpha (TNF–alpha) and IL–6 in human monocytes. Wolf HM, et al. **Clin Exp Immunol** 1996 Sep;105(3):537–43

The effect of aging on the immune response: influence of phosphatidylcholine–containing lipid on IgD–receptor expression and antibody formation. Swenson CD, et al. **Mech Ageing Dev** 1997 May;95(3):167–86

GENETICS

Fc epsilon R1–beta polymorphism and total serum IgE levels in endemically parasitized Australian aborigines. Palmer LJ, et al. **Am J Hum Genet** 1997 Jul;61(1):182–8

Alternative splicing of the human IgA Fc receptor CD89 in neutrophils and eosinophils. Pleass RJ, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):771–7

The polymeric immunoglobulin receptor: structure and synthesis. Kaetzel CS, et al. **Biochem Soc Trans** 1997 May; 25(2):475–80 (50 ref.)

Cloning and characterization of Fc alpha Rb, a novel Fc alpha receptor (CD89) isoform expressed in eosinophils and neutrophils. van Dijk TB, et al. **Blood** 1996 Dec 1; 88(11):4229–38

Proinflammatory cytokines regulate Fc alphaR expression by human mesangial cells in vitro. Bagheri N, et al. **Clin Exp Immunol** 1997 Feb;107(2):404–9

Fc receptors. Ravetch JV. **Curr Opin Immunol** 1997 Feb; 9(1):121–5 (52 ref.)

Alternative splicing of IgA Fc receptor (CD89) transcripts. Reterink TJ, et al. **Gene** 1996 Oct 10;175(1–2):279–80

Association between atopic asthma and a coding variant of Fc epsilon RI beta in a Japanese population. Shirakawa T, et al. **Hum Mol Genet** 1996 Dec;5(12):2068

Nucleotide sequence of cattle FcGRIII: its identification in gammadelta T cells. Collins RA, et al. **Immunogenetics** 1997;45(6):440–3

Molecular cloning of a novel murine cell–surface glycoprotein homologous to killer cell inhibitory receptors. Hayami K, et al. **J Biol Chem** 1997 Mar 14;272(11):7320–7

Induction of tolerance to human gamma–globulin in FcR gamma– and Fc gammaRII–deficient mice. Whitmer KJ, et al. **J Immunol** 1997 Jul 15;159(2):644–9

Detection of Fc receptor genes from Staphylococcus aureus and streptococci by polymerase chain reaction. Yamada S, et al. **J Med Microbiol** 1996 Dec;45(6):507–11

IMMUNOLOGY

Aleutian mink disease parvovirus infection of K562 cells is antibody–dependent and is mediated via an Fc(gamma)RII receptor. Dworak LJ, et al. **Arch Virol** 1997;142(2):363–73

Fc gammaRIII–mediated regulation of hematopoiesis in murine bone marrow cells by interleukin–3 and CD95

(Fas/Apo-1). Yoshikawa H, et al. **Blood** 1997 Sep 1; 90(5):1911-9

Fc receptors. Ravetch JV. **Curr Opin Immunol** 1997 Feb; 9(1):121-5 (52 ref.)

Cytophilic immunoglobulins revisited via natural killer cells. Sulica A, et al. **FASEB J** 1996 Nov;10(13):1495-504

pH6 antigen (PsaA protein) of Yersinia pestis, a novel bacterial Fc-receptor. Zav'yalov VP, et al. **FEMS Immunol Med Microbiol** 1996 May;14(1):53-7

Complement and Fc-receptors in regulation of the antibody response. Heyman B. **Immunol Lett** 1996 Dec;54(2-3):195-9 (68 ref.)

Finally! The Brambell receptor (FcRB). Mediator of transmission of immunity and protection from catabolism for IgG [published erratum appears in Immunol Res 1997;16(2):215] Junghans RP. **Immunol Res** 1997 Feb; 16(1):29-57 (108 ref.)

Lipoprotein lipase regulates Fc receptor-mediated phagocytosis by macrophages maintained in glucose-deficient medium. Yin B, et al. **J Clin Invest** 1997 Aug 1;100(3):649-57

Stimulation of Fc gamma receptors in rat peritoneal macrophages induces the expression of nitric oxide synthase and chemokines by mechanisms showing different sensitivities to antioxidants and nitric oxide donors. Bayón Y, et al. **J Immunol** 1997 Jul 15;159(2):887-94

Involvement of the ras-like GTPase rab3d in RBL-2H3 mast cell exocytosis following stimulation via high affinity IgE receptors (Fc epsilonRI). Roa M, et al. **J Immunol** 1997 Sep 15;159(6):2815-23

Fc receptor-triggered insertion of secretory granules into the plasma membrane of human neutrophils: selective retrieval during phagocytosis. Tapper H, et al. **J Immunol** 1997 Jul 1;159(1):409-18

Platelet-activating factor abrogates apoptosis induced by cross-linking of the surface IgM receptor in a human B lymphoblastoid cell line. Toledano BJ, et al. **J Immunol** 1997 Apr 15;158(8):3705-15

Autoantibody-mediated capture and presentation of autoantigen to T cells via the Fc epsilon receptor by a recombinant human autoantibody Fab converted to IgE. Guo J, et al. **J Immunol Methods** 1996 Sep 9;195(1-2):81-92

Flow cytometric quantitation of attachment and phagocytosis in phenotypically-defined subpopulations of cells using PKH26-labeled Fc gamma R-specific probes. Pricop L, et al. **J Immunol Methods** 1997 Jun 23;205(1):55-65

The neonatal Fc receptor is not required for mucosal infection by mouse mammary tumor virus. Velin D, et al. **J Virol** 1996 Oct;70(10):7250-4

Divergent signal transduction pathways and effects on natural killer cell functions induced by interaction of Fc receptors with physiologic ligands or antireceptor antibodies. Sulica A, et al. **Nat Immun** 1995;14(3):123-33 (58 ref.)

Internalization of anti-Hu IgG is not Fc gamma receptor mediated. Hormigo A, et al. **Neurology** 1996 Aug; 47(2):607-9

The structure and evolution of FcRn. Simister NE, et al. **Res Immunol** 1996 Jun;147(5):333-7; discussion 353 (38 ref.)

Role of complement and Fc receptors in the pathogenesis of HIV-1 infection. Montefiori DC. **Springer Semin Immunopathol** 1997;18(3):371-90 (176 ref.)

Workshop summary: immunoglobulins and Fc receptors. Bianchi A, et al. **Vet Immunol Immunopathol** 1996 Nov; 54(1-4):25-31

Interaction of platelet fc and complement receptors with circulating immune complexes involving the AB0 system. Heal JM, et al. **Vox Sang** 1996;71(4):205-11

ISOLATION & PURIFICATION

Isolation from human placenta of the IgG transporter, FcRn, and localization to the syncytiotrophoblast: implications for maternal-fetal antibody transport. Leach JL, et al. **J Immunol** 1996 Oct 15;157(8):3317-22

METABOLISM

Requirements for mIgM-triggered activation versus apoptosis in human B cells. Mongini P, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:469-71

Purification of high Mr forms of IgA1 from human serum: demonstration of binding to human B-lymphocytes. Bonner BC, et al. **Biochem Soc Trans** 1997 May;25(2):331S

Probing the Fc alpha R binding site on IgA by mutagenesis of the IgA Fc region. Pleass RJ, et al. **Biochem Soc Trans** 1997 May;25(2):328S

High-affinity binding of the neonatal Fc receptor to its IgG ligand requires receptor immobilization. Vaughn DE, et al. **Biochemistry** 1997 Aug 5;36(31):9374-80

Altered surface expression of effector cell molecules on neutrophils in myelodysplastic syndromes. Ohsaka A, et al. **Br J Haematol** 1997 Jul;98(1):108-13

Localization of the site of the IgG molecule that regulates maternofetal transmission in mice. Medesan C, et al. **Eur J Immunol** 1996 Oct;26(10):2533-6

Increased clearance of IgG in mice that lack beta 2-microglobulin: possible protective role of FcRn. Israel EJ, et al. **Immunology** 1996 Dec;89(4):573-8

Differential sensitivity of B lymphocyte populations to IgM receptor ligation is determined by local factors. Modigliani Y, et al. **Int Immunol** 1997 May;9(5):755-62

Fcgamma receptor I activation triggers a novel Ca2+-activated current selective for monovalent cations in the human monocytic cell line, U937. Floto RA, et al. **J Biol Chem** 1997 Feb 21;272(8):4753-8

Co-ligation of the antigen and Fc receptors gives rise to the selective modulation of intracellular signaling in B cells. Regulation of the association of phosphatidylinositol 3-kinase and inositol 5'-phosphatase with the antigen receptor complex. Kiener PA, et al. **J Biol Chem** 1997 Feb 7;272(6):3838-44

A novel association of Fc receptor gamma-chain with glycoprotein VI and their co-expression as a collagen receptor in human platelets. Tsuji M, et al. **J Biol Chem** 1997 Sep 19;272(38):23528-31

Immunoglobulins and their receptors on epidermal Langerhans cells in atopic dermatitis. Okada S, et al. **J Dermatol** 1996 Apr;23(4):247-53

Differential effects of the T helper cell type 2-derived cytokines IL-4 and IL-5 on ligand binding to IgG and IgA receptors expressed by human eosinophils. Bracke M, et al. **J Immunol** 1997 Aug 1;159(3):1459-65

Interaction of IgA with Fc alpha receptors of human mesangial cells activates transcription factor nuclear factor-kappa B and induces expression and synthesis of monocyte chemoattractant protein-1, IL-8, and IFN-inducible protein 10. Duque N, et al. **J Immunol** 1997 Oct 1;159(7):3474-82

Cross-linking of the IgM receptor induces rapid translocation of IgM-associated Ig alpha, Lyn, and Syk tyrosine kinases to the membrane skeleton. Jugloff LS, et al. **J Immunol** 1997 Aug 1;159(3):1096-106

Varicella-zoster virus Fc receptor gE glycoprotein: serine/threonine and tyrosine phosphorylation of monomeric and dimeric forms. Olson JK, et al. **J Virol** 1997 Jan;71(1):110-9

Endocytosis and recycling of varicella-zoster virus Fc receptor glycoprotein gE: internalization mediated by a YXXL motif in the cytoplasmic tail. Olson JK, et al. **J Virol** 1997 May;71(5):4042-54

syk kinase activation by a src kinase-initiated activation loop phosphorylation chain reaction. El-Hillal O, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1919-24

PHYSIOLOGY

Fc receptors and their interactions with immunoglobulins. Raghavan M, et al. **Ann Rev Cell Dev Biol** 1996;12:181-220 (158 ref.)

Fc receptor biology. Daëron M. **Annu Rev Immunol** 1997; 15:203-34 (198 ref.)

Human neutrophil Fc alpha R and Fc gamma RIIa but not Fc gamma RIIIb generate intracellular calcium signals which trigger the respiratory burst. Lang ML, et al. **Biochem Soc Trans** 1997 May;25(2):333S

New functions of the MHC class I-related Fc receptor, FcRn. Simister NE, et al. **Biochem Soc Trans** 1997 May; 25(2):481-6 (70 ref.)

Anti-inflammatory properties of human serum IgA: induction of IL-1 receptor antagonist and Fc alpha R (CD89)-mediated down-regulation of tumour necrosis factor-alpha (TNF-alpha) and IL-6 in human monocytes. Wolf HM, et al. **Clin Exp Immunol** 1996 Sep;105(3):537-43

Immunomodulatory effect of immunoglobulins. Wolf HM, et al. **Clin Exp Rheumatol** 1996 May-Jun;14 Suppl 15:S17-25 (88 ref.)

Expression and function of Fc receptors in the thymus. Leclercq G, et al. **Crit Rev Immunol** 1995;15(3-4):215-33 (151 ref.)

Structure and function of human IgA Fc receptors (Fc alpha R). Morton HC, et al. **Crit Rev Immunol** 1996;16(4):423-40 (155 ref.)

Immunoreceptor tyrosine-based activation motif (ITAM), a unique module linking antigen and Fc receptors to their signaling cascades. Isakov N. **J Leukoc Biol** 1997 Jan; 61(1):6-16 (123 ref.)

Effect of morphine on Fc-mediated phagocytosis by murine macrophages in vitro. Tomei EZ, et al. **J Neuroimmunol** 1997 Apr;74(1-2):111-6

Functional characteristics of enhanced Fc receptor expression of beta 2 integrin-deficient bovine mononuclear phagocytes. Nagahata H, et al. **Microbiol Immunol** 1996; 40(5):389-95

[Immunoregulatory functions of Fc receptors] Takai T. **Seikagaku** 1997 Jun;69(6):394-409 (74 ref.) **(Jpn)**

[Subunits gamma and zeta of Fc receptors. Structure and function] Mikulska J. **Postepy Hig Med Dosw** 1996; 50(4):351-61 (50 ref.) (Eng. Abstr.) **(Pol)**

[The nature of macrophage functional heterogeneity exemplified by Fc receptors] Rodionov SV, et al. **Tsitologiia** 1996;38(9):983-90 (Eng. Abstr.) **(Rus)**

RECEPTORS, FC EPSILON see **RECEPTORS, IGE**

RECEPTORS, FC GAMMA see **RECEPTORS, IGG**

RECEPTORS, FGF see **RECEPTORS, FIBROBLAST GROWTH FACTOR**

RECEPTORS, FIBRINOGEN see **PLATELET GLYCOPROTEIN GPIIB-IIIA COMPLEX**

RECEPTORS, FIBROBLAST GROWTH FACTOR

ANALYSIS

Nuclear localization of functional FGF receptor 1 in human astrocytes suggests a novel mechanism for growth factor action. Stachowiak MK, et al. **Brain Res Mol Brain Res** 1996 May;38(1):161-5

Localisation and differential expression of the fibroblast growth factor receptor (FGFR) multigene family in normal and atherosclerotic human arteries. Hughes SE. **Cardiovasc Res** 1996 Sep;32(3):557-69

Prognostic value of basic fibroblast growth factor and its receptor (FGFR-1) in patients with non-small cell lung carcinomas. Volm M, et al. **Eur J Cancer** 1997 Apr; 33(4):691-3

Localization, differential expression and retrograde axonal transport suggest physiological role of FGF-2 in spinal autonomic neurons of the rat. Blottner D, et al. **Eur J Neurosci** 1997 Feb;9(2):368-77

A paracrine role for myoepithelial cell-derived FGF2 in the normal human breast. Gomm JJ, et al. **Exp Cell Res** 1997 Jul 10;234(1):165-73

Quantitative characterization of high- and low-affinity binding sites for basic fibroblast growth factor on trabecular cells of the eye. Tripathi RC, et al. **Exp Eye Res** 1997 Mar;64(3):335-41

Visualization of several binding sites for basic fibroblast growth factor (FGF-2) on fibroblasts by photoaffinity labeling: evidence for intracellular complexes. Gannoun-Zaki L, et al. **J Cell Biochem** 1996 Aug; 62(2):240-50

Immunohistochemical localization of fibroblast growth factor-1 (FGF-1), FGF-2 and fibroblast growth factor receptor-1 (FGFR-1) in pleomorphic adenoma of the salivary glands. Myoken Y, et al. **J Oral Pathol Med** 1997 Jan;26(1):17-22

Detection of mRNA and immunoreactive proteins for acidic and basic fibroblast growth factor and expression of the fibroblast growth factor receptors in the bovine oviduct. Gabler C, et al. **J Reprod Fertil** 1997 Mar;109(2):213-21

Expression of fibroblast growth factor receptors in naevus-cell naevus and malignant melanoma. Ahmed NU, et al. **Melanoma Res** 1997 Aug;7(4):299-305

Immunolocalization of acidic fibroblast growth factor and receptors in the tubulointerstitial compartment of chronically rejected human renal allografts. Kerby JD, et al. **Transplantation** 1997 Apr 15;63(7):988-95

BIOSYNTHESIS

Postnatal regulation of fibroblast growth factor ligand and receptor gene expression in rat thoracic aorta. Winkles JA, et al. **Am J Pathol** 1996 Dec;149(6):2119-31

FGF receptor-1 (flg) expression is correlated with fibre differentiation during rat lens morphogenesis and growth. de Iongh RU, et al. **Dev Dyn** 1996 Aug;206(4):412-26

Fibroblast growth factor receptor 1 in skeletal and heart muscle cells: expression during early avian development and regulation after notochord transplantation. Grothe C, et al. **Dev Dyn** 1996 Jul;206(3):310-7

Function of the Drosophila POU domain transcription factor drifter as an upstream regulator of breathless receptor tyrosine kinase expression in developing trachea. Anderson MG, et al. **Development** 1996 Dec;122(12):4169-78

Effects of estrogen on cell growth and fibroblast growth factor receptor induction in MtT/Se cells. Takahashi H, et al. **Endocr Res** 1997 Feb-May;23(1-2):95-104

Differential expression of fibroblast growth factor-2 and receptor by glial cells in experimental autoimmune encephalomyelitis (EAE) [retracted by Gehrmann J, Lannes-Vieira J, Wekerle H. In: Glia 1997 May;20(1):86] Gehrmann J, et al. **Glia** 1996 Feb;16(2):93-100

Differential expression of fibroblast growth factor receptors during rat lens morphogenesis and growth. de Iongh RU, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1688-99

Cell type-specific inhibition of keratinocyte collagenase-1 expression by basic fibroblast growth factor and keratinocyte growth factor. A common receptor pathway. Pilcher BK, et al. **J Biol Chem** 1997 Jul 18;272(29):18147-54

Expression of fibroblast growth factor-2 in hypoglossal motoneurons is stimulated by peripheral nerve injury. Huber K, et al. **J Comp Neurol** 1997 Jun 2;382(2):189-98

Rat oligodendrocytes and astrocytes preferentially express fibroblast growth factor receptor-2 and -3 mRNAs. Miyake A, et al. **J Neurosci Res** 1996 Sep 1;45(5):534-41

Expression of fibroblast growth factors (FGFs) and FGF receptors in human prostate. Ittman M, et al. **J Urol** 1997 Jan;157(1):351-6

FGF receptor 1 expression in experimental choroidal neovascularization. Matsushima M, et al. **Jpn J Ophthalmol** 1996;40(3):329-38

Gene expressions of basic fibroblast growth factor and its receptor in healing of rat retina after laser photocoagulation. Yamamoto C, et al. **Jpn J Ophthalmol** 1996;40(4):480-90

Expression of FGF1 and FGFR1 in human melanoma tissues. Xerri L, et al. **Melanoma Res** 1996 Jun;6(3):223-30

Regulation of FGF receptors in the oligodendrocyte lineage. Bansal R, et al. **Mol Cell Neurosci** 1996 Apr;7(4):263-75

Overexpression of vascular endothelial growth factor induces

cell transformation in cooperation with fibroblast growth factor 2. Guerrin M, et al. **Oncogene** 1997 Jan 30; 14(4):463–71

Constitutive receptor activation by Crouzon syndrome mutations in fibroblast growth factor receptor (FGFR)2 and FGFR2/Neu chimeras. Galvin BD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7894–9

Fibroblast growth factor 2 can replace ectodermal signaling for feather development. Song H, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10246–9

[Expression of basic fibroblast growth factor and fibroblast growth factor receptor 1 in the experimental retinal vein occlusion model] Matsushima M, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jul;101(7):564–70 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Receptors for fibroblast growth factors. Coutts JC, et al. **Immunol Cell Biol** 1995 Dec;73(6):584–9 (64 ref.)

A homeo-interaction sequence in the ectodomain of the fibroblast growth factor receptor. Wang F, et al. **J Biol Chem** 1997 Sep 19;272(38):23887–95

Identification and characterization of a novel, intracellular isoform of fibroblast growth factor receptor-1(FGFR-1). Maher PA. **J Cell Physiol** 1996 Nov;169(2):380–90

Structures of the tyrosine kinase domain of fibroblast growth factor receptor in complex with inhibitors. Mohammadi M, et al. **Science** 1997 May 9;276(5314):955–60

DRUG EFFECTS

Endogenous basic fibroblast growth factor displaced by heparin from the lumenal surface of human blood vessels is preferentially sequestered by injured regions of the vessel wall. Medalion B, et al. **Circulation** 1997 Apr 1; 95(7):1853–62

Modulation of fibroblast growth factor-2 receptor binding, dimerization, signaling, and angiogenic activity by a synthetic heparin-mimicking polyanionic compound. Miao HQ, et al. **J Clin Invest** 1997 Apr 1;99(7):1565–75

GENETICS

Achondroplasia in Sweden caused by the G1138A mutation in FGFR3. Alderborn A, et al. **Acta Paediatr** 1996 Dec; 85(12):1506–7

Common mutations in the gene encoding fibroblast growth factor receptor 3 account for achondroplasia, hypochondroplasia and thanatophoric dysplasia. Bonaventure J, et al. **Acta Paediatr Suppl** 1996 Oct;417:33–8

A unique point mutation in the fibroblast growth factor receptor 3 gene (FGFR3) defines a new craniosynostosis syndrome. Muenke M, et al. **Am J Hum Genet** 1997 Mar; 60(3):555–64

An unusual radiological finding in thanatophoric dysplasia type 1 with common mutation of the fibroblast growth factor receptor-3 (FGFR3) gene (Arg248Cys) [letter] Camera G, et al. **Am J Med Genet** 1997 Jul 11;71(1):122–3

Atypical achondroplasia [letter; comment] Gorlin RJ. **Am J Med Genet** 1997 May 16;70(2):202; discussion 203–5 . Comment on: Am J Med Genet 1995 Nov 20;59(3):393–5.

Pfeiffer mutation in an Apert patient: how wide is the spectrum of variability due to mutations in the FGFR2 gene? [letter] Passos-Bueno MR, et al. **Am J Med Genet** 1997 Aug 8;71(2):243–5

FGFR2 mutation in clinically nonclassifiable autosomal dominant craniosynostosis with pronounced phenotypic variation. Steinberger D, et al. **Am J Med Genet** 1996 Dec 2;66(1):81–6

Lumpers, splitters, and FGFRs [letter; comment] [see comments] Winter RM, et al. **Am J Med Genet** 1996 Jun 14;63(3):501–2. Comment on: Am J Med Genet 1995 Apr 10;56(3):334–9. Comment in: Am J Med Genet 1996 Jun 14;63(3):503–4.

Postnatal regulation of fibroblast growth factor ligand and receptor gene expression in rat thoracic aorta. Winkles JA, et al. **Am J Pathol** 1996 Dec;149(6):2119–31

Mapping of bovine fibroblast growth factor receptor 3 (FGFR3) to the telomeric region of chromosome 6 by SSCP analysis. Teres V, et al. **Anim Genet** 1996 Oct; 27(5):371

Dwarfism in Dexter cattle is not caused by the mutations in FGFR3 responsible for achondroplasia in humans. Usha AP, et al. **Anim Genet** 1997 Feb;28(1):55–7

A tetracycline-responsive promoter system reveals the role of a secreted binding protein for FGFs during the early phase of tumor growth. Liaudet-Coopman ED, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):930–7

Japanese cases of type 1 thanatophoric dysplasia exclusively carry a C to T transition at nucleotide 742 of the fibroblast growth factor receptor 3 gene. Pokharel RK, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):236–9

Detection of polymorphic FGF receptor 1 mRNA in bovine lens epithelium by PCR. Marunouchi T, et al. **Biochem Mol Biol Int** 1997 May;41(6):1171–8

Determination of fibroblast growth factor receptor expression in mouse, rat and human samples using a single primer pair. McEwen DG, et al. **Biotechniques** 1997 Jun; 22(6):1068–70

Fibroblast growth factor receptor 1 in the adrenal gland and PC12 cells: developmental expression and regulation by extrinsic molecules. Meisinger C, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):70–8

Expression of the fibroblast growth factor family and their receptor family genes during mouse brain development. Ozawa K, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1–2):279–88

Skeletal disorders associated with fibroblast growth factor receptor mutations. De Moerlooze L, et al. **Curr Opin Genet Dev** 1997 Jun;7(3):378–85 (68 ref.)

Fibroblast growth factor receptor 3 and the human chondrodysplasias. Horton WA. **Curr Opin Pediatr** 1997 Aug;9(4):437–42 (49 ref.)

Spectrum of craniosynostosis phenotypes associated with novel mutations at the fibroblast growth factor receptor 2 locus. Pulleyn LJ, et al. **Eur J Hum Genet** 1996; 4(5):283–91

Antisense transcription of a murine FGFR-3 psuedogene during fetal developement. Weil D, et al. **Gene** 1997 Mar 10;187(1):115–22

heartless encodes a fibroblast growth factor receptor (DFR1/DFGF-R2) involved in the directional migration of early mesodermal cells in the Drosophila embryo. Gisselbrecht S, et al. **Genes Dev** 1996 Dec 1;10(23):3003–17

Genomic organization of the human fibroblast growth factor receptor 3 (FGFR3) gene and comparative sequence analysis with the mouse Fgfr3 gene. Perez-Castro AV, et al. **Genomics** 1997 Apr 1;41(1):10–6

Mutation detection in FGFR2 craniosynostosis syndromes. Hollway GE, et al. **Hum Genet** 1997 Feb;99(2):251–5

Trp290Cys mutation in exon IIIa of the fibroblast growth factor receptor 2 (FGFR2) gene is associated with Pfeiffer syndrome. Tartaglia M, et al. **Hum Genet** 1997 May; 99(5):602–6

Human fibroblast growth factor receptor 3 gene (FGFR3): genomic sequence and primer set information for gene analysis. Wüchner C, et al. **Hum Genet** 1997 Aug; 100(2):215–9

Genotype-phenotype correlation for nucleotide substitutions in the IgII-IgIII linker of FGFR2. Oldridge M, et al. **Hum Mol Genet** 1997 Jan;6(1):137–43

Crouzon syndrome: previously unrecognized deletion, duplication, and point mutation within FGFR2 gene. Steinberger D, et al. **Hum Mutat** 1996;8(4):386–90

Fibroblast growth factor receptor 3 (FGFR3) gene G1138A mutation in Chinese patients with achondroplasia. Wang TR, et al. **Hum Mutat** 1996;8(2):178–9

Developmental expression of splicing variants of fibroblast growth factor receptor 3 (FGFR3) in mouse. Wuechner C, et al. **Int J Dev Biol** 1996 Dec;40(6):1185–8

Expression of syndecan-1 and -3 during embryogenesis of the central nervous system in relation to binding with midkine. Nakanishi T, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):197–205

Sequence requirements for regulated RNA splicing of the human fibroblast growth factor receptor-1 alpha exon. Cote GJ, et al. **J Biol Chem** 1997 Jan 10;272(2):1054–60

Cysteine-rich FGF receptor regulates intracellular FGF-1 and FGF-2 levels. Zuber ME, et al. **J Cell Physiol** 1997 Mar;170(3):217–27

Comparative localization of fibroblast growth factor receptor-1, -2, and -3 mRNAs in the rat brain: in situ hybridization analysis. Belluardo N, et al. **J Comp Neurol** 1997 Mar 10;379(2):226–46

Protein expression of fibroblast growth factor receptor-1 in keratinocytes during wound healing in rat skin. Takenaka H, et al. **J Invest Dermatol** 1997 Jul;109(1):108–12

Phenotypic expression of the fibroblast growth factor receptor 3 (FGFR3) mutation P250R in a large craniosynostosis family. Golla A, et al. **J Med Genet** 1997 Aug;34(8):683–4

Craniosynostosis associated with FGFR3 pro250arg mutation results in a range of clinical presentations including unisutural sporadic craniosynostosis. Reardon W, et al. **J Med Genet** 1997 Aug;34(8):632–6

Clinical and genetic heterogeneity of hypochondroplasia. Rousseau F, et al. **J Med Genet** 1996 Sep;33(9):749–52

A novel mutation (a886g) in exon 5 of FGFR2 in members of a family with Crouzon phenotype and plagiocephaly. Steinberger D, et al. **J Med Genet** 1997 May;34(5):420–2

A recurrent mutation, ala391glu, in the transmembrane region of FGFR3 causes Crouzon syndrome and acanthosis nigricans. Wilkes D, et al. **J Med Genet** 1996 Sep; 33(9):744–8

Genomic organization of the extracellular coding region of the human FGFR4 and FLT4 genes: evolution of the genes encoding receptor tyrosine kinases with immunoglobulin-like domains. Agnès F, et al. **J Mol Evol** 1997 Jul;45(1):43–9

Of worms and men: an evolutionary perspective on the fibroblast growth factor (FGF) and FGF receptor families. Coulier F, et al. **J Mol Evol** 1997 Jan;44(1):43–56

Differential regulation of fibroblast growth factor (FGF)-2 and FGF receptor 1 mRNAs and FGF-2 isoforms in spinal ganglia and sciatic nerve after peripheral nerve lesion. Meisinger C, et al. **J Neurochem** 1997 Mar;68(3):1150–8

Retinal degeneration in transgenic mice with photoreceptor-specific expression of a dominant-negative fibroblast growth factor receptor. Campochiaro PA, et al. **J Neurosci** 1996 Mar 1;16(5):1679–88

FGF plays a subtle role in oligodendrocyte maintenance in vivo. Harari D, et al. **J Neurosci Res** 1997 Aug 15; 49(4):404–15

Predominance of the mutation at 1138 of the cDNA for the fibroblast growth factor receptor 3 in Japanese patients with achondroplasia. Tonoki H, et al. **Jpn J Hum Genet** 1995 Dec;40(4):347–9

Prevalence of Pro250Arg mutation of fibroblast growth factor receptor 3 in coronal craniosynostosis. Moloney DM, et al. **Lancet** 1997 Apr 12;349(9058):1059–62

Embryonic expression patterns of Xenopus syndecans. Teel AL, et al. **Mech Dev** 1996 Oct;59(2):115–27

Multiple interdependent sequence elements control splicing of a fibroblast growth factor receptor 2 alternative exon. Del Gatto F, et al. **Mol Cell Biol** 1997 Sep;17(9):5106–16

Chimeras of the native form or achondroplasia mutant (G375C) of human fibroblast growth factor receptor 3 induce ligand-dependent differentiation of PC12 cells. Thompson LM, et al. **Mol Cell Biol** 1997 Jul;17(7):4169–77

Identical mutations in three different fibroblast growth factor receptor genes in autosomal dominant craniosynostosis syndromes. Bellus GA, et al. **Nat Genet** 1996 Oct; 14(2):174–6

Frequent translocation t(4;14)(p16.3;q32.3) in multiple myeloma is associated with increased expression and activating mutations of fibroblast growth factor receptor 3. Chesi M, et al. **Nat Genet** 1997 Jul;16(3):260–4

Selective induction of fibroblast growth factor receptor-1 mRNA after transient focal ischemia in the cerebral cortex of rats. Masumura M, et al. **Neurosci Lett** 1996 Aug 2; 213(2):119–22

Rat fibroblast growth factor receptor-4 mRNA in the brain is preferentially expressed in cholinergic neurons in the medial habenular nucleus. Miyake A, et al. **Neurosci Lett** 1996 Jan 19;203(2):101–4

Expression of fibroblast growth factor-2 and fibroblast growth factor receptor 1 messenger RNAs in spinal ganglia and sciatic nerve: regulation after peripheral nerve lesion. Grothe C, et al. **Neuroscience** 1997 Jan;76(1):123–35

Effect of mutation of cytoplasmic receptor domain and of genistein on transport of acidic fibroblast growth factor into cells. Muñoz R, et al. **Oncogene** 1997 Jul 31; 15(5):525–36

Suppression of autocrine cell proliferation and tumorigenesis of human melanoma cells and fibroblast growth factor transformed fibroblasts by a kinase-deficient FGF receptor 1: evidence for the involvement of Src-family kinases. Yayon A, et al. **Oncogene** 1997 Jun 26;14(25):2999–3009

Short-limb skeletal dysplasias and craniosynostosis: what do they have in common? Cohen MM Jr. **Pediatr Radiol** 1997 May;27(5):442–6 (19 ref.)

Shared cell adhesion molecule (CAM) homology domains point to CAMs signalling via FGF receptors. Doherty P, et al. **Perspect Dev Neurobiol** 1996;4(2–3):157–68 (55 ref.)

Craniosynostosis and skeletal dysplasias: fibroblast growth factor receptor defects. Lewanda AF, et al. **Proc Assoc Am Physicians** 1996 Jan;108(1):19–24 (32 ref.)

Constitutive receptor activation by Crouzon syndrome mutations in fibroblast growth factor receptor (FGFR)2 and FGFR2/Neu chimeras. Galvin BD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7894–9

FRAG1, a gene that potently activates fibroblast growth factor receptor by C-terminal fusion through chromosomal rearrangement. Lorenzi MV, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8956–61

The primate MHC contains sequences related to the fibroblast growth factor receptor gene family. Leelayuwat C, et al. **Tissue Antigens** 1996 Jul;48(1):59–64

FGFR activation in skeletal disorders: too much of a good thing. Webster MK, et al. **Trends Genet** 1997 May; 13(5):178–82 (57 ref.)

[Association of achondroplasia to a mutation in the transmembrane domain of fibroblastic growth factor receptor 3 (FGFR3)] Rousseau F, et al. **Ann Endocrinol (Paris)** 1996;57(3):151–2 (6 ref.) **(Fre)**

[Mutations of FGFR3 gene cause 3 types of nanisms with variably severity: achondroplasia, thanatophoric nanism and hypochondroplasia] Rousseau F, et al. **Ann Endocrinol (Paris)** 1996;57(3):153 **(Fre)**

[Fibroblast growth factor receptors and hereditary abnormalities of bone growth] Bonaventure J, et al. **Arch Pediatr** 1997;4(2 Suppl 2):112s–117s **(Fre)**

IMMUNOLOGY

Fibroblast growth factor-2 (FGF-2) and FGF-receptor (FGFR-1) immunoreactivity in embryonic spinal autonomic neurons. Stapf C, et al. **Cell Tissue Res** 1997 Mar;287(3):471–80

Inhibition of in vitro limb cartilage differentiation by syndecan-3 antibodies. Seghatoleslami MR, et al. **Dev Dyn** 1996 Sep;207(1):114–9

ISOLATION & PURIFICATION

Latent transforming growth factor-beta complex in Chinese hamster ovary cells contains the multifunctional cysteine-rich fibroblast growth factor receptor, also termed E-selectin-ligand or MG-160. Olofsson A, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):427–34

Differential expression of the fibroblast growth factor receptor (FGFR) multigene family in normal human adult tissues. Hughes SE. **J Histochem Cytochem** 1997 Jul; 45(7):1005–19

METABOLISM

Cytokine regulation of fibroblast growth factor receptor 3 IIIb in intestinal epithelial cells. Kanai M, et al.

Am J Physiol 1997 Apr;272(4 Pt 1):G885–93

IGF–I increases bFGF–induced mitogenesis and upregulates FGFR–1 in rabbit vascular smooth muscle cells. Reape TJ, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1141–8

Uterine fibroblast growth factor–2 and embryonic fibroblast growth factor receptor–1 at the beginning of gastrulation in the rabbit. Gründker C, et al. **Anat Embryol (Berl)** 1996 Aug;194(2):169–75

Nuclear localization of a complex of fibroblast growth factor(FGF)–1 and an NH2–terminal fragment of FGF receptor isoforms R4 and R1alpha in human liver cells. Feng S, et al. **Biochim Biophys Acta** 1997 Jan 10; 1310(1):67–73

The human diploid fibroblast senescence pathway is independent of interleukin–1 alpha mRNA levels and tyrosine phosphorylation of FGFR–1 substrates. Garfinkel S, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):109–19

bFGF and FGFR–3 immunoreactivity in the rat brain following systemic kainic acid administration at convulsant doses: localization of bFGF and FGFR–3 in reactive astrocytes, and FGFR–3 in reactive microglia. Ballabriga J, et al. **Brain Res** 1997 Mar 28;752(1–2):315–8

A comprehensive analysis of the distribution of FGF–2 and FGFR1 in the rat brain. Gonzalez AM, et al. **Brain Res** 1995 Dec 1;701(1–2):201–26

Targeted gene delivery to Kaposi's sarcoma cells via the fibroblast growth factor receptor. Goldman CK, et al. **Cancer Res** 1997 Apr 15;57(8):1447–51

A lipid–anchored Grb2–binding protein that links FGF–receptor activation to the Ras/MAPK signaling pathway. Kouhara H, et al. **Cell** 1997 May 30;89(5):693–702

Increased immunoreactivities for the basic fibroblast growth factor and its receptor in astrocytes at the site of cerebral lesions and oedematous change in SHR. Kataoka H, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S262–4

Fibroblast growth factor and epidermal growth factor receptors in ligament healing. Panossian V, et al. **Clin Orthop** 1997 Sep;(342):173–80

Neural induction: do fibroblast growth factors strike a cord? Mason I. **Curr Biol** 1996 Jun 1;6(6):672–5 (12 ref.)

A transformed neonatal rat retinal pigment epithelial cell line: secreted protein analysis and fibroblast growth factor and receptor expression. Sheedlo HJ, et al. **Curr Eye Res** 1997 Feb;16(2):116–26

FGF–stimulated outgrowth and proliferation of limb mesoderm is dependent on syndecan–3. Dealy CN, et al. **Dev Biol** 1997 Apr 15;184(2):343–50

Fibroblast growth factor signalling in the hair growth cycle: expression of the fibroblast growth factor receptor and ligand genes in the murine hair follicle. Rosenquist TA, et al. **Dev Dyn** 1996 Apr;205(4):379–86

Transgenic Xenopus embryos from sperm nuclear transplantations reveal FGF signaling requirements during gastrulation. Kroll KL, et al. **Development** 1996 Oct; 122(10):3173–83

Perinuclear localization of an intracellular binding protein related to the fibroblast growth factor (FGF) receptor 1 is temporally associated with the nuclear trafficking of FGF–2 in proliferating epiphyseal growth plate chondrocytes. Kilkenny DM, et al. **Endocrinology** 1996 Nov;137(11):5078–89

Basic fibroblast growth factor and N–cadherin maintain rat granulosa cell and ovarian surface epithelial cell viability by stimulating the tyrosine phosphorylation of the fibroblast growth factor receptors. Trolice MP, et al. **Endocrinology** 1997 Jan;138(1):107–13

The basic fibroblast growth factor and its receptor in pulmonary adenocarcinomas: an investigation of their expression as prognostic markers. Takanami I, et al. **Eur J Cancer** 1996 Aug;32A(9):1504–9

The mitogenic effect of H2O2 for vascular smooth muscle cells is mediated by an increase of the affinity of basic fibroblast growth factor for its receptor. Herbert JM, et al. **FEBS Lett** 1996 Oct 14;395(1):43–7

Ligand–binding specificity of human fibroblast growth factor receptor–3 IIIc. Lin HY, et al. **FEBS Lett** 1997 Jul 14; 411(2–3):389–92

Helicobacter pylori interacts with heparin and heparin–dependent growth factors. Ascencio F, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):265–72

Expression of fibroblast growth factor binding protein HBp17 in normal and tumor cells [letter] Okamoto T, et al. **In Vitro Cell Dev Biol Anim** 1996 Feb;32(2):69–71

Basic fibroblast growth factor mRNA, bFGF peptide and FGF receptor in epiretinal membranes of intraocular proliferative disorders (PVR and PDR). Hueber A, et al. **Int Ophthalmol** 1996–97;20(6):345–50

Overlapping expression and redundant activation of mesenchymal fibroblast growth factor (FGF) receptors by alternatively spliced FGF–8 ligands. Blunt AG, et al. **J Biol Chem** 1997 Feb 7;272(6):3733–8

Divalent cations and heparin/heparan sulfate cooperate to control assembly and activity of the fibroblast growth factor receptor complex. Kan M, et al. **J Biol Chem** 1996 Oct 18;271(42):26143–8

Phosphatidylinositol 3'–kinase–independent p70 S6 kinase activation by fibroblast growth factor receptor–1 is important for proliferation but not differentiation of endothelial cells. Kanda S, et al. **J Biol Chem** 1997 Sep 12;272(37):23347–53

Ligand–independent activation of fibroblast growth factor receptors by point mutations in the extracellular, transmembrane, and kinase domains. Neilson KM, et al. **J Biol Chem** 1996 Oct 4;271(40):25049–57

Induction of urokinase–type plasminogen activator by fibroblast growth factor (FGF)–2 is dependent on expression of FGF receptors and does not require activation of phospholipase Cgamma1. Roghani M, et al. **J Biol Chem** 1996 Dec 6;271(49):31154–9

Identification and characterization of a fibroblast growth factor (FGF) binding domain in the cysteine–rich FGF receptor. Zhou Z, et al. **J Biol Chem** 1997 Feb 21; 272(8):5167–74

The E–selectin ligand–1 is selectively activated in Chinese hamster ovary cells by the alpha(1,3)–fucosyltransferases IV and VII. Zöllner O, et al. **J Biol Chem** 1996 Dec 20; 271(51):33002–8

Mutation associated with Crouzon syndrome causes ligand–independent dimerization and activation of FGF receptor–2. Mangasarian K, et al. **J Cell Physiol** 1997 Jul; 172(1):117–25

The E–selectin–ligand ESL–1 is located in the Golgi as well as on microvilli on the cell surface. Steegmaier M, et al. **J Cell Sci** 1997 Mar;110 (Pt 6):687–94

Altered expression of fibroblast growth factor receptors in human pituitary adenomas. Abbass SA, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1160–6

Distributions of fibroblast growth factor and the mRNA for its receptor, MFR1, in the developing testis of the medaka, Oryzias latipes. Watanabe A, et al. **J Exp Zool** 1997 Oct 1;279(2):177–84

Ganglioside effects on basic fibroblast and epidermal growth factor receptors in retinal glial cells. Meuillet E, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):277–88

Retinal degeneration in transgenic mice with photoreceptor–specific expression of a dominant–negative fibroblast growth factor receptor. Campochiaro PA, et al. **J Neurosci** 1996 Mar 1;16(5):1679–88

Ligand binding by fibroblast growth factor receptors investigated using chimeric receptor molecules. Yayon A, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):185–97

Immunolocalization of basic fibroblast growth factor receptors in internal thoracic artery and saphenous vein grafts. St Rammos K, et al. **J Thorac Cardiovasc Surg** 1997 Jun;113(6):1111–2

Expression of fibroblast growth factors and their receptors in rat glomeruli. Ford MD, et al. **Kidney Int** 1997 Jun; 51(6):1729–38

A distinct basic fibroblast growth factor (FGF–2)/FGF receptor interaction distinguishes urokinase–type plasminogen activator induction from mitogenicity in endothelial cells. Rusnati M, et al. **Mol Biol Cell** 1996 Mar; 7(3):369–81

Nuclear accumulation of fibroblast growth factor receptors is regulated by multiple signals in adrenal medullary cells. Stachowiak MK, et al. **Mol Biol Cell** 1996 Aug; 7(8):1299–317

Enhanced signaling and morphological transformation by a membrane–localized derivative of the fibroblast growth factor receptor 3 kinase domain. Webster MK, et al. **Mol Cell Biol** 1997 Oct;17(10):5739–47

Fibroblast growth factor receptor signaling activates the human interstitial collagenase promoter via the bipartite Ets–AP1 element. Newberry EP, et al. **Mol Endocrinol** 1997 Jul;11(8):1129–44

Antisense targeting of basic fibroblast growth factor and fibroblast growth factor receptor–1 in human melanomas blocks intratumoral angiogenesis and tumor growth. Wang Y, et al. **Nat Med** 1997 Aug;3(8):887–93

Activation of Stat1 by mutant fibroblast growth–factor receptor in thanatophoric dysplasia type II dwarfism. Su WC, et al. **Nature** 1997 Mar 20;386(6622):288–92

Signal–regulated proteins and fibroblast growth factor receptors: comparative immunolocalization in rat retina. Blanquet PR, et al. **Neurosci Lett** 1996 Aug 23; 214(2–3):135–8

Cytotoxic activity of a diptheria toxin/FGF6 mitotoxin on human tumour cell lines. Coll–Fresno PM, et al. **Oncogene** 1997 Jan 16;14(2):243–7

Decreased expression of keratinocyte growth factor receptor in a subset of human transitional cell bladder carcinomas. Diez de Medina SG, et al. **Oncogene** 1997 Jan 23; 14(3):323–30

Nuclear accumulation of fibroblast growth factor receptors in human glial cells—association with cell proliferation. Stachowiak EK, et al. **Oncogene** 1997 May 8; 14(18):2201–11

Cell scattering of SK–N–MC neuroepithelioma cells in response to Ret and FGF receptor tyrosine kinase activation is correlated with sustained ERK2 activation. van Puijenbroek AA, et al. **Oncogene** 1997 Mar 13; 14(10):1147–57

Distribution of fibroblast growth factor (FGF)–2 and FGF receptor–1 messenger RNA expression and protein presence in the mid–trimester human fetus. Gonzalez AM, et al. **Pediatr Res** 1996 Mar;39(3):375–85

Analysis of high–affinity binding determinants in the receptor binding epitope of basic fibroblast growth factor. Zhu H, et al. **Protein Eng** 1997 Apr;10(4):417–21

[Expression of FGF2, FGF receptor–1 and alpha–smooth muscle actin in experimental mesangial proliferative nephritis] Jyo Y. **Nippon Jinzo Gakkai Shi** 1996 Dec; 38(12):545–54 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Retrograde transport of acidic fibroblast growth factor as a part of the growth factor signaling. Więdłocha A. **Arch Immunol Ther Exp (Warsz)** 1996;44(4):201–7 (64 ref.)

Review: a role for the FGF receptor in the axonal growth response stimulated by cell adhesion molecules? Hall H, et al. **Cell Adhes Commun** 1996 Apr;3(6):441–50 (97 ref.)

Fibroblast growth factor receptor 1–induced differentiation of endothelial cell line established from tsA58 large T transgenic mice. Kanda S, et al. **Cell Growth Differ** 1996 Mar;7(3):383–95

Use of transgenic mice to study autocrine–paracrine signaling in lung morphogenesis and differentiation. Whitsett JA, et al. **Clin Perinatol** 1996 Dec;23(4):753–69 (54 ref.)

Functions of fibroblast growth factors in vertebrate development. Goldfarb M. **Cytokine Growth Factor Rev** 1996 Dec;7(4):311–25 (143 ref.)

Fibroblast growth factor receptor–1 (FGFR–1) is essential for normal neural tube and limb development. Deng C, et al. **Dev Biol** 1997 May 1;185(1):42–54

Localization of MAP kinase activity in early Xenopus embryos: implications for endogenous FGF signaling. LaBonne C, et al. **Dev Biol** 1997 Mar 1;183(1):9–20

Fibroblast growth factor receptors and regeneration of the eye lens. McDevitt DS, et al. **Dev Dyn** 1997 Feb; 208(2):220–6

Chimeric analysis of fibroblast growth factor receptor–1 (Fgfr1) function: a role for FGFR1 in morphogenetic movement through the primitive streak. Ciruna BG, et al. **Development** 1997 Jul;124(14):2829–41

Requirements of DFR1/Heartless, a mesoderm–specific Drosophila FGF–receptor, for the formation of heart, visceral and somatic muscles, and ensheathing of longitudinal axon tracts in CNS. Shishido E, et al. **Development** 1997 Jun;124(11):2119–28

Heartless, a Drosophila FGF receptor homolog, is essential for cell migration and establishment of several mesodermal lineages. Beiman M, et al. **Genes Dev** 1996 Dec 1; 10(23):2993–3002

Regulated Breathless receptor tyrosine kinase activity required to pattern cell migration and branching in the Drosophila tracheal system. Lee T, et al. **Genes Dev** 1996 Nov 15;10(22):2912–21

Neural induction and patterning in embryos deficient in FGF signaling. Godsave SF, et al. **Int J Dev Biol** 1997 Feb; 41(1):57–65

Signal transduction pathway of human fibroblast growth factor receptor 3. Identification of a novel 66–kDa phosphoprotein. Kanai M, et al. **J Biol Chem** 1997 Mar 7;272(10):6621–8

Cell type–specific inhibition of keratinocyte collagenase–1 expression by basic fibroblast growth factor and keratinocyte growth factor. A common receptor pathway. Pilcher BK, et al. **J Biol Chem** 1997 Jul 18;272(29):18147–54

Fibroblast growth factor receptor signalling has a role in lobuloalveolar development of the mammary gland. Jackson D, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1261–8

Fibroblast growth factors, their receptors and receptor disorders. Gorlin RJ. **J Craniomaxillofac Surg** 1997 Apr; 25(2):69–79 (77 ref.)

Chimeras of the native form or achondroplasia mutant (G375C) of human fibroblast growth factor receptor 3 induce ligand–dependent differentiation of PC12 cells. Thompson LM, et al. **Mol Cell Biol** 1997 Jul;17(7):4169–77

Fibroblast growth factor receptor function is required for the orderly projection of ganglion cell axons in the developing mammalian retina. Brittis PA, et al. **Mol Cell Neurosci** 1996;8(2–3):120–8

CAM–FGF receptor interactions: a model for axonal growth. Doherty P, et al. **Mol Cell Neurosci** 1996;8(2–3):99–111 (77 ref.)

Expression of a dominant negative FGF receptor inhibits axonal growth and FGF receptor phosphorylation stimulated by CAMs. Saffell JL, et al. **Neuron** 1997 Feb; 18(2):231–42

Activation of FGF receptors by mutations in the transmembrane domain. Li Y, et al. **Oncogene** 1997 Mar 27;14(12):1397–406

Ligand–independent activation of fibroblast growth factor receptor–2 by carboxyl terminal alterations. Lorenzi MV, et al. **Oncogene** 1997 Aug 14;15(7):817–26

Amino acid residues which distinguish the mitogenic potentials of two FGF receptors. Wang JK, et al. **Oncogene** 1997 Apr 17;14(15):1767–78

Shared cell adhesion molecule (CAM) homology domains point to CAMs signalling via FGF receptors. Doherty P, et al. **Perspect Dev Neurobiol** 1996;4(2–3):157–68 (55 ref.)

RECEPTORS, FIBRONECTIN

[Induction of apoptosis by fibronectin via its interaction with VLA5] Sugahara H. **Nippon Rinsho** 1996 Jul;54(7):1809–14 (16 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Differential regulation of airway epithelial integrins by growth factors. Wang A, et al. **Am J Respir Cell Mol Biol** 1996 Nov;15(5):664–72

Decrease in fibronectin occurs coincident with the increased expression of its integrin receptor alpha5beta1 in stress–deprived ligaments. AbiEzzi SS, et al.

RECEPTORS, FIBRONECTIN

Iowa Orthop J 1997;17:102–9

ANTAGONISTS & INHIBITORS

Amino acid sequence and molecular modelling of glycoprotein IIb–IIIa and fibronectin receptor iso–antagonists from Trimeresurus elegans venom. Scaloni A, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):775–82

BIOSYNTHESIS

Alteration in the expression of endothelial cell integrin receptors alpha 5 beta 1 and alpha 2 beta 1 and alpha 6 beta 1 after in vitro infection with a clinical isolate of human cytomegalovirus. Shahgasempour S, et al. **Arch Virol** 1997;142(1):125–38

Control of fibronectin receptor expression by fibronectin: antisense fibronectin RNA downmodulates the induction of fibronectin receptor by transforming growth factor beta1. Rajagopal S, et al. **J Cell Physiol** 1997 Feb; 170(2):138–44

Lymphocyte adhesion molecules in renal allograft rejection. Korczak–Kowalska G, et al. **Transplant Proc** 1996 Dec; 28(6):3437–8

CHEMISTRY

Defining the topology of integrin alpha5beta1–fibronectin interactions using inhibitory anti–alpha5 and anti–beta1 monoclonal antibodies. Evidence that the synergy sequence of fibronectin is recognized by the amino–terminal repeats of the alpha5 subunit. Mould AP, et al. **J Biol Chem** 1997 Jul 11;272(28):17283–92

GENETICS

A 68–kD antigen, which is probably an N–terminal fragment of the VLA–5 alpha 5–subunit, is specific for differentiating keratinocytes. De Strooper B, et al. **Dermatology** 1996; 193(3):212–20

Modulation of alpha 4 beta 1 and alpha 5 beta 1 integrin expression: heterogeneous effects of Q–switched ruby, Nd:YAG, and alexandrite lasers on melanoma cells in vitro. van Leeuwen RL, et al. **Lasers Surg Med** 1996;18(1):63–71

IMMUNOLOGY

Binding of human leukocytes to fibronectin is augmented by an anti–CD44 mAb (TL–1) and blocked by another anti–CD44 mAb (Hermes–3) but not by anti–VLA–4/VLA–5 mAbs. Cao L, et al. **Immunobiology** 1996–97;196(5):504–12

Induction of nonspecific cross–reacting antigen mRNA by interferon–gamma and anti–fibronectin receptor antibody in colon cancer cells. Hinoda Y, et al. **J Gastroenterol** 1997 Apr;32(2):200–5

Trans–dominant inhibition of integrin function. Díaz–González F, et al. **Mol Biol Cell** 1996 Dec; 7(12):1939–51

METABOLISM

Follicular dendritic cells adhere to fibronectin and laminin fibers via their respective receptors. Ogata T, et al. **Blood** 1996 Oct 15;88(8):2995–3003

Detection of post–translational sulfation of alpha–5 beta–1 integrin and its role in integrin–fibronectin binding. Veiga SS, et al. **Braz J Med Biol Res** 1996 Sep;29(9):1235–8

Extracellular matrix rigidity causes strengthening of integrin–cytoskeleton linkages. Choquet D, et al. **Cell** 1997 Jan 10;88(1):39–48

Distinct structural requirements for interaction of the integrins alpha 5 beta 1, alpha v beta 5, and alpha v beta 6 with the central cell binding domain in fibronectin. Chen J, et al. **Cell Adhes Commun** 1996 Nov;4(4–5):237–50

The type III connecting segment of fibronectin contains an aspartic acid residue that regulates the rate of binding to integrin alpha 4 beta 1. Jongewaard IN, et al. **Cell Adhes Commun** 1996 Apr;3(6):487–95

Role of alpha 5 beta 1 integrin in determining malignant properties of colon carcinoma cells. Gong J, et al. **Cell Growth Differ** 1997 Jan;8(1):83–90

Graded fibronectin receptor aggregation in migrating cells. Brown MJ, et al. **Cell Motil Cytoskeleton** 1996;34(3):185–93

Differential utilization of VLA–4 (alpha 4 beta 1) and –5 (alpha 5 beta 1) integrins during the development of mouse bone marrow–derived mast cells. Fehlner–Gardiner CC, et al. **Differentiation** 1996 Sep;60(5):317–25

Functional relevance during lymphocyte migration and cellular localization of activated beta1 integrins. Gómez M, et al. **Eur J Immunol** 1997 Jan;27(1):8–16

Fibronectin distribution in human bone marrow stroma: matrix assembly and tumor cell adhesion via alpha5 beta1 integrin. Van der Velde–Zimmermann D, et al. **Exp Cell Res** 1997 Jan 10;230(1):111–20

Fibronectin and fibronectin receptors in lung development. Roman J. **Exp Lung Res** 1997 Mar–Apr;23(2):147–59 (50 ref.)

A recombinant, arginine–glycine–aspartic acid (RGD) motif from foot–and–mouth disease virus binds mammalian cells through vitronectin and, to a lower extent, fibronectin receptors. Villaverde A, et al. **Gene** 1996 Nov 21; 180(1–2):101–6

Functional role of alpha4beta1 and alpha5beta1 integrin fibronectin receptors expressed on adriamycin–resistant MCF–7 human mammary carcinoma cells. Nista A, et al. **Int J Cancer** 1997 Jul 3;72(1):133–41

Interleukin–6 gene expression is preferentially restricted in VLA–5–MPC–1– immature but not in VLA–5+MPC–1+ mature myeloma cells. Mihara K. **Int J Hematol** 1996 Apr; 63(3):215–26

Ligation of integrin alpha5beta1 is required for internalization of vitronectin by integrin alphavbeta3. Pijuan–Thompson V, et al. **J Biol Chem** 1997 Jan 31;272(5):2736–43

A region of the Yersinia pseudotuberculosis invasin protein that contributes to high affinity binding to integrin receptors. Saltman LH, et al. **J Biol Chem** 1996 Sep 20; 271(38):23438–44

Fibrinogen is a ligand for integrin alpha5beta1 on endothelial cells. Suehiro K, et al. **J Biol Chem** 1997 Feb 21; 272(8):5360–6

Post–translational modifications of alpha5beta1 integrin by glycosaminoglycan chains. The alpha5beta1 integrin is a facultative proteoglycan. Veiga SS, et al. **J Biol Chem** 1997 May 9;272(19):12529–35

Morphological evidence for a different fibronectin receptor organization and function during fibroblast adhesion on hydrophilic and hydrophobic glass substrata. Altankov G, et al. **J Biomater Sci Polym Ed** 1997;8(9):721–40

Cyclic strain induces reorganization of integrin alpha 5 beta 1 and alpha 2 beta 1 in human umbilical vein endothelial cells. Yano Y, et al. **J Cell Biochem** 1997 Mar 1;64(3):505–13

Integrin cross talk: activation of lymphocyte function–associated antigen–1 on human T cells alters alpha4beta1– and alpha5beta1–mediated function. Porter JC, et al. **J Cell Biol** 1997 Sep 22;138(6):1437–47

Platelet–derived growth factor and inflammatory cytokines have differential effects on the expression of integrins alpha 1 beta 1 and alpha 5 beta 1 by human dermal fibroblasts in vitro. Gailit J, et al. **J Cell Physiol** 1996 Nov;169(2):281–9

NPXY motifs control the recruitment of the alpha5beta1 integrin in focal adhesions independently of the association of talin with the beta1 chain. Vignoud L, et al. **J Cell Sci** 1997 Jun;110 (Pt 12):1421–30

Expression of the alpha 5 beta 1 fibronectin receptor on T lymphocytes of patients with HIV–1 infection. Torre D, et al. **J Clin Pathol** 1996 Sep;49(9):733–6

Localization of the transmembrane 4 superfamily (TM4SF) member PETA–3 (CD151) in normal human tissues: comparison with CD9, CD63, and alpha5beta1 integrin. Sincock PM, et al. **J Histochem Cytochem** 1997 Apr; 45(4):515–25

Enhancement of lymphokine–activated killer cell activity by fibronectin. Li YQ, et al. **J Immunother** 1997 Mar; 20(2):123–30

PHYSIOLOGY

Fibronectin and its alpha 5 beta 1–integrin receptor are involved in the wound–repair process of airway epithelium. Hérard AL, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L726–33

Adhesion of lymphoma cells to fibronectin: differential use of alpha 4 beta 1 and alpha 5 beta 1 integrins and stimulation by the 9EG7 mAb against the murine beta 1 integrin subunit. Driessens MH, et al. **Cell Adhes Commun** 1995 Nov;3(4):327–36

Identification of a new biological function for the integrin alpha v beta 3: initiation of fibronectin matrix assembly. Wu C, et al. **Cell Adhes Commun** 1996 Sep;4(3):149–58

VLA–5 in the plasma cell line, FR4ds, acts as a common regulator of VLA–4 and VLA–6 in spreading induced by fibronectin and laminin. Hattori H, et al. **Cell Immunol** 1996 Nov 25;174(1):63–72

Thrombopoietin promotes adhesion of primitive human hemopoietic cells to fibronectin and vascular cell adhesion molecule–1: role of activation of very late antigen (VLA)–4 and VLA–5. Cui L, et al. **J Immunol** 1997 Aug 15; 159(4):1961–9

Role of alpha 5 beta 1 integrin in TGF–beta 1–costimulated CD8+ T cell growth and apoptosis. Rich S, et al. **J Immunol** 1996 Oct 1;157(7):2916–23

Fibronectin receptor functions in embryonic cells deficient in alpha 5 beta 1 integrin can be replaced by alpha V integrins. Yang JT, et al. **Mol Biol Cell** 1996 Nov; 7(11):1737–48

Integrin regulation of polymorphonuclear leukocyte apoxis during hypoxia is primarily dependent on very late activation antigens 3 and 5. Leuenroth S, et al. **Surgery** 1997 Aug;122(2):153–62

[The interaction between beta 1 integrin (VLA–5) and extracellular matrix protein (fibronectin)—activation of cultured monocytes by fibronectin] Nishinarita S, et al. **Rinsho Byori** 1996 Sep;Suppl 102:140–6 (19 ref.) **(Jpn)**

RECEPTORS, FOLLICLE–STIMULATING HORMONE see **RECEPTORS, FSH**

RECEPTORS, FSH

ANTAGONISTS & INHIBITORS

Low levels of follicle–stimulating hormone receptor–activation inhibitors in serum and follicular fluid from normal controls and anovulatory patients with or without polycystic ovary syndrome. Schipper I, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1325–31

BIOSYNTHESIS

Follitropin signal transduction: alternative splicing of the FSH receptor gene produces a dominant negative form of receptor which inhibits hormone action. Sairam MR, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):717–22

Ontogeny of FSH receptor messenger ribonucleic acid transcripts in relation to FSH secretion and testicular function in sheep. Yarney TA, et al. **J Mol Endocrinol** 1997 Apr;18(2):113–25

CHEMISTRY

Highly heterologous region in the N–terminal extracellular domain of reptilian follitropin receptors. Akazome Y, et al. **Gen Comp Endocrinol** 1996 Dec;104(3):374–81

Molecular characteristics of the N–terminal region of the quail follitropin receptor. Akazome Y, et al. **In Vivo** 1996 May–Jun;10(3):345–9

Molecular cloning, genomic organization, and developmental regulation of a novel receptor from Drosophila melanogaster structurally related to members of the thyroid–stimulating hormone, follicle–stimulating hormone, luteinizing hormone/choriogonadotropin receptor family from mammals. Hauser F, et al. **J Biol Chem** 1997 Jan 10;272(2):1002–10

The LH/CG and FSH receptors: different molecular forms and intracellular traffic. Misrahi M, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):161–7 (33 ref.)

Advances in the molecular understanding of gonadotropins–receptors interactions. el Tayar N. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):65–70 (33 ref.)

DEFICIENCY

Men homozygous for an inactivating mutation of the follicle–stimulating hormone (FSH) receptor gene present variable suppression of spermatogenesis and fertility. Tapanainen JS, et al. **Nat Genet** 1997 Feb;15(2):205–6

DRUG EFFECTS

Transcriptional and post–transcriptional regulation of FSH receptor in rat granulosa cells by cyclic AMP and activin. Tano M, et al. **J Endocrinol** 1997 Jun;153(3):465–73

GENETICS

Follicle–stimulating hormone (FSH) regulates the expression of FSH receptor messenger ribonucleic acid in cultured Sertoli cells and in hypophysectomized rat testis. Maguire SM, et al. **Biol Reprod** 1997 May;56(5):1106–11

Regulation of luteinizing hormone–receptor and follicle–stimulating hormone–receptor messenger ribonucleic acid levels during development in the neonatal mouse ovary. O'Shaughnessy PJ, et al. **Biol Reprod** 1997 Sep;57(3):602–8

Characterization of the chicken follicle–stimulating hormone receptor (cFSH–R) complementary deoxyribonucleic acid, and expression of cFSH–R messenger ribonucleic acid in the ovary. You S, et al. **Biol Reprod** 1996 Nov; 55(5):1055–62

Premature ovarian failure. Conway GS. **Curr Opin Obstet Gynecol** 1997 Jun;9(3):202–6 (51 ref.)

Selection of the dominant follicle in cattle occurs in the absence of differences in the expression of messenger ribonucleic acid for gonadotropin receptors. Evans AC, et al. **Endocrinology** 1997 Jul;138(7):2963–71

A role for neurotransmitters in early follicular development: induction of functional follicle–stimulating hormone receptors in newly formed follicles of the rat ovary. Mayerhofer A, et al. **Endocrinology** 1997 Aug; 138(8):3320–9

Expression of follicle–stimulating hormone receptor in human ovary. Minegishi T, et al. **Eur J Clin Invest** 1997 Jun;27(6):469–74

Expression of messenger ribonucleic acids of luteinizing hormone and follicle–stimulating hormone receptors in granulosa and theca layers of chicken preovulatory follicles. Zhang C, et al. **Gen Comp Endocrinol** 1997 Mar; 105(3):402–9

Role of E box and initiator region in the expression of the rat follicle–stimulating hormone receptor. Goetz TL, et al. **J Biol Chem** 1996 Dec 27;271(52):33317–24

Clinical features of primary ovarian failure caused by a point mutation in the follicle–stimulating hormone receptor gene. Aittomäki K, et al. **J Clin Endocrinol Metab** 1996 Oct; 81(10):3722–6

A mutation in the follicle–stimulating hormone receptor occurs frequently in human ovarian sex cord tumors. Kotlar TJ, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1020–6

Stage–specific expression of the FSH receptor gene in the prepubertal and adult rat seminiferous epithelium. Rannikko A, et al. **J Endocrinol** 1996 Oct;151(1):29–35

Monitoring the transfection efficiency of the human follicle–stimulating hormone receptor cDNA in COS–7 cells: evaluation of the growth hormone transient gene expression assay system. Simoni M, et al. **J Endocrinol Invest** 1996 Jun;19(6):359–64

Cloning, sequencing and in vitro functional expression of recombinant donkey follicle–stimulating hormone receptor: a new insight into the binding specificity of gonadotrophin receptors. Richard F, et al. **J Mol Endocrinol** 1997 Jun; 18(3):193–202

Ontogeny of FSH receptor messenger ribonucleic acid transcripts in relation to FSH secretion and testicular function in sheep. Yarney TA, et al. **J Mol Endocrinol** 1997 Apr;18(2):113–25

Mutation analysis of gonadotropin receptor and G protein genes in various types of human ovarian tumors. Ichikawa Y, et al. **Jpn J Clin Oncol** 1996 Oct;26(5):298–302

Bioassays of gonadotropins based on cloned receptors. Christin-Maitre S, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):151–9 (49 ref.)

Functional and clinical consequences of mutations in the FSH receptor. Gromoll J, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):177–82 (21 ref.)

Expression of follicle stimulating hormone-receptor mRNA during gonadal development. O'Shaughnessy PJ, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):169–75 (46 ref.)

Expression of follicle-stimulating hormone-receptor mRNA alternate transcripts in bovine granulosa cells during luteinization in vivo and in vitro. Rajapaksha WR, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):25–30

[The postnatal changes of follicle-stimulating hormone receptor mRNA level in rat testis] Ding Y, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):99–103 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Decreased spermatogenesis as the result of an induced autoimmune reaction directed against the gonadotropin receptors in male rats. Graf KM, et al. **J Androl** 1997 Mar-Apr;18(2):174–85

Immunization against exon 1 decapeptides from the lutropin/choriogonadotropin receptor or the follitropin receptor as potential male contraceptive. Remy JJ, et al. **J Reprod Immunol** 1996 Nov;32(1):37–54

METABOLISM

Modulation of FSH receptor phosphorylation correlates with hormone-induced coupling to the adenylate cyclase system. Selvaraj N, et al. **Endocrine** 1997 Apr;6(2):179–85

Application of a CHO cell line transfected with the human FSH receptor for the measurement of specific FSH receptor activation inhibitors in human serum. Schipper I, et al. **J Endocrinol** 1996 Sep;150(3):505–14

Inhibitory role of prolactin in the downregulation of testicular follicle-stimulating hormone receptors in mice. Takase M, et al. **J Exp Zool** 1997 Jul 1;278(4):234–42

Dual coupling and down regulation of human FSH receptor in CHO cells. Minegishi T, et al. **Life Sci** 1997; 60(23):2043–50

Human follitropin heterodimerization and receptor binding structural motifs: identification and analysis by a combination of synthetic peptide and mutagenesis approaches. Dias JA. **Mol Cell Endocrinol** 1996 Dec 20; 125(1–2):45–54 (74 ref.)

Fourier analysis of differential light scattering for the quantitation of FSH response associated with structural changes in immortalized granulosa cells. Schiffer Z, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):145–53

Induction of promiscuous G protein coupling of the follicle-stimulating hormone (FSH) receptor: a novel mechanism for transducing pleiotropic actions of FSH isoforms. Arey BJ, et al. **Mol Endocrinol** 1997 May; 11(5):517–26

The C-terminal third of the human luteinizing hormone (LH) receptor is important for inositol phosphate release: analysis using chimeric human LH/follicle-stimulating hormone receptors. Hirsch B, et al. **Mol Endocrinol** 1996 Sep; 10(9):1127–37

Influence of FSH and hCG on the resumption of meiosis of bovine oocytes surrounded by cumulus cells connected to membrana granulosa. van Tol HT, et al. **Mol Reprod Dev** 1996 Oct;45(2):218–24

PHYSIOLOGY

A role for neurotransmitters in early follicular development: induction of functional follicle-stimulating hormone receptors in newly formed follicles of the rat ovary. Mayerhofer A, et al. **Endocrinology** 1997 Aug; 138(8):3320–9

Immunization of male bonnet monkeys (M. radiata) with a recombinant FSH receptor preparation affects testicular function and fertility. Moudgal NR, et al. **Endocrinology** 1997 Jul;138(7):3065–8

Regulation of follicle-stimulating hormone receptor. Minegishi T, et al. **Horm Res** 1996;46 Suppl 1:37–44

Functional and clinical consequences of mutations in the FSH receptor. Gromoll J, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):177–82 (21 ref.)

RECEPTORS, GABA

GABAA receptor pharmacology. Johnston GA. **Pharmacol Ther** 1996;69(3):173–98 (346 ref.)

[GABA receptors] Kuriyama K, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):302–7 (50 ref.) **(Jpn)**

AGONISTS see GABA AGONISTS

ANALYSIS

Time course of appearance of GABA and GABA receptors during retinal regeneration in the adult newt. Chiba C, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):204–10

ANTAGONISTS & INHIBITORS see GABA ANTAGONISTS

BIOSYNTHESIS

Localization of gamma-aminobutyric acid (GABA) receptor rho 3 subunit in rat retina. Ogurusu T, et al. **Neuroreport** 1997 Mar 3;8(4):925–7

CHEMISTRY

A classic cAMP responsive element in the promoter region of the alpha 1-GABAA receptor subunit has non-classic properties. Gerner FM, et al. **Funct Neurol** 1997 Mar-Apr; 12(2):55–61

GABAC receptors in the vertebrate retina. Lukasiewicz PD. **Mol Neurobiol** 1996 Jun;12(3):181–94 (73 ref.)

A 100 amino acid region in the GABA rho 1 subunit confers robust homo-oligomeric expression. Hackam AS, et al. **Neuroreport** 1997 Apr 14;8(6):1425–30

Predicted structure of the extracellular region of ligand-gated ion-channel receptors shows SH2-like and SH3-like domains forming the ligand-binding site. Gready JE, et al. **Protein Sci** 1997 May;6(5):983–98

DRUG EFFECTS

The GABAergic system of the dentate gyrus after withdrawal from chronic alcohol consumption: effects of intracerebral grafting and putative neuroprotective agents. Cadete-Leite A, et al. **Alcohol Alcohol** 1997 Jul-Aug; 32(4):471–84

Interaction of positive allosteric modulators with human and Drosophila recombinant GABA receptors expressed in Xenopus laevis oocytes. Belelli D, et al. **Br J Pharmacol** 1996 Jun;118(3):563–76

Allosteric modulation of an expressed homo-oligomeric GABA-gated chloride channel of Drosophila melanogaster. Hosie AM, et al. **Br J Pharmacol** 1996 Mar; 117(6):1229–37

Actions of picrodendrin antagonists on dieldrin-sensitive and -resistant Drosophila GABA receptors. Hosie AM, et al. **Br J Pharmacol** 1996 Dec;119(8):1569–76

Effects of [3H]-BIDN, a novel bicyclic dinitrile radioligand for GABA-gated chloride channels of insects and vertebrates. Rauh JJ, et al. **Br J Pharmacol** 1997 Aug; 121(7):1496–505

Zinc modulation of bicuculline-sensitive and -insensitive GABA receptors in the developing rat hippocampus. Martina M, et al. **Eur J Neurosci** 1996 Oct;8(10):2168–76

Unsaturated phosphinic analogues of gamma-aminobutyric acid as GABA(C) receptor antagonists. Chebib M, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):223–9

Steroid inhibition of [3H]SR 95531 binding to the GABAA recognition site. Hawkinson JE, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):141–6

Propofol and flurazepam act synergistically to potentiate GABAA receptor activation in human recombinant receptors. Reynolds JN, et al. **Eur J Pharmacol** 1996 Oct 24;314(1–2):151–6

Wolff Award 1996. The actions of valproate and neurosteroids in a model of trigeminal pain. Cutrer FM, et al. **Headache** 1996 Nov-Dec;36(10):579–85

GABA and neuroprotection. Lyden PD. **Int Rev Neurobiol** 1997;40:233–58 (80 ref.)

Neurosteroid analogues. 4. The effect of methyl substitution at the C-5 and C-10 positions of neurosteroids on electrophysiological activity at GABAA receptors. Han M, et al. **J Med Chem** 1996 Oct 11;39(21):4218–32

A structural determinant of desensitization and allosteric regulation by pentobarbitone of the GABAA receptor. Birnir B, et al. **J Membr Biol** 1997 Jan 15;155(2):157–66

Beta adrenergic sensitization of gamma-aminobutyric acid receptors to ethanol involves a cyclic AMP/protein kinase A second-messenger mechanism. Freund RK, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1192–200

High-threshold Ca2+ currents in rat hippocampal interneurones and their selective inhibition by activation of GABA(B) receptors. Lambert NA, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):115–27

Effect of in vivo administration of anesthetics on GABAA receptor function. Engel SR, et al. **Lab Anim Sci** 1996 Aug; 46(4):425–9

Design and in vitro pharmacology of a selective gamma-aminobutyric acidC receptor antagonist. Ragozzino D, et al. **Mol Pharmacol** 1996 Oct;50(4):1024–30

Contrasting actions of lanthanum on different recombinant gamma-aminobutyric acid receptor isoforms expressed in L929 fibroblasts. Saxena NC, et al. **Mol Pharmacol** 1997 Feb;51(2):328–35

Epipregnanolone acts as a partial agonist on a common neurosteroid modulatory site of the GABA(A) receptor complex in avian CNS. Pignataro L, et al. **Neurochem Res** 1997 Feb;22(2):221–5

Wild-type and insecticide-resistant homo-oligomeric GABA receptors of Drosophila melanogaster stably expressed in a Drosophila cell line. Buckingham SD, et al. **Neuropharmacology** 1996;35(9–10):1393–401

Ethacrynic acid: effects on postsynaptic GABA responses and electric activity of CA3 neurones. Bonnet U, et al. **Neuroreport** 1996 Nov 25;7(18):2983–7

Melatonin effects on behavior: possible mediation by the central GABAergic system. Golombek DA, et al. **Neurosci Biobehav Rev** 1996 Autumn;20(3):403–12 (175 ref.)

Functional expression of GABA rho 3 receptors in Xenopus oocytes. Shingai R, et al. **Neurosci Res** 1996 Dec; 26(4):387–90

L-arginine potentiates GABA-mediated synaptic transmission by a nitric oxide-independent mechanism in rat dopamine neurons. Shen KZ, et al. **Neuroscience** 1997 Aug;79(3):649–58

Differences in enhancing effects of zolpidem and benzodiazepine drugs on recurrent inhibition in rat hippocampal slices. Higashima M, et al. **Psychopharmacology (Berl)** 1997 Jun;131(4):394–8

Stimulatory effect of diazepam on gastric acid secretion in the continuously perfused stomach in rats under urethane anesthesia. Lin WC. **Res Commun Mol Pathol Pharmacol** 1997 Feb;95(2):157–68

GABAA receptor subtype diversity: implications for new generation hypnotic drug discovery. Graham D, et al. **Sleep** 1996 Oct;19(8 Suppl):S43–54

Localized changes in GABA receptor-gated chloride channel in rat brain after long-term haloperidol: relation to vacuous chewing movements. Sasaki T, et al. **Synapse** 1997 Jan;25(1):73–9

GABA and its receptors in the spinal cord. Malcangio M, et al. **Trends Pharmacol Sci** 1996 Dec;17(12):457–62 (59 ref.)

Use-dependent and use-independent blocking actions of picrotoxin and zinc at the GABAC receptor in retinal horizontal cells. Dong CJ, et al. **Vision Res** 1996 Dec; 36(24):3997–4005

[Effect of muscimol on the delay in desensitization of GABA-receptor/Cl--ionophor complex induced by picrotoxin and bicuculline] Rebrov IB, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):144–7 **(Rus)**

[Effect of withdrawal of phenazepam and nicotinamide on the status of the system of reception of benzodiazepines and NAD] Fomenko AI, et al. **Ukr Biokhim Zh** 1996 Sep-Oct;68(5):20–5 (Eng. Abstr.) **(Rus)**

GENETICS

A study of genetic association between manic-depressive illness and a highly polymorphic marker from the GABRbeta-1 gene. Puertollano R, et al. **Am J Med Genet** 1997 May 31;74(3):342–4

Agonist pharmacology of two Drosophila GABA receptor splice variants. Hosie AM, et al. **Br J Pharmacol** 1996 Dec; 119(8):1577–85

pH-dependent actions of THIP and ZAPA on an ionotropic Drosophila melanogaster GABA receptor. Matsuda K, et al. **Brain Res** 1996 Nov 11;739(1–2):335–8

Functional expression of recombinant GABAA receptor channels in L929 fibroblasts. Macdonald RL, et al. **Epilepsy Res Suppl** 1996;12:177–85

Benign adult familial myoclonus epilepsy (BAFME): an autosomal dominant form not linked to the dentatorubral pallidoluysian atrophy (DRPLA) gene. Kuwano A, et al. **J Med Genet** 1996 Jan;33(1):80–1

An mRNA encoding a putative GABA-gated chloride channel is expressed in the human cardiac conduction system. Garret M, et al. **J Neurochem** 1997 Apr; 68(4):1382–9

Neuronally restricted RNA splicing regulates the expression of a novel GABAA receptor subunit conferring atypical functional properties [corrected; erratum to be published] Whiting PJ, et al. **J Neurosci** 1997 Jul 1;17(13):5027–37

Expression cloning of GABA(B) receptors uncovers similarity to metabotropic glutamate receptors [see comments] Kaupmann K, et al. **Nature** 1997 Mar 20; 386(6622):239–46. Comment in: Nature 1997 Mar 20;386(6622):223–4.

METABOLISM

Cerebral GABA receptors. Kuriyama K. **Alcohol Alcohol Suppl** 1994;2:181–6 (47 ref.)

Induction of CYP1A1 by GABA receptor ligands. Sadar MD, et al. **Biochem Biophys Res Commun** 1996 Dec 4; 229(1):231–7

Receptor binding sites and uptake activities mediating GABA neurotransmission in chronic alcoholics with Wernicke encephalopathy. Dodd PR, et al. **Brain Res** 1996 Feb 26; 710(1–2):215–28

No evidence for functional GABA receptors in outer hair cells isolated from the apical half of the guinea-pig cochlea. Evans MG, et al. **Hear Res** 1996 Nov 1;101(1–2):1–6

The N-terminal domain of human GABA receptor rho1 subunits contains signals for homooligomeric and heterooligomeric interaction. Hackam AS, et al. **J Biol Chem** 1997 May 23;272(21):13750–7

Development of MK-801, kainate, AMPA, and muscimol binding sites and the effect of dark rearing in rat visual cortex. Gordon B, et al. **J Comp Neurol** 1997 Jun 23; 383(1):73–81

Immunocytochemical localization of the GABA(C) receptor rho subunits in the cat, goldfish, and chicken retina. Koulen P, et al. **J Comp Neurol** 1997 Apr 21;380(4):520–32

3-Phenyl-substituted imidazo[1,5-alpha]quinoxalin-4-ones

and imidazo[1,5-alpha]quinoxaline ureas that have high affinity at the GABAA/benzodiazepine receptor complex. Jacobsen EJ, et al. **J Med Chem** 1996 Sep 13;39(19):3820–36

Effects of chlorotrifluoroethylene oligomer fatty acids on recombinant GABA receptors expressed in Xenopus oocytes. DelRaso NJ, et al. **J Membr Biol** 1996 Jan; 149(1):33–40

Chronic ethanol administration regulates the expression of GABAA receptor alpha 1 and alpha 5 subunits in the ventral tegmental area and hippocampus. Charlton ME, et al. **J Neurochem** 1997 Jan;68(1):121–7

Modulation of GABAA receptor tert-[35S]butylbicyclophosphorothionate binding by antagonists: relationship to patterns of subunit expression. Korpi ER, et al. **J Neurochem** 1996 May;66(5):2179–87

Inhibitors of histamine methylation in brain promote formation of imidazoleacetic acid, which interacts with GABA receptors. Prell GD, et al. **J Neurochem** 1997 Jan; 68(1):142–51

GABA receptors precede glutamate receptors in hypothalamic development; differential regulation by astrocytes. Chen G, et al. **J Neurophysiol** 1995 Oct; 74(4):1473–84

Modulation of GABAA receptor function by tyrosine phosphorylation of beta subunits. Wan Q, et al. **J Neurosci** 1997 Jul 1;17(13):5062–9

3 beta-OH-5 beta-pregnan-20-one enhances [3H]GABA binding in developing chick optic lobe. Viapiano MS, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):585–97

Regional age-related alterations in cholinergic and GABAergic receptors in the rat brain. Araki T, et al. **Mech Ageing Dev** 1996 Jul 5;88(1–2):49–60

From kinetics and thermodynamics of GABAA receptor binding to ionophore function. Maksay G. **Neurochem Int** 1996 Oct;29(4):361–70 (65 ref.)

Effects of the antidepressant pirlindole and its dehydro-derivative on the activity of monoamine oxidase-A and on GABAA receptors. Medvedev AE, et al. **Neurochem Res** 1996 Dec;21(12):1521–6

GABA-dopamine receptor-receptor interactions in neostriatal membranes of the rat. Pérez de la Mora M, et al. **Neurochem Res** 1997 Aug;22(8):1051–4

Clozapine and some other antipsychotic drugs may preferentially block the same subset of GABA(A) receptors. Squires RF, et al. **Neurochem Res** 1997 Feb; 22(2):151–62

GABA uptake sites in frontal cortex from suicide victims and in aging. Sundman I, et al. **Neuropsychobiology** 1997; 35(1):11–5

The rho 1 GABA receptor cloned from rat retina is down-modulated by protons. Wegelius K, et al. **Neuroreport** 1996 Aug 12;7(12):2005–9

The Japanese herbal medicine 'saiko-keishi-to' activates GABAA receptors of rat sensory neurons in culture. Sugiyama K, et al. **Neurosci Lett** 1996 Oct 4;216(3):147–50

Dopamine and GABA receptors in cultured substantia nigra neurons: correlation of electrophysiology and immunocytochemistry. Kim KM, et al. **Neuroscience** 1997 Jun;78(3):759–69

Characterization of subtypes of gamma-aminobutyric acid receptors in an Ascaris muscle preparation by binding assay and binding of PF1022A, a new anthelmintic, on the receptors. Chen W, et al. **Parasitol Res** 1996;82(2):97–101

Novel azole derivatives are antagonists at the inhibitory GABA receptor on the somatic muscle cells of the parasitic nematode Ascaris suum. Bascal Z, et al. **Parasitology** 1996 Feb;112 (Pt 2):253–9

Insights into the activation mechanism of rho1 GABA receptors obtained by coexpression of wild type and activation-impaired subunits. Amin J, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):273–82

Is the input to a GABAergic or cholinergic synapse the sole asymmetry in rabbit's retinal directional selectivity? Grzymacz NM, et al. **Vis Neurosci** 1997 Jan-Feb; 14(1):39–54

[GABA-immunoreactive structures in the stellate and superior cervical ganglia of the cat] Fateev MM, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):20–5 (Eng. Abstr.) **(Rus)**

[The participation of the serotoninergic system in regulating the activity of the central glutamatergic/aspartatergic and GABA-ergic synapses] Grigor'ev IP, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug-Sep;82(8–9):22–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Opposite effects of GABAA and NMDA receptor antagonists on ethanol-induced behavioral sleep in rats. Beleslin DB, et al. **Alcohol** 1997 Mar-Apr;14(2):167–73

GABAB-ergic stimulation in hypothalamic pressor area induces larger sympathetic and cardiovascular depression in spontaneously hypertensive rats. Takenaka K, et al. **Am J Hypertens** 1996 Oct;9(10 Pt 1):964–72

Neurointegrative role of dopamine and GABA in psychosis [letter] Daigle MS, et al. **Ann Pharmacother** 1996 Oct; 30(10):1197–9

Olfaction, GABAergic neurotransmission in the olfactory bulb, and intermale aggression in mice: modulation by steroids. Guillot PV, et al. **Behav Genet** 1996 Sep; 26(5):497–504 (65 ref.)

Inescapable shock-induced potentiation of morphine analgesia in rats: involvement of opioid, GABAergic, and serotonergic mechanisms in the dorsal raphe nucleus. Sutton LC, et al. **Behav Neurosci** 1997 Aug;111(4):816–24

Working hypothesis on a GABAergic therapeutic approach of the spongiform encephalopathies [letter] Vamvakidès A. **Boll Chim Farm** 1997 Jan;136(1):1

Inhibitions mediated by glycine and GABAA receptors shape the discharge pattern of bulbar respiratory neurons. Schmid K, et al. **Brain Res** 1996 Feb 26;710(1–2):150–60

Role of GABA in cerebral cortex. Krnjević K. **Can J Physiol Pharmacol** 1997 May;75(5):439–51 (95 ref.)

Differential regulation of luteinizing hormone release by gamma-aminobutyric acid receptor subtypes in the arcuate-ventromedial region of the castrated ram. Ferreira SA, et al. **Endocrinology** 1996 Aug;137(8):3453–60

The GABAA receptors. From subunits to diverse functions. Mohler H, et al. **Ion Channels** 1996;4:89–113 (150 ref.)

GABAergic regulation of cerebral microvascular tone in the rat. Fergus A, et al. **J Cereb Blood Flow Metab** 1997 Sep; 17(9):992–1003

gamma-Aminobutyric acid receptor distribution in the mushroom bodies of a fly (Calliphora erythrocephala): a functional subdivision of Kenyon cells? Brotz TM, et al. **J Comp Neurol** 1997 Jun 23;383(1):42–8

Duality of glutamatergic and GABAergic control of pulsatile GnRH secretion by rat hypothalamic explants: II. Reduced NR2C- and GABAA-receptor-mediated inhibition at initiation of sexual maturation. Bourguignon JP, et al. **J Neuroendocrinol** 1997 Mar;9(3):193–9

Cholinergic and GABAergic receptors on fly tangential cells and their role in visual motion detection. Brotz TM, et al. **J Neurophysiol** 1996 Sep;76(3):1786–99

Blockade of GABAergic inhibition reveals reordered cortical somatotopic maps in rats that sustained neonatal forelimb removal. Lane RD, et al. **J Neurophysiol** 1997 May; 77(5):2723–35

Role of GABA receptor subtypes in inhibition of primate spinothalamic tract neurons: difference between spinal and periaqueductal gray inhibition. Lin Q, et al. **J Neurophysiol** 1996 Jan;75(1):109–23

Physiology, pharmacology, and topography of cholinergic neocortical oscillations in vitro. Lukatch HS, et al. **J Neurophysiol** 1997 May;77(5):2427–45

Two types of identified ascending interneurons with distinct GABA receptors in the crayfish terminal abdominal ganglion. Miyata H, et al. **J Neurophysiol** 1997 Mar; 77(3):1213–23

Pharmacologically novel GABA receptor in human dorsal root ganglion neurons. Valeyev AY, et al. **J Neurophysiol** 1996 Nov;76(5):3555–8

Ionotropic GABA receptor from lobster olfactory projection neurons. Zhainazarov AB, et al. **J Neurophysiol** 1997 May; 77(5):2235–51

Preferential suppression of the ON pathway by GABAC receptors in the amphibian retina. Zhang J, et al. **J Neurophysiol** 1995 Oct;74(4):1583–92

Excitatory GABA responses in embryonic and neonatal cortical slices demonstrated by gramicidin perforated-patch recordings and calcium imaging. Owens DF, et al. **J Neurosci** 1996 Oct 15;16(20):6414–23

Spinal muscarinic, glutamatergic and GABAergic receptor systems in cardiovascular regulation. Feldman DS, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):274–83

Optical imaging of spatiotemporal patterns of glutamatergic excitation and GABAergic inhibition in the guinea-pig auditory cortex in vivo. Horikawa J, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):629–38

Effect of in vivo administration of anesthetics on GABAA receptor function. Engel SR, et al. **Lab Anim Sci** 1996 Aug; 46(4):425–9

Involvement of supraspinal GABA-ergic systems in clonidine-induced antinociception in the tail-pinch test in mice. Nguyen TT, et al. **Life Sci** 1997;61(11):1097–103

GABAC receptors in the vertebrate retina. Lukasiewicz PD. **Mol Neurobiol** 1996 Jun;12(3):181–94 (73 ref.)

GABA receptors in the region of the dorsomedial hypothalamus of rats are implicated in the control of melatonin and corticosterone release. Kalsbeek A, et al. **Neuroendocrinology** 1996 Jan;63(1):69–78

Estrogen rapidly attenuates a GABAB response in hypothalamic neurons. Lagrange AH, et al. **Neuroendocrinology** 1996 Aug;64(2):114–23

GABAA receptor-mediated responses in the ventromedial nucleus of the hypothalamus of female and male neonatal rats. Smith ST, et al. **Neuroendocrinology** 1996 Aug; 64(2):103–13

Desensitizing GABAC receptors on carp retinal bipolar cells. Han MH, et al. **Neuroreport** 1997 Apr 14;8(6):1331–5

Effects of pentylenetetrazol on GABA receptors expressed in oocytes of Xenopus laevis: extra- and intracellular sites of action. Bloms-Funke P, et al. **Neurosci Lett** 1996 Feb 23;205(2):115–8

Optical characterization of a novel GABA response in early embryonic chick brainstem. Momose-Sato Y, et al. **Neuroscience** 1997 Sep;80(1):203–19

Whole-cell and single-channel alpha1 beta1 gamma2S GABAA receptor currents elicited by a "multipuffer" drug application device. Greenfield LJ Jr, et al. **Pflugers Arch** 1996 Oct;432(6):1080–90

Mice devoid of gamma-aminobutyrate type A receptor beta3 subunit have epilepsy, cleft palate, and hypersensitive behavior. Homanics GE, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4143–8

Agonist-induced closure of constitutively open gamma-aminobutyric acid channels with mutated M2 domains. Pan ZH, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6490–5

The pharmacology of amino-acid responses in septal neurons. Kumamoto E. **Prog Neurobiol** 1997 Jun;52(3):197–259 (425 ref.)

GABAc receptors: relatively simple transmitter -gated ion channels? Johnston GA. **Trends Pharmacol Sci** 1996 Sep; 17(9):319–23 (30 ref.)

GABA and its receptors in the spinal cord. Malcangio M, et al. **Trends Pharmacol Sci** 1996 Dec;17(12):457–62 (59 ref.)

[Functional properties of receptors for glutamate and GABA in cultured trigeminal ganglion neurons] Iida Y. **Kokubyo Gakkai Zasshi** 1997 Mar;64(1):121–32 (Eng. Abstr.) **(Jpn)**

[The loss of sensitivity of the respiratory system to carbon dioxide during activation of GABAergic brain structures] Tarakanov IA. **Biull Eksp Biol Med** 1997 Apr; 123(4):385–90 **(Rus)**

[Sensitivity of the respiratory system to oxygen during activation of brain GABAergic structures] Tarakanov IA. **Biull Eksp Biol Med** 1997 Mar;123(3):264–8 **(Rus)**

RECEPTORS, GABA-A

AGONISTS

A central cholinergic link in the cardiovascular effects of the benzodiazepine receptor partial inverse agonist FG 7142. Berntson GG, et al. **Behav Brain Res** 1996 Jan; 74(1–2):91–103

Pharmacokinetics of MDL 26479, a novel benzodiazepine inverse agonist, in normal volunteers. Robbins DK, et al. **Biopharm Drug Dispos** 1997 May;18(4):325–34

Heterogeneous distribution of benzodiazepine receptors among rat neostriatal neurones. Munakata M, et al. **Br J Pharmacol** 1996 Jun;118(3):820–5

Biphasic actions of the benzodiazepine receptor inverse agonist RU34347 in the rat cerebellar slice. Pringle AK, et al. **Brain Res** 1996 Apr 9;715(1–2):155–62

Benzodiazepine receptor stimulation blocks scopolamine-induced learning impairments in a water maze task. Smythe JW, et al. **Brain Res Bull** 1996;41(5):299–304

Interaction among alfaxalone, pregnenolone sulfate, and two GABAA agonists on hippocampal slices. SanMartin S, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):427–31

Allosteric modulation by single enantiomers of a C3-chiral 1,4-benzodiazepine of the gamma aminobutyric acid type A receptor channel expressed in Xenopus oocytes. Demuro A, et al. **Chirality** 1997;9(3):286–90

Activation of the GABAA receptor inhibits the proliferative effects of bFGF in cortical progenitor cells. Antonopoulos J, et al. **Eur J Neurosci** 1997 Feb;9(2):291–8

Prevention of kainic acid-induced limbic seizures and Fos expression by the GABA-A receptor agonist muscimol. Zhang X, et al. **Eur J Neurosci** 1997 Jan;9(1):29–40

In vivo modulation of benzodiazepine receptor function after inhibition of endogenous gamma-aminobutyyric acid synthesis. Bottlaender M, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):13–7

Decreased agonist sensitivity of human GABA(A) receptors by an amino acid variant, isoleucine to valine, in the alpha1 subunit. Westh-Hansen SE, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):253–7

Behavioural responsiveness to picrotoxin and desipramine in adult rats prenatally exposed to different benzodiazepine receptor agonists. Cannizzaro C, et al. **Eur Neuropsychopharmacol** 1995 Dec;5(4):523–6

Halothane acts as a partial agonist of the alpha6 beta2 gamma2S GABA(A)receptor. Sincoff R, et al. **FASEB J** 1996 Nov;10(13):1539–45

Cardiovascular effects of beta-carbolines in conscious rats. Wible JH, et al. **Hypertens Res** 1996 Sep;19(3):161–70

Locating biologically active compounds in medium-sized heterogeneous datasets by topological autocorrelation vectors: dopamine and benzodiazepine agonists. Bauknecht H, et al. **J Chem Inf Comput Sci** 1996 Nov-Dec; 36(6):1205–13

Can you provide a table of equivalences for benzodiazepines and other marketed benzodiazepine receptor agonists? Shader RI, et al. **J Clin Psychopharmacol** 1997 Aug; 17(4):331

Enhancement by lanthanide of general anesthetic-induced GABAA-receptor current in rat septal cholinergic neurons in culture. Kumamoto E, et al. **J Neurophysiol** 1996 Jun; 75(6):2294–9

Baclofen inhibition of the hyperpolarization-activated cation current, Ih, in rat substantia nigra zona compacta neurons may be secondary to potassium current activation. Watts AE, et al. **J Neurophysiol** 1996 Oct;76(4):2262–70

Delta subunit inhibits neurosteroid modulation of GABAA receptors. Zhu WJ, et al. **J Neurosci** 1996 Nov 1; 16(21):6648–56

Seizure after withdrawal from supratherapeutic doses of zolpidem tartrate, a selective omega I benzodiazepine receptor agonist. Gilbert DL, et al. **J Pain Symptom Manage** 1997 Aug;14(2):118–20

Long-term studies on anticonvulsant tolerance and withdrawal characteristics of benzodiazepine receptor ligands in different seizure models in mice. I. Comparison

of diazepam, clonazepam, clobazam and abecarnil. Löscher W, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):561–72

Long-term studies on anticonvulsant tolerance and withdrawal characteristics of benzodiazepine receptor ligands in different seizure models in mice. II. The novel imidazoquinazolines NNC 14–0185 and NNC 14–0189. Löscher W, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):573–81

Effects of gamma-aminobutyric acid agonists on the isolated perfused rat kidney. Monasterolo LA, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):602–7

Direct activation of GABAA receptors by barbiturates in cultured rat hippocampal neurons. Rho JM, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):509–22

Convulsive effects of a benzodiazepine receptor inverse agonist: are they related to anxiogenic processes? Clément Y, et al. **J Physiol Paris** 1997 Feb;91(1):21–9

Furosemide-sensitive calcium rise induced by GABAA-receptor stimulation in cultures of embryonic rat striatal neurons. Ikeda Y, et al. **Jpn J Pharmacol** 1997 Jun; 74(2):165–9

Further evidence for differences between non-selective and BZ-1 (omega 1) selective, benzodiazepine receptor ligands in murine models of "state" and "trait" anxiety. Griebel G, et al. **Neuropharmacology** 1996;35(8):1081–91

Benzodiazepine and barbiturate ligands modulate responses of cultured hippocampal neurones to the GABAA receptor partial agonist, 4-PIOL. Kristiansen U, et al. **Neuropharmacology** 1996;35(9–10):1181–91

Direct evidence for diazepam modulation of GABAA receptor microscopic affinity. Lavoie AM, et al. **Neuropharmacology** 1996;35(9–10):1383–92

Modulation of long-term potentiation in CA1 region of mouse hippocampal brain slices by GABAA receptor benzodiazepine site ligands. Seabrook GR, et al. **Neuropharmacology** 1997 Jun;36(6):823–30

Chronic administration of antipanic drugs alters rat brainstem GABAA receptor subunit mRNA levels. Tanay VA, et al. **Neuropharmacology** 1996;35(9–10):1475–82

The agonistic action of pentobarbital on GABAA beta-subunit homomeric receptors. Cestari IN, et al. **Neuroreport** 1996 Mar 22;7(4):943–7

Characterisation of the furanocoumarin phellopterin as a rat brain benzodiazepine receptor partial agonist in vitro. Dekermendjian K, et al. **Neurosci Lett** 1996 Nov 29; 219(3):151–4

Neuroprotective effects of the GABA(A) receptor partial agonist U-101017 in 3-acetylpyridine-treated rats. Sethy VH, et al. **Neurosci Lett** 1997 May 30;228(1):45–9

Mechanisms of etomidate potentiation of GABAA receptor-gated currents in cultured postnatal hippocampal neurons. Yang J, et al. **Neuroscience** 1996 Jul;73(1):69–78

Rewarding effect of the neuroactive steroid 3 alpha-hydroxy-5 alpha-pregnan-20-one in mice. Finn DA, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):261–4

A nonbenzodiazepine partial agonist, S-(+)-DN-2327, has minimal physical dependence-producing liability, but shows cross-dependence on barbital in rats. Inui Y, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1197–211

The use of the rat elevated plus-maze to discriminate between non-selective and BZ-1 (omega 1) selective, benzodiazepine receptor ligands. Griebel G, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):245–54

Assessment of benzodiazepine receptor heterogeneity in vivo: apparent pA2 and pKB analyses from behavioral studies. Rowlett JK, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(1):1–16

Anxiolytic-like effects of PNU-101017, a partial agonist at the benzodiazepine receptor. Tang AH, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):255–63

The cardiovascular startle response: anxiety and the benzodiazepine receptor complex. Berntson GG, et al. **Psychophysiology** 1997 May;34(3):348–57

Selective agonists for GABAC receptors [letter; comment] Qian H, et al. **Trends Neurosci** 1996 May;19(5):190. Comment on: Trends Neurosci 1995 Dec;18(12):515–9.

ANALYSIS

Photoaffinity labeling of peripheral benzodiazepine receptors in R-3327 Dunning prostatic tumors. Alenfall J, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1009–13

Characterization of a benzodiazepine receptor site with exceptionally high affinity for Ro 15-4513 in the rat CNS. Mehta AK, et al. **Brain Res** 1995 Dec 18;704(2):289–97

A mouse mutant strain highly resistant to methyl beta-carboline-3-carboxylate-induced seizures. Clément Y, et al. **Exp Brain Res** 1996 Jun;110(1):28–35

Immunological localization of GABAA-receptor subunits in cultured human and rat retinal pigment epithelium [letter] Wood JP, et al. **Exp Eye Res** 1996 Jul;63(1):113–6

Cerebral benzodiazepine receptor binding in vivo in patients with recurrent hepatic encephalopathy. Macdonald GA, et al. **Hepatology** 1997 Aug;26(2):277–82

Coexistence of two beta subunit isoforms in the same gamma-aminobutyric acid type A receptor. Li M, et al. **J Biol Chem** 1997 Jun 27;272(26):16564–9

Parametric images of benzodiazepine receptor concentration using a partial-saturation injection. Delforge J, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):343–55

Distribution of immunoreactivity for the beta 2 and beta 3 subunits of the GABAA receptor in the mammalian spinal cord. Alvarez FJ, et al. **J Comp Neurol** 1996 Feb 12; 365(3):392–412

Distribution of GABAA, GABAB, and glycine receptors in the central auditory system of the big brown bat, Eptesicus fuscus. Fubara BM, et al. **J Comp Neurol** 1996 May 20;369(1):83–92

Laminar distribution of MK-801, kainate, AMPA, and muscimol binding sites in cat visual cortex: a developmental study. Gordon B, et al. **J Comp Neurol** 1996 Feb 12; 365(3):466–78

Differential distribution of (GABA)A receptor subunits on bulbospinal serotonergic and nonserotonergic neurons of the ventromedial medulla of the rat. Hama AT, et al. **J Comp Neurol** 1997 Aug 4;384(3):337–48

GABA(A) receptors containing the alpha4-subunit: prevalence, distribution, pharmacology, and subunit architecture in situ. Benke D, et al. **J Neurochem** 1997 Aug; 69(2):806–14

PK ('peripheral benzodiazepine')--binding sites in the CNS indicate early and discrete brain lesions: microautoradiographic detection of [3H]PK11195 binding to activated microglia. Banati RB, et al. **J Neurocytol** 1997 Feb;26(2):77–82

Muscarinic, N-methyl-D-aspartate (NMDA) and benzodiazepine receptor binding sites in cortical membranes from amyotrophic lateral sclerosis patients. Gredal O, et al. **J Neurol Sci** 1996 Nov;143(1–2):121–5

Is upregulation of benzodiazepine receptors a compensatory reaction to reduced GABAergic tone in the brain of stressed mice? Pokk P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):703–8

Distribution of the GABAA receptor complex beta 2/3 subunits in the brain of the frog Rana pipiens. Aller MI, et al. **Neurosci Lett** 1997 Mar 28;225(1):65–8

GABA(A) receptor subunits in the rat hippocampus I: immunocytochemical distribution of 13 subunits. Sperk G, et al. **Neuroscience** 1997 Oct;80(4):987–1000

Development of 123I-labelled NNC 13-8241 as a radioligand for SPECT visualization of benzodiazepine receptor binding. Foged C, et al. **Nucl Med Biol** 1996 Apr; 23(3):201–9

Error analysis on parameter estimates in the ligand-receptor model: application to parameter imaging using PET data. Millet P, et al. **Phys Med Biol** 1996 Dec;41(12):2739–56

Differential synaptic localization of two major gamma-aminobutyric acid type A receptor alpha subunits on hippocampal pyramidal cells. Nusser Z, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11939–44

GABAA receptors in neurons of the nerve fiber layer in rabbit retina. Ehinger B, et al. **Vis Neurosci** 1996 Sep–Oct; 13(5):991–4

[Evaluation of benzodiazepine receptor in the cerebral cortex of Parkinson's disease using 123I-iomazenil SPECT] Kawabata K, et al. **Nippon Rinsho** 1997 Jan;55(1):244–8 (21 ref.) (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Effects of the benzodiazepine receptor inverse agonist Ro 15-4513 on the ingestion of sucrose and sodium saccharin solutions: a microstructural analysis of licking behavior. Higgs S, et al. **Behav Neurosci** 1996 Jun;110(3):559–66

Self-infusion of GABA(A) antagonists directly into the ventral tegmental area and adjacent regions. Ikemoto S, et al. **Behav Neurosci** 1997 Apr;111(2):369–80

Modulatory role of catecholamines in the transsynaptic expression of c-fos in the rat medial prefrontal cortex induced by disinhibition of the mediodorsal thalamus: a study employing microdialysis and immunohistochemistry. Bubser M, et al. **Brain Res** 1997 Feb 28;749(2):214–25

Effects of the benzodiazepine inverse agonist RO19-4603 alone and in combination with the benzodiazepine receptor antagonists flumazenil, ZK 93426 and CGS 8216, on ethanol intake in alcohol-preferring (P) rats. June HL, et al. **Brain Res** 1996 Sep 23;734(1–2):19–34

The effects of GABAA receptor blockade in the dorsomedial hypothalamic nucleus on corticotrophin (ACTH) and corticosterone secretion in male rats. Keim SR, et al. **Brain Res** 1996 Nov 11;739(1–2):46–51

Effects of GABA and glycine receptor antagonists on the activity and PAG-induced inhibition of rat dorsal horn neurons. Peng YB, et al. **Brain Res** 1996 Oct 14; 736(1–2):189–201

Involvement of the caudal striatum in auditory processing: c-fos response to cortical application of picrotoxin and to auditory stimulation. Arnauld E, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):27–35

Significant inhibition of spontaneous IgA secretion by selective peripheral-type benzodiazepine receptor ligands. Bessler H, et al. **Clin Neuropharmacol** 1997 Jun;20(3):215–23

The role of brain acetylcholine in GABAA receptor antagonist-induced blood-pressure changes in rat. Tellioğlu T, et al. **Eur J Pharmacol** 1996 Dec 19; 317(2–3):301–7

Effects of clozapine metabolites and chronic clozapine treatment on rat brain GABAA receptors. Wong G, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):319–23

Benzodiazepine receptor antagonist (flumazenil) does not affect sleep-related breathing disorders. Schönhofer B, et al. **Eur Respir J** 1996 Sep;9(9):1816–20

GABA(A) receptor blockade in the anterior ventral tegmental area increases extracellular levels of dopamine in the nucleus accumbens of rats. Ikemoto S, et al. **J Neurochem** 1997 Jul;69(1):137–43

Electrophysiological evidence for agonist properties of flumazenil, a benzodiazepine receptor antagonist, in rat hippocampus slices. Buldakova S, et al. **J Neurol Sci** 1997 Aug;149(2):121–6

Blocking GABA(A) inhibition reveals AMPA- and NMDA-receptor-mediated polysynaptic responses in the CA1 region of the rat hippocampus. Crépel V, et al. **J Neurophysiol** 1997 Apr;77(4):2071–82

Ligand-gated ion channel subunit partnerships: GABAA receptor alpha6 subunit gene inactivation inhibits delta subunit expression. Jones A, et al. **J Neurosci** 1997 Feb 15;17(4):1350–62

Neurosteroid prolongs GABAA channel deactivation by altering kinetics of desensitized states. Zhu WJ, et al. **J Neurosci** 1997 Jun 1;17(11):4022–31

Modulation by adenosine of GABA-activated current in rat dorsal root ganglion neurons. Hu HZ, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):67–75

Substance P suppresses GABAA receptor function via protein kinase C in primary sensory neurones of bullfrogs. Yamada K, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):439–49

GABA(A) antagonist and nicotine-induced antinociception. Mui WC, et al. **Life Sci** 1997;61(15):PL 221–5

Isoniazid-induced inhibition of GABAergic transmission enhances neurosteroid content in the rat brain. Barbaccia ML, et al. **Neuropharmacology** 1996;35(9–10):1299–305

Loreclezole enhances apparent desensitization of recombinant GABAA receptor currents. Donnelly JL, et al. **Neuropharmacology** 1996;35(9–10):1233–41

Evidence that a hybrid molecule of norfloxacin and biphenylacetic acid is a potent antagonist at the GABAA receptor. Imanishi T, et al. **Neuropharmacology** 1996; 35(9–10):1271–7

Inhibition of GABAA receptor chloride channel by quinolones and norfloxacin-biphenylacetic acid hybrid compounds. Ito Y, et al. **Neuropharmacology** 1996; 35(9–10):1263–9

A functional comparison of the antagonists bicuculline and picrotoxin at recombinant GABAA receptors. Krishek BJ, et al. **Neuropharmacology** 1996;35(9–10):1289–98

Blunted furosemide action on cerebellar GABAA receptors in ANT rats selectively bred for high alcohol sensitivity. Mäkelä R, et al. **Neuropharmacology** 1996; 35(9–10):1493–502

Inhibition of GABA-gated chloride channels in brain by the arachidonic acid metabolite, thromboxane A2. Schwartz-Bloom RD, et al. **Neuropharmacology** 1996; 35(9–10):1347–53

Distinct deactivation and desensitization kinetics of recombinant GABAA receptors. Tia S, et al. **Neuropharmacology** 1996;35(9–10):1375–82

Partial suppression of GABAA-mediated inhibition induces spatially restricted epileptiform activity in guinea pig neocortical slices. Langenstroth M, et al. **Neurosci Lett** 1996 May 31;210(2):103–6

N-methyl-D-aspartate depresses GABAA receptor-mediated currents in neurons of bullfrog dorsal root ganglia. Xi ZX, et al. **Neurosci Lett** 1996 Jul 5; 212(1):17–20

Inhibition of benzodiazepine binding in vitro by amentoflavone, a constituent of various species of Hypericum. Baureithel KH, et al. **Pharm Acta Helv** 1997 Jun;72(3):153–7

Supraspinal delta 2 opioid agonist analgesia in Swiss-Webster mice involves spinal GABAA receptors. Rady JJ, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):363–9

The inhibitory effects on sexual behavior and ambulatory activity of the mixed GABAA/GABAB agonist progabide are differentially blocked by GABA receptor antagonists. Agmo A, et al. **Psychopharmacology (Berl)** 1997 Jan; 129(1):27–34

The effects of a benzodiazepine receptor antagonist beta-carboline ZK-93426 on scopolamine-induced impairment on attention, memory and psychomotor skills. Duka T, et al. **Psychopharmacology (Berl)** 1996 Feb; 123(4):361–73

Agonizing over antagonizing: what do benzodiazepine receptor antagonists demonstrate? [letter] Sarter M, et al. **Psychopharmacology (Berl)** 1996 Jul;126(2):182–4

Medical therapy for intracerebral hematoma with the gamma-aminobutyric acid-A agonist muscimol. Lyden PD, et al. **Stroke** 1997 Feb;28(2):387–91

Inhibitory effect of new quinolones on GABA(A) receptor-mediated response and its potentiation with felbinac in Xenopus oocytes injected with mouse-brain mRNA: correlation with convulsive potency in vivo. Kawakami J, et al. **Toxicol Appl Pharmacol** 1997 Aug; 145(2):246–54

Correlation between a bicuculline-resistant response to GABA and GABAA receptor rho 1 subunit expression in single rat retinal bipolar cells. Yeh HH, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):283–92

[Changes in the density of GABAA receptor chloride channels in rodent brain induced by norbornane] Golovko AI, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):14–6 **(Rus)**

[The contribution of presynaptic dopaminergic receptors to the mechanism of the reactivating influences of blockade of the GABA-benzodiazepine-ionophor complex]

Dubrovina NI, et al.
Zh Vyssh Nerv Deist Im I P Pavlova 1997 Jan-Feb; 47(1):117-22 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

The effect of GABA stimulation on GABAA receptor subunit protein and mRNA expression in rat cultured cerebellar granule cells. Platt KP, et al.
Br J Pharmacol 1996 Dec;119(7):1393-400

Learning and novelty induced increase of central benzodiazepine receptors from chick forebrain, in a food discrimination task. Salvatierra NA, et al. **Brain Res** 1997 May 16;757(1):79-84

GABAA alpha 2 mRNA levels are decreased following induction of spontaneous epileptiform discharges in hippocampal-entorhinal cortical slices. Vick RS, et al.
Brain Res 1996 May 20;721(1-2):111-9

Postnatal development of peripheral-type benzodiazepine receptors in rat brain and peripheral tissues. Kurumaji A, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):148-51

GABA and GABA-A receptors are maximally expressed in association with cone synaptogenesis in neonatal rabbit retina. Mitchell CK, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):63-71

Localization of GABAA alpha 1 mRNA subunit in the brainstem nuclei controlling esophageal peristalsis. Broussard DL, et al. **Brain Res Mol Brain Res** 1996 Aug; 40(1):143-7

GABAA receptor subunit expression changes in the rat cerebellum and cerebral cortex during aging. Gutiérrez A, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):59-70

Down-regulation of the GABA receptor subunits mRNA levels in mammalian cultured cortical neurons following chronic neurosteroid treatment. Yu R, et al.
Brain Res Mol Brain Res 1996 Sep 5;41(1-2):163-8

Localization of CAM II kinase-alpha, GAD, GluR2 and GABA(A) receptor subunit mRNAs in the human entorhinal cortex. Longson D, et al. **Eur J Neurosci** 1997 Apr;9(4):662-75

Expression of GABA(A) receptor subunit mRNAs by layer V pyramidal cells of the rat primary visual cortex. Ruano D, et al. **Eur J Neurosci** 1997 Apr;9(4):857-62

Subpopulations of GABA neurons in the dentate gyrus express high levels of the alpha 1 subunit of the GABAA receptor. Esclapez M, et al. **Hippocampus** 1996;6(3):225-38

Repression of gamma-aminobutyric acid type A receptor alpha1 polypeptide biosynthesis requires chronic agonist exposure. Miranda JD, et al. **J Biol Chem** 1997 Jun 27; 272(26):16288-94

Developmental expression of GABA(A) receptor subunit and GAD genes in mouse somatosensory barrel cortex. Golshani P, et al. **J Comp Neurol** 1997 Jun 30; 383(2):199-219

Stoichiometry and assembly of a recombinant GABAA receptor subtype. Tretter V, et al. **J Neurosci** 1997 Apr 15;17(8):2728-37

The effects of raising intracellular calcium on synaptic GABAA receptor-channels. De Koninck Y, et al.
Neuropharmacology 1996;35(9-10):1365-74

Chronic treatment with diazepam or abecarnil differently affects the expression of GABAA receptor subunit mRNAs in the rat cortex. Holt RA, et al. **Neuropharmacology** 1996; 35(9-10):1457-63

Subunit stoichiometry of oligomeric membrane proteins: GABAA receptors isolated by selective immunoprecipitation from the cell surface. Kellenberger S, et al. **Neuropharmacology** 1996;35(9-10):1403-11

Chimeric GABAA/glycine receptors: expression and barbiturate pharmacology. Koltchine VV, et al.
Neuropharmacology 1996;35(9-10):1445-56

Reversible modification of GABAA receptor subunit mRNA expression during tolerance to diazepam-induced cognition dysfunction. Longone P, et al. **Neuropharmacology** 1996; 35(9-10):1465-73

Chronic administration of antipanic drugs alters rat brainstem GABAA receptor subunit mRNA levels. Tanay VA, et al. **Neuropharmacology** 1996;35(9-10):1475-82

Developmental regulation of expression of GABAA receptor alpha 1 and alpha 6 subunits in cultured rat cerebellar granule cells. Thompson CL, et al. **Neuropharmacology** 1996;35(9-10):1337-46

Up-regulation of GABAA receptor binding on neurons of the prefrontal cortex in schizophrenic subjects. Benes FM, et al. **Neuroscience** 1996 Dec;75(4):1021-31

GABA(A) receptor subunits in the rat hippocampus III: altered messenger RNA expression in kainic acid-induced epilepsy. Tsunashima K, et al. **Neuroscience** 1997 Oct; 80(4):1019-32

Directing gene expression to cerebellar granule cells using gamma-aminobutyric acid type A receptor alpha6 subunit transgenes. Bahn S, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9417-21

BLOOD

Electroconvulsive therapy down-regulates platelet peripheral-type benzodiazepine receptors in medication-resistant major depressed patients. Weizman R, et al. **Biol Psychiatry** 1996 Aug 1;40(3):221-4

CHEMISTRY

Indole derivatives as probes to study the benzodiazepine binding site in GABA receptor complex. Da Settimo A, et al. **Adv Exp Med Biol** 1996;398:677-83

Multiplicity, structure, and function in GABAA receptors. Barnard EA, et al. **Ann N Y Acad Sci** 1993 Dec 20; 707:116-25 (37 ref.)

Inversion of Markov processes to determine rate constants from single-channel data. Jackson MB. **Biophys J** 1997 Sep; 73(3):1382-94

Expression of the alpha 1, alpha 2 and alpha 3 isoforms of the GABAA receptor in human alcoholic brain. Lewohl JM, et al. **Brain Res** 1997 Mar 14;751(1):102-12

Characterisation of GABAA receptor gamma subunit expression by magnocellular neurones in rat hypothalamus. Fenelon VS, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):45-56

Allosteric modulation by single enantiomers of a C3-chiral 1,4-benzodiazepine of the gamma aminobutyric acid type A receptor channel expressed in Xenopus oocytes. Demuro A, et al. **Chirality** 1997;9(3):286-90

Molecular and pharmacological characterization of native cortical gamma-aminobutyric acidA receptors containing both alpha1 and alpha3 subunits. Araujo F, et al.
J Biol Chem 1996 Nov 1;271(44):27902-11

Immunocytochemical localization of the alpha 6 subunit of the gamma-aminobutyric acidA receptor in the rat nervous system. Gutiérrez A, et al. **J Comp Neurol** 1996 Feb 12; 365(3):504-10

Identification of channel-lining residues in the M2 membrane-spanning segment of the GABA(A) receptor alpha1 subunit. Xu M, et al. **J Gen Physiol** 1996 Feb; 107(2):195-205

Mapping the peripheral benzodiazepine receptor binding site by conformationally restrained derivatives of 1-(2-chlorophenyl)-N-methyl-N-(1-methylpropyl)-3-isoquinolinecarboxamide (PK11195). Cappelli A, et al.
J Med Chem 1997 Aug 29;40(18):2910-21

GABA(A) receptors containing the alpha4-subunit: prevalence, distribution, pharmacology, and subunit architecture in situ. Benke D, et al. **J Neurochem** 1997 Aug; 69(2):806-14

Proteins associated with alpha 1-subunit-containing GABAA receptors from bovine brain. Kannenberg K, et al. **J Neurochem** 1997 Apr;68(4):1352-60

Stoichiometry of a recombinant GABAA receptor. Chang Y, et al. **J Neurosci** 1996 Sep 1;16(17):5415-24

HPLC resolution of C5 chiral 4,5-dihydro-1,4-benzodiazepines: stereochemical characterization and enantioselective GABAA receptor binding. Bertucci C, et al. **J Pharm Biomed Anal** 1997 Mar; 15(6):803-9

Solubilized benzodiazepine receptors for use in receptor assays. Janssen MJ, et al. **J Pharm Biomed Anal** 1996 Jun; 14(8-10):989-96

Differential subunit dependence of the actions of the general anesthetics alphaxalone and etomidate at gamma-aminobutyric acid type A receptors expressed in Xenopus laevis oocytes. Sanna E, et al. **Mol Pharmacol** 1997 Mar;51(3):484-90

The gamma subunits of the native GABAA/benzodiazepine receptors. Khan ZU, et al. **Neurochem Res** 1996 Feb; 21(2):147-59

A mammalian mitochondrial drug receptor functions as a bacterial "oxygen" sensor [see comments] Yeliseev AA, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5101-6 . Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):4821-2.

Effect of subunit composition on GABAA receptor complex characteristics in a baculovirus expression system. Hartnett C, et al. **Receptors Channels** 1996;4(3):179-95

Peripheral benzodiazepine receptor in cholesterol transport and steroidogenesis. Papadopoulos V, et al. **Steroids** 1997 Jan;62(1):21-8 (66 ref.)

CLASSIFICATION

Impact of pregnancy and lactation on GABA(A) receptor and central-type and peripheral-type benzodiazepine receptors. Weizman R, et al. **Brain Res** 1997 Mar 28; 752(1-2):307-14

Pharmacological modulation of the diazepam-insensitive recombinant gamma-aminobutyric acidA receptors alpha 4 beta 2 gamma 2 and alpha 6 beta 2 gamma 2. Knoflach F, et al. **Mol Pharmacol** 1996 Nov;50(5):1253-61

Cerebellar gamma-aminobutyric acid type A receptors: pharmacological subtypes revealed by mutant mouse lines. Mäkelä R, et al. **Mol Pharmacol** 1997 Sep;52(3):380-8

Functional evidence for two native GABAA receptor subtypes in adult rat hippocampus and cerebellum. Schmid G, et al. **Neuroscience** 1996 Aug;73(3):697-704

GABAA-receptor subtypes [letter; comment] Sigel E, et al. **Trends Neurosci** 1996 Sep;19(9):386. Comment on: Trends Neurosci 1996 Apr;19(4):139-43.

DRUG EFFECTS

Sulfonylureas enhance GABAA synaptic potentials in rat midbrain dopamine neurones. Grenhoff J, et al.
Acta Physiol Scand 1996 Feb;156(2):147-8

New insight into the mechanisms of ethanol effects on GABAA receptor function and expression, and their relevance to behavior. Buck KJ. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):198A-202A

Ethanol, flunitrazepam, and pentobarbital modulation of GABAA receptors expressed in mammalian cells and Xenopus oocytes. Harris RA, et al.
Alcohol Clin Exp Res 1997 May;21(3):444-51

Discriminative stimulus function of ethanol: role of GABAA receptors in the nucleus accumbens. Hodge CW, et al.
Alcohol Clin Exp Res 1996 Oct;20(7):1221-8

Modulation of GABAA receptor function by alcohols: effects of subunit composition and differential effects of ethanol. Whitten RJ, et al. **Alcohol Clin Exp Res** 1996 Oct; 20(7):1313-9

Functional inactivation of the lateral and basal nuclei of the amygdala by muscimol infusion prevents fear conditioning to an explicit conditioned stimulus and to contextual stimuli. Muller J, et al. **Behav Neurosci** 1997 Aug; 111(4):683-91

Sevoflurane modulates both GABAA and GABAB receptors in area CA1 of rat hippocampus. Hirota K, et al.
Br J Anaesth 1997 Jan;78(1):60-5

Modulation by general anaesthetics of rat GABAA receptors comprised of alpha 1 beta 3 and beta 3 subunits expressed in human embryonic kidney 293 cells. Davies PA, et al.
Br J Pharmacol 1997 Mar;120(5):899-909

Subunit-dependent interaction of the general anaesthetic etomidate with the gamma-aminobutyric acid type A receptor. Hill-Venning C, et al. **Br J Pharmacol** 1997 Mar; 120(5):749-56

GABAA-receptor-mediated effects of progesterone, its ring-A-reduced metabolites and synthetic neuroactive steroids on neurogenic oedema in the rat meninges. Limmroth V, et al. **Br J Pharmacol** 1996 Jan;117(1):99-104

Barbiturate interactions at the human GABAA receptor: dependence on receptor subunit combination. Thompson SA, et al. **Br J Pharmacol** 1996 Feb;117(3):521-527

Interactions between loreclezole, chlormethiazole and pentobarbitone at GABA(A) receptors: functional and binding studies. Zhong Y, et al. **Br J Pharmacol** 1997 Aug; 121(7):1392-6

gamma-aminobutyric acidA receptor regulation: heterologous uncoupling of modulatory site interactions induced by chronic steroid, barbiturate, benzodiazepine, or GABA treatment in culture. Friedman LK, et al.
Brain Res 1996 Jan 22;707(1):100-9

Lanthanum and zinc sensitivity of GABAA-activated currents in adult medial septum/diagonal band neurons from ethanol dependent rats. Frye GD, et al.
Brain Res 1996 May 13;720(1-2):101-10

Characterization of U-101017 as a GABA(A) receptor ligand of dual functionality. Im HK, et al. **Brain Res** 1996 Apr 1;714(1-2):165-8

Lack of correlation between the molecular size and the efficacy of lanthanides for potentiating GABAA currents in rat septal cholinergic neurons in culture. Kumamoto E, et al. **Brain Res** 1996 Jun 3;723(1-2):235-7

Differential effects of hexachlorocyclohexane isomers on the GABA receptor subunits expressed in human embryonic kidney cell line. Nagata K, et al. **Brain Res** 1996 Oct 28; 738(1):131-7

Flumazenil reverses the decrease in the hypnotic activity of pentobarbital by social isolation stress: are endogenous benzodiazepine receptor ligands involved? Ojima K, et al.
Brain Res 1997 Jan 16;745(1-2):127-33

Opioid peptides modulate GABA(A) receptor responses in neurons of bullfrog dorsal root ganglia. Xi ZX, et al.
Brain Res 1997 May 30;758(1-2):163-8

GABAA receptor stimulation promotes survival of embryonic rat striatal neurons in culture. Ikeda Y, et al.
Brain Res Dev Brain Res 1997 Feb 20;98(2):253-8

The endogenous benzodiazepine receptor ligand ODN increases cytosolic calcium in cultured rat astrocytes. Lamacz M, et al. **Brain Res Mol Brain Res** 1996 Apr; 37(1-2):290-6

Chronic exposure to stress levels of corticosterone alters GABAA receptor subunit mRNA levels in rat hippocampus. Orchinik M, et al.
Brain Res Mol Brain Res 1995 Dec 1;34(1):29-37

Chronic triazolam and its withdrawal alters GABAA receptor subunit mRNA levels: an in situ hybridization study. Ramsey-Williams VA, et al.
Brain Res Mol Brain Res 1996 Dec 31;43(1-2):132-40

Modulation of the GABAA response in rat ventromedial hypothalamic neurons by pregnanolone. Xu TL, et al.
Comp Biochem Physiol A Physiol 1997 Jun;117(2):219-26

Decreased density of lymphocyte benzodiazepine receptors in drug-resistant epileptic patients. Ferrarese C, et al.
Epilepsy Res 1997 Jun;27(3):181-5

Differential effects mediated by GABAA receptors in thalamic nuclei in lh/lh model of absence seizures. Hosford DA, et al. **Epilepsy Res** 1997 Apr;27(1):55-65

Chronic and single administration of pentylenetetrazol modifies benzodiazepine receptor-binding: an autoradiographic study. Rocha L, et al. **Epilepsy Res** 1996 Jun;24(2):65-72

Substantia nigra GABA receptors can mediate anticonvulsant or proconvulsant effects. Moshé SL, et al.
Epilepsy Res Suppl 1996;12:247-56

The anxiolytic-like effects of the neurosteroid allopregnanolone: interactions with GABA(A) receptors. Brot MD, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):1-7

Tolerance to the ataxic effects of diazepam in guinea pig is not associated with a reduced sensitivity of GABAA receptors in the vestibular nucleus. Hutchinson MA, et al.
Eur J Pharmacol 1996 Apr 22;301(1-3):83-90

Down-regulation of benzodiazepine receptors by ethyl beta-carboline-3-carboxylate in cerebrocortical neurons. Katsura M, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):71-7

Peripheral benzodiazepine receptor ligands in rat liver mitochondria: effect on 27-hydroxylation of cholesterol. Tsankova V, et al. **Eur J Pharmacol** 1996 Mar 28; 299(1-3):197-203

Anxioselective properties of 6,3'-dinitroflavone, a high-affinity benzodiazepine receptor ligand. Wolfman C, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):23-30

Treatment with an antisense oligodeoxynucleotide to the GABAA receptor gamma 2 subunit increases convulsive threshold for beta-CCM, a benzodiazepine "inverse agonist", in rats. Zhao TJ, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):61-6

Benzodiazepine-GABA modulation of concurrent ethanol and sucrose reinforcement in the rat. Petry NM. **Exp Clin Psychopharmacol** 1997 Aug;5(3):183-94

1,2,3-triazolo[1.5-a]quinazolines: synthesis, benzodiazepine receptor binding and theoretical calculations. Biagi G, et al. **Farmaco** 1996 Feb;51(2):131-6

Pharmacologic characteristics of excitatory gamma-amino-butyric acid (GABA) receptors in a snail neuron. Zhang W, et al. **Gen Pharmacol** 1997 Jan; 28(1):45-53

Carbamazepine affects neutrophil function through an action on peripheral benzodiazepine receptors. Caldiroli E, et al. **Immunopharmacol Immunotoxicol** 1997 Aug;19(3):367-82

Modifications of diazepam binding inhibitor and peripheral benzodiazepine receptors in the lymphocytes of epileptic patients. Ferrarese C, et al. **Ital J Neurol Sci** 1996 Apr; 17(2):141-5

Anesthetic activity of novel water-soluble 2 beta-morpholinyl steroids and their modulatory effects at GABAA receptors. Anderson A, et al. **J Med Chem** 1997 May 23;40(11):1668-81

Synthesis, structure-activity relationships, and molecular modeling studies of N-(indol-3-ylglyoxylyl)benzylamine derivatives acting at the benzodiazepine receptor. Da Settimo A, et al. **J Med Chem** 1996 Dec 20;39(26):5083-91

Elevation of basal protein kinase C activity increases ethanol sensitivity of GABA(A) receptors in rat hippocampal CA1 pyramidal neurons. Weiner JL, et al. **J Neurochem** 1997 May;68(5):1949-59

Effects of the volatile anesthetic enflurane on spontaneous discharge rate and GABA(A)-mediated inhibition of Purkinje cells in rat cerebellar slices. Antkowiak B, et al. **J Neurophysiol** 1997 May;77(5):2525-38

Imaging the induction and spread of seizure activity in the isolated brain of the guinea pig: the roles of GABA and glutamate receptors. Federico P, et al. **J Neurophysiol** 1996 Nov;76(5):3471-92

Protein kinase modulation of GABAA currents in rabbit retinal rod bipolar cells. Gillette MA, et al. **J Neurophysiol** 1996 Nov;76(5):3070-86

Differential ethanol sensitivity of subpopulations of GABAA synapses onto rat hippocampal CA1 pyramidal neurons. Weiner JL, et al. **J Neurophysiol** 1997 Mar;77(3):1306-12

Rapid seizure-induced reduction of benzodiazepine and Zn2+ sensitivity of hippocampal dentate granule cell GABAA receptors. Kapur J, et al. **J Neurosci** 1997 Oct 1;17(19):7532-40

Silent GABAA synapses during flurazepam withdrawal are region-specific in the hippocampal formation. Poisbeau P, et al. **J Neurosci** 1997 May 15;17(10):3467-75

Inhibition of GABAA synaptic responses by brain-derived neurotrophic factor (BDNF) in rat hippocampus. Tanaka T, et al. **J Neurosci** 1997 May 1;17(9):2959-66

Regulation of GABA(A) receptor subunit mRNA expression by the pesticide dieldrin in embryonic brainstem cultures: a quantitative, competitive reverse transcription-polymerase chain reaction study. Liu J, et al. **J Neurosci Res** 1997 Sep 1;49(5):645-53

Role of GABAA receptors in the GABA attenuation of ethanol neurotoxicity. Spoerri PE, et al. **J Neurosci Res** 1996 Jun 1;44(5):499-506

The interactions of hexachlorocyclohexane isomers with human gamma-aminobutyric acid(A) receptors expressed in Xenopus oocytes. Aspinwall LS, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1557-64

Effects of negative allosteric modulators of gamma-aminobutyric acidA receptors on complex behavioral processes in monkeys. Auta J, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):316-25

Characterization of the anticonvulsant properties of ganaxolone (CCD 1042; 3alpha-hydroxy-3beta-methyl-5alpha-pregnan-20-one), a selective, high-affinity, steroid modulator of the gamma-aminobutyric acid(A) receptor. Carter RB, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1284-95

Protracted treatment with diazepam reduces benzodiazepine1 receptor-mediated potentiation of gamma-aminobutyric acid-induced currents in dissociated rat hippocampal neurons. Itier V, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1092-9

Effects of the androgenic/anabolic steroid stanozolol on GABAA receptor function: GABA-stimulated 36Cl- influx and [35S] TBPS binding. Masonis AE, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):186-93

Antinociceptive properties of propofol: involvement of spinal cord gamma-aminobutyric acid(A) receptors. Nadeson R, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1181-6

Regulation of neuronal and recombinant GABA(A) receptor ion channels by xenovulene A, a natural product isolated from Acremonium strictum. Thomas P, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):513-20

Partial agonism by 3alpha,21-dihydroxy-5beta-pregnan-20-one at the gamma-aminobutyric acidA receptor neurosteroid site. Xue BG, et al. **J Pharmacol Exp Ther** 1997 Jun; 281(3):1095-101

Waglerin-1 modulates gamma-aminobutyric acid activated current of murine hypothalamic neurons. Ye JH, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):74-80

Action of methylmercury on GABA(A) receptor-mediated inhibitory synaptic transmission is primarily responsible for its early stimulatory effects on hippocampal CA1 excitatory synaptic transmission. Yuan Y, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):64-73

Antipsychotic effects of bretazenil, a partial benzodiazepine agonist in acute schizophrenia--a study group report. Delini-Stula A, et al. **J Psychiatr Res** 1996 Jul-Aug; 30(4):239-50

Regulation of GABAA receptor structure and function by chronic drug treatments in vivo and with stably transfected cells. Klein RL, et al. **Jpn J Pharmacol** 1996 Jan;70(1):1-15 (124 ref.)

Pharmacological modulation of the diazepam-insensitive recombinant gamma-aminobutyric acidA receptors alpha 4 beta 2 gamma 2 and alpha 6 beta 2 gamma 2. Knoflach F, et al. **Mol Pharmacol** 1996 Nov;50(5):1253-61

Cerebellar gamma-aminobutyric acid type A receptors: pharmacological subtypes revealed by mutant mouse lines. Mäkelä R, et al. **Mol Pharmacol** 1997 Sep;52(3):380-8

Differential subunit dependence of the actions of the general anesthetics alphaxalone and etomidate at gamma-aminobutyric acid type A receptors expressed in Xenopus laevis oocytes. Sanna E, et al. **Mol Pharmacol** 1997 Mar;51(3):484-90

Pharmacology of the human gamma-aminobutyric acidA receptor alpha 4 subunit expressed in Xenopus laevis oocytes. Whittemore ER, et al. **Mol Pharmacol** 1996 Nov; 50(5):1364-75

Lactone modulation of the gamma-aminobutyric acid A receptor: evidence for a positive modulatory site. Williams KL, et al. **Mol Pharmacol** 1997 Jul;52(1):114-9

Enantioselectivity of steroid-induced gamma-aminobutyric acidA receptor modulation and anesthesia. Wittmer LL, et al. **Mol Pharmacol** 1996 Dec;50(6):1581-6

Selectivity of general anesthetics: a new dimension [news] Franks NP, et al. **Nat Med** 1997 Apr;3(4):377-8

Insensitivity to anaesthetic agents conferred by a class of GABA(A) receptor subunit. Davies PA, et al. **Nature** 1997 Feb 27;385(6619):820-3

Hippocampal GABA(A) channel conductance increased by diazepam. Eghbali M, et al. **Nature** 1997 Jul 3; 388(6637):71-5

Sites of alcohol and volatile anaesthetic action on GABA(A) and glycine receptors [see comments] Mihic SJ, et al. **Nature** 1997 Sep 25;389(6649):385-9. Comment in: Nature 1997 Sep 25;389(6649):384-5.

The use of in vivo antisense oligonucleotide technology for the investigation of brain GABA receptors. Karle J, et al. **Neurochem Int** 1997 Sep;31(3):437-46

Alcohol, alcoholic brain damage, and GABAA receptor isoform gene expression. Lewohl JM, et al. **Neurochem Int** 1996 Dec;29(6):677-84

Antagonism of convulsions but failure to enhance GABA(A) receptor function by felbamate in mice tolerant to diazepam. Serra M, et al. **Neurochem Res** 1997 Jun; 22(6):693-7

Modulation of human recombinant GABAA receptors by pregnanediols. Belelli D, et al. **Neuropharmacology** 1996; 35(9-10):1223-31

GABAA receptor subtypes differentiated by their gamma-subunit variants: prevalence, pharmacology and subunit architecture. Benke D, et al. **Neuropharmacology** 1996;35(9-10):1413-23

Midazolam inhibits long-term potentiation through modulation of GABAA receptors. Evans MS, et al. **Neuropharmacology** 1996 Mar;35(3):347-57

A behavioural and neurochemical study in rats of the pharmacology of loreclezole, a novel allosteric modulator of the GABAA receptor. Green AR, et al. **Neuropharmacology** 1996;35(9-10):1243-50

Pharmacological properties of recombinant "diazepam-insensitive" GABAA receptors. Gunnersen D, et al. **Neuropharmacology** 1996;35(9-10):1307-14

Effects of the nootropic drug nefiracetam on the GABAA receptor-channel complex in dorsal root ganglion neurons. Huang CS, et al. **Neuropharmacology** 1996; 35(9-10):1251-61

Zolpidem functionally discriminates subtypes of native GABAA receptors in acutely dissociated rat striatal and cerebellar neurons. Itier V, et al. **Neuropharmacology** 1996 Feb;35(2):137-45

Alpha subunit isoform influences GABA(A) receptor modulation by propofol. Krasowski MD, et al. **Neuropharmacology** 1997 Jul;36(7):941-9

Benzodiazepine site pharmacokinetic/pharmacodynamic quantification in man: direct measurement of drug occupancy and effects on the human brain in vivo. Malizia AL, et al. **Neuropharmacology** 1996;35(9-10):1483-91

Physiological comparison of alpha-ethyl-alpha-methyl-gamma-thiobutyrolactone with benzodiazepine and barbiturate modulators of GABAA receptors. Mathews GC, et al. **Neuropharmacology** 1996 Feb;35(2):123-36

Proton modulation of functionally distinct GABAA receptors in acutely isolated pyramidal neurons of rat hippocampus. Pasternack M, et al. **Neuropharmacology** 1996;35(9-10):1279-88

Modulation of synaptic GABAA receptor function by benzodiazepines in area CA3 of rat hippocampal slice cultures. Poncer JC, et al. **Neuropharmacology** 1996; 35(9-10):1169-79

Reduction of cerebellar GABAA responses by interleukin-1 (IL-1) through an indomethacin insensitive mechanism. Pringle AK, et al. **Neuropharmacology** 1996 Feb; 35(2):147-52

Effects of neurosteroid and benz[e]indene enantiomers on GABAA receptors in cultured hippocampal neurons and transfected HEK-293 cells. Zorumski CF, et al. **Neuropharmacology** 1996;35(9-10):1161-8

Role of GABAA receptors in sleep regulation. Differential effects of muscimol and midazolam on sleep in rats. Lancel M, et al. **Neuropsychopharmacology** 1996 Jul;15(1):63-74

The spread of excitation in neocortical columns visualized with infrared-darkfield videomicroscopy. Dodt HU, et al. **Neuroreport** 1996 Jul 8;7(10):1553-8

Nitrooxy alkyl apovincaminate modulates GABA(A) receptor in rat neocortical neurones. Munakata M, et al. **Neuroreport** 1996 Jan 31;7(2):613-6

Activation of GABAergic function necessary for afterdischarge generation in rat hippocampal slices. Higashima M, et al. **Neurosci Lett** 1996 Mar 29;207(2):101-4

Role of cerebellar granule cell-specific GABAA receptor subtype in the differential sensitivity of [3H]ethynylbicycloorthobenzoate binding to GABA mimetics. Huang J, et al. **Neurosci Lett** 1997 Apr 4; 225(2):85-8

The calcineurin inhibitor cyclosporin A-cyclophilin A complex reduces desensitization of GABAA-mediated responses in acutely dissociated rat hippocampal neurons. Martina M, et al. **Neurosci Lett** 1996 Sep 6;215(2):95-8

Tonic activation of presynaptic GABA(B) receptors on thalamic sensory afferents. Emri Z, et al. **Neuroscience** 1996 Jun;72(3):689-98

Thyroid hormonal modulation of the binding and activity of the GABAA receptor complex of brain. Martin JV, et al. **Neuroscience** 1996 Aug;73(3):705-13

GABA(A) receptor-mediated inhibition in the nucleus ambiguus motoneuron. Yajima Y, et al. **Neuroscience** 1997 Aug;79(4):1079-88

Synthesis and evaluation of [123I]-iodo-PK11195 for mapping peripheral-type benzodiazepine receptors (omega 3) in heart. Gildersleeve DL, et al. **Nucl Med Biol** 1996 Jan;23(1):23-8

Changes in tonic immobility and the GABA-benzodiazepine system in response to handling in the chick. Fluck E, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):269-74

Tolerance and sensitization to the behavioral effects of cocaine in rats: relationship to benzodiazepine receptors. Goeders NE, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):43-56

Cholinergic and GABAergic modulation of self-stimulation of lateral hypothalamus and ventral tegmentum: effects of carbachol, atropine, bicuculline, and picrotoxin. Singh J, et al. **Physiol Behav** 1997 Mar;61(3):411-8

Potentiation of GABAA receptor in cultured mouse hippocampal cells by brain-derived peptide mixture cerebrolysin. Zemková H, et al. **Physiol Res** 1995; 44(3):151-5

Pharmacology of tolerance to benzodiazepine receptor ligands. Ptaźnik A. **Pol J Pharmacol** 1995 Nov-Dec; 47(6):489-99 (67 ref.)

GABAA receptor antagonists reduce acute opiate withdrawal in isolated tissue. Capasso A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Feb; 21(2):315-30

Possible involvement of an endogenous benzodiazepine receptor ligand of the inverse agonist type in the regulation of rapid-eye movement (REM) sleep: an hypothesis. Wichlinski LJ. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jan; 20(1):1-44 (182 ref.)

Reduced benzodiazepine sensitivity in patients with premenstrual syndrome: a pilot study. Sundström I, et al. **Psychoneuroendocrinology** 1997 Jan;22(1):25-38

Ovarian steroids modify the behavioral and neurochemical responses of the central benzodiazepine receptor. Bitran D, et al. **Psychopharmacology (Berl)** 1996 May;125(1):65-73

Role of GABA-A and mitochondrial diazepam binding inhibitor receptors in the anti-stress activity of neurosteroids in mice. Reddy DS, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):280-92

Alcohol, GABAA-benzodiazepine receptor complex, and aggression. Miczek KA, et al. **Recent Dev Alcohol** 1997; 13:139-71 (164 ref.)

Cocaine selectively alters neurotransmitter receptor mRNAs in mouse embryos. Mackler SA, et al. **Reprod Toxicol** 1996 Jan-Feb;10(1):37-42

Baclofen reduces GABAA receptor responses in acutely dissociated neurons of bullfrog dorsal root ganglia. Xi ZX, et al. **Synapse** 1997 Jun;26(2):165-74

Mercury chloride modulation of the GABAA

receptor-channel complex in rat dorsal root ganglion neurons. Huang CS, et al. **Toxicol Appl Pharmacol** 1996 Oct;140(2):508-20

Protection against cocaine and combined cocaine-ethanol toxicities in mice by imidazobenzodiazepine Ro 15-4513. Hayase T, et al. **Toxicology** 1997 Feb 28;117(2-3):171-82

[A study of the effects of antidepressants on the GABAA receptor and its complex based on the drug actions on the power-spectral changes of rat hippocampal EEG induced by GABA antagonists and inverse agonists] Matsubara M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):75-83 (Eng. Abstr.) **(Jpn)**

[Effect of withdrawal of phenazepam and nicotinamide on the status of the system of reception of benzodiazepines and NAD] Fomenko AI, et al. **Ukr Biokhim Zh** 1996 Sep-Oct;68(5):20-5 (Eng. Abstr.) **(Rus)**

GENETICS

Linkage analysis between idiopathic generalized epilepsies and the GABA(A) receptor alpha5, beta3 and gamma3 subunit gene cluster on chromosome 15. Sander T, et al. **Acta Neurol Scand** 1997 Jul;96(1):1-7

GABAA and NMDA receptor subunit mRNA expression in ethanol dependent rats. Morrow AL, et al. **Alcohol Alcohol Suppl** 1994;2:89-95

Human GABAA receptor alpha 1 and alpha 3 subunits genes and alcoholism. Parsian A, et al. **Alcohol Clin Exp Res** 1997 May;21(3):430-3

Lack of association between juvenile myoclonic epilepsy and GABRA5 and GABRB3 genes. Guipponi M, et al. **Am J Med Genet** 1997 Apr 18;74(2):150-3

Candidate gene study of eight GABAA receptor subunits in panic disorder. Crowe RR, et al. **Am J Psychiatry** 1997 Aug;154(8):1096-100

Polymorphisms and intron sequences flanking the alternatively spliced 8-amino-acid exon of gamma2 subunit gene for GABAA receptors. Cheng AT, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):683-5

Expression of the alpha 1, alpha 2 and alpha 3 isoforms of the GABAA receptor in human alcoholic brain. Lewohl JM, et al. **Brain Res** 1997 Mar 14;751(1):102-12

Effect of substituting amino acids in extracellular disulfide loop on GABA rho1 subunit function. Lu L. **Brain Res** 1997 May 9;756(1-2):1-8

Adeno-associated virus (AAV) vector antisense gene transfer in vivo decreases GABA(A) alpha1 containing receptors and increases inferior collicular seizure sensitivity. Xiao X, et al. **Brain Res** 1997 May 9;756(1-2):76-83

Developmental expression of chick cortical GABA(A) receptor alpha1 subunits in vivo and in vitro. Miranda JD, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):176-86

GABAA receptor subunit expression and assembly in cultured rat cerebellar granule neurons. Nadler LS, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):216-25

The GABAA receptor alpha 6 subunit gene (Gabra6) is tightly linked to the alpha 1-gamma 2 subunit cluster on mouse chromosome 11. Garrett KM, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):133-7

Effect of PKG activation on recombinant GABAA receptors. Leidenheimer NJ. **Brain Res Mol Brain Res** 1996 Nov;42(1):131-4

Exclusion of linkage between idiopathic generalized epilepsies and the GABAA receptor alpha 1 and gamma 2 subunit gene cluster on chromosome 5. Sander T, et al. **Epilepsy Res** 1996 Apr;23(3):235-44

Assignment of genes encoding GABAA receptor subunits alpha 1, alpha 6, beta 2, and gamma 2 to a YAC contig of 5q33. Kostrzewa M, et al. **Eur J Hum Genet** 1996; 4(4):199-204

Identification of a putative DNA replication origin in the gamma-aminobutyric acid receptor subunit beta3 and alpha5 gene cluster on human chromosome 15q11-q13, a region associated with parental imprinting and allele-specific replication timing. Sinnett D, et al. **Gene** 1996 Sep 16;173(2):171-7

Structure and organization of GABRB3 and GABRA5. Glatt K, et al. **Genomics** 1997 Apr 1;41(1):63-9

Human gamma-aminobutyric acid-type A receptor alpha5 subunit gene (GABRA5): characterization and structural organization of the 5' flanking region. Kim Y, et al. **Genomics** 1997 Jun 15;42(3):378-87

Conservation of cyclodiene insecticide resistance-associated mutations in insects [published erratum appears in Insect Mol Biol 1995 May;4(2):124] Thompson M, et al. **Insect Mol Biol** 1993;2(3):149-54

Effects of mutating leucine to threonine in the M2 segment of alpha1 and beta1 subunits of GABAA alpha1beta1 receptors. Tierney ML, et al. **J Membr Biol** 1996 Nov; 154(1):11-21

Conservation of gamma-aminobutyric acid type A receptor alpha 6 subunit gene expression in cerebellar granule cells. Bahn S, et al. **J Neurochem** 1996 May;66(5):1810-8

An mRNA encoding a putative GABA-gated chloride channel is expressed in the human cardiac conduction system. Garret M, et al. **J Neurochem** 1997 Apr; 68(4):1382-9

Chronic intermittent ethanol treatment in rats increases GABA(A) receptor alpha4-subunit expression: possible relevance to alcohol dependence. Mahmoudi M, et al. **J Neurochem** 1997 Jun;68(6):2485-92

Evidence that GABAA receptor subunit mRNA expression during development is regulated by GABAA receptor stimulation. Poulter MO, et al. **J Neurochem** 1997 Feb; 68(2):631-9

Plasticity in GABAA receptor subunit mRNA expression by hypothalamic magnocellular neurons in the adult rat. Fénelon VS, et al. **J Neurosci** 1996 Aug 15;16(16):4872-80

Ligand-gated ion channel subunit partnerships: GABAA receptor alpha6 subunit gene inactivation inhibits delta subunit expression. Jones A, et al. **J Neurosci** 1997 Feb 15;17(4):1350-62

Expression of a bovine GABAA receptor alpha1-subunit cDNA in murine erythroleukaemia cells. Amar M, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):71-9

Genetic approaches to CNS disorders with particular reference to GABAA-receptor mutations. Mohler H. **J Recept Signal Transduct Res** 1997 Jan-May;17(1-3):1-10 (33 ref.)

The production of a stably transformed insect cell line expressing an invertebrate GABAA receptor beta-subunit. Smith LA, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):33-41

Methods for transient expression of hetero-oligomeric ligand-gated ion channels. Lüddens H, et al. **Methods Mol Biol** 1997;83:55-63 (25 ref.)

Functional characterization of human gamma-aminobutyric acidA receptors containing the alpha 4 subunit. Wafford KA, et al. **Mol Pharmacol** 1996 Sep;50(3):670-8

Extensive heterogeneity of recombinant gamma-aminobutyric acidA receptors expressed in alpha 4 beta 3 gamma 2-transfected human embryonic kidney 293 cells. Ebert V, et al. **Neuropharmacology** 1996; 35(9-10):1323-30

Chimeric GABAA/glycine receptors: expression and barbiturate pharmacology. Koltchine VV, et al. **Neuropharmacology** 1996;35(9-10):1445-56

Blunted furosemide action on cerebellar GABAA receptors in ANT rats selectively bred for high alcohol sensitivity. Mäkelä R, et al. **Neuropharmacology** 1996; 35(9-10):1493-502

Positive association between the GABRA5 gene and unipolar recurrent major depression. Oruč L, et al. **Neuropsychobiology** 1997;36(2):62-4

Cell intrinsic mechanisms regulate mouse cerebellar granule neuron differentiation. Lin X, et al. **Neurosci Lett** 1996 Dec 13;220(2):81-4

Directing gene expression to cerebellar granule cells using gamma-aminobutyric acid type A receptor alpha6 subunit transgenes. Bahn S, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9417-21

A point mutation in the gamma2 subunit of gamma-aminobutyric acid type A receptors results in altered benzodiazepine binding site specificity. Buhr A, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8824-9

Association study between bipolar disorder and candidate genes involved in dopamine-serotonin metabolism and GABAergic neurotransmission: a preliminary report [letter] Oruč L, et al. **Psychiatr Genet** 1996 Winter;6(4):213-7 (40 ref.)

Effect of subunit composition on GABAA receptor complex characteristics in a baculovirus expression system. Hartnett C, et al. **Receptors Channels** 1996;4(3):179-95

Nature of the 5' residue in the M2 domain affects function of the human alpha 1 beta 1 GABAA receptor. Birnir B, et al. **Synapse** 1997 Jul;26(3):324-7

IMMUNOLOGY

Expression of functional GABAA receptors in transfected L929 cells isolated by immunomagnetic bead separation. Greenfield LJ Jr, et al. **Neuropharmacology** 1997 Jan; 36(1):63-73

ISOLATION & PURIFICATION

Size-exclusion chromatographic reconstitution of the bovine brain benzodiazepine receptor. Effects of lipid environment on the binding characteristics. Viel GT, et al. **J Chromatogr A** 1997 Jul 25;776(1):101-7

METABOLISM

Indole derivatives as probes to study the benzodiazepine binding site in GABA receptor complex. Da Settimo A, et al. **Adv Exp Med Biol** 1996;398:677-83

GABAA receptors in damaged cerebral cortex areas in human chronic alcoholics. Dodd PR. **Alcohol Alcohol Suppl** 1994;2:187-91

Quantitative autoradiography using selective radioligands for central and peripheral-type benzodiazepine receptors in experimental Wernicke's encephalopathy: implications for positron emission tomography imaging. Leong DK, et al. **Alcohol Clin Exp Res** 1996 May;20(3):601-5

Correlation between reduced in vivo benzodiazepine receptor binding and severity of psychotic symptoms in schizophrenia [published erratum appears in Am J Psychiatry 1997 May;154(5):722] Busatto GF, et al. **Am J Psychiatry** 1997 Jan;154(1):56-63

Benzodiazepine receptor binding and schizophrenia [letter] Verhoeff NP. **Am J Psychiatry** 1997 Oct;154(10):1480

A method for the quantification of benzodiazepine receptors by using 123I-iomazenil and SPECT with one scan and one blood sampling. Ito H, et al. **Ann Nucl Med** 1997 May; 11(2):101-8

Infection with Plasmodium berghei alters benzodiazepine receptor in rat brain. Kokwaro G, et al. **Arch Med Res** 1997 Autumn;28(3):425-7

Localized cerebellar reductions in benzodiazepine receptor density in human partial epilepsy. Savic I, et al. **Arch Neurol** 1996 Jul;53(7):656-62

Structure-activity relationship studies of novel pyrazolo[1,5-c][1,3]benzoxazines: synthesis and benzodiazepine receptor affinity. Varano F, et al. **Arch Pharm (Weinheim)** 1996 Dec;329(12):529-34

Alterations in acetylcholine, NMDA, benzodiazepine receptors and protein kinase C in the brain of the senescence-accelerated mouse: an animal model useful for studies on cognitive enhancers. Nomura Y, et al. **Behav Brain Res** 1997 Feb;83(1-2):51-5

Structure-activity relationships of 2-aryl-2,5-dihydropyridazino [4,3-b]indol-3(3H)-ones at the benzodiazepine receptor. Palluotto F, et al. **Bioorg Med Chem** 1996 Dec;4(12):2091-104

Prediction of the therapeutic dose for benzodiazepine anxiolytics based on receptor occupancy theory. Ito K, et al. **Biopharm Drug Dispos** 1997 May;18(4):293-303 (37 ref.)

The influence of membrane cholesterol on the GABAA receptor. Bennett PJ, et al. **Br J Pharmacol** 1996 Jan; 117(1):87-92

Molecular mechanisms of benzodiazepine-induced down-regulation of GABAA receptor alpha 1 subunit protein in rat cerebellar granule cells. Brown MJ, et al. **Br J Pharmacol** 1996 Jul;118(5):1103-10

Alterations of the benzodiazepine site of rat alpha 6 beta 2 gamma 2-GABAA receptor by replacement of several divergent amino-terminal regions with the alpha 1 counterparts. Im WB, et al. **Br J Pharmacol** 1997 Feb; 120(4):559-64

Furosemide interactions with brain GABAA receptors. Korpi ER, et al. **Br J Pharmacol** 1997 Mar;120(5):741-8

Differential regulation of 5-hydroxytryptamine release by GABAA and GABAB receptors in midbrain raphe nuclei and forebrain of rats. Tao R, et al. **Br J Pharmacol** 1996 Dec;119(7):1375-84

Cerebral benzodiazepine receptors in hippocampal sclerosis. An objective in vivo analysis. Koepp MJ, et al. **Brain** 1996 Oct;119 (Pt 5):1677-87

Uncoupling of GABA(A) and benzodiazepine receptor binding activity in the hippocampal formation of schizophrenic brain. Benes FM, et al. **Brain Res** 1997 Apr 25;755(1):121-9

Colocalization of GABA(A) and NMDA receptors within the dorsal motor nucleus of the vagus nerve (DMV) of the rat. Broussard DL, et al. **Brain Res** 1997 Jul 18; 763(1):123-6

GABAA receptor alpha 1-subunit-immunopositive neurons in the rat striatum. Caruncho HJ, et al. **Brain Res** 1996 May 25;722(1-2):185-9

Increased expression of the peripheral-type benzodiazepine receptor-isoquinoline carboxamide binding protein mRNA in brain following portacaval anastomosis. Desjardins P, et al. **Brain Res** 1997 May 30;758(1-2):255-8

Modulation of ligand binding to components of the GABAA receptor complex by ammonia: implications for the pathogenesis of hyperammonemic syndromes. Ha JH, et al. **Brain Res** 1996 May 13;720(1-2):35-44

Acute liver failure and hyperammonemia increase peripheral-type benzodiazepine receptor binding and pregnenolone synthesis in mouse brain. Itzhak Y, et al. **Brain Res** 1995 Dec 24;705(1-2):345-8

The peripheral benzodiazepine receptor is a sensitive indicator of domoic acid neurotoxicity. Kuhlmann AC, et al. **Brain Res** 1997 Mar 21;751(2):281-8

Effect of substituting amino acids in extracellular disulfide loop on GABA rho1 subunit function. Lu L. **Brain Res** 1997 May 9;756(1-2):1-8

Age-related modifications on the GABAA receptor binding properties from Wistar rat prefrontal cortex. Ruano D, et al. **Brain Res** 1996 Oct 28;738(1):103-8

Impact of pregnancy and lactation on GABA(A) receptor and central-type and peripheral-type benzodiazepine receptors. Weizman R, et al. **Brain Res** 1997 Mar 28; 752(1-2):307-14

Adeno-associated virus (AAV) vector antisense gene transfer in vivo decreases GABA(A) alpha1 containing receptors and increases inferior collicular seizure sensitivity. Xiao X, et al. **Brain Res** 1997 May 9;756(1-2):76-83

Influence of gender and gonadectomy on bicuculline-induced convulsions and on GABAA receptors. Bujas M, et al. **Brain Res Bull** 1997;43(4):411-6

Sexual dimorphism of GABAA receptor levels in subcortical brain regions of a woodland rodent (Apodemus sylvaticus). Canonaco M, et al. **Brain Res Bull** 1996;40(3):187-94

Kainate, GABAA and NMDA receptors in Xenopus oocytes expressing mRNA from the cortex of mice kindled with FG 7142. Lewin E, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1-2):304-8

Chronic triazolam and its withdrawal alters GABAA receptor subunit mRNA levels: an in situ hybridization study. Ramsey-Williams VA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):132-40

Identification of the GABAA receptor alpha-subunit mRNA in rat intestine. Zeiter DK, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1-2):241-4

Area and lamina-specific expression of GABAA receptor subunit mRNAs in monkey cerebral cortex. Jones EG. **Can J Physiol Pharmacol** 1997 May;75(5):452-69

Hemin-induced erythroid differentiation of human myeloleukemia K562 cell line and its modification by bioresponse modifiers. Nakajima O, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Feb;43(1):115-34

The modulation of brain dopamine and GABAA receptors by estradiol: a clue for CNS changes occurring at menopause. Bossé R, et al. **Cell Mol Neurobiol** 1996 Apr; 16(2):199-212

Neurosteroid modulation of native and recombinant GABAA receptors. Lambert JJ, et al. **Cell Mol Neurobiol** 1996 Apr; 16(2):155-74 (100 ref.)

Hypothalamic and medullary GABAA and GABAB-ergic systems differently regulate sympathetic and cardiovascular systems. Takenaka K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S48-50

Functional preservation of benzodiazepine receptors of the primary somatosensory cortex in Creutzfeldt-Jakob disease: a pharmacologic-evoked potential study. Aguglia U, et al. **Clin Neuropharmacol** 1996 Feb;19(1):87-91

Decrease of the central type benzodiazepine receptor in cortical tubers in a patient with tuberous sclerosis. Fujita M, et al. **Clin Nucl Med** 1997 Feb;22(2):130-1

In vivo regulation of peripheral-type benzodiazepine receptor and glucocorticoid synthesis by Ginkgo biloba extract EGb 761 and isolated ginkgolides. Amri H, et al. **Endocrinology** 1996 Dec;137(12):5707-18

Acute action of choriogonadotropin on Leydig tumor cells: changes in the topography of the mitochondrial peripheral-type benzodiazepine receptor. Boujrad N, et al. **Endocrinology** 1996 Dec;137(12):5727-30

Effects of chronic morphine pretreatment on amygdaloid kindling development, postictal seizure and suppression and benzodiazepine receptor binding in rats. Rocha L, et al. **Epilepsy Res** 1996 Apr;23(3):225-33

Long-term treatment with some methylxanthines decreases the susceptibility to bicuculline- and pentylenetetrazol-induced seizures in mice. Relationship to c-fos expression and receptor binding. Johansson B, et al. **Eur J Neurosci** 1996 Dec;8(12):2447-58

Anatomical gradients in proliferation and differentiation of embryonic rat CNS accessed by buoyant density fractionation: alpha 3, beta 3 and gamma 2 GABAA receptor subunit co-expression by post-mitotic neocortical neurons correlates directly with cell buoyancy. Maric O, et al. **Eur J Neurosci** 1997 Mar;9(3):507-22

Delayed image of iodine-123 iomazenil as a relative map of benzodiazepine receptor binding: the optimal scan time. Onishi Y, et al. **Eur J Nucl Med** 1996 Nov;23(11):1491-7

Central benzodiazepine receptor occupancy by zolpidem in the human brain as assessed by positron emission tomography. Abadie P, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):35-44

Novelty-associated locomotion: correlation with cortical and sub-cortical GABAA receptor binding. Gruen RJ, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):115-20

Chronic zolpidem treatment alters GABA(A) receptor mRNA levels in the rat cortex. Holt RA, et al. **Eur J Pharmacol** 1997 Jun 25;329(2-3):129-32

Diazepam-insensitive GABAA receptors in rat cerebellum and thalamus. Huh KH, et al. **Eur J Pharmacol** 1996 Aug 29;310(2-3):225-33

N3-phenacyluridine, a novel hypnotic compound, interacts with the benzodiazepine receptor. Kimura T, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):265-9

Zolpidem binding sites on the GABA(A) receptor in brain from human cirrhotic and non-cirrhotic alcoholics. Lewohl JM, et al. **Eur J Pharmacol** 1997 May 20;326(2-3):265-72

Affinity of various ligands for GABAA receptors containing alpha 4 beta 3 gamma 2, alpha 4 gamma 2, or alpha 1 beta 3 gamma 2 subunits. Scholze P, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):155-62

Allosteric interactions between gamma-aminobutyric acid, benzodiazepine and picrotoxinin binding sites in primary cultures of cerebellar granule cells. Differential effects induced by gamma- and delta-hexachlorocyclohexane. Vale C, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):343-53

Developmental regulation of regional functionality of substantial nigra GABAA receptors involved in seizures. Velišková J, et al. **Eur J Pharmacol** 1996 Aug 8; 309(2):167-73

Hormonal modulation of benzodiazepines' actions on rat isolated uterus. Yiu MK, et al. **Eur J Pharmacol** 1996 Apr 29;302(1-3):99-108

Interaction of allosteric ligands with GABAA receptors containing one, two, or three different subunits. Zezula J, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):207-14

Pharmacological profile of benzodiazepine site ligands with recombinant GABAA receptor subtypes. Graham D, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):119-25

The autoradiographic perspective of central benzodiazepine receptors; a short review. Fernández-López A, et al. **Gen Pharmacol** 1997 Aug;29(2):173-80 (84 ref.)

Molecular and pharmacological characterization of native cortical gamma-aminobutyric acidA receptors containing both alpha1 and alpha3 subunits. Araujo F, et al. **J Biol Chem** 1996 Nov 1;271(44):27902-11

Human pyridoxal kinase. cDNA cloning, expression, and modulation by ligands of the benzodiazepine receptor. Hanna MC, et al. **J Biol Chem** 1997 Apr 18; 272(16):10756-60

A novel class of GABAA receptor subunit in tissues of the reproductive system. Hedblom E, et al. **J Biol Chem** 1997 Jun 13;272(24):15346-50

Peripheral benzodiazepine receptors in isolated human pancreatic islets. Giusti L, et al. **J Cell Biochem** 1997 Feb; 64(2):273-7

Neuroprotective properties of the benzodiazepine receptor, partial agonist PNU-101017 in the gerbil forebrain ischemia model. Hall ED, et al. **J Cereb Blood Flow Metab** 1997 Aug;17(8):875-83

GABAA receptor activation attenuates excitotoxicity but exacerbates oxygen-glucose deprivation-induced neuronal injury in vitro. Muir JK, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1211-8

Dimorphic distribution of the two main GABA(A) binding sites in cortical and limbic areas of a rodent living in natural environmental conditions. Canonaco M, et al. **J Comp Neurol** 1997 Apr 21;380(4):423-34

Alterations of GABAA receptor subunit mRNA levels in the aging Fischer 344 rat inferior colliculus. Milbrandt JC, et al. **J Comp Neurol** 1997 Mar 17;379(3):455-65

Molecular basis of peripheral vs central benzodiazepine receptor selectivity in a new class of peripheral benzodiazepine receptor ligands related to alpidem. Anzini M, et al. **J Med Chem** 1996 Oct 11;39(21):4275-84

Mapping the peripheral benzodiazepine receptor binding site by conformationally restrained derivatives of 1-(2-chlorophenyl)-N-methyl-N-(1-methylpropyl)-3-isoquinolinecarboxamide (PK11195). Cappelli A, et al. **J Med Chem** 1997 Aug 29;40(18):2910-21

Synthesis and in vitro activity of 3 beta-substituted-3 alpha-hydroxypregnan-20-ones: allosteric modulators of the GABAA receptor. Hogenkamp DJ, et al. **J Med Chem** 1997 Jan 3;40(1):61-72

Synthesis and biology of a 7-nitro-2,1,3-benzoxadiazol-4-yl derivative of 2-phenylindole-3-acetamide: a fluorescent probe for the peripheral-type benzodiazepine receptor. Kozikowski AP, et al. **J Med Chem** 1997 Aug 1; 40(16):2435-9

Modulation of melphalan resistance in glioma cells with a peripheral benzodiazepine receptor ligand-melphalan conjugate. Kupczyk-Subotkowska L, et al. **J Med Chem** 1997 May 23;40(11):1726-30

High-affinity alpha-aminobutyric acid A/benzodiazepine ligands: synthesis and structure-activity relationship studies of a new series of tetracyclic imidazoquinoxalines. Mickelson JW, et al. **J Med Chem** 1996 Nov 8; 39(23):4654-66

Genetic neural networks for quantitative structure-activity relationships: improvements and application of benzodiazepine affinity for benzodiazepine/GABAA receptors. So SS, et al. **J Med Chem** 1996 Dec 20; 39(26):5246-56

3 alpha-Hydroxy-3 beta-(phenylethynyl)-5 beta-pregnan-20-ones: synthesis and pharmacological activity of neuroactive steroids with high affinity for GABAA receptors. Upasani RB, et al. **J Med Chem** 1997 Jan 3;40(1):73-84

Bidirectional alterations of GABA(A) receptor subunit peptide levels in rat cortex during chronic ethanol consumption and withdrawal. Devaud LL, et al. **J Neurochem** 1997 Jul;69(1):126-30

Elevation of basal protein kinase C activity increases ethanol sensitivity of GABA(A) receptors in rat hippocampal CA1 pyramidal neurons. Weiner JL, et al. **J Neurochem** 1997 May;68(5):1949-59

Microtubule depolymerization inhibits ethanol-induced enhancement of GABAA responses in stably transfected cells. Whatley VJ, et al. **J Neurochem** 1996 Mar; 66(3):1318-21

Unsaturated free fatty acids increase benzodiazepine receptor agonist binding depending on the subunit composition of the GABAA receptor complex. Witt MR, et al. **J Neurochem** 1996 Nov;67(5):2141-5

A five minute experience in the elevated plus-maze alters the state of the benzodiazepine receptor in the dorsal raphe nucleus. Gonzalez LE, et al. **J Neurosci** 1997 Feb 15; 17(4):1505-11

Assembly of GABAA receptors composed of alpha1 and beta2 subunits in both cultured neurons and fibroblasts. Gorrie GH, et al. **J Neurosci** 1997 Sep 1;17(17):6587-96

Confocal imaging of intracellular chloride in living brain slices: measurement of GABAA receptor activity. Inglefield JR, et al. **J Neurosci Methods** 1997 Aug 22; 75(2):127-35

Mapping the location of functional nicotinic and gamma-aminobutyric acidA receptors on hippocampal neurons. Alkondon M, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1491-506

Avermectin B1a binds to high- and low-affinity sites with dual effects on the gamma-aminobutyric acid-gated chloride channel of cultured cerebellar granule neurons. Huang J, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):261-6

Interactions of the neurosteroid dehydroepiandrosterone sulfate with the GABA(A) receptor complex reveals that it may act via the picrotoxin site. Sousa A, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):827-33

Recombinant GABAA receptor desensitization: the role of the gamma 2 subunit and its physiological significance. Dominguez-Perrot C, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):145-59

Proton sensitivity of the GABA(A) receptor is associated with the receptor subunit composition. Krishek BJ, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):431-43

Structural and pharmacological aspects of the GABAA receptor: involvement in behavioral pathogenesis. Clément Y. **J Physiol Paris** 1996;90(1):1-13 (144 ref.)

Immunocytochemical localization of the GABAA/benzodiazepine receptor beta2/beta3 subunits in the optic tectum of the salmon. Anzelius M, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):413-25

Development of stable cell lines expressing different subtypes of GABAA receptors. Besnard F, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):99-113

Kinetic analysis of ligand-receptor association data that display an overshoot phenomenon. Lutz RA, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):691-702

The pharmacology of the benzodiazepine site of the GABA-A receptor is dependent on the type of gamma-subunit present. McKernan RM, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):173-83

Functional modulation of ligand-gated GABAA and NMDA receptor channels by phosphorylation. Sigel E. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):325-32 (21 ref.)

Direct interactions of androgenic/anabolic steroids with the peripheral benzodiazepine receptor in rat brain: implications for the psychological and physiological manifestations of androgenic/anabolic steroid abuse. Masonis AE, et al. **J Steroid Biochem Mol Biol** 1996 Aug; 58(5-6):551-5

Calmidazolium and other imidazole compounds affect steroidogenesis in Y1 cells: lack of involvement of the peripheral-type benzodiazepine receptor. Zisterer DM, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3-4):189-95

Majonoside-R2 reverses social isolation stress-induced decrease in pentobarbital sleep in mice: possible involvement of neuroactive steroids. Nguyen TT, et al. **Life Sci** 1997;61(4):395-402

L-364,718 and L-365,260, two CCK antagonists, have no affinity for central benzodiazepine binding sites in chickens. Rodriguez-Sinovas A, et al. **Life Sci** 1996;59(15):1211-6

Diazepam physical dependence and withdrawal in rats is associated with alteration in GABAA receptor function. Toki S, et al. **Life Sci** 1996;59(19):1631-41

Synaptoneurosomes. A preparation for studying subhippocampal GABAA receptor activity. Titulaer MN, et al. **Methods Mol Biol** 1997;72:49-59

Light adaptation affects synaptic vesicle density but not the distribution of GABAA receptors in goldfish photoreceptor terminals. Yazulla S, et al. **Microsc Res Tech** 1997 Jan 1;36(1):43-56

Clustering of GABAA receptors by rapsyn/43kD protein in vitro. Yang SH, et al. **Mol Cell Neurosci** 1997;8(6):430-8

Two tyrosine residues on the alpha subunit are crucial for benzodiazepine binding and allosteric modulation of gamma-aminobutyric acidA receptors. Amin J, et al. **Mol Pharmacol** 1997 May;51(5):833-41

Recruitment of functional GABA(A) receptors to postsynaptic domains by insulin. Wan Q, et al. **Nature** 1997 Aug 14;388(6643):686-90

Sex differences in the effects of gonadectomy and acute swim stress on GABAA receptor binding in mouse forebrain membranes. Akinci MK, et al. **Neurochem Int** 1997 Jul; 31(1):1-10

Neurosteroid modulation of GABAA receptors in the developing rat brain cortex. Borodinsky LN, et al. **Neurochem Int** 1997 Aug;31(2):313-7

GABAA receptor-mediated K(+)-evoked GABA release from globus pallidus--analysis using microdialysis. Hashimoto T, et al. **Neurochem Int** 1997 Mar;30(3):247-52

Recruitment of peripheral-type benzodiazepine receptors after acute stress in chick forebrain membranes: action of Triton X-100. Marín RH, et al. **Neurochem Int** 1996 Apr; 28(4):425-9

Functional coupling of Gi subtype with GABAB receptor/adenylyl cyclase system: analysis using a reconstituted system with purified GTP-binding protein from bovine cerebral cortex. Nishikawa M, et al. **Neurochem Int** 1997 Jul;31(1):21-5

Neurosteroid modulation of the benzodiazepine receptor in developing chick optic lobe. Pignataro L, et al. **Neurochem Int** 1996 Oct;29(4):405-10

Single cell reverse transcription-polymerase chain reaction (RT-PCR) and the GABA-A receptor. Sudweeks SN, et al. **Neurochem Int** 1996 Feb;28(2):137-9

Overview--flavonoids: a new family of benzodiazepine receptor ligands. Medina JH, et al. **Neurochem Res** 1997 Apr;22(4):419-25 (58 ref.)

Time-dependent changes in rat brain neuroactive steroid concentrations and GABAA receptor function after acute stress. Barbaccia ML, et al. **Neuroendocrinology** 1996 Feb; 63(2):166-72

Further studies on the mechanism of action of the endogenous benzodiazepine receptor ligand octadecaneuropeptide on gonadotropin-releasing hormone gene expression in the rat brain. Li S, et al. **Neuroendocrinology** 1996 Aug;64(2):79-84

GABAA receptor subtypes differentiated by their gamma-subunit variants: prevalence, pharmacology and subunit architecture. Benke D, et al. **Neuropharmacology**

1996;35(9-10):1413-23
Identification of domains in human recombinant GABAA receptors that are photoaffinity labelled by [3H]flunitrazepam and [3H]Ro15-4513. Davies M, et al. **Neuropharmacology** 1996;35(9-10):1199-208
The anaesthetic action and modulation of GABAA receptor activity by the novel water-soluble aminosteroid Org 20599. Hill-Venning C, et al. **Neuropharmacology** 1996; 35(9-10):1209-22
Modulation of GABAA receptor function by G protein-coupled 5-HT2C receptors. Huidobro-Toro JP, et al. **Neuropharmacology** 1996;35(9-10):1355-63
The alpha 4 subunit of the GABAA receptors from rat brain and retina. Khan ZU, et al. **Neuropharmacology** 1996; 35(9-10):1315-22
[3H]L-655,708, a novel ligand selective for the benzodiazepine site of GABAA receptors which contain the alpha 5 subunit. Quirk K, et al. **Neuropharmacology** 1996;35(9-10):1331-5
The gamma 2 subunit of the GABAA receptor is concentrated in synaptic junctions containing the alpha 1 and beta 2/3 subunits in hippocampus, cerebellum and globus pallidus. Somogyi P, et al. **Neuropharmacology** 1996; 35(9-10):1425-44
Pharmacological characterisation of multiple components in the enhancement by pregnanolone and propofol of [3H]flunitrazepam binding to GABAA receptors. Zhong Y, et al. **Neuropharmacology** 1996;35(9-10):1193-8
Altered platelet peripheral-type benzodiazepine receptor in posttraumatic stress disorder. Gavish M, et al. **Neuropsychopharmacology** 1996 Mar;14(3):181-6
Differential expression of the GABAA receptor alpha 1 subunit in developing chicken brain. Fan SS, et al. **Neuroreport** 1997 Jul 7;8(9-10):2399-404
A subclass of GABAA/benzodiazepine receptor exclusively localized in the limbic system. Onoe H, et al. **Neuroreport** 1996 Dec 20;8(1):117-22
Differential distribution of gamma-aminobutyric acidA receptor subunit (alpha 1, alpha 2, alpha 3, alpha 5 and beta 2 + 3) immunoreactivity in the medial prefrontal cortex of the rat. Dunn E, et al. **Neurosci Lett** 1996 Jun 7;210(3):213-7
Enhanced expression of the peripheral benzodiazepine receptor (PBR) and its endogenous ligand octadecaneuropeptide (ODN) in the regenerating adult rat sciatic nerve. Lacor P, et al. **Neurosci Lett** 1996 Dec 6; 220(1):61-5
Receptor imaging technique with 11C-labeled receptor ligands in living brain slices: its application to time-resolved imaging and saturation analysis of benzodiazepine receptor using [11C]Ro15-1788. Murata T, et al. **Neurosci Res** 1996 Jun;25(2):145-54
In vivo regulation of specific GABAA receptor subunit messenger RNAs by increased GABA concentrations in rat brain. Fénelon VS, et al. **Neuroscience** 1996 Apr; 71(3):661-70
Aging-related subunit expression changes of the GABAA receptor in the rat hippocampus. Gutiérrez A, et al. **Neuroscience** 1996 Sep;74(2):341-8
Immunohistochemical localization of the beta 2 and beta 3 subunits of the GABAA receptor in the basolateral amygdala of the rat and monkey. McDonald AJ, et al. **Neuroscience** 1996 Nov;75(2):407-19
In contrast to kindled seizures, the frequency of spontaneous epilepsy in the limbic status model correlates with greater aberrant fascia dentata excitatory and inhibitory axon sprouting, and increased staining for N-methyl-D-aspartate, AMPA and GABA(A) receptors. Mathern GW, et al. **Neuroscience** 1997 Apr;77(4):1003-19
GABAA receptor binding in the aging rat inferior colliculus. Milbrandt JC, et al. **Neuroscience** 1996 Jul;73(2):449-58
The distribution of the GABA(A) beta2,beta3 subunit receptor in the cat superior colliculus using antibody immunocytochemistry. Mize RR, et al. **Neuroscience** 1997 Aug;79(4):1121-35
GABAA receptor subtype changes in the substantia nigra of the rat following quinolinate lesions in the striatum: a correlative in situ hybridization and immunohistochemical study. Nicholson LF, et al. **Neuroscience** 1996 Sep; 74(1):89-98
Tolerance to diazepam and changes in GABA(A) receptor subunit expression in rat neocortical areas. Pesold C, et al. **Neuroscience** 1997 Jul;79(2):477-87
GABA(A) receptor subunits in the rat hippocampus II: altered distribution in kainic acid-induced temporal lobe epilepsy. Schwarzer C, et al. **Neuroscience** 1997 Oct; 80(4):1001-17
Radioiodinated nordiazepam analog for in vivo assessment of benzodiazepine receptors by single photon emission tomography. Saji H, et al. **Nucl Med Biol** 1994 Jan; 21(1):57-62
Synthesis of the enantiomers of [N-methyl-11C]PK 11195 and comparison of their behaviours as radioligands for PK binding sites in rats. Shah F, et al. **Nucl Med Biol** 1994 May;21(4):573-81
Pharmacokinetic analysis of benzodiazepine receptor binding of [123I]iomazenil in human brain. Ito K, et al. **Pharm Res** 1997 Aug;14(8):999-1003
Effects of N omega-nitro-L-arginine methyl ester on benzodiazepine binding in some limbic areas of hyperlipidaemic rats. Facciolo RM, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):431-7
Benzodiazepine receptors increase induced by stress and maze-learning performance in chick forebrain. Marín RH, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):581-4
Regional densities of benzodiazepine sites in the CNS of alcohol-naive P and NP rats. Thielen RJ, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):875-82
Effects of benzodiazepine receptor ligands on isolated rat superior cervical ganglia neurons. Aguayo LG, et al. **Pharmacology** 1996 Jun;52(6):371-6
Increased open field locomotion and decreased striatal GABAA binding after activity wheel running. Dishman RK, et al. **Physiol Behav** 1996 Sep;60(3):699-705
A point mutation in the gamma2 subunit of gamma-aminobutyric acid type A receptors results in altered benzodiazepine binding site specificity. Buhr A, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8824-9
GABA and epilepsy in the photosensitive baboon Papio papio. Brailowsky S. **Proc West Pharmacol Soc** 1996; 39:71-5 (37 ref.)
Epalons as anticonvulsants: actions mediated by the GABAA receptor complex. Gee KW. **Proc West Pharmacol Soc** 1996;39:55
Benzodiazepine receptors in the post-mortem brain of suicide victims and schizophrenic subjects. Pandey GN, et al. **Psychiatry Res** 1997 Aug 8;71(3):137-49
Benzodiazepine receptor distribution and diazepam binding in schizophrenia: an exploratory study. Schröder J, et al. **Psychiatry Res** 1997 Feb 7;68(2-3):125-31
Glutamate and benzodiazepine receptor autoradiography in rat brain after repetition of alcohol dependence. Ulrichsen J, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):31-41
Alterations of benzodiazepine receptor binding potential in anxiety and somatoform disorders measured by 123I-iomazenil SPECT. Tokunaga M, et al. **Radiat Med** 1997 May-Jun;15(3):163-9
Semiquantitative immunocytochemical analysis of GABAA receptor subunit expression in the rat neostriatum. Caruncho HJ, et al. **Receptors Channels** 1996;4(2):85-92
Assessment of benzodiazepine receptors using iodine-123-labeled iomazenil single-photon emission computed tomography in patients with ischemic cerebrovascular disease. A comparison with PET study. Dong Y, et al. **Stroke** 1997 Sep;28(9):1776-82
Differences in the subregional and cellular distribution of GABAA receptor binding in the hippocampal formation of schizophrenic brain. Benes FM, et al. **Synapse** 1996 Apr; 22(4):338-49
Nature of the 5' residue in the M2 domain affects function of the human alpha 1 beta 1 GABAA receptor. Birnir B, et al. **Synapse** 1997 Jul;26(3):324-7
Striatal efferents preferentially innervate neurons in the ventral pallidum containing GABAA receptor alpha 1 subunit-like immunoreactivity. Marksteiner J, et al. **Synapse** 1996 Jun;23(2):107-14
Mercury chloride modulation of the GABAA receptor-channel complex in rat dorsal root ganglion neurons. Huang CS, et al. **Toxicol Appl Pharmacol** 1996 Oct;140(2):508-20
[Parametric images of central-type benzodiazepine receptor binding and ligand transport by two SPECT scans of 123I-iomazenil: relative quantification without blood data] Onishi Y, et al. **Kaku Igaku** 1996 Sep;33(9):953-63 (Eng. Abstr.) **(Jpn)**
[Assessment of cerebral benzodiazepine receptor distribution in anxiety disorders by 123I-iomazenil-SPECT: comparison to cerebral perfusion scintigraphy by 123I-IMP] Uchiyama M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Jan;57(1):41-6 (Eng. Abstr.) **(Jpn)**
[Assessment of cerebral benzodiazepine receptor distribution in epilepsy by 123I-iomazenil-SPECT] Uchiyama M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Jan; 57(1):47-51 (Eng. Abstr.) **(Jpn)**
[Reaction of the brain receptor system to the effect of low intensity microwaves] Iurinskaia MM, et al. **Biofizika** 1996 Jul-Aug;41(4):859-65 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Significant reduction of seizure incidence and increase of benzodiazepine receptor density after interstitial radiosurgery in low-grade gliomas. Warnke PC, et al. **Acta Neurochir Suppl (Wien)** 1997;68:90-2
The NMDA and GABA-A receptors in behavioral activity of rats. Car H, et al. **Acta Physiol Hung** 1996;84(3):269-70
Alcohol dependence: a commentary on mechanisms. Hoffman PL, et al. **Alcohol Alcohol** 1996 Jul;31(4):333-40 (60 ref.)
Long-term GABAA receptor activation increases [Ca2+]i in single lactotrophs. Lorsignol A, et al. **Am J Physiol** 1996 May;270(5 Pt 1):E793-801
Multiplicity, structure, and function in GABAA receptors. Barnard EA, et al. **Ann N Y Acad Sci** 1993 Dec 20; 707:116-25 (37 ref.)
Short-term rebound anxiolytic effects and long-term changes in platelet benzodiazepine binding after pentylenetetrazole-kindling in two strains of rat. File SE, et al. **Anxiety** 1996;2(3):109-16
The GABAA receptor is expressed in human neurons derived from a teratocarcinoma cell line. Matsuoka T, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):719-23
Acute exposure to 25-hydroxy-cholesterol selectively reduces GABAb and not GABAa receptor-mediated synaptic inhibition. Phelan KD, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):68-73
Multiple forms and locations for the peripheral-type benzodiazepine receptor. Woods MJ, et al. **Biochem Pharmacol** 1996 Dec 24;52(12):1805-14 (94 ref.)
Visual evoked potentials and nitrous oxide-induced neuronal depression: role for benzodiazepine receptors. Dzoljic M, et al. **Br J Anaesth** 1996 Oct;77(4):522-5
Functional GABAA receptors on rat vagal afferent neurones. Ashworth-Preece M, et al. **Br J Pharmacol** 1997 Feb; 120(3):469-75
Measurement of GABAA receptor function in rat cultured cerebellar granule cells by the Cytosensor microphysiometer. Brown MJ, et al. **Br J Pharmacol** 1997 May;121(1):71-6
Functional correlation between allopregnanolone and [35S]-TBPS binding in the brain of rats exposed to isoniazid, pentylenetetrazol or stress. Concas A, et al. **Br J Pharmacol** 1996 Jun;118(4):839-46
Regulation of proopiomelanocortin gene expression by endogenous ligands of the GABAA receptor complex as evaluated by in situ hybridization in the rat pars intermedia. Garcia de Yebenes E, et al. **Brain Res** 1997 Mar 7; 750(1-2):277-84
5-HT1A and benzodiazepine receptors in the basolateral amygdala modulate anxiety in the social interaction test, but not in the elevated plus-maze. Gonzalez LE, et al. **Brain Res** 1996 Sep 2;732(1-2):145-53
Persistent reduction of GABA(A) receptor-mediated inhibition in rat hippocampus after chronic intermittent ethanol treatment. Kang M, et al. **Brain Res** 1996 Feb 19; 709(2):221-8
Adenosine by activating A1 receptors prevents GABAA-mediated actions during hypoxia in the rat hippocampus. Lucchi R, et al. **Brain Res** 1996 Sep 2; 732(1-2):261-6
Central corticotropin-releasing factor and benzodiazepine receptor systems are involved in the social isolation stress-induced decrease in ethanol sleep in mice. Matsumoto K, et al. **Brain Res** 1997 Apr 11;753(2):318-21
Peripheral-type benzodiazepine receptors in association with epileptic seizures in EL mice. Nakamoto Y, et al. **Brain Res** 1996 Apr 22;717(1-2):91-8
Excitatory amino acid receptors in the basolateral amygdala regulate anxiety responses in the social interaction test. Sajdyk TJ, et al. **Brain Res** 1997 Aug 1;764(1-2):262-4
Medial septal benzodiazepine receptors modulate hippocampal evoked responses and long-term potentiation. Stackman RW, et al. **Brain Res** 1996 Apr 22;717(1-2):12-21
The antidopaminergic action of S-20098 is mediated by benzodiazepine/GABA(A) receptors in the striatum. Tenn CC, et al. **Brain Res** 1997 May 9;756(1-2):293-6
Differences in the expression of GABA(A) receptors between functionally innervated and non-innervated granule neurons in neonatal rat cerebellar cultures. Ueno S, et al. **Brain Res** 1996 Apr 1;714(1-2):49-56
OFF pathway is preferentially suppressed by the activation of GABA(A) receptors in carp retina. Zhang DQ, et al. **Brain Res** 1997 Jun 6;759(1):160-2
Functional evidence for the involvement of GABAA receptors in cholecystokinin-induced ileal contraction. Alican I, et al. **Can J Physiol Pharmacol** 1995 Nov; 73(11):1596-9
Functional and pharmacological properties of GABA-mediated inhibition in the human neocortex. Avoli M, et al. **Can J Physiol Pharmacol** 1997 May;75(5):526-34 (46 ref.)
Do GABAA and GABAB inhibitory postsynaptic responses originate from distinct interneurons in the hippocampus? Nurse S, et al. **Can J Physiol Pharmacol** 1997 May; 75(5):520-5 (59 ref.)
Properties of spontaneous miniature GABAA receptor mediated synaptic currents in area CA3 of rat hippocampal slice cultures. Thompson SM, et al. **Can J Physiol Pharmacol** 1997 May;75(5):495-9
Peripheral benzodiazepine receptors: molecular pharmacology to possible physiological significance in stress-induced hypertension. Drugan RC. **Clin Neuropharmacol** 1996 Dec;19(6):475-96 (157 ref.)
Modulation of the GABAA response in rat ventromedial hypothalamic neurons by pregnanolone. Xu TL, et al. **Comp Biochem Physiol A Physiol** 1997 Jun;117(2):219-26
Neuroendocrine gamma-aminobutyric acid (GABA): functional differences in GABAA versus GABAB receptor inhibition of the melanotrope cell of Xenopus laevis. Buzzi M, et al. **Endocrinology** 1997 Jan;138(1):203-12
Possible role of the gamma-aminobutyric acid-A receptor system in the timing of the proestrous luteinizing hormone surge in rats. Mitsushima D, et al. **Endocrinology** 1997 May; 138(5):1944-8
GABAA inhibition controls the calcium flows during NMDA-dependent epileptiform activity in human epileptogenic neocortex. Louvel J, et al. **Epilepsy Res Suppl** 1996;12:293-300
Effects of caloric vestibular stimulation on prepositus hypoglossi neurons in rats. Nishiike S, et al. **Eur Arch Otorhinolaryngol** 1996;253(1-2):52-6
Three-dimensional visualization and quantification of the benzodiazepine receptor population within a living human brain using PET and MRI. Pauli S, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(2):61-70
A dual mechanism for impairment of GABAA receptor

activity by NMDA receptor activation in rat cerebellum granule cells. Robello M, et al. **Eur Biophys J** 1997; 25(3):181-7

Development of action potential-dependent and independent spontaneous GABAA receptor-mediated currents in granule cells of postnatal rat cerebellum. Wall MJ, et al. **Eur J Neurosci** 1997 Mar;9(3):533-48

The stimulatory effect of the octadecaneuropeptide (ODN) on cytosolic Ca2+ in rat astrocytes is not mediated through classical benzodiazepine receptors. Gandolfo P, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):275-81

Both GABAA and GABAB receptors participate in suppression of [CA2+]i pulsing in toad melanotrophs. Shibuya I, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):241-6

Is the mitochondrial benzodiazepine receptor involved in the control of airway smooth muscle tone? Pelaia G, et al. **Gen Pharmacol** 1997 Apr;28(4):495-8 (18 ref.)

Use-dependent regulation of GABAA receptors. Barnes EM Jr. **Int Rev Neurobiol** 1996;39:53-76 (112 ref.)

Screening of the macromolecular component of CSF from various pathologies for its interference with GABAA receptor function. Rapallino MV, et al. **Ital J Neurol Sci** 1995 Dec;16(9):643-6

Subtle changes in residue 77 of the gamma subunit of alpha1beta2gamma2 GABAA receptors drastically alter the affinity for ligands of the benzodiazepine binding site. Buhr A, et al. **J Biol Chem** 1997 May 2;272(18):11799-804

Flunitrazepam has an inverse agonistic effect on recombinant alpha6beta2gamma2-GABAA receptors via a flunitrazepam-binding site. Hauser CA, et al. **J Biol Chem** 1997 May 2;272(18):11723-7

Contrasting strategies for anoxic brain survival--glycolysis up or down. Lutz PL, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):411-9 (59 ref.)

Anesthetic activity of novel water-soluble 2 beta-morpholinyl steroids and their modulatory effects at GABAA receptors. Anderson A, et al. **J Med Chem** 1997 May 23;40(11):1668-81

Synthesis and binding affinity of 2-phenylimidazo[1,2-alpha]pyridine derivatives for both central and peripheral benzodiazepine receptors. A new series of high-affinity and selective ligands for the peripheral type. Trapani G, et al. **J Med Chem** 1997 Sep 12;40(19):3109-18

Signaling pathway downstream of GABAA receptor in the growth cone. Fukura H, et al. **J Neurochem** 1996 Oct; 67(4):1426-34

Distinct loci mediate the direct and indirect actions of the anesthetic etomidate at GABA(A) receptors. Moody EJ, et al. **J Neurochem** 1997 Sep;69(3):1310-3

Expression of native GABAA receptors in Xenopus oocytes injected with rat brain synaptosomes. Sanna E, et al. **J Neurochem** 1996 Nov;67(5):2212-4

GABAA mediated afterdepolarization in pyramidal neurons from rat neocortex. Cerne R, et al. **J Neurophysiol** 1997 Feb;77(2):1039-45

Different mechanisms regulate IPSC kinetics in early postnatal and juvenile hippocampal granule cells. Draguhn A, et al. **J Neurophysiol** 1996 Dec;76(6):3983-93

GABAA receptor function in developing rat thalamic reticular neurons: whole cell recordings of GABA-mediated currents and modulation by clonazepam. Gibbs JW 3rd, et al. **J Neurophysiol** 1996 Oct;76(4):2568-79

Physiological and pharmacological alterations in postsynaptic GABA(A) receptor function in a hippocampal culture model of chronic spontaneous seizures. Gibbs JW 3rd, et al. **J Neurophysiol** 1997 Apr;77(4):2139-52

Differential epilepsy-associated alterations in postsynaptic GABA(A) receptor function in dentate granule and CA1 neurons. Gibbs JW 3rd, et al. **J Neurophysiol** 1997 Apr; 77(4):1924-38

Decrement of GABAA receptor-mediated inhibitory postsynaptic currents in dentate granule cells in epileptic hippocampus. Isokawa M. **J Neurophysiol** 1996 May; 75(5):1901-8

Cyclic AMP-dependent protein kinase enhances hippocampal dentate granule cell GABAA receptor currents. Kapur J, et al. **J Neurophysiol** 1996 Oct; 76(4):2626-34

Properties of unitary IPSCs in hippocampal pyramidal cells originating from different types of interneurons in young rats. Ouardouz M, et al. **J Neurophysiol** 1997 Apr; 77(4):1939-49

GABAA-receptor-mediated conductance and action potential waveform in cutaneous and muscle afferent neurons of the adult rat: differential expression and response to nerve injury. Oyelese AA, et al. **J Neurophysiol** 1996 Oct;76(4):2383-92

Posttetanic excitation mediated by GABA(A) receptors in rat CA1 pyramidal neurons. Taira T, et al. **J Neurophysiol** 1997 Apr;77(4):2213-8

Properties of GABAA receptors underlying inhibitory synaptic currents in neocortical pyramidal neurons. Galarreta M, et al. **J Neurosci** 1997 Oct 1;17(19):7220-7

Role of spinal gamma-aminobutyric acidA receptors in formalin-induced nociception in the rat. Kaneko M, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):928-38

Ultrasonic vocalizations in rat pups: modulation at the gamma-aminobutyric acidA receptor complex and the neurosteroid recognition site. Vivian JA, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):318-25

Development of a tonic form of synaptic inhibition in rat cerebellar granule cells resulting from persistent activation of GABAA receptors. Brickley SG, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):753-9

Run-down of the GABAA response under experimental ischaemia in acutely dissociated CA1 pyramidal neurones of the rat. Harata N, et al. **J Physiol (Lond)** 1997 May 1;500 (Pt 3):673-88

GABAA receptor-mediated IPSCs in rat thalamic sensory nuclei: patterns of discharge and tonic modulation by GABAB autoreceptors. Le Feuvre Y, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):91-104

Modulation of GABAA receptor-mediated IPSCs by neuroactive steroids in a rat hypothalamo-hypophyseal coculture model. Poisbeau P, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):475-85

Neurokinin-1 (NK1) receptors mediate tachykinin-induced depression of GABA current in bullfrog sensory neurons. Akasu T, et al. **Kurume Med J** 1997;44(1):33-41

Involvement of supraspinal GABA receptors in majonoside-R2 suppression of clonidine-induced antinociception in mice. Nguyen TT, et al. **Life Sci** 1997; 61(4):427-36

Gene knockout of the alpha6 subunit of the gamma-aminobutyric acid type A receptor: lack of effect on responses to ethanol, pentobarbital, and general anesthetics. Homanics GE, et al. **Mol Pharmacol** 1997 Apr; 51(4):588-96

Pharmacological properties of gamma-aminobutyric acidA receptors from acutely dissociated rat dentate granule cells. Kapur J, et al. **Mol Pharmacol** 1996 Sep;50(3):458-66

Endogenous subunits can cause ambiguities in the pharmacology of exogenous gamma-aminobutyric acidA receptors expressed in human embryonic kidney 293 cells. Ueno S, et al. **Mol Pharmacol** 1996 Oct;50(4):931-8

Functional characterization of human gamma-aminobutyric acidA receptors containing the alpha 4 subunit. Wafford KA, et al. **Mol Pharmacol** 1996 Sep;50(3):670-8

Pharmacology of the human gamma-aminobutyric acidA receptor alpha 4 subunit expressed in Xenopus laevis oocytes. Whittemore ER, et al. **Mol Pharmacol** 1996 Nov; 50(5):1364-75

Inhibition of GABAA ligand-gated Cl- channels by zinc in adult rat brain: a regional study. Ito Y, et al. **Neurochem Res** 1996 Aug;21(8):955-61

Ca2+ oscillations mediated by the synergistic excitatory actions of GABA(A) and NMDA receptors in the neonatal hippocampus. Leinekugel X, et al. **Neuron** 1997 Feb; 18(2):243-55

Alteration of GABAA receptor function following gene transfer of the CLC-2 chloride channel. Staley K, et al. **Neuron** 1996 Sep;17(3):543-51

Midazolam inhibits long-term potentiation through modulation of GABAA receptors. Evans MS, et al. **Neuropharmacology** 1996 Mar;35(3):347-57

Direct activation of GABAA receptors by loreclezole, an anticonvulsant drug with selectivity for the beta-subunit. Sanna E, et al. **Neuropharmacology** 1996;35(12):1753-60

The cerebellum: a model system for studying GABAA receptor diversity. Wisden W, et al. **Neuropharmacology** 1996;35(9-10):1139-60 (130 ref.)

Repeated swim stress and peripheral-type benzodiazepine receptors. Burgin R, et al. **Neuropsychobiology** 1996; 33(1):28-31

Diazepam-insensitive GABAA receptors on postnatal spiral ganglion neurones in culture. Malgrange B, et al. **Neuroreport** 1997 Feb 10;8(3):591-6

Role of GABAA receptors in the organization of brain and behavioural sex differences. Segovia S, et al. **Neuroreport** 1996 Nov 4;7(15-17):2553-7

Role of GABAA and GABAB receptors of the brain in the negative feedback mechanism of the hypothalamohypophyseotesticular complex. Naumenko EV, et al. **Neurosci Behav Physiol** 1996 May-Jun; 26(3):277-80

Daily variations in GABA receptor function in Syrian hamster cerebral cortex. Kanterewicz BI, et al. **Neurosci Lett** 1995 Nov 24;200(3):211-3

GABA in locus coeruleus regulates spontaneous rapid eye movement sleep by acting on GABAA receptors in freely moving rats. Kaur S, et al. **Neurosci Lett** 1997 Feb 21; 223(2):105-8

GABAA receptor currents recorded from Müeller glial cells of the baboon (Papio cynocephalus) retina. Reichelt W, et al. **Neurosci Lett** 1996 Jan 26;203(3):159-62

Effects of 5-(4-piperidyl) isoxazol-3-ol (4-PIOL), a GABA(A) receptor partial agonist, on recombinant human GABA(A) receptors. Westh-Hansen SE, et al. **Neurosci Lett** 1997 Jul 11;230(1):45-8

GABA(A) receptor activation triggers a Cl- conductance increase and a K+ channel blockade in cerebellar granule cells. Labrakakis C, et al. **Neuroscience** 1997 Jul; 79(1):177-89

Shortened-duration GABA(A) receptor-mediated synaptic potentials underlie enhanced CA1 excitability in a chronic model of temporal lobe epilepsy. Mangan PS, et al. **Neuroscience** 1997 Oct;80(4):1101-11

Nitric oxide and GABAA receptor function in the rat cerebral cortex and cerebellar granule cells. Robello M, et al. **Neuroscience** 1996 Sep;74(1):99-105

Benzodiazepine mediated antagonism of opioid analgesia. Gear RW, et al. **Pain** 1997 May;71(1):25-9

GABAB-mediated upregulation of the high-voltage-activated Ca2+ channels in rat dorsal root ganglia. Fujikawa S, et al. **Pflugers Arch** 1997 May; 434(1):84-90

Eubacterial signal transduction by ligands of the mammalian peripheral benzodiazepine receptor complex [see comments] Donohue TJ. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4821-2 (18 ref.). Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):5101-6.

Area-specific regulation of gamma-aminobutyric acid type A receptor subtypes by thalamic afferents in developing rat neocortex. Paysan J, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6995-7000

A mammalian mitochondrial drug receptor functions as a bacterial "oxygen" sensor [see comments] Yeliseev AA, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5101-6 . Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):4821-2.

Compartmentalised distribution of GABAA and glutamate receptors in relation to transmitter release sites on the surface of cerebellar neurones. Nusser Z, et al. **Prog Brain Res** 1997;114:109-27 (91 ref.)

Peripheral-type benzodiazepine receptors on human blood mononuclear cells are not regulated by ovarian steroids. Ferrero P, et al. **Psychoneuroendocrinology** 1994; 19(1):65-78

Stress-induced regulation of the renal peripheral benzodiazepine receptor: possible role of the renin-angiotensin system. Holmes PV, et al. **Psychoneuroendocrinology** 1994;19(1):43-54

Progesterone: does it affect response to drug? Kroboth PD, et al. **Psychopharmacol Bull** 1997;33(2):297-301 (18 ref.)

Functional dynamics of GABAergic inhibition in the thalamus. Kim U, et al. **Science** 1997 Oct 3;278(5335):130-4

Peripheral benzodiazepine receptor in cholesterol transport and steroidogenesis. Papadopoulos V, et al. **Steroids** 1997 Jan;62(1):21-8 (66 ref.)

Selective expression and rapid regulation of GABAA receptor subunits in geniculocortical neurons of macaque dorsal lateral geniculate nucleus. Hendry SH, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):223-35

[Mitochondrial transport of nucleic acids. Participation of the benzodiazepine receptor] Zorov DB. **Biokhimiia** 1996 Jul;61(7):1320-32 (88 ref.) (Eng. Abstr.) **(Rus)**

[The interaction of GABA-A receptors with the serotoninergic system of the brain in regulating the testosterone level by the negative feedback mechanism] Amikishieva AV, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov;82(10-11):84-90 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Synaptogenesis in the rat retina: subcellular localization of glycine receptors, GABA(A) receptors, and the anchoring protein gephyrin. Sassoè-Pognetto M, et al. **J Comp Neurol** 1997 May 5;381(2):158-74

RECEPTORS, GABA-B

AGONISTS

Actions of thienyl analogs of baclofen at GABA(B) receptors in rat neocortical slices. Ong J, et al. **Eur J Pharmacol** 1997 Jun 25;329(2-3):133-6

Activation of ventral tegmental GABAB receptors inhibits morphine-induced place preference in rats. Tsuji M, et al. **Eur J Pharmacol** 1996 Oct 17;313(3):169-73

Effects of gamma-aminobutyric acid agonists on the isolated perfused rat kidney. Monasterolo LA, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):602-7

Tolerance to mu-opioid receptor agonists but not cross-tolerance to gamma-aminobutyric acid(B) receptor agonists in arcuate A12 dopamine neurons with chronic morphine treatment. Wagner EJ, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1057-64

Presynaptic GABAB-and gamma-hydroxybutyric acid-mediated mechanisms in generalized absence seizures. Snead OC 3rd. **Neuropharmacology** 1996 Mar;35(3):359-67

Gamma-hydroxybutyric acid decreases thalamic sensory excitatory postsynaptic potentials by an action on presynaptic GABAB receptors. Emri Z, et al. **Neurosci Lett** 1996 Sep 27;216(2):121-4

Baclofen, a selective GABAB receptor agonist, dose-dependently impairs spatial learning in rats. McNamara RK, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):303-8

ANALYSIS

Distribution of GABAA, GABAB, and glycine receptors in the central auditory system of the big brown bat, Eptesicus fuscus. Fubara BM, et al. **J Comp Neurol** 1996 May 20;369(1):83-92

Immunohistochemical demonstration of GABAB receptors in the rat gastrointestinal tract. Nakajima K, et al. **Neurochem Res** 1996 Feb;21(2):211-5

ANTAGONISTS & INHIBITORS

Effects of the GABAB antagonist CGP 35348 on sleep-wake states, behaviour, and spike-wave discharges in old rats. Puigcerver A, et al. **Brain Res Bull** 1996;40(3):157-62

Study of paired-pulse inhibition of transcallosal response in the pyramidal tract neuron in vivo. Chowdhury SA, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):313-7

Effects of GABAB receptor antagonists on learning and memory retention in a rat model of absence epilepsy. Getova D, et al. **Eur J Pharmacol** 1997 Feb 5;320(1):9–13

GABAB receptor antagonism by resolved (R)–saclofen in the guinea–pig ileum. Kerr DI, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):R1–2

3–amino–2–hydroxy–N–(4–nitrophenyl)–propanesulphonamide, a new class of GABAB receptor antagonist in central and peripheral preparations. Kerr DI, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):349–52

The GABAB–receptor antagonist, CGP 35348, antagonises gamma–hydroxybutyrate– and baclofen–induced alterations in locomotor activity and forebrain dopamine levels in mice. Nissbrandt H, et al. **J Neural Transm** 1996; 103(11):1255–63

GABA(B) receptor blockade reduces resistive loading–induced hypoventilation in anesthetized rabbits. Delpierre S, et al. **Neurosci Lett** 1997 Apr 25;226(2):83–6

Metabotropic glutamate receptor antagonists, like GABA(B) antagonists, potentiate dorsal root–evoked excitatory synaptic transmission at neonatal rat spinal motoneurons in vitro. Cao CQ, et al. **Neuroscience** 1997 May; 78(1):243–50

The inhibitory effects on sexual behavior and ambulatory activity of the mixed GABAA/GABAB agonist progabide are differentially blocked by GABA receptor antagonists. Agmo A, et al. **Psychopharmacology (Berl)** 1997 Jan; 129(1):27–34

DRUG EFFECTS

The GABAB receptor antagonist CGP 36,742 and the nootropic oxiracetam facilitate the formation of long–term memory. Mondadori C, et al. **Behav Brain Res** 1996 May; 77(1–2):223–5

CGP 36,742, an orally active GABAB receptor antagonist, facilitates memory in a social recognition test in rats. Mondadori C, et al. **Behav Brain Res** 1996 May; 77(1–2):227–9

Sevoflurane modulates both GABAA and GABAB receptors in area CA1 of rat hippocampus. Hirota K, et al. **Br J Anaesth** 1997 Jan;78(1):60–5

Sensitivity of postsynaptic GABAB receptors on hippocampal CA1 and CA3 pyramidal neurons to ethanol. Frye GD, et al. **Brain Res** 1996 Oct 7;735(2):239–48

Mouse cerebellar GABAB participation in the expression of acute ethanol–induced ataxia and in its modulation by the cerebellar adenosinergic A1 system. Dar MS. **Brain Res Bull** 1996;41(1):53–9

Involvement of GABAB receptors in the antinociception induced by baclofen in the formalin test. Shafizadeh M, et al. **Gen Pharmacol** 1997 Apr;28(4):611–5

Multiple postsynaptic actions of GABA via GABAB receptors on CA1 pyramidal cells of rat hippocampal slices. Pham TM, et al. **J Neurophysiol** 1996 Jul;76(1):69–80

GABAB receptors, monoamine receptors, and postsynaptic inositol trisphosphate–induced Ca2+ release are involved in the induction of long–term potentiation at visual cortical inhibitory synapses. Komatsu Y. **J Neurosci** 1996 Oct 15; 16(20):6342–52

GABAB receptor–activated inwardly rectifying potassium current in dissociated hippocampal CA3 neurons. Sodickson DL, et al. **J Neurosci** 1996 Oct 15;16(20):6374–85

Fluoxetine selectively alters 5–hydroxytryptamine1A and gamma–aminobutyric acidB receptor–mediated hyperpolarization in area CA1, but not area CA3, hippocampal pyramidal cells. Beck SG, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):115–22

Chronic cocaine enhances gamma–aminobutyric acid and glutamate release by altering presynaptic and not postsynaptic gamma–aminobutyric acidB receptors within the rat dorsolateral septal nucleus. Shoji S, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):129–37

The pharmacology of adenylyl cyclase modulation by GABAB receptors in rat brain slices. Knight AR, et al. **Neuropharmacology** 1996 Jun;35(6):703–12

cAMP modulates an S–type K+ channel coupled to GABAB receptors in mammalian respiratory neurons. Wagner PG, et al. **Neuroreport** 1997 May 6;8(7):1667–70

Suppression by GABAB receptors of 4–aminopyridine–induced hyperactivity in guinea–pig dentate neurons. Bijak M, et al. **Neurosci Lett** 1996 Feb 16;205(1):49–52

GABAB–activated gK+ in thalamic neurons in the lethargic (lh/lh) mouse model of generalized absence seizures. Caddick SJ, et al. **Neurosci Lett** 1996 Feb 16;205(1):29–32

Hippocampal long–term potentiation and spatial learning in the rat: effects of GABAB receptor blockade. Brucato FH, et al. **Neuroscience** 1996 Sep;74(2):331–9

Growth hormone response to the GABAB agonist baclofen in major depressive disorder. Davis LL, et al. **Psychoneuroendocrinology** 1997 Apr;22(3):129–40

Presynaptic and postsynaptic GABAB receptors of neocortical neurons of the rat in vitro: differences in pharmacology and ionic mechanisms. Deisz RA, et al. **Synapse** 1997 Jan;25(1):62–72

GENETICS

The cloning of GABA(B) receptors [news; comment] Bowery NG, et al. **Nature** 1997 Mar 20;386(6622):223–4. Comment on: Nature 1997 Mar 20;386(6622):239–46.

Expression cloning of GABA(B) receptors uncovers similarity to metabotropic glutamate receptors [see comments] Kaupmann K, et al. **Nature** 1997 Mar 20; 386(6622):239–46. Comment in: Nature 1997 Mar 20;386(6622):223–4.

Metabotropic GABA(B) receptors cloned at last. Bowery NG. **Trends Pharmacol Sci** 1997 Apr;18(4):103 (6 ref.)

METABOLISM

Alteration in cerebral GABAB receptor functions during formation of alcohol dependence. Kuriyama K, et al. **Alcohol Alcohol Suppl** 1994;2:193–7

Activation of GABAB receptors increases a potassium conductance in rat bulbospinal neurons of the C1 area. Li YW, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1304–10

Relation of the [3H] gamma–hydroxybutyric acid (GHB) binding site to the gamma–aminobutyric acidB (GABAB) receptor in rat brain. Snead OC 3rd. **Biochem Pharmacol** 1996 Oct 25;52(8):1235–43

Human brain somatostatin release from isolated cortical nerve endings and its modulation through GABAB receptors. Bonanno G, et al. **Br J Pharmacol** 1996 Jul;118(6):1441–6

Pharmacologically distinct GABAB receptors that mediate inhibition of GABA and glutamate release in human neocortex. Bonanno G, et al. **Br J Pharmacol** 1997 Jan; 120(1):60–4

Differential regulation of 5–hydroxytryptamine release by GABAA and GABAB receptors in midbrain raphe nuclei and forebrain of rats. Tao R, et al. **Br J Pharmacol** 1996 Dec;119(7):1375–84

Evidence for pharmacologically distinct GABAB receptors associated with cAMP production in rat brain. Cunningham MD, et al. **Brain Res** 1996 May 13; 720(1–2):220–4

Progesterone regulates gamma–aminobutyric acid B (GABAB) receptors in the neocortex of female rats. al–Dahan MI, et al. **Brain Res** 1996 Jul 15;727(1–2):40–8

Sensitivity of postsynaptic GABAB receptors on hippocampal CA1 and CA3 pyramidal neurons to ethanol. Frye GD, et al. **Brain Res** 1996 Oct 7;735(2):239–48

Mechanism of colchicine impairment on learning and memory, and protective effect of CGP36742 in mice. Yu Z, et al. **Brain Res** 1997 Mar 7;750(1–2):53–8

Regional differences of the inhibition of GABAB ligand binding by the GTP analogue Gpp(NH)p. Mathivet P, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):18–24

Functional alteration of the GABAB receptor in the brain of spontaneously hypertensive rats. Ichida T, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S51–3

Hypothalamic and medullary GABAA and GABAB–ergic systems differently regulate sympathetic and cardiovascular systems. Takenaka K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S48–50

Binding characteristics of gamma–hydroxybutyric acid as a weak but selective GABAB receptor agonist. Mathivet P, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):67–75

Evidence for release of glutamic acid, aspartic acid and substance P but not gamma–aminobutyric acid from primary afferent fibres in rat spinal cord. Teoh H, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):27–36

GABAA receptor activation attenuates excitotoxicity but exacerbates oxygen–glucose deprivation–induced neuronal injury in vitro. Muir JK, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1211–8

In vivo evidence that GABA(B) receptors are negatively coupled to adenylate cyclase in rat striatum. Hashimoto T, et al. **J Neurochem** 1997 Jul;69(1):365–70

Kainic acid–induced seizures enhance dentate gyrus inhibition by downregulation of GABA(B) receptors. Haas KZ, et al. **J Neurosci** 1996 Jul 1;16(13):4250–60

PHYSIOLOGY

Specific action of GABAB ligands on the temperature sensitivity of hypothalamic neurons. Pierau FK, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:146–55

Propagated calcium modulates the calcium–dependent potassium current by the activation of GABAB receptor at the axonal branch in the type B photoreceptor of Hermissenda. Sakakibara M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:492–5

Inhibition of the vesicular release of neurotransmitters by stimulation of GABAB receptor. Taniyama K, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:496–9

Acute exposure to 25–hydroxy–cholesterol selectively reduces GABAb and not GABAa receptor–mediated synaptic inhibition. Phelan KD, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):68–73

Electrophysiological actions of GABAB agonists and antagonists in rat dorso–lateral septal neurones in vitro. Bon C, et al. **Br J Pharmacol** 1996 Jun;118(4):961–7

Synaptic inhibition mediated by GABAB receptors in the neonatal rat spinal cord in vitro. Lacey G. **Brain Res** 1996 Apr 22;717(1–2):76–80

Involvement of GABAB receptor systems in experimental depression: baclofen but not bicuculline exacerbates helplessness in rats. Nakagawa Y, et al. **Brain Res** 1996 Nov 25;741(1–2):240–5

Involvement of GABA(B) receptor systems in action of antidepressants: baclofen but not bicuculline attenuates the effects of antidepressants on the forced swim test in rats. Nakagawa Y, et al. **Brain Res** 1996 Feb 19;709(2):215–20

Brain–derived peptides inhibit synaptic transmission via presynaptic GABAB receptors in CA1 area of rat hippocampal slices. Xiong H, et al. **Brain Res** 1996 Oct 21;737(1–2):188–94

Functional and pharmacological properties of GABA–mediated inhibition in the human neocortex. Avoli M, et al. **Can J Physiol Pharmacol** 1997 May;75(5):526–34 (46 ref.)

Do GABAA and GABAB inhibitory postsynaptic responses originate from distinct interneurons in the hippocampus? Nurse S, et al. **Can J Physiol Pharmacol** 1997 May; 75(5):520–5 (59 ref.)

Neuroendocrine gamma–aminobutyric acid (GABA): functional differences in GABAA versus GABAB receptor inhibition of the melanotrope cell of Xenopus laevis. Buzzi M, et al. **Endocrinology** 1997 Jan;138(1):203–12

Role of peripheral GABAB receptors in the regulation of pepsinogen secretion in anaesthetized rats. Blandizzi C, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):191–200

In vivo blockade of thalamic GABA(B) receptors increases excitatory amino–acid levels. Nyitrai G, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):295–300

Both GABAA and GABAB receptors participate in suppression of [CA2+]i pulsing in toad melanotrophs. Shibuya I, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):241–6

Physiology and pharmacology of corticothalamic stimulation–evoked responses in rat somatosensory thalamic neurons in vitro. Kao CQ, et al. **J Neurophysiol** 1997 May;77(5):2661–76

GABAB receptor–mediated inhibition of tetrodotoxin–resistant GABA release in rodent hippocampal CA1 pyramidal cells. Jarolimek W, et al. **J Neurosci** 1997 Feb 1;17(3):1025–32

Regulation of EPSPs by the synaptic activation of GABAB autoreceptors in rat hippocampus. Davies CH, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):451–70

GABAA receptor–mediated IPSCs in rat thalamic sensory nuclei: patterns of discharge and tonic modulation by GABAB autoreceptors. Le Feuvre Y, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):91–104

GABAB receptor–mediated inhibition of spontaneous inhibitory synaptic currents in rat midbrain culture. Rohrbacher J, et al. **J Physiol (Lond)** 1997 May 1;500 (Pt 3):739–49

GABAB receptor–mediated responses in GABAergic projection neurones of rat nucleus reticularis thalami in vitro. Ulrich D, et al. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):845–54

Disappearance of gamma–aminobutyric acid (GABA)B receptor–mediated cAMP suppression in mouse cerebrum after chronic treatment with morphine. Ichida T, et al. **Life Sci** 1996;59(25–26):2173–9

A study on the involvement of GABAB receptor ligands in stress–induced antinociception in male mice. Houston AJ, et al. **Methods Find Exp Clin Pharmacol** 1997 Apr; 19(3):167–71

The role of GABAB mechanisms in animal models of absence seizures. Caddick SJ, et al. **Mol Neurobiol** 1996 Aug; 13(1):23–32 (62 ref.)

Novartis find sparks new GABA drug search [news] Eccleston A. **Nat Biotechnol** 1997 May;15(5):403–4

GABA(B)–mediated presynaptic inhibition of excitatory transmission and synaptic vesicle dynamics in cultured hippocampal neurons. Isaacson JS, et al. **Neuron** 1997 Jan; 18(1):143–52

Excitatory acoustic responses in the inferior colliculus of the rat are increased by GABAB receptor blockade. Vaughn MD, et al. **Neuropharmacology** 1996;35(12):1761–7

Role of GABAA and GABAB receptors of the brain in the negative feedback mechanism of the hypothalamohypophyseotesticular complex. Naumenko EV, et al. **Neurosci Behav Physiol** 1996 May–Jun; 26(3):277–80

The contribution of GABAB receptor–mediated events to inflammatory pain processing: carrageenan oedema and associated spinal c–Fos expression in the rat. Buritova J, et al. **Neuroscience** 1996 Jul;73(2):487–96

Shortened–duration GABA(A) receptor–mediated synaptic potentials underlie enhanced CA1 excitability in a chronic model of temporal lobe epilepsy. Mangan PS, et al. **Neuroscience** 1997 Oct;80(4):1101–11

Effect of GABA(B) receptors on synaptic interactions in dentate gyrus granule neurons of the rat. Wang S, et al. **Neuroscience** 1997 Jul;79(1):117–27

The conditioned eyeblink response: a role for the GABA–B receptor? Ramirez OA, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):127–32

Gamma–aminobutyric acid type B receptor–dependent burst–firing in thalamic neurons: a dynamic clamp study. Ulrich D, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):13245–9

Functional dynamics of GABAergic inhibition in the thalamus. Kim U, et al. **Science** 1997 Oct 3;278(5335):130–4

GABAB–receptor–mediated inhibition reduces the orientation selectivity of the sustained response of striate cortical neurons in cats. Allison JD, et al. **Vis Neurosci** 1996 May–Jun;13(3):559–66

RECEPTORS, GABA–BENZODIAZEPINE see **RECEPTORS, GABA–A**

RECEPTORS, GAMMA–AMINOBUTYRIC ACID see **RECEPTORS, GABA**

RECEPTORS, GASTRIN see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, GASTRIN-RELEASING PEPTIDE see **RECEPTORS, BOMBESIN**

RECEPTORS, GASTROINTESTINAL HORMONE

[Motilin and motilin receptor] Satoh M, et al. **Nippon Rinsho** 1996 Apr;54(4):1092-6 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Gastric inhibitory polypeptide (GIP) and GIP receptor (GIPR)] Yasuda K, et al. **Nippon Rinsho** 1996 Apr; 54(4):1078-82 (14 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

EM574, an erythromycin derivative, is a motilin receptor agonist in the rabbit. Sato F, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):63-71

[Acute reversible pan-dysautonomia: effect of erythromycin on gastrointestinal involvement] Lagasse JP, et al. **Gastroenterol Clin Biol** 1997;21(4):331-4 (12 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Ultrastructural localization of galanin and galanin receptors in the guinea pig median eminence. Dutriez I, et al. **Brain Res** 1997 Apr 4;753(1):36-46

Evidence for the existence of galanin receptors on cultured astrocytes of rat CNS: colocalization with cholinergic receptors. Hösli E, et al. **J Chem Neuroanat** 1997 Jul; 13(2):95-103

Study of the binding of motilin to the membranes of enterocytes from rabbit jejunum. Alcalde AI, et al. **Peptides** 1996;17(7):1237-41

ANTAGONISTS & INHIBITORS

Galanin receptor antagonist M40 blocks galanin-induced choice accuracy deficits on a delayed-nonmatching-to-position task. McDonald MP, et al. **Behav Neurosci** 1996 Oct;110(5):1025-32

Discrimination between neuropeptide Y and peptide YY in the rat tail artery by the neuropeptide Y1-selective antagonist, BIBP 3226. Gicquiaux H, et al. **Br J Pharmacol** 1996 Dec;119(7):1313-8

Galanin receptor antagonists attenuate spinal antinociceptive effects of DAMGO, tramadol and non-opioid drugs in rats. Selve N, et al. **Brain Res** 1996 Oct 7;735(2):177-87

Potent neuropeptide Y Y1 receptor antagonist, 1229U91: blockade of neuropeptide Y-induced and physiological food intake. Kanatani A, et al. **Endocrinology** 1996 Aug; 137(8):3177-82

Anxiogenic-like effect of the neuropeptide Y Y1 receptor antagonist BIBP3226: antagonism with diazepam. Kask A, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):R3-4

Feeding induced by pharmacological blockade of fatty acid metabolism is selectively attenuated by hindbrain injections of the galanin receptor antagonist, M40. Koegler FH, et al. **Obes Res** 1996 Jul;4(4):329-36

BIOSYNTHESIS

Molecular characterization of a second mouse pancreatic polypeptide receptor and its inactivated human homologue. Gregor P, et al. **J Biol Chem** 1996 Nov 1;271(44):27776-81

Expression of galanin and a galanin receptor in several sensory systems and bone anlage of rat embryos. Xu ZQ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14901-5

CHEMISTRY

Speculations on the mechanism of hormone-receptor interactions of the secretin/glucagon family of polypeptide hormones derived from computational structural studies. Momany FA, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:172-81; discussion 181-3 (18 ref.)

Localization of the domains involved in ligand binding and activation of the glucose-dependent insulinotropic polypeptide receptor. Gelling RW, et al. **Endocrinology** 1997 Jun;138(6):2640-3

Mutational analysis of extracellular cysteine residues of rat secretin receptor shows that disulfide bridges are essential for receptor function. Vilardaga JP, et al. **Eur J Biochem** 1997 May 15;246(1):173-80

The arrangement of the transmembrane helices in the secretin receptor family of G-protein-coupled receptors. Donnelly D. **FEBS Lett** 1997 Jun 16;409(3):431-6

Structural diversity of receptors for neuropeptide Y, peptide YY and pancreatic polypeptide. Larhammar D. **Regul Pept** 1996 Sep 16;65(3):165-74 (64 ref.)

CLASSIFICATION

Molecular cloning and pharmacological characterization of a new galanin receptor subtype. Wang S, et al. **Mol Pharmacol** 1997 Sep;52(3):337-43

DRUG EFFECTS

Erythromycin inhibits rabbit pyloric smooth muscle through neuronal motilin receptors. Parkman HP, et al. **Gastroenterology** 1996 Sep;111(3):682-90

GENETICS

Identification of two missense mutations in the GIP receptor gene: a functional study and association analysis with NIDDM: no evidence of association with Japanese NIDDM subjects. Kubota A, et al. **Diabetes** 1996 Dec; 45(12):1701-5

Genetic studies of neuropeptide Y and neuropeptide Y receptors Y1 and Y5 regions in morbid obesity. Roche C, et al. **Diabetologia** 1997 Jun;40(6):671-5

Mutational analysis of extracellular cysteine residues of rat secretin receptor shows that disulfide bridges are essential for receptor function. Vilardaga JP, et al. **Eur J Biochem** 1997 May 15;246(1):173-80

Molecular cloning and characterization of a new receptor for galanin. Howard AD, et al. **FEBS Lett** 1997 Apr 1; 405(3):285-90

Genomic organization and functional characterization of the mouse GalR1 galanin receptor. Wang S, et al. **FEBS Lett** 1997 Jul 14;411(2-3):225-30

Assignment of the gene encoding human galanin receptor (GALNR) to 18q23 by in situ hybridization. Nicholl J, et al. **Genomics** 1995 Dec 10;30(3):629-30

Molecular characterization of a second mouse pancreatic polypeptide receptor and its inactivated human homologue. Gregor P, et al. **J Biol Chem** 1996 Nov 1;271(44):27776-81

Inactivation of a novel neuropeptide Y/peptide YY receptor gene in primate species. Matsumoto M, et al. **J Biol Chem** 1996 Nov 1;271(44):27217-20

Expression cloning of a rat hypothalamic galanin receptor coupled to phosphoinositide turnover. Smith KE, et al. **J Biol Chem** 1997 Sep 26;272(39):24612-6

Retinoic acid is a negative regulator of the neuropeptide Y/peptide YY Y1 receptor gene in SK-N-MC cells. Mannon PJ, et al. **J Neurochem** 1997 Jan;68(1):20-5

Distribution of a rat galanin receptor mRNA in rat brain. Gustafson EL, et al. **Neuroreport** 1996 Mar 22;7(4):953-7

ISOLATION & PURIFICATION

Solubilization and molecular characterization of active pancreastatin receptors from rat liver membranes. Sánchez-Margalet V, et al. **Endocrinology** 1997 Apr; 138(4):1712-8

A structure activity analysis of the cloned rat and human Y4 receptors for pancreatic polypeptide. Walker MW, et al. **Peptides** 1997;18(4):609-12

METABOLISM

Peptide YY receptor in submucosal and myenteric plexus synaptosomes of canine small intestine. Mao YK, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G36-41

Chronic desensitization of the glucose-dependent insulinotropic polypeptide receptor in diabetic rats. Tseng CC, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):E661-6

Pharmacological characterization and tissue distribution of the human and rat GALR1 receptors. Sullivan KA, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):823-8

A point mutation in the glucose-dependent insulinotropic peptide receptor confers constitutive activity. Tseng CC, et al. **Biochem Biophys Res Commun** 1997 Mar 6; 232(1):96-100

Expression of receptors for gut peptides in human pancreatic adenocarcinoma and tumour-free pancreas. Tang C, et al. **Br J Cancer** 1997;75(10):1467-73

Neuropeptide Y Y2 receptor and somatostatin sst2 receptor coupling to mobilization of intracellular calcium in SH-SY5Y human neuroblastoma cells. Connor M, et al. **Br J Pharmacol** 1997 Feb;120(3):455-63

Localization of galanin and its binding sites in the quail brain. Azumaya Y, et al. **Brain Res** 1996 Jul 15;727(1-2):187-95

Expression of receptors for gut peptides in pancreata of BOP-treated and control hamsters. Tang C, et al. **Carcinogenesis** 1996 Oct;17(10):2171-5

Localization of the domains involved in ligand binding and activation of the glucose-dependent insulinotropic polypeptide receptor. Gelling RW, et al. **Endocrinology** 1997 Jun;138(6):2640-3

The neuropeptide Y Y1 receptor selective radioligand, [125I][Leu31,Pro34]peptide YY, is also a high affinity radioligand for human pancreatic polypeptide 1 receptors. Gehlert DR, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2-3):485-90

Role of receptor phosphorylation in desensitization and internalization of the secretin receptor. Holtmann MH, et al. **J Biol Chem** 1996 Sep 20;271(38):23566-71

Autoradiographic quantitation and anatomical mapping of GTP sensitive-galanin receptors in the guinea pig central nervous system. Dutriez I, et al. **J Chem Neuroanat** 1996 Dec;12(2):85-104

Demonstration, localization, and development of galanin receptors in the quail oviduct. Tsutsui K, et al. **J Exp Zool** 1997 Jan 1;277(1):57-65

L-Ala-substituted rat galanin analogs distinguish between hypothalamic and jejunal galanin receptor subtypes. Juréus A, et al. **J Pept Res** 1997 Mar;49(3):195-200

Molecular basis and species specificity of high affinity binding of vasoactive intestinal polypeptide by the rat secretin receptor. Holtmann MH, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):555-60

Molecular cloning and pharmacological characterization of a new galanin receptor subtype. Wang S, et al. **Mol Pharmacol** 1997 Sep;52(3):337-43

Inhibition of cyclic AMP-dependent chloride secretion by PP receptors and alpha 2-adrenoceptors in a human colonic epithelial cell line. Holliday ND, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):183-9

Evidence for galanin receptors in primary sensory neurones and effect of axotomy and inflammation. Xu ZQ, et al. **Neuroreport** 1996 Dec 20;8(1):237-42

The C-terminus ends of secretin and VIP interact with the N-terminal domains of their receptors. Gourlet P, et al. **Peptides** 1996;17(5):825-9

Heterogeneity of motilin receptors in the gastrointestinal tract of the rabbit. Poitras P, et al. **Peptides** 1996; 17(4):701-7

PHYSIOLOGY

GIP receptors and signal-transduction mechanisms. McIntosh CH, et al. **Acta Physiol Scand** 1996 Jul; 157(3):361-5 (30 ref.)

Inhibitory effect of PYY on vagally stimulated acid secretion is mediated predominantly by Y1 receptors. Lloyd KC, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G123-7

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP-1, and other members of their new family of G protein-linked receptors: structure-function relationship with special reference to the human VIP-1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94-109; discussion 110-1 (64 ref.)

The alpha2-adrenergic receptor is more effective than the galanin receptor in activating G-proteins in RINm5F beta-cell membranes. Gillison SL, et al. **Diabetes** 1997 Mar; 46(3):401-7

Antisecretory mechanisms of peptide YY in rat distal colon. Whang EE, et al. **Dig Dis Sci** 1997 Jun;42(6):1121-7

The role of galanin and its receptor in the feedback regulation of growth hormone secretion. Chan YY, et al. **Endocrinology** 1996 Dec;137(12):5303-10

Postprandial stimulation of insulin release by glucose-dependent insulinotropic polypeptide (GIP). Effect of a specific glucose-dependent insulinotropic polypeptide receptor antagonist in the rat. Tseng CC, et al. **J Clin Invest** 1996 Dec 1;98(11):2440-5

Galanin receptors: involvement in feeding, pain, depression and Alzheimer's disease. Kask K, et al. **Life Sci** 1997; 60(18):1523-33 (110 ref.)

Aqueduct occlusion does not impair feeding induced by either third or fourth ventricle galanin injection. Koegler FH, et al. **Obes Res** 1997 May;5(3):262-7

RECEPTORS, GASTROINTESTINAL PEPTIDES see **RECEPTORS, GASTROINTESTINAL HORMONE**

RECEPTORS, GLUCAGON

AGONISTS

High potency antagonists of the pancreatic glucagon-like peptide-1 receptor. Montrose-Rafizadeh C, et al. **J Biol Chem** 1997 Aug 22;272(34):21201-6

ANALYSIS

Beta-cell receptors for glucagon/GLP-1? Properties of exendin(9-39) in mouse islets. Kofod H, et al. **Acta Physiol Scand** 1996 Jul;157(3):347

Down-regulation of glucagon receptors on the surface of broiler adipocytes. Oscar TP. **Poult Sci** 1996 Aug; 75(8):1027-34

ANTAGONISTS & INHIBITORS

Glucagon-like peptide-1-(9-36) amide is a major metabolite of glucagon-like peptide-1-(7-36) amide after in vivo administration to dogs, and it acts as an antagonist on the pancreatic receptor. Knudsen LB, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):429-35

High potency antagonists of the pancreatic glucagon-like peptide-1 receptor. Montrose-Rafizadeh C, et al. **J Biol Chem** 1997 Aug 22;272(34):21201-6

BIOSYNTHESIS

Co-transfection with protein kinase D confers phorbol-ester-mediated inhibition on glucagon-stimulated cAMP accumulation in COS cells transfected to overexpress glucagon receptors. Tobias ES, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):545-51

Expression and signal transduction of the glucagon receptor in betaTC3 cells. Li J, et al. **Biochim Biophys Acta** 1997 Apr 24;1356(2):229-36

Insulinotropic glucagon-like peptide I receptor expression in glucagon-producing alpha-cells of the rat endocrine pancreas. Heller RS, et al. **Diabetes** 1997 May;46(5):785-91

Glucagon-like peptide-1 receptor (GLP1-R) mRNA in the rat hypothalamus. Shughrue PJ, et al. **Endocrinology** 1996 Nov;137(11):5159-62

Expression of glucagon-like peptide 1 receptor in a murine C cell line: regulation of calcitonin gene by glucagon-like peptide 1. Lamari Y, et al. **FEBS Lett** 1996 Sep 16; 393(2-3):248-52

Colocalization of glucagon-like peptide-1 (GLP-1) receptors, glucose transporter GLUT-2, and glucokinase mRNAs in rat hypothalamic cells: evidence for a role of

GLP-1 receptor agonists as an inhibitory signal for food and water intake. Navarro M, et al. **J Neurochem** 1996 Nov;67(5):1982-91

CHEMISTRY

Speculations on the mechanism of hormone-receptor interactions of the secretin/glucagon family of polypeptide hormones derived from computational structural studies. Momany FA, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:172-81; discussion 181-3 (18 ref.)

Hypothesis: glucagon receptor glycine to serine missense mutation contributes to one in 20 cases of essential hypertension. Morris BJ, et al.
Clin Exp Pharmacol Physiol 1996 Dec;23(12):1035-7

Localization of the domains involved in ligand binding and activation of the glucose-dependent insulinotropic polypeptide receptor. Gelling RW, et al. **Endocrinology** 1997 Jun;138(6):2640-3

The isolated N-terminal extracellular domain of the glucagon-like peptide-1 (GLP)-1 receptor has intrinsic binding activity. Wilmen A, et al. **FEBS Lett** 1996 Nov 25;398(1):43-7

Human glucagon receptor monoclonal antibodies: antagonism of glucagon action and use in receptor characterization. Buggy J, et al. **Horm Metab Res** 1996 May;28(5):215-9

Scanning of the glucagon-like peptide-1 receptor localizes G protein-activating determinants primarily to the N terminus of the third intracellular loop. Mathi SK, et al. **Mol Endocrinol** 1997 Apr;11(4):424-32

Exchange of W39 by A within the N-terminal extracellular domain of the GLP-1 receptor results in a loss of receptor function. Van Eyll B, et al. **Peptides** 1996;17(4):565-70

Five out of six tryptophan residues in the N-terminal extracellular domain of the rat GLP-1 receptor are essential for its ability to bind GLP-1. Wilmen A, et al. **Peptides** 1997;18(2):301-5

DRUG EFFECTS

Glucagon and phenylephrine combination vs glucagon alone in experimental verapamil overdose [see comments] Stone CK, et al. **Acad Emerg Med** 1996 Feb;3(2):120-5. Comment in: Acad Emerg Med 1996 Feb;3(2):99-100.

GENETICS

Glucagon and GLP-1 receptors: lessons from chimeric ligands and receptors. Hjorth SA, et al.
Acta Physiol Scand 1996 Jul;157(3):343-5 (12 ref.)

Regulation of glucagon receptor expression. Nishimura E, et al. **Acta Physiol Scand** 1996 Jul;157(3):329-32 (26 ref.)

Co-transfection with protein kinase D confers phorbol-ester-mediated inhibition on glucagon-stimulated cAMP accumulation in COS cells transfected to overexpress glucagon receptors. Tobias ES, et al.
Biochem J 1997 Sep 1;326 (Pt 2):545-51

Hypothesis: glucagon receptor glycine to serine missense mutation contributes to one in 20 cases of essential hypertension. Morris BJ, et al.
Clin Exp Pharmacol Physiol 1996 Dec;23(12):1035-7

A population association study of four candidate genes (hexokinase II, glucagon-like peptide-1 receptor, fatty acid binding protein-2, and apolipoprotein C-II) with type 2 diabetes and impaired glucose tolerance in Japanese subjects. Yagi T, et al. **Diabet Med** 1996 Oct;13(10):902-7

Absence of the Gly40-ser mutation in the glucagon receptor gene in Japanese subjects with NIDDM. Ogata M, et al. **Diabetes Res Clin Pract** 1996 Jul;33(2):71-4

Restricted geographical extension of the association of a glucagon receptor gene mutation (Gly40Ser) with non-insulin-dependent diabetes mellitus. Ristow M, et al. **Diabetes Res Clin Pract** 1996 May;32(3):183-5

Physiological and genetic characterization of the Gly40Ser mutation in the glucagon receptor gene in the Sardinian population. The Sardinian Diabetes Genetic Study Group. Tonolo G, et al. **Diabetologia** 1997 Jan;40(1):89-94

Polymorphism of the glucagon receptor gene and non-insulin-dependent diabetes mellitus in the Russian population. Babadjanova G, et al.
Exp Clin Endocrinol Diabetes 1997;105(4):225-6

Absence of association between the Gly40-->Ser mutation in the human glucagon receptor and Japanese patients with non-insulin-dependent diabetes mellitus or impaired glucose tolerance. Odawara M, et al. **Hum Genet** 1996 Dec; 98(6):636-9

Gly40Ser mutation of glucagon receptor gene and essential hypertension in Japanese [letter] Fujisawa T, et al.
Hypertension 1996 Dec;28(6):1100

Expression of the glucagon-like peptide-1 receptor gene in rat brain. Alvarez E, et al. **J Neurochem** 1996 Mar; 66(3):920-7

Localization of the rat genes encoding glucagon, glucagon receptor, and insulin receptor, candidates for diabetes mellitus susceptibility loci. Szpirer C, et al.
Mamm Genome 1997 Aug;8(8):586-8

Overexpression of glucagon-like peptide-1 receptor in an insulin-secreting cell line enhances glucose responsiveness. Montrose-Rafizadeh C, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1-2):109-17

Ligand-induced regulation of glucagon-like peptide-I receptor function and expression in insulin-secreting beta cells. Fehmann HC, et al. **Pancreas** 1996 Oct;13(3):273-82

Reciprocal cellular distribution of glucagon-like peptide-1 (GLP-1) immunoreactivity and GLP-1 receptor mRNA in pancreatic islets of rat. Hörsch D, et al. **Pancreas** 1997 Apr;14(3):290-4

Cloning and characterization of the 5' flanking sequences (promoter region) of the human GLP-1 receptor gene. Lankat-Buttgereit B, et al. **Peptides** 1997;18(5):617-24

IMMUNOLOGY

Human glucagon receptor monoclonal antibodies: antagonism of glucagon action and use in receptor characterization. Buggy J, et al. **Horm Metab Res** 1996 May;28(5):215-9

METABOLISM

Glucagon and GLP-1 receptors: lessons from chimeric ligands and receptors. Hjorth SA, et al.
Acta Physiol Scand 1996 Jul;157(3):343-5 (12 ref.)

Signal transduction and desensitization of the glucagon-like peptide-1 receptor. Thorens B, et al.
Acta Physiol Scand 1996 Jul;157(3):317-9

Glucagon and its receptor in various tissues. Christophe J. **Ann N Y Acad Sci** 1996 Dec 26;805:31-42; discussion 42-3 (69 ref.)

Roles of the RAM and ANK domains in signaling by the C. elegans GLP-1 receptor. Roehl H, et al. **EMBO J** 1996 Dec 16;15(24):7002-12

Localization of the domains involved in ligand binding and activation of the glucose-dependent insulinotropic polypeptide receptor. Gelling RW, et al. **Endocrinology** 1997 Jun;138(6):2640-3

Distribution of glucagon receptors on hormone-specific endocrine cells of rat pancreatic islets. Kieffer TJ, et al. **Endocrinology** 1996 Nov;137(11):5119-25

The isolated N-terminal extracellular domain of the glucagon-like peptide-1 (GLP)-1 receptor has intrinsic binding activity. Wilmen A, et al. **FEBS Lett** 1996 Nov 25;398(1):43-7

Alterations in receptor activation and divalent cation activation of agonist binding by deletion of intracellular domains of the glucagon receptor. Chicchi GG, et al.
J Biol Chem 1997 Mar 21;272(12):7765-9

Novel signal transduction and peptide specificity of glucagon-like peptide receptor in 3T3-L1 adipocytes. Montrose-Rafizadeh C, et al. **J Cell Physiol** 1997 Sep; 172(3):275-83

The role of phenylalanine at position 6 in glucagon's mechanism of biological action: multiple replacement analogues of glucagon. Azizeh BY, et al. **J Med Chem** 1997 Aug 1;40(16):2555-62

Desensitization of alpha 1-, beta- and glucagon receptors in rat hepatocytes: influence of ageing. Van Ermen A, et al. **Mech Ageing Dev** 1994 Jul;75(1):45-58

Desensitization and phosphorylation of the glucagon-like peptide-1 (GLP-1) receptor by GLP-1 and 4-phorbol 12-myristate 13-acetate. Widmann C, et al.
Mol Endocrinol 1996 Jan;10(1):62-75

Internalization and homologous desensitization of the GLP-1 receptor depend on phosphorylation of the receptor carboxyl tail at the same three sites. Widmann C, et al. **Mol Endocrinol** 1997 Jul;11(8):1094-102

Glucose intolerance but normal satiety in mice with a null mutation in the glucagon-like peptide 1 receptor gene. Scrocchi LA, et al. **Nat Med** 1996 Nov;2(11):1254-8

Fluorescein-Trp25-exendin-4, a biologically active fluorescent probe for the human GLP-1 receptor. Chicchi GG, et al. **Peptides** 1997;18(2):319-21

Exchange of W39 by A within the N-terminal extracellular domain of the GLP-1 receptor results in a loss of receptor function. Van Eyll B, et al. **Peptides** 1996;17(4):565-70

Five out of six tryptophan residues in the N-terminal extracellular domain of the rat GLP-1 receptor are essential for its ability to bind GLP-1. Wilmen A, et al. **Peptides** 1997;18(2):301-5

The amino terminal domain of the glucagon-like peptide-1 receptor is a critical determinant of subtype specificity. Graziano MP, et al. **Receptors Channels** 1996;4(1):9-17

Regulation of glucagon-like peptide-I receptor expression and transcription by the protein kinase C pathway. Fehmann HC, et al. **Res Exp Med (Berl)** 1996;196(4):219-25

PHYSIOLOGY

The signal transduction of the glucagon-like peptide 1 receptor: fishing beyond the protein kinase level. Göke B, et al. **Acta Physiol Scand** 1996 Jul;157(3):321-8

Glucagon, glucagon-like peptide-1 and their receptors: an introduction. Holst JJ. **Acta Physiol Scand** 1996 Jul; 157(3):309-15 (65 ref.)

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP-1, and other members of their new family of G protein-linked receptors: structure-function relationship with special reference to the human VIP-1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94-109; discussion 110-1 (64 ref.)

Pancreatic beta-cell receptors and G proteins coupled to adenylyl cyclase. Marie JC, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:122-31; discussion 132 (61 ref.)

Desensitization of glucagon-like peptide 1 receptors in insulin-secreting beta TC3 cells: role of PKA-independent mechanisms. Gromada J, et al. **Br J Pharmacol** 1996 Jun; 118(3):769-75

Role of the glucagon receptor COOH-terminal domain in glucagon-mediated signaling and receptor internalization. Buggy JJ, et al. **Diabetes** 1997 Sep;46(9):1400-5

Molecular and cellular aspects of the glucagon receptor: role in diabetes and metabolism. Burcelin R, et al.
Diabetes Metab 1996 Dec;22(6):373-96 (267 ref.)

Glucagon acts through its own receptors in the presence of functional glucagon-like peptide-1 receptors on hamster insulinoma. Marie JC, et al. **Endocrinology** 1996 Oct; 137(10):4108-14

Ligand-induced regulation of glucagon-like peptide-I receptor function and expression in insulin-secreting beta cells. Fehmann HC, et al. **Pancreas** 1996 Oct;13(3):273-82

Down-regulation of glucagon receptors on the surface of broiler adipocytes. Oscar TP. **Poult Sci** 1996 Aug; 75(8):1027-34

RECEPTORS, GLUCOCORTICOID

Steroid receptor number. Individual variation and downregulation by treatment. Brönnegård M.
Am J Respir Crit Care Med 1996 Aug;154(2 Pt 2):S28-32; discussion S32-3 (49 ref.)

[Glucocorticoid receptor] Ashida K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:562-5 (5 ref.) **(Jpn)**

AGONISTS

Chemosensitizing steroids: glucocorticoid receptor agonists capable of inhibiting P-glycoprotein function. Gruol DJ, et al. **Cancer Res** 1997 Feb 15;57(4):720-7

ANALYSIS

Response to intranasal fluticasone propionate in perennial allergic rhinitis not associated with glucocorticoid receptor characteristics. Garrelds IM, et al.
Ann Allergy Asthma Immunol 1997 Mar;78(3):319-24

Developmental changes and molecular weight of immunoreactive glucocorticoid receptor protein in the ovine fetal hypothalamus and pituitary. Saoud CJ, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):916-21

Expression of glucocorticoid and mineralocorticoid receptors in an immortalized hippocampal neuronal cell line. Beaman-Hall CM, et al. **Brain Res** 1996 Jul 8; 726(1-2):141-52

Resistance to glucocorticoid-induced apoptosis in human T-cell acute lymphoblastic leukemia CEM-C1 cells is due to insufficient glucocorticoid receptor expression. Geley S, et al. **Cancer Res** 1996 Nov 1;56(21):5033-8

On the role of glucocorticoid receptors in brain plasticity. Fuxe K, et al. **Cell Mol Neurobiol** 1996 Apr;16(2):239-58

Glucocorticoid (type II) receptors in the olfactory mucosa of the guinea-pig: RU 28362. Kern RC, et al.
Chem Senses 1997 Jun;22(3):313-9

Partial colocalization of glucocorticoid and mineralocorticoid receptors in discrete compartments in nuclei of rat hippocampus neurons. van Steensel B, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):787-92

Steroid receptors in the rat hippocampus: a note to the methodology of their binding assay. Szuran TF, et al.
J Recept Signal Transduct Res 1997 Jan-May; 17(1-3):337-54

Determinants of subcellular distribution of the glucocorticoid receptor. Sackey FN, et al. **Mol Endocrinol** 1996 Oct; 10(10):1191-205

Distribution of glucocorticoid receptor immunoreactivity and mRNA in the rat brain: an immunohistochemical and in situ hybridization study. Morimoto M, et al.
Neurosci Res 1996 Nov;26(3):235-69

Glucocorticoid receptors in the pig intestinal tract and muscle tissue. Claus R, et al. **Zentralbl Veterinarmed A** 1996 Nov;43(9):553-60

[Patients with rheumatoid arthritis: study of the correlation between density of glucocorticoid receptors in synovial cells and clinical response to steroidal treatment] Cuchacovich M, et al. **Rev Med Chil** 1996 Feb;124(2):160-9 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Glucocorticoid receptor antagonism by mifepristone alters phosphocreatine breakdown during sepsis. Mitsuo T, et al.
Arch Surg 1996 Nov;131(11):1179-85

Zinc reversibly inhibits steroid binding to murine glucocorticoid receptor. Telford WG, et al.
Biochem Biophys Res Commun 1997 Sep 8;238(1):86-9

Protection against hypoxic-ischemic damage with corticosterone and dexamethasone: inhibition of effect by a glucocorticoid antagonist RU38486. Tuor UI, et al.
Brain Res 1996 Dec 16;743(1-2):258-62

Chronic brain glucocorticoid receptor blockade enhances the rise in circadian and stress-induced pituitary-adrenal activity. van Haarst AD, et al. **Endocrinology** 1996 Nov; 137(11):4935-43

Effects of the glucocorticoid II receptor antagonist mifepristone on hypertension in the obese Zucker rat. Clapham JC, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1503-8

Effect of glucocorticoid receptor antagonist RU 38486 on acute glucocorticoid-induced insulin resistance in rat adipocytes. Ishizuka T, et al. **Metabolism** 1997 Sep; 46(9):997-1002

Inhibition of mineralocorticoid and glucocorticoid receptor

function by the heat shock protein 90-binding agent geldanamycin. Bamberger CM, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):233–40

Type II glucocorticoid receptor antagonists impair contextual but not auditory-cue fear conditioning in juvenile rats. Pugh CR, et al. **Neurobiol Learn Mem** 1997 Jan;67(1):75–9

The antiglucocorticoid action of mifepristone. Agarwai MK. **Pharmacol Ther** 1996;70(3):183–213 (552 ref.)

BIOSYNTHESIS

cAMP modulates glucocorticoid-induced protein accumulation and glucocorticoid receptor in cardiomyocytes. Sato A, et al. **Am J Physiol** 1996 Nov; 271(5 Pt 1):E827–33

Early environmental regulation of forebrain glucocorticoid receptor gene expression: implications for adrenocortical responses to stress. Meaney MJ, et al. **Dev Neurosci** 1996; 18(1–2):49–72 (138 ref.)

A novel action of IL-13: induction of diminished monocyte glucocorticoid receptor-binding affinity. Spahn JD, et al. **J Immunol** 1996 Sep 15;157(6):2654–9

Altered glucocorticoid receptor expression and function during mouse skin carcinogenesis. Budunova IV, et al. **Mol Carcinog** 1997 Mar;18(3):177–85

Growth and differentiation of C2 myogenic cells are dependent on serum response factor. Soulez M, et al. **Mol Cell Biol** 1996 Nov;16(11):6065–74

Modulation of glucocorticoid receptor gene expression by antidepressant drugs. Barden N. **Pharmacopsychiatry** 1996 Jan;29(1):12–22

A glucocorticoid-mediated transcriptional induction system in transgenic plants. Aoyama T, et al. **Plant J** 1997 Mar; 11(3):605–12

BLOOD

Glucocorticoid-resistance in peripheral-blood lymphocytes does not correlate with number of affinity of glucocorticoid-receptors in chronic renal failure patients. Hirano T, et al. **Immunopharmacology** 1997 Apr;36(1):57–67

Glucocorticoid receptors in human peripheral blood mononuclear cells in relation to age and to sport activity. Grasso G, et al. **Life Sci** 1997;61(3):301–8

[Effect of methimazole and dexamethasone on leucocyte glucocorticoid receptor, plasma ACTH, and cortisol levels in Graves' disease] Gao Y, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar;27(1):75–8 (Eng. Abstr.) **(Chi)**

CHEMISTRY

Glucocorticoid receptor lacking the tau 1 transactivation domain is a gene-specific regulator of the wild-type glucocorticoid-receptor activity. Delaunay F, et al. **Eur J Biochem** 1996 Dec 15;242(3):839–45

Folding of the glucocorticoid receptor by the reconstituted Hsp90-based chaperone machinery. The initial hsp90.p60.hsp70-dependent step is sufficient for creating the steroid binding conformation. Dittmar KD, et al. **J Biol Chem** 1997 May 16;272(20):13047–54

Folding of the glucocorticoid receptor by the heat shock protein (hsp) 90-based chaperone machinery. The role of p23 is to stabilize receptor.hsp90 heterocomplexes formed by hsp90.p60.hsp70. Dittmar KD, et al. **J Biol Chem** 1997 Aug 22;272(34):21213–20

A new function for the C-terminal zinc finger of the glucocorticoid receptor. Repression of RelA transactivation. Liden J, et al. **J Biol Chem** 1997 Aug 22; 272(34):21467–72

The rat glucocorticoid receptor mutant K461A differentiates between two different mechanisms of transrepression. Meyer T, et al. **J Biol Chem** 1997 Aug 22;272(34):21090–5

Protein phosphatase 5 is a major component of glucocorticoid receptor.hsp90 complexes with properties of an FK506-binding immunophilin. Silverstein AM, et al. **J Biol Chem** 1997 Jun 27;272(26):16224–30

A one nanosecond molecular dynamics simulation of the glucocorticoid receptor protein in complex with a glucocorticoid response element DNA sequence in a 10 Angstrom water layer. Harris LF, et al. **J Biomol Struct Dyn** 1995 Dec;13(3):423–40

Role of the C terminus of the glucocorticoid receptor in hormone binding and agonist/antagonist discrimination. Zhang S, et al. **Mol Endocrinol** 1996 Jan;10(1):24–34

DEFICIENCY

Behavioral reactivity to aversive stimuli in a transgenic mouse model of impaired glucocorticoid (type II) receptor function: effects of diazepam and FG-7142. Rochford J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):145–52

DRUG EFFECTS

In vitro and in vivo modulation of alpha- and beta-glucocorticoid-receptor mRNA in human bronchial epithelium. Korn SH, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1117–22

The dexamethasone suppression test and glucocorticoid receptors in borderline personality disorder. Grossman R, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:459–64

Progesterone inhibits 20alpha-hydroxysteroid dehydrogenase expression in the rat corpus luteum through the glucocorticoid receptor. Sugino N, et al. **Endocrinology** 1997 Oct;138(10):4497–500

A glucocorticoid receptor-independent mechanism for neurosteroid inhibition of tumor necrosis factor production. Di Santo E, et al. **Eur J Pharmacol** 1996 Mar 28; 299(1–3):179–86

Antisense to the glucocorticoid receptor in hippocampal dentate gyrus reduces immobility in forced swim test. Korte SM, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):19–25

Steroid-induced conformational changes at ends of the hormone-binding domain in the rat glucocorticoid receptor are independent of agonist versus antagonist activity. Modarress KJ, et al. **J Biol Chem** 1997 Sep 19; 272(38):23986–94

Stable and specific binding of heat shock protein 90 by geldanamycin disrupts glucocorticoid receptor function in intact cells. Whitesell L, et al. **Mol Endocrinol** 1996 Jun; 10(6):705–12

Glucocorticoid receptor agonist and antagonist administration into the basolateral but not central amygdala modulates memory storage. Roozendaal B, et al. **Neurobiol Learn Mem** 1997 Mar;67(2):176–9

Dexamethasone in the last week of pregnancy attenuates hippocampal glucocorticoid receptor gene expression and elevates blood pressure in the adult offspring in the rat. Levitt NS, et al. **Neuroendocrinology** 1996 Dec;64(6):412–8

Repeated cocaine administration down-regulates glucocorticoid receptors in the rat brain cortex and hippocampus. Budziszewska B, et al. **Pol J Pharmacol** 1996 Nov-Dec;48(6):575–81

Repeated amphetamine administration down-regulates glucocorticoid, but not mineralocorticoid, receptors in the rat hippocampus. Budziszewska B, et al. **Pol J Pharmacol** 1995 Sep-Oct;47(5):401–6

The acute effect of lead acetate on glucocorticoid receptor binding in C6 glioma cells. Tonner LE, et al. **Toxicology** 1997 Jan 15;116(1–3):109–22

[Mechanisms of action of glucocorticoids] Bamberger CM, et al. **Internist (Berl)** 1997 Apr;38(4):366–70 (41 ref.) **(Ger)**

GENETICS

Corticosteroid receptor mRNA expression is unaffected by corticosteroids in rat kidney, heart, and colon. Escoubet B, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1343–53

The glucocorticoid receptor protein. A hormone-dependent transcription factor. Carlstedt-Duke J. **Am J Respir Crit Care Med** 1996 Aug;154(2 Pt 2):S7–9; discussion S9–10

A three-allele PstI RFLP at the porcine glucocorticoid receptor (GRL) gene. Nielsen VH, et al. **Anim Genet** 1997 Apr;28(2):150–1

Glucocorticoid and mineralocorticoid receptors: biology and clinical relevance. Funder JW. **Annu Rev Med** 1997; 48:231–40 (53 ref.)

Glucocorticoid receptor mutations in genetically hypertensive rats: markers of glucocorticoid insensitivity? Heeley RP, et al. **Biochem Soc Trans** 1997 May;25(2):236S

Regulation of glucocorticoid and mineralocorticoid receptor mRNAs in the hippocampus of the maternally deprived infant rat. Vázquez DM, et al. **Brain Res** 1996 Aug 26; 731(1–2):79–90

Hippocampal glucocorticoid receptor mRNA is up-regulated by acute and down-regulated by chronic amphetamine treatment. Shilling PD, et al. **Brain Res Mol Brain Res** 1996 May;38(1):156–60

Early environmental regulation of forebrain glucocorticoid receptor gene expression: implications for adrenocortical responses to stress. Meaney MJ, et al. **Dev Neurosci** 1996; 18(1–2):49–72 (138 ref.)

Analysis of competence and of Brachyury autoinduction by use of hormone-inducible Xbra. Tada M, et al. **Development** 1997 Jun;124(11):2225–34

Transcriptional activities of estrogen and glucocorticoid receptors are functionally integrated at the AP-1 response element. Uht RM, et al. **Endocrinology** 1997 Jul; 138(7):2900–8

Chronic loss of glucocorticoids following adrenalectomy down-regulates the expression of glucocorticoid receptor mRNA in the rat forebrain. Hu Z, et al. **Eur J Neurosci** 1997 Aug;9(8):1778–83

Modulation of glucocorticoid receptor expression in human bronchial epithelial cell lines by IL-1 beta, TNF-alpha and LPS. Verheggen MM, et al. **Eur Respir J** 1996 Oct; 9(10):2036–43

A comment on: 'Fish glucocorticoid receptor with splicing variants in the DNA binding domain' by Jiro Takeo, Jun-ichiro Hata, Chisako Segawa, Haruhiko Toyohara, Shinya Yamashita, FEBS Letters 389 (1996) 244–248 [letter; comment] Ducouret B. **FEBS Lett** 1996 Nov 25; 398(1):125–6. Comment on: FEBS Lett 1996 Jul 8;389(3):244–8.

Role of the composite glucocorticoid response element in proliferin gene expression. Hoeppner MA, et al. **Gene Expr** 1995;5(2):133–41

Lack of association between five polymorphisms in the human glucocorticoid receptor gene and glucocorticoid resistance. Koper JW, et al. **Hum Genet** 1997 May; 99(5):663–8

Glucocorticoid-receptor-gene defects and resistance to glucocorticoid-induced apoptosis in human leukemic cell lines. Hala M, et al. **Int J Cancer** 1996 Nov 27;68(5):663–8

Orphan receptors chicken ovalbumin upstream promoter transcription factor II (COUP-TFII) and retinoid X receptor (RXR) activate and bind the rat cholesterol 7alpha-hydroxylase gene (CYP7A). Stroup D, et al. **J Biol Chem** 1997 Apr 11;272(15):9833–9

Expression of glucocorticoid receptor gene isoforms in corticotropin-secreting tumors. Dahia PL, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1088–93

Cloning and expression of the glucocorticoid receptor from the squirrel monkey (Saimiri boliviensis boliviensis), a glucocorticoid-resistant primate. Reynolds PD, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):465–72

Molecular and functional evidence for in vitro cytokine enhancement of human and murine target cell sensitivity to glucocorticoids. TNF-alpha priming increases glucocorticoid inhibition of TNF-alpha-induced cytotoxicity/apoptosis. Costas M, et al. **J Clin Invest** 1996 Sep 15;98(6):1409–16

Glucocorticoid resistant syndromes--molecular basis and clinical presentations. Brönnegård M, et al. **J Neuroendocrinol** 1996 Jun;8(6):405–15 (105 ref.)

Androgens modulate glucocorticoid receptor mRNA, but not mineralocorticoid receptor mRNA levels, in the rat hippocampus. Kerr JE, et al. **J Neuroendocrinol** 1996 Jun; 8(6):439–47

Co-localization of alpha1D adrenergic receptor mRNA with mineralocorticoid and glucocorticoid receptor mRNA in rat hippocampus. Williams AM, et al. **J Neuroendocrinol** 1997 Feb;9(2):113–9

Hippocampal cell responses in mice with a targeted glucocorticoid receptor gene disruption. Hesen W, et al. **J Neurosci** 1996 Nov 1;16(21):6766–74

Dysregulation of diurnal rhythms of serotonin 5-HT2C and corticosteroid receptor gene expression in the hippocampus with food restriction and glucocorticoids. Holmes MC, et al. **J Neurosci** 1997 Jun 1;17(11):4056–65

Differential binding of mutant glucocorticoid receptors to the glucocorticoid response element of the tyrosine aminotransferase gene. Rowan BG, et al. **J Steroid Biochem Mol Biol** 1996 May;58(2):147–62

Transfected glucocorticoid receptor and certain GR fragments evoke cell death in malignant lymphoid, not myeloid cell lines. Nazareth LV, et al. **Leukemia** 1996 Nov; 10(11):1789–95

Cardiac nuclear hormone receptor mRNA in heart failure in man. Sylvén C, et al. **Life Sci** 1996;59(22):1917–22

Role of hydrophobic amino acid clusters in the transactivation activity of the human glucocorticoid receptor. Almlöf T, et al. **Mol Cell Biol** 1997 Feb; 17(2):934–45

Antagonism between Nur77 and glucocorticoid receptor for control of transcription. Philips A, et al. **Mol Cell Biol** 1997 Oct;17(10):5952–9

Differential hormone-dependent transcriptional activation and -repression by naturally occurring human glucocorticoid receptor variants. de Lange P, et al. **Mol Endocrinol** 1997 Jul;11(8):1156–64

Involvement of the transcription factor IID protein complex in gene activation by the N-terminal transactivation domain of the glucocorticoid receptor in vitro. Ford J, et al. **Mol Endocrinol** 1997 Sep;11(10):1467–75

Identification of single amino acid substitutions of Cys-736 that affect the steroid-binding affinity and specificity of the glucocorticoid receptor using phenotypic screening in yeast. Lind U, et al. **Mol Endocrinol** 1996 Nov; 10(11):1358–70

Repression of glucocorticoid receptor transactivation and DNA binding of a glucocorticoid response element within the serum/glucocorticoid-inducible protein kinase (sgk) gene promoter by the p53 tumor suppressor protein. Maiyar AC, et al. **Mol Endocrinol** 1997 Mar;11(3):312–29

Mutation of isoleucine 747 by a threonine alters the ligand responsiveness of the human glucocorticoid receptor. Roux S, et al. **Mol Endocrinol** 1996 Oct;10(10):1214–26

Gene silencing by chicken ovalbumin upstream promoter-transcription factor I (COUP-TFI) is mediated by transcriptional corepressors, nuclear receptor-corepressor (N-CoR) and silencing mediator for retinoic acid receptor and thyroid hormone receptor (SMRT). Shibata H, et al. **Mol Endocrinol** 1997 Jun; 11(6):714–24

Mutant and wild-type androgen receptors exhibit cross-talk on androgen-, glucocorticoid-, and progesterone-mediated transcription [published erratum appears in Mol Endocrinol 1997 Mar;11(3):391–2] Yen PM, et al. **Mol Endocrinol** 1997 Feb;11(2):162–71

Feedback control of glucocorticoid production is established during fetal development. Reichardt HM, et al. **Mol Med** 1996 Nov;2(6):735–44

Abdominal visceral fat is associated with a BclI restriction fragment length polymorphism at the glucocorticoid receptor gene locus. Buemann B, et al. **Obes Res** 1997 May; 5(3):186–92

Modulation of glucocorticoid receptor gene expression by antidepressant drugs. Barden N. **Pharmacopsychiatry** 1996 Jan;29(1):12–22

Cushing's disease preceded by generalized glucocorticoid resistance: clinical consequences of a novel, dominant-negative glucocorticoid receptor mutation. Karl M, et al. **Proc Assoc Am Physicians** 1996 Jul;108(4):296–307

Occupancy and composition of proteins bound to the AP-1 sites in the glucocorticoid receptor and c-jun promoters

after glucocorticoid treatment and in different cell types. **Barrett TJ, et al. Recept Signal Transduct** 1996; 6(3–4):179–93

Molecular genetic analysis of glucocorticoid and mineralocorticoid signaling in development and physiological processes. Berger SA, et al. **Steroids** 1996 Apr;61(4):236–9

Distribution of hippocampal mineralocorticoid and glucocorticoid receptor mRNA in a glucocorticoid resistant nonhuman primate. Johnson EO, et al. **Steroids** 1996 Feb;61(2):69–73

Clinical aspects of glucocorticoid sensitivity. Lamberts SW, et al. **Steroids** 1996 Apr;61(4):157–60 (37 ref.)

Molecular basis of glucocorticoid-resistant syndromes. Werner S, et al. **Steroids** 1996 Apr;61(4):216–21 (42 ref.)

IMMUNOLOGY

Molecular and functional evidence for in vitro cytokine enhancement of human and murine target cell sensitivity to glucocorticoids. TNF-alpha priming increases glucocorticoid inhibition of TNF-alpha-induced cytotoxicity/apoptosis. Costas M, et al. **J Clin Invest** 1996 Sep 15;98(6):1409–16

Neurochemical changes in the hippocampus of the brown Norway rat during aging. Bhatnagar M, et al. **Neurobiol Aging** 1997 May–Jun;18(3):319–27

Cross-talk between the T cell antigen receptor and the glucocorticoid receptor regulates thymocyte development. Ashwell JD, et al. **Stem Cells** 1996 Sep;14(5):490–500 (58 ref.)

METABOLISM

Interference between DNA binding activities of AP-1 and GR transcription factors in rat thymocytes undergoing dexamethasone-induced apoptosis. Sikora E, et al. **Acta Biochim Pol** 1996;43(4):721–31

Effect of perinatal triiodothyronine (T3) treatment on thymic glucocorticoid and estrogen receptors and uterus estrogen receptors. Receptor selectivity during hormonal imprinting. Csaba G, et al. **Acta Physiol Hung** 1996; 84(1):19–23

Allergen exposure decreases glucocorticoid receptor binding affinity and steroid responsiveness in atopic asthmatics. Nimmagadda SR, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):87–93

Characterization of adrenal hormone binding sites in the prairie vole. Hastings NB, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:525–9

Glucocorticoid receptor localization in human epidermal cells. Serres M, et al. **Arch Dermatol Res** 1996 Mar; 288(3):140–6

Bcl-2 relieves the trans-repressive function of the glucocorticoid receptor and inhibits the activation of CPP32-like cysteine proteases. Miyashita T, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):781–7

Zinc reversibly inhibits steroid binding to murine glucocorticoid receptor. Telford WG, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):86–9

Stimulation of transcription in vitro from a liver-specific promoter by human glucocorticoid receptor (hGRalpha). Schweizer-Groyer G, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):823–31

Structure and dynamics of the glucocorticoid receptor DNA-binding domain: comparison of wild type and a mutant with altered specificity. Berglund H, et al. **Biochemistry** 1997 Sep 16;36(37):11188–97

Geldanamycin, a heat shock protein 90-binding benzoquinone ansamycin, inhibits steroid-dependent translocation of the glucocorticoid receptor from the cytoplasm to the nucleus. Czar MJ, et al. **Biochemistry** 1997 Jun 24;36(25):7776–85

The alteration of glucocorticoid receptor-immunoreactivity in the rat forebrain following short-term and long-term adrenalectomy. Visser DT, et al. **Brain Res** 1996 Aug 12; 729(2):216–22

Sexually dimorphic effects of maternal adrenalectomy on hypothalamic corticotrophin-releasing factor, glucocorticoid receptor and anterior pituitary POMC mRNA levels in rat neonates. Halasz I, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):198–204

Long-term effects of neonatal maternal deprivation and ACTH on hippocampal mineralocorticoid and glucocorticoid receptors. Sutanto W, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):156–63

Hormonal and non-hormonal regulation of glutamine synthetase in the developing neural retina. Gorovits R, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):321–9

Mineralocorticoid receptors and glucocorticoid receptors. Funder JW. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):651–6 (43 ref.)

Glucocorticoid-dependent transcriptional repression of the osteocalcin gene by competitive binding at the TATA box. Meyer T, et al. **DNA Cell Biol** 1997 Aug;16(8):919–27

I kappaB alpha-independent downregulation of NF-kappaB activity by glucocorticoid receptor. Heck S, et al. **EMBO J** 1997 Aug 1;16(15):4698–707

Determinants of specificity of transactivation by the mineralocorticoid or glucocorticoid receptor. Lim-Tio SS, et al. **Endocrinology** 1997 Jun;138(6):2537–43

Specific nuclear localization of 11-dehydrocorticosterone in rat colon: evidence for a novel corticosteroid receptor. Sheppard KE, et al. **Endocrinology** 1996 Aug;137(8):3274–8

Energy substrates, hormone responses and glucocorticoid binding in lymphocytes during intense physical exercise in humans following phosphocreatine administration. Vorobiev DV, et al. **Eur J Appl Physiol** 1996;74(6):534–40

A comment on: 'Fish glucocorticoid receptor with splicing variants in the DNA binding domain' by Jiro Takeo, Jun-ichiro Hata, Chisako Segawa, Haruhiko Toyohara, Shinya Yamashita, FEBS Letters 389 (1996) 244–248 [letter; comment] Ducouret B. **FEBS Lett** 1996 Nov 25; 398(1):125–6. Comment on: FEBS Lett 1996 Jul 8;389(3):244–8.

Nuclear localisation of calreticulin in vivo is enhanced by its interaction with glucocorticoid receptors. Roderick HL, et al. **FEBS Lett** 1997 Mar 24;405(2):181–5

Subcellular distribution of glucocorticoid receptor in cultured rat and human liver-derived cells and cell lines: influence of dexamethasone. Raddatz D, et al. **Hepatology** 1996 Oct;24(4):928–33

Effect of macromolecular-translocation inhibitor-III on binding of activated glucocorticoid-receptor complex to specific DNA. Okamoto K, et al. **J Biochem (Tokyo)** 1996 May;119(5):920–5

The tetratricopeptide repeat domain of protein phosphatase 5 mediates binding to glucocorticoid receptor heterocomplexes and acts as a dominant negative mutant. Chen MS, et al. **J Biol Chem** 1996 Dec 13;271(50):32315–20

Androgen and glucocorticoid receptor heterodimer formation. A possible mechanism for mutual inhibition of transcriptional activity. Chen Sy, et al. **J Biol Chem** 1997 May 30;272(22):14087–92

Utilization of recombinant adenovirus and dominant negative mutants to characterize hepatocyte nuclear factor 4-regulated apolipoprotein AI and CIII expression. Fraser JD, et al. **J Biol Chem** 1997 May 23;272(21):13892–8

Sequence-specific DNA binding and transcription factor phosphorylation by Ku Autoantigen/DNA-dependent protein kinase. Phosphorylation of Ser-527 of the rat glucocorticoid receptor. Giffin W, et al. **J Biol Chem** 1997 Feb 28;272(9):5647–58

Three amino acid substitutions selectively disrupt the activation but not the repression function of the glucocorticoid receptor N terminus. Iñiguez-Lluhi JA, et al. **J Biol Chem** 1997 Feb 14;272(7):4149–56

The DNA binding domain of hepatocyte nuclear factor 4 mediates cooperative, specific binding to DNA and heterodimerization with the retinoid X receptor alpha. Jiang G, et al. **J Biol Chem** 1997 Jan 10;272(2):1218–25

The orphan receptor COUP-TF binds to a third glucocorticoid accessory factor element within the phosphoenolpyruvate carboxykinase gene promoter. Scott DK, et al. **J Biol Chem** 1996 Dec 13;271(50):31909–14

Interaction of the ligand-activated glucocorticoid receptor with the 14-3-3 eta protein. Wakui H, et al. **J Biol Chem** 1997 Mar 28;272(13):8153–6

Mouse glucocorticoid receptor phosphorylation status influences multiple functions of the receptor protein. Webster JC, et al. **J Biol Chem** 1997 Apr 4;272(14):9287–93

Distinct domains of the RelA NF-kappaB subunit are required for negative cross-talk and direct interaction with the glucocorticoid receptor. Wissink S, et al. **J Biol Chem** 1997 Aug 29;272(35):22278–84

Subnuclear trafficking of glucocorticoid receptors in vitro: chromatin recycling and nuclear export. Yang J, et al. **J Cell Biol** 1997 May 5;137(3):523–38

Cloning and expression of the glucocorticoid receptor from the squirrel monkey (Saimiri boliviensis boliviensis), a glucocorticoid-resistant primate. Reynolds PD, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):465–72

A novel action of IL-13: induction of diminished monocyte glucocorticoid receptor-binding affinity. Spahn JD, et al. **J Immunol** 1996 Sep 15;157(6):2654–9

Macrophage migration inhibitory factor: a counter-regulator of glucocorticoid action and critical mediator of septic shock. Calandra T, et al. **J Inflamm** 1995–96;47(1–2):39–51 (52 ref.)

Identification of novel glucocorticoid-response elements in human elastin promoter and demonstration of nucleotide sequence specificity of the receptor binding. Del Monaco M, et al. **J Invest Dermatol** 1997 Jun;108(6):938–42

Long-term selective down-regulation of brain glucocorticoid receptors after neonatal dexamethasone treatment in rats. Felszeghy K, et al. **J Neuroendocrinol** 1996 Jul;8(7):493–9

Morphine-induced locomotor and neurochemical stimulation is enhanced in transgenic mice with impaired glucocorticoid receptor function. Spanagel B, et al. **J Neuroendocrinol** 1996 Feb;8(2):93–7

Changes in plasma adrenocorticotropin, corticosterone, corticosteroid-binding globulin, and hippocampal glucocorticoid receptor occupancy/translocation in rat pups in response to stress. Viau V, et al. **J Neuroendocrinol** 1996 Jan;8(1):1–8

Inhibition of mineralocorticoid activity by the beta-isoform of the human glucocorticoid receptor. Bamberger CM, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):43–50

Glucocorticoid receptors and actions in the spinal cord of the Wobbler mouse, a model for neurodegenerative diseases. González Deniselle MC, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3–4):205–13

Ability of various members of the hsp70 family of chaperones to promote assembly of the glucocorticoid receptor into a functional heterocomplex with hsp90. Hutchison KA, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):251–8

Regulation of glucocorticoid receptor by the tyrosine kinase inhibitor herbimycin A in the cytosolic fraction of primary cultured rat hepatocytes. Niimi S, et al. **J Steroid Biochem Mol Biol** 1997 Apr;61(1–2):65–71

DNA bending is induced by binding of the glucocorticoid receptor DNA binding domain and progesterone receptors to their response element. Petz LN, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):31–41

Differential binding of mutant glucocorticoid receptors to the glucocorticoid response element of the tyrosine aminotransferase gene. Rowan BG, et al. **J Steroid Biochem Mol Biol** 1996 May;58(2):147–62

Optimal ligand binding by the recombinant human glucocorticoid receptor and assembly of the receptor complex with heat shock protein 90 correlate with high intracellular ATP levels in Spodoptera frugiperda cells. Srinivasan G, et al. **J Steroid Biochem Mol Biol** 1997 Jan; 60(1–2):1–9

Glucocorticoid and estrogen receptors have elevated activity in human endometrial and ovarian tumors as compared to the adjacent normal tissues and recognize sequence elements of the H-ras proto-oncogene. Zachos G, et al. **Jpn J Cancer Res** 1996 Sep;87(9):916–22

Type II (glucocorticoid) receptors mediate fast-feedback inhibition of the hypothalamic-pituitary-adrenal axis in man. Cooney JM, et al. **Life Sci** 1996;59(23):1981–8

A role for HDJ-2/HSDJ in correcting subnuclear trafficking, transactivation, and transrepression defects of a glucocorticoid receptor zinc finger mutant. Tang Y, et al. **Mol Biol Cell** 1997 May;8(5):795–809

Role of the Ada adaptor complex in gene activation by the glucocorticoid receptor. Henriksson A, et al. **Mol Cell Biol** 1997 Jun;17(6):3065–73

Chicken ovalbumin upstream promoter transcription factors act as auxiliary cofactors for hepatocyte nuclear factor 4 and enhance hepatic gene expression. Ktistaki E, et al. **Mol Cell Biol** 1997 May;17(5):2790–7

Glucocorticoid receptor-glucocorticoid response element binding stimulates nucleosome disruption by the SWI/SNF complex. Ostlund Farrants AK, et al. **Mol Cell Biol** 1997 Feb;17(2):895–905

Glucocorticoid receptor-mediated cell cycle arrest is achieved through distinct cell-specific transcriptional regulatory mechanisms. Rogatsky I, et al. **Mol Cell Biol** 1997 Jun;17(6):3181–93

Identification of the human insulin negative regulatory element as a negative glucocorticoid response element. Goodman PA, et al. **Mol Cell Endocrinol** 1996 Jul 1; 120(2):139–46

Tonic suppression of adrenal AP-1 activity by glucocorticoids. Smith M, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):151–8

Disruption of the glucocorticoid receptor assembly with heat shock protein 90 by a peptidic antiglucocorticoid. Dao-Phan HP, et al. **Mol Endocrinol** 1997 Jun;11(7):962–72

Differential hormone-dependent transcriptional activation and -repression by naturally occurring human glucocorticoid receptor variants. de Lange P, et al. **Mol Endocrinol** 1997 Jul;11(8):1156–64

Determinants of promoter-specific activity by glucocorticoid receptor. Guido EC, et al. **Mol Endocrinol** 1996 Oct; 10(10):1178–90

Control by basal phosphorylation of cell cycle-dependent, hormone-induced glucocorticoid receptor hyperphosphorylation. Hu JM, et al. **Mol Endocrinol** 1997 Mar;11(3):305–11

Identification of single amino acid substitutions of Cys-736 that affect the steroid-binding affinity and specificity of the glucocorticoid receptor using phenotypic screening in yeast. Lind U, et al. **Mol Endocrinol** 1996 Nov; 10(11):1358–70

In vivo evidence for the generation of a glucocorticoid receptor-heat shock protein-90 complex incapable of binding hormone by the calmodulin antagonist phenoxybenzamine. Ning YM, et al. **Mol Endocrinol** 1996 Jan;10(1):14–23

Stable and specific binding of heat shock protein 90 by geldanamycin disrupts glucocorticoid receptor function in intact cells. Whitesell L, et al. **Mol Endocrinol** 1996 Jun; 10(6):705–12

Assessment of glucocorticoid receptor-heat shock protein 90 interactions in vivo during nucleocytoplasmic trafficking. Yang J, et al. **Mol Endocrinol** 1996 Jan; 10(1):3–13

Role of the C terminus of the glucocorticoid receptor in hormone binding and agonist/antagonist discrimination. Zhang S, et al. **Mol Endocrinol** 1996 Jan;10(1):24–34

The non-ligand binding beta-isoform of the human glucocorticoid receptor (hGR beta): tissue levels, mechanism of action, and potential physiologic role. de Castro M, et al. **Mol Med** 1996 Sep;2(5):597–607

Hypercortisolemia, hippocampal glucocorticoid receptors, and fast feedback. Young EA, et al. **Mol Psychiatry** 1996 May;1(2):149–59 (87 ref.)

Functional interactions between Stat5 and the glucocorticoid receptor. Stöcklin E, et al. **Nature** 1996 Oct 24; 383(6602):726–8

Reduced sensitivity to glucocorticoid feedback and reduced glucocorticoid receptor mRNA expression in the luteal phase of the menstrual cycle. Altemus M, et al.

Neuropsychopharmacology 1997 Aug;17(2):100–9

Codistribution of the dopamine D3 receptor and glucocorticoid receptor mRNAs during striatal prenatal development in the rat. Diaz R, et al. **Neurosci Lett** 1997 May 16;227(2):119–22

A three-hybrid system for detecting small ligand-protein receptor interactions. Licitra EJ, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12817–21

Maternal care, hippocampal glucocorticoid receptors, and hypothalamic–pituitary–adrenal responses to stress [see comments] Liu D, et al. **Science** 1997 Sep 12; 277(5332):1659–62. Comment in: Science 1997 Sep 12;277(5332):1620–1.

Mitochondrial genes as sites of primary action of steroid hormones. Demonacos CV, et al. **Steroids** 1996 Apr; 61(4):226–32

Interaction of the Ubc9 human homologue with c-Jun and with the glucocorticoid receptor. Göttlicher M, et al. **Steroids** 1996 Apr;61(4):257–62

Binding specificity of medroxyprogesterone acetate and proligestone for the progesterone and glucocorticoid receptor in the dog. Selman PJ, et al. **Steroids** 1996 Mar; 61(3):133–7

In vivo and in vitro effects of carbenoxolone on glucocorticoid receptor binding and glucocorticoid activity. Soro A, et al. **Steroids** 1997 Apr;62(4):388–94

Molecular basis of glucocorticoid-resistant syndromes. Werner S, et al. **Steroids** 1996 Apr;61(4):216–21 (42 ref.)

The acute effect of lead acetate on glucocorticoid receptor binding in C6 glioma cells. Tonner LE, et al. **Toxicology** 1997 Jan 15;116(1–3):109–22

Heterodimerization between mineralocorticoid and glucocorticoid receptors increases the functional diversity of corticosteroid action. Trapp T, et al. **Trends Pharmacol Sci** 1996 Apr;17(4):145–9 (49 ref.)

PHYSIOLOGY

Appearance of glucocorticoid receptors in the inner ear of the mouse during development. Erichsen S, et al. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):721–5

Involvement of type I corticosteroid receptor in the effects of ovariectomy on energy balance. Dagnault A, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R199–206

Glucocorticoid receptor signaling in a bronchial epithelial cell line. LeVan TD, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L838–43

Cell cycle regulation of membrane glucocorticoid receptor in CCRF-CEM human ALL cells: correlation to apoptosis. Sackey FN, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):E571–83

Regulation of branched-chain ketoacid dehydrogenase flux by extracellular pH and glucocorticoids. Wang X, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C2031–6

Glucocorticoid receptors: ATP and cell cycle dependence, phosphorylation, and hormone resistance. Bodwell JE, et al. **Am J Respir Crit Care Med** 1996 Aug;154(2 Pt 2):S2–6 (35 ref.)

Psychoendocrinological observations in women with chronic pelvic pain. Heim C, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:456–8

Growth factors mediate glucocorticoid receptor function and dexamethasone-induced regression of osteoblastic lesions in hormone refractory prostate cancer. Koutsilieris M, et al. **Anticancer Res** 1997 May–Jun;17(3A):1461–5 (29 ref.)

Ligand-induced differentiation of glucocorticoid receptor (GR) trans-repression and transactivation. Adcock IM, et al. **Biochem Soc Trans** 1996 May;24(2):267S

Mechanism of gene expression by the glucocorticoid receptor: role of protein–protein interactions. McEwan IJ, et al. **Bioessays** 1997 Feb;19(2):153–60 (70 ref.)

Role of adrenal steroid mineralocorticoid and glucocorticoid receptors in long-term potentiation in the CA1 field of hippocampal slices. Pavlides C, et al. **Brain Res** 1996 Nov 4;738(2):229–35

Regulation of hippocampal 5-HT1A receptor mRNA and binding in transgenic mice with a targeted disruption of the glucocorticoid receptor. Meijer OC, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):290–6

Modulation of hormone-dependent transcriptional activity of the glucocorticoid receptor by the tumor suppressor p53. Yu C, et al. **Cancer Lett** 1997 Jun 24;116(2):191–6

Hyperthermic stress affects glucocorticoid receptor-mediated transcription in rat liver. Vidović S, et al. **Cell Biol Int** 1996 Aug;20(8):553–9

Brain–corticosteroid hormone dialogue: slow and persistent. de Kloet ER, et al. **Cell Mol Neurobiol** 1996 Jun; 16(3):345–56 (52 ref.)

On the role of glucocorticoid receptors in brain plasticity. Fuxe K, et al. **Cell Mol Neurobiol** 1996 Apr;16(2):239–58

Enhancement of glucocorticoid receptor-mediated gene expression by cellular stress: evidence for the involvement of a heat shock-initiated factor or process during recovery from stress. Hu JL, et al. **Cell Stress Chaperones** 1996 Sep; 1(3):197–205

Glucocorticoid receptor regulates expression of L-selectin and CD11/CD18 on human neutrophils. Filep JG, et al. **Circulation** 1997 Jul 1;96(1):295–301

Glucocorticoid receptor function possibly modulates cell–cell interactions in osteoblastic metastases on rat skeleton. Reyes-Moreno C, et al. **Clin Exp Metastasis** 1997 May; 15(3):205–17

Corticosteroids in essential hypertension: multiple candidate loci and phenotypic variation. Connell JM, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):369–74 (46 ref.)

Glucocorticoid resistance. de Castro M, et al. **Curr Ther Endocrinol Metab** 1997;6:188–9 (7 ref.)

The glucocorticoid receptor is a key regulator of the decision between self-renewal and differentiation in erythroid progenitors. Wessely O, et al. **EMBO J** 1997 Jan 15; 16(2):267–80

Molecular determinants of glucocorticoid receptor function and tissue sensitivity to glucocorticoids. Bamberger CM, et al. **Endocr Rev** 1996 Jun;17(3):245–61 (216 ref.)

Inhibition of corticosteroid-binding globulin caused by a severe stressor is apparently mediated by the adrenal but not by glucocorticoid receptors. Martí O, et al. **Endocrine** 1997 Apr;6(2):159–64

Hypothalamic–pituitary–adrenocortical axis changes in a transgenic mouse with impaired glucocorticoid receptor function. Karanth S, et al. **Endocrinology** 1997 Aug; 138(8):3476–85

Glucocorticoid- and mineralocorticoid receptors in microglial cells: the two receptors mediate differential effects of corticosteroids. Tanaka J, et al. **Glia** 1997 May; 20(1):23–37

The glucocorticoid insensitivity syndrome. Lamberts SW. **Horm Res** 1996;45 Suppl 1:2–4 (10 ref.)

Promoter-dependent synergy between glucocorticoid receptor and Stat5 in the activation of beta-casein gene transcription. Lechner J, et al. **J Biol Chem** 1997 Aug 15; 272(33):20954–60

Differential activity of progesterone and glucocorticoid receptors on mouse mammary tumor virus templates differing in chromatin structure. Smith CL, et al. **J Biol Chem** 1997 May 30;272(22):14227–35

Induction properties of a transiently transfected glucocorticoid-responsive gene vary with glucocorticoid receptor concentration. Szapary D, et al. **J Biol Chem** 1996 Nov 29;271(48):30576–82

Thioredoxin: a redox-regulating cellular cofactor for glucocorticoid hormone action. Cross talk between endocrine control of stress response and cellular antioxidant defense system. Makino Y, et al. **J Clin Invest** 1996 Dec 1;98(11):2469–77

Mechanisms in interleukin-2 protection against glucocorticoid-induced apoptosis: regulation of AP-1 and glucocorticoid receptor transcriptional activities. Guizani L, et al. **J Interferon Cytokine Res** 1996 Aug;16(8):601–9

Steroid hormone receptors activate transcription in glial cells of intact retina but not in primary cultures of retinal glial cells. Li YC, et al. **J Mol Neurosci** 1997 Apr;8(2):145–58

Influence of the glucocorticoid receptor on c-fos inducibility in activated ras-containing mouse lung cells. Johnson TA, et al. **Mol Carcinog** 1996 Oct;17(2):70–7

Mitogen-activated and cyclin-dependent protein kinases selectively and differentially modulate transcriptional enhancement by the glucocorticoid receptor. Krstic MD, et al. **Mol Cell Biol** 1997 Jul;17(7):3947–54

The nuclear orphan receptors COUP-TF and ARP-1 positively regulate the trout estrogen receptor gene through enhancing autoregulation. Lazennec G, et al. **Mol Cell Biol** 1997 Sep;17(9):5053–66

Glucocorticoid receptor-independent transcriptional induction of cytochrome P450 3A1 by metyrapone and its potentiation by glucocorticoid. Wright MC, et al. **Mol Pharmacol** 1996 Oct;50(4):856–63

Corticosteroid effects in skeletal muscle: gene induction/receptor autoregulation. McKay LI, et al. **Muscle Nerve** 1997 Oct;20(10):1318–20

Morphine-induced increase in D-1 receptor regulated signal transduction in rat striatal neurons and its facilitation by glucocorticoid receptor activation: possible role in behavioral sensitization. Schoffelmeer AN, et al. **Neurochem Res** 1996 Nov;21(11):1417–23

Modulation of a novel RNA in brain neurons by glucocorticoid and mineralocorticoid receptors. Masters JN, et al. **Neuroendocrinology** 1996 Jan;63(1):28–38

Spatial memory in transgenic mice with impaired glucocorticoid receptor function. Rousse I, et al. **Neuroreport** 1997 Mar 3;8(4):841–5

Hippocampal mineralocorticoid, but not glucocorticoid, receptors modulate anxiety-like behavior in rats. Smythe JW, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):507–13

Glucocorticoid receptor pathways are involved in the inhibition of astrocyte proliferation. Crossin KL, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2687–92

Behavioral reactivity to aversive stimuli in a transgenic mouse model of impaired glucocorticoid (type II) receptor function: effects of diazepam and FG-7142. Rochford J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):145–52

[Implication of type II glucocorticoid receptors in aldosterone induced apoptosis of rat thymocytes] Ben Rhouma K, et al. **Arch Physiol Biochem** 1997 Apr; 105(2):216–24 (Eng. Abstr.) **(Fre)**

[Glucocorticoid receptor function in hemorrhagic shock and its treatment by calcium antagonist] Golikov PP, et al. **Vopr Med Khim** 1997 May–Jun;43(3):139–47 (Eng. Abstr.) **(Rus)**

[Receptor mechanisms of glucocorticoid and antiglucocorticoid effects] Golikov PP. **Vopr Med Khim** 1996 Jul–Sep;42(3):184–92 (76 ref.) (Eng. Abstr.) **(Rus)**

RECEPTORS, GLUTAMATE

[Molecular diversity and physiological roles of the glutamate receptor channel] Mishina M. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):285–94 (36 ref.) **(Jpn)**

AGONISTS see EXCITATORY AMINO ACID AGONISTS

ANALYSIS

Glutamate receptors in the frontal cortex of alcoholics. Freund G, et al. **Alcohol Clin Exp Res** 1996 Oct; 20(7):1165–72

Electrochemical evaluation of chemical selectivity of glutamate receptor ion channel proteins with a multi-channel sensor. Sugawara M, et al. **Biosens Bioelectron** 1997;12(5):425–39

Immunocytochemical distribution of ionotropic glutamate receptor subunits in the spinal cord of the rabbit. Bonnot A, et al. **J Chem Neuroanat** 1996 Oct;11(4):267–78

NMDA and non-NMDA receptors are co-localized at excitatory synapses of rat hypoglossal motoneurons. O'Brien JA, et al. **Neurosci Lett** 1997 May 9;227(1):5–8

A light and electron microscopic study of GluR4-positive cells in human cerebral cortex. Ong WY, et al. **Neurosci Lett** 1996 May 31;210(2):107–10

Localization of the glutamate receptor subunit GluR1 on the surface of living and within cultured hippocampal neurons. Richmond SA, et al. **Neuroscience** 1996 Nov;75(1):69–82

ANTAGONISTS & INHIBITORS see EXCITATORY AMINO ACID ANTAGONISTS

BIOSYNTHESIS

Expression of the alpha 1 and alpha 2 subunits of the AMPA-selective glutamate receptor channel in insect cells using a baculovirus vector. Kawamoto S, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:460–2

Regional analysis of developmental changes in the extent of GluR6 mRNA editing in rat brain. Schmitt J, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):153–7

Expression of glutamate receptor subunit 1 and nitric oxide synthase in the hypoglossal nucleus and dorsal vagal nucleus in the rat after neurectomy. Yeo JF, et al. **Int J Neurosci** 1997 Jun;90(1–2):9–20

Seizure-related changes in the glutamate R2 and R5 receptor genes expression in the rat hippocampal formation. Lasoń W, et al. **J Neural Transm** 1997;104(2–3):125–33

Expression of N-methyl-D-aspartate (NMDA) and non-NMDA glutamate receptor genes in neuroblastoma, medulloblastoma, and other cells lines. Yoshioka A, et al. **J Neurosci Res** 1996 Oct 15;46(2):164–78

Expression of glutamate receptor subunit mRNAs in gonadotropin-releasing hormone neurons during the sexual maturation of the female rat. Eyigor O, et al. **Neuroendocrinology** 1997 Aug;66(2):122–9

Expression of glutamate receptor subunit genes during development of the mouse retina. Zhang C, et al. **Neuroreport** 1996 Dec 20;8(1):335–40

Splice variants of glutamate receptor subunits 2 and 3 in striatal projection neurons. Tallaksen-Greene SJ, et al. **Neuroscience** 1996 Dec;75(4):1057–64

Are there ionotropic glutamate receptors on the rod bipolar cell of the mouse retina? Hughes TE. **Vis Neurosci** 1997 Jan–Feb;14(1):103–9

CHEMISTRY

A single tryptophan on M2 of glutamate receptor channels confers high permeability to divalent cations. Ferrer-Montiel AV, et al. **Biophys J** 1996 Aug;71(2):749–58

Binding properties of glutamate receptors in streptozotocin-induced diabetes in rats. Gagné J, et al. **Diabetes** 1997 May;46(5):841–6

Functional expression of a recombinant unitary glutamate receptor from Xenopus, which contains N-methyl-D-aspartate (NMDA) and non-NMDA receptor subunits. Soloviev MM, et al. **J Biol Chem** 1996 Dec 20;271(51):32572–9

Homomeric and heteromeric ion channels formed from the kainate-type subunits GluR6 and KA2 have very small, but different, unitary conductances. Howe JR. **J Neurophysiol** 1996 Jul;76(1):510–9

Use of a modified bacteriophage to probe the interactions between peptides and ion channel receptors in mammalian cells. Li M. **Nat Biotechnol** 1997 Jun;15(6):559–63

The C-terminal domain of glutamate receptor subunit 1 is a target for calpain-mediated proteolysis. Bi X, et al. **Neuroscience** 1996 Aug;73(4):903–6

Localization of glutamate receptor subunits of the alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) type in the pancreas of newborn guinea pigs. Liu HP, et al. **Pancreas** 1997 May;14(4):360–8

Predicted structure of the extracellular region of ligand-gated ion-channel receptors shows SH2-like and SH3-like domains forming the ligand-binding site. Gready JE, et al. **Protein Sci** 1997 May;6(5):983–98

DRUG EFFECTS

Effects of dexmedetomidine on hypoxia-evoked glutamate

release and glutamate receptor activity in hippocampal slices. Talke P, et al. **Anesthesiology** 1996 Sep;85(3):551–7

Desensitization and resensitization kinetics of glutamate receptor channels from Drosophila larval muscle. Heckmann M, et al. **Biophys J** 1997 May;72(5):2160–9

Effect of phosphatidylserine on the binding properties of glutamate receptors in brain sections from adult and neonatal rats. Gagné J, et al. **Brain Res** 1996 Nov 18; 740(1–2):337–45

Chronic alcohol reduces calcium signaling elicited by glutamate receptor stimulation in developing cerebellar neurons. Gruol DL, et al. **Brain Res** 1996 Jul 29; 728(2):166–74

The effects of copper ions on glutamate receptors in cultured rat cortical neurons. Weiser T, et al. **Brain Res** 1996 Dec 2;742(1–2):211–8

Different responses of gonadotropin–releasing hormone (GnRH) release to glutamate receptor agonists during aging. Sortino MA, et al. **Brain Res Bull** 1996;41(6):359–62

Vulnerability of CA1 neurons to glutamate is developmentally regulated. Marks JD, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):194–206

Arginine–481 mutation abolishes ligand–binding of the AMPA–selective glutamate receptor channel alpha1–subunit. Kawamoto S, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):339–44

The pharmacology of antimyoclonic drugs. Pranzatelli MR. **Clin Neurosci** 1995–96;3(4):246–52 (60 ref.)

An immunocytochemical study of glutamate receptors and glutamine synthetase in the hippocampus of rats injected with kainate. Ong WY, et al. **Exp Brain Res** 1996 May; 109(2):251–67

Impairment of excitatory amino acid transporter activity by oxidative stress conditions in retinal cells: effect of antioxidants. Agostinho P, et al. **FASEB J** 1997 Feb; 11(2):154–63

The L–AP4 receptor. Thomsen C. **Gen Pharmacol** 1997 Aug; 29(2):151–8 (80 ref.)

Ca2+ signaling pathways linked to glutamate receptor activation in the somatic and dendritic regions of cultured cerebellar purkinje neurons. Gruol DL, et al. **J Neurophysiol** 1996 Nov;76(5):3325–40

Suppression of the glutamate receptor delta 2 subunit produces a specific impairment in cerebellar long–term depression. Jeromin A, et al. **J Neurophysiol** 1996 Nov; 76(5):3578–83

Electrophysiological and pharmacological characteristics of ionotropic glutamate receptors in medial vestibular nucleus neurons: a whole cell patch clamp study in acutely dissociated neurons. Sakai N, et al. **Jpn J Pharmacol** 1996 Dec;72(4):335–46

N1–dansyl–spermine and N1–(n–octanesulfonyl)–spermine, novel glutamate receptor antagonists: block and permeation of N–methyl–D–aspartate receptors. Chao J, et al. **Mol Pharmacol** 1997 May;51(5):861–71

Cloning and expression of rat metabotropic glutamate receptor 8 reveals a distinct pharmacological profile. Saugstad JA, et al. **Mol Pharmacol** 1997 Jan;51(1):119–25

beta–Cyano–L–alanine toxicity: evidence for the involvement of an excitotoxic mechanism. Roy DN, et al. **Nat Toxins** 1996;4(6):247–53

Lead–induced blockage of kainate–sensitive receptor channels. Musshoff U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):42–5

Excitatory amino acid receptors coupled to the phosphoinositide pathway in Bergmann glia. López–Colomé AM, et al. **Neurochem Res** 1997 Mar; 22(3):305–12

Two phenylglycine derivatives antagonize responses to L–AP4 in ON bipolar cells of the amphibian retina. Thoreson WB, et al. **Neuropharmacology** 1997 Jan; 36(1):13–20

Glutamate receptor agonists up–regulate glutamate transporter GLAST in astrocytes. Gegelashvili G, et al. **Neuroreport** 1996 Dec 20;8(1):261–5

Effects of glutamate receptor agonists on presumed presynaptic Ca(2+)–signals in juvenile rat hippocampal area CA1. Alici K, et al. **Neurosci Lett** 1996 Aug 16; 214(1):17–20

The effect of chronic haloperidol treatment on glutamate receptor subunit (GluR1, GluR2, KA1, KA2, NR1) mRNAs and glutamate binding protein mRNA in rat forebrain. Eastwood SL, et al. **Neurosci Lett** 1996 Jul 19; 212(3):163–6

The role of excitatory amino acids in the actions of abused drugs. **NIDA Res Monogr** 1994;140:65–8

Endothelin–1 in periaqueductal gray area of mice induces analgesia via glutamatergic receptors. D'Amico M, et al. **Pain** 1996 May–Jun;65(2–3):205–9

Effects of D–cycloserine and aniracetam on spatial learning in rats with entorhinal cortex lesions. Zajaczkowski W, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):21–9

Regulation of ionotropic glutamate receptors following subchronic and chronic treatment with typical and atypical antipsychotics. Tarazi FI, et al. **Psychopharmacology (Berl)** 1996 Dec;128(4):371–9

Cocaine selectively alters neurotransmitter receptor mRNAs in mouse embryos. Mackler SA, et al. **Reprod Toxicol** 1996 Jan–Feb;10(1):37–42

Facilitation of glutamate receptors reverses an age–associated memory impairment in rats. Granger R, et al. **Synapse** 1996 Apr;22(4):332–7

Conantokin–T selectively antagonizes N–methyl–D–aspartate–evoked responses in rat hippocampal slice. Huang CC, et al. **Toxicon** 1997 Mar; 35(3):355–63

[Tolerance to opiate analgesia: a complex effect of antagonists of excitatory amino acid receptors] Bespalov AIu, et al. **Biull Eksp Biol Med** 1994 May;117(5):494–6 **(Rus)**

GENETICS

Lack of evidence for close linkage of the glutamate GluR6 receptor gene with schizophrenia. Chen AC, et al. **Am J Psychiatry** 1996 Dec;153(12):1634–6

Molecular evolution of ion channels in central nervous system: possible primitive mRNA segments conserved in glutamate and acetylcholine receptor channel genes. Ohnishi K. **Ann N Y Acad Sci** 1993 Dec 20;707:524–8

Exclusion of linkage of schizophrenia to the gene for the glutamate GluR5 receptor. Chen AC, et al. **Biol Psychiatry** 1997 Jan 15;41(2):243–5

Distribution of kainate receptor subunit mRNAs in human hippocampus, neocortex and cerebellum, and bilateral reduction of hippocampal GluR6 and KA2 transcripts in schizophrenia. Porter RH, et al. **Brain Res** 1997 Mar 21; 751(2):217–31

Altered intracellular localization of the glutamate receptor channel delta 2 subunit in weaver and reeler Purkinje cells. Takayama C, et al. **Brain Res** 1997 Jan 16;745(1–2):231–42

Molecular analysis of cDNA molecules encoding glutamate receptor subunits, fGluR1 alpha and fGluR1 beta, of Oreochromis sp. Wu YM, et al. **DNA Cell Biol** 1996 Sep; 15(9):717–25

Hippocampal kindling leads to an enhanced expression of glutamate receptor–A, –B, and –C Flip variants in dentate granule cells. Kamphuis W, et al. **Epilepsy Res Suppl** 1996; 12:257–63

Reduced long–term potentiation in the dentate gyrus of mGlu1 receptor–mutant mice in vivo. Bordi F. **Eur J Pharmacol** 1996 Apr 22;301(1–3):R15–6

Erratum to 'HmGlu1d, a novel splice variant of the human type I metabotropic glutamate receptor' [Eur. J. pharmacol. 296 (1996) R1–R3] Laurie DJ, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):229

Cloning of a human RNA editing deaminase (ADARB1) of glutamate receptors that maps to chromosome 21q22.3. Mittaz L, et al. **Genomics** 1997 Apr 15;41(2):210–7

Purification of human double–stranded RNA–specific editase 1 (hRED1) involved in editing of brain glutamate receptor B pre–mRNA. O'Connell MA, et al. **J Biol Chem** 1997 Jan 3;272(1):473–8

Expression of glutamate receptors in the human and rat basal ganglia: effect of the dopaminergic denervation on AMPA receptor gene expression in the striatopallidal complex in Parkinson's disease and rat with 6–OHDA lesion. Bernard V, et al. **J Comp Neurol** 1996 May 13;368(4):553–68

Growth factor–induced transcription of GluR1 increases functional AMPA receptor density in glial progenitor cells. Chew LJ, et al. **J Neurosci** 1997 Jan 1;17(1):227–40

Co–expression of receptor mRNA and protein: striatal dopamine and excitatory amino acid subtypes. Noblett KL, et al. **J Neurosci Methods** 1996 May;66(1):61–7

Editing of glutamate receptor B subunit ion channel RNAs by four alternatively spliced DRADA2 double–stranded RNA adenosine deaminases. Lai F, et al. **Mol Cell Biol** 1997 May;17(5):2413–24

High affinity glutamate transporters: regulation of expression and activity. Gegelashvili G, et al. **Mol Pharmacol** 1997 Jul;52(1):6–15 (98 ref.)

Neurodegeneration in Lurcher mice caused by mutation in delta2 glutamate receptor gene [see comments] Zuo J, et al. **Nature** 1997 Aug 21;388(6644):769–73. Comment in: Nature 1997 Aug 21;388(6644):716–7.

Expression of ionotropic glutamate receptor subunit mRNAs by paraventricular corticotropin–releasing factor (CRF) neurons. Aubry JM, et al. **Neurosci Lett** 1996 Feb 23; 205(2):95–8

Introduction of the glutamate receptor subunit 1 into motor neurons in vitro and in vivo using a recombinant herpes simplex virus. Neve RL, et al. **Neuroscience** 1997 Jul; 79(2):435–47

Expression of non–N–methyl–D–aspartate glutamate receptor subunits in the olfactory epithelium. Thukral V, et al. **Neuroscience** 1997 Jul;79(2):411–24

Purification and characterization of a human RNA adenosine deaminase for glutamate receptor B pre–mRNA editing. Yang JH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4354–9

A unitary non–NMDA receptor short subunit from Xenopus: DNA cloning and expression. Ishimaru H, et al. **Receptors Channels** 1996;4(1):31–49

[A new type of ionotropic glutamate receptors] Solov'ev MM, et al. **Bioorg Khim** 1996 Jun;22(6):468–71 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The role of autoimmunity to glutamate receptors in neurological disease. Rogers SW, et al. **Mol Med Today** 1996 Feb;2(2):76–81 (27 ref.)

Autoantibodies to glutamate receptor subunit GluR2 in nonfamilial olivopontocerebellar degeneration. Gahring LC, et al. **Neurology** 1997 Feb;48(2):494–500

[The diagnosis of epilepsy by using blood analysis for the content of autoantibodies to glutamate neuroreceptors] Odinak MM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(2):45–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Distributions of taurine, glutamate, and glutamate receptors during post–natal development and plasticity in the rat brain. Magnusson KR. **Adv Exp Med Biol** 1996;403:435–44

Effect of magnesium sulfate on excitatory amino acid receptors in the rat brain. I. N–methyl–D–aspartate receptor channel complex. Hallak M, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):575–81

Effect of magnesium sulfate on excitatory amino acid receptors in the rat brain. II. Kainate and alpha–amino–3–hydroxy–5–methylisoxazole–4–propionic acid receptors. Hallak M, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):582–7

Three types of postsynaptic glutamatergic receptors are activated in DMNX neurons upon stimulation of NTS. Willis A, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1614–9

A microplate receptor assay for the amnesic shellfish poisoning toxin, domoic acid, utilizing a cloned glutamate receptor. Van Dolah FM, et al. **Anal Biochem** 1997 Feb 1;245(1):102–5

GTP–binding proteins coupling to glutamate receptors on bovine retinal membranes. Kikkawa S, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:557–60

Differential effects of the N–methyl–D–aspartate and non–N–methyl–D–aspartate receptors of the excitatory amino acids system on LH and FSH secretion. Its effects on the hypothalamic luteinizing hormone releasing hormone during maturation in male rats. Carbone S, et al. **Brain Res** 1996 Jan 29;707(2):139–45

Distribution of glutamate receptor subunit proteins GluR2(4), GluR5/6/7, and NMDAR1 in the canine and primate cerebral cortex: a comparative immunohistochemical analysis. Hof PR, et al. **Brain Res** 1996 Jun 3;723(1–2):77–89

Distribution of ionotropic glutamate receptor subunit immunoreactivity in the suprachiasmatic nucleus and intergeniculate leaflet of the hamster. Stamp JA, et al. **Brain Res** 1997 May 9;756(1–2):215–24

Altered intracellular localization of the glutamate receptor channel delta 2 subunit in weaver and reeler Purkinje cells. Takayama C, et al. **Brain Res** 1997 Jan 16;745(1–2):231–42

Changes in glutamate receptors, c–fos mRNA expression and activator protein–1 (AP–1) DNA binding activity in the brain of phenobarbital–dependent and –withdrawn rats. Tanaka S, et al. **Brain Res** 1997 May 9;756(1–2):35–45

Calretinin mRNA and immunoreactivity in the medullary reticular formation of the rat: colocalization with glutamate receptors. Winsky L, et al. **Brain Res** 1996 Nov 25; 741(1–2):123–33

Developmental changes in glutamate receptor–activated translocation of protein kinase C in cerebellar granule neurons. Barrios M, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):22–30

Developmental changes in expression and distribution of the glutamate receptor channel delta 2 subunit according to the Purkinje cell maturation. Takayama C, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):147–55

GluR2 glutamate receptor subunit flip and flop isoforms are decreased in the hippocampal formation in schizophrenia: a reverse transcriptase–polymerase chain reaction (RT–PCR) study. Eastwood SL, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):92–8

Glutamate receptor autoimmunity in Rasmussen's encephalitis. McNamara JO, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:327–32 (46 ref.)

Mitochondrial membrane potential measurement in rat cerebellar neurons by flow cytometry. Sureda FX, et al. **Cytometry** 1997 May 1;28(1):74–80

Neural activity affects distribution of glutamate receptors during neuromuscular junction formation in Drosophila embryos. Saitoe M, et al. **Dev Biol** 1997 Apr 1;184(1):48–60

Reduced long–term potentiation in the dentate gyrus of mGlu1 receptor–mutant mice in vivo. Bordi F. **Eur J Pharmacol** 1996 Apr 22;301(1–3):R15–6

Ca2+ influx through glutamate receptor–associated channels in retina cells correlates with neuronal cell death. Ferreira IL, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):153–62

Glutamate receptor agonist injections into the dorsal striatum cause contralateral turning in the rat: involvement of kainate and AMPA receptors. Smith ID, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):7–17

Distribution of glutamate receptor subunit GluR1 and GABA in human cerebral neocortex: a double immunolabelling and electron microscopic study. He Y, et al. **Exp Brain Res** 1996 Nov;112(1):147–57

Impairment of excitatory amino acid transporter activity by oxidative stress conditions in retinal cells: effect of antioxidants. Agostinho P, et al. **FASEB J** 1997 Feb; 11(2):154–63

Ion channel properties of a protein complex with characteristics of a glutamate/N–methyl–D–aspartate receptor. Aistrup GL, et al. **FEBS Lett** 1996 Sep 30; 394(2):141–8

Glutamate receptors in the developing cochlear ganglion. Jiménez C, et al. **Int J Dev Biol** 1996;Suppl 1:159S–160S

Identification of amino acids in the glutamate receptor, GluR3, important for antibody–binding and

receptor-specific activation. Carlson NG, et al. **J Biol Chem** 1997 Apr 25;272(17):11295-301

Carbamoylation of brain glutamate receptors by a disulfiram metabolite. Nagendra SN, et al. **J Biol Chem** 1997 Sep 26; 272(39):24247-51

Regulation of CCAAT/enhancer-binding protein family members by stimulation of glutamate receptors in cultured rat cortical astrocytes. Yano S, et al. **J Biol Chem** 1996 Sep 20;271(38):23520-7

Development of MK-801, kainate, AMPA, and muscimol binding sites and the effect of dark rearing in rat visual cortex. Gordon B, et al. **J Comp Neurol** 1997 Jun 23; 383(1):73-81

Localization of AMPA-selective glutamate receptors in the auditory brainstem of the barn owl. Levin MD, et al. **J Comp Neurol** 1997 Feb 10;378(2):239-53

Design, synthesis, and pharmacological characterization of (+)-2-aminobicyclo[3.1.0]hexane-2,6-dicarboxylic acid (LY354740): a potent, selective, and orally active group 2 metabotropic glutamate receptor agonist possessing anticonvulsant and anxiolytic properties. Monn JA, et al. **J Med Chem** 1997 Feb 14;40(4):528-37

Glutamate receptor activation induces carrier mediated release of endogenous GABA from rat striatal slices. Wang J, et al. **J Neural Transm** 1996;103(1-2):31-43

Delta-glutamate receptors are differentially distributed at parallel and climbing fiber synapses on Purkinje cells. Zhao HM, et al. **J Neurochem** 1997 Mar;68(3):1041-52

Glycine effects on glutamate-receptor elicited acetylcholinesterase release from slices and synaptosomes of the spinal ventral horn. Rodriguez-Ithurralde D, et al. **J Neurol Sci** 1996 Aug;139 Suppl:76-82

GABA receptors precede glutamate receptors in hypothalamic development; differential regulation by astrocytes. Chen G, et al. **J Neurophysiol** 1995 Oct; 74(4):1473-84

Distribution and functional properties of glutamate receptors in the leech central nervous system. Dierkes PW, et al. **J Neurophysiol** 1996 Jun;75(6):2312-21

Immunocytochemical characterization of AMPA-selective glutamate receptor subunits: laminar and compartmental distribution in macaque striate cortex. Carder RK. **J Neurosci** 1997 May 1;17(9):3352-63

Redistribution and stabilization of cell surface glutamate receptors during synapse formation. Mammen AL, et al. **J Neurosci** 1997 Oct 1;17(19):7351-8

The glutamate receptor subunit delta1 is highly expressed in hair cells of the auditory and vestibular systems. Safieddine S, et al. **J Neurosci** 1997 Oct 1;17(19):7523-31

Glutamate receptor subunits GluR5 and KA-2 are coexpressed in rat trigeminal ganglion neurons. Sahara Y, et al. **J Neurosci** 1997 Sep 1;17(17):6611-20

Dendritic and somatic glutamate receptor channels in rat cerebellar Purkinje cells. Häusser M, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):77-95

Kinetic properties of glutamate receptor channels in cultured embryonic Drosophila myotubes. Chang H, et al. **Jpn J Physiol** 1996 Jun;46(3):249-64

Permeation of organic cations and ammonium through the glutamate receptor channel in Drosophila larval muscle. Ciani S, et al. **Jpn J Physiol** 1997 Apr;47(2):189-98

Is electron-transfer from glutamate receptors or other plasma membrane ionic channels involved in oxidative stress and neurodegenerative diseases? Cavelier G. **Med Hypotheses** 1996 Apr;46(4):303-4

Etiology of (CAG)n triplet repeat neurodegenerative diseases such as Huntington's disease is connected to stimulation of glutamate receptors. Fischer KM. **Med Hypotheses** 1997 May;48(5):393-8 (66 ref.)

Alterations of excitatory amino acid receptors in the brain of manganese-treated mice. Cano G, et al. **Mol Chem Neuropathol** 1997 Jan-Feb;30(1-2):41-52

Use of a modified bacteriophage to probe the interactions between peptides and ion channel receptors in mammalian cells. Li M. **Nat Biotechnol** 1997 Jun;15(6):559-63

Neurodegeneration. A silent channel opens its gates [news; comment] Seeburg PH. **Nature** 1997 Aug 21; 388(6644):716-7. Comment on: Nature 1997 Aug 21;388(6644):769-73.

Excitatory synapses. Glutamate receptors put in their place [news; comment] Sheng M. **Nature** 1997 Mar 20; 386(6622):221, 223. Comment on: Nature 1997 Mar 20;386(6622):279-74. Comment on: Nature 1997 Mar 20;386(6622):284-8.

Differential desensitization of ionotropic non-NMDA receptors having distinct neuronal location and function. Pittaluga A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):29-38

Effect of glutamate receptor ligands on mitochondrial membrane potential in rat dissociated cerebellar cells. Sureda FX, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):420-3

Glutamate receptor binding in the human hippocampus and adjacent cortex during development and aging. Johnson M, et al. **Neurobiol Aging** 1996 Jul-Aug;17(4):639-51

Functional partial agonism at ionotropic excitatory amino acid receptors. Ebert B, et al. **Neurochem Int** 1996 Sep; 29(3):309-16

Cadmium rapidly and irreversibly blocks presynaptic phospholipase C-linked metabotropic glutamate receptors. Vignes M, et al. **Neurochem Int** 1996 Oct;29(4):371-81

Loss of [3H]kainate and of NMDA-displaceable [3H]glutamate binding sites in brain in thiamine deficiency: results of a quantitative autoradiographic study. Peterson C, et al. **Neurochem Res** 1995 Oct;20(10):1155-60

Glutamate receptors are selectively targeted to postsynaptic sites in neurons. Rubio ME, et al. **Neuron** 1997 Jun; 18(6):939-50

Distribution of desensitization time constants of mouse embryonic-like nicotinic and homomeric GLUR6 glutamate receptor channels. Bufler J, et al. **Neurosci Lett** 1997 Jan 17;221(2-3):173-6

Chronic cocaine administration increases tyrosine hydroxylase activity in the ventral tegmental area through glutaminergic- and dopaminergic D2-receptor mechanisms. Masserano JM, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):73-6

Effect of glutamate receptor phosphorylation by endogenous protein kinases on electrical activity of isolated postsynaptic densities of rat cortex and hippocampus. Wyneken U, et al. **Neurosci Lett** 1997 Mar 14;224(2):131-5

Effects of monocular enucleation on receptor binding and innervation pattern of the noradrenergic system in the superior colliculus of the pigmented rat. Muguruma K, et al. **Neurosci Res** 1997 Aug;28(4):311-24

The C-terminal domain of glutamate receptor subunit 1 is a target for calpain-mediated proteolysis. Bi X, et al. **Neuroscience** 1996 Aug;73(4):903-6

Cellular expression of ionotropic glutamate receptor subunits on specific striatal neuron types and its implication for striatal vulnerability in glutamate receptor-mediated excitotoxicity. Chen Q, et al. **Neuroscience** 1996 Aug; 73(3):715-31

Involvement of three glutamate receptor epsilon subunits in the formation of N-methyl-D-aspartate receptors mediating excitotoxicity in primary cultures of mouse cerebellar granule cells. Didier M, et al. **Neuroscience** 1997 Jun;78(4):1129-46

Glutamate receptors in the olfactory bulb synaptic circuitry: heterogeneity and synaptic localization of N-methyl-D-aspartate receptor subunit 1 and AMPA receptor subunit 1. Giustetto M, et al. **Neuroscience** 1997 Feb;76(3):787-98

Upregulation of spinal glutamate receptors in chronic pain. Harris JA, et al. **Neuroscience** 1996 Sep;74(1):7-12

Ionotropic glutamate receptor subtypes in the aged memory-impaired and unimpaired Long-Evans rat. Le Jeune H, et al. **Neuroscience** 1996 Sep;74(2):349-63

AMPA receptors in the rat and primate hippocampus: a possible absence of GluR2/3 subunits in most interneurons. Leranth C, et al. **Neuroscience** 1996 Feb;70(3):631-52

EAAT4, a glutamate transporter with properties of a chloride channel, is predominantly localized in Purkinje cell dendrites, and forms parasagittal compartments in rat cerebellum. Nagao S, et al. **Neuroscience** 1997 Jun; 78(4):929-33

Hippocampal N-methyl-D-aspartate and kainate binding in response to entorhinal cortex aspiration or 192 IgG-saporin lesions of the basal forebrain. Nicolle MM, et al. **Neuroscience** 1997 Apr;77(3):649-59

Glutamate receptors in spinal motoneurons after sciatic nerve transection. Popratiloff A, et al. **Neuroscience** 1996 Oct; 74(4):953-8

An immunocytochemical study of the distribution of AMPA selective glutamate receptor subunits in the normal human motor system. Williams TL, et al. **Neuroscience** 1996 Sep; 74(1):185-98

Excessive glutamate receptor 1 immunoreactivity in adult Down syndrome brains. Arai Y, et al. **Pediatr Neurol** 1996 Oct;15(3):203-6

The neurotransmitter candidature of sulphur-containing excitatory amino acids in the mammalian central nervous system. Thompson GA, et al. **Pharmacol Ther** 1996; 72(1):25-36 (109 ref.)

Glutamate and benzodiazepine receptor autoradiography in rat brain after repetition of alcohol dependence. Ulrichsen J, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):31-41

A unitary non-NMDA receptor short subunit from Xenopus: DNA cloning and expression. Ishimaru H, et al. **Receptors Channels** 1996;4(1):31-49

Postsynaptic glutamate transport at the climbing fiber-Purkinje cell synapse. Otis TS, et al. **Science** 1997 Sep 5;277(5331):1515-8

Cytoskeletal interactions with glutamate receptors at central synapses. Westbrook GL, et al. **Soc Gen Physiol Ser** 1997; 52:163-75 (76 ref.)

Glutamate receptor regulation of rat nucleus accumbens neurons in vivo. Hu XT, et al. **Synapse** 1996 Jul; 23(3):208-18

Glutamatergic effects and depolarization block [letter] Gessa GL, et al. **Trends Neurosci** 1997 Sep;20(9):393-4; discussion 394-5

Glutamatergic effects and depolarization block [letter] Lidsky TI, et al. **Trends Neurosci** 1997 Sep;20(9):393; discussion 394-5

News on glutamate receptors in glial cells. Steinhäuser C, et al. **Trends Neurosci** 1996 Aug;19(8):339-45 (99 ref.)

Ionotropic glutamate receptors: new types and new concepts. Barnard EA. **Trends Pharmacol Sci** 1997 May;18(5):141-8 (47 ref.)

[Reaction of the brain receptor system to the effect of low intensity microwaves] Iurinskaia MM, et al. **Biofizika** 1996 Jul-Aug;41(4):859-65 (Eng. Abstr.) **(Rus)**

[The participation of the serotoninergic system in regulating the activity of the central glutamatergic/aspartatergic and GABA-ergic synapses] Grigor'ev IP, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug-Sep;82(8-9):22-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Intracellular Ca2+ imaging of cultured chicken telencephalic cells: characterization of ionotropic glutamate receptor activation. Lendvai B, et al. **Acta Physiol Hung** 1996; 84(3):305-7

Presynaptic alpha2-adrenoceptors inhibit excitatory synaptic transmission in rat brain stem. Bertolino M, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G654-61

Glutamate receptor subtypes mediate excitatory synaptic responses of rat lateral parabrachial neurons. Zidichouski JA, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1557-67

Glutamate receptors in the central nervous system. Jonas P. **Ann N Y Acad Sci** 1993 Dec 20;707:126-35 (29 ref.)

Quantal properties of single glutamatergic synaptic boutons in thin slices from rat neostriatum. Kasai H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:458-9

Diversity of glutamate receptor subtypes responsible for increase in [Ca2+]i in hippocampal cells. Kudo Y, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:509-10

Spider toxin-binding protein: functional and immunohistochemical study. Shimazaki K, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:427-30

Induction of TRE and CRE binding activities in cultured granule cells stimulated via glutamate receptors. Tsuda M. **Ann N Y Acad Sci** 1993 Dec 20;707:529-30

Effects of some excitatory amino acid antagonists and drugs enhancing gamma-aminobutyric acid neurotransmission on pefloxacin-induced seizures in DBA/2 mice. De Sarro G, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):427-34

NMDA and non-NMDA sensitive [L-3H]glutamate receptor binding in the brain of the Naples high- and low-excitability rats: an autoradiographic study. Sadile AG, et al. **Behav Brain Res** 1996 Aug;78(2):163-74

Unilateral frontal cortex ablation producing neglect causes time-dependent changes in striatal glutamate receptors. Vargo JM, et al. **Behav Brain Res** 1996 May;77(1-2):189-99

A single tryptophan on M2 of glutamate receptor channels confers high permeability to divalent cations. Ferrer-Montiel AV, et al. **Biophys J** 1996 Aug;71(2):749-58

mGluR-evoked augmentation of receptor-mediated cyclic AMP formation in neonatal and adult rat striatum. Cartmell J, et al. **Br J Pharmacol** 1997 Aug;121(7):1263-8

Depression of glutamatergic transmission by nociceptin in the neonatal rat hemisected spinal cord preparation in vitro. Faber ES, et al. **Br J Pharmacol** 1996 Sep;119(2):189-90

NMDA receptor dependence of mGlu-mediated depression of synaptic transmission in the CA1 region of the rat hippocampus. Harvey J, et al. **Br J Pharmacol** 1996 Nov; 119(6):1239-47

Glutamate receptor-induced toxicity in neostriatal cells. Colwell CS, et al. **Brain Res** 1996 Jun 17;724(2):205-12

Intracolonic zymosan produces visceral hyperalgesia in the rat that is mediated by spinal NMDA and non-NMDA receptors. Coutinho SV, et al. **Brain Res** 1996 Oct 14; 736(1-2):7-15

Regulation of cerebral microvessels by glutamatergic mechanisms. Fergus A, et al. **Brain Res** 1997 Apr 18; 754(1-2):35-45

Deafferentiation-induced c-fos gene expression in subthalamic nucleus and substantia nigra reticulata is reduced by non-NMDA receptor antagonist. Saji M, et al. **Brain Res** 1995 Dec 12;703(1-2):165-74

Distribution of AMPA-type glutamate receptor subunits in the chick visual system. Pires RS, et al. **Braz J Med Biol Res** 1997 Jan;30(1):73-7

Glutamatergic transmission in the nucleus tractus solitarii: from server to peripherals in the cardiovascular information superhighway. Talman WT. **Braz J Med Biol Res** 1997 Jan;30(1):1-7 (66 ref.)

Glutamate receptors and gene induction: signalling from receptor to nucleus. Lerea LS. **Cell Signal** 1997 May-Jun; 9(3-4):219-26 (72 ref.)

Formation and retrieval of inhibitory avoidance memory: differential roles of glutamate receptors in the amygdala and medial prefrontal cortex. Liang KC, et al. **Chin J Physiol** 1996;39(3):155-66

The GluR2 hypothesis: Ca(++)-permeable AMPA receptors in delayed neurodegeneration. Bennett MV, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:373-84 (29 ref.)

Functions and roles of glutamate receptors in synaptic transmission and plasticity. Nakanishi S, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:67-75 (39 ref.)

Interaction of ion channels and receptors with PDZ domain proteins. Kornau HC, et al. **Curr Opin Neurobiol** 1997 Jun; 7(3):368-73 (35 ref.)

Long-term enhancement of excitability and the regulation of glutamate receptors by protein kinases. MacDonald JF, et al. **Epilepsy Res Suppl** 1996;12:275-82 (38 ref.)

Stimulation of the ventral subiculum of the hippocampus evokes glutamate receptor-mediated changes in dopamine efflux in the rat nucleus accumbens. Blaha CD, et al. **Eur J Neurosci** 1997 May;9(5):902-11

Interneuron-specific Ca2+ responses linked to metabotropic and ionotropic glutamate receptors in rat hippocampal

slices. Carmant L, et al. **Eur J Neurosci** 1997 Aug; 9(8):1625–35

The cerebral cortex and parafascicular thalamic nucleus facilitate in vivo acetylcholine release in the rat striatum through distinct glutamate receptor subtypes. Consolo S, et al. **Eur J Neurosci** 1996 Dec;8(12):2702–10

Thiocyanate ions inhibit AMPA–activated currents in recombinant non–NMDA receptors expressed in Xenopus laevis oocytes: the role of the GluR2 subunit. Eugène D, et al. **Eur J Neurosci** 1996 Sep;8(9):1983–93

Glutamate depresses release by activating non–conventional glutamate receptors at crayfish nerve terminals. Parnas I, et al. **Eur J Neurosci** 1996 Jan;8(1):116–26

Long–term plasticity in cingulate cortex requires both NMDA and metabotropic glutamate receptor activation. Hedberg TG, et al. **Eur J Pharmacol** 1996 Aug 22; 310(1):19–27

Interactive processing between glutamatergic and cholinergic systems involved in inhibitory avoidance learning of rats. Ohno M, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):145–7

NMDA and non–NMDA receptors mediate taste afferent inputs to cortical taste neurons in rats. Otawa S, et al. **Exp Brain Res** 1995;106(3):391–402

Electrical coupling among Bergmann glial cells and its modulation by glutamate receptor activation. Müller T, et al. **Glia** 1996 Aug;17(4):274–84

Postnatal ontogeny of glutamate receptors in the rat nucleus tractus solitarii and ventrolateral medulla. Rao H, et al. **J Auton Nerv Syst** 1997 Jul 14;65(1):25–32

Effects of nitric oxide on glutamate–gated channels and other ionic channels. Fagni L, et al. **J Chem Neuroanat** 1996 Jun; 10(3–4):231–40 (55 ref.)

Synaptic transmission in the pineal eye of young Xenopus laevis tadpoles: a role for NMDA and non–NMDA glutamate and non–glutaminergic receptors? Jamieson D. **J Comp Physiol [A]** 1997 Aug;181(2):177–86

L–deprenyl protects mesencephalic dopamine neurons from glutamate receptor–mediated toxicity in vitro. Mytilineou C, et al. **J Neurochem** 1997 Jan;68(1):33–9

Intrastriatal infusion of (+/–)–S–nitroso–N–acetylpenicillamine releases vesicular dopamine via an ionotropic glutamate receptor–mediated mechanism: an in vivo microdialysis study in chloral hydrate–anesthetized rats. West AR, et al. **J Neurochem** 1996 May;66(5):1971–80

Adult thalamocortical transmission involves both NMDA and non–NMDA receptors. Gil Z, et al. **J Neurophysiol** 1996 Oct;76(4):2547–54

Glutamate currents in morphologically identified human dentate granule cells in temporal lobe epilepsy. Isokawa M, et al. **J Neurophysiol** 1997 Jun;77(6):3355–69

Glutamate–mediated slow synaptic currents in neonatal rat deep dorsal horn neurons in vitro. Miller BA, et al. **J Neurophysiol** 1996 Sep;76(3):1465–76

Local and propagated dendritic action potentials evoked by glutamate iontophoresis on rat neocortical pyramidal neurons. Schwindt PC, et al. **J Neurophysiol** 1997 May; 77(5):2466–83

Differential activation of glutamate receptor subtypes on a single class of cells enables a neural oscillator to produce distinct behaviors. Spiro JE. **J Neurophysiol** 1997 Aug; 78(2):835–47

Eighth nerve activity regulates intracellular calcium concentration of avian cochlear nucleus neurons via a metabotropic glutamate receptor. Zirpel L, et al. **J Neurophysiol** 1996 Dec;76(6):4127–39

Role of NMDA and non–NMDA ionotropic glutamate receptors in traumatic spinal cord axonal injury. Agrawal SK, et al. **J Neurosci** 1997 Feb 1;17(3):1055–63

Epileptogenesis in vivo enhances the sensitivity of inhibitory presynaptic metabotropic glutamate receptors in basolateral amygdala neurons in vitro. Neugebauer V, et al. **J Neurosci** 1997 Feb 1;17(3):983–95

Glutamate receptor–mediated calcium entry in neurons derived from P19 embryonal carcinoma cells. Canzoniero LM, et al. **J Neurosci Res** 1996 Aug 1;45(3):226–36

Spinal muscarinic, glutamatergic and GABAergic receptor systems in cardiovascular regulation. Feldman DS, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):274–83

Glutamate receptor–mediated synaptic excitation in axons of the lamprey. Cochilla AJ, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):443–57

Optical imaging of spatiotemporal patterns of glutamatergic excitation and GABAergic inhibition in the guinea–pig auditory cortex in vivo. Horikawa J, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):629–38

Electrophysiological and pharmacological characteristics of ionotropic glutamate receptors in medial vestibular nucleus neurons: a whole cell patch clamp study in acutely dissociated neurons. Sakai N, et al. **Jpn J Pharmacol** 1996 Dec;72(4):335–46

Influence of dietary restriction on ionotropic glutamate receptors during aging in C57B1 mice. Magnusson KR. **Mech Ageing Dev** 1997 May;95(3):187–202

Inhibitory glutamate receptor channels. Cleland TA. **Mol Neurobiol** 1996 Oct;13(2):97–136 (114 ref.)

N–palmitoyl–serine and N–palmitoyl–tyrosine phosphoric acids are selective competitive antagonists of the lysophosphatidic acid receptors. Liliom K, et al. **Mol Pharmacol** 1996 Sep;50(3):616–23

Glutamate receptors and schizophrenia: opportunities and caveats [news;comment] Javitt DC. **Mol Psychiatry** 1996 Mar;1(1):16–7. Comment on: Mol Psychiatry 1996 Mar;1(1):41–53.

Rapid alterations in dendrite morphology during sublethal hypoxia or glutamate receptor activation. Park JS, et al. **Neurobiol Dis** 1996;3(3):215–27

Studies of NMDA– and non–NMDA–mediated neurotoxicity in cultured neurons. Deupree DL, et al. **Neurochem Int** 1996 Sep;29(3):255–61

NMDAR1 mRNA expression and glutamate receptor stimulated increase in cytosolic calcium concentration in rat and mouse cerebellar granule cells. Mogensen HS, et al. **Neurochem Int** 1996 Nov;29(5):497–506

Modulation of glutamate receptors by calcium/calmodulin–dependent protein kinase II. Soderling TR. **Neurochem Int** 1996 Apr;28(4):359–61 (27 ref.)

Glutamate receptor agonists evoked Ca(2+)–dependent and Ca(2+)–independent release of [3H]D–aspartate from cultured chick retina cells. Santos PF, et al. **Neurochem Res** 1996 Mar;21(3):361–8

Electrophysiological characterization of non–NMDA glutamate receptors on cultured intermediate lobe cells of the rat pituitary. Poisbeau P, et al. **Neuroendocrinology** 1996 Aug;64(2):162–8

Postsynaptic mechanisms for bidirectional control of MAP2 phosphorylation by glutamate receptors. Quinlan EM, et al. **Neuron** 1996 Feb;16(2):357–68

The effects of metabolic stress on glutamate receptor–mediated depolarizations in the in vitro rat hippocampal slice. Frenguelli BG. **Neuropharmacology** 1997 Jul;36(7):981–91

Peripheral NMDA and non–NMDA glutamate receptors contribute to nociceptive behaviors in the rat formalin test. Davidson EM, et al. **Neuroreport** 1997 Mar 3;8(4):941–6

Ionotropic glutamate receptors and nitric oxide synthesis in the rat striatum. East SJ, et al. **Neuroreport** 1996 Dec 20; 8(1):71–5

Differential regulation of neuronal proteoglycans by activation of excitatory amino acid receptors. Wang W, et al. **Neuroreport** 1997 Feb 10;8(3):659–63

Peripheral administration of NMDA, AMPA or KA results in pain behaviors in rats. Zhou S, et al. **Neuroreport** 1996 Mar 22;7(4):895–900

Modulation of dopamine neuronal activity by glutamate receptor subtypes. Meltzer LT, et al. **Neurosci Biobehav Rev** 1997 Jul;21(4):511–8 (96 ref.)

Behavioural pharmacology of glutamate receptors in the basal ganglia. Schmidt WJ, et al. **Neurosci Biobehav Rev** 1997 Jul;21(4):381–92 (142 ref.)

The amplitude of quantal currents is reduced during short–term depression at neuromuscular synapses in Drosophila. Adelsberger H, et al. **Neurosci Lett** 1997 Mar 28;225(1):5–8

Two pathways of nitric oxide production through glutamate receptors in the rat cerebellum in vivo. Yamada K, et al. **Neurosci Res** 1997 Jun;28(2):93–102

Effects of glutamate receptor agonists and antagonists on Ca2+ uptake in rat hippocampal slices lesioned by glucose deprivation or by kainate. Alici K, et al. **Neuroscience** 1997 Mar;77(1):97–109

Glutamate–dependent long–term presynaptic changes in corticostriatal excitability. Garcia–Munoz M, et al. **Neuroscience** 1996 Jul;73(1):109–19

Release of ATP from cultured rat astrocytes elicited by glutamate receptor activation. Queiroz G, et al. **Neuroscience** 1997 Jun;78(4):1203–8

Glutamate hyperexcitability and seizure–like activity throughout the brain and spinal cord upon relief from chronic glutamate receptor blockade in culture. Van Den Pol AN, et al. **Neuroscience** 1996 Oct;74(3):653–74

Activation kinetics of glutamate receptor channels from wild–type Drosophila muscle. Heckmann M, et al. **Pflugers Arch** 1996 Oct;432(6):1023–9

Glutamate receptors in cortical plasticity: molecular and cellular biology. Kaczmarek L, et al. **Physiol Rev** 1997 Jan; 77(1):217–55 (392 ref.)

Contribution of NMDA and non–NMDA glutamate receptors to locomotor pattern generation in the neonatal rat spinal cord. Beato M, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):877–84

Compartmentalised distribution of GABAA and glutamate receptors in relation to transmitter release sites on the surface of cerebellar neurones. Nusser Z, et al. **Prog Brain Res** 1997;114:109–27 (91 ref.)

Involvement of glutamatergic neurotransmission and protein kinase C in spinal plasticity and the development of chronic pain. Tölle TR, et al. **Prog Brain Res** 1996;110:193–206 (54 ref.)

The role of glutamate in the photic regulation of the suprachiasmatic nucleus. Ebling FJ. **Prog Neurobiol** 1996 Oct;50(2–3):109–32 (209 ref.)

The pharmacology of amino–acid responses in septal neurons. Kumamoto E. **Prog Neurobiol** 1997 Jun;52(3):197–259 (425 ref.)

Involvement of adenosine and glutamate receptors in the induction of c–fos in the striatum by haloperidol. Boegman RJ, et al. **Synapse** 1996 Jan;22(1):70–7

Glutamate receptors and schizophrenia [letter; comment] Ishimaru M, et al. **Trends Neurosci** 1996 Oct;19(10):416–7 . Comment on: Trends Neurosci 1996 May;19(5):171–6.

Contrast adaptation and excitatory amino acid receptors in cat striate cortex. McLean J, et al. **Vis Neurosci** 1996 Nov–Dec;13(6):1069–87

[Functional properties of receptors for glutamate and GABA in cultured trigeminal ganglion neurons] Iida Y. **Kokubyo Gakkai Zasshi** 1997 Mar;64(1):121–32 (Eng. Abstr.) **(Jpn)**

[Study of long–term potentiation and depression of excitatory transmission using mathematic modeling of post–synaptic processes] Murzina BGB, et al. **Dokl Akad Nauk** 1997 Jan; 352(3):420–3 **(Rus)**

ULTRASTRUCTURE

Localisation of ionotropic glutamate receptor subunits, and gamma–aminobutyric acid (GABA) in the monkey amygdala––a double immunolabelling and electron microscopic study. He Y, et al. **J Hirnforsch** 1996; 37(4):479–503

Ultrastructural localization of glutamate receptor subunits (NMDAR1, AMPA GluR1 and GluR2/3) and spinothalamic tract cells. Ye Z, et al. **Neuroreport** 1996 Nov 4;7(15–17):2581–5

RECEPTORS, GLUTAMATE, METABOTROPIC see **RECEPTORS, METABOTROPIC GLUTAMATE**

RECEPTORS, GLYCINE

The glycine receptor. Rajendra S, et al. **Pharmacol Ther** 1997; 73(2):121–46 (222 ref.)

[Molecular function of subtype and subunit drug receptors] Kimura M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep; 108(3):155–6 (0 ref.) **(Jpn)**

AGONISTS

Enhancement of homomeric glycine receptor function by long–chain alcohols and anaesthetics. Mascia MP, et al. **Br J Pharmacol** 1996 Dec;119(7):1331–6

D–cycloserine, a glycine site agonist, reverses working memory failure by hippocampal muscarinic receptor blockade in rats. Ohno M, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):267–71

Chronic administration of a partial agonist at strychnine–insensitive glycine receptors: a novel experimental approach to the treatment of ischemias. Fossom LH, et al. **J Neural Transm Suppl** 1997;49:235–44 (38 ref.)

Antidepressant–like effects of a partial agonist at strychnine–insensitive glycine receptors and a competitive NMDA receptor antagonist. Przegaliński E, et al. **Neuropharmacology** 1997 Jan;36(1):31–7

Altered responsiveness of medullary depressor neurones to L–glutamate and D–serine in SHR rats. Kapoor V, et al. **Neuroreport** 1996 May 31;7(8):1409–12

Glycine activation of human homomeric alpha 1 glycine receptors is sensitive to pressure in the range of the high pressure nervous syndrome. Roberts RJ, et al. **Neurosci Lett** 1996 Apr 19;208(2):125–8

ANALYSIS

Distribution of GABAA, GABAB, and glycine receptors in the central auditory system of the big brown bat, Eptesicus fuscus. Fubara BM, et al. **J Comp Neurol** 1996 May 20;369(1):83–92

Partition of transient and sustained inhibitory glycinergic input to retinal ganglion cells. Han Y, et al. **J Neurosci** 1997 May 15;17(10):3392–400

ANTAGONISTS & INHIBITORS

Synthesis and biological evaluation of a series of quinazoline–2–carboxylic acids and quinazoline–2,4–diones as glycine–NMDA antagonists: a pharmacophore model based approach. Colotta V, et al. **Arch Pharm (Weinheim)** 1997 May;330(5):129–34

Attenuation of nociceptive responses by ACEA–1021, a competitive NMDA receptor/glycine site antagonist, in the mice. Lutfy K, et al. **Brain Res** 1996 Dec 16;743(1–2):17–23

The glycine/NMDA receptor antagonist HA–966 impairs visual recognition memory in rhesus monkeys. Matsuoka N, et al. **Brain Res** 1996 Aug 26;731(1–2):72–8

Effects of GABA and glycine receptor antagonists on the activity and PAG–induced inhibition of rat dorsal horn neurons. Peng YB, et al. **Brain Res** 1996 Oct 14; 736(1–2):189–201

Failure of glycine site NMDA receptor antagonists to protect against L–2–chloropropionic acid–induced neurotoxicity highlights the uniqueness of cerebellar NMDA receptors. Widdowson PS, et al. **Brain Res** 1996 Nov 4;738(2):236–42

Pharmacological characterization of MDL 105,519, an NMDA receptor glycine site antagonist. Baron BM, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):181–92

Anticonvulsant effects by combined treatment with a glycineB receptor antagonist and a polyamine site antagonist in amygdala–kindled rats. Ebert U, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):179–84

Progression of a focal ischemic lesion in rat brain during treatment with a novel glycine/NMDA antagonist: an in vivo three–dimensional diffusion–weighted MR microscopy study. Qiu H, et al. **J Magn Reson Imaging** 1997 Jul–Aug;7(4):739–44

Blockade of FG 7142–induced increased dopamine utilization by the glycine/NMDA receptor antagonist (+)–HA 966. Horger BA, et al. **J Neurochem** 1996 May;66(5):1959–62

Anticonvulsant and behavioral profile of L-701,324, a potent, orally active antagonist at the glycine modulatory site on the N-methyl-D-aspartate receptor complex. Bristow LJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):492-501
Novel antagonists of the inhibitory glycine receptor derived from quinolinic acid compounds. Schmieden V, et al. **Mol Pharmacol** 1996 Nov;50(5):1200-6
Competitive and glycine/NMDA receptor antagonists attenuate withdrawal-induced behaviours and increased hippocampal acetylcholine efflux in morphine-dependent rats. Bristow LJ, et al. **Neuropharmacology** 1997 Feb; 36(2):241-50
Electrophysiological characterisation of the antagonist properties of two novel NMDA receptor glycine site antagonists, L-695,902 and L-701,324. Priestley T, et al. **Neuropharmacology** 1996;35(11):1573-81
EEG seizure activity and behavioral neurotoxicity produced by (+)-MK801, but not the glycine site antagonist L-687,414, in the rat. Tortella FC, et al. **Neuropharmacology** 1996 Apr;35(4):441-8
Glycine antagonism does not block ischemic spontaneous depolarization in the rat. Takaoka S, et al. **Neuroreport** 1997 Mar 24;8(5):1139-42
Structural neurotoxicologic investigation of the glycine antagonist 5-nitro-6,7-dichloroquinoxalinedione (ACEA-1021). Auer RN. **Neurotoxicology** 1997; 18(1):53-62
Competitive NMDA and strychnine-insensitive glycine-site antagonists disrupt prepulse inhibition. Furuya Y, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):909-13
Glycine site antagonist attenuates infarct size in experimental focal ischemia. Postmortem and diffusion mapping studies. Takano K, et al. **Stroke** 1997 Jun;28(6):1255-62; discussion 1263

BIOSYNTHESIS

Embryonic rat spinal cord neurons change expression of glycine receptor subtypes during development in vitro. Withers MD, et al. **J Neurobiol** 1997 Jun 5;32(6):579-92

CHEMISTRY

Structure and biology of inhibitory glycine receptors. Betz H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:109-15 (40 ref.)
Predicted structure of the extracellular region of ligand-gated ion-channel receptors shows SH2-like and SH3-like domains forming the ligand-binding site. Gready JE, et al. **Protein Sci** 1997 May;6(5):983-98

DRUG EFFECTS

Effects of inhalational general anaesthetics on native glycine receptors in rat medullary neurones and recombinant glycine receptors in Xenopus oocytes. Downie DL, et al. **Br J Pharmacol** 1996 Jun;118(3):493-502
The pharmacology of antimyoclonic drugs. Pranzatelli MR. **Clin Neurosci** 1995-96;3(4):246-52 (60 ref.)
Manganese poisoning reduces strychnine-insensitive glycine binding sites in the globus pallidus of the mouse brain. Cano G, et al. **Invest Clin** 1996 Dec;37(4):209-19
Glycine current in rat septal cholinergic neuron in culture: monophasic positive modulation by Zn2+. Kumamoto E, et al. **J Neurophysiol** 1996 Jul;76(1):227-41
alpha-subunit of CaM-KII increases glycine currents in acutely isolated rat spinal neurons. Wang RA, et al. **J Neurophysiol** 1996 Jun;75(6):2651-3
Effects of strychnine-insensitive glycine receptor ligands in rats discriminating dizocilpine or phencyclidine from saline. Witkin JM, et al. **J Pharmacol Exp Ther** 1997 Jan; 280(1):46-52
Sites of alcohol and volatile anaesthetic action on GABA(A) and glycine receptors [see comments] Mihic SJ, et al. **Nature** 1997 Sep 25;389(6649):385-9. Comment in: Nature 1997 Sep 25;389(6649):384-5.
Enhancement of intermediate-term memory by an alpha-1 agonist or a partial agonist at the glycine site of the NMDA receptor. Pussinen R, et al. **Neurobiol Learn Mem** 1997 Jan;67(1):69-74
Role of the strychnine-insensitive glycine binding site in the nucleus accumbens and anterodorsal striatum in sensorimotor gating: a behavioral and microdialysis study. Kretschmer BD, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):131-8

GENETICS

Hyperekplexia: abnormal startle response due to glycine receptor mutations. Andrew M, et al. **Br J Psychiatry** 1997 Feb;170:106-8 (30 ref.)
Expression and mRNA splicing of glycine receptor subunits and gephyrin during neuronal differentiation of P19 cells in vitro, studied by RT-PCR and immunocytochemistry. Heck S, et al. **Brain Res Dev Brain Res** 1997 Feb 20; 98(2):211-20
Molecular and genetic insights into ligand binding and signal transduction at the inhibitory glycine receptor. Schofield PR, et al. **Cold Spring Harb Symp Quant Biol** 1996; 61:333-42
Structure of the human alpha 2 subunit gene of the glycine receptor—use of vectorette and Alu-exon PCR [letter] Monani U, et al. **Genome Res** 1996 Dec;6(12):1200-6
Startle disease in an Italian family by mutation (K276E): The alpha-subunit of the inhibiting glycine receptor. Seri M, et al. **Hum Mutat** 1997;9(2):185-7
Dendritic and postsynaptic localizations of glycine receptor alpha subunit mRNAs. Racca C, et al. **J Neurosci** 1997 Mar 1;17(5):1691-700
Phenotypic heterogeneity and disease course in three murine strains with mutations in genes encoding for alpha 1 and beta glycine receptor subunits. Simon ES. **Mov Disord** 1997 Mar;12(2):221-8
Increased startle responses in mice carrying mutations of glycine receptor subunit genes. Koch M, et al. **Neuroreport** 1996 Feb 29;7(3):806-8
The frameshift mutation oscillator (Glra1(spd-ot)) produces a complete loss of glycine receptor alpha1-polypeptide in mouse central nervous system. Kling C, et al. **Neuroscience** 1997 May;78(2):411-7

METABOLISM

Identification of intracellular and extracellular domains mediating signal transduction in the inhibitory glycine receptor chloride channel. Lynch JW, et al. **EMBO J** 1997 Jan 2;16(1):110-20
Permeation and gating of alpha1 glycine-gated channels expressed at low and high density in Xenopus oocyte. Maammar M, et al. **FEBS Lett** 1997 Sep 1;414(1):99-104
Cell-type specific organization of glycine receptor clusters in the mammalian spinal cord. Alvarez FJ, et al. **J Comp Neurol** 1997 Mar 3;379(1):150-70
Development of adult-type inhibitory glycine receptors in the central auditory system of rats. Friauf E, et al. **J Comp Neurol** 1997 Aug 18;385(1):117-34

PHYSIOLOGY

Glycine: the other inhibitory neurotransmitter. Schofield P. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):219A-223A
Structure and biology of inhibitory glycine receptors. Betz H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:109-15 (40 ref.)
Development of inhibitory synaptic currents in rat spinal neurons. Momiyama A, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:447-8
Inhibitions mediated by glycine and GABAA receptors shape the discharge pattern of bulbar respiratory neurons. Schmid K, et al. **Brain Res** 1996 Feb 26;710(1-2):150-60
Glycine receptors from long-sleep and short-sleep mice: genetic differences in drug sensitivity. Mascia MP, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):169-72
Molecular and genetic insights into ligand binding and signal transduction at the inhibitory glycine receptor. Schofield PR, et al. **Cold Spring Harb Symp Quant Biol** 1996; 61:333-42
Glycinergic transmission regulates dendrite size in organotypic culture. Sanes DH, et al. **J Neurobiol** 1996 Dec;31(4):503-11
Pharmacological evidence for two types of postsynaptic glycinergic receptors on the Mauthner cell of 52-h-old zebrafish larvae. Legendre P. **J Neurophysiol** 1997 May; 77(5):2400-15
Alpha 2 adrenoceptor potentiates glycine receptor-mediated taurine response through protein kinase A in rat substantia nigra neurons. Nabekura J, et al. **J Neurophysiol** 1996 Oct; 76(4):2447-54
Measurement of glycine receptor function by radioactive chloride uptake. Blednov YA, et al. **J Neurosci Methods** 1996 Oct;68(2):253-7
Protein kinase C-mediated enhancement of glycine response in rat sacral dorsal commissural neurones by serotonin. Xu TL, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):491-501
Molecular biology of glycinergic neurotransmission. Zafra F, et al. **Mol Neurobiol** 1997 Jun;14(3):117-42 (187 ref.)
The pharmacology of amino-acid responses in septal neurons. Kumamoto E. **Prog Neurobiol** 1997 Jun;52(3):197-259 (425 ref.)
Glycine receptors in the rod pathway of the macaque monkey retina. Grünert U, et al. **Vis Neurosci** 1996 Jan-Feb; 13(1):101-15
[Strychnine/glycine cytoprotective receptor] Li TC, et al. **Sheng Li Ko Hsueh Chin Chan** 1996 Jan;27(1):61-3 (10 ref.) **(Chi)**

ULTRASTRUCTURE

Synaptogenesis in the rat retina: subcellular localization of glycine receptors, GABA(A) receptors, and the anchoring protein gephyrin. Sassoè-Pognetto M, et al. **J Comp Neurol** 1997 May 5;381(2):158-74

RECEPTORS, GNRH see **RECEPTORS, LHRH**

RECEPTORS, GONADOLIBERIN see **RECEPTORS, LHRH**

RECEPTORS, GONADORELIN see **RECEPTORS, LHRH**

RECEPTORS, GONADOTROPIN

Gonadotropins and their receptors: structure, function and molecular forms. Conference proceedings. Paris, France, May 9-10, 1996. **Mol Cell Endocrinol** 1996 Dec 20; 125(1-2):1-182

GENETICS

Messenger ribonucleic acid for insulin-like growth factors-I and -II, insulin-like growth factor-binding protein-2, gonadotropin receptors, and steroidogenic enzymes in porcine follicles. Yuan W, et al. **Biol Reprod** 1996 Nov; 55(5):1045-54
Clinical manifestations of genetic defects affecting gonadotrophins and their receptors. Conway GS. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):657-63 (41 ref.)
Gonadotropin receptor mutations. Themmen AP, et al. **J Endocrinol** 1997 May;153(2):179-83 (33 ref.)

METABOLISM

Functional consequences of the phosphorylation of the gonadotropin receptors. Ascoli M. **Biochem Pharmacol** 1996 Dec 13;52(11):1647-55 (65 ref.)
Ontogenesis of LH and FSH receptors in postnatal rabbit testes: age-dependent differential expression of long and short RNA transcripts. Laborde P, et al. **J Reprod Fertil** 1996 Sep;108(1):25-30
Modulatory action of epidermal growth factor on differentiated human granulosa lutein cells: cross-talk between ligand activated receptors for EGF and gonadotropin. Budnik LT, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):141-50

PHYSIOLOGY

Polymorphism of gonadotropin action; molecular mechanisms and clinical implications. Huhtaniemi IT. **Acta Neurobiol Exp (Warsz)** 1996;56(3):743-51 (37 ref.)
Gonadotropins and ovarian gonadotropin receptors during the perimenopausal transition period. Vihko KK. **Maturitas** 1996 May;23 Suppl:S19-22 (26 ref.)

RECEPTORS, GRANULOCYTE COLONY-STIMULATING FACTOR

Effect of the chimeric soluble granulocyte colony-stimulating factor receptor on the proliferation of leukemic blast cells from patients with acute myeloblastic leukemia. Asano Y, et al. **Cancer Res** 1997 Aug 15; 57(16):3395-7

BIOSYNTHESIS

Human endometrial expression of granulocyte colony-stimulating factor (G-CSF) and its receptor, stimulation of endometrial G-CSF production by interleukin-1 beta, and G-CSF inhibition of choriocarcinoma cell proliferation. Vandermolen DT, et al. **Am J Reprod Immunol** 1996 Nov;36(5):278-84
Granulocyte colony-stimulating factor receptor expression on human transitional cell carcinoma of the bladder. Tachibana M, et al. **Br J Cancer** 1997;75(10):1489-96
Kinetics of serum granulocyte-colony stimulating factor (G-CSF) concentration and G-CSF receptor expression during G-CSF treatment of cyclophosphamide-treated mice. Matsuzaki G, et al. **Int J Immunopharmacol** 1996 Jun-Jul;18(6-7):363-9
The loss of recombinant human granulocyte colony-stimulating factor and recombinant human TNF-alpha priming effects on the superoxide-generating response in exudated neutrophils is associated with a decrease in their receptor affinities. Niwa M, et al. **J Immunol** 1996 Nov 1;157(9):4147-53

CHEMISTRY

Disulfide structure and N-glycosylation sites of an extracellular domain of granulocyte-colony stimulating factor receptor. Haniu M, et al. **Biochemistry** 1996 Oct 8; 35(40):13040-6
Conformational changes in G-CSF/Receptor complex as investigated by isotope-edited FTIR spectroscopy. Li T, et al. **Biochemistry** 1997 Jul 22;36(29):8849-57
The extracellular region of granulocyte colony-stimulating factor receptor in solution has multiple oligomerization states without ligand. Hiraoka O, et al. **Biomed Pharmacother** 1996;50(6-7):309-14
Dimerization of granulocyte-colony stimulating factor receptor: the Ig plus CRH construct of granulocyte-colony stimulating factor receptor forms a 2:2 complex with a ligand. Horan TP, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):370-5
Solution structure of an extracellular domain containing the WSxWS motif of the granulocyte colony-stimulating factor receptor and its interaction with ligand. Yamasaki K, et al. **Nat Struct Biol** 1997 Jun;4(6):498-504

DEFICIENCY

Impaired production and increased apoptosis of neutrophils in granulocyte colony-stimulating factor receptor-deficient mice. Liu F, et al. **Immunity** 1996 Nov;5(5):491-501

DRUG EFFECTS

Increased G-CSF responsiveness of bone marrow cells from hematopoietic cell phosphatase deficient viable motheaten mice. Tapley P, et al. **Exp Hematol** 1997 Feb;25(2):122-31

RECEPTORS, GRANULOCYTE COLONY-STIMULATING FACTOR

GENETICS

Clinical relevance of point mutations in the cytoplasmic domain of the granulocyte colony-stimulating factor receptor gene in patients with severe congenital neutropenia. Tidow N, et al. **Blood** 1997 Apr 1; 89(7):2369-75

Pathophysiology of Kostmann syndrome: the G-CSF receptor issue. Donadieu J. **Hematol Cell Ther** 1997 Apr; 39(2):102-4 (16 ref.)

Impaired production and increased apoptosis of neutrophils in granulocyte colony-stimulating factor receptor-deficient mice. Liu F, et al. **Immunity** 1996 Nov;5(5):491-501

Severe congenital neutropenia terminating in acute myeloid leukemia: disease progression associated with mutations in the granulocyte-colony stimulating factor receptor gene. Touw IP, et al. **Leuk Res** 1996 Aug;20(8):629-31 (20 ref.)

Rarity of dominant-negative mutations of the G-CSF receptor in patients with blast crisis of chronic myeloid leukemia or de novo acute leukemia. Carapeti M, et al. **Leukemia** 1997 Jul;11(7):1005-8

Mutations in the granulocyte colony-stimulating factor receptor gene in patients with severe congenital neutropenia. Dong F, et al. **Leukemia** 1997 Jan;11(1):120-5

Absence of granulocyte colony-stimulating factor signaling and neutrophil development in CCAAT enhancer binding protein alpha-deficient mice. Zhang DE, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):569-74

IMMUNOLOGY

Neutralising antibodies to the granulocyte colony-stimulating factor receptor recognise both the immunoglobulin-like domain and the cytokine receptor homologous domain. Layton JE, et al. **Growth Factors** 1997;14(2-3):117-30

METABOLISM

The extracellular region of granulocyte colony-stimulating factor receptor in solution has multiple oligomerization states without ligand. Hiraoka O, et al. **Biomed Pharmacother** 1996;50(6-7):309-14

The structural and functional basis of cytokine receptor activation: lessons from the common beta subunit of the granulocyte-macrophage colony-stimulating factor, interleukin-3 (IL-3), and IL-5 receptors. Bagley CJ, et al. **Blood** 1997 Mar 1;89(5):1471-82 (87 ref.)

Tyrosine residues in the granulocyte colony-stimulating factor (G-CSF) receptor mediate G-CSF-induced differentiation of murine myeloid leukemic (M1) cells. Nicholson SE, et al. **J Biol Chem** 1996 Oct 25; 271(43):26947-53

Distinct roles for leukemia inhibitory factor receptor alpha-chain and gp130 in cell type-specific signal transduction. Starr R, et al. **J Biol Chem** 1997 Aug 8; 272(32):19982-6

Leptin receptor (OB-R) signaling. Cytoplasmic domain mutational analysis and evidence for receptor homo-oligomerization [published erratum appears in J Biol Chem 1997 May 2;272(18):12248] White DW, et al. **J Biol Chem** 1997 Feb 14;272(7):4065-71

Granulocyte colony-stimulating factor receptor at various differentiation stages of normal and leukemic hematopoietic cells. Shinjo K, et al. **Leuk Lymphoma** 1997 Mar; 25(1-2):37-46 (49 ref.)

Protein tyrosine kinases in granulocyte colony stimulating factor receptor signal transduction, myeloid cell proliferation, and neutrophil activation. Deshpande RV, et al. **Life Sci** 1997;60(9):587-604

Tyrosine 763 of the murine granulocyte colony-stimulating factor receptor mediates Ras-dependent activation of the JNK/SAPK mitogen-activated protein kinase pathway. Rausch O, et al. **Mol Cell Biol** 1997 Mar;17(3):1170-9

Solution structure of an extracellular domain containing the WSxWS motif of the granulocyte colony-stimulating factor receptor and its interaction with ligand. Yamasaki K, et al. **Nat Struct Biol** 1997 Jun;4(6):498-504

Characterization of the receptor binding determinants of granulocyte colony stimulating factor. Young DC, et al. **Protein Sci** 1997 Jun;6(6):1228-36

PHYSIOLOGY

Soluble thrombopoietin receptor (Mpl) and granulocyte colony-stimulating factor receptor directly stimulate proliferation of primitive hematopoietic progenitors of mice in synergy with steel factor or the ligand for Flt3/Flk2. Ku H, et al. **Blood** 1996 Dec 1;88(11):4124-31

Jak1 plays an essential role for receptor phosphorylation and Stat activation in response to granulocyte colony-stimulating factor. Shimoda K, et al. **Blood** 1997 Jul 15;90(2):597-604

Tec protein tyrosine kinase is involved in the signaling mechanism of granulocyte colony-stimulating factor receptor. Miyazato A, et al. **Cell Growth Differ** 1996 Sep; 7(9):1135-9

Advances in understanding postreceptor signaling in response to granulocyte colony-stimulating factor. Tidow N, et al. **Curr Opin Hematol** 1997 May;4(3):171-5 (27 ref.)

Dissociation of the Jak kinase pathway from G-CSF receptor signaling in neutrophils. Avalos BR, et al. **Exp Hematol** 1997 Feb;25(2):160-8

Involvement of STAT3 in the granulocyte colony-stimulating factor-induced differentiation of myeloid cells. Shimozaki K, et al. **J Biol Chem** 1997 Oct 3;272(40):25184-9

[Signal transduction through G-CSF receptors] Shimoda K, et al. **Rinsho Ketsueki** 1997 Mar;38(3):193-5 (10 ref.) **(Jpn)**

RECEPTORS, GRANULOCYTE-MACROPHAGE COLONY-STIMULATING FACTOR

[Granulocyte-macrophage colony-stimulating factor receptor] Kurata H. **Nippon Rinsho** 1997 Apr;55 Suppl 2:542-5 (14 ref.) **(Jpn)**

ANALYSIS

Flow cytometric detection and quantitative analysis of the GM-CSF receptor in human granulocytes and comparison with the radioligand binding assay. Stacchini A, et al. **Cytometry** 1996 Aug 1;24(4):374-81

Flow cytometry measurement of GM-CSF receptors in acute leukemic blasts, and normal hemopoietic cells. Lanza F, et al. **Leukemia** 1997 Oct;11(10):1700-10

ANTAGONISTS & INHIBITORS

Inhibition of proliferation and induction of apoptosis in juvenile myelomonocytic leukemic cells by the granulocyte-macrophage colony-stimulating factor analogue E21R. Iversen PO, et al. **Blood** 1996 Oct 1; 88(7):2634-9

BIOSYNTHESIS

Upregulation of alpha GM-CSF-receptor in nonatopic asthma but not in atopic asthma. Kotsimbos AT, et al. **J Allergy Clin Immunol** 1997 May;99(5):666-72

MEL-P, a GM-CSF-producing human melanoma cell line [published erratum appears in Melanoma Res 1996 Aug;6(4):337] Ciotti P, et al. **Melanoma Res** 1996 Jun; 6(3):203-13

Coexpression of Kit and the receptors for erythropoietin, interleukin 6 and GM-CSF on hemopoietic cells. de Jong MO, et al. **Stem Cells** 1997;15(4):275-85

CHEMISTRY

The structural basis of the biological actions of the GM-CSF receptor. Nicola NA, et al. **Ciba Found Symp** 1997; 204:19-27; discussion 27-32 (23 ref.)

Oligomerization of the soluble granulocyte-macrophage colony-stimulating factor receptor: identification of the functional ligand-binding species. Brown CB, et al. **Cytokine** 1997 Apr;9(4):219-25

Cytoplasmic domains of the common beta-chain of the GM-CSF/IL-3/IL-5 receptors that are required for inducing differentiation or clonal suppression in myeloid leukaemic cell lines. Smith A, et al. **EMBO J** 1997 Feb 3;16(3):451-64

Involvement of the fourth alpha-helix of mouse granulocyte-macrophage colony-stimulating factor in binding to the alpha-subunit of the receptor complex. Altmann SW, et al. **Growth Factors** 1995;12(4):251-62

A dominant negative granulocyte-macrophage colony-stimulating factor receptor alpha chain reveals the multimeric structure of the receptor complex. Lia F, et al. **J Biol Chem** 1996 Nov 8;271(45):28287-93

Functional replacement of cytokine receptor extracellular domains by leucine zippers. Patel N, et al. **J Biol Chem** 1996 Nov 29;271(48):30386-91

Crucial role of the residue R280 at the F'-G' loop of the human granulocyte/macrophage colony-stimulating factor receptor alpha chain for ligand recognition. Rajotte D, et al. **J Exp Med** 1997 Jun 2;185(11):1939-50

DEFICIENCY

Hematopoiesis in mice lacking the entire granulocyte-macrophage colony-stimulating factor/interleukin-3/interleukin-5 functions. Nishinakamura R, et al. **Blood** 1996 Oct 1;88(7):2458-64

[Mice deficient for the IL-3/GM-CSF/IL-5 beta receptors] Nishinakamura R. **Rinsho Ketsueki** 1997 Mar;38(3):181-5 (8 ref.) **(Jpn)**

DRUG EFFECTS

Human granulocyte-macrophage colony-stimulating factor (hGM-CSF) induces inhibition of intrathymic T-cell development in hGM-CSF receptor transgenic mice. Yasuda Y, et al. **Blood** 1997 Feb 15;89(4):1349-56

A recombinant fusion toxin targeted to the granulocyte-macrophage colony-stimulating factor receptor. Bendel AE, et al. **Leuk Lymphoma** 1997 Apr; 25(3-4):257-70

Granulocyte-macrophage colony-stimulating factor receptor-targeted therapy of chemotherapy- and radiation-resistant human myeloid leukemias. Perentesis JP, et al. **Leuk Lymphoma** 1997 Apr;25(3-4):247-56

GENETICS

Expression of activated mutants of the human interleukin-3/interleukin-5/granulocyte-macrophage colony-stimulating factor receptor common beta subunit in primary hematopoietic cells induces factor-independent proliferation and differentiation. McCormack MP, et al. **Blood** 1997 Aug 15;90(4):1471-81

Contribution of both STAT and SRF/TCF to c-fos promoter activation by granulocyte-macrophage colony-stimulating factor. Rajotte D, et al. **Blood** 1996 Oct 15;88(8):2906-16

Analysis of the coding sequence for the GM-CSF receptor alpha and beta chains in patients with juvenile chronic myeloid leukemia (JCML). Freeburn RW, et al. **Exp Hematol** 1997 Apr;25(4):306-11

Endogenous GM-CSF is involved as an autocrine growth factor for human osteoblastic cells. Modrowski D, et al. **J Cell Physiol** 1997 Jan;170(1):35-46

METABOLISM

Establishment of human granulocyte-macrophage colony stimulating factor producing transgenic SCID mice. Miyakawa Y, et al. **Br J Haematol** 1996 Dec;95(3):437-42

Independent regulation of invasion and anchorage-independent growth by different autophosphorylation sites of the macrophage colony-stimulating factor 1 receptor. Sapi E, et al. **Cancer Res** 1996 Dec 15;56(24):5704-12

Oligomerization of the soluble granulocyte-macrophage colony-stimulating factor receptor: identification of the functional ligand-binding species. Brown CB, et al. **Cytokine** 1997 Apr;9(4):219-25

Involvement of the fourth alpha-helix of mouse granulocyte-macrophage colony-stimulating factor in binding to the alpha-subunit of the receptor complex. Altmann SW, et al. **Growth Factors** 1995;12(4):251-62

The apoptosis-inducing granulocyte-macrophage colony-stimulating factor (GM-CSF) analog E21R functions through specific regions of the heterodimeric GM-CSF receptor and requires interleukin-1beta-converting enzyme-like proteases. Iversen PO, et al. **J Biol Chem** 1997 Apr 11;272(15):9877-83

A single tyrosine residue in the membrane-proximal domain of the granulocyte-macrophage colony-stimulating factor, interleukin (IL)-3, and IL-5 receptor common beta-chain is necessary and sufficient for high affinity binding and signaling by all three ligands. Woodcock JM, et al. **J Biol Chem** 1996 Oct 18;271(42):25999-6006

Tyrosine phosphorylation of Shc is not required for proliferation or viability signaling by granulocyte-macrophage colony-stimulating factor in hematopoietic cell lines. Durstin M, et al. **J Immunol** 1996 Jul 15;157(2):534-40

Binding of human GM-CSF to synthetic peptides of the alpha subunit of its receptor. Di Bartolo V, et al. **J Recept Signal Transduct Res** 1996 Jan-Mar;16(1-2):77-92

The beta c component of the granulocyte-macrophage colony-stimulating factor (GM-CSF)/interleukin 3 (IL-3)/IL-5 receptor interacts with a hybrid GM-CSF/erythropoietin receptor to influence proliferation and beta-globin mRNA expression. Jubinsky PT, et al. **Mol Med** 1996 Nov;2(6):766-73

PHYSIOLOGY

Hematopoietic and lymphopoietic responses in human granulocyte-macrophage colony-stimulating factor (GM-CSF) receptor transgenic mice injected with human GM-CSF. Nishijima I, et al. **Blood** 1997 Aug 1;90(3):1031-8

Receptors that induce erythroid differentiation of Ba/F3 cells: structural requirements and effect on STAT5 binding. Pless M, et al. **Blood** 1997 May 1;89(9):3175-85

Characterization of cis-acting sequences and trans-acting signals regulating early growth response 1 and c-fos promoters through the granulocyte-macrophage colony-stimulating factor receptor in BA/F3 cells. Watanabe S, et al. **Blood** 1997 Feb 15;89(4):1197-206

The influence of granulocyte/macrophage colony-stimulating factor on dendritic cell levels in mouse lymphoid organs. Vremec D, et al. **Eur J Immunol** 1997 Jan;27(1):40-4

Interleukin-3 (IL-3) and granulocyte-macrophage colony-stimulating factor (GM-CSF) can induce differentiation of chronic B cell leukemia expressing the alpha subunit of IL-3 and GM-CSF receptor. Shiiba M, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:12-5

Roles of JAK kinases in human GM-CSF receptor signal transduction. Watanabe S, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S183-91 (26 ref.)

The cytoplasmic domain of granulocyte-macrophage colony-stimulating factor (GM-CSF) receptor alpha subunit is essential for both GM-CSF-mediated growth and differentiation. Matsuguchi T, et al. **J Biol Chem** 1997 Jul 11;272(28):17450-9

GM-CSF and its effects on replication of HIV-1 in cells of macrophage lineage. Crowe SM, et al. **J Leukoc Biol** 1997 Jul;62(1):41-8 (100 ref.)

Ricin fusion toxin targeted to the human granulocyte-macrophage colony stimulating factor receptor is selectively toxic to acute myeloid leukemia cells. Burbage C, et al. **Leuk Res** 1997 Jul;21(7):681-90

Signal transduction by the GM-CSF, IL-3 and IL-5 receptors. Miyajima A, et al. **Leukemia** 1997 Apr;11 Suppl 3:418-22 (16 ref.)

Roles of JAK kinase in human GM-CSF receptor signals. Watanabe S, et al. **Leukemia** 1997 Apr;11 Suppl 3:76-8

RECEPTORS, GROWTH FACTOR

Serine/threonine kinase receptors: mediators of transforming growth factor beta family signals. Massagué J, et al. **Cancer Surv** 1996;27:41–64 (128 ref.)

[Receptors for factors of the VEGF (Vascular Endothelial Growth Family)] Fournier E, et al. **Bull Cancer** 1997 Apr; 84(4):397–405 (61 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Cell signaling and cancer treatment. Corda D, et al. **Ann Oncol** 1997 May;8(5):429–33

Expression of keratinocyte growth factor and its receptor in human breast cancer. Bansal GS, et al. **Br J Cancer** 1997; 75(11):1567–74

Distinct patterns of expression of keratinocyte growth factor and its receptor in endometrial carcinoma. Siegfried S, et al. **Cancer** 1997 Mar 15;79(6):1166–71

Oncogenes and growth factor receptors as diagnostic and prognostic markers in precancers and cancers of the oral mucosa. Burkhardt A. **Curr Top Pathol** 1996;90:223–39 (136 ref.)

The effects of ageing on wound healing: immunolocalisation of growth factors and their receptors in a murine incisional model. Ashcroft GS, et al. **J Anat** 1997 Apr;190 (Pt 3):351–65

Correlation between expression of vascular endothelial growth factor and tumor vascularity, and patient outcome in human gastric carcinoma. Tanigawa N, et al. **J Clin Oncol** 1997 Feb;15(2):826–32

Immunolocalization of type I or type II activin receptors in the rat brain. Funaba M, et al. **J Neuroendocrinol** 1997 Feb;9(2):105–11

Estrogen receptor, growth factor receptor and protooncogene protein activities and possible signal transduction crosstalk in estrogen dependent and independent breast cancer cell lines. Mohamood AS, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):1–17

Expression and localization of inhibin/activin subunits and activin receptors in the normal rat prostate. Ying SY, et al. **Life Sci** 1997;60(6):397–401

Molecular and immunohistochemical study of class I growth factor receptors in squamous cell lung carcinomas. Gorgoulis V, et al. **Pathol Res Pract** 1995 Oct; 191(10):973–81

BIOSYNTHESIS

Bone morphogenetic protein receptors and activin receptors are highly expressed in ossified ligament tissues of patients with ossification of the posterior longitudinal ligament. Yonemori K, et al. **Am J Pathol** 1997 Apr;150(4):1335–47

Identification and developmental expression of two activin receptors in baboon lung. Zhao Y, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):50–7

Differential expression of transforming growth factor-beta, basic fibroblast growth factor, and their receptors in CD34+ hematopoietic progenitor cells from patients with myelofibrosis and myeloid metaplasia. Le Bousse-Kerdilès MC, et al. **Blood** 1996 Dec 15;88(12):4534–46

Expression of growth factor receptors in unilineage differentiation culture of purified hematopoietic progenitors. Testa U, et al. **Blood** 1996 Nov 1; 88(9):3391–406

Over expression of vascular endothelial growth factor and its receptor during the development of estrogen-induced rat pituitary tumors may mediate estrogen-initiated tumor angiogenesis. Banerjee SK, et al. **Carcinogenesis** 1997 Jun; 18(6):1155–61

Histomorphological and immunohistochemical characterization of colonic aberrant crypt foci in rats: relationship to growth factor expression. Thorup I. **Carcinogenesis** 1997 Mar;18(3):465–72

Modulation of keratinocyte growth factor receptor expression in human cultured keratinocytes. Marchese C, et al. **Cell Growth Differ** 1997 Sep;8(9):989–97

Regulation of flt-1 expression during mouse embryogenesis suggests a role in the establishment of vascular endothelium. Fong GH, et al. **Dev Dyn** 1996 Sep; 207(1):1–10

Bovine activin receptor type IIB messenger ribonucleic acid displays alternative splicing involving a sequence homologous to Src-homology 3 domain binding sites. Ethier JF, et al. **Endocrinology** 1997 Jun;138(6):2425–34

Effects of UVB irradiation on keratinocyte growth factor (KGF) and receptor (KGFR) expression in cultured human keratinocytes. Zhou Y, et al. **Exp Dermatol** 1996 Jun; 5(3):138–44

Osteoblasts express types I and II activin receptors during early intramembranous and endochondral bone formation. Shuto T, et al. **J Bone Miner Res** 1997 Mar;12(3):403–11

Growth factor receptor expression during in vitro differentiation of partially purified populations containing murine stem cells. Ashihara E, et al. **J Cell Physiol** 1997 Jun;171(3):343–56

Expression and localization of inhibin/activin and activin receptors in GH3 cells, a rat pituitary adenocarcinoma cell line. Ying C, et al. **J Endocrinol Invest** 1996 Jan;19(1):6–11

Growth factor receptors and medulloblastoma. Goumnerova LC. **J Neurooncol** 1996 Jul;29(1):85–9 (17 ref.)

C-met proto-oncogene expression in benign and malignant human renal tissues. Pisters LL, et al. **J Urol** 1997 Sep;158(3 Pt 1):724–8

Uterine smooth muscle cells express functional receptors (flt-1 and KDR) for vascular permeability factor/vascular endothelial growth factor. Brown LF, et al. **Lab Invest** 1997 Feb;76(2):245–55

A role for notochord in axial vascular development revealed by analysis of phenotype and the expression of VEGR-2 in zebrafish flh and ntl mutant embryos. Sumoy L, et al. **Mech Dev** 1997 Apr;63(1):15–27

The melanoma-specific XMEL antigen is expressed in dysplastic naevi. Tron VA, et al. **Melanoma Res** 1997 Jun; 7(3):209–13

Hypoxia and cobalt stimulate vascular endothelial growth factor receptor gene expression in rats. Sandner P, et al. **Pflugers Arch** 1997 Apr;433(6):803–8

Ligand-dependent development of the endothelial and hemopoietic lineages from embryonic mesodermal cells expressing vascular endothelial growth factor receptor 2. Eichmann A, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5141–6

BLOOD

Biomarkers of gene expression: growth factors and oncoproteins. Brandt-Rauf PW. **Environ Health Perspect** 1997 Jun;105 Suppl 4:807–16 (125 ref.)

CHEMISTRY

Identification and cloning of a novel type I serine/threonine kinase receptor of the TGF-beta/BMP superfamily in rat prostate. Kang Y, et al. **Biochem Mol Biol Int** 1996 Nov; 40(5):993–1001

Asparagine-344 is a key residue for ligand binding in keratinocyte growth factor receptor. Gray TE, et al. **Biochemistry** 1996 Dec 10;35(49):15640–5

Ligand-induced dimerization of growth factor receptors: variations on the theme. Heldin CH, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):3–10 (59 ref.)

The biology of vascular endothelial growth factor. Ferrara N, et al. **Endocr Rev** 1997 Feb;18(1):4–25 (250 ref.)

Kinase-inactive splice variants of the activin type I receptor [letter] McKeehan K, et al. **In Vitro Cell Dev Biol Anim** 1996 Mar;32(3):131–4

Vascular endothelial growth factor and its receptors in normal human testicular tissue. Ergün S, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):9–20

The mouse rostral cerebellar malformation gene encodes an UNC-5-like protein. Ackerman SL, et al. **Nature** 1997 Apr 24;386(6627):838–42

Vertebrate homologues of C. elegans UNC-5 are candidate netrin receptors. Leonardo ED, et al. **Nature** 1997 Apr 24;386(6627):833–8

DRUG EFFECTS

Changes in protein and mRNA levels of growth factor/growth factor receptors in rat livers after administration of phenobarbitone or methylclofenapate. Garcia-Allan C, et al. **Arch Toxicol** 1997;71(7):409–15

Ovarian activin receptor subtype and follistatin gene expression in rats: reciprocal regulation by gonadotropins. Aloi JA, et al. **Biol Reprod** 1997 Jun;56(6):1565–9

Follistatins neutralize activin bioactivity by inhibition of activin binding to its type II receptors. de Winter JP, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):105–14

A subclass of tumor-inhibitory monoclonal antibodies to ErbB-2/HER2 blocks crosstalk with growth factor receptors. Klapper LN, et al. **Oncogene** 1997 May 1; 14(17):2099–109

Cell-surface perturbations of the epidermal growth factor and vascular endothelial growth factor receptors by phosphorothioate oligodeoxynucleotides. Rockwell P, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6523–8

Targeted therapy for prostate cancer: the Memorial Sloan-Kettering Cancer Center approach. Slovin SF, et al. **Semin Oncol** 1996 Dec;23(6 Suppl 14):41–8 (61 ref.)

GENETICS

The molecular biology of hormone and growth factor receptors in meningiomas. Black P, et al. **Acta Neurochir Suppl (Wien)** 1996;65:50–3

Anti-angiogenic gene therapy of malignant glioma. Stratmann A, et al. **Acta Neurochir Suppl (Wien)** 1997; 68:105–10 (30 ref.)

Expression of vascular endothelial growth factor and its receptors in pilocytic astrocytoma. Leung SY, et al. **Am J Surg Pathol** 1997 Aug;21(8):941–50

Changes in protein and mRNA levels of growth factor/growth factor receptors in rat livers after administration of phenobarbitone or methylclofenapate. Garcia-Allan C, et al. **Arch Toxicol** 1997;71(7):409–15

Identification and cloning of a novel type I serine/threonine kinase receptor of the TGF-beta/BMP superfamily in rat prostate. Kang Y, et al. **Biochem Mol Biol Int** 1996 Nov; 40(5):993–1001

Ovarian activin receptor subtype and follistatin gene expression in rats: reciprocal regulation by gonadotropins. Aloi JA, et al. **Biol Reprod** 1997 Jun;56(6):1565–9

Expression of vascular endothelial growth factor (VEGF) and VEGF-receptor messenger ribonucleic acids in the peri-implantation rabbit uterus. Das SK, et al. **Biol Reprod** 1997 Jun;56(6):1390–9

PCR phenotyping of cytokines, growth factors and their receptors and bone matrix proteins in human osteoblast-like cell lines. Bilbe G, et al. **Bone** 1996 Nov;19(5):437–45

A requirement for Flk1 in primitive and definitive hematopoiesis and vasculogenesis. Shalaby F, et al. **Cell** 1997 Jun 13;89(6):981–90

Expression of serine/threonine kinase receptors including the bone morphogenetic factor type II receptor in the developing and adult rat brain. Söderström S, et al. **Cell Tissue Res** 1996 Nov;286(2):269–79

Characterization of the endothelium-specific murine vascular endothelial growth factor receptor-2 (Flk-1) promoter. Rönicke V, et al. **Circ Res** 1996 Aug;79(2):277–85

Cloning of the bovine activin receptor type II gene (ACVR2) and mapping to chromosome 2 (BTA2). Flavin N, et al. **Cytogenet Cell Genet** 1996;75(1):25–9

Cloning of rat type I receptor cDNA for bone morphogenetic protein-2 and bone morphogenetic protein-4, and the localization compared with that of the ligands. Ikeda T, et al. **Dev Dyn** 1996 Jul;206(3):318–29

Flk-1 expression defines a population of early embryonic hematopoietic precursors. Kabrun N, et al. **Development** 1997 May;124(10):2039–48

Analysis of growth factor and receptor mRNA levels during development of the rat seminal vesicle and prostate. Thomson AA, et al. **Development** 1997 Jun;124(12):2431–9

Habrecl, a novel serine/threonine kinase TGF-beta type I-like receptor, has a specific cellular expression suggesting function in the developing organism and adult brain. Lorentzon M, et al. **Exp Neurol** 1996 Dec;142(2):351–60

Characterization of the promoter region for flt-1 tyrosine kinase gene, a receptor for vascular endothelial growth factor. Ikeda T, et al. **Growth Factors** 1996;13(3–4):151–62

C-kit mutations and mast cell disorders. A model of activating mutations of growth factor receptors. Pignon JM. **Hematol Cell Ther** 1997 Apr;39(2):114–6 (14 ref.)

Sequence of keratinocyte growth factor and keratinocyte growth factor receptor orthologs [monkey, pig, rabbit] [letter] Doyle MP, et al. **In Vitro Cell Dev Biol Anim** 1996 Jun;32(6):318–20

Kinase-inactive splice variants of the activin type I receptor [letter] McKeehan K, et al. **In Vitro Cell Dev Biol Anim** 1996 Mar;32(3):131–4

Molecular cloning of the Xenopus c-met/hepatocyte growth factor receptor and its regional expression during early development. Aoki S, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):961–8

Differential transcriptional regulation of the two vascular endothelial growth factor receptor genes. Flt-1, but not Flk-1/KDR, is up-regulated by hypoxia. Gerber HP, et al. **J Biol Chem** 1997 Sep 19;272(38):23659–67

Nuclear protein interactions with the human KDR/flk-1 promoter in vivo. Regulation of Sp1 binding is associated with cell type-specific expression. Patterson C, et al. **J Biol Chem** 1997 Mar 28;272(13):8410–6

High levels of fetal membrane activin beta A and activin receptor IIB mRNAs and augmented concentration of amniotic fluid activin A in women in term or preterm labor. Petraglia F, et al. **J Endocrinol** 1997 Jul;154(1):95–101

Hypoxia regulates the expression of vascular permeability factor/vascular endothelial growth factor (VPF/VEGF) and its receptors in human skin. Detmar M, et al. **J Invest Dermatol** 1997 Mar;108(3):263–8

Cloning and characterization of goldfish activin type IIB receptor. Ge W, et al. **J Mol Endocrinol** 1997 Aug; 19(1):47–57

Expression of growth factor ligand and receptor genes in rat cancellous bone trabeculae and marrow. Watson PH, et al. **J Mol Endocrinol** 1996 Aug;17(1):45–54

Activin receptor mRNA expression by neurons of the avian ciliary ganglion. Kos K, et al. **J Neurobiol** 1997 Jan; 32(1):33–44

Regulation of activin type-II receptor mRNA levels in rat hypothalamus by estradiol in vivo. Trudeau VL, et al. **J Neuroendocrinol** 1996 May;8(5):395–401

Expression of growth factor receptors is not a prognostic indicator in young patients with colorectal cancer. Langlois N, et al. **J R Coll Surg Edinb** 1997 Apr;42(2):98–101

Development and regenerative ability of bladder in the transgenic epidermal growth factor receptor gene knockout mouse. DiSandro MJ, et al. **J Urol** 1997 Sep;158(3 Pt 2):1058–65

Induction of VEGF and VEGF receptor gene expression by hypoxia: divergent regulation in vivo and in vitro. Sandner P, et al. **Kidney Int** 1997 Feb;51(2):448–53

Fluorescent in situ localization of the bovine activin receptor type IIA locus on chromosome 2 (2q2.3–2.4). Monteagudo LV, et al. **Mamm Genome** 1996 Nov;7(11):869

A chimeric serine/threonine kinase receptor system reveals the potential of multiple type II receptors to cooperate with transforming growth factor-beta type I receptor. Muramatsu M, et al. **Mol Biol Cell** 1997 Mar;8(3):469–80

Vascular endothelial growth factor and its receptors in normal human testicular tissue. Ergün S, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):9–20

Cloning of human bone morphogenetic protein type IB receptor (BMPR-IB) and its expression in prostate cancer in comparison with other BMPRs. Ide H, et al. **Oncogene** 1997 Mar 20;14(11):1377–82

Pediatric brain tumors express multiple receptor tyrosine kinases including novel cell adhesion kinases. Weiner HL, et al. **Pediatr Neurosurg** 1996 Aug;25(2):64–71; discussion

71-2
Differential gene expression of transforming growth factors alpha and beta, epidermal growth factor, keratinocyte growth factor, and their receptors in fetal and adult human prostatic tissues and cancer cell lines. Dahiya R, et al. **Urology** 1996 Dec;48(6):963-70
[Interaction markers of 3-dimensional cell cultures for characterization of reproduction of in-vivo growth] String A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:69-73 (Eng. Abstr.) **(Ger)**
[Correlation of neovascularization and vascular endothelial growth factor in human renal cell carcinoma] Sato K, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(4):389-94 (17 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Tat-human immunodeficiency virus-1 induces human monocyte chemotaxis by activation of vascular endothelial growth factor receptor-1. Mitola S, et al. **Blood** 1997 Aug 15;90(4):1365-72

ISOLATION & PURIFICATION

[Identification of receptors for bone morphogenetic proteins] Nishitoh H. **Kokubyo Gakkai Zasshi** 1997 Mar;64(1):24-37 (Eng. Abstr.) **(Jpn)**

METABOLISM

Vascular growth factors and receptors in capillary hemangioblastomas and hemangiopericytomas. Hatva E, et al. **Am J Pathol** 1996 Mar;148(3):763-75
VEGF, flk-1, and flt-1 expression in a rat myocardial infarction model of angiogenesis. Li J, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1803-11
Type I receptor serine-threonine kinase preferentially expressed in pulmonary blood vessels. Panchenko MP, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):L547-58
Evidence that embryonic kidney cells expressing flk-1 are intrinsic, vasculogenic angioblasts. Robert B, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F744-53
Vascular endothelial growth factor and its receptor correlate with angiogenesis and survival in pulmonary adenocarcinoma. Takanami I, et al. **Anticancer Res** 1997 Jul-Aug;17(4A):2811-4
The phosphorylated 1169-tyrosine containing region of flt-1 kinase (VEGFR-1) is a major binding site for PLCgamma. Sawano A, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):487-91
Virocrine transformation. Drummond-Barbosa D, et al. **Biochim Biophys Acta** 1997 Feb 22;1332(1):M1-17 (148 ref.)
Characterization of signal transduction pathways in human bone marrow endothelial cells. Liu ZY, et al. **Blood** 1997 Sep 15;90(6):2253-9
VEGF mRNA levels in placentae from pregnancies complicated by pre-eclampsia [see comments] Cooper JC, et al. **Br J Obstet Gynaecol** 1996 Dec;103(12):1191-6. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):972.
Biological properties of VEGF/VPF receptors. Terman BI, et al. **Cancer Metastasis Rev** 1996 Jun;15(2):159-63 (42 ref.)
Up-regulation of flk-1/vascular endothelial growth factor receptor 2 by its ligand in a cerebral slice culture system. Kremer C, et al. **Cancer Res** 1997 Sep 1;57(17):3852-9
Flt-1 but not KDR/Flk-1 tyrosine kinase is a receptor for placenta growth factor, which is related to vascular endothelial growth factor. Sawano A, et al. **Cell Growth Differ** 1996 Feb;7(2):213-21
Functional upregulation of the vascular endothelial growth factor receptor KDR by hypoxia [see comments] Waltenberger J, et al. **Circulation** 1996 Oct 1;94(7):1647-54 . Comment in: Circulation 1996 Oct 1;94(7):1496-8.
Cytoplasmic polyadenylation of activin receptor mRNA and the control of pattern formation in Xenopus development. Simon R, et al. **Dev Biol** 1996 Oct 10;179(1):239-50
A Xenopus type I activin receptor mediates mesodermal but not neural specification during embryogenesis. Chang C, et al. **Development** 1997 Feb;124(4):827-37
VEGF-C receptor binding and pattern of expression with VEGFR-3 suggests a role in lymphatic vascular development. Kukk E, et al. **Development** 1996 Dec; 122(12):3829-37
Keratinocyte growth factor and its receptor are involved in regulating early lung branching. Post M, et al. **Development** 1996 Oct;122(10):3107-15
An activated form of type I serine/threonine kinase receptor TARAM-A reveals a specific signalling pathway involved in fish head organiser formation. Renucci A, et al. **Development** 1996 Dec;122(12):3735-43
The second immunoglobulin-like domain of the VEGF tyrosine kinase receptor Flt-1 determines ligand binding and may initiate a signal transduction cascade. Davis-Smyth T, et al. **EMBO J** 1996 Sep 16;15(18):4919-27
Proteolytic processing regulates receptor specificity and activity of VEGF-C. Joukov V, et al. **EMBO J** 1997 Jul 1;16(13):3898-911
Dephosphorylation of receptor tyrosine kinases as target of regulation by radiation, oxidants or alkylating agents. Knebel A, et al. **EMBO J** 1996 Oct 1;15(19):5314-25
Inhibin interferes with activin signaling at the level of the activin receptor complex in Chinese hamster ovary cells. Martens JW, et al. **Endocrinology** 1997 Jul;138(7):2928-36
Tissue-specific binding of radiolabeled activin A by activin receptors and follistatin in postimplantation rat and mouse embryos. Roberts VJ, et al. **Endocrinology** 1996 Oct; 137(10):4201-9
Isolation and cellular localization of the decorin endocytosis receptor. Hausser H, et al. **Eur J Cell Biol** 1996 Dec; 71(4):325-31
A study of growth factor receptors in human lens epithelial cells and their relationship to fiber differentiation. Ibaraki N, et al. **Exp Eye Res** 1996 Dec;63(6):683-92
Comparison of growth factor receptors and metabolic characteristics of satellite cells derived from the biceps femoris and pectoralis major muscles of the turkey. McFarland DC, et al. **Gen Comp Endocrinol** 1997 Jan; 105(1):114-20
The TGF-beta family mediator Smad1 is phosphorylated directly and activated functionally by the BMP receptor kinase. Kretzschmar M, et al. **Genes Dev** 1997 Apr 15; 11(8):984-95
The signaling pathway mediated by the type IIB activin receptor controls axial patterning and lateral asymmetry in the mouse. Oh SP, et al. **Genes Dev** 1997 Jul 15; 11(14):1812-26
Soluble receptors for cytokines and growth factors. Müller-Newen G, et al. **Int Arch Allergy Immunol** 1996 Oct;111(2):99-106 (58 ref.)
Expression and functions of EGF, FGF and TGFbeta-growth-factor family members and their receptors in invasive human transitional-cell-carcinoma cells. De Boer WI, et al. **Int J Cancer** 1997 Apr 10; 71(2):284-91
Hepatocyte growth factor, keratinocyte growth factor, and other growth factor-receptor systems in the lens. Weng J, et al. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1543-54
A role of dystroglycan in schwannoma cell adhesion to laminin. Matsumura K, et al. **J Biol Chem** 1997 May 23; 272(21):13904-10
A kinase domain-truncated type I receptor blocks bone morphogenetic protein-2-induced signal transduction in C2C12 myoblasts. Namiki M, et al. **J Biol Chem** 1997 Aug 29;272(35):22046-52
Interaction between soluble type I receptor for bone morphogenetic protein and bone morphogenetic protein-4. Natsume T, et al. **J Biol Chem** 1997 Apr 25; 272(17):11535-40
Extracellular cleavage of the vascular endothelial growth factor 189-amino acid form by urokinase is required for its mitogenic effect. Plouët J, et al. **J Biol Chem** 1997 May 16;272(20):13390-6
A novel type I receptor serine-threonine kinase predominantly expressed in the adult central nervous system. Rydén M, et al. **J Biol Chem** 1996 Nov 29; 271(48):30603-9
Dystroglycan is a dual receptor for agrin and laminin-2 in Schwann cell membrane. Yamada H, et al. **J Biol Chem** 1996 Sep 20;271(38):23418-23
Suramin is a potent inhibitor of vascular endothelial growth factor. A contribution to the molecular basis of its antiangiogenic action. Waltenberger J, et al. **J Mol Cell Cardiol** 1996 Jul;28(7):1523-9
Pancreatic cancer: the potential clinical relevance of alterations in growth factors and their receptors. Friess H, et al. **J Mol Med** 1996 Jan;74(1):35-42 (120 ref.)
Increased expression of dystrophin, beta-dystroglycan and adhalin in denervated rat muscles. Biral D, et al. **J Muscle Res Cell Motil** 1996 Oct;17(5):523-32
Flk-1, a receptor for vascular endothelial growth factor (VEGF), is expressed by retinal progenitor cells. Yang K, et al. **J Neurosci** 1996 Oct 1;16(19):6089-99
The mitogenic effect of KGF and the expression of its cell surface receptor on cultured normal and malignant human oral keratinocytes and on contiguous fibroblasts. Drugan CS, et al. **J Oral Pathol Med** 1997 Aug;26(7):327-33
Growth promoting peptides in diabetic and non-diabetic pregnancy: interactions with trophoblastic receptors and serum carrier proteins. Culler FL, et al. **J Pediatr Endocrinol Metab** 1996 Jan-Feb;9(1):21-9
A theoretical approach to the bell-shaped dependency of cell proliferation on the hormone concentration. Higo J, et al. **J Theor Biol** 1997 Jun 21;186(4):477-90
Differential effects on Xenopus development of interference with type IIA and type IIB activin receptors. New HV, et al. **Mech Dev** 1997 Jan;61(1-2):175-86
A chimeric serine/threonine kinase receptor system reveals the potential of multiple type II receptors to cooperate with transforming growth factor-beta type I receptor. Muramatsu M, et al. **Mol Biol Cell** 1997 Mar;8(3):469-80
Activin and inhibin have antagonistic effects on ligand-dependent heteromerization of the type I and type II activin receptors and human erythroid differentiation. Lebrun JJ, et al. **Mol Cell Biol** 1997 Mar;17(3):1682-91
Follistatins neutralize activin bioactivity by inhibition of activin binding to its type II receptors. de Winter JP, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):105-14
The angiogenesis induced by HIV-1 tat protein is mediated by the Flk-1/KDR receptor on vascular endothelial cells. Albini A, et al. **Nat Med** 1996 Dec;2(12):1371-5
Decreased expression of keratinocyte growth factor receptor in a subset of human transitional cell bladder carcinomas. Diez de Medina SG, et al. **Oncogene** 1997 Jan 23; 14(3):323-30
Signal transduction by the oncogenic receptor tyrosine kinase Xmrk in melanoma formation of Xiphophorus. Wellbrock C, et al. **Pigment Cell Res** 1997 Feb-Apr;10(1-2):34-40 (60 ref.)
Computer modelling of the receptor-binding domains of VEGF and PIGF. Walsh TP, et al. **Protein Eng** 1997 Apr; 10(4):389-98
VEGF and flt. Expression time kinetics in rat brain infarct. Kovács Z, et al. **Stroke** 1996 Oct;27(10):1865-72; discussion 1872-3

PHYSIOLOGY

Activin receptors: cellular signalling by receptor serine kinases. Zimmerman CM, et al. **Biochem Soc Symp** 1996; 62:25-38 (47 ref.)
Distinct localization of two serine-threonine kinase receptors for activin and TGF-beta in the rat brain and down-regulation of type I activin receptor during peripheral nerve regeneration. Morita N, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):263-71
Competition by second messenger systems for receptor interaction and activation: implications for tissue-specific responses and disease therapy. Crouch MF, et al. **Clin Exp Pharmacol Physiol** 1997 Aug;24(8):632-8 (22 ref.)
Use of transgenic mice to study autocrine-paracrine signaling in lung morphogenesis and differentiation. Whitsett JA, et al. **Clin Perinatol** 1996 Dec;23(4):753-69 (54 ref.)
Serine/threonine kinase receptors and ligands. Josso N, et al. **Curr Opin Genet Dev** 1997 Jun;7(3):371-7 (68 ref.)
Trans-signaling by cytokine and growth factor receptors. Castellino AM, et al. **Cytokine Growth Factor Rev** 1996 Dec;7(4):297-302 (56 ref.)
Vascular endothelial growth factor and its receptors. Klagsbrun M, et al. **Cytokine Growth Factor Rev** 1996 Oct; 7(3):259-70 (136 ref.)
BMP signaling during bone pattern determination in the developing limb. Kawakami Y, et al. **Development** 1996 Nov;122(11):3557-66
DPP controls tracheal cell migration along the dorsoventral body axis of the Drosophila embryo. Vincent S, et al. **Development** 1997 Jul;124(14):2741-50
Constitutively active BMP type I receptors transduce BMP-2 signals without the ligand in C2C12 myoblasts. Akiyama S, et al. **Exp Cell Res** 1997 Sep 15;235(2):362-9
Vascular permeability factor/vascular endothelial growth factor: a multifunctional angiogenic cytokine. Brown LF, et al. **EXS** 1997;79:233-69 (133 ref.)
Vascular endothelial growth factor: basic biology and clinical implications. Ferrara N, et al. **EXS** 1997;79:209-32 (142 ref.)
Distinct roles of type I bone morphogenetic protein receptors in the formation and differentiation of cartilage. Zou H, et al. **Genes Dev** 1997 Sep 1;11(17):2191-203
Soluble receptors for cytokines and growth factors. Müller-Newen G, et al. **Int Arch Allergy Immunol** 1996 Oct;111(2):99-106 (58 ref.)
The role of exogenous growth-promoting factors and their receptors in organogenesis. Pratten MK. **Int J Dev Biol** 1997 Apr;41(2):319-28 (108 ref.)
Regulated shedding of syndecan-1 and -4 ectodomains by thrombin and growth factor receptor activation. Subramanian SV, et al. **J Biol Chem** 1997 Jun 6; 272(23):14713-20
Transforming growth factor beta s and fibroblast growth factors and their receptors: role in sutural biology and craniosynostosis [editorial; comment] Cohen MM Jr. **J Bone Miner Res** 1997 Mar;12(3):322-31 (76 ref.). Comment on: J Bone Miner Res 1997 Mar;12(3):301-10. Comment on: J Bone Miner Res 1997 Mar;12(3):311-21.
Two distinct signaling pathways activated by activin A in glucose-responsive pancreatic beta-cell lines. Shibata H, et al. **J Mol Endocrinol** 1996 Jun;16(3):249-58
Treatment strategies for neurodegenerative diseases based on trophic factors and cell transplantation techniques. Hoffer B, et al. **J Neural Transm Suppl** 1997;49:1-10 (31 ref.)
Detection of ligands in regions anatomically connected to neurons expressing the Eph receptor Bsk: potential roles in neuron-target interaction. Zhang JH, et al. **J Neurosci** 1996 Nov 15;16(22):7182-92
Role of receptors for epidermal growth factor and insulin-like growth factors I and II in the differentiation of rat mammary glands from lactogenesis I to lactogenesis II. Bussmann LE, et al. **J Reprod Fertil** 1996 Jul; 107(2):307-14
The 230 kDa mature form of KDR/Flk-1 (VEGF receptor-2) activates the PLC-gamma pathway and partially induces mitotic signals in NIH3T3 fibroblasts. Takahashi T, et al. **Oncogene** 1997 May 1;14(17):2079-89
Possible involvement of VEGF-FLT tyrosine kinase receptor system in normal and tumor angiogenesis. Shibuya M, et al. **Princess Takamatsu Symp** 1994;24:162-70 (23 ref.)
Activins and activin receptors in cell growth. Ying SY, et al. **Proc Soc Exp Biol Med** 1997 Feb;214(2):114-22 (114 ref.)
Angiogenesis in embryos and ischemic diseases. Breier G, et al. **Thromb Haemost** 1997 Jul;78(1):678-83 (70 ref.)

RECEPTORS, GROWTH HORMONE see **RECEPTORS, SOMATOTROPIN**

RECEPTORS, HEMATOPOIETIC GROWTH FACTORS see **RECEPTORS, COLONY-STIMULATING FACTOR**

RECEPTORS, HISTAMINE

AGONISTS see HISTAMINE AGONISTS

ANTAGONISTS & INHIBITORS see HISTAMINE ANTAGONISTS

DRUG EFFECTS

[3H]-thioperamide as a radioligand for the histamine H3 receptor in rat cerebral cortex. Alves-Rodrigues A, et al. **Br J Pharmacol** 1996 Aug;118(8):2045-52

Ebastine in context. Introduction. Buendia E. **Drugs** 1996;52 Suppl 1:1-7 (24 ref.)

Role of the 5-HT receptor in neurogenic inflammation in Fisher 344 rat airways. Germonpré PR, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):249-55

Histamine mediates the muscle layer-specific responses in the isolated swine myometrium. Kitazawa T, et al. **J Vet Pharmacol Ther** 1997 Jun;20(3):187-97

Modulation of noradrenaline release in rat isolated stomach by prostanoids, but not by histaminergic mechanisms. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec;352(6):631-9

Activation of P2-purino-, alpha 1-adreno and H1-histamine receptors triggers cytoplasmic calcium signalling in cerebellar Purkinje neurons. Kirischuk S, et al. **Neuroscience** 1996 Aug;73(3):643-7

H1, H2, and H3 receptors contribute to drinking elicited by exogenous histamine and eating in rats. Kraly FS, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):347-54

Investigation into the role of histamine receptors in rodent antinociception. Lamberti C, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):567-74

METABOLISM

Histamine receptors in isolated bovine oviductal arteries. Martínez AC, et al. **Eur J Pharmacol** 1997 May 20; 326(2-3):163-73

Histamine: the quintessential mediator. Greaves MW, et al. **J Dermatol** 1996 Nov;23(11):735-40 (43 ref.)

Olopatadine (AL-4943A): ligand binding and functional studies on a novel, long acting H1-selective histamine antagonist and anti-allergic agent for use in allergic conjunctivitis. Sharif NA, et al. **J Ocul Pharmacol Ther** 1996 Winter;12(4):401-7

G proteins endogenously expressed in Sf 9 cells: interactions with mammalian histamine receptors. Leopoldt D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):216-24

Investigation into the role of histamine receptors in rodent antinociception. Lamberti C, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):567-74

PHYSIOLOGY

Characterization of histamine receptors in the ureter of the dog. Dodel RC, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2-3):395-402

Modulation of acetylcholine release in the ventral striatum by histamine receptors. Prast H, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S37-8

Hippocampal histamine receptors: possible role on the mechanisms of memory in the rat, II. Alvarez EO, et al. **J Neural Transm** 1996;103(1-2):147-56

Central histaminergic mechanisms mediate the vasopressin-induced pituitary adrenocortical stimulation. Bugajski J, et al. **J Physiol Pharmacol** 1996 Dec; 47(4):649-59

Effects of histamine agents on methamphetamine-induced stereotyped behavior and behavioral sensitization in rats. Ito C, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(4):362-7

Food-associated drinking in pygmy goats: importance of histamine receptors. Rossi R, et al. **Zentralbl Veterinarmed A** 1997 Jun;44(4):243-7

RECEPTORS, HISTAMINE H1

[Histamine receptors] Watanabe T, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):327-34 (28 ref.) **(Jpn)**

BIOSYNTHESIS

Interleukin-4 stimulates rheumatoid synovial fibroblasts to express matrix metalloproteinase-1 (tissue collagenase) and histamine H1 receptor mRNA. Zenmyo M, et al. **Biochem Mol Biol Int** 1996 Dec;40(6):1253-60

Regulation of the human histamine H1 receptor stably expressed in Chinese hamster ovary cells. Smit MJ, et al. **Br J Pharmacol** 1996 Mar;117(6):1071-80

Histamine H1-receptors in the nasal mucosa: a mystery solved? [editorial] Simons FE, et al. **Clin Exp Allergy** 1996 Apr;26(4):368-70

DRUG EFFECTS

Histamine H1 receptor-induced Ca2+ mobilization and prostaglandin E2 release in human gingival fibroblasts. Possible role of receptor-operated Ca2+ influx. Niisato N, et al. **Biochem Pharmacol** 1996 Oct 11;52(7):1015-23

Effects of hypomagnesia on histamine H1 receptor-mediated facilitation of NMDA responses. Payne GW, et al. **Br J Pharmacol** 1997 May;121(2):199-204

Regulation of the human histamine H1 receptor stably expressed in Chinese hamster ovary cells. Smit MJ, et al. **Br J Pharmacol** 1996 Mar;117(6):1071-80

Histamine H1 receptor activation stimulates [3H]GABA release from human astrocytoma U373 MG cells. Soria-Jasso LE, et al. **Eur J Pharmacol** 1996 Dec 27; 318(1):185-92

Regulation of [Ca2+]i rise activated by doxepin-sensitive H1-histamine receptors in Jurkat cells, cloned human T lymphocytes. Kitamura Y, et al. **Gen Pharmacol** 1996 Mar; 27(2):285-91

Food intake is inversely correlated with central nervous system histamine receptor (H1) concentrations in male Sprague-Dawley rats fed normal, low protein, low energy or poor quality protein diets. Haq AU, et al. **J Nutr** 1996 Dec;126(12):3083-9

Gender affects rats' central nervous system histaminergic responses to dietary manipulation. Mercer LP, et al. **J Nutr** 1996 Dec;126(12):3128-35

Studies on the novel antiallergic agent HSR-609: its penetration into the central nervous system in mice and guinea pigs and its selectivity for the histamine H1-receptor. Kakiuchi M, et al. **Jpn J Pharmacol** 1997 Apr; 73(4):291-8

EFFECTS OF HISTAMINE AND RELATED COMPOUNDS ON THE BOVINE IRIS DILATOR. KAMEI CH. **Methods Find Exp Clin Pharmacol** 1996 May; 18(4):273-8

Pharmacological properties of cardiovascular histamine H1 receptor binding sites: characterisation with 2-phenylhistamines. Carman-Krzan M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):431-7

Chronic beta 1-adrenoceptor blockade sensitises the H1 and H2 receptor systems in human atrium: rôle of cyclic nucleotides. Sanders L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):661-70

Histamine H1 receptors and inositol phosphate formation in rat thalamus. Soria-Jasso LE, et al. **Neurosci Lett** 1997 Apr 4;225(2):117-20

[Can one adjust the distribution of a drug in an organism to its target sites? The example of antihistaminics (anti-H1) and cetirizine] Tillement JP, et al. **Allerg Immunol (Paris)** 1996 Dec;28(10):330-2 (6 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Role of endothelium and nitric oxide in histamine-induced responses in human cranial arteries and detection of mRNA encoding H1- and H2-receptors by RT-PCR. Jansen-Olesen I, et al. **Br J Pharmacol** 1997 May; 121(1):41-8

Increased expression of histamine H1 receptor mRNA in allergic rhinitis. Iriyoshi N, et al. **Clin Exp Allergy** 1996 Apr;26(4):379-85

Histamine H1-receptors in the nasal mucosa: a mystery solved? [editorial] Simons FE, et al. **Clin Exp Allergy** 1996 Apr;26(4):368-70

Characteristics of the mouse genomic histamine H1 receptor gene. Inoue I, et al. **Genomics** 1996 Aug 15;36(1):178-81

Pharmacological and functional characterisation of the wild-type and site-directed mutants of the human H1 histamine receptor stably expressed in CHO cells. Moguilevsky N, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):91-102

Impaired locomotor activity and exploratory behavior in mice lacking histamine H1 receptors. Inoue I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13316-20

[Structure of the histamine H1 receptor gene and transcriptional up-regulation of the H1 receptor] Fukui H. **Nippon Rinsho** 1996 Feb;54(2):389-95 (15 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Action of ebrotidine, ranitidine and cimetidine on the specific binding to histamine H1- and H2-receptors. Agut J, et al. **Arzneimittelforschung** 1997 Apr;47(4A):447-9

Assessment of antihistaminic and antimuscarinic effects of optical isomers of ephedrine and methylephedrine by receptor binding assay in guinea pig ileal muscle. Kawasuji T, et al. **Biol Pharm Bull** 1996 Oct;19(10):1307-10

Regulation of histamine H1 receptor coupling by dexamethasone in human cultured airway smooth muscle. Hardy E, et al. **Br J Pharmacol** 1996 Jun;118(4):1079-84

The histamine H1 receptor in GT1-7 neuronal cells is regulated by calcium influx and KN-62, a putative inhibitor of calcium/calmodulin protein kinase II. Zamani MR, et al. **Br J Pharmacol** 1996 Jul;118(5):1119-26

Human conjunctival epithelial cells express histamine-1 receptors coupled to phosphoinositide turnover and intracellular calcium mobilization: role in ocular allergic and inflammatory diseases. Sharif NA, et al. **Exp Eye Res** 1996 Aug;63(2):169-78

Dietary induced anorexia: a review of involvement of the histaminergic system. Mercer LP, et al. **J Am Coll Nutr** 1996 Jun;15(3):223-30 (78 ref.)

H1 and H2 histamine receptors modulate osteoclastic resorption by different pathways: evidence obtained by using receptor antagonists in a rat synchronized resorption model. Dobigny C, et al. **J Cell Physiol** 1997 Oct; 173(1):10-8

Pharmacological and functional characterisation of the wild-type and site-directed mutants of the human H1 histamine receptor stably expressed in CHO cells. Moguilevsky N, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):91-102

Phenoxybenzamine discriminates between two distinct populations of histamine H1-receptors in longitudinal muscle of guinea-pig ileum. Takayanagi I, et al. **J Smooth Muscle Res** 1996 Dec;32(6):249-54

Histamine H1 receptors in C6 glial cells are coupled to calcium-dependent potassium channels via release of calcium from internal stores. Weiger T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):559-65

PHYSIOLOGY

Histamine activates phospholipase C in human airway epithelial cells via a phorbol ester-sensitive pathway. Rugolo M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):L665-71

Calcium signalling in mouse Bergmann glial cells mediated by alpha1-adrenoreceptors and H1 histamine receptors. Kirischuk S, et al. **Eur J Neurosci** 1996 Jun;8(6):1198-208

Mechanisms for histamine H1 receptor-mediated vasodilation in isolated canine lingual arteries. Chiba S, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):63-8

The role of histamine H1 receptors in the thermoregulatory effect of morphine in mice. Ulugöl A, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):49-52

H1-receptor-mediated excitation and facilitation of the heat response by histamine in canine visceral polymodal receptors studied in vitro. Koda H, et al. **J Neurophysiol** 1996 Sep;76(3):1396-404

The role of histamine H1-receptors in the anticonvulsive effect of morphine against maximal electroconvulsive shock in mice. Karadağ CH, et al. **Jpn J Pharmacol** 1996 Jun; 71(2):109-12

In U-937 promonocytes, misteltoe lectin I increases basal [Ca2+]i, enhances histamine H1- and complement C5a-receptor-mediated rises in [Ca2+]i, and induces cell death. Wenzel-Seifert K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):190-7

A role for histamine receptors in rheumatoid arthritis. Tanaka S, et al. **Semin Arthritis Rheum** 1997 Jun;26(6):824-33 (25 ref.)

[Histamine (H1 and H2) dependent changes in neutrophil adhesion to human endothelial cells] Schäfer U, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:635-8 (Eng. Abstr.) **(Ger)**

RECEPTORS, HISTAMINE H2

[Structural analysis of the histamine H2 receptor] Fukushima Y, et al. **Nippon Rinsho** 1996 Apr;54(4):1144-8 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Histamine receptors] Watanabe T, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):327-34 (28 ref.) **(Jpn)**

BIOSYNTHESIS

Oligomer formation of histamine H2 receptors expressed in Sf9 and COS7 cells. Fukushima Y, et al. **FEBS Lett** 1997 Jun 9;409(2):283-6

CHEMISTRY

Oligomer formation of histamine H2 receptors expressed in Sf9 and COS7 cells. Fukushima Y, et al. **FEBS Lett** 1997 Jun 9;409(2):283-6

Role of the C terminus in histamine H2 receptor signaling, desensitization, and agonist-induced internalization. Fukushima Y, et al. **J Biol Chem** 1997 Aug 1; 272(31):19464-70

The agonistic binding site at the histamine H2 receptor. I. Theoretical investigations of histamine binding to an oligopeptide mimicking a part of the fifth transmembrane alpha-helix. Nederkoorn PH, et al. **J Comput Aided Mol Des** 1996 Oct;10(5):461-78

The agonistic binding site at the histamine H2 receptor. II. Theoretical investigations of histamine binding to receptor models of the seven alpha-helical transmembrane domain. Nederkoorn PH, et al. **J Comput Aided Mol Des** 1996 Oct; 10(5):479-89

The C terminal tail of the histamine H2 receptor contains positive and negative signals important for signal transduction and receptor down-regulation. Smit MJ, et al. **J Neurochem** 1996 Nov;67(5):1791-800

DRUG EFFECTS

Effect of N alpha-methyl-histamine on acid secretion in isolated cultured rabbit parietal cells: implications for Helicobacter pylori associated gastritis and gastric physiology. Beales IL, et al. **Gut** 1997 Jan;40(1):14-9

Cimetidine and other H2-receptor antagonists as inhibitors of human E3 aldehyde dehydrogenase. Kikonyogo A, et al. **Mol Pharmacol** 1997 Aug;52(2):267-71

Chronic beta 1-adrenoceptor blockade sensitises the H1 and H2 receptor systems in human atrium: rôle of cyclic

RECEPTORS, HISTAMINE H2

nucleotides. Sanders L, et al.
Naunyn Schmiedebergs Arch Pharmacol 1996 May; 353(6):661–70

GENETICS

Role of endothelium and nitric oxide in histamine–induced responses in human cranial arteries and detection of mRNA encoding H1– and H2–receptors by RT–PCR. Jansen–Olesen I, et al. **Br J Pharmacol** 1997 May; 121(1):41–8

Cloning, RNA expression, and chromosomal location of a mouse histamine H2 receptor gene. Kobayashi T, et al. **Genomics** 1996 Nov 1;37(3):390–4

Individuals with schizophrenia have an increased incidence of the H2R649G allele for the histamine H2 receptor gene. Orange PR, et al. **Mol Psychiatry** 1996 Dec;1(6):466–9

Allelic variations of the human histamine H2 receptor gene. Orange PR, et al. **Neuroreport** 1996 May 17;7(7):1293–6

METABOLISM

Action of ebrotidine, ranitidine and cimetidine on the specific binding to histamine H1– and H2–receptors. Agut J, et al. **Arzneimittelforschung** 1997 Apr;47(4A):447–9

Interaction between the two signal transduction systems of the histamine H2 receptor: desensitizing and sensitizing effects of histamine stimulation on histamine–dependent cAMP production in Chinese hamster ovary cells. Fukushima Y, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):27–32

Cardiac and gastric effects of histamine H2 receptor antagonists: no evidence for a correlation between lipophilicity and receptor affinity. Coruzzi G, et al. **Br J Pharmacol** 1996 Aug;118(7):1813–21

Involvement of beta–adrenergic receptor kinase–1 in homologous desensitization of histamine H2 receptors in human gastric carcinoma cell line MKN–45. Nakata H, et al. **Digestion** 1996 Nov–Dec;57(6):406–10

Histamine H2 receptor mediated relaxation of buffalo (Bubalus bubalus) ureter. Phadnis S, et al. **Indian J Exp Biol** 1995 Jan;33(1):41–3

H1 and H2 histamine receptors modulate osteoclastic resorption by different pathways: evidence obtained by using receptor antagonists in a rat synchronized resorption model. Dobigny C, et al. **J Cell Physiol** 1997 Oct; 173(1):10–8

The agonistic binding site at the histamine H2 receptor. II. Theoretical investigations of histamine binding to receptor models of the seven alpha–helical transmembrane domain. Nederkoorn PH, et al. **J Comput Aided Mol Des** 1996 Oct; 10(5):479–89

The agonistic binding site at the histamine H2 receptor. I. Theoretical investigations of histamine binding to an oligopeptide mimicking a part of the fifth transmembrane alpha–helix. Nederkoorn PH, et al. **J Comput Aided Mol Des** 1996 Oct;10(5):461–78

Anti–Helicobacter pylori agents. 1. 2–(Alkylguanidino)–4–furylthiazoles and related compounds. Katsura Y, et al. **J Med Chem** 1997 Aug 1; 40(16):2462–5

G proteins of the Gq family couple the H2 histamine receptor to phospholipase C. Kühn B, et al. **Mol Endocrinol** 1996 Dec;10(12):1697–707

[Age differences in topic concentrations and activity of H2– and B2–receptors in the larynx and trachea] Aslanian GG. **Vestn Otorinolaringol** 1997;(1):36–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Histamine H2 receptor activates adenylate cyclase and PLC via separate GTP–dependent pathways. Wang L, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):G613–20

Pharmacological properties of alpha–mangostin, a novel histamine H1 receptor antagonist. Chairungsrilerd N, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):351–6

Histamine receptors and bioeffects on clonal parathyroid endothelial cells. Frediani U, et al. **J Endocrinol Invest** 1996 May;19(5):298–303

Histaminergic H2 action protects hippocampal CA1 neurons by prolonging the onset of the anoxic depolarization in gerbils. Fujitani T, et al. **J Neurochem** 1996 Dec; 67(6):2613–5

Histamine modulates the expression of c–fos through cyclic AMP production via the H2 receptor in the human promonocytic cell line U937. Shayo C, et al. **Mol Pharmacol** 1997 Jun;51(6):983–90

Detailed mapping of the histamine H2 receptor and its gene transcripts in guinea–pig brain. Vizuete ML, et al. **Neuroscience** 1997 Sep;80(2):321–43

A role for histamine receptors in rheumatoid arthritis. Tanaka S, et al. **Semin Arthritis Rheum** 1997 Jun;26(6):824–33 (25 ref.)

[Histamine (H1 and H2) dependent changes in neutrophil adhesion to human endothelial cells] Schäfer U, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:635–8 (Eng. Abstr.) **(Ger)**

RECEPTORS, HISTAMINE H3

ANALYSIS

[Pharmacological approach of histamine H3 receptors: use of arterial and bronchiolar perfusion technique] Oudart N, et al. **Ann Pharm Fr** 1996;54(5):217–22 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

Effects of unilateral vagotomy on nitric oxide synthase and histamine H3 receptors in the rat dorsal vagal complex. Zhao XL, et al. **J Chem Neuroanat** 1996 Oct;11(4):221–9

DRUG EFFECTS

Novel histamine H3–receptor antagonists with benzyl ether structure or related moieties: synthesis and structure–activity relationships. Hüls A, et al. **Arch Pharm (Weinheim)** 1996 Aug–Sep;329(8–9):379–85

Inhibition of cortical acetylcholine release and cognitive performance by histamine H3 receptor activation in rats. Blandina P, et al. **Br J Pharmacol** 1996 Dec;119(8):1656–64

The effect of dopamine D1 receptor stimulation on the up–regulation of histamine H3–receptors following destruction of the ascending dopaminergic neurones. Ryu JH, et al. **Br J Pharmacol** 1996 Jun;118(3):585–92

Sensitivity of histamine H3 receptor agonist–stimulated [35S]GTP gamma[S] binding to pertussis toxin. Clark EA, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):223–5

Pharmacological characterization of histamine H3 receptors in isolated guinea pig pulmonary artery and ileum. Rizzo CA, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):329–35

Ligands of the histamine H3–receptor: new potent antagonists of the 2–thioimidazole type. Plazzi PV, et al. **Farmaco** 1997 May;52(5):295–302

Hemodynamic profile of activation of histamine H3 receptors by R–alpha–methylhistamine in the guinea pig. McLeod RL, et al. **Gen Pharmacol** 1996 Sep;27(6):1001–7

A novel series of (phenoxyalkyl)imidazoles as potent H3–receptor histamine antagonists. Ganellin CR, et al. **J Med Chem** 1996 Sep 13;39(19):3806–13

Rat protein binding and cerebral phospholipid affinity of the H3–receptor antagonist thioperamide. Plazzi PV, et al. **J Pharm Pharmacol** 1996 Jul;48(7):712–7

Structure–activity relationships of novel azomethine prodrugs of the histamine H3–receptor agonist (R)–alpha–methylhistamine: from alkylaryl to substituted diaryl derivatives. Krause M, et al. **Pharmazie** 1996 Oct; 51(10):720–6

Search for novel leads for histamine H3–receptor antagonists: amine derivatives. Stark H, et al. **Pharmazie** 1997 Jun; 52(6):419–23

Search for novel leads for histamine H3–receptor antagonists: oxygen–containing derivatives. Stark H, et al. **Pharmazie** 1997 Jul;52(7):495–500

[Mechanisms of histamine–induced raise in calcium levels in cardiomyocytes; relative effectiveness of histamine receptors blockers] Khankoeva AI, et al. **Biull Eksp Biol Med** 1997 Apr;123(4):414–6 **(Rus)**

METABOLISM

Interaction between H3–receptors and other prejunctional receptor systems in the isolated guinea pig duodenum. Poli E, et al. **Ann N Y Acad Sci** 1997 May 30;812:213–5

Binding of clozapine metabolites and analogues to the histamine H3 receptor in rat brain cortex. Alves–Rodrigues A, et al. **Arch Pharm (Weinheim)** 1996 Aug–Sep; 329(8–9):413–6

Novel histamine H3 receptor antagonists: synthesis and evaluation of formamidine and S–methylisothiourea derivatives. Goto T, et al. **Chem Pharm Bull (Tokyo)** 1997 Feb;45(2):305–11

Characterisation of the specific binding of the histamine H3 receptor antagonist radioligand [3H]GR168320. Brown JD, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):305–10

Binding of histamine H3–receptor antagonists to hematopoietic progenitor cells. Evidence for a histamine transporter unrelated to histamine H3 receptors. Corbel S, et al. **FEBS Lett** 1997 Mar 10;404(2–3):289–93

Absence of histamine H3–receptors in the rabbit colon: species difference. Pozzoli C, et al. **Gen Pharmacol** 1997 Aug;29(2):217–21

H3–receptor antagonists: synthesis and structure–activity relationships of para– and meta–substituted 4(5)–phenyl–2–[[2–[4(5)–imidazolyl]ethyl]thio]imidazoles. Mor M, et al. **J Med Chem** 1997 Aug 1;40(16):2571–8

Involvement of presynaptic histamine H3 receptors in the modulation of somatostatin binding and its effects on adenylyl cyclase activity in the rat frontoparietal cortex. Puebla L, et al. **J Neurochem** 1996 Mar;66(3):1051–9

Histamine H3 receptor–mediated depression of synaptic transmission in the dentate gyrus of the rat in vitro. Brown RE, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):175–84

Autoregulation of enterochromaffin–like cell histamine secretion via the histamine 3 receptor subtype. Kidd M, et al. **Yale J Biol Med** 1996 Jan–Feb;69(1):9–19

PHYSIOLOGY

Physiopathology of H3–receptors and pharmacology of betahistine. Van Cauwenberge PB, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;526:43–6 (23 ref.)

Control of exocrine secretion in the guinea–pig pancreas by histamine H3 receptors. Jennings LJ, et al. **Can J Physiol Pharmacol** 1996 Jun;74(6):744–52

Histamine H3 receptors do not modulate reflex–evoked peristaltic motility in the isolated guinea–pig ileum. Poli E, et al. **Eur J Pharmacol** 1997 May 26;327(1):49–56

H3–histamine receptors and clonidine analgesia in rats. Chiechio S, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S43–4

GABAergic mechanism in histamine H3 receptor inhibition of K(+)–evoked release of acetylcholine from rat cortex in vivo. Giorgetti M, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S33–4

Is there a role for histamine H3–receptors in the control of intestinal peristalsis? Poli E, et al. **Inflamm Res** 1997 Mar; 46 Suppl 1:S99–100

Identification of histamine H3 receptors in the tail artery from normotensive and spontaneously hypertensive rats. Godlewski G, et al. **J Cardiovasc Pharmacol** 1997 Jun; 29(6):801–7

Interaction between histamine H3 receptors and other prejunctional receptor systems in the isolated guinea pig duodenum. Poli E, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):393–9

Effects of clobenpropit (VUF–9153), a histamine H3–receptor antagonist, on learning and memory, and on cholinergic and monoaminergic systems in mice. Miyazaki S, et al. **Life Sci** 1997;61(4):355–61

Inhibitory H3 receptors on sympathetic nerves of the pithed rat: activation by endogenous histamine and operation in spontaneously hypertensive rats. Godlewski G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):261–6

Prejunctional histamine H3–receptors inhibit electrically evoked endogenous noradrenaline overflow in the portal vein of freely moving rats. Smit J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):256–60

Effects of imidazolines on noradrenaline release in brain: an investigation into their relationship to imidazoline, alpha 2 and H3 receptors. Schlicker E, et al. **Neurochem Int** 1997 Jan;30(1):73–83

Histamine H3 receptor activation selectively inhibits dopamine D1 receptor–dependent [3H]GABA release from depolarization–stimulated slices of rat substantia nigra pars reticulata. Garcia M, et al. **Neuroscience** 1997 Sep; 80(1):241–9

Mutual interactions of the presynaptic histamine H3 and prostaglandin EP3 receptors on the noradrenergic terminals in the mouse brain. Schlicker E, et al. **Neuroscience** 1997 Jul;79(1):247–54

Modulation of pentagastrin–induced histamine release by histamine H3 receptors in the dog. Soldani G, et al. **Scand J Gastroenterol** 1996 Jul;31(7):631–8

A role for histamine receptors in rheumatoid arthritis. Tanaka S, et al. **Semin Arthritis Rheum** 1997 Jun;26(6):824–33 (25 ref.)

RECEPTORS, HIV

see related
HIV ENVELOPE PROTEIN GP120

Macrophage tropism of human immunodeficiency virus type 1 and utilization of the CC–CKR5 coreceptor. Cheng–Mayer C, et al. **J Virol** 1997 Feb;71(2):1657–61

Chemokines and HIV–1 second receptors. Confluence of two fields generates optimism in AIDS research. D'Souza MP, et al. **Nat Med** 1996 Dec;2(12):1293–300 (79 ref.)

[Chemokines and HIV–1 second receptors] Murakami T, et al. **Tanpakushitsu Kakusan Koso** 1997 Jul;42(9):1427–34 (35 ref.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Chemokine inhibitors for HIV [news] Eccleston A. **Nat Biotechnol** 1997 Aug;15(8):709, 710

Exploiting the HIV–chemokine nexus [news] Cohen J. **Science** 1997 Feb 28;275(5304):1261–4

Potent inhibition of HIV–1 infectivity in macrophages and lymphocytes by a novel CCR5 antagonist. Simmons G, et al. **Science** 1997 Apr 11;276(5310):276–9

BIOSYNTHESIS

Expression of the human immunodeficiency virus type–1 coreceptors CXCR–4 (fusin, LESTR) and CKR–5 in CD34+ hematopoietic progenitor cells. Deichmann M, et al. **Blood** 1997 May 15;89(10):3522–8

Functional expression of the CXC–chemokine receptor–4/fusin on mouse microglial cells and astrocytes. Tanabe S, et al. **J Immunol** 1997 Jul 15;159(2):905–11

CXCR4 expression during lymphopoiesis: implications for human immunodeficiency virus type 1 infection of the thymus. Kitchen SG, et al. **J Virol** 1997 Sep;71(9):6928–34

CHEMISTRY

Regions in beta–chemokine receptors CCR5 and CCR2b that determine HIV–1 cofactor specificity. Rucker J, et al. **Cell** 1996 Nov 1;87(3):437–46

The second extracellular loop of CCR5 is the major determinant of ligand specificity. Samson M, et al. **J Biol Chem** 1997 Oct 3;272(40):24934–41

Role of the first and third extracellular domains of CXCR–4 in human immunodeficiency virus coreceptor activity. Brelot A, et al. **J Virol** 1997 Jun;71(6):4744–51

HIV and the 7–transmembrane domain receptors. Broder CC, et al. **Pathobiology** 1996;64(4):171–9 (108 ref.)

DRUG EFFECTS

Bicyclams, a class of potent anti-HIV agents, are targeted at the HIV coreceptor fusin/CXCR-4. Schols D, et al. **Antiviral Res** 1997 Aug;35(3):147-56

GENETICS

CC-chemokine receptor 5 genotypes and in vitro susceptibility to HIV-1 of a cohort of British HIV-exposed uninfected homosexual men [letter] Aarons E, et al. **AIDS** 1997 Apr;11(5):688-9

Homozygous delta 32 deletion of the CCR-5 chemokine receptor gene in an HIV-1-infected patient. Balotta C, et al. **AIDS** 1997 Aug;11(10):F67-71

Heterozygosity for a deletion in the CKR-5 gene leads to prolonged AIDS-free survival and slower CD4 T-cell decline in a cohort of HIV-seropositive individuals. Eugen-Olsen J, et al. **AIDS** 1997 Mar;11(3):305-10

Early protective effect of CCR-5 delta 32 heterozygosity on HIV-1 disease progression: relationship with viral load. The SEROCO Study Group. Meyer L, et al. **AIDS** 1997 Sep;11(11):F73-8

Intact CCR-5 coreceptors in HIV-1-infected chimpanzees [letter] ten Haaft PJ, et al. **AIDS** 1997 Aug;11(10):1291-3

Host genes and HIV: the role of the chemokine receptor gene CCR5 and its allele. McNicholl JM, et al. **Emerg Infect Dis** 1997 Jul-Sep;3(3):261-71 (62 ref.)

Two murine homologues of the human chemokine receptor CXCR4 mediating stromal cell-derived factor 1alpha activation of Gi2 are differentially expressed in vivo. Moepps B, et al. **Eur J Immunol** 1997 Aug;27(8):2102-12

Hot fusion breakthrough for AIDS research. **Immunol Today** 1996 Jul;17(7):299

Cloning and characterization of a novel murine beta chemokine receptor, D6. Comparison to three other related macrophage inflammatory protein-1alpha receptors, CCR-1, CCR-3, and CCR-5. Nibbs RJB, et al. **J Biol Chem** 1997 May 9;272(19):12495-504

Antigen-driven C-C chemokine-mediated HIV-1 suppression by CD4(+) T cells from exposed uninfected individuals expressing the wild-type CCR-5 allele. Furci L, et al. **J Exp Med** 1997 Aug 4;186(3):455-60

Alternate splicing of mouse fusin/CXC chemokine receptor-4: stromal cell-derived factor-1alpha is a ligand for both CXC chemokine receptor-4 isoforms. Heesen M, et al. **J Immunol** 1997 Apr 15;158(8):3561-4

Cloning of the mouse fusin gene, homologue to a human HIV-1 co-factor. Heesen M, et al. **J Immunol** 1996 Dec 15;157(12):5455-60

Chemokine receptor CCR5 genotype influences the kinetics of human immunodeficiency virus type 1 infection in human PBL-SCID mice. Picchio GR, et al. **J Virol** 1997 Sep;71(9):7124-7

Dual effect of CCR5 delta 32 gene deletion in HIV-1-infected patients. Copenhagen AIDS Study Group [letter] Garred P, et al. **Lancet** 1997 Jun 28;349(9069):1884

CCR5-delta 32 gene deletion in HIV-1 infected patients [letter] Michael NL, et al. **Lancet** 1997 Sep 6; 350(9079):741-2

HIV-1 infection in a man homozygous for CCR5 delta 32 [letter] O'Brien TR, et al. **Lancet** 1997 Apr 26; 349(9060):1219

32 bp CCR-5 gene deletion and resistance to fast progression in HIV-1 infected heterozygotes [letter] Rappaport J, et al. **Lancet** 1997 Mar 29;349(9056):922-3

CCR5-delta 32 gene deletion in HIV-1 infected patients [letter] Smith MW, et al. **Lancet** 1997 Sep 6;350(9079):741; discussion 742

HIV-1 infection in an individual homozygous for CCR5 delta 32. Seroco Study Group [letter] Theodorou I, et al. **Lancet** 1997 Apr 26;349(9060):1219-20

CCR5-delta 32 gene deletion in HIV-1 infected patients [letter] Wang B, et al. **Lancet** 1997 Sep 6;350(9079):742

Inherited resistance to HIV-1 conferred by an inactivating mutation in CC chemokine receptor 5: studies in populations with contrasting clinical phenotypes, defined racial background, and quantified risk. Zimmerman PA, et al. **Mol Med** 1997 Jan;3(1):23-36

The extent of genetic variation in the CCR5 gene [letter] Ansari-Lari MA, et al. **Nat Genet** 1997 Jul;16(3):221-2

Global distribution of the CCR5 gene 32-basepair deletion. Martinson JJ, et al. **Nat Genet** 1997 May;16(1):100-3

HIV-1 infection in an individual homozygous for the CCR5 deletion allele [letter; comment] Biti R, et al. **Nat Med** 1997 Mar;3(3):252-3. Comment on: Nat Med 1996 Nov;2(11):1240-3.

The role of a mutant CCR5 allele in HIV-1 transmission and disease progression [see comments] Huang Y, et al. **Nat Med** 1996 Nov;2(11):1240-3. Comment in: Nat Med 1997 Mar;3(3):252-3.

The role of viral phenotype and CCR-5 gene defects in HIV-1 transmission and disease progression. Michael NL, et al. **Nat Med** 1997 Mar;3(3):338-40

HIV CCR5 resistance incomplete [news] Smith O. **Nat Med** 1997 Apr;3(4):372-3

Molecular cloning and characterization of a murine pre-B-cell growth-stimulating factor/stromal cell-derived factor 1 receptor, a murine homolog of the human immunodeficiency virus 1 entry coreceptor fusin. Nagasawa T, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14726-9

Expression pattern of HIV-1 coreceptors on T cells: implications for viral transmission and lymphocyte homing [comment] Unutmaz D, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1615-8. Comment on: Proc Natl Acad Sci U S A 1997 Mar 4;94(5):1925-30.

In search of AIDS-resistance genes. O'Brien SJ, et al. **Sci Am** 1997 Sep;277(3):44-51

Differential regulation of HIV-1 fusion cofactor expression by CD28 costimulation of CD4+ T cells. Carroll RG, et al. **Science** 1997 Apr 11;276(5310):273-6

Ethics of AIDS study [letter; comment] Gomperts ED, et al. **Science** 1996 Dec 6;274(5293):1596. Comment on: Science 1996 Sep 27;273(5283):1797-8.

HIV experts vs. sequencers in patent race [news] Marshall E. **Science** 1997 Feb 28;275(5304):1263

Contrasting genetic influence of CCR2 and CCR5 variants on HIV-1 infection and disease progression. Hemophilia Growth and Development Study (HGDS), Multicenter AIDS Cohort Study (MACS), Multicenter Hemophilia Cohort Study (MHCS), San Francisco City Cohort (SFCC), ALIVE Study. Smith MW, et al. **Science** 1997 Aug 15;277(5328):959-65

[Tracking down natural resistance to HIV. Defective cellular receptor prevents entrance of virus into the cell] Hobom B. **Fortschr Med** 1996 Oct 20;114(29):12, 14 **(Ger)**

IMMUNOLOGY

Hot fusion breakthrough for AIDS research. **Immunol Today** 1996 Jul;17(7):299

Polarization of chemokine receptors to the leading edge during lymphocyte chemotaxis. Nieto M, et al. **J Exp Med** 1997 Jul 7;186(1):153-8

CD4, CXCR-4, and CCR-5 dependencies for infections by primary patient and laboratory-adapted isolates of human immunodeficiency virus type 1. Kozak SL, et al. **J Virol** 1997 Feb;71(2):873-82

Inhibition of human immunodeficiency virus fusion by a monoclonal antibody to a coreceptor (CXCR4) is both cell type and virus strain dependent. McKnight A, et al. **J Virol** 1997 Feb;71(2):1692-6

Utilization of C-C chemokine receptor 5 by the envelope glycoproteins of a pathogenic simian immunodeficiency virus, SIVmac239. Marcon L, et al. **J Virol** 1997 Mar; 71(3):2522-7

Scientists confirm natural resistance to HIV-1 [news] **Oncology (Huntingt)** 1996 Dec;10(12):1879-80

Differential utilization of CCR5 by macrophage and T cell tropic simian immunodeficiency virus strains. Edinger AL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4005-10

Antibodies to several conformation-dependent epitopes of gp120/gp41 inhibit CCR-5-dependent cell-to-cell fusion mediated by the native envelope glycoprotein of a primary macrophage-tropic HIV-1 isolate. Verrier FC, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9326-31

ISOLATION & PURIFICATION

Hot fusion breakthrough for AIDS research. **Immunol Today** 1996 Jul;17(7):299

[How AIDS virus infects cells. Second receptor isolated (news)] **Schweiz Rundsch Med Prax** 1996 Sep 17; 85(38):1189 **(Ger)**

METABOLISM

Co-expression of CXCR4/fusin and galactosylceramide in the human intestinal epithelial cell line HT-29. Delézay O, et al. **AIDS** 1997 Sep;11(11):1311-8

Human immunodeficiency virus-1 entry into purified blood dendritic cells through CC and CXC chemokine coreceptors. Ayehunie S, et al. **Blood** 1997 Aug 15; 90(4):1379-86

CD4-independent infection by HIV-2 is mediated by fusin/CXCR4. Endres MJ, et al. **Cell** 1996 Nov 15; 87(4):745-56

A CXCR4/CD4 pseudotype rhabdovirus that selectively infects HIV-1 envelope protein-expressing cells [see comments] Mebatsion T, et al. **Cell** 1997 Sep 5;90(5):841-7. Comment in: Cell 1997 Sep 5;90(5):821-4.

Molecular mechanism of desensitization of the chemokine receptor CCR-5: receptor signaling and internalization are dissociable from its role as an HIV-1 co-receptor. Aramori I, et al. **EMBO J** 1997 Aug 1;16(15):4606-16

HIV-1-induced cell fusion is mediated by multiple regions within both the viral envelope and the CCR-5 co-receptor. Bieniasz PD, et al. **EMBO J** 1997 May 15;16(10):2599-609

Two murine homologues of the human chemokine receptor CXCR4 mediating stromal cell-derived factor 1alpha activation of Gi2 are differentially expressed in vivo. Moepps B, et al. **Eur J Immunol** 1997 Aug;27(8):2102-12

CC chemokine receptor 5-mediated signaling and HIV-1 Co-receptor activity share common structural determinants. Critical residues in the third extracellular loop support HIV-1 fusion. Alkhatib G, et al. **J Biol Chem** 1997 Aug 8;272(32):19771-6

HIV-1 entry and macrophage inflammatory protein-1beta-mediated signaling are independent functions of the chemokine receptor CCR5. Farzan M, et al. **J Biol Chem** 1997 Mar 14;272(11):6854-7

The second extracellular loop of CCR5 is the major determinant of ligand specificity. Samson M, et al. **J Biol Chem** 1997 Oct 3;272(40):24934-41

CCR5 levels and expression pattern correlate with infectability by macrophage-tropic HIV-1, in vitro. Wu L, et al. **J Exp Med** 1997 May 5;185(9):1681-91

HIV-1 gp120 induces an association between CD4 and the chemokine receptor CXCR4. Ugolini S, et al. **J Immunol** 1997 Sep 15;159(6):3000-8

Murine CXCR-4 is a functional coreceptor for T-cell-tropic and dual-tropic strains of human immunodeficiency virus type 1. Bieniasz PD, et al. **J Virol** 1997 Sep;71(9):7097-100

Genetically divergent strains of simian immunodeficiency virus use CCR5 as a coreceptor for entry. Chen Z, et al. **J Virol** 1997 Apr;71(4):2705-14

Two distinct CCR5 domains can mediate coreceptor usage by human immunodeficiency virus type 1. Doranz BJ, et al. **J Virol** 1997 Sep;71(9):6305-14

Envelope glycoproteins from human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus can use human CCR5 as a coreceptor for viral entry and make direct CD4-dependent interactions with this chemokine receptor. Hill CM, et al. **J Virol** 1997 Sep;71(9):6296-304

Simian immunodeficiency virus variants with differential T-cell and macrophage tropism use CCR5 and an unidentified cofactor expressed in CEMx174 cells for efficient entry. Kirchhoff F, et al. **J Virol** 1997 Sep; 71(9):6509-16

Multiple extracellular domains of CCR-5 contribute to human immunodeficiency virus type 1 entry and fusion. Picard L, et al. **J Virol** 1997 Jul;71(7):5003-11

Chemokine receptor CCR5 genotype influences the kinetics of human immunodeficiency virus type 1 infection in human PBL-SCID mice. Picchio GR, et al. **J Virol** 1997 Sep;71(9):7124-7

Primary, syncytium-inducing human immunodeficiency virus type 1 isolates are dual-tropic and most can use either Lestr or CCR5 as coreceptors for virus entry. Simmons G, et al. **J Virol** 1996 Dec;70(12):8355-60

Selective employment of chemokine receptors as human immunodeficiency virus type 1 coreceptors determined by individual amino acids within the envelope V3 loop. Speck RF, et al. **J Virol** 1997 Sep;71(9):7136-9

A monoclonal antibody (12G5) directed against CXCR-4 inhibits infection with the dual-tropic human immunodeficiency virus type 1 isolate HIV-1(89.6) but not the T-tropic isolate HIV-1(HxB). Strizki JM, et al. **J Virol** 1997 Jul;71(7):5678-83

Shared usage of the chemokine receptor CXCR4 by the feline and human immunodeficiency viruses. Willett BJ, et al. **J Virol** 1997 Sep;71(9):6407-15

HIV-1—co-receptors binding [letter; comment] [published erratum appears in Nat Med 1997 Aug;3(8):817] Jiang S. **Nat Med** 1997 Apr;3(4):367-8. Comment on: Nat Med 1996 Nov;2(11):1244-7.

The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry. Bleul CC, et al. **Nature** 1996 Aug 29;382(6594):829-33

Expression cloning of new receptors used by simian and human immunodeficiency viruses [see comments] Deng HK, et al. **Nature** 1997 Jul 17;388(6639):296-300. Comment in: Nature 1997 Jul 17;388(6639):230-1.

HIV-1 tropism and co-receptor use [letter] Dittmar MT, et al. **Nature** 1997 Feb 6;385(6616):495-6

CCR3 and CCR5 are co-receptors for HIV-1 infection of microglia. He J, et al. **Nature** 1997 Feb 13;385(6617):645-9

The CXC chemokine SDF-1 is the ligand for LESTR/fusin and prevents infection by T-cell-line-adapted HIV-1. Oberlin E, et al. **Nature** 1996 Aug 29;382(6594):833-5

CD4-dependent, antibody-sensitive interactions between HIV-1 and its co-receptor CCR-5 [see comments] Trkola A, et al. **Nature** 1996 Nov 14;384(6605):184-7. Comment in: Nature 1996 Nov 14;384(6605):117-8.

HIV. One on one meets two [news; comment] Wain-Hobson S. **Nature** 1996 Nov 14;384(6605):117-8. Comment on: Nature 1996 Nov 14;384(6605):179-83. Comment on: Nature 1996 Nov 14;384(6605):184-7.

Common mechanism of infection by lentiviruses [letter] Willett BJ, et al. **Nature** 1997 Feb 13;385(6617):587

CD4-induced interaction of primary HIV-1 gp120 glycoproteins with the chemokine receptor CCR-5 [see comments] Wu L, et al. **Nature** 1996 Nov 14; 384(6605):179-83. Comment in: Nature 1996 Nov 14;384(6605):117-8.

HIV-1 subtype and second-receptor use [letter] Zhang L, et al. **Nature** 1996 Oct 31;383(6603):768

The HIV coreceptors CXCR4 and CCR5 are differentially expressed and regulated on human T lymphocytes [see comments] Bleul CC, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1925-30. Comment in: Proc Natl Acad Sci U S A 1997 Mar 4;94(5):1615-7.

Multiple extracellular elements of CCR5 and HIV-1 entry: dissociation from response to chemokines. Atchison RE, et al. **Science** 1996 Dec 13;274(5294):1924-6

Investigators detail HIV's fatal handshake [news; comment] Cohen J. **Science** 1996 Oct 25;274(5287):502. Comment on: Science 1996 Oct 25;274(5287):602-5.

HIV gets a taste of its own medicine [news] Cohen J. **Science** 1997 Sep 12;277(5332):1606

A broad-spectrum chemokine antagonist encoded by Kaposi's sarcoma-associated herpesvirus. Kledal TN, et al. **Science** 1997 Sep 12;277(5332):1656-9

Evidence for cell-surface association between fusin and the CD4-gp120 complex in human cell lines [see comments] Lapham CK, et al. **Science** 1996 Oct 25;274(5287):602-5. Comment in: Science 1996 Oct 25;274(5287):502.

RECEPTORS, HIV

Coreceptors: implications for HIV pathogenesis and therapy. Moore JP. **Science** 1997 Apr 4;276(5309):51–2 (19 ref.)

AIDS: the process of discovery [letter; comment] Varmus H, et al. **Science** 1997 Jan 10;275(5297):141; discussion 142 . Comment on: Science 1996 Dec 20;274(5295):1988–9.

HIV–1 coreceptor activity of CCR5 and its inhibition by chemokines: independence from G protein signaling and importance of coreceptor downmodulation. Alkhatib G, et al. **Virology** 1997 Aug 4;234(2):340–8

Binding of HIV–1 to its receptor induces tyrosine phosphorylation of several CD4–associated proteins, including the phosphatidylinositol 3–kinase. Briand G, et al. **Virology** 1997 Feb 17;228(2):171–9

CD4–independent infection by HIV–2 (ROD/B): use of the 7–transmembrane receptors CXCR–4, CCR–3, and V28 for entry. Reeves JD, et al. **Virology** 1997 Apr 28;231(1):130–4

Indicator cell lines for detection of primary strains of human and simian immunodeficiency viruses. Vodicka MA, et al. **Virology** 1997 Jun 23;233(1):193–8

PHYSIOLOGY

HIV type 1 coreceptors, neutralization serotypes, and vaccine development. Moore J, et al.
AIDS Res Hum Retroviruses 1997 Jun 10;13(9):733–6 (35 ref.)

Human immunodeficiency virus (HIV)–resistant CD4+ UT–7 megakaryocytic human cell line becomes highly HIV–1 and HIV–2 susceptible upon CXCR4 transfection: induction of cell differentiation by HIV–1 infection. Baiocchi M, et al. **Blood** 1997 Apr 15;89(8):2670–8

CD4–independent association between HIV–1 gp120 and CXCR4: functional chemokine receptors are expressed in human neurons. Hesselgesser J, et al. **Curr Biol** 1997 Feb 1;7(2):112–21

The chemokine SDF–1, stromal cell–derived factor 1, attracts early stage B cell precursors via the chemokine receptor CXCR4. D'Apuzzo M, et al. **Eur J Immunol** 1997 Jul;27(7):1788–93

Chemokine receptors as fusion cofactors for human immunodeficiency virus type 1 (HIV–1). Doranz BJ, et al. **Immunol Res** 1997 Feb;16(1):15–28 (79 ref.)

Determinants of HIV–1 coreceptor function on CC chemokine receptor 3. Importance of both extracellular and transmembrane/cytoplasmic regions. Alkhatib G, et al. **J Biol Chem** 1997 Aug 15;272(33):20420–6

Chemically synthesized SDF–1alpha analogue, N33A, is a potent chemotactic agent for CXCR4/Fusin/LESTR–expressing human leukocytes. Ueda H, et al. **J Biol Chem** 1997 Oct 3;272(40):24966–70

HIV coreceptor downregulation as antiviral principle: SDF–1alpha–dependent internalization of the chemokine receptor CXCR4 contributes to inhibition of HIV replication. Amara A, et al. **J Exp Med** 1997 Jul 7; 186(1):139–46

STRL33, A novel chemokine receptor–like protein, functions as a fusion cofactor for both macrophage–tropic and T cell line–tropic HIV–1. Liao F, et al. **J Exp Med** 1997 Jun 2;185(11):2015–23

CXCR4/fusin is not a species–specific barrier in murine cells for HIV–1 entry. Tachibana K, et al. **J Exp Med** 1997 May 19;185(10):1865–70

Chemokine receptors and HIV. Broder CC, et al.
J Leukoc Biol 1997 Jul;62(1):20–9 (84 ref.)

Coreceptor usage of primary human immunodeficiency virus type 1 isolates varies according to biological phenotype. Björndal A, et al. **J Virol** 1997 Oct;71(10):7478–87

Human immunodeficiency virus type 1 coreceptors participate in postentry stages in the virus replication cycle and function in simian immunodeficiency virus infection. Chackerian B, et al. **J Virol** 1997 May;71(5):3932–9

Human immunodeficiency virus strains differ in their ability to infect CD4+ cells expressing the rat homolog of CXCR–4 (fusin). Pleskoff O, et al. **J Virol** 1997 Apr; 71(4):3259–62

CD4–independent infection by human immunodeficiency virus type 2 strain ROD/B: the role of the N–terminal domain of CXCR–4 in fusion and entry. Potempa S, et al. **J Virol** 1997 Jun;71(6):4419–24

Role of CCR5 in infection of primary macrophages and lymphocytes by macrophage–tropic strains of human immunodeficiency virus: resistance to patient–derived and prototype isolates resulting from the delta ccr5 mutation. Rana S, et al. **J Virol** 1997 Apr;71(4):3219–27

Infection by human immunodeficiency virus—CD4 is not enough. Levy JA. **N Engl J Med** 1996 Nov 14; 335(20):1528–30

Immunodeficiency viruses. Spoilt for choice of co–receptors [news; comment] Clapham PR, et al. **Nature** 1997 Jul 17; 388(6639):230–1. Comment on: Nature 1997 Jul 17;388(6639):238. Comment on: Nature 1997 Jul 17;388(6639):296–300.

Host factors and the pathogenesis of HIV–induced disease. Fauci AS. **Nature** 1996 Dec 12;384(6609):529–34 (113 ref.)

HIV and the 7–transmembrane domain receptors. Broder CC, et al. **Pathobiology** 1996;64(4):171–9 (108 ref.)

Molecular uncoupling of C–C chemokine receptor 5–induced chemotaxis and signal transduction from HIV–1 coreceptor activity. Gosling J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5061–6

Evolution of HIV–1 coreceptor usage through interactions with distinct CCR5 and CXCR4 domains. Lu Z, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6426–31

New hope in HIV disease [news] [see comments] Balter M. **Science** 1996 Dec 20;274(5295):1988–9. Comment in: Science 1997 Jan 10;275(5297):141; discussion 142.

Does a common virus give HIV a helping hand? [news; comment] Balter M. **Science** 1997 Jun 20;276(5320):1794. Comment on: Science 1997 Jun 20;276(5320):1874–8.

Breakthroughs of the year, 1996 [editorial] Bloom FE. **Science** 1996 Dec 20;274(5295):1987

AIDS: the process of discovery [letter; comment] Gallo R. **Science** 1997 Jan 10;275(5297):141; discussion 142. Comment on: Science 1996 Dec 20;274(5295):1988–9.

Identification of a chemokine receptor encoded by human cytomegalovirus as a cofactor for HIV–1 entry [see comments] Pleskoff O, et al. **Science** 1997 Jun 20; 276(5320):1874–8. Comment in: Science 1997 Jun 20;276(5320):1794.

Control of HIV co–receptor expression: implications for pathogenesis and treatment. Rowland–Jones S, et al. **Trends Microbiol** 1997 Aug;5(8):300–2; discussion 302–3 (28 ref.)

Unwelcomed guests with master keys: how HIV uses chemokine receptors for cellular entry. Doms RW, et al. **Virology** 1997 Sep 1;235(2):179–90 (108 ref.)

Role of the amino–terminal extracellular domain of CXCR–4 in human immunodeficiency virus type 1 entry. Picard L, et al. **Virology** 1997 Apr 28;231(1):105–11

[Mechanism of HIV infection (news)]
Schweiz Rundsch Med Prax 1997 Apr 23;86(17):692, 699 **(Ger)**

RECEPTORS, HUMAN CHORIONIC GONADOTROPIN see **RECEPTORS, LH**

RECEPTORS, HYALURONAN see **ANTIGENS, CD44**

RECEPTORS, HYPOTHALAMIC RELEASE–INHIBITING HORMONES see **RECEPTORS, PITUITARY HORMONE–REGULATING HORMONE**

RECEPTORS, HYPOTHALAMIC RELEASING HORMONES see **RECEPTORS, PITUITARY HORMONE–REGULATING HORMONE**

RECEPTORS, IGE

ANALYSIS

Circulating soluble CD23 levels in Kawasaki disease with coronary artery lesions. Hirao J, et al.
Acta Paediatr Jpn 1997 Jun;39(3):397–9

Effects of inhaled steroid treatment on serum eosinophilic cationic protein (ECP) and low affinity receptor for IgE (Fc epsilon RII/sCD23) in childhood bronchial asthma. Türktaş I, et al. **Arch Dis Child** 1996 Oct;75(4):314–8

Lack of Fc–epsilon receptors on murine eosinophils: implications for the functional significance of elevated IgE and eosinophils in parasitic infections [see comments] de Andres B, et al. **Blood** 1997 May 15;89(10):3826–36. Comment in: Blood 1997 May 15;89(10):3497–501.

Prognostic importance of serum soluble CD23 level in chronic lymphocytic leukemia [see comments] Sarfati M, et al. **Blood** 1996 Dec 1;88(11):4259–64. Comment in: Blood 1997 Jun 1;89(11):4241–2.

Fc epsilon RI on antigen–presenting cells. Bieber T.
Curr Opin Immunol 1996 Dec;8(6):773–7 (26 ref.)

Allergen–induced recruitment of Fc epsilon RI+ eosinophils in human atopic skin. Barata LT, et al. **Eur J Immunol** 1997 May;27(5):1236–41

Function of CD23 in the response of human B cells to antigen. Reljić R, et al. **Eur J Immunol** 1997 Feb; 27(2):572–5

Cellular expression and serum circulating levels of CD23 in B–cell chronic lymphocytic leukemia. Implications for prognosis. Molica S, et al. **Haematologica** 1996 Sep–Oct; 81(5):428–33

Expression of the high–affinity immunoglobulin E receptor alpha–subunit in human blood eosinophils. Bjerke T, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):302–4

Differentiation of eosinophils from cord blood cell precursors: kinetics of Fc epsilon RI and Fc epsilon RII expression. Capron M, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):48–50

Cytokine expression on cross–linking of human tissue Fc epsilon RI. Gordon JR, et al.
Int Arch Allergy Immunol 1997 May–Jul;113(1–3):269–71

High–affinity IgE receptor Fc epsilon RI expression in allergic reactions. Grant JA, et al.
Int Arch Allergy Immunol 1997 May–Jul;113(1–3):376–8

Serum IgE level drives basophil and mast cell IgE receptor display. MacGlashan DW Jr, et al.
Int Arch Allergy Immunol 1997 May–Jul;113(1–3):45–7

Characteristics of Fc epsilon RI expression on human monocytes and monocytic cell lines: establishment of an in vitro model. Reischl IG, et al.
Int Arch Allergy Immunol 1997 May–Jul;113(1–3):266–8

GM–CSF downregulates expression of tryptase, Fc epsilon RI and histamine in HMC–1 mast cells. Welker P, et al.
Int Arch Allergy Immunol 1997 May–Jul;113(1–3):284–6

Nasal mast cells in perennial allergic rhinitics exhibit increased expression of the Fc epsilonRI, CD40L, IL–4, and IL–13, and can induce IgE synthesis in B cells [see comments] Pawankar R, et al. **J Clin Invest** 1997 Apr 1; 99(7):1492–9. Comment in: J Clin Invest 1997 Apr 1;99(7):1465–6.

Expression of CD23 in the germinal center of thymus from myasthenia gravis patients. Murai H, et al.
J Neuroimmunol 1997 Jun;76(1–2):61–9

ANTAGONISTS & INHIBITORS

Structure–based design of peptides that inhibit IgE binding to its high–affinity receptor Fc epsilon RI. McDonnell JM, et al. **Biochem Soc Trans** 1997 May;25(2):387–92 (34 ref.)

BIOSYNTHESIS

Interleukin–7 modulates CD23 and HLA–DR expression on CD4+ T cells and promotes a Th–2 type citokine profile. Fratazzi C, et al. **Allergol Immunopathol (Madr)** 1997 Jul–Aug;25(4):189–98

Increased soluble CD23 molecules in serum/saliva and correlation with the stage of sialoectasis in patients with primary Sjögren's syndrome. Takei M, et al.
Clin Exp Rheumatol 1995 Nov–Dec;13(6):711–5

Interleukin–7 modulates intracytoplasmatic CD23 production and induces adhesion molecule expression and adhesiveness in activated CD4+CD23+ T cell subsets. Fratazzi C, et al. **Clin Immunol Immunopathol** 1996 Dec;81(3):261–70

Induction of CD25 expression in human B lymphocytes by pharmacological activators of cellular signalling pathways. McKay CE, et al. **Cytokine** 1996 Apr;8(4):305–12

Targeted elimination of cells expressing the high–affinity receptor for IgE (Fc epsilon RI) by a Pseudomonas exotoxin–based chimeric protein. Fishman A, et al.
Eur J Immunol 1997 Feb;27(2):486–94

Analysis of cytokine profile in human colonic mucosal Fc epsilonRI–positive cells by single cell PCR: inhibition of IL–3 expression in steroid–treated IBD patients. Ligumsky M, et al. **FEBS Lett** 1997 Aug 25;413(3):436–40

Fc epsilon RI–expressing antigen–presenting cells: new players in the atopic game. Bieber T. **Immunol Today** 1997 Jul;18(7):311–3 (17 ref.)

Induction of the high–affinity IgE receptor (Fc epsilon RI) on human mast cells by IL–4. Toru H, et al.
Int Immunol 1996 Sep;8(9):1367–73

Altered expression of IgG and complement receptors indicates a significant role of phagocytes in atopic dermatitis. Isolauri E, et al. **J Allergy Clin Immunol** 1997 May;99(5):707–13

Enhanced expression of high–affinity IgE receptor (Fc epsilon RI) alpha chain in human allergen–induced rhinitis with co–localization to mast cells, macrophages, eosinophils, and dendritic cells. Rajakulasingam K, et al.
J Allergy Clin Immunol 1997 Jul;100(1):78–86

Expression of high–affinity IgE receptors (Fc epsilon RI) on peripheral blood basophils, monocytes, and eosinophils in atopic and nonatopic subjects: relationship to total serum IgE concentrations. Sihra BS, et al.
J Allergy Clin Immunol 1997 May;99(5):699–706

Transcription factor Egr–1 activity down–regulates Fas and CD23 expression in B cells. Dinkel A, et al.
J Immunol 1997 Sep 15;159(6):2678–84

IgE regulates mouse basophil Fc epsilon RI expression in vivo. Lantz CS, et al. **J Immunol** 1997 Mar 15; 158(6):2517–21

Peripheral blood dendritic cells express Fc epsilon RI as a complex composed of Fc epsilon RI alpha– and Fc epsilon RI gamma–chains and can use this receptor for IgE–mediated allergen presentation. Maurer D, et al.
J Immunol 1996 Jul 15;157(2):607–16

Pathways controlling the expression of surface CD21 (CR2) and CD23 (Fc(epsilon)IIR) proteins in human malignant B cells. Shubinsky G, et al. **Leuk Lymphoma** 1997 May; 25(5–6):521–30

[Expression of human IgE–binding factor (sCD23) in Escherichia coli cells] Kaĭgorodov VA, et al.
Biull Eksp Biol Med 1996 Jun;121(6):690–4 **(Rus)**

BLOOD

Serum endometrial IgG antibodies and soluble CD23 concentrations in patients with endometriosis. Odukoya O, et al. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):927–31

Soluble CD23 is increased in allergy. Boccafogli A, et al.
Allergy 1997 Mar;52(3):357–8

Effect of immunotherapy on sCD23 levels in patients allergic to Hymenoptera venom. Forman SO, et al.
Ann Allergy Asthma Immunol 1996 Oct;77(4):282–4

Prognostic impact of the serum levels of soluble CD23 in B–cell chronic lymphocytic leukemia [letter; comment] Knauf WU, et al. **Blood** 1997 Jun 1;89(11):4241–2. Comment on: Blood 1996 Dec 1;88(11):4259–64.

Increased plasma levels of soluble CD23 in haemorrhagic fever with renal syndrome; relation to virus–specific IgE. Alexeyev OA, et al. **Clin Exp Immunol** 1997 Aug; 109(2):351–5

Serum soluble CD23 but not IL8, IL10, GM–CSF, or IFN–gamma is elevated in patients with hepatitis C infection. Bansal AS, et al. **Clin Immunol Immunopathol** 1997 Aug;84(2):139–44

Clinical implications of serum levels of soluble CD23 and tumor necrosis factor alpha in low–grade non–Hodgkin's lymphoma. Zinzani PL, et al. **Eur J Haematol** 1996 Nov; 57(5):335–40

IL–4 and SCD23 in children with atopic dermatitis [letter;

comment] Hatzistilianou M, et al **Eur J Pediatr** 1996 Jun; 155(6):521–2. Comment on: Eur J Pediatr 1995 Sep;154(9):723–8.

Soluble serum CD23 levels and CD23 molecule expression on intestinal epithelial cells in infants with reaginic and non reaginic cow's milk allergy [letter] Lachaux A, et al. **Eur J Pediatr** 1996 Oct;155(10):918

Serum soluble CD23 levels in giant cell arteritis. Roblot P, et al. **Immunol Lett** 1996 Oct;53(1):41–4

Increase in CD23+ B cells in infants with bronchiolitis is accompanied by appearance of IgE and IgG4 antibodies specific for respiratory syncytial virus. Rabatić S, et al. **J Infect Dis** 1997 Jan;175(1):32–7

Serum levels of TNF, IL-6 and sCD23 correlate with changes in lymphocyte count in patients with B-cell chronic lymphocytic leukaemia receiving interferon-alpha therapy. Jewell AP, et al. **Leuk Lymphoma** 1997 Jan; 24(3–4):327–33

Serum levels of the soluble low affinity receptor for IgE and soluble interleukin-2 receptor in childhood, and their relation to age, gender, atopy and allergic disease. Miller AL, et al. **Pediatr Allergy Immunol** 1996 May;7(2):68–74

[Serum levels of sCD23 and IL-4 concentration in stimulated PBMC in children with atopic diseases] Boznański A, et al. **Pediatr Pol** 1996 Sep;71(9):753–7 (Eng. Abstr.) **(Pol)**

[Evaluation of soluble components of receptors with weak affinity for IgE (sCD23) in children with pollinosis given specific immunotherapy] Boznański A, et al. **Pneumonol Alergol Pol** 1996;64(7–8):386–91 (Eng. Abstr.) **(Pol)**

CHEMISTRY

NMR-based modelling revealed an alpha helical structure for cytoplasmic domain of the alpha subunit of Fc epsilon RI, the high affinity IgE receptor. Zloh M, et al. **Biochem Soc Trans** 1997 Feb;25(1):55S

Lipid–helix interactions in membrane receptors. Zloh M, et al. **Biochem Soc Trans** 1996 May;24(2):305S

5-iodonaphthyl-1-azide labeling of plasma membrane proteins adjacent to specific sites via energy transfer. Meiklejohn BI, et al. **Biochim Biophys Acta** 1997 Mar 13; 1324(2):320–32

Fc epsilon RI expression on monocytes in atopic disease: cause or effect? [editorial; comment] Larché M. **Clin Exp Allergy** 1996 Jun;26(6):616–7. Comment on: Clin Exp Allergy 1996 Jun;26(6):630–41.

Automated hydrodynamic modelling of a complex between a human IgE fragment (Fc epsilon 3–4) and the IgE high affinity receptor Fc epsilon RI alpha-chain. Beavil AJ, et al. **Eur Biophys J** 1997;25(5–6):463–9

Basis of the 1:1 stoichiometry of the high affinity receptor Fc epsilon RI–IgE complex. Keown MB, et al. **Eur Biophys J** 1997;25(5–6):471–6

New insights in the structure and biology of the high affinity receptor for IgE (Fc epsilon RI) on human epidermal Langerhans cells. Bieber T, et al. **J Dermatol Sci** 1996 Oct; 13(1):71–5

Peripheral blood dendritic cells express Fc epsilon RI as a complex composed of Fc epsilon RI alpha- and Fc epsilon RI gamma-chains and can use this receptor for IgE-mediated allergen presentation. Maurer D, et al. **J Immunol** 1996 Jul 15;157(2):607–16

The use of chimeric human Fc(epsilon) receptor I to redirect cytotoxic T lymphocytes to tumors. Kershaw MH, et al. **J Leukoc Biol** 1996 Dec;60(6):721–8

Development and function of T cells in T cell antigen receptor/CD3 zeta knockout mice reconstituted with Fc epsilon RI gamma. Liu CP, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):616–21

[Low affinity Fc receptor for IgE (Fc epsilon R II/CD23)] Gon Y, et al. **Nippon Rinsho** 1996 Feb;54(2):456–60 (20 ref.) (Eng. Abstr.) **(Jpn)**

[High affinity receptor for immunoglobulin E (Fc epsilon R I)] Ra C. **Nippon Rinsho** 1996 Feb;54(2):446–55 (39 ref.) (Eng. Abstr.) **(Jpn)**

[Receptor CD23 and sCD23--structure and biological function] Gina AR, et al. **Pol Arch Med Wewn** 1995 Nov; 94(5):436–41 (20 ref.) **(Pol)**

DRUG EFFECTS

Interleukin-7 modulates intracytoplasmatic CD23 production and induces adhesion molecule expression and adhesiveness in activated CD4+CD23+ T cell subsets. Fratazzi C, et al. **Clin Immunol Immunopathol** 1996 Dec;81(3):261–70

Effects of the anti-allergics astemizole and norastemizole on Fc epsilon RI receptor-mediated signal transduction processes. Fischer MJ, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):97–105

Analysis of the promoter elements necessary for IL-4 and anti-CD40 antibody induction of murine Fc epsilon RII (CD23): comparison with the germline epsilon promoter. Richards ML, et al. **J Immunol** 1997 Jan 1;158(1):263–72

GENETICS

Absence of mutations in the 6th exon of Fc epsilon RI-beta. Deichmann KA, et al. **Adv Exp Med Biol** 1996;409:355–8

Maternal inheritance of atopy at the Fc epsilon RI beta locus in Japanese sibs. Mao XQ, et al. **Hum Hered** 1997 May–Jun; 47(3):178–80

A new variant of the beta subunit of the high-affinity receptor for immunoglobulin E (Fc epsilon RI-beta E237G): associations with measures of atopy and bronchial hyper-responsiveness. Hill MR, et al. **Hum Mol Genet** 1996 Jul;5(7):959–62

Association between atopic asthma and a coding variant of Fc epsilon RI beta in a Japanese population [published erratum appears in Hum Mol Genet 1996 Dec;5(12):2068] Shirakawa T, et al. **Hum Mol Genet** 1996 Aug;5(8):1129–30

Genetic influence on immune responses to an N. brasiliensis infection: surface expression and occupancy of IgE receptors and histamine releasability of mast cells. Chen XJ, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S17–8

Levels of tryptase, chymase, and Fc epsilon RI alpha messenger RNA in human skin are unchanged after IgE-dependent stimulation of cutaneous mast cells in vivo. Xia HZ, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):224–6

Absence of Fc epsilonRI alpha chain results in upregulation of Fc gammaRIII-dependent mast cell degranulation and anaphylaxis. Evidence of competition between Fc epsilonRI and Fc gammaRIII for limiting amounts of FcR beta and gamma chains. Dombrowicz D, et al. **J Clin Invest** 1997 Mar 1;99(5):915–25

Systemic anaphylaxis in the mouse can be mediated largely through IgG1 and Fc gammaRIII. Assessment of the cardiopulmonary changes, mast cell degranulation, and death associated with active or IgE- or IgG1-dependent passive anaphylaxis. Miyajima I, et al. **J Clin Invest** 1997 Mar 1;99(5):901–14

Delayed maturation of CD4- CD8- Fc gamma RII/III+ T and natural killer cell precursors in Fc epsilon RI gamma transgenic mice. Flamand V, et al. **J Exp Med** 1996 Nov 1;184(5):1725–35

Analysis of the promoter elements necessary for IL-4 and anti-CD40 antibody induction of murine Fc epsilon RII (CD23): comparison with the germline epsilon promoter. Richards ML, et al. **J Immunol** 1997 Jan 1;158(1):263–72

Chromatin structure of the lymphocyte Fc epsilon receptor gene (CD23): identification of an upstream transcriptional enhancer. Schubach WH, et al. **J Immunol** 1997 Mar 1; 158(5):2228–35

Isolation and characterization of the rat beta-subunit gene of the high affinity receptor for immunoglobulin E. Witthuhn BA, et al. **Mol Immunol** 1996 Jul;33(10):881–90

Molecular genetics of the high-affinity IgE receptor. Hopkin JM. **Monogr Allergy** 1996;33:97–108 (72 ref.)

A bacterial signal peptide directs efficient secretion of eukaryotic proteins in the baculovirus expression system. Allet B, et al. **Protein Expr Purif** 1997 Feb;9(1):61–8

TNF-alpha regulates GM-CSF-, IL-3- or M-CSF-induced Fc epsilon RII/CD23 gene expression and soluble Fc epsilon RII release by human monocytes. Hashimoto S, et al. **Scand J Immunol** 1997 Mar;45(3):255–60

Atopy phenotype in subjects with variants of the beta subunit of the high affinity IgE receptor. Li A, et al. **Thorax** 1997 Jul;52(7):654–5

[Isolation of atopic genes] Yamaguchi E, et al. **Nippon Naika Gakkai Zasshi** 1996 Jun 10;85(6):942–7 (11 ref.) **(Jpn)**

[Genetic analysis of bronchial asthma in Japanese population--Fc epsilon RI beta gene and beta 2 adrenergic receptor gene] Hizawa N, et al. **Nippon Rinsho** 1996 Feb; 54(2):539–43 (23 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Study on changes in the level of serum IL-4 and soluble CD 23(s-CD23) with immunotherapy in nasal allergy patients. Ito H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996; 525:98–104

The roles of CD40 and CD23 in IgE regulation. Yasui T, et al. **Adv Exp Med Biol** 1996;409:349–54 (28 ref.)

Demonstration of the high-affinity IgE receptor (Fc epsilon RI) on Langerhans' cells of diseased nasal mucosa. Haas N, et al. **Allergy** 1997 Apr;52(4):436–9

Antigen-mediated IGE receptor aggregation and signaling: a window on cell surface structure and dynamics. Holowka D, et al. **Annu Rev Biophys Biomol Struct** 1996;25:79–112 (149 ref.)

The low-affinity receptor for IgE (Fc epsilon RII or CD23) as a therapeutic target. Conrad DH, et al. **Biochem Soc Trans** 1997 May;25(2):393–7 (28 ref.)

Eosinophils and IgE receptors: a continuing controversy [editorial; comment] Kita H, et al. **Blood** 1997 May 15; 89(10):3497–501. Comment on: Blood 1997 May 15;89(10):3826–36.

Human blood basophils produce interleukin-13 in response to IgE-receptor-dependent and -independent activation. Ochensberger B, et al. **Blood** 1996 Oct 15;88(8):3028–37

Loratadine and desethoxylcarbonyl-loratadine inhibit the immunological release of mediators from human Fc epsilon RI+ cells. Genovese A, et al. **Clin Exp Allergy** 1997 May; 27(5):559–67

Anti-IgE and anti-Fc epsilon RI autoantibodies in clinical allergy. Fiebiger E, et al. **Curr Opin Immunol** 1996 Dec; 8(6):784–9 (40 ref.)

Function of CD23 in the response of human B cells to antigen. Reljić R, et al. **Eur J Immunol** 1997 Feb; 27(2):572–5

Pairs of surface molecules involved in human IgE regulation: CD23-CD21 and CD40-CD40L. Bonnefoy JY, et al. **Eur Respir J Suppl** 1996 Aug;22:63s–66s (48 ref.)

CD5/CD19/CD23 chronic lymphocytosis [letter] Manteiga R, et al. **Haematologica** 1997 Jul–Aug;82(4):510–1

Complement peptides and mast cell triggering. Erdei A, et al. **Immunol Lett** 1996 Dec;54(2–3):109–12

Regulation of IgE synthesis. Lessons from the study of IgE transgenic and CD23-deficient mice. Lamers MC, et al. **Immunol Rev** 1995 Dec;148:71–95 (74 ref.)

A new role for CD23 in inflammation. Bonnefoy JY, et al. **Immunol Today** 1996 Sep;17(9):418–20

Decrease in CD23+ B lymphocytes and clinical outcome in asthmatic patients receiving specific rush immunotherapy. Kljaic-Turkalj M, et al. **Int Arch Allergy Immunol** 1996 Oct;111(2):188–94

Granulocyte macrophage colony stimulating factor induces Fc epsilon RII/CD23 expression on normal human polymorphonuclear neutrophils. Yamaoka KA, et al. **Int Immunol** 1996 Apr;8(4):479–90

Epstein-Barr virus binding to CD21, the virus receptor, activates resting B cells via an intracellular pathway that is linked to B cell infection. Roberts ML, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3077–85

The 25-kDa soluble CD23 activates type III constitutive nitric oxide-synthase activity via CD11b and CD11c expressed by human monocytes. Aubry JP, et al. **J Immunol** 1997 Jul 15;159(2):614–22

TCR-gamma delta cells in CD3 zeta-deficient mice contain Fc epsilon RI gamma in the receptor complex but are specifically unresponsive to antigen. Khattri R, et al. **J Immunol** 1996 Sep 15;157(6):2320–7

Protein tyrosine kinases Syk and ZAP-70 display distinct requirements for Src family kinases in immune response receptor signal transduction. Zoller KE, et al. **J Immunol** 1997 Feb 15;158(4):1650–9

Heterogeneity of human skin mast cells and human basophils. I. Pharmacological experiments with activators and inhibitors of protein kinase C. Amon U, et al. **Skin Pharmacol** 1996;9(3):211–20

[Pathogenetic significance of IgE-binding epitopes allergens (published erratum appears in Pneumologie 1996 Dec;50(12):938)] Bufe A, et al. **Pneumologie** 1996 Sep; 50(9):625–31 (55 ref.) **(Ger)**

[Low affinity Fc receptor for IgE (Fc epsilon R II/CD23)] Gon Y, et al. **Nippon Rinsho** 1996 Feb;54(2):456–60 (20 ref.) (Eng. Abstr.) **(Jpn)**

[High affinity receptor for immunoglobulin E (Fc epsilon R I)] Ra C. **Nippon Rinsho** 1996 Feb;54(2):446–55 (39 ref.) (Eng. Abstr.) **(Jpn)**

[Receptor CD23 and sCD23--structure and biological function] Gina AR, et al. **Pol Arch Med Wewn** 1995 Nov; 94(5):436–41 (20 ref.) **(Pol)**

METABOLISM

Elevated soluble CD23 levels in the sera from patients with localized scleroderma. Sato S, et al. **Arch Dermatol Res** 1996 Feb;288(2):74–8

Type II phospholipase A2 is linked to cyclooxygenase-2-mediated delayed prostaglandin D2 generation by cultured mouse mast cells following FcepsilonRI- and cytokine-dependent activation. Ashraf MM, et al. **Biochem Biophys Res Commun** 1996 Dec 24; 229(3):726–32

Cross-linking of the high-affinity IgE receptor induces the expression of cyclo-oxygenase 2 and attendant prostaglandin generation requiring interleukin 10 and interleukin 1 beta in mouse cultured mast cells. Ashraf M, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):965–73

Fc epsilon RI-ligation induces association of tyrosine phosphorylated proteins with Src homology 2 domains of phospholipase C gamma 1 in RBL-2H3 rat basophilic leukemia cells. Han MY, et al. **Biochem Mol Biol Int** 1997 Apr;41(5):895–904

Altered patterns of tyrosine phosphorylation and Syk activation for sterically restricted cyclic dimers of IgE-Fc epsilonRI. Harris NT, et al. **Biochemistry** 1997 Feb 25; 36(8):2237–42

Evidence supporting a role for microfilaments in regulating the coupling between poorly dissociable IgE-Fc epsilonRI aggregates downstream signaling pathways. Pierini L, et al. **Biochemistry** 1997 Jun 17;36(24):7447–56

Interaction of the low-affinity receptor CD23/Fc epsilonRII lectin domain with the Fc epsilon3–4 fragment of human immunoglobulin E. Shi J, et al. **Biochemistry** 1997 Feb 25; 36(8):2112–22

Analysis of Fc(epsilon)RI-mediated mast cell stimulation by surface-carried antigens. Schweitzer-Stenner R, et al. **Biophys J** 1997 Jun;72(6):2470–8

Inhibition of apoptosis in a human pre-B-cell line by CD23 is mediated via a novel receptor. White LJ, et al. **Blood** 1997 Jul 1;90(1):234–43

Expression of mRNA for the proto-oncogene c-fos in rat basophilic leukaemia cells. Stephan V, et al. **Cell Signal** 1997 Jan;9(1):65–70

Function and regulation of Fc epsilon RI expression on monocytes from non-atopic donors [see comments] Reischl IG, et al. **Clin Exp Allergy** 1996 Jun;26(6):630–41. Comment in: Clin Exp Allergy 1996 Jun;26(6):616–7.

Dendritic cells in normal and asthmatic airways: expression of the alpha subunit of the high affinity immunoglobulin E receptor (Fc epsilon RI -alpha). Tunon-De-Lara JM, et al. **Clin Exp Allergy** 1996 Jun;26(6):648–55

Basis of the 1:1 stoichiometry of the high affinity receptor Fc epsilon RI–IgE complex. Keown MB, et al. **Eur Biophys J** 1997;25(5–6):471–6

Association of tissue factor with a gamma chain homodimer of the IgE receptor type I in cultured human monocytes.

Masuda M, et al. **Eur J Immunol** 1996 Oct;26(10):2529–32
Cleavage of the low–affinity receptor for human IgE (CD23) by a mite cysteine protease: nature of the cleaved fragment in relation to the structure and function of CD23. Schulz O, et al. **Eur J Immunol** 1997 Mar;27(3):584–8
Serum immunoglobulin E and soluble CD23 in patients with Graves' disease. Sayinalp S, et al. **Horm Metab Res** 1996 Mar;28(3):133–7
Soluble CD23 protein in the peritoneal fluid of patients with endometriosis. Odukoya OA, et al. **Hum Reprod** 1996 Sep; 11(9):2018–21
IgE antibody up–regulates high affinity IgE binding on murine bone marrow–derived mast cells. Hsu C, et al. **Immunol Lett** 1996 Sep;52(2–3):129–34
Clustering the mast cell function–associated antigen (MAFA) induces tyrosyl phosphorylation of the Fc epsilonRI–beta subunit. Rong X, et al. **Immunol Lett** 1996 Dec; 54(2–3):105–8
A new role for CD23 in inflammation. Bonnefoy JY, et al. **Immunol Today** 1996 Sep;17(9):418–20
Expression of CD23, CD32, Mac–1 and other adhesion molecules in eosinophils in strongyloidiasis and HTLV–I–positive patients. Kakazu T, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:46–50
Expression of high–affinity IgE receptor (Fc epsilon RI) on human alveolar macrophages from atopic and non–atopic patients. Ochiai K, et al. **Int Arch Allergy Immunol** 1996; 111 Suppl 1:55–8
Characterization of Fc epsilonRI expressing human monocytic cell lines. 1. The role of CD45 on signal transduction in primary monocytes and cell lines. Reischl IG, et al. **Int Arch Allergy Immunol** 1997 Aug;113(4):444–53
Induction of B cell apoptosis by co–cross–linking CD23 and sIg involves aberrant regulation of c–myc and is inhibited by bcl–2. Campbell KA, et al. **Int Immunol** 1997 Aug; 9(8):1131–40
Molecular cloning and characterization of guinea pig Fc gamma RIII: expression but not function is independent of the gamma chain of Fc epsilon RI. Isashi Y, et al. **Int Immunol** 1996 Sep;8(9):1335–46
Granulocyte macrophage colony stimulating factor induces Fc epsilon RII/CD23 expression on normal human polymorphonuclear neutrophils. Yamaoka KA, et al. **Int Immunol** 1996 Apr;8(4):479–90
Production of IL–5 and granulocyte–macrophage colony–stimulating factor by naive human mast cells activated by high–affinity IgE receptor ligation. Bressler RB, et al. **J Allergy Clin Immunol** 1997 Apr;99(4):508–14
Requirement of calcium influx for hydrolytic action of membrane phospholipids by cytosolic phospholipase A2 rather than mitogen–activated protein kinase activation in Fc epsilon RI–stimulated rat peritoneal mast cells. Ishimoto T, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1247–52
Reconstituted killer cell inhibitory receptors for major histocompatibility complex class I molecules control mast cell activation induced via immunoreceptor tyrosine–based activation motifs. Bléry M, et al. **J Biol Chem** 1997 Apr 4;272(14):8989–96
Interaction of phosphorylated FcepsilonRIgamma immunoglobulin receptor tyrosine activation motif–based peptides with dual and single SH2 domains of p72syk. Assessment of binding parameters and real time binding kinetics. Chen T, et al. **J Biol Chem** 1996 Oct 11; 271(41):25308–15
Compartmentalized activation of the high affinity immunoglobulin E receptor within membrane domains. Field KA, et al. **J Biol Chem** 1997 Feb 14;272(7):4276–80
SLP–76 is a substrate of the high affinity IgE receptor–stimulated protein tyrosine kinases in rat basophilic leukemia cells. Hendricks–Taylor LR, et al. **J Biol Chem** 1997 Jan 10;272(2):1363–7
The negative signaling molecule SH2 domain–containing inositol–polyphosphate 5–phosphatase (SHIP) binds to the tyrosine–phosphorylated beta subunit of the high affinity IgE receptor. Kimura T, et al. **J Biol Chem** 1997 May 23; 272(21):13991–6
Downstream signaling molecules bind to different phosphorylated immunoreceptor tyrosine–based activation motif (ITAM) peptides of the high affinity IgE receptor. Kimura T, et al. **J Biol Chem** 1996 Nov 1;271(44):27962–8
Characterization of protein–tyrosine phosphatases that dephosphorylate the high affinity IgE receptor. Mao SY, et al. **J Biol Chem** 1997 May 30;272(22):14067–73
The inositol 5'–phosphatase SHIP binds to immunoreceptor signaling motifs and responds to high affinity IgE receptor aggregation. Osborne MA, et al. **J Biol Chem** 1996 Nov 15;271(46):29271–8
Biochemical evidence that the phosphorylated tyrosines, serines, and threonines on the aggregated high affinity receptor for IgE are in the immunoreceptor tyrosine–based activation motifs. Pribluda VS, et al. **J Biol Chem** 1997 Apr 25;272(17):11185–92
Aggregation of the high affinity IgE receptor results in the tyrosine phosphorylation of the surface adhesion protein PECAM–1 (CD31). Sagawa K, et al. **J Biol Chem** 1997 May 16;272(20):13412–8
Association of a p95 Vav–containing signaling complex with the FcepsilonRI gamma chain in the RBL–2H3 mast cell line. Evidence for a constitutive in vivo association of Vav with Grb2, Raf–1, and ERK2 in an active complex. Song JS, et al. **J Biol Chem** 1996 Oct 25;271(43):26962–70
Tyrosine phosphorylation of the vav proto–oncogene product links FcepsilonRI to the Rac1–JNK pathway. Teramoto H, et al. **J Biol Chem** 1997 Apr 18; 272(16):10751–5
The unique domain as the site on Lyn kinase for its constitutive association with the high affinity receptor for IgE. Vonakis BM, et al. **J Biol Chem** 1997 Sep 19; 272(38):24072–80
Increased degranulation and phospholipase A2, C, and D activity in RBL cells stimulated through FcepsilonR1 is due to spreading and not simply adhesion. Apgar JR. **J Cell Sci** 1997 Mar;110 (Pt 6):771–80
IL–10 suppresses cell surface CD23/Fc epsilon RII expression, not by enhancing soluble CD23 release, but by reducing CD23 mRNA expression in human monocytes. Morinobu A, et al. **J Clin Immunol** 1996 Nov;16(6):326–33
New insights in the structure and biology of the high affinity receptor for IgE (Fc epsilon RI) on human epidermal Langerhans cells. Bieber T, et al. **J Dermatol Sci** 1996 Oct; 13(1):71–5
IgE enhances mouse mast cell Fc(epsilon)RI expression in vitro and in vivo: evidence for a novel amplification mechanism in IgE–dependent reactions. Yamaguchi M, et al. **J Exp Med** 1997 Feb 17;185(4):663–72
Down–regulation of Fc(epsilon)RI expression on human basophils during in vivo treatment of atopic patients with anti–IgE antibody. MacGlashan DW Jr, et al. **J Immunol** 1997 Feb 1;158(3):1438–45
Effect of anti–IgE antibodies on Fc epsilonRI–bound IgE. Rudolf MP, et al. **J Immunol** 1996 Dec 15;157(12):5646–52
Effects of anti–IgE mAb on serum IgE, Fc epsilon RII/CD23 expression on splenic B cells and worm burden in mice infected with Paragonimus westermani. Shin MH, et al. **Korean J Parasitol** 1997 Mar;35(1):47–54
CD23 expression in transformed small lymphocytic lymphomas/chronic lymphocytic leukemias and blastic transformations of mantle cell lymphoma. Dunphy CH, et al. **Mod Pathol** 1997 Aug;10(8):818–22
Use of CD23 (BU38) on paraffin sections in the diagnosis of small lymphocytic lymphoma and mantle cell lymphoma. Kumar S, et al. **Mod Pathol** 1996 Sep;9(9):925–9
Involvement of interleukin–4 and soluble CD23 in hypersynthesis of immunoglobulins A and E in patients with IgA nephropathy. Yano N, et al. **Nephron** 1996; 72(1):44–51
Critical role for the tyrosine kinase Syk in signalling through the high affinity IgE receptor of mast cells. Costello PS, et al. **Oncogene** 1996 Dec 19;13(12):2595–605
Shuttling of initiating kinase between discrete aggregates of the high affinity receptor for IgE regulates the cellular response. Torigoe C, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1372–7

PHYSIOLOGY

Cooperation between the Fc epsilonR1 and formyl peptide receptor signaling pathways in RBL(FPR) cells: the contribution of receptor–specific Ca2+ mobilization responses. Lee RJ, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):812–9
The human high affinity IgG receptor (Fc gamma RI) signals through the immunoreceptor tyrosine–based activation motif (ITAM) of the gamma chain of Fc epsilon RI. Gillooly DJ, et al. **Biochem Soc Trans** 1997 May;25(2):215S
Downstream signals initiated in mast cells by Fc epsilon RI and other receptors. Beaven MA, et al. **Curr Opin Immunol** 1996 Dec;8(6):766–72 (66 ref.)
Direct interaction of Syk and Lyn protein tyrosine kinases in rat basophilic leukemia cells activated via type I Fc epsilon receptors. Amoui M, et al. **Eur J Immunol** 1997 Jan;27(1):321–8
IgE receptor (Fc epsilon RI) and signal transduction. Kinet JP, et al. **Eur Respir J Suppl** 1996 Aug;22:116s–118s (31 ref.)
Expression, but lack of calcium mobilization by high–affinity IgE Fc epsilon receptor I on human epidermal and dermal Langerhans cells. Shibaki A, et al. **Exp Dermatol** 1996 Oct; 5(5):272–8
B cell hybridoma presents both B–cell and T–cell epitopes for stimulating antibody production via CD23 pathway. Schmaltz R, et al. **Immunol Invest** 1996 Sep–Nov; 25(5–6):481–93
The role of RGD in CD23–mediated cell adhesion [letter] Moulder K. **Immunol Today** 1996 Apr;17(4):198–9
Relation between effects of a set of anti–allergic drugs on calcium pathways and membrane structure in Fc epsilon RI activated signal transduction. Fischer MJ, et al. **Inflamm Res** 1996 Nov;45(11):564–73
The characterization of tyrosine phosphorylation of 78 and 92 kDa proteins in rat basophilic RBL–2H3 cells. Matsui K, et al. **Inflamm Res** 1996 Sep;45(9):452–6
Gene regulation after Fc epsilon RI stimulation in the murine mast cell line CPII. Baumruker T, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):39–41
Fc epsilon RI on human epidermal Langerhans cells: an old receptor with new structure and functions. Bieber T. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):30–4 (28 ref.)
Fc epsilon RI and the FcR–beta amplifier. Scharenberg AM, et al. **Int Arch Allergy Immunol** 1997 May–Jul; 113(1–3):42–4 (18 ref.)
IgE–mediated allergen presentation via Fc epsilon RI on antigen–presenting cells. Stingl G, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):24–9 (46 ref.)
Importance of the phospholipase D–initiated sequential pathway for arachidonic acid release and prostaglandin D2 generation by rat peritoneal mast cells. Ishimoto T, et al. **J Biochem (Tokyo)** 1996 Sep;120(3):616–23
Fc epsilon RI–mediated association of 6–micron beads with RBL–2H3 mast cells results in exclusion of signaling proteins from the forming phagosome and abrogation of normal downstream signaling. Pierini L, et al. **J Cell Biol** 1996 Sep;134(6):1427–39
Absence of Fc epsilonRI alpha chain results in upregulation of Fc gammaRIII–dependent mast cell degranulation and anaphylaxis. Evidence of competition between Fc epsilonRI and Fc gammaRIII for limiting amounts of FcR beta and gamma chains. Dombrowicz D, et al. **J Clin Invest** 1997 Mar 1;99(5):915–25
Systemic anaphylaxis in the mouse can be mediated largely through IgG1 and Fc gammaRIII. Assessment of the cardiopulmonary changes, mast cell degranulation, and death associated with active or IgE– or IgG1–dependent passive anaphylaxis. Miyajima I, et al. **J Clin Invest** 1997 Mar 1;99(5):901–14
Distinct Ras effector pathways are involved in Fc epsilon RI regulation of the transcriptional activity of Elk–1 and NFAT in mast cells. Turner H, et al. **J Exp Med** 1997 Jan 6;185(1):43–53
Glucocorticoids inhibit the cytokine–induced proliferation of mast cells, the high affinity IgE receptor–mediated expression of TNF–alpha, and the IL–10–induced expression of chymases. Eklund KK, et al. **J Immunol** 1997 May 1;158(9):4373–80
Fc epsilonRI–deficient mice infected with Schistosoma mansoni mount normal Th2–type responses while displaying enhanced liver pathology. Jankovic D, et al. **J Immunol** 1997 Aug 15;159(4):1868–75
Lymphotactin gene expression in mast cells following Fc(epsilon) receptor I aggregation: modulation by TGF–beta, IL–4, dexamethasone, and cyclosporin A. Rumsaeng V, et al. **J Immunol** 1997 Feb 1;158(3):1353–60
Increased secretion of TNF–alpha by costimulation of mast cells via CD28 and Fc epsilon RI. Tashiro M, et al. **J Immunol** 1997 Mar 1;158(5):2382–9
CD23–mediated nitric oxide synthase pathway induction in human keratinocytes is inhibited by retinoic acid derivatives. Bécherel PA, et al. **J Invest Dermatol** 1996 Jun;106(6):1182–6
The high–affinity receptor for IgE is the predominant IgE–binding structure in lesional skin of atopic dermatitis patients. Klubal R, et al. **J Invest Dermatol** 1997 Mar; 108(3):336–42
Anti–ganglioside monoclonal antibody AA4 selectively inhibits IgE–induced signal transduction pathways in rat basophilic leukemia cells. Stephan V, et al. **Mol Immunol** 1997 Feb;34(3):227–35
Mouse mast cell gp49B1 contains two immunoreceptor tyrosine–based inhibition motifs and suppresses mast cell activation when coligated with the high–affinity Fc receptor for IgE. Katz HR, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10809–14
CD23 (Fc epsilon RII) activation induces the nitric oxide synthase pathway in human keratinocytes: possible relevance in cutaneous allergic diseases. Bécherel PA, et al. **Res Immunol** 1995 Nov–Dec;146(9):703–7
Role of CD23 in NO production by human monocytic cells. Kolb JP, et al. **Res Immunol** 1995 Nov–Dec;146(9):684–9 (52 ref.)

RECEPTORS, IGF–I see **RECEPTORS, INSULIN–LIKE–GROWTH FACTOR I**

RECEPTORS, IGF–II see **RECEPTORS, INSULIN–LIKE–GROWTH–FACTOR II**

RECEPTORS, IGG

Clinical significance of IgG Fc receptors and Fc gamma R–directed immunotherapies. Deo YM, et al. **Immunol Today** 1997 Mar;18(3):127–35 (57 ref.)

ANALYSIS

Membrane antigen and ligand receptor expression on neonatal monocytes. El–Mohandes AA, et al. **Biol Neonate** 1995;68(5):308–17
Identification of a unique porcine Fc gamma RIIIA alpha molecular complex. Sweeney SE, et al. **Cell Immunol** 1996 Aug 25;172(1):92–9
Restricted expression of Fc gammaRIII (CD16) in synovium and dermis: implications for tissue targeting in rheumatoid arthritis (RA). Edwards JC, et al. **Clin Exp Immunol** 1997 Jun;108(3):401–6
Heterogeneity of human blood monocytes: the CD14+ CD16+ subpopulation. Ziegler–Heitbrock HW. **Immunol Today** 1996 Sep;17(9):424–8
Demonstration of cytoplasmic CD32 (Fc gamma RII) within human lymphocytes following microwave treatment. Sandilands GP, et al. **Immunology** 1997 Mar;90(3):427–34
Enhanced expression of HLA–DR, Fc gamma receptor I (CD64) and leukocyte common antigen (CD45) indicate activation of monocytes in regenerative training periods of endurance athletes. Gabriel H, et al. **Int J Sports Med** 1997 Feb;18(2):136–41
Expression of immunoglobulin G1 receptors by bovine

mammary epithelial cells and mammary leukocytes. Barrington GM, et al. **J Dairy Sci** 1997 Jan;80(1):86–93

Effect of prolactin on in vitro expression of the bovine mammary immunoglobulin G1 receptor. Barrington GM, et al. **J Dairy Sci** 1997 Jan;80(1):94–100

Mapping regions of herpes simplex virus type 1 glycoprotein I required for formation of the viral Fc receptor for monomeric IgG. Basu S, et al. **J Immunol** 1997 Jan 1; 158(1):209–15

Human cytomegalovirus induces an Fc gamma receptor (Fc gammaR) in endothelial cells and fibroblasts that is distinct from the human cellular Fc gammaRs. MacCormac LP, et al. **J Infect Dis** 1996 Dec;174(6):1151–61

Loss of Fc gamma receptor and impaired phagocytosis of polymorphonuclear leukocytes in gingival crevicular fluid. Miyazaki A, et al. **J Periodontal Res** 1997 Jul;32(5):439–46

Ultrastructural evidence of intestinal mucosal macrophage activation after bone marrow transplantation. Forbes GM, et al. **Pathology** 1996 Aug;28(3):251–4

Long-term continuous ambulatory peritoneal dialysis reduces the expression of CD11b, CD14, CD16, and CD64 on peritoneal macrophages. Cárcamo C, et al. **Perit Dial Int** 1996 Nov–Dec;16(6):582–9

ANTAGONISTS & INHIBITORS

Inhibition of Fc gamma R-dependent functions by N-formylmethionylleucylphenylalanine in human neutrophils. Alves Rosa MF, et al. **Clin Immunol Immunopathol** 1997 May;83(2):147–55

Treatment of chronic autoimmune thrombocytopenic purpura with monoclonal anti-D: lack of efficiency due to absence of Fc gammaR-inhibiting activity? [letter; comment] Neppert J, et al. **Transfusion** 1997 Apr; 37(4):444–5; discussion 445–6. Comment on: Transfusion 1996 Apr;36(4):328–30.

Transplant rejection associated with the presence of human leucocyte antigen antibodies detected by the Fc gamma R inhibition test but not by the lymphocytotoxicity test. Neppert J, et al. **Transpl Immunol** 1997 Mar;5(1):45–8

BIOSYNTHESIS

Value of neutrophil CD16 expression for detection of left shift and acute-phase response. Hübl W, et al. **Am J Clin Pathol** 1997 Feb;107(2):187–96

Granulocytic and monocytic differentiation of CD34hi cells is associated with distinct changes in the expression of the PU.1-regulated molecules, CD64 and macrophage colony-stimulating factor receptor. Olweus J, et al. **Blood** 1996 Nov 15;88(10):3741–54

Flow-cytometric study of granulocyte activation during hemodialysis with different membranes. Mordacchini M, et al. **Blood Purif** 1995 Nov–Dec;13(6):322–6

Effect of gamma interferon on expression of Fc gamma receptors in monocytes of newborn infants and adults. Fairchild KD, et al. **Clin Diagn Lab Immunol** 1996 Jul; 3(4):464–9

Progression of HIV disease is associated with increased expression of Fc gammaRI and CR1 on alveolar macrophages. Gilbody J, et al. **Clin Exp Immunol** 1997 Jan; 107(1):31–6

Febrile infection changes the expression of IgG Fc receptors and complement receptors in human neutrophils in vivo. Leino L, et al. **Clin Exp Immunol** 1997 Jan;107(1):37–43

Increased expression of the high-affinity receptor for IgG (FcRI, CD64) on neutrophils in multiple myeloma. Ohsaka A, et al. **Hematopathol Mol Hematol** 1996;10(3):151–60

Rat spleen dendritic cells express natural killer cell receptor protein 1 (NKR-P1) and have cytotoxic activity to select targets via a Ca2+-dependent mechanism. Josien R, et al. **J Exp Med** 1997 Aug 4;186(3):467–72

Characterization of expression, cytokine regulation, and effector function of the high affinity IgG receptor Fc gamma RI (CD64) expressed on human blood dendritic cells. Fanger NA, et al. **J Immunol** 1997 Apr 1; 158(7):3090–8

Defective Fc gamma RII gene expression in macrophages of NOD mice: genetic linkage with up-regulation of IgG1 and IgG2b in serum. Luan JJ, et al. **J Immunol** 1996 Nov 15;157(10):4707–16

Human monocyte binding to fibronectin enhances IFN-gamma-induced early signaling events. McCarthy JB, et al. **J Immunol** 1997 Sep 1;159(5):2424–30

Human cytomegalovirus induces an Fc gamma receptor (Fc gammaR) in endothelial cells and fibroblasts that is distinct from the human cellular Fc gammaRs. MacCormac LP, et al. **J Infect Dis** 1996 Dec;174(6):1151–61

Design, synthesis, expression, and characterization of the genes for mouse Fc gamma RIIb1 and Fc gamma RIIb2 cytoplasmic regions. Chen L, et al. **Protein Sci** 1997 May; 6(5):1038–46

BLOOD

Soluble CD16 (sCD16), a marker of malignancy in individuals with monoclonal gammopathy of undetermined significance (MGUS). Mathiot C, et al. **Br J Haematol** 1996 Dec;95(4):660–5

Type I (CD64) and type II (CD32) Fc gamma receptor-mediated phagocytosis by human blood dendritic cells. Fanger NA, et al. **J Immunol** 1996 Jul 15;157(2):541–8

Cytokine production precedes the expansion of CD14+CD16+ monocytes in human sepsis: a case report of a patient with self-induced septicemia. Blumenstein M, et al. **Shock** 1997 Jul;8(1):73–5

Plasma levels of soluble Fc gamma receptors II (sCD32) and III (sCD16) in patients with heparin-induced thrombocytopenia [letter] Saffroy R, et al. **Thromb Haemost** 1997 Aug;78(2):970–1

CHEMISTRY

Scanning alanine mutagenesis of the second Ig domain of Fc gamma RI indicates critical residues for ligand recognition. McCarthy-Troke MH, et al. **Biochem Soc Trans** 1997 May;25(2):361S

Synthetic peptides from mouse Fc receptor (MoFc gamma RII) that alter the binding of IgG to MoFc gamma RII. Goldsmith EB, et al. **Biochemistry** 1997 Jan 28;36(4):952–9

Characterization of a new alloantigen (SH) on the human neutrophil Fc gamma receptor IIIb. Bux J, et al. **Blood** 1997 Feb 1;89(3):1027–34

Evidence for independent binding domains within a group A streptococcal type IIo IgG-binding protein. Tsivitse M, et al. **Can J Microbiol** 1996 Nov;42(11):1172–5

Design, synthesis, expression, and characterization of the genes for mouse Fc gamma RIIb1 and Fc gamma RIIb2 cytoplasmic regions. Chen L, et al. **Protein Sci** 1997 May; 6(5):1038–46

Biochemical and functional characterization of soluble multivalent MHC L(d)/Fc gamma 1 and L(d)/Fc mu chimeric proteins loaded with specific peptides. Lepley DM, et al. **Transplantation** 1997 Mar 15;63(5):765–74

DEFICIENCY

Impaired IgG-dependent anaphylaxis and Arthus reaction in Fc gamma RIII (CD16) deficient mice. Hazenbos WL, et al. **Immunity** 1996 Aug;5(2):181–8

Multiple loss of effector cell functions in FcR gamma-deficient mice. Takai T. **Int Rev Immunol** 1996; 13(4):369–81 (48 ref.)

Amplified follicular immune complex deposition in mice lacking the Fc receptor gamma-chain does not alter maturation of the B cell response. Vora KA, et al. **J Immunol** 1997 Sep 1;159(5):2116–24

Xenograft rejection of porcine islet-like cell clusters in immunoglobulin- or Fc-receptor gamma-deficient mice. Benda B, et al. **Transplantation** 1996 Nov 15;62(9):1207–11

DRUG EFFECTS

Inhibition of Fc gamma R-dependent functions by N-formylmethionylleucylphenylalanine in human neutrophils. Alves Rosa MF, et al. **Clin Immunol Immunopathol** 1997 May;83(2):147–55

Increase in CD57 + CD16-lymphocytes in workers exposed to benzidine and beta-naphthylamine: assessment of natural killer cell subpopulations. Tanigawa T, et al. **Int Arch Occup Environ Health** 1996;69(1):69–72

GENETICS

Clinical relevance of Fc gamma receptor polymorphisms. Rascu A, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:282–95 (76 ref.)

Fc gammaRIIA polymorphism as a risk factor for invasive pneumococcal infections in systemic lupus erythematosus. Yee AM, et al. **Arthritis Rheum** 1997 Jun;40(6):1180–2

Fc gamma RIIA H/R 131 polymorphism, subclass-specific IgG anti-heparin/platelet factor 4 antibodies and clinical course in patients with heparin-induced thrombocytopenia and thrombosis. Arepally G, et al. **Blood** 1997 Jan 15; 89(2):370–5

Identification of an unusual Fc gamma receptor IIIa (CD16) on natural killer cells in a patient with recurrent infections. de Vries E, et al. **Blood** 1996 Oct 15;88(8):3022–7

Fc gammaRIIIa-158V/F polymorphism influences the binding of IgG by natural killer cell Fc gammaRIIIa, independently of the Fc gammaRIIIa-48L/R/H phenotype. Koene HR, et al. **Blood** 1997 Aug 1; 90(3):1109–14

Evidence for independent binding domains within a group A streptococcal type IIo IgG-binding protein. Tsivitse M, et al. **Can J Microbiol** 1996 Nov;42(11):1172–5

Epitope mapping of new monoclonal antibodies recognizing distinct human FcRII (CD32) isoforms. Weinrich V, et al. **Hybridoma** 1996 Apr;15(2):109–16

Impaired IgG-dependent anaphylaxis and Arthus reaction in Fc gamma RIII (CD16) deficient mice. Hazenbos WL, et al. **Immunity** 1996 Aug;5(2):181–8

Polymorphism in the Ly-17 alloantigenic system of the mouse FcgRII gene. Slingsby JH, et al. **Immunogenetics** 1997;46(4):361–2

Relevance of immunoglobulin G Fc receptor polymorphism to recurrence of adult periodontitis in Japanese patients. Kobayashi T, et al. **Infect Immun** 1997 Sep;65(9):3556–60

Molecular cloning and characterization of guinea pig Fc gamma RIII: expression but not function is independent of the gamma chain of Fc epsilon RI. Isashi Y, et al. **Int Immunol** 1996 Sep;8(9):1335–46

Separate promoters from proximal and medial control regions contribute to the natural killer cell-specific transcription of the human FcgammaRIII-A (CD16-A) receptor gene. Gessner JE, et al. **J Biol Chem** 1996 Nov 29; 271(48):30755–64

Absence of Fc epsilonRI alpha chain results in upregulation of Fc gammaRIII-dependent mast cell degranulation and anaphylaxis. Evidence of competition between Fc epsilonRI and Fc gammaRIII for limiting amounts of FcR beta and gamma chains. Dombrowicz D, et al. **J Clin Invest** 1997 Mar 1;99(5):915–25

Systemic anaphylaxis in the mouse can be mediated largely through IgG1 and Fc gammaRIII. Assessment of the cardiopulmonary changes, mast cell degranulation, and death associated with active or IgE- or IgG1-dependent passive anaphylaxis. Miyajima I, et al. **J Clin Invest** 1997 Mar 1;99(5):901–14

Defective Fc gamma RII gene expression in macrophages of NOD mice: genetic linkage with up-regulation of IgG1 and IgG2b in serum. Luan JJ, et al. **J Immunol** 1996 Nov 15;157(10):4707–16

Congenic mapping of the insulin-dependent diabetes (Idd) gene, Idd10, localizes two genes mediating the Idd10 effect and eliminates the candidate Fcgr1. Podolin PL, et al. **J Immunol** 1997 Aug 15;159(4):1835–43

Rapid detection of the Fc gamma RIIA-H/R 131 ligand-binding polymorphism using an allele-specific restriction enzyme digestion (ASRED). Jiang XM, et al. **J Immunol Methods** 1996 Nov 29;199(1):55–9

Heterogeneity in the expression of Fc gammaRIII in morphologically mature granulocytes from patients with chronic myeloid leukemia. Kant AM, et al. **Leuk Res** 1997 Mar;21(3):225–34

Mapping of bovine FcgammaR (FCGR) genes by sperm typing allows extended use of human map information. Klungland H, et al. **Mamm Genome** 1997 Aug;8(8):573–7

Linkage mapping of the Fcgamma2 receptor gene to bovine chromosome 18. Klungland H, et al. **Mamm Genome** 1997 Apr;8(4):300–1

Analysis at the DNA level of human Fc gamma RII isoforms in relation to the polymorphic binding of murine IgG2b to human B cells. Tax WJ, et al. **Scand J Immunol** 1996 Dec;44(6):571–7

IMMUNOLOGY

Inhibition of monocyte and polymorphonuclear granulocyte immune phagocytosis by monoclonal antibodies specific for Fc gamma RI, II and III. Flesch BK, et al. **Ann Hematol** 1997 Jan;74(1):15–22

Treatment of refractory Hodgkin's disease with an anti-CD16/CD30 bispecific antibody. Hartmann F, et al. **Blood** 1997 Mar 15;89(6):2042–7

Bispecific antibody-dependent cellular cytotoxicity of HER2/neu-overexpressing tumor cells by Fc gamma receptor type I-expressing effector cells. Keler T, et al. **Cancer Res** 1997 Sep 15;57(18):4008–14

Preclinical studies with Fc(gamma)R bispecific antibodies and granulocyte colony-stimulating factor-primed neutrophils as effector cells against HER-2/neu overexpressing breast cancer. Stockmeyer B, et al. **Cancer Res** 1997 Feb 15;57(4):696–701

Association between long-term kidney graft survival and the presence of pre-transplant cytotoxic anti-HLA and/or non-MHC Fc gamma RII blocking' (anti-TLX) alloantibody. Padányi A, et al. **Clin Transplant** 1996 Oct; 10(5):455–60

Fc gamma receptor II dependency of enhanced presentation of major histocompatibility complex class II peptides by a B cell lymphoma. Berg M, et al. **Eur J Immunol** 1997 Apr;27(4):1022–8

The SHIP phosphatase becomes associated with Fc gammaRIIB1 and is tyrosine phosphorylated during 'negative' signaling. D'Ambrosio D, et al. **Immunol Lett** 1996 Dec;54(2-3):77–82

Selective in vivo recruitment of the phosphatidylinositol phosphatase SHIP by phosphorylated Fc gammaRIIB during negative regulation of IgE-dependent mouse mast cell activation. Fong DC, et al. **Immunol Lett** 1996 Dec; 54(2-3):83–91

Modulation of Fc(gamma)R and human complement activation by IgG3-core oligosaccharide interactions. Jefferis R, et al. **Immunol Lett** 1996 Dec;54(2-3):101–4

Developmentally regulated Fc gamma receptor expression in lymphopoiesis Fc gammaR III (CD16) provides an ITAM motif for pro-T and pro-B-cells. Sandor M, et al. **Immunol Lett** 1996 Dec;54(2-3):123–7

Integration of activatory and inhibitory signals in human B-cells. Sármay G, et al. **Immunol Lett** 1996 Dec; 54(2-3):93–100

Different pathways of the release of cytotoxic proteins in LAK cells. Sashchenko LP, et al. **Immunol Lett** 1996 Oct; 53(1):25–9

Finally! The Brambell receptor (FcRB). Mediator of transmission of immunity and protection from catabolism for IgG [published erratum appears in Immunol Res 1997;16(2):215] Junghans RP. **Immunol Res** 1997 Feb; 16(1):29–57 (108 ref.)

Monocyte-bound monoclonal antibodies inhibit the Fc gamma RI-mediated phagocytosis of sensitized red cells: the efficiency and mechanism of inhibition are determined by the nature of the antigen. Shepard SL, et al. **Immunology** 1997 Feb;90(2):314–22

The anti-Fc gamma RIII mAb 3G8 induces neutrophil activation via a cooperative actin of Fc gamma RIIIb and Fc gamma RIIa. Vossebeld PJ, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):465–73

Anti-Fc gamma receptor autoantibodies from patients with Sjögren's syndrome do not react with native receptor on

human polymorphonuclear leukocytes. Lamour A, et al. **J Autoimmun** 1996 Apr;9(2):181-91

F(c)gammaRI-targeted fusion proteins result in efficient presentation by human monocytes of antigenic and antagonist T cell epitopes. Liu C, et al. **J Clin Invest** 1996 Nov 1;98(9):2001-7

A recombinant tumor necrosis factor-alpha p80 receptor:Fc fusion protein decreases circulating bioactive tumor necrosis factor-alpha but not lung injury or mortality during immunosuppression-related gram-negative bacteremia. Lechner AJ, et al. **J Crit Care** 1997 Mar; 12(1):28-38

Delayed maturation of CD4- CD8- Fc gamma RII/III+ T and natural killer cell precursors in Fc epsilon RI gamma transgenic mice. Flamand V, et al. **J Exp Med** 1996 Nov 1;184(5):1725-35

Cytolytic and cytostatic properties of an anti-human Fc gammaRI (CD64) x epidermal growth factor bispecific fusion protein. Goldstein J, et al. **J Immunol** 1997 Jan 15; 158(2):872-9

Fc epsilonRI gamma can support T cell development and function in mice lacking endogenous TCR zeta-chain. Shores E, et al. **J Immunol** 1997 Jul 1;159(1):222-30

The presence of anti-Fc gamma receptor autoantibodies is related to the clinical presentation of primary Sjögren's syndrome. Lamour A, et al. **J Rheumatol** 1995 Dec; 22(12):2241-5

CD3+, CD16+, CD56+ cells: a novel subset of T lymphocytes from patients with Balkanic nephropathy. Drugărin D, et al. **Roum Arch Microbiol Immunol** 1995 Oct-Dec;54(4):255-64

Antibodies to human major histocompatibility complex products inhibit Fc gamma receptors types I and II. Neppert J, et al. **Transfus Med** 1996 Jun;6(2):125-31

Role of Fc gamma RIIa (CD32) in IgG anti-RhD-mediated red cell phagocytosis in vitro. Wiener E, et al. **Transfus Med** 1996 Sep;6(3):235-41

Inhibition of the monocyte chemiluminescent response to anti-D-sensitized red cells by Fc gamma RI-blocking antibodies which ameliorate the severity of haemolytic disease of the newborn. Shepard SL, et al. **Vox Sang** 1996; 70(3):157-63

[New concepts of the mechanisms of immunopatholgies+ of Streptococcal etiology] Burova LA, et al. **Vestn Ross Akad Med Nauk** 1996;(11):28-34 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation from human placenta of the IgG transporter, FcRn, and localization to the syncytiotrophoblast: implications for maternal-fetal antibody transport. Leach JL, et al. **J Immunol** 1996 Oct 15;157(8):3317-22

METABOLISM

CD16 antigen density on neutrophils in chronic myeloproliferative disorders. Kabutomori O, et al. **Am J Clin Pathol** 1997 Jun;107(6):661-4

Cytophilic immunoglobulin G binding on neutrophils from a child with malignant osteopetrosis who developed fatal acute respiratory distress mimicking transfusion-related acute lung injury. Madyastha PR, et al. **Am J Hematol** 1996 Nov;53(3):196-200

Human placental Fc gamma-binding proteins in the maternofetal transfer of IgG. Kristoffersen EK. **APMIS Suppl** 1996;64:5-36 (375 ref.)

Human HMC-1 mast cells exclusively express the Fc gamma RII subtype of IgG receptor. Wedi B, et al. **Arch Dermatol Res** 1996 Dec;289(1):21-7

Tyrosine phosphorylation-dependent activation of phosphatidylinositide 3-kinase occurs upstream of Ca2+-signalling induced by Fcgamma receptor cross-linking in human neutrophils. Vossebeld PJ, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):87-94

Scanning alanine mutagenesis of the second Ig domain of Fc gamma RI indicates critical residues for ligand recognition. McCarthy-Troke MH, et al. **Biochem Soc Trans** 1997 May;25(2):361S

Expression of Fc gamma RIII in neutrophils in rheumatoid arthritis. Quayle JA, et al. **Biochem Soc Trans** 1996 Aug; 24(3):489S

Synthetic peptides from mouse Fc receptor (MoFc gamma RII) that alter the binding of IgG to MoFc gamma RII. Goldsmith EB, et al. **Biochemistry** 1997 Jan 28;36(4):952-9

Influence of tyrosine phosphorylation on protein interaction with FcgammaRIIa. Ibarrola I, et al. **Biochim Biophys Acta** 1997 Jul 24;1357(3):348-58

Differential activation of the tyrosine kinases ZAP-70 and Syk after Fc gamma RI stimulation. Taylor N, et al. **Blood** 1997 Jan 15;89(2):388-96

Analysis of CD9, CD32 and p67 signalling: use of degranulated platelets indicates direct involvement of CD9 and p67 in integrin activation. Slupsky JR, et al. **Br J Haematol** 1997 Feb;96(2):275-86

The Fc receptor gamma-chain and the tyrosine kinase Syk are essential for activation of mouse platelets by collagen. Poole A, et al. **EMBO J** 1997 May 1;16(9):2333-41

Glucocorticoid-mediated generation of suppressor macrophages with high density Fc gamma RII during acute cold stress. Kizaki T, et al. **Endocrinology** 1996 Oct; 137(10):4260-7

Fc gamma receptor II dependency of enhanced presentation of major histocompatibility complex class II peptides by a B cell lymphoma. Berg M, et al. **Eur J Immunol** 1997 Apr;27(4):1022-8

Affinity of the interaction between Fc gamma receptor type III (Fc gammaRIII) and monomeric human IgG subclasses. Role of Fc gammaRIII glycosylation. Galon J, et al. **Eur J Immunol** 1997 Aug;27(8):1928-32

The timing and magnitude of Ca2+ signaling by CD32 depends on its redistribution on the cell surface. Roberts GM, et al. **Exp Cell Res** 1997 Feb 1;230(2):303-9

Interleukin-1beta expression is induced by adherence and is enhanced by Fc-receptor binding to immune complex in THP-1 cells. Cobb RR, et al. **FEBS Lett** 1996 Oct 7; 394(3):241-6

Glycoprotein VI is the collagen receptor in platelets which underlies tyrosine phosphorylation of the Fc receptor gamma-chain. Gibbins JM, et al. **FEBS Lett** 1997 Aug 18; 413(2):255-9

Involvement of a metalloprotease in the shedding of human neutrophil Fc gammaRIIIB. Middelhoven PJ, et al. **FEBS Lett** 1997 Sep 1;414(1):14-8

Tyrosine phosphorylation and Fcgamma receptor-mediated phagocytosis. Strzelecka A, et al. **FEBS Lett** 1997 Jan 2; 400(1):11-4 (51 ref.)

Fc gammaRIIB1 inhibition of BCR-mediated phosphoinositide hydrolysis and Ca2+ mobilization is integrated by CD19 dephosphorylation. Hippen KL, et al. **Immunity** 1997 Jul;7(1):49-58

Fc gamma receptor type IIb induced recruitment of inositol and protein phosphatases to the signal transductory complex of human B-cell. Sarmay G, et al. **Immunol Lett** 1997 Jun 1;57(1-3):159-64

A human CD4+ T-cell line expresses functional CD64 (Fc gamma RI), CD32 (Fc gamma RII), and CD16 (Fc gamma RIII) receptors but these do not enhance the infectivity of HIV-1-IgG complexes. McLain L, et al. **Immunology** 1997 Jan;90(1):109-14

Neutrophils from the synovial fluid of patients with rheumatoid arthritis express the high affinity immunoglobulin G receptor, Fc gamma RI (CD64): role of immune complexes and cytokines in induction of receptor expression. Quayle JA, et al. **Immunology** 1997 Jun;91(2):266-73

Differential expression of CD32 isoforms following alloactivation of human T cells. Sandilands GP, et al. **Immunology** 1997 Jun;91(2):204-11

Circulating promyelocytes and low levels of CD16 expression on polymorphonuclear leukocytes accompany early-onset periodontitis. Nemoto E, et al. **Infect Immun** 1997 Sep;65(9):3906-12

Expression of CD23, CD32, Mac-1 and other adhesion molecules in eosinophils in strongyloidiasis and HTLV-I-positive patients. Kakazu T, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:46-50

A new multivalent B cell activation model--anti-IgD bound to Fc gamma RI: properties and comparison with CD40L-mediated activation. Cho S, et al. **Int Immunol** 1997 Feb;9(2):239-48

The anti-Fc gamma RIII mAb 3G8 induces neutrophil activation via a cooperative actin of Fc gamma RIIIb and Fc gamma RIIa. Vossebeld PJ, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):465-73

Priming of neutrophils with tumor necrosis factor-alpha measured as Fc gamma receptor-mediated respiratory burst correlates with increased complement receptor 3 membrane density. Asman B, et al. **Int J Clin Lab Res** 1996;26(4):236-9

Both IgG- and C1q-receptors play a role in the enhanced binding of IgG complexes to human mesangial cells. van den Dobbelsteen ME, et al. **J Am Soc Nephrol** 1996 Apr; 7(4):573-81

The cytoplasmic tail of FcgammaRIIIAalpha is involved in signaling by the low affinity receptor for immunoglobulin G. Hou X, et al. **J Biol Chem** 1996 Sep 13;271(37):22815-22

Protein-tyrosine phosphatase SHP-1 is dispensable for FcgammaRIIB-mediated inhibition of B cell antigen receptor activation. Nadler MJS, et al. **J Biol Chem** 1997 Aug 8;272(32):20038-43

Mechanism of first-dose cytokine-release syndrome by CAMPATH 1-H: involvement of CD16 (FcgammaRIII) and CD11a/CD18 (LFA-1) on NK cells. Wing MG, et al. **J Clin Invest** 1996 Dec 15;98(12):2819-26

Fc gamma R-dependent mitogen-activated protein kinase activation in leukocytes: a common signal transduction event necessary for expression of TNF-alpha and early activation genes. Trotta R, et al. **J Exp Med** 1996 Sep 1; 184(3):1027-35

Differential effects of the T helper cell type 2-derived cytokines IL-4 and IL-5 on ligand binding to IgG and IgA receptors expressed by human eosinophils. Bracke M, et al. **J Immunol** 1997 Aug 1;159(3):1459-65

Aggregation of low affinity IgG receptors induces mast cell adherence to fibronectin: requirement for the common FcR gamma-chain. Dastych J, et al. **J Immunol** 1997 Feb 15; 158(4):1803-9

Association of non-receptor protein tyrosine kinases with the Fc gamma RI/gamma-chain complex in monocytic cells. Duchemin AM, et al. **J Immunol** 1997 Jan 15; 158(2):865-71

Cytolytic and cytostatic properties of an anti-human Fc gammaRI (CD64) x epidermal growth factor bispecific fusion protein. Goldstein J, et al. **J Immunol** 1997 Jan 15; 158(2):872-9

Multiple interactions of IgG with its core oligosaccharide can modulate recognition by complement and human Fc gamma receptor I and influence the synthesis of its oligosaccharide chains. Lund J, et al. **J Immunol** 1996 Dec 1;157(11):4963-9

CD16 cross-linking induces both secretory and extracellular signal-regulated kinase (ERK)-dependent cytosolic phospholipase A2 (PLA2) activity in human natural killer cells: involvement of ERK, but not PLA2, in CD16-triggered granule exocytosis. Milella M, et al. **J Immunol** 1997 Apr 1;158(7):3148-54

Fc gamma receptor cross-linking activates p42, p38, and JNK/SAPK mitogen-activated protein kinases in murine macrophages: role for p42MAPK in Fc gamma receptor-stimulated TNF-alpha synthesis. Rose DM, et al. **J Immunol** 1997 Apr 1;158(7):3433-8

CD16-expressing CD8alpha alpha+ T lymphocytes in the intestinal epithelium: possible precursors of Fc gammaR-CD8alpha alpha+ T cells. She J, et al. **J Immunol** 1997 May 15;158(10):4678-87

Rapid detection of the Fc gamma RIIA-H/R 131 ligand-binding polymorphism using an allele-specific restriction enzyme digestion (ASRED). Jiang XM, et al. **J Immunol Methods** 1996 Nov 29;199(1):55-9

Recruitment and phosphorylation of SH2-containing inositol phosphatase and Shc to the B-cell Fc gamma immunoreceptor tyrosine-based inhibition motif peptide motif. Tridandapani S, et al. **Mol Cell Biol** 1997 Aug; 17(8):4305-11

PHYSIOLOGY

Interferon-gamma and transforming growth factor-beta modulate the activation of mitogen-activated protein kinases and tumor necrosis factor-alpha production induced by Fc gamma-receptor stimulation in murine macrophages. Rose DM, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):256-60

Vav in natural killer cells is tyrosine phosphorylated upon cross-linking of Fc gamma RIIIA and is constitutively associated with a serine/threonine kinase. Xu X, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):527-32

Positive and negative signal co-operativity in the immune system: the BCR, Fc gamma RIIB, CR2 paradigm. Cambier JC. **Biochem Soc Trans** 1997 May;25(2):441-5 (21 ref.)

The human high affinity IgG receptor (Fc gamma RI) signals through the immunoreceptor tyrosine-based activation motif (ITAM) of the gamma chain of Fc epsilon RI. Gillooly DJ, et al. **Biochem Soc Trans** 1997 May;25(2):215S

Human neutrophil Fc alpha R and Fc gamma RIIa but not Fc gamma RIIIb generate intracellular calcium signals which trigger the respiratory burst. Lang ML, et al. **Biochem Soc Trans** 1997 May;25(2):333S

Differentiation dependent switch in signalling pathways initiated by Fc gamma RI. Melendez A, et al. **Biochem Soc Trans** 1997 May;25(2):254S

New functions of the MHC class I-related Fc receptor, FcRn. Simister NE, et al. **Biochem Soc Trans** 1997 May; 25(2):481-6 (70 ref.)

Fc gammaRII (CD32) is linked to apoptotic pathways in murine granulocyte precursors and mature eosinophils. de Andrés B, et al. **Blood** 1997 Aug 1;90(3):1267-74

Activation of B lymphocytes: integrating signals from CD19, CD22 and Fc gamma RIIb1. Doody GM, et al. **Curr Opin Immunol** 1996 Jun;8(3):378-82 (47 ref.)

Integrin alpha chain cytoplasmic tails regulate "antibody-redirected" cell adhesion, independently of ligand binding. Weitzman JB, et al. **Eur J Immunol** 1997 Jan;27(1):78-84

A dominant role for mast cell Fc receptors in the Arthus reaction. Sylvestre DL, et al. **Immunity** 1996 Oct; 5(4):387-90

Fc gamma-receptor III (CD 16) is involved in NK-B cell interaction. Lenz P, et al. **Immunobiology** 1996; 196(4):387-98

ITIMs and ITAMs. The Yin and Yang of antigen and Fc receptor-linked signaling machinery. Isakov N. **Immunol Res** 1997 Feb;16(1):85-100 (112 ref.)

Negative regulation of mast cell activation by receptors for IgG. Daëron M. **Int Arch Allergy Immunol** 1997 May-Jul; 113(1-3):138-41 (29 ref.)

Contribution of the intracellular domain of murine Fc-gamma receptor type IIB1 to its tumor-enhancing potential. Zusman T, et al. **Int J Cancer** 1996 Oct 9; 68(2):219-27

Human type II Fcgamma receptors inhibit B cell activation by interacting with the p21(ras)-dependent pathway. Sármay G, et al. **J Biol Chem** 1996 Nov 29; 271(48):30499-504

Stimulation of intracellular Ca2+ levels in human neutrophils by soluble immune complexes. Functional activation of FcgammaRIIIb during priming. Watson F, et al. **J Biol Chem** 1997 Jul 18;272(29):17944-51

Absence of Fc epsilonRI alpha chain results in upregulation of Fc gammaRIII-dependent mast cell degranulation and anaphylaxis. Evidence of competition between Fc epsilonRI and Fc gammaRIII for limiting amounts of FcR beta and gamma chains. Dombrowicz D, et al. **J Clin Invest** 1997 Mar 1;99(5):915-25

Systemic anaphylaxis in the mouse can be mediated largely through IgG1 and Fc gammaRIII. Assessment of the cardiopulmonary changes, mast cell degranulation, and death associated with active or IgE- or IgG1-dependent

passive anaphylaxis. Miyajima I, et al. **J Clin Invest** 1997 Mar 1;99(5):901–14

A novel polymorphism of FcgammaRIIIa (CD16) alters receptor function and predisposes to autoimmune disease. Wu J, et al. **J Clin Invest** 1997 Sep 1;100(5):1059–70

Negative signaling pathways of the killer cell inhibitory receptor and Fc gamma RIIb1 require distinct phosphatases. Gupta N, et al. **J Exp Med** 1997 Aug 4; 186(3):473–8

Rho is required for the initiation of calcium signaling and phagocytosis by Fcgamma receptors in macrophages. Hackam DJ, et al. **J Exp Med** 1997 Sep 15;186(6):955–66

Measles virus nucleocapsid protein binds to FcgammaRII and inhibits human B cell antibody production. Ravanel K, et al. **J Exp Med** 1997 Jul 21;186(2):269–78

Differential effects of B cell receptor and B cell receptor–FcgammaRIIB1 engagement on docking of Csk to GTPase–activating protein (GAP)–associated p62. Vuica M, et al. **J Exp Med** 1997 Jul 21;186(2):259–67

Aggregation of low affinity IgG receptors induces mast cell adherence to fibronectin: requirement for the common FcR gamma–chain. Dastych J, et al. **J Immunol** 1997 Feb 15; 158(4):1803–9

Characterization of expression, cytokine regulation, and effector function of the high affinity IgG receptor Fc gamma RI (CD64) expressed on human blood dendritic cells. Fanger NA, et al. **J Immunol** 1997 Apr 1; 158(7):3090–8

Type I (CD64) and type II (CD32) Fc gamma receptor–mediated phagocytosis by human blood dendritic cells. Fanger NA, et al. **J Immunol** 1996 Jul 15;157(2):541–8

Monocyte IL–8 release is induced by two independent Fc gamma R– mediated pathways. Marsh CB, et al. **J Immunol** 1996 Sep 15;157(6):2632–7

Fc(gamma) receptor cross–linking induces peripheral blood mononuclear cell monocyte chemoattractant protein–1 expression: role of lymphocyte Fc(gamma)RIII. Marsh CB, et al. **J Immunol** 1997 Feb 1;158(3):1078–84

Differential activation of human platelets induced by Fc gamma receptor II cross–linking and by anti–CD9 monoclonal antibody. Qi R, et al. **J Immunol** 1996 Dec 15;157(12):5638–45

Negative signaling in B cells causes reduced Ras activity by reducing Shc–Grb2 interactions. Tridandapani S, et al. **J Immunol** 1997 Feb 1;158(3):1125–32

CR3 (alphaM beta2; CD11b/CD18) restores IgG–dependent phagocytosis in transfectants expressing a phagocytosis–defective Fc gammaRIIA (CD32) tail–minus mutant. Worth RG, et al. **J Immunol** 1996 Dec 15; 157(12):5660–5

Phospholipase D mediates Fc gamma receptor activation of neutrophils and provides specificity between high–valency immune complexes and fMLP signaling pathways. Gewirtz AT, et al. **J Leukoc Biol** 1997 Apr;61(4):522–8

Fc gamma receptor I (CD64)–negative human monocytes are potent accessory cells in viral antigen–induced T cell activation and exhibit high IFN–alpha–producing capacity. Grage–Griebenow E, et al. **J Leukoc Biol** 1996 Sep; 60(3):389–96

Fas involvement in human NK cell apoptosis: lack of a requirement for CD16–mediated events. Ortaldo JR, et al. **J Leukoc Biol** 1997 Feb;61(2):209–15

Protein tyrosine phosphorylation in leukocyte activation through receptors for IgG. Santana C, et al. **J Leukoc Biol** 1996 Oct;60(4):433–40 (74 ref.)

Abrogation of the Fc gamma receptor IIA–mediated phagocytic signal by stem–loop Syk antisense oligonucleotides. Matsuda M, et al. **Mol Biol Cell** 1996 Jul; 7(7):1095–106

Role of polymorphic Fc receptor Fc gammaRIIa in cytokine release and adverse effects of murine IgG1 anti–CD3/T cell receptor antibody (WT31). Tax WJ, et al. **Transplantation** 1997 Jan 15;63(1):106–12

RECEPTORS, IL–1 see **RECEPTORS, INTERLEUKIN–1**

RECEPTORS, IL–2 see **RECEPTORS, INTERLEUKIN–2**

RECEPTORS, IL–3 see **RECEPTORS, INTERLEUKIN–3**

RECEPTORS, IMMUNOLOGIC

Scavenger receptors in atherosclerosis. Freeman MW. **Curr Opin Hematol** 1997 Jan;4(1):41–7 (52 ref.)

Improved endothelial cell attachment on ePTFE vascular grafts pretreated with synthetic RGD–containing peptides. Walluscheck KP, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):321–30

Proceedings of the 9th Symposium on Signals and Signal Processing in the Immune System. Tihany, Hungary, September 8–12, 1996. **Immunol Lett** 1996 Dec; 54(2–3):65–226

Major histocompatibility complex class I–specific receptors on human natural killer and T lymphocytes. Moretta A, et al. **Immunol Rev** 1997 Feb;155:105–17 (92 ref.)

Immune receptors. **Immunol Today** 1996 Oct;Suppl:1–29

Ontogeny of inhibitory receptors for MHC molecules on NK cells [letter; comment] Saxena RK. **Immunol Today** 1997 Mar;18(3):146. Comment on: Immunol Today 1996 Feb;17(2):86–91.

Characterization and functional analysis of the promoter of RAGE, the receptor for advanced glycation end products. Li J, et al. **J Biol Chem** 1997 Jun 27;272(26):16498–506

[Scavenger receptor] Kodama T. **Nippon Rinsho** 1997 Apr; 55 Suppl 2:574–6 (6 ref.) **(Jpn)**

[Diversity of scavenger receptor molecules] Fukasawa M. **Seikagaku** 1996 May;68(5):372–7 (16 ref.) **(Jpn)**

[LRP (alpha 2–macroglobulin receptor) and Alzheimer lesions] Akiyama H, et al. **Tanpakushitsu Kakusan Koso** 1996 Aug;41(10):1470–5 (11 ref.) **(Jpn)**

ANALYSIS

Presence of the T–cell activation marker OX–40 on tumor infiltrating lymphocytes and draining lymph node cells from patients with melanoma and head and neck cancers. Vetto JT, et al. **Am J Surg** 1997 Sep;174(3):258–65

Neurite–promoting effect of alpha 2–macroglobulin in rat cerebral cortex is mainly associated with alpha 2–macroglobulin receptor. Ishii M, et al. **Brain Res** 1996 Oct 21;737(1–2):269–74

Expression of alpha2–macroglobulin receptor/low density lipoprotein receptor–related protein on surfaces of tumour cells: a study using flow cytometry. Li Y, et al. **Cancer Lett** 1997 Jan 1;111(1–2):199–205

cDNA cloning and primary structure analysis of C1qR(P), the human C1q/MBL/SPA receptor that mediates enhanced phagocytosis in vitro. Nepomuceno RR, et al. **Immunity** 1997 Feb;6(2):119–29

Type I transmembrane receptor with inhibitory function in mouse mast cells and NK cells. Rojo S, et al. **J Immunol** 1997 Jan 1;158(1):9–12

Detection and biochemical characteristics of the receptor for complexes of soluble CD14 and bacterial lipopolysaccharide. Vita N, et al. **J Immunol** 1997 Apr 1; 158(7):3457–62

FMLP actions and its binding sites in isolated human coronary arteries. Keitoku M, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):881–94

Enhanced expression of chemotactic receptors in multiple sclerosis lesions. Müller–Ladner U, et al. **J Neurol Sci** 1996 Dec;144(1–2):135–41

Quantitative approach for detection and characterization of formyl peptide receptor in solution using a photoaffinity ligand. Lala A, et al. **Pept Res** 1996 Mar–Apr;9(2):58–60

Why is CTX all the RAGE? Du Pasquier L, et al. **Res Immunol** 1996 May;147(4):261–6 (15 ref.)

ANTAGONISTS & INHIBITORS

Antagonists of the mannose receptor and the LDL receptor–related protein dramatically delay the clearance of tissue plasminogen activator. Biessen EA, et al. **Circulation** 1997 Jan 7;95(1):46–52

Anti–inflammatory therapies to treat sepsis and septic shock: a reassessment [editorial; comment] Zeni F, et al. **Crit Care Med** 1997 Jul;25(7):1095–100 (38 ref.). Comment on: Crit Care Med 1997 Jul;25(7):1115–24.

Blockade of the alpha 2–macroglobulin receptor/low–density–lipoprotein–receptor–related protein on rat liver parenchymal cells by the 39–kDa receptor–associated protein leaves the interaction of beta–migrating very–low–density lipoprotein with the lipoprotein remnant receptor unaffected. Ziere GJ, et al. **Eur J Biochem** 1996 Dec 15;242(3):703–11

The CD94 and NKG2–A C–type lectins covalently assemble to form a natural killer cell inhibitory receptor for HLA class I molecules. Carretero M, et al. **Eur J Immunol** 1997 Feb;27(2):563–7

Opposing functions of activatory T–cell receptors and inhibitory NK–cell receptors on cytotoxic T cells. Ciccone E, et al. **Immunol Today** 1996 Oct;17(10):450–3 (9 ref.)

Human histocompatibility leukocyte antigen (HLA)–G molecules inhibit NKAT3 expressing natural killer cells. Münz C, et al. **J Exp Med** 1997 Feb 3;185(3):385–91

BIOSYNTHESIS

Type II alveolar epithelial cells in lung express receptor for advanced glycation end products (RAGE) gene. Katsuoka F, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):512–6

Beta amyloid toxicity does not require RAGE protein. Liu Y, et al. **Biochem Biophys Res Commun** 1997 Aug 8; 237(1):37–40

Expression and purification of recombinant human N–formyi–L–leucyl–L–phenylalanine (FMLP) receptor: generation of polyclonal antibody against FMLP receptor. Lala A, et al. **Biochem Pharmacol** 1997 Aug 1;54(3):381–90

Low density lipoprotein receptor–related protein is expressed early and becomes restricted to a somatodendritic domain during neuronal differentiation in culture. Brown MD, et al. **Brain Res** 1997 Feb 7;747(2):313–7

Interleukin–15–induced maturation of human natural killer cells from early thymic precursors: selective expression of CD94/NKG2–A as the only HLA class I–specific inhibitory receptor. Mingari MC, et al. **Eur J Immunol** 1997 Jun;27(6):1374–80

Expression of killer cell inhibitory receptors on human uterine natural killer cells. Verma S, et al. **Eur J Immunol** 1997 Apr;27(4):979–83

Characterization of an antigen that is recognized on a melanoma showing partial HLA loss by CTL expressing an NK inhibitory receptor. Ikeda H, et al. **Immunity** 1997 Feb;6(2):199–208

LAIR–1, a novel inhibitory receptor expressed on human mononuclear leukocytes. Meyaard L, et al. **Immunity** 1997 Aug;7(2):283–90

Functional expression of the NKB1 killer cell inhibitory receptors on agammadelta CTL clone. Nakajima H, et al. **Immunogenetics** 1997;45(3):226–8

The NK2.1 receptor is encoded by Ly–49C and its expression is regulated by MHC class I alleles. Gosselin P, et al. **Int Immunol** 1997 Apr;9(4):533–40

Low density lipoprotein receptor–related protein–1 expression in the testis: regulated expression in Sertoli cells. Igdoura SA, et al. **J Androl** 1997 Jul–Aug;18(4):400–10

Selection and adaptation of cells expressing major histocompatibility complex class I–specific receptors of the natural killer complex. Bendelac A. **J Exp Med** 1997 Aug 4;186(3):349–51

A novel inhibitory receptor (ILT3) expressed on monocytes, macrophages, and dendritic cells involved in antigen processing. Cella M, et al. **J Exp Med** 1997 May 19; 185(10):1743–51

Altered expression of Ly49 inhibitory receptors on natural killer cells from MHC class I–deficient mice. Salcedo M, et al. **J Immunol** 1997 Apr 1;158(7):3174–80

Regulation of sialoadhesin expression on rat macrophages. Induction by glucocorticoids and enhancement by IFN–beta, IFN–gamma, IL–4, and lipopolysaccharide. van den Berg TK, et al. **J Immunol** 1996 Oct 1;157(7):3130–8

Mouse natural killer cells express gp49B1, a structural homologue of human killer inhibitory receptors. Wang LL, et al. **J Immunol** 1997 Jan 1;158(1):13–7

Characterization of inherited scavenger receptor overexpression and abnormal macrophage phenotype in a normolipidemic subject with planar xanthomas. Giry C, et al. **J Lipid Res** 1996 Jul;37(7):1422–35

Embryo implantation in mouse: fetomaternal coordination in the pattern of expression of uPA, uPAR, PAI–1 and alpha 2MR/LRP genes. Teesalu T, et al. **Mech Dev** 1996 May;56(1–2):103–16

RAGE mRNA expression in the diabetic mouse kidney. Ziyadeh FN, et al. **Mol Cell Biochem** 1997 May; 170(1–2):147–52

Apolipoprotein E uptake and low–density lipoprotein receptor–related protein expression by the NTera2/D1 cell line: a cell culture model of relevance for late–onset Alzheimer's disease. Williams KR, et al. **Neurobiol Dis** 1997;4(1):58–67

A novel pair of immunoglobulin–like receptors expressed by B cells and myeloid cells [see comments] Kubagawa H, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5261–6 . Comment in: Proc Natl Acad Sci U S A 1997 Jun 10;94(12):5993–5.

BLOOD

Soluble low density lipoprotein receptor–related protein (LRP) circulates in human plasma. Quinn KA, et al. **J Biol Chem** 1997 Sep 19;272(38):23946–51

Human uterine NK cells have a similar repertoire of killer inhibitory and activatory receptors to those found in blood, as demonstrated by RT–PCR and sequencing. Hiby SE, et al. **Mol Immunol** 1997 Apr;34(5):419–30

CHEMISTRY

A novel G protein–coupled receptor with homology to neuropeptide and chemoattractant receptors expressed during bone development. Methner A, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):336–42

Interconverting receptor states at 4 degrees C for the neutrophil N–formyl peptide receptor. Hoffman JF, et al. **Biochemistry** 1996 Oct 8;35(40):13047–55

The isolation and characterization of a novel G protein–coupled receptor regulated by immunologic challenge. Charlton ME, et al. **Brain Res** 1997 Aug 1; 764(1–2):141–8

Molecular structures of HLA–specific human NK cell receptors. Cantoni C, et al. **Chem Immunol** 1996;64:88–103 (70 ref.)

The lysine cluster in the collagen–like domain of the scavenger receptor provides for its ligand binding and ligand specificity. Yamamoto K, et al. **FEBS Lett** 1997 Sep 8;414(2):182–6

Mapping of monoclonal antibody– and receptor–binding domains on human granulocyte–macrophage colony–stimulating factor (rhGM–CSF) using a surface plasmon resonance–based biosensor. Laricchia–Robbio L, et al. **Hybridoma** 1996 Oct;15(5):343–50

Receptor–binding properties of the peptides corresponding to the beta–endorphin–like sequence of human immunoglobulin G. Zav'yalov VP, et al. **Immunol Lett** 1996 Jan;49(1–2):21–6

Killer cell inhibitory receptors: diversity, specificity, and function. Long EO, et al. **Immunol Rev** 1997 Feb; 155:135–44 (51 ref.)

Structure and function of the CD94 C–type lectin receptor complex involved in recognition of HLA class I molecules. López–Botet M, et al. **Immunol Rev** 1997 Feb;155:165–74 (74 ref.)

Domain organization and sequence relationship of killer cell inhibitory receptors. Salter RD, et al. **Immunol Rev** 1997 Feb;155:175–82 (39 ref.)

Polymorphism and domain variability of human killer cell inhibitory receptors. Selvakumar A, et al. **Immunol Rev** 1997 Feb;155:183–96 (57 ref.)

Immunoreceptor tyrosine-based inhibition motifs. Vivier E, et al. **Immunol Today** 1997 Jun;18(6):286–91 (52 ref.)
HLA-class I-specific inhibitory receptors in human cytolytic T lymphocytes: molecular characterization, distribution in lymphoid tissues and co-expression by individual T cells. Mingari MC, et al. **Int Immunol** 1997 Apr;9(4):485–91
Structures of class A macrophage scavenger receptors. Electron microscopic study of flexible, multidomain, fibrous proteins and determination of the disulfide bond pattern of the scavenger receptor cysteine-rich domain. Resnick D, et al. **J Biol Chem** 1996 Oct 25;271(43):26924–30
Detection and biochemical characteristics of the receptor for complexes of soluble CD14 and bacterial lipopolysaccharide. Vita N, et al. **J Immunol** 1997 Apr 1; 158(7):3457–62
A single amino acid in the p58 killer cell inhibitory receptor controls the ability of natural killer cells to discriminate between the two groups of HLA-C allotypes. Winter CC, et al. **J Immunol** 1997 May 1;158(9):4026–8
Human uterine NK cells have a similar repertoire of killer inhibitory and activatory receptors to those found in blood, as demonstrated by RT-PCR and sequencing. Hiby SE, et al. **Mol Immunol** 1997 Apr;34(5):419–30
Structure of the inhibitory receptor for human natural killer cells resembles haematopoietic receptors. Fan QR, et al. **Nature** 1997 Sep 4;389(6646):96–100
Synthetic collagen-like domain derived from the macrophage scavenger receptor binds acetylated low-density lipoprotein in vitro. Tanaka T, et al. **Protein Eng** 1996 Mar; 9(3):307–13
Expression, crystallization, and preliminary X-ray analysis of a sialic acid-binding fragment of sialoadhesin in the presence and absence of ligand. May AP, et al. **Protein Sci** 1997 Mar;6(3):717–21
Inhibitory and activatory receptors for MHC class I molecules. Cambiaggi A, et al. **Res Immunol** 1997 Mar-Apr;148(3):172–9 (53 ref.)
HLA class-I-specific NK receptors belong to two distinct molecular families and display inhibitory or activating function. Cantoni C, et al. **Res Immunol** 1997 Mar-Apr; 148(3):146–50 (28 ref.)

CLASSIFICATION

Inhibitory and activatory receptors for HLA class I molecules in human natural killer cells. Moretta A, et al. **Chem Immunol** 1996;64:77–87 (50 ref.)
Inhibitory MHC class I receptors on NK and T cells: a standard nomenclature [letter] Long EO, et al. **Immunol Today** 1996 Feb;17(2):100

DEFICIENCY

Embryonic fibroblasts that are genetically deficient in low density lipoprotein receptor-related protein demonstrate increased activity of the urokinase receptor system and accelerated migration on vitronectin. Weaver AM, et al. **J Biol Chem** 1997 May 30;272(22):14372–9

DRUG EFFECTS

Desensitization of the fMLP-induced NADPH-oxidase response in human neutrophils is lacking in okadaic acid-treated cells. Harbecke O, et al. **J Leukoc Biol** 1997 Jun;61(6):753–8
Preventive effect of rebamipide on gastric mucosal cell damage evoked by activation of formyl-methionyl-leucyl-phenylalanine receptors of rabbit neutrophils. Kim CD, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):478–83
Silica-induced apoptosis mediated via scavenger receptor in human alveolar macrophages. Iyer R, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):84–92

GENETICS

Regulation of scavenger receptor expression in smooth muscle cells by protein kinase C: a role for oxidative stress. Mietus-Snyder M, et al. **Arterioscler Thromb Vasc Biol** 1997 May;17(5):969–78
Lovastatin inhibits gene expression of type-I scavenger receptor in THP-1 human macrophages. Umetani N, et al. **Biochim Biophys Acta** 1996 Oct 18;1303(3):199–206
Immune receptor repertoire for influenza haemagglutinin. Thomas DB, et al. **Biosci Rep** 1995 Dec;15(6):481–92
NKB1: a killer cell inhibitory receptor for class I HLA-B allotypes. D'Andrea A, et al. **Chem Immunol** 1996; 64:104–15 (44 ref.)
Short report on DNA marker at candidate locus. Two new alleles in the tetranucleotide repeat polymorphism in the LDL-receptor-related protein (LRP) gene. Harris M, et al. **Clin Genet** 1996 Jul;50(1):54–5
A new human gene complex encoding the killer cell inhibitory receptors and related monocyte/macrophage receptors. Wagtmann N, et al. **Curr Biol** 1997 Aug 1; 7(8):615–8
Role of murine NK cells and their receptors in hybrid resistance. Kumar V, et al. **Curr Opin Immunol** 1997 Feb; 9(1):52–6 (39 ref.)
Inhibitory receptors, ITIM sequences and phosphatases. Unkeless JC, et al. **Curr Opin Immunol** 1997 Jun;9(3):338–43 (42 ref.)
Two murine homologues of the human chemokine receptor CXCR4 mediating stromal cell-derived factor 1alpha activation of Gi2 are differentially expressed in vivo. Moepps B, et al. **Eur J Immunol** 1997 Aug;27(8):2102–12
Cloning of novel immunoglobulin superfamily receptors expressed on human myeloid and lymphoid cells: structural evidence for new stimulatory and inhibitory pathways. Samaridis J, et al. **Eur J Immunol** 1997 Mar;27(3):660–5
Functional analysis of immunoreceptor tyrosine-based activation motif (ITAM)-mediated signal transduction: the two YxxL segments within a single CD3zeta-ITAM are functionally distinct. Sunder-Plassmann R, et al. **Eur J Immunol** 1997 Aug;27(8):2001–9
A novel member of an ancient superfamily: sponge (Geodia cydonium, Porifera) putative protein that features scavenger receptor cysteine-rich repeats. Pancer Z, et al. **Gene** 1997 Jul 9;193(2):211–8
The Cmv1 host resistance locus is closely linked to the Ly49 multigene family within the natural killer cell gene complex on mouse chromosome 6. Forbes CA, et al. **Genomics** 1997 May 1;41(3):406–13
BIT (Bit) maps to mouse chromosome 2. Ohnishi H, et al. **Genomics** 1997 Mar 15;40(3):504–6
Multiple function of macrophage scavenger receptors mediated by fibrous coiled coil domains. Liao HS, et al. **Gerontology** 1996;42 Suppl 1:37–47 (32 ref.)
Combination of Hodgkin's disease and diffuse large cell lymphoma: an in situ hybridization study for immunoglobulin light chain messenger RNA. Hell K, et al. **Histopathology** 1995 Dec;27(6):491–9
The binding site of NK receptors on HLA-C molecules. Mandelboim O, et al. **Immunity** 1997 Mar;6(3):341–50
Molecular evolution of the N-formyl peptide and C5a receptors in non-human primates. Alvarez V, et al. **Immunogenetics** 1996;44(6):446–52
Alternatively spliced Ly-49D and H transcripts are found in IL-2-activated NK cells. Silver ET, et al. **Immunogenetics** 1996;44(6):478–82
The human natural killer gene complex (NKC) is located on chromosome 12p13.1-p13.2. Suto Y, et al. **Immunogenetics** 1997;46(2):159–62
Polymorphism and domain variability of human killer cell inhibitory receptors. Selvakumar A, et al. **Immunol Rev** 1997 Feb;155:183–96 (57 ref.)
The NK2.1 receptor is encoded by Ly-49C and its expression is regulated by MHC class I alleles. Gosselin P, et al. **Int Immunol** 1997 Apr;9(4):533–40
An lrp-like gene of Bacillus subtilis involved in branched-chain amino acid transport. Belitsky BR, et al. **J Bacteriol** 1997 Sep;179(17):5448–57
Molecular cloning, mapping to human chromosome 1 q21-q23, and cell binding characteristics of Spalpha, a new member of the scavenger receptor cysteine-rich (SRCR) family of proteins. Gebe JA, et al. **J Biol Chem** 1997 Mar 7;272(10):6151–8
Characterization and functional analysis of the promoter of RAGE, the receptor for advanced glycation end products. Li J, et al. **J Biol Chem** 1997 Jun 27;272(26):16498–506
Human cytomegalovirus increases modified low density lipoprotein uptake and scavenger receptor mRNA expression in vascular smooth muscle cells. Zhou YF, et al. **J Clin Invest** 1996 Nov 1;98(9):2129–38
Characterization of inherited scavenger receptor overexpression and abnormal macrophage phenotype in a normolipidemic subject with planar xanthomas. Giry C, et al. **J Lipid Res** 1996 Jul;37(7):1422–35
Novel elements located at -504 to -399 bp of the promoter region regulated the expression of the human macrophage scavenger receptor gene in murine macrophages. Liao HS, et al. **J Lipid Res** 1997 Jul;38(7):1433–44
Uremic serum enhances scavenger receptor expression and activity in the human monocytic cell line U937. Ando M, et al. **Kidney Int** 1997 Mar;51(3):785–92
Quantitative assessment of tuftsin receptor expression and second messenger during in vitro differentiation of peripheral blood derived monocytes of leprosy patients. Khare S, et al. **Mol Cell Biochem** 1997 Jun;171(1-2):1–10
The putA gene of Agrobacterium tumefaciens is transcriptionally activated in response to proline by an Lrp-like protein and is not autoregulated. Cho K, et al. **Mol Microbiol** 1996 Dec;22(5):1025–33
Enhanced gene expression of scavenger receptor in peripheral blood monocytes from patients on cuprophane haemodialysis. Konishi Y, et al. **Nephrol Dial Transplant** 1997 Jun;12(6):1167–72
Scavenger receptor mRNAs in rat brain microglia are induced by kainic acid lesioning and by cytokines. Grewal RP, et al. **Neuroreport** 1997 Mar 24;8(5):1077–81
Natural killer cell acceptance of H-2 mismatch bone marrow grafts in transgenic mice expressing HLA-Cw3 specific killer cell inhibitory receptor. Cambiaggi A, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8088–92
Nuclear integration of JAK/STAT and Ras/AP-1 signaling by CBP and p300. Horvai AE, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1074–9
LARD: a new lymphoid-specific death domain containing receptor regulated by alternative pre-mRNA splicing. Screaton GR, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4615–9
Macrophages lacking scavenger receptor A show a decrease in binding and uptake of acetylated low-density lipoprotein and of apoptotic thymocytes, but not of oxidatively damaged red blood cells. Terpstra V, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8127–31
CTX, a new lymphocyte receptor in Xenopus, and the early evolution of Ig domains. DuPasquier L, et al. **Res Immunol** 1996 May;147(4):218–26 (28 ref.)
Events in the adaptation of natural killer cell receptors to MHC class I polymorphisms. Parham P. **Res Immunol** 1997 Mar-Apr;148(3):190–4 (19 ref.)
The killer cell inhibitory receptor genomic region on human chromosome 19q13.4. Dupont B, et al. **Tissue Antigens** 1997 Jun;49(6):557–63 (43 ref.)
Genomic organization and allelic polymorphism of the human killer cell inhibitory receptor gene KIR103. Selvakumar A, et al. **Tissue Antigens** 1997 Jun;49(6):564–73
NK cell receptor gene of the KIR family with two IG domains but highest homology to KIR receptors with three IG domains. Selvakumar A, et al. **Tissue Antigens** 1996 Oct;48(4 Pt 1):285–94
Genomic organization of a human killer cell inhibitory receptor gene. Wilson MJ, et al. **Tissue Antigens** 1997 Jun; 49(6):574–9
[Scavenger receptor gene--regulation of scavenger receptor gene expression in alveolar macrophages and the pathogenesis of pulmonary alveolar proteinosis] Mori T, et al. **Nippon Rinsho** 1996 Feb;54(2):353–7 (13 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Nonfimbrial adhesins of Escherichia coli. Goldhar J. **Adv Exp Med Biol** 1996;408:63–72 (29 ref.)
TCR alpha beta+ anti-tumor cytolytic T lymphocytes express NKR-P1 whilethe anti-tumor activity of TCR gamma delta+ T lymphocytes is not correlated to NKR-P1 expression. Yrlid U, et al. **Cell Immunol** 1996 Nov 1;173(2):287–94
HLA-class I-specific inhibitory receptors of NK type on a subset of human T cells. Mingari MC, et al. **Chem Immunol** 1996;64:135–45 (51 ref.)
Recognition and signaling by mouse Ly-49 receptors. Seaman WE, et al. **Chem Immunol** 1996;64:19–27 (31 ref.)
Role of murine NK cells and their receptors in hybrid resistance. Kumar V, et al. **Curr Opin Immunol** 1997 Feb; 9(1):52–6 (39 ref.)
Natural killer cell receptors. Long EO, et al. **Curr Opin Immunol** 1997 Jun;9(3):344–50 (69 ref.)
Co-receptors of B lymphocytes. O'Rourke L, et al. **Curr Opin Immunol** 1997 Jun;9(3):324–9 (65 ref.)
The cytoplasmic domain of rat NKR-P1 receptor interacts with the N-terminal domain of p56(lck) via cysteine residues. Campbell KS, et al. **Eur J Immunol** 1997 Jan; 27(1):72–7
CD94 functions as a natural killer cell inhibitory receptor for different HLA class I alleles: identification of the inhibitory form of CD94 by the use of novel monoclonal antibodies. Sivori S, et al. **Eur J Immunol** 1996 Oct; 26(10):2487–92
The binding site of NK receptors on HLA-C molecules. Mandelboim O, et al. **Immunity** 1997 Mar;6(3):341–50
Anti-receptor antibodies inhibit Pseudomonas aeruginosa binding to the cornea and prevent corneal perforation. Hobden JA, et al. **Immunol Cell Biol** 1996 Jun;74(3):258–64
Function of killer cell inhibitory receptors for MHC class I molecules. Vély F, et al. **Immunol Lett** 1996 Dec; 54(2-3):145–50
Specificity, tolerance and developmental regulation of natural killer cells defined by expression of class I-specific Ly49 receptors. Raulet DH, et al. **Immunol Rev** 1997 Feb; 155:41–52 (46 ref.)
Opposing functions of activatory T-cell receptors and inhibitory NK-cell receptors on cytotoxic T cells. Ciccone E, et al. **Immunol Today** 1996 Oct;17(10):450–3 (9 ref.)
Inhibitory MHC class I receptors on NK cells and T cells [see comments] Lanier LL, et al. **Immunol Today** 1996 Feb; 17(2):86–91 (52 ref.). Comment in: Immunol Today 1997 Mar;18(3):146.
Induction of cell death by chimeric L-selectin-Fas receptors. Ishiwatari-Hayasaka H, et al. **Int Immunol** 1997 Apr; 9(4):627–35
The activation status of ovine CD45R+ and CD45R- efferent lymph T cells after orf virus reinfection. Haig DM, et al. **J Comp Pathol** 1996 Aug;115(2):163–74
Transgenic expression of the Ly49A natural killer cell receptor confers class I major histocompatibility complex (MHC)-specific inhibition and prevents bone marrow allograft rejection. Held W, et al. **J Exp Med** 1996 Nov 1;184(5):2037–41
The Ly-49D receptor activates murine natural killer cells. Mason LH, et al. **J Exp Med** 1996 Dec 1;184(6):2119–28
A p70 killer cell inhibitory receptor specific for several HLA-B allotypes discriminates among peptides bound to HLA-B*2705. Peruzzi M, et al. **J Exp Med** 1996 Oct 1; 184(4):1585–90
Receptors that turn on and turn off natural killer cells. Chong AS. **J Heart Lung Transplant** 1996 Jul;15(7):675–83 (71 ref.)
Engagement of the signaling lymphocytic activation molecule (SLAM) on activated T cells results in IL-2-independent, cyclosporin A-sensitive T cell proliferation and IFN-gamma production. Aversa G, et al. **J Immunol** 1997 May 1;158(9):4036–44
NK1.1+ CD4+ T cells lose NK1.1 expression upon in vitro activation. Chen H, et al. **J Immunol** 1997 Jun 1; 158(11):5112–9
Melatonin enhances IL-2, IL-6, and IFN-gamma production by human circulating CD4+ cells: a possible nuclear

receptor-mediated mechanism involving T helper type 1 lymphocytes and monocytes. Garcia-Mauriño S, et al. **J Immunol** 1997 Jul 15;159(2):574–81

Conserved and variable residues within the Bw4 motif of HLA-B make separable contributions to recognition by the NKB1 killer cell-inhibitory receptor. Gumperz JE, et al. **J Immunol** 1997 Jun 1;158(11):5237–41

Analysis of the contact sites on the CD4 molecule with class II MHC molecule: co-ligand versus co-receptor function. Huang B, et al. **J Immunol** 1997 Jan 1;158(1):216–25

A newly recognized pathway for the negative regulation of mast cell-dependent hypersensitivity and inflammation mediated by an endogenous cell surface receptor of the gp49 family. Katz HR, et al. **J Immunol** 1997 Jun 1; 158(11):5065–70 (32 ref.)

Human killer cell activatory receptors for MHC class I molecules are included in a multimeric complex expressed by natural killer cells. Olcese L, et al. **J Immunol** 1997 Jun 1;158(11):5083–6

Selective inhibition of human and mouse natural killer tumor recognition using retroviral antisense in primary natural killer cells: involvement with MHC class I killer cell inhibitory receptors. Ortaldo JR, et al. **J Immunol** 1997 Feb 1;158(3):1262–7

Biochemical and serologic evidence for the existence of functionally distinct forms of the CD94 NK cell receptor. Pérez-Villar JJ, et al. **J Immunol** 1996 Dec 15; 157(12):5367–74

Enhancement of class II-restricted T cell responses by costimulatory NK receptors for class I MHC proteins. Mandelboim O, et al. **Science** 1996 Dec 20; 274(5295):2097–100

Intracellular signaling in neutrophil priming and activation. Downey GP, et al. **Semin Cell Biol** 1995 Dec;6(6):345–56 (61 ref.)

Specificity of two anti-class I HLA monoclonal antibodies that block class I recognition by the NKB1 killer cell inhibitory receptor. Gumperz JE, et al. **Tissue Antigens** 1996 Oct;48(4 Pt 1):278–84

Human killer inhibitory receptors: specificity for HLA-class I molecules and mechanisms of signal transduction. Colonna M, et al. **Transplant Proc** 1996 Dec;28(6):3035

ISOLATION & PURIFICATION

A novel immunoglobulin superfamily receptor for cellular and viral MHC class I molecules. Cosman D, et al. **Immunity** 1997 Aug;7(2):273–82

METABOLISM

Advanced glycation end products (AGEs) co-localize with AGE receptors in the retinal vasculature of diabetic and of AGE-infused rats. Stitt AW, et al. **Am J Pathol** 1997 Feb;150(2):523–31

Interaction of apo E-containing lipoproteins with the LDL receptor-related protein LRP. Küchenhoff A, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C369–82

Effects of stress-related signal molecules on cells associated with muscle tissue. Loehrke B, et al. **Anal Quant Cytol Histol** 1996 Oct;18(5):383–8

Role of the macrophage scavenger receptor for internalization of lysophosphatidylcholine in oxidized low density lipoprotein-induced macrophage growth. Sakai M, et al. **Ann N Y Acad Sci** 1997 Apr 15;811:378–84

Subtle differences between human and rabbit neutrophil receptors shown by the secretagogue activity of constrained formyl peptides. Dentino AR, et al. **Arch Biochem Biophys** 1997 Jan 15;337(2):267–74

Characterization of alpha 2-macroglobulin binding to human trabecular meshwork cells: presence of the alpha 2-macroglobulin signaling receptor. Howard GC, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):19–26

Acetylated LDL endocytosis by the human monocytic Mono Mac 6sr cells is not mediated by the macrophage type I and II scavenger receptors. Scheithe R, et al. **Arterioscler Thromb Vasc Biol** 1997 Jun;17(6):1024–31

Scavenger receptor activity and expression of apolipoprotein E mRNA in monocyte-derived macrophages of young and old healthy men. Friedman G, et al. **Atherosclerosis** 1997 Jan 3;128(1):67–73

Regulation of serum-induced lipid accumulation in human monocyte-derived macrophages by interferon-gamma. Correlations with apolipoprotein E production, lipoprotein lipase activity and LDL receptor-related protein expression. Garner B, et al. **Atherosclerosis** 1997 Jan 3; 128(1):47–58

Pseudo type III dyslipoproteinemia is associated with normal fibroblast lipoprotein receptor activity. Giroux LM, et al. **Atherosclerosis** 1997 Jul 11;132(1):85–94

NKR-P1A protein, an activating receptor of rat natural killer cells, binds to the chitobiose core of uncompletely glycosylated N-linked glycans, and to linear chitooligomers. Bezouška K, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):149–53

Identification of an N-formyl peptide receptor ligand binding domain by a gain-of-function approach. Quehenberger O, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):377–81

Binding and degradation of thrombospondin-1 mediated through heparan sulphate proteoglycans and low-density-lipoprotein receptor-related protein: localization of the functional activity to the trimeric N-terminal heparin-binding region of thrombospondin-1. Chen H, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):959–63

Advanced glycation end products are eliminated by scavenger-receptor-mediated endocytosis in hepatic sinusoidal Kupffer and endothelial cells. Smedsrød B, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):567–73

Hybrid antibodies monitoring receptor profiles on lymphocyte subsets. Bell CG. **Biochem Soc Trans** 1996 Aug;24(3):496S

Identification of residues in alpha-macroglobulins involved in activation of the alpha 2-macroglobulin signaling receptor. Howard GC, et al. **Biochim Biophys Acta** 1996 Oct 17;1297(2):111–4

Nickel is a specific antagonist for the catabolism of activated alpha 2-macroglobulin. Kancha RK, et al. **Biochim Biophys Acta** 1997 Mar 1;1355(3):231–40

Characterization of alpha 2-macroglobulin receptor low density lipoprotein receptor-related protein (alpha 2 MR/LRP) in White Carneau pigeon peritoneal macrophages: its role in lipoprotein metabolism. Seo T, et al. **Biochim Biophys Acta** 1997 Jan 21;1344(2):171–88

Stimulation of macrophage DNA synthesis by polyanionic substances through binding to the macrophage scavenger receptor. Sasaki T, et al. **Biol Pharm Bull** 1996 Mar; 19(3):449–55

Kinetic characterization of binding and internalization of fractionated [3H]heparin in rat liver parenchymal cells in primary culture. Urano K, et al. **Biol Pharm Bull** 1997 Jun; 20(6):680–3

Uptake mechanism of fractioned [(3)H]heparin in isolated rat kupffer cells: involvement of scavenger receptors. Watanabe J, et al. **Biol Pharm Bull** 1996 Apr;19(4):581–6

The protein product of the proto-oncogene c-cbl forms a complex with phosphatidylinositol 3-kinase p85 and CD19 in anti-IgM-stimulated human B-lymphoma cells. Beckwith M, et al. **Blood** 1996 Nov 1;88(9):3502–7

Inhibition of apoptosis in a human pre-B-cell line by CD23 is mediated via a novel receptor. White LJ, et al. **Blood** 1997 Jul 1;90(1):234–43

Differential messenger RNA and protein expression of the receptor for advanced glycosylated end products in normal lung and non-small cell lung carcinoma. Schraml P, et al. **Cancer Res** 1997 Sep 1;57(17):3669–71

Increased expression of low density lipoprotein receptor-related protein/alpha2-macroglobulin receptor in human malignant astrocytomas. Yamamoto M, et al. **Cancer Res** 1997 Jul 1;57(13):2799–805

Natural killer cell receptors and MHC class I interactions. Lanier LL. **Curr Opin Immunol** 1997 Feb;9(1):126–31 (63 ref.)

Collagenous macrophage scavenger receptors. Kodama T, et al. **Curr Opin Lipidol** 1996 Oct;7(5):287–91 (37 ref.)

Genetics and molecular biology [editorial] Patel S. **Curr Opin Lipidol** 1995 Dec;6(6):U149–53

Flow cytometric measurement of kinetic and equilibrium binding parameters of arginine-glycine-aspartic acid ligands in binding to glycoprotein IIb/IIIa on platelets. Bednar B, et al. **Cytometry** 1997 May 1;28(1):58–65

Recent progress in advanced glycation end products and diabetic complications. Vlassara H. **Diabetes** 1997 Sep;46 Suppl 2:S19–25

Advanced glycation end products and their receptors co-localise in rat organs susceptible to diabetic microvascular injury. Soulis T, et al. **Diabetologia** 1997 Jun; 40(6):619–28

The 39-kDa protein regulates LRP activity in cultured endothelial and smooth muscle cells. Warshawsky I, et al. **Eur J Cell Biol** 1996 Feb;69(2):156–65

What's the RAGE? The receptor for advanced glycation end products (RAGE) and the dark side of glucose. Yan SD, et al. **Eur J Clin Invest** 1997 Mar;27(3):179–81 (20 ref.)

The CD94 and NKG2-A C-type lectins covalently assemble to form a natural killer cell inhibitory receptor for HLA class I molecules. Carretero M, et al. **Eur J Immunol** 1997 Feb;27(2):563–7

Location-specific regulation of transgenic Ly49A receptors by major histocompatibility complex class I molecules. Fahlén L, et al. **Eur J Immunol** 1997 Aug;27(8):2057–65

Two murine homologues of the human chemokine receptor CXCR4 mediating stromal cell-derived factor 1alpha activation of Gi2 are differentially expressed in vivo. Moepps B, et al. **Eur J Immunol** 1997 Aug;27(8):2102–12

Binding of a soluble p70 killer cell inhibitory receptor to HLA-B*5101: requirement for all three p70 immunoglobulin domains. Rojo S, et al. **Eur J Immunol** 1997 Feb;27(2):568–71

Functional analysis of immunoreceptor tyrosine-based activation motif (ITAM)-mediated signal transduction: the two YxxL segments within a single CD3zeta-ITAM are functionally distinct. Sunder-Plassmann R, et al. **Eur J Immunol** 1997 Aug;27(8):2001–9

Differential association of phosphatases with hematopoietic co-receptors bearing immunoreceptor tyrosine-based inhibition motifs. Vély F, et al. **Eur J Immunol** 1997 Aug; 27(8):1994–2000

Localization of advanced glycation end products of Maillard reaction in bovine tissues and their endocytosis by macrophage scavenger receptors. Mori T, et al. **Exp Mol Pathol** 1995 Oct;63(2):135–52

Functional and possible physical association of scavenger receptor with cytoplasmic tyrosine kinase Lyn in monocytic THP-1-derived macrophages. Miki S, et al. **FEBS Lett** 1996 Dec 16;399(3):241–4

ADP-ribosylation of tuftsin suppresses its receptor-binding capacity and phagocytosis-stimulating activity to murine peritoneal macrophages. Terashima M, et al. **FEBS Lett** 1997 Jul 21;412(1):227–32

The lysine cluster in the collagen-like domain of the scavenger receptor provides for its ligand binding and ligand specificity. Yamamoto K, et al. **FEBS Lett** 1997 Sep 8;414(2):182–6

Multiple function of macrophage scavenger receptors mediated by fibrous coiled coil domains. Liao HS, et al. **Gerontology** 1996;42 Suppl 1:37–47 (32 ref.)

The Sialoadhesins—a family of sialic acid-dependent cellular recognition molecules within the immunoglobulin superfamily. Kelm S, et al. **Glycoconj J** 1996 Dec; 13(6):913–26 (114 ref.)

Killer cell inhibitory receptor interactions with HLA class I molecules: implications for alloreactivity and transplantation. Young NT, et al. **Hum Immunol** 1997 Jan; 52(1):1–11 (109 ref.)

Sequential involvement of Lck and SHP-1 with MHC-recognizing receptors on NK cells inhibits FcR-initiated tyrosine kinase activation. Binstadt BA, et al. **Immunity** 1996 Dec;5(6):629–38

cDNA cloning and primary structure analysis of C1qR(P), the human C1q/MBL/SPA receptor that mediates enhanced phagocytosis in vitro. Nepomuceno RR, et al. **Immunity** 1997 Feb;6(2):119–29

Association of human NK cell surface receptors NKR-P1 and CD94 with Src-family protein kinases. Cerný J, et al. **Immunogenetics** 1997;46(3):231–6

Intracellular signaling and endosomal trafficking of immunoreceptors. Shared effectors underlying MHC class II-restricted antigen presentation. Bonnerot C, et al. **Immunol Lett** 1997 Jun 1;57(1-3):1–4 (35 ref.)

Receptor-binding properties of the peptides corresponding to the beta-endorphin-like sequence of human immunoglobulin G. Zav'yalov VP, et al. **Immunol Lett** 1996 Jan;49(1-2):21–6

Signal transduction by human NK cell MHC-recognizing receptors. Binstadt BA, et al. **Immunol Rev** 1997 Feb; 155:197–203 (70 ref.)

Why is it so hard to dissociate multivalent antigens from cell-surface antibodies? [see comments] Goldstein B, et al. **Immunol Today** 1996 Feb;17(2):77–80 (22 ref.). Comment in: Immunol Today 1997 Jun;18(6):305–6.

Endocytic uptake of lysophosphatidylcholine mediated by macrophage scavenger receptor plays a major role in oxidized low density lipoprotein-induced macrophage growth. Sakai M, et al. **J Atheroscler Thromb** 1996; 2(2):81–6 (19 ref.)

Reconstituted killer cell inhibitory receptors for major histocompatibility complex class I molecules control mast cell activation induced via immunoreceptor tyrosine-based activation motifs. Bléry M, et al. **J Biol Chem** 1997 Apr 4;272(14):8989–96

Binding specificities of the sialoadhesin family of I-type lectins. Sialic acid linkage and substructure requirements for binding of myelin-associated glycoprotein, Schwann cell myelin protein, and sialoadhesin. Collins BE, et al. **J Biol Chem** 1997 Jul 4;272(27):16889–95

Apolipoprotein E-containing high density lipoprotein promotes neurite outgrowth and is a ligand for the low density lipoprotein receptor-related protein. Fagan AM, et al. **J Biol Chem** 1996 Nov 22;271(47):30121–5

Native and modified low density lipoproteins increase the functional expression of the macrophage class B scavenger receptor, CD36. Han J, et al. **J Biol Chem** 1997 Aug 22; 272(34):21654–9

Low density lipoprotein receptor-related protein modulates the expression of tissue-type plasminogen activator in human colon fibroblasts. Hardy MM, et al. **J Biol Chem** 1997 Mar 7;272(10):6812–7

Chemoattractant receptor-induced phosphorylation of L-selectin. Haribabu B, et al. **J Biol Chem** 1997 May 23; 272(21):13961–5

Molecular analysis of ligand binding to the second cluster of complement-type repeats of the low density lipoprotein receptor-related protein. Evidence for an allosteric component in receptor-associated protein-mediated inhibition of ligand binding. Horn IR, et al. **J Biol Chem** 1997 May 23;272(21):13608–13

Induction of macrophage colony-stimulating factor receptor (c-fms) expression in vascular medial smooth muscle cells treated with heparin binding epidermal growth factor-like growth factor. Inaba T, et al. **J Biol Chem** 1996 Oct 4; 271(40):24413–7

Scavenger receptor BI promotes high density lipoprotein-mediated cellular cholesterol efflux. Ji Y, et al. **J Biol Chem** 1997 Aug 22;272(34):20982–5

High affinity saturable uptake of oxidized low density lipoprotein by macrophages from mice lacking the scavenger receptor class A type I/II. Lougheed M, et al. **J Biol Chem** 1997 May 16;272(20):12938–44

Platelet endothelial cell adhesion molecule-1 is phosphorylatable by c-Src, binds Src-Src homology 2 domain, and exhibits immunoreceptor tyrosine-based activation motif-like properties. Lu TT, et al. **J Biol Chem** 1997 May 30;272(22):14442–6

Cellular internalization and degradation of thrombospondin-1 is mediated by the amino-terminal heparin binding domain (HBD). High affinity interaction of dimeric HBD with the

low density lipoprotein receptor-related protein. Mikhailenko I, et al. **J Biol Chem** 1997 Mar 7; 272(10):6784–91

Up-regulation of the alpha2-macroglobulin signaling receptor on rheumatoid synovial fibroblasts. Misra UK, et al. **J Biol Chem** 1997 Jan 3;272(1):497–502

Segments in the C-terminal folding domain of lipoprotein lipase important for binding to the low density lipoprotein receptor-related protein and to heparan sulfate proteoglycans. Nielsen MS, et al. **J Biol Chem** 1997 Feb 28;272(9):5821–7

Differential functions of triplicated repeats suggest two independent roles for the receptor-associated protein as a molecular chaperone. Obermoeller LM, et al. **J Biol Chem** 1997 Apr 18;272(16):10761–8

Desensitization of N-formylpeptide receptor-mediated activation is dependent upon receptor phosphorylation. Prossnitz ER. **J Biol Chem** 1997 Jun 13;272(24):15213–9

The scavenger receptor serves as a route for internalization of lysophosphatidylcholine in oxidized low density lipoprotein-induced macrophage proliferation. Sakai M, et al. **J Biol Chem** 1996 Nov 1;271(44):27346–52

A lymphocyte-specific Ltk tyrosine kinase isoform is retained in the endoplasmic reticulum in association with calnexin. Snijders AJ, et al. **J Biol Chem** 1997 Jan 10;272(2):1297–301

The low density lipoprotein receptor-related protein can function independently from heparan sulfate proteoglycans in tissue factor pathway inhibitor endocytosis. Warshawsky I, et al. **J Biol Chem** 1996 Oct 18;271(42):25873–9

Epidermal growth factor and platelet-derived growth factor-BB induce a stable increase in the activity of low density lipoprotein receptor-related protein in vascular smooth muscle cells by altering receptor distribution and recycling. Weaver AM, et al. **J Biol Chem** 1996 Oct 4; 271(40):24894–900

The binding of receptor-recognized alpha2-macroglobulin to the low density lipoprotein receptor-related protein and the alpha2M signaling receptor is decoupled by oxidation. Wu SM, et al. **J Biol Chem** 1997 Aug 15;272(33):20627–35

The binding of human blood platelets to fibrinogen-, fibronectin-, and Arg-Gly-Asp-derivatized Sephadex G-10. Besselink GA, et al. **J Biomater Sci Polym Ed** 1995; 7(7):551–62

Possible involvement of RGD (Arg-Gly-Asp)-containing extracellular matrix proteins in rat growth plate chondrocyte differentiation in culture. Yasuda T, et al. **J Bone Miner Res** 1996 Oct;11(10):1430–7

Binding site on human C-reactive protein (CRP) recognized by the leukocyte CRP-receptor. Zen Q, et al. **J Cell Biochem** 1997 Jan;64(1):140–51

Receptor-mediated endocytosis of urokinase-type plasminogen activator is regulated by cAMP-dependent protein kinase. Goretzki L, et al. **J Cell Sci** 1997 Jun;110 (Pt 12):1395–402

Ligand interaction of human alpha 2-macroglobulin-alpha 2-macroglobulin receptor studied by partitioning in aqueous two-phase systems. Birkenmeier G, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):97–103

Oxidized or acetylated low density lipoproteins are rapidly cleared by the liver in mice with disruption of the scavenger receptor class A type I/II gene. Ling W, et al. **J Clin Invest** 1997 Jul 15;100(2):244–52

The receptor for advanced glycation end products (RAGE) is a central mediator of the interaction of AGE-beta2microglobulin with human mononuclear phagocytes via an oxidant-sensitive pathway. Implications for the pathogenesis of dialysis-related amyloidosis. Miyata T, et al. **J Clin Invest** 1996 Sep 1;98(5):1088–94

The direct binding of a p58 killer cell inhibitory receptor to human histocompatibility leukocyte antigen (HLA)-Cw4 exhibits peptide selectivity. Rajagopalan S, et al. **J Exp Med** 1997 Apr 21;185(8):1523–8

Dual interaction of the malaria circumsporozoite protein with the low density lipoprotein receptor-related protein (LRP) and heparan sulfate proteoglycans. Shakibaei M, et al. **J Exp Med** 1996 Nov 1;184(5):1699–711

Selective suppression of interleukin-12 induction after macrophage receptor ligation. Sutterwala FS, et al. **J Exp Med** 1997 Jun 2;185(11):1977–85

Phosphorylation of the NC-1.1 receptor and regulation of natural cytotoxicity by protein kinase C and cyclic GMP-dependent protein kinase. Holmgreen SP, et al. **J Immunol** 1997 Mar 1;158(5):2035–41

Bispecific antibodies overcome the opsonin-receptor mismatch of cystic fibrosis in vitro: restoration of neutrophil-mediated phagocytosis and killing of Pseudomonas aeruginosa. McCormick LL, et al. **J Immunol** 1997 Apr 1;158(7):3474–82

NK cell receptor calibration: effects of MHC class I induction on killing by Ly49Ahigh and Ly49Alow NK cells. Olsson-Alheim MY, et al. **J Immunol** 1997 Oct 1; 159(7):3189–94

Undifferentiated U937 cells transfected with chemoattractant receptors: a model system to investigate chemotactic mechanisms and receptor structure/function relationships. Kew RR, et al. **J Leukoc Biol** 1997 Mar;61(3):329–37

Relative roles of the LDL receptor, the LDL receptor-like protein, and hepatic lipase in chylomicron remnant removal by the liver. de Faria E, et al. **J Lipid Res** 1996 Jan; 37(1):197–209

Modulation of macrophage scavenger receptor transport by protein phosphorylation. Fong LG. **J Lipid Res** 1996 Mar; 37(3):574–87

Amino terminus of apolipoprotein B suffices to produce recognition of malondialdehyde-modified low density lipoprotein by the scavenger receptor of human monocyte-macrophages. Kreuzer J, et al. **J Lipid Res** 1997 Feb;38(2):324–42

Ligand-induced conformational change within the CD2 ectodomain accompanies receptor clustering: implication for molecular lattice formation. Li J, et al. **J Mol Biol** 1996 Oct 25;263(2):209–26

Rigidone, a sesquiterpene o-quinone from the gorgonian Pseudopterogorgia rigida. Freyer AJ, et al. **J Nat Prod** 1997 Mar;60(3):309–11

Modulation of the alpha 2 macroglobulin receptor/low density lipoprotein receptor related protein by interferon-gamma in human astroglial cells. Businaro R, et al. **J Neuroimmunol** 1997 Jan;72(1):75–81

T-lymphocyte immunointerferon receptors in patients with multiple sclerosis. Bongioanni P, et al. **J Neurol** 1996 Aug; 243(8):605–10

Fixation traps formyl peptide receptors in high and low affinity forms that can be regulated by GTP[S] in the absence of ligand. Domalewski MD, et al. **J Recept Signal Transduct Res** 1996 Jan-Mar;16(1-2):59–75

Primary, syncytium-inducing human immunodeficiency virus type 1 isolates are dual-tropic and most can use either Lestr or CCR5 as coreceptors for virus entry. Simmons G, et al. **J Virol** 1996 Dec;70(12):8355–60

Uremic serum enhances scavenger receptor expression and activity in the human monocytic cell line U937. Ando M, et al. **Kidney Int** 1997 Mar;51(3):785–92

Two novel probes reveal tubular and vascular Arg-Gly-Asp (RGD) binding sites in the ischemic rat kidney. Romanov V, et al. **Kidney Int** 1997 Jul;52(1):93–102

Pinning the suspect to the crime in Alzheimer's [news] Finkel E. **Lancet** 1996 Nov 30;348(9040):1506

Therapeutic delivery of proteins to macrophages: implications for treatment of Gaucher's disease. Mistry PK, et al. **Lancet** 1996 Dec 7;348(9041):1555–9

Control of thrombopoietin-induced megakaryocytic differentiation by the mitogen-activated protein kinase pathway. Rouyez MC, et al. **Mol Cell Biol** 1997 Sep; 17(9):4991–5000

Structural basis for the interaction of superantigen with the alternative superantigen-binding receptor p85. Rogers TJ, et al. **Mol Immunol** 1997 Feb;34(3):263–72

Heparin binding protein-44 (HBP-44)/receptor-associated protein (RAP)mediates cell-substratum adhesion of mouse NIH/3T3 cells through its binding to low density lipoprotein (LDL) receptor-related protein (LRP). Terada H, et al. **Mol Membr Biol** 1997 Apr-Jun;14(2):81–6

Recombinant advanced glycation end product receptor pharmacokinetics in normal and diabetic rats. Renard C, et al. **Mol Pharmacol** 1997 Jul;52(1):54–62

Binding proteins selected from combinatorial libraries of an alpha-helical bacterial receptor domain. Nord K, et al. **Nat Biotechnol** 1997 Aug;15(8):772–7

A role for macrophage scavenger receptors in atherosclerosis and susceptibility to infection. Suzuki H, et al. **Nature** 1997 Mar 20;386(6622):292–6

Expression of receptors for advanced glycation end-products in occlusive vascular and renal disease. Bierhaus A, et al. **Nephrol Dial Transplant** 1996;11 Suppl 5:87–90 (32 ref.)

The receptor for advanced glycation end-products has a central role in mediating the effects of advanced glycation end-products on the development of vascular disease in diabetes mellitus. Hori O, et al. **Nephrol Dial Transplant** 1996;11 Suppl 5:13–6 (26 ref.)

Immunocytochemical demonstration of alpha 2-M-R/LRP on Müller (glial) cells isolated from rabbit and human retina. Birkenmeier G, et al. **Neuroreport** 1996 Dec 20; 8(1):149–51

Association between the low density lipoprotein receptor-related protein (LRP) and Alzheimer's disease. Wavrant-DeVrièze F, et al. **Neurosci Lett** 1997 May 9; 227(1):68–70

In vivo fate of phosphorothioate antisense oligodeoxynucleotides: predominant uptake by scavenger receptors on endothelial liver cells. Bijsterbosch MK, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3290–6

Expression of HLA class I-specific inhibitory natural killer cell receptors in HIV-specific cytolytic T lymphocytes: impairment of specific cytolytic functions. De Maria A, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10285–8

Molecular identity and cellular distribution of advanced glycation endproduct receptors: relationship of p60 to OST-48 and p90 to 80K-H membrane proteins. Li YM, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11047–52

Human CD8+ T lymphocyte subsets that express HLA class I-specific inhibitory receptors represent oligoclonally or monoclonally expanded cell populations. Mingari MC, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12433–8

Protein engineering of Bacillus thuringiensis delta-endotoxin: mutations at domain II of CryIAb enhance receptor affinity and toxicity toward gypsy moth larvae. Rajamohan F, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14338–43

Synthetic collagen-like domain derived from the macrophage scavenger receptor binds acetylated low-density lipoprotein in vitro. Tanaka T, et al. **Protein Eng** 1996 Mar; 9(3):307–13

Binding and uptake of 125iodine-labelled, oxidized low density lipoprotein by macrophages: comparison of the effects of alpha-tocopherol, probucol, pyridoxal-5'-phosphate and magnesium-pyridoxal-5'-phosphate-glutamate. Selmer D, et al. **Z Naturforsch [C]** 1997 Jan-Feb;52(1-2):97–104

PHYSIOLOGY

Growth retardation of Mato's fluorescent granular perithelial (FGP) cells in scavenger receptor knockout (SRKO) mice. Mato M, et al. **Anat Rec** 1997 Mar;247(3):307–16

Receptors for HLA class-I molecules in human natural killer cells. Moretta A, et al. **Annu Rev Immunol** 1996;14:619–48 (127 ref.)

Cooperation between the Fc epsilonR1 and formyl peptide receptor signaling pathways in RBL(FPR) cells: the contribution of receptor-specific Ca2+ mobilization responses. Lee RJ, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):812–9

Scavenger receptors may regulate nitric oxide production from macrophages stimulated by LPS. Matsuno R, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):601–5

Scavenger receptor B1 (SR-B1) substrates inhibit the selective uptake of high-density-lipoprotein cholesteryl esters by rat parenchymal liver cells. Fluiter K, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):515–9

Scavenger receptor-mediated delivery of antisense mini-exon phosphorothioate oligonucleotide to Leishmania-infected macrophages. Selective and efficient elimination of the parasite. Chaudhuri G. **Biochem Pharmacol** 1997 Feb 7; 53(3):385–91

Functional resemblance between the Ig-related NK cell receptors specific for HLA class I molecules and the CD94 C-type lectin. López-Botet M, et al. **Chem Immunol** 1996; 64:116–34 (60 ref.)

Inhibitory and activatory receptors for HLA class I molecules in human natural killer cells. Moretta A, et al. **Chem Immunol** 1996;64:77–87 (50 ref.)

Phagocytosis of nonopsonized Cryptococcus neoformans by swine microglia involves CD14 receptors. Lipovsky MM, et al. **Clin Immunol Immunopathol** 1997 Aug;84(2):208–11

Downstream signals initiated in mast cells by Fc epsilon RI and other receptors. Beaven MA, et al. **Curr Opin Immunol** 1996 Dec;8(6):766–72 (66 ref.)

Atherosclerosis: cell biology and lipoproteins [editorial] Tabas I. **Curr Opin Lipidol** 1997 Apr;8(2):U25–7 (16 ref.)

The receptor for advanced glycation end products mediates the chemotaxis of rabbit smooth muscle cells. Higashi T, et al. **Diabetes** 1997 Mar;46(3):463–72

Regulatory role of CD95 ligation on human B cells induced in vivo capable of spontaneous and high-rate Ig secretion. Medina F, et al. **Eur J Immunol** 1997 Mar;27(3):700–6

BIT, an immune antigen receptor-like molecule in the brain. Sano S, et al. **FEBS Lett** 1997 Jul 14;411(2-3):327–34

Of plaques and stones: the SR-B1 (scavenger receptor class B, type 1). Arrese MA, et al. **Hepatology** 1997 Oct; 26(4):1072–4

Natural killer cells: from no receptors to too many. Lanier LL. **Immunity** 1997 Apr;6(4):371–8 (109 ref.)

Signal transduction during natural killer cell activation: inside the mind of a killer. Leibson PJ. **Immunity** 1997 Jun; 6(6):655–61 (117 ref.)

LAIR-1, a novel inhibitory receptor expressed on human mononuclear leukocytes. Meyaard L, et al. **Immunity** 1997 Aug;7(2):283–90

CD94 and a novel associated protein (94AP) form a NK cell receptor involved in the recognition of HLA-A, HLA-B, and HLA-C allotypes. Phillips JH, et al. **Immunity** 1996 Aug;5(2):163–72

Macrophage scavenger receptor MARCO: in vitro and in vivo regulation and involvement in the anti-bacterial host defense. van der Laan LJ, et al. **Immunol Lett** 1997 Jun 1;57(1-3):203–8

Specificity and function of immunoglobulin superfamily NK cell inhibitory and stimulatory receptors. Colonna M. **Immunol Rev** 1997 Feb;155:127–33 (55 ref.)

Arousal and inhibition of human NK cells. Lanier LL, et al. **Immunol Rev** 1997 Feb;155:145–54 (98 ref.)

Killer cell inhibitory receptors: diversity, specificity, and function. Long EO, et al. **Immunol Rev** 1997 Feb; 155:135–44 (51 ref.)

Structure and function of the CD94 C-type lectin receptor complex involved in recognition of HLA class I molecules. López-Botet M, et al. **Immunol Rev** 1997 Feb;155:165–74 (74 ref.)

Transduction of cytotoxic signals in natural killer cells: a general model of fine tuning between activatory and inhibitory pathways in lymphocytes. Renard V, et al. **Immunol Rev** 1997 Feb;155:205–21 (153 ref.)

Human NK cells: their ligands, receptors and functions. Reyburn H, et al. **Immunol Rev** 1997 Feb;155:119–25 (70 ref.)

Divergent functions of lectin-like receptors on NK cells. Ryan JC, et al. **Immunol Rev** 1997 Feb;155:79–89 (70 ref.)

Killer cell receptors: keeping pace with MHC class I evolution. Valiante NM, et al. **Immunol Rev** 1997 Feb; 155:155–64 (51 ref.)

NK-cell receptors and recognition of MHC class I molecules. López-Botet M, et al. **Immunol Today** 1996 May; 17(5):212–4 (4 ref.)

Immunoreceptor tyrosine-based inhibition motifs. Vivier E, et al. **Immunol Today** 1997 Jun;18(6):286–91 (52 ref.)

Induction of cell death by chimeric L-selectin-Fas receptors. Ishiwatari-Hayasaka H, et al. **Int Immunol** 1997 Apr;

9(4):627–35

Human T cell responses against the major cysteine proteinase (cruzipain) of Trypanosoma cruzi: role of the multifunctional alpha 2-macroglobulin receptor in antigen presentation by monocytes. Morrot A, et al. **Int Immunol** 1997 Jun;9(6):825–34

B-cell activation versus tolerance--the central role of immunoglobulin receptor engagement and T-cell help. Fulcher DA, et al. **Int Rev Immunol** 1997;15(1-2):33–52 (22 ref.)

Hensin: a matrix protein determinant of epithelial polarity [editorial] Alpern RJ. **J Clin Invest** 1996 Nov 15; 98(10):2189–90

Characterization of a germline Vk gene encoding cationic anti-DNA antibody and role of receptor editing for development of the autoantibody in patients with systemic lupus erythematosus. Suzuki N, et al. **J Clin Invest** 1996 Oct 15;98(8):1843–50

Hensin, a new collecting duct protein involved in the in vitro plasticity of intercalated cell polarity. Takito J, et al. **J Clin Invest** 1996 Nov 15;98(10):2324–31

Negative signaling pathways of the killer cell inhibitory receptor and Fc gamma RIIb1 require distinct phosphatases. Gupta N, et al. **J Exp Med** 1997 Aug 4; 186(3):473–8

Killer cell inhibitory receptor recognition of human leukocyte antigen (HLA) class I blocks formation of a pp36/PLC-gamma signaling complex in human natural killer (NK) cells. Valiante NM, et al. **J Exp Med** 1996 Dec 1;184(6):2243–50

Disruption of T cell tolerance by directing a self antigen to macrophage-specific scavenger receptors. Abraham R, et al. **J Immunol** 1997 May 1;158(9):4029–35

Receptors for immune complexes activate gene expression and synthesis of matrix proteins in cultured rat and human mesangial cells: role of TGF-beta. López-Armada MJ, et al. **J Immunol** 1996 Sep 1;157(5):2136–42

Regulation of CTL recognition by receptors for HLA-DR molecules. Nakajima H, et al. **J Immunol** 1996 Sep 15; 157(6):2239–42

Mycobacterial lipoarabinomannan recognition requires a receptor that shares components of the endotoxin signaling system. Savedra R Jr, et al. **J Immunol** 1996 Sep 15; 157(6):2549–54

Flow-cytometric screening for the modulation of receptor-mediated endocytosis in human dendritic cells: implications for the development of an in vitro technique for predictive testing of contact sensitizers. Becker D, et al. **J Immunol Methods** 1997 Apr 25;203(2):171–80

In vivo effects of recombinant human granulocyte colony-stimulating factor on neutrophil oxidative functions in normal human volunteers. Allen RC, et al. **J Infect Dis** 1997 May;175(5):1184–92

Expression and function of the early activation antigen CD69 in murine macrophages. Marzio R, et al. **J Leukoc Biol** 1997 Sep;62(3):349–55

Maleylated-BSA induces hydrolysis of PIP2, fluxes of Ca2+, NF-kappaB binding, and transcription of the TNF-alpha gene in murine macrophages. Misra UK, et al. **J Leukoc Biol** 1996 Dec;60(6):784–92

The Ly-49 family: regulation of cytokine production in murine NK cells. Ortaldo JR, et al. **J Leukoc Biol** 1997 Sep;62(3):381–8

Hepatic lipase mediates the uptake of chylomicrons and beta-VLDL into cells via the LDL receptor-related protein (LRP). Krapp A, et al. **J Lipid Res** 1996 May; 37(5):926–36

Phagocytosis of mast cell granule remnant-bound LDL by smooth muscle cells of synthetic phenotype: a scavenger receptor-mediated process that effectively stimulates cytoplasmic cholesteryl ester synthesis. Wang Y, et al. **J Lipid Res** 1996 Oct;37(10):2155–66

The low-density lipoprotein receptor-related protein, a multifunctional apolipoprotein E receptor, modulates hippocampal neurite development. Narita M, et al. **J Neurochem** 1997 Feb;68(2):587–95

Disposition of oligonucleotides in isolated perfused rat kidney: involvement of scavenger receptors in their renal uptake. Sawai K, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):284–90

HTLV-I Tax trans-activation and cell growth signaling. Nakamura M, et al. **Leukemia** 1997 Apr;11 Suppl 3:7–9

Evidence for hapten recognition in receptor-mediated intracellular uptake of a hapten-protein conjugate by murine macrophage. Cherukuri A, et al. **Mol Immunol** 1997 Jan;34(1):21–32

Amyloid-beta peptide-receptor for advanced glycation endproduct interaction elicits neuronal expression of macrophage-colony stimulating factor: a proinflammatory pathway in Alzheimer disease. Du Yan S, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5296–301

Role for the class A macrophage scavenger receptor in the phagocytosis of apoptotic thymocytes in vitro. Platt N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12456–60

Immunoglobulin superfamily inhibitory receptors: from natural killer cells to antigen-presenting cells. Colonna M. **Res Immunol** 1997 Mar-Apr;148(3):169–71 (33 ref.)

HLA class-I-specific inhibitory receptor in human T lymphocytes: interference with T-cell functions. Mingari MC, et al. **Res Immunol** 1997 Mar-Apr;148(3):150–5 (32 ref.)

NK receptors and signalling. Palmieri G, et al. **Res Immunol** 1997 Mar-Apr;148(3):184–90 (55 ref.)

Evidence that the receptor for soluble CD14:LPS complexes may not be the putative signal-transducing molecule associated with membrane-bound CD14. Haziot A, et al. **Scand J Immunol** 1997 Sep;46(3):242–5

The role of the low-density lipoprotein receptor-related protein (LRP) in the plasma clearance and liver uptake of recombinant single-chain urokinase-type plasminogen activator in rats. van der Kaaden ME, et al. **Thromb Haemost** 1997 Apr;77(4):710–7

Receptor function of CD4 structures from African green monkey and pig-tail macaque for simian immunodeficiency virus, SIVsm, SIVagm, and human immunodeficiency virus type-1. Fomsgaard A, et al. **Viral Immunol** 1995; 8(3):121–33

RECEPTORS, INSULIN

VIth International Symposium on Insulin Receptors and Insulin Action, Molecular and Clinical Aspects. Copenhagen, Denmark, May 6–10, 1996. Abstracts. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 2:1–189

[Insulin receptor] Matsuba H, et al. **Nippon Rinsho** 1997 Apr; 55 Suppl 2:499–502 (9 ref.) **(Jpn)**

AGONISTS

Insulin-like growth factor II stimulates cell proliferation through the insulin receptor. Morrione A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3777–82

ANALYSIS

Assay of insulin receptors in mouse brain. Zaia A, et al. **Boll Soc Ital Biol Sper** 1996 Mar-Apr;72(3-4):95–102

Distribution and levels of insulin-like growth factor (IGF-I and IGF-II) and insulin receptor binding sites in the spinal cords of amyotrophic lateral sclerosis (ALS) patients. Doré S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):128–33

Insulin receptors in the pituitary gland: morphological evidence for influence on opioid peptide-synthesizing cells. Unger JW, et al. **Cell Tissue Res** 1997 Jun;288(3):471–83

Regulation of hepatic insulin receptors by pancreatic polypeptide in fasting and feeding. Seymour NE, et al. **J Surg Res** 1996 Sep;65(1):1–4

Location of insulin receptors in the placenta and its progenitor tissues. Desoye G, et al. **Microsc Res Tech** 1997 Jul 1-15;38(1-2):63–75 (80 ref.)

Insulin receptors in human ocular tissues. Immunohistochemical demonstration in normal and diabetic eyes. Naeser P. **Ups J Med Sci** 1997;102(1):35–40

ANTAGONISTS & INHIBITORS

Expression of the putative inhibitor of the insulin receptor tyrosine kinase PC-1 in dermal fibroblasts from patients with syndromes of severe insulin resistance. Whitehead JP, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):65–70

BIOSYNTHESIS

Expression of insulin receptors and of 60-kDa receptor substrate in rat mature and immature enterocytes. Buts JP, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G217–26

Growth hormone-induced insulin resistance: role of the insulin receptor, IRS-1, GLUT-1, and GLUT-4. Smith TR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E1071–9

Four mutant alleles of the insulin receptor gene associated with genetic syndromes of extreme insulin resistance. Kadowaki H, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):516–20

Effect of plane of nutrition and growth hormone treatment on insulin receptor gene expression and kinase activity of sheep muscle and adipose tissue. Wilson LA, et al. **Biochem Soc Trans** 1996 May;24(2):222S

Expression of insulin receptor-related receptor in the rat brain examined by in situ hybridization and immunohistochemistry. Tsuji N, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):250–8

Protein kinase C isoforms beta 1 and beta 2 inhibit the tyrosine kinase activity of the insulin receptor. Bossenmaier B, et al. **Diabetologia** 1997 Jul;40(7):863–6

Insulin receptor expression in bone. Thomas DM, et al. **J Bone Miner Res** 1996 Sep;11(9):1312–20

Systemic administration of kainic acid induces selective time dependent decrease in [125I]insulin-like growth factor I, [125I]insulin-like growth factor II and [125I]insulin receptor binding sites in adult rat hippocampal formation. Kar S, et al. **Neuroscience** 1997 Oct;80(4):1041–55

Developmental regulation and the role of insulin and insulin receptor in metanephrogenesis. Liu ZZ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6758–63

BLOOD

Evaluation of glucose metabolic disorder: insulin resistance and insulin receptors in critically ill children. Xu F, et al. **Chin Med J (Engl)** 1996 Oct;109(10):807–9

CHEMISTRY

Characterization of a hybrid receptor formed by dimerization of the insulin receptor-related receptor (IRR) with the insulin receptor (IR): coexpression of cDNAs encoding human IRR and human IR in NIH-3T3 cells. Jui HY, et al. **Biochemistry** 1996 Nov 12;35(45):14326–30

Conformational changes of the insulin receptor upon insulin binding and activation as monitored by fluorescence spectroscopy. Lee J, et al. **Biochemistry** 1997 Mar 4; 36(9):2701–8

Identification and partial characterization of putative taurine receptor proteins from the olfactory organ of the spiny lobster. Sung DY, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Sep; 115(1):19–26

Role of the insulin receptor C-terminal acidic domain in the modulation of the receptor kinase by polybasic effectors. Baron V, et al. **Eur J Biochem** 1996 Oct 1;241(1):186–92

A synthetic peptide derived from a COOH-terminal domain of the insulin receptor specifically enhances insulin receptor signaling. Kole HK, et al. **J Biol Chem** 1996 Dec 6; 271(49):31619–26

Identification of the cysteine residues involved in the class I disulfide bonds of the human insulin receptor: properties of insulin receptor monomers. Lu K, et al. **Mol Biol Cell** 1996 May;7(5):679–91

Insulin receptor structural requirements for the formation of a ternary complex with IRS-1 and PI 3-kinase. Wilden PA, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):131–40

[Design, synthesis, and immunochemical identification of the proposed receptor domain of human insulin] Panin LE, et al. **Mol Biol (Mosk)** 1997 Mar-Apr;31(2):366–72 **(Rus)**

[The homology of the primary structure of the third cytoplasmic domains in rhodopsin-type receptors and of the cytoplasmic tail in the beta-subunit of the insulin receptor] Shpakov AO. **Tsitologiia** 1996;38(11):1179–90 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Hypoglycemic effect of insulin-like growth factor-1 in mice lacking insulin receptors. Di Cola G, et al. **J Clin Invest** 1997 May 15;99(10):2538–44

DRUG EFFECTS

Influence of ethanol on insulin receptor substrate-1-mediated signal transduction during rat liver regeneration. Sasaki Y, et al. **Alcohol Alcohol** 1994;29 Suppl 1:99–106

Effects of peroxovanadate and vanadate on insulin binding, degradation and sensitivity in rat adipocytes. Yu ZW, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):103–9

Binding of 125I-insulin on capillary endothelial and myofiber cell membranes in normal and streptozotocin-induced diabetic perfused rat hearts. Haddad RE, et al. **Comp Biochem Physiol A Physiol** 1997 Aug;117(4):523–30

Effect of glimepiride (HOE 490) on insulin receptors of skeletal muscles from genetically diabetic KK-Ay mouse. Takada Y, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):205–10

The effect of metformin on insulin receptors and lipid peroxidation in alloxan and streptozotocin induced diabetes. Kanigür-Sultuybek G, et al. **J Basic Clin Physiol Pharmacol** 1995;6(3-4):271–80

Effect of monensin on 2-deoxyglucose uptake, the insulin receptor and phosphatidylinositol 3-kinase activity in rat muscle. Turinsky J, et al. **J Endocrinol** 1997 Jul; 154(1):85–93

ASPB10 insulin induction of increased mitogenic responses and phenotypic changes in human breast epithelial cells: evidence for enhanced interactions with the insulin-like growth factor-I receptor. Milazzo G, et al. **Mol Carcinog** 1997 Jan;18(1):19–25

Effect of cations on the tyrosine kinase activity of the insulin receptor: inhibition by fluoride is magnesium dependent. Viñals F, et al. **Mol Cell Biochem** 1997 Jun;171(1-2):69–73

[Morphologic effect of adrenaline and insulin on bone capillaries after receptor blockade. Functional transmission electron microscopy analysis] Döhler JR, et al. **Langenbecks Arch Chir** 1997;382(3):164–6 (Eng. Abstr.) **(Ger)**

GENETICS

Clinical and biochemical characterization of syndromes associated with defects of the insulin receptor. Dreyer M, et al. **Acta Univ Carol [Med] (Praha)** 1992;38(1-4):49–66

The Val985Met insulin-receptor variant in the Danish Caucasian population: lack of associations with non-insulin-dependent diabetes mellitus or insulin resistance [letter] Hansen L, et al. **Am J Hum Genet** 1997 Jun;60(6):1532–5

Association of the insulin-receptor variant Met-985 with hyperglycemia and non-insulin-dependent diabetes mellitus in the Netherlands: a population-based study. ‘t Hart LM, et al. **Am J Hum Genet** 1996 Nov;59(5):1119–25

Insulin receptor mRNA splicing and altered metabolic control in aged and mildly insulin-deficient rats. Wiersma MM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E607–15

Four mutant alleles of the insulin receptor gene associated with genetic syndromes of extreme insulin resistance. Kadowaki H, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):516–20

Defects of insulin and IGF-1 action at receptor and postreceptor level in a patient with type A syndrome of insulin resistance. Knebel B, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):626–30

Identification of two novel insulin receptor mutations, Asp59Gly and Leu62Pro, in type A syndrome of extreme

insulin resistance. Rouard M, et al.
Biochem Biophys Res Commun 1997 May 29;234(3):764–8

Development of a novel polygenic model of NIDDM in mice heterozygous for IR and IRS-1 null alleles. Brüning JC, et al. **Cell** 1997 Feb 21;88(4):561–72

Homozygous nonsense mutation in the insulin receptor gene of a patient with severe congenital insulin resistance: leprechaunism and the role of the insulin-like growth factor receptor [see comments] Jospe N, et al.
Clin Endocrinol (Oxf) 1996 Aug;45(2):229–35. Comment in: Clin Endocrinol (Oxf) 1996 Aug;45(2):237–8.

Homozygous mutation in the insulin receptor [comment] Krook A, et al. **Clin Endocrinol (Oxf)** 1996 Aug;45(2):237–8 . Comment on: Clin Endocrinol (Oxf) 1996 Aug;45(2):229–35.

Insulin receptor gene in hypertension. Morris BJ.
Clin Exp Hypertens 1997 Jul–Aug;19(5–6):551–65 (78 ref.)

No difference in the proportion of insulin receptor exon 11 +/– isoform mRNA in the liver of rats after development of hypertension. Lou Y, et al.
Clin Exp Pharmacol Physiol 1996 Jun–Jul;23(6–7):602–4

Short sequence repeats in intron 2 of the insulin receptor gene among black and white South Africans. Panz VR, et al. **Clin Genet** 1996 Dec;50(6):529–30

A homozygous kinase-defective mutation in the insulin receptor gene in a patient with leprechaunism. Takahashi Y, et al. **Diabetologia** 1997 Apr;40(4):412–20

Insulin receptor-induced phosphorylation of cellular and synthetic substrates is regulated by the receptor beta-subunit C-terminus. Gual P, et al. **Endocrinology** 1996 Aug;137(8):3416–23

Overexpression and activation of the insulin receptor enhances expression of ERCC-1 messenger ribonucleic acid in cultured cells. Perfetti R, et al. **Endocrinology** 1997 May;138(5):1829–35

In-frame exon 2 deletion in insulin receptor RNA in a family with extreme insulin resistance in association with defective insulin binding: a case report. Moritz W, et al.
Eur J Endocrinol 1996 Sep;135(3):357–63

Leprechaunism/Donohue syndrome/insulin receptor gene mutations: a syndrome delineation story from clinicopathological description to molecular understanding. Kosztolányi G. **Eur J Pediatr** 1997 Apr;156(4):253–5 (17 ref.)

SSCP analysis of the tyrosine kinase domain of the insulin receptor gene: polymorphisms detected in South African black and white subjects. Panz VR, et al. **Hum Genet** 1996 Apr;97(4):438–40

Insulin-mediated secretion of ecdysteroids from mosquito ovaries and molecular cloning of the insulin receptor homologue from ovaries of bloodfed Aedes aegypti. Graf R, et al. **Insect Mol Biol** 1997 May;6(2):151–63

Complementary roles of the insulin family of factors and receptors in early development and neurogenesis. De Pablo F, et al. **Int J Dev Biol** 1996;Suppl 1:109S–110S

Reduced cell attachment and phosphorylation of focal adhesion kinase associated with expression of a mutant insulin receptor. Konstantopoulos N, et al. **J Biol Chem** 1996 Nov 15;271(46):28960–8

Analog binding properties of insulin receptor mutants. Identification of amino acids interacting with the COOH terminus of the B-chain of the insulin molecule. Mynarcik DC, et al. **J Biol Chem** 1997 Jan 24;272(4):2077–81

The adapter protein Grb10 associates preferentially with the insulin receptor as compared with the IGF-I receptor in mouse fibroblasts. Laviola L, et al. **J Clin Invest** 1997 Mar 1;99(5):830–7

RNA metabolism in myotonic dystrophy: patient muscle shows decreased insulin receptor RNA and protein consistent with abnormal insulin resistance. Morrone A, et al. **J Clin Invest** 1997 Apr 1;99(7):1691–8

Effect of dexamethasone on insulin receptor mRNA levels, RNA stability and isotype RNA pattern in U-937 human promonocytic cells. Leal MA, et al. **J Endocrinol Invest** 1996 Sep;19(8):530–4

Dexamethasone modulates insulin receptor expression and subcellular distribution of the glucose transporter GLUT 1 in UMR 106-01, a clonal osteogenic sarcoma cell line. Thomas DM, et al. **J Mol Endocrinol** 1996 Aug;17(1):7–17

Insulin receptor in Aplysia neurons: characterization, molecular cloning, and modulation of ion currents. Jonas EA, et al. **J Neurosci** 1996 Mar 1;16(5):1645–58

Dietary soybean protein increases insulin receptor gene expression in Wistar fatty rats when dietary polyunsaturated fatty acid level is low. Iritani N, et al. **J Nutr** 1997 Jun;127(6):1077–83

Localization of the rat genes encoding glucagon, glucagon receptor, and insulin receptor, candidates for diabetes mellitus susceptibility loci. Szpirer C, et al.
Mamm Genome 1997 Aug;8(8):586–8

Tissue-specific modulation of insulin receptor mRNA levels in adrenaline-treated rats. Campión J, et al.
Mol Cell Biochem 1997 Apr;169(1–2):165–9

Structure and expression of the insulin-like peptide receptor from amphioxus. Pashmforoush M, et al.
Mol Endocrinol 1996 Jul;10(7):857–66

Insulin receptor mRNA in the substantia nigra in Parkinson's disease. Takahashi M, et al. **Neurosci Lett** 1996 Feb 9; 204(3):201–4

Major circadian variations of glucose homeostasis in a patient with Rabson-Mendenhall syndrome and primary insulin resistance due to a mutation (Cys284—>Tyr) in the insulin receptor alpha-subunit. Desbois-Mouthon C, et al.
Pediatr Res 1997 Jul;42(1):72–7

Antilipolytic effect of insulin and insulin receptor messenger RNA expression in adipocytes of infants, children, and adults. Kamel A, et al. **Pediatr Res** 1997 Apr;41(4 Pt 1):563–7

Molecular analysis of the insulin receptor gene for prenatal diagnosis of leprechaunism in two families.
Desbois-Mouthon C, et al. **Prenat Diagn** 1997 Jul; 17(7):657–63

daf-2, an insulin receptor-like gene that regulates longevity and diapause in Caenorhabditis elegans [see comments] Kimura KD, et al. **Science** 1997 Aug 15;277(5328):942–6. Comment in: Science 1997 Aug 15;277(5328):897–8.

Worm longevity gene cloned [news; comment] Roush W. **Science** 1997 Aug 15;277(5328):897–8. Comment on: Science 1997 Aug 15;277(5328):942–6.

IMMUNOLOGY

Systemic lupus erythematosus with acanthosis nigricans, hyperpigmentation, and insulin receptor antibody. Baird JS, et al. **Lupus** 1997;6(3):275–8

ISOLATION & PURIFICATION

Purification and properties of insulin receptor ectodomain from large-scale mammalian cell culture. Cosgrove L, et al. **Protein Expr Purif** 1995 Dec;6(6):789–98

METABOLISM

An evaluation of the cross-linking model for the interaction of insulin with its receptor. Hammond BJ, et al.
Am J Physiol 1997 Jun;272(6 Pt 1):E1136–44

Fate of insulin analogs in intact and nephrectomized rats determined by their receptor binding constants. Kruse V, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E1089–98

Insulin receptor mRNA splicing and altered metabolic control in aged and mildly insulin-deficient rats. Wiersma MM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E607–15

Substrates for protein kinase CK2 in insulin receptor preparations from rat liver membranes: identification of a 210-kDa protein substrate as the dimeric form of endoplasmin. Trujillo R, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):18–28

Effect of coumestrol on the insulin receptor in erythrocytes and liver membranes of female rabbits. Nogowski L.
Arch Vet Pol 1994;34(3–4):267–73

LMW-PTP is a negative regulator of insulin-mediated mitotic and metabolic signalling. Chiarugi P, et al.
Biochem Biophys Res Commun 1997 Sep 18;238(2):676–82

Differential modification of activities of the high-affinity and low-affinity insulin receptors of 3T3-L1 fibroblasts by phosphonolipids in vivo. Patterson CH Jr, et al.
Biochem Biophys Res Commun 1996 Nov 1;228(1):75–80

Insulin internalization in the absence of the insulin receptor tyrosine kinase domain is insufficient for mediating intracellular biological effects. Schranz DB, et al.
Biochem Biophys Res Commun 1996 Oct 14;227(2):600–7

Functional importance of heat shock protein 90 associated with insulin receptor on insulin-stimulated mitogenesis. Takata Y, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):345–7

Insulin-induced in situ phosphorylation of the insulin receptor located in the plasma membrane versus endosomes. Wang B, et al.
Biochem Biophys Res Commun 1996 Oct 3;227(1):27–34

Studies on an insulin-stimulated insulin receptor serine kinase activity: separation of the kinase activity from the insulin receptor and its reconstitution back to the insulin receptor. Asamoah KA, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):915–22

Logical analysis of timing-dependent receptor signalling specificity: application to the insulin receptor metabolic and mitogenic signalling pathways. Shymko RM, et al.
Biochem J 1997 Sep 1;326 (Pt 2):463–9 (51 ref.)

Studies on receptor binding site of insulin: the hydrophobic B12Val can be substituted by hydrophilic thr. Wang QQ, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1245–54

Chromium oligopeptide activates insulin receptor tyrosine kinase activity. Davis CM, et al. **Biochemistry** 1997 Apr 15;36(15):4382–5

Differential phosphorylation of pp120 by insulin and insulin-like growth factor-1 receptors: role for the C-terminal domain of the beta-subunit. Najjar SM, et al.
Biochemistry 1997 Jun 3;36(22):6827–34

The 60 kDa insulin receptor substrate functions like an IRS protein (pp60IRS3) in adipose cells. Smith-Hall J, et al.
Biochemistry 1997 Jul 8;36(27):8304–10

Histone H4 stimulates glucose uptake through the insulin receptor. Louters LL, et al. **Biochimie** 1996;78(1):39–45

Characterization of insulin and insulin-like growth factor-I ovarian receptors during the reproductive cycle of carp (Cyprinus carpio). Maestro MA, et al. **Biol Reprod** 1997 May;56(5):1126–32

Wilms' tumor 1-KTS isoforms induce p53-independent apoptosis that can be partially rescued by expression of the epidermal growth factor receptor or the insulin receptor. Menke AL, et al. **Cancer Res** 1997 Apr 1; 57(7):1353–63

Coordinate expression of the insulin-like growth factor system after microembolisation in porcine heart. Kluge A, et al. **Cardiovasc Res** 1997 Feb;33(2):324–31

Suppression of insulin receptor activation by overexpression of the protein-tyrosine phosphatase LAR in hepatoma cells. Li PM, et al. **Cell Signal** 1996 Nov;8(7):467–73 (35 ref.)

Recombinant human alpha 2-HS glycoprotein inhibits insulin-stimulated mitogenic pathway without affecting metabolic signalling in Chinese hamster ovary cells overexpressing the human insulin receptor. Srinivas PR, et al. **Cell Signal** 1996 Dec;8(8):567–73

ARF proteins mediate insulin-dependent activation of phospholipase D. Shome K, et al. **Curr Biol** 1997 Jun 1; 7(6):387–96

Signaling via the insulin-like growth factor-I receptor: does it differ from insulin receptor signaling? Blakesley VA, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):153–9 (52 ref.)

Inhibition of insulin receptor signaling by TNF: potential role in obesity and non-insulin-dependent diabetes mellitus. Skolnik EY, et al. **Cytokine Growth Factor Rev** 1996 Aug; 7(2):161–73 (111 ref.)

Protein tyrosine phosphatase 1B interacts with the activated insulin receptor. Seely BL, et al. **Diabetes** 1996 Oct; 45(10):1379–85

Impact of natural IRS-1 mutations on insulin signals: mutations of IRS-1 in the PTB domain and near SH2 protein binding sites result in impaired function at different steps of IRS-1 signaling. Yoshimura R, et al. **Diabetes** 1997 Jun;46(6):929–36

Effect of metformin on insulin-stimulated tyrosine kinase activity of erythrocytes from obese women with normal glucose tolerance. Santos RF, et al. **Diabetes Metab** 1997 Apr;23(2):143–8

Insulin degradation by Madin-Darby canine kidney cells expressing the insulin receptor. Takeuchi F, et al.
Diabetes Res Clin Pract 1997 Aug;37(2):81–90

PC-1 content in skeletal muscle of non-obese, non-diabetic subjects: relationship to insulin receptor tyrosine kinase and whole body insulin sensitivity. Frittitta L, et al.
Diabetologia 1996 Oct;39(10):1190–5

Increased adipose tissue PC-1 protein content, but not tumour necrosis factor-alpha gene expression, is associated with a reduction of both whole body insulin sensitivity and insulin receptor tyrosine-kinase activity. Frittitta L, et al. **Diabetologia** 1997 Mar;40(3):282–9

Abnormal glucose transport and GLUT1 cell-surface content in fibroblasts and skeletal muscle from NIDDM and obese subjects. Miele C, et al. **Diabetologia** 1997 Apr;40(4):421–9

Effects of angiotensin II on insulin receptor binding and mRNA levels in normal and diabetic rats. Sechi LA, et al. **Diabetologia** 1997 Jul;40(7):770–7

Increased expression of low-affinity insulin receptor isoform and insulin/insulin-like growth factor-I hybrid receptors in term placenta from insulin-resistant women with gestational hypertension. Valensise H, et al. **Diabetologia** 1996 Aug;39(8):952–60

A role for tyrosine phosphorylation in both activation and inhibition of the insulin receptor tyrosine kinase in vivo. Drake PG, et al. **Endocrinology** 1996 Nov;137(11):4960–8

Insulin promotes and cyclic adenosine 3',5'-monophosphate impairs functional insertion of insulin receptors in the plasma membrane of rat adipocytes: evidence for opposing effects of tyrosine and serine/threonine phosphorylation. Eriksson JW, et al. **Endocrinology** 1997 Feb;138(2):607–12

Up-regulation of insulin/insulin-like growth factor-I hybrid receptors during differentiation of HT29-D4 human colonic carcinoma cells. Garrouste FL, et al.
Endocrinology 1997 May;138(5):2021–32

Overexpression and activation of the insulin receptor enhances expression of ERCC-1 messenger ribonucleic acid in cultured cells. Perfetti R, et al. **Endocrinology** 1997 May;138(5):1829–35

Interaction of SH2-containing protein tyrosine phosphatase 2 with the insulin receptor and the insulin-like growth factor-I receptor: studies of the domains involved using the yeast two-hybrid system. Rocchi S, et al.
Endocrinology 1996 Nov;137(11):4944–52

In vitro binding and phosphorylation of insulin receptor substrate 1 by the insulin receptor. Role of interactions mediated by the phosphotyrosine-binding domain and the pleckstrin-homology domain. Backer JM, et al.
Eur J Biochem 1997 Apr 1;245(1):91–6

In-frame exon 2 deletion in insulin receptor RNA in a family with extreme insulin resistance in association with defective insulin binding: a case report. Moritz W, et al.
Eur J Endocrinol 1996 Sep;135(3):357–63

Effects of glucagon-like peptide-1 (GLP-1) in RINm5F insulinoma cells. Stimulation of insulin secretion, insulin content, and insulin receptor binding. Jehle PM, et al.
Exp Clin Endocrinol Diabetes 1995;103 Suppl 2:31–6

Identification of Ser-1275 and Ser-1309 as autophosphorylation sites of the insulin receptor. Al-Hasani H, et al. **FEBS Lett** 1997 Jan 2;400(1):65–70

The transmembrane protein tyrosine phosphatase alpha dephosphorylates the insulin receptor in intact cells. Lammers R, et al. **FEBS Lett** 1997 Mar 3;404(1):37–40

Ovarian receptors for insulin and insulin-like growth factor I (IGF-I) and effects of IGF-I on steroid production by isolated follicular layers of the preovulatory coho salmon ovarian follicle. Maestro MA, et al.
Gen Comp Endocrinol 1997 May;106(2):189–201

Reexamining interaction of the SH2 domains of SYP and GAP with insulin and IGF-1 receptors in the two-hybrid

system. Lamothe B, et al. **Gene** 1996 Dec 5;182(1-2):77-80

The effect of in vivo thyroxine treatment on insulin receptors, glucose transport and GLUT4 in rat adipocytes. Fickova M, et al. **Horm Metab Res** 1997 Jan;29(1):16-9

Protein-tyrosine phosphatase 1B complexes with the insulin receptor in vivo and is tyrosine-phosphorylated in the presence of insulin. Bandyopadhyay D, et al. **J Biol Chem** 1997 Jan 17;272(3):1639-45

Insulin signal transduction by a mutant human insulin receptor lacking the NPEY sequence. Evidence for an alternate mitogenic signaling pathway that is independent of Shc phosphorylation. Berhanu P, et al. **J Biol Chem** 1997 Sep 5;272(36):22884-90

An aspartate/insulin receptor chimera mitogenically activates fibroblasts. Biemann HP, et al. **J Biol Chem** 1996 Nov 1; 271(44):27927-30

Annexin II is a novel player in insulin signal transduction. Possible association between annexin II phosphorylation and insulin receptor internalization. Biener Y, et al. **J Biol Chem** 1996 Nov 15;271(46):29489-96

Thyrotropin via cyclic AMP induces insulin receptor expression and insulin Co-stimulation of growth and amplifies insulin and insulin-like growth factor signaling pathways in dog thyroid epithelial cells. Burikhanov R, et al. **J Biol Chem** 1996 Nov 15;271(46):29400-6

In skeletal muscle, glucose storage and oxidation are differentially impaired by the IR1152 mutant receptor. Caruso M, et al. **J Biol Chem** 1997 Mar 14;272(11):7290-7

Dual role of a dileucine motif in insulin receptor endocytosis. Hamer I, et al. **J Biol Chem** 1997 Aug 29;272(35):21685-91

Insulin-induced egr-1 and c-fos expression in 32D cells requires insulin receptor, Shc, and mitogen-activated protein kinase, but not insulin receptor substrate-1 and phosphatidylinositol 3-kinase activation [published erratum appears in J Biol Chem 1997 Jan 31;272(5):3124] Harada S, et al. **J Biol Chem** 1996 Nov 22;271(47):30222-6

Analysis of thermal injury-induced insulin resistance in rodents. Implication of postreceptor mechanisms. Ikezu T, et al. **J Biol Chem** 1997 Oct 3;272(40):25289-95

Different pathways of postreceptor desensitization following chronic insulin treatment and in cells overexpressing constitutively active insulin receptors. Inoue G, et al. **J Biol Chem** 1996 Nov 8;271(45):28206-11

Functional importance of Shc tyrosine 317 on insulin signaling in Rat1 fibroblasts expressing insulin receptors. Ishihara H, et al. **J Biol Chem** 1997 Apr 4;272(14):9581-6

A synthetic peptide derived from a COOH-terminal domain of the insulin receptor specifically enhances insulin receptor signaling. Kole HK, et al. **J Biol Chem** 1996 Dec 6; 271(49):31619-26

Insulin-induced activation of NADPH-dependent H2O2 generation in human adipocyte plasma membranes is mediated by Galphai2. Krieger-Brauer HI, et al. **J Biol Chem** 1997 Apr 11;272(15):10135-43

Identification of common ligand binding determinants of the insulin and insulin-like growth factor 1 receptors. Insights into mechanisms of ligand binding. Mynarcik DC, et al. **J Biol Chem** 1997 Jul 25;272(30):18650-5

14-3-3 protein binds to insulin receptor substrate-1, one of the binding sites of which is in the phosphotyrosine binding domain. Ogihara T, et al. **J Biol Chem** 1997 Oct 3; 272(40):25267-74

Interaction of MAD2 with the carboxyl terminus of the insulin receptor but not with the IGFIR. Evidence for release from the insulin receptor after activation. O'Neill TJ, et al. **J Biol Chem** 1997 Apr 11;272(15):10035-40

Interaction of a GRB-IR splice variant (a human GRB10 homolog) with the insulin and insulin-like growth factor I receptors. Evidence for a role in mitogenic signaling. O'Neill TJ, et al. **J Biol Chem** 1996 Sep 13;271(37):22506-13

Functional roles of the Shc phosphotyrosine binding and Src homology 2 domains in insulin and epidermal growth factor signaling. Ricketts WA, et al. **J Biol Chem** 1996 Oct 18; 271(42):26165-9

Tyr624 and Tyr628 in insulin receptor substrate-2 mediate its association with the insulin receptor. Sawka-Verhelle D, et al. **J Biol Chem** 1997 Jun 27;272(26):16414-20

Role of Hsp70 synthesis in the fate of the insulin-receptor complex after heat shock in cultured fetal hepatocytes. Zachayus JL, et al. **J Cell Biochem** 1996 May;61(2):216-29

Increased expression of insulin/insulin-like growth factor-I hybrid receptors in skeletal muscle of noninsulin-dependent diabetes mellitus subjects. Federici M, et al. **J Clin Invest** 1996 Dec 15;98(12):2887-93

Changes in tyrosine phosphorylation of insulin receptor and insulin receptor substrate-1 (IRS-1) and association of p85 of phosphatidylinositol 3-kinase with IRS-1 after feeding in rat liver in vivo. Ito Y, et al. **J Endocrinol** 1997 Aug; 154(2):267-73

Insulin receptor content in tissues of normal and diabetic rats measured by radioimmunoassay. Pezzino V, et al. **J Endocrinol Invest** 1996 Oct;19(9):593-7

High density insulin receptor-positive T lymphocytes from nonobese diabetic mice transfer insulitis and diabetes. McInerney MF, et al. **J Immunol** 1996 Oct 15; 157(8):3716-26

Modulatory effects of peroxovanadates on insulin receptor binding. Kwong DW, et al. **J Inorg Biochem** 1996 Nov 15;64(3):163-80

Insulin-like growth factor (IGF)-I A- and B-domain analogues with altered type 1 IGF and insulin receptor binding specificities. Shooter GK, et al. **J Mol Endocrinol** 1996 Dec;17(3):237-46

Glucose-induced insulin secretion is impaired and insulin-induced phosphorylation of the insulin receptor and insulin receptor substrate-1 are increased in protein-deficient rats. Reis MA, et al. **J Nutr** 1997 Mar; 127(3):403-10

Result of oral intake of glucose by healthy subjects and patients with essential hypertension on the binding and degradation of 125I-insulin by erythrocyte receptors. Szczęśniak L, et al. **J Physiol Pharmacol** 1996 Jun; 47(2):269-79

Effect of hypothermia on the insulin-receptor interaction in skeletal muscle plasma membranes. Torlińska T, et al. **J Physiol Pharmacol** 1996 Jun;47(2):311-9

The role of receptor kinase activity and the NPEY960 motif in insulin-accelerated receptor-mediated insulin internalization. Smith RM, et al. **J Recept Signal Transduct Res** 1996 Sep-Nov; 16(5-6):339-55

Insulin receptor-related receptor expression in non-A intercalated cells in the kidney. Bates CM, et al. **Kidney Int** 1997 Sep;52(3):674-81

Localization of insulin receptor-related receptor in the rat kidney. Ozaki K, et al. **Kidney Int** 1997 Sep;52(3):694-8

Overexpression of bovine growth hormone in transgenic mice is associated with changes in hepatic insulin receptors and in their kinase activity. Balbis A, et al. **Life Sci** 1996; 59(16):1363-71

Insulin receptors in mouse brain: age-related modifications are corrected by thymus graft. Zaia A, et al. **Mech Ageing Dev** 1997 Oct;98(1):37-46

Simulation model of defective insulin receptors as byproducts of receptor recycling. Kurbel B, et al. **Med Hypotheses** 1997 Aug;49(2):165-70

In vivo effects of vanadate on hepatic glycogen metabolizing and lipogenic enzymes in insulin-dependent and insulin-resistant diabetic animals. Khandelwal RL, et al. **Mol Cell Biochem** 1995 Dec 6-20;153(1-2):87-94

Vanadium salts stimulate mitogen-activated protein (MAP) kinases and ribosomal S6 kinases. Pandey SK, et al. **Mol Cell Biochem** 1995 Dec 6-20;153(1-2):69-78

Cleavage site mutants of the subtype B insulin receptor are uncleaved and fully functional. Auzan C, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1-2):129-37

Distribution of insulin/insulin-like growth factor-I hybrid receptors in human tissues. Federici M, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):121-6

Insulin receptor structural requirements for the formation of a ternary complex with IRS-1 and PI 3-kinase. Wilden PA, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):131-40

Insulin-induced mitogen-activated protein (MAP) kinase phosphatase-1 (MKP-1) attenuates insulin-stimulated MAP kinase activity: a mechanism for the feedback inhibition of insulin signaling. Kusari AB, et al. **Mol Endocrinol** 1997 Sep;11(10):1532-43

Structure and expression of the insulin-like peptide receptor from amphioxus. Pashmforoush M, et al. **Mol Endocrinol** 1996 Jul;10(7):857-66

Distribution and levels of [125I]IGF-I, [125I]IGF-II and [125I]insulin receptor binding sites in the hippocampus of aged memory-unimpaired and -impaired rats. Doré S, et al. **Neuroscience** 1997 Oct;80(4):1033-40

Effect of hypoxia on blood glucose, hormones, and insulin receptor functions in newborn calves. Cheng N, et al. **Pediatr Res** 1997 Jun;41(6):852-6

Stat5 is a physiological substrate of the insulin receptor. Chen J, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18; 94(6):2295-300

Insulin and insulin-like growth factor-I (IGF-I) binding in fish red muscle: regulation by high insulin levels. Baños N, et al. **Regul Pept** 1997 Feb 26;68(3):181-7

Insulin and insulin-like growth factor-I receptors in fish brain. Leibush B, et al. **Regul Pept** 1996 Feb 22;61(2):155-61

Insulin receptors: the binding capacity and localization in the digestive tract during the rabbits neonatal period. Nowak JW, et al. **Reprod Nutr Dev** 1996;36(5):513-21

[Insulin resistance: lessons from animal models of obesity] Freychet P, et al. **Bull Mem Acad R Med Belg** 1996; 151(7-9):385-92; discussion 392-3 (Eng. Abstr.) **(Fre)**

[Effects of hyperglycemia in the transmission of the insulin message] Hauguel-de Mouzon S, et al. **Journ Annu Diabetol Hotel Dieu** 1996;:145-56 (85 ref.) **(Fre)**

[Interaction of erythrocyte and tissue insulin receptors] Zolenko GA. **Biull Eksp Biol Med** 1997 Feb;123(2):209-11 **(Rus)**

[Immunochemical identification of the suggested receptor domain for human insulin] Panin LE, et al. **Dokl Akad Nauk** 1996 Jul;349(2):262-4 **(Rus)**

PHYSIOLOGY

Insulin receptor/IRS-1/PI 3-kinase signaling system in corticosteroid-induced insulin resistance. Folli F, et al. **Acta Diabetol** 1996 Sep;33(3):185-92 (82 ref.)

The protein tyrosine phosphatase LAR has a major impact on insulin receptor dephosphorylation. Mooney RA, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):709-12

Insulin-induced tyrosine dephosphorylation of paxillin and focal adhesion kinase requires active phosphotyrosine phosphatase 1D. Ouwens DM, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):609-14

Logical analysis of timing-dependent receptor signalling specificity: application to the insulin receptor metabolic and mitogenic signalling pathways. Shymko RM, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):463-9 (51 ref.)

Insulin and secretagogues differentially regulate fluid-phase pinocytosis in insulin-secreting beta-cells. Xu G, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):623-9

Signalling pathways which regulate eIF4E. Flynn A, et al. **Biochem Soc Trans** 1997 May;25(2):192S

Insulin signal transduction in adipocytes from lactating sheep. Wilson LA, et al. **Biochem Soc Trans** 1996 May;24(2):162S

Insulin second messengers. Strålfors P. **Bioessays** 1997 Apr; 19(4):327-35 (79 ref.)

Growth-promoting interaction of IGF-II with the insulin receptor during mouse embryonic development. Louvi A, et al. **Dev Biol** 1997 Sep 1;189(1):33-48

Role of PI 3-kinase and SH-PTP2 in insulin action. Kasuga M. **Diabet Med** 1996 Sep;13(9 Suppl 6):S87-9 (23 ref.)

Role of the juxtamembrane tyrosine in insulin receptor-mediated tyrosine phosphorylation of p60 endogenous substrates. Danielsen AG, et al. **Endocrinology** 1996 Dec;137(12):5326-31

Insulin receptor-induced phosphorylation of cellular and synthetic substrates is regulated by the receptor beta-subunit C-terminus. Gual P, et al. **Endocrinology** 1996 Aug;137(8):3416-23

Phosphatidylinositol 3-kinase is necessary and sufficient for insulin-stimulated stress fiber breakdown. Martin SS, et al. **Endocrinology** 1996 Nov;137(11):5045-54

Role of prepancreatic (pro)insulin and the insulin receptor in prevention of embryonic apoptosis. Morales AV, et al. **Endocrinology** 1997 Sep;138(9):3967-75

Dynamics of insulin-stimulated translocation of GLUT4 in single living cells visualised using green fluorescent protein. Dobson SP, et al. **FEBS Lett** 1996 Sep 16;393(2-3):179-84

CSF-1 receptor/insulin receptor chimera permits CSF-1-dependent differentiation of 3T3-L1 preadipocytes. Chaika OV, et al. **J Biol Chem** 1997 May 2; 272(18):11968-74

Interactions between Src homology (SH) 2/SH3 adapter proteins and the guanylnucleotide exchange factor SOS are differentially regulated by insulin and epidermal growth factor. Okada S, et al. **J Biol Chem** 1996 Oct 11; 271(41):25533-8

The adapter protein Grb10 associates preferentially with the insulin receptor as compared with the IGF-I receptor in mouse fibroblasts. Laviola L, et al. **J Clin Invest** 1997 Mar 1;99(5):830-7

Insulin receptors in breast cancer: biological and clinical role. Papa V, et al. **J Endocrinol Invest** 1996 May;19(5):324-33 (54 ref.)

Insulin receptor in Aplysia neurons: characterization, molecular cloning, and modulation of ion currents. Jonas EA, et al. **J Neurosci** 1996 Mar 1;16(5):1645-58

Insulin resistance: circumventing nature's blocks. Taylor R. **Lancet** 1996 Oct 19;348(9034):1045-6

Severe resistance to insulin and insulin-like growth factor-I in cells from a patient with leprechaunism as a result of two mutations in the tyrosine kinase domain of the insulin receptor. Desbois-Mouthon C, et al. **Metabolism** 1996 Dec; 45(12):1493-500

The dominant negative effect of a kinase-defective insulin receptor on insulin-like growth factor-I-stimulated signaling in Rat-1 fibroblasts. Takata Y, et al. **Metabolism** 1996 Dec;45(12):1474-82

Cellular effects of phosphotyrosine-binding domain inhibitors on insulin receptor signaling and trafficking. Giorgetti-Peraldi S, et al. **Mol Cell Biol** 1997 Mar; 17(3):1180-8

The early intracellular signaling pathway for the insulin/insulin-like growth factor receptor family in the mammalian central nervous system. Folli F, et al. **Mol Neurobiol** 1996 Oct;13(2):155-83 (162 ref.)

RECEPTORS, INSULIN-LIKE-GROWTH FACTOR I

ANALYSIS

Immunohistochemical analysis of insulin-like growth factor I, insulin-like growth factor I receptor and insulin-like growth factor II in endometriotic tissue and endometrium. Chang SY, et al. **Acta Obstet Gynecol Scand** 1997 Feb; 76(2):112-7

Expression of insulin-like growth factors (IGFs), their receptors and IGF binding protein-3 in normal, benign and malignant smooth muscle tissues. Van der Ven LT, et al. **Br J Cancer** 1997;75(11):1631-40

Distribution and levels of insulin-like growth factor (IGF-I and IGF-II) and insulin receptor binding sites in the spinal cords of amyotrophic lateral sclerosis (ALS) patients. Doré S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):128-33

Insulin receptors in the pituitary gland: morphological evidence for influence on opioid peptide-synthesizing cells. Unger JW, et al. **Cell Tissue Res** 1997 Jun;288(3):471-83

The localisation and characterisation of insulin-like growth factor-I receptors and the investigation of melatonin receptors on the hair follicles of seasonal and non-seasonal fibre-producing goats. Dicks P, et al. **J Endocrinol** 1996 Oct;151(1):55-63

RECEPTORS, INSULIN-LIKE-GROWTH FACTOR I

ANTAGONISTS & INHIBITORS

Monoclonal antibody alpha IR-3 inhibits non-small cell lung cancer growth in vitro and in vivo. Zia F, et al. **J Cell Biochem Suppl** 1996;24:269-75

BIOSYNTHESIS

Association of insulin-like growth factor mRNA expressions with muscle regeneration in young, adult, and old rats. Marsh DR, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R353-8

Induction of insulin-like growth factor receptor (IGF IR) mRNA levels by low density lipoproteins. Polanco JI, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):917-22

Insulin-like growth factor I receptor messenger RNA in the colon is unchanged during neoplasia. Zenilman ME, et al. **Cancer Invest** 1997;15(1):1-7

Ras proteins mediate induction of uncoupling protein, IGF-I, and IGF-I receptor in rat fetal brown adipocyte cell lines. Porras A, et al. **DNA Cell Biol** 1996 Nov;15(11):921-8

Selective expression of insulin-like growth factor system components during porcine ovary follicular selection. Zhou J, et al. **Endocrinology** 1996 Nov;137(11):4893-901

Insulin-like growth factor-1 receptor and its ligand regulate the reentry of adult ventricular myocytes into the cell cycle. Reiss K, et al. **Exp Cell Res** 1997 Aug 25; 235(1):198-209

Localization of IGF-I and IGF-I receptor mRNA in Sparus aurata larvae. Funkenstein B, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):291-303

Mevalonate-regulated mechanisms in cell growth control: role of dolichyl phosphate in expression of the insulin-like growth factor-1 receptor (IGF-1R) in comparison to Ras prenylation and expression of c-myc. Dricu A, et al. **Glycobiology** 1997 Jul;7(5):625-33

Serum factors inhibit melanoma cell surface expression of type I and type II IGF receptors. Bellan C, et al. **J Recept Signal Transduct Res** 1996 Jan-Mar; 16(1-2):115-34

Expression of mRNA for the insulin-like growth factors and their receptors in human preimplantation embryos. Lighten AD, et al. **Mol Reprod Dev** 1997 Jun;47(2):134-9

Systemic administration of kainic acid induces selective time dependent decrease in [125I]insulin-like growth factor I, [125I]insulin-like growth factor II and [125I]insulin receptor binding sites in adult rat hippocampal formation. Kar S, et al. **Neuroscience** 1997 Oct;80(4):1041-55

Suppression of insulin-like growth factor type I receptor by a triple-helix strategy inhibits IGF-I transcription and tumorigenic potential of rat C6 glioblastoma cells. Rininsland F, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5854-9

CHEMISTRY

Effect of dimerization on signal transduction and biological function of oncogenic Ros, insulin, and insulin-like growth factor I receptors. Chan JL, et al. **J Biol Chem** 1997 Jan 3;272(1):146-53

Identification and characterization of the insulin-like growth factor I receptor in mature rabbit osteoclasts. Hou P, et al. **J Bone Miner Res** 1997 Apr;12(4):534-40

DRUG EFFECTS

Ethanol-induced inhibition of cell proliferation is modulated by insulin-like growth factor-I receptor levels. Resnicoff M, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):961-6

ASPB10 insulin induction of increased mitogenic responses and phenotypic changes in human breast epithelial cells: evidence for enhanced interactions with the insulin-like growth factor-I receptor. Milazzo G, et al. **Mol Carcinog** 1997 Jan;18(1):19-25

GENETICS

Expression of the insulin-like growth factor system in the hypokalemic rat kidney. Rohan RM, et al. **Am J Physiol** 1997 May;272(5 Pt 2):F661-7

Defects of insulin and IGF-1 action at receptor and postreceptor level in a patient with type A syndrome of insulin resistance. Knebel B, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):626-30

The IGF-I receptor in cell growth, transformation and apoptosis. Baserga R, et al. **Biochim Biophys Acta** 1997 Jun 7;1332(3):F105-26

Antinociceptive action of intrathecally administered IGF-I and the expression of its receptor in rat spinal cord. Bitar MS, et al. **Brain Res** 1996 Oct 21;737(1-2):292-4

The avian IGF type 1 receptor: cDNA analysis and in situ hybridization reveal conserved sequence elements and expression patterns relevant for the development of the nervous system. Holzenberger M, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):76-87

Control of insulin-like growth factor (IGF) action by regulation of IGF-I receptor expression. Roberts CT Jr. **Endocr J** 1996 Oct;43 Suppl:S49-55 (50 ref.)

Insulin-like growth factor I receptor messenger expression during oogenesis in Xenopus laevis. Groigno L, et al. **Endocrinology** 1996 Sep;137(9):3856-63

The 16-kDa proteolytic fragment of insulin-like growth factor (IGF) binding protein-3 inhibits the mitogenic action of fibroblast growth factor on mouse fibroblasts with a targeted disruption of the type 1 IGF receptor gene. Zadeh SM, et al. **Endocrinology** 1997 Jul;138(7):3069-72

Induction of growth hormone receptor and insulin-like growth factor-I mRNA in aorta and caval vein during hemodynamic challenge. Wickman A, et al. **Hypertension** 1997 Jan;29(1 Pt 1):123-30

Differential regulation of insulin-like growth factor-I (IGF-I) receptor gene expression by IGF-I and basic fibroblastic growth factor. Hernández-Sánchez C, et al. **J Biol Chem** 1997 Feb 21;272(8):4663-70

Decreased expression of Wilms' tumor gene WT-1 and elevated expression of insulin growth factor-II (IGF-II) and type 1 IGF receptor genes in prostatic stromal cells from patients with benign prostatic hyperplasia. Dong G, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2198-203

Protein and messenger ribonucleic acid (mRNA) for the type 1 insulin-like growth factor (IGF) receptor is decreased and IGF-II mRNA is increased in human prostate carcinoma compared to benign prostate epithelium. Tennant MK, et al. **J Clin Endocrinol Metab** 1996 Oct; 81(10):3774-82

The adapter protein Grb10 associates preferentially with the insulin receptor as compared with the IGF-I receptor in mouse fibroblasts. Laviola L, et al. **J Clin Invest** 1997 Mar 1;99(5):830-7

Inhibition of nitric oxide in rats. Regulation of cardiovascular structure and expression of insulin-like growth factor I and its receptor messenger RNA. Wickman A, et al. **J Hypertens** 1997 Jul;15(7):751-9

IGF, type I IGF receptor and IGF-binding protein mRNA expression in kidney and liver of potassium-depleted and normal rats infused with IGF-I. van Neck JW, et al. **J Mol Endocrinol** 1997 Aug;19(1):59-66

Regulation of insulin-like growth factor I receptor gene expression by the Wilms' tumor suppressor WT1. Werner H, et al. **J Mol Neurosci** 1996 Summer;7(2):111-23

Linkage mapping of the bovine insulin-like growth factor-1 receptor gene. Moody DE, et al. **Mamm Genome** 1996 Feb; 7(2):168-9

Altered expression of insulin-like growth factor I and its receptor during multistage carcinogenesis in mouse skin. Rho O, et al. **Mol Carcinog** 1996 Oct;17(2):62-9

Characterization of the insulin-like growth factor type 1 receptor messenger in two teleost species. Elies G, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):131-40

Microsatellite instability in the insulin-like growth factor II receptor gene in gastrointestinal tumours [letter] [published erratum appears in Nat Genet 1996 Dec;14(4):488] Souza RF, et al. **Nat Genet** 1996 Nov;14(3):255-7

The pattern of expression of insulin-like growth factor (IGF). IGF-I receptor and IGF binding protein (IGFBP) mRNAs in the rhesus monkey placenta suggests a paracrine mode of IGF-IGFBP interaction in placental development. Coulter CL, et al. **Placenta** 1996 Sep;17(7):451-60

METABOLISM

IGF-I receptor binding, autophosphorylation, and kinase activity in kidney and muscle of acutely uremic rats. Tsao T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):F325-32

Acute exercise attenuates age-associated resistance to insulin-like growth factor I. Willis PE, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):E397-404

Expression of insulin-like growth factor I receptors and binding proteins by colonic smooth muscle cells. Zeeh JM, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G481-7

IGF-I resistance in virus-transformed B-lymphocytes from African Efe Pygmies. Cortez AB, et al. **Biochem Mol Med** 1996 Jun;58(1):31-6

Structural changes in insulin-like growth factor (IGF) I mutant proteins affecting binding kinetic rates to IGF binding protein 1 and IGF-I receptor. Jansson M, et al. **Biochemistry** 1997 Apr 8;36(14):4108-17

Differential phosphorylation of pp120 by insulin and insulin-like growth factor-1 receptors: role for the C-terminal domain of the beta-subunit. Najjar SM, et al. **Biochemistry** 1997 Jun 3;36(22):6827-34

Characterization of insulin and insulin-like growth factor-I ovarian receptors during the reproductive cycle of carp (Cyprinus carpio). Maestro MA, et al. **Biol Reprod** 1997 May;56(5):1126-32

Interferon gamma downregulates stem cell factor and erythropoietin receptors but not insulin-like growth factor-I receptors in human erythroid colony-forming cells. Taniguchi S, et al. **Blood** 1997 Sep 15;90(6):2244-52

Type I insulin-like growth factor receptor gene expression in normal human breast tissue treated with oestrogen and progesterone. Clarke RB, et al. **Br J Cancer** 1997; 75(2):251-7

Tamoxifen interferes with the insulin-like growth factor I receptor (IGF-IR) signaling pathway in breast cancer cells. Guvakova MA, et al. **Cancer Res** 1997 Jul 1;57(13):2606-10

Insulin-like growth factor I receptor-mediated circuit in Ewing's sarcoma/peripheral neuroectodermal tumor: a possible therapeutic target. Scotlandi K, et al. **Cancer Res** 1996 Oct 15;56(20):4570-4

Insulin-like growth factor-I receptor overexpression mediates cellular radioresistance and local breast cancer recurrence after lumpectomy and radiation. Turner BC, et al. **Cancer Res** 1997 Aug 1;57(15):3079-83

Coordinate expression of the insulin-like growth factor system after microembolisation in porcine heart. Kluge A, et al. **Cardiovasc Res** 1997 Feb;33(2):324-31

Alpha 2a-interferon-induced differentiation of human alveolar rhabdomyosarcoma cells: correlation with down-regulation of the insulin-like growth factor type I receptor. Thulasi R, et al. **Cell Growth Differ** 1996 Apr; 7(4):531-41

Increased number of IGF-I receptors on erythrocytes of women with polycystic ovarian syndrome. Gdansky E, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):185-90

Signaling via the insulin-like growth factor-I receptor: does it differ from insulin receptor signaling? Blakesley VA, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):153-9 (52 ref.)

Increased expression of low-affinity insulin receptor isoform and insulin/insulin-like growth factor-I hybrid receptors in term placenta from insulin-resistant women with gestational hypertension. Valensise H, et al. **Diabetologia** 1996 Aug;39(8):952-60

Tyrosine residues in the C-terminal domain of the insulin-like growth factor-I receptor mediate mitogenic and tumorigenic signals. Esposito DL, et al. **Endocrinology** 1997 Jul;138(7):2979-88

Up-regulation of insulin/insulin-like growth factor-I hybrid receptors during differentiation of HT29-D4 human colonic carcinoma cells. Garrouste FL, et al. **Endocrinology** 1997 May;138(5):2021-32

Reexpression of the type 1 insulin-like growth factor receptor inhibits the malignant phenotype of simian virus 40 T antigen immortalized human prostate epithelial cells. Plymate SR, et al. **Endocrinology** 1997 Apr;138(4):1728-35

Interaction of SH2-containing protein tyrosine phosphatase 2 with the insulin receptor and the insulin-like growth factor-I receptor: studies of the domains involved using the yeast two-hybrid system. Rocchi S, et al. **Endocrinology** 1996 Nov;137(11):4944-52

Roles of insulin receptor substrate-1 and Shc on insulin-like growth factor I receptor signaling in early passages of cultured human fibroblasts. Takahashi Y, et al. **Endocrinology** 1997 Feb;138(2):741-50

Spatial and temporal changes in the insulin-like growth factor (IGF) axis indicate autocrine/paracrine actions of IGF-I within wounds of the rat brain. Walter HJ, et al. **Endocrinology** 1997 Jul;138(7):3024-34

Human insulin-like growth factor I (IGF-I) produced in the mammary glands of transgenic rabbits: yield, receptor binding, mitogenic activity, and effects on IGF-binding proteins. Wolf E, et al. **Endocrinology** 1997 Jan; 138(1):307-13

Characterization of insulin-like growth factor (IGF)-I-receptor binding sites during in vitro transformation of rat hepatic stellate cells to myofibroblasts. Brenzel A, et al. **Eur J Clin Chem Clin Biochem** 1996 May; 34(5):401-9

Increased neutrophil insulin-like growth factor-I (IGF-I) receptor expression and IGF-I-induced functional capacity in patients with untreated Laron syndrome [see comments] Bjerknes R, et al. **Eur J Endocrinol** 1997 Jan;136(1):92-5 . Comment in: Eur J Endocrinol 1997 Jan;136(1):33-4.

The yin and the yang of the IGF system: immunological manifestations of GH resistance [comment] Le Roith D, et al. **Eur J Endocrinol** 1997 Jan;136(1):33-4. Comment on: Eur J Endocrinol 1997 Jan;136(1):92-5.

Insulin-like growth factor receptors in normal and tumorous adult human adrenocortical glands. Weber MM, et al. **Eur J Endocrinol** 1997 Mar;136(3):296-303

Overexpressed IGF-I receptors reduce estrogen growth requirements, enhance survival, and promote E-cadherin-mediated cell-cell adhesion in human breast cancer cells. Guvakova MA, et al. **Exp Cell Res** 1997 Feb 25;231(1):149-62

Developmental changes in insulin-like growth factor-I (IGF-I) receptor levels and plasma IGF-I concentrations in large white and Meishan pigs. Louveau I, et al. **Gen Comp Endocrinol** 1996 Oct;104(1):29-36

Ovarian receptors for insulin and insulin-like growth factor I (IGF-I) and effects of IGF-I on steroid production by isolated follicular layers of the preovulatory coho salmon ovarian follicle. Maestro MA, et al. **Gen Comp Endocrinol** 1997 May;106(2):189-201

Reexamining interaction of the SH2 domains of SYP and GAP with insulin and IGF-1 receptors in the two-hybrid system. Lamothe B, et al. **Gene** 1996 Dec 5;182(1-2):77-80

Characterization of receptors for insulin-like growth factor type I on cultured human endometrial stromal cells: downregulation by progesterone. Strowitzki T, et al. **Gynecol Endocrinol** 1996 Aug;10(4):229-40

Eosinophil cationic protein induces insulin-like growth factor I receptor expression on bronchial epithelial cells. Chihara J, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:43-5

14-3-3 (epsilon) interacts with the insulin-like growth factor I receptor and insulin receptor substrate I in a phosphoserine-dependent manner. Craparo A, et al. **J Biol Chem** 1997 Apr 25;272(17):11663-9

Characterization of ligand binding of a soluble human insulin-like growth factor I receptor variant suggests a ligand-induced conformational change. Jansson M, et al. **J Biol Chem** 1997 Mar 28;272(13):8189-97

Differential signaling to glycogen synthesis by the intracellular domain of the insulin versus the insulin-like growth factor-1 receptor. Evidence from studies of TrkC-chimeras. Kalloo-Hosein HE, et al. **J Biol Chem** 1997 Sep 26;272(39):24325-32

Identification of common ligand binding determinants of the insulin and insulin-like growth factor 1 receptors. Insights

into mechanisms of ligand binding. Mynarcik DC, et al. **J Biol Chem** 1997 Jul 25;272(30):18650–5

Interaction of MAD2 with the carboxyl terminus of the insulin receptor but not with the IGFIR. Evidence for release from the insulin receptor after activation. O'Neill TJ, et al. **J Biol Chem** 1997 Apr 11;272(15):10035–40

Interaction of a GRB–IR splice variant (a human GRB10 homolog) with the insulin and insulin-like growth factor I receptors. Evidence for a role in mitogenic signaling. O'Neill TJ, et al. **J Biol Chem** 1996 Sep 13;271(37):22506–13

Src phosphorylates the insulin-like growth factor type I receptor on the autophosphorylation sites. Requirement for transformation by src. Peterson JE, et al. **J Biol Chem** 1996 Dec 6;271(49):31562–71

Type I insulin-like growth factor receptor activation regulates apoptotic proteins. Singleton JR, et al. **J Biol Chem** 1996 Dec 13;271(50):31791–4

Protein and messenger ribonucleic acid (mRNA) for the type 1 insulin-like growth factor (IGF) receptor is decreased and IGF–II mRNA is increased in human prostate carcinoma compared to benign prostate epithelium. Tennant MK, et al. **J Clin Endocrinol Metab** 1996 Oct; 81(10):3774–82

Hypoglycemic effect of insulin-like growth factor–1 in mice lacking insulin receptors. Di Cola G, et al. **J Clin Invest** 1997 May 15;99(10):2538–44

Increased expression of insulin/insulin-like growth factor–I hybrid receptors in skeletal muscle of noninsulin–dependent diabetes mellitus subjects. Federici M, et al. **J Clin Invest** 1996 Dec 15;98(12):2887–93

Localization of [125I]IGF–I binding on the ovine pars tuberalis. Williams LM, et al. **J Neuroendocrinol** 1995 Dec; 7(12):931–8

Regulation of mouse skeletal muscle L–type Ca2+ channel by activation of the insulin–like growth factor–1 receptor. Delbono O, et al. **J Neurosci** 1997 Sep 15;17(18):6918–28

Effect of protein nutrition on insulin–like growth factor–I (IGF–I) receptor in various tissues of rats. Takenaka A, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Aug;42(4):347–57

Phosphotyrosyl proteins in childhood rhabdomyosarcomas: phosphorylation of catenins and components of the insulin–like growth factor type I receptor signaling cascade. McManus MJ, et al. **J Pediatr Hematol Oncol** 1997 Jul–Aug;19(4):319–26

The contribution of quantitative confocal laser scanning microscopy in cartilage research: chondrocyte insulin–like growth factor–1 receptors in health and pathology. Verschure PJ, et al. **Microsc Res Tech** 1997 May 15; 37(4):285–98 (65 ref.)

Up–regulation of nuclear IGF–I receptor by short term exposure of stilbene estrogen, diethylstilbestrol. Chen CW, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):1–8

Evidence for the direct interaction of the insulin–like growth factor I receptor with IRS–1, Shc, and Grb10. Dey BR, et al. **Mol Endocrinol** 1996 Jun;10(6):631–41

Insulin–like growth factor (IGF–I) mRNA and IGF–I receptor in trout testis and in isolated spermatogenic and Sertoli cells. Le Gac F, et al. **Mol Reprod Dev** 1996 May; 44(1):23–35

IGF–I and insulin regulate glucose transport in mouse blastocysts via IGF–I receptor. Pantaleon M, et al. **Mol Reprod Dev** 1996 May;44(1):71–6

Light–microscopic study of insulin like growth factor II (IGF–II) and insulin like growth factor I receptor (IGF–I–R) in myopathy. Heuss DF. **Neurol Res** 1997 Apr; 19(2):153–9

Distribution and levels of [125I]IGF–I, [125I]IGF–II and [125I]insulin receptor binding sites in the hippocampus of aged memory–unimpaired and –impaired rats. Doré S, et al. **Neuroscience** 1997 Oct;80(4):1033–40

Presence and differential internalization of two distinct insulin–like growth factor receptors in rat hippocampal neurons. Doré S, et al. **Neuroscience** 1997 May;78(2):373–83

Spatial polarization of insulin–like growth factor receptors on the human syncytiotrophoblast. Fang J, et al. **Pediatr Res** 1997 Feb;41(2):258–65

Autocrine regulation of growth by insulin–like growth factor (IGF)–II mediated by type I IGF–receptor in Wilms tumor cells. Qing RQ, et al. **Pediatr Res** 1996 Jan;39(1):160–5

Type I insulin–like growth factor receptors in the BeWo choriocarcinoma cell (b30 clone) during cell differentiation. Cohran V, et al. **Placenta** 1996 Jul–Aug;17(5–6):313–20

Estradiol stimulates tyrosine phosphorylation of the insulin–like growth factor–1 receptor and insulin receptor substrate–1 in the uterus. Richards RG, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):12002–7

Engineering the C–region of human insulin–like growth factor–1: implications for receptor binding. Gill R, et al. **Protein Eng** 1996 Nov;9(11):1011–9

Insulin and insulin–like growth factor–I (IGF–I) binding in fish red muscle: regulation by high insulin levels. Baños N, et al. **Regul Pept** 1997 Feb 26;68(3):181–7

Expression of IGF–I, IGF–I receptor and IGF binding proteins–1, –2, –3, –4 and –5 in human atherectomy specimens. Grant MB, et al. **Regul Pept** 1996 Dec 17; 67(3):137–44

Involvement of phenylalanine 23 in the binding of IGF–1 to the insulin and type I IGF receptor. Hodgson DR, et al. **Regul Pept** 1996 Oct 22;66(3):191–6

Insulin and insulin–like growth factor–I receptors in fish brain. Leibush B, et al. **Regul Pept** 1996 Feb 22;61(2):155–61

Comparative effects of insulin–like growth factor II (IGF–II) and IGF–II mutants specific for IGF–II/CIM6–P or IGF–I receptors on in vitro hematopoiesis. Schwartz GN, et al. **Stem Cells** 1996 May;14(3):337–50

PHYSIOLOGY

L–type Ca2+ channel–insulin–like growth factor–1 receptor signaling impairment in aging rat skeletal muscle. Renganathan M, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):784–9

Interactions among basic fibroblast growth factor, epidermal growth factor, insulin, and insulin–like growth factor–I (IGF–I) on cell numbers and steroidogenesis of bovine thecal cells: role of IGF–I receptors. Spicer LJ, et al. **Biol Reprod** 1996 Jan;54(1):255–63

Inhibition of N–linked glycosylation using tunicamycin causes cell death in malignant cells: role of down–regulation of the insulin–like growth factor 1 receptor in induction of apoptosis. Dricu A, et al. **Cancer Res** 1997 Feb 1;57(3):543–8

Insulin–like growth factor I receptor prevents apoptosis and enhances neuroblastoma tumorigenesis. Singleton JR, et al. **Cancer Res** 1996 Oct 1;56(19):4522–9

Transformation by human papillomavirus 16 E6 and E7: role of the insulin–like growth factor 1 receptor. Steller MA, et al. **Cancer Res** 1996 Nov 1;56(21):5087–91

TNF–alpha stimulates glucose uptake in L6 myoblasts. Yamasaki H, et al. **Diabetes Res Clin Pract** 1996 Apr; 32(1–2):11–8

The path less traveled by [editorial; comment] Baserga R. **Endocrinology** 1997 Jun;138(6):2217–8 (9 ref.). Comment on: Endocrinology 1997 Jun;138(6):2219–26.

Regulation of myeloid growth and differentiation by the insulin–like growth factor I receptor. Li YM, et al. **Endocrinology** 1997 Jan;138(1):362–8

Mitogen–activated protein kinase and phosphatidylinositol 3–kinase pathways are not sufficient for insulin–like growth factor I–induced mitogenesis and tumorigenesis. Scrimgeour AG, et al. **Endocrinology** 1997 Jun; 138(6):2552–8

Insulin–like growth factors I and II are autocrine factors in stimulating proteoglycan synthesis, a marker of differentiated chondrocytes, acting through their respective receptors on a clonal human chondrosarcoma–derived chondrocyte cell line, HCS–2/8. Takigawa M, et al. **Endocrinology** 1997 Oct;138(10):4390–400

Effect of the insulin–like growth factor I receptor on ionizing radiation–induced cell death in mouse embryo fibroblasts. Nakamura S, et al. **Exp Cell Res** 1997 Aug 25;235(1):287–94

The IGF–I receptor in mitogenesis and transformation of mouse embryo cells: role of receptor number. Rubini M, et al. **Exp Cell Res** 1997 Feb 1;230(2):284–92

Membrane–associated insulin–like growth factor–binding protein–3 inhibits insulin–like growth factor–I–induced insulin–like growth factor–I receptor signaling in ishikawa endometrial cancer cells. Karas M, et al. **J Biol Chem** 1997 Jun 27;272(26):16514–20

Different mechanisms are involved in intracellular calcium increase by insulin–like growth factors 1 and 2 in articular chondrocytes: voltage–gated calcium channels, and/or phospholipase C coupled to a pertussis–sensitive G–protein. Poiraudeau S, et al. **J Cell Biochem** 1997 Mar 1;64(3):414–22

Insulin–like growth factor receptor cooperates with integrin alpha v beta 5 to promote tumor cell dissemination in vivo. Brooks PC, et al. **J Clin Invest** 1997 Mar 15;99(6):1390–8

The adapter protein Grb10 associates preferentially with the insulin receptor as compared with the IGF–I receptor in mouse fibroblasts. Laviola L, et al. **J Clin Invest** 1997 Mar 1;99(5):830–7

Role of the IGF–I receptor in mutagenesis and tumor promotion. Blakesley VA, et al. **J Endocrinol** 1997 Mar; 152(3):339–44 (51 ref.)

Influence of blockers for the estrogen receptor (ER) and type I IGF–receptor on the levels of ER, ER mRNA and IGF–I mRNA in the rat uterus. Sahlin L, et al. **J Steroid Biochem Mol Biol** 1996 Jul;58(4):359–65

Antiapoptotic signalling by the insulin–like growth factor I receptor, phosphatidylinositol 3–kinase, and Akt. Kulik G, et al. **Mol Cell Biol** 1997 Mar;17(3):1595–606

Identification of domains of the insulin–like growth factor I receptor that are required for protection from apoptosis. O'Connor R, et al. **Mol Cell Biol** 1997 Jan;17(1):427–35

The insulin–like growth factor I receptor as a physiologically relevant target of p53 in apoptosis caused by interleukin–3 withdrawal. Prisco M, et al. **Mol Cell Biol** 1997 Mar; 17(3):1084–92

Insulin–like growth factor I receptor signaling in transformation by src oncogenes. Valentinis B, et al. **Mol Cell Biol** 1997 Jul;17(7):3744–54

Overexpression of insulin–like growth factor (IGF)–I receptor enhances inhibition of DNA replication in mouse cells exposed to x–rays. Wang Y, et al. **Radiat Environ Biophys** 1997 Jun;36(2):117–23

The role of the IGF–I receptor in apoptosis. Baserga R, et al. **Vitam Horm** 1997;53:65–98 (124 ref.)

RECEPTORS, INSULIN–LIKE–GROWTH–FACTOR II

ANALYSIS

Expression of insulin–like growth factors (IGFs), their receptors and IGF binding protein–3 in normal, benign and malignant smooth muscle tissues. Van der Ven LT, et al. **Br J Cancer** 1997;75(11):1631–40

Distribution and levels of insulin–like growth factor (IGF–I and IGF–II) and insulin receptor binding sites in the spinal cords of amyotrophic lateral sclerosis (ALS) patients. Doré S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):128–33

Identification of functional insulin–like growth factor–II/mannose–6–phosphate receptors in isolated bone cells. Martinez DA, et al. **J Cell Biochem** 1995 Oct; 59(2):246–57

ANTAGONISTS & INHIBITORS

Inhibition of calcium–independent mannose 6–phosphate receptor incorporation into trans–Golgi network–derived clathrin–coated vesicles by wortmannin. Gaffet P, et al. **J Biol Chem** 1997 Sep 26;272(39):24170–5

BIOSYNTHESIS

Cell proliferation and regulation of negative growth factors in mouse liver foci. Moser GJ, et al. **Carcinogenesis** 1996 Sep;17(9):1835–40

Streptozotocin induction of diabetes in rats leads to increased insulin–like growth factor–II/mannose–6–phosphate receptor mRNA expression in kidney but not in lung or heart. Kiess W, et al. **Growth Regul** 1996 Jun;6(2):66–72

Serum factors inhibit melanoma cell surface expression of type I and type II IGF receptors. Bellan C, et al. **J Recept Signal Transduct Res** 1996 Jan–Mar; 16(1–2):115–34

Expression of mRNA for the insulin–like growth factors and their receptors in human preimplantation embryos. Lighten AD, et al. **Mol Reprod Dev** 1997 Jun;47(2):134–9

Systemic administration of kainic acid induces selective time dependent decrease in [125I]insulin–like growth factor I, [125I]insulin–like growth factor II and [125I]insulin receptor binding sites in adult rat hippocampal formation. Kar S, et al. **Neuroscience** 1997 Oct;80(4):1041–55

CHEMISTRY

Identification of three internalization sequences in the cytoplasmic tail of the 46 kDa mannose 6–phosphate receptor. Denzer K, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):497–505

GENETICS

The insulin–like growth factor II receptor gene is mutated in genetically unstable cancers of the endometrium, stomach, and colorectum. Ouyang H, et al. **Cancer Res** 1997 May 15;57(10):1851–4

Expression of mannose 6–phosphate receptors in chicken. Matzner U, et al. **Dev Dyn** 1996 Sep;207(1):11–24

Coordinate expression of insulin–like growth factor II (IGF–II) and IGF–II/mannose–6–phosphate receptor mRNA and stable expression of IGF–I receptor mRNA during differentiation of human colon carcinoma cells (Caco–2). Hoeflich A, et al. **Eur J Endocrinol** 1996 Jul; 135(1):49–59

Maternal–specific methylation of the human IGF2R gene is not accompanied by allele–specific transcription. Riesewijk AM, et al. **Genomics** 1996 Jan 15;31(2):158–66

Vital factors in liver cancer. Rumsby PC. **Hum Exp Toxicol** 1996 Jun;15(6):539–40

Systematic mutational analysis of the cation–independent mannose 6–phosphate/insulin–like growth factor II receptor cytoplasmic domain. An acidic cluster containing a key aspartate is important for function in lysosomal enzyme sorting. Chen HJ, et al. **J Biol Chem** 1997 Mar 14;272(11):7003–12

The carboxy–terminal peptides of 46 kDa and 300 kDa mannose 6–phosphate receptors share partial sequence homology and contain information for sorting in the early endosomal pathway. Böker C, et al. **J Cell Sci** 1997 Apr; 110 (Pt 8):1023–32

Translocation between chromosomes 6 and 15 (45,XX,t(6;15)(q25;q11.2)) with further evidence for lack of imprinting of the insulin–like growth factor II/mannose–6–phosphate receptor in humans. Treacy E, et al. **J Med Genet** 1996 Jan;33(1):42–6

Paternal repression of the imprinted mouse Igf2r locus occurs during implantation and is stable in all tissues of the post–implantation mouse embryo. Lerchner W, et al. **Mech Dev** 1997 Jan;61(1–2):141–9

Developmental expression of insulin–like growth factor II receptor (IGF–IIR) in congenic mouse embryonic lungs: correlation between IGF–IIR mRNA and protein levels and heterochronic lung development. Melnick M, et al. **Mol Reprod Dev** 1996 Jun;44(2):159–70

Aberrant imprinting of the insulin–like growth factor II receptor gene in Wilms' tumor. Xu YQ, et al. **Oncogene** 1997 Mar 6;14(9):1041–6

Loss of the gene encoding mannose 6–phosphate/insulin–like growth factor II receptor is an early event in liver

carcinogenesis. Yamada T, et al.
Proc Natl Acad Sci U S A 1997 Sep 16;94(19):10351-5
Molecular evolution of imprinted genes: no evidence for antagonistic coevolution. McVean GT, et al.
Proc R Soc Lond B Biol Sci 1997 May 22;264(1382):739-46

ISOLATION & PURIFICATION

Affinity purification of mannose 6-phosphate receptor proteins. Purification and partial characterisation of goat liver receptors. Yerramalla UL, et al.
Biochem Mol Biol Int 1996 Nov;40(4):815-21

METABOLISM

Functional role of cation-independent mannose 6-phosphate/insulin-like growth factor II receptor in cell adhesion and proliferation of a human myeloma cell line OPM-2. Nishiura T, et al. **Blood** 1996 Nov 1;88(9):3546-54
Insulin-like growth factor-II/mannose-6-phosphate receptor expression during early heart development. McCormick KM, et al. **Dev Dyn** 1996 Oct;207(2):195-203
Regulation of soluble insulin-like growth factor-II/mannose 6-phosphate receptor in hepatocytes from intact and regenerating rat liver. Scott CD, et al. **Endocrinology** 1996 Sep;137(9):3864-70
Insulin-like growth factor receptors in normal and tumorous adult human adrenocortical glands. Weber MM, et al.
Eur J Endocrinol 1997 Mar;136(3):296-303
Postnatal age and food intake alter insulin-like growth factor-II/mannose-6-phosphate receptors in ovine skeletal muscles. Oldham JM, et al. **Growth Regul** 1996 Jun; 6(2):88-95
The phosphorylation pattern of oligosaccharides in secreted procathepsin D is glycosylation site-specific and independent of the expression of mannose 6-phosphate receptors. Dittmer F, et al. **J Biol Chem** 1997 Jan 10; 272(2):852-8
The 46-kDa mannose 6-phosphate receptor contains multiple binding sites for clathrin adaptors. Höning S, et al.
J Biol Chem 1997 Aug 8;272(32):19884-90
Ligand binding specificities of the two mannose 6-phosphate receptors. Sleat DE, et al. **J Biol Chem** 1997 Jan 10; 272(2):731-8
Biosynthesis, processing, and targeting of sphingolipid activator protein (SAP)precursor in cultured human fibroblasts. Mannose 6-phosphate receptor-independent endocytosis of SAP precursor. Vielhaber G, et al.
J Biol Chem 1996 Dec 13;271(50):32438-46
Glucose increases both the plasma membrane number and phosphorylation of insulin-like growth factor II/mannose 6-phosphate receptors. Zhang Q, et al. **J Biol Chem** 1997 Sep 19;272(38):23703-6
Serine phosphorylation site of the 46-kDa mannose 6-phosphate receptor is required for transport to the plasma membrane in Madin-Darby canine kidney and mouse fibroblast cells. Breuer P, et al. **Mol Biol Cell** 1997 Apr; 8(4):567-76
Phosphatidylinositol 3-kinase is not required for recycling of mannose 6-phosphate receptors from late endosomes to the trans-Golgi network. Nakajima Y, et al.
Mol Biol Cell 1997 Apr;8(4):577-82
Inhibition of IGF II-induced redistribution of mannose 6-phosphate receptors by the phosphatidylinositol 3-kinase inhibitor, wortmannin. Körner C, et al.
Mol Cell Endocrinol 1996 Apr 19;118(1-2):201-5
Affinity for the insulin-like growth factor-II (IGF-II) receptor inhibits autocrine IGF-II activity in MCF-7 breast cancer cells. Ellis MJ, et al. **Mol Endocrinol** 1996 Mar;10(3):286-97
Truncated forms of the insulin-like growth factor II (IGF-II)/mannose 6-phosphate receptor encompassing the IGF-II binding site: characterization of a point mutation that abolishes IGF-II binding. Garmroudi F, et al.
Mol Endocrinol 1996 Jun;10(6):642-51
Developmental expression of insulin-like growth factor II receptor (IGF-IIR) in congenic mouse embryonic lungs: correlation between IGF-IIR mRNA and protein levels and heterochronic lung development. Melnick M, et al.
Mol Reprod Dev 1996 Jun;44(2):159-70
Distribution and levels of [125I]IGF-I, [125I]IGF-II and [125I]insulin receptor binding sites in the hippocampus of aged memory-unimpaired and -impaired rats. Doré S, et al. **Neuroscience** 1997 Oct;80(4):1033-40
Presence and differential internalization of two distinct insulin-like growth factor receptors in rat hippocampal neurons. Doré S, et al. **Neuroscience** 1997 May;78(2):373-83
Spatial polarization of insulin-like growth factor receptors on the human syncytiotrophoblast. Fang J, et al.
Pediatr Res 1997 Feb;41(2):258-65

PHYSIOLOGY

Deficient transforming growth factor-beta1 activation and excessive insulin-like growth factor II (IGFII) expression in IGFII receptor-mutant tumors. Wang S, et al.
Cancer Res 1997 Jul 1;57(13):2543-6
Insulin-like growth factors I and II are autocrine factors in stimulating proteoglycan synthesis, a marker of differentiated chondrocytes, acting through their respective receptors on a clonal human chondrosarcoma-derived chondrocyte cell line, HCS-2/8. Takigawa M, et al.
Endocrinology 1997 Oct;138(10):4390-400
The insulin-like growth factor II/mannose 6-phosphate receptor is required for proliferin-induced angiogenesis. Volpert O, et al. **Endocrinology** 1996 Sep;137(9):3871-6
Different mechanisms are involved in intracellular calcium increase by insulin-like growth factors 1 and 2 in articular chondrocytes: voltage-gated calcium channels, and/or phospholipase C coupled to a pertussis-sensitive G-protein. Poiraudeau S, et al. **J Cell Biochem** 1997 Mar 1;64(3):414-22
Mannose 6-phosphate receptors regulate the formation of clathrin-coated vesicles in the TGN. Le Borgne R, et al.
J Cell Biol 1997 Apr 21;137(2):335-45
Insulin-like growth factor II signaling through the insulin-like growth factor II/mannose-6-phosphate receptor promotes exocytosis in insulin-secreting cells. Zhang Q, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10; 94(12):6232-7
[Intracellular transport of lysosomal enzyme--role of mannose-6-phosphate receptors] Czartoryska B.
Postepy Biochem 1996;42(4):350-7 (75 ref.) **(Pol)**

RECEPTORS, INSULIN-LIKE GROWTH FACTORS see **RECEPTORS, SOMATOMEDIN**

RECEPTORS, INTERFERON

Nomenclature of interferon receptors and interferon-delta. Lundgren E, et al. **J Interferon Cytokine Res** 1997 May; 17(5):315-6
Nomenclature of interferon receptors and interferon-delta. Lundgren E, et al. **J Interferon Cytokine Res** 1997 Jul; 17(7):431-2
An oligonucleotide blocks interferon-gamma signal transduction. Lee PP, et al. **Transplantation** 1996 Nov 15; 62(9):1297-301

ANALYSIS

Distribution of type-I interferon-receptors in human first trimester and term placental tissues and on isolated trophoblast cells. Paulesu L, et al.
Am J Reprod Immunol 1997 Jun;37(6):443-8
Quantitative analysis of interferon alpha/beta receptor mRNA in the liver of patients with chronic hepatitis C: correlation with serum hepatitis C virus-RNA levels and response to treatment with interferon. Yatsuhashi H, et al.
J Gastroenterol Hepatol 1997 Jun;12(6):460-7
Effectiveness of interferon-alpha therapy in chronic hepatitis C is associated with the amount of interferon-alpha receptor mRNA in the liver. Fukuda R, et al.
J Hepatol 1997 Mar;26(3):455-61
Induction of human T helper cell type 1 differentiation results in loss of IFN-gamma receptor beta-chain expression. Groux H, et al. **J Immunol** 1997 Jun 15;158(12):5627-31
Determination of interferon-alpha receptors in urothelial cancer and in normal urothelium [see comments] Giannopoulos A, et al. **J Urol** 1997 Jan;157(1):79-82. Comment in: J Urol 1997 Jan;157(1):83-4.

ANTAGONISTS & INHIBITORS

Isolation and characterization of 2'-fluoro-, 2'-amino-, and 2'-fluoro-/amino-modified RNA ligands to human IFN-gamma that inhibit receptor binding. Kubik MF, et al. **J Immunol** 1997 Jul 1;159(1):259-67

BIOSYNTHESIS

Antiblastic chemotherapy drugs up-modulate interferon-gamma receptor expression on human malignant T cells. Novelli F, et al. **Cancer Detect Prev** 1997; 21(2):191-5
The direct effect of interferon-gamma on human eosinophilic leukemia cell lines: the induction of interleukin-5 mRNA and the presence of an interferon-gamma receptor. Ishizuka T, et al. **Inflammation** 1996 Apr;20(2):151-63
Altered synthesis of interferon-gamma and expression of interferon-gamma receptor by peripheral blood mononuclear cells from patients with IgA nephropathy and non-IgA proliferative glomerulonephritis. Yano N, et al.
J Clin Immunol 1996 Jan;16(1):71-9
Expression of interferon-alpha receptor mRNA in the liver in chronic liver diseases associated with hepatitis C virus: relation to effectiveness of interferon therapy. Fukuda R, et al. **J Gastroenterol** 1996 Dec;31(6):806-11
Switching on of the proliferation or apoptosis of activated human T lymphocytes by IFN-gamma is correlated with the differential expression of the alpha- and beta-chains of its receptor. Novelli F, et al. **J Immunol** 1996 Sep 1; 157(5):1935-43
Upregulation of interferon-alpha receptor expression in hydroxyurea-treated leukemia cell lines. Tamura T, et al.
J Investig Med 1997 Apr;45(4):160-7
Induction of cytokines by HIV-1 and its gp120 protein in human peripheral blood monocyte/macrophages and modulation of cytokine response during differentiation. Gessani S, et al. **J Leukoc Biol** 1997 Jul;62(1):49-53
Expression of type I interferon receptor in solid tumors of childhood. Rosolen A, et al. **Mod Pathol** 1997 Jan; 10(1):55-61

BLOOD

Specific binding of interferon-gamma to high affinity receptors on human erythroid colony-forming cells. Taniguchi S, et al. **Exp Hematol** 1997 Mar;25(3):193-8

CHEMISTRY

Interferons alpha/beta and their receptors: place in the hierarchy of cytokines. Zav'Yalov VP, et al. **APMIS** 1997 Mar;105(3):161-86 (220 ref.)
The type-I interferon receptor. The long and short of it. Domanski P, et al. **Cytokine Growth Factor Rev** 1996 Aug; 7(2):143-51 (68 ref.)
The human type I interferon receptor. Identification of the interferon beta-specific receptor-associated phosphoprotein. Croze E, et al. **J Biol Chem** 1996 Dec 27;271(52):33165-8
A negative regulatory region in the intracellular domain of the human interferon-alpha receptor. Gibbs VC, et al.
J Biol Chem 1996 Nov 8;271(45):28710-6
Human interferon-alpha receptor: identification of the region involved in binding to interferon-alpha B. Hirata MH, et al. **J Interferon Cytokine Res** 1996 Oct;16(10):845-52
A bivalent immunoadhesin of the human interferon-gamma receptor is an effective inhibitor of IFN-gamma activity. Moosmayer D, et al. **J Interferon Cytokine Res** 1995 Dec; 15(12):1111-5
A three-dimensional model of interferon-tau. Senda T, et al. **J Interferon Cytokine Res** 1995 Dec;15(12):1053-60
Purification and crystallization of a complex between human interferon gamma receptor (extracellular domain) and human interferon gamma. Windsor WT, et al. **Proteins** 1996 Sep;26(1):108-14

DEFICIENCY

Fatal disseminated Mycobacterium smegmatis infection in a child with inherited interferon gamma receptor deficiency. Pierre-Audigier C, et al. **Clin Infect Dis** 1997 May; 24(5):982-4
Immune defence in mice lacking type I and/or type II interferon receptors. van den Broek MF, et al.
Immunol Rev 1995 Dec;148:5-18 (61 ref.)
Crescentic glomerulonephritis in interferon-gamma receptor deficient mice. Haas C, et al. **J Inflamm** 1995-96; 47(4):206-13
Generation of nitric oxide and clearance of interferon-gamma after BCG infection are impaired in mice that lack the interferon-gamma receptor. Kamijo R, et al. **J Inflamm** 1995-96;46(1):23-31
Pathological changes in the spleens of gamma interferon receptor-deficient mice infected with murine gammaherpesvirus: a role for CD8 T cells. Dutia BM, et al. **J Virol** 1997 Jun;71(6):4278-83
Interferon-gamma-receptor deficiency in an infant with fatal bacille Calmette-Guérin infection. Jouanguy E, et al.
N Engl J Med 1996 Dec 26;335(26):1956-61

DRUG EFFECTS

Effect of suramin on human interferon alpha binding to cell receptors. Kandefer-Szerszeń M, et al.
Arch Immunol Ther Exp (Warsz) 1997;45(1):93-9

GENETICS

Interferon receptors. Langer J, et al. **Biotherapy** 1996; 8(3-4):163-74 (112 ref.)
Soluble interferon-gamma receptors encoded by poxviruses. Alcamí A, et al. **Comp Immunol Microbiol Infect Dis** 1996 Sep;19(4):305-17
1.8-megabases fine physical map encompassing IFNAR and AML1 loci on human chromosome 21q22.1. Eki T, et al.
DNA Seq 1996;6(2):95-108
The gene for the ligand binding chain of the human interferon gamma receptor. Merlin G, et al. **Immunogenetics** 1997; 45(6):413-21
Binding of interferon-alpha and -beta to a component of the human type I interferon receptor expressed in simian cells. Hwang SY, et al. **Int J Biochem Cell Biol** 1996 Aug; 28(8):911-6
Chimeric erythropoietin-interferon gamma receptors reveal differences in functional architecture of intracellular domains for signal transduction. Muthukumaran G, et al.
J Biol Chem 1997 Feb 21;272(8):4993-9
Cloning and characterization of soluble and transmembrane isoforms of a novel component of the murine type I interferon receptor, IFNAR 2. Owczarek CM, et al.
J Biol Chem 1997 Sep 19;272(38):23865-70
Characterization of beta-R1, a gene that is selectively induced by interferon beta (IFN-beta) compared with IFN-alpha. Rani MRS, et al. **J Biol Chem** 1996 Sep 13; 271(37):22878-84
The structure of the gene for the second chain of the human interferon-gamma receptor. Rhee S, et al. **J Biol Chem** 1996 Nov 15;271(46):28947-52
Relationship between the intrahepatic expression of interferon-alpha receptor mRNA and the histological progress of hepatitis C virus-associated chronic liver diseases. Ishimura N, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):712-7
The intracellular domain of the second chain of the interferon-gamma receptor is interchangeable between species. Muthukumaran G, et al.
J Interferon Cytokine Res 1996 Dec;16(12):1039-45
Isolation of a biologically active soluble human interferon-alpha receptor-GST fusion protein expressed in Escherichia coli. Nguyen NY, et al.
J Interferon Cytokine Res 1996 Oct;16(10):835-44

Structure of an ovine interferon receptor and its expression in endometrium. Kaluz S, et al. **J Mol Endocrinol** 1996 Dec;17(3):207–15

Interferon–gamma receptor–deficiency renders mice highly susceptible to toxoplasmosis by decreased macrophage activation. Deckert–Schlüter M, et al. **Lab Invest** 1996 Dec; 75(6):827–41

Suppressed induction of 2–5AS in cells with HTLV–I is not associated with the fluctuation of IFN–receptor, IFN–regulatory factors (IRF–1 and IRF–2) or STAT–1 alpha. Yokosawa N, et al. **Microbiol Immunol** 1997; 41(1):63–6

Interferon–gamma–receptor deficiency in an infant with fatal bacille Calmette–Guérin infection. Jouanguy E, et al. **N Engl J Med** 1996 Dec 26;335(26):1956–61

A mutation in the interferon–gamma–receptor gene and susceptibility to mycobacterial infection. Newport MJ, et al. **N Engl J Med** 1996 Dec 26;335(26):1941–9

Genomic organization and promoter analysis of the gene ifngr2 encoding the second chain of the mouse interferon–gamma receptor. Ebensperger C, et al. **Scand J Immunol** 1996 Dec;44(6):599–606

Receptors for gamma–interferon encoded by poxviruses: implications for the unknown origin of vaccinia virus. Alcamí A, et al. **Trends Microbiol** 1996 Aug;4(8):321–6 (38 ref.)

[A mutation in the interferon–gamma receptor and susceptibility to mycobacterial infections] Ehlers S. **Pneumologie** 1997 May;51(5):505–6 **(Ger)**

IMMUNOLOGY

Immune defence in mice lacking type I and/or type II interferon receptors. van den Broek MF, et al. **Immunol Rev** 1995 Dec;148:5–18 (61 ref.)

Impaired macrophage listericidal and cytokine activities are responsible for the rapid death of Listeria monocytogenes–infected IFN–gamma receptor–deficient mice. Dai WJ, et al. **J Immunol** 1997 Jun 1;158(11):5297–304

IFN–gamma is essential for the development of autoimmune glomerulonephritis in MRL/Ipr mice. Haas C, et al. **J Immunol** 1997 Jun 1;158(11):5484–91

High susceptibility to collagen–induced arthritis in mice lacking IFN–gamma receptors. Manoury–Schwartz B, et al. **J Immunol** 1997 Jun 1;158(11):5501–6

Accelerated collagen–induced arthritis in IFN–gamma receptor–deficient mice. Vermeire K, et al. **J Immunol** 1997 Jun 1;158(11):5507–13

Distinct organ–dependent mechanisms for the control of murine cytomegalovirus infection by natural killer cells. Tay CH, et al. **J Virol** 1997 Jan;71(1):267–75

METABOLISM

Interaction of truncated human interferon gamma variants with the interferon gamma receptor: crucial importance of Arg–129. Haelewyn J, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):591–5

Expression and modulation of cellular receptors for interferon–gamma, tumour necrosis factor, and Fas on human bone marrow CD34+ cells. Sato T, et al. **Br J Haematol** 1997 May;97(2):356–65

The type–I interferon receptor. The long and short of it. Domanski P, et al. **Cytokine Growth Factor Rev** 1996 Aug; 7(2):143–51 (68 ref.)

A protein–arginine methyltransferase binds to the intracytoplasmic domain of the IFNAR1 chain in the type I interferon receptor. Abramovich C, et al. **EMBO J** 1997 Jan 15;16(2):260–6

Possible involvement of Janus kinase Jak2 in interferon–gamma induction of nitric oxide synthase in rat glial cells. Kitamura Y, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):297–306

Contributions of cloned type I interferon receptor subunits to differential ligand binding. Cutrone EC, et al. **FEBS Lett** 1997 Mar 10;404(2–3):197–202

Immune defence in mice lacking type I and/or type II interferon receptors. van den Broek MF, et al. **Immunol Rev** 1995 Dec;148:5–18 (61 ref.)

The short form of the interferon alpha/beta receptor chain 2 acts as a dominant negative for type I interferon action. Pfeffer LM, et al. **J Biol Chem** 1997 Apr 25;272(17):11002–5

Expression and role in apoptosis of the alpha– and beta–chains of the IFN–gamma receptor on human Th1 and Th2 clones. Novelli F, et al. **J Immunol** 1997 Jul 1; 159(1):206–13

Exacerbated viral hepatitis in IFN–gamma receptor–deficient mice is not suppressed by IL–12. Schijns VE, et al. **J Immunol** 1996 Jul 15;157(2):815–21

Structural requirements for agonist activity of a murine interferon–gamma peptide. Szente BE, et al. **J Interferon Cytokine Res** 1996 Oct;16(10):813–7

T–lymphocyte immunointerferon receptors in patients with multiple sclerosis. Bongioanni P, et al. **J Neurol** 1996 Aug; 243(8):605–10

The purified myxoma virus gamma interferon receptor homolog M–T7 interacts with the heparin–binding domains of chemokines. Lalani AS, et al. **J Virol** 1997 Jun; 71(6):4356–63

Investigation of IFN type–I receptor and IFN regulatory factor expression relating to induction of 2', 5'–oligoadenylate synthetase in cells persistently infected with the mumps virus. Fujii N, et al. **Microbiol Immunol** 1996;40(10):777–81

Functional subdomains of STAT2 required for preassociation with the alpha interferon receptor and for signaling. Li X, et al. **Mol Cell Biol** 1997 Apr;17(4):2048–56

The course of Plasmodium chabaudi chabaudi infections in interferon–gamma receptor deficient mice. Favre N, et al. **Parasite Immunol** 1997 Aug;19(8):375–83

STAT3 as an adapter to couple phosphatidylinositol 3–kinase to the IFNAR1 chain of the type I interferon receptor. Pfeffer LM, et al. **Science** 1997 May 30;276(5317):1418–20

Analysis of an interaction between the soluble vaccinia virus–coded type I interferon (IFN)–receptor and human IFN–alpha1 and IFN–alpha2. Liptáková H, et al. **Virology** 1997 May 26;232(1):86–90

PHYSIOLOGY

The IFN gamma receptor: a paradigm for cytokine receptor signaling. Bach EA, et al. **Annu Rev Immunol** 1997; 15:563–91 (107 ref.)

Interferons alpha/beta and their receptors: place in the hierarchy of cytokines. Zav'Yalov VP, et al. **APMIS** 1997 Mar;105(3):161–86 (220 ref.)

Mechanisms of immunity to the respiratory pathogen Bordetella pertussis in normal and gene knockout mice: clearance of primary infection is not enhanced by therapeutic interleukin–12. Mahon BP, et al. **Biochem Soc Trans** 1997 May;25(2):341S

The effects of a nonimmunogenic form of murine soluble interferon–gamma receptor on the development of autoimmune diabetes in the NOD mouse. Nicoletti F, et al. **Endocrinology** 1996 Dec;137(12):5567–75

Effects of moderate endurance exercise and training on in vitro lymphocyte proliferation, interleukin–2 (IL–2) production, and IL–2 receptor expression. Rhind SG, et al. **Eur J Appl Physiol** 1996;74(4):348–60

Post–translational up–regulation of the cell surface–associated alpha component of the human type I interferon receptor during differentiation of peripheral blood monocytes: role in the biological response to type I interferon. Eantuzzi L, et al. **Eur J Immunol** 1997 May; 27(5):1075–81

Genital tract infection with Chlamydia trachomatis fails to induce protective immunity in gamma interferon receptor–deficient mice despite a strong local immunoglobulin A response. Johansson M, et al. **Infect Immun** 1997 Mar;65(3):1032–44

Mice lacking the gamma interferon receptor have an impaired granulomatous reaction to Schistosoma mansoni infection. Rezende SA, et al. **Infect Immun** 1997 Aug;65(8):3457–61

A type I interferon signaling factor, ISF21, encoded on chromosome 21 is distinct from receptor components and their down–regulation and Is necessary for transcriptional activation of interferon–regulated genes. Holland KA, et al. **J Biol Chem** 1997 Aug 22;272(34):21045–51

Mouse macrophages carrying both subunits of the human interferon–gamma (IFN–gamma) receptor respond to human IFN–gamma but do not acquire full protection against viral cytopathic effect. Lembo D, et al. **J Biol Chem** 1996 Dec 20;271(51):32659–66

Differences in interferon alpha and beta signaling. Interferon beta selectively induces the interaction of the alpha and betaL subunits of the type I interferon receptor. Platanias LC, et al. **J Biol Chem** 1996 Sep 27;271(39):23630–3

Interferon–gamma receptor–deficiency renders mice highly susceptible to toxoplasmosis by decreased macrophage activation. Deckert–Schlüter M, et al. **Lab Invest** 1996 Dec; 75(6):827–41

Interferon–gamma receptors in nociceptive pathways: role in neuropathic pain–related behaviour. Robertson B, et al. **Neuroreport** 1997 Mar 24;8(5):1311–6

Experimental model for human intestinal microsporidiosis in interferon gamma receptor knockout mice infected by Encephalitozoon intestinalis. Achbarou A, et al. **Parasite Immunol** 1996 Aug;18(8):387–92

The interferon receptors. Pestka S. **Semin Oncol** 1997 Jun; 24(3 Suppl 9):S9–18–S9–40 (122 ref.)

RECEPTORS, INTERLEUKIN

Inhibition of growth and enhancement of differentiation of colorectal carcinoma cell lines by MAb MR6 and IL–4. Al–Tubuly AA, et al. **Int J Cancer** 1997 May 16; 71(4):605–11

[Interleukin–5 receptor] Ogata N, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:534–7 (9 ref.) **(Jpn)**

[Interleukin 4 receptor (IL–4R)] Saito S. **Nippon Rinsho** 1997 Apr;55 Suppl 2:531–3 (3 ref.) **(Jpn)**

[Interleukin–6 (IL–6) receptor] Sakamoto K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:538–41 (10 ref.) **(Jpn)**

AGONISTS

The EBV IL–10 homologue is a selective agonist with impaired binding to the IL–10 receptor. Ying L, et al. **J Immunol** 1997 Jan 15;158(2):604–13

ANALYSIS

Immunohistochemical studies of proinflammatory cytokines and their receptors in hair follicles of normal human skin. Ahmed AA, et al. **Acta Derm Venereol** 1996 Sep; 76(5):348–52

Biochemical and morphological characterization of vascular and lymphocytic interleukin–4 receptors. Schnyder B, et al. **Am J Pathol** 1996 Oct;149(4):1369–79

The expression of interleukin–8 receptor in untreated and treated psoriasis. Beljaards RC, et al. **Arch Dermatol Res** 1997 Jul;289(8):440–3

Interleukin–7 receptor expression in cutaneous T–cell lymphomas. Bagot M, et al. **Br J Dermatol** 1996 Oct; 135(4):572–5

IL–6 and soluble IL–6 receptors (sIL–6R and sgp130) in human pleural effusions: massive IL–6 production independently of underlying diseases. Doré P, et al. **Clin Exp Immunol** 1997 Jan;107(1):182–8

Interleukin–6 receptor antagonists inhibit interleukin–11 biological activity. Sun RX, et al. **Eur Cytokine Netw** 1997 Mar;8(1):51–6

Characteristic localization of gp130 (the signal–transducing receptor component used in common for IL–6/IL–11/CNTF/LIF/OSM) in the rat brain. Watanabe D, et al. **Eur J Neurosci** 1996 Aug;8(8):1630–40

Seminal cytokine concentrations (IL–1beta, IL–2, IL–6, sR IL–2, sR IL–6), semen parameters and blood hormonal status in male infertility. Dousset B, et al. **Hum Reprod** 1997 Jul;12(7):1476–9

Expression of interleukin–6 receptor subunits in human macrophage subsets. Zwadlo–Klarwasser G, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):300–1

IL–4 receptor complexes containing or lacking the gamma C chain are inhibited by an overlapping set of antagonistic IL–4 mutant proteins. Schnarr B, et al. **Int Immunol** 1997 Jun;9(6):861–8

Identification, purification, and characterization of a soluble interleukin (IL)–13–binding protein. Evidence that it is distinct from the cloned Il–13 receptor and Il–4 receptor alpha–chains. Zhang JG, et al. **J Biol Chem** 1997 Apr 4; 272(14):9474–80

Analysis of interleukin 6 receptor and gp130 expressions and proliferative capability of human CD34+ cells. Tajima S, et al. **J Exp Med** 1996 Oct 1;184(4):1357–64

Association of the common gamma–chain with the human IL–7 receptor is modulated by T cell activation. Page TH, et al. **J Immunol** 1997 Jun 15;158(12):5727–35

The IL–4 receptor alpha–chain cytoplasmic domain is sufficient for activation of JAK–1 and STAT6 and the induction of IL–4–specific gene expression. Reichel M, et al. **J Immunol** 1997 Jun 15;158(12):5860–7

Alternative assay procedures for cytokines and soluble receptors of the IL–6 family. Oppmann B, et al. **J Immunol Methods** 1996 Sep 9;195(1–2):153–9

The influence of interleukin–6 on the growth of human esophageal cancer cell lines. Oka M, et al. **J Interferon Cytokine Res** 1996 Dec;16(12):1001–6

Detection of mouse IL–8 receptor homologue expression on peripheral blood leukocytes and mature myeloid lineage cells in bone marrow. Wang J, et al. **J Leukoc Biol** 1996 Sep;60(3):372–81

Enhanced expression of chemotactic receptors in multiple sclerosis lesions. Müller–Ladner U, et al. **J Neurol Sci** 1996 Dec;144(1–2):135–41

Platelet–derived growth factor, interleukin (IL)–1 beta, IL–6R and tumor necrosis factor–alpha in IgA nephropathy. An immunohistochemical study. Taniguchi Y, et al. **Nephron** 1996;74(4):652–60

Soluble receptors and cytokine antagonists in human milk. Buescher ES, et al. **Pediatr Res** 1996 Dec;40(6):839–44

Shedding of soluble interleukin–6 receptor during peritonitis in patients on CAPD. Lu Y, et al. **Perit Dial Int** 1997 Jul–Aug;17(4):399–401

Tagging T cells: TH1 or TH2? [news] Gallagher R. **Science** 1997 Mar 14;275(5306):1615

ANTAGONISTS & INHIBITORS

Significance of interleukin–1beta and interleukin–1 receptor antagonist genetic polymorphism in inflammatory bowel diseases. Heresbach D, et al. **Am J Gastroenterol** 1997 Jul; 92(7):1164–9

Interleukin–4 receptor blockade prevents airway responses induced by antigen challenge in mice. Gavett SH, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L253–61

Interleukin–6 receptor antagonists inhibit interleukin–11 biological activity. Sun RX, et al. **Eur Cytokine Netw** 1997 Mar;8(1):51–6

Characterization of potential antagonists of human interleukin 5 demonstrates their cross–reactivity with receptors for interleukin 3 and granulocyte–macrophage colony–stimulating factor. Wiekowski M, et al. **Eur J Biochem** 1997 Jun 15;246(3):625–32

IL–4–induced expression of the IL–1 receptor antagonist gene is mediated by STAT6. Ohmori Y, et al. **J Immunol** 1996 Sep 1;157(5):2058–65

IL–12 antagonism induces T helper 2 responses, yet exacerbates cardiac allograft rejection. Evidence against a dominant protective role for T helper 2 cytokines in alloimmunity. Piccotti JR, et al. **J Immunol** 1996 Sep 1; 157(5):1951–7

Differential effects of IL–12 receptor blockade with IL–12 p40 homodimer on the induction of CD4+ and CD8+ IFN–gamma–producing cells. Piccotti JR, et al. **J Immunol** 1997 Jan 15;158(2):643–8

Plasma levels of interleukin–1 receptor antagonist (IL–1ra) and severity of illness in patients with burns. Endo S, et al. **J Med** 1996;27(1–2):57–71

Treatment with the interleukin-1 receptor antagonist and soluble tumor necrosis factor receptor Fc fusion protein does not prevent endotoxin-induced preterm parturition in mice. Fidel PL Jr, et al. **J Soc Gynecol Investig** 1997 Jan-Feb;4(1):22-6

IL12 receptors and receptor antagonists. Presky DH, et al. **Res Immunol** 1995 Sep-Oct;146(7-8):439-45 (21 ref.)

BIOSYNTHESIS

Downmodulation of IL-8 receptors, type A and type B, on human lung neutrophils in vivo. Soejima K, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L618-25

Membrane-bound and soluble alpha IL-5 receptor mRNA in the bronchial mucosa of atopic and nonatopic asthmatics. Yasruel Z, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1413-8

Two differentially expressed interleukin-11 receptor genes in the mouse genome. Bilinski P, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):359-63

Characterization of interleukin-10 receptor expression on B-cell chronic lymphocytic leukemia cells. Jurlander J, et al. **Blood** 1997 Jun 1;89(11):4146-52

Expression of interleukin-7 receptor by lineage-negative human bone marrow progenitors with enhanced lymphoid proliferative potential and B-lineage differentiation capacity. Ryan DH, et al. **Blood** 1997 Feb 1;89(3):929-40

Absence of the IL-7 receptor component CDw127 indicates that gamma(c) expression alone is insufficient for IL-7 to modulate human neutrophil responses. Girard D, et al. **Clin Immunol Immunopathol** 1997 Jun;83(3):264-71

The production of soluble interleukin 4 receptors is preferentially regulated by the murine Th2 cell subset. Fernandez-Botran R, et al. **Cytokine** 1997 Mar;9(3):166-77

Human keratinocytes constitutively express IL-4 receptor molecules and respond to IL-4 with an increase in B7/BB1 expression. Junghans V, et al. **Exp Dermatol** 1996 Dec; 5(6):316-24

Localization of IL-4 and IL-4 receptors in the human term placenta, decidua and amniochorionic membranes. de Moraes-Pinto MI, et al. **Immunology** 1997 Jan;90(1):87-94

Human ovarian-carcinoma cell lines express IL-4 and IL-13 receptors: comparison between IL-4- and IL-13-induced signal transduction. Murata T, et al. **Int J Cancer** 1997 Jan 17;70(2):230-40

A potential role for interleukin-15 in the regulation of human natural killer cell survival. Carson WE, et al. **J Clin Invest** 1997 Mar 1;99(5):937-43

Selective expression of an interleukin-12 receptor component by human T helper 1 cells. Rogge L, et al. **J Exp Med** 1997 Mar 3;185(5):825-31

Regulation of the interleukin (IL)-12R beta 2 subunit expression in developing T helper 1 (Th1) and Th2 cells. Szabo SJ, et al. **J Exp Med** 1997 Mar 3;185(5):817-24

Two distinct stimulus-dependent pathways lead to production of soluble murine interleukin-4 receptor. Blum H, et al. **J Immunol** 1996 Sep 1;157(5):1846-53

Chemotaxis and IL-8 receptor expression in B cells from normal and HIV-infected subjects. Jinquan T, et al. **J Immunol** 1997 Jan 1;158(1):475-84

IL-5 receptor expression and Ig secretion from murine B lymphocytes requires coordinated signaling by membrane Ig, IL-4, and IL-5. Weber JD, et al. **J Immunol** 1996 Nov 15;157(10):4428-35

Yeast expression of the cytokine receptor domain of the soluble interleukin-6 receptor. Vollmer P, et al. **J Immunol Methods** 1996 Nov 29;199(1):47-54

Interleukin-13 receptors on human prostate carcinoma cell lines represent a novel target for a chimeric protein composed of IL-13 and a mutated form of Pseudomonas exotoxin. Maini A, et al. **J Urol** 1997 Sep;158(3 Pt 1):948-53

Analysis of IL-2, IL-4 and their receptors in clonally-related cell lines derived from a patient with a progressive cutaneous T-cell lymphoproliferative disorder. Wasik MA, et al. **Leuk Lymphoma** 1996 Sep;23(1-2):125-36

Expression of interleukin-6 receptors and NF-kappa B in AIDS-related Kaposi sarcoma cell strains. Bailer RT, et al. **Lymphology** 1997 Jun;30(2):63-76

Homodimerization of the human interleukin 4 receptor alpha chain induces Cepsilon germline transcripts in B cells in the absence of the interleukin 2 receptor gamma chain. Fujiwara H, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5866-71

A functional interleukin 12 receptor complex is composed of two beta-type cytokine receptor subunits. Presky DH, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14002-7

Cloning, expression and purification of the ligand-binding region of human IL-6R in E. coli and its preliminary functional identification. Duan J, et al. **Sci China B** 1995 Nov;38(11):1321-31

Expression of murine interleukin 11 and its receptor alpha-chain in adult and embryonic tissues. Davidson AJ, et al. **Stem Cells** 1997;15(2):119-24

Coexpression of Kit and the receptors for erythropoietin, interleukin 6 and GM-CSF on hemopoietic cells. de Jong MO, et al. **Stem Cells** 1997;15(4):275-85

BLOOD

Serum levels of soluble IL-6 receptor in multiple myeloma as indicator of disease activity. Papadaki H, et al. **Acta Haematol** 1997;97(4):191-5

Interleukin-6 and its soluble receptor during acute meningococcal infections: effect of plasma or whole blood exchange. Frieling JT, et al. **Crit Care Med** 1996 Nov; 24(11):1801-5

Concentrations of soluble tumor necrosis factor and interleukin-6 receptors in heatstroke and heatstress [see comments] Hammami MM, et al. **Crit Care Med** 1997 Aug; 25(8):1314-9. Comment in: Crit Care Med 1997 Aug;25(8):1263-9.

IL-6 and soluble IL-6 receptor levels change differently after surgery both in the blood and in the operative field. Hisano S, et al. **Cytokine** 1997 Jun;9(6):447-52

Detection of soluble receptors for tumor necrosis factor, interleukin-2 and interleukin-6 in retroplacental serum from normal pregnant women. Lien E, et al. **Gynecol Obstet Invest** 1996;41(1):1-4

Influence of some immune factors on the IL-6 and soluble IL-2 receptors in haemodialysed patients. Koziol-Montewka M, et al. **Int Urol Nephrol** 1997; 29(3):369-75

Expression of IL-2R, IL-4R, IL-6R on peripheral blood lymphocytes in systemic lupus erythematosus and correlation with disease activity: a prospective study. Chan EY, et al. **J Clin Pathol** 1996 Aug;49(8):660-3

Soluble IL-6 receptor leads to a paracrine modulation of the IL-6-induced hepatic acute phase response in double transgenic mice. Peters M, et al. **J Immunol** 1997 Aug 1; 159(3):1474-81

Reciprocal changes in circulating interleukin-6 and its soluble receptor during evolving sepsis in leukocytopenic patients. Ostermann H, et al. **J Infect Dis** 1997 Sep;176(3):825-8

[Soluble interleukin-6 receptors in the serum in multiple myeloma] Ščudla V, et al. **Cas Lek Cesk** 1996 Nov 20; 135(22):719-22 (Eng. Abstr.) **(Cze)**

CHEMISTRY

Molecular biology of interleukin-12 receptors. Gubler U, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:36-40

Evidence for multiple sites of interaction between IL-12 and its receptor. Presky DH, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:390-3

Reversible inhibition of IL-8 receptor B mRNA expression and proliferation in non-small cell lung cancer by antisense oligonucleotides. Olbina G, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3525-30

Structure of IL-13 receptor: analysis of subunit composition in cancer and immune cells. Murata T, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):90-4

Characterization of a soluble IL-6 receptor alpha mutant C277D/H280I expressed in E.coli. Duan J, et al. **Biochem Mol Biol Int** 1997 May;41(6):1101-8

Analysis of the human interleukin-6/human interleukin-6 receptor binding interface at the amino acid level: proposed mechanism of interaction. Kalai M, et al. **Blood** 1997 Feb 15;89(4):1319-33

Cytoplasmic domains of the common beta-chain of the GM-CSF/IL-3/IL-5 receptors that are required for inducing differentiation or clonal suppression in myeloid leukaemic cell lines. Smith A, et al. **EMBO J** 1997 Feb 3;16(3):451-64

1.9 A crystal structure of interleukin 6: implications for a novel mode of receptor dimerization and signaling. Somers W, et al. **EMBO J** 1997 Mar 3;16(5):989-97

Global and local determinants for the kinetics of interleukin-4/interleukin-4 receptor alpha chain interaction. A biosensor study employing recombinant interleukin-4-binding protein. Shen BJ, et al. **Eur J Biochem** 1996 Aug 15;240(1):252-61

Multiple tyrosine residues in the intracellular domain of the common beta subunit of the interleukin 5 receptor are involved in activation of STAT5. van Dijk TB, et al. **FEBS Lett** 1997 Jul 21;412(1):161-4

Spatial orientation of the alpha and betac receptor chain binding sites on monomeric human interleukin-5 constructs. Edgerton MD, et al. **J Biol Chem** 1997 Aug 15;272(33):20611-8

Homodimerization of interleukin-4 receptor alpha chain can induce intracellular signaling. Kammer W, et al. **J Biol Chem** 1996 Sep 27;271(39):23634-7

Functional expression of soluble human interleukin-11 (IL-11) receptor alpha and stoichiometry of in vitro IL-11 receptor complexes with gp130. Neddermann P, et al. **J Biol Chem** 1996 Nov 29;271(48):30986-91

Stat3 recruitment by two distinct ligand-induced, tyrosine-phosphorylated docking sites in the interleukin-10 receptor intracellular domain. Weber-Nordt RM, et al. **J Biol Chem** 1996 Nov 1;271(44):27954-61

A single tyrosine residue in the membrane-proximal domain of the granulocyte-macrophage colony-stimulating factor, interleukin (IL)-3, and IL-5 receptor common beta-chain is necessary and sufficient for high affinity binding and signaling by all three ligands. Woodcock JM, et al. **J Biol Chem** 1996 Oct 18;271(42):25999-6006

Two basic amino acids in the second inner loop of the interleukin-8 receptor are essential for Galpha16 coupling. Xie W, et al. **J Biol Chem** 1997 Oct 3;272(40):24948-51

Identification, purification, and characterization of a soluble interleukin (IL)-13-binding protein. Evidence that it is distinct from the cloned Il-13 receptor and Il-4 receptor alpha-chains. Zhang JG, et al. **J Biol Chem** 1997 Apr 4; 272(14):9474-80

Critical cytoplasmic domains of human interleukin-9 receptor alpha chain in interleukin-9-mediated cell proliferation and signal transduction. Zhu YX, et al. **J Biol Chem** 1997 Aug 22;272(34):21334-40

I. A bioactive designer cytokine for human hematopoietic progenitor cell expansion. Fischer M, et al. **Nat Biotechnol** 1997 Feb;15(2):142-5

The amino terminus of JAK3 is necessary and sufficient for binding to the common gamma chain and confers the ability to transmit interleukin 2-mediated signals. Chen M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6910-5

Homology modeling study of the human interleukin-7 receptor complex. Kroemer RT, et al. **Protein Eng** 1996 Dec;9(12):1135-42

Interleukin-6: structure-function relationships. Simpson RJ, et al. **Protein Sci** 1997 May;6(5):929-55 (338 ref.)

Crystal structure of human interleukin-10 at 1.6 A resolution and a model of a complex with its soluble receptor. Zdanov A, et al. **Protein Sci** 1996 Oct;5(10):1955-62

Characterization of a chemokine receptor-related gene in human herpesvirus 8 and its expression in Kaposi's sarcoma. Guo HG, et al. **Virology** 1997 Feb 17;228(2):371-8

DEFICIENCY

Hematopoiesis in mice lacking the entire granulocyte-macrophage colony-stimulating factor/interleukin-3/interleukin-5 functions. Nishinakamura R, et al. **Blood** 1996 Oct 1;88(7):2458-64

Mouse macrophage development in the absence of the common gamma chain: defining receptor complexes responsible for IL-4 and IL-13 signaling. Andersson A, et al. **Eur J Immunol** 1997 Jul;27(7):1762-8

TCR-gamma genes are rearranged but not transcribed in IL-7R alpha-deficient mice. Perumal NB, et al. **J Immunol** 1997 Jun 15;158(12):5744-50

Characterization of IL-12 receptor beta1 chain (IL-12Rbeta1)-deficient mice: IL-12Rbeta1 is an essential component of the functional mouse IL-12 receptor. Wu C, et al. **J Immunol** 1997 Aug 15;159(4):1658-65

[Mice deficient for the IL-3/GM-CSF/IL-5 beta receptors] Nishinakamura R. **Rinsho Ketsueki** 1997 Mar;38(3):181-5 (8 ref.) **(Jpn)**

DRUG EFFECTS

Interleukin-4 receptor blockade prevents airway responses induced by antigen challenge in mice. Gavett SH, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L253-61

Myeloma cell growth arrest, apoptosis, and interleukin-6 receptor modulation induced by EB1089, a vitamin D3 derivative, alone or in association with dexamethasone. Puthier D, et al. **Blood** 1996 Dec 15;88(12):4659-66

Chemoattractant receptors for interleukin-8 and C5a: expression on peripheral blood leukocytes and differential regulation on HL-60 and AML-193 cells by vitamin D3 and all-trans retinoic acid. Zahn S, et al. **Eur J Immunol** 1997 Apr;27(4):935-40

Biological activity of IL-4 and IL-13 on human endothelial cells: functional evidence that both cytokines act through the same receptor. Kotowicz K, et al. **Int Immunol** 1996 Dec;8(12):1915-25

Chemokine antagonists that discriminate between interleukin-8 receptors. Selective blockers of CXCR2. Jones SA, et al. **J Biol Chem** 1997 Jun 27;272(26):16166-9

The EBV IL-10 homologue is a selective agonist with impaired binding to the IL-10 receptor. Ying L, et al. **J Immunol** 1997 Jan 15;158(2):604-13

Pore-forming toxins trigger shedding of receptors for interleukin 6 and lipopolysaccharide. Walev I, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7882-7

GENETICS

Transcriptional up-regulation of interleukin 4 receptors by human immunodeficiency virus type 1 tat gene. Husain SR, et al. **AIDS Res Hum Retroviruses** 1996 Sep 20; 12(14):1349-59

Significance of interleukin-1beta and interleukin-1 receptor antagonist genetic polymorphism in inflammatory bowel diseases. Heresbach D, et al. **Am J Gastroenterol** 1997 Jul; 92(7):1164-9

Structure of the mouse IL-12R beta 1 chain and regulation of its expression in BCG/LPS-treated mice. Showe LC, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:413-5

Common polymorphisms in the coding part of the IL4-receptor gene. Deichmann K, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):696-7

Mapping of the extracellular binding regions of the human interleukin-8 type B receptor. Katancik JA, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):663-8

Functional expression on human trophoblasts of interleukin 4 and interleukin 7 receptor complexes with a common gamma chain. Saito S, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):429-34

Two differentially expressed interleukin-11 receptor genes in the mouse genome. Bilinski P, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):359-63

Characterization of a soluble IL-6 receptor alpha mutant C277D/H280I expressed in E.coli. Duan J, et al. **Biochem Mol Biol Int** 1997 May;41(6):1101-8

Molecular cloning and characterization of a cDNA encoding the rat interleukin-8 receptor. Gobl AE, et al. **Biochim Biophys Acta** 1997 Jun 12;1326(2):171-7

Expression of activated mutants of the human interleukin-3/interleukin-5/granulocyte-macrophage

colony-stimulating factor receptor common beta subunit in primary hematopoietic cells induces factor-independent proliferation and differentiation. McCormack MP, et al. **Blood** 1997 Aug 15;90(4):1471-81

Transduction of human interleukin-9 receptor gene into human cord blood erythroid progenitors increases the number of erythropoietin-dependent erythroid colonies. Xiao M, et al. **Bone Marrow Transplant** 1996 Dec; 18(6):1103-9

Postnatal expression of interleukin-6 (IL-6) and IL-6 receptor (IL-6R) mRNAs in rat sympathetic and sensory ganglia. Gadient RA, et al. **Brain Res** 1996 Jun 10; 724(1):41-6

Bcl-2 rescues T lymphopoiesis in interleukin-7 receptor-deficient mice. Akashi K, et al. **Cell** 1997 Jun 27; 89(7):1033-41

Bcl-2 can rescue T lymphocyte development in interleukin-7 receptor-deficient mice but not in mutant rag-1-/- mice. Maraskovsky E, et al. **Cell** 1997 Jun 27;89(7):1011-9

Assignment of IL12RB1 and IL12RB2, interleukin-12 receptor beta 1 and beta 2 chains, to human chromosome 19 band p13.1 and chromosome 1 band p31.2, respectively, by in situ hybridization. Yamamoto K, et al. **Cytogenet Cell Genet** 1997;77(3-4):257-8

A soluble interleukin 6 receptor isolated from conditioned medium of human breast cancer cells is encoded by a differentially spliced mRNA. Oh JW, et al. **Cytokine** 1996 May;8(5):401-9

Mouse macrophage development in the absence of the common gamma chain: defining receptor complexes responsible for IL-4 and IL-13 signaling. Andersson A, et al. **Eur J Immunol** 1997 Jul;27(7):1762-8

A novel 4-kb interleukin-13 receptor alpha mRNA expressed in human B, T, and endothelial cells encoding an alternate type-II interleukin-4/interleukin-13 receptor. Gauchat JF, et al. **Eur J Immunol** 1997 Apr;27(4):971-8

Interleukin-7R alpha mRNA expression increases as stem cells differentiate into T and B lymphocyte progenitors. Orlic D, et al. **Exp Hematol** 1997 Mar;25(3):217-22

Cloning of the human IL-13R alpha1 chain and reconstitution with the IL4R alpha of a functional IL-4/IL-13 receptor complex. Miloux B, et al. **FEBS Lett** 1997 Jan 20;401(2-3):163-6

Chromosome mapping and expression of the human interleukin-13 receptor. Guo J, et al. **Genomics** 1997 May 15;42(1):141-5

Identification of a second murine interleukin-11 receptor alpha-chain gene (IL11Ra2) with a restricted pattern of expression. Robb L, et al. **Genomics** 1997 Mar 15; 40(3):387-94

The IL-9 receptor gene, located in the Xq/Yq pseudoautosomal region, has an autosomal origin, escapes X inactivation and is expressed from the Y. Vermeesch JR, et al. **Hum Mol Genet** 1997 Jan;6(1):1-8

IL-7 receptor and VDJ recombination: trophic versus mechanistic actions. Candéias S, et al. **Immunity** 1997 May; 6(5):501-8 (104 ref.)

Detection of polymorphisms within the human IL10 receptor cDNA gene sequence by RT-PCR RFLP. Tanaka Y, et al. **Immunogenetics** 1997;46(5):439-41

Defective T-cell receptor gamma gene rearrangement in interleukin-7 receptor knockout mice. Candéias S, et al. **Immunol Lett** 1997 Jun 1;57(1-3):9-14

1,25-(OH)2-vitamin D3 and calcipotriol induce IL-10 receptor gene expression in human epidermal cells. Michel G, et al. **Inflamm Res** 1997 Jan;46(1):32-4

Eosinophils negatively regulate eosinophilopoiesis by decreasing IL-5 levels. Enokihara H, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:2-4

The gene for the human interleukin-11 receptor alpha chain locus is highly homologous to the murine gene and contains alternatively spliced first exons. Nandurkar HH, et al. **Int J Biochem Cell Biol** 1997 May;29(5):753-66

Involvement of IL-4 in human glomerulonephritis: an in situ hybridization study of IL-4 mRNA and IL-4 receptor mRNA. Furusu A, et al. **J Am Soc Nephrol** 1997 May; 8(5):730-41

cDNA cloning and characterization of the human interleukin 13 receptor alpha chain. Aman MJ, et al. **J Biol Chem** 1996 Nov 15;271(46):29265-70

Identification of two rat genes orthologous to the human interleukin-8 receptors. Dunstan CAN, et al. **J Biol Chem** 1996 Dec 20;271(51):32770-6

Interleukin-4-induced STAT6 recognizes and activates a target site in the promoter of the interleukin-4 receptor gene. Kotanides H, et al. **J Biol Chem** 1996 Oct 11; 271(41):25555-61

Ligand-induced .desensitization of the human CXC chemokine receptor-2 is modulated by multiple serine residues in the carboxyl-terminal domain of the receptor. Mueller SG, et al. **J Biol Chem** 1997 Mar 28; 272(13):8207-14

Soluble IL-6 receptor leads to a paracrine modulation of the IL-6-induced hepatic acute phase response in double transgenic mice. Peters M, et al. **J Immunol** 1997 Aug 1; 159(3):1474-81

Characterization and biologic activities of recombinant rat soluble interleukin-6 receptor. Thibault V, et al. **J Interferon Cytokine Res** 1996 Nov;16(11):973-81

Bone resorption and mRNA expression of IL-6 and IL-6 receptor in patients with renal osteodystrophy. Langub MC Jr, et al. **Kidney Int** 1996 Aug;50(2):515-20

The influence of restraint stress on the expression of mRNAs for IL-6 and the IL-6 receptor in the hypothalamus and midbrain of the rat. Shizuya K, et al. **Life Sci** 1997; 61(10):PL 135-40

Interleukin-4 receptor expression on AIDS-associated Kaposi's sarcoma cells and their targeting by a chimeric protein comprised of circularly permuted interleukin-4 and Pseudomonas exotoxin. Husain SR, et al. **Mol Med** 1997 May;3(5):327-38

[Expression of cDNA for human interleukin-8 type one receptor in BALB 3T3 fibroblasts and characteristics of products of expression] Tikhonov II, et al. **Mol Biol (Mosk)** 1996 Sep-Oct;30(5):1014-21 **(Rus)**

IMMUNOLOGY

Interleukin-8 receptor B immunoreactivity in brain and neuritic plaques of Alzheimer's disease. Xia M, et al. **Am J Pathol** 1997 Apr;150(4):1267-74

Therapeutic potential of humanized anti-interleukin-6 receptor antibody: antitumor activity in xenograft model of multiple myeloma. Tsunenari T, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2537-44

New xenograft model of multiple myeloma and efficacy of a humanized antibody against human interleukin-6 receptor. Tsunenari T, et al. **Blood** 1997 Sep 15; 90(6):2437-44

The function of the soluble IL-6 receptor in vivo. Peters M, et al. **Immunol Lett** 1996 Dec;54(2-3):177-84

Identification of a novel antigenic structure of the human receptor for interleukin-6 involved in the interaction with the glycoprotein 130 chain. Gaillard JP, et al. **Immunology** 1996 Sep;89(1):135-41

Interleukin-13 selectively induces monocyte chemoattractant protein-1 synthesis and secretion by human endothelial cells. Involvement of IL-4R alpha and Stat6 phosphorylation. Goebeler M, et al. **Immunology** 1997 Jul; 91(3):450-7

Biological activity of IL-4 and IL-13 on human endothelial cells: functional evidence that both cytokines act through the same receptor. Kotowicz K, et al. **Int Immunol** 1996 Dec;8(12):1915-25

Two distinct stimulus-dependent pathways lead to production of soluble murine interleukin-4 receptor. Blum H, et al. **J Immunol** 1996 Sep 1;157(5):1846-53

Chemotaxis and IL-8 receptor expression in B cells from normal and HIV-infected subjects. Jinquan T, et al. **J Immunol** 1997 Jan 1;158(1):475-84

The IL-13 receptor structure differs on various cell types and may share more than one component with IL-4 receptor. Obiri NI, et al. **J Immunol** 1997 Jan 15; 158(2):756-64

Differential effects of IL-12 receptor blockade with IL-12 p40 homodimer on the induction of CD4+ and CD8+ IFN-gamma-producing cells. Piccotti JR, et al. **J Immunol** 1997 Jan 15;158(2):643-8

Eosinophilia and intracranial worm recovery in interleukin-5 transgenic and interleukin-5 receptor alpha chain-knockout mice infected with Angiostrongylus cantonensis. Sugaya H, et al. **Parasitol Res** 1997; 83(6):583-90

Inhibition of the human allogeneic mixed lymphocyte response by cyclosporin A: relationship with the IL-12 pathway. Bonnotte B, et al. **Tissue Antigens** 1996 Oct;48(4 Pt 1):265-70

Safety and kinetic properties of a humanized antibody to human interleukin-6 receptor in healthy non-human primates. Shinkura H, et al. **Toxicology** 1997 Oct 19; 122(3):163-70

T cell hyperreactivity to IL-6 in chronic nonviremic HBV carriers despite normal IL-6 receptor or gp130 expression. Baroja ML, et al. **Viral Immunol** 1996;9(3):187-94

[Prevention of the development of immediate hypersensitivity and airway hyperresponsiveness following in vivo treatment with soluble IL-4 receptor] Knöchel B, et al. **Pneumologie** 1996 Aug;50(8):569-70 **(Ger)**

[Clinical application of interleukin-6 receptor antibody] Nishimoto N, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Apr;20(2):87-94 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Effect of humanized anti-interleukin-6 receptor antibody on new xenograft model of multiple myeloma] Shimazaki C, et al. **Rinsho Ketsueki** 1997 Apr;38(4):281-4 **(Jpn)**

METABOLISM

Expression of interleukin-8 receptors in the gestational tissues before and after initiation of labor: immunohistochemical study. el Maradny E, et al. **Acta Obstet Gynecol Scand** 1996 Oct;75(9):790-6

Interleukin-6 receptor expression in the peripheral B cells of patients with multicentric Castleman's disease. Ishiyama T, et al. **Ann Hematol** 1996 Oct;73(4):179-82

A 70-kDa protein facilitates interleukin-4 signal transduction in the absence of the common gamma receptor chain. Dawson CH, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):279-82

Mapping of the extracellular binding regions of the human interleukin-8 type B receptor. Katancik JA, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):663-8

Changes in the NMR-derived motional parameters of the insulin receptor substrate 1 phosphotyrosine binding domain upon binding to an interleukin 4 receptor phosphopeptide. Olejniczak ET, et al. **Biochemistry** 1997 Apr 8;36(14):4118-24

Characterization of synthetic human granulocyte chemotactic protein 2: usage of chemokine receptors CXCR1 and CXCR2 and in vivo inflammatory properties. Wuyts A, et al. **Biochemistry** 1997 Mar 4;36(9):2716-23

The structural and functional basis of cytokine receptor activation: lessons from the common beta subunit of the granulocyte-macrophage colony-stimulating factor, interleukin-3 (IL-3), and IL-5 receptors. Bagley CJ, et al. **Blood** 1997 Mar 1;89(5):1471-82 (87 ref.)

Evidence for the participation of interleukin-2 (IL-2) and IL-4 in the regulation of autonomous growth and tumorigenesis of transformed cells of lymphoid origin. Hassuneh MR, et al. **Blood** 1997 Jan 15;89(2):610-20

Interleukin-4 induces association of the c-fes proto-oncogene product with phosphatidylinositol-3 kinase. Izuhara K, et al. **Blood** 1996 Nov 15;88(10):3910-8

Soluble IL-6 receptors (sIL-6R) in hematological patients receiving immunotherapy with IL-2/IFN-alpha or donor lymphocytes following bone marrow transplantation. Toren A, et al. **Bone Marrow Transplant** 1996 Oct; 18(4):721-4

Absence of IL-6 receptor expression in fresh childhood Burkitt's lymphoma cells and induction of IL-6 receptors by Epstein-Barr virus in vitro. Tomeczkowski J, et al. **Br J Haematol** 1997 May;97(2):400-8

Coadministration of interleukin-6 (IL-6) and soluble IL-6 receptor delays progression of wobbler mouse motor neuron disease. Ikeda K, et al. **Brain Res** 1996 Jul 8; 726(1-2):91-7

Resistance to interleukin 6 in human non-small cell lung carcinoma cell lines: role of receptor components. Ganapathi MK, et al. **Cell Growth Differ** 1996 Jul; 7(7):923-9

Usefulness of flow cytometric detection of cell surface interleukin-6 receptors in human myeloma cell lines. Chen YH, et al. **Clin Lab Haematol** 1996 Sep;18(3):161-9

IL-8 and NAP-2 differ in their capacities to bind and chemoattract 293 cells transfected with either IL-8 receptor type A or type B. Ben-Baruch A, et al. **Cytokine** 1997 Jan;9(1):37-45

IL-6 and soluble IL-6 receptor levels change differently after surgery both in the blood and in the operative field. Hisano S, et al. **Cytokine** 1997 Jun;9(6):447-52

Receptor-mediated endocytosis of IL-8: a fluorescent microscopic evidence and implication of the process in ligand-induced biological response in human neutrophils. Ray E, et al. **Cytokine** 1997 Aug;9(8):587-96

Interleukin-4-specific signal transduction events are driven by homotypic interactions of the interleukin-4 receptor alpha subunit. Lai SY, et al. **EMBO J** 1996 Sep 2; 15(17):4506-14

Diphtheria toxin-based receptor-specific chimaeric toxins as targeted therapies. Sweeney EB, et al. **Essays Biochem** 1995;30:119-31 (23 ref.)

Interleukin-13 responsiveness and interleukin-13 receptor expression in non-Hodgkin's lymphoma and reactive lymph node B cells. Modulation by CD40 activation. Billard C, et al. **Eur Cytokine Netw** 1997 Mar;8(1):19-27

Global and local determinants for the kinetics of interleukin-4/interleukin-4 receptor alpha chain interaction. A biosensor study employing recombinant interleukin-4-binding protein. Shen BJ, et al. **Eur J Biochem** 1996 Aug 15;240(1):252-61

A transgenic T cell receptor restores thymocyte differentiation in interleukin-7 receptor alpha chain-deficient mice. Crompton T, et al. **Eur J Immunol** 1997 Jan;27(1):100-4

Chemoattractant receptors for interleukin-8 and C5a: expression on peripheral blood leukocytes and differential regulation on HL-60 and AML-193 cells by vitamin D3 and all-trans retinoic acid. Zahn S, et al. **Eur J Immunol** 1997 Apr;27(4):935-40

Identification of G-protein binding sites of the human interleukin-8 receptors by functional mapping of the intracellular loops. Damaj BB, et al. **FASEB J** 1996 Oct; 10(12):1426-34

A complex of the soluble interleukin-6 receptor and interleukin-6 is internalized via the signal transducer gp130. Graeve L, et al. **FEBS Lett** 1996 Dec 9;399(1-2):131-4

The cytokine interleukin-5 (IL-5) effects cotransport of its receptor subunits to the nucleus in vitro. Jans DA, et al. **FEBS Lett** 1997 Jun 30;410(2-3):368-72

Reconstitution of two isoforms of the human interleukin-11 receptor and comparison of their functional properties. Lebeau B, et al. **FEBS Lett** 1997 Apr 28;407(2):141-7

IL4 and IL13 receptors share the gamma c chain and activate STAT6, STAT3 and STAT5 proteins in normal human B cells. Rolling C, et al. **FEBS Lett** 1996 Sep 9;393(1):53-6

Intestinal intraepithelial lymphocytes have a promiscuous interleukin-8 receptor. Roberts AI, et al. **Gut** 1997 Mar; 40(3):333-8

Interleukin 6 receptors on human outer root sheath cells and interfollicular epidermal keratinocytes in vitro: density-induced down regulation (DIDR) of receptors [letter] Waelti ER, et al. **In Vitro Cell Dev Biol Anim** 1996 May;32(5):255-8

Critical proline residues of the cytoplasmic domain of the IL-5 receptor alpha chain and its function in IL-5-mediated activation of JAK kinase and STAT5. Kouro T, et al. **Int Immunol** 1996 Feb;8(2):237-45

Demonstration of a cross-talk between IL-2 and IL-5 in phosphorylation of IL-2 and IL-5 receptor beta chains. Ohbo K, et al. **Int Immunol** 1996 Jun;8(6):951-60

IL-4 receptor complexes containing or lacking the gamma C chain are inhibited by an overlapping set of antagonistic IL-4 mutant proteins. Schnarr B, et al. **Int Immunol** 1997 Jun;9(6):861-8

Design and evaluation of small peptides mapping the exposed surface of IL-8. Thompson SK, et al. **Int J Pept Protein Res** 1996 Mar;47(3):214-8

Receptor for interleukin (IL) 13 does not interact with IL4 but receptor for IL4 interacts with IL13 on human glioma cells. Debinski W, et al. **J Biol Chem** 1996 Sep 13; 271(37):22428-33

Molecular modeling-guided mutagenesis of the extracellular part of gp130 leads to the identification of contact sites in the interleukin-6 (IL-6).IL-6 receptor.gp130 complex. Horsten U, et al. **J Biol Chem** 1997 Sep 19;272(38):23748-57

Interacting residues in the extracellular region of the common beta subunit of the human granulocyte-macrophage colony-stimulating factor, interleukin (IL)-3, and IL-5 receptors involved in constitutive activation. Jenkins BJ, et al. **J Biol Chem** 1996 Nov 22;271(47):29707-14

Influence of subunit combinations on signaling by receptors for oncostatin M, leukemia inhibitory factor, and interleukin-6. Kuropatwinski KK, et al. **J Biol Chem** 1997 Jun 13;272(24):15135-44

Mutants of single chain interleukin 5 show asymmetric recruitment of receptor alpha and betac subunits. Li J, et al. **J Biol Chem** 1996 Dec 6;271(49):31729-34

Tumor necrosis factor alpha enhances the expression of the interleukin (IL)-4 receptor alpha-chain on endothelial cells increasing IL-4 or IL-13-induced Stat6 activation. Lugli SM, et al. **J Biol Chem** 1997 Feb 28;272(9):5487-94

An interleukin (IL)-13 receptor lacking the cytoplasmic domain fails to transduce IL-13-induced signals and inhibits responses to IL-4. Orchansky PL, et al. **J Biol Chem** 1997 Sep 5;272(36):22940-7

HMG-I(Y) phosphorylation status as a nuclear target regulated through insulin receptor substrate-1 and the I4R motif of the interleukin-4 receptor. Wang D, et al. **J Biol Chem** 1997 Oct 3;272(40):25083-90

Stat3 recruitment by two distinct ligand-induced, tyrosine-phosphorylated docking sites in the interleukin-10 receptor intracellular domain. Weber-Nordt RM, et al. **J Biol Chem** 1996 Nov 1;271(44):27954-61

Discrete steps in binding and signaling of interleukin-8 with its receptor. Wu L, et al. **J Biol Chem** 1996 Dec 6; 271(49):31202-9

Two basic amino acids in the second inner loop of the interleukin-8 receptor are essential for Galpha16 coupling. Xie W, et al. **J Biol Chem** 1997 Oct 3;272(40):24948-51

Differential associations between the cytoplasmic regions of the interleukin-12 receptor subunits beta1 and beta2 and JAK kinases. Zou J, et al. **J Biol Chem** 1997 Feb 28; 272(9):6073-7

Interleukin-6 and soluble interleukin-6 receptors in the synovial fluids from rheumatoid arthritis patients are responsible for osteoclast-like cell formation. Kotake S, et al. **J Bone Miner Res** 1996 Jan;11(1):88-95

Interleukin-6 and the interleukin-6 receptor in the human adrenal gland: expression and effects on steroidogenesis. Päth G, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2343-9

Increased serum concentrations of interleukin-6 (IL-6) and soluble IL-6 receptor in patients with Graves' disease [see comments] Salvi M, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2976-9. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):1307.

Shared gamma(c) subunit within the human interleukin-7 receptor complex. A molecular basis for the pathogenesis of X-linked severe combined immunodeficiency. Lai SY, et al. **J Clin Invest** 1997 Jan 15;99(2):169-77

Involvement of Interleukin (IL) 8 receptor in negative regulation of myeloid progenitor cells in vivo: evidence from mice lacking the murine IL-8 receptor homologue. Broxmeyer HE, et al. **J Exp Med** 1996 Nov 1; 184(5):1825-32

The V-J recombination of T cell receptor-gamma genes is blocked in interleukin-7 receptor-deficient mice. Maki K, et al. **J Exp Med** 1996 Dec 1;184(6):2423-7

The differential ability of IL-8 and neutrophil-activating peptide-2 to induce attenuation of chemotaxis is mediated by their divergent capabilities to phosphorylate CXCR2 (IL-8 receptor B). Ben-Baruch A, et al. **J Immunol** 1997 Jun 15;158(12):5927-33

A Ca2+-dependent autoregulation of lipopolysaccharide-induced IL-8 receptor expression in human polymorphonuclear neutrophils. Bhattacharya C, et al. **J Immunol** 1997 Feb 1;158(3):1293-301

Chemoattractant cross-desensitization of the human neutrophil IL-8 receptor involves receptor internalization and differential receptor subtype regulation. Sabroe I, et al. **J Immunol** 1997 Feb 1;158(3):1361-9

The EBV IL-10 homologue is a selective agonist with impaired binding to the IL-10 receptor. Ying L, et al. **J Immunol** 1997 Jan 15;158(2):604-13

Establishment of an IL-12-responsive T cell clone: its characterization and utilization in the quantitation of IL-12 activity. Maruo S, et al. **J Leukoc Biol** 1997 Mar; 61(3):346-52

Interleukin 5 interactions with soluble and cell surface forms of its receptor. Li J, et al. **J Mol Recognit** 1996 Sep-Dec; 9(5-6):347-55 (60 ref.)

Interleukin-1 beta differentially affects interleukin-6 and soluble interleukin-6 receptor in the blood and central nervous system of the monkey. Reyes TM, et al. **J Neuroimmunol** 1996 May;66(1-2):135-41

Soluble cytokine receptors as carrier proteins: effects of soluble interleukin-4 receptors on the pharmacokinetics of murine interleukin-4. Ma Y, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):340-50

Concentrations and origins of soluble interleukin 6 receptor-alpha in serum and synovial fluid. Desgeorges A, et al. **J Rheumatol** 1997 Aug;24(8):1510-6

Expression of interleukin-6 receptors by pediatric acute lymphoblastic leukemia cells with the t(4;11) translocation: a possible target for therapy with recombinant IL6-Pseudomonas exotoxin. Gu L, et al. **Leukemia** 1997 Oct;11(10):1779-86

The beta c component of the granulocyte-macrophage colony-stimulating factor (GM-CSF)/interleukin 3 (IL-3)/IL-5 receptor interacts with a hybrid GM-CSF/erythropoietin receptor to influence proliferation and beta-globin mRNA expression. Jubinsky PT, et al. **Mol Med** 1996 Nov;2(6):766-73

Interleukin-6 expression after renal transplantation. Waiser J, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):753-9

Unmasking by soluble IL-6 receptor of IL-6 effect on metastatic melanoma: growth inhibition and differentiation of B16-F10.9 tumor cells. Oh JW, et al. **Oncogene** 1997 Jul 31;15(5):569-77

Tec tyrosine kinase links the cytokine receptors to PI-3 kinase probably through JAK. Takahashi-Tezuka M, et al. **Oncogene** 1997 May 15;14(19):2273-82

Differential modulation of T cell functions by soluble IL-4R (sIL-4R) in two cases of severe atopic dermatitis. Nasert S, et al. **Pediatr Allergy Immunol** 1996 May;7(2):91-4

Receptor-associated constitutive protein tyrosine phosphatase activity controls the kinase function of JAK1. Haque SJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8563-8

Monomeric isomers of human interleukin 5 show that 1:1 receptor recruitment is sufficient for function. Li J, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6694-9

A mixed-charge pair in human interleukin 4 dominates high-affinity interaction with the receptor alpha chain. Wang Y, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4; 94(5):1657-62

Functional and receptor binding characterization of recombinant murine macrophage inflammatory protein 2: sequence analysis and mutagenesis identify receptor binding epitopes. Jerva LF, et al. **Protein Sci** 1997 Aug;6(8):1643-52

IL-8 single-chain homodimers and heterodimers: interactions with chemokine receptors CXCR1, CXCR2, and DARC. Leong SR, et al. **Protein Sci** 1997 Mar;6(3):609-17

Monomeric variants of IL-8: effects of side chain substitutions and solution conditions upon dimer formation. Lowman HB, et al. **Protein Sci** 1997 Mar;6(3):598-608

Structural change and receptor binding in a chemokine mutant with a rearranged disulfide: X-ray structure of E38C/C50AIL-8 at 2 A resolution. Eigenbrot C, et al. **Proteins** 1997 Apr;27(4):556-66

The family of the IL-6-type cytokines: specificity and promiscuity of the receptor complexes. Grötzinger J, et al. **Proteins** 1997 Jan;27(1):96-109

PHYSIOLOGY

Biochemical and morphological characterization of vascular and lymphocytic interleukin-4 receptors. Schnyder B, et al. **Am J Pathol** 1996 Oct;149(4):1369-79

Effect of soluble interleukin-6 receptor on interleukin-6 synthesis in human skin fibroblasts. Cichy J, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):318-21

Mediation of interleukin-11-dependent biological responses by a soluble form of the interleukin-11 receptor. Karow J, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):489-95

Interleukin-13 is a potent activator of JAK3 and STAT6 in cells expressing interleukin-2 receptor-gamma and interleukin-4 receptor-alpha. Malabarba MG, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):865-72

Interleukin 4 and interleukin 13: same response, different receptors. Callard RE, et al. **Biochem Soc Trans** 1997 May; 25(2):451-5 (44 ref.)

Distinct mechanisms for rescue from apoptosis in Ramos human B cells by signalling through CD40 and interleukin-4 receptor: role for inhibition of an early response gene, Berg36. Ning ZQ, et al. **Biochem Soc Trans** 1997 May;25(2):306S

Adult mice with targeted mutation of the interleukin-11 receptor (IL11Ra) display normal hematopoiesis. Nandurkar HH, et al. **Blood** 1997 Sep 15;90(6):2148-59

Receptors that induce erythroid differentiation of Ba/F3 cells: structural requirements and effect on STAT5 binding. Pless M, et al. **Blood** 1997 May 1;89(9):3175-85

Myeloma cell growth arrest, apoptosis, and interleukin-6 receptor modulation induced by EB1089, a vitamin D3 derivative, alone or in association with dexamethasone. Puthier D, et al. **Blood** 1996 Dec 15;88(12):4659-66

Structure and function of interleukin-4 and its receptor. Puri RK. **Cancer Treat Res** 1995;80:143-85 (318 ref.)

Interleukin 4: signalling mechanisms and control of T cell differentiation. Paul WE. **Ciba Found Symp** 1997; 204:208-16; discussion 216-9 (40 ref.)

Absence of the IL-7 receptor component CDw127 indicates that gamma(c) expression alone is insufficient for IL-7 to modulate human neutrophil responses. Girard D, et al. **Clin Immunol Immunopathol** 1997 Jun;83(3):264-71

A fusion protein of IL-8 and a Fab antibody fragments binds to IL-8 receptors and induces neutrophil activation. Holzer W, et al. **Cytokine** 1996 Mar;8(3):214-21

Interleukin-6 and its soluble receptor regulate the expression of insulin-like growth factor binding protein-5 in osteoblast cultures. Franchimont N, et al. **Endocrinology** 1997 Aug; 138(8):3380-6

Interleukin-6 (IL-6) inhibits thyroid function in the presence of soluble IL-6 receptor in cultured human thyroid follicles. Yamazaki K, et al. **Endocrinology** 1996 Nov; 137(11):4857-63

Interferon-gamma and interleukin-4 regulate T cell interleukin-12 responsiveness through the differential modulation of high-affinity interleukin-12 receptor expression. Gollob JA, et al. **Eur J Immunol** 1997 Mar; 27(3):647-52

X-SCID B cell responses to interleukin-4 and interleukin-13 are mediated by a receptor complex that includes the interleukin-4 receptor alpha chain (p140) but not the gamma c chain. Matthews DJ, et al. **Eur J Immunol** 1997 Jan;27(1):116-21

Distinct mechanisms for rescue from apoptosis in Ramos human B cells by signaling through CD40 and interleukin-4 receptor: role for inhibition of an early response gene, Berg36. Ning ZQ, et al. **Eur J Immunol** 1996 Oct; 26(10):2356-63

Regulation of interleukin-12 receptor beta1 chain expression and interleukin-12 binding by human peripheral blood mononuclear cells. Wu C, et al. **Eur J Immunol** 1997 Jan; 27(1):147-54

Antibodies to rat soluble IL-6 receptor stimulate B9 hybridoma cell proliferation. Thibault V, et al. **FEBS Lett** 1997 May 19;408(2):182-6

Multiple tyrosine residues in the intracellular domain of the common beta subunit of the interleukin 5 receptor are involved in activation of STAT5. van Dijk TB, et al. **FEBS Lett** 1997 Jul 21;412(1):161-4

Role of IL-6 and its soluble receptor in induction of chemokines and leukocyte recruitment. Romano M, et al. **Immunity** 1997 Mar;6(3):315-25

IL-4 and IL-13 receptors: are they one and the same? Callard RE, et al. **Immunol Today** 1996 Mar;17(3):108-10 (33 ref.)

Role of epithelial interleukin-8 (IL-8) and neutrophil IL-8 receptor A in Escherichia coli-induced transuroepithelial neutrophil migration. Godaly G, et al. **Infect Immun** 1997 Aug;65(8):3451-6

Interleukin-3 (IL-3) and granulocyte-macrophage colony-stimulating factor (GM-CSF) can induce differentiation of chronic B cell leukemia expressing the alpha subunit of IL-3 and GM-CSF receptor. Shiiba M, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:12-5

The soluble form of the IL-6 receptor (sIL-6R alpha) is a potent growth factor for AIDS-associated Kaposi's sarcoma (KS) cells; the soluble form of gp130 is antagonistic for sIL-6R alpha-induced AIDS-KS cell growth. Murakami-Mori K, et al. **Int Immunol** 1996 Apr; 8(4):595-602

IL-6-soluble IL-6 receptor complex inhibits the proliferation of dermal fibroblasts. Mihara M, et al. **Int J Immunopharmacol** 1996 Jan;18(1):89-94

Interleukin-4 and its receptor: essential mediators of the allergic response. Ryan JJ. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):1-5 (8 ref.)

Interleukin-6 and its soluble receptor cause a marked induction of collagenase 3 expression in rat osteoblast cultures. Franchimont N, et al. **J Biol Chem** 1997 May 2;272(18):12144-50

A Kaposi's sarcoma-associated herpesvirus-encoded cytokine homolog (vIL-6) activates signaling through the shared gp130 receptor subunit. Molden J, et al. **J Biol Chem** 1997 Aug 1;272(31):19625-31

Leptin receptor action in hepatic cells. Wang Y, et al. **J Biol Chem** 1997 Jun 27;272(26):16216-23

A potential role for interleukin-15 in the regulation of human natural killer cell survival. Carson WE, et al. **J Clin Invest** 1997 Mar 1;99(5):937-43

Distinct roles for signals relayed through the common cytokine receptor gamma chain and interleukin 7 receptor alpha chain in natural T cell development. Boesteanu A, et al. **J Exp Med** 1997 Jul 21;186(2):331-6

Src homology 2 protein tyrosine phosphatase (SHPTP2)/Src homology 2 phosphatase 2 (SHP2) tyrosine phosphatase is a positive regulator of the interleukin 5 receptor signal transduction pathways leading to the prolongation of eosinophil survival. Pazdrak K, et al. **J Exp Med** 1997 Aug 18;186(4):561-8

Shc mediates IL-6 signaling by interacting with gp130 and Jak2 kinase. Giordano V, et al. **J Immunol** 1997 May 1; 158(9):4097-103

The common gamma-chain of cytokine receptors regulates intrathymic T cell development at multiple stages. He YW, et al. **J Immunol** 1997 Mar 15;158(6):2592-9

Impaired survival and proliferation in IL-7 receptor-deficient peripheral T cells. Maraskovsky E, et al. **J Immunol** 1996 Dec 15;157(12):5315-23

In vivo, in vitro, and molecular aspects of interleukin-8 and the interleukin-8 receptors. Hoch RC, et al. **J Lab Clin Med** 1996 Aug;128(2):134-45 (97 ref.)

Signal transduction by the GM-CSF, IL-3 and IL-5 receptors. Miyajima A, et al. **Leukemia** 1997 Apr;11 Suppl 3:418-22 (16 ref.)
Interleukin-6: structure-function relationships. Simpson RJ, et al. **Protein Sci** 1997 May;6(5):929-55 (338 ref.)
Endothelial cell protein S synthesis is upregulated by the complex of IL-6 and soluble IL-6 receptor. Hooper WC, et al. **Thromb Haemost** 1997 May;77(5):1014-9

RECEPTORS, INTERLEUKIN-1

A clinical phase I/II study of recombinant human interleukin-1 receptor in glucocorticoid-resistant graft-versus-host disease. McCarthy PL Jr, et al. **Transplantation** 1996 Sep 15;62(5):626-31
[Interleukin-1 receptor] Kasahara T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:516-9 (8 ref.) **(Jpn)**

ANALYSIS

Immunostaining and transcriptional enhancement of interleukin-1 receptor type I in the rat dental follicle. Wise GE, et al. **Arch Oral Biol** 1997 May;42(5):339-44
Molecular characterization of the bovine type II IL-1 receptor. Yu PW, et al. **Cytokine** 1997 Jan;9(1):1-8
Enhanced epithelial proliferation due to elevated levels of interleukin-1 receptors in middle ear cholesteatomas. Bujia J, et al. **Eur Arch Otorhinolaryngol** 1997;254(1):6-8
Particle concentration fluorescence as an alternative to radioactivity for cytokine receptor binding assays. Sarubbi E. **J Immunol Methods** 1996 Nov 13;198(2):113-8

ANTAGONISTS & INHIBITORS

Effect of data normalization for age on the correlations between corneometric values and serum molecule levels in plaque-type psoriatic patients. Carducci M, et al. **Acta Derm Venereol** 1997 Mar;77(2):110-4
Expression of interleukin-1 receptor antagonist protein in post-mortem human brain tissues of Alzheimer's disease and control cases. Yasuhara O, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):414-20
Inflammatory cytokines and inhibitors in HIV infection: correlation between interleukin-1 receptor antagonist and weight loss. Rimaniol AC, et al. **AIDS** 1996 Oct; 10(12):1349-56
Blood serum interleukin-1 receptor antagonist in pars planitis and ocular Behçet disease. Benezra D, et al. **Am J Ophthalmol** 1997 May;123(5):593-8
Fibronectin modulates expression of interleukin-1 beta and its receptor antagonist in human mononuclear cells. Graves KL, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L61-9
Interleukin-1 receptor antagonist inhibits endotoxin fever and systemic interleukin-6 induction in the rat. Luheshi G, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):E91-5
Regulation of peptide-chain initiation in muscle during sepsis by interleukin-1 receptor antagonist. Vary TC, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E513-20
Circulating IL-1ra and IL-10 levels are increased but do not predict the development of acute respiratory distress syndrome in at-risk patients. Parsons PE, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1469-73
Expression of interleukin-1 beta (IL-1beta) and interleukin-1 receptor antagonist (IL-1ra) on asthmatic bronchial epithelium. Sousa AR, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1061-6
Unopposed interleukin-1 is necessary for increased plasma cytokine and eicosanoid levels to develop in severe sepsis. Slotman GJ, et al. **Ann Surg** 1997 Jul;226(1):77-84
Differential induction of pro- and anti-inflammatory cytokines in whole blood by bacteria: effects of antibiotic treatment. Frieling JT, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1439-43
Interleukin-1 receptor antagonist gene polymorphism in Japanese patients with systemic lupus erythematosus. Suzuki H, et al. **Arthritis Rheum** 1997 Feb;40(2):389-90
Influence of dialysis membranes on interleukin-1 beta and interleukin-1 receptor antagonist production by peripheral blood mononuclear cells. Higuchi T, et al. **Artif Organs** 1997 Apr;21(4):265-71
IgG for intravenous use, autologous serum and plasma induce comparable interleukin-1 receptor antagonist liberation from human mononuclear cells: an in vitro phenomenon depending upon plastic adherence. Andersen LS, et al. **Autoimmunity** 1995;22(2):127-33
Endogenous interleukin-1 receptor antagonist is neuroprotective. Loddick SA, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):211-5
Overexpression of interleukin-1 receptor antagonist in the mouse brain reduces ischemic brain injury. Yang GY, et al. **Brain Res** 1997 Mar 21;751(2):181-8
Vagal paraganglia bind biotinylated interleukin-1 receptor antagonist: a possible mechanism for immune-to-brain communication. Goehler LE, et al. **Brain Res Bull** 1997; 43(3):357-64
Interleukin-10 and interleukin-1 receptor antagonists increase during cardiac surgery. Kawamura T, et al. **Can J Anaesth** 1997 Jan;44(1):38-42
Protective effect of interleukin-1 receptor antagonist on oleic acid-induced lung injury. Sun D, et al. **Chin Med J (Engl)** 1996 Jul;109(7):522-6
IL-1 receptor antagonist in saliva; characterization in normal saliva and reduced concentration in Sjögren's syndrome (SS). Dubost JJ, et al. **Clin Exp Immunol** 1996 Nov; 106(2):237-42
IL-1 receptor antagonist inhibits recurrence of disease after syngeneic pancreatic islet transplantation to spontaneously diabetic non-obese diabetic (NOD) mice. Sandberg JO, et al. **Clin Exp Immunol** 1997 May;108(2):314-7
Anti-inflammatory properties of human serum IgA: induction of IL-1 receptor antagonist and Fc alpha R (CD89)-mediated down-regulation of tumour necrosis factor-alpha (TNF-alpha) and IL-6 in human monocytes. Wolf HM, et al. **Clin Exp Immunol** 1996 Sep;105(3):537-43
Circulating levels of interleukin 1 beta and of interleukin 1 receptor antagonist in systemic juvenile chronic arthritis. De Benedetti F, et al. **Clin Exp Rheumatol** 1995 Nov-Dec; 13(6):779-84
Interleukin-1 receptor antagonist in neonates, children and adults, and in patients with pauci- and polyarticular onset juvenile chronic arthritis. Müller K, et al. **Clin Exp Rheumatol** 1997 Jul-Aug;15(4):439-44
Confirmatory interleukin-1 receptor antagonist trial in severe sepsis: a phase III, randomized, double-blind, placebo-controlled, multicenter trial. The Interleukin-1 Receptor Antagonist Sepsis Investigator Group [see comments] Opal SM, et al. **Crit Care Med** 1997 Jul; 25(7):1115-24. Comment in: Crit Care Med 1997 Jul;25(7):1095-100.
Five novel intragenic dimorphisms in the human interleukin-1 genes combine to high informativity. Guasch JF, et al. **Cytokine** 1996 Aug;8(8):598-602
Detection and characterization of IL-1 receptor antagonist in tissues from healthy rabbits: IL-1 receptor antagonist is probably involved in health. Matsukawa A, et al. **Cytokine** 1997 May;9(5):307-15
Interleukin 1 beta, tumour necrosis factor-alpha and interleukin 1 receptor antagonist in newly diagnosed insulin-dependent diabetes mellitus: comparison to long-standing diabetes and healthy individuals. Netea MG, et al. **Cytokine** 1997 Apr;9(4):284-7
Effects of repeated administration of granulocyte colony-stimulating factor (G-CSF) on neutrophil counts, plasma cytokine, and cytokine receptor levels. Pollmächer T, et al. **Cytokine** 1996 Oct;8(10):799-803
Interleukin 1 receptor antagonist localization exclusively in non-parenchymal cells of the mouse liver. Rokita H, et al. **Cytokine** 1997 Apr;9(4):249-53
Direct contact with stimulated T cells induces the expression of IL-1beta and IL-1 receptor antagonist in human monocytes. Involvement of serine/threonine phosphatases in differential regulation. Vey E, et al. **Cytokine** 1997 Jul; 9(7):480-7
Improved conditions for the analysis of large variable number of tandemly repeated (VNTR) unit polymorphisms. Vandenbroeck K, et al. **Electrophoresis** 1996 Apr; 17(4):678-80
Different behaviour of radioiodinated human recombinant interleukin-1 and its receptor antagonist in an animal model of infection. van der Laken CJ, et al. **Eur J Nucl Med** 1996 Nov;23(11):1531-5
Plasma interleukin-1alpha, interleukin-1beta and interleukin-1 receptor antagonist levels in pre-eclampsia. Kimya Y, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 May;73(1):17-21
Circulating interleukin-1 receptor antagonist levels in neonates. Geiger R, et al. **Eur J Pediatr** 1996 Sep; 155(9):811-4
Interleukin-1 receptor antagonist does not reverse lipopolysaccharide-induced inhibition of water intake in rat. Nava F, et al. **Eur J Pharmacol** 1996 Aug 15; 309(3):223-7
The mechanism of altered neural function in a rat model of acute colitis. Jacobson K, et al. **Gastroenterology** 1997 Jan;112(1):156-62
Cytokine gene polymorphisms in inflammatory bowel disease. Louis E, et al. **Gut** 1996 Nov;39(5):705-10
Systemic delivery of the interleukin-1 receptor antagonist protein using a new strategy of direct adenoviral-mediated gene transfer to skeletal muscle capillary endothelium in the isolated rat hindlimb. Welling TH, et al. **Hum Gene Ther** 1996 Oct 1;7(15):1795-802
The production and characterization of a modified recombinant interleukin-1 receptor antagonist. Chang DM, et al. **Immunol Invest** 1996 Jul;25(4):355-68
Down-regulation of cyclooxygenase-2 (COX-2) by interleukin-1 receptor antagonist in human monocytes. Porreca E, et al. **Immunology** 1996 Nov;89(3):424-9
Negative regulators of the interleukin-1 system: receptor antagonists and a decoy receptor. Mantovani A, et al. **Int J Clin Lab Res** 1996;26(1):7-14 (78 ref.)
Inhibition of interleukin-1 type I receptor expression in human cell-lines by an antisense phosphorothioate oligodeoxynucleotide. Miraglia L, et al. **Int J Immunopharmacol** 1996 Apr;18(4):227-40
Detection and modulation of interleukin-1 receptor antagonist messenger ribonucleic acid and immunoreactivity in Graves' orbital fibroblasts. Mühlberg T, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):1018-28
Inhibitors of type-I interleukin-1 receptor from microbial metabolites. Stefanelli S, et al. **J Antibiot (Tokyo)** 1997 Jun; 50(6):484-9
AF12198, a novel low molecular weight antagonist, selectively binds the human type I interleukin (IL)-1 receptor and blocks in vivo responses to IL-1. Akeson AL, et al. **J Biol Chem** 1996 Nov 29;271(48):30517-23
Cortical protection by localized striatal injection of IL-1ra following cerebral ischemia in the rat. Stroemer RP, et al. **J Cereb Blood Flow Metab** 1997 Jun;17(6):597-604
Soluble interleukin-1 receptor antagonist serum levels in smokers and nonsmokers with Graves' ophthalmopathy undergoing orbital radiotherapy. Hofbauer LC, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2244-7
Interleukin-1 beta, interleukin-1 receptor antagonist, and soluble interleukin-1 receptor type II secretion in chronic fatigue syndrome. Cannon JG, et al. **J Clin Immunol** 1997 May;17(3):253-61
Characterization of an interleukin 1 receptor antagonist protein released from ultraviolet-irradiated epidermal sheet. Hirao T, et al. **J Dermatol Sci** 1997 Mar;14(3):189-98
Detection of IL-1 alpha, IL-1 beta and IL-1 receptor antagonist in blister fluid of bullous pemphigoid. Schmidt E, et al. **J Dermatol Sci** 1996 Feb;11(2):142-7
Cytokine antagonists in aged subjects and their relation with cellular immunity. Catania A, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):B93-7
Interleukin-1 receptor antagonist plasma concentration is specifically increased by alpha-2A-interferon treatment. Naveau S, et al. **J Hepatol** 1997 Aug;27(2):272-5
The IL-1 system in psoriatic skin: IL-1 antagonist sphere of influence in lesional psoriatic epidermis. Debets R, et al. **J Immunol** 1997 Mar 15;158(6):2955-63
Expression of a biologically active recombinant mouse IL-1 receptor antagonist and its use in vivo to modulate aspects of the acute phase response. Grehan S, et al. **J Immunol** 1997 Jul 1;159(1):369-78
Intracellular IL-1 receptor antagonist promoter: cell type-specific and inducible regulatory regions. Jenkins JK, et al. **J Immunol** 1997 Jan 15;158(2):748-55
Extracellular release of the type I intracellular IL-1 receptor antagonist from human airway epithelial cells: differential effects of IL-4, IL-13, IFN-gamma, and corticosteroids. Levine SJ, et al. **J Immunol** 1997 Jun 15;158(12):5949-57
Inhibitory activity of IL-1 receptor antagonist depends on the balance between binding capacity for IL-1 receptor type 1 and IL-1 receptor type II. Ruggiero P, et al. **J Immunol** 1997 Apr 15;158(8):3881-7
Interleukin-1 receptor antagonist: characterisation of its gene expression in rabbit tissues and large-scale expression in eucaryotic cells using a baculovirus expression system. Apostolopoulos J, et al. **J Immunol Methods** 1996 Nov 29; 199(1):27-35
Dexamethasone antagonizes IL-4 and IL-10-induced release of IL-1RA by monocytes but augments IL-4-, IL-10-, and TGF-beta-induced suppression of TNF-alpha release. Joyce DA, et al. **J Interferon Cytokine Res** 1996 Jul; 16(7):511-7
Elevated plasma levels of interleukin-1 receptor antagonist and interleukin-10 in patients with acute myocardial infarction. Shibata M, et al. **J Interferon Cytokine Res** 1997 Mar;17(3):145-50
Induced upregulation of IL-1, IL-1RA and IL-1R type I gene expression by Schwann cells. Skundric DS, et al. **J Neuroimmunol** 1997 Apr;74(1-2):9-18
Multiple sclerosis: longitudinal measurement of interleukin-1 receptor antagonist [letter] Voltz R, et al. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):200-1
Interleukin-1 receptor antagonist and interleukin-4 in gingival crevicular fluid of patients with inflammatory periodontal disease. Kabashima H, et al. **J Oral Pathol Med** 1996 Sep;25(8):449-55
An ex vivo method for studying inflammation in cynomolgus monkeys: analysis of interleukin-1 receptor antagonist. Akeson A, et al. **J Pharmacol Toxicol Methods** 1996 Nov; 36(3):155-61
Different pattern of interleukin-1 beta-(IL-1 beta), interleukin-1 receptor antagonist- (IL-1ra) and interleukin-1 receptor type I- (IL-1R tI) mRNA-expression in single preimplantation mouse embryos at various developmental stages. Kruessel JS, et al. **J Reprod Immunol** 1997 Sep;34(2):103-20
Hormonal regulation of serum and endometrial IL-1 alpha, IL-1 beta and IL-1ra: IL-1 endometrial microenvironment of the human embryo at the apposition phase under physiological and supraphysiological steroid level conditions. Simón C, et al. **J Reprod Immunol** 1996 Oct; 31(3):165-84
Interleukin 1 (IL-1) receptor antagonist, soluble tumor necrosis factor receptors, IL-1 beta, and IL-8--markers of remission in rheumatoid arthritis during treatment with methotrexate. Seitz M, et al. **J Rheumatol** 1996 Sep; 23(9):1512-6
Interleukin-1 receptor antagonist allele: is it a genetic link between Henoch-Schönlein nephritis and IgA nephropathy? Liu ZH, et al. **Kidney Int** 1997 Jun; 51(6):1938-42
Interleukin-1 receptor antagonist gene in multiple sclerosis [letter; comment] Semana G, et al. **Lancet** 1997 Feb 15; 349(9050):476. Comment on: Lancet 1995 Oct 7;346(8980):979.
Infra-red laser irradiation enhances interleukin-1 receptor antagonist, increases 3H-thymidine incorporation and the release of [3H]arachidonic acid in human monocytes. Reale M, et al. **Mol Cell Biochem** 1997 Apr;169(1-2):51-9
The effects of interleukin-1 receptor antagonist protein (IRAP) infusion following spinal cord transection in rats. Gelderd JB, et al. **Mol Chem Neuropathol** 1996 Feb;

27(2):167-83

Interleukin-1 receptors and receptor antagonist in haemodialysis. Donati D, et al. **Nephrol Dial Transplant** 1997 Jan;12(1):111-8

Induction of interleukin-1 beta and interleukin-1 receptor antagonist mRNA by chronic treatment with various psychotropics in widespread area of rat brain. Suzuki E, et al. **Neurosci Lett** 1996 Sep 13;215(3):201-4

Increased survival in experimental rat heatstroke by continuous perfusion of interleukin-1 receptor antagonist. Chiu WT, et al. **Neurosci Res** 1996 Jan;24(2):159-63

Involvement of tumor necrosis factor-alpha, interleukin-1 beta, interleukin-8, and interleukin-1 receptor antagonist in acute lung injury caused by local Shwartzman reaction. Imamura S, et al. **Pathol Int** 1997 Jan;47(1):16-24

The promise of a new clinical trial—intra-articular IL-1 receptor antagonist. Evans CH, et al.
Proc Assoc Am Physicians 1996 Jan;108(1):1-5 (34 ref.)

Purification of human recombinant interleukin 1 receptor antagonist proteins upon Bacillus subtilis sporulation. Maurizi G, et al. **Protein Expr Purif** 1997 Mar;9(2):219-27

Interleukin-1 receptor antagonists and other markers in colorectal cancer patients. Iwagaki H, et al.
Scand J Gastroenterol 1997 Jun;32(6):577-81

Lower plasma CC16, a natural anti-inflammatory protein, and increased plasma interleukin-1 receptor antagonist in schizophrenia: effects of antipsychotic drugs. Maes M, et al. **Schizophr Res** 1996 Jul;21(1):39-50

Interleukin-1 receptor antagonism. Nikolic-Paterson DJ, et al. **Semin Nephrol** 1996 Nov;16(6):583-90 (38 ref.)

Neurophysiologic changes in lumbar nerve root inflammation in the rat after treatment with cytokine inhibitors. Evidence for a role of interleukin-1. Wehling P, et al. **Spine** 1996 Apr 15;21(8):931-5

Interleukin-1 receptor blockade attenuates oxygen-derived free radical production and microcirculatory disturbances in ischemia/reperfusion injury in the liver. Shirasugi N, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):371-3

Molecular cloning and functional expression of equine interleukin-1 receptor antagonist. Kato H, et al.
Vet Immunol Immunopathol 1997 May;56(3-4):221-31

[Pro-inflammatory cytokines: a pathogenic key of POEMS syndrome] Gherardi RK, et al. **Rev Neurol (Paris)** 1996 May;152(5):409-12 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

The pattern of interleukin-1beta (IL-1beta) and its modulating agents IL-1 receptor antagonist and IL-1 soluble receptor type II in acute meningococcal infections. van Deuren M, et al. **Blood** 1997 Aug 1;90(3):1101-8

Differential expression of IL-1 and TNF receptors in inflammatory arthritis and osteoarthritis. Ruggeri R, et al. **Boll Soc Ital Biol Sper** 1996 Jan-Feb;72(1-2):15-20

Modulation of interleukin-1 receptors in the brain-endocrine-immune axis by stress and infection. Takao T, et al. **Brain Behav Immun** 1995 Dec;9(4):276-91

The combination of endotoxin and dexamethasone induces type II interleukin 1 receptor (IL-1r II) in monocytes: a comparison to interleukin 1 beta (IL-1 beta) and interleukin 1 receptor antagonist (IL-1ra). Brown EA, et al.
Cytokine 1996 Nov;8(11):828-36

Inhibition of interleukin-1 type I receptor expression in human cell-lines by an antisense phosphorothioate oligodeoxynucleotide. Miraglia L, et al.
Int J Immunopharmacol 1996 Apr;18(4):227-40

Receptor induction regulates the synergistic effects of substance P with IL-1 and platelet-derived growth factor on the proliferation of bone marrow fibroblasts. Rameshwar P, et al. **J Immunol** 1997 Apr 1;158(7):3417-24

Regulation of brain interleukin-1 beta (IL-1 beta) system mRNAs in response to pathophysiological concentrations of IL-1 beta in the cerebrospinal fluid. Ilyin SE, et al.
J Mol Neurosci 1996 Fall;7(3):169-81

Increased expression of interleukin-1 receptors on fibroblasts derived from inflamed gingiva. Kanda-Nakamura C, et al.
J Periodontol 1996 Dec;67(12):1267-73

Different pattern of interleukin-1 beta-(IL-1 beta), interleukin-1 receptor antagonist- (IL-1ra) and interleukin-1 receptor type I- (IL-1R tI) mRNA-expression in single preimplantation mouse embryos at various developmental stages. Kruessel JS, et al. **J Reprod Immunol** 1997 Sep;34(2):103-20

Detection and in vivo hormonal regulation of rat ovarian type I and type II interleukin-I receptor mRNAs: increased expression during the periovulatory period. Scherzer WJ, et al. **J Soc Gynecol Investig** 1996 May-Jun;3(3):131-9

Enhancement of interleukin-1 alpha mediated autocrine growth of cultured human keratinocytes by sho-saiko-to. Matsumoto Y, et al. **Jpn J Pharmacol** 1997 Apr;73(4):333-6

Keratinocyte expression of the type 2 interleukin 1 receptor mediates local and specific inhibition of interleukin 1-mediated inflammation. Rauschmayr T, et al.
Proc Natl Acad Sci U S A 1997 May 27;94(11):5814-9

Interleukin-1 receptor and receptor antagonist gene expression after focal stroke in rats. Wang X, et al.
Stroke 1997 Jan;28(1):155-61; discussion 161-2

Functional significance of donor islet interleukin-1 receptor type 1 (IL-1Rt1) expression in islet transplantation. Kaufman DB, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):772-3

BLOOD

Antiinflammatory cytokine responses during clinical sepsis and experimental endotoxemia: sequential measurements of plasma soluble interleukin (IL)-1 receptor type II, IL-10, and IL-13. van der Poll T, et al. **J Infect Dis** 1997 Jan; 175(1):118-22

Clinical value of cytokine antagonists in infectious complications. Iwagaki H, et al.
Res Commun Mol Pathol Pharmacol 1997 Apr;96(1):25-34

CHEMISTRY

Type I IL-1 receptor: ligand specific confirmation differences and the role of glycosylation in ligand binding. Einstein R, et al. **Cytokine** 1996 Mar;8(3):206-13

An interleukin-1 binding region oligopeptide from the human type I IL-1 receptor reduces acute inflammation, delayed hypersensitivity reaction, and lethal endotoxemia in animals. Suzuki Y, et al. **J Interferon Cytokine Res** 1995 Dec;15(12):1083-8

Conformational dynamics and kinetics of peptide antagonist interactions with interleukin-1 receptor. Fluorescence studies using the NBD-labelled peptide AF12415. Cowley DJ, et al. **J Pept Res** 1997 May;49(5):444-54

A new cytokine-receptor binding mode revealed by the crystal structure of the IL-1 receptor with an antagonist. Schreuder H, et al. **Nature** 1997 Mar 13;386(6621):194-200

Crystal structure of the type-I interleukin-1 receptor complexed with interleukin-1beta. Vigers GP, et al.
Nature 1997 Mar 13;386(6621):190-4

DEFICIENCY

Interleukin-6 expression and histomorphometry of bones from mice deficient in receptors for interleukin-1 or tumor necrosis factor. Vargas SJ, et al. **J Bone Miner Res** 1996 Nov;11(11):1736-44

Phenotypic and functional characterization of mice that lack the type I receptor for IL-1. Glaccum MB, et al.
J Immunol 1997 Oct 1;159(7):3364-71

Absence of IL-1 signaling and reduced inflammatory response in IL-1 type I receptor-deficient mice. Labow M, et al. **J Immunol** 1997 Sep 1;159(5):2452-61

Endothelial structural integrity is maintained during endotoxic shock in an interleukin-1 type 1 receptor knockout mouse. Sutton ET, et al. **Shock** 1997 Feb; 7(2):105-10

DRUG EFFECTS

Type I and type II interferons upregulate functional type I interleukin-1 receptor in a human fibroblast cell line TIG-1. Takii T, et al. **J Interferon Cytokine Res** 1995 Dec; 15(12):1065-73

An approach to study molecular mechanisms involved in cytokine-induced anorexia. Ilyin SE, et al.
J Neurosci Methods 1996 Dec;70(1):33-8

Tenidap reduces the level of interleukin 1 receptors and collagenase expression in human arthritic synovial fibroblasts. Martel-Pelletier J, et al. **J Rheumatol** 1996 Jan; 23(1):24-31

Interleukin-1 receptor accessory protein transcripts in the brain and spleen: kinetics after peripheral administration of bacterial lipopolysaccharide in mice. Gabellec MM, et al. **Neuroimmunomodulation** 1996 Sep-Oct;3(5):304-9

GENETICS

Type I and type II interleukin-1 receptor expression in rat, mouse, and human testes. Gomez E, et al. **Biol Reprod** 1997 Jun;56(6):1513-26

Three distinct promoters direct transcription of different 5' untranslated regions of the human interleukin 1 type I receptor: a possible mechanism for control of translation. Ye K, et al. **Cytokine** 1996 Jun;8(6):421-9

Reproduction in mice lacking a functional type 1 IL-1 receptor. Abbondanzo SJ, et al. **Endocrinology** 1996 Aug; 137(8):3598-601

Cytokine gene polymorphisms in inflammatory bowel disease. Louis E, et al. **Gut** 1996 Nov;39(5):705-10

An association between type 1 diabetes and the interleukin-1 receptor type 1 gene. The DiMe Study Group. Childhood Diabetes in Finland. Metcalfe KA, et al. **Hum Immunol** 1996 Nov;51(1):41-8

Localisation of mRNA for interleukin-1 receptor and interleukin-1 receptor antagonist in the rat ovary. Wang LJ, et al. **J Endocrinol** 1997 Jan;152(1):11-7

Phenotypic and functional characterization of mice that lack the type I receptor for IL-1. Glaccum MB, et al.
J Immunol 1997 Oct 1;159(7):3364-71

Human IL-1Ra gene transfer into human synovial fibroblasts is chondroprotective. Müller-Ladner U, et al.
J Immunol 1997 Apr 1;158(7):3492-8

Endotoxin-induced upregulation of type I interleukin-1 receptor mRNA expression in hepatocytes of mice: role of cytokines. Ito A, et al. **J Interferon Cytokine Res** 1997 Jan;17(1):55-61

Role of glucocorticoid in the upregulation of type I interleukin-1 receptor mRNA expression in hepatocytes of endotoxin-administrated mice. Ito A, et al.
J Interferon Cytokine Res 1997 Jul;17(7):413-7

Effects of dexamethasone treatment on IL-1 receptor mRNA levels in vivo. Yu PW, et al. **J Leukoc Biol** 1997 Sep; 62(3):401-4

Interleukin-1 receptors type I and type II in the mouse brain: kinetics of mRNA expressions after peripheral administration of bacterial lipopolysaccharide. Gabellec MM, et al. **J Neuroimmunol** 1996 May;66(1-2):65-70

Induced upregulation of IL-1, IL-1RA and IL-1R type I gene expression by Schwann cells. Skundric DS, et al.
J Neuroimmunol 1997 Apr;74(1-2):9-18

The expression of interleukin-1 alpha, interleukin-1 beta, and interleukin-1 receptor type I mRNA during preimplantation mouse development. Takacs P, et al.
J Reprod Immunol 1996 Nov;32(1):27-35

Osteoclasts in normal and adjuvant arthritis bone tissues express the mRNA for both type I and II interleukin-1 receptors. Xu LX, et al. **Lab Invest** 1996 Nov;75(5):677-87

The Arabidopsis downy mildew resistance gene RPP5 shares similarity to the toll and interleukin-1 receptors with N and L6. Parker JE, et al. **Plant Cell** 1997 Jun;9(6):879-94

IMMUNOLOGY

Differential sensitivity to Escherichia coli infection in mice lacking tumor necrosis factor p55 or interleukin-1 p80 receptors. Acton RD, et al. **Arch Surg** 1996 Nov; 131(11):1216-21

The IL-1 system in HIV infection: peripheral concentrations of IL-1beta, IL-1 receptor antagonist and soluble IL-1 receptor type II. Kreuzer KA, et al. **Clin Exp Immunol** 1997 Jul;109(1):54-8

Cutaneous allergy to recombinant human type I IL-1 receptor (rhu IL-1RI). Grammer LC, et al.
J Allergy Clin Immunol 1997 May;99(5):714-5

An antibody to a 17 amino acid synthetic peptide of the type I interleukin-1 receptor preferentially blocks interleukin-1 beta binding. Clark BD, et al.
J Interferon Cytokine Res 1996 Dec;16(12):1079-88

Characterization of interleukin-1 alpha-induced melanoma cell motility: inhibition by type I and type II receptor-blocking monoclonal antibodies. Dekker SK, et al. **Melanoma Res** 1997 Jun;7(3):223-30

METABOLISM

Interleukin-1 and interleukin-1 receptor antagonist in inflammatory bowel disease. Cominelli F, et al.
Aliment Pharmacol Ther 1996;10 Suppl 2:49-53; discussion 54 (39 ref.)

Cytokines and T-lymphocyte subsets in healthy post-menopausal women: estrogen retards bone loss without affecting the release of IL-1 or IL-1ra. Abrahamsen B, et al. **Bone** 1997 Mar;20(3):251-8

Interleukin-1 receptor type I mRNA levels in brain regions from male and female rats. Gayle D, et al.
Brain Res Bull 1997;42(6):463-7

Type I IL-1 receptor: ligand specific confirmation differences and the role of glycosylation in ligand binding. Einstein R, et al. **Cytokine** 1996 Mar;8(3):206-13

Dual expression of p80 type I and p68 type II interleukin-I receptors on anterior pituitary cells synthesizing growth hormone. French RA, et al. **Endocrinology** 1996 Sep; 137(9):4027-36 (84 ref.)

The interleukin-1 receptor complex and interleukin-1 signal transduction. Martin MU, et al. **Eur Cytokine Netw** 1997 Mar;8(1):5-17 (65 ref.)

Local upregulation of corticotropin-releasing hormone and interleukin-1 receptors in rats with painful hindlimb inflammation. Mousa SA, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):221-31

The interleukin-1 receptor-associated kinase is degraded by proteasomes following its phosphorylation. Yamin TT, et al. **J Biol Chem** 1997 Aug 22;272(34):21540-7

Interleukin-1 beta, interleukin-1 receptor antagonist, and soluble interleukin-1 receptor type II secretion in chronic fatigue syndrome. Cannon JG, et al. **J Clin Immunol** 1997 May;17(3):253-61

Cytosolic domain of the type I interleukin-1 receptor spontaneously recruits signaling molecules to activate a proinflammatory gene. Singh R, et al. **J Clin Invest** 1997 Jul 15;100(2):419-28

TNF-alpha, unlike other pro- and anti-inflammatory cytokines, induces rapid release of the IL-1 type II decoy receptor in human myelomonocytic cells. Orlando S, et al. **J Immunol** 1997 Apr 15;158(8):3861-8

Down-regulation of surface receptors for TNF and IL-1 on circulating monocytes and granulocytes during human endotoxemia: effect of neutralization of endotoxin-induced TNF activity by infusion of a recombinant dimeric TNF receptor. van der Poll T, et al. **J Immunol** 1997 Feb 1; 158(3):1490-7

Particle concentration fluorescence as an alternative to radioactivity for cytokine receptor binding assays. Sarubbi E. **J Immunol Methods** 1996 Nov 13;198(2):113-8

Evidence for an intracellular activation loop in the IL-1 system. Hofmeister R, et al. **J Inflamm** 1995-96; 47(3):151-63

The internalized interleukin-1 activation complex in fibroblasts localizes to the Golgi apparatus. Praast G, et al. **J Inflamm** 1995-96;46(3):125-38

D-mannose dimer introduced human recombinant interleukin- 1 alpha, NEO IL-1 alpha, exhibits altered tissue distribution in mice. Takei Y, et al.
J Interferon Cytokine Res 1996 Apr;16(4):333-6

Interleukin-1 receptors type I and type II in the mouse brain: kinetics of mRNA expressions after peripheral

administration of bacterial lipopolysaccharide. Gabellec MM, et al. **J Neuroimmunol** 1996 May;66(1-2):65-70

Conformational dynamics and kinetics of peptide antagonist interactions with interleukin-1 receptor. Fluorescence studies using the NBD-labelled peptide AF12415. Cowley DJ, et al. **J Pept Res** 1997 May;49(5):444-54

Interleukin-1 receptors and receptor antagonist in haemodialysis. Donati D, et al. **Nephrol Dial Transplant** 1997 Jan;12(1):111-8

Age-related reciprocal modulation of interleukin-1beta and interleukin-1 receptors in the mouse brain-endocrine-immune axis. Takao T, et al. **Neuroimmunomodulation** 1996 Jul-Aug;3(4):205-12

IL-1 beta, IL-1 receptor type I and iNOS gene expression in rat brain vasculature and perivascular areas. Wong ML, et al. **Neuroreport** 1996 Nov 4;7(15-17):2445-8

A mechanism for the inhibition of fever by a virus. Alcamí A, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):11029-34

Ultraviolet light and osmotic stress: activation of the JNK cascade through multiple growth factor and cytokine receptors. Rosette C, et al. **Science** 1996 Nov 15; 274(5290):1194-7

Effect of inhaled glucocorticoids on IL-1 beta and IL-1 receptor antagonist (IL-1 ra) expression in asthmatic bronchial epithelium. Sousa AR, et al. **Thorax** 1997 May; 52(5):407-10

PHYSIOLOGY

IL-1 type I receptor mediates acute phase response to turpentine, but not lipopolysaccharide, in mice. Leon LR, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1668-75

Soluble receptors neutralizing TNF-alpha and IL-1 block stress-triggered murine abortion. Arck PC, et al. **Am J Reprod Immunol** 1997 Mar;37(3):262-6

Central interleukin-1 receptors as mediators of sickness. Kelley KW, et al. **Ann N Y Acad Sci** 1997 Aug 14; 823:234-46 (91 ref.)

Altered acute phase responses to inflammation in IL-1 and TNF receptor knockout mice. Leon LR, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:244-54

Effects of recombinant soluble type I interleukin-1 receptor on human inflammatory responses to endotoxin. Preas HL 2nd, et al. **Blood** 1996 Oct 1;88(7):2465-72

Interleukin-1 beta primes interleukin-8-stimulated chemotaxis and elastase release in human neutrophils via its type I receptor. Brandolini L, et al. **Eur Cytokine Netw** 1997 Jun;8(2):173-8

A critical role for interleukin-1 receptor accessory protein in interleukin-1 signaling. Korherr C, et al. **Eur J Immunol** 1997 Jan;27(1):262-7

The afferent discharges from sensors for interleukin 1 beta in the hepatoportal system in the anesthetized rat. Niijima A. **J Auton Nerv Syst** 1996 Dec 14;61(3):287-91

Human IL-1Ra gene transfer into human synovial fibroblasts is chondroprotective. Müller-Ladner U, et al. **J Immunol** 1997 Apr 1;158(7):3492-8

Central mediation of the effects of interleukin-1 on social exploration and body weight in mice. Bluthé RM, et al. **Psychoneuroendocrinology** 1997 Jan;22(1):1-11

RADIATION EFFECTS

Interleukin-1 receptors type I and type II are differentially regulated in human keratinocytes by ultraviolet B radiation. Grewe M, et al. **J Invest Dermatol** 1996 Dec;107(6):865-70

RECEPTORS, INTERLEUKIN-2

Coupling of the IL2 receptor complex with non-receptor protein tyrosine kinases. Miyazaki T, et al. **Cancer Surv** 1996;27:25-40 (72 ref.)

Highly purified CD25- resting T cells cannot be infected de novo with HIV-1. Chou CS, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1361-5

[Interleukin-2 receptor] Takakura K. **Nippon Rinsho** 1997 Apr;55 Suppl 2:520-5 (6 ref.) **(Jpn)**

ANALYSIS

T-helper 2 type cytokine and soluble interleukin-2 receptor levels in seminal plasma of infertile men. Paradisi R, et al. **Am J Reprod Immunol** 1997 Aug;38(2):94-9

Membrane antigen and ligand receptor expression on neonatal monocytes. El-Mohandes AA, et al. **Biol Neonate** 1995;68(5):308-17

Serum soluble interleukin 2 receptor in hemodialysis patients treated with recombinant human erythropoietin. Sennesael JJ, et al. **Blood Purif** 1995 Nov-Dec;13(6):347-56

Relapse of acute myelogenous leukemia during low dose interleukin-2 (IL-2) therapy. Phenotypic evolution associated with strong expression of the IL-2 receptor alpha chain. Spiekermann K, et al. **Cancer** 1995 Apr 1; 75(7):1594-7

An in situ quantitative immunohistochemical study of cytokines and IL-2R+ in chronic human chagasic myocarditis: correlation with the presence of myocardial Trypanosoma cruzi antigens. Reis MM, et al. **Clin Immunol Immunopathol** 1997 May;83(2):165-72

Comparative value of urinalysis, urine cytology and urine sIL2R in the assessment of renal disease in patients with systemic lupus erythematosus (SLE). Roberti I, et al. **Clin Nephrol** 1996 Sep;46(3):176-82

Soluble interleukin-2 receptors and serum autoantibodies in dry eye patients: correlation with lacrimal gland function. Tsubota K, et al. **Cornea** 1997 May;16(3):339-44

Fibroblast dependency during early thymocyte development maps to the CD25+ CD44+ stage and involves interactions with fibroblast matrix molecules. Anderson G, et al. **Eur J Immunol** 1997 May;27(5):1200-6

Autoimmune phenomena and activation of the immune system in HIV infection [letter] Radkowski M, et al. **Infection** 1996 Jan-Feb;24(1):56

Increased expression of interleukin-2 receptor alpha on peripheral blood mononuclear cells in HTLV-I tax/rex mRNA-positive asymptomatic carriers. Okayama A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):70-5

Distribution of IL-15 receptor alpha-chains on human peripheral blood mononuclear cells and effect of immunosuppressive drugs on receptor expression. Chae DW, et al. **J Immunol** 1996 Oct 1;157(7):2813-9

T cell deletion induced by chronic infection with mouse mammary tumor virus spares a CD25-positive, IL-10-producing T cell population with infectious capacity. Papiernik M, et al. **J Immunol** 1997 May 15; 158(10):4642-53

Usefulness of soluble interleukin-2 receptor specificity [letter; comment] Wyman ML, et al. **J Pediatr** 1996 Mar; 128(3):445-6. Comment on: J Pediatr 1995 Jun;126(6):982-5.

The lymphocyte and macrophage profile in the pancreas and spleen of NOD mice: percentage of interleukin-2 and prolactin receptors on immunocompetent cell subsets. Hawkins TA, et al. **J Reprod Immunol** 1996 Nov; 32(1):55-71

The monitoring biomarker for immune function of lymphocytes in the elderly. Liu J, et al. **Mech Ageing Dev** 1997 Mar;94(1-3):177-82

Interleukin-10, interferon gamma, interleukin-2, and soluble interleukin-2 receptor alpha detected during peritonitis in the dialysate and serum of patients on continuous ambulatory peritoneal dialysis. Lu Y, et al. **Perit Dial Int** 1996 Nov-Dec;16(6):607-12

Interleukin-6 and soluble interleukin-2 receptor in juvenile chronic arthritis: correlations with clinical and laboratory parameters [see comments] Spadaro A, et al. **Rev Rhum Engl Ed** 1996 Mar;63(3):171-7. Comment in: Rev Rhum Engl Ed 1996 Mar;63(3):153-8.

Adhesion molecules and activation markers in acute rejection of human renal allografts. von Willebrand E, et al. **Transpl Immunol** 1996 Mar;4(1):57-8

A critical analysis of soluble interleukin-2 receptor levels in kidney allograft recipients. Kaden J, et al. **Transpl Int** 1996;9 Suppl 1:S63-7

BT563 significantly decreases sIL-2R plasma levels despite acute allograft rejection. Mueller AR, et al. **Transplant Proc** 1996 Dec;28(6):3103-5

Value of circulating immune parameters in renal transplantation. Rebhandl W, et al. **Transplant Proc** 1997 May;29(3):1881-5

Immunohistological study on bovine lymph node using monoclonal antibodies to interleukin-2 receptor. Asahina M, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):411-3

Detection of Mycobacterium bovis infection in cattle using an immunoassay for bovine soluble interleukin-2 receptor-alpha (sIL-2R-alpha) produced by peripheral blood T-lymphocytes following incubation with tuberculin PPD. Nuallàin EM, et al. **Vet Immunol Immunopathol** 1997 May;56(1-2):65-76

[Eosinophil colony stimulating factor (Eo-CSF) activity and soluble interleukin-2 receptor (sIL-2R) in patients with reactive eosinophilia] Watanabe K, et al. **Arerugi** 1995 Nov; 44(11):1317-21 (Eng. Abstr.) **(Jpn)**

[Common gamma chains for cytokine receptors] Nakamura M. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Dec; 19(6):623-8 (30 ref.) **(Jpn)**

[The clinical significance of the measurement of serum soluble interleukin-2 receptors in various diseases] Sugimoto H, et al. **Rinsho Byori** 1996 Feb;44(2):176-82 (Eng. Abstr.) **(Jpn)**

[Clinical significance of serum soluble interleukin-2 receptor (sIL-2R) determination in patients with rheumatoid arthritis] Takemura M, et al. **Rinsho Byori** 1996 Jun; 44(6):564-8 (Eng. Abstr.) **(Jpn)**

[Soluble interleukin-2 receptor and macrophage colony-stimulating factor (M-CSF) in cerebrospinal fluid in patients with hematological malignancies: clinical significance in adult T-cell leukemia with meningeal infiltration] Tanaka K, et al. **Rinsho Ketsueki** 1996 Jul; 37(7):610-7 (Eng. Abstr.) **(Jpn)**

[Coexpression of CD4 and CD8 antigens and the appearance of HLA-DR and CD25 receptors on lymphocytes as markers of immune activation in patients with HIV infection] Radkowski M, et al. **Pol Merkuriusz Lek** 1996 Nov;1(5):325-6 (Eng. Abstr.) **(Pol)**

[Comparative study of soluble interleukin 2 receptor and adenosine deaminase levels in tuberculous and other etiologies pleural fluids] Avilés Inglés MJ, et al. **Arch Bronconeumol** 1996 Dec;32(10):523-6 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Identification and characterization of two alternative splice variants of human interleukin-2. Tsytsikov VN, et al. **J Biol Chem** 1996 Sep 20;271(38):23055-60

[Quadruple induction therapy after liver transplantation with ATG or interleukin-2 receptor antibody BT563. A prospective randomized study] Langrehr JM, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:673-6 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Functional IL-2 receptors are expressed by rat lung type II epithelial cells. Lesur O, et al. **Am J Physiol** 1997 Sep; 273(3 Pt 1):L495-503

Impaired CD25 expression and soluble CD25-IL-2R alpha receptor release by anti-CD3 stimulated peripheral blood mononuclear cells in Hodgkin's disease patients. Frydecka I, et al. **Arch Immunol Ther Exp (Warsz)** 1996; 44(2-3):127-30

T cell antigen receptor dependent signalling in human lymphocytes: cholera toxin inhibits interleukin-2 receptor expression but not interleukin-2 synthesis by preventing activation of a protein kinase C isotype, PKC-alpha. Szamel M, et al. **Biochim Biophys Acta** 1997 Apr 24; 1356(2):237-48

The antineoplastic agent bryostatin-1 induces proinflammatory cytokine production in human monocytes: synergy with interleukin-2 and modulation of interleukin-2Rgamma chain expression. Bosco MC, et al. **Blood** 1997 May 1;89(9):3402-11

Early calcium signaling and calcium requirements for the IL-2 receptor expression and IL-2 production in stimulated lymphocytes. Komada H, et al. **Cell Immunol** 1996 Nov 1;173(2):215-20

Different expression of IL-2 receptor alpha-chain on a lamina propria T cell population and goblet cells in rats orally tolerized or sensitized to ovalbumin (OA) after colonization with an OA-producing Escherichia coli. Dahlman-Höglund A, et al. **Clin Exp Immunol** 1996 Dec; 106(3):534-40

Expression of interleukin-15 and its receptor by human fetal retinal pigment epithelial cells. Kumaki N, et al. **Curr Eye Res** 1996 Aug;15(8):876-82

Suppression of dialysis patients' lymphocyte IL-2R expression by glucocorticoids and cyclosporine. Briggs WA, et al. **Cytokine** 1997 Aug;9(8):624-8

Induction of CD25 expression in human B lymphocytes by pharmacological activators of cellular signalling pathways. McKay CE, et al. **Cytokine** 1996 Apr;8(4):305-12

A purified protein from Salmonella typhimurium inhibits high-affinity interleukin-2 receptor expression on CTLL-2 cells. Arai T, et al. **FEMS Immunol Med Microbiol** 1997 Mar;17(3):155-60

Halothane inhibits T cell proliferation and interleukin-2 receptor expression in rats. Hamra JG, et al. **Immunopharmacol Immunotoxicol** 1996 May;18(2):323-36

Expression of the IL-2 receptor gamma subunit in resting human CD4 T lymphocytes: mRNA is constitutively transcribed and the protein stored as an intracellular component. Bani L, et al. **Int Immunol** 1997 Apr; 9(4):573-80

Ligand-induced autoregulation of IL-2 receptor alpha chain expression in murine T cell lines. Demaison C, et al. **Int Immunol** 1996 Oct;8(10):1521-8

CD28 co-stimulatory signals induce IL-2 receptor expression on antigen-stimulated virgin T cells by an IL-2-independent mechanism. Toyooka K, et al. **Int Immunol** 1996 Feb;8(2):159-69

Effects of in vivo thyroid hormone treatment on the expression of interleukin-2 receptors on avian splenocytes. Chandratilleke D, et al. **Int J Immunopharmacol** 1996 Mar; 18(3):203-10

Human fibroblasts express functional IL-2 receptors formed by the IL-2R alpha- and beta-chain subunits: association of IL-2 binding with secretion of the monocyte chemoattractant protein-1. Gruss HJ, et al. **J Immunol** 1996 Jul 15;157(2):851-7

Effect of space flight on cytokine production and other immunologic parameters of rhesus monkeys. Sonnenfeld G, et al. **J Interferon Cytokine Res** 1996 May;16(5):409-15

Diminished production of type-I interferons and interleukin-2 in patients with multiple sclerosis. Wandinger KP, et al. **J Neurol Sci** 1997 Jul;149(1):87-93

An analysis of the uterine lymphocyte-derived hybridoma cell line GWM 1-2 for expression of receptors for estrogen, progesterone and interleukin 2. van den Heuvel M, et al. **J Reprod Immunol** 1996 Aug;31(1-2):37-50

Analysis of IL-2, IL-4 and their receptors in clonally-related cell lines derived from a patient with a progressive cutaneous T-cell lymphoproliferative disorder. Wasik MA, et al. **Leuk Lymphoma** 1996 Sep;23(1-2):125-36

Signal sequence trap. Expression cloning method for secreted proteins and type 1 membrane proteins. Tashiro K, et al. **Methods Mol Biol** 1997;69:203-19

Suppression of mitogen-induced IL-2R alpha expression in PBL by serum from microfilaraemic rats chronically infected with Brugia pahangi. Satoh M, et al. **Parasitology** 1997 Jan;114 (Pt 1):65-9

Increased cAMP and cAMP-dependent protein kinase activity mediate anti-CD2 induced suppression of anti-CD3-driven interleukin-2 production and CD25 expression. Lin J, et al. **Pathobiology** .1995;63(4):175-87

IL-2 receptor gamma chain expression on CD34 positive hematopoietic progenitor cells from bone marrow and cord blood. Itano M, et al. **Tohoku J Exp Med** 1996 Apr;

178(4):389–98

Rat renal allograft tolerance is associated with local TGF-beta and absence of IL-2r expression within chimeric immunocytic foci. Hewitt CW, et al. **Transplant Proc** 1997 Jun;29(4):2183–4

Role of in situ IL-2r and TGF-beta expression in tolerant vascularized bone marrow (limb) transplant chimeras. Tatem LD, et al. **Transplant Proc** 1997 Jun;29(4):2194–5

Detection of Mycobacterium bovis infection in cattle using an immunoassay for bovine soluble interleukin-2 receptor-alpha (sIL-2R-alpha) produced by peripheral blood T-lymphocytes following incubation with tuberculin PPD. Nualláin EM, et al. **Vet Immunol Immunopathol** 1997 May;56(1–2):65–76

Effect of bovine herpesvirus-1 on expression of interleukin-2 receptors and effect of interleukin-12 on lymphocyte proliferation. Lan HC, et al. **Vet Microbiol** 1996 Mar; 49(1–2):59–66

Development of a sandwich immunoassay for the detection of soluble bovine interleukin-2 receptor-alpha (sIL-2R-alpha) and its use to measure cell-mediated immunity in cattle. Nualláin EM, et al. **Vet Res Commun** 1997 Jan;21(1):19–28

Measles virus infection of human T cells modulates cytokine generation and IL-2 receptor alpha chain expression. Bell AF, et al. **Virology** 1997 Jun 9;232(2):241–7

[Effect of dexamethasone on the human interleukin-2 receptor alpha chain gene expression] Guan Z, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):89–94 (Eng. Abstr.) **(Chi)**

BLOOD

Soluble interleukin-2 receptor (sIL-2R) is a marker of disease activity in psoriasis: a comparison of sIL-2R, sCD27, sCD4, sCD8 and sICAM-1. De Rie MA, et al. **Acta Derm Venereol** 1996 Sep;76(5):357–60

Clinical significance of soluble interleukin-2 receptor. Chrobák L. **Acta Medica (Hradec Kralove)** 1996;39(1):3–6 (42 ref.)

Serum levels of specific IgE, soluble interleukin-2 receptor, and soluble intercellular adhesion molecule-1 in seasonal allergic rhinitis. Ohashi Y, et al. **Ann Allergy Asthma Immunol** 1997 Sep;79(3):213–20

Serum cytokine and soluble interleukin-2 receptors in patients with panic disorder. Rapaport MH, et al. **Anxiety** 1994;1(1):22–5

Serum interleukin-2 and soluble interleukin-2 receptor levels in generalized social phobia. Rapaport MH, et al. **Anxiety** 1994;1(2):50–3

Immunological responses to respiratory syncytial virus infection in infancy. Smyth RL, et al. **Arch Dis Child** 1997 Mar;76(3):210–4

Smoking affects plasma-soluble interleukin-2 receptor levels in patients with schizophrenia [letter; comment] Pollmächer T, et al. **Arch Gen Psychiatry** 1997 Jan;54(1):89–90. Comment on: Arch Gen Psychiatry 1995 Aug;52(8):668–72.

Serum soluble interleukin 2 receptor alpha and soluble CD8 levels in patients with gynecological malignancies undergoing radiotherapy. Frydecka I, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(2–3):123–6

Circulating levels of IL-2R, ICAM-1, and IL-6 in spinal cord injuries. Segal JL, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):44–7

Soluble interleukin-2 receptor in primary and secondary Sjögren's syndrome. Tomás S, et al. **Br J Rheumatol** 1997 Feb;36(2):194–7

Soluble interleukin-2 receptor serum level as a predictor of locoregional control and survival for patients with head and neck carcinoma: results of a multivariate prospective study. Tartour E, et al. **Cancer** 1997 Apr 1;79(7):1401–8

Cytokines (IL-6, TNF-alpha, IL-1alpha) and soluble interleukin-2 receptor as serum tumor markers in multiple myeloma. Filella X, et al. **Cancer Detect Prev** 1996; 20(1):52–6

Steroid-resistant asthma immunologic characteristics. Sun Y, et al. **Chin Med J (Engl)** 1996 Jul;109(7):527–32

Serum-soluble interleukin-2 receptor in acute myocardial infarction and in acute heart failure [letter; comment] Blum A, et al. **Circulation** 1997 Mar 18;95(6):1670–1. Comment on: Circulation 1995 Feb 1;91(3):631–4.

Interleukin-6 and soluble interleukin-2-receptor in psoriatic arthritis: correlations with clinical and laboratory parameters. Spadaro A, et al. **Clin Exp Rheumatol** 1996 Jul-Aug;14(4):413–6

Increased soluble interleukin-2 receptor concentrations in patients with insulin-dependent diabetes mellitus [letter] Netea MG, et al. **Diabet Med** 1997 Feb;14(2):168

The soluble interleukin-2 receptor as an indicator of clinical evolution in patients with ulcerative colitis. Balzano A, et al. **Eur J Gastroenterol Hepatol** 1997 Feb;9(2):173–7

Soluble and membrane bound IL-2 receptors (alpha and beta chains) in chronic hemodialyzed patients. Koziol-Montewka M, et al. **Folia Histochem Cytobiol** 1997; 35(2):79–80

Elevation of serum soluble interleukin-2 receptor levels in patients with hepatitis C virus infection. Kawakami Y, et al. **Fukuoka Igaku Zasshi** 1997 Jul;88(7):274–82

Changes in lymphocyte subsets, interleukin 2, and soluble interleukin 2 receptor in old and very old age. Rea IM, et al. **Gerontology** 1996;42(2):69–78

Detection of soluble receptors for tumor necrosis factor, interleukin-2 and interleukin-6 in retroplacental serum from normal pregnant women. Lien E, et al. **Gynecol Obstet Invest** 1996;41(1):1–4

The serum levels of soluble interleukin-2 receptor levels in patients with obstructive jaundice. Yüceyar H, et al. **Hepatogastroenterology** 1996 Jul-Aug;43(10):949–53

Serum levels of interleukins 2, 6 and 8, soluble interleukin-2 receptor and intercellular adhesion molecule-1 during treatment with interleukin-2 plus interferon-alfa. Vuoristo MS, et al. **Immunopharmacol Immunotoxicol** 1996 Aug; 18(3):337–54

Serial cytokine changes in peritoneal effluent and plasma during peritonitis in patients on continuous ambulatory peritoneal dialysis (CAPD). Koziol-Montewka M, et al. **Inflamm Res** 1997 Apr;46(4):132–6

Circulating immunostimulatory protein 90K and soluble interleukin-2-receptor in human ovarian cancer. Zeimet AG, et al. **Int J Cancer** 1996 Sep 27;68(1):34–8

Clinical significance of serum soluble interleukin-2 receptor in chronic myeloproliferative disorders. Kawatani T, et al. **Int J Hematol** 1997 Feb;65(2):123–8

The soluble interleukin-2 receptor, peripheral blood, and reticulocyte fractions in acute pancreatitis. Salomone T, et al. **Int J Pancreatol** 1996 Dec;20(3):197–203

Influence of some immune factors on the IL-6 and soluble IL-2 receptors in haemodialysed patients. Koziol-Montewka M, et al. **Int Urol Nephrol** 1997; 29(3):369–75

Serum interleukin 2 and soluble interleukin 2 receptor in chronic active hepatitis C: effect of interferon therapy. Simsek H, et al. **J Int Med Res** 1996 May-Jun;24(3):239–45

Circulating interleukin-2 receptors are a group of multimeric proteins with immunoreactivity for interleukin-2 receptor alpha, beta, and gamma chains. Dummer R, et al. **J Interferon Cytokine Res** 1996 Apr;16(4):315–20

Elevation of serum interleukin-6 but not serum-soluble interleukin-2 receptor in children with Crohn's disease. Bross DA, et al. **J Pediatr Gastroenterol Nutr** 1996 Aug; 23(2):164–71

Interleukin-2 receptor levels in sera of patients with rheumatoid arthritis treated with sulfasalazine, parenteral gold, or placebo. Merkel PA, et al. **J Rheumatol** 1996 Nov; 23(11):1856–61

Serum concentrations of neopterin, soluble interleukin 2 receptor, and soluble tumor necrosis factor receptor in Wegener's granulomatosis. Nassonov EL, et al. **J Rheumatol** 1997 Apr;24(4):666–70

Soluble interleukin 2 receptors and treatment with hydroxychloroquine in erosive osteoarthritis [letter] Punzi L, et al. **J Rheumatol** 1996 Aug;23(8):1477–8

Circulating interleukin 2 receptor (IL2R) in nephrotic syndrome. Hulton SA, et al. **Kidney Int Suppl** 1997 Mar; 58:S83–4 (15 ref.)

The clinical significance of serum soluble interleukin-2 receptors in lung cancer. Yano T, et al. **Lung Cancer** 1996 Aug;15(1):79–84

Age-related tyrosine-specific protein phosphorylation defect in human T lymphocytes activated through CD3, CD4, CD8 or the IL-2 receptor. Quadri RA, et al. **Mech Ageing Dev** 1996 Jul 17;88(3):125–38

Simultaneous measurement of serum 5-S-cysteinyldopa, circulating intercellular adhesion molecule-1 and soluble interleukin-2 receptor levels in Japanese patients with malignant melanoma. Hasegawa M, et al. **Melanoma Res** 1997 Jun;7(3):243–51

Serum soluble IL-2 receptor as a reliable and noninvasive marker of disease activity in patients with hairy cell leukemia. Chrobák L, et al. **Neoplasma** 1996;43(5):321–5

Serum-soluble IL-2 receptor and IL-6 levels in patients with melanoma. Boyano MD, et al. **Oncology** 1997 Sep-Oct; 54(5):400–6

Serum levels of the soluble low affinity receptor for IgE and soluble interleukin-2 receptor in childhood, and their relation to age, gender, atopy and allergic disease. Miller AL, et al. **Pediatr Allergy Immunol** 1996 May;7(2):68–74

Increased production of interleukin-2 (IL-2) but not soluble interleukin-2 receptors (sIL-2R) in unmedicated patients with schizophrenia and schizophreniform disorder. O'Donnell MC, et al. **Psychiatry Res** 1996 Dec 20; 65(3):171–8

Occupational levels of radiation exposure induce surface expression of interleukin-2 receptors in stimulated human peripheral blood lymphocytes. Xu Y, et al. **Radiat Environ Biophys** 1996 May;35(2):89–93

Clinical value of cytokine antagonists in infectious complications. Iwagaki H, et al. **Res Commun Mol Pathol Pharmacol** 1997 Apr;96(1):25–34

Immunological status of ENL (erythema nodosum leprosum) patients: its relationship to bacterial load and levels of circulating IL-2R. Vieira LM, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar-Apr;38(2):103–11

Relationship of soluble interleukin-2-receptor and interleukin-6 with class-specific rheumatoid factors during low-dose methotrexate treatment in rheumatoid arthritis. Spadaro A, et al. **Rev Rhum Engl Ed** 1997 Feb;64(2):89–94

Serum level of soluble interleukin-2 receptor in patients with seasonal allergic rhinitis. Ohashi Y, et al. **Scand J Immunol** 1997 Mar;45(3):315–21

Lower plasma CC16, a natural anti-inflammatory protein, and increased plasma interleukin-1 receptor antagonist in schizophrenia: effects of antipsychotic drugs. Maes M, et al. **Schizophr Res** 1996 Jul;21(1):39–50

Soluble interleukin 2 receptor and soluble CD8 levels in previously treated human immunodeficiency virus-negative hemophiliacs multiply transfused with a monoclonal antibody-purified factor VIII concentrate. Smid WM, et al. **Transfusion** 1997 Jan;37(1):86–9

Sequential monitoring of urine-soluble interleukin 2 receptor and interleukin 6 predicts acute rejection of human renal allografts before clinical or laboratory signs of renal dysfunction. Casiraghi F, et al. **Transplantation** 1997 May 27;63(10):1508–14

[Study on the level of soluble interleukin-2 receptor, expression of membrane interleukin-2 receptor and T lymphocyte subpopulations in pulmonary tuberculosis] Liu C, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1996 Feb;19(1):44–6 (Eng. Abstr.) **(Chi)**

[Level and significance of the soluble interleukin-2 receptor expression in serum of patients with bladder cancer] Wen R, et al. **Chung Hua Wai Ko Tsa Chih** 1996 Jan;34(1):16–8 (Eng. Abstr.) **(Chi)**

[Effect of acupuncture on immunomodulation in patients with malignant tumors] Wu B, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Mar; 16(3):139–41 (Eng. Abstr.) **(Chi)**

[Changes in the cytokine concentration (Il-6, Il-8, Il-1ra) and their cellular expression of membrane molecules (CD25, CD30, HLA-DR) after surgical trauma] Decker D, et al. **Zentralbl Chir** 1997;122(3):157–63; discussion 163–4 (Eng. Abstr.) **(Ger)**

[The role of serum soluble interleukin 2 receptor (sIL-2R) levels in patients with renal cell carcinoma] Akiyama K, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Apr; 88(4):473–8 (Eng. Abstr.) **(Jpn)**

[Relationship between severity of farmer's lung and the level of soluble interleukin 2 receptors in serum] Fukuzawa J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):978–82 (Eng. Abstr.) **(Jpn)**

[Diagnostic value of serum soluble interleukin-2 receptor levels in interstitial pneumonia of the patients with hematological disorders] Kohda K, et al. **Rinsho Ketsueki** 1997 Feb;38(2):146–8 (Eng. Abstr.) **(Jpn)**

[The serum level of soluble interleukin-2 receptors in patients with rheumatoid arthritis] Medvedev AN, et al. **Ter Arkh** 1996;68(5):24–7 (Eng. Abstr.) **(Rus)**

[Activation of cellular immunity in Wegener's granulomatosis: a study of neopterin, interleukin-2 receptors and tumor necrosis factor] Nasonov EL, et al. **Ter Arkh** 1996;68(11):67–70 **(Rus)**

CHEMISTRY

Interleukin-2 (IL-2) upregulates BAG-1 gene expression through serine-rich region within IL-2 receptor beta c chain. Adachi M, et al. **Blood** 1996 Dec 1;88(11):4118–23

Identification and cellular distribution of the rat interleukin-2 receptor beta chain: induction of the IL-2R alpha- beta+ phenotype by major histocompatibility complex class I recognition during T cell development in vivo and by T cell receptor stimulation of CD4+8+ immature thymocytes in vitro. Park JH, et al. **Eur J Immunol** 1996 Oct;26(10):2371–5

Characterization of interleukin-15 (IL-15) and the IL-15 receptor complex. Kennedy MK, et al. **J Clin Immunol** 1996 May;16(3):134–43 (56 ref.)

DEFICIENCY

Interleukin-15 signals T84 colonic epithelial cells in the absence of the interleukin-2 receptor beta-chain. Stevens AC, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1201–8

Bcl-2 rescues T lymphopoiesis, but not B or NK cell development, in common gamma chain-deficient mice. Kondo M, et al. **Immunity** 1997 Jul;7(1):155–62

Lymphohaematopoietic abnormalities and systemic lymphoproliferative disorder in interleukin-2 receptor gamma chain-deficient mice. Ikebe M, et al. **Int J Exp Pathol** 1997 Jun;78(3):133–48

Functional responses and apoptosis of CD25 (IL-2R alpha)-deficient T cells expressing a transgenic antigen receptor. Van Parijs L, et al. **J Immunol** 1997 Apr 15; 158(8):3738–45

DRUG EFFECTS

Interleukin-2 receptor-specific fusion toxin inhibits barotrauma-induced arterial atherosclerosis. Miller DD, et al. **Atherosclerosis** 1996 Sep 27;126(1):1–14

De novo malignancies after liver transplantation using tacrolimus-based protocols or cyclosporine-based quadruple immunosuppression with an interleukin-2 receptor antibody or antithymocyte globulin. Jonas S, et al. **Cancer** 1997 Sep 15;80(6):1141–50

Retinoid regulation of interleukin-2 receptors on human T-cells. Sidell N, et al. **Cell Immunol** 1997 Aug 1; 179(2):116–25

Halothane inhibits T cell proliferation and interleukin-2 receptor expression in rats. Hamra JG, et al. **Immunopharmacol Immunotoxicol** 1996 May;18(2):323–36

Retinoic acid-induced modulation of IL-2 mRNA production and IL-2 receptor expression on T cells. Ballow M, et al. **Int Arch Allergy Immunol** 1997 May-Jul; 113(1–3):167–9

Ligand-induced autoregulation of IL-2 receptor alpha chain expression in murine T cell lines. Demaison C, et al. **Int Immunol** 1996 Oct;8(10):1521–8

The promiscuous IL-2/IL-15 receptor: a target for immunotherapy of HTLV-I-associated disorders. Waldmann TA.
J Acquir Immune Defic Syndr Hum Retrovirol 1996;13 Suppl 1:S179–85 (43 ref.)

Suppression of lymphocyte interleukin-2 receptor expression by glucocorticoids, cyclosporine, or both. Briggs WA, et al. **J Clin Pharmacol** 1996 Oct;36(10):931–7

Evaluation of dithiol chelating agents as potential adjuvants for anti-IL-2 receptor lead or bismuth alpha radioimmunotherapy. Jones SB, et al. **Nucl Med Biol** 1996 Feb;23(2):105–13

GENETICS

Regulation of interleukin-2 receptor gamma chain mRNA expression in human monocytic cell line THP-1. Yanai H, et al. **Acta Med Okayama** 1996 Jun;50(3):145–50

Genes for interleukin-2 receptor beta chain, interleukin-1 beta, and schizophrenia: no evidence for the association or linkage. Tatsumi M, et al. **Am J Med Genet** 1997 May 31;74(3):338–41

Differential regulation of the expression of interleukin-2 receptor gamma-chain during the in vitro differentiation of human myeloid cells. Morrone G, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):909–14

A 15-base acridine-conjugated oligodeoxynucleotide forms triplex DNA with its IL-2R alpha promoter target with greatly improved avidity. Klysik J, et al.
Bioconjug Chem 1997 May-Jun;8(3):318–26

Mutation analysis of IL2RG in human X-linked severe combined immunodeficiency. Puck JM, et al. **Blood** 1997 Mar 15;89(6):1968–77

The alpha chain of the IL-2 receptor determines the species specificity of high-affinity IL-2 binding. Liu KD, et al. **Cytokine** 1996 Aug;8(8):613–21

Quantification of IL-2 and IL-2 receptor mRNA in peripheral blood mononuclear cells by the RT-PCR based SHARP Signal system. Lee BN, et al.
Cytokines Cell Mol Ther 1997 Mar;3(1):33–40

Induction of interleukin-2 receptor alpha gene by delta9-tetrahydrocannabinol is mediated by nuclear factor kappaB and CB1 cannabinoid receptor. Daaka Y, et al. **DNA Cell Biol** 1997 Mar;16(3):301–9

An IL-2 response element in the human IL-2 receptor alpha chain promoter is a composite element that binds Stat5, Elf-1, HMG-I(Y) and a GATA family protein. John S, et al. **EMBO J** 1996 Oct 15;15(20):5627–35

Interleukin-2 receptor gamma-chain mutations in severe combined immunodeficiency with B-lymphocytes. Tsuge I, et al. **Eur J Pediatr** 1996 Dec;155(12):1018–24

B-cell-negative severe combined immunodeficiency associated with a common gamma chain mutation. Jones AM, et al. **Hum Genet** 1997 May;99(5):677–80

Carrier and prenatal diagnosis of X-linked severe combined immunodeficiency: mutation detection methods and utilization. Puck JM, et al. **Hum Genet** 1997 May; 99(5):628–33

IL2RGbase: a database of gamma c-chain defects causing human X-SCID. Puck JM. **Immunol Today** 1996 Nov; 17(11):507–11

Interleukin-2 (IL-2)-mediated induction of the IL-2 receptor alpha chain gene. Critical role of two functionally redundant tyrosine residues in the IL-2 receptor beta chain cytoplasmic domain and suggestion that these residues mediate more than Stat5 activation. Ascherman DP, et al. **J Biol Chem** 1997 Mar 28;272(13):8704–9

Maternal mosaicism for a novel interleukin-2 receptor gamma-chain mutation causing X-linked severe combined immunodeficiency in a Navajo kindred. O'Marcaigh AS, et al. **J Clin Immunol** 1997 Jan;17(1):29–33

Elf-1 contributes to the function of the complex interleukin (IL)-2-responsive enhancer in the mouse IL-2 receptor alpha gene. Serdobova I, et al. **J Exp Med** 1997 Apr 7; 185(7):1211–21

Elf-1 and Stat5 bind to a critical element in a new enhancer of the human interleukin-2 receptor alpha gene. Lécine P, et al. **Mol Cell Biol** 1997 Apr;17(4):2351

Elf-1 and Stat5 bind to a critical element in a new enhancer of the human interleukin-2 receptor alpha gene. Lécine P, et al. **Mol Cell Biol** 1996 Dec;16(12):6829–40

The immediate-early gene product Egr-1 regulates the human interleukin-2 receptor beta-chain promoter through noncanonical Egr and Sp1 binding sites. Lin JX, et al. **Mol Cell Biol** 1997 Jul;17(7):3714–22

Atypical X-linked severe combined immunodeficiency due to possible spontaneous reversion of the genetic defect in T cells. Stephan V, et al. **N Engl J Med** 1996 Nov 21; 335(21):1563–7

Human immune disorder arising from mutation of the alpha chain of the interleukin-2 receptor. Sharfe N, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3168–71

Expression of soluble human interleukin-2 receptor alpha-chain in Escherichia coli. Dracheva S, et al. **Protein Expr Purif** 1995 Dec;6(6):737–47

Expression of the mouse interleukin-2 receptor gamma chain in insect cells using a baculovirus expression vector--comparison with the human common gamma chain. Stenroos K, et al. **Scand J Immunol** 1997 Feb; 45(2):140–4

Differential levels of mRNAs for cytokines, the interleukin-2 receptor and class II DR/DQ genes in ovine interstitial pneumonia induced by maedi visna virus infection. Woodall CJ, et al. **Vet Pathol** 1997 May;34(3):204–11

[IL-2, IL-2R mRNA gene expression and protein production] Li Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jul;76(7):505–8 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Interleukin-2 receptor signaling mechanisms. Karnitz LM, et al. **Adv Immunol** 1996;61:147–99 (255 ref.)

Rapid expression of the CD69 antigen on T cells and natural killer cells upon antigenic stimulation of peripheral blood mononuclear cell suspensions. Werfel T, et al. **Allergy** 1997 Apr;52(4):465–9

Phage-displayed Fab fragments against anti-human interleukin-2 receptor alpha. Detection of antigen-bound phages with anti-cpIII monoclonal antibodies. Raivio E, et al. **APMIS** 1997 Feb;105(2):108–14

Therapy of streptozotocin induced diabetes with a bifunctional antibody that delivers vinca alkaloids to IL-2 receptor positive cells. Kuus-Reichel K, et al.
Autoimmunity 1995;22(3):173–81

Biodistribution and catabolism of Ga-67-labeled anti-Tac dsFv fragment. Wu C, et al. **Bioconjug Chem** 1997 May-Jun;8(3):365–9

A phase-I study of an anti-CD25 ricin A-chain immunotoxin (RFT5-SMPT-dgA) in patients with refractory Hodgkin's lymphoma. Engert A, et al. **Blood** 1997 Jan 15;89(2):403–10

Inhibition of interleukin-2 receptor (CD25) expression induced on T cells from children with acute lymphoblastic leukemia. Zhang XL, et al.
Cancer Immunol Immunother 1997 Mar;44(1):41–7

Immunotherapy for cancer: construction, expression and functional characterization of chimeric antibodies. Motmans K, et al. **Eur J Cancer Prev** 1996 Dec;5(6):512–9

Interleukin 2 and its receptors: recent advances and new immunological functions [see comments] Thèze J, et al. **Immunol Today** 1996 Oct;17(10):481–6 (39 ref.). Comment in: Immunol Today 1997 May;18(5):254.

Humanized antibodies against the alpha-chain of the IL-2 receptor and against the beta-chain shared by the IL-2 and IL-15 receptors in a monkey uveitis model of autoimmune diseases. Guex-Crosier Y, et al. **J Immunol** 1997 Jan 1;158(1):452–8

Tumor-induced suppression of T lymphocyte proliferation coincides with inhibition of Jak3 expression and IL-2 receptor signaling: role of soluble products from human renal cell carcinomas. Kolenko V, et al. **J Immunol** 1997 Sep 15;159(6):3057–67

IL-2 and TNF receptors as targets of regulatory T-T interactions: isolation and characterization of cytokine receptor-reactive T cell lines in the Lewis rat. Mor F, et al. **J Immunol** 1996 Dec 1;157(11):4855–61

Bispecific humanized anti-IL-2 receptor alpha beta antibodies inhibitory for both IL-2- and IL-15-mediated proliferation. Pilson RS, et al. **J Immunol** 1997 Aug 1; 159(3):1543–56

Characterization of interleukin-1 alpha-induced melanoma cell motility: inhibition by type I and type II receptor-blocking monoclonal antibodies. Dekker SK, et al. **Melanoma Res** 1997 Jun;7(3):223–30

The influence of stress intrusion on immunodepression in generalized anxiety disorder patients and controls. La Via MF, et al. **Psychosom Med** 1996 Mar-Apr;58(2):138–42

Pharmacokinetics and immunodynamics of chimeric IL-2 receptor monoclonal antibody SDZ CHI 621 in renal allograft recipients. Kovarik JM, et al. **Transpl Int** 1996; 9 Suppl 1:S32–3

Rescue therapy with interleukin-2 receptor antibody in high risk kidney transplant patients: a 3-year follow-up study. Carl S, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):320–2

Selective immunosuppression induces tolerance after liver transplantation: an immunohistochemical and cytofluorographic analysis of the graft and recipient immune system. Gassel HJ, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):1163

Treatment of murine cardiac allograft by monoclonal antibodies to IL-2 receptor alpha chain and beta chain. Isobe M, et al. **Transplant Proc** 1997 Jun;29(4):2301–2

Interleukin-2 receptor antibody versus antithymocyte globulin as part of quadruple induction therapy after orthotopic liver transplantation: a randomized study. Langrehr JM, et al. **Transplant Proc** 1996 Dec;28(6):3204

Influence of the anti-CD25 monoclonal antibody BT563 on clinical and biological rejection after orthotopic liver transplantation. Otto G, et al. **Transplant Proc** 1996 Dec; 28(6):3210–1

Long-term follow-up after induction treatment with monoclonal anti-interleukin-2 receptor antibody (BT563) in kidney allograft recipients: a double-blind, placebo-controlled trial. van Gelder T, et al.
Transplant Proc 1996 Dec;28(6):3221–2

A prospective randomized trial comparing interleukin-2 receptor antibody versus antithymocyte globulin as part of a quadruple immunosuppressive induction therapy following orthotopic liver transplantation. Langrehr JM, et al. **Transplantation** 1997 Jun 27;63(12):1772–81

Expansion of intermediate T cell receptor cells expressing interleukin-2 receptor alpha- beta+, CD8alpha+ beta+, and lymphocyte function-associated antigen-1+ in the liver in association with intrahepatic islet xenograft rejection from rat to mouse: prevention of rejection with anti-interleukin-2 receptor beta monoclonal antibody treatment. Ohtsuka K, et al. **Transplantation** 1997 Aug 27; 64(4):633–9

Immunohistological study on bovine lymph node using monoclonal antibodies to interleukin-2 receptor. Asahina M, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):411–3

Anti asialoglycoprotein receptor antibodies and soluble interleukin-2 receptor levels as marker for inflammation in autoimmune hepatitis. Dejica D, et al.
Z Gastroenterol 1997 Jan;35(1):15–21

METABOLISM

Quantitation of IL-2Rp75 (CD122) expression on mononuclear cells in rheumatic disease. Creamer P, et al. **Ann Rheum Dis** 1996 Nov;55(11):844–7

Serum soluble interleukin-2 receptor levels in familial Mediterranean fever. Erken E, et al. **Ann Rheum Dis** 1996 Nov;55(11):852–5

Circulating skin-homing T cells in atopic dermatitis. Selective up-regulation of HLA-DR, interleukin-2R, and CD30 and decrease after combined UV-A and UV-B phototherapy [see comments] Piletta PA, et al.
Arch Dermatol 1996 Oct;132(10):1171–6. Comment in: Arch Dermatol 1996 Oct;132(10):1230–2.

Hemodialysis related interleukin-2 receptor release by peripheral blood mononuclear cells. Memoli B, et al.
ASAIO J 1996 Jan-Feb;42(1):60–3

Effect of 5-fluorouracil on interleukin-1 and interleukin-2 receptor expression. Balaji KN, et al.
Biochem Mol Biol Int 1997 Jun;42(2):419–24

Peptide nucleic acids directed to the promoter of the alpha-chain of the interleukin-2 receptor. Praseuth D, et al. **Biochim Biophys Acta** 1996 Dec 11;1309(3):226–38

Evidence for the participation of interleukin-2 (IL-2) and IL-4 in the regulation of autonomous growth and tumorigenesis of transformed cells of lymphoid origin. Hassuneh MR, et al. **Blood** 1997 Jan 15;89(2):610–20

Cerebrospinal fluid soluble interleukin-2 receptor in cerebral lupus. Gilad R, et al. **Br J Rheumatol** 1997 Feb;36(2):190–3

Clinical importance of interleukin-2 receptor alpha-chain expression in acute leukemia. The Japan Cooperative Group of Leukemia/Lymphoma. Nakase K, et al.
Cancer Detect Prev 1997;21(3):273–9

Improved biodistribution of 125I-labeled anti-Tac disulfide-stabilized Fv fragment by blocking its binding to the alpha subunit of the interleukin 2 receptor in the circulation with preinjected humanized anti-Tac IgG. Kobayashi H, et al. **Cancer Res** 1997 May 15;57(10):1955–61

Effect of luteinizing hormone alpha-subunit on IL-2 and sIL-2R in vitro secretions from human peripheral blood mononuclear cells. Komorowski J, et al. **Cytobios** 1997; 89(356):31–7

Analysis of human IL-2/IL-2 receptor beta chain interactions: monoclonal antibody H2-8 and new IL-2 mutants define the critical role of alpha helix-A of IL-2. Eckenberg R, et al. **Cytokine** 1997 Jul;9(7):488–98

Analysis of IL-2 and IL-6 binding to peripheral blood lymphocytes in Graves disease: relationship with disease activity. Corrales JJ, et al. **Cytometry** 1997 Jun 15; 30(3):118–23

Interleukin-2 fusion protein: an investigational therapy for interleukin-2 receptor expressing malignancies. Nichols J, et al. **Eur J Cancer** 1997 Jan;33 Suppl 1:S34–6 (27 ref.)

Il-2 receptor expression on gastric mucosa T lymphocytes is enhanced in duodenal ulcer patients compared with non-ulcer dyspeptic patients. Ihan A, et al.
Hepatogastroenterology 1996 Nov-Dec;43(12):1665–70

Epidemiologic investigation of serum levels of the soluble forms of CD25, CD54 and CD58, and T cell responsiveness after stimulation via the CD2-dependent pathway in a random sample of the general population. Becker N, et al. **Immunobiology** 1996 Jan;195(1):47–60

T-cell activation, expression of adhesion molecules and response to ethanol in alcoholic cirrhosis. Santos-Perez JL, et al. **Immunol Lett** 1996 May;50(3):179–83

Altered interleukin-2 receptor alpha-chain is expressed in human T-cell leukaemia virus type-I-infected T-cell lines and human peripheral blood mononuclear cells of adult T-cell leukaemia patients through an alternative splicing mechanism. Horiuchi S, et al. **Immunology** 1997 May; 91(1):28–34

Demonstration of a cross-talk between IL-2 and IL-5 in phosphorylation of IL-2 and IL-5 receptor beta chains. Ohbo K, et al. **Int Immunol** 1996 Jun;8(6):951–60

Helicobacter pylori infection enhances mucosal interleukin-1 beta, interleukin-6, and the soluble receptor of interleukin-2. Basso D, et al. **Int J Clin Lab Res** 1996; 26(3):207–10

Expression of IL-2 receptor beta-chain in B16 melanoma cells. Garcia De Galdeano A, et al. **Int J Dev Biol** 1996; Suppl 1:301S–302S

Intermediate affinity interleukin-2 receptor mediates survival via a phosphatidylinositol 3-kinase-dependent pathway. González-García A, et al. **J Biol Chem** 1997 Apr 11; 272(15):10220–6

Modulation of interleukin (IL)-13 binding and signaling by the gammac chain of the IL-2 receptor. Obiri NI, et al.
J Biol Chem 1997 Aug 8;272(32):20251–8

Phosphatidylinositol 3-kinase links the interleukin-2 receptor to protein kinase B and p70 S6 kinase. Reif K, et al.
J Biol Chem 1997 May 30;272(22):14426–33

Kinetics of soluble interleukin-2 receptor after mechanical and burn trauma. Schinkel C, et al.
J Burn Care Rehabil 1997 May-Jun;18(3):210–3

RECEPTORS, INTERLEUKIN-2

An alpha-helical signal in the cytosolic domain of the interleukin 2 receptor beta chain mediates sorting towards degradation after endocytosis. Subtil A, et al. **J Cell Biol** 1997 Feb 10;136(3):583–95

IL-15 functions as a potent autocrine regulator of macrophage proinflammatory cytokine production: evidence for differential receptor subunit utilization associated with stimulation or inhibition. Alleva DG, et al. **J Immunol** 1997 Sep 15;159(6):2941–51

Alteration of interleukin-2 (IL-2) and soluble IL-2 receptor secretion in the sera and urine of patients with rickettsial boutonneuse fever. Mansueto S, et al. **J Infect Dis** 1997 Jan;175(1):142–5

I-interleukin-2 scintigraphy: a new approach to assess disease activity in autoimmunity. Signore A, et al. **J Pediatr Endocrinol Metab** 1996 Mar;9 Suppl 1:139–44

IL2 fused to lectin-deficient ricin is toxic to human leukemia cells expressing the IL2 receptor. Frankel AE, et al. **Leukemia** 1997 Jan;11(1):22–30

Inhibition of proliferation and CD25 down-regulation by retinoic acid in human adult T cell leukemia cells. Miyatake JI, et al. **Leukemia** 1997 Mar;11(3):401–7

Interleukin-2 receptors in pulmonary adenocarcinoma tissue. Yano T, et al. **Lung Cancer** 1996 Dec;16(1):13–9

An IgG3-IL-2 fusion protein has higher affinity than hrIL-2 for the IL-2R alpha subunit: real time measurement of ligand binding. Harvill ET, et al. **Mol Immunol** 1996 Aug; 33(11–12):1007–14

Interleukin-2 induces tyrosine phosphorylation of SHP-2 through IL-2 receptor beta chain. Adachi M, et al. **Oncogene** 1997 Apr 3;14(13):1629–33

Blastogenic responses, interleukin-2 production and interleukin-2 receptor expression on CD4+ and CD8+ lymphocytes in rhesus monkeys experimentally inoculated with Loa loa. Dennis VA, et al. **Parasite Immunol** 1997 Jul;19(7):301–8

Requirement for an initial signal from the membrane-proximal region of the interleukin 2 receptor gamma(c) chain for Janus kinase activation leading to T cell proliferation. Nelson BH, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1878–83

Activation of Jak/STAT proteins involved in signal transduction pathway mediated by receptor for interleukin 2 in malignant T lymphocytes derived from cutaneous anaplastic large T-cell lymphoma and Sezary syndrome. Zhang Q, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9148–53

Characterization of a ricin fusion toxin targeted to the interleukin-2 receptor. Frankel AE, et al. **Protein Eng** 1996 Oct;9(10):913–9

Kinetic analysis of ligand binding to interleukin-2 receptor complexes created on an optical biosensor surface. Myszka DG, et al. **Protein Sci** 1996 Dec;5(12):2468–78

Circulating levels of intercellular adhesion molecule-1 (ICAM-1) and soluble interleukin 2 receptors (IL-2R) in patients with B cell chronic lymphocytic leukaemia. Musolino C, et al. **Riv Eur Sci Med Farmacol** 1996 May-Jun;18(3):113–8

[Effect of inhaled corticosteroids on serum eosinophil cationic protein and sIL-2R levels in asthmatics pulmonary hypertension] Wang H, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Oct; 18(5):306–8, 319 (Eng. Abstr.) **(Chi)**

[The expression of IL-2 receptor alpha subunit in T cells] Liu CB, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:183–8 (17 ref.) **(Jpn)**

PHYSIOLOGY

The interleukin-2 receptor gamma chain: its role in the multiple cytokine receptor complexes and T cell development in XSCID. Sugamura K, et al. **Annu Rev Immunol** 1996;14:179–205 (120 ref.)

Interleukin-13 is a potent activator of JAK3 and STAT6 in cells expressing interleukin-2 receptor-gamma and interleukin-4 receptor-alpha. Malabarba MG, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):865–72

Interleukin 15. Cosman D, et al. **Biochem Soc Trans** 1997 May;25(2):371–4 (30 ref.)

Evidence for direct and indirect mechanisms in the potent modulatory action of interleukin-2 on the release of acetylcholine in rat hippocampal slices. Seto D, et al. **Br J Pharmacol** 1997 Mar;120(6):1151–7

The in vitro effect on T cell function of soluble IL-2Ralpha from advanced ovarian cancer ascites. Elg SA, et al. **Gynecol Oncol** 1997 Jul;66(1):133–7

An upregulation of interleukin-2 receptor, transferrin receptor expression and cytokine production mediated by hemin in human peripheral blood mononuclear cells. Tsuji A, et al. **Int J Urol** 1996 May;3(3):191–5

Lymphocyte subsets and interleukin-2 receptors in autistic children. Denney DR, et al. **J Autism Dev Disord** 1996 Feb;26(1):87–97

Two discrete regions of interleukin-2 (IL2) receptor beta independently mediate IL2 activation of a PD98059/rapamycin/wortmannin-insensitive Stat5a/b serine kinase. Kirken RA, et al. **J Biol Chem** 1997 Jun 13; 272(24):15459–65

Abnormal development of intestinal intraepithelial lymphocytes and peripheral natural killer cells in mice lacking the IL-2 receptor beta chain. Suzuki H, et al. **J Exp Med** 1997 Feb 3;185(3):499–505

Role of IL-15, IL-2, and their receptors in the development of T cell alveolitis in pulmonary sarcoidosis. Agostini C, et al. **J Immunol** 1996 Jul 15;157(2):910–8

Human gamma delta T cell subset-proliferative response to malarial antigen in vitro depends on CD4+ T cells or cytokines that signal through components of the IL-2R. Elloso MM, et al. **J Immunol** 1996 Sep 1;157(5):2096–102

Human fibroblasts express functional IL-2 receptors formed by the IL-2R alpha- and beta-chain subunits: association of IL-2 binding with secretion of the monocyte chemoattractant protein-1. Gruss HJ, et al. **J Immunol** 1996 Jul 15;157(2):851–7

Bispecific humanized anti-IL-2 receptor alpha beta antibodies inhibitory for both IL-2- and IL-15-mediated proliferation. Pilson RS, et al. **J Immunol** 1997 Aug 1; 159(3):1543–56

HTLV-I Tax trans-activation and cell growth signaling. Nakamura M, et al. **Leukemia** 1997 Apr;11 Suppl 3:7–9

Promotion of interleukin-2 activity as a strategy for 'rejuvenating' geriatric immune function. McCarty MF. **Med Hypotheses** 1997 Jan;48(1):47–54 (120 ref.)

A phase I trial of humanized anti-interleukin 2 receptor antibody in renal transplantation. Vincenti F, et al. **Transplantation** 1997 Jan 15;63(1):33–8

RECEPTORS, INTERLEUKIN-3

[Interleukin-3 receptor] Liu CB, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:526–30 (14 ref.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Characterization of potential antagonists of human interleukin 5 demonstrates their cross-reactivity with receptors for interleukin 3 and granulocyte-macrophage colony-stimulating factor. Wiekowski M, et al. **Eur J Biochem** 1997 Jun 15;246(3):625–32

BIOSYNTHESIS

IL-3 receptor expression, regulation and function in cells of the vasculature. Korpelainen EI, et al. **Immunol Cell Biol** 1996 Feb;74(1):1–7 (63 ref.)

CHEMISTRY

Roles of the N and C terminal domains of the interleukin-3 receptor alpha chain in receptor function. Barry SC, et al. **Blood** 1997 Feb 1;89(3):842–52

DEFICIENCY

Hematopoiesis in mice lacking the entire granulocyte-macrophage colony-stimulating factor/interleukin-3/interleukin-5 functions. Nishinakamura R, et al. **Blood** 1996 Oct 1;88(7):2458–64

[Mice deficient for the IL-3/GM-CSF/IL-5 beta receptors] Nishinakamura R. **Rinsho Ketsueki** 1997 Mar;38(3):181–5 (8 ref.) **(Jpn)**

DRUG EFFECTS

Characterization and receptor specific toxicity of two diphtheria toxin-related interleukin-3 fusion proteins DAB389-mIL-3 and DAB389-(Gly4Ser)2-mIL-3. Liger D, et al. **FEBS Lett** 1997 Apr 7;406(1–2):157–61

GENETICS

Expression of activated mutants of the human interleukin-3/interleukin-5/granulocyte-macrophage colony-stimulating factor receptor common beta subunit in primary hematopoietic cells induces factor-independent proliferation and differentiation. McCormack MP, et al. **Blood** 1997 Aug 15;90(4):1471–81

Rapid evolution of human pseudoautosomal genes and their mouse homologs. Ellison JW, et al. **Mamm Genome** 1996 Jan;7(1):25–30

METABOLISM

The structural and functional basis of cytokine receptor activation: lessons from the common beta subunit of the granulocyte-macrophage colony-stimulating factor, interleukin-3 (IL-3), and IL-5 receptors. Bagley CJ, et al. **Blood** 1997 Mar 1;89(5):1471–82 (87 ref.)

Erythropoietin induces tyrosine phosphorylation of the interleukin-3 receptor beta subunit (betaIL3) and recruitment of Stat5 to possible Stat5-docking sites in betaIL3. Chin H, et al. **Blood** 1997 Jun 15;89(12):4327–36

Physical and functional interactions between Stat5 and the tyrosine-phosphorylated receptors for erythropoietin and interleukin-3. Chin H, et al. **Blood** 1996 Dec 15; 88(12):4415–25

The beta chain of the interleukin-3 receptor functionally associates with the erythropoietin receptor. Jubinsky PT, et al. **Blood** 1997 Sep 1;90(5):1867–73

A discontinuous eight-amino acid epitope in human interleukin-3 binds the alpha-chain of its receptor. Bagley CJ, et al. **J Biol Chem** 1996 Dec 13;271(50):31922–8

SHP1 and SHP2 protein-tyrosine phosphatases associate with betac after interleukin-3-induced receptor tyrosine phosphorylation. Identification of potential binding sites and substrates. Bone H, et al. **J Biol Chem** 1997 May 30; 272(22):14470–6

Binding of src-like kinases to the beta-subunit of the interleukin-3 receptor. Burton EA, et al. **J Biol Chem** 1997 Jun 27;272(26):16189–95

Activation of the JAK/STAT pathway leads to proliferation of ST14A central nervous system progenitor cells. Cattaneo E, et al. **J Biol Chem** 1996 Sep 20;271(38):23374–9

A novel phosphatidylinositol-3,4,5-trisphosphate 5-phosphatase associates with the interleukin-3 receptor. Liu L, et al. **J Biol Chem** 1996 Nov 22;271(47):29729–33

A single tyrosine residue in the membrane-proximal domain of the granulocyte-macrophage colony-stimulating factor, interleukin (IL)-3, and IL-5 receptor common beta-chain is necessary and sufficient for high affinity binding and signaling by all three ligands. Woodcock JM, et al. **J Biol Chem** 1996 Oct 18;271(42):25999–6006

P210 Bcr-Abl interacts with the interleukin-3 beta c subunit and constitutively activates Jak2. Wilson-Rawls J, et al. **Leukemia** 1997 Apr;11 Suppl 3:428–31

Over-expression of protein tyrosine phosphatase 1 (PTP1) alters IL-3-dependent growth and tyrosine phosphorylation. Gelderloos JA, et al. **Oncogene** 1996 Dec 5;13(11):2367–78

Tec tyrosine kinase links the cytokine receptors to PI-3 kinase probably through JAK. Takahashi-Tezuka M, et al. **Oncogene** 1997 May 15;14(19):2273–82

PHYSIOLOGY

Roles of the N and C terminal domains of the interleukin-3 receptor alpha chain in receptor function. Barry SC, et al. **Blood** 1997 Feb 1;89(3):842–52

Interleukin-3 and its receptor. Lindemann A, et al. **Cancer Treat Res** 1995;80:107–42 (283 ref.)

IL-3 receptor expression, regulation and function in cells of the vasculature. Korpelainen EI, et al. **Immunol Cell Biol** 1996 Feb;74(1):1–7 (63 ref.)

Interleukin-3 (IL-3) and granulocyte-macrophage colony-stimulating factor (GM-CSF) can induce differentiation of chronic B cell leukemia expressing the alpha subunit of IL-3 and GM-CSF receptor. Shiiba M, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:12–5

Interleukin-3 (IL-3) inhibits erythropoietin-induced differentiation in Ba/F3 cells via the IL-3 receptor alpha subunit. Krosl J, et al. **J Biol Chem** 1996 Nov 1; 271(44):27432–7

Signal transduction by the GM-CSF, IL-3 and IL-5 receptors. Miyajima A, et al. **Leukemia** 1997 Apr;11 Suppl 3:418–22 (16 ref.)

Function and signal transduction mediated by the interleukin 3 receptor system in hematopoiesis. Hara T, et al. **Stem Cells** 1996 Nov;14(6):605–18 (99 ref.)

RECEPTORS, INTERSTITIAL CELL-STIMULATING HORMONE see **RECEPTORS, LH**

RECEPTORS, INVERTEBRATE PEPTIDE

ANTAGONISTS & INHIBITORS

Receptor inactivation by dye-neuropeptide conjugates: 1. The synthesis of Cys-containing dye-neuropeptide conjugates. Feigenbaum JJ, et al. **Peptides** 1996;17(6):991–4

DRUG EFFECTS

Modulation of adenylyl cyclase by Aplysia bag cell peptides: evidence for a common receptor. Berry RW. **Brain Res Mol Brain Res** 1996 May;38(1):176–8

GENETICS

Cloning and characterization of a new isoform of Choristoneura hormone receptor 3 from the spruce budworm. Palli SR, et al. **Arch Insect Biochem Physiol** 1997;35(1–2):33–44

Cloning and developmental expression of Choristoneura hormone receptor 3, an ecdysone-inducible gene and a member of the steroid hormone receptor superfamily [published erratum appears in Insect Biochem Mol Biol 1996 Jun;26(6):I] Palli SR, et al. **Insect Biochem Mol Biol** 1996 May;26(5):485–99

Transcriptional expression of a putative tachykinin-like peptide receptor gene from stable fly. Guerrero FD. **Peptides** 1997;18(1):1–5

METABOLISM

Receptor inactivation by dye-neuropeptide conjugates. 3. Comparative binding of dye-neuropeptide conjugates to FMRFamide receptors of Helix aspersa and Loligo pealei. Feigenbaum JJ, et al. **Peptides** 1996;17(8):1279–84

RECEPTORS, KAINATE see **RECEPTORS, KAINIC ACID**

RECEPTORS, KAINIC ACID

AGONISTS

Glutamate receptor agonist injections into the dorsal striatum cause contralateral turning in the rat: involvement of kainate and AMPA receptors. Smith ID, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):7–17

Comparison of the agonist binding site of homomeric, heteromeric, and chimeric GluR1(o) and GluR3(o) AMPA receptors. Banke TG, et al. **J Neurosci Res** 1997 Jul 15;

49(2):176–85
Domoic acid induces the release of glutamate in the rat hippocampal CA3 subregion. Malva JO, et al. **Neuroreport** 1996 May 17;7(7):1330–4

ANALYSIS

Ultrastructural localization of the kainate selective glutamate receptor in noradrenergic perikarya and dendrites of the nucleus locus coeruleus in the rat brain. Van Bockstaele EJ, et al. **Brain Res** 1996 Sep 2;732(1–2):223–31
Laminar distribution of MK–801, kainate, AMPA, and muscimol binding sites in cat visual cortex: a developmental study. Gordon B, et al. **J Comp Neurol** 1996 Feb 12; 365(3):466–78
Kainate/AMPA receptors expressed on human fetal astrocytes in long–term culture. Cauley K, et al. **J Neurosci Res** 1997 Feb 1;47(3):311–21

ANTAGONISTS & INHIBITORS

Delayed antagonism of AMPA/kainate receptors reduces long–term functional deficits resulting from spinal cord trauma. Wrathall JR, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):565–73
Selective protection against AMPA– and kainate–evoked neurotoxicity by (3S,4aR,6R,8aR)–6–[2–(1(2)H–tetrazole–5–yl) ethyl]decahyd roisoquinoline– 3–carboxylic acid (LY293558) and its racemate (LY215490). Schoepp DD, et al. **J Neural Transm** 1996;103(8–9):905–16
Antagonism of NMDA receptors but not AMPA/kainate receptors blocks bursting in dopaminergic neurons induced by electrical stimulation of the prefrontal cortex. Tong ZY, et al. **J Neural Transm** 1996;103(8–9):889–904
Irreversible inhibition of high–affinity [3H]kainate binding by a novel photoactivatable analogue: (2'S,3'S,4'R)–2'–carboxy–4'–(2–diazo–1–oxo–3, 3,3–trifluoropropyl)–3'–pyrrolidinyl acetate. Willis CL, et al. **J Neurochem** 1997 Apr;68(4):1503–10
Evans blue antagonizes both alpha–amino–3–hydroxy–5–methyl–4–isoxazolepropionate and kainate receptors and modulates receptor desensitization. Price CJ, et al. **Mol Pharmacol** 1996 Dec; 50(6):1665–71
Competitive antagonism of recombinant AMPA/kainate receptors by N–methyl–D–aspartate and analogues. Magazanik LG, et al. **Neuroreport** 1996 Dec 20;8(1):257–9
Studies of synaptic transmission in vivo: indirect versus direct effects of (RS)–alpha–amino–3–hydroxy–5–methyl–4–isoxazole– propionic acid/kainate antagonists on rat spinal sensory responses. Cumberbatch MJ, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):33–6
Phencyclidine produces changes in NMDA and kainate receptor binding in rat hippocampus over a 48–hour time course. Gao XM, et al. **Synapse** 1996 Aug;23(4):274–9
[The effect of blockade of the AMPA/kainate receptors of the nucleus accumbens on synaptic dopamine release during an emotional conditioned response] Saul'skaia NB, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):533–8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Cytotoxic effects of kainate ligands on HEK cell lines expressing recombinant kainate receptors. Carver JM, et al. **Brain Res** 1996 May 13;720(1–2):69–74
Expression of kainate–selective glutamate receptor subunits in glial cells of the adult bovine white matter. Garcia–Barcina JM, et al. **Eur J Neurosci** 1996 Nov; 8(11):2379–87
Synchronized overproduction of AMPA, kainate, and NMDA glutamate receptors during human spinal cord development. Kalb RG, et al. **J Comp Neurol** 1997 Jul 28; 384(2):200–10
Dimensions and ion selectivity of recombinant AMPA and kainate receptor channels and their dependence on Q/R site residues. Burnashev N, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):165–73

DRUG EFFECTS

Retinal neurones containing kainate receptors are influenced by exogenous kainate and ischaemia while neurones lacking these receptors are not — melatonin counteracts the effects of ischaemia and kainate. Cazevieille C, et al. **Brain Res** 1997 Apr 25;755(1):91–100
Clozapine and haloperidol differentially affect AMPA and kainate receptor subunit mRNA levels in rat cortex and striatum. Healy DJ, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):331–8
Corticosteroid actions on the expression of kainate receptor subunit mRNAs in rat hippocampus. Joëls M, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):15–20
Comparative antagonism of kainate–activated kainate and AMPA receptors in hippocampal neurons. Paternain AV, et al. **Eur J Neurosci** 1996 Oct;8(10):2129–36
Inhibition of [3H] gamma–aminobutyric acid release by kainate receptor activation in rat hippocampal synaptosomes. Cunha RA, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):167–72
(S)–5–fluorowillardiine–mediated neurotoxicity in cultured murine cortical neurones occurs via AMPA and kainate receptors. Larm JA, et al. **Eur J Pharmacol** 1996 Oct 24; 314(1–2):249–54
(2S,4R)–4–methylglutamic acid (SYM 2081): a selective, high–affinity ligand for kainate receptors. Zhou LM, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):422–7
Desensitization of kainate receptors by kainate, glutamate and diastereomers of 4–methylglutamate. Jones KA, et al. **Neuropharmacology** 1997 Jun;36(6):853–63
Localisation and properties of AMPA–insensitive kainate sites: receptor autoradiography and gene expression in rat brain. Lunn ML, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):121–4

GENETICS

Contrasting effects of electroconvulsive shock on mRNAs encoding the high affinity kainate receptor subunits (KA1 and KA2) and cyclophilin in the rat. Porter RH, et al. **Brain Res** 1996 Feb 26;710(1–2):97–102
Distribution of kainate receptor subunit mRNAs in human hippocampus, neocortex and cerebellum, and bilateral reduction of hippocampal GluR6 and KA2 transcripts in schizophrenia. Porter RH, et al. **Brain Res** 1997 Mar 21; 751(2):217–31
Developmental changes of RNA editing of glutamate receptor subunits GluR5 and GluR6: in vivo versus in vitro. Paschen W, et al. **Brain Res Dev Brain Res** 1997 Feb 20; 98(2):271–80
Gene structure of the rat kainate receptor subunit KA2 and characterization of an intronic negative regulatory region. Huang F, et al. **J Biol Chem** 1997 Mar 28;272(13):8618–27
RNA editing of glutamate receptor subunits GluR2, GluR5 and GluR6 in transient cerebral ischemia in the rat. Paschen W, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):548–56
Spatial distribution of kainate receptor subunit mRNA in the mouse basal ganglia and ventral mesencephalon. Bischoff S, et al. **J Comp Neurol** 1997 Mar 24;379(4):541–62
Dramatic increase of the RNA editing for glutamate receptor subunits during terminal differentiation of clonal human neurons. Lai F, et al. **J Neurochem** 1997 Jul;69(1):43–52
Kainate binding proteins possess functional ion channel domains. Villmann C, et al. **J Neurosci** 1997 Oct 15; 17(20):7634–43
Effect of RNA editing and subunit co–assembly single–channel properties of recombinant kainate receptors. Swanson GT, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):129–42
Ligand–binding characteristics and related structural features of the expressed goldfish kainate receptors: identification of a conserved disulfide bond and three residues important for ligand binding. Wo ZG, et al. **Mol Pharmacol** 1996 Oct;50(4):770–80
Differential regulation of hippocampal AMPA and kainate receptor subunit expression by haloperidol and clozapine [see comments] Meador–Woodruff JH, et al. **Mol Psychiatry** 1996 Mar;1(1):41–53. Comment in: Mol Psychiatry 1996 Mar;1(1):16–7.
Genotypes at the GluR6 kainate receptor locus are associated with variation in the age of onset of Huntington disease. Rubinsztein DC, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3872–6
A unitary non–NMDA receptor short subunit from Xenopus: DNA cloning and expression. Ishimaru H, et al. **Receptors Channels** 1996;4(1):31–49

METABOLISM

Changes in [3H]AMPA and [3H]kainate binding in rat caudate–putamen and nucleus accumbens after 6–hydroxydopamine lesions of the medial forebrain bundle: an autoradiographic study. Zavitsanou K, et al. **Brain Res** 1996 Aug 26;731(1–2):132–40
Kainate, GABAA and NMDA receptors in Xenopus oocytes expressing mRNA from the cortex of mice kindled with FG 7142. Lewin E, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):304–8
Developmental expression and self–regulation of Ca2+ entry via AMPA/KA receptors in the embryonic chick retina. Allcorn S, et al. **Eur J Neurosci** 1996 Dec;8(12):2499–510
Specific binding of [3H]GppNHp to extracellular membrane receptors in chick cerebellum: possible involvement of kainic acid receptors. Ramos M, et al. **FEBS Lett** 1997 Apr 7;406(1–2):114–8
Activation of AMPA and kainate glutamate receptors impairs the viability of oligodendrocytes in vitro. Sanchez–Gomez MV, et al. **Int J Dev Biol** 1996;Suppl 1:187S–188S
Development of MK–801, kainate, AMPA, and muscimol binding sites and the effect of dark rearing in rat visual cortex. Gordon B, et al. **J Comp Neurol** 1997 Jun 23; 383(1):73–81
Synthesis of a series of aryl kainic acid analogs and evaluation in cells stably expressing the kainate receptor humGluR6. Cantrell BE, et al. **J Med Chem** 1996 Sep 13;39(19):3617–24
Synthesis of chiral 1–(2'–amino–2'–carboxyethyl)–1,4–dihydro–6,7–quinoxaline–2,3–diones: alpha–amino–3–hydroxy–5–methyl–4–isoxazolepropionate receptor agonists and antagonists. Sun G, et al. **J Med Chem** 1996 Oct 25;39(22):4430–8
Role of guanine nucleotides as endogenous ligands of a kainic acid binding site population in the mammalian cerebellum. Migani P, et al. **J Neurochem** 1997 Apr;68(4):1648–54
Cerebrospinal fluid from amyotrophic lateral sclerosis has no effect on intracellular free calcium in cultured cortical neurons. Gredal O, et al. **Mol Chem Neuropathol** 1996 Oct–Dec;29(2–3):141–52
Non–NMDA glutamate receptor binding in canine brain after global cerebral ischemia and reperfusion. Wei H, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):37–52
Ligand–binding characteristics and related structural features of the expressed goldfish kainate receptors: identification of a conserved disulfide bond and three residues important for ligand binding. Wo ZG, et al. **Mol Pharmacol** 1996 Oct;50(4):770–80
Kainate receptors mediate a slow postsynaptic current in hippocampal CA3 neurons. Castillo PE, et al. **Nature** 1997 Jul 10;388(6638):182–6
The synaptic activation of kainate receptors. Vignes M, et al. **Nature** 1997 Jul 10;388(6638):179–82
Kainate receptor modification in the fetal guinea pig brain during hypoxia. Mishra OP, et al. **Neurochem Res** 1995 Oct;20(10):1171–7
Loss of [3H]kainate and of NMDA–displaceable [3H]glutamate binding sites in brain in thiamine deficiency: results of a quantitative autoradiographic study. Peterson C, et al. **Neurochem Res** 1995 Oct;20(10):1155–60
Identification of the amino acid subsets accounting for the ligand binding specificity of a glutamate receptor [published erratum appears in Neuron 1997 Jan;18(1):177] Paas Y, et al. **Neuron** 1996 Nov;17(5):979–90
Unilateral eyeball enucleation differentially alters AMPA–, NMDA– and kainate glutamate receptor binding in the newborn rat brain. Kiyosawa M, et al. **Neurosci Res** 1996 Nov;26(3):215–24
Hippocampal N–methyl–D–aspartate and kainate binding in response to entorhinal cortex aspiration or 192 IgG–saporin lesions of the basal forebrain. Nicolle MM, et al. **Neuroscience** 1997 Apr;77(3):649–59
In vitro autoradiography of ionotropic glutamate receptors in hippocampus and striatum of aged Long–Evans rats: relationship to spatial learning. Nicolle MM, et al. **Neuroscience** 1996 Oct;74(3):741–56
Effect of spinal kainic acid receptor activation on spinal amino acid and prostaglandin E2 release in rat. Yang LC, et al. **Neuroscience** 1996 Nov;75(2):453–61
New developments in the molecular pharmacology of alpha–amino–3–hydroxy–5–methyl–4–isoxazole propionate and kainate receptors. Fletcher EJ, et al. **Pharmacol Ther** 1996;70(1):65–89 (251 ref.)
Glutamate receptor–mediated toxicity in optic nerve oligodendrocytes. Matute C, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8830–5
Kainate and AMPA receptors in the rat brain in thioacetamide–induced hepatic encephalopathy. Oja SS, et al. **Proc West Pharmacol Soc** 1996;39:15–7
Glutamate and benzodiazepine receptor autoradiography in rat brain after repetition of alcohol dependence. Ulrichsen J, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):31–41
A unitary non–NMDA receptor short subunit from Xenopus: DNA cloning and expression. Ishimaru H, et al. **Receptors Channels** 1996;4(1):31–49

PHYSIOLOGY

Role of AMPA/kainate receptors in transmission of the sympathetic baroreflex in rat CVLM. Miyawaki T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R800–12
Kinetics of homomeric GluR6 glutamate receptor channels. Heckmann M, et al. **Biophys J** 1996 Oct;71(4):1743–50
AMPA/kainate receptors mediate sympathetic chemoreceptor reflex in the rostral ventrolateral medulla. Miyawaki T, et al. **Brain Res** 1996 Jul 8;726(1–2):64–8
Subthreshold receptive fields and baseline excitability of "silent" S1 callosal neurons in awake rabbits: contributions of AMPA/kainate and NMDA receptors. Swadlow HA, et al. **Exp Brain Res** 1997 Jul;115(3):403–9
Motor neurons are selectively vulnerable to AMPA/kainate receptor–mediated injury in vitro. Carriedo SG, et al. **J Neurosci** 1996 Jul 1;16(13):4069–79
Prevention of normally occurring and deafferentation–induced neuronal death in chick brainstem auditory neurons by periodic blockade of AMPA/kainate receptors. Solum D, et al. **J Neurosci** 1997 Jun 15; 17(12):4744–51
Activation and desensitization of hippocampal kainate receptors. Wilding TJ, et al. **J Neurosci** 1997 Apr 15; 17(8):2713–21
Effect of RNA editing and subunit co–assembly single–channel properties of recombinant kainate receptors. Swanson GT, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):129–42
Possible roles of AMPA/KA receptor in cultured Müller cells. Kawasaki I, et al. **Jpn J Ophthalmol** 1996;40(2):158–66
Kainate receptors are involved in the glutamate–induced indirect, purinergic inhibition of [3H]–noradrenaline release in rabbit brain cortex. von Kugelgen I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):46–54
Cortical neurones exhibiting kainate–activated Co2+ uptake are selectively vulnerable to AMPA/kainate receptor–mediated toxicity. Turetsky DM, et al. **Neurobiol Dis** 1994 Dec;1(3):101–10
Cortical neurones with Ca2+ permeable AMPA/kainate channels display distinct receptor immunoreactivity and are GABAergic. Yin Hz, et al. **Neurobiol Dis** 1994 Nov; 1(1–2):43–9

RECEPTORS, KAINIC ACID

Glutamate receptors of the kainate type and synaptic transmission. Lerma J, et al. **Trends Neurosci** 1997 Jan; 20(1):9–12 (45 ref.)

The functional study of kainate receptors—hopes and doubts [letter] Vizi ES, et al. **Trends Neurosci** 1997 Sep;20(9):396–7

RECEPTORS, KAPPA see **RECEPTORS, OPIOID, KAPPA**

RECEPTORS, KAPPA OPIOID see **RECEPTORS, OPIOID, KAPPA**

RECEPTORS, LAMININ

ANALYSIS

Analysis of nuclear localization of laminin binding protein precursor p40 (LBP/p40). Sato M, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):896–901

Presence of the elastin–laminin receptor on human activated lymphocytes. Péterszegi G, et al. **C R Acad Sci III** 1996 Sep;319(9):799–803

Presence of laminin and 67KDa laminin–receptor on endothelial surface of lung capillaries. An immunocytochemical study. Hilario E, et al. **Histol Histopathol** 1996 Oct;11(4):915–8

BIOSYNTHESIS

Increased expression of alpha6–integrin receptors and of mRNA encoding the putative 37 kDa laminin receptor precursor in pancreatic carcinoma. Halatsch ME, et al. **Cancer Lett** 1997 Sep 16;118(1):7–11

Expression of the 67–kD laminin receptor, galectin–1, and galectin–3 in advanced human uterine adenocarcinoma. van den Brule FA, et al. **Hum Pathol** 1996 Nov;27(11):1185–91

CHEMISTRY

Laminin–induced clustering of dystroglycan on embryonic muscle cells: comparison with agrin–induced clustering. Cohen MW, et al. **J Cell Biol** 1997 Mar 10;136(5):1047–58

GENETICS

Expression of 32–kDa laminin–binding protein mRNA in colon cancer tissues. Pei DP, et al. **J Surg Res** 1996 Feb 15;61(1):120–6

Cloning and expression of a cDNA encoding a nonintegrin laminin–binding protein from Echinococcus granulosus with localization of the laminin–binding domain. Zhang L, et al. **Mol Biochem Parasitol** 1997 Aug;87(2):183–92

IMMUNOLOGY

Laminin/VLA–6 interactions and T cell function. Savino W, et al. **Braz J Med Biol Res** 1996 Sep;29(9):1209–20

Variable region structure and staphylococcal protein A binding specificity of a mouse monoclonal IgM anti–laminin–receptor antibody. Feijó GC, et al. **Immunology** 1997 Jul;91(3):479–85

Involvement of laminin and its receptor in abrogation of heart graft rejection by autoreactive T cells from Trypanosoma cruzi–infected mice. Silva–Barbosa SD, et al. **J Immunol** 1997 Jul 15;159(2):997–1003

ISOLATION & PURIFICATION

Distribution of laminin variants and their integrin receptors in human secondary lymphoid tissue. Colocalization suggests that the alpha 6 beta 4–integrin is a receptor for laminin–5 in lymphoid follicles. Jaspars LH, et al. **Cell Adhes Commun** 1996 Nov;4(4–5):269–79

METABOLISM

Laminin E8 alveolarization site: heparin sensitivity, cell surface receptors, and role in cell spreading. Chen L, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):L494–503

Follicular dendritic cells adhere to fibronectin and laminin fibers via their respective receptors. Ogata T, et al. **Blood** 1996 Oct 15;88(8):2995–3003

Expression of high–affinity 67–kDa laminin receptors in primary breast cancers and metachronous metastatic lesions or contralateral cancers. Daidone MG, et al. **Br J Cancer** 1997;76(1):52–3

Human SY5Y neuroblastoma cell interactions with laminin isoforms: neurite outgrowth on laminin–5 is mediated by integrin alpha 3 beta 1. Smith BE, et al. **Cell Adhes Commun** 1996 Apr;3(6):451–62

Receptors for laminins during epithelial morphogenesis. Ekblom P. **Curr Opin Cell Biol** 1996 Oct;8(5):700–6 (58 ref.)

Dystroglycan: an extracellular matrix receptor linked to the cytoskeleton. Henry MD, et al. **Curr Opin Cell Biol** 1996 Oct;8(5):625–31 (69 ref.)

Expression of the 67 kD laminin receptor in human ovarian carcinomas as defined by a monoclonal antibody, MLuC5. van den Brûle FA, et al. **Eur J Cancer** 1996 Aug; 32A(9):1598–602

Expression and identification of a laminin–binding protein in Aspergillus fumigatus conidia. Tronchin G, et al. **Infect Immun** 1997 Jan;65(1):9–15

Peptide G, containing the binding site of the 67–kDa laminin receptor, increases and stabilizes laminin binding to cancer cells. Magnifico A, et al. **J Biol Chem** 1996 Dec 6; 271(49):31179–84

A role of dystroglycan in schwannoma cell adhesion to laminin. Matsumura K, et al. **J Biol Chem** 1997 May 23; 272(21):13904–10

Murine epidermal growth factor peptide (33–42) binds to a YIGSR–specific laminin receptor on both tumor and endothelial cells. Nelson J, et al. **J Biol Chem** 1996 Oct 18;271(42):26179–86

Dystroglycan is a dual receptor for agrin and laminin–2 in Schwann cell membrane. Yamada H, et al. **J Biol Chem** 1996 Sep 20;271(38):23418–23

The role of laminin–5 and its receptors in mammary epithelial cell branching morphogenesis. Stahl S, et al. **J Cell Sci** 1997 Jan;110 (Pt 1):55–63

Laminin suppresses progesterone production by human luteinizing granulosa cells via interaction with integrin alpha 6 beta 1. Fujiwara H, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2122–8

Increased expression of dystrophin, beta–dystroglycan and adhalin in denervated rat muscles. Biral D, et al. **J Muscle Res Cell Motil** 1996 Oct;17(5):523–32

Independent prognostic value of the 67–kd laminin receptor in human prostate cancer. Waltregny D, et al. **J Natl Cancer Inst** 1997 Aug 20;89(16):1224–7

Expression of the 67 KD laminin receptor in human cervical preneoplastic and neoplastic squamous epithelial lesions: an immunohistochemical study. al–Saleh W, et al. **J Pathol** 1997 Mar;181(3):287–93

Overexpression of the 67–kD laminin receptor correlates with tumour progression in human colorectal carcinoma. Sanjuán X, et al. **J Pathol** 1996 Aug;179(4):376–80

The spectrum of 67–kD laminin receptor expression in breast carcinoma progression. Viacava P, et al. **J Pathol** 1997 May;182(1):36–44

The A and B variants of the alpha 3 integrin subunit: tissue distribution and functional characterization. de Melker AA, et al. **Lab Invest** 1997 Apr;76(4):547–63

Overexpression of the 67 kD laminin receptor correlates with the progression of gastric carcinoma. Lee WA, et al. **Pathol Res Pract** 1996 Dec;192(12):1195–201

PHYSIOLOGY

Intestinal epithelial restitution. Involvement of specific laminin isoforms and integrin laminin receptors in wound closure of a transformed model epithelium. Lotz MM, et al. **Am J Pathol** 1997 Feb;150(2):747–60

Aging of the vascular wall and atherogenesis: role of the elastin–laminin receptor [published erratum appears in Atherosclerosis 1996 Sep 27;126(1):173] Robert L. **Atherosclerosis** 1996 Jun;123(1–2):169–79 (56 ref.)

Biological roles of the non–integrin elastin/laminin receptor. Hinek A. **Biol Chem** 1996 Jul–Aug;377(7–8):471–80 (76 ref.)

An epitope on VLA–6 (alpha6beta1) integrin involved in migration but not adhesion is required for extravasation of murine melanoma B16F1 cells in liver. Hangan D, et al. **Cancer Res** 1997 Sep 1;57(17):3812–7

The alpha7beta1 integrin mediates adhesion and migration of skeletal myoblasts on laminin. Crawley S, et al. **Exp Cell Res** 1997 Aug 25;235(1):274–86

Neuronal laminins and their cellular receptors. Powell SK, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):401–14 (133 ref.)

Tyrosine phosphorylation induced by integrin–mediated adhesion of retinal neurons to laminin. Malosio ML, et al. **Int J Dev Neurosci** 1996 Jun;14(3):269–81

Integrin alpha 6B beta 1 is involved in kidney tubulogenesis in vitro. Falk M, et al. **J Cell Sci** 1996 Dec;109 (Pt 12):2801–10

Laminin–binding epitope on gp43 from Paracoccidioides brasiliensis is recognized by a monoclonal antibody raised against Staphylococcus aureus laminin receptor. Vicentini AP, et al. **J Med Vet Mycol** 1997 Jan–Feb;35(1):37–43

Integrin alpha 3 beta 1 participates in the phagocytosis of extracellular matrix molecules by human breast cancer cells. Coopman PJ, et al. **Mol Biol Cell** 1996 Nov; 7(11):1789–804

RECEPTORS, LDL

Low density lipoprotein receptor–related protein is expressed early and becomes restricted to a somatodendritic domain during neuronal differentiation in culture. Brown MD, et al. **Brain Res** 1997 Feb 7;747(2):313–7

The 39–kDa protein regulates LRP activity in cultured endothelial and smooth muscle cells. Warshawsky I, et al. **Eur J Cell Biol** 1996 Feb;69(2):156–65

Hepatic lipase mediates the uptake of chylomicrons and beta–VLDL into cells via the LDL receptor–related protein (LRP). Krapp A, et al. **J Lipid Res** 1996 May; 37(5):926–36

The role of the low–density lipoprotein receptor–related protein (LRP) in the plasma clearance and liver uptake of recombinant single–chain urokinase–type plasminogen activator in rats. van der Kaaden ME, et al. **Thromb Haemost** 1997 Apr;77(4):710–7

[LDL receptor] Ishibashi S. **Nippon Rinsho** 1997 Apr;55 Suppl 2:577–80 (11 ref.) **(Jpn)**

ANALYSIS

Determination of LDL– and scavenger–receptor activity in adherent and non–adherent cultured cells with a new single–step fluorometric assay. Teupser D, et al. **Biochim Biophys Acta** 1996 Oct 18;1303(3):193–8

Does receptor–'Ck' deficiency initiate leukaemia? Kaul D, et al. **Cancer Lett** 1997 Jan 30;112(2):199–202

Low density lipoprotein receptors and polyamine levels in human colorectal adenocarcinoma. Notarnicola M, et al. **J Gastroenterol** 1995 Dec;30(6):705–9

[Study of low density lipoprotein (LDL) receptor mutations, using restriction endonucleases, in familial hypercholesterolemia] Kerepesi M, et al. **Orv Hetil** 1997 Jan 5;138(1):15–8 (17 ref.) (Eng. Abstr.) **(Hun)**

ANTAGONISTS & INHIBITORS

Reversal of cyclosporine–inhibited low–density lipoprotein receptor activity in HepG2 cells by 3–hydroxy–3–methylglutaryl coenzyme A reductase inhibitors. al Rayyes O, et al. **Hepatology** 1997 Apr; 25(4):991–4

Additive inhibitory effect of hydrocortisone and cyclosporine on low–density lipoprotein receptor activity in cultured HepG2 cells. Al Rayyes O, et al. **Hepatology** 1997 Oct; 26(4):967–71

BIOSYNTHESIS

Surface expression of low density lipoprotein receptor in EBV–transformed lymphocytes: characterization and use for studying familial hypercholesterolemia. Chan P, et al. **Atherosclerosis** 1997 Jun;131(2):149–60

Enhanced expression of endothelial oxidized low–density lipoprotein receptor (LOX–1) in hypertensive rats. Nagase M, et al. **Biochem Biophys Res Commun** 1997 Aug 28; 237(3):496–8

Cyclic AMP–mediated control of LDL receptor gene expression in human skin fibroblasts. Holmes C, et al. **Biochem Soc Trans** 1997 May;25(2):179S

Low–density lipoprotein receptor mRNA in human breast cancer cells: influence by PKC modulators. Stranzl A, et al. **Breast Cancer Res Treat** 1997 Feb;42(3):195–205

Sterol resistance in CHO cells traced to point mutation in SREBP cleavage–activating protein. Hua X, et al. **Cell** 1996 Nov 1;87(3):415–26

Low density lipoprotein receptor expression and function in human polymorphonuclear leucocytes. Lara LL, et al. **Clin Exp Immunol** 1997 Jan;107(1):205–12

Germ cell–somatic cell dichotomy of a low–density lipoprotein receptor gene family member in testis. Lindstedt KA, et al. **DNA Cell Biol** 1997 Jan;16(1):35–43

Embryo implantation in mouse: fetomaternal coordination in the pattern of expression of uPA, uPAR, PAI–1 and alpha 2MR/LRP genes. Teesalu T, et al. **Mech Dev** 1996 May;56(1–2):103–16

BLOOD

Reducing saturated fat intake is associated with increased levels of LDL receptors on mononuclear cells in healthy men and women. Mustad VA, et al. **J Lipid Res** 1997 Mar; 38(3):459–68

CHEMISTRY

Conformationally specific enhancement of receptor–mediated LDL binding and internalization by peptide models of a conserved anionic N–terminal domain of human apolipoprotein E. Braddock DT, et al. **Biochemistry** 1996 Nov 5;35(44):13975–84

LDL–receptor structure. Calcium cages, acid baths and recycling receptors [news; comment] Brown MS, et al. **Nature** 1997 Aug 14;388(6643):629–30. Comment on: Nature 1997 Aug 14;388(6643):691–3.

Molecular basis of familial hypercholesterolaemia from structure of LDL receptor module [see comments] Fass D, et al. **Nature** 1997 Aug 14;388(6643):691–3. Comment in: Nature 1997 Aug 14;388(6643):629–30.

Expression and characterization of a truncated, soluble, low–density lipoprotein receptor. Dirlam KA, et al. **Protein Expr Purif** 1996 Dec;8(4):489–500

DEFICIENCY

Effect of probucol treatment on gene expression of VCAM–1, MCP–1, and M–CSF in the aortic wall of LDL receptor–deficient rabbits during early atherogenesis. Fruebis J, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul; 17(7):1289–302

Does receptor–'Ck' deficiency initiate leukaemia? Kaul D, et al. **Cancer Lett** 1997 Jan 30;112(2):199–202

Hyperlipoproteinemia enhances susceptibility to acute disseminated Candida albicans infection in low–density–lipoprotein–receptor–deficient mice. Netea MG, et al. **Infect Immun** 1997 Jul;65(7):2663–7

The emergence of mouse models of atherosclerosis and their relevance to clinical research. Smith JD, et al. **J Intern Med** 1997 Aug;242(2):99–109 (99 ref.)

Acquired VLDL receptor deficiency in experimental nephrosis. Liang K, et al. **Kidney Int** 1997 Jun;51(6):1761–5

DRUG EFFECTS

Effects of gemfibrozil administration on very low density lipoprotein receptor mRNA levels in rabbits. Matsuoka N, et al. **Atherosclerosis** 1996 Oct 25;126(2):221–6

Effect of tincture of Crataegus on the LDL–receptor activity of hepatic plasma membrane of rats fed an atherogenic diet.

Rajendran S, et al. **Atherosclerosis** 1996 Jun; 123(1-2):235-41

Hypocholesterolemic effect of lycopene and beta-carotene is related to suppression of cholesterol synthesis and augmentation of LDL receptor activity in macrophages. Fuhrman B, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):658-62

Carboxymethylated beta-1,3-glucan inhibits the binding and degradation of acetylated low density lipoproteins in macrophages in vitro and modulates their plasma clearance in vivo. Dushkin MI, et al. **Cell Biochem Funct** 1996 Sep; 14(3):209-17

Reversal of cyclosporine-inhibited low-density lipoprotein receptor activity in HepG2 cells by 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors. al Rayyes O, et al. **Hepatology** 1997 Apr; 25(4):991-4

Effects of granulocyte-macrophage colony-stimulating factor on the levels of VLDL and LDL receptor mRNAs in vivo. Ishibashi T, et al. **J Atheroscler Thromb** 1996; 2(2):76-80

Effects of cyclosporin on cholesterol 27-hydroxylation and LDL receptor activity in HepG2 cells. Winegar DA, et al. **J Lipid Res** 1996 Jan;37(1):179-91

No association between very low density lipoprotein receptor (VLDL-R) and Alzheimer disease in American Caucasians. Pritchard ML, et al. **Neurosci Lett** 1996 May 10; 209(2):105-8

[Pravastatin increases the activity pf the LDL receptors in lymphocytes of individuals with heterozygous familial hypercholesterolemia] Alvarez-Sala LA, et al. **Rev Clin Esp** 1997 May;197(5):317-22 (Eng. Abstr.) **(Spa)**

GENETICS

Alcohol feeding impedes early atherosclerosis in low-density lipoprotein receptor knockout mice: factors in addition to high-density lipoprotein-apolipoprotein A1 are involved. Dai J, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):11-8

Decreased very-low-density lipoprotein and low-density lipoprotein receptor messenger ribonucleic acid expression in placentas from preeclamptic pregnancies. Murata M, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1551-6

Expression of very low density lipoprotein receptor mRNA in rabbit atherosclerotic lesions. Nakazato K, et al. **Am J Pathol** 1996 Dec;149(6):1831-8

A new member with eleven binding repeats: novel insights into the LDL receptor gene family. Bujo H, et al. **Ann N Y Acad Sci** 1997 Apr 15;811:185-90 (19 ref.)

Inhibitors of 3-hydroxy-3-methylglutaryl coenzyme A reductase unmask transcriptional regulation of hepatic low-density lipoprotein receptor gene expression by dietary cholesterol. Lopez D, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):215-9

Pvu II RFLPs of LDL receptor gene in normolipidemic subjects from Havana City. López-Cánovas L, et al. **Arch Med Res** 1996 Winter;27(4):571-2

Familial moderate hypercholesterolemia caused by Asp235-->Glu mutation of the LDL receptor gene and co-occurrence of a de novo deletion of the LDL receptor gene in the same family. Koivisto UM, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1392-9

A novel mosaic protein containing LDL receptor elements is highly conserved in humans and chickens. Mörwald S, et al. **Arterioscler Thromb Vasc Biol** 1997 May; 17(5):996-1002

Effective lowering of plasma, LDL, and esterified cholesterol in LDL receptor-knockout mice by adenovirus-mediated gene delivery of ApoB mRNA editing enzyme (Apobec1). Teng B, et al. **Arterioscler Thromb Vasc Biol** 1997 May; 17(5):889-97

Influence of genetic variability in the nondeletion LDL-receptor allele on phenotypic variation in French-Canadian familial hypercholesterolemia heterozygotes sharing a 'null' LDL-receptor gene defect. Bétard C, et al. **Atherosclerosis** 1996 Jan 5;119(1):43-55

A common W556S mutation in the LDL receptor gene of Danish patients with familial hypercholesterolemia encodes a transport-defective protein. Jensen HK, et al. **Atherosclerosis** 1997 May;131(1):67-72

1 alpha,25-dihydroxyvitamin D3 induces very low density lipoprotein receptor mRNA expression in HL-60 cells in association with monocytic differentiation. Kohno M, et al. **Atherosclerosis** 1997 Aug;133(1):45-9

Two novel point mutations causing receptor-negative familial hypercholesterolemia in a South African Indian homozygote. Langenhoven E, et al. **Atherosclerosis** 1996 Aug 23;125(1):111-9

Detection and characterization of a novel splice mutation in the LDL receptor intron 12 resulting in two different mutant mRNA variants. Nissen H, et al. **Atherosclerosis** 1997 Jan 3;128(1):75-83

Statin therapy in a kindred with both apolipoprotein B and low density lipoprotein receptor gene defects. Raal FJ, et al. **Atherosclerosis** 1997 Feb 28;129(1):97-102

Heterozygous familial hypercholesterolemia in children: low-density lipoprotein receptor mutational analysis and variation in the expression of plasma lipoprotein-lipid concentrations. Torres AL, et al. **Atherosclerosis** 1996 Sep 27;126(1):163-71

Abnormal regulation of the LDL-R and HMG CoA reductase genes in subjects with familial hypercholesterolemia with the "French Canadian mutation". Yu L, et al. **Atherosclerosis** 1996 Jul; 124(1):103-17

Serum response element-like sequences of the human low density lipoprotein receptor promoter: possible regulation sites for sterol-independent transcriptional activation. Pak YK. **Biochem Mol Biol Int** 1996 Feb;38(1):31-6

Association of an exon 3 mutation (Trp66-->Gly) of the LDL receptor with variable expression of familial hypercholesterolemia in a French Canadian family. Levy E, et al. **Biochem Mol Med** 1997 Feb;60(1):59-69

Involvement of tyrosine kinase activity in the low-density lipoprotein receptor expression in human lung adenocarcinoma cell line A549. Gueddari N, et al. **Biochimie** 1996;78(10):874-81

Ovarian follicular steroidogenic acute regulatory protein, low-density lipoprotein receptor, and cytochrome P450 side-chain cleavage messenger ribonucleic acids in cattle undergoing superovulation. Soumano K, et al. **Biol Reprod** 1997 Feb;56(2):516-22

L-arginine prevents xanthoma development and inhibits atherosclerosis in LDL receptor knockout mice [see comments] Aji W, et al. **Circulation** 1997 Jan 21;95(2):430-7 . Comment in: Circulation 1997 Jan 21;95(2):311-2.

Single-strand conformation polymorphism analysis with high throughput modifications, and its use in mutation detection in familial hypercholesterolemia. International Federation of Clinical Chemistry Scientific Division: Committee on Molecular Biology Techniques. Humphries SE, et al. **Clin Chem** 1997 Mar;43(3):427-35 (47 ref.)

Two novel mutations in the LDL receptor gene: common causes of familial hypercholesterolemia in a Spanish population. Cenarro A, et al. **Clin Genet** 1996 Apr; 49(4):180-5

Seven DNA polymorphisms in the LDL receptor gene: application to the study of familial hypercholesterolemia in Spain. Chaves FJ, et al. **Clin Genet** 1996 Jul;50(1):28-35

High prevalence of a novel mutation in the exon 4 of the low-density lipoprotein receptor gene causing familial hypercholesterolemia in Belgium. Descamps O, et al. **Clin Genet** 1997 May;51(5):303-8

Detection of the PvuII RFLP in intron 15 of the LDL receptor gene by long-distance PCR. du Plessis L, et al. **Clin Genet** 1996 May;49(5):277-8

A G-1-to-A acceptor splice site LDLR mutant allele leads to reduced relative transcript levels in patients with heterozygous familial hypercholesterolemia. Jensen HK, et al. **Clin Genet** 1996 Apr;49(4):175-9

Phenotypic characterization of a patient homozygous for the D558N LDL receptor gene mutation. Jensen HK, et al. **Clin Genet** 1996 Nov;50(5):388-92

CpG hotspot mutations at the LDL receptor locus are a frequent cause of familial hypercholesterolaemia among South African Indians. Kotze MJ, et al. **Clin Genet** 1997 Jun;51(6):394-8

A novel mutation M-21V in exon 1 of the low density lipoprotein receptor gene causing familial hypercholesterolemia. Lombardi P, et al. **Clin Genet** 1997 Jun;51(6):430-1

Identification of a double mutation in the low-density lipoprotein receptor gene causing familial hypercholesterolemia. Lombardi P, et al. **Clin Genet** 1996 Dec;50(6):525-6

A novel V415A mutation in exon 9 of the low density lipoprotein receptor gene causing familial hypercholesterolemia. Lombardi P, et al. **Clin Genet** 1997 Apr;51(4):286-7

The atherogenic lipoprotein phenotype is not caused by a mutation in the coding region of the low density lipoprotein receptor gene. Naggert JK, et al. **Clin Genet** 1997 Apr; 51(4):236-40

A three-allelic polymorphic system in exon 12 of the LDL receptor gene is highly informative for segregation analysis of familial hypercholesterolemia in the Spanish population. Puig O, et al. **Clin Genet** 1996 Jul;50(1):50-3

Geographic distribution of French-Canadian low-density lipoprotein receptor gene mutations in the Province of Quebec. Vohl MC, et al. **Clin Genet** 1997 Jul;52(1):1-6

A novel point mutation (Pro84-->Ser) of the low density lipoprotein receptor gene in a family with moderate hypercholesterolemia. Vuorio AF, et al. **Clin Genet** 1997 Mar;51(3):191-5

Androgen receptor-mediated antagonism of estrogen-dependent low density lipoprotein receptor transcription in cultured hepatocytes. Croston GE, et al. **Endocrinology** 1997 Sep;138(9):3779-86

Novel effects of histamine on lipoprotein metabolism: suppression of hepatic low density lipoprotein receptor expression and reduction of plasma high density lipoprotein cholesterol in the rat. Liao W, et al. **Endocrinology** 1997 May;138(5):1863-70

Fast amplification of the low density lipoprotein receptor gene and detection of a large deletion by means of long polymerase chain reaction. Bochmann H, et al. **Eur J Clin Chem Clin Biochem** 1996 Dec;34(12):955-9

Comparison of the effect of two low-density lipoprotein receptor class mutations on coronary heart disease among French-Canadian patients heterozygous for familial hypercholesterolaemia. Vohl MC, et al. **Eur J Clin Invest** 1997 May;27(5):366-73

Origin and migration of an Afrikaner founder mutation FHAfrikaner-2 (V408M) causing familial hypercholesterolemia. Defesche JC, et al. **Gene Geogr** 1996 Apr;10(1):1-10

HBV-derived promoters direct liver-specific expression of an adenovirally transduced LDL receptor gene. Sandig V, et al. **Gene Ther** 1996 Nov;3(11):1002-9

No association between the very low density lipoprotein receptor gene and late-onset Alzheimer's disease nor interaction with the apolipoprotein E gene in population-based and clinic samples. Fallin D, et al. **Genet Epidemiol** 1997;14(3):299-305

PCR induction of a TaqI restriction site at any CpG dinucleotide using two mismatched primers (CpG-PCR). O'Dell SD, et al. **Genome Res** 1996 Jun;6(6):558-68

Two partial deletion mutations involving the same Alu sequence within intron 8 of the LDL receptor gene in Korean patients with familial hypercholesterolemia. Chae JJ, et al. **Hum Genet** 1997 Feb;99(2):155-63

Differential loss of heterozygosity in familial, sporadic, and uremic hyperparathyroidism. Farnebo F, et al. **Hum Genet** 1997 Mar;99(3):342-9

Association between common alleles of the low-density lipoprotein receptor gene region and interindividual variation in plasma lipid and apolipoprotein levels in a population-based sample from Rochester, Minnesota. Haviland MB, et al. **Hum Genet** 1997 Jan;99(1):108-14

A double mutant LDL receptor allele in a cypriot family with heterozygous familial hypercholesterolemia. Kotze MJ, et al. **Hum Genet** 1997 Jul;100(1):101-3

The T705I mutation of the low density lipoprotein receptor gene (FH Paris-9) does not cause familial hypercholesterolemia. Lombardi P, et al. **Hum Genet** 1997 Jan;99(1):106-7

Mutational and genetic origin of LDL receptor gene mutations detected in both Belgian and Dutch familial hypercholesterolemics. Peeters AV, et al. **Hum Genet** 1997 Aug;100(2):266-70

A new MspIPCR-RFLP in the human LDL receptor gene. Chae JJ, et al. **Hum Hered** 1996 Nov-Dec;46(6):339-41

Genetic variation at a splicing branch point in intron 9 of the low density lipoprotein (LDL)-receptor gene: a rare mutation that disrupts mRNA splicing in a patient with familial hypercholesterolaemia and a common polymorphism. Webb JC, et al. **Hum Mol Genet** 1996 Sep; 5(9):1325-31

Identification of two novel LDL receptor gene defects in French-Canadian pediatric population: mutational analysis and biochemical studies. Assouline L, et al. **Hum Mutat** 1997;9(6):555-62

Spectrum of LDL receptor gene mutations in heterozygous familial hypercholesterolemia. Day IN, et al. **Hum Mutat** 1997;10(2):116-27

Common founder mutation in the LDL receptor gene causing familial hypercholesterolaemia in the Icelandic population. Gudnason V, et al. **Hum Mutat** 1997;10(1):36-44

Two mutations in the same low-density lipoprotein receptor allele act in synergy to reduce receptor function in heterozygous familial hypercholesterolemia. Jensen HK, et al. **Hum Mutat** 1997;9(5):437-44

Allele-specific measurement of low-density lipoprotein receptor transcript levels. Jensen LG, et al. **Hum Mutat** 1996;8(2):126-33

A novel deletion/inversion mutation in the low-density lipoprotein receptor gene as a cause of heterozygous familial hypercholesterolemia. Koivisto UM, et al. **Hum Mutat** 1996;8(4):326-32

A high incidence of mutations in exon 6 of the low-density lipoprotein receptor gene in Greek familial hypercholesterolemia patients, including a novel mutation. Mavroidis N, et al. **Hum Mutat** 1997;9(3):274-6

VLDL receptor in health and disease: interview with a receptor in avian oocytes and mammalian muscle and fat cells. Bujo H, et al. **J Atheroscler Thromb** 1996;2(2):71-5 (33 ref.)

Identification of a novel cis-acting element participating in maximal induction of the human low density lipoprotein receptor gene transcription in response to low cellular cholesterol levels. Mehta KD, et al. **J Biol Chem** 1996 Dec 27;271(52):33616-22

Absence of P-selectin delays fatty streak formation in mice. Johnson RC, et al. **J Clin Invest** 1997 Mar 1;99(5):1037-43

In the absence of the low density lipoprotein receptor, human apolipoprotein C1 overexpression in transgenic mice inhibits the hepatic uptake of very low density lipoproteins via a receptor-associated protein-sensitive pathway. Jong MC, et al. **J Clin Invest** 1996 Nov 15;98(10):2259-67

Distribution of types for six PCR-based loci; LDLR, GYPA, HBGG, D7S8, GC and HLA-DQA1 in central Pyrenees and Teruel (Spain). Bell B, et al. **J Forensic Sci** 1997 May; 42(3):510-3

Population data on the loci LDLR, GYPA, HBGG, D7S8, and GC in three southwest European populations. Rodriguez-Calvo MS, et al. **J Forensic Sci** 1996 Mar; 41(2):291-6

Navajo, Pueblo, and Sioux population data on the Loci HLA-DQA1, LDLR, GYPA, HBGG, D7S8, Gc, and D1S80. Scholl S, et al. **J Forensic Sci** 1996 Jan;41(1):47-51

Molecular genetics of familial hypercholesterolaemia in Norway. Leren TP, et al. **J Intern Med** 1997 Mar; 241(3):185-94

Leukocyte low density lipoprotein receptor (LDL-R) does not contribute to LDL clearance in vivo: bone marrow transplantation studies in the mouse. Fazio S, et al.

J Lipid Res 1997 Feb;38(2):391–400

Transcriptional and post-transcriptional regulation of LDL receptor gene expression in PMA-treated THP-1 cells by LDL-containing immune complexes. Huang Y, et al. **J Lipid Res** 1997 Jan;38(1):110–20

Cholesterol homeostasis is modulated by amphiphiles at transcriptional and post-transcriptional loci. Lange Y, et al. **J Lipid Res** 1996 Mar;37(3):534–9

Activation of LDL receptor gene expression in HepG2 cells by hepatocyte growth factor. Pak YK, et al. **J Lipid Res** 1996 May;37(5):985–98

An improved method for detection of low density lipoprotein receptor defects in human T lymphocytes. Verhoeye FR, et al. **J Lipid Res** 1996 Jun;37(6):1377–84

Characterization of mutations in the low density lipoprotein (LDL)-receptor gene in patients with homozygous familial hypercholesterolemia, and frequency of these mutations in FH patients in the United Kingdom. Webb JC, et al. **J Lipid Res** 1996 Feb;37(2):368–81

Modulation of LDL receptor mRNA stability by phorbol esters in human liver cell culture models. Wilson GM, et al. **J Lipid Res** 1997 Mar;38(3):437–46

Identification of a common low density lipoprotein receptor mutation (R329X) in the south of England: complete linkage disequilibrium with an allele of microsatellite D19S394. Day IN, et al. **J Med Genet** 1997 Feb;34(2):111–6

Chiloscyllium plagiosum low-density lipoprotein receptor: evolutionary conservation of five different functional domains. Mehta KD, et al. **J Mol Evol** 1996 Feb; 42(2):264–72

Low density lipoprotein receptor gene family members mediate yolk deposition. Bujo H, et al. **J Nutr** 1997 May; 127(5 Suppl):801S–804S (29 ref.)

Down-regulation of VLDL receptor expression in chronic experimental renal failure. Vaziri ND, et al. **Kidney Int** 1997 Mar;51(3):913–9

Down-regulation of hepatic LDL receptor expression in experimental nephrosis. Vaziri ND, et al. **Kidney Int** 1996 Sep;50(3):887–93

Adenoviral delivery of low-density lipoprotein receptors to hyperlipidemic rabbits: receptor expression modulates high-density lipoproteins. Brown DR, et al. **Metabolism** 1996 Dec;45(12):1447–57

Receptor-'Ck' dependent signalling regulates the LDL-receptor gene transcription. Goel R, et al. **Mol Cell Biochem** 1997 Apr;169(1–2):79–83

Deletions of the low density lipoprotein receptor gene underlying familial hypercholesterolaemia: screening by polymerase chain reaction using pooled DNA and blood samples. Vuorio AF, et al. **Mol Cell Probes** 1997 Feb; 11(1):65–70

Gene expression of LDL receptor, HMG-CoA reductase, and cholesterol-7 alpha-hydroxylase in chronic renal failure. Liang K, et al. **Nephrol Dial Transplant** 1997 Jul; 12(7):1381–6

Genetic association of the low-density lipoprotein receptor-related protein gene (LRP), an apolipoprotein E receptor, with late-onset Alzheimer's disease. Kang DE, et al. **Neurology** 1997 Jul;49(1):56–61

Software and database for the analysis of mutations in the human LDL receptor gene. Varret M, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):172–80

A rapid, polymerase chain reaction-based procedure for identifying mutant restricted ovulator chickens. Bujo H, et al. **Poult Sci** 1996 Sep;75(9):1113–7

Regulation of mRNA encoding low density lipoprotein receptor and high density lipoprotein-binding protein in ovine corpora lutea. Tandeski TR, et al. **Reprod Fertil Dev** 1996;8(7):1107–14

Phenotypic presentation of the FH-Cincinnati type 5 low density lipoprotein receptor mutation. Nissen H, et al. **Scand J Clin Lab Invest** 1996 Feb;56(1):75–85

Application of long polymerase chain reaction in the study of the LDL receptor gene. Rødningen OK, et al. **Scand J Clin Lab Invest** 1996 Feb;56(1):93–6

A mouse model with features of familial combined hyperlipidemia. Masucci-Magoulas L, et al. **Science** 1997 Jan 17;275(5298):391–4

[The family of lipoprotein receptors is growing] Heliö T, et al. **Duodecim** 1995;111(16):1534–41 (38 ref.) **(Fin)**

[Molecular genetics of apolipoprotein E and its receptors, implications for genetic risk factors of Alzheimer's disease] Okuizumi K, et al. **Tanpakushitsu Kakusan Koso** 1996 Aug; 41(10):1460–4 (20 ref.) **(Jpn)**

[Application of gene technology in the diagnosis of familial hypercholesterolemia] Leren TP, et al. **Tidsskr Nor Laegeforen** 1997 Feb 20;117(5):678–81 (Eng. Abstr.) **(Nor)**

IMMUNOLOGY

Immunoenzyme assessment of human apoB-lipoprotein binding to immobilized receptor of low density lipoproteins. 1. Preparation of anti-receptor monoclonal antibodies. Tsibulsky VP, et al. **Biochemistry (Mosc)** 1997 Jun;62(6):596–602

ISOLATION & PURIFICATION

Characterization of a receptor for oxidized low-density lipoproteins on rat Kupffer cells: similarity to macrosialin. Van Velzen AG, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):411–5

An M(r) 145,000 low-density lipoprotein (LDL)-binding protein is conserved throughout the Kinetoplastida order. Bastin P, et al. **Mol Biochem Parasitol** 1996 Feb-Mar; 76(1–2):43–56

[Isolation and characteristics of recombinant ligand-binding domain of human low density lipoprotein receptor] Golubkov VI, et al. **Biull Eksp Biol Med** 1997 Feb; 123(2):184–7 **(Rus)**

METABOLISM

Increased expression of low-density lipoprotein receptors in a Smith-Lemli-Opitz infant with elevated bilirubin levels. Ness GC, et al. **Am J Med Genet** 1997 Jan 31;68(3):294–9

Chylomicron remnant uptake by enterocytes is receptor dependent. Soued M, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G203–12

Colocalization of gold-labeled LDL and fibrinogen on platelets: enhanced fibrinogen binding induced by LDL. Volf I, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):C118–29

Human leukemia inhibitory factor upregulates LDL receptors on liver cells and decreases serum cholesterol in the cholesterol-fed rabbit. Moran CS, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1267–73

Contrasting effects of plasminogen activators, urokinase receptor, and LDL receptor-related protein on smooth muscle cell migration and invasion. Okada SS, et al. **Arterioscler Thromb Vasc Biol** 1996 Oct;16(10):1269–76

Possible functional interactions of apolipoprotein B-100 segments that associate with cell proteoglycans and the ApoB/E receptor. Olsson U, et al. **Arterioscler Thromb Vasc Biol** 1997 Jan;17(1):149–55

Development of selective low-density lipoprotein (LDL) apheresis system: immobilized polyanion as LDL-specific adsorption for LDL apheresis system. Tani N. **Artif Organs** 1996 Aug;20(8):922–9

Three-dimensional structure of the LDL receptor-binding domain of the human apolipoprotein E2 (Arg136-->Cys) variant. Feussner G, et al. **Atherosclerosis** 1996 Oct 25; 126(2):177–84

Pseudo type III dyslipoproteinemia is associated with normal fibroblast lipoprotein receptor activity. Giroux LM, et al. **Atherosclerosis** 1997 Jul 11;132(1):85–94

Familial defective apolipoprotein B-100 (FDB): effect of simvastatin therapy on LDL-receptor binding. Mamotte CD, et al. **Atherosclerosis** 1996 Aug 23;125(1):103–10

LDL receptor-independent and -dependent uptake of lipoproteins. van Berkel TJ, et al. **Atherosclerosis** 1995 Dec; 118 Suppl:S43–50 (59 ref.)

Lovastatin increases surface low density lipoprotein receptor expression by retarding the receptor internalization rate in proliferating lymphocytes. Chan PC, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):117–22

Hypocholesterolemic effect of lycopene and beta-carotene is related to suppression of cholesterol synthesis and augmentation of LDL receptor activity in macrophages. Fuhrman B, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):658–62

Lactacystin increases LDL receptor level on HepG2 cells. Miura H, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):684–7

Binding and degradation of thrombospondin-1 mediated through heparan sulphate proteoglycans and low-density-lipoprotein receptor-related protein: localization of the functional activity to the trimeric N-terminal heparin-binding region of thrombospondin-1. Chen H, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):959–63

Kinetics of low-density lipoprotein receptor activity in Hep-G2 cells: derivation and validation of a Briggs-Haldane-based kinetic model for evaluating receptor-mediated endocytotic processes in which receptors recycle. Harwood Jr HJ, et al. **Biochem J** 1997 May 1;323 (Pt 3):649–59

Synthesis and properties of the very-low-density-lipoprotein receptor and a comparison with the low-density-lipoprotein receptor. Patel DD, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):371–7

Intracellular transport of the low-density lipoprotein receptor. Soutar AK. **Biochem Soc Trans** 1996 May; 24(2):547–52 (41 ref.)

Conformationally specific enhancement of receptor-mediated LDL binding and internalization by peptide models of a conserved anionic N-terminal domain of human apolipoprotein E. Braddock DT, et al. **Biochemistry** 1996 Nov 5;35(44):13975–84

Immunoenzyme assessment of human apoB-lipoprotein binding to immobilized receptor of low density lipoproteins. 1. Preparation of anti-receptor monoclonal antibodies. Tsibulsky VP, et al. **Biochemistry (Mosc)** 1997 Jun;62(6):596–602

Immunoenzyme assessment of human apoB-lipoprotein binding to immobilized receptor of low density lipoproteins. 2. Binding of isolated lipoproteins. Tsibulsky VP, et al. **Biochemistry (Mosc)** 1997 Jun;62(6):603–8

Selective endocytosis of fluorothymidine and azidothymidine coupled to LDL into HIV infected mononuclear cells. Mankertz J, et al. **Biochim Biophys Acta** 1996 Dec 16; 1317(3):233–7

Characterization of alpha 2-macroglobulin receptor low density lipoprotein receptor-related protein (alpha 2 MR/LRP) in White Carneau pigeon peritoneal macrophages: its role in lipoprotein metabolism. Seo T, et al. **Biochim Biophys Acta** 1997 Jan 21;1344(2):171–88

Changes in the spectral properties of a plasma membrane lipid analog during the first seconds of endocytosis in living cells. Chen CS, et al. **Biophys J** 1997 Jan;72(1):37–50

Cell surface APP751 forms complexes with protease nexin 2 ligands and is internalized via the low density lipoprotein receptor-related protein (LRP). Knauer MF, et al. **Brain Res** 1996 Nov 18;740(1–2):6–14

Specific lipid protein interactions characterize 3 populations of clathrin coated vesicles involved in the LDL receptor traffic. Turpin E, et al. **C R Acad Sci III** 1996 Jun; 319(6):493–503

Sterol dependent LDL-receptor gene transcription in lymphocytes from normal and CML patients. Goel R, et al. **Cancer Lett** 1996 Oct 22;107(2):193–8

Lipoprotein metabolism in the fat Zucker rat: reduced basal expression but normal regulation of hepatic low density lipoprotein receptors. Liao W, et al. **Endocrinology** 1997 Aug;138(8):3276–82

Structural and compositional modifications of diabetic low-density lipoproteins influence their receptor-mediated uptake by hepatocytes. Krämer-Guth A, et al. **Eur J Clin Invest** 1997 Jun;27(6):460–8

Expression of receptors for native and chemically modified low-density lipoproteins in brain microvessels. Lucarelli M, et al. **FEBS Lett** 1997 Jan 13;401(1):53–8

Preferential recognition of the very low-density lipoprotein receptor ligand binding site by antibodies from phage display libraries. Pfistermueller DM, et al. **FEBS Lett** 1996 Oct 28;396(1):14–20

The lysine cluster in the collagen-like domain of the scavenger receptor provides for its ligand binding and ligand specificity. Yamamoto K, et al. **FEBS Lett** 1997 Sep 8;414(2):182–6

Increased uptake of LDL by oxidized macrophages is the result of an initial enhanced LDL receptor activity and of a further progressive oxidation of LDL. Fuhrman B, et al. **Free Radic Biol Med** 1997;23(1):34–46

The relationship between lipoprotein(a) and low density lipoprotein receptors during the treatment of hyperthyroidism. Hayashi H, et al. **Horm Metab Res** 1996 Aug;28(8):384–7

The apolipoprotein B Q3405E polymorphism has no effect on its low-density-lipoprotein receptor binding affinity. Pullinger CR, et al. **Hum Genet** 1996 Dec;98(6):678–80

Vitellogenin receptors: oocyte-specific members of the low-density lipoprotein receptor supergene family. Schneider WJ. **Int Rev Cytol** 1996;166:103–37 (119 ref.)

Cellular binding and degradation of lipoprotein (a). Fless GM. **J Atheroscler Thromb** 1995;2 Suppl 1:S1–4 (20 ref.)

Interaction of apolipoprotein J-amyloid beta-peptide complex with low density lipoprotein receptor-related protein-2/megalin. A mechanism to prevent pathological accumulation of amyloid beta-peptide. Hammad SM, et al. **J Biol Chem** 1997 Jul 25;272(30):18644–9

Receptor-associated protein and members of the low density lipoprotein receptor family share a common epitope. An extended model for the development of passive Heymann nephritis. Hiesberger T, et al. **J Biol Chem** 1996 Nov 15; 271(46):28792–7

Molecular analysis of ligand binding to the second cluster of complement-type repeats of the low density lipoprotein receptor-related protein. Evidence for an allosteric component in receptor-associated protein-mediated inhibition of ligand binding. Horn IR, et al. **J Biol Chem** 1997 May 23;272(21):13608–13

High affinity saturable uptake of oxidized low density lipoprotein by macrophages from mice lacking the scavenger receptor class A type I/II. Lougheed M, et al. **J Biol Chem** 1997 May 16;272(20):12938–44

Segments in the C-terminal folding domain of lipoprotein lipase important for binding to the low density lipoprotein receptor-related protein and to heparan sulfate proteoglycans. Nielsen MS, et al. **J Biol Chem** 1997 Feb 28;272(9):5821–7

Elements of neural adhesion molecules and a yeast vacuolar protein sorting receptor are present in a novel mammalian low density lipoprotein receptor family member. Yamazaki H, et al. **J Biol Chem** 1996 Oct 4;271(40):24761–8

A new function for the LDL receptor: transcytosis of LDL across the blood-brain barrier. Dehouck B, et al. **J Cell Biol** 1997 Aug 25;138(4):877–89

Ligand interaction of human alpha 2-macroglobulin-alpha 2-macroglobulin receptor studied by partitioning in aqueous two-phase systems. Birkenmeier G, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):97–103

Oxidized or acetylated low density lipoproteins are rapidly cleared by the liver in mice with disruption of the scavenger receptor class A type I/II gene. Ling W, et al. **J Clin Invest** 1997 Jul 15;100(2):244–52

Tri-iodothyronine prevents the amiodarone-induced decrease in the expression of the liver low-density lipoprotein receptor gene. Hudig F, et al. **J Endocrinol** 1997 Mar;152(3):413–21

Cigarette smoke increases cholesterol oxidation and lipid peroxidation of human low-density lipoprotein and decreases its binding to the hepatic receptor in vitro. Mahfouz MM, et al. **J Environ Pathol Toxicol Oncol** 1995; 14(3–4):181–92

Apolipoprotein (apo) E genotype and apoE concentration determine binding of normal very low density lipoproteins to HepG2 cell surface receptors. Bohnet K, et al. **J Lipid Res** 1996 Jun;37(6):1316–24

Relative roles of the LDL receptor, the LDL receptor-like protein, and hepatic lipase in chylomicron remnant removal by the liver. de Faria E, et al. **J Lipid Res** 1996 Jan; 37(1):197–209

Lipoprotein lipase-mediated uptake of lipoprotein in human fibroblasts: evidence for an LDL receptor-independent internalization pathway. Fernández-Borja M, et al. **J Lipid Res** 1996 Mar;37(3):464–81

Isoproterenol decreases LDL receptor expression in rat adipose cells: activation of cyclic AMP-dependent proteolysis. Kraemer FB, et al. **J Lipid Res** 1996 Feb; 37(2):237–49

Association of genetic variations in apolipoprotein B with hypercholesterolemia, coronary artery disease, and receptor binding of low density lipoproteins. Ludwig EH, et al. **J Lipid Res** 1997 Jul;38(7):1361–73

Dietary linoleic acid increases and palmitic acid decreases hepatic LDL receptor protein and mRNA abundance in young pigs. Mustad VA, et al. **J Lipid Res** 1996 Nov; 37(11):2310–23

VLDL receptor mediates the uptake of human chylomicron remnants in vitro. Niemeier A, et al. **J Lipid Res** 1996 Aug; 37(8):1733–42

Particle size determines the specificity of apolipoprotein E-containing triglyceride-rich emulsions for the LDL receptor versus hepatic remnant receptor in vivo. Rensen PC, et al. **J Lipid Res** 1997 Jun;38(6):1070–84

Effects of streptozotocin-induced diabetes on low density lipoprotein receptor expression in rat adipose tissue. Swami S, et al. **J Lipid Res** 1996 Feb;37(2):229–36

Interaction of a recombinant form of apolipoprotein[a] with human fibroblasts and with the human hepatoma cell line HepG2. Tam SP, et al. **J Lipid Res** 1996 Mar;37(3):518–33

Macrophage oxidative modification of low density lipoprotein occurs independently of its binding to the low density lipoprotein receptor. Tangirala RK, et al. **J Lipid Res** 1996 Apr;37(4):835–43

Modulation of the alpha 2 macroglobulin receptor/low density lipoprotein receptor related protein by interferon-gamma in human astroglial cells. Businaro R, et al. **J Neuroimmunol** 1997 Jan;72(1):75–81

Down-regulation of hepatic LDL receptor expression in experimental nephrosis. Vaziri ND, et al. **Kidney Int** 1996 Sep;50(3):887–93

Down-regulation of VLDL receptor expression in chronic experimental renal failure. Vaziri ND, et al. **Kidney Int** 1997 Mar;51(3):913–9

Plasma kinetic behavior in hyperlipidemic subjects of a lipidic microemulsion that binds to low density lipoprotein receptors. Maranhão RC, et al. **Lipids** 1997 Jun; 32(6):627–33

Corticotropin increases the receptor-specific uptake of native low-density lipoprotein (LDL)--but not of oxidized LDL and native or oxidized lipoprotein(a) [Lp(a)]--in HEPG2 cells: no evidence for Lp(a) catabolism via the LDL-receptor. Bartens W, et al. **Metabolism** 1997 Jul; 46(7):726–9

An endothelial receptor for oxidized low-density lipoprotein. Sawamura T, et al. **Nature** 1997 Mar 6;386(6620):73–7

Immunocytochemical demonstration of alpha 2-M-R/LRP on Müller (glial) cells isolated from rabbit and human retina. Birkenmeier G, et al. **Neuroreport** 1996 Dec 20; 8(1):149–51

Identification of the second cluster of ligand-binding repeats in megalin as a site for receptor-ligand interactions. Orlando RA, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2368–73

Cell surface expression of mouse macrosialin and human CD68 and their role as macrophage receptors for oxidized low density lipoprotein. Ramprasad MP, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14833–8

Prostaglandin I2-mediated upregulation of 125I-LDL-receptor binding by isradipine in normo- and hypercholesterolemic rabbits in vivo. Sinzinger H, et al. **Prostaglandins** 1996 Aug;52(2):77–91

The carboxyl-terminal cytoplasmic domain of CD36 is required for oxidized low-density lipoprotein modulation of NF-kappaB activity by tumor necrosis factor-alpha. Lipsky RH, et al. **Recept Signal Transduct** 1997;7(1):1–11

Binding and uptake of 125iodine-labelled, oxidized low density lipoprotein by macrophages: comparison of the effects of alpha-tocopherol, probucol, pyridoxal-5'-phosphate and magnesium-pyridoxal-5'-phosphate-glutamate. Selmer D, et al. **Z Naturforsch [C]** 1997 Jan-Feb;52(1-2):97–104

[Intracellular signal transmission of low density lipoprotein receptors in human monocytes] Balogh Z, et al. **Orv Hetil** 1997 Sep 7;138(36 Suppl 2):2318–21 (30 ref.) (Eng. Abstr.) **(Hun)**

[Abnormal function of lipoprotein receptors in the monocytes of hypercholesteremic patients] Paragh G, et al. **Orv Hetil** 1997 Sep 7;138(36 Suppl 2):2298–301 (Eng. Abstr.) **(Hun)**

PHYSIOLOGY

Lipoprotein-stimulated surfactant secretion in alveolar type II cells: mediation by heterotrimeric G proteins. Pian MS, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L634–9

Role of leukocyte-specific LDL receptors on plasma lipoprotein cholesterol and atherosclerosis in mice. Boisvert WA, et al. **Arterioscler Thromb Vasc Biol** 1997 Feb; 17(2):340–7

Low-density lipoprotein receptor knockout mice exhibit exaggerated microvascular responses to inflammatory stimuli. Henninger DD, et al. **Circ Res** 1997 Aug; 81(2):274–81

Low density lipoprotein receptor expression and function in human polymorphonuclear leucocytes. Lara LL, et al. **Clin Exp Immunol** 1997 Jan;107(1):205–12

The age-related rise of plasma cholesterol in humans is not caused by a cell removal defect of LDL particles: 'in vitro' studies in peripheral mononuclear blood cells. Neves MQ, et al. **Gerontology** 1997;43(4):232–41

Role of the low density lipoprotein (LDL) receptor pathway in the metabolism of chylomicron remnants. A quantitative study in knockout mice lacking the LDL receptor, apolipoprotein E, or both. Ishibashi S, et al. **J Biol Chem** 1996 Sep 13;271(37):22422–7

A new function for the LDL receptor: transcytosis of LDL across the blood-brain barrier. Dehouck B, et al. **J Cell Biol** 1997 Aug 25;138(4):877–89

Regulatory adaptation of isoprenoid biosynthesis and the LDL receptor pathway in fibroblasts from patients with mevalonate kinase deficiency. Hoffmann GF, et al. **Pediatr Res** 1997 Apr;41(4 Pt 1):541–6

RECEPTORS, LECTIN see **RECEPTORS, MITOGEN**

RECEPTORS, LEUKOCYTE-ADHESION

see related
LEUKOCYTE-ADHESION DEFICIENCY SYNDROME

ANALYSIS

The regulation of CD11b integrin levels on human blood leukocytes and leukotriene B4-stimulated skin by a specific leukotriene B4 receptor antagonist (LY293111). van Pelt JP, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):1005–12

Preinfection in vitro chemotaxis, phagocytosis, oxidative burst, and expression of CD11/CD18 receptors and their predictive capacity on the outcome of mastitis induced in dairy cows with Escherichia coli. Van Werven T, et al. **J Dairy Sci** 1997 Jan;80(1):67–74

DEFICIENCY see **LEUKOCYTE-ADHESION DEFICIENCY SYNDROME**

DRUG EFFECTS

Peritoneal dialysis solution attenuates microvascular leukocyte adhesion induced by nitric oxide synthesis inhibition. White R, et al. **Adv Perit Dial** 1996;12:53–6

GENETICS

A new class of obesity genes encodes leukocyte adhesion receptors. Dong ZM, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7526–30

METABOLISM

Circulating leukocyte integrin expression in Wegener's granulomatosis. Haller H, et al. **J Am Soc Nephrol** 1996 Jan;7(1):40–8

Beta 2 (CD11/CD18) integrins can serve as signaling partners for other leukocyte receptors. Todd RF 3rd, et al. **J Lab Clin Med** 1997 May;129(5):492–8 (64 ref.)

RECEPTORS, LEUKOTRIENE

ANTAGONISTS & INHIBITORS

Leukotrienes and their antagonists in allergic disorders. Negro JM, et al. **Allergol Immunopathol (Madr)** 1997 Mar-Apr;25(2):104–12 (69 ref.)

Eosinophil chemotaxis inhibited by 5-lipoxygenase blockade and leukotriene receptor antagonism. Muñoz NM, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1398–403

Leukotriene antagonist prevents exacerbation of asthma during reduction of high-dose inhaled corticosteroid. The Tokyo Joshi-Idai Asthma Research Group. Tamaoki J, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1235–40

Persistent airway eosinophilia after leukotriene (LT) D4 administration in the guinea pig: modulation by the LTD4 receptor antagonist, pranlukast, or an interleukin-5 monoclonal antibody. Underwood DC, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):850–7

Effectiveness of the leukotriene receptor antagonist zafirlukast for mild-to-moderate asthma. A randomized, double-blind, placebo-controlled trial. Suissa S, et al. **Ann Intern Med** 1997 Feb 1;126(3):177–83

Zafirlukast: the first leukotriene-receptor antagonist approved for the treatment of asthma [see comments] Kelloway JS. **Ann Pharmacother** 1997 Sep;31(9):1012–21 (43 ref.). Comment in: Ann Pharmacother 1997 Sep;31(9):1084–6.

Leukotrienes in asthma. The potential therapeutic role of antileukotriene agents. Smith LJ. **Arch Intern Med** 1996 Oct 28;156(19):2181–9 (95 ref.)

Purification and characterization of pranlukast hydrolase from rat liver microsomes: the hydrolase is identical to carboxylesterase pI 6.2. Luan L, et al. **Biol Pharm Bull** 1997 Jan;20(1):71–5

Discovery of OT4003, a novel, potent, and orally active cys-LT1 receptor antagonist. Tvaermose-Nielsen O, et al. **Bioorg Med Chem** 1997 Feb;5(2):415–27

Pharmacodynamics and pharmacokinetics of BAY x 7195 aerosol, a new and selective receptor antagonist of cysteinyl-leukotrienes, in normal volunteers. Wensing G, et al. **Br J Clin Pharmacol** 1996 Aug;42(2):171–8

Worldwide clinical experience with the first marketed leukotriene receptor antagonist. Barnes NC, et al. **Chest** 1997 Feb;111(2 Suppl):52S–60S (20 ref.)

Pharmacology of leukotriene receptor antagonists. More than inhibitors of bronchoconstriction. Hay DW. **Chest** 1997 Feb;111(2 Suppl):35S–45S (131 ref.)

Challenge studies of a leukotriene receptor antagonist. Okudaira H. **Chest** 1997 Feb;111(2 Suppl):46S–51S (22 ref.)

Montelukast causes prolonged, potent leukotriene D4-receptor antagonism in the airways of patients with asthma. De Lepeleire I, et al. **Clin Pharmacol Ther** 1997 Jan;61(1):83–92

Antileukotriene agents. Tan RA, et al. **Curr Opin Pulm Med** 1997 May;3(3):215–20 (46 ref.)

Management of asthma with zafirlukast. Clinical experience and tolerability profile. Spector SL. **Drugs** 1996;52 Suppl 6:36–46 (46 ref.)

Effects of progesterone and leukotriene receptor antagonists in experimental models of P-glycoprotein-related resistance. Nuessler V, et al. **Eur J Med Res** 1997 Apr 21;2(4):159–64

The cysteinyl-leukotriene receptor antagonist BAY u9773 is a competitive antagonist of leukotriene C4 in the guinea-pig ileum. Bäck M, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):107–13

Effects of a cysteinyl leukotriene antagonist, ONO-1078 (pranlukast), on total airway resistance after antigen challenge in sensitized guinea pigs. Narita S, et al. **Inflamm Res** 1997 Apr;46(4):143–6

Leukotriene cysLT1 (LTD4) receptor antagonism of H1-antihistamines: an in vitro study. Zhang MQ, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S93–4

Therapeutic effect of pranlukast, a selective cysteinyl leukotriene receptor antagonist, on bronchial asthma. Oosaki R, et al. **Int Arch Allergy Immunol** 1997 Sep; 114(1):97–100

Effects of montelukast (MK-0476), a new potent cysteinyl leukotriene (LTD4) receptor antagonist, in patients with chronic asthma. Reiss TF, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):528–34

A proposed common spatial pharmacophore and the corresponding active conformations of some peptide leukotriene receptor antagonists. Hariprasad V, et al. **J Comput Aided Mol Des** 1996 Aug;10(4):284–92

Synthesis and structure-activity relationships of carboxylated chalcones: a novel series of CysLT1 (LTD4) receptor antagonists. Zwaagstra ME, et al. **J Med Chem** 1997 Mar 28;40(7):1075–89

Leukotriene D4-induced Ca2+ mobilization in Ehrlich ascites tumor cells. Pedersen S, et al. **J Membr Biol** 1997 Jan 1;155(1):61–73

Leukotriene receptor antagonists: clinical effects. Barnes N. **J R Soc Med** 1997 Apr;90(4):200–4 (63 ref.)

Leukotriene receptor antagonists: the newest in asthma drugs. Stevenson AM. **MCN Am J Matern Child Nurs** 1997 May-Jun;22(3):170, 169

Pharmacological characteristics of leukotriene antagonists. Nicosia S. **Monaldi Arch Chest Dis** 1996 Dec;51(6):556

Pharmacology of leukotriene receptor antagonists and 5-lipoxygenase inhibitors in the management of asthma. Drazen JM. **Pharmacotherapy** 1997 Jan-Feb;17(1 Pt 2):22S–30S (58 ref.)

New frontiers in asthma therapy: leukotriene receptor antagonists and 5-lipoxygenase inhibitors. Introduction. Hendeles L. **Pharmacotherapy** 1997 Jan-Feb;17(1 Pt 2):1S–2S

The use of 5-lipoxygenase inhibitors and leukotriene receptor antagonists in the treatment of chronic asthma. Sorkness CA. **Pharmacotherapy** 1997 Jan-Feb;17(1 Pt 2):50S–54S (14 ref.)

Beneficial effects of a leukotriene receptor antagonist on thrombin-induced pulmonary edema in the rat. Ahn CM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1995 Dec; 53(6):433–8

Anti-leukotriene intervention: is there adequate information for clinical use in asthma? Ind PW. **Respir Med** 1996 Nov; 90(10):575–86 (70 ref.)

Peptide leukotriene receptor antagonist diminishes pancreatic edema formation in rats with cerulein-induced acute pancreatitis. Hirano T. **Scand J Gastroenterol** 1997 Jan; 32(1):84–8

Pranlukast, a novel leukotriene receptor antagonist: results of the first European, placebo controlled, multicentre clinical study in asthma. Barnes NC, et al. **Thorax** 1997 Jun;52(6):523–7

Effect of pranlukast, an oral leukotriene receptor antagonist, on leukotriene D4 (LTD4) challenge in normal volunteers. O'Shaughnessy TC, et al. **Thorax** 1997 Jun;52(6):519–22

[Leukotrienes and antagonists of leukotriene receptors] **J Pharm Belg** 1997 May-Jun;52(3):131–2 (0 ref.) **(Fre)**

[Leukotriene antagonists. A new therapeutic approach in asthma] Chanez P, et al. **Presse Med** 1997 Feb 22; 26(5):234–9 (70 ref.) (Eng. Abstr.) **(Fre)**

[Leukotriene-receptor antagonists: a new therapeutic principle in bronchial asthma? (editorial)] Pforte A.

RECEPTORS, LEUKOTRIENE

Dtsch Med Wochenschr 1996 Sep 13;121(37):1111–2 **(Ger)**

[Leukotriene receptor antagonists] Bornkessel B. **Med Monatsschr Pharm** 1996 Oct;19(10):284–6 (3 ref.) **(Ger)**

[Clinical pharmacology of leucotriene inhibitors] Paggiaro PL, et al. **Ann Ital Med Int** 1996 Oct;11 Suppl 2:85S–89S (39 ref.) (Eng. Abstr.) **(Ita)**

[Inhibitory effect of ONO–1078, a novel leukotriene receptor antagonist, on human peripheral blood eosinophils] Kobayashi S, et al. **Arerugi** 1996 Nov;45(11):1166–71 (Eng. Abstr.) **(Jpn)**

[Cough–variant asthma successfully treated with a peptide leukotriene receptor antagonist] Nishi K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan; 35(1):117–23 (Eng. Abstr.) **(Jpn)**

[Peptidoleukotriene receptor antagonists in asthma therapy] Sakakibara H, et al. **Nippon Rinsho** 1996 Nov; 54(11):3049–55 (36 ref.) (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Working hypothesis on the classification of Cys–leukotriene receptors in airways. Capra V, et al. **Ann N Y Acad Sci** 1997 May 30;812:169–70

More on the classification of cysteinyl leukotriene receptors [letter; comment] Rovati GE, et al. **Trends Pharmacol Sci** 1997 May;18(5):148–9. Comment on: Trends Pharmacol Sci 1996 Oct;17(10):342–5.

DRUG EFFECTS

[Leukotrienes and asthma. Clinical and experimental experiences with leukotriene receptor antagonists and leukotriene synthesis inhibitors] Henriksen AH, et al. **Tidsskr Nor Laegeforen** 1997 Feb 20;117(5):647–51 (27 ref.) (Eng. Abstr.) **(Nor)**

METABOLISM

Leukotriene receptors in HL–60 cells differentiated into eosinophils, monocytes and neutrophils. Patry C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 May; 54(5):361–70

Induction of granulocytic differentiation in myeloblasts by 17–beta–estradiol involves the leukotriene D4 receptor. Dietsch V, et al. **Recept Signal Transduct** 1996;6(2):63–75

Induction of granulocytic differentiation in myeloblasts by hydroquinone, a metabolite of benzene, involves the leukotriene D4 receptor. Hazel BA, et al. **Recept Signal Transduct** 1996;6(1):1–12

Cysteinyl leukotriene receptors in the human lung: what's new? [see comments] Gorenne I, et al. **Trends Pharmacol Sci** 1996 Oct;17(10):342–5 (27 ref.). Comment in: Trends Pharmacol Sci 1997 May;18(5):148–9.

RECEPTORS, LEUKOTRIENE B4

ANTAGONISTS & INHIBITORS

Synthesis and biochemical/pharmacological profile of the novel leukotriene B4 receptor antagonist sodium (1S*, 3S*)–1–hydroxy–3–[(3 R*S*,E)–3–hydroxy–7–phenyl–1–hepten–1–yl]–1–cyclohexane acetate. Hullot P, et al. **Arzneimittelforschung** 1997 Jan;47(1):51–8

The regulation of CD11b integrin levels on human blood leukocytes and leukotriene B4–stimulated skin by a specific leukotriene B4 receptor antagonist (LY293111). van Pelt JP, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):1005–12

New serine protease inhibitors with leukotriene B4 (LTB4) receptor binding affinity. Nakayama Y, et al. **Bioorg Med Chem** 1997 May;5(5):971–85

Inhibition of ex vivo neutrophil activation by oral LY293111, a novel leukotriene B4 receptor antagonist. Marder P, et al. **Br J Clin Pharmacol** 1996 Oct;42(4):457–64

Characterization of the pharmacological profile of the potent LTB4 antagonist CP–105,696 on murine LTB4 receptors in vitro. Showell HJ, et al. **Br J Pharmacol** 1996 Mar; 117(6):1127–32

(E)–3–[6–[[(2,6–dichlorophenyl)thio]methyl]–3–(2–phenylethoxy)–2– pyridinyl]–2–propenoic acid: a high–affinity leukotriene B4 receptor antagonist with oral antiinflammatory activity. Daines RA, et al. **J Med Chem** 1996 Sep 13;39(19):3837–41

Effect of a leukotriene B4 receptor antagonist, LY293111, on allergen induced responses in asthma [see comments] Evans DJ, et al. **Thorax** 1996 Dec;51(12):1178–84. Comment in: Thorax 1996 Dec;51(12):1171–3.

Effects of montelukast (MK–0476); a potent cysteinyl leukotriene receptor antagonist, on bronchodilation in asthmatic subjects treated with and without inhaled corticosteroids. Reiss TF, et al. **Thorax** 1997 Jan;52(1):45–8

DRUG EFFECTS

Stimulation of protein kinase C redistribution and inhibition of leukotriene B4–induced inositol 1,4,5–trisphosphate generation in human neutrophils by lipoxin A4. Chung–a–on KO, et al. **Br J Pharmacol** 1996 Mar; 117(6):1334–40

METABOLISM

Effects of metal ions on the binding activity of the human leukocyte leukotriene B4 receptor. Ng CF, et al. **Biochem Biophys Res Commun** 1997 Jul 18;236(2):355–9

New serine protease inhibitors with leukotriene B4 (LTB4) receptor binding affinity. Nakayama Y, et al. **Bioorg Med Chem** 1997 May;5(5):971–85

Characterization of the pharmacological profile of the potent LTB4 antagonist CP–105,696 on murine LTB4 receptors in vitro. Showell HJ, et al. **Br J Pharmacol** 1996 Mar; 117(6):1127–32

Structure–activity relationships study of two series of leukotriene B4 antagonists: novel indolyl and naphthyl compounds substituted with a 2–[methyl(2–phenethyl)amino]–2–oxoethyl side chain. Chan WK, et al. **J Med Chem** 1996 Sep 13;39(19):3756–68

A novel series of [2–[methyl(2–phenethyl)amino]–2–oxoethyl] benzene–containing leukotriene B4 antagonists: initial structure–activity relationships. Huang FC, et al. **J Med Chem** 1996 Sep 13;39(19):3748–55

A G–protein–coupled receptor for leukotriene B4 that mediates chemotaxis. Yokomizo T, et al. **Nature** 1997 Jun 5;387(6633):620–4

RECEPTORS, LH

TSH receptor and LH receptor, 1996. Kosugi S, et al. **Endocr J** 1996 Dec;43(6):595–604 (37 ref.)

[The functional analysis of LH receptor] Yano K. **Nippon Rinsho** 1997 Apr;55 Suppl 2:487–90 (6 ref.) **(Jpn)**

ANALYSIS

Identification of a CG/LH binding site in two strains of Mycobacterium vaccae. Carrell DT, et al. **Endocr Res** 1997 Feb–May;23(1–2):59–67

The presence of luteinizing hormone/human chorionic gonadotropin receptors in lactating rat mammary glands. Tao YX, et al. **Life Sci** 1997;60(15):1297–303

Immunohistochemical localization of the LH/HCG receptor in human ovary: HCG enhances cell surface expression of LH/HCG receptor on luteinizing granulosa cells in vitro. Takao Y, et al. **Mol Hum Reprod** 1997 Jul;3(7):569–78

ANTAGONISTS & INHIBITORS

Circulating luteinizing hormone receptor inhibitor(s) in boys with chronic renal failure. Dunkel L, et al. **Kidney Int** 1997 Mar;51(3):777–84

BIOSYNTHESIS

Rat luteinizing hormone receptor messenger ribonucleic acid expression and luteolysis: inhibition by prostaglandin F2 alpha. Bjurulf E, et al. **Biol Reprod** 1996 Jun;54(6):1350–5

Murine oocytes suppress expression of luteinizing hormone receptor messenger ribonucleic acid by granulosa cells. Eppig JJ, et al. **Biol Reprod** 1997 Apr;56(4):976–84

Messenger ribonucleic acid expression for growth hormone receptor, luteinizing hormone receptor, and steroidogenic enzymes during the estrous cycle and pregnancy in porcine and bovine corpora lutea. Yuan W, et al. **Domest Anim Endocrinol** 1996 Sep;13(5):431–44

Molecular mechanisms of reappearance of luteinizing hormone receptor expression and function in rat testis after selective Leydig cell destruction by ethylene dimethane sulfonate. Tena–Sempere M, et al. **Endocrinology** 1997 Aug; 138(8):3340–8

Cloning and functional expression of the luteinizing hormone receptor complementary deoxyribonucleic acid from the marmoset monkey testis: absence of sequences encoding exon 10 in other species. Zhang FP, et al. **Endocrinology** 1997 Jun;138(6):2481–90

Down–regulation of LH/hCG receptor in rat cultured granulosa cells. Kishi H, et al. **FEBS Lett** 1997 Feb 3; 402(2–3):198–202

Increased expression of LH/hCG receptors in endometrial hyperplasia and carcinoma in anovulatory women. Konishi I, et al. **Gynecol Oncol** 1997 May;65(2):273–80

CHEMISTRY

Ligand–induced receptor dimerization may be critical for signal transduction by choriogonadotropin. Grewal N, et al. **Biophys J** 1997 Sep;73(3):1190–7

Ligand–induced rapid desensitization causes structural alteration of rat ovarian LH/hCG receptor. Kolena J, et al. **Exp Clin Endocrinol Diabetes** 1996;104(6):459–63

Fluorescence quenching studies of the rat ovarian LH/hCG receptor. Scsuková S, et al. **Gen Physiol Biophys** 1996 Dec; 15(6):451–62

Evidence for the direct involvement of transmembrane region 6 of the lutropin/choriogonadotropin receptor in activating Gs. Abell AN, et al. **J Biol Chem** 1997 Jun 6; 272(23):14586–91

Molecular cloning, genomic organization, and developmental regulation of a novel receptor from Drosophila melanogaster structurally related to members of the thyroid–stimulating hormone, follicle–stimulating hormone, luteinizing hormone/choriogonadotropin receptor family from mammals. Hauser F, et al. **J Biol Chem** 1997 Jan 10;272(2):1002–10

The role of Asp578 in maintaining the inactive conformation of the human lutropin/choriogonadotropin receptor. Kosugi S, et al. **J Biol Chem** 1996 Dec 13;271(50):31813–7

Protein engineering of a novel constitutively active hormone–receptor complex. Wu C, et al. **J Biol Chem** 1996 Dec 6;271(49):31638–42

Phe576 plays an important role in the secondary structure and intracellular signaling of the human luteinizing hormone/chorionic gonadotropin receptor. Yano K, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2586–91

Evidence for an important functional role of intracellular loop II of the lutropin receptor. Fernandez LM, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):161–9

The LH/CG and FSH receptors: different molecular forms and intracellular traffic. Misrahi M, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):161–7 (33 ref.)

hCG–receptor binding and transmembrane signaling. Puett D, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):55–64 (61 ref.)

Structure and functional significance of the carbohydrates of the LH/CG receptor. Rajaniemi HJ, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):101–5 (35 ref.)

Mapping of HCG–receptor complexes. Remy JJ, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):79–91 (51 ref.)

Molecular mechanism of LH/CG receptor activation. Ryu KS, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):93–100 (34 ref.)

Advances in the molecular understanding of gonadotropins–receptors interactions. el Tayar N. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):65–70 (33 ref.)

The six N–linked carbohydrates of the lutropin/choriogonadotropin receptor are not absolutely required for correct folding, cell surface expression, hormone binding, or signal transduction. Davis DP, et al. **Mol Endocrinol** 1997 May;11(5):550–62

A model of the lutropin/choriogonadotropin receptor: insights into the structural and functional effects of constitutively activating mutations. Lin Z, et al. **Protein Eng** 1997 May;10(5):501–10

DRUG EFFECTS

The rotational diffusion of LH receptors differs when receptors are occupied by hCG versus LH and is increased by cytochalasin D. Roess DA, et al. **Biochim Biophys Acta** 1997 Jun 5;1357(1):98–106

Ligand–induced rapid desensitization causes structural alteration of rat ovarian LH/hCG receptor. Kolena J, et al. **Exp Clin Endocrinol Diabetes** 1996;104(6):459–63

Diethylpyrocarbonate, a histidine selective reagent, causes structural alteration of rat ovarian LH/hCG receptor. Kolena J, et al. **Gen Physiol Biophys** 1997 Mar;16(1):39–47

GENETICS

Luteinizing hormone resistance syndromes. Tsigos C, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:263–73

Heterogeneity of activating mutations of the human luteinizing hormone receptor in male–limited precocious puberty. Laue L, et al. **Biochem Mol Med** 1996 Aug; 58(2):192–8

3' untranslated region–mediated regulation of luteinizing hormone/human chorionic gonadotropin receptor expression. Lu DL, et al. **Biochemistry** 1996 Sep 24; 35(38):12347–53

Novel expression of functional luteinizing hormone/chorionic gonadotropin receptors in cultured glial cells from neonatal rat brains. AL–Hader AA, et al. **Biol Reprod** 1997 Feb;56(2):501–7

Changes in messenger ribonucleic acid encoding luteinizing hormone receptor, cytochrome P450–side chain cleavage, and aromatase are associated with recruitment and selection of bovine ovarian follicles. Bao B, et al. **Biol Reprod** 1997 May;56(5):1158–68

Homologous down–regulation of luteinizing hormone/chorionic gonadotropin receptors by increasing the degradation of receptor transcripts in human uterine endometrial stromal cells. Han SW, et al. **Biol Reprod** 1997 Jul;57(1):158–64

Characterization of a chicken luteinizing hormone receptor (cLH–R) complementary deoxyribonucleic acid, and expression of cLH–R messenger ribonucleic acid in the ovary. Johnson AL, et al. **Biol Reprod** 1996 Aug; 55(2):304–9

Regulation of luteinizing hormone–receptor and follicle–stimulating hormone–receptor messenger ribonucleic acid levels during development in the neonatal mouse ovary. O'Shaughnessy PJ, et al. **Biol Reprod** 1997 Sep;57(3):602–8

Steady–state luteinizing hormone receptor messenger ribonucleic acid levels and endothelial cell composition in bovine normal– and short–lived corpora lutea. Smith GD, et al. **Biol Reprod** 1996 Oct;55(4):902–9

Ontogeny and regulation of luteinizing hormone receptor messenger ribonucleic acid within the ovine corpus luteum. Smith GW, et al. **Biol Reprod** 1996 Jan;54(1):76–83

Expression of luteinizing hormone/human chorionic gonadotropin receptor gene in benign prostatic hyperplasia and in prostate carcinoma in humans. Tao YX, et al. **Biol Reprod** 1997 Jan;56(1):67–72

Selection of the dominant follicle in cattle occurs in the absence of differences in the expression of messenger ribonucleic acid for gonadotropin receptors. Evans AC, et al. **Endocrinology** 1997 Jul;138(7):2963–71

cis–acting elements and trans–acting proteins in the

transcription of chorionic gonadotropin/luteinizing hormone receptor gene in human choriocarcinoma cells and placenta. Hu YL, et al. **Endocrinology** 1996 Sep; 137(9):3897–905

Filamentous phage displaying the extracellular domain of the hLH/CG receptor bind hCG specifically. Lobel LI, et al. **Endocrinology** 1997 Mar;138(3):1232–9

Cloning and functional expression of the luteinizing hormone receptor complementary deoxyribonucleic acid from the marmoset monkey testis: absence of sequences encoding exon 10 in other species. Zhang FP, et al. **Endocrinology** 1997 Jun;138(6):2481–90

Expression of messenger ribonucleic acids of luteinizing hormone and follicle-stimulating hormone receptors in granulosa and theca layers of chicken preovulatory follicles. Zhang C, et al. **Gen Comp Endocrinol** 1997 Mar; 105(3):402–9

Co-expression of defective luteinizing hormone receptor fragments partially reconstitutes ligand-induced signal generation. Osuga Y, et al. **J Biol Chem** 1997 Oct 3; 272(40):25006–12

Response to challenge with gonadotropin-releasing hormone agonist in a mother and her two sons with a constitutively activating mutation of the luteinizing hormone receptor—a clinical research center study. Rosenthal IM, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3802–6

An inactivating mutation of the luteinizing hormone receptor causes amenorrhea in a 46,XX female. Toledo SP, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3850–4

A new point mutation in the luteinising hormone receptor gene in familial and sporadic male limited precocious puberty: genotype does not always correlate with phenotype. Evans BA, et al. **J Med Genet** 1996 Feb; 33(2):143–7

Mutation analysis of gonadotropin receptor and G protein genes in various types of human ovarian tumors. Ichikawa Y, et al. **Jpn J Clin Oncol** 1996 Oct;26(5):298–302

Bioassays of gonadotropins based on cloned receptors. Christin-Maitre S, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):151–9 (49 ref.)

Regulation of function of the murine luteinizing hormone receptor promoter by cis- and trans-acting elements in mouse Leydig tumor cells. El-Hefnawy T, et al. **Mol Cell Endocrinol** 1996 May 31;119(2):207–17

Determination of residues important in hormone binding to the extracellular domain of the luteinizing hormone/chorionic gonadotropin receptor by site-directed mutagenesis and modeling. Bhowmick N, et al. **Mol Endocrinol** 1996 Sep;10(9):1147–59

Mutational analyses of the extracellular domain of the full-length lutropin/choriogonadotropin receptor suggest leucine-rich repeats 1–6 are involved in hormone binding. Thomas D, et al. **Mol Endocrinol** 1996 Jun;10(6):760–8

Progressive cytoplasmic tail truncations of the lutropin–choriogonadotropin receptor prevent agonist- or phorbol ester-induced phosphorylation, impair agonist- or phorbol ester-induced desensitization, and enhance agonist-induced receptor down-regulation. Wang Z, et al. **Mol Endocrinol** 1996 Jun;10(6):748–59

Expression of luteinizing hormone/human chorionic gonadotrophin (LH/HCG) receptor mRNA in the human ovary. Minegishi T, et al. **Mol Hum Reprod** 1997 Feb; 3(2):101–7

Recombinant expression and secretion of a natural splicing variant containing the ectodomain of porcine LH receptor in HC11 mammary epithelial cells. Pajot-Augy E, et al. **Protein Expr Purif** 1997 Jun;10(1):107–14

[Alteration of mRNA transcripts of rat Sertoli cell secreted proteins and Leydig cell LH/CG-R protein following glycosides of Tripterigium Wilfordii Hook administration] Zheng W, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):104–10 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Decreased spermatogenesis as the result of an induced autoimmune reaction directed against the gonadotropin receptors in male rats. Graf KM, et al. **J Androl** 1997 Mar–Apr;18(2):174–85

Immunization of male rabbits with sheep luteal receptor to LH results in production of antibodies exhibiting hormone-agonistic and -antagonistic activities. Jeyakumar M, et al. **J Endocrinol** 1996 Sep;150(3):431–43

Immunization against exon 1 decapeptides from the lutropin/choriogonadotropin receptor or the follitropin receptor as potential male contraceptive. Remy JJ, et al. **J Reprod Immunol** 1996 Nov;32(1):37–54

METABOLISM

Induction of apoptosis in Kaposi's sarcoma spindle cell cultures by the subunits of human chorionic gonadotropin. Lang ME, et al. **AIDS** 1997 Sep;11(11):1333–40

Neurons from fetal rat brains contain functional luteinizing hormone/chorionic gonadotropin receptors. AL-Hader AA, et al. **Biol Reprod** 1997 May;56(5):1071–6

Homologous down-regulation of luteinizing hormone/chorionic gonadotropin receptors by increasing the degradation of receptor transcripts in human uterine endometrial stromal cells. Han SW, et al. **Biol Reprod** 1997 Jul;57(1):158–64

Development of luteinizing hormone action in the perinatal rat ovary. Sokka TA, et al. **Biol Reprod** 1996 Sep; 55(3):663–70

Luteinizing hormone/human chorionic gonadotropin receptors in breast cancer. Meduri G, et al. **Cancer Res** 1997 Mar 1;57(5):857–64

Filamentous phage displaying the extracellular domain of the hLH/CG receptor bind hCG specifically. Lobel LI, et al. **Endocrinology** 1997 Mar;138(3):1232–9

Activation of LH receptors expressed in GnRH neurons stimulates cyclic AMP production and inhibits pulsatile neuropeptide release. Mores N, et al. **Endocrinology** 1996 Dec;137(12):5731–4

A defined epitope on the human choriogonadotropin alpha-subunit interacts with the second extracellular loop of the transmembrane domain of the lutropin/choriogonadotropin receptor. Couture L, et al. **Eur J Biochem** 1996 Oct 15;241(2):627–32

Effect of neutral lipids on fluidity of corpora lutea plasma membranes and the accessibility of LH/hCG receptor. Scsuková S, et al. **Gen Physiol Biophys** 1995 Dec; 14(6):503–13

Fluorescence quenching studies of the rat ovarian LH/hCG receptor. Scsuková S, et al. **Gen Physiol Biophys** 1996 Dec; 15(6):451–62

Luteinizing hormone receptor in the human corpus luteum: lack of down-regulation during maternal recognition of pregnancy. Duncan WC, et al. **Hum Reprod** 1996 Oct; 11(10):2291–7

HCG binding to the testicular LH receptor is similar in fertile, subfertile, and infertile stallions. Motton DD, et al. **J Androl** 1997 Jul–Aug;18(4):411–6

Evidence for the direct involvement of transmembrane region 6 of the lutropin/choriogonadotropin receptor in activating Gs. Abell AN, et al. **J Biol Chem** 1997 Jun 6; 272(23):14586–91

Post-translational processing in the Golgi plays a critical role in the trafficking of the luteinizing hormone/human chorionic gonadotropin receptor to the cell surface. Bradbury FA, et al. **J Biol Chem** 1997 Feb 28;272(9):5921–6

Roles of transmembrane prolines and proline-induced kinks of the lutropin/choriogonadotropin receptor. Hong S, et al. **J Biol Chem** 1997 Feb 14;272(7):4166–71

Transmembrane regions V and VI of the human luteinizing hormone receptor are required for constitutive activation by a mutation in the third intracellular loop. Kudo M, et al. **J Biol Chem** 1996 Sep 13;271(37):22470–8

Comparison of immunocytochemical and molecular features with the phenotype in a case of incomplete male pseudohermaphroditism associated with a mutation of the luteinizing hormone receptor. Misrahi M, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2159–65

Novel presence of luteinizing hormone/chorionic gonadotropin receptors in human adrenal glands. Pabon JE, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2397–400

Expression of human chorionic gonadotropin (hCG)/luteinizing hormone receptors and regulation of the cyclooxygenase-1 gene by exogenous hCG in human fetal membranes. Toth P, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1283–8

Arachidonic acid release from rat Leydig cells depends on the presence of luteinizing hormone/human chorionic gonadotrophin receptors. Moraga PF, et al. **J Endocrinol** 1997 Aug;154(2):201–9

hCG beta residues 94–96 alter LH activity without appearing to make key receptor contacts [published erratum appears in Mol Cell Endocrinol 1997 May 16;129(2):237–9] Han Y, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):151–61

Role of palmitoylation of conserved cysteine residues of luteinizing hormone/human choriogonadotropin receptors in receptor down-regulation. Kawate N, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):211–9

hCG-receptor binding and transmembrane signaling. Puett D, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):55–64 (61 ref.)

Molecular mechanism of LH/CG receptor activation. Ryu KS, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):93–100 (34 ref.)

Determination of residues important in hormone binding to the extracellular domain of the luteinizing hormone/chorionic gonadotropin receptor by site-directed mutagenesis and modeling. Bhowmick N, et al. **Mol Endocrinol** 1996 Sep;10(9):1147–59

The C-terminal third of the human luteinizing hormone (LH) receptor is important for inositol phosphate release: analysis using chimeric human LH/follicle-stimulating hormone receptors. Hirsch B, et al. **Mol Endocrinol** 1996 Sep; 10(9):1127–37

Luteinizing hormone/choriogonadotropin-dependent, cholera toxin-catalyzed adenosine 5'-diphosphate (ADP)-ribosylation of the long and short forms of Gs alpha and pertussis toxin-catalyzed ADP-ribosylation of Gi alpha*. Rajagopalan-Gupta RM, et al. **Mol Endocrinol** 1997 May;11(5):538–49

Mutational analyses of the extracellular domain of the full-length lutropin/choriogonadotropin receptor suggest leucine-rich repeats 1–6 are involved in hormone binding. Thomas D, et al. **Mol Endocrinol** 1996 Jun;10(6):760–8

Progressive cytoplasmic tail truncations of the lutropin–choriogonadotropin receptor prevent agonist- or phorbol ester-induced phosphorylation, impair agonist- or phorbol ester-induced desensitization, and enhance agonist-induced receptor down-regulation. Wang Z, et al. **Mol Endocrinol** 1996 Jun;10(6):748–59

Phosphorylation of the lutropin/choriogonadotropin receptor facilitates uncoupling of the receptor from adenylyl cyclase and endocytosis of the bound hormone. Wang Z, et al. **Mol Endocrinol** 1997 Feb;11(2):183–92

Influence of FSH and hCG on the resumption of meiosis of bovine oocytes surrounded by cumulus cells connected to membrana granulosa. van Tol HT, et al. **Mol Reprod Dev** 1996 Oct;45(2):218–24

Interaction, signal generation, signal divergence, and signal transduction of LH/CG and the receptor. Ji TH, et al. **Recent Prog Horm Res** 1997;52:431–53; discussion 454 (78 ref.)

Functional reconstitution of detergent-solubilized bovine calf testis luteinizing hormone/chorionic gonadotropin receptor into phospholipid vesicles. Grasso P. **Recept Signal Transduct** 1996;6(2):53–62

PHYSIOLOGY

Induction of apoptosis in Kaposi's sarcoma spindle cell cultures by the subunits of human chorionic gonadotropin. Lang ME, et al. **AIDS** 1997 Sep;11(11):1333–40

Luteinizing hormone resistance syndromes. Tsigos C, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:263–73

Ligand-induced receptor dimerization may be critical for signal transduction by choriogonadotropin. Grewal N, et al. **Biophys J** 1997 Sep;73(3):1190–7

Potential novel roles of luteinizing hormone and human chorionic gonadotropin during early pregnancy in women. Rao CV. **Early Pregnancy** 1997 Mar;3(1):1–9 (88 ref.)

Temperature sensitivity of some mutants of the lutropin/choriogonadotropin receptor. Jaquette J, et al. **Endocrinology** 1997 Jan;138(1):85–91

Molecular mechanisms of reappearance of luteinizing hormone receptor expression and function in rat testis after selective Leydig cell destruction by ethylene dimethane sulfonate. Tena-Sempere M, et al. **Endocrinology** 1997 Aug; 138(8):3340–8

A proposed role for the lutropin receptor in contact-inducible gonococcal invasion of Hec1B cells. Spence JM, et al. **Infect Immun** 1997 Sep;65(9):3736–42

Co-expression of defective luteinizing hormone receptor fragments partially reconstitutes ligand-induced signal generation. Osuga Y, et al. **J Biol Chem** 1997 Oct 3; 272(40):25006–12

Evidence for an important functional role of intracellular loop II of the lutropin receptor. Fernandez LM, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):161–9

Structure and functional significance of the carbohydrates of the LH/CG receptor. Rajaniemi HJ, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):101–5 (35 ref.)

RECEPTORS, LHRH

see related

INHIBIN

[Pathophysiology of Gn-RH receptor] Imai A, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:463–7 (14 ref.) **(Jpn)**

AGONISTS

Long-term follow-up on the treatment of endometriosis with the GnRH-agonist buserelinacetate. Long-term follow-up data (up to 98 months) of 42 patients with endometriosis who were treated with GnRH-agonist buserelinacetate (Suprecur), were evaluated in respect of recurrence of pain symptoms and pregnancy outcome. Regidor PA, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jun;73(2):153–60

Is there a role for induction androgen deprivation prior to radical prostatectomy? Watson R, et al. **Hematol Oncol Clin North Am** 1996 Jun;10(3):627–41 (62 ref.)

Gonadotrophin-releasing hormone agonist therapy for hirsutism is as effective as high dose cyproterone acetate but results in a longer remission. Carmina E, et al. **Hum Reprod** 1997 Apr;12(4):663–6

Value of buserelin testing in the evaluation of hirsute women. Ambrosi B, et al. **J Endocrinol Invest** 1996 Apr;19(4):204–9

ANALYSIS

Studies of gonadotropin-releasing hormone (GnRH) action using GnRH receptor-expressing pituitary cell lines. Kaiser UB, et al. **Endocr Rev** 1997 Feb;18(1):46–70 (191 ref.)

Frequent expression of Fas in gonadotropin-releasing hormone receptor-bearing tumors. Imai A, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jul;74(1):73–8

Chicken GnRH II-like peptides and a GnRH receptor selective for chicken GnRH II in amphibian sympathetic ganglia. Troskie B, et al. **Neuroendocrinology** 1997 Jun; 65(6):396–402

Brain gonadotropin releasing hormone receptors: localization and regulation. Jennes L, et al. **Recent Prog Horm Res** 1997;52:475–90; discussion 490–1 (73 ref.)

BIOSYNTHESIS

Functional interaction between gonadotropin-releasing hormone and PACAP in gonadotropes and alpha T3-1 cells. McArdle CA. **Ann N Y Acad Sci** 1996 Dec 26; 805:112–20; discussion 120–1

Gonadotropin-releasing hormone receptor: gene structure,

expression and regulation. Leung PC, et al. **Biol Signals** 1996 Mar-Apr;5(2):63-9 (54 ref.)

Inhibin and estradiol alter gonadotropes differentially in ovine pituitary cultures: changing gonadotrope numbers and calcium responses to gonadotropin-releasing hormone. Ghosh BR, et al. **Endocrinology** 1996 Nov;137(11):5144-54

The genes for gonadotropin-releasing hormone and its receptor are expressed in human breast with fibrocystic disease and cancer. Kottler ML, et al. **Int J Cancer** 1997 May 16;71(4):595-9

Epitope-tagged gonadotropin-releasing hormone receptors heterologously-expressed in mammalian (COS-1) and insect (Sf9) cells. Neill JD, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):143-54

GnRH receptor mRNA expression by in-situ hybridization in the primate pituitary and ovary. Fraser HM, et al. **Mol Hum Reprod** 1996 Feb;2(2):117-21

CHEMISTRY

Differences in structure-function relations between nonmammalian and mammalian gonadotropin-releasing hormone receptors. Blomenröhr M, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):517-22

Molecular mechanisms of ligand interaction with the gonadotropin-releasing hormone receptor. Sealfon SC, et al. **Endocr Rev** 1997 Apr;18(2):180-205 (237 ref.)

The gonadotrophin-releasing hormone receptor: structural determinants and regulatory control. Sealfon SC, et al. **Hum Reprod Update** 1995 May;1(3):216-30 (156 ref.)

DRUG EFFECTS

The inhibition of growth and down-regulation of gonadotropin releasing hormone (GnRH) receptor in alphaT3-1 cells by GnRH agonist. Kakar SS, et al. **Anticancer Drugs** 1997 Apr;8(4):369-75

Continuous stimulation of gonadotropin-releasing hormone (GnRH) receptors by GnRH agonist decreases pituitary GnRH receptor messenger ribonucleic acid concentration in immature female rats. Sakakibara H, et al. **Endocr J** 1996 Feb;43(1):115-8

Gonadotropin releasing hormone agonist provokes homologous receptor microaggregation: an early event in seven-transmembrane receptor mediated signaling. Janovick JA, et al. **Endocrinology** 1996 Aug;137(8):3602-5

Specific gonadotrophin-releasing hormone analogue binding predominantly in human luteinized follicular aspirates and not in human pre-ovulatory follicles. Brus L, et al. **Hum Reprod** 1997 Apr;12(4):769-73

GnRH agonists and antagonists in ovarian stimulation. Hodgen G. **Hum Reprod** 1996 Sep;11 Suppl 1:123-32; discussion 133-6

GENETICS

A binding site for steroidogenic factor-1 is part of a complex enhancer that mediates expression of the murine gonadotropin-releasing hormone receptor gene. Duval DL, et al. **Biol Reprod** 1997 Jan;56(1):160-8

Effects of bovine follicular fluid and passive immunization against gonadotropin-releasing hormone (GnRH) on messenger ribonucleic acid for GnRH receptor and gonadotropin subunits in ovariectomized ewes. Turzillo AM, et al. **Biol Reprod** 1997 Jun;56(6):1537-43

Gonadotropin-releasing hormone receptor: gene structure, expression and regulation. Leung PC, et al. **Biol Signals** 1996 Mar-Apr;5(2):63-9 (54 ref.)

Estrogen regulation of gonadotropin-releasing hormone receptor messenger RNA in female rat pituitary tissue. Quiñones-Jenab V, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):243-50

Presence of gonadotropin-releasing hormone (GnRH) receptor mRNA in rat myenteric plexus cells. Ho JS, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Apr; 113(4):817-21

Ovariectomy-evoked increase in gonadotropin releasing hormone receptor parallels its messenger RNA level, but does not correlate with stimulated gonadotropin release. Saito S, et al. **Endocr J** 1996 Apr;43(2):139-43

Continuous stimulation of gonadotropin-releasing hormone (GnRH) receptors by GnRH agonist decreases pituitary GnRH receptor messenger ribonucleic acid concentration in immature female rats. Sakakibara H, et al. **Endocr J** 1996 Feb;43(1):115-8

Differential effects of gonadotropin-releasing hormone (GnRH) pulse frequency on gonadotropin subunit and GnRH receptor messenger ribonucleic acid levels in vitro. Kaiser UB, et al. **Endocrinology** 1997 Mar;138(3):1224-31

Expression of a murine gonadotropin-releasing hormone receptor-luciferase fusion gene in transgenic mice is diminished by immunoneutralization of gonadotropin-releasing hormone. McCue JM, et al. **Endocrinology** 1997 Aug;138(8):3154-60

Chronic administration of the luteinizing hormone-releasing hormone (LHRH) antagonist cetrorelix decreases gonadotrope responsiveness and pituitary LHRH receptor messenger ribonucleic acid levels in rats. Pinski J, et al. **Endocrinology** 1996 Aug;137(8):3430-6

Molecular structure of the human gonadotropin-releasing hormone receptor gene [see comments] Kakar SS. **Eur J Endocrinol** 1997 Aug;137(2):183-92. Comment in: Eur J Endocrinol 1997 Aug;137(2):118-9.

Multiple regulatory elements in the human GnRH receptor gene [comment] Millar R. **Eur J Endocrinol** 1997 Aug; 137(2):118-9. Comment on: Eur J Endocrinol 1997 Aug;137(2):183-92.

Gonadotropin-releasing hormone and gonadotropin-releasing hormone receptor messenger ribonucleic acids expression in nontumorous and neoplastic pituitaries. Sanno N, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1974-82

Dynamic changes in gonadotropin releasing hormone receptor mRNA content in the mediobasal hypothalamus during the rat estrous cycle. Jennes L, et al. **J Neuroendocrinol** 1996 Apr;8(4):275-81

Maternal pituitary gonadotroph function in relation to GnRH receptor and LH beta mRNA content during pregnancy in ewes. Fowler PA, et al. **J Reprod Fertil** 1997 Jul; 110(2):267-78

Structural organization and characterization of the promoter region of the rat gonadotropin-releasing hormone receptor gene. Reinhart J, et al. **Mol Cell Endocrinol** 1997 Jun 20; 130(1-2):1-12

Mutations of the conserved DRS motif in the second intracellular loop of the gonadotropin-releasing hormone receptor affect expression, activation, and internalization. Arora KK, et al. **Mol Endocrinol** 1997 Aug;11(9):1203-12

Brain gonadotropin releasing hormone receptors: localization and regulation. Jennes L, et al. **Recent Prog Horm Res** 1997;52:475-90; discussion 490-1 (73 ref.)

ISOLATION & PURIFICATION

Development of methods for purification of membrane associated gonadotropin-releasing hormone binding proteins. Flanagan CA, et al. **Biomed Chromatogr** 1996 Mar-Apr;10(2):83-8

METABOLISM

Gi protein activation of gonadotropin-releasing hormone-mediated protein dephosphorylation in human endometrial carcinoma. Imai A, et al. **Am J Obstet Gynecol** 1997 Feb;176(2):371-6

The inhibition of growth and down-regulation of gonadotropin releasing hormone (GnRH) receptor in alphaT3-1 cells by GnRH agonist. Kakar SS, et al. **Anticancer Drugs** 1997 Apr;8(4):369-75

Differences in structure-function relations between nonmammalian and mammalian gonadotropin-releasing hormone receptors. Blomenröhr M, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):517-22

Moderate and severe nutrient restriction has divergent effects on gonadotroph function in orchidectomized sheep. Beckett JL, et al. **Biol Reprod** 1997 Aug;57(2):415-9

Signal transduction of GnRH receptor in the reproductive tract tumor. Imai A, et al. **Endocr J** 1996 Jun;43(3):249-60 (139 ref.)

Ovariectomy-evoked increase in gonadotropin releasing hormone receptor parallels its messenger RNA level, but does not correlate with stimulated gonadotropin release. Saito S, et al. **Endocr J** 1996 Apr;43(2):139-43

GnRH receptors and GnRH endocrine effects on luteoma cells. Chamson-Reig A, et al. **Endocrine** 1997 Apr; 6(2):165-71

An intramolecular disulfide bond between conserved extracellular cysteines in the gonadotropin-releasing hormone receptor is essential for binding and activation. Cook JV, et al. **Endocrinology** 1997 Jul;138(7):2800-6

Cryptic gonadotropin-releasing hormone receptors of rat pituitary cells in culture are unmasked by epidermal growth factor. Leblanc P, et al. **Endocrinology** 1997 Feb; 138(2):574-9

Effect of gonadotropin-releasing hormone (GnRH) pulse frequency on serum and pituitary concentrations of luteinizing hormone and follicle-stimulating hormone, GnRH receptors, and messenger ribonucleic acid for gonadotropin subunits in cows. Vizcarra JA, et al. **Endocrinology** 1997 Feb;138(2):594-601

Sequence of two gonadotropin releasing hormones from tunicate suggest an important role of conformation in receptor activation. Craig AG, et al. **FEBS Lett** 1997 Aug 18;413(2):215-25

Gonadotrophs but not somatotrophs carry gonadotrophin-releasing hormone receptors: receptor localisation, intracellular calcium, and gonadotrophin and GH release. Bosma PT, et al. **J Endocrinol** 1997 Mar; 152(3):437-46

Concentration of GnRH receptor and GnRH receptor mRNA in pituitary tissue of orchidectomized sheep: effect of oestradiol, progesterone, and progesterone withdrawal. Sakurai H, et al. **J Endocrinol** 1997 Jan;152(1):91-8

Binding of Cu2+, Zn2+, and Ni(2+)-GnRH complexes with the rat pituitary receptor. Kochman K, et al. **J Inorg Biochem** 1997 Mar;65(4):277-9

Mutations of the conserved DRS motif in the second intracellular loop of the gonadotropin-releasing hormone receptor affect expression, activation, and internalization. Arora KK, et al. **Mol Endocrinol** 1997 Aug;11(9):1203-12

Regulation of G(q/11)alpha by the gonadotropin-releasing hormone receptor. Stanislaus D, et al. **Mol Endocrinol** 1997 Jun;11(6):738-46

LHRH receptors and LHRH receptor-bearing cells in pituitaries of streptozocin diabetic male rats. Bestetti GE, et al. **Pharmacol Res** 1997 Apr;35(4):321-7

PHYSIOLOGY

Molecular mechanisms of ligand interaction with the gonadotropin-releasing hormone receptor. Sealfon SC, et al. **Endocr Rev** 1997 Apr;18(2):180-205 (237 ref.)

Distinct efficacies for two endogenous ligands on a single cognate gonadoliberin receptor. Tensen C, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):134-40

GnRH receptor signaling: cross-talk of Ca2+ and protein kinase C. Naor Z. **Eur J Endocrinol** 1997 Feb;136(2):123-7 (39 ref.)

The gonadotrophin-releasing hormone receptor: structural determinants and regulatory control. Sealfon SC, et al. **Hum Reprod Update** 1995 May;1(3):216-30 (156 ref.)

Desensitization of gonadotropin-releasing hormone action in alphaT3-1 cells due to uncoupling of inositol 1,4,5-trisphosphate generation and Ca2+ mobilization. McArdle CA, et al. **J Biol Chem** 1996 Sep 27; 271(39):23711-7

RECEPTORS, LIPOPOLYSACCHARIDE see **ANTIGENS, CD14**

RECEPTORS, LIPOPROTEIN

[Apolipoprotein E and its receptors in Alzheimer's disease] Ikeda K. **Tanpakushitsu Kakusan Koso** 1996 Aug; 41(10):1465-9 (29 ref.) **(Jpn)**

BIOSYNTHESIS

Decreased expression of the very low density lipoprotein receptor mRNA in the cardiac ventricle of spontaneously hypertensive rats. Jingami H, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S246-8

BLOOD

Overexpression of the HDL receptor SR-BI alters plasma HDL and bile cholesterol levels. Kozarsky KF, et al. **Nature** 1997 May 22;387(6631):414-7

DRUG EFFECTS

Neurotoxicity of the 22 kDa thrombin-cleavage fragment of apolipoprotein E and related synthetic peptides is receptor-mediated. Tolar M, et al. **J Neurosci** 1997 Aug 1;17(15):5678-86

GENETICS

Inhibitory effect of cholesterol oxides on low density lipoprotein receptor gene expression. Peng SK, et al. **Artery** 1996;22(2):61-79

Avian and murine LR8B and human apolipoprotein E receptor 2: differentially spliced products from corresponding genes. Brandes C, et al. **Genomics** 1997 Jun 1;42(2):185-91

Exon/intron organization, chromosome localization, alternative splicing, and transcription units of the human apolipoprotein E receptor 2 gene. Kim DH, et al. **J Biol Chem** 1997 Mar 28;272(13):8498-504

Cloning and characterization of HB2, a candidate high density lipoprotein receptor. Sequence homology with members of the immunoglobulin superfamily of membrane proteins. Matsumoto A, et al. **J Biol Chem** 1997 Jul 4; 272(27):16778-82

The 5-repeat allele in the very-low-density lipoprotein receptor gene polymorphism is not increased in sporadic Alzheimer's disease in Japanese. Arinami T, et al. **Neurology** 1996 Nov;47(5):1349-50

Genetic association of the low-density lipoprotein receptor-related protein gene (LRP), an apolipoprotein E receptor, with late-onset Alzheimer's disease. Kang DE, et al. **Neurology** 1997 Jul;49(1):56-61

Genetic association studies between dementia of the Alzheimer's type and three receptors for apolipoprotein E in a Caucasian population. Lendon CL, et al. **Neurosci Lett** 1997 Feb 7;222(3):187-90

[The family of lipoprotein receptors is growing] Heliö T, et al. **Duodecim** 1995;111(16):1534-41 (38 ref.) **(Fin)**

METABOLISM

Uptake by J774 macrophages of very-low-density lipoproteins isolated from apoE-deficient mice is mediated by a distinct receptor and stimulated by lipoprotein lipase. Hendriks WL, et al. **Arterioscler Thromb Vasc Biol** 1997 Mar;17(3):498-504

A brain receptor for a subfraction of high density lipoprotein containing apolipoprotein E. Stewart JM, et al. **Biochem Soc Trans** 1996 May;24(2):155S

High-density lipoprotein 3 receptor-dependent endocytosis pathway in a human hepatoma cell line (HepG2). Garcia A, et al. **Biochemistry** 1996 Oct 8;35(40):13064-71

Close encounters with apolipoprotein E receptors. Yamamoto T, et al. **Curr Opin Lipidol** 1996 Oct; 7(5):298-302 (31 ref.)

Expression of lipoprotein receptors and related molecules in atherosclerotic lesions. Ylä-Herttuala S. **Curr Opin Lipidol** 1996 Oct;7(5):292-7 (73 ref.)

Murine SR-BI, a high density lipoprotein receptor that mediates selective lipid uptake, is N-glycosylated and fatty acylated and colocalizes with plasma membrane caveolae. Babitt J, et al. **J Biol Chem** 1997 May 16;272(20):13242-9

Lipoprotein trafficking in vascular cells. Molecular Trojan

horses and cellular saboteurs. Hajjar DP, et al. **J Biol Chem** 1997 Sep 12;272(37):22975–8 (64 ref.)

The binding activity of the macrophage lipoprotein(a)/apolipoprotein(a) receptor is induced by cholesterol via a post-translational mechanism and recognizes distinct kringle domains on apolipoprotein(a). Keesler GA, et al. **J Biol Chem** 1996 Dec 13; 271(50):32096–104

Characterization of CLA–1, a human homologue of rodent scavenger receptor BI, as a receptor for high density lipoprotein and apoptotic thymocytes. Murao K, et al. **J Biol Chem** 1997 Jul 11;272(28):17551–7

Regulation by adrenocorticotropic hormone of the in vivo expression of scavenger receptor class B type I (SR–BI), a high density lipoprotein receptor, in steroidogenic cells of the murine adrenal gland. Rigotti A, et al. **J Biol Chem** 1996 Dec 27;271(52):33545–9

Developmental down-regulation of receptor-mediated endocytosis of an insect lipoprotein. Dantuma NP, et al. **J Lipid Res** 1997 Feb;38(2):254–65

Lipoprotein lipase (EC 3.1.1.34) targeting of lipoproteins to receptors. Beisiegel U, et al. **Proc Nutr Soc** 1997 Jul; 56(2):731–7 (37 ref.)

[Characteristics of specific binding sites for high density lipoproteins on the surface of rat hepatocytes; the effect of estradiol and testosterone] Vishniakova TG, et al. **Biull Eksp Biol Med** 1996 Dec;122(12):629–34 **(Rus)**

PHYSIOLOGY

Lipoprotein-stimulated surfactant secretion in alveolar type II cells: mediation by heterotrimeric G proteins. Pian MS, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L634–9

Gene transfer and disruption strategies to elucidate hepatic lipoprotein receptor functions. Herz J, et al. **Atherosclerosis** 1995 Dec;118 Suppl:S37–41 (15 ref.)

Of plaques and stones: the SR–B1 (scavenger receptor class B, type 1). Arrese MA, et al. **Hepatology** 1997 Oct; 26(4):1072–4

The low-density lipoprotein receptor-related protein, a multifunctional apolipoprotein E receptor, modulates hippocampal neurite development. Narita M, et al. **J Neurochem** 1997 Feb;68(2):587–95

[Lipoprotein receptors. Old acquaintances and newcomers] Ducobu J. **Rev Med Brux** 1997 Feb;18(1):10–5 (Eng. Abstr.) **(Fre)**

[High density lipoproteins: physiological importance] Kurashvili LV. **Patol Fiziol Eksp Ter** 1997 Jul–Sep;(3):40–3 (52 ref.) **(Rus)**

RECEPTORS, LOW DENSITY LIPOPROTEIN see **RECEPTORS, LDL**

RECEPTORS, LULIBERIN see **RECEPTORS, LHRH**

RECEPTORS, LUTEINIZING HORMONE see **RECEPTORS, LH**

RECEPTORS, LYMPHOCYTE HOMING

Preference of lymphocyte-homing to high endothelial venules in palatine tonsils of musk shrew (Suncus murinus). Tohya K, et al. **Acta Otolaryngol Suppl (Stockh)** 1996; 523:25–7

ANALYSIS

Expression of the cutaneous lymphocyte antigen and the alpha IEL beta 7 integrin by intraepithelial lymphocytes in healthy and diseased human gingiva. Tonetti MS, et al. **Arch Oral Biol** 1995 Dec;40(12):1125–32

Expression of the cutaneous lymphocyte-associated antigen in circulating T cells in drug-allergic reactions. Gonzalez FJ, et al. **Int Arch Allergy Immunol** 1997 May–Jul; 113(1–3):345–7

A skin homing molecule defines the langerhans cell progenitor in human peripheral blood. Strunk D, et al. **J Exp Med** 1997 Mar 17;185(6):1131–6

Specialization of mucosal follicular dendritic cells revealed by mucosal addressin-cell adhesion molecule-1 display. Szabo MC, et al. **J Immunol** 1997 Jun 15;158(12):5584–8

BIOSYNTHESIS

Human mucosal addressin cell adhesion molecule-1 is preferentially expressed in intestinal tract and associated lymphoid tissue. Briskin M, et al. **Am J Pathol** 1997 Jul; 151(1):97–110

Preferential expression of the mucosal homing receptor integrin alpha 4 beta 7 in gastrointestinal non-Hodgkin's lymphomas. Drillenburg P, et al. **Am J Pathol** 1997 Mar; 150(3):919–27

The integrin very late antigen-4 is expressed in human smooth muscle cell. Involvement of alpha 4 and vascular cell adhesion molecule-1 during smooth muscle cell differentiation. Duplàa C, et al. **Circ Res** 1997 Feb; 80(2):159–69

Circulating immunoglobulin-secreting cells are heterogeneous in their expression of maturation markers and homing receptors. Kantele JM, et al. **Clin Exp Immunol** 1996 Jun;104(3):525–30

Expression of functionally active alpha 4 beta 1 integrin by thymic epithelial cells. Nieto M, et al. **Clin Exp Immunol** 1996 Oct;106(1):170–8

Virus-induced polyclonal T cell activation is followed by apoptosis: partitioning of CD8+ T cells based on alpha 4 integrin expression. Christensen JP, et al. **Int Immunol** 1996 May;8(5):707–15

Erythema multiforme to phenobarbital: involvement of eosinophils and T cells expressing the skin homing receptor. Gonzalez FJ, et al. **J Allergy Clin Immunol** 1997 Jul; 100(1):135–7

Granulocyte-macrophage colony-stimulating factor regulates the functional adhesive state of very late antigen-4 expressed by eosinophils. Sung KL, et al. **J Immunol** 1997 Jan 15;158(2):919–27

Increased expression of intercellular adhesion molecule 1, CD11/CD18 cell surface adhesion glycoproteins and alpha 4 beta 1 integrin in a rat model of chronic interstitial lung fibrosis. Barquín N, et al. **Pathobiology** 1996;64(4):187–92

Lymphocyte adhesion molecules in renal allograft rejection. Korczak-Kowalska G, et al. **Transplant Proc** 1996 Dec; 28(6):3437–8

CHEMISTRY

Solution structure of a biologically active cyclic LDV peptide analogue containing a type II' beta-turn mimetic. Doyle PM, et al. **Int J Pept Protein Res** 1996 Jun; 47(6):427–36

Mucosal addressin cell adhesion molecule-1: a structural and functional analysis demarcates the integrin binding motif. Viney JL, et al. **J Immunol** 1996 Sep 15;157(6):2488–97

Multiple loop structures critical for ligand binding of the integrin alpha4 subunit in the upper face of the beta-propeller mode 1. Irie A, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7198–203

DRUG EFFECTS

IL–7 activates alpha4beta1 integrin in murine thymocytes. Kitazawa H, et al. **J Immunol** 1997 Sep 1;159(5):2259–64

Granulocyte-macrophage colony-stimulating factor regulates the functional adhesive state of very late antigen-4 expressed by eosinophils. Sung KL, et al. **J Immunol** 1997 Jan 15;158(2):919–27

GENETICS

Modulation of alpha 4 beta 1 and alpha 5 beta 1 integrin expression: heterogeneous effects of Q-switched ruby, Nd:YAG, and alexandrite lasers on melanoma cells in vitro. van Leeuwen RL, et al. **Lasers Surg Med** 1996;18(1):63–71

IMMUNOLOGY

Differential expression of alpha E beta 7 integrins on bronchoalveolar lavage T lymphocyte subsets: regulation by alpha 4 beta 1-integrin crosslinking and TGF-beta. Rihs S, et al. **Am J Respir Cell Mol Biol** 1996 Nov;15(5):600–10

T cell migration during ontogeny and T cell repertoire generation. Dunon D, et al. **Curr Top Microbiol Immunol** 1996;212:79–93 (45 ref.)

Binding of human leukocytes to fibronectin is augmented by an anti-CD44 mAb (TL–1) and blocked by another anti-CD44 mAb (Hermes–3) but not by anti–VLA–4/VLA–5 mAbs. Cao L, et al. **Immunobiology** 1996–97;196(5):504–12

The beta 1 integrin, very late activation antigen–4 on human neutrophils can contribute to neutrophil migration through connective tissue fibroblast barriers. Gao JX, et al. **Immunology** 1997 Mar;90(3):448–54

Treatment of established adjuvant arthritis in rats with monoclonal antibody to CD18 and very late activation antigen–4 integrins suppresses neutrophil and T-lymphocyte migration to the joints and improves clinical disease. Issekutz AC, et al. **Immunology** 1996 Aug; 88(4):569–76

A monoclonal antibody against very late activation antigen–4 inhibits eosinophil accumulation and late asthmatic response in a guinea pig model of asthma. Sagara H, et al. **Int Arch Allergy Immunol** 1997 Mar;112(3):287–94

Antibody to very late activation antigen 4 prevents interleukin–5–induced airway hyperresponsiveness and eosinophil infiltration in the airways of guinea pigs. Kraneveld AD, et al. **J Allergy Clin Immunol** 1997 Aug; 100(2):242–50

Microglial production of TNF–alpha is induced by activated T lymphocytes. Involvement of VLA–4 and inhibition by interferonbeta–1b. Chabot S, et al. **J Clin Invest** 1997 Aug 1;100(3):604–12

Antibody to VLA–4, but not to L–selectin, protects neuronal M2 muscarinic receptors in antigen–challenged guinea pig airways. Fryer AD, et al. **J Clin Invest** 1997 Apr 15; 99(8):2036–44

Anti–CD43 inhibition of T cell homing. McEvoy LM, et al. **J Exp Med** 1997 Apr 21;185(8):1493–8

Triggering of motile behavior in T lymphocytes via cross–linking of alpha 4 beta 1 and alpha L beta 2. Hauzenberger D, et al. **J Immunol** 1997 Jan 1;158(1):76–84

Homing potentials of circulating lymphocytes in humans depend on the site of activation: oral, but not parenteral, typhoid vaccination induces circulating antibody-secreting cells that all bear homing receptors directing them to the gut. Kantele A, et al. **J Immunol** 1997 Jan 15;158(2):574–9

Monoclonal antibodies specific for beta 7 integrin and mucosal addressin cell adhesion molecule–1 (MAdCAM–1) reduce inflammation in the colon of scid mice reconstituted with CD45RBhigh CD4+ T cells. Picarella D, et al. **J Immunol** 1997 Mar 1;158(5):2099–106

Distinct phenotype of leukemic T cells with various tissue tropisms. Tanaka Y, et al. **J Immunol** 1997 Apr 15; 158(8):3822–9

Therapy with antibody against leukocyte integrin VLA–4 (CD49d) is effective and safe in virus–facilitated experimental allergic encephalomyelitis. Soilu–Hänninen M, et al. **J Neuroimmunol** 1997 Jan;72(1):95–105

Protective effects of monoclonal antibody to VLA–4 on leukocyte adhesion and course of disease in adjuvant arthritis in rats. Seiffge D. **J Rheumatol** 1996 Dec; 23(12):2086–91

Anti–integrin (LFA–1, VLA–4, and Mac–1) antibody treatment and acute cardiac graft rejection in the rat. Paul LC, et al. **Transpl Int** 1996;9(4):420–5

Anti–VLA–4 and cyclosporine synergistically prolong rat heterotopic small bowel allografts. Tice DG, et al. **Transplant Proc** 1996 Oct;28(5):2496

[Allo–cytotoxic T lymphocyte responses in corneal allografted mice treated with monoclonal antibodies to adhesion molecules] Hori J, et al. **Nippon Ganka Gakkai Zasshi** 1996 Aug;100(8):582–6 (Eng. Abstr.) **(Jpn)**

[The role of hepatic sinusoidal cells in homing of lymphocytes. Preferential hepatic trapping of PNA(+) lymphocyte and its modulation during liver regeneration] Miyamoto M, et al. **Nippon Ika Daigaku Zasshi** 1997 Jun; 64(3):256–63 (Eng. Abstr.) **(Jpn)**

METABOLISM

Topographic distribution of homing receptors on B and T cells in human gut–associated lymphoid tissue: relation of L–selectin and integrin alpha 4 beta 7 to naive and memory phenotypes. Farstad IN, et al. **Am J Pathol** 1997 Jan; 150(1):187–99

Eosinophil VLA–4 binding to fibronectin augments bronchial narrowing through 5–lipoxygenase activation. Muñoz NM, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):L587–94

Circulating skin–homing T cells in atopic dermatitis. Selective up–regulation of HLA–DR, interleukin–2R, and CD30 and decrease after combined UV–A and UV–B phototherapy [see comments] Piletta PA, et al. **Arch Dermatol** 1996 Oct;132(10):1171–6. Comment in: Arch Dermatol 1996 Oct;132(10):1230–2.

The alpha 4 beta 1 fibronectin ligands CS–1, Hep II, and RGD induce different intracellular events in B lymphoid cells. Comparison with the effects of the endothelial ligand VCAM–1. Domínguez–Jiménez C, et al. **Cell Adhes Commun** 1996 Nov;4(4–5):251–67

The type III connecting segment of fibronectin contains an aspartic acid residue that regulates the rate of binding to integrin alpha 4 beta 1. Jongewaard IN, et al. **Cell Adhes Commun** 1996 Apr;3(6):487–95

Leucocyte/endothelial cell adhesion receptors in muscle biopsies from patients with idiopathic inflammatory myopathies (IIM). Cid MC, et al. **Clin Exp Immunol** 1996 Jun;104(3):467–73

Integrin-dependent adhesive activity is spatially controlled by inductive signals at gastrulation. Ramos JW, et al. **Development** 1996 Sep;122(9):2873–83

Differential utilization of VLA–4 (alpha 4 beta 1) and –5 (alpha 5 beta 1) integrins during the development of mouse bone marrow–derived mast cells. Fehlner–Gardiner CC, et al. **Differentiation** 1996 Sep;60(5):317–25

Functional relevance during lymphocyte migration and cellular localization of activated beta1 integrins. Gómez M, et al. **Eur J Immunol** 1997 Jan;27(1):8–16

Association between receptor density, cellular activation, and transformation of adhesive behavior of flowing lymphocytes binding to VCAM–1. Lalor PF, et al. **Eur J Immunol** 1997 Jun;27(6):1422–6

Phenotype, and migration properties of three major subsets of tissue homing T cells in sheep. Mackay CR, et al. **Eur J Immunol** 1996 Oct;26(10):2433–9

Clustering the adhesion molecules VLA–4 (CD49d/CD29) in Jurkat T cells or VCAM–1 (CD106) in endothelial (ECV 304) cells activates the phosphoinositide pathway and triggers Ca2+ mobilization. Ricard I, et al. **Eur J Immunol** 1997 Jun;27(6):1530–8

Leukocyte integrin very late antigen–4/vascular cell adhesion molecule–1 adhesion pathway in splanchnic artery occlusion shock. Squadrito F, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):153–60

The role of alpha 4 integrins in lung pathophysiology. Lobb RR, et al. **Eur Respir J Suppl** 1996 Aug;22:104s–108s (34 ref.)

The effect of oral contraceptive pills on markers of endometrial receptivity. Somkuti SG, et al. **Fertil Steril** 1996 Mar;65(3):484–8

Sulfation and sialylation requirements for a glycoform of CD34, a major endothelial ligand for L–selectin in porcine peripheral lymph nodes. Shailubhai K, et al. **Glycobiology** 1997 Mar;7(2):305–14

Sinusoidal endothelium release of hydrogen peroxide enhances very late antigen–4–mediated melanoma cell adherence and tumor cytotoxicity during interleukin–1 promotion of hepatic melanoma metastasis in mice. Anasagasti MJ, et al. **Hepatology** 1997 Apr;25(4):840–6

Interaction of monocytoid cells with the mucosal addressin

MAdCAM-1 via the integrins VLA-4 and LPAM-1. Yang Y, et al. **Immunol Cell Biol** 1996 Oct;74(5):383-93

Expression of VCAM-1 and VLA-4 dependent T-lymphocyte adhesion to dermal fibroblasts stimulated with proinflammatory cytokines. Gao JX, et al. **Immunology** 1996 Nov;89(3):375-83

Comparison of adhesion molecule expression on light and normal-density eosinophils from patients with eosinophilia. Li J, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:59-62

Propolypeptide of von Willebrand factor is a novel ligand for very late antigen-4 integrin. Isobe T, et al. **J Biol Chem** 1997 Mar 28;272(13):8447-53

VLA-4 integrin cross-linking on human monocytic THP-1 cells induces tissue factor expression by a mechanism involving mitogen-activated protein kinase. McGilvray ID, et al. **J Biol Chem** 1997 Apr 11;272(15):10287-94

Fibronectin type III5 repeat contains a novel cell adhesion sequence, KLDAPT, which binds activated alpha4beta1 and alpha4beta7 integrins. Moyano JV, et al. **J Biol Chem** 1997 Oct 3;272(40):24832-6

Integrin cross talk: activation of lymphocyte function-associated antigen-1 on human T cells alters alpha4beta1- and alpha5beta1-mediated function. Porter JC, et al. **J Cell Biol** 1997 Sep 22;138(6):1437-47

Expression of cutaneous lymphocyte-associated antigen defined by monoclonal antibody HECA-452 on human Langerhans cells. Yasaka N, et al. **J Dermatol Sci** 1996 Jan;11(1):19-27

Triggering of motile behavior in T lymphocytes via cross-linking of alpha 4 beta 1 and alpha L beta 2. Hauzenberger D, et al. **J Immunol** 1997 Jan 1;158(1):76-84

Comparison of E-selectin-binding glycoprotein ligands on human lymphocytes, neutrophils, and bovine gamma delta T cells. Jones WM, et al. **J Immunol** 1997 Oct 1; 159(7):3574-83

Transmembrane-4 superfamily proteins CD81 (TAPA-1), CD82, CD63, and CD53 specifically associated with integrin alpha 4 beta 1 (CD49d/CD29). Mannion BA, et al. **J Immunol** 1996 Sep 1;157(5):2039-47

Structure-function analysis of the integrin beta 7 subunit: identification of domains involved in adhesion to MAdCAM-1. Tidswell M, et al. **J Immunol** 1997 Aug 1; 159(3):1497-505

Selective induction of peripheral and mucosal endothelial cell addressins with peripheral lymph nodes and Peyer's patch cell-conditioned media. Denis V, et al. **J Leukoc Biol** 1996 Dec;60(6):744-52

A developmental switch in lymphocyte homing receptor and endothelial vascular addressin expression regulates lymphocyte homing and permits CD4+ CD3- cells to colonize lymph nodes. Mebius RE, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11019-24

PHYSIOLOGY

The role of adhesion molecules in multiple myeloma. Cook G, et al. **Acta Haematol** 1997;97(1-2):81-9 (65 ref.)

Regulation and function of adhesion molecules in B-cell chronic lymphocytic leukaemia. Jewell AP, et al. **Acta Haematol** 1997;97(1-2):67-72 (25 ref.)

Adhesion molecules in the dissemination of non-Hodgkin's lymphomas. Pals ST, et al. **Acta Haematol** 1997; 97(1-2):73-80 (84 ref.)

Homing and trafficking of hemopoietic progenitor cells. Papayannopoulou T, et al. **Acta Haematol** 1997; 97(1-2):97-104 (73 ref.)

The role of adhesion and costimulation molecules in graft-versus-host disease. Schlegel PG. **Acta Haematol** 1997;97(1-2):105-17 (191 ref.)

Pathophysiologic role of alpha 4 integrins in the lung. Lobb RR, et al. **Ann N Y Acad Sci** 1996 Oct 31;796:113-23 (47 ref.)

Mechanisms of drug-induced lupus. III. Sex-specific differences in T cell homing may explain increased disease severity in female mice. Yung R, et al. **Arthritis Rheum** 1997 Jul;40(7):1334-43

Intracellular single-chain antibody inhibits integrin VLA-4 maturation and function. Yuan Q, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):591-6

High-endothelial-venule ligands for L-selectin: identification and functions. Rosen SD, et al. **Biochem Soc Trans** 1997 May;25(2):428-33 (45 ref.)

Phorbol ester stimulation increases sickle erythrocyte adherence to endothelium: a novel pathway involving alpha 4 beta 1 integrin receptors on sickle reticulocytes and fibronectin. Kumar A, et al. **Blood** 1996 Dec 1; 88(11):4348-58

Neutrophils can adhere via alpha4beta1-integrin under flow conditions. Reinhardt PH, et al. **Blood** 1997 May 15; 89(10):3837-46

Vascular cell adhesion molecule-1 is expressed by cortical thymic epithelial cells and mediates thymocyte adhesion. Implications for the function of alpha4beta1 (VLA4) integrin in T-cell development. Salomon DR, et al. **Blood** 1997 Apr 1;89(7):2461-71

Influence of interleukin-3 and other growth factors on alpha4beta1 integrin-mediated adhesion and migration of human hematopoietic progenitor cells. Schofield KP, et al. **Blood** 1997 Sep 1;90(5):1858-66

Endothelial interactions of hairy cells: the importance of alpha 4 beta 1 in the unusual tissue distribution of the disorder. Vincent AM, et al. **Blood** 1996 Nov 15; 88(10):3945-52

Adhesion of lymphoma cells to fibronectin: differential use of alpha 4 beta 1 and alpha 5 beta 1 integrins and stimulation by the 9EG7 mAb against the murine beta 1 integrin subunit. Driessens MH, et al. **Cell Adhes Commun** 1995 Nov;3(4):327-36

VLA-5 in the plasma cell line, FR4ds, acts as a common regulator of VLA-4 and VLA-6 in spreading induced by fibronectin and laminin. Hattori H, et al. **Cell Immunol** 1996 Nov 25;174(1):63-72

Expression of functionally active alpha 4 beta 1 integrin by thymic epithelial cells. Nieto M, et al. **Clin Exp Immunol** 1996 Oct;106(1):170-8

Lymphocyte homing: the scent of a follicle. Goodnow CC, et al. **Curr Biol** 1997 Apr 1;7(4):R219-22 (26 ref.)

The role of alpha 4 integrins in lung pathophysiology. Lobb RR, et al. **Eur Respir J Suppl** 1996 Aug;22:104s-108s (34 ref.)

Correlation of very late activation integrin and CD44 expression with extrarenal invasion and metastasis of renal cell carcinomas. Gilcrease MZ, et al. **Hum Pathol** 1996 Dec;27(12):1355-60

Expression of mucosal homing receptor alpha4beta7 by circulating CD4+ cells with memory for intestinal rotavirus. Rott LS, et al. **J Clin Invest** 1997 Sep 1; 100(5):1204-8

Human peripheral blood eosinophils express a functional c-kit receptor for stem cell factor that stimulates very late antigen 4 (VLA-4)-mediated cell adhesion to fibronectin and vascular cell adhesion molecule 1 (VCAM-1). Yuan Q, et al. **J Exp Med** 1997 Jul 21;186(2):313-23

Thrombopoietin promotes adhesion of primitive human hemopoietic cells to fibronectin and vascular cell adhesion molecule-1: role of activation of very late antigen (VLA)-4 and VLA-5. Cui L, et al. **J Immunol** 1997 Aug 15; 159(4):1961-9

Alpha 4 beta 1 (CD49d/CD29) integrin costimulation of human T cells enhances transcription factor and cytokine induction in the absence of altered sensitivity to anti-CD3 stimulation. Udagwa T, et al. **J Immunol** 1996 Sep 1; 157(5):1965-72

Function of lymphocyte homing-associated adhesion molecules on human natural killer and lymphokine-activated killer cells. Uksila J, et al. **J Immunol** 1997 Feb 15;158(4):1610-7

Mucosal addressin cell adhesion molecule-1: a structural and functional analysis demarcates the integrin binding motif. Viney JL, et al. **J Immunol** 1996 Sep 15;157(6):2488-97

Anti-VLA-4 antibody reduces intimal hyperplasia in the endarterectomized carotid artery in nonhuman primates. Lumsden AB, et al. **J Vasc Surg** 1997 Jul;26(1):87-93

Differing roles of CD18 and VLA-4 in leukocyte migration/activation during anti-GBM nephritis. Wu X, et al. **Kidney Int** 1996 Aug;50(2):462-72

Selective homing of human leukemic B-cell precursors to specific lymphohematopoietic microenvironments in SCID mice: a role for the beta 1 integrin family surface adhesion molecules VLA-4 and VLA-5. Messinger Y, et al. **Leuk Lymphoma** 1996 Sep;23(1-2):61-9

VLA-4-mediated interactions between normal human hematopoietic progenitors and stromal cells. Oostendorp RA, et al. **Leuk Lymphoma** 1997 Feb;24(5-6):423-35 (94 ref.)

In vivo function of homing receptors participating in lymphocyte recirculation: transfer analysis in SCID mice. Saito S, et al. **Pathobiology** 1995;63(6):305-13

Rotavirus contains integrin ligand sequences and a disintegrin-like domain that are implicated in virus entry into cells. Coulson BS, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5389-94

Human lymphocyte adhesion to xenogeneic porcine endothelial cells: modulation by human TNF-alpha and involvement of VLA-4 and LFA-1. Birmele B, et al. **Transpl Immunol** 1996 Dec;4(4):265-70

RECEPTORS, MACROPHAGE COLONY-STIMULATING FACTOR

BIOSYNTHESIS

Control of vascular smooth-muscle cell growth by macrophage-colony-stimulating factor. Herembert T, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):123-8

Granulocytic and monocytic differentiation of CD34hi cells is associated with distinct changes in the expression of the PU.1-regulated molecules, CD64 and macrophage colony-stimulating factor receptor. Olweus J, et al. **Blood** 1996 Nov 15;88(10):3741-54

Interleukin-4 rapidly down-modulates the macrophage colony-stimulating factor receptor in murine macrophages. Dello Sbarba P, et al. **J Leukoc Biol** 1996 Nov;60(5):644-50

Bryostatin 1 (bryo1)-induced monocytic differentiation in THP-1 human leukemia cells is associated with enhanced c-fyn tyrosine kinase and M-CSF receptors [see comments] Li Y, et al. **Leuk Res** 1997 May;21(5):391-7. Comment in: Leuk Res 1997 May;21(5):399-401.

Regulation of CSF-1 receptor expression. Hume DA, et al. **Mol Reprod Dev** 1997 Jan;46(1):46-52; discussion 52-3 (20 ref.)

Synergistic up-regulation of the myeloid-specific promoter for the macrophage colony-stimulating factor receptor by AML1 and the t(8;21) fusion protein may contribute to leukemogenesis. Rhoades KL, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11895-900

CHEMISTRY

Macrophage colony-stimulating-factor (M-CSF or CSF-1) and its receptor: structure-function relationships. Fixe P, et al. **Eur Cytokine Netw** 1997 Jun;8(2):125-36 (140 ref.)

DRUG EFFECTS

Requirement for Y706 of the murine (or Y708 of the human) CSF-1 receptor for STAT1 activation in response to CSF-1. Novak U, et al. **Oncogene** 1996 Dec 19; 13(12):2607-13

GENETICS

Biochemical and genetic characterization of multiple splice variants of the Flt3 ligand. McClanahan T, et al. **Blood** 1996 Nov 1;88(9):3371-82

c-fms mRNA is regulated posttranscriptionally by 1,25(OH)2D3 in HL-60 cells. Biskobing DM, et al. **Calcif Tissue Int** 1997 Sep;61(3):205-9

Synergistic effects of transforming growth factor-beta on the expression of c-fms, macrophage colony-stimulating factor receptor gene, in vascular smooth muscle cells. Inaba T, et al. **FEBS Lett** 1996 Dec 16;399(3):207-10

Expression of c-fms on smooth muscle cells isolated from experimental arteriosclerosis. Inaba T, et al. **J Atheroscler Thromb** 1994;1 Suppl 1:S22-8

Induction of macrophage colony-stimulating factor receptor (c-fms) expression in vascular medial smooth muscle cells treated with heparin binding epidermal growth factor-like growth factor. Inaba T, et al. **J Biol Chem** 1996 Oct 4; 271(40):24413-7

Induction of macrophage colony-stimulating factor receptor up-regulation in THP-1 human leukemia cells is dependent on the activation of c-fyn protein tyrosine kinase. Li Y, et al. **Leuk Res** 1997 Jun;21(6):539-47

Functional characterization of ETV6 and ETV6/CBFA2 in the regulation of the MCSFR proximal promoter. Fears S, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1949-54

Synergistic up-regulation of the myeloid-specific promoter for the macrophage colony-stimulating factor receptor by AML1 and the t(8;21) fusion protein may contribute to leukemogenesis. Rhoades KL, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11895-900

[Cell biology of osteoclasts and molecular mechanisms of bone resorption] Amling M, et al. **Pathologe** 1996 Sep; 17(5):358-67 (76 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Recognition of activated CSF-1 receptor in breast carcinomas by a tyrosine 723 phosphospecific antibody. Flick MB, et al. **Oncogene** 1997 May 29;14(21):2553-61

METABOLISM

Expression of macrophage colony-stimulating factor and its receptor in hepatic granulomas of Kupffer-cell-depleted mice. Moriyama H, et al. **Am J Pathol** 1997 Jun; 150(6):2047-60

Interleukin 2 down-modulates the macrophage colony-stimulating factor receptor in murine macrophages. Sbarba PD, et al. **Cytokine** 1996 Jun;8(6):488-94

Lipopolysaccharide induces synthesis of mouse colony-stimulating factor-1 in vivo. Roth P, et al. **J Immunol** 1997 Apr 15;158(8):3874-80

PHYSIOLOGY

Macrophage colony-stimulating-factor (M-CSF or CSF-1) and its receptor: structure-function relationships. Fixe P, et al. **Eur Cytokine Netw** 1997 Jun;8(2):125-36 (140 ref.)

FMS (CSF-1 receptor) prolongs cell cycle and promotes retinoic acid-induced hypophosphorylation of retinoblastoma protein, G1 arrest, and cell differentiation. Yen A, et al. **Exp Cell Res** 1996 Nov 25;229(1):111-25

CSF-1 signal transduction. Hamilton JA. **J Leukoc Biol** 1997 Aug;62(2):145-55 (121 ref.)

CSF-1 and its receptor in breast carcinomas and neoplasms of the female reproductive tract. Kacinski BM. **Mol Reprod Dev** 1997 Jan;46(1):71-4 (17 ref.)

Growth and differentiation signals regulated by the M-CSF receptor. Rohrschneider LR, et al. **Mol Reprod Dev** 1997 Jan;46(1):96-103 (11 ref.)

The promoter of macrophage colony-stimulating factor receptor is active in astrocytes. Tkachuk M, et al. **Neurosci Lett** 1997 Apr 4;225(2):121-5

[Signaling pathway of macrophage colony-stimulating factor receptor] Kimura F, et al. **Rinsho Ketsueki** 1997 Mar; 38(3):189-92 (10 ref.) **(Jpn)**

RECEPTORS, MANNOSE-6-PHOSPHATE see **RECEPTORS, INSULIN-LIKE-GROWTH-FACTOR II**

RECEPTORS, MENOTROPIN see **RECEPTORS, GONADOTROPIN**

RECEPTORS, METABOTROPIC GLUTAMATE

[Metabotropic glutamate receptors] Minakami R, et al.

Tanpakushitsu Kakusan Koso 1997 Feb;42(3 Suppl):295–301 (43 ref.) **(Jpn)**

AGONISTS

Metabotropic glutamate receptor subtypes mediating slow inward tail current (IADP) induction and inhibition of synaptic transmission in olfactory cortical neurones. Libri V, et al. **Br J Pharmacol** 1997 Mar;120(6):1083–95

Anti–epileptogenic and anticonvulsant activity of L–2–amino–4–phosphonobutyrate, a presynaptic glutamate receptor agonist. Abdul–Ghani AS, et al. **Brain Res** 1997 May 2;755(2):202–12

Metabotropic glutamate receptor activation selectively limits excitotoxic damage in the intact neostriatum. Colwell CS, et al. **Brain Res** 1996 Jul 8;726(1–2):223–6

Effects of metabotropic glutamate receptor agonists on excitatory and inhibitory transmissions in cultured rat hippocampal neurons. Ohno–Shosaku T, et al. **Brain Res** 1995 Dec 24;705(1–2):337–40

DCG–IV, a potent metabotropic glutamate receptor agonist, as an NMDA receptor agonist in the rat cortical slice. Uyama Y, et al. **Brain Res** 1997 Mar 28;752(1–2):327–30

Intrauterine hypoxia–ischemia reduces phosphoinositide hydrolysis stimulated by metabotropic glutamate receptor agonists in cultured rat cerebellar granule cells. Rhodes PG, et al. **Brain Res Dev Brain Res** 1996 May 31; 93(1–2):129–35

Potentiated cAMP rise in metabotropically stimulated rat cultured astrocytes by a Ca2+–related A1/A2 adenosine receptor cooperation. Ogata T, et al. **Eur J Neurosci** 1996 Jun;8(6):1124–31

Activation of multiple metabotropic glutamate receptor subtypes prevents NMDA–induced excitotoxicity in rat hippocampal slices. Pizzi M, et al. **Eur J Neurosci** 1996 Jul;8(7):1516–21

Differential long–lasting potentiation of the NMDA and non–NMDA synaptic currents induced by metabotropic and NMDA receptor coactivation in cerebellar granule cells. rossi P, et al. **Eur J Neurosci** 1996 Jun;8(6):1182–9

Activation of group–II metabotropic glutamate receptors blocks induction of long–term potentiation and depotentiation in area CA1 of the rat in vivo. Hölscher C, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):155–63

Agonists of cyclic AMP–coupled metabotropic glutamate receptors in adult rat cortical slices. Kemp MC, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):79–85

Prolonged anticonvulsant action of glutamate metabotropic receptor agonists in inferior colliculus of genetically epilepsy–prone rats. Tang E, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):109–15

Effects of the selective metabotropic glutamate receptor agonist, L–CCG–I, on acquisition of a Morris task by rats. Van der Staay FJ, et al. **Eur J Pharmacol** 1995 Dec 27; 294(1):361–5

Metabotropic glutamate receptor mGluR5 in astrocytes: pharmacological properties and agonist regulation. Balázs R, et al. **J Neurochem** 1997 Jul;69(1):151–63

Metabotropic glutamate receptor agonist–induced hyperpolarizations in rat basolateral amygdala neurons: receptor characterization and ion channels. Holmes KH, et al. **J Neurophysiol** 1996 Nov;76(5):3059–69

1S, 3R–ACPD induces a region of negative slope conductance in the steady–state current–voltage relationship of hippocampal pyramidal cells. Lüthi A, et al. **J Neurophysiol** 1997 Jan;77(1):221–8

The neuroprotective activity of group–II metabotropic glutamate receptors requires new protein synthesis and involves a glial–neuronal signaling. Bruno V, et al. **J Neurosci** 1997 Mar 15;17(6):1891–7

Metabotropic glutamate agonist–induced rotation: a pharmacological, FOS immunohistochemical, and [14C]–2–deoxyglucose autoradiographic study. Kearney JA, et al. **J Neurosci** 1997 Jun 1;17(11):4415–25

Activation of the metabotropic glutamate receptor mGluR5 prevents glutamate toxicity in primary cultures of cerebellar neurons. Montoliu C, et al. **J Pharmacol Exp Ther** 1997 May;281(2):643–7

Metabotropic glutamate receptor agonists increase release of soluble amyloid precursor protein derivatives from rat brain cortical and hippocampal slices. Ulus IH, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):149–54

Tyrosine kinase inhibitors enhance a Ca(2+)–activated K+ current (IAHP) and reduce IAHP suppression by a metabotropic glutamate receptor agonist in rat dentate granule neurones. Abdul–Ghani MA, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):139–44

Methamphetamine–induced sensitization of dopamine release via a metabotropic glutamate receptor mediated pathway in rat striatal slices. Arai I, et al. **Jpn J Pharmacol** 1997 Mar;73(3):243–6

Activation of phospholipases C and D by the novel metabotropic glutamate receptor agonist tADA. Klein J, et al. **Neuropharmacology** 1997 Feb;36(2):261–3

LY354740 is a potent and highly selective group II metabotropic glutamate receptor agonist in cells expressing human glutamate receptors. Schoepp DD, et al. **Neuropharmacology** 1997 Jan;36(1):1–11

A novel orally active group 2 metabotropic glutamate receptor agonist: LY354740. Bond A, et al. **Neuroreport** 1997 Apr 14;8(6):1463–6

mGluR II agonist inhibition of LTP induction, and mGluR II antagonist inhibition of LTD induction, in the dentate gyrus in vitro. Huang LQ, et al. **Neuroreport** 1997 Feb 10;8(3):687–93

Anticonvulsant action of metabotropic glutamate receptor agonists in kindled amygdala of rats. Suzuki K, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):41–4

Synchronous 20 Hz rhythmic activity in hippocampal networks induced by activation of metabotropic glutamate receptors in vitro. Boddeke HW, et al. **Neuroscience** 1997 Feb;76(3):653–8

Neurotoxicity of (2S,1'R,2'R,3'R)–2–(2,3–dicarboxycyclopropyl)glycine, a potent agonist for class II metabotropic glutamate receptors, in the rat. Kwak S, et al. **Neuroscience** 1996 Aug; 73(3):687–95

Physiological and pharmacological profile of trans–azetidine–2,4–dicarboxylic acid: metabotropic glutamate receptor agonism and effects on long–term potentiation. Manahan–Vaughan D, et al. **Neuroscience** 1996 Jun;72(4):999–1008

Anticonvulsive and neuroprotective actions of a potent agonist (DCG–IV) for group II metabotropic glutamate receptors against intraventricular kainate in the rat. Miyamoto M, et al. **Neuroscience** 1997 Mar;77(1):131–40

A metabotropic glutamate receptor agonist regulates neurotrophin messenger RNA in rat forebrain. Murray KD, et al. **Neuroscience** 1996 Feb;70(3):617–30

Activation of hamster suprachiasmatic neurons in vitro via metabotropic glutamate receptors. Scott G, et al. **Neuroscience** 1996 Mar;71(2):533–41

ANALYSIS

Immunohistochemical distribution of metabotropic glutamate receptor subtypes mGluR1b, mGluR2/3, mGluR4a and mGluR5 in human hippocampus. Blümcke I, et al. **Brain Res** 1996 Oct 14;736(1–2):217–26

Group II and group III metabotropic glutamate receptors in the rat retina: distributions and developmental expression patterns. Koulen P, et al. **Eur J Neurosci** 1996 Oct; 8(10):2177–87

Perisynaptic location of metabotropic glutamate receptors mGluR1 and mGluR5 on dendrites and dendritic spines in the rat hippocampus. Lujan R, et al. **Eur J Neurosci** 1996 Jul;8(7):1488–500

Immunocytochemical visualization of the mGluR1a metabotropic glutamate receptor at synapses of corticothalamic terminals originating from area 17 of the rat. Vidnyanszky Z, et al. **Eur J Neurosci** 1996 Jun; 8(6):1061–71

A light– and electron–microscopic study of GluR4–positive cells in cerebral cortex, subcortical white matter and corpus callosum of neonatal, immature and adult rats. Ong WY, et al. **Exp Brain Res** 1996 Aug;110(3):367–78

A monoclonal antibody shows discrete cellular and subcellular localizations of mGluR1 alpha metabotropic glutamate receptors. Petralia RS, et al. **J Chem Neuroanat** 1997 Jul;13(2):77–93

Metabotropic glutamate receptor expression in cultured rat astrocytes and human gliomas. Condorelli DF, et al. **Neurochem Res** 1997 Sep;22(9):1127–33

mGluR5 metabotropic glutamate receptor distribution in rat and human spinal cord: a developmental study. Valerio A, et al. **Neurosci Res** 1997 May;28(1):49–57

ANTAGONISTS & INHIBITORS

L–AP4 (L–(+)–2–amino–4–phosphonobutyric acid) induced impairment of spatial learning in the rat is antagonized by MAP4 ((S)–2–amino–2–methyl–4–phosphonobutanoic acid). Hölscher C, et al. **Behav Brain Res** 1996 Nov; 81(1–2):69–79

Attenuation of morphine withdrawal symptoms by subtype–selective metabotropic glutamate receptor antagonists. Fundytus ME, et al. **Br J Pharmacol** 1997 Mar; 120(6):1015–20

Stimulatory effects of the putative metabotropic glutamate receptor antagonist L–AP3 on phosphoinositide turnover in neonatal rat cerebral cortex. Mistry R, et al. **Br J Pharmacol** 1996 Mar;117(6):1309–17

The effects of (RS)–alpha–cyclopropyl–4–phosphonophenylglycine ((RS)–CPPG), a potent and selective metabotropic glutamate receptor antagonist. Toms NJ, et al. **Br J Pharmacol** 1996 Nov;119(5):851–4

Novel potent selective phenylglycine antagonists of metabotropic glutamate receptors. Bedingfield JS, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):71–8

The anxiolytic–like effect of metabotropic glutamate receptor antagonists after intrahippocampal injection in rats. Chojnacka–Wójcik E, et al. **Eur J Pharmacol** 1997 Jan 29; 319(2–3):153–6

The metabotropic glutamate receptor antagonist L–2–amino–3–phosphonopropionic acid inhibits phosphoserine phosphatase. Hawkinson JE, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):219–25

Class I mGlu receptor antagonist 1–aminoindan–1,5–dicarboxylic acid blocks contextual but not cue conditioning in rats. Nielsen KS, et al. **Eur J Pharmacol** 1997 May 20;326(2–3):105–8

Synthesis and pharmacological characterization of aminocyclopentanetricarboxylic acids: new tools to discriminate between metabotropic glutamate receptor subtypes. Acher FC, et al. **J Med Chem** 1997 Sep 12; 40(19):3119–29

Pharmacological characterization of 1–aminoindan–1,5–dicarboxylic acid, a potent mGluR1 antagonist. Moroni F, et al. **J Pharmacol Exp Ther** 1997 May;281(2):721–9

Cyclic GMP inhibition of metabotropic glutamate receptor–induced phosphoinositide hydrolysis in mesencephalic neurons. Ambrosini A, et al. **Neuropharmacology** 1996;35(11):1641–3

Effects of the metabotropic glutamate receptor antagonist MCPG on spatial and context–specific learning. Bordi F, et al. **Neuropharmacology** 1996;35(11):1557–65

Antagonism of mGlu receptors and potentiation of EPSCs at rat spinal motoneurones in vitro. Cao CQ, et al. **Neuropharmacology** 1997 Mar;36(3):313–8

Potent antagonists at the L–AP4– and (1S,3S)–ACPD–sensitive presynaptic metabotropic glutamate receptors in the neonatal rat spinal cord. Jane DE, et al. **Neuropharmacology** 1996;35(8):1029–35

Antagonism of the presumed presynaptic action of L–AP4 on GABAergic transmission in the ventrobasal thalamus by the novel mGluR antagonist MPPG. Salt TE, et al. **Neuropharmacology** 1996 Feb;35(2):239–41

alpha–Methyl derivatives of serine–O–phosphate as novel, selective competitive metabotropic glutamate receptor antagonists. Thomas NK, et al. **Neuropharmacology** 1996 Jun;35(6):637–42

Metabotropic glutamate receptor antagonists, like GABA(B) antagonists, potentiate dorsal root–evoked excitatory synaptic transmission at neonatal rat spinal motoneurons in vitro. Cao CQ, et al. **Neuroscience** 1997 May; 78(1):243–50

Anxiolytic–like effects of metabotropic glutamate antagonist (RS)–alpha–methylserine–O–phosphate in rats. Chojnacka–Wójcik E, et al. **Pol J Pharmacol** 1996 Sep–Oct; 48(5):507–9

Blockade of metabotropic glutamate receptors protects hippocampal neurons from hypoxia–induced cell death in rat in vivo. Riedel G, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1253–63

BIOSYNTHESIS

Immunohistochemical localization of metabotropic and ionotropic glutamate receptors in the mouse brain. Ryo Y, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:554–6

Expression of eight metabotropic glutamate receptor subtypes during neuronal differentiation of P19 embryocarcinoma cells: a study by RT–PCR and in situ hybridization. Heck S, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):85–91

Molecular characterization and localization of human metabotropic glutamate receptor type 3. Makoff A, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):55–63

Human metabotropic glutamate receptor type 7: molecular cloning and mRNA distribution in the CNS. Makoff A, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):165–70

Immortalized hypothalamic neurons express metabotropic glutamate receptors positively coupled to cyclic AMP formation. Sortino MA, et al. **Eur J Neurosci** 1996 Nov; 8(11):2407–15

Exposure of astrocytes to thrombin reduces levels of the metabotropic glutamate receptor mGluR5. Miller S, et al. **J Neurochem** 1996 Oct;67(4):1435–47

A novel splice variant of a metabotropic glutamate receptor, human mGluR7b. Flor PJ, et al. **Neuropharmacology** 1997 Feb;36(2):153–9

Cloning, distribution and functional expression of the human mGlu6 metabotropic glutamate receptor. Laurie DJ, et al. **Neuropharmacology** 1997 Feb;36(2):145–52

Glutamatergic deafferentation of olfactory bulb modulates the expression of mGluR1a mRNA. Ferraris N, et al. **Neuroreport** 1997 May 27;8(8):1949–53

Chronic ethanol on mRNA levels of IP3R1, IP3 3–kinase and mGluR1 in mouse Purkinje neurons. Simonyi A, et al. **Neuroreport** 1996 Sep 2;7(13):2115–8

ON cone bipolar cells in rat express the metabotropic receptor mGluR6. Vardi N, et al. **Vis Neurosci** 1997 Jul–Aug;14(4):789–94

CHEMISTRY

Molecular characterization of NMDA and metabotropic glutamate receptors. Masu M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:153–64 (36 ref.)

Conformational analysis of glutamic acid analogues as probes of glutamate receptors using molecular modelling and NMR methods. Comparison with specific agonists. Todeschi N, et al. **Bioorg Med Chem** 1997 Feb;5(2):335–52

Metabotropic glutamate receptor 5 is a disulfide–linked dimer. Romano C, et al. **J Biol Chem** 1996 Nov 8; 271(45):28612–6

Homology modeling of metabotropic glutamate receptors. (mGluRs) structural motifs affecting binding modes and pharmacological profile of mGluR1 agonists and competitive antagonists. Costantino G, et al. **J Med Chem** 1996 Sep 27;39(20):3998–4006

Metabotropic glutamate receptor mGluR5 in astrocytes: pharmacological properties and agonist regulation. Balázs R, et al. **J Neurochem** 1997 Jul;69(1):151–63

Cloning and characterization of a metabotropic glutamate receptor, mGluR4b. Thomsen C, et al.

Neuropharmacology 1997 Jan;36(1):21–30

DEFICIENCY

Mice lacking metabotropic glutamate receptor 5 show impaired learning and reduced CA1 long-term potentiation (LTP) but normal CA3 LTP. Lu YM, et al. **J Neurosci** 1997 Jul 1;17(13):5196–205

mGluR1 mutant mice as a tool to study calcium signalling and multiple innervation in the cerebellum. Daniel H, et al. **J Physiol Paris** 1996;90(3–4):171–2

DRUG EFFECTS

Metabotropic glutamate receptors and neuronal degeneration in culture. Bruno V, et al. **Adv Neurol** 1996;71:47–51, discussion 51–2 (23 ref.)

Pharmacological characterization of desensitization in a human mGlu1 alpha-expressing non-neuronal cell line co-transfected with a glutamate transporter. Desai MA, et al. **Br J Pharmacol** 1996 Jul;118(6):1558–64

Enhancement of dopamine release from the striatum through metabotropic glutamate receptor activation in methamphetamine sensitized rats. Arai I, et al. **Brain Res** 1996 Aug 12;729(2):277–80

Is activation of metabotropic glutamate receptors responsible for acute hyposic changes in hippocampal neurons? Erdemli G, et al. **Brain Res** 1996 Jun 3;723(1–2):1–7

Activation of pharmacologically distinct metabotropic glutamate receptors depresses reticulospinal-evoked monosynaptic EPSPs in the lamprey spinal cord. Krieger P, et al. **J Neurophysiol** 1996 Dec;76(6):3834–41

Presynaptic modulation by metabotropic glutamate receptors of excitatory and inhibitory synaptic inputs to hypothalamic magnocellular neurons. Schrader LA, et al. **J Neurophysiol** 1997 Feb;77(2):527–36

A long-lasting calcium-activated nonselective cationic current is generated by synaptic stimulation or exogenous activation of group I metabotropic glutamate receptors in CA1 pyramidal neurons. Congar P, et al. **J Neurosci** 1997 Jul 15;17(14):5366–79

Quisqualate-preferring metabotropic glutamate receptor activates Na(+)-Ca2+ exchange in rat basolateral amygdala neurones. Keele NB, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):87–104

Novel glial-neuronal signalling by coactivation of metabotropic glutamate and beta-adrenergic receptors in rat hippocampus. Winder DG, et al. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):743–55

Enhanced type 1alpha metabotropic glutamate receptor-stimulated phosphoinositide signaling after pertussis toxin treatment. Carruthers AM, et al. **Mol Pharmacol** 1997 Sep;52(3):406–14

Coupling of metabotropic glutamate receptors 2 and 4 to G alpha 15, G alpha 16, and chimeric G alpha q/i proteins: characterization of new antagonists. Gomeza J, et al. **Mol Pharmacol** 1996 Oct;50(4):923–30

A novel cognition enhancer NS-105 modulates adenylate cyclase activity through metabotropic glutamate receptors in primary neuronal culture. Oka M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):189–96

Characterization of the metabotropic glutamate receptors (mGluRs) which modulate GABA-mediated inhibition in the ventrobasal thalamus. Salt TE, et al. **Neurochem Int** 1996 Sep;29(3):317–22

Persistent multiple climbing fiber innervation of cerebellar Purkinje cells in mice lacking mGluR1. Kano M, et al. **Neuron** 1997 Jan;18(1):71–9

Pharmacological characterization of synaptic transmission through mGluRs in rat cerebellar slices. Batchelor AM, et al. **Neuropharmacology** 1997 Mar;36(3):401–3

Activation of metabotropic glutamate receptors induce differential effects on synaptic transmission in the dentate gyrus and CA1 of the hippocampus in the anaesthetized rat. Davis S, et al. **Neuropharmacology** 1996 Mar; 35(3):337–46

(RS)-2-chloro-5-hydroxyphenylglycine (CHPG) activates mGlu5, but no mGlu1, receptors expressed in CHO cells and potentiates NMDA responses in the hippocampus. Doherty AJ, et al. **Neuropharmacology** 1997 Feb; 36(2):265–7

Ontogenetic and pharmacological studies on metabotropic glutamate receptors coupled to phospholipase D activation. Klein J, et al. **Neuropharmacology** 1997 Mar;36(3):305–11

Cloning and stable expression of the mGluR1b subtype of human metabotropic receptors and pharmacological comparison with the mGluR5a subtype. Lin FF, et al. **Neuropharmacology** 1997 Jul;36(7):917–31

Activation of group III metabotropic glutamate receptors depresses glutamatergic transmission at corticostriatal synapse. Pisani A, et al. **Neuropharmacology** 1997 Jun; 36(6):845–51

Pharmacological characterization of metabotropic glutamate receptors linked to the inhibition of adenylate cyclase activity in rat striatal slices. Schaffhauser H, et al. **Neuropharmacology** 1997 Jul;36(7):933–40

The synaptic potential mediated by metabotropic glutamate receptors is not associated with a substantial elevation of cytosolic free calcium concentration in Purkinje cells. Batchelor AM, et al. **Neuroreport** 1996 Aug 12; 7(12):1949–52

Convulsant and anticonvulsant actions of agonists and antagonists of group III mGluRs. Ghauri M, et al. **Neuroreport** 1996 Jun 17;7(9):1469–74

Activation of group I mGluRs potentiates NMDA responses in rat hippocampal slices [published erratum appears in Neurosci Lett 1996 Mar 29;207(2):142] Fitzjohn SM, et al. **Neurosci Lett** 1996 Jan 26;203(3):211–3

Metabotropic glutamate receptor activation contributes to nociceptive reflex activity in the rat spinal cord in vitro. Boxall SJ, et al. **Neuroscience** 1996 Sep;74(1):13–20

Phorbol ester and forskolin suppress the presynaptic inhibitory action of group-II metabotropic glutamate receptor at rat hippocampal mossy fibre synapse. Kamiya H, et al. **Neuroscience** 1997 Sep;80(1):89–94

The synergism between metabotropic glutamate receptor activation and arachidonic acid on glutamate release is occluded by induction of long-term potentiation in the dentate gyrus. McGahon B, et al. **Neuroscience** 1996 Jun; 72(3):847–55

Metabotropic glutamate receptors: a new target for the therapy of neurodegenerative disorders? Nicoletti F, et al. **Trends Neurosci** 1996 Jul;19(7):267–71 (74 ref.)

GENETICS

Differentiating allele combinations of a transgene using multiple primer PCR. Pekhletski R, et al. **Biotechniques** 1996 Jun;20(6):956–8, 960

Regulation of synaptic plasticity by mGluR1 studied in vivo in mGluR1 mutant mice. Bordi F, et al. **Brain Res** 1997 Jun 27;761(1):121–6

The whole nucleotide sequence and chromosomal localization of the gene for human metabotropic glutamate receptor subtype 6. Hashimoto T, et al. **Eur J Neurosci** 1997 Jun;9(6):1226–35

HmGlu1d, a novel splice variant of the human type I metabotropic glutamate receptor. Laurie DJ, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):R1–R3

Localization of two metabotropic glutamate receptor genes, GRM3 and GRM8, to human chromosome 7q. Scherer SW, et al. **Genomics** 1996 Jan 15;31(2):230–3

Cloning and functional expression of a Drosophila metabotropic glutamate receptor expressed in the embryonic CNS. Parmentier ML, et al. **J Neurosci** 1996 Nov 1;16(21):6687–94

The mGluR6 5' upstream transgene sequence directs a cell-specific and developmentally regulated expression in retinal rod and ON-type cone bipolar cells. Ueda Y, et al. **J Neurosci** 1997 May 1;17(9):3014–23

Molecular cloning, functional expression, pharmacological characterization and chromosomal localization of the human metabotropic glutamate receptor type 3. Emile L, et al. **Neuropharmacology** 1996 May;35(5):523–30

A novel splice variant of a metabotropic glutamate receptor, human mGluR7b. Flor PJ, et al. **Neuropharmacology** 1997 Feb;36(2):153–9

Impairment of pupillary responses and optokinetic nystagmus in the mGluR6-deficient mouse. Iwakabe H, et al. **Neuropharmacology** 1997 Feb;36(2):135–43

Cloning, distribution and functional expression of the human mGlu6 metabotropic glutamate receptor. Laurie DJ, et al. **Neuropharmacology** 1997 Feb;36(2):145–52

Incomplete regression of multiple climbing fibre innervation of cerebellar Purkinje cells in mGLuR1 mutant mice. Levenes C, et al. **Neuroreport** 1997 Jan 20;8(2):571–4

Metabotropic glutamate receptor mRNA expression in rat spinal cord. Valerio A, et al. **Neuroreport** 1997 Aug 18; 8(12):2695–9

IMMUNOLOGY

Metabotropic glutamate receptor subtype-1 alpha (mGluR1 alpha) immunoreactivity in ependymal cells of the rat caudal medulla oblongata and spinal cord. Tang FR, et al. **Neurosci Lett** 1997 Apr 11;225(3):177–80

METABOLISM

Immunocytochemical localization of mGluR1a metabotropic glutamate receptor in inhibitory interneurons of the cerebellar cortex. Hámori J, et al. **Acta Biol Hung** 1996; 47(1–4):181–94

Distribution of metabotropic glutamate receptor 1a in the rat hypothalamus: an immunocytochemical study using monoclonal and polyclonal antibody. Kiss J, et al. **Acta Biol Hung** 1996;47(1–4):221–37

Different levels of receptor expression as a new procedure to estimate agonist affinity constant. Application to the metabotropic receptors. Corti C, et al. **Ann N Y Acad Sci** 1997 May 30;812:231–3

Pharmacological characterization of type 1alpha metabotropic glutamate receptor-stimulated [35S]-GTPgammaS binding. Akam EC, et al. **Br J Pharmacol** 1997 Jul;121(6):1203–9

Metabotropic glutamate receptors, transmitter output and fatty acids: studies in rat brain slices. Lombardi G, et al. **Br J Pharmacol** 1996 Jan;117(1):189–95

Pharmacological characterization of metabotropic glutamate receptors potentiating NMDA responses in mouse cortical wedge preparations. Mannaioni G, et al. **Br J Pharmacol** 1996 Jul;118(6):1530–6

Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus. Pellegrini-Giampietro DE, et al. **Br J Pharmacol** 1996 Jun;118(4):1035–43

Activation of metabotropic glutamate receptors increases endogenous protein kinase C substrate phosphorylation in adult hippocampal slices. Angenstein F, et al. **Brain Res** 1997 Jan 16;745(1–2):46–54

Altered expression of group I metabotropic glutamate receptors in the hippocampus of amygdala-kindled rats. Akbar MT, et al. **Brain Res Mol Brain Res** 1996 Dec 31; 43(1–2):105–16

Molecular characterization and localization of human metabotropic glutamate receptor type 4. Makoff A, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):239–48

Expression and coupling to polyphosphoinositide hydrolysis of group I metabotropic glutamate receptors in early postnatal and adult rat brain. Casabona G, et al. **Eur J Neurosci** 1997 Jan;9(1):12–7

Characterization of metabotropic glutamate receptors in rat C6 glioma cells. Albasanz JL, et al. **Eur J Pharmacol** 1997 May 12;326(1):85–91

Interactions between arachidonic acid and metabotropic glutamate receptors in the induction of synaptic potentiation in the rat hippocampal slice. Collins DR, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):147–54

Differential ontogenic pattern of metabotropic [3H]-L-glutamate receptors in normal and granule cell-deficient mouse cerebellum. Becker T, et al. **Exp Brain Res** 1996;107(3):361–6

Down-regulation of mGluR5 by antisense deoxynucleotides alters pharmacological responses to applications of ACPD in the rat hippocampus. Dorri F, et al. **Exp Neurol** 1997 Sep;147(1):48–54

Phosphorylation and calmodulin binding of the metabotropic glutamate receptor subtype 5 (mGluR5) are antagonistic in vitro. Minakami R, et al. **J Biol Chem** 1997 Aug 8; 272(32):20291–8

Ionotropic and metabotropic glutamate receptors show unique postsynaptic, presynaptic, and glial localizations in the dorsal cochlear nucleus. Petralia RS, et al. **J Comp Neurol** 1996 Aug 26;372(3):356–83

Immunocytochemical localization of the mGluR1 alpha metabotropic glutamate receptor in the dorsal cochlear nucleus. Wright DD, et al. **J Comp Neurol** 1996 Jan 22; 364(4):729–45

Positive and negative coupling of the metabotropic glutamate receptors to a G protein-activated K+ channel, GIRK, in Xenopus oocytes. Sharon D, et al. **J Gen Physiol** 1997 Apr;109(4):477–90

Homology modeling of metabotropic glutamate receptors. (mGluRs) structural motifs affecting binding modes and pharmacological profile of mGluR1 agonists and competitive antagonists. Costantino G, et al. **J Med Chem** 1996 Sep 27;39(20):3998–4006

N-acetylaspartylglutamate selectively activates mGluR3 receptors in transfected cells. Wroblewska B, et al. **J Neurochem** 1997 Jul;69(1):174–81

Glutamate and N-acetylaspartylglutamate block HVA calcium currents in frog olfactory bulb interneurons via an mGluR2/3-like receptor. Bischofberger J, et al. **J Neurophysiol** 1996 Sep;76(3):2089–92

Suppression of K+ conductance by metabotropic glutamate receptor in acutely dissociated large cholinergic neurons of rat caudate putamen. Takeshita Y, et al. **J Neurophysiol** 1996 Sep;76(3):1545–58

Group I metabotropic glutamate receptors mGluR1alpha and mGluR5a: localization in both synaptic layers of the rat retina. Koulen P, et al. **J Neurosci** 1997 Mar 15; 17(6):2200–11

Impaired cerebellar synaptic plasticity and motor performance in mice lacking the mGluR4 subtype of metabotropic glutamate receptor. Pekhletski R, et al. **J Neurosci** 1996 Oct 15;16(20):6364–73

cAMP levels increased by activation of metabotropic glutamate receptors correlate with visual plasticity. Reid SN, et al. **J Neurosci** 1996 Dec 1;16(23):7619–26

Differential presynaptic localization of metabotropic glutamate receptor subtypes in the rat hippocampus. Shigemoto R, et al. **J Neurosci** 1997 Oct 1;17(19):7503–22

Activation of a metabotropic excitatory amino acid receptor potentiates spike-driven calcium increases in neurons of the dorsolateral septum. Zheng F, et al. **J Neurosci** 1996 Oct 1;16(19):6079–88

Activation of metabotropic glutamate receptor type 2/3 suppresses transmission at rat hippocampal mossy fibre synapses. Kamiya H, et al. **J Physiol (Lond)** 1996 Jun 1; 493 (Pt 2):447–55

Membrane-delimited modulation of NMDA currents by metabotropic glutamate receptor subtypes 1/5 in cultured mouse cortical neurons. Yu SP, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):721–32

Non-NMDA glutamate receptor binding in canine brain after global cerebral ischemia and reperfusion. Wei H, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):37–52

Coupling of metabotropic glutamate receptors 2 and 4 to G alpha 15, G alpha 16, and chimeric G alpha q/i proteins: characterization of new antagonists. Gomeza J, et al. **Mol Pharmacol** 1996 Oct;50(4):923–30

Frequency detection and temporally dispersed synaptic signal association through a metabotropic glutamate receptor pathway. Batchelor AM, et al. **Nature** 1997 Jan 2; 385(6611):74–7

Homer: a protein that selectively binds metabotropic glutamate receptors [see comments] Brakeman PR, et al. **Nature** 1997 Mar 20;386(6622):284–8. Comment in: Nature

1997 Mar 20;386(6622):221, 223.
Expression cloning of GABA(B) receptors uncovers similarity to metabotropic glutamate receptors [see comments] Kaupmann K, et al. **Nature** 1997 Mar 20; 386(6622):239–46. Comment in: Nature 1997 Mar 20;386(6622):223–4.
Phospholipase C isozymes selectively couple to specific neurotransmitter receptors. Kim D, et al. **Nature** 1997 Sep 18;389(6648):290–3
Use–dependent increases in glutamate concentration activate presynaptic metabotropic glutamate receptors. Scanziani M, et al. **Nature** 1997 Feb 13;385(6617):630–4
Cloning and stable expression of the mGluR1b subtype of human metabotropic receptors and pharmacological comparison with the mGluR5a subtype. Lin FF, et al. **Neuropharmacology** 1997 Jul;36(7):917–31
Downregulation of metabotropic glutamate receptor 1a in motoneurons after axotomy. Alvarez FJ, et al. **Neuroreport** 1997 May 6;8(7):1711–6
Distribution of the metabotropic glutamate receptor subtype mGluR5 in rat midbrain periaqueductal grey and relationship with ascending spinofugal afferents. Azkue JJ, et al. **Neurosci Lett** 1997 May 30;228(1):1–4
In vivo inhibition of veratridine–evoked release of striatal excitatory amino acids by the group II metabotropic glutamate receptor agonist LY354740 in rats. Battaglia G, et al. **Neurosci Lett** 1997 Jul 4;229(3):161–4
Differential effects of learning and recall of a spatial task on phosphoinositide hydrolysis induced by the metabotropic glutamate receptor agonist 1S,3R–ACPD (1S,3R–1–amino–cyclopentane–1,3–discarboxylic acid) in the hippocampus and the prefrontal cortex of rats. de Bruin JP, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):57–60
Presynaptic localization of a metabotropic glutamate receptor, mGluR4a, in the cerebellar cortex: a light and electron microscope study in the rat. Kinoshita A, et al. **Neurosci Lett** 1996 Apr 5;207(3):199–202
Localization of a metabotropic glutamate receptor, mGluR7, in axon terminals of presumed nociceptive, primary afferent fibers in the superficial layers of the spinal dorsal horn: an electron microscope study in the rat. Li H, et al. **Neurosci Lett** 1997 Feb 28;223(3):153–6
Immunohistochemical localization of a metabotropic glutamate receptor, mGluR7, in ganglion neurons of the rat; with special reference to the presence in glutamatergic ganglion neurons. Li JL, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):9–12
Metabotropic glutamate receptors mGluR2 and mGluR5 are expressed in two non–overlapping populations of Golgi cells in the rat cerebellum. Neki A, et al. **Neuroscience** 1996 Dec;75(3):815–26
Acute mechanical hyperalgesia in the rat can be produced by coactivation of spinal ionotropic AMPA and metabotropic glutamate receptors, activation of phospholipase A2 and generation of cyclooxygenase products. Meller ST, et al. **Prog Brain Res** 1996;110:177–92 (69 ref.)
The enhancement and the inhibition of noradrenaline–induced cyclic AMP accumulation in rat brain by stimulation of metabotropic glutamate receptors. Pilc A, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1996 May; 20(4):673–90
Metabotropic glutamate receptor subtype 1A activates adenylate cyclase when expressed in baby hamster kidney cells. Thomsen C.
Prog Neuropsychopharmacol Biol Psychiatry 1996 May; 20(4):709–26
Presynaptic calcium current modulation by a metabotropic glutamate receptor. Takahashi T, et al. **Science** 1996 Oct 25;274(5287):594–7
Activation of the G protein Gq/11 through tyrosine phosphorylation of the alpha subunit. Umemori H, et al. **Science** 1997 Jun 20;276(5320):1878–81
Activation of metabotropic glutamate receptors has different effects in different layers of cat visual cortex. Reid SN, et al. **Vis Neurosci** 1997 Jan–Feb;14(1):83–8

PHYSIOLOGY

The enhancement and the inhibition of noradrenaline–induced cyclic AMP accumulation in rat brain by stimulation of metabotropic glutamate receptors. Legutko B, et al. **Acta Physiol Hung** 1996;84(3):301–3
Metabotropic glutamate receptors in hippocampal long–term potentiation and learning and memory. Riedel G, et al. **Acta Physiol Scand** 1996 May;157(1):1–19 (125 ref.)
Stimulation of metabotropic glutamate receptors in the dorsomedial hypothalamus elevates heart rate in rats. DiMicco J, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1115–21
Metabotropic glutamate response in acutely dissociated hippocampal CA3 neurons of the rat. Harata N, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:511–4
Molecular characterization of NMDA and metabotropic glutamate receptors. Masu M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:153–64 (36 ref.)
Mode of interactions between metabotropic glutamate receptors and G proteins in Xenopus oocyte. Sugiyama H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:515–7
The t–ACPD–induced current response in rat cerebellum. Takagi H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:518–20
Characterization of metabotropic glutamate receptors in cultured Purkinje cells. Yuzaki M, et al.
Ann N Y Acad Sci 1993 Dec 20;707:505–8
Pharmacology and functions of metabotropic glutamate receptors. Conn PJ, et al. **Annu Rev Pharmacol Toxicol** 1997;37:205–37 (198 ref.)
Glutamatergically induced pattern of Ca2+ driving potential as a mechanism of postsynaptic plasticity. Korogod SM, et al. **Biophys J** 1997 Sep;73(3):1655–64
Differences in agonist and antagonist activities for two indices of metabotropic glutamate receptor–stimulated phosphoinositide turnover. Mistry R, et al.
Br J Pharmacol 1996 Apr;117(8):1735–43
Enhancement of NMDA responses by group I metabotropic glutamate receptor activation in striatal neurones. Pisani A, et al. **Br J Pharmacol** 1997 Mar;120(6):1007–14
Cellular localisation of metabotropic glutamate receptors in the mammalian optic nerve: a mechanism for axon–glia communication. Jeffery G, et al. **Brain Res** 1996 Nov 25; 741(1–2):75–81
Involvement of metabotropic glutamate receptors in Gi– and Gs–dependent modulation of adenylate cyclase activity induced by a novel cognition enhancer NS–105 in rat brain. Oka M, et al. **Brain Res** 1997 Apr 18;754(1–2):121–30
Involvement of the glutamatergic metabotropic receptors in the regulation of glutamate uptake and extracellular excitatory amino acid levels in the striatum of chloral hydrate–anesthetized rats. Samuel D, et al. **Brain Res** 1996 Nov 11;739(1–2):156–62
Synaptic transmission: well–placed modulators. Forsythe ID, et al. **Curr Biol** 1997 Jun 1;7(6):R362–5 (21 ref.)
Microinfusion of the metabotropic glutamate receptor agonist 1S,3R–1–aminocyclopentane–1,3–dicarboxylic acid into the nucleus accumbens induces dopamine–dependent locomotor activation in the rat. Attarian S, et al.
Eur J Neurosci 1997 Apr;9(4):809–16
Interneuron–specific Ca2+ responses linked to metabotropic and ionotropic glutamate receptors in rat hippocampal slices. Carmant L, et al. **Eur J Neurosci** 1997 Aug; 9(8):1625–35
Type 2 metabotropic glutamate (mGlu) receptors tonically inhibit transmitter release in rat caudate nucleus: in vivo studies with (2S,1'S,2'S,3'R)–2–(2'–carboxy–3'–phenylcyclopropyl) glycine, a new potent and selective antagonist. Cozzi A, et al. **Eur J Neurosci** 1997 Jul;9(7):1350–5
Metabotropic glutamate receptors in the rat nucleus accumbens. Manzoni O, et al. **Eur J Neurosci** 1997 Jul; 9(7):1514–23
A slow excitatory postsynaptic current mediated by G–protein–coupled metabotropic glutamate receptors in rat ventral tegmental dopamine neurons. Shen KZ, et al.
Eur J Neurosci 1997 Jan;9(1):48–54
Characterization of metabotropic glutamate receptor–mediated nitric oxide production in vivo. Bhardwaj A, et al. **J Cereb Blood Flow Metab** 1997 Feb; 17(2):153–60
4–Hydroxynonenal, an aldehydic product of lipid peroxidation, impairs signal transduction associated with muscarinic acetylcholine and metabotropic glutamate receptors: possible action on G alpha(q/11). Blanc EM, et al. **J Neurochem** 1997 Aug;69(2):570–80
Metabotropic glutamate receptors increase amyloid precursor protein processing in astrocytes: inhibition by cyclic AMP. Lee RK, et al. **J Neurochem** 1997 May;68(5):1830–5
Metabotropic glutamate receptor subtype mGluR1alpha stimulates the secretion of the amyloid beta–protein precursor ectodomain. Nitsch RM, et al. **J Neurochem** 1997 Aug;69(2):704–12
(1 S,3 R)–1–aminocyclopentane–1,3–dicarboxylic acid–induced increases in cyclic AMP formation in the neonatal rat hippocampus are mediated by a synergistic interaction between phosphoinositide– and inhibitory cyclic AMP–coupled mGluRs. Schoepp DD, et al.
J Neurochem 1996 May;66(5):1981–5
Metabotropic glutamate receptors coupled to IP3 production mediate inhibition of IAHP in rat dentate granule neurons. Abdul–Ghani MA, et al. **J Neurophysiol** 1996 Oct; 76(4):2691–700
Responses to glutamate in rat taste cells. Bigiani A, et al. **J Neurophysiol** 1997 Jun;77(6):3048–59
Metabotropic glutamate receptor dependent EPSP and EPSP–spike potentiation in area CA1 of the submerged rat hippocampal slice. Breakwell NA, et al.
J Neurophysiol 1996 Nov;76(5):3126–35
Activation of Ca2+–dependent currents in dorsal root ganglion neurons by metabotropic glutamate receptors and cyclic ADP–ribose precursors. Crawford JH, et al.
J Neurophysiol 1997 May;77(5):2573–84
Glutamate–mediated release of Ca2+ in mitral cells of the olfactory bulb. Geiling H, et al. **J Neurophysiol** 1996 Jul; 76(1):563–70
Metabotropic glutamate receptors switch visual response mode of lateral geniculate nucleus cells from burst to tonic. Godwin DW, et al. **J Neurophysiol** 1996 Sep;76(3):1800–16
Block of glutamate decarboxylase decreases GABAergic inhibition at the crayfish synapses: possible role of presynaptic metabotropic mechanisms. Golan H, et al.
J Neurophysiol 1996 May;75(5):2089–98
Loss of mGluR–mediated hyperpolarizations and increase in mGluR depolarizations in basolateral amygdala neurons in kindling–induced epilepsy. Holmes KH, et al.
J Neurophysiol 1996 Oct;76(4):2808–12
Differential involvement of group II and group III mGluRs as autoreceptors at lateral and medial perforant path synapses. Macek TA, et al. **J Neurophysiol** 1996 Dec; 76(6):3798–806
Frequency–dependent depression of excitatory synaptic transmission is independent of activation of MCPG–sensitive presynaptic metabotropic glutamate receptors in cultured hippocampal neurons. Maki R, et al.
J Neurophysiol 1995 Oct;74(4):1671–4
Evidence for functional metabotropic glutamate receptors in the dorsal cochlear nucleus. Molitor SC, et al.
J Neurophysiol 1997 Apr;77(4):1889–905
Modulation of regenerative membrane properties by stimulation of metabotropic glutamate receptors in rat deep dorsal horn neurons. Morisset V, et al. **J Neurophysiol** 1996 Oct;76(4):2794–8
Eighth nerve activity regulates intracellular calcium concentration of avian cochlear nucleus neurons via a metabotropic glutamate receptor. Zirpel L, et al.
J Neurophysiol 1996 Dec;76(6):4127–39
Ultrastructural localization suggests that retinal and cortical inputs access different metabotropic glutamate receptors in the lateral geniculate nucleus. Godwin DW, et al.
J Neurosci 1996 Dec 15;16(24):8181–92
Metabotropic glutamate receptor activation modulates kainate and serotonin calcium response in astrocytes. Haak LL, et al. **J Neurosci** 1997 Mar 1;17(5):1825–37
Group 1 and 2 metabotropic glutamate receptors play differential roles in hippocampal long–term depression and long–term potentiation in freely moving rats.
Manahan–Vaughan D. **J Neurosci** 1997 May 1; 17(9):3303–11
Activation of metabotropic glutamate receptor subtype mGluR1 contributes to post–traumatic neuronal injury. Mukhin A, et al. **J Neurosci** 1996 Oct 1;16(19):6012–20
Metabotropic glutamate receptors activate G–protein–coupled inwardly rectifying potassium channels in Xenopus oocytes. Saugstad JA, et al. **J Neurosci** 1996 Oct 1;16(19):5979–85
Roles of metabotropic glutamate receptors in glial function and glial–neuronal communication. Winder DG, et al.
J Neurosci Res 1996 Oct 15;46(2):131–7 (63 ref.)
G–protein–mediated desensitization of metabotropic glutamatergic and muscarinic responses in CA3 cells in rat hippocampus. Guérineau NC, et al.
J Physiol (Lond) 1997 Apr 15;500 (Pt 2):487–96
Role of metabotropic glutamate receptors in the cat's visual cortex during development. Daw NW, et al.
J Physiol Paris 1996;90(3–4):173–7
The modulation of calcium currents by the activation of mGluRs. Functional implications. Stefani A, et al.
Mol Neurobiol 1996 Aug;13(1):81–95 (81 ref.)
Enhanced type 1alpha metabotropic glutamate receptor–stimulated phosphoinositide signaling after pertussis toxin treatment. Carruthers AM, et al.
Mol Pharmacol 1997 Sep;52(3):406–14
Functional coupling of rat group II metabotropic glutamate receptors to an omega–conotoxin GVIA–sensitive calcium channel in human embryonic kidney 293 cells. McCool BA, et al. **Mol Pharmacol** 1996 Oct;50(4):912–22
Differential responsiveness of metabotropic glutamate receptors coupled to phosphoinositide hydrolysis to agonists in various brain areas of the adult rat. Lorenzini P, et al. **Neurochem Res** 1996 Mar;21(3):323–9
Influences of hypothyroidism on lipid composition and inositol lipid–linked receptors responsiveness and protein kinase C (PKC) activity in the cerebral cortex of Lewis rats. Pintor A, et al. **Neurochem Res** 1996 May;21(5):541–5
Two distinct forms of long–term depression coexist in CA1 hippocampal pyramidal cells. Oliet SH, et al. **Neuron** 1997 Jun;18(6):969–82
Activation of metabotropic glutamate receptors induce differential effects on synaptic transmission in the dentate gyrus and CA1 of the hippocampus in the anaesthetized rat. Davis S, et al. **Neuropharmacology** 1996 Mar; 35(3):337–46
Impairment of pupillary responses and optokinetic nystagmus in the mGluR6–deficient mouse. Iwakabe H, et al.
Neuropharmacology 1997 Feb;36(2):135–43
Metabotropic glutamate receptor mediated long–term depression in developing hippocampus. Overstreet LS, et al. **Neuropharmacology** 1997 Jun;36(6):831–44
The novel metabotropic glutamate receptor agonist 2R,4R–APDC potentiates stimulation of phosphoinositide hydrolysis in the rat hippocampus by 3,5–dihydroxyphenylglycine: evidence for a synergistic interaction between group 1 and group 2 receptors. Schoepp DD, et al. **Neuropharmacology** 1996; 35(12):1661–72
G–protein activation by metabotropic glutamate receptors reduces spike frequency adaptation in neocortical neurons. Burke JP, et al. **Neuroscience** 1996 Nov;75(1):123–31
Modulation of excitatory synaptic transmission in locus coeruleus by multiple presynaptic metabotropic glutamate receptors. Dubé GR, et al. **Neuroscience** 1997 Sep; 80(2):511–21
Role of N–methyl–D–aspartate and metabotropic glutamate receptors in corticothalamic excitatory postsynaptic potentials in vivo. Eaton SA, et al. **Neuroscience** 1996 Jul; 73(1):1–5
Evidence against a permissive role of the metabotropic glutamate receptor 1 in acute excitotoxicity. Ferraguti F,

et al. **Neuroscience** 1997 Jul;79(1):1–5
Metabotropic glutamate receptor subtype agonists facilitate long–term potentiation within a distinct time window in the dentate gyrus in vivo. Manahan–Vaughan D, et al. **Neuroscience** 1996 Oct;74(3):723–31
The contribution of metabotropic glutamate receptors (mGluRs) to formalin–induced nociception. Fisher K, et al. **Pain** 1996 Dec;68(2–3):255–63
Glutamate receptors and development of the visual cortex: effect of metabotropic agonists on cAMP. Flavin HJ, et al. **Prog Brain Res** 1996;108:263–72
Receptor–mediated activation of protein kinase C in hippocampal long–term potentiation: facts, problems and implications [see comments] Angenstein F, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Apr; 21(3):427–54 (113 ref.). Comment in: Prog Neuropsychopharmacol Biol Psychiatry 1997 Apr;21(3):373–8.
Comparing the role of metabotropic glutamate receptors in long–term potentiation and in learning and memory. Riedel G, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jul;20(5):761–89 (118 ref.)
Metabotropic glutamate receptor–mediated inhibition and excitation of substantia nigra dopamine neurons. Meltzer LT, et al. **Synapse** 1997 Jun;26(2):184–93
Metabotropic glutamate receptors: a new target for the therapy of neurodegenerative disorders? Nicoletti F, et al. **Trends Neurosci** 1996 Jul;19(7):267–71 (74 ref.)
Function of metabotropic glutamate receptors in learning and memory. Riedel G. **Trends Neurosci** 1996 Jun;19(6):219–24
Latest eruptions in metabotropic glutamate receptors. Toms NJ, et al. **Trends Pharmacol Sci** 1996 Dec;17(12):429–35
Activation of metabotropic glutamate receptors decreases a high–threshold calcium current in spiking neurons of the Xenopus retina. Akopian A, et al. **Vis Neurosci** 1996 May–Jun;13(3):549–57

RECEPTORS, N–METHYL–D–ASPARTATE

D–serine as a neuromodulator: regional and developmental localizations in rat brain glia resemble NMDA receptors. Schell MJ, et al. **J Neurosci** 1997 Mar 1;17(5):1604–15
[Molecular function of subtype and subunit drug receptors] Kimura M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep; 108(3):155–6 (0 ref.) **(Jpn)**
[Molecular diversity and physiological roles of the NMDA–receptor channel] Mori H, et al. **Nippon Yakurigaku Zasshi** 1996 Jul;108(1):1–12 (50 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

Serotonin depletion exacerbates changes in striatal gene expression following quinolinic acid injection. Cummings TJ, et al. **Brain Res** 1996 Dec 16;743(1–2):240–8
Reversion of beta 25–35–amyloid peptide–induced amnesia by NMDA receptor–associated glycine site agonists. Maurice T, et al. **Brain Res** 1996 Aug 26;731(1–2):249–53
NMDA receptor activation induces glutamate release through nitric oxide synthesis in guinea pig dentate gyrus. Nei K, et al. **Brain Res** 1996 Jul 22;728(1):105–10
Stimulation of N–methyl–D–aspartate receptors induces apoptosis in rat brain. Qin ZH, et al. **Brain Res** 1996 Jul 1;725(2):166–76
DCG–IV, a potent metabotropic glutamate receptor agonist, as an NMDA receptor agonist in the rat cortical slice. Uyama Y, et al. **Brain Res** 1997 Mar 28;752(1–2):327–30
Development of locomotor activity induced by NMDA receptor activation in the lumbar spinal cord of the rat fetus studied in vitro. Ozaki S, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):118–25
Changes in expression of delta FosB and the Fos family proteins following NMDA receptor activation in the rat striatum. Hollen KM, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):31–43
The glutamate transport inhibitor L–trans–pyrrolidine–2,4–dicarboxylate indirectly evokes NMDA receptor mediated neurotoxicity in rat cortical cultures. Blitzblau R, et al. **Eur J Neurosci** 1996 Sep; 8(9):1840–52
Origin of aspartate–induced responses in rat cerebellar Purkinje cells. Renard A, et al. **Eur J Neurosci** 1996 May; 8(5):978–87
DCG–IV inhibits synaptic transmission by activation of NMDA receptors in area CA1 of rat hippocampus. Breakwell NA, et al. **Eur J Pharmacol** 1997 Mar 19; 322(2–3):173–8
Glycine causes increased excitability and neurotoxicity by activation of NMDA receptors in the hippocampus. Newell DW, et al. **Exp Neurol** 1997 May;145(1):235–44
Huntington's disease: N–methyl–D–aspartate receptor coagonist glycine is increased in platelets. Reilmann R, et al. **Exp Neurol** 1997 Apr;144(2):416–9
Stimulation of glutamine synthetase activity by excitatory amino acids in astrocyte cultures derived from aged mouse cerebral hemispheres may be associated with non–N–methyl–D–aspartate receptor activation. Fleischer–Lambropoulos E, et al. **Int J Dev Neurosci** 1996 Jul;14(4):523–30
Effects of depolarization and NMDA antagonists on the role survival of cerebellar granule cells: a pivotal role for protein kinase C isoforms. Lin WW, et al. **J Neurochem** 1997 Jun;68(6):2577–86
Functional organization of cone bipolar cells in the rat retina. Hartveit E. **J Neurophysiol** 1997 Apr;77(4):1716–30
Activation of N–methyl–D–aspartate receptors by glycine: role of an aspartate residue in the M3–M4 loop of the NR1 subunit. Williams K, et al. **Mol Pharmacol** 1996 Oct; 50(4):701–8
Molecular determinants of agonist discrimination by NMDA receptor subunits: analysis of the glutamate binding site on the NR2B subunit. Laube B, et al. **Neuron** 1997 Mar; 18(3):493–503
Developmental spectrum of the excitotoxic cascade induced by ibotenate: a model of hypoxic insults in fetuses and neonates. Gressens P, et al. **Neuropathol Appl Neurobiol** 1996 Dec;22(6):498–502 (22 ref.)
N–methyl–D–aspartate receptor activation by guanidinosuccinate but not by methylguanidine: behavioural and electrophysiological evidence. D'Hooge R, et al. **Neuropharmacology** 1996 Apr;35(4):433–40
Behavioral and neuroendocrine effects of the partial NMDA agonist D–cycloserine in healthy subjects. van Berckel BN, et al. **Neuropsychopharmacology** 1997 May;16(5):317–24
Reduced NMDA receptor sensitivity may underlie the resistance of subpopulations of PVN neurons to excitotoxicity. Bains JS, et al. **Neuroreport** 1997 Jul 7; 8(9–10):2101–5
Increased agonist and antagonist sensitivity of N–methyl–D–aspartate stimulated calcium flux in cultured neurons following chronic ethanol exposure. Blevins T, et al. **Neurosci Lett** 1995 Nov 24;200(3):214–8
Transforming growth factor–beta2 increases NMDA receptor–mediated excitotoxicity in rat cerebral cortical neurons independently of glia. Kane CJ, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):93–6
Chronic antipsychotic treatment alters glycine–stimulated NMDA receptor binding in rat brain. McCoy L, et al. **Neurosci Lett** 1996 Aug 2;213(2):137–41
Acute thermal hyperalgesia in the rat is produced by activation of N–methyl–D–aspartate receptors and protein kinase C and production of nitric oxide. Meller ST, et al. **Neuroscience** 1996 Mar;71(2):327–35
EMD 95885, a new eliprodil analogue with higher affinity for the N–methyl–D–aspartate (NMDA) receptor. Leibrock J, et al. **Pharmazie** 1997 Jun;52(6):479–80
Methylation of the NMDA receptor agonist L–trans–2,3–pyrrolidine–dicarboxylate: enhanced excitotoxic potency and selectivity. Willis CL, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):45–55
Quinolinic acid neurotoxicity: in vivo increased copper and manganese content in rat corpus striatum after quinolinate intrastriatal injection. Santamaría A, et al. **Toxicol Lett** 1996 Oct;87(2–3):113–9
Activation of NMDA receptor–channels in human retinal Müller glial cells inhibits inward–rectifying potassium currents. Puro DG, et al. **Vis Neurosci** 1996 Mar–Apr; 13(2):319–26
[N–butylaspartic acid––a partial agonist of NMDA receptors?] Kamri M, et al. **Eksp Klin Farmakol** 1996 May–Jun;59(3):9–11 (Eng. Abstr.) **(Rus)**

ANALYSIS

NMDA–R1 subunit of the cerebral cortex co–localizes with neuronal nitric oxide synthase at pre– and postsynaptic sites and in spines. Aoki C, et al. **Brain Res** 1997 Mar 7; 750(1–2):25–40
Cellular distribution of the NMDA receptor NR2A/2B subunits in the rat striatum. Chen Q, et al. **Brain Res** 1996 Dec 16;743(1–2):346–52
Ultrastructural localization and comparative distribution of nitric oxide synthase and N–methyl–D–aspartate receptors in the shell of the rat nucleus accumbens. Gracy KN, et al. **Brain Res** 1997 Feb 7;747(2):259–72
Ultrastructural immunocytochemical localization of the N–methyl–D–aspartate receptor and tyrosine hydroxylase in the shell of the rat nucleus accumbens. Gracy KN, et al. **Brain Res** 1996 Nov 11;739(1–2):169–81
Postnatal changes in the laminar and subcellular distribution of NMDA–R1 subunits in the cat visual cortex as revealed by immuno–electron microscopy. Aoki C. **Brain Res Dev Brain Res** 1997 Jan 2;98(1):41–59
Glutamate receptor subtypes localize to patches in the developing striatum. Snyder–Keller A, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):246–50
Expression of NMDA receptor–1 (NR1) and huntingtin in striatal neurons which colocalize somatostatin, neuropeptide Y, and NADPH diaphorase: a double–label histochemical and immunohistochemical study. Kumar U, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):412–24
Muscarinic, N–methyl–D–aspartate (NMDA) and benzodiazepine receptor binding sites in cortical membranes from amyotrophic lateral sclerosis patients. Gredal O, et al. **J Neurol Sci** 1996 Nov;143(1–2):121–5
Dual ultrastructural localization of mu–opioid receptors and NMDA–type glutamate receptors in the shell of the rat nucleus accumbens. Gracy KN, et al. **J Neurosci** 1997 Jun 15;17(12):4839–48
Detection of delta opioid receptor and N–methyl–D–aspartate receptor–like immunoreactivity in retinoic acid–differentiated neuroblastoma x glioma (NG108–15) cells. Beczkowska IW, et al. **J Neurosci Res** 1997 Jan 1;47(1):83–9
Neuronal and glial localization of NMDA receptors in the cerebral cortex. Conti F, et al. **Mol Neurobiol** 1997 Feb–Apr;14(1–2):1–18 (85 ref.)
The majority of N–methyl–D–aspartate receptor complexes in adult rat cerebral cortex contain at least three different subunits (NR1/NR2A/NR2B). Luo J, et al. **Mol Pharmacol** 1997 Jan;51(1):79–86
Aberrant hippocampal mossy fiber sprouting correlates with greater NMDAR2 receptor staining. Mathern GW, et al. **Neuroreport** 1996 Apr 10;7(5):1029–35
Analysis of the glycine binding domain of the NMDA receptor channel zeta 1 subunit. Uchino S, et al. **Neuroreport** 1997 Jan 20;8(2):445–9
NMDA and non–NMDA receptors are co–localized at excitatory synapses of rat hypoglossal motoneurons. O'Brien JA, et al. **Neurosci Lett** 1997 May 9;227(1):5–8
Cholecystokinin, dopamine D2 and N–methyl–D–aspartate binding sites in the nucleus of the solitary tract of the rat: possible relationship to ingestive behavior. Qian M, et al. **Neuroscience** 1997 Apr;77(4):1077–89

ANTAGONISTS & INHIBITORS

Four years' treatment with ketamine and a trial of dextromethorphan in a patient with severe post–herpetic neuralgia [see comments] Klepstad P, et al. **Acta Anaesthesiol Scand** 1997 Mar;41(3):422–6. Comment in: Acta Anaesthesiol Scand 1997 Mar;41(3):329–31.
Extended studies on the effect of glutamate antagonists on ischemic CA–1 damage. Diemer NH, et al. **Acta Neurochir Suppl (Wien)** 1996;66:73–5
N–methyl–D–aspartate receptor antagonists potentiate morphine's antinociceptive effect in the rat. Grass S, et al. **Acta Physiol Scand** 1996 Nov;158(3):269–73
Opposite effects of GABAA and NMDA receptor antagonists on ethanol–induced behavioral sleep in rats. Beleslin DB, et al. **Alcohol** 1997 Mar–Apr;14(2):167–73
Ethanol inhibition of NMDA receptor function in primary cultures of rat cerebellar granule cells and cerebral cortical cells. Hoffman PL, et al. **Alcohol Alcohol Suppl** 1994; 2:199–204 (34 ref.)
Mechanism of ethanol inhibition of NMDA receptor function in primary cultures of cerebral cortical cells. Bhave SV, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):934–41
Behavioral sensitivity and ethanol potentiation of the N–methyl–D–aspartate receptor antagonist MK–801 in a rat line selected for high ethanol sensitivity. Toropainen M, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):666–71
NMDA receptor blockade in cat dorsal horn blunts reflex pressor response to muscle contraction and stretch. Hand GA, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H500–8
Multiple mechanisms of ketamine blockade of N–methyl–D–aspartate receptors. Orser BA, et al. **Anesthesiology** 1997 Apr;86(4):903–17
Synthesis and biological evaluation of a series of quinazoline–2–carboxylic acids and quinazoline–2,4–diones as glycine–NMDA antagonists: a pharmacophore model based approach. Colotta V, et al. **Arch Pharm (Weinheim)** 1997 May;330(5):129–34
Neuroprotective effect of D–(E)–2–amino–4–methyl–5–phosphono–3–pentenoic acid in the gerbil model of transient global cerebral ischemia. Okada M, et al. **Arzneimittelforschung** 1997 Jun;47(6):700–2
Effect of D–(E)–2–amino–4–methyl–5–phosphono–3–pentenoic acid on focal cerebral ischemia in cat. Okada M, et al. **Arzneimittelforschung** 1997 Jun;47(6):703–5
Early NMDA receptor blockade impairs defensive behavior and increases cell proliferation in the dentate gyrus of developing rats. Gould E, et al. **Behav Neurosci** 1997 Feb; 111(1):49–56
A dose of MK801 previously shown to impair spatial learning in the radial maze attenuates primed burst potentiation in the dentate gyrus of freely moving rats. Hargreaves EL, et al. **Behav Neurosci** 1997 Feb;111(1):35–48
Effects of the PCP analog dizocilpine on sensory gating: potential relevance to clinical subtypes of schizophrenia. al–Amin HA, et al. **Biol Psychiatry** 1996 Oct 15; 40(8):744–54
Psychotogenicity and N–methyl–D–aspartate receptor antagonism: implications for neuroprotective pharmacotherapy. Kornhuber J, et al. **Biol Psychiatry** 1997 Jan 15;41(2):135–44 (85 ref.)
Effects of competitive and noncompetitive antagonists of the N–methyl–D–aspartate receptor on the analgesic action of delta 1– and delta 2–opioid receptor agonists in mice. Bharagava HN, et al. **Br J Pharmacol** 1996 Dec; 119(8):1586–90
Effects of memantine on recombinant rat NMDA receptors expressed in HEK 293 cells. Bresink I, et al. **Br J Pharmacol** 1996 Sep;119(2):195–204
Voltage–dependent block of NMDA responses by 5–HT agonists in ventral spinal cord neurones. Chesnoy–Marchais D, et al. **Br J Pharmacol** 1996 Jan;117(1):133–41
Effect of 1–aminocyclopropanecarboxylic acid on N–methyl–D–aspartate–stimulated [3H]–noradrenaline release in rat hippocampal synaptosomes. Clos MV, et al. **Br J Pharmacol** 1996 Jun;118(4):901–4
Inhibition of cortical spreading depression by L–701,324, a novel antagonist at the glycine site of the N–methyl–D–aspartate receptor complex. Obrenovitch TP, et al. **Br J Pharmacol** 1996 Mar;117(5):931–7
Differential action of NMDA antagonists on cholinergic

neurotoxicity produced by N-methyl-D-aspartate and quinolinic acid. Pawley AC, et al. **Br J Pharmacol** 1996 Mar;117(6):1059–64

An isobolographic analysis of the effects of N-methyl-D-aspartate and NK1 tachykinin receptor antagonists on inflammatory hyperalgesia in the rat. Ren K, et al. **Br J Pharmacol** 1996 Jan;117(1):196–202

Similarity of neuronal cell injury and death in AIDS dementia and focal cerebral ischemia: potential treatment with NMDA open-channel blockers and nitric oxide-related species. Lipton SA. **Brain Pathol** 1996 Oct;6(4):507–17 (117 ref.)

Effects of N-methyl-D-aspartate receptor antagonists on the analgesia and tolerance to D-Ala2, Glu4 deltorphin II, a delta 2-opioid receptor agonist in mice. Bhargava HN, et al. **Brain Res** 1996 May 6;719(1-2):56–61

Differential effects of LY235959, a competitive antagonist of the NMDA receptor on kappa-opioid receptor agonist induced responses in mice and rats. Bhargava HN, et al. **Brain Res** 1997 Feb 7;747(2):246–51

Effect of an NMDA receptor antagonist and a ganglioside GM1 derivative upon ethanol-induced modification of parameters of oxidative stress in several brain regions. Bondy SC, et al. **Brain Res** 1996 Apr 15;716(1-2):165–70

NMDA receptor antagonist blocks the bradycardic but not the pressor response to L-glutamate microinjected into the nucleus tractus solitarius (NTS) of unanesthetized rats. Colombari E, et al. **Brain Res** 1997 Feb 28;749(2):209–13

Harmaline-induced tremor and impairment of learning are both blocked by dizocilpine in the rabbit. Du W, et al. **Brain Res** 1997 Jan 16;745(1-2):183–8

Effect of cerebral hypoxia on NMDA receptor binding characteristics after treatment with 3-(2-carboxypiperazin-4-yl)propyl-1-phosphonic acid (CPP) in newborn piglets. Fritz KI, et al. **Brain Res** 1996 Aug 5;729(1):66–74

The N-methyl-D-aspartate (NMDA) receptor glycine site antagonist ACEA 1021 does not produce pathological changes in rat brain. Hawkinson JE, et al. **Brain Res** 1997 Jan 9;744(2):227–34

Opioids suppress spontaneous and NMDA-induced inhibitory postsynaptic currents in the dorsal raphe nucleus of the rat in vitro. Jolas T, et al. **Brain Res** 1997 May 2; 755(2):229–45

Pharmacologic blockade of non-NMDA receptors at deep prepiriform cortex attenuates heat shock protein expression in global ischemia. Kawaguchi K, et al. **Brain Res** 1997 Jan 23;746(1-2):59–62

NMDA-but not AMPA-receptor antagonists augment scopolamine-induced spatial cognitive deficit of rats in a radial maze task. Li HB, et al. **Brain Res** 1996 Jul 1; 725(2):268–71

NMDA and non-NMDA receptor antagonists protect against excitotoxic injury in the rat spinal cord. Liu S, et al. **Brain Res** 1997 May 9;756(1-2):160–7

Calcineurin inhibitors, FK506 and cyclosporin A, suppress the NMDA receptor-mediated potentials and LTP, but not depotentiation in the rat hippocampus. Lu YF, et al. **Brain Res** 1996 Aug 5;729(1):142–6

Attenuation of nociceptive responses by ACEA-1021, a competitive NMDA receptor/glycine site antagonist, in the mice. Lutfy K, et al. **Brain Res** 1996 Dec 16;743(1-2):17–23

Inhibition of morphine tolerance by NMDA receptor antagonists in the formalin test. Lutfy K, et al. **Brain Res** 1996 Aug 26;731(1-2):171–81

The glycine/NMDA receptor antagonist HA-966 impairs visual recognition memory in rhesus monkeys. Matsuoka N, et al. **Brain Res** 1996 Aug 26;731(1-2):72–8

Reversal of levodopa-induced motor fluctuations in experimental parkinsonism by NMDA receptor blockade. Papa SM, et al. **Brain Res** 1995 Dec 1;701(1-2):13–8

Effect of an NMDA receptor antagonist on the wind-up of neurons in the trigeminal oralis subnucleus. Parada CA, et al. **Brain Res** 1997 Jul 4;761(2):313–20

Neuroprotection by both NMDA and non-NMDA receptor antagonists in in vitro ischemia. Pringle AK, et al. **Brain Res** 1997 Apr 25;755(1):36–46

Systemic ketamine attenuates nociceptive behaviors in a rat model of peripheral neuropathy. Qian J, et al. **Brain Res** 1996 Apr 9;715(1-2):51–62

Comparison of the patterns of altered cerebral glucose utilisation produced by competitive and non-competitive NMDA receptor antagonists. Sharkey J, et al. **Brain Res** 1996 Sep 30;735(1):67–82

Suppression of neuropathic pain by a naturally-derived peptide with NMDA antagonist activity. Siegan JB, et al. **Brain Res** 1997 May 2;755(2):331–4

Prevention of HIV-1 gp120-induced neuronal damage in the central nervous system of transgenic mice by the NMDA receptor antagonist memantine. Toggas SM, et al. **Brain Res** 1996 Jan 15;706(2):303–7

Regionally different effects of scopolamine on NMDA antagonist-induced heat shock protein HSP70. Tomitaka SI, et al. **Brain Res** 1997 Jul 25;763(2):255–8

17beta-Estradiol protects against NMDA-induced excitotoxicity by direct inhibition of NMDA receptors. Weaver CE Jr, et al. **Brain Res** 1997 Jul 4;761(2):338–41

Single doses of MK-801, a non-competitive antagonist of NMDA receptors, increase the number of 5-HT1A serotonin receptors in the rat brain. Wędzony K, et al. **Brain Res** 1997 May 9;756(1-2):84–91

Failure of glycine site NMDA receptor antagonists to protect against L-2-chloropropionic acid-induced neurotoxicity highlights the uniqueness of cerebellar NMDA receptors. Widdowson PS, et al. **Brain Res** 1996 Nov 4;738(2):236–42

NMDA-receptor modulation of lateral inhibition and c-fos expression in olfactory bulb. Wilson DA, et al. **Brain Res** 1996 May 6;719(1-2):62–71

Attenuation of Mg2(+)-block of synaptic N-methyl-D-aspartate receptors in the visual cortex of rats raised under optic nerve blockade. Yoshimura H, et al. **Brain Res** 1996 Sep 9;733(1):108–12

Alteration of CaM I mRNA expression in the developing rat superior colliculus following chronic treatment with an NMDA receptor antagonist. Berry FB, et al. **Brain Res Dev Brain Res** 1996 Feb 26;91(2):171–80

Chronic pre-explant blockade of the NMDA receptor affects survival of cerebellar granule cells explanted in vitro. Ciani E, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):112–7

Long-term effects of excitatory amino acid antagonists NBQX and MK-801 on the developing brain. Tandon P, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):256–62

Intrathecally administered NMDA receptor antagonists reduce the MAC of isoflurane in rats. Ishizaki K, et al. **Can J Anaesth** 1996 Jul;43(7):724–30

Effects of prolonged infusions of the NMDA antagonist aptiganel hydrochloride (CNS 1102) in normal volunteers. Muir KW, et al. **Clin Neuropharmacol** 1997 Aug; 20(4):311–21

Competitive NMDA receptor antagonists do not block cholinergic kindling with carbachol. Saucier D, et al. **Epilepsy Res** 1996 May;24(1):9–18

Effects of the uncompetitive NMDA receptor antagonist memantine on hippocampal long-term potentiation, short-term exploratory modulation and spatial memory in awake, freely moving rats. Barnes CA, et al. **Eur J Neurosci** 1996 Mar;8(3):565–71

Chronic dizocilpine maleate (MK-801) treatment suppresses the effects of nigrostriatal dopamine deafferentation on enkephalin but not on substance P expression in the rat striatum. Hajji MD, et al. **Eur J Neurosci** 1996 May; 8(5):917–26

Effects of NMDA receptor blockade in the developing rat somatosensory cortex on the expression of the glia-derived extracellular matrix glycoprotein tenascin-C. Mitrovic N, et al. **Eur J Neurosci** 1996 Sep;8(9):1793–802

Comparative patch-clamp studies with freshly dissociated rat hippocampal and striatal neurons on the NMDA receptor antagonistic effects of amantadine and memantine. Parsons CG, et al. **Eur J Neurosci** 1996 Mar;8(3):446–54

Chronic NMDA receptor antagonism during retinotopic map formation depresses CaM kinase II differentiation in rat superior colliculus. Scheetz AJ, et al. **Eur J Neurosci** 1996 Jul;8(7):1322–8

Antagonist properties of the stereoisomers of ifenprodil at NR1A/NR2A and NR1A/NR2B subtypes of the NMDA receptor expressed in Xenopus oocytes. Avenet P, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):209–13

Pharmacological characterization of MDL 105,519, an NMDA receptor glycine site antagonist. Baron BM, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):181–92

The effects of ifenprodil and eliprodil on voltage-dependent Ca2+ channels and in gerbil global cerebral ischaemia. Bath CP, et al. **Eur J Pharmacol** 1996 Mar 28; 299(1-3):103–12

Blockade of the polyamine site of NMDA receptors produces antinociception and enhances the effect of morphine, in mice. Bernardi M, et al. **Eur J Pharmacol** 1996 Feb 29; 298(1):51–5

NMDA receptor antagonists prevent conditioned activation of intracranial self-stimulation in rats. Bespalov A, et al. **Eur J Pharmacol** 1997 May 20;326(2-3):109–12

Competitive NMDA receptor antagonist, CGP 40116, substitutes for the discriminative stimulus effects of ethanol. Bienkowski P, et al. **Eur J Pharmacol** 1996 Oct 31; 314(3):277–80

NMDA receptor antagonists increase the release of dopamine in the substantia nigra of reserpine-treated rats. Biggs CS, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):83–91

Block of P-type Ca2+ channels by the NMDA receptor antagonist eliprodil in acutely dissociated rat Purkinje cells. Biton B, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):91–100

Study of potency, kinetics of block and toxicity of NMDA receptor antagonists using fura-2. Black M, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):377–81

Ca2+ channel blockade and the antielectroshock activity of NMDA receptor antagonists, CGP 40116 and CGP 43487, in mice. Gasior M, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):27–33

Evidence for alcohol anti-craving properties of memantine. Hölter SM, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):R1–2

L-701,324, a glycine/NMDA receptor antagonist, blocks the increase of cortical dopamine metabolism by stress and DMCM. Hutson PH, et al. **Eur J Pharmacol** 1997 May 20;326(2-3):127–32

Pharmacology of ACEA-1416: a potent systemically active NMDA receptor glycine site antagonist. Ilyin VI, et al. **Eur J Pharmacol** 1996 Aug 29;310(2-3):107–14

The effects of (+)-SKF10047 and ketamine hydrochloride on stereotyped behaviour, locomotor activity and ataxia in guinea pig. Jerram AH, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):269–73

Zn2+ inhibition of [3H]MK-801 binding is different in mouse brain and spinal cord: effect of glycine and glutamate. Kovács KJ, et al. **Eur J Pharmacol** 1997 Apr 11; 324(1):117–23

NMDA receptor 2C subunit is selectively decreased by MK-801 in the entorhinal cortex. Lindén AM, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):R1–2

The competitive NMDA receptor antagonist SDZ 220-581 reverses haloperidol-induced catalepsy in rats. McAllister KH. **Eur J Pharmacol** 1996 Oct 31;314(3):307–11

NMDA receptor antagonists block development of tolerance to m-CPP-induced increases in ACTH concentrations in rats. Mazzola-Pomietto P, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):329–33

Learning deficits induced by chronic intraventricular infusion of quinolinic acid—protection by MK-801 and memantine. Misztal M, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):1–8

MK-801 and memantine inhibit a centrally induced increase in myocardial oxygen demand in rabbits. Monassier L, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):109–13

Protection by NMDA receptor antagonists against seizures induced by intracerebral administration of 4-aminopyridine. Morales-Villagrán A, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):87–93

Beta-adrenergic dysfunction exacerbates impairment of working memory induced by hippocampal NMDA receptor blockade in rats. Ohno M, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):21–6

Competitive NMDA receptor antagonists do not produce locomotor hyperactivity by a dopamine-dependent mechanism. Ouagazzal A, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):137–46

Dextromethorphan reduces intravenous cocaine self-administration in the rat. Pulvirenti L, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):279–83

Recovery of decreased seizure threshold for pentylenetetrazole during diazepam withdrawal by NMDA receptor antagonists. Tsuda M, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):63–6

A novel NMDA receptor antagonist protects against N-methyl-D-aspartate- and glutamate-induced neurotoxicity in the goldfish retina. Tyan SH, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):171–9

Effects of site-selective NMDA receptor antagonists in an elevated plus-maze model of anxiety in mice. Wiley JL, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):101–7

Effects of NMDA receptor antagonists on inhibition of morphine tolerance in rats: binding at mu-opioid receptors. Wong CS, et al. **Eur J Pharmacol** 1996 Feb 15; 297(1-2):27–33

Enzyme-catalyzed production of the neuroprotective NMDA receptor antagonist 7-chlorokynurenic acid in the rat brain in vivo. Wu HQ, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):13–20

Infusion of (+) -MK-801 and memantine — contrasting effects on radial maze learning in rats with entorhinal cortex lesion. Zajaczkowski W, et al. **Eur J Pharmacol** 1996 Feb 5;296(3):239–46

Aging decreases rebound synaptic excitation produced by removal of NMDA receptor block in the striatum. Ou X, et al. **Exp Brain Res** 1997 May;114(3):590–4

Anticonvulsant action of both NMDA and non-NMDA receptor antagonists against seizures induced by homocysteine in immature rats. Folbergrová J. **Exp Neurol** 1997 Jun;145(2 Pt 1):442–50

Tricyclic heteroaromatic systems. 3-substituted 1,2,3,5,6,7-hexahydro-2,5,6-trioxopyrazino[1,2,3-de]-quinoxalines as novel antagonists at the glycine-NMDA site. Varano F, et al. **Farmaco** 1997 Mar;52(3):179–82

The NMR solution structure of the NMDA receptor antagonist, conantokin-T, in the absence of divalent metal ions. Warder SE, et al. **FEBS Lett** 1997 Jul 7;411(1):19–26

NMDA antagonist blockade of AT8 tau immunoreactive changes in neuronal cultures. Couratier P, et al. **Fundam Clin Pharmacol** 1996;10(4):344–9

Enhancement of morphine actions in morphine-naive and morphine-tolerant mice by LY 235959, a competitive antagonist of the NMDA receptor. Bhargava HN. **Gen Pharmacol** 1997 Jan;28(1):61–4

Memantine, a noncompetitive NMDA receptor antagonist improves hyperammonemia-induced encephalopathy and acute hepatic encephalopathy in rats [see comments] Vogels BA, et al. **Hepatology** 1997 Apr;25(4):820–7. Comment in: Hepatology 1997 Apr;25(4):1032–4.

Effect of N-methyl-D-aspartate-receptor blockade on hypoxic ventilatory response in unanesthetized piglets. Lin J, et al. **J Appl Physiol** 1996 May;80(5):1759–63

Deep prepiriform cortex modulates neuronal cell death in global ischemia. Kawaguchi K, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):356–60

Neuroprotective effect of NMDA receptor glycine recognition site antagonism persists when brain temperature is controlled. Takaoka S, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):161–7

High-performance liquid chromatographic analysis of (S)-alpha-amino-5-phosphonomethyl[1,1'-biphenyl]-3-propanoic acid (EAB 515) in brain and blood microdialysate (on-line) and in plasma ultrafiltrate of freely moving rats. Malhotra BK, et al. **J Chromatogr B Biomed Appl** 1996 Apr 26;679(1-2):167–76

Enantioselective determination of selfotel in human urine by high-performance liquid chromatography on a chiral stationary phase after derivatization with 9-fluorenylmethyl chloroformate. Knoche B, et al.

J Chromatogr B Biomed Sci Appl 1997 Aug 1;695(2):355–63
Extracts from rhizomes of Cyperus articulatus (Cyperaceae) displace [3H]CGP39653 and [3H]glycine binding from cortical membranes and selectively inhibit NMDA receptor–mediated neurotransmission. Bum EN, et al. **J Ethnopharmacol** 1996 Nov;54(2–3):103–11
Structure–activity relationships of alkyl- and alkoxy-substituted 1,4–dihydroquinoxaline–2,3–diones: potent and systemically active antagonists for the glycine site of the NMDA receptor. Cai SX, et al. **J Med Chem** 1997 Feb 28;40(5):730–8
Structure–activity relationships of 4–hydroxy–3–nitroquinolin–2(1H)–ones as novel antagonists at the glycine site of N–methyl–D–aspartate receptors. Cai SX, et al. **J Med Chem** 1996 Nov 8; 39(23):4682–6
4–substituted–3–phenylquinolin–2(1H)–ones: acidic and nonacidic glycine site N–methyl–D–aspartate antagonists with in vivo activity. Carling RW, et al. **J Med Chem** 1997 Feb 28;40(5):754–65
Synthesis and structure–activity relationships of 6,7–benzomorphan derivatives as antagonists of the NMDA receptor–channel complex. Grauert M, et al. **J Med Chem** 1997 Aug 29;40(18):2922–30
Analogs of 3–hydroxy–1H–1–benzazepine–2,5–dione: structure–activity relationship at N–methyl–D–aspartate receptor glycine sites. Guzikowski AP, et al. **J Med Chem** 1996 Nov 8;39(23):4643–53
Synthesis of racemic 6,7,8,9–tetrahydro–3–hydroxy–1H–1–benzazepine–2,5–diones as antagonists of N–methyl–d–aspartate (NMDA) and alpha–amino–3–hydroxy–5–methylisoxazole–4–propionic acid (AMPA) receptors. Guzikowski AP, et al. **J Med Chem** 1997 Jul 18;40(15):2424–9
The synergistic effect of fluoxetine on the locomotor hyperactivity induced by MK–801, a non–competitive NMDA receptor antagonist. Maj J, et al. **J Neural Transm** 1996;103(1–2):131–46
Antagonism of NMDA receptors but not AMPA/kainate receptors blocks bursting in dopaminergic neurons induced by electrical stimulation of the prefrontal cortex. Tong ZY, et al. **J Neural Transm** 1996;103(8–9):889–904
Concurrent locomotor stimulation and decrease in dopamine release in rats and mice after treatment with the competitive NMDA receptor antagonists D–CPPene and CGS 19755. Waters N, et al. **J Neural Transm** 1996;103(1–2):117–29
CGP 39653 binding in the chick CNS after NMDA receptor antagonist treatment. White BH, et al. **J Neural Transm** 1996;103(11):1247–53
Orphenadrine is an uncompetitive N–methyl–D–aspartate (NMDA) receptor antagonist: binding and patch clamp studies. Kornhuber J, et al. **J Neural Transm Gen Sect** 1995; 102(3):237–46
Memantine prevents progressive functional neurodegeneration in rats. Heim C, et al. **J Neural Transm Suppl** 1995;46:117–30
Microdialysis studies with amantadine and memantine on pharmacokinetics and effects on dopamine turnover. Quack G, et al. **J Neural Transm Suppl** 1995;46:97–105
Blockade of FG 7142–induced increased dopamine utilization by the glycine/NMDA receptor antagonist (+)–HA 966. Horger BA, et al. **J Neurochem** 1996 May;66(5):1959–62
Serotonin inhibition of the NMDA receptor/nitric oxide/cyclic GMP pathway in rat cerebellum: involvement of 5–hydroxytryptamine2C receptors. Marcoli M, et al. **J Neurochem** 1997 Jul;69(1):427–30
Factors affecting the survival of cat retinal ganglion cells after optic nerve injury. Russelakis–Carneiro M, et al. **J Neurocytol** 1996 Jun;25(6):393–402
Inhibition of steroid–induced galanin mRNA expression in GnRH neurons by specific NMDA–receptor blockade. Rossmanith WG, et al. **J Neuroendocrinol** 1996 Mar; 8(3):179–84
Administration of a competitive NMDA antagonist MDL–100,453 reduces infarct size after permanent middle cerebral artery occlusion in rat. Jiang N, et al. **J Neurol Sci** 1996 Jun;138(1–2):36–41
The competitive NMDA antagonist, CGS–19755, improves postischemic hypoperfusion in selectively vulnerable regions in gerbils. Omae T, et al. **J Neurol Sci** 1996 Jun; 138(1–2):105–13
Memantine abrogates neurological deficits, but not CNS inflammation, in Lewis rat experimental autoimmune encephalomyelitis. Wallström E, et al. **J Neurol Sci** 1996 May;137(2):89–96
Trapping channel block of NMDA–activated responses by amantadine and memantine. Blanpied TA, et al. **J Neurophysiol** 1997 Jan;77(1):309–23
NREM delta stimulation following MK–801 is a response of sleep systems. Campbell IG, et al. **J Neurophysiol** 1996 Dec;76(6):3714–20
Sensory–evoked pocket scratch motor patterns in the in vitro turtle spinal cord: reduction of excitability by an N–methyl–D–aspartate antagonist. Currie SN, et al. **J Neurophysiol** 1996 Jul;76(1):81–92
Phencyclidine increases forebrain monoamine metabolism in rats and monkeys: modulation by the isomers of HA966. Jentsch JD, et al. **J Neurosci** 1997 Mar 1;17(5):1769–75
Activation of glutamatergic neurotransmission by ketamine: a novel step in the pathway from NMDA receptor blockade to dopaminergic and cognitive disruptions associated with the prefrontal cortex. Moghaddam B, et al. **J Neurosci** 1997 Apr 15;17(8):2921–7
MK–801 neurotoxicity in the guinea pig cerebral cortex: susceptibility and regional differences compared with the rat. Raboisson P, et al. **J Neurosci Res** 1997 Aug 1; 49(3):364–71
Effects of the novel NMDA antagonists CP–98,113, CP–101,581 and CP–101,606 on cognitive function and regional cerebral edema following experimental brain injury in the rat. Okiyama K, et al. **J Neurotrauma** 1997 Apr;14(4):211–22
No protective effect of the NMDA antagonist memantine in experimental spinal cord injuries. von Euler M, et al. **J Neurotrauma** 1997 Jan;14(1):53–61
Ameliorative effect of MK–801 on retinal ischemia. Lam TT, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):129–37
Acetylcholinesterase inhibition and protection by dizocilpine (MK–801) enantiomers. Galli A, et al. **J Pharm Pharmacol** 1996 Jan;48(1):71–6
[3H]MDL 105,519, a high–affinity radioligand for the N–methyl–D–aspartate receptor–associated glycine recognition site. Baron BM, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):62–8
Differential sensitivity of recombinant N–methyl–D–aspartate receptor subunits to inhibition by dynorphin. Brauneis U, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1063–8
Anticonvulsant and behavioral profile of L–701,324, a potent, orally active antagonist at the glycine modulatory site on the N–methyl–D–aspartate receptor complex. Bristow LJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):492–501
Efficacy of spinal NMDA receptor antagonism in formalin hyperalgesia and nerve injury evoked allodynia in the rat. Chaplan SR, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):829–38
Characterization of haloperidol and trifluperidol as subtype–selective N–methyl–D–aspartate (NMDA) receptor antagonists using [3H]TCP and [3H]ifenprodil binding in rat brain membranes. Coughenour LL, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):584–92
Inhibition of N–methyl–D–aspartate receptors by haloperidol: developmental and pharmacological characterization in native and recombinant receptors. Lynch DR, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):154–61
Antagonism of N–methyl–D–aspartate–evoked currents in rat cortical cultures by ARL 15896AR. Mealing GA, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):376–83
Lead inhibition of N–methyl–D–aspartate receptors containing NR2A, NR2C and NR2D subunits. Omelchenko IA, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1458–64
Inhibition of reinforcing effects of morphine and motivational aspects of naloxone–precipitated opioid withdrawal by N–methyl–D–aspartate receptor antagonist, memantine. Popik P, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):854–65
Effects of gamma–aminobutyric acid agonists and N–methyl–D–aspartate antagonists on a multiple schedule of ethanol and saccharin self–administration in rats. Shelton KL, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1250–60
N–methyl–D–aspartate antagonist activity of alpha– and beta–sulfallorphans. Shukla VK, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):357–65
Antagonism of N–methyl–D–aspartate receptors by sigma site ligands: potency, subtype–selectivity and mechanisms of inhibition. Whittemore ER, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):326–38
Voltage–dependent interaction of open–channel blocking molecules with gating of NMDA receptors in rat cortical neurons. Antonov SM, et al. **J Physiol (Lond)** 1996 Jun 1;493 (Pt 2):425–45
A novel mechanism of activity–dependent NMDA receptor antagonism describes the effect of ifenprodil in rat cultured cortical neurones. Kew JN, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):761–72
Calcium–induced inactivation of NMDA receptor–channels evolves independently of run–down in cultured rat brain neurones. Medina I, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):411–27
Competitive and non–competitive NMDA receptor antagonists induce c–Fos expression in the rat anterior, cingulate cortex. Wędzony K, et al. **J Physiol Pharmacol** 1996 Sep;47(3):525–33
Effect of NMDA receptor antagonists on protein kinase activated by chronic morphine treatment. Makimura M, et al. **J Toxicol Sci** 1997 Feb;22(1):57–64
N1–dansyl–spermine and N1–(n–octanesulfonyl)–spermine, novel glutamate receptor antagonists: block and permeation of N–methyl–D–aspartate receptors. Chao J, et al. **Mol Pharmacol** 1997 May;51(5):861–71
Differential sensitivity of recombinant N–methyl–D–aspartate receptor subtypes to zinc inhibition. Chen N, et al. **Mol Pharmacol** 1997 Jun;51(6):1015–23
Subtype–selective inhibition of N–methyl–D–aspartate receptors by haloperidol. Ilyin VI, et al. **Mol Pharmacol** 1996 Dec;50(6):1541–50
Calcium–dependent inactivation of recombinant N–methyl–D–aspartate receptors is NR2 subunit specific. Krupp JJ, et al. **Mol Pharmacol** 1996 Dec;50(6):1680–8
Novel antagonists of the inhibitory glycine receptor derived from quinolinic acid compounds. Schmieden V, et al. **Mol Pharmacol** 1996 Nov;50(5):1200–6
Aminoglycoside excitement silences hearing [news; comment] Ernfors P, et al. **Nat Med** 1996 Dec;2(12):1313–4 . Comment on: Nat Med 1996 Dec;2(12):1338–43.
Behavioural pharmacology of the non–competitive NMDA antagonists dextrorphan and ADCI: relations between locomotor stimulation, anticataleptic potential and forebrain dopamine metabolism. Bubser M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):767–73
The adenosine receptor antagonist theophylline induces a monoamine–dependent increase of the anticataleptic effects of NMDA receptor antagonists. Hauber W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):179–86
Effects of L–701,324, a high–affinity antagonist at the N–methyl–D–aspartate (NMDA) receptor glycine site, on the rat electroencephalogram. Obrenovitch TP, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):779–86
Narrow temporal therapeutic window for NMDA antagonist protection against focal cerebral ischaemia. Steinberg GK, et al. **Neurobiol Dis** 1995 Apr;2(2):109–18
Influence of the N–methyl–D–aspartate receptor antagonist DL–2–amino–5–phosphonovaleric acid on auditory filial imprinting in the domestic chick. Bock J, et al. **Neurobiol Learn Mem** 1996 Mar;65(2):177–88
Olfactory conditioning impairment following posttraining NMDA receptor blockade in neonatal rats. Weldon DA, et al. **Neurobiol Learn Mem** 1997 Jan;67(1):34–42
NMDA receptor antagonist MK–801 down–regulates rat striatal proenkephalin and protachykinin mRNAs. Zhang F, et al. **Neurochem Int** 1996 Feb;28(2):189–92
NMDA receptor antagonists prevent acute ammonia toxicity in mice. Hermenegildo C, et al. **Neurochem Res** 1996 Oct; 21(10):1237–44
Differential inhibition of NMDA– and naloxone–induced LH release by NMDA receptor antagonist and CRH in ovariectomized estrogen–primed rats. Chiba A, et al. **Neuroendocrinology** 1997 Feb;65(2):141–6
Pretreatment with NMDA receptor antagonist MK801 improves neurophysiological outcome after an acute spinal cord injury. Haghighi SS, et al. **Neurol Res** 1996 Dec; 18(6):509–15
The antidepressant metapramine is a low–affinity antagonist at N–methyl–D–aspartic acid receptors. Boireau A, et al. **Neuropharmacology** 1996;35(12):1703–7
Effect of MK–801 at the human alpha 7 nicotinic acetylcholine receptor. Briggs CA, et al. **Neuropharmacology** 1996 Apr;35(4):407–14
Competitive and glycine/NMDA receptor antagonists attenuate withdrawal–induced behaviours and increased hippocampal acetylcholine efflux in morphine–dependent rats. Bristow LJ, et al. **Neuropharmacology** 1997 Feb; 36(2):241–50
Ibogaine block of the NMDA receptor: in vitro and in vivo studies. Chen K, et al. **Neuropharmacology** 1996 Apr; 35(4):423–31
Dizocilpine–like discriminative stimulus effects of low–affinity uncompetitive NMDA antagonists. Grant KA, et al. **Neuropharmacology** 1996;35(12):1709–19
Effects of N–methyl–D–aspartate receptor antagonists on cisplatin–induced emesis in the ferret. Lehmann A, et al. **Neuropharmacology** 1996 Apr;35(4):475–81
The neurosteroid pregnenolone sulfate blocks deficits induced by a competitive NMDA antagonist in active avoidance and lever–press learning tasks in mice. Mathis C, et al. **Neuropharmacology** 1996;35(8):1057–64
Subchronic intraventricular infusion of quinolinic acid produces working memory impairment—a model of progressive excitotoxicity. Misztal M, et al. **Neuropharmacology** 1996 Apr;35(4):449–58
Behavioral evidence for modulation by sigma ligands of (+)MK–801–induced hyperlocomotion in monoamine–depleted mice. Okuyama S, et al. **Neuropharmacology** 1996 Apr;35(4):467–74
Electrophysiological characterisation of the antagonist properties of two novel NMDA receptor glycine site antagonists, L–695,902 and L–701,324. Priestley T, et al. **Neuropharmacology** 1996;35(11):1573–81
Antidepressant–like effects of a partial agonist at strychnine–insensitive glycine receptors and a competitive NMDA receptor antagonist. Przegaliński E, et al. **Neuropharmacology** 1997 Jan;36(1):31–7
Bepridil–induced blockade of NMDA channels in rat hippocampal neurones. Sobolevsky A, et al. **Neuropharmacology** 1997 Mar;36(3):319–24
EEG seizure activity and behavioral neurotoxicity produced by (+)–MK801, but not the glycine site antagonist L–687,414, in the rat. Tortella FC, et al. **Neuropharmacology** 1996 Apr;35(4):441–8
Biphenyl–derivatives of 2–amino–7–phosphonoheptanoic acid, a novel class of potent competitive N–methyl–D–aspartate receptor antagonist—I. Pharmacological characterization in vitro. Urwyler S, et al. **Neuropharmacology** 1996 Jun;35(6):643–54
Biphenyl–derivatives of 2–amino–7–phosphono–heptanoic acid, a novel class of potent competitive N–methyl–D–aspartate receptor antagonists—II. Pharmacological characterization in vivo. Urwyler S, et al. **Neuropharmacology** 1996 Jun;35(6):655–69
The competitive NMDA antagonist CPP blocks MK–801–elicited popping behavior in mice. Deutsch SI,

et al. **Neuropsychopharmacology** 1996 Oct;15(4):329–31

bFGF enhances the protective effects of MK–801 against ischemic neuronal injury in vitro. Barth A, et al. **Neuroreport** 1996 Jun 17;7(9):1461–4

Magnesium deficiency induces an hyperalgesia reversed by the NMDA receptor antagonist MK801. Dubray C, et al. **Neuroreport** 1997 Apr 14;8(6):1383–6

Olfactory nerve stimulation activates rat mitral cells via NMDA and non–NMDA receptors in vitro [see comments] Ennis M, et al. **Neuroreport** 1996 Apr 10;7(5):989–92. Comment in: Neuroreport 1996 Apr 10;7(5):969.

A natural peptide with NMDA inhibitory activity reduces tonic pain in the formalin model. Siegan JB, et al. **Neuroreport** 1997 Apr 14;8(6):1379–81

Modulation of levodopa–induced motor response complications by NMDA antagonists in Parkinson's disease. Blanchet PJ, et al. **Neurosci Biobehav Rev** 1997 Jul;21(4):447–53 (80 ref.)

Aminoadamantanes as NMDA receptor antagonists and antiparkinsonian agents--preclinical studies. Danysz W, et al. **Neurosci Biobehav Rev** 1997 Jul;21(4):455–68 (151 ref.)

Antagonist properties of eliprodil and other NMDA receptor antagonists at rat NR1A/NR2A and NR1A/NR2B receptors expressed in Xenopus oocytes. Avenet P, et al. **Neurosci Lett** 1997 Feb 21;223(2):133–6

Increased agonist and antagonist sensitivity of N–methyl–D–aspartate stimulated calcium flux in cultured neurons following chronic ethanol exposure. Blevins T, et al. **Neurosci Lett** 1995 Nov 24;200(3):214–8

NMDA–antagonists reverse increased hypoxic tolerance by preceding chemical hypoxia. Kasischke K, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):175–8

Reduction of excitotoxicity–induced brain damage by the competitive NMDA antagonist CGP 40116: a longitudinal study using diffusion–weighted imaging. Laurent D, et al. **Neurosci Lett** 1996 Aug 9;213(3):209–12

N–methyl–D–aspartate (NMDA) and non–NMDA glutamate receptor antagonists differentially suppress dorsal horn neuron responses to mechanical stimuli in rats with peripheral nerve injury. Leem JW, et al. **Neurosci Lett** 1996 Jun 14;211(1):37–40

N–methyl–D–aspartate (NMDA) and non–NMDA glutamate receptor antagonists protect from apoptosis induced in the lateral geniculate nucleus of rabbits exposed to the dark. Nucci C, et al. **Neurosci Lett** 1997 Jul 4;229(3):185–8

Influence of extracellular pH on inhibition by ifenprodil at N–methyl–D–aspartate receptors in Xenopus oocytes. Pahk AJ, et al. **Neurosci Lett** 1997 Mar 28;225(1):29–32

The calcium–dependent transient inactivation of recombinant NMDA receptor–channel does not involve the high affinity calmodulin binding site of the NR1 subunit. Rafiki A, et al. **Neurosci Lett** 1997 Feb 21;223(2):137–9

Local treatment with the N–methyl–D–aspartate receptor antagonist ketamine, inhibit development of secondary hyperalgesia in man by a peripheral action. Warncke T, et al. **Neurosci Lett** 1997 May 9;227(1):1–4

N–methyl–D–aspartate and non–N–methyl–D–aspartate receptor antagonism reduces Fos–like immunoreactivity in central trigeminal neurons after corneal stimulation in the rat. Bereiter DA, et al. **Neuroscience** 1996 Jul;73(1):249–58

Impairments of movement initiation and execution induced by a blockade of dopamine D1 or D2 receptors are reversed by a blockade of N–methyl–D–aspartate receptors. Hauber W. **Neuroscience** 1996 Jul;73(1):121–30

Protection by diphenyliodonium against glutamate neurotoxicity due to blocking of N–methyl–D–aspartate receptors. Nakamura Y, et al. **Neuroscience** 1997 Jan; 76(2):459–66

Chronic corticosterone treatment induces parallel changes in N–methyl–D–aspartate receptor subunit messenger RNA levels and antagonist binding sites in the hippocampus. Weiland NG, et al. **Neuroscience** 1997 Jun;78(3):653–62

Dizocilpine maleate, an N–methyl–D–aspartate antagonist, inhibits dipsogenic responses and C–Fos expression induced by intracerebral infusion of angiotensin II. Xu Z, et al. **Neuroscience** 1997 May;78(1):203–14

Relief of glossopharyngeal neuralgia by ketamine–induced N–methyl–aspartate receptor blockade. Eide PK, et al. **Neurosurgery** 1997 Aug;41(2):505–8

Methylmercury–induced neurotoxicity in cerebral neuron culture is blocked by antioxidants and NMDA receptor antagonists. Park ST, et al. **Neurotoxicology** 1996 Spring; 17(1):37–45

The protective effect of MK–801 on infarct development over a period of 24 h as assessed by diffusion–weighted magnetic resonance imaging. Gill R, et al. **NMR Biomed** 1996 Sep;9(6):241–8

Competitive and non–competitive NMDA antagonists block the development of antinociceptive tolerance to morphine, but not to selective mu or delta opioid agonists in mice. Bilsky EJ, et al. **Pain** 1996 Dec;68(2–3):229–37

Comments on Andersen et al., Pain, 67 (1996) 369 [letter] Caudle RM. **Pain** 1997 Aug;72(1–2):283–4

Reply to S.T. Meller: Ketamine: relief from chronic pain through actions at the NMDA receptor [letter] Eide PK, et al. **Pain** 1997 Aug;72(1–2):289–91

The NMDA receptor antagonist MK–801 differentially modulates mu and kappa opioid actions in spinal cord in vitro. Feng J, et al. **Pain** 1996 Aug;66(2–3):343–9

Antinociceptive effects of NMDA and non–NMDA receptor antagonists in the tail flick test in mice. Lutfy K, et al. **Pain** 1997 Mar;70(1):31–40

Ketamine: relief from chronic pain through actions at the NMDA receptor? [letter] Meller ST. **Pain** 1996 Dec; 68(2–3):435–6

Ketamine, an NMDA receptor antagonist, suppresses spatial and temporal properties of burn–induced secondary hyperalgesia in man: a double–blind, cross–over comparison with morphine and placebo. Warncke T, et al. **Pain** 1997 Aug;72(1–2):99–106

Intraaccumbens administration of NMDA receptor antagonist (+/–)–CPP prevents locomotor activation conditioned by morphine and amphetamine in rats. Bespalov AY, et al. **Pharmacol Biochem Behav** 1996 Oct; 55(2):203–7

The non–competitive NMDA antagonist MK–801 increases food intake in rats. Burns GA, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):145–9

NMDA receptor complex blockade by oral administration of magnesium: comparison with MK–801. Decollogne S, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):261–8

Inbred mouse strains differ in sensitivity to "popping" behavior elicited by MK–801. Deutsch SI, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):315–7

Competitive NMDA and strychnine–insensitive glycine–site antagonists disrupt prepulse inhibition. Furuya Y, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):909–13

Effect of NMDA antagonists on rapid tolerance to ethanol under two different testing paradigms. Khanna JM, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):693–7

Blockade of morphine–induced hindlimb myoclonic seizures in mice by ketamine. Kolesnikov Y, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):423–5

NMDA but not AMPA receptor antagonists impair the delay–interposed radial maze performance of rats. Li HB, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):249–53

Behavioral recovery patterns in rats receiving the NMDA receptor antagonist MDL 100,453 immediately post–stroke. Markgraf CG, et al. **Pharmacol Biochem Behav** 1997 Mar; 56(3):391–7

Blockade of spontaneous posttraining performance improvement in mice by NMDA antagonists. Mélan C, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):589–94

The behavioral effects of NMDA antagonists in serotonin depleted rats. Płaźnik A, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):159–66

Discriminative stimulus effects of the NMDA receptor antagonists MK–801 and CGP 37849 in rats. Zajaczkowski W, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):163–8

NMDA receptor–mediated increase in cyclic GMP in the rat cerebellum in vivo is blocked by alaproclate and GEA–857. Hu PS, et al. **Pharmacol Toxicol** 1997 Feb; 80(2):97–102

Locomotor activity and motor disturbances induced by the competitive NMDA receptor antagonist CGP 37849. Kolasiewicz W, et al. **Pol J Pharmacol** 1996 Sep–Oct; 48(5):467–79

Rapid down–regulation of beta–adrenergic receptors evoked by combined forced swimming test and CGP 37849--a competitive antagonist of NMDA receptors. Wędzony K, et al. **Pol J Pharmacol** 1995 Nov–Dec;47(6):537–40

Neuroprotective activity of a new class of steroidal inhibitors of the N–methyl–D–aspartate receptor. Weaver CE Jr, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10450–4

Effect of NMDA receptor antagonists on D1, D2 and D1/D2 mediated behaviors in intact rats. Dall'Olio R, et al. **Psychopharmacology (Berl)** 1996 Jan;123(2):187–90

The NMDA receptor antagonist dizocilpine (MK–801) stereoselectively inhibits morphine–induced place preference conditioning in mice. Del Pozo E, et al. **Psychopharmacology (Berl)** 1996 Jun;125(3):209–13

Glycyldodecylamide, a phencyclidine behavioral antagonist, blocks cortical glycine uptake: implications for schizophrenia and substance abuse. Javitt DC, et al. **Psychopharmacology (Berl)** 1997 Jan;129(1):96–8

Olanzapine and fluperlapine mimic clozapine in preventing MK–801 neurotoxicity. Farber NB, et al. **Schizophr Res** 1996 Jul;21(1):33–7

Innovations in pharmacologic therapies. Miaskowski C. **Semin Oncol Nurs** 1997 Feb;13(1):30–5 (44 ref.)

Competitive NMDA receptor antagonists differentially affect dopamine cell firing pattern. Connelly ST, et al. **Synapse** 1997 Mar;25(3):234–42

Phencyclidine produces changes in NMDA and kainate receptor binding in rat hippocampus over a 48–hour time course. Gao XM, et al. **Synapse** 1996 Aug;23(4):274–9

Differential interaction of competitive NMDA and AMPA antagonists with selective dopamine D–1 and D–2 agonists in a rat model of Parkinson's disease. Löschmann PA, et al. **Synapse** 1997 Aug;26(4):381–91

Conantokin–T selectively antagonizes N–methyl–D–aspartate–evoked responses in rat hippocampal slice. Huang CC, et al. **Toxicon** 1997 Mar; 35(3):355–63

[The influence of intrathecal NMDA receptor antagonist on the isoflurane MAC and on the motor function] Yamazaki M. **Masui** 1996 Jan;45(1):70–6 (Eng. Abstr.) **(Jpn)**

[Properties of reversible Ca2+–dependent inactivation of NMDA receptor on the cerebellum granular cells] Filippova NG, et al. **Dokl Akad Nauk** 1996 Sep; 350(1):131–4 **(Rus)**

BIOSYNTHESIS

Distinct spatio–temporal distributions of the NMDA receptor channel subunit mRNAs in the brain. Watanabe M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:463–6

Transiently catecholaminergic cells in the fetal rat express mRNA for the glutamate NMDAR1 receptor. Burns GA, et al. **Brain Res** 1996 Apr 29;718(1–2):117–23

Distribution of the N–methyl–D–aspartate glutamate receptor subunit NR2A in control and amyotrophic lateral sclerosis spinal cord. Samarasinghe S, et al. **Brain Res** 1996 Jul 15;727(1–2):233–7

Regional and subunit specific changes in NMDA receptor mRNA and immunoreactivity in mouse brain following chronic ethanol ingestion. Snell LD, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):71–8

Overexpression of a functional NMDA receptor subunit (NMDAR1) in baculovirus–infected Trichoplusia ni insect cells. Sydow S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):228–40

Acute and chronic changes in K(+)–induced depolarization alter NMDA and nNOS gene expression in cultured cerebellar granule cells. Tascedda F, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):171–4

Expression of ionotropic glutamate receptor subunits in glial cells of the hippocampal CA1 area following transient forebrain ischemia. Gottlieb M, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):290–300

Synchronized overproduction of AMPA, kainate, and NMDA glutamate receptors during human spinal cord development. Kalb RG, et al. **J Comp Neurol** 1997 Jul 28; 384(2):200–10

Permeation properties of Na+ and Ca2+ ions through the mouse epsilon2/zeta1 NMDA receptor channel expressed in Xenopus oocytes. Iino M, et al. **J Membr Biol** 1997 Jan 15;155(2):143–56

Regional and ontogenic expression of the NMDA receptor subunit NR2D protein in rat brain using a subunit–specific antibody. Dunah AW, et al. **J Neurochem** 1996 Dec; 67(6):2335–45

High level expression of the NMDAR1 glutamate receptor subunit in electroporated COS cells. Ishmael JE, et al. **J Neurochem** 1996 Oct;67(4):1500–10

Functional consequences of changes in NMDA receptor subunit expression during development. Feldmeyer D, et al. **J Neurocytol** 1996 Dec;25(12):857–67 (80 ref.)

Presynaptic control of subunit composition of NMDA receptors mediating synaptic plasticity. Gottmann K, et al. **J Neurosci** 1997 Apr 15;17(8):2766–74

Expression of N–methyl–D–aspartate (NMDA) and non–NMDA glutamate receptor genes in neuroblastoma, medulloblastoma, and other cells lines. Yoshioka A, et al. **J Neurosci Res** 1996 Oct 15;46(2):164–78

Stable expression and characterization of recombinant human heteromeric N–methyl–D–aspartate receptor subtypes NMDAR1A/2A and NMDAR1A/2B in mammalian cells. Varney MA, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):367–78

Cellular distribution of NMDA glutamate receptor subunit mRNAs in the human cerebellum. Scherzer CR, et al. **Neurobiol Dis** 1997;4(1):35–46

Dendritic compartmentation of NMDA receptor mRNA in cultured hippocampal neurons. Benson DL. **Neuroreport** 1997 Mar 3;8(4):823–8

AII amacrine cells express functional NMDA receptors. Hartveit E, et al. **Neuroreport** 1997 Mar 24;8(5):1219–23

Striatal NMDAR2B mRNA expression after bilateral cortical and unilateral nigral deafferentation. Kayadjanian N, et al. **Neuroreport** 1996 Feb 29;7(3):713–6

Differential expression of N–methyl–D–aspartate receptor in the cochlear nucleus of the mouse. Bilak MM, et al. **Neuroscience** 1996 Dec;75(4):1075–97

Increased expression of the N–methyl–D–aspartate receptor subunit, NR1, in immunohistochemically identified magnocellular hypothalamic neurons during dehydration. Decavel C, et al. **Neuroscience** 1997 May;78(1):191–202

The messenger RNAs for the N–methyl–D–aspartate receptor subunits show region–specific expression of different subunit composition in the human brain. Rigby M, et al. **Neuroscience** 1996 Jul;73(2):429–47

Expression of N–methyl–D–aspartate glutamate receptor subunits in the prefrontal cortex of the rat. Rudolf GD, et al. **Neuroscience** 1996 Jul;73(2):417–27

Chronic corticosterone treatment induces parallel changes in N–methyl–D–aspartate receptor subunit messenger RNA levels and antagonist binding sites in the hippocampus. Weiland NG, et al. **Neuroscience** 1997 Jun;78(3):653–62

CHEMISTRY

Molecular characterization of NMDA and metabotropic glutamate receptors. Masu M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:153–64 (36 ref.)

Molecular and functional diversity of the NMDA receptor channel. Mishina M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:136–52 (43 ref.)

Inversion of Markov processes to determine rate constants from single–channel data. Jackson MB. **Biophys J** 1997 Sep; 73(3):1382–94

Modification of the glycine (co–activator) binding site of the N–methyl–D–aspartate receptor in the guinea pig fetus brain during development following hypoxia. Razdan B, et al. **Brain Res** 1996 Sep 9;733(1):15–20

Differential expression of five N–methyl–D–aspartate receptor subunit mRNAs in vasopressin and oxytocin neuroendocrine cells. Al–Ghoul WM, et al.

Brain Res Mol Brain Res 1997 Mar;44(2):262–72

Functional expression of a recombinant unitary glutamate receptor from Xenopus, which contains N-methyl-D-aspartate (NMDA) and non-NMDA receptor subunits. Soloviev MM, et al. **J Biol Chem** 1996 Dec 20;271(51):32572–9

An alanine residue in the M3–M4 linker lines the glycine binding pocket of the N-methyl-D-aspartate receptor. Wood MW, et al. **J Biol Chem** 1997 Feb 7;272(6):3532–7

Biochemical evidence for the existence of a pool of unassembled C2 exon-containing NR1 subunits of the mammalian forebrain NMDA receptor. Chazot PL, et al. **J Neurochem** 1997 Feb;68(2):507–16

NMDA-NR1 receptor subunit mRNA expression in rat brain after 6-OH-dopamine induced lesions: a non-isotopic in situ hybridization study. Andrés ME, et al. **J Neurosci Res** 1996 Nov 1;46(3):375–84

Use of a modified bacteriophage to probe the interactions between peptides and ion channel receptors in mammalian cells. Li M. **Nat Biotechnol** 1997 Jun;15(6):559–63

Cellular distribution of NMDA glutamate receptor subunit mRNAs in the human cerebellum. Scherzer CR, et al. **Neurobiol Dis** 1997;4(1):35–46

Role of histidyl residues in the binding of ligands to the porcine N-methyl-D-aspartate receptor. Jenei Z, et al. **Neurosci Lett** 1997 Jun 6;228(2):127–30

DEFICIENCY

Adenovirus-mediated NMDA receptor knockouts in the rat hippocampal CA1 region. Kammesheidt A, et al. **Neuroreport** 1997 Feb 10;8(3):635–8

DRUG EFFECTS

Effects of prenatal and early postnatal ethanol exposure on [3H]MK-801 binding in rat cortex and hippocampus. Diaz-Granados JL, et al. **Alcohol Clin Exp Res** 1997 Aug; 21(5):874–81

Interactions between ethanol and agents that act on the NMDA-type glutamate receptor. Lovinger DM. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):187A–191A

Ethanol's inhibition of LTP may not be mediated solely via direct effects on the NMDA receptor. Schummers J, et al. **Alcohol Clin Exp Res** 1997 May;21(3):404–8

Non-aminergic effects of amphetamine on the NMDA receptor in primary cultured cortical cells. Yamamoto H, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:327–39

Lead-induced changes in NMDA receptor complex binding: correlations with learning accuracy and with sensitivity to learning impairments caused by MK-801 and NMDA administration. Cory-Slechta DA, et al. **Behav Brain Res** 1997 May;85(2):161–74

Investigation of the involvement of the N-methyl-D-aspartate receptor macrocomplex in the development of spermine-induced CNS excitation in vivo. Doyle KM, et al. **Br J Pharmacol** 1996 Apr;117(8):1803–8

The glycine site of the NMDA receptor contributes to neurokinin1 receptor agonist facilitation of NMDA receptor agonist-evoked activity in rat dorsal horn neurons. Heppenstall PA, et al. **Brain Res** 1997 Jan 9;744(2):235–45

Regulation of glutamate release via NMDA and 5-HT1A receptors in guinea pig dentate gyrus. Matsuyama S, et al. **Brain Res** 1996 Jul 29;728(2):175–80

Modulation of a competitive N-methyl-D-aspartate receptor antagonist binding by zinc oxide. Terse PS, et al. **Brain Res** 1997 Jan 9;744(2):347–50

Effect of NMDA receptor blockade on melatonin and activity rhythm responses to a light pulse in rats. Rowe SA, et al. **Brain Res Bull** 1996;41(6):351–8

The effect of ibogaine on Sigma- and NMDA-receptor-mediated release of [3H]dopamine. Sershen H, et al. **Brain Res Bull** 1996;40(1):63–7

Decrease of (+)-3-[125I]MK-801 binding to NMDA brain receptors revealed at puberty in rats treated neonatally with monosodium glutamate. Otoya RE, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):149–56

Modulatory treatment of NMDA receptors in neonatal rats affects cognitive behavior in adult age. Wangen K, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):126–30

The 71 kDa glutamate-binding protein is increased in cerebellar granule cells after chronic ethanol treatment. Hoffman PL, et al. **Brain Res Mol Brain Res** 1996 Jul; 39(1–2):167–76

Chronic ethanol treatment produces a selective upregulation of the NMDA receptor subunit gene expression in mammalian cultured cortical neurons. Hu XJ, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):211–8

Time-dependent changes in NMDA receptor expression in neurones cultured from rat brain. Priestley T, et al. **Brain Res Mol Brain Res** 1996 Sep 1;40(2):271–4

Postnatal phencyclidine treatment differentially regulates N-methyl-D-aspartate receptor subunit mRNA expression in developing rat cerebral cortex. Sircar R, et al. **Brain Res Mol Brain Res** 1996 Sep 1;40(2):214–20

N-methyl-D-aspartate receptors, nitric oxide, and ethanol tolerance. Morato GS, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1415–26 (138 ref.)

Involvement of non-NMDA and NMDA receptors in glutamate-induced pressor or depressor responses of the pons and medulla. Chen SY, et al. **Clin Exp Pharmacol Physiol** 1997 Jan;24(1):46–56

The expression of both amphetamine-conditioned place preference and pentylenetetrazol-conditioned place aversion is attenuated by the NMDA receptor antagonist (+/-)-CPP. Bespalov AYu. **Drug Alcohol Depend** 1996 May;41(1):85–8

In vitro metal inhibition of N-methyl-D-aspartate specific glutamate receptor binding in neonatal and adult rat brain. Rajanna B, et al. **Drug Chem Toxicol** 1997 Feb–May; 20(1–2):21–9

Remacemide HCl and its metabolite, FPL 12495AA, limit action potential firing frequency and block NMDA responses of mouse spinal cord neurons in cell culture. Wamil AW, et al. **Epilepsy Res** 1996 Feb;23(1):1–14

Differential long-lasting potentiation of the NMDA and non-NMDA synaptic currents induced by metabotropic and NMDA receptor coactivation in cerebellar granule cells. rossi P, et al. **Eur J Neurosci** 1996 Jun;8(6):1182–9

Pharmacological heterogeneity of NMDA receptors: characterization of NR1a/NR2D heteromers expressed in Xenopus oocytes. Buller AL, et al. **Eur J Pharmacol** 1997 Feb 5;320(1):87–94

Thyrotropin-releasing hormone facilitates spinal nociceptive responses by potentiating NMDA receptor-mediated transmission. Chizh BA, et al. **Eur J Pharmacol** 1996 Apr 11;300(3):183–9

Effects of 7-nitroindazole, NG-nitro-L-arginine, and D-CPPene on harmaline-induced postural tremor, N-methyl-D-aspartate-induced seizures, and lisuride-induced rotations in rats with nigral 6-hydroxydopamine lesions. Eblen F, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):9–16

Effects of and interactions between antagonists for different sites on the NMDA receptor complex on hippocampal and striatal acetylcholine efflux in vivo. Hutson PH, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):45–52

Pharmacology of N-methyl-D-aspartate-evoked [3H]noradrenaline release in adult rat spinal cord. Klarica M, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):135–44

Differential effects of five glycine site antagonists on NMDA receptor desensitisation. Molnár P, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):311–4

Differential effects of agents acting at various sites of the NMDA receptor complex in a place preference conditioning model. Papp M, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):191–6

Ethanol inhibition of stress-related tachycardia involves medullary NMDA receptors. Varga K, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):145–53

Activation of muscarinic receptors modulates NMDA receptor-mediated responses in auditory cortex. Aramakis VB, et al. **Exp Brain Res** 1997 Mar;113(3):484–96

NMDA receptor overstimulation triggers a prolonged wave of immediate early gene expression: relationship to excitotoxicity. Shan Y, et al. **Exp Neurol** 1997 Apr; 144(2):406–15

NMDA antagonists: their role in neuroprotection. Small DL, et al. **Int Rev Neurobiol** 1997;40:137–71 (229 ref.)

Manganese poisoning reduces strychnine-insensitive glycine binding sites in the globus pallidus of the mouse brain. Cano G, et al. **Invest Clin** 1996 Dec;37(4):209–19

Isoflurane and propofol block neurotoxicity caused by MK-801 in the rat posterior cingulate/retrosplenial cortex. Jevtović-Todorović V, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):168–74

New horizons in molecular mechanisms underlying Parkinson's disease and in our understanding of the neuroprotective effects of selegiline. Gerlach M, et al. **J Neural Transm Suppl** 1996;48:7–21 (63 ref.)

Enhanced NMDAR-dependent epileptiform activity is controlled by oxidizing agents in a chronic model of temporal lobe epilepsy. Hirsch JC, et al. **J Neurophysiol** 1996 Dec;76(6):4185–9

Glycine regulation of synaptic NMDA receptors in hippocampal neurons. Wilcox KS, et al. **J Neurophysiol** 1996 Nov;76(5):3415–24

High-affinity zinc inhibition of NMDA NR1-NR2A receptors. Paoletti P, et al. **J Neurosci** 1997 Aug 1; 17(15):5711–25

P2 purinoceptor blocker suramin antagonises NMDA receptors and protects against excitatory behaviour caused by NMDA receptor agonist (RS)-(tetrazol-5-yl)-glycine in rats. Ong WY, et al. **J Neurosci Res** 1997 Sep 1; 49(5):627–38

Glycine and calcium-dependent effects of lead on N-methyl-D-aspartate receptor function in rat hippocampal neurons. Marchioro M, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):143–53

Modulation of the NMDA receptor by cyanide: enhancement of receptor-mediated responses. Sun P, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1341–8

N-methyl-D-aspartate receptors in associative eyeblink conditioning: both MK-801 and phencyclidine produce task- and dose-dependent impairments. Thompson LT, et al. **J Pharmacol Exp Ther** 1997 May;281(2):928–40

Mechanism of memantine block of NMDA-activated channels in rat retinal ganglion cells: uncompetitive antagonism. Chen HS, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):27–46

Effects of intracellular Mg2+ on channel gating and steady-state responses of the NMDA receptor in cultured rat neurons. Li-Smerin Y, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):137–50

Glycine does not reverse the inhibitory actions of ethanol on NMDA receptor functions in cerebellar granule cells. Cebers G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec;354(6):736–45

D-serine modulates the NMDA receptor/nitric oxide/cGMP pathway in the rat cerebellum during in vivo microdialysis. Fedele E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan;355(1):43–7

Further evidence for the subsensitivity of striatal AMPA receptors, induced by chronic haloperidol administration: an autoradiographic study. Ossowska K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):384–8

Upregulation of NMDARI mRNA induced by MK-801 is associated with massive death of axotomized motor neurones in adult rats. Sanner C, et al. **Neurobiol Dis** 1994 Dec;1(3):121–9

Blockade of NMDA receptors in the anterior forebrain impairs sensory acquisition in the zebra finch (Poephila guttata). Basham ME, et al. **Neurobiol Learn Mem** 1996 Nov;66(3):295–304

Enhancement of intermediate-term memory by an alpha-1 agonist or a partial agonist at the glycine site of the NMDA receptor. Pussinen R, et al. **Neurobiol Learn Mem** 1997 Jan;67(1):69–74

Evidence for native NMDA receptor subtype pharmacology as revealed by differential effects on the NMDA-evoked release of striatal neuromodulators: eliprodil, ifenprodil and other native NMDA receptor subtype selective compounds. Nankai M, et al. **Neurochem Int** 1996 Nov; 29(5):529–42

NMDA receptor-dependent and -independent long-term depression in the CA1 region of the adult rat hippocampus in vitro. Kemp N, et al. **Neuropharmacology** 1997 Mar; 36(3):397–9

Uncompetitive NMDA receptor antagonists attenuate NMDA-induced impairment of passive avoidance learning and LTP. Zajaczkowski W, et al. **Neuropharmacology** 1997 Jul;36(7):961–71

Inhibition of NMDA receptor-mediated synaptic transmission in the rat dentate gyrus in vitro by IL-1 beta. Coogan A, et al. **Neuroreport** 1997 Jul 7;8(9–10):2107–10

Evidence for functional co-activation of N-methyl-D-aspartate receptors by glycine. Fern R, et al. **Neuroreport** 1996 Aug 12;7(12):1953–6

Developmental changes in arachidonic acid potentiation of NMDA currents in cortical neurones. Horimoto N, et al. **Neuroreport** 1996 Nov 4;7(15–17):2463–7

Focal brain injury increases activin betaA mRNA expression in hippocampal neurons. Lai M, et al. **Neuroreport** 1997 Aug 18;8(12):2691–4

Chronic L-dopa alters striatal NMDA receptors in rats with dopaminergic injury. O'Dell SJ, et al. **Neuroreport** 1996 Nov 4;7(15–17):2457–61

Analysis of the glycine binding domain of the NMDA receptor channel zeta 1 subunit. Uchino S, et al. **Neuroreport** 1997 Jan 20;8(2):445–9

Effects of an anabolic-androgenic steroid on the regulation of the NMDA receptor NR1, NR2A and NR2B subunit mRNAs in brain regions of the male rat. Le Grevès P, et al. **Neurosci Lett** 1997 Apr 18;226(1):61–4

Chronic hypoxia induces modification of the N-methyl-D-aspartate receptor in rat brain. Pichiule P, et al. **Neurosci Lett** 1996 Nov 1;218(2):83–6

Redox sites of NMDA receptors can modulate epileptiform activity in hippocampal slices from kainic acid-treated rats. Quesada O, et al. **Neurosci Lett** 1996 Jul 19;212(3):171–4

Modulation of N-methyl-D-aspartate receptor mediated arachidonic acid release by endogenous nitric oxide in cultured neurons. Rodriguez-Alvarez J, et al. **Neurosci Lett** 1996 Nov 1;218(2):95–8

Effects of NMDA antagonists on seizure thresholds induced by intrahippocampal microdialysis of picrotoxin in freely moving rats. Sierra-Paredes G, et al. **Neurosci Lett** 1996 Oct 25;218(1):62–6

Separating dual effects of zinc at recombinant N-methyl-D-aspartate receptors. Williams K. **Neurosci Lett** 1996 Aug 30;215(1):9–12

N-methyl-D-aspartate and non-N-methyl-D-aspartate receptors mediate seizures and CA1 hippocampal damage induced by dendrotoxin-K in rats. Bagetta G, et al. **Neuroscience** 1996 Apr;71(3):613–24

Differential effects of histamine on the N-methyl-D-aspartate channel in hippocampal slices and cultures. Bekkers JM, et al. **Neuroscience** 1996 Jun; 72(3):669–77

Dual mode of N-methyl-D-aspartate-induced neuronal death in hippocampal slice cultures in relation to N-methyl-D-aspartate receptor properties. Sakaguchi T, et al. **Neuroscience** 1997 Jan;76(2):411–23

Postweaning lead exposure enhances the stimulus properties of N-methyl-D-aspartate: possible dopaminergic involvement? Cory-Slechta DA, et al. **Neurotoxicology** 1996 Summer;17(2):509–21

Selective neurotoxicity induced by the ionophore lasalocid in rat dissociated cerebral cultures, involvement of the NMDA receptor/channel. Safran N, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):883–95

L-2-chloropropionic acid inhibits glutamate and aspartate release from rat cerebellar slices but does not activate cerebellar NMDA receptors: implications for L-2-chloropropionic acid-induced neurotoxicity. Widdowson PS, et al. **Neurotoxicology** 1997;18(1):169–77

Calcium antagonists in the olfactory bulbectomy animal model of depression: effect on the cortical NMDA receptor complex. Nowak G. **Pol J Pharmacol** 1996 Mar-Apr; 48(2):137-43

Glycinergic augmentation of NMDA receptor-mediated neurotransmission in the treatment of schizophrenia. Heresco-Levy U, et al. **Psychopharmacol Bull** 1996; 32(4):731-40

Associative and non-associative mechanisms of morphine analgesic tolerance are neurochemically distinct in the rat spinal cord. Grisel JE, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):248-55

N-methyl-D-aspartate (NMDA) and alpha-amino-3-hydroxy-5-methyl-4-isoxazolepreprionate (AMPA) glutamate-receptor antagonists have different interactions with the discriminative stimuli of abused drugs. Jackson A, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):320-7

Effects of stimulation of alpha 1-adrenergic and NMDA/glycine-B receptors on learning defects in aged rats. Riekkinen M, et al. **Psychopharmacology (Berl)** 1997 May;131(1):49-56

GENETICS

GABAA and NMDA receptor subunit mRNA expression in ethanol dependent rats. Morrow AL, et al. **Alcohol Alcohol Suppl** 1994;2:89-95

Effects of ethanol and temperature on NMDA receptor function in different mouse genotypes. Musleh W, et al. **Alcohol Clin Exp Res** 1996 Oct;20(7):1299-304

Molecular biological investigations into the role of the NMDA receptor in the pathophysiology of schizophrenia. Catts SV, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):17-26 (110 ref.)

Absence of prostaglandin E2-induced hyperalgesia in NMDA receptor epsilon subunit knockout mice. Minami T, et al. **Br J Pharmacol** 1997 Apr;120(8):1522-6

Effects of NMDA-R1 antisense oligodeoxynucleotide administration: behavioral and radioligand binding studies. Zapata A, et al. **Brain Res** 1997 Jan 16;745(1-2):114-20

Spinocerebellar mossy fiber terminal topography in the NR2C/PKC gamma double mutant cerebellum. Ji Z, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):138-42

Regulation of alternative splicing of NMDAR1 in the kindling model. Kraus JE, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):97-104

Cloning of the cDNA for the human NMDA receptor NR2C subunit and its expression in the central nervous system and periphery. Lin YJ, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):57-64

Gene structure and chromosomal localization of the mouse NMDA receptor channel subunits. Nagasawa M, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):1-11

Expression of NMDAR2D glutamate receptor subunit mRNA in neurochemically identified interneurons in the rat neostriatum, neocortex and hippocampus. Standaert DG, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):89-102

Hippocampal CA1-region-restricted knockout of NMDAR1 gene disrupts synaptic plasticity, place fields, and spatial learning. Tonegawa S, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:225-38

Altered gene expression of the N-methyl-D-aspartate receptor channel subunits in Purkinje cells of the staggerer mutant mouse. Nakagawa S, et al. **Eur J Neurosci** 1996 Dec;8(12):2644-51

Nerve growth factor up-regulates the N-methyl-D-aspartate receptor subunit 1 promoter in PC12 cells. Bai G, et al. **J Biol Chem** 1997 Feb 28;272(9):5936-42

Differential surface expression and phosphorylation of the N-methyl-D-aspartate receptor subunits NR1 and NR2 in cultured hippocampal neurons. Hall RA, et al. **J Biol Chem** 1997 Feb 14;272(7):4135-40

Subconductance states of a mutant NMDA receptor channel kinetics, calcium, and voltage dependence. Premkumar LS, et al. **J Gen Physiol** 1997 Feb;109(2):181-9

Biochemical evidence for the existence of a pool of unassembled C2 exon-containing NR1 subunits of the mammalian forebrain NMDA receptor. Chazot PL, et al. **J Neurochem** 1997 Feb;68(2):507-16

Cloning and localization of exon 5-containing isoforms of the NMDAR1 subunit in human and rat brains. Nash NR, et al. **J Neurochem** 1997 Aug;69(2):485-93

NMDA receptor heterogeneity during postnatal development of the rat brain: differential expression of the NR2A, NR2B, and NR2C subunit proteins. Wenzel A, et al. **J Neurochem** 1997 Feb;68(2):469-78

Changes of NMDA receptor subunit (NR1, NR2B) and glutamate transporter (GLT1) mRNA expression in Huntington's disease--an in situ hybridization study. Arzberger T, et al. **J Neuropathol Exp Neurol** 1997 Apr; 56(4):440-54

Modification of NMDA receptor channels and synaptic transmission by targeted disruption of the NR2C gene. Ebralidze AK, et al. **J Neurosci** 1996 Aug 15; 16(16):5014-25

Differential regulation of NMDAR1 mRNA and protein by estradiol in the rat hippocampus. Gazzaley AH, et al. **J Neurosci** 1996 Nov 1;16(21):6830-8

Gonadotropin-releasing hormone and NMDA receptor gene expression and colocalization change during puberty in female rats. Gore AC, et al. **J Neurosci** 1996 Sep 1; 16(17):5281-9

Motor discoordination results from combined gene disruption of the NMDA receptor NR2A and NR2C subunits, but not from single disruption of the NR2A or NR2C subunit. Kadotani H, et al. **J Neurosci** 1996 Dec 15;16(24):7859-67

Temporal correlations between functional and molecular changes in NMDA receptors and GABA neurotransmission in the superior colliculus. Shi J, et al. **J Neurosci** 1997 Aug 15;17(16):6264-76

Synapse-selective impairment of NMDA receptor functions in mice lacking NMDA receptor epsilon 1 or epsilon 2 subunit. Ito I, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):401-8

NMDAR1 mRNA expression and glutamate receptor stimulated increase in cytosolic calcium concentration in rat and mouse cerebellar granule cells. Mogensen HS, et al. **Neurochem Int** 1996 Nov;29(5):497-506

Effect of antipsychotic drugs on the gene expression of NMDA receptor subunits in rats. Toyoda H, et al. **Neurochem Res** 1997 Mar;22(3):249-52

Impairment of suckling response, trigeminal neuronal pattern formation, and hippocampal LTD in NMDA receptor epsilon 2 subunit mutant mice. Kutsuwada T, et al. **Neuron** 1996 Feb;16(2):333-44

Adenovirus-mediated NMDA receptor knockouts in the rat hippocampal CA1 region. Kammesheidt A, et al. **Neuroreport** 1997 Feb 10;8(3):635-8

Amygdala kindling alters N-methyl-D-aspartate receptor subunit messenger RNA expression in the rat supraoptic nucleus. Al-Ghoul WM, et al. **Neuroscience** 1997 Apr; 77(4):985-92

Effects of pilocarpine and kainate-induced seizures on N-methyl-D-aspartate receptor gene expression in the rat hippocampus. Lasón W, et al. **Neuroscience** 1997 Jun; 78(4):997-1004

A linkage study of the N-methyl-D-aspartate receptor subunit gene loci and schizophrenia in southern African Bantu-speaking families. Riley BP, et al. **Psychiatr Genet** 1997 Summer;7(2):57-74

NMDA receptors: from genes to channels. Sucher NJ, et al. **Trends Pharmacol Sci** 1996 Oct;17(10):348-55 (67 ref.)

IMMUNOLOGY

Regional and ontogenic expression of the NMDA receptor subunit NR2D protein in rat brain using a subunit-specific antibody. Dunah AW, et al. **J Neurochem** 1996 Dec; 67(6):2335-45

[The level of autoantibodies to glutamate receptors in the blood serum of patients in the acute period of ischemic stroke] Gusev EI, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(5):68-72 (Eng. Abstr.) **(Rus)**

[Autoantibodies to glutamate receptor subtypes--markers of functional brain damage: their diagnostic significance for detecting paroxysmal activity and ischemia] Dambinova SA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar-Apr;47(2):439-46 (48 ref.) (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

NMDA receptors in cultured radial glia. López T, et al. **FEBS Lett** 1997 Mar 24;405(2):245-8

METABOLISM

Hydrogen-bond patterns in 1,4-dihydro-2,3-quinoxalinediones: ligands for the glycine modulatory site on the NMDA receptor. Kubicki M, et al. **Acta Crystallogr B** 1996 Jun 1;52 (Pt 3):487-99

Altered distribution of the alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate receptor subunit GluR2(4) and the N-methyl-D-aspartate receptor subunit NMDAR1 in the hippocampus of patients with temporal lobe epilepsy. Blümcke I, et al. **Acta Neuropathol (Berl)** 1996 Dec;92(6):576-87

A novel action of lithium: stimulation of glutamate release and inositol 1,4,5 trisphosphate accumulation via activation of the N-methyl D-aspartate receptor in monkey and mouse cerebral cortex slices. Hokin LE, et al. **Adv Enzyme Regul** 1996;36:229-44

NMDA receptor coagonist glycine site: evidence for a role in lateral hypothalamic stimulation of feeding. Stanley BG, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R790-6

Estimation of the relative potency of two glycine antagonists on NMDA-induced depolarizations in BRSC and ARCS. Corsi M, et al. **Ann N Y Acad Sci** 1997 May 30;812:187-8

Immunocytochemical study of the NMDA receptor in the visual cortex of strabismic cat. Yin ZQ, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):88-91

Alterations in acetylcholine, NMDA, benzodiazepine receptors and protein kinase C in the brain of the senescence-accelerated mouse: an animal model useful for studies on cognitive enhancers. Nomura Y, et al. **Behav Brain Res** 1997 Feb;83(1-2):51-5

A calcium-dependent nitric oxide synthase and NMDA R1 glutamate receptor in the ink gland of Sepia officinalis: a hint to a regulatory role of nitric oxide in melanogenesis? Palumbo A, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):429-32

Immunoautoradiographic evidence for a loss of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate-preferring non-N-methyl-D-aspartate glutamate receptors within the medial temporal lobe in schizophrenia. Eastwood SL, et al. **Biol Psychiatry** 1997 Mar 15;41(6):636-43

Desensitization of AMPA receptors and AMPA-NMDA receptor interaction: an in vivo cyclic GMP microdialysis study in rat cerebellum. Fedele E, et al. **Br J Pharmacol** 1996 Mar;117(6):1133-8

Regionally different N-methyl-D-aspartate receptors distinguished by ligand binding and quantitative autoradiography of [3H]-CGP 39653 in rat brain. Mugnaini M, et al. **Br J Pharmacol** 1996 Nov;119(5):819-28

Modification of the binding of [3H]MK-801 to brain regions and spinal cord of rats treated chronically with U-50,488H, a kappa-opioid receptor agonist. Bhargava HN, et al. **Brain Res** 1997 Feb 28;749(2):347-50

Colocalization of GABA(A) and NMDA receptors within the dorsal motor nucleus of the vagus nerve (DMV) of the rat. Broussard DL, et al. **Brain Res** 1997 Jul 18; 763(1):123-6

Differential effects of the N-methyl-D-aspartate and non-N-methyl-D-aspartate receptors of the excitatory amino acids system on LH and FSH secretion. Its effects on the hypothalamic luteinizing hormone releasing hormone during maturation in male rats. Carbone S, et al. **Brain Res** 1996 Jan 29;707(2):139-45

Distribution of NMDA and AMPA receptors in the cerebellar cortex of rhesus macaques. Garyfallou VT, et al. **Brain Res** 1996 Apr 15;716(1-2):22-8

Distribution of glutamate receptor subunit proteins GluR2(4), GluR5/6/7, and NMDAR1 in the canine and primate cerebral cortex: a comparative immunohistochemical analysis. Hof PR, et al. **Brain Res** 1996 Jun 3;723(1-2):77-89

Quantitative localization of NMDAR1 receptor subunit immunoreactivity in inferotemporal and prefrontal association cortices of monkey and human. Huntley GW, et al. **Brain Res** 1997 Feb 28;749(2):245-62

Regulation of GABA release via NMDA and 5-HT1A receptors in guinea pig dentate gyrus. Matsuyama S, et al. **Brain Res** 1997 Jun 27;761(1):105-12

Alterations in N-methyl-D-aspartate receptor binding in dystonic hamster brains. Nobrega JN, et al. **Brain Res** 1997 Jan 2;744(1):161-5

Stress persistently increases NMDA receptor-mediated binding of [3H]PDBu (a marker for protein kinase C) in the amygdala, and re-exposure to the stressful context reactivates the increase. Shors TJ, et al. **Brain Res** 1997 Mar 7;750(1-2):293-300

Intrinsic redox properties of N-methyl-D-aspartate receptor can determine the developmental expression of excitotoxicity in rat cortical neurons in vitro. Sinor JD, et al. **Brain Res** 1997 Feb 7;747(2):297-303

Effect of up-regulation of NMDA receptors on cerebral O2 consumption and blood flow in rat. Weiss HR, et al. **Brain Res** 1996 Aug 19;730(1-2):193-8

Evidence for N-methyl-D-aspartate receptor-mediated increase in norepinephrine utilization in the prefrontal cortex of unanesthetized rats. Yoshida Y, et al. **Brain Res** 1997 Jan 2;744(1):156-60

Do nitric oxide synthase, NMDA receptor subunit R1 and cytochrome oxidase co-localize in the rat central nervous system? Zhang C, et al. **Brain Res** 1996 Aug 12; 729(2):205-15

Retinoic acid-induced increase in delta-opioid receptor and N-methyl-D-aspartate receptor mRNA levels in neuroblastoma x glioma (NG108-15) cells. Beczkowska IW, et al. **Brain Res Bull** 1996;39(3):193-9

An anti-chi-1 antibody recognizes a heavily glycosylated protein in rat brain. Ciabarra AM, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):85-90

Activation of NMDA and muscarinic receptors induces nur-77 mRNA in hippocampal neurons. Dragunow M, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):349-56

Cortical NMDAR-1 gene expression is rapidly upregulated after seizure. Jensen PJ, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):157-62

Kainate, GABAA and NMDA receptors in Xenopus oocytes expressing mRNA from the cortex of mice kindled with FG 7142. Lewin E, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1-2):304-8

Inducible expression of N-methyl-D-aspartate (NMDA) receptor channels from cloned cDNAs in CHO cells. Uchino S, et al. **Brain Res Mol Brain Res** 1997 Feb; 44(1):1-11

Use-dependent depression of synaptic NMDA receptor mediated responses by dizocilpine (MK-801). Capek R, et al. **Can J Physiol Pharmacol** 1997 Feb;75(2):158-63

Transient expression of NMDA receptors during rearrangement of AMPA-receptor-expressing fibers in the developing inner ear. Knipper M, et al. **Cell Tissue Res** 1997 Jan;287(1):23-41

Cortical NMDA receptor properties and membrane fluidity are altered in Alzheimer's disease. Scheuer K, et al. **Dementia** 1996 Jul-Aug;7(4):210-4

Epileptiform activity but not synaptic plasticity is blocked by oxidation of NMDA receptors in a chronic model of temporal lobe epilepsy. Quesada O, et al. **Epilepsy Res** 1997 Jan;26(2):373-80

Polyamine spider toxins and mammalian N-methyl-D-aspartate receptors. Structural basis for channel blocking and binding of argiotoxin636. Raditsch M, et al. **Eur J Biochem** 1996 Sep 1;240(2):416-26

NMDA receptor properties in rat supraoptic magnocellular neurons: characterization and postnatal development. Hussy N, et al. **Eur J Neurosci** 1997 Jul;9(7):1439-49

Neuroprotective effects of RPR 104632, a novel antagonist at the glycine site of the NMDA receptor, in vitro. Boireau A, et al. **Eur J Pharmacol** 1996 Apr 11;300(3):237–46

Structure–activity relationships of competitive NMDA receptor antagonists. Cheung NS, et al. **Eur J Pharmacol** 1996 Oct 10;313(1–2):159–62

The effect of the desglycinyl metabolite of remacemide on cortical wedges prepared from DBA/2 mice. Hu RQ, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):251–6

Effects of and interactions between antagonists for different sites on the NMDA receptor complex on hippocampal and striatal acetylcholine efflux in vivo. Hutson PH, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):45–52

Structurally modified ibogaine analogs exhibit differing affinities for NMDA receptors. Layer RT, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):159–65

Adaptation of cortical but not hippocampal NMDA receptors after chronic citalopram treatment. Nowak G, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):75–85

Imidazoli(di)ne compounds interact with the phencyclidine site of NMDA receptors in the rat brain. Olmos G, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):273–6

Binding of the radiolabeled glycine site antagonist [3H]MDL 105,519 to homomeric NMDA–NR1a receptors. Siegel BW, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):357–65

Pharmacological characterization of [3H]MK–801 binding in the rat spinal cord. Souverbie F, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):347–53

Ion channel properties of a protein complex with characteristics of a glutamate/N–methyl–D–aspartate receptor. Aistrup GL, et al. **FEBS Lett** 1996 Sep 30; 394(2):141–8

Expression of NR1 and NR2A/B subunits of the NMDA receptor in cortical astrocytes. Conti F, et al. **Glia** 1996 Jul;17(3):254–8

Characterization of [3H]MK–801 binding to N–methyl–D–aspartate receptors in cultured rat cerebellar granule neurons and involvement in glutamate–mediated toxicity. Berman FW, et al. **J Biochem Toxicol** 1996; 11(5):217–26

Differential surface expression and phosphorylation of the N–methyl–D–aspartate receptor subunits NR1 and NR2 in cultured hippocampal neurons. Hall RA, et al. **J Biol Chem** 1997 Feb 14;272(7):4135–40

Phosphorylation–dependent regulation of N–methyl–D–aspartate receptors by calmodulin. Hisatsune C, et al. **J Biol Chem** 1997 Aug 15;272(33):20805–10

Cyclic AMP–dependent protein kinase and protein kinase C phosphorylate N–methyl–D–aspartate receptors at different sites. Leonard AS, et al. **J Biol Chem** 1997 May 2;272(18):12107–15

Identification of a phosphorylation site for calcium/calmodulindependent protein kinase II in the NR2B subunit of the N–methyl–D–aspartate receptor. Omkumar RV, et al. **J Biol Chem** 1996 Dec 6; 271(49):31670–8

Functional N–methyl–D–aspartate receptors in O–2A glial precursor cells: a critical role in regulating polysialic acid–neural cell adhesion molecule expression and cell migration. Wang C, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1565–81

Spinal cord adenosine receptor stimulation in rats inhibits peripheral neutrophil accumulation. The role of N–methyl–D–aspartate receptors. Bong GW, et al. **J Clin Invest** 1996 Dec 15;98(12):2779–85

N–methyl–D–aspartate subunit R1 involvement in the postnatal organization of the primary visual cortex of Callithrix jacchus. Fonta C, et al. **J Comp Neurol** 1997 Sep 22;386(2):260–76

Postnatal changes in NMDAR1 subunit expression in the rat trigeminal pathway to barrel field cortex. Rema V, et al. **J Comp Neurol** 1996 Apr 29;368(2):165–84

Selective distribution of the NMDA–R1 glutamate receptor in astrocytes and presynaptic axon terminals in the nucleus locus coeruleus of the rat brain: an immunoelectron microscopic study. Van Bockstaele EJ, et al. **J Comp Neurol** 1996 Jun 10;369(4):483–96

Subconductance states of a mutant NMDA receptor channel kinetics, calcium, and voltage dependence. Premkumar LS, et al. **J Gen Physiol** 1997 Feb;109(2):181–9

Polyamine analogue regulation of NMDA MK–801 binding: a structure–activity study. Bergeron RJ, et al. **J Med Chem** 1996 Dec 20;39(26):5257–66

8–(1H–imidazol–1–yl)–7–nitro–4(5H)–imidazo[1,2–alpha]quinoxalinone and related compounds: synthesis and structure–activity relationships for the AMPA–type non–NMDA receptor. Ohmori J, et al. **J Med Chem** 1997 Jun 20;40(13):2053–63

The antiparkinsonian drug budipine binds to NMDA and sigma receptors in postmortem human brain tissue. Kornhuber J, et al. **J Neural Transm Suppl** 1995;46:131–7

NMDA receptor–mediated regulation of AMPA receptor properties in organotypic hippocampal slice cultures. Gellerman DM, et al. **J Neurochem** 1997 Jul;69(1):131–6

The N–methyl–D–aspartate receptor subunits NR2A and NR2B bind to the SH2 domains of phospholipase C–gamma. Gurd JW, et al. **J Neurochem** 1997 Aug; 69(2):623–30

Effects of subchronic clozapine and haloperidol on striatal glutamatergic synapses. Meshul CK, et al. **J Neurochem** 1996 Nov;67(5):1965–73

Inhibition of [3H]MK–801 binding by ferrous (II) but not ferric (III) ions in a manner different from that by sodium nitroprusside (II) in rat brain synaptic membranes. Shuto M, et al. **J Neurochem** 1997 Aug;69(2):744–52

Transient ischemia differentially increases tyrosine phosphorylation of NMDA receptor subunits 2A and 2B. Takagi N, et al. **J Neurochem** 1997 Sep;69(3):1060–5

Developmental and regional expression of NMDA receptor subtypes containing the NR2D subunit in rat brain. Wenzel A, et al. **J Neurochem** 1996 Mar;66(3):1240–8

NMDA receptor activation inhibits neuronal volume regulation after swelling induced by veratridine–stimulated Na+ influx in rat cortical cultures. Churchwell KB, et al. **J Neurosci** 1996 Dec 1;16(23):7447–57

A direct comparison of the single–channel properties of synaptic and extrasynaptic NMDA receptors. Clark BA, et al. **J Neurosci** 1997 Jan 1;17(1):107–16

Kinetics of NMDA channel opening. Dzubay JA, et al. **J Neurosci** 1996 Jul 1;16(13):4129–34

Modification of NMDA receptor channels and synaptic transmission by targeted disruption of the NR2C gene. Ebralidze AK, et al. **J Neurosci** 1996 Aug 15; 16(16):5014–25

Gonadotropin–releasing hormone and NMDA receptor gene expression and colocalization change during puberty in female rats. Gore AC, et al. **J Neurosci** 1996 Sep 1; 16(17):5281–9

Functional properties of AMPA and NMDA receptors expressed in identified types of basal ganglia neurons. Götz T, et al. **J Neurosci** 1997 Jan 1;17(1):204–15

AMPA and NMDA glutamate receptor subunits in midbrain dopaminergic neurons in the squirrel monkey: an immunohistochemical and in situ hybridization study. Paquet M, et al. **J Neurosci** 1997 Feb 15;17(4):1377–96

NMDA receptor and the tyrosine phosphorylation of its 2B subunit in taste learning in the rat insular cortex. Rosenblum K, et al. **J Neurosci** 1997 Jul 1;17(13):5129–35

Calcium influx via the NMDA receptor induces immediate early gene transcription by a MAP kinase/ERK–dependent mechanism. Xia Z, et al. **J Neurosci** 1996 Sep 1; 16(17):5425–36

Spatio–temporal pattern of N–methyl–D–aspartate receptor NR1 mRNA expression during postnatal development of visual structures of the rat brain. Nowicka D, et al. **J Neurosci Res** 1996 Jun 1;44(5):471–7

Functional N–methyl–D–aspartate receptors in clonal rat phaeochromocytoma cells. Casado M, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):391–404

Ryanodine produces a low frequency stimulation–induced NMDA receptor–independent long–term potentiation in the rat dentate gyrus in vitro. Wang Y, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):755–67

Membrane–delimited modulation of NMDA currents by metabotropic glutamate receptor subtypes 1/5 in cultured mouse cortical neurons. Yu SP, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):721–32

Immunobiochemical characterization of the NMDA–receptor subunit NR1 in the developing and adult rat brain. Benke D, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):393–411

Functional modulation of ligand–gated GABAA and NMDA receptor channels by phosphorylation. Sigel E. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):325–32 (21 ref.)

Coadministered pentobarbital anesthesia postpones but does not block the motor and sleep EEG responses to MK–801. Feinberg I, et al. **Life Sci** 1997;60(12):PL 217–22

Developmental expression, subcellular localization, and tyrosine phosphorylation of NR2A and NR2B in the rat brain. Jin DH, et al. **Mol Cells** 1997 Feb 28;7(1):64–71

Global cerebral ischemia and reperfusion alters NMDA receptor binding in canine brain. Wei H, et al. **Mol Chem Neuropathol** 1997 Jan–Feb;30(1–2):25–39

Chronic ethanol increases N–methyl–D–aspartate–stimulated nitric oxide formation but not receptor density in cultured cortical neurons. Chandler LJ, et al. **Mol Pharmacol** 1997 May;51(5):733–40

Age–related alterations of the N–methyl–D–aspartate receptor in the dentate gyrus [news] Morrison JH, et al. **Mol Psychiatry** 1996 Nov;1(5):356–8

Use of a modified bacteriophage to probe the interactions between peptides and ion channel receptors in mammalian cells. Li M. **Nat Biotechnol** 1997 Jun;15(6):559–63

NMDA–receptor regulation of substance P release from primary afferent nociceptors. Liu H, et al. **Nature** 1997 Apr 17;386(6626):721–4

Competitive binding of alpha–actinin and calmodulin to the NMDA receptor. Wyszynski M, et al. **Nature** 1997 Jan 30;385(6615):439–42

N–methyl–D–aspartate receptor binding in brains of rats at different ages. Shimada A, et al. **Neurobiol Aging** 1997 May–Jun;18(3):329–33

Ca2+ and H+ antagonize the decrease of [3H]MK–801 binding induced by glutamate and glycine in the presence of Mg2+. Liu Y, et al. **Neurochem Int** 1996 Apr; 28(4):401–15

In vivo hypoxia–induced neuronal damage in dentate gyrus of rat hippocampus: changes in NMDA receptors and the effect of MK–801. Matsuoka Y, et al. **Neurochem Int** 1997 Jun;30(6):533–42

Glutathione is an endogenous ligand of rat brain N–methyl–D–aspartate (NMDA) and 2–amino–3–hydroxy–5–methyl–4–isoxazolepropionate (AMPA) receptors. Varga V, et al. **Neurochem Res** 1997 Sep;22(9):1165–71

NMDA receptor mediated nitric oxide dependent cGMP synthesis in brain cortex and hippocampus. Effect of ischemia on NO related biochemical processes during reperfusion. Chalimoniuk M, et al. **Neurol Neurochir Pol** 1996;30 Suppl 2:65–84

NMDA receptor–mediated calcium fluxes in the hippocampus: relevance to ischemic brain pathology. Salińska E, et al. **Neurol Neurochir Pol** 1996;30 Suppl 2:35–42 (34 ref.)

Beta–adrenergic regulation of synaptic NMDA receptors by cAMP–dependent protein kinase. Raman IM, et al. **Neuron** 1996 Feb;16(2):415–21

NMDA receptor mRNA correlation with antemortem cognitive impairment in schizophrenia. Humphries C, et al. **Neuroreport** 1996 Aug 12;7(12):2051–5

NMDA receptors are important for both mechanical and thermal allodynia from peripheral nerve injury in rats. Kim YI, et al. **Neuroreport** 1997 Jul 7;8(9–10):2149–53

Presynaptic and Ca(2+)–independent PKC subspecies modulates NMDAR1 current. Koga T, et al. **Neuroreport** 1996 Jan 31;7(2):477–80

Regionally distinct stoichiometry for N–methyl–D–aspartate receptor domains in brain. Matsunaga T, et al. **Neuroreport** 1996 Feb 29;7(3):833–7

Dopaminergic denervation of striatum results in elevated expression of NR2A subunit. Ułas J, et al. **Neuroreport** 1996 Jul 29;7(11):1789–93

Distribution and localization of NMDA receptor subunit 1 in the visual cortex of strabismic and anisometropic amblyopic cats. Yin ZQ, et al. **Neuroreport** 1996 Nov 25; 7(18):2997–3003

The d– and l–isomers of methadone bind to the non–competitive site on the N–methyl–D–aspartate (NMDA) receptor in rat forebrain and spinal cord. Gorman AL, et al. **Neurosci Lett** 1997 Feb 14;223(1):5–8

Modification of the N–methyl–D–aspartate (NMDA) receptor in the brain of newborn piglets following hyperventilation induced ischemia. Graham EM, et al. **Neurosci Lett** 1996 Oct 25;218(1):29–32

Characterisation of the binding of [3H]MDL 105,519, a radiolabelled antagonist for the N–methyl–D–aspartate–associated glycine site, to pig cortical brain membranes. Höfner G, et al. **Neurosci Lett** 1997 Apr 25;226(2):79–82

The calcium–dependent transient inactivation of recombinant NMDA receptor–channel does not involve the high affinity calmodulin binding site of the NR1 subunit. Rafiki A, et al. **Neurosci Lett** 1997 Feb 21;223(2):137–9

Regulation of dopamine uptake in rat striatal tissue by NMDA receptors as measured using rotating disk electrode voltammetry. Welch SM, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):184–8

Unilateral eyeball enucleation differentially alters AMPA–, NMDA– and kainate glutamate receptor binding in the newborn rat brain. Kiyosawa M, et al. **Neurosci Res** 1996 Nov;26(3):215–24

Effects of monocular enucleation on receptor binding and innervation pattern of the noradrenergic system in the superior colliculus of the pigmented rat. Muguruma K, et al. **Neurosci Res** 1997 Aug;28(4):311–24

Modified N–methyl–D–aspartate receptor subunit expression emerges in reeler Purkinje cells after accomplishment of the adult wild–type expression. Watanabe M, et al. **Neurosci Res** 1996 Dec;26(4):335–43

Inducible expression of N–methyl–D–aspartate receptor, and delta and mu opioid receptor messenger RNAs and protein in the NT2–N human cell line. Beczkowska IW, et al. **Neuroscience** 1997 Aug;79(3):855–62

Tonic facilitation of glutamate release by presynaptic N–methyl–D–aspartate autoreceptors in the entorhinal cortex. Berretta N, et al. **Neuroscience** 1996 Nov; 75(2):339–44

Glutamate receptors in the olfactory bulb synaptic circuitry: heterogeneity and synaptic localization of N–methyl–D–aspartate receptor subunit 1 and AMPA receptor subunit 1. Giustetto M, et al. **Neuroscience** 1997 Feb;76(3):787–98

In contrast to kindled seizures, the frequency of spontaneous epilepsy in the limbic status model correlates with greater aberrant fascia dentata excitatory and inhibitory axon sprouting, and increased staining for N–methyl–D–aspartate, AMPA and GABA(A) receptors. Mathern GW, et al. **Neuroscience** 1997 Apr;77(4):1003–19

In vitro autoradiography of ionotropic glutamate receptors in hippocampus and striatum of aged Long–Evans rats: relationship to spatial learning. Nicolle MM, et al. **Neuroscience** 1996 Oct;74(3):741–56

Hippocampal N–methyl–D–aspartate and kainate binding in response to entorhinal cortex aspiration or 192 IgG–saporin lesions of the basal forebrain. Nicolle MM, et al. **Neuroscience** 1997 Apr;77(3):649–59

Developmental regulation and cell–specific expression of N–methyl–D–aspartate receptor splice variants in rat hippocampus. Paupard MC, et al. **Neuroscience** 1997 Jul; 79(2):399–409

Size–related properties of vestibular afferent fibers in the frog: differential synaptic activation of N–methyl–D–aspartate and non–N–methyl–D–aspartate receptors. Straka H, et al. **Neuroscience** 1996 Feb;

70(3):697-707

Decreased expression of N-methyl-D-aspartate receptor 1 messenger RNA in select regions of Alzheimer brain. Ulas J, et al. **Neuroscience** 1997 Aug;79(4):973-82

N-methyl-D-aspartate receptors containing the NR2D subunit in the retina are selectively expressed in rod bipolar cells. Wenzel A, et al. **Neuroscience** 1997 Jun;78(4):1105-12

Synthesis, radiosynthesis, and biological evaluation of fluorinated thienylcyclohexyl piperidine derivatives as potential radiotracers for the NMDA receptor-linked calcium ionophore. Ouyang X, et al. **Nucl Med Biol** 1996 Apr;23(3):315-24

First SPET images of glutamate (NMDA) receptor activation in vivo in cerebral ischaemia. Owens J, et al. **Nucl Med Commun** 1997 Feb;18(2):149-58

A pivotal role for glutamate in the pathogenesis of schizophrenia, and its cognitive dysfunction. Hirsch SR, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):797-802 (51 ref.)

Adaptation of N-methyl-D-aspartate (NMDA) receptors following antidepressant treatment: implications for the pharmacotherapy of depression. Skolnick P, et al. **Pharmacopsychiatry** 1996 Jan;29(1):23-6 (28 ref.)

A mutation that alters magnesium block of N-methyl-D-aspartate receptor channels. Sharma G, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9259-63

Brain-derived neurotrophic factor rapidly enhances phosphorylation of the postsynaptic N-methyl-D-aspartate receptor subunit 1. Suen PC, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8191-5

Single-channel currents from recombinant NMDA NR1a/NR2D receptors expressed in Xenopus oocytes. Wyllie DJ, et al. **Proc R Soc Lond B Biol Sci** 1996 Aug 22;263(1373):1079-86

NMDA channel regulation by channel-associated protein tyrosine kinase Src. Yu XM, et al. **Science** 1997 Jan 31; 275(5300):674-8

Reduction of voltage-dependent Mg2+ blockade of NMDA current in mechanically injured neurons. Zhang L, et al. **Science** 1996 Dec 13;274(5294):1921-3

Striatal and cortical NMDA receptors are altered by a neurotoxic regimen of methamphetamine. Eisch AJ, et al. **Synapse** 1996 Mar;22(3):217-25

NMDA receptors: from genes to channels. Sucher NJ, et al. **Trends Pharmacol Sci** 1996 Oct;17(10):348-55 (67 ref.)

Central nervous system expression of HIV-1 Gp120 activates the hypothalamic-pituitary-adrenal axis: evidence for involvement of NMDA receptors and nitric oxide synthase. Raber J, et al. **Virology** 1996 Dec 15;226(2):362-73

[An antisense oligodeoxynucleotides for NR1 suppressed seizures and reduced discharges in the temporal cortex slice in genetically epilepsy-prone rat] Shan W, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Oct;76(10):767-70 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

NMDA receptor antagonists: interactions with opioids. Dickenson AH. **Acta Anaesthesiol Scand** 1997 Jan;41(1 Pt 2):112-5

The NMDA and GABA-A receptors in behavioral activity of rats. Car H, et al. **Acta Physiol Hung** 1996;84(3):269-70

The role of NMDA receptors in central action of angiotensin II. Wiśniewski K, et al. **Acta Physiol Hung** 1996;84(3):347-8

Alcohol dependence: a commentary on mechanisms. Hoffman PL, et al. **Alcohol Alcohol** 1996 Jul;31(4):333-40 (60 ref.)

NMDA as well as non-NMDA receptors in phrenic nucleus mediate respiratory effects of carotid chemoreflex. Chitravanshi VC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R302-10

Alkalemia reduces recovery from global cerebral ischemia by NMDA receptor-mediated mechanism. Hurn PD, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2557-62

Role of NMDA and AMPA glutamatergic transmission in spinal c-fos expression after urinary tract irritation. Kakizaki H, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R990-6

Role of spinal NMDA and AMPA receptors in episodic hypertension in conscious spinal rats. Maiorov DN, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1266-74

Respiratory modulation of sympathetic nerve activity: effect of MK-801. Morrison SF. **Am J Physiol** 1996 Mar;270(3 Pt 2):R645-51

Lateral hypothalamic NMDA receptors and glutamate as physiological mediators of eating and weight control. Stanley BG, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R443-9

Molecular characterization of NMDA and metabotropic glutamate receptors. Masu M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:153-64 (36 ref.)

Molecular and functional diversity of the NMDA receptor channel. Mishina M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:136-52 (43 ref.)

N-methyl-D-aspartate receptor hypofunction in schizophrenia could arise from reduced cortical connectivity rather than receptor dysfunction [letter; comment] Hoffman RE, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):578-80. Comment on: Arch Gen Psychiatry 1995 Dec;52(12):998-1007.

Testing hypotheses of spatial learning: the role of NMDA receptors and NMDA-mediated long-term potentiation. Cain DP, et al. **Behav Brain Res** 1997 Mar;84(1-2):179-93

NMDA and non-NMDA sensitive [L-3H]glutamate receptor binding in the brain of the Naples high- and low-excitability rats: an autoradiographic study. Sadile AG, et al. **Behav Brain Res** 1996 Aug;78(2):163-74

N-methyl-D-aspartate receptors in the basolateral amygdala are required for both acquisition and expression of conditional fear in rats. Maren S, et al. **Behav Neurosci** 1996 Dec;110(6):1365-74

Early acquisition, but not retention, of the classically conditioned eyeblink response is N-methyl-D-aspartate (NMDA) receptor dependent. Servatius RJ, et al. **Behav Neurosci** 1996 Oct;110(5):1040-8

N-methyl-D-aspartate receptor-mediated events contribute to neurovascular breakdown during experimental allergic encephalomyelitis. Paul C, et al. **Biochem Soc Trans** 1997 May;25(2):167S

Simultaneous measurement of Ca2+ influx and reversal potentials in recombinant N-methyl-D-aspartate receptor channels. Schneggenburger R. **Biophys J** 1996 May; 70(5):2165-74

Analytical description of the activation of multi-state receptors by continuous neurotransmitter signals at brain synapses. Uteshev VV, et al. **Biophys J** 1997 Mar; 72(3):1127-34

NMDA receptor dependence of mGlu-mediated depression of synaptic transmission in the CA1 region of the rat hippocampus. Harvey J, et al. **Br J Pharmacol** 1996 Nov; 119(6):1239-47

Electrically-evoked dopamine and acetylcholine release from rat striatal slices perfused without magnesium: regulation by glutamate acting on NMDA receptors. Jin S, et al. **Br J Pharmacol** 1997 Aug;121(7):1269-76

Effect of adenosine and some of its structural analogues on the conductance of NMDA receptor channels in a subset of rat neostriatal neurones. Nörenberg W, et al. **Br J Pharmacol** 1997 Sep;122(1):71-80

Enhancement of NMDA responses by group I metabotropic glutamate receptor activation in striatal neurones. Pisani A, et al. **Br J Pharmacol** 1997 Mar;120(6):1007-14

NMDA receptor-mediated pilocarpine-induced seizures: characterization in freely moving rats by microdialysis. Smolders I, et al. **Br J Pharmacol** 1997 Jul;121(6):1171-9

Interleukin-1 and tumor necrosis factor-alpha synergistically mediate neurotoxicity: involvement of nitric oxide and of N-methyl-D-aspartate receptors. Chao CC, et al. **Brain Behav Immun** 1995 Dec;9(4):355-65

NMDA receptor-independent mechanisms responsible for the rate of rise of cumulative depolarization evoked by trains of dorsal root stimuli on rat spinal motoneurones. Baranauskas G, et al. **Brain Res** 1996 Nov 4;738(2):329-32

Time-related roles of excitatory amino acid receptors during persistent noxiously evoked responses of rat dorsal horn neurones. Chapman V, et al. **Brain Res** 1995 Dec 12; 703(1-2):45-50

NMDA as well as non-NMDA receptors mediate the neurotransmission of inspiratory drive to phrenic motoneurons in the adult rat. Chitravanshi VC, et al. **Brain Res** 1996 Apr 9;715(1-2):104-12

Intracolonic zymosan produces visceral hyperalgesia in the rat that is mediated by spinal NMDA and non-NMDA receptors. Coutinho SV, et al. **Brain Res** 1996 Oct 14; 736(1-2):7-15

Single-channel evidence for glycine and NMDA requirement in NMDA receptor activation. Currás MC, et al. **Brain Res** 1996 Nov 18;740(1-2):27-40

The contribution of NMDA receptors to the visual response in animals that have been partially monocularly deprived. Czepita D, et al. **Brain Res** 1996 Jul 22;728(1):7-12

Evidence for roles of kappa-opioid and NMDA receptors in the mechanism of action of ibogaine. Glick SD, et al. **Brain Res** 1997 Feb 28;749(2):340-3

Ethanol-induced state-dependent learning is mediated by 5-hydroxytryptamine3 receptors but not by N-methyl-D-aspartate receptor complex. Nakagawa Y, et al. **Brain Res** 1996 Jan 15;706(2):227-32

NMDA receptor dependence of the input specific NMDA receptor-independent LTP in the hippocampal CA1 region. Pananceau M, et al. **Brain Res** 1997 Mar 28; 752(1-2):255-60

Excitatory amino acid receptors in the basolateral amygdala regulate anxiety responses in the social interaction test. Sajdyk TJ, et al. **Brain Res** 1997 Aug 1;764(1-2):262-4

NMDA receptors in the midbrain periaqueductal gray mediate hypothalamically evoked hissing behavior in the cat. Schubert K, et al. **Brain Res** 1996 Jul 8;726(1-2):80-90

Lowering extracellular Na+ concentration causes NMDA receptor-mediated neuronal death in cultured rat hippocampal slices. Takahashi M, et al. **Brain Res** 1996 Sep 30;735(1):1-8

Chronic and intra-amygdala administrations of the ACTH(4-9) analog ORG 2766 modulate behavioral changes after manipulation of NMDA-receptor activity. van Rijzingen IM, et al. **Brain Res** 1996 Apr 22; 717(1-2):200-3

Role of dopamine D1- and NMDA receptors in regulating neurotensin release in the striatum and nucleus accumbens. Wagstaff JD, et al. **Brain Res** 1997 Feb 14;748(1-2):241-4

Involvement of N-methyl-D-aspartate receptor in the delayed transneuronal regression of substantia nigra neurons in rats. Yamada K, et al. **Brain Res** 1996 Dec 16; 743(1-2):233-9

NMDA receptors of the vestibular nuclei neurones. Vidal PP, et al. **Brain Res Bull** 1996;40(5-6):347-52

Retinal activity regulates developmental switches in functional properties and ifenprodil sensitivity of NMDA receptors in the lateral geniculate nucleus. Ramoa AS, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1-2):165-75

Alternative splicing of the NMDAR1 subunit affects modulation by calcium. Koltchine VV, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1-2):99-108

Impaired hippocampal representation of space in CA1-specific NMDAR1 knockout mice [see comments] McHugh TJ, et al. **Cell** 1996 Dec 27;87(7):1339-49. Comment in: Cell 1996 Dec 27;87(7):1147-8.

The essential role of hippocampal CA1 NMDA receptor-dependent synaptic plasticity in spatial memory [see comments] Tsien JZ, et al. **Cell** 1996 Dec 27; 87(7):1327-38. Comment in: Cell 1996 Dec 27;87(7):1147-8.

Gonadal and adrenal steroids regulate neurochemical and structural plasticity of the hippocampus via cellular mechanisms involving NMDA receptors. McEwen BS. **Cell Mol Neurobiol** 1996 Apr;16(2):103-16 (75 ref.)

4(R)- and 4(S)-(5-phenylpentyl)-glutamic acids attenuate excitatory postsynaptic potential on hippocampus without inhibiting postsynaptic NMDA and AMPA receptors. Tyan SH, et al. **Chin J Physiol** 1996;39(2):131-7

Anticonvulsant effect of reduced NMDA receptor expression in audiogenic DBA/2 mice. Chapman AG, et al. **Epilepsy Res** 1996 Dec;26(1):25-35

Age dependence of NMDA receptor involvement in epileptiform activity in rat hippocampal slices. Wang C, et al. **Epilepsy Res** 1996 Mar;23(2):105-13

NMDA and non-NMDA synaptic currents in rat neocortex during early postnatal development. Hablitz JJ, et al. **Epilepsy Res Suppl** 1996;12:45-52

GABAA inhibition controls the calcium flows during NMDA-dependent epileptiform activity in human epileptogenic neocortex. Louvel J, et al. **Epilepsy Res Suppl** 1996;12:293-300

Non-NMDA receptor antagonists and the development of amygdala kindling. Meldrum BS, et al. **Epilepsy Res Suppl** 1996;12:283-91

Selective vulnerability to perforant path stimulation: role of NMDA and non-NMDA receptors. Penix LP, et al. **Epilepsy Res Suppl** 1996;12:63-73

A dual mechanism for impairment of GABAA receptor activity by NMDA receptor activation in rat cerebellum granule cells. Robello M, et al. **Eur Biophys J** 1997; 25(3):181-7

Role of the dorso-caudal neostriatum in filial imprinting of the domestic chick: a pharmacological and autoradiographical approach focused on the involvement of NMDA-receptors. Bock J, et al. **Eur J Neurosci** 1997 Jun;9(6):1262-72

Voltage oscillations in Xenopus spinal cord neurons: developmental onset and dependence on co-activation of NMDA and 5HT receptors. Scrymgeour-Wedderburn JF, et al. **Eur J Neurosci** 1997 Jul;9(7):1473-82

Characterization of excitatory amino acid neurotoxicity in N-methyl-D-aspartate receptor-deficient mouse cortical neuronal cells. Tokita Y, et al. **Eur J Neurosci** 1996 Jan; 8(1):69-78

Involvement of the NMDA receptor in a non-cholinergic action of acetylcholinesterase in guinea-pig substantia nigra pars compacta neurons. Webb CP, et al. **Eur J Neurosci** 1996 Apr;8(4):837-41

Activity-dependent decay of early LTP revealed by dual EPSP recording in hippocampal slices from young rats. Xiao MY, et al. **Eur J Neurosci** 1996 Sep;8(9):1916-23

NMDA receptors in the pontine brainstem are necessary for fear potentiation of the startle response. Fendt M, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):1-6

Motor depressant effects of systemically administered polyamines in mice: involvement of central NMDA receptors. Giménez-Llort L, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):231-8

Long-term plasticity in cingulate cortex requires both NMDA and metabotropic glutamate receptor activation. Hedberg TG, et al. **Eur J Pharmacol** 1996 Aug 22; 310(1):19-27

Dopamine-N-methyl-D-aspartate interactions in the modulation of locomotor activity and memory consolidation in mice. Mele A, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):1-12

Involvement of NMDA receptor in the regulation of plasma interleukin-6 levels in mice. Song DK, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):165-9

Calcium-dependent, sustained enhancement of excitability during washout of aconitine in rat hippocampal slices. Ameri A, et al. **Exp Brain Res** 1997 May;114(3):518-24

Treadmill running induces striatal Fos expression via NMDA glutamate and dopamine receptors. Liste I, et al. **Exp Brain Res** 1997 Jul;115(3):458-68

NMDA and non-NMDA receptors mediate taste afferent inputs to cortical taste neurons in rats. Otawa S, et al. **Exp Brain Res** 1995;106(3):391-402

Subthreshold receptive fields and baseline excitability of "silent" S1 callosal neurons in awake rabbits: contributions of AMPA/kainate and NMDA receptors. Swadlow HA, et al. **Exp Brain Res** 1997 Jul;115(3):403-9

The role of glutamate in the pathophysiology of Parkinson's disease. Blandini F, et al. **Funct Neurol** 1996 Jan-Feb; 11(1):3-15 (95 ref.)

NMDA receptor-dependent LTD in different subfields of

hippocampus in vivo and in vitro. Thiels E, et al. **Hippocampus** 1996;6(1):43–51 (64 ref.)

The role of N-methyl-D-aspartate (NMDA) receptors in wind-up: a mathematical model. Britton NF, et al. **IMA J Math Appl Med Biol** 1996 Sep;13(3):193–205

Implication of NMDA type glutamate receptors in neural regeneration and neoformation of synapses after excitotoxic injury in the guinea pig cochlea. d'Aldin CG, et al. **Int J Dev Neurosci** 1997 Jul;15(4–5):619–29

The NR2B-specific interactions of polyamines and protons with the N-methyl-D-aspartate receptor. Gallagher MJ, et al. **J Biol Chem** 1997 Oct 3;272(40):24971–9

N-methyl-D-aspartate receptors expressed in a nonneuronal cell line mediate subunit-specific increases in free intracellular calcium. Grant ER, et al. **J Biol Chem** 1997 Jan 3;272(1):647–56

Non-NMDA and NMDA receptor-mediated excitotoxic neuronal deaths in adult brain are morphologically distinct: further evidence for an apoptosis-necrosis continuum. Portera-Cailliau C, et al. **J Comp Neurol** 1997 Feb 3; 378(1):88–104

Synaptic transmission in the pineal eye of young Xenopus laevis tadpoles: a role for NMDA and non-NMDA glutamate and non-glutaminergic receptors? Jamieson D. **J Comp Physiol [A]** 1997 Aug;181(2):177–86

Positive role of non-N-methyl-D-aspartate receptors in the control of growth hormone secretion in male rats. Pinilla L, et al. **J Endocrinol Invest** 1996 Jun;19(6):353–8

Learning abilities depend on NMDA-receptor density in hippocampus in adult rats. Stecher J, et al. **J Neural Transm** 1997;104(2–3):281–9

Domoic acid neurotoxicity in cultured cerebellar granule neurons is mediated predominantly by NMDA receptors that are activated as a consequence of excitatory amino acid release. Berman FW, et al. **J Neurochem** 1997 Aug; 69(2):693–703

Cytoskeletal breakdown and apoptosis elicited by NO donors in cerebellar granule cells require NMDA receptor activation. Bonfoco E, et al. **J Neurochem** 1996 Dec; 67(6):2484–93

NMDA receptor-mediated neurotoxicity: a paradoxical requirement for extracellular Mg2+ in Na+/Ca2+-free solutions in rat cortical neurons in vitro. Hartnett KA, et al. **J Neurochem** 1997 May;68(5):1836–45

Eating-induced dopamine release from mesolimbic neurons is mediated by NMDA receptors in the ventral tegmental area: a dual-probe microdialysis study. Westerink BH, et al. **J Neurochem** 1997 Aug;69(2):662–8

Duality of glutamatergic and GABAergic control of pulsatile GnRH secretion by rat hypothalamic explants: II. Reduced NR2C- and GABAA-receptor-mediated inhibition at initiation of sexual maturation. Bourguignon JP, et al. **J Neuroendocrinol** 1997 Mar;9(3):193–9

NMDA receptors contribute to primary visceral afferent transmission in the nucleus of the solitary tract. Aylwin ML, et al. **J Neurophysiol** 1997 May;77(5):2539–48

Physiological contributions of neurokinin 1 receptor activation, and interactions with NMDA receptors, to inflammatory-evoked spinal c-Fos expression. Chapman V, et al. **J Neurophysiol** 1996 Sep;76(3):1817–27

Blocking GABA(A) inhibition reveals AMPA- and NMDA-receptor-mediated polysynaptic responses in the CA1 region of the rat hippocampus. Crépel V, et al. **J Neurophysiol** 1997 Apr;77(4):2071–82

Glycine at the NMDA receptor in cat visual cortex: saturation and changes with age. Czepita D, et al. **J Neurophysiol** 1996 Jan;75(1):311–7

Adult thalamocortical transmission involves both NMDA and non-NMDA receptors. Gil Z, et al. **J Neurophysiol** 1996 Oct;76(4):2547–54

Experimental down-regulation of the NMDA channel associated with synapse pruning. Hickmott PW, et al. **J Neurophysiol** 1997 Aug;78(2):1096–107

Physiology and pharmacology of corticothalamic stimulation-evoked responses in rat somatosensory thalamic neurons in vitro. Kao CQ, et al. **J Neurophysiol** 1997 May;77(5):2661–76

Modulation of spinal visceral nociceptive transmission by NMDA receptor activation in the rat. Kolhekar R, et al. **J Neurophysiol** 1996 Jun;75(6):2344–53

N-methyl-D-aspartate receptors at parallel fiber synapses in the dorsal cochlear nucleus. Manis PB, et al. **J Neurophysiol** 1996 Sep;76(3):1639–56

Induction of LTD in the dentate gyrus in vitro is NMDA receptor independent, but dependent on Ca2+ influx via low-voltage-activated Ca2+ channels and release of Ca2+ from intracellular stores. Wang Y, et al. **J Neurophysiol** 1997 Feb;77(2):812–25

Potentiation of NMDA currents by pituitary adenylate cyclase activating polypeptide in neonatal rat sympathetic preganglionic neurons. Wu SY, et al. **J Neurophysiol** 1997 Aug;78(2):1175–9

Potentiation of NMDA receptor-mediated responses by dynorphin at low extracellular glycine concentrations. Zhang L, et al. **J Neurophysiol** 1997 Aug;78(2):582–90

Role of NMDA and non-NMDA ionotropic glutamate receptors in traumatic spinal cord axonal injury. Agrawal SK, et al. **J Neurosci** 1997 Feb 1;17(3):1055–63

A postsynaptic interaction between dopamine D1 and NMDA receptors promotes presynaptic inhibition in the rat nucleus accumbens via adenosine release. Harvey J, et al. **J Neurosci** 1997 Jul 15;17(14):5271–80

Amphetamine and dopamine-induced immediate early gene expression in striatal neurons depends on postsynaptic NMDA receptors and calcium. Konradi C, et al. **J Neurosci** 1996 Jul 1;16(13):4231–9

Developmental influence of glycinergic transmission: regulation of NMDA receptor-mediated EPSPs. Kotak VC, et al. **J Neurosci** 1996 Mar 1;16(5):1836–43

Prostaglandin F2alpha is required for NMDA receptor-mediated induction of c-fos mRNA in dentate gyrus neurons. Lerea LS, et al. **J Neurosci** 1997 Jan 1; 17(1):117–24

Modulatory actions of dopamine on NMDA receptor-mediated responses are reduced in D1A-deficient mutant mice. Levine MS, et al. **J Neurosci** 1996 Sep 15; 16(18):5870–82

Long-term potentiation in distinct subtypes of hippocampal nonpyramidal neurons. Maccaferri G, et al. **J Neurosci** 1996 Sep 1;16(17):5334–43

Vicious cycle involving Na+ channels, glutamate release, and NMDA receptors mediates delayed neurodegeneration through nitric oxide formation. Strijbos PJ, et al. **J Neurosci** 1996 Aug 15;16(16):5004–13

Control of NMDA receptor activation by a glycine transporter co-expressed in Xenopus oocytes. Supplisson S, et al. **J Neurosci** 1997 Jun 15;17(12):4580–90

NMDA receptor dependence of kindling and mossy fiber sprouting: evidence that the NMDA receptor regulates patterning of hippocampal circuits in the adult brain. Sutula T, et al. **J Neurosci** 1996 Nov 15;16(22):7398–406

Estradiol increases the sensitivity of hippocampal CA1 pyramidal cells to NMDA receptor-mediated synaptic input: correlation with dendritic spine density. Woolley CS, et al. **J Neurosci** 1997 Mar 1;17(5):1848–59

Serotonin 5-HT2 receptor activation potentiates N-methyl-D-aspartate receptor-mediated ion currents by a protein kinase C-dependent mechanism. Blank T, et al. **J Neurosci Res** 1996 Jul 15;45(2):153–60

NMDA receptor-mediated cGMP synthesis in primary cultures of mouse cerebellar granule cells appears to involve neuron-astrocyte communication with NO operating as the intercellular messenger. Malcolm C, et al. **J Neurosci Res** 1996 Jul 15;45(2):129–42

Interactive effects of pH and temperature on N-methyl-D-aspartate receptor activity in rat cortical brain slices. Gray AT, et al. **J Neurosurg Anesthesiol** 1997 Apr;9(2):180–7

Pharmacological properties of acquired excitotoxicity in Chinese hamster ovary cells transfected with N-methyl-D-aspartate receptor subunits. Boeckman FA, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):515–23

NR1 and NR2 subunit contributions to N-methyl-D-aspartate receptor channel blocker pharmacology. Monaghan DT, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):614–20

Nitric oxide regulates NMDA-driven GABAergic inputs to type I neurones of the rat paraventricular nucleus. Bains JS, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):733–46

Synaptic NMDA receptors in developing mouse hippocampal neurones: functional properties and sensitivity to ifenprodil. Kirson ED, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):437–55

Subtype-specific regulation of recombinant NMDA receptor-channels by protein tyrosine kinases of the src family. Köhr G, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):445–52

Ca(2+)-dependent inactivation of NMDA receptors: fast kinetics and high Ca2+ sensitivity in rat dorsal horn neurons. Kyrozis A, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):449–63

Identification of a native low-conductance NMDA channel with reduced sensitivity to Mg2+ in rat central neurones. Momiyama A, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):479–92

Molecular determinants of NMDA receptor function in GABAergic neurones of rat forebrain. Plant T, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):47–63

Non-NMDA glutamate receptor occupancy and open probability at a rat cerebellar synapse with single and multiple release sites. Silver RA, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):231–50

Progress in understanding NMDA-receptor-dependent synaptic plasticity in the visual cortex. Bear MF. **J Physiol Paris** 1996;90(3-4):223–7 (39 ref.)

Evidence that presynaptic changes are involved in the expression of LTP and LTD of NMDA receptor-mediated EPSCs in area CA1 of the hippocampus. Clark KA, et al. **J Physiol Paris** 1996;90(5–6):311

The 2B subunit of the NMDA receptor is a saliency indicator in brain. Dudai Y. **J Physiol Paris** 1996;90(5–6):393

Analysis of NMDA receptor mediated synaptic plasticity using gene targeting: roles of Fyn and FAK non-receptor tyrosine kinases. Grant SG. **J Physiol Paris** 1996; 90(5–6):337–8

Heterosynaptic long-term depression in the hippocampus. Scanziani M, et al. **J Physiol Paris** 1996;90(3–4):165–6

Evidence for the involvement of NMDA receptors in vestibular compensation. Aoki M, et al. **J Vestib Res** 1996 Jul–Aug;6(4):315–7

Presence of functional NMDA receptors in a human neuroblastoma cell line. North WG, et al. **Mol Chem Neuropathol** 1997 Jan–Feb;30(1–2):77–94

Nitric oxide responsible for NMDA receptor-evoked inhibition of arachidonic acid incorporation into lipids of brain membrane. Samochocki M, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):79–92

Activation of N-methyl-D-aspartate receptor attenuates acute responsiveness of delta-opioid receptors. Cai YC, et al. **Mol Pharmacol** 1997 Apr;51(4):583–7

Differential sensitivity of recombinant N-methyl-D-aspartate receptor subtypes to zinc inhibition. Chen N, et al. **Mol Pharmacol** 1997 Jun;51(6):1015–23

Use of subunit-specific antisense oligodeoxynucleotides to define developmental changes in the properties of N-methyl-D-aspartate receptors. Zhong J, et al. **Mol Pharmacol** 1996 Sep;50(3):631–8

Second-order fear conditioning prevented by blocking NMDA receptors in amygdala. Gewirtz JC, et al. **Nature** 1997 Jul 31;388(6641):471–4

Both ethanol and ifenprodil inhibit NMDA-evoked release of various neurotransmitters at different, yet proportional potency: potential relation to NMDA receptor subunit composition. Fink K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):312–9

Spinal cord neurons in which interaction between N-methyl-D-aspartate and neurokinin-1 receptors may occur. Szúcs P, et al. **Neurobiology (Bp)** 1996;4(3):281–2

The endogenous agonist quinolinic acid and the non endogenous homoquinolinic acid discriminate between NMDAR2 receptor subunits. de Carvalho LP, et al. **Neurochem Int** 1996 Apr;28(4):445–52

Studies of NMDA- and non-NMDA-mediated neurotoxicity in cultured neurons. Deupree DL, et al. **Neurochem Int** 1996 Sep;29(3):255–61

Activation of serotonergic 5-HT1A receptor reduces Ca(2+)- and glutamatergic receptor-evoked arachidonic acid and No/cGMP release in adult hippocampus. Strosznajder J, et al. **Neurochem Int** 1996 Apr;28(4):439–44

Cascade of gene expression induced by Ca2+ signals in neurons. Tsuda M. **Neurochem Int** 1996 Nov;29(5):443–51 (49 ref.)

Role of NMDA receptors in pentobarbital tolerance/dependence. Oh S, et al. **Neurochem Res** 1997 Jul;22(7):767–74

Extrasynaptic glutamate spillover in the hippocampus: dependence on temperature and the role of active glutamate uptake. Asztely F, et al. **Neuron** 1997 Feb;18(2):281–93

Heteromultimerization and NMDA receptor-clustering activity of Chapsyn-110, a member of the PSD-95 family of proteins. Kim E, et al. **Neuron** 1996 Jul;17(1):103–13

LTP of AMPA and NMDA receptor-mediated signals: evidence for presynaptic expression and extrasynaptic glutamate spill-over. Kullmann DM, et al. **Neuron** 1996 Sep;17(3):461–74

Ca2+ oscillations mediated by the synergistic excitatory actions of GABA(A) and NMDA receptors in the neonatal hippocampus. Leinekugel X, et al. **Neuron** 1997 Feb; 18(2):243–55

Two distinct forms of long-term depression coexist in CA1 hippocampal pyramidal cells. Oliet SH, et al. **Neuron** 1997 Jun;18(6):969–82

Coupling of permeation and gating in an NMDA-channel pore mutant. Schneggenburger R, et al. **Neuron** 1997 Jan; 18(1):167–77

NMDA-receptor contribution to spinal nociceptive reflexes: influence of stimulus parameters and of preparatory surgery. Hartell NA, et al. **Neuropharmacology** 1996; 35(11):1567–72

beta-Amyloid produces a delayed NMDA receptor-dependent reduction in synaptic transmission in rat hippocampus. Cullen WK, et al. **Neuroreport** 1996 Dec 20;8(1):87–92

Peripheral NMDA and non-NMDA glutamate receptors contribute to nociceptive behaviors in the rat formalin test. Davidson EM, et al. **Neuroreport** 1997 Mar 3;8(4):941–6

Enhancement of NMDA receptor maturation by BDNF in cultured mouse cerebellar granule cells. Muzet M, et al. **Neuroreport** 1996 Jan 31;7(2):548–52

Dorsal hippocampal muscarinic acetylcholine and NMDA receptors disrupt water maze navigation. Riekkinen M, et al. **Neuroreport** 1997 Feb 10;8(3):645–8

NMDA receptor involvement in spinal inhibitory controls of nociception in the rat. Romita VV, et al. **Neuroreport** 1996 Jul 29;7(11):1705–8

Cortical induction of c-fos by intrastriatal endothelin-1 is mediated via NMDA receptors. Sullivan AM, et al. **Neuroreport** 1996 Dec 20;8(1):211–6

NMDA receptor clustering in rat prefrontal cortex revealed by in vitro calcium macroimaging. Takita M, et al. **Neuroreport** 1997 Jan 20;8(2):551–3

NMDA receptor-mediated synapses between CA1 neurones: activation by ischaemia. Tsintsadze T, et al. **Neuroreport** 1996 Nov 4;7(15–17):2679–82

Role of the NMDA receptor complex in DMCM-induced seizure in mice. Tsuda M, et al. **Neuroreport** 1997 Feb 10; 8(3):603–6

Histamine slows the onset of desensitization of rat cortical NMDA receptors. Zwart R, et al. **Neuroreport** 1996 Sep 2;7(13):2206–10

NMDA receptors and associative-type ultrastructural synaptic plasticity in the rat neocortex. Khludova GG, et al. **Neurosci Behav Physiol** 1997 Jul–Aug;27(4):391–3

N-methyl-D-aspartate receptor involvement in dexamethasone and stress-induced hypothalamic

somatostatin release in rats. Estupina C, et al. **Neurosci Lett** 1996 Nov 29;219(3):203–6

Developmental alterations in NMDA receptor–mediated currents in neonatal rat spinal motoneurons. Hori Y, et al. **Neurosci Lett** 1996 Feb 23;205(2):99–102

Long–term potentiation and long–term depression are induced through pharmacologically distinct NMDA receptors. Hrabetova S, et al. **Neurosci Lett** 1997 Apr 25; 226(2):107–10

Role of vestibulocerebellar N–methyl–D–aspartate receptors for behavioral recovery following unilateral labyrinthectomy in rats. Kim MS, et al. **Neurosci Lett** 1997 Feb 7;222(3):171–4

Involvement of N–methyl–d–aspartate receptor and free radical in homocysteine–mediated toxicity on rat cerebellar granule cells in culture. Kim WK, et al. **Neurosci Lett** 1996 Sep 27;216(2):117–20

Clozapine–induced potentiation of synaptic responses in the perforant path–dentate gyrus pathway in chronically prepared rabbits. Kubota T, et al. **Neurosci Lett** 1996 Jun 14;211(1):21–4

NMDA receptor–mediated calcium entry in the absence of AMPA receptor activation in rat dorsal horn neurons. Reichling DB, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):17–20

An increased intensity of N–methyl–D–aspartate (NMDA) but not non–NMDA receptor activation may be responsible for the enhancement of excitatory processes in the neocortex of two–week–old rats: a brain slices study. Világi I, et al. **Neurosci Lett** 1996 Jan 19;203(2):139–42

Peripheral NMDA receptors contribute to activation of nociceptors: a c–fos expression study in rats. Wang H, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):101–4

Electrophysiological demonstration of N–methyl–D–aspartate receptors at the afferent synapse of catfish electroreceptor organs. Andrianov GN, et al. **Neuroscience** 1997 Aug;79(4):1231–7

Stimulus intensity, cell excitation and the N–methyl–D–aspartate receptor component of sensory responses in the rat spinal cord in vivo. Chizh BA, et al. **Neuroscience** 1997 Sep;80(1):251–65

Involvement of three glutamate receptor epsilon subunits in the formation of N–methyl–D–aspartate receptors mediating excitotoxicity in primary cultures of mouse cerebellar granule cells. Didier M, et al. **Neuroscience** 1997 Jun;78(4):1129–46

Role of N–methyl–D–aspartate and metabotropic glutamate receptors in corticothalamic excitatory postsynaptic potentials in vivo. Eaton SA, et al. **Neuroscience** 1996 Jul; 73(1):1–5

N–methyl–D–aspartate receptors mediate a slow excitatory postsynaptic potential in the rat midbrain dopaminergic neurons. Mercuri NB, et al. **Neuroscience** 1996 Oct; 74(3):785–92

Spontaneous bursting activity of dopaminergic neurons in midbrain slices from immature rats: role of N–methyl–D–aspartate receptors. Mereu G, et al. **Neuroscience** 1997 Apr;77(4):1029–36

Activation of N–methyl–D–aspartate receptors regulates basal electrical activity of oxytocin and vasopressin neurons in lactating rats. Moos FC, et al. **Neuroscience** 1997 Apr; 77(4):993–1002

Postnatal lead exposure and MK–801 sensitivity. Cory–Slechta DA. **Neurotoxicology** 1997;18(1):209–20

Pb2+ inhibits NMDA receptor function at high and low affinity sites: developmental and regional brain expression. Guilarte TR. **Neurotoxicology** 1997;18(1):43–51

Thalamic NMDA receptors modulate inflammation–produced hyperalgesia in the rat. Kolhekar R, et al. **Pain** 1997 May;71(1):31–40

Spinally administered dynorphin A produces long–lasting allodynia: involvement of NMDA but not opioid receptors. Laughlin TM, et al. **Pain** 1997 Aug;72(1–2):253–60

Lignocaine selectively reduces C fibre–evoked neuronal activity in rat spinal cord in vitro by decreasing N–methyl–D–aspartate and neurokinin receptor–mediated post–synaptic depolarizations; implications for the development of novel centrally acting analgesics. Nagy I, et al. **Pain** 1996 Jan;64(1):59–70

Involvement of NMDA receptor mechanisms in jaw electromyographic activity and plasma extravasation induced by inflammatory irritant application to temporomandibular joint region of rats. Yu XM, et al. **Pain** 1996 Nov;68(1):169–78

The in vivo effect of bilirubin on the N–methyl–D–aspartate receptor/ion channel complex in the brains of newborn piglets. Hoffman DJ, et al. **Pediatr Res** 1996 Dec; 40(6):804–8

Blockade of tolerance to stress–induced analgesia by MK–801 in mice. Vaccarino AL, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):435–9

NMDA receptor–mediated increase in cyclic GMP in the rat cerebellum in vivo is blocked by alaproclate and GEA–857. Hu PS, et al. **Pharmacol Toxicol** 1997 Feb; 80(2):97–102

Muscle NMDA receptors regulate the resting membrane potential through NO–synthase. Urazaev AK, et al. **Physiol Res** 1995;44(3):205–8

NMDA receptors in the rostral and intermediate–caudal striatum play an opposite role in regulation of the muscle tone in rats. Ossowska K, et al. **Pol J Pharmacol** 1996 May–Jun;48(3):261–7

A synaptic basis for memory storage in the cerebral cortex. Bear MF. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13453–9 (59 ref.)

Role of cortical N–methyl–D–aspartate receptors in auditory sensory memory and mismatch negativity generation: implications for schizophrenia. Javitt DC, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11962–7

Neurotoxicity associated with dual actions of homocysteine at the N–methyl–D–aspartate receptor. Lipton SA, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5923–8

Arrest of neuronal migration by excitatory amino acids in hamster developing brain. Marret S, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15463–8

Spreading depression and focal brain ischemia induce cyclooxygenase–2 in cortical neurons through N–methyl–D–aspartic acid–receptors and phospholipase A2. Miettinen S, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6500–5

Long–term potentiation increases tyrosine phosphorylation of the N–methyl–D–aspartate receptor subunit 2B in rat dentate gyrus in vivo. Rosenblum K, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10457–60

Enhanced tyrosine phosphorylation of the 2B subunit of the N–methyl–D–aspartate receptor in long–term potentiation. Rostas JA, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10452–6

Interactions between two divalent ion binding sites in N–methyl–D–aspartate receptor channels. Sharma G, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14170–5

Contribution of NMDA and non–NMDA glutamate receptors to locomotor pattern generation in the neonatal rat spinal cord. Beato M, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):877–84

NMDA–receptor–dependent synaptic plasticity in the visual cortex. Bear MF. **Prog Brain Res** 1996;108:205–18 (78 ref.)

The role of NMDA receptors and nitric oxide in retinogeniculate development. Cramer KS, et al. **Prog Brain Res** 1996;108:235–44 (84 ref.)

Ontogeny of dopamine agonist–induced sensitization: role of NMDA receptors. Duke MA, et al. **Psychopharmacology (Berl)** 1997 Jan;129(2):153–60

New knockout mice point to molecular basis of memory [news] Roush W. **Science** 1997 Jan 3;275(5296):32–3

Maturation of a central glutamatergic synapse. Wu G, et al. **Science** 1996 Nov 8;274(5289):972–6

Characterization of ionotropic glutamate receptor–mediated nitric oxide production in vivo in rats. Bhardwaj A, et al. **Stroke** 1997 Apr;28(4):850–6; discussion 856–7

NMDA and D1 receptors regulate the phosphorylation of CREB and the induction of c–fos in striatal neurons in primary culture. Das S, et al. **Synapse** 1997 Mar; 25(3):227–33

NMDA receptors in nucleus accumbens modulate stress–induced dopamine release in nucleus accumbens and ventral tegmental area. Doherty MD, et al. **Synapse** 1997 Jul;26(3):225–34

NMDA receptors play an anti–aggregating role in human platelets. Franconi F, et al. **Thromb Haemost** 1996 Jul; 76(1):84–7

Is there a nociceptive carousel? Urban L, et al. **Trends Pharmacol Sci** 1997 Jul;18(7):223–4 (7 ref.)

Corticofugal influences on visual responses in cat superior colliculus: the role of NMDA receptors. Binns KE, et al. **Vis Neurosci** 1996 Jul–Aug;13(4):683–94

[Dynamic regulation of the NMDA receptor channel subunits in the central nervous system and their involvement in synaptic plasticity and development] Watanabe M. **Kaibogaku Zasshi** 1996 Oct;71(5):517–22 (17 ref.) (Eng. Abstr.) **(Jpn)**

[N–methyl–D–aspartate (NMDA) receptor and pain] Yamamoto T. **Masui** 1996 Nov;45(11):1312–8 (24 ref.) (Eng. Abstr.) **(Jpn)**

[NMDA receptors and the ultrastructural synaptic plasticity of the associative type in the rat neocortex] Khludova GG, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul–Aug; 46(4):808–10 **(Rus)**

ULTRASTRUCTURE

Differential subcellular regulation of NMDAR1 protein and mRNA in dendrites of dentate gyrus granule cells after perforant path transection. Gazzaley AH, et al. **J Neurosci** 1997 Mar 15;17(6):2006–17

Presynaptic NMDA receptors in the neocortex are both auto– and heteroreceptors. DeBiasi S, et al. **Neuroreport** 1996 Nov 4;7(15–17):2773–6

EM colocalization of AMPA and NMDA receptor subunits at synapses in rat cerebral cortex. Kharazia VN, et al. **Neurosci Lett** 1996 May 24;210(1):37–40

NMDA and AMPA receptors in the lateral nucleus of the amygdala are postsynaptic to auditory thalamic afferents. Farb CR, et al. **Synapse** 1997 Oct;27(2):106–21

RECEPTORS, MINERALOCORTICOID

[Mineralocorticoid receptor] Suzuki Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:566–9 (17 ref.) **(Jpn)**

ANALYSIS

Localization of mineralocorticoid receptor and 11 beta–hydroxysteroid dehydrogenase type II in human breast and its disorders. Sasano H, et al. **Anticancer Res** 1997 May–Jun;17(3C):2001–7

Expression of glucocorticoid and mineralocorticoid receptors in an immortalized hippocampal neuronal cell line. Beaman–Hall CM, et al. **Brain Res** 1996 Jul 8; 726(1–2):141–52

Partial colocalization of glucocorticoid and mineralocorticoid receptors in discrete compartments in nuclei of rat hippocampus neurons. van Steensel B, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):787–92

Steroid receptors in the rat hippocampus: a note to the methodology of their binding assay. Szuran TF, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):337–54

Immunochemical demonstration of the mineralocorticoid receptor in ocular tissues. Mirshahi M, et al. **Neuroendocrinology** 1997 Jan;65(1):70–8

ANTAGONISTS & INHIBITORS

Blocking of central nervous mineralocorticoid receptors counteracts inhibition of pituitary–adrenal activity in human sleep. Born J, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1106–10

Inhibition of mineralocorticoid and glucocorticoid receptor function by the heat shock protein 90–binding agent geldanamycin. Bamberger CM, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):233–40

Cognitive dysfunctions induced by scopolamine are reduced by systemic or intrahippocampal mineralocorticoid receptor blockade. Smythe JW, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):613–21

BIOSYNTHESIS

Ketanserin selectively blocks acute stress–induced changes in NGFI–A and mineralocorticoid receptor gene expression in hippocampal neurons. Olsson T, et al. **Neuroscience** 1997 Jan;76(2):441–8

DRUG EFFECTS

Evidence that high dose cortisol–induced Na+ retention in man is not mediated by the mineralocorticoid receptor. Whitworth JA, et al. **J Endocrinol Invest** 1995 Jul–Aug; 18(7):586–91

Intracerebral administration of mineralocorticoid receptor antisense oligonucleotides attenuate adrenal steroid–induced salt appetite in rats. Sakai RR, et al. **Neuroendocrinology** 1996 Dec;64(6):425–9

Repeated amphetamine administration down–regulates glucocorticoid, but not mineralocorticoid, receptors in the rat hippocampus. Budziszewska B, et al. **Pol J Pharmacol** 1995 Sep–Oct;47(5):401–6

GENETICS

Corticosteroid receptor mRNA expression is unaffected by corticosteroids in rat kidney, heart, and colon. Escoubet B, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1343–53

Glucocorticoid and mineralocorticoid receptors: biology and clinical relevance. Funder JW. **Annu Rev Med** 1997; 48:231–40 (53 ref.)

Regulation of glucocorticoid and mineralocorticoid receptor mRNAs in the hippocampus of the maternally deprived infant rat. Vázquez DM, et al. **Brain Res** 1996 Aug 26; 731(1–2):79–90

Sexual dimorphism of steroid hormone receptor messenger ribonucleic acid expression and hormonal regulation in rat vascular tissue. Knauthe R, et al. **Endocrinology** 1996 Aug; 137(8):3220–7

Tissue–specific expression of alpha and beta messenger ribonucleic acid isoforms of the human mineralocorticoid receptor in normal and pathological states. Zennaro MC, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1345–52

Androgens modulate glucocorticoid receptor mRNA, but not mineralocorticoid receptor mRNA levels, in the rat hippocampus. Kerr JE, et al. **J Neuroendocrinol** 1996 Jun; 8(6):439–47

Co–localization of alpha1D adrenergic receptor mRNA with mineralocorticoid and glucocorticoid receptor mRNA in rat hippocampus. Williams AM, et al. **J Neuroendocrinol** 1997 Feb;9(2):113–9

Dysregulation of diurnal rhythms of serotonin 5–HT2C and corticosteroid receptor gene expression in the hippocampus with food restriction and glucocorticoids. Holmes MC, et al. **J Neurosci** 1997 Jun 1;17(11):4056–65

The human mineralocorticoid receptor gene promoter: its structure and expression. Listwak SJ, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):495–506

Characterization of the human mineralocorticoid receptor gene 5'–regulatory region: evidence for differential hormonal regulation of two alternative promoters via nonclassical mechanisms. Zennaro MC, et al. **Mol Endocrinol** 1996 Dec;10(12):1549–60

Increased stress–induced adrenocorticotropin response after long–term intracerebroventricular treatment of rats with antisense mineralocorticoid receptor oligodeoxynucleotides. Reul JM, et al. **Neuroendocrinology** 1997 Mar;65(3):189–99

Molecular genetic analysis of glucocorticoid and mineralocorticoid signaling in development and physiological processes. Berger SA, et al. **Steroids** 1996 Apr;61(4):236–9

Distribution of hippocampal mineralocorticoid and glucocorticoid receptor mRNA in a glucocorticoid resistant nonhuman primate. Johnson EO, et al. **Steroids** 1996 Feb;61(2):69–73

IMMUNOLOGY

Neurochemical changes in the hippocampus of the brown Norway rat during aging. Bhatnagar M, et al. **Neurobiol Aging** 1997 May–Jun;18(3):319–27

METABOLISM

Progesterone binding to mineralocorticoid receptors: in vitro and in vivo studies. Myles K, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):E601–7

Involvement of the N-terminal region of the human mineralocorticoid receptor hormone-binding domain in agonist and antagonist binding as revealed by a new monoclonal antibody. Jalaguier S, et al. **Biochem J** 1997 May 15;324 (Pt 1):57–63

Preferential occupation of mineralocorticoid receptors by corticosterone enhances glutamate-induced burst firing in rat midbrain dopaminergic neurons. Overton PG, et al. **Brain Res** 1996 Oct 21;737(1–2):146–54

Permanent upregulation of hippocampal mineralocorticoid receptors after neonatal administration of ACTH-(4–9) analog ORG 2766 in rats. Nyakas C, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):142–7

Long-term effects of neonatal maternal deprivation and ACTH on hippocampal mineralocorticoid and glucocorticoid receptors. Sutanto W, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):156–63

The promiscuous receptor: a case for the guardian enzyme [comment] Weber KT. **Cardiovasc Res** 1995 Aug;30(2):176 . Comment on: Cardiovasc Res 1995 Aug;30(2):177–80.

Mineralocorticoid (type I) receptors in the olfactory mucosa of the mammal: studies with [3H]aldosterone and the anti-mineralocorticoid spironolactone. Kern RC, et al. **Chem Senses** 1997 Apr;22(2):141–8

Mineralocorticoid receptors and glucocorticoid receptors. Funder JW. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):651–6 (43 ref.)

Down-regulation of the mineralocorticoid receptor by dexamethasone in an amphibian kidney cell line (A6). Hagley RD, et al. **Endocr Res** 1996 Aug;22(3):221–35

Exclusion of corticosterone from epithelial mineralocorticoid receptors is insufficient for selectivity of aldosterone action: in vivo binding studies. Funder J, et al. **Endocrinology** 1996 Dec;137(12):5264–8

Determinants of specificity of transactivation by the mineralocorticoid or glucocorticoid receptor. Lim-Tio SS, et al. **Endocrinology** 1997 Jun;138(6):2537–43

Differential expression of nuclear 11beta-hydroxysteroid dehydrogenase type 2 in mineralocorticoid receptor positive and negative tissues. Petrelli MD, et al. **Endocrinology** 1997 Jul;138(7):3077–80

Specific nuclear localization of 11-dehydrocorticosterone in rat colon: evidence for a novel corticosteroid receptor. Sheppard KE, et al. **Endocrinology** 1996 Aug;137(8):3274–8

Inhibition of mineralocorticoid activity by the beta-isoform of the human glucocorticoid receptor. Bamberger CM, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):43–50

Characterization of the human mineralocorticoid receptor gene 5'-regulatory region: evidence for differential hormonal regulation of two alternative promoters via nonclassical mechanisms. Zennaro MC, et al. **Mol Endocrinol** 1996 Dec;10(12):1549–60

Mineralocorticoid receptors in the rabbit iris-ciliary body. Schwartz B, et al. **Ophthalmic Res** 1997;29(1):42–7

Heterodimerization between mineralocorticoid and glucocorticoid receptors increases the functional diversity of corticosteroid action. Trapp T, et al. **Trends Pharmacol Sci** 1996 Apr;17(4):145–9 (49 ref.)

PHYSIOLOGY

Evidence for receptor-mediated mineralocorticoid action in rat osteoblastic cells. Agarwal MK, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1088–95

Involvement of type I corticosteroid receptor in the effects of ovariectomy on energy balance. Dagnault A, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R199–206

The renin-angiotensin-aldosterone system in experimental mineralocorticoid-salt-induced cardiac fibrosis. Young MJ, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E883–8

Role of adrenal steroid mineralocorticoid and glucocorticoid receptors in long-term potentiation in the CA1 field of hippocampal slices. Pavlides C, et al. **Brain Res** 1996 Nov 4;738(2):229–35

Brain-corticosteroid hormone dialogue: slow and persistent. de Kloet ER, et al. **Cell Mol Neurobiol** 1996 Jun; 16(3):345–56 (52 ref.)

11 beta-Hydroxysteroid dehydrogenase and the syndrome of apparent mineralocorticoid excess. White PC, et al. **Endocr Rev** 1997 Feb;18(1):135–56 (209 ref.)

High glucose stimulates aldosterone-induced hypertrophy via type I mineralocorticoid receptors in neonatal rat cardiomyocytes. Sato A, et al. **Endocrinology** 1996 Oct; 137(10):4145–53

Glucocorticoid- and mineralocorticoid receptors in microglial cells: the two receptors mediate differential effects of corticosteroids. Tanaka J, et al. **Glia** 1997 May; 20(1):23–37

The mineralocorticoid receptor discriminates aldosterone from glucocorticoids independently of the 11 beta-hydroxysteroid dehydrogenase. Funder JW. **J Endocrinol Invest** 1995 Jul–Aug;18(7):576–9

Modulation of a novel RNA in brain neurons by glucocorticoid and mineralocorticoid receptors. Masters JN, et al. **Neuroendocrinology** 1996 Jan;63(1):28–38

Hippocampal mineralocorticoid, but not glucocorticoid, receptors modulate anxiety-like behavior in rats. Smythe JW, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):507–13

Corticosteroids enhance convulsion susceptibility via central mineralocorticoid receptors. Roberts AJ, et al. **Psychoneuroendocrinology** 1995;20(8):891–902 (52 ref.)

Mineralocorticoid receptors, salt, and hypertension. Funder JW, et al. **Recent Prog Horm Res** 1997;52:247–60; discussion 261–2 (54 ref.)

ULTRASTRUCTURE

Localization of the mineralocorticoid receptor in rat cochlear tissue. Yao X, et al. **Acta Otolaryngol (Stockh)** 1996 May; 116(3):493–6

RECEPTORS, MITOGEN

The CD94/NKG2 C-type lectin receptor complex: involvement in NK cell-mediated recognition of HLA class I molecules. López-Botet M, et al. **Immunol Res** 1997; 16(2):175–85 (50 ref.)

ANALYSIS

Correlation between expression of vascular endothelial growth factor and tumor vascularity, and patient outcome in human gastric carcinoma. Tanigawa N, et al. **J Clin Oncol** 1997 Feb;15(2):826–32

Lectin-like receptor for alpha 1-acid glycoprotein in the epithelium of the rat prostate gland and seminal vesicles. Andersen UO, et al. **Prostate** 1996 Dec;29(6):356–61

[Distribution of immunoregulatory carbohydrate lectin receptors on glioma cell membranes and autologus peripheral mononuclears in neuro-oncological patients depending upon the degree of brain tumor anaplasia] Gnedkova IA, et al. **Biull Eksp Biol Med** 1996 Oct; 122(10):441–5 **(Rus)**

BIOSYNTHESIS

Induction of germinal center B cell markers in vitro by activated CD4+ T lymphocytes: the role of CD40 ligand, soluble factors, and B cell antigen receptor cross-linking. Lahvis GP, et al. **J Immunol** 1997 Aug 15;159(4):1783–93

Hypoxia and cobalt stimulate vascular endothelial growth factor receptor gene expression in rats. Sandner P, et al. **Pflugers Arch** 1997 Apr;433(6):803–8

CHEMISTRY

Vascular endothelial growth factor and its receptors in normal human testicular tissue. Ergün S, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):9–20

GENETICS

Expression of vascular endothelial growth factor and its receptors in pilocytic astrocytoma. Leung SY, et al. **Am J Surg Pathol** 1997 Aug;21(8):941–50

Receptor protein tyrosine kinase DDR is up-regulated by p53 protein. Sakuma S, et al. **FEBS Lett** 1996 Dec 2; 398(2–3):165–9

The genomic structure of discoidin receptor tyrosine kinase. Playford MP, et al. **Genome Res** 1996 Jul;6(7):620–7

Nuclear protein interactions with the human KDR/flk-1 promoter in vivo. Regulation of Sp1 binding is associated with cell type-specific expression. Patterson C, et al. **J Biol Chem** 1997 Mar 28;272(13):8410–6

Long-term age-related consequences of forelimb damage upon expression of primary afferent phenotypes in the cervical dorsal horn. Rhoades RW, et al. **Somatosens Mot Res** 1995;12(3–4):199–208

IMMUNOLOGY

The CD94/NKG2-A inhibitory receptor complex is involved in natural killer cell-mediated recognition of cells expressing HLA-G1. Pérez-Villar JJ, et al. **J Immunol** 1997 Jun 15;158(12):5736–43

Enhanced expression of lipocortin-1 as a new immunosuppressive protein in cancer patients and its influence on reduced in vitro peripheral blood lymphocyte response to mitogens. Koseki H, et al. **Surg Today** 1997; 27(1):30–9

METABOLISM

Possible mechanism for the inhibition of lectin-erythrocyte interaction in presence of endogenous lectin receptor. Basu PS, et al. **Biosci Rep** 1996 Dec;16(6):453–8

The effect of high and low Dk/L soft contact lenses on the glycocalyx layer of the corneal epithelium and on the membrane associated receptors for lectins [see comments] Latkovic S, et al. **CLAO J** 1997 Jul;23(3):185–91. Comment in: CLAO J 1997 Jul;23(3):148.

In vitro characterization of chondrogenic cells isolated from chick embryonic muscle using peanut agglutinin affinity chromatography. Stringa E, et al. **Exp Cell Res** 1997 May 1;232(2):287–94

Differential reactivities of the Arachis hypogaea (peanut) and Vicia villosa B4 lectins with human ovarian carcinoma cells, grown either in vitro or in vivo xenograft model. Avichezer D, et al. **FEBS Lett** 1996 Oct 21;395(2–3):103–8

Modulation of cell surface lectin receptors on K562 human erythroleukemia cells induced by transfection with annexin IV cDNA. Satoh A, et al. **FEBS Lett** 1997 Mar 17; 405(1):107–10

Distribution of chondroitin sulphate proteoglycans and peanut agglutinin-binding molecules during bovine fetal palatine ridge formation. Takanosu M, et al. **J Anat** 1996 Aug;189 (Pt 1):109–15

Lectin-like receptor for alpha 1-acid glycoprotein in the epithelium of the rat prostate gland and seminal vesicles. Andersen UO, et al. **Prostate** 1996 Dec;29(6):356–61

The CD94/NKG2C-type lectin receptor complex in recognition of HLA class I molecules. López-Botet M, et al. **Res Immunol** 1997 Mar–Apr;148(3):155–9 (30 ref.)

VEGF and flt. Expression time kinetics in rat brain infarct. Kovács Z, et al. **Stroke** 1996 Oct;27(10):1865–72; discussion 1872–3

PHYSIOLOGY

CD94/NKG2 is the predominant inhibitory receptor involved in recognition of HLA-G by decidual and peripheral blood NK cells. Söderström K, et al. **J Immunol** 1997 Aug 1;159(3):1072–5

RECEPTORS, MORPHINE see **RECEPTORS, OPIOID, MU**

RECEPTORS, MU see **RECEPTORS, OPIOID, MU**

RECEPTORS, MU OPIOID see **RECEPTORS, OPIOID, MU**

RECEPTORS, MUSCARINIC

Negative inotropic effect of chagasic IgG mediated by nitric oxide. Vila Echagüe A, et al. **Acta Physiol Pharmacol Ther Latinoam** 1996;46(1):23–32

Selective muscarinic receptor agonists and antagonists. Eglen RM, et al. **Pharmacol Toxicol** 1996 Feb;78(2):59–68 (101 ref.)

[Molecular function of subtype and subunit drug receptors] Kimura M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep; 108(3):155–6 (0 ref.) **(Jpn)**

AGONISTS see MUSCARINIC AGONISTS

ANALYSIS

Identification of muscarinic receptor subtypes in mouse parotid gland. Watson EL, et al. **Am J Physiol** 1996 Sep; 271(3 Pt 1):C905–13

Cultures of airway parasympathetic nerves express functional M2 muscarinic receptors. Fryer AD, et al. **Am J Respir Cell Mol Biol** 1996 Dec;15(6):716–25

Radiolabeled ligands for imaging the muscarinic-cholinergic receptors of the heart and brain. Knapp FF Jr, et al. **Anticancer Res** 1997 May–Jun;17(3B):1559–72 (63 ref.)

Immunolocalization of myoepithelial cells in isolated acini of rat exorbital lacrimal gland: cellular distribution of muscarinic receptors. Lemullois M, et al. **Biol Cell** 1996; 86(2–3):175–81

Immunocytochemical localization of muscarinic, adrenergic and AT1 receptors. Schulze W, et al. **Blood Press Suppl** 1996;3:15–8

Immunocytochemical studies of M2 muscarinic receptors in guinea pig atria and ventricles using anti-peptide antibodies. Zhu L, et al. **Blood Press Suppl** 1996;3:19–21

Effects of freezing storage time on the density of muscarinic receptors in the human postmortem brain: an autoradiographic study in control and Alzheimer's disease brain tissues. Rodriguez-Puertas R, et al. **Brain Res** 1996 Jul 22;728(1):65–71

Chronic infusion of nerve growth factor into rat striatum increases cholinergic markers and inhibits striatal neuronal discharge rate. Förander P, et al. **Eur J Neurosci** 1996 Sep; 8(9):1822–32

Demonstration of a reduction in muscarinic receptor binding in early Alzheimer's disease using iodine-123 dexetimide single-photon emission tomography. Claus JJ, et al. **Eur J Nucl Med** 1997 Jun;24(6):602–8

Discrepancy between blood flow and muscarinic receptor distribution in rat brain after middle cerebral artery occlusion. Kuji I, et al. **Eur J Nucl Med** 1997 Jun; 24(6):665–9

Positron emission tomographic investigations of central muscarinic cholinergic receptors with three isomers of [76Br]BrQNP. Strijckmans V, et al. **Eur J Nucl Med** 1997 May;24(5):475–82

Genetic variation in the morphology of the septo-hippocampal cholinergic and GABAergic systems in mice: II. Morpho-behavioral correlations. Schwegler H, et al. **Hippocampus** 1996;6(5):535–45

Immunocytochemical localization of muscarinic receptors as an autoantigen in heart tissue [published erratum appears in Int J Cardiol 1996 Sep;56(1):103] Schulze W, et al. **Int J Cardiol** 1996 May;54(2):177–82 (39 ref.)

Muscarinic receptor subtypes in human iris-ciliary body

measured by immunoprecipitation. Gil DW, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1434–42

Reduced muscarinic cholinoceptor density and sensitivity in various models of experimental cardiac hypertrophy. Mertens MJ, et al. **J Auton Pharmacol** 1995 Dec; 15(6):465–74

Beta-adrenergic and muscarinic cholinergic receptor densities in the human sinoatrial node: identification of a high beta 2-adrenergic receptor density. Rodefeld MD, et al. **J Cardiovasc Electrophysiol** 1996 Nov;7(11):1039–49

Comparative ontogenic profile of cholinergic markers, including nicotinic and muscarinic receptors, in the rat brain. Aubert I, et al. **J Comp Neurol** 1996 May 20; 369(1):31–55

Developmental profiles of various cholinergic markers in the rat main olfactory bulb using quantitative autoradiography. Le Jeune H, et al. **J Comp Neurol** 1996 Sep 23;373(3):433–50

Expression of m1–m4 muscarinic acetylcholine receptor immunoreactivity in septohippocampal neurons and other identified hippocampal afferents. Rouse ST, et al. **J Comp Neurol** 1996 Nov 18;375(3):406–16

Immunolocalization of muscarinic acetylcholine subtype 2 receptors in rat cochlear nucleus. Yao W, et al. **J Comp Neurol** 1996 Sep 9;373(1):27–40

Immunohistochemical localization of muscarinic acetylcholine receptors in primary and metastatic malignant melanomas. Lammerding-Köppel M, et al. **J Cutan Pathol** 1997 Mar;24(3):137–44

Muscarinic, N-methyl-D-aspartate (NMDA) and benzodiazepine receptor binding sites in cortical membranes from amyotrophic lateral sclerosis patients. Gredal O, et al. **J Neurol Sci** 1996 Nov;143(1–2):121–5

Down-regulation of cardiac muscarinic receptors induced by di-isopropylfluorophosphate. Valette H, et al. **J Nucl Med** 1997 Sep;38(9):1430–3

M2, M3 and M4, but not M1, muscarinic receptor subtypes are present in rat spinal cord. Höglund AU, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):470–7

Muscarinic acetylcholine receptor subtype, m2: diverse functional implications of differential synaptic localization. Rouse ST, et al. **Life Sci** 1997;60(13–14):1031–8

Does mammalian heart contain only the M2 muscarinic receptor subtype? Sharma VK, et al. **Life Sci** 1997; 60(13–14):1023–9

Radioligand binding measurement of receptor sequestration in intact and permeabilized cells. Slowiejko DM, et al. **Methods Mol Biol** 1997;83:243–50 (11 ref.)

Specific binding component of the "inactive" stereoisomer (S,S)-[125I] IQNB to rat brain muscarinic receptors in vivo. Boulay SF, et al. **Nucl Med Biol** 1996 Apr;23(3):211–9

Pharmacological characterization and positron emission tomography evaluation of 4-[76Br]bromodexetimide and 4-[76Br]bromolevetimide for investigations of central muscarinic cholinergic receptors. Loc'h C, et al. **Nucl Med Biol** 1996 Apr;23(3):235–43

Evaluation of 1-azabicyclo[2.2.2]oct-3-yl alpha-fluoroalkyl-alpha-hydroxy-alpha-phenylacetates as potential ligands for the study of muscarinic receptor density by positron emission tomography. Luo H, et al. **Nucl Med Biol** 1996 Apr;23(3):267–76

Cholinergic innervation and receptors in the cerebellum. Jaarsma D, et al. **Prog Brain Res** 1997;114:67–96 (113 ref.)

[Regional distribution of the muscarinic cholinergic receptor in the human brain studied with 11C-benztropine and PET using an anatomical standardization technique] Ono S, et al. **Kaku Igaku** 1996 Jul;33(7):721–7 (Eng. Abstr.) **(Jpn)**

[Muscarinic cholinergic receptor imaging of parkinsonian brain using 11C-NMPB and PET] Asahina M, et al. **Nippon Rinsho** 1997 Jan;55(1):233–7 (10 ref.) (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS see MUSCARINIC ANTAGONISTS

BIOSYNTHESIS

Chronic nicotine treatment delays the developmental increase in brain muscarinic receptors in rat neonate. Zhu J, et al. **Brain Res** 1996 Sep 2;732(1–2):257–60

Pre- and postsynaptic M3 muscarinic receptor mRNAs in the rodent peripheral auditory system. Safieddine S, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):127–35

Induction of ileum muscarinic cholinoceptor signal transduction pathways by rat interferon-gamma. Sterin-Borda L, et al. **Int J Immunopharmacol** 1996 Jan; 18(1):17–22

beta-Adrenergic and muscarinic receptor expression are regulated in opposite ways during senescence in rat left ventricle. Hardouin S, et al. **J Mol Cell Cardiol** 1997 Jan; 29(1):309–19

Downregulation of muscarinic M2 receptors linked to K+ current in cultured guinea-pig atrial myocytes. Bünemann M, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):351–62

ONO-1603, a potential antidementia drug, shows neuroprotective effects and increases m3-muscarinic receptor mRNA levels in differentiating rat cerebellar granule neurons. Katsube N, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):151–4

Muscarinic cholinergic receptor subtypes expression by human placenta. Tayebati SK, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):208–12

Expression of human muscarinic cholinergic receptors in tobacco. Mu JH, et al. **Plant Mol Biol** 1997 May; 34(2):357–62

Muscarinic acetylcholine receptor expression in memory circuits: implications for treatment of Alzheimer disease. Levey AI. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13541–6 (64 ref.)

BLOOD

Stimulatory roles of muscarinic acetylcholine receptors on T cell antigen receptor/CD3 complex-mediated interleukin-2 production in human peripheral blood lymphocytes. Fujino H, et al. **Mol Pharmacol** 1997 Jun; 51(6):1007–14

CHEMISTRY

Studies of the pharmacology, localization, and structure of muscarinic acetylcholine receptors. Brann MR, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:225–36 (59 ref.)

Molecular basis of the muscarinic acetylcholine receptor. Kubo T. **Ann N Y Acad Sci** 1993 Dec 20;707:210–24 (44 ref.)

Formation of the functional complexes of m2 muscarinic acetylcholine receptors with GTP-binding regulatory proteins in solution. Rinken A. **J Biochem (Tokyo)** 1996 Jul;120(1):193–200

Functional role of the third cytoplasmic loop in muscarinic receptor dimerization. Maggio R, et al. **J Biol Chem** 1996 Dec 6;271(49):31055–60

Two homologous phosphorylation domains differentially contribute to desensitization and internalization of the m2 muscarinic acetylcholine receptor. Pals-Rylaarsdam R, et al. **J Biol Chem** 1997 May 30;272(22):14152–8

Stereoselective synthesis and biodistribution of potent [11C]-labeled antagonists for positron emission tomography imaging of muscarinic receptors in the airways. Visser TJ, et al. **J Med Chem** 1997 Jan 3; 40(1):117–24

Comparison of structurally different allosteric modulators of muscarinic receptors by self-organizing neural networks. Holzgrabe U, et al. **J Mol Graph** 1996 Aug;14(4):185–93, 217–21

Studies on the characterization of the subtype(s) of muscarinic receptor involved in prostacyclin synthesis in rabbit car liomyocytes. Tyagi MG, et al. **J Recept Signal Transduct Res** 1996 Sep-Nov; 16(5–6):273–96

Structural basis of receptor/G protein coupling selectivity studied with muscarinic receptors as model systems. Wess J, et al. **Life Sci** 1997;60(13–14):1007–14 (33 ref.)

Allosteric regulation of muscarinic receptors. Birdsall NJ, et al. **Prog Brain Res** 1996;109:147–51 (17 ref.)

Molecular aspects of muscarinic receptor assembly and function. Wess J, et al. **Prog Brain Res** 1996;109:153–62 (45 ref.)

Role of two highly conserved tyrosine residues in the m1 muscarinic receptor second transmembrane domain in ligand binding and receptor function. Lee SY, et al. **Recept Signal Transduct** 1996;6(1):43–52

CLASSIFICATION

Characterization of the muscarinic receptor subtype(s) mediating contraction of the guinea-pig lung strip and inhibition of acetylcholine release in the guinea-pig trachea with the selective muscarinic receptor antagonist tripitramine. Roffel AF, et al. **Br J Pharmacol** 1997 Sep; 122(1):133–41

Identification of muscarinic receptor subtypes in RINm5F cells by means of polymerase chain reaction, subcloning, and DNA sequencing. Tang SH, et al. **Diabetes** 1997 Sep; 46(9):1419–23

Pharmacology of muscarinic acetylcholine receptor subtypes (m1–m5): high throughput assays in mammalian cells. Bräuner-Osborne H, et al. **Eur J Pharmacol** 1996 Jan 4; 295(1):93–102

Pharmacologic characterization of muscarine receptor subtypes in rat gastric fundus mediating contractile responses. Milovanović DR, et al. **Indian J Med Res** 1997 May;105:239–45

Pharmacological characterization of the muscarinic receptor subtypes responsible for the contractile response in the rat urinary bladder. Tong YC, et al. **J Auton Pharmacol** 1997 Feb;17(1):21–5

The M5 (m5) receptor subtype: fact or fiction? Reever CM, et al. **Life Sci** 1997;60(13–14):1105–12 (20 ref.)

Muscarinic receptor subtypes and smooth muscle function. Eglen RM, et al. **Pharmacol Rev** 1996 Dec;48(4):531–65 (482 ref.)

DRUG EFFECTS

Assessment of receptor reserve during cholinergically induced intestinal secretion in rat jejunum in vitro. Przyborski SA, et al. **Acta Physiol Scand** 1996 Dec; 158(4):377–9

Acetylcholine elevates intracellular Ca2+ via muscarinic and nicotinic receptors in rat carotid body type I cells. Dasso LL, et al. **Adv Exp Med Biol** 1996;410:239–44

Long-term effects of chronic ethanol on muscarinic receptor binding in rat brain. Rothberg BS, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1613–7

Acetylcholine via muscarinic receptors inhibits histamine release from human isolated bronchi. Reinheimer T, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):389–95

Ipratropium decreases airway size in dogs by preferential M2 muscarinic receptor blockade in vivo. Groeben H, et al. **Anesthesiology** 1996 Oct;85(4):867–73

Halothane and isoflurane differentially affect the regulation of dopamine and gamma-aminobutyric acid release mediated by presynaptic acetylcholine receptors in the rat striatum. Salord F, et al. **Anesthesiology** 1997 Mar; 86(3):632–41

Strain-dependent effects of D2 dopaminergic and muscarinic-cholinergic agonists and antagonists on memory consolidation processes in mice. Gasbarri A, et al. **Behav Brain Res** 1997 Jun;86(1):97–104

Inhibition of M3 muscarinic acetylcholine receptor-mediated Ca2+ influx and intracellular Ca2+ mobilization in neuroblastoma cells by the Ca2+/calmodulin-dependent protein kinase inhibitor 1-[N,O-bis(5-isoquinolinesulfonyl)-N-methyl-L-trosyl]-4-phenylpiperazin e (KN-62). Puhl HL, et al. **Biochem Pharmacol** 1997 Apr 25;53(8):1107–14

Antagonist inhibition curves and the measurement of dissociation constants. Barlow RB, et al. **Br J Pharmacol** 1997 Jan;120(1):13–8

Indirect muscarinic receptor activation by pentamidine on airway smooth muscle. Biyah K, et al. **Br J Pharmacol** 1996 Nov;119(6):1131–6

Endogenous Alzheimer's brain factor and oxidized glutathione inhibit antagonist binding to the muscarinic receptor. Frey WH 2nd, et al. **Brain Res** 1996 Apr 1; 714(1–2):87–94

Facilitatory role of somatostatin via muscarinic cholinergic system in the generation of long-term potentiation in the rat dentate gyrus in vivo. Nakata A, et al. **Brain Res** 1996 Jun 3;723(1–2):135–40

Antagonists have a greater selectivity for muscarinic receptor subtypes in intact cerebellar granule cells than in membranes. Saunders PA, et al. **Brain Res** 1996 Mar 25; 713(1–2):29–35

Biphasic effect of tacrine on acetylcholine release in rat brain via M1 and M2 receptors. Svensson AL, et al. **Brain Res** 1996 Jul 8;726(1–2):207–12

Effects of ethanol on muscarinic receptor-stimulated c-fos expression in human neuroblastoma cells. Ding WQ, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):77–84

Neuritogenesis, not receptor expression, of NG108-15 cells can be modulated by monosialoganglioside GM1. Hwang HM, et al. **Chin J Physiol** 1996;39(4):211–7

Possible involvement of muscarinic M1 and M3 receptor subtypes mediating vasodilation in isolated, perfused canine lingual arteries. Chiba S, et al. **Clin Exp Pharmacol Physiol** 1996 Sep;23(9):839–43

Imaging of nicotinic and muscarinic receptors in Alzheimer's disease: effect of tacrine treatment. Nordberg A, et al. **Dement Geriatr Cogn Disord** 1997 Mar-Apr;8(2):78–84

Dual effects of extracellular ATP on the muscarinic acetylcholine receptor-operated K+ current in guinea-pig atrial cells. Hara Y, et al. **Eur J Pharmacol** 1997 Apr 18; 324(2–3):295–303

Interactions of agonists with an allosteric antagonist at muscarinic acetylcholine M2 receptors [published erratum appears in Eur J Pharmacol 1997 Mar 5;321(3):399] Lanzafame A, et al. **Eur J Pharmacol** 1996 Nov 28; 316(1):27–32

Pharmacological characterization and distribution of muscarinic receptors in human placental syncytiotrophoblast brush-border and basal plasma membranes. Pavía J, et al. **Eur J Pharmacol** 1997 Feb 12; 320(2–3):209–14

Selective enhancement of antagonist ligand binding at muscarinic M2 receptors by heparin due to receptor uncoupling. Wang SZ, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):113–8

Muscarinic m4 receptor activation by some atypical antipsychotic drugs. Zeng XP, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):349–54

Activation of muscarinic receptors modulates NMDA receptor-mediated responses in auditory cortex. Aramakis VB, et al. **Exp Brain Res** 1997 Mar;113(3):484–96

Muscarinic receptors and insulin concentration in the rat pancreas after chronic alcohol intake and cholinergic stimulation. Laine VJ, et al. **Exp Toxicol Pathol** 1996 Jan; 48(1):77–9

NG-nitro-L-arginine methyl-ester: a muscarinic receptor antagonist? Hellmich B, et al. **Fundam Clin Pharmacol** 1997; 11(4):305–14

Glucocorticoid modulation of muscarinic and beta-adrenergic receptors in guinea pig lung. Scherrer D, et al. **Fundam Clin Pharmacol** 1997;11(2):111–6

Prejunctional regulation by endogenous and exogenous acetylcholine of adrenergic nerve function in isolated canine mesenteric arteries. Zhang JX, et al. **Hypertens Res** 1997 Jun;20(2):119–25

Effects of central muscarinic-1 receptor stimulation on blood pressure regulation. Medina A, et al. **Hypertension** 1997 Mar;29(3):828–34

Induction of ileum muscarinic cholinoceptor signal transduction pathways by rat interferon-gamma. Sterin-Borda L, et al. **Int J Immunopharmacol** 1996 Jan; 18(1):17–22

Muscarinic receptor subtypes in the submandibular gland and the urinary bladder of the rabbit: in vivo and in vitro functional comparisons of receptor antagonists. Tobin G.

J Auton Pharmacol 1995 Dec;15(6):451–63

Pharmacological characterization of the muscarinic receptors mediating contraction of canine saphenous vein. Watson N, et al. **J Auton Pharmacol** 1995 Dec;15(6):437–41

Loss of acetylcholine-induced relaxation by M3-receptor activation in mesenteric arteries of spontaneously hypertensive rats. Wu CC, et al. **J Cardiovasc Pharmacol** 1997 Aug;30(2):245–52

Conformational analysis, molecular shape comparison, and pharmacophore identification of different allosteric modulators of muscarinic receptors. Holzgrabe U, et al. **J Chem Inf Comput Sci** 1996 Sep–Oct;36(5):1018–24

Inhibition of muscarinic receptor-stimulated glial cell proliferation by ethanol. Guizzetti M, et al. **J Neurochem** 1996 Dec;67(6):2236–45

Presynaptic depression of excitatory synaptic inputs to rat hypoglossal motoneurons by muscarinic M2 receptors. Bellingham MC, et al. **J Neurophysiol** 1996 Dec; 76(6):3758–70

Muscarine activates a nonselective cation current through a M3 muscarinic receptor subtype in rat dorsolateral septal nucleus neurons. Hasuo H, et al. **J Neurophysiol** 1996 Oct; 76(4):2221–30

Distinct muscarinic receptor subtypes suppress excitatory and inhibitory synaptic responses in cortical neurons. Kimura F, et al. **J Neurophysiol** 1997 Feb;77(2):709–16

The sources of Ca2+ for muscarinic receptor-induced contraction in the rat ileum. Elorriaga M, et al. **J Pharm Pharmacol** 1996 Aug;48(8):817–9

Antinociceptive profile of 3-alpha-tropanyl-(2-Cl)-acid phenoxybutyrate (SM-21): a novel analgesic with a presynaptic cholinergic mechanism of action. Ghelardini C, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):430–9

Three allosteric modulators act at a common site, distinct from that of competitive antagonists, at muscarinic acetylcholine M2 receptors. Lanzafame A, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):278–85

M1 receptor agonist activity is not a requirement for muscarinic antinociception. Sheardown MJ, et al. **J Pharmacol Exp Ther** 1997 May;281(2):868–75

Search for lead structures to develop new allosteric modulators of muscarinic receptors. Tränkle C, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):926–33

Differential muscarinic receptor binding of acetylcholinesterase inhibitors in rat brain, human brain and Chinese hamster ovary cells expressing human receptors. Van Den Beukel I, et al. **J Pharmacol Exp Ther** 1997 Jun; 281(3):1113–9

Inhibitory effect of amiodarone on the muscarinic acetylcholine receptor-operated potassium current in guinea pig atrial cells. Watanabe Y, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):617–24

Muscarinic and nicotinic receptors raise intracellular Ca2+ levels in rat carotid body type I cells. Dasso LL, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):327–38

Influence of oestrogens on muscarinic receptor density and contractile response in the guinea-pig uterus. Matucci R, et al. **J Reprod Fertil** 1996 Jul;107(2):153–60

Effects of bifemelane on muscarinic receptors and choline acetyltransferase in the brains of aged rats following chronic cerebral hypoperfusion induced by permanent occlusion of bilateral carotid arteries. Egashira T, et al. **Jpn J Pharmacol** 1996 Sep;72(1):57–65

Effects of ONO-2235, an aldose reductase inhibitor, on muscarinic receptors and contractile response of the urinary bladder in rats with streptozotocin-induced diabetes. Kanda M, et al. **Jpn J Pharmacol** 1997 Mar;73(3):221–8

Drug receptor mechanisms in smooth muscle: beta-chloroethylamine-sensitive and -resistant receptor mechanisms. Takayanagi I, et al. **Jpn J Pharmacol** 1997 Jan;73(1):1–22 (89 ref.)

Muscarinic receptor subtype selective toxins. Adem A, et al. **Life Sci** 1997;60(13–14):1069–76 (32 ref.)

Discovery & development of selective M3 antagonists for clinical use. Alabaster VA. **Life Sci** 1997;60(13–14):1053–60 (24 ref.)

Selective allosteric enhancement of the binding and actions of acetylcholine at muscarinic receptor subtypes. Birdsall NJ, et al. **Life Sci** 1997;60(13–14):1047–52 (29 ref.)

Interaction of ebeinone, an alkaloid from Fritillaria imperialis, at two muscarinic acetylcholine receptor subtypes. Gilani AH, et al. **Life Sci** 1997;60(8):535–44

Workshop: the use of muscarinic toxins in the study of muscarinic receptors. Jerusalinsky D, et al. **Life Sci** 1997; 60(13–14):1161–2

Muscarinic M1 receptor agonists increase the secretion of the amyloid precursor protein ectodomain. Müller DM, et al. **Life Sci** 1997;60(13–14):985–91

Effect of S-adenosyl methionine on muscarinic receptors in young rats. Pavia J, et al. **Life Sci** 1997;60(11):825–32

Molecular rigidity and potency of bispyridinium type allosteric modulators at muscarinic M2-receptors. Tränkle C, et al. **Life Sci** 1997;60(22):1995–2003

In vivo consequences of M1-receptor activation by talsaclidine. Walland A, et al. **Life Sci** 1997; 60(13–14):977–84

Regulatory effects of acutely repeated nicotine treatment towards central muscarinic receptors. Wang H, et al. **Life Sci** 1996;59(17):1415–21

Pharmacology of muscarinic receptor subtypes constitutively activated by G proteins. Burstein ES, et al. **Mol Pharmacol** 1997 Feb;51(2):312–9

The role of the aspartate-arginine-tyrosine triad in the m1 muscarinic receptor: mutations of aspartate 122 and tyrosine 124 decrease receptor expression but do not abolish signaling. Lu ZL, et al. **Mol Pharmacol** 1997 Feb; 51(2):234–41

Effects of volatile anesthetics on the G protein-regulated muscarinic potassium channel. Magyar J, et al. **Mol Pharmacol** 1996 Dec;50(6):1520–8

Divergent modes of action among cationic allosteric modulators of muscarinic M2 receptors. Tränkle C, et al. **Mol Pharmacol** 1997 Apr;51(4):674–82

Interaction of class III antiarrhythmic drugs with muscarinic M2 and M3 receptors: radioligand binding and functional studies. Uemura H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):73–9

Non-muscarinic- and non-adrenergic-mediated effects of lindane on phosphoinositide hydrolysis in rat brain cortex slices. Pajuelo L, et al. **Neurochem Res** 1997 Jan;22(1):57–62

Down-regulation of brain muscarinic cholinergic receptor promoted by diacylglycerols and phorbol ester. Pediconi MF, et al. **Neurochem Res** 1995 Oct;20(10):1225–31

Characterization of phospholipase D activation by muscarinic receptors in human neuroblastoma SH-SY5Y cells. Boyano-Adánez MC, et al. **Neuropharmacology** 1997 Mar; 36(3):295–304

Ketoprofen, a non-steroidal anti-inflammatory drug prevents the late-onset reduction of muscarinic receptors in gerbil hippocampus after transient forebrain ischemia. Asanuma M, et al. **Neurosci Lett** 1997 Apr 4;225(2):109–12

Muscarinic cholinergic receptor subtypes in human peripheral blood lymphocytes. Bronzetti E, et al. **Neurosci Lett** 1996 Apr 26;208(3):211–5

M3 muscarinic receptors mediate cholinergic excitation of the spontaneous activity of subthalamic neurons in the rat. Flores G, et al. **Neurosci Lett** 1996 Jan 26;203(3):203–6

Involvement of M2 receptor in an enhancement of long-term potentiation by carbachol in Schaffer collateral-CA1 synapses of hippocampal slices. Shimoshige Y, et al. **Neurosci Res** 1997 Feb;27(2):175–80

Circling behavior elicited by cholinergic transmission in the substantia nigra pars compacta: involvement of nicotinic and muscarinic receptors. Góngora-Alfaro JL, et al. **Neuroscience** 1996 Apr;71(3):729–34

Carbachol induces inward current in neostriatal neurons through M1-like muscarinic receptors. Hsu KS, et al. **Neuroscience** 1996 Aug;73(3):751–60

Basal forebrain and cerebral cortical muscarinic receptors mediate increase in cortical blood flow provoked by periaqueductal gray matter. Nakai M, et al. **Neuroscience** 1997 Jul;79(2):571–9

Interaction of mercury compounds with muscarinic receptor subtypes in the rat brain. Castoldi AF, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):735–41

Effects of organophosphate exposure on muscarinic acetylcholine receptor subtype mRNA levels in the adult rat. Yagle K, et al. **Neurotoxicology** 1996 Summer; 17(2):523–30

Activating the posttraumatic cholinergic system for the treatment of cognitive impairment following traumatic brain injury. Pike BR, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):785–91

Pharmacological characteristics of indoline derivatives in muscarinic receptor subtypes. Adachi S, et al. **Pharmacology** 1996 Oct;53(4):250–8

Cholinergic and GABAergic modulation of self-stimulation of lateral hypothalamus and ventral tegmentum: effects of carbachol, atropine, bicuculline, and picrotoxin. Singh J, et al. **Physiol Behav** 1997 Mar;61(3):411–8

Effect of L-alpha glycerylphosphorylcholine on muscarinic receptors and membrane microviscosity of aged rat brain. Muccioli G, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Feb; 20(2):323–39

Cocaine toxicity: concurrent influence of dopaminergic, muscarinic and sigma receptors in mediating cocaine-induced lethality. Ritz MC, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):311–21

Cocaine-induced convulsions: pharmacological antagonism at serotonergic, muscarinic and sigma receptors. Ritz MC, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):299–310

Evidence for an involvement of muscarinic cholinergic systems in the induction but not expression of behavioral sensitization to cocaine. Heidbreder CA, et al. **Synapse** 1996 Oct;24(2):182–92

Activation of muscarinic receptors stimulates GABA release in the rat globus pallidus. Kayadjanian N, et al. **Synapse** 1997 Jun;26(2):131–9

Characterization of muscarinic receptors in equine tracheal smooth muscle in vitro. van Nieuwstadt RA, et al. **Vet Q** 1997 Jun;19(2):54–7

[Comparative pharmacological analysis of M-cholinoreceptors in Daphnia and rats] Tonkopiĭ VD, et al. **Biull Eksp Biol Med** 1994 May;117(5):497–9 **(Rus)**

GENETICS

Molecular basis of receptor/G protein coupling selectivity studied by coexpression of wild type and mutant m2 muscarinic receptors with mutant G alpha(q) subunits. Kostenis E, et al. **Biochemistry** 1997 Feb 11;36(6):1487–95

Increased expression of M2 muscarinic receptor mRNA and binding sites in the rostral ventrolateral medulla of spontaneously hypertensive rats. Gattu M, et al. **Brain Res** 1997 May 9;756(1–2):125–32

Expression of m1 and m4 muscarinic receptor mRNA in the striatum following a selective lesion of striatonigral neurons. Harrison MB, et al. **Brain Res** 1996 Sep 23; 734(1–2):323–6

Is the M1-muscarinic receptor a candidate gene for hypertension in the spontaneously hypertensive rat? Klett CP, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S4–6

Midkine gene and the m4 muscarinic acid receptor gene are linked on mouse chromosome 2. Kha H, et al. **Genomics** 1996 Oct 15;37(2):242–4

Expression of the rat m4 muscarinic acetylcholine receptor gene is regulated by the neuron-restrictive silencer element/repressor element 1. Mieda M, et al. **J Biol Chem** 1997 Feb 28;272(9):5854–60

Structure of the m1 muscarinic acetylcholine receptor gene and its promoter. Pepitoni S, et al. **J Biol Chem** 1997 Jul 4;272(27):17112–7

Heteromultimerization of G-protein-gated inwardly rectifying K+ channel proteins GIRK1 and GIRK2 and their altered expression in weaver brain. Liao YJ, et al. **J Neurosci** 1996 Nov 15;16(22):7137–50

Expression of human M2 muscarinic receptors in Sf9 cells: characterisation and reconstitution with G-proteins. Heitz F, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):55–70

Alpha-adrenergic, neurokinin and muscarinic receptors in rat mesenteric artery; an mRNA study during postnatal development. Phillips JK, et al. **Mech Ageing Dev** 1996 Dec 20;92(2–3):235–46

Differential effects of butyrate and dibutyryl cAMP on mRNA levels of muscarinic acetylcholine receptor subtypes expressed in neurohybrid cell lines. Fukamauchi F, et al. **Neurosci Lett** 1996 Jul 5;212(1):49–52

Cerebral ischemia alters the regional hippocampal expression of the rat m1 muscarinic acetylcholine receptor gene. Hsu JC, et al. **Neurosci Lett** 1996 Nov 22;219(2):87–90

Preventive effects of bifemelane hydrochloride on decreased levels of muscarinic acetylcholine receptor and its mRNA in a rat model of chronic cerebral hypoperfusion. Kondo Y, et al. **Neurosci Res** 1996 Mar;24(4):409–14

Localization of a G-protein-coupled inwardly rectifying K+ channel, CIR, in the rat brain. Iizuka M, et al. **Neuroscience** 1997 Mar;77(1):1–13

Expression of human muscarinic cholinergic receptors in tobacco. Mu JH, et al. **Plant Mol Biol** 1997 May; 34(2):357–62

Isolation and characterization of the chicken m2 acetylcholine receptor promoter region: induction of gene transcription by leukemia inhibitory factor and ciliary neurotrophic factor. Rosoff ML, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14889–94

Agonist-induced internalization of human m1 muscarinic receptor mutants: immunofluorescence confocal microscopy. Arden J, et al. **Proc West Pharmacol Soc** 1996; 39:51–4

IMMUNOLOGY

Agonistic effects of anti-peptide antibodies and autoantibodies directed against adrenergic and cholinergic receptors: absence of desensitization. Wallukat G, et al. **Blood Press Suppl** 1996;3:31–6

Effects of anti-peptide antibodies against human M2 muscarinic receptors on the cAMP generating system in guinea pig ventricles. Wang WZ, et al. **Blood Press Suppl** 1996;3:22–4

Effects of anti-peptide antibodies against human M2 muscarinic receptors on cardiac function in rats in vivo. Wang WZ, et al. **Blood Press Suppl** 1996;3:25–7

Circulating antibodies against rat parotid gland M3 muscarinic receptors in primary Sjögren's syndrome. Bacman S, et al. **Clin Exp Immunol** 1996 Jun;104(3):454–9

Interaction of human chagasic IgG with the second extracellular loop of the human heart muscarinic acetylcholine receptor: functional and pathological implications. Goin JC, et al. **FASEB J** 1997 Jan;11(1):77–83

Desensitization and sequestration of human m2 muscarinic acetylcholine receptors by autoantibodies from patients with Chagas' disease. Leiros CP, et al. **J Biol Chem** 1997 May 16;272(20):12989–93

Antibody to VLA-4, but not to L-selectin, protects neuronal M2 muscarinic receptors in antigen-challenged guinea pig airways. Fryer AD, et al. **J Clin Invest** 1997 Apr 15; 99(8):2036–44

Structural and functional analysis of the B cell epitopes recognized by anti-receptor autoantibodies in patients with Chagas' disease. Elies R, et al. **J Immunol** 1996 Nov 1; 157(9):4203–11

Peptides derived from cardiovascular G-protein-coupled receptors induce morphological cardiomyopathic changes in immunized rabbits. Matsui S, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):641–55

Circulating antibodies against neonatal cardiac muscarinic acetylcholine receptor in patients with Sjögren's syndrome. Borda E, et al. **Mol Cell Biochem** 1996 Oct–Nov; 163–164:335–41

Characterization of anti-heart M2 muscarinic receptor antibodies--a combined clinical and experimental study. Fu ML. **Mol Cell Biochem** 1996 Oct–Nov;163–164:343–7 (33 ref.)

Effects of anti-peptide antibodies against the second

extracellular loop of human M2 muscarinic acetylcholine receptors on transmembrane potentials and currents in guinea pig ventricular myocytes. Zhao R, et al. **Mol Cell Biochem** 1996 Oct-Nov;163-164:185-93

ISOLATION & PURIFICATION

Effect of purification followed by solubilization of receptor material on quantitative receptor assays for anticholinergic drugs. Smisterová J, et al. **J Pharm Biomed Anal** 1996 Aug; 14(11):1425-33

METABOLISM

Muscarinic acetylcholine receptors on human lymphocytes in patients with Menière's disease. Masuyama K, et al. **Acta Otolaryngol (Stockh)** 1996 May;116(3):369-73

Muscarinic receptor-stimulated expression of c-fos in neuroblastoma cells. Alling C, et al. **Alcohol Alcohol Suppl** 1994;2:103-8

Long-term effects of chronic ethanol on muscarinic receptor binding in rat brain. Rothberg BS, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1613-7

Location and quantification of muscarinic receptor subtypes in rat pons: implications for REM sleep generation. Baghdoyan HA. **Am J Physiol** 1997 Sep;273(3 Pt 2):R896-904

Adrenergic, dopaminergic, and muscarinic receptor stimulation leads to PKA phosphorylation of Na-K-ATPase. Beguin P, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 1):C131-7

Glucocorticoid treatment decreases muscarinic receptor expression in canine airway smooth muscle. Emala CW, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L745-51

Muscarinic receptor reserve for inhibition of cAMP accumulation in bovine trachealis cells. Ethier MF, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):L199-207

Agonist potency ratios at m1 and m3 muscarinic receptors expressed in A9L and CHO cells. Richards MH. **Ann N Y Acad Sci** 1997 May 30;812:165

M3 receptor mobilizes intracellular calcium in rat stomach fundus. Smaili SS, et al. **Ann N Y Acad Sci** 1997 May 30; 812:200-2

ERK activation and cellular proliferation in response to muscarinic acetylcholine receptor agonists. Wang P, et al. **Ann N Y Acad Sci** 1997 May 30;812:182-3

Effects of protein-energy malnutrition on muscarinic receptor density and acetylcholinesterase activity in rat brain. Viana GS, et al. **Ann Nutr Metab** 1997;41(1):52-9

Palmitoylation of muscarinic acetylcholine receptor m2 subtypes: reduction in their ability to activate G proteins by mutation of a putative palmitoylation site, cysteine 457, in the carboxyl-terminal tail. Hayashi MK, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):376-82

Muscarinic signalling in submandibular salivary acinar cells of ageing rats. Seagrave J, et al. **Arch Oral Biol** 1996 May; 41(5):425-30

Analogues of carbacholine: synthesis and relationship between structure and affinity for muscarinic and nicotinic acetylcholine receptors. Søkilde B, et al. **Arch Pharm (Weinheim)** 1996 Feb;329(2):95-104

Cytosolic phospholipase A2 is coupled to muscarinic receptors in the human astrocytoma cell line 1321N1: characterization of the transducing mechanism. Bayon Y, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):281-7

Covalent labeling of muscarinic acetylcholine receptors by tritiated aryldiazonium photoprobes [published erratum appears in Biochem Pharmacol 1997 Jun 15;53(12):1945] Autelitano F, et al. **Biochem Pharmacol** 1997 Feb 21; 53(4):501-10

Kinetic studies of co-operativity at atrial muscarinic M2 receptors with an "infinite dilution" procedure [published erratum appears in Biochem Pharmacol 1997 Jun 15;53(12):1946] Christopoulos A, et al. **Biochem Pharmacol** 1997 Mar 21;53(6):795-800

Allosteric regulation of the binding of [3H]acetylcholine to m2 muscarinic receptors. Gnagey A, et al. **Biochem Pharmacol** 1996 Dec 13;52(11):1767-75

Differential regulation of expression of rat hippocampal muscarinic receptor subtypes following fimbria-fornix lesion. Zang Z, et al. **Biochem Pharmacol** 1997 May 9; 53(9):1379-82

Cardiac muscarinic receptors. Cooperativity as the basis for multiple states of affinity. Chidiac P, et al. **Biochemistry** 1997 Jun 17;36(24):7361-79

Cardiac muscarinic receptors. Relationship between the G protein and multiple states of affinity. Green MA, et al. **Biochemistry** 1997 Jun 17;36(24):7380-94

Constitutive activation of the m5 muscarinic receptor by a series of mutations at the extracellular end of transmembrane 6. Spalding TA, et al. **Biochemistry** 1997 Aug 19;36(33):10109-16

Assessment of antihistaminic and antimuscarinic effects of optical isomers of ephedrine and methylephedrine by receptor binding assay in guinea pig ileal muscle. Kawasuji T, et al. **Biol Pharm Bull** 1996 Oct;19(10):1307-10

Activation of porcine oocytes via an exogenously introduced rat muscarinic M1 receptor. Macháty Z, et al. **Biol Reprod** 1997 Jul;57(1):85-91

Synthesis and structure-activity relationship studies in a series of 2-substituted 1,3-dioxolanes modified at the cationic head. Angeli P, et al. **Bioorg Med Chem** 1997 Apr; 5(4):731-7

Synthesis and biochemical activity of novel amidine derivatives as m1 muscarinic receptor agonists. Ojo B, et al. **Bioorg Med Chem** 1996 Oct;4(10):1605-15

Muscarinic thioligands with cyclopentane nucleus. Piergentili A, et al. **Bioorg Med Chem** 1996 Dec;4(12):2193-9

Inhibition of muscarinic K+ current in guinea-pig atrial myocytes by PD 81,723, an allosteric enhancer of adenosine binding to A1 receptors. Brandts B, et al. **Br J Pharmacol** 1997 Jul;121(6):1217-23

Influence of monovalent cations on the binding of a charged and an uncharged ('carbo'-)muscarinic antagonist to muscarinic receptors. Hou X, et al. **Br J Pharmacol** 1996 Mar;117(5):955-61

M1 and M3 muscarinic receptors in human pulmonary arteries. Norel X, et al. **Br J Pharmacol** 1996 Sep; 119(1):149-57

Stereoselective recognition of the enantiomers of phenglutarimide and of six related compounds by four muscarinic receptor subtypes. Waelbroeck M, et al. **Br J Pharmacol** 1996 Dec;119(7):1319-30

Prothoracicotropic hormone-producing neurosecretory cells in the silkworm, Bombyx mori, express a muscarinic acetylcholine receptor. Aizono Y, et al. **Brain Res** 1997 Jul 18;763(1):131-6

Downregulation of muscarinic- and 5-HT1B-mediated modulation of [3H]acetylcholine release in hippocampal slices of rats with fimbria-fornix lesions and intrahippocampal grafts of septal origin. Cassel JC, et al. **Brain Res** 1995 Dec 18;704(2):153-66

Permanent alteration of muscarinic acetylcholine receptor binding in rat striatum after circling training during development. Ibarra GR, et al. **Brain Res** 1995 Dec 24; 705(1-2):39-44

In vitro electro-pharmacological and autoradiographic analyses of muscarinic receptor subtypes in rat hypothalamic ventromedial nucleus: implications for cholinergic regulation of lordosis. Kow LM, et al. **Brain Res** 1995 Oct 2;694(1-2):29-39

Relationship between cholinergic dysfunction and discrimination learning disabilities in Wistar rats following chronic cerebral hypoperfusion. Tanaka K, et al. **Brain Res** 1996 Aug 5;729(1):55-65

Heme from Alzheimer's brain inhibits muscarinic receptor binding via thiyl radical generation. Venters HD Jr, et al. **Brain Res** 1997 Aug 1;764(1-2):93-100

Motor activity and quantitative autoradiographic analysis of muscarinic receptors in the brain of rats subjected to the forced swimming test. Carrizo E, et al. **Brain Res Bull** 1997; 42(2):133-9

Differential effects of the M1-M5 muscarinic acetylcholine receptor subtypes on intracellular calcium and on the incorporation of choline into membrane lipids in genetically modified Chinese hamster ovary cell lines. Doležal V, et al. **Brain Res Bull** 1997;42(1):71-8

Nicotinic and muscarinic cholinergic receptor binding in the human hippocampal formation during development and aging. Court JA, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1-2):93-105

Distribution of muscarinic receptor subtypes in rat brain from postnatal to old age. Tice MA, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):70-6

Activation of NMDA and muscarinic receptors induces nur-77 mRNA in hippocampal neurons. Dragunow M, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):349-56

Regulation of IRK3 inward rectifier K+ channel by m1 acetylcholine receptor and intracellular magnesium. Chuang H, et al. **Cell** 1997 Jun 27;89(7):1121-32

Receptor-dependent G protein-mediated Ca2+ sensitization in canine airway smooth muscle. Iizuka K, et al. **Cell Calcium** 1997 Jul;22(1):21-30

Characteristics of cytosolic Ca2+ elevation induced by muscarinic receptor activation in single adrenal chromaffin cells of the guinea pig. Ohta T, et al. **Cell Calcium** 1996 Sep;20(3):303-14

Negative regulation of MAP kinase by diacylglycerol-dependent mechanisms via G protein-coupled receptors in rat basophilic RBL-2H3 (ml) cells. Hirasawa N, et al. **Cell Signal** 1997 May-Jun; 9(3-4):319-22

Synthesis of novel succinamide derivatives having the 5,11-dihydro-6H-pyrido[2,3-b][1,4]benzodiazepin-6-one skeleton as potent and selective M2 muscarinic receptor antagonists. I. Watanabe T, et al. **Chem Pharm Bull (Tokyo)** 1997 Jun;45(6):996-1007

Molecular and functional identification of m1 muscarinic acetylcholine receptors in rat ventricular myocytes. Sharma VK, et al. **Circ Res** 1996 Jul;79(1):86-93

Physiological and biochemical evidence for coordinate increases in muscarinic receptors and Gi during pacing-induced heart failure. Vatner DE, et al. **Circulation** 1996 Jul 1;94(1):102-7

Lymphocyte muscarinic cholinergic activity and PGE2 involvement in experimental Trypanosoma cruzi infection. Sterin-Borda L, et al. **Clin Immunol Immunopathol** 1996 Nov;81(2):122-8

Interaction of metals with muscarinic cholinoceptor and adrenoceptor binding, and agonist-stimulated inositol phospholipid hydrolysis in rat brain. Rajanna B, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Feb;116(2):111-6

Molecular biology of muscarinic acetylcholine receptors. Wess J. **Crit Rev Neurobiol** 1996;10(1):69-99 (196 ref.)

Expression of muscarinic receptor subtypes in rat gastric smooth muscle: effect of M3 selective antagonist on gastric motility and emptying. Lin S, et al. **Dig Dis Sci** 1997 May; 42(5):907-14

A novel membrane receptor with high affinity for lysosphingomyelin and sphingosine 1-phosphate in atrial myocytes. Bünemann M, et al. **EMBO J** 1996 Oct 15; 15(20):5527-34

The m1 muscarinic acetylcholine receptor transactivates the EGF receptor to modulate ion channel activity. Tsai W, et al. **EMBO J** 1997 Aug 1;16(15):4597-605

Evidence for a multiple binding mode of bispyridinium-type allosteric modulators of muscarinic receptors. Kostenis E, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):385-92

Opposite effects of alcuronium on agonist and on antagonist binding to muscarinic receptors. Maass A, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):231-4

Characterisation of muscarinic autoreceptors in the septo-hippocampal system of the rat: a microdialysis study. Moor E, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):155-61

Pharmacological characterization and distribution of muscarinic receptors in human placental syncytiotrophoblast brush-border and basal plasma membranes. Pavía J, et al. **Eur J Pharmacol** 1997 Feb 12; 320(2-3):209-14

New methods for determining dissociation constants of agonist-receptor complexes. Venter DP. **Eur J Pharmacol** 1996 May 15;303(3):235-46

Stereoselective interaction of uncharged esters at four muscarinic receptor subtypes. Waelbroeck M, et al. **Eur J Pharmacol** 1996 May 15;303(3):221-6

Binding of the labelled muscarinic toxin 125I-MT1 to rat brain muscarinic M1 receptors. Waelbroeck M, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):187-92

Muscarinic receptors in developing rat colon. Zhang L. **Eur J Pharmacol** 1996 May 23;304(1-3):211-9

Synergistic increase in Ca2+ produced by A1 adenosine and muscarinic receptor activation via a pertussis-toxin-sensitive pathway in epithelial cells of the rabbit ciliary body. Farahbakhsh NA, et al. **Exp Eye Res** 1997 Feb;64(2):173-9

Muscarinic acetylcholine receptor stimulation of biliary epithelial cells and its effect on bile secretion in the isolated perfused liver [corrected] [published erratum appears in Hepatology 1997 Aug;26(2):516] Elsing C, et al. **Hepatology** 1997 Apr;25(4):804-13

Cardiac muscarinic receptor function in rats with cirrhotic cardiomyopathy. Jaue DN, et al. **Hepatology** 1997 Jun; 25(6):1361-5

Axotomy-induced loss of m2 muscarinic receptor mRNA in the rat facial motor nucleus precedes a decrease in concentration of muscarinic receptors. Hoover DB, et al. **Histochem J** 1996 Nov;28(11):771-8

Characterization of muscarinic binding sites in the central nervous system of larval Manduca sexta. Qazi S, et al. **Insect Biochem Mol Biol** 1996 Jul;26(7):721-32

Antiadrenergic and muscarinic receptor antibodies in Chagas' cardiomyopathy. Borda ES, et al. **Int J Cardiol** 1996 May; 54(2):149-56 (38 ref.)

Anti-M2 muscarinic receptor autoantibodies and idiopathic dilated cardiomyopathy. Fu ML. **Int J Cardiol** 1996 May; 54(2):127-35 (57 ref.)

Muscarinic and purinergic Ca2+ mobilizations in the neural retina of early embryonic chick. Sakaki Y, et al. **Int J Dev Neurosci** 1996 Oct;14(6):691-9

Variation in mRNA expression of alpha-adrenergic, neurokinin and muscarinic receptors amongst four arteries of the rat. Phillips JK, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1-2):85-93

Purification and functional reconstitution with GTP-binding regulatory proteins of hexahistidine-tagged muscarinic acetylcholine receptors (m2 subtype). Hayashi MK, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1232-8

Dynamic targeting of the agonist-stimulated m2 muscarinic acetylcholine receptor to caveolae in cardiac myocytes. Feron O, et al. **J Biol Chem** 1997 Jul 11;272(28):17744-8

Genetic analysis of receptor-Galphaq coupling selectivity. Kostenis E, et al. **J Biol Chem** 1997 Sep 19; 272(38):23675-81

Differential coupling of muscarinic m2 and m3 receptors to adenylyl cyclases V/VI in smooth muscle. Concurrent M2-mediated inhibition via Galphai3 and m3-mediated stimulation via Gbetagammaq. Murthy KS, et al. **J Biol Chem** 1997 Aug 22;272(34):21317-24

Internalization of the m2 muscarinic acetylcholine receptor. Arrestin-independent and -dependent pathways. Pals-Rylaarsdam R, et al. **J Biol Chem** 1997 Sep 19; 272(38):23682-9

Synergistic regulation of m2 muscarinic acetylcholine receptor desensitization and sequestration by G protein-coupled receptor kinase-2 and beta-arrestin-1. Schlador ML, et al. **J Biol Chem** 1997 Jul 25; 272(30):18882-90

Stimulus-dependent phosphorylation of G-protein-coupled receptors by casein kinase 1alpha. Tobin AB, et al. **J Biol Chem** 1997 Aug 15;272(33):20844-9

Interaction of arrestins with intracellular domains of muscarinic and alpha2-adrenergic receptors. Wu G, et al. **J Biol Chem** 1997 Jul 11;272(28):17836-42

Glucagon facilitates adrenal catecholamine release mediated by nicotinic receptors but not by muscarinic receptors in anesthetized dogs. Koshika T, et al.

J Cardiovasc Pharmacol 1996 Oct;28(4):585-90
Kinetic evaluation of positron-emitting muscarinic receptor ligands employing direct intracarotid injection. Buck A, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1280-7
Muscarinic receptor modulation of basal and beta-adrenergic stimulated function of the failing human left ventricle. Newton GE, et al. **J Clin Invest** 1996 Dec 15; 98(12):2756-63
Muscarinic acetylcholine receptor immunoreactivity after hippocampal commissural/associational pathway lesions: evidence for multiple presynaptic receptor subtypes. Rouse ST, et al. **J Comp Neurol** 1997 Apr 14;380(3):382-94
Effector contributions to G beta gamma-mediated signaling as revealed by muscarinic potassium channel gating. Ivanova-Nikolova TT, et al. **J Gen Physiol** 1997 Feb; 109(2):245-53
Receptor-mediated phosphoinositide metabolism in peripheral nerve and cultured Schwann cells. Eichberg J, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):187-95 (26 ref.)
Regulation of phospholipase D activity in neuroblastoma cells. Gustavsson L, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):229-35
Inositol trisphosphate/Ca2+ as messengers of bradykinin B2 and muscarinic acetylcholine m1-m4 receptors in neuroblastoma-derived hybrid cells. Noda M, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):175-85 (44 ref.)
Acute regulation of the receptor-mediated phosphoinositide signal transduction pathway. Willars GB, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):157-68 (35 ref.)
Synthesis and biological characterization of 1,4,5,6-tetrahydropyrimidine and 2-amino-3,4,5,6-tetrahydropyridine derivatives as selective m1 agonists. Messer WS Jr, et al. **J Med Chem** 1997 Apr 11;40(8):1230-46
Activation of inwardly rectifying potassium channels by muscarinic receptor-linked G protein in isolated human ventricular myocytes. Koumi S, et al. **J Membr Biol** 1997 May 1;157(1):71-81
Membrane stretch augments the cardiac muscarinic K+ channel activity. Pleumsamran A, et al. **J Membr Biol** 1995 Dec;148(3):287-97
Stimulation of guanosine 5'-O-(3-[35S] thiotriphosphate) binding by cholinergic muscarinic receptors in membranes of rat olfactory bulb. Olianas MC, et al. **J Neurochem** 1996 Dec;67(6):2549-56
Residues specifically involved in down-regulation but not internalization of the m1 muscarinic acetylcholine receptor. Shockley MS, et al. **J Neurochem** 1997 Feb;68(2):601-9
Agonist-induced endocytosis of muscarinic cholinergic receptors: relationship to stimulated phosphoinositide turnover. Sorensen SD, et al. **J Neurochem** 1997 Apr; 68(4):1473-83
Muscarinic cholinergic receptor subtypes in the pigeon bursa of Fabricius: a radioligand binding and autoradiographic study. Ricci A, et al. **J Neuroimmunol** 1996 May; 66(1-2):23-8
Alteration of muscarinic acetylcholine receptors in rabies viral-infected dog brains. Dumrongphol H, et al. **J Neurol Sci** 1996 Apr;137(1):1-6
Human meningiomas possess muscarinic acetylcholine receptors: stimulation of phosphatidylinositol turnover by carbachol. Adams EF, et al. **J Neurooncol** 1997 Mar; 32(1):1-6
The nitric oxide/cGMP pathway couples muscarinic receptors to the activation of Ca2+ influx. Mathes C, et al. **J Neurosci** 1996 Mar 1;16(5):1702-9
Depletion of choline acetyltransferase activity but preservation of M1 and M2 muscarinic receptor binding sites in temporal cortex following head injury: a preliminary human postmortem study. Dewar D, et al. **J Neurotrauma** 1996 Apr;13(4):181-7
Characterization of the muscarinic receptor subtypes in the bovine corneal epithelial cells. Socci RR, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):259-69
Anticholinergic activity in mice and receptor-binding properties in rats of a series of synthetic tropane derivatives. Gao ZG, et al. **J Pharm Pharmacol** 1997 Mar;49(3):315-8
The interaction of the enantiomers of aceclidine with subtypes of the muscarinic receptor. Ehlert FJ, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1335-44
In vivo downregulation of M2 receptors revealed by measurement of muscarinic K+ current in cultured guinea-pig atrial myocytes. Bünemann M, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):549-54
Role of L- and N-type Ca2+ channels in muscarinic receptor-mediated facilitation of ACh and noradrenaline release in the rat urinary bladder. Somogyi GT, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):645-54
Expression of functional human muscarinic M2 receptors in different insect cell lines. Heitz F, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):305-17
Characterisation of [3H]-darifenacin as a novel radioligand for the study of muscarinic M3 receptors. Smith CM, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):177-84
M2-muscarinic receptors: how does ligand binding affinity relate to intrinsic activity? Van Gelderen JG, et al. **J Recept Signal Transduct Res** 1996 Jan-Mar; 16(1-2):135-48
Muscarinic acetylcholine receptors on rat thymocytes: their possible involvement in DNA fragmentation. Yamada T, et al. **Jpn J Pharmacol** 1997 Apr;73(4):311-6
Impairment of muscarinic stimulation of adenylyl cyclase by heparin in rat olfactory bulb. Olianas MC, et al. **Life Sci** 1997;61(5):515-22
Muscarinic receptors in Alzheimer's disease. Pavía J, et al. **Methods Find Exp Clin Pharmacol** 1996;18 Suppl B:71-5
Use of random-saturation mutagenesis to study receptor-G protein coupling. Burstein ES, et al. **Methods Mol Biol** 1997;83:143-57 (18 ref.)
Protocols employed in the investigation of G protein-coupled receptor phosphorylation. Tobin AB. **Methods Mol Biol** 1997;83:227-34
Antibodies from Trypanosoma cruzi infected mice recognize the second extracellular loop of the beta 1-adrenergic and M2-muscarinic receptors and regulate calcium channels in isolated cardiomyocytes. Mijares A, et al. **Mol Cell Biochem** 1996 Oct-Nov;163-164:107-12
Positive cooperativity of acetylcholine and other agonists with allosteric ligands on muscarinic acetylcholine receptors. Jakubík J, et al. **Mol Pharmacol** 1997 Jul; 52(1):172-9
Divergent modes of action among cationic allosteric modulators of muscarinic M2 receptors. Tränkle C, et al. **Mol Pharmacol** 1997 Apr;51(4):674-82
The density of muscarinic M1 receptors is decreased in the caudate-putamen of subjects with schizophrenia [see comments] Dean B, et al. **Mol Psychiatry** 1996 Mar; 1(1):54-8. Comment in: Mol Psychiatry 1996 Nov;1(5):364-6.
Muscarinic M1 receptors in schizophrenia [letter; comment] Reynolds GP. **Mol Psychiatry** 1996 Nov;1(5):364-6. Comment on: Mol Psychiatry 1996 Mar;1(1):54-8.
Phospholipase C isozymes selectively couple to specific neurotransmitter receptors. Kim D, et al. **Nature** 1997 Sep 18;389(6648):290-3
Phosphorylation-dependent activation of the Ras-GRF/CDC25Mm exchange factor by muscarinic receptors and G-protein beta gamma subunits. Mattingly RR, et al. **Nature** 1996 Jul 18;382(6588):268-72
A1 adenosine receptors and muscarinic cholinoceptors in myocardial ischemia. Ungerer M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jun; 354(1):44-52
Muscarinic acetylcholine receptor trafficking in streptolysin O-permeabilized MDCK cells. Vogt S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):128-35
Chronic administration of Oren-gedoku-to (TJ15) inhibits ischemia-induced changes in brain indoleamine metabolism and muscarinic receptor binding in the Mongolian gerbil. Kabuto H, et al. **Neurochem Res** 1997 Jan;22(1):33-6
Acetylcholine receptor targets on cortical pyramidal neurones as targets for Alzheimer's therapy. Chessell JP. **Neurodegeneration** 1996 Dec;5(4):453-9
Pontine acetylcholine release is regulated by muscarinic autoreceptors. Roth MT, et al. **Neuroreport** 1996 Nov 25; 7(18):3069-72
Carbachol stimulates inositol phosphate formation in rat thalamus slices through muscarinic M3-receptor activation. de la Vega MT, et al. **Neurosci Lett** 1996 Jul 26; 213(1):29-32
Differential selectivity of M1 and M3 type muscarinic acetylcholine receptors in coupling with a G protein G01 alpha examined in Xenopus oocytes. Fujii K, et al. **Neurosci Lett** 1996 Sep 6;215(2):131-3
Nicotinic receptors, muscarinic receptors and choline acetyltransferase activity in the temporal cortex of Alzheimer patients with differing apolipoprotein E genotypes. Svensson AL, et al. **Neurosci Lett** 1997 Aug 22;232(1):37-40
Immunocytochemical localization of muscarinic m2 receptor in the rat spinal cord. Yung KK, et al. **Neurosci Lett** 1997 Jun 27;229(2):81-4
Autoradiographic localization of functional muscarinic receptors in the rat superior cervical sympathetic ganglion reveals an extensive distribution over non-synaptic surfaces of neuronal somata, dendrites and nerve endings. Ramcharan EJ, et al. **Neuroscience** 1996 Apr;71(3):797-832
Cholinergic denervation and sympathetic ingrowth result in persistent changes in hippocampal muscarinic receptors. Roberson MR, et al. **Neuroscience** 1997 Sep;80(2):413-8
Muscarinic acetylcholine receptor immunoreactivity in the amygdala--II. Fear-induced plasticity. Roozendaal B, et al. **Neuroscience** 1997 Jan;76(1):75-83
Muscarinic acetylcholine receptor immunoreactivity in the amygdala--I. Cellular distribution correlated with fear-induced behavior. van der Zee EA, et al. **Neuroscience** 1997 Jan;76(1):63-73
Autoradiographic evidence that (R)-3-quinuclidinyl (S)-4-fluoromethylbenzilate ((R,S)-FMeQNB) displays in vivo selectivity for the muscarinic m2 subtype. Boulay SF, et al. **Nucl Med Biol** 1996 Oct;23(7):889-96
Radiosynthesis of [123I]N-methyl-4-iododexetimide and [123I]N-methyl-4-iodolevetimide: in vitro and in vivo characterisation of binding to muscarinic receptors in the rat heart. Kassiou M, et al. **Nucl Med Biol** 1996 Feb; 23(2):147-53
Novel technetium ligands with affinity for the muscarinic cholinergic receptor. Lever SZ, et al. **Nucl Med Biol** 1994 Feb;21(2):157-64
Central muscarinic cholinergic M1 and M2 receptor changes in congenital ornithine transcarbamylase deficiency. Ratnakumari L, et al. **Pediatr Res** 1996 Jul;40(1):25-8
The relationship of oral chlorpyrifos effects on behavior, cholinesterase inhibition, and muscarinic receptor density in rat. Nostrandt AC, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):15-23
[3H]tricyclopinate binding to brain muscarinic acetylcholine receptors: a comparison with [3H]quinuclidinyl benzilate. Gao ZG, et al. **Pharmacol Res** 1996 Apr-May; 33(4-5):283-9
Effects of a new cholinolytic drug of tropanes and its optical isomers on central muscarinic and nicotinic receptors. Gao ZG, et al. **Pharmacol Res** 1995 Sep;32(3):105-9
Interaction of the chiral forms of ketamine with opioid, phencyclidine, sigma and muscarinic receptors. Hustveit O, et al. **Pharmacol Toxicol** 1995 Dec;77(6):355-9
Differential coupling of m1, m3, and m5 muscarinic receptors to activation of neuronal nitric oxide synthase. Wang SZ, et al. **Pharmacology** 1996 Nov;53(5):271-80
The small GTP-binding protein Rho links G protein-coupled receptors and Galpha12 to the serum response element and to cellular transformation. Fromm C, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10098-103
G alpha(o) is necessary for muscarinic regulation of Ca2+ channels in mouse heart. Valenzuela D, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1727-32
Agonist-induced internalization of human m1 muscarinic receptor mutants: immunofluorescence confocal microscopy. Arden J, et al. **Proc West Pharmacol Soc** 1996; 39:51-4
Allosteric regulation of muscarinic receptors. Birdsall NJ, et al. **Prog Brain Res** 1996;109:147-51 (17 ref.)
3-Heteroarylquinuclidin-2-ene derivatives as muscarinic antagonists: synthesis, structure-activity relationships and molecular modelling. Nordvall G, et al. **Prog Brain Res** 1996;109:141-5
Role of two highly conserved tyrosine residues in the m1 muscarinic receptor second transmembrane domain in ligand binding and receptor function. Lee SY, et al. **Recept Signal Transduct** 1996;6(1):43-52
In vivo autoradiographic competition studies of isomers of [125I]IQNP against QNB demonstrating in vivo m2 muscarinic subtype selectivity for QNB. Zeeberg BR, et al. **Recept Signal Transduct** 1997;7(1):45-54
Comparison of the in vivo rat brain regional pharmacokinetics of [3H]QNB, (R,S)-[125I]-4IQNB, and (R,R)-[125I]-4IQNB binding to the muscarinic acetylcholine receptor in relationship to the regional subtype composition. Boulay SF, et al. **Receptor** 1995; 5(4):207-18
Autoradiographic distribution of M1, M2, M3, and M4 muscarinic receptor subtypes in Alzheimer's disease. Rodríguez-Puertas R, et al. **Synapse** 1997 Aug;26(4):341-50
[Effect of Chinese herbal medicine of tonifying kidney on M-cholinergic receptor and acetylcholinesterase activity in dementia mimetic mice] Mo Q, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Feb; 16(2):99-101 (Eng. Abstr.) **(Chi)**
[Types of the presynaptic M-cholinoreceptors in different regions of rat brain] Podosinovikova NP, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):75-7 **(Rus)**

PHYSIOLOGY

Muscarinic cholinergic effects on stimulus-evoked responses in rat primary somatosensory cortex. An electrophysiological study. Farkas T, et al. **Acta Biol Hung** 1996;47(1-4):113-8
G protein-coupled receptor kinase: phosphorylation of muscarinic receptors and facilitation of receptor sequestration. Haga T, et al. **Adv Pharmacol** 1996;36:173-91 (23 ref.)
Halothane reduces myofilament Ca2+ sensitivity during muscarinic receptor stimulation of airway smooth muscle. Akao M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L719-25
Localization of eosinophils to airway nerves and effect on neuronal M2 muscarinic receptor function. Costello RW, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):L93-103
Both M1 and M3 receptors regulate exocrine secretion by mucous acini. Culp DJ, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1963-72
On the role of muscarinic and peptidergic receptors in ganglionic transmission in bullfrogs in vivo. Ivanoff AY, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1501-14
Role of endogenous NO in modulating airway contraction mediated by muscarinic receptors during development. Jakupaj M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L531-6
Muscarinic receptor regulation of synaptic transmission in airway parasympathetic ganglia. Myers AC, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):L630-6
M1 muscarinic mechanisms regulate intestinal-phase gallbladder physiology in humans. Nelson DK, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G824-30
Muscarinic receptors inhibit ATP-sensitive K+ channels in swine tracheal smooth muscle. Nuttle LC, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):L478-84
Chronic carbachol pretreatment decreases adenylyl cyclase activity in airway smooth muscle. Schears G, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L640-7
M2 receptor activation of nonselective cation channels in smooth muscle cells: calcium and Gi/G(o) requirements. Wang YX, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C500-8
Muscarinic receptor stimulation modulates the effect of

halothane on Mn2+ influx in airway smooth muscle. Warner DO, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C868–73

Effects of protons on muscarinic receptor cationic current in single visceral smooth muscle cells. Zholos AV, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G215–23

Allergen challenge of passively sensitized human bronchi alters M2 and beta2 receptor function. Song P, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1230–4

Characterization of muscarinic receptor subtypes that mediate antinociception in the rat spinal cord. Naguib M, et al. **Anesth Analg** 1997 Oct;85(4):847–53

Halothane attenuation of calcium sensitivity in airway smooth muscle. Mechanisms of action during muscarinic receptor stimulation. Bremarich DH, et al. **Anesthesiology** 1997 Jul; 87(1):94–101

Synergistic inhibition of muscarinic signaling by ketamine stereoisomers and the preservative benzethonium chloride. Durieux ME, et al. **Anesthesiology** 1997 Jun;86(6):1326–33

Halothane and isoflurane differentially affect the regulation of dopamine and gamma-aminobutyric acid release mediated by presynaptic acetylcholine receptors in the rat striatum. Salord F, et al. **Anesthesiology** 1997 Mar; 86(3):632–41

Studies of the pharmacology, localization, and structure of muscarinic acetylcholine receptors. Brann MR, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:225–36 (59 ref.)

Coupling of muscarinic receptor subtypes to ion channels: experiments on neuroblastoma hybrid cells. Brown DA, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:237–58

Heat acclimation and heat stress have different effects on cholinergic muscarinic receptors. Kaspler P, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:620–7

Molecular basis of the muscarinic acetylcholine receptor. Kubo T. **Ann N Y Acad Sci** 1993 Dec 20;707:210–24 (44 ref.)

Modulation of muscarinic receptor-stimulated phosphoinositide breakdown by sulfhydryl group modification is a general response in different rat brain regions and depends on the stage of brain development. Balduini W, et al. **Biochem Mol Biol Int** 1996 Oct; 40(2):427–32

Differential cholinoceptor subtype-dependent activation of signal transduction pathways in neonatal versus adult rat atria. Borda ES, et al. **Biochem Pharmacol** 1997 Apr 4; 53(7):959–67

Evidence for the involvement of a muscarinic receptor in ascorbic acid secretion in the rat stomach. Muto N, et al. **Biochem Pharmacol** 1997 Feb 21;53(4):553–9

Increased function of inhibitory neuronal M2 muscarinic receptors in diabetic rat lungs. Belmonte KE, et al. **Br J Pharmacol** 1997 Aug;121(7):1287–94

Functional interactions between muscarinic M2 receptors and 5-hydroxytryptamine (5-HT)4 receptors and beta 3-adrenoceptors in isolated oesophageal muscularis mucosae of the rat. Eglen RM, et al. **Br J Pharmacol** 1996 Oct;119(3):595–601

Functional role of M2 and M3 muscarinic receptors in the urinary bladder of rats in vitro and in vivo. Hegde SS, et al. **Br J Pharmacol** 1997 Apr;120(8):1409–18

Specific Gq protein involvement in muscarinic M3 receptor-induced phosphatidylinositol hydrolysis and Ca2+ release in mouse duodenal myocytes. Morel JL, et al. **Br J Pharmacol** 1997 Jun;121(3):451–8

Some evidence against the involvement of arachidonic acid in muscarinic suppression of voltage-gated calcium channel current in guinea-pig ileal smooth muscle cells. Unno T, et al. **Br J Pharmacol** 1996 Sep;119(2):213–22

A novel GTP-dependent mechanism of ileal muscarinic metabotropic channel desensitization. Zholos AV, et al. **Br J Pharmacol** 1996 Nov;119(5):997–1012

Muscarinic receptors mediate carbachol-induced phase shifts of circadian activity rhythms in Syrian hamsters. Bina KG, et al. **Brain Res** 1996 Dec 16;743(1–2):202–11

Nicotinic, muscarinic and dopaminergic actions in the ventral hippocampus and the nucleus accumbens: effects on spatial working memory in rats. Kim JS, et al. **Brain Res** 1996 Jul 1;725(2):231–40

Muscarinic receptor-dependent activation of phospholipase C in human fetal central nervous system organotypic tissue culture. Larocca JN, et al. **Brain Res** 1995 Dec 1; 701(1–2):135–41

Presynaptic muscarinic cholinergic receptors in the dorsal hippocampus regulate behavioral inhibition of preweanling rats. Takahashi LK, et al. **Brain Res** 1996 Aug 26; 731(1–2):230–5

Interactions between D1 and muscarinic receptors in the induction of striatal c-fos in rats depleted of dopamine as neonates. Sandstrom MI, et al. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):148–58

Regulation of tyrosine hydroxylase gene expression by the m1 muscarinic acetylcholine receptor in rat pheochromocytoma cells. Chen Y, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):42–54

Depressed smooth muscle contractility after massive intestinal resection in rat: role of alterations in muscarinic receptor status or source of calcium for excitation-contraction coupling. Chin BC, et al. **Can J Physiol Pharmacol** 1996 Nov;74(11):1187–95

Evidence for muscarinic 3 receptor mediated ion transport in HT29 cells studied by X-ray microanalysis. Zhang W, et al. **Cell Struct Funct** 1997 Jun;22(3):379–85

Changes in receptor function by oxidative stress in guinea pig tracheal smooth muscle. van Hoof IH, et al. **Cent Eur J Public Health** 1996;4 Suppl:3–5

M3 muscarinic receptor mediates regulation of protein secretion in rabbit lacrimal gland. Nakamura M, et al. **Curr Eye Res** 1997 Jun;16(6):614–9

M1-muscarinic mechanisms regulate interdigestive cycling of motor and secretory activity in human upper gut. Nelson DK, et al. **Dig Dis Sci** 1996 Oct;41(10):2006–15

Acetylcholine autoexcites the release of proopiomelanocortin-derived peptides from melanotrope cells of Xenopus laevis via an M1 muscarinic receptor. Van Strien FJ, et al. **Endocrinology** 1996 Oct;137(10):4298–307

Synaptically activated low-threshold muscarinic inward current sustains tonic firing in rabbit prevertebral sympathetic neurons. Niel JP, et al. **Eur J Neurosci** 1996 Mar;8(3):611–20

Critical role for M3 muscarinic receptors in paradoxical sleep generation in the cat. Sakai K, et al. **Eur J Neurosci** 1997 Mar;9(3):415–23

Effects of phorbol ester on carbachol-induced contraction in bovine ciliary muscle: possible involvement of protein kinase C. Daniele E, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2–3):247–56

Spinal muscarinic cholinergic and nitric oxide systems in cardiovascular regulation. Feldman DS, et al. **Eur J Pharmacol** 1996 Oct 17;313(3):211–20

Induction of muscarinic receptor subtypes in monocytic/macrophagic cells differentiated from EoL-1 cells. Mita Y, et al. **Eur J Pharmacol** 1996 Feb 15; 297(1–2):121–7

D-cycloserine, a glycine site agonist, reverses working memory failure by hippocampal muscarinic receptor blockade in rats. Ohno M, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):267–71

Dysfunctional muscarinic M2 autoreceptors in vagally induced bronchoconstriction of conscious guinea pigs after the early allergic reaction. Ten Berge RE, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):131–9

Involvement of muscarinic receptors in the control of female puberty in the rat. Trkulja V, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):93–6

Regulation of cellular tyrosine phosphorylation by stimulatory and inhibitory muscarinic acetylcholine receptors. Alessandro R, et al. **Exp Cell Res** 1997 Jul 10; 234(1):18–26

Muscarinic receptor-stimulated cytosol-membrane translocation of RhoA. Keller J, et al. **FEBS Lett** 1997 Feb 24;403(3):299–302

Sensing by intrahepatic muscarinic nerves of a portal-arterial glucose concentration gradient as a signal for insulin-dependent glucose uptake in the perfused rat liver. Stümpel F, et al. **FEBS Lett** 1997 Apr 7;406(1–2):119–22

Inflammatory modulation of muscarinic receptor activation in canine ileal circular muscle cells. Shi XZ, et al. **Gastroenterology** 1997 Mar;112(3):864–74

Whole-cell voltage-clamp investigation of the role of PKC in muscarinic inhibition of IAHP in rat CA1 hippocampal neurons. Engisch KL, et al. **Hippocampus** 1996;6(2):183–91

Regulation of cell spreading during differentiation in the muscarinic M5 receptor tumor-suppressor model. Spoonster JR, et al. **Int J Cancer** 1997 Jul 17;72(2):362–8

Age-dependent changes in cardiac muscarinic receptor function in healthy volunteers. Poller U, et al. **J Am Coll Cardiol** 1997 Jan;29(1):187–93

Muscarinic transmission decreases the number of SIF cells demonstrating catecholamine histofluorescence in rat superior cervical ganglia. Heppener TJ, et al. **J Auton Nerv Syst** 1996 Oct 7;61(1):61–9

Acetylcholinesterase histochemistry and functional characterization of the muscarinic receptor mediating the contraction of the bovine oesophageal groove. Barahona MV, et al. **J Auton Pharmacol** 1997 Apr;17(2):77–86

Muscarinic autoinhibition of acetylcholine release in mouse atria is not transduced through cyclic AMP or protein kinase C. Dawson JJ, et al. **J Auton Pharmacol** 1996 Apr; 16(2):79–85

Synergy between tumor necrosis factor alpha and interleukin 1beta in inducing transcriptional down-regulation of muscarinic M2 receptor gene expression. Involvement of protein kinase A and ceramide pathways. Haddad EB, et al. **J Biol Chem** 1996 Dec 20;271(51):32586–92

Tubulin, Gq, and phosphatidylinositol 4,5-bisphosphate interact to regulate phospholipase Cbeta1 signaling. Popova JS, et al. **J Biol Chem** 1997 Mar 7;272(10):6760–5

Dual transduction signaling by a Xenopus muscarinic receptor: adenylyl cyclase inhibition and MAP kinase activation. Herrera L, et al. **J Cell Biochem** 1997 Apr; 65(1):75–82

Rapid oscillations in plasma glucagon-like peptide-1 (GLP-1) in humans: cholinergic control of GLP-1 secretion via muscarinic receptors. Balks HJ, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):786–90

Na+ activation of the muscarinic K+ channel by a G-protein-independent mechanism. Sui JL, et al. **J Gen Physiol** 1996 Nov;108(5):381–91

A9 fibroblasts transfected with the m3 muscarinic receptor clone express a Ca2+ channel activated by carbachol, GTP and GDP. Singer-Lahat D, et al. **J Membr Biol** 1997 Sep 1;159(1):21–8

Participation of nitric oxide signaling system in the cardiac muscarinic cholinergic effect of human chagasic IgG. Sterin-Borda L, et al. **J Mol Cell Cardiol** 1997 Jul; 29(7):1851–65

4-Hydroxynonenal, an aldehydic product of lipid peroxidation, impairs signal transduction associated with muscarinic acetylcholine and metabotropic glutamate receptors: possible action on G alpha(q/11). Blanc EM, et al. **J Neurochem** 1997 Aug;69(2):570–80

Interactions of muscarinic receptors with the heterotrimeric G proteins Gq and G12: transduction of proliferative signals. Burstein ES, et al. **J Neurochem** 1997 Feb; 68(2):525–33

Muscarinic acetylcholine receptor-mediated induction of zif268 mRNA in PC12D cells requires protein kinase C and the influx of extracellular calcium. Ebihara T, et al. **J Neurochem** 1997 Mar;68(3):1001–10

Arginine-modulated receptor-activated calcium influx via a NO/cyclic GMP pathway in human SK-N-SH neuroblastoma cells. Liu PS, et al. **J Neurochem** 1997 Jan; 68(1):376–82

Nicotinic autoreceptors mediating enhancement of acetylcholine release become operative in conditions of "impaired" cholinergic presynaptic function. Marchi M, et al. **J Neurochem** 1996 Nov;67(5):1974–81

M3 muscarinic receptor-mediated enhancement of NMDA-evoked adenosine release in rat cortical slices in vitro. Semba K, et al. **J Neurochem** 1997 Sep;69(3):1066–72

Effect of continuous phorbol ester treatment on muscarinic receptor-mediated calmodulin redistribution in SK-N-SH neuroblastoma cells. Shariat-Madar Z, et al. **J Neurochem** 1997 Jan;68(1):40–6

Modulation of second messengers in the nervous system of larval Manduca sexta by muscarinic receptors. Trimmer BA, et al. **J Neurochem** 1996 May;66(5):1903–13

Muscarinic modulation of the oscillatory and repetitive firing properties of entorhinal cortex layer II neurons. Klink R, et al. **J Neurophysiol** 1997 Apr;77(4):1813–28

Ionic mechanisms of muscarinic depolarization in entorhinal cortex layer II neurons. Klink R, et al. **J Neurophysiol** 1997 Apr;77(4):1829–43

Progression of M-current inhibition after agonist removal. Villarroel A. **J Neurophysiol** 1996 Jan;75(1):518–21

Spinal muscarinic, glutamatergic and GABAergic receptor systems in cardiovascular regulation. Feldman DS, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):274–83

Differentiation of muscarinic receptors mediating negative chronotropic and vasoconstrictor responses to acetylcholine in isolated rat hearts. Hoover DB, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1337–44

Functional properties of muscarinic receptor subtypes Hm1, Hm3 and Hm5 expressed in Sf9 cells using the baculovirus expression system. Kukkonen JP, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):593–601

[3H]inositol polyphosphate metabolism in muscarinic cholinoceptor-stimulated airways smooth muscle: accumulation of [3H]inositol 4,5 bisphosphate via a lithium-sensitive inositol polyphosphate 1-phosphatase. Lynch BJ, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):974–82

Functional evidence of excitatory M1 receptors in the rabbit airway. Matsumoto S. **J Pharmacol Exp Ther** 1997 Apr; 281(1):531–9

M2 muscarinic receptor inhibition of agonist-induced cyclic adenosine monophosphate accumulation and relaxation in the guinea pig ileum. Ostrom RS, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):189–99

The full D1 dopamine receptor agonist SKF-82958 induces neuropeptide mRNA in the normosensitive striatum of rats: regulation of D1/D2 interactions by muscarinic receptors. Wang JQ, et al. **J Pharmacol Exp Ther** 1997 May; 281(2):972–82

Muscarinic receptors mediating depression and long-term potentiation in rat hippocampus. Auerbach JM, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):479–93

Exotoxin-insensitive G proteins mediate synaptically evoked muscarinic sodium current in rabbit sympathetic neurones. Delmas P, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):627–40

G-protein-mediated desensitization of metabotropic glutamatergic and muscarinic responses in CA3 cells in rat hippocampus. Guérineau NC, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):487–96

Modulation of the muscarinic K+ channel by P2-purinoceptors in guinea-pig atrial myocytes. Matsuura H, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):379–93

Regulation of muscarinic acetylcholine receptor-mediated synaptic responses by adenosine receptors in the rat hippocampus. Morton RA, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):75–90

4-aminopyridine activates potassium currents by activation of a muscarinic receptor in feline atrial myocytes. Navarro-Polanco RA, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):663–78

On muscarinic control of neurogenic mucus secretion in ferret trachea. Ramnarine SI, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):577–86

M1 muscarinic receptor-induced facilitation of ACh and noradrenaline release in the rat bladder is mediated by protein kinase C. Somogyi GT, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):245–54

Modulation of inwardly rectifying currents in rat sympathetic neurones by muscarinic receptors. Wang HS, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):467–78

Temporal specificity of muscarinic synaptic modulation of the Ca(2+)-dependent K+ current (ISAHP) in rat hippocampal neurones. Zhang L, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):395-405

Cholinergic control of the walking network in the crayfish Procambarus clarkii. Cattaert D, et al. **J Physiol Paris** 1995; 89(4-6):209-20

Evidence for the presence of regional differences in the subtype specificity of muscarinic receptors in rabbit lower urinary tract. Mutoh S, et al. **J Urol** 1997 Feb;157(2):717-21

Muscarinic autoinhibition and modulatory role of protein kinase C in acetylcholine release from the myenteric plexus of guinea pig ileum. Saitoh N, et al. **Jpn J Pharmacol** 1997 Jun;74(2):155-63

Regulation of muscarinic M2 receptors. Barnes PJ, et al. **Life Sci** 1997;60(13-14):1015-21 (29 ref.)

Activation of M2 muscarinic receptors in guinea-pig ileum opens cationic channels modulated by M3 muscarinic receptors. Bolton TB, et al. **Life Sci** 1997;60(13-14):1121-8

Muscarinic mechanisms in nerve cells. Brown DA, et al. **Life Sci** 1997;60(13-14):1137-44 (104 ref.)

Pathways and roadblocks in muscarinic receptor-mediated growth regulation. Brown JH, et al. **Life Sci** 1997; 60(13-14):1077-84 (49 ref.)

The pathway connecting m2 receptors to the nucleus involves small GTP-binding proteins acting on divergent MAP kinase cascades. Gutkind JS, et al. **Life Sci** 1997; 60(13-14):999-1006 (19 ref.)

Subtypes of muscarinic receptors: closing summary. Jenden DJ. **Life Sci** 1997;60(13-14):1153-9

Functional characterization of peripheral muscarinic subtypes in anesthetized cats. Koss MC. **Life Sci** 1997;61(2):217-27

Role of m1 receptor-G protein coupling in cell proliferation in the prostate. Luthin GR, et al. **Life Sci** 1997; 60(13-14):963-8

Regulation of muscarinic receptor expression and function in cultured cells and in knock-out mice. McKinnon LA, et al. **Life Sci** 1997;60(13-14):1101-4 (17 ref.)

Muscarinic M3 receptor coupling and regulation. Nahorski SR, et al. **Life Sci** 1997;60(13-14):1039-45 (45 ref.)

Regulation of phospholipase C and D activities by small molecular weight G proteins and muscarinic receptors. Schmidt M, et al. **Life Sci** 1997;60(13-14):1093-100

Muscarinic receptors involved in hippocampal plasticity. Segal M, et al. **Life Sci** 1997;60(13-14):1085-91 (37 ref.)

Alpha 1- and beta-adrenergic and muscarinic-cholinergic regulation in the spontaneous beating and Ca2+ oscillations in cultured neonatal rat cardiac myocytes. Takemura H, et al. **Life Sci** 1996;59(14):PL221-6

Muscarinic control of airway function. Zaagsma J, et al. **Life Sci** 1997;60(13-14):1061-8 (40 ref.)

Nicotinic and muscarinic components in acetylcholine stimulation of porcine adrenal medullary cells. Nassar-Gentina V, et al. **Mol Cell Biochem** 1997 Apr; 169(1-2):107-13

m3 Muscarinic receptor-induced and Gi-mediated heterologous potentiation of phospholipase C stimulation: role of phosphoinositide synthesis. Schmidt M, et al. **Mol Pharmacol** 1996 Oct;50(4):1038-46

A role for Rho in receptor- and G protein-stimulated phospholipase C. Reduction in phosphatidylinositol 4,5-bisphosphate by Clostridium difficile toxin B. Schmidt M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):87-94

Chronic aluminum treatment results in aluminum deposits and affects Ml muscarinic receptors in rat brain. Harkány T, et al. **Neurobiology (Bp)** 1996;4(1-2):35-43

Influences of hypothyroidism on lipid composition and inositol lipid-linked receptors responsiveness and protein kinase C (PKC) activity in the cerebral cortex of Lewis rats. Pintor A, et al. **Neurochem Res** 1996 May;21(5):541-5

Co-alteration of dopamine D2 receptor and muscarinic acetylcholine receptor binding in rat striatum after circling training. Ibarra GR, et al. **Neuroreport** 1996 Nov 4; 7(15-17):2491-4

Muscarinic receptor subtypes in the medial preoptic area and sleep-wake cycles. Imeri L, et al. **Neuroreport** 1996 Jan 31;7(2):417-20

Dorsal hippocampal muscarinic acetylcholine and NMDA receptors disrupt water maze navigation. Riekkinen M, et al. **Neuroreport** 1997 Feb 10;8(3):645-8

Stimulus-dependent muscarinic effects on evoked unit activity in the rat barrel cortex. Farkas T, et al. **Neurosci Lett** 1996 Jul 5;212(1):61-4

Muscarinic depolarization of SH-SY5Y human neuroblastoma cells as determined using oxonol V. Kukkonen JP, et al. **Neurosci Lett** 1996 Jul 5;212(1):57-60

Phosphoinositide-derived diacylglycerol conversion to phosphatidic acid is a receptor-dependent and compartmentalized phenomenon in human neuroblastoma. Limatola C, et al. **Neurosci Lett** 1996 Nov 22;219(2):127-30

Selective M1 muscarinic receptor antagonists disrupt memory consolidation of inhibitory avoidance in rats. Roldán G, et al. **Neurosci Lett** 1997 Jul 18;230(2):93-6

Theta-activity-dependent and -independent muscarinic facilitation of long-term potentiation in guinea pig hippocampal slices. Natsume K, et al. **Neurosci Res** 1997 Apr;27(4):335-41

N- and C-terminal substance P fragments modulate striatal dopamine outflow through a cholinergic link mediated by muscarinic receptors. Khan S, et al. **Neuroscience** 1996 Aug;73(4):919-27

Muscarinic receptors regulate striatal neuropeptide gene expression in normal and amphetamine-treated rats. Wang JQ, et al. **Neuroscience** 1996 Nov;75(1):43-56

Muscarinic regulation of phospholipase D and its role in arachidonic acid release in rat submandibular acinar cells. Chung HC, et al. **Pflugers Arch** 1995 Dec;431(2):161-8

Inhibition of the L-type calcium channel by the five muscarinic receptors (m1-m5) expressed in NIH 3T3 cells. Pemberton KE, et al. **Pflugers Arch** 1997 Feb;433(4):505-14

The role of muscarinic cholinergic receptors in the discriminative stimulus properties of clozapine in rats. Kelley BM, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):707-19

Both nicotinic and muscarinic receptors in ventral tegmental area contribute to brain-stimulation reward. Yeomans J, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):915-21

Muscarinic receptor subtypes and smooth muscle function. Eglen RM, et al. **Pharmacol Rev** 1996 Dec;48(4):531-65 (482 ref.)

Interaction between opioid and muscarinic receptors in the guinea-pig ileum preparation: a mathematical model. Hustveit O. **Pharmacol Toxicol** 1996 Mar;78(3):167-73

Muscarinic M2 and M3 receptor function in smooth muscle. Eglen RM. **Proc West Pharmacol Soc** 1996;39:57-60 (48 ref.)

The role of G-protein coupled receptor kinases in the regulation of muscarinic cholinergic receptors. Hosey MM, et al. **Prog Brain Res** 1996;109:169-79 (64 ref.)

Muscarinic activation of phosphatidylcholine hydrolysis. Klein J, et al. **Prog Brain Res** 1996;109:201-8 (57 ref.)

Muscarinic receptors and cell signalling. Löffelholz K. **Prog Brain Res** 1996;109:191-4 (33 ref.)

Activation, cellular redistribution and enhanced degradation of the G proteins Gq and G11 by endogenously expressed and transfected phospholipase C-coupled muscarinic m1 acetylcholine receptors. Mullaney I, et al. **Prog Brain Res** 1996;109:181-7 (44 ref.)

Regulation of muscarinic acetylcholine receptor expression and function. Nathanson NM. **Prog Brain Res** 1996; 109:165-8 (20 ref.)

Participation of small GTP-binding proteins in m3 muscarinic acetylcholine receptor signalling to phospholipase D and C. Rümenapp U, et al. **Prog Brain Res** 1996;109:209-16 (42 ref.)

Muscarinic receptor activated Ca2+ channels in non-excitable cells. Singer-Lahat D, et al. **Prog Brain Res** 1996;109:195-9

Molecular aspects of muscarinic receptor assembly and function. Wess J, et al. **Prog Brain Res** 1996;109:153-62 (45 ref.)

Muscarinic cholinergic receptors promote growth of human prostate cancer cells. Rayford W, et al. **Prostate** 1997 Feb 15;30(3):160-6

Role of beta-adrenergic and cholinergic systems in acclimatization to hypoxia in the rat. Clancy RL, et al. **Respir Physiol** 1997 Jan;107(1):75-84

The roles of muscarinic receptor subtypes in modulation of nasal ciliary action. Yang B, et al. **Rhinology** 1996 Sep; 34(3):136-9

Emptying against outflow obstruction--pharmacological aspects. Andersson KE. **Scand J Urol Nephrol Suppl** 1997; 184:77-84 (83 ref.)

Sympathoadrenal activation and muscarinic receptor stimulation induce acute release of tissue-type plasminogen activator but not von Willebrand factor across the human forearm. Jern C, et al. **Thromb Haemost** 1997 Aug; 78(2):887-91

Changes in neuroreceptor function of tracheal smooth muscle following acute ozone exposure of guinea pigs. van Hoof HJ, et al. **Toxicology** 1997 Jul 11;120(3):159-69

[Functional role of muscarinic M1 receptor for the ganglionic transmission in the rat superior cervical ganglion] Ikeda T. **Hokkaido Igaku Zasshi** 1997 May;72(3):261-72 (Eng. Abstr.) **(Jpn)**

[The role of the muscarinic receptors in the pathogenesis of the convulsive state induced by korazol in rats] Khobotova ZI, et al. **Eksp Klin Farmakol** 1997 Jan-Feb; 60(1):16-8 (Eng. Abstr.) **(Rus)**

[Muscarinic receptors on lymphocytes] Miralles F, et al. **Rev Neurol** 1997 Jun;25(142):843-6 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Ultrastructural localization of cholinergic muscarinic receptors in rat brain cortical capillaries. Luiten PG, et al. **Brain Res** 1996 May 13;720(1-2):225-9

RECEPTORS, MUSCIMOL see **RECEPTORS, GABA-A**

RECEPTORS, NARCOTIC see **RECEPTORS, OPIOID**

RECEPTORS, NERVE GROWTH FACTOR

[Neurotrophins and their receptors] Furukawa Y, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):470-80 (55 ref.) **(Jpn)**

AGONISTS

Specificity determinants in neurotrophin-3 and design of nerve growth factor-based trkC agonists by changing central beta-strand bundle residues to their neurotrophin-3 analogs. Urfer R, et al. **Biochemistry** 1997 Apr 22; 36(16):4775-81

ANALYSIS

Light microscopy study of low-affinity nerve growth factor receptor and phosphoprotein B-50/neuromodulin in inflammatory myopathies. Heuss D. **Acta Neuropathol (Berl)** 1996;91(4):409-15

Distribution of p75 and trk-neurotrophin receptor proteins in adult human sympathetic ganglia. Garcia-Suarez O, et al. **Anat Embryol (Berl)** 1996 Jun;193(6):577-83

CNTF induces GFAP in a S-100 alpha brain cell population: the pattern of CNTF-alpha R suggests an indirect mode of action. Kahn MA, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):221-33

Neurotrophin and neurotrophin receptors in human fetal kidney. Huber LJ, et al. **Dev Biol** 1996 Nov 1;179(2):369-81

Coordination of early neural tube development by BDNF/trkB. Jungbluth S, et al. **Development** 1997 May; 124(10):1877-85

Regeneration of cut adult axons fails even in the presence of continuous aligned glial pathways. Davies SJ, et al. **Exp Neurol** 1996 Dec;142(2):203-16

Embryonic precursor cells that express Trk receptors: induction of different cell fates by NGF, BDNF, NT-3, and CNTF. Lachyankar MB, et al. **Exp Neurol** 1997 Apr; 144(2):350-60

Immunohistochemical localization of low-affinity nerve growth factor receptor in the enteric nervous system of adult rats. Aimi Y, et al. **Histochem J** 1997 Jul;29(7):529-37

Cellular localization of Pan-trk immunoreactivity and trkC mRNA in the enteric nervous system. Sternini C, et al. **J Comp Neurol** 1996 May 13;368(4):597-607

p75 nerve growth factor receptor staining helps identify desmoplastic and neurotropic melanoma. Kanik AB, et al. **J Cutan Pathol** 1996 Jun;23(3):205-10

Immunohistochemical detection of p140trkA and p75LNGFR neurotrophin receptors in neuroblastoma. Dominici C, et al. **J Neurooncol** 1997 Jan;31(1-2):57-64

Cell-surface markers for assessing gene transfer into human hematopoietic cells [see comments] Phillips K, et al. **Nat Med** 1996 Oct;2(10):1154-6 (25 ref.). Comment in: Nat Med 1996 Dec;2(12):1280-1.

Neurotrophin-3 and trkC-immunoreactive neurons in rat dorsal root ganglia correlate by distribution and morphology. Chen C, et al. **Neurochem Res** 1996 Jul; 21(7):809-14

Differential distribution of BDNF and TRKB in regenerating dorsal column axons. Cameron AA. **Neuroreport** 1997 Aug 18;8(12):2655-9

trk-like immunoreactivity in the human trigeminal ganglion and subnucleus caudalis. Quartu M, et al. **Neuroreport** 1996 Apr 10;7(5):1013-9

Low-affinity nerve growth factor receptor is associated with motoneuron axonal pathways. Tanaka H, et al. **Neurosci Res** 1997 Jan;27(1):21-7

Expression of nerve growth factor, p75, and trk in the somatosensory and motor cortices of mature rats: evidence for local trophic support circuits. Pitts AF, et al. **Somatosens Mot Res** 1995;12(3-4):329-42

Trk-like proteins during the post-hatching growth of the avian bursa of Fabricius. Ciriaco E, et al. **Vet Immunol Immunopathol** 1997 Mar;55(4):313-20

ANTAGONISTS & INHIBITORS

A radioactive binding assay for inhibitors of trkA kinase. Knight E Jr, et al. **Anal Biochem** 1997 May 1;247(2):376-81

CEP-751 inhibits TRK receptor tyrosine kinase activity in vitro OFF exhibits anti-tumor activity. Camoratto AM, et al. **Int J Cancer** 1997 Aug 7;72(4):673-9

Suppression of p140trkA does not abolish nerve growth factor-mediated rescue of serum-free PC12 cells. Taglialatela G, et al. **J Neurochem** 1996 May;66(5):1826-35

Retrograde degeneration and colchicine protection of basal forebrain cholinergic neurons following hippocampal injections of an immunotoxin against the P75 nerve growth factor receptor. Ohtake T, et al. **Neuroscience** 1997 May; 78(1):123-33

Identification of ciliary neurotrophic factor (CNTF) residues essential for leukemia inhibitory factor receptor binding and generation of CNTF receptor antagonists. Di Marco A, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9247-52

BIOSYNTHESIS

Neurotrophin receptors expression in the developing mouse retina: an immunohistochemical study. Llamosas MM, et al. **Anat Embryol (Berl)** 1997 Apr;195(4):337-44

Expression of functional TrkA receptor tyrosine kinase in the HMC-1 human mast cell line and in human mast cells. Tam SY, et al. **Blood** 1997 Sep 1;90(5):1807-20

Clinical relevance of TRKA expression on neuroblastoma: comparison with N-MYC amplification and CD44 expression. Combaret V, et al. **Br J Cancer** 1997; 75(8):1151-5

Expression of mRNAs for preprotachykinin and nerve growth factor receptors in the dorsal root-ganglion following peripheral inflammation. Cho HJ, et al. **Brain Res** 1996 Apr 15;716(1-2):197-201

Up-regulation of high-affinity neurotrophin receptor, trk B-like protein on western blots of rat cortex after chronic

ethanol treatment. **Baek JK, et al.**
Brain Res Mol Brain Res 1996 Aug;40(1):161–4

1,25–Dihydroxyvitamin D3 regulates the expression of the low–affinity neurotrophin receptor. Naveilhan P, et al.
Brain Res Mol Brain Res 1996 Sep 5;41(1–2):259–68

Comparison of RPTP zeta/beta, phosphacan, and trkB mRNA expression in the developing and adult rat nervous system and induction of RPTP zeta/beta and phosphacan mRNA following brain injury. Snyder SE, et al.
Brain Res Mol Brain Res 1996 Aug;40(1):79–96

Expression of neurotrophin trk and p75 receptors in quail embryos undergoing gastrulation and neurulation. Zhang D, et al. **Dev Dyn** 1996 Feb;205(2):150–61

Expression of EGFR–, p75NGFR–, and PSTAIR (cdc2)–like immunoreactivity by proliferating cells in the adult rat hippocampal formation and forebrain. Okano HJ, et al.
Dev Neurosci 1996;18(3):199–209

Sympathetic neuron survival and TrkA expression in NT3–deficient mouse embryos. Wyatt S, et al.
EMBO J 1997 Jun 2;16(11):3115–23

Overexpression of nerve growth factor in skin increases sensory neuron size and modulates Trk receptor expression. Goodness TP, et al. **Eur J Neurosci** 1997 Aug;9(8):1574–85

Timing and regulation of trkB and BDNF mRNA expression in placode–derived sensory neurons and their targets. Robinson M, et al. **Eur J Neurosci** 1996 Nov;8(11):2399–406

Reciprocal changes in expression of mRNA for nerve growth factor and its receptors TrkA and LNGFR in brain of aged rats in relation to maze learning deficits. Hasenöhrl RU, et al. **Exp Brain Res** 1997 Apr;114(2):205–13

p75 neurotrophin receptor induction and macrophage infiltration in peripheral nerve during experimental diabetic neuropathy: possible relevance on regeneration. Conti G, et al. **Exp Neurol** 1997 Jul;146(1):206–11

Reduction in p140–TrkA receptor protein within the nucleus basalis and cortex in Alzheimer's disease. Mufson EJ, et al. **Exp Neurol** 1997 Jul;146(1):91–103

The expression of the low affinity nerve growth factor receptor in long–term denervated Schwann cells. You S, et al. **Glia** 1997 Jun;20(2):87–100

Neurotrophin and neurotrophin receptors in islet cells. Scharfmann R. **Horm Metab Res** 1997 Jun;29(6):294–6 (13 ref.)

Induction of the intronic enhancer of the human ciliary neurotrophic factor receptor (CNTFRalpha) gene by the TR4 orphan receptor. A member of steroid receptor superfamily. Young WJ, et al. **J Biol Chem** 1997 Jan 31; 272(5):3109–16

Expression of human p140trk receptors in p140trk–deficient, PC12/endothelial cells results in nerve growth factor–induced signal transduction and DNA synthesis. Jiang H, et al. **J Cell Biochem** 1997 Aug 1;66(2):229–44

Nerve growth factor receptor TrkA is down–regulated during postnatal development by a subset of dorsal root ganglion neurons. Molliver DC, et al. **J Comp Neurol** 1997 May 19;381(4):428–38

Expression of trKB neurotrophin receptor during T cell development. Role of brain derived neurotrophic factor in immature thymocyte survival. Maroder M, et al.
J Immunol 1996 Oct 1;157(7):2864–72

Differential expression of ciliary neurotrophic factor receptor in skeletal muscle of chick and rat after nerve injury. Ip FC, et al. **J Neurochem** 1996 Oct;67(4):1607–12

Differential regulation of ciliary neurotrophic factor (CNTF) and CNTF receptor alpha expression in astrocytes and neurons of the fascia dentata after entorhinal cortex lesion. Lee MY, et al. **J Neurosci** 1997 Feb 1;17(3):1137–46

Transgenic mice expressing the intracellular domain of the p75 neurotrophin receptor undergo neuronal apoptosis. Majdan M, et al. **J Neurosci** 1997 Sep 15;17(18):6988–98

The low–affinity nerve growth factor receptor p75NGFR mediates death of PC12 cells after nerve growth factor withdrawal. Barrett GL, et al. **J Neurosci Res** 1996 Jul 15;45(2):117–28

Early expression of the nerve growth factor receptor ctrkA in chick sympathetic and sensory ganglia. Schröpel A, et al. **Mol Cell Neurosci** 1995 Dec;6(6):544–66

Brain–derived neurotrophic factor suppresses programmed death of cerebellar granule cells through a posttranslational mechanism. Suzuki K, et al. **Mol Chem Neuropathol** 1997 Jan–Feb;30(1–2):101–24

Expression of mRNAs for neurotrophic factors (NGF, BDNF, NT–3, and GDNF) and their receptors (p75NGFR, trkA, trkB, and trkC) in the adult human peripheral nervous system and nonneural tissues. Yamamoto M, et al. **Neurochem Res** 1996 Aug;21(8):929–38

Analysis of low affinity neurotrophin receptor (p75) expression in glia of the CNS–PNS transition zone following dorsal root transection. Gai WP, et al.
Neuropathol Appl Neurobiol 1996 Oct;22(5):434–9

Relationship between BDNF– and trk–expressing neurones in rat dorsal root ganglion: an analysis by in situ hybridization. Kashiba H, et al. **Neuroreport** 1997 Mar 24; 8(5):1229–34

Induction of TrkA receptor by retinoic acid in leukaemia cell lines. Xie P, et al. **Neuroreport** 1997 Mar 24; 8(5):1067–70

Ciliary neurotrophic factor: regulation of acetylcholinesterase in skeletal muscle and distribution of messenger RNA encoding its receptor in synaptic versus extrasynaptic compartments. Boudreau–Larivière C, et al.
Neuroscience 1996 Jul;73(2):613–22

Seizure–induced differential expression of messenger RNAs for neurotrophins and their receptors in genetically fast and slow kindling rats. Kokaia Z, et al. **Neuroscience** 1996 Nov;75(1):197–207

Suppression of trkB expression by antisense oligonucleotides alters a neuronal phenotype in the rod pathway of the developing rat retina. Rickman DW, et al.
Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12564–9

Adenovirus–mediated gene delivery into neuronal precursors of the adult mouse brain. Yoon SO, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11974–9

CHEMISTRY

Sequential cis/trans autophosphorylation in TrkB tyrosine kinase. Iwasaki Y, et al. **Biochemistry** 1997 Mar 4; 36(9):2694–700

NMR structure of the death domain of the p75 neurotrophin receptor. Liepinsh E, et al. **EMBO J** 1997 Aug 15; 16(16):4999–5005

Characterization of a distinctive motif of the low molecular weight neurotrophin receptor that modulates NGF–mediated neurite growth. Dostaler SM, et al.
Eur J Neurosci 1996 May;8(5):870–9

Interactions between brain–derived neurotrophic factor and the TRKB receptor. Identification of two ligand binding domains in soluble TRKB by affinity separation and chemical cross–linking. Haniu M, et al. **J Biol Chem** 1997 Oct 3;272(40):25296–303

A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptor–induced apoptosis. Nocentini G, et al.
Proc Natl Acad Sci U S A 1997 Jun 10;94(12):6216–21

DEFICIENCY

Expression of human p140trk receptors in p140trk–deficient, PC12/endothelial cells results in nerve growth factor–induced signal transduction and DNA synthesis. Jiang H, et al. **J Cell Biochem** 1997 Aug 1;66(2):229–44

Dental innervation and CGRP in adult p75–deficient mice. Sarram S, et al. **J Comp Neurol** 1997 Aug 25;385(2):297–308

Absence of p75NTR causes increased basal forebrain cholinergic neuron size, choline acetyltransferase activity, and target innervation. Yeo TT, et al. **J Neurosci** 1997 Oct 15;17(20):7594–605

Reduced sympathetic sprouting occurs in dorsal root ganglia after axotomy in mice lacking low–affinity neurotrophin receptor. Ramer M, et al. **Neurosci Lett** 1997 May 30; 228(1):9–12

DRUG EFFECTS

Ethanol reduces expression of the nerve growth factor receptor, but not nerve growth factor protein levels in the neonatal rat cerebellum. Dohrman DP, et al.
Alcohol Clin Exp Res 1997 Aug;21(5):882–93

Thyroid hormone regulates NGF content and p75LNGFR expression in the basal forebrain of adult rats. Calzà L, et al. **Exp Neurol** 1997 Feb;143(2):196–206

The neurotrophin receptor p75 binds neurotrophin–3 on sympathetic neurons with high affinity and specificity. Dechant G, et al. **J Neurosci** 1997 Jul 15;17(14):5281–7

Interaction of NT–4 and BDNF with gp145trkb receptor: effect on cellular metabolism. Hopkins MA, et al.
J Neurosci Methods 1997 Apr 4;72(2):167–74

Identification of functional receptors for ciliary neurotrophic factor on chick ciliary ganglion neurons. Koshlukova S, et al. **Neuroscience** 1996 Jun;72(3):821–32

GENETICS

Mutation of the trkB gene encoding the high–affinity receptor for brain–derived neurotrophic factor in stroke–prone spontaneously hypertensive rats. Kageyama H, et al. **Biochem Biophys Res Commun** 1996 Dec 24; 229(3):713–8

Regulation of the rat p75 neurotrophin receptor promoter by GC element binding proteins. Poukka H, et al.
Biochem Biophys Res Commun 1996 Dec 13;229(2):565–70

Recombinant retroviruses pseudotyped with the vesicular stomatitis virus G glycoprotein mediate both stable gene transfer and pseudotransduction in human peripheral blood lymphocytes. Gallardo HF, et al. **Blood** 1997 Aug 1; 90(3):952–7

Development of striatal dopaminergic function. III: Pre– and postnatal development of striatal and cortical mRNAs for the neurotrophin receptors trkBTK+ and trkC and their regulation by synaptic dopamine. Jung AB, et al.
Brain Res Dev Brain Res 1996 Jul 20;94(2):133–43

Neuronal coexistence of trkB and glutamic acid decarboxylase67 mRNAs in rat hippocampus. Zachrisson O, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):169–73

Presence and localization of neurotrophin receptor tyrosine kinase (TrkA, TrkB, TrkC) mRNAs in visceral afferent neurons of the nodose and petrosal ganglia. Zhuo H, et al. **Brain Res Mol Brain Res** 1996 May;38(1):63–70

Expression of mRNAs for neurotrophins and their receptors in developing rat heart. Hiltunen JO, et al. **Circ Res** 1996 Nov;79(5):930–9

Ret and trk proto–oncogene activation in thyroid papillary carcinomas in French patients from the Champagne–Ardenne region. Delvincourt C, et al.
Clin Biochem 1996 Jun;29(3):267–71

Exclusion of the p75 neurotrophin receptor gene as a candidate gene for Meckel syndrome. Wartiovaara K, et al. **Clin Dysmorphol** 1997 Jul;6(3):213–7

Low affinity nerve growth factor receptor gene co–segregates with decreased bodyweight and increased left ventricular weight in spontaneously hypertensive rats. Kapuscinski MK, et al. **Clin Exp Pharmacol Physiol** 1996 Jun–Jul;23(6–7):614–6

Activation of TRK genes in Ewing's sarcoma. Trk A receptor expression linked to neural differentiation. Nogueira E, et al. **Diagn Mol Pathol** 1997 Feb;6(1):10–6

Mapping of the tyrosine kinase receptors trkA (NTRK1), trkB (NTRK2) and trkC(NTRK3) to human chromosomes 1q22, 9q22 and 15q25 by fluorescence in situ hybridization. Valent A, et al. **Eur J Hum Genet** 1997 Mar–Apr;5(2):102–4

Analysis of cutaneous sensory neurons in transgenic mice lacking the low affinity neurotrophin receptor p75. Bergmann I, et al. **Eur J Neurosci** 1997 Jan;9(1):18–28

Increased expression of BDNF and trkB mRNA in rat facial motoneurons after axotomy. Kobayashi NR, et al.
Eur J Neurosci 1996 May;8(5):1018–29

Decreased TrkA gene expression in cholinergic neurons of the striatum and basal forebrain of patients with Alzheimer's disease. Boissiere F, et al. **Exp Neurol** 1997 May;145(1):245–52

Suppressed kindling epileptogenesis and perturbed BDNF and TrkB gene regulation in NT–3 mutant mice. Elmér E, et al. **Exp Neurol** 1997 May;145(1):93–103

Effects of BDNF infusion on the regulation of TrkB protein and message in adult rat brain. Frank L, et al.
Exp Neurol 1997 May;145(1):62–70

High–efficiency retroviral vector mediated gene transfer into human peripheral blood CD4+ T lymphocytes. Rudoll T, et al. **Gene Ther** 1996 Aug;3(8):695–705

Chromosome 1 rearrangements involving the genes TPR and NTRK1 produce structurally different thyroid–specific TRK oncogenes. Greco A, et al.
Genes Chromosomes Cancer 1997 Jun;19(2):112–23

Catalytic and non–catalytic forms of the neurotrophin receptor xTrkB mRNA are expressed in a pseudo–segmental manner within the early Xenopus central nervous system. Islam N, et al. **Int J Dev Biol** 1996 Oct; 40(5):973–83

Cloning of a new chicken trkC extracellular isoform and its mRNA expression in E9 sensory and autonomic ganglia. Bäckström A, et al. **Int J Dev Neurosci** 1997 Jun; 15(3):275–84

Differential signaling to glycogen synthesis by the intracellular domain of the insulin versus the insulin–like growth factor–1 receptor. Evidence from studies of TrkC–chimeras. Kalloo–Hosein HE, et al. **J Biol Chem** 1997 Sep 26;272(39):24325–32

TrkB variants with deletions in the leucine–rich motifs of the extracellular domain. Ninkina N, et al. **J Biol Chem** 1997 May 16;272(20):13019–25

Induction of the intronic enhancer of the human ciliary neurotrophic factor receptor (CNTFRalpha) gene by the TR4 orphan receptor. A member of steroid receptor superfamily. Young WJ, et al. **J Biol Chem** 1997 Jan 31; 272(5):3109–16

Neuropeptides and neurotrophin receptor mRNAs in primary sensory neurons of aged rats. Bergman E, et al.
J Comp Neurol 1996 Nov 11;375(2):303–19

Developmental and mature expression of full–length and truncated TrkB receptors in the rat forebrain. Fryer RH, et al. **J Comp Neurol** 1996 Oct 7;374(1):21–40

Cellular localization of Pan–trk immunoreactivity and trkC mRNA in the enteric nervous system. Sternini C, et al.
J Comp Neurol 1996 May 13;368(4):597–607

Neurotrophins and their trk receptors in cultured cells of the glial lineage and in white matter of the central nervous system. Condorelli DF, et al. **J Mol Neurosci** 1995; 6(4):237–48

Culture density regulates both the cholinergic phenotype and the expression of the CNTF receptor in P19 neurons. Parnas D, et al. **J Mol Neurosci** 1997 Apr;8(2):115–30

Ganglioside GM1 enhances induction by nerve growth factor of a putative dimer of TrkA. Farooqui T, et al.
J Neurochem 1997 Jun;68(6):2348–55

Construction and characterization of ciliary neurotrophic factor (CNTF) antagonists: microenvironmental difference in the CNTF receptor between rat and chicken cells for recognizing the D1 cap region. Inoue M, et al.
J Neurochem 1997 Jul;69(1):95–101

Neurotrophin–3–like immunoreactivity and Trk C expression in human spinal motoneurones in amyotrophic lateral sclerosis. Duberley RM, et al. **J Neurol Sci** 1997 May 1; 148(1):33–40

Induction of p75NGFR in human diabetic neuropathy. Scarpini E, et al. **J Neurol Sci** 1996 Jan;135(1):55–62

Expression of TrkA, TrkB and TrkC in human neuroblastomas. Brodeur GM, et al. **J Neurooncol** 1997 Jan; 31(1–2):49–55

The low–affinity neurotrophin receptor p75 regulates the function but not the selective survival of specific subpopulations of sensory neurons. Stucky CL, et al.
J Neurosci 1997 Jun 1;17(11):4398–405

Attenuation and recovery of nerve growth factor receptor mRNA in dorsal root ganglion neurons following axotomy. Krekoski CA, et al. **J Neurosci Res** 1996 Jan 1;43(1):1–11

Recombinant adeno–associated virus mediates a high level of gene transfer but less efficient integration in the K562

human hematopoietic cell line. Malik P, et al. **J Virol** 1997 Mar;71(3):1776–83

Mutation and expression of the low affinity neurotrophin receptor in human malignant melanoma. Papandreou C, et al. **Melanoma Res** 1996 Oct;6(5):373–8

Immunoglobulin-like domains define the nerve growth factor binding site of the TrkA receptor. Holden PH, et al. **Nat Biotechnol** 1997 Jul;15(7):668–72

Measuring gene-transfer efficiency [letter; comment] Comoli P, et al. **Nat Med** 1996 Dec;2(12):1280–1. Comment on: Nat Med 1996 Oct;2(10):1154–6.

The mouse rostral cerebellar malformation gene encodes an UNC-5-like protein. Ackerman SL, et al. **Nature** 1997 Apr 24;386(6627):838–42

BDNF and trkB mRNA expression in neurons of the neonatal mouse barrel field cortex: normal development and plasticity after cauterizing facial vibrissae. Singh TD, et al. **Neurochem Res** 1997 Jul;22(7):791–7

Expression of catalytic trkB gene in the striatum and the basal forebrain of patients with Alzheimer's disease: an in situ hybridization study. Boissière F, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):141–4

Increased expression of the alpha subunit of the ciliary neurotrophic factor (CNTF) receptor by rat racial motoneurons after neonatal axotomy and CNTF treatment. Duberley RM, et al. **Neurosci Lett** 1996 Nov 8; 218(3):188–92

Mutation of low affinity nerve growth factor receptor gene is associated with the hypertensive phenotype in spontaneously hypertensive inbred rat strains. Nemoto K, et al. **Neurosci Lett** 1996 May 24;210(1):69–72

Expression of messenger RNA coding for the nerve growth factor receptor trkA in the hippocampus of the adult rat. Cellerino A. **Neuroscience** 1996 Feb;70(3):613–16

Systemic capsaicin in the adult rat differentially affects gene expression for neuropeptides and neurotrophin receptors in primary sensory neurons. Kashiba H, et al. **Neuroscience** 1997 Jan;76(1):299–312

Expression of ciliary neurotrophic factor receptor-alpha messenger RNA in neonatal and adult rat brain: an in situ hybridization study. Lee MY, et al. **Neuroscience** 1997 Mar; 77(1):233–46

Oncogenic activation of the tyrosine kinase domain of the human trk proto-oncogene by fusion to a cell adhesion molecule. Albor A, et al. **Oncogene** 1996 Oct 17; 13(8):1755–63

Genomic organization of the human NTRK1 gene. Greco A, et al. **Oncogene** 1996 Dec 5;13(11):2463–6

Exclusion of p75NGFR and other candidate genes in a family with hereditary sensory neuropathy type II. Davar G, et al. **Pain** 1996 Sep;67(1):135–9

Comments on Davar et al., Pain, 67 (1996) 135–139 [letter] Mandich P, et al. **Pain** 1997 Aug;72(1–2):287–8

Expression of nerve growth factor and neurotrophin receptors in testicular cells suggest novel roles for neurotrophins outside the nervous system. Seidl K, et al. **Reprod Fertil Dev** 1996;8(7):1075–87

Participation of nerve growth factor in the regulation of ovarian function. Dissen GA, et al. **Zygote** 1996 Nov; 4(4):309–12 (38 ref.)

IMMUNOLOGY

4-1BB costimulatory signals preferentially induce CD8+ T cell proliferation and lead to the amplification in vivo of cytotoxic T cell responses. Shuford WW, et al. **J Exp Med** 1997 Jul 7;186(1):47–55

Monoclonal antibodies against the 4-1BB T-cell activation molecule eradicate established tumors. Melero I, et al. **Nat Med** 1997 Jun;3(6):682–5

p75 neurotrophin receptor immunoreactivity in the aged human hypothalamus. Moga MM, et al. **Neurosci Lett** 1997 Aug 1;231(1):9–12

METABOLISM

Excitotoxicity and excitoprotection in vitro. Mattson MP, et al. **Adv Neurol** 1996;71:1–30; discussion 30–5 (267 ref.)

Expression of nerve growth factor and epidermal growth factor receptors in neural nevi with nevic corpuscles. Argenyi ZB, et al. **Am J Dermatopathol** 1996 Oct; 18(5):460–4

Neurotrophin and neurotrophin receptor proteins in medulloblastomas and other primitive neuroectodermal tumors of the pediatric central nervous system. Washiyama K, et al. **Am J Pathol** 1996 Mar;148(3):929–40

Sensory epithelium of the vomeronasal organ express TrkA-like and epidermal growth factor receptor in adulthood. An immunohistochemical study in the horse. Garcia-Suarez O, et al. **Anat Rec** 1997 Mar;247(3):299–306

Transient exposure to cytarabine increases peptide growth factor receptor expression and tumorigenicity of melanoma cells. Caraglia M, et al. **Anticancer Res** 1997 Jul-Aug; 17(4A):2369–75

Analysis of mitogen-activated protein kinase activation by naturally occurring splice variants of TrkC, the receptor for neurotrophin-3. Gunn-Moore FJ, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):193–8

Sequential cis/trans autophosphorylation in TrkB tyrosine kinase. Iwasaki Y, et al. **Biochemistry** 1997 Mar 4; 36(9):2694–700

A simple and reliable technique to combine oligonucleotide probe in situ hybridization with neuronal tract tracing in vertebrate embryos. Fritzsch B, et al. **Biotech Histochem** 1996 Nov;71(6):289–94

Expression of the nerve growth factor receptor c-TRK in human myeloid leukaemia cells. Kaebisch A, et al. **Br J Haematol** 1996 Oct;95(1):102–9

Low affinity NGF receptor expression in CMT1A nerve biopsies of different disease stages. Hanemann CO, et al. **Brain** 1996 Oct;119 (Pt 5):1461–9

Effects of estrogen on basal forebrain cholinergic neurons vary as a function of dose and duration of treatment. Gibbs RB. **Brain Res** 1997 May 16;757(1):10–6

Ethanol exposure reduces the density of the low-affinity nerve growth factor receptor (p75) on pheochromocytoma (PC12) cells. Luo J, et al. **Brain Res** 1996 Oct 21; 737(1–2):34–44

The distribution of p75 neurotrophin receptor-immunoreactive cells in the forebrain of the common marmoset (Callithrix jacchus). Maclean CJ, et al. **Brain Res Bull** 1997;43(2):197–208

Trk receptor alterations in Alzheimer's disease. Connor B, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):1–17

TrkB expression in dentate granule cells is associated with a late phase of long-term potentiation. Dragunow M, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):274–80

Regenerating sensory neurones of diabetic rats express reduced levels of mRNA for GAP-43, gamma-preprotachykinin and the nerve growth factor receptors, trkA and p75NGFR. Maeda K, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):166–74

mRNAS for one, two or three members of trk receptor family are expressed in single rat trigeminal ganglion neurons. Moshnyakov M, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):141–8

Expression of neurotrophins and their receptors in the developing and adult rat adrenal gland. Suter-Crazzolara C, et al. **Brain Res Mol Brain Res** 1996 Dec 31; 43(1–2):351–5

Activation of Ras and protection from apoptotic cell death by BDNF in PC12 cells expressing TrkB. Jian Z, et al. **Cell Signal** 1996 Aug;8(5):365–70

Neurotrophins and their p75 receptor. Carter BD, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:407–15

Neurotrophin-Trk receptor interactions in neoplasia: a possible role in interstitial and perineural invasion in ductal pancreatic cancer. Miknyoczki SJ, et al. **Crit Rev Oncog** 1996;7(1–2):89–100 (109 ref.)

Natriuretic peptide receptors on human trabecular meshwork cells. Chang AT, et al. **Curr Eye Res** 1996 Feb;15(2):137–43

Signal transduction by the neurotrophin receptors. Kaplan DR, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):213–21 (79 ref.)

Craniosynostosis: novel insights into pathogenesis and treatment. Wilkie AO, et al. **Curr Opin Neurol** 1996 Apr; 9(2):146–52 (84 ref.)

Trk neurotrophin receptors in cholinergic neurons of patients with Alzheimer's disease. Boissière F, et al. **Dement Geriatr Cogn Disord** 1997 Jan-Feb;8(1):1–8

Expression of neurotrophin receptors during rat tooth development is developmentally regulated, independent of innervation, and suggests functions in the regulation of morphogenesis and innervation. Luukko K, et al. **Dev Dyn** 1996 May;206(1):87–99

Timing of neuronal death in trkA, trkB and trkC mutant embryos reveals developmental changes in sensory neuron dependence on Trk signalling. Piñon LG, et al. **Development** 1996 Oct;122(10):3255–61

Postnatal changes in the expression of the trkA high-affinity NGF receptor in primary sensory neurons. Bennett DL, et al. **Eur J Neurosci** 1996 Oct;8(10):2204–8

BDNF down-regulates neurotrophin responsiveness, TrkB protein and TrkB mRNA levels in cultured rat hippocampal neurons. Frank L, et al. **Eur J Neurosci** 1996 Jun;8(6):1220–30

Recovery of ChAT immunoreactivity in axotomized rat cholinergic septal neurons despite reduced NGF receptor expression. Naumann T, et al. **Eur J Neurosci** 1997 Jul; 9(7):1340–9

Analysis of neurotrophin/receptor interactions with a gD-flag-modified quantitative kinase receptor activation (gD.KIRA) enzyme-linked immunosorbent assay. Sadick MD, et al. **Exp Cell Res** 1997 Aug 1;234(2):354–61

Potential roles of gene expression change in adult rat spinal motoneurons following axonal injury: a comparison among c-jun, off-affinity nerve growth factor receptor (LNGFR), and nitric oxide synthase (NOS). Wu W. **Exp Neurol** 1996 Oct;141(2):190–200

Glycosylation of rat NGF receptor ectodomain in the yeast Saccharomyces cerevisiae. Holkeri H, et al. **FEBS Lett** 1996 Apr 1;383(3):255–8

Expression of the p75 neurotrophin receptor in the developing and adult testis of the rat. Russo MA, et al. **Int J Dev Biol** 1996;Suppl 1:227S–228S

p75 and Trk oncoproteins expression is developmentally regulated in the inner ear of human embryos. Vazquez E, et al. **Int J Dev Biol** 1996;Suppl 1:77S–78S

Mice with a targeted disruption of the neurotrophin receptor trkB lose their gustatory ganglion cells early but do develop taste buds. Fritzsch B, et al. **Int J Dev Neurosci** 1997 Jul; 15(4–5):563–76

Human CD4+ T cell clones produce and release nerve growth factor and express high-affinity nerve growth factor receptors. Lambiase A, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):408–14

Alanine substitution for Thr268 and Asp269 of soluble ciliary neurotrophic factor (CNTF) receptor alpha component defines a specific antagonist for the CNTF response. Auguste P, et al. **J Biol Chem** 1996 Oct 18;271(42):26049–56

Association of p75(NTR) with caveolin and localization of neurotrophin-induced sphingomyelin hydrolysis to caveolae. Bilderback TR, et al. **J Biol Chem** 1997 Apr 18; 272(16):10922–7

Autophosphorylation of activation loop tyrosines regulates signaling by the TRK nerve growth factor receptor. Cunningham ME, et al. **J Biol Chem** 1997 Apr 18; 272(16):10957–67

Agonistic and antagonistic variants of ciliary neurotrophic factor (CNTF) reveal functional differences between membrane-bound and soluble CNTF alpha-receptor. Di Marco A, et al. **J Biol Chem** 1997 Sep 12;272(37):23069–75

Ciliary neurotrophic factor induces down-regulation of its receptor and desensitization of signal transduction pathways in vivo: non-equivalence with pharmacological activity. DiStefano PS, et al. **J Biol Chem** 1996 Sep 13; 271(37):22839–46

Both p140(trk) and p75(NGFR) nerve growth factor receptors mediate nerve growth factor-stimulated calcium uptake. Jiang H, et al. **J Biol Chem** 1997 Mar 14; 272(11):6835–7

Two restricted sites on the surface of the nerve growth factor molecule independently determine specific TrkA receptor binding and activation. Kullander K, et al. **J Biol Chem** 1997 Apr 4;272(14):9300–7

Analysis of 4-1BBL and laminin binding to murine 4-1BB, a member of the tumor necrosis factor receptor superfamily, and comparison with human 4-1BB. Loo DT, et al. **J Biol Chem** 1997 Mar 7;272(10):6448–56

Brain-derived neurotrophic factor binding to the p75 neurotrophin receptor reduces TrkA signaling while increasing serine phosphorylation in the TrkA intracellular domain. MacPhee IJ, et al. **J Biol Chem** 1997 Sep 19; 272(38):23547–51

A dominant role of the juxtamembrane region of the TrkA nerve growth factor receptor during neuronal cell differentiation. Yoon SO, et al. **J Biol Chem** 1997 Sep 12; 272(37):23231–8

Staurosporine induces neurite outgrowth in neuronal hybrids (PC12EN) lacking NGF receptors. Rasouly D, et al. **J Cell Biochem** 1996 Sep 1;62(3):356–71

NGF and neurotrophin-3 both activate TrkA on sympathetic neurons but differentially regulate survival and neuritogenesis. Belliveau DJ, et al. **J Cell Biol** 1997 Jan 27;136(2):375–88

Two peptides derived from the nerve growth factor precursor are biologically active. Dicou E, et al. **J Cell Biol** 1997 Jan 27;136(2):389–98

Rapid retrograde tyrosine phosphorylation of trkA and other proteins in rat sympathetic neurons in compartmented cultures. Senger DL, et al. **J Cell Biol** 1997 Jul 28; 138(2):411–21

TRK and p75 neurotrophin receptor systems in the developing human brain. Chen EY, et al. **J Comp Neurol** 1996 Jun 10;369(4):591–618

Immunocytochemical localization of TrkB in the central nervous system of the adult rat [published erratum appears in J Comp Neurol 1997 Jun 16;382(4):546–7] Yan Q, et al. **J Comp Neurol** 1997 Feb 3;378(1):135–57

Neuritogenic effect of epolactaene derivatives on human neuroblastoma cells which lack high-affinity nerve growth factor receptors. Kakeya H, et al. **J Med Chem** 1997 Feb 14;40(4):391–4

Opposing regulation of ciliary neurotrophic factor receptors on neuroblastoma cells by distinct differentiating agents. Malek RL, et al. **J Neurobiol** 1997 Jan;32(1):81–94

Changes in expression of ciliary neurotrophic factor (CNTF) and CNTF-receptor alpha after spinal cord injury. Oyesiku NM, et al. **J Neurobiol** 1997 Mar;32(3):251–61

Ganglioside GM1 enhances induction by nerve growth factor of a putative dimer of TrkA. Farooqui T, et al. **J Neurochem** 1997 Jun;68(6):2348–55

Suramin induces phosphorylation of the high-affinity nerve growth factor receptor in PC12 cells and dorsal root ganglion neurons. Gill JS, et al. **J Neurochem** 1996 Mar; 66(3):963–72

Transient association of the phosphotyrosine phosphatase SHP-2 with TrkA is induced by nerve growth factor. Goldsmith BA, et al. **J Neurochem** 1997 Sep;69(3):1014–9

Induction of a distinct morphology and signal transduction in TrkB/PC12 cells by nerve growth factor and brain-derived neurotrophic factor. Iwasaki Y, et al. **J Neurochem** 1997 Mar;68(3):927–34

Evidence for multiple, local functions of ciliary neurotrophic factor (CNTF) in retinal development: expression of CNTF and its receptors and in vitro effects on target cells. Kirsch M, et al. **J Neurochem** 1997 Mar;68(3):979–90

K-252b potentiation of neurotrophin-3 is trkA specific in cells lacking p75NTR. Maroney AC, et al. **J Neurochem** 1997 Jan;68(1):88–94

Localization of Trk neurotrophin receptor-like proteins in avian primary lymphoid organs (thymus and bursa of Fabricius). Ciriaco E, et al. **J Neuroimmunol** 1996 Sep; 69(1–2):73–83

Distribution of NGF receptors in normal and pathologic human lymphoid tissues. Labouyrie E, et al. **J Neuroimmunol** 1997 Aug;77(2):161–73

BDNF and TrkB co-localize in CA1 neurons resistant to transient forebrain ischemia in the adult gerbil. Ferrer I, et al. **J Neuropathol Exp Neurol** 1997 Jul;56(7):790–7
Changing patterns of expression and subcellular localization of TrkB in the developing visual system. Cabelli RJ, et al. **J Neurosci** 1996 Dec 15;16(24):7965–80
Expression of TrkB receptor isoforms in the developing avian visual system. Garner AS, et al. **J Neurosci** 1996 Mar 1; 16(5):1740–52
Axonal interactions regulate Schwann cell apoptosis in developing peripheral nerve: neuregulin receptors and the role of neuregulins. Grinspan JB, et al. **J Neurosci** 1996 Oct 1;16(19):6107–18
Optimal nerve growth factor trophic signals mediated by synergy of TrkA and p75 receptor-specific ligands. Maliartchouk S, et al. **J Neurosci** 1997 Aug 15; 17(16):6031–7
Interaction of NT-4 and BDNF with gp145trkb receptor: effect on cellular metabolism. Hopkins MA, et al. **J Neurosci Methods** 1997 Apr 4;72(2):167–74
Reducing p75 nerve growth factor receptor levels using antisense oligonucleotides prevents the loss of axotomized sensory neurons in the dorsal root ganglia of newborn rats. Cheema SS, et al. **J Neurosci Res** 1996 Oct 15;46(2):239–45
Structural determinants of Trk receptor specificities using BDNF-based neurotrophin chimeras. Lai KO, et al. **J Neurosci Res** 1996 Dec 1;46(5):618–29
High-dose anabolic androgenic steroids modulate concentrations of nerve growth factor and expression of its low affinity receptor (p75-NGFr) in male rat brain. Tirassa P, et al. **J Neurosci Res** 1997 Jan 15;47(2):198–207
BDNF/NT4-5 receptor TrkB and cadherin participate in cell-cell adhesion. Zhou H, et al. **J Neurosci Res** 1997 Aug 1;49(3):281–91
Alterations in neurotrophin and neurotrophin-receptor localization in Hirschsprung's disease. Hoehner JC, et al. **J Pediatr Surg** 1996 Nov;31(11):1524–9
Dendritic reticulum cell immunoreactivity for low-affinity nerve growth factor receptor in malignant lymphomas. Dorfman DM, et al. **Mod Pathol** 1996 Oct;9(10):959–65
Neurotrophin receptors and selective loss of cholinergic neurons in Alzheimer disease. Boissière F, et al. **Mol Chem Neuropathol** 1996 May-Aug;28(1-3):219–23 (17 ref.)
Neurotrophin receptors, tumor progression and tumor maturation. Påhlman S, et al. **Mol Med Today** 1996 Oct; 2(10):432–8
Activating mechanism of CNTF and related cytokines. Inoue M, et al. **Mol Neurobiol** 1996 Jun;12(3):195–209 (128 ref.)
Immunoglobulin-like domains define the nerve growth factor binding site of the TrkA receptor. Holden PH, et al. **Nat Biotechnol** 1997 Jul;15(7):668–72
Death of oligodendrocytes mediated by the interaction of nerve growth factor with its receptor p75. Casaccia-Bonnefil P, et al. **Nature** 1996 Oct 24; 383(6602):716–9
Netrins find their receptor [news] Drescher U. **Nature** 1996 Dec 5;384(6608):416–7
Neurotrophin receptor and tyrosine hydroxylase gene expression in aged sympathetic neurons. Kuchel GA, et al. **Neurobiol Aging** 1997 Jan-Feb;18(1):67–79
Constitutive phosphorylation of TrkC receptors in cultured cerebellar granule neurons might be responsible for the inability of NT-3 to increase neuronal survival and to activate p21 Ras. Zirrgiebel U, et al. **Neurochem Res** 1996 Jul;21(7):851–9
Expression of trkA and p75 nerve growth factor receptors in the adrenal gland. Michael GJ, et al. **Neuroreport** 1996 Jul 8;7(10):1617–22
Increase of p75 immunoreactivity in rat urinary bladder following inflammation. Wakabayashi Y, et al. **Neuroreport** 1996 Apr 26;7(6):1141–4
Age-related loss of calbindin from human basal forebrain cholinergic neurons. Wu CK, et al. **Neuroreport** 1997 Jul 7;8(9-10):2209–13
trkA and trkC expression is increased in human diabetic skin. Terenghi G, et al. **Neurosci Lett** 1997 May 30;228(1):33–6
Immobilization stress reduced the expression of neurotrophins and their receptors in the rat brain. Ueyama T, et al. **Neurosci Res** 1997 Jun;28(2):103–10
Expression of messenger RNA coding for the nerve growth factor receptor trkA in the hippocampus of the adult rat. Cellerino A. **Neuroscience** 1996 Feb;70(3):613–16
Co-localization of high-affinity neurotrophin receptors in nucleus basalis of Meynert neurons and their differential reduction in Alzheimer's disease. Salehi A, et al. **Neuroscience** 1996 Nov;75(2):373–87
P53 associates with trk tyrosine kinase. Montano X. **Oncogene** 1997 Jul 17;15(3):245–56
A signaling organelle containing the nerve growth factor-activated receptor tyrosine kinase, TrkA. Grimes ML, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9909–14
Loss of low-affinity nerve growth factor receptor during malignant transformation of the human prostate. Perez M, et al. **Prostate** 1997 Mar 1;30(4):274–9
CRNF, a molluscan neurotrophic factor that interacts with the p75 neurotrophin receptor. Fainzilber M, et al. **Science** 1996 Nov 29;274(5292):1540–3
An NGF-TrkA-mediated retrograde signal to transcription factor CREB in sympathetic neurons [see comments] Riccio A, et al. **Science** 1997 Aug 22;277(5329):1097–100 . Comment in: Science 1997 Aug 22;277(5329):1037.
Nerve growth factors from snake venoms: chemical properties, mode of action and biological significance. Kostiza T, et al. **Toxicon** 1996 Jul;34(7):787–806 (75 ref.)

PHYSIOLOGY

The neurotrophins and CNTF: two families of collaborative neurotrophic factors. Ip NY, et al. **Annu Rev Neurosci** 1996; 19:491–515 (137 ref.)
Physiology of the neurotrophins. Lewin GR, et al. **Annu Rev Neurosci** 1996;19:289–317 (203 ref.)
Exploring cell death mechanisms by analyzing signaling cascades of the TNF/NGF receptor family. Wallach D, et al. **Behring Inst Mitt** 1996 Oct;(97):144–55 (69 ref.)
Selective role for trkB neurotrophin receptors in rapid modulation of hippocampal synaptic transmission. Levine ES, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):300–3
TrkA expression decreases the in vivo aggressiveness of C6 glioma cells. Lachyankar MB, et al. **Cancer Res** 1997 Feb 1;57(3):532–6
Signalling through the neurotrophin receptor p75NTR. Dechant G, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):413–8 (58 ref.)
Neuregulins and neuregulin receptors in neural development. Gassmann M, et al. **Curr Opin Neurobiol** 1997 Feb; 7(1):87–92 (48 ref.)
Interleukin-7 is trophic for embryonic neurons and is expressed in developing brain. Michaelson MD, et al. **Dev Biol** 1996 Oct 10;179(1):251–63
The estrogen/neurotrophin connection during neural development: is co-localization of estrogen receptors with the neurotrophins and their receptors biologically relevant? Toran-Allerand CD. **Dev Neurosci** 1996;18(1-2):36–48 (105 ref.)
Expression and function of TrkB variants in developing sensory neurons. Ninkina N, et al. **EMBO J** 1996 Dec 2; 15(23):6385–93
Involvement of nerve growth factor in the ovulatory cascade: trkA receptor activation inhibits gap junctional communication between thecal cells. Mayerhofer A, et al. **Endocrinology** 1996 Dec;137(12):5662–70
TrkB and TrkC neurotrophin receptors cooperate in promoting survival of hippocampal and cerebellar granule neurons. Minichiello L, et al. **Genes Dev** 1996 Nov 15; 10(22):2849–58
Evidence that the p75 neurotrophin receptor mediates perineural spread of desmoplastic melanoma. Iwamoto S, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):725–31
Interactions between brain-derived neurotrophic factor and the TRKB receptor. Identification of two ligand binding domains in soluble TRKB by affinity separation and chemical cross-linking. Haniu M, et al. **J Biol Chem** 1997 Oct 3;272(40):25296–303
Differential modulation of neuron survival during development by nerve growth factor binding to the p75 neurotrophin receptor. Rydén M, et al. **J Biol Chem** 1997 Jun 27;272(26):16322–8
Differential Ca2+ signaling induced by activation of the epidermal growth factor and nerve growth factor receptors. Tinhofer I, et al. **J Biol Chem** 1996 Nov 29; 271(48):30505–9
Increased vulnerability to demyelination in streptozotocin diabetic rats. Jaffey PB, et al. **J Comp Neurol** 1996 Sep 9;373(1):55–61
Endogenous nerve growth factor is required for regulation of the low affinity neurotrophin receptor (p75) in sympathetic but not sensory ganglia. Zhou XF, et al. **J Comp Neurol** 1996 Aug 12;372(1):37–48
Basophil priming by neurotrophic factors. Activation through the trk receptor. Bürgi B, et al. **J Immunol** 1996 Dec 15;157(12):5582–8
Role of IL-12 and 4-1BB ligand in cytokine production by CD28+ and CD28- T cells. Chu NR, et al. **J Immunol** 1997 Apr 1;158(7):3081–9
Signals through 4-1BB are costimulatory to previously activated splenic T cells and inhibit activation-induced cell death. Hurtado JC, et al. **J Immunol** 1997 Mar 15; 158(6):2600–9
On the role of the low-affinity neurotrophin receptor p75LNTR in nerve growth factor induction of differentiation and AP 1 binding activity in PC12 cells. Kontny E, et al. **J Mol Neurosci** 1997 Feb;8(1):29–44
A kinase insert isoform of rat TrkA supports nerve growth factor-dependent cell survival but not neurite outgrowth. Meakin SO, et al. **J Neurochem** 1997 Sep;69(3):954–67
Interleukin-6 induces expression of peripherin and cooperates with Trk receptor signaling to promote neuronal differentiation in PC12 cells. Sterneck E, et al. **J Neurochem** 1996 Oct;67(4):1365–74
TrkB signaling is required for postnatal survival of CNS neurons and protects hippocampal and motor neurons from axotomy-induced cell death. Alcántara S, et al. **J Neurosci** 1997 May 15;17(10):3623–33
Signal transduction mediated by the truncated trkB receptor isoforms, trkB.T1 and trkB.T2. Baxter GT, et al. **J Neurosci** 1997 Apr 15;17(8):2683–90
Trk receptors function as rapid retrograde signal carriers in the adult nervous system. Bhattacharyya A, et al. **J Neurosci** 1997 Sep 15;17(18):7007–16
TrkA, but not TrkC, receptors are essential for survival of sympathetic neurons in vivo. Fagan AM, et al. **J Neurosci** 1996 Oct 1;16(19):6208–18
The trkA receptor mediates growth cone turning toward a localized source of nerve growth factor. Gallo G, et al. **J Neurosci** 1997 Jul 15;17(14):5445–54
Brain-derived neurotrophic factor mediates the activity-dependent regulation of inhibition in neocortical cultures. Rutherford LC, et al. **J Neurosci** 1997 Jun 15; 17(12):4527–35
Synthetic NGF peptide derivatives prevent neuronal death via a p75 receptor-dependent mechanism. Longo FM, et al. **J Neurosci Res** 1997 Apr 1;48(1):1–17
Inhibition of nuclear factor kappa B (NFkappaB) activity induces nerve growth factor-resistant apoptosis in PC12 cells. Taglialatela G, et al. **J Neurosci Res** 1997 Jan 15; 47(2):155–62
Nerve growth factor controls proliferation and progression of human prolactinoma cell lines through an autocrine mechanism. Missale C, et al. **Mol Endocrinol** 1996 Mar; 10(3):272–85
Neurotrophin-3 knocks heart off Trk. Srivastava D, et al. **Nat Med** 1996 Oct;2(10):1069–71 (17 ref.)
Vertebrate homologues of C. elegans UNC-5 are candidate netrin receptors. Leonardo ED, et al. **Nature** 1997 Apr 24;386(6627):833–8
Neurotrophins and their receptors in nerve injury and repair. Ebadi M, et al. **Neurochem Int** 1997 Apr-May; 30(4-5):347–74 (240 ref.)
Autocrine regulation of apoptosis and bcl-2 expression by nerve growth factor in early differentiating cerebellar granule neurons involves low affinity neurotrophin receptor. Muller Y, et al. **Neurochem Int** 1997 Aug; 31(2):177–91
Neuregulins and their receptors: a versatile signaling module in organogenesis and oncogenesis. Burden S, et al. **Neuron** 1997 Jun;18(6):847–55 (48 ref.)
Neurotrophins live or let die: does p75NTR decide? Carter BD, et al. **Neuron** 1997 Feb;18(2):187–90 (24 ref.)
Brain derived neurotrophic factor induces a rapid upregulation of synaptophysin and tau proteins via the neurotrophin receptor TrkB in rat cerebellar granule cells. Coffey ET, et al. **Neurosci Lett** 1997 May 23;227(3):177–80
Induction of apoptosis by p75 neurotrophin receptor in human neuroblastoma cells. Bunone G, et al. **Oncogene** 1997 Mar 27;14(12):1463–70
N-Shc: a neural-specific adapter molecule that mediates signaling from neurotrophin/Trk to Ras/MAPK pathway. Nakamura T, et al. **Oncogene** 1996 Sep 19;13(6):1111–21
Blockade of plasma membrane calcium pumping ATPase isoform I impairs nerve growth factor-induced neurite extension in pheochromocytoma cells. Brandt PC, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13843–8
A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptor-induced apoptosis. Nocentini G, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6216–21
Neurotrophin regulation of ionic currents and cell size depends on cell context. Sherwood NT, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5917–22
Basal forebrain neuronal loss in mice lacking neurotrophin receptor p75 [letter; comment] Peterson DA, et al. **Science** 1997 Aug 8;277(5327):837–9. Comment on: Science 1996 Dec 6;274(5293):1729–32.
Survival of cholinergic forebrain neurons in developing p75NGFR-deficient mice [see comments] Van der Zee CE, et al. **Science** 1996 Dec 6;274(5293):1729–32. Comment in: Science 1997 Aug 8;277(5327):837–9.
p75NTR and apoptosis: Trk-dependent and Trk-independent effects. Bredesen DE, et al. **Trends Neurosci** 1997 Jul; 20(7):287–90 (36 ref.)

RECEPTORS, NEU see **PROTO-ONCOGENE PROTEINS C-ERBB-2**

RECEPTORS, NEURAL see **RECEPTORS, SENSORY**

RECEPTORS, NEUROHUMOR see **RECEPTORS, NEUROTRANSMITTER**

RECEPTORS, NEUROKININ-1

AGONISTS

Substance P and keratinocyte activation markers: an in vitro approach. Viac J, et al. **Arch Dermatol Res** 1996 Feb; 288(2):85–90
Evidence that tachykinins relax the guinea-pig trachea via nitric oxide release and by stimulation of a septide-insensitive NK1 receptor. Figini M, et al. **Br J Pharmacol** 1996 Mar;117(6):1270–6
The glycine site of the NMDA receptor contributes to neurokinin1 receptor agonist facilitation of NMDA receptor agonist-evoked activity in rat dorsal horn neurons. Heppenstall PA, et al. **Brain Res** 1997 Jan 9;744(2):235–45
Temperature and agonist dependency of tachykinin NK1 receptor antagonist potencies in rat isolated superior cervical ganglion. Hawcock AB, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):163–71
Characterization of non-peptide antagonist and peptide agonist binding sites of the NK1 receptor with fluorescent ligands. Turcatti G, et al. **J Biol Chem** 1997 Aug 22; 272(34):21167–75
The effects of neurokinin-1 receptor agonists on spinal motoneurones of the neonatal rat. Lepre M, et al.

Neuropharmacology 1996 Apr;35(4):511-22

Tachykinin neurokinin-1 and neurokinin-3 receptor-mediated responses in guinea-pig substantia nigra: an in vitro electrophysiological study. Nalivaiko E, et al. **Neuroscience** 1997 Jun;78(3):745-57

ANALYSIS

Characterization of neurokinin-1 receptors in the submucosal plexus of guinea pig ileum. Moore BA, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G670-8

Distribution of trigeminothalamic and spinothalamic-tract neurons showing substance P receptor-like immunoreactivity in the rat. Li JL, et al. **Brain Res** 1996 May 6;719(1-2):207-12

Differential expression of two isoforms of the neurokinin-1 (substance P) receptor in vivo. Mantyh PW, et al. **Brain Res** 1996 May 6;719(1-2):8-13

Presynaptic and postsynaptic subcellular localization of substance P receptor immunoreactivity in the neostriatum of the rat and rhesus monkey (Macaca mulatta). Jakab RL, et al. **J Comp Neurol** 1996 May 20;369(1):125-36

Distribution and neurochemical character of substance P receptor (SPR)-immunoreactive striatal neurons of the macaque monkey: accumulation of SP fibers and SPR neurons and dendrites in "striocapsules" encircling striosomes. Jakab RL, et al. **J Comp Neurol** 1996 May 20; 369(1):137-49

A monoclonal antibody to the ligand-binding domain of the neurokinin 1 receptor (NK1-R) for the neuropeptide substance P. Déry O, et al. **J Neuroimmunol** 1997 Jun; 76(1-2):1-9

Substance P receptors in brain stem respiratory centers of the rat: regulation of NK1 receptors by hypoxia. Mazzone SB, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1547-56

GABAergic synapses upon neurons expressing substance P receptors in the nucleus of the solitary tract: an immunocytochemical electron microscope study in the rat. Jia HG, et al. **Neurosci Lett** 1996 May 24;210(1):49-52

ANTAGONISTS & INHIBITORS

The non-peptide tachykinin NK1- and NK2-receptor antagonists SR 140333 and SR 48968 prevent castor-oil induced diarrhea in rats. Croci T, et al. **Acta Physiol Hung** 1996;84(3):273-4

Effects of hCGRP 8-37 and the NK1-receptor antagonist SR 140.333 on capsaicin-evoked vasodilation in the pig nasal mucosa in vivo. Rinder J, et al. **Acta Physiol Scand** 1996 Feb;156(2):115-22

Effect of a new dual neurokinin antagonist on airway smooth muscle in situ. Shioya T, et al. **Arzneimittelforschung** 1995 Nov;45(11):1194-7

Possible ligand-receptor interactions for NK1 antagonists as observed in their crystal structures. Boks GJ, et al. **Bioorg Med Chem** 1997 Mar;5(3):535-47

Absorption, emission, and chiroptical spectra of neurokinin 1 tachykinin receptor antagonists: the role of charge-transfer states on the biological activity. Pispisa B, et al. **Biopolymers** 1996;40(5):529-42

The effect of CP-99994 on the responses to provocative motion in the cat. Lucot JB, et al. **Br J Pharmacol** 1997 Jan;120(1):116-20

An isobolographic analysis of the effects of N-methyl-D-aspartate and NK1 tachykinin receptor antagonists on inflammatory hyperalgesia in the rat. Ren K, et al. **Br J Pharmacol** 1996 Jan;117(1):196-202

The action of the NK1 tachykinin receptor antagonist, CP 99,994, in antagonizing the acute and delayed emesis induced by cisplatin in the ferret. Rudd JA, et al. **Br J Pharmacol** 1996 Nov;119(5):931-6

NMDA receptor-independent mechanisms responsible for the rate of rise of cumulative depolarization evoked by trains of dorsal root stimuli on rat spinal motoneurones. Baranauskas G, et al. **Brain Res** 1996 Nov 4;738(2):329-32

Effect of intrathecal pretreatment with the neurokinin receptor antagonist CP-99994 on the expression of naloxone-precipitated morphine withdrawal symptoms. Buccafusco JJ, et al. **Brain Res Bull** 1997;43(3):321-6

Novel targets of pain modulation in anaesthesia: preventing painful memories [editorial; comment] Gilron I, et al. **Can J Anaesth** 1997 May;44(5 Pt 1):457-62. Comment on: Can J Anaesth 1997 May;44(5 Pt 1):543-9. **(Eng, Fre)**

Intrathecal neurokinin-1 receptor antagonist reduces isoflurane MAC in rats [see comments] Ishizaki K, et al. **Can J Anaesth** 1997 May;44(5 Pt 1):543-9. Comment in: Can J Anaesth 1997 May;44(5 Pt 1):457-62.

A water-soluble, stable dipeptide NK1 receptor-selective neurokinin receptor antagonist with potent in vivo pharmacological effects: S18523. Bonnet J, et al. **Eur J Pharmacol** 1996 Aug 22;310(1):37-46

5-HT3 and 5-HT4 receptors and cholinergic and tachykininergic neurotransmission in the guinea-pig proximal colon. Briejer MR, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):173-80

Characterization of the binding and activity of a high affinity, pseudoirreversible morpholino tachykinin NK1 receptor antagonist. Cascieri MA, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):253-61

Peripheral effects of three novel non-peptide tachykinin NK1 receptor antagonists in the anaesthetized rat. Cellier E, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):377-85

Broad spectrum antiemetic effects of CP-122,721, a tachykinin NK1 receptor antagonist, in ferrets. Gonsalves S, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):181-5

Temperature and agonist dependency of tachykinin NK1 receptor antagonist potencies in rat isolated superior cervical ganglion. Hawcock AB, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):163-71

Role of tachykinin and bradykinin receptors and mast cells in gaseous formaldehyde-induced airway microvascular leakage in rats. Ito K, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):291-8

Tachykinin NK1 receptor antagonist RP67580 attenuates progressive hypersensitivity of flexor reflex during experimental inflammation in rats. Ma QP, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):165-71

Tachykinins and central respiratory activity: an in vitro study on the newborn rat. Monteau R, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):41-50

In vitro and in vivo predictors of the anti-emetic activity of tachykinin NK1 receptor antagonists. Rupniak NM, et al. **Eur J Pharmacol** 1997 May 20;326(2-3):201-9

L-733,060, a novel tachykinin NK1 receptor antagonist; effects in [Ca2+]i mobilisation, cardiovascular and dural extravasation assays. Seabrook GR, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):129-35

The tachykinin NK1 receptor antagonist PD 154075 blocks cisplatin-induced delayed emesis in the ferret. Singh L, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):209-16

SR 48968 specifically depresses neurokinin A- vs. substance P-induced hyperalgesia in a nociceptive withdrawal reflex. Yashpal K, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):41-8

Role of tachykinins in bronchoconstriction induced by intravenous administration of bradykinin in guinea-pigs. Kuroiwa C, et al. **Eur Respir J** 1996 Apr;9(4):741-6

NK1 receptor antagonist CP-99,994 inhibits cigarette smoke-induced neutrophil and eosinophil adhesion in rat tracheal venules. Baluk P, et al. **Exp Lung Res** 1996 Jul-Aug;22(4):409-18

The NK1 antagonist GR203040 inhibits cyclophosphamide-induced damage in the rat and ferret bladder. Alfieri A, et al. **Gen Pharmacol** 1997 Aug; 29(2):245-50

Role of substance P in blood pressure regulation in salt-dependent experimental hypertension. Kohlmann O Jr, et al. **Hypertension** 1997 Jan;29(1 Pt 2):506-9

The effects of NK1 receptor antagonists (FK224 and FK888) on agonist- and antigen-induced nasal microvascular leakage in guinea pigs. Shirasaki H, et al. **Inflamm Res** 1997 Jan;46(1):28-31

The peripheral NK-1/NK-2 receptor antagonist MDL 105,172A inhibits tachykinin-mediated respiratory effects in guinea-pigs. Kudlacz EM, et al. **J Auton Pharmacol** 1997 Apr;17(2):109-19

Characterization of non-peptide antagonist and peptide agonist binding sites of the NK1 receptor with fluorescent ligands. Turcatti G, et al. **J Biol Chem** 1997 Aug 22; 272(34):21167-75

Magnesium-deficiency-enhanced post-ischemic myocardial injury is reduced by substance P receptor blockade. Kramer JH, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):97-110

Use of an NK1 receptor antagonist to prevent delayed emesis after cisplatin [letter] Kris MG, et al. **J Natl Cancer Inst** 1997 Jun 4;89(11):817-8

[3H]LY303870, a novel nonpeptide radioligand for the NK-1 receptor. Gehlert DR, et al. **J Neurochem** 1996 Mar; 66(3):1095-102

Substance P receptor antagonist inhibits murine IgM expression in developing schistosome granulomas by blocking the terminal differentiation of intragranuloma B cells. Blum A, et al. **J Neuroimmunol** 1996 May; 66(1-2):1-10

Development of HPLC plasma assays for CAM 4515 and CAM 4750, two new nonpeptide tachykinin antagonists, and application to bioavailability studies. Van Noord T, et al. **J Pharm Biomed Anal** 1996 Sep;14(12):1709-16

Effect of tachykinin receptor inhibition in the brain on cardiovascular and behavioral responses to stress. Culman J, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):238-46

LY303870, a centrally active neurokinin-1 antagonist with a long duration of action. Iyengar S, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):774-85

Effect of MDL 105,212, a nonpeptide NK-1/NK-2 receptor antagonist in an allergic guinea pig model. Kudlacz EM, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):732-9

The non-peptide NK-1 receptor antagonist LY303870 inhibits neurogenic dural inflammation in guinea pigs. Phebus LA, et al. **Life Sci** 1997;60(18):1553-61

Nonpeptide tachykinin antagonists: medicinal chemistry and molecular biology. Lowe JA 3rd. **Med Res Rev** 1996 Nov; 16(6):527-45 (87 ref.)

Nonpeptide antagonists of the NK1 tachykinin receptor. McLean S. **Med Res Rev** 1996 Jul;16(4):297-317 (175 ref.)

Relative contribution of polar interactions and conformational compatibility to the binding of neurokinin-1 receptor antagonists. Fong TM, et al. **Mol Pharmacol** 1996 Dec;50(6):1605-11

The neurokinin-1 receptor antagonist LY306,740 blocks nociception-induced increases in dorsal horn neurokinin-1 receptor gene expression. McCarson KE, et al. **Mol Pharmacol** 1996 Nov;50(5):1189-99

Effect of the non-peptide blocker (+/-) CP 96,345 on the cellular mechanism involved in the response to NK1 receptor stimulation in human skin fibroblasts. Ziche M, et al. **Neuropeptides** 1996 Aug;30(4):345-54

Tachykinin NK1 receptor antagonists act centrally to inhibit emesis induced by the chemotherapeutic agent cisplatin in ferrets. Tattersall FD, et al. **Neuropharmacology** 1996; 35(8):1121-9

Neurokinin-1 receptor antagonist SR140333: a novel type of drug to treat cerebral ischemia. Yu Z, et al. **Neuroreport** 1997 Jul 7;8(9-10):2117-9

Tachykinin neurokinin-1 and neurokinin-3 receptor-mediated responses in guinea-pig substantia nigra: an in vitro electrophysiological study. Nalivaiko E, et al. **Neuroscience** 1997 Jun;78(3):745-57

Enantioselective inhibition of the formalin paw late phase by the NK1 receptor antagonist L-733,060 in gerbils. Rupniak NM, et al. **Pain** 1996 Sep;67(1):189-95

Effect of substance P and receptor antagonists on secretion of lingual lipase and amylase from rat von Ebner's gland. Field RB, et al. **Peptides** 1997;18(2):277-85

Neurokinin receptors in the guinea pig ileum. Nguyen-Le XK, et al. **Pharmacology** 1996 Jan;52(1):35-45

The activity of GR205171, a potent non-peptide tachykinin NK1 receptor antagonist, in the trigeminovascular system. Polley JS, et al. **Regul Pept** 1997 Jan 15;68(1):23-9

The effect of the acute and chronic administration of CP 96,345, a selective neurokinin1 receptor antagonist, on midbrain dopamine neurons in the rat: a single unit, extracellular recording study. Minabe Y, et al. **Synapse** 1996 Jan;22(1):35-45

Evidence for adrenergic and tachykinin activity in venom of the stonefish (Synanceja trachynis). Hopkins BJ, et al. **Toxicon** 1996 May;34(5):541-54

[Molecular modelling and drug design: neurokinin receptor antagonism] Boudon A, et al. **J Pharm Belg** 1997 Mar-Apr; 52(2):103 **(Fre)**

BIOSYNTHESIS

Expression and localization of enkephalin, substance P, and substance P receptor genes in the rat carotid body. Gauda EB, et al. **Adv Exp Med Biol** 1996;410:313-8

Upregulation of substance P receptors in angiogenesis associated with chronic airway inflammation in rats. Baluk P, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L565-71

Decreased levels of preprotachykinin-A and tachykinin NK1 receptor mRNA in specific region of the rat striatum after electroconvulsive stimuli. Zachrisson O, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):191-5

NK1 receptor expression in the interstitial cells of Cajal and neurons and tachykinins distribution in rat ileum during development. Vannucchi MG, et al. **J Comp Neurol** 1997 Jun 30;383(2):153-62

Receptor induction regulates the synergistic effects of substance P with IL-1 and platelet-derived growth factor on the proliferation of bone marrow fibroblasts. Rameshwar P, et al. **J Immunol** 1997 Apr 1;158(7):3417-24

Commentary on magnesium deficiency, substance P receptor up-regulation and NO overproduction. Weglicki WB, et al. **Magnes Res** 1996 Dec;9(4):331-2 (10 ref.)

Increased level of neurokinin-1 tachykinin receptor gene expression during early postnatal development of rat brain. Taoka M, et al. **Neuroscience** 1996 Oct;74(3):845-53

CHEMISTRY

p-(4-Hydroxybenzoyl)phenylalanine: a photoreactive amino acid analog amenable to radioiodination for elucidation of peptide-protein interaction. Application to substance P receptor. Wilson CJ, et al. **Biochemistry** 1997 Apr 15; 36(15):4542-51

Connectivity and orientation of the seven helical bundle in the tachykinin NK-1 receptor probed by zinc site engineering. Elling CE, et al. **EMBO J** 1996 Nov 15; 15(22):6213-9

The use of photolabelled peptides to localize the substance-P-binding site in the human neurokinin-1 tachykinin receptor. Girault S, et al. **Eur J Biochem** 1996 Aug 15;240(1):215-22

Identification of potential tyrosine-containing endocytic motifs in the carboxyl-tail and seventh transmembrane domain of the neurokinin 1 receptor. Böhm SK, et al. **J Biol Chem** 1997 Jan 24;272(4):2363-72

Desensitization of the neurokinin 1 receptor is mediated by the receptor carboxy-terminal region, but is not caused by receptor internalization. Sanders MA, et al. **J Neurochem** 1996 Dec;67(6):2362-72

DRUG EFFECTS

Measurement of intracellular calcium in cell populations loaded with aequorin: neurokinin-1 responses in U373MG cells. Hedley L, et al. **Anal Biochem** 1996 May 1; 236(2):270-4

Tachykinin NK-1 receptor probed with constrained analogues of substance P. Sagan S, et al. **Bioorg Med Chem** 1996 Dec;4(12):2167-78

Differential activation of the epithelial and smooth muscle NK1 receptors by synthetic tachykinin agonists in guinea-pig trachea. Figini M, et al. **Br J Pharmacol** 1997 Jun;121(4):773-81

Involvement of NK2 receptors rather than NK1 receptors in bronchial hyperresponsiveness induced by allergic reaction in guinea-pigs. Mizuguchi M, et al. **Br J Pharmacol** 1996 Feb;117(3):443-448

Tachykinins cause inward current through NK1 receptors

in bullfrog sensory neurons. Akasu T, et al. **Brain Res** 1996 Mar 25;713(1-2):160-7

Intravascular substance P dilates cerebral parenchymal vessels through a specific tachykinin NK1 receptor in cats. Kobari M, et al. **Eur J Pharmacol** 1996 Dec 19; 317(2-3):269-74

Effect of niflumic acid on electromechanical coupling by tachykinin NK1 receptor activation in rabbit colon. Patacchini R, et al. **Eur J Pharmacol** 1996 May 15; 303(3):197-204

Intracellular signaling pathway of substance P-induced superoxide production in human neutrophils. Tanabe T, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):187-95

Substance P activation of enteric neurons in response to intraluminal Clostridium difficile toxin A in the rat ileum. Mantyh CR, et al. **Gastroenterology** 1996 Nov; 111(5):1272-80

Sidestream smoke exposure enhances rapidly adapting receptor responses to substance P in young guinea pigs. Bonham AC, et al. **J Appl Physiol** 1996 Oct;81(4):1715-22

Excitation of rat sympathetic preganglionic neurones by selective activation of the NK1 receptor. Cammack C, et al. **J Auton Nerv Syst** 1996 Feb 5;57(1-2):87-92

Down-regulation of substance P receptors during colitis induced by trinitrobenzene sulfonic acid in rats. Evangelista S, et al. **Neuropeptides** 1996 Oct;30(5):425-8

Evidence for the presence of NK1 and NK3 receptors on cholinergic neurones in the guinea-pig ileum. Legat FJ, et al. **Neurosci Lett** 1996 Mar 29;207(2):125-8

A contribution of neurokinin-1 receptor to formalin-induced c-fos expression in the rat spinal dorsal horn. Tao YX, et al. **Neurosci Lett** 1997 Jan 17;221(2-3):105-8

Molecular characterization and functional expression of a substance P receptor from the sympathetic ganglion of Rana catesbeiana. Simmons MA, et al. **Neuroscience** 1997 Aug;79(4):1219-29

GENETICS

Molecular characterization and functional expression of a substance P receptor from the sympathetic ganglion of Rana catesbeiana. Simmons MA, et al. **Neuroscience** 1997 Aug;79(4):1219-29

IMMUNOLOGY

The neostriatal mosaic: basis for the changing distribution of neurokinin-1 receptor immunoreactivity during development. Ardelt AA, et al. **J Comp Neurol** 1996 Dec 16;376(3):463-75

Neurokinin-1 receptor-immunoreactive sympathetic preganglionic neurons: target specificity and ultrastructure. Llewellyn-Smith IJ, et al. **Neuroscience** 1997 Apr; 77(4):1137-49

ISOLATION & PURIFICATION

Purification and reconstitution of a recombinant human neurokinin-1 receptor. Mazina KE, et al. **J Recept Signal Transduct Res** 1996 May-Jul; 16(3-4):191-207

METABOLISM

Tachykinin NK-1 receptor probed with constrained analogues of substance P. Sagan S, et al. **Bioorg Med Chem** 1996 Dec;4(12):2167-78

Localization and activation of substance P receptors in unmyelinated axons of rat glabrous skin. Carlton SM, et al. **Brain Res** 1996 Sep 23;734(1-2):103-8

Sparing of striatal neurons coexpressing calretinin and substance P (NK1) receptor in Huntington's disease. Cicchetti F, et al. **Brain Res** 1996 Aug 19;730(1-2):232-7

Changes in receptor levels for thyrotropin releasing hormone, serotonin, and substance P in cervical spinal cord of Wobbler mouse: a quantitative autoradiography study during early and late stages of the motoneuron disease. Deng YP, et al. **Brain Res** 1996 Jun 24;725(1):49-60

Evidence for the presence of neurokinin-1 receptors on dorsal horn spinocerebellar tract cells in the rat. McGonigle DJ, et al. **Brain Res** 1996 Dec 2;742(1-2):1-9

Patchy distribution of substance P receptor immunoreactivity in the developing rat striatum. Tokuno H, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):107-17

The use of photolabelled peptides to localize the substance-P-binding site in the human neurokinin-1 tachykinin receptor. Girault S, et al. **Eur J Biochem** 1996 Aug 15;240(1):215-22

Neurons in the rat occipital cortex co-expressing the substance P-receptor and GABA: a comparison between in vivo and organotypic cultures. Echevarría D, et al. **Eur J Neurosci** 1997 Jul;9(7):1530-5

Visualization of the thymus by substance P receptor scintigraphy in man. van Hagen PM, et al. **Eur J Nucl Med** 1996 Nov;23(11):1508-13

Characterization of the binding and activity of a high affinity, pseudoirreversible morpholino tachykinin NK1 receptor antagonist. Cascieri MA, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):253-61

Autoradiographic localization of tachykinin NK2 and NK1 receptors in the guinea-pig lung, using selective radioligands. Strigas J, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):177-86

In situ hybridization analysis of substance P receptor in the rat retina. Kondoh A, et al. **Exp Brain Res** 1996 Nov; 112(2):181-6

Septide and neurokinin A are high-affinity ligands on the NK-1 receptor: evidence from homologous versus heterologous binding analysis. Hastrup H, et al. **FEBS Lett** 1996 Dec 16;399(3):264-6

Local up-regulation of neuropeptide receptors in host blood vessels around human colorectal cancers. Reubi JC, et al. **Gastroenterology** 1996 Jun;110(6):1719-26

Characterisation of substance P-induced endocytosis of NK1 receptors on enteric neurons. Southwell BR, et al. **Histochem Cell Biol** 1996 Dec;106(6):563-71

Innervation and neurokinin receptors during angiogenesis in the rat sponge granuloma. Walsh DA, et al. **Histochem J** 1996 Nov;28(11):759-69

Variation in mRNA expression of alpha-adrenergic, neurokinin and muscarinic receptors amongst four arteries of the rat. Phillips JK, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1-2):85-93

Identification of methionine as the site of covalent attachment of a p-benzoyl-phenylalanine-containing analogue of substance P on the substance P (NK-1) receptor. Kage R, et al. **J Biol Chem** 1996 Oct 18;271(42):25797-800

A mutation changes ligand selectivity and transmembrane signaling preference of the neurokinin-1 receptor. Riitano D, et al. **J Biol Chem** 1997 Mar 21;272(12):7646-55

Immunostaining for substance P receptor labels GABAergic cells with distinct termination patterns in the hippocampus. Acsády L, et al. **J Comp Neurol** 1997 Feb 17;378(3):320-36

The neostriatal mosaic: basis for the changing distribution of neurokinin-1 receptor immunoreactivity during development. Ardelt AA, et al. **J Comp Neurol** 1996 Dec 16;376(3):463-75

Distribution of immunoreactivity for the NK1 receptor on different subpopulations of sympathetic preganglionic neurons in the rat. Grkovic I, et al. **J Comp Neurol** 1996 Oct 21;374(3):376-86

Distribution of trigeminohypothalamic and spinohypothalamic tract neurons displaying substance P receptor-like immunoreactivity in the rat. Li JL, et al. **J Comp Neurol** 1997 Feb 24;378(4):508-21

Human astrocytoma cells (U-87 MG) exhibit a specific substance P binding site with the characteristics of an NK-1 receptor. Ogo H, et al. **J Neurochem** 1996 Nov; 67(5):1813-20

Presynaptic or postsynaptic location of receptors for angiotensin II and substance P in the medial solitary tract nucleus. Qu L, et al. **J Neurophysiol** 1996 Jun;75(6):2220-8

Inflammation increases the distribution of dorsal horn neurons that internalize the neurokinin-1 receptor in response to noxious and non-noxious stimulation. Abbadie C, et al. **J Neurosci** 1997 Oct 15;17(20):8049-60

Cells in laminae III and IV of the rat spinal cord that possess the neurokinin-1 receptor and have dorsally directed dendrites receive a major synaptic input from tachykinin-containing primary afferents. Naim M, et al. **J Neurosci** 1997 Jul 15;17(14):5536-48

Substance P receptor expression and cellular responses to substance P in prenatal rat spinal cord cells. St. John PA, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):569-83

Functional characterization of the human neurokinin receptors NK1, NK2, and NK3 based on a cellular assay system. Stratowa C, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):617-30

High affinity binding of [3H]propionyl-[Met(O2)11]substance P(7-11), a tritiated septide-like peptide, in Chinese hamster ovary cells expressing human neurokinin-1 receptors and in rat submandibular glands. Sagan S, et al. **Mol Pharmacol** 1997 Jul;52(1):120-7

Heterogeneity of tachykinin receptors in the rabbit lung. Millard SL, et al. **Neurochem Res** 1996 Feb;21(2):277-83

Expression of NK-1 receptor mRNA in murine T lymphocytes. McCormack RJ, et al. **Neuroimmunomodulation** 1996 Jan-Feb;3(1):35-46

Backbone-to-backbone cyclized and linear pseudopeptide analogs of substance P as ligands to the substance P receptor from rat brain. Rivera-Baeza C, et al. **Neuropeptides** 1996 Aug;30(4):327-33

Comparison of the spatial distribution of endopeptidase-24.11 with substance P, substance P receptor (NK-1r) and gastric efferent neurons in the dorsal vagal complex of the rat. Ladic L, et al. **Neurosci Lett** 1997 Jan 24;222(1):41-4

Endocytosis and recycling of neurokinin 1 receptors in enteric neurons. Grady EF, et al. **Neuroscience** 1996 Dec; 75(4):1239-54

Characteristics of nerve growth factor induced hyperalgesia in adult rats: dependence on enhanced bradykinin-1 receptor activity but not neurokinin-1 receptor activation. Rueff A, et al. **Pain** 1996 Aug;66(2-3):359-72

Neurokinin subtype receptors mediating substance P contraction in immature rabbit airways. Kazem E, et al. **Pediatr Res** 1996 Jan;39(1):120-6

Autoradiographic mapping of pulmonary NK1 and NK2 tachykinin receptors and changes after repeated antigen challenge in guinea pigs. Mak JC, et al. **Peptides** 1996; 17(8):1389-95

Characterization of neurokinin type 1 receptor in canine small intestinal muscle. Mao YK, et al. **Peptides** 1996; 17(5):839-43

A substance P (neurokinin-1) receptor mutant carboxyl-terminally truncated to resemble a naturally occurring receptor isoform displays enhanced responsiveness and resistance to desensitization. Li H, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9475-80

Localization of substance P NK-1 receptors in rat tongue. Chang GQ, et al. **Regul Pept** 1996 Jul 5;63(2-3):85-9

GR205171: a novel antagonist with high affinity for the tachykinin NK1 receptor, and potent broad-spectrum anti-emetic activity. Gardner CJ, et al. **Regul Pept** 1996 Aug 27;65(1):45-53

Inhibition of hyperalgesia by ablation of lamina I spinal neurons expressing the substance P receptor [see comments] Mantyh PW, et al. **Science** 1997 Oct 10;278(5336):275-9. Comment in: Science 1997 Oct 10;278(5336):239-40.

PHYSIOLOGY

Neurogenic inflammation. A model for studying efferent actions of sensory nerves. McDonald DM, et al. **Adv Exp Med Biol** 1996;410:453-62 (68 ref.)

Evidence for functional tachykinin NK1 receptors on human isolated small bronchi. Naline E, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L763-7

Upregulation of neuropeptides and neuropeptide receptors in a murine model of immune inflammation in lung parenchyma. Kaltreider HB, et al. **Am J Respir Cell Mol Biol** 1997 Feb;16(2):133-44

Biophysical and functional consequences of receptor-mediated nerve fiber transformation. Tanelian DL, et al. **Biophys J** 1997 Mar;72(3):1092-108

The NK1 receptor and its participation in the synergistic enhancement of corneal epithelial migration by substance P and insulin-like growth factor-1. Nakamura M, et al. **Br J Pharmacol** 1997 Feb;120(4):547-52

Differential roles of neurokinin 1 and neurokinin 2 receptors in the development and maintenance of heat hyperalgesia induced by acute inflammation. Sluka KA, et al. **Br J Pharmacol** 1997 Apr;120(7):1263-73

What are the roles of substance P and neurokinin-1 receptors in the control of negative chronotropic or negative dromotropic vagal motoneurons? A physiological and ultrastructural analysis. Massari VJ, et al. **Brain Res** 1996 Apr 9;715(1-2):197-207

Spinal NK1 receptors contribute to the increased excitability of the nociceptive flexor reflex during persistent peripheral inflammation. Parsons AM, et al. **Brain Res** 1996 Nov 11; 739(1-2):263-75

Involvement of tachykinin NK1 and NK2 receptors in substance P-induced microvascular leakage hypersensitivity and airway hyperresponsiveness in guinea-pigs. Boichot E, et al. **Eur Respir J** 1996 Jul; 9(7):1445-50

Airway responses to capsaicin in guinea pigs: role of NK-1 and NK-2 neurokinin receptors. Vieira JE, et al. **Exp Lung Res** 1997 Jan-Feb;23(1):85-99

Increased delayed type hypersensitivity in rats subjected to unilateral mononeuropathy is mediated by neurokinin-1 receptors. Herzberg U, et al. **J Neuroimmunol** 1996 Apr; 65(2):119-24

Physiological contributions of neurokinin 1 receptor activation, and interactions with NMDA receptors, to inflammatory-evoked spinal c-Fos expression. Chapman V, et al. **J Neurophysiol** 1996 Sep;76(3):1817-27

Neurokinin-1 (NK1) receptors mediate tachykinin-induced depression of GABA current in bullfrog sensory neurons. Akasu T, et al. **Kurume Med J** 1997;44(1):33-41

Spinal cord neurons in which interaction between N-methyl-D-aspartate and neurokinin-1 receptors may occur. Szúcs P, et al. **Neurobiology (Bp)** 1996;4(3):281-2

NK1 and CGRP receptor-mediated dilatation of the carotid arterial bed of the anaesthetized rabbit. Perren MJ, et al. **Neuropeptides** 1996 Apr;30(2):141-8

Tachykinin NK1 and NK2 receptors mediate non-adrenergic non-cholinergic excitatory neuromuscular transmission in the human ileum. Zagorodnyuk V, et al. **Neuropeptides** 1997 Jun;31(3):265-71

Destruction of neurokinin-1 receptor expressing cells in vitro and in vivo using substance P-saporin in rats. Wiley RG, et al. **Neurosci Lett** 1997 Jul 18;230(2):97-100

Tachykinin NK1 and NK2 receptors mediate non-adrenergic non-cholinergic excitatory neuromuscular transmission in the guinea-pig stomach. Zagorodnyuk V, et al. **Neuroscience** 1997 Sep;80(2):625-34

Vasorelaxation by casomokinin L, a derivative of beta-casomorphin and casoxin D, is mediated by NK1 receptor. Fujita H, et al. **Peptides** 1996;17(4):635-9

RECEPTORS, NEUROKININ-2

AGONISTS

Neurokinin A and senktide attenuate scopolamine-induced impairment of spontaneous alternation performance in mice. Ukai M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Jun; 16(3):97-101

ANALYSIS

Radioligand binding, autoradiographic and functional studies demonstrate tachykinin NK-2 receptors in dog urinary bladder. Mussap CJ, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):423-34

RECEPTORS, NEUROKININ-2

ANTAGONISTS & INHIBITORS

The non-peptide tachykinin NK1- and NK2-receptor antagonists SR 140333 and SR 48968 prevent castor-oil induced diarrhea in rats. Croci T, et al. **Acta Physiol Hung** 1996;84(3):273-4

Role for neurokinin-2 receptor in interleukin-5-induced airway hyperresponsiveness but not eosinophilia in guinea pigs. Kraneveld AD, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):367-74

Effect of a new dual neurokinin antagonist on airway smooth muscle in situ. Shioya T, et al. **Arzneimittelforschung** 1995 Nov;45(11):1194-7

[3H][beta-Ala8]neurokinin A-(4-10): a novel, selective radioligand for the tachykinin NK2 receptor. Goso C, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):239-45

Characterization of tachykinin NK2 receptor on dog proximal colon. Antagonism by MEN 10,627 and SR 48,968. Parlani M, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2-3):419-24

SR 48968 specifically depresses neurokinin A- vs. substance P-induced hyperalgesia in a nociceptive withdrawal reflex. Yashpal K, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):41-8

Role of tachykinins in bronchoconstriction induced by intravenous administration of bradykinin in guinea-pigs. Kuroiwa C, et al. **Eur Respir J** 1996 Apr;9(4):741-6

Aerosolized tachykinin antagonists inhibit pentamidine-induce bronchoconstriction in guinea pigs. Jarreau PH, et al. **Fundam Clin Pharmacol** 1996; 10(6):518-23

Effect of several bicyclic peptide and cyclic pseudopeptide tachykinin NK2 receptor antagonists in the human isolated urinary bladder. Giuliani S, et al. **J Auton Pharmacol** 1996 Oct;16(5):251-9

The peripheral NK-1/NK-2 receptor antagonist MDL 105,172A inhibits tachykinin-mediated respiratory effects in guinea-pigs. Kudlacz EM, et al. **J Auton Pharmacol** 1997 Apr;17(2):109-19

Conformational rigidity versus flexibility in a novel peptidic neurokinin A receptor antagonist. Pavone V, et al. **J Pept Sci** 1995 Jul-Aug;1(4):236-40

Effect of tachykinin receptor inhibition in the brain on cardiovascular and behavioral responses to stress. Culman J, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):238-46

Effect of MDL 105,212, a nonpeptide NK-1/NK-2 receptor antagonist in an allergic guinea pig model. Kudlacz EM, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):732-9

Neurokinin receptors in the guinea pig ileum. Nguyen-Le XK, et al. **Pharmacology** 1996 Jan;52(1):35-45

A review of the design, synthesis and biological activity of the bicyclic hexapeptide tachykinin NK2 antagonist MEN 10627. Quartara L, et al. **Regul Pept** 1996 Aug 27;65(1):55-9 (29 ref.)

Effect of the acute and chronic administration of the selective neurokinin2 receptor antagonist SR 48968 on midbrain dopamine neurons in the rat: an in vivo extracellular single cell study. Minabe Y, et al. **Synapse** 1997 Feb;25(2):196-204

Evidence for adrenergic and tachykinin activity in venom of the stonefish (Synanceja trachynis). Hopkins BJ, et al. **Toxicon** 1996 May;34(5):541-54

[Molecular modelling and drug design: neurokinin receptor antagonism] Boudon A, et al. **J Pharm Belg** 1997 Mar-Apr; 52(2):103 **(Fre)**

DRUG EFFECTS

Involvement of NK2 receptors rather than NK1 receptors in bronchial hyperresponsiveness induced by allergic reaction in guinea-pigs. Mizuguchi M, et al. **Br J Pharmacol** 1996 Feb;117(3):443-448

Neurokinin A-induced vasoconstriction and muscular contraction in the rat isolated stomach: mediation by distinct and unusual neurokinin2 receptors. Lippe I, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1294-302

Tachykinin NK2 receptors: characterization in the rat small intestine by the use of a peptide agonist and a nonpeptide antagonist as radioligands. Renzetti AR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):139-44

Heterologous desensitization of the human endothelin A and neurokinin A receptors in Xenopus laevis oocytes. Cyr CR, et al. **Recept Signal Transduct** 1996;6(2):99-109

GENETICS

High-level expression of G protein-coupled receptors with the aid of the Semliki Forest virus expression system. Lundstrom K, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):23-32

IMMUNOLOGY

Spinal NK2 receptors contribute to the increased excitability of the nociceptive flexor reflex during persistent peripheral inflammation. Jia YP, et al. **Brain Res** 1997 Mar 14; 751(1):169-74

METABOLISM

Distribution of neurokinin-2 receptors in the guinea-pig gastrointestinal tract. Portbury AL, et al. **Cell Tissue Res** 1996 Dec;286(3):281-92

Autoradiographic localization of tachykinin NK2 and NK1 receptors in the guinea-pig lung, using selective radioligands. Strigas J, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):177-86

Functional characterization of the human neurokinin receptors NK1, NK2, and NK3 based on a cellular assay system. Stratowa C, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):617-30

Heterogeneity of tachykinin receptors in the rabbit lung. Millard SL, et al. **Neurochem Res** 1996 Feb;21(2):277-83

Neurokinin subtype receptors mediating substance P contraction in immature rabbit airways. Kazem E, et al. **Pediatr Res** 1996 Jan;39(1):120-6

Autoradiographic mapping of pulmonary NK1 and NK2 tachykinin receptors and changes after repeated antigen challenge in guinea pigs. Mak JC, et al. **Peptides** 1996; 17(8):1389-95

PHYSIOLOGY

Differential roles of neurokinin 1 and neurokinin 2 receptors in the development and maintenance of heat hyperalgesia induced by acute inflammation. Sluka KA, et al. **Br J Pharmacol** 1997 Apr;120(7):1263-73

Involvement of tachykinin NK1 and NK2 receptors in substance P-induced microvascular leakage hypersensitivity and airway hyperresponsiveness in guinea-pigs. Boichot E, et al. **Eur Respir J** 1996 Jul; 9(7):1445-50

Airway responses to capsaicin in guinea pigs: role of NK-1 and NK-2 neurokinin receptors. Vieira JE, et al. **Exp Lung Res** 1997 Jan-Feb;23(1):85-99

Pharmacological evidence that NK-2 tachykinin receptors mediate hypotension in the guinea pig but not in the rat. Floch A, et al. **Fundam Clin Pharmacol** 1996;10(4):337-43

Tachykinin NK1 and NK2 receptors mediate non-adrenergic non-cholinergic excitatory neuromuscular transmission in the human ileum. Zagorodnyuk V, et al. **Neuropeptides** 1997 Jun;31(3):265-71

Tachykinin NK1 and NK2 receptors mediate non-adrenergic non-cholinergic excitatory neuromuscular transmission in the guinea-pig stomach. Zagorodnyuk V, et al. **Neuroscience** 1997 Sep;80(2):625-34

RECEPTORS, NEUROKININ-3

AGONISTS

Tachykinin neurokinin-1 and neurokinin-3 receptor-mediated responses in guinea-pig substantia nigra: an in vitro electrophysiological study. Nalivaiko E, et al. **Neuroscience** 1997 Jun;78(3):745-57

Neurokinin A and senktide attenuate scopolamine-induced impairment of spontaneous alternation performance in mice. Ukai M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Jun; 16(3):97-101

Effects of the selective tachykinin NK3 receptor agonist NH2-senktide on intraoral intake and taste reactivity responses elicited by NaCl in sodium-replete rats. Polidori C, et al. **Regul Pept** 1996 Oct 8;66(1-2):101-4

ANALYSIS

Localisation of neurokinin 3 (NK3) receptor immunoreactivity in the rat gastrointestinal tract. Mann PT, et al. **Cell Tissue Res** 1997 Jul;289(1):1-9

Relationship of NK3 receptor-immunoreactivity to subpopulations of neurons in rat spinal cord. Seybold VS, et al. **J Comp Neurol** 1997 May 19;381(4):439-48

Immunoelectron microscopic localization of NK-3 receptor in the rat spinal cord. Zerari F, et al. **Neuroreport** 1997 Aug 18;8(12):2661-4

ANTAGONISTS & INHIBITORS

Potency and selectivity of the tachykinin NK3 receptor antagonist SR 142801. Beaujouan JC, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):307-16

Discovery of a novel class of selective non-peptide antagonists for the human neurokinin-3 receptor. 1. Identification of the 4-quinolinecarboxamide framework. Giardina GA, et al. **J Med Chem** 1997 Jun 6; 40(12):1794-807

In vivo evidence for the involvement of tachykinin NK3 receptors in the hexamethonium-resistant inhibitory transmission in the rat colon. Lecci A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):671-9

Tachykinin neurokinin-1 and neurokinin-3 receptor-mediated responses in guinea-pig substantia nigra: an in vitro electrophysiological study. Nalivaiko E, et al. **Neuroscience** 1997 Jun;78(3):745-57

Neurokinin receptors in the guinea pig ileum. Nguyen-Le XK, et al. **Pharmacology** 1996 Jan;52(1):35-45

Pharmacological characterization of SR 142801: a new non-peptide antagonist of the neurokinin NK-3 receptor. Nguyen-Le XK, et al. **Pharmacology** 1996 May; 52(5):283-91

[Molecular modelling and drug design: neurokinin receptor antagonism] Boudon A, et al. **J Pharm Belg** 1997 Mar-Apr; 52(2):103 **(Fre)**

DRUG EFFECTS

Characterization of NK3 receptors in rabbit isolated iris sphincter muscle. Medhurst AD, et al. **Br J Pharmacol** 1997 Jan;120(1):93-101

Regulation by oestrogens of tachykinin NK3 receptor expression in the rat uterus. Pinto FM, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):125-7

Nonpeptide tachykinin receptor antagonists: I. Pharmacological and pharmacokinetic characterization of SB 223412, a novel, potent and selective neurokinin-3 receptor antagonist. Sarau HM, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1303-11

Evidence for the presence of NK1 and NK3 receptors on cholinergic neurones in the guinea-pig ileum. Legat FJ, et al. **Neurosci Lett** 1996 Mar 29;207(2):125-8

Electrophysiological, behavioural and biochemical evidence for activation of brain noradrenergic systems following neurokinin NK3 receptor stimulation. Jung M, et al. **Neuroscience** 1996 Sep;74(2):403-14

METABOLISM

Immunocytochemical localisation of NK3 receptors in the dorsal vagal complex of rat. Carpentier C, et al. **Brain Res** 1996 Sep 23;734(1-2):327-31

Variation in mRNA expression of alpha-adrenergic, neurokinin and muscarinic receptors amongst four arteries of the rat. Phillips JK, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1-2):85-93

Immunocytochemical detection of the neurokinin B receptor (NK3) on melanin-concentrating hormone (MCH) neurons in rat brain. Griffond B, et al. **J Chem Neuroanat** 1997 Mar;12(3):183-9

In situ hybridization analysis of the distribution of neurokinin-3 mRNA in the rat central nervous system. Shughrue PJ, et al. **J Comp Neurol** 1996 Aug 26; 372(3):395-414

Functional characterization of the human neurokinin receptors NK1, NK2, and NK3 based on a cellular assay system. Stratowa C, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):617-30

Transglutaminase-synthesized spermine derivative of substance P recognizes rat portal vein neurokinin-3 receptors. Filippelli A, et al. **Life Sci** 1997;60(6):403-11

Functional expression of a novel human neurokinin-3 receptor homolog that binds [3H]senktide and [125I-MePhe7]neurokinin B, and is responsive to tachykinin peptide agonists. Krause JE, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):310-5

PHYSIOLOGY

Analysis of contributions of acetylcholine and tachykinins to neuro-neuronal transmission in motility reflexes in the guinea-pig ileum. Johnson PJ, et al. **Br J Pharmacol** 1996 Jun;118(4):973-83

Antidiuretic action of tachykinin NK-3 receptor in the rat paraventricular nucleus. Eguchi T, et al. **Brain Res** 1996 Dec 16;743(1-2):49-55

RECEPTORS, NEUROMEDIN B see **RECEPTORS, BOMBESIN**

RECEPTORS, NEUROPEPTIDE

[GRH receptor] Sato M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:468-71 (7 ref.) **(Jpn)**

[Motilin and motilin receptor] Satoh M, et al. **Nippon Rinsho** 1996 Apr;54(4):1092-6 (20 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

EM574, an erythromycin derivative, is a motilin receptor agonist in the rabbit. Sato F, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):63-71

Gallbladder contraction induced by intravenous erythromycin administration. Relation to body mass index. Kakkos SK, et al. **Hepatogastroenterology** 1996 Nov-Dec; 43(12):1540-3

Chronic administration of a new potent agonist of growth hormone- releasing hormone induces compensatory linear growth in growth hormone-deficient rats: mechanism of action. Kovács M, et al. **Neuroendocrinology** 1996 Sep; 64(3):169-76

[Acute reversible pan-dysautonomia: effect of erythromycin on gastrointestinal involvement] Lagasse JP, et al. **Gastroenterol Clin Biol** 1997;21(4):331-4 (12 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Peptide receptors in gut endocrine tumours. de Herder WW, et al. **Baillieres Clin Gastroenterol** 1996 Dec;10(4):571-87 (55 ref.)

Tissue-specific molecular heterogeneity of human growth hormone-releasing hormone receptor protein. Fujinaka Y, et al. **FEBS Lett** 1996 Sep 23;394(1):1-4

Study of the binding of motilin to the membranes of enterocytes from rabbit jejunum. Alcalde AI, et al. **Peptides** 1996;17(7):1237-41

ANTAGONISTS & INHIBITORS

Intracerebroventricular responses to neuropeptide gamma in the conscious rat: characterization of its receptor with

selective antagonists. Picard P, et al. **Br J Pharmacol** 1996 Jan;117(2):241–9

Cardiovascular responses to intrathecal neuropeptide gamma in conscious rats: receptor characterization and mechanism of action. Poulat P, et al. **Br J Pharmacol** 1996 Jan; 117(2):250–7

BIOSYNTHESIS

Glucocorticoids regulate pituitary growth hormone–releasing hormone receptor messenger ribonucleic acid expression. Miller TL, et al. **Endocrinology** 1997 Jun;138(6):2458–65

Pituitary growth hormone–releasing factor receptor expression in normal and dwarf rats. Carmignac DF, et al. **Neuroendocrinology** 1996 Sep;64(3):177–85

CHEMISTRY

A novel G protein–coupled receptor with homology to neuropeptide and chemoattractant receptors expressed during bone development. Methner A, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):336–42

Tissue-specific molecular heterogeneity of human growth hormone–releasing hormone receptor protein. Fujinaka Y, et al. **FEBS Lett** 1996 Sep 23;394(1):1–4

Investigation of growth hormone releasing hormone receptor structure and activity using yeast expression technologies. Kajkowski EM, et al. **J Recept Signal Transduct Res** 1997 Jan–May;17(1–3):293–303

DRUG EFFECTS

Erythromycin inhibits rabbit pyloric smooth muscle through neuronal motilin receptors. Parkman HP, et al. **Gastroenterology** 1996 Sep;111(3):682–90

Selective activity of a proctolin analogue reveals the existence of two receptor subtypes. Baines RA, et al. **J Neurophysiol** 1996 Jun;75(6):2647–50

Gene expression of the receptor for growth–hormone–releasing hormone is physiologically regulated by glucocorticoids and estrogen. Lam KS, et al. **Neuroendocrinology** 1996 Jun;63(6):475–80

Prepro–neuropeptide Y mRNA and NPY binding sites in human inferior vagal ganglia. McLean KJ, et al. **Neuroreport** 1997 Jul 7;8(9–10):2317–20

Presence of neuropeptide FF receptors on primary afferent fibres of the rat spinal cord. Gouardères C, et al. **Neuroscience** 1996 Sep;74(1):21–7

GENETICS

A putative chemokine receptor, BLR1, directs B cell migration to defined lymphoid organs and specific anatomic compartments of the spleen. Förster R, et al. **Cell** 1996 Dec 13;87(6):1037–47

Gender difference in pituitary growth hormone–releasing factor (GRF) receptor gene expression in the rat. Miki N, et al. **Endocr J** 1996 Oct;43 Suppl:S123–5

Homologous down–regulation of growth hormone–releasing hormone receptor messenger ribonucleic acid levels. Aleppo G, et al. **Endocrinology** 1997 Mar;138(3):1058–65

Growth hormone–releasing hormone (GHRH) receptor mutation and dwarfism: after the mouse, the human. Bertherat J. **Eur J Endocrinol** 1996 Jun;134(6):684–5

Thyroid hormone and glucocorticoid regulation of pituitary growth hormone–releasing hormone receptor gene expression. Korytko AI, et al. **J Endocrinol** 1997 Feb; 152(2):R13–7

Dexamethasone increases growth hormone (GH)–releasing hormone (GRH) receptor mRNA levels in cultured rat anterior pituitary cells. Tamaki M, et al. **J Neuroendocrinol** 1996 Jun;8(6):475–80

ISOLATION & PURIFICATION

Species differences in the localization of neuropeptide FF receptors in rodent and lagomorph brain and spinal cord. Dupouy V, et al. **Peptides** 1996;17(3):399–405

METABOLISM

Growth hormone–releasing hormone receptor mRNA in acromegalic pituitary tumors. Lopes MB, et al. **Am J Pathol** 1997 Jun;150(6):1885–91

Intracerebroventricular responses to neuropeptide gamma in the conscious rat: characterization of its receptor with selective antagonists. Picard P, et al. **Br J Pharmacol** 1996 Jan;117(2):241–9

Cardiovascular responses to intrathecal neuropeptide gamma in conscious rats: receptor characterization and mechanism of action. Poulat P, et al. **Br J Pharmacol** 1996 Jan; 117(2):250–7

Nitric oxide and delta–opioid receptors in the tissue interactions among enkephalins, angiotensins and kinins. Carmignani M, et al. **Immunopharmacology** 1996 May; 32(1–3):172–5

Cloning and functional characterization of the ornithokinin receptor. Recognition of the major kinin receptor antagonist, HOE140, as a full agonist. Schroeder C, et al. **J Biol Chem** 1997 May 9;272(19):12475–81

Expression of neurotrophic factors and neuropeptide receptors by Langerhans cells and the Langerhans cell–like cell line XS52: further support for a functional relationship between Langerhans cells and epidermal nerves. Torii H, et al. **J Invest Dermatol** 1997 Oct;109(4):586–91

Cloning, characterization, and expression of a G–protein–coupled receptor from Lymnaea stagnalis and identification of a leucokinin–like peptide, PSFHSWSamide, as its endogenous ligand. Cox KJ, et al. **J Neurosci** 1997 Feb 15;17(4):1197–205

The study of membrane– or receptor–bound neuropeptides by NMR. Hicks RP. **Methods Mol Biol** 1997;73:185–207 (50 ref.)

Neuropeptide FF receptors of mouse olfactory bulb: binding properties and stimulation of adenylate cyclase activity. Gherardi N, et al. **Peptides** 1997;18(4):577–83

Heterogeneity of motilin receptors in the gastrointestinal tract of the rabbit. Poitras P, et al. **Peptides** 1996; 17(4):701–7

Neuropeptide FF receptors in rat brain: a quantitative light–microscopic autoradiographic study using [125I][D.Tyr1, (NMe)Phe3]NPFF. Dupouy V, et al. **Synapse** 1996 Nov;24(3):282–96

PHYSIOLOGY

The growth–hormone–releasing hormone receptor: signal transduction, gene expression, and physiological function in growth regulation. Mayo KE, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:184–203 (35 ref.)

Neuropeptide FF receptors control morphine–induced analgesia in the parafascicular nucleus and the dorsal raphe nucleus. Dupouy V, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2–3):129–37

RECEPTORS, NEUROPEPTIDE Y

AGONISTS

Modified, cyclic dodecapeptide analog of neuropeptide Y is the smallest full agonist at the human Y2 receptor. Rist B, et al. **FEBS Lett** 1996 Sep 30;394(2):169–73

Neuropeptide Y receptor agonists: multiple effects on spontaneous activity in the paraventricular hypothalamus. Aramakis VB, et al. **Peptides** 1996;17(8):1349–57

Anxiolytic activity of NPY receptor agonists in the conflict test. Britton KT, et al. **Psychopharmacology (Berl)** 1997 Jul; 132(1):6–13

ANALYSIS

High levels of specific neuropeptide Y/pancreatic polypeptide receptors in the rat hypothalamus and brainstem. Trinh T, et al. **Eur J Pharmacol** 1996 Dec 27; 318(1):R1–3

Expression of peptides, nitric oxide synthase and NPY receptor in trigeminal and nodose ganglia after nerve lesions. Zhang X, et al. **Exp Brain Res** 1996 Oct; 111(3):393–404

NPY Y1 receptor like immunoreactivity exists in a subpopulation of beta–endorphin immunoreactive nerve cells in the arcuate nucleus: a double immunolabelling analysis in the rat. Fuxe K, et al. **Neurosci Lett** 1997 Mar 28;225(1):49–52

Localization of neuropeptide Y Y1 receptor–like immunoreactivity in catecholaminergic neurons of the rat medulla oblongata. Yang SN, et al. **Neuroscience** 1996 Jul; 73(2):519–30

Analysis of NPY receptor subtypes in the human frontal cortex reveals abundant Y1 mRNA and binding sites. Statnick MA, et al. **Peptides** 1997;18(1):137–43

ANTAGONISTS & INHIBITORS

Suppression of neuropeptide Y1 receptor function in SK–N–MC cells by nitric oxide. Dötsch J, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C618–21

Discrimination between neuropeptide Y and peptide YY in the rat tail artery by the neuropeptide Y1–selective antagonist, BIBP 3226. Gicquiaux H, et al. **Br J Pharmacol** 1996 Dec;119(7):1313–8

Synthesis and characterization of a selective peptide antagonist of neuropeptide Y vascular postsynaptic receptors. Lew MJ, et al. **Br J Pharmacol** 1996 Apr; 117(8):1768–72

The neuropeptide Y (NPY) Y1 receptor antagonist BIBP 3226: equal effects on vascular responses to exogenous and endogenous NPY in the pig in vivo. Malmström RE, et al. **Br J Pharmacol** 1997 Jun;121(3):595–603

GW1229, a novel neuropeptide Y Y1 receptor antagonist, inhibits the vasoconstrictor effect on neuropeptide Y in the hamster microcirculation. Bitran M, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):43–7

SR 120107A antagonizes neuropeptide Y Y1 receptor mediated sympathetic vasoconstriction in pigs in vivo. Malmström RE, et al. **Eur J Pharmacol** 1996 Jun 3; 305(1–3):145–54

Characterization of a selective antagonist of neuropeptide Y at the Y2 receptor. Synthesis and pharmacological evaluation of a Y2 antagonist. Grouzmann E, et al. **J Biol Chem** 1997 Mar 21;272(12):7699–706

Contractile effects of neuropeptide Y in human subcutaneous resistance arteries are mediated by Y1 receptors. Nilsson T, et al. **J Cardiovasc Pharmacol** 1996 Dec;28(6):764–8

Hemodynamic characterization of a novel neuropeptide Y receptor antagonist. Tadepalli AS, et al. **J Cardiovasc Pharmacol** 1996 May;27(5):712–8

Novel neuropeptide Y receptor antagonists block vasoconstriction in the hamster cheek pouch microcirculation. Kim D, et al. **Microvasc Res** 1997 Mar; 53(2):167–72

Effects of the neuropeptide YY1 receptor antagonist SR 120107A on sympathetic vascular control in pigs in vivo . Malmström RE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):633–42

The non–peptide neuropeptide Y Y1 receptor antagonist BIBP3226 blocks the [Leu31,Pro34]neuropeptide Y–induced modulation of alpha 2–adrenoceptors in the nucleus tractus solitarii of the rat. Yang SN, et al. **Neuroreport** 1996 Nov 4;7(15–17):2701–5

Synthesis, structure, and antagonistic properties of des–Asn29[D–Trp28,32]NPY(27–36). Balasubramaniam A, et al. **Peptides** 1996;17(7):1113–8

Effects of the neuropeptide Y (NPY)–receptor antagonist BIBP3226 on vascular NPY–receptors with different ligand requirements. Grundemar L, et al. **Pharmacol Toxicol** 1996 Nov;79(5):266–9

BIBP 3226, the first selective neuropeptide Y1 receptor antagonist: a review of its pharmacological properties. Doods HN, et al. **Regul Pept** 1996 Aug 27;65(1):71–7 (48 ref.)

Recent developments with neuropeptide Y receptor antagonists. Lundberg JM, et al. **Trends Pharmacol Sci** 1996 Sep;17(9):301–4 (35 ref.)

BIOSYNTHESIS

Cloning and functional expression of a cDNA encoding a mouse type 2 neuropeptide Y receptor. Nakamura M, et al. **Biochim Biophys Acta** 1996 Oct 23;1284(2):134–7

Localization of neuropeptide Y Y1 mRNA in the human brain: abundant expression in cerebral cortex and striatum. Caberlotto L, et al. **Eur J Neurosci** 1997 Jun;9(6):1212–25

Regulation of leptin receptor and NPY gene expression in hypothalamus of leptin–treated obese (ob/ob) and cold–exposed lean mice. Mercer JG, et al. **FEBS Lett** 1997 Feb 3;402(2–3):185–8

Altered expression of NPY–Y1 receptors in kainic acid induced epilepsy in rats. Kofler N, et al. **Neurosci Lett** 1997 Jul 18;230(2):129–32

CHEMISTRY

The bioactive conformation of neuropeptide Y analogues at the human Y2–receptor. Rist B, et al. **Eur J Biochem** 1997 Aug 1;247(3):1019–28

Modeling the G–protein–coupled neuropeptide Y Y1 receptor agonist and antagonist binding sites. Du P, et al. **Protein Eng** 1997 Feb;10(2):109–17

Neuropeptide Y1 receptors in the rat genital tract. Kopp J, et al. **Regul Pept** 1997 Jun 18;70(2–3):149–60

Structural diversity of receptors for neuropeptide Y, peptide YY and pancreatic polypeptide. Larhammar D. **Regul Pept** 1996 Sep 16;65(3):165–74 (64 ref.)

CLASSIFICATION

Neuropeptide Y receptor subtypes. Wan CP, et al. **Life Sci** 1995 Feb 17;56(13):1055–64 (79 ref.)

Characterization of neuropeptide Y receptor subtypes in the normal human brain, including the hypothalamus. Jacques D, et al. **Neuroscience** 1997 Jul;79(1):129–48

DRUG EFFECTS

In vivo receptor characterization of neuropeptide Y–induced effects in consecutive vascular sections of cat skeletal muscle. Ekelund U, et al. **Br J Pharmacol** 1997 Feb; 120(3):387–92

Characterization of Y3 receptor–mediated synaptic inhibition by chimeric neuropeptide Y–peptide YY peptides in the rat brainstem. Glaum SR, et al. **Br J Pharmacol** 1997 Feb; 120(3):481–7

Cytoskeletal inhibitors impair Ca2+ elevations via neuropeptide Y and other Gi–coupled receptors. Michel MC, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):87–94

Regulation of neurotransmission in the arcuate nucleus of the rat by different neuropeptide Y receptors. Rhim H, et al. **J Neurosci** 1997 May 1;17(9):2980–9

Neuropeptide Y receptors from calf brain: effect of crude Conus venom preparations on [3H]NPY binding. Czerwiec E, et al. **Neurochem Int** 1996 Dec;29(6):669–76

Cellular localization of neuropeptide–Y receptors in the rat hippocampus: long–term effects of limbic seizures. Gobbi M, et al. **Neuroreport** 1996 Jun 17;7(9):1475–80

Neuropeptide Y phase shifts the circadian clock in vitro via a Y2 receptor. Golombek DA, et al. **Neuroreport** 1996 May 17;7(7):1315–9

Neuropeptide Y phase shifts circadian rhythms in vivo via a Y2 receptor. Huhman KL, et al. **Neuroreport** 1996 May 17;7(7):1249–52

NPY–Y1 receptor antisense injected centrally in rats causes hyperthermia and feeding. Lopez–Valpuesta FJ, et al. **Neuroreport** 1996 Nov 4;7(15–17):2781–4

Inhibition of canine exocrine pancreatic secretion by peptide YY is mediated by PYY–preferring Y2 receptors. Teyssen S, et al. **Pancreas** 1996 Jul;13(1):80–8

GENETICS

Molecular cloning, organization and localization of the gene for the mouse neuropeptide Y–Y5 receptor. Nakamura M,

et al. **Biochim Biophys Acta** 1997 Sep 4;1328(2):83–9

Genetic studies of neuropeptide Y and neuropeptide Y receptors Y1 and Y5 regions in morbid obesity. Roche C, et al. **Diabetologia** 1997 Jun;40(6):671–5

Monitoring of antisense effects of oligonucleotides targeted to the neuropeptide Y Y1 receptor gene. Hänze J, et al. **Eur J Pharmacol** 1997 Jul 2;330(1):87–92

Characterization of the human type 2 neuropeptide Y receptor gene (NPY2R) and localization to the chromosome 4q region containing the type 1 neuropeptide Y receptor gene. Ammar DA, et al. **Genomics** 1996 Dec 15;38(3):392–8

Overlapping gene structure of the human neuropeptide Y receptor subtypes Y1 and Y5 suggests coordinate transcriptional regulation. Herzog H, et al. **Genomics** 1997 May 1;41(3):315–9

Neuropeptide Y receptor genes on human chromosome 4q31–q32 map to conserved linkage groups on mouse chromosomes 3 and 8. Lutz CM, et al. **Genomics** 1997 May 1;41(3):498–500

Inactivation of a novel neuropeptide Y/peptide YY receptor gene in primate species. Matsumoto M, et al. **J Biol Chem** 1996 Nov 1;271(44):27217–20

Molecular genetic analysis of a human neuropeptide Y receptor. The human homolog of the murine "Y5" receptor may be a pseudogene. Rose PM, et al. **J Biol Chem** 1997 Feb 7;272(6):3622–7

Regulation of mouse neuropeptide Y Y1 receptor gene transcription: a potential role for nuclear factor-kappa B/Rel proteins. Musso R, et al. **Mol Pharmacol** 1997 Jan; 51(1):27–35

Expression of the neuropeptide Y Y1 receptor mRNA in the human brain: an in situ hybridization study. Jacques D, et al. **Neuroreport** 1996 Apr 10;7(5):1053–6

Presence of neuropeptide Y Y1 receptor mediating vasoconstriction in human cerebral arteries. Nilsson T, et al. **Neurosci Lett** 1996 Feb 9;204(3):145–8

Ligand binding analysis of human neuropeptide Y1 receptor mutants expressed in E. coli. Münch G, et al. **Receptors Channels** 1995;3(4):291–7

Neuropeptide Y receptor gene regulation in mouse adrenocortical Y-1 cells. Weng G, et al. **Regul Pept** 1996 May 7;63(1):53–6

Y-receptor subtypes--how many more? Blomqvist AG, et al. **Trends Neurosci** 1997 Jul;20(7):294–8 (64 ref.)

METABOLISM

Regionally-selective down-regulation of NPY receptor subtypes in the obese Zucker rat. Relationship to the Y5 'feeding' receptor. Widdowson PS. **Brain Res** 1997 May 30;758(1–2):17–25

Distribution of the neuropeptide Y Y2 receptor mRNA in rat central nervous system. Gustafson EL, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):223–35

Neuropeptide Y Y1-receptor stimulation is required for physiological amplification of preovulatory luteinizing hormone surges. Leupen SM, et al. **Endocrinology** 1997 Jul; 138(7):2735–9

Solution structure of neuropeptide tyrosine 13–36, a Y2 receptor agonist, as determined by NMR. Labelle M, et al. **Eur J Biochem** 1997 Jun 15;246(3):780–5

The neuropeptide Y Y1 receptor selective radioligand, [125I][Leu31,Pro34]peptide YY, is also a high affinity radioligand for human pancreatic polypeptide 1 receptors. Gehlert DR, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2–3):485–90

Differences in cation sensitivity of ligand binding to Y1 and Y2 subtype of neuropeptide Y receptor of rat brain. Parker MS, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):193–200

The dog saphenous vein: a sensitive and selective preparation for the Y2 receptor of neuropeptide Y. Pheng LH, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):163–7

Pharmacological characterization of neuropeptide Y-(2–36) binding to neuropeptide Y Y1 and Y2 receptors. Schober DA, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):307–13

Acylation of the alpha-amino group in neuropeptide Y(12–36) increases binding affinity for the Y2 receptor. Murase S, et al. **J Biochem (Tokyo)** 1996 Jan;119(1):37–41

Prejunctional neuropeptide Y receptors in human kidney and atrium. Rump LC, et al. **J Cardiovasc Pharmacol** 1997 May; 29(5):656–61

Autoradiographic localization of receptors for neuropeptide Y (NPY) in the brain of broiler and leghorn chickens (Gallus domesticus). Merckaert J, et al. **J Chem Neuroanat** 1996 Dec;12(2):123–34

Reduced NPY induced feeding in diabetic but not steroid-treated rats: lack of evidence for changes in receptor number or affinity. Morgan DG, et al. **J Neuroendocrinol** 1996 Apr;8(4):283–90

Multiple NPY receptors coexist in pre- and postsynaptic sites: inhibition of GABA release in isolated self-innervating SCN neurons. Chen G, et al. **J Neurosci** 1996 Dec 1;16(23):7711–24

A rational approach for the development of reduced-size analogues of neuropeptide Y with high affinity to the Y1 receptor. Rist B, et al. **J Pept Sci** 1995 Sep–Oct;1(5):341–8

Synthesis, receptor binding, and crosslinking of photoactive analogues of neuropeptide Y. Beck-Sickinger AG, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):473–85

Fluorescent labelled analogues of neuropeptide Y for the characterization of cells expressing NPY receptor subtypes. Ingenhoven N, et al. **J Recept Signal Transduct Res** 1997 Jan–May;17(1–3):407–18

Neuropeptide Y Y1 receptors in the rat forebrain: autoradiographic demonstration of [125I][Leu31,Pro34]-NPY binding sites and neurons expressing Y1 receptor mRNA. Larsen PJ, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):457–72

Anticonvulsant action of neuropeptide Y. Neuropeptide Y may act as an endogenous anticonvulsant through Y5 receptors suggesting a new target for antiepileptic drugs [news; comment] Sperk G, et al. **Nat Med** 1997 Jul; 3(7):728–9. Comment on: Nat Med 1997 Jul;3(7):761–4.

Powerful inhibition of kainic acid seizures by neuropeptide Y via Y5-like receptors [see comments] Woldbye DP, et al. **Nat Med** 1997 Jul;3(7):761–4. Comment in: Nat Med 1997 Jul;3(7):728–9.

Comparative autoradiographic distribution of neuropeptide Y Y1 receptors visualized with the Y1 receptor agonist [125I][Leu31,Pro34]PYY and the non-peptide antagonist [3H]BIBP3226. Dumont Y, et al. **Neuroreport** 1996 Mar 22;7(4):901–4

NPY opposes PACAP phase shifts via receptors different from those involved in NPY phase shifts. Harrington ME, et al. **Neuroreport** 1997 Aug 18;8(12):2677–80

Inhibition of stimulated cyclic AMP production by multiple neuropeptide Y receptors in the rat brainstem. Ny L, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):113–6

Differential distribution of neuropeptide Y Y1 and Y2 receptors in rat and guinea-pig brains. Gehlert DR, et al. **Neuroscience** 1997 Jan;76(1):215–24

Characterization of neuropeptide Y receptor subtypes in the normal human brain, including the hypothalamus. Jacques D, et al. **Neuroscience** 1997 Jul;79(1):129–48

Neuropeptide Y family of hormones: receptor subtypes and antagonists. Balasubramaniam AA. **Peptides** 1997; 18(3):445–57 (159 ref.)

[125I]Leu31, Pro34-PYY is a high affinity radioligand for rat PP1/Y4 and Y1 receptors: evidence for heterogeneity in pancreatic polypeptide receptors. Gehlert DR, et al. **Peptides** 1997;18(3):397–401

Unexpected high density of neuropeptide Y Y1 receptors in the guinea pig spleen. Gehlert DR, et al. **Peptides** 1996; 17(8):1345–8

Neuropeptide Y 3–36 is an endogenous ligand selective for Y2 receptors. Grandt D, et al. **Regul Pept** 1996 Nov 14; 67(1):33–7

Ligand binding and functional effects of systematic double D-amino acid residue substituted neuropeptide Y analogs on Y1 and Y2 receptor types. Grundemar L, et al. **Regul Pept** 1996 Apr 23;62(2–3):131–6

Structure-affinity studies of C-terminally modified analogs of neuropeptide Y led to a novel class of peptidic Y1 receptor antagonist. Hoffmann S, et al. **Regul Pept** 1996 Aug 27;65(1):61–70

Inhibitory effect of neuropeptide Y on growth hormone secretion in rats is mediated by both Y1- and Y2-receptor subtypes and abolished after anterolateral deafferentation of the medial basal hypothalamus. Suzuki N, et al. **Regul Pept** 1996 Sep 9;65(2):145–51

PHYSIOLOGY

Neuropeptide Y regulates rat renal tubular Na,K-ATPase through several signalling pathways. Ohtomo Y, et al. **Acta Physiol Scand** 1996 Sep;158(1):97–105

Neuropeptide Y Y1 receptor mechanisms in sympathetic vascular control. Malmström RE. **Acta Physiol Scand Suppl** 1997;636:1–55 (229 ref.)

Stress-induced mesenteric vasoconstriction in rats is mediated by neuropeptide Y Y1 receptors. Zukowska-Grojec Z, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H796–800

Functional characterisation of the neuropeptide Y receptor mediating feeding in the rat. Haynes AC, et al. **Biochem Soc Trans** 1996 May;24(2):286S

Characterization of neuropeptide Y receptors mediating contraction, potentiation and inhibition of relaxation. Nilsson T, et al. **Blood Press** 1996 May;5(3):164–9

Receptor subtypes Y1 and Y5 are involved in the renal effects of neuropeptide Y. Bischoff A, et al. **Br J Pharmacol** 1997 Apr;120(7):1335–43

The functional investigation of a human adenocarcinoma cell line, stably transfected with the neuropeptide Y Y1 receptor. Holliday ND, et al. **Br J Pharmacol** 1996 Sep; 119(2):321–9

Neuropeptide Y Y2 receptor-mediated attenuation of neurogenic plasma extravasation acting through pertussis toxin-sensitive mechanisms. Yu XJ, et al. **Br J Pharmacol** 1996 Sep;119(2):229–32

Neuropeptide Y induced feeding in the rat is mediated by a novel receptor. O'Shea D, et al. **Endocrinology** 1997 Jan; 138(1):196–202

Neuropeptide Y potentiates noradrenaline-induced contraction through the neuropeptide Y Y1 receptor. Bergdahl A, et al. **Eur J Pharmacol** 1996 Nov 28; 316(1):59–64

Role of neuropeptide Y and its receptor subtypes in neurogenic pulmonary edema. Hirabayashi A, et al. **Eur J Pharmacol** 1996 Feb 5;296(3):297–305

Neuropeptide Y Y1 receptors are involved in the vasoconstriction caused by human sympathetic nerve stimulation. Racchi H, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):79–83

Identification of a novel hypothalamic neuropeptide Y receptor associated with feeding behavior. Hu Y, et al. **J Biol Chem** 1996 Oct 18;271(42):26315–9

Does the neuropeptide Y Y1 receptor contribute to blood pressure control in the spontaneously hypertensive rat? Zhao XH, et al. **J Hypertens** 1997 Jan;15(1):19–27

Stimulation of the sympathetic perimesenteric arterial nerves releases neuropeptide Y potentiating the vasomotor activity of noradrenaline: involvement of neuropeptide Y-Y1 receptors. Donoso MV, et al. **J Neurochem** 1997 Sep; 69(3):1048–59

Retinoic acid-induced regulation of neuropeptide Y receptor expression and function in the neuroepithelioma line SK-N-MC. Shorter NA, et al. **J Pediatr Surg** 1997 May; 32(5):721–3

PYY and NPY: control of gastric motility via action on Y1 and Y2 receptors in the DVC. Chen CH, et al. **Neurogastroenterol Motil** 1997 Jun;9(2):109–16

Activity of centrally truncated analogues of neuropeptide Y at Y1 and Y2 receptor subtypes in vivo. McCloskey MJ, et al. **Neuropeptides** 1997 Apr;31(2):193–7

Inhibition of canine exocrine pancreatic secretion by peptide YY is mediated by PYY-preferring Y2 receptors. Teyssen S, et al. **Pancreas** 1996 Jul;13(1):80–8

Expression and regulation of the neuropeptide Y Y2 receptor in sensory and autonomic ganglia. Zhang X, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):729–34

RECEPTORS, NEUROTENSIN

AGONISTS

A C-terminal cyclic 8–13 neurotensin fragment analog appears less exposed to neprilysin when it crosses the blood-brain barrier than the cerebrospinal fluid-brain barrier in mice. Van Kemmel FM, et al. **Neurosci Lett** 1996 Oct 11;217(1):58–60

ANALYSIS

Cellular distribution of neurotensin receptors in rat brain: immunohistochemical study using an antipeptide antibody against the cloned high affinity receptor. Boudin H, et al. **J Comp Neurol** 1996 Sep 9;373(1):76–89

ANTAGONISTS & INHIBITORS

Negative modulation of nitric oxide production by neurotensin as a putative mechanism of the diuretic action of SR 48692 in rats. Croci T, et al. **Br J Pharmacol** 1997 Apr;120(7):1312–8

The neurotensin receptor antagonist SR 48692 decreases extracellular striatal GABA in rats. Chapman MA, et al. **Brain Res** 1996 Aug 5;729(1):124–6

In vivo regulation of neurotensin receptors following long-term pharmacological blockade with a specific receptor antagonist. Azzi M, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):213–21

Inhibition of neurotensin-induced pancreatic carcinoma growth by a nonpeptide neurotensin receptor antagonist, SR48692. Iwase K, et al. **Cancer** 1997 May 1;79(9):1787–93

Dose-dependent pain-facilitatory and -inhibitory actions of neurotensin are revealed by SR 48692, a nonpeptide neurotensin antagonist: influence on the antinociceptive effect of morphine. Smith DJ, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):899–908

Central administration of the neurotensin receptor antagonist, SR48692, modulates diurnal and stress-related hypothalamic-pituitary-adrenal activity. Rowe WB, et al. **Neuroendocrinology** 1997 Aug;66(2):75–85

The neurotensin antagonist SR 48692 fails to modify the behavioural responses to a dopamine D1 receptor agonist in the rat. Stoessl AJ, et al. **Neuropharmacology** 1997 Jan; 36(1):93–9

A neurotensin antagonist, SR 48692, inhibits colonic responses to immobilization stress in rats. Castagliuolo I, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12611–5

Indirect inhibitory effect of a neurotensin receptor antagonist on human colon cancer (LoVo) growth. Iwase K, et al. **Surg Oncol** 1996 Oct-Dec;5(5–6):245–51

Involvement of cortical neurotensin in the regulation of rat meso-cortico-limbic dopamine neurons: evidence from changes in the number of spontaneously active A10 cells after neurotensin receptor blockade. Santucci V, et al. **Synapse** 1997 Aug;26(4):370–80

BIOSYNTHESIS

Cloning and characterization of the rat neurotensin receptor gene promoter. Maeno H, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):97–104

Neurotensin agonist induces differential regulation of neurotensin receptor mRNA. Identification of distinct transcriptional and post-transcriptional mechanisms. Souazé F, et al. **J Biol Chem** 1997 Apr 11;272(15):10087–94

CHEMISTRY

Identification in the rat neurotensin receptor of amino-acid residues critical for the binding of neurotensin. Botto JM, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):311–7

DRUG EFFECTS

Relaxant effect of xenin on rat ileum is mediated by apamin-sensitive neurotensin-type receptors. Clemens A, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):G190-6

Mediation by neurotensin-receptors of effects of neurotensin on self-stimulation of the medial prefrontal cortex. Fernández R, et al. **Br J Pharmacol** 1996 Sep; 119(2):299-302

Bowel resection and neurotensin treatment. Histochemical study of neurotensin-like and somatostatin-like immunoreactivities and receptors. Toledano A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1145-58

Neurotensin receptor down-regulation induced by dexamethasone and forskolin in rat hypothalamic cultures is mediated by endogenous neurotensin. Scarcériaux V, et al. **J Neuroendocrinol** 1996 Aug;8(8):587-93

GENETICS

Existence of two translation initiation sites leading to the expression of two proteins from the rat high-affinity neurotensin-receptor cDNA: possible regulation by the 5' end non-coding region. Botto JM, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):389-93

Cloning and characterization of the rat neurotensin receptor gene promoter. Maeno H, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):97-104

Tetranucleotide repeat polymorphism in the human neurotensin receptor (NTR) gene. Le F, et al. **Clin Genet** 1997 Jan;51(1):76-7

Identification and expression of a variant isoform of the levocabastine-sensitive neurotensin receptor in the mouse central nervous system. Botto JM, et al. **FEBS Lett** 1997 Jan 3;400(2):211-4

Characterization of the genomic structure, promoter region, and a tetranucleotide repeat polymorphism of the human neurotensin receptor gene. Le F, et al. **J Biol Chem** 1997 Jan 10;272(2):1315-22

Common quantitative trait loci for alcohol-related behaviors and central nervous system neurotensin measures: hypnotic and hypothermic effects. Erwin VG, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):911-8

METABOLISM

Neurotensin-containing endocrine cells and neurotensin receptor mRNA-expressing epithelial cells in the chicken thymus. Atoji Y, et al. **Arch Histol Cytol** 1996 May; 59(2):197-203

Activation of mitogen-activated protein kinase couples neurotensin receptor stimulation to induction of the primary response gene Krox-24. Poinot-Chazel C, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):145-51

A site-directed mutagenesis study on the conserved alanine residue in the distal third intracellular loops of cholecystokininB and neurotensin receptors. Wang HL. **Br J Pharmacol** 1997 May;121(2):310-6

Evidence for neurotensin autoreceptors and relationship of neurotensin and its receptors with tyrosine hydroxylase-positive neurons in rat primary hypothalamic cultures. Bachelet CM, et al. **Eur J Neurosci** 1997 Jul; 9(7):1483-7

Neurotensin receptors in the human amygdaloid complex. Topographical and quantitative autoradiographic study. Lantos TA, et al. **J Chem Neuroanat** 1996 Sep;11(3):209-17

Radiolabeled ligands specific for the G protein-coupled state of neurotensin receptors. Gaudriault G, et al. **J Neurochem** 1996 Dec;67(6):2590-8

Structure, functional expression, and cerebral localization of the levocabastine-sensitive neurotensin/neuromedin N receptor from mouse brain. Mazella J, et al. **J Neurosci** 1996 Sep 15;16(18):5613-20

Differential binding profile and internalization process of neurotensin via neuronal and glial receptors. Nouel D, et al. **J Neurosci** 1997 Mar 1;17(5):1795-803

Down-regulation of neurotensin receptors after ligand-induced internalization in rat primary cultured neurons. Hermans E, et al. **Neurochem Int** 1997 Aug; 31(2):291-9

High affinity binding of 125I-neurotensin to dispersed cells from chicken liver and brain. Mitra SP, et al. **Peptides** 1997; 18(4):521-5

Neurotensin levels and receptors in HAS and LAS rat brains: effects of ethanol. Erwin VG, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):525-32

Neurotensin receptor expression in prostate cancer cell line and growth effect of NT at physiological concentrations. Seethalakshmi L, et al. **Prostate** 1997 May 15;31(3):183-92

PHYSIOLOGY

Relaxant effect of xenin on rat ileum is mediated by apamin-sensitive neurotensin-type receptors. Clemens A, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):G190-6

Mediation by neurotensin-receptors of effects of neurotensin on self-stimulation of the medial prefrontal cortex. Fernández R, et al. **Br J Pharmacol** 1996 Sep; 119(2):299-302

Biochemical and pharmacological activities of SR 142948A, a new potent neurotensin receptor antagonist. Gully D, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):802-12

RECEPTORS, NEUROTRANSMITTER

Evolution and overview of classical transmitter molecules and their receptors. Walker RJ, et al. **Parasitology** 1996; 113 Suppl:S3-33 (221 ref.)

[Neurologic development, morphogenic receptors and schizophrenia (editorial)] Castro R, et al. **Med Clin (Barc)** 1997 Jul 5;109(6):219-21 **(Spa)**

[In vitro and in vivo techniques for the location of the receptors in human brain: methodological basis and general applications] Pazos A. **Rev Neurol** 1997 Jul;25 Suppl 1:S23-7 (16 ref.) **(Spa)**

[Receptors localization in human brain: contribution to neurochemistry of normal aging and neurodegenerative diseases] Pazos A. **Rev Neurol** 1997 Jul;25 Suppl 1:S28-32 (28 ref.) **(Spa)**

AGONISTS

On the synthesis of neurotransmitter receptor agonists with antagonist potential. Crumrine DS, et al. **Neurochem Res** 1997 Feb;22(2):107-11

ANALYSIS

Autoradiographic visualization in brain of receptor-G protein coupling using [35S]GTP gamma S binding. Sim LJ, et al. **Methods Mol Biol** 1997;83:117-32 (40 ref.)

ANTAGONISTS & INHIBITORS

Effects of monoamine receptor antagonists on nicotine-induced hypophagia in the rat. Zarrindast MR, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):157-62

On the synthesis of neurotransmitter receptor agonists with antagonist potential. Crumrine DS, et al. **Neurochem Res** 1997 Feb;22(2):107-11

Effect of receptor blockers on brain natriuretic peptide and C-type natriuretic peptide caused anxiolytic state in rats. Bíró E, et al. **Neuropeptides** 1996 Feb;30(1):59-65

BIOSYNTHESIS

Expression of the avian VEGF receptor homologues Quek1 and Quek2 in blood-vascular and lymphatic endothelial and non-endothelial cells during quail embryonic development. Wilting J, et al. **Cell Tissue Res** 1997 May; 288(2):207-23

CHEMISTRY

Identification and partial characterization of putative taurine receptor proteins from the olfactory organ of the spiny lobster. Sung DY, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Sep; 115(1):19-26

CLASSIFICATION

Nomenclature and classification of transmitter receptors: an integrated approach. Hoyer D, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):551-68 (49 ref.)

The alpha and omega of G-protein coupled receptors: a novel method for classification. Part 1. Moereels H, et al. **Receptors Channels** 1996;4(1):19-30

DRUG EFFECTS

Review of neurotransmitters and their role in alcoholism treatment. Erickson CK. **Alcohol Alcohol** 1996 Mar;31 Suppl 1:5-11 (35 ref.)

Molecular and cellular mechanisms of antidepressant drugs. Owens MJ. **Depress Anxiety** 1996-97;4(4):153-9 (35 ref.)

In vitro and in vivo biochemistry of olanzapine: a novel, atypical antipsychotic drug. Bymaster FP, et al. **J Clin Psychiatry** 1997;58 Suppl 10:28-36 (59 ref.)

Synaptic effects of antidepressants. Richelson E. **J Clin Psychopharmacol** 1996 Jun;16(3 Suppl 2):1S-7S; discussion 7S-9S (9 ref.)

Antisense oligonucleotides in psychopharmacology and behaviour: promises and pitfalls. Robinson ES, et al. **J Psychopharmacol (Oxf)** 1997;11(3):259-69 (100 ref.)

Contrasting modes of action of methylglutamate derivatives on the excitatory amino acid transporters, EAAT1 and EAAT2. Vandenberg RJ, et al. **Mol Pharmacol** 1997 May; 51(5):809-15

Pharmacological properties of peripherally induced postsynaptic potentials in bulbar respiratory neurons of decerebrate cats. Haji A, et al. **Neurosci Lett** 1996 Jun 14; 211(1):17-20

Inhibition by MK-801 of morphine-induced conditioned place preference and postsynaptic dopamine receptor supersensitivity in mice. Kim HS, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):11-7

Cocaine selectively alters neurotransmitter receptor mRNAs in mouse embryos. Mackler SA, et al. **Reprod Toxicol** 1996 Jan-Feb;10(1):37-42

[Neuroleptic-induced supersensitivity] Börner I, et al. **Fortschr Neurol Psychiatr** 1997 May;65(5):214-20 (45 ref.) (Eng. Abstr.) **(Ger)**

GENETICS

A novel gene codes for a putative G protein-coupled receptor with an abundant expression in brain. O'Dowd BF, et al. **FEBS Lett** 1996 Oct 7;394(3):325-9

Molecular cloning and in vitro expression of C. elegans and parasitic nematode ionotropic receptors. Fleming JT, et al. **Parasitology** 1996;113 Suppl:S175-90 (73 ref.)

METABOLISM

Clinical applications of neurotransmitter-receptor studies in geriatric neuropharmacology. Gómez-Vargas M, et al. **Acta Med Okayama** 1996 Aug;50(4):173-90 (148 ref.)

Pharmacological profile of hypericum extract. Effect on serotonin uptake by postsynaptic receptors. Perovic S, et al. **Arzneimittelforschung** 1995 Nov;45(11):1145-8

Amino acid neurotransmitter receptor/chloride channels of mammalian sperm and the acrosome reaction. Meizel S. **Biol Reprod** 1997 Mar;56(3):569-74 (86 ref.)

Collective binding properties of receptor arrays. Agmon N, et al. **Biophys J** 1997 Apr;72(4):1582-94

Saturation of postsynaptic receptors at central synapses? Frerking M, et al. **Curr Opin Neurobiol** 1996 Jun; 6(3):395-403 (66 ref.)

Antiadrenergic and muscarinic receptor antibodies in Chagas' cardiomyopathy. Borda ES, et al. **Int J Cardiol** 1996 May; 54(2):149-56 (38 ref.)

The cytoskeleton and neurotransmitter receptors. Whatley VJ, et al. **Int Rev Neurobiol** 1996;39:113-43 (79 ref.)

Potentiation and inhibition of ionotropic neurotransmitter receptors expressed in Xenopus oocyte by linoleic acid and its hydroperoxide. Aoshima H. **J Neurochem** 1996 Mar; 66(3):1300-5

A postsynaptic excitatory amino acid transporter with chloride conductance functionally regulated by neuronal activity in cerebellar Purkinje cells. Kataoka Y, et al. **J Neurosci** 1997 Sep 15;17(18):7017-24

Differential distribution of functional receptors for neuromodulators evoking short-term heterosynaptic plasticity in Aplysia sensory neurons. Sun ZY, et al. **J Neurosci** 1996 Dec 1;16(23):7540-9

Pharmacological analysis of mast cell mediator and neurotransmitter receptors coupled to adenylate cyclase and phospholipase C on immunocytochemically-defined human conjunctival epithelial cells. Sharif NA, et al. **J Ocul Pharmacol Ther** 1997 Aug;13(4):321-36

Interaction of L-cysteine with a human excitatory amino acid transporter. Zerangue N, et al. **J Physiol (Lond)** 1996 Jun 1;493 (Pt 2):419-23

Desensitization and neurohumor modulation: a model of drug dependence II. Gero A. **J Theor Biol** 1995 Dec 21; 177(4):357-68

Recruitment of functional GABA(A) receptors to postsynaptic domains by insulin. Wan Q, et al. **Nature** 1997 Aug 14;388(6643):686-90

An affinity-modulating site on neuronal monoamine transport proteins. Plenge P, et al. **Pharmacol Toxicol** 1997 Apr; 80(4):197-201

Chemical and biological investigation of the root bark of Clerodendrum mandarinorum. Zhu M, et al. **Planta Med** 1996 Oct;62(5):393-6

Effect of brain angiotensin II AT1, AT2, and cholinergic receptor antagonism on drinking in water-deprived rats. Lee WJ, et al. **Regul Pept** 1996 Oct 8;66(1-2):41-6

Neuroscientists seek answers to brain function and disease. Faulty protein linked to ALS [news] Vogel G. **Science** 1996 Dec 6;274(5293):1612-3

[New drugs in the last year. Part 2. Antipsychotics] Eiden F, et al. **Pharm Unserer Zeit** 1996 Sep;25(5):250-9 (46 ref.) **(Ger)**

[Analysis and characterization of ligand-receptor binding systems] Ogawa N. **Nippon Rinsho** 1997 Apr;55 Suppl 2:444-9 (14 ref.) **(Jpn)**

PHYSIOLOGY

SPECT measurements of brain function in dementia: a review. Ryding E. **Acta Neurol Scand Suppl** 1996;168:54-8 (87 ref.)

The characterization and classification of neurotransmitter receptors. Humphrey PP. **Ann N Y Acad Sci** 1997 May 30;812:1-13 (63 ref.)

Determination of the chemical mechanism of neurotransmitter receptor-mediated reactions by rapid chemical kinetic methods. Hess GP. **Arch Physiol Biochem** 1996 Oct;104(6):752-61 (31 ref.)

Long-lasting enhancement of synaptic excitability of CA1/subiculum neurons of the rat ventral hippocampus by vasopressin and vasopressin(4-8). Chepkova AN, et al. **Brain Res** 1995 Dec 1;701(1-2):255-66

Non-NMDA receptor antagonists and the development of amygdala kindling. Meldrum BS, et al. **Epilepsy Res Suppl** 1996;12:283-91

Intracellular blockade of inhibitory synaptic responses in visual cortical layer IV neurons. Dudek SM, et al. **J Neurophysiol** 1996 May;75(5):2167-73

AMPA-preferring receptors mediate excitatory synaptic inputs to retinal ganglion cells. Lukasiewicz PD, et al. **J Neurophysiol** 1997 Jan;77(1):57-64

Modulation of Ca2+ currents by various G protein-coupled receptors in sympathetic neurons of male rat pelvic ganglia. Zhu Y, et al. **J Neurophysiol** 1997 Aug;78(2):780-9

Non-NMDA receptors modulate respiratory drive in fetal sheep. Bissonnette JM, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):415-23

Synaptic targeting of ionotropic neurotransmitter receptors. Kirsch J, et al. **Mol Cell Neurosci** 1996;8(2-3):93-8 (50 ref.)

RECEPTORS, NEUROTRANSMITTER

Neurotransmitter receptor/G-protein mediated signal transduction in Alzheimer's disease brain. Cowburn RF, et al. **Neurodegeneration** 1996 Dec;5(4):483–8 (37 ref.)
Receptors controlling transmitter release from sympathetic neurons in vitro. Boehm S, et al. **Prog Neurobiol** 1997 Feb; 51(3):225–42 (94 ref.)
Astrocytic neurotransmitter receptors in situ and in vivo. Porter JT, et al. **Prog Neurobiol** 1997 Mar;51(4):439–55 (150 ref.)
The impact of receptor desensitization on fast synaptic transmission. Jones MV, et al. **Trends Neurosci** 1996 Mar; 19(3):96–101 (84 ref.)
The transmitter-gated channels: a range of receptor types and structures. Barnard EA. **Trends Pharmacol Sci** 1996 Sep;17(9):305–9 (38 ref.)
[Schizophrenia: receptors and clinical aspects] Azorin JM. **Encephale** 1997 Apr;23 Spec No 2:17–9 (9 ref.) (Eng. Abstr.) **(Fre)**
[The effect of the serotonin level on the postsynaptically induced potentiation of neuronal responses in the snail] Malyshev AIu, et al.
Zh Vyssh Nerv Deiat Im I P Pavlova 1997 May–Jun; 47(3):553–62 (Eng. Abstr.) **(Rus)**

RECEPTORS, NGF see **RECEPTORS, NERVE GROWTH FACTOR**

RECEPTORS, NICOTINIC

[Aspect of patho-receptor in the modern pharmacology for drug design developing from Japanese traditional sino-medicines systems] Kimura M. **Yakugaku Zasshi** 1996 Nov;116(11):831–49 (120 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS see **NICOTINIC AGONISTS**

ANALYSIS

Localization of nicotinic acetylcholine receptors in cat carotid body and petrosal ganglion. Ishizawa Y, et al.
Adv Exp Med Biol 1996;410:253–6
Improved in situ hybridization: color intensity enhancement procedure for the alkaline phosphatase/Fast Red system. Chiu KP, et al. **Biotechniques** 1996 Jun;20(6):964–6, 968
Expression of alpha 7 neuronal nicotinic receptors during postnatal development of the rate cerebellum. Domínguez del Toro E, et al. **Brain Res Dev Brain Res** 1997 Jan 2; 98(1):125–33
Synthesis and characterization of radioiodinated (S)–5–iodonicotine: a new ligand for potential imaging of brain nicotinic cholinergic receptors by single photon emission computed tomography. Saji H, et al.
Chem Pharm Bull (Tokyo) 1997 Feb;45(2):284–90
Radioiodination of nicotine with specific activity high enough for mapping nicotinic acetylcholine receptors. Kämpfer I, et al. **Eur J Nucl Med** 1996 Feb;23(2):157–62
Use of carbon–11 nicotine in PET studies [letter; comment] Lundqvist H, et al. **Eur J Nucl Med** 1997 Jul;24(7):825–6 . Comment on: Eur J Nucl Med 1996 Aug;23(8):1012–4.
Nicotinic receptor distribution in the human thalamus: autoradiographical localization of [3H]nicotine and [125I] alpha–bungarotoxin binding. Spurden DP, et al.
J Chem Neuroanat 1997 Jul;13(2):105–13
Comparative ontogenic profile of cholinergic markers, including nicotinic and muscarinic receptors, in the rat brain. Aubert I, et al. **J Comp Neurol** 1996 May 20; 369(1):31–55
Developmental profiles of various cholinergic markers in the rat main olfactory bulb using quantitative autoradiography. Le Jeune H, et al. **J Comp Neurol** 1996 Sep 23;373(3):433–50
Synaptic and extrasynaptic distribution of two distinct populations of nicotinic acetylcholine receptor clusters in the frog cardiac ganglion. Wilson Horch HL, et al.
J Neurocytol 1996 Jan;25(1):67–77
Detection of functional nicotinic receptors blocked by alpha–bungarotoxin on PC12 cells and dependence of their expression on post-translational events. Blumenthal EM, et al. **J Neurosci** 1997 Aug 15;17(16):6094–104
Fluorine–18–FPH for PET imaging of nicotinic acetylcholine receptors. Horti A, et al. **J Nucl Med** 1997 Aug; 38(8):1260–5
Nicotinic acetylcholine receptors on hippocampal neurons: distribution on the neuronal surface and modulation of receptor activity. Albuquerque EX, et al.
J Recept Signal Transduct Res 1997 Jan–May; 17(1–3):243–66 (50 ref.)
Immunohistochemical localization of the nicotinic acetylcholine receptor subunit alpha6 to dopaminergic neurons in the substantia nigra and ventral tegmental area. Göldner FM, et al. **Neuroreport** 1997 Aug 18;8(12):2739–42
Parallel increases in [alpha–125I]bungarotoxin binding and alpha 7 nicotinic subunit immunoreactivity during the development of rat hippocampal neurons in culture. Samuel N, et al. **Neurosci Lett** 1997 Feb 7;222(3):179–82
An attempt to visualize baboon brain nicotinic receptors with N–[11C]ART–418 and N–[11C]methyl–cytisine. Valette H, et al. **Nucl Med Commun** 1997 Feb;18(2):164–8
Cholinergic innervation and receptors in the cerebellum. Jaarsma D, et al. **Prog Brain Res** 1997;114:67–96 (113 ref.)

ANTAGONISTS & INHIBITORS see **NICOTINIC ANTAGONISTS**

BIOSYNTHESIS

Acetylcholine receptor alpha–subunit isoforms are differentially expressed in thymuses from myasthenic patients. Andreetta F, et al. **Am J Pathol** 1997 Jan; 150(1):341–8
Activation and inhibition of rat neuronal nicotinic receptors by ABT–418. Papke RL, et al. **Br J Pharmacol** 1997 Feb; 120(3):429–38
Neuronal nicotinic receptor alpha 6 subunit mRNA is selectively concentrated in catecholaminergic nuclei of the rat brain. Le Novère N, et al. **Eur J Neurosci** 1996 Nov; 8(11):2428–39
Stable expression in HEK–293 cells of the rat alpha3/beta4 subtype of neuronal nicotinic acetylcholine receptor. Stetzer E, et al. **FEBS Lett** 1996 Nov 11;397(1):39–44
Transcriptional regulation of neuronal nicotinic acetylcholine receptor genes. A possible role for the DNA–binding protein Puralpha. Du Q, et al. **J Biol Chem** 1997 Jun 6; 272(23):14990–5
Assembly of the nicotinic acetylcholine receptor. The first transmembrane domains of truncated alpha and delta subunits are required for heterodimer formation in vivo. Wang ZZ, et al. **J Biol Chem** 1996 Nov 1;271(44):27575–84
Comparative structure of human neuronal alpha 2–alpha 7 and beta 2–beta 4 nicotinic acetylcholine receptor subunits and functional expression of the alpha 2, alpha 3, alpha 4, alpha 7, beta 2, and beta 4 subunits. Elliott KJ, et al.
J Mol Neurosci 1996 Fall;7(3):217–28
Tyrosine kinase inhibitors alter composition of nicotinic receptors on neurons. Haselbeck RC, et al. **J Neurobiol** 1996 Dec;31(4):404–14
Sex difference in up–regulation of nicotinic acetylcholine receptors in rat brain. Koylu E, et al. **Life Sci** 1997; 61(12):PL 185–90
Association of phosphotyrosine with rapsyn expression in Xenopus embryonic cells. Dai Z, et al. **Neuroreport** 1996 Jan 31;7(2):657–61
Tacrine interacts with an allosteric activator site on alpha 4 beta 2 nAChRs in M10 cells. Svensson AL, et al.
Neuroreport 1996 Sep 2;7(13):2201–5
Expression of alpha subunit genes of nicotinic acetylcholine receptors in human lymphocytes. Hiemke C, et al.
Neurosci Lett 1996 Aug 23;214(2–3):171–4
The neuron–restrictive silencer element: a dual enhancer/silencer crucial for patterned expression of a nicotinic receptor gene in the brain. Bessis A, et al.
Proc Natl Acad Sci U S A 1997 May 27;94(11):5906–11

CHEMISTRY

Antigenic structure of the muscle nicotinic acetylcholine receptor. Tzartos SJ, et al. **Ann Med Interne (Paris)** 1996; 147(6):442–6 (28 ref.)
Molecular aspects of ion permeation through channels. Imoto K. **Ann N Y Acad Sci** 1993 Dec 20;707:38–50 (28 ref.)
Antibodies as tools to study the structure of membrane proteins: the case of the nicotinic acetylcholine receptor. Conti–Fine BM, et al. **Annu Rev Biophys Biomol Struct** 1996;25:197–229 (112 ref.)
Desensitization of the nicotinic acetylcholine receptor mainly involves a structural change in solvent–accessible regions of the polypeptide backbone. Baenziger JE, et al.
Biochemistry 1997 Mar 25;36(12):3617–24
Interactions of the nicotinic acetylcholine receptor transmembrane segments with the lipid bilayer in native receptor–rich membranes. Dreger M, et al. **Biochemistry** 1997 Jan 28;36(4):839–47
Tryptophan substitutions at the lipid–exposed transmembrane segment M4 of Torpedo californica acetylcholine receptor govern channel gating. Lasalde JA, et al. **Biochemistry** 1996 Nov 12;35(45):14139–48
The high–affinity quinacrine binding site is located at a non–annular lipid domain of the nicotinic acetylcholine receptor. Arias HR. **Biochim Biophys Acta** 1997 Jul 12; 1347(1):9–22
Nicotinic acetylcholine receptor labeled with a tritiated, photoactivatable agonist: a new tool for investigating the functional, activated state. Kotzyba–Hibert F, et al.
Bioconjug Chem 1997 Jul–Aug;8(4):472–80
A kinetic mechanism for nicotinic acetylcholine receptors based on multiple allosteric transitions. Edelstein SJ, et al.
Biol Cybern 1996 Nov;75(5):361–79
Inversion of Markov processes to determine rate constants from single–channel data. Jackson MB. **Biophys J** 1997 Sep; 73(3):1382–94
The pore domain of the nicotinic acetylcholine receptor: molecular modeling, pore dimensions, and electrostatics. Sankararamakrishnan R, et al. **Biophys J** 1996 Oct; 71(4):1659–71
Molecular dynamics study of water and Na+ ions in models of the pore region of the nicotinic acetylcholine receptor. Smith GR, et al. **Biophys J** 1997 Sep;73(3):1364–81
A model of the nicotinic receptor extracellular domain based on sequence identity and residue location. Tsigelny I, et al. **Biophys J** 1997 Jul;73(1):52–66
Nicotinic acetylcholine receptor channels are influenced by the physical state of their membrane environment. Zanello LP, et al. **Biophys J** 1996 May;70(5):2155–64
Compared structures of the free nicotinic acetylcholine receptor main immunogenic region (MIR) decapeptide and the antibody–bound [A76]MIR analogue: a molecular dynamics simulation from two–dimensional NMR data. Orlewski P, et al. **Biopolymers** 1996;40(5):419–32
Neurogenesis of cholinoceptive neurons in the chick retina. Gardino PF, et al. **Brain Res Dev Brain Res** 1996 Sep 2; 95(2):205–12
Mouse–Torpedo chimeric alpha–subunit used to probe channel–gating determinants on the nicotinic acetylcholine receptor primary sequence. Butler DH, et al.
Cell Mol Neurobiol 1997 Feb;17(1):13–33
Acetylcholine receptor subunit homomer formation requires compatibility between amino acid residues of the M1 and M2 transmembrane segments. Vicente–Agulló F, et al.
FEBS Lett 1996 Dec 9;399(1–2):83–6
Cloning and sequence analysis of the candidate nicotinic acetylcholine receptor alpha subunit gene tar–1 from Trichostrongylus colubriformis. Wiley LJ, et al. **Gene** 1996 Dec 5;182(1–2):97–100
Asymmetric contribution of the conserved disulfide loop to subunit oligomerization and assembly of the nicotinic acetylcholine receptor. Fu DX, et al. **J Biol Chem** 1996 Dec 6;271(49):31479–84
Interaction of d–tubocurarine analogs with the mouse nicotinic acetylcholine receptor. Ligand orientation at the binding site. Papineni RV, et al. **J Biol Chem** 1997 Oct 3;272(40):24891–8
Structural effects of neutral and anionic lipids on the nicotinic acetylcholine receptor. An infrared difference spectroscopy study. Ryan SE, et al. **J Biol Chem** 1996 Oct 4; 271(40):24590–7
Formation of a ligand–binding site for the acetylcholine receptor in vitro. Shtrom SS, et al. **J Biol Chem** 1996 Oct 11;271(41):25506–14
Assembly of the nicotinic acetylcholine receptor. The first transmembrane domains of truncated alpha and delta subunits are required for heterodimer formation in vivo. Wang ZZ, et al. **J Biol Chem** 1996 Nov 1;271(44):27575–84
Membrane tethering enables an extracellular domain of the acetylcholine receptor alpha subunit to form a heterodimeric ligand–binding site. Wang ZZ, et al.
J Cell Biol 1996 Nov;135(3):809–17
Comparative structure of human neuronal alpha 2–alpha 7 and beta 2–beta 4 nicotinic acetylcholine receptor subunits and functional expression of the alpha 2, alpha 3, alpha 4, alpha 7, beta 2, and beta 4 subunits. Elliott KJ, et al.
J Mol Neurosci 1996 Fall;7(3):217–28
A dual function activity–dependent, muscle–specific enhancer from rat nicotinic acetylcholine receptor delta–subunit gene. Walke W, et al. **J Neurobiol** 1996 Nov; 31(3):359–69
Formation of oligomers containing the beta3 and beta4 subunits of the rat nicotinic receptor. Forsayeth JR, et al.
J Neurosci 1997 Mar 1;17(5):1531–8
The nicotinic cholinergic receptor: a theoretical model. Aprison MH, et al. **J Neurosci Res** 1996 Oct 15; 46(2):226–30
Mapping of exposed surfaces of the nicotinic acetylcholine receptor by identification of iodinated tyrosine residues. Mund M, et al. **J Protein Chem** 1997 Apr;16(3):161–70
Dose–response relations for unnatural amino acids at the agonist binding site of the nicotinic acetylcholine receptor: tests with novel side chains and with several agonists. Kearney PC, et al. **Mol Pharmacol** 1996 Nov;50(5):1401–12
Determinants of nicotinic receptor gating in natural and unnatural side chain structures at the M2 9' position. Kearney PC, et al. **Neuron** 1996 Dec;17(6):1221–9
Subcellular localization of the alpha 7 nicotinic receptor in rat cerebellar granule cell layer. Caruncho HJ, et al.
Neuroreport 1997 Apr 14;8(6):1431–3
The alpha–bungarotoxin binding site on the nicotinic acetylcholine receptor: analysis using a phage–epitope library. Balass M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6054–8
Threonine–for–leucine mutation within domain M2 of the neuronal alpha(7) nicotinic receptor converts 5–hydroxytryptamine from antagonist to agonist. Palma E, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11231–5
Three–dimensional solution structure of the complex of alpha–bungarotoxin with a library–derived peptide. Scherf T, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10; 94(12):6059–64
Structure and function of neuronal nicotinic acetylcholine receptors. Lindstrom J, et al. **Prog Brain Res** 1996; 109:125–37 (65 ref.)
A mixed helix–beta–sheet model of the transmembrane region of the nicotinic acetylcholine receptor. Ortells MO, et al.
Protein Eng 1996 Jan;9(1):51–9
Molecular modelling of the nicotinic acetylcholine receptor transmembrane region in the open state. Ortells MO, et al. **Protein Eng** 1997 May;10(5):511–7

CLASSIFICATION

Analysis of nicotinic acetylcholine receptor subunits in the cochlea of the mouse. Drescher DG, et al.
Comp Biochem Physiol C Pharmacol Toxicol Endocrinol 1995 Nov;112(3):267–73
Simultaneous comparison of nicotinic receptor antagonists on three nicotinic acetylcholine receptors. Kerr KP, et al.
J Pharm Pharmacol 1995 Dec;47(12A):1002–6
Diversity of nicotinic acetylcholine receptors in rat brain. V. alpha–Bungarotoxin–sensitive nicotinic receptors in olfactory bulb neurons and presynaptic modulation of glutamate release. Alkondon M, et al.
J Pharmacol Exp Ther 1996 Sep;278(3):1460–71

DRUG EFFECTS

Acetylcholine elevates intracellular Ca2+ via muscarinic and nicotinic receptors in rat carotid body type I cells. Dasso LL, et al. **Adv Exp Med Biol** 1996;410:239–44

Effect of acetylcholine on intracellular calcium of carotid body cells of adult cats. Shirahata M, et al. **Adv Exp Med Biol** 1996;410:257–60

Interaction of midazolam with the nicotinic acetylcholine receptor of mouse myotubes. Hertle I, et al. **Anesth Analg** 1997 Jul;85(1):174–81

Ketamine blocks currents through mammalian nicotinic acetylcholine receptor channels by interaction with both the open and the closed state. Scheller M, et al. **Anesth Analg** 1996 Oct;83(4):830–6

Alpha 4 beta 2 neuronal nicotinic acetylcholine receptors in the central nervous system are inhibited by isoflurane and propofol, but alpha 7-type nicotinic acetylcholine receptors are unaffected [see comments] Flood P, et al. **Anesthesiology** 1997 Apr;86(4):859–65. Comment in: Anesthesiology 1997 Apr;86(4):760–2.

Halothane interactions with nicotinic acetylcholine receptor membranes. Steady-state and kinetic studies of intrinsic fluorescence quenching. Raines DE, et al. **Anesthesiology** 1997 Feb;86(2):476–86

Halothane and isoflurane differentially affect the regulation of dopamine and gamma-aminobutyric acid release mediated by presynaptic acetylcholine receptors in the rat striatum. Salord F, et al. **Anesthesiology** 1997 Mar; 86(3):632–41

Isoflurane and sevoflurane interact with the nicotinic acetylcholine receptor channels in micromolar concentrations. Scheller M, et al. **Anesthesiology** 1997 Jan; 86(1):118–27

Differential sensitivities of mammalian neuronal and muscle nicotinic acetylcholine receptors to general anesthetics [see comments] Violet JM, et al. **Anesthesiology** 1997 Apr; 86(4):866–74. Comment in: Anesthesiology 1997 Apr;86(4):760–2.

Critical interactions at the dimer interface of kappa-bungarotoxin, a neuronal nicotinic acetylcholine receptor antagonist. Grant GA, et al. **Biochemistry** 1997 Mar 18;36(11):3353–8

A noncompetitive peptide inhibitor of the nicotinic acetylcholine receptor from Conus purpurascens venom. Shon KJ, et al. **Biochemistry** 1997 Aug 5;36(31):9581–7

Homologous mutations on different subunits cause unequal but additive effects on n-alcohol block in the nicotinic receptor pore. Forman SA. **Biophys J** 1997 May; 72(5):2170–9

Enhancement by calcitonin gene-related peptide of non-contractile Ca2(+)-induced nicotinic receptor desensitization at the mouse neuromuscular junction. Dezaki K, et al. **Br J Pharmacol** 1996 Aug;118(8):1971–6

Different mechanisms of Ca2(+)-handling following nicotinic acetylcholine receptor stimulation, P2U-purinoceptor stimulation and K(+)-induced depolarization in C2C12 myotubes. Henning RH, et al. **Br J Pharmacol** 1996 Apr;117(8):1785–91

Differential block of nicotinic synapses on B versus C neurones in sympathetic ganglia of frog by alpha-conotoxins MII and ImI. Tavazoie SF, et al. **Br J Pharmacol** 1997 Mar;120(6):995–1000

Characterization of nicotinic receptors in immortalized hippocampal neurons. Komourian J, et al. **Brain Res** 1996 Apr 29;718(1-2):37–45

Phorbol ester modulation of both delta-mutant and subunit-omitted nicotinic receptors expressed in Xenopus oocytes. Limatola C, et al. **Brain Res** 1996 Dec 2; 742(1-2):172–6

Dual, non-competitive interaction of lead with neuronal nicotinic acetylcholine receptors in N1E-115 neuroblastoma cells. Oortgiesen M, et al. **Brain Res** 1997 Jan 30;747(1):1–8

Potency of agonists and competitive antagonists on adult- and fetal-type nicotinic acetylcholine receptors. Yost CS, et al. **Cell Mol Neurobiol** 1997 Feb;17(1):35–50

Imaging of nicotinic and muscarinic receptors in Alzheimer's disease: effect of tacrine treatment. Nordberg A, et al. **Dement Geriatr Cogn Disord** 1997 Mar-Apr;8(2):78–84

Open channel block by physostigmine and procaine in embryonic-like nicotinic receptors of mouse muscle. Bufler J, et al. **Eur J Neurosci** 1996 Apr;8(4):677–87

Nicotine cue: lack of effect of the alpha 7 nicotinic receptor antagonist methyllycaconitine. Brioni JD, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):1–5

Pharmacology of the nicotinic acetylcholine receptor from fetal rat muscle expressed in Xenopus oocytes. Cooper JC, et al. **Eur J Pharmacol** 1996 Aug 15;309(3):287–98

The role of protein kinase C in nicotinic responses of bovine chromaffin cells. Loneragan K, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):87–94

Ibogaine selectively inhibits nicotinic receptor-mediated catecholamine release. Schneider AS, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):R1–2

Distinct effects of omega-toxins and various groups of Ca(2+)-entry inhibitors on nicotinic acetylcholine receptor and Ca2+ channels of chromaffin cells. Villarroya M, et al. **Eur J Pharmacol** 1997 Feb 12;320(2-3):249–57

Ethanol depression of cerebellar Purkinje neuron firing involves nicotinic acetylcholine receptors. Freund RK, et al. **Exp Neurol** 1997 Feb;143(2):319–22

Spinal nicotinic receptor expression in spontaneously hypertensive rats. Khan IM, et al. **Hypertension** 1996 Dec; 28(6):1093–9

Differential targeting of nicotinic acetylcholine receptors by novel alphaA-conotoxins. Jacobsen R, et al. **J Biol Chem** 1997 Sep 5;272(36):22531–7

Mechanisms of barbiturate inhibition of acetylcholine receptor channels. Dilger JP, et al. **J Gen Physiol** 1997 Mar;109(3):401–14

Neurosteroids modulate nicotinic receptor function in mouse striatal and thalamic synaptosomes. Bullock AE, et al. **J Neurochem** 1997 Jun;68(6):2412–23

Differential expression of alpha-bungarotoxin-sensitive neuronal nicotinic receptors in adrenergic chromaffin cells: a role for transcription factor Egr-1. Criado M, et al. **J Neurosci** 1997 Sep 1;17(17):6554–64

Pharmacological characterization of recombinant human neuronal nicotinic acetylcholine receptors h alpha 2 beta 2, h alpha 2 beta 4, h alpha 3 beta 2, h alpha 3 beta 4, h alpha 4 beta 2, h alpha 4 beta 4 and h alpha 7 expressed in Xenopus oocytes. Chavez-Noriega LE, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):346–56

Involvement of nitric oxide in nicotinic receptor-mediated myopathy. El-Dada MD, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1463–70

Melatonin modulation of presynaptic nicotinic acetylcholine receptors in the rat vas deferens. Markus RP, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):18–22

Alpha-conotoxin-ImI: a competitive antagonist at alpha-bungarotoxin-sensitive neuronal nicotinic receptors in hippocampal neurons. Pereira EF, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1472–83

Open channel and competitive block of the embryonic form of the nicotinic receptor of mouse myotubes by (+)-tubocurarine. Bufler J, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):83–95

Muscarinic and nicotinic receptors raise intracellular Ca2+ levels in rat carotid body type I cells. Dasso LL, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):327–38

Noncompetitive agonism at nicotinic acetylcholine receptors; functional significance for CNS signal transduction. Maelicke A, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):333–53 (43 ref.)

Luminal and non-luminal non-competitive inhibitor binding sites on the nicotinic acetylcholine receptor. Arias HR. **Mol Membr Biol** 1996 Jan-Mar;13(1):1–17 (150 ref.)

Determinants of specificity for alpha-conotoxin MII on alpha3beta2 neuronal nicotinic receptors. Harvey SC, et al. **Mol Pharmacol** 1997 Feb;51(2):336–42

Ethanol inhibition of nicotinic acetylcholine type alpha 7 receptors involves the amino-terminal domain of the receptor. Yu D, et al. **Mol Pharmacol** 1996 Oct;50(4):1010–6

Screening structural-functional relationships of neuropharmacologically active organic compounds at the nicotinic acetylcholine receptor. Barrantes GE, et al. **Neuropharmacology** 1997 Mar;36(3):269–79

Effect of MK-801 at the human alpha 7 nicotinic acetylcholine receptor. Briggs CA, et al. **Neuropharmacology** 1996 Apr;35(4):407–14

Evaluation of anti-nociceptive effects of neuronal nicotinic acetylcholine receptor (NAChR) ligands in the rat tail-flick assay. Rao TS, et al. **Neuropharmacology** 1996 Apr; 35(4):393–405

A-85380 [3-(2(S)-azetidinylmethoxy) pyridine]: in vitro pharmacological properties of a novel, high affinity alpha 4 beta 2 nicotinic acetylcholine receptor ligand. Sullivan JP, et al. **Neuropharmacology** 1996 Jun;35(6):725–34

Subconductance-state currents generated by imidacloprid at the nicotinic acetylcholine receptor in PC 12 cells. Nagata K, et al. **Neuroreport** 1996 Apr 10;7(5):1025–8

Potent modulation of neuronal nicotinic acetylcholine receptor-channel by ethanol. Nagata K, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):189–93

Neuronal nicotinic receptor operates slow Ca2+ mobilization at mouse muscle endplate. Tsuneki H, et al. **Neurosci Lett** 1997 Apr 11;225(3):185–8

Effect of stimulation of nicotinic cholinergic receptors on cortical cerebral blood flow and changes in the effect during aging in anesthetized rats. Uchida S, et al. **Neurosci Lett** 1997 Jun 13;228(3):203–6

Nicotinic receptor mediates spontaneous GABA release in the rat dorsal motor nucleus of the vagus. Bertolino M, et al. **Neuroscience** 1997 Aug;79(3):671–81

Circling behavior elicited by cholinergic transmission in the substantia nigra pars compacta: involvement of nicotinic and muscarinic receptors. Góngora-Alfaro JL, et al. **Neuroscience** 1996 Apr;71(3):729–34

Rapid drug application resolves two types of nicotinic receptors on rat sympathetic ganglion cells. Britt JC, et al. **Pflugers Arch** .1997 May;434(1):38–48

Hyperactivity induced by prenatal nicotine exposure is associated with an increase in cortical nicotinic receptors. Tizabi Y, et al. **Pharmacol Biochem Behav** 1997 Sep; 58(1):141–6

Pharmacology of nicotine and its therapeutic use in smoking cessation and neurodegenerative disorders. Balfour DJ, et al. **Pharmacol Ther** 1996;72(1):51–81 (289 ref.)

Blockage of muscle and neuronal nicotinic acetylcholine receptors by fluoxetine (Prozac). García-Colunga J, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2041–4

Relationship between up-regulation of nicotine binding sites in rat brain and delayed cognitive enhancement observed after chronic or acute nicotinic receptor stimulation. Abdulla FA, et al. **Psychopharmacology (Berl)** 1996 Apr; 124(4):323–31

[125/123I]IPH: a radioiodinated analog of epibatidine for in vivo studies of nicotinic acetylcholine receptors. Musachio JL, et al. **Synapse** 1997 Aug;26(4):392–9

[Nicotinic currents of cultured rat superior cervical ganglion neurons and use-dependent block by mecamylamine] Liu QS, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov; 16(6):520–3 (Eng. Abstr.) **(Chi)**

[Effect of withdrawal of phenazepam and nicotinamide on the status of the system of reception of benzodiazepines and NAD] Fomenko AI, et al. **Ukr Biokhim Zh** 1996 Sep-Oct;68(5):20–5 (Eng. Abstr.) **(Rus)**

GENETICS

Neuronal nicotinic acetylcholine receptor alpha 4 subunit (CHRNA4) and panic disorder: an association study. Steinlein OK, et al. **Am J Med Genet** 1997 Apr 18; 74(2):199–201

BamHI RFLP at the chicken ACRG locus. Girard-Santosuosso O, et al. **Anim Genet** 1996 Oct; 27(5):375

Homologous mutations on different subunits cause unequal but additive effects on n-alcohol block in the nicotinic receptor pore. Forman SA. **Biophys J** 1997 May; 72(5):2170–9

Expression of nicotinic acetylcholine receptor mRNA in the adult rat peripheral vestibular system. Hiel H, et al. **Brain Res** 1996 Nov 4;738(2):347–52

Linkage of strain-specific nicotinic receptor alpha 7 subunit restriction fragment length polymorphisms with levels of alpha-bungarotoxin binding in brain. Stitzel JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):30–40

Expression of the alpha 7 subunit of the nicotinic acetylcholine receptor in normal and myasthenic human thymuses. Navaneetham D, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 May;43(3):433–42

A dinucleotide repeat and a Hae III polymorphism in the human nicotinic acetylcholine receptor alpha-subunit gene (CHRNA1). Djabiri F, et al. **Clin Genet** 1997 Aug; 52(2):130–2

A fok1 polymorphism in the human neuronal nicotinic acetylcholine receptor alpha 4 subunit gene. Guipponi M, et al. **Clin Genet** 1997 Jan;51(1):78–9

SSCP variants within the alpha 4 subunit of the neuronal nicotinic acetylcholine receptor gene. Phillips HA, et al. **Clin Genet** 1997 Feb;51(2):135–6

Dinucleotide polymorphism in the first intron of the human neuronal nicotinic acetylcholine receptor alpha 4 subunit gene (CHRNA4). Weiland S, et al. **Clin Genet** 1996 Nov; 50(5):433–4

Analysis of nicotinic acetylcholine receptor subunits in the cochlea of the mouse. Drescher DG, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1995 Nov;112(3):267–73

Cloning and sequence of full-length cDNAs encoding the human neuronal nicotinic acetylcholine receptor (nAChR) subunits beta3 and beta4 and expression of seven nAChR subunits in the human neuroblastoma cell line SH-SY5Y and/or IMR-32. Groot Kormelink PJ, et al. **FEBS Lett** 1997 Jan 6;400(3):309–14

Cloning of cDNA encoding human rapsyn and mapping of the RAPSN gene locus to chromosome 11p11.2-p11.1. Buckel A, et al. **Genomics** 1996 Aug 1;35(3):613–6

Exon-intron structure of the human neuronal nicotinic acetylcholine receptor alpha 4 subunit (CHRNA4). Steinlein O, et al. **Genomics** 1996 Mar 1;32(2):289–94

An insertion mutation of the CHRNA4 gene in a family with autosomal dominant nocturnal frontal lobe epilepsy. Steinlein OK, et al. **Hum Mol Genet** 1997 Jun;6(6):943–7

ALS and SAD-like nicotinic acetylcholine receptor subunit genes are widely distributed in insects. Sgard F, et al. **Insect Mol Biol** 1993;2(4):215–23

Transcriptional regulation of neuronal nicotinic acetylcholine receptor genes. Functional interactions between Sp1 and the rat beta4 subunit gene promoter. Bigger CB, et al. **J Biol Chem** 1996 Dec 20;271(51):32842–8

Mutations in the M4 domain of the Torpedo californica nicotinic acetylcholine receptor alter channel opening and closing. Ortiz-Miranda SI, et al. **J Membr Biol** 1997 Jul 1;158(1):17–30

Elements between the protein-coding regions of the adjacent beta 4 and alpha 3 acetylcholine receptor genes direct neuron-specific expression in the central nervous system. Yang X, et al. **J Neurobiol** 1997 Mar;32(3):311–24

Neuronal nicotinic acetylcholine receptors on bovine chromaffin cells: cloning, expression, and genomic organization of receptor subunits. Campos-Caro A, et al. **J Neurochem** 1997 Feb;68(2):488–97

Expression of the nicotinic receptor alpha 7 gene in tendon and periosteum during early development. Romano SJ, et al. **J Neurochem** 1997 Feb;68(2):640–8

Distribution of three nicotinic receptor alpha 4 mRNA transcripts in rat brain: selective regulation by nicotine administration. Yu ZJ, et al. **J Neurochem** 1996 Mar; 66(3):1326–9

Detection of functional nicotinic receptors blocked by alpha-bungarotoxin on PC12 cells and dependence of their expression on post-translational events. Blumenthal EM, et al. **J Neurosci** 1997 Aug 15;17(16):6094–104

Chick ciliary ganglion neurons contain transcripts coding for acetylcholine receptor-associated protein at synapses

(rapsyn). Burns AL, et al. **J Neurosci** 1997 Jul 1; 17(13):5016–26

Caenorhabditis elegans levamisole resistance genes lev-1, unc-29, and unc-38 encode functional nicotinic acetylcholine receptor subunits. Fleming JT, et al. **J Neurosci** 1997 Aug 1;17(15):5843–57

Changes in the regulatory effects of cell–cell interactions on neuronal AChR subunit transcript levels after synapse formation. Levey MS, et al. **J Neurosci** 1996 Nov 1; 16(21):6878–85

Designing PCR primers to amplify specific members or subgroups of multigene families. Horton RM, et al. **Methods Mol Biol** 1997;67:459–79

Characterization of an acetylcholine receptor gene of Haemonchus contortus in relation to levamisole resistance. Hoekstra R, et al. **Mol Biochem Parasitol** 1997 Feb; 84(2):179–87

Structural and functional characterization of the human alpha3 nicotinic subunit gene promoter. Fornasari D, et al. **Mol Pharmacol** 1997 Feb;51(2):250–61

"Orphan" alpha6 nicotinic AChR subunit can form a functional heteromeric acetylcholine receptor. Gerzanich V, et al. **Mol Pharmacol** 1997 Feb;51(2):320–7

A nonsense mutation in the alpha4 subunit of the nicotinic acetylcholine receptor (CHRNA4) cosegregates with 20q-linked benign neonatal familial convulsions (EBNI). Beck C, et al. **Neurobiol Dis** 1994 Nov;1(1–2):95–9

Genetic correlation of inhibitory gating of hippocampal auditory evoked response and alpha–bungarotoxin–binding nicotinic cholinergic receptors in inbred mouse strains. Stevens KE, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):152–62

Differential co–expression of nicotinic acetylcholine receptor alpha 4 and beta 2 subunit genes in various regions of rat brain. Liu C, et al. **Neuroreport** 1996 Jul 8;7(10):1645–9

Transcriptional regulation and cell specificity determinants of the rat nicotinic acetylcholine receptor alpha 3 gene. Boyd RT. **Neurosci Lett** 1996 Apr 19;208(2):73–6

Nicotine regulates mRNA level of tyrosine hydroxylase gene but not that of nicotinic acetylcholine receptor genes in PC12 cells. Ishiguro H, et al. **Neurosci Lett** 1997 May 30; 228(1):37–40

Expression of two neuronal nicotinic receptor subunits in innervated and denervated adult rat muscle. Sala C, et al. **Neurosci Lett** 1996 Sep 6;215(2):71–4

Linkage of a neurophysiological deficit in schizophrenia to a chromosome 15 locus. Freedman R, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):587–92

IMMUNOLOGY

Anti–acetylcholine receptor Fab fragments isolated from thymus–derived phage display libraries from myasthenia gravis patients reflect predominant specificities in serum and block the action of pathogenic serum antibodies. Graus YF, et al. **Immunol Lett** 1997 Jun 1;57(1–3):59–62

FK506 prevents induction of rat experimental autoimmune myasthenia gravis. Yoshikawa H, et al. **J Autoimmun** 1997 Feb;10(1):11–6

Human anti–nicotinic acetylcholine receptor recombinant Fab fragments isolated from thymus–derived phage display libraries from myasthenia gravis patients reflect predominant specificities in serum and block the action of pathogenic serum antibodies. Graus YF, et al. **J Immunol** 1997 Feb 15;158(4):1919–29

B–cell activation in vitro by helper T cells specific to region alpha 146–162 of Torpedo californica nicotinic acetylcholine receptor. Rosenberg JS, et al. **J Immunol** 1996 Oct 1;157(7):3192–9

Restricted T cell receptor repertoire for acetylcholine receptor in murine myasthenia gravis. Kraig E, et al. **J Neuroimmunol** 1996 Dec;71(1–2):87–95

Tumor necrosis factor–alpha, lymphotoxin, interleukin (IL)–6, IL–10, IL–12 and perforin mRNA expression in mononuclear cells in response to acetylcholine receptor is augmented in myasthenia gravis. Matusevicius D, et al. **J Neuroimmunol** 1996 Dec;71(1–2):191–8

ISOLATION & PURIFICATION

Purification of the nicotinic acetylcholine receptor protein by affinity chromatography using a regioselectively modified and reversibly immobilized alpha–toxin from Naja nigricollis. Ringler P, et al. **Biochim Biophys Acta** 1997 Feb 21;1324(1):37–46

Novel neonicotinoid–agarose affinity column for Drosophila and Musca nicotinic acetylcholine receptors. Tomizawa M, et al. **J Neurochem** 1996 Oct;67(4):1669–76

METABOLISM

Long–term ethanol treatment elicits changes in nicotinic receptor binding in only a few brain regions. Booker TK, et al. **Alcohol** 1997 Mar–Apr;14(2):131–40

In vitro phosphorylation of rat brain nicotinic acetylcholine receptor by cAMP–dependent protein kinase. Nakayama H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:439–42

Temperature and ionic strength dependence of quinacrine binding and quinacrine displacement elicited by high concentrations of agonists on the nicotinic acetylcholine receptor. Arias HR. **Arch Biochem Biophys** 1996 Sep 1; 333(1):1–11

Analogues of carbacholine: synthesis and relationship between structure and affinity for muscarinic and nicotinic acetylcholine receptors. Søkilde B, et al. **Arch Pharm (Weinheim)** 1996 Feb;329(2):95–104

A serum factor potentiates ACh and AMPA receptor currents via differential signal transduction pathways. Nishizaki T, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):565–8

Interactions of the nicotinic acetylcholine receptor transmembrane segments with the lipid bilayer in native receptor–rich membranes. Dreger M, et al. **Biochemistry** 1997 Jan 28;36(4):839–47

Determinants involved in the affinity of alpha–conotoxins GI and SI for the muscle subtype of nicotinic acetylcholine receptors. Groebe DR, et al. **Biochemistry** 1997 May 27; 36(21):6469–74

Quinacrine and ethidium bromide bind the same locus on the nicotinic acetylcholine receptor from Torpedo californica. Lurtz MM, et al. **Biochemistry** 1997 Feb 25; 36(8):2068–75

Quantitative structure–activity relationships of nicotine analogues as neuronal nicotinic acetylcholine receptor ligands. Kim KH, et al. **Bioorg Med Chem** 1996 Dec; 4(12):2211–7

Synthesis and pharmacology of alkanediguanidinium compounds that block the neuronal nicotinic acetylcholine receptor. Villarroya M, et al. **Bioorg Med Chem** 1996 Aug; 4(8):1177–83

Inorganic, monovalent cations compete with agonists for the transmitter binding site of nicotinic acetylcholine receptors. Akk G, et al. **Biophys J** 1996 Jun;70(6):2652–8

Biphasic effect of pentobarbitone on chick myotube nicotinic receptor channel kinetics. Liu GJ, et al. **Br J Pharmacol** 1996 Jul;118(6):1385–8

Cholinergic deafferentation enhances rat hippocampal pyramidal neuron responsiveness to locally applied nicotine. Frazier CJ, et al. **Brain Res** 1996 Jul 15; 727(1–2):217–20

Forskolin reduces the activity of the rat muscle embryonic type acetylcholine receptor channel. Lorenzon P, et al. **Brain Res** 1995 Dec 12;703(1–2):100–4

Nicotinic and muscarinic cholinergic receptor binding in the human hippocampal formation during development and aging. Court JA, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):93–105

ST/b and DBA/2 mice differ in brain alpha–bungarotoxin binding and alpha 7 nicotinic receptor subunit mRNA levels: a quantitative autoradiographic analysis. Marks MJ, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):207–22

Linkage of strain–specific nicotinic receptor alpha 7 subunit restriction fragment length polymorphisms with levels of alpha–bungarotoxin binding in brain. Stitzel JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):30–40

The molecular biology of neuronal nicotinic acetylcholine receptors. Boyd RT. **Crit Rev Toxicol** 1997 May; 27(3):299–318 (164 ref.)

Identification of calcium binding sites that regulate potentiation of a neuronal nicotinic acetylcholine receptor. Galzi JL, et al. **EMBO J** 1996 Nov 1;15(21):5824–32

Open channel block by physostigmine and procaine in embryonic–like nicotinic receptors of mouse muscle. Bufler J, et al. **Eur J Neurosci** 1996 Apr;8(4):677–87

Allosteric proteins after thirty years: the binding and state functions of the neuronal alpha 7 nicotinic acetylcholine receptors. Edelstein SJ, et al. **Experientia** 1996 Dec 15; 52(12):1083–90 (67 ref.)

Activation of alpha7 nicotinic acetylcholine receptor promotes survival of spinal cord motoneurons. Messi ML, et al. **FEBS Lett** 1997 Jul 7;411(1):32–8

Nicotinic system and Alzheimer's disease [letter; comment] Gambassi G, et al. **J Am Geriatr Soc** 1997 May;45(5):655–6 . Comment on: J Am Geriatr Soc 1996 Aug;44(8):905–9.

Modulation of muscle nicotinic acetylcholine receptors by the glucocorticoid hydrocortisone. Possible allosteric mechanism of channel blockade. Bouzat C, et al. **J Biol Chem** 1996 Oct 18;271(42):25835–41

The alpha–bungarotoxin–binding nicotinic acetylcholine receptor from rat brain contains only the alpha7 subunit. Chen D, et al. **J Biol Chem** 1997 Sep 19;272(38):24024–9

Interaction of d–tubocurarine analogs with the mouse nicotinic acetylcholine receptor. Ligand orientation at the binding site. Papineni RV, et al. **J Biol Chem** 1997 Oct 3;272(40):24891–8

Only snake curaremimetic toxins with a fifth disulfide bond have high affinity for the neuronal alpha7 nicotinic receptor. Servent D, et al. **J Biol Chem** 1997 Sep 26; 272(39):24279–86

Formation of a ligand–binding site for the acetylcholine receptor in vitro. Shtrom SS, et al. **J Biol Chem** 1996 Oct 11;271(41):25506–14

Identification of equivalent residues in the gamma, delta, and epsilon subunits of the nicotinic receptor that contribute to alpha–bungarotoxin binding. Sine SM. **J Biol Chem** 1997 Sep 19;272(38):23521–7

Anionic residue in the alpha–subunit of the nicotinic acetylcholine receptor contributing to subunit assembly and ligand binding. Sugiyama N, et al. **J Biol Chem** 1996 Oct 25;271(43):26575–81

Glucagon facilitates adrenal catecholamine release mediated by nicotinic receptors but not by muscarinic receptors in anesthetized dogs. Koshika T, et al. **J Cardiovasc Pharmacol** 1996 Oct;28(4):585–90

A population of nicotinic receptors is associated with thalamocortical afferents in the adult rat: laminal and areal analysis. Lavine N, et al. **J Comp Neurol** 1997 Apr 7; 380(2):175–90

Whitefly (Hemiptera: Aleyrodidae) binding site for imidacloprid and related insecticides: a putative nicotinic acetylcholine receptor. Chao SL, et al. **J Econ Entomol** 1997 Aug;90(4):879–82

Lophotoxin–insensitive nematode nicotinic acetylcholine receptors. Tornøe C, et al. **J Exp Biol** 1996 Oct;199 (Pt 10):2161–8

Voltage–jump relaxation kinetics for wild–type and chimeric beta subunits of neuronal nicotinic receptors. Figl A, et al. **J Gen Physiol** 1996 Mar;107(3):369–79

Rabies virus binding to the nicotinic acetylcholine receptor alpha subunit demonstrated by virus overlay protein binding assay. Gastka M, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2437–40

Activation of keratinocyte nicotinic cholinergic receptors stimulates calcium influx and enhances cell differentiation. Grando SA, et al. **J Invest Dermatol** 1996 Sep;107(3):412–8

Nudicauline and elatine as potent norditerpenoid ligands at rat neuronal alpha–bungarotoxin binding sites: importance of the 2–(methylsuccinimido)benzoyl moiety for neuronal nicotinic acetylcholine receptor binding. Hardick DJ, et al. **J Med Chem** 1996 Nov 22;39(24):4860–6

Synthesis and nicotinic acetylcholine receptor binding properties of exo–2–(2'–fluoro–5'–pyridinyl)–7–azabicyclo–[2.2.1]heptane: a new positron emission tomography ligand for nicotinic receptors. Liang F, et al. **J Med Chem** 1997 Jul 18;40(15):2293–5

Structure–activity studies on 2–methyl–3–(2(S)–pyrrolidinylmethoxy) pyridine (ABT–089): an orally bioavailable 3–pyridyl ether nicotinic acetylcholine receptor ligand with cognition–enhancing properties. Lin NH, et al. **J Med Chem** 1997 Jan 31; 40(3):385–90

Lycaconitine revisited: partial synthesis and neuronal nicotinic acetylcholine receptor affinities. Jacyno JM, et al. **J Nat Prod** 1996 Jul;59(7):707–9

Nicotinic receptor subunits alpha 3, alpha 4, and beta 2 and high affinity nicotine binding sites are expressed by P19 embryonal cells. Cauley K, et al. **J Neurobiol** 1996 Jun; 30(2):303–14

Elements between the protein–coding regions of the adjacent beta 4 and alpha 3 acetylcholine receptor genes direct neuron–specific expression in the central nervous system. Yang X, et al. **J Neurobiol** 1997 Mar;32(3):311–24

Glial regulation of alpha 7–type nicotinic acetylcholine receptor expression in cultured rat cortical neurons. Jensen JJ, et al. **J Neurochem** 1997 Jan;68(1):112–20

Temperature–sensitive expression of Drosophila neuronal nicotinic acetylcholine receptors. Lansdell SJ, et al. **J Neurochem** 1997 May;68(5):1812–9

Dose–response relationship for nicotine–induced up–regulation of rat brain nicotinic receptors. Rowell PP, et al. **J Neurochem** 1997 May;68(5):1982–9

Novel neonicotinoid–agarose affinity column for Drosophila and Musca nicotinic acetylcholine receptors. Tomizawa M, et al. **J Neurochem** 1996 Oct;67(4):1669–76

Calcium flux through predominantly independent purinergic ATP and nicotinic acetylcholine receptors. Rogers M, et al. **J Neurophysiol** 1997 Mar;77(3):1407–17

Human alpha4beta2 neuronal nicotinic acetylcholine receptor in HEK 293 cells: A patch–clamp study. Buisson B, et al. **J Neurosci** 1996 Dec 15;16(24):7880–91

Tyrosine phosphorylation of nicotinic acetylcholine receptor mediates Grb2 binding. Colledge M, et al. **J Neurosci** 1997 Jul 1;17(13):5038–45

Differential expression of alpha–bungarotoxin–sensitive neuronal nicotinic receptors in adrenergic chromaffin cells: a role for transcription factor Egr–1. Criado M, et al. **J Neurosci** 1997 Sep 1;17(17):6554–64

Neuronal nicotinic receptor expression in sensory neurons of the rat trigeminal ganglion: demonstration of alpha3beta4, a novel subtype in the mammalian nervous system. Flores CM, et al. **J Neurosci** 1996 Dec 15; 16(24):7892–901

Anticholinergic activity in mice and receptor–binding properties in rats of a series of synthetic tropane derivatives. Gao ZG, et al. **J Pharm Pharmacol** 1997 Mar;49(3):315–8

Mapping the location of functional nicotinic and gamma–aminobutyric acidA receptors on hippocampal neurons. Alkondon M, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1491–506

[125I]IPH, an epibatidine analog, binds with high affinity to neuronal nicotinic cholinergic receptors. Dávila–García MI, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):445–51

Evidence for spare nicotinic acetylcholine receptors and a beta 4 subunit in bovine adrenal chromaffin cells: studies using bromoacetylcholine, epibatidine, cytisine and mAb35. Wenger BW, et al. **J Pharmacol Exp Ther** 1997 May; 281(2):905–13

Binding sites contribute unequally to the gating of mouse nicotinic alpha D200N acetylcholine receptors. Akk G, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):185–96

Ca(2+)–activated K+ channels in rat otic ganglion cells: role of Ca2+ entry via Ca2+ channels and nicotinic receptors. Callister RJ, et al. **J Physiol (Lond)** 1997 May 1;500 (Pt 3):571–82

Vasoactive intestinal polypeptide modulation of nicotinic ACh receptor channels in rat intracardiac neurones. Cuevas J, et al. **J Physiol (Lond)** 1996 Jun 1;493 (Pt 2):503–15

Stimulation of a nicotinic ACh receptor causes depolarization

and activation of L-type Ca2+ channels in rat pinealocytes. Letz B, et al. **J Physiol (Lond)** 1997 Mar 1; 499 (Pt 2):329-40

Neuronal nicotinic alpha 7 receptor expressed in Xenopus oocytes presents five putative binding sites for methyllycaconitine. Palma E, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):151-61

Noncompetitive agonism at nicotinic acetylcholine receptors; functional significance for CNS signal transduction. Maelicke A, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1-4):333-53 (43 ref.)

Allosteric modulation of Torpedo nicotinic acetylcholine receptor ion channel activity by noncompetitive agonists. Maelicke A, et al. **J Recept Signal Transduct Res** 1997 Jan-May;17(1-3):11-28

[3H]benzylpempidine, a new radioligand for probing a putative channel site on nicotinic cholinergic receptors. Wang DX, et al. **Life Sci** 1997;60(15):1271-7

The synapse-associated protein rapsyn regulates tyrosine phosphorylation of proteins colocalized at nicotinic acetylcholine receptor clusters. Qu Z, et al. **Mol Cell Neurosci** 1996;8(2-3):171-84

Luminal and non-luminal non-competitive inhibitor binding sites on the nicotinic acetylcholine receptor. Arias HR. **Mol Membr Biol** 1996 Jan-Mar;13(1):1-17 (150 ref.)

Dose-response relations for unnatural amino acids at the agonist binding site of the nicotinic acetylcholine receptor: tests with novel side chains and with several agonists. Kearney PC, et al. **Mol Pharmacol** 1996 Nov;50(5):1401-12

Role of central nicotinic and beta-adrenergic receptors in the onset and further development of tail-tremor induced by repeated nicotine administration to rats. Suemaru K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):571-5

Expression of alpha 4-1 and alpha 5 nicotinic cholinoceptor mRNA in the aging rat cerebral cortex. Birtsch C, et al. **Neurobiol Aging** 1997 May-Jun;18(3):335-42

Involvement of histidine 134 in the binding of alpha-bungarotoxin to the nicotinic acetylcholine receptor. Venera GD, et al. **Neurochem Int** 1997 Jul;31(1):151-7

Interactions between tachykinins and diverse, human nicotinic acetylcholine receptor subtypes. Lukas RJ, et al. **Neurochem Res** 1996 Oct;21(10):1245-57

Acetylcholine receptor targets on cortical pyramidal neurones as targets for Alzheimer's therapy. Chessell JP. **Neurodegeneration** 1996 Dec;5(4):453-9

Determinants of nicotinic receptor gating in natural and unnatural side chain structures at the M2 9' position. Kearney PC, et al. **Neuron** 1996 Dec;17(6):1221-9

Muscle-type nicotinic acetylcholine receptor delta subunit determines sensitivity to noncompetitive inhibitors, while gamma subunit regulates divalent permeability. Francis MM, et al. **Neuropharmacology** 1996;35(11):1547-56

Ciliary neurotrophic factor regulates nicotinic acetylcholine receptors on human neuroblastoma cells. Halvorsen SW, et al. **Neuropharmacology** 1996 Mar;35(3):257-65

Phosphorylation of the predicted major intracellular domains of the rat and chick neuronal nicotinic acetylcholine receptor alpha 7 subunit by cAMP-dependent protein kinase. Moss SJ, et al. **Neuropharmacology** 1996; 35(8):1023-8

Genetic correlation of inhibitory gating of hippocampal auditory evoked response and alpha-bungarotoxin-binding nicotinic cholinergic receptors in inbred mouse strains. Stevens KE, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):152-62

Distribution of desensitization time constants of mouse embryonic-like nicotinic and homomeric GLUR6 glutamate receptor channels. Bufler J, et al. **Neurosci Lett** 1997 Jan 17;221(2-3):173-6

Nicotinic receptors, muscarinic receptors and choline acetyltransferase activity in the temporal cortex of Alzheimer patients with differing apolipoprotein E genotypes. Svensson AL, et al. **Neurosci Lett** 1997 Aug 22;232(1):37-40

Characterization of nicotinic receptors involved in the release of noradrenaline from the hippocampus. Sershen H, et al. **Neuroscience** 1997 Mar;77(1):121-30

Effects of nicotine on human nasal epithelium: evidence for nicotinic receptors in non-excitable cells. Blank U, et al. **Pflugers Arch** 1997 Sep;434(5):581-6

Alpha-bungarotoxin-sensitive nicotinic responses in rat tuberomammillary neurons. Uteshev VV, et al. **Pflugers Arch** 1996 Aug;432(4):607-13

Functional characterization of the novel neuronal nicotinic acetylcholine receptor ligand GTS-21 in vitro and in vivo. Briggs CA, et al. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1-2):231-41

Effects of a new cholinolytic drug of tropanes and its optical isomers on central muscarinic and nicotinic receptors. Gao ZG, et al. **Pharmacol Res** 1995 Sep;32(3):105-9

Functional aspects of dexamethasone upregulated nicotinic acetylcholine receptors in C2C12 myotubes. Maestrone E, et al. **Pharmacol Res** 1995 Nov;32(5):305-8

The alpha-bungarotoxin binding site on the nicotinic acetylcholine receptor: analysis using a phage-epitope library. Balass M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6054-8

Neuronal nicotinic threonine-for-leucine 247 alpha7 mutant receptors show different gating kinetics when activated by acetylcholine or by the noncompetitive agonist 5-hydroxytryptamine. Palma E, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9915-9

Three-dimensional solution structure of the complex of alpha-bungarotoxin with a library-derived peptide. Scherf T, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10; 94(12):6059-64

Fixation of allosteric states of the nicotinic acetylcholine receptor by chemical cross-linking. Watty A, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8202-7

Ca(2+)-permeability of muscle nicotinic acetylcholine receptor is increased by expression of the epsilon subunit. Cens T, et al. **Receptors Channels** 1997;5(1):29-40

A membrane skeleton that clusters nicotinic acetylcholine receptors in muscle. Bloch RJ, et al. **Soc Gen Physiol Ser** 1997;52:177-95 (68 ref.)

A comparison of in vitro methods for assessing the potency of therapeutic antisera against the venom of the coral snake Micrurus nigrocinctus. Alape-Girón A, et al. **Toxicon** 1997 Apr;35(4):573-81

Binding of native kappa-neurotoxins and site-directed mutants to nicotinic acetylcholine receptors. Chiappinelli VA, et al. **Toxicon** 1996 Nov-Dec;34(11-12):1243-56 (41 ref.)

Presynaptic nicotinic ACh receptors. Wonnacott S. **Trends Neurosci** 1997 Feb;20(2):92-8 (76 ref.)

[Effective binding of alpha-bungarotoxin with the solubilized alpha-subunit of Torpedo californica acetylcholine receptor (letter)] Utkin IuN, et al. **Bioorg Khim** 1996 May; 22(5):387-9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The pharmacology of (-)-nicotine and novel cholinergic channel modulators. Brioni JD, et al. **Adv Pharmacol** 1997; 37:153-214 (298 ref.)

Pharmacology of neuronal nicotinic acetylcholine receptor subtypes. Colquhoun LM, et al. **Adv Pharmacol** 1997; 39:191-220 (150 ref.)

Participation of 5-HT3, 5-HT4, and nicotinic receptors in the peristaltic reflex of guinea pig distal colon. Kadowaki M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G849-57

Possible nicotinic receptor-mediated modulation of synaptic transmission in nucleus of the solitary tract. Shiraki T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R869-73

Halothane and isoflurane differentially affect the regulation of dopamine and gamma-aminobutyric acid release mediated by presynaptic acetylcholine receptors in the rat striatum. Salord F, et al. **Anesthesiology** 1997 Mar; 86(3):632-41

Molecular aspects of ion permeation through channels. Imoto K. **Ann N Y Acad Sci** 1993 Dec 20;707:38-50 (28 ref.)

Desensitization of nicotine receptor through CGRP-enhanced non-contractile Ca2+ in neuromuscular synapse. Tsuneki H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:435-8

Nicotinic receptor stimulation protects neurons against beta-amyloid toxicity. Kihara T, et al. **Ann Neurol** 1997 Aug;42(2):159-63

Role of the putative transmembrane segment M3 in gating of neuronal nicotinic receptors. Campos-Caro A, et al. **Biochemistry** 1997 Mar 4;36(9):2709-15

Molecular dynamics study of water and Na+ ions in models of the pore region of the nicotinic acetylcholine receptor. Smith GR, et al. **Biophys J** 1997 Sep;73(3):1364-81

A model of the nicotinic receptor extracellular domain based on sequence identity and residue location. Tsigelny I, et al. **Biophys J** 1997 Jul;73(1):52-66

Nicotinic acetylcholine receptor channels are influenced by the physical state of their membrane environment. Zanello LP, et al. **Biophys J** 1996 May;70(5):2155-64

Inhibition of nicotinic receptor-mediated responses in bovine chromaffin cells by diltiazem. Gandía L, et al. **Br J Pharmacol** 1996 Jul;118(5):1301-7

The influx of Ca2+ and the release of noradrenaline evoked by the stimulation of presynaptic nicotinic receptors of chick sympathetic neurons in culture are not mediated via L-, N-, or P-type calcium channels. Doležal V, et al. **Brain Res** 1996 Nov 18;740(1-2):75-80

Nicotinic, muscarinic and dopaminergic actions in the ventral hippocampus and the nucleus accumbens: effects on spatial working memory in rats. Kim JS, et al. **Brain Res** 1996 Jul 1;725(2):231-40

Lead modulation of the neuronal nicotinic acetylcholine receptor in PC12 cells. Nagata K, et al. **Brain Res** 1997 Apr 18;754(1-2):21-7

Evidence for two types of nicotinic receptors in the cat carotid body chemoreceptor cells. Obeso A, et al. **Brain Res** 1997 Apr 18;754(1-2):298-302

Presumptive presynaptic nicotinic acetylcholine receptors in the chick tectum: effects of lesions of the lateral spiriform nucleus. Torrão AS, et al. **Brain Res** 1996 Dec 16; 743(1-2):154-61

Single-channel recording in brain slices reveals heterogeneity of nicotinic receptors on individual neurons within the chick lateral spiriform nucleus. Weaver WR, et al. **Brain Res** 1996 Jun 24;725(1):95-105

Is binding to nicotinic acetylcholine and dopamine receptors related to working memory in rats? Levin ED, et al. **Brain Res Bull** 1997;43(3):295-304

Long-lasting enhancement of ACh receptor currents by lysophospholipids. Ikeuchi Y, et al. **Brain Res Mol Brain Res** 1997 May;45(2):317-20

Nicotinic receptors and brain plasticity. Changeux JP, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:343-62 (103 ref.)

The nicotinic acetylcholine receptor at the neuromuscular junction: assembly and tyrosine phosphorylation. Wang ZZ, et al. **Cold Spring Harb Symp Quant Biol** 1996; 61:363-71 (51 ref.)

Sequential roles of agrin, MuSK and rapsyn during neuromuscular junction formation. Glass DJ, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):379-84 (45 ref.)

Adrenocorticotropin response and nicotine-induced norepinephrine secretion in the rat paraventricular nucleus are mediated through brainstem receptors. Fu Y, et al. **Endocrinology** 1997 May;138(5):1935-43

Alpha7 and alpha8 nicotinic receptor subtypes immunopurified from chick retina have different immunological, pharmacological and functional properties. Gotti C, et al. **Eur J Neurosci** 1997 Jun;9(6):1201-11

Functional properties of neuronal nicotinic acetylcholine receptor channels expressed in transfected human cells. Ragozzino D, et al. **Eur J Neurosci** 1997 Mar;9(3):480-8

Heterogeneous levamisole receptors: a single-channel study of nicotinic acetylcholine receptors from Oesophagostomum dentatum. Martin RJ, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):249-57

An amino acid exchange in the second transmembrane segment of a neuronal nicotinic receptor causes partial epilepsy by altering its desensitization kinetics. Weiland S, et al. **FEBS Lett** 1996 Nov 25;398(1):91-6

Neuronal nicotinic acetylcholine receptors. Lindstrom J. **Ion Channels** 1996;4:377-450 (270 ref.)

Host cell-specific folding and assembly of the neuronal nicotinic acetylcholine receptor alpha7 subunit. Cooper ST, et al. **J Neurochem** 1997 May;68(5):2140-51

Multiple determinants of dihydro-beta-erythroidine sensitivity on rat neuronal nicotinic receptor alpha subunits. Harvey SC, et al. **J Neurochem** 1996 Nov;67(5):1953-9

Nicotinic autoreceptors mediating enhancement of acetylcholine release become operative in conditions of "impaired" cholinergic presynaptic function. Marchi M, et al. **J Neurochem** 1996 Nov;67(5):1974-81

Evidence for nicotinic receptors potentially modulating nociceptive transmission at the level of the primary sensory neuron: studies with F11 cells. Puttfarcken PS, et al. **J Neurochem** 1997 Sep;69(3):930-8

Cerebellar choline acetyltransferase positive mossy fibres and their granule and unipolar brush cell targets: a model for central cholinergic nicotinic neurotransmission. Jaarsma D, et al. **J Neurocytol** 1996 Dec;25(12):829-42

Progression of M-current inhibition after agonist removal. Villarroel A. **J Neurophysiol** 1996 Jan;75(1):518-21

Rapid synaptic transmission in the avian ciliary ganglion is mediated by two distinct classes of nicotinic receptors. Ullian EM, et al. **J Neurosci** 1997 Oct 1;17(19):7210-9

Properties of neuronal nicotinic acetylcholine receptors: pharmacological characterization and modulation of synaptic function. Albuquerque EX, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1117-36

Activation of the recombinant human alpha 7 nicotinic acetylcholine receptor significantly raises intracellular free calcium. Delbono O, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):428-38

Activation and blockade of mouse muscle nicotinic channels by antibodies directed against the binding site of the acetylcholine receptor. Bufler J, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):107-14

Recombinant nicotinic receptors, expressed in Xenopus oocytes, do not resemble native rat sympathetic ganglion receptors in single-channel behaviour. Sivilotti LG, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):123-38

Nicotinic and muscarinic components in acetylcholine stimulation of porcine adrenal medullary cells. Nassar-Gentina V, et al. **Mol Cell Biochem** 1997 Apr; 169(1-2):107-13

The synapse-associated protein rapsyn regulates tyrosine phosphorylation of proteins colocalized at nicotinic acetylcholine receptor clusters. Qu Z, et al. **Mol Cell Neurosci** 1996;8(2-3):171-84

Clustering of GABAA receptors by rapsyn/43kD protein in vitro. Yang SH, et al. **Mol Cell Neurosci** 1997;8(6):430-8

Nicotinic receptors in the brain. Molecular biology, function, and therapeutics. Vidal C. **Mol Chem Neuropathol** 1996 May-Aug;28(1-3):3-11 (48 ref.)

Elevation of intracellular calcium levels in neurons by nicotinic acetylcholine receptors. Rathouz MM, et al. **Mol Neurobiol** 1996 Apr;12(2):117-31 (113 ref.)

Regulation of acetylcholine release by presynaptic nicotinic receptors at developing neuromuscular synapses. Fu WM, et al. **Mol Pharmacol** 1997 Mar;51(3):390-8

Regulation of human alpha4beta2 neuronal nicotinic acetylcholine receptors by cholinergic channel ligands and second messenger pathways. Gopalakrishnan M, et al. **Mol Pharmacol** 1997 Sep;52(3):524-34

Modulation of alpha7 nicotinic receptor-mediated calcium influx by nicotinic agonists. Quik M, et al. **Mol Pharmacol** 1997 Mar;51(3):499-506

Pharmacological characterization of a nicotinic autoreceptor in rat hippocampal synaptosomes. Wilkie GI, et al. **Neurochem Res** 1996 Sep;21(9):1141-8

Role of nicotinic acetylcholine receptors at the vertebrate myotendinous junction: a hypothesis. Bernheim L, et al. **Neuromuscul Disord** 1996 May;6(3):211-4

Rapsyn is required for MuSK signaling and recruits synaptic components to a MuSK-containing scaffold. Apel ED, et

RECEPTORS, NICOTINIC

al. **Neuron** 1997 Apr;18(4):623–35

Oleic acid enhances ACh receptor currents by activation of Ca2+/calmodulin-dependent protein kinase II. Nishizaki T, et al. **Neuroreport** 1997 Feb 10;8(3):597–601

Partial inhibition of the in vitro infection of adult mouse dorsal root ganglion neurons by rabies virus using nicotinic antagonists. Castellanos JE, et al. **Neurosci Lett** 1997 Jul 4;229(3):198–200

Differential effects of dimethyl sulfoxide on nicotinic acetylcholine receptors from mouse muscle and Torpedo electrocytes. Eaton MJ, et al. **Neurosci Lett** 1997 Jul 25; 230(3):163–6

An evaluation of neuronal nicotinic acetylcholine receptor activation by quaternary nitrogen compounds indicates that choline is selective for the alpha 7 subtype. Papke RL, et al. **Neurosci Lett** 1996 Aug 9;213(3):201–4

Nicotinic receptor-mediated responses in relay cells and interneurons in the rat lateral geniculate nucleus. Zhu JJ, et al. **Neuroscience** 1997 Sep;80(1):191–202

Immunological approaches to nicotine receptors. Patrick JW, et al. **NIDA Res Monogr** 1996;161:3–19 (70 ref.)

Both nicotinic and muscarinic receptors in ventral tegmental area contribute to brain-stimulation reward. Yeomans J, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):915–21

Real-time detection of the surface delivery of newly synthesized membrane proteins. Andreose JS, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7661–6

Peptidyl prolyl cis–trans isomerase activity of cyclophilin A in functional homo-oligomeric receptor expression. Helekar SA, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5432–7

Co-expression of the neuronal alpha7 and L247T alpha7 mutant subunits yields hybrid nicotinic receptors with properties of both wild-type alpha7 and alpha7 mutant homomeric receptors. Palma E, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1539–43

Nicotinic acetylcholine receptors on hippocampal neurons: cell compartment-specific expression and modulatory control of channel activity. Albuquerque EX, et al. **Prog Brain Res** 1996;109:111–24 (88 ref.)

Structure and function of neuronal nicotinic acetylcholine receptors. Lindstrom J, et al. **Prog Brain Res** 1996; 109:125–37 (65 ref.)

Nicotinic receptors of the vertebrate CNS: introductory remarks. Maelicke A. **Prog Brain Res** 1996;109:107–10 (25 ref.)

Nicotinic receptor function in schizophrenia. Leonard S, et al. **Schizophr Bull** 1996;22(3):431–45 (101 ref.)

RECEPTORS, NK-2 see **RECEPTORS, NEUROKININ-2**

RECEPTORS, NK-3 see **RECEPTORS, NEUROKININ-3**

RECEPTORS, NMDA see **RECEPTORS, N-METHYL-D-ASPARTATE**

RECEPTORS, NOREPINEPHRINE see **RECEPTORS, ADRENERGIC**

RECEPTORS, ODORANT

Olfactory receptor database (ORDB): a resource for sharing and analyzing published and unpublished data. Healy MD, et al. **Chem Senses** 1997 Jun;22(3):321–6

ANALYSIS

Putative odour receptors localize in cilia of olfactory receptor cells in rat and mouse: a freeze-substitution ultrastructural study. Menco BP, et al. **J Neurocytol** 1997 May; 26(5):297–312

BIOSYNTHESIS

Differential expression of odorant-binding protein genes in rat nasal glands: implications for odorant-binding proteinII as a possible pheromone transporter. Ohno K, et al. **Neuroscience** 1996 Mar;71(2):355–66

Nested expression domains for odorant receptors in zebrafish olfactory epithelium. Weth F, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13321–6

CHEMISTRY

Expression of an olfactory receptor in Escherichia coli: purification, reconstitution, and ligand binding. Kiefer H, et al. **Biochemistry** 1996 Dec 17;35(50):16077–84

Microheterogeneity of odorant-binding proteins in the porcupine revealed by N-terminal sequencing and mass spectrometry. Ganni M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):287–91

Expression and characterization of a lepidopteran general odorant binding protein. Feng L, et al. **Insect Biochem Mol Biol** 1997 May;27(5):405–12

Subfamily of olfactory receptors characterized by unique structural features and expression patterns. Kubick S, et al. **J Neurochem** 1997 Aug;69(2):465–75

Relation of chemical structure to spatial distribution of sensory responses in rat olfactory epithelium. Scott JW, et al. **J Neurophysiol** 1996 May;75(5):2036–49

The three-dimensional structure of bovine odorant binding protein and its mechanism of odor recognition [see comments] Bianchet MA, et al. **Nat Struct Biol** 1996 Nov; 3(11):934–9. Comment in: Nat Struct Biol 1996 Nov;3(11):902–6.

Waiting to inhale [news; comment] Brownlow S, et al. **Nat Struct Biol** 1996 Nov;3(11):902–6. Comment on: Nat Struct Biol 1996 Oct;3(10):863–7. Comment on: Nat Struct Biol 1996 Nov;3(11):934–9.

Domain swapping creates a third putative combining site in bovine odorant binding protein dimer [see comments] Tegoni M, et al. **Nat Struct Biol** 1996 Oct;3(10):863–7. Comment in: Nat Struct Biol 1996 Nov;3(11):902–6.

Positive selection moments identify potential functional residues in human olfactory receptors. Singer MS, et al. **Receptors Channels** 1996;4(3):141–7

DRUG EFFECTS

Existence of multiple receptors in single neurons: responses of singie bullfrog olfactory neurons to many cAMP-dependent and independent odorants. Kashiwayanagi M, et al. **Brain Res** 1996 Nov 4;738(2):222–8

GENETICS

Molecular cloning and chromosomal mapping of olfactory receptor genes expressed in the male germ line: evidence for their wide distribution in the human genome. Vanderhaeghen P, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):283–7

The molecular biology of olfactory perception. Mombaerts P, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:135–45 (41 ref.)

Genetic approaches to mammalian olfaction. Reed RR. **Cold Spring Harb Symp Quant Biol** 1996;61:165–72 (53 ref.)

Olfaction: scents and sensibility. Firestein S. **Curr Biol** 1996 Jun 1;6(6):666–7 (9 ref.)

The evolution of mammalian olfactory receptor genes. Issel-Tarver L, et al. **Genetics** 1997 Jan;145(1):185–95

Sequence analysis in the olfactory receptor gene cluster on human chromosome 17: recombinatorial events affecting receptor diversity. Glusman G, et al. **Genomics** 1996 Oct 15;37(2):147–60

Specific repertoire of olfactory receptor genes in the male germ cells of several mammalian species. Vanderhaeghen P, et al. **Genomics** 1997 Feb 1;39(3):239–46

Expression and characterization of a lepidopteran general odorant binding protein. Feng L, et al. **Insect Biochem Mol Biol** 1997 May;27(5):405–12

Spatial patterns of olfactory neurons expressing specific odor receptor genes in 48-hour-old embryos of zebrafish Danio rerio. Vogt RG, et al. **J Exp Biol** 1997 Feb;200 (Pt 3):433–43

Subfamily of olfactory receptors characterized by unique structural features and expression patterns. Kubick S, et al. **J Neurochem** 1997 Aug;69(2):465–75

Spatially organized response zones in rat olfactory epithelium. Scott JW, et al. **J Neurophysiol** 1997 Apr; 77(4):1950–62

Olfaction in birds: differential embryonic expression of nine putative odorant receptor genes in the avian olfactory system. Nef S, et al. **Mech Dev** 1996 Mar;55(1):65–77

Noncoordinate expression of odorant receptor genes tightly linked in the zebrafish genome. Barth AL, et al. **Neuron** 1997 Aug;19(2):359–69

Differential expression of odorant-binding protein genes in rat nasal glands: implications for odorant-binding proteinII as a possible pheromone transporter. Ohno K, et al. **Neuroscience** 1996 Mar;71(2):355–66

Organization and expression of canine olfactory receptor genes. Issel-Tarver L, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10897–902

Olfaction: transient expression of a putative odorant receptor in the avian notochord. Nef S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4766–71

Unconscious odors. Hines PJ. **Science** 1997 Oct 3; 278(5335):79

ISOLATION & PURIFICATION

Visualizing an olfactory sensory map. Mombaerts P, et al. **Cell** 1996 Nov 15;87(4):675–86

METABOLISM

Evidence of distinct amino acid and bile salt receptors in the olfactory system of the zebrafish, Danio rerio. Michel WC, et al. **Brain Res** 1997 Aug 1;764(1–2):179–87

Electrophysiological evidence for the broad distribution of specific odorant receptor molecules across the olfactory organ of the channel catfish. Chang Q, et al. **Chem Senses** 1996 Oct;21(5):519–27

Affinities of nutty and green-smelling pyrazines and thiazoles to odorant-binding proteins, in relation with their lipophilicity. Hérent MF, et al. **Chem Senses** 1995 Dec; 20(6):601–8

Effect of nasal dilators on perceived odor intensity. Hornung DE, et al. **Chem Senses** 1997 Apr;22(2):177–80

Olfactory adaptation. The nose leads the eye [news; comment] Gold GH, et al. **Nature** 1997 Feb 20; 385(6618):677, 679. Comment on: Nature 1997 Feb 20;385(6618):725–9.

Mechanism of odorant adaptation in the olfactory receptor cell [see comments] Kurahashi T, et al. **Nature** 1997 Feb 20;385(6618):725–9. Comment in: Nature 1997 Feb 20;385(6618):677, 679.

PHYSIOLOGY

Information coding in the vertebrate olfactory system. Buck LB **Annu Rev Neurosci** 1996;19:517–44 (187 ref.)

Expression of an olfactory receptor in Escherichia coli: purification, reconstitution, and ligand binding. Kiefer H, et al. **Biochemistry** 1996 Dec 17;35(50):16077–84

Olfactory receptors, vomeronasal receptors, and the organization of olfactory information. Bargmann CI. **Cell** 1997 Aug 22;90(4):585–7 (17 ref.)

A spectroscopic mechanism for primary olfactory reception. Turin L. **Chem Senses** 1996 Dec;21(6):773–91

Responses of antennal olfactory receptors in the yellow fever mosquito Aedes aegypti to human body odours. Pappenberger B, et al. **Ciba Found Symp** 1996;200:254–63; discussion 263–6, 281–4

Perireception in olfaction: molecular mass sieving by aesthetasc sensillar cuticle determines odorant access to receptor sites in the Caribbean spiny lobster Panulirus argus. Derby CD, et al. **J Exp Biol** 1997 Aug;200 (Pt 15):2073–81

Relation of chemical structure to spatial distribution of sensory responses in rat olfactory epithelium. Scott JW, et al. **J Neurophysiol** 1996 May;75(5):2036–49

From the nose to the brain [news] Bargmann C. **Nature** 1996 Dec 12;384(6609):512–3

Beta subunits of the olfactory cyclic nucleotide-gated channel form a nitric oxide activated Ca2+ channel. Broillet MC, et al. **Neuron** 1997 Jun;18(6):951–8

Combinatorial and chemotopic odorant coding in the zebrafish olfactory bulb visualized by optical imaging. Friedrich RW, et al. **Neuron** 1997 May;18(5):737–52

Non-conventional role of lysosomal acid phosphatase in olfactory receptor axons: co-localization with growth-associated phosphoprotein-43. Wolff JR, et al. **Neuroscience** 1997 Aug;79(3):887–91

Molecular basis of signal recognition in olfaction. Breer H. **Pflugers Arch** 1996;431(6 Suppl 2):R311–2 (5 ref.)

Positive selection moments identify potential functional residues in human olfactory receptors. Singer MS, et al. **Receptors Channels** 1996;4(3):141–7

ULTRASTRUCTURE

Non-conventional role of lysosomal acid phosphatase in olfactory receptor axons: co-localization with growth-associated phosphoprotein-43. Wolff JR, et al. **Neuroscience** 1997 Aug;79(3):887–91

RECEPTORS, OPIATE see **RECEPTORS, OPIOID**

RECEPTORS, OPIOID

Molecular Approaches to Drug Abuse Research. Proceedings of a conference. Bethesda, Maryland, March 22–23, 1994. **NIDA Res Monogr** 1996;161:1–219

International Union of Pharmacology. XII. Classification of opioid receptors. Dhawan BN, et al. **Pharmacol Rev** 1996 Dec;48(4):567–92 (350 ref.)

Insights into opioid action in the intestinal tract. De Luca A, et al. **Pharmacol Ther** 1996;69(2):103–15 (164 ref.)

[Molecular biological study on structure and function of the opioid receptor] Fukuda K. **Masui** 1996 Sep;45(9):1060–66 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Opioid receptors] Minami M, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):335–42 (22 ref.) **(Jpn)**

[The opiates-opioids binominal apropos of recent appearance of DSM-IV in Spanish] Martin Jacod E. **Acta Psiquiatr Psicol Am Lat** 1995 Dec;41(4):333–4 **(Spa)**

AGONISTS

Effects of centrally administered opioid agonists on macrophage nitric oxide production and splenic lymphocyte proliferation. Schneider GM, et al. **Adv Exp Med Biol** 1996;402:81–8

[Tyr1]-nociceptin, a novel nociceptin analog, decreases systemic arterial pressure by a naloxone-insensitive mechanism in the rat. Champion HC, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):309–12

Inhibition of tachykinin release from peripheral endings of sensory nerves by nociceptin, a novel opioid peptide. Giuliani S, et al. **Br J Pharmacol** 1996 Aug;118(7):1567–9

Modulation of excitatory synaptic transmission by nociceptin in superficial dorsal horn neurones of the neonatal rat spinal cord. Liebel JT, et al. **Br J Pharmacol** 1997 Jun; 121(3):425–32

Nociceptin induced inhibition of K+ evoked glutamate release from rat cerebrocortical slices. Nicol B, et al. **Br J Pharmacol** 1996 Nov;119(6):1081–3

Naloxone-insensitive inhibition of acetylcholine release from parasympathetic nerves innervating guinea-pig trachea by the novel opioid, nociceptin. Patel HJ, et al. **Br J Pharmacol** 1997 Mar;120(5):735–6

Bidirectional modulatory effect of orphanin FQ on morphine-induced analgesia: antagonism in brain and potentiation in spinal cord of the rat. Tian JH, et al. **Br J Pharmacol** 1997 Feb;120(4):676–80

Cardiovascular effects of microinjections of opioid agonists into the 'Depressor Region' of the ventrolateral periaqueductal gray region. Keay KA, et al. **Brain Res** 1997 Jul 11;762(1–2):61–71

Effects of intrathecally administered nociceptin, an opioid receptor-like1 (ORL1) receptor agonist, on the thermal hyperalgesia induced by carageenan injection into the rat paw. Yamamoto T, et al. **Brain Res** 1997 Apr 18; 754(1-2):329-32

Molecular characterization and functional expression of opioid receptor-like1 receptor. Wu YL, et al. **Cell Res** 1997 Jun;7(1):69-77

Nociceptin/orphanin FQ microinjected into hippocampus impairs spatial learning in rats. Sandin J, et al. **Eur J Neurosci** 1997 Jan;9(1):194-7

The mouse vas deferens: a pharmacological preparation sensitive to nociceptin. Calò G, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):R3-5

Nociceptin stimulates locomotion and exploratory behaviour in mice. Florin S, et al. **Eur J Pharmacol** 1996 Dec 12; 317(1):9-13

The antiproliferative effect of opioid receptor agonists on the T47D human breast cancer cell line, is partially mediated through opioid receptors. Hatzoglou A, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):199-207

Pharmacological characterization of KT-90 using cloned mu-, delta- and kappa-opioid receptors. Katsumata S, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):349-55

Gastric effects of mu-, delta- and kappa-opioid receptor agonists on brainstem unitary responses in the neonatal rat. Yuan CS. **Eur J Pharmacol** 1996 Oct 24;314(1-2):27-32

Association of aminopeptidase N and endopeptidase 24.15 inhibitors potentiate behavioral effects mediated by nociceptin/orphanin FQ in mice. Noble F, et al. **FEBS Lett** 1997 Jan 20;401(2-3):227-9

Central effects of opioid agonists and naloxone on blood pressure and heart rate in normotensive and hypertensive rats. Sun SY, et al. **Gen Pharmacol** 1996 Oct;27(7):1187-94

Synthesis and opioid activity of [D-Pro10]dynorphin A-(1-11) analogues with N-terminal alkyl substitution. Choi H, et al. **J Med Chem** 1997 Aug 15;40(17):2733-9

Actions of the ORL1 receptor ligand nociceptin on membrane properties of rat periaqueductal gray neurons in vitro. Vaughan CW, et al. **J Neurosci** 1997 Feb 1; 17(3):996-1003

Sex differences in opioid antinociception. Bartok RE, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):769-78

Discriminative stimulus effects of butorphanol: influence of training dose on the substitution patterns produced by Mu, Kappa and Delta opioid agonists. Picker MJ, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1130-41

Pharmacological characterization of orphanin FQ/nociceptin and its fragments. Rossi GC, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):858-65

Orphan receptors and their natural ligands. Civelli O, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):545-50 (49 ref.)

Nociceptin: an endogenous agonist for central opioid like1 (ORL1) receptors possesses systemic vasorelaxant properties. Gumusel B, et al. **Life Sci** 1997;60(8):PL141-5

Rats rapidly develop tolerance to the locomotor-inhibiting effects of the novel neuropeptide orphanin FQ. Devine DP, et al. **Neurochem Res** 1996 Nov;21(11):1387-96

Simultaneous measurement of biogenic amines and their metabolites in rat brain regions after acute administration of and abrupt withdrawal from butorphanol or morphine. Wakabayashi H, et al. **Neurochem Res** 1995 Oct; 20(10):1179-85

Spinally delivered nociceptin/orphanin FQ reduces flinching behaviour in the rat formalin test. Erb K, et al. **Neuroreport** 1997 May 27;8(8):1967-70

Orphanin FQ, agonist of orphan opioid receptor ORL1, stimulates feeding in rats. Pomonis JD, et al. **Neuroreport** 1996 Dec 20;8(1):369-71

Orphanin FQ/nociceptin-immunoreactive nerve fibers parallel those containing endogenous opioids in rat spinal cord. Riedl M, et al. **Neuroreport** 1996 May 31;7(8):1369-72

Nociceptin/orphanin FQ and opioid peptides show overlapping distribution but not co-localization in pain-modulatory brain regions. Schulz S, et al. **Neuroreport** 1996 Nov 25;7(18):3021-5

Nociceptin or antinociceptin: potent spinal antinociceptive effect of orphanin FQ/nociceptin in the rat. Xu XJ, et al. **Neuroreport** 1996 Sep 2;7(13):2092-4

Autoradiographic localization of [3H]nociceptin binding sites from telencephalic to mesencephalic regions of the mouse brain. Florin S, et al. **Neurosci Lett** 1997 Jul 11;230(1):33-6

Spinal analgesic activity of orphanin FQ/nociceptin and its fragments. King MA, et al. **Neurosci Lett** 1997 Feb 21; 223(2):113-6

Determination of nociceptin-like immunoreactivity in the rat dorsal spinal cord. Schuligoi R, et al. **Neurosci Lett** 1997 Mar 14;224(2):136-8

Effects of intrathecally administered nociceptin, an opioid receptor-like1 (ORL1) receptor agonist, on the thermal hyperalgesia induced by unilateral constriction injury to the sciatic nerve in the rat. Yamamoto T, et al. **Neurosci Lett** 1997 Mar 14;224(2):107-10

Pretreatment with protein kinase C activator phorbol 12,13-dibutyrate attenuates the antinociception induced by mu- but not epsilon-opioid receptor agonist in the mouse. Narita M, et al. **Neuroscience** 1997 Jan;76(1):291-8

Antisense oligodeoxynucleotide to a delta-opioid receptor messenger RNA selectively blocks the antinociception induced by intracerebroventricularly administered delta-, but not mu-, epsilon- or kappa-opioid receptor agonists in the mouse. Wang HQ, et al. **Neuroscience** 1996 Nov; 75(2):445-52

Effects of morphine-3-glucuronide on the antinociceptive activity of peptide and nonpeptide opioid receptor agonists in mice. Bian JT, et al. **Peptides** 1996;17(8):1415-9

Pronociceptive effects of the neuropeptide, nociceptin, in the land snail, Cepaea nemoralis. Kavaliers M, et al. **Peptides** 1996;17(5):763-8

Pulsed magnetic field induced "analgesia" in the land snail, Cepaea nemoralis, and the effects of mu, delta, and kappa opioid receptor agonists/antagonists. Thomas AW, et al. **Peptides** 1997;18(5):703-9

Nociceptin in vitro biotransformation in human blood. Yu J, et al. **Peptides** 1996;17(5):873-6

Role of opioidergic and serotonergic mechanisms in cough and antitussives. Kamei J. **Pulm Pharmacol** 1996 Oct-Dec; 9(5-6):349-56 (67 ref.)

Effect of mu, delta and kappa opioid receptor agonists on a reactive oxygen species mediated model of skin inflammation. Earl JR, et al. **Skin Pharmacol** 1996; 9(4):250-8

[Opioid agonists and antagonists, opioid receptors] Holzgrabe U, et al. **Pharmazie** 1997 Jan;52(1):4-22 (220 ref.) **(Ger)**

[The effect of naloxone and leu-enkephalin on the atretic changes in the ovarian follicles of hypophysectomized rats] Zaporozhchenko MB, et al. **Fiziol Zh Im I M Sechenova** 1996 Dec;82(12):18-22 (Eng. Abstr.) **(Rus)**

[Aquaretic agents] Bosch-Marcé M, et al. **Gastroenterol Hepatol** 1996 Nov;19(9):472-7 (55 ref.) **(Spa)**

ANALYSIS

Kappa Opioid receptors on immune cells as studied by fluorescent ligands. Bidlack JM, et al. **Adv Exp Med Biol** 1996;402:13-22

Presence and characterization of nociceptin (orphanin FQ) receptor binding in adult rat and human fetal hypothalamus. Makman MH, et al. **Brain Res** 1997 Jul 11;762(1-2):247-50

Assessing neuroreceptor occupancy by continuous infusion of carbon-11 labeled radioligands. Kao PF, et al. **Eur J Nucl Med** 1996 Feb;23(2):141-4

Long-term regulation of opioid receptors in neuroblastoma and lymphoma cell lines. Shapira M, et al. **J Neuroimmunol** 1997 Jun;76(1-2):145-52

Expression of the opioid growth factor, [Met5]-enkephalin, and the zeta opioid receptor in head and neck squamous cell carcinoma. Levin RJ, et al. **Laryngoscope** 1997 Mar; 107(3):335-9

Molecular and biochemical evidence for receptors for drugs of abuse on immune cells. **NIDA Res Monogr** 1996;162:37-9

Opioid receptor imaging and displacement studies with [6-O-[11C] methyl]buprenorphine in baboon brain. Galynker I, et al. **Nucl Med Biol** 1996 Apr;23(3):325-31

ANTAGONISTS & INHIBITORS

Interaction between opiate and 5-HT3 receptor antagonists in the regulation of alcohol intake. Le AD, et al. **Alcohol Alcohol Suppl** 1994;2:545-9

Interleukin-6 is differently modulated by central opioid receptor subtypes. Bertolucci M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R956-9

Chronic opiate-receptor inhibition in experimental congestive heart failure in dogs. Yatani A, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H478-84

Opioid receptor antagonists attenuate heat stress-induced reduction in cerebral blood flow, increased blood-brain barrier permeability, vasogenic edema and cell changes in the rat. Sharma HS, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:559-71

Effects of sigma ligands on the nociceptin/orphanin FQ receptor co-expressed with the G-protein-activated K+ channel in Xenopus oocytes. Kobayashi T, et al. **Br J Pharmacol** 1997 Mar;120(6):986-7

Effects of the blockade of opioid receptor on defensive reactions elicited by electrical stimulation within the deep layers of the superior colliculus and DPAG. Coimbra NC, et al. **Brain Res** 1996 Oct 14;736(1-2):348-52

Different central opioid receptor subtype antagonists modify maltose dextrin and deprivation-induced water intake in sham feeding and sham drinking rats. Leventhal L, et al. **Brain Res** 1996 Nov 25;741(1-2):300-8

Biphalin, an enkephalin analog with unexpectedly high antinociceptive potency and low dependence liability in vivo, selectively antagonizes excitatory opioid receptor functions of sensory neurons in culture. Shen KF, et al. **Brain Res** 1995 Dec 1;701(1-2):158-66

Naloxone blockade of (-)pentazocine-induced changes in auditory function. Sahley TL, et al. **Ear Hear** 1996 Aug; 17(4):341-53

Synthesis and opioid activity of [D-Pro10]dynorphin A-(1-11) analogues with N-terminal alkyl substitution. Choi H, et al. **J Med Chem** 1997 Aug 15;40(17):2733-9

Nociceptin gene expression in rat dorsal root ganglia induced by peripheral inflammation. Andoh T, et al. **Neuroreport** 1997 Aug 18;8(12):2793-6

Orphanin FQ is a functional anti-opioid peptide. Mogil JS, et al. **Neuroscience** 1996 Nov;75(2):333-7

Effects of some 7-arylidene and 7-heteroarylidene morphinan-6-ones on the antinociceptive activity of [D-Pen2, D-Pen5]enkephalin and [D-Ala2, Glu4]deltorphin II and on multiple opioid receptors. Bhargava HN, et al. **Peptides** 1997;18(5):695-701

Pulsed magnetic field induced "analgesia" in the land snail, Cepaea nemoralis, and the effects of mu, delta, and kappa opioid receptor agonists/antagonists. Thomas AW, et al. **Peptides** 1997;18(5):703-9

Reductions in locomotor activity following central opioid receptor subtype antagonists in rats. Leventhal L, et al. **Physiol Behav** 1996 Sep;60(3):833-6

Effects of opioid and dopamine receptor antagonists on relapse induced by stress and re-exposure to heroin in rats. Shaham Y, et al. **Psychopharmacology (Berl)** 1996 Jun; 125(4):385-91

Role of opioidergic and serotonergic mechanisms in cough and antitussives. Kamei J. **Pulm Pharmacol** 1996 Oct-Dec; 9(5-6):349-56 (67 ref.)

[Opioid agonists and antagonists, opioid receptors] Holzgrabe U, et al. **Pharmazie** 1997 Jan;52(1):4-22 (220 ref.) **(Ger)**

BIOSYNTHESIS

Expression of mu-, delta- and kappa-opioid receptors in baculovirus-infected insect cells. Obermeier H, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):161-6

Functional selectivity of orphanin FQ for its receptor coexpressed with potassium channel subunits in Xenopus laevis oocytes. Matthes H, et al. **Mol Pharmacol** 1996 Sep; 50(3):447-50

CHEMISTRY

Mu opioid receptor-like sequences are present throughout vertebrate evolution. Li X, et al. **J Mol Evol** 1996 Sep; 43(3):179-84

[The molecular structure of the opioid receptors] Sirakov L. **Mol Med (Sofia)** 1996;1(1):4-7 (18 ref.) **(Bul)**

[Endomorphins in pain relief. New endogenous peptides a sensational discovery] Nyberg F. **Lakartidningen** 1997 Sep 3;94(36):3019-21 (15 ref.) **(Swe)**

DRUG EFFECTS

Peptide and nonpeptide ligands for opioid receptors. Misicka A. **Acta Pol Pharm** 1995 Sep-Oct;52(5):349-63 (128 ref.)

Endogenous opioids in the treatment of alcohol dependence. XIXth Collegium Internationale Neuro-Psycopharmacologium Congress. Washington, D.C., June 24, 1994. **Alcohol** 1996 Jan-Feb;13(1):1-106

The effect of ethanol drinking on opioid analgesia and receptors in mice. Shah S, et al. **Alcohol** 1997 Jul-Aug; 14(4):361-6

Dopaminergic and opiate agonists and antagonists differentially decrease multiple schedule responding maintained by sucrose/ethanol and sucrose. Slawecki CJ, et al. **Alcohol** 1997 May-Jun;14(3):281-94

Antinociceptive response to nitrous oxide is mediated by supraspinal opiate and spinal alpha 2 adrenergic receptors in the rat. Guo TZ, et al. **Anesthesiology** 1996 Oct; 85(4):846-52

Influence of chronic prenatal and postnatal administration of naltrexone in locomotor activity induced by morphine in mice. Medina Jiménez M, et al. **Arch Med Res** 1997 Spring;28(1):61-5

Alfentanil-mediated analgesia during propofol injection: no evidence for a peripheral action. Wrench IJ, et al. **Br J Anaesth** 1996 Aug;77(2):162-4

Role of opioid receptors in the spinal antinociceptive effects of neuropeptide FF analogues. Gouardères C, et al. **Br J Pharmacol** 1996 Feb;117(3):493-501

Alterations in opiate receptor binding in the hippocampus of aged Long-Evans rats. Nagahara AH, et al. **Brain Res** 1996 Jan 22;707(1):22-30

Naloxone blockade of (-)pentazocine-induced changes in auditory function. Sahley TL, et al. **Ear Hear** 1996 Aug; 17(4):341-53

Recognition and activation of the opioid receptor-like ORL 1 receptor by nociceptin, nociceptin analogs and opioids. Butour JL, et al. **Eur J Pharmacol** 1997 Feb 19; 321(1):97-103

Tramadol, M1 metabolite and enantiomer affinities for cloned human opioid receptors expressed in transfected HN9.10 neuroblastoma cells. Lai J, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):369-72

Metopon and two unique derivatives: affinity and selectivity for the multiple opioid receptors. McLaughlin JP, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):201-6

Ibogaine and noribogaine potentiate the inhibition of adenylyl cyclase activity by opioid and 5-HT receptors. Rabin RA, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):343-8

Involvement of the opioid system in the anxiolytic effect of diazepam in mice. Tsuda M, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):7-14

Functional analysis of opioid receptor subtypes in the ventromedial hypothalamic nucleus of the rat. Zhang C, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):153-9

Strain differences in mice antinociception: relationship between alprazolam and opioid receptor subtypes. Pick CG. **Eur Neuropsychopharmacol** 1996 Aug;6(3):201-5

The effects of estradiol and progesterone on pain sensitivity and brain opioid receptors in ovariectomized rats. Gordon FT, et al. **Horm Behav** 1996 Sep;30(3):244-50

Cocaine, dopamine and the endogenous opioid system. Kreek MJ. **J Addict Dis** 1996;15(4):73-96 (84 ref.)

Forskolin enhancement of opioid currents in rat locus

coeruleus neurons. Osborne PB, et al. **J Neurophysiol** 1996 Sep;76(3):1559–65

Nociceptin (orphanin FQ), an endogenous ligand for the ORL1 (opioid–receptor–like1) receptor; modulates responses of trigeminal neurons evoked by excitatory amino acids and somatosensory stimuli. Wang XM, et al. **J Neurophysiol** 1996 Nov;76(5):3568–72

Changes in opioid receptor density on murine splenocytes induced by in vivo treatment with morphine and methadone. Patrini G, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):172–6

Inhibitory effect of mitragynine, an alkaloid with analgesic effect from Thai medicinal plant Mitragyna speciosa, on electrically stimulated contraction of isolated guinea–pig ileum through the opioid receptor. Watanabe K, et al. **Life Sci** 1997;60(12):933–42

Characterization of a naloxone–insensitive beta–endorphin receptor on murine peritoneal macrophages. Woods JA, et al. **Life Sci** 1997;60(9):573–86

Effect of differential rearing environments on morphine–induced behaviors, opioid receptors and dopamine synthesis. Bardo MT, et al. **Neuropharmacology** 1997 Feb;36(2):251–9

Human interleukin–2 could bind to opioid receptor and induce corresponding signal transduction. Wang Y, et al. **Neuroreport** 1996 Dec 20;8(1):11–4

No evidence for specific opioid effects on batrachotoxin–modified sodium channels from human brain synaptosomes. Frenkel C, et al. **Neurosci Lett** 1997 Jun 20;229(1):41–4

The interleukin–1beta–mediated regulation of proenkephalin and opioid receptor messenger RNA in primary astrocyte–enriched cultures. Ruzicka BB, et al. **Neuroscience** 1997 Jul;79(2):517–24

Evaluation of new compounds for opioid activity annual report (1993). Woods JH, et al. **NIDA Res Monogr** 1994; 140:196–247

Effects of some 7–arylidene and 7–heteroarylidene morphinan–6–ones on the antinociceptive activity of [D–Pen2, D–Pen5]enkephalin and [D–Ala2, Glu4]deltorphin II and on multiple opioid receptors. Bhargava HN, et al. **Peptides** 1997;18(5):695–701

Central opiate receptor blockade by naloxone impairs thalamic and hypothalamic autoregulation in the cat. Komjáti K, et al. **Pflugers Arch** 1997 May;434(1):144–6

Pharmacotherapy of opioids: present and future developments. Meert TF. **Pharm World Sci** 1996 Jan; 18(1):1–15 (136 ref.)

Central and peripheral involvement of endogenous opioid peptides in gastric protection in stressed rats. Scoto GM, et al. **Pharmacology** 1996 Jan;52(1):56–60

Effects of naltrexone on food intake and changes in subjective appetite during eating: evidence for opioid involvement in the appetizer effect. Yeomans MR, et al. **Physiol Behav** 1997 Jul;62(1):15–21

Endogenous opioid systems and alcohol addiction. Herz A. **Psychopharmacology (Berl)** 1997 Jan;129(2):99–111 (150 ref.)

Cerebrocortical and medullary blood flow changes after general opiate receptor blockade during hemorrhagic shock in cats. Komjáti K, et al. **Shock** 1997 Apr;7(4):288–93

Synthesis and characterization of substituted benzoylhydrazones of naloxone. Ciszewska GR, et al. **Synapse** 1996 Oct;24(2):193–201

Naloxone–sensitive, haloperidol–sensitive, [3H](+)SKF–10047–binding protein partially purified from rat liver and rat brain membranes: an opioid/sigma receptor? Tsao LI, et al. **Synapse** 1997 Feb;25(2):117–24

[The participation of the mu–, delta– and kappa–opioid receptors in the realization of the anti–arrhythmia effect of Rhodiola rosea] Maĭmeskulova LA, et al. **Eksp Klin Farmakol** 1997 Jan–Feb;60(1):38–9 (Eng. Abstr.) **(Rus)**

GENETICS

Opioidergic and dopaminergic gene expression in the caudate–putamen and accumbens of the mutant mouse, tottering (tg/tg). De Bartolomeis A, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):321–4

Molecular characterization and functional expression of opioid receptor–like1 receptor. Wu YL, et al. **Cell Res** 1997 Jun;7(1):69–77

Dual label in situ hybridization studies provide evidence that luteinizing hormone–releasing hormone neurons do not synthesize messenger ribonucleic acid for mu, kappa, or delta opiate receptors. Sannella MI, et al. **Endocrinology** 1997 Apr;138(4):1667–72

Multiple opioid receptor–like genes are identified in diverse vertebrate phyla. Li X, et al. **FEBS Lett** 1996 Nov 11; 397(1):25–9

A novel human gene encoding a G–protein–coupled receptor (GPR15) is located on chromosome 3. Heiber M, et al. **Genomics** 1996 Mar 15;32(3):462–5

Moving from the orphanin FQ receptor to an opioid receptor using four point mutations. Meng F, et al. **J Biol Chem** 1996 Dec 13;271(50):32016–20

Mu opioid receptor–like sequences are present throughout vertebrate evolution. Li X, et al. **J Mol Evol** 1996 Sep; 43(3):179–84

Human opioid receptors: chromosomal mapping and mRNA localization. Miotto K, et al. **NIDA Res Monogr** 1996; 161:72–82 (34 ref.)

Molecular biology of opioid receptors. Raynor K, et al. **NIDA Res Monogr** 1996;161:83–103 (42 ref.)

IMMUNOLOGY

The relevance of opioids and opioid receptors on immunocompetence and immune homeostasis. Carr DJ, et al. **Proc Soc Exp Biol Med** 1996 Dec;213(3):248–57 (97 ref.)

METABOLISM

Morphine affects the brain–immune axis by modulating an interleukin–1 beta dependent pathway. Chang SL, et al. **Adv Exp Med Biol** 1996;402:35–42 (34 ref.)

Opiates, glia, and neurotoxicity. Chao CC, et al. **Adv Exp Med Biol** 1996;402:29–33 (20 ref.)

Opioid dependency and the progression of simian AIDS: opioid dependency and behavioral observations. Killam KF, et al. **Adv Exp Med Biol** 1996;402:43–51

Identification and characterization of the zeta–opioid receptor in developing rat heart. McLaughlin PJ, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1841–6

Comparison of the three mouse G–protein–activated K+ (GIRK) channels and functional couplings of the opioid receptors with the GIRK1 channel. Ikeda K, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:95–109 (26 ref.)

Taxol inhibits opioid binding on T47D human breast cancer cells. Bakogeorgou E, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):201–4

Biochemical evidence for orphanin FQ/nociceptin receptor heterogeneity in mouse brain. Mathis JP, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):462–5

Milk protein–derived opioid receptor ligands. Teschemacher H, et al. **Biopolymers** 1997;43(2):99–117 (171 ref.)

Nociceptin receptor coupling to a potassium conductance in rat locus coeruleus neurones in vitro. Connor M, et al. **Br J Pharmacol** 1996 Dec;119(8):1614–8

Influence of pertussis toxin on the calcitonin–opioid interaction in isolated tissues. Martin MI, et al. **Br J Pharmacol** 1996 Nov;119(5):804–6

Opioid receptors on peripheral sensory axons. Coggeshall RE, et al. **Brain Res** 1997 Aug 1;764(1–2):126–32

Autoradiographic determination of changes in opioid receptor binding in the limbic system of the Columbian ground squirrel at different hibernation states. Cui Y, et al. **Brain Res** 1997 Feb 7;747(2):189–94

Autoradiographic characterization of rat spinal neuropeptide FF receptors by using [125I][D.Tyr1, (NMe)Phe3]NPFF. Gouardères C, et al. **Brain Res Bull** 1997;42(3):231–8

Identification and characterization of an endogenous ligand for opioid receptor homologue ROR–C: its involvement in allodynic response to innocuous stimulus. Okuda–Ashitaka E, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):96–104

G proteins and opioid receptor–mediated signalling. Standifer KM, et al. **Cell Signal** 1997 May–Jun;9(3–4):237–48 (166 ref.)

Structure–function analysis of the cloned opiate receptors: peptide and small molecule interactions. Blake AD, et al. **Chem Biol** 1996 Dec;3(12):967–72 (28 ref.)

Opioid and opiate immunoregulatory processes. Stefano GB, et al. **Crit Rev Immunol** 1996;16(2):109–44 (258 ref.)

Metopon and two unique derivatives: affinity and selectivity for the multiple opioid receptors. McLaughlin JP, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):201–6

Activation of mitogen–activated protein kinase by the nociceptin receptor expressed in Chinese hamster ovary cells. Fukuda K, et al. **FEBS Lett** 1997 Jul 28;412(2):290–4

Functional expression, activation and desensitization of opioid receptor–like receptor ORL1 in neuroblastoma x glioma NG108–15 hybrid cells. Ma L, et al. **FEBS Lett** 1997 Feb 10;403(1):91–4

Replacement of Gln280 by His in TM6 of the human ORL1 receptor increases affinity but reduces intrinsic activity of opioids. Mollereau C, et al. **FEBS Lett** 1996 Oct 14; 395(1):17–21

Opioid receptor affinity of multivalent ligand system consisting of polymerized liposome. Tetsui S, et al. **Int J Pept Protein Res** 1996 Jul;48(1):95–101

Sensitivity of opioid receptor–like receptor ORL1 for chemical modification on nociceptin, a naturally occurring nociceptive peptide. Shimohigashi Y, et al. **J Biol Chem** 1996 Sep 27;271(39):23642–5

11C–diprenorphine binding in Huntington's disease: a comparison of region of interest analysis with statistical parametric mapping. Weeks RA, et al. **J Cereb Blood Flow Metab** 1997 Sep;17(9):943–9

Immunohistochemical localization of ORL–1 in the central nervous system of the rat. Anton B, et al. **J Comp Neurol** 1996 Apr 29;368(2):229–51

Synthesis and pharmacological activity of deltorphin and dermorphin–related glycopeptides. Tomatis R, et al. **J Med Chem** 1997 Aug 29;40(18):2948–52

Ischemic preconditioning is mediated by a peripheral opioid receptor mechanism in the intact rat heart. Schultz JJ, et al. **J Mol Cell Cardiol** 1997 May;29(5):1355–62

Characterization of [3H]pentazocine binding sites in post–mortem human frontal cortex. Kornhuber J, et al. **J Neural Transm** 1996;103(1–2):45–53

Evidence for multiple opioid receptors in the human posterior pituitary. Jordan D, et al. **J Neuroendocrinol** 1996 Nov;8(11):883–7

Opiate receptor avidity and cerebral blood flow in Alzheimer's disease. Cohen RM, et al. **J Neurol Sci** 1997 May 29;148(2):171–80

Changes in hippocampal circuitry after pilocarpine–induced seizures as revealed by opioid receptor distribution and activation. Bausch SB, et al. **J Neurosci** 1997 Jan 1; 17(1):477–92

Met5–enkephalin–Arg6–Phe7, an endogenous neuropeptide, binds to multiple opioid and nonopioid sites in rat brain. Benyhe S, et al. **J Neurosci Res** 1997 May 1;48(3):249–58

Potential irreversible ligands for opioid receptors. Cinnamoyl derivatives of beta–naltrexamine. Derrick I, et al. **J Pharm Pharmacol** 1996 Feb;48(2):192–6

Synthesis, opioid receptor affinity, and enzymatic hydrolysis of sterically hindered morphine 3–esters. Mignat C, et al. **J Pharm Sci** 1996 Jul;85(7):690–4

Opioid receptors on guinea–pig intestinal crypt epithelial cells. Lang ME, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):161–74

Orphan receptors and their natural ligands. Civelli O, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):545–50 (49 ref.)

Thermodynamic parameters of opioid binding in the presence and absence of G–protein coupling. Fábián G, et al. **J Recept Signal Transduct Res** 1996 May–Jul; 16(3–4):151–68

Nociceptin, an endogenous ligand for the ORL1 receptor, has novel hypotensive activity in the rat. Champion HC, et al. **Life Sci** 1997;60(16):PL 241–5

Characterization of a naloxone–insensitive beta–endorphin receptor on murine peritoneal macrophages. Woods JA, et al. **Life Sci** 1997;60(9):573–86

Interaction of [3H]orphanin FQ and 125I–Tyr14–orphanin FQ with the orphanin FQ receptor: kinetics and modulation by cations and guanine nucleotides. Ardati A, et al. **Mol Pharmacol** 1997 May;51(5):816–24

Regulation of opioid receptors in rat sensory neurons in culture. Chen JJ, et al. **Mol Pharmacol** 1997 Apr; 51(4):666–73

Sigma binding in a human neuroblastoma cell line. Ryan–Moro J, et al. **Neurochem Res** 1996 Nov; 21(11):1309–14

Opioid binding profile of morphiceptin, Tyr–MIF–1 and dynorphin–related peptides in rat brain membranes. Sartania N, et al. **Neuropeptides** 1996 Jun;30(3):225–30

Endogenous opioid receptor–like receptor in human neuroblastoma SK–N–SH cells: activation of inhibitory G protein and homologous desensitization. Cheng ZJ, et al. **Neuroreport** 1997 May 27;8(8):1913–8

Identification of opioid receptor–like (ORL1) peptide–stimulated [35S]GTP gamma S binding in rat brain. Sim LJ, et al. **Neuroreport** 1996 Feb 29;7(3):729–33

Human interleukin–2 could bind to opioid receptor and induce corresponding signal transduction. Wang Y, et al. **Neuroreport** 1996 Dec 20;8(1):11–4

Lack of effect of gamma–hydroxybutyrate on mu, delta and kappa opioid receptor binding. Feigenbaum JJ, et al. **Neurosci Lett** 1996 Jul 5;212(1):5–8

[125I][Tyr14]Orphanin binding to rat brain: evidence for labelling the opioid–receptor–like 1 (ORL1). Foddi MC, et al. **Neurosci Lett** 1997 Jul 18;230(2):105–8

Novel receptor mechanisms for heroin and morphine–6 beta–glucuronide analgesia. Rossi GC, et al. **Neurosci Lett** 1996 Sep 20;216(1):1–4

Densitometrical analysis of opioid receptor ligand binding in the human striatum—I. Distribution of mu opioid receptor defines shell and core of the ventral striatum. Voorn P, et al. **Neuroscience** 1996 Dec;75(3):777–92

Regulation of acute and chronic opioid receptor functions by OBCAM, a cell adhesion–like molecule. Loh HH, et al. **NIDA Res Monogr** 1996;161:141–53 (24 ref.)

Nociceptin, an endogenous ligand for the ORL1 receptor, decreases cardiac output and total peripheral resistance in the rat. Champion HC, et al. **Peptides** 1997;18(5):729–32

Distribution of opioid peptide receptors in muscles of lean and obese–diabetic mice. Evans AA, et al. **Peptides** 1996; 17(4):629–34

Interaction of the chiral forms of ketamine with opioid, phencyclidine, sigma and muscarinic receptors. Hustveit O, et al. **Pharmacol Toxicol** 1995 Dec;77(6):355–9

Regulation and distribution of members of the opioid receptor family. Monteillet–Agius G, et al. **Proc West Pharmacol Soc** 1996;39:69–70 (12 ref.)

Involvement of beta–endorphin in the modulation of paw inflammatory edema in the rat. Sacerdote P, et al. **Regul Pept** 1996 Jul 5;63(2–3):79–83

[Changes in opioid receptor binding nature in rat brain and spinal cord following formalin or carrageenan–induced nociception] Ohta S, et al. **Masui** 1997 May;46(5):644–9 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Opioid receptors: electrophysiological and neurophysiological approaches. Dickenson AH. **Acta Anaesthesiol Belg** 1996;47(3):101–4

Development of sensory information processing—the ontogenesis of opioid binding sites in nociceptive afferents and their significance in the clinical setting. Freye E. **Acta Anaesthesiol Scand Suppl** 1996;109:98–101

Endogenous opioid mechanisms in hypothalamic blood flow autoregulation during haemorrhagic hypotension and angiotensin–induced acute hypertension in cats. Komjáti K, et al. **Acta Physiol Scand** 1996 May;157(1):53–61

Opiate and 5-HT2A receptors in alcohol drinking: preference in HAD rats is inhibited by combination treatment with naltrexone and amperozide. Lankford MF, et al. **Alcohol** 1996 Jan-Feb;13(1):53-7

Central opioid receptors mediate glucoprivic inhibition of pituitary LH secretion. Briski KP. **Am J Physiol** 1997 Apr; 272(4 Pt 1):E517-22

Nociceptin, a novel endogenous ligand for the ORL1 receptor, has potent erectile activity in the cat. Champion HC, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E214-9

Opioid growth factor is present in human and mouse gastrointestinal tract and inhibits DNA synthesis. Zagon IS, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1094-104

Opiatergic influence on gonadotropin-releasing hormone and luteinizing hormone release during the macaque menstrual cycle. Pau KY, et al. **Biol Reprod** 1996 Aug;55(2):478-84

Opioid receptors in the ventral tegmental area contribute to stress-induced analgesia in the formalin test for tonic pain. Altier N, et al. **Brain Res** 1996 Apr 29;718(1-2):203-6

Opioid receptor modulation of mossy fiber synaptogenesis: independence from long-term potentiation. Escobar ML, et al. **Brain Res** 1997 Mar 21;751(2):330-5

Functional coupling of the nociceptin/orphanin FQ receptor with the G-protein-activated K+ (GIRK) channel. Ikeda K, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):117-26

Opiate receptor-mediated mechanisms in the regulation of cerebral blood flow. Benyó Z, et al. **Cerebrovasc Brain Metab Rev** 1996 Winter;8(4):326-57 (216 ref.)

Stress decreases lymphocyte cytolytic activity in the young monkey even after blockade of steroid and opiate hormone receptors. Coe CL, et al. **Dev Psychobiol** 1997 Jan; 30(1):1-10

Antisense confirmation of mu- and kappa-opioid receptor mediation of morphine's effects on body temperature in rats. Chen XH, et al. **Drug Alcohol Depend** 1996 Dec 11; 43(3):119-24

Unrestrained nociceptive response and disregulation of hearing ability in mice lacking the nociceptin/orphaninFQ receptor. Nishi M, et al. **EMBO J** 1997 Apr 15; 16(8):1858-64

A role for central cannabinoid and opioid systems in peripheral delta 9-tetrahydrocannabinol-induced analgesia in mice. Reche I, et al. **Eur J Pharmacol** 1996 Apr 22; 301(1-3):75-81

Naloxone sensitive orphanin FQ-induced analgesia in mice. Rossi GC, et al. **Eur J Pharmacol** 1996 Sep 12; 311(2-3):R7-8

Involvement of the opioid system in the anxiolytic effect of diazepam in mice. Tsuda M, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):7-14

Nutritional infertility: the role of the interconnected hypothalamic neuropeptide Y-galanin-opioid network. Kalra SP, et al. **Front Neuroendocrinol** 1996 Oct; 17(4):371-401 (219 ref.)

Orphanin FQ inhibits synaptic transmission and long-term potentiation in rat hippocampus. Yu TP, et al. **Hippocampus** 1997;7(1):88-94

Neuronal regulation of interleukin 6 secretion in murine spleen: adrenergic and opioidergic control. Straub RH, et al. **J Neurochem** 1997 Apr;68(4):1633-9

3rd Annual Symposium on AIDS, Drugs of Abuse and the Neuroimmune Axis. San Diego, CA, USA. November 9-11, 1995. Proceedings. **J Neuroimmunol** 1996 Sep; 69(1-2):1-62

Dendritic arbor of locus coeruleus neurons contributes to opioid inhibition. Travagli RA, et al. **J Neurophysiol** 1996 May;75(5):2029-35

Inhibition of nitric oxide synthase enhances antinociception mediated by mu, delta and kappa opioid receptors in acute and prolonged pain in the rat spinal cord. Machelska H, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):977-84

Peptidase inhibitor-induced antidiuresis mediated through angiotensin and opioid receptors in the rat hypothalamus. Tsushima H, et al. **Jpn J Pharmacol** 1996 May;71(1):61-71

Antinociceptive action of mitragynine in mice: evidence for the involvement of supraspinal opioid receptors. Matsumoto K, et al. **Life Sci** 1996;59(14):1149-55

Social deprivation stress induces adaptative changes of opioid mechanisms in the rat tail artery. Parra L, et al. **Life Sci** 1997;60(25):2315-22

Opioid mu, delta, and kappa receptor-induced activation of phospholipase C-beta 3 and inhibition of adenylyl cyclase is mediated by Gi2 and G(o) in smooth muscle. Murthy KS, et al. **Mol Pharmacol** 1996 Oct;50(4):870-7

Opioid receptors: some perspectives from early studies of their role in normal physiology, stress responsivity, and in specific addictive diseases. Kreek MJ. **Neurochem Res** 1996 Nov;21(11):1469-88 (139 ref.)

Functional analysis of cloned opioid receptors in transfected cell lines. Piros ET, et al. **Neurochem Res** 1996 Nov; 21(11):1277-85 (86 ref.)

Opiate receptors modulate estrogen-induced cholecystokinin and tachykinin but not enkephalin messenger RNA levels in the limbic system and hypothalamus. Eckersell CB, et al. **Neuroscience** 1997 Sep;80(2):473-85

Opioid receptors: molecular and structural studies. **NIDA Res Monogr** 1994;140:46-50

Spinally administered dynorphin A produces long-lasting allodynia: involvement of NMDA but not opioid receptors. Laughlin TM, et al. **Pain** 1997 Aug;72(1-2):253-60

D1 and D2 dopamine and opiate receptors are involved in the restraint stress-induced sensitization to the psychostimulant effects of amphetamine. Díaz-Otañez CS, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):9-14

Interaction between opioid and muscarinic receptors in the guinea-pig ileum preparation: a mathematical model. Hustveit O. **Pharmacol Toxicol** 1996 Mar;78(3):167-73

Differential effects of morphine-6-glucuronide, an active metabolite of morphine, and morphine on locomotor activity in mice: involvement of the opioid receptor. Uchihashi Y, et al. **Pharmacol Toxicol** 1996 May; 78(5):322-6

Peripheral effects of opioids in a model of intestinal inflammation in mice. Pol O, et al. **Pharmacology** 1996 Dec; 53(6):340-50

The orphan opioid receptor and its endogenous ligand--nociceptin/orphanin FQ. Henderson G, et al. **Trends Pharmacol Sci** 1997 Aug;18(8):293-300 (67 ref.)

[Opioid receptors and phagocyte defects in drug addicts] Mazzone A, et al. **Recenti Prog Med** 1996 Nov;87(11):530-7 (Eng. Abstr.) **(Ita)**

[Opioid receptor types and dependence] Suzuki T, et al. **Nippon Yakurigaku Zasshi** 1997 Apr;109(4):165-74 (49 ref.) (Eng. Abstr.) **(Jpn)**

[Opiatergic mechanisms of antiarrhythmic effect of adaptation] Lishmanov IuB, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):276-8 **(Rus)**

[The interaction of the renin-angiotensin and enkephalinergic systems of the brain and hypophysis in normal rats and in experimental pathology of the hypothalamo-hypophyseal-adrenal complex] Kalinskaia LN, et al. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):60-4 (Eng. Abstr.) **(Rus)**

[The participation of different types of opiate receptors in the mechanism of cardiac stressor damage] Maslov LN, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun; 82(5-6):53-8 (Eng. Abstr.) **(Rus)**

[The role of the opioid system in body adaptation and protection of the heart in stress] Lishmanov IuB, et al. **Usp Fiziol Nauk** 1997 Jan-Mar;28(1):75-96 (120 ref.) (Eng. Abstr.) **(Rus)**

[Stimulation of the endorphin structures of the brain--a new nondrug treatment method] Aleksandrova VA, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(2):101-4 (65 ref.) **(Rus)**

[The activity of the enkephalinergic systems of the brain and hypophysis in experimental hypocorticism] Kalyns'ka LM, et al. **Fiziol Zh** 1995 Sep-Dec;41(5-6):61-6 (Eng. Abstr.) **(Ukr)**

RECEPTORS, OPIOID, DELTA

AGONISTS

Modulation of protein kinase C and cAMP-dependent protein kinase by delta-opioid. Lou LG, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):626-9

Effects of competitive and noncompetitive antagonists of the N-methyl-D-aspartate receptor on the analgesic action of delta 1- and delta 2-opioid receptor agonists in mice. Bharagava HN, et al. **Br J Pharmacol** 1996 Dec; 119(8):1586-90

Effects of ibogaine and noribogaine on the antinociceptive action of mu-, delta- and kappa-opioid receptor agonists in mice. Bhargava HN, et al. **Brain Res** 1997 Mar 28; 752(1-2):234-8

Effects of N-methyl-D-aspartate receptor antagonists on the analgesia and tolerance to D-Ala2, Glu4 deltorphin II, a delta 2-opioid receptor agonist in mice. Bhargava HN, et al. **Brain Res** 1996 May 6;719(1-2):56-61

Effects of ibogaine on the development of tolerance to antinociceptive action of mu-, delta- and kappa-opioid receptor agonists in mice. Cao YJ, et al. **Brain Res** 1997 Mar 28;752(1-2):250-4

Autoradiographic comparison of [3H]DPDPE and [3H]DSLET binding: evidence for distinct delta 1 and delta 2 opioid receptor populations in rat brain. Hiller JM, et al. **Brain Res** 1996 May 6;719(1-2):85-95

Opioids modulate N-methyl-D-aspartic acid (NMDA)-evoked responses of neurons in the superficial and deeper dorsal horn of the medulla (trigeminal nucleus caudalis). Zhang KM, et al. **Brain Res** 1996 May 6; 719(1-2):229-33

Effects of multiple intracerebroventricular injections of [D-Pen2,D-Pen5]enkephalin and [D-Ala2,Glu4]deltorphin II on tolerance to their analgesic action and on brain delta-opioid receptors. Zhao GM, et al. **Brain Res** 1997 Jan 16;745(1-2):243-7

Role of hydrophobic substituents in the interaction of opioid Tyr-Tic dipeptide analogs with dodecylphosphocholine micelles. Molecular partitioning in model membrane systems. Carpenter KA, et al. **Eur J Biochem** 1996 Nov 1;241(3):756-64

The antinociceptive activity of kappa- but not delta-opioid receptor agonists is maintained in morphine-tolerant neuropathic rats. Catheline G, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):273-81

Phorbol ester blocks the increase of a high affinity GTPase activity induced by delta 2-opioid receptor agonist in the mouse spinal cord. Narita M, et al. **Eur J Pharmacol** 1996 Aug 29;310(2-3):R1-3

Relative efficacies of delta-opioid receptor agonists at the cloned human delta-opioid receptor. Quock RM, et al. **Eur J Pharmacol** 1997 May 12;326(1):101-4

Differential effects of mu-, delta- and kappa-opioid receptor agonists on the discriminative stimulus properties of cocaine in rats. Suzuki T, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):21-9

The role of delta-opioid receptors in the discriminative stimulus properties of a low dose of methamphetamine. Suzuki T, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):1-8

Opioids modulate the cholinergic contraction but not the nonadrenergic relaxation in guinea-pig airways in vitro. Pype JL, et al. **Eur Respir J** 1996 Nov;9(11):2280-5

Cardiovascular effects of intrathecally injected mu, delta and kappa opioid receptor agonists in rabbits. Oğütman C, et al. **J Auton Pharmacol** 1995 Dec;15(6):443-50

Inhibitory role of opioid peptides in the regulation of aggressive and sexual behaviors in male Japanese quails. Kotegawa T, et al. **J Exp Zool** 1997 Feb 1;277(2):146-54

Probes for narcotic receptor mediated phenomena. 23. Synthesis, opioid receptor binding, and bioassay of the highly selective delta agonist (+)-4-[(alpha R)-alpha-((2S,5R)-4-Allyl-2,5-dimethyl-1-piperazinyl)-3-methoxybenzyl]- N,N-diethylbenzamide (SNC 80) and related novel nonpeptide delta opioid receptor ligands. Calderon SN, et al. **J Med Chem** 1997 Feb 28;40(5):695-704

7-spirobenzocyclohexyl derivatives of naltrexone, oxymorphone, and hydromorphone as selective opioid receptor ligands. Fang X, et al. **J Med Chem** 1997 Sep 12;40(19):3064-70

Probes for narcotic receptor-mediated phenomena. 25. Synthesis and evaluation of N-alkyl-substituted (alpha-piperazinylbenzyl)benzamides as novel, highly selective delta opioid receptor agonists. Katsura Y, et al. **J Med Chem** 1997 Aug 29;40(18):2936-47

Conformationally constrained deltorphin analogs with 2-aminotetralin-2-carboxylic acid in position 3. Tóth G, et al. **J Med Chem** 1997 Mar 14;40(6):990-5

Delta-selective opioid peptides containing a single aromatic residue in the message domain: an NMR conformational analysis. Crescenzi O, et al. **J Pept Sci** 1996 Sep-Oct; 2(5):290-308

Human delta opioid receptor: functional studies on stably transfected Chinese hamster ovary cells after acute and chronic treatment with the selective nonpeptidic agonist SNC-80. Malatynska E, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1083-9

Antagonistic modulation between the delta opioid agonist BW373U86 and the mu opioid agonist fentanyl in mice. O'Neill SJ, et al. **J Pharmacol Exp Ther** 1997 Jul; 282(1):271-7

Effect of the highly selective and nonpeptide delta opioid receptor agonist TAN-67 on the morphine-induced place preference in mice. Suzuki T, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):177-85

Analysis of the role of delta opioid receptors in gastroprotection in the rat. Gyires K, et al. **Life Sci** 1997; 60(16):1337-47

Extraordinary potency of a novel delta opioid receptor agonist is due in part to increased efficacy. Kramer TH, et al. **Life Sci** 1997;61(2):129-35

Agonist activation of delta-opioid receptor but not mu-opioid receptor potentiates fetal calf serum or tyrosine kinase receptor-mediated cell proliferation in a cell-line-specific manner. Law PY, et al. **Mol Pharmacol** 1997 Jan;51(1):152-60

The third extracellular loop of the human delta-opioid receptor determines the selectivity of delta-opioid agonists. Varga EV, et al. **Mol Pharmacol** 1996 Dec;50(6):1619-24

delta-opioid receptor mobilization of intracellular calcium in SH-SY5Y cells: lack of evidence for delta-receptor subtypes. Connor MA, et al. **Neuropharmacology** 1997 Jan; 36(1):125-33

Mu and delta opioid receptor gene expression after chronic treatment with opioid agonist. Buzas B, et al. **Neuroreport** 1996 Jun 17;7(9):1505-8

Selective blockade of peripheral delta opioid agonist induced antinociception by intrathecal administration of delta receptor antisense oligodeoxynucleotide. Bilsky EJ, et al. **Neurosci Lett** 1996 Dec 20;220(3):155-8

Competitive and non-competitive NMDA antagonists block the development of antinociceptive tolerance to morphine, but not to selective mu or delta opioid agonists in mice. Bilsky EJ, et al. **Pain** 1996 Dec;68(2-3):229-37

Opioid peptides: simultaneous delta agonism and mu antagonism in somatostatin analogues. Bonner GG, et al. **Peptides** 1997;18(1):93-100

A comparative study of immunomodulation produced by in vitro exposure to delta opioid receptor agonist peptides. House RV, et al. **Peptides** 1996;17(1):75-81

Interactions between angiotensin II and delta opioid receptor subtype agonists upon water intake in rats. Yu WZ, et al. **Peptides** 1997;18(2):241-5

Nitric oxide synthase inhibition attenuates tolerance to morphine but not to [D-Ala2, Glu4] deltorphin II, a delta 2-opioid receptor agonist in mice. Zhao GM, et al. **Peptides** 1996;17(4):619-23

Supraspinal delta 2 opioid agonist analgesia in Swiss-Webster mice involves spinal GABAA receptors. Rady JJ, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):363-9

Discriminative stimulus effects of a centrally administered, delta-opioid peptide (D-Pen2-D-Pen5-enkephalin) in pigeons. Jewett DC, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):225-30

Effects of the delta opioid against BW373U86 in pigeons trained to discriminate fentanyl, bremazocine and water in a three-choice drug discrimination procedure. Negus SS, et al. **Psychopharmacology (Berl)** 1996 Aug; 126(3):199–205

The effects of dopamine D1 and D2 receptor antagonists on the rewarding effects of delta 1 and delta 2 opioid receptor agonists in mice. Suzuki T, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):211–8

Novel scaffolds for non-peptide mimetics of delta opioid receptor agonists based on peptide leads. Qian X, et al. **Regul Pept** 1996 Aug 27;65(1):79–82

[Differentiation of antinociceptive effects of mu, delta and kappa agonists using heat, chemical and mechanical nociception] Murakawa K, et al. **Masui** 1996 Aug; 45(8):937–42 (Eng. Abstr.) **(Jpn)**

[Effect of mu- and delta-opiate receptor agonists on cell division in epithelium of retina and tongue of albino rats] Timoshin SS, et al. **Biull Eksp Biol Med** 1994 May; 117(5):533–5 **(Rus)**

ANALYSIS

Opioid diketopiperazines: refinement of the delta opioid antagonist pharmacophore. Bryant SD, et al. **Biol Chem** 1997 Feb;378(2):107–14

Cellular and subcellular localization of delta opioid receptor immunoreactivity in the rat dentate gyrus. Commons KG, et al. **Brain Res** 1996 Nov 4;738(2):181–95

Determination of delta-opioid in NG108–15 cells. Ho BY, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):109–14

Immunohistochemical mapping of rat brain delta opioid receptor. Anand DJ, et al. **Indian J Exp Biol** 1995 Jan; 33(1):44–7

Localization of delta opioid receptor immunoreactivity in interneurons and pyramidal cells in the rat hippocampus. Commons KG, et al. **J Comp Neurol** 1997 May 12; 381(3):373–87

Detection of delta opioid receptor and N-methyl-D-aspartate receptor-like immunoreactivity in retinoic acid-differentiated neuroblastoma x glioma (NG108–15) cells. Beczkowska IW, et al. **J Neurosci Res** 1997 Jan 1;47(1):83–9

Antisense targeting of delta opioid receptors in NG 108–15 cells: direct correlation between oligodeoxynucleotide uptake and receptor density. Lai J, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):589–96

The mu-opioid receptor down-regulates differently from the delta-opioid receptor: requirement of a high affinity receptor/G protein complex formation. Chakrabarti S, et al. **Mol Pharmacol** 1997 Jul;52(1):105–13

Immunofluorescence analysis of antisense oligodeoxynucleotide-mediated 'knock-down' of the mouse delta opioid receptor in vitro and in vivo. Lai J, et al. **Neurosci Lett** 1996 Aug 9;213(3):205–8

ANTAGONISTS & INHIBITORS

Naltrindole sensitive delta 2 opioid receptor mediates invertebrate immunocyte activation. Stefano GB, et al. **Acta Biol Hung** 1995;46(2–4):321–7

Opioid antagonist properties of the highly delta-receptor-selective BOC-Tyr-Pro-Gly-Phe-Leu-Thr (OtBu) peptide and of its Phe1 and Mel1 analogues. Rónai AZ, et al. **Arch Int Pharmacodyn Ther** 1995 Nov-Dec;330(3):361–9

Role of hydrophobic substituents in the interaction of opioid Tyr-Tic dipeptide analogs with dodecylphosphocholine micelles. Molecular partitioning in model membrane systems. Carpenter KA, et al. **Eur J Biochem** 1996 Nov 1;241(3):756–64

Effects of chronic administration of 7-benzylidene-7-dehydronaltrexone and naltriben on the antinociceptive actions of delta 1- and delta 2-opioid receptor agonists. Bhargava HN, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):127–32

Alcohol drinking is reduced by a mu 1- but not by a delta-opioid receptor antagonist in alcohol-preferring rats. Honkanen A, et al. **Eur J Pharmacol** 1996 May 23; 304(1–3):7–13

Enhanced kappa-opioid receptor-mediated analgesia by antisense targeting the sigma1 receptor. King M, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):R5–6

IP3 receptor antagonist heparin uncompetitively inhibits [3H](+)-SKF-10047 binding to sigma receptors. Tsao LI, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):R1–2

Effects of mu-, delta- and kappa-opioid antagonists in atrial preparations from nonfailing and failing human hearts. Llobel F, et al. **Gen Pharmacol** 1997 Mar;28(3):371–4

Effect of aromatic amino acid substitutions in the 3-position of cyclic beta-casomorphin analogues on mu-opioid agonist/delta-opioid antagonist properties. Schmidt R, et al. **Int J Pept Protein Res** 1996 Nov;48(5):411–9

Comparison of cyclic delta-opioid peptides with non-peptide delta-agonist spiroindanyloxymorphone (SIOM) using the message-address concept: a molecular modeling study. Gao P. **J Comput Aided Mol Des** 1996 Aug;10(4):327–36

Pyrrolomorphinans as delta opioid receptor antagonists. The role of steric hindrance in conferring selectivity. Farouz-Grant F, et al. **J Med Chem** 1997 Jun 20; 40(13):1977–81

Evolution of the Dmt-Tic pharmacophore: N-terminal methylated derivatives with extraordinary delta opioid antagonist activity. Salvadori S, et al. **J Med Chem** 1997 Sep 12;40(19):3100–8

Differential effects of delta- and mu-opioid receptor antagonists on the amphetamine-induced increase in extracellular dopamine in striatum and nucleus accumbens. Schad CA, et al. **J Neurochem** 1996 Dec;67(6):2292–9

Modulation of humoral immune response by central administration of leucine-enkephalin: effects of mu, delta and kappa opioid receptor antagonists. Radulović J, et al. **J Neuroimmunol** 1996 Apr;65(2):155–61

Antisense targeting of delta opioid receptors in NG 108–15 cells: direct correlation between oligodeoxynucleotide uptake and receptor density. Lai J, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):589–96

Blockade of morphine supersensitivity by an antisense oligodeoxynucleotide targeting the delta opioid receptor (DOR-1). Kest B, et al. **Life Sci** 1997;60(9):PL155–9

Inverse agonistic effect of ICI-174,864 on the cloned delta-opioid receptor: role of G protein and adenylyl cyclase activation. Chiu TT, et al. **Mol Pharmacol** 1996 Dec;50(6):1651–7

Mu- and delta-opioid receptor antagonists precipitate similar withdrawal phenomena in butorphanol and morphine dependence. Feng YZ, et al. **Neurochem Res** 1996 Jan; 21(1):63–71

Functional antagonism of mu-, delta- and kappa-opioid antinociception by orphanin FQ. Mogil JS, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):131–4

Naltrindole, a delta-opioid antagonist, blocks MDMA's ability to enhance pressing for rewarding brain stimulation. Reid LD, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):477–80

Effects of mu- and delta-opioid-receptor antagonists on the stimulus properties of cholecystokinin. Riley AL, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1–2):57–62

BIOSYNTHESIS

Quantitative analysis of mu and delta opioid receptor gene expression in rat brain and peripheral ganglia using competitive polymerase chain reaction. Büzás B, et al. **Neuroscience** 1997 Jan;76(2):479–89

Antisense oligodeoxynucleotide to a delta-opioid receptor messenger RNA selectively blocks the antinociception induced by intracerebroventricularly administered delta-, but not mu-, epsilon- or kappa-opioid receptor agonists in the mouse. Wang HQ, et al. **Neuroscience** 1996 Nov; 75(2):445–52

CHEMISTRY

The carboxyl terminus of mouse delta-opioid receptor is not required for agonist-dependent activation. Zhu X, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):513–6

Identification and characterization of opioid and somatostatin binding sites in the opossum kidney (OK) cell line and their effect on growth. Hatzoglou A, et al. **J Cell Biochem** 1996 Dec 15;63(4):410–21

The mu- and delta-opioid pharmacophore conformations of cyclic beta-casomorphin analogues indicate docking of the Phe3 residue to different domains of the opioid receptors. Brandt W, et al. **J Comput Aided Mol Des** 1996 Jun; 10(3):201–12

Development of a common 3D pharmacophore for delta-opioid recognition from peptides and non-peptides using a novel computer program. Huang P, et al. **J Comput Aided Mol Des** 1997 Jan;11(1):21–8

The delta-opioid receptor in SK-N-BE human neuroblastoma cell line undergoes heterologous desensitization. Namir N, et al. **J Neurochem** 1997 Apr; 68(4):1764–72

Solution conformation of [D-Pen2, D-Pen5] enkephalin in water: a NMR and molecular dynamics study. Gussmann M, et al. **J Pept Sci** 1996 Nov-Dec;2(6):351–6

Application of the message-address concept to the docking of naltrexone and selective naltrexone-derived opioid antagonists into opioid receptor models. Metzger TG, et al. **Neurochem Res** 1996 Nov;21(11):1287–94

A 3D model of the delta opioid receptor and ligand-receptor complexes. Alkorta I, et al. **Protein Eng** 1996 Jul; 9(7):573–83

CLASSIFICATION

Opposite role of delta 1- and delta 2-opioid receptors activated by endogenous or exogenous opioid agonists on the endogenous cholecystokinin system: further evidence for delta-opioid receptor heterogeneity. Noble F, et al. **Neuroscience** 1996 Dec;75(3):917–26

DRUG EFFECTS

Substance P-induced respiratory excitation is blunted by delta-receptor specific opioids in the rat medulla oblongata. Chen Z, et al. **Acta Physiol Scand** 1996 Jun;157(2):165–73

Antinociception by intrathecal midazolam involves endogenous neurotransmitters acting at spinal cord delta opioid receptors. Goodchild CS, et al. **Br J Anaesth** 1996 Dec;77(6):758–63

The effect of pretreatment with a delta 2-opioid receptor antisense oligodeoxynucleotide on the recovery from acute antinociceptive tolerance to delta 2-opioid receptor agonist in the mouse spinal cord. Narita M, et al. **Br J Pharmacol** 1997 Feb;120(4):587–92

Differential desensitization of mu- and delta- opioid receptors in selected neural pathways following chronic morphine treatment. Noble F, et al. **Br J Pharmacol** 1996 Jan;117(1):161–9

Delta and kappa opioid receptors in eyestalk ganglia of a crustacean. Hanke J, et al. **Brain Res** 1997 Jan 9; 744(2):279–84

Involvement of dopamine-dependent and -independent mechanisms in the rewarding effects mediated by delta opioid receptor subtypes in mice. Suzuki T, et al. **Brain Res** 1997 Jan 9;744(2):327–34

An antisense oligodeoxynucleotide to the delta opioid receptor (DOR-1) inhibits morphine tolerance and acute dependence in mice. Kest B, et al. **Brain Res Bull** 1996; 39(3):185–8

Activation of protein kinase A prevents the ethanol-induced up-regulation of delta-opioid receptor mRNA in NG108–15 cells. Jenab S, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):44–8

Interaction of the delta-opioid receptor with GM1 ganglioside: conversion from inhibitory to excitatory mode. Wu G, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):341–6

Further evidence for a peripheral component in the enhanced antinociceptive effect of systemic morphine in mononeuropathic rats: involvement of kappa-, but not delta-opioid receptors. Catheline G, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):135–43

The role of spinal delta1-opioid receptors in inhibiting the formalin-induced nociceptive response in diabetic mice. Kamei J, et al. **Eur J Pharmacol** 1997 May 12;326(1):31–6

[Cys(O2NH2)2]enkephalin analogues and dalargin: selectivity for delta-opioid receptors. Pencheva N, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):99–108

Supraspinal administration of opioids with selectivity for mu-, delta- and kappa-opioid receptors produces analgesia in amphibians. Stevens CW, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):15–21

Distinct components of morphine effects on cardiac myocytes are mediated by the kappa and delta opioid receptors. Ela C, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):711–20

Opioids modulate N-methyl-D-aspartic acid (NMDA)-evoked responses of trigeminothalamic neurons. Wang XM, et al. **J Neurophysiol** 1996 Sep;76(3):2093–6

Changes in the association of G protein subunits with the cloned mouse delta opioid receptor on agonist stimulation. Law SF, et al. **J Pharmacol Exp Ther** 1997 Jun; 281(3):1476–86

Treatment with antisense oligodeoxynucleotide to a conserved sequence of opioid receptors inhibits antinociceptive effects of delta subtype selective ligands. Lai J, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1–4):643–50

Met-enkephalin inhibits 5-hydroxytryptamine release from the rat ventral spinal cord via delta opioid receptors. Franck J, et al. **Neuropharmacology** 1996 Jun;35(6):743–9

Spinal delta opioid receptor subtype activity of 6-monoacetylmorphine in Swiss Webster mice. Rady JJ, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):243–9

Delta and kappa opioid receptor subtypes and ingestion: antagonist and glucoprivic effects. Yu WZ, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):353–61

[The interaction of dialkylaminoacyl derivatives of phenothiazine, dibenzazepine and dibenzdiazepine with opiate receptors] Brusova EG, et al. **Eksp Klin Farmakol** 1996 Mar-Apr;59(2):20–3 (Eng. Abstr.) **(Rus)**

GENETICS

Characterization of the mu and delta opioid receptors in the brain of the C57BL/6 and DBA/2 mice, selected for their differences in voluntary ethanol consumption. de Waele JP, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):754–62

Agonist activation of p42 and p44 mitogen-activated protein kinases following expression of the mouse delta opioid receptor in Rat-1 fibroblasts: effects of receptor expression levels and comparisons with G-protein activation. Burt AR, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):227–35

Antisense mapping DOR-1 in mice: further support for delta receptor subtypes. Rossi GC, et al. **Brain Res** 1997 Apr 4;753(1):176–9

Characterization of delta, kappa, and mu human opioid receptors overexpressed in baculovirus-infected insect cells. Massotte D, et al. **J Biol Chem** 1997 Aug 8; 272(32):19987–92

Novel "restoration of function" mutagenesis strategy to identify amino acids of the delta-opioid receptor involved in ligand binding. Pepin MC, et al. **J Biol Chem** 1997 Apr 4;272(14):9260–7

Regulation of delta-opioid receptor mRNA levels by receptor-mediated and direct activation of the adenylyl cyclase-protein kinase A pathway. Buzas B, et al. **J Neurochem** 1997 Feb;68(2):610–5

Overexpression of delta-opioid receptors in recombinant baculovirus-infected Trichoplusia ni "High 5" insect cells. Wehmeyer A, et al. **J Neurochem** 1997 Apr;68(4):1361–71

Expression cloning of a full-length cDNA encoding delta opioid receptor from mouse thymocytes. Sedqi M, et al. **J Neuroimmunol** 1996 Apr;65(2):167–70

Detection of basal levels and induction of delta opioid receptor mRNA in murine splenocytes. Sharp BM, et al. **J Neuroimmunol** 1997 Sep;78(1–2):198–202

Antisense oligodeoxynucleotide to delta opioid receptors

attenuates morphine dependence in mice. Suzuki T, et al. **Life Sci** 1997;61(11):PL 165–70

Antisense oligodeoxynucleotide to delta opioid receptors blocks cocaine-induced place preference in mice. Suzuki T, et al. **Life Sci** 1997;60(20):PL 283–8

Selective blockade of peripheral delta opioid agonist induced antinociception by intrathecal administration of delta receptor antisense oligodeoxynucleotide. Bilsky EJ, et al. **Neurosci Lett** 1996 Dec 20;220(3):155–8

Immunofluorescence analysis of antisense oligodeoxynucleotide-mediated 'knock-down' of the mouse delta opioid receptor in vitro and in vivo. Lai J, et al. **Neurosci Lett** 1996 Aug 9;213(3):205–8

Quantitative analysis of mu and delta opioid receptor gene expression in rat brain and peripheral ganglia using competitive polymerase chain reaction. Búzás B, et al. **Neuroscience** 1997 Jan;76(2):479–89

Cloning and characterization of multiple opioid receptors. Akil H, et al. **NIDA Res Monogr** 1996;161:127–40 (27 ref.)

IMMUNOLOGY

Naltrindole sensitive delta 2 opioid receptor mediates invertebrate immunocyte activation. Stefano GB, et al. **Acta Biol Hung** 1995;46(2–4):321–7

ISOLATION & PURIFICATION

Opioid receptor types for endogenous enkephalin in the thoracic ganglion of the crab, Carcinus maenas. Hanke J, et al. **Peptides** 1996;17(6):965–72

METABOLISM

Imaging of delta- and mu-opioid receptors in temporal lobe epilepsy by positron emission tomography. Madar I, et al. **Ann Neurol** 1997 Mar;41(3):358–67

Carboxyl terminus of delta opioid receptor is required for agonist-dependent receptor phosphorylation. Zhao J, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):71–6

Agonist-induced desensitization and down-regulation of delta opioid receptors alter the levels of their 125I-beta-endorphin cross-linked products in subcellular fractions from NG108-15 cells. Belcheva MM, et al. **Biochemistry** 1996 Nov 26;35(47):14818–24

delta- and mu-opioid receptor mobilization of intracellular calcium in SH-SY5Y human neuroblastoma cells. Connor M, et al. **Br J Pharmacol** 1996 Jan;117(2):333–40

Role of protein kinase C in desensitization of spinal delta-opioid-mediated antinociception in the mouse. Narita M, et al. **Br J Pharmacol** 1996 Aug;118(7):1829–35

Postnatal development of delta-opioid receptor subtypes in mice. Negri L, et al. **Br J Pharmacol** 1997 Mar; 120(6):989–94

Affinity of naloxone and its quaternary analogue for avian central delta and mu opioid receptors. Deviche P. **Brain Res** 1997 May 23;757(2):276–9

Differences among mouse strains in the regulation by mu, delta 1 and delta 2 opioid receptors of striatal adenylyl cyclases activated by dopamine D1 or adenosine A2a receptors. Noble F, et al. **Brain Res** 1996 Apr 15; 716(1–2):107–17

Retinoic acid-induced increase in delta-opioid receptor and N-methyl-D-aspartate receptor mRNA levels in neuroblastoma x glioma (NG108-15) cells. Beczkowska IW, et al. **Brain Res Bull** 1996;39(3):193–9

Distributions of mu and delta opioid receptors in central nervous system of SHR rats and normotensive WKY rats. Yin X, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan; 17(1):28–31

Opioid receptor selectivity alteration by single residue replacement: synthesis and activity profile of [Dmt1]deltorphin B. Guerrini R, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):37–42

Continuous cocaine administration enhances mu- but not delta-opioid receptor-mediated inhibition of adenylyl cyclase activity in nucleus accumbens. Izenwasser S, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):187–91

Supraspinal delta 1-opioid receptor-mediated antinociceptive properties of (-)-TAN-67 in diabetic mice. Kamei J, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):27–30

Thermodynamics of ligand binding to the cloned delta-opioid receptor. Maguire PA, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):505–9

Mapping the receptor domains critical for the binding selectivity of delta-opioid receptor ligands. Meng F, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):285–92

Interactions of selective serotonin reuptake inhibitors with subtypes of sigma receptors in rat brain. Narita N, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):117–9

Nitric oxide and delta-opioid receptors in the tissue interactions among enkephalins, angiotensins and kinins. Carmignani M, et al. **Immunopharmacology** 1996 May; 32(1–3):172–5

Reversible affinity labeling of opioid receptors via disulfide bonding: discriminative labeling of mu and delta subtypes by chemically activated thiol-containing enkephalin analogs. Yasunaga T, et al. **J Biochem (Tokyo)** 1996 Aug; 120(2):459–65

Receptor-induced internalization of selective peptidic mu and delta opioid ligands. Gaudriault G, et al. **J Biol Chem** 1997 Jan 31;272(5):2880–8

Sequestration of the delta opioid receptor. Role of the C terminus in agonist-mediated internalization. Trapaidze N, et al. **J Biol Chem** 1996 Nov 15;271(46):29279–85

The use of topographical constraints in receptor mapping: investigation of the topographical requirements of the tryptophan 30 residue for receptor binding of Asp-Tyr-D-Phe-Gly-Trp-(N-Me)Nle-Asp-Phe-NH2 (SNF 9007), a cholecystokinin (26–33) analogue that binds to both CCK-B and delta-opioid receptors. Boteju LW, et al. **J Med Chem** 1996 Sep 27;39(20):4120–4

7-Spiroindanyl derivatives of naltrexone and oxymorphone as selective ligands for delta opioid receptors. Ohkawa S, et al. **J Med Chem** 1997 May 23;40(11):1720–5

(E)- and (Z)-7-arylidenenaltrexones: synthesis and opioid receptor radioligand displacement assays. Palmer RB, et al. **J Med Chem** 1997 Feb 28;40(5):749–53

Brain and spinal cord distribution of biphalin: correlation with opioid receptor density and mechanism of CNS entry. Abbruscato TJ, et al. **J Neurochem** 1997 Sep;69(3):1236–45

Acute and chronic effects of opioids on delta and mu receptor activation of G proteins in NG108-15 and SK-N-SH cell membranes. Breivogel CS, et al. **J Neurochem** 1997 Apr; 68(4):1462–72

Preparation and binding properties of radioiodinated analogues of dermorphin and deltorphin with high specificity for the mu- and delta-opioid receptors. Gaudriault G, et al. **J Neurochem** 1997 Feb;68(2):813–9

Passage of a delta-opioid receptor selective enkephalin, [D-penicillamine2,5] enkephalin, across the blood-brain and the blood-cerebrospinal fluid barriers. Williams SA, et al. **J Neurochem** 1996 Mar;66(3):1289–99

mu-Opioid and delta-opioid receptors are expressed in brainstem antinociceptive circuits: studies using immunocytochemistry and retrograde tract-tracing. Kalyuzhny AE, et al. **J Neurosci** 1996 Oct 15; 16(20):6490–503

Presynaptic versus postsynaptic localization of mu and delta opioid receptors in dorsal and ventral striatopallidal pathways. Olive MF, et al. **J Neurosci** 1997 Oct 1; 17(19):7471–9

Opioid regulation of the mouse delta-opioid receptor expressed in human embryonic kidney 293 cells. Bot G, et al. **Mol Pharmacol** 1997 Aug;52(2):272–81

Identification of the critical domains of the delta-opioid receptor involved in G protein coupling using site-specific synthetic peptides. Merkouris M, et al. **Mol Pharmacol** 1996 Oct;50(4):985–93

A single residue, Lys108, of the delta-opioid receptor prevents the mu-opioid-selective ligand [D-Ala2,N-MePhe4,Gly-ol5]enkephalin from binding to the delta-opioid receptor. Minami M, et al. **Mol Pharmacol** 1996 Nov;50(5):1413–22

The third extracellular loop of the human delta-opioid receptor determines the selectivity of delta-opioid agonists. Varga EV, et al. **Mol Pharmacol** 1996 Dec;50(6):1619–24

Involvement of mu- and delta-opioid receptors in the effects of systemic and locally perfused morphine on extracellular levels of dopamine, DOPAC and HVA in the nucleus accumbens of the halothane-anaesthetized rat. Borg PJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):582–8

Morphine-6-O-beta-D-glucuronide but not morphine-3-O-beta-D-glucuronide binds to mu-, delta- and kappa- specific opioid binding sites in cerebral membranes. Löser SV, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):192–7

Receptor binding properties of a hemorphin analogue in rat brain membrane preparations. Szikra J, et al. **Neurobiology (Bp)** 1996;4(3):279–80

Laminar distribution of the multiple opioid receptors in the human cerebral cortex. Hiller JM, et al. **Neurochem Res** 1996 Nov;21(11):1333–45

Sensitivity of opioid receptor binding to N-substituted maleimides and methanethiosulfonate derivatives. Shahrestanifar MS, et al. **Neurochem Res** 1996 Nov; 21(11):1295–9

cAMP decreases steady-state levels of delta-opioid receptor mRNA in NG108-15 cells. Gylys KH, et al. **Neuroreport** 1997 Jul 7;8(9–10):2369–72

Inducible expression of N-methyl-D-aspartate receptor, and delta and mu opioid receptor messenger RNAs and protein in the NT2-N human cell line. Beczkowska IW, et al. **Neuroscience** 1997 Aug;79(3):855–62

Hypoxia decreases opioid delta receptor expression in mouse brain. Mayfield KP, et al. **Neuroscience** 1996 Jun; 72(3):785–9

Distribution of opioid peptide receptors in muscles of lean and obese-diabetic mice. Evans AA, et al. **Peptides** 1996; 17(4):629–34

Mu and delta opioid receptor activation inhibits omega-conotoxin-sensitive calcium channels in a voltage- and time-dependent mode in the human neuroblastoma cell line SH-SY5Y. Toselli M, et al. **Pflugers Arch** 1997 Mar; 433(5):587–96

Imaging of delta opioid receptors in human brain by N1'-([11C]methyl)naltrindole and PET. Madar I, et al. **Synapse** 1996 Sep;24(1):19–28

Ultrastructural localization of delta-1 opioid receptor in the dorsal raphe nucleus of the rat. Wang QP, et al. **Synapse** 1997 Jul;26(3):243–53

PHYSIOLOGY

Opioid peptide receptor stimulation reverses beta-adrenergic effects in rat heart cells. Xiao RP, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H797–805

Role of central mu, delta-1, and kappa-1 opioid receptors in opioid-induced muscle rigidity in the rat. Vankova ME, et al. **Anesthesiology** 1996 Sep;85(3):574–83

Dopamine and opioid regulation of the memory retrieval recovery in mice. Dubrovina NI, et al. **Behav Brain Res** 1996 Sep;79(1–2):23–9

Modulation of protein kinase C and cAMP-dependent protein kinase by delta-opioid. Lou LG, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):626–9

Carboxyl terminus of delta opioid receptor is required for agonist-dependent receptor phosphorylation. Zhao J, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):71–6

The carboxyl terminus of mouse delta-opioid receptor is not required for agonist-dependent activation. Zhu X, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):513–6

Mitogenic signalling by delta opioid receptors expressed in rat-1 fibroblasts involves activation of the p70s6k/p85s6k S6 kinase. Wilson MA, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):217–22

Effects of mitragynine on cAMP formation mediated by delta-opiate receptors in NG108-15 cells. Tohda M, et al. **Biol Pharm Bull** 1997 Apr;20(4):338–40

Involvement of spinal cord delta opiate receptors in the antinociception of gestation and its hormonal simulation. Dawson-Basoa M, et al. **Brain Res** 1997 May 16; 757(1):37–42

Role of opioid receptors (mu, delta 1, delta 2) in modulating responses of nociceptive neurons in the superficial and deeper dorsal horn of the medulla (trigeminal nucleus caudalis) in the rat. Wang XM, et al. **Brain Res** 1996 Nov 11;739(1–2):235–43

Delta-Opioid receptor modulation of the release of substance P-like immunoreactivity in the dorsal horn of the rat following mechanical or thermal noxious stimulation. Zachariou V, et al. **Brain Res** 1996 Oct 14;736(1–2):305–14

'Cross talk' between opioid peptide and adrenergic receptor signaling in isolated rat heart. Pepe S, et al. **Circulation** 1997 Apr 15;95(8):2122–9

Gx/z is regulated by mu but not delta opioid receptors in the stimulation of the low Km GTPase activity in mouse periaqueductal grey matter. Garzón J, et al. **Eur J Neurosci** 1997 Jun;9(6):1194–200

Synergy between mu/delta-opioid receptors mediates adenosine release from spinal cord synaptosomes. Cahill CM, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):45–9

Differences in G-protein activation by mu- and delta-opioid, and cannabinoid, receptors in rat striatum. Sim LJ, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):97–105

The role of delta-opioid receptors in the discriminative stimulus properties of a low dose of methamphetamine. Suzuki T, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):1–8

Kappa, but not mu or delta, opioids attenuate responses to distention of afferent fibers innervating the rat colon. Sengupta JN, et al. **Gastroenterology** 1996 Oct; 111(4):968–80

Hormone-defined cell system for studying G-protein coupled receptor agonist-activated growth modulation: delta-opioid and serotonin-5HT2C receptor activation show opposite mitogenic effects. Agarwal D, et al. **J Cell Physiol** 1997 Apr;171(1):61–74

delta opioid receptor expression is induced by concanavalin A in CD4+ T cells. Miller B. **J Immunol** 1996 Dec 15; 157(12):5324–8

The delta-opioid receptor regulates activity of ryanodine receptors in the human neuroblastoma cell line SK-N-BE. Allouche S, et al. **J Neurochem** 1996 Dec;67(6):2461–70

The delta-opioid receptor in SK-N-BE human neuroblastoma cell line undergoes heterologous desensitization. Namir N, et al. **J Neurochem** 1997 Apr; 68(4):1764–72

Endogenous activation of mu and delta-1 opioid receptors is required for long-term potentiation induction in the lateral perforant path: dependence on GABAergic inhibition. Bramham CR, et al. **J Neurosci** 1996 Dec 15; 16(24):8123–31

The alpha2a adrenergic receptor subtype mediates spinal analgesia evoked by alpha2 agonists and is necessary for spinal adrenergic-opioid synergy. Stone LS, et al. **J Neurosci** 1997 Sep 15;17(18):7157–65

Opioids binding mu and delta receptors exhibit diverse efficacy in the activation of Gi2 and G(x/z) transducer proteins in mouse periaqueductal gray matter. Garzón J, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):549–57

Human delta opioid receptor: functional studies on stably transfected Chinese hamster ovary cells after acute and chronic treatment with the selective nonpeptidic agonist SNC-80. Malatynska E, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1083–9

Antisense oligodeoxynucleotides to opioid mu and delta receptors reduced morphine dependence in mice: role of delta-2 opioid receptors. Sánchez-Blázquez P, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1423–31

Opioid modulation of the fetal hypothalamic-pituitary-adrenal axis: the role of receptor subtypes and route of administration. Taylor CC, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):129–35

Delta-1 opioid receptor-mediated antinociceptive properties of a nonpeptidic delta opioid receptor agonist, (-)TAN-67, in the mouse spinal cord. Tseng LF, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):600–5

RECEPTORS, OPIOID, DELTA

Analysis of the role of delta opioid receptors in gastroprotection in the rat. Gyires K, et al. **Life Sci** 1997; 60(16):1337–47

[Met5]enkephalin and delta2–opioid receptors in the spinal cord are involved in the cold water swimming–induced antinociception in the mouse. Mizoguchi H, et al. **Life Sci** 1997;61(7):PL81–6

Activation of N–methyl–D–aspartate receptor attenuates acute responsiveness of delta–opioid receptors. Cai YC, et al. **Mol Pharmacol** 1997 Apr;51(4):583–7

Voltage–dependent inhibition of Ca2+ channels in GH3 cells by cloned mu– and delta–opioid receptors. Piros ET, et al. **Mol Pharmacol** 1996 Oct;50(4):947–56

[35S]GTP gamma S binding: a tool to evaluate functional activity of a cloned opioid receptor transiently expressed in COS cells. Befort K, et al. **Neurochem Res** 1996 Nov; 21(11):1301–7

Modulatory effects of Gs–coupled excitatory opioid receptor functions on opioid analgesia, tolerance, and dependence. Crain SM, et al. **Neurochem Res** 1996 Nov;21(11):1347–51 (59 ref.)

The relevance of intact enkephalin molecule in predominantly delta opioid receptor mediated superoxide anion release. Haberstock H, et al. **Neuropeptides** 1995 Dec; 29(6):357–65

Receptor–induced beta gamma release from fatty acylation–deficient mutants of G alpha z. Beck HI, et al. **Neuroreport** 1997 Mar 3;8(4):937–40

Genetic sensitivity to hot–plate nociception in DBA/2J and C57BL/6J inbred mouse strains: possible sex–specific mediation by delta2–opioid receptors. Mogil JS, et al. **Pain** 1997 Apr;70(2–3):267–77

Involvement of delta 1 and delta 2 opioid receptor subtypes in the development of physical dependence on morphine in mice. Suzuki T, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):293–9

Opioid–receptor subtype agonist–induced enhancements of sucrose intake are dependent upon sucrose concentration. Ruegg H, et al. **Physiol Behav** 1997 Jul;62(1):121–8

The importance of delta and kappa opioid receptors in the property of thyrotropin–releasing hormone against hemorrhagic shock. Liu LM, et al. **Shock** 1997 Jan; 7(1):60–4

[Effect of opiate receptor ligands on the morpho–functional state of the sympathico–adrenal system and electrical stability of the heart in acute exposure to cold] Lishmanov IuB, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):154–7 **(Rus)**

[The role of cnetral and peripheral mu and delta opiate receptors in the realization of the anti–arrhythymic effect of adaptation] Lishmonov IuB, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):378–81 **(Rus)**

[Relationship between the adaptation capacity of the organism and the type of response of the opioid system to the stress physical load] Surkina ID, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):135–8 **(Rus)**

RECEPTORS, OPIOID, KAPPA

AGONISTS

Effect of the kappa agonist fedotozine on perception of gastric distension in healthy humans. Coffin B, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):919–25

kappa–Opioid agonist inhibition of osmotically induced AVP release: preferential action at hypothalamic sites. Rossi NF, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E367–72

Effects of R–84760, a selective kappa–opioid receptor agonist, on nociception, locomotion and respiration in rats. Fujibayashi K, et al. **Arch Int Pharmacodyn Ther** 1996 Mar–Apr;331(2):153–62

NMR and structural model of dynorphin A (1–17) bound to dodecylphosphocholine micelles. Tessmer MR, et al. **Biochemistry** 1997 Feb 25;36(8):1971–81

Effects of repeated administration of a kappa–opioid agonist on phorbol ester binding to membrane–bound protein kinase C in rat brain [published erratum appears in Biol Pharm Bull 1996 Jul;19(6):909] Feng Y, et al. **Biol Pharm Bull** 1996 Feb;19(2):303–4

Opioid receptor agonists selective for mu and kappa receptors attenuate methamphetamine–induced behavioral sensitization in the mouse. Toyoshi T, et al. **Biol Pharm Bull** 1996 Mar;19(3):369–74

Differential influence of D1 and D2 dopamine receptors on acute opiate withdrawal in guinea–pig isolated ileum. Capasso A, et al. **Br J Pharmacol** 1997 Mar;120(6):1001–6

The effects of spiradoline (U–62066E), a kappa–opioid receptor agonist, on neuroendocrine function in man. Ur E, et al. **Br J Pharmacol** 1997 Mar;120(5):781–4

Inhibition of [3H]–U69593 binding and the cardiac effects of U50, 488H by calcium channel blockers in the rat heart. Zhang WM, et al. **Br J Pharmacol** 1997 Mar;120(5):827–32

Modification of the binding of [3H]MK–801 to brain regions and spinal cord of rats treated chronically with U–50,488H, a kappa–opioid receptor agonist. Bhargava HN, et al. **Brain Res** 1997 Feb 28;749(2):347–50

Differential effects of LY235959, a competitive antagonist of the NMDA receptor on kappa–opioid receptor agonist induced responses in mice and rats. Bhargava HN, et al. **Brain Res** 1997 Feb 7;747(2):246–51

Effects of ibogaine and noribogaine on the antinociceptive action of mu–, delta– and kappa–opioid receptor agonists in mice. Bhargava HN, et al. **Brain Res** 1997 Mar 28; 752(1–2):234–8

Kappa opioid receptor agonists inhibit sigma–1 (sigma 1) receptor binding in guinea–pig brain, liver and spleen: autoradiographical evidence. Brent PJ. **Brain Res** 1996 Jul 1;725(2):155–65

Effects of ibogaine on the development of tolerance to antinociceptive action of mu–, delta– and kappa–opioid receptor agonists in mice. Cao YJ, et al. **Brain Res** 1997 Mar 28;752(1–2):250–4

Increased release of excitatory amino acids in rat locus coeruleus in kappa–opioid agonist dependent rats precipitated by nor–binaltorphimine. Hoshi K, et al. **Brain Res** 1997 Apr 4;753(1):63–8

Pharmacological characterization of buprenorphine, a mixed agonist–antagonist with kappa 3 analgesia. Pick CG, et al. **Brain Res** 1997 Jan 2;744(1):41–6

Analgesic efficacy of the kappa–receptor agonist, enadoline, in dental surgery pain. Pande AC, et al. **Clin Neuropharmacol** 1996 Feb;19(1):92–7

Comparison of the effects of a series of kappa–opioid receptor agonists upon sodium channel function in rat brain miniprisms. Tiger G, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 May;117(1):69–73

The antinociceptive activity of kappa– but not delta–opioid receptor agonists is maintained in morphine–tolerant neuropathic rats. Catheline G, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):273–81

Precipitated kappa–opioid receptor agonist withdrawal increase glutamate in rat locus coeruleus. Hoshi K, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):301–6

Enhanced kappa–opioid receptor–mediated analgesia by antisense targeting the sigma1 receptor. King M, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):R5–6

Kappa–opioid receptor agonist U50,488H modulates cocaine and morphine self–administration in drug–naive rats and mice. Kuzmin AV, et al. **Eur J Pharmacol** 1997 Mar 5; 321(3):265–71

Differential effects of mu–, delta– and kappa–opioid receptor agonists on the discriminative stimulus properties of cocaine in rats. Suzuki T, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):21–9

Opioids modulate the cholinergic contraction but not the nonadrenergic relaxation in guinea–pig airways in vitro. Pype JL, et al. **Eur Respir J** 1996 Nov;9(11):2280–5

Suppression of adjuvant arthritis by kappa–opioid receptor agonist: effect of route of administration and strain differences. Antić J, et al. **Immunopharmacology** 1996 Sep; 34(2–3):105–12

Cross–tolerance to acute administration of mu and kappa opioid agonists at the spinal cord level in the rat. Laurido C, et al. **Int J Neurosci** 1996 Nov;87(3–4):191–9

Effect of fedotozine on human distal colon. Adami M, et al. **Ital J Gastroenterol** 1996 Oct–Nov;28(8):441–6

Cardiovascular effects of intrathecally injected mu, delta and kappa opioid receptor agonists in rabbits. Oğütman C, et al. **J Auton Pharmacol** 1995 Dec;15(6):443–50

Renal and haemodynamic responses to a novel kappa opioid receptor agonist, niravoline (RU 51,599), in rats with cirrhosis. Moreau R, et al. **J Gastroenterol Hepatol** 1996 Sep;11(9):857–63

Aspartic acid conjugates of 2–(3,4–dichlorophenyl)–N–methyl–N–[(1S)–1(3–aminophenyl)–2–(1–pyrrolidi nyl) ethyl]acetamide: kappa opioid receptor agonists with limited access to the central nervous system. Chang AC, et al. **J Med Chem** 1996 Oct 25;39(22):4478–82

Chronic exposure to kappa–opioids enhances the susceptibility of immortalized neurons (F–11kappa 7) to apoptosis–inducing drugs by a mechanism that may involve ceramide. Dawson G, et al. **J Neurochem** 1997 Jun; 68(6):2363–70

The kappa–opioid receptor agonist MR–2034 stimulates the rat hypothalamic–pituitary–adrenal axis: studies in vivo and in vitro. Calogero AE, et al. **J Neuroendocrinol** 1996 Aug; 8(8):579–85

Inhibition of T cell superantigen responses following treatment with the kappa–opioid agonist U50,488H. Guan L, et al. **J Neuroimmunol** 1997 May;75(1–2):163–8

Effects of kappa opioid receptor–selective agonists on responses of pelvic nerve afferents to noxious colorectal distension. Su X, et al. **J Neurophysiol** 1997 Aug; 78(2):1003–12

Cholesterol–fed rabbits: study of the response of the vas deferens to adrenergic and non–adrenergic stimulus and to a kappa–opioid agonist. Alfaro MJ, et al. **J Pharm Pharmacol** 1996 Apr;48(4):433–6

Comparison of the water diuretic activity of kappa receptor agonists and a vasopressin receptor antagonist in dogs. Brooks DP, et al. **J Pharmacol Exp Ther** 1997 Mar; 280(3):1176–83

Effects of the structurally novel opioid 14 alpha, 14' beta–[dithiobis [(2–oxo–2,1–ethanediyl)imino]]bis(7,8–dihydromorphinone) on schedule–controlled behavior and thermal nociception in rhesus monkeys. Gatch MB, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1282–9

The kappa opioid agonist niravoline decreases brain edema in the mouse middle cerebral artery occlusion model of stroke. Guéniau C, et al. **J Pharmacol Exp Ther** 1997 Jul; 282(1):1–6

Putative kappa–2 opioid agonists are antihyperalgesic in a rat model of inflammation. Ho J, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):136–41

Adenosine 3',5'–cyclic monophosphate–stimulated Ca++ efflux and acetylcholine release in ileal myenteric plexus are mediated by N–type Ca++ channels: inhibition by the kappa opioid receptor agonist. Kojima Y, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):403–9

Effects of kappa opioids on cocaine self–administration by rhesus monkeys. Negus SS, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):44–55

Differential effects of fedotozine compared to other kappa agonists on diuresis in rats. Soulard CD, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1379–85

Body temperature and analgesic effects of selective mu and kappa opioid receptor agonists microdialyzed into rat brain. Xin L, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):499–507

Substance P release in the rat periaqueductal gray and preoptic anterior hypothalamus after noxious cold stimulation: effect of selective mu and kappa opioid agonists. Xin L, et al. **J Pharmacol Exp Ther** 1997 Aug; 282(2):1055–63

Activation of the cloned human kappa opioid receptor by agonists enhances [35S]GTPgammaS binding to membranes: determination of potencies and efficacies of ligands. Zhu J, et al. **J Pharmacol Exp Ther** 1997 Aug; 282(2):676–84

Reversal by kappa–agonists of peritoneal irritation–induced ileus and visceral pain in rats. Friese N, et al. **Life Sci** 1997; 60(9):625–34

Radioligand–dependent discrepancy in agonist affinities enhanced by mutations in the kappa–opioid receptor. Hjorth SA, et al. **Mol Pharmacol** 1996 Oct;50(4):977–84

Modulation of kappa–opioid receptor mediated tolerance in the guinea–pig ileum by chronic co–administration of dihydropyridines. Garaulet JV, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jun; 354(1):72–9

Differential modulation by muscimol and baclofen on antinociception induced by morphine, beta–endorphin, D–Pen2,5–enkephalin and U50,488H administered intracerebroventricularly in the mouse. Suh HW, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):614–9

Cyclazocine revisited. Archer S, et al. **Neurochem Res** 1996 Nov;21(11):1369–73 (22 ref.)

Effect of central administration of the kappa–opiate receptor agonist U 69.593 on neurohypophyseal hormone levels in blood and cerebrospinal fluid. van Wimersma Greidanus TB, et al. **Neuropeptides** 1996 Oct;30(5):452–5

Mu and kappa opioid system interactions in the expression of acute opioid dependence in isolated guinea–pig ileum. Valeri P, et al. **Neuropharmacology** 1996 Mar;35(3):377–84

Opioid receptor independent inhibition of Ca2+ and K+ currents in NG108–15 cells by the kappa opioid receptor agonist U50488H. Carpenter E, et al. **Neuroreport** 1996 Jul 29;7(11):1809–12

Gender difference in analgesic response to the kappa–opioid pentazocine. Gear RW, et al. **Neurosci Lett** 1996 Mar 1; 205(3):207–9

Prolonged antagonism of morphine–induced locomotor stimulation by kappa opioid agonists: enhancement by prior morphine exposure. Pearl SM, et al. **Neurosci Lett** 1996 Jul 26;213(1):5–8

Estrogen and progesterone activate spinal kappa–opiate receptor analgesic mechanisms. Dawson–Basoa ME, et al. **Pain** 1996 Mar;64(3):607–15

Dietary modulation of mu and kappa opioid receptor–mediated analgesia. Kanarek RB, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):43–9

Sensitization to the behavioral effects of cocaine: modulation by dynorphin and kappa–opioid receptor agonists. Shippenberg TS, et al. **Pharmacol Biochem Behav** 1997 Jul; 57(3):449–55 (66 ref.)

Effects of kappa receptor agonists on D1 and D2 dopamine agonist and antagonist–induced behaviors. Marin C, et al. **Psychopharmacology (Berl)** 1996 Jan;123(2):215–21

[Differentiation of antinociceptive effects of mu, delta and kappa agonists using heat, chemical and mechanical nociception] Murakawa K, et al. **Masui** 1996 Aug; 45(8):937–42 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Kappa opioid receptor–like immunoreactivity is present in substance P–containing subcortical afferents in guinea pig dentate gyrus. Drake CT, et al. **Hippocampus** 1997; 7(1):36–47

Kappa opioid receptor–like immunoreactivity in guinea pig brain: ultrastructural localization in presynaptic terminals in hippocampal formation. Drake CT, et al. **J Comp Neurol** 1996 Jul 1;370(3):377–95

Distribution and changes in mu– and kappa–opiate receptors during the midlife neurodevelopmental period of Coho salmon, Oncorhynchus kisutch. Ebbesson LO, et al. **J Comp Neurol** 1996 Mar 11;366(3):448–64

Fluorescent staining of kappa opioid receptors using naltrexamine derivatives and phycoerythrin. Lawrence DM, et al. **J Immunol Methods** 1997 Feb 28;201(2):173–81

ANTAGONISTS & INHIBITORS

Interaction of cholecystokinin and somatostatin with a selective mu-opioid agonist and mu- and kappa-antagonists in thermoregulation. Ghosh S, et al. **Brain Res** 1997 Jan 16;745(1-2):152-7

Pharmacological characterization of buprenorphine, a mixed agonist-antagonist with kappa 3 analgesia. Pick CG, et al. **Brain Res** 1997 Jan 2;744(1):41-6

Role of dopamine mesolimbic system in opioid action of psychotropic analgesic nitrous oxide in alcohol and drug withdrawal. Lichtigfeld FJ, et al. **Clin Neuropharmacol** 1996 Jun;19(3):246-51 (43 ref.)

Effects of mu-, delta- and kappa-opioid antagonists in atrial preparations from nonfailing and failing human hearts. Llobel F, et al. **Gen Pharmacol** 1997 Mar;28(3):371-4

Inhibition of tuberoinfundibular dopaminergic neural activity during suckling: involvement of mu and kappa opiate receptor subtypes. Callahan P, et al. **J Neuroendocrinol** 1996 Oct;8(10):771-6

Modulation of humoral immune response by central administration of leucine-enkephalin: effects of mu, delta and kappa opioid receptor antagonists. Radulović J, et al. **J Neuroimmunol** 1996 Apr;65(2):155-61

A kappa opioid antagonist blocks sensitization in a rodent model of Parkinson's disease. Newman DD, et al. **Neuroreport** 1997 Feb 10;8(3):669-72

Functional antagonism of mu-, delta- and kappa-opioid antinociception by orphanin FQ. Mogil JS, et al. **Neurosci Lett** 1996 Aug 23;214(2-3):131-4

The NMDA receptor antagonist MK-801 differentially modulates mu and kappa opioid actions in spinal cord in vitro. Feng J, et al. **Pain** 1996 Aug;66(2-3):343-9

BIOSYNTHESIS

Dopamine antagonist and "binge" cocaine effects on rat opioid and dopamine transporter mRNAs. Spangler R, et al. **Neuroreport** 1996 Sep 2;7(13):2196-200

CHEMISTRY

Identification and characterization of opioid and somatostatin binding sites in the opossum kidney (OK) cell line and their effect on growth. Hatzoglou A, et al. **J Cell Biochem** 1996 Dec 15;63(4):410-21

Application of the message-address concept to the docking of naltrexone and selective naltrexone-derived opioid antagonists into opioid receptor models. Metzger TG, et al. **Neurochem Res** 1996 Nov;21(11):1287-94

DRUG EFFECTS

Effects of the kappa-opioid dynorphin A(1-13) on learning and memory in mice. Ukai M, et al. **Behav Brain Res** 1997 Feb;83(1-2):169-72

Delta and kappa opioid receptors in eyestalk ganglia of a crustacean. Hanke J, et al. **Brain Res** 1997 Jan 9; 744(2):279-84

Prodynorphin, proenkephalin and kappa opioid receptor mRNA responses to acute "binge" cocaine. Spangler R, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):139-42

Differential sensitivity to morphine challenge in migraine sufferers and headache-exempt subjects. Nicolodi M. **Cephalalgia** 1996 Aug;16(5):297-304

Kappa opioids: therapeutic considerations in epilepsy and CNS injury. Tortella FC, et al. **Clin Neuropharmacol** 1994 Oct;17(5):403-16 (77 ref.)

Further evidence for a peripheral component in the enhanced antinociceptive effect of systemic morphine in mononeuropathic rats: involvement of kappa-, but not delta-opioid receptors. Catheline G, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):135-43

Peripheral kappa 1-opioid receptor-mediated analgesia in mice. Kolesnikov Y, et al. **Eur J Pharmacol** 1996 Aug 29; 310(2-3):141-3

Fedotozine blocks hypersensitive visceral pain in conscious rats: action at peripheral kappa-opioid receptors. Langlois A, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):211-7

Potentiation of delta 9-tetrahydrocannabinol-induced analgesia by morphine in mice: involvement of mu- and kappa-opioid receptors. Reche I, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):11-6

Chronic U50,488H abolishes inositol 1,4,5-trisphosphate and intracellular Ca2+ elevations evoked by kappa-opioid receptor in rat myocytes. Sheng JZ, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):323-9

Supraspinal administration of opioids with selectivity for mu-, delta- and kappa-opioid receptors produces analgesia in amphibians. Stevens CW, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):15-21

Systemic administration of dynorphin A-(1-13) markedly improves cycloheximide-induced amnesia in mice. Ukai M, et al. **Eur J Pharmacol** 1996 Oct 10;313(1-2):11-5

Opioid receptor ligand binding in the human striatum: II. Heterogeneous distribution of kappa opioid receptor labeled with [3H]bremazocine. Vonkeman HE, et al. **J Comp Neurol** 1996 Oct 14;374(2):223-9

Distinct components of morphine effects on cardiac myocytes are mediated by the kappa and delta opioid receptors. Ela C, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):711-20

Differential agonist regulation of the human kappa-opioid receptor. Blake AD, et al. **J Neurochem** 1997 May; 68(5):1846-52

Kappa opioid receptor tolerance in the guinea pig hippocampus. Jin W, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):123-8

EEG spectral analysis of the neuroprotective kappa opioids enadoline and PD117302. Tortella FC, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):286-93

A guinea pig ileum preparation devoid of functional kappa receptors: a new in vitro pharmacologic assay for mu-opioid ligands. Schwartz RW, et al. **Life Sci** 1997; 60(15):PL235-9

Selective opposite modulation of dentate granule cells excitability by mu and kappa opioids in rat hippocampal slices. Sagratella S, et al. **Neurosci Lett** 1996 Feb 16; 205(1):53-6

Delta and kappa opioid receptor subtypes and ingestion: antagonist and glucoprivic effects. Yu WZ, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):353-61

Cross-tolerance of associative and nonassociative morphine tolerance in the rat with mu- and kappa-specific opioids. Carter BL, et al. **Psychopharmacology (Berl)** 1996 Feb; 123(3):289-96

Discriminative stimulus and subjective effects of opioids with mu and kappa activity: data from laboratory animals and human subjects. Dykstra LA, et al. **Psychopharmacology (Berl)** 1997 Mar;130(1):14-27 (94 ref.)

The hypothesis that antagonism of fentanyl analgesia by 2-chloroprocaine is mediated by direct action on opioid receptors. Coda B, et al. **Reg Anesth** 1997 Jan-Feb; 22(1):43-52

Characterizing kappa3 opioid receptors with a selective monoclonal antibody. Brooks AI, et al. **Synapse** 1996 Mar; 22(3):247-52

[The participation of the central and peripheral kappa-opiate receptors in the mechanism of the anti-arrhythmia action of benzeneacetamide derivatives] Maslov LN, et al. **Eksp Klin Farmakol** 1996 Nov-Dec;59(6):20-2 (Eng. Abstr.) **(Rus)**

GENETICS

kappa-opioid receptor expression defines a phenotypically distinct subpopulation of astroglia: relationship to Ca2+ mobilization, development, and the antiproliferative effect of opioids. Gurwell JA, et al. **Brain Res** 1996 Oct 21; 737(1-2):175-87

Regulation of kappa opioid receptor mRNA in the rat brain by "binge" pattern cocaine administration and correlation with preprodynorphin mRNA. Spangler R, et al. **Brain Res Mol Brain Res** 1996 May;38(1):71-6

Characterization of delta, kappa, and mu human opioid receptors overexpressed in baculovirus-infected insect cells. Massotte D, et al. **J Biol Chem** 1997 Aug 8; 272(32):19987-92

Radioligand-dependent discrepancy in agonist affinities enhanced by mutations in the kappa-opioid receptor. Hjorth SA, et al. **Mol Pharmacol** 1996 Oct;50(4):977-84

Studies of dual promoters of mouse kappa-opioid receptor gene. Lu S, et al. **Mol Pharmacol** 1997 Sep;52(3):415-20

Cloning and characterization of multiple opioid receptors. Akil H, et al. **NIDA Res Monogr** 1996;161:127-40 (27 ref.)

IMMUNOLOGY

Anti-human kappa opioid receptor antibodies: characterization of site-directed neutralizing antibodies specific for a peptide kappa R(33-52) derived from the predicted amino terminal region of the human kappa receptor. Buchner RR, et al. **J Immunol** 1997 Feb 15; 158(4):1670-80

ISOLATION & PURIFICATION

Opioid receptor types for endogenous enkephalin in the thoracic ganglion of the crab, Carcinus maenas. Hanke J, et al. **Peptides** 1996;17(6):965-72

METABOLISM

Agonist binding properties for recombinant kappa opioid receptors expressed in CHO-K1 cells. Carboni L, et al. **Ann N Y Acad Sci** 1997 May 30;812:203-4

Syntheses of novel pyridazinomorphinans by inverse electron demand cycloaddition and their binding to mu and kappa receptors. Klindert T, et al. **Arch Pharm (Weinheim)** 1997 Jun;330(6):163-8

Identification of a novel opioid peptide (Tyr-Val-Pro-Phe-Pro) derived from human alpha S1 casein (alpha S1-casomorphin, and alpha S1-casomorphin amide). Kampa M, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):903-8

Inhibition of Ca2+ channel current by mu- and kappa-opioid receptors coexpressed in Xenopus oocytes: desensitization dependence on Ca2+ channel alpha 1 subunits. Kaneko S, et al. **Br J Pharmacol** 1997 Jun; 121(4):806-12

Effects of sigma ligands on the cloned mu-, delta- and kappa-opioid receptors co-expressed with G-protein-activated K+ (GIRK) channel in Xenopus oocytes. Kobayashi T, et al. **Br J Pharmacol** 1996 Sep; 119(1):73-80

Diabetes alters mu and kappa opioid binding in rat brain regions: comparison with effects of food restriction. Wolinsky TD, et al. **Brain Res** 1996 Oct 28;738(1):167-71

Chronic food restriction alters mu and kappa opioid receptor binding in the parabrachial nucleus of the rat: a quantitative autoradiographic study. Wolinsky TD, et al. **Brain Res** 1996 Jan 15;706(2):333-6

Amphetamine-induced preprodynorphin mRNA expression and kappa-opioid receptor binding in basal ganglia of adult rats after prenatal exposure to diazepam. Inderbitzin S, et al. **Brain Res Dev Brain Res** 1997 Jan 2;98(1):114-24

Opioid receptor expression in the rat gastrointestinal tract: a quantitative study with comparison to the brain. Fickel J, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):1-8

Prodynorphin, proenkephalin and kappa opioid receptor mRNA responses to acute "binge" cocaine. Spangler R, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):139-42

The expression of mRNA for a kappa opioid receptor in the substantia nigra of Parkinson's disease brain. Yamada M, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):12-20

Dissociation of affinity and efficacy in KOR-3 chimeras. Pan YX, et al. **FEBS Lett** 1996 Oct 21;395(2-3):207-10

Opioid receptor ligand binding in the human striatum: II. Heterogeneous distribution of kappa opioid receptor labeled with [3H]bremazocine. Vonkeman HE, et al. **J Comp Neurol** 1996 Oct 14;374(2):223-9

Multiplicity of kappa opioid receptor binding in the rat cardiac sarcolemma. Zhang WM, et al. **J Mol Cell Cardiol** 1996 Jul;28(7):1547-54

Differential agonist regulation of the human kappa-opioid receptor. Blake AD, et al. **J Neurochem** 1997 May; 68(5):1846-52

Irreversible binding of N-methyl-N-[(1S)-1-(4-isothiocyanatophenyl)-2-(1-pyrrolidinyl)ethyl-3,4 -dichlorophenylacetamide to the cloned rat kappa opioid receptor. Chen C, et al. **Life Sci** 1997;61(8):787-94

Functional selectivity of orphanin FQ for its receptor coexpressed with potassium channel subunits in Xenopus laevis oocytes. Matthes H, et al. **Mol Pharmacol** 1996 Sep; 50(3):447-50

Morphine-6-O-beta-D-glucuronide but not morphine-3-O-beta-D-glucuronide binds to mu-, delta- and kappa- specific opioid binding sites in cerebral membranes. Löser SV, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):192-7

Receptor binding properties of a hemorphin analogue in rat brain membrane preparations. Szikra J, et al. **Neurobiology (Bp)** 1996;4(3):279-80

Laminar distribution of the multiple opioid receptors in the human cerebral cortex. Hiller JM, et al. **Neurochem Res** 1996 Nov;21(11):1333-45

Alterations in kappa opioid receptor mRNA levels in the paraventricular nucleus of the hypothalamus by stress and sex steroids. Yukhananov RY, et al. **Neuroreport** 1996 Jul 8;7(10):1690-4

Modulation of neurotransmitter release by opioid mu- and kappa-receptors from adrenergic terminals in the myenteric plexus of the guinea-pig colon: effect of alpha 2-autoreceptor blockade. Cosentino M, et al. **Neurosci Lett** 1997 Jan 31;222(2):75-8

Immunohistochemical localization of the cloned kappa 1 receptor in the rat CNS and pituitary. Mansour A, et al. **Neuroscience** 1996 Apr;71(3):671-90

Effect of low pH treatment on opioid peptides binding to their receptors and functional coupling of G-proteins to adenylyl cyclase in the rat spinal cord. Reddy PL, et al. **Peptides** 1996;17(4):625-8

Kappa opioids exert a strong antiproliferative effect on PC12 rat pheochromocytoma cells. Venihaki M, et al. **Peptides** 1996;17(3):413-9

[Central K1-opiate receptors and mechanisms of arrhythmogenesis] Ugdyzhekova DS, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):656-8 **(Rus)**

PHYSIOLOGY

Role of central mu, delta-1, and kappa-1 opioid receptors in opioid-induced muscle rigidity in the rat. Vankova ME, et al. **Anesthesiology** 1996 Sep;85(3):574-83

Effects of opioids on thermosensitivity of rat hypothalamic neurons. Yakimova KS, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:156-65

Role of kappa opioid receptors in modulating cholinergic twitches in the circular muscle of guinea-pig colon. Giuliani S, et al. **Br J Pharmacol** 1996 Nov;119(5):985-9

Evidence for roles of kappa-opioid and NMDA receptors in the mechanism of action of ibogaine. Glick SD, et al. **Brain Res** 1997 Feb 28;749(2):340-3

Cholecystokinin octapeptide reverses the kappa-opioid-receptor-mediated depression of calcium current in rat dorsal root ganglion neurons. Xu T, et al. **Brain Res** 1996 Aug 19;730(1-2):207-11

Kappa, but not mu or delta, opioids attenuate responses to distention of afferent fibers innervating the rat colon. Sengupta JN, et al. **Gastroenterology** 1996 Oct; 111(4):968-80

Inhibition of tuberoinfundibular dopaminergic neural activity during suckling: involvement of mu and kappa opiate receptor subtypes. Callahan P, et al. **J Neuroendocrinol** 1996 Oct;8(10):771-6

Kappa-opioid receptor activation modulates Ca2+ currents and secretion in isolated neuroendocrine nerve terminals. Rusin KI, et al. **J Neurosci** 1997 Sep 1;17(17):6565-74

Opioid modulation of the fetal hypothalamic-pituitary-adrenal axis: the role of receptor

RECEPTORS, OPIOID, KAPPA

subtypes and route of administration. Taylor CC, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):129–35

Participation of central kappa-opioid receptor in arrhythmogenesis. Lishmanov YB, et al. **Life Sci** 1997; 61(3):PL33–8

Cellular mechanism for anti-analgesic action of agonists of the kappa-opioid receptor. Pan ZZ, et al. **Nature** 1997 Sep 25;389(6649):382–5

Modulatory effects of Gs-coupled excitatory opioid receptor functions on opioid analgesia, tolerance, and dependence. Crain SM, et al. **Neurochem Res** 1996 Nov;21(11):1347–51 (59 ref.)

Mu and kappa opioid system interactions in the expression of acute opioid dependence in isolated guinea-pig ileum. Valeri P, et al. **Neuropharmacology** 1996 Mar;35(3):377–84

Estrogen and progesterone activate spinal kappa-opiate receptor analgesic mechanisms. Dawson-Basoa ME, et al. **Pain** 1996 Jan;64(1):169–77

Opioid-receptor subtype agonist-induced enhancements of sucrose intake are dependent upon sucrose concentration. Ruegg H, et al. **Physiol Behav** 1997 Jul;62(1):121–8

kappa opioid receptors in human microglia downregulate human immunodeficiency virus 1 expression. Chao CC, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8051–6

The importance of delta and kappa opioid receptors in the property of thyrotropin-releasing hormone against hemorrhagic shock. Liu LM, et al. **Shock** 1997 Jan; 7(1):60–4

RECEPTORS, OPIOID, MU

AGONISTS

The endogenous mu-opioid receptor agonists endomorphins 1 and 2 have novel hypotensive activity in the rabbit. Champion HC, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):567–70

Opioid receptor agonists selective for mu and kappa receptors attenuate methamphetamine-induced behavioral sensitization in the mouse. Toyoshi T, et al. **Biol Pharm Bull** 1996 Mar;19(3):369–74

Suppression of vagus-mediated pancreatic polypeptide release by the mu-opiate receptor agonist loperamide in man. Riepl RL, et al. **Br J Clin Pharmacol** 1996 Sep; 42(3):371–7

Differential influence of D1 and D2 dopamine receptors on acute opiate withdrawal in guinea-pig isolated ileum. Capasso A, et al. **Br J Pharmacol** 1997 Mar;120(6):1001–6

Tolerance to mu-opioid agonists in human neuroblastoma SH-SY5Y cells as determined by changes in guanosine-5'-O-(3-[35S]-thio)triphosphate binding. Elliott J, et al. **Br J Pharmacol** 1997 Aug;121(7):1422–8

Renal effects of TAPP, a highly selective mu-opioid agonist. Gutkowska J, et al. **Br J Pharmacol** 1996 Sep;119(2):239–44

Effects of ibogaine and noribogaine on the antinociceptive action of mu-, delta- and kappa-opioid receptor agonists in mice. Bhargava HN, et al. **Brain Res** 1997 Mar 28; 752(1-2):234–8

Effects of ibogaine on the development of tolerance to antinociceptive action of mu-, delta- and kappa-opioid receptor agonists in mice. Cao YJ, et al. **Brain Res** 1997 Mar 28;752(1-2):250–4

Interaction of cholecystokinin and somatostatin with a selective mu-opioid agonist and mu- and kappa-antagonists in thermoregulation. Ghosh S, et al. **Brain Res** 1997 Jan 16;745(1-2):152–7

mu-Opioid receptor activation enhances DNA synthesis in immature oligodendrocytes. Knapp PE, et al. **Brain Res** 1996 Dec 16;743(1-2):341–5

Modulation of glycine-induced chloride current in acutely dissociated rat periaqueductal gray neurons by mu-opioid agonist DAGO. Min BI, et al. **Brain Res** 1996 Sep 23; 734(1-2):72–8

Opioids modulate N-methyl-D-aspartic acid (NMDA)-evoked responses of neurons in the superficial and deeper dorsal horn of the medulla (trigeminal nucleus caudalis). Zhang KM, et al. **Brain Res** 1996 May 6; 719(1-2):229–33

Analgesic effects of Tyr-W-MIF-1: a mixed mu2-opioid receptor agonist/mu1-opioid receptor antagonist. Gergen KA, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):33–8

Differential effects of mu-, delta- and kappa-opioid receptor agonists on the discriminative stimulus properties of cocaine in rats. Suzuki T, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):21–9

Opioids modulate the cholinergic contraction but not the nonadrenergic relaxation in guinea-pig airways in vitro. Pype JL, et al. **Eur Respir J** 1996 Nov;9(11):2280–5

Cross-tolerance to acute administration of mu and kappa opioid agonists at the spinal cord level in the rat. Laurido C, et al. **Int J Neurosci** 1996 Nov;87(3-4):191–9

Effect of aromatic amino acid substitutions in the 3-position of cyclic beta-casomorphin analogues on mu-opioid agonist/delta-opioid antagonist properties. Schmidt R, et al. **Int J Pept Protein Res** 1996 Nov;48(5):411–9

Cardiovascular effects of intrathecally injected mu, delta and kappa opioid receptor agonists in rabbits. Oğütman C, et al. **J Auton Pharmacol** 1995 Dec;15(6):443–50

Mass spectrometric quantification of the mu opioid receptor agonist Tyr-D-Arg-Phe-Lys-NH2 (DALDA) in high-performance liquid chromatography-purified ovine plasma. Grigoriants OO, et al. **J Chromatogr B Biomed Sci Appl** 1997 Aug 1;695(2):287–98

Modulation of high-voltage activated Ca2+ channels in the rat periaqueductal gray neurons by mu-type opioid agonist. Kim CJ, et al. **J Neurophysiol** 1997 Mar;77(3):1418–24

X-ray structure of Tyr-D-Tic-Phe-Phe-NH2 (D-TIPP-NH2), a highly potent mu-receptor selective opioid agonist. Comparison with proposed model structures. Flippen-Anderson JL, et al. **J Pept Res** 1997 May;49(5):384–93

Mechanisms of the regional hemodynamic effects of a mu-opioid receptor agonist microinjected into the hypothalamic paraventricular nuclei of conscious unrestrained rats. Bachelard H, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):460–70

Intracranial self-stimulation in rats: sensitization to an opioid antagonist following acute or chronic treatment with mu opioid agonists. Easterling KW, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):188–99

Characterization of opioid agonist efficacy in a C6 glioma cell line expressing the mu opioid receptor. Emmerson PJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1121–7

Butorphanol-mediated antinociception in mice: partial agonist effects and mu receptor involvement. Garner HR, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1253–61

Effects of the structurally novel opioid 14 alpha, 14' beta-[dithiobis [(2-oxo-2,1-ethanediyl)imino]]bis(7,8-dihydromorphinone) on schedule-controlled behavior and thermal nociception in rhesus monkeys. Gatch MB, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1282–9

Mu opioid agonists potentiate amphetamine- and cocaine-induced rotational behavior in the rat. Kimmel HL, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):734–46

Antagonistic modulation between the delta opioid agonist BW373U86 and the mu opioid agonist fentanyl in mice. O'Neill SJ, et al. **J Pharmacol Exp Ther** 1997 Jul; 282(1):271–7

Tolerance to mu-opioid receptor agonists but not cross-tolerance to gamma-aminobutyric acid(B) receptor agonists in arcuate A12 dopamine neurons with chronic morphine treatment. Wagner EJ, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1057–64

Substance P release in the rat periaqueductal gray and preoptic anterior hypothalamus after noxious cold stimulation: effect of selective mu and kappa opioid agonists. Xin L, et al. **J Pharmacol Exp Ther** 1997 Aug; 282(2):1055–63

Body temperature and analgesic effects of selective mu and kappa opioid receptor agonists microdialyzed into rat brain. Xin L, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):499–507

Central regulation of urine production by a selective mu-opioid agonist, [D-Ala2, N-Me-Phe4, Gly5-ol]-enkephalin, in rats. Tsushima H, et al. **Jpn J Pharmacol** 1997 May;74(1):45–9

An examination of the relationship between mu-opioid antinociceptive efficacy and G-protein coupling using pertussis and cholera toxins. Goode TL, et al. **Life Sci** 1997; 60(7):PL107–13

Agonist activation of delta-opioid receptor but not mu-opioid receptor potentiates fetal calf serum or tyrosine kinase receptor-mediated cell proliferation in a cell-line-specific manner. Law PY, et al. **Mol Pharmacol** 1997 Jan;51(1):152–60

Agonist-induced functional desensitization of the mu-opioid receptor is mediated by loss of membrane receptors rather than uncoupling from G protein. Pak Y, et al. **Mol Pharmacol** 1996 Nov;50(5):1214–22

mu-Opioid receptor-stimulated guanosine-5'-O-(gamma-thio)-triphosphate binding in rat thalamus and cultured cell lines: signal transduction mechanisms underlying agonist efficacy. Selley DE, et al. **Mol Pharmacol** 1997 Jan;51(1):87–96

Another opiate for the masses? [news; comment] Julius D. **Nature** 1997 Apr 3;386(6624):442. Comment on: Nature 1997 Apr 3;386(6624):499–502.

A potent and selective endogenous agonist for the mu-opiate receptor [see comments] Zadina JE, et al. **Nature** 1997 Apr 3;386(6624):499–502. Comment in: Nature 1997 Apr 3;386(6624):442.

mu-Opioid agonists stimulate growth hormone secretion in immature rats. Eason MG, et al. **Neuroendocrinology** 1996 Jun;63(6):489–97

Mu and kappa opioid system interactions in the expression of acute opioid dependence in isolated guinea-pig ileum. Valeri P, et al. **Neuropharmacology** 1996 Mar;35(3):377–84

Mu and delta opioid receptor gene expression after chronic treatment with opioid agonist. Buzas B, et al. **Neuroreport** 1996 Jun 17;7(9):1505–8

Neuropeptide FF reverses the effect of mu-opioid on Ca2+ channels in rat spinal ganglion neurones. Rebeyrolles S, et al. **Neuroreport** 1996 Nov 25;7(18):2979–81

A mu-receptor opioid agonist induces AP-1 and NF-kappa B transcription factor activity in primary cultures of rat cortical neurons. Hou YN, et al. **Neurosci Lett** 1996 Jul 19;212(3):159–62

Agonist and antagonist properties of dihydroetorphine for mu-opioid receptors in mice. Kamei J, et al. **Neurosci Lett** 1996 Sep 6;215(2):87–90

mu-Opioid receptor-mediated reduction of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid-activated current in dorsal horn neurons. Kolaj M, et al. **Neurosci Lett** 1996 Feb 2;204(1-2):133–7

Neuronal basis for the hyperthermic effect of mu-opioid agonists in rats: decrease in temperature sensitivity of warm-sensitive hypothalamic neurons. Yakimova KS, et al. **Neurosci Lett** 1996 Nov 1;218(2):115–8

Pretreatment with protein kinase C activator phorbol 12,13-dibutyrate attenuates the antinociception induced by mu- but not epsilon-opioid receptor agonist in the mouse. Narita M, et al. **Neuroscience** 1997 Jan;76(1):291–8

Competitive and non-competitive NMDA antagonists block the development of antinociceptive tolerance to morphine, but not to selective mu or delta opioid agonists in mice. Bilsky EJ, et al. **Pain** 1996 Dec;68(2-3):229–37

Neuronal model of tactile allodynia produced by spinal strychnine: effects of excitatory amino acid receptor antagonists and a mu-opiate receptor agonist. Sorkin LS, et al. **Pain** 1996 Dec;68(2-3):283–92

Majonoside-R2, a major constituent of Vietnamese ginseng, attenuates opioid-induced antinociception. Huong NT, et al. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1-2):285–91

Dietary modulation of mu and kappa opioid receptor-mediated analgesia. Kanarek RB, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):43–9

Induction of sensitization to hyperactivity caused by morphine in mice: effects of post-drug environments. Kuribara H. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1-2):341–6

Neuroendocrine effects of dexmedetomidine: evidence of cross-tolerance between a mu-opioid agonist and an alpha 2-adrenoceptor agonist in growth hormone secretion of the male rat. Idänpään-Heikkilä JJ, et al. **Pharmacol Toxicol** 1996 Mar;78(3):136–42

Agonist-selective endocytosis of mu opioid receptor by neurons in vivo. Sternini C, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9241–6

Interactions between the mu opioid agonist DAMGO and substance P in regulation of the ventral pallidum. Mitrovic I, et al. **Synapse** 1996 Jul;23(3):142–51

[Differentiation of antinociceptive effects of mu, delta and kappa agonists using heat, chemical and mechanical nociception] Murakawa K, et al. **Masui** 1996 Aug; 45(8):937–42 (Eng. Abstr.) **(Jpn)**

[The effect of mu-opioid receptor agonist tetrapeptide A10 on the DNA synthesis in the myocardium and liver of albino rats during early stages of postnatal ontogenesis] Goncharova EN, et al. **Biull Eksp Biol Med** 1997 Feb; 123(2):212–5 **(Rus)**

[The anti-arrhythmic effect of the mu-opiate receptor agonists in adrenal arrhythmia: the role of the autonomic nervous system] Maslov LN, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):25–7 **(Rus)**

[Effect of mu- and delta-opiate receptor agonists on cell division in epithelium of retina and tongue of albino rats] Timoshin SS, et al. **Biull Eksp Biol Med** 1994 May; 117(5):533–5 **(Rus)**

[The mechanism of the anti-arrhythmia action of mu-opioid-receptor agonists in a model of CaCl2-induced arrhythmias: the role of the autonomic nervous system] Maslov LN, et al. **Eksp Klin Farmakol** 1997 Jan-Feb; 60(1):35–7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Presence of opiate alkaloid-selective mu3 receptors in cultured astrocytes and in brain and retina. Makman MH, et al. **Adv Exp Med Biol** 1996;402:23–8

Immunocytochemical localization of mu-opioid receptors in follicular cells and preimplantation mouse embryos. Kalyuzhny AE, et al. **Anat Embryol (Berl)** 1997 May; 195(5):451–5

The locus coeruleus of the Japanese monkey (Macaca fuscata) does not express mu-opioid receptor-like immunoreactivity. Chen J, et al. **Brain Res** 1997 May 2; 755(2):326–30

Ultrastructural localization of mu-opioid receptors in the superficial layers of the rat cervical spinal cord: extrasynaptic localization and proximity to Leu5-enkephalin. Cheng PY, et al. **Brain Res** 1996 Aug 26;731(1-2):141–54

Vicia villosa agglutinin labels a subset of neurons coexpressing both the mu opioid receptor and parvalbumin in the developing rat subiculum. Bausch SB, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):169–77

Immunolabeling of Mu opioid receptors in the rat nucleus of the solitary tract: extrasynaptic plasmalemmal localization and association with Leu5-enkephalin. Cheng PY, et al. **J Comp Neurol** 1996 Aug 5;371(4):522–36

Distribution and changes in mu- and kappa-opiate receptors during the midlife neurodevelopmental period of Coho salmon, Oncorhynchus kisutch. Ebbesson LO, et al. **J Comp Neurol** 1996 Mar 11;366(3):448–64

Coexistence of mu-opioid receptor-like and substance P-like immunoreactivities in the cat dorsal root ganglionic neurons. Lü Y, et al. **J Hirnforsch** 1997;38(2):243–6

Dual ultrastructural localization of mu-opioid receptors and NMDA-type glutamate receptors in the shell of the rat nucleus accumbens. Gracy KN, et al. **J Neurosci** 1997 Jun 15;17(12):4839–48

The mu-opioid receptor down-regulates differently from the delta-opioid receptor: requirement of a high affinity receptor/G protein complex formation. Chakrabarti S, et al. **Mol Pharmacol** 1997 Jul;52(1):105–13

mu Opiate receptor immunoreactivity in rat central nervous system. Moriwaki A, et al. **Neurochem Res** 1996 Nov; 21(11):1315–31

GABAergic synapses on mu–opioid receptor–expressing neurons in the superficial dorsal horn: an electron microscope study in the cat spinal cord. Gong LW, et al. **Neurosci Lett** 1997 May 9;227(1):33–6

Colocalization of mu opioid receptors with GIRK1 potassium channels in the rat brain: an immunocytochemical study. Bausch SB, et al. **Receptors Channels** 1995;3(3):221–41

ANTAGONISTS & INHIBITORS

Interaction of cholecystokinin and somatostatin with a selective mu–opioid agonist and mu– and kappa–antagonists in thermoregulation. Ghosh S, et al. **Brain Res** 1997 Jan 16;745(1–2):152–7

The effect of mu–opioid receptor antisense on morphine potency and antagonist–induced supersensitivity and receptor upregulation. Shah S, et al. **Brain Res Bull** 1997; 42(6):479–84

Role of dopamine mesolimbic system in opioid action of psychotropic analgesic nitrous oxide in alcohol and drug withdrawal. Lichtigfeld FJ, et al. **Clin Neuropharmacol** 1996 Jun;19(3):246–51 (43 ref.)

Analgesic effects of Tyr–W–MIF–1: a mixed mu2–opioid receptor agonist/mu1–opioid receptor antagonist. Gergen KA, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):33–8

Alcohol drinking is reduced by a mu 1– but not by a delta–opioid receptor antagonist in alcohol–preferring rats. Honkanen A, et al. **Eur J Pharmacol** 1996 May 23; 304(1–3):7–13

14 beta–Chlorocinnamoylamino derivatives of metopon: long–term mu–opioid receptor antagonists. McLaughlin JP, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):121–9

Effects of mu–, delta– and kappa–opioid antagonists in atrial preparations from nonfailing and failing human hearts. Llobel F, et al. **Gen Pharmacol** 1997 Mar;28(3):371–4

Differential effects of delta– and mu–opioid receptor antagonists on the amphetamine–induced increase in extracellular dopamine in striatum and nucleus accumbens. Schad CA, et al. **J Neurochem** 1996 Dec;67(6):2292–9

Inhibition of tuberoinfundibular dopaminergic neural activity during suckling: involvement of mu and kappa opiate receptor subtypes. Callahan P, et al. **J Neuroendocrinol** 1996 Oct;8(10):771–6

Modulation of humoral immune response by central administration of leucine–enkephalin: effects of mu, delta and kappa opioid receptor antagonists. Radulović J, et al. **J Neuroimmunol** 1996 Apr;65(2):155–61

Dissociation of tolerance and dependence for opioid peripheral antinociception in rats. Aley KO, et al. **J Neurosci** 1997 May 15;17(10):3907–12

Blood–brain barrier permeability and bioavailability of a highly potent and mu–selective opioid receptor antagonist, CTAP: comparison with morphine. Abbruscato TJ, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):402–9

Effects of the structurally novel opioid 14 alpha, 14' beta–[dithiobis [(2–oxo–2,1–ethanediyl)imino]]bis(7,8–dihydromorphinone) on schedule–controlled behavior and thermal nociception in rhesus monkeys. Gatch MB, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1282–9

N–cyclobutylmethyl analog of normorphinone, N–CBM–TAMO: a short–term opioid agonist and long–term Mu–selective irreversible opioid antagonist. Xu JY, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):539–47

Mechanism of clocinnamox blockade of opioid receptors: evidence from in vitro and ex vivo binding and behavioral assays. Zernig G, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):23–31

The mu–opioid receptor antagonist D–Phe–Cys–Tyr–D–Trp–Orn–Thr–Pen–Thr–NH2 (CTOP) [but not D–Phe–Cys–Tyr–D–Trp–Arg–Thr–Pen–Thr–NH2 (CTAP)] produces a nonopioid receptor–mediated increase in K+ conductance of rat locus ceruleus neurons. Chieng B, et al. **Mol Pharmacol** 1996 Sep;50(3):650–5

Cyclazocine revisited. Archer S, et al. **Neurochem Res** 1996 Nov;21(11):1369–73 (22 ref.)

Mu– and delta–opioid receptor antagonists precipitate similar withdrawal phenomena in butorphanol and morphine dependence. Feng YZ, et al. **Neurochem Res** 1996 Jan; 21(1):63–71

Agonist and antagonist properties of dihydroetorphine for mu–opioid receptors in mice. Kamei J, et al. **Neurosci Lett** 1996 Sep 6;215(2):87–90

mu–Opioid receptor–mediated reduction of alpha–amino–3–hydroxy–5–methyl–4–isoxazolepropionic acid–activated current in dorsal horn neurons. Kolaj M, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):133–7

Functional antagonism of mu–, delta– and kappa–opioid antinociception by orphanin FQ. Mogil JS, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):131–4

The NMDA receptor antagonist MK–801 differentially modulates mu and kappa opioid actions in spinal cord in vitro. Feng J, et al. **Pain** 1996 Aug;66(2–3):343–9

Opioid peptides: simultaneous delta agonism and mu antagonism in somatostatin analogues. Bonner GG, et al. **Peptides** 1997;18(1):93–100

Antagonism of morphine–like discriminative effects by beta–funaltrexamine. Holtzman SG. **Pharmacol Biochem Behav** 1997 Aug;57(4):771–7

Effects of mu– and delta–opioid–receptor antagonists on the stimulus properties of cholecystokinin. Riley AL, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):57–62

Interaction of mu–opioid antagonistic drugs with antiepileptics. Frey HH, et al. **Pharmacol Toxicol** 1996 Apr; 78(4):264–8

BIOSYNTHESIS

Chronic morphine and naltrexone fail to modify mu–opioid receptor mRNA levels in the rat brain. Castelli MP, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):149–53

Mu opioid receptor mRNA in nucleus accumbens is elevated following dopamine receptor activation. Azaryan AV, et al. **Neurochem Res** 1996 Nov;21(11):1411–5

Co–localization of mu opioid receptor is greater with dynorphin than enkephalin in rat striatum. Guttenberg ND, et al. **Neuroreport** 1996 Sep 2;7(13):2119–24

Effects of peripheral nerve ligation on expression of mu–opioid receptor in sensory ganglion neurons: an immunohistochemical study in dorsal root and nodose ganglion neurons of the rat. Li JL, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):91–4

Quantitative analysis of mu and delta opioid receptor gene expression in rat brain and peripheral ganglia using competitive polymerase chain reaction. Búzás B, et al. **Neuroscience** 1997 Jan;76(2):479–89

CHEMISTRY

Ligand recognition in mu opioid receptor: experimentally based modeling of mu opioid receptor binding sites and their testing by ligand docking. Sagara T, et al. **Bioorg Med Chem** 1996 Dec;4(12):2151–66

Identification in the mu–opioid receptor of cysteine residues responsible for inactivation of ligand binding by thiol alkylating and reducing agents. Gaibelet G, et al. **FEBS Lett** 1997 May 19;408(2):135–40

Agonist–induced desensitization of the mu opioid receptor is determined by threonine 394 preceded by acidic amino acids in the COOH–terminal tail. Pak Y, et al. **J Biol Chem** 1997 Oct 3;272(40):24961–5

Conformational and electrostatic similarity between polyprotonated and Ca(2+)–bound mu–opioid peptides. Zhorov PS, et al. **J Biomol Struct Dyn** 1996 Oct; 14(2):173–83

Identification and characterization of opioid and somatostatin binding sites in the opossum kidney (OK) cell line and their effect on growth. Hatzoglou A, et al. **J Cell Biochem** 1996 Dec 15;63(4):410–21

The mu– and delta–opioid pharmacophore conformations of cyclic beta–casomorphin analogues indicate docking of the Phe3 residue to different domains of the opioid receptors. Brandt W, et al. **J Comput Aided Mol Des** 1996 Jun; 10(3):201–12

Mu opioid receptor–like sequences are present throughout vertebrate evolution. Li X, et al. **J Mol Evol** 1996 Sep; 43(3):179–84

DEFICIENCY

Differential sensitivity to morphine challenge in migraine sufferers and headache–exempt subjects. Nicolodi M. **Cephalalgia** 1996 Aug;16(5):297–304

Altered hematopoiesis, behavior, and sexual function in mu opioid receptor–deficient mice. Tian M, et al. **J Exp Med** 1997 Apr 21;185(8):1517–22

DRUG EFFECTS

5–HT spinal antinociception involves mu opioid receptors: cross tolerance and antagonist studies. Goodchild CS, et al. **Br J Anaesth** 1997 May;78(5):563–9

Differential desensitization of mu– and delta– opioid receptors in selected neural pathways following chronic morphine treatment. Noble F, et al. **Br J Pharmacol** 1996 Jan;117(1):161–9

Estrogen regulation of mu opioid receptor density in hypothalamic premammillary nuclei. Brown LL, et al. **Brain Res** 1996 Dec 2;742(1–2):347–51

mu–Opioid receptor activation decreases N–type Ca2+ current in magnocellular neurons of the rat basal forebrain. Soldo BL, et al. **Brain Res** 1997 May 30;758(1–2):118–26

mu–Opioid receptor binding in chicken brain in relation to degree of food restriction: a quantitative autoradiographic study. Stewart MG, et al. **Brain Res** 1996 Dec 2; 742(1–2):343–6

Estrogen regulation of mu–opioid receptor mRNA in the forebrain of female rats. Quiñones–Jenab V, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):134–8

mu–opioid receptor regulates CFTR coexpressed in Xenopus oocytes in a cAMP independent manner. Wotta DR, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):55–65

Tolerance and cross tolerance to the accuracy– and rate–decreasing effects of mu opioids in rats responding under a fixed–consecutive–number schedule. Smith MA, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):19–30

Potentiation of delta 9–tetrahydrocannabinol–induced analgesia by morphine in mice: involvement of mu– and kappa–opioid receptors. Reche I, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):11–6

Tyr–D–Arg2–Phe–sarcosine4 activates phospholipase C–coupled mu2–opioid receptors in SH–SY5Y cells. Smart D, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):235–8

Supraspinal administration of opioids with selectivity for mu–, delta– and kappa–opioid receptors produces analgesia in amphibians. Stevens CW, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):15–21

Solubilization of high–affinity, guanine nucleotide–sensitive mu–opioid receptors from rat brain membranes. Weems HB, et al. **J Neurochem** 1996 Mar;66(3):1042–50

Opioids modulate N–methyl–D–aspartic acid (NMDA)–evoked responses of trigeminothalamic neurons. Wang XM, et al. **J Neurophysiol** 1996 Sep;76(3):2093–6

Different mechanisms mediate development and expression of tolerance and dependence for peripheral mu–opioid antinociception in rat. Aley KO, et al. **J Neurosci** 1997 Oct 15;17(20):8018–23

Methoclocinnamox: agonist and antagonist effects of a novel long–lasting opioid in rhesus monkeys. Butelman ER, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):934–8

Activation of mu opioid receptors inhibits microglial cell chemotaxis. Chao CC, et al. **J Pharmacol Exp Ther** 1997 May;281(2):998–1004

Intracisternal injection of opioids induces itch–associated response through mu–opioid receptors in mice. Tohda C, et al. **Jpn J Pharmacol** 1997 May;74(1):77–82

Antinociceptive effect of buprenorphine in mu1–opioid receptor deficient CXBK mice. Kamei J, et al. **Life Sci** 1997;60(22):PL 333–7

Use of a mu–antisense oligodeoxynucleotide as a mu opioid receptor noncompetitive antagonist in vivo. Chen XH, et al. **Neurochem Res** 1996 Nov;21(11):1363–8

Selective attenuation of mu–opioid receptor–mediated effects in rat sensory neurons by intrathecal administration of antisense oligodeoxynucleotides. Khasar SG, et al. **Neurosci Lett** 1996 Oct 25;218(1):17–20

Selective opposite modulation of dentate granule cells excitability by mu and kappa opioids in rat hippocampal slices. Sagratella S, et al. **Neurosci Lett** 1996 Feb 16; 205(1).53–6

Binding of Tyr–W–MIF–1 (Tyr–Pro–Trp–Gly–NH2) and related peptides to mu 1 and mu 2 opiate receptors. Zadina JE, et al. **Neurosci Lett** 1996 Aug 30;215(1):65–9

Downregulation of mu–opioid binding sites following chronic administration of neuropeptide FF (NPFF) and morphine. Goodman CB, et al. **Peptides** 1996;17(3):389–97

Effects of cold acclimation and central opioid processes on thermoregulation in rats. Wilson JR, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):317–25

Cross–tolerance of associative and nonassociative morphine tolerance in the rat with mu– and kappa–specific opioids. Carter BL, et al. **Psychopharmacology (Berl)** 1996 Feb; 123(3):289–96

The role of serotonergic receptors in the effects of mu opioids in squirrel monkeys responding under a titration procedure. Powell KR, et al. **Psychopharmacology (Berl)** 1996 Jul; 126(1):42–9

In vivo apparent pA2 analysis in rats treated with either clocinnamox or morphine. Walker EA, et al. **Psychopharmacology (Berl)** 1996 May;125(2):113–9

The hypothesis that antagonism of fentanyl analgesia by 2–chloroprocaine is mediated by direct action on opioid receptors. Coda B, et al. **Reg Anesth** 1997 Jan–Feb; 22(1):43–52

[The interaction of dialkylaminoacyl derivatives of phenothiazine, dibenzazepine and dibenzdiazepine with opiate receptors] Brusova EG, et al. **Eksp Klin Farmakol** 1996 Mar–Apr;59(2):20–3 (Eng. Abstr.) **(Rus)**

GENETICS

Characterization of the mu and delta opioid receptors in the brain of the C57BL/6 and DBA/2 mice, selected for their differences in voluntary ethanol consumption. de Waele JP, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):754–62

Dual promoters of mouse mu–opioid receptor gene. Ko JL, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):351–7

Expression and pharmacological characterization of the human mu–opioid receptor in the methylotrophic yeast Pichia pastoris. Talmont F, et al. **FEBS Lett** 1996 Oct 7; 394(3):268–72

Characterization of delta, kappa, and mu human opioid receptors overexpressed in baculovirus–infected insect cells. Massotte D, et al. **J Biol Chem** 1997 Aug 8; 272(32):19987–92

Mu opioid receptor–like sequences are present throughout vertebrate evolution. Li X, et al. **J Mol Evol** 1996 Sep; 43(3):179–84

Identification of an octamer–1 transcription factor binding site in the promoter of the mouse mu–opioid receptor gene. Liang Y, et al. **J Neurochem** 1996 Oct;67(4):1352–9

A constitutively internalizing and recycling mutant of the mu–opioid receptor. Segredo V, et al. **J Neurochem** 1997 Jun;68(6):2395–404

Antisense mapping of MOR–1 in rats: distinguishing between morphine and morphine–6beta–glucuronide antinociception. Rossi GC, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):109–14

Use of a mu–antisense oligodeoxynucleotide as a mu opioid receptor noncompetitive antagonist in vivo. Chen XH, et al. **Neurochem Res** 1996 Nov;21(11):1363–8

Quantitative comparison of mu opioid receptor mRNA in selected CNS regions of alcohol naive rats selectively bred for high and low alcohol drinking. Gong J, et al.

Neurosci Lett 1997 May 9;227(1):9–12

Downregulation of mu-opioid receptor mRNA in the mediobasal hypothalamus of the female guinea pig following morphine treatment. Rønnekleiv OK, et al. **Neurosci Lett** 1996 Sep 27;216(2):129–32

Quantitative analysis of mu and delta opioid receptor gene expression in rat brain and peripheral ganglia using competitive polymerase chain reaction. Búzás B, et al. **Neuroscience** 1997 Jan;76(2):479–89

Cloning and characterization of multiple opioid receptors. Akil H, et al. **NIDA Res Monogr** 1996;161:127–40 (27 ref.)

Opioid receptors from a lower vertebrate (Catostomus commersoni): sequence, pharmacology, coupling to a G-protein-gated inward-rectifying potassium channel (GIRK1), and evolution. Darlison MG, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8214–9

ISOLATION & PURIFICATION

Use of zonal centrifugation method for the preparation of mu-opioid receptor enriched membranes from bovine corpus striatum. Sastry KV, et al. **J Neurosci Methods** 1997 Jun 6;74(1):45–52

METABOLISM

Imaging of delta- and mu-opioid receptors in temporal lobe epilepsy by positron emission tomography. Madar I, et al. **Ann Neurol** 1997 Mar;41(3):358–67

Syntheses of novel pyridazinomorphinans by inverse electron demand cycloaddition and their binding to mu and kappa receptors. Klindert T, et al. **Arch Pharm (Weinheim)** 1997 Jun;330(6):163–8

Ligand recognition in mu opioid receptor: experimentally based modeling of mu opioid receptor binding sites and their testing by ligand docking. Sagara T, et al. **Bioorg Med Chem** 1996 Dec;4(12):2151–66

delta- and mu-opioid receptor mobilization of intracellular calcium in SH-SY5Y human neuroblastoma cells. Connor M, et al. **Br J Pharmacol** 1996 Jan;117(2):333–40

Inhibition of Ca2+ channel current by mu- and kappa-opioid receptors coexpressed in Xenopus oocytes: desensitization dependence on Ca2+ channel alpha 1 subunits. Kaneko S, et al. **Br J Pharmacol** 1997 Jun; 121(4):806–12

Effects of sigma ligands on the cloned mu-, delta- and kappa-opioid receptors co-expressed with G-protein-activated K+ (GIRK) channel in Xenopus oocytes. Kobayashi T, et al. **Br J Pharmacol** 1996 Sep; 119(1):73–80

Affinity of naloxone and its quaternary analogue for avian central delta and mu opioid receptors. Deviche P. **Brain Res** 1997 May 23;757(2):276–9

Differences among mouse strains in the regulation by mu, delta 1 and delta 2 opioid receptors of striatal adenylyl cyclases activated by dopamine D1 or adenosine A2a receptors. Noble F, et al. **Brain Res** 1996 Apr 15; 716(1–2):107–17

Opioid receptor-coupled G-proteins in rat locus coeruleus membranes: decrease in activity after chronic morphine treatment. Selley DE, et al. **Brain Res** 1997 Jan 23; 746(1–2):10–8

Chronic food restriction alters mu and kappa opioid receptor binding in the parabrachial nucleus of the rat: a quantitative autoradiographic study. Wolinsky TD, et al. **Brain Res** 1996 Jan 15;706(2):333–6

Diabetes alters mu and kappa opioid binding in rat brain regions: comparison with effects of food restriction. Wolinsky TD, et al. **Brain Res** 1996 Oct 28;738(1):167–71

Further studies on the suppression of luteinizing hormone release due to activation of medial preoptic-anterior hypothalamic area mu-opioid receptors. Smith MJ, et al. **Brain Res Bull** 1997;42(1):1–7

Opioid receptor expression in the rat gastrointestinal tract: a quantitative study with comparison to the brain. Fickel J, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):1–8

Protein kinase modulation of mu opioid receptor signalling. Yu L. **Cell Signal** 1996 Aug;8(5):371–4 (36 ref.)

Electron microscopic distribution of mu opioid receptors on noradrenergic neurons of the locus coeruleus. Moyse E, et al. **Eur J Neurosci** 1997 Jan;9(1):128–39

Opioid receptor selectivity alteration by single residue replacement: synthesis and activity profile of [Dmt1]deltorphin B. Guerrini R, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):37–42

Continuous cocaine administration enhances mu- but not delta-opioid receptor-mediated inhibition of adenylyl cyclase activity in nucleus accumbens. Izenwasser S, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):187–91

Antiprogestins inhibit the binding of opioids to mu-opioid receptors in nervous membrane preparations. Maggi R, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):169–77

The mu-opioid receptor is necessary for [D-Pen2,D-Pen5]enkephalin-induced analgesia. Sora I, et al. **Eur J Pharmacol** 1997 Apr 18;324(2–3):R1–2

Attenuation of memory with Tyr-D-Arg-Phe-beta-Ala-NH2, a novel dermorphin analog with high affinity for mu-opioid receptors. Ukai M, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):245–9

Effects of NMDA receptor antagonists on inhibition of morphine tolerance in rats: binding at mu-opioid receptors. Wong CS, et al. **Eur J Pharmacol** 1996 Feb 15; 297(1–2):27–33

Expression and pharmacological characterization of the human mu-opioid receptor in the methylotrophic yeast Pichia pastoris. Talmont F, et al. **FEBS Lett** 1996 Oct 7; 394(3):268–72

Reversible affinity labeling of opioid receptors via disulfide bonding: discriminative labeling of mu and delta subtypes by chemically activated thiol-containing enkephalin analogs. Yasunaga T, et al. **J Biochem (Tokyo)** 1996 Aug; 120(2):459–65

Opiate-induced adenylyl cyclase superactivation is isozyme-specific. Avidor-Reiss T, et al. **J Biol Chem** 1997 Feb 21;272(8):5040–7

Differential opioid agonist regulation of the mouse mu opioid receptor. Blake AD, et al. **J Biol Chem** 1997 Jan 10; 272(2):782–90

Receptor-induced internalization of selective peptidic mu and delta opioid ligands. Gaudriault G, et al. **J Biol Chem** 1997 Jan 31;272(5):2880–8

Mu-opioid receptor is located on the plasma membrane of dendrites that receive asymmetric synapses from axon terminals containing leucine-enkephalin in the rat nucleus locus coeruleus. Van Bockstaele EJ, et al. **J Comp Neurol** 1996 Dec 2;376(1):65–74

Ultrastructural immunocytochemical localization of mu opioid receptors and Leu5-enkephalin in the patch compartment of the rat caudate-putamen nucleus. Wang H, et al. **J Comp Neurol** 1996 Nov 25;375(4):659–74

Brain and spinal cord distribution of biphalin: correlation with opioid receptor density and mechanism of CNS entry. Abbruscato TJ, et al. **J Neurochem** 1997 Sep;69(3):1236–45

Acute and chronic effects of opioids on delta and mu receptor activation of G proteins in NG108-15 and SK-N-SH cell membranes. Breivogel CS, et al. **J Neurochem** 1997 Apr; 68(4):1462–72

Preparation and binding properties of radioiodinated analogues of dermorphin and deltorphin with high specificity for the mu- and delta-opioid receptors. Gaudriault G, et al. **J Neurochem** 1997 Feb;68(2):813–9

Key residues defining the mu-opioid receptor binding pocket: a site-directed mutagenesis study. Mansour A, et al. **J Neurochem** 1997 Jan;68(1):344–53

Solubilization of high-affinity, guanine nucleotide-sensitive mu-opioid receptors from rat brain membranes. Weems HB, et al. **J Neurochem** 1996 Mar;66(3):1042–50

Regulation of mu-opioid receptor in neural cells by extracellular sodium. Yabaluri N, et al. **J Neurochem** 1997 Mar;68(3):1053–61

mu-Opioid and delta-opioid receptors are expressed in brainstem antinociceptive circuits: studies using immunocytochemistry and retrograde tract-tracing. Kalyuzhny AE, et al. **J Neurosci** 1996 Oct 15; 16(20):6490–503

Presynaptic versus postsynaptic localization of mu and delta opioid receptors in dorsal and ventral striatopallidal pathways. Olive MF, et al. **J Neurosci** 1997 Oct 1; 17(19):7471–9

Ultrastructural immunocytochemical localization of mu-opioid receptors in rat nucleus accumbens: extrasynaptic plasmalemmal distribution and association with Leu5-enkephalin. Svingos AL, et al. **J Neurosci** 1996 Jul 1;16(13):4162–73

Ultrastructural evidence for prominent distribution of the mu-opioid receptor at extrasynaptic sites on noradrenergic dendrites in the rat nucleus locus coeruleus. Van Bockstaele EJ, et al. **J Neurosci** 1996 Aug 15;16(16):5037–48

A guinea pig ileum preparation devoid of functional kappa receptors: a new in vitro pharmacologic assay for mu-opioid ligands. Schwartz RW, et al. **Life Sci** 1997; 60(15):PL235–9

Modulation of G protein-coupled receptors by an estrogen receptor that activates protein kinase A. Lagrange AH, et al. **Mol Pharmacol** 1997 Apr;51(4):605–12

Increased mu opioid receptor binding detected by PET in cocaine-dependent men is associated with cocaine craving. Zubieta JK, et al. **Nat Med** 1996 Nov;2(11):1225–9

How does morphine work? [news; comment] Iversen LL. **Nature** 1996 Oct 31;383(6603):759–60. Comment on: Nature 1996 Oct 31;383(6603):819–23.

Loss of morphine-induced analgesia, reward effect and withdrawal symptoms in mice lacking the mu-opioid-receptor gene [see comments] Matthes HW, et al. **Nature** 1996 Oct 31;383(6603):819–23. Comment in: Nature 1996 Oct 31;383(6603):759–60.

Involvement of mu- and delta-opioid receptors in the effects of systemic and locally perfused morphine on extracellular levels of dopamine, DOPAC and HVA in the nucleus accumbens of the halothane-anaesthetized rat. Borg PJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):582–8

Morphine-6-O-beta-D-glucuronide but not morphine-3-O-beta-D-glucuronide binds to mu-, delta- and kappa- specific opioid binding sites in cerebral membranes. Löser SV, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):192–7

A chimeric analysis of the opioid receptor domains critical for the binding selectivity of mu opioid ligands. Watson B, et al. **Neurobiol Dis** 1996 Feb;3(1):87–96

Receptor binding properties of a hemorphin analogue in rat brain membrane preparations. Szikra J, et al. **Neurobiology (Bp)** 1996;4(3):279–80

Laminar distribution of the multiple opioid receptors in the human cerebral cortex. Hiller JM, et al. **Neurochem Res** 1996 Nov;21(11):1333–45

Sensitivity of opioid receptor binding to N-substituted maleimides and methanethiosulfonate derivatives. Shahrestanifar MS, et al. **Neurochem Res** 1996 Nov; 21(11):1295–9

Modulation of neurotransmitter release by opioid mu- and kappa-receptors from adrenergic terminals in the myenteric plexus of the guinea-pig colon: effect of alpha 2-autoreceptor blockade. Cosentino M, et al. **Neurosci Lett** 1997 Jan 31;222(2):75–8

Regulation of immunolabelled mu-opioid receptors and protein kinase C-alpha and zeta isoforms in the frontal cortex of human opiate addicts. García-Sevilla JA, et al. **Neurosci Lett** 1997 Apr 18;226(1):29–32

Inducible expression of N-methyl-D-aspartate receptor, and delta and mu opioid receptor messenger RNAs and protein in the NT2-N human cell line. Beczkowska IW, et al. **Neuroscience** 1997 Aug;79(3):855–62

The mu-opioid receptor (MOR1) is mainly restricted to neurons that do not contain GABA or glycine in the superficial dorsal horn of the rat spinal cord. Kemp T, et al. **Neuroscience** 1996 Dec;75(4):1231–8

Localization of mu-opioid receptor-like immunoreactivity in the central components of the vagus nerve: a light and electron microscope study in the rat. Nomura S, et al. **Neuroscience** 1996 Jul;73(1):277–86

In vivo binding of [125I]NH2-carfentanil to mu opioid receptors in mouse brain. Tafani JA, et al. **Nucl Med Biol** 1994 Feb;21(2):231–8

Mu-opioid receptor is involved in beta-endorphin-induced feeding in goldfish. de Pedro N, et al. **Peptides** 1996; 17(3):421–4

Effect of low pH treatment on opioid peptides binding to their receptors and functional coupling of G-proteins to adenylyl cyclase in the rat spinal cord. Reddy PL, et al. **Peptides** 1996;17(4):625–8

Mu and delta opioid receptor activation inhibits omega-conotoxin-sensitive calcium channels in a voltage- and time-dependent mode in the human neuroblastoma cell line SH-SY5Y. Toselli M, et al. **Pflugers Arch** 1997 Mar; 433(5):587–96

Influence of continuous levels of fentanyl in rats on the mu-opioid receptor in the central nervous system. Albrecht E, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):189–94

The mu1 and mu2 opioid receptor binding of ketobemidone, norketobemidone and 3-dimethylamino-1,1-diphenylbutene. Kristensen K, et al. **Pharmacol Toxicol** 1996 Aug;79(2):103–4

Agonist-selective endocytosis of mu opioid receptor by neurons in vivo. Sternini C, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9241–6

Autoradiographic mapping of mu opioid receptor changes in rat brain after long-term haloperidol treatment: relationship to the development of vacuous chewing movements. Sasaki T, et al. **Psychopharmacology (Berl)** 1996 Nov;128(1):97–104

Are mu-opioid receptors involved in the control of endothelin-1 release from the pituitary gland in normal and dehydrated rats? Płonowski A, et al. **Regul Pept** 1997 Mar 26;69(2):89–94

Cannabinoid and heroin activation of mesolimbic dopamine transmission by a common mu1 opioid receptor mechanism [see comments] Tanda G, et al. **Science** 1997 Jun 27; 276(5321):2048–50. Comment in: Science 1997 Jun 27;276(5321):1967–8. Comment in: Science 1997 Aug 8;277(5327):749; discussion 750–2.

[Specific regulation of gene expression in brain by antisense oligodeoxynucleotides] Yoshikawa M, et al. **Nippon Yakurigaku Zasshi** 1997 Apr;109(4):187–91 (10 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Central opiate mu-receptor-mediated suppression of tissue protein synthesis. Hashiguchi Y, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R920–7

Role of central mu, delta-1, and kappa-1 opioid receptors in opioid-induced muscle rigidity in the rat. Vankova ME, et al. **Anesthesiology** 1996 Sep;85(3):574–83

Effects of opioids on thermosensitivity of rat hypothalamic neurons. Yakimova KS, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:156–65

Inescapable shock-induced potentiation of morphine analgesia in rats: involvement of opioid, GABAergic, and serotonergic mechanisms in the dorsal raphe nucleus. Sutton LC, et al. **Behav Neurosci** 1997 Aug;111(4):816–24

The effects of recombinant rat mu-opioid receptor activation in CHO cells on phospholipase C, [Ca2+]i and adenylyl cyclase. Smart D, et al. **Br J Pharmacol** 1997 Mar; 120(6):1165–71

Involvement of cholinergic neurons in the release of dopamine elicited by stimulation of mu-opioid receptors in striatum. Dourmap N, et al. **Brain Res** 1997 Feb 28; 749(2):295–300

mu-Opioid receptor-induced Ca2+ mobilization and astroglial development: morphine inhibits DNA synthesis and stimulates cellular hypertrophy through a Ca(2+)-dependent mechanism. Hauser KF, et al. **Brain Res** 1996 May 13;720(1–2):191–203

The effects of morphine on carrageenin-induced spinal c-Fos expression are completely blocked by beta-funaltrexamine, a selective mu-opioid receptor antagonist. Honoré P, et

al. **Brain Res** 1996 Sep 2;732(1-2):242-6
Activation of mu-opioid receptors are required for the conditioned enhancement of NK cell activity. Hsueh CM, et al. **Brain Res** 1996 Oct 21;737(1-2):263-8
Role of opioid receptors (mu, delta 1, delta 2) in modulating responses of nociceptive neurons in the superficial and deeper dorsal horn of the medulla (trigeminal nucleus caudalis) in the rat. Wang XM, et al. **Brain Res** 1996 Nov 11;739(1-2):235-43
Autoradiographic evidence of mu-opioid receptors down-regulation after prenatal stress in offspring rat brain. Sanchez MD, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):14-21
Opioid peptide release and mu-receptor binding during amygdala kindling in rats: regional discordances. Rocha L, et al. **Epilepsy Res Suppl** 1996;12:215-28
Gx/z is regulated by mu but not delta opioid receptors in the stimulation of the low Km GTPase activity in mouse periaqueductal grey matter. Garzón J, et al. **Eur J Neurosci** 1997 Jun;9(6):1194-200
Synergy between mu/delta-opioid receptors mediates adenosine release from spinal cord synaptosomes. Cahill CM, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):45-9
Magnitude of tolerance to fentanyl is independent of mu-opioid receptor density. Chan KW, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):225-8
Evidence for mu1-opioid receptor involvement in fentanyl-mediated respiratory depression. Chen SW, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):241-4
Differences in G-protein activation by mu- and delta-opioid, and cannabinoid, receptors in rat striatum. Sim LJ, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):97-105
Kappa, but not mu or delta, opioids attenuate responses to distention of afferent fibers innervating the rat colon. Sengupta JN, et al. **Gastroenterology** 1996 Oct; 111(4):968-80
Agonist-induced desensitization of the mu opioid receptor is determined by threonine 394 preceded by acidic amino acids in the COOH-terminal tail. Pak Y, et al. **J Biol Chem** 1997 Oct 3;272(40):24961-5
Altered mu-opiate receptor-G protein signal transduction following chronic morphine exposure. Wang L, et al. **J Neurochem** 1997 Jan;68(1):248-54
Inhibition of tuberoinfundibular dopaminergic neural activity during suckling: involvement of mu and kappa opiate receptor subtypes. Callahan P, et al. **J Neuroendocrinol** 1996 Oct;8(10):771-6
Involvement of cAMP-dependent protein kinase in mu-opioid modulation of NMDA-mediated synaptic currents. Xie CW, et al. **J Neurophysiol** 1997 Aug; 78(2):759-66
Different mechanisms mediate development and expression of tolerance and dependence for peripheral mu-opioid antinociception in rat. Aley KO, et al. **J Neurosci** 1997 Oct 15;17(20):8018-23
Endogenous activation of mu and delta-1 opioid receptors is required for long-term potentiation induction in the lateral perforant path: dependence on GABAergic inhibition. Bramham CR, et al. **J Neurosci** 1996 Dec 15; 16(24):8123-31
mu-Opioid receptors modulate NMDA receptor-mediated responses in nucleus accumbens neurons. Martin G, et al. **J Neurosci** 1997 Jan 1;17(1):11-22
The alpha2a adrenergic receptor subtype mediates spinal analgesia evoked by alpha2 agonists and is necessary for spinal adrenergic-opioid synergy. Stone LS, et al. **J Neurosci** 1997 Sep 15;17(18):7157-65
Chronic morphine treatment increases stimulatory beta-2 adrenoceptor signaling in A431 cells stably expressing the mu opioid receptor. Ammer H, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):512-20
3H-morphine-6beta-glucuronide binding in brain membranes and an MOR-1-transfected cell line. Brown GP, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1291-7
Opioids binding mu and delta receptors exhibit diverse efficacy in the activation of Gi2 and G(x/z) transducer proteins in mouse periaqueductal gray matter. Garzón J, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):549-57
Antisense mapping of the MOR-1 opioid receptor clone: modulation of hyperphagia induced by DAMGO. Leventhal L, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1402-7
Antisense oligodeoxynucleotides to opioid mu and delta receptors reduced morphine dependence in mice: role of delta-2 opioid receptors. Sánchez-Blázquez P, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1423-31
Opioid modulation of the fetal hypothalamic-pituitary-adrenal axis: the role of receptor subtypes and route of administration. Taylor CC, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):129-35
Possible involvement of mu 2-opioid receptor-mediated mechanisms in morphine-induced enhancement of the pentobarbital-induced loss of the righting reflex in the mouse. Kamei J, et al. **Life Sci** 1996;59(22):PL349-53
The stimulatory effect of opioids on mitogen-activated protein kinase in Chinese hamster ovary cells transfected to express mu-opioid receptors. Li LY, et al. **Mol Pharmacol** 1996 Sep;50(3):599-602
Voltage-dependent inhibition of Ca2+ channels in GH3 cells by cloned mu- and delta-opioid receptors. Piros ET, et al. **Mol Pharmacol** 1996 Oct;50(4):947-56
Cellular mechanism for anti-analgesic action of agonists of the kappa-opioid receptor. Pan ZZ, et al. **Nature** 1997 Sep 25;389(6649):382-5
Modulatory effects of Gs-coupled excitatory opioid receptor functions on opioid analgesia, tolerance, and dependence. Crain SM, et al. **Neurochem Res** 1996 Nov;21(11):1347-51 (59 ref.)
Effects of prenatal morphine and adult estrogen administration on mu-opioid inhibition of norepinephrine release from hypothalamic slices. Vathy I, et al. **Neuroendocrinology** 1996 Jan;63(1):61-8
Mu and kappa opioid system interactions in the expression of acute opioid dependence in isolated guinea-pig ileum. Valeri P, et al. **Neuropharmacology** 1996 Mar;35(3):377-84
Endogenous opioids acting at a medullary mu-opioid receptor contribute to the behavioral antinociception produced by GABA antagonism in the midbrain periaqueductal gray. Roychowdhury SM, et al. **Neuroscience** 1996 Oct;74(3):863-72
Opioid receptor signal transduction in narcotic tolerance and dependence. **NIDA Res Monogr** 1996;162:64-6
Mu opioid receptors: cellular action and tolerance development. Mestek A, et al. **NIDA Res Monogr** 1996; 161:104-26 (87 ref.)
Involvement of opioid mu 1 receptors in morphine-induced conditioned place preference in rats. Piepponen TP, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):275-9
Interactions between vasopressin and mu-opioid systems in the rat fetus. Petrov ES, et al. **Physiol Behav** 1996 Jul; 60(1):217-30
Endogenous mu opioid systems and perioral responsiveness in the rat fetus. Petrov ES, et al. **Physiol Behav** 1997 Jul; 62(1):31-7
Opioid-receptor subtype agonist-induced enhancements of sucrose intake are dependent upon sucrose concentration. Ruegg H, et al. **Physiol Behav** 1997 Jul;62(1):121-8
Opiate receptor knockout mice define mu receptor roles in endogenous nociceptive responses and morphine-induced analgesia. Sora I, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1544-9
Opioid modulation of attention-related responses: peripheral-to-central progression and development of mu influence as learning occurs. Hernández LL, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):50-60
[Cardioprotective effects of stimulation of peripheral mu-opiate receptors, and the role of opiatergic mechanisms in the pathogenesis of stress-induced heart damage] Lishmanov IuB, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):276-8 **(Rus)**
[Effect of opiate receptor ligands on the morpho-functional state of the sympathico-adrenal system and electrical stability of the heart in acute exposure to cold] Lishmanov IuB, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):154-7 **(Rus)**
[The role of cnetral and peripheral mu and delta opiate receptors in the realization of the anti-arrhythmic effect of adaptation] Lishmonov IuB, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):378-81 **(Rus)**

ULTRASTRUCTURE

Electron microscopic distribution of mu opioid receptors on noradrenergic neurons of the locus coeruleus. Moyse E, et al. **Eur J Neurosci** 1997 Jan;9(1):128-39
Ultrastructural immunocytochemical localization of mu opioid receptors and Leu5-enkephalin in the patch compartment of the rat caudate-putamen nucleus. Wang H, et al. **J Comp Neurol** 1996 Nov 25;375(4):659-74

RECEPTORS, OPIOID, SIGMA see RECEPTORS, SIGMA

RECEPTORS, OXYTOCIN

AGONISTS

Guanine nucleotide regulation and cation sensitivity of agonist binding to rat brain oxytocin receptors. Flanagan-Cato LM, et al. **Brain Res** 1995 Dec 1; 701(1-2):75-80
Two aromatic residues regulate the response of the human oxytocin receptor to the partial agonist arginine vasopressin. Chini B, et al. **FEBS Lett** 1996 Nov 18; 397(2-3):201-6

ANALYSIS

Are there oxytocin receptors in the primate brain? Toloczko DM, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:506-9
Oxytocin and oxytocin receptor expression in reproductive tissues of the male marmoset monkey. Einspanier A, et al. **Biol Reprod** 1997 Feb;56(2):416-22
Oxytocin receptors in bovine cervix: distribution and gene expression during the estrous cycle. Fuchs AR, et al. **Biol Reprod** 1996 Mar;54(3):700-8
Pharmacological characterisation of oxytocin binding sites in the ovine pineal gland. Rahmani HR, et al. **Regul Pept** 1997 May 14;70(1):23-7

ANTAGONISTS & INHIBITORS

Inhibition of milk ejection in cows by oxytocin receptor blockade, alpha-adrenergic receptor stimulation and in unfamiliar surroundings. Bruckmaier RM, et al. **J Dairy Res** 1997 Aug;64(3):315-25
Effect of oxytocin receptor antagonists on the renal actions of oxytocin and vasopressin in the rat. Windle RJ, et al. **J Endocrinol** 1997 Feb;152(2):257-64
Infusion with an oxytocin receptor antagonist delays parturition in a marsupial. Renfree MB, et al. **J Reprod Fertil** 1996 Sep;108(1):131-7
The oxytocin receptor antagonist 1-deamino-2-D-Tyr-(OEt)-4-Thr-8-Orn-oxytocin inhibits effects of the 5-HT1A receptor agonist 8-OH-DPAT on plasma levels of insulin, cholecystokinin and somatostatin. Björkstrand E, et al. **Regul Pept** 1996 May 7;63(1):47-52
Brain oxytocin receptor antagonism disinhibits sodium appetite in preweanling rats. Chow SY, et al. **Regul Pept** 1997 Jan 29;68(2):119-24

BIOSYNTHESIS

Interferon-alpha downregulates expression of the oxytocin receptor in cultured human myometrial cells. Maggi M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E840-6
The 5' flanking region of the monogamous prairie vole oxytocin receptor gene directs tissue-specific expression in transgenic mice. Young LJ, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:514-7
Characterization of porcine endometrial, myometrial, and mammary oxytocin binding sites during gestation and labor. Lundin-Schiller S, et al. **Biol Reprod** 1996 Sep;55(3):575-81
Species differences in central oxytocin receptor gene expression: comparative analysis of promoter sequences. Young LJ, et al. **J Neuroendocrinol** 1996 Oct;8(10):777-83
Effects of interferon-tau and progesterone on oestrogen-stimulated expression of receptors for oestrogen, progesterone and oxytocin in the endometrium of ovariectomized ewes. Spencer TE, et al. **Reprod Fertil Dev** 1996;8(5):843-53

CHEMISTRY

Identification of a single residue responsible for agonist selectivity in the oxytocin-vasopressin receptors. Chini B, et al. **Ann N Y Acad Sci** 1997 May 30;812:218-21
Two aromatic residues regulate the response of the human oxytocin receptor to the partial agonist arginine vasopressin. Chini B, et al. **FEBS Lett** 1996 Nov 18; 397(2-3):201-6

DRUG EFFECTS

Comparison of in vitro and in vivo inhibitory effects of peptide and nonpeptide oxytocin antagonists on radioligand binding and uterine contractility of rats during pregnancy. Kawarabayashi T, et al. **Am J Obstet Gynecol** 1996 Nov; 175(5):1348-55
Down-regulation of oxytocin receptors and secretion of prostaglandin F2alpha after chronic treatment of ewes with estradiol-17beta. Hazzard TM, et al. **Biol Reprod** 1997 Jun; 56(6):1576-81
The desensitization of oxytocin receptors in human myometrial cells is accompanied by down-regulation of oxytocin receptor messenger RNA. Phaneuf S, et al. **J Endocrinol** 1997 Jul;154(1):7-18

GENETICS

Oxytocin receptors in bovine cervix during pregnancy and parturition: gene expression and cellular localization. Fuchs AR, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1654-60
The 5' flanking region of the monogamous prairie vole oxytocin receptor gene directs tissue-specific expression in transgenic mice. Young LJ, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:514-7
Oxytocin receptors in bovine cervix: distribution and gene expression during the estrous cycle. Fuchs AR, et al. **Biol Reprod** 1996 Mar;54(3):700-8
A new silent C to T polymorphism in the exon 3 of the oxytocin receptor gene. Liao WX, et al. **Clin Genet** 1996 Dec;50(6):533-4
Cloning, novel promoter sequence, and estrogen regulation of a rat oxytocin receptor gene. Bale TL, et al. **Endocrinology** 1997 Mar;138(3):1151-8
Expression and region-specific regulation of the oxytocin receptor gene in rat brain. Breton C, et al. **Endocrinology** 1997 May;138(5):1857-62
Gene targeting approaches to neuroendocrinology: oxytocin, maternal behavior, and affiliation. Young LJ, et al. **Horm Behav** 1997 Jun;31(3):221-31 (34 ref.)
Changes in oxytocin receptor mRNA in the rat uterus measured by competitive reverse transcription-polymerase chain reaction. Liu CX, et al. **J Endocrinol** 1996 Sep; 150(3):479-86
Species differences in central oxytocin receptor gene expression: comparative analysis of promoter sequences. Young LJ, et al. **J Neuroendocrinol** 1996 Oct;8(10):777-83
Structure and expression of the mouse oxytocin receptor gene. Kubota Y, et al. **Mol Cell Endocrinol** 1996 Nov 29; 124(1-2):25-32
Effects of estrogen on oxytocin receptor messenger ribonucleic acid expression in the uterus, pituitary, and forebrain of the female rat. Quiñones-Jenab V, et al. **Neuroendocrinology** 1997 Jan;65(1):9-17
Molecular cloning and functional characterization of the oxytocin receptor from a rat pancreatic cell line (RINm5F). Jeng YJ, et al. **Neuropeptides** 1996 Dec;30(6):557-65

RECEPTORS, OXYTOCIN

METABOLISM

Oxytocin receptors in bovine cervix during pregnancy and parturition: gene expression and cellular localization. Fuchs AR, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1654–60

Coupling of oxytocin receptor to G proteins in rat myometrium during labor: Gi receptor interaction. Strakova Z, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E870–6

Cholesterol as modulator of receptor function. Gimpl G, et al. **Biochemistry** 1997 Sep 9;36(36):10959–74

Oxytocin induces prostaglandin F2 alpha release in pregnant cows: influence of gestational age and oxytocin receptor concentrations. Fuchs AR, et al. **Biol Reprod** 1996 Mar; 54(3):647–53

Down-regulation of oxytocin receptors and secretion of prostaglandin F2alpha after chronic treatment of ewes with estradiol-17beta. Hazzard TM, et al. **Biol Reprod** 1997 Jun; 56(6):1576–81

Functional oxytocin receptors in bovine granulosa cells. Okuda K, et al. **Biol Reprod** 1997 Mar;56(3):625–31

Regulation of oxytocin receptors in bovine granulosa cells. Uenoyama Y, et al. **Biol Reprod** 1997 Sep;57(3):569–74

Oxytocin receptors expressed and coupled to Ca2+ signalling in a human vascular smooth muscle cell line. Yazawa H, et al. **Br J Pharmacol** 1996 Mar;117(5):799–804

Vasopressin and oxytocin receptors in the central nervous system. Barberis C, et al. **Crit Rev Neurobiol** 1996; 10(1):119–54 (287 ref.)

Effects of RU486 on estrogen, progesterone, oxytocin, and their receptors in the rat uterus during late gestation. Fang X, et al. **Endocrinology** 1997 Jul;138(7):2763–8

Relationships among sex steroids, oxytocin, and their receptors in the rat uterus during late gestation and at parturition. Fang X, et al. **Endocrinology** 1996 Aug; 137(8):3213–9

Separate agonist and peptide antagonist binding sites of the oxytocin receptor defined by their transfer into the V2 vasopressin receptor. Postina R, et al. **J Biol Chem** 1996 Dec 6;271(49):31593–601

Two oxytocin-binding site subtypes in rat kidney: pharmacological characterization, ontogeny and localization by in vitro and in vivo autoradiography. Arpin-Bott MP, et al. **J Endocrinol** 1997 Apr;153(1):49–59

Regulation of oxytocin, oestradiol and progesterone receptor concentrations in different uterine regions by oestradiol, progesterone and oxytocin in ovariectomized ewes. Wathes DC, et al. **J Endocrinol** 1996 Dec;151(3):375–93

Correlation between the stimulatory effect of oxytocin on the formation of inositol phosphates and the oxytocin receptor level in the pregnant rabbit myometrium. Hirata J, et al. **J Obstet Gynaecol Res** 1996 Oct;22(5):497–506

Conformational aspects of differences in requirements for oxytocin and vasopressin receptors. Oldziej S, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):703–13

Relationship between endometrial oxytocin receptors and oxytocin-induced prostaglandin F2 alpha release during the oestrous cycle and early pregnancy in pony mares. Sharp DC, et al. **J Reprod Fertil** 1997 Jan;109(1):137–44

Repetition of oxytocin stimuli increases the sensitivity of oxytocin receptors in the dissected myometrium. Wada J, et al. **J Smooth Muscle Res** 1995 Dec;31(6):522–4

Small molecule ligands for oxytocin and vasopressin receptors. Freidinger RM, et al. **Med Res Rev** 1997 Jan; 17(1):1–16 (68 ref.)

Molecular cloning and functional characterization of the oxytocin receptor from a rat pancreatic cell line (RINm5F). Jeng YJ, et al. **Neuropeptides** 1996 Dec;30(6):557–65

Vasopressin and oxytocin receptor mRNAs are expressed in the rat inner ear. Kitano H, et al. **Neuroreport** 1997 Jul 7;8(9–10):2289–92

Distribution of vasopressin and oxytocin receptors in the rat spinal cord: sex-related differences and effect of castration in pudendal motor nuclei. Tribollet E, et al. **Neuroscience** 1997 May;78(2):499–509

Myometrial steroid concentration and oxytocin receptor density in parturient women at term. Rezapour M, et al. **Steroids** 1996 Jun;61(6):338–44

[Changes in the oxytocinergic neurosecretory cells in the accessory magnocellular neuroendocrine nuclei of the rat hypothalamus during aging] Bazhanova ED, et al. **Morfologiia** 1997;111(2):44–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The role of oxytocin receptors and vasopressin V1a receptors in uterine contractions in rats: implications for tocolytic therapy with oxytocin antagonists. Chan WY, et al. **Am J Obstet Gynecol** 1996 Nov;175(5):1331–5

Molecular aspects of monogamy. Insel TR, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:302–16 (44 ref.)

Evidence for a local fetal influence on myometrial oxytocin receptors during pregnancy in the tammar wallaby (Macropus eugenii). Parry LJ, et al. **Biol Reprod** 1997 Jan; 56(1):200–7

Oxytocin receptor-mediated activation of phosphoinositidase C and elevation of cytosolic calcium in the gonadotrope-derived alphaT3-1 cell line. Evans JJ, et al. **Endocrinology** 1997 May;138(5):2049–55

Comparison of vasopressin and oxytocin receptors in the rat uterus and vascular tissue. Anouar A, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):87–96

Analogies between oxytocin systems of the uterus and brain. Caldwell JD, et al. **Horm Metab Res** 1996 Feb;28(2):65–74 (100 ref.)

Oxytocin and its receptor in pregnancy and parturition: current concepts and clinical implications. Zeeman GG, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):873–83 (107 ref.)

Assessment of the role of oxytocin receptors in phenylpropanolamine-induced anorexia in rats. McMahon LR, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):767–70

RECEPTORS, PAIN see **NOCICEPTORS**

RECEPTORS, PANCREATIC HORMONE

METABOLISM

[125I]Leu31, Pro34-PYY is a high affinity radioligand for rat PP1/Y4 and Y1 receptors: evidence for heterogeneity in pancreatic polypeptide receptors. Gehlert DR, et al. **Peptides** 1997;18(3):397–401

RECEPTORS, PANCREOZYMIN see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, PARATHYROID HORMONE

[Parathyroid hormone-related peptide (PTHrP) and PTH/PTHrP receptor in the gastrointestinal tract] Ito M, et al. **Nippon Rinsho** 1996 Apr;54(4):1104–8 (17 ref.) (Eng. Abstr.) **(Jpn)**

[PTH/PTHrP receptor] Ito M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:495–8 (10 ref.) **(Jpn)**

AGONISTS

Inverse agonism of amino-terminally truncated parathyroid hormone (PTH) and PTH-related peptide (PTHrP) analogs revealed with constitutively active mutant PTH/PTHrP receptors. Gardella TJ, et al. **Endocrinology** 1996 Sep; 137(9):3936–41

Direct mapping of an agonist-binding domain within the parathyroid hormone/parathyroid hormone-related protein receptor by photoaffinity crosslinking. Zhou AT, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3644–9

ANALYSIS

Gastric cancer associated with overexpression of parathyroid hormone-related peptide (PTHrP) and PTH/PTHrP receptor in relation to tumor progression. Ito M, et al. **J Gastroenterol** 1997 Jun;32(3):396–400

BIOSYNTHESIS

Parathyroidectomy does not affect mRNA of PTH-PTHrP receptor in kidney, liver, and heart. Smogorzewski M, et al. **Am J Nephrol** 1997;17(2):187–92

Expression of the parathyroid hormone receptor and correlation with other osteoblastic parameters in fetal rat osteoblasts. Bos MP, et al. **Calcif Tissue Int** 1996 Feb; 58(2):95–100

Abnormal skeletal response to parathyroid hormone and the expression of its receptor in chronic uremia. Drüeke TB. **Pediatr Nephrol** 1996 Jun;10(3):348–50 (23 ref.)

CHEMISTRY

Conformational characterization of a peptide mimetic of the third cytoplasmic loop of the G-protein coupled parathyroid hormone/parathyroid hormone related protein receptor. Pellegrini M, et al. **Biopolymers** 1996;40(6):653–66

Structure of a parathyroid hormone/parathyroid hormone-related peptide receptor of the human cerebellum and functional expression in human neuroblastoma SK-N-MC cells. Eggenberger M, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):127–36

GENETICS

Localization of parathyroid hormone/parathyroid hormone-related peptide receptor mRNA in kidney. Lee K, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F186–91

Expression of PTHrP, PTH/PTHrP receptor, and Ca(2+)-sensing receptor mRNAs along the rat nephron. Yang T, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):F751–8

Cell-specific expression of the parathyroid hormone (PTH)/PTH-related peptide receptor gene in kidney from kidney-specific and ubiquitous promoters. Amizuka N, et al. **Endocrinology** 1997 Jan;138(1):469–81

Histidine at position 5 is the specificity "switch" between two parathyroid hormone receptor subtypes. Behar V, et al. **Endocrinology** 1996 Oct;137(10):4217–24

Inverse agonism of amino-terminally truncated parathyroid hormone (PTH) and PTH-related peptide (PTHrP) analogs revealed with constitutively active mutant PTH/PTHrP receptors. Gardella TJ, et al. **Endocrinology** 1996 Sep; 137(9):3936–41

Tissue-specific transcription start sites and alternative splicing of the parathyroid hormone (PTH)/PTH-related peptide (PTHrP) receptor gene: a new PTH/PTHrP receptor splice variant that lacks the signal peptide. Joun H, et al. **Endocrinology** 1997 Apr;138(4):1742–9

Distribution of parathyroid hormone-2 receptor messenger ribonucleic acid in rat. Usdin TB, et al. **Endocrinology** 1996 Oct;137(10):4285–97

Assignment of the human PTH2 receptor gene (PTHR2) to chromosome 2q33 by fluorescence in situ hybridization. Usdin TB, et al. **Genomics** 1996 Oct 1;37(1):140–1

Receptors of calciotropic hormones. Findlay DM, et al. **Horm Metab Res** 1997 Mar;29(3):128–34 (77 ref.)

Cloning and characterization of the promoter regions of the human parathyroid hormone (PTH)/PTH-related peptide receptor gene: analysis of deoxyribonucleic acid from normal subjects and patients with pseudohypoparathyroidism type 1b. Bettoun JD, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1031–40

A type I collagen substrate increases PTH/PTHrP receptor mRNA expression and suppresses PTHrP mRNA expression in UMR106-06 osteoblast-like cells. Celic S, et al. **J Endocrinol** 1996 Aug;150(2):299–308

Coordinate regulation of PTH/PTHrP receptors by PTH and calcitriol in UMR 106-01 osteoblast-like cells. González EA, et al. **Kidney Int** 1996 Jul;50(1):63–70

Renal mRNA of PTH-PTHrP receptor, [Ca2+]i and phosphaturic response to PTH in phosphate depletion. Marcinkowski W, et al. **Miner Electrolyte Metab** 1997; 23(1):48–57

Expression of alternatively spliced isoforms of the parathyroid hormone (PTH)/PTH-related peptide receptor messenger RNA in human kidney and bone cells. Jobert AS, et al. **Mol Endocrinol** 1996 Sep;10(9):1066–76

Constitutive activation of the cyclic adenosine 3',5'-monophosphate signaling pathway by parathyroid hormone (PTH)/PTH-related peptide receptors mutated at the two loci for Jansen's metaphyseal chondrodysplasia. Schipani E, et al. **Mol Endocrinol** 1997 Jun;11(7):851–8

Mutations of neighboring polar residues on the second transmembrane helix disrupt signaling by the parathyroid hormone receptor. Turner PR, et al. **Mol Endocrinol** 1996 Feb;10(2):132–9

PTH/PTHrP receptor mRNA is down-regulated in epiphyseal cartilage growth plate of uraemic rats. Ureña P, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):2008–16

METABOLISM

Localization of the extracellular Ca(2+)-sensing receptor and PTH/PTHrP receptor in rat kidney. Riccardi D, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F951–6

Downregulation of the PTH/PTHrP receptor by vitamin D3 in the osteoblast-like ROS 17/2.8 cells. Xie LY, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):E654–60

Molecular basis for the management of secondary hyperparathyroidism in chronic renal failure. Fukagawa M, et al. **Artif Organs** 1995 Dec;19(12):1210–4 (25 ref.)

Mono- and bicyclic analogs of parathyroid hormone-related protein. 1. Synthesis and biological studies. Bisello A, et al. **Biochemistry** 1997 Mar 18;36(11):3293–9

Role of glycosylation in expression and function of the human parathyroid hormone/parathyroid hormone-related protein receptor. Bisello A, et al. **Biochemistry** 1996 Dec 10;35(49):15890–5

Conformational characterization of a peptide mimetic of the third cytoplasmic loop of the G-protein coupled parathyroid hormone/parathyroid hormone related protein receptor. Pellegrini M, et al. **Biopolymers** 1996;40(6):653–66

Parathyroid hormone-related peptide and the parathyroid hormone/parathyroid hormone-related peptide receptor in skeletal development. Karaplis AC, et al. **Curr Opin Nephrol Hypertens** 1997 Jul;6(4):308–13 (52 ref.)

Osteogenic action of parathyroid hormone-related peptide (1–141) in rat ROS cells. Motomura K, et al. **Endocr J** 1996 Oct;43(5):527–35

Evidence for a parathyroid hormone-2 receptor selective ligand in the hypothalamus. Usdin TB. **Endocrinology** 1997 Feb;138(2):831–4

Expression of parathyroid hormone-related peptide (PTHrP) and PTH/PTHrP receptor in newborn human calvaria osteoblastic cells. Lomri A, et al. **Eur J Endocrinol** 1997 Jun;136(6):640–8

Full activation of chimeric receptors by hybrids between parathyroid hormone and calcitonin. Evidence for a common pattern of ligand-receptor interaction. Bergwitz C, et al. **J Biol Chem** 1996 Oct 25;271(43):26469–72

The N-terminal region of the third intracellular loop of the parathyroid hormone (PTH)/PTH-related peptide receptor is critical for coupling to cAMP and inositol phosphate/Ca2+ signal transduction pathways. Huang Z, et al. **J Biol Chem** 1996 Dec 27;271(52):33382–9

Mutations in the second cytoplasmic loop of the rat parathyroid hormone (PTH)/PTH-related protein receptor result in selective loss of PTH-stimulated phospholipase C activity. Iida-Klein A, et al. **J Biol Chem** 1997 Mar 14; 272(11):6882–9

Phosphorylation of the cytoplasmic tail of the PTH/PTHrP receptor. Blind E, et al. **J Bone Miner Res** 1996 May; 11(5):578–86

Down-regulation of the receptor for parathyroid hormone (PTH) and PTH-related peptide by PTH in primary fetal rat osteoblasts. Jongen JW, et al. **J Bone Miner Res** 1996 Sep;11(9):1218–25

Changes in parathyroid hormone receptor binding affinity during egg laying: implications for calcium homeostasis in chicken. Yasuoka T, et al. **J Bone Miner Res** 1996 Dec; 11(12):1913–20

Parathyroid hormone/parathyroid hormone-related protein receptor expression in nude mice with a transplantable canine apocrine adenocarcinoma (CAC-8) and humoral hypercalcaemia of malignancy. Gröne A, et al. **J Endocrinol** 1997 Apr;153(1):123-9

Bioactivities and secondary structures of constrained analogues of human parathyroid hormone: cyclic lactams of the receptor binding region. Barbier JR, et al. **J Med Chem** 1997 Apr 25;40(9):1373-80

Expression of parathyroid hormone (PTH)-related peptide (PTHrP) and PTH/PTHrP receptor in giant cell tumour of tendon sheath. Nakashima M, et al. **J Pathol** 1996 Sep; 180(1):80-4

Coexpression and stimulation of parathyroid hormone receptor positively regulates slowly activating IsK channels expressed in Xenopus oocytes. Waldegger S, et al. **Kidney Int** 1996 Jan;49(1):112-6

Expression of alternatively spliced isoforms of the parathyroid hormone (PTH)/PTH-related peptide receptor messenger RNA in human kidney and bone cells. Jobert AS, et al. **Mol Endocrinol** 1996 Sep;10(9):1066-76

PHYSIOLOGY

Mechanisms of homologous and heterologous desensitization of PTH/PTHrP receptor signaling in LLC-PK1 cells. Guo J, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):E383-93

Receptors for parathyroid hormone and parathyroid hormone-related peptide: from molecular cloning to definition of diseases. Jüppner H, et al. **Curr Opin Nephrol Hypertens** 1996 Jul;5(4):300-6 (62 ref.)

Cell-specific signal transduction of parathyroid hormone (PTH)-related protein through stably expressed recombinant PTH/PTHrP receptors in vascular smooth muscle cells [see comments] Maeda S, et al. **Endocrinology** 1996 Aug;137(8):3154-62. Comment in: Endocrinology 1996 Aug;137(8):3151-3.

Stimulation of cell proliferation by calcium and a calcimimetic compound. Mailland M, et al. **Endocrinology** 1997 Sep;138(9):3601-5

PTH/PTHrP receptor is temporally regulated during osteoblast differentiation and is associated with collagen synthesis. McCauley LK, et al. **J Cell Biochem** 1996 Jun 15;61(4):638-47

Hypercalcemia due to constitutive activity of the parathyroid hormone (PTH)/PTH-related peptide receptor: comparison with primary hyperparathyroidism. Parfitt AM, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3584-8

[Parathyroid hormone receptors: from cloning to physiological, physiopathological and clinical implications (editorial)] Mannstadt M, et al. **Nephrologie** 1997;18(1):5-10 (45 ref.) (Eng. Abstr.) **(Fre)**

RECEPTORS, PCP see **RECEPTORS, PHENCYCLIDINE**

RECEPTORS, PDGF see **RECEPTORS, PLATELET-DERIVED GROWTH FACTOR**

RECEPTORS, PEPTIDE

11th International Symposium on Regulatory Peptides. Copenhagen, Denmark, September 3-7, 1996. Abstracts. **Regul Pept** 1996 Jul 15;64(1-3):1-230

[Vasoactive intestinal contractor (VIC)/mouse ET-2 and VIC receptor: biological activity, gene expression, and specific receptor] Saida K, et al. **Nippon Rinsho** 1996 Apr; 54(4):1115-21 (14 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

Discovery of prototype peptidomimetic agonists at the human melanocortin receptors MC1R and MC4R. Haskell-Luevano C, et al. **J Med Chem** 1997 Jul 4; 40(14):2133-9

ANALYSIS

Guanylyl cyclase receptors and guanylin-like peptides in reptilian intestine. Krause WJ, et al. **Gen Comp Endocrinol** 1997 Aug;107(2):229-39

FMLP actions and its binding sites in isolated human coronary arteries. Keitoku M, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):881-94

Enhanced expression of chemotactic receptors in multiple sclerosis lesions. Müller-Ladner U, et al. **J Neurol Sci** 1996 Dec;144(1-2):135-41

Radioligand binding using 125I-labeled peptides. Abel PW, et al. **Methods Mol Biol** 1997;73:323-9

Quantitative approach for detection and characterization of formyl peptide receptor in solution using a photoaffinity ligand. Lala A, et al. **Pept Res** 1996 Mar-Apr;9(2):58-60

Guanylyl cyclase C is a selective marker for metastatic colorectal tumors in human extraintestinal tissues. Carrithers SL, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14827-32

ANTAGONISTS & INHIBITORS

ART (protein product of agouti-related transcript) as an antagonist of MC-3 and MC-4 receptors. Fong TM, et al. **Biochem Biophys Res Commun** 1997 Aug 28; 237(3):629-31

Dynorphin peptides: antagonists of melanocortin receptors. Quillan JM, et al. **Pharm Res** 1997 Jun;14(6):713-9

Antagonism of central melanocortin receptors in vitro and in vivo by agouti-related protein. Ollmann MM, et al. **Science** 1997 Oct 3;278(5335):135-8

BIOSYNTHESIS

Signal transduction pathways via guanylin and uroguanylin in stomach and intestine. London RM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G93-105

Expression and purification of recombinant human N-formyl-L-leucyl-L-phenylalanine (FMLP) receptor: generation of polyclonal antibody against FMLP receptor. Lala A, et al. **Biochem Pharmacol** 1997 Aug 1;54(3):381-90

An autocrine/paracrine role of human decidual relaxin. I. Interstitial collagenase (matrix metalloproteinase-1) and tissue plasminogen activator. Qin X, et al. **Biol Reprod** 1997 Apr;56(4):800-11

Elevated glucose concentration and natriuretic peptides receptor response on vascular smooth muscle of spontaneously hypertensive rats. Yasunari K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S180-2

Two eye guanylyl cyclases are expressed in the same photoreceptor cells and form homomers in preference to heteromers. Yang RB, et al. **J Biol Chem** 1997 May 23; 272(21):13738-42

The heat-stable enterotoxin-guanylin receptor is expressed in rat hepatocytes and in a rat hepatoma (H-35) cell line. Balint JP, et al. **J Recept Signal Transduct Res** 1997 Jul; 17(4):609-30

Morphine down-regulates melanocortin-4 receptor expression in brain regions that mediate opiate addiction. Alvaro JD, et al. **Mol Pharmacol** 1996 Sep;50(3):583-91

CHEMISTRY

A novel G protein-coupled receptor with homology to neuropeptide and chemoattractant receptors expressed during bone development. Methner A, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):336-42

Sequence, genomic organization, and chromosomal location of the mouse Müllerian-inhibiting substance type II receptor gene. Mishina Y, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):741-6

Interconverting receptor states at 4 degrees C for the neutrophil N-formyl peptide receptor. Hoffman JF, et al. **Biochemistry** 1996 Oct 8;35(40):13047-55

Sequence-selective nonmacrocyclic two-armed receptors for peptides. Nestler HP. **Mol Divers** 1996 Oct;2(1-2):35-40 (18 ref.)

Expression of the extracellular domain of the human heat-stable enterotoxin receptor in Escherichia coli and generation of neutralizing antibodies. Nandi A, et al. **Protein Expr Purif** 1996 Sep;8(2):151-9

DRUG EFFECTS

Multiple receptors for calcitonin gene-related peptide and amylin on guinea-pig ileum and vas deferens. Tomlinson AE, et al. **Br J Pharmacol** 1996 Mar;117(6):1362-8

Use of peptide receptor agonists and antagonists for diagnosis and treatment. Jensen RT. **Digestion** 1997;58 Suppl 1:86-93 (26 ref.)

Vasopressin-induced sensitization: involvement of neurohypophyseal peptide receptors. Poulin P, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):29-39

Desensitization of the fMLP-induced NADPH-oxidase response in human neutrophils is lacking in okadaic acid-treated cells. Harbecke O, et al. **J Leukoc Biol** 1997 Jun;61(6):753-8

Preventive effect of rebamipide on gastric mucosal cell damage evoked by activation of formyl-methionyl-leucyl-phenylalanine receptors of rabbit neutrophils. Kim CD, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):478-83

[Trypsinogen as a modifier of peptidergic influences on the secretion of the gastric and pancreatic glands] Korot'ko GF, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug-Sep; 82(8-9):87-95 (Eng. Abstr.) **(Rus)**

GENETICS

Cloning of a novel member of the G protein-coupled receptor family related to peptide receptors. Feng Y, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):651-4

Sequence, genomic organization, and chromosomal location of the mouse Müllerian-inhibiting substance type II receptor gene. Mishina Y, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):741-6

Identification of a gene in the euryarchaeal Thermococcus species AN1 encoding a protein homologous to the alpha subunit of the eukaryal signal recognition particle (SRP) receptor. Ronimus RS, et al. **Biochim Biophys Acta** 1997 Mar 20;1351(1-2):1-8

A putative signal recognition particle receptor alpha subunit (SR alpha) homologue is expressed in the hyperthermophilic crenarchaeon Sulfolobus acidocaldarius. Moll R, et al. **FEMS Microbiol Lett** 1996 Mar 15; 137(1):51-6

The bovine guanylate cyclase GC-E gene and 5' flanking region. Johnston JP, et al. **Gene** 1997 Jul 9;193(2):219-27

Genetic analysis of the Müllerian-inhibiting substance signal transduction pathway in mammalian sexual differentiation. Mishina Y, et al. **Genes Dev** 1996 Oct 15;10(20):2577-87

A novel human gene encoding a G-protein-coupled receptor (GPR15) is located on chromosome 3. Heiber M, et al. **Genomics** 1996 Mar 15;32(3):462-5

Localization of the guanylyl cyclase C gene to mouse chromosome 6 and human chromosome 12p12. Mann EA, et al. **Genomics** 1996 Jun 1;34(2):265-7

A 27 base-pair deletion of the anti-müllerian type II receptor gene is the most common cause of the persistent müllerian duct syndrome. Imbeaud S, et al. **Hum Mol Genet** 1996 Sep;5(9):1269-77

Molecular evolution of the N-formyl peptide and C5a receptors in non-human primates. Alvarez V, et al. **Immunogenetics** 1996;44(6):446-52

Identification of ligand recognition sites in heat-stable enterotoxin receptor, membrane-associated guanylyl cyclase C by site-directed mutational analysis. Wada A, et al. **Infect Immun** 1996 Dec;64(12):5144-50

Molecular biology of MIS and its receptors. Teixeira J, et al. **J Androl** 1996 Jul-Aug;17(4):336-41 (21 ref.)

Multiple transcribed elements control expression of the Escherichia coli btuB gene. Franklund CV, et al. **J Bacteriol** 1997 Jun;179(12):4039-42

Expression and purification of the Saccharomyces cerevisiae alpha-factor receptor (Ste2p), a 7-transmembrane-segment G protein-coupled receptor. David NE, et al. **J Biol Chem** 1997 Jun 13;272(24):15553-61

Genetic interactions among the transmembrane segments of the G protein coupled receptor encoded by the yeast STE2 gene. Sommers CM, et al. **J Mol Biol** 1997 Feb 28; 266(3):559-75

DNA antisense strategies in the study of receptors for vasoactive peptides, and of growth and wound-healing factors. D'Orléans-Juste P, et al. **Mol Cell Biochem** 1997 Jul;172(1-2):199-211 (77 ref.)

Vitamin B12 repression of the btuB gene in Salmonella typhimurium is mediated via a translational control which requires leader and coding sequences. Ravnum S, et al. **Mol Microbiol** 1997 Jan;23(1):35-42

ISOLATION & PURIFICATION

Purification of a head-activator receptor from hydra. Franke I, et al. **Eur J Biochem** 1997 Mar 15;244(3):940-5

Organ/tissue preparations for the assessment of agonist/antagonist activity. Murnin M, et al. **Methods Mol Biol** 1997;73:343-52

METABOLISM

Distribution of Escherichia coli heat-stable enterotoxin/guanylin/uroguanylin receptors in the avian intestinal tract. Krause WJ, et al. **Acta Anat (Basel)** 1995; 153(3):210-9

Differential processing of guanylyl cyclase C along villus-crypt axis of rat small intestine. Scheving LA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1995-2004

Structure, glycosylation, and localization of rat intestinal guanylyl cyclase C: modulation by fasting. Scheving LA, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G959-68

Effects of stress-related signal molecules on cells associated with muscle tissue. Loehrke B, et al. **Anal Quant Cytol Histol** 1996 Oct;18(5):383-8

Subtle differences between human and rabbit neutrophil receptors shown by the secretagogue activity of constrained formyl peptides. Dentino AR, et al. **Arch Biochem Biophys** 1997 Jan 15;337(2):267-74

The calcium-independent receptor of alpha-latrotoxin is not a neurexin. Krasnoperov VG, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):868-75

Identification of an N-formyl peptide receptor ligand binding domain by a gain-of-function approach. Quehenberger O, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):377-81

Characterization of a putative receptor for intestinal trefoil factor in rat small intestine: identification by in situ binding and ligand blotting. Tan XD, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):673-7

A conformational epitope in the N-terminus of the Escherichia coli heat-stable enterotoxins is involved in receptor-ligand interactions. Garrett BM, et al. **Biochim Biophys Acta** 1996 Nov 15;1317(2):149-54

Effect of introduction of an arginine16 in VIP, PACAP and secretin on ligand affinity for the receptors. Gourlet P, et al. **Biochim Biophys Acta** 1996 Dec 12;1314(3):267-73

Guanylyl cyclase C is up-regulated by nonparenchymal cells and hepatocytes in regenerating rat liver. Scheving LA, et al. **Cancer Res** 1996 Nov 15;56(22):5186-91

Empty site forms of the SRP54 and SR alpha GTPases mediate targeting of ribosome-nascent chain complexes to the endoplasmic reticulum [see comments] Rapiejko PJ, et al. **Cell** 1997 May 30;89(5):703-13. Comment in: Cell 1997 May 30;89(5):673-6.

Two types of alpha-factor receptor determinants for pheromone specificity in the mating-incompatible yeasts S. cerevisiae and S. kluyveri. Sen M, et al. **Curr Genet** 1997 Mar;31(3):235-40

Co-translational protein targeting catalyzed by the Escherichia coli signal recognition particle and its receptor. Powers T, et al. **EMBO J** 1997 Aug 15;16(16):4880-6

Characterization of amylin and calcitonin receptor binding in the mouse alpha-thyroid-stimulating hormone thyrotroph cell line. Perry KJ, et al. **Endocrinology** 1997 Aug;138(8):3486-96

Specific binding sites for rat prepro-TRH-(160-169) on C6

glioma and BN1010 clonal neural cells. Ladram A, et al. **FEBS Lett** 1997 Feb 24;403(3):287–93

Expression of peptide receptors in human endocrine tumours of the pancreas. Tang C, et al. **Gut** 1997 Feb;40(2):267–71

Translocation of the neutrophil kinin moiety and changes in the regulation of kinin receptors in inflammation. Bhoola KD. **Immunopharmacology** 1996 Jun;33(1–3):247–56

Isolation and biochemical characterization of a Ca2+–independent alpha–latrotoxin–binding protein. Davletov BA, et al. **J Biol Chem** 1996 Sep 20; 271(38):23239–45

Mutant isoforms of the anti–Müllerian hormone type II receptor are not expressed at the cell membrane. Faure E, et al. **J Biol Chem** 1996 Nov 29;271(48):30571–5

Chemoattractant receptor–induced phosphorylation of L–selectin. Haribabu B, et al. **J Biol Chem** 1997 May 23; 272(21):13961–5

The role of charged residues in determining transmembrane protein insertion orientation in yeast. Harley CA, et al. **J Biol Chem** 1996 Oct 4;271(40):24625–33

Alpha–latrotoxin receptor, latrophilin, is a novel member of the secretin family of G protein–coupled receptors. Lelianova VG, et al. **J Biol Chem** 1997 Aug 22; 272(34):21504–8

Relaxin binds to and elicits a response from cells of the human monocytic cell line, THP–1. Parsell DA, et al. **J Biol Chem** 1996 Nov 1;271(44):27936–41

Desensitization of N–formylpeptide receptor–mediated activation is dependent upon receptor phosphorylation. Prossnitz ER. **J Biol Chem** 1997 Jun 13;272(24):15213–9

Undifferentiated U937 cells transfected with chemoattractant receptors: a model system to investigate chemotactic mechanisms and receptor structure/function relationships. Kew RR, et al. **J Leukoc Biol** 1997 Mar;61(3):329–37

Fixation traps formyl peptide receptors in high and low affinity forms that can be regulated by GTP[S] in the absence of ligand. Domalewski MD, et al. **J Recept Signal Transduct Res** 1996 Jan–Mar;16(1–2):59–75

Receptor imaging of human diseases using radiolabeled peptides. Reubi JC, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):379–92 (19 ref.)

Two novel probes reveal tubular and vascular Arg–Gly–Asp (RGD) binding sites in the ischemic rat kidney. Romanov V, et al. **Kidney Int** 1997 Jul;52(1):93–102

Phosphorylation and activation of the intestinal guanylyl cyclase receptor for Escherichia coli heat–stable toxin by protein kinase C. Crane JK, et al. **Mol Cell Biochem** 1996 Dec 20;165(2):111–20

Expression cloning of new receptors used by simian and human immunodeficiency viruses [see comments] Deng HK, et al. **Nature** 1997 Jul 17;388(6639):296–300. Comment in: Nature 1997 Jul 17;388(6639):230–1.

Role of melanocortinergic neurons in feeding and the agouti obesity syndrome [see comments] Fan W, et al. **Nature** 1997 Jan 9;385(6612):165–8. Comment in: Nature 1997 Jan 9;385(6612):119–20.

Modes of peptide binding in G protein–coupled receptors. Berthold M, et al. **Neurochem Res** 1997 Aug;22(8):1023–31 (57 ref.)

Amylin mobilizes [Ca2+]i and stimulates the release of pancreatic digestive enzymes from rat acinar AR42J cells: evidence for an exclusive receptor system of amylin. Huang Y, et al. **Peptides** 1996;17(3):497–502

The NG domain of the prokaryotic signal recognition particle receptor, FtsY, is fully functional when fused to an unrelated integral membrane polypeptide. Zelazny A, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6025–9

Short–time stability of markers of coagulation and fibrinolysis in frozen plasma [published erratum appears in Thromb Res 1996 Apr 15;82(2):199] Iversen LH, et al. **Thromb Res** 1996 Jan 15;81(2):253–61

PHYSIOLOGY

On the role of muscarinic and peptidergic receptors in ganglionic transmission in bullfrogs in vivo. Ivanoff AY, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1501–14

Cooperation between the Fc epsilonR1 and formyl peptide receptor signaling pathways in RBL(FPR) cells: the contribution of receptor–specific Ca2+ mobilization responses. Lee RJ, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):812–9

Targeted disruption of the melanocortin–4 receptor results in obesity in mice. Huszar D, et al. **Cell** 1997 Jan 10; 88(1):131–41

A peptide with unique receptor specificity: stimulation of phosphoinositide hydrolysis and induction of superoxide generation in human neutrophils. Seo JK, et al. **J Immunol** 1997 Feb 15;158(4):1895–901

alpha–Latrotoxin stimulates exocytosis by the interaction with a neuronal G–protein–coupled receptor. Krasnoperov VG, et al. **Neuron** 1997 Jun;18(6):925–37

Regulation of intestinal uroguanylin/guanylin receptor–mediated responses by mucosal acidity. Hamra FK, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18; 94(6):2705–10

Müllerian inhibiting substance as a model for the transforming growth factor–beta family: development of new treatment strategies. Shah PC, et al. **Semin Pediatr Surg** 1996 Aug; 5(3):182–90 (34 ref.)

[Vesicular flow in epithelial cells: physiopathologic importance of two multiligand receptors] Verroust PJ, et al. **Bull Acad Natl Med** 1996 Jun–Jul;180(6):1187–97; discussion 1197–8 (Eng. Abstr.) **(Fre)**

RECEPTORS, PEPTIDE, INVERTEBRATE see **RECEPTORS, INVERTEBRATE PEPTIDE**

RECEPTORS, PHENCYCLIDINE

METABOLISM

Interaction of the chiral forms of ketamine with opioid, phencyclidine, sigma and muscarinic receptors. Hustveit O, et al. **Pharmacol Toxicol** 1995 Dec;77(6):355–9

PHYSIOLOGY

In vivo functional interaction between phencyclidine binding sites and sigma receptors to produce head–weaving behavior in rats. Kitaichi K, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):205–11

RECEPTORS, PHEROMONE see **CHEMORECEPTORS**

RECEPTORS, PITUITARY HORMONE

AGONISTS

Truncation studies of alpha–melanotropin peptides identify tripeptide analogues exhibiting prolonged agonist bioactivity. Haskell–Luevano C, et al. **Peptides** 1996; 17(6):995–1002

ANALYSIS

Distribution of GLP–1 and PACAP receptors in human tissues. Wei Y, et al. **Acta Physiol Scand** 1996 Jul; 157(3):355–7 (7 ref.)

Pituitary adenylate cyclase–activating polypeptide and its type I receptors in the rat hypothalamus: neuroendocrine interactions. Shioda S, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:670–6

Localization of pituitary adenylate cyclase–activating polypeptide and its type I receptors in the rat ovary: immunohistochemistry and in situ hybridization. Shioda S, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:677–83

Human epidermal melanocyte and keratinocyte melanotropin receptors: visualization by melanotropic peptide conjugated macrospheres (polyamide beads). Jiang J, et al. **Exp Dermatol** 1997 Feb;6(1):6–12

Human dermal microvascular endothelial cells express the melanocortin receptor type 1 and produce increased levels of IL–8 upon stimulation with alpha–melanocyte–stimulating hormone. Hartmeyer M, et al. **J Immunol** 1997 Aug 15;159(4):1930–7

Evidence for the presence of receptors for pituitary adenylate cyclase–activating polypeptide in the neurohypophysis that are positively coupled to cyclic AMP formation and neurohypophyseal hormone secretion. Lutz–Bucher B, et al. **Neuroendocrinology** 1996 Aug;64(2):153–61

ANTAGONISTS & INHIBITORS

PACAP hybrid: a new PACAP receptor antagonist. Pisegna JR, et al. **Life Sci** 1997;61(6):631–9

BIOSYNTHESIS

Ocular expression of type–I pituitary adenylate cyclase–activating polypeptide (PACAP) receptors. Cavallaro S, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:555–7

Ontogeny of PACAP and PACAP receptors in the rat brain: role of PACAP in the cerebellum during development. Gonzalez BJ, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:302–13; discussion 313–4 (51 ref.)

Purification of recombinant human pituitary adenylate cyclase–activating polypeptide receptor expressed in Sf9 insect cells. Ohtaki T, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:590–4

PACAP and type I PACAP receptors in the pineal gland. Olcese J, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:595–600

Localization of pituitary adenylate cyclase–activating polypeptide and its type I receptors in the rat ovary: immunohistochemistry and in situ hybridization. Shioda S, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:677–83

Multiple human receptors for pituitary adenylyl cyclase–activating polypeptide and vasoactive intestinal peptide are expressed in a tissue–specific manner. Wei Y, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:624–7

Pituitary adenylate cyclase–activating polypeptide/vasoactive intestinal polypeptide receptor subtypes are differently expressed in rat transplanted pituitary tumours (SMtTW) and in the normal gland. Vertongen P, et al. **J Mol Endocrinol** 1996 Jun;16(3):239–48

Expression of pituitary adenylate cyclase–activating polypeptide (PACAP) receptors and PACAP in human fetal retina. Olianas MC, et al. **J Neurochem** 1997 Sep; 69(3):1213–8

Expression of PACAP and its type–I receptor isoforms in the rat ovary. Scaldaferri L, et al. **Mol Cell Endocrinol** 1996 Mar 25;117(2):227–32

Switches in the expression and function of PACAP and VIP receptors during phenotypic interconversion in human neuroblastoma cells. Lelièvre V, et al. **Neuropeptides** 1996 Aug;30(4):313–22

PACAP type I receptor gene expression in the paravertricular and supraoptic nuclei of rats. Nomura M, et al. **Neuroreport** 1996 Dec 20;8(1):67–70

Expression of pituitary adenylate cyclase activating polypeptide receptors in the early mouse embryo as assessed by reverse transcription polymerase chain reaction and in situ hybridisation. Sheward WJ, et al. **Neurosci Lett** 1996 Sep 20;216(1):45–8

Ontogeny of pituitary adenylate cyclase activating polypeptide and its receptor mRNA in the mouse brain. Shuto Y, et al. **Regul Pept** 1996 Dec 3;67(2):79–83

CHEMISTRY

Genomic organization of the rat pituitary adenylate cyclase–activating polypeptide receptor gene. Alternative splicing within the 5'–untranslated region. Chatterjee TK, et al. **J Biol Chem** 1997 May 2;272(18):12122–31

DRUG EFFECTS

A selective protein kinase C inhibitor (CGP 41251) positively and negatively modulates melanoma cell MSH receptors. Siegrist W, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar;15(1–4):283–96

GENETICS

Localization of the human pituitary adenylate cyclase–activating polypeptide receptor (PACAP1–R) gene to 7p15–p14 by fluorescence in situ hybridization. Brabet P, et al. **Genomics** 1996 Nov 15;38(1):100–2

The Asp84Glu variant of the melanocortin 1 receptor (MC1R) is associated with melanoma. Valverde P, et al. **Hum Mol Genet** 1996 Oct;5(10):1663–6

Identification of common polymorphisms in the coding sequence of the human MSH receptor (MCIR) with possible biological effects. Koppula SV, et al. **Hum Mutat** 1997;9(1):30–6

Genomic organization of the rat pituitary adenylate cyclase–activating polypeptide receptor gene. Alternative splicing within the 5'–untranslated region. Chatterjee TK, et al. **J Biol Chem** 1997 May 2;272(18):12122–31

Molecular cloning of a novel variant of the pituitary adenylate cyclase–activating polypeptide (PACAP) receptor that stimulates calcium influx by activation of L–type calcium channels. Chatterjee TK, et al. **J Biol Chem** 1996 Dec 13;271(50):32226–32

Induction of constitutive melanogenesis in amelanotic mouse melanoma cells by transfection of the human melanocortin–1 receptor gene. Chluba–de Tapia J, et al. **J Cell Sci** 1996 Aug;109 (Pt 8):2023–30

Production of POMC, CRH–R1, MC1, and MC2 receptor mRNA and expression of tyrosinase gene in relation to hair cycle and dexamethasone treatment in the C57BL/6 mouse skin. Ermak G, et al. **J Invest Dermatol** 1997 Feb; 108(2):160–5

Deficiency of glutathione S–transferases T1 and M1 as heritable factors of increased cutaneous UV sensitivity. Kerb R, et al. **J Invest Dermatol** 1997 Feb;108(2):229–32

Stable expression of the human MSH receptor in a mouse melanoma cell line. Tapia JC, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar;15(1–4):43–53

A missense mutation in the gene for melanocyte–stimulating hormone receptor (MC1R) is associated with the chestnut coat color in horses. Marklund L, et al. **Mamm Genome** 1996 Dec;7(12):895–9

Val92Met variant of the melanocyte stimulating hormone receptor gene [letter; comment] Xu X, et al. **Nat Genet** 1996 Dec;14(4):384. Comment on: Nat Genet 1995 Nov;11(3):328–30.

Distribution of mRNAs for pituitary adenylate cyclase–activating polypeptide (PACAP), PACAP receptor, vasoactive intestinal polypeptide (VIP), and VIP receptors in the rat superior cervical ganglion. Nogi H, et al. **Neurosci Lett** 1997 May 9;227(1):37–40

Expression of pituitary adenylate cyclase activating polypeptide receptors in the early mouse embryo as assessed by reverse transcription polymerase chain reaction and in situ hybridisation. Sheward WJ, et al. **Neurosci Lett** 1996 Sep 20;216(1):45–8

Localization and gene expression of the receptor for pituitary adenylate cyclase–activating polypeptide in the rat brain. Shioda S, et al. **Neurosci Res** 1997 Aug;28(4):345–54

ISOLATION & PURIFICATION

Purification of recombinant human pituitary adenylate cyclase–activating polypeptide receptor expressed in Sf9 insect cells. Ohtaki T, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:590–4

METABOLISM

PACAP–(1–38) as neurotransmitter in pig pancreas: receptor activation revealed by the antagonist PACAP–(6–38). Tornøe K, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G436–46

PACAP–preferring receptors in human hyperplastic prostate. Carmena MJ, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:708–12

Modulation of cyclic AMP and inositol phosphate production in rat prostatic cultures by VIP/PACAP, ATP, and carbachol: role in prostatic proliferation. Guijarro LG, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:723–8

Current status of PACAP as a regulator of insulin secretion

in pancreatic islets. Yada T, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:329–40; discussion 341–2

PACAP type I receptor activation promotes cerebellar neuron survival through the cAMP/PKA signaling pathway. Campard PK, et al. **DNA Cell Biol** 1997 Mar; 16(3):323–33

Photoaffinity labeling analysis of the interaction of pituitary adenylate-cyclase-activating polypeptide (PACAP) with the PACAP type I receptor. Cao YJ, et al. **Eur J Biochem** 1997 Mar 1;244(2):400–6

Melanotropic peptide receptors: membrane markers of human melanoma cells. Jiang J, et al. **Exp Dermatol** 1996 Dec; 5(6):325–33

Binding and internalization of the melanocyte stimulating hormone receptor ligand [Nle4, D-Phe7] alpha-MSH in B16 melanoma cells. Wong W, et al. **Int J Biochem Cell Biol** 1996 Nov;28(11):1223–32

Response and level of beta-adrenergic, vasoactive intestinal peptide, and PACAP receptors during the circadian cycle. Hirota A, et al. **Invest Ophthalmol Vis Sci** 1997 Aug; 38(9):1708–18

DNA binding properties of peroxisome proliferator-activated receptor subtypes on various natural peroxisome proliferator response elements. Importance of the 5'-flanking region. Juge-Aubry C, et al. **J Biol Chem** 1997 Oct 3;272(40):25252–9

Maxadilan, the vasodilator from sand flies, is a specific pituitary adenylate cyclase activating peptide type I receptor agonist. Moro O, et al. **J Biol Chem** 1997 Jan 10;272(2):966–70

beta-Methylation of the Phe7 and Trp9 melanotropin side chain pharmacophores affects ligand-receptor interactions and prolonged biological activity. Haskell-Luevano C, et al. **J Med Chem** 1997 Aug 15;40(17):2740–9

Tissue specific expression of different human receptor types for pituitary adenylate cyclase activating polypeptide and vasoactive intestinal polypeptide: implications for their role in human physiology. Wei Y, et al. **J Neuroendocrinol** 1996 Nov;8(11):811–7

alpha-MSH receptor autoradiography on mouse and human melanoma tissue sections and biopsies. Bagutti C, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1–4):427–42

MSH receptors and the response of human A375 melanoma cells to interleukin-1 beta. Baumann JB, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1–3):199–210

A selective protein kinase C inhibitor (CGP 41251) positively and negatively modulates melanoma cell MSH receptors. Siegrist W, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1–4):283–96

Melanocortin probes for the melanoma MC1 receptor: synthesis, receptor binding and biological activity. Erskine-Grout ME, et al. **Melanoma Res** 1996 Apr; 6(2):89–94

Vasoactive intestinal polypeptide and pituitary adenylate cyclase-activating polypeptide receptor chimeras reveal domains that determine specificity of vasoactive intestinal polypeptide binding and activation. Hashimoto H, et al. **Mol Pharmacol** 1997 Jul;52(1):128–35

Properties of the pituitary adenylate cyclase-activating polypeptide I and II receptors, vasoactive intestinal peptide1, and chimeric amino-terminal pituitary adenylate cyclase-activating polypeptide/vasoactive intestinal peptide1 receptors: evidence for multiple receptor states. Van Rampelbergh J, et al. **Mol Pharmacol** 1996 Dec; 50(6):1596–604

PACAP acts through VIP type 2 receptors in the rat testis. Krempels K, et al. **Neuropeptides** 1995 Dec;29(6):315–20

Localization and gene expression of the receptor for pituitary adenylate cyclase-activating polypeptide in the rat brain. Shioda S, et al. **Neurosci Res** 1997 Aug;28(4):345–54

Fluorine-18-labeled [Nle4,D-Phe7]-alpha-MSH, an alpha-melanocyte stimulating hormone analogue. Vaidyanathan G, et al. **Nucl Med Biol** 1997 Feb;24(2):171–8

Melanotropic peptide-conjugated beads for microscopic visualization and characterization of melanoma melanotropin receptors. Sharma SD, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13715–20

Pituitary adenylate cyclase activating polypeptide (PACAP) redistributes the blood within the pancreas of anesthetized rats. Carlsson PO, et al. **Regul Pept** 1996 Jul 5;63(2–3):123–8

C-terminally shortened pituitary adenylate cyclase-activating peptides (PACAP) discriminate PACAP I, PACAP II-VIP1 and PACAP II-VIP2 recombinant receptors. Gourlet P, et al. **Regul Pept** 1996 Apr 23;62(2–3):125–30

Expression of pituitary adenylate cyclase activating peptide (PACAP) and PACAP type I receptors in the rat adrenal medulla. Moller K, et al. **Regul Pept** 1996 Jul 5; 63(2–3):129–39

PHYSIOLOGY

Characterization of PACAP receptors and signaling pathways in rabbit gastric muscle cells. Murthy KS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1391–9

Dual effects of PACAP on guinea pig gallbladder muscle via PACAP-preferring and VIP/PACAP-preferring receptors. Parkman HP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1433–8

PACAPs stimulate duodenal bicarbonate secretion at PACAP receptors in the rat. Takeuchi K, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G646–53

Pituitary adenylate cyclase-activating polypeptide (PACAP) and insulin secretion: effects and mechanisms. af Klinteberg K, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:543–8

Pituitary adenylate cyclase-activating polypeptides, PACAP-38 and PACAP-27, regulation of sympathetic neuron catecholamine, and neuropeptide Y expression through activation of type I PACAP/VIP receptor isoforms. Braas KM, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:204–16; discussion 217–8 (47 ref.)

PACAP/VIP receptor subtypes, signal transducers, and effectors in pituitary cells. Hezareh M, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:315–27; discussion 327–8 (41 ref.)

PACAP/VIP receptors in pancreatic beta-cells: their roles in insulin secretion. Inagaki N, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:44–51; discussion 52–3 (23 ref.)

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP-1, and other members of their new family of G protein-linked receptors: structure-function relationship with special reference to the human VIP-1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94–109; discussion 110–1 (64 ref.)

Chimaeric VIP2/PACAP receptors reveal that agonist pharmacology but not signal transduction is determined by extracellular domain 1. Lutz EM, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:574–8

Phospholipase C activation by VIP1 and VIP2 receptors expressed in COS 7 cells involves a pertussis toxin-sensitive mechanism. MacKenzie CJ, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:579–84

Differential signaling and immediate-early gene activation by four splice variants of the human pituitary adenylate cyclase-activating polypeptide receptor (hPACAP-R). Pisegna JR, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:54–64; discussion 64–6

PACAP-type IB receptors mediate stimulation of phosphoinositide metabolism in mouse neuroblastoma cells, clone N1E-115. Taylor JE. **Ann N Y Acad Sci** 1996 Dec 26;805:620–3

VIP and PACAP receptor-mediated actions on cell proliferation and survival. Waschek JA. **Ann N Y Acad Sci** 1996 Dec 26;805:290–300; discussion 300–1 (71 ref.)

The pituitary adenylate cyclase activating polypeptide (PACAP I) and VIP (PACAP II VIP1) receptors stimulate inositol phosphate synthesis in transfected CHO cells through interaction with different G proteins. Van Rampelbergh J, et al. **Biochim Biophys Acta** 1997 Jun 27; 1357(2):249–55

Pituitary adenylate cyclase activating polypeptide (PACAP) and vasoactive intestinal peptide (VIP) stimulate interleukin-6 production through the third subtype of PACAP/VIP receptor in rat bone marrow-derived stromal cells. Cai Y, et al. **Endocrinology** 1997 Jun;138(6):2515–20

Vasoactive intestinal peptide (VIP) and pituitary adenylate cyclase-activating polypeptide (PACAP) potentiate the glutamate-evoked release of arachidonic acid from mouse cortical neurons. Evidence for a cAMP-independent mechanism. Stella N, et al. **J Biol Chem** 1996 Sep 27; 271(39):23705–10

PACAP and VIP stimulate Ca2+ oscillations in rat gonadotrophs through the PACAP/VIP type 1 receptor (PVR1) linked to a pertussis toxin-insensitive G-protein and the activation of phospholipase C-beta. Hezareh M, et al. **J Neuroendocrinol** 1996 May;8(5):367–74

Evidence for the presence of receptors for pituitary adenylate cyclase-activating polypeptide in the neurohypophysis that are positively coupled to cyclic AMP formation and neurohypophyseal hormone secretion. Lutz-Bucher B, et al. **Neuroendocrinology** 1996 Aug;64(2):153–61

Evidence for roles of vasoactive intestinal polypeptide (VIP) and pituitary adenylate cyclase activating polypeptide (PACAP) receptors in modulating the responses of rat dorsal horn neurons to sensory inputs. Dickinson T, et al. **Neuropeptides** 1997 Apr;31(2):175–85

The neuropeptide alpha-MSH has specific receptors on neutrophils and reduces chemotaxis in vitro. Catania A, et al. **Peptides** 1996;17(4):675–9

RECEPTORS, PITUITARY HORMONE-REGULATING HORMONE

[GRH receptor] Sato M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:468–71 (7 ref.) **(Jpn)**

AGONISTS

Chronic administration of a new potent agonist of growth hormone- releasing hormone induces compensatory linear growth in growth hormone-deficient rats: mechanism of action. Kovács M, et al. **Neuroendocrinology** 1996 Sep; 64(3):169–76

ANALYSIS

Tissue-specific molecular heterogeneity of human growth hormone-releasing hormone receptor protein. Fujinaka Y, et al. **FEBS Lett** 1996 Sep 23;394(1):1–4

BIOSYNTHESIS

Glucocorticoids regulate pituitary growth hormone-releasing hormone receptor messenger ribonucleic acid expression. Miller TL, et al. **Endocrinology** 1997 Jun;138(6):2458–65

Pituitary growth hormone-releasing factor receptor expression in normal and dwarf rats. Carmignac DF, et al. **Neuroendocrinology** 1996 Sep;64(3):177–85

CHEMISTRY

Tissue-specific molecular heterogeneity of human growth hormone-releasing hormone receptor protein. Fujinaka Y, et al. **FEBS Lett** 1996 Sep 23;394(1):1–4

Investigation of growth hormone releasing hormone receptor structure and activity using yeast expression technologies. Kajkowski EM, et al. **J Recept Signal Transduct Res** 1997 Jan-May;17(1–3):293–303

DRUG EFFECTS

Gene expression of the receptor for growth-hormone-releasing hormone is physiologically regulated by glucocorticoids and estrogen. Lam KS, et al. **Neuroendocrinology** 1996 Jun;63(6):475–80

GENETICS

Gender difference in pituitary growth hormone-releasing factor (GRF) receptor gene expression in the rat. Miki N, et al. **Endocr J** 1996 Oct;43 Suppl:S123–5

Homologous down-regulation of growth hormone-releasing hormone receptor messenger ribonucleic acid levels. Aleppo G, et al. **Endocrinology** 1997 Mar;138(3):1058–65

Growth hormone-releasing hormone (GHRH) receptor mutation and dwarfism: after the mouse, the human. Bertherat J. **Eur J Endocrinol** 1996 Jun;134(6):684–5

Thyroid hormone and glucocorticoid regulation of pituitary growth hormone-releasing hormone receptor gene expression. Korytko AI, et al. **J Endocrinol** 1997 Feb; 152(2):R13–7

Dexamethasone increases growth hormone (GH)-releasing hormone (GRH) receptor mRNA levels in cultured rat anterior pituitary cells. Tamaki M, et al. **J Neuroendocrinol** 1996 Jun;8(6):475–80

METABOLISM

Growth hormone-releasing hormone receptor mRNA in acromegalic pituitary tumors. Lopes MB, et al. **Am J Pathol** 1997 Jun;150(6):1885–91

PHYSIOLOGY

The growth-hormone-releasing hormone receptor: signal transduction, gene expression, and physiological function in growth regulation. Mayo KE, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:184–203 (35 ref.)

RECEPTORS, PITUITARY HORMONE RELEASE INHIBITING HORMONES see **RECEPTORS, PITUITARY HORMONE-REGULATING HORMONE**

RECEPTORS, PITUITARY HORMONE-RELEASING HORMONE see **RECEPTORS, PITUITARY HORMONE-REGULATING HORMONE**

RECEPTORS, PLATELET-DERIVED GROWTH FACTOR

ANALYSIS

PDGFR alpha expression during mouse embryogenesis: immunolocalization analyzed by whole-mount immunohistostaining using the monoclonal anti-mouse PDGFR alpha antibody APA5. Takakura N, et al. **J Histochem Cytochem** 1997 Jun;45(6):883–93

Immunolocalization of platelet-derived growth factor A and B chains and PDGF-alpha and beta receptors in human gingival wounds. Green RJ, et al. **J Periodontal Res** 1997 Feb;32(2):209–14

Platelet-derived growth factor A and B chains and the alpha and beta receptors in prostatic intraepithelial neoplasia. Fudge K, et al. **Prostate** 1996 Nov;29(5):282–6

ANTAGONISTS & INHIBITORS

Platelet-activating factor is an effector of rapid reactions and an inductor of late responses in immune-mediated injury. Sanchez Crespo M, et al. **Adv Exp Med Biol** 1996;416:195–9

Phosphorylation site-specific inhibition of platelet-derived growth factor beta-receptor autophosphorylation by the receptor blocking tyrphostin AG1296. Kovalenko M, et al. **Biochemistry** 1997 May 27;36(21):6260–9

Antisense oligonucleotide inhibition of PDGFR-beta receptor subunit expression directs suppression of intimal thickening [see comments] Sirois MG, et al. **Circulation** 1997 Feb 4;95(3):669–76. Comment in: Circulation 1997 Feb 4;95(3):555–6.

TGF-beta1 selectively suppresses PDGF receptor signaling pathways in MG-63 human osteosarcoma cell. Hung LM, et al. **Life Sci** 1997;61(7):685–93

RECEPTORS, PLATELET-DERIVED GROWTH FACTOR

BIOSYNTHESIS

Gene expression of PDGF and PDGF receptor in various forms of glomerulonephritis. Matsuda M, et al. **Am J Nephrol** 1997;17(1):25–31

Basic fibroblast growth factor induces expression of the PDGF receptor–alpha on human bronchial smooth muscle cells. Bonner JC, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L880–8

Ischemia–induced transplant arteriosclerosis in the rat. Induction of peptide growth factor expression. Waltenberger J, et al. **Arterioscler Thromb Vasc Biol** 1996 Dec;16(12):1516–23

Proteinases are isoform–specific regulators of the binding of transforming growth factor beta to alpha 2–macroglobulin. Webb DJ, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):551–5

Expression of platelet–derived growth factor (PDGF) receptor alpha–subunit in mouse brain: comparison of Patch mutants and normal littermates. Zhang FX, et al. **Cell Mol Neurobiol** 1996 Aug;16(4):479–87

Lens–specific expression of PDGF–A alters lens growth and development. Reneker LW, et al. **Dev Biol** 1996 Dec 15; 180(2):554–65

Receptor induction regulates the synergistic effects of substance P with IL–1 and platelet–derived growth factor on the proliferation of bone marrow fibroblasts. Rameshwar P, et al. **J Immunol** 1997 Apr 1;158(7):3417–24

Reduced expression of PDGF and PDGF receptors during impaired wound healing. Beer HD, et al. **J Invest Dermatol** 1997 Aug;109(2):132–8

Evidence for neuronal regulation of oligodendrocyte development: cellular localization of platelet–derived growth factor alpha receptor and A–chain mRNA during cerebral cortex development in the rat. Ellison JA, et al. **J Neurosci Res** 1996 Jul 1;45(1):28–39

Temporal expression of platelet–derived growth factor (PDGF)–A and its receptor in human preimplantation embryos. Osterlund C, et al. **Mol Hum Reprod** 1996 Jul; 2(7):507–12

Expression of platelet–derived growth factor ligands and receptors by rat aortic endothelium in vivo. Lindner V. **Pathobiology** 1995;63(5):257–64

Identification of PDGF receptors on human megakaryocytes and megakaryocytic cell lines. Yang M, et al. **Thromb Haemost** 1997 Aug;78(2):892–6

Cytomegalovirus infection accelerates experimental obliterative bronchiolitis via platelet–derived growth factor upregulation. Koskinen P, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):798

Expression of platelet–derived growth factor in the development of cardiac allograft vasculopathy in the rat. Lemström K, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1045–6

DRUG EFFECTS

Transforming growth factor beta as a potential tumor progression factor among hyperdiploid glioblastoma cultures: evidence for the role of platelet–derived growth factor. Jennings MT, et al. **J Neurooncol** 1997 Feb; 31(3):233–54

GENETICS

Altered development of spinal cord in the mouse mutant (Patch) lacking the PDGF receptor alpha–subunit gene. Li L, et al. **Brain Res Dev Brain Res** 1996 Oct 23; 96(1–2):204–9

Spina bifida occulta in homozygous Patch mouse embryos. Payne J, et al. **Dev Dyn** 1997 May;209(1):105–16

Isolation and characterization of the platelet–derived growth factor beta receptor promoter. Shinbrot E, et al. **Dev Dyn** 1997 Feb;208(2):211–9

Disruption of gastrulation and oral–aboral ectoderm differentiation in the Lytechinus pictus embryo by a dominant/negative PDGF receptor. Ramachandran RK, et al. **Development** 1997 Jun;124(12):2355–64

Nuclear factor Y controls the basal transcription activity of the mouse platelet–derived–growth–factor beta–receptor gene. Ishisaki A, et al. **Eur J Biochem** 1997 May 15; 246(1):142–6

Involvement of phosphatidylinositide 3'–kinase and Rac in platelet–derived growth factor–induced actin reorganization and chemotaxis. Hooshmand–Rad R, et al. **Exp Cell Res** 1997 Aug 1;234(2):434–41

Conserved linkage between the puffer fish (Fugu rubripes) and human genes for platelet–derived growth factor receptor and macrophage colony–stimulating factor receptor. How GF, et al. **Genome Res** 1996 Dec; 6(12):1185–91

An RT–PCR analysis of mRNA for growth factor receptors in damaged and control sensory epithelia of rat utricles. Saffer LD, et al. **Hear Res** 1996 May;94(1–2):14–23

Expression of PDGF and PDGF receptor mRNA in glomeruli in IgA nephropathy. Terada Y, et al. **J Am Soc Nephrol** 1997 May;8(5):817–9

Analysis of mutant platelet–derived growth factor receptors expressed in PC12 cells identifies signals governing sodium channel induction during neuronal differentiation. Fanger GR, et al. **Mol Cell Biol** 1997 Jan;17(1):89–99

PDGF–alpha receptor and myelin basic protein mRNAs are not coexpressed by oligodendrocytes in vivo: a double in situ hybridization study in the anterior medullary velum of the neonatal rat. Butt AM, et al. **Mol Cell Neurosci** 1997; 8(5):311–22

PLC–gamma activation is required for PDGF–betaR–mediated mitogenesis and monocytic differentiation of myeloid progenitor cells. Alimandi M, et al. **Oncogene** 1997 Jul 31;15(5):585–93

Integration of proviral DNA into the PDGF beta–receptor gene in HTLV–I–infected T–cells results in a novel tyrosine kinase product with transforming activity. Chi KD, et al. **Oncogene** 1997 Aug 28;15(9):1051–7

Oncogenic activation of the alphaPDGFR defines a domain that negatively regulates receptor dimerization. Uren A, et al. **Oncogene** 1997 Jan 16;14(2):157–62

IMMUNOLOGY

An antibody reactive with domain 4 of the platelet–derived growth factor beta receptor allows BB binding while inhibiting proliferation by impairing receptor dimerization. Shulman T, et al. **J Biol Chem** 1997 Jul 11;272(28):17400–4

ISOLATION & PURIFICATION

Isolation and characterization of the platelet–derived growth factor beta receptor promoter. Shinbrot E, et al. **Dev Dyn** 1997 Feb;208(2):211–9

Spinal cord oligodendrocytes develop from ventrally derived progenitor cells that express PDGF alpha–receptors. Hall A, et al. **Development** 1996 Dec;122(12):4085–94

METABOLISM

Expression of platelet–derived growth factor and its receptors in normal human liver and during active hepatic fibrogenesis. Pinzani M, et al. **Am J Pathol** 1996 Mar; 148(3):785–800

Temporal expression of PDGF receptors and PDGF regulatory effects on osteoblastic cells in mineralizing cultures. Yu X, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1709–16

Different roles for PDGF–alpha and –beta receptors in embryonic lung development. Souza P, et al. **Am J Respir Cell Mol Biol** 1996 Oct;15(4):551–62

PDGF receptor protein tyrosine kinase expression in the balloon–injured rat carotid artery. Panek RL, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1283–8

Association of coatomer proteins with the beta–receptor for platelet–derived growth factor. Hansen K, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):455–60

Distribution of platelet–derived growth factor (PDGF) A chain mRNA, protein, and PDGF–alpha receptor in rapidly forming human bone. Horner A, et al. **Bone** 1996 Oct;19(4):353–62

Expression of platelet–derived growth factor (PDGF)–A, PDGF–B and the PDGF–alpha receptor, but not the PDGF–beta receptor, in human malignant melanoma in vivo. Barnhill RL, et al. **Br J Dermatol** 1996 Dec; 135(6):898–904

Detection of activated platelet–derived growth factor receptors in human meningioma. Shamah SM, et al. **Cancer Res** 1997 Sep 15;57(18):4141–7

Platelet–derived growth factor ligand and receptor expression in response to altered blood flow in vivo. Mondy JS, et al. **Circ Res** 1997 Sep;81(3):320–7

Stimulated activation of platelet–derived growth factor receptor in vivo in balloon–injured arteries: a link between angiotensin II and intimal thickening. Abe J, et al. **Circulation** 1997 Sep 16;96(6):1906–13

Expression and localization of platelet–derived growth factor ligand and receptor protein during acute and chronic rejection of rat cardiac allografts. Lemström KB, et al. **Circulation** 1997 Aug 19;96(4):1240–9

Mutation of a Src phosphorylation site in the PDGF beta–receptor leads to increased PDGF–stimulated chemotaxis but decreased mitogenesis. Hansen K, et al. **EMBO J** 1996 Oct 1;15(19):5299–313

Selective inhibition of platelet–derived growth factor (PDGF) receptor autophosphorylation and PDGF–mediated cellular events by a quinoline derivative. Yagi M, et al. **Exp Cell Res** 1997 Aug 1;234(2):285–92

Aggregation of PDGF–beta receptors in human skin fibroblasts: characterization by image correlation spectroscopy (ICS). Wiseman PW, et al. **FEBS Lett** 1997 Jan 13;401(1):43–8

Role of protein tyrosine phosphorylation in rat corneal neovascularization. Hayashi A, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jul;235(7):460–7

Mechanism of action of platelet–derived growth factor. Claesson–Welsh L. **Int J Biochem Cell Biol** 1996 Apr; 28(4):373–85 (78 ref.)

Production of cell–associated PDGF–AA by a human sarcoma cell line: evidence for a latent autocrine effect. Afrakhte M, et al. **Int J Cancer** 1996 Dec 11;68(6):802–9

Distribution and functions of platelet–derived growth factors and their receptors during embryogenesis. Ataliotis P, et al. **Int Rev Cytol** 1997;172:95–127 (155 ref.)

Platelet–derived growth factor (PDGF)–induced Ca2+ signaling in the CG4 oligodendroglial cell line and in transformed oligodendrocytes expressing the beta–PDGF receptor. Fatatis A, et al. **J Biol Chem** 1997 Feb 14; 272(7):4351–8

Extracellular calcium and platelet–derived growth factor promote receptor–mediated chemotaxis in osteoblasts through different signaling pathways. Godwin SL, et al. **J Biol Chem** 1997 Apr 25;272(17):11307–12

Platelet–derived growth factor receptor tyrosine phosphorylation requires protein geranylgeranylation but not farnesylation. McGuire TF, et al. **J Biol Chem** 1996 Nov 1;271(44):27402–7

Immunoglobulin–like domain 4–mediated receptor–receptor interactions contribute to platelet–derived growth factor–induced receptor dimerization. Omura T, et al. **J Biol Chem** 1997 May 9;272(19):12676–82

Grb7 is a downstream signaling component of platelet–derived growth factor alpha– and beta–receptors. Yokote K, et al. **J Biol Chem** 1996 Nov 29;271(48):30942–9

Regulation of platelet–derived growth factor receptor expression by cell context overrides regulation by cytokines. Barrett TB, et al. **J Cell Physiol** 1996 Oct; 169(1):126–38

Immunohistochemical analysis of platelet–derived growth factor and its receptors in fibrohistiocytic tumors. Taniuchi K, et al. **J Cutan Pathol** 1997 Aug;24(7):393–7

Expression of platelet–derived growth factor and its receptor in livers of patients with chronic liver disease. Ikura Y, et al. **J Gastroenterol** 1997 Aug;32(4):496–501

Clinical assessment of the significance of platelet–derived growth factor in patients with immunoglobulin A nephropathy. Naito T, et al. **J Lab Clin Med** 1997 Jul; 130(1):63–8

Developmental expression of platelet–derived growth factor alpha–receptor in neurons and glial cells of the mouse CNS. Oumesmar BN, et al. **J Neurosci** 1997 Jan 1;17(1):125–39

Porphyromonas gingivalis reduces mitogenic and chemotactic responses of human periodontal ligament cells to platelet–derived growth factor in vitro. Matsuda N, et al. **J Periodontol** 1996 Dec;67(12):1335–41

Identification of amino acids in the transmembrane and juxtamembrane domains of the platelet–derived growth factor receptor required for productive interaction with the bovine papillomavirus E5 protein. Petti LM, et al. **J Virol** 1997 Oct;71(10):7318–27

Localization of PDGF alpha–receptor in the developing and mature human kidney. Floege J, et al. **Kidney Int** 1997 Apr;51(4):1140–50

Oxidative stress induces tyrosine phosphorylation of PDGF alpha–and beta–receptors and pp60c–src in mesangial cells. González–Rubio M, et al. **Kidney Int** 1996 Jul;50(1):164–73

Phosphorylation of tyrosine 720 in the platelet–derived growth factor alpha receptor is required for binding of Grb2 and SHP–2 but not for activation of Ras or cell proliferation. Bazenet CE, et al. **Mol Cell Biol** 1996 Dec; 16(12):6926–36

Phosphotyrosine binding domain–dependent upregulation of the platelet–derived growth factor receptor alpha signaling cascade by transforming mutants of Cbl: implications for Cbl's function and oncogenicity. Bonita DP, et al. **Mol Cell Biol** 1997 Aug;17(8):4597–610

PLC–gamma activation is required for PDGF–betaR–mediated mitogenesis and monocytic differentiation of myeloid progenitor cells. Alimandi M, et al. **Oncogene** 1997 Jul 31;15(5):585–93

The PDGF receptor phosphorylates Tyr 138 in the c–Src SH3 domain in vivo reducing peptide ligand binding. Broome MA, et al. **Oncogene** 1997 Jan 9;14(1):17–34

The TEL/platelet–derived growth factor beta receptor (PDGF beta R) fusion in chronic myelomonocytic leukemia is a transforming protein that self–associates and activates PDGF beta R kinase–dependent signaling pathways. Carroll M, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14845–50

PHYSIOLOGY

Regulation of PDGF–beta receptor–operated Ca2+ channels by phospholipase C–gamma 1 in glomerular mesangial cells. Ma H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F994–1003

Maximal PDGF–induced lung fibroblast chemotaxis requires PDGF receptor–alpha. Osornio–Vargas AR, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L93–9

Effects of overexpressing wild–type and mutant PDGF receptors on translocation of GLUT4 in transfected rat adipose cells. Quon MJ, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):587–94

D–3 phosphoinositide metabolism in cells treated with platelet–derived growth factor. Whiteford CC, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):851–60

Characterization of platelet–derived growth factor (PDGF) action on a mouse neuroblastoma cell line, NB41, by introduction of an antisense PDGF beta–receptor RNA. Funa K, et al. **Cell Growth Differ** 1997 Aug;8(8):861–9

The PDGF alpha receptor is required for neural crest cell development and for normal patterning of the somites. Soriano P. **Development** 1997 Jul;124(14):2691–700

A domain of TEL conserved in a subset of ETS proteins defines a specific oligomerization interface essential to the mitogenic properties of the TEL–PDGFR beta oncoprotein. Jousset C, et al. **EMBO J** 1997 Jan 2; 16(1):69–82

Divergence in signal transduction pathways of platelet–derived growth factor (PDGF) and epidermal growth factor (EGF) receptors. Involvement of sphingosine 1–phosphate in PDGF but not EGF signaling. Rani CS, et al. **J Biol Chem** 1997 Apr 18;272(16):10777–83

PDGF–BB increases endothelial migration on cord movements during angiogenesis in vitro. Thommen R, et al. **J Cell Biochem** 1997 Mar 1;64(3):403–13

Molecular basis of hair growth control [editorial; comment]

Stenn KS, et al. **J Invest Dermatol** 1996 Nov;107(5):669–70 . Comment on: J Invest Dermatol 1996 Nov;107(5):770–7.

Involvement of platelet-derived growth factor receptor-alpha in hair canal formation [comment] Takakura N, et al. **J Invest Dermatol** 1996 Nov;107(5):770–7. Comment on: J Invest Dermatol 1996 Nov;107(5):669–70.

Platelet-derived growth factor-dependent activation of phosphatidylinositol 3-kinase is regulated by receptor binding of SH2-domain-containing proteins which influence Ras activity. Klinghoffer RA, et al. **Mol Cell Biol** 1996 Oct;16(10):5905–14

RECEPTORS, POLYMERIC IMMUNOGLOBULIN

Immunologic responses to gene transfer into mice via the polymeric immunoglobulin receptor. Ferkol T, et al. **Gene Ther** 1996 Aug;3(8):669–78

ANALYSIS

Secretory component, the receptor for polymeric immunoglobulin, has nothing to do with beta-galactosyltransferase in human milk. Kobayashi K, et al. **Immunol Lett** 1996 Apr;50(1–2):99–104

Reduction in the quantity of the polymeric immunoglobulin receptor is sufficient to account for the low concentration of intestinal secretory immunoglobulin A in a weanling mouse model of wasting protein-energy malnutrition. Ha CL, et al. **J Nutr** 1997 Mar;127(3):427–35

BIOSYNTHESIS

Uterine stromal cell suppression of pIgR production by uterine epithelial cells in vitro: a mechanism for regulation of pIgR production. Richardson JM, et al. **J Reprod Immunol** 1997 Jun;33(2):95–112

CHEMISTRY

Human free secretory component is composed of the first 585 amino acid residues of the polymeric immunoglobulin receptor. Hughes GJ, et al. **FEBS Lett** 1997 Jun 30; 410(2–3):443–6

The basolateral sorting signal of the polymeric immunoglobulin receptor contains two functional domains. Reich V, et al. **J Cell Sci** 1996 Aug;109 (Pt 8):2133–9

GENETICS

Isolation and genomic analysis of the rat polymeric immunoglobulin receptor gene terminal domain and transcriptional control region. Fodor E, et al. **DNA Cell Biol** 1997 Feb;16(2):215–25

Attenuation of gene expression by a trinucleotide repeat-rich tract from the terminal exon of the rat hepatic polymeric immunoglobulin receptor gene. Aoki T, et al. **J Mol Biol** 1997 Mar 28;267(2):229–36

Transcriptional regulation of the human polymeric immunoglobulin receptor gene by interferon-gamma. Piskurich JF, et al. **Mol Immunol** 1997 Jan;34(1):75–91

IMMUNOLOGY

Secretory component, the receptor for polymeric immunoglobulin, has nothing to do with beta-galactosyltransferase in human milk. Kobayashi K, et al. **Immunol Lett** 1996 Apr;50(1–2):99–104

Epithelial cell polarization is a determinant in the infectious outcome of immunoglobulin A-mediated entry by Epstein-Barr virus. Gan YJ, et al. **J Virol** 1997 Jan; 71(1):519–26

METABOLISM

Regulation of protein traffic in polarized epithelial cells: the polymeric immunoglobulin receptor model. Mostov KE, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:775–81 (25 ref.)

Both microtubules and actin filaments are required for efficient postendocytotic traffic of the polymeric immunoglobulin receptor in polarized Madin–Darby canine kidney cells. Maples CJ, et al. **J Biol Chem** 1997 Mar 7; 272(10):6741–51

RECEPTORS, PRESYNAPTIC

Presynaptic alpha2-adrenoceptors inhibit excitatory synaptic transmission in rat brain stem. Bertolino M, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G654–61

AGONISTS

Domoic acid induces the release of glutamate in the rat hippocampal CA3 subregion. Malva JO, et al. **Neuroreport** 1996 May 17;7(7):1330–4

ANALYSIS

Presynaptic and postsynaptic subcellular localization of substance P receptor immunoreactivity in the neostriatum of the rat and rhesus monkey (Macaca mulatta). Jakab RL, et al. **J Comp Neurol** 1996 May 20;369(1):125–36

ANTAGONISTS & INHIBITORS

Polyamine FTX-3.3 and polyamine amide sFTX-3.3 inhibit presynaptic calcium currents and acetylcholine release at mouse motor nerve terminals. Fatehi M, et al. **Neuropharmacology** 1997 Feb;36(2):185–94

Potent antagonists at the L-AP4- and (1S,3S)-ACPD-sensitive presynaptic metabotropic glutamate receptors in the neonatal rat spinal cord. Jane DE, et al. **Neuropharmacology** 1996;35(8):1029–35

CLASSIFICATION

[New approaches to determining the type classification of presynaptic acetylcholine receptors] Kosmachev AB, et al. **Eksp Klin Farmakol** 1996 Sep–Oct;59(5):3–5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Modulation by presynaptic adenosine A1 receptors of nicotinic receptor antagonist-induced neuromuscular block in the mouse. Prior C, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):103–8

Presynaptic depression of excitatory synaptic inputs to rat hypoglossal motoneurons by muscarinic M2 receptors. Bellingham MC, et al. **J Neurophysiol** 1996 Dec; 76(6):3758–70

Presynaptic effects of a trinitrobenzene analogue at the frog neuromuscular junction. Osanai M, et al. **J Neurophysiol** 1996 Sep;76(3):1735–43

Antinociceptive profile of 3-alpha-tropanyl-(2-Cl)-acid phenoxybutyrate (SM-21): a novel analgesic with a presynaptic cholinergic mechanism of action. Ghelardini C, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):430–9

Melatonin modulation of presynaptic nicotinic acetylcholine receptors in the rat vas deferens. Markus RP, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):18–22

Psychopharmacological profile of amisulpride: an antipsychotic drug with presynaptic D2/D3 dopamine receptor antagonist activity and limbic selectivity. Perrault G, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):73–82

Presynaptic inhibitory action of opioids on synaptic transmission in the rat periaqueductal grey in vitro. Vaughan CW, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):463–72

Melatonin receptor antagonists that differentiate between the human Mel1a and Mel1b recombinant subtypes are used to assess the pharmacological profile of the rabbit retina ML1 presynaptic heteroreceptor. Dubocovich ML, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):365–75

Presynaptic alpha 2A/D-autoreceptors in the brain cortex of Cercopithecus aethiops. Trendelenburg AU, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):341–6

Basal forebrain cholinergic immunolesion by 192IgG-saporin: evidence for a presynaptic location of subpopulations of alpha 2- and beta-adrenergic as well as 5-HT2A receptors on cortical cholinergic terminals. Heider M, et al. **Neurochem Res** 1997 Aug;22(8):957–66

Presynaptic inhibition by serotonin: a possible mechanism for switching motor output of the hypoglossal nucleus. Singer JH, et al. **Sleep** 1996 Dec;19(10 Suppl):S146–9 (28 ref.)

Presynaptic inhibition of excitatory neurotransmission by lamotrigine in the rat amygdalar neurons. Wang SJ, et al. **Synapse** 1996 Nov;24(3):248–55

[The contribution of presynaptic dopaminergic receptors to the mechanism of the reactivating influences of blockade of the GABA-benzodiazepine-ionophor complex] Dubrovina NI, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan–Feb; 47(1):117–22 (Eng. Abstr.) **(Rus)**

METABOLISM

Binding proteins on synaptic membranes for certain phospholipases A2 with presynaptic toxicity. Tzeng MC, et al. **Adv Exp Med Biol** 1996;391:271–8 (46 ref.)

Presynaptic 5-HT auto- and heteroreceptors in the human central and peripheral nervous system. Göthert M, et al. **Behav Brain Res** 1996;73(1–2):89–92 (24 ref.)

PET study of the pre- and post-synaptic dopaminergic markers for the neurodegenerative process in Huntington's disease. Ginovart N, et al. **Brain** 1997 Mar;120 (Pt 3):503–14

3,4-Diaminopyridine masks the inhibition of noradrenaline release from chick sympathetic neurons via presynaptic alpha 2-adrenoceptors: insights into the role of N- and L-type calcium channels. Doležal V, et al. **Brain Res** 1996 May 20;721(1–2):101–10

L-DOPA induces concentration-dependent facilitation and inhibition of presynaptic acetylcholine release in the guinea-pig submucous plexus. Hirai K, et al. **Brain Res** 1996 Apr 29;718(1–2):105–11

Serotonin and 8-OH-DPAT reduce excitatory transmission in rat hippocampal area CA1 via reduction in presumed presynaptic Ca2+ entry. Schmitz D, et al. **Brain Res** 1995 Dec 1;701(1–2):249–54

Imaging of dopamine transporters with iodine-123-beta-CIT and SPECT in Parkinson's disease. Asenbaum S, et al. **J Nucl Med** 1997 Jan;38(1):1–6

Inhibition of acetylcholine release from presynaptic terminals of skate electric organ by calcium channel antagonists: a detailed pharmacological study. Richardson CM, et al. **Neuropharmacology** 1996;35(11):1537–46

Involvement of the presynaptic dopamine D2 receptor in the depression of spinal reflex by apomorphine. Gajendiran M, et al. **Neuroreport** 1996 Jan 31;7(2):513–6

Presynaptic and Ca(2+)-independent PKC subspecies modulates NMDAR1 current. Koga T, et al. **Neuroreport** 1996 Jan 31;7(2):477–80

Tonic facilitation of glutamate release by presynaptic N-methyl-D-aspartate autoreceptors in the entorhinal cortex. Berretta N, et al. **Neuroscience** 1996 Nov; 75(2):339–44

The calcium channel and the organization of the presynaptic transmitter release face. Stanley EF. **Trends Neurosci** 1997 Sep;20(9):404–9 (54 ref.)

PHYSIOLOGY

Characteristics of laryngeal receptors analyzed by presynaptic recording from the cat medulla oblongata. Esaki H, et al. **Auris Nasus Larynx** 1997;24(1):73–83

A role for presynaptic AMPA receptors in the enhancement of neuronal glutamate release by kainic acid. Patel DR, et al. **Biochem Soc Trans** 1996 Aug;24(3):431S

Differential presynaptic modulation of noradrenaline release in human atrial tissue in normoxia and anoxia. Münch G, et al. **Br J Pharmacol** 1996 Aug;118(7):1855–61

Ultrastructural evidence for convergence of enkephalin and adrenaline-containing axon terminals on common targets and their presynaptic associations in the rat nucleus locus coeruleus. Van Bockstaele EJ, et al. **Brain Res** 1996 Apr 29;718(1–2):61–75

Confocal-microscopic visualization of membrane addition during synaptic exocytosis at presynaptic active zones of hair cells. Hudspeth AJ, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:303–7

Time-dependent decrease of presynaptic inotropic supersensitivity: physiological evidence of sympathetic reinnervation after heart transplantation. Koglin J, et al. **J Heart Lung Transplant** 1997 Jun;16(6):621–8

Presynaptic inhibition of calcium-dependent and -independent release elicited with ionomycin, gadolinium, and alpha-latrotoxin in the hippocampus. Capogna M, et al. **J Neurophysiol** 1996 May;75(5):2017–28

Decrement of GABAA receptor-mediated inhibitory postsynaptic currents in dentate granule cells in epileptic hippocampus. Isokawa M. **J Neurophysiol** 1996 May; 75(5):1901–8

Long-lasting potentiation and depression without presynaptic activity. Neveu D, et al. **J Neurophysiol** 1996 May; 75(5):2157–60

Presynaptic or postsynaptic location of receptors for angiotensin II and substance P in the medial solitary tract nucleus. Qu L, et al. **J Neurophysiol** 1996 Jun;75(6):2220–8

Study of the inhibitor of the crayfish neuromuscular junction by presynaptic voltage control. Vyshedskiy A, et al. **J Neurophysiol** 1997 Jan;77(1):103–15

Epileptogenesis in vivo enhances the sensitivity of inhibitory presynaptic metabotropic glutamate receptors in basolateral amygdala neurons in vitro. Neugebauer V, et al. **J Neurosci** 1997 Feb 1;17(3):983–95

Evidence for cutaneous and corticospinal modulation of presynaptic inhibition of Ia afferents from the human lower limb. Iles JF. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):197–207

Presynaptic calcium currents at voltage-clamped excitor and inhibitor nerve terminals of crayfish. Wright SN, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):347–61

Characterisation of pre- and post-synaptic alpha-adrenoceptors in modulation of the rat ileum longitudinal and circular muscle activities. Liu L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):248–56

Glutamate-dependent long-term presynaptic changes in corticostriatal excitability. Garcia-Munoz M, et al. **Neuroscience** 1996 Jul;73(1):109–19

Interneurons presynaptic to rat tail-flick motoneurons as mapped by transneuronal transport of pseudorabies virus: few have long ascending collaterals. Jasmin L, et al. **Neuroscience** 1997 Feb;76(3):859–76

Purinergic regulation of acetylcholine release. Ribeiro JA, et al. **Prog Brain Res** 1996;109:231–41 (41 ref.)

Presynaptic dopaminergic function in the striatum of schizophrenic patients. Dao-Castellana MH, et al. **Schizophr Res** 1997 Feb 7;23(2):167–74

25 years since the discovery of presynaptic receptors: present knowledge and future perspectives. Langer SZ. **Trends Pharmacol Sci** 1997 Mar;18(3):95–9 (39 ref.)

ULTRASTRUCTURE

Ultrastructural evidence for convergence of enkephalin and adrenaline-containing axon terminals on common targets and their presynaptic associations in the rat nucleus locus coeruleus. Van Bockstaele EJ, et al. **Brain Res** 1996 Apr 29;718(1–2):61–75

RECEPTORS, PROGESTERONE

Estrogen and progesterone receptors in endometrial cancer. Clinicopathological correlations and prognostic significance. Nyholm HC. **APMIS Suppl** 1996;65:5–33 (186 ref.)

RECEPTORS, PROGESTERONE

AGONISTS

The partial agonist activity of antagonist-occupied steroid receptors is controlled by a novel hinge domain-binding coactivator L7/SPA and the corepressors N-CoR or SMRT. Jackson TA, et al. **Mol Endocrinol** 1997 Jun; 11(6):693-705

ANALYSIS

Progesterone receptors in tumor fragment spheroids of human meningiomas. Tonn JC, et al. **Acta Neurochir Suppl (Wien)** 1996;65:105-7

Immunohistochemical assessment of steroid hormone receptors in tissues of the anal canal. Implications for anal incontinence? Franz HB, et al. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):892-5

Immunohistochemical analysis of distribution of estrogen receptors and progesterone receptors in the postmenopausal endometrium. Koshiyama M, et al. **Acta Obstet Gynecol Scand** 1996 Sep;75(8):702-6

Preoperative fine needle aspiration from human breast cancer is a valuable sampling material for progesterone receptor and cytometric DNA analysis. Fernö M, et al. **Acta Oncol** 1996;35 Suppl 8:19-25

Differential sensitivity of estrogen/progesterone receptors and BRST-2 markers in metastatic ductal and lobular breast carcinoma to the skin. Wallace ML, et al. **Am J Dermatopathol** 1996 Jun;18(3):241-7

Nuclear areas in breast cancer: relationship with estrogen and progesterone receptor expression. Maiorana A, et al. **Anal Cell Pathol** 1996 Aug;11(3):199-209

Quantitative measurement of estrogen and progesterone receptors in breast lumps using image cytometry. Sarker SK, et al. **Anal Quant Cytol Histol** 1997 Feb;19(1):87-91

Reproducibility of subjective immunoscoring of steroid receptors in breast cancer. van Diest PJ, et al. **Anal Quant Cytol Histol** 1996 Oct;18(5):351-4

Interobserver reproducibility of immunocytochemical estrogen- and progesterone receptor status assessment in breast cancer. Biesterfeld S, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2497-500

Multivariate analysis of DNA ploidy, p53, c-erbB-2 proteins, EGFR, and steroid hormone receptors for prediction of poor short term prognosis in breast cancer. Eissa S, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1417-23

EGFR and steroid receptors in ovarian carcinoma: comparison with prognostic parameters and outcome of patients. Fischer-Colbrie J, et al. **Anticancer Res** 1997 Jan-Feb;17(1B):613-9

The development of estrogen and progestin radiopharmaceuticals for imaging breast cancer. Katzenellenbogen JA, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1573-6

Time-varying prognostic impact of tumour biological factors urokinase (uPA), PAI-1 and steroid hormone receptor status in primary breast cancer. Schmitt M, et al. **Br J Cancer** 1997;76(3):306-11

Progesterone treatment increases Fos-immunoreactivity within some progestin receptor-containing neurons in localized regions of female rat forebrain. Auger AP, et al. **Brain Res** 1997 Jan 23;746(1-2):164-70

Sex steroid receptor expression in 'carcinoid' tumours of the breast. Birsak CA, et al. **Breast Cancer Res Treat** 1996; 40(3):243-9

Reverse transcription-polymerase chain reaction (RT-PCR) assays of estrogen and progesterone receptors in breast cancer. Chevillard S, et al. **Breast Cancer Res Treat** 1996; 41(1):81-9

Estrogen receptors, progesterone receptors, and cell proliferation in human breast cancer. Fanelli MA, et al. **Breast Cancer Res Treat** 1996;37(3):217-28

Improvement of quality control for steroid receptor measurements: analysis of distributions in more than 40000 primary breast cancers. French Study Group on Tissue and Molecular Biopathology. Romain S, et al. **Breast Cancer Res Treat** 1996;41(2):131-9

Captopril modulates hormone receptor concentration and inhibits proliferation of human mammary ductal carcinoma cells in culture. Small W Jr, et al. **Breast Cancer Res Treat** 1997 Jul;44(3):217-24

Adenocarcinoma of the cervix. Expression and clinical significance of estrogen and progesterone receptors. Fujiwara H, et al. **Cancer** 1997 Feb 1;79(3):505-12

Simultaneous quantitative analyses of c-erbB-2 protein, epidermal growth factor receptor, cathepsin D, and hormone receptors in breast cancer. Iwase H, et al. **Cancer Detect Prev** 1997;21(1):29-35

Progesterone receptors in the mouse mammary duct: distribution and developmental regulation. Silberstein GB, et al. **Cell Growth Differ** 1996 Jul;7(7):945-52

Membrane receptors for estrogen, progesterone, and testosterone in the rat brain: fantasy or reality. Ramirez VD, et al. **Cell Mol Neurobiol** 1996 Apr;16(2):175-98

Estrogen and progesterone receptors in breast cancer: comparison between enzyme immunoassay and computer-assisted image analysis of immunocytochemical assay. Cavaliere A, et al. **Cytometry** 1996 Sep 15; 26(3):204-8

Expression of estrogen and progesterone receptors in cytologic specimens using various fixatives. Hudock JA, et al. **Diagn Cytopathol** 1996 Jul;15(1):78-83

Preoperative assessment of proliferative activity and hormonal receptor status in carcinoma of the breast: a comparison of needle aspiration and needle-core biopsies to the surgical specimen. Railo M, et al. **Diagn Cytopathol** 1996 Sep;15(3):205-10

In situ hybridization of chromosome 6 on fine-needle aspirates from breast carcinomas: comparison of numerical abnormalities and ER/PgR status and staining pattern. Sauer T, et al. **Diagn Cytopathol** 1997 May;16(5):420-4

Immunostaining of estrogen receptor, progesterone receptor, MIB1 antigen, and c-erbB-2 oncoprotein in cytologic specimens: a simplified method with formalin fixation. Suthipintawong C, et al. **Diagn Cytopathol** 1997 Aug; 17(2):127-33

Steroid receptors and subfertility. Suri NK. **East Afr Med J** 1996 Jul;73(7):479-83

Blockade of the estrogen induced increase in progesterone receptor caused by propylthiouracil, an anti-thyroid drug, in a transplantable pituitary tumor in rats. Fujimoto N, et al. **Endocr J** 1996 Jun;43(3):329-34

Expression of estrogen and progesterone receptors in endometrium and peritoneal endometriosis: an immunohistochemical and in situ hybridization study. Fujishita A, et al. **Fertil Steril** 1997 May;67(5):856-64

A very sticky riddle [letter; comment] Turmero JA. **Fertil Steril** 1997 Jan;67(1):184; discussion 184-6. Comment on: Fertil Steril 1996 Mar;65(3):477-83.

In situ hybridization study of messenger RNA for estrogen receptor and immunohistochemical detection of estrogen and progesterone receptors in the human ovary. Revelli A, et al. **Gynecol Endocrinol** 1996 Jun;10(3):177-86

Biochemical and histological effects of vaginal estriol and estradiol applications on the endometrium, myometrium and vagina of postmenopausal women. van Haaften M, et al. **Gynecol Endocrinol** 1997 Jun;11(3):175-85

Regional distribution of proliferating cells and hormone receptors in the mammary gland of surgically postmenopausal macaques. Cline JM, et al. **Gynecol Obstet Invest** 1997;44(1):41-6

Estradiol and progesterone endometrial receptors and body fat distribution in obese women. Morán C, et al. **Gynecol Obstet Invest** 1996;42(2):117-9

Chorion villosum does not express progesterone and estrogen receptors during the first trimester of pregnancy. Taddei G, et al. **Gynecol Obstet Invest** 1996;42(2):77-9

Estrogen and progesterone receptors in the endometrium of postmenopausal breast cancer patients treated with tamoxifen and progestogens. Cohen I, et al. **Gynecol Oncol** 1997 Apr;65(1):83-8

Relationship between hormone receptor levels and cell-kinetics in human colorectal cancer. Korenaga D, et al. **Hepatogastroenterology** 1997 Jan-Feb;44(13):78-83

Immunolocalization of oestrogen and progesterone receptors in prostatic hyperplasia and carcinoma. Hiramatsu M, et al. **Histopathology** 1996 Feb;28(2):163-8

Hyaline globules and progesterone receptors in an ovarian sclerosing stromal tumour. Lifschitz-Mercer B, et al. **Histopathology** 1995 Aug;27(2):195-7

Endocrine tumors of the pancreas: Ki-67 immunoreactivity on paraffin sections is an independent predictor for malignancy: a comparative study with proliferating-cell nuclear antigen and progesterone receptor protein immunostaining, mitotic index, and other clinicopathologic variables. Pelosi G, et al. **Hum Pathol** 1996 Nov; 27(11):1124-34

Progesterone receptor in Norplant endometrium. Lau TM, et al. **Hum Reprod** 1996 Oct;11 Suppl 2:90-4 (16 ref.)

Cell surface CD44v5 levels correlate with progesterone receptors and a tumor size > 2 cm in infiltrating ductal carcinomas of the breast [letter] Nuñez MI, et al. **Int J Biol Markers** 1996 Oct-Dec;11(4):220-2

Steroid receptor measurement in breast cancers: comparison between ligand binding and enzyme-immunoassay in cytosolic and nuclear extracts. Luqmani YA, et al. **Int J Cancer** 1997 May 16;71(4):526-38

Quantitative analysis of p185(HER-2/neu) protein in breast cancer and its association with other prognostic factors. Valerón PF, et al. **Int J Cancer** 1997 Apr 22;74(2):175-9

Immunohistochemical expressions of estrogen and progesterone receptors in human epididymis at different ages--a preliminary study. Misao R, et al. **Int J Fertil Womens Med** 1997 Jan-Feb;42(1):39-42

Estrogen and progesterone receptor expression in endometrial polyps. Mittal K, et al. **Int J Gynecol Pathol** 1996 Oct;15(4):345-8

Minimal deviation adenocarcinoma of the uterine cervix has abnormal expression of sex steroid receptors, CA125, and gastric mucin. Toki T, et al. **Int J Gynecol Pathol** 1997 Apr;16(2):111-6

The hormonal receptor status of uterine carcinosarcomas (mixed müllerian tumours): an immunohistochemical study. Ansink AC, et al. **J Clin Pathol** 1997 Apr;50(4):328-31

Efferent projections from the ovarian steroid receptor-containing area of the ventrolateral hypothalamus in female guinea pigs. Ricciardi KH, et al. **J Neuroendocrinol** 1996 Sep;8(9):673-85

Progesterone and estrogen receptors in meningiomas: prognostic considerations. Hsu DW, et al. **J Neurosurg** 1997 Jan;86(1):113-20

Sex-steroid hormone receptors in human medullary thyroid carcinoma. Colomer A, et al. **Mod Pathol** 1996 Jan; 9(1):68-72

Estrogen and progesterone receptors and anti-gross cystic disease fluid protein 15 (BRST-2) fail to distinguish metastatic breast carcinoma from eccrine neoplasms. Wallace ML, et al. **Mod Pathol** 1995 Dec;8(9):897-901

Hepatobiliary and pancreatic mucinous cystadenocarcinomas with mesenchymal stroma: analysis of estrogen receptors/progesterone receptors and expression of tumor-associated antigens. Weihing RR, et al. **Mod Pathol** 1997 Apr;10(4):372-9

Estrogen and progesterone receptors and estrogen receptor-related antigen (ER-D5) in human epididymis. Ergün S, et al. **Mol Reprod Dev** 1997 Aug;47(4):448-55

Phylloid breast tumors and three steroid hormone receptors. Lang BA, et al. **Neoplasma** 1997;44(1):53-7

Colocalization of progesterone receptor and somatostatin immunoreactivities in the hypothalamus of the male and female guinea pig. Dufourny L, et al. **Neuroendocrinology** 1996 Sep;64(3):215-24

Estrogen and progesterone receptor expression in neuroendocrine and related neurons of the pubertal female monkey hypothalamus. Goldsmith PC, et al. **Neuroendocrinology** 1997 May;65(5):325-34

Expression of estrogen and progesterone receptors in glutamate and GABA neurons of the pubertal female monkey hypothalamus. Thind KK, et al. **Neuroendocrinology** 1997 May;65(5):314-24

Estrogen and progesterone receptors in the uterosacral ligament. Mokrzycki ML, et al. **Obstet Gynecol** 1997 Sep; 90(3):402-4

Immunohistological detection of estrogen and progesterone receptors in multiple and well differentiated leiomyomatous lung tumors in women with uterine leiomyomas (so-called benign metastasizing leiomyomas). A report on 5 cases. Jautzke G, et al. **Pathol Res Pract** 1996 Mar;192(3):215-23 (77 ref.)

Correlation of alpha 2 beta 1 integrin expression with histological type and hormonal receptor status in breast carcinomas. Lanzafame S, et al. **Pathol Res Pract** 1996 Oct; 192(10):1031-8

Relationship between receptors for epidermal growth factor and steroid hormones in normal, dysplastic and neoplastic canine mammary tissues. Donnay I, et al. **Res Vet Sci** 1996 May;60(3):251-4

Female sex hormone receptor status in advanced hepatocellular carcinoma and outcome after surgical resection. Jonas S, et al. **Surgery** 1997 Apr;121(4):456-61

[Immunohistochemical detection of estradiol and progesterone receptors in paraffin sections after treatment with microwaves. Comparison with biochemical assay of receptors in a series of 123 breast cancers with determination of the threshold of optimal positivity] Vilain MO, et al. **Ann Pathol** 1997 Apr;17(2):82-8 **(Fre)**

[Value of detection of hormone receptors by biochemical and immunochemical methods in therapeutic decision for breast cancer] Goussard J. **Bull Cancer** 1996 Dec; 83(12):1031-6 (Eng. Abstr.) **(Fre)**

[A comparative study of hormone receptors in breast cancer with quantitative immunocytochemistry and biochemistry] Marcot I, et al. **Bull Cancer** 1997 Jun;84(6):613-8 (27 ref.) (Eng. Abstr.) **(Fre)**

[Breast carcinoma: evaluation of hormone receptors and pS2, erb-B2, P-glycoprotein and Ki-67 markers] Abadjian G, et al. **J Med Liban** 1996;44(1):10-5 (Eng. Abstr.) **(Fre)**

[Leiomyomatosis of the lung--a case report with immunohistochemical evaluation] Kink E, et al. **Zentralbl Gynakol** 1996;118(7):426-9 (Eng. Abstr.) **(Ger)**

[Current questions about estrogen receptor determination and hormone dependence (does estrogen receptor positivity equal estrogen dependence?)] Kahán Z. **Orv Hetil** 1996 Oct 20;137(42):2305-8 (35 ref.) (Eng. Abstr.) **(Hun)**

[Male breast cancer. Histochemical and flow cytometry analysis of 6 cases] Galasso MG, et al. **Pathologica** 1995 Oct;87(5):503-5 (Eng. Abstr.) **(Ita)**

[Dna synthesis and expression of steroid receptors in cells of human breast carcinoma] Simone G, et al. **Pathologica** 1996 Apr;88(2):111-6 (Eng. Abstr.) **(Ita)**

[Analysis of steroid hormone receptors in endometrial cancer] Kędzia W. **Ginekol Pol** 1996 May;67(5):254-8 (Eng. Abstr.) **(Pol)**

[Sex hormone receptors in the gastric mucosa in gastric precancer and cancer] Iushkov PV. **Arkh Patol** 1997 May-Jun;59(3):24-7 (Eng. Abstr.) **(Rus)**

[Apparent heterogeneous distribution of progesterone receptors in certain cases of endometrial carcinoma] Bernal A, et al. **Ginecol Obstet Mex** 1997 Mar;65:96-100 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Inhibition of progesterone receptor activity in yeast by synthetic chemicals. Tran DQ, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):518-23

Effects of progesterone and leukotriene receptor antagonists in experimental models of P-glycoprotein-related resistance. Nuessler V, et al. **Eur J Med Res** 1997 Apr 21;2(4):159-64

Clinical uses of antiprogestogens. Van Look PF, et al. **Hum Reprod Update** 1995 Jan;1(1):19-34 (113 ref.)

The partial agonist activity of antagonist-occupied steroid receptors is controlled by a novel hinge domain-binding coactivator L7/SPA and the corepressors N-CoR or SMRT. Jackson TA, et al. **Mol Endocrinol** 1997 Jun; 11(6):693-705

Vinclozolin does not alter progesterone receptor (PR)

function in vivo despite inhibition of PR binding by its metabolites in vitro. Laws SC, et al. **Toxicology** 1996 Sep 2;112(3):173–82

BIOSYNTHESIS

Enhancement of the expression of progesterone receptor on progesterone-treated lymphocytes after immunotherapy in unexplained recurrent spontaneous abortion. Chiu L, et al. **Am J Reprod Immunol** 1996 Jun;35(6):552–7

Progesterone receptor messenger ribonucleic acid and protein in luteinized granulosa cells of rhesus monkeys are regulated in vitro by gonadotropins and steroids. Duffy DM, et al. **Biol Reprod** 1996 Apr;54(4):888–95

Sociosexual stimuli affect ER- and PR-mRNA abundance in the hypothalamus of all-female whiptail lizards. Hartman V, et al. **Brain Res** 1996 Nov 25;741(1–2):344–7

Morphological detection of cell kinetics and progesterone receptor expression during growth and regression of pregnancy-dependent mammary tumors of GRS/A mice. Yang J, et al. **Cancer Lett** 1996 Aug 23;106(1):83–9

Epithelial and stromal estrogen and progesterone receptor expression in endometrial cancer: true color computer-assisted image analysis versus subjective scoring. Kohlberger PD, et al. **Gynecol Oncol** 1997 Mar; 64(3):404–10

Immunohistochemical analysis of endometrial adenocarcinoma for bcl-2 and p53 in relation to expression of sex steroid receptor and proliferative activity [published erratum appears in Int J Gynecol Pathol 1996 Oct;15(4):369] Yamauchi N, et al. **Int J Gynecol Pathol** 1996 Jul;15(3):202–8

An analysis of the uterine lymphocyte-derived hybridoma cell line GWM 1-2 for expression of receptors for estrogen, progesterone and interleukin 2. van den Heuvel M, et al. **J Reprod Immunol** 1996 Aug;31(1–2):37–50

Insulin-like growth factors control the regulation of oestrogen and progesterone receptor expression by oestrogens. Clayton SJ, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):57–68

Interactions of p60, a mediator of progesterone receptor assembly, with heat shock proteins hsp90 and hsp70. Chen S, et al. **Mol Endocrinol** 1996 Jun;10(6):682–93

L-histidine/medroxyprogesterone acetate interaction modulates human breast cancer cell growth and progestin receptor expression in vitro. Ghezzo F, et al. **Pharmacol Res** 1997 Feb;35(2):119–22

Estrogen-induced transcription of the progesterone receptor gene does not parallel estrogen receptor occupancy. Lee YJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15180–4

Effects of interferon-tau and progesterone on oestrogen-stimulated expression of receptors for oestrogen, progesterone and oxytocin in the endometrium of ovariectomized ewes. Spencer TE, et al. **Reprod Fertil Dev** 1996;8(5):843–53

CHEMISTRY

Identification and characterization of estrogen and progesterone receptors from the oviduct of the American alligator (Alligator mississippiensis). Vonier PM, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):308–12

Induction of a novel conformation in the progesterone receptor by ZK299 involves a defined region of the carboxyl-terminal tail. Allan GF, et al. **Mol Endocrinol** 1996 Oct;10(10):1206–13

Hinge and amino-terminal sequences contribute to solution dimerization of human progesterone receptor. Tetel MJ, et al. **Mol Endocrinol** 1997 Jul;11(8):1114–28

The extreme C terminus of progesterone receptor contains a transcriptional repressor domain that functions through a putative corepressor. Xu J, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12195–9

DRUG EFFECTS

Several synthetic chemicals inhibit progesterone receptor-mediated transactivation in yeast. Jin L, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):139–46

Oestrogen increases S-phase fraction and oestrogen and progesterone receptors in human cervical cancer in vivo. Bhattacharya D, et al. **Br J Cancer** 1997;75(4):554–8

Sex differences in estrogen receptor and progestin receptor induction in the guinea pig hypothalamus and preoptic area. Brown TJ, et al. **Brain Res** 1996 Jun 24;725(1):37–48

Dopamine-mediated activation of the human progesterone receptor. Philpott AJ, et al. **Cell Mol Neurobiol** 1996 Jun; 16(3):417–20

Clomiphene citrate therapy and unexplained subfertility. Suri NK. **East Afr Med J** 1996 Nov;73(11):724–6

Steroid receptor-mediated effects of neuroactive steroids: characterization of structure-activity relationship. Rupprecht R, et al. **Eur J Pharmacol** 1996 May 15; 303(3):227–34

Non-competitive anti-oestrogenic actions of progesterone antagonists in primate endometrium: enhancement of oestrogen and progesterone receptors with blockade of post-receptor proliferative mechanisms. Neulen J, et al. **Hum Reprod** 1996 Jul;11(7):1533–7

PF1092A, B and C, new nonsteroidal progesterone receptor ligands produced by Penicillium oblatum. I. Taxonomy of producing strain, fermentation, isolation and biological activities. Tabata Y, et al. **J Antibiot (Tokyo)** 1997 Apr; 50(4):304–8

Behavioral responses to Depo-Provera, Fadrozole, and estradiol in castrated, testosterone-treated cynomolgus monkeys (Macaca fascicularis): the involvement of progestin receptors. Zumpe D, et al. **Physiol Behav** 1996 Aug;60(2):531–40

Evaluation of chemicals with endocrine modulating activity in a yeast-based steroid hormone receptor gene transcription assay. Gaido KW, et al. **Toxicol Appl Pharmacol** 1997 Mar;143(1):205–12

The molecular pharmacology of ovarian steroid receptors. Vegeto E, et al. **Vitam Horm** 1996;52:99–128 (129 ref.)

GENETICS

Full-length cDNA sequence of a progesterone membrane-binding protein from porcine vascular smooth muscle cells. Falkenstein E, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):86–9

Identification of novel exon-deleted progesterone receptor variant mRNAs in human breast tissue. Leygue E, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):63–8

Expression of the chicken progesterone receptor forms A and B is differentially regulated by estrogen in vivo. Syvälä H, et al. **Biochem Biophys Res Commun** 1997 Feb 24; 231(3):573–6

Estradiol up-regulates estrogen receptor and progesterone receptor gene expression in specific ovine uterine cells. Ing NH, et al. **Biol Reprod** 1997 May;56(5):1205–15

No association of a 306-bp insertion polymorphism in the progesterone receptor gene with ovarian and breast cancer [letter] Manolitsas TP, et al. **Br J Cancer** 1997;75(9):1398–9

Transcriptional regulation of the murine multidrug resistance gene mdr1b by progesterone occurs via an indirect mechanism. Mallick S, et al. **DNA Cell Biol** 1997 Jul; 16(7):807–18

Steroid regulation of estrogen and progestin receptor messenger ribonucleic acid in monkey hypothalamus and pituitary. Bethea CL, et al. **Endocrinology** 1996 Oct; 137(10):4372–83

Endocrine defects in mice carrying a null mutation for the progesterone receptor gene. Chappell PE, et al. **Endocrinology** 1997 Oct;138(10):4147–52

Sexual dimorphism of steroid hormone receptor messenger ribonucleic acid expression and hormonal regulation in rat vascular tissue. Knauthe R, et al. **Endocrinology** 1996 Aug; 137(8):3220–7

Association between family history of cancer and breast cancer defined by estrogen and progesterone receptor status. Tutera AM, et al. **Genet Epidemiol** 1996;13(2):207–21

Expression of estrogen and progesterone receptors and their mRNAs in ovarian endometriosis. Misao R, et al. **Gynecol Endocrinol** 1996 Oct;10(5):303–10

Progesterone inhibits female-typical receptive behavior and decreases hypothalamic estrogen and progesterone receptor messenger ribonucleic acid levels in whiptail lizards (genus Cnemidophorus). Godwin J, et al. **Horm Behav** 1996 Jun; 30(2):138–44

Reproductive functions illustrating direct and indirect effects of genes on behavior. Ogawa S, et al. **Horm Behav** 1996 Dec;30(4):487–94

TAXI/UAS: A molecular switch to control expression of genes in vivo. Delort JP, et al. **Hum Gene Ther** 1996 May 1;7(7):809–20

Expression of progesterone receptor mRNA in the endometrium during the normal menstrual cycle and in Norplant users. Lau TM, et al. **Hum Reprod** 1996 Dec; 11(12):2629–34

Distribution of the A and B forms of the progesterone receptor messenger ribonucleic acid and protein in uterine leiomyomata and adjacent myometrium. Viville B, et al. **Hum Reprod** 1997 Apr;12(4):815–22

Sequences in the ligand-binding domains of the human androgen and progesterone receptors which determine their distinct ligand identities. Vivat V, et al. **J Mol Endocrinol** 1997 Apr;18(2):147–60

Intrahypothalamic implantation of progesterone in castrated male whiptail lizards (Cnemidophorus inornatus) elicits courtship and copulatory behavior and affects androgen receptor- and progesterone receptor-mRNA expression in the brain. Crews D, et al. **J Neurosci** 1996 Nov 15; 16(22):7347–52

The molecular basis of RU486 resistance in the Tammar Wallaby, Macropus eugenii. Lim-Tio SS, et al. **Mol Cell Endocrinol** 1996 May 31;119(2):169–74

Progesterone receptor (PR) inhibits expression of insulin-like growth factor-binding protein-1 (IGFBP-1) in human endometrial cell line HEC-1B: characterization of the inhibitory effect of PR on the distal promoter region of the IGFBP-1 gene. Gao J, et al. **Mol Endocrinol** 1997 Jun; 11(7):973–9

Point mutation in the ligand-binding domain of the progesterone receptor generates a transdominant negative phenotype. Gong W, et al. **Mol Endocrinol** 1997 Sep; 11(10):1476–85

Activation of transcription by progesterone receptor involves derepression of activation functions by a cofactor. Klotzbücher M, et al. **Mol Endocrinol** 1997 Jun; 11(6):768–78

Dopamine requires the unoccupied progesterone receptor to induce sexual behavior in mice [published erratum appears in Mol Endocrinol 1997 Apr;11(4):423] Mani SK, et al. **Mol Endocrinol** 1996 Dec;10(12):1728–37

An amino-terminal truncated progesterone receptor isoform, PRc, enhances progestin-induced transcriptional activity. Wei LL, et al. **Mol Endocrinol** 1996 Nov;10(11):1379–87

Mutant and wild-type androgen receptors exhibit cross-talk on androgen-, glucocorticoid-, and progesterone-mediated transcription [published erratum appears in Mol Endocrinol 1997 Mar;11(3):391–2] Yen PM, et al. **Mol Endocrinol** 1997 Feb;11(2):162–71

Regulation of progesterone receptor gene expression by sex steroid hormones in the hypothalamus and the cerebral cortex of the rabbit. Camacho-Arroyo I, et al. **Neurosci Lett** 1996 Aug 16;214(1):25–8

IMMUNOLOGY

Tumors of the uterine isthmus: clinicopathologic features and immunohistochemical characterization of p53 expression and hormone receptors. Jacques SM, et al. **Int J Gynecol Pathol** 1997 Jan;16(1):38–44

Cutaneous leiomyomas lack estrogen and progesterone receptor immunoreactivity. McGinley KM, et al. **J Cutan Pathol** 1997 Apr;24(4):241–5

[Monoclonal antibodies to human progesterone receptors: production, indentification and clinical application] Huang W, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar; 27(1):40–5 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Lack of relationship between the expression of Hsp27 heat shock estrogen receptor-associated protein and estrogen receptor or progesterone receptor status in male breast carcinoma. Muñoz de Toro MM, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):277–84

METABOLISM

Expression of pS2 protein and estrogen and progesterone receptor status in breast cancer. Ioakim-Liossi A, et al. **Acta Cytol** 1997 May-Jun;41(3):713–6

Progesterone receptors in arachnoid cysts. An immunocytochemical study in 2 cases. Go KG, et al. **Acta Neurochir (Wien)** 1997;139(4):349–54

Changes in radiation sensitivity and steroid receptor content induced by hormonal agents and ionizing radiation in breast cancer cells in vitro. Paulsen GH, et al. **Acta Oncol** 1996; 35(8):1011–9

Breast cancer risk factors according to combined estrogen and progesterone receptor status: a case-control analysis. Yoo KY, et al. **Am J Epidemiol** 1997 Aug 15;146(4):307–14

Effects of food deprivation on induction of neural progestin receptors by estradiol in Syrian hamsters. Du Y, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R978–83

Estrogen and progesterone receptors in the endometrium. Moutsatsou P, et al. **Ann N Y Acad Sci** 1997 Jun 17; 816:99–115 (70 ref.)

Papillary cystic tumors of the pancreas: assessment of malignant potential by analysis of progesterone receptor, flow cytometry, and ras oncogene mutation. Lee WY, et al. **Anticancer Res** 1997 Jul-Aug;17(4A):2587–91

Expression of estrogen and progesterone receptors in non-small-cell lung cancer: immunohistochemical study. Su JM, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3803–6

Analysis of chicken progesterone receptor function and phosphorylation using an adenovirus-mediated procedure for high-efficiency DNA transfer. Allgood VE, et al. **Biochemistry** 1997 Jan 7;36(1):224–32

Stromal cell progesterone and estrogen receptors during proliferation and regression of the decidua basalis in the pregnant rat. Ogle TF, et al. **Biol Reprod** 1997 Sep; 57(3):495–506

Estrogen, progesterone and testosterone receptors in human fetal cartilaginous tissue: immunohistochemical studies. Ben-Hur H, et al. **Calcif Tissue Int** 1997 Jun;60(6):520–6

Establishment of a human endometrial cell culture system and characterization of its polarized hormone responsive epithelial cells. Classen-Linke I, et al. **Cell Tissue Res** 1997 Jan;287(1):171–85

Estrogen and progestin cytosol receptor concentrations in patients with endometriosis and their changes after gossypol therapy. Zhang Y, et al. **Chin Med J (Engl)** 1996 Oct;109(10):814–6

Altered endometrial progesterone/oestrogen receptor ratio in luteal phase defect. Abd-el-Maeboud KH, et al. **Dis Markers** 1997 Apr;13(2):107–16

Effects of RU486 on estrogen, progesterone, oxytocin, and their receptors in the rat uterus during late gestation. Fang X, et al. **Endocrinology** 1997 Jul;138(7):2763–8

Extracellular matrix regulates ovarian hormone-dependent proliferation of mouse mammary epithelial cells. Xie J, et al. **Endocrinology** 1997 Jun;138(6):2466–73

Interaction of environmental chemicals with the estrogen and progesterone receptors from the oviduct of the American alligator. Vonier PM, et al. **Environ Health Perspect** 1996 Dec;104(12):1318–22

Oestrogen and progesterone receptors in gastrointestinal cancer cell lines. Jacobs E, et al. **Eur J Cancer** 1996 Dec; 32A(13):2348–53

Oestrogen and progestogen receptor content in human endometrium. Snijders M, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Dec;70(1):9–10

Endometrial progesterone receptors and markers of uterine receptivity in the window of implantation [see comments] Lessey BA, et al. **Fertil Steril** 1996 Mar;65(3):477–83.

Comment in: Fertil Steril 1997 Jan;67(1):184; discussion 184–6.

Binding activity of 5alpha-reduced gestagens to the progestin receptor from African elephant (Loxodonta africana). Meyer HHD, et al. **Gen Comp Endocrinol** 1997 Feb; 105(2):164–7

Estrogen and progesterone receptor status as prognostic indicators in patients with optimally cytoreduced stage IIIc serous cystadenocarcinoma of the ovary. Geisler JP, et al. **Gynecol Oncol** 1996 Mar;60(3):424–7 (18 ref.)

Immunohistochemical demonstration of progesterone receptor in hepatobiliary cystadenoma with mesenchymal stroma. Grayson W, et al. **Histopathology** 1996 Nov; 29(5):461–3

Vascular endothelial growth factor in primate endometrium is regulated by oestrogen-receptor and progesterone-receptor ligands in vivo. Greb RR, et al. **Hum Reprod** 1997 Jun;12(6):1280–92

Immunohistochemical characterization of proliferation, oestrogen receptor and progesterone receptor expression in endometriosis: comparison of eutopic and ectopic endometrium with normal cycling endometrium. Jones RK, et al. **Hum Reprod** 1995 Dec;10(12):3272–9

Non-competitive anti-oestrogenic actions of progesterone antagonists in primate endometrium: enhancement of oestrogen and progesterone receptors with blockade of post-receptor proliferative mechanisms. Neulen J, et al. **Hum Reprod** 1996 Jul;11(7):1533–7

Endometrial vascular smooth muscle oestrogen and progesterone receptor distribution in women with and without menorrhagia. Rogers PA, et al. **Hum Reprod** 1996 Sep;11(9):2003–8

Progesterone receptor immunoreactivity at the maternofetal interface of first trimester pregnancy: a study of the trophoblast population. Wang JD, et al. **Hum Reprod** 1996 Feb;11(2):413–9

Study of oestrogen and progesterone receptors in meningiomas by a technique utilizing the binding hormones in a polymerized state. Kumar S, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):189–92

Differential phosphorylation of chicken progesterone receptor in hormone-dependent and ligand-independent activation. Bai W, et al. **J Biol Chem** 1997 Apr 18; 272(16):10457–63

A DNA-binding element for a steroid receptor-binding factor is flanked by dual nuclear matrix DNA attachment sites in the c-myc gene promoter. Lauber AH, et al. **J Biol Chem** 1997 Sep 26;272(39):24657–65

Effect of oestradiol and insulin on the proliferative pattern and on oestrogen and progesterone receptor contents in MCF-7 cells. Panno ML, et al. **J Cancer Res Clin Oncol** 1996;122(12):745–9

Analysis of receptor phenotypes in operated breast cancer. Cherubini M, et al. **J Chemother** 1997 Apr;9(2):117–8

Prognostic role of oestrogen and progesterone receptors in patients with breast cancer: relation to age and lymph node status. Collett K, et al. **J Clin Pathol** 1996 Nov;49(11):920–5

Oestrogen and progesterone receptor assessment in core biopsy specimens of breast carcinoma. Zidan A, et al. **J Clin Pathol** 1997 Jan;50(1):27–9

Steroid hormone receptors and antineoplastic chemotherapy in human breast cancer. Görlich M, et al. **J Exp Clin Cancer Res** 1997 Mar;16(1):95–103 (59 ref.)

Sequences in the ligand-binding domains of the human androgen and progesterone receptors which determine their distinct ligand identities. Vivat V, et al. **J Mol Endocrinol** 1997 Apr;18(2):147–60

Reproductively-relevant stimuli induce Fos-immunoreactivity within progestin receptor-containing neurons in localized regions of female rat forebrain. Auger AP, et al. **J Neuroendocrinol** 1996 Nov; 8(11):831–8

Ovarian steroid regulation of estrogen and progesterone receptor messenger ribonucleic acid in the anteroventral periventricular nucleus of the rat. Simerly RB, et al. **J Neuroendocrinol** 1996 Jan;8(1):45–56

Dopaminergic regulation of progesterone receptors: brain D5 dopamine receptors mediate induction of lordosis by D1-like agonists in rats. Apostolakis EM, et al. **J Neurosci** 1996 Aug 15;16(16):4823–34

Bcl-2 expression is correlated with a low apoptotic index and associated with progesterone receptor immunoreactivity in endometrial carcinomas. Saegusa M, et al. **J Pathol** 1996 Nov;180(3):275–82

Ligand specificity of uterine oestrogen and progesterone receptors in the subadult African elephant, Loxodonta africana. Greyling MD, et al. **J Reprod Fertil** 1997 Mar; 109(2):199–204

DNA bending is induced by binding of the glucocorticoid receptor DNA binding domain and progesterone receptors to their response element. Petz LN, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):31–41

The ovarian progestogen receptor in the spotted seatrout, Cynoscion nebulosus, demonstrates steroid specificity different from progesterone receptors in other vertebrates. Pinter J, et al. **J Steroid Biochem Mol Biol** 1997 Jan; 60(1–2):113–9

Uterine estradiol and progesterone receptor concentration, activities of certain antioxidant enzymes and dehydrogenases and histoarchitecture in relation to time of secretion of nidatory estrogen and high endometrial sensitivity in rat. Singh MM, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):215–24

Hormone-dependent changes in A and B forms of progesterone receptor. Syvälä H, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):517–24

Molecular cloning of human FKBP51 and comparisons of immunophilin interactions with Hsp90 and progesterone receptor. Nair SC, et al. **Mol Cell Biol** 1997 Feb; 17(2):594–603

In vivo regulation of central nervous system progesterone receptors: cocaine induces steroid-dependent behavior through dopamine transporter modulation of D5 receptors in rats. Apostolakis EM, et al. **Mol Endocrinol** 1996 Dec; 10(12):1595–604

Disruption of the glucocorticoid receptor assembly with heat shock protein 90 by a peptidic antiglucocorticoid. Dao-Phan HP, et al. **Mol Endocrinol** 1997 Jun;11(7):962–72

Mammary gland development is mediated by both stromal and epithelial progesterone receptors. Humphreys RC, et al. **Mol Endocrinol** 1997 Jun;11(6):801–11

Dopamine requires the unoccupied progesterone receptor to induce sexual behavior in mice [published erratum appears in Mol Endocrinol 1997 Apr;11(4):423] Mani SK, et al. **Mol Endocrinol** 1996 Dec;10(12):1728–37

Hinge and amino-terminal sequences contribute to solution dimerization of human progesterone receptor. Tetel MJ, et al. **Mol Endocrinol** 1997 Jul;11(8):1114–28

Phosphorylation of human progesterone receptor by cyclin-dependent kinase 2 on three sites that are authentic basal phosphorylation sites in vivo. Zhang Y, et al. **Mol Endocrinol** 1997 Jun;11(6):823–32

Rapid loss of oestrogen and progesterone receptors in human leiomyoma and myometrial explant cultures. Severino MF, et al. **Mol Hum Reprod** 1996 Nov;2(11):823–8

Immunohistochemical detection of progestin receptors in hypothalamic beta-endorphin and substance P neurons of steroid-treated monkeys. Bethea CL, et al. **Neuroendocrinology** 1996 Feb;63(2):132–41

Sex differences in estradiol-induced progestin receptor immunoreactivity in the guinea pig preoptic area and hypothalamus. Dufourny L, et al. **Neurosci Lett** 1997 Feb 21;223(2):109–12

Crosslinking of progesterone receptor to DNA using tuneable nanosecond, picosecond and femtosecond UV laser pulses. Russmann C, et al. **Nucleic Acids Res** 1997 Jun 15; 25(12):2478–84

Estrogen and progesterone receptors in vernal keratoconjunctivitis. Bonini S, et al. **Ophthalmology** 1995 Sep;102(9):1374–9

Effects of progesterone, estrogen, and androgen on progesterone receptor binding in hen oviduct uterus (shell gland). Kawashima M, et al. **Poult Sci** 1996 Feb; 75(2):257–60

Steroid specificity of the human sperm membrane progesterone receptor. Alexander NJ, et al. **Steroids** 1996 Mar;61(3):116–25

Binding specificity of medroxyprogesterone acetate and proligestone for the progesterone and glucocorticoid receptor in the dog. Selman PJ, et al. **Steroids** 1996 Mar; 61(3):133–7

[Effects of levonorgestrel subdermal implants on estradiol and progesterone receptors of endometrium and ovarian tissues in rats] Sun A, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Sep;31(9):530–2 (Eng. Abstr.) **(Chi)**

[The prognostic significance of progesterone receptor level in endometrial cancer] Nyholm HC, et al. **Ugeskr Laeger** 1997 Jan 27;159(5):601–4 (Eng. Abstr.) **(Dan)**

[Kinetics of interaction of [3H]16alpha,17alpha-cyclohexanoprogesterone with progesterone receptor in the rabbit uterus] Smirnov AN, et al. **Biokhimiia** 1996 Aug;61(8):1460–70 (Eng. Abstr.) **(Rus)**

[Expression of pS2 protein in breast cancer and its relationship with estrogen and progesterone receptors] Díez Gibert O, et al. **Med Clin (Barc)** 1996 Jun 15; 107(3):90–2 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Progesterone-independent activation of rat brain progestin receptors by reproductive stimuli. Auger AP, et al. **Endocrinology** 1997 Jan;138(1):511–4

Endocrine defects in mice carrying a null mutation for the progesterone receptor gene. Chappell PE, et al. **Endocrinology** 1997 Oct;138(10):4147–52

Progesterone receptor function from a behavioral perspective. Mani SK, et al. **Horm Behav** 1997 Jun; 31(3):244–55 (80 ref.)

Progesterone-induced immunosuppression [letter; comment] Szekeres-Bartho J. **Hum Reprod** 1997 Mar;12(3):629. Comment on: Hum Reprod 1996 May;11(5):980–5.

Differential activity of progesterone and glucocorticoid receptors on mouse mammary tumor virus templates differing in chromatin structure. Smith CL, et al. **J Biol Chem** 1997 May 30;272(22):14227–35

Progesterone regulated expression of flavin-containing monooxygenase 5 by the B-isoform of progesterone receptors: implications for tamoxifen carcinogenicity. Miller MM, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):2956–61

Steroid hormone receptors activate transcription in glial cells of intact retina but not in primary cultures of retinal glial cells. Li YC, et al. **J Mol Neurosci** 1997 Apr;8(2):145–58

Progesterone receptor participates in the stimulatory effect of LHRH, prostaglandin E2, and cyclic AMP on lordosis and proceptive behaviours in rats. Beyer C, et al. **J Neuroendocrinol** 1997 Aug;9(8):609–14

Steroids conjugated to bovine serum albumin as tools to demonstrate specific steroid neuronal membrane binding sites. Zheng J, et al. **J Psychiatry Neurosci** 1996 May; 21(3):187–97

Characterization of the functional progesterone receptor in an endometrial adenocarcinoma cell line (Ishikawa): progesterone-induced expression of the alpha1 integrin [published erratum appears in J Steroid Biochem Mol Biol 1997 Jan;60(1–2):161] Lessey BA, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):31–9

Variations in steroid hormone receptor content throughout age and menopausal periods, and menstrual cycle in breast cancer patients. Nikolić-Vukosavljević D, et al. **Neoplasma** 1996;43(3):163–9

Sex steroid receptors and human parturition. Rezapour M, et al. **Obstet Gynecol** 1997 Jun;89(6):918–24

Role of steroid hormone and growth factor receptors and proto-oncogenes in the behavior of human mammary epithelial cancer cells in vitro. Saxena S, et al. **Pathobiology** 1997;65(2):75–82

Asymmetry in progestin receptor levels and sexual behavior in female rats. McCormick CM, et al. **Physiol Behav** 1996 Feb;59(2):349–54

Steroid receptor induction of gene transcription: a two-step model. Jenster G, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7879–84

RECEPTORS, PROGESTIN see **RECEPTORS, PROGESTERONE**

RECEPTORS, PROGLUMIDE see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, PROLACTIN

ANALYSIS

Prolactin receptor heterogeneity in bovine fetal and maternal tissues. Schuler LA, et al. **Endocrinology** 1997 Aug; 138(8):3187–94

Immune localization of prolactin receptor in the mitochondria-rich cells of the euryhaline teleost (Oreochromis mossambicus) gill. Weng CF, et al. **FEBS Lett** 1997 Mar 17;405(1):91–4

Prolactin receptors in human meningiomas: characterization and biological role. Muccioli G, et al. **J Endocrinol** 1997 Jun;153(3):365–71

The lymphocyte and macrophage profile in the pancreas and spleen of NOD mice: percentage of interleukin-2 and prolactin receptors on immunocompetent cell subsets. Hawkins TA, et al. **J Reprod Immunol** 1996 Nov; 32(1):55–71

BIOSYNTHESIS

Expression of prolactin receptors in human osteosarcoma cells. Bataille-Simoneau N, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):323–8

The decidual prolactin receptor and its regulation by decidua-derived factors. Gu Y, et al. **Endocrinology** 1996 Nov;137(11):4878–85

Prolactin and prolactin receptors are expressed and functioning in human prostate. Nevalainen MT, et al. **J Clin Invest** 1997 Feb 15;99(4):618–27

Atlas of the neurons that express mRNA for the long form of the prolactin receptor in the forebrain of the female rat. Bakowska JC, et al. **J Comp Neurol** 1997 Sep 22; 386(2):161–77

Cloning, sequencing and functional analysis of a truncated cDNA encoding red deer prolactin receptor: an alternative tyrosine residue mediates beta-casein promoter activation. Jabbour HN, et al. **Mol Cell Endocrinol** 1996 Oct 14; 123(1):17–26

Prolactin receptor expression in the developing mouse embryo. Tzeng SJ, et al. **Mol Reprod Dev** 1997 Sep; 48(1):45–52

Prolactin receptor expression by rat NK cells. Chambers WH, et al. **Nat Immun** 1995;14(3):145–56

CHEMISTRY

Tyrosine docking sites of the rat prolactin receptor required for association and activation of stat5. Pezet A, et al. **J Biol Chem** 1997 Oct 3;272(40):25043–50

Development of a constitutively active mutant form of the prolactin receptor, a member of the cytokine receptor family. Gourdou I, et al. **Mol Endocrinol** 1996 Jan; 10(1):45–56

Template-based docking of a prolactin receptor proline-rich motif octapeptide to FKBP12: implications for cytokine receptor signaling. Soman KV, et al. **Protein Sci** 1997 May; 6(5):999–1008

Homology modeling of rabbit prolactin hormone complexed with its receptor. Halaby D, et al. **Proteins** 1997 Mar; 27(3):459–68

DRUG EFFECTS

Prolactin causes the dissociation of prolactin from plasma

membrane receptor in lactating mouse mammary cell: action of high prolactin concentration. Sakai S. **Endocr J** 1996 Feb;43(1):93–100

Direct evidence that lactogenic hormones induce homodimerization of membrane-anchored prolactin receptor in intact Nb2–11C rat lymphoma cells. Sakal E, et al. **FEBS Lett** 1997 Jun 30;410(2–3):289–92

GENETICS

Molecular cloning, tissue distribution, and expression of the prolactin receptor during various reproductive states in Meleagris gallopavo. Zhou JF, et al. **Biol Reprod** 1996 Nov; 55(5):1081–90

The regulation of the prolactin receptor gene expression in the mammary gland of early pregnant mouse. Mizoguchi Y, et al. **Endocr J** 1997 Feb;44(1):53–8

Acute expression of the PRL receptor gene after ovariectomy in midpregnant mouse mammary gland. Mizoguchi Y, et al. **Endocr J** 1996 Oct;43(5):537–44

Prolactin-dependent growth and gamma-casein gene expression in Ba/F3 cells transfected with a long form of mouse mammary prolactin receptor. Sasaki M, et al. **Endocr J** 1996 Feb;43(1):45–52

Hepatic prolactin receptor gene expression increases in the sheep fetus before birth and after cortisol infusion. Phillips ID, et al. **Endocrinology** 1997 Mar;138(3):1351–4

Developmental aspects of prolactin receptor gene expression in fetal and neonatal mice. Brown-Borg HM, et al. **Eur J Endocrinol** 1996 Jun;134(6):751–7

Null mutation of the prolactin receptor gene produces multiple reproductive defects in the mouse. Ormandy CJ, et al. **Genes Dev** 1997 Jan 15;11(2):167–78

Epo-induced hemoglobinization of SKT6 cells is mediated by minimal cytoplasmic domains of the Epo or prolactin receptors without modulation of GATA-1 or EKLF. Reese TT, et al. **Growth Factors** 1997;14(2–3):161–76

Steroidogenic factor-1 is an essential transcriptional activator for gonad-specific expression of promoter I of the rat prolactin receptor gene. Hu Z, et al. **J Biol Chem** 1997 May 30;272(22):14263–71

Prolactin receptor messenger ribonucleic acid in normal and neoplastic human pituitary tissues. Jin L, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):963–8

Increased expression of prolactin receptor mRNA in adenomyotic uterus in mice. Yamashita M, et al. **Life Sci** 1997;60(17):1437–46

Removal of milk by suckling acutely increases the prolactin receptor gene expression in the lactating mouse mammary gland. Kim JY, et al. **Mol Cell Endocrinol** 1997 Jul 4; 131(1):31–8

The last proline of Box 1 is essential for association with JAK2 and functional activation of the prolactin receptor. Pezet A, et al. **Mol Cell Endocrinol** 1997 May 16; 129(2):199–208

Differential promoter usage in prolactin receptor gene expression: hepatocyte nuclear factor 4 binds to and activates the promoter preferentially active in the liver. Møldrup A, et al. **Mol Endocrinol** 1996 Jun;10(6):661–71

Dominant negative and cooperative effects of mutant forms of prolactin receptor. Perrot-Applanat M, et al. **Mol Endocrinol** 1997 Jul;11(8):1020–32

Dopamine D1, dopamine D2, and prolactin receptor messenger ribonucleic acid expression by the polymerase chain reaction in human meningiomas. Carroll RS, et al. **Neurosurgery** 1996 Feb;38(2):367–75

[Expression of prolactin receptor gene in human decidua of early pregnancy] Tanaka S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Dec; 48(12):1141–7 (Eng. Abstr.) **(Jpn)**

[Expression of brain prolactin receptor mRNA and induction of maternal behavior] Sakaguchi K, et al. **Seikagaku** 1997 Apr;69(4):247–50 (15 ref.) **(Jpn)**

[Heterogeneity of the 5'-untranslated area of prolactin receptor mRNA in rat liver] Rubtsov PM, et al. **Mol Biol (Mosk)** 1996 Mar–Apr;30(2):330–8 **(Rus)**

METABOLISM

Prolactin and growth hormone receptors. Goffin V, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):247–55 (120 ref.)

Prolactin (PRL) receptors are colocalized in dopaminergic neurons in fetal hypothalamic cell cultures: effect of PRL on tyrosine hydroxylase activity. Arbogast LA, et al. **Endocrinology** 1997 Jul;138(7):3016–23

Prolactin receptor expression during adipocyte differentiation of bone marrow stroma. McAveney KM, et al. **Endocrinology** 1996 Dec;137(12):5723–6

Melatonin-induced downregulation of uterine prolactin receptors in mink (Mustela vison). Rose J, et al. **Gen Comp Endocrinol** 1996 Jul;103(1):101–6

Real-time kinetic measurements of the interactions between lactogenic hormones and prolactin-receptor extracellular domains from several species support the model of hormone-induced transient receptor dimerization. Gertler A, et al. **J Biol Chem** 1996 Oct 4;271(40):24482–91

Prolactin signaling in mammary gland development. Hennighausen L, et al. **J Biol Chem** 1997 Mar 21; 272(12):7567–9 (40 ref.)

Identification of a motif associated with the lactogenic actions of human growth hormone. Peterson FC, et al. **J Biol Chem** 1997 Aug 22;272(34):21444–8

Identification of cytoplasmic motifs required for short prolactin receptor internalization. Vincent V, et al. **J Biol Chem** 1997 Mar 14;272(11):7062–8

Internalization of prolactin receptor and prolactin in transfected cells does not involve nuclear translocation. Perrot-Applanat M, et al. **J Cell Sci** 1997 May;110 (Pt 9):1123–32

Functional aspects of the effect of prolactin (PRL) on adrenal steroidogenesis and distribution of the PRL receptor in the human adrenal gland. Glasow A, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3103–11

Ontogenesis of prolactin receptors in the human fetus in early gestation. Implications for tissue differentiation and development. Freemark M, et al. **J Clin Invest** 1997 Mar 1;99(5):1107–17

Rapidly reversible binding of rabbit prolactin to the rabbit prolactin receptor accounts for the differences between homologous and heterologous binding. Petridou B, et al. **J Endocrinol** 1997 May;153(2):207–19

The effect of age and sex on the expression of prolactin binding activity in the chicken bursa of Fabricius. Di Carlo R, et al. **Life Sci** 1996;59(21):1803–8

Placental lactogen-I variant utilizes the prolactin receptor signaling pathway. Cohick CB, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):49–58

Prolactin recruits STAT1, STAT3 and STAT5 independent of conserved receptor tyrosines TYR402, TYR479, TYR515 and TYR580. DaSilva L, et al. **Mol Cell Endocrinol** 1996 Mar 25;117(2):131–40

Prolactin signal transduction to milk protein genes: carboxy-terminal part of the prolactin receptor and its tyrosine phosphorylation are not obligatory for JAK2 and STAT5 activation. Goupille O, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):155–69

Interactions among Janus kinases and the prolactin (PRL) receptor in the regulation of a PRL response element. Gao J, et al. **Mol Endocrinol** 1996 Jul;10(7):847–56

Development of a constitutively active mutant form of the prolactin receptor, a member of the cytokine receptor family. Gourdou I, et al. **Mol Endocrinol** 1996 Jan; 10(1):45–56

Differential promoter usage in prolactin receptor gene expression: hepatocyte nuclear factor 4 binds to and activates the promoter preferentially active in the liver. Møldrup A, et al. **Mol Endocrinol** 1996 Jun;10(6):661–71

Dominant negative and cooperative effects of mutant forms of prolactin receptor. Perrot-Applanat M, et al. **Mol Endocrinol** 1997 Jul;11(8):1020–32

Multiple prolactin (PRL) receptor cytoplasmic residues and Stat1 mediate PRL signaling to the interferon regulatory factor-1 promoter. Wang Y, et al. **Mol Endocrinol** 1997 Aug;11(9):1353–64

Induction of brain prolactin receptor long-form mRNA expression and maternal behavior in pup-contacted male rats: promotion by prolactin administration and suppression by female contact. Sakaguchi K, et al. **Neuroendocrinology** 1996 Jun;63(6):559–68

Prolactin binding sites in rat brain and liver: effects of long-term ovariectomy and ovarian steroids. Mustafa A, et al. **Neurosci Lett** 1995 Nov 24;200(3):179–82

Template-based docking of a prolactin receptor proline-rich motif octapeptide to FKBP12: implications for cytokine receptor signaling. Soman KV, et al. **Protein Sci** 1997 May; 6(5):999–1008

Interaction of recombinant rat placental lactogen-I with extracellular domains of prolactin receptors from three species. Sakal E, et al. **Recept Signal Transduct** 1996; 6(1):35–42

[Prolactin receptors in bile duct cells during rat ontogenesis] Petrashchuk OM, et al. **Biull Eksp Biol Med** 1996 Dec; 122(12):669–72 **(Rus)**

[Autostimulation of prolactin receptors in the guinea pig adrenal cortex] Sautin IuIu, et al. **Biull Eksp Biol Med** 1997 May;123(5):548–9 **(Rus)**

PHYSIOLOGY

Dopamine requires ascorbic acid to be the prolactin release-inhibiting factor. Shin SH, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):E593–8

Tyrosine docking sites of the rat prolactin receptor required for association and activation of stat5. Pezet A, et al. **J Biol Chem** 1997 Oct 3;272(40):25043–50

The prolactin receptor and severely truncated erythropoietin receptors support differentiation of erythroid progenitors. Socolovsky M, et al. **J Biol Chem** 1997 May 30; 272(22):14009–12

Prolactin and prolactin receptors are expressed and functioning in human prostate. Nevalainen MT, et al. **J Clin Invest** 1997 Feb 15;99(4):618–27

The short form of the prolactin (PRL) receptor silences PRL induction of the beta-casein gene promoter. Berlanga JJ, et al. **Mol Endocrinol** 1997 Sep;11(10):1449–57

RECEPTORS, PROSTAGLANDIN

10th International Conference on Prostaglandins and Related Compounds. Vienna, Austria, 22–27 September 1996. Abstracts. **Prostaglandins Leukot Essent Fatty Acids** 1996 Sep;55 Suppl 1:1–152

[Prostanoid receptors] Sasaki Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:586–9 (6 ref.) **(Jpn)**

AGONISTS

Prostaglandin F2alpha receptor (FP receptor) agonists are potent adipose differentiation inhibitors for primary culture of adipocyte precursors in defined medium. Serrero G, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):200–2

Characterization of thromboxane A2/prostaglandin endoperoxide receptors in aorta. Zhang R, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):91–6

Prostaglandin effects on the contractility of bovine trabecular meshwork and ciliary muscle. Krauss AH, et al. **Exp Eye Res** 1997 Mar;64(3):447–53

Prostanoid receptor-mediated calcium signaling in cultured rat astrocytes. Kitanaka J, et al. **Jpn J Pharmacol** 1996 May; 71(1):85–7

7,7-Difluoroprostacyclin derivative, AFP-07, a highly selective and potent agonist for the prostacyclin receptor. Chang CS, et al. **Prostaglandins** 1997 Feb;53(2):83–90

ANALYSIS

Detection of EP2, EP4, and FP receptors in human ciliary epithelial and ciliary muscle cells. Mukhopadhyay P, et al. **Biochem Pharmacol** 1997 May 9;53(9):1249–55

Regulation of prostaglandin F2 alpha receptor expression in cultured human granulosa-luteal cells. Ristimäki A, et al. **Endocrinology** 1997 Jan;138(1):191–5

Radioligand-binding methods for membrane preparations and intact cells. Keen M. **Methods Mol Biol** 1997;83:1–24 (15 ref.)

ANTAGONISTS & INHIBITORS

Partial agonist effects of BW A868C, a selective DP receptor antagonist, on Cl- secretion in dog tracheal epithelium. Liu YJ, et al. **Eur J Pharmacol** 1996 May 23; 304(1–3):117–22

Characterization of thromboxane A2/prostaglandin endoperoxide receptors in aorta. Zhang R, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):91–6

Prostaglandin effects on the contractility of bovine trabecular meshwork and ciliary muscle. Krauss AH, et al. **Exp Eye Res** 1997 Mar;64(3):447–53

Interaction of BW A868C, a prostanoid DP-receptor antagonist, with two receptor subtypes in the rabbit isolated saphenous vein [published erratum appears in Prostaglandins 1997 Jan;53(1):59–62] Lydford SJ, et al. **Prostaglandins** 1996 Aug;52(2):125–39

BIOSYNTHESIS

Expression of prostacyclin receptor in human megakaryocytes. Sasaki Y, et al. **Blood** 1997 Aug 1; 90(3):1039–46

Expression pattern of messenger RNAs for prostanoid receptors in glial cell cultures. Kitanaka J, et al. **Brain Res** 1996 Jan 29;707(2):282–7

Gene expression of prostacyclin receptor in the hypertrophied heart of spontaneously hypertensive rats. Nakagawa O, et al. **Clin Exp Pharmacol Physiol Suppl** 1995; 1:S270–2

Characterization and regulation of a mRNA encoding the prostaglandin F2alpha receptor in the rat ovary. Olofsson JI, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):45–52

BLOOD

Platelet PGI2 receptor affinity is reduced in pre-eclampsia. Klockenbusch W, et al. **Br J Clin Pharmacol** 1996 Jun; 41(6):616–8

Prostacyclin receptor desensitization is a reversible phenomenon in human platelets. Fisch A, et al. **Circulation** 1997 Aug 5;96(3):756–60

[Thrombocyte prostacyclin receptors in gestational hypertension and pre-eclampsia] Klockenbusch W, et al. **Z Geburtshilfe Neonatol** 1996 May-Jun;200(3):96–9 (Eng. Abstr.) **(Ger)**

CHEMISTRY

Structural determinants for agonist binding affinity to thromboxane/prostaglandin endoperoxide (TP) receptors. Analysis of chimeric rat/human TP receptors. Dorn GW 2nd, et al. **J Biol Chem** 1997 May 9;272(19):12399–405

DRUG EFFECTS

Characterization of the prostanoid receptors mediating inhibition of PAF-induced aggregation of guinea-pig eosinophils. Teixeira MM, et al. **Br J Pharmacol** 1997 May; 121(1):77–82

Prostacyclin receptor desensitization is a reversible phenomenon in human platelets. Fisch A, et al. **Circulation** 1997 Aug 5;96(3):756–60

Preadipocyte differentiation blocked by prostaglandin stimulation of prostanoid FP2 receptor in murine 3T3-L1 cells. Casimir DA, et al. **Differentiation** 1996 Jul; 60(4):203–10

Histamine-induced contraction of human isolated bronchus is enhanced by endogenous prostaglandin F2 alpha and activation of TP receptors. Knight DA, et al. **Eur J Pharmacol** 1997 Jan 29;319(2–3):261–7

Relaxant actions of nonprostanoid prostacyclin mimetics on human pulmonary artery. Jones RL, et al. **J Cardiovasc Pharmacol** 1997 Apr;29(4):525–35

Pharmacological nature of TP receptor mediated contraction

in human intrapulmonary artery. Jino H, et al. **Life Sci** 1996;59(24):2059–65

Modulation of noradrenaline release in rat isolated stomach by prostanoids, but not by histaminergic mechanisms. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec;352(6):631–9

GENETICS

Hormonal regulation of prostaglandin F2 alpha receptor gene expression in mouse ovary. Sugatani J, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):E686–93

Potential sites of prostaglandin actions in the periimplantation mouse uterus: differential expression and regulation of prostaglandin receptor genes. Yang ZM, et al. **Biol Reprod** 1997 Feb;56(2):368–79

Induction of cyclooxygenase-2 and prostaglandin F2alpha receptor expression by interleukin-1beta in cultured human granulosa-luteal cells. Narko K, et al. **Endocrinology** 1997 Sep;138(9):3638–44

Distinct mechanisms regulate induction of messenger ribonucleic acid for prostaglandin (PG) G/H synthase-2, PGE (EP3) receptor, and PGF2 alpha receptor in bovine preovulatory follicles. Tsai SJ, et al. **Endocrinology** 1996 Aug;137(8):3348–55

Genomic organization and characterization of the gene encoding bovine prostaglandin F2alpha receptor. Ezashi T, et al. **Gene** 1997 May 6;190(2):271–8

Mapping of the genes encoding mouse prostaglandin D, E, and F and prostacyclin receptors. Ishikawa TO, et al. **Genomics** 1996 Mar 1;32(2):285–8

Cloning of a carboxyl-terminal isoform of the prostanoid FP receptor. Pierce KL, et al. **J Biol Chem** 1997 Jan 10; 272(2):883–7

Association of expression of mRNA encoding the PGF2 alpha receptor with luteal cell apoptosis in ovaries of pseudopregnant mice. Hasumoto K, et al. **J Reprod Fertil** 1997 Jan;109(1):45–51

PLD activation in Chinese hamster ovary (CHO) cells transfected with PGF2 alpha receptor cDNA. Liu B, et al. **Prostaglandins** 1996 Apr;51(4):233–48

Expression and regulation of prostaglandin F receptor mRNA in rodent osteoblastic cells. Nemoto K, et al. **Prostaglandins** 1995 Nov-Dec;50(5–6):349–58

Cloning, sequencing and proposed structure for a prostaglandin F2 alpha receptor regulatory protein. Orlicky DJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Oct;55(4):261–8

IMMUNOLOGY

Demonstration of a novel circulating anti-prostacyclin receptor antibody. Kahn NN, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8779–82

METABOLISM

Internalization and down-regulation of the prostacyclin receptor in human platelets. Giovanazzi S, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):71–7

Protein kinase C plays a key role in the cross-talk between intracellular signalings via prostanoid receptors in a megakaryoblastic cell line, MEG-01s. Watanabe T, et al. **Biochim Biophys Acta** 1996 Nov 22;1304(2):161–9

Prostaglandins and their receptors: implications for ovarian physiology. Olofsson JI, et al. **Biol Signals** 1996 Mar-Apr; 5(2):90–100 (103 ref.)

Intracellular calcium mobilization following prostaglandin receptor activation in human ciliary muscle cells. Chen W, et al. **Curr Eye Res** 1997 Aug;16(8):847–53

Overexpression of G(s)alpha in NG108–15, neuroblastomaXglioma cells: effects on receptor regulation of the stimulatory adenylyl cyclase cascade. Mullaney I, et al. **FEBS Lett** 1996 Nov 18;397(2–3):325–30

Genomic organization and characterization of the gene encoding bovine prostaglandin F2alpha receptor. Ezashi T, et al. **Gene** 1997 May 6;190(2):271–8

Functional and molecular aspects of renal prostaglandin receptors [see comments] Breyer MD, et al. **J Am Soc Nephrol** 1996 Jan;7(1):8–17 (87 ref.). Comment in: J Am Soc Nephrol 1996 Aug;7(8):1245–6.

Identification of domains conferring ligand binding specificity to the prostanoid receptor. Studies on chimeric prostacyclin/prostaglandin D receptors. Kobayashi T, et al. **J Biol Chem** 1997 Jun 13;272(24):15154–60

Agonist-dependent phosphorylation of an epitope-tagged human prostacyclin receptor. Smyth EM, et al. **J Biol Chem** 1996 Dec 27;271(52):33698–704

Positive and negative regulation of cell proliferation through prostaglandin receptors in NIH-3T3 cells. Watanabe T, et al. **J Cell Physiol** 1996 Nov;169(2):401–9

Comparative studies on prostanoid receptors in human non-pigmented ciliary epithelial and mouse fibroblast cell lines. Liu L, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Oct; 55(4):231–40

Negative regulatory activity of a prostaglandin F2 alpha receptor associated protein (FPRP). Orlicky DJ. **Prostaglandins Leukot Essent Fatty Acids** 1996 Apr; 54(4):247–59

Failure of parturition in mice lacking the prostaglandin F receptor. Sugimoto Y, et al. **Science** 1997 Aug 1; 277(5326):681–3

Structure-activity relationships and receptor profiles of some ocular hypotensive prostanoids. Resul B, et al. **Surv Ophthalmol** 1997 Feb;41 Suppl 2:S47–52 (16 ref.)

The molecular biology and ocular distribution of prostanoid receptors. Woodward DF, et al. **Surv Ophthalmol** 1997 Feb; 41 Suppl 2:S15–21 (58 ref.)

PHYSIOLOGY

The role of prostaglandin receptors in regulating cerebral blood flow in the perinatal period. Chemtob S, et al. **Acta Paediatr** 1996 May;85(5):517–24 (107 ref.)

Regulation of prostanoid vasomotor effects and receptors in choroidal vessels of newborn pigs. Abran D, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R995–1001

Evidence for the distinct nature of F2-isoprostane receptors from those of thromboxane A2. Fukunaga M, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F477–83

Sympathetic nervous system and hypertension during prolonged TxA2/PGH2 receptor activation in rats. Gao H, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H734–9

AT1 and TxA2/PGH2 receptors maintain hypertension throughout 2K,1C Goldblatt hypertension in the rat. Wilcox CS, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R891–6

Characterization of the prostanoid receptor(s) on human blood monocytes at which prostaglandin E2 inhibits lipopolysaccharide-induced tumour necrosis factor-alpha generation. Meja KK, et al. **Br J Pharmacol** 1997 Sep; 122(1):149–57

FP prostaglandin receptors mediating inositol phosphates generation and calcium mobilization in Swiss 3T3 cells: a pharmacological study. Griffin BW, et al. **J Pharmacol Exp Ther** 1997 May;281(2):845–54

Differential involvement of serotonin 2A/C and thromboxane A2/prostanoid receptors in high- vs. low-shear rate arterial thrombosis in rabbits. Valentin JP, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):761–9

Characterization of receptor subtypes involved in prostanoid-induced conjunctival pruritus and their role in mediating allergic conjunctival itching. Woodward DF, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):137–42

Altered pain perception and inflammatory response in mice lacking prostacyclin receptor. Murata T, et al. **Nature** 1997 Aug 14;388(6643):678–82

Prostanoid receptors and signal transduction. Narumiya S. **Prog Brain Res** 1996;113:231–41 (70 ref.)

Regulation of cerebrovascular prostaglandin E2 (PGE2) and PGF2 alpha receptors and their functions during development. Chemtob S, et al. **Semin Perinatol** 1996 Jun; 20(3):164–72

RECEPTORS, PROSTAGLANDIN E

Molecular aspects of the structures and functions of the prostaglandin E receptors. Ichikawa A, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):83–7

AGONISTS

Functional interaction of the carboxylic acid group of agonists and the arginine residue of the seventh transmembrane domain of prostaglandin E receptor EP3 subtype. Chang C, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):597–601

Effects of centrally administered prostaglandin EP receptor agonists on febrile and adrenocortical responses in the prepubertal pig. Parrott RF, et al. **Brain Res Bull** 1996; 41(2):97–103

Two Gs-coupled prostaglandin E receptor subtypes, EP2 and EP4, differ in desensitization and sensitivity to the metabolic inactivation of the agonist. Nishigaki N, et al. **Mol Pharmacol** 1996 Oct;50(4):1031–7

ANALYSIS

Detection of EP2, EP4, and FP receptors in human ciliary epithelial and ciliary muscle cells. Mukhopadhyay P, et al. **Biochem Pharmacol** 1997 May 9;53(9):1249–55

ANTAGONISTS & INHIBITORS

EP1 receptor blockade attenuates both spontaneous tone and PGE2-elicited contraction in guinea pig trachealis. Ndukwu IM, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L626–33

Interaction of BW A868C, a prostanoid DP-receptor antagonist, with two receptor subtypes in the rabbit isolated saphenous vein [published erratum appears in Prostaglandins 1997 Jan;53(1):59–62] Lydford SJ, et al. **Prostaglandins** 1996 Aug;52(2):125–39

BIOSYNTHESIS

Hepatocyte growth factor as a key to modulate anti-ulcer action of prostaglandins in stomach. Takahashi M, et al. **J Clin Invest** 1996 Dec 1;98(11):2604–11

CHEMISTRY

Constitutive activity of human prostaglandin E receptor EP3 isoforms. Jin J, et al. **Br J Pharmacol** 1997 May; 121(2):317–23

Functional role of carboxyl-terminal tail of prostaglandin EP3 receptor in Gi coupling. Hizaki H, et al. **FEBS Lett** 1997 Sep 8;414(2):323–6

The long cytoplasmic carboxyl terminus of the prostaglandin E2 receptor EP4 subtype is essential for agonist-induced desensitization. Bastepe M, et al. **Mol Pharmacol** 1997 Feb; 51(2):343–9

DRUG EFFECTS

Pharmacological studies on prostanoid receptors in the rabbit isolated saphenous vein: a comparison with the rabbit isolated ear artery. Lydford SJ, et al. **Br J Pharmacol** 1996 Jan;117(1):13–20

Effect of adenosine 3',5'-cyclic monophosphate (cAMP) on human non-tumorigenic and tumorigenic parotid acinar cells in culture. Krause G, et al. **Cancer Lett** 1996 Nov 12;108(1):73–9

Chronic exposure of NG 108–15 cells to inhibitory acting drugs reduces stimulatory prostaglandin E1 receptor number. Ammer H, et al. **Eur J Pharmacol** 1996 Apr 29; 302(1–3):199–205

The long cytoplasmic carboxyl terminus of the prostaglandin E2 receptor EP4 subtype is essential for agonist-induced desensitization. Bastepe M, et al. **Mol Pharmacol** 1997 Feb; 51(2):343–9

Membrane depolarization by activation of prostaglandin E receptor EP3 subtype of putative serotonergic neurons in the dorsal raphe nucleus of the rat. Momiyama T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Mar; 353(4):377–81

Prostaglandin E2 both stimulates and inhibits adenyl cyclase on platelets: comparison of effects on cloned EP4 and EP3 prostaglandin receptor subtypes. Mao GF, et al. **Prostaglandins** 1996 Sep;52(3):175–85

GENETICS

Cloning and expression of the rabbit prostaglandin EP4 receptor. Breyer RM, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F485–93

The mouse genes for the EP1 prostanoid receptor and the PKN protein kinase overlap. Båtshake B, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):70–6

'Distinct cellular localization' of the messenger ribonucleic acid for prostaglandin E receptor subtypes in the mouse uterus during pseudopregnancy. Katsuyama M, et al. **Endocrinology** 1997 Jan;138(1):344–50

Distinct mechanisms regulate induction of messenger ribonucleic acid for prostaglandin (PG) G/H synthase-2, PGE (EP3) receptor, and PGF2 alpha receptor in bovine preovulatory follicles. Tsai SJ, et al. **Endocrinology** 1996 Aug;137(8):3348–55

Exclusive expression of the Gs-linked prostaglandin E2 receptor subtype 4 mRNA in mononuclear Jurkat and KM-3 cells and coexpression of subtype 4 and 2 mRNA in U-937 cells. Blaschke V, et al. **FEBS Lett** 1996 Sep 23;394(1):39–43

Structural organization of the human prostaglandin EP3 receptor subtype gene (PTGER3). Kotani M, et al. **Genomics** 1997 Mar 15;40(3):425–34

Prostanoid receptors of murine NIH 3T3 and RAW 264.7 cells. Structure and expression of the murine prostaglandin EP4 receptor gene. Arakawa T, et al. **J Biol Chem** 1996 Nov 22;271(47):29569–75

Suppression of prostaglandin E receptor signaling by the variant form of EP1 subtype. Okuda-Ashitaka E, et al. **J Biol Chem** 1996 Dec 6;271(49):31255–61

Gene expression of the human prostaglandin E receptor EP4 subtype: differential regulation in monocytoid and lymphoid lineage cells by phorbol ester. Mori K, et al. **J Mol Med** 1996 Jun;74(6):333–6

Functional analysis and chromosomal gene assignment of rat kidney prostaglandin EP3 receptor. Takeuchi K, et al. **Kidney Int Suppl** 1996 Jun;55:S183–6

METABOLISM

Differential localization of prostaglandin E receptor subtypes in human kidney. Breyer MD, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F912–8

Cellular localization of mRNAs for prostaglandin E receptor subtypes in mouse gastrointestinal tract. Morimoto K, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G681–7

Functional interaction of the carboxylic acid group of agonists and the arginine residue of the seventh transmembrane domain of prostaglandin E receptor EP3 subtype. Chang C, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):597–601

Identification and distribution of prostaglandin E receptors on porcine luteal cells. Feng SM, et al. **Biol Reprod** 1996 Jun;54(6):1366–74

Characterization of the PGE2 receptor subtype in bovine chondrocytes in culture. de Brum-Fernandes AJ, et al. **Br J Pharmacol** 1996 Aug;118(7):1597–604

Morphine dependence in human neuroblastoma SH-SY5Y cells is associated with adaptive changes in both the quantity and functional interaction of PGE1 receptors and stimulatory G proteins. Ammer H, et al. **Brain Res** 1996 Jan 29;707(2):235–44

Characterization and regulation of prostaglandin E2 receptor and receptor-coupled functions in the choroidal vasculature of the pig during development [see comments] Abran D, et al. **Circ Res** 1997 Apr;80(4):463–72. Comment in: Circ Res 1997 Apr;80(4):604–6.

PGE2 synthesis and response pathways in cultured corneal endothelial cells: the effects of in vitro aging. Jumblatt MM. **Curr Eye Res** 1997 May;16(5):428–35

The C-terminal domain of the Gs-coupled EP4 receptor

confers agonist-dependent coupling control to Gi but no coupling to Gs in a receptor hybrid with the Gi-coupled EP3 receptor. Neuschäfer-Rube F, et al. **FEBS Lett** 1997 Jan 20;401(2-3):185-90

Interactions of malondialdehyde and 4-hydroxynonenal with rat liver plasma membranes and their effect on binding of prostaglandin E2 by specific receptors. Buko VU, et al. **Free Radic Res** 1996 Nov;25(5):415-20

The second extracellular loop of the prostaglandin EP3 receptor is an essential determinant of ligand selectivity. Audoly L, et al. **J Biol Chem** 1997 May 23;272(21):13475-8

Prostaglandin E receptor EP3 subtype induces neurite retraction via small GTPase Rho. Katoh H, et al. **J Biol Chem** 1996 Nov 22;271(47):29780-4

EP receptor subtypes implicated in the PGE2-induced sensitization of polymodal receptors in response to bradykinin and heat. Kumazawa T, et al. **J Neurophysiol** 1996 Jun;75(6):2361-8

Characterization and ontogeny of PGE2 and PGF2 alpha receptors on the retinal vasculature of the pig [published erratum appears in Prostaglandins 1996 Sep;52(3):247] Abran D, et al. **Prostaglandins** 1995 Nov-Dec; 50(5-6):253-67

Distribution of prostaglandin E receptors in the rat gastrointestinal tract. Ding M, et al. **Prostaglandins** 1997 Mar;53(3):199-216

PHYSIOLOGY

Prostaglandins induce proliferation of rat hepatocytes through a prostaglandin E2 receptor EP3 subtype. Hashimoto N, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G597-604

Two isoforms of prostaglandin EP3 receptor exhibiting constitutive activity and agonist-dependent activity in Rho-mediated stress fiber formation. Hasegawa H, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):631-6

Functional role of carboxyl-terminal tail of prostaglandin EP3 receptor in Gi coupling. Hizaki H, et al. **FEBS Lett** 1997 Sep 8;414(2):323-6

A specific prostaglandin E2 receptor and its role in modulating salivary secretion in the female tick, Amblyomma americanum (L.). Qian Y, et al. **Insect Biochem Mol Biol** 1997 May;27(5):387-95

Regulation of expression of matrix metalloproteinase-9 in early human T cells of the HSB.2 cultured line by the EP3 subtype of prostaglandin E2 receptor. Zeng L, et al. **J Biol Chem** 1996 Nov 1;271(44):27744-50

Intestinal effects of isoprostanes: evidence for the involvement of prostanoid EP and TP receptors. Elmhurst JL, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1198-205

Substitution of charged amino acid residues in transmembrane regions 6 and 7 affect ligand binding and signal transduction of the prostaglandin EP3 receptor. Audoly L, et al. **Mol Pharmacol** 1997 Jan;51(1):61-8

Mutual interactions of the presynaptic histamine H3 and prostaglandin EP3 receptors on the noradrenergic terminals in the mouse brain. Schlicker E, et al. **Neuroscience** 1997 Jul;79(1):247-54

Prostaglandin E receptor EP3 subtype is involved in thermal hyperalgesia through its actions in the preoptic hypothalamus and the diagonal band of Broca in rats. Hosoi M, et al. **Pain** 1997 Jul;71(3):303-11

Prostaglandin E2 receptors of the EP2 and EP4 subtypes regulate activation and differentiation of mouse B lymphocytes to IgE-secreting cells. Fedyk ER, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10978-83

Regulation of cerebrovascular prostaglandin E2 (PGE2) and PGF2 alpha receptors and their functions during development. Chemtob S, et al. **Semin Perinatol** 1996 Jun; 20(3):164-72

[Prostanoid receptors] Negishi M. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Dec;19(6):569-71 (0 ref.) **(Jpn)**

RECEPTORS, PROTIRELIN see **RECEPTORS, THYROTROPIN-RELEASING HORMONE**

RECEPTORS, PULMONARY STRETCH see **PULMONARY STRETCH RECEPTORS**

RECEPTORS, PURINERGIC

Development and perspectives of the purinoceptor concept. Burnstock G. **J Auton Pharmacol** 1996 Dec;16(6):295-302 (90 ref.)

AGONISTS

Identification of potent P2Y-purinoceptor agonists that are derivatives of adenosine 5'-monophosphate. Boyer JL, et al. **Br J Pharmacol** 1996 Aug;118(8):1959-64

Enzymatic synthesis of UTP gamma S, a potent hydrolysis resistant agonist of P2U-purinoceptors. Lazarowski ER, et al. **Br J Pharmacol** 1996 Jan;117(1):203-9

The effects of the purinergic system on digitalis-induced epileptiform activity. Kesim Y, et al. **J Basic Clin Physiol Pharmacol** 1994 Apr-Jun;5(2):167-78

Regulation by purinergic agonists of zinc uptake by rat submandibular glands. Dehaye JP. **J Trace Elem Med Biol** 1995 Jul;9(2):94-101

ANTAGONISTS & INHIBITORS

Effects of a selective adenosine A1 receptor antagonist on the development of cyclosporin nephrotoxicity. Balakrishnan VS, et al. **Br J Pharmacol** 1996 Mar; 117(5):879-84

Effect of oral aminophylline in patients with angina and normal coronary arteriograms (cardiac syndrome X). Elliott PM, et al. **Heart** 1997 Jun;77(6):523-6

The effects of the purinergic system on digitalis-induced epileptiform activity. Kesim Y, et al. **J Basic Clin Physiol Pharmacol** 1994 Apr-Jun;5(2):167-78

BLOOD

Evidence that most high-affinity ATP binding sites on aortic endothelial cells and membranes do not correspond to P2 receptors. Motte S, et al. **Eur J Pharmacol** 1996 Jun 27; 307(2):201-9

CHEMISTRY

Radiolabeling of the rat P2X4 purinoceptor: evidence for allosteric interactions of purinoceptor antagonists and monovalent cations with P2X purinoceptors. Michel AD, et al. **Mol Pharmacol** 1997 Mar;51(3):524-32

DRUG EFFECTS

Purinoceptor modulation of noradrenaline release in rat tail artery: tonic modulation mediated by inhibitory P2Y- and facilitatory A2A-purinoceptors. Gonçalves J, et al. **Br J Pharmacol** 1996 Jan;117(1):156-60

Dissociation of P2 purinoceptor-mediated increase in intracellular Ca2+ level from myosin light chain phosphorylation and contraction in rat aorta. Kitajima S, et al. **Br J Pharmacol** 1996 Jun;118(3):543-8

The effects of purine compounds on the isolated aorta of the frog Rana temporaria. Knight GE, et al. **Br J Pharmacol** 1996 Mar;117(5):873-8

Characterization of the P2Y-purinoceptor involved in the ATP-induced rise in cytosolic Ca2+ concentration in rat ileal myocytes. Pacaud P, et al. **Br J Pharmacol** 1996 Aug; 118(8):2213-9

Differential effects of diadenosine phosphates on purinoceptors in the rat isolated perfused kidney. van der Giet M, et al. **Br J Pharmacol** 1997 Apr;120(8):1453-60

Molecular characterization and pharmacological properties of the human P2X3 purinoceptor. Garcia-Guzman M, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1-2):59-66

Differential antagonism of cardiac actions of adenosine by theophylline. Bertolet BD, et al. **Cardiovasc Res** 1996 Nov; 32(5):839-45

Selective adenosine A3 receptor stimulation reduces ischemic myocardial injury in the rabbit heart. Tracey WR, et al. **Cardiovasc Res** 1997 Feb;33(2):410-5

Pharmacological characterization of P2 purinoceptor types in rat locus coeruleus neurons. Fröhlich R, et al. **Eur J Pharmacol** 1996 Nov 21;315(3):255-61

The effects of P2 purinoceptor agonists on the isolated portal vein of the guinea pig. Orre M, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):229-36

ATP-evoked inositol phosphates formation through activation of P2U purinergic receptors in cultured astrocytes: regulation by PKC subtypes alpha, delta, and theta. Chen CC, et al. **Glia** 1996 May;17(1):63-71

Activation of P2x-purinoceptors in the nucleus tractus solitarius elicits differential inhibition of lumbar and renal sympathetic nerve activity. Scislo TJ, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1-2):103-10

ATP P2X receptors mediate fast synaptic transmission in the dorsal horn of the rat spinal cord. Bardoni R, et al. **J Neurosci** 1997 Jul 15;17(14):5297-304

Carbon-11-labeled KF15372: a potential central nervous system adenosine A1 receptor ligand. Furuta R, et al. **J Nucl Med** 1996 Jul;37(7):1203-7

Activation of A2-purinoceptors by adenosine stimulates L-arginine transport (system y+) and nitric oxide synthesis in human fetal endothelial cells. Sobrevia L, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):135-40

Changes in cholinergic and purinergic neurotransmission in pathologic bladder of chronic spinal rabbit. Yokota T, et al. **J Urol** 1996 Nov;156(5):1862-6

Single channel properties of ATP-gated cation channels (P2X receptors) heterologously expressed in Chinese hamster ovary cells. Evans RJ. **Neurosci Lett** 1996 Jul 19; 212(3):212-4

Evidence of P2Y-purinoceptor mediated bladder neck smooth muscle post-contractile relaxation in the male mini-pig. Tong YC, et al. **Neurosci Lett** 1997 Apr 11; 225(3):181-4

Activation of P2-purino-, alpha 1-adreno and H1-histamine receptors triggers cytoplasmic calcium signalling in cerebellar Purkinje neurons. Kirischuk S, et al. **Neuroscience** 1996 Aug;73(3):643-7

Purinergic receptors. Malec D. **Pol J Pharmacol** 1996 Sep-Oct;48(5):457-65 (96 ref.)

GENETICS

Cloning of the rat P2u receptor and its potential role in coronary vasodilation. Gödecke S, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C570-7

IMMUNOLOGY

Effects of extracellular ATP and adenosine on different thymocyte subsets: possible role of ATP-gated channels and G protein-coupled purinergic receptor. Apasov SG, et al. **J Immunol** 1997 Jun 1;158(11):5095-105

METABOLISM

Regulation of purinoceptors in guinea pig pulmonary artery: functional evidences. Szentmiklósi AJ, et al. **Acta Physiol Hung** 1996;84(3):339-41

Extracellular nucleotides stimulate proliferation in MCF-7 breast cancer cells via P2-purinoceptors. Dixon CJ, et al. **Br J Cancer** 1997;75(1):34-9

Purine and pyrimidine nucleotide receptors in the apical membranes of equine cultured epithelia. Ko WH, et al. **Br J Pharmacol** 1997 May;121(1):150-6

Coexistence of purino- and pyrimidinoceptors on activated rat microglial cells. Nörenberg W, et al. **Br J Pharmacol** 1997 Jul;121(6):1087-98

Activation of purinergic receptors triggers oscillatory contractions in adult rat ventricular myocytes. Zhang BX, et al. **Circ Res** 1996 Jul;79(1):94-102

Muscarinic and purinergic Ca2+ mobilizations in the neural retina of early embryonic chick. Sakaki Y, et al. **Int J Dev Neurosci** 1996 Oct;14(6):691-9

Regulatory functions of protein kinase C isoenzymes in purinoceptor signalling in mesangial cells. Pfeilschifter J, et al. **J Auton Pharmacol** 1996 Dec;16(6):315-8

Purinergic receptor stimulation increases membrane trafficking in brown adipocytes. Pappone PA, et al. **J Gen Physiol** 1996 Nov;108(5):393-404

Dinucleotide receptor modulation by protein kinases (protein kinases A and C) and protein phosphatases in rat brain synaptic terminals. Pintor J, et al. **J Neurochem** 1997 Jun; 68(6):2552-7

Calcium-mobilizing purine receptors on the surface of mammalian articular chondrocytes. Koolpe M, et al. **J Orthop Res** 1997 Mar;15(2):204-12

Purinergic stimulation of rabbit ciliated airway epithelia: control by multiple calcium sources. Korngreen A, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):53-66

Localization of ATP-gated ion channels in cerebellum using P2x2R subunit-specific antisera. Kanjhan R, et al. **Neuroreport** 1996 Nov 4;7(15-17):2665-9

[Increase in access to SH-groups of membrane proteins in Ehrlich ascites carcinoma cells upon purinergic receptor activation] Rybina VV, et al. **Biofizika** 1997 Mar-Apr; 42(2):455-8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Heterogeneity of P2u- and P2y-purinergic receptor regulation of phospholipases in MDCK cells. Firestein BL, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F610-8

Cloning of the rat P2u receptor and its potential role in coronary vasodilation. Gödecke S, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C570-7

Role of purinergic receptors in chloride secretion in Caco-2 cells. Inoue CN, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1862-70

Pressure-mediated vasoconstriction of juxtamedullary afferent arterioles involves P2-purinoceptor activation. Inscho EW, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1077-85

Purinergic-mediated inhibition of Na+-K+-ATPase in proximal tubule cells: elevated cytosolic Ca2+ is not required. Jin W, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1169-77

Potentiation of regulatory volume decrease by P2U purinoceptors in HSG-PA cells. Kim HD, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C86-97

Inhibition of Na+ and Ca2+ reabsorption by P2u purinoceptors requires PKC but not Ca2+ signaling. Koster HP, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F53-60

Effects of P2 purinergic receptor stimulation in brown adipocytes. Lee SC, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C679-86

Purinergic facilitation of ATP-sensitive potassium current in rat ventricular myocytes. Babenko AP, et al. **Br J Pharmacol** 1997 Feb;120(4):631-8

Evidence for two distinct P2-purinoceptors subserving contraction of the rat anococcygeus smooth muscle. Najbar AT, et al. **Br J Pharmacol** 1996 Jun;118(3):537-42

Effects of purinoceptor agonists on cytosolic Ca2+ concentration in swine tracheal smooth muscle cells in culture. Sawai H, et al. **Br J Pharmacol** 1996 Oct; 119(3):539-44

P2 purinoceptor-mediated inhibition of cyclic AMP accumulation in NG108-15 cells. Song SL, et al. **Brain Res** 1996 Sep 23;734(1-2):243-51

Electrophysiological consequences of purinergic receptor stimulation in isolated rat pulmonary arterial myocytes. Hartley SA, et al. **Circ Res** 1997 Feb;80(2):170-8

Purinergic receptors: their role in nociception and primary afferent neurotransmission. Burnstock G, et al. **Curr Opin Neurobiol** 1996 Aug;6(4):526-32 (63 ref.)

P2-purinoreceptor evoked changes in intracellular calcium oscillations in single isolated human granulosa-lutein cells. Lee PS, et al. **Endocrinology** 1996 Sep;137(9):3756-61

Activation of purinergic receptor subtypes in the nucleus tractus solitarius elicits specific regional vascular response patterns. Barraco RA, et al. **J Auton Nerv Syst** 1996 Jul

5;59(3):113–24
Purinoceptors and platelet aggregation. Hourani SM. **J Auton Pharmacol** 1996 Dec;16(6):349–52 (31 ref.)
Effects of hypophysectomy on purinergic and noradrenergic contractility of the rat vas deferens. Ralevic V, et al. **J Auton Pharmacol** 1996 Aug;16(4):191–6
Activation of apical P2U purine receptors permits inhibition of adrenaline-evoked cyclic AMP accumulation in cultured equine sweat gland epithelial cells. Wilson SM, et al. **J Exp Biol** 1996 Oct;199 (Pt 10):2153–60
Purinoceptors: from history to recent progress. A review. Windscheif U. **J Pharm Pharmacol** 1996 Oct; 48(10):993–1011 (227 ref.)
P2 purinoceptor-activated inward currents in follicular oocytes of Xenopus laevis. King BF, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):17–28
Purinoceptor-operated cationic channels in human B lymphocytes. Markwardt F, et al. **J Physiol (Lond)** 1997 Jan 1;498 (Pt 1):143–51
Activation of A2-purinoceptors by adenosine stimulates L-arginine transport (system y+) and nitric oxide synthesis in human fetal endothelial cells. Sobrevia L, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):135–40
Ca2+ responses to ATP via purinoceptors in the early embryonic chick retina. Sugioka M, et al. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):855–63
Adrenergic and purinergic receptors-mediated calcium responses in brown adipocytes. Omatsu-Kanbe M, et al. **Jpn J Physiol** 1997;47 Suppl 1:S47–8
Induction of reactive gliosis by purinoceptor activation: a critical appraisal. Walz W. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jan; 13(1):30–5 (25 ref.)
Intracellular calcium transients mediated by P2 receptors in the paranodal Schwann cell region of myelinated rat spinal root axons. Mayer C, et al. **Neurosci Lett** 1997 Mar 7; 224(1):49–52
Purinergic cation channels in neurons of rabbit vesical parasympathetic ganglia. Nishimura T, et al. **Neurosci Lett** 1996 Jul 19;212(3):215–7
Presence of functional P2T and P2U purinoceptors on the human megakaryoblastic cell line, Meg-01 characterization by functional and binding studies. Hechler B, et al. **Nouv Rev Fr Hematol** 1995;37(4):231–40
Domains of P2X receptors involved in desensitization. Werner P, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15485–90
P2U-purinergic receptor activation mediates inhibition of cAMP accumulation in cultured renal mesangial cells. Schulze-Lohoff E, et al. **Ren Physiol Biochem** 1995 Sep–Oct;18(5):219–30

RECEPTORS, PURINERGIC P1

AGONISTS

Vasorelaxation of noradrenaline-constricted guinea-pig and rabbit aorta by the adenosine analogue NECA: roles of intra-and extracellular calcium. Ford WR, et al. **Arch Int Pharmacodyn Ther** 1996 May-Jun;331(3):285–300
Adenosine A3 receptor agonists protect HL-60 and U-937 cells from apoptosis induced by A3 antagonists. Yao Y, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):317–22
Role of cysteine residues of rat A2a adenosine receptors in agonist binding. Mazzoni MR, et al. **Biochim Biophys Acta** 1997 Feb 21;1324(1):159–70
Stimulation of human sperm during capacitation in vitro by an adenosine agonist with specificity for A2 receptors. Fénichel P, et al. **Biol Reprod** 1996 Jun;54(6):1405–11
Functional characterization of adenosine receptors in the nucleus tractus solitarius mediating hypotensive responses in the rat. White PJ, et al. **Br J Pharmacol** 1996 Jan; 117(2):305–8
Adenosine A2A receptor agonists increase Fos-like immunoreactivity in mesolimbic areas. Pinna A, et al. **Brain Res** 1997 Jun 6;759(1):41–9
Effects of selective adenosine A1 and A2a agonists on amphetamine-induced locomotion and c-Fos in striatum and nucleus accumbens. Turgeon SM, et al. **Brain Res** 1996 Jan 22;707(1):75–80
Protection against global ischemia in the rabbit isolated heart 24 hours after transient adenosine A1 receptor activation [letter] Baxter GF, et al. **Cardiovasc Drugs Ther** 1997 Mar; 11(1):83–5
Adenosine A3 receptor agonists inhibit murine macrophage tumor necrosis factor-alpha production in vitro and in vivo. Bowlin TL, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 May; 43(3):345–9
Effects of A1 adenosine receptor agonism using N6-cyclohexyl-2'-O-methyladenosine in patients with left ventricular dysfunction. Bertolet BD, et al. **Circulation** 1996 Sep 15;94(6):1212–5
Pharmacological stress thallium scintigraphy with 2-cyclohexylmethylidenehydrazinoadenosine (WRC-0470). A novel, short-acting adenosine A2A receptor agonist. Glover DK, et al. **Circulation** 1996 Oct 1;94(7):1726–32
Molecular simulation of 8-styrylxanthines. Mager PP, et al. **Drug Des Discov** 1995 Nov;13(2):89–107
Potentiated cAMP rise in metabotropically stimulated rat cultured astrocytes by a Ca2+-related A1/A2 adenosine receptor cooperation. Ogata T, et al. **Eur J Neurosci** 1996 Jun;8(6):1124–31
Repeated treatment with adenosine A1 receptor agonist and antagonist modifies the anticonvulsant properties of CPPene. De Sarro G, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):239–45
Motor depressant effects mediated by dopamine D2 and adenosine A2A receptors in the nucleus accumbens and the caudate-putamen. Hauber W, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):127–31
Stimulation of adenosine A1 receptors prevents the EEG arousal due to dopamine D1 receptor activation in rabbits. Popoli P, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):123–6
Adenosine analogues relax guinea-pig taenia caeci via an adenosine A2B receptor and a xanthine-resistant site. Prentice DJ, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):103–6
Hemodynamic effects and histamine release elicited by the selective adenosine A3 receptor agonist 2-Cl-IB-MECA in conscious rats. Van Schaick EA, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):311–4
Reduction of postischemic brain damage and memory deficits following treatment with the selective adenosine A1 receptor agonist. Von Lubitz DK, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):43–8
Synergistic increase in Ca2+ produced by A1 adenosine and muscarinic receptor activation via a pertussis-toxin-sensitive pathway in epithelial cells of the rabbit ciliary body. Farahbakhsh NA, et al. **Exp Eye Res** 1997 Feb;64(2):173–9
The effect of N6-cyclohexyladenosine and 5'-N-ethylcarboxamidoadenosine on body temperature in normothermic rabbits. Matuszek M, et al. **Gen Pharmacol** 1996 Apr;27(3):467–9
Mechanism and pressor relevance of the short-term cardiovascular and renin excitatory actions of the selective A2A-adenosine receptor agonists. Alberti C, et al. **J Cardiovasc Pharmacol** 1997 Sep;30(3):320–4
Time course of delayed myocardial protection after transient adenosine A1-receptor activation in the rabbit. Baxter GF, et al. **J Cardiovasc Pharmacol** 1997 May;29(5):631–8
Cardiovascular and metabolic effects of adenosine A1-receptor agonists in streptozotocin-treated rats. Cox BF, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):417–26
Purinergic agonists stimulate the secretion of endothelin-1 in rat thyroid FRTL-5 cells. Vainio M, et al. **J Cell Physiol** 1996 Dec;169(3):538–43
Effects of adenosine-receptor agonists on renin release in anaesthetized rats. Protasoni G, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1753–7
Adenosine receptor agonists differentially regulate IL-10, TNF-alpha, and nitric oxide production in RAW 264.7 macrophages and in endotoxemic mice. Haskó G, et al. **J Immunol** 1996 Nov 15;157(10):4634–40
A tandem solid phase extraction, reversed-phase HPLC method for determining SDZ WAG 994 in dog, monkey and rat blood. Cramer JA, et al. **J Pharm Biomed Anal** 1997 Mar;15(6):749–58
Agonist-independent effect of an allosteric enhancer of the A1 adenosine receptor in CHO cells stably expressing the recombinant human A1 receptor. Kollias-Baker CA, et al. **J Pharmacol Exp Ther** 1997 May;281(2):761–8
Partial agonism of the nonselective adenosine receptor agonist 8-butylaminoadenosine at the A1 receptor in vivo. Mathot RA, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1439–46
In vivo role of the adenosine A3 receptor: N6-2-(4-aminophenyl)ethyladenosine induces bronchospasm in BDE rats by a neurally mediated mechanism involving cells resembling mast cells. Meade CJ, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1148–56
Adenosine and its receptor agonists potentiate nitric oxide synthase expression induced by lipopolysaccharide in RAW 264.7 murine macrophages. Hon WM, et al. **Life Sci** 1997; 60(16):1327–35
Short term desensitization of the A1 adenosine receptors in DDT1MF-2 cells. Nie Z, et al. **Mol Pharmacol** 1997 Sep; 52(3):456–64
Persistent activation by and receptor reserve for an irreversible A1-adenosine receptor agonist in DDT1 MF-2 cells and in guinea pig heart. Zhang J, et al. **Mol Pharmacol** 1997 Sep;52(3):491–8
The selective adenosine A2A receptor antagonist SCH 58261 discriminates between two different binding sites for [3H]-CGS 21680 in the rat brain. Lindström K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):539–41
Working memory failure by stimulation of hippocampal adenosine A1 receptors in rats. Ohno M, et al. **Neuroreport** 1996 Nov 25;7(18):3013–6
Modification of cardiovascular response of adenosine A1 receptor agonist by cyclic AMP in the spinal cord of the rats. Koh HC, et al. **Neurosci Lett** 1996 Nov 29; 219(3):195–8
Kindled seizures do not affect adenosinergic inhibition of DA or ACh release in rat accumbens or PFC. Engelbrecht AH, et al. **Pharmacol Biochem Behav** 1996 Nov; 55(3):315–21
p-SPA, a peripheral adenosine A1 analogue, reduces sleep apneas in rats. Monti D, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):341–5
Effect of adenosine receptor agonists and antagonists on the expression of opiate withdrawal in rats. Salem A, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):671–9
Hemodynamic changes do not mediate the cardioprotection induced by the A1, adenosine receptor agonist CCPA in the rabbit. Casati C, et al. **Pharmacol Res** 1997 Jan; 35(1):51–5
Indomethacin antagonises the effects of adenosine receptor agonists on the contractility and effective refractory period of guinea pig papillary muscle. Kocić I. **Pharmacol Res** 1996 Sep-Oct;34(3–4):143–7
Cardioprotective effects of adenosine A1 and A2A receptor agonists in the isolated rat heart. Lozza G, et al. **Pharmacol Res** 1997 Jan;35(1):57–64
Realizing the potential of adenosine-receptor-based therapeutics. Barrett RJ. **Proc West Pharmacol Soc** 1996; 39:61–6 (42 ref.)
Adenosine receptor agonists attenuate and adenosine receptor antagonists exacerbate opiate withdrawal signs. Kaplan GB, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):64–70
[The effect of adenosine receptor agonists on the normal cerebral blood flow and in subsequent ischemia] Kulinskiĭ VI, et al. **Eksp Klin Farmakol** 1996 May-Jun;59(3):37–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Influence of nutritional weaning on porcine adipocyte beta-adrenergic and adenosine A1 receptors. Mersmann HJ, et al. **J Anim Sci** 1997 Sep;75(9):2368–77

ANTAGONISTS & INHIBITORS

Adenosine antagonists and cardiopulmonary resuscitation [letter] de Garavilla L. **Acad Emerg Med** 1996 Nov; 3(11):1075–6
Long-lasting treatment with adenosine receptor antagonists: effects on hypoxic tolerance and vascular responsiveness. Cseppentö A, et al. **Acta Physiol Hung** 1996;84(3):275–6
A new adenosine subtype-1 receptor antagonist, FK-838, attenuates salt-induced hypertension in Dahl salt-sensitive rats. Uehara Y, et al. **Am J Hypertens** 1995 Dec;8(12 Pt 1):1189–99
A1-adenosine receptor antagonists block endotoxin-induced lung injury. Neely CF, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L353–61
Role of adenosine in isoflurane-induced cardioprotection. Kersten JR, et al. **Anesthesiology** 1997 May;86(5):1128–39
Aza-analogs of 8-styrylxanthines as A2A-adenosine receptor antagonists. Müller CE, et al. **Arch Pharm (Weinheim)** 1997 Jun;330(6):181–9
General pharmacology of the new non-xanthine adenosine A1 receptor antagonist (+)-(R)-[(E)-3-(2-phenylpyrazolo[1,5-a]pyridin-3-yl) acryloyl]-2- piperidine ethanol. Terai T, et al. **Arzneimittelforschung** 1996 Feb;46(2):185–91
Adenosine A3 receptor agonists protect HL-60 and U-937 cells from apoptosis induced by A3 antagonists. Yao Y, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):317–22
Effects of KW-3902 (8-(noradamantan-3-yl)-1,3-dipropylxanthine), an adenosine A1-receptor antagonist, on urinary excretions of various electrolytes in rats. Nagashima K, et al. **Biol Pharm Bull** 1996 Jul;19(7):940–3
Carbamazepine inhibits the potentiation by adenosine analogues of agonist induced inositolphosphate formation in hippocampal astrocyte cultures. Biber K, et al. **Biol Psychiatry** 1996 Oct 1;40(7):563–7
1-Phenylpyrazolo[3,4-d]pyrimidines as adenosine antagonists: the effects of substituents at C4 and C6. Chebib M, et al. **Bioorg Med Chem** 1997 Feb;5(2):311–22
Conformational search for the N6-substituted adenosine analogues and related adenosine A1 receptor antagonists. Dooley MJ, et al. **Bioorg Med Chem** 1996 Jun;4(6):917–21
Characterization of human A2A adenosine receptors with the antagonist radioligand [3H]-SCH 58261. Dionisotti S, et al. **Br J Pharmacol** 1997 Jun;121(3):353–60
KW-3902, a selective high affinity antagonist for adenosine A1 receptors. Nonaka H, et al. **Br J Pharmacol** 1996 Apr; 117(8):1645–52
Augmented sensory-motor vasodilatation of the rat mesenteric arterial bed after chronic infusion of the P1-purinoceptor antagonist, DPSPX. Relevic V, et al. **Br J Pharmacol** 1996 Aug;118(7):1675–80
Functional characterization of adenosine receptors in the nucleus tractus solitarius mediating hypotensive responses in the rat. White PJ, et al. **Br J Pharmacol** 1996 Jan; 117(2):305–8
The effects of selective A1 and A2a adenosine receptor antagonists on cerebral ischemic injury in the gerbil. Phillis JW. **Brain Res** 1995 Dec 24;705(1–2):79–84
Synergistic interaction between an adenosine antagonist and a D1 dopamine agonist on rotational behavior and striatal c-Fos induction in 6-hydroxydopamine-lesioned rats. Pollack AE, et al. **Brain Res** 1996 Dec 16;743(1–2):124–30
Effects of A1 adenosine receptor blockade on the warm-up phenomenon. Tomai F, et al. **Cardiologia** 1997 Apr; 42(4):385–92
Adenosine receptor blockade enhance glycolysis in hypoperfused guinea-pig myocardium. Gao ZP, et al. **Cardiovasc Res** 1997 Jan;33(1):31–44
Binding of the novel nonxanthine A2A adenosine receptor antagonist [3H]SCH58261 to coronary artery membranes.

Belardinelli L, et al. **Circ Res** 1996 Dec;79(6):1153–60

A1 adenosine receptor antagonists block ischemia–reperfusion injury of the heart. Neely CF, et al. **Circulation** 1996 Nov 1;94(9 Suppl):II376–80

Competition of adenine nucleotides for a 1,3–[3H]–dipropyl–8–cyclopentylxanthine binding site in rat vas deferens. Smith AD, et al. **Clin Exp Pharmacol Physiol** 1997 Jul;24(7):492–7

Facilitation of ECT by intravenous administration of theophylline. Leentjens AF, et al. **Convuls Ther** 1996 Dec; 12(4):232–7

Effects of substituent size upon adenosine receptor A1/A2 affinity of some newly synthesised 8–cycloalkyl xanthines. Castagnino E, et al. **Drug Des Discov** 1995 Apr;12(4):313–21

Molecular simulation of 8–styrylxanthines. Mager PP, et al. **Drug Des Discov** 1995 Nov;13(2):89–107

Blockade of A2a adenosine receptors positively modulates turning behaviour and c–Fos expression induced by D1 agonists in dopamine–denervated rats. Pinna A, et al. **Eur J Neurosci** 1996 Jun;8(6):1176–81

Repeated treatment with adenosine A1 receptor agonist and antagonist modifies the anticonvulsant properties of CPPene. De Sarro G, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):239–45

Adenosine A2A receptor antagonism potentiates L–DOPA–induced turning behaviour and c–fos expression in 6–hydroxydopamine–lesioned rats. Fenu S, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):143–7

8–cyclopentyltheophylline, an adenosine A1 receptor antagonist, inhibits the reversal of long–term potentiation in hippocampal CA1 neurons. Fujii S, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):9–14

Adenosine transport inhibitors enhance high K(+)–evoked taurine release from rat hippocampus. Hada J, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):101–7

In vivo characterisation of ZM 241385, a selective adenosine A2A receptor antagonist. Keddie JR, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):107–13

Adenosine analogues relax guinea–pig taenia caeci via an adenosine A2B receptor and a xanthine–resistant site. Prentice DJ, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):103–6

Alkylxanthine adenosine antagonists and epileptiform activity in rat hippocampal slices in vitro. Chesi AJ, et al. **Exp Brain Res** 1997 Feb;113(2):303–10

Effects of bamiphylline on exercise testing in patients with syndrome X. Lanza GA, et al. **G Ital Cardiol** 1997 Jan; 27(1):50–4

Myocardial infarction related atrial fibrillation: role of endogenous adenosine. Bertolet BD, et al. **Heart** 1997 Jul; 78(1):88–90

Adenosine A1 antagonism increases specific synaptic forms of glutamate release during anoxia, revealing a unique source of excitation. Katchman AN, et al. **Hippocampus** 1996;6(3):213–24

Aminophylline reduces cardiac ischemic pain during percutaneous transluminal coronary angioplasty. Hashino T, et al. **J Am Coll Cardiol** 1996 Dec;28(7):1725–31

Bradycardia after heart transplantation: reversal with theophylline [letter; comment] Heinz G. **J Am Coll Cardiol** 1997 Feb;29(2):470–1. Comment on: J Am Coll Cardiol 1996 Aug;28(2):396–9.

Hypertension due to chronic blockade of P1–purinoceptors. Guimarães S, et al. **J Auton Pharmacol** 1996 Dec; 16(6):367–70 (27 ref.)

Structure–activity relationships of 4–(phenylethynyl)–6–phenyl–1,4–dihydropyridines as highly selective A3 adenosine receptor antagonists. Jiang J, et al. **J Med Chem** 1997 Aug 1;40(16):2596–608

6–phenyl–1,4–dihydropyridine derivatives as potent and selective A3 adenosine receptor antagonists. Jiang JL, et al. **J Med Chem** 1996 Nov 8;39(23):4667–75

Synthesis and biological evaluation of the enantiomers of the potent and selective A1–adenosine antagonist 1,3–dipropyl–8–[2–(5,6–epoxynorbonyl)]–xanthine. Pfister JR, et al. **J Med Chem** 1997 Jun 6;40(12):1773–8

Synthesis and structure–activity relationship of pyrazolo[3,4–d]pyrimidines: potent and selective adenosine A1 receptor antagonists. Poulsen SA, et al. **J Med Chem** 1996 Oct 11;39(21):4156–61

Pharmacodynamics of ZM 241385, a potent A2a adenosine receptor antagonist, after enteric administration in rat, cat and dog. Poucher SM, et al. **J Pharm Pharmacol** 1996 Jun; 48(6):601–6

Adenosine A1 receptor blockade does not abolish the cardioprotective effects of the adenosine triphosphate–sensitive potassium channel opener bimakalim. Gross GJ, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):533–40

Covalent modification of transmembrane span III of the A1 adenosine receptor with an antagonist photoaffinity probe. Kennedy AP, et al. **Mol Pharmacol** 1996 Oct;50(4):789–98

DNA antisense therapy for asthma in an animal model [see comments] Nyce JW, et al. **Nature** 1997 Feb 20; 385(6618):721–5. Comment in: Nature 1997 Feb 20;385(6618):684–5.

Asthma. Blocking adenosine with antisense [news; comment] Richardson PJ. **Nature** 1997 Feb 20;385(6618):684–5. Comment on: Nature 1997 Feb 20;385(6618):721–5.

The adenosine receptor antagonist theophylline induces a monoamine–dependent increase of the anticataleptic effects of NMDA receptor antagonists. Hauber W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):179–86

The selective adenosine A2A receptor antagonist SCH 58261 discriminates between two different binding sites for [3H]–CGS 21680 in the rat brain. Lindström K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):539–41

Adenosine and the endothelium–dependent modulation of 3H–noradrenaline release in the canine pulmonary artery. Vaz–da–Silva MJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):640–5

Adenosine A1 receptor blockade selectively potentiates the motor effects induced by dopamine D1 receptor stimulation in rodents. Popoli P, et al. **Neurosci Lett** 1996 Nov 8; 218(3):209–13

Effect of adenosine receptor agonists and antagonists on the expression of opiate withdrawal in rats. Salem A, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):671–9

On the high affinity of 8–cyclohexylcaffeine for the presynaptic inhibitory adenosine receptor present in rat motor nerve terminals. Lobo MG, et al. **Pharmacol Toxicol** 1997 Jun;80(6):295–300

Realizing the potential of adenosine–receptor–based therapeutics. Barrett RJ. **Proc West Pharmacol Soc** 1996; 39:61–6 (42 ref.)

Adenosine receptor agonists attenuate and adenosine receptor antagonists exacerbate opiate withdrawal signs. Kaplan GB, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):64–70

Adenosine receptor antagonism in refractory asystolic cardiac arrest: results of a human pilot study. Mader TJ, et al. **Resuscitation** 1997 Aug;35(1):3–7

Evidence that adenosine contributes to maintenance of hepatosplanchnic blood flow during peritoneal sepsis in rats. Motew SJ, et al. **Shock** 1997 Jun;7(6):439–46

Adenosine receptor ligands: differences with acute versus chronic treatment. Jacobson KA, et al. **Trends Pharmacol Sci** 1996 Mar;17(3):108–13 (50 ref.)

BIOSYNTHESIS

Localization of adenosine–receptor subtype mRNA in rat outer medullary descending vasa recta by RT–PCR. Kreisberg MS, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1231–8

Tissue distribution of adenosine receptor mRNAs in the rat. Dixon AK, et al. **Br J Pharmacol** 1996 Jul;118(6):1461–8

Differential expression of adenosine A1 receptors in colorectal cancer and related mucosa. Khoo HE, et al. **Cancer Lett** 1996 Aug 23;106(1):17–21

Glucocorticoids regulate the expression of adenosine A1 but not A(2A) receptors in rat brain. Svenningsson P, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1094–101

Distribution and postnatal ontogeny of adenosine A2A receptors in rat brain: comparison with dopamine receptors. Johansson B, et al. **Neuroscience** 1997 Oct;80(4):1187–207

Cellular expression of adenosine A2A receptor messenger RNA in the rat central nervous system with special reference to dopamine innervated areas. Svenningsson P, et al. **Neuroscience** 1997 Oct;80(4):1171–85

Transgenic A1 adenosine receptor overexpression increases myocardial resistance to ischemia. Matherne GP, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6541–6

BLOOD

Adenosine A2a receptor activation delays apoptosis in human neutrophils. Walker BA, et al. **J Immunol** 1997 Mar 15; 158(6):2926–31

CHEMISTRY

Identification of an A2a adenosine receptor domain specifically responsible for mediating short–term desensitization. Palmer TM, et al. **Biochemistry** 1997 Jan 28;36(4):832–8

Identification of A2a adenosine receptor domains involved in selective coupling to Gs. Analysis of chimeric A1/A2a adenosine receptors. Olah ME. **J Biol Chem** 1997 Jan 3; 272(1):337–44

Hydrophilic side chains in the third and seventh transmembrane helical domains of human A2A adenosine receptors are required for ligand recognition. Jiang Q, et al. **Mol Pharmacol** 1996 Sep;50(3):512–21

CLASSIFICATION

Functional classification of P1–purinoceptors in guinea–pig left and right atria: anomalous characteristics of antagonism by cyclopentyltheophylline. Ford WR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):759–66

Towards a revised nomenclature for P1 and P2 receptors. Fredholm BB, et al. **Trends Pharmacol Sci** 1997 Mar; 18(3):79–82

DRUG EFFECTS

Adenosine increases the cAMP content of the rat carotid body in vitro. Monteiro EC, et al. **Adv Exp Med Biol** 1996; 410:299–303

Caffeine and ischemia––effects on immediate early genes and adenosine receptors. Fredholm BB, et al. **Adv Neurol** 1996; 71:469–74

Thermoregulatory effects of 5'–N–ethylcarboxamidoadenosine in rabbits. Matuszek MT, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:360–8

Intramyocardial infusion of tool drugs for the study of molecular mechanisms in ischemic preconditioning. Vogt AM, et al. **Basic Res Cardiol** 1996 Sep–Oct;91(5):389–400

Chemical modifications of striatal A2A adenosine receptors: a possible role for tyrosine at the ligand binding sites. Martini C, et al. **Biochim Biophys Acta** 1997 May 22; 1326(1):67–74

Desensitization and internalization of adenosine A1 receptors in rat brain by in vivo treatment with R–PIA: involvement of coated vesicles. Ruiz A, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):168–74

Characterization of P1–purinoceptors on rat isolated duodenum longitudinal muscle and muscularis mucosae. Nicholls J, et al. **Br J Pharmacol** 1996 Jan;117(1):170–4

Activation of multiple sites by adenosine analogues in the rat isolated aorta. Prentice DJ, et al. **Br J Pharmacol** 1996 Jul;118(6):1509–17

Stimulation of the A2A adenosine receptor increases expression of the tyrosine hydroxylase gene. Chae HD, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):31–8

A method to evaluate the response of the coronary circulation of perfused rat heart to adenosine. Harrison GJ, et al. **Can J Physiol Pharmacol** 1996 Feb;74(2):145–9

Selective activation of A3 adenosine receptors with N6–(3–iodobenzyl)adenosine–5'–N–methyluronamide protects against myocardial stunning and infarction without hemodynamic changes in conscious rabbits. Auchampach JA, et al. **Circ Res** 1997 Jun;80(6):800–9

Effects of A1 adenosine receptor blockade by bamiphylline on ischaemic preconditioning during coronary angioplasty [see comments] Tomai F, et al. **Eur Heart J** 1996 Jun; 17(6):846–53. Comment in: Eur Heart J 1996 Jun;17(6):812–4.

The affinity of adenosine for the high– and low–affinity states of the human adenosine A1 receptor. Cohen FR, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):111–4

Adenosine A2A receptors modulate the binding characteristics of dopamine D2 receptors in stably cotransfected fibroblast cells. Dasgupta S, et al. **Eur J Pharmacol** 1996 Dec 5;316(2–3):325–31

Effect of ouabain on adenosine receptor–mediated hyperpolarization in porcine coronary artery smooth muscle. Olanrewaju HA, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):185–90

ATP and beta,gamma–methylene ATP produce relaxation of guinea–pig isolated trachealis muscle via actions at P1 purinoceptors. Piper AS, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):183–9

Modulation by presynaptic adenosine A1 receptors of nicotinic receptor antagonist–induced neuromuscular block in the mouse. Prior C, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):103–8

Caffeine antinociception: role of formalin concentration and adenosine A1 and A2 receptors. Sawynok J, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):105–11

Dual activation of adenosine A1 and A3 receptors mediates preconditioning of isolated cardiac myocytes. Wang J, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):241–8

Adenosine receptor agents and conditioned place preference. Zarrindast MR, et al. **Gen Pharmacol** 1997 Aug;29(2):285–9

Adenosine and neuroprotection. Fredholm BB. **Int Rev Neurobiol** 1997;40:259–80 (130 ref.)

Effects of theophylline and dibutyryl–cAMP on adenosine receptors and heart rate in cultured cardiocytes. el–Ani D, et al. **J Basic Clin Physiol Pharmacol** 1996;7(4):347–62

Adenosine–1 active ligands: cirsimarin, a flavone glycoside from Microtea debilis. Hasrat JA, et al. **J Nat Prod** 1997 Jun;60(6):638–41

Brain tissue hydrolysate, Cerebrolysin, acts on presynaptic adenosine receptors in the rat hippocampus. Wojtowicz JM, et al. **J Neural Transm Suppl** 1996;47:281

Effect of low density lipoprotein on adenosine receptor–mediated coronary vasorelaxation in vitro. Abebe W, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):851–7

Diinosine polyphosphates, a group of dinucleotides with antagonistic effects on diadenosine polyphosphate receptor. Pintor J, et al. **Mol Pharmacol** 1997 Feb;51(2):277–84

Chronic intrathecal morphine treatment does not cause down–regulation of spinal adenosine A1 receptors in rats. Tao PL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):187–91

Adenosine A3 receptors potentiate hippocampal calcium current by a PKA–dependent/PKC–independent pathway. Fleming KM, et al. **Neuropharmacology** 1997 Mar; 36(3):353–62

Adenosine A2A agonists: a potential new type of atypical antipsychotic. Rimondini R, et al. **Neuropsychopharmacology** 1997 Aug;17(2):82–91

Involvement of spinal adenosine A1 and A2 receptors in fentanyl–induced muscular rigidity in the rat. Lui PW. **Neurosci Lett** 1997 Mar 21;224(3):189–92

Prolonged exposure to 5'–N–ethylcarboxamidoadenosine (NECA) does not affect the adenosine A2A–mediated vasodilation in porcine coronary arteries. Conti A, et al. **Pharmacol Res** 1997 Feb;35(2):123–8

Influence of adenosinergic drugs on ethanol withdrawal syndrome in rats. Malec D, et al. **Pol J Pharmacol** 1996 Nov–Dec;48(6):583–8

Purine modulation of dizocilpine effects on spontaneous alternation. Fraser CM, et al. **Psychopharmacology (Berl)**

1997 Apr;130(4):334–42
Effects of purine analogues on spontaneous alternation in mice. Hooper N, et al. **Psychopharmacology (Berl)** 1996 Feb;123(3):250–7
Presynaptic receptors and the control of glutamate exocytosis. Sánchez-Prieto J, et al. **Trends Neurosci** 1996 Jun;19(6):235–9
Pharmacology of adenosine A2A receptors. Ongini E, et al. **Trends Pharmacol Sci** 1996 Oct;17(10):364–72 (60 ref.)
[The biological range and characteristics of the importance of adenosine receptors for the resistance of the brain to total ischemia] Kulinskiĭ VI, et al. **Eksp Klin Farmakol** 1996 Jul-Aug;59(4):25–7 (Eng. Abstr.) **(Rus)**

GENETICS

Adenosine A1 receptor and its gene expression in ventricles from spontaneously hypertensive rats. Kobayashi S, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R704–9
Adenosine A3 receptor expression and function in eosinophils. Walker BA, et al. **Am J Respir Cell Mol Biol** 1997 May;16(5):531–7
A1 and A2A adenosine receptors and A1 mRNA in mouse brain: effect of long-term caffeine treatment. Johansson B, et al. **Brain Res** 1997 Jul 11;762(1–2):153–64
A1-adenosine receptor gene expression in fetal rat brain. Weaver DR. **Brain Res Dev Brain Res** 1996 Jul 20; 94(2):205–23
Transfected adenosine A1 receptor-mediated modulation of thrombin-stimulated phospholipase C and phospholipase A2 activity in CHO cells. Dickenson JM, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):77–86
Site-directed mutagenesis of the human adenosine A2A receptor. Critical involvement of Glu13 in agonist recognition. IJzerman AP, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):269–72
Mapping of the human adenosine A2a receptor gene: relationship to potential schizophrenia loci on chromosome 22q and exclusion from the CATCH 22 region. Deckert J, et al. **Hum Genet** 1997 Mar;99(3):326–8
Human adenosine A2a receptor (A2aAR) gene: systematic mutation screening in patients with schizophrenia. Deckert J, et al. **J Neural Transm** 1996;103(12):1447–55
Cloning, expression and pharmacological characterization of rabbit adenosine A1 and A3 receptors. Hill RJ, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):122–8
Approaches to the stable transfection of G protein-coupled receptors. Townsend-Nicholson A. **Methods Mol Biol** 1997;83:45–54 (7 ref.)
Early occurrence of metastatic differentiated thyroid carcinomas in transgenic mice expressing the A2a adenosine receptor gene and the human papillomavirus type 16 E7 oncogene. Coppée F, et al. **Oncogene** 1996 Oct 3;13(7):1471–82
The chicken adenosine receptor 2B gene is regulated by v-myb. Worpenberg S, et al. **Oncogene** 1997 Jul 10; 15(2):213–21

IMMUNOLOGY

Adenosine inhibits neutrophil degranulation in activated human whole blood: involvement of adenosine A2 and A3 receptors. Bouma MG, et al. **J Immunol** 1997 Jun 1; 158(11):5400–8

METABOLISM

Adenosine and adenosine receptors in the cardiovascular system: biochemistry, physiology, and pharmacology. Shryock JC, et al. **Am J Cardiol** 1997 Jun 19;79(12A):2–10 (123 ref.)
Upregulated renal adenosine A1 receptors augment PKC and glucose transport but inhibit proliferation. Coulson R, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):F263–74
Adenosine A1 receptor and its gene expression in ventricles from spontaneously hypertensive rats. Kobayashi S, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R704–9
Pharmacological probes for A1 and A2 adenosine receptors in vivo in feline pulmonary vascular bed. Neely CF, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H610–9
Characterization of a stimulatory adenosine A2a receptor in adult rat ventricular myocyte. Xu H, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1655–61
Metabolic effects of ischemic preconditioning and adenosine receptor blockade in dogs. Pisarenko OI, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:85–97
[3H]-(R)-N6-Phenylisopropyladenosine agonist binding to the solubilized A1 adenosine receptor from bovine epididymal spermatozoa. Minelli A, et al. **Arch Biochem Biophys** 1997 Jan 1;337(1):54–61
De novo analysis of receptor binding affinity data of 8-ethenyl-xanthine antagonists to adenosine A1 and A2a receptors. Dalpiaz A, et al. **Arzneimittelforschung** 1997 May;47(5):591–4
Identification of an A2a adenosine receptor domain specifically responsible for mediating short-term desensitization. Palmer TM, et al. **Biochemistry** 1997 Jan 28;36(4):832–8
Role of cysteine residues of rat A2a adenosine receptors in agonist binding. Mazzoni MR, et al. **Biochim Biophys Acta** 1997 Feb 21;1324(1):159–70
Changes in myocardial A1 adenosine receptor and message levels during fetal development and postnatal maturation. Matherne GP, et al. **Biol Neonate** 1996;70(4):199–205
Theoretical structure-activity studies of adenosine A1 ligands: requirements for receptor affinity. Dooley MJ, et al. **Bioorg Med Chem** 1996 Jun;4(6):923–34
Activation of A3 adenosine receptors on human eosinophils elevates intracellular calcium. Kohno Y, et al. **Blood** 1996 Nov 1;88(9):3569–74
Inhibition of muscarinic K+ current in guinea-pig atrial myocytes by PD 81,723, an allosteric enhancer of adenosine binding to A1 receptors. Brandts B, et al. **Br J Pharmacol** 1997 Jul;121(6):1217–23
Characterization of human A2A adenosine receptors with the antagonist radioligand [3H]-SCH 58261. Dionisotti S, et al. **Br J Pharmacol** 1997 Jun;121(3):353–60
Renal adenosine A1 receptor binding characteristics and mRNA levels during the development of acute renal failure in the rat. Gould J, et al. **Br J Pharmacol** 1997 Mar; 120(5):947–53
Differential development of adenosine A1 and A2b receptors in the rat duodenum. Peachey JA, et al. **Br J Pharmacol** 1996 Nov;119(5):949–58
The ontogenetic profiles of the pre- and postjunctional adenosine receptors in the rat vas deferens. Peachey JA, et al. **Br J Pharmacol** 1996 Mar;117(6):1105–10
Pharmacological and biochemical characterization of purified A2a adenosine receptors in human platelet membranes by [3H]-CGS 21680 binding. Varani K, et al. **Br J Pharmacol** 1996 Apr;117(8):1693–701
2-Phenylaminoadenosine stimulates dopamine synthesis in rat forebrain in vitro and in vivo via adenosine A2 receptors. Choksi NY, et al. **Brain Res** 1997 Jun 27;761(1):151–5
Loss of A1 adenosine receptors in human temporal lobe epilepsy. Glass M, et al. **Brain Res** 1996 Feb 26; 710(1–2):56–68
Localisation of the adenosine uptake site in the human brain: a comparison with the distribution of adenosine A1 receptors. Glass M, et al. **Brain Res** 1996 Feb 26; 710(1–2):79–91
A1 and A2A adenosine receptors and A1 mRNA in mouse brain: effect of long-term caffeine treatment. Johansson B, et al. **Brain Res** 1997 Jul 11;762(1–2):153–64
Differences among mouse strains in the regulation by mu, delta 1 and delta 2 opioid receptors of striatal adenylyl cyclases activated by dopamine D1 or adenosine A2a receptors. Noble F, et al. **Brain Res** 1996 Apr 15; 716(1–2):107–17
[125I]4-aminobenzyl-5'-N-methylcarboxamidoadenosine (125I)AB-MECA) labels multiple adenosine receptor subtypes in rat brain. Shearman LP, et al. **Brain Res** 1997 Jan 16;745(1–2):10–20
Brain maturation of high-affinity adenosine A2 receptors and their coupling to G-proteins. Doriat JF, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1–2):1–9
Protective effect of preconditioning on ischemic heart and characterization of adenosine receptors in ischemic rabbit hearts. Li YL, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):505–8
Nucleotide receptors. North RA, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):346–57 (107 ref.)
A quantitative analysis of binding affinities of ligands active at adenosine receptors. Sharma RC, et al. **Drug Des Discov** 1994 Nov;12(2):169–77
Long-term treatment with some methylxanthines decreases the susceptibility to bicuculline- and pentylenetetrazol-induced seizures in mice. Relationship to c-fos expression and receptor binding. Johansson B, et al. **Eur J Neurosci** 1996 Dec;8(12):2447–58
Differential distribution of adenosine A2 receptors in the epididymal and prostatic portions of the rat vas deferens. Brownhill VR, et al. **Eur J Pharmacol** 1996 May 6; 303(1–2):87–90
Synergistic interactions between human transfected adenosine A1 receptors and endogenous cholecystokinin receptors in CHO cells. Dickenson JM, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):141–51
Adenosine A2 receptor activation facilitates 45Ca2+ uptake by rat brain synaptosomes. Gonçalves ML, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):257–61
Adenosine A1 receptors mediate hypoxia-induced inhibition of electrically evoked transmitter release from rat striatal slices. Jin S, et al. **Eur J Pharmacol** 1997 Jun 25; 329(2–3):107–13
Activation of adenosine A3 receptors on macrophages inhibits tumor necrosis factor-alpha. McWhinney CD, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):209–16
Intrastriatal adenosine A1 receptor antisense oligodeoxynucleotide blocks ethanol-induced motor incoordination. Phan TA, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):R5–7
Cerebral ischemia in gerbils: effects of acute and chronic treatment with adenosine A2A receptor agonist and antagonist. Von Lubitz DK, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):295–302
2-chloroadenosine stimulates granule exocytosis from mouse natural killer cells: evidence for signal transduction through a novel extracellular receptor. Williams BA, et al. **Exp Cell Res** 1997 May 25;233(1):187–97
1,2,3-Triazolo [4,5-d] pyridazines—V. Preparation and adenosine receptor binding of new 4-amino derivatives. Biagi G, et al. **Farmaco** 1996 Aug-Sep;51(8–9):601–8
Synthesis of 4,6-disubstituted- and 4,5,6-trisubstituted-2-phenyl-pyrimidines and their affinity towards A1 adenosine receptors. Biagi G, et al. **Farmaco** 1997 Jan;52(1):61–5
Expression and function of adenosine receptors in the chinchilla cochlea. Ford MS, et al. **Hear Res** 1997 Mar; 105(1–2):130–40
Protein kinase C inhibits adenylyl cyclase type VI activity during desensitization of the A2a-adenosine receptor-mediated cAMP response. Lai HL, et al. **J Biol Chem** 1997 Feb 21;272(8):4970–7
Stimulation of the mitogen-activated protein kinase via the A2A-adenosine receptor in primary human endothelial cells. Sexl V, et al. **J Biol Chem** 1997 Feb 28;272(9):5792–9
Betagamma subunits of pertussis toxin-sensitive G proteins mediate A1 adenosine receptor agonist-induced activation of phospholipase C in collaboration with thyrotropin. A novel stimulatory mechanism through the cross-talk of two types of receptors. Tomura H, et al. **J Biol Chem** 1997 Sep 12;272(37):23130–7
Spinal cord adenosine receptor stimulation in rats inhibits peripheral neutrophil accumulation. The role of N-methyl-D-aspartate receptors. Bong GW, et al. **J Clin Invest** 1996 Dec 15;98(12):2779–85
Receptor-mediated phosphoinositide metabolism in peripheral nerve and cultured Schwann cells. Eichberg J, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):187–95 (26 ref.)
Mutagenesis reveals structure-activity parallels between human A2A adenosine receptors and biogenic amine G protein-coupled receptors. Jiang Q, et al. **J Med Chem** 1997 Aug 1;40(16):2588–95
Derivatives of the triazoloquinazoline adenosine antagonist (CGS15943) are selective for the human A3 receptor subtype. Kim YC, et al. **J Med Chem** 1996 Oct 11; 39(21):4142–8
2-alkenyl and 2-alkyl derivatives of adenosine and adenosine-5'-N-ethyluronamide: different affinity and selectivity of E- and Z-diastereomers at A2A adenosine receptors. Vittori S, et al. **J Med Chem** 1996 Oct 11; 39(21):4211–7
Desensitisation of the adenosine A1 receptor by the A2A receptor in the rat striatum. Dixon AK, et al. **J Neurochem** 1997 Jul;69(1):315–21
Chronic exposure to adenosine receptor agonists and antagonists reciprocally regulates the A1 adenosine receptor-adenylyl cyclase system in cerebellar granule cells. Hettinger-Smith BD, et al. **J Neurochem** 1996 Nov; 67(5):1921–30
Labeling of A2A adenosine receptors in human platelets by use of the new nonxanthine antagonist radioligand [3H]SCH 58261. Dionisotti S, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1209–14
Binding thermodynamics at A1 and A2A adenosine receptors. Borea PA, et al. **Life Sci** 1996;59(17):1373–88 (52 ref.)
Site-directed mutagenesis and chimeric receptors in the study of receptor-ligand binding. Olah ME, et al. **Methods Mol Biol** 1997;83:25–43 (29 ref.)
Lack of endogenous adenosine receptor activation explains the insensitivity of neonatal rat Leydig cells to treatment with pertussis toxin. Eskola V, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):9–14
Site-directed mutagenesis of the human A1 adenosine receptor: influences of acidic and hydroxy residues in the first four transmembrane domains on ligand binding. Barbhaiya H, et al. **Mol Pharmacol** 1996 Dec;50(6):1635–42
Reconstitution of recombinant bovine A1 adenosine receptors in Sf9 cell membranes with recombinant G proteins of defined composition. Figler RA, et al. **Mol Pharmacol** 1996 Dec;50(6):1587–95
Covalent modification of transmembrane span III of the A1 adenosine receptor with an antagonist photoaffinity probe. Kennedy AP, et al. **Mol Pharmacol** 1996 Oct;50(4):789–98
Short term desensitization of the A1 adenosine receptors in DDT1MF-2 cells. Nie Z, et al. **Mol Pharmacol** 1997 Sep; 52(3):456–64
A1 adenosine receptors and muscarinic cholinoceptors in myocardial ischemia. Ungerer M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jun; 354(1):44–52
Modulation of Ca2+ channels by activation of adenosine A1 receptors in rat striatal glutamatergic nerve terminals. Ambrósio AF, et al. **Neurosci Lett** 1996 Dec 20; 220(3):163–6
In vivo regulation of acetylcholine release via adenosine A1 receptor in rat cerebral cortex. Kurokawa M, et al. **Neurosci Lett** 1996 May 17;209(3):181–4
Evaluation of carbon-11 labeled KF15372 and its ethyl and methyl derivatives as a potential CNS adenosine A1 receptor ligand. Noguchi J, et al. **Nucl Med Biol** 1997 Jan; 24(1):53–9
In vivo biodistribution of [N-11C-methyl]KF 17837 using 3-D-PET: evaluation as a ligand for the study of adenosine A2A receptors. Stone-Elander S, et al. **Nucl Med Biol** 1997 Feb;24(2):187–91
Chronic ethanol intoxication enhances [3H]CCPA binding and does not reduce A1 adenosine receptor function in rat cerebellum. Concas A, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):249–55

PHYSIOLOGY

Role of adenosine as a modulator of synaptic activity in the central nervous system. Brundege JM, et al. **Adv Pharmacol** 1997;39:353–91 (200 ref.)

Role of adenosine receptor subtypes in neural stunning of sympathetic coronary innervation. Abe T, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H25–34

Adenosine receptor–mediated relaxation of rabbit airway smooth muscle: a role for nitric oxide. Ali S, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L581–7

Adenosine A1 and A2 receptors mediate tone–dependent responses in feline pulmonary vascular bed. Cheng DY, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H200–7

Preconditioning cultured human pediatric myocytes requires adenosine and protein kinase C. Ikonomidis JS, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1220–30

Modulation of ATP–sensitive K+ channels in rabbit ventricular myocytes by adenosine A1 receptor activation. Kim E, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H325–33

Direct preconditioning of cardiac ventricular myocytes via adenosine A1 receptor and KATP channel. Liang BT. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1769–77

Protein kinase C–mediated preconditioning of cardiac myocytes: role of adenosine receptor and KATP channel. Liang BT. **Am J Physiol** 1997 Aug;273(2 Pt 2):H847–53

Luminal adenosine receptors regulate amiloride–sensitive Na+ channels in A6 distal nephron cells. Ma H, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F798–805

Role of adenosine receptors in late preconditioning against myocardial stunning in conscious rabbits. Maldonado C, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1324–32

Adenosine A2–receptor mediates ethanol–induced arteriolar dilation in rat stomach. Nagata H, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1028–33

A novel cardioprotective function of adenosine A1 and A3 receptors during prolonged simulated ischemia. Stambaugh K, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H501–5

Branchial and systemic roles of adenosine receptors in rainbow trout: an in vivo microscopy study. Sundin L, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R661–9

Adenosine A2–receptor activation inhibits neutrophil–mediated injury to coronary endothelium. Zhao ZQ, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1456–64

Characterization of adenosine receptors mediating spinal sensory transmission related to nociceptive information in the rat. Nakamura I, et al. **Anesthesiology** 1997 Sep; 87(3):577–84

The contractile response of the ventricular myocardium to adenosine A1 and A2 receptor stimulation. Dobson JG Jr, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:64–73

Adenosine A1 receptor promotion of multinucleated giant cell formation by human monocytes: a mechanism for methotrexate–induced nodulosis in rheumatoid arthritis. Merrill JT, et al. **Arthritis Rheum** 1997 Jul;40(7):1308–15

Role of A2a extracellular adenosine receptor–mediated signaling in adenosine–mediated inhibition of T–cell activation and expansion. Huang S, et al. **Blood** 1997 Aug 15;90(4):1600–10

Characterization of the human brain putative A2B adenosine receptor expressed in Chinese hamster ovary (CHO.A2B4) cells. Alexander SP, et al. **Br J Pharmacol** 1996 Nov; 119(6):1286–90

Preferential activation of excitatory adenosine receptors at rat hippocampal and neuromuscular synapses by adenosine formed from released adenine nucleotides. Cunha RA, et al. **Br J Pharmacol** 1996 Sep;119(2):253–60

Predominant role of A1 adenosine receptors in mediating adenosine induced vasodilatation of rat diaphragmatic arterioles: involvement of nitric oxide and the ATP–dependent K+ channels. Danialou G, et al. **Br J Pharmacol** 1997 Aug;121(7):1355–63

Characterization of adenosine receptors involved in adenosine–induced bronchoconstriction in allergic rabbits. el–Hashim A, et al. **Br J Pharmacol** 1996 Nov;119(6):1262–8

The activation of P1– and P2–purinoceptors in the guinea–pig left atrium by diadenosine polyphosphates. Hoyle CH, et al. **Br J Pharmacol** 1996 Jul;118(5):1294–300

Effect of adenosine receptor modulation on pentylenetetrazole–induced seizures in rats. Malhotra J, et al. **Br J Pharmacol** 1997 Jan;120(2):282–8

Characterization of the P2 receptors in rabbit pulmonary artery. Qasabian RA, et al. **Br J Pharmacol** 1997 Feb; 120(4):553–8

Role of brainstem adenosine A1 receptors in the cardiovascular response to hypothalamic defence area stimulation in the anaesthetized rat. St Lambert JH, et al. **Br J Pharmacol** 1996 Jan;117(2):277–82

Negative chronotropic and inotropic effects exerted by diadenosine hexaphosphate (AP6A) via A1–adenosine receptors. Vahlensieck U, et al. **Br J Pharmacol** 1996 Nov; 119(5):835–44

Augmented release of serotonin by adenosine A2a receptor activation and desensitization by CGS 21680 in the rat nucleus tractus solitarius. Barraco RA, et al. **Brain Res** 1996 Sep 16;733(2):155–61

Mouse cerebellar adenosinergic modulation of ethanol–induced motor incoordination: possible involvement of cAMP. Dar MS. **Brain Res** 1997 Feb 28; 749(2):263–74

Endogenous adenosine facilitates neurotransmission via A2A adenosine receptors in the rat superior colliculus in vivo. Ishikawa S, et al. **Brain Res** 1997 May 23;757(2):268–75

A role for adenosine A2 receptors in the induction of long–term potentiation in the CA1 region of rat hippocampus. Kessey K, et al. **Brain Res** 1997 May 9; 756(1–2):184–90

Adenosine by activating A1 receptors prevents GABAA–mediated actions during hypoxia in the rat hippocampus. Lucchi R, et al. **Brain Res** 1996 Sep 2; 732(1–2):261–6

Properties of 3,4–diaminopyridine–evoked dopamine and acetylcholine release in rabbit caudate nucleus slices: involvement of facilitatory adenosine A2 receptors or nitric oxide? Ries V, et al. **Brain Res** 1996 Dec 16;743(1–2):303–14

Mouse cerebellar GABAB participation in the expression of acute ethanol–induced ataxia and in its modulation by the cerebellar adenosinergic A1 system. Dar MS. **Brain Res Bull** 1996;41(1):53–9

Response to prejunctional adenosine receptors is dependent on stimulus frequency. Crosson CE, et al. **Curr Eye Res** 1997 Apr;16(4):359–64

Nucleotide receptors. North RA, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):346–57 (107 ref.)

Dopamine D1 receptor–mediated facilitation of GABAergic neurotransmission in the rat strioentopenduncular pathway and its modulation by adenosine A1 receptor–mediated mechanisms. Ferre S, et al. **Eur J Neurosci** 1996 Jul; 8(7):1545–53

Differential ontogeny of adenosine receptors in the longitudinal muscle and muscularis mucosae of the rat isolated duodenum. Brownhill VR, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):321–8

Transfected adenosine A1 receptor–mediated modulation of thrombin–stimulated phospholipase C and phospholipase A2 activity in CHO cells. Dickenson JM, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):77–86

Adenosine A1 receptor–mediated inhibition of cyclic AMP accumulation in type–2 but not type–1 rat astrocytes. Peakman MC, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1–3):281–9

Plasma membrane Ca2+ pumping plays a prominent role in adenosine A1 receptor mediated changes in [Ca2+]i in DDT1 MF–2 cells. Sipma H, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):187–94

Dual activation of adenosine A1 and A3 receptors mediates preconditioning of isolated cardiac myocytes. Wang J, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):241–8

Changes in adenosine receptors mediating hypotension in morphine–dependent rats. White PJ, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):215–20

Propentofylline inhibits polymorphonuclear leukocyte recruitment in vivo by a mechanism involving adenosine A2A receptors. Zhang Y, et al. **Eur J Pharmacol** 1996 Oct 17;313(3):237–42

The role of adenosine receptors in the rostral ventrolateral medulla in the cardiovascular response to defence area stimulation in the rat. Thomas T, et al. **Exp Physiol** 1996 Jan;81(1):67–77

Smooth muscle relaxant activity of A1– and A2–selective adenosine receptor agonists in guinea pig trachea: involvement of potassium channels. Hadjkaddour K, et al. **Fundam Clin Pharmacol** 1996;10(3):269–77

Purines and neutrophil leukocytes. Fredholm BB. **Gen Pharmacol** 1997 Mar;28(3):345–50 (100 ref.)

A2 adenosine receptors: their presence and neuromodulatory role in the central nervous system. Latini S, et al. **Gen Pharmacol** 1996 Sep;27(6):925–33 (110 ref.)

Cyclooxygenase–2 expression in rat microglia is induced by adenosine A2a–receptors. Fiebich BL, et al. **Glia** 1996 Oct; 18(2):152–60

Adenosine A3 receptors promote degranulation of rat mast cells both in vitro and in vivo. Reeves JJ, et al. **Inflamm Res** 1997 May;46(5):180–4

P1–purinoceptor–mediated vasodilatation and vasoconstriction in hypoxia. Broadley KJ, et al. **J Auton Pharmacol** 1996 Dec;16(6):363–6

Purinoceptor–mediated regulation of the renal microvasculature. Inscho EW. **J Auton Pharmacol** 1996 Dec;16(6):385–8 (20 ref.)

Direct preconditioning of cultured chick ventricular myocytes. Novel functions of cardiac adenosine A2a and A3 receptors. Strickler J, et al. **J Clin Invest** 1996 Oct 15;98(8):1773–9

Altered cardiovascular responses to purinergic A2 stimulation in the nucleus tractus solitarius of spontaneously hypertensive rats. Tanaka M, et al. **J Hypertens** 1995 Nov; 13(11):1285–90

Adenosine receptor agonists differentially regulate IL–10, TNF–alpha, and nitric oxide production in RAW 264.7 macrophages and in endotoxemic mice. Haskó G, et al. **J Immunol** 1996 Nov 15;157(10):4634–40

The effect of age on adenosine A1 receptor function in the rat heart. Gao E, et al. **J Mol Cell Cardiol** 1997 Feb; 29(2):593–602

Concentration–response relationships for adenosine agonists during preconditioning of rabbit cardiomyocytes. Rice PJ, et al. **J Mol Cell Cardiol** 1996 Jun;28(6):1355–65

Facilitative interactions between noradrenergic and purinergic signaling during preconditioning of the rat heart. Winter CB, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):163–73

Activation of phosphodiesterase IV during desensitization of the A2A adenosine receptor–mediated cyclic AMP response in rat pheochromocytoma (PC12) cells. Chang YH, et al. **J Neurochem** 1997 Sep;69(3):1300–9

Adenosine A2a receptor–mediated modulation of striatal acetylcholine release in vivo. Kurokawa M, et al. **J Neurochem** 1996 May;66(5):1882–8

A2A adenosine receptors inhibit ATP–induced Ca2+ influx in PC12 cells by involving protein kinase A. Park TJ, et al. **J Neurochem** 1997 May;68(5):2177–85

Adenosine A1 receptors in cultured cerebellar granule cells: role of endogenous adenosine. Sanz JM, et al. **J Neurochem** 1996 Oct;67(4):1469–77

Presynaptic A1 inhibitory/A2A facilitatory adenosine receptor activation balance depends on motor nerve stimulation paradigm at the rat hemidiaphragm. Correia–de–Sá P, et al. **J Neurophysiol** 1996 Dec; 76(6):3910–9

Presynaptic inhibition at excitatory hippocampal synapses: development and role of presynaptic Ca2+ channels. Scholz KP, et al. **J Neurophysiol** 1996 Jul;76(1):39–46

Adenosine A1 receptor–mediated activation of phospholipase C in cultured astrocytes depends on the level of receptor expression. Biber K, et al. **J Neurosci** 1997 Jul 1; 17(13):4956–64

Hippocampal noradrenaline release in awake, freely moving rats is regulated by alpha–2 adrenoceptors but not by adenosine receptors. Carter AJ. **J Pharmacol Exp Ther** 1997 May;281(2):648–54

Adenosine A2 receptor activation attenuates reperfusion injury by inhibiting neutrophil accumulation, superoxide generation and coronary endothelial adherence. Jordan JE, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):301–9

Interaction between histamine H3 receptors and other prejunctional receptor systems in the isolated guinea pig duodenum. Poli E, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):393–9

Regulation of muscarinic acetylcholine receptor–mediated synaptic responses by adenosine receptors in the rat hippocampus. Morton RA, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):75–90

The role of the A(2A) adenosine receptor subtype in functional hyperaemia in the hindlimb of anaesthetized cats. Poucher SM. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):495–503

Ischaemic skeletal muscle hyperaemia in the anaesthetized cat: no contribution of A2A adenosine receptors. Poucher SM. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):205–12

Adrenomedullin mediates coronary vasodilation through adenosine receptors and KATP channels. Sabates BL, et al. **J Surg Res** 1997 Feb 1;67(2):163–8

Cellular and molecular biology of chloride secretion in the shark rectal gland: regulation by adenosine receptors. Forrest JN Jr. **Kidney Int** 1996 Jun;49(6):1557–62 (20 ref.)

Hydrophilic side chains in the third and seventh transmembrane helical domains of human A2A adenosine receptors are required for ligand recognition. Jiang Q, et al. **Mol Pharmacol** 1996 Sep;50(3):512–21

A dominant negative mutant of the G protein–coupled receptor kinase 2 selectively attenuates adenosine A2 receptor desensitization. Mundell SJ, et al. **Mol Pharmacol** 1997 Jun;51(6):991–8

Pharmacological characterization of the rat A2a adenosine receptor functionally coupled to the yeast pheromone response pathway. Price LA, et al. **Mol Pharmacol** 1996 Oct;50(4):829–37

Aggressiveness, hypoalgesia and high blood pressure in mice lacking the adenosine A2a receptor [see comments] Ledent C, et al. **Nature** 1997 Aug 14;388(6643):674–8. Comment in: Nature 1997 Aug 14;388(6643):624.

Adenosine receptors. Knockouts anxious for new therapy [news; comment] Snyder SH. **Nature** 1997 Aug 14; 388(6643):624. Comment on: Nature 1997 Aug 14;388(6643):674–8.

Adenosine A2A receptors mediate the inhibitory effect of adenosine on formyl–Met–Leu–Phe–stimulated respiratory burst in neutrophil leucocytes. Fredholm BB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):262–7

Adenosine A2A receptor stimulation increases release of acetylcholine from rat hippocampus but not striatum, and does not affect catecholamine release. Jin S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):48–56

Adenosine–dopamine receptor interactions in the isolated rat nodose ganglion but not in membranes of dorsal vagal complex. Lawrence AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):303–8

Mechanism of adenosine accumulation in the hippocampal slice during energy deprivation. Doolette DJ. **Neurochem Int** 1997 Feb;30(2):211–23

Both adenosine A1– and A2–receptors are required to stimulate microglial proliferation. Gebicke–Haerter PJ, et al. **Neurochem Int** 1996 Jul;29(1):37–42

Adenosine A2a receptors in the nucleus accumbens modulate prepulse inhibition of the startle response. Hauber W, et al. **Neuroreport** 1997 Apr 14;8(6):1515–8

Adenosine receptor activation suppresses tactile hypersensitivity and potentiates spinal cord stimulation in mononeuropathic rats. Cui JG, et al. **Neurosci Lett** 1997 Feb 28;223(3):173–6

Nerve growth factor (NGF) expression in rat microglia is induced by adenosine A2a–receptors. Heese K, et al. **Neurosci Lett** 1997 Aug 8;231(2):83–6

Adenosine A1 and A2 receptors modulate extracellular dopamine levels in rat striatum. Okada M, et al. **Neurosci Lett** 1996 Jul 5;212(1):53–6

Adenosine uptake and deamination regulate tonic A2a receptor facilitation of evoked [3H]acetylcholine release

RECEPTORS, PURINERGIC P1

from the rat motor nerve terminals. Correia-de-Sá P, et al. **Neuroscience** 1996 Jul;73(1):85–92

Adenosine physiology and pharmacology: how about A2 receptors? Daval JL, et al. **Pharmacol Ther** 1996; 71(3):325–35 (117 ref.)

Purinergic regulation of acetylcholine release. Ribeiro JA, et al. **Prog Brain Res** 1996;109:231–41 (41 ref.)

Adenosine A2 receptor–mediated excitatory actions on the nervous system. Sebastião AM, et al. **Prog Neurobiol** 1996 Feb;48(3):167–89 (225 ref.)

Involvement of adenosine and glutamate receptors in the induction of c–fos in the striatum by haloperidol. Boegman RJ, et al. **Synapse** 1996 Jan;22(1):70–7

Purines '96. Alexander SP, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):385–8

RECEPTORS, PURINERGIC P2

The diverse series of recombinant P2Y purinoceptors. Barnard EA, et al. **Ciba Found Symp** 1996;198:166–80; discussion 180–8 (53 ref.)

Involvement of distinct receptors in the actions of extracellular uridine nucleotides. Boeynaems JM, et al. **Ciba Found Symp** 1996;198:266–74; discussion 274–7 (26 ref.)

P2U purinoceptors: cDNA cloning, signal transduction mechanisms and structure–function analysis. Lustig KD, et al. **Ciba Found Symp** 1996;198:193–204; discussion 204–7 (28 ref.)

Challenges in developing P2 purinoceptor–based therapeutics. Williams M. **Ciba Found Symp** 1996; 198:309–21 (53 ref.)

Evaluation of P2–purinoceptor antagonists at two relaxation–mediating P2–purinoceptors in guinea–pig taenia coli. Bültmann R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Mar; 353(4):445–51

Uridine nucleotide receptors and their ligands: structural, physiological, and pathophysiological aspects, with special emphasis on the nervous system. Heilbronn E, et al. **Neurochem Res** 1997 Aug;22(8):1041–50 (86 ref.)

ADP receptors on platelets. Mills DC. **Thromb Haemost** 1996 Dec;76(6):835–56 (263 ref.)

[ATP receptor and intracellular signaling] Katsuragi T, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):166–8 (0 ref.) **(Jpn)**

[ATP receptors] Inoue K. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):308–15 (48 ref.) **(Jpn)**

AGONISTS

Inhibition of ecto–ATPase by the P2 purinoceptor agonists, ATPgammaS, alpha,beta–methylene–ATP, and AMP–PNP, in endothelial cells. Chen BC, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):442–6

P2x–purinoceptors of myenteric neurones from the guinea–pig ileum and their unusual pharmacological properties. Barajas–López C, et al. **Br J Pharmacol** 1996 Dec;119(8):1541–8

Rise in cytosolic Ca2+ concentration induced by P2–purinoceptor activation in isolated myocytes from the rat gastrointestinal tract. Blottière HM, et al. **Br J Pharmacol** 1996 Mar;117(5):775–80

ATP–regulated K+ channel and cytosolic Ca2+ mobilization in cultured rat spinal neurons. Ikeuchi Y, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):163–9

Effects of adenosine A2A receptor agonist, CGS 21680, on blood pressure, cardiac index and arterial conductance in anaesthetized rats. Nekooeian AA, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):163–9

Identification of an ecto–nucleoside diphosphokinase and its contribution to interconversion of P2 receptor agonists. Lazarowski ER, et al. **J Biol Chem** 1997 Aug 15; 272(33):20402–7

Effects of purinergic agonists on mechanical and electrical activities of gastric smooth muscle of guinea–pig. Ahn SC, et al. **J Smooth Muscle Res** 1995 Dec;31(6):407–10

Activation of ADP receptors and platelet function. Gachet C, et al. **Thromb Haemost** 1997 Jul;78(1):271–5 (58 ref.)

ANALYSIS

Cellular distribution of the P2X4 ATP receptor mRNA in the brain and non–neuronal organs of rats. Tanaka J, et al. **Arch Histol Cytol** 1996 Dec;59(5):485–90

Co–existence of P2Y–and PPADS–insensitive P2U–purinoceptors in endothelial cells from adrenal medulla. Mateo J, et al. **Br J Pharmacol** 1996 Nov; 119(6):1223–32

Identification and characterization of P2Y2 nucleotide receptors in human retinal pigment epithelial cells. Sullivan DM, et al. **J Neurosci Res** 1997 Jul 1;49(1):43–52

Characterization of P2 purinergic receptors on human erythro leukemia cells. Akbar GK, et al. **J Recept Signal Transduct Res** 1996 May–Jul; 16(3–4):209–24

Differential distribution of two ATP–gated channels (P2X receptors) determined by immunocytochemistry. Vulchanova L, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8063–7

ANTAGONISTS & INHIBITORS

P2x–purinoceptors of myenteric neurones from the guinea–pig ileum and their unusual pharmacological properties. Barajas–López C, et al. **Br J Pharmacol** 1996 Dec;119(8):1541–8

Cloned and transfected P2Y4 receptors: characterization of a suramin and PPADS–insensitive response to UTP. Charlton SJ, et al. **Br J Pharmacol** 1996 Dec;119(7):1301–3

PPADS and suramin as antagonists at cloned P2Y– and P2U–purinoceptors. Charlton SJ, et al. **Br J Pharmacol** 1996 Jun;118(3):704–10

Inhibition by heterologously–expressed P2Y2 nucleotide receptors of N–type calcium currents in rat sympathetic neurones. Filippov AK, et al. **Br J Pharmacol** 1997 Jul; 121(5):849–51

The isoquinoline derivative KN–62 a potent antagonist of the P2Z–receptor of human lymphocytes. Gargett CE, et al. **Br J Pharmacol** 1997 Apr;120(8):1483–90

Potent inhibition by trivalent cations of ATP–gated channels. Nakazawa K, et al. **Eur J Pharmacol** 1997 May 1; 325(2–3):237–43

Extracellular adenosine 5'–triphosphate (ATP) in the endolymphatic compartment influences cochlear function. Muñoz DJ, et al. **Hear Res** 1995 Oct;90(1–2):106–118

Design and pharmacology of selective P2–purinoceptor antagonists. Lambrecht G. **J Auton Pharmacol** 1996 Dec; 16(6):341–4 (21 ref.)

P2 purinoceptor blocker suramin antagonises NMDA receptors and protects against excitatory behaviour caused by NMDA receptor agonist (RS)–(tetrazol–5–yl)–glycine in rats. Ong WY, et al. **J Neurosci Res** 1997 Sep 1; 49(5):627–38

Suramin inhibits glucose–induced Ca2+ response in single rat pancreatic beta cells. Kuromi H, et al. **Jpn J Pharmacol** 1997 Feb;73(2):179–82

Identification of competitive antagonists of the P2Y1 receptor. Boyer JL, et al. **Mol Pharmacol** 1996 Nov; 50(5):1323–9

Endotoxin–induced apoptosis in ovarian follicles is partially blocked by 2–methylthioATP or 2–chloroATP. Perez GI, et al. **Mol Reprod Dev** 1996 Jul;44(3):360–9

P2–purinoceptor antagonists: III. Blockade of P2–purinoceptor subtypes and ecto–nucleotidases by compounds related to suramin. Bültmann R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):498–504

P2–purinoceptor antagonists: I. Blockade of P2–purinoceptor subtypes and ecto–nucleotidases by small aromatic isothiocyanato–sulphonates. Bültmann R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):481–90

P2–purinoceptor antagonists: II. Blockade of P2–purinoceptor subtypes and ecto–nucleotidases by compounds related to Evans blue and trypan blue. Wittenburg H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):491–7

BIOSYNTHESIS

Stage–specific expression of P2Y receptors, ecto–apyrase, and ecto–5'–nucleotidase in myeloid leukocytes. Clifford EE, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C973–87

Upregulation of P2Y2 nucleotide receptors in rat salivary gland cells during short–term culture. Turner JT, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C1100–7

The P2Y1 receptor is an ADP receptor antagonized by ATP and expressed in platelets and megakaryoblastic cells. Léon C, et al. **FEBS Lett** 1997 Feb 10;403(1):26–30

Expression of the P2X2 receptor subunit of the ATP–gated ion channel in the retina. Greenwood D, et al. **Neuroreport** 1997 Mar 24;8(5):1083–8

CHEMISTRY

A novel method for chemical modification of functional groups other than a carboxyl group in proteins by N–ethyl–5–phenylisooxazolium–3'–sulfonate (Woodward's reagent–K): inhibition of ADP–induced platelet responses involves covalent modification of aggregin, an ADP receptor. Puri RN, et al. **Anal Biochem** 1996 Sep 5; 240(2):251–61

Structural motif and characteristics of the extracellular domain of P2X receptors. Hansen MA, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):670–5

The 6H1 orphan receptor, claimed to be the p2y5 receptor, does not mediate nucleotide–promoted second messenger responses. Li Q, et al. **Biochem Biophys Res Commun** 1997 Jul 18;236(2):455–60

Modelling the P2Y purinoceptor using rhodopsin as template. Van Rhee AM, et al. **Drug Des Discov** 1995 Nov; 13(2):133–54

Identification of amino acid residues contributing to the pore of a P2X receptor. Rassendren F, et al. **EMBO J** 1997 Jun;16(12):3446–54

P2X receptors: an emerging channel family. Buell G, et al. **Eur J Neurosci** 1996 Oct;8(10):2221–8 (47 ref.)

Structural characterization and fine chromosomal mapping of the human P2Y1 purinergic receptor gene (P2RY1). Ayyanathan K, et al. **Somat Cell Mol Genet** 1996 Sep; 22(5):419–24

CLASSIFICATION

P2 purinoceptors: historical perspective and classification. Burnstock G. **Ciba Found Symp** 1996;198:1–28; discussion 29–34 (239 ref.)

Endothelial P2–purinoceptors: subtypes and signal transduction. Pirotton S, et al. **J Auton Pharmacol** 1996 Dec;16(6):353–6 (26 ref.)

Towards a revised nomenclature for P1 and P2 receptors. Fredholm BB, et al. **Trends Pharmacol Sci** 1997 Mar; 18(3):79–82

DRUG EFFECTS

ATP– and EGF–stimulated phosphatidulinositol synthesis by two different pathways, phospholipase D and diacylglycerol kinase, in A–431 epidermoid carcinoma cells. Hosoi K, et al. **Biochem Cell Biol** 1996;74(2):197–209

Desensitization of P2U receptor in neuronal cell line. Different control by the agonists ATP and UTP, as demonstrated by single–cell Ca2+ responses. Czubayko U, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):215–9

Enhancement of the response to purinergic agonists in P2Y1 transfected 1321N1 cells by antagonists suramin and PPADS. Brown CA, et al. **Br J Pharmacol** 1997 Mar; 120(6):1049–52

Properties of the pore–forming P2X7 purinoceptor in mouse NTW8 microglial cells. Chessell IP, et al. **Br J Pharmacol** 1997 Aug;121(7):1429–37

Effects of extracellular nucleotides on single cells and populations of human osteoblasts: contribution of cell heterogeneity to relative potencies. Dixon CJ, et al. **Br J Pharmacol** 1997 Mar;120(5):777–80

Different mechanisms of Ca2(+)–handling following nicotinic acetylcholine receptor stimulation, P2U–purinoceptor stimulation and K(+)–induced depolarization in C2C12 myotubes. Henning RH, et al. **Br J Pharmacol** 1996 Apr;117(8):1785–91

Potentiation by cadmium ion of ATP–evoked dopamine release in rat phaeochromocytoma cells. Ikeda M, et al. **Br J Pharmacol** 1996 Mar;117(5):950–4

The effect of the neuropeptide substance P on desensitization of ATP receptors of PC12 cells. Khiroug L, et al. **Br J Pharmacol** 1997 Jun;121(3):497–502

Effects of extracellular pH on agonism and antagonism at a recombinant P2X2 receptor. King BF, et al. **Br J Pharmacol** 1997 Aug;121(7):1445–53

Potentiation by 2,2'–pyridylisatogen tosylate of ATP–responses at a recombinant P2Y1 purinoceptor. King BF, et al. **Br J Pharmacol** 1996 Mar;117(6):1111–8

Selectivity and activity of adenine dinucleotides at recombinant P2X2 and P2Y1 purinoceptors. Pintor J, et al. **Br J Pharmacol** 1996 Nov;119(5):1006–12

An examination of deoxyadenosine 5'(alpha–thio)triphosphate as a ligand to define P2Y receptors and its selectivity as a low potency partial agonist of the P2Y1 receptor. Schachter JB, et al. **Br J Pharmacol** 1997 May;121(2):338–44

Potentiation of purinergic transmission by angiotensin in prostatic rat vas deferens. Sum CS, et al. **Br J Pharmacol** 1996 Jul;118(6):1523–9

The interaction of diadenosine polyphosphates with P2x–receptors in the guinea–pig isolated vas deferens. Westfall TD, et al. **Br J Pharmacol** 1997 May;121(1):57–62

Potentiation of ATP–responses at a recombinant P2x2 receptor by neurotransmitters and related substances. Wildman SS, et al. **Br J Pharmacol** 1997 Jan;120(2):221–4

Adenosine A2 receptor function in rat ventricular myocytes. Dobson JG Jr, et al. **Cardiovasc Res** 1997 May;34(2):337–47

Pharmacological characterization of the human P2Y4 receptor. Communi D, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):383–9

Characterization of vascular P2 purinoceptors in the rat isolated perfused kidney. Eltze M, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):139–52

Peripheral adenosine 5'–triphosphate enhances nociception in the formalin test via activation of a purinergic p2X receptor. Sawynok J, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2–3):115–21

ATP acting on P2Y receptors triggers calcium mobilization in Schwann cells at the neuroelectrocyte junction in skate. Green AC, et al. **Neuroscience** 1997 Sep;80(2):635–51

ATP increases [Ca2+]i and ion secretion via a basolateral P2Y–receptor in rat distal colonic mucosa. Leipziger J, et al. **Pflugers Arch** 1997 May;434(1):77–83

Enhanced increases in cytosolic Ca2+ in ADP–stimulated platelets from patients with delta–storage pool deficiency—a possible indicator of interactions between granule–bound ADP and the membrane ADP receptor. Lages B, et al. **Thromb Haemost** 1997 Feb;77(2):376–82

GENETICS

Functional expression of a P2T ADP receptor in Xenopus oocytes injected with megakaryocyte (CMK 11–5) RNA. Greco NJ. **Arterioscler Thromb Vasc Biol** 1997 Apr; 17(4):769–77

Cloning of a human heptahelical receptor closely related to the P2Y5 receptor. Janssens R, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):106–12

Cloning of P2Y6 cDNAs and identification of a pseudogene: comparison of P2Y receptor subtype expression in bone and brain tissues. Maier R, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):297–302

The human P2x1 receptor: molecular cloning, tissue distribution, and localization to chromosome 17. Longhurst PA, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):185–8

Molecular cloning and sequencing of a novel human P2 nucleotide receptor. Southey MC, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):77–80

Cloned and transfected P2Y4 receptors: characterization of a suramin and PPADS–insensitive response to UTP. Charlton SJ, et al. **Br J Pharmacol** 1996 Dec;119(7):1301–3

Characterization of a P2X–purinoceptor in cultured neurones of the rat dorsal root ganglia. Robertson SJ, et al. **Br J Pharmacol** 1996 Jun;118(4):951–6

Cloning of P2XM, a novel human P2X receptor gene regulated by p53. Urano T, et al. **Cancer Res** 1997 Aug 1;57(15):3281–7

Nucleotide–induced mucin release from primary hamster tracheal surface epithelial cells involves the P2u purinoceptor. Kim KC, et al. **Eur Respir J** 1996 Jul; 9(7):1579

Structure and chromosomal mapping of the mouse P2X3 gene. Souslova V, et al. **Gene** 1997 Aug 11;195(1):101–11

The molecular biology of P2X receptors. Evans RJ. **J Auton Pharmacol** 1996 Dec;16(6):309–10 (18 ref.)

Molecular biology of P2Y purinoceptors: expression in rat heart. Webb TE, et al. **J Auton Pharmacol** 1996 Dec; 16(6):303–7

Early expression of a novel nucleotide receptor in the neural plate of Xenopus embryos. Bogdanov YD, et al. **J Biol Chem** 1997 May 9;272(19):12583–90

The permeabilizing ATP receptor, P2X7. Cloning and expression of a human cDNA. Rassendren F, et al. **J Biol Chem** 1997 Feb 28;272(9):5482–6

A mutational analysis of residues essential for ligand recognition at the human P2Y1 receptor. Jiang Q, et al. **Mol Pharmacol** 1997 Sep;52(3):499–507

Down–regulation of P2U–purinergic nucleotide receptor messenger RNA expression during in vitro differentiation of human myeloid leukocytes by phorbol esters or inflammatory activators. Martin KA, et al. **Mol Pharmacol** 1997 Jan;51(1):97–108

Localization and functional expression of splice variants of the P2X2 receptor. Simon J, et al. **Mol Pharmacol** 1997 Aug;52(2):237–48

Transient up–regulation of P2Y2 nucleotide receptor mRNA expression is an immediate early gene response in activated thymocytes. Koshiba M, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):831–6

Characterization and chromosomal localization of a human P2X receptor from the urinary bladder. Valera S, et al. **Receptors Channels** 1995;3(4):283–9

Structural characterization and fine chromosomal mapping of the human P2Y1 purinergic receptor gene (P2RY1). Ayyanathan K, et al. **Somat Cell Mol Genet** 1996 Sep; 22(5):419–24

IMMUNOLOGY

P2 purinoceptors in the immune system. Di Virgilio F, et al. **Ciba Found Symp** 1996;198:290–302; discussion 302–5 (49 ref.)

The P2Z purinoceptor: an open question in the immune system [letter] Persechini PM, et al. **Immunol Today** 1996 Jun;17(6):292–4

ISOLATION & PURIFICATION

Receptors responsive to extracellular pyrimidine nucleotides. Communi D, et al. **Trends Pharmacol Sci** 1997 Mar; 18(3):83–6 (30 ref.)

METABOLISM

Presence of a metabotropic and an ionotropic purinergic receptor on rat submandibular ductal cells. Amsallem H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1546–55

Adenylate cyclase–coupled ATP receptor and surfactant secretion in type II pneumocytes from newborn rats. Gobran LI, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L187–96

Study of nonspecific cation channel coupled to P2z purinergic receptors using an acid load technique. Lachish M, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1920–6

Characterization and function of ATP receptors on hepatocytes from the little skate Raja erinacea. Nathanson MH, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R561–70

Changes in P2Y1 nucleotide receptor activity during the development of rat salivary glands. Park MK, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1388–93

Alteration in cardiac sarcolemmal ATP receptors by oxyradicals. Musat S, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:1–12

Modulation of platelet responses by 2–[3–(bromo–2–oxopropylthio)]adenosine–5'–diphosphate involves its binding to as well as covalent modification of an ADP–receptor, aggregin. Puri RN, et al. **Arch Biochem Biophys** 1997 Jul 1;343(1):140–5

Peptidyl conjugates of adenosine 5'–carboxylic acid synthesized and evaluated as ligands for P2 purinoceptors. Järlebark L, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):363–9

Phosphorylation and activation of p42 and p44 mitogen–activated protein kinase are required for the P2 purinoceptor stimulation of endothelial prostacyclin production. Patel V, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):221–6

ATP–induced calcium mobilization in glomerular mesangial cells is mediated by P2U purinoceptor. Takeda M, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1193–200

Role of intracellular calcium in fast and slow desensitization of P2–receptors in PC12 cells. Khiroug L, et al. **Br J Pharmacol** 1997 Apr;120(8):1552–60

A comparison of the binding characteristics of recombinant P2X1 and P2X2 purinoceptors. Michel AD, et al. **Br J Pharmacol** 1996 Aug;118(7):1806–12

High affinity P2x–purinoceptor binding sites for [35S]–adenosine 5'–O–[3–thiotriphosphate] in rat vas deferens membranes. Michel AD, et al. **Br J Pharmacol** 1996 Jan;117(1):63–70

The binding characteristics of a human bladder recombinant P2X purinoceptor, labelled with [3H]–alpha beta meATP, [35S]–ATP gamma S or [33P]–ATP. Michel AD, et al. **Br J Pharmacol** 1996 Mar;117(6):1254–60

Characterization of P2 receptors for purine and pyrimidine nucleotides in human placental cotyledons. Ralevic V, et al. **Br J Pharmacol** 1997 Jul;121(6):1121–6

Characterization of [35S]–ATP alpha S and [3H]–alpha, beta–MeATP binding sites in rat brain cortical synaptosomes: regulation of ligand binding by divalent cations. Schäfer R, et al. **Br J Pharmacol** 1997 Jul; 121(5):913–22

Trophic roles of P2 purinoceptors in central nervous system astroglial cells. Abbracchio MP, et al. **Ciba Found Symp** 1996;198:142–7; discussion 147–8 (23 ref.)

Features of P2X receptor–mediated synapses in the rat brain: why doesn't ATP kill the postsynaptic cell? Edwards FA. **Ciba Found Symp** 1996;198:278–86; discussion 286–9 (15 ref.)

P2Z purinoceptors. Hickman SE, et al. **Ciba Found Symp** 1996;198:71–83; discussion 83–90 (40 ref.)

P2T purinoceptors: ADP receptors on platelets. Hourani SM, et al. **Ciba Found Symp** 1996;198:53–64; discussion 64–70 (50 ref.)

P2 purinoceptors and pyrimidinoceptors of catecholamine–producing cells and immunocytes. Illes P, et al. **Ciba Found Symp** 1996;198:110–25; discussion 125–9 (59 ref.)

The diadenosine polyphosphate receptors: P2D purinoceptors. Miras–Portugal MT, et al. **Ciba Found Symp** 1996;198:35–47; discussion 48–52

P2X receptors: a third major class of ligand–gated ion channels. North RA. **Ciba Found Symp** 1996;198:91–105; discussion 105–9 (76 ref.)

ATP release and its prejunctional modulation. Starke K, et al. **Ciba Found Symp** 1996;198:239–49; discussion 249–59

Transduction mechanisms of P2Z purinoceptors. Wiley JS, et al. **Ciba Found Symp** 1996;198:149–60; discussion 160–5 (52 ref.)

Effects of pertussis toxin on signal transductions via P2–purinergic receptors in A–431 human epidermoidal carcinoma cells. Sugita K, et al. **Enzyme Protein** 1994–95; 48(4):222–8

Evidence for a novel P2X purinoceptor in human placental chorionic surface arteries. Dobronyi I, et al. **Eur J Pharmacol** 1997 Feb 5;320(1):61–4

Slow desensitization of the human P2Y6 receptor. Robaye B, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):231–6

P2Y purinoceptors in gastric gland plasma membranes. Vallejo AI, et al. **Eur J Pharmacol** 1996 Sep 26; 312(2):209–14

Propagation of mechanically induced intercellular calcium waves via gap junctions and ATP receptors in rat liver epithelial cells. Frame MK, et al. **Exp Cell Res** 1997 Feb 1;230(2):197–207

The P2Y1 receptor is an ADP receptor antagonized by ATP and expressed in platelets and megakaryoblastic cells. Léon C, et al. **FEBS Lett** 1997 Feb 10;403(1):26–30

P2X7 purinoceptor expression in Xenopus oocytes is not sufficient to produce a pore–forming P2Z–like phenotype. Petrou S, et al. **FEBS Lett** 1997 Jul 14;411(2–3):339–45

Characterization and autoradiographic localization of [3H] alpha,beta–methylene ATP binding sites in cat urinary bladder. Zhao M, et al. **Gen Pharmacol** 1996 Apr; 27(3):509–12

P2U nucleotide receptor activation in rat glial cell line induces [Ca2+]i oscillations which depend on cytosolic pH. Czubayko U, et al. **Glia** 1996 Feb;16(2):108–16

Extracellular adenosine 5' triphosphate involvement in the death of LAK–engaged human tumor cells via P2X–receptor activation. Correale P, et al. **Immunol Lett** 1997 Feb;55(2):69–78

Stimulation of P2U purinergic or alpha 1A adrenergic receptors mobilizes Ca2+ in lens cells. Churchill GC, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):855–65

A purinergic hypothesis for immunomodulation. Di Virgilio F, et al. **Ital J Biochem** 1996 Dec;45(4):195–203 (42 ref.)

P2–purinoceptors utilize multiple signalling pathways in MDCK–D1 cells. Insel PA, et al. **J Auton Pharmacol** 1996 Dec;16(6):311–3

Pharmacological and second messenger signalling selectivities of cloned P2Y receptors. Nicholas RA, et al. **J Auton Pharmacol** 1996 Dec;16(6):319–23

The P2U purinoceptor obligatorily engages the heterotrimeric G protein G16 to mobilize intracellular Ca2+ in human erythroleukemia cells. Baltensperger K, et al. **J Biol Chem** 1997 Apr 11;272(15):10151–9

A guanine nucleotide–independent inwardly rectifying cation permeability is associated with P2Y1 receptor expression in Xenopus oocytes. O'Grady SM, et al. **J Biol Chem** 1996 Nov 15;271(46):29080–7

Characterization of signaling pathways of P2Y and P2U purinoceptors in bovine pulmonary artery endothelial cells. Chen BC, et al. **J Cardiovasc Pharmacol** 1996 Aug; 28(2):192–9

Spontaneous cell fusion in macrophage cultures expressing high levels of the P2Z/P2X7 receptor. Chiozzi P, et al. **J Cell Biol** 1997 Aug 11;138(3):697–706

Extracellular ATP triggers IL–1 beta release by activating the purinergic P2Z receptor of human macrophages. Ferrari D, et al. **J Immunol** 1997 Aug 1;159(3):1451–8

Pharmacological evidence that calcium is not required for P2–receptor–stimulated Cl– secretion in HT29–Cl.16E. Guo X, et al. **J Membr Biol** 1997 Feb 1;155(3):239–46

Antagonistic effect of Na+ and Mg2+ on P2z purinoceptor–associated pores in dibutyryl cyclic AMP–differentiated NG108–15 cells. Song SL, et al. **J Neurochem** 1996 Oct;67(4):1694–701

Two distinct P2 purinergic receptors, P2Y and P2U, are coupled to phospholipase C in mouse pineal gland tumor cells. Suh BC, et al. **J Neurochem** 1997 Apr;68(4):1622–32

Calcium flux through predominantly independent purinergic ATP and nicotinic acetylcholine receptors. Rogers M, et al. **J Neurophysiol** 1997 Mar;77(3):1407–17

P2 receptor excitation of rodent hypoglossal motoneuron activity in vitro and in vivo: a molecular physiological analysis. Funk GD, et al. **J Neurosci** 1997 Aug 15; 17(16):6325–37

Baculovirus expression provides direct evidence for heteromeric assembly of P2X2 and P2X3 receptors. Radford KM, et al. **J Neurosci** 1997 Sep 1;17(17):6529–33

Expression of ligand–gated ion channels with the Semliki Forest virus expression system. Lundstrom K, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):115–26

P2X–purinoceptors in the heart: actions of ATP and UTP. Froldi G, et al. **Life Sci** 1997;60(17):1419–30

Identification of competitive antagonists of the P2Y1 receptor. Boyer JL, et al. **Mol Pharmacol** 1996 Nov; 50(5):1323–9

A mutational analysis of residues essential for ligand recognition at the human P2Y1 receptor. Jiang Q, et al. **Mol Pharmacol** 1997 Sep;52(3):499–507

Distinct ATP receptors on pain–sensing and stretch–sensing neurons. Cook SP, et al. **Nature** 1997 May 29; 387(6632):505–8

Functional characterisation of P2 purinoceptors in PC12 cells by measurement of radiolabelled calcium influx. Michel AD, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov;354(5):562–71

Extracellular ATP induces formation of AP–1 complexes in astrocytes via P2 purinoceptors. Neary JT, et al. **Neuroreport** 1996 Nov 25;7(18):2893–6

P2 purinoceptors in rat cortical astrocytes: expression, calcium–imaging and signalling studies. King BF, et al. **Neuroscience** 1996 Oct;74(4):1187–96

A novel receptor mediated ATP transport system regulated by tyrosine and serine/threonine phosphokinases in Trypanosoma cruzi trypomastigotes. Sadigursky M, et al. **Recept Signal Transduct** 1997;7(1):29–43

Plasma membrane ATP receptors in Trypanosoma cruzi trypomastigotes. Inverso JA, et al. **Receptor** 1995; 5(4):197–206

Release, metabolism and interconversion of adenine and uridine nucleotides: implications for G protein–coupled P2 receptor agonist selectivity. Harden TK, et al. **Trends Pharmacol Sci** 1997 Feb;18(2):43–6 (15 ref.)

[Ecto–ATPases and receptors for ATP] Ziganshin AU, et al. **Eksp Klin Farmakol** 1997 May–Jun;60(3):78–82 (59 ref.) (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Electrophysiological evidence that the twitch contraction of guinea–pig vas deferens is triggered by phasic activation of P2x–purinoceptors. Stjärne L, et al. **Acta Physiol Scand** 1997 Jul;160(3):295–6

Presence of a metabotropic and an ionotropic purinergic receptor on rat submandibular ductal cells. Amsallem H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1546–55

Purinergic Ca2+ signaling in myenteric neurons via P2 purinoceptors. Christofi FL, et al. **Am J Physiol** 1997 Mar; 272(3 Pt 1):G463–73

ATP activates K and Cl channels via purinoceptor–mediated release of Ca2+ in human coronary artery smooth muscle. Strøbaek D, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1463–71

Signaling by extracellular nucleotides. Brake AJ, et al. **Ann Rev Cell Dev Biol** 1996;12:519–41 (111 ref.)

Lack of nucleotide–promoted second messenger signaling responses in 1321N1 cells expressing the proposed P2Y receptor, p2y7. Herold CL, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):717–21

Role of P2–purinergic receptors in rat Leydig cell steroidogenesis. Foresta C, et al. **Biochem J** 1996 Dec 1; 320 (Pt 2):499–504

Evidence for P2–purinoceptor–mediated uptake of Ca2+ across a fish (Oreochromis mossambicus) intestinal brush border membrane. Klaren PH, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):129–34

P2 purinoceptor–stimulated conversion of arginine to citrulline in bovine endothelial cells is reduced by inhibition of protein kinase C. Brown CA, et al. **Biochem Pharmacol** 1996 Dec 24;52(12):1849–54

RECEPTORS, PURINERGIC P2

P2-receptor modulation of noradrenergic neurotransmission in rat kidney. Bohmann C, et al. **Br J Pharmacol** 1997 Aug; 121(7):1255-62

Characterization of Na+ influx mediated by ATP(4-)-activated P2 purinoceptors in PC12 cells. Choi SY, et al. **Br J Pharmacol** 1996 Jun;118(4):935-40

Role of the purinergic and noradrenergic components in the potentiation by endothelin-1 of the sympathetic contraction of the rabbit central ear artery during cooling. García-Villalón AL, et al. **Br J Pharmacol** 1997 Sep; 122(1):172-8

The activation of P1- and P2-purinoceptors in the guinea-pig left atrium by diadenosine polyphosphates. Hoyle CH, et al. **Br J Pharmacol** 1996 Jul;118(5):1294-300

Pyrimidinoceptor-mediated activation of phospholipase C and phospholipase A2 in RAW 264.7 macrophages. Lin WW, et al. **Br J Pharmacol** 1996 Sep;119(2):261-8

Dual regulation of cerebrovascular tone by UTP: P2U receptor-mediated contraction and endothelium-dependent relaxation. Miyagi Y, et al. **Br J Pharmacol** 1996 Jun; 118(4):847-56

P2-purinoceptors mediating spasm of the isolated uterus of the non-pregnant guinea-pig. Piper AS, et al. **Br J Pharmacol** 1996 Apr;117(8):1721-9

Relative contribution of P2U- and P2Y-purinoceptors to endothelium-dependent vasodilatation in the golden hamster isolated mesenteric arterial bed. Ralevic V, et al. **Br J Pharmacol** 1996 Apr;117(8):1797-802

Prominent sympathetic purinergic vasoconstriction in the rabbit splenic artery: potentiation by 2,2'-pyridylisatogen tosylate. Ren LM, et al. **Br J Pharmacol** 1997 Feb; 120(3):530-6

Evidence for a P2-purinoceptor mediating vasoconstriction by UTP, ATP and related nucleotides in the isolated pulmonary vascular bed of the rat. Rubino A, et al. **Br J Pharmacol** 1996 Jul;118(6):1415-20

P2-purinoceptor-mediated formation of inositol phosphates and intracellular Ca2+ transients in human coronary artery smooth muscle cells. Strøbaek D, et al. **Br J Pharmacol** 1996 Aug;118(7):1645-52

Vasoconstrictor responses via P2X-receptors are selectively antagonized by NF023 in rabbit isolated aorta and saphenous artery. Ziyal R, et al. **Br J Pharmacol** 1997 Mar; 120(5):954-60

ATP receptor activation potentiates a voltage-dependent Ca channel in hippocampal neurons. Dave S, et al. **Brain Res** 1996 Apr 9;715(1-2):208-16

Regulation of ion transport by P2u purinoceptors and alpha 2A adrenoceptors in HT29 cells. Zhang W, et al. **Cell Biol Int** 1997 Apr;21(4):195-200

P2u purinoceptor modulation of intracellular Ca2+ in a human lung adenocarcinoma cell line: down-regulation of Ca2+ influx by protein kinase C. Clunes MT, et al. **Cell Calcium** 1996 Oct;20(4):339-46

ATP receptors in sickness, pain and death. Brake A, et al. **Chem Biol** 1996 Apr;3(4):229-32 (23 ref.)

Functional properties of native and cloned P2X receptors. Surprenant A. **Ciba Found Symp** 1996;198:208-19; discussion 219-22 (40 ref.)

Extracellular nucleotides act through P2U purinoceptors to elevate [Ca2+]i and enhance basic fibroblast growth factor-induced proliferation in sheep chondrocytes. Kaplan AD, et al. **Endocrinology** 1996 Nov;137(11):4757-66

Adenosine activates the K+ channel and enhances cytosolic Ca2+ release via a P2Y purinoceptor in hippocampal neurons. Ikeuchi Y, et al. **Eur J Pharmacol** 1996 May 23; 304(1-3):191-9

Peripheral adenosine 5'-triphosphate enhances nociception in the formalin test via activation of a purinergic p2X receptor. Sawynok J, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2-3):115-21

P2 purinoceptor-mediated stimulation of adenylyl cyclase in PC12 cells. Yakushi Y, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):243-8

Desensitization of the P2X(2) receptor controlled by alternative splicing. Brändle U, et al. **FEBS Lett** 1997 Mar 10;404(2-3):294-8

Purines and neutrophil leukocytes. Fredholm BB. **Gen Pharmacol** 1997 Mar;28(3):345-50 (100 ref.)

Purinoceptor-mediated regulation of the renal microvasculature. Inscho EW. **J Auton Pharmacol** 1996 Dec;16(6):385-8 (20 ref.)

ATP as a cotransmitter in perivascular sympathetic nerves. Kennedy C. **J Auton Pharmacol** 1996 Dec;16(6):337-40 (11 ref.)

P2-purinoceptors on postganglionic sympathetic neurones. von Kügelgen I, et al. **J Auton Pharmacol** 1996 Dec; 16(6):413-6 (28 ref.)

Dual role of protein kinase C in the regulation of cPLA2-mediated arachidonic acid release by P2U receptors in MDCK-D1 cells: involvement of MAP kinase-dependent and -independent pathways. Xing M, et al. **J Clin Invest** 1997 Feb 15;99(4):805-14

Purinergic modulation of interleukin-1 beta release from microglial cells stimulated with bacterial endotoxin. Ferrari D, et al. **J Exp Med** 1997 Feb 3;185(3):579-82

Induction of the P2z/P2X7 nucleotide receptor and associated phospholipase D activity by lipopolysaccharide and IFN-gamma in the human THP-1 monocytic cell line. Humphreys BD, et al. **J Immunol** 1996 Dec 15; 157(12):5627-37

Regulation of cytosolic free Ca2+ in cultured rat alveolar macrophages (NR8383). Zhang GH, et al. **J Leukoc Biol** 1997 Sep;62(3):341-8

Selected P2 purinoceptor modulators prevent glutamate-evoked cytotoxicity in cultured cerebellar granule neurons. Volonté C, et al. **J Neurosci Res** 1996 Jul 15;45(2):183-93

Ionic permeability of, and divalent cation effects on, two ATP-gated cation channels (P2X receptors) expressed in mammalian cells. Evans RJ, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):413-22

ATP-gated cation channels (P2X purinoceptors) in trigeminal mesencephalic nucleus neurons of the rat. Khakh BS, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):709-15

Modulation of the muscarinic K+ channel by P2-purinoceptors in guinea-pig atrial myocytes. Matsuura H, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):379-93

Variation in expression of the outer hair cell P2X receptor conductance along the guinea-pig cochlea. Raybould NP, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):717-27

An ATP-gated cation channel with some P2Z-like characteristics in gastric smooth muscle cells of toad. Ugur M, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):427-42

P2X purinoceptors in cultured myenteric neurons of guinea-pig small intestine. Zhou X, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):719-29

Intracellular mechanism of ATP-induced depolarizing response in the bullfrog sympathetic ganglion cells. Somei K, et al. **Methods Find Exp Clin Pharmacol** 1996 Sep; 18(7):443-8

Characterization of recombinant human P2X4 receptor reveals pharmacological differences to the rat homologue. Garcia-Guzman M, et al. **Mol Pharmacol** 1997 Jan; 51(1):109-18

New insights on P2X purinoceptors. Humphrey PP, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):585-96 (94 ref.)

P2-receptor-mediated inhibition of noradrenaline release in the rat hippocampus. Koch H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):707-15

Purinoceptor-stimulated phosphoinositide hydrolysis in Madin-Darby canine kidney (MDCK) cells. Yang CM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):1-7

Extracellular ATP promotes cellular growth of renal inner medullary collecting duct cells mediated via P2u receptors. Ishikawa S, et al. **Nephron** 1997;76(2):208-14

A role for calcineurin in the desensitization of the P2X3 receptor. King B, et al. **Neuroreport** 1997 Mar 24; 8(5):1099-102

P2 purinoceptor-mediated intracellular Ca2+ transients in human sural nerve. Wächtler J, et al. **Neuroreport** 1996 May 17;7(7):1289-92

Functional evidence for multiple purinoceptor subtypes in the rat medial vestibular nucleus. Chessell IP, et al. **Neuroscience** 1997 Apr;77(3):783-91

Effect of P2-purinoceptor antagonists on hemolysate-induced and adenosine 5'-triphosphate-induced contractions of dog basilar artery in vitro. Sima B, et al. **Neurosurgery** 1996 Oct;39(4):815-21; discussion 821-2

Extracellular ATP modulates ion transport via P2Y purinoceptors in a middle-ear epithelial cell line. Yen PT, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 May-Jun; 59(3):170-5

UDP activates a mucosal-restricted receptor on human nasal epithelial cells that is distinct from the P2Y2 receptor. Lazarowski ER, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2599-603

P2Y1 purinergic receptors in sensory neurons: contribution to touch-induced impulse generation. Nakamura F, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10465-70

Differential distribution of two ATP-gated channels (P2X receptors) determined by immunocytochemistry. Vulchanova L, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8063-7

Autocrine signaling through ATP release represents a novel mechanism for cell volume regulation. Wang Y, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):12020-5

Implication of ATP receptors in brain functions. Inoue K, et al. **Prog Neurobiol** 1996 Dec;50(5-6):483-92 (73 ref.)

Purines '96. Alexander SP, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):385-8

RECEPTORS, RETINOIC ACID

All-trans-retinoic acid mediates G1 arrest but not apoptosis of normal human mammary epithelial cells. Seewaldt VL, et al. **Cell Growth Differ** 1997 Jun;8(6):631-41

AGONISTS

Chemoprevention of mammary carcinoma by LGD1069 (Targretin): an RXR-selective ligand. Gottardis MM, et al. **Cancer Res** 1996 Dec 15;56(24):5566-70

A novel retinoic acid receptor-selective retinoid, ALRT1550, has potent antitumor activity against human oral squamous carcinoma xenografts in nude mice. Shalinsky DR, et al. **Cancer Res** 1997 Jan 1;57(1):162-8

An RXR-selective analog attenuates the RAR alpha-selective analog-induced differentiation and non-G1-restricted growth arrest of NB4 cells. Brooks SC 3rd, et al. **Exp Cell Res** 1997 Aug 1;234(2):259-69

Identification and functional separation of retinoic acid receptor neutral antagonists and inverse agonists. Klein ES, et al. **J Biol Chem** 1996 Sep 13;271(37):22692-6

Identification, characterization, and tissue distribution of human peroxisome proliferator-activated receptor (PPAR) isoforms PPARgamma2 versus PPARgamma1 and activation with retinoid X receptor agonists and antagonists. Mukherjee R, et al. **J Biol Chem** 1997 Mar 21;272(12):8071-6

The retinoid X receptor agonist 9-cis-retinoic acid and the 24-hydroxylase inhibitor ketoconazole increase activity of 1,25-dihydroxyvitamin D3 in human skin in vivo. Kang S, et al. **J Invest Dermatol** 1997 Apr;108(4):513-8

Identification of retinoic acid receptor beta subtype specific agonists. Johnson AT, et al. **J Med Chem** 1996 Dec 20; 39(26):5027-30

Receptor specificity of retinoid-induced epidermal hyperplasia: effect of RXR-selective agonists and correlation with topical irritation. Thacher SM, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):528-34

Sensitization of diabetic and obese mice to insulin by retinoid X receptor agonists. Mukherjee R, et al. **Nature** 1997 Mar 27;386(6623):407-10

ANALYSIS

Two novel RXR alpha isoforms from mouse testis. Brocard J, et al. **Biochem Biophys Res Commun** 1996 Dec 4; 229(1):211-8

Expression of retinoic acid receptors in normal, dysplastic and malignant oral epithelia. Sherman JA, et al. **Br J Oral Maxillofac Surg** 1997 Aug;35(4):260-6

Loss of retinoic acid receptors in mouse skin and skin tumors is associated with activation of the ras(Ha) oncogene and high risk for premalignant progression. Darwiche N, et al. **Cancer Res** 1996 Nov 1;56(21):4942-9

Retinoid X receptors in the kidney: their protein expression and functional significance. Sugawara A, et al. **Endocrinology** 1997 Aug;138(8):3175-80

Immunohistochemical detection of retinoic acid receptor alpha in human skin: a comparison of different fixation protocols. Epple S, et al. **Histochem J** 1996 Sep; 28(9):657-60

Suppression of retinoic acid receptor beta in non-small-cell lung cancer in vivo: implications for lung cancer development [see comments] Xu XC, et al. **J Natl Cancer Inst** 1997 May 7;89(9):624-9. Comment in: J Natl Cancer Inst 1997 May 7;89(9):602-4.

Steroidogenic factor 1 and Dax-1 colocalize in multiple cell lineages: potential links in endocrine development. Ikeda Y, et al. **Mol Endocrinol** 1996 Oct;10(10):1261-72

Evaluation of semiquantitative reverse transcriptase-polymerase chain reaction assay of PML/retinoic acid receptor alpha mRNA and in vitro differentiation assay as prognostic prediction in acute promyelocytic leukemia treated with all-trans retinoic acid. Iwakiri R, et al. **Nippon Ika Daigaku Zasshi** 1996 Aug; 63(4):259-67

ANTAGONISTS & INHIBITORS

Identification and functional separation of retinoic acid receptor neutral antagonists and inverse agonists. Klein ES, et al. **J Biol Chem** 1996 Sep 13;271(37):22692-6

Identification, characterization, and tissue distribution of human peroxisome proliferator-activated receptor (PPAR) isoforms PPARgamma2 versus PPARgamma1 and activation with retinoid X receptor agonists and antagonists. Mukherjee R, et al. **J Biol Chem** 1997 Mar 21;272(12):8071-6

Identification of highly potent retinoic acid receptor alpha-selective antagonists. Teng M, et al. **J Med Chem** 1997 Aug 1;40(16):2445-51

BIOSYNTHESIS

Male infertility caused by epididymal dysfunction in transgenic mice expressing a dominant negative mutation of retinoic acid receptor alpha 1. Costa SL, et al. **Biol Reprod** 1997 Apr;56(4):985-90

Downregulation of RAR alpha in mice by antisense transgene leads to a compensatory increase in RAR beta and RAR gamma and development of lymphoma. Manshouri T, et al. **Blood** 1997 Apr 1;89(7):2507-15

Role of thyroid hormone and retinoid receptors in the homeotic transformation of tails into limbs in frogs. Maden M, et al. **Dev Genet** 1996;19(1):85-93

An essential role for retinoid signaling in anteroposterior neural patterning. Blumberg B, et al. **Development** 1997 Jan;124(2):373-9

Elevated expression of retinoic acid receptor-alpha (RAR alpha) in estrogen-receptor-positive breast carcinomas as detected by immunohistochemistry. Han QX, et al. **Diagn Mol Pathol** 1997 Feb;6(1):42-8

Localization of cellular retinoic acid-binding protein (CRABP) II and CRABP in developing rat testis. Zheng WL, et al. **Endocrinology** 1996 Nov;137(11):5028-35

Immunochemical and in situ hybridization analyses of retinoic acid receptor alpha, beta, and gamma in murine Harderian and submandibular glands. Zhuang YH, et al. **Histochem Cell Biol** 1996 Sep;106(3):311-8

Expression of the vitamin D and the retinoid X receptors in Saccharomyces cerevisiae: alternative in vivo models for ligand-induced transactivation. Berghöfer-Hochheimer

, et al. **J Cell Biochem** 1997 Aug 1;66(2):184–96
.tinoic acid receptor expression abnormalities in lung cancer: important clues or major obstacles? [editorial; comment] Minna JD, et al. **J Natl Cancer Inst** 1997 May 7;89(9):602–4 (42 ref.). Comment on: J Natl Cancer Inst 1997 May 7;89(9):624–9.
Retinoid–X receptors and the effects of 9–cis–retinoic acid on insulin secretion from RINm5F cells. Chertow BS, et al. **Metabolism** 1997 Jun;46(6):656–60
Genomic footprinting of retinoic acid regulated promoters in embryonal carcinoma cells. Dey A, et al. **Methods** 1997 Feb;11(2):197–204
Retinoid–dependent in vitro transcription. Valcárcel R, et al. **Methods Enzymol** 1996;274:149–61
Modification of thyroid hormone and 9–cis retinoic acid signaling by overexpression of their cognate receptors using adenoviral vector. Hayashi Y, et al.
Mol Cell Endocrinol 1997 Jul 4;131(1):59–66
Are nuclear receptors involved in pituitary responsiveness to melatonin? Hazlerigg DG, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):53–9
EGF increases retinoid X receptor–alpha expression in human trophoblastic cells in culture: relationship with retinoic acid induced human chorionic gonadotropin secretion. Roulier S, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):125–35
Hormonal and developmental regulation of DAX–1 expression in Sertoli cells. Tamai KT, et al.
Mol Endocrinol 1996 Dec;10(12):1561–9
Nuclear retinoid receptor expression in normal human endometrium throughout the menstrual cycle.
Kumarendran MK, et al. **Mol Hum Reprod** 1996 Feb; 2(2):123–9
Transgenic expression of PML/RARalpha impairs myelopoiesis. Early E, et al.
Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7900–4
Response of cell growth and retinoic acid receptor expression to retinoic acid in neoplastic and non–neoplastic prostate cell lines. Jones HE, et al. **Prostate** 1997 Feb 15; 30(3):174–82

CHEMISTRY

Structure/function of cytoplasmic vitamin A–binding proteins. Li E, et al. **Annu Rev Nutr** 1996;16:205–34 (159 ref.)
Analysis of homo– and heterodimerization of retinoid receptors in solution. Venepally P, et al.
Arch Biochem Biophys 1997 Jul 15;343(2):234–42
Purification of the human RARgamma ligand–binding domain and crystallization of its complex with all–trans retinoic acid. Rochel N, et al.
Biochem Biophys Res Commun 1997 Jan 13;230(2):293–6
The isolation and characterization of purified heterocomplexes of recombinant retinoic acid receptor and retinoid X receptor ligand binding domains. Tian K, et al. **Biochemistry** 1997 May 13;36(19):5669–76
Location of two photoaffinity–labeled sites on the ligand–binding domain of retinoic acid receptor alpha. Sasaki T, et al. **Biol Pharm Bull** 1996 May;19(5):659–64
Ligand–induced conformational changes in the human retinoic acid receptor detected using monoclonal antibodies. Driscoll JE, et al. **J Biol Chem** 1996 Sep 20; 271(38):22969–75
Ligand–dependent heterodimerization of thyroid hormone receptor and retinoid X receptor. Kakizawa T, et al.
J Biol Chem 1997 Sep 19;272(38):23799–804
Mutational analysis reveals that all–trans–retinoic acid, 9–cis–retinoic acid, and antagonist interact with distinct binding determinants of RARalpha. Keidel S, et al.
J Biol Chem 1997 Jul 18;272(29):18267–72
Analysis of the ligand–binding domain of human retinoic acid receptor alpha by site–directed mutagenesis. Lamour FP, et al. **Mol Cell Biol** 1996 Oct;16(10):5386–92
A conformational switch in nuclear hormone receptors is involved in coupling hormone binding to corepressor release. Lin BC, et al. **Mol Cell Biol** 1997 Oct;17(10):6131–8
Two distinct dimerization interfaces differentially modulate target gene specificity of nuclear hormone receptors. Perlmann T, et al. **Mol Endocrinol** 1996 Aug;10(8):958–66
Distinct conformations of vitamin D receptor/retinoid X receptor–alpha heterodimers are specified by dinucleotide differences in the vitamin D–responsive elements of the osteocalcin and osteopontin genes. Staal A, et al.
Mol Endocrinol 1996 Nov;10(11):1444–56
Retinoid X receptor heterodimerization and developmental expression distinguish the orphan nuclear receptors NGFI–B, Nurr1, and Nor1. Zetterström RH, et al.
Mol Endocrinol 1996 Dec;10(12):1656–66
Intrinsic tryptophans of CRABPI as probes of structure and folding. Clark PL, et al. **Protein Sci** 1996 Jun;5(6):1108–17

DEFICIENCY

RXRalpha–null F9 embryonal carcinoma cells are resistant to the differentiation, anti–proliferative and apoptotic effects of retinoids. Clifford J, et al. **EMBO J** 1996 Aug 15;15(16):4142–55

DRUG EFFECTS

1 alpha, 25–dihydroxyvitamin D3 and all–trans–retinoic acid inhibit the growth of a lung cancer cell line. Higashimoto Y, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2653–9
Didehydroretinoic acid: retinoid receptor–mediated transcriptional activation and binding properties. Sani BP, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):1049–53
Tazarotene—first of a new generation of receptor–selective retinoids. Chandraratna RA. **Br J Dermatol** 1996 Oct;135 Suppl 49:18–25
Retinyl methyl ether down–regulates activator protein 1 transcriptional activation in breast cancer cells. Agadir A, et al. **Cancer Res** 1997 Aug 15;57(16):3444–50
Retinoic acid receptor– and retinoid X receptor–selective retinoids activate signaling pathways that converge on AP–1 and inhibit squamous differentiation in human bronchial epithelial cells. Lee HY, et al.
Cell Growth Differ 1996 Aug;7(8):997–1004
Murine endodermal F9E cells, derived from the teratocarcinoma line F9, contain high basal levels of retinoic acid receptors (RARs and RXRs) but are not sensitive to the actions of retinoic acid. Wan YJ, et al. **Differentiation** 1996 Jul;60(4):211–8
Retinoic acid modulates retinoid X receptor alpha and retinoic acid receptor alpha levels of cultured brown adipocytes. Bonet ML, et al. **FEBS Lett** 1997 Apr 7; 406(1–2):196–200
Tazarotene: the first receptor–selective topical retinoid for the treatment of psoriasis. Chandraratna RA.
J Am Acad Dermatol 1997 Aug;37(2 Pt 3):S12–7 (34 ref.)
Potentiation of VD–induced monocytic leukemia cell differentiation by retinoids involves both RAR and RXR signaling pathways. Defacque H, et al. **Leukemia** 1997 Feb; 11(2):221–7
Induction of apoptosis by retinoids and retinoic acid receptor gamma–selective compounds in mouse thymocytes through a novel apoptosis pathway. Szondy Z, et al.
Mol Pharmacol 1997 Jun;51(6):972–82
A new metabolite of retinol: all–trans–4–oxo–retinol as a receptor activator and differentiation agent. Ross SA, et al. **Nutr Rev** 1996 Nov;54(11 Pt 1):355–6 (10 ref.)

GENETICS

Sex determining gene on the X chromosome short arm: dosage sensitive sex reversal. Ogata T, et al.
Acta Paediatr Jpn 1996 Aug;38(4):390–8 (40 ref.)
Activation of the retinoic acid receptor beta gene by 5–aza–2'–deoxycytidine in human DLD–1 colon carcinoma cells. Côté S, et al. **Anticancer Drugs** 1997 Jan;8(1):56–61
Differential expression of CRABP II, psoriasin and cytokeratin 1 mRNA in human skin diseases. Algermissen B, et al. **Arch Dermatol Res** 1996 Jul;288(8):426–30
Topical all–trans retinoic acid (RA) induces an early, coordinated increase in RA–inducible skin–specific gene/psoriasin and cellular RA–binding protein II mRNA levels which precedes skin erythema. Zouboulis CC, et al. **Arch Dermatol Res** 1996 Oct;288(11):664–9
Two novel RXR alpha isoforms from mouse testis. Brocard J, et al. **Biochem Biophys Res Commun** 1996 Dec 4; 229(1):211–8
DAX1 gene expression upregulated by steroidogenic factor 1 in an adrenocortical carcinoma cell line. Vilain E, et al. **Biochem Mol Med** 1997 Jun;61(1):1–8
The molecular genetics of retinoic acid receptors: cardiovascular and limb development. Sucov HM, et al. **Biochem Soc Symp** 1996;62:143–56 (47 ref.)
Structure of the human retinoic acid receptor beta 1 gene. Toulouse A, et al. **Biochim Biophys Acta** 1996 Nov 11; 1309(1–2):1–4
Retinoid X receptor (RXR alpha) gene expression is regulated by fatty acids and dexamethasone in hepatic cells. Steineger HH, et al. **Biochimie** 1997 Feb–Mar; 79(2–3):107–10
Induction of mouse embryonal carcinoma cell differentiation and activation of the retinoic acid receptor beta 2 promoter by 1,25–dihydroxyvitamin D3. Müschen M, et al.
Biol Chem 1996 Nov;377(11):703–10
Retinoic acid receptor alpha gene expression in the rat testis: potential role during the prophase of meiosis and in the transition from round to elongating spermatids. Akmal KM, et al. **Biol Reprod** 1997 Feb;56(2):549–56
Male infertility caused by epididymal dysfunction in transgenic mice expressing a dominant negative mutation of retinoic acid receptor alpha 1. Costa SL, et al.
Biol Reprod 1997 Apr;56(4):985–90
Variable expression of cellular retinol– and cellular retinoic acid–binding proteins in the rat uterus and ovary during the estrous cycle. Wardlaw SA, et al. **Biol Reprod** 1997 Jan;56(1):125–32
Detection of transcripts for retinoic acid receptors, retinol–binding protein, and transforming growth factors during rapid trophoblastic elongation in the porcine conceptus. Yelich JV, et al. **Biol Reprod** 1997 Aug; 57(2):286–94
High–level expression of the retinoic acid receptor beta gene in normal cells of the uterine cervix is regulated by the retinoic acid receptor alpha and is abnormally down–regulated in cervical carcinoma cells. Geisen C, et al. **Cancer Res** 1997 Apr 15;57(8):1460–7
Inappropriate retinoic acid receptor–beta expression in oral dysplasias: correlation with acquisition of the immortal phenotype. McGregor F, et al. **Cancer Res** 1997 Sep 15; 57(18):3886–9
Regulation of the human retinoic acid receptor alpha gene in the estrogen receptor negative human breast carcinoma cell lines SKBR–3 and MDA–MB–435. Rishi AK, et al.
Cancer Res 1996 Nov 15;56(22):5246–52
Regulation of retinoid–induced differentiation in embryonal carcinoma PCC4.aza1R cells: effects of retinoid–receptor selective ligands. Mills KJ, et al. **Cell Growth Differ** 1996 Mar;7(3):327–37
Negative regulation of two hyperproliferative keratinocyte differentiation markers by a retinoic acid receptor–specific retinoid: insight into the mechanism of retinoid action in psoriasis. Nagpal S, et al. **Cell Growth Differ** 1996 Dec; 7(12):1783–91
Reduced tumorigenicity of metastatic human lung cancer cell subline (PGCL3) transfected with hRAR beta gene. Zhu W, et al. **Chin Med Sci J** 1996 Mar;11(1):13–6
Compartment–selective sensitivity of cardiovascular morphogenesis to combinations of retinoic acid receptor gene mutations. Lee RY, et al. **Circ Res** 1997 Jun; 80(6):757–64
Assignment of the genes for cellular retinoic acid binding protein 1 (CRABP1) and 2 (CRABP2) to human chromosome band 15q24 and 1q21.3, respectively, by in situ hybridization. Squire JA, et al. **Cytogenet Cell Genet** 1996; 75(2–3):164–6
Initiation of retinoid signaling in primitive streak mouse embryos: spatiotemporal expression patterns of receptors and metabolic enzymes for ligand synthesis. Ang HL, et al. **Dev Dyn** 1997 Apr;208(4):536–43
The CRABP I gene contains two separable, redundant regulatory regions active in neural tissues in transgenic mouse embryos. Means AL, et al. **Dev Dyn** 1997 May; 209(1):59–69
Differential expression of transcripts encoding retinoid binding proteins and retinoic acid receptors during placentation of the mouse. Sapin V, et al. **Dev Dyn** 1997 Feb;208(2):199–210
Effects of all–trans–retinoic acid on skeletal pattern, 5'HoxD gene expression, and RAR beta 2/beta 4 promoter activity in embryonic mouse limbs. Wood HB, et al. **Dev Genet** 1996;19(1):74–84
Genetic evidence that the retinoid signal is transduced by heterodimeric RXR/RAR functional units during mouse development. Kastner P, et al. **Development** 1997 Jan; 124(2):313–26
A four–amino–acid insertion in the ligand–binding domain inactivates hRXRbeta and renders dominant negative activity. Mahajna J, et al. **DNA Cell Biol** 1997 Apr; 16(4):463–76
The promoter context is a decisive factor in establishing selective responsiveness to nuclear class II receptors. Sanguedolce MV, et al. **EMBO J** 1997 May 15; 16(10):2861–73
Characterization of the mouse DAX–1 gene reveals evolutionary conservation of a unique amino–terminal motif and widespread expression in mouse tissue. Bae DS, et al. **Endocrinology** 1996 Sep;137(9):3921–7
Effect of retinoid status on the messenger ribonucleic acid expression of nuclear retinoid receptors alpha, beta, and gamma, and retinoid X receptors alpha, beta, and gamma in the mouse testis. Gaemers IC, et al. **Endocrinology** 1997 Apr;138(4):1544–51
Androgen modulation of the messenger ribonucleic acid of retinoic acid receptors in the prostate, seminal vesicles, and kidney in the rat. Huang HF, et al. **Endocrinology** 1997 Feb;138(2):553–9
Retinoid X receptors in the kidney: their protein expression and functional significance. Sugawara A, et al.
Endocrinology 1997 Aug;138(8):3175–80
Ahch, the mouse homologue of DAX1: cloning, characterization and synteny with GyK, the glycerol kinase locus. Guo W, et al. **Gene** 1996 Oct 31;178(1–2):31–4
Inhibition of ligand induced promoter occupancy in vivo by a dominant negative RXR. Blanco JC, et al.
Genes Cells 1996 Feb;1(2):209–21
Transcriptional regulation of a Purkinje cell–specific gene through a functional interaction between ROR alpha and RAR. Matsui T. **Genes Cells** 1997 Apr;2(4):263–72
Suprabasal expression of a dominant–negative RXR alpha mutant in transgenic mouse epidermis impairs regulation of gene transcription and basal keratinocyte proliferation by RAR–selective retinoids. Feng X, et al. **Genes Dev** 1997 Jan 1;11(1):59–71
Potential role of bFGF and retinoic acid in the regeneration of chicken cochlear hair cells. Lee KH, et al.
Hear Res 1996 May;94(1–2):1–13
DAX–1 gene mutations and deletions in Japanese patients with adrenal hypoplasia congenita and hypogonadotropic hypogonadism. Kinoshita E, et al. **Horm Res** 1997; 48(1):29–34
Abnormalities of sex differentiation. Nawata H, et al.
Horm Res 1996;46 Suppl 1:15–9
X–linked adrenal hypoplasia in a large Greenlandic family. Detection of a missense mutation (N4401) in the DAX–1 gene; implication for genetic counselling and carrier diagnosis. Schwartz M, et al. **Hum Genet** 1997 Jan; 99(1):83–7
New frameshift mutation in the DAX–1 gene in a patient with X–linked adrenal hypoplasia and hypogonadotropic hypogonadism. Meloni A, et al. **Hum Mutat** 1996;

8(2):183–4
Genetics of APL and the molecular basis of retinoic acid treatment. Casini T, et al. **Int J Cancer** 1997 Feb 7; 70(4):473–4
Interferons induce normal and aberrant retinoic-acid receptors type alpha in acute promyelocytic leukemia cells: potentiation of the induction of retinoid-dependent differentiation markers. Gianní M, et al. **Int J Cancer** 1996 Sep 27;68(1):75–83
Role of the various isoforms of retinoic acid receptors during the final commitment step of the erythrocytic differentiation sequence in the chicken. Gandrillon O, et al. **Int J Dev Biol** 1996;Suppl 1:111S–112S
Identification of a retinoid/chicken ovalbumin upstream promoter transcription factor response element in the human retinoid X receptor gamma2 gene promoter. Barger PM, et al. **J Biol Chem** 1997 Jan 31;272(5):2722–8
Characterization of a negative response DNA element in the upstream region of the cellular retinoic acid–binding protein-I gene of the mouse. Chang L, et al. **J Biol Chem** 1997 Apr 11;272(15):10144–50
Transcriptional regulation by transforming growth factor beta of the expression of retinoic acid and retinoid X receptor genes in osteoblastic cells is mediated through AP-1. Chen Y, et al. **J Biol Chem** 1996 Dec 6; 271(49):31602–6
Transcriptional activation of the human p21(WAF1/CIP1) gene by retinoic acid receptor. Correlation with retinoid induction of U937 cell differentiation. Liu M, et al. **J Biol Chem** 1996 Dec 6;271(49):31723–8
Expression of the vitamin D and the retinoid X receptors in Saccharomyces cerevisiae: alternative in vivo models for ligand-induced transactivation. Berghöfer-Hochheimer Y, et al. **J Cell Biochem** 1997 Aug 1;66(2):184–96
Truncation at the C-terminus of the DAX-1 protein impairs its biological actions in patients with X-linked adrenal hypoplasia congenita. Nakae J, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3680–5
RXR alpha deficiency confers genetic susceptibility for aortic sac, conotruncal, atrioventricular cushion, and ventricular muscle defects in mice. Gruber PJ, et al. **J Clin Invest** 1996 Sep 15;98(6):1332–43
Secondary cytogenetic changes in acute promyelocytic leukemia--prognostic importance in patients treated with chemotherapy alone and association with the intron 3 breakpoint of the PML gene: a Cancer and Leukemia Group B study. Slack JL, et al. **J Clin Oncol** 1997 May; 15(5):1786–95
Compromised allograft rejection response in transgenic mice expressing antisense sequences to retinoic acid receptor beta2. Chen H, et al. **J Immunol** 1997 Jul 15;159(2):623–34
Specific organization of the negative response elements for retinoic acid and thyroid hormone receptors in keratin gene family. Radoja N, et al. **J Invest Dermatol** 1997 Oct; 109(4):566–72
Cloning of the human orphan receptor germ cell nuclear factor/retinoid receptor–related testis–associated receptor and its differential regulation during embryonal carcinoma cell differentiation. Lei W, et al. **J Mol Endocrinol** 1997 Apr;18(2):167–76
Localization and ontogeny of the orphan receptor OR-1 in the rat brain. Kainu T, et al. **J Mol Neurosci** 1996 Spring; 7(1):29–39
Constitutive retinoid receptors expressed from adenovirus vectors that specifically activate chromosomal target genes required for differentiation of promyelocytic leukemia and teratocarcinoma cells. Lipkin SM, et al. **J Virol** 1996 Oct; 70(10):7182–9
Mutation in the ligand-binding domain of the retinoic acid receptor alpha in HL-60 leukemic cells resistant to retinoic acid and with increased sensitivity to vitamin D3 analogs. Doré BT, et al. **Leuk Res** 1996 Sep;20(9):761–9
Retinoid receptors in development and disease. Schulman IG, et al. **Leukemia** 1997 Apr;11 Suppl 3:376–7
Nuclear proteins binding to the recombination hotspot region of the retinoic acid receptor alpha gene. Tashiro S, et al. **Leukemia** 1997 Apr;11 Suppl 3:285–6
Assignment of three loci: tumor suppressor protein–53 (TP53), retinoic acid receptor A (RARA), collagen 1A1 (COL1A1) to Syrian hamster chromosome 9. Evidence that this chromosome is homologous with human chromosome 17, mouse chromosome 11, and rat chromosome 10. Islam MQ, et al. **Mamm Genome** 1995 Dec;6(12):882–4
Linkage mapping of the cellular retinoic acid–binding protein 1 (Crabp1) gene to rat chromosome 8. Pravenec M, et al. **Mamm Genome** 1997 Jun;8(6):455–6
Compound mutants for retinoic acid receptor (RAR) beta and RAR alpha 1 reveal developmental functions for multiple RAR beta isoforms. Luo J, et al. **Mech Dev** 1996 Mar;55(1):33–44
DAX-1 inhibits SF-1–mediated transactivation via a carboxy–terminal domain that is deleted in adrenal hypoplasia congenita. Ito M, et al. **Mol Cell Biol** 1997 Mar; 17(3):1476–83
Modification of thyroid hormone and 9-cis retinoic acid signaling by overexpression of their cognate receptors using adenoviral vector. Hayashi Y, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):59–66
Differential responses to ligands of overexpressed thyroid hormone and retinoid X receptors in a Xenopus cell line and in vivo. Ulisse S, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):17–24
Retinoic acid induction of the tissue transglutaminase promoter is mediated by a novel response element. Yan ZH, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):203–12
Analysis of the functional role of steroid receptor coactivator-1 in ligand–induced transactivation by thyroid hormone receptor. Jeyakumar M, et al. **Mol Endocrinol** 1997 Jun;11(6):755–67
Human vitamin D receptor–dependent transactivation in Saccharomyces cerevisiae requires retinoid X receptor. Jin CH, et al. **Mol Endocrinol** 1996 Feb;10(2):196–205
Fusion of retinoic acid receptor alpha to NuMA, the nuclear mitotic apparatus protein, by a variant translocation in acute promyelocytic leukaemia. Wells RA, et al. **Nat Genet** 1997 Sep;17(1):109–13
A PMLRARalpha transgene initiates murine acute promyelocytic leukemia. Brown D, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2551–6
Acute leukemia with promyelocytic features in PML/RARalpha transgenic mice. He LZ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5302–7
RXR gamma null mice are apparently normal and compound RXR alpha +/-/RXR beta -/-/RXR gamma -/- mutant mice are viable. Krężel W, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9010–4
Congenital anomalies in relatives of schizophrenic probands may indicate a retinoid pathology. Goodman AB. **Schizophr Res** 1996 May;19(2–3):163–70

IMMUNOLOGY

Abnormal regulation of retinoic acid receptor beta2 expression and compromised allograft rejection in transgenic mice expressing antisense sequences to retinoic acid receptor beta1 and beta3. Bérard J, et al. **J Immunol** 1997 Sep 15;159(6):2586–98

ISOLATION & PURIFICATION

The isolation and characterization of purified heterocomplexes of recombinant retinoic acid receptor and retinoid X receptor ligand binding domains. Tian K, et al. **Biochemistry** 1997 May 13;36(19):5669–76
Retinoid-dependent in vitro transcription. Valcárcel R, et al. **Methods Enzymol** 1996;274:149–61
One-step immunoaffinity purification of recombinant human retinoic acid receptor gamma. Repa JJ, et al. **Protein Expr Purif** 1997 Apr;9(3):319–30

METABOLISM

Retinoid binding proteins in mouse yolk sac and chorio–allantoic placentas. Johansson S, et al. **Anat Embryol (Berl)** 1997 Jun;195(6):483–90
The additive antiproliferative effect of all-trans retinoic acid and interferon-alpha2a on human cervical carcinoma cell lines is not associated with increased expression of retinoid receptors. Wahlberg P, et al. **Anticancer Drugs** 1997 Jun; 8(5):522–8
Salt concentration determines 1,25–dihydroxyvitamin D3 dependency of vitamin D receptor–retinoid X receptor—vitamin D–responsive element complex formation. Kimmel-Jehan C, et al. **Arch Biochem Biophys** 1997 May 1;341(1):75–80
Regulation of hepatic lecithin:retinol acyltransferase activity by retinoic acid receptor–selective retinoids. Shimada T, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):220–7
Characterization of cellular retinoic acid–binding protein I from chick embryo and its ligand binding properties. Venepally P, et al. **Arch Biochem Biophys** 1996 Dec 15; 336(2):231–9
Expression of co-factors (SMRT and Trip-1) for retinoic acid receptors in human neuroectodermal cell lines. Bernardini S, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):278–82
Inhibitors of preadipocyte differentiation induce COUP-TF binding to a PPAR/RXR binding sequence. Brodie AE, et al. **Biochem Biophys Res Commun** 1996 Nov 21; 228(3):655–61
DNA binding preferences of PPAR alpha/RXR alpha heterodimers. Castelein H, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):91–5
Retinoic acid receptors beta and gamma distinguish retinoid signals for growth inhibition and neuritogenesis in human neuroblastoma cells. Cheung B, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):349–54
Purification of the human RARgamma ligand–binding domain and crystallization of its complex with all–trans retinoic acid. Rochel N, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):293–6
Mechanisms of transcriptional activation by retinoic acid receptors. Glass CK, et al. **Biochem Soc Trans** 1997 May; 25(2):602–5 (20 ref.)
TIF1 alpha: a chromatin-specific mediator for the ligand–dependent activation function AF-2 of nuclear receptors? Le Douarin B, et al. **Biochem Soc Trans** 1997 May;25(2):605–12 (39 ref.)
Cellular retinoic acid–binding protein(II) presence in rat uterine epithelial cells correlates with their synthesis of retinoic acid. Bucco RA, et al. **Biochemistry** 1997 Apr 1; 36(13):4009–14
Requirement of cofactors for RXR/RAR–mediated transcriptional activation in vitro. Valcárcel R, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):229–34
Anticoagulant effects of synthetic retinoids mediated via different receptors on human leukemia and umbilical vein endothelial cells. Shibakura M, et al. **Blood** 1997 Aug 15; 90(4):1545–51
Myeloid differentiation is impaired in transgenic mice with targeted expression of a dominant negative form of retinoid [illegible] receptor beta. Sunaga S, et al. **Br J Haematol** 1997 Jan; 96(1):19–30
Effects of receptor class– and subtype–selective retinoids and an apoptosis–inducing retinoid on the adherent growth of the NIH:OVCAR-3 ovarian cancer cell line in culture. Chao WR, et al. **Cancer Lett** 1997 May 1;115(1):1–7
Tyrosine kinase signaling pathways control the expression of retinoic acid receptor–alpha in SK–BR–3 breast cancer cells. Flicker SH, et al. **Cancer Lett** 1997 May 1; 115(1):63–72
Retinoic acid receptor alpha expression correlates with retinoid–induced growth inhibition of human breast cancer cells regardless of estrogen receptor status. Fitzgerald P, et al. **Cancer Res** 1997 Jul 1;57(13):2642–50
Stimulation of RAR alpha activation function AF–1 through binding to the general transcription factor TFIIH and phosphorylation by CDK7. Rochette-Egly C, et al. **Cell** 1997 Jul 11;90(1):97–107
Retinoic acid: identification of specific receptors through which it may mediate transcriptional regulation of fibronectin gene in bovine lens epithelial cells. Shanker G, et al. **Cell Biol Int** 1996 Sep;20(9):613–9
Differential regulation of human ectocervical epithelial cell line proliferation and differentiation by retinoid X receptor– and retinoic acid receptor–specific retinoids. Agarwal C, et al. **Cell Growth Differ** 1996 Apr;7(4):521–30
Vitamin D3– and retinoic acid–induced monocytic differentiation: interactions between the endogenous vitamin D3 receptor, retinoic acid receptors, and retinoid X receptors in U–937 cells. Botling J, et al. **Cell Growth Differ** 1996 Sep;7(9):1239–49
FGF–2, BMP–2, and BMP–4 regulate retinoid binding proteins and receptors in 3T3 cells. Means AL, et al. **Cell Growth Differ** 1996 Aug;7(8):989–96
Receptor–selective retinoids implicate retinoic acid receptor alpha and gamma in the regulation of bmp–2 and bmp–4 in F9 embryonal carcinoma cells. Rogers MB. **Cell Growth Differ** 1996 Jan;7(1):115–22
Retinoids in patterning: chimeras win by a knockout. Maden M. **Curr Biol** 1996 Jul 1;6(7):790–3 (18 ref.)
Activation of a single retinoic acid receptor isoform mediates proximodistal respecification. Pecorino LT, et al. **Curr Biol** 1996 May 1;6(5):563–9
The lacrimal gland expresses nuclear retinoid X receptors. Ubels JL, et al. **Curr Eye Res** 1997 May;16(5):511–5
Retinoid receptors in transcriptional regulation. Minucci S, et al. **Curr Opin Genet Dev** 1996 Oct;6(5):567–74 (67 ref.)
Differential effect of IFN–alpha and IFN–gamma on phosphorylation of p65 and p50 (rel) in the K562 cell line: implications for altered interaction with RXR beta. Chatterjee M, et al. **Cytokine** 1996 May;8(5):357–64
RXR–mediated regulation of the alpha–fetoprotein gene through an upstream element. Li C, et al. **DNA Cell Biol** 1996 Nov;15(11):955–63
Determinants of chromatin disruption and transcriptional regulation instigated by the thyroid hormone receptor: hormone–regulated chromatin disruption is not sufficient for transcriptional activation. Wong J, et al. **EMBO J** 1997 Jun 2;16(11):3158–71
Differential patterns of expression of DAX-1 and steroidogenic factor-1 (SF-1) in the fetal rat testis. Majdic G, et al. **Endocrinology** 1996 Aug;137(8):3586–9
Modulation of the retinoic acid and retinoid X receptor signaling pathways in P19 embryonal carcinoma cells by calreticulin. Shago M, et al. **Exp Cell Res** 1997 Jan 10; 230(1):50–60
In vivo and in vitro association of retinoic acid with form–deprivation myopia in the chick. Seko Y, et al. **Exp Eye Res** 1996 Oct;63(4):443–52
A systematic analysis of the AF–2 domain of human retinoic acid receptor alpha reveals amino acids critical for transcriptional activation and conformational integrity. Tate BF, et al. **FASEB J** 1996 Nov;10(13):1524–31
Aging decreases the abundance of retinoic acid (RAR) and triiodothyronine (TR) nuclear receptor mRNA in rat brain: effect of the administration of retinoids. Enderlin V, et al. **FEBS Lett** 1997 Aug 4;412(3):629–32
9,13–di–cis–Retinoic acid induces the production of tPA and activation of latent TGF–beta via RAR alpha in a human liver stellate cell line, LI90. Imai S, et al. **FEBS Lett** 1997 Jul 7;411(1):102–6
Cross–talk between thyroid hormone and specific retinoid X receptor subtypes in yeast selectively regulates cognate ligand actions. Walfish PG, et al. **Gene Expr** 1996; 6(3):169–84
Identification of an extended half–site motif required for the function of peroxisome proliferator–activated receptor alpha. Osada S, et al. **Genes Cells** 1997 May;2(5):315–27
Human TAF(II)135 potentiates transcriptional activation by the AF–2s of the retinoic acid, vitamin D3, and thyroid hormone receptors in mammalian cells. Mengus G, et al. **Genes Dev** 1997 Jun 1;11(11):1381–95
The phantom ligand effect: allosteric control of transcription by the retinoid X receptor. Schulman IG, et al. **Genes Dev** 1997 Feb 1;11(3):299–308
Expression of retinoid–X receptors (–alpha,–beta,–gamma) and retinoic acid receptors (–alpha,–beta,–gamma) in

normal human skin: an immunohistological evaluation. Reichrath J, et al. **Histochem J** 1997 Feb;29(2):127–33

Altered distribution of the nuclear receptor RAR beta accompanies proliferation and differentiation changes caused by retinoic acid in Caco–2 cells. McCormack SA, et al. **In Vitro Cell Dev Biol Anim** 1996 Jan;32(1):53–61

Expression of cytoplasmic retinoic acid–binding proteins and nuclear receptors in squamous–cell carcinomas in vitro. Kley J, et al. **Int J Cancer** 1997 Feb 7;70(4):478–80

Activity of retinoic acid receptor–gamma selectively binding retinoids alone and in combination with interferon–gamma in breast cancer cell lines. Widschwendter M, et al. **Int J Cancer** 1997 May 2;71(3):497–504

Retinoic acid receptors and nuclear orphan receptors in the development of Xenopus laevis. Dreyer C, et al. **Int J Dev Biol** 1996 Feb;40(1):255–62 (55 ref.)

Retinoic acid receptor/retinoid X receptor heterodimers can be activated through both subunits providing a basis for synergistic transactivation and cellular differentiation. Botling J, et al. **J Biol Chem** 1997 Apr 4;272(14):9443–9

Thyroid hormone–mediated enhancement of heterodimer formation between thyroid hormone receptor beta and retinoid X receptor. Collingwood TN, et al. **J Biol Chem** 1997 May 16;272(20):13060–5

4–Hydroxyphenyl retinamide is a highly selective activator of retinoid receptors. Fanjul AN, et al. **J Biol Chem** 1996 Sep 13;271(37):22441–6

Stromelysin–3 induction and interstitial collagenase repression by retinoic acid. Therapeutical implication of receptor–selective retinoids dissociating transactivation and AP–1–mediated transrepression. Guérin E, et al. **J Biol Chem** 1997 Apr 25;272(17):11088–95

All–trans–retinoic acid increases transforming growth factor–beta2 and insulin–like growth factor binding protein–3 expression through a retinoic acid receptor–alpha–dependent signaling pathway. Han GR, et al. **J Biol Chem** 1997 May 23;272(21):13711–6

Polarity and specific sequence requirements of peroxisome proliferator–activated receptor (PPAR)/retinoid X receptor heterodimer binding to DNA. A functional analysis of the malic enzyme gene PPAR response element. IJpenberg A, et al. **J Biol Chem** 1997 Aug 8; 272(32):20108–17

Different DNA elements can modulate the conformation of thyroid hormone receptor heterodimer and its transcriptional activity. Ikeda M, et al. **J Biol Chem** 1996 Sep 20;271(38):23096–104

The DNA binding domain of hepatocyte nuclear factor 4 mediates cooperative, specific binding to DNA and heterodimerization with the retinoid X receptor alpha. Jiang G, et al. **J Biol Chem** 1997 Jan 10;272(2):1218–25

Mutational analysis reveals that all–trans–retinoic acid, 9–cis–retinoic acid, and antagonist interact with distinct binding determinants of RARalpha. Keidel S, et al. **J Biol Chem** 1997 Jul 18;272(29):18267–72

The DNA binding pattern of the retinoid X receptor is regulated by ligand–dependent modulation of its oligomeric state. Kersten S, et al. **J Biol Chem** 1997 May 9; 272(19):12771–7

Plasticity of tetramer formation by retinoid X receptors. An alternative paradigm for DNA recognition. Lin BC, et al. **J Biol Chem** 1997 Apr 11;272(15):9860–7

Retinoic acid–induced expression of apolipoprotein D and concomitant growth arrest in human breast cancer cells are mediated through a retinoic acid receptor RARalpha–dependent signaling pathway. López–Boado YS, et al. **J Biol Chem** 1996 Dec 13;271(50):32105–11

5'–flanking sequences in thyroid hormone response element half–sites determine the requirement of retinoid X receptor for receptor–mediated gene expression. Olson DP, et al. **J Biol Chem** 1997 Apr 11;272(15):9907–14

Identification of a novel retinoic acid response element in the promoter region of the retinol–binding protein gene. Panariello L, et al. **J Biol Chem** 1996 Oct 11; 271(41):25524–32

DNA–independent and DNA–dependent mechanisms regulate the differential heterodimerization of the isoforms of the thyroid hormone receptor with retinoid X receptor. Reginato MJ, et al. **J Biol Chem** 1996 Nov 8; 271(45):28199–205

Differential role of homologous positively charged amino acid residues for ligand binding in retinoic acid receptor alpha compared with retinoic acid receptor beta. Scafonas A, et al. **J Biol Chem** 1997 Apr 25;272(17):11244–9

Specific activation of retinoic acid receptors (RARs) and retinoid X receptors reveals a unique role for RARgamma in induction of differentiation and apoptosis of S91 melanoma cells. Spanjaard RA, et al. **J Biol Chem** 1997 Jul 25;272(30):18990–9

Orphan receptors chicken ovalbumin upstream promoter transcription factor II (COUP–TFII) and retinoid X receptor (RXR) activate and bind the rat cholesterol 7alpha–hydroxylase gene (CYP7A). Stroup D, et al. **J Biol Chem** 1997 Apr 11;272(15):9833–9

Structure–function relationships of cellular retinoic acid–binding proteins. Quantitative analysis of the ligand binding properties of the wild–type proteins and site–directed mutants. Wang L, et al. **J Biol Chem** 1997 Jan 17;272(3):1541–7

Identification of sulfhydryl–modified cysteine residues in the ligand binding pocket of retinoic acid receptor beta. Wolfgang CL, et al. **J Biol Chem** 1997 Jan 10;272(2):746–53

Characterization of the response element and DNA binding properties of the nuclear orphan receptor germ cell nuclear factor/retinoid receptor–related testis–associated receptor. Yan ZH, et al. **J Biol Chem** 1997 Apr 18;272(16):10565–72

Thyroid hormone receptor variant alpha2. Role of the ninth heptad in dna binding, heterodimerization with retinoid X receptors, and dominant negative activity. Yang YZ, et al. **J Biol Chem** 1996 Nov 8;271(45):28235–42

Retinoid X receptor (RXR) ligands activate the human 25–hydroxyvitamin D3–24–hydroxylase promoter via RXR heterodimer binding to two vitamin D–responsive elements and elicit additive effects with 1,25–dihydroxyvitamin D3. Zou A, et al. **J Biol Chem** 1997 Jul 25;272(30):19027–34

Inhibition of rabbit collagenase (matrix metalloproteinase–1; MMP–1) transcription by retinoid receptors: evidence for binding of RARs/RXRs to the –77 AP–1 site through interactions with c–Jun. Schroen DJ, et al. **J Cell Physiol** 1996 Nov;169(2):320–32

Fully automated determination of selective retinoic acid receptor ligands in mouse plasma and tissue by reversed–phase liquid chromatography coupled on–line with solid–phase extraction. Arafa HM, et al. **J Chromatogr A** 1996 Apr 5;729(1–2):125–36

Thyroid hormone, vitamin D and retinoid receptor expression and signalling in primary cultures of rat osteoblastic and immortalised osteosarcoma cells. Bland R, et al. **J Endocrinol** 1997 Jul;154(1):63–74

Some new twists in the regulation of gene expression by thyroid hormone and retinoic acid receptors. Glass CK. **J Endocrinol** 1996 Sep;150(3):349–57 (64 ref.)

Expression of retinoic acid receptor proteins in basal cell carcinomas: an immunohistochemical analysis. Kamradt J, et al. **J Histochem Cytochem** 1996 Dec;44(12):1415–20

Conformationally defined 6–s–trans–retinoic acid analogs. 3. Structure–activity relationships for nuclear receptor binding, transcriptional activity, and cancer chemopreventive activity. Muccio DD, et al. **J Med Chem** 1996 Sep 13;39(19):3625–35

Cloning of the human orphan receptor germ cell nuclear factor/retinoid receptor–related testis–associated receptor and its differential regulation during embryonal carcinoma cell differentiation. Lei W, et al. **J Mol Endocrinol** 1997 Apr;18(2):167–76

In vitro and in vivo interactions between nuclear receptors at estrogen response elements. Joyeux A, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):507–15

Spermatogenesis in the vitamin A–deficient rat: possible interplay between retinoic acid receptors, androgen receptor and inhibin alpha–subunit. Zhuang YH, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):67–76

Accurate reading of morphogen concentrations by nuclear receptors: a formal model of complex transduction pathways. Kerszberg M. **J Theor Biol** 1996 Nov 7; 183(1):95–104

Nuclear import of cellular retinoic acid–binding protein type I in mouse embryonic cells [published erratum appears in Mech Dev 1996 Dec;60(2):241] Gustafson AL, et al. **Mech Dev** 1996 Aug;58(1–2):27–38

Phytol metabolites are circulating dietary factors that activate the nuclear receptor RXR. Kitareewan S, et al. **Mol Biol Cell** 1996 Aug;7(8):1153–66

tau4/tau c/AF–2 of the thyroid hormone receptor relieves silencing of the retinoic acid receptor silencer core independent of both tau4 activation function and full dissociation of corepressors. Baniahmad A, et al. **Mol Cell Biol** 1997 Aug;17(8):4259–71

Peroxisome proliferator–activated receptors and retinoic acid receptors differentially control the interactions of retinoid X receptor heterodimers with ligands, coactivators, and corepressors. DiRenzo J, et al. **Mol Cell Biol** 1997 Apr; 17(4):2166–76

Analysis of the ligand–binding domain of human retinoic acid receptor alpha by site–directed mutagenesis. Lamour FP, et al. **Mol Cell Biol** 1996 Oct;16(10):5386–92

Retinoid X receptor:vitamin D3 receptor heterodimers promote stable preinitiation complex formation and direct 1,25–dihydroxyvitamin D3–dependent cell–free transcription. Lemon BD, et al. **Mol Cell Biol** 1997 Apr; 17(4):1923–37

Retinoid X receptor (RXR) within the RXR–retinoic acid receptor heterodimer binds its ligand and enhances retinoid–dependent gene expression. Minucci S, et al. **Mol Cell Biol** 1997 Feb;17(2):644–55

Myb–Ets fusion oncoprotein inhibits thyroid hormone receptor/c–ErbA and retinoic acid receptor functions: a novel mechanism of action for leukemogenic transformation by E26 avian retrovirus. Rascle A, et al. **Mol Cell Biol** 1996 Nov;16(11):6338–51

Sequence requirements for high affinity retinoid X receptor–alpha homodimer binding. Castelein H, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):11–20

Retinoid X and retinoic acid receptors interact with transcription factor II–B by distinct mechanisms. Chen HW, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):55–61

Aberrant metabolism of retinoid X receptor proteins in human hepatocellular carcinoma. Matsushima–Nishiwaki R, et al. **Mol Cell Endocrinol** 1996 Aug 9;121(2):179–90

Characterization of the sequences of the human cytomegalovirus enhancer that mediate differential regulation by natural and synthetic retinoids. Angulo A, et al. **Mol Endocrinol** 1996 Jul;10(7):781–93

Inhibition of retinoid signaling in transgenic mice alters lipid processing and disrupts epidermal barrier function. Attar PS, et al. **Mol Endocrinol** 1997 Jun;11(6):792–800

Identification of transcripts initiated from an internal promoter in the c–erbA alpha locus that encode inhibitors of retinoic acid receptor–alpha and triiodothyronine receptor activities. Chassande O, et al. **Mol Endocrinol** 1997 Aug;11(9):1278–90

The thyrotrope–restricted isoform of the retinoid–X receptor–gamma1 mediates 9–cis–retinoic acid suppression of thyrotropin–beta promoter activity. Haugen BR, et al. **Mol Endocrinol** 1997 Apr;11(4):481–9

Two distinct dimerization interfaces differentially modulate target gene specificity of nuclear hormone receptors. Perlmann T, et al. **Mol Endocrinol** 1996 Aug;10(8):958–66

Two receptor interacting domains in the nuclear hormone receptor corepressor RIP13/N–CoR. Seol W, et al. **Mol Endocrinol** 1996 Dec;10(12):1646–55

Differential effects of nuclear receptor corepressor (N–CoR) expression levels on retinoic acid receptor–mediated repression support the existence of dynamically regulated corepressor complexes. Söderström M, et al. **Mol Endocrinol** 1997 Jun;11(6):682–92

Vitamin D receptors from patients with resistance to 1,25–dihydroxyvitamin D3: point mutations confer reduced transactivation in response to ligand and impaired interaction with the retinoid X receptor heterodimeric partner. Whitfield GK, et al. **Mol Endocrinol** 1996 Dec; 10(12):1617–31

Retinoid X receptor heterodimerization and developmental expression distinguish the orphan nuclear receptors NGFI–B, Nurr1, and Nor1. Zetterström RH, et al. **Mol Endocrinol** 1996 Dec;10(12):1656–66

Analysis of vitamin D analog–induced heterodimerization of vitamin D receptor with retinoid X receptor using the yeast two–hybrid system. Zhao XY, et al. **Mol Endocrinol** 1997 Mar;11(3):366–78

Functional consequences of reduced retinoic acid receptor gamma expression in a human squamous cell carcinoma line. Monzon RI, et al. **Mol Pharmacol** 1997 Mar; 51(3):377–82

Two distinct actions of retinoid–receptor ligands. Chen JY, et al. **Nature** 1996 Aug 29;382(6594):819–22

Activation of specific RXR heterodimers by an antagonist of RXR homodimers. Lala DS, et al. **Nature** 1996 Oct 3; 383(6599):450–3

Immunohistochemical expression of retinoid X receptor isoforms in human pituitaries and pituitary adenomas. Sanno N, et al. **Neuroendocrinology** 1997 Apr;65(4):299–306

Binding of type II nuclear receptors and estrogen receptor to full and half–site estrogen response elements in vitro. Klinge CM, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1903–12

A new metabolite of retinol: all–trans–4–oxo–retinol as a receptor activator and differentiation agent. Ross SA, et al. **Nutr Rev** 1996 Nov;54(11 Pt 1):355–6 (10 ref.)

The RAR alpha–PLZF chimera associated with Acute Promyelocytic Leukemia has retained a sequence–specific DNA–binding domain. Sitterlin D, et al. **Oncogene** 1997 Mar 6;14(9):1067–74

YY1 regulates vitamin D receptor/retinoid X receptor mediated transactivation of the vitamin D responsive osteocalcin gene. Guo B, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):121–6

SMRT corepressor interacts with PLZF and with the PML–retinoic acid receptor alpha (RARalpha) and PLZF–RARalpha oncoproteins associated with acute promyelocytic leukemia. Hong SH, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9028–33

Identification of a novel negative retinoic acid responsive element in the promoter of the human matrix Gla protein gene. Kirfel J, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2227–32

Leukemia–associated retinoic acid receptor alpha fusion partners, PML and PLZF, heterodimerize and colocalize to nuclear bodies. Koken MH, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10255–60

Coexpression of nuclear receptor partners increases their solubility and biological activities. Li C, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2278–83

Terminal differentiation of human liposarcoma cells induced by ligands for peroxisome proliferator–activated receptor gamma and the retinoid X receptor. Tontonoz P, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):237–41

Yeast hormone response element assays detect and characterize GRIP1 coactivator–dependent activation of transcription by thyroid and retinoid nuclear receptors. Walfish PG, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3697–702

Effects of retinoid X receptor–selective ligands on proliferation of prostate cancer cells. de Vos S, et al. **Prostate** 1997 Jul 1;32(2):115–21

Effects of vitamin D3 on keratinocyte proliferation and differentiation in vitro: modulation by ligands for retinoic acid and retinoid X receptors. Sørensen S, et al. **Skin Pharmacol** 1997;10(3):144–52

Multiple factors contribute to the toxicity of the aromatic retinoid, TTNPB (Ro 13–7410): binding affinities and disposition. Pignatello MA, et al. **Toxicol Appl Pharmacol** 1997 Feb;142(2):319–27

Retinoids: from hindbrain patterning to Parkinson disease. Eichele G. **Trends Genet** 1997 Sep;13(9):343–5 (25 ref.)

RECEPTORS, RETINOIC ACID

PHYSIOLOGY

Diminished retinoic acid signaling in hepatic stellate cells in cholestatic liver fibrosis. Ohata M, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G589–96

PPAR tissue distribution and interactions with other hormone–signaling pathways. Lemberger T, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:231–51

Interplay of the peroxisome proliferator–activated receptor and the thyroid hormone receptor–signaling pathways in regulating peroxisome proliferator–responsive genes. Winrow CJ, et al. **Ann N Y Acad Sci** 1996 Dec 27; 804:214–30

Structure/function of cytoplasmic vitamin A–binding proteins. Li E, et al. **Annu Rev Nutr** 1996;16:205–34 (159 ref.)

Regulation of metabolism by retinoic acid and its nuclear receptors. Pfahl M, et al. **Annu Rev Nutr** 1996;16:257–83 (157 ref.)

Possible involvement of Bcl–2 pathway in retinoid X receptor alpha–induced apoptosis of HL–60 cells. Agarwal N, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):251–3

Retinoid signalling and retinoid receptors in amphibian limb regeneration. Brockes JP. **Biochem Soc Symp** 1996; 62:137–42 (22 ref.)

Retinoid–dependent transcription: the RAR/RXR–TBP–EIA/EIA–LA connection. Meyer M, et al. **Biochem Soc Symp** 1996;62:97–109 (50 ref.)

Ultraspiracle, a Drosophila retinoic X receptor alpha homologue, can mobilize the human thyroid hormone receptor to transactivate a human promoter. Hatzivassiliou E, et al. **Biochemistry** 1997 Jul 29;36(30):9221–31

Involvement of retinoic acid receptor–alpha–mediated signaling pathway in induction of CD38 cell–surface antigen. Mehta K, et al. **Blood** 1997 May 15;89(10):3607–14

E3, a hematopoietic–specific transcript directly regulated by the retinoic acid receptor alpha. Scott LM, et al. **Blood** 1996 Oct 1;88(7):2517–30

Human breast carcinoma slice cultures retain retinoic acid sensitivity. Jing Y, et al. **Braz J Med Biol Res** 1996 Sep; 29(9):1105–8

High–level expression of the retinoic acid receptor beta gene in normal cells of the uterine cervix is regulated by the retinoic acid receptor alpha and is abnormally down–regulated in cervical carcinoma cells. Geisen C, et al. **Cancer Res** 1997 Apr 15;57(8):1460–7

The cellular retinoic acid binding protein II is a positive regulator of retinoic acid signaling in breast cancer cells. Jing Y, et al. **Cancer Res** 1997 May 1;57(9):1668–72

E2F inhibits transcriptional activation by the retinoic acid receptor. Costa SL, et al. **Cell Growth Differ** 1996 Nov; 7(11):1479–85

Activation of retinoid receptors RAR alpha and RXR alpha induces differentiation and apoptosis, respectively, in HL–60 cells. Mehta K, et al. **Cell Growth Differ** 1996 Feb; 7(2):179–86

Contribution of retinoic acid receptor gamma to retinoid–induced craniofacial and axial defects. Iulianella A, et al. **Dev Dyn** 1997 May;209(1):92–104

An essential role for retinoid signaling in anteroposterior neural patterning. Blumberg B, et al. **Development** 1997 Jan;124(2):373–9

Ligand–bound RXR can mediate retinoid signal transduction during embryogenesis. Lu HC, et al. **Development** 1997 Jan; 124(1):195–203

Retinoid signaling is required for the establishment of a ZPA and for the expression of Hoxb–8, a mediator of ZPA formation. Lu HC, et al. **Development** 1997 May; 124(9):1643–51

Retinoid receptors promote primary neurogenesis in Xenopus. Sharpe CR, et al. **Development** 1997 Jan; 124(2):515–23

Axial (HNF3beta) and retinoic acid receptors are regulators of the zebrafish sonic hedgehog promoter. Chang BE, et al. **EMBO J** 1997 Jul 1;16(13):3955–64

Interactions among receptors, thyroid hormone response elements, and ligands in the regulation of the rat uncoupling protein gene expression by thyroid hormone. Rabelo R, et al. **Endocrinology** 1996 Aug;137(8):3478–87

Roles of retinoids and their nuclear receptors in the development and prevention of upper aerodigestive tract cancers. Lotan R. **Environ Health Perspect** 1997 Jun;105 Suppl 4:985–8 (52 ref.)

Nuclear retinoid receptors: mediators of retinoid effects. van der Saag PT. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S24–8 (46 ref.)

X–linked adrenal hypoplasia and hypogonadotropic hypogonadism: multiple roles for the putative transcription factor DAX–1. Kopp P. **Eur J Endocrinol** 1997 Feb; 136(2):153–4

Retinoic acid receptors alpha and gamma mediate the induction of "tissue" transglutaminase activity and apoptosis in human neuroblastoma cells. Melino G, et al. **Exp Cell Res** 1997 Aug 25;235(1):55–61

Periodically hyperthyroid phenotype in thyroid hormone resistance is associated with mutation D322N in the thyroid hormone receptor beta gene: transcriptional properties of the mutant and the role of retinoid X receptor. Behr M, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:111–6

Effects of retinoids and role of retinoic acid receptors in human thyroid carcinomas and cell lines derived therefrom. Schmutzler C, et al. **Exp Clin Endocrinol Diabetes** 1996; 104 Suppl 4:16–9

Retinoic acid receptor beta regulates growth and differentiation in human pancreatic carcinoma cells. Kaiser A, et al. **Gastroenterology** 1997 Sep;113(3):920–9

Retinoid X receptors. Rowe A. **Int J Biochem Cell Biol** 1997 Feb;29(2):275–8 (11 ref.)

Links between pharmacological properties of retinoids and nuclear retinoid receptors. Bollag W, et al. **Int J Cancer** 1997 Feb 7;70(4):470–2

Role of the retinoic acid receptor beta (RARbeta) during mouse development. Ghyselinck NB, et al. **Int J Dev Biol** 1997 Jun;41(3):425–47

Functional assessment of two vitamin D–responsive elements in the rat 25–hydroxyvitamin D3 24–hydroxylase gene. Ohyama Y, et al. **J Biol Chem** 1996 Nov 29;271(48):30381–5

Specific activation of retinoic acid receptors (RARs) and retinoid X receptors reveals a unique role for RARgamma in induction of differentiation and apoptosis of S91 melanoma cells. Spanjaard RA, et al. **J Biol Chem** 1997 Jul 25;272(30):18990–9

Retinoic acid receptor alpha function in vertebrate limb skeletogenesis: a modulator of chondrogenesis. Cash DE, et al. **J Cell Biol** 1997 Jan 27;136(2):445–57

Retinoid X receptor–specific ligands synergistically upregulate 1, 25–dihydroxyvitamin D3–dependent transcription in epidermal keratinocytes in vitro and in vivo. Li XY, et al. **J Invest Dermatol** 1997 Apr; 108(4):506–12

A limited role for retinoic acid and retinoic acid receptors RAR alpha and RAR beta in regulating keratin 19 expression and keratinization in oral and epidermal keratinocytes. Schön M, et al. **J Invest Dermatol** 1996 Sep; 107(3):428–38

Alterations of differentiation, clonal proliferation, cell cycle progression and bcl–2 expression in RAR alpha–altered sublines of HL–60. Grillier I, et al. **Leukemia** 1997 Mar; 11(3):393–400

Unravelling of physiological functions of retinoic acid using a dominant–negative retinoic acid receptor. Kakizuka A. **Leukemia** 1997 Apr;11 Suppl 3:378–9

Distinct retinoid X receptor–retinoic acid receptor heterodimers are differentially involved in the control of expression of retinoid target genes in F9 embryonal carcinoma cells. Chiba H, et al. **Mol Cell Biol** 1997 Jun; 17(6):3013–20

Both thyroid hormone and 9–cis retinoic acid receptors are required to efficiently mediate the effects of thyroid hormone on embryonic development and specific gene regulation in Xenopus laevis. Puzianowska–Kuznicka M, et al. **Mol Cell Biol** 1997 Aug;17(8):4738–49

Heterodimeric interaction between retinoid X receptor alpha and orphan nuclear receptor OR1 reveals dimerization–induced activation as a novel mechanism of nuclear receptor activation. Wiebel FF, et al. **Mol Cell Biol** 1997 Jul;17(7):3977–86

Retinoid X receptor and peroxisome proliferator–activated receptor activate an estrogen responsive gene independent of the estrogen receptor. Nuñez SB, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):27–40

The function of retinoid X receptors on negative thyroid hormone response elements. Takeda T, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):85–96

Vitamin D receptor binding to the negative human parathyroid hormone vitamin D response element does not require the retinoid x receptor. Mackey SL, et al. **Mol Endocrinol** 1996 Mar;10(3):298–305

Induction of apoptosis by retinoids and retinoic acid receptor gamma–selective compounds in mouse thymocytes through a novel apoptosis pathway. Szondy Z, et al. **Mol Pharmacol** 1997 Jun;51(6):972–82

A truncated RAR alpha co–operates with the v–erbB oncogene to transform early haematopoietic progenitors in vitro and in vivo. Altabef M, et al. **Oncogene** 1997 Mar 27;14(12):1471–9

Effects of all–trans–retinoic acid (ATRA) and retinoic acid receptor (RAR) expression on secretion, growth, and apoptosis of insulin–secreting RINm5F cells. Chertow BS, et al. **Pancreas** 1997 Aug;15(2):122–31

RARalpha–mediated teratogenicity in mice is potentiated by an RXR agonist and reduced by an RAR antagonist: dissection of retinoid receptor–induced pathways. Elmazar MM, et al. **Toxicol Appl Pharmacol** 1997 Sep;146(1):21–8

RECEPTORS, SENSORY

[Sensory afferences and motor control of equilibrium using static and dynamic posture tests] Perrin P, et al. **Ann Otolaryngol Chir Cervicofac** 1996;113(3):133–46 (Eng. Abstr.) **(Fre)**

[Small fiber neuropathy] Johnsen SH, et al. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1476–9 (Eng. Abstr.) **(Nor)**

ANATOMY & HISTOLOGY

Distinct but overlapping populations of commissural and GABAergic neurons in the dorsal nucleus of the little skate, Raja erinacea. Duman CH, et al. **Brain Behav Evol** 1997; 49(2):99–109

The dorsal filament of the weakly electric Apteronotidae (Gymnotiformes; Teleostei) is specialized for electroreception. Franchina CR, et al. **Brain Behav Evol** 1996;47(4):165–78

Evolution of gnathostome lateral line ontogenies. Northcutt RG. **Brain Behav Evol** 1997 Jul;50(1):25–37 (70 ref.)

Sensory innervation of the cat knee articular capsule and cruciate ligament visualised using anterogradely transported wheat germ agglutinin–horseradish peroxidase. Madey SM, et al. **J Anat** 1997 Feb;190 (Pt 2):289–97

[Projections and fiber characteristics of sensory afferents of the anterior cruciate ligament in an animal experiment] Parsch D, et al. **Unfallchirurgie** 1996 Oct;22(5):193–201 (Eng. Abstr.) **(Ger)**

[The structural organization of the receptor elements and organs of the land mollusk Pomatia elegans (Prosobranchia)] Zaĭtseva OV. **Morfologiia** 1996; 110(4):83–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Inhibition by nociceptin of neurogenic inflammation and the release of SP and CGRP from sensory nerve terminals. Helyes Z, et al. **Br J Pharmacol** 1997 Jun;121(4):613–5

Gustatory receptor cell responses to the sweeteners, monellin and thaumatin. Tonosaki K, et al. **Brain Res** 1997 Feb 14; 748(1–2):234–6

Action of cholinesters on sensory nerve endings in skin and muscle. Carr RW, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):355–62 (81 ref.)

Capsaicin cough receptor sensitivity test in children. Chang AB, et al. **Eur Respir J** 1996 Nov;9(11):2220–3

Induction of cell proliferation in avian inner ear sensory epithelia by insulin–like growth factor–I and insulin. Oesterle EC, et al. **J Comp Neurol** 1997 Apr 7;380(2):262–74

A quinine–activated cationic conductance in vertebrate taste receptor cells. Tsunenari T, et al. **J Gen Physiol** 1996 Dec; 108(6):515–23

Capsaicin–sensitive sensory nerve terminals with local and systemic efferent functions: facts and scopes of an unorthodox neuroregulatory mechanism. Szolcsányi J. **Prog Brain Res** 1996;113:343–59 (132 ref.)

Acute exposure to ozone does not influence neuroreceptor density and sensitivity in guinea pig lung. van Hoof HJ, et al. **Toxicol Lett** 1997 Jan 15;90(1):53–60

[Pharmacological study of neuroreceptors and implications in neurological and psychiatric therapeutics] Maloteaux JM. **Bull Mem Acad R Med Belg** 1996;151(2):187–93 (Eng. Abstr.) **(Fre)**

[The morphophysiological restructuring of the sensory bushy receptor of the frog bladder under the influence of colchicine] Zamuraev IN, et al. **Fiziol Zh Im I M Sechenova** 1996 Dec;82(12):30–4 (Eng. Abstr.) **(Rus)**

METABOLISM

Fatty acid modulation of K+ channels in taste receptor cells: gustatory cues for dietary fat. Gilbertson TA, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1203–10

Neurotransmitters and neuroreceptors in the lower urinary tract. Andersson KE. **Curr Opin Obstet Gynecol** 1996 Oct; 8(5):361–5 (49 ref.)

The regulation of heme turnover and carbon monoxide biosynthesis in cultured primary rat olfactory receptor neurons. Ingi T, et al. **J Neurosci** 1996 Sep 15;16(18):5621–8

The neuroreceptors: one key for many locks. Civelli O. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):161–72 (11 ref.)

The cellular localization of the neuropeptides substance P, neurokinin A, calcitonin gene–related peptide and neuropeptide Y in guinea–pig vestibular sensory organs: a high–resolution confocal microscopy study. Scarfone E, et al. **Neuroscience** 1996 Nov;75(2):587–600

Guanylyl cyclase expression in specific sensory neurons: a new family of chemosensory receptors. Yu S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3384–7

Mechanisms of modulation by internal protons of cyclic nucleotide–gated channels cloned from sensory receptor cells. Gavazzo P, et al. **Proc R Soc Lond B Biol Sci** 1997 Aug 22;264(1385):1157–65

Acute exposure to ozone does not influence neuroreceptor density and sensitivity in guinea pig lung. van Hoof HJ, et al. **Toxicol Lett** 1997 Jan 15;90(1):53–60

PATHOLOGY

Changes in the number of primary sensory neurons in normal and vitamin–E–deficient rats during aging. Cecchini T, et al. **Somatosens Mot Res** 1995;12(3–4):317–27

PHYSIOLOGY

Connections between otolith receptors and neck motoneurons. Uchino Y. **Acta Otolaryngol Suppl (Stockh)** 1997;528:49–51

Injury–stimulated neurogenesis in sensory systems. Farbman AI. **Adv Neurol** 1997;72:157–61 (9 ref.)

CO2–sensitive olfactory and pulmonary receptor modulation of episodic breathing in bullfrogs. Kinkead R, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R134–44

Renal sensory receptor activation causes prostaglandin–dependent release of substance P. Kopp UC, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R720–7

Ultrastructure of the crotaline snake infrared pit receptors: SEM confirmation of TEM findings. Amemiya F, et al. **Anat Rec** 1996 Sep;246(1):135–46

Functional and structural complexity of signal transduction via G–protein–coupled receptors. Gudermann T, et al.

Annu Rev Neurosci 1997;20:399–427 (192 ref.)

Variations in learning reflect individual differences in sensory function and synaptic integration. Matzel LD, et al. **Behav Neurosci** 1996 Oct;110(5):1084–95

Dynamics of analog–to–frequency transduction in sensory receptors. Menzinger M, et al. **Biosystems** 1997; 40(1–2):119–26

A quantitative analysis of passive electrolocation behavior in electric fish. Hopkins CD, et al. **Brain Behav Evol** 1997; 50 Suppl 1:32–59

Making sense of chemicals. Gilbertson TA, et al. **Chem Biol** 1996 Apr;3(4):233–7 (41 ref.)

In the medical literature, physiologists, neuromorphologists, and neurologists frequently refer to peripheral or distal parts of sensory neurons as "receptors," "sensory terminals," or "sensory nerve endings" [letter] Malinovsky L, et al. **Clin Anat** 1996;9(5):356

Sensory nerve recovery following median nerve provocation in carpal tunnel syndrome. Rosecrance JC, et al. **Electromyogr Clin Neurophysiol** 1997 Jun–Jul;37(4):219–29

Electrophysiologic evidence showing the existence of sensory receptors within the alveolar bone in anesthetized cats. Héraud J, et al. **Int J Oral Maxillofac Implants** 1996 Nov–Dec;11(6):800–5

Development of voltage–dependent currents in taste receptor cells. Mackay–Sim A, et al. **J Comp Neurol** 1996 Feb 5; 365(2):278–88

Distribution of omega–Conotoxin GVIA binding sites in teleost cerebellar and electrosensory neurons. Tharani Y, et al. **J Comp Neurol** 1996 Jan 15;364(3):456–472

T–type Ca2+ channel lowers the threshold of spike generation in the newt olfactory receptor cell. Kawai F, et al. **J Gen Physiol** 1996 Dec;108(6):525–35

A quinine–activated cationic conductance in vertebrate taste receptor cells. Tsunenari T, et al. **J Gen Physiol** 1996 Dec; 108(6):515–23

Rapid development of synaptic connections and plasticity between sensory neurons and motor neurons of Aplysia in cell culture: implications for learning and regulation of synaptic strength. Coulson RL, et al. **J Neurophysiol** 1997 May;77(5):2316–27

Human thalamic nucleus mediating taste and multiple other sensations related to ingestive behavior. Lenz FA, et al. **J Neurophysiol** 1997 Jun;77(6):3406–9

Primary afferent depolarizations of sensory origin within contact–sensitive mechanoreceptive afferents of a crayfish leg. Marchand AR, et al. **J Neurophysiol** 1997 Jun; 77(6):3340–54

Atrial natriuretic peptide modulates synaptic transmission from osmoreceptor afferents to the supraoptic nucleus. Richard D, et al. **J Neurosci** 1996 Dec 1;16(23):7526–32

Specific C–receptors for itch in human skin. Schmelz M, et al. **J Neurosci** 1997 Oct 15;17(20):8003–8

The influence of otoliths and somatic graviceptors on angular velocity estimation. Mittelstaedt ML, et al. **J Vestib Res** 1996 Sep–Oct;6(5):355–66

The dynamics of neurogenic signalling underlying bristle development in Drosophila melanogaster. Parks AL, et al. **Mech Dev** 1997 Apr;63(1):61–74

From stimulus encoding to feature extraction in weakly electric fish [see comments] Gabbiani F, et al. **Nature** 1996 Dec 12;384(6609):564–7. Comment in: Nature 1996 Dec 12;384(6609):517–8.

Train signals for electric fish [news; comment] Maler L. **Nature** 1996 Dec 12;384(6609):517–8. Comment on: Nature 1996 Dec 12;384(6609):564–7.

alpha–Latrotoxin stimulates exocytosis by the interaction with a neuronal G–protein–coupled receptor. Krasnoperov VG, et al. **Neuron** 1997 Jun;18(6):925–37

Ipsilateral and bilateral receptive fields in rat primary somatosensory cortex. Zarei M, et al. **Neuroreport** 1996 Jan 31;7(2):647–51

Renal R2 chemoreceptor activity is attenuated after back heating in the rat. Wu MS, et al. **Neurosci Lett** 1997 Jun 27;229(2):101–4

The effect of hyperosmotic treatment on the functioning of ampullary electroreceptor organs. Heijmen PS, et al. **Neuroscience** 1996 Jun;72(4):1107–15

Neuropeptides in dural fine sensory nerve endings—involvement in neurogenic inflammation? Hanesch U. **Prog Brain Res** 1996;113:299–317 (89 ref.)

Functional morphology of nociceptive and other fine sensory endings (free nerve endings) in different tissues. Messlinger K. **Prog Brain Res** 1996;113:273–98 (75 ref.)

On the speed of different senses and nerve transmission by Hirsch (1862). Nicolas S. **Psychol Res** 1997;59(4):261–8

Sensory receptor activation by mediators of defense reflexes in guinea–pig lungs. Bergren DR. **Respir Physiol** 1997 Jun; 108(3):195–204

Mechanisms underlying stimulation of rapidly adapting receptors during pulmonary air embolism in dogs. Chen HF, et al. **Respir Physiol** 1997 Jul;109(1):1–13

Selective labeling of [3H]2–deoxy–D–glucose in the snake trigeminal system: basal and infrared–stimulated conditions. Jiang PJ, et al. **Somatosens Mot Res** 1995;12(3–4):299–307

[Reversible changes of the neural pathways and receptor functions associated with development and regeneration following nerve injuries] Nabekura J. **Fukuoka Igaku Zasshi** 1997 Jul;88(7):267–73 (7 ref.) **(Jpn)**

PHYSIOPATHOLOGY

Esophageal sensation in spinal cord–injured patients: balloon distension and cerebral evoked potential recording. DeVault KR, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G937–41

Intra– and inter–tester reliability of sensibility testing in leprosy. van Brakel WH, et al. **Int J Lepr Other Mycobact Dis** 1996 Sep;64(3):287–98

[Development of corneal sensitivity after phacoemulsification with scleral tunnel incision] Kohlhaas M, et al. **Klin Monatsbl Augenheilkd** 1997 Jul;211(1):32–6 (Eng. Abstr.) **(Ger)**

[Effects of inhaled anticholinergic agents and beta 2–agonists on distilled water induced cough in patients with chronic cough] Tanaka S. **Arerugi** 1996 Jan;45(1):17–27 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

The sensory trigeminal system of a snake in the possession of infrared receptors. I. The sensory trigeminal nuclei. Molenaar GJ. **J Comp Neurol** 1978 May 1;179(1):123–35

The sensory trigeminal system of a snake in the possession of infrared receptors. II. The central projections of the trigeminal nerve. Molenaar GJ. **J Comp Neurol** 1978 May 1;179(1):137–51

ULTRASTRUCTURE

Ultrastructure of the crotaline snake infrared pit receptors: SEM confirmation of TEM findings. Amemiya F, et al. **Anat Rec** 1996 Sep;246(1):135–46

F–actin bundles in Drosophila bristles are assembled from modules composed of short filaments. Tilney LG, et al. **J Cell Biol** 1996 Dec;135(5):1291–308

Influence of receptor axons on the formation of olfactory glomeruli in a hemimetabolous insect, the cockroach Periplaneta americana. Salecker I, et al. **J Comp Neurol** 1996 Jun 24;370(2):262–79

Development of the organ of Corti in horseshoe bats: scanning and transmission electron microscopy. Vater M, et al. **J Comp Neurol** 1997 Jan 27;377(4):520–34

The cellular localization of the neuropeptides substance P, neurokinin A, calcitonin gene–related peptide and neuropeptide Y in guinea–pig vestibular sensory organs: a high–resolution confocal microscopy study. Scarfone E, et al. **Neuroscience** 1996 Nov;75(2):587–600

RECEPTORS, SEROTONIN

Serotonin. Proceedings of the 3rd IUPHAR satellite meeting on serotonin. Chicago, Illinois, July 30–August 3, 1994. **Behav Brain Res** 1996;73(1–2):v, 1–394

Are 5–HT1A receptors involved in the control of reflex bradycardia induced by intracoronary injection of contrast medium in humans? Hatab SA, et al. **Braz J Med Biol Res** 1996 Jun;29(6):769–72

Molecular cloning and characterization of NESP55, a novel chromogranin–like precursor of a peptide with 5–HT1B receptor antagonist activity. Ischia R, et al. **J Biol Chem** 1997 Apr 25;272(17):11657–62

AGONISTS see SEROTONIN AGONISTS

ANALYSIS

Immunohistochemical localization of 5–HT2A receptors in peripheral sensory axons in rat glabrous skin. Carlton SM, et al. **Brain Res** 1997 Jul 25;763(2):271–5

5–HT3–like receptors in the rat medial prefrontal cortex: further pharmacological characterization. Edwards E, et al. **Brain Res** 1996 Sep 9;733(1):21–30

Immuno–localization of serotonin 5–HT6 receptor–like material in the rat central nervous system. Gérard C, et al. **Brain Res** 1997 Jan 23;746(1–2):207–19

Distribution of [3H]–sumatriptan binding sites in human brain [editorial; comment] Connor HE. **Cephalalgia** 1996 Aug; 16(5):287–8. Comment on: Cephalalgia 1996 Aug;16(5):317–22.

Autoradiographic distribution of [3H]sumatriptan–binding sites in post–mortem human brain [see comments] Pascual J, et al. **Cephalalgia** 1996 Aug;16(5):317–22. Comment in: Cephalalgia 1996 Aug;16(5):287–8.

Initial evaluation of 123I–5–I–R91150, a selective 5–HT2A ligand for single–photon emission tomography, in healthy human subjects [published erratum appears in Eur J Nucl Med 1997 Jun;24(6):707] Busatto GF, et al. **Eur J Nucl Med** 1997 Feb;24(2):119–24

5–HT receptors in mammalian brain: receptor autoradiography and in situ hybridization studies of new ligands and newly identified receptors. Mengod G, et al. **Histochem J** 1996 Nov;28(11):747–58

5–HT1A receptor binding sites in post–mortem brain samples from depressed suicides and controls. Lowther S, et al. **J Affect Disord** 1997 Feb;42(2–3):199–207

Immunocytochemical studies of the 5–HT(1A) receptor in ventral medullaryneurons that project to the intermediolateral cell column and contain serotonin or tyrosine hydroxylase immunoreactivity. Helke CJ, et al. **J Comp Neurol** 1997 Mar 10;379(2):261–70

Immunocytochemical localization of serotonin1A receptors in the rat central nervous system. Kia HK, et al. **J Comp Neurol** 1996 Feb 5;365(2):289–305

Colocalization of serotonin receptor subtypes 5–HT2A, 5–HT2C, and 5–HT6 with neuropeptides in rat striatum. Ward RP, et al. **J Comp Neurol** 1996 Jul 1;370(3):405–14

Serotonergic neurotransmission in the spinal cord and motor cortex of patients with motor neuron disease and controls: quantitative autoradiography for 5–HT1a and 5–HT2 receptors. Forrest V, et al. **J Neurol Sci** 1996 Aug;139 Suppl:83–90

Ultrastructural localization of 5–hydroxytryptamine1A receptors in the rat brain. Kia HK, et al. **J Neurosci Res** 1996 Dec 15;46(6):697–708

Autoradiographic localization of 5–HT1E and 5–HT1F binding sites in rat brain: effect of serotonergic lesioning. Fugelli A, et al. **J Recept Signal Transduct Res** 1997 Jul; 17(4):631–45

Characterization of a serotonin receptor in the cnidarian Renilla koellikeri: a radiobinding analysis. Hajj–Ali I, et al. **Neurochem Int** 1997 Jul;31(1):83–93

In vivo binding of [18F]altanserin to rat brain 5HT2 receptors: a film and electronic autoradiographic study. Biver F, et al. **Nucl Med Biol** 1997 May;24(4):357–60

Synthesis and evaluation of 5–HT3 receptor antagonist [11C]KF17643. Ishiwata K, et al. **Nucl Med Biol** 1996 Apr; 23(3):285–90

Preparation of 8–[3–(4–fluorobenzoyl)–propyl]–1–(4–[123I] iodobenzoyl)–1,3,8–triazaspiro[4,5]decan–4–one: a novel selective serotonin 5–HT2 receptor agent. Samnick S, et al. **Nucl Med Biol** 1997 May;24(4):295–303

The effects of paroxetine given repeatedly on the 5–HT receptor subpopulations in the rat brain. Maj J, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):73–82

Decreased frontal cortical serotonin2A receptors in schizophrenia. Dean B, et al. **Schizophr Res** 1996 Sep 18; 21(3):133–9

ANTAGONISTS & INHIBITORS see SEROTONIN ANTAGONISTS

BIOSYNTHESIS

Regulation of 5–HT2A receptor mRNA in P11 cells. Ferry RC, et al. **Behav Brain Res** 1996;73(1–2):187–91 (26 ref.)

Effects of altered 5–ht6 expression in the rat: functional studies using antisense oligonucleotides. Sleight AJ, et al. **Behav Brain Res** 1996;73(1–2):245–8

Transcriptional regulation of the 5–HT2A receptor. Toth M. **Behav Brain Res** 1996;73(1–2):183–6 (17 ref.)

Learned helplessness increases 5–hydroxytryptamine1B receptor mRNA levels in the rat dorsal raphe nucleus. Neumaier JF, et al. **Biol Psychiatry** 1997 Mar 15; 41(6):668–74

Cloning, expression and pharmacology of a truncated splice variant of the human 5–HT7 receptor (h5–HT7b). Jasper JR, et al. **Br J Pharmacol** 1997 Sep;122(1):126–32

Enhanced 5–HT1A receptor expression in forebrain regions of aggressive house mice. Korte SM, et al. **Brain Res** 1996 Oct 14;736(1–2):338–43

Expression of serotonin receptors in human fetal astrocytes and glioma cell lines: a possible role in glioma cell proliferation and migration. Merzak A, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):1–7

Impact of adrenalectomy on 5–HT6 and 5–HT7 receptor gene expression in the rat hippocampus. Yau JL, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):182–6

Estrogen control of central neurotransmission: effect on mood, mental state, and memory. Fink G, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):325–44 (87 ref.)

5–HT2B receptor–mediated serotonin morphogenetic functions in mouse cranial neural crest and myocardiac cells. Choi DS, et al. **Development** 1997 May;124(9):1745–55

Ontogenetic development of 5–HT1D receptors in human brain: an autoradiographic study. del Olmo E, et al. **Eur J Neurosci** 1996 Jan;8(1):53–60

Human serotonin 5–HT7 receptor: cloning and pharmacological characterisation of two receptor variants. Stam NJ, et al. **FEBS Lett** 1997 Aug 25;413(3):489–94

Pattern of expression of the serotonin2C receptor messenger RNA in the basal ganglia of adult rats. Eberle–Wang K, et al. **J Comp Neurol** 1997 Jul 28;384(2):233–47

Identification of cells that express 5–hydroxytryptamine1A receptors in the nervous systems of the bowel and pancreas. Kirchgessner AL, et al. **J Comp Neurol** 1996 Jan 15; 364(3):439–455

Mianserin–induced down–regulation of human 5–hydroxytryptamine2A and 5–hydroxytryptamine2C receptors stably expressed in the human neuroblastoma cell line SH–SY5Y. Newton RA, et al. **J Neurochem** 1997 Sep; 69(3):1031–8

Identification of 5–HT receptor sub–types in a homogeneous population of presumptive serotoninergic neurones. Jackson ZE, et al. **Neuropharmacology** 1997 Apr–May; 36(4–5):543–8

Molecular cloning and pharmacological characterization of guinea pig 5–HT1B and 5–HT1D receptors. Zgombick JM, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):513–24

5–HT2B receptor mRNA in guinea pig superior cervical ganglion. Newberry NR, et al. **Neuroreport** 1996 Nov 25; 7(18):2909–11

Imipramine–induced increase in 5–HT2C receptor mRNA level in the rat brain. Tohda M, et al. **Neurosci Res** 1996 Jan;24(2):189–93

The effects of clozapine and haloperidol on serotonin–1A, –2A and –2C receptor gene expression and serotonin

metabolism in the rat forebrain. Burnet PW, et al. **Neuroscience** 1996 Jul;73(2):531–40

Evidence for expression of the 5-hydroxytryptamine-2B receptor protein in the rat central nervous system. Duxon MS, et al. **Neuroscience** 1997 Jan;76(2):323–9

Elevated basal trough levels of corticosterone suppress hippocampal 5-hydroxytryptamine(1A) receptor expression in adrenally intact rats: implication for the pathogenesis of depression. Meijer OC, et al. **Neuroscience** 1997 Sep;80(2):419–26

Enhanced RACE method using specific enrichment by biotinylated oligonucleotides bound to streptavidin coated magnetic particles. Lankiewicz S, et al. **Nucleic Acids Res** 1997 May 15;25(10):2037–8

Quantitative RT-PCR distribution of serotonin 5-HT6 receptor mRNA in the central nervous system of control or 5,7-dihydroxytryptamine-treated rats. Gérard C, et al. **Synapse** 1996 Jul;23(3):164–73

BLOOD

An investigation into the psychobiology of social phobia: personality domains and serotonergic function. Chatterjee S, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):544–50

Improvement of schizophrenic symptoms and changes in plasma HVA concentrations, plasma anti-D2 and anti-5-HT2 receptor activities with clozapine. Yamada K, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):291–4

CHEMISTRY

Evolutionary conservation of the 5-HT2B receptors. Colas JF, et al. **Ann N Y Acad Sci** 1997 May 30;812:149–53 (11 ref.)

Apparent heterogeneity of 5-HT2A receptors observed in functional studies with antagonists may reflect species-related differences. Mylecharane EJ, et al. **Ann N Y Acad Sci** 1997 May 30;812:174–5

Conformational flexibility of serotonin1A receptor ligands from crystallographic data. Updated model of the receptor pharmacophore. Chilmonczyk Z, et al. **Arch Pharm (Weinheim)** 1997 May;330(5):146–60

Functional characterisation of a 5-HT2 receptor cDNA cloned from Lymnaea stagnalis. Gerhardt CC, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):249–58

Molecular modeling of serotonin, ketanserin, ritanserin and their 5-HT2C receptor interactions. Kristiansen K, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):195–210

Molecular and functional characterization of a 5-HT4 receptor cloned from human atrium. Blondel O, et al. **FEBS Lett** 1997 Aug 4;412(3):465–74

Identification of lymphocyte 5-HT3 receptor subtype and its implication in fish T-cell proliferation. Meyniel JP, et al. **Immunol Lett** 1997 Mar;55(3):151–60

MD simulations of a 5-HT2A receptor model in DOPC membranes. Garmer DR. **J Biomol Struct Dyn** 1997 Apr; 14(5):525–46

Four 5-hydroxytryptamine7 (5-HT7) receptor isoforms in human and rat produced by alternative splicing: species differences due to altered intron-exon organization. Heidmann DE, et al. **J Neurochem** 1997 Apr;68(4):1372–81

Characterisation of human 5-hydroxytryptamine2A and 5-hydroxytryptamine2C receptors expressed in the human neuroblastoma cell line SH-SY5Y: comparative stimulation by hallucinogenic drugs. Newton RA, et al. **J Neurochem** 1996 Dec;67(6):2521–31

Two amino acid differences in the sixth transmembrane domain are partially responsible for the pharmacological differences between the 5-HT1D beta and 5-HT1E 5-hydroxytryptamine receptors. Parker EM, et al. **J Neurochem** 1996 Nov;67(5):2096–103

Dopamine and serotonin receptors: amino acid sequences, and clinical role in neuroleptic parkinsonism. Seeman P, et al. **Jpn J Pharmacol** 1996 Jul;71(3):187–204 (140 ref.)

A conserved threonine residue in the second intracellular loop of the 5-hydroxytryptamine 1A receptor directs signaling specificity. Lembo PM, et al. **Mol Pharmacol** 1997 Jul;52(1):164–71

Identification of conserved aromatic residues essential for agonist binding and second messenger production at 5-hydroxytryptamine2A receptors. Roth BL, et al. **Mol Pharmacol** 1997 Aug;52(2):259–66

Structure and function of serotonin 5-HT2 receptors. Shih JC, et al. **NIDA Res Monogr** 1994;146:284–97 (22 ref.)

Hallucinogens acting at 5-HT receptors: toward a mechanistic understanding at atomic resolution. Weinstein H, et al. **NIDA Res Monogr** 1994;146:241–62 (63 ref.)

Molecular modeling of the interaction of LSD and other hallucinogens with 5-HT2 receptors. Westkaemper RB, et al. **NIDA Res Monogr** 1994;146:263–83 (32 ref.)

Molecular modelling of UH-301 and 5-HT(1a) receptor interactions. Sylte I, et al. **Protein Eng** 1996 Feb;9(2):149–60

Predicted structure of the extracellular region of ligand-gated ion-channel receptors shows SH2-like and SH3-like domains forming the ligand-binding site. Gready JE, et al. **Protein Sci** 1997 May;6(5):983–98

The 5-HT7 receptor: orphan found. Eglen RM, et al. **Trends Pharmacol Sci** 1997 Apr;18(4):104–7 (52 ref.)

CLASSIFICATION

Classification and nomenclature of 5-HT receptors: a comment on current issues. Hoyer D, et al. **Behav Brain Res** 1996;73(1–2):263–8 (30 ref.)

Sequential onset of three 5-HT receptors during the 5-hydroxytryptaminergic differentiation of the murine 1C11 cell line. Kellermann O, et al. **Br J Pharmacol** 1996 Jul;118(5):1161–70

Human brainstem serotonin receptors: characterization and implications for subcortical myoclonus. Pranzatelli MR, et al. **Clin Neuropharmacol** 1996 Dec;19(6):507–14

Nature of 5-HT1-like receptors mediating depressor responses in vagosympathectomized rats; close resemblance to the cloned 5-ht7 receptor. De Vries P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):90–9

5-HT receptor classification and nomenclature: towards a harmonization with the human genome. Hoyer D, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):419–28 (65 ref.)

Alignment of receptor nomenclature with the human genome: classification of 5-HT1B and 5-HT1D receptor subtypes. Hartig PR, et al. **Trends Pharmacol Sci** 1996 Mar; 17(3):103–5 (22 ref.)

DEFICIENCY

Serotonin1B receptor modulation of startle reactivity, habituation, and prepulse inhibition in wild-type and serotonin1B knockout mice. Dulawa SC, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):125–34

DRUG EFFECTS

5-HT3 receptor antagonist, tropisetron, does not influence ethanol-induced conditioned taste aversion and conditioned place aversion. Bienkowski P, et al. **Alcohol** 1997 Jan–Feb;14(1):63–9

The mixed 5-HT 1A/2A receptor drug FG5938 suppresses alcohol drinking while enhancing feeding in P rats. Piercy KT, et al. **Alcohol** 1996 Sep–Oct;13(5):521–7

Interaction between opiate and 5-HT3 receptor antagonists in the regulation of alcohol intake. Le AD, et al. **Alcohol Alcohol Suppl** 1994;2:545–9

5-HT receptors: implications for the neuropharmacology of alcohol and alcoholism. Overstreet DH, et al. **Alcohol Alcohol Suppl** 1994;2:205–10 (49 ref.)

Selective 5-hydroxytryptamine antagonism: a role in irritable bowel syndrome and functional dyspepsia? Maxton DG, et al. **Aliment Pharmacol Ther** 1996 Aug;10(4):595–9

Cyproheptadine: a potent in vivo serotonin antagonist [letter] Kapur S, et al. **Am J Psychiatry** 1997 Jun;154(6):884

5-Hydroxytryptamine3 receptor and regulation of gastric emptying in rats. Ito C, et al. **Arch Int Pharmacodyn Ther** 1996 Mar–Apr;331(2):203–18

Structure-activity relationship studies of CNS agents, Part 31: Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment--new 5-HT1A receptor ligands. Paluchowska MH, et al. **Arch Pharm (Weinheim)** 1996 Oct;329(10):451–6

Modulation of serotonin-induced currents by metals in mouse neuroblastoma cells. Uki M, et al. **Arch Toxicol** 1996; 70(10):652–60

Structure-affinity relationship studies on D-2/5-HT1A receptor ligands. 4-(2-Heteroarylethyl)-1-arylpiperazines. Dukić S, et al. **Arzneimittelforschung** 1997 Mar; 47(3):239–43

Novel discriminatory ligands for 5-HT2B receptors. Baxter GS. **Behav Brain Res** 1996;73(1–2):149–52 (19 ref.)

5-HT2B receptor signaling in the rat stomach fundus: dependence on calcium influx, calcium release and protein kinase C. Cox DA, et al. **Behav Brain Res** 1996; 73(1–2):289–92

The role of serotonin in the actions of psychostimulants: molecular and pharmacological analyses. Cunningham KA, et al. **Behav Brain Res** 1996;73(1–2):93–102 (66 ref.)

A new peptide, 5-HT-moduline, isolated and purified from mammalian brain specifically interacts with 5-HT1B/1D receptors. Fillion G, et al. **Behav Brain Res** 1996; 73(1–2):313–17

5-HT1A autoreceptors and the mode of action of selective serotonin reuptake inhibitors (SSRI). Hjorth S, et al. **Behav Brain Res** 1996;73(1–2):281–3

Stereoselective pharmacological effects of lysergic acid amides possessing chirality in the amide substituent. Nichols DE, et al. **Behav Brain Res** 1996;73(1–2):117–9 (9 ref.)

Autoradiographic analysis of 5-HT receptor subtypes labeled by [3H]5-CT ([3H]5-carboxamidotryptamine). Palacios JM, et al. **Behav Brain Res** 1996;73(1–2):239–43

Development of 5-HT1A receptor antagonists. Routledge C. **Behav Brain Res** 1996;73(1–2):153–6 (31 ref.)

GR127935: a potent and selective 5-HT1D receptor antagonist. Skingle M, et al. **Behav Brain Res** 1996; 73(1–2):157–61 (23 ref.)

The antipsychotic potential of subtype-selective 5-HT receptor ligands based on interactions with mesolimbic dopamine systems. Tricklebank MD. **Behav Brain Res** 1996; 73(1–2):15–7 (25 ref.)

Absorption characteristics of azasetron from rectal and oral routes in rabbits. Moriyama Y, et al. **Biol Pharm Bull** 1997 Jun;20(6):701–3

CP2289, a new 5-HT3 receptor ligand: agonistic activities on gastroenteric motility. Sato Y, et al. **Biol Pharm Bull** 1997 Jul;20(7):752–5

Effect of serum cholesterol levels on meta-chlorophenylpiperazine-evoked neuroendocrine responses in healthy subjects. Terao T, et al. **Biol Psychiatry** 1997 May 1;41(9):974–8

5-HT1D receptor agonists and human coronary artery reactivity in vitro: crossover comparisons of 5-HT and sumatriptan with rizatriptan and L-741,519. Longmore J, et al. **Br J Clin Pharmacol** 1996 Oct;42(4):431–41

Neural 5-HT4 receptors in the human isolated detrusor muscle: effects of indole, benzimidazolone and substituted benzamide agonists and antagonists. Candura SM, et al. **Br J Pharmacol** 1996 Aug;118(8):1965–70

Characterization of a 5-HT1B receptor on CHO cells: functional responses in the absence of radioligand binding. Giles H, et al. **Br J Pharmacol** 1996 Mar;117(6):1119–26

Endothelial 5-HT receptors mediate relaxation of porcine pulmonary arteries in response to ergotamine and dihydroergotamine. Glusa E, et al. **Br J Pharmacol** 1996 Sep;119(2):330–4

Ligand-gated ion channels opened by 5-HT in molluscan neurones. Green KA, et al. **Br J Pharmacol** 1996 Oct; 119(3):602–8

Calcium entry and 5-HT2 receptor blockade in oliguric ischaemic acute renal failure: effects of levemopamil in conscious rats. Kramer HJ, et al. **Br J Pharmacol** 1996 Mar;117(6):1348–54

Characterization of putative 5-ht7 receptors mediating direct relaxation in Cynomolgus monkey isolated jugular vein. Leung E, et al. **Br J Pharmacol** 1996 Mar;117(5):926–30

Inhibition of the constitutive activity of human 5-HT1A receptors by the inverse agonist, spiperone but not the neutral antagonist, WAY 100,635. Newman-Tancredi A, et al. **Br J Pharmacol** 1997 Mar;120(5):737–9

Characterization of 5-hydroxytryptamine receptors mediating contractions in basilar arteries from stroke-prone spontaneously hypertensive rats. Nishimura Y. **Br J Pharmacol** 1996 Mar;117(6):1325–1333

The atypical antipsychotic profile of NRA0045, a novel dopamine D4 and 5-hydroxytryptamine2A receptor antagonist, in rats. Okuyama S, et al. **Br J Pharmacol** 1997 Jun;121(3):515–25

Characterization of the contraction to 5-HT in the canine colon longitudinal muscle. Prins NH, et al. **Br J Pharmacol** 1997 Feb;120(4):714–20

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: increase in Na+, K(+)-ATPase activity in renal proximal tubules via activation of 5-HT1A receptors. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar;117(6):1199–203

Ability of 5-HT4 receptor ligands to modulate rat striatal dopamine release in vitro and in vivo. Steward LJ, et al. **Br J Pharmacol** 1996 Jan;117(1):55–62

Pharmacological characterization of the 5-hydroxytryptamine receptor mediating relaxation in the rat isolated ileum. Tuladhar BR, et al. **Br J Pharmacol** 1996 Sep;119(2):303–10

5-HT3 and 5-HT4 receptor-mediated facilitation of the emptying phase of the peristaltic reflex in the marmoset isolated ileum. Tuladhar BR, et al. **Br J Pharmacol** 1996 Apr;117(8):1679–84

5-HT2B receptor-mediated calcium release from ryanodine-sensitive intracellular stores in human pulmonary artery endothelial cells. Ullmer C, et al. **Br J Pharmacol** 1996 Mar;117(6):1081–8

Selection of distinct conformational states of the 5-HT3 receptor by full and partial agonists. van Hooft JA, et al. **Br J Pharmacol** 1996 Mar;117(5):839–46

Participation of 5-HT1-like and 5-HT2A receptors in the contraction of human temporal artery by 5-hydroxytryptamine and related drugs. Verheggen R, et al. **Br J Pharmacol** 1996 Jan;117(2):283–9

Multiple 5-HT receptors in the guinea-pig superior cervical ganglion. Watkins CJ, et al. **Br J Pharmacol** 1996 Jan; 117(1):21–8

Volatile general anaesthetic actions on recombinant nACh alpha 7, 5-HT3 and chimeric nACh alpha 7-5-HT3 receptors expressed in Xenopus oocytes. Zhang L, et al. **Br J Pharmacol** 1997 Feb;120(3):353–5

Activation of 5-HT1B receptors suppresses low but not high frequency synaptic transmission in the rat subicular cortex in vitro. Boeijinga PH, et al. **Brain Res** 1996 May 20; 721(1–2):59–65

Effect of corticosterone on serotonin and catecholamine receptors and uptake sites in rat frontal cortex. Crayton JW, et al. **Brain Res** 1996 Jul 29;728(2):260–2

Distribution and characterisation of the [3H](S)-zacopride labelled 5-HT3 receptor in pig forebrain. Fletcher S, et al. **Brain Res** 1996 Aug 12;729(2):281–4

Regulation of glutamate release via NMDA and 5-HT1A receptors in guinea pig dentate gyrus. Matsuyama S, et al. **Brain Res** 1996 Jul 29;728(2):175–80

Chronic amitriptyline exposure reduces 5-HT3 receptor-mediated cyclic GMP formation in NG 108-15 cells. Shimizu M, et al. **Brain Res** 1996 Nov 25; 741(1–2):89–94

Ibogaine and cocaine abuse: pharmacological interactions at dopamine and serotonin receptors. Sershen H, et al. **Brain Res Bull** 1997;42(3):161–8 (77 ref.)

Protective effects of maternal buspirone treatment on serotonin reuptake sites in ethanol-exposed offspring. Kim JA, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):190–8

Regional variability in changes in 5-HT2A receptor mRNA levels in rat brain following irreversible inactivation with EEDQ. Raghupathi RK, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):198–206

Time-course of recovery of 5-HT1A receptors and changes

in 5-HT1A receptor mRNA after irreversible inactivation with EEDQ. Raghupathi RK, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):233–42

Possible role of protein kinase C in regulation of 5-hydroxytryptamine 2A receptors in rat brain. Rahimian R, et al. **Can J Physiol Pharmacol** 1995 Dec;73(12):1686–91

The activity of dihydropyrimidine dehydrogenase from rat liver was not affected by any of five 5-hydroxytryptamine antagonists. Tateishi T, et al. **Cancer Lett** 1996 Nov 12; 108(1):1–5

Serotonin and analgesic-related headache [comment] Joseph R. **Cephalalgia** 1996 Oct;16(6):405. Comment on: Cephalalgia 1996 Oct;16(6):419–22. Comment on: Cephalalgia 1996 Oct;16(6):423–6.

Serotonin receptor adaptation in patients with analgesic-induced headache [see comments] Srikiatkhachorn A, et al. **Cephalalgia** 1996 Oct;16(6):419–22 . Comment in: Cephalalgia 1996 Oct;16(6):405.

Synthesis, affinity at 5-HT2A, 5-HT2B and 5-HT2C serotonin receptors and structure-activity relationships of a series of cyproheptadine analogues. Honrubia MA, et al. **Chem Pharm Bull (Tokyo)** 1997 May;45(5):842–8

Synthesis and affinities for dopamine (D2) and 5-hydroxytryptamine (5-HT2A) receptors of 1-(benzoylpropyl)-4-(1-oxocycloalkyl-2-ethyl)-piperazines as cyclic butyrophenone derivatives. Raviña E, et al. **Chem Pharm Bull (Tokyo)** 1996 Mar;44(3):534–41

Novel 5-hydroxytryptamine (5-HT3) receptor antagonists. Synthesis and structure-activity relationships of 9-methyl-2,3,4,9-tetrahydrothiopyrano[2,3-b]indol-4-one derivatives. Suzuki T, et al. **Chem Pharm Bull (Tokyo)** 1997 Jan;45(1):101–6

Greater effects of fluoxetine and its combination with (-)-pindolol in elevating hypothalamic serotonin in rats during dark hours. Dreshfield LJ, et al. **Chin J Physiol** 1997 Jun 30;40(2):57–61

Synthesis and pharmacology of the enantiomers of UH301: opposing interactions with 5-HT1A receptors. Hillver SE, et al. **Chirality** 1996;8(8):531–44

Circadian rhythm in the hypothermic response to serotonin1A receptor agonist 8-OH-DPAT in rats. Lu JQ, et al. **Chronobiol Int** 1997 May;14(3):267–73

Effects of 5HT2 receptor antagonists on responses to potassium depolarization in rat isolated aorta. Okoro EO, et al. **Clin Exp Pharmacol Physiol** 1997 Jan;24(1):34–9

Venlafaxine: a novel antidepressant that has a dual mechanism of action. Andrews JM, et al. **Depression** 1996; 4(2):48–56 (40 ref.)

Age-dependent differences in the rat's conditioned defensive burying behavior: effect of 5-HT1A compounds. Lopez-Rubalcava C, et al. **Dev Psychobiol** 1996 Mar; 29(2):157–69

Serotonin syndrome and drug combinations: focus on MAOI and RIMA. Hilton SE, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):113–9 (49 ref.)

Effects of metoclopramide and tropisetron on aldosterone secretion possibly due to agonism and antagonism at the 5-HT4 receptor. Sommers DK, et al. **Eur J Clin Pharmacol** 1996;50(5):371–3

Pharmacological comparison between [3H]GR 113808 binding sites and functional 5-HT4 receptors in neurons. Ansanay H, et al. **Eur J Pharmacol** 1996 Mar 7; 298(2):165–74

Comparison of relative potencies of i.v. and i.c.v. administered 8-OH-DPAT gives evidence of different sites of action for hypothermia, lower lip retraction and tail flicks. Bagdy G, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):53–8

Increased defaecation caused by 5-HT4 receptor activation in the mouse. Banner SE, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):181–6

EMD 68843, a serotonin reuptake inhibitor with selective presynaptic 5-HT1A receptor agonistic properties. Bartoszyk GD, et al. **Eur J Pharmacol** 1997 Mar 19; 322(2-3):147–53

Modulation of 5-HT receptor subtype-mediated behaviours by corticosterone. Berendsen HH, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):103–11

Imipramine increases the 5-HT1A receptor-mediated inhibition of hippocampal neurons without changing the 5-HT1A receptor binding. Bijak M, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):79–85

5-HT3 and 5-HT4 receptors and cholinergic and tachykininergic neurotransmission in the guinea-pig proximal colon. Briejer MR, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):173–80

5-Hydroxytryptamine-induced Cl- transport is mediated by 5-HT3 and 5-HT4 receptors in the rat distal colon. Budhoo MR, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):137–44

Interaction of S 21007 with 5-HT3 receptors. In vitro and in vivo characterization. Delagrange P, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):195–203

Role of the 5-HT receptor in neurogenic inflammation in Fisher 344 rat airways. Germonpré PR, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):249–55

Effects of 5-HT3 receptor-selective agents on locomotor activity in rats following injection into the nucleus accumbens and the ventral tegmental area. Gillies DM, et al. **Eur J Pharmacol** 1996 May 6;303(1-2):1–12

Attenuated 5-HT2 receptor-mediated responses in hindquarters of diabetic rats. James GM, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):109–15

Effects of 5-HT1A receptor ligands in a modified Geller-Seifter conflict model in the rat. King CM, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):121–8

SDZ NVI 085, an alpha 1A-adrenoceptor agonist with 5-HT2A receptor antagonist properties. Lachnit WG, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):83–6

Effects of chronic diazepam treatment on pre- and postsynaptic 5-HT1A receptors in the rat brain. Lanfumey L, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):137–48

Response heterogeneity of 5-HT3 receptor antagonists in a rat visceral hypersensitivity model. Langlois A, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):141–4

Facilitation by substance P and inhibition by (+)-tubocurarine of the 5-HT3 receptor-mediated Bezold-Jarisch reflex in rats. Malinowska B, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):159–64

The subtype-selective alpha 2-adrenoceptor antagonists BRL 44408 and ARC 239 also recognize 5-HT1A receptors in the rat brain. Meana JJ, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):385–8

Potentiation of fluoxetine-induced penile erections by combined blockade of 5-HT1A and 5-HT1B receptors. Millan MJ, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):R11–3

5-HT2C receptors mediate penile erections in rats: actions of novel and selective agonists and antagonists. Millan MJ, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):9–12

Antiemetic effects of N-3389, a newly synthesized 5-HT3 and 5-HT4 receptor antagonist, in ferrets. Minami M, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):333–42

The putative 5-HT1A receptor antagonist DU125530 blocks the discriminative stimulus of the 5-HT1A receptor agonist flesinoxan in pigeons. Mos J, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):145–53

Ibogaine and noribogaine potentiate the inhibition of adenylyl cyclase activity by opioid and 5-HT receptors. Rabin RA, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):343–8

Partial role of 5-HT2 and 5-HT3 receptors in the activity of antidepressants in the mouse forced swimming test. Redrobe JP, et al. **Eur J Pharmacol** 1997 May 1; 325(2-3):129–35

The antiaggressive potency of (-)-penbutolol involves both 5-HT1A and 5-HT1B receptors and beta-adrenoceptors. Sánchez C, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):1–8

Assessment of relative efficacies of 5-HT1A receptor ligands by means of in vivo animal models. Sánchez C, et al. **Eur J Pharmacol** 1996 Nov 21;315(3):245–54

Effects of co-administration of a monoamine oxidase inhibitor and a 5-HT1A receptor antagonist on 5-hydroxytryptamine cell firing and release. Sharp T, et al. **Eur J Pharmacol** 1997 Feb 5;320(1):15–9

Activities of novel aryloxyalkylimidazolines on rat 5-HT2A and 5-HT2C receptors. Siegel BW, et al. **Eur J Pharmacol** 1996 Feb 5;296(3):307–18

Electrophysiological effects of fluoxetine and duloxetine in the dorsal raphe nucleus and hippocampus. Smith JE, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):69–73

Cardiovascular effects produced by R-(+)-8-hydroxy-2-(di-n-propylamino) tetralin in the preoptic area of conscious rats. Szabó A, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):187–94

Pharmacological studies on YM992, a novel antidepressant with selective serotonin re-uptake inhibitory and 5-HT2A receptor antagonistic activity. Takeuchi H, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):27–35

Ipsapirone enhances the dopamine outflow via 5-HT1A receptors in the rat prefrontal cortex. Wędzony K, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):73–8

Effect of repeated ipsapirone treatment on hippocampal excitatory synaptic transmission in the freely behaving rat: role of 5-HT1A receptors and relationship to anxiolytic effect. Xu L, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):59–68

Hyperglycemia induced by the 5-HT receptor agonist, 5-methoxytryptamine, in rats: involvement of the peripheral 5-HT2A receptor. Yamada J, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):235–40

Epinastine (WAL 801CL) modulates the noncholinergic contraction in guinea-pig airways in vitro by a prejunctional 5-HT1-like receptor. Dupont LJ, et al. **Eur Respir J** 1996 Jul;9(7):1433–8

Behavorial responses to the 5-HT1A receptor antagonist NAN190 injected into rat CA1 hippocampal area. Belcheva I, et al. **Gen Pharmacol** 1997 Mar;28(3):435–41

Effects of repeated doses of azapirones on rat brain 5-HT1A receptors and plasma corticosterone levels. Matheson GK, et al. **Gen Pharmacol** 1996 Mar;27(2):355–61

5-HT3 receptor blocking properties of the antiparkinsonian agent, talipexole. Nishio H, et al. **Gen Pharmacol** 1996 Jul; 27(5):779–85

Prior treatment with estrogen attenuates the effects of the 5-HT1A agonist, 8-OH-DPAT, on lordosis behavior. Jackson A, et al. **Horm Behav** 1996 Jun;30(2):145–52

Preliminary experience with use of a selective 5HT3 receptor antagonist (ondansetron) to prevent high dose chemotherapy induced emesis. Parikh PM, et al. **Indian J Cancer** 1996 Mar;33(1):17–20

The effects of mirtazapine on central noradrenergic and serotonergic neurotransmission [published erratum appears in Int Clin Psychopharmacol 1996 Jun;11(2):153] de Boer T. **Int Clin Psychopharmacol** 1995 Dec;10 Suppl 4:19–23 (33 ref.)

Noradrenergic modulation of central serotonergic neurotransmission: acute and long-term actions of mirtazapine [published erratum appears in Int Clin Psychopharmacol 1996 Jun;11(2):153] Haddjeri N, et al. **Int Clin Psychopharmacol** 1995 Dec;10 Suppl 4:11–7 (30 ref.)

Two actions are better than one: avoiding self-inhibition of serotonergic neurones enhances the effects of serotonin uptake inhibitors. Romero L, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:1–8 (50 ref.)

Involvement of 5-hydroxytryptamine (5-HT)3 receptor mechanisms in regulation of basal pancreatic secretion in conscious rats. Masuda M, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1-2):58–62

Serotonin-induced vasoconstriction in rabbit femoral artery: mediation by both 5-HT2 serotonergic and alpha 1-adrenoceptors. Grandaw PP, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):854–60

Comparison of the cardiovascular effects of the novel 5-HT(1B/1D) receptor agonist, SB 209509 (VML251), and sumatriptan in dogs. Parsons AA, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):136–41

5-HT1-like receptor-mediated contraction in the human internal mammary artery. Yildiz O, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):6–10

Mixed depression and anxiety: serotonin1A receptors as a common pharmacologic link. Stahl SM. **J Clin Psychiatry** 1997;58 Suppl 8:20–6 (64 ref.)

Venlafaxine, monoamine oxidase inhibitors, and the serotonin syndrome [letter] Gitlin MJ. **J Clin Psychopharmacol** 1997 Feb;17(1):66–7

A case of neuroleptic malignant syndrome and serotonin disturbance [letter] Young C. **J Clin Psychopharmacol** 1997 Feb;17(1):65–6

Mediation of serotonin-induced hyperventilation via 5-HT3-receptor in European eel Anguilla anguilla. Janvier JJ, et al. **J Comp Physiol [B]** 1996;165(8):640–6

A novel series of 2,5-substituted tryptamine derivatives as vascular 5HT1B/1D receptor antagonists. Moloney GP, et al. **J Med Chem** 1997 Jul 18;40(15):2347–62

Serotonin stimulation of 5-HT4 receptors indirectly enhances in vivo dopamine release in the rat striatum. De Deurwaerdère P, et al. **J Neurochem** 1997 Jan; 68(1):195–203

Serotonin 5-HT1A receptors modulate hippocampal reactivity to afferent stimulation. Levkovitz Y, et al. **J Neurosci** 1997 Jul 15;17(14):5591–8

Serotonergic receptors as targets for pharmacotherapy. Kirk EE, et al. **J Neurosci Nurs** 1997 Jun;29(3):191–7 (61 ref.)

PET measurement of neuroreceptor occupancy by typical and atypical neuroleptics. Goyer PF, et al. **J Nucl Med** 1996 Jul;37(7):1122–7

VB20B7, a novel 5-HT-ergic agent with gastrokinetic activity. II. Evaluation of the gastroprokinetic activity in rats and dogs. García-Garayoa E, et al. **J Pharm Pharmacol** 1997 Jan;49(1):66–73

VB20B7, a novel 5-HT-ergic agent with gastrokinetic activity. I. Interaction with 5-HT3 and 5-HT4 receptors. Ramirez MJ, et al. **J Pharm Pharmacol** 1997 Jan;49(1):58–65

Pharmacodynamic and pharmacokinetic studies in rats of S-8-(2-Furyl)- and R-8-phenyl-2-(di-n-propylamino) tetralin, two novel 5-HT1A receptor agonists in-vitro with different properties in-vivo. Yu H, et al. **J Pharm Pharmacol** 1997 Feb;49(2):169–77

Fluoxetine selectively alters 5-hydroxytryptamine1A and gamma-aminobutyric acidB receptor-mediated hyperpolarization in area CA1, but not area CA3, hippocampal pyramidal cells. Beck SG, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):115–22

Positron emission tomographic analysis of central 5-hydroxytryptamine2 receptor occupancy in healthy volunteers treated with the novel antipsychotic agent, ziprasidone. Fischman AJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):939–47

Chronic fluoxetine induces a gradual desensitization of 5-HT1A receptors: reductions in hypothalamic and midbrain Gi and G(o) proteins and in neuroendocrine responses to a 5-HT1A agonist. Li Q, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):1035–42

A desensitization of hypothalamic 5-HT1A receptors by repeated injections of paroxetine: reduction in the levels of G(i) and G(o) proteins and neuroendocrine responses, but not in the density of 5-HT1A receptors. Li Q, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1581–90

LSD and the phenethylamine hallucinogen DOI are potent partial agonists at 5-HT2A receptors on interneurons in rat piriform cortex. Marek GJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1373–82

S 15535, a novel benzodioxopiperazine ligand of serotonin (5-HT)1A receptors: I. Interaction with cloned human (h)5-HT1A, dopamine hD2/hD3 and h alpha2A-adrenergic receptors in relation to modulation of cortical monoamine release and activity in models of potential antidepressant activity. Millan MJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):132–47

S 15535, a novel benzodioxopiperazine ligand of serotonin (5-HT)1A receptors: II. Modulation of hippocampal serotonin release in relation to potential anxiolytic properties. Millan MJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):148–61

Inhibition of 5-hydroxytryptamine type 2A receptor-induced currents by n-alcohols and anesthetics. Minami K, et al.

J Pharmacol Exp Ther 1997 Jun;281(3):1136–43

In vitro and in vivo characterization of the dopamine D4 receptor, serotonin 5-HT2A receptor and alpha-1 adrenoceptor antagonist (R)-(+)-2-amino-4-(4-fluorophenyl)-5-[1-[4-(4-fluorophenyl)-4-oxobutyl] pyrrolidin-3-yl]thiazole (NRA0045). Okuyama S, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):56–63

Direct injection of 5-HT2A receptor agonists into the medial prefrontal cortex produces a head-twitch response in rats. Willins DL, et al. **J Pharmacol Exp Ther** 1997 Aug; 282(2):699–706

The dipeptide carnosine constricts rabbit saphenous vein as a zinc complex apparently via a serotonergic receptor. O'Dowd A, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):535–43

Partial agonistic activity of R- and S-enantiomers of 8-OH-DPAT at 5-HT1A receptors. Hadrava V, et al. **J Psychiatry Neurosci** 1996 Mar;21(2):101–8

Brain 5-hydroxytryptamine uptake sites labeled with [3H]paroxetine in antidepressant drug-treated depressed suicide victims and controls. Lawrence KM, et al. **J Psychiatry Neurosci** 1997 May;22(3):185–91

The effect of central and systemic injection of the 5-HT1A receptor agonist 8-OHDPAT and the 5-HT1A receptor antagonist WAY100635 on periaqueductal grey-induced defence behaviour. Beckett S, et al. **J Psychopharmacol (Oxf)** 1997;11(1):35–40

The selective 5-hydroxytryptamine (5-HT)4-receptor agonist RS67506 enhances lower intestinal propulsion in mice. Nagakura Y, et al. **Jpn J Pharmacol** 1997 Jun; 74(2):209–12

Species differences in the 5-hydroxytryptamine-induced contraction in the isolated distal ileum. Yamano M, et al. **Jpn J Pharmacol** 1997 Jul;74(3):267–74

A novel class of 5-HT2A receptor antagonists: aryl aminoguanidines. Bryant HU, et al. **Life Sci** 1996; 59(15):1259–68

Serotonin 5-HT3 and 5-HT4 receptor antagonists. Gaster LM, et al. **Med Res Rev** 1997 Mar;17(2):163–214 (311 ref.)

Direct inhibition of 5-hydroxytryptamine3 receptors by antagonists of L-type Ca2+ channels. Hargreaves AC, et al. **Mol Pharmacol** 1996 Nov;50(5):1284–94

5-Hydroxytryptamine1B receptors modulate the effect of cocaine on c-fos expression: converging evidence using 5-hydroxytryptamine1B knockout mice and the 5-hydroxytryptamine1B/1D antagonist GR127935. Lucas JJ, et al. **Mol Pharmacol** 1997 May;51(5):755–63

A specific inhibitory action of lithium on the 5-HT2c receptor expressed in Xenopus laevis oocytes. Matsuoka T, et al. **Mol Pharmacol** 1997 Mar;51(3):471–4

Mechanism of action of clozapine-induced modification of motor behavior in an animal model of the "super-off" phenomenon. Dziewczapolski G, et al. **Mov Disord** 1997 Mar;12(2):159–66

Repeated treatment with antidepressant drugs induces subsensitivity to the excitatory effect of 5-HT4 receptor activation in the rat hippocampus. Bijak M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):14–9

Interactions of GR127935, a 5-HT(1B/D) receptor ligand, with functional 5-HT receptors. De Vries P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):423–30

Effects of chronic treatment with fluoxetine and citalopram on 5-HT uptake, 5-HT1B autoreceptors, 5-HT3 and 5-HT4 receptors in rats. Gobbi M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):22–8

Comparison of 5-HT4 receptors in guinea-pig colon and rat oesophagus: effects of novel agonists and antagonists. Leung E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):145–56

In vitro and in vivo effects of the anorectic agent dexfenfluramine on the central serotoninergic neuronal systems of non-human primates. A comparison with the rat. Mennini T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):641–7

Agonist activity of antimigraine drugs at recombinant human 5-HT1A receptors: potential implications for prophylactic and acute therapy. Newman-Tancredi A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):682–8

Presynaptic inhibitory serotonin autoreceptors in the human hippocampus. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):393–6

Operational characteristics of the 5-HT1-like receptors mediating external carotid vasoconstriction in vagosympathectomized dogs. Close resemblance to the 5-HT1D receptor subtype. Villalón CM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):550–6

Critical issues in the antisense inhibition of brain gene expression in vivo: experiences targetting the 5-HT1A receptor. Le Corre SM, et al. **Neurochem Int** 1997 Sep; 31(3):349–62

Basal forebrain cholinergic immunolesion by 192IgG-saporin: evidence for a presynaptic location of subpopulations of alpha 2- and beta-adrenergic as well as 5-HT2A receptors on cortical cholinergic terminals. Heider M, et al. **Neurochem Res** 1997 Aug;22(8):957–66

Differential effects of three acute stressors on the serotonin 5-HT1A receptor system in rat brain. Raghupathi RK, et al. **Neuroendocrinology** 1997 Apr;65(4):246–58

Cloning and characterization of the guinea pig 5-HT1F receptor subtype: a comparison of the pharmacological profile to the human species homolog. Adham N, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):569–76

(-)-pindolol and (+/-)-tertatolol affect rat hippocampal 5-HT levels through mechanisms involving not only 5-HT1A, But also 5-HT1B receptors. Assie MB, et al. **Neuropharmacology** 1996 Feb;35(2):213–22

Functional and radioligand binding characterization of rat 5-HT6 receptors stably expressed in HEK293 cells. Boess FG, et al. **Neuropharmacology** 1997 Apr-May; 36(4-5):713–20

Activation of 5-HT2B receptors in the medial amygdala causes anxiolysis in the social interaction test in the rat. Duxon MS, et al. **Neuropharmacology** 1997 Apr-May; 36(4-5):601–8

A comparative study of the effects of selective and non-selective 5-HT2 receptor subtype antagonists in rat and mouse models of anxiety. Griebel G, et al. **Neuropharmacology** 1997 Jun;36(6):793–802

Autoreceptor antagonists enhance the effect of the reuptake inhibitor citalopram on extracellular 5-HT: this effect persists after repeated citalopram treatment. Gundlah C, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):475–82

Radioligand binding and photoaffinity labelling studies show a direct interaction of phenothiazines at 5-HT3 receptors. Lummis SC, et al. **Neuropharmacology** 1997 Apr-May; 36(4-5):665–70

Agonist and inverse agonist efficacy at human recombinant serotonin 5-HT1A receptors as a function of receptor:G-protein stoichiometry. Newman-Tancredi A, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):451–9

How efficacious are 5-HT1B/D receptor ligands: an answer from GTP gamma S binding studies with stably transfected C6-glial cell lines. Pauwels PJ, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):499–512

Effects of 5-HT agonists, selective for different receptor subtypes, on oxytocin, CCK, gastrin and somatostatin plasma levels in the rat. Uvnäs-Moberg K, et al. **Neuropharmacology** 1996;35(11):1635–40

The 5-HT1D receptor antagonist GR-127,935 prevents inhibitory effects of sumatriptan but not CP-122,288 and 5-CT on neurogenic plasma extravasation within guinea pig dura mater. Yu XJ, et al. **Neuropharmacology** 1997 Jan; 36(1):83–91

Addition of lithium to chronic antidepressant treatment potentiates presynaptic serotonergic function without changes in serotonergic receptors in the rat cerebral cortex. Okamoto Y, et al. **Neuropsychobiology** 1996;33(1):17–20

Selective activation of postsynaptic 5-HT1A receptors induces rapid antidepressant response. Blier P, et al. **Neuropsychopharmacology** 1997 May;16(5):333–8

Effects of sleep deprivation on serotonergic neuronal activity in the dorsal raphe nucleus of the freely moving cat. Gardner JP, et al. **Neuropsychopharmacology** 1997 Aug; 17(2):72–81

Chronic citalopram and fluoxetine treatments upregulate 5-HT2c receptors in the rat choroid plexus. Laakso A, et al. **Neuropsychopharmacology** 1996 Aug;15(2):143–51

Effect of pindolol on the function of pre- and postsynaptic 5-HT1A receptors: in vivo microdialysis and electrophysiological studies in the rat brain [published erratum appears in Neuropsychopharmacology 1997 Jan;16(1):91] Romero L, et al. **Neuropsychopharmacology** 1996 Oct;15(4):349–60

Agonist-promoted down-regulation and functional desensitization in two naturally occurring variants of the human serotonin1A receptor. Rotondo A, et al. **Neuropsychopharmacology** 1997 Jul;17(1):18–26

Neuroendocrine effects of a 20-mg citalopram infusion in healthy males. A placebo-controlled evaluation of citalopram as 5-HT function probe. Seifritz E, et al. **Neuropsychopharmacology** 1996 Apr;14(4):253–63

Comparison of the effects of sertraline and its metabolite desmethylsertraline on blockade of central 5-HT reuptake in vivo. Sprouse J, et al. **Neuropsychopharmacology** 1996 Apr;14(4):225–31

5-HT1E receptor agonists inhibit neurogenic dural inflammation in guinea pigs. Johnson KW, et al. **Neuroreport** 1997 Jul 7;8(9-10):2237–40

Contribution of central 5-HT2 receptors in the occurrence of locomotor activity and myoclonia in freely moving rats exposed to high pressure. Kriem B, et al. **Neuroreport** 1996 Nov 4;7(15-17):2687–90

Efficacy and side-effects of clozapine not associated with variation in the 5-HT2C receptor. Rietschel M, et al. **Neuroreport** 1997 May 27;8(8):1999–2003

The role of 5HT3 in nociceptive processing in the rat spinal cord: results from behavioural and electrophysiological studies. Ali Z, et al. **Neurosci Lett** 1996 Apr 26;208(3):203–7

Identification of central 5-HT and 5-HT1A receptors in the turtle brain (Chrysemys picta). Larson-Prior LJ, et al. **Neurosci Lett** 1996 Jul 12;212(2):79–82

Dual effect of serotonin on formalin-induced nociception in the rat spinal cord. Oyama T, et al. **Neurosci Res** 1996 Jun;25(2):129–35

The endogenous cerebral tetrapeptide 5-HT-moduline reduces in vivo the functional activity of central 5-HT1B receptors in the rat. Seguin L, et al. **Neurosci Res** 1997 Mar;27(3):277–80

Electrophysiological studies on the actions of hallucinogenic drugs at 5-HT2 receptors in rat brain. Aghajanian GK. **NIDA Res Monogr** 1994;146:183–202 (49 ref.)

Serotonin receptor involvement in an animal model of the acute effects of hallucinogens. Geyer MA, et al. **NIDA Res Monogr** 1994;146:124–56 (59 ref.)

Structure and function of serotonin 5-HT2 receptors. Shih JC, et al. **NIDA Res Monogr** 1994;146:284–97 (22 ref.)

Hallucinogens acting at 5-HT receptors: toward a mechanistic understanding at atomic resolution. Weinstein H, et al. **NIDA Res Monogr** 1994;146:241–62 (63 ref.)

Molecular modeling of the interaction of LSD and other hallucinogens with 5-HT2 receptors. Westkaemper RB, et al. **NIDA Res Monogr** 1994;146:263–83 (32 ref.)

Evaluation of radioiodo-4-amino-N-[1-[3-(4-fluorophenoxy)-propyl]-4- methyl-4-piperidinyl]-5-iodo-2-methoxybenzamide as a potential 5HT2 receptor tracer for SPE(C)T. Terriere D, et al. **Nucl Med Biol** 1995 Nov;22(8):1005–5

[18F]fluoroalkyl analogues of the potent 5-HT1A antagonist WAY 100635: radiosyntheses and in vivo evaluation. Wilson AA, et al. **Nucl Med Biol** 1996 May;23(4):487–90

An ethopharmacological analysis of selective activation of 5-HT1A receptors: the mouse 5-HT1A syndrome. Blanchard RJ, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):897–908

The mechanism by which the selective 5-HT1A receptor antagonist S-(-) UH 301 produces head-twitches in mice. Darmani NA, et al. **Pharmacol Biochem Behav** 1996 Sep; 55(1):1–10

The stimulatory and inhibitory components of cocaine's actions on the 5-HTP-induced 5-HT2A receptor response. Darmani NA, et al. **Pharmacol Biochem Behav** 1996 Nov; 55(3):387–96

Effect of third ventricle administration of L-694,247, a selective 5-HT1D receptor agonist, on water intake in rats. De Castro-e-Silva E, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):749–54

5-HT1A agonists induce central cholinergic antinociception. Galeotti N, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):835–41

Buspirone enhances immobility in the forced swim test in mice. Kitamura Y, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):445–51

Intravenous cocaine self-administration in mice lacking 5-HT1B receptors. Rocha BA, et al. **Pharmacol Biochem Behav** 1997 Jul;57(3):407–12

Elicited PGO waves in rats: lack of 5-HT1A inhibition in putative pontine generator region. Sanford LD, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):323–7

GYKI-46 903, a non-competitive antagonist for 5-HT3 receptors. Csillik-Perczel V, et al. **Pharmacol Toxicol** 1996 Jul;79(1):32–9

5-HT3 receptor antagonist MDL 72222 dose-dependently attenuates cocaine- and amphetamine-induced elevations of extracellular dopamine in the nucleus accumbens and the dorsal striatum. Kankaanpää A, et al. **Pharmacol Toxicol** 1996 May;78(5):317–21

Effects of ergotamine and dihydroergotamine on 5-hydroxytryptamine-2A receptors in the isolated rat aorta. Kalkman HO, et al. **Pharmacology** 1996 Dec; 53(6):351–5

Buspirone analogues as ligands of the 5-HT1A receptor. II: Capacity factors as chromatographic parameter of lipophilicity evaluation in a series of 5-HT1A and 5-HT2A receptor ligands. Chilmonczyk Z, et al. **Pharmazie** 1996 Dec;51(12):924–7

MP-3022, a new putative antagonist at pre- and postsynaptic 5-HT1A receptors. Przegaliński E, et al. **Pol J Pharmacol** 1996 Jan-Feb;48(1):13–22

Blockage of 5HT2C serotonin receptors by fluoxetine (Prozac). Ni YG, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2036–40

Typical and atypical antipsychotic drugs are potent antagonists of the relaxant 5-hydroxytryptamine receptor in the smooth muscle of canine coronary artery. Terrón JA. **Proc West Pharmacol Soc** 1996;39:23–5

Effect of citalopram on the desensitization of serotonin-2A receptor-mediated calcium mobilization in rat glioma cells. Kagaya A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jan; 20(1):157–66

Serotonergic serotonin 2 receptor modulation on DOPAC and 5-HIAA levels in rat striatum and nucleus accumbens: microdialysis studies of freely moving rats. Liu Y, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Feb; 20(2):307–22

A pharmacological analysis of serotonergic receptors: effects of their activation of blockade in learning. Meneses A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Feb; 21(2):273–96 (121 ref.)

Improvement of schizophrenic symptoms and changes in plasma HVA concentrations, plasma anti-D2 and anti-5-HT2 receptor activities with clozapine. Yamada K, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):291–4

Biological and behavioral responses to D-amphetamine, alone and in combination with the serotonin3 receptor antagonist ondansetron, in healthy volunteers. Grady TA, et al. **Psychiatry Res** 1996 Aug 30;64(1):1–10

Serotonergic ethanol effects and auditory evoked dipole

activity in alcoholic and healthy subjects. Hegerl U, et al. **Psychiatry Res** 1996 Jun 26;63(1):47–55

Platelet serotonergic indices in major depression: up-regulation of 5-HT2A receptors unchanged by antidepressant treatment. Hrdina PD, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):73–85

Modulation of learned helplessness by 5-hydroxytryptamine2A receptor antisense oligodeoxynucleotides. Papolos DF, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):197–203

Role of serotonin3 receptors in prolactin release induced by electroconvulsive therapy: a study with ondansetron. Yatham LN, et al. **Psychiatry Res** 1996 Feb 28;60(1):33–9

On the elevated plus-maze the anxiolytic-like effects of the 5-HT(1A) agonist, 8-OH-DPAT, but not the anxiogenic-like effects of the 5-HT(1A) partial agonist, buspirone, are blocked by the 5-HT1A antagonist, WAY 100635. Collinson N, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):35–43

Activation of acetylcholine receptors and 5-HT2 receptors have additive effects in the suppression of neocortical high-voltage spindles in aged rats. Jäkälä P, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):270–80

CP-94, 253: a selective serotonin1B (5-HT1B) agonist that promotes satiety. Lee MD, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):264–70

Evidence that m-chlorophenylpiperazine-induced hyperthermia in rats is mediated by stimulation of 5-HT2C receptors. Mazzola-Pomietto P, et al. **Psychopharmacology (Berl)** 1996 Feb;123(4):333–9

Effect of imipramine treatments on the 5-HT1A-receptor-mediated inhibition of panic-like behaviours in rats. Mongeau R, et al. **Psychopharmacology (Berl)** 1997 Jun;131(4):321–8

Circadian rhythm in the responsiveness of central 5-HT2A receptor to DOI in rats. Nagayama H, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):113–6

5-HT modulation of auditory and visual sensorimotor gating: II. Effects of the 5-HT2A antagonist MDL 100,907 on disruption of sound and light prepulse inhibition produced by 5-HT agonists in Wistar rats. Padich RA, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):107–16

Interactions of selective serotonin reuptake inhibitors with the serotonin 5-HT2c receptor. Pälvimäki EP, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):234–40

Serotonin1b receptor stimulation enhances dopamine-mediated reinforcement. Parsons LH, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):150–60

Somatodendritic 5-HT1A receptors are critically involved in the anxiolytic effects of 8-OH-DPAT. Remy SM, et al. **Psychopharmacology (Berl)** 1996 May;125(1):89–91

Cocaine-induced convulsions: pharmacological antagonism at serotonergic, muscarinic and sigma receptors. Ritz MC, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):299–310

Effect of paroxetine and nefazodone on 5-HT1A receptor sensitivity. Sargent P, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):296–302

Functional behavioral homology between rat 5-HT1B and guinea pig 5-HT1D receptors in the modulation of prepulse inhibition of startle. Sipes TE, et al. **Psychopharmacology (Berl)** 1996 Jun;125(3):231–7

Effects of 5-HT1A receptor agonists, partial agonists and a silent antagonist on the performance of the conditioned emotional response test in the rat. Stanhope KJ, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):293–303

Behavioral stimulation without alteration of beta and 5-HT receptors and adenylate cyclase activity in rat brain after chronic sertraline administration. Tadokoro C, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):124–30

Behavioural evidence that d-fenfluramine-induced anorexia in the rat is not mediated by the 5-HT1A receptor subtype. Vickers SP, et al. **Psychopharmacology (Berl)** 1996 May; 125(2):168–75

(-)Alprenolol potentiates the disrupting effects of dizocilpine on sensorimotor function in the rat. Zhang J, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):281–8

Pharmacological and biochemical characterization of the mouse 5HT5A serotonin receptor heterologously produced in the yeast Saccharomyces cerevisiae. Bach M, et al. **Receptors Channels** 1996;4(2):129–39

Chronic administration of the 5-HT1A receptor agonist 8-OH-DPAT differentially desensitizes 5-HT1A autoreceptors of the dorsal and median raphe nuclei. Kreiss DS, et al. **Synapse** 1997 Feb;25(2):107–16

Appetite suppression by commonly used drugs depends on 5-HT receptors but not on 5-HT availability [see comments] Curzon G, et al. **Trends Pharmacol Sci** 1997 Jan;18(1):21–5 (51 ref.). Comment in: Trends Pharmacol Sci 1997 Jun;18(6):191–2.

Allosteric modulation of 5-HT3 receptors: focus on alcohols and anaesthetic agents. Parker RM, et al. **Trends Pharmacol Sci** 1996 Mar;17(3):95–9 (38 ref.)

Serotonin syndrome from venlafaxine-tranylcypromine interaction. Brubacher JR, et al. **Vet Hum Toxicol** 1996 Oct;38(5):358–61

[The 5-HT1A receptor: a new effective principle in psychopharmacologic therapy?] Davids E, et al. **Fortschr Neurol Psychiatr** 1996 Nov;64(11):460–72 (135 ref.) (Eng. Abstr.) **(Ger)**

[The role of serotonergic system in the mechanism of action of antidepressant agents] Wielosz M. **Psychiatr Pol** 1996 Nov-Dec;30(6):963–72 (32 ref.) (Eng. Abstr.) **(Pol)**

GENETICS

Investigation of genetic risk factors associated with alcoholism. Harada S, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9 Suppl):293A–296A

Serotonin2C receptors and serotonin2C receptor-mediated phosphoinositide hydrolysis in the brain of alcohol-preferring and alcohol-nonpreferring rats. Pandey SC, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):1038–42

Reduced sensitivity to ethanol reward, but not ethanol aversion, in mice lacking 5-HT1B receptors. Risinger FO, et al. **Alcohol Clin Exp Res** 1996 Nov;20(8):1401–5

Genomic imprinting of the human serotonin-receptor (HTR2) gene involved in development of retinoblastoma. Kato MV, et al. **Am J Hum Genet** 1996 Nov;59(5):1084–90

5-HT2C (HTR2C) serotonin receptor gene polymorphism associated with the human personality trait of reward dependence: interaction with dopamine D4 receptor (D4DR) and dopamine D3 receptor (D3DR) polymorphisms. Ebstein RP, et al. **Am J Med Genet** 1997 Feb 21;74(1):65–72

No association between schizophrenia and the serotonin receptor 5HTR2a in an Italian population. Verga M, et al. **Am J Med Genet** 1997 Feb 21;74(1):21–5

5-HT1B receptor knock out--behavioral consequences. Ramboz S, et al. **Behav Brain Res** 1996;73(1–2):305–12

Determination of transcription initiation sites and promoter activity of the human 5-HT2A receptor gene. Shih JC, et al. **Behav Brain Res** 1996;73(1–2):59–62

Transcriptional regulation of the 5-HT2A receptor. Toth M. **Behav Brain Res** 1996;73(1–2):183–6 (17 ref.)

Human 5-HT5A receptor gene: systematic screening for DNA sequence variation and linkage mapping on chromosome 7q34-q36 using a polymorphism in the 5' untranslated region. Shimron-Abarbanell D, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):6–9

Effects of antidepressants on intracellular Ca2+ mobilization in CHO cells transfected with the human 5-HT2C receptors. Akiyoshi J, et al. **Biol Psychiatry** 1996 Jun 15; 39(12):1000–8

Two naturally occurring amino acid substitutions of the 5-HT2A receptor: similar prevalence in patients with seasonal affective disorder and controls. Ozaki N, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1267–72

Serotonin2A receptor gene polymorphism in mood disorders. Zhang HY, et al. **Biol Psychiatry** 1997 Apr 1;41(7):768–73

Cloning, expression and pharmacology of a truncated splice variant of the human 5-HT7 receptor (h5-HT7b). Jasper JR, et al. **Br J Pharmacol** 1997 Sep;122(1):126–32

Sequential onset of three 5-HT receptors during the 5-hydroxytryptaminergic differentiation of the murine 1C11 cell line. Kellermann O, et al. **Br J Pharmacol** 1996 Jul;118(5):1161–70

Recombinant saphenous vein 5-HT1B receptors of the rabbit: comparative pharmacology with human 5-HT1B receptors. Wurch T, et al. **Br J Pharmacol** 1997 Jan; 120(1):153–9

Immuno-localization of serotonin 5-HT6 receptor-like material in the rat central nervous system. Gérard C, et al. **Brain Res** 1997 Jan 23;746(1–2):207–19

The type 3 serotonin receptor is expressed in a subpopulation of GABAergic neurons in the rat neocortex and hippocampus. Morales M, et al. **Brain Res** 1996 Aug 26; 731(1–2):199–202

Serotonergic lesioning differentially affects presynaptic and postsynaptic 5-HT1B receptor mRNA levels in rat brain. Neumaier JF, et al. **Brain Res** 1996 May 25;722(1–2):50–8

Cloning and developmental expression of 5-HT1A receptor gene in Xenopus laevis. Marracci S, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):67–77

Migraine association and linkage analyses of the human 5-hydroxytryptamine (5HT2A) receptor gene. Nyholt DR, et al. **Cephalalgia** 1996 Nov;16(7):463–7

RNA editing: rewriting receptors. O'Connell MA. **Curr Biol** 1997 Jul 1;7(7):R437–9 (28 ref.)

Assignment of the 5-hydroxytryptamine (serotonin) receptor 5A gene (HTR5A) to human chromosome band 7q36.1. Schanen NC, et al. **Cytogenet Cell Genet** 1996;72(2–3):187–8

Functional characterisation of a 5-HT2 receptor cDNA cloned from Lymnaea stagnalis. Gerhardt CC, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):249–58

Genomic responses to 5-HT1A or 5-HT2A/2C receptor activation is differentially regulated in four regions of rat brain. Tilakaratne N, et al. **Eur J Pharmacol** 1996 Jun 27; 307(2):211–7

GR127935 acts as a partial agonist at recombinant human 5-HT1D alpha and 5-HT1D beta receptors. Watson JM, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):365–72

Cloning, expression and pharmacology of the mouse 5-HT(4L) receptor. Claeysen S, et al. **FEBS Lett** 1996 Nov 25;398(1):19–25

Mutational analysis of the mouse 5-HT7 receptor: importance of the third intracellular loop for receptor-G-protein interaction. Obosi LA, et al. **FEBS Lett** 1997 Jul 28; 412(2):321–4

Molecular cloning of a putative serotonin receptor gene from barnacle, Balanus amphitrite. Kawahara H, et al. **Gene** 1997 Jan 15;184(2):245–50

Molecular identification of a G protein-coupled receptor family which is expressed in planarians. Saitoh O, et al. **Gene** 1997 Aug 11;195(1):55–61

Molecular cloning of 5-hydroxytryptamine (5-HT) type 1 receptor genes from the Japanese puffer fish, Fugu rubripes. Yamaguchi F, et al. **Gene** 1997 Jun 3;191(2):219–23

The human serotonin 5-HT2C receptor: complete cDNA, genomic structure, and alternatively spliced variant. Xie E, et al. **Genomics** 1996 Aug 1;35(3):551–61

Association between serotonin type 2 receptor (HTR2) and bronchial asthma in humans [letter] Mao HQ, et al. **J Med Genet** 1996 Jun;33(6):525

Molecular cloning and functional expression of a serotonin receptor from Caenorhabditis elegans. Olde B, et al. **J Mol Neurosci** 1997 Feb;8(1):53–62

Differential regulation by methylenedioxymethamphetamine of 5-hydroxytryptamine1A receptor density and mRNA expression in rat hippocampus, frontal cortex, and brainstem: the role of corticosteroids. Aguirre N, et al. **J Neurochem** 1997 Mar;68(3):1099–105

Four 5-hydroxytryptamine7 (5-HT7) receptor isoforms in human and rat produced by alternative splicing: species differences due to altered intron-exon organization. Heidmann DE, et al. **J Neurochem** 1997 Apr;68(4):1372–81

A naturally occurring amino acid substitution of the human serotonin 5-HT2A receptor influences amplitude and timing of intracellular calcium mobilization. Ozaki N, et al. **J Neurochem** 1997 May;68(5):2186–93

Identification of an endogenous 5-hydroxytryptamine2A receptor in NIH-3T3 cells: agonist-induced down-regulation involves decreases in receptor RNA and number. Saucier C, et al. **J Neurochem** 1997 May; 68(5):1998–2011

Sequence and functional analysis of cloned guinea pig and rat serotonin 5-HT1D receptors: common pharmacological features within the 5-HT1D receptor subfamily. Wurch T, et al. **J Neurochem** 1997 Jan;68(1):410–8

Dysregulation of diurnal rhythms of serotonin 5-HT2C and corticosteroid receptor gene expression in the hippocampus with food restriction and glucocorticoids. Holmes MC, et al. **J Neurosci** 1997 Jun 1;17(11):4056–65

Postnatal development of serotonergic innervation, 5-HT1A receptor expression, and 5-HT responses in rat motoneurons. Talley EM, et al. **J Neurosci** 1997 Jun 1; 17(11):4473–85

The 5-HT2A (serotonin2A) receptor gene in the aetiology, pathophysiology and pharmacotherapy of schizophrenia. Harrison PJ, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):18–20

Meta-analysis of association between the 5-HT2a receptor T102C polymorphism and schizophrenia. EMASS Collaborative Group. European Multicentre Association Study of Schizophrenia [letter] Williams J, et al. **Lancet** 1997 Apr 26;349(9060):1221

Evaluation of a Cys23Ser mutation within the human 5-HT2C receptor gene: no evidence for an association of the mutant allele with obesity or underweight in children, adolescents and young adults. Lentes KU, et al. **Life Sci** 1997;61(1):PL9–16

Localization of the gene for the human serotonin 5-HT(2B) receptor to chromosome 2. Horton YM, et al. **Mol Membr Biol** 1996 Jan-Mar;13(1):29–31

Identification, molecular cloning, and distribution of a short variant of the 5-hydroxytryptamine2C receptor produced by alternative splicing. Canton H, et al. **Mol Pharmacol** 1996 Oct;50(4):799–807

The human serotonin 7 (5-HT7) receptor gene: genomic organization and systematic mutation screening in schizophrenia and bipolar affective disorder. Erdmann J, et al. **Mol Psychiatry** 1996 Nov;1(5):392–7

DRD2, DRD3 and 5HT2A receptor genes polymorphisms in obsessive-compulsive disorder. Nicolini H, et al. **Mol Psychiatry** 1996 Dec;1(6):461–5

Sound-induced seizures in serotonin 5-HT2c receptor mutant mice. Brennan TJ, et al. **Nat Genet** 1997 Aug;16(4):387–90

Regulation of serotonin-2C receptor G-protein coupling by RNA editing [see comments] Burns CM, et al. **Nature** 1997 May 15;387(6630):303–8. Comment in: Nature 1997 May 15;387(6630):242–3.

RNA editing. Message change for a fat controller [news; comment] Scott J. **Nature** 1997 May 15;387(6630):242–3. Comment on: Nature 1997 May 15;387(6630):303–8.

Differences in ligand binding profiles between cloned rabbit and human 5-HT1D alpha and 5-HT1D beta receptors: ketanserin and methiothepin distinguish rabbit 5-HT1D receptor subtypes. Bard JA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):237–44

Distribution of 5-HT4 receptor mRNA in the rat brain. Ullmer C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):210–2

Analysis of the ligand binding site of the 5-HT3 receptor using site directed mutagenesis: importance of glutamate 106. Boess FG, et al. **Neuropharmacology** 1997 Apr-May; 36(4–5):637–47

5-HT receptor classification and nomenclature: towards a harmonization with the human genome. Hoyer D, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):419–28 (65 ref.)

Intact 5-HT2A receptor exons and the adjoining intron regions in schizophrenia. Ishigaki T. **Neuropsychopharmacology** 1996 Sep;15(3):323

Allelic variation in the serotonin 5-HT2C receptor gene and migraine. Burnet PW, et al. **Neuroreport** 1997 Aug 18; 8(12):2651–3

Clozapine response and the 5HT2C Cys23Ser polymorphism. Malhotra AK, et al. **Neuroreport** 1996 Sep 2;7(13):2100–2

Efficacy and side-effects of clozapine not associated with

variation in the 5-HT2C receptor. Rietschel M, et al. **Neuroreport** 1997 May 27;8(8):1999-2003

Developmental expression of 5-HT7 receptor mRNA in rat brain visual structures after neonatal enucleation. Venero JL, et al. **Neuroreport** 1997 Apr 14;8(6):1531-5

5-HT2A receptor and bipolar affective disorder: association studies in affected patients. Arranz MJ, et al. **Neurosci Lett** 1997 Mar 14;224(2):95-8

Analysis of a structural polymorphism in the 5-HT2A receptor and clinical response to clozapine. Arranz MJ, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):177-8

Allelic association analysis of the 5-HT2C receptor gene in bipolar affective disorder. Gutiérrez B, et al. **Neurosci Lett** 1996 Jul 5;212(1):65-7

Expression of 5-HT7 receptor mRNA in rat brain during postnatal development. Vizuete ML, et al. **Neurosci Lett** 1997 May 9;227(1):53-6

Functional characterization of two 5-HT3 receptor splice variants isolated from a mouse hippocampal cell line. Glitsch M, et al. **Pflugers Arch** 1996 May;432(1):134-43

5-HT2 receptor gene locus: association with schizophrenia or treatment response not detected. Nimgaonkar VL, et al. **Psychiatr Genet** 1996 Spring;6(1):23-7

Association study between bipolar disorder and candidate genes involved in dopamine-serotonin metabolism and GABAergic neurotransmission: a preliminary report [letter] Oruč L, et al. **Psychiatr Genet** 1996 Winter;6(4):213-7 (40 ref.)

Further selection of rat lines differing in 5-HT-1A receptor sensitivity: behavioral and functional correlates. Overstreet DH, et al. **Psychiatr Genet** 1996 Fall;6(3):107-17

Schizophrenia, chronic hospitalization and the 5-HT2C receptor gene. Segman RH, et al. **Psychiatr Genet** 1997 Summer;7(2):75-8

No association between bipolar affective disorder and a serotonin receptor (5-HT2A) polymorphism. Mahieu B, et al. **Psychiatry Res** 1997 May 5;70(2):65-9

Alignment of receptor nomenclature with the human genome: classification of 5-HT1B and 5-HT1D receptor subtypes. Hartig PR, et al. **Trends Pharmacol Sci** 1996 Mar; 17(3):103-5 (22 ref.)

[Molecular genetic approach to schizophrenia: direct analysis of 5-HT receptor genes] Ozaki N. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Oct; 16(5):175-80 (23 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Immunogenic and antigenic analysis of the extracellular loops of the serotoninergic 5-HT1A receptor. Verdot L, et al. **Blood Press Suppl** 1996;3:8-10

METABOLISM

Stereochemistry of serotonin receptor ligands from crystallographic data. Crystal structures of NAN-190.HBr, 1-phenylbiguanide, MDL 72222 and mianserin.HCl and selectivity criteria towards 5-HT1, 5-HT2, and 5-HT3 receptor subtypes. Dalpiaz A, et al. **Acta Crystallogr B** 1996 Jun 1;52 (Pt 3):509-18

5-HT1D and 5-HT2B receptors mediate contraction of smooth muscle in human small intestine. Borman RA, et al. **Ann N Y Acad Sci** 1997 May 30;812:222-3

Heterogeneity of 5-HT receptors mediating secretion in the human intestine. Borman RA, et al. **Ann N Y Acad Sci** 1997 May 30;812:224-5

Acylation differentiates two forms of agonist binding to rat 5-HT1A receptors. Palmitoylated G protein--agonist states? Dacquet C, et al. **Ann N Y Acad Sci** 1997 May 30;812:178

Cloned and native guinea pig 5-ht7 receptors. Characterization using an integrated approach. Eglen RM, et al. **Ann N Y Acad Sci** 1997 May 30;812:216-7

13-Tert-butylergoline derivatives. Assessment of functional serotonergic 5-HT1A component. Fornaretto MG, et al. **Ann N Y Acad Sci** 1997 May 30;812:226-8

[3H]5-HT binding to 5-HT1nonA-nonB receptors in rat hypothalamus is not representative of 5-HT7 receptors. Gobbi M, et al. **Ann N Y Acad Sci** 1997 May 30;812:167-8

Sodium dependency of constitutive activity at 5-HT1D alpha/1D beta receptors. Gray DW, et al. **Ann N Y Acad Sci** 1997 May 30;812:236-9

High level expression of the human 5-HT1D alpha serotonin receptor using the Semliki Forest Virus expression system. Stables J, et al. **Ann N Y Acad Sci** 1997 May 30;812:229-30

GR127935 antagonizes the 5-HT1-like receptor-mediated external carotid vasoconstriction in vagosympathectomized dogs. Villalón CM, et al. **Ann N Y Acad Sci** 1997 May 30;812:207-8

Binding affinity of sarpogrelate, a new antiplatelet agent, and its metabolite for serotonin receptor subtypes. Nishio H, et al. **Arch Int Pharmacodyn Ther** 1996 Mar-Apr; 331(2):189-202

3-(omega-Aminoalkyl)-5,5-dialkyl(or spirocycloalkyl-1',5-)hydantoins as new 5-HT1A and 5-HT2A receptor ligands. Byrtus H, et al. **Arch Pharm (Weinheim)** 1996 Jun;329(6):283-90

Structure-activity relationship studies of CNS agents, Part 31: Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment--new 5-HT1A receptor ligands. Paluchowska MH, et al. **Arch Pharm (Weinheim)** 1996 Oct;329(10):451-6

Hippocampal 5-HT1A receptor binding site densities, 5-HT1A receptor messenger ribonucleic acid abundance and serotonin levels parallel the activity of the hypothalamo-pituitary-adrenal axis in rats. Burnet PW, et al. **Behav Brain Res** 1996;73(1-2):365-68

The mouse 5-HT2B receptor: homologous subtype or species variant? Choi DS, et al. **Behav Brain Res** 1996; 73(1-2):253-7

Serotonin2 receptors and the serotonin transporter in the schizophrenic brain. Dean B, et al. **Behav Brain Res** 1996; 73(1-2):169-75

Regulation of central 5-HT2A receptors: a review of in vivo studies. Eison AS, et al. **Behav Brain Res** 1996; 73(1-2):177-81 (54 ref.)

Presynaptic 5-HT auto- and heteroreceptors in the human central and peripheral nervous system. Göthert M, et al. **Behav Brain Res** 1996;73(1-2):89-92 (24 ref.)

Ventral tegmental area 5-HT receptors: mesolimbic dopamine release and behavioural studies. Mylecharane EJ. **Behav Brain Res** 1996;73(1-2):1-5 (37 ref.)

Ca2+ mobilizing agents mimic serotonin 5-HT2A facilitation of N-methyl-D-aspartate depolarization. Neuman RS, et al. **Behav Brain Res** 1996;73(1-2):273-5

Increased 5-HT1A receptor immunoreactivity in the rat hippocampus following 5,7-dihydroxytryptamine lesions in the cingulum bundle and fimbria-fornix. Patel TD, et al. **Behav Brain Res** 1996;73(1-2):319-23

Species differences in 5-HT autoreceptors. Price GW, et al. **Behav Brain Res** 1996;73(1-2):79-82

Positron emission tomography of 5-HT reuptake sites in the human brain with C-11 McN5652 extraction of characteristic images by artificial neural network analysis. Szabo Z, et al. **Behav Brain Res** 1996;73(1-2):221-4

Regional distribution and ontogeny of 5-HT4 binding sites in rat brain. Waeber C, et al. **Behav Brain Res** 1996; 73(1-2):259-62

Altered G-protein coupling of a frontal cortical low affinity [3H]8-hydroxy-N,N-dipropyl-2-aminotetralin serotonergic binding site in Alzheimer's disease. Weinstein D, et al. **Behav Brain Res** 1996;73(1-2):325-9

Characterization of [3H]GR 113808 binding to 5-HT4 receptors in brain tissues from patients with neurodegenerative disorders. Wong EH, et al. **Behav Brain Res** 1996;73(1-2):249-52

Desensitization of 5-HT3 receptors expressed in Xenopus oocytes: dependence on voltage and primary structure. Yakel JL. **Behav Brain Res** 1996;73(1-2):269-72

Repeated peripheral administration of 6R-L-erythro-5,6,7,8-tetrahydrobiopterin alters the binding activities of 5-HT1A and 5-HT2 receptors in rat brain. Muguruma K, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):794-9

Ras-dependent activation of fibroblast mitogen-activated protein kinase by 5-HT1A receptor via a G protein beta gamma-subunit-initiated pathway. Garnovskaya MN, et al. **Biochemistry** 1996 Oct 29;35(43):13716-22

Autoradiography with [3H]8-OH-DPAT reveals increases in 5-HT(1A) receptors in ventral prefrontal cortex in schizophrenia. Simpson MD, et al. **Biol Psychiatry** 1996 Jun 1;39(11):919-28

Hyperserotoninemia and serotonin receptor antibodies in children with autism but not mental retardation. Singh VK, et al. **Biol Psychiatry** 1997 Mar 15;41(6):753-5

Molecular structure and dynamics of some potent 5-HT3 receptor antagonists. Insight into the interaction with the receptor. Cappelli A, et al. **Bioorg Med Chem** 1996 Aug; 4(8):1255-69

Serotonin stimulates megakaryocytopoiesis via the 5-HT2 receptor. Yang M, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):127-33

Modulation by calcineurin of 5-HT3 receptor function in NG108-15 neuroblastoma x glioma cells. Boddeke HW, et al. **Br J Pharmacol** 1996 Aug;118(7):1836-40

Identification of 5-hydroxytryptamine receptors positively coupled to adenylyl cyclase in rat cultured astrocytes. Hirst WD, et al. **Br J Pharmacol** 1997 Feb;120(3):509-15

Characterization of a human 5-hydroxytryptamine3 receptor type A (h5-HT3R-AS) subunit stably expressed in HEK 293 cells. Hope AG, et al. **Br J Pharmacol** 1996 Jul; 118(5):1237-45

Stimulation of cyclic AMP formation in the circular smooth muscle of human colon by activation of 5-HT4-like receptors. McLean PG, et al. **Br J Pharmacol** 1996 Jan; 117(2):238-9

Functional characterization of the 5-HT terminal autoreceptor in the guinea-pig brain cortex. Roberts C, et al. **Br J Pharmacol** 1996 Jan;117(2):384-8

Functional, endogenously expressed 5-hydroxytryptamine 5-ht7 receptors in human vascular smooth muscle cells. Schoeffter P, et al. **Br J Pharmacol** 1996 Mar;117(6):993-4

Influence of the endothelium and nitric oxide on the contractile responses evoked by 5-HT1D receptor agonists in the rabbit isolated saphenous vein. Valentin JP, et al. **Br J Pharmacol** 1996 Sep;119(1):35-42

Characterization of putative 5-HT7 receptors mediating tachycardia in the cat. Villalón CM, et al. **Br J Pharmacol** 1997 Jul;121(6):1187-95

Mediation by 5-HT3 receptors of an excitatory effect of 5-HT on dorsal vagal preganglionic neurones in anaesthetized rats: an ionophoretic study. Wang Y, et al. **Br J Pharmacol** 1996 Aug;118(7):1697-704

Multiple 5-HT receptors in the guinea-pig superior cervical ganglion. Watkins CJ, et al. **Br J Pharmacol** 1996 Jan; 117(1):21-8

Thalamocortical afferents in rat transiently express high-affinity serotonin uptake sites. Bennett-Clarke CA, et al. **Brain Res** 1996 Sep 16;733(2):301-6

Downregulation of muscarinic- and 5-HT1B-mediated modulation of [3H]acetylcholine release in hippocampal slices of rats with fimbria-fornix lesions and intrahippocampal grafts of septal origin. Cassel JC, et al. **Brain Res** 1995 Dec 18;704(2):153-66

An autoradiographic study of serotonergic receptors in a murine genetic model of anxiety-related behaviors. Clement Y, et al. **Brain Res** 1996 Feb 19;709(2):229-42

Changes in receptor levels for thyrotropin releasing hormone, serotonin, and substance P in cervical spinal cord of Wobbler mouse: a quantitative autoradiography study during early and late stages of the motoneuron disease. Deng YP, et al. **Brain Res** 1996 Jun 24;725(1):49-60

Down-regulation of rat brain 5-HT uptake carriers after treatment with high doses of D-fenfluramine. Gobbi M, et al. **Brain Res** 1996 Aug 19;730(1-2):165-72

Autoradiographic localization of 5-HT1A receptors in the post-mortem human brain using [3H]WAY-100635 and [11C]way-100635. Hall H, et al. **Brain Res** 1997 Jan 16; 745(1-2):96-108

Regulation of GABA release via NMDA and 5-HT1A receptors in guinea pig dentate gyrus. Matsuyama S, et al. **Brain Res** 1997 Jun 27;761(1):105-12

5-HT1A receptor expression is modulated by corticosteroid receptor agonists in primary rat hippocampal culture. Nishi M, et al. **Brain Res** 1996 May 25;722(1-2):190-4

Apparent absence of aging and gender effects on serotonin 1A receptors in human neocortex and hippocampus. Palego L, et al. **Brain Res** 1997 May 30;758(1-2):26-32

Quantitative subregional distribution of serotonin1A receptors and serotonin transporters in the human dorsal raphe. Stockmeier CA, et al. **Brain Res** 1996 Jul 15; 727(1-2):1-12

Single doses of MK-801, a non-competitive antagonist of NMDA receptors, increase the number of 5-HT1A serotonin receptors in the rat brain. Wędzony K, et al. **Brain Res** 1997 May 9;756(1-2):84-91

Serotonin receptors expressed by myelinating Schwann cells in rat sciatic nerve. Yoder EJ, et al. **Brain Res** 1997 Apr 11;753(2):299-308

Cellular localization of 5-HT1B receptor mRNA in the rat olfactory tubercle: do GABAergic neurons express the 5-HT1B gene? Cloëz-Tayarani I, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):337-42

Brain specific proteins binding to the 3'UTR of the 5-HT2C receptor mRNA. Kao HT, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):174-84

Regulation of hippocampal 5-HT1A receptor mRNA and binding in transgenic mice with a targeted disruption of the glucocorticoid receptor. Meijer OC, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):290-6

Cellular and subcellular immunolocalization of the type 3 serotonin receptor in the rat central nervous system. Morales M, et al. **Brain Res Mol Brain Res** 1996 Mar; 36(2):251-60

Comparative anatomical distribution of serotonin 1A, 1D alpha and 2A receptor mRNAs in human brain postmortem. Pasqualetti M, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1-2):223-33

Regional variability in changes in 5-HT2A receptor mRNA levels in rat brain following irreversible inactivation with EEDQ. Raghupathi RK, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1-2):198-206

Localization of 5-HT4 receptor mRNA in rat brain by in situ hybridization histochemistry. Vilaró MT, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):356-60

Monoamine receptors in the prefrontal cortex of Tupaia belangeri during chronic psychosocial stress. Flügge G, et al. **Cell Tissue Res** 1997 Apr;288(1):1-10

Human brainstem serotonin receptors: characterization and implications for subcortical myoclonus. Pranzatelli MR, et al. **Clin Neuropharmacol** 1996 Dec;19(6):507-14

Synthesis and 5-HT3 affinity of new 3-substituted indoles at central nervous system. Monge A, et al. **Drug Des Discov** 1996 Oct;14(2):157-70

Lesion study of the distribution of serotonin 5-HT4 receptors in rat basal ganglia and hippocampus. Compan V, et al. **Eur J Neurosci** 1996 Dec;8(12):2591-8

Structural modification of receptor-binding technetium-99m complexes in order to improve brain uptake. Johannsen B, et al. **Eur J Nucl Med** 1997 Mar;24(3):316-9

Preclinical evaluation of [123I]R93274 as a SPECT radiotracer for imaging 5-HT2A receptors. Abi-Dargham A, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):285-93

[3H]5-hydroxytryptamine labels the agonist high affinity state of the cloned rat 5-HT4 receptor. Adham N, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):231-5

Comparison of [3H]YM060 binding to native and cloned rat 5-HT3 receptors. Akuzawa S, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):227-30

Human colonic mucosa possesses a mixed population of 5-HT receptors. Borman RA, et al. **Eur J Pharmacol** 1996 Aug 15;309(3):271-4

Binding thermodynamics of 5-HT1A receptor ligands. Dalpiaz A, et al. **Eur J Pharmacol** 1996 Sep 19; 312(1):107-14

Synergistic interactions between human transfected adenosine A1 receptors and endogenous cholecystokinin

receptors in CHO cells. Dickenson JM, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):141–51

Iloperidone binding to human and rat dopamine and 5–HT receptors. Kongsamut S, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):417–23

Characterisation of a postjunctional 5–ht7–like and a prejunctional 5–HT3 receptor mediating contraction of rat isolated jejunum. McLean PG, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):215–25

Compounds possessing 5–HT3 receptor antagonistic activity inhibit intestinal propulsion in mice. Nagakura Y, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):67–72

S 15535 and WAY 100,635 antagonise 5–HT–stimulated [35S]GTP gamma S binding at cloned human 5–HT1A receptors. Newman–Tancredi A, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):107–11

Exquisite delineation of 5–HT1A receptors in human brain with PET and [carbonyl–11 C]WAY–100635. Pike VW, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):R5–7

Characterisation of a cloned human 5–HT1A receptor cell line using [35S]GTP gamma S binding. Stanton JA, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):267–75

Effect of idebenone on in vivo serotonin release and serotonergic receptors in young and aged rats. Scavini C, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):95–102

5–Hydroxytryptamine induces forestomach hypomotility in sheep through 5–HT4 receptors. Plaza MA, et al. **Exp Physiol** 1996 Sep;81(5):781–90

New benzamide–derived 5–HT3 receptor antagonists which prevent the effects of ethanol on extracellular dopamine, and fail to reduce voluntary alcohol intake in rats. Iusco G, et al. **Farmaco** 1997 Mar;52(3):141–6

Peripheral 5–HT4 receptors. Hegde SS, et al. **FASEB J** 1996 Oct;10(12):1398–407 (80 ref.)

Cloning, expression and pharmacology of the mouse 5–HT(4L) receptor. Claeysen S, et al. **FEBS Lett** 1996 Nov 25;398(1):19–25

Molecular cloning of a novel gene involved in serotonin receptor–mediated signal transduction in rat stomach. Ohya S, et al. **FEBS Lett** 1997 Jan 20;401(2–3):252–8

The human 5–hydroxytryptamine 1A receptor differentially modulates phospholipase C and adenylyl cyclase activities. Fenrick R, et al. **Gen Pharmacol** 1996 Mar;27(2):263–8

Resolution of multiple affinity states of 5–hydroxytryptamine–1A receptors labelled by [3H]–8–hydroxy–2–(di–n–propilamino) tetralin in rat hippocampal membranes. Pesce G, et al. **Gen Pharmacol** 1996 Jun;27(4):723–9

The 5HT5A serotonin receptor is expressed predominantly by astrocytes in which it inhibits cAMP accumulation: a mechanism for neuronal suppression of reactive astrocytes. Carson MJ, et al. **Glia** 1996 Aug;17(4):317–26

5–Hydroxytryptamine2A receptors on cultured rat Schwann cells. Yoder EJ, et al. **Glia** 1996 May;17(1):15–27

Identification of lymphocyte 5–HT3 receptor subtype and its implication in fish T–cell proliferation. Meyniel JP, et al. **Immunol Lett** 1997 Mar;55(3):151–60

Pharmacologic evidence for 5–HT1A receptors associated with human retinal pigment epithelial cells in culture. Nash MS, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):510–9

Activation of a mitogen–activated protein kinase (ERK2) by the 5–hydroxytryptamine1A receptor is sensitive not only to inhibitors of phosphatidylinositol 3–kinase, but to an inhibitor of phosphatidylcholine hydrolysis. Cowen DS, et al. **J Biol Chem** 1996 Sep 13;271(37):22297–300

5–HT1A receptor activates Na+/H+ exchange in CHO–K1 cells through Gialpha2 and Gialpha3. Garnovskaya MN, et al. **J Biol Chem** 1997 Mar 21;272(12):7770–6

Identification and localization of a skeletal muscle secrotonin 5–HT2A receptor coupled to the Jak/STAT pathway. Guillet–Deniau I, et al. **J Biol Chem** 1997 Jun 6; 272(23):14825–9

Functional reconstitution in situ of 5–hydroxytryptamine2c (5HT2c) receptors with alphaq and inverse agonism of 5HT2c receptor antagonists. Hartman JL IV, et al. **J Biol Chem** 1996 Sep 13;271(37):22591–7

Autoradiographic mapping of serotonin 5–HT1A, 5–HT1D, 5–HT2A and 5–HT3 receptors in the aged human spinal cord. Laporte AM, et al. **J Chem Neuroanat** 1996 Jul; 11(1):67–75

Selective decline of 5–HT1A receptor binding sites in rat cortex, hippocampus and cholinergic basal forebrain nuclei during aging. Nyakas C, et al. **J Chem Neuroanat** 1997 Jun;13(1):53–61

High–performance liquid chromatographic analysis of ondansetron enantiomers in human serum using a reversed–phase cellulose–based chiral stationary phase and solid–phase extraction. Liu J, et al. **J Chromatogr B Biomed Appl** 1997 Jun 20;694(1):179–84

Effects of 'Seroquel' (quetiapine) on platelet serotonin–2 binding in schizophrenia [letter] Faustman WO, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):464–6

The effect of fluvoxamine on serum prolactin and serum sodium concentrations: relation to platelet 5–HT2A receptor status. Spigset O, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):292–7

New benzocycloalkylpiperazines, potent and selective 5–HT1A receptor ligands. el Ahmad Y, et al. **J Med Chem** 1997 Mar 14;40(6):952–60

5–HT1D receptor agonist properties of novel 2–[5–[[(trifluoromethyl)sulfonyl]oxy]indolyl]ethylamines and their use as synthetic intermediates. Barf TA, et al. **J Med Chem** 1996 Nov 22;39(24):4717–26

Novel agonists of 5HT2C receptors. Synthesis and biological evaluation of substituted 2–(indol–1–yl)–1–methylethylamines and 2–(indeno[1,2–b]pyrrol–1–yl)–1–methylethylamines. Improved therapeutics for obsessive compulsive disorder. Bös M, et al. **J Med Chem** 1997 Aug 15;40(17):2762–9

3–amino–3,4–dihydro–2H–1–benzopyran derivatives as 5–HT1A receptor ligands and potential anxiolytic agents. 2. Synthesis and quantitative structure–activity relationship studies of spiro[pyrrolidine– and piperidine–2,3'(2'H)–benzopyrans] Comoy C, et al. **J Med Chem** 1996 Oct 11;39(21):4285–98

Structure–activity relationships for the binding of arylpiperazines and arylbiguanides at 5–HT3 serotonin receptors. Dukat M, et al. **J Med Chem** 1996 Sep 27; 39(20):4017–26

Derivatives of (R)– and (S)–5–fluoro–8–hydroxy–2–(dipropylamino)tetralin: synthesis and interactions with 5–HT1A receptors. Höök BB, et al. **J Med Chem** 1996 Sep 27;39(20):4036–43

5–HT1A–versus D2–receptor selectivity of flesinoxan and analogous N4–substituted N1–arylpiperazines. Kuipers W, et al. **J Med Chem** 1997 Jan 31;40(3):300–12

Synthesis and structure–activity relationships of a new model of arylpiperazines. 1. 2–[[4–(o–methoxyphenyl)piperazin–1–yl]methyl]–1, 3–dioxoperhydroimidazo[1,5–alpha]pyridine: a selective 5–HT1A receptor agonist. López–Rodríguez ML, et al. **J Med Chem** 1996 Oct 25;39(22):4439–50

Synthesis and structure–activity relationships of a new model of arylpiperazines. 3.1 2–[omega–(4–arylpiperazin–1–yl)alkyl]perhydropyrrolo–[1,2–c]imidazoles and –perhydroimidazo[1,5–a]pyridines: study of the influence of the terminal amide fragment on 5–HT1A affinity/selectivity. López–Rodríguez ML, et al. **J Med Chem** 1997 Aug 1;40(16):2653–6

Synthesis and structure–activity relationships of a new model of arylpiperazines. 2. Three–dimensional quantitative structure–activity relationships of hydantoin–phenylpiperazine derivatives with affinity for 5–HT1A and alpha 1 receptors. A comparison of CoMFA models. López–Rodríguez ML, et al. **J Med Chem** 1997 May 23;40(11):1648–56

[[(Arylpiperazinyl)alkyl]thio]thieno[2,3–d]pyrimidinone derivatives as high–affinity, selective 5–HT1A receptor ligands. Modica M, et al. **J Med Chem** 1997 Feb 14; 40(4):574–85

Structure–activity relationship studies on the 5–HT(1A) receptor affinity of 1–phenyl–4–[omega–(alpha– or beta–tetralinyl)alkyl]piperazines. 4. Perrone R, et al. **J Med Chem** 1996 Dec 6;39(25):4928–34

Novel and selective partial agonists of 5–HT3 receptors. 2. Synthesis and biological evaluation of piperazinopyridopyrrolopyrazines, piperazinopyrroloquinoxalines, and piperazinopyridopyrroloquinoxalines. Prunier H, et al. **J Med Chem** 1997 Jun 6;40(12):1808–19

Arylcarbamate derivatives of 1–piperidineethanol as potent ligands for 5–HT4 receptors. Soulier JL, et al. **J Med Chem** 1997 May 23;40(11):1755–61

New esters of 4–amino–5–chloro–2–methoxybenzoic acid as potent agonists and antagonists for 5–HT4 receptors. Yang D, et al. **J Med Chem** 1997 Feb 14;40(4):608–21

N–[2–[(substituted chroman–8–yl)oxy]ethyl]–4–(4–methoxyphenyl) butylamines: synthesis and wide range of antagonism at the human 5–HT1A receptor. Yasunaga T, et al. **J Med Chem** 1997 Apr 11;40(8):1252–7

Activity of Parthenolide at 5HT2A receptors. Weber JT, et al. **J Nat Prod** 1997 Jun;60(6):651–3

Serotonin 5–HT3 receptor binding kinetics in the cortex of suicide victims are normal. Mann JJ, et al. **J Neural Transm** 1996;103(1–2):165–71

Lower 3H–paroxetine binding in cerebral cortex of suicide victims is partly due to fewer high affinity, non–transporter sites. Mann JJ, et al. **J Neural Transm** 1996;103(11):1337–50

Differential regulation by methylenedioxymethamphetamine of 5–hydroxytryptamine1A receptor density and mRNA expression in rat hippocampus, frontal cortex, and brainstem: the role of corticosteroids. Aguirre N, et al. **J Neurochem** 1997 Mar;68(3):1099–105

Serotonin inhibition of the NMDA receptor/nitric oxide/cyclic GMP pathway in rat cerebellum: involvement of 5–hydroxytryptamine2C receptors. Marcoli M, et al. **J Neurochem** 1997 Jul;69(1):427–30

Immunological characterization and transmembrane topology of 5–hydroxytryptamine3 receptors by functional epitope tagging. Mukerji J, et al. **J Neurochem** 1996 Mar; 66(3):1027–32

Two amino acid differences in the sixth transmembrane domain are partially responsible for the pharmacological differences between the 5–HT1D beta and 5–HT1E 5–hydroxytryptamine receptors. Parker EM, et al. **J Neurochem** 1996 Nov;67(5):2096–103

Combined administration of a 5–hydroxytryptamine (5–HT)1D antagonist and a 5–HT reuptake inhibitor synergistically increases 5–HT release in guinea pig hypothalamus in vivo [see comments] Rollema H, et al. **J Neurochem** 1996 Nov;67(5):2204–7. Comment in: J Neurochem 1997 Jul;69(1):437–9.

Identification of an endogenous 5–hydroxytryptamine2A receptor in NIH–3T3 cells: agonist–induced down–regulation involves decreases in receptor RNA and number. Saucier C, et al. **J Neurochem** 1997 May; 68(5):1998–2011

Down–regulation of 5–hydroxytryptamine7 receptors by dexamethasone in rat frontocortical astrocytes. Shimizu M, et al. **J Neurochem** 1997 Jun;68(6):2604–9

Sequence and functional analysis of cloned guinea pig and rat serotonin 5–HT1D receptors: common pharmacological features within the 5–HT1D receptor subfamily. Wurch T, et al. **J Neurochem** 1997 Jan;68(1):410–8

Autoradiographic distribution of [3H]–(S)–zacopride–labelled 5–HT3 receptors in human brain. Parker RM, et al. **J Neurol Sci** 1996 Dec; 144(1–2):119–27

Development of short–term heterosynaptic facilitation at aplysia sensorimotor synapses in vitro is accompanied by changes in the functional expression of presynaptic serotonin receptors. Sun ZY, et al. **J Neurophysiol** 1996 Oct;76(4):2250–61

5HT4 receptors couple positively to tetrodotoxin–insensitive sodium channels in a subpopulation of capsaicin–sensitive rat sensory neurons. Cardenas CG, et al. **J Neurosci** 1997 Oct 1;17(19):7181–9

The 5–HT3 receptor is present in different subpopulations of GABAergic neurons in the rat telencephalon. Morales M, et al. **J Neurosci** 1997 May 1;17(9):3157–67

Developing neonatal rat sympathetic and sensory neurons differ in their regulation of 5–HT3 receptor expression. Rosenberg M, et al. **J Neurosci** 1997 Sep 1;17(17):6629–38

Post–stroke changes in cortical 5–HT2 serotonergic receptors. Véra P, et al. **J Nucl Med** 1996 Dec; 37(12):1976–81

Interactions of (+)– and (–)–8– and 7–hydroxy–2–(di–n–propylamino)tetralin at human (h)D3, hD2 and h serotonin1A receptors and their modulation of the activity of serotoninergic and dopaminergic neurones in rats. Lejeune F, et al. **J Pharmacol Exp Ther** 1997 Mar; 280(3):1241–9

Platelet 5–hydroxytryptamine (5–HT) transporter and 5–HT2A receptor binding after chronic hypercorticosteronemia, (+/–)–1–(2,5–dimethoxy–4–iodophenyl)–2–aminopropane administration or neurotoxin–induced depletion of central nervous system 5–HT in the rat. Owens MJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1040–9

Differential effects of protein kinase C activation on 5–HT1A receptor coupling to Ca2+ and K+ currents in rat serotonergic neurones. Chen Y, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):129–37

Combined in situ hybridisation, northern blot analysis, and receptor binding studies in clones expressing different levels of the human 5–HT1A receptor. Konings PN, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):443–55

Expression of ligand–gated ion channels with the Semliki Forest virus expression system. Lundstrom K, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):115–26

Pharmacological characterisation of [35S]–GTPgammaS binding to Chinese hamster ovary cell membranes stably expressing cloned human 5–HT1D receptor subtypes. Thomas DR, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar;15(1–4):199–211

Full and partial agonists induce distinct desensitized states of the 5–HT3 receptor. van Hooft JA, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):267–77

Interaction of orally administered 5–[3–[((2S)–1,4–benzodioxan–2–ylmethyl)amino]propoxy]–1,3–benzodioxole (MKC–242) with 5–HT1A receptors in rat brain. Asano S, et al. **Jpn J Pharmacol** 1997 May; 74(1):69–75

High affinity binding of azasetron hydrochloride to 5–hydroxytryptamine3 receptors in the small intestine of rats. Katayama K, et al. **Jpn J Pharmacol** 1997 Apr; 73(4):357–60

5–HT2A receptor polymorphism and steady state receptor expression in schizophrenia [letter] Kouzmenko AP, et al. **Lancet** 1997 Jun 21;349(9068):1815

In vivo regulation of serotonin 5–HT2A receptors in rat brain by subchronic administration of sigma receptor ligand NE–100. Hashimoto K, et al. **Life Sci** 1997;60(24):2245–54

Pharmacological characterization of recombinant human 5–hydroxytryptamine1A receptors using a novel antagonist radioligand, [3H]WAY–100635. Khawaja X, et al. **Life Sci** 1997;60(9):653–65

Streptozotocin–induced diabetes provokes changes in serotonin concentration and on 5–HT1A and 5–HT2 receptors in the rat brain. Sandrini M, et al. **Life Sci** 1997; 60(16):1393–7

Identification and characterization of the 5–HT4 receptor in the intestinal tract and striatum of the guinea pig. Uchiyama–Tsuyuki Y, et al. **Life Sci** 1996; 59(25–26):2129–37

The expression of serotonin receptors by cultured rat Schwann cells is a function of their differentiation: correlation with a quiescent myelinating phenotype. Yoder EJ, et al. **Mol Cell Neurosci** 1997;8(5):303–10

Interaction of tryptamine and ergoline compounds with threonine 196 in the ligand binding site of the 5–hydroxytryptamine6 receptor. Boess FG, et al.

Mol Pharmacol 1997 Sep;52(3):515-23

Identification, molecular cloning, and distribution of a short variant of the 5-hydroxytryptamine2C receptor produced by alternative splicing. Canton H, et al. **Mol Pharmacol** 1996 Oct;50(4):799-807

Study of the interaction between aryloxypropanolamines and Asn386 in helix VII of the human 5-hydroxytryptamine1A receptor. Kuipers W, et al. **Mol Pharmacol** 1997 May; 51(5):889-96

Alniditan, a new 5-hydroxytryptamine1D agonist and migraine-abortive agent: ligand-binding properties of human 5-hydroxytryptamine1D alpha, human 5-hydroxytryptamine1D beta, and calf 5-hydroxytryptamine1D receptors investigated with [3H]5-hydroxytryptamine and [3H]alniditan. Leysen JE, et al. **Mol Pharmacol** 1996 Dec;50(6):1567-80

5-hydroxytryptamine-moduline, a new endogenous cerebral peptide, controls the serotonergic activity via its specific interaction with 5-hydroxytryptamine1B/1D receptors. Massot O, et al. **Mol Pharmacol** 1996 Oct;50(4):752-62

5-HT1D and 5-HT1E/1F binding sites in depressed suicides: increased 5-HT1D binding in globus pallidus but not cortex. Lowther S, et al. **Mol Psychiatry** 1997 Jul; 2(4):314-21

[3H]MDL 100,907: a novel selective 5-HT2A receptor ligand. Johnson MP, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):205-9

Inhibition of 5-HT3 receptor function by imidazolines in mouse neuroblastoma cells: potential involvement of sigma 2 binding sites. Molderings GJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):245-52

[3H]WAY-100635 for 5-HT1A receptor autoradiography in human brain: a comparison with [3H]8-OH-DPAT and demonstration of increased binding in the frontal cortex in schizophrenia. Burnet PW, et al. **Neurochem Int** 1997 Jun;30(6):565-74

Effects of a chronic lithium treatment on cortical serotonin uptake sites and 5-HT1A receptors. Carli M, et al. **Neurochem Res** 1997 Apr;22(4):427-35

Imipramine-induced changes in 5-HT2 receptor sites and inositoltrisphosphate levels in rat brain. Subhash MN, et al. **Neurochem Res** 1997 Sep;22(9):1095-9

5-HT3 receptors in outside-out patches of N1E-115 neuroblastoma cells: basic properties and effects of pentobarbital. Barann M, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):655-64

Analysis of the ligand binding site of the 5-HT3 receptor using site directed mutagenesis: importance of glutamate 106. Boess FG, et al. **Neuropharmacology** 1997 Apr-May; 36(4-5):637-47

[3H]RS 57639, a high affinity, selective 5-HT4 receptor partial agonist, specifically labels guinea-pig striatal and rat cloned (5-HT4S and 5-HT4L) receptors. Bonhaus DW, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):671-9

RS-102221: a novel high affinity and selective, 5-HT2C receptor antagonist. Bonhaus DW, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):621-9

Differential distribution of [3H]sumatriptan binding sites (5-HT1B, 5-HT1D and 5-HT1F receptors) in human brain: focus on brainstem and spinal cord. Castro ME, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):535-42

Effects of food deprivation on midbrain 5-HT1A autoreceptors in Lewis and SHR rats. Chaouloff F, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):483-8

Serotonin efflux in the rat ventral lateral geniculate nucleus assessed by fast cyclic voltammetry is modulated by 5-HT1B and 5-HT1D autoreceptors. Davidson C, et al. **Neuropharmacology** 1996;35(11):1627-34

Modulation of GABAA receptor function by G protein-coupled 5-HT2C receptors. Huidobro-Toro JP, et al. **Neuropharmacology** 1996;35(9-10):1355-63

SB 242084, a selective and brain penetrant 5-HT2C receptor antagonist. Kennett GA, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):609-20

In vivo electrophysiological characterization of 5-HT receptors in the guinea pig head of caudate nucleus and orbitofrontal cortex. el Mansari M, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):577-88

Importance of h5-HT1B receptor selectivity for 5-HT terminal autoreceptor activity: an in vivo microdialysis study in the freely-moving guinea-pig. Roberts C, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):549-57

Inhibition of cAMP accumulation via recombinant human serotonin 5-HT1A receptors: considerations on receptor effector coupling across systems. Schoeffter P, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):429-37

Autoradiographic localization of 5-CT-insensitive 5-HT1-like recognition sites in guinea pig and rat brain. Stanton JA, et al. **Neuropharmacology** 1996 Feb;35(2):223-9

Allosteric potentiation of the 5-HT3 receptor-mediated ion current in N1E-115 neuroblastoma cells by 5-hydroxyindole and analogues. van Hooft JA, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):649-53

Clarifications on the effects of 5-HT1A agonists and selective 5-HT reuptake inhibitors on the 5-HT system [letter; comment] Blier P, et al. **Neuropsychopharmacology** 1996 Aug;15(2):213-6. Comment on: Neuropsychopharmacology 1996 Jan;14(1):19-25.

5-HT1A and 5-HT2A receptor mRNAs and binding site densities are differentially altered in schizophrenia. Burnet PW, et al. **Neuropsychopharmacology** 1996 Nov; 15(5):442-55

Impulsive aggression in personality disorder correlates with platelet 5-HT2A receptor binding. Coccaro EF, et al. **Neuropsychopharmacology** 1997 Mar;16(3):211-6

Chronic fluoxetine reduces serotonin transporter mRNA and 5-HT1B mRNA in a sequential manner in the rat dorsal raphe nucleus. Neumaier JF, et al. **Neuropsychopharmacology** 1996 Nov;15(5):515-22

A PET study of 5-HT2 and D2 dopamine receptor occupancy induced by olanzapine in healthy subjects. Nyberg S, et al. **Neuropsychopharmacology** 1997 Jan; 16(1):1-7

Serotonin 5-HT2A receptor binding in platelets from healthy subjects as studied by [3H]-lysergic acid diethylamide ([3H]-LSD): intra- and interindividual variability. Spigset O, et al. **Neuropsychopharmacology** 1997 Apr;16(4):285-93

Serotonin receptors in suicide victims with major depression. Stockmeier CA, et al. **Neuropsychopharmacology** 1997 Feb; 16(2):162-73

The effect of streptozotocin-induced diabetes on dopamine2, serotonin1A and serotonin2A receptors in the rat brain. Sumiyoshi T, et al. **Neuropsychopharmacology** 1997 Mar; 16(3):183-90

Region-specific serotonin1A receptor turnover following irreversible blockade with EEDQ. Keck BJ, et al. **Neuroreport** 1996 Nov 4;7(15-17):2717-21

Identification of planarian serotonin receptor by ligand binding and PCR studies. Saitoh O, et al. **Neuroreport** 1996 Dec 20;8(1):173-8

Sex difference in 5HT2 receptor in the living human brain. Biver F, et al. **Neurosci Lett** 1996 Feb 2;204(1-2):25-8

5-HT1D-like receptors inhibit the release of endogenously formed [3H]GABA in human, but not in rabbit, neocortex. Feuerstein TJ, et al. **Neurosci Lett** 1996 May 17; 209(3):210-4

Effects of phencyclidine metabolites on serotonin uptake in rat brain. Hori T, et al. **Neurosci Lett** 1996 May 17; 209(3):153-6

Serotonin1A receptors are expressed by a subpopulation of cholinergic neurons in the rat medial septum and diagonal band of Broca--a double immunocytochemical study. Kia HK, et al. **Neuroscience** 1996 Sep;74(1):143-54

Differential addressing of 5-HT1A and 5-HT1B receptors in transfected LLC-PK1 epithelial cells: a model of receptor targeting in neurons. Langlois X, et al. **Neuroscience** 1996 Sep;74(2):297-302

Site-specific regulation of corticosteroid and serotonin receptor subtype gene expression in the rat hippocampus following 3,4-methylenedioxymethamphetamine: role of corticosterone and serotonin. Yau JL, et al. **Neuroscience** 1997 May;78(1):111-21

5-Hydroxytryptamine1B and alpha 2 adrenaline receptors in the brain of rats prenatally treated with methylazoxymethanol. Watanabe M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):69-73

Development of central 5-HT2A receptor radioligands for PET: comparison of [3H]RP 62203 and [3H]SR 46349B kinetics in rat brain. Ashworth S, et al. **Nucl Med Biol** 1996 Apr;23(3):245-50

Specific in vivo binding in the rat brain of [18F]RP 62203: a selective 5-HT2A receptor radioligand for positron emission tomography. Besret L, et al. **Nucl Med Biol** 1996 Feb;23(2):169-71

Technetium(V) and rhenium(V) complexes for 5-HT2A serotonin receptor binding: structure-affinity considerations. Johannsen B, et al. **Nucl Med Biol** 1996 May;23(4):429-38

Characterization of the radioactive metabolites of the 5-HT1A receptor radioligand, [O-methyl-11C]WAY-100635, in monkey and human plasma by HPLC: comparison of the behaviour of an identified radioactive metabolite with parent radioligand in monkey using PET. Osman S, et al. **Nucl Med Biol** 1996 Jul;23(5):627-34

Radioligands for PET studies of central 5-HT receptors and re-uptake sites--current status. Pike VW. **Nucl Med Biol** 1995 Nov;22(8):1011-8 (38 ref.)

Reliability of a simple non-invasive method for the evaluation of 5-HT2 receptors using [18F]-setoperone PET imaging. Kapur S, et al. **Nucl Med Commun** 1997 May;18(5):395-9

Functional characterization of two 5-HT3 receptor splice variants isolated from a mouse hippocampal cell line. Glitsch M, et al. **Pflugers Arch** 1996 May;432(1):134-43

Different effects of tropisetron and ondansetron in learning and memory paradigms. Pitsikas N, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):571-6

5-HT3 serotonin hetero-receptors inhibit [3H]acethylcholine release in rat cortical synaptosomes. Crespi D, et al. **Pharmacol Res** 1997 Apr;35(4):351-4

Pharmacokinetics, toxicity, side effects, receptor affinities and in vitro radiosensitizing effects of the novel metoclopramide formulations, sensamide and neu-sensamide. Pero RW, et al. **Pharmacol Toxicol** 1997 May;80(5):231-9

5-HT1A and 5-HT2A receptor affinity and functional profile of some N-[3-(4-aryl-1-piperazinyl)propyl] derivatives of indolin-2(1H)-one, quinolin-2(1 H)-one and isoquinolin-1(2H)-one. Part 30: Structure-activity relationship studies of CNS agents. Mokrosz MJ, et al. **Pharmazie** 1997 Jun;52(6):423-8

Autoradiographic characterization of [3H]-5-HT-moduline binding sites in rodent brain and their relationship to 5-HT1B receptors. Cloëz-Tayarani I, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9899-904

Effect of chronic ipsapirone treatment on the density of 5-HT1A receptors and 5-HT1A receptor mRNA in discrete regions of the rat brain. Shiro Y, et al. **Psychiatry Clin Neurosci** 1996 Jun;50(3):141-6

Central 5-HT2A and D2 dopamine receptor occupancy after sublingual administration of ORG 5222 in healthy men. Andrée B, et al. **Psychopharmacology (Berl)** 1997 Jun; 131(4):339-45

The 5-HT1A antagonist, WAY 100635, ameliorates the cognitive impairment induced by fornix transection in the marmoset. Harder JA, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):245-54

Increase of 5-HT7 (serotonin-7) and 5-HT1A (serotonin-1A) receptor mRNA expression in rat hippocampus after adrenalectomy. Le Corre S, et al. **Psychopharmacology (Berl)** 1997 Apr;130(4):368-74

Risperidone compared with new and reference antipsychotic drugs: in vitro and in vivo receptor binding. Schotte A, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):57-73

Serotonin1A receptor autoradiography during alcohol-withdrawal kindling. Ulrichsen J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):19-26

Subcellular localization of 5-HT1B binding sites in the stratum griseum superficiale of the rat superior colliculus: An electron microscopic quantitative autoradiographic study. Boulenguez P, et al. **Synapse** 1996 Nov;24(3):203-12

In vivo SPECT imaging of 5-HT1A receptors with [123I]p-MPPI in nonhuman primates. Kung HF, et al. **Synapse** 1996 Nov;24(3):273-81

Distribution of the 5-hydroxytryptamine2C receptor protein in adult rat brain and spinal cord determined using a receptor-directed antibody: effect of 5,7-dihydroxytryptamine. Sharma A, et al. **Synapse** 1997 Sep;27(1):45-56

P-[18F]-MPPF: a potential radioligand for PET studies of 5-HT1A receptors in humans. Shiue CY, et al. **Synapse** 1997 Feb;25(2):147-54

Serotonin 5-HT2A receptors are expressed on pyramidal cells and interneurons in the rat cortex. Willins DL, et al. **Synapse** 1997 Sep;27(1):79-82

[Development of the serotoninergic system in the mouse midbrain, and the role of serotonin in this process] Sapronova AIa, et al. **Biull Eksp Biol Med** 1996 Aug; 122(8):167-9 **(Rus)**

[The serotoninergic neurosecretory system in the caudal neurosecretory complex of sturgeons] Saenko II. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):128-34 **(Rus)**

[Effect of domestication of the silver fox on the main enzymes of serotonin metabolism and serotonin receptors] Popova NK, et al. **Genetika** 1997 Mar;33(3):370-4 (Eng. Abstr.) **(Rus)**

[The distribution of serotonin 5-HT1A receptors in the brain of rats genetically predisposed to the development of catalepsy] Popova NK, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May-Jun; 46(3):578-82 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Prolonged treatment with antidepressants increases the 5-HT1A-mediated inhibition of hippocampal neurons without changing the 5-HT1A receptor binding. Tokarski K, et al. **Acta Physiol Hung** 1996;84(3):343-4

The effects of peripheral serotonin2 receptor agonist on food intake of rats. Yamada J, et al. **Adv Exp Med Biol** 1996; 398:555-7

Serotonin-3 receptor and ethanol-stimulated somatodendritic dopamine release. Campbell AD, et al. **Alcohol** 1996 Nov-Dec;13(6):569-74

Opiate and 5-HT2A receptors in alcohol drinking: preference in HAD rats is inhibited by combination treatment with naltrexone and amperozide. Lankford MF, et al. **Alcohol** 1996 Jan-Feb;13(1):53-7

Effects of 5-HT3 receptor agonists on voluntary ethanol intake in rats maintained on a limited access procedure. Dyr W, et al. **Alcohol Alcohol** 1997 Jul-Aug;32(4):455-62

Norepinephrine and serotonin receptors in the paraventricular nucleus interactively modulate ethanol consumption. Hodge CW, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1669-74

Possibility of 5-HT3 receptor involvement in alcohol dependence: a microdialysis study of nucleus accumbens dopamine and serotonin release in rats with chronic alcohol consumption. Yoshimoto K, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9 Suppl):311A-319A

Central 5-HT1A modulation of cardiovascular responses to tibial nerve stimulation-evoked muscle contraction. Ally A, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1020-7

Role of CRH in the effects of 5-HT-receptor agonists on food intake and metabolic rate. Bovetto S, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1231-8

Ondansetron reduces nausea induced by gastroduodenal stimulation without changing gastric motility. Feinle C, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):G591-7

5-HT-induced colonic contractions: enteric locus of action and receptor subtypes. Graf S, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G68-74

5-HT released by mucosal stimuli initiates peristalsis by

activating 5-HT4/5-HT1p receptors on sensory CGRP neurons. Grider JR, et al. **Am J Physiol** 1996 May;270(5 Pt 1):G778-82

Participation of 5-HT3, 5-HT4, and nicotinic receptors in the peristaltic reflex of guinea pig distal colon. Kadowaki M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G849-57

Role of serotonin3 receptors in the nucleus tractus solitarii on the carotid chemoreflex. Sévoz C, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1250-9

Subthreshold stimulation of a serotonin 5-HT3 reflex attenuates cardiovascular reflexes. Veelken R, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1500-6

Somatosensory influences on renal sympathetic nerve activity in anesthetized Wistar and hypertensive rats. Zhang T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R982-90

Effect of 5-hydroxytryptamine type-2 receptor blockade on pulmonary function in calves with experimentally induced Pasteurella haemolytica pneumonia. Hare JE, et al. **Am J Vet Res** 1996 Jul;57(7):1034-9

Ketanserin effects on thermoregulation in malarial and normal rats. Dascombe MJ, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:392-7

Species difference in the 5-hydroxytryptamine3 receptor associated with the von Bezold-Jarisch reflex. Yamano M, et al. **Arch Int Pharmacodyn Ther** 1995 Sep-Oct; 330(2):177-89

Serotonin (5-hydroxytryptamine, 5-HT) enhances migration of rat aortic smooth muscle cells through 5-HT2 receptors. Tamura K, et al. **Atherosclerosis** 1997 Jul 25;132(2):139-43

Role of the hypothalamic paraventricular nucleus in 5-HT1A, 5-HT2A and 5-HT2C receptor-mediated oxytocin, prolactin and ACTH/corticosterone responses. Bagdy G. **Behav Brain Res** 1996;73(1-2):277-80

Serotonin receptors involved in regulation of pituitary-adrenocortical function in rats. Fuller RW. **Behav Brain Res** 1996;73(1-2):215-9 (33 ref.)

Electrophysiological studies of 5-hydroxytryptamine receptors on enteric neurons. Galligan JJ. **Behav Brain Res** 1996;73(1-2):199-201 (19 ref.)

5-HT3 and 5-HT4 receptors in terminal regions of the mesolimbic system. Kilpatrick GJ, et al. **Behav Brain Res** 1996;73(1-2):11-3 (23 ref.)

Role of hippocampal 5-HT1A receptors on elevated plus maze exploration after a single restraint experience. Netto SM, et al. **Behav Brain Res** 1996 May;77(1-2):215-8

Modulation of serotonin2A/2C receptors and these receptor-linked phosphoinositide system by ethanol. Pandey SC, et al. **Behav Brain Res** 1996;73(1-2):235-8 (26 ref.)

5-HT1B receptor knock out--behavioral consequences. Ramboz S, et al. **Behav Brain Res** 1996;73(1-2):305-12

Serotonergic regulation of renin and prolactin secretion. Van de Kar LD, et al. **Behav Brain Res** 1996;73(1-2):203-8 (44 ref.)

Modulation of the A10 dopamine system: electrophysiological studies of the role of 5-HT3-like receptors. Wang RY, et al. **Behav Brain Res** 1996; 73(1-2):7-10 (34 ref.)

5-HT2 receptor involvement in conditioned olfactory learning in the neonate rat pup. McLean JH, et al. **Behav Neurosci** 1996 Dec;110(6):1426-34

Inescapable shock-induced potentiation of morphine analgesia in rats: involvement of opioid, GABAergic, and serotonergic mechanisms in the dorsal raphe nucleus. Sutton LC, et al. **Behav Neurosci** 1997 Aug;111(4):816-24

Platelet dense granule secretion in adolescents with conduct disorder and substance abuse: preliminary evidence for variation in signal transduction. Moss HB, et al. **Biol Psychiatry** 1996 Nov 1;40(9):892-8

Growth hormone response to sumatriptan (5-HT1D agonist) challenge in seasonal affective disorder: effects of light therapy. Yatham LN, et al. **Biol Psychiatry** 1997 Jul 1; 42(1):24-9

The effect of 5-HT and selective 5-HT receptor agonists and antagonists on rat dorsal vagal preganglionic neurones in vitro. Albert AP, et al. **Br J Pharmacol** 1996 Oct; 119(3):519-26

Spinal 5-HT-receptors and tonic modulation of transmission through a withdrawal reflex pathway in the decerebrated rabbit. Clarke RW, et al. **Br J Pharmacol** 1996 Nov; 119(6):1167-76

Functional interactions between muscarinic M2 receptors and 5-hydroxytryptamine (5-HT)4 receptors and beta 3-adrenoceptors in isolated oesophageal muscularis mucosae of the rat. Eglen RM, et al. **Br J Pharmacol** 1996 Oct;119(3):595-601

Endothelial 5-HT receptors mediate relaxation of porcine pulmonary arteries in response to ergotamine and dihydroergotamine. Glusa E, et al. **Br J Pharmacol** 1996 Sep;119(2):330-4

Evidence for 5-HT1-like receptor-mediated vasoconstriction in human pulmonary artery. MacLean MR, et al. **Br J Pharmacol** 1996 Sep;119(2):277-82

Further investigation into the signal transduction mechanism of the 5-HT4-like receptor in the circular smooth muscle of human colon. McLean PG, et al. **Br J Pharmacol** 1996 Jun;118(4):1058-64

Functional characterization of 5-HT1D autoreceptors on the modulation of 5-HT release in guinea-pig mesencephalic raphe, hippocampus and frontal cortex. el Mansari M, et al. **Br J Pharmacol** 1996 Jun;118(3):681-9

Evidence for the involvement of 5-HT4 receptors in the 5-hydroxytryptamine-induced pattern of migrating myoelectric complex in sheep. Plaza MA, et al. **Br J Pharmacol** 1997 Mar;120(6):1144-50

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: endogenous 5-hydroxytryptamine, 5-HT1A receptors and antinatriuresis during high sodium intake. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar; 117(6):1193-8

Role of 5-ht7 receptors in the long-lasting hypotensive response induced by 5-hydroxytryptamine in the rat. Terrón JA. **Br J Pharmacol** 1997 Jun;121(3):563-71

The relaxant 5-HT receptor in the dog coronary artery smooth muscle: pharmacological resemblance to the cloned 5-ht7 receptor subtype. Terrón JA. **Br J Pharmacol** 1996 Jul;118(6):1421-8

Pharmacological characterization of the 5-hydroxytryptamine receptor mediating relaxation in the rat isolated ileum. Tuladhar BR, et al. **Br J Pharmacol** 1996 Sep;119(2):303-10

Mediation of 5-HT-induced external carotid vasodilatation in GR 127935-pretreated vagosympathectomized dogs by the putative 5-HT7 receptor. Villalón CM, et al. **Br J Pharmacol** 1997 Apr;120(7):1319-27

A critical role for D1 receptors in the 5-HT1A-mediated facilitation of in vivo acetylcholine release in rat frontal cortex. Consolo S, et al. **Brain Res** 1996 Jan 29;707(2):320-3

5-HT1A and benzodiazepine receptors in the basolateral amygdala modulate anxiety in the social interaction test, but not in the elevated plus-maze. Gonzalez LE, et al. **Brain Res** 1996 Sep 2;732(1-2):145-53

Modulation of frog spinal cord interneuronal activity by activation of 5-HT3 receptors. Holohean AM, et al. **Brain Res** 1995 Dec 18;704(2):184-90

Characterization of the K+ current mediated by 5-HT1A receptor in the acutely dissociated rat dorsal raphe neurons. Katayama J, et al. **Brain Res** 1997 Jan 16;745(1-2):283-92

Nucleus raphe obscurus evokes 5-HT-1A receptor-mediated modulation of respiratory neurons. Lalley PM, et al. **Brain Res** 1997 Jan 30;747(1):156-9

Cuneiform nucleus stimulation-induced sympathoexcitation: role of adrenoceptors, excitatory amino acid and serotonin receptors in rat spinal cord. Lam W, et al. **Brain Res** 1997 May 23;757(2):191-201

5-HT1A agonists induce hippocampal theta activity in freely moving cats: role of presynaptic 5-HT1A receptors. Marrosu F, et al. **Brain Res** 1996 Nov 11;739(1-2):192-200

Involvement of 5-HT1A receptor mechanisms in the inhibitory effects of methamphetamine on photic responses in the rodent suprachiasmatic nucleus. Moriya T, et al. **Brain Res** 1996 Nov 18;740(1-2):261-7

Ethanol-induced state-dependent learning is mediated by 5-hydroxytryptamine3 receptors but not by N-methyl-D-aspartate receptor complex. Nakagawa Y, et al. **Brain Res** 1996 Jan 15;706(2):227-32

Differential effects of 5-HT3 receptor antagonism on working memory failure due to deficiency of hippocampal cholinergic and glutamatergic transmission in rats. Ohno M, et al. **Brain Res** 1997 Jul 11;762(1-2):211-5

Blockade of 5-HT1A receptors compensates loss of hippocampal cholinergic neurotransmission involved in working memory of rats. Ohno M, et al. **Brain Res** 1996 Oct 14;736(1-2):180-8

5-HT2 receptor regulation of acetylcholine release induced by dopaminergic stimulation in rat striatal slices. Ramírez MJ, et al. **Brain Res** 1997 May 16;757(1):17-23

DOI disrupts prepulse inhibition of startle in rats via 5-HT2A receptors in the ventral pallidum. Sipes TE, et al. **Brain Res** 1997 Jun 27;761(1):97-104

Role of serotonin receptor subtypes in the development of amygdaloid kindling in rats. Wada Y, et al. **Brain Res** 1997 Feb 7;747(2):338-42

5-HT7 receptors mediate serotonergic effects on light-sensitive suprachiasmatic nucleus neurons. Ying SW, et al. **Brain Res** 1997 May 2;755(2):246-54

5-HT1a receptors mediate the neurotrophic effect of serotonin on developing dentate granule cells. Yan W, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):185-90

Circadian rhythm in the function of central 5-HT1A receptors is endogenous in nature. Lu JQ, et al. **Cell Mol Life Sci** 1997 Mar;53(3):224-6

Differential effects of the serotonin receptors on cultured rat cerebral cortical neurons. Matsuoka T, et al. **Cell Mol Life Sci** 1997 Mar;53(3):233-6

Renal and intestinal autocrine monoaminergic systems: dopamine versus 5-hydroxytryptamine. Vieira-Coelho MA, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):43-58 (22 ref.)

Enhanced contractile responses mediated by different 5-HT receptor subtypes in basilar arteries, superior mesenteric arteries and thoracic aortas from stroke-prone spontaneously hypertensive rats. Nishimura Y, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S99-101

Rabbit cerebral cortex 5HT1a receptors. Weber JT, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 May;117(1):19-24

Serotonin receptors in cognitive behaviors. Buhot MC. **Curr Opin Neurobiol** 1997 Apr;7(2):243-54 (67 ref.)

Modulation of embryonic intracellular Ca2+ signaling by Wnt-5A. Slusarski DC, et al. **Dev Biol** 1997 Feb 1; 182(1):114-20

Serotonin modulation of lymphocyte proliferation via 5-HT1A receptors in rainbow trout (Oncorhynchus mykiss). Ferriere F, et al. **Dev Comp Immunol** 1996 Jul-Aug;20(4):273-83

5-HT1A receptor agonist flesinoxan enhances Fos immunoreactivity in rat central amygdala, bed nucleus of the stria terminalis and hypothalamus. Compaan JC, et al. **Eur J Neurosci** 1996 Nov;8(11):2340-7

Activation of meningeal 5-HT2B receptors: an early step in the generation of migraine headache? Schmuck K, et al. **Eur J Neurosci** 1996 May;8(5):959-67

Voltage oscillations in Xenopus spinal cord neurons: developmental onset and dependence on co-activation of NMDA and 5HT receptors. Scrymgeour-Wedderburn JF, et al. **Eur J Neurosci** 1997 Jul;9(7):1473-82

Characterisation of the 5-HT receptor potentiating neurotransmission in rabbit bladder. Barras M, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):425-8

The role of the 5-HT4 receptor in Cl- secretion in human jejunal mucosa. Budhoo MR, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):109-14

The effect of 5-HT1A receptor stimulation on nociceptive dorsal horn neurones in rats. Gjerstad J, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):315-21

Post-synaptic 5-HT4 receptor modulation of tachykinergic excitation of rat oesophageal tunica muscularis mucosae. Goldhill J, et al. **Eur J Pharmacol** 1997 Apr 4; 323(2-3):229-33

8-OH-DPAT-induced release of hippocampal noradrenaline in vivo: evidence for a role of both 5-HT1A and dopamine D1 receptors. Hajós-Korcsok E, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):285-91

Involvement of 5-HT2A receptors in the elevation of rat serum corticosterone concentrations by quipazine and MK-212. Hemrick-Luecke SK, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):207-11

Serotonergic modulation of central respiratory activity in the neonatal mouse: an in vitro study. Hilaire G, et al. **Eur J Pharmacol** 1997 Jun 25;329(2-3):115-20

Raphe 5-HT1A autoreceptors, but not postsynaptic 5-HT1A receptors or beta-adrenoceptors, restrain the citalopram-induced increase in extracellular 5-hydroxytryptamine in vivo. Hjorth S, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):43-7

Effects of 5-HT1A receptor ligands in a modified Geller-Seifter conflict model in the rat. King CM, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):121-8

5-HT2C receptors mediate penile erections in rats: actions of novel and selective agonists and antagonists. Millan MJ, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):9-12

Renal vasoconstrictor response to 5-hydroxytryptamine in the in situ autoperfused rat kidney: involvement of angiotensin II and the 5-HT2 receptor activation. Morán A, et al. **Eur J Pharmacol** 1997 Jul 9;330(2-3):205-11

The putative 5-HT1A receptor antagonist DU125530 blocks the discriminative stimulus of the 5-HT1A receptor agonist flesinoxan in pigeons. Mos J, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):145-53

Inhibitory effect of ethanol on the 5-HT3 receptor-mediated tachycardia in isolated guinea-pig atrium. Nishio H, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):27-31

The antinociceptive action of paracetamol is associated with changes in the serotonergic system in the rat brain. Pini LA, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):31-40

Partial role of 5-HT2 and 5-HT3 receptors in the activity of antidepressants in the mouse forced swimming test. Redrobe JP, et al. **Eur J Pharmacol** 1997 May 1; 325(2-3):129-35

The role of 5-HT1A and 5-HT1B receptors in antidepressant drug actions in the mouse forced swimming test. Redrobe JP, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):213-20

The role of 5-HT(1B/1D) receptors in the modulation of 5-hydroxytryptamine levels in the frontal cortex of the conscious guinea pig. Roberts C, et al. **Eur J Pharmacol** 1997 May 12;326(1):23-30

Studies on the role of 5-HT3 receptors in the mediation of the ethanol interoceptive cue. Stefanski R, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):141-7

Effects of the 5-HT2C/2B receptor agonist 1-(3-chlorophenyl) piperazine on plasma glucose levels of rats. Sugimoto Y, et al. **Eur J Pharmacol** 1996 Jun 20; 307(1):75-80

Effects of peripheral 5-HT2 and 5-HT3 receptor agonists on food intake in food-deprived and 2-deoxy-D-glucose-treated rats. Sugimoto Y, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):15-21

Evidence for receptor subtype cross-talk in the mitogenic action of serotonin on human small-cell lung carcinoma cells. Vicentini LM, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2-3):497-504

Effects of a nitric oxide synthase inhibitor on 5-HT1A receptor agonist 8-OH-DPAT-induced hyperphagia in rats. Yamada J, et al. **Eur J Pharmacol** 1996 Nov 28; 316(1):23-6

Investigation of 5-HT3 receptor-mediated contraction in guinea-pig distal colon. Yamano M, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):353-9

Blockade of serotonin-2C receptors by mesulergine reduces ocular dominance plasticity in kitten visual cortex. Wang Y, et al. **Exp Brain Res** 1997 Apr;114(2):321-8

Molecular and functional characterization of a 5-HT4 receptor cloned from human atrium. Blondel O, et al. **FEBS Lett** 1997 Aug 4;412(3):465-74

Role of 5-HT1A autoreceptors in the mechanism of action

of serotoninergic antidepressant drugs: recent findings from in vivo microdialysis studies. Gardier AM, et al. **Fundam Clin Pharmacol** 1996;10(1):16–27 (88 ref.)

Stress-induced alterations of somatodendritic 5-HT1A autoreceptor sensitivity in the rat dorsal raphe nucleus--in vitro electrophysiological evidence. Laaris N, et al. **Fundam Clin Pharmacol** 1997;11(3):206–14

Distinct 5-HT receptors mediate the peristaltic reflex induced by mucosal stimuli in human and guinea pig intestine. Foxx-Orenstein AE, et al. **Gastroenterology** 1996 Nov;111(5):1281–90

Adrenergic and serotoninergic receptors mediate the immunological activation of corticosterone secretion in male rats. Guo AL, et al. **Gynecol Endocrinol** 1996 Jun; 10(3):149–54

5-Hydroxytryptamine contracts human uterine artery smooth muscle predominantly via 5-HT2 receptors. Karlsson C, et al. **Hum Reprod** 1997 Feb;12(2):361–7

Plastic responses of neonatal 5-hydroxytryptamine1B receptors to 5,7-dihydroxytryptamine lesions mapped by quantitative autoradiography. Pranzatelli MR, et al. **Int J Dev Neurosci** 1996 Aug;14(5):621–9

Hormone-defined cell system for studying G-protein coupled receptor agonist-activated growth modulation: delta-opioid and serotonin-5HT2C receptor activation show opposite mitogenic effects. Agarwal D, et al. **J Cell Physiol** 1997 Apr;171(1):61–74

5-HT2 receptors are partially involved in the relationship between renin release and delta relative power. Brandenberger G, et al. **J Endocrinol Invest** 1996 Sep; 19(8):556–62

Effect of interferon-alpha on DOI-induced wet-dog shakes in rats. Kugaya A, et al. **J Neural Transm** 1996; 103(8–9):947–55

Serotonin stimulation of 5-HT4 receptors indirectly enhances in vivo dopamine release in the rat striatum. De Deurwaerdère P, et al. **J Neurochem** 1997 Jan; 68(1):195–203

Functional coupling of endogenous serotonin (5-HT1B) and calcitonin (C1a) receptors in CHO cells to a cyclic AMP-responsive luciferase reporter gene. George SE, et al. **J Neurochem** 1997 Sep;69(3):1278–85

Activating mutations of the serotonin 5-HT2C receptor. Herrick-Davis K, et al. **J Neurochem** 1997 Sep; 69(3):1138–44

A naturally occurring amino acid substitution of the human serotonin 5-HT2A receptor influences amplitude and timing of intracellular calcium mobilization. Ozaki N, et al. **J Neurochem** 1997 May;68(5):2186–93

Preferential potentiation of the effects of serotonin uptake inhibitors by 5-HT1A receptor antagonists in the dorsal raphe pathway: role of somatodendritic autoreceptors. Romero L, et al. **J Neurochem** 1997 Jun;68(6):2593–603

Native serotonin 5-HT3 receptors expressed in Xenopus oocytes differ from homopentameric 5-HT3 receptors. van Hooft JA, et al. **J Neurochem** 1997 Sep;69(3):1318–21

Two parallel signaling pathways couple 5HT1A receptors to N- and L-type calcium channels in C-like rat dorsal root ganglion cells. Cardenas CG, et al. **J Neurophysiol** 1997 Jun;77(6):3284–96

Electrophysiological analysis of dorsal root ganglion neurons pre- and post-coexpression of green fluorescent protein and functional 5-HT3 receptor. Smith GM, et al. **J Neurophysiol** 1997 Jun;77(6):3115–21

Subpopulations of gastric myenteric neurons are differentially activated via distinct serotonin receptors: projection, neurochemical coding, and functional implications. Michel K, et al. **J Neurosci** 1997 Oct 15;17(20):8009–17

Differential actions of serotonin, mediated by 5-HT1B and 5-HT2C receptors, on GABA-mediated synaptic input to rat substantia nigra pars reticulata neurons in vitro. Stanford IM, et al. **J Neurosci** 1996 Dec 1;16(23):7566–73

5-HT2A receptor-mediated regulation of brain-derived neurotrophic factor mRNA in the hippocampus and the neocortex. Vaidya VA, et al. **J Neurosci** 1997 Apr 15; 17(8):2785–95

Serotonin 5-HT2 receptor activation potentiates N-methyl-D-aspartate receptor-mediated ion currents by a protein kinase C-dependent mechanism. Blank T, et al. **J Neurosci Res** 1996 Jul 15;45(2):153–60

Expression and modulation of 5-hydroxytryptamine1A receptors in P11 cells. Hensler JG, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1138–45

Central serotonergic systems in the spontaneously hypertensive and Lewis rat strains that differ in the elevated plus-maze test of anxiety. Kulikov A, et al. **J Pharmacol Exp Ther** 1997 May;281(2):775–84

Combined blockade of 5-HT3- and 5-HT4-serotonin receptors inhibits colonic functions in conscious rats and mice. Nagakura Y, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):284–90

High-affinity agonist binding is not sufficient for agonist efficacy at 5-hydroxytryptamine2A receptors: evidence in favor of a modified ternary complex model. Roth BL, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):576–83

Chronic antidepressant exposure enhances 5-hydroxytryptamine7 receptor-mediated cyclic adenosine monophosphate accumulation in rat frontocortical astrocytes. Shimizu M, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1551–8

Differential involvement of serotonin 2A/C and thromboxane A2/prostanoid receptors in high- vs. low-shear rate arterial thrombosis in rabbits. Valentin JP, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):761–9

Induction and maintenance of ganglionic long-term potentiation require activation of 5-hydroxytryptamine (5-HT3) receptors. Alkadhi KA, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):479–89

Limbic circuits and monoamine receptors: dissecting the effects of antipsychotics from disease processes. Joyce JN, et al. **J Psychiatr Res** 1997 Mar-Apr;31(2):197–217 (70 ref.)

Perspectives on the role of serotonergic mechanisms in the pharmacology of schizophrenia. Busatto GF, et al. **J Psychopharmacol (Oxf)** 1997;11(1):3–12 (127 ref.)

The relevance of serotonergic mechanisms in the treatment of schizophrenia has not been confirmed. Nyberg S, et al. **J Psychopharmacol (Oxf)** 1997;11(1):13–4

5-HT receptors, genes and antipsychotic mechanisms. Reynolds GP. **J Psychopharmacol (Oxf)** 1997;11(1):26–7

Role of dopamine D2, D4 and serotonin(2A) receptors in antipsychotic and anticataleptic action. Seeman P, et al. **J Psychopharmacol (Oxf)** 1997;11(1):15–7

Perspectives on the role of serotonergic mechanisms in the pharmacology of schizophrenia [letter] Seibyl JP. **J Psychopharmacol (Oxf)** 1997;11(2):188–9

Atypical antipsychotics--serotonergic mechanisms but don't forget dopamine. Vile JM, et al. **J Psychopharmacol (Oxf)** 1997;11(1):24–5

Functional interaction between serotonin and other neuronal systems: focus on in vivo microdialysis studies. Saito H, et al. **Jpn J Pharmacol** 1996 Mar;70(3):203–5 (221 ref.)

Dopamine and serotonin receptors: amino acid sequences, and clinical role in neuroleptic parkinsonism. Seeman P, et al. **Jpn J Pharmacol** 1996 Jul;71(3):187–204 (140 ref.)

5-HT receptor subtypes involved in the serotonin-induced inhibition of L-leucine absorption in rabbit jejunum. Salvador MT, et al. **Life Sci** 1997;61(3):309–18

Which type of 5-hydroxytryptamine receptor mediates relaxation of the longitudinal muscle of guinea pig proximal colon in vitro? Sevcík J, et al. **Methods Find Exp Clin Pharmacol** 1996 Sep;18(7):421–30

5-hydroxytryptamine2C receptor activation inhibits 5-hydroxytryptamine1B-like receptor function via arachidonic acid metabolism. Berg KA, et al. **Mol Pharmacol** 1996 Oct;50(4):1017–23

5-hydroxytryptamine1A receptor-mediated increases in receptor expression and activation of nuclear factor-kappaB in transfected Chinese hamster ovary cells. Cowen DS, et al. **Mol Pharmacol** 1997 Aug;52(2):221–6

5-Hydroxytryptamine1B receptors modulate the effect of cocaine on c-fos expression: converging evidence using 5-hydroxytryptamine1B knockout mice and the 5-hydroxytryptamine1B/1D antagonist GR127935. Lucas JJ, et al. **Mol Pharmacol** 1997 May;51(5):755–63

5-Hydroxytryptamine4 receptors reduce afterhyperpolarization in hippocampus by inhibiting calcium-induced calcium release. Torres GE, et al. **Mol Pharmacol** 1996 Nov;50(5):1316–22

Nature of 5-HT1-like receptors mediating depressor responses in vagosympathectomized rats; close resemblance to the cloned 5-ht7 receptor. De Vries P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):90–9

Modulation of cortical acetylcholine release by serotonin: the role of substance P interneurons. Feuerstein TJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):618–26

Promotion of cell growth by stimulation of cloned human 5-HT1D receptor sites in transfected C6-glial cells is highly sensitive to intrinsic activity at 5-HT1D receptors. Pauwels PJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):136–44

Pharmacological characterizations of recombinant human 5-HT1D alpha and 5-HT1D beta receptor subtypes coupled to adenylate cyclase inhibition in clonal cell lines: apparent differences in drug intrinsic efficacies between human 5-HT1D subtypes. Zgombick JM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):226–36

Therapeutic effect of sarpogrelate, a new 5-hydroxytryptamine receptor 2A antagonist, on diabetic nephropathy and neuropathy [letter] Ishimura E, et al. **Nephron** 1997;76(2):227–9

Activation of serotonergic 5-HT1A receptor reduces Ca(2+)- and glutamatergic receptor-evoked arachidonic acid and No/cGMP release in adult hippocampus. Strosznajder J, et al. **Neurochem Int** 1996 Apr;28(4):439–44

Specific involvement of central 5-HT1A receptors in the mediation of male rat ejaculatory behavior. Ahlenius S, et al. **Neurochem Res** 1997 Aug;22(8):1065–70 (34 ref.)

Enhancement of fluoxetine-dependent increase of extracellular serotonin (5-HT) levels by (-)-pindolol, an antagonist at 5-HT1A receptors. Dreshfield LJ, et al. **Neurochem Res** 1996 May;21(5):557–62

Responses of the rat lower oesophageal sphincter (LOS) to vagal efferent activation. Kawahara H, et al. **Neurogastroenterol Motil** 1997 Jun;9(2):85–97

311C90: increasing the options for therapy with effective acute antimigraine 5HT1B/1D receptor agonists. Ferrari MD. **Neurology** 1997 Mar;48(3 Suppl 3):S21–4 (15 ref.)

5-HT1A receptors are not involved in clozapine's lack of cataleptogenic potential. Bartoszyk GD, et al. **Neuropharmacology** 1996;35(11):1645–6

Role of the 5-HT1A receptor in development of the neonatal rat brain: preliminary behavioral studies. Borella A, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):445–50

5-HT1A receptor-mediated inhibition of acetylcholine release from guinea pig myenteric plexus: potential mechanisms. Dietrich C, et al. **Neuropharmacology** 1996 Apr;35(4):483–8

The effects of novel, selective 5-hydroxytryptamine (5-HT)4 receptor ligands in rat spatial navigation. Fontana DJ, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):689–96

5-HT4 receptors improve social olfactory memory in the rat. Letty S, et al. **Neuropharmacology** 1997 Apr-May; 36(4–5):681–7

Do 5-HT1B/1D autoreceptors modulate dorsal raphe cell firing? In vivo electrophysiological studies in guinea pigs with GR127935. Sprouse J, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):559–67

In vivo effects of 5-hydroxytryptamine receptor activation on rat nucleus tractus solitarius neurones excited by vagal C-fibre afferents. Wang Y, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):489–98

The involvement of 5-HT1B receptors in the inhibitory effects of nitric oxide synthase inhibitor on 2-deoxy-D-glucose-induced hyperphagia in rats. Sugimoto Y, et al. **Neuroreport** 1997 Aug 18;8(12):2735–7

Influence of 5-HT1B/1D receptors on dopamine release in the guinea pig nucleus accumbens: a microdialysis study. Hållbus M, et al. **Neurosci Lett** 1997 Mar 28;225(1):57–60

TFMPP, a 5HT1B receptor agonist, inhibits light-induced phase shifts of the circadian activity rhythm and c-Fos expression in the mouse suprachiasmatic nucleus. Pickard GE, et al. **Neurosci Lett** 1997 Aug 8;231(2):95–8

Serotonin as a regulator of hypothalamic-pituitary-interrenal activity in teleost fish. Winberg S, et al. **Neurosci Lett** 1997 Jul 18;230(2):113–6

Effects of serotonin through serotonin1A and serotonin4 receptors on inhibition in the guinea-pig dentate gyrus in vitro. Bijak M, et al. **Neuroscience** 1997 Jun;78(4):1017–26

Behavioral characterization of mice packing the 5-HT1B receptor. Ramboz S, et al. **NIDA Res Monogr** 1996; 161:39–57 (32 ref.)

Do beta-adrenoceptors and serotonin 5-HT1A receptors have similar functions in the control of intraocular pressure in the rabbit? Osborne NN, et al. **Ophthalmologica** 1996; 210(5):308–14 (40 ref.)

Two distinct receptors operate the cAMP cascade to up-regulate L-type Ca channels. Lukyanetz EA, et al. **Pflugers Arch** 1996 Jun;432(2):174–81

High intensity social conflict in the Swiss albino mouse induces analgesia modulated by 5-HT1A receptors. Canto de Souza A, et al. **Pharmacol Biochem Behav** 1997 Mar; 56(3):481–6

The 5-HT1A receptor is not involved in emotional stress-induced rises in stress hormones. Groenink L, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):303–8

Combined cholinergic and 5-HT2 receptor activation suppresses thalamocortical oscillations in aged rats. Jäkälä P, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):713–8

Role of 5-HT1b receptor in the pressure-induced behavioral and neurochemical disorders in rats. Kriem B, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):257–64

Serotonergic receptors modify the voluntary intake of alcohol and morphine but not of cocaine and nicotine by rats. Mosner A, et al. **Pharmacology** 1997 Apr;54(4):186–92

Naturally occurring clavines: antagonism/partial agonism at 5-HT2A receptors and antagonism at alpha 1-adrenoceptors in blood vessels. Pertz H. **Planta Med** 1996 Oct;62(5):387–92

5-HT3 receptors and central effects of ethanol. Kostowski W. **Pol J Pharmacol** 1996 May-Jun;48(3):243–54 (108 ref.)

Peptidyl prolyl cis-trans isomerase activity of cyclophilin A in functional homo-oligomeric receptor expression. Helekar SA, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5432–7

Brain lipids that induce sleep are novel modulators of 5-hydroxytrypamine receptors. Huidobro-Toro JP, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8078–82

Irreversible antagonism of 5HT2c receptors by N-ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline (EEDQ). Ni YG, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2715–8

Visualisation of loss of 5-HT2A receptors with age in healthy volunteers using [18F]altanserin and positron emission tomographic imaging. Rosier A, et al. **Psychiatry Res** 1996 Nov 25;68(1):11–22

Moderate dieting causes 5-HT2C receptor supersensitivity. Cowen PJ, et al. **Psychol Med** 1996 Nov;26(6):1155–9

Inhibition of GH in maternal separation may be mediated through altered serotonergic activity at 5-HT2A and 5-HT2C receptors. Katz LM, et al. **Psychoneuroendocrinology** 1996 Feb;21(2):219–35

Serotonin1B receptor modulation of startle reactivity, habituation, and prepulse inhibition in wild-type and serotonin1B knockout mice. Dulawa SC, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):125–34

Increased 5-HT2C receptor responsiveness occurs on rearing rats in social isolation. Fone KC, et al. **Psychopharmacology (Berl)** 1996 Feb;123(4):346–52

Circadian rhythm in the response of central 5-HT1A receptors to 8-OH-DPAT in rats. Lu JQ, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):42–5

CP-135,807, a selective 5-HT1D agonist: effects in drug

discrimination and punishment procedures in the pigeon. Mansbach RS, et al. **Psychopharmacology (Berl)** 1996 Dec; 128(3):313–9

5-HT3 receptor mediated dopamine release in the nucleus accumbens during withdrawal from continuous cocaine. Matell MS, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(3):242–8

Functional subsensitivity of 5-HT2A and 5-HT2C receptors mediating hyperthermia following acute and chronic treatment with 5-HT2A/2C receptor antagonists. Mazzola-Pomietto P, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):144–51

RU24969-induced behavioural syndrome requires activation of both 5HT1A and 5HT1B receptors. O'Neill MF, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):255–60

Central 5-HT1A and 5-HT1D receptors modulate reflex bronchoconstriction in guinea-pigs. Ramage AG, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):369–70

Psychobiology of postpartum mood disorders. Wisner KL, et al. **Semin Reprod Endocrinol** 1997 Feb;15(1):77–89

Role of 5HT1 receptors in the control of hypoglossal motoneurons in vivo. Okabe S, et al. **Sleep** 1996 Dec;19(10 Suppl):S150–3

Autoregulatory properties of dorsal raphe 5-HT neurons: possible role of electrotonic coupling and 5-HT1D receptors in the rat brain. Piñeyro G, et al. **Synapse** 1996 Jan;22(1):54–62

[Dopamine D2 and serotonin 5HT2 receptors: functions, interactions and clinical consequences in schizophrenia] Guise S, et al. **Encephale** 1997 Apr;23 Spec No 2:10–6 (20 ref.) (Eng. Abstr.) **(Fre)**

[Is it feasible to develop a 5-HT basis for the treatment of depression?] Hamon M. **Encephale** 1995 Dec;21 Spec No 4:27–32 (26 ref.) **(Fre)**

[Role of 5-HT3 receptors in the control by cholecystokinin of transient relaxations of the inferior esophageal sphincter in dogs] Rouzade ML, et al. **Gastroenterol Clin Biol** 1996; 20(6-7):575–80 (Eng. Abstr.) **(Fre)**

[Affective disturbances and serotonin-2 receptor functions] Kuzumi I, et al. **Seishin Shinkeigaku Zasshi** 1996; 98(11):915–9 (22 ref.) **(Jpn)**

[Is chronic serotonin deficiency the basis of diabetic and age-related angiopathy?] Simonenkov AP, et al. **Biull Eksp Biol Med** 1997 Jan;123(1):103–10 **(Rus)**

[The interaction of GABA-A receptors with the serotoninergic system of the brain in regulating the testosterone level by the negative feedback mechanism] Amikishieva AV, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov;82(10-11):84–90 (Eng. Abstr.) **(Rus)**

[The participation of the serotoninergic system in regulating the activity of the central glutamatergic/aspartatergic and GABA-ergic synapses] Grigor'ev IP, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug-Sep;82(8-9).22–7 (Eng. Abstr.) **(Rus)**

[A comparison of serotonin- and dopaminergic neuronal systems in sexually mature and juvenile terrestrial mollusks of the genera Helix and Eobania] Ierusalimskiĭ VN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):563–76 (Eng. Abstr.) **(Rus)**

[The effect of the repeated experience of victories and defeats in social conflicts on the function of the brain serotoninergic system in male mice] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov-Dec; 46(6):1088–96 (Eng. Abstr.) **(Rus)**

[The participation of serotonin S1A and S2 receptors in the formation of different levels of anxiety in male mice under the influence of the experience of social victories and defeats] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Mar-Apr; 46(2):370–7 (Eng. Abstr.) **(Rus)**

[The role of the interaction of serotonin- and noradrenergic systems in regulating behavior] Semenova TP. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar-Apr; 47(2):358–61 (21 ref.) (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[The participation of mast cells and serotonin-immunoreactive fibers in the innervation of the cerebral vessels] Korneeva TE, et al. **Morfologiia** 1996; 109(3):31–5 (Eng. Abstr.) **(Rus)**

RECEPTORS, SIGMA

AGONISTS

SA4503, a novel cognitive enhancer, with sigma 1 receptor agonistic properties. Matsuno K, et al. **Behav Brain Res** 1997 Feb;83(1-2):221–4

Beneficial effects of sigma agonists on the age-related learning impairment in the senescence-accelerated mouse (SAM). Maurice T, et al. **Brain Res** 1996 Sep 16; 733(2):219–30

Ameliorating effect of SA4503, a novel sigma 1 receptor agonist, on memory impairments induced by cholinergic dysfunction in rats. Senda T, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):1–10

The presence of sigma receptor subtypes in bovine retinal membranes [letter] Senda T, et al. **Exp Eye Res** 1997 May; 64(5):857–60

Regional differences of the effect of sigma receptor ligands on the acetylcholine release in the rat brain. Kobayashi T, et al. **J Neural Transm Gen Sect** 1996;103(6):661–9

Tear film stability of protein extracts from dry eye patients administered a sigma agonist. Schoenwald RD, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):151–61

Enhancement of acetylcholine release by SA4503, a novel sigma 1 receptor agonist, in the rat brain. Kobayashi T, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):106–13

ANALYSIS

Sigma-receptor imaging by means of I123-IDAB scintigraphy: clinical application in melanoma and non-small cell lung cancer. Everaert H, et al. **Anticancer Res** 1997 May-Jun;17(3B):1577–82

99mTc-labeled sigma-receptor-binding complex: synthesis, characterization, and specific binding to human ductal breast carcinoma (T47D) cells. John CS, et al. **Bioconjug Chem** 1997 May-Jun;8(3):304–9

Synthesis and evaluation of [18F] labeled benzamides: high affinity sigma receptor ligands for PET imaging. Dence CS, et al. **Nucl Med Biol** 1997 May;24(4):333–40

In vivo evaluation of [18F]1-(3-fluoropropyl)-4-(4-cyanophenoxymethyl) piperidine: a selective sigma-1 receptor radioligand for PET. Waterhouse RN, et al. **Nucl Med Biol** 1997 Feb; 24(2):127–34

ANTAGONISTS & INHIBITORS

The effects of (+)-SKF10047 and ketamine hydrochloride on stereotyped behaviour, locomotor activity and ataxia in guinea pig. Jerram AH, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):269–73

sigma Receptor antagonists block the development of sensitization to cocaine. Ujike H, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):123–8

Subchronic administration of N-[2-(3,4-dichlorophenyl) ethyl]-N-methyl-2-(dimethylamino) ethylamine (BD1047) alters sigma 1 receptor binding. Zambon AC, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):39–47

BMY-14802 reversed the sigma receptor agonist-induced neck dystonia in rats. Okumura K, et al. **J Neural Transm** 1996;103(10):1153–61

Stereoselective inhibition of natural killer activity by the sigma ligand (+)-pentazocine. Maity R, et al. **J Neuroimmunol** 1996 Oct;70(1):7–13

Cocaine-induced convulsions: pharmacological antagonism at serotonergic, muscarinic and sigma receptors. Ritz MC, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):299–310

BLOOD

Development of a radioimmunoassay for SR 31747A, a new sigma ligand, in human plasma. Dussossoy D, et al. **J Pharm Biomed Anal** 1996 May;14(7):783–91

CHEMISTRY

Differential solubilization of rat liver sigma 1 and sigma 2 receptors: retention of sigma 2 sites in particulate fractions. Torrence-Campbell C, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):201–10

DRUG EFFECTS

Lack of neuroprotective effect of sigma receptor ligands in the neurotoxicity of p-chloroamphetamine in rat brain. Narita N, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:199–204

Dehydroepiandrosterone sulfate attenuates dizocilpine-induced learning impairment in mice via sigma 1-receptors. Maurice T, et al. **Behav Brain Res** 1997 Feb; 83(1-2):159–64

Neuroleptic binding to sigma receptors: possible involvement in neuroleptic-induced acute dystonia. Jeanjean AP, et al. **Biol Psychiatry** 1997 May 15;41(10):1010–9

Effect of short-term and long-term treatments with sigma ligands on the N-methyl-D-aspartate response in the CA3 region of the rat dorsal hippocampus. Bergeron R, et al. **Br J Pharmacol** 1997 Apr;120(7):1351–9

Kappa opioid receptor agonists inhibit sigma-1 (sigma 1) receptor binding in guinea-pig brain, liver and spleen: autoradiographical evidence. Brent PJ. **Brain Res** 1996 Jul 1;725(2):155–65

(-)-Pentazocine analgesia in mice: interactions with a sigma receptor system. Chien CC, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):303–8

The sigma receptor ligand rimcazole alters secretion of prolactin and alpha-melanocyte stimulating hormone by dopaminergic and non-dopaminergic mechanisms. Eaton MJ, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):171–7

Evidence that the NH2-terminus of substance P modulates N-methyl-D-aspartate-induced activity by an action involving sigma receptors. Hornfeldt CS, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):15–22

Role of (+)-SKF-10,047-sensitive sub-population of sigma 1 receptors in amelioration of conditioned fear stress in rats: association with mesolimbic dopaminergic systems. Kamei H, et al. **Eur J Pharmacol** 1997 Jan 29; 319(2-3):165–72

(+)-SKF-10,047 and dextromethorphan ameliorate conditioned fear stress through the activation of phenytoin-regulated sigma 1 sites. Kamei H, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):21–8

(+)-SKF-10,047 and dextromethorphan ameliorate conditioned fear stress via dopaminergic systems linked to phenytoin-regulated sigma 1 sites. Kamei H, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):149–58

Induction of c-fos gene expression by the selective sigma receptor ligand EMD 57445 in rat brain. Dahmen N, et al. **Eur Neuropsychopharmacol** 1996 Aug;6(3):237–43

In vivo effects of a new immunosuppressive sigma ligand, SR 31747, on mouse thymus. Carayon P, et al. **Immunopharmacol Immunotoxicol** 1996 May;18(2):179–91

Antagonism of N-methyl-D-aspartate receptors by sigma site ligands: potency, subtype-selectivity and mechanisms of inhibition. Whittemore ER, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):326–38

The effects of MK-801, ifenprodil, JO 1784, JO 1994 and JO 1997 on PK 11195 receptor binding, nitric oxide synthase (NO synthase) activity and infarct volume in a mouse model of focal cerebral ischaemia. Earley B, et al. **Neurochem Int** 1996 May-Jun;28(5-6):509–21

The pharmacology of the novel and selective sigma ligand, PD 144418. Akunne HC, et al. **Neuropharmacology** 1997 Jan;36(1):51–62

Behavioral evidence for modulation by sigma ligands of (+)MK-801-induced hyperlocomotion in monoamine-depleted mice. Okuyama S, et al. **Neuropharmacology** 1996 Apr;35(4):467–74

Synthesis and preliminary evaluation of [123I]1-(4-cyanobenzyl)-4-[[(trans-iodopropen-2-yl) oxy]meth yl]piperidin e: a novel high affinity sigma receptor radioligand for SPECT. Waterhouse RN, et al. **Nucl Med Biol** 1997 Jan;24(1):45–51

The sigma ligand JO 1784 prevents trimethyltin-induced behavioural and sigma-receptor dysfunction in the rat. O'Connell AW, et al. **Pharmacol Toxicol** 1996 May; 78(5):296–302

Reduction of the scopolamine-induced impairment of passive-avoidance performance by sigma receptor agonist in mice. Senda T, et al. **Physiol Behav** 1997 Feb; 61(2):257–64

Neuroprotective and anti-amnesic potentials of sigma (sigma) receptor ligands. Maurice T, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan; 21(1):69–102 (224 ref.)

Open clinical trial on the sigma ligand panamesine in patients with schizophrenia. Frieboes RM, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):82–8

Cocaine toxicity: concurrent influence of dopaminergic, muscarinic and sigma receptors in mediating cocaine-induced lethality. Ritz MC, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):311–21

[The anti-arrhythmic effect of the selective sigma-receptor antagonist DuP 734 [1-(cyclopropylmethyl)-4-(2'-(4''-fluorophenyl)-2'-oxoethyl)piper idine HBr]] Maslov LN, et al. **Eksp Klin Farmakol** 1997 Mar-Apr;60(2):24–6 (Eng. Abstr.) **(Rus)**

GENETICS

Cloning and functional expression of the human type 1 sigma receptor (hSigmaR1). Kekuda R, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):553–8

METABOLISM

Effects of sigma ligands on the cloned mu-, delta- and kappa-opioid receptors co-expressed with G-protein-activated K+ (GIRK) channel in Xenopus oocytes. Kobayashi T, et al. **Br J Pharmacol** 1996 Sep; 119(1):73–80

High affinity of sigma 1-binding sites for sterol isomerization inhibitors: evidence for a pharmacological relationship with the yeast sterol C8-C7 isomerase. Moebius FF, et al. **Br J Pharmacol** 1997 May;121(1):1–6

Differentiation of sigma ligand-activated receptor subtypes that modulate NMDA-evoked [3H]-noradrenaline release in rat hippocampal slices. Monnet FP, et al. **Br J Pharmacol** 1996 Sep;119(1):65–72

Neuroprotective sigma ligands attenuate NMDA and trans-ACPD-induced calcium signaling in rat primary neurons. Klette KL, et al. **Brain Res** 1997 May 9; 756(1-2):231–40

Sigma 2 receptors as potential biomarkers of proliferation in breast cancer. Mach RH, et al. **Cancer Res** 1997 Jan 1;57(1):156–61

Synthesis and characterization of [125I]3'-(-)-iodopentazocine, a selective sigma 1 receptor ligand. Chien CC, et al. **Eur J Pharmacol** 1997 Mar 5; 321(3):361–8

Brain sigma receptors labelled by [3H]nemonapride. Helmeste D, et al. **Eur J Pharmacol** 1996 Apr 22; 301(1-3):R1–3

Decrease in sigma but no increase in striatal dopamine D4 sites in schizophrenic brains. Helmeste DM, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):R3–5

Sigma 1 receptor subtype is involved in the relief of behavioral despair in the mouse forced swimming test. Matsuno K, et al. **Eur J Pharmacol** 1996 Oct 3; 312(3):267–71

Binding properties of SA4503, a novel and selective sigma 1 receptor agonist. Matsuno K, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):271–9

Comparison of binding parameters of sigma 1 and sigma 2 binding sites in rat and guinea pig brain membranes: novel subtype-selective trishomocubanes. Nguyen VH, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):233–40

RECEPTORS, SIGMA

Possible expression of a sigma 1 site in rat pheochromocytoma (PC12) cells. Sagi N, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):185-90

Characterization of the delta-opioid receptor found in SH-SY5Y neuroblastoma cells. Toll L, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):261-7

[3H]1,3-di(2-tolyl) guanidine binds to a sigma 2 receptor on Jurkat cell membranes, but sigma compounds fail to influence immunomodulatory events in human peripheral blood lymphocytes. DeHaven-Hudkins DL, et al. **Immunopharmacology** 1996 Oct;35(1):27-39

Potentiation by dehydroepiandrosterone of the neuronal response to N-methyl-D-aspartate in the CA3 region of the rat dorsal hippocampus: an effect mediated via sigma receptors. Debonnel G, et al. **J Endocrinol** 1996 Sep;150 Suppl:S33-42

Novel potent sigma 1 ligands: N-[omega-(tetralin-1-yl)alkyl]piperidine derivatives. Berardi F, et al. **J Med Chem** 1996 Oct 11;39(21):4255-60

Halogenated 4-(phenoxymethyl)piperidines as potential radiolabeled probes for sigma-1 receptors: in vivo evaluation of [123I]-1-(iodopropen-2-yl)-4-[(4-cyanophenoxy) methyl]pip eri dine. Waterhouse RN, et al. **J Med Chem** 1997 May 23;40(11):1657-67

The antiparkinsonian drug budipine binds to NMDA and sigma receptors in postmortem human brain tissue. Kornhuber J, et al. **J Neural Transm Suppl** 1995;46:131-7

Protein phosphorylation and calcium uptake into rat forebrain synaptosomes: modulation by the sigma ligand, 1,3-ditolylguanidine. Brent PJ, et al. **J Neurochem** 1997 May;68(5):2201-11

Differential localization of three distinct binding sites for sigma receptor ligands in rat spleen. Wolfe SA Jr, et al. **J Neuroimmunol** 1997 Jan;72(1):45-58

Modulation by neurosteroids of the in vivo (+)-[3H]SKF-10,047 binding to sigma 1 receptors in the mouse forebrain. Maurice T, et al. **J Neurosci Res** 1996 Dec 15;46(6):734-43

RU 3117 a steroidal compound with high affinity for sigma sites in rat testis membranes. Bonfils A, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):49-54

Solubilization and characterization of binding sites for [3H]NE-100, a novel and potent sigma 1 ligand, from guinea pig brain. Chaki S, et al. **Life Sci** 1996; 59(16):1331-40

In vivo regulation of serotonin 5-HT2A receptors in rat brain by subchronic administration of sigma receptor ligand NE-100. Hashimoto K, et al. **Life Sci** 1997;60(24):2245-54

The novel sigma ligand JO 1994 protects against ischaemia-induced behavioural changes, cell death and receptor dysfunction in the gerbil. O'Neill M, et al. **Neurochem Int** 1996 Feb;28(2):193-207

Sigma binding in a human neuroblastoma cell line. Ryan-Moro J, et al. **Neurochem Res** 1996 Nov; 21(11):1309-14

[3H]YM-09151-2 (nemonapride), a potent radioligand for both sigma 1 and sigma 2 receptor subtypes. Ujike H, et al. **Neuroreport** 1996 Apr 10;7(5):1057-61

Intrasynaptosomal free calcium levels in rat forebrain synaptosomes: modulation by sigma (sigma) receptor ligands. Brent PJ, et al. **Neurosci Lett** 1996 Jun 21; 211(2):138-42

[3H]1,3-di(2-tolyl)guanidine and [3H](+)pentazocine binding sites in the rat brain: autoradiographic visualization of the putative sigma1 and sigma2 receptor subtypes. Bouchard P, et al. **Neuroscience** 1997 Jan;76(2):467-77

Synthesis, in vitro validation and in vivo pharmacokinetics of [125I]N-[2-(4-iodophenyl)ethyl]-N-methyl-2-(1-piperidinyl) ethylamine: a high-affinity ligand for imaging sigma receptor positive tumors. John CS, et al. **Nucl Med Biol** 1996 Aug;23(6):761-6

Some behavioral effects of 1,3-di-o-tolylguanidine, opipramol and sertraline, the sigma site ligands. Maj J, et al. **Pol J Pharmacol** 1996 Jul-Aug;48(4):379-95

Purification, molecular cloning, and expression of the mammalian sigma1-binding site. Hanner M, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8072-7

[Neuropharmacological effects of sigma receptor ligands: anxiolytic, anti-amnesic and neuroprotective effects] Amano M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Jun; 16(3):73-84 (103 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

The sigma ligand rimcazole activates noradrenergic neurons projecting to the paraventricular nucleus and increases corticosterone secretion in rats. Eaton MJ, et al. **Brain Res** 1996 Sep 16;733(2):162-6

Evidence that the ability of imidazoline compounds to stimulate insulin secretion is not due to interaction with sigma receptors. Chan SL, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):241-4

The involvement of sigma receptors in the choice reaction performance deficits induced by phencyclidine. Jin J, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):147-52

In vivo functional interaction between phencyclidine binding sites and sigma receptors to produce head-weaving behavior in rats. Kitaichi K, et al. **Eur J Pharmacol** 1996 Dec 30;318(2-3):205-11

Dissociation of the motor effects of (+)-pentazocine from binding to sigma 1 sites. Matsumoto RR, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):31-40

Regulation of [3H]norepinephrine release from guinea pig hippocampus by sigma2 receptors. Weatherspoon JK, et al. **Eur J Pharmacol** 1997 May 20;326(2-3):133-8

Involvement of sigma-receptors in the increase in contraction of mouse vas deferens induced by exogenous ATP. Matsuno K, et al. **J Pharm Pharmacol** 1996 Jan;48(1):96-9

Sigma 1 receptor subtype is involved in the facilitation of cortical dopaminergic transmission in the rat brain. Kobayashi T, et al. **Neurochem Res** 1997 Sep;22(9):1105-9

Regulation of [3H] dopamine release from mesolimbic and mesocortical areas of guinea pig brain by sigma receptors. Weatherspoon JK, et al. **Schizophr Res** 1996 Jul;21(1):51-62

Roles of sigma receptors in isolated guinea pig parietal cells. Suzuki T, et al. **Tokai J Exp Clin Med** 1995 Dec; 20(4-6):245-56

The mysteries of sigma receptors: new family members reveal a role in cholesterol synthesis. Moebius FF, et al. **Trends Pharmacol Sci** 1997 Mar;18(3):67-70 (30 ref.)

RECEPTORS, SIGMA OPIOID see **RECEPTORS, SIGMA**

RECEPTORS, SINCALIDE see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, SOMATOMEDIN

ANALYSIS

IGF-II, IGF-binding proteins and IGF receptors in pancreatic beta-cell lines. Katz LE, et al. **J Endocrinol** 1997 Mar;152(3):455-64

BIOSYNTHESIS

Expression of insulin-like growth factor-I receptor and transferrin receptor by breast cancer cells in pleural effusion smears. Athanassiadou P, et al. **Cytopathology** 1996 Dec;7(6):400-5

DRUG EFFECTS

Insulin-like growth factors in breast cancer. Helle SI, et al. **Acta Oncol** 1996;35 Suppl 5:19-22 (29 ref.)

GENETICS

Insulin-like growth factor binding protein gene expression in the pregnant rat uterus and placenta. Cerro JA, et al. **Dev Biol** 1997 Apr 15;184(2):278-95

Thyroid hormone controls the expression of insulin-like growth factor I receptor gene at different levels in lung and heart of developing and adult rats. Moreno B, et al. **Endocrinology** 1997 Mar;138(3):1194-203

Coordinate expression of insulin-like growth factor II (IGF-II) and IGF-II/mannose-6-phosphate receptor mRNA and stable expression of IGF-I receptor mRNA during differentiation of human colon carcinoma cells (Caco-2). Hoeflich A, et al. **Eur J Endocrinol** 1996 Jul; 135(1):49-59

Simultaneous detection of multiple gene expression in mouse and human individual preimplantation embryos. Liu HC, et al. **Fertil Steril** 1997 Apr;67(4):733-41

Expression of insulin-like growth factor (IGF), IGF-binding protein, and IGF receptor messenger ribonucleic acids in normal and polycystic ovaries. Voutilainen R, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1003-8

Expression and distribution of IGF-1 receptors containing a beta-subunit variant (betagc) in developing neurons. Mascotti F, et al. **J Neurosci** 1997 Feb 15;17(4):1447-59

METABOLISM

Insulin-like growth factor-I and type I insulin-like growth factor receptor in 85% O2-exposed rat lung. Han RN, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L139-49

Association between insulin-like growth factor receptors & cell density in breast cancer cells. Larsen C, et al. **Biochem Soc Trans** 1996 Aug;24(3):363S

Insulin-like growth factors and their binding proteins in human colonocytes: preferential degradation of insulin-like growth factor binding protein 2 in colonic cancers. Michell NP, et al. **Br J Cancer** 1997;76(1):60-6

Toxin-induced increase in survival factor receptors: modulation of the threshold for apoptosis. Boyle CC, et al. **Cancer Res** 1997 Jun 15;57(12):2404-9

Protective effect of the insulin-like growth factor I receptor on apoptosis induced by okadaic acid. D'Ambrosio C, et al. **Cancer Res** 1997 Aug 1;57(15):3264-71

Localization of insulin-like growth factor (IGF-I) and IGF-I receptor expression in human corpora lutea: role on estradiol secretion. Johnson MC, et al. **Fertil Steril** 1996 Mar;65(3):489-94

Insulin-like growth factor receptor-1 stimulates phosphorylation of the beta2-adrenergic receptor in vivo on sites distinct from those phosphorylated in response to insulin. Karoor V, et al. **J Biol Chem** 1996 Nov 15; 271(46):29347-52

Decreased insulin-like growth factor I receptor expression and function in immortalized African Pygmy T cells. Hattori Y, et al. **J Clin Endocrinol Metab** 1996 Jun; 81(6):2257-63

Insulin-like growth factor (IGF)-I A- and B-domain analogues with altered type 1 IGF and insulin receptor binding specificities. Shooter GK, et al. **J Mol Endocrinol** 1996 Dec;17(3):237-46

Expression and distribution of IGF-1 receptors containing a beta-subunit variant (betagc) in developing neurons. Mascotti F, et al. **J Neurosci** 1997 Feb 15;17(4):1447-59

Distribution of insulin/insulin-like growth factor-I hybrid receptors in human tissues. Federici M, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):121-6

Characterization of an insulin-like growth factor (IGF) receptor and the insulin-like effects of IGF-1 in the bony fish, Lates calcarifer. Drakenberg K, et al. **Regul Pept** 1997 Mar 12;69(1):41-5

PHYSIOLOGY

Functional maturation of the primate fetal adrenal in vivo: I. Role of insulin-like growth factors (IGFs), IGF-I receptor, and IGF binding proteins in growth regulation. Coulter CL, et al. **Endocrinology** 1996 Oct;137(10):4487-98

The early intracellular signaling pathway for the insulin/insulin-like growth factor receptor family in the mammalian central nervous system. Folli F, et al. **Mol Neurobiol** 1996 Oct;13(2):155-83 (162 ref.)

Two primitive neuroectodermal tumor cell lines require an activated insulin-like growth factor I receptor for growth in vitro. Chin LS, et al. **Neurosurgery** 1996 Dec; 39(6):1183-90

RECEPTORS, SOMATOMEDIN C see **RECEPTORS, INSULIN-LIKE-GROWTH FACTOR I**

RECEPTORS, SOMATOSTATIN

Somatostatin receptor scintigraphy in the Zollinger-Ellison syndrome [letter; comment] Ciaccia D, et al. **Ann Intern Med** 1997 May 1;126(9):741-2. Comment on: Ann Intern Med 1996 Jul 1;125(1):26-34.

Somatostatin Analogues: Basic and Clinical Perspectives. Proceedings of a meeting. Sorrento, Italy, 16-19 November 1995. **Digestion** 1996;57 Suppl 1:1-120

Endoscopic ultrasonography and somatostatin receptor scintigraphy in the preoperative localisation of insulinomas and gastrinomas. Zimmer T, et al. **Gut** 1996 Oct;39(4):562-8

The value of somatostatin-receptor scintigraphy in newly diagnosed endocrine gastroenteropancreatic tumors. Kisker O, et al. **J Am Coll Surg** 1997 May;184(5):487-92

Regulatory peptide receptors as molecular targets for cancer diagnosis and therapy. Reubi JC. **Q J Nucl Med** 1997 Jun; 41(2):63-70 (18 ref.)

[Somatostatin receptors] Kimura N. **Nippon Rinsho** 1997 Apr; 55 Suppl 2:503-7 (19 ref.) **(Jpn)**

[Somatostatin and its receptors] Yamada Y, et al. **Nippon Rinsho** 1996 Apr;54(4):1109-14 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Somatostatin receptors. A new way to diagnosis and therapy of neuroendocrine tumors] Wängberg B, et al. **Lakartidningen** 1997 Mar 5;94(10):829-30, 835-8 (20 ref.) (Eng. Abstr.) **(Swe)**

AGONISTS

Agonist-dependent regulation of cloned human somatostatin receptor types 1-5 (hSSTR1-5): subtype selective internalization or upregulation. Hukovic N, et al. **Endocrinology** 1996 Sep;137(9):4046-9

Intracerebroventricular injection of somatostatin sst5 receptor agonist inhibits gastric acid secretion in rats. Martínez V, et al. **Eur J Pharmacol** 1996 Jan 25; 296(2):153-60

Somatostatin5 receptor-mediated [35S]guanosine-5'-O-(3-thio)triphosphate binding: agonist potencies and the influence of sodium chloride on intrinsic activity. Williams AJ, et al. **Mol Pharmacol** 1997 Jun; 51(6):1060-9

ANALYSIS

Clinical relevance of somatostatin receptor scintigraphy in patients with skull base tumours. Luyken C, et al. **Acta Neurochir Suppl (Wien)** 1996;65:102-4

Somatostatin receptor scintigraphy of non-neuroendocrine malignancies with 111In-pentetreotide. Limouris GS, et al. **Anticancer Res** 1997 May-Jun;17(3B):1593-7

Preferential localization of regional metastases from gastroenteropancreatic endocrine tumors with somatostatin-receptor scintigraphy. MacGillivray DC, et al. **Arch Surg** 1996 Dec;131(12):1338-42

Analysis of somatostatin receptor subtype mRNA expression in human breast cancer. Evans AA, et al. **Br J Cancer** 1997; 75(6):798-803

Presence of somatostatin sst2 receptors in the developing rat auditory system. Thoss VS, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):269-78

Incidental appendix carcinoid. Value of somatostatin receptor imaging. Hoegerle S, et al. **Clin Nucl Med** 1997 Jul; 22(7):467-9

Immunohistochemical localization of somatostatin receptor SST2A in the rat pancreas [corrected and republished with original paging, article originally printed in Endocrinology 1997 Jun;138(6):2632-5] Hunyady B, et al. **Endocrinology** 1997 Jul;138(7):2632-5

Immunohistochemical localization of somatostatin receptor SST2A in the rat pancreas [corrected and republished in Endocrinology 1997 Jul;138(7):2632-5] Hunyady B, et al.

Endocrinology 1997 Jun;138(6):2632–5

Expression of the five somatostatin receptor (SSTR1–5) subtypes in rat pituitary somatotrophes: quantitative analysis by double-layer immunofluorescence confocal microscopy. Kumar U, et al. **Endocrinology** 1997 Oct; 138(10):4473–6

Results of somatostatin receptor scintigraphy do not predict pituitary tumor volume- and hormone-response to ocreotide therapy and do not correlate with tumor histology [see comments] Plöckinger U, et al. **Eur J Endocrinol** 1997 Apr;136(4):369–76. Comment in: Eur J Endocrinol 1997 Apr;136(4):359–61.

Enhanced bilateral somatostatin receptor expression in mediastinal lymph nodes ("chimney sign") in occult metastatic medullary thyroid cancer: a typical site of tumour manifestation? Behr TM, et al. **Eur J Nucl Med** 1997 Feb;24(2):184–91 (20 ref.)

Indium-111 pentetreotide single-photon emission tomography in patients with TSH-secreting pituitary adenomas: correlation with the effect of a single administration of octreotide on serum TSH levels. Losa M, et al. **Eur J Nucl Med** 1997 Jul;24(7):728–31

DOTATOC: a powerful new tool for receptor-mediated radionuclide therapy. Otte A, et al. **Eur J Nucl Med** 1997 Jul;24(7):792–5

Somatostatin-receptor scintigraphy in Graves' orbitopathy. Postema PT, et al. **Eur J Nucl Med** 1996 Jun;23(6):615–7

Preoperative detection of duodenal gastrinomas and peripancreatic lymph nodes by somatostatin receptor scintigraphy. Groupe D'etude Du Syndrome De Zollinger-Ellison. Cadiot G, et al. **Gastroenterology** 1996 Oct;111(4):845–54

Usefulness of somatostatin receptor scintigraphy in the management of patients with Zollinger-Ellison syndrome. Groupe de Recherche et d'Etude du Syndrome de Zollinger-Ellison (GRESZE). Cadiot G, et al. **Gut** 1997 Jul;41(1):107–14

Somatostatin 2A receptor is expressed by enteric neurons, and by interstitial cells of Cajal and enterochromaffin-like cells of the gastrointestinal tract. Sternini C, et al. **J Comp Neurol** 1997 Sep 29;386(3):396–408

Vasoactive intestinal peptide and somatostatin receptor scintigraphy for differential diagnosis of hepatic carcinoid metastasis. Kurtaran A, et al. **J Nucl Med** 1997 Jun; 38(6):880–1

Clinical impact of somatostatin receptor scintigraphy in the management of patients with neuroendocrine gastroenteropancreatic tumors. Lebtahi R, et al. **J Nucl Med** 1997 Jun;38(6):853–8

Somatostatin receptors in schwannomas [letter; comment] Reubi JC. **J Nucl Med** 1997 May;38(5):827. Comment on: J Nucl Med 1996 Jul;37(7):1272.

Somatostatin receptor scintigraphy of malignant somatostatinoma with indium-111-pentetreotide. Schillaci O, et al. **J Nucl Med** 1997 Jun;38(6):886–7

Neuropeptide receptor imaging of schwannoma [letter; comment] [see comments] Van Steelandt H, et al. **J Nucl Med** 1996 Jul;37(7):1272. Comment on: J Nucl Med 1995 Oct;36(10):1825–35. Comment in: J Nucl Med 1997 May;38(5):827.

Somatostatin receptor scintigraphy in the staging of lymphomas. Ivancević V, et al. **Leuk Lymphoma** 1997 Jun; 26(1–2):107–14

Somatostatin receptors in the rhesus monkey brain: localization and pharmacological characterization. Thoss VS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May;353(6):648–60

Somatostatin receptor scintigraphy in patients with pituitary adenoma. Rieger A, et al. **Neurosurg Rev** 1997;20(1):7–12

PET-pharmacokinetics of 18F-octreotide: a comparison with 67Ga-DFO- and 86Y-DTPA-octreotide. Wester HJ, et al. **Nucl Med Biol** 1997 May;24(4):275–86

Studies on radiolabeled somatostatin analogues in rats and in patients. Breeman WA, et al. **Q J Nucl Med** 1996 Sep; 40(3):209–20 (93 ref.)

Somatostatin receptor imaging: a preliminary experience in forty-nine patients. Giammarile F, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):121–3

Somatostatin receptor scintigraphy in the diagnosis of neuroendocrine gastroenteropancreatic tumors. Bäder M, et al. **Recent Results Cancer Res** 1996;142:137–62 (66 ref.)

[Somatostatin receptor subtypes in endocrine tumors] Stenger AM, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:769–72 (Eng. Abstr.) **(Ger)**

[Clinical value of somatostatin receptor scintigraphy. Studies of pre- and intraoperative localization of gastrointestinal and pancreatic tumors] Adams S, et al. **Med Klin** 1997 Mar 15;92(3):138–43 (Eng. Abstr.) **(Ger)**

[Somatostatin receptor scintigraphy. Methodology, indications, results] Eising EG, et al. **Radiologe** 1996 Jan; 36(1):81–8 (33 ref.) (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

Potent antagonism by BIM-23056 at the human recombinant somatostatin sst5 receptor. Wilkinson GF, et al. **Br J Pharmacol** 1996 Jun;118(3):445–7

Reversal of gastric somatostatin receptor inhibition by Helicobacter pylori lipopolysaccharide with ebrotidine and sulglycotide. Piotrowski J, et al. **Gen Pharmacol** 1997 May; 28(5):705–8

BIOSYNTHESIS

Molecular cloning of a novel type of somatostatin receptor and platelet-activating factor receptor cDNAs from rat. Bito H, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:480–1

Comparison of MIBG and pentetreotide scintigraphy in children with neuroblastoma. Is the expression of somatostatin receptors a prognostic factor? Kropp J, et al. **Anticancer Res** 1997 May-Jun;17(3B):1583–8

Somatostatin receptor subtype mRNA expression in human colorectal cancer and normal colonic mucosae. Laws SA, et al. **Br J Cancer** 1997;75(3):360–6

Characterization of human recombinant somatostatin sst5 receptors mediating activation of phosphoinositide metabolism. Wilkinson GF, et al. **Br J Pharmacol** 1997 May;121(1):91–6

The helix-loop-helix transcription factor SEF-2 regulates the activity of a novel initiator element in the promoter of the human somatostatin receptor II gene. Pscherer A, et al. **EMBO J** 1996 Dec 2;15(23):6680–90

Ontogeny of somatostatin binding sites in respiratory nuclei of the human brainstem. Carpentier V, et al. **J Comp Neurol** 1997 May 19;381(4):461–72

Somatostatin receptor expression in rat iliac arteries after balloon injury. Chen JC, et al. **J Invest Surg** 1997 Jan-Apr; 10(1–2):17–23

Measles virus modulates human T-cell somatostatin receptors and their coupling to adenylyl cyclase. Krantic S, et al. **J Virol** 1997 Oct;71(10):7470–7

Expression of the somatostatin gene and receptors in the rat harderian gland. Mato ME, et al. **Microsc Res Tech** 1996 Jun 1;34(2):118–22

CHEMISTRY

Identification and characterization of opioid and somatostatin binding sites in the opossum kidney (OK) cell line and their effect on growth. Hatzoglou A, et al. **J Cell Biochem** 1996 Dec 15;63(4):410–21

The elusive nature of cerebellar somatostatin receptors: studies in rat, monkey and human cerebellum. Piwko C, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1–3):385–405

Molecular and functional properties of somatostain receptor subtypes. Liapakis G, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):12–3 (11 ref.)

DRUG EFFECTS

Helicobacter pylori lipopolysaccharide inhibition of gastric somatostatin receptor: effect of sucralfate. Piotrowski J, et al. **Biochem Mol Biol Int** 1997 Jul;42(3):545–51

Operational characteristics of somatostatin receptors mediating inhibitory actions on rat locus coeruleus neurones. Chessell IP, et al. **Br J Pharmacol** 1996 Apr; 117(8):1673–8

Acute effects of D1- and D2-receptor agonist and antagonist drugs on somatostatin binding, inhibition of adenylyl cyclase activity and accumulation of inositol 1,4,5-trisphosphate in the rat striatum. Izquierdo-Claros RM, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):99–107

Influence of fluoxetine and p-chloroamphetamine on the somatostatin receptor-adenylyl cyclase system in the rat frontoparietal cortex. Muñoz-Acedo G, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):117–24

Modulation by 5-hydroxytryptamine of the somatostatin receptor-effector system and somatostatin levels in rat brain. Muñoz-Acedo G, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):259–66

Bowel resection and neurotensin treatment. Histochemical study of neurotensin-like and somatostatin-like immunoreactivities and receptors. Toledano A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1145–58

Somatostatin inhibition of acid and histamine release by activation of somatostatin receptor subtype 2 receptors in rats. Aurang K, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):245–52

Pharmacological characterisation of human cerebral cortex somatostatin SRIF1 and SRIF2 receptors. Piwko C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):161–7

Evidence that a novel somatostatin receptor couples to an inward rectifier potassium current in AtT-20 cells. Tallent M, et al. **Neuroscience** 1996 Aug;73(3):855–64

111In-octreotide scintigraphy in metastatic medullary thyroid carcinoma before and after octreotide therapy: in vivo evidence of the possible down-regulation of somatostatin receptors. Ronga G, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):134–6

GENETICS

Activation of rat thymocytes selectively upregulates the expression of somatostatin receptor subtype-1. Sedqi M, et al. **Biochem Mol Biol Int** 1996 Feb;38(1):103–12

The helix-loop-helix transcription factor SEF-2 regulates the activity of a novel initiator element in the promoter of the human somatostatin receptor II gene. Pscherer A, et al. **EMBO J** 1996 Dec 2;15(23):6680–90

The effect of hypophysectomy and growth hormone replacement on sst1 and sst2 somatostatin receptor subtype messenger ribonucleic acids in the arcuate nucleus. Guo F, et al. **Endocrinology** 1996 Sep;137(9):3928–35

Thyroid hormone-induced expression of specific somatostatin receptor subtypes correlates with involution of the TtT-97 murine thyrotrope tumor. James RA, et al. **Endocrinology** 1997 Feb;138(2):719–24

Estrogen regulates somatostatin receptor subtype 2 messenger ribonucleic acid expression in human breast cancer cells. Xu Y, et al. **Endocrinology** 1996 Dec; 137(12):5634–40

Characterization of a human gene related to genes encoding somatostatin receptors. Kolakowski LF Jr, et al. **FEBS Lett** 1996 Dec 2;398(2–3):253–8

Isolation and characterization of the gene encoding the type 5 mouse (Mus musculus) somatostatin receptor (msst5). Lublin AL, et al. **Gene** 1997 Aug 11;195(1):63–6

Localization of somatostatin receptor genes on mouse chromosomes 2, 11, 12, 15, and 17: correlation with growth QTLs. Brinkmeier ML, et al. **Genomics** 1997 Jul 1; 43(1):9–14

The tuberin (TSC2), autosomal dominant polycystic kidney disease (PKD1), and somatostatin type V receptor (SSTR5) genes form a synteny group in the Fugu genome. Sandford R, et al. **Genomics** 1996 Nov 15;38(1):84–6

Different expression patterns of somatostatin receptor subtypes in cultured epithelial cells from human normal prostate and prostate cancer. Sinisi AA, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2566–9

Molecular pharmacology of somatostatin receptor subtypes. Patel YC. **J Endocrinol Invest** 1997 Jun;20(6):348–67 (159 ref.)

Distinct patterns of expression and physiological effects of sst1 and sst2 receptor subtypes in mouse hypothalamic neurons and astrocytes in culture. Viollet C, et al. **J Neurochem** 1997 Jun;68(6):2273–80

Differential expression of multiple somatostatin receptors in the rat cerebellum during development. Viollet C, et al. **J Neurochem** 1997 Jun;68(6):2263–72

Expression of somatostatin receptor (SSTR) subtypes in pituitary adenomas: quantitative analysis of SSTR2 mRNA by reverse transcription-polymerase chain reaction. Murabe H, et al. **J Neuroendocrinol** 1996 Aug;8(8):605–10

Molecular biology of somatostatin receptor subtypes. Patel YC, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):31–8 (31 ref.)

Molecular control of peptide hormone and receptor expression. Dimaline R. **Proc Nutr Soc** 1996 Mar; 55(1B):265–77 (77 ref.)

[Molecular biology, pharmacology and signal transduction of 5 cloned human somatostatin receptors] Fehmann HC, et al. **Z Gastroenterol** 1996 Nov;34(11):767–74 (53 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Immunomodulatory activities of the somatostatin receptor subtype analogues on human peripheral blood lymphocytes. Atiya A, et al. **Transplant Proc** 1997 Jun;29(4):2151

ISOLATION & PURIFICATION

Somatostatin analogs and receptors. Diagnostic and therapeutic applications. Hofland LJ, et al. **Cancer Treat Res** 1997;89:365–82 (91 ref.)

METABOLISM

Colonic smooth muscle cells possess a different subtype of somatostatin receptor from gastric smooth muscle cells. Corleto VD, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G689–97

Characterization of cloned somatostatin receptor subtypes. Localization of rat SSTRs in gastrointestinal tissues, SSTR1 gene promoter studies, and mutational analyses of SSTR3. Schäfer J, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:601–6

Neuropeptide Y Y2 receptor and somatostatin sst2 receptor coupling to mobilization of intracellular calcium in SH-SY5Y human neuroblastoma cells. Connor M, et al. **Br J Pharmacol** 1997 Feb;120(3):455–63

Somatostatin receptors in Neuro2A neuroblastoma cells: operational characteristics. Koenig JA, et al. **Br J Pharmacol** 1997 Jan;120(1):45–51

Somatostatin receptors in Neuro2A neuroblastoma cells: ligand internalization. Koenig JA, et al. **Br J Pharmacol** 1997 Jan;120(1):52–9

Identification and pharmacological characterization of somatostatin receptors in rat lung. Schloos J, et al. **Br J Pharmacol** 1997 Jul;121(5):963–71

Somatostatin receptor scintigraphy in medullary thyroid carcinoma. Tisell LE, et al. **Br J Surg** 1997 Apr;84(4):543–7

Distribution of somatostatin receptors in the adult human brainstem. Carpentier V, et al. **Brain Res** 1996 Sep 23; 734(1–2):135–48

The somatostatin receptor subtype 2 is expressed in normal and tumoral human tissues70. Prévost G, et al. **Cancer Detect Prev** 1997;21(1):62–70

Expression of receptors for gut peptides in pancreata of BOP-treated and control hamsters. Tang C, et al. **Carcinogenesis** 1996 Oct;17(10):2171–5

Somatostatin receptor imaging: fatty meal-induced clearance of gallbladder activity. Katz N, et al. **Clin Nucl Med** 1997 Jan;22(1):58–9

Somatostatin receptor imaging: predictive and prognostic considerations. Anthony LB, et al. **Digestion** 1996;57 Suppl 1:50–3

Somatostatin receptor: scintigraphy and radionuclide therapy. Krenning EP, et al. **Digestion** 1996;57 Suppl

1:57–61
Somatostatin receptor scintigraphy in non-medullary thyroid cancer. Postema PT, et al. **Digestion** 1996;57 Suppl 1:36–7
Somatostatin receptor manipulation. Visser-Wisselaar HA, et al. **Digestion** 1996;57 Suppl 1:7–10 (32 ref.)
Endocytosis of the rat somatostatin receptors: subtype discrimination, ligand specificity, and delineation of carboxy-terminal positive and negative sequence motifs. Roth A, et al. **DNA Cell Biol** 1997 Jan;16(1):111–9
Agonist-dependent regulation of cloned human somatostatin receptor types 1–5 (hSSTR1–5): subtype selective internalization or upregulation. Hukovic N, et al. **Endocrinology** 1996 Sep;137(9):4046–9
Differential internalization of somatostatin in COS–7 cells transfected with SST1 and SST2 receptor subtypes: a confocal microscopic study using novel fluorescent somatostatin derivatives. Nouel D, et al. **Endocrinology** 1997 Jan;138(1):296–306
17-beta-estradiol-dependent regulation of somatostatin receptor subtype expression in the 7315b prolactin secreting rat pituitary tumor in vitro and in vivo. Visser-Wisselaar HA, et al. **Endocrinology** 1997 Mar;138(3):1180–9
Somatostatin receptors in the developing rat brain. Thoss VS, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):145–55
A novel system that reports the G-proteins linked to a given receptor: a study of type 3 somatostatin receptor. Komatsuzaki K, et al. **FEBS Lett** 1997 Apr 7; 406(1–2):165–70
Coexistence of somatostatin receptor subtypes in the human neuroblastoma cell line LA-N-2. Nilsson L, et al. **FEBS Lett** 1997 Jan 13;401(1):83–8
Distribution of somatostatin receptor messenger RNAs in the rat gastrointestinal tract. Krempels K, et al. **Gastroenterology** 1997 Jun;112(6):1948–60
Local up-regulation of neuropeptide receptors in host blood vessels around human colorectal cancers. Reubi JC, et al. **Gastroenterology** 1996 Jun;110(6):1719–26
Value of somatostatin receptor scintigraphy: a prospective study in gastrinoma of its effect on clinical management. Termanini B, et al. **Gastroenterology** 1997 Feb; 112(2):335–47
Isolation and characterization of the gene encoding the type 5 mouse (Mus musculus) somatostatin receptor (msst5). Lublin AL, et al. **Gene** 1997 Aug 11;195(1):63–6
Insulinoma associated with a case of multiple endocrine neoplasia type I: Functional somatostatin receptors and abnormal glucose-induced insulin secretion. Waeber G, et al. **Horm Res** 1997;48(2):76–82
Receptor scintigraphy of non-neuroendocrine cancers with In-111 pentetreotide. Limouris GS, et al. **Hybridoma** 1997 Feb;16(1):133–7
Somatostatin receptor subtypes sst1, sst2, sst3 and sst5 expression in human pituitary, gastroentero-pancreatic and mammary tumors: comparison of mRNA analysis with receptor autoradiography. Schaer JC, et al. **Int J Cancer** 1997 Mar 4;70(5):530–7
Both overlapping and distinct signaling pathways for somatostatin receptor subtypes SSTR1 and SSTR2 in pituitary cells. Chen L, et al. **J Biol Chem** 1997 Jul 25; 272(30):18666–72
Agonist-induced desensitization, internalization, and phosphorylation of the sst2A somatostatin receptor. Hipkin RW, et al. **J Biol Chem** 1997 May 23;272(21):13869–76
The tyrosine phosphatase SHP-1 associates with the sst2 somatostatin receptor and is an essential component of sst2-mediated inhibitory growth signaling. Lopez F, et al. **J Biol Chem** 1997 Sep 26;272(39):24448–54
Somatostatin receptor-mediated signaling in smooth muscle. Activation of phospholipase C-beta3 by Gbetagamma and inhibition of adenylyl cyclase by Galphai1 and Galphao. Murthy KS, et al. **J Biol Chem** 1996 Sep 20; 271(38):23458–63
Phosphorylation of four amino acid residues in the carboxyl terminus of the rat somatostatin receptor subtype 3 is crucial for its desensitization and internalization. Roth A, et al. **J Biol Chem** 1997 Sep 19;272(38):23769–74
Distribution and pharmacological characterization of somatostatin receptor binding sites in the sheep brain. Fodor M, et al. **J Chem Neuroanat** 1997 Mar;12(3):175–82
Somatostatin receptor subtype expression in human thyroid and thyroid carcinoma cell lines. Ain KB, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1857–62
Somatostatin receptor imaging of olfactory neuroblastoma. Ramsay HA, et al. **J Laryngol Otol** 1996 Dec; 110(12):1161–3
A refined model for the somatostatin pharmacophore: conformational analysis of lanthionine-sandostatin analogs. Melacini G, et al. **J Med Chem** 1997 Jul 4;40(14):2252–8
Lanthionine-somatostatin analogs: synthesis, characterization, biological activity, and enzymatic stability studies. Osapay G, et al. **J Med Chem** 1997 Jul 4; 40(14):2241–51
In vitro and in vivo detection of functional somatostatin receptors in canine insulinomas. Robben JH, et al. **J Nucl Med** 1997 Jul;38(7):1036–42
5-hydroxytryptamine decreases somatostatin receptors and somatostatin-responsive adenylyl cyclase in rat pancreatic acinar membranes. Muñoz-Acedo G, et al. **Life Sci** 1997; 60(22):1965–76
Binding properties of somatostatin receptor subtypes. Bruns C, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):17–20 (15 ref.)
Receptor-specific somatostatin analogs: correlations with biological activity. Coy DH, et al. **Metabolism** 1996 Aug; 45(8 Suppl 1):21–3 (14 ref.)
Effector coupling of somatostatin receptor subtypes on human endocrine tumors. Kubota A, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):42–5
Molecular and functional properties of somatostain receptor subtypes. Liapakis G, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):12–3 (11 ref.)
Somatostatin receptors and their subtypes in human tumors and in peritumoral vessels. Reubi JC, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):39–41 (5 ref.)
Somatostatin receptor subtypes: specific expression and signaling properties. Schonbrunn A, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):8–11 (24 ref.)
The relevance of somatostatin receptor expression in malignant lymphomas. van den Anker-Lugtenburg PJ, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):96–7
Somatostatin receptor expression in clinical immunology. van Hagen PM. **Metabolism** 1996 Aug;45(8 Suppl 1):86–7 (10 ref.)
Coupling specificity between somatostatin receptor sst2A and G proteins: isolation of the receptor-G protein complex with a receptor antibody. Gu YZ, et al. **Mol Endocrinol** 1997 May;11(5):527–37
Activation in vitro of somatostatin receptor subtypes 2, 3, or 4 stimulates protein tyrosine phosphatase activity in membranes from transfected Ras-transformed NIH 3T3 cells: coexpression with catalytically inactive SHP-2 blocks responsiveness. Reardon DB, et al. **Mol Endocrinol** 1997 Jul;11(8):1062–9
Subtype-selective induction of wild-type p53 and apoptosis, but not cell cycle arrest, by human somatostatin receptor 3. Sharma K, et al. **Mol Endocrinol** 1996 Dec; 10(12):1688–96
Somatostatin5 receptor-mediated [35S]guanosine-5'-O-(3-thio)triphosphate binding: agonist potencies and the influence of sodium chloride on intrinsic activity. Williams AJ, et al. **Mol Pharmacol** 1997 Jun; 51(6):1060–9
Identification and characterisation of heterogeneous somatostatin binding sites in rat distal colonic mucosa. McKeen ES, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):543–9
Localization and pharmacological characterization of somatostatin sst2 sites in the rat cerebellum. Piwko C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):607–13
Pharmacological characterisation of human cerebral cortex somatostatin SRIF1 and SRIF2 receptors. Piwko C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):161–7
Autoradiographic analysis of somatostatin SRIF1 and SRIF2 receptors in the human brain and pituitary. Thoss VS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):168–76
Expression of five somatostatin receptor mRNAs in the human brain and pituitary. Thoss VS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):411–9
Somatostatin-14 mainly binds the somatostatin receptor subtype 2 in human neuroblastoma tumors. Prevost G, et al. **Neuroendocrinology** 1996 Feb;63(2):188–97
A quantitative autoradiographical study on the distribution of somatostatin sst2 receptors in the rat central nervous system using [125I]-BIM-23027. Holloway S, et al. **Neuropharmacology** 1996;35(8):1109–20
Differential expression of somatostatin receptors in the rat eye: SSTR4 is intensely expressed in the iris/ciliary body. Mori M, et al. **Neurosci Lett** 1997 Feb 28;223(3):185–8
Status of somatostatin receptor messenger RNAs and binding sites in rat brain during kindling epileptogenesis. Piwko C, et al. **Neuroscience** 1996 Dec;75(3):857–68
Immunohistochemical localization of the somatostatin SST2(A) receptor in the rat brain and spinal cord. Schindler M, et al. **Neuroscience** 1997 Jan;76(1):225–40
(2-[18F]fluoropropionyl-(D)phe1)-octreotide, a potential radiopharmaceutical for quantitative somatostatin receptor imaging with PET: synthesis, radiolabeling, in vitro validation and biodistribution in mice. Guhlke S, et al. **Nucl Med Biol** 1994 Aug;21(6):819–25
Neural monitoring system for circulating somatostatin in the hepatoportal area. Nakabayashi H. **Nutrition** 1997 Mar; 13(3):225–9 (17 ref.)
Hormone treatment may help some cases of pancreatic cancer [news] **Oncology (Huntingt)** 1996 Mar;10(3):424–5
Real-time evaluation of somatostatin subtype 2 receptor activity employing the technique of cytosensor microphysiometry. Taylor JE, et al. **Peptides** 1996; 17(7):1257–9
Intracellular transducing mechanisms coupled to brain somatostatin receptors. Florio T, et al. **Pharmacol Res** 1996 Jun;33(6):297–305 (94 ref.)
Characterization of somatostatin receptor subtypes mediating inhibition of nutrient-stimulated gastric acid and gastrin in dogs. Fung LC, et al. **Regul Pept** 1997 Feb 26; 68(3):197–203
Evaluation of somatostatin-receptor scintigraphy for detecting neuroendocrine tumors. Meko JB, et al. **Surgery** 1996 Dec;120(6):975–83; discussion 983–4
Value of somatostatin receptor scintigraphy for preoperative localization of carcinoids. Kisker O, et al. **World J Surg** 1996 Feb;20(2):162–7
Somatostatin receptor scintigraphy in patients with carcinoid tumors. Kwekkeboom DJ, et al. **World J Surg** 1996 Feb; 20(2):157–61

PHYSIOLOGY

Somatostatin inhibits gastrin release and acid secretion by activating sst2 in dogs. Lloyd KC, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1481–8
Somatostatin sst2 receptor-mediated inhibition of parietal cell function in rat isolated gastric mucosa. Wyatt MA, et al. **Br J Pharmacol** 1996 Nov;119(5):905–10
sst2 somatostatin receptor expression reverses tumorigenicity of human pancreatic cancer cells. Delesque N, et al. **Cancer Res** 1997 Mar 1;57(5):956–62
Somatostatin analogues for somatostatin-receptor-mediated radiotherapy of cancer. Stolz B, et al. **Digestion** 1996;57 Suppl 1:17–21
Somatostatin receptor regulation of gastric carcinoid tumours. Tang LH, et al. **Digestion** 1996;57 Suppl 1:11–4 (30 ref.)
Electrophysiological properties of human carcinoid cells of the gut. Glassmeier G, et al. **Gastroenterology** 1997 Jul; 113(1):90–100
Somatostatin receptor subtype 2 mediates inhibition of gastrin and histamine secretion from human, dog, and rat antrum. Zaki M, et al. **Gastroenterology** 1996 Oct;111(4):919–24
Preferential suppression of insulin-stimulated proliferation of cultured hepatocytes by somatostatin: evidence for receptor-mediated growth regulation. Kothary PC, et al. **J Cell Biochem** 1995 Oct;59(2):258–65
Somatostatin receptor subtype specificity in human fetal pituitary cultures. Differential role of SSTR2 and SSTR5 for growth hormone, thyroid-stimulating hormone, and prolactin regulation. Shimon I, et al. **J Clin Invest** 1997 Feb 15;99(4):789–98
Multiple intracellular effectors modulate physiological functions of the cloned somatostatin receptors. Florio T, et al. **J Mol Endocrinol** 1996 Oct;17(2):89–100 (102 ref.)
Activation of locus coeruleus somatostatin receptors induces an increase of growth hormone release in male rats. Mounier F, et al. **J Neuroendocrinol** 1996 Oct;8(10):761–4
Dopamine enhances somatostatin receptor-mediated inhibition of adenylate cyclase in rat striatum and hippocampus. Rodríguez-Sánchez MN, et al. **J Neurosci Res** 1997 May 1;48(3):238–48
Activation of human somatostatin receptor type 2 causes inhibition of cell growth in transfected HEK293 but not in transfected CHO cells. Ren J, et al. **J Surg Res** 1997 Jul 15;71(1):13–8
A somatostatin receptor inhibits noradrenaline release from chick sympathetic neurons through pertussis toxin-sensitive mechanisms: comparison with the action of alpha 2-adrenoceptors. Boehm S, et al. **Neuroscience** 1996 Jul; 73(2):595–604
Anatomical distribution of somatostatin receptors in the brainstem of the human fetus. Carpentier V, et al. **Neuroscience** 1996 Aug;73(3):865–79
Mechanism of signaling by growth hormone receptor. Argetsinger LS, et al. **Physiol Rev** 1996 Oct;76(4):1089–107 (240 ref.)
Characterization of the antiproliferative signal mediated by the somatostatin receptor subtype sst5. Cordelier P, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9343–8
Somatostatin receptors in the central nervous system. Schindler M, et al. **Prog Neurobiol** 1996 Sep;50(1):9–47 (255 ref.)
Somatostatin receptor regulation of gastric enterochromaffin-like cell transformation to gastric carcinoid. Borin JF, et al. **Surgery** 1996 Dec;120(6):1026–32

ULTRASTRUCTURE

Somatostatin receptor localization of pancreatic endocrine tumors. Corleto VD, et al. **World J Surg** 1996 Feb; 20(2):241–4

RECEPTORS, SOMATOTROPIN

Growth hormone receptor signalling. Postel-Vinay MC, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):323–36 (79 ref.)
Proceedings of the 8th Tokyo Symposium on Growth Hormone and Related Factors. February 17, 1996. **Endocr J** 1996 Oct;43 Suppl:S1–146
[GH receptor function and its evaluation] Matsuzaki F. **Nippon Rinsho** 1997 Apr;55 Suppl 2:483–6 (12 ref.) **(Jpn)**

AGONISTS

An unusual host-parasite relationship: the growth hormone-like factor from plerocercoids of spirometrid tapeworms. Phares K. **Int J Parasitol** 1996 Jun;26(6):575–88 (80 ref.)

ANALYSIS

Cellular localization of growth hormone receptors/binding proteins in immune tissues. Hull KL, et al. **Cell Tissue Res** 1996 Oct;286(1):69–80
Human skin fibroblasts as a model of growth hormone (GH) action in GH receptor-positive Laron's syndrome. Freeth

JS, et al. **Endocrinology** 1997 Jan;138(1):55–61
Evidence for a local action of growth hormone in embryonic tooth development in the rat. Zhang CZ, et al. **Growth Factors** 1997;14(2–3):131–43

BIOSYNTHESIS

Subpopulations of stromal cells from long-term human bone marrow cultures: ontogeny of progenitor cells and expression of growth hormone receptors. Lincoln DT, et al. **Anat Histol Embryol** 1997 Mar;26(1):11–28
Expression of alternate growth hormone receptor messenger RNA in ovary and uterus of cattle. Heap D, et al. **Domest Anim Endocrinol** 1996 Sep;13(5):421–30
Messenger ribonucleic acid expression for growth hormone receptor, luteinizing hormone receptor, and steroidogenic enzymes during the estrous cycle and pregnancy in porcine and bovine corpora lutea. Yuan W, et al. **Domest Anim Endocrinol** 1996 Sep;13(5):431–44
Human growth hormone receptor: cloning and expression of the full-length complementary DNA after site-directed inactivation of a cryptic bacterial promoter. Bieth E, et al. **Gene** 1997 Jul 18;194(1):97–105
Differential effects of maternal ovine placental lactogen and growth hormone (GH) administration on GH receptor, insulin-like growth factor (IGF)-1 and IGF binding protein-3 gene expression in the pregnant and fetal sheep. Currie MJ, et al. **Growth Regul** 1996 Sep;6(3):123–9
Growth hormone (GH)-binding proteins in GH-resistant guinea pigs. Hull KL, et al. **Growth Regul** 1996 Sep; 6(3):165–75
Functional growth hormone (GH) receptors and GH are expressed by preimplantation mouse embryos: a role for GH in early embryogenesis? Pantaleon M, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5125–30

CHEMISTRY

Immunodominant regions of the extra-cellular domain of the bovine growth hormone receptor. Beattie J, et al. **Biochem Soc Trans** 1996 May;24(2):307S
Structural comparison of a portion of the rat and mouse growth hormone receptor/binding protein genes. Zhou Y, et al. **Gene** 1996 Oct 24;177(1–2):257–9
Conformational changes required in the human growth hormone receptor for growth hormone signaling. Mellado M, et al. **J Biol Chem** 1997 Apr 4;272(14):9189–96
Stimulation of kinase cascades by growth hormone: a paradigm for cytokine signaling. Wood TJ, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:73–94 (107 ref.)

DEFICIENCY

An unusual case of growth hormone receptor deficiency syndrome. Kwong PY, et al. **Ann Clin Biochem** 1996 Sep; 33 (Pt 5):465–7
Partial growth hormone insensitivity in childhood. Carlsson LM. **Baillieres Clin Endocrinol Metab** 1996 Jul; 10(3):389–400 (49 ref.)
Treatment of growth hormone insensitivity syndrome (GHIS) with insulin-like growth factor (IGF-I). Ranke MB. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):401–10 (28 ref.)
Laron syndrome: typical and atypical forms. Woods KA, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul; 10(3):371–87 (71 ref.)
Tissue-specific alterations in insulin-like growth factor-I concentrations in response to 3,3',5-triiodo-L-thyronine supplementation in the growth hormone receptor-deficient sex-linked dwarf chicken. Vasilatos-Younken R, et al. **Gen Comp Endocrinol** 1997 Jan;105(1):31–9
Two-year treatment of growth hormone (GH) receptor deficiency with recombinant insulin-like growth factor I in 22 children: comparison of two dosage levels and to GH-treated GH deficiency. Guevara-Aguirre J, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):629–33
Nine novel growth hormone receptor gene mutations in patients with Laron syndrome. Sobrier ML, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):435–7
Insulin-like growth factor-I decreases serum lipoprotein (a) during long-term treatment of patients with Laron syndrome. Laron Z, et al. **Metabolism** 1996 Oct; 45(10):1263–6
Growth hormone insensitivity. Rosenbloom AL, et al. **Pediatr Clin North Am** 1997 Apr;44(2):423–42 (65 ref.)

DRUG EFFECTS

Growth hormone receptor activity is stimulated by insulin-like growth factor binding protein 5 in rat osteosarcoma cells. Slootweg MC, et al. **Growth Regul** 1996 Dec;6(4):238–46
Regulation of human growth hormone receptor gene transcription by human growth hormone binding protein. Mullis PE, et al. **Mol Cell Endocrinol** 1997 Jul 4; 131(1):89–96

GENETICS

Molecular basis of inherited growth hormone resistance in childhood. Amselem S, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):353–69 (63 ref.)
Effects of growth hormone and pregnancy on expression of growth hormone receptor, insulin-like growth factor-I, and insulin-like growth factor binding protein-2 and -3 genes in bovine uterus, ovary, and oviduct. Kirby CJ, et al. **Biol Reprod** 1996 Nov;55(5):996–1002
Cellular localization of growth hormone receptors/binding proteins in immune tissues. Hull KL, et al. **Cell Tissue Res** 1996 Oct;286(1):69–80
Dynamic alterations in growth hormone receptor mRNA levels in rat brain during stress tolerance. Fujikawa T, et al. **Endocr J** 1996 Oct;43 Suppl:S119–22
Differential regulation of the growth hormone receptor gene: effects of dexamethasone and estradiol. Bennett PA, et al. **Endocrinology** 1996 Sep;137(9):3891–6
Liver and kidney growth hormone (GH) receptors are regulated differently in diabetic GH and GH antagonist transgenic mice. Chen NY, et al. **Endocrinology** 1997 May; 138(5):1988–94
Regulation of hypothalamic somatostatin, growth hormone-releasing hormone, and growth hormone receptor messenger ribonucleic acid by glucocorticoids. Señaris RM, et al. **Endocrinology** 1996 Dec;137(12):5236–41
Isolation of a liver-specific promoter for human growth hormone receptor gene. Zou L, et al. **Endocrinology** 1997 Apr;138(4):1771–4
Proinflammatory cytokines interleukin 1 beta and tumor necrosis factor alpha inhibit growth hormone stimulation of insulin-like growth factor I synthesis and growth hormone receptor mRNA levels in cultured rat liver cells. Wolf M, et al. **Eur J Endocrinol** 1996 Dec;135(6):729–37
Human growth hormone receptor: cloning and expression of the full-length complementary DNA after site-directed inactivation of a cryptic bacterial promoter. Bieth E, et al. **Gene** 1997 Jul 18;194(1):97–105
Decreased growth hormone receptor expression in long bones from toothless (osteopetrotic) rats and restoration by treatment with colony-stimulating factor-1. Symons AL, et al. **Growth Factors** 1996;13(1–2):1–10
Effect of different serum concentrations of growth hormone-binding protein (GHBP) on the regulation of GH receptor/GHBP gene transcription in a human hepatoma cell line. Mullis PE, et al. **Horm Res** 1997;47(2):73–80
Distinct sexual dimorphism in the effect of hypothyroidism on the expression of the growth hormone receptor and growth hormone-binding protein gene in rat liver. Romero GS, et al. **Horm Res** 1996;45(6):273–8
Induction of growth hormone receptor and insulin-like growth factor-I mRNA in aorta and caval vein during hemodynamic challenge. Wickman A, et al. **Hypertension** 1997 Jan;29(1 Pt 1):123–30
Effects of growth hormone administration and dietary protein intake on insulin-like growth factor I and growth hormone receptor mRNA Expression in porcine liver, skeletal muscle, and adipose tissue. Brameld JM, et al. **J Anim Sci** 1996 Aug;74(8):1832–41
Monkey growth hormone (GH) receptor gene expression. Evidence for two mechanisms for the generation of the GH binding protein. Martini JF, et al. **J Biol Chem** 1997 Jul 25;272(30):18951–8
Selenium-regulated translation control of heterologous gene expression: normal function of selenocysteine-substituted gene products. Leonard JL, et al. **J Cell Biochem** 1996 Jun 1;61(3):410–9
Measurement of human growth hormone receptor messenger ribonucleic acid by a quantitative polymerase chain reaction-based assay: demonstration of reduced expression after elective surgery. Hermansson M, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):421–8
Growth hormone receptor messenger ribonucleic acid in normal and pathologic human adrenocortical tissues--an analysis by quantitative polymerase chain reaction technique. Lin CJ, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2671–6
Nine novel growth hormone receptor gene mutations in patients with Laron syndrome. Sobrier ML, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):435–7
Relationships of polymorphisms for growth hormone and growth hormone receptor genes with milk production traits for Italian Holstein-Friesian bulls. Falaki M, et al. **J Dairy Sci** 1996 Aug;79(8):1446–53
Decreased muscle cell proliferation in chicks with a deletion in the GH receptor gene. Goddard C, et al. **J Mol Endocrinol** 1996 Aug;17(1):67–78
Central administration of a growth hormone (GH) receptor mRNA antisense increases GH pulsatility and decreases hypothalamic somatostatin expression in rats. Pellegrini E, et al. **J Neurosci** 1996 Dec 15;16(24):8140–8
Partial growth-hormone insensitivity: the role of growth-hormone receptor mutations in idiopathic short stature. Goddard AD, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S51–5
The spectrum of growth-hormone insensitivity. Parks JS, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S45–50 (20 ref.)
Effects of luteotrophic and luteolytic hormones on expression of mRNA encoding insulin-like growth factor I and growth hormone receptor in the ovine corpus luteum. Juengel JL, et al. **J Reprod Fertil** 1997 Jul;110(2):291–8
Induction of mRNAs for the growth hormone receptor gene during mouse 3T3-L1 preadipocyte differentiation. Zou L, et al. **Metabolism** 1997 Jan;46(1):114–8
Differential expression of the growth hormone receptor and its transcript in bovine uterus and placenta. Kölle S, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):127–36
Growth hormone down-regulates growth hormone receptor mRNA in chickens but developmental increases in growth hormone receptor mRNA occur independently of growth hormone action. Mao JN, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):135–43
Regulation of human growth hormone receptor gene transcription by human growth hormone binding protein. Mullis PE, et al. **Mol Cell Endocrinol** 1997 Jul 4; 131(1):89–96
Molecular analysis of rat pituitary and hypothalamic growth hormone secretagogue receptors. McKee KK, et al. **Mol Endocrinol** 1997 Apr;11(4):415–23
Identification and characterization of single strand DNA-binding protein that represses growth hormone receptor gene expression. Menon RK, et al. **Mol Endocrinol** 1997 Aug;11(9):1291–304
A short isoform of the human growth hormone receptor functions as a dominant negative inhibitor of the full-length receptor and generates large amounts of binding protein. Ross RJ, et al. **Mol Endocrinol** 1997 Mar;11(3):265–73
Expression of growth hormone receptor in mouse preimplantation embryos. Terada Y, et al. **Mol Hum Reprod** 1996 Nov;2(11):879–81
A dominant-negative mutation of the growth hormone receptor causes familial short stature [letter] Ayling RM, et al. **Nat Genet** 1997 May;16(1):13–4
Alternatively spliced forms in the cytoplasmic domain of the human growth hormone (GH) receptor regulate its ability to generate a soluble GH-binding protein. Dastot F, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10723–8
Alternative splicing of exon 3 of the human growth hormone receptor is the result of an unusual genetic polymorphism. Stallings-Mann ML, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12394–9

IMMUNOLOGY

Immunodominant regions of the extra-cellular domain of the bovine growth hormone receptor. Beattie J, et al. **Biochem Soc Trans** 1996 May;24(2):307S
Functional characterization of monoclonal antibodies specific to growth hormone receptor. Wang BS, et al. **Mol Immunol** 1996 Oct;33(15):1197–202

METABOLISM

Prolactin and growth hormone receptors. Goffin V, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):247–55 (120 ref.)
Growth hormone-binding protein in the goat: characterization, evolution under exogenous growth hormone treatment, and correlation with liver growth hormone receptor levels. Jammes H, et al. **Domest Anim Endocrinol** 1996 Nov;13(6):477–89
Linkage of the ubiquitin-conjugating system and the endocytic pathway in ligand-induced internalization of the growth hormone receptor. Govers R, et al. **EMBO J** 1997 Aug 15;16(16):4851–8
Chronic administration of growth hormone (GH) to adult chickens exerts marked effects on circulating concentrations of insulin-like growth factor-I (IGF-I), IGF binding proteins, hepatic GH regulated gene I, and hepatic GH receptor mRNA. Radecki SV, et al. **Endocrine** 1997 Apr;6(2):117–24
In search of the cellular site of growth hormone (GH)-binding protein cleavage from the rabbit GH receptor. Amit T, et al. **Endocrinology** 1996 Sep; 137(9):3986–91
Regulation of cellular rabbit growth hormone (GH) receptor and GH-binding protein generation in vitro. Bick T, et al. **Endocrinology** 1996 Sep;137(9):3977–85
Developmental changes and differential regulation by testosterone and estradiol of growth hormone receptor expression in the rabbit. Yu YM, et al. **Eur J Endocrinol** 1996 Nov;135(5):583–90
The role of receptor dimerization domain residues in growth hormone signaling. Chen C, et al. **J Biol Chem** 1997 Feb 21;272(8):5133–40
Mapping of a cytoplasmic domain of the human growth hormone receptor that regulates rates of inactivation of Jak2 and Stat proteins. Hackett RH, et al. **J Biol Chem** 1997 Apr 25;272(17):11128–32
Identification of a motif associated with the lactogenic actions of human growth hormone. Peterson FC, et al. **J Biol Chem** 1997 Aug 22;272(34):21444–8
Crystal structure of an antagonist mutant of human growth hormone, G120R, in complex with its receptor at 2.9 A resolution. Sundström M, et al. **J Biol Chem** 1996 Dec 13; 271(50):32197–203
Ontogeny of growth hormone receptors in human tissues: an immunohistochemical study. Simard M, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3097–102
Growth hormone binds to a single high affinity receptor site on mouse osteoblasts: modulation by retinoic acid and cell differentiation. Slootweg MC, et al. **J Endocrinol** 1996 Sep; 150(3):465–72
The role of GH receptor tyrosine phosphorylation in Stat5 activation. Hansen JA, et al. **J Mol Endocrinol** 1997 Jun; 18(3):213–21
Growth hormone receptor/binding protein--clinical implications. Postel-Vinay MC. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:279–83 (38 ref.)
Identification of growth hormone receptor (GHR) tyrosine residues required for GHR phosphorylation and JAK2 and

STAT5 activation. Wang X, et al. **Mol Endocrinol** 1996 Oct;10(10):1249–60

Growth hormone receptor cytoplasmic domain differentially promotes tyrosine phosphorylation of signal transducers and activators of transcription 5b and 3 by activated JAK2 kinase. Yi W, et al. **Mol Endocrinol** 1996 Nov; 10(11):1425–43

Growth hormone binding protein and free growth hormone in chronic renal failure. Baumann G. **Pediatr Nephrol** 1996 Jun;10(3):328–30 (32 ref.)

PHYSIOLOGY

Acute leukemias express a functional receptor for the human growth hormone. Giesbert S, et al. **Ann Hematol** 1997 Jun; 74(6):253–7

A case of abnormal growth hormone secretion possibly caused by low somatomedin production of unknown origin: is the unresponsiveness of GH receptor responsible for it? Shiratsuchi M, et al. **Endocr J** 1996 Oct;43 Suppl:S85–7

Signaling molecules involved in coupling growth hormone receptor to mitogen-activated protein kinase activation. Vanderkuur JA, et al. **Endocrinology** 1997 Oct; 138(10):4301–7

Growth hormone-induced signal tranduction depends on an intact ubiquitin system. Strous GJ, et al. **J Biol Chem** 1997 Jan 3;272(1):40–3

The role of growth hormone (GH), GH-receptor and GH-binding protein in reproduction and ovulation induction. Blumenfeld Z, et al.
J Pediatr Endocrinol Metab 1996 Mar–Apr;9(2):145–62 (82 ref.)

Differential activation of Stat3 and Stat5 by distinct regions of the growth hormone receptor. Sotiropoulos A, et al. **Mol Endocrinol** 1996 Aug;10(8):998–1009

Stimulation of kinase cascades by growth hormone: a paradigm for cytokine signaling. Wood TJ, et al.
Prog Nucleic Acid Res Mol Biol 1997;57:73–94 (107 ref.)

RECEPTORS, SOMATOTROPIN RELEASE INHIBITING HORMONE see **RECEPTORS, SOMATOSTATIN**

RECEPTORS, SRS-A see **RECEPTORS, LEUKOTRIENE**

RECEPTORS, STEM CELL FACTOR see **PROTO-ONCOGENE PROTEINS C-KIT**

RECEPTORS, STEROID

[NGFI-B/nur77 family involved in T-cell apoptosis] Okabe T, et al. **Nippon Rinsho** 1996 Jul;54(7):1768–72 (11 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

The effects of type I and type II corticosteroid receptor agonists on exploratory behavior and spatial memory in the Y-maze. Conrad CD, et al. **Brain Res** 1997 Jun 6; 759(1):76–83

5-HT1A receptor expression is modulated by corticosteroid receptor agonists in primary rat hippocampal culture. Nishi M, et al. **Brain Res** 1996 May 25;722(1–2):190–4

Enhanced synaptophysin immunoreactivity in rat hippocampal culture by 5-HT 1A agonist, S100b, and corticosteroid receptor agonists. Nishi M, et al. **Synapse** 1996 May;23(1):1–9

ANALYSIS

In vitro chemotherapy of steroid receptor positive human meningioma low-passage primary cultures with nitrosourea-methionine-steroid conjugates. Taut FJ, et al. **Clin Neuropharmacol** 1996 Dec;19(6):520–5

The effect of transdermal oestradiol on bleeding pattern, hormonal profiles and sex steroid receptor distribution in the endometrium of Norplant users. Boonkasemsanti W, et al. **Hum Reprod** 1996 Oct;11 Suppl 2:115–23

Immunocytochemical localization of gonadotropin and gonadal steroid receptors in human pineal glands [letter; comment] Rao CV. **J Clin Endocrinol Metab** 1997 Aug; 82(8):2756–7. Comment on: J Clin Endocrinol Metab 1997 Mar;82(3):977–81.

Cellular receptors for sex steroids in human pituitary adenomas. Jaffrain-Rea ML, et al. **J Endocrinol** 1996 Nov; 151(2):175–84

BIOSYNTHESIS

Developmental profiles and ecdysteroid regulation of the mRNAs for two ecdysone receptor isoforms in the epidermis and wings of the tobacco hornworm, Manduca sexta. Jindra M, et al. **Dev Biol** 1996 Nov 25;180(1):258–72

Relationship between the expression of cyclins/cyclin-dependent kinases and sex-steroid receptors/Ki67 in normal human endometrial glands and stroma during the menstrual cycle. Shiozawa T, et al.
Mol Hum Reprod 1996 Oct;2(10):745–52

Frequent association of alternative splicing of NER, a nuclear hormone receptor gene in cancer tissues. Saito H, et al. **Oncogene** 1997 Feb 6;14(5):617–21

CHEMISTRY

Kes1p shares homology with human oxysterol binding protein and participates in a novel regulatory pathway for yeast Golgi-derived transport vesicle biogenesis. Fang M, et al. **EMBO J** 1996 Dec 2;15(23):6447–59

Functional domains of the human orphan receptor ARP-1/COUP-TFII involved in active repression and transrepression. Achatz G, et al. **Mol Cell Biol** 1997 Sep; 17(9):4914–32

CLASSIFICATION

Ten years after: reclassification of steroid-responsive genes. Dean DM, et al. **Mol Endocrinol** 1996 Dec;10(12):1489–95 (50 ref.)

DRUG EFFECTS

Alterations in steroid hormone receptors in the tamoxifen-treated endometrium. Schwartz LB, et al.
Am J Obstet Gynecol 1997 Jan;176(1 Pt 1):129–37

The novel progestin drospirenone and its natural counterpart progesterone: biochemical profile and antiandrogenic potential. Fuhrmann U, et al. **Contraception** 1996 Oct; 54(4):243–51

Effect of perinatal vitamin A or retinoic acid treatment (hormonal imprinting) on the sexual behavior of adult rats. Csaba G, et al. **Hum Exp Toxicol** 1997 Apr;16(4):193–7

Tripartite steroid hormone receptor pharmacology: interaction with multiple effector sites as a basis for the cell- and promoter-specific action of these hormones. Katzenellenbogen JA, et al. **Mol Endocrinol** 1996 Feb; 10(2):119–31 (129 ref.)

The neurosteroid tetrahydroprogesterone attenuates the endocrine response to stress and exerts glucocorticoid-like effects on vasopressin gene transcription in the rat hypothalamus. Patchev VK, et al.
Neuropsychopharmacology 1996 Dec;15(6):533–40

Hippocampal type I and type II corticosteroid receptors are differentially regulated by chronic prazosin treatment. Kabbaj M, et al. **Neuroscience** 1996 Aug;73(4):963–70

Corticosteroid receptor mediated effects on mood in humans. Plihal W, et al. **Psychoneuroendocrinology** 1996 Aug; 21(6):515–23

GENETICS

Expression and purification of 6xHis-tagged DNA binding domains of functional ecdysteroid receptor from drosophila melanogaster. Rusin A, et al. **Acta Biochim Pol** 1996; 43(4):611–21

Modified steroid receptors and steroid-inducible promoters as genetic switches for gene therapy. White JH.
Adv Pharmacol 1997;40:339–67 (155 ref.)

Expression of EcR and USP in Escherichia coli: purification and functional studies. Elke C, et al.
Arch Insect Biochem Physiol 1997;35(1–2):59–69

Structure, mapping and expression of a human NOR-1 gene, the third member of the Nur77/NGFI-B family. Ohkura N, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):205–14

A putative leucine-rich repeat receptor kinase involved in brassinosteroid signal transduction [see comments] Li J, et al. **Cell** 1997 Sep 5;90(5):929–38. Comment in: Cell 1997 Sep 5;90(5):825–7.

Cloning and development expression of Choristoneura hormone receptor 75: a homologue of the Drosophila E75A gene. Palli SR, et al. **Dev Genet** 1997;20(1):36–46

Chick ovalbumin upstream promoter-transcription factors (COUP-TFs): coming of age. Tsai SY, et al.
Endocr Rev 1997 Apr;18(2):229–40 (94 ref.)

Cloning and characterization of LcEcR: a functional ecdysone receptor from the sheep blowfly Lucilia cuprina. Hannan GN, et al. **Insect Biochem Mol Biol** 1997 Jun; 27(6):479–88

Identification and mRNA developmental profiles of two ultraspiracle isoforms in the epidermis and wings of Manduca sexta. Jindra M, et al. **Insect Mol Biol** 1997 Feb; 6(1):41–53

Regulation of the ecdysone receptor, USP, E75 and MHR3 mRNAs by 20-hydroxyecdysone in the GV1 cell line of the tobacco hornworm, Manduca sexta. Lan Q, et al.
Insect Mol Biol 1997 Feb;6(1):3–10

Comparative messenger ribonucleic acid analysis of immediate early genes and sex steroid receptors in human leiomyoma and healthy myometrium. Lessl M, et al.
J Clin Endocrinol Metab 1997 Aug;82(8):2596–600

Gonadal steroids exert facilitating and "buffering" effects on glucocorticoid-mediated transcriptional regulation of corticotropin-releasing hormone and corticosteroid receptor genes in rat brain. Patchev VK, et al.
J Neurosci 1996 Nov 1;16(21):7077–84

Gene expression of NOR-1, a neuron-derived orphan receptor, is inducible in neuronal and other cell lineages in culture. Bandoh S, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):227–30

Ten years after: reclassification of steroid-responsive genes. Dean DM, et al. **Mol Endocrinol** 1996 Dec;10(12):1489–95 (50 ref.)

Steroid receptor transcriptional synergy is potentiated by disruption of the DNA-binding domain dimer interface. Liu W, et al. **Mol Endocrinol** 1996 Nov;10(11):1399–406

Molecular cloning and characterization of a mouse nuclear orphan receptor expressed in embryos and testes. Lee CH, et al. **Mol Reprod Dev** 1996 Jul;44(3):305–14

Mitochondrial genes as sites of primary action of steroid hormones. Demonacos CV, et al. **Steroids** 1996 Apr; 61(4):226–32

[Effect of PML and PML-RAR on the transactivation properties and subcellular localization of steroid hormone receptors] Guiochon-Mantel A, et al.
Ann Endocrinol (Paris) 1996;57(2):91–100 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Dexamethasone suppression test: corticosteroid receptors regulation in mononuclear leukocytes of young and aged subjects. Zovato S, et al. **Aging (Milano)** 1996 Oct; 8(5):360–4

METABOLISM

Characterization and partial cloning of ecdysteroid receptor from a cotton boll weevil embryonic cell line. Dhadialla TS, et al. **Arch Insect Biochem Physiol** 1997;35(1–2):45–57

Reduction of oxysterol levels up-regulates HMG-CoA reductase activity in rat liver. Tamasawa N, et al.
Atherosclerosis 1997 Jun;131(2):237–42

Identification of the human aldolase A gene as the first induced target for the TR2 orphan receptor, a member of the steroid hormone receptor superfamily. Chang C, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):205–11

A new nonsteroidal chemical class of ligand for the ecdysteroid receptor 3,
5-di-tert-butyl-4-hydroxy-N-isobutyl-benzamide shows apparent insect molting hormone activities at molecular and cellular levels. Mikitani K.
Biochem Biophys Res Commun 1996 Oct 14;227(2):427–32

The transcription of the human fructose-bisphosphate aldolase C gene is activated by nerve-growth-factor-induced B factor in human neuroblastoma cells. Buono P, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):245–50

Steroid hormone receptors and their regulation by phosphorylation. Weigel NL. **Biochem J** 1996 Nov 1;319 (Pt 3):657–67 (156 ref.)

Subnuclear trafficking of steroid receptors. DeFranco DB.
Biochem Soc Trans 1997 May;25(2):592–7 (50 ref.)

Steroid-independent activation of steroid receptors in mammalian and yeast cells and in breast cancer. Picard D, et al. **Biochem Soc Trans** 1997 May;25(2):597–602 (50 ref.)

Activation of the type 2 adrenal steroid receptor can rescue granule cells from death during development. Gould E, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):265–8

Co-expression of steroid hormone receptors in opioid peptide-containing neurons correlates with patterns of gene expression during the estrous cycle. Simerly RB, et al.
Brain Res Mol Brain Res 1996 Sep 1;40(2):275–84

Chimeric receptors as gene switches. Allgood VE, et al.
Curr Opin Biotechnol 1997 Aug;8(4):474–9 (24 ref.)

The differentiation of the serotonergic neurons in the Drosophila ventral nerve cord depends on the combined function of the zinc finger proteins Eagle and Huckebein. Dittrich R, et al. **Development** 1997 Jul;124(13):2515–25

Interaction of steroid hormone receptors with the transcription initiation complex. Beato M, et al.
Endocr Rev 1996 Dec;17(6):587–609 (261 ref.)

Steroid receptor interactions with heat shock protein and immunophilin chaperones. Pratt WB, et al. **Endocr Rev** 1997 Jun;18(3):306–60 (698 ref.)

Identification of steroid receptors in human adipose tissue. Pedersen SB, et al. **Eur J Clin Invest** 1996 Dec; 26(12):1051–6

Molecular chaperoning of steroid hormone receptors. Pratt WB, et al. **EXS** 1996;77:79–95 (103 ref.)

Action of different ecdysteroids on the regulation of mRNAs for the ecdysone receptor, MHR3, dopa decarboxylase, and a larval cuticle protein in the larval epidermis of the tobacco hornworm, Manduca sexta. Hiruma K, et al.
Gen Comp Endocrinol 1997 Jul;107(1):84–97

Estradiol regulates tumor growth by influencing p53 and bcl-2 expression in human endometrial adenocarcinomas grown in nude mice. Horvath G, et al. **In Vivo** 1996 Jul–Aug;10(4):411–6

Bombyx EcR (BmEcR) and Bombyx USP (BmCF1) combine to form a functional ecdysone receptor. Swevers L, et al.
Insect Biochem Mol Biol 1996 Mar;26(3):217–21

Identification of direct repeat 4 as a positive regulatory element for the human TR4 orphan receptor. A modulator for the thyroid hormone target genes. Lee YF, et al.
J Biol Chem 1997 May 2;272(18):12215–20

DNA intersegment transfer, how steroid receptors search for a target site. Lieberman BA, et al. **J Biol Chem** 1997 Jan 10;272(2):1061–8

Induction of the intronic enhancer of the human ciliary neurotrophic factor receptor (CNTFRalpha) gene by the TR4 orphan receptor. A member of steroid receptor superfamily. Young WJ, et al. **J Biol Chem** 1997 Jan 31; 272(5):3109–16

Expression of steroid receptors and steroidogenic enzymes in the baboon (Papio anubis) corpus luteum during the menstrual cycle and early pregnancy. Hild-Petito S, et al.
J Clin Endocrinol Metab 1997 Mar;82(3):955–62

Aromatase and steroid receptors in gynecomastia and male breast carcinoma: an immunohistochemical study. Sasano H, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3063–7

Distinct expression patterns and biological activities of two isoforms of the mouse orphan receptor TR2. Lee CH, et

al. **J Endocrinol** 1997 Feb;152(2):245–55

11 beta-Hydroxysteroid dehydrogenase activity in the hippocampus: implications for in vivo corticosterone receptor binding and cell nuclear retention. van Haarst AD, et al. **J Neuroendocrinol** 1996 Aug;8(8):595–600

Epidermal growth factor and transforming growth factor alpha mRNA expression in human breast cancer biopsies; analysis in relation to estradiol, progesterone and EGF receptor content. Artagaveytia N, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3–4):221–8

Two new regulatory elements controlling the Drosophila Sgs-3 gene are potential ecdysone receptor and fork head binding sites. Lehmann M, et al. **Mech Dev** 1997 Feb; 62(1):15–27

The mosquito ultraspiracle homologue, a partner of ecdysteroid receptor heterodimer: cloning and characterization of isoforms expressed during vitellogenesis. Kapitskaya M, et al. **Mol Cell Endocrinol** 1996 Aug 9;121(2):119–32

Contextual dependence of steroid receptor function on an androgen-responsive enhancer. Scheller A, et al. **Mol Cell Endocrinol** 1996 Jul 23;121(1):75–86

Steroid receptor transcriptional synergy is potentiated by disruption of the DNA-binding domain dimer interface. Liu W, et al. **Mol Endocrinol** 1996 Nov;10(11):1399–406

Overexpression of unliganded steroid receptors activates endogenous heat shock factor. Xiao N, et al. **Mol Endocrinol** 1997 Aug;11(9):1365–74

Hippocampal and hypothalamic type I corticosteroid receptor affinities are reduced in adult rats born by a caesarean procedure with or without an added period of anoxia. Boksa P, et al. **Neuroendocrinology** 1996 Jul; 64(1):25–34

Corticosteroid receptor function is decreased in depressed patients. Modell S, et al. **Neuroendocrinology** 1997 Mar; 65(3):216–22

Effect of increased maternal corticosterone during lactation on hippocampal corticosteroid receptors, stress response and learning in offspring in the early stages of life. Casolini P, et al. **Neuroscience** 1997 Aug;79(4):1005–12

Site-specific regulation of corticosteroid and serotonin receptor subtype gene expression in the rat hippocampus following 3,4-methylenedioxymethamphetamine: role of corticosterone and serotonin. Yau JL, et al. **Neuroscience** 1997 May;78(1):111–21

Transcriptional repression by Rev-erbA alpha is dependent on the signature motif and helix 5 in the ligand binding domain: silencing does not involve an interaction with N-CoR. Downes M, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3490–8

Two receptor interaction domains in the corepressor, N-CoR/RIP13, are required for an efficient interaction with Rev-erbA alpha and RVR: physical association is dependent on the E region of the orphan receptors. Downes M, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4379–86

Promoter- and cell-specific responses to sex steroids. Milgrom E, et al. **Osteoporos Int** 1997;7 Suppl 1:S23–8 (40 ref.)

RAC3, a steroid/nuclear receptor-associated coactivator that is related to SRC-1 and TIF2. Li H, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8479–84

CREB binding protein acts synergistically with steroid receptor coactivator-1 to enhance steroid receptor-dependent transcription. Smith CL, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8884–8

Endocrine Screening Methods Workshop report: detection of estrogenic and androgenic hormonal and antihormonal activity for chemicals that act via receptor or steroidogenic enzyme mechanisms. Gray LE Jr, et al. **Reprod Toxicol** 1997 Sep–Oct;11(5):719–50

Transcriptional regulation by steroid hormones. Beato M, et al. **Steroids** 1996 Apr;61(4):240–51 (176 ref.)

[Affinity of 3-beta-(2-hydroxyethoxy)-5-alpha-cholest-8(14)-ene-15-one to oxysterol binding protein and its metabolism in HepG2 hepatoma cells] Misharin AIu, et al. **Bioorg Khim** 1997 Apr;23(4):297–303 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Interaction of type I and type II corticosteroid receptor stimulation on carcass energy and carcass water. White BD, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1099–108

Functional analysis of the yeast 40 kDa cyclophilin Cyp40 and its role for viability and steroid receptor regulation. Warth R, et al. **Biol Chem** 1997 May;378(5):381–91

Steroid receptors and nervous system metamorphosis in insects. Truman JW. **Dev Neurosci** 1996;18(1–2):87–101 (41 ref.)

Stress decreases lymphocyte cytolytic activity in the young monkey even after blockade of steroid and opiate hormone receptors. Coe CL, et al. **Dev Psychobiol** 1997 Jan; 30(1):1–10

Functional redundancy of the Nur77 and Nor-1 orphan steroid receptors in T-cell apoptosis. Cheng LE, et al. **EMBO J** 1997 Apr 15;16(8):1865–75

Novel aspects of steroid hormone resistance. Symposium of the Sonderforschungsbereich 351. Abstracts. **Exp Clin Endocrinol Diabetes** 1996;104(4):A1–9

Aldosterone and dexamethasone stimulate calcineurin activity through a transcription-independent mechanism involving steroid receptor-associated heat shock proteins. Tumlin JA, et al. **J Clin Invest** 1997 Mar 15;99(6):1217–23

Molecular dissection of corticosteroid action in the rat hippocampus. Application of the differential display techniques. Vreugdenhil E, et al. **J Mol Neurosci** 1996 Summer;7(2):135–46 (40 ref.)

Modulation of 5HT1A responsiveness in CA1 pyramidal neurons by in vivo activation of corticosteroid receptors. Hesen W, et al. **J Neuroendocrinol** 1996 Jun;8(6):433–8

The nuclear orphan receptors COUP-TF and ARP-1 positively regulate the trout estrogen receptor gene through enhancing autoregulation. Lazennec G, et al. **Mol Cell Biol** 1997 Sep;17(9):5053–66

Nuclear factor-kappa-B/steroid hormone receptor interactions as a functional basis of anti-inflammatory action of steroids in reproductive organs. van der Burg B, et al. **Mol Hum Reprod** 1996 Jun;2(6):433–8 (57 ref.)

Transcriptional repression by the orphan steroid receptor RVR/Rev-erb beta is dependent on the signature motif and helix 5 in the E region: functional evidence for a biological role of RVR in myogenesis. Burke L, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3481–9

RU 486 reduces morphine-induced analgesia in mice, but steroid receptors are not involved. Bianchi M, et al. **Pharmacology** 1996 Jun;52(6):387–91

Role of co-activators and co-repressors in the mechanism of steroid/thyroid receptor action. Shibata H, et al. **Recent Prog Horm Res** 1997;52:141–64; discussion 164–5 (119 ref.)

Regulation of T cell apoptosis via T cell receptors and steroid receptors. Iwata M, et al. **Stem Cells** 1996 Nov;14(6):632–41 (66 ref.)

RECEPTORS, STRETCH see **MECHANORECEPTORS**

RECEPTORS, STRETCH, ARTERIAL see **PRESSORECEPTORS**

RECEPTORS, STRETCH, MUSCLE see **MUSCLE SPINDLES**

RECEPTORS, STRETCH, PULMONARY see **PULMONARY STRETCH RECEPTORS**

RECEPTORS, STRETCH, VASCULAR see **PRESSORECEPTORS**

RECEPTORS, SUBSTANCE K see **RECEPTORS, NEUROKININ-2**

RECEPTORS, SUBSTANCE P see **RECEPTORS, NEUROKININ-1**

RECEPTORS, SYNAPTIC see **RECEPTORS, NEUROTRANSMITTER**

RECEPTORS, T-CELL GROWTH FACTOR see **RECEPTORS, INTERLEUKIN-2**

RECEPTORS, TACHYKININ

Tachykinins: receptor to effector. Khawaja AM, et al. **Int J Biochem Cell Biol** 1996 Jul;28(7):721–38 (152 ref.)

[Peptide receptors] Yokota Y. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):343–8 (31 ref.) **(Jpn)**

AGONISTS

Use of the chemical structure of peptides as the starting point to design nonpeptide agonists and antagonists at peptide receptors: examples with cholecystokinin and tachykinins. Horwell DC. **Bioorg Med Chem** 1996 Oct;4(10):1573–6 (24 ref.)

Intravital microscope studies on the effects of neurokinin agonists and calcitonin gene-related peptide on dural vessel diameter in the anaesthetized rat. Williamson DJ, et al. **Cephalalgia** 1997 Jun;17(4):518–24

Effects of central administration of tachykinin receptor agonists and antagonists on plus-maze behavior in mice. Teixeira RM, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):7–14

Effects of tachykinins on identified dorsal vagal neurons: an electrophysiological study in vitro. Martini-Luccarini F, et al. **Neuroscience** 1996 Mar;71(1):119–31

ANALYSIS

Detection of naturally expressed receptors for gastrin-releasing peptide and tachykinins using cyanine 3-labelled neuropeptides. Bunnett NW, et al. **Histochem J** 1996 Nov;28(11):811–26

Characterization of antisera specific to NK1, NK2, and NK3 neurokinin receptors and their utilization to localize receptors in the rat gastrointestinal tract. Grady EF, et al. **J Neurosci** 1996 Nov 1;16(21):6975–86

ANTAGONISTS & INHIBITORS

Use of the chemical structure of peptides as the starting point to design nonpeptide agonists and antagonists at peptide receptors: examples with cholecystokinin and tachykinins. Horwell DC. **Bioorg Med Chem** 1996 Oct;4(10):1573–6 (24 ref.)

Tachykinin regulation of basal synovial blood flow. Ferrell WR, et al. **Br J Pharmacol** 1997 May;121(1):29–34

Evidence for the participation of glutamate in reflexes involving afferent, substance P-containing nerve fibres in the rat. Juránek I, et al. **Br J Pharmacol** 1996 Jan; 117(1):71–8

Estimation of blood levels of endothelin and neurokinin receptor antagonists at the rat portal and jugular veins after oral administration as a tool in peptide drug design. Paladino J, et al. **Drug Des Discov** 1994 Nov;12(2):121–8

Effects of central administration of tachykinin receptor agonists and antagonists on plus-maze behavior in mice. Teixeira RM, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):7–14

The role of tachykinin receptor antagonists in the prevention of bronchial hyperresponsiveness, airway inflammation and cough. Advenier C, et al. **Eur Respir J** 1997 Aug; 10(8):1892–906 (196 ref.)

Tachykinin antagonist FK224 inhibits neurokinin A-, substance P- and capsaicin-induced human bronchial contraction. Honda I, et al. **Fundam Clin Pharmacol** 1997; 11(3):260–6

'Targeted' molecular diversity: design and development of non-peptide antagonists for cholecystokinin and tachykinin receptors. Horwell D, et al. **Immunopharmacology** 1996 Jun; 33(1–3):68–72 (14 ref.)

Effect of the tachykinin receptor antagonists, SR 140333, FK 888, and SR 142801, on capsaicin-induced mouse ear oedema. Inoue H, et al. **Inflamm Res** 1996 Jun;45(6):303–7

Potential role of tachykinins in inflammatory diseases. Canning BJ. **J Allergy Clin Immunol** 1997 May;99(5):579–82 (30 ref.)

Conformational analysis of three NK1 tripeptide antagonists: a proton nuclear magnetic resonance study Caliendo G, et al. **J Med Chem** 1997 Feb 14;40(4):594–601

Nonpeptide tachykinin receptor antagonists: I. Pharmacological and pharmacokinetic characterization of SB 223412, a novel, potent and selective neurokinin-3 receptor antagonist. Sarau HM, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1303–11

Distinct regulations by septide and the neurokinin-1 tachykinin receptor agonist [pro9]substance P of the N-methyl-D-aspartate-evoked release of dopamine in striosome- and matrix-enriched areas of the rat striatum. Gauchy C, et al. **Neuroscience** 1996 Aug;73(4):929–39

Effects of tachykinins on identified dorsal vagal neurons: an electrophysiological study in vitro. Martini-Luccarini F, et al. **Neuroscience** 1996 Mar;71(1):119–31

Myositis-induced functional reorganisation of the rat dorsal horn: effects of spinal superfusion with antagonists to neurokinin and glutamate receptors. Hoheisel U, et al. **Pain** 1997 Feb;69(3):219–30

Tachykinin receptor antagonists and cough. Advenier C, et al. **Pulm Pharmacol** 1996 Oct–Dec;9(5–6):329–33

Tachykinin and kinin receptor antagonists: therapeutic perspectives in allergic airway disease. Bertrand C, et al. **Trends Pharmacol Sci** 1996 Jul;17(7):255–9 (58 ref.)

[Pharmacological profiles of a novel tachykinin NK-2 receptor antagonist, TAC-363] Higashide Y, et al. **Yakugaku Zasshi** 1996 Nov;116(11):884–91 (Eng. Abstr.) **(Jpn)**

[Antagonists of the tachykinin receptors] Kasheverov IE, et al. **Bioorg Khim** 1997 Jun;23(6):451–68 (180 ref.) (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Upregulation of tachykinin receptors in chronic airway inflammation. McDonald DM. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):203–5 (15 ref.)

CHEMISTRY

Biochemical characterization of mosquito kinin and related receptors. Hayes TK, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:342–5

DRUG EFFECTS

Tachykinin receptors in the guinea-pig isolated oesophagus: a complex system. Kerr KP, et al. **Br J Pharmacol** 1997 Mar;120(6):1021–8

Tachykininergic synaptic transmission in the coeliac ganglion of the guinea-pig. Zhao FY, et al. **Br J Pharmacol** 1996 Aug;118(8):2059–66

Tachykinin receptors and non-cholinergic bronchoconstriction in the anaesthetized guinea-pig. Yuan L, et al. **Clin Exp Pharmacol Physiol** 1996 Feb;23(2):119–24

Tachykinin actions on deep dorsal horn neurons in vitro: an electrophysiological and morphological study in the immature rat. King AE, et al. **Eur J Neurosci** 1997 May; 9(5):1037–46

Inhibitory effect of KW-4679, an anti-allergic drug, on tachykinin-mediated airway response induced by electrical vagal stimulation in guinea pigs. Ikemura T, et al. **Jpn J Pharmacol** 1996 Jun;71(2):179–82

MEN 11,420, a peptide tachykinin NK2 receptor antagonist, reduces motor responses induced by the intravesical administration of capsaicin in vivo. Lecci A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):182–8

GENETICS

Functional characterization by heterologous expression of a novel cloned tachykinin peptide receptor. Donaldson LF, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):1–5

RECEPTORS, TACHYKININ

Neurokinin receptor mRNA localization in human midbrain dopamine neurons. Whitty CJ, et al. **J Comp Neurol** 1997 Jun 9;382(3):394–400

Alpha-adrenergic, neurokinin and muscarinic receptors in rat mesenteric artery; an mRNA study during postnatal development. Phillips JK, et al. **Mech Ageing Dev** 1996 Dec 20;92(2–3):235–46

Transcriptional expression of a putative tachykinin-like peptide receptor gene from stable fly. Guerrero FD. **Peptides** 1997;18(1):1–5

IMMUNOLOGY

Characterization of antisera specific to NK1, NK2, and NK3 neurokinin receptors and their utilization to localize receptors in the rat gastrointestinal tract. Grady EF, et al. **J Neurosci** 1996 Nov 1;16(21):6975–86

METABOLISM

Neurokinin receptors. Comparison of data from classical pharmacology, binding, and molecular biology. Regoli D, et al. **Ann N Y Acad Sci** 1997 May 30;812:144–6 (12 ref.)

Allergic inflammation in isolated vagal sensory ganglia unmasks silent NK-2 tachykinin receptors. Weinreich D, et al. **J Neurosci** 1997 Oct 15;17(20):7683–93

Modulation by protein kinase C of the enhanced responsiveness to tachykinins in ovalbumin-sensitized guinea pig alveolar macrophages. Brunelleschi S, et al. **Neuropeptides** 1996 Jun;30(3):249–60

Substance P(6–11) and natural tachykinins interact with septide-sensitive tachykinin receptors coupled to a phospholipase C in the rat urinary bladder. Torrens Y, et al. **Neuropeptides** 1997 Jun;31(3):243–51

PHYSIOLOGY

Receptors mediating tachykinin-evoked depolarisations of neurons in the neonatal rat spinal cord. Fox AJ, et al. **Acta Biol Hung** 1996;47(1–4):129–44

Evidence that tachykinin NK2 receptors modulate resting tone in the rat isolated small intestine. Maggi CA, et al. **Br J Pharmacol** 1996 Jul;118(5):1262–8

Evidence for modulation of dopamine-neuronal function by tachykinin NK3 receptor stimulation in gerbil mesencephalic cell cultures. Alonso R, et al. **Eur J Neurosci** 1996 Apr;8(4):801–8

Involvement of tachykinin receptors in oedema formation and plasma extravasation induced by substance P, neurokinin A, and neurokinin B in mouse ear. Inoue H, et al. **Inflamm Res** 1996 Jul;45(7):316–23

Effect of celiac ganglionectomy on tachykinin innervation, receptor distribution and intestinal responses in the rat. Ouyang A, et al. **J Auton Nerv Syst** 1996 Dec 14; 61(3):292–300

Tachykinin receptors mediate atropine-resistant rat duodenal reflex contractions in vivo. Giuliani S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):327–35

Cellular MTT reduction distinguishes the mechanism of action of beta-amyloid from that of tachykinin receptor peptides. Shearman MS. **Neuropeptides** 1996 Apr; 30(2):125–32

RECEPTORS, TETRAGASTRIN see **RECEPTORS, CHOLECYSTOKININ**

RECEPTORS, TGF-ALPHA see **RECEPTORS, EPIDERMAL GROWTH FACTOR-UROGASTRONE**

RECEPTORS, TGF-BETA see **RECEPTORS, TRANSFORMING GROWTH FACTOR BETA**

RECEPTORS, THROMBIN

Pretreatment of human platelets with plasmin inhibits responses to thrombin, but potentiates responses to low concentrations of aggregating agents, including the thrombin receptor activating peptide, SFLLRN. Kinlough-Rathbone RL, et al. **Thromb Haemost** 1997 Apr; 77(4):741–7

Thrombin receptor: a novel target for antiplatelet drug development. Ray A, et al. **Thromb Res** 1997 Jul 1; 87(1):37–50 (55 ref.)

AGONISTS

Lipopeptide conjugates: biomolecular building blocks for receptor activating membrane-mimetic structures. Winger TM, et al. **Biomaterials** 1996 Feb;17(4):437–41

Thrombin receptor-dependent prostaglandin E2 synthesis in hamster fibroblasts: synergistic interactions with interleukin-1beta. Derian CK, et al. **Exp Cell Res** 1997 Apr 10;232(1):1–7

Conformational analysis of the thrombin receptor agonist peptides SFLLR and SFLLR-NH2 by NMR: evidence for a cyclic bioactive conformation. Matsoukas J, et al. **J Protein Chem** 1997 Feb;16(2):113–31

ANALYSIS

Thrombin receptor on rat primary hippocampal neurons: coupled calcium and cAMP responses. Yang Y, et al. **Brain Res** 1997 Jun 27;761(1):11–8

Rat uterine stromal cells: thrombin receptor and growth stimulation by thrombin. Arena CS, et al. **Endocrinology** 1996 Sep;137(9):3744–9

ANTAGONISTS & INHIBITORS

Thrombin receptor antagonists: a work in progress. Brass LF. **Coron Artery Dis** 1997 Jan;8(1):49–58 (59 ref.)

Development of potent thrombin receptor antagonist peptides. Bernatowicz MS, et al. **J Med Chem** 1996 Dec 6;39(25):4879–87

Thrombin receptor antagonists. Seiler SM. **Semin Thromb Hemost** 1996;22(3):223–32 (118 ref.)

Antithrombotic strategies targeting thrombin activities, thrombin receptors and thrombin generation. Harker LA, et al. **Thromb Haemost** 1997 Jul;78(1):736–41 (55 ref.)

BLOOD

Loss of high-affinity thrombin receptors during platelet concentrate storage impairs the reactivity of platelets to thrombin. Lozano ML, et al. **Transfusion** 1997 Apr; 37(4):368–75

CHEMISTRY

Thrombin affinity mapping of its receptor tethered ligand. Witting JI, et al. **Blood Coagul Fibrinolysis** 1997 Jan; 8(1):65–9

Role of the thrombin receptor's cytoplasmic tail in intracellular trafficking. Distinct determinants for agonist-triggered versus tonic internalization and intracellular localization. Shapiro MJ, et al. **J Biol Chem** 1996 Dec 20;271(51):32874–80

A strong thrombin-inhibitory prourokinase derivative with sequence elements from hirudin and the human thrombin receptor. Wnendt S, et al. **Protein Eng** 1997 Feb; 10(2):169–73

DEFICIENCY

Biological consequences of thrombin receptor deficiency in mice. Darrow AL, et al. **Thromb Haemost** 1996 Dec; 76(6):860–6

DRUG EFFECTS

Activation of vascular thrombin receptors mediates cardiac response to alpha-thrombin in isolated, perfused guinea pig heart. Damiano BP, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1585–96

The involvement of a novel mechanism distinct from the thrombin receptor in the vasocontraction induced by trypsin. Komuro T, et al. **Br J Pharmacol** 1997 Mar; 120(5):851–6

Serotonin stimulates the expression of thrombin receptors in cultured vascular smooth muscle cells. Role of protein kinase C and protein tyrosine kinases. Schini-Kerth VB, et al. **Circulation** 1996 Jun 15;93(12):2170–7

Characterization of in vitro and in vivo platelet responses to thrombin and thrombin receptor-activating peptides in guinea pigs. Chiu PJ, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):129–35

Pharmacological characterization of protease-activated receptor (PAR-1) in rat astrocytes. Debeir T, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):111–7

Cardiovascular actions of thrombin receptor activation in vivo. Damiano BP, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1365–78

Binding of a thrombin receptor tethered ligand analogue to human platelet thrombin receptor. Ahn HS, et al. **Mol Pharmacol** 1997 Feb;51(2):350–6

GENETICS

Cloning of PAR3 cDNA from human platelets, and human erythroleukemic and human promonocytic cell lines [letter] Scase TJ, et al. **Blood** 1997 Sep 1;90(5):2113–4

The human thrombin receptor and proteinase activated receptor-2 genes are tightly linked on chromosome 5q13. Schmidt VA, et al. **Br J Haematol** 1997 Jun;97(3):523–9

Cloning and identification of regulatory sequences of the human thrombin receptor gene. Li F, et al. **J Biol Chem** 1996 Oct 18;271(42):26320–8

Intimal hyperplasia following vascular injury is not inhibited by an antisense thrombin receptor oligodeoxynucleotide. Herbert JM, et al. **J Cell Physiol** 1997 Feb;170(2):106–14

Conserved structure and adjacent location of the thrombin receptor and protease-activated receptor 2 genes define a protease-activated receptor gene cluster. Kahn M, et al. **Mol Med** 1996 May;2(3):349–57

Expression of rat thrombin receptor and mutants in the baculovirus-infected insect cell system. Henrikson KP, et al. **Thromb Res** 1997 Jul 15;87(2):205–14

METABOLISM

Differences between platelet phosphoinositide metabolism stimulated by thrombin or SFLLRN are not accounted for by interaction of thrombin with glycoprotein Ib. Vickers JD, et al. **Am J Hematol** 1997 Apr;54(4):288–95

Restenosis following percutaneous revascularization--the potential role of thrombin and the thrombin receptor. Stouffer GA, et al. **Ann Hematol** 1996;73 Suppl 1:S39–41 (14 ref.)

Thrombin activates NF-kappa B through thrombin receptor and results in proliferation of vascular smooth muscle cells: role of thrombin in atherosclerosis and restenosis. Maruyama I, et al. **Ann N Y Acad Sci** 1997 Apr 15; 811:429–36

Thrombin receptor expression in rheumatoid and osteoarthritic synovial tissue. Morris R, et al. **Ann Rheum Dis** 1996 Nov;55(11):841–3

Defective thrombin-induced calcium changes and aggregation of Bernard-Soulier platelets are not associated with deficient moderate-affinity receptors. McNicol A, et al. **Arterioscler Thromb Vasc Biol** 1996 May;16(5):628–32

Cleavage of the thrombin receptor: identification of potential activators and inactivators. Parry MA, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):335–41

Ras activation in platelets after stimulation of the thrombin receptor, thromboxane A2 receptor or protein kinase C. Shock DD, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):525–30

The thrombin receptor in adrenal medullary microvascular endothelial cells is negatively coupled to adenylyl cyclase through a Gi protein. Manolopoulos VG, et al. **Biochim Biophys Acta** 1997 May 27;1356(3):321–32

Protein kinase C plays a key role in the cross-talk between intracellular signalings via prostanoid receptors in a megakaryoblastic cell line, MEG-01s. Watanabe T, et al. **Biochim Biophys Acta** 1996 Nov 22;1304(2):161–9

Role of glycoprotein V in the formation of the platelet high-affinity thrombin-binding site. Dong JF, et al. **Blood** 1997 Jun 15;89(12):4355–63

Functional interactions between the thrombin receptor and the T-cell antigen receptor in human T-cell lines. Joyce DE, et al. **Blood** 1997 Sep 1;90(5):1893–901

Specific inhibition of thrombin-induced cell activation by the neutrophil proteinases elastase, cathepsin G, and proteinase 3: evidence for distinct cleavage sites within the aminoterminal domain of the thrombin receptor. Renesto P, et al. **Blood** 1997 Mar 15;89(6):1944–53

Differential regulation of human keratinocyte growth and differentiation by a novel family of protease-activated receptors. Derian CK, et al. **Cell Growth Differ** 1997 Jul; 8(7):743–9

Vascular thrombin receptor regulation in hypertensive rats. Capers Q 4th, et al. **Circ Res** 1997 Jun;80(6):838–44

Thrombin activates the sarcolemmal Na(+)-H+ exchanger. Evidence for a receptor-mediated mechanism involving protein kinase C. Yasutake M, et al. **Circ Res** 1996 Oct; 79(4):705–15

Calorie restriction decreases platelet-derived growth factor (PDGF)-A and thrombin receptor mRNA expression in autoimmune murine lupus nephritis. Troyer DA, et al. **Clin Exp Immunol** 1997 Apr;108(1):58–62

Failure of heparin to inhibit the expression of the thrombin receptor following endothelial injury of the rabbit carotid artery. Guitteny AF, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):157–62

Direct evidence for two distinct G proteins coupling with thrombin receptors in human neuroblastoma SH-EP cells. Ogino Y, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):105–9

Kinetic characteristics of thrombin receptor-mediated responses in rat megakaryocytes. Uneyama C, et al. **Eur J Pharmacol** 1997 Jan 29;319(2–3):299–305

Binding of thrombin to the G-protein-linked receptor, and not to glycoprotein Ib, precedes thrombin-mediated platelet activation. Liu L, et al. **J Biol Chem** 1997 Jan 17; 272(3):1997–2004

Thrombin receptors on human platelets. Initial localization and subsequent redistribution during platelet activation. Molino M, et al. **J Biol Chem** 1997 Feb 28;272(9):6011–7

Endothelial cell thrombin receptors and PAR-2. Two protease-activated receptors located in a single cellular environment. Molino M, et al. **J Biol Chem** 1997 Apr 25; 272(17):11133–41

Interactions of mast cell tryptase with thrombin receptors and PAR-2. Molino M, et al. **J Biol Chem** 1997 Feb 14; 272(7):4043–9

The thrombin receptor is present in myoblasts and its expression is repressed upon fusion. Suidan HS, et al. **J Biol Chem** 1996 Nov 15;271(46):29162–9

The thrombin receptor second cytoplasmic loop confers coupling to Gq-like G proteins in chimeric receptors. Additional evidence for a common transmembrane signaling and G protein coupling mechanism in G protein-coupled receptors. Verrall S, et al. **J Biol Chem** 1997 Mar 14;272(11):6898–902

Binding of biotinylated thrombin receptor peptide to cloned human thrombin receptor overexpressed in baby hamster kidney cells. Takada M, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1–4):103–15

Induction of c-fos expression in rat vascular smooth muscle reporter cells by selective activation of the thrombin receptor. Yalkinoglu AO, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1–4):117–30

alpha-Thrombin induces transforming growth factor-beta1 mRNA and protein in cultured vascular smooth muscle cells via a proteolytically activated receptor. Bachhuber BG, et al. **J Vasc Res** 1997 Jan-Feb;34(1):41–8

Coupling of the thrombin receptor to G12 may account for selective effects of thrombin on gene expression and DNA synthesis in 1321N1 astrocytoma cells. Post GR, et al. **Mol Biol Cell** 1996 Nov;7(11):1679–90

Protease-activated receptor 3 is a second thrombin receptor in humans. Ishihara H, et al. **Nature** 1997 Apr 3;

386(6624):502–6
The G12 coupled thrombin receptor stimulates mitogenesis through the Shc SH2 domain. Collins LR, et al. **Oncogene** 1997 Jul 31;15(5):595–600
Thrombin–mediated events implicated in mast cell activation. Strukova SM, et al. **Semin Thromb Hemost** 1996; 22(2):145–50
The thrombin receptor in the nervous system. Suidan HS, et al. **Semin Thromb Hemost** 1996;22(2):125–33 (63 ref.)
Protease–activated G protein–coupled receptors on human platelets and endothelial cells. Brass LF, et al. **Thromb Haemost** 1997 Jul;78(1):234–41 (89 ref.)
Ca(2+)–dependent activation of the 33–kDa protein kinase transmits thrombin receptor signals in human platelets. Ido M, et al. **Thromb Haemost** 1996 Sep;76(3):439–43

PHYSIOLOGY

Surface thrombomodulin modulates thrombin receptor responses on vascular smooth muscle cells. Grinnell BW, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H603–9
Plasmin–platelet interaction involves cleavage of functional thrombin receptor. Kimura M, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C54–60
Different effects of thrombin receptor activation on endothelium and smooth muscle cells of human coronary bypass vessels. Implications for venous bypass graft failure. Yang Z, et al. **Circulation** 1997 Apr 1;95(7):1870–6
Polymorphisms of platelet receptors as risk factors in coronary thrombosis [editorial] Nurden AT. **Eur Heart J** 1996 Sep;17(9):1293–4
Protease activated receptors modulate aortic vascular tone. Magazine HI, et al. **Int J Cardiol** 1996 Apr 26;53 Suppl:S75–80
D3 phosphoinositides and outside–in integrin signaling by glycoprotein IIb–IIIa mediate platelet actin assembly and filopodial extension induced by phorbol 12–myristate 13–acetate. Hartwig JH, et al. **J Biol Chem** 1996 Dec 20; 271(51):32986–93
Regulated shedding of syndecan–1 and –4 ectodomains by thrombin and growth factor receptor activation. Subramanian SV, et al. **J Biol Chem** 1997 Jun 6; 272(23):14713–20
Synergistic actions of a thrombin–derived synthetic peptide and a thrombin receptor–activating peptide in stimulating fibroblast mitogenesis. Hollenberg MD, et al. **J Cell Physiol** 1996 Dec;169(3):491–6
Thrombin induces thrombomodulin mRNA expression via the proteolytically activated thrombin receptor in cultured bovine smooth muscle cells. Ma SF, et al. **J Lab Clin Med** 1997 Jun;129(6):611–9
Thrombin receptor–related hemostatic defect after cardiopulmonary bypass. Ferraris VA, et al. **Semin Thromb Hemost** 1996;22(4):351–6
Thrombin, its receptor and protease nexin I, its potent serpin, in the nervous system. Festoff BW, et al. **Semin Thromb Hemost** 1996;22(3):267–71 (47 ref.)
Pathophysiology of platelet thrombin receptors. Jamieson GA. **Thromb Haemost** 1997 Jul;78(1):242–6 (49 ref.)
[Role of thrombin and its receptor in the pathogenesis of severe forms of human glomerulonephritis with fibrin deposits] Sraer JD, et al. **Bull Acad Natl Med** 1996 Oct; 180(7):1609–23; discussion 1624–5 (Eng. Abstr.) **(Fre)**
[Thrombin receptor in thrombosis] Maruyama I. **Nippon Naika Gakkai Zasshi** 1997 Jun 10;86(6):981–5 **(Jpn)**

RECEPTORS, THROMBOSPONDIN see **ANTIGENS, CD36**

RECEPTORS, THROMBOXANE

AGONISTS

Characterization of thromboxane A2/prostaglandin endoperoxide receptors in aorta. Zhang R, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):91–6
Activation of thromboxane A2 receptors alters lipopolysaccharide–induced adherence of THP–1 cells. Wagner RS, et al. **Shock** 1996 Jan;5(1):41–6

ANALYSIS

Immunolocalization of rat thromboxane receptor in the kidney. Takahashi N, et al. **Endocrinology** 1996 Nov; 137(11):5170–3
Characterization of the prostanoid TP receptor population in human nonpregnant myometrium. Senchyna M, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):262–70

ANTAGONISTS & INHIBITORS

Postinjury thromboxane receptor blockade ameliorates acute lung injury. Goff CD, et al. **Ann Thorac Surg** 1997 Sep; 64(3):826–9
Pharmacokinetics and metabolism of the new thromboxane A2 receptor antagonist ramatroban in animals. 1st communication: absorption, concentrations in plasma, metabolism, and excretion after single administration to rats and dogs. Boberg M, et al. **Arzneimittelforschung** 1997 Aug; 47(8):928–38
Pharmacokinetics and metabolism of the new thromboxane A2 receptor antagonist ramatroban in animals. 2nd communication: distribution to organs and tissues in male, female and pregnant rats, and characteristics of protein binding in plasma. Steinke W, et al. **Arzneimittelforschung** 1997 Aug;47(8):939–48
Antiplatelet effect of a new inhibitor of thromboxane synthase and thromboxane A2 receptors. Tubaro E, et al. **Arzneimittelforschung** 1996 Jan;46(1):35–41
DTTX30, a combined thromboxane receptor antagonist and thromboxane synthetase inhibitor, prevents coronary thrombosis in anesthetized dogs. Guth BD, et al. **Basic Res Cardiol** 1997 Jun;92(3):181–90
Thromboxane A2 synthase inhibition and thromboxane A2 receptor blockade by 2–[(4–cyanophenyl)amino]–3–chloro–1,4–naphthalenedione (NQ–Y15) in rat platelets. Chang TS, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):259–68
The potent inhibition of vapiprost, a novel thromboxane A2 receptor antagonist, on the secondary aggregation and ATP release of human platelets. Horie S, et al. **Biol Pharm Bull** 1997 Jun;20(6):625–31
Modulation of sensitivity to cis–diamminedichloroplatinum (II) by thromboxane A2 receptor antagonists in non–small–cell lung cancer cell lines. Kasahara K, et al. **Br J Cancer** 1996 Nov;74(10):1553–8
The haemodynamic effects of GR 32191, a thromboxane A2 receptor antagonist, in patients with renal artery stenosis and hypertension. Lyons D, et al. **Br J Clin Pharmacol** 1993 Sep;36(3):271–3
Thromboxane A2–mediated shape change: independent of Gq–phospholipase C—Ca2+ pathway in rabbit platelets. Ohkubo S, et al. **Br J Pharmacol** 1996 Mar;117(6):1095–104
Thromboxane A2 receptor density increases during chronic exposure to thromboxane A2 receptor antagonists after porcine carotid bypass. Brothers TE, et al. **Cardiovasc Surg** 1997 Feb;5(1):92–8
Synthesis of [[(benzenesulfonamido)alkyl]phenyl]alkanoic acid derivatives containing pyridyl or imidazolyl groups and their thromboxane A2 receptor antagonistic and thromboxane A2 synthase inhibitory activities. Sakurai S, et al. **Chem Pharm Bull (Tokyo)** 1996 Aug;44(8):1510–20
Effect of ifetroban, a thromboxane A2 receptor antagonist, in stroke–prone spontaneously hypertensive rats. Johnson RA, et al. **Clin Exp Hypertens** 1996 Feb;18(2):171–88
Identification of rat and human cytochrome P450 forms involved in the metabolism of the thromboxane A2 receptor antagonist (+)–S–145. Yamaguchi Y, et al. **Drug Metab Dispos** 1997 Jan;25(1):75–80
Thromboxane A2–receptor blockade improves cerebral protection for deep hypothermic circulatory arrest. Tsui SS, et al. **Eur J Cardiothorac Surg** 1997 Aug;12(2):228–35
Thromboxane A2 receptor blockade suppresses intercellular adhesion molecule–1 expression by stimulated vascular endothelial cells. Ishizuka T, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):367–77
Characterization of thromboxane A2/prostaglandin endoperoxide receptors in aorta. Zhang R, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):91–6
Effect of thromboxane A2–receptor antagonist on bradykinin–induced bronchoconstriction in asthma. Rajakulasingam K, et al. **J Appl Physiol** 1996 Jun; 80(6):1973–7
Determination of ZD9583, a thromboxane receptor antagonist, in human plasma and urine by liquid chromatography atmospheric pressure chemical ionization tandem mass spectrometry. Gao CX, et al. **J Chromatogr B Biomed Sci Appl** 1997 Aug 1; 695(2):299–307
Safety and efficacy of picotamide, a dual anti–thromboxane agent, in patients with thrombocytosis and a previous thromboembolic event: a 1–year observational study. Pogliani E, et al. **J Int Med Res** 1996 May–Jun;24(3):311–5
On the bioisosteric potential of diazines: diazine analogues of the combined thromboxane A2 receptor antagonist and synthetase inhibitor Ridogrel. Heinisch G, et al. **J Med Chem** 1996 Sep 27;39(20):4058–64
ZD9583, an orally effective thromboxane A2 synthase inhibitor and receptor antagonist with a sustained duration of action in rat and dog. Brownlie RP, et al. **J Pharm Pharmacol** 1997 Feb;49(2):187–94
Pharmacokinetic and pharmacodynamic properties of FK070 (KDI–792), a novel thromboxane receptor antagonist/thromboxane synthetase inhibitor, after single and multiple oral administrations to healthy volunteers. Uematsu T, et al. **J Pharm Pharmacol** 1996 Apr;48(4):380–5
Pulmonary pharmacology of DT–TX 30 SE, a potent selective combined thromboxane synthetase inhibitor and receptor antagonist, in guinea pigs. Meade CJ, et al. **Jpn J Pharmacol** 1996 Jun;71(2):119–27
Acute effects of thromboxane dual blocker (KDI–792) on different portions of lower limb blood flow—a study using Doppler ultrasonography and laser Doppler flowmetry in type 2 diabetic patients. Sone H, et al. **Prostaglandins** 1997 Jun;53(6):395–409
Protective actions of a thromboxane receptor antagonist, SQ 29548 on the ischemic myocardium: morphologic and hemodynamic effects. Singh J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 Feb; 56(2):105–10
Mechanism of the persisting TxA2 receptor antagonism by picotamide. Pulcinelli FM, et al. **Thromb Res** 1997 Feb 1;85(3):207–15
Sex differences in the metabolism of (+)–S–145, a novel thromboxane A2 receptor antagonist in rat. Yamaguchi Y, et al. **Xenobiotica** 1996 Jun;26(6):613–26
[Thromboxane A2 receptor antagonist in asthma therapy] Endo S, et al. **Nippon Rinsho** 1996 Nov;54(11):3045–8 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Molecular pharmacology and application to the bronchial asthma of thromboxane A2 antagonists] Kohno S. **Nippon Rinsho** 1996 Feb;54(2):551–8 (25 ref.) (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Distribution of thromboxane A2 receptor mRNA along the mouse nephron segments. Asano K, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):613–7

CHEMISTRY

Structural determinants for agonist binding affinity to thromboxane/prostaglandin endoperoxide (TP) receptors. Analysis of chimeric rat/human TP receptors. Dorn GW 2nd, et al. **J Biol Chem** 1997 May 9;272(19):12399–405
Characterization of a rat kidney thromboxane A2 receptor: high affinity for the agonist ligand I–BOP. D'Angelo DD, et al. **Prostaglandins** 1996 Oct;52(4):303–16

DRUG EFFECTS

Thromboxane A2 agonist modulation of excitatory synaptic transmission in the rat hippocampal slice. Hsu KS, et al. **Br J Pharmacol** 1996 Aug;118(8):2220–7
Evidence for human thromboxane receptor heterogeneity using a novel series of 9,11–cyclic carbonate derivatives of prostaglandin F2 alpha. Krauss AH, et al. **Br J Pharmacol** 1996 Mar;117(6):1171–80
Gender–related differences in androgen regulation of thromboxane A2 receptors in rat aortic smooth–muscle cells. Higashiura K, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):311–5
The human thromboxane A2 receptor alpha isoform (TP alpha) functionally couples to the G proteins Gq and G11 in vivo and is activated by the isoprostane 8–epi prostaglandin F2 alpha. Kinsella BT, et al. **J Pharmacol Exp Ther** 1997 May;281(2):957–64
PGF2 alpha causes bronchoconstriction and pulmonary vasoconstriction via thromboxane receptors in rat lung. Kang KH, et al. **Korean J Intern Med** 1996 Jan;11(1):74–81

GENETICS

Site–directed mutagenesis of cysteinyl and serine residues of human thromboxane A2 receptor in insect cells. Chiang N, et al. **Arch Biochem Biophys** 1996 Oct 1;334(1):9–17
Molecular characterization of a dominantly inherited bleeding disorder with impaired platelet responses to thromboxane A2. Okuma M, et al. **Pol J Pharmacol** 1996 Jan–Feb;48(1):77–82

METABOLISM

Stimulation of rat mesangial cell thromboxane A2 receptors inhibits particulate but not soluble guanylyl cyclase. Paul RV, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F31–8
Low–affinity thromboxane receptor mediates proliferation in cultured vascular smooth muscle cells of rats. Ko FN. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1274–82
Ras activation in platelets after stimulation of the thrombin receptor, thromboxane A2 receptor or protein kinase C. Shock DD, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):525–30
Tyrosine phosphorylation of phosphatidylinositol 3–kinase and of the thromboxane A2 (TXA2) receptor by the TXA2 mimetic I–BOP in A7r5 cells. Morinelli TA, et al. **Biochem Pharmacol** 1997 Jun 15;53(12):1823–32
Differential desensitization of thromboxane A2 receptor subtypes. Yukawa M, et al. **Circ Res** 1997 Apr;80(4):551–6
Rapid, agonist–dependent phosphorylation in vivo of human thromboxane receptor isoforms. Minimal involvement of protein kinase C. Habib A, et al. **J Biol Chem** 1997 Mar 14;272(11):7191–200
Pharmacological evidence for thromboxane receptor heterogeneity—implications for the eye. Krauss AH, et al. **J Ocul Pharmacol Ther** 1997 Aug;13(4):303–12
Inhibition of testosterone 5 alpha–reductase: evidence for tissue–specific regulation of thromboxane A2 receptors. Higashiura K, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1386–91
Alterations in thromboxane synthase and thromboxane A2 receptors in experimental alcoholic liver disease. Nanji AA, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):1037–43
Pathogenetic analysis of five cases with a platelet disorder characterized by the absence of thromboxane A2 (TXA2)–induced platelet aggregation in spite of normal TXA2 binding activity. Fuse I, et al. **Thromb Haemost** 1996 Dec;76(6):1080–5

PHYSIOLOGY

Evidence for the distinct nature of F2–isoprostane receptors from those of thromboxane A2. Fukunaga M, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F477–83
Sympathetic nervous system and hypertension during prolonged TxA2/PGH2 receptor activation in rats. Gao H, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H734–9
Central thromboxane receptors: mRNA expression and mediation of pressor responses. Gao H, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1493–500

RECEPTORS, THROMBOXANE

TXA2 agonists inhibit high-voltage-activated calcium channels in rat hippocampal CA1 neurons. Hsu KS, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1269-77

AT1 and TxA2/PGH2 receptors maintain hypertension throughout 2K,1C Goldblatt hypertension in the rat. Wilcox CS, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R891-6

Nitric oxide regulation of TP receptor-mediated pulmonary vasoconstriction in the anesthetized, open-chest rat. Valentin JP, et al. **Eur J Pharmacol** 1996 Dec 19; 317(2-3):335-42

Thromboxane A2 and related prostaglandins in airways. Devillier P, et al. **Fundam Clin Pharmacol** 1997;11(1):2-18 (186 ref.)

Vascular smooth muscle thromboxane A2 receptors mediate arachidonic acid-induced sudden death in rabbits. Pfister SL, et al. **Hypertension** 1997 Jan;29(1 Pt 2):303-9

Cigarette smoke-induced bronchoconstriction: causative agents and role of thromboxane receptors. Hong JL, et al. **J Appl Physiol** 1996 Nov;81(5):2053-9

Pulmonary vasoconstrictor effects of prostacyclin in rats: potential role of thromboxane receptors. Zhao YJ, et al. **J Appl Physiol** 1996 Dec;81(6):2595-603

Intestinal effects of isoprostanes: evidence for the involvement of prostanoid EP and TP receptors. Elmhurst JL, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1198-205

Differential involvement of serotonin 2A/C and thromboxane A2/prostanoid receptors in high- vs. low-shear rate arterial thrombosis in rabbits. Valentin JP, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):761-9

Thromboxane A2 receptor mediation of calcium and calcium transients in rat cardiomyocytes. Dogan S, et al. **Life Sci** 1997;60(12):943-52

Prostanoid receptors and signal transduction. Narumiya S. **Prog Brain Res** 1996;113:231-41 (70 ref.)

Defective signal transduction through the thromboxane A2 receptor in a patient with a mild bleeding disorder: deficiency of the inositol 1,4,5-triphosphate formation despite normal G-protein activation. Mitsui T, et al. **Thromb Haemost** 1997 May;77(5):991-5

RECEPTORS, THROMBOXANE A2 see **RECEPTORS, THROMBOXANE**

RECEPTORS, THYROID HOMONE

see related

THYROID HORMONE RESISTANCE SYNDROME

[Thyroid hormone receptors] Nakamura H. **Nippon Rinsho** 1997 Apr;55 Suppl 2:570-3 (9 ref.) **(Jpn)**

ANALYSIS

Identification of a nuclear protein from rat developing brain as heterodimerization partner with thyroid hormone receptor-beta. Huo B, et al. **Endocrinology** 1997 Aug; 138(8):3283-9

Differential distribution of thyroid hormone receptor isoform in rat dorsal root ganglia and sciatic nerve in vivo and in vitro. Glauser L, et al. **J Neuroendocrinol** 1997 Mar; 9(3):217-27

BIOSYNTHESIS

The expression of thyroid hormone receptors in human bone. Abu EO, et al. **Bone** 1997 Aug;21(2):137-42

The isoform-specific expression of the tri-iodothyronine receptor in osteoblasts and osteoclasts. Allain TJ, et al. **Eur J Clin Invest** 1996 May;26(5):418-25

Cloning and expression of a thyroid hormone receptor alpha 1 in the perennibranchiate amphibian Proteus anguinus. Ho Huynh TD, et al. **Int J Dev Biol** 1996 Jun;40(3):537-43

Mutations in the c-erbA beta 1 gene: do they underlie euthyroid fibromyalgia? Lowe JC, et al. **Med Hypotheses** 1997 Feb;48(2):125-35 (152 ref.)

Modification of thyroid hormone and 9-cis retinoic acid signaling by overexpression of their cognate receptors using adenoviral vector. Hayashi Y, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):59-66

Characterization of a cDNA encoding an alpha thyroid hormone receptor in muscovy duckling. Lachuer J, et al. **Poult Sci** 1996 Dec;75(12):1531-5

Is there a negative TRE in the luciferase reporter cDNA? Maia AL, et al. **Thyroid** 1996 Aug;6(4):325-8

CHEMISTRY

Critical role of glutamine 252 in the hormone-dependent transcriptional activity of the thyroid hormone beta1 nuclear receptor. Bhat MK, et al. **Biochemistry** 1997 Apr 8;36(14):4233-9

Ligand-dependent heterodimerization of thyroid hormone receptor and retinoid X receptor. Kakizawa T, et al. **J Biol Chem** 1997 Sep 19;272(38):23799-804

A conformational switch in nuclear hormone receptors is involved in coupling hormone binding to corepressor release. Lin BC, et al. **Mol Cell Biol** 1997 Oct;17(10):6131-8

DEFICIENCY

Thyrotropin regulation by thyroid hormone in thyroid hormone receptor beta-deficient mice. Weiss RE, et al. **Endocrinology** 1997 Sep;138(9):3624-9

DRUG EFFECTS

Thyroid hormone action beyond the receptor [editorial; comment] Wondisford FE. **J Clin Endocrinol Metab** 1996 Dec;81(12):4194-5. Comment on: J Clin Endocrinol Metab 1996 Dec;81(12):4196-203.

GENETICS

SF-1: a key regulator of development and function in the mammalian reproductive system. Ikeda Y. **Acta Paediatr Jpn** 1996 Aug;38(4):412-9 (45 ref.)

The gene regulating activity of thyroid hormone nuclear receptors is modulated by cell-type specific factors. Lin K, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):280-4

A mutant thyroid hormone receptor beta 1 identified in a patient with resistance to thyroid hormone inhibits the activities of not only the wild-type TRs, but also other nuclear receptors. Miyoshi Y, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):39-43

Molecular cloning and sequencing of a cDNA encoding a beta-thyroid hormone receptor in muscovy duckling. Lachuer J, et al. **Biochim Biophys Acta** 1997 Jan 10; 1310(1):127-30

Structure, mapping and expression of a human NOR-1 gene, the third member of the Nur77/NGFI-B family. Ohkura N, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):205-14

The T3R alpha gene encoding a thyroid hormone receptor is essential for post-natal development and thyroid hormone production. Fraichard A, et al. **EMBO J** 1997 Jul 16;16(14):4412-20

Chick ovalbumin upstream promoter-transcription factors (COUP-TFs): coming of age. Tsai SY, et al. **Endocr Rev** 1997 Apr;18(2):229-40 (94 ref.)

Deletion of the thyroid hormone beta1 receptor increases basal and triiodothyronine-induced growth hormone messenger ribonucleic acid in GH3 cells. Ball SG, et al. **Endocrinology** 1997 Aug;138(8):3125-32

Isoform-specific 3,5,3'-triiodothyronine receptor binding capacity and messenger ribonucleic acid content in rat adenohypophysis: effect of thyroidal state and comparison with extrapituitary tissues. Ercan-Fang S, et al. **Endocrinology** 1996 Aug;137(8):3228-33

Identification of naturally occurring dominant negative mutants of thyroid hormone alpha 1 and beta 1 receptors in a human hepatocellular carcinoma cell line [see comments] Lin KH, et al. **Endocrinology** 1996 Oct; 137(10):4073-81. Comment in: Endocrinology 1996 Oct;137(10):4071-2.

Amino acid substitutions of thyroid hormone receptor-beta at codon 435 with resistance to thyroid hormone selectively alter homodimer formation. Nomura Y, et al. **Endocrinology** 1996 Oct;137(10):4082-6

Post-transcriptional induction of beta 1-adrenergic receptor by retinoic acid, but not triiodothyronine, in C6 glioma cells expressing thyroid hormone receptors [see comments] López-Barahona M, et al. **Eur J Endocrinol** 1996 Dec; 135(6):709-15. Comment in: Eur J Endocrinol 1996 Dec;135(6):651-2.

Periodically hyperthyroid phenotype in thyroid hormone resistance is associated with mutation D322N in the thyroid hormone receptor beta gene: transcriptional properties of the mutant and the role of retinoid X receptor. Behr M, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:111-6

Mild resistance to thyroid hormone with a truncated thyroid hormone receptor beta. Taniyama M, et al. **Exp Clin Endocrinol Diabetes** 1996;104(4):339-43

Identification of a novel mutation (A268G) in exon 8 of the HTR beta gene in a large family with thyroid hormone resistance. Jézéquel P, et al. **Hum Mutat** 1996;8(4):396

Rapid molecular diagnosis of mutations associated with generalized thyroid hormone resistance by PCR-coupled automated direct sequencing of genomic DNA: detection of two novel mutations. Seto D, et al. **Hum Mutat** 1996; 8(3):247-57

Function of nuclear co-repressor protein on thyroid hormone response elements is regulated by the receptor A/B domain. Hollenberg AN, et al. **J Biol Chem** 1996 Nov 8; 271(45):28516-20

5'-flanking sequences in thyroid hormone response element half-sites determine the requirement of retinoid X receptor for receptor-mediated gene expression. Olson DP, et al. **J Biol Chem** 1997 Apr 11;272(15):9907-14

Functional characterization of a mutant thyroid hormone receptor in Xenopus laevis. Puzianowska-Kuznicka M, et al. **J Biol Chem** 1996 Dec 27;271(52):33394-403

Thyroid hormone receptor beta2 promoter activity in pituitary cells is regulated by Pit-1. Wood WM, et al. **J Biol Chem** 1996 Sep 27;271(39):24213-20

The differential hormone-dependent transcriptional activation of thyroid hormone receptor isoforms is mediated by interplay of their domains. Zhu XG, et al. **J Biol Chem** 1997 Apr 4;272(14):9048-54

Selenium-regulated translation control of heterologous gene expression: normal function of selenocysteine-substituted gene products. Leonard JL, et al. **J Cell Biochem** 1996 Jun 1;61(3):410-9

Deoxyribonucleic acid binding and transcriptional silencing by a truncated c-erbA beta 1 thyroid hormone receptor identified in a severely retarded patient with resistance to thyroid hormone. Behr M, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1081-7

Dominant inheritance of resistance to thyroid hormone not linked to defects in the thyroid hormone receptor alpha or beta genes may be due to a defective cofactor [see comments] Weiss RE, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4196-203. Comment in: J Clin Endocrinol Metab 1996 Dec;81(12):4194-5.

Resistance to thyroid hormone caused by two mutant thyroid hormone receptors beta, R243Q and R243W, with marked impairment of function that cannot be explained by altered in vitro 3,5,3'-triiodothyroinine binding affinity. Yagi H, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1608-14

Introducing a point mutation identified in a patient with pituitary resistance to thyroid hormone (Arg 338 to Trp) into other mutant thyroid hormone receptors weakens their dominant negative activities. Ando S, et al. **J Endocrinol** 1996 Nov;151(2):293-300

Specific organization of the negative response elements for retinoic acid and thyroid hormone receptors in keratin gene family. Radoja N, et al. **J Invest Dermatol** 1997 Oct; 109(4):566-72

Thyroid hormone receptor genes of neotenic amphibians. Safi R, et al. **J Mol Evol** 1997 Jun;44(6):595-604

Cardiac nuclear hormone receptor mRNA in heart failure in man. Sylvén C, et al. **Life Sci** 1996;59(22):1917-22

Mutations in the c-erbA beta 1 gene: do they underlie euthyroid fibromyalgia? Lowe JC, et al. **Med Hypotheses** 1997 Feb;48(2):125-35 (152 ref.)

Modification of thyroid hormone and 9-cis retinoic acid signaling by overexpression of their cognate receptors using adenoviral vector. Hayashi Y, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):59-66

Oct-1, silencer sequence, and GC box regulate thyroid hormone receptor beta1 promoter. Nagasawa T, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1-2):153-65

Expression of c-erbA alpha, c-erbA beta and Rev-erbA alpha mRNA during the conversion of brown adipose tissue into white adipose tissue. Reyne Y, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):59-65

Differential responses to ligands of overexpressed thyroid hormone and retinoid X receptors in a Xenopus cell line and in vivo. Ulisse S, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):17-24

Identification of transcripts initiated from an internal promoter in the c-erbA alpha locus that encode inhibitors of retinoic acid receptor-alpha and triiodothyronine receptor activities. Chassande O, et al. **Mol Endocrinol** 1997 Aug;11(9):1278-90

A mouse model of resistance to thyroid hormone produced by somatic gene transfer of a mutant thyroid hormone receptor. Hayashi Y, et al. **Mol Endocrinol** 1996 Jan; 10(1):100-6

Analysis of the functional role of steroid receptor coactivator-1 in ligand-induced transactivation by thyroid hormone receptor. Jeyakumar M, et al. **Mol Endocrinol** 1997 Jun;11(6):755-67

Isoform variable action among thyroid hormone receptor mutants provides insight into pituitary resistance to thyroid hormone. Safer JD, et al. **Mol Endocrinol** 1997 Jan; 11(1):16-26

Thyroid hormone resistance syndrome manifests as an aberrant interaction between mutant T3 receptors and transcriptional corepressors. Yoh SM, et al. **Mol Endocrinol** 1997 Apr;11(4):470-80

Expression of multiple thyroid hormone receptor mRNAs in human oocytes, cumulus cells, and granulosa cells. Zhang SS, et al. **Mol Hum Reprod** 1997 Jul;3(7):555-62

Transgenic mice bearing a human mutant thyroid hormone beta 1 receptor manifest thyroid function anomalies, weight reduction, and hyperactivity. Wong R, et al. **Mol Med** 1997 May;3(5):303-14

Molecular cloning and characterization of a mouse nuclear orphan receptor expressed in embryos and testes. Lee CH, et al. **Mol Reprod Dev** 1996 Jul;44(3):305-14

Lack of loss of heterozygosity at the c-erbA beta locus in gastrointestinal tumors [published erratum appears in Oncology 1997 Sep-Oct;54(5):370] Huber-Gieseke T, et al. **Oncology** 1997 May-Jun;54(3):214-9

A natural transactivation mutation in the thyroid hormone beta receptor: impaired interaction with putative transcriptional mediators. Collingwood TN, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):248-53

The product of a thyroid hormone-responsive gene interacts with thyroid hormone receptors. Thompson CC, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8527-32

Estrogen and thyroid hormone interaction on regulation of gene expression. Zhu YS, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12587-92

Enhanced levels of wild-type versus mutant thyroid hormone receptor beta 1 messenger RNA in fibroblasts from heterozygotes of kindred S with thyroid hormone resistance. Bercu BB, et al. **Thyroid** 1996 Jun;6(3):189-94

A new point mutation (M313T) in the thyroid hormone receptor beta gene in a patient with resistance to thyroid hormone. di Fulvio M, et al. **Thyroid** 1997 Feb;7(1):43-4

Resistance to thyroid hormone in a family caused by a new point mutation L330S in the thyroid receptor (TR) beta gene. Pohlenz J, et al. **Thyroid** 1997 Feb;7(1):39-41

Mutation in the thyroid hormone receptor (TR) beta gene (M313T) not previously reported in two unrelated families with resistance to thyroid hormone (RTH). Refetoff S, et al. **Thyroid** 1996 Dec;6(6):571-3

Cloning of the alpha and beta ovine thyroid hormone

receptor cDNAs. Tucker M, et al. **Thyroid** 1996 Jun; 6(3):237–43

Phenotype differences of resistance to thyroid hormone in two unrelated families with an identical mutation in the thyroid hormone receptor beta gene (R320C). Weiss RE, et al. **Thyroid** 1997 Feb;7(1):35–8

A new mutation in the thyroid hormone receptor (TR) beta gene (V458A) in a family with resistance to thyroid hormone (RTH). Weiss RE, et al. **Thyroid** 1996 Aug; 6(4):311–2

IMMUNOLOGY

Regional changes in beta1 thyroid hormone receptor immunoreactivity in rat brain after thyroidectomy. Nobrega JN, et al. **Brain Res** 1997 Jun 27;761(1):161–4

METABOLISM

Effects of diabetes on rodent cardiac thyroid hormone receptor and isomyosin expression. Haddad F, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E856–63

Identification of the human aldolase A gene as the first induced target for the TR2 orphan receptor, a member of the steroid hormone receptor superfamily. Chang C, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):205–11

Steroid hormone receptors and their regulation by phosphorylation. Weigel NL. **Biochem J** 1996 Nov 1;319 (Pt 3):657–67 (156 ref.)

Three steps in the regulation of transcription by the thyroid hormone receptor: establishment of a repressive chromatin structure, disruption of chromatin and transcriptional activation. Wolffe AP, et al. **Biochem Soc Trans** 1997 May; 25(2):612–5 (18 ref.)

Critical role of glutamine 252 in the hormone-dependent transcriptional activity of the thyroid hormone beta1 nuclear receptor. Bhat MK, et al. **Biochemistry** 1997 Apr 8;36(14):4233–9

Multiple steroidogenic factor 1 binding elements in the human steroidogenic acute regulatory protein gene 5'-flanking region are required for maximal promoter activity and cyclic AMP responsiveness. Sugawara T, et al. **Biochemistry** 1997 Jun 10;36(23):7249–55

Cell–cell and cell–ECM interactions in epithelial apoptosis and cell renewal during frog intestinal development. Shi YB. **Cell Biochem Biophys** 1995;27(3):179–202 (85 ref.)

Thyroid carcinoma: interrelationships between local thyroid hormone metabolism by the type I 5'-deiodinase and the expression of thyroid hormone receptors and other thyroid-specific (de-)differentiation markers. Köhrle J. **Curr Top Pathol** 1997;91:83–116 (230 ref.)

An immunocytochemical analysis of the expression of thyroid hormone receptor alpha and beta proteins during natural and thyroid hormone-induced metamorphosis in Xenopus. Fairclough L, et al. **Dev Growth Differ** 1997 Jun; 39(3):273–83

Determinants of chromatin disruption and transcriptional regulation instigated by the thyroid hormone receptor: hormone-regulated chromatin disruption is not sufficient for transcriptional activation. Wong J, et al. **EMBO J** 1997 Jun 2;16(11):3158–71

Isoform-specific 3,5,3'-triiodothyronine receptor binding capacity and messenger ribonucleic acid content in rat adenohypophysis: effect of thyroidal state and comparison with extrapituitary tissues. Ercan-Fang S, et al. **Endocrinology** 1996 Aug;137(8):3228–33

When is a thyroid hormone receptor not a thyroid hormone receptor? [editorial; comment] Lazar MA. **Endocrinology** 1996 Oct;137(10):4071–2 (24 ref.). Comment on: Endocrinology 1996 Oct;137(10):4073–81.

Calcitriol down-modulates the 3,5,3' triiodothyronine (T3) receptors and affects, in a biphasic manner, the T3-dependent adipose differentiation of Ob 17 preadipocytes. Lenoir C, et al. **Endocrinology** 1996 Oct; 137(10):4268–76

Identification of naturally occurring dominant negative mutants of thyroid hormone alpha 1 and beta 1 receptors in a human hepatocellular carcinoma cell line [see comments] Lin KH, et al. **Endocrinology** 1996 Oct; 137(10):4073–81. Comment in: Endocrinology 1996 Oct;137(10):4071–2.

Thyroid hormone receptor beta 1 expression in developing mouse limbs and face. Nagasawa T, et al. **Endocrinology** 1997 Mar;138(3):1276–81

Amino acid substitutions of thyroid hormone receptor-beta at codon 435 with resistance to thyroid hormone selectively alter homodimer formation. Nomura Y, et al. **Endocrinology** 1996 Oct;137(10):4082–6

Characterization of a low affinity thyroid hormone receptor binding site within the rat GLUT4 gene promoter. Torrance CJ, et al. **Endocrinology** 1997 Mar;138(3):1215–23

Differential sensitivity of thyroid hormone receptor isoform homodimers and mutant heterodimers to hormone-induced dissociation from deoxyribonucleic acid: its role in dominant negative action. Zhu XG, et al. **Endocrinology** 1997 Apr;138(4):1456–63

Thyroid hormone receptors are necessary but not sufficient for transcription [comment] Puymirat J. **Eur J Endocrinol** 1996 Dec;135(6):651–2. Comment on: Eur J Endocrinol 1996 Dec;135(6):709–15.

Aging decreases the abundance of retinoic acid (RAR) and triiodothyronine (TR) nuclear receptor mRNA in rat brain: effect of the administration of retinoids. Enderlin V, et al. **FEBS Lett** 1997 Aug 4;412(3):629–32

Cross-talk between thyroid hormone and specific retinoid X receptor subtypes in yeast selectively regulates cognate ligand actions. Walfish PG, et al. **Gene Expr** 1996; 6(3):169–84

Human TAF(II)135 potentiates transcriptional activation by the AF-2s of the retinoic acid, vitamin D3, and thyroid hormone receptors in mammalian cells. Mengus G, et al. **Genes Dev** 1997 Jun 1;11(11):1381–95

Postnatal expression of the alpha-thyroid hormone receptor in the rat cochlea. Lautermann J, et al. **Hear Res** 1997 May;107(1–2):23–8

The expression of sf-1/Ad4BP is related to the process of luteinization in the marmoset (Callithrix jacchus) ovary. Wehrenberg U, et al. **Histochem Cell Biol** 1997 Apr; 107(4):345–50

Thyroid hormone receptors in perennibranchiate amphibians. Safi R, et al. **Int J Dev Biol** 1997 Jun;41(3):533–5

Thyroid hormone-mediated enhancement of heterodimer formation between thyroid hormone receptor beta and retinoid X receptor. Collingwood TN, et al. **J Biol Chem** 1997 May 16;272(20):13060–5

Different DNA elements can modulate the conformation of thyroid hormone receptor heterodimer and its transcriptional activity. Ikeda M, et al. **J Biol Chem** 1996 Sep 20;271(38):23096–104

Identification of direct repeat 4 as a positive regulatory element for the human TR4 orphan receptor. A modulator for the thyroid hormone target genes. Lee YF, et al. **J Biol Chem** 1997 May 2;272(18):12215–20

Inhibition of peroxisome proliferator signaling pathways by thyroid hormone receptor. Competitive binding to the response element. Miyamoto T, et al. **J Biol Chem** 1997 Mar 21;272(12):7752–8

DNA-independent and DNA-dependent mechanisms regulate the differential heterodimerization of the isoforms of the thyroid hormone receptor with retinoid X receptor. Reginato MJ, et al. **J Biol Chem** 1996 Nov 8; 271(45):28199–205

Negative regulation of the gene for the preprothyrotropin-releasing hormone from the mouse by thyroid hormone requires additional factors in conjunction with thyroid hormone receptors. Satoh T, et al. **J Biol Chem** 1996 Nov 1;271(44):27919–26

Tissue-specific stabilization of the thyroid hormone beta1 nuclear receptor by phosphorylation. Ting YT, et al. **J Biol Chem** 1997 Feb 14;272(7):4129–34

Identification and characterization of the AF-1 transactivation domain of thyroid hormone receptor beta1. Wilkinson JR, et al. **J Biol Chem** 1997 Sep 19; 272(38):23824–32

Thyroid hormone receptor variant alpha2. Role of the ninth heptad in dna binding, heterodimerization with retinoid X receptors, and dominant negative activity. Yang YZ, et al. **J Biol Chem** 1996 Nov 8;271(45):28235–42

Thyroid hormone and estrogen receptor expression in normal pituitary and nonfunctioning tumors of the anterior pituitary. Gittoes NJ, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1960–7

Thyroid hormone, vitamin D and retinoid receptor expression and signalling in primary cultures of rat osteoblastic and immortalised osteosarcoma cells. Bland R, et al. **J Endocrinol** 1997 Jul;154(1):63–74

Some new twists in the regulation of gene expression by thyroid hormone and retinoic acid receptors. Glass CK. **J Endocrinol** 1996 Sep;150(3):349–57 (64 ref.)

Distinct expression patterns and biological activities of two isoforms of the mouse orphan receptor TR2. Lee CH, et al. **J Endocrinol** 1997 Feb;152(2):245–55

A Purkinje cell protein-2 intronic thyroid hormone response element binds developmentally regulated thyroid hormone receptor-nuclear protein complexes. Hagen SG, et al. **J Mol Neurosci** 1996 Winter;7(4):245–55

Application of a novel method for the comparison of DNA binding parameters of the two human thyroid hormone receptor subtypes hTR alpha 1 and hTR beta 1. Carlsson B, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1–3):355–71

Direct modulation of simian virus 40 late gene expression by thyroid hormone and its receptor. Zuo F, et al. **J Virol** 1997 Jan;71(1):427–36

Starvation-induced decrease in the maximal binding capacity for triiodothyronine of the thyroid hormone receptor is due to a decrease in the receptor protein. Tagami T, et al. **Metabolism** 1996 Aug;45(8):970–3

tau4/tau c/AF-2 of the thyroid hormone receptor relieves silencing of the retinoic acid receptor silencer core independent of both tau4 activation function and full dissociation of corepressors. Baniahmad A, et al. **Mol Cell Biol** 1997 Aug;17(8):4259–71

The transcriptional integrator CREB-binding protein mediates positive cross talk between nuclear hormone receptors and the hematopoietic bZip protein p45/NF-E2. Cheng X, et al. **Mol Cell Biol** 1997 Mar;17(3):1407–16

Myocyte-specific enhancer factor 2 and thyroid hormone receptor associate and synergistically activate the alpha-cardiac myosin heavy-chain gene. Lee Y, et al. **Mol Cell Biol** 1997 May;17(5):2745–55

Myb-Ets fusion oncoprotein inhibits thyroid hormone receptor/c-ErbA and retinoic acid receptor functions: a novel mechanism of action for leukemogenic transformation by E26 avian retrovirus. Rascle A, et al. **Mol Cell Biol** 1996 Nov;16(11):6338–51

Mutations in the conserved C-terminal sequence in thyroid hormone receptor dissociate hormone-dependent activation from interference with AP-1 activity. Saatcioglu F, et al. **Mol Cell Biol** 1997 Aug;17(8):4687–95

Presence and mRNA expression of T3 receptors in differentiating rat brown adipocytes. Hernández A, et al. **Mol Cell Endocrinol** 1996 Jul 23;121(1):37–46

An artificial thyroid hormone receptor mutant without DNA binding can have dominant negative effect. Liu RT, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):85–93

Analysis of the functional state of T3 nuclear receptors expressed in thyroid cells. Selmi-Ruby S, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):95–104

Identification of transcripts initiated from an internal promoter in the c-erbA alpha locus that encode inhibitors of retinoic acid receptor-alpha and triiodothyronine receptor activities. Chassande O, et al. **Mol Endocrinol** 1997 Aug;11(9):1278–90

A TATA binding protein-associated factor functions as a coactivator for thyroid hormone receptors. Petty KJ, et al. **Mol Endocrinol** 1996 Dec;10(12):1632–45

Two receptor interacting domains in the nuclear hormone receptor corepressor RIP13/N-CoR. Seol W, et al. **Mol Endocrinol** 1996 Dec;10(12):1646–55

Two receptor interaction domains in the corepressor, N-CoR/RIP13, are required for an efficient interaction with Rev-erbA alpha and RVR: physical association is dependent on the E region of the orphan receptors. Downes M, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4379–86

A thyroid hormone receptor coactivator negatively regulated by the retinoblastoma protein. Chang KH, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9040–5

Yeast hormone response element assays detect and characterize GRIP1 coactivator-dependent activation of transcription by thyroid and retinoid nuclear receptors. Walfish PG, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3697–702

The thyroid hormone receptor resource [editorial] Moore DD. **Thyroid** 1997 Feb;7(1):1–2

Reconstitution of triiodothyronine inhibition in non-triiodothyronine-responsive thyrotropic tumor cells using transfected thyroid hormone receptor isoforms. Sarapura VD, et al. **Thyroid** 1997 Jun;7(3):453–61

Hormone-activated phosphorylation of human beta1 thyroid hormone nuclear receptor. Ting YT, et al. **Thyroid** 1997 Jun;7(3):463–9

PHYSIOLOGY

PPAR tissue distribution and interactions with other hormone-signaling pathways. Lemberger T, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:231–51

Interplay of the peroxisome proliferator-activated receptor and the thyroid hormone receptor-signaling pathways in regulating peroxisome proliferator-responsive genes. Winrow CJ, et al. **Ann N Y Acad Sci** 1996 Dec 27; 804:214–30

A mutant thyroid hormone receptor beta 1 identified in a patient with resistance to thyroid hormone inhibits the activities of not only the wild-type TRs, but also other nuclear receptors. Miyoshi Y, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):39–43

The nuclear receptor corepressor SMRT inhibits interstitial collagenase (MMP-1) transcription through an HRE-independent mechanism. Schroen DJ, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):52–8

Ultraspiracle, a Drosophila retinoic X receptor alpha homologue, can mobilize the human thyroid hormone receptor to transactivate a human promoter. Hatzivassiliou E, et al. **Biochemistry** 1997 Jul 29;36(30):9221–31

Transcription of the rat sarcoplasmic reticulum Ca2+ adenosine triphosphatase gene is increased by 3,5,3'-triiodothyronine receptor isoform-specific interactions with the myocyte-specific enhancer factor-2a. Moriscot AS, et al. **Endocrinology** 1997 Jan;138(1):26–32

Interactions among receptors, thyroid hormone response elements, and ligands in the regulation of the rat uncoupling protein gene expression by thyroid hormone. Rabelo R, et al. **Endocrinology** 1996 Aug;137(8):3478–87

A unique role of the beta-2 thyroid hormone receptor isoform in negative regulation by thyroid hormone. Mapping of a novel amino-terminal domain important for ligand-independent activation. Langlois MF, et al. **J Biol Chem** 1997 Oct 3;272(40):24927–33

Resistance to thyroid hormone caused by two mutant thyroid hormone receptors beta, R243Q and R243W, with marked impairment of function that cannot be explained by altered in vitro 3,5,3'-triiodothyronine binding affinity. Yagi H, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1608–14

Both thyroid hormone and 9-cis retinoic acid receptors are required to efficiently mediate the effects of thyroid hormone on embryonic development and specific gene regulation in Xenopus laevis. Puzianowska-Kuznicka M, et al. **Mol Cell Biol** 1997 Aug;17(8):4738–49

Nuclear receptor corepressors activate rather than suppress basal transcription of genes that are negatively regulated by thyroid hormone. Tagami T, et al. **Mol Cell Biol** 1997 May;17(5):2642–8

Role of co-activators and co-repressors in the mechanism of steroid/thyroid receptor action. Shibata H, et al. **Recent Prog Horm Res** 1997;52:141–64; discussion 164–5

(119 ref.)
Reversal of TR-T3 inhibition of the hTRH gene by excess TR ligand-binding domain: evidence for novel accessory protein. Li QL, et al. **Thyroid** 1996 Jun;6(3):233-6

RADIATION EFFECTS

[The effect of gamma radiation at low doses on the receptor binding of triiodothyronine in the nuclei of rat liver cells] Konoplia EF, et al. **Radiats Biol Radioecol** 1997 Mar-Apr; 37(2):131-6 (Eng. Abstr.) **(Rus)**

RECEPTORS, THYROID STIMULATING HORMONE see **RECEPTORS, THYROTROPIN**

RECEPTORS, THYROLIBERIN see **RECEPTORS, THYROTROPIN-RELEASING HORMONE**

RECEPTORS, THYROTROPIN

TSH receptor and LH receptor, 1996. Kosugi S, et al. **Endocr J** 1996 Dec;43(6):595-604 (37 ref.)
[TSH receptor] Kosugi S, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:480-2 (9 ref.) **(Jpn)**

ANALYSIS

Identification of thyroid blocking antibodies and receptor epitopes in autoimmune hypothyroidism by affinity purification using synthetic TSH receptor peptides. Bryant WP, et al. **Autoimmunity** 1995;22(2):69-79
Epitope-tagging of a functional thyrotropin receptor: detection of the native receptor on intact cells. Tanaka K, et al. **Biochem Biophys Res Commun** 1996 Nov 1; 228(1):21-8
Relationship between prognostic score and thyrotropin receptor (TSH-R) in papillary thyroid carcinoma: immunohistochemical detection of TSH-R. Tanaka K, et al. **Br J Cancer** 1997;76(5):594-9
Precise determination of TSH receptor antibody activity in serum containing bovine TSH (bTSH) binding antibody by absorption using denatured bTSH or sheep FSH. Inui T, et al. **Thyroid** 1996 Aug;6(4):295-9

ANTAGONISTS & INHIBITORS

Effect of neonatal treatment with monoclonal antibody to thyrotropin (TSH) receptor on the thyroxin (T4) level and certain parameters of the internal genital organs of adult rats. Karabélyos C, et al. **Acta Physiol Hung** 1996; 84(1):25-32
Hypothyroidism due to thyrotropin-receptor blocking antibodies associated with sarcoidosis [letter] Heshmati HM, et al. **Ann Med Interne (Paris)** 1997;148(1):102-3

BIOSYNTHESIS

Cloning and expression of a brain-derived TSH receptor. Bockmann J, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):173-8
The full length and splice variant thyrotropin receptor is expressed exclusively in skeletal muscle of extraocular origin: a link to the pathogenesis of Graves' ophthalmopathy. Major BJ, et al.
Biochem Biophys Res Commun 1997 Jan 23;230(3):493-6
In vitro synthesized TSH receptor as a tool for autoantibody detection. Morgenthaler NG, et al.
Exp Clin Endocrinol Diabetes 1996;104 Suppl 4:56-9
TSH receptor transcripts and TSH receptor-like immunoreactivity in orbital and pretibial fibroblasts of patients with Graves' ophthalmopathy and pretibial myxedema. Stadlmayr W, et al. **Thyroid** 1997 Feb;7(1):3-12

BLOOD

The prevalence of affective disorder and in particular of a rapid cycling of bipolar disorder in patients with abnormal thyroid function tests. Oomen HA, et al.
Clin Endocrinol (Oxf) 1996 Aug;45(2):215-23
Relationship between thyroid-stimulating antibodies and thyrotropin-binding inhibitory immunoglobulins years after administration of radioiodine for Graves' disease: retrospective clinical survey. Yoshida K, et al.
J Endocrinol Invest 1996 Nov;19(10):682-6
Effect of 1 alpha-hydroxyvitamin D3 on serum levels of thyroid hormones in hyperthyroid patients with untreated Graves' disease. Kawakami-Tani T, et al. **Metabolism** 1997 Oct;46(10):1184-8

CHEMISTRY

Cloning and characterization of the 4.2 kb region of the rat thyrotropin receptor promoter. Ikuyama S, et al.
Endocr J 1997 Apr;44(2):247-56
Characterization of soluble, disulfide bond-stabilized, prokaryotically expressed human thyrotropin receptor ectodomain. Bobovnikova Y, et al. **Endocrinology** 1997 Feb; 138(2):588-93
Evidence that the thyrotropin receptor ectodomain contains not one, but two, cleavage sites. Chazenbalk GD, et al. **Endocrinology** 1997 Jul;138(7):2893-9
Aspartate-474 in the first exoplasmic loop of the thyrotropin receptor is crucial for receptor activation. Kosugi S, et al. **FEBS Lett** 1997 Apr 7;406(1-2):139-41
Molecular cloning, genomic organization, and developmental regulation of a novel receptor from Drosophila melanogaster structurally related to members of the thyroid-stimulating hormone, follicle-stimulating hormone, luteinizing hormone/choriogonadotropin receptor family from mammals. Hauser F, et al.
J Biol Chem 1997 Jan 10;272(2):1002-10
Epitope analysis of the thyrotropin receptor, 1997. Kosugi S, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1-2):11-8 (58 ref.)
Structure and function of the TSH receptor: its suitability as a target for radiotherapy. Morris JC. **Thyroid** 1997 Apr; 7(2):253-8 (50 ref.)

CLASSIFICATION

Subtypes of anti-TSH receptor antibodies classified by various assays using CHO cells expressing wild-type or chimeric human TSH receptor. Watanabe Y, et al.
Thyroid 1997 Feb;7(1):13-9

DRUG EFFECTS

Specific activation of the thyrotropin receptor by trypsin. Van Sande J, et al. **Mol Cell Endocrinol** 1996 May 31; 119(2):161-8

GENETICS

Cloning and expression of a brain-derived TSH receptor. Bockmann J, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):173-8
The full length and splice variant thyrotropin receptor is expressed exclusively in skeletal muscle of extraocular origin: a link to the pathogenesis of Graves' ophthalmopathy. Major BJ, et al.
Biochem Biophys Res Commun 1997 Jan 23;230(3):493-6
Genetic alterations in
N-bis(2-hydroxypropyl)nitrosamine-induced rat transplantable thyroid carcinoma lines: analysis of the TSH-R, G(alpha)s, ras and p53 genes. Kitahori Y, et al. **Carcinogenesis** 1997 Feb;18(2):265-9
Recombinant human TSH receptor expressed in E. coli. Nakai A, et al. **Clin Chim Acta** 1997 Jul 4;263(1):15-23
Cloning and characterization of the 4.2 kb region of the rat thyrotropin receptor promoter. Ikuyama S, et al.
Endocr J 1997 Apr;44(2):247-56
Detection of thyroid-stimulating antibody using frozen stocks of Chinese hamster ovary cells transfected with cloned human thyrotropin receptor. Takano T, et al.
Endocr J 1997 Jun;44(3):431-5
Characterization of soluble, disulfide bond-stabilized, prokaryotically expressed human thyrotropin receptor ectodomain. Bobovnikova Y, et al. **Endocrinology** 1997 Feb; 138(2):588-93
Regulation of thyrotropin receptor gene expression in 3T3-L1 adipose cells is distinct from its regulation in FRTL-5 thyroid cells. Shimura H, et al. **Endocrinology** 1997 Apr;138(4):1483-90
Analysis of human thyrotropin receptor gene expression and immunoreactivity in human orbital tissue. Spitzweg C, et al. **Eur J Endocrinol** 1997 Jun;136(6):599-607
The gene for the thyrotropin receptor (TSHR) as a candidate gene for congenital hypothyroidism with thyroid dysgenesis. Krude H, et al.
Exp Clin Endocrinol Diabetes 1996;104 Suppl 4:117-20 (11 ref.)
Constitutively activating TSH receptor mutations as the cause of toxic thyroid adenoma, multinodular toxic goiter and autosomal dominant non autoimmune hyperthyroidism. Paschke R. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:129-32 (18 ref.)
Mutations of the TSH receptor as cause of congenital hyperthyroidism. Schwab KO, et al.
Exp Clin Endocrinol Diabetes 1996;104 Suppl 4:124-8
Constitutive activation of the TSH receptor by spontaneous mutations affecting the N-terminal extracellular domain. Duprez L, et al. **FEBS Lett** 1997 Jun 16;409(3):469-74
Clinical consequences of activating germline mutations of TSH receptor, the concept of toxic hyperplasia. Leclère J, et al. **Horm Res** 1997;47(4-6):158-62 (15 ref.)
Genetic and linkage analysis of familial congenital hypothyroidism: exclusion of linkage to the TSH receptor gene. Ahlbom BD, et al. **Hum Genet** 1997 Feb;99(2):186-90
Two novel mutations in the thyrotropin (TSH) receptor gene in a child with resistance to TSH. Clifton-Bligh RJ, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1094-100
Thyrotropin receptor transcripts in human adipose tissue. Crisp MS, et al. **J Clin Endocrinol Metab** 1997 Jun; 82(6):2003-5
Four families with loss of function mutations of the thyrotropin receptor. de Roux N, et al.
J Clin Endocrinol Metab 1996 Dec;81(12):4229-35
Analysis of the thyrotropin receptor as a candidate gene in familial Graves' disease. de Roux N, et al.
J Clin Endocrinol Metab 1996 Oct;81(10):3483-6
TSH receptor and Gs-alpha gene mutations in the pathogenesis of toxic thyroid adenomas--a note of caution [editorial] Derwahl M. **J Clin Endocrinol Metab** 1996 Aug; 81(8):2783-5 (27 ref.)
Two autonomous nodules of a patient with multinodular goiter harbor different activating mutations of the thyrotropin receptor gene. Duprez L, et al.
J Clin Endocrinol Metab 1997 Jan;82(1):306-8
G protein and thyrotropin receptor mutations in thyroid neoplasia. Esapa C, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):493-6
Activating mutations of the thyrotropin receptor--unanswered questions [editorial; comment] Morris JC. **J Clin Endocrinol Metab** 1996 Jun;81(6):2021-2 (17 ref.). Comment on: J Clin Endocrinol Metab 1996 Jun;81(6):2023-6.
Diversity and prevalence of somatic mutations in the thyrotropin receptor and Gs alpha genes as a cause of toxic thyroid adenomas. Parma J, et al.
J Clin Endocrinol Metab 1997 Aug;82(8):2695-701
Thyrotropin (TSH) receptor autoantibodies do not appear to bind to the TSH receptor produced in an in vitro transcription/translation system. Prentice L, et al.
J Clin Endocrinol Metab 1997 Apr;82(4):1288-92
Detection of an activating mutation of the thyrotropin receptor in a case of an autonomously hyperfunctioning thyroid insular carcinoma. Russo D, et al.
J Clin Endocrinol Metab 1997 Mar;82(3):735-8
Structural studies of the thyrotropin receptor and Gs alpha in human thyroid cancers: low prevalence of mutations predicts infrequent involvement in malignant transformation. Spambalg D, et al.
J Clin Endocrinol Metab 1996 Nov;81(11):3898-901
Familial congenital hypothyroidism due to inactivating mutation of the thyrotropin receptor causing profound hypoplasia of the thyroid gland. Abramowicz MJ, et al.
J Clin Invest 1997 Jun 15;99(12):3018-24
Epitope mapping of a recombinant human TSH receptor extracellular domain: identification of a predominant epitope using animal sera. Hunt N, et al.
J Clin Lab Anal 1996;10(4):193-204
Transfection with the cDNA of the human thyrotropin receptor of a poorly differentiated rat thyroid cell line (FRT). Elisei R, et al. **J Endocrinol Invest** 1996 Apr; 19(4):230-5
Molecular insights into TSH receptor abnormality and thyroid disease. Russo D, et al. **J Endocrinol Invest** 1997 Jan;20(1):36-47 (74 ref.)
Cloning and sequencing of complete thyrotropin receptor transcripts in pretibial fibroblast culture cells. Wu SL, et al. **J Endocrinol Invest** 1996 Jun;19(6):365-70
Bovine thyrotropin receptor cDNA is characterized by full-length and truncated transcripts. Silversides DW, et al. **J Mol Endocrinol** 1997 Apr;18(2):101-12
Messenger RNA expression for a TSH receptor variant in the thymus of a two-year-old child. Paschke R, et al.
J Mol Med 1995 Nov;73(11):577-80
Microsatellites and PCR primers for genetic studies and genomic sequencing of the human TSH receptor gene. de Roux N, et al. **Mol Cell Endocrinol** 1996 Mar 25; 117(2):253-6
Decreased growth rate and tumour formation of human anaplastic thyroid carcinoma cells transfected with a human thyrotropin receptor cDNA in NMRI nude mice treated with propylthiouracil. Gustavsson B, et al.
Mol Cell Endocrinol 1996 Aug 9;121(2):143-51
Interferon-gamma suppresses thyrotropin receptor promoter activity by reducing thyroid transcription factor-1 (TTF-1) binding to its recognition site. Ohe K, et al.
Mol Endocrinol 1996 Jul;10(7):826-36
A Y-box protein is a suppressor factor that decreases thyrotropin receptor gene expression. Ohmori M, et al.
Mol Endocrinol 1996 Jan;10(1):76-89
Congenital hypothyroidism caused by mutations in the thyrotropin-receptor gene [letter] Biebermann H, et al.
N Engl J Med 1997 May 8;336(19):1390-1
Mutations of thyrotropin receptor isolated from thyroid autonomous functioning adenomas confer
TSH-independent growth to thyroid cells. Procellini A, et al. **Oncogene** 1997 Aug 14;15(7):781-9
Localization and clinical significance of thyrotropin receptor mRNA expression in orbital fat and eye muscle tissues from patients with thyroid-associated ophthalmopathy. Hiromatsu Y, et al. **Thyroid** 1996 Dec;6(6):553-62
No association between a thyrotropin receptor gene polymorphism and Graves' disease in the female population. Kotsa KD, et al. **Thyroid** 1997 Feb;7(1):31-3
TSH-receptor expression and human thyroid disease: relation to clinical, endocrine, and molecular thyroid parameters. Schuppert F, et al. **Thyroid** 1996 Dec;6(6):575-87
Differential expression of thyrotropin receptor mRNA in the porcine heart. Sellitti DF, et al. **Thyroid** 1997 Aug; 7(4):641-6
TSH receptor transcripts and TSH receptor-like immunoreactivity in orbital and pretibial fibroblasts of patients with Graves' ophthalmopathy and pretibial myxedema. Stadlmayr W, et al. **Thyroid** 1997 Feb;7(1):3-12
Low incidence of the stimulatory G protein alpha-subunit mutations in autonomously functioning thyroid adenomas in Japan. Tanaka K, et al. **Thyroid** 1996 Jun;6(3):195-9
[Expression of thyrotropin receptor gene in autoimmune thyroid disease and the relation to expression of HLA genes] Yang D, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Oct;76(10):753-5 (Eng. Abstr.) **(Chi)**
[TSH receptor double mutation in functional autonomic thyroid nodule] Semlitsch G, et al. **Acta Med Austriaca** 1995;22(4):75-7 (Eng. Abstr.) **(Ger)**
[Polymorphism of the 52 triplet gene (nucleotide 253) of the TSH receptor in Basedow-Graves patients and in healthy controls] Kaczur V, et al. **Orv Hetil** 1997 Jun 22; 138(25):1625-8 (Eng. Abstr.) **(Hun)**

IMMUNOLOGY

Autoimmunity to the thyroid stimulating hormone receptor. Patibandla SA, et al. **Adv Neuroimmunol** 1996;6(4):347–57 (57 ref.)

Autoimmune thyroid disease [letter; comment] Mullins R. **Aust N Z J Med** 1997 Feb;27(1):78–9. Comment on: Aust N Z J Med 1996 Jun;26(3):424–5.

Insight into screening immunoglobulin gene combinatorial libraries in a phage display vector: a tale of two antibodies. Kakinuma A, et al. **Autoimmunity** 1997;25(2):73–84

Influence of adjuvants on the induction of autoantibodies to the thyrotropin receptor. Seetharamaiah GS, et al. **Autoimmunity** 1996;24(4):205–15

Reversible primary hypothyroidism with blocking or stimulating type TSH binding inhibitor immunoglobulin following recombinant interferon-alpha therapy in patients with pre-existing thyroid disorders. Chen FQ, et al. **Clin Endocrinol (Oxf)** 1996 Aug;45(2):207–14

TSH receptor in endocrine autoimmunity. Otto E, et al. **Clin Exp Rheumatol** 1996 May–Jun;14 Suppl 15:S77–84

Transfer of thyroiditis, with syngeneic spleen cells sensitized with the human thyrotropin receptor, to naive BALB/c and NOD mice. Costagliola S, et al. **Endocrinology** 1996 Nov;137(11):4637–43

Thyrotropin (TSH) receptor antibodies (TSHrAb) can inhibit TSH-mediated cyclic adenosine 3',5'- monophosphate production in thyroid cells by either blocking TSH binding or affecting a step subsequent to TSH binding. Dallas JS, et al. **Endocrinology** 1996 Aug;137(8):3329–39

Identification of the peptides that inhibit the stimulation of thyrotropin receptor by Graves' immunoglobulin G from peptide libraries. Park JY, et al. **Endocrinology** 1997 Feb; 138(2):617–26

Folding-dependent binding of thyrotropin (TSH) and TSH receptor autoantibodies to the murine TSH receptor ectodomain. Vlase H, et al. **Endocrinology** 1997 Apr; 138(4):1658–66

Relationships between plasma thyrotropin receptor antibodies and lipid or lipoprotein parameters in Graves' disease. Rieu M, et al. **Eur J Endocrinol** 1996 Jul; 135(1):77–81

Immunopathogenicity of thyrotropin receptor--ability to induce autoimmune thyroid disease in an experimental animal model. Banga JP. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 3:32–4 (21 ref.)

Epitope mapping of the human TSH receptor; structure function studies. Hunt N, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:52–5

In vitro synthesized TSH receptor as a tool for autoantibody detection. Morgenthaler NG, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:56–9

Experimental autoimmunity to thyrotropin receptor. Patibandla SA, et al. **Exp Clin Endocrinol Diabetes** 1996; 104 Suppl 3:28–32

Thyrotropin-receptor-mediated diseases: a paradigm for receptor autoimmunity. Prabhakar BS, et al. **Immunol Today** 1997 Sep;18(9):437–42 (54 ref.)

Yersinia enterocolitica envelope proteins that are crossreactive with the thyrotropin receptor (TSHR) also have B-cell mitogenic activity. Zhang H, et al. **J Autoimmun** 1996 Aug;9(4):509–16

Engineering the human thyrotropin receptor ectodomain from a non-secreted form to a secreted, highly immunoreactive glycoprotein that neutralizes autoantibodies in Graves' patients' sera. Chazenbalk GD, et al. **J Biol Chem** 1997 Jul 25;272(30):18959–65

Incidence of transient congenital hypothyroidism due to maternal thyrotropin receptor-blocking antibodies in over one million babies. Brown RS, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1147–51

Thyrotropin receptor autoantibodies in serum are present at much lower levels than thyroid peroxidase autoantibodies: analysis by flow cytometry. Jaume JC, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):500–7

The human thyrotropin (TSH) receptor in a TSH binding inhibition assay for TSH receptor autoantibodies. Kakinuma A, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2129–34

Thyrotropin receptor antibodies and Graves' disease, a side-effect of 131I treatment in patients with nontoxic goiter. Nygaard B, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2926–30

Thyrotropin (TSH) receptor autoantibodies do not appear to bind to the TSH receptor produced in an in vitro transcription/translation system. Prentice L, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1288–92

Thyrotropin receptor antibodies in parotid saliva. Tumilasci OR, et al. **J Endocrinol Invest** 1996 Jul–Aug;19(7):412–4

Requirement of glycosylation of the human thyrotropin receptor ectodomain for its reactivity with autoantibodies in patients' sera. Seetharamaiah GS, et al. **J Immunol** 1997 Mar 15;158(6):2798–804

Lipoprotein from Yersinia enterocolitica contains epitopes that cross-react with the human thyrotropin receptor. Zhang H, et al. **J Immunol** 1997 Feb 15;158(4):1976–83

Monoclonal antibodies to the human TSH receptor: epitope mapping and binding to the native receptor on the basolateral plasma membrane of thyroid follicular cells. Nicholson LB, et al. **J Mol Endocrinol** 1996 Apr; 16(2):159–70

Development of primary hypothyroidism with antithyroglobulin, antiperoxidase, and blocking-type thyrotropin receptor antibodies after radiation therapy for neuroblastoma. Kikawa Y, et al. **J Pediatr** 1996 Dec; 129(6):909–12 (19 ref.)

The autoimmune response induced by immunising female mice with recombinant human thyrotropin receptor varies with the genetic background. Costagliola S, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):199–206

Induction of Graves-like disease in mice by immunization with fibroblasts transfected with the thyrotropin receptor and a class II molecule. Shimojo N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11074–9

Precise determination of TSH receptor antibody activity in serum containing bovine TSH (bTSH) binding antibody by absorption using denatured bTSH or sheep FSH. Inui T, et al. **Thyroid** 1996 Aug;6(4):295–9

T-cell recognition of residue 158–176 in thyrotropin receptor confers risk for development of thyroid autoimmunity in siblings in a family with Graves' disease. Soliman M, et al. **Thyroid** 1996 Dec;6(6):545–51

Preoperative change of thyroid stimulating hormone receptor antibody level: possible marker for predicting recurrent hyperthyroidism in patients with Graves' disease after subtotal thyroidectomy. Sugino K, et al. **World J Surg** 1996 Sep;20(7):801–6; discussion 806–7

[Significance of TSH receptor antibody determination] Gannage MH, et al. **J Med Liban** 1996;44(3):134–7 (Eng. Abstr.) **(Fre)**

[TSH-receptor antibodies in thyroid diseases] Hasse-Lazar K, et al. **Pol Arch Med Wewn** 1997 Mar;97(3):239–51 (Eng. Abstr.) **(Pol)**

[TSH anti-receptor antibodies in Graves' disease] Sérgio MR, et al. **Acta Med Port** 1996 Jul–Sep;9(7–9):229–31 (Eng. Abstr.) **(Por)**

METABOLISM

Cell surface protein disulfide-isomerase is involved in the shedding of human thyrotropin receptor ectodomain. Couët J, et al. **Biochemistry** 1996 Nov 26;35(47):14800–5

Suppression of thyrotropin receptor–G protein–phospholipase C coupling by activation of protein kinase C in thyroid carcinoma cells. Broecker M, et al. **Endocrinology** 1997 Sep;138(9):3787–96

Multimeric complex formation by the thyrotropin receptor in solubilized thyroid membranes. Graves PN, et al. **Endocrinology** 1996 Sep;137(9):3915–20

Differentiation of rat preadipocytes is accompanied by expression of thyrotropin receptors. Haraguchi K, et al. **Endocrinology** 1996 Aug;137(8):3200–5

Differential reactivities of recombinant glycosylated ectodomains of mouse and human thyrotropin receptors with patient autoantibodies. Patibandla SA, et al. **Endocrinology** 1997 Apr;138(4):1559–66

Analysis of human thyrotropin receptor gene expression and immunoreactivity in human orbital tissue. Spitzweg C, et al. **Eur J Endocrinol** 1997 Jun;136(6):599–607

Iodide, cytokines and TSH-receptor expression in Graves' disease. Schuppert F, et al. **Exp Clin Endocrinol Diabetes** 1996;104 Suppl 4:68–74

Basolateral localization and transcytosis of gonadotropin and thyrotropin receptors expressed in Madin-Darby canine kidney cells. Beau I, et al. **J Biol Chem** 1997 Feb 21; 272(8):5241–8

Human thyroid-stimulating hormone (hTSH) subunit gene fusion produces hTSH with increased stability and serum half-life and compensates for mutagenesis-induced defects in subunit association. Grossmann M, et al. **J Biol Chem** 1997 Aug 22;272(34):21312–6

Betagamma subunits of pertussis toxin-sensitive G proteins mediate A1 adenosine receptor agonist-induced activation of phospholipase C in collaboration with thyrotropin. A novel stimulatory mechanism through the cross-talk of two types of receptors. Tomura H, et al. **J Biol Chem** 1997 Sep 12;272(37):23130–7

Flow cytometric analyses of antibody binding to Chinese hamster ovary cells expressing human thyrotropin receptor. Patibandla SA, et al. **J Clin Endocrinol Metab** 1997 Jun; 82(6):1885–93

Requirement of glycosylation of the human thyrotropin receptor ectodomain for its reactivity with autoantibodies in patients' sera. Seetharamaiah GS, et al. **J Immunol** 1997 Mar 15;158(6):2798–804

Multiple G-protein coupling of the dog thyrotropin receptor. Allgeier A, et al. **Mol Cell Endocrinol** 1997 Mar 14; 127(1):81–90

Epitope analysis of the thyrotropin receptor, 1997. Kosugi S, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):11–8 (58 ref.)

GRK2 and beta-arrestin 1 as negative regulators of thyrotropin receptor-stimulated response. Iacovelli L, et al. **Mol Endocrinol** 1996 Sep;10(9):1138–46

Cloning of the single strand DNA-binding protein important for maximal expression and thyrotropin (TSH)-induced negative regulation of the TSH receptor. Ohmori M, et al. **Mol Endocrinol** 1996 Nov;10(11):1407–24

Serum antibodies reactive with eye muscle antigens and the TSH receptor in a euthyroid subject who developed ophthalmopathy and Graves' hyperthyroidism. Wall J, et al. **Thyroid** 1996 Aug;6(4):353–8

PHYSIOLOGY

Evidence for negative cooperativity among human thyrotropin receptors overexpressed in mammalian cells. Chazenbalk GD, et al. **Endocrinology** 1996 Nov; 137(11):4586–91

Key elements involved in the negative regulation of the TSH receptor: G protein-coupled receptor kinases, arrestin and inducible cAMP early repressor. Kopp P. **Eur J Endocrinol** 1997 Mar;136(3):269–70

Stimulation of thyroidal and extrathyroidal thyrotropin receptors. Hoermann R. **Exp Clin Endocrinol Diabetes** 1996; 104 Suppl 4:88–91 (13 ref.)

Structure and function of the TSH receptor: its suitability as a target for radiotherapy. Morris JC. **Thyroid** 1997 Apr; 7(2):253–8 (50 ref.)

RECEPTORS, THYROTROPIN-RELEASING HORMONE

ANALYSIS

Distribution of thyrotropin-releasing hormone (TRH) receptors in the brain of the ataxic mutant mouse, rolling mouse Nagoya. Kinoshita K, et al. **Biol Pharm Bull** 1997 Jan;20(1):86–7

CHEMISTRY

Altered ligand dissociation rates in thyrotropin-releasing hormone receptors mutated in glutamine 105 of transmembrane helix III. del Camino D, et al. **Biochemistry** 1997 Mar 18;36(11):3308–18

Interactions between conserved residues in transmembrane helices 1, 2, and 7 of the thyrotropin-releasing hormone receptor. Perlman JH, et al. **J Biol Chem** 1997 May 2; 272(18):11937–42

GENETICS

Expression of thyrotropin-releasing hormone (TRH) receptor mRNA in somatotrophs in the rat anterior pituitary. Konaka S, et al. **Endocrinology** 1997 Feb; 138(2):827–30

A novel mechanism for isolated central hypothyroidism: inactivating mutations in the thyrotropin-releasing hormone receptor gene. Collu R, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1561–5

An alternative splice variant of the mouse TRH receptor mRNA is the major form expressed in the mouse pituitary gland. Jones KE, et al. **J Mol Endocrinol** 1996 Apr; 16(2):197–204

Multivariate analysis of HLA loci in conjunction with a thyrotropin receptor codon 52 polymorphism in conferring risk of Graves' disease. Cuddihy RM, et al. **Thyroid** 1996 Aug;6(4):261–5

METABOLISM

Altered ligand dissociation rates in thyrotropin-releasing hormone receptors mutated in glutamine 105 of transmembrane helix III. del Camino D, et al. **Biochemistry** 1997 Mar 18;36(11):3308–18

Changes in receptor levels for thyrotropin releasing hormone, serotonin, and substance P in cervical spinal cord of Wobbler mouse: a quantitative autoradiography study during early and late stages of the motoneuron disease. Deng YP, et al. **Brain Res** 1996 Jun 24;725(1):49–60

Constitutive activity of native thyrotropin-releasing hormone receptors revealed using a protein kinase C-responsive reporter gene. Jinsi-Parimoo A, et al. **Endocrinology** 1997 Apr;138(4):1471–5

Interaction of the G-protein G11alpha with receptors and phosphoinositidase C: the contribution of G-protein palmitoylation and membrane association. Wise A, et al. **FEBS Lett** 1997 May 5;407(3):257–60

Interactions between conserved residues in transmembrane helices 1, 2, and 7 of the thyrotropin-releasing hormone receptor. Perlman JH, et al. **J Biol Chem** 1997 May 2; 272(18):11937–42

A receptor-G protein coupling-independent step in the internalization of the thyrotropin-releasing hormone receptor. Petrou C, et al. **J Biol Chem** 1997 Jan 24; 272(4):2326–33

Effect of cell type on the subcellular localization of the thyrotropin-releasing hormone receptor. Yu R, et al. **Mol Pharmacol** 1997 May;51(5):785–93

Effects of repeated cocaine administration on the thyrotropin-releasing hormone level and receptors in the rat brain. Jaworska-Feil L, et al. **Neuropeptides** 1997 Jun; 31(3):253–8

The effects of single and repeated morphine administration on the level of thyrotropin-releasing hormone and its receptors in the rat brain. Jaworska-Feil L, et al. **Neuropeptides** 1995 Dec;29(6):343–9

Drugs that influence tubulin polymerization modulate thyrotropin-releasing hormone receptor number in AtT-20 cells. Ravindra R, et al. **Pharmacol Toxicol** 1997 Jan; 80(1):24–9

PHYSIOLOGY

Intracisternal antisense oligonucleotides to TRH receptor abolish TRH-evoked gastric motor excitation. Sivarao DV, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1372–81

RECEPTORS, THYROXINE

RECEPTORS, THYROXINE see **RECEPTORS, THYROID HORMONE**

RECEPTORS, TRANSFERRIN

see related
CARRIER PROTEINS

ANALYSIS

Soluble transferrin receptor in the study of fetal erythropoietic activity. Carpani G, et al. **Am J Hematol** 1996 Jul;52(3):192–6

Dehydration of transferrin receptor-positive sickle reticulocytes during continuous or cyclic deoxygenation: role of KCl cotransport and extracellular calcium. Franco RS, et al. **Blood** 1996 Dec 1;88(11):4359–65

Soluble and cell-associated transferrin receptor in lung cancer. Dowlati A, et al. **Br J Cancer** 1997;75(12):1802–6

Assessment of iron status. Baynes RD. **Clin Biochem** 1996 Jun;29(3):209–15 (35 ref.)

Evaluation of new immunoenzymometric assay for measuring soluble transferrin receptor to detect iron deficiency in anemic patients. Suominen P, et al. **Clin Chem** 1997 Sep; 43(9):1641–6

The possible meaning of transferrin and its soluble receptors in seminal plasma as markers of the seminiferous epithelium. Zalata A, et al. **Hum Reprod** 1996 Apr;11(4):761–4

Synaptic-like microvesicles of neuroendocrine cells originate from a novel compartment that is continuous with the plasma membrane and devoid of transferrin receptor [published erratum appears in J Cell Biol 1997 Jun 2;137(5):1197] Schmidt A, et al. **J Cell Biol** 1997 Apr 21; 137(2):445–58

ANTAGONISTS & INHIBITORS

Iron deprivation and cancer: a view beginning with studies of monoclonal antibodies against the transferrin receptor. Kemp JD. **Histol Histopathol** 1997 Jan;12(1):291–6 (52 ref.)

Transferrin dependence of Ga (NO3)3 inhibition of growth in human-derived small cell lung cancer cells. Weiner RE, et al. **J Cell Biochem Suppl** 1996;24:276–87

BIOSYNTHESIS

The expression of transferrin receptors on erythroblasts in anaemia of chronic disease, myelodysplastic syndromes and iron deficiency. Kuiper-Kramer PA, et al. **Acta Haematol** 1997;97(3):127–31

Expression of genes involved in iron metabolism in mouse intestine. McKie AT, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G772–9

Ferritin gene expression and transferrin receptor activity in intestine of rats with varying iron stores. Oates PS, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G636–46

Divergent effects of alpha 1-antitrypsin on the regulation of iron metabolism in human erythroleukaemic (K562) and myelomonocytic (THP-1) cells. Weiss G, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):897–902

Nitric oxide alters the expression of gamma-globin, H-ferritin, and transferrin receptor in human K562 cells at the posttranscriptional level. Domachowske JB, et al. **Blood** 1996 Oct 15;88(8):2980–8

Modulation of in vitro and in vivo T-cell responses by transferrin-gallium and gallium nitrate. Drobyski WR, et al. **Blood** 1996 Oct 15;88(8):3056–64

Expression of insulin-like growth factor-I receptor and transferrin receptor by breast cancer cells in pleural effusion smears. Athanassiadou P, et al. **Cytopathology** 1996 Dec;7(6):400–5

Transferrin receptor expression by blast cells in acute lymphoblastic leukemia correlates with white cell count & immunophenotype. Das Gupta A, et al. **Indian J Med Res** 1996 Sep;104:226–33

BLOOD

Serum transferrin receptor levels in the evaluation of iron deficiency in the neonate. Rusia U, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):455–9

Day-to-day variation of transferrin receptor and ferritin in healthy men and women [see comments] Cooper MJ, et al. **Am J Clin Nutr** 1996 Nov;64(5):738–42. Comment in: Am J Clin Nutr 1996 Nov;64(5):793–4. Comment in: Am J Clin Nutr 1997 Jun;65(6):1897–8.

Biological variation of transferrin receptor and ferritin [letter; comment] Massé J. **Am J Clin Nutr** 1997 Jun;65(6):1897–8 . Comment on: Am J Clin Nutr 1996 Nov;64(5):738–42.

Percentile estimates for transferrin receptor in normal infants 9–15 mo of age. Yeung GS, et al. **Am J Clin Nutr** 1997 Aug;66(2):342–6

Serum transferrin receptor levels in different stages of iron deficiency [letter] Gimferrer E, et al. **Blood** 1997 Aug 1; 90(3):1332–4

Serum transferrin receptor and its ratio to serum ferritin in the diagnosis of iron deficiency. Punnonen K, et al. **Blood** 1997 Feb 1;89(3):1052–7

Soluble transferrin receptor-transferrin complex in serum: measurement by latex agglutination nephelometric immunoassay. Hikawa A, et al. **Clin Chim Acta** 1996 Oct 29;254(2):159–72

Maternal origin of transferrin receptor positive cells in venous blood of pregnant women. Slunga-Tallberg A, et al. **Clin Genet** 1996 Apr;49(4):196–9

Serum transferrin receptor levels in patients undergoing evaluation of iron stores: correlation with other parameters and observed versus predicted results. North M, et al. **Clin Lab Haematol** 1997 Jun;19(2):93–7

Analytical and clinical implications of soluble transferrin receptors in serum. Kuiper-Kramer EP, et al. **Eur J Clin Chem Clin Biochem** 1996 Aug;34(8):645–9

Body iron stores decrease in boys during pubertal development: the transferrin receptor–ferritin ratio as an indicator of iron status. Anttila R, et al. **Pediatr Res** 1997 Feb;41(2):224–8

Components of biological variation in serum soluble transferrin receptor: relationships to serum iron, transferrin and ferritin concentrations, and immune and haematological variables. Maes M, et al. **Scand J Clin Lab Invest** 1997 Feb;57(1):31–41

Circulating transferrin receptor during erythropoietin medication of anemic patients with rheumatoid arthritis. Pettersson T, et al. **Scand J Rheumatol** 1996;25(5):321–4

Iron status of Filipino infants and preschoolers using plasma ferritin and transferrin receptor levels. Kuizon MD, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):343–9

CHEMISTRY

Structure of human transferrin receptor oligosaccharides: conservation of site-specific processing. Hayes GR, et al. **Biochemistry** 1997 Apr 29;36(17):5276–84

Characterization of the diversity and the transferrin-binding domain of gonococcal transferrin-binding protein 2. Cornelissen CN, et al. **Infect Immun** 1997 Feb;65(2):822–8

Transferrin receptor containing the SDYQRL motif of TGN38 causes a reorganization of the recycling compartment but is not targeted to the TGN. Johnson AO, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1749–62

Characterisation of bovine transferrin receptor on normal activated and Theileria parva-transformed lymphocytes by a new monoclonal antibody. Naessens J, et al. **Vet Immunol Immunopathol** 1996 Jun 15;52(1–2):65–76

DRUG EFFECTS

Aluminum alters iron and manganese uptake and regulation of surface transferrin receptors in primary rat oligodendrocyte cultures. Golub MS, et al. **Brain Res** 1996 May 6;719(1–2):72–7

Serum transferrin receptor levels in patients with thalassemia intermedia during rHuEPO administration. Dore F, et al. **Haematologica** 1996 Jan–Feb;81(1):37–9

Mitogenic activation of the transferrin receptor gene promoter is modulated by inhibitors of tyrosine kinases and tyrosine phosphatases. Hirsch S, et al. **Recept Signal Transduct** 1996;6(3–4):121–9

GENETICS

Phosphatidylinositol 3-kinase inhibitor wortmannin blocks mitogenic activation of the transferrin receptor gene promoter in late G1. Miskimins WK, et al. **Cell Growth Differ** 1997 May;8(5):565–70

Ultraviolet light and serum induce similar delayed responses that lead to activation of a mitogen-responsive promoter. Hirsch S, et al. **Cell Mol Biol Res** 1995;41(5):441–9

Maternal origin of transferrin receptor positive cells in venous blood of pregnant women. Slunga-Tallberg A, et al. **Clin Genet** 1996 Apr;49(4):196–9

Serum erythropoietin and circulating transferrin receptor in thalassemia intermedia patients with heterogeneous genotypes. Camaschella C, et al. **Haematologica** 1996 Sep–Oct;81(5):397–403

Rapid identification and cloning of bacterial transferrin and lactoferrin receptor protein genes. Ogunnariwo JA, et al. **J Bacteriol** 1996 Dec;178(24):7326–8

Expression and changing distribution of the human transferrin receptor in developing Drosophila oocytes and embryos. Bretscher MS. **J Cell Sci** 1996 Dec;109 (Pt 13):3113–9

Identification of a somatodendritic targeting signal in the cytoplasmic domain of the transferrin receptor. West AE, et al. **J Neurosci** 1997 Aug 15;17(16):6038–47

Trypanosoma brucei with an active metacyclic variant surface gene expression site expresses a transferrin receptor derived from esag6 and esag7. Steverding D, et al. **Mol Biochem Parasitol** 1996 Jun;78(1–2):285–8

Interaction between iron-regulatory proteins and their RNA target sequences, iron-responsive elements. Henderson BR, et al. **Prog Mol Subcell Biol** 1997;18:117–39 (115 ref.)

Mechanisms for posttranscriptional regulation by iron-responsive elements and iron regulatory proteins. Muckenthaler M, et al. **Prog Mol Subcell Biol** 1997; 18:93–115 (100 ref.)

Mitogenic activation of the transferrin receptor gene promoter is modulated by inhibitors of tyrosine kinases and tyrosine phosphatases. Hirsch S, et al. **Recept Signal Transduct** 1996;6(3–4):121–9

IMMUNOLOGY

Iron deprivation increases erythropoietin production in vitro, in normal subjects and patients with malignancy. Kling PJ, et al. **Br J Haematol** 1996 Nov;95(2):241–8

Clearance of antitransferrin receptor immunotoxin from the rabbit eye. Handa JT, et al. **Curr Eye Res** 1996 Oct; 15(10):1039–44

Enrichment of early fetal-liver hemopoietic stem cells of the rat using monoclonal antibodies against the transferrin receptor, Thy-1, and MRC-OX82. Crook K, et al. **Dev Immunol** 1996;4(4):235–46

Transcytosis of protein through the mammalian cerebral epithelium and endothelium. III. Receptor-mediated transcytosis through the blood-brain barrier of blood-borne transferrin and antibody against the transferrin receptor. Broadwell RD, et al. **Exp Neurol** 1996 Nov; 142(1):47–65

Bifunctional fusion between nerve growth factor and a transferrin receptor antibody. McGrath JP, et al. **J Neurosci Res** 1997 Jan 15;47(2):123–33

Characterization, receptor mapping and blood-brain barrier transcytosis of antibodies to the human transferrin receptor. Friden PM, et al. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1491–8

Blocking of iron uptake from transferrin by antibodies against the transferrin binding proteins in Neisseria meningitidis. Pintor M, et al. **Microb Pathog** 1996 Mar;20(3):127–39

Characterisation of bovine transferrin receptor on normal activated and Theileria parva-transformed lymphocytes by a new monoclonal antibody. Naessens J, et al. **Vet Immunol Immunopathol** 1996 Jun 15;52(1–2):65–76

ISOLATION & PURIFICATION

Isolation of the transferrin receptor from human placenta. Kanevsky VYu, et al. **Biochem Mol Biol Int** 1997 Jun; 42(2):309–14

METABOLISM

Effects of dietary iron loading with carbonyl iron and of iron depletion on intestinal growth, morphology, and expression of transferrin receptor in the rat. Oates PS, et al. **Anat Rec** 1996 Nov;246(3):364–71

Transient exposure to cytarabine increases peptide growth factor receptor expression and tumorigenicity of melanoma cells. Caraglia M, et al. **Anticancer Res** 1997 Jul-Aug; 17(4A):2369–75

Response of Neisseria meningitidis to iron limitation. Pettersson A, et al. **Antonie Van Leeuwenhoek** 1997 Feb; 71(1–2):129–36 (34 ref.)

An immunohistochemical localization of transferrin binding protein in the chicken respiratory tract. Cho SS, et al. **Arch Histol Cytol** 1996 Oct;59(4):369–73

Association of the two lobes of ovotransferrin is a prerequisite for receptor recognition. Studies with recombinant ovotransferrins. Mason AB, et al. **Biochem J** 1996 Oct 15; 319 (Pt 2):361–8

Hsp-70 is closely associated with the transferrin receptor in exosomes from maturing reticulocytes. Mathew A, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):823–30

Modulation of transferrin receptor expression by dexrazoxane (ICRF-187) via activation of iron regulatory protein. Weiss G, et al. **Biochem Pharmacol** 1997 May 15;53(10):1419–24

Synthesis of transferrin-mitomycin C conjugate as a receptor-mediated drug targeting system. Tanaka T, et al. **Biol Pharm Bull** 1996 May;19(5):774–7

Regulation of cellular iron metabolism by erythropoietin: activation of iron-regulatory protein and upregulation of transferrin receptor expression in erythroid cells. Weiss G, et al. **Blood** 1997 Jan 15;89(2):680–7

Immunotoxin sensitivity of Chinese hamster ovary cells expressing human transferrin receptors with differing internalization rates. Recht LD, et al. **Cancer Immunol Immunother** 1996 Jul;42(6):357–61

Phosphatidylinositol 3'-kinase, but not p70 ribosomal S6 kinase, is involved in membrane protein recycling: wortmannin inhibits glucose transport and downregulates cell-surface transferrin receptor numbers independently of any effect on fluid-phase endocytosis in fibroblasts. Jess TJ, et al. **Cell Signal** 1996 Jun;8(4):297–304

Serum transferrin receptor levels in patients undergoing evaluation of iron stores: correlation with other parameters and observed versus predicted results. North M, et al. **Clin Lab Haematol** 1997 Jun;19(2):93–7

Expression of transferrin receptors in endothelial cells transfected by electroporation. Heltianu C, et al. **Eur J Cell Biol** 1997 Jan;72(1):79–89

Low affinity of Trypanosoma brucei transferrin receptor to apotransferrin at pH 5 explains the fate of the ligand during endocytosis. Maier A, et al. **FEBS Lett** 1996 Oct 28; 396(1):87–9

Influence of transferrin glycans on receptor binding and iron-donation. Hoefkens P, et al. **Glycoconj J** 1997 Feb; 14(2):289–95

Measurement of transferrin receptor kinetics in the baboon liver using dynamic positron emission tomography imaging and [18F]holo-transferrin. Aloj L, et al. **Hepatology** 1997 Apr;25(4):986–90

Transferrin receptor recycling in rat hepatocytes is regulated by protein phosphatase 2A, possibly through effects on microtubule-dependent transport. Runnegar M, et al. **Hepatology** 1997 Jul;26(1):176–85

Inhibition of uptake of transferrin-bound iron by human hepatoma cells by nontransferrin-bound iron. Trinder D, et al. **Hepatology** 1997 Sep;26(3):691–8

Receptor ligand-facilitated gene transfer: enhancement of liposome-mediated gene transfer and expression by

transferrin. Cheng PW. **Hum Gene Ther** 1996 Feb 10; 7(3):275–82

Ehrlichia chaffeensis inclusions are early endosomes which selectively accumulate transferrin receptor. Barnewall RE, et al. **Infect Immun** 1997 Apr;65(4):1455–61

Differences in the regulation of iron regulatory protein-1 (IRP-1) by extra- and intracellular oxidative stress. Pantopoulos K, et al. **J Biol Chem** 1997 Apr 11; 272(15):9802–8

Bafilomycin A1 treatment retards transferrin receptor recycling more than bulk membrane recycling. Presley JF, et al. **J Biol Chem** 1997 May 23;272(21):13929–36

Saturation of the endocytic pathway for the transferrin receptor does not affect the endocytosis of the epidermal growth factor receptor. Warren RA, et al. **J Biol Chem** 1997 Jan 24;272(4):2116–21

Transferrin receptor containing the SDYQRL motif of TGN38 causes a reorganization of the recycling compartment but is not targeted to the TGN. Johnson AO, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1749–62

Apical and basolateral endosomes of MDCK cells are interconnected and contain a polarized sorting mechanism. Odorizzi G, et al. **J Cell Biol** 1996 Oct;135(1):139–52

Structural requirements for basolateral sorting of the human transferrin receptor in the biosynthetic and endocytic pathways of Madin-Darby canine kidney cells. Odorizzi G, et al. **J Cell Biol** 1997 Jun 16;137(6):1255–64

GLUT4 in cultured skeletal myotubes is segregated from the transferrin receptor and stored in vesicles associated with TGN. Ralston E, et al. **J Cell Sci** 1996 Dec;109 (Pt 13):2967–78

Immunohistochemical localization of intraneuronal transferrin receptor immunoreactivity in the adult mouse central nervous system. Moos T. **J Comp Neurol** 1996 Nov 25;375(4):675–92

The paradox of transferrin receptor-mediated drug delivery—intracellular targeting or transcellular transport? Shah D, et al. **J Drug Target** 1995;3(4):243–5 (14 ref.)

Systemic administration of a nerve growth factor conjugate reverses age-related cognitive dysfunction and prevents cholinergic neuron atrophy. Bäckman C, et al. **J Neurosci** 1996 Sep 1;16(17):5437–42

Transferrin binding protein two interacts with both the N-lobe and C-lobe of ovotransferrin. Alcantara J, et al. **Microb Pathog** 1996 Feb;20(2):73–85

Wortmannin alters the transferrin receptor endocytic pathway in vivo and in vitro. Spiro DJ, et al. **Mol Biol Cell** 1996 Mar;7(3):355–67

Autoradiography of transferrin receptors in the human brain. Griffiths PD, et al. **Neurosci Lett** 1996 Jun 14;211(1):53–6

Increased N-glycosylation and reduced transferrin-binding capacity of transferrin receptor isolated from placentae of diabetic women. Georgieff MK, et al. **Placenta** 1997 Sep; 18(7):563–8

Binding of human isotransferrin variants to microvillous and basal membrane vesicles from human term placenta. Verrijt CE, et al. **Placenta** 1997 Jan;18(1):71–7

PHYSIOLOGY

Receptor-mediated transcytosis of transferrin through blood-brain barrier endothelial cells. Descamps L, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1149–58

Liposomal targeting of leukaemia HL60 cells induced by transferrin-receptor endocytosis. Sarti P, et al. **Biotechnol Appl Biochem** 1996 Dec;24 (Pt 3):269–76

Modulation of doxorubicin resistance in a doxorubicin-resistant human leukaemia cell by an immunoliposome targeting transferring receptor. Suzuki S, et al. **Br J Cancer** 1997;76(1):83–9

An upregulation of interleukin-2 receptor, transferrin receptor expression and cytokine production mediated by hemin in human peripheral blood mononuclear cells. Tsuji A, et al. **Int J Urol** 1996 May;3(3):191–5

Effects of tumor necrosis factor on receptor-mediated endocytosis and barrier functions of bovine brain capillary endothelial cell monolayers. Descamps L, et al. **J Neuroimmunol** 1997 Apr;74(1-2):173–84

Receptor mediated delivery of daunomycin using immunoliposomes: pharmacokinetics and tissue distribution in the rat. Huwyler J, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1541–6

RECEPTORS, TRANSFORMING-GROWTH FACTOR ALPHA see **RECEPTORS, EPIDERMAL GROWTH FACTOR-UROGASTRONE**

RECEPTORS, TRANSFORMING GROWTH FACTOR BETA

AGONISTS

Regulation and interactions of transforming growth factor-beta with cardiovascular cells: implications for development and disease. Saltis J, et al. **Clin Exp Pharmacol Physiol** 1996 Mar;23(3):193–200 (94 ref.)

ANALYSIS

Distribution of transforming growth factor beta1-binding proteins and low-affinity receptors during odontoblast differentiation in the mouse. Cam Y, et al. **Arch Oral Biol** 1997 May;42(5):385–91

Cellular distribution of transforming growth factor betas 1, 2, and 3 and their types I and II receptors during postnatal development and spermatogenesis in the boar testis. Caussanel V, et al. **Biol Reprod** 1997 Feb;56(2):357–67

Differential expression of transforming growth factor-beta isoforms and receptors in experimental membranous nephropathy. Shankland SJ, et al. **Kidney Int** 1996 Jul; 50(1):116–24

Ehrlich ascites tumor cells produce a transforming growth factor-beta (TGFbeta)-like activity but lack receptors with TGFbeta-binding capacity. Elexpuru A, et al. **Mol Cell Biochem** 1997 May;170(1-2):153–62

Expression and localization of transforming growth factor-beta receptors type I and type II in the rat ventral prostate during regression. Kim IY, et al. **Mol Endocrinol** 1996 Jan;10(1):107–15

ANTAGONISTS & INHIBITORS

Mechanism of TGFbeta receptor inhibition by FKBP12. Chen YG, et al. **EMBO J** 1997 Jul 1;16(13):3866–76

BIOSYNTHESIS

Expression of various TGF-beta isoforms and type I receptor in necrotizing human brain lesions. Ata AK, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):326–33

Type I (RI) and type II (RII) receptors for transforming growth factor-beta isoforms are expressed subsequent to transforming growth factor-beta ligands during excisional wound repair. Gold LI, et al. **Am J Pathol** 1997 Jan; 150(1):209–22

Transforming growth factor-beta, transforming growth factor-beta receptor II, and p27Kip1 expression in nontumorous and neoplastic human pituitaries. Jin L, et al. **Am J Pathol** 1997 Aug;151(2):509–19

Differential expression of transforming growth factor-beta receptors in rat kidney development. Choi ME, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F386–95

Transforming growth factor-beta receptors in human cancer cell lines: analysis of transcript, protein and proliferation. Jakowlew SB, et al. **Anticancer Res** 1997 May-Jun; 17(3C):1849–60

Ischemia-induced transplant arteriosclerosis in the rat. Induction of peptide growth factor expression. Waltenberger J, et al. **Arterioscler Thromb Vasc Biol** 1996 Dec;16(12):1516–23

Identification and developmental expression of two activin receptors in baboon lung. Zhao Y, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):50–7

Dynamic expression of transforming growth factor-betas (TGF-beta) and their type I and type II receptors in the synovial tissue of arthritic rats. Müssener A, et al. **Clin Exp Immunol** 1997 Jan;107(1):112–9

Distinct expression of transforming growth factor-beta receptor subtypes on vascular smooth muscle cells from spontaneously hypertensive rats and Wistar-Kyoto rats. Fukuda N, et al. **Clin Exp Pharmacol Physiol Suppl** 1995; 1:S120–2

Species-specific expression of type II TGF-beta receptor isoforms by articular chondrocytes: effect of proteoglycan depletion and aging. Glansbeek HL, et al. **Cytokine** 1997 May;9(5):347–51

Direct neural induction and selective inhibition of mesoderm and epidermis inducers by Xnr3. Hansen CS, et al. **Development** 1997 Jan;124(2):483–92

Transforming growth factor-beta receptor and fibronectin expressions in aortic smooth muscle cells in diabetic rats. Kanzaki T, et al. **Diabetologia** 1997 Apr;40(4):383–91

Dysregulated expression of transforming growth factor beta and its type-I and type-II receptors in basal-cell carcinoma. Furue M, et al. **Int J Cancer** 1997 May 16; 71(4):505–9

Down-regulation of protein and mRNA expression for transforming growth factor-beta (TGF-beta1) type I and type II receptors in human prostate cancer. Guo Y, et al. **Int J Cancer** 1997 May 16;71(4):573–9

Transforming growth factor-beta receptor expression in human cornea. Joyce NC, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):1922–8

Captopril reverses high-glucose-induced growth effects on LLC-PK1 cells partly by decreasing transforming growth factor-beta receptor protein expressions. Guh JY, et al. **J Am Soc Nephrol** 1996 Aug;7(8):1207–15

Expression of transforming growth factor beta type III receptor suppresses tumorigenicity of human breast cancer MDA-MB-231 cells. Sun L, et al. **J Biol Chem** 1997 Oct 3;272(40):25367–72

Expression of TGF-beta type II receptor mRNA in the CNS. Böttner M, et al. **Neuroreport** 1996 Nov 25;7(18):2903–7

Frequent inactivation of the transforming growth factor beta type II receptor in small-cell lung carcinoma cells. de Jonge RR, et al. **Oncol Res** 1997;9(2):89–98

Loss of functional cell surface transforming growth factor beta (TGF-beta) type 1 receptor correlates with insensitivity to TGF-beta in chronic lymphocytic leukemia. DeCoteau JF, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5877–81

Expression of a dominant-negative type II transforming growth factor beta (TGF-beta) receptor in the epidermis of transgenic mice blocks TGF-beta-mediated growth inhibition. Wang XJ, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2386–91

CHEMISTRY

The unglycosylated extracellular domain of type-II receptor for transforming growth factor-beta. A novel assay for characterizing ligand affinity and specificity. Goetschy JF, et al. **Eur J Biochem** 1996 Oct 15;241(2):355–62

Binding affinity of transforming growth factor-beta for its type II receptor is determined by the C-terminal region of the molecule. Qian SW, et al. **J Biol Chem** 1996 Nov 29;271(48):30656–62

CLASSIFICATION

An emerging complexity of receptors for transforming growth factor-beta. Derynck R, et al. **Princess Takamatsu Symp** 1994;24:264–75 (54 ref.)

DEFICIENCY

TGF-beta receptor type II deficiency results in defects of yolk sac hematopoiesis and vasculogenesis. Oshima M, et al. **Dev Biol** 1996 Oct 10;179(1):297–302

GENETICS

Transforming growth factor-beta receptor type 2 mutations and microsatellite instability in sporadic colorectal adenomas and carcinomas. Samowitz WS, et al. **Am J Pathol** 1997 Jul;151(1):33–5

Mutations of the transforming growth factor-beta type II receptor gene are strongly related to sporadic proximal colon carcinomas with microsatellite instability. Akiyama Y, et al. **Cancer** 1996 Dec 15;78(12):2478–84

Microsatellite instability and mutated type II transforming growth factor-beta receptor gene in gliomas. Izumoto S, et al. **Cancer Lett** 1997 Jan 30;112(2):251–6

Microsatellite instability-associated mutations associate preferentially with the intestinal type of primary gastric carcinomas in a high-risk population. Chung YJ, et al. **Cancer Res** 1996 Oct 15;56(20):4662–5

Genomic structure of the transforming growth factor beta type II receptor gene and its mutations in hereditary nonpolyposis colorectal cancers. Lu SL, et al. **Cancer Res** 1996 Oct 15;56(20):4595–8

A mutation in the transforming growth factor beta type II receptor gene promoter associated with loss of gene expression. Muñoz-Antonia T, et al. **Cancer Res** 1996 Nov 1;56(21):4831–5

A transforming growth factor beta type II receptor gene mutation common in sporadic cecum cancer with microsatellite instability. Togo G, et al. **Cancer Res** 1996 Dec 15;56(24):5620–3

Absence of mutations in the transforming growth factor-beta type II receptor in sporadic lung cancers with microsatellite instability and rare H-ras1 alleles. Takenoshita S, et al. **Carcinogenesis** 1997 Jul;18(7):1427–9

Infrequent mutations of the transforming growth factor beta-type II receptor gene at chromosome 3p22 in human lung cancers with chromosome 3p deletions. Tani M, et al. **Carcinogenesis** 1997 May;18(5):1119–21

Transforming growth factor beta 1 functions in monocytic differentiation of hematopoietic cells through autocrine and paracrine mechanisms. Turley JM, et al. **Cell Growth Differ** 1996 Nov;7(11):1535–44

Analysis of a polyadenine tract of the transforming growth factor-beta type II receptor gene in colorectal cancers by non-gel-sieving capillary electrophoresis. Oto M, et al. **Clin Chem** 1997 May;43(5):759–63

The type II transforming growth factor-beta receptor as a tumor-suppressor gene. Brattain MG, et al. **Curr Opin Oncol** 1996 Jan;8(1):49–53 (26 ref.)

Cloning of the promoter regions of mouse TGF-beta receptor genes by inverse PCR with highly overlapped primers. Yoshitomo-Nakagawa K, et al. **DNA Res** 1997 Feb 28;4(1):73–5

Expression of a dominant-negative mutant TGF-beta type II receptor in transgenic mice reveals essential roles for TGF-beta in regulation of growth and differentiation in the exocrine pancreas. Böttinger EP, et al. **EMBO J** 1997 May 15;16(10):2621–33

The somatic mutation frequency of the transforming growth factor beta receptor type II gene varies widely among different cancers with microsatellite instability. Abe T, et al. **Eur J Surg Oncol** 1996 Oct;22(5):474–7

Habrec1, a novel serine/threonine kinase TGF-beta type I-like receptor, has a specific cellular expression suggesting function in the developing organism and adult brain. Lorentzon M, et al. **Exp Neurol** 1996 Dec;142(2):351–60

Transforming growth factor beta type II receptor gene mutations in adenomas from hereditary nonpolyposis colorectal cancer [see comments] Akiyama Y, et al. **Gastroenterology** 1997 Jan;112(1):33–9. Comment in: Gastroenterology 1997 Jan;112(1):297–302.

What's new with RII? [editorial; comment] Grady W, et al. **Gastroenterology** 1997 Jan;112(1):297–302. Comment on: Gastroenterology 1997 Jan;112(1):33–9. Comment on: Gastroenterology 1997 Jan;112(1):40–5.

A transforming growth factor beta 1 receptor type II mutation in ulcerative colitis-associated neoplasms [see comments] Souza RF, et al. **Gastroenterology** 1997 Jan; 112(1):40–5. Comment in: Gastroenterology 1997 Jan;112(1):297–302.

RECEPTORS, TRANSFORMING GROWTH FACTOR BETA

Cloning of a cDNA encoding the human transforming growth factor-beta type II receptor: heterogeneity of the mRNA. Ogasa H, et al. **Gene** 1996 Nov 28;181(1-2):185-90

The TGF beta type II receptor, Tgfbr2, maps to distal mouse chromosome 9. Bonyadi M, et al. **Genomics** 1996 Apr 15; 33(2):328-9

The genomic structure of the gene encoding the human transforming growth factor beta type II receptor (TGF-beta RII). Takenoshita S, et al. **Genomics** 1996 Sep 1;36(2):341-4

Alterations of transforming growth factor-beta 1 receptor type II occur in ulcerative colitis-associated carcinomas, sporadic colorectal neoplasms, and esophageal carcinomas, but not in gastric neoplasms. Souza RF, et al. **Hum Cell** 1996 Sep;9(3):229-36

Microsatellite instability and mutations of p53 and TGF-beta RII genes in gastric cancer. Renault B, et al. **Hum Genet** 1996 Nov;98(5):601-7

Mutations of the transforming growth factor beta type II receptor gene and microsatellite instability in gastric cancer. Ohue M, et al. **Int J Cancer** 1996 Oct 9;68(2):203-6

Multiple and essential Sp1 binding sites in the promoter for transforming growth factor-beta type I receptor. Ji C, et al. **J Biol Chem** 1997 Aug 22;272(34):21260-7

Mechanism of E1A-induced transforming growth factor-beta (TGF-beta) resistance in mouse keratinocytes involves repression of TGF-beta type II receptor transcription. Kim DH, et al. **J Biol Chem** 1997 Jan 3; 272(1):688-94

Cloning, characterization, and expression of the transforming growth factor-beta type I receptor promoter in fetal rat bone cells. Ji C, et al. **J Cell Biochem** 1996 Dec 15; 63(4):478-90

Expression of TGF-beta superfamily receptors in dental pulp. Toyono T, et al. **J Dent Res** 1997 Sep;76(9):1555-60

Inappropriate expression of human transforming growth factor (TGF)-alpha in the uterus of transgenic mouse causes downregulation of TGF-beta receptors and delays the blastocyst-attachment reaction. Das SK, et al. **J Mol Endocrinol** 1997 Jun;18(3):243-57

Changes in levels of mRNAs of transforming growth factor (TGF)-beta1, -beta2, -beta3, TGF-beta type II receptor and sulfated glycoprotein-2 during apoptosis of mouse uterine epithelium. Wada K, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5-6):367-75

Microsatellite instability is an early genetic event in myelodysplastic syndrome but is infrequent and not associated with TGF-beta receptor type II gene mutation. Kaneko H, et al. **Leukemia** 1996 Nov;10(11):1696-9

A chimeric serine/threonine kinase receptor system reveals the potential of multiple type II receptors to cooperate with transforming growth factor-beta type I receptor. Muramatsu M, et al. **Mol Biol Cell** 1997 Mar;8(3):469-80

Expression and localization of transforming growth factor-beta receptors type I and type II in the rat ventral prostate during regression. Kim IY, et al. **Mol Endocrinol** 1996 Jan;10(1):107-15

The expression of transforming growth factor-beta s and TGF-beta receptor mRNA and protein and the effect of TGF-beta s on human myometrial smooth muscle cells in vitro. Tang XM, et al. **Mol Hum Reprod** 1997 Mar; 3(3):233-40

Mutation analysis of coding sequences of the entire transforming growth factor beta type II receptor gene in sporadic human colon cancer using genomic DNA and intron primers. Takenoshita S, et al. **Oncogene** 1997 Mar 13;14(10):1255-8

Mutation analysis of the transforming growth factor-beta type II receptor in human cell lines resistant to growth inhibition by transforming growth factor-beta. Vincent F, et al. **Oncogene** 1997 Jul 3;15(1):117-22

Expression of transforming growth factor-beta receptor type I and type II in rat ventral prostate and Dunning R3327 PAP adenocarcinoma in response to castration and oestrogen treatment. Wikström P, et al. **Urol Res** 1997; 25(2):103-11

ISOLATION & PURIFICATION

Molecular cloning of a novel type I receptor serine/threonine kinase for the TGF beta superfamily from rat brain. Tsuchida K, et al. **Mol Cell Neurosci** 1996 Jun;7(6):467-78

METABOLISM

Expression of transforming growth factor-beta receptors during hyperoxia-induced lung injury and repair. Zhao Y, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):L355-62

Decreased expression of transforming growth factor beta receptors on head and neck squamous cell carcinoma tumor cells. Eisma RJ, et al. **Am J Surg** 1996 Dec;172(6):641-5

Heterogenous response of B lymphocytes to transforming growth factor-beta in B-cell chronic lymphocytic leukaemia: correlation with the expression of TGF-beta receptors. Lagneaux L, et al. **Br J Haematol** 1997 Jun; 97(3):612-20

TGF-beta1 resistance is not associated with alterations in TGF-beta type II receptors in immortalized human lung epithelial cells. Hamburger AW, et al. **Cancer Lett** 1997 Feb 26;113(1-2):65-70

Involvement of extracellular signal-regulated kinase 2 and stress-activated protein kinase/Jun N-terminal kinase activation by transforming growth factor beta in the negative growth control of breast cancer cells. Frey RS, et al. **Cancer Res** 1997 Feb 15;57(4):628-33

Predominant cytosolic localization of type II transforming growth factor beta receptors in human breast carcinoma cells. Koli KM, et al. **Cancer Res** 1997 Mar 1;57(5):970-7

Human malignant thyroid tumors displayed reduced levels of transforming growth factor beta receptor type II messenger RNA and protein. Lazzereschi D, et al. **Cancer Res** 1997 May 15;57(10):2071-6

Decreased transforming growth factor beta type II receptor expression in intestinal adenomas from Min/+ mice is associated with increased cyclin D1 and cyclin-dependent kinase 4 expression. Zhang T, et al. **Cancer Res** 1997 May 1;57(9):1638-43

The MAD-related protein Smad7 associates with the TGFbeta receptor and functions as an antagonist of TGFbeta signaling. Hayashi H, et al. **Cell** 1997 Jun 27; 89(7):1165-73

MADR2 is a substrate of the TGFbeta receptor and its phosphorylation is required for nuclear accumulation and signaling. Macías-Silva M, et al. **Cell** 1996 Dec 27; 87(7):1215-24

An inositolphosphate glycan released by TGF-beta mimics the proliferative but not the transcriptional effects of the factor and requires functional receptors. Bogdanowicz P, et al. **Cell Signal** 1996 Nov;8(7):503-9

From receptor to nucleus: the Smad pathway. Baker JC, et al. **Curr Opin Genet Dev** 1997 Aug;7(4):467-73 (50 ref.)

Smooth muscle lineage diversity in the chick embryo. Two types of aortic smooth muscle cell differ in growth and receptor-mediated transcriptional responses to transforming growth factor-beta. Topouzis S, et al. **Dev Biol** 1996 Sep 15;178(2):430-45

Mechanism of TGFbeta receptor inhibition by FKBP12. Chen YG, et al. **EMBO J** 1997 Jul 1;16(13):3866-76

A kinase subdomain of transforming growth factor-beta (TGF-beta) type I receptor determines the TGF-beta intracellular signaling specificity. Feng XH, et al. **EMBO J** 1997 Jul 1;16(13):3912-23

Positive and negative regulation of type II TGF-beta receptor signal transduction by autophosphorylation on multiple serine residues. Luo K, et al. **EMBO J** 1997 Apr 15;16(8):1970-81

Signaling by chimeric erythropoietin-TGF-beta receptors: homodimerization of the cytoplasmic domain of the type I TGF-beta receptor and heterodimerization with the type II receptor are both required for intracellular signal transduction. Luo K, et al. **EMBO J** 1996 Sep 2; 15(17):4485-96

Phosphorylation of Ser165 in TGF-beta type I receptor modulates TGF-beta1-induced cellular responses. Souchelnytskyi S, et al. **EMBO J** 1996 Nov 15; 15(22):6231-40

Role of collagen in retinoic acid-induced differentiation and down-regulation of TGF-beta receptors in rat preosteoblastic RCT-1 cells. Kodama Y, et al. **Endocr J** 1997 Jun;44(3):375-81

Transforming growth factor-beta and its receptors in rabbit renal proximal tubules after uninephrectomy. García-Ocaña A, et al. **Exp Nephrol** 1996 Jul-Aug; 4(4):231-40

Expression of transforming growth factor beta isoforms and their receptors during hair growth phases in mice. Wollina U, et al. **Histol Histopathol** 1996 Apr;11(2):431-6

Reconstitution of a pentameric complex of dimeric transforming growth factor beta ligand and a type I, II, III receptor in baculoviral-infected insect cells. Matsuzaki K, et al. **In Vitro Cell Dev Biol Anim** 1996 Jun;32(6):345-60

Role of the juxtamembrane domains of the transforming growth factor-alpha precursor and the beta-amyloid precursor protein in regulated ectodomain shedding. Arribas J, et al. **J Biol Chem** 1997 Jul 4;272(27):17160-5

FKBP-12 recognition is dispensable for signal generation by type I transforming growth factor-beta receptors. Charng MJ, et al. **J Biol Chem** 1996 Sep 20;271(38):22941-4

Expression of transforming growth factor beta (TGFbeta) type III receptor restores autocrine TGFbeta1 activity in human breast cancer MCF-7 cells. Chen C, et al. **J Biol Chem** 1997 May 9;272(19):12862-7

Processing of the transforming growth factor beta type I and II receptors. Biosynthesis and ligand-induced regulation [published erratum appears in J Biol Chem 1997 Jul 4;272(27):17245] Koli KM, et al. **J Biol Chem** 1997 Mar 7;272(10):6423-7

The type II transforming growth factor-beta receptor autophosphorylates not only on serine and threonine but also on tyrosine residues. Lawler S, et al. **J Biol Chem** 1997 Jun 6;272(23):14850-9

The type V transforming growth factor beta receptor is the putative insulin-like growth factor-binding protein 3 receptor. Leal SM, et al. **J Biol Chem** 1997 Aug 15; 272(33):20572-6

Function of the type V transforming growth factor beta receptor in transforming growth factor beta-induced growth inhibition of mink lung epithelial cells. Liu Q, et al. **J Biol Chem** 1997 Jul 25;272(30):18891-5

Biosynthesis of the type I and type II TGF-beta receptors. Implications for complex formation. Wells RG, et al. **J Biol Chem** 1997 Apr 25;272(17):11444-51

TGF-beta receptors are diminished after retinoid exposure in rat liver epithelial cells. Mercier T, et al. **J Cell Biochem** 1996 May;61(2):230-7

Restored expression of transforming growth factor beta type II receptor in k-ras-transformed thyroid cells, TGF beta-resistant, reverts their malignant phenotype. Coppa A, et al. **J Cell Physiol** 1997 Aug;172(2):200-8

Transforming growth factor-beta receptor type I and type II expression during murine hair follicle development and cycling. Paus R, et al. **J Invest Dermatol** 1997 Oct; 109(4):518-26

Inappropriate expression of human transforming growth factor (TGF)-alpha in the uterus of transgenic mouse causes downregulation of TGF-beta receptors and delays the blastocyst-attachment reaction. Das SK, et al. **J Mol Endocrinol** 1997 Jun;18(3):243-57

A chimeric serine/threonine kinase receptor system reveals the potential of multiple type II receptors to cooperate with transforming growth factor-beta type I receptor. Muramatsu M, et al. **Mol Biol Cell** 1997 Mar;8(3):469-80

Transforming growth factor beta receptor expression in cultured porcine granulosa cells. Goddard I, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):207-13

The expression of transforming growth factor-beta s and TGF-beta receptor mRNA and protein and the effect of TGF-beta s on human myometrial smooth muscle cells in vitro. Tang XM, et al. **Mol Hum Reprod** 1997 Mar; 3(3):233-40

The crystal structure of TGF-beta 3 and comparison to TGF-beta 2: implications for receptor binding. Mittl PR, et al. **Protein Sci** 1996 Jul;5(7):1261-71

Expression of transforming growth factor-beta receptor type I and type II in rat ventral prostate and Dunning R3327 PAP adenocarcinoma in response to castration and oestrogen treatment. Wikström P, et al. **Urol Res** 1997; 25(2):103-11

PHYSIOLOGY

Signal transduction and TGF-beta superfamily receptors. Kolodziejczyk SM, et al. **Biochem Cell Biol** 1996; 74(3):299-314 (133 ref.)

Differential expression of beta transforming growth factors (TGF beta 1, TGF beta 2, and TGF beta 3) and their receptors (type I and type II) in peri-implantation porcine conceptuses. Gupta A, et al. **Biol Reprod** 1996 Oct; 55(4):796-802

Expression of transforming growth factor beta type II receptor reduces tumorigenicity in human gastric cancer cells. Chang J, et al. **Cancer Res** 1997 Jul 15;57(14):2856-9

Overexpression of transforming growth factor beta type I receptor abolishes malignant phenotype of a rat bladder carcinoma cell line. Okamoto M, et al. **Cell Growth Differ** 1997 Aug;8(8):921-6

Signal transduction by members of the transforming growth factor-beta superfamily. Attisano L, et al. **Cytokine Growth Factor Rev** 1996 Dec;7(4):327-39 (127 ref.)

Transforming growth factor-beta is a survival factor for neonate cortical neurons: coincident expression of type I receptors in developing cerebral cortices. Tomoda T, et al. **Dev Biol** 1996 Oct 10;179(1):79-90

Abrogation of transforming growth factor-beta type II receptor stimulates embryonic mouse lung branching morphogenesis in culture. Zhao J, et al. **Dev Biol** 1996 Nov 25;180(1):242-57

TGF-beta receptors and signal transduction. Miyazono K. **Int J Hematol** 1997 Feb;65(2):97-104 (42 ref.)

Transforming growth factor (TGF-beta)-specific signaling by chimeric TGF-beta type II receptor with intracellular domain of activin type IIB receptor. Persson U, et al. **J Biol Chem** 1997 Aug 22;272(34):21187-94

Roles of the transforming growth factor beta 1 and its type I and II receptors in the development of a pulmonary adenocarcinoma: results of an immunohistochemical study. Takanami I, et al. **J Surg Oncol** 1997 Apr;64(4):262-7

Combinatorial signalling by Xwnt-11 and Xnr3 in the organizer epithelium. Glinka A, et al. **Mech Dev** 1996 Dec; 60(2):221-31

Müllerian inhibiting substance as a model for the transforming growth factor-beta family: development of new treatment strategies. Shah PC, et al. **Semin Pediatr Surg** 1996 Aug; 5(3):182-90 (34 ref.)

[TGF-beta and its receptors] Yuasa Y. **Gan To Kagaku Ryoho** 1997 Sep;24(11):1460-4 (19 ref.) (Eng. Abstr.) **(Jpn)**

RECEPTORS, TRH see **RECEPTORS, THYROTROPIN-RELEASING HORMONE**

RECEPTORS, TRIIODOTHYRONINE see **RECEPTORS, THYROID HORMONE**

RECEPTORS, TRYPTAMINE see **RECEPTORS, SEROTONIN**

RECEPTORS, TUMOR NECROSIS FACTOR

Preclinical safety assessment of the recombinant TNF receptor-immunoglobulin fusion protein. Winter M. **Clin Immunol Immunopathol** 1997 Apr;83(1):21-4

Analysis of Arg-Gly-Asp mimetics and soluble receptor of tumour necrosis factor as therapeutic modalities for concanavalin A induced hepatitis in mice. Bruck R, et al.

Gut 1997 Jan;40(1):133–8

Inhibition of tumor necrosis factor and amelioration of brain infarction in mice. Nawashiro H, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):229–32

Randomized placebo–controlled clinical trial of high–dose interleukin–2 in combination with a soluble p75 tumor necrosis factor receptor immunoglobulin G chimera in patients with advanced melanoma and renal cell carcinoma. Du Bois JS, et al. **J Clin Oncol** 1997 Mar;15(3):1052–62

Tumor necrosis factor receptor superfamily. Naismith JH, et al. **J Inflamm** 1995–96;47(1–2):1–7 (9 ref.)

Myxoma T2 protein as a model for poxvirus TNF receptor homologs. McFadden G, et al. **J Neuroimmunol** 1997 Feb; 72(2):119–26 (47 ref.)

Recombinant soluble tumor necrosis factor receptor (p80) fusion protein: toxicity and dose finding trial in refractory rheumatoid arthritis. Moreland LW, et al. **J Rheumatol** 1996 Nov;23(11):1849–55

Treatment with the interleukin–I receptor antagonist and soluble tumor necrosis factor receptor Fc fusion protein does not prevent endotoxin–induced preterm parturition in mice. Fidel PL Jr, et al. **J Soc Gynecol Investig** 1997 Jan–Feb;4(1):22–6

p55 Tumor necrosis factor receptor fusion protein in the treatment of patients with severe sepsis and septic shock. A randomized controlled multicenter trial. Ro 45–2081 Study Group. Abraham E, et al. **JAMA** 1997 May 21; 277(19):1531–8

Anticytokine therapy in rheumatoid arthritis [editorial; comment] Firestein GS, et al. **N Engl J Med** 1997 Jul 17; 337(3):195–7. Comment on: N Engl J Med 1997 Jul 17;337(3):141–7.

Tumor necrosis factor receptor: Fc fusion protein in septic shock [letter; comment] Glauser MP, et al. **N Engl J Med** 1996 Nov 21;335(21):1608; discussion 1608–9 . Comment on: N Engl J Med 1996 Jun 27;334(26):1697–702.

Treatment of rheumatoid arthritis with a recombinant human tumor necrosis factor receptor (p75)–Fc fusion protein [see comments] Moreland LW, et al. **N Engl J Med** 1997 Jul 17;337(3):141–7. Comment in: N Engl J Med 1997 Jul 17;337(3):195–7.

Tumor necrosis factor receptor: Fc fusion protein in septic shock [letter; comment] Whiteley MS. **N Engl J Med** 1996 Nov 21;335(21):1607–8; discussion 1608–9. Comment on: N Engl J Med 1996 Jun 27;334(26):1697–702.

Tumor necrosis factor receptor: Fc fusion protein does not improve septic shock and may increase mortality in human [editorial] Atallah AN. **Rev Paul Med** 1996 May–Jun; 114(3):1151

TNF and anti–TNF treatment in rheumatoid arthritis (RA). What we know and what we still need to know. Weisman MH. **Ryumachi** 1997 Apr;37(2):142–3

[TNF] Yamauchi N, et al. **Gan To Kagaku Ryoho** 1997 Sep; 24(11):1486–94 (68 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Immunohistochemical studies of proinflammatory cytokines and their receptors in hair follicles of normal human skin. Ahmed AA, et al. **Acta Derm Venereol** 1996 Sep; 76(5):348–52

In situ expression and serum levels of tumour necrosis factor alpha receptors in patients with lichen planus. Simon M Jr, et al. **Acta Derm Venereol** 1997 May;77(3):191–3

Expression of the human p55 and p75 tumor necrosis factor receptors in primary villous trophoblasts and their role in cytotoxic signal transduction. Yui J, et al. **Biol Reprod** 1996 Aug;55(2):400–9

TNF–receptors on human peritoneal mesothelial cells: regulation of receptor levels and shedding by IL–1 alpha and TNF alpha. Douvdevani A, et al. **Kidney Int** 1996 Jul;50(1):219–28

p55 tumour necrosis factor receptors distribution in neuroblastoma cells. Chambaut–Guérin AM, et al. **Neuroreport** 1997 Apr 14;8(6):1451–6

Soluble receptors and cytokine antagonists in human milk. Buescher ES, et al. **Pediatr Res** 1996 Dec;40(6):839–44

Value of circulating immune parameters in renal transplantation. Rebhandl W, et al. **Transplant Proc** 1997 May;29(3):1881–5

ANTAGONISTS & INHIBITORS

Adenovirus–mediated blockade of lymphotoxin–beta inhibits the induction of contact sensitivity in mice. Trueb RM, et al. **Exp Dermatol** 1997 Aug;6(4):175–80

BIOSYNTHESIS

Interleukin–10–induced HIV–1 expression is mediated by induction of both membrane–bound tumour necrosis factor (TNF)–alpha and TNF receptor type 1 in a promonocytic cell line. Barcellini W, et al. **AIDS** 1996 Jul;10(8):835–42

Solamargine purified from Solanum incanum Chinese herb triggers gene expression of human TNFR I which may lead to cell apoptosis. Hsu SH, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):1–5

Differential expression of IL–1 and TNF receptors in inflammatory arthritis and osteoarthritis. Ruggeri R, et al. **Boll Soc Ital Biol Sper** 1996 Jan–Feb;72(1–2):15–20

Elevation of serum soluble tumour necrosis factor (TNF) receptor and IL–1 receptor antagonist levels in bronchial asthma. Yoshida S, et al. **Clin Exp Immunol** 1996 Oct; 106(1):73–8

Serum levels and in situ expression of TNF–alpha and TNF–alpha binding proteins in inflammatory liver diseases. Spengler U, et al. **Cytokine** 1996 Nov;8(11):864–72

Differential regulation of the p80 tumor necrosis factor receptor in human obesity and insulin resistance. Hotamisligil GS, et al. **Diabetes** 1997 Mar;46(3):451–5

Tumor necrosis factor–alpha: a multifunctional regulator of mammary gland development. Varela LM, et al. **Endocrinology** 1996 Nov;137(11):4915–24

Barrier disruption increases gene expression of cytokines and the 55 kD TNF receptor in murine skin. Wood LC, et al. **Exp Dermatol** 1997 Apr;6(2):98–104

Inhibition of transfer of collagen–induced arthritis into SCID mice by ex vivo infection of spleen cells with retroviruses expressing soluble tumor necrosis factor receptor. Chernajovsky Y, et al. **Gene Ther** 1995 Dec;2(10):731–5

Cytokine response of B lymphocytes from splenic lymphoma with villous lymphocytes: correlation with TNF–RII (p75) and CD11c expression. Treton D, et al. **Hematol Cell Ther** 1996 Aug;38(4):345–52

Tumor necrosis factor–alpha modulates the expression of its p60 receptor and several cytokines in rat tracheal epithelial cells. Bader T, et al. **J Immunol** 1996 Oct 1;157(7):3089–96

The loss of recombinant human granulocyte colony–stimulating factor and recombinant human TNF–alpha priming effects on the superoxide–generating response in exudated neutrophils is associated with a decrease in their receptor affinities. Niwa M, et al. **J Immunol** 1996 Nov 1;157(9):4147–53

Expression of tumor necrosis factor–alpha and its receptors type I and type II in human oocytes. Naz RK, et al. **Mol Reprod Dev** 1997 Jun;47(2):127–33

Decreased interleukin–10 production by neonatal monocytes and T cells: relationship to decreased production and expression of tumor necrosis factor–alpha and its receptors. Chheda S, et al. **Pediatr Res** 1996 Sep;40(3):475–83

Disrupted splenic architecture, but normal lymph node development in mice expressing a soluble lymphotoxin–beta receptor–IgG1 fusion protein. Ettinger R, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13102–7

Effect of interferon gamma and TNF alpha on the differentiation/activation of human glial cells: implication for the TNF alpha receptor 1. Janabi N, et al. **Res Virol** 1996 Mar–Jun;147(2–3):147–53

Expression of a negative dominant mutant of human p55 tumor necrosis factor–receptor inhibits TNF and monocyte–induced activation in porcine aortic endothelial cells. Stroka DM, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):882

BLOOD

Plasma levels of soluble CD30, tumour necrosis factor (TNF)–alpha and TNF receptors during primary HIV–1 infection: correlation with HIV–1 RNA and the clinical outcome. Rizzardi GP, et al. **AIDS** 1996 Nov;10(13):F45–50

Serum levels of soluble receptors for tumor necrosis factor (p55 and p75 sTNFr) in endometrial cancer. Gadducci A, et al. **Anticancer Res** 1996 Sep–Oct;16(5B):3125–8

Soluble tumour necrosis factor receptor levels reflect coagulation abnormalities in systemic juvenile chronic arthritis. de Benedetti F, et al. **Br J Rheumatol** 1997 May; 36(5):581–8.

Release of soluble tumor necrosis factor receptors in Mediterranean spotted fever rickettsiosis. Kern WV, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):233–5

Elevation of serum soluble tumour necrosis factor (TNF) receptor and IL–1 receptor antagonist levels in bronchial asthma. Yoshida S, et al. **Clin Exp Immunol** 1996 Oct; 106(1):73–8

Cytokines, nitrite/nitrate, soluble tumor necrosis factor receptors, and procalcitonin concentrations: comparisons in patients with septic shock, cardiogenic shock, and bacterial pneumonia. de Werra I, et al. **Crit Care Med** 1997 Apr;25(4):607–13

Concentrations of soluble tumor necrosis factor and interleukin–6 receptors in heatstroke and heatstress [see comments] Hammami MM, et al. **Crit Care Med** 1997 Aug; 25(8):1314–9. Comment in: Crit Care Med 1997 Aug;25(8):1263–9.

Intramucosal acidosis and systemic host responses in abdominal aortic aneurysm surgery. Soong CV, et al. **Crit Care Med** 1997 Sep;25(9):1472–9

Relation between pro– and anti–inflammatory cytokines and the production of nitric oxide (NO) in severe sepsis. Groeneveld PH, et al. **Cytokine** 1997 Feb;9(2):138–42

Mechanisms of downmodulation and release of tumour necrosis factor receptor induced by human immunodeficiency virus type 1 in human monocytes. Rimaniol AC, et al. **Cytokine** 1997 Jan;9(1):9–18

Soluble TNF receptors as prognostic factors for mortality [letter; comment] Parks RW, et al. **Gut** 1997 Apr;40(4):560 . Comment on: Gut 1996 Mar;38(3):447–53.

Interleukin–4, interleukin–10, and soluble tumor necrosis factor receptors in cord blood. Hata T, et al. **Gynecol Obstet Invest** 1997;43(3):155–7

Detection of soluble receptors for tumor necrosis factor, interleukin–2 and interleukin–6 in retroplacental serum from normal pregnant women. Lien E, et al. **Gynecol Obstet Invest** 1996;41(1):1–4

Plasma levels of sTNFR p75 and IL–8 in patients with HIV–1 infection. Hober D, et al. **Immunol Lett** 1996 Aug; 52(1):57–60

High plasma level of soluble tumor necrosis factor receptor type II (sTNFRII) in asymptomatic HIV–1–infected patients. Hober D, et al. **Infection** 1996 May–Jun; 24(3):213–7

Increased serum levels of soluble tumor necrosis factor receptors (sTNF–Rs) in children and adolescents with vertically and horizontally transmitted HIV infection. Weiss M, et al. **Infection** 1996 Jul–Aug;24(4):301–8

Tumor necrosis factor ligand–receptor system can predict treatment outcome in lymphoma patients. Warzocha K, et al. **J Clin Oncol** 1997 Feb;15(2):499–508

Soluble tumor necrosis factor receptor in serum of patients with arthritis. Lee CS, et al. **J Formos Med Assoc** 1997 Aug;96(8):573–8

Cytokine antagonists in aged subjects and their relation with cellular immunity. Catania A, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):B93–7

Evaluation of interleukin–6 and soluble receptors of tumor necrosis factor for early diagnosis of neonatal infection. Messer J, et al. **J Pediatr** 1996 Oct;129(4):574–80

Circulating levels of tumor necrosis factor soluble receptors in systemic lupus erythematosus are significantly higher than in other rheumatic diseases and correlate with disease activity. Gabay C, et al. **J Rheumatol** 1997 Feb;24(2):303–8

Serum concentrations of neopterin, soluble interleukin 2 receptor, and soluble tumor necrosis factor receptor in Wegener's granulomatosis. Nassonov EL, et al. **J Rheumatol** 1997 Apr;24(4):666–70

Interleukin 1 (IL–1) receptor antagonist, soluble tumor necrosis factor receptors, IL–1 beta, and IL–8––markers of remission in rheumatoid arthritis during treatment with methotrexate. Seitz M, et al. **J Rheumatol** 1996 Sep; 23(9):1512–6

Soluble tumor necrosis factor receptors are elevated in relation to severity of congestive heart failure. Nozaki N, et al. **Jpn Circ J** 1997 Aug;61(8):657–64

Prognostic significance of TNF alpha and its p55 soluble receptor in malignant lymphomas. Warzocha K, et al. **Leukemia** 1997 Apr;11 Suppl 3:441–3

High levels of sTNFR p75 and TNF alpha in dengue–infected patients. Hober D, et al. **Microbiol Immunol** 1996;40(8):569–73

Tumour necrosis factor soluble receptors I and II and interleukin–1 receptor antagonist in acute pyelonephritis in relation to bacterial virulence–associated traits and renal function. Jacobson SH, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2209–14

Mini–review: tumor necrosis factor (TNF) and TNF soluble receptors (TNF–sR) in liver disease and liver transplantation. Majno PE, et al. **Swiss Surg** 1995;(4):182–5 (27 ref.)

[Serum levels of solubule tumor necrosis factor (TNF) receptors in patients with pulmonary tuberculosis] Kawaguchi H, et al. **Kekkaku** 1996 Mar;71(3):259–65 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Prevention of autoimmune diabetes mellitus in NOD mice by transgenic expression of soluble tumor necrosis factor receptor p55. Hunger RE, et al. **Eur J Immunol** 1997 Jan; 27(1):255–61

Molecular, structural, and biological characteristics of the tumor necrosis factor ligand superfamily. Gruss HJ. **Int J Clin Lab Res** 1996;26(3):143–59 (238 ref.)

I–FLICE, a novel inhibitor of tumor necrosis factor receptor–1– and CD–95–induced apoptosis. Hu S, et al. **J Biol Chem** 1997 Jul 11;272(28):17255–7

Inhibition of p75 tumor necrosis factor receptor by antisense oligonucleotides increases hypoxic injury and beta–amyloid toxicity in human neuronal cell line. Shen Y, et al. **J Biol Chem** 1997 Feb 7;272(6):3550–3

The lymphotoxin–alpha (LTalpha) subunit is essential for the assembly, but not for the receptor specificity, of the membrane–anchored LTalpha1beta2 heterotrimeric ligand. Williams–Abbott L, et al. **J Biol Chem** 1997 Aug 1; 272(31):19451–6

Characterization of different soluble TNF receptor (TNFR80) derivatives: positive influence of the intracellular domain on receptor/ligand interaction and TNF neutralization capacity. Moosmayer D, et al. **J Interferon Cytokine Res** 1996 Jun;16(6):471–7

Seeing double: crystal structures of the type I TNF receptor. Naismith JH, et al. **J Mol Recognit** 1996 Mar–Apr; 9(2):113–7

A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptor–induced apoptosis. Nocentini G, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6216–21

Structures of the extracellular domain of the type I tumor necrosis factor receptor. Naismith JH, et al. **Structure** 1996 Nov 15;4(11):1251–62

TRAF proteins and meprins share a conserved domain. Uren AG, et al. **Trends Biochem Sci** 1996 Jul;21(7):244–5

DEFICIENCY

Exacerbated febrile responses to LPS, but not turpentine, in TNF double receptor–knockout mice. Leon LR, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R563–9

Induction of CD14 expression in Lpsn, Lpsd and tumor necrosis factor receptor–deficient mice. Takakuwa T, et

al. **Eur J Immunol** 1996 Nov;26(11):2686–92

Targeted disruption of TRAF3 leads to postnatal lethality and defective T-dependent immune responses. Xu Y, et al. **Immunity** 1996 Nov;5(5):407–15

Accelerated atherosclerosis in mice lacking tumor necrosis factor receptor p55. Schreyer SA, et al. **J Biol Chem** 1996 Oct 18;271(42):26174–8

Interleukin-6 expression and histomorphometry of bones from mice deficient in receptors for interleukin-1 or tumor necrosis factor. Vargas SJ, et al. **J Bone Miner Res** 1996 Nov;11(11):1736–44

Regulation of inducible nitric oxide synthase messenger RNA expression and nitric oxide production by lipopolysaccharide in vivo: the roles of macrophages, endogenous IFN-gamma, and TNF receptor-1-mediated signaling. Salkowski CA, et al. **J Immunol** 1997 Jan 15; 158(2):905–12

Mice lacking the TNF receptor p55 fail to resolve lesions caused by infection with Leishmania major, but control parasite replication. Vieira LQ, et al. **J Immunol** 1996 Jul 15;157(2):827–35

Cell-permeable ceramide inhibits the growth of B lymphoma Raji cells lacking TNF-alpha-receptors by inducing G0/G1 arrest but not apoptosis: a new model for dissecting cell-cycle arrest and apoptosis. Kuroki J, et al. **Leukemia** 1996 Dec;10(12):1950–8

DRUG EFFECTS

Kinetics of soluble TNF-receptors and soluble adhesion molecules ICAM-1, E-selectin and VCAM-1 under systemic rhTNF alpha therapy. Boehme MW, et al. **Eur J Clin Invest** 1996 May;26(5):404–10

Modulation of tumor necrosis factor (TNF) receptor expression during monocytic differentiation by glucocorticoids. Goppelt-Struebe M, et al. **Inflamm Res** 1996 Oct;45(10):503–7

Epinephrine attenuates down-regulation of monocyte tumor necrosis factor receptors during human endotoxemia. van der Poll T, et al. **J Leukoc Biol** 1997 Feb;61(2):156–60

Mice lacking the TNF 55 kDa receptor fail to sleep more after TNFalpha treatment. Fang J, et al. **J Neurosci** 1997 Aug 1;17(15):5949–55

Tumor necrosis factor alpha inhibits entry of human immunodeficiency virus type 1 into primary human macrophages: a selective role for the 75-kilodalton receptor [published erratum appears in J Virol 1997 Mar;71(3):1581] Herbein G, et al. **J Virol** 1996 Nov;70(11):7388–97

GENETICS

Increased release of the tumour necrosis factor receptor p75 by immortalized human keratinocytes results from an activated shedding mechanism and is not related to augmented steady-state levels of p75 mRNA. Neuner P, et al. **Arch Dermatol Res** 1996 Oct;288(11):691–6

Patterns of expression of tumor necrosis factor alpha, tumor necrosis factor beta, and their receptors in synovia of patients with juvenile rheumatoid arthritis and juvenile spondylarthropathy. Grom AA, et al. **Arthritis Rheum** 1996 Oct;39(10):1703–10

Suppression of collagen-induced arthritis through adenovirus-mediated transfer of a modified tumor necrosis factor alpha receptor gene. Le CH, et al. **Arthritis Rheum** 1997 Sep;40(9):1662–9

Identification and characterization of an RNA specific primer for human tumor necrosis factor receptor I (TNFR-I). Kuo KW, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):119–25

Modified antisense oligonucleotides directed against tumor necrosis factor receptor type I inhibit tumor necrosis factor alpha-mediated functions. Ojwang JO, et al. **Biochemistry** 1997 May 20;36(20):6033–45

Apo-3, a new member of the tumor necrosis factor receptor family, contains a death domain and activates apoptosis and NF-kappa B. Marsters SA, et al. **Curr Biol** 1996 Dec 1;6(12):1669–76

Expression of an efficient small molecular weight tumour necrosis factor/lymphotoxin antagonist. Neve R, et al. **Cytokine** 1996 May;8(5):365–70

Induction of CD14 expression in Lpsn, Lpsd and tumor necrosis factor receptor-deficient mice. Takakuwa T, et al. **Eur J Immunol** 1996 Nov;26(11):2686–92

Tumour necrosis factor receptor gene expression and shedding in human whole lung tissue and pulmonary epithelium. Nakamura H, et al. **Eur Respir J** 1996 Aug; 9(8):1643–7

Targeted disruption of TRAF3 leads to postnatal lethality and defective T-dependent immune responses. Xu Y, et al. **Immunity** 1996 Nov;5(5):407–15

A newly identified member of the tumor necrosis factor receptor superfamily with a wide tissue distribution and involvement in lymphocyte activation. Kwon BS, et al. **J Biol Chem** 1997 May 30;272(22):14272–6

A tandem GC box motif is necessary for lipopolysaccharide-induced transcription of the type II TNF receptor gene. Bethea JR, et al. **J Immunol** 1997 Jun 15;158(12):5815–23

Differential activation of the nuclear factor-kappa B by TNF muteins specific for the p60 and p80 TNF receptors. Chainy GB, et al. **J Immunol** 1996 Sep 15;157(6):2410–7

Mutational analysis of the ligand-binding domain of M-T2 protein, the tumor necrosis factor receptor homologue of myxoma virus. Schreiber M, et al. **J Immunol** 1996 Nov 15;157(10):4486–95

Mice lacking the TNF receptor p55 fail to resolve lesions caused by infection with Leishmania major, but control parasite replication. Vieira LQ, et al. **J Immunol** 1996 Jul 15;157(2):827–35

Induction of cell death by myristylated death domain of p55 TNF receptor is not abolished by Iprcg-like point mutation in death domain. Kim CH, et al. **J Inflamm** 1995; 45(4):312–22

Sequence, genomic organization, and chromosome localization of the mouse TRADD gene. Pan MG, et al. **J Inflamm** 1995–96;46(3):168–75

Independent signals regulate development of primary and secondary follicle structure in spleen and mesenteric lymph node. Fu YX, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5739–43

Polymorphisms of tumor necrosis factor receptor 2 are not associated with insulin-dependent diabetes mellitus or Graves' disease. Rau H, et al. **Tissue Antigens** 1997 May; 49(5):535–6

Cowpox virus genome encodes a second soluble homologue of cellular TNF receptors, distinct from CrmB, that binds TNF but not LT alpha. Smith CA, et al. **Virology** 1996 Sep 1;223(1):132–47

[TNF/TNFR gene and apoptosis] Takeda Y, et al. **Nippon Rinsho** 1996 Jul;54(7):1888–94 (15 ref.) (Eng. Abstr.) **(Jpn)**

[A polymorphic markers for the p75 tumor necrosis factor receptor gene: use for analyzing disease linkage] Turetskaia RL, et al. **Dokl Akad Nauk** 1996 Dec;351(4):558–60 **(Rus)**

IMMUNOLOGY

Autoimmunity due to defective Nur77, Fas, and TNF-RI apoptosis. Mountz JD, et al. **Adv Exp Med Biol** 1996; 406:241–62 (93 ref.)

Effect of blocking TNF on IL-6 levels and metastasis in a B16-BL6 melanoma/mouse model. Cubillos S, et al. **Anticancer Res** 1997 May-Jun;17(3C):2207–11

Differential sensitivity to Escherichia coli infection in mice lacking tumor necrosis factor p55 or interleukin-1 p80 receptors. Acton RD, et al. **Arch Surg** 1996 Nov; 131(11):1216–21

Effect of soluble P55 tumour-necrosis factor binding fusion protein on the local Shwartzman and Arthus reactions. Norman KE, et al. **Br J Pharmacol** 1996 Feb;117(3):471–478

Recent advances in tumour necrosis factor and CD40 signaling. Tewari M, et al. **Curr Opin Genet Dev** 1996 Feb; 6(1):39–44 (52 ref.)

Kinetics of circulating TNF-alpha and TNF soluble receptors following surgery in a clinical model of sepsis. Neilson D, et al. **Cytokine** 1996 Dec;8(12):938–43

Tumour necrosis factor-alpha (TNF-alpha): the good, the bad and potentially very effective. Barbara JA, et al. **Immunol Cell Biol** 1996 Oct;74(5):434–43 (107 ref.)

The role of receptors for tumour necrosis factor-alpha in the induction of human polymorphonuclear neutrophil chemiluminescence. Zeman K, et al. **Immunol Lett** 1996 Oct;53(1):45–50

Lymphotoxin-alpha-deficient and TNF receptor-I-deficient mice define developmental and functional characteristics of germinal centers. Matsumoto M, et al. **Immunol Rev** 1997 Apr;156:137–44 (40 ref.)

Tumor necrosis factor receptor p55 is essential for intrahepatic granuloma formation and hepatocellular apoptosis in a murine model of bacterium-induced fulminant hepatitis. Tsuji H, et al. **Infect Immun** 1997 May; 65(5):1892–8

A recombinant tumor necrosis factor-alpha p80 receptor:Fc fusion protein decreases circulating bioactive tumor necrosis factor-alpha but not lung injury or mortality during immunosuppression-related gram-negative bacteremia. Lechner AJ, et al. **J Crit Care** 1997 Mar; 12(1):28–38

4-1BB costimulatory signals preferentially induce CD8+ T cell proliferation and lead to the amplification in vivo of cytotoxic T cell responses. Shuford WW, et al. **J Exp Med** 1997 Jul 7;186(1):47–55

TNF receptor-2-triggered apoptosis is associated with the down-regulation of Bcl-xL on activated T cells and can be prevented by CD28 costimulation. Lin RH, et al. **J Immunol** 1997 Jan 15;158(2):598–603

IL-2 and TNF receptors as targets of regulatory T-T interactions: isolation and characterization of cytokine receptor-reactive T cell lines in the Lewis rat. Mor F, et al. **J Immunol** 1996 Dec 1;157(11):4855–61

TNF receptor p55 controls early acute graft-versus-host disease. Speiser DE, et al. **J Immunol** 1997 Jun 1; 158(11):5185–90

TNF receptors in murine Candida albicans infection: evidence for an important role of TNF receptor p55 in antifungal defense. Steinshamn S, et al. **J Immunol** 1996 Sep 1;157(5):2155–9

Enhancement of TNF receptor p60-mediated cytotoxicity by TNF receptor p80: requirement of the TNF receptor-associated factor-2 binding site. Weiss T, et al. **J Immunol** 1997 Mar 1;158(5):2398–404

V beta CDR3 motifs associated with BP recognition are enriched in OX-40+ spinal cord T cells of Lewis rats with EAE. Buenafe AC, et al. **J Neurosci Res** 1996 Jun 15; 44(6):562–7

Involvement of two types of TNF receptor in TNF-alpha induced neutrophil apoptosis. Gon S, et al. **Microbiol Immunol** 1996;40(6):463–5

Monoclonal antibodies against the 4-1BB T-cell activation molecule eradicate established tumors. Melero I, et al. **Nat Med** 1997 Jun;3(6):682–5

Cytokines, viruses and macrophages: an interactive network. An immune dysregulation involving the members of the tumor necrosis factor (TNF) receptor superfamily could be critical in AIDS pathogenesis. Herbein G. **Pathol Biol (Paris)** 1997 Feb;45(2):115–25 (127 ref.)

The epitopes for natural polyreactive antibodies are rich in proline. Tchernychev B, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6335–9

[The TRAF family protein-mediated B cell proliferation signal and the mechanism of LMP1-induced B cell transformation] Inoue J. **Nippon Rinsho** 1997 Feb; 55(2):299–304 (18 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Tumor necrosis factor receptor p55 mediates induction of HIV type 1 expression in chronically infected U1 cells. Edfjäll C, et al. **AIDS Res Hum Retroviruses** 1996 Feb 10;12(3):199–204

Immunolocalization of stromelysin, tumor necrosis factor (TNF) alpha, and TNF receptors in atrophied canine articular cartilage treated with hyaluronic acid and transforming growth factor beta. Comer JS, et al. **Am J Vet Res** 1996 Oct;57(10):1488–96

Tumor necrosis factor (TNF) enhances the locomotion of low-density human tonsillar B lymphocytes through the selective triggering of type II receptor. Corcione A, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:364–6

Increased release of the tumour necrosis factor receptor p75 by immortalized human keratinocytes results from an activated shedding mechanism and is not related to augmented steady-state levels of p75 mRNA. Neuner P, et al. **Arch Dermatol Res** 1996 Oct;288(11):691–6

Soluble TNF alpha receptors are increased in chronic renal insufficiency and hemodialysis and inhibit neutrophil priming by TNF alpha. Ward R, et al. **Artif Organs** 1996 May;20(5):390–5

Effect of a recombinant dimeric tumor necrosis factor receptor on inflammatory responses to intravenous endotoxin in normal humans. van der Poll T, et al. **Blood** 1997 May 15;89(10):3727–34

Expression and modulation of cellular receptors for interferon-gamma, tumour necrosis factor, and Fas on human bone marrow CD34+ cells. Sato T, et al. **Br J Haematol** 1997 May;97(2):356–65

Distribution of tumor necrosis factor receptor messenger RNA in normal and herpes simplex virus infected trigeminal ganglia in the mouse. Cunningham ET Jr, et al. **Brain Res** 1997 May 30;758(1-2):99–106

Tumor necrosis factor receptors in the pituitary cells. Kobayashi H, et al. **Brain Res** 1997 May 30;758(1-2):45–50

FAN, a novel WD-repeat protein, couples the p55 TNF-receptor to neutral sphingomyelinase. Adam-Klages S, et al. **Cell** 1996 Sep 20;86(6):937–47

Serum levels of IL-10, IL-15 and soluble tumour necrosis factor-alpha (TNF-alpha) receptors in type C chronic liver disease. Kakumu S, et al. **Clin Exp Immunol** 1997 Sep; 109(3):458–63

Transducing signals of life and death. Yuan J. **Curr Opin Cell Biol** 1997 Apr;9(2):247–51 (31 ref.)

Long-term protection against the effects of tumour necrosis factor by controlled delivery of the soluble p55 TNF receptor. Eliaz R, et al. **Cytokine** 1996 Jun;8(6):482–7

A physicochemical modelling approach for estimating the stability of soluble receptor-bound tumour necrosis factor-alpha. Ramanathan M. **Cytokine** 1997 Jan;9(1):19–26

Release of soluble tumour necrosis factor alpha receptors during and after paediatric cardiopulmonary bypass. Correlation with haemodynamic and clinical variables. Saatvedt K, et al. **Cytokine** 1996 Dec;8(12):944–8

Tumor necrosis factor alpha-induced activation of c-jun N-terminal kinase is mediated by TRAF2. Reinhard C, et al. **EMBO J** 1997 Mar 3;16(5):1080–92

RIP mediates tumor necrosis factor receptor 1 activation of NF-kappaB but not Fas/APO-1-initiated apoptosis. Ting AT, et al. **EMBO J** 1996 Nov 15;15(22):6189–96

Production of prostaglandin E2 and collagenase is inhibited by the recombinant soluble tumour necrosis factor receptor p55-human gamma 3 fusion protein at concentrations a hundred-fold lower than those decreasing T cell activation. Nicod LP, et al. **Eur Cytokine Netw** 1996 Dec;7(4):757–63

Soluble tumour necrosis factor receptor release after anti-CD3 monoclonal antibody treatment in mice is independent of tumour necrosis factor-alpha release. Vossen AC, et al. **Eur Cytokine Netw** 1996 Dec;7(4):751–5

Expression and cleavage of tumor necrosis factor-alpha and tumor necrosis factor receptors by human monocytic cell lines upon direct contact with stimulated T cells. Vey E, et al. **Eur J Immunol** 1996 Oct;26(10):2404–9

Soluble tumor necrosis factor receptors are present in human vitreous and shed by retinal pigment epithelial cells. Sippy BD, et al. **Exp Eye Res** 1996 Sep;63(3):311–7

The p80 TNF receptor-associated kinase (p80TRAK) associates with residues 354–397 of the p80 cytoplasmic domain: similarity to casein kinase. Darnay BG, et al. **FEBS Lett** 1997 Apr 7;406(1-2):101–5

Inhibition of protein tyrosine phosphatases causes phosphorylation of tyrosine-331 in the p60 TNF receptor

and inactivates the receptor-associated kinase. Darnay BG, et al. **FEBS Lett** 1997 Jun 30;410(2-3):361-7

IgG immunoglobulins induce activation of the sphingomyelin cycle in HL-60 cells. Glick D, et al. **FEBS Lett** 1996 Oct 7;394(3):237-40

Cell death induction by receptors of the TNF family: towards a molecular understanding. Wallach D, et al. **FEBS Lett** 1997 Jun 23;410(1):96-106 (155 ref.)

Localization of tumor necrosis factor receptor messenger RNA in normal and herpes simplex virus-infected mouse eyes. Cunningham ET Jr, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):9-15

A novel interaction between the juxtamembrane region of the p55 tumor necrosis factor receptor and phosphatidylinositol-4-phosphate 5-kinase. Castellino AM, et al. **J Biol Chem** 1997 Feb 28;272(9):5861-70

ATAR, a novel tumor necrosis factor receptor family member, signals through TRAF2 and TRAF5. Hsu H, et al. **J Biol Chem** 1997 May 23;272(21):13471-4

A novel family of viral death effector domain-containing molecules that inhibit both CD-95- and tumor necrosis factor receptor-1-induced apoptosis. Hu S, et al. **J Biol Chem** 1997 Apr 11;272(15):9621-4

Analysis of 4-1BBL and laminin binding to murine 4-1BB, a member of the tumor necrosis factor receptor superfamily, and comparison with human 4-1BB. Loo DT, et al. **J Biol Chem** 1997 Mar 7;272(10):6448-56

Lymphotoxin beta receptor triggering induces activation of the nuclear factor kappaB transcription factor in some cell types. Mackay F, et al. **J Biol Chem** 1996 Oct 4; 271(40):24934-8

Herpesvirus entry mediator, a member of the tumor necrosis factor receptor (TNFR) family, interacts with members of the TNFR-associated factor family and activates the transcription factors NF-kappaB and AP-1. Marsters SA, et al. **J Biol Chem** 1997 May 30;272(22):14029-32

Ligand-induced formation of p55 and p75 tumor necrosis factor receptor heterocomplexes on intact cells. Pinckard JK, et al. **J Biol Chem** 1997 Apr 18;272(16):10784-9

MADD, a novel death domain protein that interacts with the type 1 tumor necrosis factor receptor and activates mitogen-activated protein kinase. Schievella AR, et al. **J Biol Chem** 1997 May 2;272(18):12069-75

Affinity and kinetics of the interaction between soluble trimeric OX40 ligand, a member of the tumor necrosis factor superfamily, and its receptor OX40 on activated T cells. Al-Shamkhani A, et al. **J Biol Chem** 1997 Feb 21; 272(8):5275-82

Serine/threonine kinase activity associated with the cytoplasmic domain of the lymphotoxin-beta receptor in HepG2 cells. Wu MY, et al. **J Biol Chem** 1997 Jul 4; 272(27):17154-9

Regulation of the release of tumour necrosis factor (TNF)alpha and soluble TNF receptor by gamma irradiation and interferon gamma in Ewing's sarcoma/peripheral primitive neuroectodermal tumour cells. van Valen F, et al. **J Cancer Res Clin Oncol** 1997; 123(5):245-52

Induced expression of trimerized intracellular domains of the human tumor necrosis factor (TNF) p55 receptor elicits TNF effects. Vandevoorde V, et al. **J Cell Biol** 1997 Jun 30;137(7):1627-38

Tumor necrosis factor priming of peripheral blood neutrophils from rheumatoid arthritis patients. Kowanko IC, et al. **J Clin Immunol** 1996 Jul;16(4):216-21

Soluble tumor necrosis factor receptor inhibits interleukin 12 production by stimulated human adult microglial cells in vitro. Becher B, et al. **J Clin Invest** 1996 Oct 1; 98(7):1539-43

TRAF-interacting protein (TRIP): a novel component of the tumor necrosis factor receptor (TNFR)- and CD30-TRAF signaling complexes that inhibits TRAF2-mediated NF-kappaB activation. Lee SY, et al. **J Exp Med** 1997 Apr 7;185(7):1275-85

Activation of the lymphotoxin beta receptor by cross-linking induces chemokine production and growth arrest in A375 melanoma cells. Degli-Esposti MA, et al. **J Immunol** 1997 Feb 15;158(4):1756-62

Two-hybrid cloning of a gene encoding TNF receptor-associated protein 2, a protein that interacts with the intracellular domain of the type 1 TNF receptor: identity with subunit 2 of the 26S protease. Dunbar JD, et al. **J Immunol** 1997 May 1;158(9):4252-9

Regulation of surface and soluble TNF receptor expression on human monocytes and synovial fluid macrophages by IL-4 and IL-10. Hart PH, et al. **J Immunol** 1996 Oct 15; 157(8):3672-80

Attenuation of collagen-induced arthritis in 55-kDa TNF receptor type 1 (TNFR1)-IgG1-treated and TNFR1-deficient mice. Mori L, et al. **J Immunol** 1996 Oct 1;157(7):3178-82

Protection against Fas/APO-1- and tumor necrosis factor-mediated cell death by a novel protein, sentrin. Okura T, et al. **J Immunol** 1996 Nov 15;157(10):4277-81

Constitutive shedding of both p55 and p75 murine TNF receptors in vivo. Pinckard JK, et al. **J Immunol** 1997 Apr 15;158(8):3869-73

Mutational analysis of the ligand-binding domain of M-T2 protein, the tumor necrosis factor receptor homologue of myxoma virus. Schreiber M, et al. **J Immunol** 1996 Nov 15;157(10):4486-95

Down-regulation of surface receptors for TNF and IL-1 on circulating monocytes and granulocytes during human endotoxemia: effect of neutralization of endotoxin-induced TNF activity by infusion of a recombinant dimeric TNF receptor. van der Poll T, et al. **J Immunol** 1997 Feb 1; 158(3):1490-7

Identification of p55 tumor necrosis factor receptor-associated proteins that couple to signaling pathways not initiated by the death domain. Adam D, et al. **J Inflamm** 1995-96;47(1-2):61-6 (35 ref.)

Cytokine priming reduces dependence on TNF-R2 for TNF-alpha-mediated induction of macrophage nitric oxide generation. Miller AR, et al. **J Interferon Cytokine Res** 1996 Dec;16(12):1055-63

Seeing double: crystal structures of the type I TNF receptor. Naismith JH, et al. **J Mol Recognit** 1996 Mar-Apr; 9(2):113-7

Differential expression, cytokine modulation, and specific functions of type-1 and type-2 tumor necrosis factor receptors in rat glia. Dopp JM, et al. **J Neuroimmunol** 1997 May;75(1-2):104-12

Multiple sclerosis: prospective analysis of TNF-alpha and 55 kDa TNF receptor in CSF and serum in correlation with clinical and MRI activity. Spuler S, et al. **J Neuroimmunol** 1996 May;66(1-2):57-64

T-cell tumour necrosis factor-alpha receptor binding in demented patients. Bongioanni P, et al. **J Neurol** 1997 Jul; 244(7):418-25

Cerebrospinal fluid levels of soluble tumour necrosis factor receptor in acute encephalitis. Ichiyama T, et al. **J Neurol** 1996 Jun;243(6):457-60

T-lymphocyte tumor necrosis factor-alpha receptor binding in patients with Parkinson's disease. Bongioanni P, et al. **J Neurol Sci** 1997 Jul;149(1):41-5

Soluble TNF-alpha receptors are constitutively shed and downregulate adhesion molecule expression in malignant gliomas. Chen TC, et al. **J Neuropathol Exp Neurol** 1997 May;56(5):541-50

Development of a novel TNF alpha ligand-receptor binding assay for screening NATCHEM Libraries. MacAllan D, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):521-9

In vitro modulation of cytokine, cytokine inhibitor, and prostaglandin E release from blood mononuclear cells and synovial fibroblasts by antirheumatic drugs. Seitz M, et al. **J Rheumatol** 1997 Aug;24(8):1471-6

Comparative analysis identifies conserved tumor necrosis factor receptor-associated factor 3 binding sites in the human and simian Epstein-Barr virus oncogene LMP1. Franken M, et al. **J Virol** 1996 Nov;70(11):7819-26

Hepatitis C virus core protein interacts with the cytoplasmic tail of lymphotoxin-beta receptor. Matsumoto M, et al. **J Virol** 1997 Feb;71(2):1301-9

Distinct domains of M-T2, the myxoma virus tumor necrosis factor (TNF) receptor homolog, mediate extracellular TNF binding and intracellular apoptosis inhibition. Schreiber M, et al. **J Virol** 1997 Mar;71(3):2171-81

Glycoprotein D of herpes simplex virus (HSV) binds directly to HVEM, a member of the tumor necrosis factor receptor superfamily and a mediator of HSV entry. Whitbeck JC, et al. **J Virol** 1997 Aug;71(8):6083-93

Elevated levels of type II soluble tumor necrosis factor receptors in the bronchoalveolar lavage fluids of patients with sarcoidosis. Hino T, et al. **Lung** 1997;175(3):187-93

The TNF-ligand and receptor superfamilies: controllers of immunity and the Trojan horses of autoimmune disease? Hill CM, et al. **Mol Aspects Med** 1996 Oct;17(5):455-509 (240 ref.)

The influence of membrane fluidity, TNF receptor binding, cAMP production and GTPase activity on macrophage cytokine production in rats fed a variety of fat diets. Tappia PS, et al. **Mol Cell Biochem** 1997 Jan;166(1-2):135-43

TNF-alpha up-regulates renal MIF expression in rat crescentic glomerulonephritis. Lan HY, et al. **Mol Med** 1997 Feb;3(2):136-44

The 55-kD tumor necrosis factor receptor and CD95 independently signal murine hepatocyte apoptosis and subsequent liver failure. Leist M, et al. **Mol Med** 1996 Jan; 2(1):109-24

TNF receptor fusion protein in rheumatoid arthritis [news] O'Brien C. **Mol Med Today** 1996 Jul;2(7):269

T-cell tumor necrosis factor-alpha receptor binding in patients with multiple sclerosis. Bongioanni P, et al. **Neurology** 1997 Apr;48(4):826-31

Subacute sclerosing panencephalitis [letter; comment] Ichiyama T, et al. **Neurology** 1997 Apr;48(4):1142-3. Comment on: Neurology 1994 Apr;44(4):710-5.

Death effector domain-containing herpesvirus and poxvirus proteins inhibit both Fas- and TNFR1-induced apoptosis. Bertin J, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1172-6

Peyer's patch organogenesis is intact yet formation of B lymphocyte follicles is defective in peripheral lymphoid organs of mice deficient for tumor necrosis factor and its 55-kDa receptor [published erratum appears in Proc Natl Acad Sci U S A 1997 Aug 19;94(17):9510] Pasparakis M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6319-23

CD30 induction of human immunodeficiency virus gene transcription is mediated by TRAF2. Tsitsikov EN, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1390-5

Initiation of liver growth by tumor necrosis factor: deficient liver regeneration in mice lacking type I tumor necrosis factor receptor. Yamada Y, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1441-6

How TRAIL kills cancer cells, but not normal cells [news; comment] Gura T. **Science** 1997 Aug 8;277(5327):768. Comment on: Science 1997 Aug 8;277(5327):815-8. Comment on: Science 1997 Aug 8;277(5327):818-21.

Activation of SAPK/JNK by TNF receptor 1 through a noncytotoxic TRAF2-dependent pathway. Natoli G, et al. **Science** 1997 Jan 10;275(5297):200-3

The receptor for the cytotoxic ligand TRAIL. Pan G, et al. **Science** 1997 Apr 4;276(5309):111-3

An antagonist decoy receptor and a death domain-containing receptor for TRAIL [see comments] Pan G, et al. **Science** 1997 Aug 8;277(5327):815-8. Comment in: Science 1997 Aug 8;277(5327):768.

Ultraviolet light and osmotic stress: activation of the JNK cascade through multiple growth factor and cytokine receptors. Rosette C, et al. **Science** 1996 Nov 15; 274(5290):1194-7

Control of TRAIL-induced apoptosis by a family of signaling and decoy receptors [see comments] Sheridan JP, et al. **Science** 1997 Aug 8;277(5327):818-21. Comment in: Science 1997 Aug 8;277(5327):768.

NF-AT activation induced by a CAML-interacting member of the tumor necrosis factor receptor superfamily. von Bülow GU, et al. **Science** 1997 Oct 3;278(5335):138-41

The CD95 system and the death of a lymphocyte. Matiba B, et al. **Semin Immunol** 1997 Feb;9(1):59-68 (108 ref.)

A membrane TNF-alpha/TNFR ratio correlates to MODS score and mortality. Pellegrini JD, et al. **Shock** 1996 Dec; 6(6):389-96

PHYSIOLOGY

Inhibition of tumor necrosis factor prevents warming-induced sleep responses in rabbits. Takahashi S, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1325-9

Soluble receptors neutralizing TNF-alpha and IL-1 block stress-triggered murine abortion. Arck PC, et al. **Am J Reprod Immunol** 1997 Mar;37(3):262-6

Soluble tumor necrosis factor alpha receptor prevents decrease of body temperature in mice treated with indomethacin and lipopolysaccharide. Kozak W, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:264-71

Altered acute phase responses to inflammation in IL-1 and TNF receptor knockout mice. Leon LR, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:244-54

Studies on the role of tumor necrosis factor alpha in the responses to bacterial pyrogenic stimuli. Roth J, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:255-63

Structural and biological features of the TNF receptor and TNF ligand superfamilies: interactive signals in the pathobiology of Hodgkin's disease. Gruss HJ, et al. **Ann Oncol** 1996;7 Suppl 4:19-26 (66 ref.)

FasL/Fas and TNF/TNFR interactions in the regulation of immune responses and disease. Lynch DH, et al. **Behring Inst Mitt** 1996 Oct;(97):175-84 (36 ref.)

Exploring cell death mechanisms by analyzing signaling cascades of the TNF/NGF receptor family. Wallach D, et al. **Behring Inst Mitt** 1996 Oct;(97):144-55 (69 ref.)

Expression of the human p55 and p75 tumor necrosis factor receptors in primary villous trophoblasts and their role in cytotoxic signal transduction. Yui J, et al. **Biol Reprod** 1996 Aug;55(2):400-9

Tumour necrosis factor alpha and its soluble receptors parallel clinical disease and autoimmune activity in systemic lupus erythematosus. Studnicka-Benke A, et al. **Br J Rheumatol** 1996 Nov;35(11):1067-74

An endogenous 55 kDa TNF receptor mediates cell death in a neural cell line. Sipe KJ, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):222-32

Dissection of TNF receptor 1 effector functions: JNK activation is not linked to apoptosis while NF-kappaB activation prevents cell death. Liu ZG, et al. **Cell** 1996 Nov 1;87(3):565-76

Apoptosis by death factor. Nagata S. **Cell** 1997 Feb 7; 88(3):355-65 (85 ref.)

Bone morphogenesis and modeling: soluble signals sculpt osteosomes in the solid state [comment] Reddi AH. **Cell** 1997 Apr 18;89(2):159-61 (15 ref.). Comment on: Cell 1997 Apr 18;89(2):309-19.

Low-molecular-weight tumor necrosis factor receptor p55 controls induction of autoimmune heart disease [see comments] Bachmaier K, et al. **Circulation** 1997 Feb 4; 95(3):655-61. Comment in: Circulation 1997 Feb 4;95(3):551-2.

In vivo effects of cytokines on psoriatic skin grafted on nude mice: involvement of the tumour necrosis factor (TNF) receptor. Gilhar A, et al. **Clin Exp Immunol** 1996 Oct; 106(1):134-42

The role of the two TNF receptors in proliferation, NF-kappa B activation and discrimination between TNF and LT alpha signalling in the human myeloma cell line OH-2. Börset M, et al. **Cytokine** 1996 Jun;8(6):430-8

Ligand passing by the p75 tumour necrosis factor receptor enhances HIV-1 activation. Butera ST, et al. **Cytokine** 1996 Oct;8(10):745-50

The potential biological and clinical significance of the soluble tumor necrosis factor receptors. Aderka D. **Cytokine Growth Factor Rev** 1996 Oct;7(3):231-40 (106 ref.)

Tumor necrosis factors in 1996. Pfizenmaier K, et al. **Cytokine Growth Factor Rev** 1996 Oct;7(3):271-7

Suicide by order: some open questions about the cell-killing activities of the TNF ligand and receptor families. Wallach

D. **Cytokine Growth Factor Rev** 1996 Oct;7(3):211–21 (133 ref.)

TNF–alpha stimulates glucose uptake in L6 myoblasts. Yamasaki H, et al. **Diabetes Res Clin Pract** 1996 Apr; 32(1–2):11–8

Tumor necrosis factor (TNF) receptor type 1 (p55) is a main mediator for TNF–alpha–induced skin inflammation. Kondo S, et al. **Eur J Immunol** 1997 Jul;27(7):1713–8

Crucial role of tumor necrosis factor (TNF) receptor 2 and membrane–bound TNF in experimental cerebral malaria. Lucas R, et al. **Eur J Immunol** 1997 Jul;27(7):1719–25

Tumor necrosis factor receptor p55 mediates deletion of peripheral cytotoxic T lymphocytes in vivo. Speiser DE, et al. **Eur J Immunol** 1996 Dec;26(12):3055–60

TRAMP, a novel apoptosis–mediating receptor with sequence homology to tumor necrosis factor receptor 1 and Fas(Apo–1/CD95). Bodmer JL, et al. **Immunity** 1997 Jan;6(1):79–88

M–T2: a poxvirus TNF receptor homologue with dual activities. Sedger L, et al. **Immunol Cell Biol** 1996 Dec; 74(6):538–45 (77 ref.)

Molecular, structural, and biological characteristics of the tumor necrosis factor ligand superfamily. Gruss HJ. **Int J Clin Lab Res** 1996;26(3):143–59 (238 ref.)

Cleavage of PITSLRE kinases by ICE/CASP–1 and CPP32/CASP–3 during apoptosis induced by tumor necrosis factor. Beyaert R, et al. **J Biol Chem** 1997 May 2;272(18):11694–7

Apoptotic activity of REAPER is distinct from signaling by the tumor necrosis factor receptor 1 death domain. Chen P, et al. **J Biol Chem** 1996 Oct 18;271(42):25735–7

Tumor necrosis factor receptors (Tnfr) in mouse fibroblasts deficient in Tnfr1 or Tnfr2 are signaling competent and activate the mitogen–activated protein kinase pathway with differential kinetics. Kalb A, et al. **J Biol Chem** 1996 Nov 8;271(45):28097–104

Fas–associated death domain protein interleukin–1beta–converting enzyme 2 (FLICE2), an ICE/Ced–3 homologue, is proximally involved in CD95– and p55–mediated death signaling. Vincenz C, et al. **J Biol Chem** 1997 Mar 7;272(10):6578–83

TRANCE is a novel ligand of the tumor necrosis factor receptor family that activates c–Jun N–terminal kinase in T cells. Wong BR, et al. **J Biol Chem** 1997 Oct 3; 272(40):25190–4

Transgenic mice expressing soluble tumor necrosis factor–receptor are protected against bone loss caused by estrogen deficiency. Ammann P, et al. **J Clin Invest** 1997 Apr 1;99(7):1699–703

Membrane tumor necrosis factor (TNF) induced cooperative signaling of TNFR60 and TNFR80 favors induction of cell death rather than virus production in HIV–infected T cells. Lazdins JK, et al. **J Exp Med** 1997 Jan 6;185(1):81–90

TNF receptor p55 plays a major role in centrally mediated increases of serum IL–6 and corticosterone after intracerebroventricular injection of TNF. Benigni F, et al. **J Immunol** 1996 Dec 15;157(12):5563–8

Role of IL–12 and 4–1BB ligand in cytokine production by CD28+ and CD28– T cells. Chu NR, et al. **J Immunol** 1997 Apr 1;158(7):3081–9

Activation of the lymphotoxin beta receptor by cross–linking induces chemokine production and growth arrest in A375 melanoma cells. Degli–Esposti MA, et al. **J Immunol** 1997 Feb 15;158(4):1756–62

Signals through 4–1BB are costimulatory to previously activated splenic T cells and inhibit activation–induced cell death. Hurtado JC, et al. **J Immunol** 1997 Mar 15; 158(6):2600–9

TNF initiates E–selectin transcription in human endothelial cells through parallel TRAF–NF–kappa B and TRAF–RAC/CDC42–JNK–c–Jun/ATF2 pathways. Min W, et al. **J Immunol** 1997 Oct 1;159(7):3508–18

Attenuation of collagen–induced arthritis in 55–kDa TNF receptor type 1 (TNFR1)–IgG1–treated and TNFR1–deficient mice. Mori L, et al. **J Immunol** 1996 Oct 1;157(7):3178–82

Corynebacterium parvum– and Mycobacterium bovis bacillus Calmette–Guerin–induced granuloma formation is inhibited in TNF receptor I (TNF–RI) knockout mice and by treatment with soluble TNF–RI. Senaldi G, et al. **J Immunol** 1996 Dec 1;157(11):5022–6

Enhancement of TNF receptor p60–mediated cytotoxicity by TNF receptor p80: requirement of the TNF receptor–associated factor–2 binding site. Weiss T, et al. **J Immunol** 1997 Mar 1;158(5):2398–404

Pretreatment with a 55–kDa tumor necrosis factor receptor–immunoglobulin fusion protein attenuates activation of coagulation, but not of fibrinolysis, during lethal bacteremia in baboons. van der Poll T, et al. **J Infect Dis** 1997 Jul;176(1):296–9

Tumor necrosis factor (TNF)–induced cutaneous necrosis is mediated by TNF receptor 1. Amar S, et al. **J Inflamm** 1995–96;47(4):180–9

How do tumor necrosis factor receptors work? Bazzoni F, et al. **J Inflamm** 1995;45(4):221–38 (139 ref.)

Cellular and molecular mechanisms of TNF protection in septic peritonitis. Echtenacher B, et al. **J Inflamm** 1995–96; 47(1–2):85–9 (24 ref.)

Tumor necrosis factor (TNF) receptors in cellular signaling of soluble and membrane–expressed TNF. Grell M. **J Inflamm** 1995–96;47(1–2):8–17 (28 ref.)

Proinflammatory responses are efficiently induced by homotrimeric but not heterotrimeric lymphotoxin ligands. Hochman PS, et al. **J Inflamm** 1995–96;46(4):220–34

Induction of cell death by myristylated death domain of p55 TNF receptor is not abolished by Iprcg–like point mutation in death domain. Kim CH, et al. **J Inflamm** 1995; 45(4):312–22

Tumor necrosis factor receptor–1 signaling is required for differentiation of follicular dendritic cells, germinal center formation, and full antibody responses. Le Hir M, et al. **J Inflamm** 1995–96;47(1–2):76–80

In vitro comparison of inhibiting ability of soluble TNF receptor p75 (TBP II) vs. soluble TNF receptor p55 (TBP I) against TNF–alpha and TNF–beta. Terlizzese M, et al. **J Interferon Cytokine Res** 1996 Dec;16(12):1047–53

Evidence for exclusive role of the p55 tumor necrosis factor (TNF) receptor in mediating the TNF–induced collagenase expression by human dermal fibroblasts. Rekdal O, et al. **J Invest Dermatol** 1996 Oct;107(4):565–8

Monocytic differentiation modulates apoptotic response to cytotoxic anti–Fas antibody and tumor necrosis factor alpha in human monoblast U937 cells. Kikuchi H, et al. **J Leukoc Biol** 1996 Dec;60(6):778–83

TNF receptors in the microvascular pathology of acute respiratory distress syndrome and cerebral malaria. Lucas R, et al. **J Leukoc Biol** 1997 May;61(5):551–8 (65 ref.)

TGF–B2 and soluble p55 TNFR modulate VCAM–1 expression in glioma cells and brain derived endothelial cells. Chen TC, et al. **J Neuroimmunol** 1997 Mar; 73(1–2):155–61

Differential expression, cytokine modulation, and specific functions of type–1 and type–2 tumor necrosis factor receptors in rat glia. Dopp JM, et al. **J Neuroimmunol** 1997 May;75(1–2):104–12

TNF–alpha receptor fusion protein prevents experimental auto–immune encephalomyelitis and demyelination in Lewis rats: an overview. Klinkert WE, et al. **J Neuroimmunol** 1997 Feb;72(2):163–8 **(44 ref.)**

Respective role of TNF receptors in the development of experimental cerebral malaria. Lucas R, et al. **J Neuroimmunol** 1997 Feb;72(2):143–8

Soluble TNF–alpha receptors are constitutively shed and downregulate adhesion molecule expression in malignant gliomas. Chen TC, et al. **J Neuropathol Exp Neurol** 1997 May;56(5):541–50

55– and 75–kilodalton tumor necrosis factor receptors mediate distinct actions in regard to human immunodeficiency virus type 1 replication in primary human macrophages. Herbein G, et al. **J Virol** 1997 May; 71(5):4150–6

Apoptosis. Placing death under control [news; comment] Wallach D. **Nature** 1997 Jul 10;388(6638):123, 125–6. Comment on: Nature 1997 Jul 10;388(6638):190–5.

Epstein–Barr virus–encoded LMP1 and CD40 mediate IL–6 production in epithelial cells via an NF–kappaB pathway involving TNF receptor–associated factors. Eliopoulos AG, et al. **Oncogene** 1997 Jun 19;14(24):2899–916

A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptor–induced apoptosis. Nocentini G, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6216–21

The tumor necrosis factor receptor 2 signal transducers TRAF2 and c–IAP1 are components of the tumor necrosis factor receptor 1 signaling complex. Shu HB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13973–8

Lymphotoxin–beta receptor signaling complex: role of tumor necrosis factor receptor–associated factor 3 recruitment in cell death and activation of nuclear factor kappaB. VanArsdale TL, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2460–5

TNF–mediated cytotoxicity and resistance in human prostate cancer cell lines. Nakajima Y, et al. **Prostate** 1996 Nov; 29(5):296–302

Biological effects and fate of a soluble, dimeric, 80–kDa tumor necrosis factor receptor in renal transplant recipients who receive OKT3 therapy. Wee S, et al. **Transplantation** 1997 Feb 27;63(4):570–7

RECEPTORS, UROGASTRONE see **RECEPTORS, EPIDERMAL GROWTH FACTOR–UROGASTRONE**

RECEPTORS, V1 see **RECEPTORS, VASOPRESSIN**

RECEPTORS, V2 see **RECEPTORS, VASOPRESSIN**

RECEPTORS, VASOACTIVE INTESTINAL PEPTIDE

ANALYSIS

Functional and molecular characterization of VIP receptors and signal transduction in human and rodent immune systems. Calvo JR, et al. **Adv Neuroimmunol** 1996; 6(1):39–47 (52 ref.)

In vitro identification of VIP receptors in human tumors: potential clinical implications. Reubi JC. **Ann N Y Acad Sci** 1996 Dec 26;805:753–9

Brain distribution of vasoactive intestinal peptide receptors following REM sleep deprivation. Jiménez–Anguiano A, et al. **Brain Res** 1996 Jul 22;728(1):37–46

Distribution of the mRNA for a pituitary adenylate cyclase–activating polypeptide receptor in the rat brain: an in situ hybridization study. Hashimoto H, et al. **J Comp Neurol** 1996 Aug 5;371(4):567–77

Vasoactive intestinal peptide and somatostatin receptor scintigraphy for differential diagnosis of hepatic carcinoid metastasis. Kurtaran A, et al. **J Nucl Med** 1997 Jun; 38(6):880–1

123I–vasoactive intestinal peptide (VIP) receptor scanning: update of imaging results in patients with adenocarcinomas and endocrine tumors of the gastrointestinal tract. Virgolini I, et al. **Nucl Med Biol** 1996 Aug;23(6):685–92

The distribution and density of airway vasoactive intestinal polypeptide (VIP) binding sites in cystic fibrosis and asthma. Sharma RK, et al. **Pulm Pharmacol** 1995 Apr–Jun; 8(2–3):91–6

ANTAGONISTS & INHIBITORS

Characterization of VIP receptor–effector system antagonists in rat and mouse peritoneal macrophages. Pozo D, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):379–86

Novel cyclic peptide agonist of high potency and selectivity for the type II vasoactive intestinal peptide receptor. Xia M, et al. **J Pharmacol Exp Ther** 1997 May;281(2):629–33

BIOSYNTHESIS

Mutagenesis of N–glycosylation sites in the human VIP 1 receptor. Couvineau A, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:558–62

Multiple human receptors for pituitary adenylyl cyclase–activating polypeptide and vasoactive intestinal peptide are expressed in a tissue–specific manner. Wei Y, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:624–7

Predominant expression of type II vasoactive intestinal peptide receptors by human T lymphoblastoma cells: transduction of both Ca2+ and cyclic AMP signals. Xia M, et al. **J Clin Immunol** 1996 Jan;16(1):21–30

Pituitary adenylate cyclase–activating polypeptide/vasoactive intestinal polypeptide receptor subtypes are differently expressed in rat transplanted pituitary tumours (SMtTW) and in the normal gland. Vertongen P, et al. **J Mol Endocrinol** 1996 Jun;16(3):239–48

Switches in the expression and function of PACAP and VIP receptors during phenotypic interconversion in human neuroblastoma cells. Lelièvre V, et al. **Neuropeptides** 1996 Aug;30(4):313–22

CHEMISTRY

Characterization of the VIP receptor from SUP T1 lymphoblasts. Robberecht P, et al. **Adv Neuroimmunol** 1996; 6(1):49–57 (58 ref.)

Role of cysteine residues in the N–terminal extracellular domain of the human VIP 1 receptor for ligand binding. A site–directed mutagenesis study. Gaudin P, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:585–9

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP–1, and other members of their new family of G protein–linked receptors: structure–function relationship with special reference to the human VIP–1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94–109; discussion 110–1 (64 ref.)

Aspartate 196 in the first extracellular loop of the human VIP1 receptor is essential for VIP binding and VIP–stimulated cAMP production. Du K, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):289–92

Characterization of the rat vasoactive intestinal polypeptide receptor gene 5' region. Pei L, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):719–23

A disulfide bond between conserved cysteines in the extracellular loops of the human VIP receptor is required for binding and activation. Knudsen SM, et al. **FEBS Lett** 1997 Jul 21;412(1):141–3

[Directed mutagenesis of human recombinant receptors of vasoactive intestinal peptide of VIP1 and VIP2 type. Difference in structure–activity relationship] Nicole P, et al. **Gastroenterol Clin Biol** 1997;21(5):365–9 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Thymosin alpha 1 interacts with the VIP receptor–effector system in rat and mouse immunocompetent cells. Pozo D, et al. **Immunopharmacology** 1996 Sep;34(2–3):113–23

VIP and pituitary adenylate cyclase activating polypeptide (PACAP) have an antiproliferative effect on the T98G human glioblastoma cell line through interaction with VIP2 receptor. Vertongen P, et al. **Neuropeptides** 1996 Oct; 30(5):491–6

The long–acting vasoactive intestinal polypeptide agonist RO 25–1553 is highly selective of the VIP2 receptor subclass. Gourlet P, et al. **Peptides** 1997;18(3):403–8

GENETICS

Expression of vasoactive intestinal polypeptide receptor mRNA and secretory regulation by vasoactive intestinal polypeptide in rat submandibular and sublingual salivary glands. Takai N, et al. **Arch Oral Biol** 1997 Mar; 42(3):197–204

Molecular evolution of vertebrate VIP receptors and functional characterization of a VIP receptor from goldfish Carassius auratus. Chow BK, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):176–85

Chromosomal localization in mouse and human of the vasoactive intestinal peptide receptor type 2 gene: a

possible contributor to the holoprosencephaly 3 phenotype. Mackay M, et al. **Genomics** 1996 Nov 1;37(3):345–53

RDCI, the vasoactive intestinal peptide receptor: a candidate gene for the features of Albright hereditary osteodystrophy associated with deletion of 2q37. Power MM, et al. **J Med Genet** 1997 Apr;34(4):287–90

Distribution of mRNAs for pituitary adenylate cyclase–activating polypeptide (PACAP), PACAP receptor, vasoactive intestinal polypeptide (VIP), and VIP receptors in the rat superior cervical ganglion. Nogi H, et al. **Neurosci Lett** 1997 May 9;227(1):37–40

Differential VIP and VIP1 receptor gene expression in rat thymocyte subsets. Delgado M, et al. **Peptides** 1996; 17(5):803–7

Characterization of gene expression of VIP and VIP1–receptor in rat peritoneal lymphocytes and macrophages. Delgado M, et al. **Regul Pept** 1996 Apr 23; 62(2–3):161–6

METABOLISM

Role of cysteine residues in the N-terminal extracellular domain of the human VIP 1 receptor for ligand binding. A site-directed mutagenesis study. Gaudin P, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:585–9

Establishment of a CHO cell clone stably expressing the recombinant human VIP–1 receptor. Gaudin P, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:570–3

Modulation of cyclic AMP and inositol phosphate production in rat prostatic cultures by VIP/PACAP, ATP, and carbachol: role in prostatic proliferation. Guijarro LG, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:723–8

Growth of the early postimplantation embryo. Regulation by high-affinity, GTP-insensitive VIP receptors. Hill JM, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:174–80

In vitro identification of VIP receptors in human tumors: potential clinical implications. Reubi JC. **Ann N Y Acad Sci** 1996 Dec 26;805:753–9

Aspartate 196 in the first extracellular loop of the human VIP1 receptor is essential for VIP binding and VIP-stimulated cAMP production. Du K, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):289–92

Expression of receptors for gut peptides in human pancreatic adenocarcinoma and tumour–free pancreas. Tang C, et al. **Br J Cancer** 1997;75(10):1467–73

Vasoactive intestinal peptide (VIP) stimulates in vitro growth of VIP–1 receptor–bearing human pancreatic adenocarcinoma–derived cells. Jiang S, et al. **Cancer Res** 1997 Apr 15;57(8):1475–80

Expression of receptors for gut peptides in pancreata of BOP–treated and control hamsters. Tang C, et al. **Carcinogenesis** 1996 Oct;17(10):2171–5

Stable expression of the recombinant human VIP1 receptor in clonal Chinese hamster ovary cells: pharmacological, functional and molecular properties. Gaudin P, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):207–14

A disulfide bond between conserved cysteines in the extracellular loops of the human VIP receptor is required for binding and activation. Knudsen SM, et al. **FEBS Lett** 1997 Jul 21;412(1):141–3

Identification of vasoactive intestinal peptide receptor subtypes in the lacrimal gland and their signal–transducing components. Hodges RR, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):610–9

Tissue specific expression of different human receptor types for pituitary adenylate cyclase activating polypeptide and vasoactive intestinal polypeptide: implications for their role in human physiology. Wei Y, et al. **J Neuroendocrinol** 1996 Nov;8(11):811–7

The effects of ribavirin on the GTP level and the VIP receptor dynamic of human IGR39 cells. Fouchier F, et al. **J Recept Signal Transduct Res** 1996 Jan–Mar; 16(1–2):39–58

Characterization of binding sites for beta-adrenergic agonists and vasoactive intestinal peptide in the rat harderian gland. Guerrero JM, et al. **Microsc Res Tech** 1996 Jun 1; 34(2):139–43

Vasoactive intestinal polypeptide and pituitary adenylate cyclase–activating polypeptide receptor chimeras reveal domains that determine specificity of vasoactive intestinal polypeptide binding and activation. Hashimoto H, et al. **Mol Pharmacol** 1997 Jul;52(1):128–35

Properties of the pituitary adenylate cyclase–activating polypeptide I and II receptors, vasoactive intestinal peptide1, and chimeric amino–terminal pituitary adenylate cyclase–activating polypeptide/vasoactive intestinal peptide1 receptors: evidence for multiple receptor states. Van Rampelbergh J, et al. **Mol Pharmacol** 1996 Dec; 50(6):1596–604

PACAP acts through VIP type 2 receptors in the rat testis. Krempels K, et al. **Neuropeptides** 1995 Dec;29(6):315–20

Decreased absolute levels of ascorbic acid and unaltered vasoactive intestinal polypeptide receptor binding in the frontal cortex in acquired immunodeficiency syndrome. Everall IP, et al. **Neurosci Lett** 1997 Mar 14;224(2):119–22

The C–terminus ends of secretin and VIP interact with the N–terminal domains of their receptors. Gourlet P, et al. **Peptides** 1996;17(5):825–9

The long–acting vasoactive intestinal polypeptide agonist RO 25–1553 is highly selective of the VIP2 receptor subclass. Gourlet P, et al. **Peptides** 1997;18(3):403–8

Characterization of VIP–and helodermin–preferring receptors on rat platelets. Shima K, et al. **Regul Pept** 1996 Jul 5;63(2–3):99–103

PHYSIOLOGY

Functional and molecular characterization of VIP receptors and signal transduction in human and rodent immune systems. Calvo JR, et al. **Adv Neuroimmunol** 1996; 6(1):39–47 (52 ref.)

Dual effects of PACAP on guinea pig gallbladder muscle via PACAP–preferring and VIP/PACAP–preferring receptors. Parkman HP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1433–8

Upregulation of neuropeptides and neuropeptide receptors in a murine model of immune inflammation in lung parenchyma. Kaltreider HB, et al. **Am J Respir Cell Mol Biol** 1997 Feb;16(2):133–44

Pituitary adenylate cyclase–activating polypeptides, PACAP–38 and PACAP–27, regulation of sympathetic neuron catecholamine, and neuropeptide Y expression through activation of type I PACAP/VIP receptor isoforms. Braas KM, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:204–16; discussion 217–8 (47 ref.)

Development of VIP agonists and antagonists with tissue and receptor specificity: effects on behavioral maturation, sexual function, and the biologic clock. Gozes I, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:159–69; discussion 169–71 (60 ref.)

PACAP/VIP receptor subtypes, signal transducers, and effectors in pituitary cells. Hezareh M, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:315–27; discussion 327–8 (41 ref.)

VIP regulation of embryonic growth. Hill JM, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:259–68; discussion 268–9 (23 ref.)

PACAP/VIP receptors in pancreatic beta–cells: their roles in insulin secretion. Inagaki N, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:44–51; discussion 52–3 (23 ref.)

Receptors for VIP, PACAP, secretin, GRF, glucagon, GLP–1, and other members of their new family of G protein–linked receptors: structure–function relationship with special reference to the human VIP–1 receptor. Laburthe M, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:94–109; discussion 110–1 (64 ref.)

Chimaeric VIP2/PACAP receptors reveal that agonist pharmacology but not signal transduction is determined by extracellular domain I. Lutz EM, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:574–8

Phospholipase C activation by VIP1 and VIP2 receptors expressed in COS 7 cells involves a pertussis toxin–sensitive mechanism. MacKenzie CJ, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:579–84

Vasoactive intestinal peptide activates both Gs and Gi in lung. Shreeve SM, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:516–20

VIP and PACAP receptor–mediated actions on cell proliferation and survival. Waschek JA. **Ann N Y Acad Sci** 1996 Dec 26;805:290–300; discussion 300–1 (71 ref.)

The pituitary adenylate cyclase activating polypeptide (PACAP I) and VIP (PACAP II VIP1) receptors stimulate inositol phosphate synthesis in transfected CHO cells through interaction with different G proteins. Van Rampelbergh J, et al. **Biochim Biophys Acta** 1997 Jun 27; 1357(2):249–55

Pituitary adenylate cyclase activating polypeptide (PACAP) and vasoactive intestinal peptide (VIP) stimulate interleukin–6 production through the third subtype of PACAP/VIP receptor in rat bone marrow–derived stromal cells. Cai Y, et al. **Endocrinology** 1997 Jun;138(6):2515–20

The C–terminal part of VIP is important for receptor binding and activation, as evidenced by chimeric constructs of VIP/secretin. Wulff B, et al. **FEBS Lett** 1997 Aug 25; 413(3):405–8

Direct evidence for functional coupling of the vasoactive intestinal peptide receptor to Gi3 in native lung membranes. Diehl NL, et al. **Mol Pharmacol** 1996 Sep;50(3):624–30

Evidence for roles of vasoactive intestinal polypeptide (VIP) and pituitary adenylate cyclase activating polypeptide (PACAP) receptors in modulating the responses of rat dorsal horn neurons to sensory inputs. Dickinson T, et al. **Neuropeptides** 1997 Apr;31(2):175–85

Bicarbonate secretion in the guinea pig duodenum: functional characterization of peptide hormone receptors in duodenal enterocytes. Reimer R, et al. **Pharmacology** 1996 Jun; 52(6):339–46

RECEPTORS, VASOPRESSIN

DuPont Prize for Receptor Research 1996. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):xviii–ix

AGONISTS

Effect of oxytocin as a partial agonist at vasoconstrictor vasopressin receptors on the human isolated uterine artery. Jovanović A, et al. **Br J Pharmacol** 1997 Aug; 121(7):1468–74

Position three in vasopressin antagonist tolerates conformationally restricted and aromatic amino acid substitutions: a striking contrast with vasopressin agonists. Manning M, et al. **J Pept Sci** 1997 Jan–Feb;3(1):31–46

ANALYSIS

Are there oxytocin receptors in the primate brain? Toloczko DM, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:506–9

Vasopressin receptors in the mouse (Mus musculus) brain: sex–related expression in the medial preoptic area and hypothalamus. Dubois–Dauphin M, et al. **Brain Res** 1996 Dec 16;743(1–2):32–9

The human V3 pituitary vasopressin receptor: ligand binding profile and density–dependent signaling pathways. Thibonnier M, et al. **Endocrinology** 1997 Oct; 138(10):4109–22

Appearance of an arginine vasotocin receptor of large molecular size in the uterus (shell gland) of the hen at oviposition. Takahashi T, et al. **J Reprod Fertil** 1997 Jul; 110(2):245–8

ANTAGONISTS & INHIBITORS

The role of vasopressin and angiotensin II in the hemodynamic response to dynamic exercise. Symons JD, et al. **Adv Exp Med Biol** 1995;381:215–21

Vasopressin and V1–receptor antagonists modulate the activity of NTS neurons receiving baroreceptor input. Hegarty AA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R143–52

Modulation of genetic hypertension by short–term AVP V1A or V2 receptor antagonism in young SHR. Naitoh M, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):F229–34

Effects of vasopressin V1–receptor blockade during acute and sustained hypovolemic hypotension. Wall BM, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R356–64

Short–term clinical trial of 1–(1–[4–(3–acetylaminopropoxy)–benzoyl]–4–piperidyl)–3, 4–dihydro–2(1H)–quinolinone in patients with diabetic nephropathy. Possible effectiveness of the specific vasopressin V1 receptor antagonist for reducing albuminuria in patients with non–insulin dependent diabetes mellitus. Nishikawa T, et al. **Arzneimittelforschung** 1996 Sep;46(9):875–8

Effects of SR 49059, an orally active V1a vasopressin receptor antagonist, on vasopressin–induced uterine contractions. Bossmar T, et al. **Br J Obstet Gynaecol** 1997 Apr;104(4):471–7

Central vasopressin blockade enhances its peripheral release in response to peripheral osmotic stimulation in conscious rats. Liu HW, et al. **Brain Res** 1996 May 6;719(1–2):14–22

Pharmacological profile of YM087, a novel nonpeptide dual vasopressin V1A and V2 receptor antagonist, in dogs. Yatsu T, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):225–30

Effect of long–term treatment with selective vasopressin V1 and V2 receptor antagonist on the development of heart failure in rats. Nishikimi T, et al. **J Cardiovasc Pharmacol** 1996 Feb;27(2):275–82

Characterization of SR 121463A, a highly potent and selective, orally active vasopressin V2 receptor antagonist. Serradeil–Le Gal C, et al. **J Clin Invest** 1996 Dec 15; 98(12):2729–38

A diurnal rhythm of stimulatory input to the hypothalamo–pituitary–adrenal system as revealed by timed intrahypothalamic administration of the vasopressin V1 antagonist. Kalsbeek A, et al. **J Neurosci** 1996 Sep 1; 16(17):5555–65 (80 ref.)

Arginine vasopressin receptor antagonists for treatment of vasogenic brain edema: an experimental study. Kagawa M, et al. **J Neurotrauma** 1996 May;13(5):273–9

Position three in vasopressin antagonist tolerates conformationally restricted and aromatic amino acid substitutions: a striking contrast with vasopressin agonists. Manning M, et al. **J Pept Sci** 1997 Jan–Feb;3(1):31–46

Determination of SR 49059 in human plasma and urine by LC–APCI/MS/MS. Burton R, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1913–22

V2 receptor antagonism of DDAVP–induced release of hemostasis factors in conscious dogs. Bernat A, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):597–602

Comparison of the water diuretic activity of kappa receptor agonists and a vasopressin receptor antagonist in dogs. Brooks DP, et al. **J Pharmacol Exp Ther** 1997 Mar; 280(3):1176–83

Pharmacological profile of YM087, a novel potent nonpeptide vasopressin V1A and V2 receptor antagonist, in vitro and in vivo. Tahara A, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):301–8

A new linear V1A vasopressin antagonist and its use in characterizing receptor/G protein interactions. Strakova Z, et al. **Mol Pharmacol** 1997 Feb;51(2):217–24

Influence of blockade of alpha 1–adrenoceptors, beta 1–adrenoceptors and vasopressin V1A receptors on the cardiovascular effects of gamma 2–melanocyte–stimulating hormone (gamma 2–MSH). Van Bergen P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):720–6

Effect of a nonpeptide vasopressin V1 antagonist (OPC–21268) on experimental accelerated focal glomerulosclerosis. Kurihara I, et al. **Nephron** 1996; 73(4):629–36

In vitro macro– and microautoradiographic localization of V1 and V2 receptors in the rat kidney using OPC–21268 and OPC–31260. Mimura Y, et al. **Nephron** 1997; 76(3):331–6

Probing the V1a vasopressin receptor binding site with pyroglutamate–substituted linear antagonists. Howl J, et

al. **Neuropeptides** 1996 Feb;30(1):73–9
Release of vasopressin within the rat suprachiasmatic nucleus: no effect of a V1/V2 antagonist. Kubota M, et al. **Neuroreport** 1996 Aug 12;7(12):1933–6
SIADH and other hyponatremic disorders: diagnosis and therapeutic problems. Saito T. **Nippon Jinzo Gakkai Shi** 1996 Oct;38(10):429–34 (22 ref.)
Synthesis and in vivo testing of a potential aquaretic agent. Kunick C, et al. **Pharmazie** 1996 Aug;51(8):601–2
Hemodynamic and metabolic effects of vasopressin blockade in endotoxin shock. Matsuoka T, et al. **Surgery** 1997 Feb; 121(2):162–73
[Aquaretic drugs—a new therapeutic principle in treatment of hyponatremia?] Hensen J, et al. **Fortschr Med** 1997 Jun 20;115(17):46–50 (Eng. Abstr.) **(Ger)**
[Aquaretic agents] Bosch-Marcé M, et al. **Gastroenterol Hepatol** 1996 Nov;19(9):472–7 (55 ref.) **(Spa)**

BIOSYNTHESIS

Localization of the vasopressin V1a and V2 receptors within the renal cortical and medullary circulation. Park F, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R243–51
Localization of V1a vasopressin receptor mRNA expression in cultured neurons, astroglia, and oligodendroglia of rat cerebral cortex. Yamazaki RS, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):138–40
Regulation of pituitary vasopressin V1b receptor mRNA during stress in the rat. Rabadan-Diehl C, et al. **J Neuroendocrinol** 1995 Dec;7(12):903–10
A fully active nonglycosylated V2 vasopressin receptor. Innamorati G, et al. **Mol Pharmacol** 1996 Sep;50(3):467–73
Evidence for expression of vasopressin V2 receptor mRNA in human lung. Fay MJ, et al. **Peptides** 1996;17(3):477–81

CHEMISTRY

Identification of a single residue responsible for agonist selectivity in the oxytocin-vasopressin receptors. Chini B, et al. **Ann N Y Acad Sci** 1997 May 30;812:218–21
Efficient photoaffinity labeling of the rat V1a vasopressin receptor using a linear azidopeptidic antagonist. Carnazzi E, et al. **Eur J Biochem** 1997 Aug 1;247(3):906–13
Molecular weight determination of the hepatic vasopressin receptor with a high-affinity photoprobe. Barbeau D, et al. **Int J Pept Protein Res** 1996 Oct;48(4):364–73
Synthetic rat V1a vasopressin receptor fragments interfere with vasopressin binding via specific interaction with the receptor. Mendre C, et al. **J Biol Chem** 1997 Aug 22; 272(34):21027–36
[Structure, function and abnormality of ADH receptors] Okada K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:491–4 (22 ref.) **(Jpn)**

CLASSIFICATION

Receptor subtype for vasopressin-induced release of nitric oxide from rat kidney. Hirata Y, et al. **Hypertension** 1997 Jan;29(1 Pt 1):58–64

DRUG EFFECTS

1-desamino-8-D-arginine vasopressin (DDAVP) as an agonist on V1b vasopressin receptor. Saito M, et al. **Biochem Pharmacol** 1997 Jun 1;53(11):1711–7
Mechanism of enhanced vasoconstrictor hormone action in vascular smooth muscle cells by cyclosporin A. Lo Russo A, et al. **Br J Pharmacol** 1997 May;121(2):248–52
Glucocorticoid regulation of vasopressin V1a receptors in rat forebrain. Watters JJ, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):276–84
Evidence in hyponatremia related to inappropriate secretion of ADH that V1 receptor stimulation contributes to the increase in renal uric acid clearance. Decaux G, et al. **J Am Soc Nephrol** 1996 May;7(5):805–10
Respiration during acute hypoxia: angiotensin- and vasopressin-receptor blocks. Overgaard CB, et al. **J Appl Physiol** 1996 Mar;80(3):810–7
Arginine vasopressin inhibits interleukin-1 beta-stimulated nitric oxide and cyclic guanosine monophosphate production via the V1 receptor in cultured rat vascular smooth muscle cells. Kusano E, et al. **J Hypertens** 1997 Jun;15(6):627–32
Surprising pharmacological activity of analogues designed by substitution of position 3 in arginine vasopressin (AVP) and 8-D-arginine vasopressin with L-2-napthylalanine. Lammek B, et al. **J Pharm Pharmacol** 1996 Mar;48(3):316–9

GENETICS

Vasopressin V2 receptor mRNA expression and cAMP accumulation in aging rat kidney. Klingler C, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1775–82
Molecular and cellular defects in nephrogenic diabetes insipidus. Knoers NV, et al. **Curr Opin Nephrol Hypertens** 1996 Jul;5(4):353–8 (43 ref.)
Molecular and functional characterization of V1b vasopressin receptor in rat adrenal medulla. Grazzini E, et al. **Endocrinology** 1996 Sep;137(9):3906–14
Analysis of vasopressin receptor type II (V2R) gene in three Japanese pedigrees with congenital nephrogenic diabetes insipidus: identification of a family with complete deletion of the V2R gene. Jinnouchi H, et al. **Eur J Endocrinol** 1996 Jun;134(6):689–98
Identification and analysis of expression of human VACM-1, a cullin gene family member located on chromosome 11q22-23 [letter] Byrd PJ, et al. **Genome Res** 1997 Jan; 7(1):71–5
Structure, sequence, expression, and chromosomal localization of the human V1a vasopressin receptor gene. Thibonnier M, et al. **Genomics** 1996 Feb 1;31(3):327–34
V3 vasopressin receptor and corticotropic phenotype in pituitary and nonpituitary tumors. de Keyzer Y, et al. **Horm Res** 1997;47(4–6):259–62 (18 ref.)
Two novel mutations in the aquaporin-2 and the vasopressin V2 receptor genes in patients with congenital nephrogenic diabetes insipidus. Oksche A, et al. **Hum Genet** 1996 Nov; 98(5):587–9
Functional characterization of five V2 vasopressin receptor gene mutations. Wenkert D, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):43–50
An X-linked NDI mutation reveals a requirement for cell surface V2R expression. Sadeghi HM, et al. **Mol Endocrinol** 1997 Jun;11(6):706–13
Vasopressin V2 receptor mutants that cause X-linked nephrogenic diabetes insipidus: analysis of expression, processing, and function. Oksche A, et al. **Mol Pharmacol** 1996 Oct;50(4):820–8
Six novel mutations in the vasopressin V2 receptor gene causing nephrogenic diabetes insipidus. Cheong HI, et al. **Nephron** 1997;75(4):431–7
Evidence for glucocorticoid regulation of the rat vasopressin V1a receptor gene. Watters JJ, et al. **Peptides** 1996; 17(1):67–73

METABOLISM

Evidence for dual signaling pathways for V2 vasopressin receptor in rat inner medullary collecting duct. Ecelbarger CA, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):F623–33
Developmental changes in forebrain vasopressin receptor binding in prairie voles (Microtus ochrogaster) and montane voles (Microtus montanus). Wang Z, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:510–3
Effects of SR 49059, an orally active V1a vasopressin receptor antagonist, on vasopressin-induced uterine contractions. Bossmar T, et al. **Br J Obstet Gynaecol** 1997 Apr;104(4):471–7
Functional evidence for the regulation of cytosolic Ca2+ activity via V1A-receptors and beta-adrenoceptors in rat CCD. Ankorina-Stark I, et al. **Cell Calcium** 1997 Feb; 21(2):163–71
Vasopressin and oxytocin receptors in the central nervous system. Barberis C, et al. **Crit Rev Neurobiol** 1996; 10(1):119–54 (287 ref.)
Molecular and functional characterization of V1b vasopressin receptor in rat adrenal medulla. Grazzini E, et al. **Endocrinology** 1996 Sep;137(9):3906–14
The human V3 pituitary vasopressin receptor: ligand binding profile and density-dependent signaling pathways. Thibonnier M, et al. **Endocrinology** 1997 Oct; 138(10):4109–22
Ectopic expression of the pituitary V3 vasopressin receptor reveals new aspects of the ectopic ACTH syndrome. Bertherat J. **Eur J Endocrinol** 1996 Aug;135(2):173–4
Age-related postreceptor mechanisms: changes in adenylate cyclase but not phosphodiesterase in isolated mouse renal medullary collecting ducts. Davidson YS, et al. **Exp Gerontol** 1995 Nov-Dec;30(6):594–604
Role of protein kinase C and carboxyl-terminal region in acute desensitization of vasopressin V1a receptor. Ancellin N, et al. **FEBS Lett** 1997 Aug 18;413(2):323–6
Migraine patients show increased platelet vasopressin receptors. Buschmann J, et al. **Headache** 1996 Nov-Dec; 36(10):586–8
Renal immunocytochemical distribution and pharmacological properties of the dual angiotensin II/AVP receptor. Gonzalez CB, et al. **Hypertension** 1997 Apr;29(4):957–61
Phosphorylation of the V2 vasopressin receptor. Innamorati G, et al. **J Biol Chem** 1997 Jan 24;272(4):2486–92
Genetic analysis of receptor-Galphaq coupling selectivity. Kostenis E, et al. **J Biol Chem** 1997 Sep 19; 272(38):23675–81
Separate agonist and peptide antagonist binding sites of the oxytocin receptor defined by their transfer into the V2 vasopressin receptor. Postina R, et al. **J Biol Chem** 1996 Dec 6;271(49):31593–601
Membrane targeting and determination of transmembrane topology of the human vasopressin V2 receptor. Schülein R, et al. **J Biol Chem** 1996 Nov 15;271(46):28844–52
Species differences in vasopressin receptor binding are evident early in development: comparative anatomic studies in prairie and montane voles. Wang Z, et al. **J Comp Neurol** 1997 Feb 24;378(4):535–46
Arginine vasopressin inhibits interleukin-1 beta-stimulated nitric oxide and cyclic guanosine monophosphate production via the V1 receptor in cultured rat vascular smooth muscle cells. Kusano E, et al. **J Hypertens** 1997 Jun;15(6):627–32
Effects of arginine vasopressin and 1-desamino-8-D arginine vasopressin on forearm vasculature of healthy subjects and patients with a V2 receptor defect. van Lieburg AF, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1695–700
Conformational aspects of differences in requirements for oxytocin and vasopressin receptors. Oldziej S, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):703–13
Maturation of receptor proteins in eukaryotic expression systems. Sadeghi HM, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):433–45
Renal bradykinin and vasopressin receptors: ligand selectivity and classification. Howl J, et al. **Kidney Int** 1996 Aug; 50(2):586–92
Autoradiographic localization of vasopressin V1a receptors in the rat kidney using [3H]-SR 49059. Serradeil-Le Gal C, et al. **Kidney Int** 1996 Aug;50(2):499–505
Pharmacological characterization of a vasopressin V1 receptor in the isolated human gastric artery. Calò G, et al. **Life Sci** 1997;60(4–5):PL63–8
Small molecule ligands for oxytocin and vasopressin receptors. Freidinger RM, et al. **Med Res Rev** 1997 Jan; 17(1):1–16 (68 ref.)
Membrane-delimited G protein-mediated coupling between V1a vasopressin receptor and dihydropyridine binding sites in rat glomerulosa cells. Grazzini E, et al. **Mol Pharmacol** 1996 Nov;50(5):1273–83
Palmitoylation of the V2 vasopressin receptor. Sadeghi HM, et al. **Mol Pharmacol** 1997 Jul;52(1):21–9
In vitro macro- and microautoradiographic localization of V1 and V2 receptors in the rat kidney using OPC-21268 and OPC-31260. Mimura Y, et al. **Nephron** 1997; 76(3):331–6
Vasopressin and oxytocin receptor mRNAs are expressed in the rat inner ear. Kitano H, et al. **Neuroreport** 1997 Jul 7;8(9–10):2289–92
Characterisation of vasopressin V1a binding sites in the ovine olfactory bulb. Rahmani HR, et al. **Neurosci Lett** 1996 Dec 6;220(1):33–6
Distribution of vasopressin and oxytocin receptors in the rat spinal cord: sex-related differences and effect of castration in pudendal motor nuclei. Tribollet E, et al. **Neuroscience** 1997 May;78(2):499–509
Alterations of renal V1 and V2 receptors in spontaneously hypertensive rats and DOCA-salt hypertensive rats using computerized quantification for macro-autoradiogram. Mimura Y, et al. **Res Commun Mol Pathol Pharmacol** 1997 Jan;95(1):43–56

PHYSIOLOGY

The role of oxytocin receptors and vasopressin V1a receptors in uterine contractions in rats: implications for tocolytic therapy with oxytocin antagonists. Chan WY, et al. **Am J Obstet Gynecol** 1996 Nov;175(5):1331–5
Central V1 AVP receptors are involved in cardiovascular adaptation to hypovolemia in WKY but not in SHR. Budzikowski AS, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1057–64
Enhanced renal vasoconstriction induced by vasopressin in SHR is mediated by V1 receptors. Feng JJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F304–13
Adenylate cyclase-coupled vasopressin receptor activates AQP2 promoter via a dual effect on CRE and AP1 elements. Yasui M, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F443–50
Species differences in V1a receptor gene expression in monogamous and nonmonogamous voles: behavioral consequences. Young LJ, et al. **Behav Neurosci** 1997 Jun; 111(3):599–605
Proconvulsive effect of vasopressin; mediation by a putative V2 receptor subtype in the central nervous system. Croiset G, et al. **Brain Res** 1997 Jun 6;759(1):18–23
Comparison of vasopressin and oxytocin receptors in the rat uterus and vascular tissue. Anouar A, et al. **Eur J Pharmacol** 1996 Jul 11;308(1):87–96
Abnormal adrenal and vascular responses to vasopressin mediated by a V1-vasopressin receptor in a patient with adrenocorticotropin-independent macronodular adrenal hyperplasia, Cushing's syndrome, and orthostatic hypotension. Lacroix A, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2414–22
Role of vasopressin V2 receptor in acute regulation of aquaporin-2. Hayashi M, et al. **Kidney Blood Press Res** 1996;19(1):32–7
Vasopressin receptors in health and disease. Bichet DG. **Kidney Int** 1996 Jun;49(6):1706–11 (33 ref.)
Functional characterization of vasopressin V1 and V2 receptors in the rabbit renal cortical collecting duct. Yoshitomi K, et al. **Kidney Int Suppl** 1996 Jun;55:S177–82
Modulation of the arterial baroreceptor reflex by the vasopressin receptor in the area postrema of the hypertensive rats. Nakayama Y, et al. **Neurosci Lett** 1997 May 2;226(3):179–82
Arginine-vasopressin stimulates CRH and ACTH release by rat adrenal medulla, acting via the V1 receptor subtype and a protein kinase C-dependent pathway. Mazzocchi G, et al. **Peptides** 1997;18(2):191–5
Testosterone facilitates aggression by modulating vasopressin receptors in the hypothalamus. Delville Y, et al. **Physiol Behav** 1996 Jul;60(1):25–9
Arginine vasopressin increases renal sodium excretion in the anesthetized rat through V1 receptors. Musabayane CT, et al. **Ren Fail** 1997 Jan;19(1):23–32
[Structure, function and abnormality of ADH receptors] Okada K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:491–4 (22 ref.) **(Jpn)**

RECEPTORS, VERY LATE ANTIGEN

BIOSYNTHESIS

Increased expression of alpha6-integrin receptors and of mRNA encoding the putative 37 kDa laminin receptor precursor in pancreatic carcinoma. Halatsch ME, et al. **Cancer Lett** 1997 Sep 16;118(1):7-11

Patterns of intermediate filaments, VLA integrins and HLA antigens in a new human biliary epithelial cell line sensitive to interferon-gamma. Rumin S, et al. **J Hepatol** 1997 Jun; 26(6):1287-99

CHEMISTRY

CD9, CD63, CD81, and CD82 are components of a surface tetraspan network connected to HLA-DR and VLA integrins. Rubinstein E, et al. **Eur J Immunol** 1996 Nov; 26(11):2657-65

GENETICS

Modulation of alpha 4 beta 1 and alpha 5 beta 1 integrin expression: heterogeneous effects of Q-switched ruby, Nd:YAG, and alexandrite lasers on melanoma cells in vitro. van Leeuwen RL, et al. **Lasers Surg Med** 1996;18(1):63-71

IMMUNOLOGY

Selective immunomodulation: utilization of CD29/VLA molecules. Morimoto C, et al. **Artif Organs** 1996 Aug; 20(8):828-31 (29 ref.)

The beta 1 integrin, very late activation antigen-4 on human neutrophils can contribute to neutrophil migration through connective tissue fibroblast barriers. Gao JX, et al. **Immunology** 1997 Mar;90(3):448-54

METABOLISM

Exposure to vinblastine modulates beta 1 integrin expression and in vitro binding to extracellular matrix molecules in a human renal carcinoma cell line. Duensing S, et al. **Invasion Metastasis** 1996;16(2):65-72

Propolypeptide of von Willebrand factor is a novel ligand for very late antigen-4 integrin. Isobe T, et al. **J Biol Chem** 1997 Mar 28;272(13):8447-53

VLA-4 integrin cross-linking on human monocytic THP-1 cells induces tissue factor expression by a mechanism involving mitogen-activated protein kinase. McGilvray ID, et al. **J Biol Chem** 1997 Apr 11;272(15):10287-94

PHYSIOLOGY

Expressions of very late antigen-6 and vitronectin receptor, and their interactions to laminin and vitronectin during tonsillar B-cell activation. Ohguro S, et al. **Auris Nasus Larynx** 1996;23:111-20

Role of VLA-integrin receptor in invasion and metastasis of human fibrosarcoma cells. Park RH, et al. **Cancer Lett** 1996 Sep 10;106(2):227-33

Granulocyte-macrophage colony-stimulating factor regulates the functional adhesive state of very late antigen-4 expressed by eosinophils. Sung KL, et al. **J Immunol** 1997 Jan 15;158(2):919-27

Selective homing of human leukemic B-cell precursors to specific lymphohematopoietic microenvironments in SCID mice: a role for the beta 1 integrin family surface adhesion molecules VLA-4 and VLA-5. Messinger Y, et al. **Leuk Lymphoma** 1996 Sep;23(1-2):61-9

RECEPTORS, VIP see **RECEPTORS, VASOACTIVE INTESTINAL PEPTIDE**

RECEPTORS, VIRUS

The beta-chemokines, HIV type 1 second receptors, and exposed uninfected persons. Paxton WA, et al. **AIDS Res Hum Retroviruses** 1996 Sep 1;12(13):1203-7 (51 ref.)

Human carcinoembryonic antigen and biliary glycoprotein can serve as mouse hepatitis virus receptors. Chen DS, et al. **J Virol** 1997 Feb;71(2):1688-91

[Measles virus receptor CD46] Yanagi Y. **Uirusu** 1995 Dec; 45(2):159-64 (21 ref.) **(Jpn)**

ANALYSIS

Identification and biology of cellular receptors for the coxsackie B viruses group. Kuhn RJ. **Curr Top Microbiol Immunol** 1997;223:209-26 (65 ref.)

Identification and characterization of receptor for dengue virus-induced macrophage cytotoxin. Khare PD, et al. **Indian J Exp Biol** 1996 Jul;34(7):652-7

Typing of Listeria monocytogenes by monocin and phage receptors. Bannerman E, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):245-62

Analysis of human parainfluenza virus 3 receptor binding variants: evidence for the use of a specific sialic acid-containing receptor. Moscona A, et al. **Microb Pathog** 1996 Mar;20(3):179-84

BIOSYNTHESIS

Molecular cloning of a complementary DNA for a membrane cofactor protein (MCP, CD46)/measles virus receptor on Vero cells and its functional characterization. Murakami Y, et al. **Biol Pharm Bull** 1996 Dec;19(12):1541-5

Two orphan seven-transmembrane segment receptors which are expressed in CD4-positive cells support simian immunodeficiency virus infection. Farzan M, et al. **J Exp Med** 1997 Aug 4;186(3):405-11

Expression of the gibbon ape leukemia virus receptor-1 in rhesus macaque tissues. Wong SW, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):59-62

Resistance to infection with mouse hepatitis virus (MHV) in the cell clones derived from persistently infected DBT cells with the JHM strain of MHV. Maeda A, et al. **J Vet Med Sci** 1997 Jul;59(7):545-9

Transgenic mice expressing human measles virus (MV) receptor CD46 provide cells exhibiting different permissivities to MV infections. Horvat B, et al. **J Virol** 1996 Oct;70(10):6673-81

CD46 expression does not overcome the intracellular block of measles virus replication in transgenic rats. Niewiesk S, et al. **J Virol** 1997 Oct;71(10):7969-73

Induction of maturation of human blood dendritic cell precursors by measles virus is associated with immunosuppression. Schnorr JJ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5326-31

Expression and distribution of the receptors for coxsackievirus B3 during fetal development of the Balb/c mouse and of their brain cells in culture. Xu R, et al. **Virus Res** 1996 Dec;46(1-2):157-70

CHEMISTRY

Binding of influenza A virus to monosialoganglioside (GM3) reconstituted in glucosylceramide and sphingomyelin membranes. Sato T, et al. **Biochim Biophys Acta** 1996 Nov 13;1285(1):14-20

Specific in vivo thiol-labeling of the FhuA outer membrane ferrichrome transport protein of Escherichia coli K-12: evidence for a disulfide bridge in the predicted gating loop. Bös C, et al. **FEMS Microbiol Lett** 1997 Aug 15; 153(2):311-9

Mapping of the primary binding site of measles virus to its receptor CD46. Buchholz CJ, et al. **J Biol Chem** 1997 Aug 29;272(35):22072-9

Structure of maltoporin from Salmonella typhimurium ligated with a nitrophenyl-maltotrioside. Meyer JE, et al. **J Mol Biol** 1997 Mar 7;266(4):761-75

Channel specificity: structural basis for sugar discrimination and differential flux rates in maltoporin. Wang YF, et al. **J Mol Biol** 1997 Sep 12;272(1):56-63

Consequences of a subtle sialic acid modification on the murine polyomavirus receptor. Herrmann M, et al. **J Virol** 1997 Aug;71(8):5922-31

Artificial mutations and natural variations in the CD46 molecules from human and monkey cells define regions important for measles virus binding. Hsu EC, et al. **J Virol** 1997 Aug;71(8):6144-54

Combinatorial mutagenesis analysis of residues in the channel constriction loop L3 and neighbouring beta-strands in the LamB glycoporin of Escherichia coli. Chan WC, et al. **Mol Membr Biol** 1996 Jan-Mar;13(1):41-48

Ligand-induced conformational change in the ferrichrome-iron receptor of Escherichia coli K-12. Moeck GS, et al. **Mol Microbiol** 1996 Nov;22(3):459-71

HCAR and MCAR: the human and mouse cellular receptors for subgroup C adenoviruses and group B coxsackieviruses. Tomko RP, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3352-6

Energy profile of maltooligosaccharide permeation through maltoporin as derived from the structure and from a statistical analysis of saccharide-protein interactions. Meyer JE, et al. **Protein Sci** 1997 May;6(5):1084-91

DRUG EFFECTS

[Changes in cell membrane fluidity evoked by removal of influenza virus receptors with neuraminidase] Sikurová L, et al. **Cesk Fysiol** 1997 Jun;46(2):64-7 (Eng. Abstr.) **(Slo)**

GENETICS

Cell targeting for gene delivery: use of fusion protein containing the modified human receptor for ecotropic murine leukemia virus. Ohno K, et al. **Biochem Mol Med** 1995 Dec;56(2):172-5

Expression of avian glypican is developmentally regulated. Niu S, et al. **Dev Dyn** 1996 Sep;207(1):25-34

Anemia and perinatal death result from loss of the murine ecotropic retrovirus receptor mCAT-1. Perkins CP, et al. **Genes Dev** 1997 Apr 1;11(7):914-25

Expression of an Epstein-Barr-virus receptor and Epstein-Barr-virus-dependent transformation of human nasopharyngeal epithelial cells. Shao X, et al. **Int J Cancer** 1997 May 29;71(5):750-5

Assembly of a functional phage PRD1 receptor depends on 11 genes of the IncP plasmid mating pair formation complex. Grahn AM, et al. **J Bacteriol** 1997 Aug; 179(15):4733-40

Molecular sites of regulation of expression of the rat cationic amino acid transporter gene. Aulak KS, et al. **J Biol Chem** 1996 Nov 22;271(47):29799-806

The promoters for human and monkey poliovirus receptors. Requirements for basic and cell type-specific activity. Solecki D, et al. **J Biol Chem** 1997 Feb 28;272(9):5579-86

Molecular cloning of the hepatitis A virus receptor from a simian cell line. Ashida M, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1565-9

Inactivated poliovirus vaccine protects transgenic poliovirus receptor mice against type 3 poliovirus challenge. Taffs RE, et al. **J Infect Dis** 1997 Feb;175(2):441-4

Recombinant adeno-associated virus-mediated high-efficiency, transient expression of the murine cationic amino acid transporter (ecotropic retroviral receptor) permits stable transduction of human HeLa cells by ecotropic retroviral vectors. Bertran J, et al. **J Virol** 1996 Oct;70(10):6759-66

The amphotropic murine leukemia virus receptor gene encodes a 71-kilodalton protein that is induced by phosphate depletion. Chien ML, et al. **J Virol** 1997 Jun; 71(6):4564-70

A single locus on human chromosome 21 directs the expression of a receptor for adenovirus type 2 in mouse A9 cells. Mayr GA, et al. **J Virol** 1997 Jan;71(1):412-8

Retrovirus packaging cells based on 10A1 murine leukemia virus for production of vectors that use multiple receptors for cell entry. Miller AD, et al. **J Virol** 1996 Aug; 70(8):5564-71

Combinatorial mutagenesis analysis of residues in the channel constriction loop L3 and neighbouring beta-strands in the LamB glycoporin of Escherichia coli. Chan WC, et al. **Mol Membr Biol** 1996 Jan-Mar;13(1):41-48

Ligand-induced conformational change in the ferrichrome-iron receptor of Escherichia coli K-12. Moeck GS, et al. **Mol Microbiol** 1996 Nov;22(3):459-71

Managed care for viruses [news] Crystal RG. **Nat Med** 1997 Apr;3(4):383-4

Structural studies of poliovirus mutants that overcome receptor defects. Wien MW, et al. **Nat Struct Biol** 1997 Aug;4(8):666-74

Human herpesvirus KSHV encodes a constitutively active G-protein-coupled receptor linked to cell proliferation [see comments] Arvanitakis L, et al. **Nature** 1997 Jan 23; 385(6614):347-50. Comment in: Nature 1997 Jan 23;385(6614):296-7, 299.

Pirated genes in Kaposi's sarcoma [news; comment] Murphy PM. **Nature** 1997 Jan 23;385(6614):296-7, 299. Comment on: Nature 1997 Jan 23;385(6614):347-50.

Proviral integrations at the Evi5 locus disrupt a novel 90 kDa protein with homology to the Tre2 oncogene and cell-cycle regulatory proteins. Liao X, et al. **Oncogene** 1997 Mar 6;14(9):1023-9

The level of mRNA encoding the amphotropic retrovirus receptor in mouse and human hematopoietic stem cells is low and correlates with the efficiency of retrovirus transduction. Orlic D, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11097-102

A transgenic mouse model for measles virus infection of the brain. Rall GF, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4659-63

Host-derived intracellular immunization against mouse hepatitis virus infection. Chen W, et al. **Virology** 1997 Feb 17;228(2):318-32

IMMUNOLOGY

Multiple stages of virus-receptor interactions as shown by simian virus 40. Norkin LC, et al. **Adv Exp Med Biol** 1996; 408:159-67 (26 ref.)

Epstein-Barr virus binding to CD21, the virus receptor, activates resting B cells via an intracellular pathway that is linked to B cell infection. Roberts ML, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3077-85

Monoclonal antibodies to a 55-kilodalton protein present in duck liver inhibit infection of primary duck hepatocytes with duck hepatitis B virus. Guo JT, et al. **J Virol** 1997 Jun;71(6):4829-31

Preferential selection of receptor-binding variants of influenza virus hemagglutinin by the neutralizing antibody repertoire of transgenic mice expressing a human immunoglobulin mu minigene. Laeeq S, et al. **J Virol** 1997 Apr;71(4):2600-5

CD9, a tetraspan transmembrane protein, renders cells susceptible to canine distemper virus. Löffler S, et al. **J Virol** 1997 Jan;71(1):42-9

Identification of a cytoplasmic Tyr-X-X-Leu motif essential for down regulation of the human cell receptor CD46 in persistent measles virus infection. Yant S, et al. **J Virol** 1997 Jan;71(1):766-70

Immunogenicity of a peptide from a major neutralising determinant of the feline immunodeficiency virus surface glycoprotein. Rigby MA, et al. **Vaccine** 1996 Aug; 14(12):1095-102

ISOLATION & PURIFICATION

Characterization of a porcine enterocyte receptor for group A rotavirus. Kuhlenschmidt MS, et al. **Adv Exp Med Biol** 1997;412:135-43

A 50 kDa membrane protein from bovine kidney cells is a putative receptor for bovine viral diarrhea virus (BVDV). Minocha HC, et al. **Adv Exp Med Biol** 1997;412:145-8

Purification of the putative coxsackievirus B receptor from HeLa cells. Carson SD, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):325-8

Identification of a surface glycoprotein on African green monkey kidney cells as a receptor for hepatitis A virus. Kaplan G, et al. **EMBO J** 1996 Aug 15;15(16):4282-96

A novel immunoglobulin superfamily receptor for cellular

and viral MHC class I molecules. Cosman D, et al. **Immunity** 1997 Aug;7(2):273–82

A putative receptor for Venezuelan equine encephalitis virus from mosquito cells. Ludwig GV, et al. **J Virol** 1996 Aug; 70(8):5592–9

Isolation of a common receptor for Coxsackie B viruses and adenoviruses 2 and 5. Bergelson JM, et al. **Science** 1997 Feb 28;275(5304):1320–3

METABOLISM

Monovalent and polymeric 5N-thioacetamido sialosides as tightly-bound receptor analogs of influenza viruses. Tuzikov AB, et al. **Antiviral Res** 1997 Jan;33(2):129–34

The cell receptor level is reduced during persistent infection with influenza C virus. Marschall M, et al. **Arch Virol** 1997; 142(6):1155–64

Use of west-western blotting for detection of adenovirus receptors. Tarassishin LA, et al. **Biochemistry (Mosc)** 1997 Jan;62(1):38–40

Adenovirus type 5 fiber knob binds to MHC class I alpha2 domain at the surface of human epithelial and B lymphoblastoid cells. Hong SS, et al. **EMBO J** 1997 May 1;16(9):2294–306

High-resolution structure of a polyomavirus VP1-oligosaccharide complex: implications for assembly and receptor binding. Stehle T, et al. **EMBO J** 1997 Aug 15;16(16):5139–48

The cytoplasmic tail of NSP4, the endoplasmic reticulum-localized non-structural glycoprotein of rotavirus, contains distinct virus binding and coiled coil domains. Taylor JA, et al. **EMBO J** 1996 Sep 2; 15(17):4469–76

Receptor co-operation in retrovirus entry: recruitment of an auxiliary entry mechanism after retargeted binding [published erratum appears in EMBO J 1997 Jul 1;16(13):4153] Valsesia-Wittmann S, et al. **EMBO J** 1997 Mar 17;16(6):1214–23

Oligomeric states and siderophore binding of the ligand-gated FhuA protein that forms channels across Escherichia coli outer membranes. Locher KP, et al. **Eur J Biochem** 1997 Aug 1;247(3):770–5

A recombinant, arginine-glycine-aspartic acid (RGD) motif from foot-and-mouth disease virus binds mammalian cells through vitronectin and, to a lower extent, fibronectin receptors. Villaverde A, et al. **Gene** 1996 Nov 21; 180(1-2):101–6

Targeting of adenovirus penton base to new receptors through replacement of its RGD motif with other receptor-specific peptide motifs. Wickham TJ, et al. **Gene Ther** 1995 Dec;2(10):750–6

SurA, a periplasmic protein with peptidyl-prolyl isomerase activity, participates in the assembly of outer membrane porins. Rouvière PE, et al. **Genes Dev** 1996 Dec 15; 10(24):3170–82

Improved gene transfer into human lymphocytes using retroviruses with the gibbon ape leukemia virus envelope. Lam JS, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1415–22

Hepatitis B virus binding to leucocyte plasma membranes utilizes a different region of the preS1 domain to the hepatocyte receptor binding site and does not require receptors for opsonins. Atkins GJ, et al. **Immunol Cell Biol** 1997 Jun;75(3):259–66

Interrelationship between tumour virus receptors, A and C, coded by host cell genes in fowl. Mehta SC, et al. **Indian J Exp Biol** 1997 Jan;35(1):33–6

Properties of the FhuA channel in the Escherichia coli outer membrane after deletion of FhuA portions within and outside the predicted gating loop. Killmann H, et al. **J Bacteriol** 1996 Dec;178(23):6913–20

Identification of glypican as a dual modulator of the biological activity of fibroblast growth factors. Bonneh-Barkay D, et al. **J Biol Chem** 1997 May 9; 272(19):12415–21

Modeling ligand-gated receptor activity. FhuA-mediated ferrichrome efflux from lipid vesicles triggered by phage T5 [published erratum appears in J Biol Chem 1997 Mar 28;272(13):8836] Letellier L, et al. **J Biol Chem** 1997 Jan 17;272(3):1448–51

Herpesvirus entry mediator, a member of the tumor necrosis factor receptor (TNFR) family, interacts with members of the TNFR-associated factor family and activates the transcription factors NF-kappaB and AP-1. Marsters SA, et al. **J Biol Chem** 1997 May 30;272(22):14029–32

Reconstitution of FhuA, an Escherichia coli outer membrane protein, into liposomes. Binding of phage T5 to Fhua triggers the transfer of DNA into the proteoliposomes. Plançon L, et al. **J Biol Chem** 1997 Jul 4;272(27):16868–72

Cell-surface interactions of echovirus 22. Pulli T, et al. **J Biol Chem** 1997 Aug 22;272(34):21176–80

Change in coreceptor use coreceptor use correlates with disease progression in HIV-1—infected individuals. Connor RI, et al. **J Exp Med** 1997 Feb 17;185(4):621–8

Epstein-Barr virus binding to CD21 activates the initial viral promoter via NF-kappaB induction. Sugano N, et al. **J Exp Med** 1997 Aug 29;186(5):731–7

Rabies virus binding to the nicotinic acetylcholine receptor alpha subunit demonstrated by virus overlay protein binding assay. Gastka M, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2437–40

Inactivation of inhibitors by the receptor-destroying enzyme of influenza C virus. Höfling K, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):567–70

Evidence for the role of cell protein phosphorylation in human cytomegalovirus/host cell fusion. Keay S, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2597–604

Characterization of functional domains in the human coronavirus HCV 229E receptor. Kolb AF, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2515–21

Virus entry into a polarized epithelial cell line (MDCK): similarities and dissimilarities between influenza C virus and bovine coronavirus. Schultze B, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2507–14

VP7: an attachment protein of bluetongue virus for cellular receptors in Culicoides variipennis. Xu G, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1617–23

Temperature-dependent non-specific adsorption of recombinant bovine leukemia virus receptor BLVRcp1 in immunoassay. Orlik O, et al. **J Immunoassay** 1997 May; 18(2):185–98

Clinical coxsackievirus B isolates differ from laboratory strains in their interaction with two cell surface receptors. Bergelson JM, et al. **J Infect Dis** 1997 Mar;175(3):697–700

The solution structure of the immunodominant and cell receptor binding regions of foot-and-mouth disease virus serotype A, variant A. Pegna M, et al. **J Pept Sci** 1996 Mar-Apr;2(2):75–90

Interspecies aminopeptidase-N chimeras reveal species-specific receptor recognition by canine coronavirus, feline infectious peritonitis virus, and transmissible gastroenteritis virus. Benbacer L, et al. **J Virol** 1997 Jan;71(1):734–7

Sendai virus efficiently infects cells via the asialoglycoprotein receptor and requires the presence of cleaved F0 precursor proteins for this alternative route of cell entry. Bitzer M, et al. **J Virol** 1997 Jul;71(7):5481–6

Mutations in type 3 reovirus that determine binding to sialic acid are contained in the fibrous tail domain of viral attachment protein sigma1. Chappell JD, et al. **J Virol** 1997 Mar;71(3):1834–41

Mutational analysis of the proposed gibbon ape leukemia virus binding site in Pit1 suggests that other regions are important for infection. Chaudry GJ, et al. **J Virol** 1997 Oct;71(10):8078–81

Genetically divergent strains of simian immunodeficiency virus use CCR5 as a coreceptor for entry. Chen Z, et al. **J Virol** 1997 Apr;71(4):2705–14

The amphotropic murine leukemia virus receptor gene encodes a 71-kilodalton protein that is induced by phosphate depletion. Chien ML, et al. **J Virol** 1997 Jun; 71(6):4564–70

Dextran sulfate can act as an artificial receptor to mediate a type-specific herpes simplex virus infection via glycoprotein B. Dyer AP, et al. **J Virol** 1997 Jan; 71(1):191–8

Identification of the alpha6 integrin as a candidate receptor for papillomaviruses. Evander M, et al. **J Virol** 1997 Mar; 71(3):2449–56

Length polymorphism within the second variable region of the human immunodeficiency virus type 1 envelope glycoprotein affects accessibility of the receptor binding site. Fox DG, et al. **J Virol** 1997 Jan;71(1):759–65

A role for naturally occurring variation of the murine coronavirus spike protein in stabilizing association with the cellular receptor. Gallagher TM. **J Virol** 1997 Apr; 71(4):3129–37

African green monkey kidney (Vero) cells provide an alternative host cell system for influenza A and B viruses. Govorkova EA, et al. **J Virol** 1996 Aug;70(8):5519–24

Differences in sialic acid-galactose linkages in the chicken egg amnion and allantois influence human influenza virus receptor specificity and variant selection. Ito T, et al. **J Virol** 1997 Apr;71(4):3357–62

The HeLa cell receptor for enterovirus 70 is decay-accelerating factor (CD55). Karnauchow TM, et al. **J Virol** 1996 Aug;70(8):5143–52

Point mutations in the S protein connect the sialic acid binding activity with the enteropathogenicity of transmissible gastroenteritis coronavirus. Krempl C, et al. **J Virol** 1997 Apr;71(4):3285–7

Epstein-Barr virus uses HLA class II as a cofactor for infection of B lymphocytes. Li Q, et al. **J Virol** 1997 Jun; 71(6):4657–62

The N-glycan of the SCR 2 region is essential for membrane cofactor protein (CD46) to function as a measles virus receptor. Maisner A, et al. **J Virol** 1996 Aug;70(8):4973–7

Murine retroviruses use at least six different receptors for entry into Mus dunni cells. Miller AD, et al. **J Virol** 1997 Jun;71(6):4531–5

Polyclonal bovine sera but not virus-neutralizing monoclonal antibodies block bovine leukemia virus (BLV) gp51 binding to recombinant BLV receptor BLVRcp1. Orlik O, et al. **J Virol** 1997 Apr;71(4):3263–7

Adeno-associated virus type 2-mediated transfer of ecotropic retrovirus receptor cDNA allows ecotropic retroviral transduction of established and primary human cells. Qing K, et al. **J Virol** 1997 Jul;71(7):5663–7

Comparative analysis of adenovirus fiber-cell interaction: adenovirus type 2 (Ad2) and Ad9 utilize the same cellular fiber receptor but use different binding strategies for attachment. Roelvink PW, et al. **J Virol** 1996 Nov; 70(11):7614–21

Role of basic residues in the subgroup-determining region of the subgroup A avian sarcoma and leukosis virus envelope in receptor binding and infection. Rong L, et al. **J Virol** 1997 May;71(5):3458–65

The Japanese feral mouse Pit1 and Pit2 homologs lack an acidic residue at position 550 but still function as gibbon ape leukemia virus receptors: implications for virus binding motif. Schneiderman RD, et al. **J Virol** 1996 Oct; 70(10):6982–6

Role of the extracellular domain of human herpesvirus 7 glycoprotein B in virus binding to cell surface heparan sulfate proteoglycans. Secchiero P, et al. **J Virol** 1997 Jun; 71(6):4571–80

Coxsackievirus A21 binds to decay-accelerating factor but requires intercellular adhesion molecule 1 for cell entry. Shafren DR, et al. **J Virol** 1997 Jun;71(6):4736–43

Mouse cells expressing human intercellular adhesion molecule-1 are susceptible to infection by coxsackievirus A21. Shafren DR, et al. **J Virol** 1997 Jan;71(1):785–9

Feline aminopeptidase N serves as a receptor for feline, canine, porcine, and human coronaviruses in serogroup I. Tresnan DB, et al. **J Virol** 1996 Dec;70(12):8669–74

Modulation of ecotropic murine retroviruses by N-linked glycosylation of the cell surface receptor/amino acid transporter. Wang H, et al. **J Virol** 1996 Oct;70(10):6884–91

Glycoprotein D of herpes simplex virus (HSV) binds directly to HVEM, a member of the tumor necrosis factor receptor superfamily and a mediator of HSV entry. Whitbeck JC, et al. **J Virol** 1997 Aug;71(8):6083–93

Binding sites for adeno-associated virus Rep proteins within the human genome. Wonderling RS, et al. **J Virol** 1997 Mar;71(3):2528–34

Epstein-Barr virus infection of human gastric carcinoma cells: implication of the existence of a new virus receptor different from CD21. Yoshiyama H, et al. **J Virol** 1997 Jul;71(7):5688–91

Expression of the poliovirus receptor in intestinal epithelial cells is not sufficient to permit poliovirus replication in the mouse gut. Zhang S, et al. **J Virol** 1997 Jul; 71(7):4915–20

Residue Trp-48 of Tva is critical for viral entry but not for high-affinity binding to the SU glycoprotein of subgroup A avian leukosis and sarcoma viruses. Zingler K, et al. **J Virol** 1996 Nov;70(11):7510–6

Interaction of kunjin virus with octyl-D-glucoside extracted Vero cell plasma membrane. Sankaran D, et al. **J Virol Methods** 1997 Jan;63(1-2):167–73

Attachment glycoproteins and receptor specificity of rat coronaviruses. Gagneten S, et al. **Lab Anim Sci** 1996 Apr; 46(2):159–66

Bacteriophage receptors on Listeria monocytogenes cells are the N-acetylglucosamine and rhamnose substituents of teichoic acids or the peptidoglycan itself. Wendlinger G, et al. **Microbiology** 1996 Apr;142 (Pt 4):985–92

A putative cellular receptor for dengue viruses [news; comment] Putnak JR, et al. **Nat Med** 1997 Aug;3(8):828–9 . Comment on: Nat Med 1997 Aug;3(8):866–71.

A new SIV co-receptor, STRL33 [letter] [see comments] Alkhatib G, et al. **Nature** 1997 Jul 17;388(6639):238. Comment in: Nature 1997 Jul 17;388(6639):230–1.

A 3D model for the measles virus receptor CD46 based on homology modeling, Monte Carlo simulations, and hemagglutinin binding studies. Mumenthaler C, et al. **Protein Sci** 1997 Mar;6(3):588–97

Crystal structures of various maltooligosaccharides bound to maltoporin reveal a specific sugar translocation pathway. Dutzler R, et al. **Structure** 1996 Feb 15;4(2):127–34

Chemokines and HIV: a remarkable synergism. Moser B. **Trends Microbiol** 1997 Mar;5(3):88–90 (33 ref.)

Receptors for the V4 strain of Newcastle disease virus in the digestive tract of chickens [corrected and republished article originally printed in Vet Microbiol 1995 Sep;46(1-3):43–6] Rehmani SF, et al. **Vet Microbiol** 1996 May;50(1-2):157–60

Mapping amino acids of the measles virus hemagglutinin responsible for receptor (CD46) downregulation. Bartz R, et al. **Virology** 1996 Oct 1;224(1):334–7

Binding of the influenza A virus to cell-surface receptors: structures of five hemagglutinin-sialyloligosaccharide complexes determined by X-ray crystallography. Eisen MB, et al. **Virology** 1997 May 26;232(1):19–31

Specification of receptor-binding phenotypes of influenza virus isolates from different hosts using synthetic sialylglycopolymers: non-egg-adapted human H1 and H3 influenza A and influenza B viruses share a common high binding affinity for 6'-sialyl(N-acetyllactosamine). Gambaryan AS, et al. **Virology** 1997 Jun 9;232(2):345–50

Avian influenza A viruses differ from human viruses by recognition of sialyloligosaccharides and gangliosides and by a higher conservation of the HA receptor-binding site. Matrosovich MN, et al. **Virology** 1997 Jun 23;233(1):224–34

Masking of retroviral envelope functions by oligomerizing polypeptide adaptors. Morling FJ, et al. **Virology** 1997 Jul 21;234(1):51–61

Spike glycoprotein-mediated fusion in biliary glycoprotein-independent cell-associated spread of mouse hepatitis virus infection. Nash TC, et al. **Virology** 1996 Sep 1;223(1):68–78

Identification of a contiguous 6-residue determinant in the MHV receptor that controls the level of virion binding to cells. Rao PV, et al. **Virology** 1997 Mar 17;229(2):336–48

Efficient delivery of circulating poliovirus to the central nervous system independently of poliovirus receptor. Yang WX, et al. **Virology** 1997 Mar 17;229(2):421–8

Is CD46 the cellular receptor for measles virus? Buckland

R, et al. **Virus Res** 1997 Apr;48(1):1–9 (44 ref.)
Protein cell receptors mediate the saturable interaction of African swine fever virus attachment protein p12 with the surface of permissive cells. Galindo I, et al. **Virus Res** 1997 Jun;49(2):193–204
Chinese hamster ovary cells are non-permissive towards infection with coxsackievirus B3 despite functional virus–receptor interactions. Kramer B, et al. **Virus Res** 1997 May;48(2):149–56
Receptor interference mediated by the envelope glycoproteins of various HIV–1 and HIV–2 isolates. Martin RA, et al. **Virus Res** 1996 Dec;45(2):135–45
Expression and distribution of the receptors for coxsackievirus B3 during fetal development of the Balb/c mouse and of their brain cells in culture. Xu R, et al. **Virus Res** 1996 Dec;46(1–2):157–70
Permissiveness of human embryonal fibroblasts for coxsackieviruses B3. Investigations on virus genetic markers in vitro and localization of virus receptor distribution by immunogold replica technique. Tonew M, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):443–56

PHYSIOLOGY

Virus–receptor interactions in the enteric tract. Virus–receptor interactions. Holmes KV, et al. **Adv Exp Med Biol** 1997;412:125–33 (49 ref.)
Soluble CD4 induces the binding of human immunodeficiency virus type 1 to cells via the V3 loop of glycoprotein 120 and specific sites in glycoprotein 41. Demaria S, et al. **AIDS Res Hum Retroviruses** 1996 Mar 1;12(4):281–90
Herpes simplex virus–1 entry into cells mediated by a novel member of the TNF/NGF receptor family. Montgomery RI, et al. **Cell** 1996 Nov 1;87(3):427–36
CD46, a complement regulatory protein/measles virus receptor, and its relation to hematological disorders. Seya T. **Int J Hematol** 1996 Aug;64(2):101–9 (38 ref.)
Lack of high affinity fiber receptor activity explains the resistance of ciliated airway epithelia to adenovirus infection. Zabner J, et al. **J Clin Invest** 1997 Sep 1; 100(5):1144–9
Adenovirus–receptor interaction with human lymphocytes. Mentel R, et al. **J Med Virol** 1997 Mar;51(3):252–7
Lack of correlation of Theiler's virus binding to cells with infection. McCright IJ, et al. **J Neurovirol** 1997 May;3 Suppl 1:S68–70
Molecular and cellular aspects of measles virus persistence in the CNS. ter Meulen V. **J Neurovirol** 1997 May;3 Suppl 1:S3–5 (25 ref.)
Blocking of feline immunodeficiency virus infection by a monoclonal antibody to CD9 is via inhibition of virus release rather than interference with receptor binding. de Parseval A, et al. **J Virol** 1997 Aug;71(8):5742–9
CD46 short consensus repeats III and IV enhance measles virus binding but impair soluble hemagglutinin binding. Devaux P, et al. **J Virol** 1997 May;71(5):4157–60
Echovirus 1 replication, not only virus binding to its receptor, VLA–2, is required for the induction of cellular immediate–early genes. Huttunen P, et al. **J Virol** 1997 May;71(5):4176–80
Efficient infection of cells in culture by type O foot–and–mouth disease virus requires binding to cell surface heparan sulfate. Jackson T, et al. **J Virol** 1996 Aug; 70(8):5282–7
Fungal phosphate transporter serves as a receptor backbone for gibbon ape leukemia virus. Pedersen L, et al. **J Virol** 1997 Oct;71(10):7619–22
Identification of two surface proteins from C6/36 cells that bind dengue type 4 virus. Salas–Benito JS, et al. **J Virol** 1997 Oct;71(10):7246–52
Selection of an avian retrovirus mutant with extended receptor usage. Taplitz RA, et al. **J Virol** 1997 Oct; 71(10):7814–9
A novel virus binding assay using confocal microscopy: demonstration that the intracellular and extracellular vaccinia virions bind to different cellular receptors. Vanderplasschen A, et al. **J Virol** 1997 May;71(5):4032–41
Targeted adenovirus–mediated gene delivery to T cells via CD3. Wickham TJ, et al. **J Virol** 1997 Oct;71(10):7663–9
Immunodeficiency viruses. Spoilt for choice of co–receptors [news; comment] Clapham PR, et al. **Nature** 1997 Jul 17; 388(6639):230–1. Comment on: Nature 1997 Jul 17;388(6639):238. Comment on: Nature 1997 Jul 17;388(6639):296–300.
Cell–surface receptors for retroviruses and implications for gene transfer. Miller AD. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11407–13 (52 ref.)
Early events in poliovirus infection: virus–receptor interactions. Racaniello VR. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11378–81 (29 ref.)
Propagation of an attenuated virus by design: engineering a novel receptor for a noninfectious foot–and–mouth disease virus. Rieder E, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10428–33
The poliovirus receptor: a hook, or an unzipper? Racaniello VR. **Structure** 1996 Jul 15;4(7):769–73 (29 ref.)
The attachment receptor for hepatitis A virus. Locarnini S. **Trends Microbiol** 1997 Feb;5(2):45–7; discussion 47–8 (17 ref.)
Canine parvovirus binds to multiple cellular membrane proteins from both permissive and nonpermissive cell lines. Uwatoko K, et al. **Vet Microbiol** 1996 Aug;51(3–4):267–73
Identification of bovine viral diarrhea virus receptor in different cell types. Xue W, et al. **Vet Microbiol** 1996 Mar; 49(1–2):67–79
Roles of N–glycans with alpha2,6 as well as alpha2,3 linked sialic acid in infection by polyoma virus. Chen MH, et al. **Virology** 1997 Jul 7;233(2):440–2
Entry of Semliki forest virus into cells: effects of concanamycin A and nigericin on viral membrane fusion and infection. Irurzun A, et al. **Virology** 1997 Jan 20; 227(2):488–92
Receptor specificity of influenza A viruses correlates with the agglutination of erythrocytes from different animal species. Ito T, et al. **Virology** 1997 Jan 20;227(2):493–9
[ICAM–1 and allergic inflammation] Canonica GW. **Allerg Immunol (Paris)** 1997 Mar;29(3):77–9; discussion 84 (17 ref.) (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Purification and structural and functional characterization of FhuA, a transporter of the Escherichia coli outer membrane. Boulanger P, et al. **Biochemistry** 1996 Nov 12; 35(45):14216–24
Cryo–electron microscopy studies of empty capsids of human parvovirus B19 complexed with its cellular receptor. Chipman PR, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7502–6
Crystal structure of phage P22 tailspike protein complexed with Salmonella sp. O–antigen receptors. Steinbacher S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10584–8

RECEPTORS, VITAMIN D see **RECEPTORS, CALCITRIOL**

RECEPTORS, VITRONECTIN

ANALYSIS

Ultrastructural analysis of the distribution of the vitronectin receptor (alpha v beta 3) in human platelets and megakaryocytes reveals an intracellular pool and labelling of the alpha–granule membrane. Poujol C, et al. **Br J Haematol** 1997 Mar;96(4):823–35
alphaV Integrins on HT–29 colon carcinoma cells: adhesion to fibronectin is mediated solely by small amounts of alphaVbeta6, and alphaVbeta5 is codistributed with actin fibers. Kemperman H, et al. **Exp Cell Res** 1997 Jul 10; 234(1):156–64

ANTAGONISTS & INHIBITORS

Dietary coenzyme Q10 supplementation alters platelet size and inhibits human vitronectin (CD51/CD61) receptor expression. Serebruany VL, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):16–22
The inhibition of vascular smooth muscle cell migration by peptide and antibody antagonists of the alphavbeta3 integrin complex is reversed by activated calcium/calmodulin– dependent protein kinase II. Bilato C, et al. **J Clin Invest** 1997 Aug 1;100(3):693–704
Discovery of potent nonpeptide vitronectin receptor (alpha v beta 3) antagonists. Keenan RM, et al. **J Med Chem** 1997 Jul 18;40(15):2289–92
Antagonists of integrin alpha v beta 3 inhibit retinal neovascularization in a murine model. Luna J, et al. **Lab Invest** 1996 Oct;75(4):563–73
Subcutaneous injection of a cyclic peptide antagonist of vitronectin receptor–type integrins inhibits retinal neovascularization. Flynn JT, et al. **Surv Ophthalmol** 1996 Nov–Dec;41(3):271–2

BIOSYNTHESIS

Immunohistochemical analysis of integrin alpha vbeta3 expression on tumor–associated vessels of human carcinomas [published erratum appears in Int J Cancer 1997 Aug 7;72(4):706–7] Max R, et al. **Int J Cancer** 1997 May 2;71(3):320–4
Retinoic acid stimulates expression of the functional osteoclast integrin alpha v beta 3: transcriptional activation of the beta 3 but not the alpha v gene. Chiba M, et al. **J Cell Biochem** 1996 Sep 15;62(4):467–75
Phorbol myristate acetate transactivates the avian beta 3 integrin gene and induces alpha v beta 3 integrin expression. Zhu HJ, et al. **J Cell Biochem** 1996 Jun 1;61(3):420–9

GENETICS

The vitronectin receptor alpha–V beta–3, contrary to ICAM–1, is not modulated by interferon–gamma and tumour necrosis factor–alpha on melanoma cell lines. Boccaletti V, et al. **Acta Derm Venereol** 1996 Jul; 76(4):269–73
The binding protein for globular heads of complement C1q, gC1qR. Functional expression and characterization as a novel vitronectin binding factor. Lim BL, et al. **J Biol Chem** 1996 Oct 25;271(43):26739–44

IMMUNOLOGY

Binding of the 68–kilodalton protein of Mycobacterium avium to alpha(v)beta3 on human monocyte–derived macrophages enhances complement receptor type 3 expression. Hayashi T, et al. **Infect Immun** 1997 Apr; 65(4):1211–6
Purification and characterization of fully functional human osteoclast precursors. James IE, et al. **J Bone Miner Res** 1996 Nov;11(11):1608–18
Identification of alpha v beta 3 as a heterotypic ligand for CD31/PECAM–1. Buckley CD, et al. **J Cell Sci** 1996 Feb; 109 (Pt 2):437–45
Expression of alpha v and beta 3 integrin chains on murine lymphocytes. Gerber DJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14698–703

ISOLATION & PURIFICATION

One–step affinity purification of recombinant alphavbeta3 integrin from transfected cells. Marcinkiewicz C, et al. **Protein Expr Purif** 1996 Aug;8(1):68–74

METABOLISM

Alpha–V/beta–3 and alpha–V/beta–5 integrin distribution in neoplastic kidney. Rabb H, et al. **Am J Nephrol** 1996; 16(5):402–8
The L1 adhesion molecule supports alpha v beta 3–mediated migration of human tumor cells and activated T lymphocytes. Duczmal A, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):236–9
Characterization of the novel murine monoclonal anti–von Willebrand factor (vWf) antibody GUR76–23 which inhibits vWf interaction with alpha IIb beta 3 but not alpha v beta 3 integrin. Yokoyama K, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):147–52
Significance of RGD loop and C–terminal domain of echistatin for recognition of alphaIIb beta3 and alpha(v) beta3 integrins and expression of ligand–induced binding site. Marcinkiewicz C, et al. **Blood** 1997 Aug 15; 90(4):1565–75
Osteoclast integrin alphaVbeta3 is present in the clear zone and contributes to cellular polarization. Nakamura I, et al. **Cell Tissue Res** 1996 Dec;286(3):507–15
Vitronectin receptor (alpha(v)beta3) mediates platelet adhesion to the luminal aspect of endothelial cells: implications for reperfusion in acute myocardial infarction. Gawaz M, et al. **Circulation** 1997 Sep 16;96(6):1809–18
Adhesion of human myelomonocytic (HL–60) cells induced by 1,25–dihydroxyvitamin D3 and phorbol myristate acetate is dependent on osteopontin synthesis and the alpha v beta 3 integrin. Andersson G, et al. **Connect Tissue Res** 1996;35(1–4):163–71
Myoblast alpha v beta3 integrin levels are controlled by transcriptional regulation of expression of the beta3 subunit and down–regulation of beta3 subunit expression is required for skeletal muscle cell differentiation. Blaschuk KL, et al. **Dev Biol** 1997 Apr 15;184(2):266–77
Novel ipriflavone receptors coupled to calcium influx regulate osteoclast differentiation and function. Miyauchi A, et al. **Endocrinology** 1996 Aug;137(8):3544–50
The selective engulfment of apoptotic bodies by dendritic cells is mediated by the alpha(v)beta3 integrin and requires intracellular and extracellular calcium. Rubartelli A, et al. **Eur J Immunol** 1997 Aug;27(8):1893–900
Human fibroblasts bind directly to fibrinogen at RGD sites through integrin alpha(v)beta3. Gailit J, et al. **Exp Cell Res** 1997 Apr 10;232(1):118–26
The effect of oral contraceptive pills on markers of endometrial receptivity. Somkuti SG, et al. **Fertil Steril** 1996 Mar;65(3):484–8
A recombinant, arginine–glycine–aspartic acid (RGD) motif from foot–and–mouth disease virus binds mammalian cells through vitronectin and, to a lower extent, fibronectin receptors. Villaverde A, et al. **Gene** 1996 Nov 21; 180(1–2):101–6
Expression of alpha(v)beta3 integrin is less frequent in ovarian epithelial tumors of low malignant potential in contrast to ovarian carcinomas. Liapis H, et al. **Hum Pathol** 1997 Apr;28(4):443–9
Fibroblasts spread on immobilized fibrin monomer by mobilizing a beta1–class integrin, together with a vitronectin receptor alphavbeta3 on their surface. Asakura S, et al. **J Biol Chem** 1997 Mar 28;272(13):8824–9
Agonist–activated alphavbeta3 on platelets and lymphocytes binds to the matrix protein osteopontin. Bennett JS, et al. **J Biol Chem** 1997 Mar 28;272(13):8137–40
Ligation of integrin alpha5beta1 is required for internalization of vitronectin by integrin alphavbeta3. Pijuan–Thompson V, et al. **J Biol Chem** 1997 Jan 31;272(5):2736–43
Changing ligand specificities of alphavbeta1 and alphavbeta3 integrins by swapping a short diverse sequence of the beta subunit. Takagi J, et al. **J Biol Chem** 1997 Aug 8; 272(32):19794–800
Role of alpha v beta 5 and alpha v beta 6 integrin glycosylation in the adhesion of a colonic adenocarcinoma cell line (HT29–D4). Lehmann M, et al. **J Cell Biochem** 1996 May;61(2):266–77
Epidermal growth factor and sex steroids dynamically regulate a marker of endometrial receptivity in Ishikawa cells. Somkuti SG, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2192–7
Synthesis and solution conformation of cyclo[RGDRGD]: a cyclic peptide with selectivity for the alpha V beta 3 receptor. Burgess K, et al. **J Med Chem** 1996 Oct 25; 39(22):4520–6
Expression of integrin alpha v beta 3 in small blood vessels of glioblastoma tumors. Gladson CL. **J Neuropathol Exp Neurol** 1996 Nov;55(11):1143–9

RECEPTORS, VITRONECTIN

Studies on alpha v beta 3/ligand interactions using a [3H]SK&F-107260 binding assay. Wong A, et al. **Mol Pharmacol** 1996 Sep;50(3):529-37

The serpin PAI-1 inhibits cell migration by blocking integrin alpha V beta 3 binding to vitronectin [see comments] Stefansson S, et al. **Nature** 1996 Oct 3;383(6599):441-3. Comment in: Nature 1996 Oct 3;383(6599):390-1.

PHYSIOLOGY

Serine 752 in the cytoplasmic domain of the beta 3 integrin subunit is not required for alpha v beta 3 postreceptor signaling events. Kieffer N, et al. **Cell Adhes Commun** 1996 Jul;4(1):25-39

REVIEW: the integrin alpha V beta 3: angiogenesis and apoptosis. Varner JA, et al. **Cell Adhes Commun** 1995 Nov; 3(4):367-74 (60 ref.)

Vascular smooth muscle alpha v beta 3 integrin mediates arteriolar vasodilation in response to RGD peptides. Mogford JE, et al. **Circ Res** 1996 Oct;79(4):821-6

Differential adhesion of metastatic RAW117 large-cell lymphoma cells under static or hydrodynamic conditions: role of integrin alpha(v) beta3. Yun Z, et al. **Clin Exp Metastasis** 1997 Jan;15(1):3-11

The role of vascular cell integrins alpha v beta 3 and alpha v beta 5 in angiogenesis. Varner JA. **EXS** 1997;79:361-90 (243 ref.)

Tumor angiogenesis and the role of vascular cell integrin alphavbeta3. Varner JA, et al. **Important Adv Oncol** 1996; :69-87 (259 ref.)

The alpha v beta 3 integrin "vitronectin receptor". Horton MA. **Int J Biochem Cell Biol** 1997 May;29(5):721-5 (14 ref.)

Thrombospondin modulates alpha v beta 3 function through integrin-associated protein. Gao AG, et al. **J Cell Biol** 1996 Oct;135(2):533-44

Evidence of the involvement of phosphatidylinositol 3-kinase in the migration, actin stress fiber formation, and alpha v beta 3-integrin-mediated adherence of human melanoma cells. Metzner B, et al. **J Invest Dermatol** 1996 Oct; 107(4):597-602

Addressing tumor blood vessels [news; comment] Folkman J. **Nat Biotechnol** 1997 Jun;15(6):510. Comment on: Nat Biotechnol 1997 Jun;15(6):542-6.

Alpha v integrins as receptors for tumor targeting by circulating ligands [see comments] Pasqualini R, et al. **Nat Biotechnol** 1997 Jun;15(6):542-6. Comment in: Nat Biotechnol 1997 Jun;15(6):510.

Potential roles of osteopontin and alphaVbeta3 integrin in the development of coronary artery restenosis after angioplasty. Panda D, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9308-13

RECEPTORS, VLA see **RECEPTORS, VERY LATE ANTIGEN**

RECEPTORS, VLA-5 see **RECEPTORS, FIBRONECTIN**

RECEPTOSOMES see **ENDOSOMES**

RECKLINGHAUSEN'S DISEASE OF BONE see **OSTEITIS FIBROSA CYSTICA**

RECKLINGHAUSEN'S DISEASE OF NERVE see **NEUROFIBROMATOSIS 1**

RECOMBINANT COLONY-STIMULATING FACTORS see **COLONY-STIMULATING FACTORS, RECOMBINANT**

RECOMBINANT DNA see **DNA, RECOMBINANT**

RECOMBINANT DNA VACCINES see **VACCINES, DNA**

RECOMBINANT ERYTHROPOIETIN see **ERYTHROPOIETIN, RECOMBINANT**

RECOMBINANT FUSION PROTEINS

see related
IMMUNOTOXINS

Development of immunoenzymatic reactions of peptides using recombinant hybrid proteins. Mandrika IK, et al. **Biochemistry (Mosc)** 1997 Feb;62(2):217-20

In vivo labeling of over-expressed recombinant proteins in E. coli. Giovane C, et al. **Biotechniques** 1997 May; 22(5):796-8

Family of plasmid vectors for the expression of beta-galactosidase fusion proteins in eukaryotic cells. Ivics Z, et al. **Biotechniques** 1997 Feb;22(2):254-6, 258

Gene transfer into mammalian cells using histone-condensed plasmid DNA. Fritz JD, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1395-404

Detection and typing of herpes simplex viruses by using recombinant immunoglobulin fragments produced in bacteria. Cattani P, et al. **J Clin Microbiol** 1997 Jun; 35(6):1504-9

Glutathione S-transferase fusion proteins as an affinity reagent for rapid isolation of specific sequence directly from genomic DNA. Majka J, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2537-8

ADMINISTRATION & DOSAGE

Cell-specific, multidrug delivery system using streptavidin-protein A fusion protein. Ohno K, et al. **Biochem Mol Med** 1996 Aug;58(2):227-33

Characterization of anti-tumor immunity derived from the inoculation of myeloma cells secreting the fusion protein RM4/IFN-tau. Qi Y, et al. **Hum Antibodies Hybridomas** 1996;7(1):21-6

Nucleic acid vaccination of sheep: Use in combination with a conventional adjuvanted vaccine against Taenia ovis. Rothel JS, et al. **Immunol Cell Biol** 1997 Feb;75(1):41-6

Restoration of the growth suppression function of mutant p53 by a synthetic peptide derived from the p53 C-terminal domain. Selivanova G, et al. **Nat Med** 1997 Jun;3(6):632-8

ADVERSE EFFECTS

Identification of an epitope of a recombinant Onchocerca volvulus protein that induces corneal pathology. Pearlman E, et al. **Mol Biochem Parasitol** 1997 Oct;89(1):123-35

ANALYSIS

Two-dimensional analysis of recombinant E. coli proteins using capillary isoelectric focusing electrospray ionization mass spectrometry. Tang W, et al. **Anal Chem** 1997 Aug 15;69(16):3177-82

Structural determinants for the intracellular localization of the isozymes of mammalian hexokinase: intracellular localization of fusion constructs incorporating structural elements from the hexokinase isozymes and the green fluorescent protein. Sui D, et al. **Arch Biochem Biophys** 1997 Sep 1;345(1):111-25

Dual luminescence-based reporter gene assay for luciferase and beta-galactosidase. Martin CS, et al. **Biotechniques** 1996 Sep;21(3):520-4

Optimized filter set and viewing conditions for the S65T mutant of GFP in living cells. Zylka MJ, et al. **Biotechniques** 1996 Aug;21(2):220-1, 224-6

Evaluation of fluorometric and zymographic methods as activity assays for stromelysins and gelatinases [published erratum appears in Clin Exp Metastasis 1997 May;15(3):339-40] Quesada AR, et al. **Clin Exp Metastasis** 1997 Jan;15(1):26-32

Identification of a recombinant synaptobrevin-thioredoxin fusion protein by capillary zone electrophoresis using laser-induced fluorescence detection. Asermely KE, et al. **J Chromatogr B Biomed Appl** 1997 Jul 18;695(1):67-75

Green fluorescent protein expressed by recombinant pseudorabies virus as an in vivo marker for viral replication. Jöns A, et al. **J Virol Methods** 1997 Jul;66(2):283-92

A novel epitope tag system to study protein targeting and organelle biogenesis in Trypanosoma brucei. Bastin P, et al. **Mol Biochem Parasitol** 1996 May;77(2):235-9

EWS/FLI-1 fusion transcript detection and MIC2 immunohistochemical staining in the diagnosis of Ewing's sarcoma. Lee CS, et al. **Pediatr Pathol Lab Med** 1996 May-Jun;16(3):379-92

ANTAGONISTS & INHIBITORS

Inactivation kinetics of dihydrofolate reductase from Chinese hamster during urea denaturation. Wu JW, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):395-401

[Cystathionase: catalytic activity of products of expression of cDNA fragments. Specific inhibition of native enzyme and fusion-protein by substrate-like O-substituted hydroxylamine] Gabibov AG, et al. **Dokl Akad Nauk** 1996 Sep;350(3):405-7 **(Rus)**

BIOSYNTHESIS

Production of a recombinant protein from Alternaria containing the reported N-terminal of the Alt a1 allergen. Barnes CS, et al. **Adv Exp Med Biol** 1996;409:197-203

Scintillation proximity assay for human DNA topoisomerase I using recombinant biotinyl-fusion protein produced in baculovirus-infected insect cells. Lerner CG, et al. **Anal Biochem** 1996 Sep 5;240(2):185-96

The utility of FK506-binding protein as a fusion partner in scintillation proximity assays: application to SH2 domains. Sonatore LM, et al. **Anal Biochem** 1996 Sep 5;240(2):289-97

Characterization of Saccharomyces cerevisiae CYP51 and a CYP51 fusion protein with NADPH cytochrome P-450 oxidoreductase expressed in Escherichia coli. Venkateswarlu K, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):776-80

Glucoamylase gene fusions alleviate limitations for protein production in Aspergillus awamori at the transcriptional and (post) translational levels. Gouka RJ, et al. **Appl Environ Microbiol** 1997 Feb;63(2):488-97

Production of the rat complement regulator, Crry, as an active soluble protein in Pichia pastoris. He C, et al. **Arch Biochem Biophys** 1997 May 15;341(2):347-52

Secretion of green fluorescent protein from recombinant baculovirus-infected insect cells. Laukkanen ML, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):755-61

Expression of an exogenous isopentenyl diphosphate isomerase gene enhances isoprenoid biosynthesis in Escherichia coli. Kajiwara S, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):421-6

High-level expression of cecropin CMIV in E. coli from a fusion construct containing the human tumor necrosis factor. Wang L, et al. **Biochem Mol Biol Int** 1997 Apr; 41(5):1051-6

Expression and purification of the E. coli DNA repair protein mut-H. Hamilton BJ, et al. **Biochem Soc Trans** 1997 Feb; 25(1):137S

Development of a human IgA antibody specific for the tumour antigen TAG-72. Ingram PE, et al. **Biochem Soc Trans** 1997 May;25(2):330S

High-level inducible expression of visual pigments in transfected cells. Kazmi MA, et al. **Biotechniques** 1996 Aug; 21(2):304-11

Conversion of bacterial gene products to secretion-competent fusion proteins. Mollenkopf HJ, et al. **Biotechniques** 1996 Nov;21(5):854, 856-60

Neurobehavioral alterations in developing transgenic mice expressing TNF-alpha in the brain. Fiore M, et al. **Brain Behav Immun** 1996 Jun;10(2):126-38

Overexpression of a functional NMDA receptor subunit (NMDAR1) in baculovirus-infected Trichoplusia ni insect cells. Sydow S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):228-40

Paradoxical tumor inhibitory effect of p53 loss in transgenic mice expressing epidermal-targeted v-rasHa, v-fos, or human transforming growth factor alpha. Greenhalgh DA, et al. **Cancer Res** 1996 Oct 1;56(19):4413-23

Production of biologically active human RelA (p65) in baculovirus-infected insect cells. Chabot-Fletcher M, et al. **Cell Biol Int** 1996 Nov;20(11):777-9

Cell-free expression of a GFP fusion protein allows quantitation in vitro and in vivo [letter] Kahn TW, et al. **Curr Biol** 1997 Apr 1;7(4):R207-8

Expression of the arylsulphatase reporter gene under the control of the nit1 promoter in Chlamydomonas reinhardtii. Ohresser M, et al. **Curr Genet** 1997 Mar;31(3):264-71

Protein expression using ubiquitin fusion and cleavage. Baker RT. **Curr Opin Biotechnol** 1996 Oct;7(5):541-6 (42 ref.)

Immunofluorescent study after transient transfection of myoblast cells with the plasmid PSV40-beta-globin. Pironcheva GL, et al. **Cytobios** 1996;86(347):243-6

Green fluorescent protein/beta-galactosidase double reporters for visualizing Drosophila gene expression patterns. Timmons L, et al. **Dev Genet** 1997;20(4):338-47

Reciprocal localization of Nod and kinesin fusion proteins indicates microtubule polarity in the Drosophila oocyte, epithelium, neuron and muscle. Clark IE, et al. **Development** 1997 Jan;124(2):461-70

Production of biologically active recombinant tilapia insulin-like growth factor-II polypeptides in Escherichia coli cells and characterization of the genomic structure of the coding region. Chen JY, et al. **DNA Cell Biol** 1997 Jul;16(7):883-92

Expression plasmid vectors with convenient subcloning sites in lambda gt11 that efficiently produce detectable tagged proteins. Takemoto Y, et al. **DNA Cell Biol** 1997 Jul; 16(7):893-6

Serum-dependent and cell cycle-dependent expression from a cytomegalovirus-based mammalian expression vector. Brightwell G, et al. **Gene** 1997 Jul 18;194(1):115-23

Targeting gamma interferon to tumor cells by a genetically engineered fusion protein secreted from myeloma cells. Xiang J, et al. **Hum Antibodies Hybridomas** 1996;7(1):2-10

Prolonged expression of therapeutic levels of human granulocyte colony-stimulating factor in rats following gene transfer to skeletal muscle. Bonham L, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1423-9

Construction of a double recombinant adenovirus vector expressing a heterodimeric cytokine: in vitro and in vivo production of biologically active interleukin-12. Bramson J, et al. **Hum Gene Ther** 1996 Feb 10;7(3):333-42

Long-term expression of a foreign gene from a unique position in the latent herpes simplex virus genome. Carpenter DE, et al. **Hum Gene Ther** 1996 Aug 1; 7(12):1447-54

Receptor ligand-facilitated gene transfer: enhancement of liposome-mediated gene transfer and expression by transferrin. Cheng PW. **Hum Gene Ther** 1996 Feb 10; 7(3):275-82

Systematic analysis of repeated gene delivery into animal lungs with a recombinant adenovirus vector. Dong JY, et al. **Hum Gene Ther** 1996 Feb 10;7(3):319-31

Granulocyte colony-stimulating factor expression from transduced vascular smooth muscle cells provides sustained neutrophil increases in rats. Lejnieks DV, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1431-6

Safety of adenovirus-mediated transfer of the human cystic fibrosis transmembrane conductance regulator cDNA to the lungs of nonhuman primates. Wilmott RW, et al. **Hum Gene Ther** 1996 Feb 10;7(3):301-18

Expression of human recombinant beta 2-microglobulin by Aspergillus nidulans and its activity. O'Herrin SM, et al. **Hum Immunol** 1996 Dec;51(2):63-72

Strategies for expressing human antibody repertoires in transgenic mice. Brüggemann M, et al. **Immunol Today** 1996 Aug;17(8):391-7 (47 ref.)

Expression of the cholera toxin B subunit in the Golgi apparatus of Swiss 3T3 cells inhibits DNA synthesis induced by basic fibroblast growth factor. Hashimoto Y, et al. **J Biochem (Tokyo)** 1996 May;119(5):985-90

Expression of the long arm sequence of mouse laminin alpha1, beta1, or gamma1 chain in COS1 cells and assembly of monkey-mouse hybrid laminin. Niimi T, et al. **J Biochem (Tokyo)** 1997 May;121(5):854-61

Mosaic hepatitis B virus core particles allow insertion of

extended foreign protein segments. Koletzki D, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):2049–53

IL–12 gene therapy protects mice in lethal Klebsiella pneumonia. Greenberger MJ, et al. **J Immunol** 1996 Oct 1;157(7):3006–12

High–level production of a secreted, heterodimeric alpha beta murine T–cell receptor in Escherichia coli. Golden A, et al. **J Immunol Methods** 1997 Aug 7;206(1–2):163–9

Efficient and sustained transgene expression in mature rat oligodendrocytes in primary culture. Guo Z, et al. **J Neurosci Res** 1996 Jan 1;43(1):32–41

Inhibitory effect of c–fos overexpression on B cell proliferative responses to membrane IGM cross–linking. Tomita Y, et al. **Kobe J Med Sci** 1995 Oct;41(5):141–53

Gene identification using the yeast two–hybrid system. Bai C, et al. **Methods Enzymol** 1996;273:331–47 (17 ref.)

Use of green fluorescent protein for intracellular protein localization in living fission yeast cells. Nabeshima K, et al. **Methods Enzymol** 1997;283:459–71

Use of conditional promoters for expression of heterologous proteins in Saccharomyces cerevisiae. Rönicke V, et al. **Methods Enzymol** 1997;283:313–22

Bacteriophage lambda–based expression vectors. Christensen AC. **Methods Mol Biol** 1997;62:29–36

Yeast two–hybrid library screening. Cowell IG. **Methods Mol Biol** 1997;69:185–202

Expression and preparation of fusion proteins from recombinant lambda gt11 phages. Huang SH, et al. **Methods Mol Biol** 1997;69:241–5

Strategies for gene fusions. Ståhl S, et al. **Methods Mol Biol** 1997;62:37–54

Protein interaction cloning by far–Western screening of lambda–phage cDNA expression libraries. Takayama S, et al. **Methods Mol Biol** 1997;69:171–84

Signal sequence trap. Expression cloning method for secreted proteins and type 1 membrane proteins. Tashiro K, et al. **Methods Mol Biol** 1997;69:203–19

Negative glucorticoid regulation of cyclic adenosine 3', 5'–monophosphate–stimulated corticotropin–releasing hormone–reporter expression in AtT–20 cells. Guardiola–Diaz HM, et al. **Mol Endocrinol** 1996 Mar; 10(3):317–29

Use of translational fusions to the maltose–binding protein to produce and purify proteins in Pseudomonas syringae and assess their activity in vivo. Peñaloza–Vázquez A, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):637–41

Yeast surface display for screening combinatorial polypeptide libraries. Boder ET, et al. **Nat Biotechnol** 1997 Jun; 15(6):553–7

Efficient hammerhead ribozyme and antisense RNA targeting in a slow ribosome Escherichia coli mutant. Chen H, et al. **Nat Biotechnol** 1997 May;15(5):432–5

Design and production of novel tetravalent bispecific antibodies [see comments] Coloma MJ, et al. **Nat Biotechnol** 1997 Feb;15(2):159–63. Comment in: Nat Biotechnol 1997 Feb;15(2):125–6.

Bioactive murine and human interleukin–12 fusion proteins which retain antitumor activity in vivo. Lieschke GJ, et al. **Nat Biotechnol** 1997 Jan;15(1):35–40

A new class of antigen–specific killer cells [see comments] Yang AG, et al. **Nat Biotechnol** 1997 Jan;15(1):46–51. Comment in: Nat Biotechnol 1997 Jan;15(1):18–9.

Getting more from the two–hybrid system: N–terminal fusions to LexA are efficient and sensitive baits for two–hybrid studies. Béranger F, et al. **Nucleic Acids Res** 1997 May 15;25(10):2035–6

Expression of herpes virus thymidine kinase in Neurospora crassa. Sachs MS, et al. **Nucleic Acids Res** 1997 Jun 15; 25(12):2389–95

Expression and characterization of the multidrug resistance–associated protein in insect cells infected with a recombinant baculovirus. Sun H, et al. **Oncol Res** 1996; 8(7–8):287–93

A transformation vector for stage–specific expression of heterologous genes in Trypanosoma cruzi epimastigotes. Thomas MC, et al. **Parasitol Res** 1997;83(2):151–6

Green–fluorescent protein fusions for efficient characterization of nuclear targeting. Grebenok RJ, et al. **Plant J** 1997 Mar;11(3):573–86

The green fluorescent protein as a marker to visualize plant mitochondria in vivo. Köhler RH, et al. **Plant J** 1997 Mar; 11(3):613–21

Generation of packaging cell lines for pseudotyped retroviral vectors of the G protein of vesicular stomatitis virus by using a modified tetracycline inducible system. Chen ST, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10057–62

Disrupted splenic architecture, but normal lymph node development in mice expressing a soluble lymphotoxin–beta receptor–IgG1 fusion protein. Ettinger R, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13102–7

Acute leukemia with promyelocytic features in PML/RARalpha transgenic mice. He LZ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5302–7

A stable human–derived packaging cell line for production of high titer retrovirus/vesicular stomatitis virus G pseudotypes. Ory DS, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11400–6

Propagation of an attenuated virus by design: engineering a novel receptor for a noninfectious foot–and–mouth disease virus. Rieder E, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10428–33

Efficient production of the C–terminal domain of secretory leukoprotease inhibitor as a thrombin–cleavable fusion protein in Escherichia coli. Masuda K, et al. **Protein Eng** 1996 Jan;9(1):101–6

Expression and biological activity of genetic fusions between MalE, the maltose binding protein from Escherichia coli and portions of CD4, the T–cell receptor of the AIDS virus. Clément JM, et al. **Protein Expr Purif** 1996 Nov; 8(3):319–31

Bovine beta–casein expressed in transgenic mouse milk is phosphorylated and incorporated into micelles. Hitchin E, et al. **Protein Expr Purif** 1996 May;7(3):247–52

Expression, isolation, and characterization of a signal sequence–appended chimeric precursor protein. Kaderbhai N, et al. **Protein Expr Purif** 1996 May;7(3):237–46

High–level expression of soluble protein in Escherichia coli using a His6–tag and maltose–binding–protein double–affinity fusion system. Pryor KD, et al. **Protein Expr Purif** 1997 Aug;10(3):309–19

Expression of aggregation–prone recombinant proteins at low temperatures: a comparative study of the Escherichia coli cspA and tac promoter systems. Vasina JA, et al. **Protein Expr Purif** 1997 Mar;9(2):211–8

Fine mapping of protein interaction surfaces with a PCR–based mutagenesis screen in yeast. Gstaiger M, et al. **Trends Genet** 1996 Oct;12(10):393–4

Construction and characterisation of a recombinant vaccinia virus expressing human papillomavirus proteins for immunotherapy of cervical cancer. Boursnell ME, et al. **Vaccine** 1996 Nov;14(16):1485–94

Production of active polyomavirus large T antigen in yeast Pichia pastoris. Peng YC, et al. **Virus Res** 1997 May; 49(1):41–7

[The expression of pulmonary surfactant proteins B and surfactant protein C in E. coli] Liu X, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jun;76(6):447–50 (Eng. Abstr.) **(Chi)**

[Expression of receptor–associated protein of the Heymann nephritis pathogenic epitope in Escherichia coli] Hu Y, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1996 Aug; 25(4):209–11 (Eng. Abstr.) **(Chi)**

[Expression of cDNA of human chorionic gonadotropin beta–subunit (beta–hCG) cDNA in insect cells and effect of expressed product on mouse lymphocytes in vitro] Shen QX, et al. **Shih Yen Sheng Wu Hsueh Pao** 1996 Mar; 29(1):95–100 (Eng. Abstr.) **(Chi)**

CHEMICAL SYNTHESIS

Introduction of spacer peptides N–terminal to a cleavage recognition motif in recombinant fusion proteins can improve site–specific cleavage. Polyak SW, et al. **Protein Eng** 1997 Jun;10(6):615–9

CHEMISTRY

The visualization of peroxisomal proteins containing a C–terminal targeting sequence on western blot by using the biotinylated PTS1–receptor [published erratum appears in Anal Biochem 1997 Mar 15;246(2):270] Fransen M, et al. **Anal Biochem** 1996 Nov 1;242(1):26–30

Single–chain Fv fusion proteins suitable as coating and detecting reagents in a double antibody sandwich enzyme–linked immunosorbent assay. Kerschbaumer RJ, et al. **Anal Biochem** 1997 Jul 1;249(2):219–27

Bifunctional fusion proteins of calmodulin and protein A as affinity ligands in protein purification and in the study of protein–protein interactions. Hentz NG, et al. **Anal Chem** 1996 Nov 15;68(22):3939–44

Renaturation and purification of recombinant tissue–type plasminogen activator expressed in E. coli. Hua ZC. **Biochem Mol Biol Int** 1997 Apr;41(4):815–20

Potent bifunctional anticoagulants: Kunitz domain–tissue factor fusion proteins. Lee GF, et al. **Biochemistry** 1997 May 13;36(19):5607–11

The isolation and characterization of purified heterocomplexes of recombinant retinoic acid receptor and retinoid X receptor ligand binding domains. Tian K, et al. **Biochemistry** 1997 May 13;36(19):5669–76

A functional chimeric modular polyketide synthase generated via domain replacement. Bedford D, et al. **Chem Biol** 1996 Oct;3(10):827–31

Demonstration of dimer formation of the cytoplasmic domain of a transmembrane osmosensor protein, EnvZ, of Escherichia coli using Ni–histidine tag affinity chromatography. Hidaka Y, et al. **FEBS Lett** 1997 Jan 3; 400(2):238–42

Reversible, site–specific immobilization of polyarginine–tagged fusion proteins on mica surfaces. Nock S, et al. **FEBS Lett** 1997 Sep 8;414(2):233–8

Detection of tetramerization domains in vivo by cooperative DNA binding to tandem lambda operator sites. Zeng X, et al. **Gene** 1997 Feb 7;185(2):245–9

Biochemical characterization of recombinant fusions of lipopolysaccharide binding protein and bactericidal/permeability–increasing protein. Implications in biological activity. Abrahamson SL, et al. **J Biol Chem** 1997 Jan 24;272(4):2149–55

Fusion peptides derived from the HIV type 1 glycoprotein 41 associate within phospholipid membranes and inhibit cell–cell Fusion. Structure–function study. Kliger Y, et al. **J Biol Chem** 1997 May 23;272(21):13496–505

Capillary electrophoretic examination of underivatized oligosaccharide mixtures released from immunoglobulin G antibodies and CTLA4Ig fusion protein. Greve KF, et al. **J Chromatogr A** 1996 Oct 18;749(1–2):237–45

Liquid chromatographic and capillary electrophoretic examination of intact and degraded fusion protein CTLA4Ig and kinetics of conformational transition. Greve KF, et al. **J Chromatogr A** 1996 Feb 9;723(2):273–84

Escherichia coli RNA polymerase holoenzyme: rapid reconstitution from recombinant alpha, beta, beta', and sigma subunits. Tang H, et al. **Methods Enzymol** 1996; 273:130–4 (19 ref.)

Binding properties and solubility of single–chain T cell receptors expressed in E. coli. Schodin BA, et al. **Mol Immunol** 1996 Jun;33(9):819–29

I. A bioactive designer cytokine for human hematopoietic progenitor cell expansion. Fischer M, et al. **Nat Biotechnol** 1997 Feb;15(2):142–5

Design of a solubilization pathway for recombinant polypeptides in vivo through processing of a bi–protein with a viral protease. Pérez–Martin J, et al. **Protein Eng** 1997 Jun;10(6):725–30

Introduction of spacer peptides N–terminal to a cleavage recognition motif in recombinant fusion proteins can improve site–specific cleavage. Polyak SW, et al. **Protein Eng** 1997 Jun;10(6):615–9

Disulfide stabilization of antibody Fv: computer predictions and experimental evaluation. Reiter Y, et al. **Protein Eng** 1995 Dec;8(12):1323–31

Topology of eukaryotic multispanning transmembrane proteins: use of LacZ fusions for the localization of cytoplasmic domains in COS.M6 cells. Schülein R, et al. **Protein Eng** 1997 Jun;10(6):707–13

A general bacterial expression system for functional analysis of cDNA–encoded proteins. Larsson M, et al. **Protein Expr Purif** 1996 Jun;7(4):447–57

Use of a fusion protein to obtain crystals suitable for X–ray analysis: crystallization of a GST–fused protein containing the DNA–binding domain of DNA replication–related element–binding factor, DREF. Kuge M, et al. **Protein Sci** 1997 Aug;6(8):1783–6

Rab7: NMR and kinetics analysis of intact and C–terminal truncated constructs. Neu M, et al. **Proteins** 1997 Feb; 27(2):204–9

DIAGNOSTIC USE

Production of a recombinant fusion protein of Sarcocystis tenella and evaluation of its diagnostic potential in an ELISA. Mertens CM, et al. **Vet Parasitol** 1996 Oct 25; 65(3–4):185–97

[Use of protease 3c and foot–and–mouth disease virus RNA polymerase hybrid proteins, synthesized in Escherichia coli, for diagnosis] Aminev AG, et al. **Mol Biol (Mosk)** 1997 May–Jun;31(3):568–72 **(Rus)**

GENETICS

An efficient method for cloning in–frame fusion protein genes. Bar–Peled M, et al. **Anal Biochem** 1997 Aug 1; 250(2):262–4

A yeast three–hybrid method to clone ternary protein complex components. Zhang J, et al. **Anal Biochem** 1996 Nov 1;242(1):68–72

Construction of a P450c27 fusion enzyme: a useful tool for analysis of vitamin D3 25–hydroxylase activity. Dilworth FJ, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):267–71

Construction, expression and characterization of chimaeric toxins containing the ribonucleolytic toxin restrictocin: intracellular mechanism of action. Rathore D, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):815–22

High–level expression of cecropin CMIV in E. coli from a fusion construct containing the human tumor necrosis factor. Wang L, et al. **Biochem Mol Biol Int** 1997 Apr; 41(5):1051–6

Cell targeting for gene delivery: use of fusion protein containing the modified human receptor for ecotropic murine leukemia virus. Ohno K, et al. **Biochem Mol Med** 1995 Dec;56(2):172–5

Human non–pancreatic (group II) secreted phospholipase A2 expressed from a synthetic gene in Escherichia coli: characterisation of N–terminal mutants. Othman R, et al. **Biochim Biophys Acta** 1996 Sep 27;1303(2):92–102

Expression of foreign proteins on the surface of Autographa californica nuclear polyhedrosis virus. Grabherr R, et al. **Biotechniques** 1997 Apr;22(4):730–5

Efficient adenoviral vector–directed expression of a foreign gene to neurons and sustentacular cells in the mouse olfactory neuroepithelium. Holtmaat AJ, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):148–56

Active rat aromatic–L–amino acid decarboxylase as a fusion protein in Escherichia coli. Jebai F, et al. **C R Acad Sci III** 1997 May;320(5):349–58

Protein expression using ubiquitin fusion and cleavage. Baker RT. **Curr Opin Biotechnol** 1996 Oct;7(5):541–6 (42 ref.)

Expression of properly folded human glutamate decarboxylase 65 as a fusion protein in Escherichia coli. Papoucnado ML, et al. **Eur J Biochem** 1997 Jun 1; 246(2):350–9

EWS–FLI1 fusion transcripts identified in patients with typical neuroblastoma. Burchill SA, et al. **Eur J Cancer** 1997 Feb;33(2):239–43

Integrative vector for constructing single–copy translational fusions between regulatory regions of Bacillus subtilis and

the bgaB reporter gene encoding a heat-stable beta-galactosidase. Stoss O, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):49-54

General purpose tagging vectors for fission yeast. Forsburg SL, et al. **Gene** 1997 Jun 3;191(2):191-5

A fusion protein library: an improved method for rapid screening and characterization of DNA binding or interacting proteins. Ikeda M, et al. **Gene** 1996 Nov 28; 181(1-2):167-71

Production of a urokinase plasminogen activator-IgG fusion protein (uPA-IgG) in the baculovirus expression system. Kost TA, et al. **Gene** 1997 Apr 29;190(1):139-44

High-level production and purification of biologically active proteins from bacterial and mammalian cells using the tandem pGFLEX expression system. Manoharan HT, et al. **Gene** 1997 Jul 9;193(2):229-37

Strategies for optimal synthesis and secretion of heterologous proteins in the methylotrophic yeast Pichia pastoris. Sreekrishna K, et al. **Gene** 1997 Apr 29;190(1):55-62

Construction and biological characterization of an interleukin-12 fusion protein (Flexi-12): delivery to acute myeloid leukemic blasts using adeno-associated virus. Anderson R, et al. **Hum Gene Ther** 1997 Jun 10; 8(9):1125-35

Treatment of advanced CNS malignancies with the recombinant adenovirus H5.010RSVTK: a phase I trial. Eck SL, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1465-82

Gene transfer using a novel fusion protein, GAL4/invasin. Paul RW, et al. **Hum Gene Ther** 1997 Jul 1;8(10):1253-62

Glioma cells transduced with an Escherichia coli CD/HSV-1 TK fusion gene exhibit enhanced metabolic suicide and radiosensitivity. Rogulski KR, et al. **Hum Gene Ther** 1997 Jan 1;8(1):73-85

A phase I/II pilot study of the safety of the adoptive transfer of syngeneic gene-modified cytotoxic T lymphocytes in HIV-infected identical twins. Walker RE. **Hum Gene Ther** 1996 Feb 10;7(3):367-400

Subcellular localization of the MEN, MLL/MEN and truncated MLL proteins expressed in leukemic cells carrying the t(11;19)(q23;p13.1) translocation. Kanda Y, et al. **Int J Hematol** 1997 Aug;66(2):189-95

Preferential MyoD homodimer formation demonstrated by a general method of dominant negative mutation employing fusion with a lysosomal protease. Li FQ, et al. **J Cell Biol** 1996 Nov;135(4):1043-57

High-level misincorporation of lysine for arginine at AGA codons in a fusion protein expressed in Escherichia coli. Calderone TL, et al. **J Mol Biol** 1996 Oct 4;262(4):407-12

Green fluorescent protein as a tool for screening recombinant baculoviruses. Eriksson S, et al. **J Virol Methods** 1996 May; 59(1-2):127-33

Identification of immediate-early gene targets of the Raf-1 serine/threonine protein kinase using an estradiol-dependent fusion protein, delta Raf-1:ER. McCarthy SA, et al. **Methods Mol Biol** 1997;85:137-51

Bacterial expression, purification, and potential use of His-tagged GAL4 fusion proteins. Schmitz ML, et al. **Methods Mol Biol** 1997;63:129-37

Authentic display of a cholera toxin epitope by chimeric type 1 fimbriae: effects of insert position and host background. Stentebjerg-Olesen B, et al. **Microbiology** 1997 Jun;143 (Pt 6):2027-38

Antigenicity of recombinant proteins derived from Plasmodium falciparum merozoite surface protein 1. Cavanagh DR, et al. **Mol Biochem Parasitol** 1997 Apr; 85(2):197-211

FLP recombinase/estrogen receptor fusion proteins require the receptor D domain for responsiveness to antagonists, but not agonists. Nichols M, et al. **Mol Endocrinol** 1997 Jun;11(7):950-61

Recombinant immunotoxins: protein engineering for cancer therapy. Brinkmann U. **Mol Med Today** 1996 Oct; 2(10):439-46

Antitumor immunotoxin secretion by T cells: ABSolutely FABulous? [news; comment] Fitzgerald DJ. **Nat Biotechnol** 1997 Jan;15(1):18-9. Comment on: Nat Biotechnol 1997 Jan;15(1):46-51.

EAT-2 is a novel SH2 domain containing protein that is up regulated by Ewing's sarcoma EWS/FLI1 fusion gene. Thompson AD, et al. **Oncogene** 1996 Dec 19; 13(12):2649-58

Destabilizing interactions between the partners of a bifunctional fusion protein. Blondel A, et al. **Protein Eng** 1996 Feb;9(2):231-8

Display of beta-lactamase on the Escherichia coli surface: outer membrane phenotypes conferred by Lpp'-OmpA'-beta-lactamase fusions. Georgiou G, et al. **Protein Eng** 1996 Feb;9(2):239-47

Design of a solubilization pathway for recombinant polypeptides in vivo through processing of a bi-protein with a viral protease. Pérez-Martin J, et al. **Protein Eng** 1997 Jun;10(6):725-30

Multimer formation as a consequence of separate homodimerization domains: the human c-Jun leucine zipper is a transplantable dimerization module [published erratum appears in Protein Eng 1996 Sep;9(9):831] Riley LG, et al. **Protein Eng** 1996 Feb;9(2):223-30

Genetic construction and characterization of the diphtheria toxin-related interleukin 15 fusion protein DAB389 sIL-15. vanderSpek JC, et al. **Protein Eng** 1995 Dec;8(12):1317-21

Construction and structure-activity relationships of chimeric prourokinase derivatives with intrinsic thrombin-inhibitory potential. Wnendt S, et al. **Protein Eng** 1996 Feb; 9(2):213-23

Large-scale purification and characterization of recombinant fibroblast growth factor-saporin mitotoxin. McDonald JR, et al. **Protein Expr Purif** 1996 Aug;8(1):97-108

Expression of the extracellular domain of the human heat-stable enterotoxin receptor in Escherichia coli and generation of neutralizing antibodies. Nandi A, et al. **Protein Expr Purif** 1996 Sep;8(2):151-9

Overexpression of bacterio-opsin in Escherichia coli as a water-soluble fusion to maltose binding protein: efficient regeneration of the fusion protein and selective cleavage with trypsin. Chen GQ, et al. **Protein Sci** 1996 Mar; 5(3):456-67

pOVEX vector: prokaryotic expression and purification of onchocerciasis vaccine candidate antigens as fusion proteins with the 24 kD Onchocerca volvulus glutathione S-transferase. Liebau E, et al. **Trop Med Int Health** 1997 Jul;2(7):691-4

[Biosynthesis of human calcitonin and mini-proinsulin in bacterial cells in the form of hybrid proteins with corresponding antisense peptides and a metal-binding peptide] Efimov VA, et al. **Bioorg Khim** 1996 Jul; 22(7):503-9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Expression and immunological characterisation of Echinococcus granulosus recombinant antigen B for IgG4 subclass detection in human cystic echinococcosis. McVie A, et al. **Acta Trop** 1997 Sep 15;67(1-2):19-35

Lol pII allergen. Production and characterization of the recombinant protein and human antibody fragments. Sidoli A, et al. **Adv Exp Med Biol** 1996;409:255-60

A superantigen-antibody fusion protein for T-cell immunotherapy of human B-lineage malignancies. Gidlöf C, et al. **Blood** 1997 Mar 15;89(6):2089-97

Human T cell responses to recombinant mite antigens of Dermatophagoides farinae. Fujii S, et al. **Clin Exp Immunol** 1997 May;108(2):284-8

Identification of epitopes on a mutant form of Pseudomonas exotoxin using serum from humans treated with Pseudomonas exotoxin containing immunotoxins. Roscoe DM, et al. **Eur J Immunol** 1997 Jun;27(6):1459-68

Probing human beta 1- and beta 2-adrenoceptors with domain-specific fusion protein antibodies. Jahns R, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):111-21

The use of recombinant vaccinia virus to generate monoclonal antibodies against the cell-surface glycoprotein endoglin. Luque A, et al. **FEBS Lett** 1997 Aug 18; 413(2):265-8

Targeting gamma interferon to tumor cells by a genetically engineered fusion protein secreted from myeloma cells. Xiang J, et al. **Hum Antibodies Hybridomas** 1996;7(1):2-10

Cloning and cytotoxicity of a human pancreatic RNase immunofusion. Zewe M, et al. **Immunotechnology** 1997 Jun; 3(2):127-36

Expression and immunogenicity of pertussis toxin S1 subunit-tetanus toxin fragment C fusions in Salmonella typhi vaccine strain CVD 908. Barry EM, et al. **Infect Immun** 1996 Oct;64(10):4172-81

Expression and immunogenicity of an Echinococcus granulosus fatty acid-binding protein in live attenuated Salmonella vaccine strains. Chabalgoity JA, et al. **Infect Immun** 1997 Jun;65(6):2402-12

V antigen-polyhistidine fusion peptide: binding to LcrH and active immunity against plague. Motin VL, et al. **Infect Immun** 1996 Oct;64(10):4313-8

Immune response during tumor therapy with antibody-superantigen fusion proteins. Rosendahl A, et al. **Int J Cancer** 1996 Sep 27;68(1):109-13

Escherichia coli expressed herpes simplex virus gG1 and gG2 proteins in ELISA and immunoblotting assays. Kakkanas A, et al. **Intervirology** 1995;38(6):346-51

An engineered bivalent single-chain antibody fragment that increases antigen binding activity. Luo D, et al. **J Biochem (Tokyo)** 1997 May;121(5):831-4

Epitope mapping of nine monoclonal antibodies against osteocalcin: combinations into two-site assays affect both assay specificity and sample stability. Hellman J, et al. **J Bone Miner Res** 1996 Aug;11(8):1165-75

Long-lived and transferable tumor immunity in mice after targeted interleukin-2 therapy. Becker JC, et al. **J Clin Invest** 1996 Dec 15;98(12):2801-4

Human recombinant antibodies specific for hepatitis C virus core and envelope E2 peptides from an immune phage display library. Chan SW, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2531-9

Domain-switched mouse IgM/IgG2b hybrids indicate individual roles for C mu 2, C mu 3, and C mu 4 domains in the regulation of the interaction of IgM with complement C1q. Chen FH, et al. **J Immunol** 1997 Oct 1;159(7):3354-63

Cytolytic and cytostatic properties of an anti-human Fc gammaRI (CD64) x epidermal growth factor bispecific fusion protein. Goldstein J, et al. **J Immunol** 1997 Jan 15; 158(2):872-9

Regulation of superantigen-induced T cell activation in the absence and the presence of MHC class II. Lando PA, et al. **J Immunol** 1996 Oct 1;157(7):2857-63

Induction of blister-causing antibodies by a recombinant full-length, but not the extracellular, domain of the pemphigus vulgaris antigen (desmoglein 3). Memar O, et al. **J Immunol** 1996 Oct 1;157(7):3171-7

Multivalent antibody fragments with high functional affinity for a tumor-associated carbohydrate antigen. Rheinnecker M, et al. **J Immunol** 1996 Oct 1;157(7):2989-97

DNA vaccines against lymphoma: promotion of anti-idiotypic antibody responses induced by single chain Fv genes by fusion to tetanus toxin fragment C. Spellerberg MB, et al. **J Immunol** 1997 Aug 15;159(4):1885-92

Engineering of a recombinant colorimetric fusion protein for immunodiagnosis of insulin. Chanussot C, et al. **J Immunol Methods** 1996 Oct 16;197(1-2):39-49

The serum albumin-binding region of streptococcal protein G: a bacterial fusion partner with carrier-related properties. Sjölander A, et al. **J Immunol Methods** 1997 Feb 14; 201(1):115-23

Mutated epitopes of hepatitis B surface antigen fused to the core antigen of the virus induce antibodies that react with the native surface antigen. Shiau AL, et al. **J Med Virol** 1997 Mar;51(3):159-66

Antigenicity of recombinant proteins derived from Plasmodium falciparum merozoite surface protein 1. Cavanagh DR, et al. **Mol Biochem Parasitol** 1997 Apr; 85(2):197-211

Recombinant Pfs230, a Plasmodium falciparum gametocyte protein, induces antisera that reduce the infectivity of Plasmodium falciparum to mosquitoes. Williamson KC, et al. **Mol Biochem Parasitol** 1995 Dec;75(1):33-42

Long-term protection of chimpanzees against high-dose HIV-1 challenge induced by immunization. Lubeck MD, et al. **Nat Med** 1997 Jun;3(6):651-8

Affinity enhancement of a recombinant antibody: formation of complexes with multiple valency by a single-chain Fv fragment-core streptavidin fusion. Kipriyanov SM, et al. **Protein Eng** 1996 Feb;9(2):203-11

pOVEX vector: prokaryotic expression and purification of onchocerciasis vaccine candidate antigens as fusion proteins with the 24 kD Onchocerca volvulus glutathione S-transferase. Liebau E, et al. **Trop Med Int Health** 1997 Jul;2(7):691-4

Cell-mediated immune responses to MUC1 fusion protein coupled to mannan. Apostolopoulos V, et al. **Vaccine** 1996 Jun;14(9):930-8

Replication and immunogenicity of Ad7-, Ad4-, and Ad5-hepatitis B virus surface antigen recombinants, with or without a portion of E3 region, in chimpanzees. Chengalvala MV, et al. **Vaccine** 1997 Feb;15(3):335-9

Combination of human cytomegalovirus recombinant immediate-early protein (IE1) with 80 nm cationic biovectors: protection from proteolysis and potentiation of presentation to CD4+ T-cell clones in vitro. Prieur E, et al. **Vaccine** 1996 Apr;14(6):511-20

Immunogenicity of a fusion protein linking the beta subunit carboxyl terminal peptide (CTP) of human chorionic gonadotropin to the B subunit of Escherichia coli heat-labile enterotoxin (LTB). Rock EP, et al. **Vaccine** 1996 Nov;14(16):1560-8

Urea/DTT solubilization of a recombinant Taenia ovis antigen, 45W, expressed as a GST fusion protein results in enhanced protective immune response to the 45W moiety. Rothel JS, et al. **Vaccine** 1997 Apr;15(5):469-72

Immunological responses in the mouse host to a cloned antigen of Taenia crassiceps. Hill DE, et al. **Vet Parasitol** 1996 Oct 25;65(3-4):247-58

[Immunohistochemical detection of antigen of human cytomegalovirus in hepatocyte] Xiong Y, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar;27(1):46-8 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Chloramphenicol resistance interferes with purification of histidine-tagged fusion proteins from recombinant Escherichia coli. Oswald T, et al. **Anal Biochem** 1996 May 1;236(2):357-8

Renaturation and purification of recombinant tissue-type plasminogen activator expressed in E. coli. Hua ZC. **Biochem Mol Biol Int** 1997 Apr;41(4):815-20

The isolation and characterization of purified heterocomplexes of recombinant retinoic acid receptor and retinoid X receptor ligand binding domains. Tian K, et al. **Biochemistry** 1997 May 13;36(19):5669-76

Cycling probe technology with RNase H attached to an oligonucleotide. Bekkaoui F, et al. **Biotechniques** 1996 Feb; 20(2):240-8

Purification of (His)6EcoRV [recombinant restriction endonuclease EcoRV fused to a (His)6 affinity domain] by metal-chelate affinity chromatography. Oswald T, et al. **Biotechnol Appl Biochem** 1997 Apr;25 (Pt 2):109-15

A new expression vector for high level protein production, one step purification and direct isotopic labeling of calmodulin-binding peptide fusion proteins. Zheng CF, et al. **Gene** 1997 Feb 20;186(1):55-60

Isolation and molecular characterization of hepatitis B virus X-protein from a baculovirus expression system. Urban S, et al. **Hepatology** 1997 Oct;26(4):1045-53

Multiple affinity domains for the detection, purification and immobilization of recombinant proteins. Nilsson J, et al. **J Mol Recognit** 1996 Sep-Dec;9(5-6):585-94

Purification of overproduced Escherichia coli RNA polymerase sigma factors by solubilizing inclusion bodies and refolding from Sarkosyl. Burgess RR. **Methods Enzymol** 1996;273:145-9 (7 ref.)

One-step PCR mediated strategy for the construction of conditionally expressed and epitope tagged yeast proteins.

Lafontaine D, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3469–71

Engineering a de novo–designed coiled–coil heterodimerization domain off the rapid detection, purification and characterization of recombinantly expressed peptides and proteins [published erratum appears in Protein Eng 1997 Mar;10(3):299] Tripet B, et al. **Protein Eng** 1996 Nov;9(11):1029–42

Purification and characterization of human and mouse recombinant alpha–fetoproteins expressed in Escherichia coli. Boismenu R, et al. **Protein Expr Purif** 1997 Jun; 10(1):10–26

Expression, purification, and characterization of the recombinant NAD–malic enzyme from Ascaris suum. Chooback L, et al. **Protein Expr Purif** 1997 Jun;10(1):51–4

Improved membrane isolation in the purification of beta 2–adrenoceptors from transgenic Escherichia coli. Hill RA, et al. **Protein Expr Purif** 1997 Jun;10(1):162–7

Purification and characterization of recombinant osteocalcin fusion protein expressed in Escherichia coli. Käkönen SM, et al. **Protein Expr Purif** 1996 Sep;8(2):137–44

A general bacterial expression system for functional analysis of cDNA–encoded proteins. Larsson M, et al. **Protein Expr Purif** 1996 Jun;7(4):447–57

Purification of recombinant lecithin: cholesterol acyltransferase. Nair MP, et al. **Protein Expr Purif** 1997 Jun;10(1):38–41

Overexpression and large–scale purification of recombinant hamster polymorphic arylamine N–acetyltransferase as a dihydrofolate reductase fusion protein. Sticha KR, et al. **Protein Expr Purif** 1997 Jun;10(1):141–53

Blood proteins from transgenic animal bioreactors. Luboń H, et al. **Transfus Med Rev** 1996 Apr;10(2):131–43 (86 ref.)

Methods and reagents. Purification of GST fusion proteins. Hengen PN. **Trends Biochem Sci** 1996 Oct;21(10):400–1

[Comparative study of 3 heterologous expression systems for obtaining recombinant Bacillus thuringiensis delta–endotoxins] Vázquez R, et al. **Rev Latinoam Microbiol** 1995 Jul–Sep;37(3):237–44 (Eng. Abstr.) **(Spa)**

METABOLISM

Lack of rearranged Tpr–met mRNA expression in human gastric cancer cell lines and gastric mucosa and carcinoma. Osaki M, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2881–4

Loading of iron into recombinant rat liver ferritin heteropolymers by ceruloplasmin. Juan SH, et al. **Arch Biochem Biophys** 1997 May 15;341(2):280–6

Macrophages expressing a fusion protein derived from bactericidal/permeability–increasing protein and IgG are resistant to endotoxin. Dahlberg PS, et al. **Arch Surg** 1996 Nov;131(11):1173–7; discussion 1177–8

Rotavirus protein expression is important for virus assembly and pathogenesis. Tian P, et al. **Arch Virol Suppl** 1996; 12:69–77 (26 ref.)

Characterization of a fusion protein between human cytochrome P450 1A1 and rat NADPH–P450 oxidoreductase in Escherichia coli. Chun YJ, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):211–4

Limited in vivo proteolysis of aggregated proteins. Corchero JL, et al. **Biochem Biophys Res Commun** 1997 Aug 18; 237(2):325–30

Measurement of agonist–induced guanine nucleotide turnover by the G–protein Gi1alpha when constrained within an alpha2A–adrenoceptor–Gi1alpha fusion protein. Wise A, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):17–21

A fragment consisting of the first 204 amino–terminal amino acids of human arylamine N–acetyltransferase one (NAT1) and the first transacetylation step of catalysis. Sinclair J, et al. **Biochem Pharmacol** 1997 Jan 10;53(1):11–6

Detection of calmodulin–binding proteins using a 32P–labeled GST–calmodulin fusion protein and a novel renaturation protocol. Fischer R, et al. **Biotechniques** 1996 Aug;21(2):292–6

Mammalian two–hybrid system: a complementary approach to the yeast two–hybrid system. Luo Y, et al. **Biotechniques** 1997 Feb;22(2):350–2

Real–time assay of the interaction of a GST fusion protein with a protein ligate using resonant mirror technique. Rubio I, et al. **Biotechniques** 1997 Feb;22(2):269–71

Recovery of polypeptides cleaved from purified calmodulin–binding peptide fusion proteins. Vaillancourt P, et al. **Biotechniques** 1997 Mar;22(3):451–3

The conversion of fibrinogen to fibrin: recombinant fibrinogen typifies plasma fibrinogen. Gorkun OV, et al. **Blood** 1997 Jun 15;89(12):4407–14

Expression of Fas–estrogen receptor fusion protein induces cell death in pancreatic cancer cell lines. Kawaguchi Y, et al. **Cancer Lett** 1997 Jun 3;116(1):53–9

Intercellular trafficking and protein delivery by a herpesvirus structural protein. Elliott G, et al. **Cell** 1997 Jan 24; 88(2):223–33

Engineering, expression and renaturation of targeted TGF–beta fusion proteins. Tuan TL, et al. **Connect Tissue Res** 1996;34(1):1–9

GTPase activating protein activity for Rab4 is enriched in the plasma membrane of 3T3–L1 adipocytes. Possible involvement in the regulation of Rab4 subcellular localization. Bortoluzzi MN, et al. **Diabetologia** 1996 Aug; 39(8):899–906

Expression of bovine beta–lactoglobulin/human erythropoietin fusion protein in the milk of transgenic mice and rabbits. Korhonen VP, et al. **Eur J Biochem** 1997 Apr 15;245(2):482–9

A recombinant polypeptide model of the second predicted nucleotide binding fold of the cystic fibrosis transmembrane conductance regulator is a GTP–binding protein. Randak C, et al. **FEBS Lett** 1996 Nov 25;398(1):97–100

Cleavage of the synaptobrevin/vesicle–associated membrane protein (VAMP) of the mouse brain by the recombinant light chain of Clostridium botulinum type B toxin. Rhee SD, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):203–8

Genomic targeting with an MBP–Cre fusion protein [published erratum appears in Gene 1997 Apr 11;189(1):149] Kolb AF, et al. **Gene** 1996 Dec 12; 183(1–2):53–60

Detection of tetramerization domains in vivo by cooperative DNA binding to tandem lambda operator sites. Zeng X, et al. **Gene** 1997 Feb 7;185(2):245–9

A new expression vector for high level protein production, one step purification and direct isotopic labeling of calmodulin–binding peptide fusion proteins. Zheng CF, et al. **Gene** 1997 Feb 20;186(1):55–60

Protection of primary human T cells from HIV infection by Trev: a transdominant fusion gene. Chinen J, et al. **Hum Gene Ther** 1997 May 1;8(7):861–8

Gene transfer using a novel fusion protein, GAL4/invasin. Paul RW, et al. **Hum Gene Ther** 1997 Jul 1;8(10):1253–62

Expression, purification, and properties of recombinant barley (Hordeum sp.) hemoglobin. Optical spectra and reactions with gaseous ligands. Duff SM, et al. **J Biol Chem** 1997 Jul 4;272(27):16746–52

A conditionally expressed third partner stabilizes or prevents the formation of a transcriptional activator in a three–hybrid system. Tirode F, et al. **J Biol Chem** 1997 Sep 12;272(37):22995–9

Circadian cycling of a PERIOD–beta–galactosidase fusion protein in Drosophila: evidence for cyclical degradation. Dembinska ME, et al. **J Biol Rhythms** 1997 Apr; 12(2):157–72

High activity, soluble, bacterially expressed human vitamin D receptor and its ligand binding domain. Mottershead DG, et al. **J Cell Biochem** 1996 Jun 1;61(3):325–37

In vivo nuclear transport kinetics in Saccharomyces cerevisiae: a role for heat shock protein 70 during targeting and translocation. Shulga N, et al. **J Cell Biol** 1996 Oct; 135(2):329–39

Replacing the first epidermal growth factor–like domain of factor IX with that of factor VII enhances activity in vitro and in canine hemophilia B. Chang JY, et al. **J Clin Invest** 1997 Aug 15;100(4):886–92

Brefeldin A and monensin arrest cell surface expression of membrane glycoproteins and release of rubella virus. Qiu Z, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):855–63

Amino terminus of apolipoprotein B suffices to produce recognition of malondialdehyde–modified low density lipoprotein by the scavenger receptor of human monocyte–macrophages. Kreuzer J, et al. **J Lipid Res** 1997 Feb;38(2):324–42

Bacterially expressed rat retinol–binding protein is functional for retinol and transthyretin bindings. Yamamoto Y, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Aug;42(4):257–66

Splase: a new class IIS zinc–finger restriction endonuclease with specificity for Sp1 binding sites. Huang B, et al. **J Protein Chem** 1996 Jul;15(5):481–9

Immunoreactive core peptides of hepatitis C virus produced in Escherichia coli and in vitro DNA amplification–restricted transcription–translation system. Esumi M, et al. **J Virol Methods** 1996 May;59(1–2):91–8

Functional characterization of a glycine 185–to–valine substitution in human P–glycoprotein by using a vaccinia–based transient expression system. Ramachandra M, et al. **Mol Biol Cell** 1996 Oct;7(10):1485–98

Myb–Ets fusion oncoprotein inhibits thyroid hormone receptor/c–ErbA and retinoic acid receptor functions: a novel mechanism of action for leukemogenic transformation by E26 avian retrovirus. Rascle A, et al. **Mol Cell Biol** 1996 Nov;16(11):6338–51

An IgG3–IL–2 fusion protein has higher affinity than hrIL–2 for the IL–2R alpha subunit: real time measurement of ligand binding. Harvill ET, et al. **Mol Immunol** 1996 Aug; 33(11–12):1007–14

Purification and characterization of the DNA–binding protein DnrI, a transcriptional factor of daunorubicin biosynthesis in Streptomyces peucetius. Tang L, et al. **Mol Microbiol** 1996 Dec;22(5):801–13

Properties of the pituitary adenylate cyclase–activating polypeptide I and II receptors, vasoactive intestinal peptide1, and chimeric amino–terminal pituitary adenylate cyclase–activating polypeptide/vasoactive intestinal peptide1 receptors: evidence for multiple receptor states. Van Rampelbergh J, et al. **Mol Pharmacol** 1996 Dec; 50(6):1596–604

Interaction of Ca2(+)–activated K+ channels with refolded charybdotoxins mutated at a central interaction residue. Naini AA, et al. **Neuropharmacology** 1996;35(7):915–21

Interaction of cellular proteins with the leukemia specific fusion proteins DEK–CAN and SET–CAN and their normal counterpart, the nucleoporin CAN. Fornerod M, et al. **Oncogene** 1996 Oct 17;13(8):1801–8

The amino terminus of Cdk2 binds p21. Moskowitz NK, et al. **Oncol Res** 1996;8(9):343–52

The AML1/ETO fusion protein activates transcription of BCL–2. Klampfer L, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14059–64

Inducible gene expression and protein translocation using nontoxic ligands identified by a mammalian three–hybrid screen. Liberles SD, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7825–30

Assembly of an active enzyme by the linkage of two protein modules. Nixon AE, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1069–73

"Peptabody": a new type of high avidity binding protein. Terskikh AV, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1663–8

Characterization of a ricin fusion toxin targeted to the interleukin–2 receptor. Frankel AE, et al. **Protein Eng** 1996 Oct;9(10):913–9

Amino–terminal charge affects the periplasmic accumulation of recombinant heregulin/EGF hybrids exported using the Escherichia coli alkaline phosphatase signal sequence. Campion SR, et al. **Protein Expr Purif** 1997 Aug; 10(3):331–9

Expression of aggregation–prone recombinant proteins at low temperatures: a comparative study of the Escherichia coli cspA and tac promoter systems. Vasina JA, et al. **Protein Expr Purif** 1997 Mar;9(2):211–8

Pharmacological sequestration of a chimeric beta 3/beta 2 adrenergic receptor occurs without a corresponding amount of receptor internalization. Mostafapour S, et al. **Recept Signal Transduct** 1996;6(3–4):151–63

Characterization of a calcium binding domain in the VP1 protein of the avian polyomavirus, budgerigar fledgling disease virus. Rodgers RE, et al. **Virus Res** 1996 Oct; 44(2):123–35

[Fusion of glutathione S–transferase with the N–terminus of yeast Sup35p protein inhibits its prion–like properties] Dagkesamanskaia AR, et al. **Genetika** 1997 May; 33(5):610–5 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Potent antithrombin activity and delayed clearance from the circulation characterize recombinant hirudin genetically fused to albumin. Syed S, et al. **Blood** 1997 May 1; 89(9):3243–52

Immunomodulation by LFA3TIP, an LFA–3/IgG1 fusion protein: cell line dependent glycosylation effects on pharmacokinetics and pharmacodynamic markers. Meier W, et al. **Ther Immunol** 1995 Jun;2(3):159–71

PHARMACOLOGY

Galactose oxidase–glucan binding domain fusion proteins as targeting inhibitors of dental plaque bacteria. Lis M, et al. **Antimicrob Agents Chemother** 1997 May;41(5):999–1003

Expression of cecropin CMIV fusion protein in E. coli under T7 promoter. Xie W, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):487–92

Construction and functional characterization of scFv(14E1)–ETA – a novel, highly potent antibody–toxin specific for the EGF receptor. Schmidt M, et al. **Br J Cancer** 1997;75(11):1575–84

In vitro effects of a recombinant toxin, mSCF–PE40, targeting c–kit receptors ectopically expressed in small cell lung cancers. Nishida K, et al. **Cancer Lett** 1997 Feb 26; 113(1–2):153–8

p21WAF1–derived peptides linked to an internalization peptide inhibit human cancer cell growth. Bonfanti M, et al. **Cancer Res** 1997 Apr 15;57(8):1442–6

A chimeric Lym–1/interleukin 2 fusion protein for increasing tumor vascular permeability and enhancing antibody uptake. Hu P, et al. **Cancer Res** 1996 Nov 1; 56(21):4998–5004

Inhibition of protein synthesis in small cell lung cancer cells induced by the diphtheria toxin–related fusion protein DAB389 GRP. vanderSpek JC, et al. **Cancer Res** 1997 Jan 15;57(2):290–4

Vascular smooth muscle cell cytotoxicity and sustained inhibition of neointimal formation by fibroblast growth factor 2–saporin fusion protein. Farb A, et al. **Circ Res** 1997 Apr;80(4):542–50

A tissue plasminogen activator/P–selectin fusion protein is an effective thrombolytic agent. Fujise K, et al. **Circulation** 1997 Feb 4;95(3):715–22

A fusion protein of IL–8 and a Fab antibody fragments binds to IL–8 receptors and induces neutrophil activation. Holzer W, et al. **Cytokine** 1996 Mar;8(3):214–21

Use of dominant negative mutants of the hepadnaviral core protein as antiviral agents. Scaglioni P, et al. **Hepatology** 1996 Nov;24(5):1010–7

Prevention of immune reactions triggered by first–generation adenoviral vectors by monoclonal antibodies and CTLA4Ig. Guérette B, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1455–63

Expression of human recombinant beta 2–microglobulin by Aspergillus nidulans and its activity. O'Herrin SM, et al. **Hum Immunol** 1996 Dec;51(2):63–72

Intra–tumoral application of a heregulin–exotoxin–a fusion protein causes rapid tumor regression without adverse systemic or local effects. Groner B, et al. **Int J Cancer** 1997 Mar 17;70(6):682–7

Cytolytic and cytostatic properties of an anti–human Fc gammaRI (CD64) x epidermal growth factor bispecific fusion protein. Goldstein J, et al. **J Immunol** 1997 Jan 15; 158(2):872–9

In vivo properties of an IgG3–IL–2 fusion protein. A general

strategy for immune potentiation. Harvill ET, et al. **J Immunol** 1996 Oct 1;157(7):3165–70

A soluble chimeric complement inhibitory protein that possesses both decay–accelerating and factor I cofactor activities. Higgins PJ, et al. **J Immunol** 1997 Mar 15; 158(6):2872–81

Pretreatment with a 55–kDa tumor necrosis factor receptor–immunoglobulin fusion protein attenuates activation of coagulation, but not of fibrinolysis, during lethal bacteremia in baboons. van der Poll T, et al. **J Infect Dis** 1997 Jul;176(1):296–9

Recombinant soluble tumor necrosis factor receptor (p80) fusion protein: toxicity and dose finding trial in refractory rheumatoid arthritis. Moreland LW, et al. **J Rheumatol** 1996 Nov;23(11):1849–55

Suppression of in vitro IgM rheumatoid factor production by diphtheria toxin interleukin 2 recombinant fusion protein (DAB 486IL–2) in patients with refractory rheumatoid arthritis. Schrohenloher RE, et al. **J Rheumatol** 1996 Nov; 23(11):1845–8

A recombinant fusion toxin targeted to the granulocyte–macrophage colony–stimulating factor receptor. Bendel AE, et al. **Leuk Lymphoma** 1997 Apr; 25(3–4):257–70

Granulocyte–macrophage colony–stimulating factor receptor–targeted therapy of chemotherapy– and radiation–resistant human myeloid leukemias. Perentesis JP, et al. **Leuk Lymphoma** 1997 Apr;25(3–4):247–56

Recombinant expression of the antimicrobial peptide polyphemusin and its activity against the protozoan oyster pathogen Perkinsus marinus. Pierce JC, et al. **Mol Mar Biol Biotechnol** 1997 Sep;6(3):248–59

Bioactive murine and human interleukin–12 fusion proteins which retain antitumor activity in vivo. Lieschke GJ, et al. **Nat Biotechnol** 1997 Jan;15(1):35–40

Cytotoxic activity of a diptheria toxin/FGF6 mitotoxin on human tumour cell lines. Coll–Fresno PM, et al. **Oncogene** 1997 Jan 16;14(2):243–7

Immunomodulation by LFA3TIP, an LFA–3/IgG1 fusion protein: cell line dependent glycosylation effects on pharmacokinetics and pharmacodynamic markers. Meier W, et al. **Ther Immunol** 1995 Jun;2(3):159–71

Effect of multimerization of human and recombinant von Willebrand factor on platelet aggregation, binding to collagen and binding of coagulation factor VIII. Fischer BE, et al. **Thromb Res** 1996 Oct 1;84(1):55–66

[Effect of IL–4 on biological regulation of tumor cell lines] Zhong M, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):116–20 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Heterologous expression of rab4 reduces glucose transport and GLUT4 abundance at the cell surface in oocytes. Mora S, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):455–9

Potent bifunctional anticoagulants: Kunitz domain–tissue factor fusion proteins. Lee GF, et al. **Biochemistry** 1997 May 13;36(19):5607–11

Effects of antibodies against cell surface protein antigen PAc–glucosyltransferase fusion proteins on glucan synthesis and cell adhesion of Streptococcus mutans. Yu H, et al. **Infect Immun** 1997 Jun;65(6):2292–8

Cells transformed by a v–Myb–estrogen receptor fusion differentiate into multinucleated giant cells. Engelke U, et al. **J Virol** 1997 May;71(5):3760–6

SECRETION

Screening of yeast transformants by chemiluminescence for detection of secreted heterologous proteins. Arffman A, et al. **Biotechniques** 1997 Jun;22(6):1030–2

High–level production of a secreted, heterodimeric alpha beta murine T–cell receptor in Escherichia coli. Golden A, et al. **J Immunol Methods** 1997 Aug 7;206(1–2):163–9

A bacterial signal peptide directs efficient secretion of eukaryotic proteins in the baculovirus expression system. Allet B, et al. **Protein Expr Purif** 1997 Feb;9(1):61–8

THERAPEUTIC USE

Interleukin–2 receptor–specific fusion toxin inhibits barotrauma–induced arterial atherosclerosis. Miller DD, et al. **Atherosclerosis** 1996 Sep 27;126(1):1–14

Recombinant human factor IX: replacement therapy, prophylaxis, and pharmacokinetics in canine hemophilia B. Brinkhous KM, et al. **Blood** 1996 Oct 1;88(7):2603–10

A superantigen–antibody fusion protein for T–cell immunotherapy of human B–lineage malignancies. Gidlöf C, et al. **Blood** 1997 Mar 15;89(6):2089–97

Effects of recombinant soluble type I interleukin–1 receptor on human inflammatory responses to endotoxin. Preas HL 2nd, et al. **Blood** 1996 Oct 1;88(7):2465–72

Targeted inhibition of tumour cell growth by a bispecific single–chain toxin containing an antibody domain and TGF alpha. Schmidt M, et al. **Br J Cancer** 1996 Sep;74(6):853–62

Preclinical development of a recombinant toxin containing circularly permuted interleukin 4 and truncated Pseudomonas exotoxin for therapy of malignant astrocytoma. Puri RK, et al. **Cancer Res** 1996 Dec 15; 56(24):5631–7

Interleukin–2 fusion protein: an investigational therapy for interleukin–2 receptor expressing malignancies. Nichols J, et al. **Eur J Cancer** 1997 Jan;33 Suppl 1:S34–6 (27 ref.)

Superantigen–based immunotherapy: a phase I trial of PNU–214565, a monoclonal antibody–staphylococcal enterotoxin A recombinant fusion protein, in advanced pancreatic and colorectal cancer. Giantonio BJ, et al. **J Clin Oncol** 1997 May;15(5):1994–2007

Toxic shock syndrome toxin–1–induced death is prevented by CTLA4Ig. Saha B, et al. **J Immunol** 1996 Nov 1; 157(9):3869–75

Differential effect of CTLA4Ig on murine graft–versus–host disease (GVHD) development: CTLA4Ig prevents both acute and chronic GVHD development but reverses only chronic GVHD. Via CS, et al. **J Immunol** 1996 Nov 1; 157(9):4258–67

TNF–alpha receptor fusion protein prevents experimental auto–immune encephalomyelitis and demyelination in Lewis rats: an overview. Klinkert WE, et al. **J Neuroimmunol** 1997 Feb;72(2):163–8 (44 ref.)

Treatment with the interleukin–I receptor antagonist and soluble tumor necrosis factor receptor Fc fusion protein does not prevent endotoxin–induced preterm parturition in mice. Fidel PL Jr, et al. **J Soc Gynecol Investig** 1997 Jan–Feb;4(1):22–6

Biological response modifiers may yield a new class of drugs to treat arthritis [news] Skolnick AA. **JAMA** 1997 Jan 22–29;277(4):276–8

TNF receptor fusion protein in rheumatoid arthritis [news] O'Brien C. **Mol Med Today** 1996 Jul;2(7):269

Anticytokine therapy in rheumatoid arthritis [editorial; comment] Firestein GS, et al. **N Engl J Med** 1997 Jul 17; 337(3):195–7. Comment on: N Engl J Med 1997 Jul 17;337(3):141–7.

Tumor necrosis factor receptor: Fc fusion protein in septic shock [letter; comment] Glauser MP, et al. **N Engl J Med** 1996 Nov 21;335(21):1608; discussion 1608–9 . Comment on: N Engl J Med 1996 Jun 27;334(26):1697–702.

Treatment of rheumatoid arthritis with a recombinant human tumor necrosis factor receptor (p75)–Fc fusion protein [see comments] Moreland LW, et al. **N Engl J Med** 1997 Jul 17;337(3):141–7. Comment in: N Engl J Med 1997 Jul 17;337(3):195–7.

Tumor necrosis factor receptor: Fc fusion protein in septic shock [letter; comment] Whiteley MS. **N Engl J Med** 1996 Nov 21;335(21):1607–8; discussion 1608–9. Comment on: N Engl J Med 1996 Jun 27;334(26):1697–702.

Destroying retroviruses from within. Boeke JD, et al. **Trends Microbiol** 1996 Nov;4(11):421–6 (27 ref.)

TOXICITY

An improved circularly permuted interleukin 4–toxin is highly cytotoxic to human renal cell carcinoma cells. Introduction of gamma c chain in RCC cells does not improve sensitivity. Puri RK, et al. **Cell Immunol** 1996 Jul 10;171(1):80–6

Cloning and cytotoxicity of a human pancreatic RNase immunofusion. Zewe M, et al. **Immunotechnology** 1997 Jun; 3(2):127–36

Development and malignant progression of astrocytomas in GFAP–v–src transgenic mice. Weissenberger J, et al. **Oncogene** 1997 May 1;14(17):2005–13

RECOMBINANT G–CSF see **GRANULOCYTE COLONY STIMULATING FACTOR, RECOMBINANT**

RECOMBINANT GM–CSF see **GRANULOCYTE MACROPHAGE COLONY–STIMULATING FACTORS, RECOMBINANT**

RECOMBINANT GRANULOCYTE COLONY STIMULATING FACTOR see **GRANULOCYTE COLONY STIMULATING FACTOR, RECOMBINANT**

RECOMBINANT GRANULOCYTE–MACROPHAGE COLONY–STIMULATING FACTORS see **GRANULOCYTE MACROPHAGE COLONY–STIMULATING FACTORS, RECOMBINANT**

RECOMBINANT INTERFERON ALFA–2A see **INTERFERON ALFA–2A**

RECOMBINANT INTERFERON ALFA–2B see **INTERFERON ALFA–2B**

RECOMBINANT INTERFERON ALFA–2C see **INTERFERON ALFA, RECOMBINANT**

RECOMBINANT INTERFERON–GAMMA see **INTERFERON–GAMMA, RECOMBINANT**

RECOMBINANT–METHIONYL HUMAN GRANULOCYTE COLONY–STIMULATING F see **FILGRASTIM**

RECOMBINANT PITUITARY GROWTH HORMONES see **SOMATOTROPINS, RECOMBINANT**

RECOMBINANT PROTEINS

Recombinant protein and therapeutic monoclonal antibody drug development in the United States from 1980 to 1994. Gosse ME, et al. **Clin Pharmacol Ther** 1996 Dec; 60(6):608–18

Characterization of recombinant adeno–associated virus–2 as a vehicle for gene delivery and expression into vascular cells. Gnatenko D, et al. **J Investig Med** 1997 Feb; 45(2):87–98

Mammalian expression of single chain variable region fragments dimerized by Fc regions. Kato T, et al. **Mol Biol Rep** 1995;21(3):141–6

Going beyond the native: protecting DNA and protein patents. Chahine KG. **Nat Biotechnol** 1997 Feb;15(2):183–6 (11 ref.)

Human amniotic fluid motogenic activity for fetal alveolar type II cells by way of hepatocyte growth factor. Itakura A, et al. **Obstet Gynecol** 1997 May;89(5 Pt 1):729–33

Special considerations concerning regulatory requirements and drug development for peptides and biotech products in the EU. Braun A, et al. **Pharm Acta Helv** 1996 Dec; 71(6):447–58 (22 ref.)

A thought–provoking insight into the current and future use of recombinant technology as an alternative to human blood [letter] Hariawala MD, et al. **World J Surg** 1997 Jul–Aug;21(6):667

[Functions of recombination proteins in meiosis] Terasawa M, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep; 41(11):1535–42 (39 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

The effect of interleukin 12 desensitization on the antitumor efficacy of recombinant interleukin 12. Coughlin CM, et al. **Cancer Res** 1997 Jun 15;57(12):2460–7

Transient interruption of arterial thrombosis by inhibition of factor Xa results in long–term antithrombotic effects in baboons. Kotzé HF, et al. **Thromb Haemost** 1997 Jun; 77(6):1137–42

ADVERSE EFFECTS

Lipoatrophy with human insulin. Jaap AJ, et al. **Diabetes Care** 1996 Nov;19(11):1289–90

Cutaneous allergy to recombinant human type I IL–1 receptor (rhu IL–1RI). Grammer LC, et al. **J Allergy Clin Immunol** 1997 May;99(5):714–5

Psoriasis flare caused by recombinant interferon beta injections [letter; comment] Kowalzick L. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):501. Comment on: J Am Acad Dermatol 1996 Feb;34(2 Pt 2):365–7.

Cutaneous reactions to recombinant cytokine therapy [letter; comment] Papini M, et al. **J Am Acad Dermatol** 1996 Dec; 35(6):1021–2. Comment on: J Am Acad Dermatol 1995 Sep;33(3):393–410; quiz 410–2.

Recombinant IL–4 aggravates experimental autoimmune uveoretinitis in rats. Ramanathan S, et al. **J Immunol** 1996 Sep 1;157(5):2209–15

Hematologic and immunologic evaluation of recombinant human interleukin–6 in patients with advanced malignant disease: evidence for monocyte activation. Keever–Taylor CA, et al. **J Immunother Emphasis Tumor Immunol** 1996 May;19(3):231–43

ANALYSIS

Biological assays: their role in the development and quality control of recombinant biological medicinal products. Mire–Sluis AR, et al. **Biologicals** 1996 Dec;24(4):351–62 (76 ref.)

Agglutination–inhibition assay for the detection of recombinant proteins tagged with peptide epitopes. Dolezal O, et al. **Biotechniques** 1997 May;22(5):897–904

Epitope tag–antibody combination useful for the detection of protein expression in prokaryotic and eukaryotic cells. Rüdiger M, et al. **Biotechniques** 1997 Jul;23(1):96–7

Antibody screening for secreted proteins expressed in Pichia pastoris. Wung JL, et al. **Biotechniques** 1996 Nov;21(5):808, 810, 812

"Hybridization analysis for the quantitative determination of residual DNA in some recombinant proteins expressed in E. Coli cells". Facchetti I, et al. **Boll Chim Farm** 1996 May; 135(5):287–96

A novel method for monitoring Mycobacterium bovis BCG trafficking with recombinant BCG expressing green fluorescent protein. Luo Y, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):761–8

Comparison of recombinant timothy grass pollen allergens with natural extract for diagnosis of grass pollen allergy in different populations. Laffer S, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):652–8

Determinants of polyreactivity in a large panel of recombinant human antibodies from HIV–1 infection. Ditzel HJ, et al. **J Immunol** 1996 Jul 15;157(2):739–49

Rapid detection of recombinant antibody fragments directed against cell–surface antigens by flow cytometry. Kipriyanov SM, et al. **J Immunol Methods** 1996 Sep 13; 196(1):51–62

Size exclusion HPLC method for the determination of acidic fibroblast growth factor in viscous formulations. Bruner MW, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1929–35

Flow injection analysis for measurement of activity of matrix metalloproteinase–7 (MMP–7). Itoh M, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1417–26

Capillary electrophoresis analysis of recombinant proteins. Teshima G, et al. **Methods Enzymol** 1996;271:264–93 (41 ref.)

Detection of recombinant protein based on reporter enzyme activity: chloramphenicol acetyltransferase. Lee P, et al.

Methods Mol Biol 1997;63:31–40

Overview of experimental strategies on the detection and isolation of recombinant proteins and their applications. Tuan RS. **Methods Mol Biol** 1997;63:3–7

Cell-surface markers for assessing gene transfer into human hematopoietic cells [see comments] Phillips K, et al. **Nat Med** 1996 Oct;2(10):1154–6 (25 ref.). Comment in: Nat Med 1996 Dec;2(12):1280–1.

Ovine lentivirus antibody detection in serum, colostrum and milk using a recombinant transmembrane protein ELISA. Keen J, et al. **Vet Immunol Immunopathol** 1996 Jun 1; 51(3–4):253–75

BIOSYNTHESIS

Expression of a cosmid containing the LCR, (A)gamma, delta, and beta globin genes in mouse erythroleukemia cells. Flamm M, et al. **Am J Hematol** 1996 Nov;53(3):181–7

Gene transfer to neurons using herpes simplex virus-based vectors. Fink DJ, et al. **Annu Rev Neurosci** 1996;19:265–87 (111 ref.)

Engineering Bacillus thuringiensis bioinsecticides with an indigenous site-specific recombination system. Baum JA, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4367–73

Regulated system for heterologous gene expression in Penicillium chrysogenum. Graessle S, et al. **Appl Environ Microbiol** 1997 Feb;63(2):753–6

Expression and loading of recombinant heavy and light chain homopolymers of rat liver ferritin. Guo JH, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):197–204

Establishment of a novel host, high-red yeast that stably expresses hamster NADPH-cytochrome P450 oxidoreductase: usefulness for examination of the function of mammalian cytochrome P450. Ohgiya S, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):215–24

A general strategy for the expression of recombinant human cytochrome P450s in Escherichia coli using bacterial signal peptides: expression of CYP3A4, CYP2A6, and CYP2E1. Pritchard MP, et al. **Arch Biochem Biophys** 1997 Sep 15; 345(2):342–54

Characterization of the intron-containing citrate synthase gene from the alkanotrophic yeast Candida tropicalis: cloning and expression in Saccharomyces cerevisiae. Ueda M, et al. **Arch Microbiol** 1997 Jul;168(1):8–15

Methylotrophic yeast hansenula polymorpha as production organism for recombinant pharmaceuticals. Gellissen G, et al. **Arzneimittelforschung** 1996 Sep;46(9):943–8 (28 ref.)

Reconstitution and characterization of a divergent plastocyanin from the photosynthetic prokaryote, Prochlorothrix hollandica, expressed in Escherichia coli. Babu CR, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):631–5

Characterization of scFv-421, a single-chain antibody targeted to p53. Jannot CB, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):242–6

Expression of recombinant rat interleukin-13 (IL-13) and generation of a neutralizing rat IL-13 antiserum. Lakkis FG, et al. **Biochem Biophys Res Commun** 1997 Jun 27; 235(3):529–32

Comparison of three nonviral transfection methods for foreign gene expression in early chicken embryos in ovo. Muramatsu T, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):376–80

Ktr1p is an alpha-1,2-mannosyltransferase of Saccharomyces cerevisiae. Comparison of the enzymic properties of soluble recombinant Ktr1p and Kre2p/Mnt1p produced in Pichia pastoris. Romero PA, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):289–95

Characterization of a soluble IL-6 receptor alpha mutant C277D/H280I expressed in E.coli. Duan J, et al. **Biochem Mol Biol Int** 1997 May;41(6):1101–8

Establishment of stable cell lines expressing potentially toxic proteins by tetracycline-regulated and epitope-tagging methods. Wu SY, et al. **Biotechniques** 1996 Oct; 21(4):718–22, 724–5

Bioreactor cultivation of the nematode Caenorhabditis elegans: large scale production of biologically active drug receptors for pharmaceutical research. Gbewonyo K, et al. **Biotechnol Genet Eng Rev** 1997;14:37–49 (35 ref.)

Engineering nutritious proteins. Hefford MA. **Biotechnol Genet Eng Rev** 1997;14:191–210 (108 ref.)

Subcellular targeting and purification of recombinant proteins in plant production systems. Moloney MM, et al. **Biotechnol Genet Eng Rev** 1997;14:321–36 (63 ref.)

Expression of recombinant glycoproteins in the simple eukaryote Dictyostelium discoideum. Slade MB, et al. **Biotechnol Genet Eng Rev** 1997;14:1–35 (212 ref.)

Commercial production of lactoferrin, a multifunctional iron-binding glycoprotein. Ward PP, et al. **Biotechnol Genet Eng Rev** 1997;14:303–19 (114 ref.)

Gene cloning of rat and mouse platelet glycoprotein V: identification of megakaryocyte-specific promoters and demonstration of functional thrombin cleavage. Ravanat C, et al. **Blood** 1997 May 1;89(9):3253–62

Engineering novel antibody molecules. Sensel MG, et al. **Chem Immunol** 1997;65:129–58 (80 ref.)

A novel method for monitoring Mycobacterium bovis BCG trafficking with recombinant BCG expressing green fluorescent protein. Luo Y, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):761–8

Expression in bacteria other than Escherichia coli. Billman-Jacobe H. **Curr Opin Biotechnol** 1996 Oct; 7(5):500–4 (52 ref.)

Engineering antibodies for imaging and therapy. Carter P, et al. **Curr Opin Biotechnol** 1997 Aug;8(4):449–54 (54 ref.)

Phage display of proteins. Dunn IS. **Curr Opin Biotechnol** 1996 Oct;7(5):547–53 (71 ref.)

Recombinant protein production in transgenic animals. Echelard Y. **Curr Opin Biotechnol** 1996 Oct;7(5):536–40 (60 ref.)

Quality and authenticity of heterologous proteins synthesized in yeast. Eckart MR, et al. **Curr Opin Biotechnol** 1996 Oct; 7(5):525–30 (47 ref.)

The state of antibody catalysis. Smithrud DB, et al. **Curr Opin Biotechnol** 1997 Aug;8(4):459–66 (46 ref.)

Optimization of heterologous protein production in Escherichia coli. Weickert MJ, et al. **Curr Opin Biotechnol** 1996 Oct;7(5):494–9 (39 ref.)

Potential of chimaeric plant virus particles as novel, stable vaccines. Xu F, et al. **Dev Biol Stand** 1996;87:201–5

Cloning and recombinant expression of a barred sand bass (Paralabrax nebulifer) cDNA. The encoded protein displays structural homology and immunological crossreactivity to human complement/cofactor related plasma proteins. Zipfel PF, et al. **Dev Comp Immunol** 1996 Nov-Dec;20(6):407–16

Expression of biologically active human thyrotropin (hTSH) in a baculovirus system: effect of insect cell glycosylation on hTSH activity in vitro and in vivo. Grossmann M, et al. **Endocrinology** 1997 Jan;138(1):92–100

Expression, purification and characterization of the rat luteal 20 alpha-hydroxysteroid dehydrogenase. Mao J, et al. **Endocrinology** 1997 Jan;138(1):182–90

Human insulin-like growth factor I (IGF-I) produced in the mammary glands of transgenic rabbits: yield, receptor binding, mitogenic activity, and effects on IGF-binding proteins. Wolf E, et al. **Endocrinology** 1997 Jan; 138(1):307–13

Cloning, bacterial expression and biological characterization of recombinant human granulocyte chemotactic protein-2 and differential expression of granulocyte chemotactic protein-2 and epithelial cell-derived neutrophil activating peptide-78 mRNAs. Froyen G, et al. **Eur J Biochem** 1997 Feb 1;243(3):762–9

Production and characterization of recombinant active mouse gelatinase B from eukaryotic cells and in vivo effects after intravenous administration. Masure S, et al. **Eur J Biochem** 1997 Feb 15;244(1):21–30

Direct expression of PCR products in a cell-free transcription/translation system: synthesis of antibacterial peptide cecropin. Martemyanov KA, et al. **FEBS Lett** 1997 Sep 8;414(2):268–70

Construction and characterization of a recombinant ureolytic Streptococcus mutans and its use to demonstrate the relationship of urease activity to pH modulating capacity. Clancy A, et al. **FEMS Microbiol Lett** 1997 Jun 15; 151(2):205–11

"The coming of wonders" [letter; comment] Out HJ, et al. **Fertil Steril** 1997 Feb;67(2):411–3. Comment on: Fertil Steril 1996 Aug;66(2):187–201.

Human growth hormone receptor: cloning and expression of the full-length complementary DNA after site-directed inactivation of a cryptic bacterial promoter. Bieth E, et al. **Gene** 1997 Jul 18;194(1):97–105

High level heterologous protein production in Lactococcus and Lactobacillus using a new secretion system based on the Lactobacillus brevis S-layer signals. Savijoki K, et al. **Gene** 1997 Feb 28;186(2):255–62

Retroviral end-point titer is not predictive of gene transfer efficiency: implications for vector production. Forestell SP, et al. **Gene Ther** 1995 Dec;2(10):723–30

Receptor-mediated transfer of pSV2CAT DNA to mouse liver cells using asialofetuin-labeled liposomes. Hara T, et al. **Gene Ther** 1995 Dec;2(10):784–8

Lung cancer-reacting human recombinant antibody AE6F4: potential usefulness in the sputum cytodiagnosis. Shoji M, et al. **Hum Antibodies Hybridomas** 1996;7(1):27–36

Genetic engineering of human FSH (Gonal-F). Howles CM. **Hum Reprod Update** 1996 Mar-Apr;2(2):172–91

The production and characterization of a modified recombinant interleukin-1 receptor antagonist. Chang DM, et al. **Immunol Invest** 1996 Jul;25(4):355–68

Obtaining a functional recombinant anti-rhesus (D) antibody using the baculovirus-insect cell expression system. Edelman L, et al. **Immunology** 1997 May;91(1):13–9

High-level heterologous expression and secretion in rapidly growing nonpathogenic mycobacteria of four major Mycobacterium tuberculosis extracellular proteins considered to be leading vaccine candidates and drug targets. Harth G, et al. **Infect Immun** 1997 Jun;65(6):2321–8

Expression in Escherichia coli of human IgE antibody fragments with specificity for major timothy grass pollen allergens using the combinatorial library approach. Steinberger P, et al. **Int Arch Allergy Immunol** 1997 May-Jul;113(1-3):258–9

Cloning of the enomycin structural gene from Streptomyces mauvecolor and production of recombinant enomycin in Escherichia coli. Takeuchi S, et al. **J Antibiot (Tokyo)** 1997 Jan;50(1):27–31

Cloning, expression and characterization of plasma platelet-activating factor-acetylhydrolase from guinea pig. Karasawa K, et al. **J Biochem (Tokyo)** 1996 Oct; 120(4):838–44

Gene cloning, purification, and characterization of NfsB, a minor oxygen-insensitive nitroreductase from Escherichia coli, similar in biochemical properties to FRase I, the major flavin reductase in Vibrio fischeri. Zenno S, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):736–44

Retroviral gene transfer is inhibited by chondroitin sulfate proteoglycans/glycosaminoglycans in malignant pleural effusions. Batra RK, et al. **J Biol Chem** 1997 May 2; 272(18):11736–43

Recombinant expression of caveolin-1 in oncogenically transformed cells abrogates anchorage-independent growth. Engelman JA, et al. **J Biol Chem** 1997 Jun 27; 272(26):16374–81

Recombinant gilthead seabream (Sparus aurata) insulin-like growth factor-I: subcloning, expression in Escherichia coli, purification and characterization. Fine M, et al. **J Endocrinol** 1997 Apr;153(1):139–50

Large-scale preparation and characterization of recombinant ovine placental lactogen. Sakal E, et al. **J Endocrinol** 1997 Feb;152(2):317–27

Production of recombinant MART-1 proteins and specific antiMART-1 polyclonal and monoclonal antibodies: use in the characterization of the human melanoma antigen MART-1. Kawakami Y, et al. **J Immunol Methods** 1997 Mar 10;202(1):13–25

High level production of soluble single chain antibodies in small-scale Escherichia coli cultures. Kipriyanov SM, et al. **J Immunol Methods** 1997 Jan 15;200(1-2):69–77

Generation of soluble recombinant human acute phase serum amyloid A2 (A-SAA2) protein and its use in development of an A-SAA specific ELISA. McCormack CC, et al. **J Immunol Methods** 1996 Oct 30;198(1):101–10

Characterization and biologic activities of recombinant rat soluble interleukin-6 receptor. Thibault V, et al. **J Interferon Cytokine Res** 1996 Nov;16(11):973–81

High yield overexpression and characterization of human recombinant proapolipoprotein A-I. McGuire KA, et al. **J Lipid Res** 1996 Jul;37(7):1519–28

High-level expression of recombinant immunoreactive thyroid peroxidase in the High Five insect cell line. Grennan Jones F, et al. **J Mol Endocrinol** 1996 Oct; 17(2):165–74

Stable expression and characterization of recombinant human heteromeric N-methyl-D-aspartate receptor subtypes NMDAR1A/2A and NMDAR1A/2B in mammalian cells. Varney MA, et al. **J Pharmacol Exp Ther** 1996 Oct; 279(1):367–78

Genomic organization of the gene for pig zona pellucida glycoprotein ZP1 and its expression in mammalian cells. Yamasaki N, et al. **J Reprod Fertil Suppl** 1996;50:19–23

High-efficiency incorporation of functional influenza virus glycoproteins into recombinant vesicular stomatitis viruses. Kretzschmar E, et al. **J Virol** 1997 Aug;71(8):5982–9

Biosynthesis, purification, and characterization of the human coronavirus 229E 3C-like proteinase. Ziebuhr J, et al. **J Virol** 1997 May;71(5):3992–7

Expression of human nitric oxide synthase isozymes. Charles IG, et al. **Methods Enzymol** 1996;268:449–60

Purification and analysis of CIP/KIP proteins. Dynlacht BD, et al. **Methods Enzymol** 1997;283:230–44

Cloning cell cycle regulatory genes by transcomplementation in yeast. Norbury C, et al. **Methods Enzymol** 1997; 283:44–59

Designing expression plasmid vectors in E. coli. Balbás P. **Methods Mol Biol** 1997;62:11–6

Design and construction of recombinant vaccinia viruses. Broder CC, et al. **Methods Mol Biol** 1997;62:173–97

Expression of cDNA-encoded proteins by cell-free transcription and translation. Coleclough C. **Methods Mol Biol** 1997;62:99–110

Design of retroviral expression vectors. Comstock KE, et al. **Methods Mol Biol** 1997;62:207–22

Cloning sequence-specific DNA-binding factors from cDNA expression libraries using oligonucleotide binding site probes. Cowell IG. **Methods Mol Biol** 1997;69:161–70

Expression of proteins in E. coli utilizing a dual promoter-based vector: pLACT7. Garcia GA, et al. **Methods Mol Biol** 1997;62:63–71

Constitutive expression vectors: PGK. Graham IR, et al. **Methods Mol Biol** 1997;62:159–69

Overview of vector design for mammalian gene expression. Kaufman RJ. **Methods Mol Biol** 1997;62:287–300

Optimization of growth, viability, and specific productivity for expression of recombinant proteins in mammalian cells. Mather JP, et al. **Methods Mol Biol** 1997;62:369–82

Analysis of heterologous gene expression in Xenopus blastomeres. Moody SA. **Methods Mol Biol** 1997;62:271–84

Inducible expression cassettes in yeast: GAL4. Mylin LM, et al. **Methods Mol Biol** 1997;62:131–48

Use of baculovirus expression vectors. O'Reilly DR. **Methods Mol Biol** 1997;62:235–46

Inducible expression cassettes in yeast: ADH2. Price VL. **Methods Mol Biol** 1997;62:149–57

Synthetic two-cistron expression system. Schoner BE. **Methods Mol Biol** 1997;62:89–97

Design of bacterial hosts for lac-based expression vectors. Schweizer HP, et al. **Methods Mol Biol** 1997;62:17–27

Expression of exogenous genes in Xenopus oocytes, eggs, and embryos. Shiokawa K, et al. **Methods Mol Biol** 1997; 62:247–70

Recombinant gene expression protocols. Overview of experimental strategies for the expression of recombinant genes. Tuan RS. **Methods Mol Biol** 1997;62:3–8

Promoters to express cloned genes uniformly in Drosophila.

Vincent JP, et al. **Methods Mol Biol** 1997;62:385–92

Application of the E. coli trp promoter. Yansura DG, et al. **Methods Mol Biol** 1997;62:55–62

Strategies for achieving high-level expression of genes in Escherichia coli. Makrides SC. **Microbiol Rev** 1996 Sep; 60(3):512–38 (623 ref.)

Effects of pleiotrophic mutations, degUh and spoOA, on the production of foreign proteins using the heterologous secretion system of Bacillus subtilis. Kim SI, et al. **Mol Cells** 1997 Apr 30;7(2):158–64

Microinjection of bivalve eggs: application in genetics. Cadoret JP, et al. **Mol Mar Biol Biotechnol** 1997 Mar; 6(1):72–7

IBC sixth annual meeting on antibody engineering Dec 4–6 1995, La Jolla, CA. Metz C. **Mol Med** 1996 Mar;2(2):169–70

Vaccines by agriculture. Featherstone C. **Mol Med Today** 1996 Jul;2(7):278–81

Bacterial growth inhibition by overproduction of protein. Kurland CG, et al. **Mol Microbiol** 1996 Jul;21(1):1–4 (25 ref.)

Amgen protects its billion dollar protein [news] Chahine K. **Nat Biotechnol** 1997 Jun;15(6):496–7

Sweet science: overexpression of monellin in yeast [news] Dansby R. **Nat Biotechnol** 1997 May;15(5):419–20

High-level expression of a sweet protein, monellin, in the food yeast Candida utilis. Kondo K, et al. **Nat Biotechnol** 1997 May;15(5):453–7

Selectively infective phage (SIP) technology: a novel method for in vivo selection of interacting protein–ligand pairs. Spada S, et al. **Nat Med** 1997 Jun;3(6):694–6

Evidence for the stochastic integration of gene trap vectors into the mouse germline. Chowdhury K, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1531–6

Efficient expression of protein coding genes from the murine U1 small nuclear RNA promoters. Bartlett JS, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8852–7

Use of virion DNA as a cloning vector for the construction of mutant and recombinant herpesviruses. Duboise SM, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11389–94

Clonal analysis of stably transduced human epidermal stem cells in culture. Mathor MB, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10371–6

The secretion of active recombinant human gastric lipase by Saccharomyces cerevisiae. Crabbe T, et al. **Protein Expr Purif** 1996 May;7(3):229–36

Eukaryotic expression systems: a comparison. Geisse S, et al. **Protein Expr Purif** 1996 Nov;8(3):271–82 (111 ref.)

Overexpression, purification, and characterization of recombinant Dictyostelium discoideum calcium-regulated 34,000-dalton F-actin bundling protein from Escherichia coli. Lim RW, et al. **Protein Expr Purif** 1997 Mar; 9(2):182–90

Characterization and partial purification of human monoamine oxidase-B expressed in Escherichia coli. Lu G, et al. **Protein Expr Purif** 1996 May;7(3):315–22

Expression and purification of the canine 54-kDa subunit of signal recognition particle as a his-tagged protein from Escherichia coli. Patel S, et al. **Protein Expr Purif** 1996 Nov;8(3):283–94

Bacterial production and purification of the fish pituitary hormone somatolactin. Pendón C, et al. **Protein Expr Purif** 1996 Jun;7(4):389–94

Production of human pancreatic ribonuclease in Saccharomyces cerevisiae and Escherichia coli. Ribó M, et al. **Protein Expr Purif** 1996 May;7(3):253–61

Expression of biologically active beta subunit of bovine follicle-stimulating hormone in the methylotrophic yeast Pichia pastoris. Samaddar M, et al. **Protein Expr Purif** 1997 Aug;10(3):345–55

Expression and purification of recombinant human apolipoprotein A-I in Chinese hamster ovary cells. Schmidt HH, et al. **Protein Expr Purif** 1997 Jul;10(2):226–36

High-level expression, purification, and crystallization of recombinant spinach glycolate oxidase in Escherichia coli. Stenberg K, et al. **Protein Expr Purif** 1996 Nov;8(3):295–8

Overexpression and large-scale production of recombinant L-methionine-alpha-deamino-gamma-mercaptomethane-lyase for novel anticancer therapy. Tan Y, et al. **Protein Expr Purif** 1997 Mar;9(2):233–45

Production of recombinant SERA proteins of Plasmodium falciparum in Escherichia coli by using synthetic genes. Sugiyama T, et al. **Vaccine** 1996 Aug;14(11):1069–76

Expression and properties of feline herpesvirus type 1 gD (hemagglutinin) by a recombinant baculovirus. Maeda K, et al. **Virus Res** 1996 Dec;46(1-2):75–80

Characterization of canine herpesvirus glycoprotein C expressed by a recombinant baculovirus in insect cells. Xuan X, et al. **Virus Res** 1996 Dec;46(1-2):57–64

Secretion of mouse alpha-amylase from Kluyveromyces lactis. Tokunaga M, et al. **Yeast** 1997 Jun 30;13(8):699–706

BLOOD

Inflammatory cytokines and inhibitors in HIV infection: correlation between interleukin-1 receptor antagonist and weight loss. Rimaniol AC, et al. **AIDS** 1996 Oct; 10(12):1349–56

CHEMICAL SYNTHESIS

Production and characterization of recombinant human plasminogen(S741C-fluorescein). A novel approach to study zymogen activation without generation of active protease. Horrevoets AJG, et al. **J Biol Chem** 1997 Jan 24;272(4):2176–82

Utilization of a recombinant substrate rAgg1 to study the biochemical properties of aggrecanase in cell culture systems. Hughes CE, et al. **J Biol Chem** 1997 Aug 8; 272(32):20269–74

CHEMISTRY

Complete determination of disulfide forms of purified recombinant human serum albumin, secreted by the yeast Pichia pastoris. Ikegaya K, et al. **Anal Chem** 1997 Jun 1; 69(11):1986–91

Production and comparison of mature single-domain 'trefoil' peptides pNR-2/pS2 Cys58 and pNR-2/pS2 Ser58. Chadwick MP, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):1001–7

Comparative studies of rat recombinant purple acid phosphatase and bone tartrate-resistant acid phosphatase. Ek-Rylander B, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):305–11

Recombinant human O6-alkylguanine-DNA alkyltransferase (AGT), Cys145-alkylated AGT and Cys145 —> Met145 mutant AGT: comparison by isoelectric focusing, CD and time-resolved fluorescence spectroscopy. Federwisch M, et al. **Biochem J** 1997 May 15;324 (Pt 1):321–8

Biochemical characterization and deletion analysis of recombinant human protein phosphatase 2C alpha. Marley AE, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):801–6

Ktr1p is an alpha-1,2-mannosyltransferase of Saccharomyces cerevisiae. Comparison of the enzymic properties of soluble recombinant Ktr1p and Kre2p/Mnt1p produced in Pichia pastoris. Romero PA, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):289–95

Compensatory mutations and protein stability: a theoretical study. Burgess CA, et al. **Biochem Soc Trans** 1997 Feb; 25(1):120S

A recombinant form of the human BP180 ectodomain forms a collagen-like homotrimeric complex. Balding SD, et al. **Biochemistry** 1997 Jul 22;36(29):8821–30

Spectroscopic characterization of recombinant Cu,Zn superoxide dismutase from Photobacterium leiognathi expressed in Escherichia coli: evidence for a novel catalytic copper binding site. Foti D, et al. **Biochemistry** 1997 Jun 10;36(23):7109–13

Domain structure and functional activity of the recombinant human fibrinogen gamma-module (gamma148–411). Medved L, et al. **Biochemistry** 1997 Apr 15;36(15):4685–93

Redefinition of the carbohydrate specificity of Erythrina corallodendron lectin based on solid-phase binding assays and molecular modeling of native and recombinant forms obtained by site-directed mutagenesis. Moreno E, et al. **Biochemistry** 1997 Apr 15;36(15):4429–37

Solution structures of a highly insecticidal recombinant scorpion alpha-toxin and a mutant with increased activity. Tugarinov V, et al. **Biochemistry** 1997 Mar 4;36(9):2414–24

Physical studies of conformational plasticity in a recombinant prion protein. Zhang H, et al. **Biochemistry** 1997 Mar 25; 36(12):3543–53

Disruption of the disulfide bonds of recombinant murine interleukin-6 induces formation of a partially unfolded state. Zhang JG, et al. **Biochemistry** 1997 Mar 4; 36(9):2380–9

Validation of peptide mapping for protein identity and genetic stability. Biologics and biotechnology section, pharmaceutical research and manufacturers of America. Allen D, et al. **Biologicals** 1996 Sep;24(3):255–74

Specific detection of his-tagged proteins with recombinant anti-His tag scFv-phosphatase or scFv-phage fusions. Lindner P, et al. **Biotechniques** 1997 Jan;22(1):140–9

Structure of cellulases and their applications. Ohmiya K, et al. **Biotechnol Genet Eng Rev** 1997;14:365–414 (180 ref.)

Biotechnology of protein and polysaccharide gels. Tombs MP. **Biotechnol Genet Eng Rev** 1997;14:337–63 (62 ref.)

Human mast cells expressing recombinant proteinase 3 (PR3) as substrate for clinical testing for anti-neutrophil cytoplasmic antibodies (ANCA). Specks U, et al. **Clin Exp Immunol** 1997 Aug;109(2):286–95

Protein engineering. **Curr Opin Biotechnol** 1997 Aug; 8(4):509–36

Stabilization of protein structures. Lee B, et al. **Curr Opin Biotechnol** 1997 Aug;8(4):423–8 (65 ref.)

Engineering novel proteins by transfer of active sites to natural scaffolds. Vita C. **Curr Opin Biotechnol** 1997 Aug; 8(4):429–34 (56 ref.)

Structural characterisation of human recombinant glycohormones follitropin, lutropin and choriogonadotropin expressed in Chinese hamster ovary cells. Amoresano A, et al. **Eur J Biochem** 1996 Dec 15; 242(3):608–18

Cloning, bacterial expression and biological characterization of recombinant human granulocyte chemotactic protein-2 and differential expression of granulocyte chemotactic protein-2 and epithelial cell-derived neutrophil activating peptide-78 mRNAs. Froyen G, et al. **Eur J Biochem** 1997 Feb 1;243(3):762–9

Production and characterization of recombinant active mouse gelatinase B from eukaryotic cells and in vivo effects after intravenous administration. Masure S, et al. **Eur J Biochem** 1997 Feb 15;244(1):21–30

Preparation and characterization of human recombinant protein 1/Clara cell M(r) 10,000 protein. Okutani R, et al. **Eur J Clin Chem Clin Biochem** 1996 Sep;34(9):691–6

Detecting native-like properties in combinatorial libraries of de novo proteins. Roy S, et al. **Fold Des** 1997;2(2):89–92

Biological and physicochemical characterization of recombinant human erythropoietins fractionated by Mono Q column chromatography and their modification with sialyltransferase. Morimoto K, et al. **Glycoconj J** 1996 Dec; 13(6):1013–20

Recombinant rat liver S-adenosyl-L-methionine synthetase tetramers and dimers are in equilibrium. Mingorance J, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):485–91

Structures of the sugar chains of recombinant macrophage colony-stimulating factor produced in Chinese hamster ovary cells. Ushida Y, et al. **J Biochem (Tokyo)** 1997 Jul; 122(1):148–56

Identification of framework residues in a secreted recombinant antibody fragment that control production level and localization in Escherichia coli. Forsberg G, et al. **J Biol Chem** 1997 May 9;272(19):12430–6

Characterization of recombinant human lactoferrin secreted in milk of transgenic mice. Nuijens JH, et al. **J Biol Chem** 1997 Mar 28;272(13):8802–7

Factor XSt. Louis II. Identification of a glycine substitution at residue 7 and characterization of the recombinant protein. Rudolph AE, et al. **J Biol Chem** 1996 Nov 8; 271(45):28601–6

Prolactin-like protein-B: heterologous expression and characterization of placental and decidual species. Cohick CB, et al. **J Endocrinol** 1997 Feb;152(2):291–302

Cytotoxic activities of recombinant soluble murine lymphotoxin-alpha and lymphotoxin-alpha beta complexes. Mackay F, et al. **J Immunol** 1997 Oct 1; 159(7):3299–310

High yield overexpression and characterization of human recombinant proapolipoprotein A-I. McGuire KA, et al. **J Lipid Res** 1996 Jul;37(7):1519–28

Stabilization of a recombinant Fv fragment by base-loop interconnection and V(H)-V(L) permutation. Brinkmann U, et al. **J Mol Biol** 1997 Apr 25;268(1):107–17

Analytical peptide mapping of recombinant DNA-derived proteins by reversed-phase high-performance liquid chromatography. Hoff ER, et al. **Methods Enzymol** 1996; 271:51–68 (32 ref.)

Rapid analysis of single-cysteine variants of recombinant proteins. Keough TW, et al. **Methods Mol Biol** 1996; 61:171–83

Production and characterization of recombinant proteins for NMR structural studies. Mossakowska DE, et al. **Methods Mol Biol** 1997;60:325–35 (24 ref.)

Protein folding and the Paracelsus challenge [news; comment] Rose GD. **Nat Struct Biol** 1997 Jul;4(7):512–4 . Comment on: Nat Struct Biol 1997 Jul;4(7):548–52.

A compendium and hydropathy/flexibility analysis of common reactive sites in proteins: reactivity at Asn, Asp, Gln, and Met motifs in neutral pH solution. Amphlett G, et al. **Pharm Biotechnol** 1996;9:1–140 (165 ref.)

A general bacterial expression system for functional analysis of cDNA-encoded proteins. Larsson M, et al. **Protein Expr Purif** 1996 Jun;7(4):447–57

Purification, characterization, and kinetics of porcine recombinant dihydropyrimidine dehydrogenase. Rosenbaum K, et al. **Protein Expr Purif** 1997 Jul; 10(2):185–91

Chick calretinin: purification, composition, and metal binding activity of native and recombinant forms. Stevens J, et al. **Protein Expr Purif** 1997 Mar;9(2):171–81

A probable conformational difference between recombinant and urinary erythropoietins. Kung CK, et al. **Proteins** 1997 May;28(1):94–8

Analysis of the conformational change of recombinant human papilloma virus type 18 E7 protein induced by metal binding. Kang JH, et al. **Virus Res** 1997 Jun;49(2):147–54

Self-association of truncated forms of HIV-1 gp120. Malvoisin E, et al. **Virus Res** 1997 Jun;49(2):163–72

[Protein drugs can be designed now. Targeting and cancer destroying drugs soon available] Josephson S, et al. **Lakartidningen** 1997 Jul 23;94(30–31):2650–3 **(Swe)**

DIAGNOSTIC USE

Recombinant mite allergens. New technologies for the management of patients with asthma. Chapman MD, et al. **Allergy** 1997 Apr;52(4):374–9 (34 ref.)

Specific serodiagnosis of human leishmaniasis with recombinant Leishmania P2 acidic ribosomal proteins. Soto M, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):387–91

Use of recombinant proteins in the diagnosis of autoimmune connective tissue diseases. Galperin C, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):337–47 (103 ref.)

DRUG EFFECTS

Monometoxytrityl derivatives of uridine as inhibitors of a human recombinant UDP-glucuronosyltransferase: UGT1*6. Cano V, et al. **Life Sci** 1997;61(1):PL1–8

GENETICS

Vectors for expressing proteins at the amino-terminus of an activation domain for use in the yeast two-hybrid system. Brown MA, et al. **Anal Biochem** 1997 May 1;247(2):451–2

Recombinant strategies for rapid purification of catalytic subunits of cAMP-dependent protein kinase. Hemmer W, et al. **Anal Biochem** 1997 Feb 15;245(2):115–22

Site-directed mutagenesis of recombinant human beta

2-glycoprotein I. Effect of phospholipid binding and anticardiolipin antibody activity. Sheng Y, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:331-3

Recombinant protein expression at low temperatures under the transcriptional control of the major Escherichia coli cold shock promoter cspA. Vasina JA, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1444-7

Validation of peptide mapping for protein identity and genetic stability. Biologics and biotechnology section, pharmaceutical research and manufacturers of America. Allen D, et al. **Biologicals** 1996 Sep;24(3):255-74

Efficient cloning method that selects the recombinant clones. Loukianov E, et al. **Biotechniques** 1997 Aug;23(2):292-5

Recombinant HMG1 protein produced in Pichia pastoris: a nonviral gene delivery agent. Mistry AR, et al. **Biotechniques** 1997 Apr;22(4):718-29

Bicistronic vector for the creation of stable mammalian cell lines that predisposes all antibiotic-resistant cells to express recombinant protein. Rees S, et al. **Biotechniques** 1996 Jan; 20(1):102-4, 106, 108-10

Recombinant proteins. Wientjes F. **Br J Hosp Med** 1997 Mar 5-18;57(5):229

Expression in bacteria other than Escherichia coli. Billman-Jacobe H. **Curr Opin Biotechnol** 1996 Oct; 7(5):500-4 (52 ref.)

Phage display of proteins. Dunn IS. **Curr Opin Biotechnol** 1996 Oct;7(5):547-53 (71 ref.)

Recombinant protein production in transgenic animals. Echelard Y. **Curr Opin Biotechnol** 1996 Oct;7(5):536-40 (60 ref.)

Quality and authenticity of heterologous proteins synthesized in yeast. Eckart MR, et al. **Curr Opin Biotechnol** 1996 Oct; 7(5):525-30 (47 ref.)

Errors of heterologous protein expression. Kurland C, et al. **Curr Opin Biotechnol** 1996 Oct;7(5):489-93 (44 ref.)

The expression of recombinant proteins in yeasts. Sudbery PE. **Curr Opin Biotechnol** 1996 Oct;7(5):517-24 (33 ref.)

Optimization of heterologous protein production in Escherichia coli. Weickert MJ, et al. **Curr Opin Biotechnol** 1996 Oct;7(5):494-9 (39 ref.)

Therapeutic proteins and enzymes from genetically engineered yeasts. Wiseman A. **Endeavour** 1996;20(3):130-2 (15 ref.)

Splicing by overlap extension by PCR using asymmetric amplification: an improved technique for the generation of hybrid proteins of immunological interest. Warrens AN, et al. **Gene** 1997 Feb 20;186(1):29-35

TAXI/UAS: A molecular switch to control expression of genes in vivo. Delort JP, et al. **Hum Gene Ther** 1996 May 1;7(7):809-20

The production and characterization of a modified recombinant interleukin-1 receptor antagonist. Chang DM, et al. **Immunol Invest** 1996 Jul;25(4):355-68

Structure and function of the recombinant fifth domain of human beta 2-glycoprotein I: effects of specific cleavage between Lys77 and Thr78. Hagihara Y, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):128-37

Epitope mapping of a recombinant human TSH receptor extracellular domain: identification of a predominant epitope using animal sera. Hunt N, et al. **J Clin Lab Anal** 1996;10(4):193-204

Stabilization of a recombinant Fv fragment by base-loop interconnection and V(H)-V(L) permutation. Brinkmann U, et al. **J Mol Biol** 1997 Apr 25;268(1):107-17

Adenovirus dodecahedron, a new vector for human gene transfer [see comments] Fender P, et al. **Nat Biotechnol** 1997 Jan;15(1):52-6. Comment in: Nat Biotechnol 1997 Jan;15(1):17.

Display of heterologous proteins on the surface of microorganisms: from the screening of combinatorial libraries to live recombinant vaccines. Georgiou G, et al. **Nat Biotechnol** 1997 Jan;15(1):29-34 (90 ref.)

Selectively infective phage (SIP) technology: a novel method for in vivo selection of interacting protein-ligand pairs. Spada S, et al. **Nat Med** 1997 Jun;3(6):694-6

Recombinant human phenylethanolamine N-methyltransferase: overproduction in Escherichia coli, purification, and characterization. Caine JM, et al. **Protein Expr Purif** 1996 Sep;8(2):160-6

Isolation and characterization of human tissue kallikrein produced in Escherichia coli: biochemical comparison to the enzymatically inactive prokallikrein and methionyl kallikrein. Lu HS, et al. **Protein Expr Purif** 1996 Sep; 8(2):215-26

Purification and characterization of human tissue prokallikrein and kallikrein isoforms expressed in Chinese hamster ovary cells. Lu HS, et al. **Protein Expr Purif** 1996 Sep;8(2):227-37

Purification of a soluble hepatitis E open reading frame 2-derived protein with unique antigenic properties. McAtee CP, et al. **Protein Expr Purif** 1996 Sep;8(2):262-70

Production and isolation of the recombinant N-lobe of human serum transferrin from the methylotrophic yeast Pichia pastoris. Mason AB, et al. **Protein Expr Purif** 1996 Aug;8(1):119-25

Upstream strategies to minimize proteolytic degradation upon recombinant production in Escherichia coli. Murby M, et al. **Protein Expr Purif** 1996 Mar;7(2):129-36 (76 ref.)

Overexpression in Pichia pastoris and crystallization of an elicitor protein secreted by the phytopathogenic fungus, Phytophthora cryptogea. O'Donohue MJ, et al. **Protein Expr Purif** 1996 Sep;8(2):254-61

Characterization of recombinant von Willebrand factors mutated on cysteine 509 or 695. Siguret V, et al. **Thromb Haemost** 1996 Sep;76(3):453-9

Expression of the human milk protein beta-casein in transgenic potato plants. Chong DK, et al. **Transgenic Res** 1997 Jul;6(4):289-96

Phenotypic and genotypic stability of multiple lines of transgenic pigs expressing recombinant human protein C. Van Cott KE, et al. **Transgenic Res** 1997 May;6(3):203-12

HISTORY

Pioneering recombinant growth hormone manufacturing: pounds produced per mile of height. Cronin MJ. **J Pediatr** 1997 Jul;131(1 Pt 2):S5-7

IMMUNOLOGY

Expression of the house dust mite allergen Der p2 and mutants in the baker's yeast Saccharomyces cerevisiae. Hakkaart GA, et al. **Adv Exp Med Biol** 1996;409:395-8 (5 ref.)

Reduction of IgE antibody binding to rDer p 2 variants generated by site-directed mutagenesis. Smith AM, et al. **Adv Exp Med Biol** 1996;409:391-4

Recombinant human monoclonal antibody IgG1b12 neutralizes diverse human immunodeficiency virus type 1 primary isolates. Kessler JA 2nd, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):575-82

Evaluation of recombinant allergens Bet v 1 and Bet v 2 (profilin) by Pharmacia CAP system in patients with pollen-related allergy to birch and apple. Rossi RE, et al. **Allergy** 1996 Dec;51(12):940-5

Immunodetection of mitochondrial glycerophosphate dehydrogenase (mGDH) by a polyclonal antibody raised against a recombinant mGDH fragment product. Novials A, et al. **Biochem Mol Med** 1996 Dec;59(2):187-91

Immunopurification of polyclonal antibodies to recombinant proteins of the same gene family. Pompéia C, et al. **Biotechniques** 1996 Dec;21(6):986-8, 990

Suppression of experimental autoimmune uveitis in Lewis rats by oral administration of recombinant Escherichia coli expressing retinal S-antigen. Singh VK, et al. **Cell Immunol** 1996 Sep 15;172(2):158-62

Glutamic acid decarboxylase autoantibody assay using 125I-labelled recombinant GAD65 produced in yeast. Powell M, et al. **Clin Chim Acta** 1996 Dec 30;256(2):175-88

Serologic reactivity of a synthetic peptide from human immunodeficiency virus type 1 gp41 with sera from a Mexican population. Gevorkian G, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):651-3

Immunological characterization of a recombinant 27-kilodalton antigenic protein from Paracoccidioides brasiliensis. Ortiz BL, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):239-41

Antibody response to human parvovirus B19 in patients with primary infection by immunoblot assay with recombinant proteins. Palmer P, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):236-8

Recombinant Coccidioides immitis complement-fixing antigen: detection of an epitope shared by C. immitis, Histoplasma capsulatum, and Blastomyces dermatitidis. Yang MC, et al. **Clin Diagn Lab Immunol** 1997 Jan; 4(1):19-22

Automated specific IgE assay with recombinant allergens: evaluation of the recombinant Aspergillus fumigatus allergen I in the Pharmacia Cap System. Crameri R, et al. **Clin Exp Allergy** 1996 Dec;26(12):1411-9

IgE and monoclonal antibody binding by the mite allergen Der p 7. Shen HD, et al. **Clin Exp Allergy** 1996 Mar; 26(3):308-15

Anti-native and recombinant myeloperoxidase monoclonals and human autoantibodies. Audrain MA, et al. **Clin Exp Immunol** 1997 Jan;107(1):127-34

Immunization of male bonnet monkeys (M. radiata) with a recombinant FSH receptor preparation affects testicular function and fertility. Moudgal NR, et al. **Endocrinology** 1997 Jul;138(7):3065-8

Crossreactions and sequence homologies between recombinant polypeptides from Leishmania aethiopica and human IgG and IgM. Osland A, et al. **FEMS Immunol Med Microbiol** 1997 Jan;17(1):11-9

Immunoglobulin G response against 10-kDa and 65-kDa heat-shock proteins in leprosy patients and their household contacts. Rojas RE, et al. **FEMS Immunol Med Microbiol** 1996 Oct;15(4):189-98

Parameters affecting the immunogenicity of recombinant T cell epitopes inserted into hybrid proteins. Lo-Man R, et al. **Hum Immunol** 1997 May;54(2):180-8 (75 ref.)

Recombinant Treponema pallidum antigens in syphilis serology. Gerber A, et al. **Immunobiology** 1996-97; 196(5):535-49

New perspectives on recombinant human antibodies. de Kruif J, et al. **Immunol Today** 1996 Oct;17(10):453-5 (13 ref.)

Induction of a type 1 immune response to a recombinant antigen from Mycobacterium tuberculosis expressed in Mycobacterium vaccae. Abou-Zeid C, et al. **Infect Immun** 1997 May;65(5):1856-62

Production of tumor necrosis factor and nitric oxide by macrophages infected with live and dead mycobacteria and their suppression by an interleukin-10-secreting recombinant. Marshall BG, et al. **Infect Immun** 1997 May; 65(5):1931-5

Passive immunity to infection with Yersinia spp. mediated by anti-recombinant V antigen is dependent on polymorphism of V antigen. Roggenkamp A, et al. **Infect Immun** 1997 Feb;65(2):446-51

Autoimmunity to heat shock protein 60 and antigen-specific production of interleukin-10. Yi Y, et al. **Infect Immun** 1997 May;65(5):1669-74

Cloning and IgE binding of a recombinant allergen from the mite Blomia tropicalis, homologous with fatty acid-binding proteins. Caraballo L, et al. **Int Arch Allergy Immunol** 1997 Apr;112(4):341-7

Recombinant proteins in newly developed foods: identification of allergenic activity. Lehrer SB, et al. **Int Arch Allergy Immunol** 1997 May-Jul;113(1-3):122-4

Differential regulation of antigen-specific IgG4 and IgE antibodies in response to recombinant filarial proteins. Garraud O, et al. **Int Immunol** 1996 Dec;8(12):1841-8

Recombinant Bet v 1, the major birch pollen allergen, induces hypersensitivity reactions equal to those induced by natural Bet v 1 in the airways of patients allergic to tree pollen. Godnic-Cvar J, et al. **J Allergy Clin Immunol** 1997 Mar; 99(3):354-9

Comparison of recombinant timothy grass pollen allergens with natural extract for diagnosis of grass pollen allergy in different populations. Laffer S, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):652-8

Mapping of IgE-binding epitopes on the recombinant major group I allergen of velvet grass pollen, rHol l 1. Schramm G, et al. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 1):781-7

Oral tolerization to adenoviral antigens permits long-term gene expression using recombinant adenoviral vectors. Ilan Y, et al. **J Clin Invest** 1997 Mar 1;99(5):1098-106

Complete protective immunity induced in mice by immunization with the 19-kilodalton carboxyl-terminal fragment of the merozoite surface protein-1 (MSP1[19]) of Plasmodium yoelii expressed in Saccharomyces cerevisiae: correlation of protection with antigen-specific antibody titer, but not with effector CD4+ T cells. Hirunpetcharat C, et al. **J Immunol** 1997 Oct 1; 159(7):3400-11

Cytotoxic activities of recombinant soluble murine lymphotoxin-alpha and lymphotoxin-alpha beta complexes. Mackay F, et al. **J Immunol** 1997 Oct 1; 159(7):3299-310

Determination of the binding affinity of an anti-CD34 single-chain antibody using a novel, flow cytometry based assay. Benedict CA, et al. **J Immunol Methods** 1997 Feb 28;201(2):223-31

Production of recombinant MART-1 proteins and specific antiMART-1 polyclonal and monoclonal antibodies: use in the characterization of the human melanoma antigen MART-1. Kawakami Y, et al. **J Immunol Methods** 1997 Mar 10;202(1):13-25

Rapid detection of recombinant antibody fragments directed against cell-surface antigens by flow cytometry. Kipriyanov SM, et al. **J Immunol Methods** 1996 Sep 13; 196(1):51-62

Humoral and cellular immune responses following vaccination with purified recombinant hemagglutinin from influenza A (H3N2) virus. Powers DC, et al. **J Infect Dis** 1997 Feb;175(2):342-51

Immunization with outer surface protein (Osp) A, but not OspC, provides cross-protection of mice challenged with North American isolates of Borrelia burgdorferi. Probert WS, et al. **J Infect Dis** 1997 Feb;175(2):400-5

Generalized autoimmunity of the nervous system (GANS) induced by a recombinant protein composed of major pathogenic determinants of MBP, IRBP, and P2 protein: suppression of inflammation by a monoclonal antibody against activated rat T line cells. Schluesener H. **J Neurosci Res** 1996 Aug 1;45(3):303-7

An indirect ELISA for the detection of antibodies against porcine reproductive and respiratory syndrome virus using recombinant nucleocapsid protein as antigen. Denac H, et al. **J Virol Methods** 1997 May;65(2):169-81

Bacterial expression of anti-DNA antibody domains. Stollar BD. **Methods** 1997 Jan;11(1):12-9

Expression of Neisseria meningitidis class 1 porin as a fusion protein in Escherichia coli: the influence of liposomes and adjuvants on the production of a bactericidal immune response. Ward SJ, et al. **Microb Pathog** 1996 Dec; 21(6):499-512

Identification of two types of autoreactive T lymphocyte clones cultured from cardiac allograft-infiltrating cells incubated with recombinant mycobacterial heat shock protein 71. Liu K, et al. **Transpl Immunol** 1997 Mar; 5(1):57-65

Allograft immune response with sCR1 intervention. Pratt JR, et al. **Transpl Immunol** 1996 Mar;4(1):72-5

Effect of context and adjuvant on the immunogenicity of recombinant proteins and peptide conjugates derived from the polymorphic malarial surface antigen MSA2. Jones GL, et al. **Vaccine** 1996 Jan;14(1):77-84

Characterization and expression of the Marek's disease virus serotype 2 glycoprotein E in recombinant baculovirus-infected cells: initial analysis of its DNA sequence and antigenic properties. Jang HK, et al. **Virus Res** 1997 May;48(2):111-23

Detection of antibody to hepatitis C virus E2 recombinant antigen among samples indeterminate for anti-HCV after wide serological testing and correlation with viremia. The Spanish Study Group for Blood Donors at Risk of

Transmission of HCV. León P, et al. **Vox Sang** 1996; 70(4):213–6

ISOLATION & PURIFICATION

Inclusion bodies and purification of proteins in biologically active forms. Mukhopadhyay A.
Adv Biochem Eng Biotechnol 1997;56:61–109 (160 ref.)

Cell disruption of Escherichia coli by glass bead stirring for the recovery of recombinant proteins. Song DD, et al.
Anal Biochem 1997 Jun 1;248(2):300–1

PCR-based multiplex method for rapid screening of recombinant bacteria. Schillberg S, et al. **Biotechniques** 1997 Aug;23(2):212–4, 216

Subcellular targeting and purification of recombinant proteins in plant production systems. Moloney MM, et al.
Biotechnol Genet Eng Rev 1997;14:321–36 (63 ref.)

Use of a statistical strategy to evaluate sources of variability in viral safety experiments for a recombinant biopharmaceutical. McAllister PR, et al. **Dev Biol Stand** 1996;88:111–21

Single-column purification of free recombinant proteins using a self-cleavable affinity tag derived from a protein splicing element. Chong S, et al. **Gene** 1997 Jun 19;192(2):271–81

Umbilical cord transforming growth factor-beta 3: isolation, comparison with recombinant TGF-beta 3 and cellular localization. Stewart AA, et al. **Growth Factors** 1996; 13(1–2):87–98

Purification by reflux electrophoresis of whey proteins and of a recombinant protein expressed in Dictyostelium discoideum. Corthals GL, et al. **J Chromatogr A** 1997 Jun 27;773(1–2):299–309

Human anti-nicotinic acetylcholine receptor recombinant Fab fragments isolated from thymus-derived phage display libraries from myasthenia gravis patients reflect predominant specificities in serum and block the action of pathogenic serum antibodies. Graus YF, et al.
J Immunol 1997 Feb 15;158(4):1919–29

Purification of heat shock transcription factor of Drosophila. Zhong M, et al. **Methods Enzymol** 1996;274:113–9

Overview of experimental strategies on the detection and isolation of recombinant proteins and their applications. Tuan RS. **Methods Mol Biol** 1997;63:3–7

Extraction of recombinant protein from bacteria. Worrall DM. **Methods Mol Biol** 1996;59:31–7

Expression, purification and immunochemical characterization of recombinant bovine beta-lactoglobulin, a major cow milk allergen. Chatel JM, et al.
Mol Immunol 1996 Oct;33(14):1113–8

Purification of human Rad51 protein by selective spermidine precipitation. Baumann P, et al. **Mutat Res** 1997 Aug; 384(2):65–72

Engineering a de novo designed coiled-coil heterodimerization domain for the rapid detection, purification and characterization of recombinantly expressed peptides and proteins. Tripet B, et al.
Protein Eng 1997 Mar;10(3):299

Immobilized hirudin and hirudin-based peptides used for the purification of recombinant human thrombin prepared from recombinant human prothrombin. Fischer BE, et al.
Protein Expr Purif 1996 Sep;8(2):167–74

Overexpression, purification, and characterization of recombinant barley alpha-amylases 1 and 2 secreted by the methylotrophic yeast Pichia pastoris. Juge N, et al.
Protein Expr Purif 1996 Sep;8(2):204–14

A general bacterial expression system for functional analysis of cDNA-encoded proteins. Larsson M, et al.
Protein Expr Purif 1996 Jun;7(4):447–57

One-step affinity purification of recombinant alphavbeta3 integrin from transfected cells. Marcinkiewicz C, et al.
Protein Expr Purif 1996 Aug;8(1):68–74

Purification of human recombinant interleukin 1 receptor antagonist proteins upon Bacillus subtilis sporulation. Maurizi G, et al. **Protein Expr Purif** 1997 Mar;9(2):219–27

Expression and radiolabeling of recombinant proteins containing a phosphorylation motif. Mohanraj D, et al.
Protein Expr Purif 1996 Sep;8(2):175–82

Bacterial production and purification of the fish pituitary hormone somatolactin. Pendón C, et al.
Protein Expr Purif 1996 Jun;7(4):389–94

Purification, characterization, and kinetics of porcine recombinant dihydropyrimidine dehydrogenase. Rosenbaum K, et al. **Protein Expr Purif** 1997 Jul; 10(2):185–91

Expression and purification of recombinant human apolipoprotein A-I in Chinese hamster ovary cells. Schmidt HH, et al. **Protein Expr Purif** 1997 Jul;10(2):226–36

Hyperexpression of chicken riboflavin carrier protein: antibodies to the recombinant protein curtail pregnancy in rodents. Sooryanarayana, et al. **Protein Expr Purif** 1996 Mar;7(2):147–54

Chick calretinin: purification, composition, and metal binding activity of native and recombinant forms. Stevens J, et al.
Protein Expr Purif 1997 Mar;9(2):171–81

Cloning of chalcone-flavanone isomerase cDNA from Pueraria lobata and its overexpression in Escherichia coli. Terai Y, et al. **Protein Expr Purif** 1996 Sep;8(2):183–90

Recombinant human cytidine deaminase: expression, purification, and characterization. Vincenzetti S, et al.
Protein Expr Purif 1996 Sep;8(2):247–53

Purification of recombinant insect transferrin from large volumes of cell culture medium using high capacity Ni(2+)-dipicolylamine gel. Winzerling JJ, et al.
Protein Expr Purif 1996 Mar;7(2):137–42

Simple method for efficient production of hepatitis B virus core antigen in Escherichia coli. Naito M, et al.
Res Virol 1997 Jul-Aug;148(4):299–305

METABOLISM

Recombinant strategies for rapid purification of catalytic subunits of cAMP-dependent protein kinase. Hemmer W, et al. **Anal Biochem** 1997 Feb 15;245(2):115–22

Do recombinant receptor assays provide affinity and potency estimates? Bockaert J, et al. **Ann N Y Acad Sci** 1997 May 30;812:55–70 (27 ref.)

Influence of cosubstrate concentration on xylose conversion by recombinant, XYL1-expressing Saccharomyces cerevisiae: a comparison of different sugars and ethanol as cosubstrates. Meinander NQ, et al.
Appl Environ Microbiol 1997 May;63(5):1959–64

The function of recombinant cytochrome P450s in intact Escherichia coli cells: the 17 alpha-hydroxylation of progesterone and pregnenolone by P450c17. Shet MS, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):218–25

Purification and characterization of recombinant baculovirus-expressed mouse DNA methyltransferase. Glickman JF, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):280–4

Fucosylation of complex glycosphingolipids by recombinant fucosyltransferase-VII. Stroud MR, et al.
Biochem Biophys Res Commun 1997 Sep 8;238(1):165–8

Effects of mutations of aspartic acid 63 on the metal-binding properties of the recombinant N-lobe of human serum transferrin. He QY, et al. **Biochemistry** 1997 May 6; 36(18):5522–8

Hydrolysis of phosphatidylcholine by hepatic lipase in discoidal and spheroidal recombinant high-density lipoprotein. Tansey JT, et al. **Biochemistry** 1997 Oct 7; 36(40):12227–34

Comparative studies of recombinant human albumin and human serum albumin derived by blood fractionation. Dodsworth N, et al. **Biotechnol Appl Biochem** 1996 Oct; 24 (Pt 2):171–6

Expression of pertussis toxin adenosine diphosphate-ribosyltransferase in a T-cell hybridoma reduces metastatic capacity. Driessens MH, et al. **Blood** 1996 Oct 15;88(8):3116–23

Proteolytic cleavage of recombinant type 2A von Willebrand factor mutants R834W and R834Q: inhibition by doxycycline and by monoclonal antibody VP-1. Tsai HM, et al. **Blood** 1997 Mar 15;89(6):1954–62

Recombinant human glycosylasparaginase catalyzes hydrolysis of L-asparagine. Noronkoski T, et al.
FEBS Lett 1997 Jul 21;412(1):149–52

In vitro and in vivo secretion of cloned antibodies by genetically modified myogenic cells. Noël D, et al.
Hum Gene Ther 1997 Jul 1;8(10):1219–29

High-efficiency stable gene transfer of adenovirus into mammalian cells using ionizing radiation. Zeng M, et al.
Hum Gene Ther 1997 Jun 10;8(9):1025–32

A recombinant single-chain HLA-A2.1 molecule, with a cis active beta-2-microglobulin domain, is biologically active in peptide binding and antigen presentation. Lee L, et al.
Hum Immunol 1996 Aug;49(1):28–37

Expression of recombinant human glutamic acid decarboxylase (GAD) in myeloma cells and enzyme-linked immunosorbent assay (ELISA) for autoantibodies to GAD. Matsuba T, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):20–4

The dual specificity mitogen-activated protein kinase phosphatase-1 and -2 are induced by the p42/p44MAPK cascade. Brondello JM, et al. **J Biol Chem** 1997 Jan 10; 272(2):1368–76

Temperature-dependent non-specific adsorption of recombinant bovine leukemia virus receptor BLVRcp1 in immunoassay. Orlik O, et al. **J Immunoassay** 1997 May; 18(2):185–98

In vivo characterization of sustained-release formulations of human growth hormone. Lee HJ, et al.
J Pharmacol Exp Ther 1997 Jun;281(3):1431–9

Bursts of action potential waveforms relieve G-protein inhibition of recombinant P/Q-type Ca2+ channels in HEK 293 cells. Brody DL, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):637–44

Optimal ligand binding by the recombinant human glucocorticoid receptor and assembly of the receptor complex with heat shock protein 90 correlate with high intracellular ATP levels in Spodoptera frugiperda cells. Srinivasan G, et al. **J Steroid Biochem Mol Biol** 1997 Jan; 60(1–2):1–9

Production of recombinant proteins in Chinese hamster ovary cells overexpressing the subtilisin-like proprotein converting enzyme furin. Ayoubi TA, et al.
Mol Biol Rep 1996;23(2):87–95

Cooperative effects of mutations in a recombinant Fab on the kinetics of antigen binding. Rauffer-Bruyre N, et al.
Mol Immunol 1997 Feb;34(2):165–73

Arginine-glycine-aspartic acid mimics can identify a transitional activation state of recombinant alphaIIb beta3 in human embryonic kidney 293 cells. Abraham DG, et al. **Mol Pharmacol** 1997 Aug;52(2):227–36

Rational engineering of activity and specificity in a serine protease [see comments] Dang QD, et al.
Nat Biotechnol 1997 Feb;15(2):146–9. Comment in: Nat Biotechnol 1997 Feb;15(2):124–5.

Fluorescein-Trp25-exendin-4, a biologically active fluorescent probe for the human GLP-1 receptor. Chicchi GG, et al. **Peptides** 1997;18(2):319–21

Self-association of truncated forms of HIV-1 gp120. Malvoisin E, et al. **Virus Res** 1997 Jun;49(2):163–72

PHARMACOKINETICS

Pharmacokinetic profile of recombination human insulin-like growth factor binding protein-1 in athymic mice. Yee D, et al. **Biomed Pharmacother** 1996;50(3–4):154–7

Pharmacokinetics and haematological parameters of recombinant human erythropoietin after subcutaneous administrations in horses. Souillard A, et al.
Biopharm Drug Dispos 1996 Dec;17(9):805–15

Pharmacology and pharmacokinetics of LEX 032, a bioengineered serpin: the first of a potential new class of drugs. Sands H, et al. **Drug Metab Rev** 1997 Feb-May; 29(1–2):309–28 (68 ref.)

Design of biological equivalence programs for therapeutic biotechnology products in clinical development: a perspective. Mordenti J, et al. **Pharm Res** 1996 Oct; 13(10):1427–37 (29 ref.)

Bioavailability of recombinant human growth hormone in different concentrations and formulations. Vahl N, et al.
Pharmacol Toxicol 1996 Sep;79(3):144–9

PHARMACOLOGY

Inclusion bodies and purification of proteins in biologically active forms. Mukhopadhyay A.
Adv Biochem Eng Biotechnol 1997;56:61–109 (160 ref.)

Recombinant allergens. Steps on the way to diagnosis and therapy of type I allergy. Valenta R, et al.
Adv Exp Med Biol 1996;409:185–96 (31 ref.)

Effects of recombinant human tissue factor pathway inhibitor on thrombus formation and its in vivo distribution in a rat DIC model. Elsayed YA, et al. **Am J Clin Pathol** 1996 Nov;106(5):574–83

Effects of products of activated immune cells and recombinant cytokines on spontaneous and ionophore-induced acrosome reaction. Dimitrov DG, et al. **Am J Reprod Immunol** 1996 Sep;36(3):150–6

General pharmacology of recombinant human basic fibroblast growth factor. Okumura M, et al. **Arzneimittelforschung** 1996 Jul;46(7):727–39

Phenotypic and functional analyses of fresh and recombinant interleukin-2 cultured tumour-infiltrating lymphocytes derived from malignant human liver tumours. Yoong KF, et al. **Biochem Soc Trans** 1997 May;25(2):271S

Inactivation of recombinant monocyte cAMP-specific phosphodiesterase by cAMP analog, 8-[(4-bromo-2,3-dioxobutyl)thio]adenosine 3',5'-cyclic monophosphate. Omburo GA, et al. **Blood** 1997 Feb 1; 89(3):1019–26

Promotion of the osteogenetic activity of recombinant human bone morphogenetic protein by prostaglandin E1. Ono I, et al. **Bone** 1996 Dec;19(6):581–8

Involvement of hepatocyte growth factor in increased integrin expression on HepG2 cells triggered by adhesion to endothelial cells. Kawakami-Kimura N, et al.
Br J Cancer 1997;75(1):47–53

Recombinant human macrophage-colony stimulating factor suppresses the mouse mixed lymphocyte reaction. Sakurai T, et al. **Cell Immunol** 1996 Jul 10;171(1):87–94

Efficacy of recombinant granulocyte colony-stimulating factor (rhG-CSF) in experimental colitis. Hommes DW, et al. **Clin Exp Immunol** 1996 Dec;106(3):529–33

Pharmacodynamics of subcutaneous recombinant human interleukin-10 in healthy volunteers. Huhn RD, et al.
Clin Pharmacol Ther 1997 Aug;62(2):171–80

Leptin directly alters lipid partitioning in skeletal muscle. Muoio DM, et al. **Diabetes** 1997 Aug;48(8):1360–3

Interleukin-8 stimulates leukocyte migration across a monolayer of cultured rabbit gastric epithelial cells. Effect associated with the impairment of gastric epithelial barrier function. Fujiwara Y, et al. **Dig Dis Sci** 1997 Jun; 42(6):1210–5

Pharmacology and pharmacokinetics of LEX 032, a bioengineered serpin: the first of a potential new class of drugs. Sands H, et al. **Drug Metab Rev** 1997 Feb-May; 29(1–2):309–28 (68 ref.)

Interleukin-10 inhibits neutrophil phagocytic and bactericidal activity. Laichalk LL, et al.
FEMS Immunol Med Microbiol 1996 Oct;15(4):181–7

Recombinant human growth/differentiation factor 5 stimulates mesenchyme aggregation and chondrogenesis responsible for the skeletal development of limbs. Hötten GC, et al. **Growth Factors** 1996;13(1–2):65–74

TAXI/UAS: A molecular switch to control expression of genes in vivo. Delort JP, et al. **Hum Gene Ther** 1996 May 1;7(7):809–20

Human recombinant interleukin-4 (HurIL-4) improves SCID mouse reconstitution with human peripheral blood lymphocytes. Bombil F, et al. **Immunobiology** 1996; 196(4):437–48

Passive immunity to infection with Yersinia spp. mediated by anti-recombinant V antigen is dependent on polymorphism of V antigen. Roggenkamp A, et al.
Infect Immun 1997 Feb;65(2):446–51

The role of nitric oxide in experimental murine sepsis due to pyrogenic exotoxin A-producing Streptococcus pyogenes. Sriskandan S, et al. **Infect Immun** 1997 May; 65(5):1767–72

Inhibition of cytosolic phospholipase A2 by annexin V in differentiated permeabilized HL-60 cells. Evidence of crucial importance of domain I type II Ca2+-binding site in the mechanism of inhibition. Mira JP, et al. **J Biol Chem** 1997 Apr 18;272(16):10474-82

Effects of recombinant bactericidal, permeability-increasing protein on bacterial translocation and pulmonary neutrophil sequestration in burned mice. Rennekampff OH, et al. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 1):17-21

Leptin accelerates the onset of puberty in normal female mice. Ahima RS, et al. **J Clin Invest** 1997 Feb 1;99(3):391-5

Immunologic and hematopoietic effects of CD40 stimulation after syngeneic bone marrow transplantation in mice. Funakoshi S, et al. **J Clin Invest** 1997 Feb 1;99(3):484-91

Effects of recombinant human growth hormone on muscle protein turnover in malnourished hemodialysis patients. Garibotto G, et al. **J Clin Invest** 1997 Jan 1;99(1):97-105

In vitro cleavage of hepatitis C virus polyprotein substrates by purified recombinant NS3 protease. D'Souza ED, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1729-36

Evidence for a deficiency of interferon response in mononuclear cells from hepatitis C viremic patients. Podevin P, et al. **J Hepatol** 1997 Aug;27(2):265-71

Recombinant guinea pig and human RANTES activate macrophages but not eosinophils in the guinea pig. Campbell EM, et al. **J Immunol** 1997 Aug 1;159(3):1482-9

Pleiotropic effects of immobilized versus soluble recombinant HIV-1 Tat protein on CD3-mediated activation, induction of apoptosis, and HIV-1 long terminal repeat transactivation in purified CD4+ T lymphocytes. Zauli G, et al. **J Immunol** 1996 Sep 1;157(5):2216-24

Immunopharmacology and cytokine production of a low-dose schedule of intraperitoneally administered human recombinant interleukin-2 in patients with advanced epithelial ovarian carcinoma. Freedman RS, et al. **J Immunother Emphasis Tumor Immunol** 1996 Nov; 19(6):443-51

A comparison of the antiproliferative properties of recombinant human IFN-alpha 2 and IFN-omega in human bone marrow culture. Tiefenthaler M, et al. **J Interferon Cytokine Res** 1997 Jun;17(6):327-9

Non-cholinergic, trophic action of recombinant acetylcholinesterase on mid-brain dopaminergic neurons. Holmes C, et al. **J Neurosci Res** 1997 Jul 15;49(2):207-18

In vivo effect of recombinant human leukemia inhibitory factor in primates. Akiyama Y, et al. **Jpn J Cancer Res** 1997 Jun;88(6):578-83

Protective effect of recombinant human leukemia inhibitory factor against thrombocytopenia in carboplatin-treated mice. Akiyama Y, et al. **Jpn J Cancer Res** 1997 Jun; 88(6):584-9

The effect of granulocyte-macrophage colony stimulating factor (rGM-CSF) on macrophage function in microbial disease. Jones TC. **Med Oncol** 1996 Sep;13(3):141-7 (54 ref.)

The effect of interferon beta-1b on cytokine-induced adhesion molecule expression. Jiang H, et al. **Neurochem Int** 1997 Apr-May;30(4-5):449-53

Effect of recombinant growth hormone and chromium picolinate on cytokine production and growth performance in swine. Myers MJ, et al. **Pathobiology** 1995;63(5):283-7

Effect of interleukin 12 on tumor induction by 3-methylcholanthrene. Noguchi Y, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11798-801

The effect of recombinant human erythropoietin on haematopoiesis in patients undergoing haemodialysis. Swanepoel C, et al. **S Afr Med J** 1996 Aug;86(8):952-5

Effects of pegylated recombinant human megakaryocyte growth and development factor on thrombocytopenia induced by a new myelosuppressive chemotherapy regimen in mice. Akahori H, et al. **Stem Cells** 1996 Nov;14(6):678-89

Recombinant human ligand for MPL, megakaryocyte growth and development factor (MGDF), stimulates thrombopoiesis in vivo in normal and myelosuppressed baboons. Andrews RG, et al. **Stem Cells** 1996 Nov; 14(6):661-77

In vitro effects of rt-PA on platelet function and clot strength. D'Amico EA, et al. **Thromb Res** 1997 Mar 15; 85(6):519-22

Recombinant bovine interferon gamma inhibits the growth of Cowdria ruminantium but fails to induce major histocompatibility complex class II following infection of endothelial cells. Totté P, et al. **Vet Immunol Immunopathol** 1996 Sep;53(1-2):61-71

[Regulative effects of cytokines on the expression of cell adhesion molecules on human mesangial cells] Yang B, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jun;76(6):416-9 (Eng. Abstr.) **(Chi)**

SECRETION

Secretion of recombinant proteins by Gram-negative bacteria. Sandkvist M, et al. **Curr Opin Biotechnol** 1996 Oct;7(5):505-11 (61 ref.)

Merits of secretion of heterologous proteins from industrial microorganisms. Quax WJ. **Folia Microbiol (Praha)** 1997; 42(2):99-103 (11 ref.)

Linker mutagenesis of the Caulobacter crescentus S-layer protein: toward a definition of an N-terminal anchoring region and a C-terminal secretion signal and the potential for heterologous protein secretion. Bingle WH, et al. **J Bacteriol** 1997 Feb;179(3):601-11

Expression and secretion of proteins in E. coli. Pines O, et al. **Methods Mol Biol** 1997;62:73-87

Influence of phospholipid composition on excretion of beta-lactamase from a stringent/relaxed Escherichia coli K 12 strain pair. Gitter B, et al. **Microbiol Res** 1996 Dec; 151(4):337-42

Secretion of proteins by Escherichia coli and its application in production of recombinant proteins. Fikus MM, et al. **Postepy Biochem** 1995;41(5 Suppl):313-8 (45 ref.)

Secretion of unprocessed human surfactant protein B in milk of transgenic mice. Yarus S, et al. **Transgenic Res** 1997 Jan;6(1):51-7

STANDARDS

Safety considerations of recombinant protein therapy: introductory comments [comment] Hayes TJ, et al. **Clin Immunol Immunopathol** 1997 Apr;83(1):1-4 (11 ref.). Comment on: Clin Immunol Immunopathol 1997 Apr;83(1):5-7. Comment on: Clin Immunol Immunopathol 1997 Apr;83(1):15-7. Comment on: Clin Immunol Immunopathol 1997 Apr;83(1):18-20.

THERAPEUTIC USE

Effects of an intratumoral injection of human recombinant tumor necrosis factor-alpha on cerebrovascular permeability and leukocytic infiltration in a rat glioma model. Wright JL, et al. **Acta Neuropathol (Berl)** 1997 Jan; 93(1):78-86

Subcutaneously administered recombinant human beta-interferon in the treatment of chronic hepatitis B virus infection. Guan R, et al. **Aliment Pharmacol Ther** 1996 Oct; 10(5):807-14

Recombinant mite allergens. New technologies for the management of patients with asthma. Chapman MD, et al. **Allergy** 1997 Apr;52(4):374-9 (34 ref.)

Synergistic effect of a recombinant N-terminal fragment of bactericidal/permeability-increasing protein and cefamandole in treatment of rabbit gram-negative sepsis. Lin Y, et al. **Antimicrob Agents Chemother** 1996 Jan; 40(1):65-9

Normalization of hematocrit with recombinant human erythropoietin in chronic hemodialysis patients does not fully improve their exercise tolerance abilities. Suzuki M, et al. **Artif Organs** 1995 Dec;19(12):1258-61

Recombinant secretory IgA for immune intervention against mucosal pathogens. Corthésy B. **Biochem Soc Trans** 1997 May;25(2):471-5 (27 ref.)

Safety of human recombinant proteins. Ryffel B. **Biomed Environ Sci** 1997 Mar;10(1):65-72 (35 ref.)

Administration of recombinant human granulocyte-macrophage colony-stimulating factor after autologous bone marrow transplantation in children with acute myelogenous leukemia: a note of caution. Calderwood S, et al. **Bone Marrow Transplant** 1996 Jul; 18(1):87-91 (23 ref.)

Antifungal effects of yeast-derived rhu-GM-CSF in patients receiving high-dose chemotherapy given with or without autologous stem cell transplantation: a retrospective analysis. Peters BG, et al. **Bone Marrow Transplant** 1996 Jul;18(1):93-102 (60 ref.)

Reversal of autoimmune phenomena in autoimmune neutropenia after treatment with rhG-CSF: two additional cases [letter; comment] Carulli G, et al. **Br J Haematol** 1997 Mar;96(4):877-8. Comment on: Br J Haematol 1996 Sep;94(3):464-9.

Suppression of experimental autoimmune uveitis in Lewis rats by oral administration of recombinant Escherichia coli expressing retinal S-antigen. Singh VK, et al. **Cell Immunol** 1996 Sep 15;172(2):158-62

Efficacy of recombinant granulocyte colony-stimulating factor (rhG-CSF) in experimental colitis. Hommes DW, et al. **Clin Exp Immunol** 1996 Dec;106(3):529-33

The treatment of systemic lupus erythematosus (SLE) in NZB/W F1 hybrid mice; studies with recombinant murine DNase and with dexamethasone [see comments] Macanovic M, et al. **Clin Exp Immunol** 1996 Nov;106(2):243-52. Comment in: Clin Exp Immunol 1996 Nov;106(2):187-9.

Safety considerations of recombinant protein therapy: introductory comments [comment] Hayes TJ, et al. **Clin Immunol Immunopathol** 1997 Apr;83(1):1-4 (11 ref.). Comment on: Clin Immunol Immunopathol 1997 Apr;83(1):5-7. Comment on: Clin Immunol Immunopathol 1997 Apr;83(1):15-7. Comment on: Clin Immunol Immunopathol 1997 Apr;83(1):18-20.

Recombinant N-terminal fragment of bactericidal/permeability increasing protein (rBPI21) prevents shock-induced microcirculatory alterations in the liver. Bauer C, et al. **Crit Care Med** 1997 Aug;25(8):1283-8

Administration of human recombinant insulin-like growth factor-I in critically ill patients. Yarwood GD, et al. **Crit Care Med** 1997 Aug;25(8):1352-61

Recombinant human erythropoietin in the treatment of cancer-related anaemia. Kasper C, et al. **Eur J Haematol** 1997 Apr;58(4):251-6

Left ventricular volume and mass in children on growth hormone therapy compared with untreated children. Heuschmann D, et al. **Eur J Pediatr** 1996 Feb;155(2):77-80

Erythropoietin in myelodysplastic syndromes: durable response in a young patient [letter; comment] [see comments] Aloe Spiriti MA, et al. **Haematologica** 1996 Jul-Aug;81(4):381-2. Comment on: Haematologica 1994 Nov-Dec;79(6):526-33. Comment in: Haematologica 1996 Nov-Dec;81(6):591.

Effect of IL-10 on collagen-induced arthritis in mice. Tanaka Y, et al. **Inflamm Res** 1996 Jun;45(6):283-8

Autonomic neuropathy in hemodialysis patients treated with recombinant human erythropoietin. Stojcheva-Taneva OO, et al. **Int J Artif Organs** 1996 Oct;19(10):574-7

Stimulation of interleukin-1 beta production may be involved in unresponsiveness to erythropoietin therapy. Takemasa A, et al. **Int J Artif Organs** 1996 Nov;19(11):633-7

Resolution of recurrent atelectasis in spinal cord injury patients with administration of recombinant human DNase. Voelker KG, et al. **Intensive Care Med** 1996 Jun; 22(6):582-4

Multiplane transesophageal echocardiography to detect effectiveness of selective pulmonary recombinant tissue-type plasminogen activator thrombolysis in pulmonary embolism and patent foramen ovale. Colonna P, et al. **J Am Soc Echocardiogr** 1997 May;10(4):384-8

Treatment of oral cavity and oropharynx squamous cell carcinoma with perilymphatic interleukin-2: clinical and pathologic correlations. De Stefani A, et al. **J Immunother Emphasis Tumor Immunol** 1996 Mar; 19(2):125-33

Immunopharmacology and cytokine production of a low-dose schedule of intraperitoneally administered human recombinant interleukin-2 in patients with advanced epithelial ovarian carcinoma. Freedman RS, et al. **J Immunother Emphasis Tumor Immunol** 1996 Nov; 19(6):443-51

Hematologic and immunologic evaluation of recombinant human interleukin-6 in patients with advanced malignant disease: evidence for monocyte activation. Keever-Taylor CA, et al. **J Immunother Emphasis Tumor Immunol** 1996 May;19(3):231-43

Treatment of stage IIIB non-small-cell lung cancer with surgery followed by infusion of tumor infiltrating lymphocytes and recombinant interleukin-2: a pilot study. Melioli G, et al. **J Immunother Emphasis Tumor Immunol** 1996 May; 19(3):224-30

Phase Ia/Ib trial of anti-GD2 chimeric monoclonal antibody 14.18 (ch14.18) and recombinant human granulocyte-macrophage colony-stimulating factor (rhGM-CSF) in metastatic melanoma. Murray JL, et al. **J Immunother Emphasis Tumor Immunol** 1996 May; 19(3):206-17

Recombinant factor VIII: are we really getting more for less? [editorial; comment] Gorlin JB, et al. **J Pediatr** 1997 Apr; 130(4):507-9. Comment on: J Pediatr 1997 Apr;130(4):537-40.

Superior in vivo response of recombinant factor VIII concentrate in children with hemophilia A [see comments] Kelly KM, et al. **J Pediatr** 1997 Apr;130(4):537-40. Comment in: J Pediatr 1997 Apr;130(4):507-9.

Does recombinant human insulin-like growth factor I have a role in the treatment of type I (insulin dependent) diabetes during puberty? Dunger DB, et al. **J Pediatr Endocrinol Metab** 1995 Oct-Dec;8(4):237-42 (51 ref.)

Approval times for supplemental indications for recombinant proteins. Gosse ME, et al. **Nat Biotechnol** 1997 Feb; 15(2):130-4

Characterization of MRI response to treatment with interferon beta-1b: contrast-enhancing MRI lesion frequency as a primary outcome measure. Stone LA, et al. **Neurology** 1997 Sep;49(3):862-9

Effective doses of recombinant human bone morphogenetic protein-2 in experimental spinal fusion. Sandhu HS, et al. **Spine** 1996 Sep 15;21(18):2115-22

Recombinant proteins for therapy. Buckel P. **Trends Pharmacol Sci** 1996 Dec;17(12):450-6 (31 ref.)

[Clinical use of recombinant gonadotropins (FSH, LH, hCG)] Antoine JM, et al. **Contracept Fertil Sex** 1997 Feb; 25(2):141-6 (Eng. Abstr.) **(Fre)**

TOXICITY

Lethal effect of recombinant human Fas ligand in mice pretreated with Propionibacterium acnes. Tanaka M, et al. **J Immunol** 1997 Mar 1;158(5):2303-9

Pharmacokinetics and toxicokinetics of bio-pharmaceuticals: technical problems. Kawai M. **J Toxicol Sci** 1996 Dec; 21(5):535-7

Safety assessment of biotechnology-derived pharmaceutical products. General principles and the relevant cases. Maki E. **J Toxicol Sci** 1996 Dec;21(5):531-3 (3 ref.)

Recombinant human epidermal growth factor1-48-induced structural changes in the digestive tract of cynomolgus monkeys (Macaca fascicularis). Reindel JF, et al. **Toxicol Pathol** 1996 Nov-Dec;24(6):669-80

The age-related difference in bone changes in rats induced by recombinant human granulocyte colony-stimulating factor. Suzuki M, et al. **Toxicol Pathol** 1997 Mar-Apr; 25(2):144-9

Differential effect of interleukin-1 alpha on rat hepatic cytochrome P450 monooxygenases. Sindhu RK, et al. **Toxicology** 1996 Nov 15;114(1):37-46

ULTRASTRUCTURE

Conformational and functional differences between recombinant human lens alphaA- and alphaB-crystallin. Sun TX, et al. **J Biol Chem** 1997 Mar 7;272(10):6220-5

RECOMBINANT SOMATOTROPINS see **SOMATOTROPINS, RECOMBINANT**

RECOMBINATION-ACTIVATING GENES-1 see **GENES, RAG-1**

RECOMBINATION, GENETIC

see related
REASSORTANT VIRUSES

Polymorphisms in Trypanosoma cruzi: evidence of genetic recombination. Bogliolo AR, et al. **Acta Trop** 1996 Mar; 61(1):31–40

V(D)J recombination pathology. Schwarz K, et al. **Adv Immunol** 1996;61:285–326 (281 ref.)

An efficient method for the rescue and analysis of functional HIV-1 env genes: evidence for recombination in the vicinity of the tat/rev splice site. Douglas NW, et al. **AIDS** 1996 Jan;10(1):39–46

HIV type 1 isolate Z321, the strain used to make a therapeutic HIV type 1 immunogen, is intersubtype recombinant. Choi DJ, et al. **AIDS Res Hum Retroviruses** 1997 Mar 1; 13(4):357–61

Phylogenetic analysis of HIV type 2 in Ghana and intrasubtype recombination in HIV type 2. Takehisa J, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):621–3

Long polymerase chain reaction amplification of heterogeneous HIV type 1 templates produces recombination at a relatively high frequency. Yang YL, et al. **AIDS Res Hum Retroviruses** 1996 Mar 1;12(4):303–6

Homologous recombination in human mitochondria? [editorial] Ashkenas J. **Am J Hum Genet** 1997 Jul;61(1):18

Characterization of recombination in the HLA class II region. Cullen M, et al. **Am J Hum Genet** 1997 Feb; 60(2):397–407

mtDNA recombination: what do in vitro data mean? [letter] Howell N. **Am J Hum Genet** 1997 Jul;61(1):19–22 (32 ref.)

Characterization of the recombination hot spot involved in the genomic rearrangement leading to the hybrid D-CE-D gene in the D(VI) phenotype. Matassi G, et al. **Am J Hum Genet** 1997 Apr;60(4):808–17

Juvenile myoclonic epilepsy in chromosome 6p12–p11: locus heterogeneity and recombinations. Liu AW, et al. **Am J Med Genet** 1996 Jun 14;63(3):438–46

+2.71 LOD score at zero recombination is not sufficient for establishing linkage between X-linked mental retardation and X-chromosome markers [letter] Robledo R, et al. **Am J Med Genet** 1996 Jul 12;64(1):134–6

Coinfection and genetic recombination between HIV-1 strains: possible biological implications in Australia and South East Asia. Saksena NK, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):121–7

Mismatch repair in replication fidelity, genetic recombination, and cancer biology. Modrich P, et al. **Annu Rev Biochem** 1996;65:101–33 (225 ref.)

Population genetic perspectives on the evolution of recombination. Feldman MW, et al. **Annu Rev Genet** 1996; 30:261–95 (119 ref.)

Recombinational repair of genetic mutations. Cole-Strauss A, et al. **Antisense Nucleic Acid Drug Dev** 1997 Jun; 7(3):211–6 (20 ref.)

In vivo recombination between two strains of the genus Nucleopolyhedrovirus in its natural host, Spodoptera exigua. Muñoz D, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3025–31

Overcoming a defect in generalized recombination in the marine fish pathogen Vibrio anguillarum 775: construction of a recA mutant by marker exchange. Singer JT, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3727–31

Recombinant expression and catalytic analysis of rapid and slow acetylator Syrian hamster chimeric NAT2 alleles. Hein DW, et al. **Arch Toxicol** 1997;71(5):306–13

The development of early vs. late onset mucosal disease is a consequence of two different pathogenic mechanisms. Fritzemeier J, et al. **Arch Virol** 1997;142(7):1335–50

The gene 32 single-stranded DNA-binding protein is not bound stably to the phage T4 presynaptic filament. Jiang H, et al. **Biochem Biophys Res Commun** 1997 Feb 24; 231(3):600–5

Evidence for a recombination-independent pathway for the repair of DNA interstrand cross-links based on a site-specific study with nitrogen mustard. Berardini M, et al. **Biochemistry** 1997 Mar 25;36(12):3506–13

Direct evidence for Holliday junction crossover isomerization. Li X, et al. **Biochemistry** 1997 Apr 8; 36(14):4240–7

Double-reciprocal crossover mediated by FLP-recombinase: a concept and an assay. Seibler J, et al. **Biochemistry** 1997 Feb 18;36(7):1740–7

DNA strand exchange mediated by the Escherichia coli RecA protein initiates in the minor groove of double-stranded DNA. Zhou X, et al. **Biochemistry** 1997 Apr 15;36(15):4650–61

The recombination mediated by double-strand breaks in extrachromosomal DNA substrate carrying mouse immunoglobulin switch regions S mu and S gamma 2b. Kameyama K, et al. **Biochim Biophys Acta** 1996 Sep 11; 1308(3):263–8

Site directed DNA joining. Guilliams TG, et al. **Biochimie** 1997;79(1):13–22

recA mutants of E. coli K12: a personal turning point. Clark AJ. **Bioessays** 1996 Sep;18(9):767–72 (31 ref.)

Inter-strain graft-vs.-host disease T-cell responses to immunodominant minor histocompatibility antigens. Korngold R, et al. **Biol Blood Marrow Transplant** 1997 Jun; 3(2):57–64

Mechanisms of nonhomologous DNA end-joining in frogs, mice and men. Daza P, et al. **Biol Chem** 1996 Dec; 377(12):775–86

Dramatic changes in the ratio of homologous recombination to nonhomologous DNA-end joining in oocytes and early embryos of Xenopus laevis. Hagmann M, et al. **Biol Chem Hoppe Seyler** 1996 Apr;377(4):239–50

Screening for homologous recombination in ES cells using RT-PCR. Danoff TM, et al. **Biotechniques** 1997 Jan; 22(1):22–4, 26

Interaction of positive allosteric modulators with human and Drosophila recombinant GABA receptors expressed in Xenopus laevis oocytes. Belelli D, et al. **Br J Pharmacol** 1996 Jun;118(3):563–76

Genetic exchange in trypanosomes. Gibson W. **Bull Mem Acad R Med Belg** 1996;151(2):203–10

Segregation of yeast polymorphic STA genes in meiotic recombinants and analysis of glucoamylase production. Balogh I, et al. **Can J Microbiol** 1996 Dec;42(12):1190–6

Recombinant plasmid mobilization between E. coli strains in seven sterile microcosms. Lebaron P, et al. **Can J Microbiol** 1997 Jun;43(6):534–40

Tn5431 arose by transposition of Tn3 into Tn1721. Zgur-Bertok D, et al. **Can J Microbiol** 1996 Dec; 42(12):1274–6

High frequency in vivo loss of heterozygosity is primarily a consequence of mitotic recombination. Gupta PK, et al. **Cancer Res** 1997 Mar 15;57(6):1188–93

RAG1 and RAG2 form a stable postcleavage synaptic complex with DNA containing signal ends in V(D)J recombination. Agrawal A, et al. **Cell** 1997 Apr 4; 89(1):43–53

The translocating RecBCD enzyme stimulates recombination by directing RecA protein onto ssDNA in a chi-regulated manner. Anderson DG, et al. **Cell** 1997 Jul 11;90(1):77–86

Human Rad51 protein promotes ATP-dependent homologous pairing and strand transfer reactions in vitro. Baumann P, et al. **Cell** 1996 Nov 15;87(4):757–66

Topological selectivity in Xer site-specific recombination. Colloms SD, et al. **Cell** 1997 Mar 21;88(6):855–64

Interchromosomal transfer of epigenetic states in Ascobolus: transfer of DNA methylation is mechanistically related to homologous recombination. Colot V, et al. **Cell** 1996 Sep 20;86(6):855–64

In vitro reconstitution of the late steps of genetic recombination in E. coli. Eggleston AK, et al. **Cell** 1997 May 16;89(4):607–17

The origins of V(D)J recombination. Lewis SM, et al. **Cell** 1997 Jan 24;88(2):159–62 (20 ref.)

The homeodomain region of Rag-1 reveals the parallel mechanisms of bacterial and V(D)J recombination. Spanopoulou E, et al. **Cell** 1996 Oct 18;87(2):263–76

A 700 bp cis-acting region controls mating-type dependent recombination along the entire left arm of yeast chromosome III. Wu X, et al. **Cell** 1996 Oct 18;87(2):277–85

Antigenic variation in Lyme disease borreliae by promiscuous recombination of VMP-like sequence cassettes. Zhang JR, et al. **Cell** 1997 Apr 18;89(2):275–85

Relationship between the levels of wheat-rye metaphase I chromosomal pairing and recombination revealed by GISH. Benavente E, et al. **Chromosoma** 1996 Aug; 105(2):92–6

Inactivation of topoisomerase I or II may lead to recombination or to aberrant replication termination on both SV40 and yeast 2 micron DNA. Levac P, et al. **Chromosoma** 1996 Oct;105(4):250–60

The use of genomic in situ hybridization (GISH) to show transmission of recombinant chromosomes by a partially fertile bigeneric hybrid, Gasteria lutzii x Aloe aristata (Aloaceae), to its progeny. Takahashi C, et al. **Chromosoma** 1997 Apr;105(6):342–8

Growth of recombinant Mycobacterium tuberculosis H37Ra in mouse macrophages. Falcone V, et al. **Clin Exp Immunol** 1997 Jul;109(1):80–3

Recombination between the postulated CCD/MHE/MHS locus and RYR1 gene markers. Fagerlund TH, et al. **Clin Genet** 1996 Dec;50(6):455–8

Reinvestigation of a genetic-based classifier system: the effectiveness of recombination. van Kampen AH, et al. **Comput Chem** 1997;21(3):153–60

Bypass of lethality with mosaic mice generated by Cre-loxP-mediated recombination. Betz UA, et al. **Curr Biol** 1996 Oct 1;6(10):1307–16

Genetic recombination: sex-change operations in yeast. Shore D. **Curr Biol** 1997 Jan 1;7(1):R24–7

Stimulation of mitotic recombination upon transcription from the yeast GAL1 promoter but not from other RNA polymerase I, II and III promoters. Bratty J, et al. **Curr Genet** 1996 Nov;30(5):381–8

Intramolecular cross-overs generate deleted mitochondrial DNA molecules in Podospora anserina. Jamet-Vierny C, et al. **Curr Genet** 1997 Feb;31(2):162–70

Short inverted repeats function as hotspots of intermolecular recombination giving rise to oligomers of deleted plastid DNAs (ptDNAs). Kawata M, et al. **Curr Genet** 1997 Feb; 31(2):179–84

Successful crosses and molecular tetrad and progeny analyses demonstrate heterothallism in Mycosphaerella graminicola. Kema GHJ, et al. **Curr Genet** 1996 Aug;30(3):251–8

Deletion of flanking ARS elements does not affect meiotic recombination at the HIS4 locus in yeast. Kirkpatrick DT. **Curr Genet** 1997 Feb;31(2):106–11

Isolation of early meiotic recombination genes analogous to S. cerevisiae REC104 from the yeasts S. paradoxus and S. pastorianus. Nau JJ, et al. **Curr Genet** 1997 Jan;31(1):7–14

The DNA-activated protein kinase — DNA-PK. Anderson CW, et al. **Curr Top Microbiol Immunol** 1996;217:91–111

Role of the Ku autoantigen in V(D)J recombination and double-strand break repair. Chu G. **Curr Top Microbiol Immunol** 1996;217:113–32 (60 ref.)

Transcription targets recombination at immunoglobulin switch sequences in a strand-specific manner. Daniels GA, et al. **Curr Top Microbiol Immunol** 1996;217:171–89

The cell cycle and V(D)J recombination. Desiderio S, et al. **Curr Top Microbiol Immunol** 1996;217:45–59 (60 ref.)

Regulation of recombination activating gene expression during lymphocyte development. Grawunder U, et al. **Curr Top Microbiol Immunol** 1996;217:31–43 (60 ref.)

Biochemical studies of class switch recombination. Jessberger R, et al. **Curr Top Microbiol Immunol** 1996;217:191–202 (30 ref.)

Characterization of Chinese hamster cell lines that are x-ray-sensitive, impaired in DNA double-strand break repair and defective for V(D)J recombination. Lee SE, et al. **Curr Top Microbiol Immunol** 1996;217:133–42

Identification of the XRCC4 gene: complementation of the DSBR and V(D)J recombination defects of XR-1 cells. Li Z, et al. **Curr Top Microbiol Immunol** 1996;217:143–50 (25 ref.)

Developmental and molecular regulation of immunoglobulin class switch recombination. Lorenz M, et al. **Curr Top Microbiol Immunol** 1996;217:151–69 (80 ref.)

Double-strand breaks, DNA hairpins, and the mechanism of V(D)J recombination. Steen SB, et al. **Curr Top Microbiol Immunol** 1996;217:61–77 (60 ref.)

Initiation of V(D)J recombinations in a cell-free system by RAG1 and RAG2 proteins. van Gent DC, et al. **Curr Top Microbiol Immunol** 1996;217:1–10 (22 ref.)

A mutational analysis of conjugation in Tetrahymena thermophila. 1. Phenotypes affecting early development: meiosis to nuclear selection. Cole ES, et al. **Dev Biol** 1997 Sep 15;189(2):215–32

Trapping of mammalian promoters by Cre-lox site-specific recombination. Fukushige S, et al. **DNA Res** 1996 Apr 30; 3(2):73–80

Genomic recombination of the mitochondrial atp6 gene in Arabidopsis thaliana at the protein processing site creates two different presequences. Marienfeld J, et al. **DNA Res** 1996 Oct 31;3(5):287–90

Deletions at stalled replication forks occur by two different pathways. Bierne H, et al. **EMBO J** 1997 Jun 2; 16(11):3332–40

Recombinational repair in yeast: functional interactions between Rad51 and Rad54 proteins. Clever B, et al. **EMBO J** 1997 May 1;16(9):2535–44

Factors responsible for target site selection in Tn10 transposition: a role for the DDE motif in target DNA capture. Junop MS, et al. **EMBO J** 1997 May 15; 16(10):2646–55

Photooxidative stress stimulates illegitimate recombination and mutability in carotenoid-less mutants of Rubrivivax gelatinosus. Ouchane S, et al. **EMBO J** 1997 Aug 1; 16(15):4777–87

Recombination between DNA repeats in yeast hpr1delta cells is linked to transcription elongation. Prado F, et al. **EMBO J** 1997 May 15;16(10):2826–35

Initiation of V(D)J recombination in vivo: role of recombination signal sequences in formation of single and paired double-strand breaks. Steen SB, et al. **EMBO J** 1997 May 15;16(10):2656–64

Assembly of a strong promoter following IS911 circularization and the role of circles in transposition. Ton-Hoang B, et al. **EMBO J** 1997 Jun 2;16(11):3357–71

Genome-wide hypermutation in a subpopulation of stationary-phase cells underlies recombination-dependent adaptive mutation. Torkelson J, et al. **EMBO J** 1997 Jun 2;16(11):3303–11

Stimulation of V(D)J cleavage by high mobility group proteins. van Gent DC, et al. **EMBO J** 1997 May 15; 16(10):2665–70

Cell type-specific chromatin organization of the region that governs directionality of yeast mating type switching. Weiss K, et al. **EMBO J** 1997 Jul 16;16(14):4352–60

Recombination in HIV: an important viral evolutionary strategy. Burke DS. **Emerg Infect Dis** 1997 Jul-Sep; 3(3):253–9 (40 ref.)

Formation and repair of O6-methylguanine in recombination hot spots of plant chromosomes. Baranczewski P, et al. **Environ Mol Mutagen** 1997;29(4):394–9

Meiotic recombination and germ cell aneuploidy. Ferguson LR, et al. **Environ Mol Mutagen** 1996;28(3):192–210 (178 ref.)

Expression of DNA-dependent protein kinase holoenzyme upon induction of lymphocyte differentiation and V(D)J recombination. Grawunder U, et al. **Eur J Biochem** 1996 Nov 1;241(3):931–40

Recombination fractions in the HLA system based on the data set 'provinces Françaises': indications of haplotype-specific recombination rates. Thomsen M, et al. **Eur J Immunogenet** 1994 Feb;21(1):33–43

Recombinant adenovirus: a gene transfer vector for study and treatment of CNS diseases. Davidson BL, et al. **Exp Neurol** 1997 Mar;144(1):125–30 (66 ref.)

The teratogenic action of retinoic acid in rat congenic and recombinant inbred strains. Bilá V, et al. **Folia Biol (Praha)** 1996;42(4):167–73

Recombinant inbred and congenic strains for mapping of genes that are responsible for spontaneous hypertension and other risk factors of cardiovascular disease. Křen V, et al. **Folia Biol (Praha)** 1996;42(4):155–8

Recombinant inbred and congenic strains of the rat for genetic analysis of limb morphogenesis. Křen V, et al. **Folia Biol (Praha)** 1996;42(4):159–66

Studies on the possibility for genetic recombination in Streptomyces flavopersicus. Stoycheva Z, et al. **Folia Microbiol (Praha)** 1995;40(3):245–8

Microevolution and epidemic spread of serogroup A Neisseria meningitidis—a review. Achtman M. **Gene** 1997 Jun 11;192(1):135–40 (23 ref.)

Recombination between a resident plasmid and the chromosome following irradiation of the radioresistant bacterium Deinococcus radiodurans. Daly MJ, et al. **Gene** 1997 Mar 18;187(2):225–9

Plasmids for ectopic integration in Bacillus subtilis. Guérout-Fleury AM, et al. **Gene** 1996 Nov 21; 180(1–2):57–61

Molecular mechanisms of intramolecular recombination-dependent recircularization of linearized plasmid DNA in Escherichia coli: requirements for the ruvA, ruvB, recG, recF and recR gene products. McFarlane RJ, et al. **Gene** 1996 Oct 24;177(1–2):209–16

An Escherichia coli system for assay of F1p site-specific recombination on substrate plasmids. Snaith MR, et al. **Gene** 1996 Nov 21;180(1–2):225–7

A yeast gene product, Fob1 protein, required for both replication fork blocking and recombinational hotspot activities. Kobayashi T, et al. **Genes Cells** 1996 May; 1(5):465–74

Polynucleotidyl transfer reactions in site-specific DNA recombination. Mizuuchi K. **Genes Cells** 1997 Jan;2(1):1–12 (79 ref.)

Sensing of DNA non-homology lowers the initiation of meiotic recombination in yeast. Rocco V, et al. **Genes Cells** 1996 Jul;1(7):645–61

Architectural flexibility in lambda site-specific recombination: three alternate conformations channel the attL site into three distinct pathways. Segall AM, et al. **Genes Cells** 1996 May;1(5):453–63

The 12/23 rule is enforced at the cleavage step of V(D)J recombination in vivo. Steen SB, et al. **Genes Cells** 1996 Jun;1(6):543–53

The duplex DNA is very underwound in the three-stranded RecA protein-mediated synaptic complex. Voloshin ON, et al. **Genes Cells** 1997 May;2(5):303–14

Immunoglobulin/Myc recombinations in murine Peyer's patch follicles. Müller JR, et al. **Genes Chromosomes Cancer** 1997 Sep;20(1):1–8

Novel MLL-CBP fusion transcript in therapy-related chronic myelomonocytic leukemia with a t(11;16)(q23;p13) chromosome translocation. Satake N, et al. **Genes Chromosomes Cancer** 1997 Sep;20(1):60–3

The recombination hot spot chi is a regulatory element that switches the polarity of DNA degradation by the RecBCD enzyme. Anderson DG, et al. **Genes Dev** 1997 Mar 1; 11(5):571–81

A tetramer of the Flp recombinase silences the trimers within it during resolution of a Holliday junction substrate. Lee J, et al. **Genes Dev** 1997 Sep 15;11(18):2438–47

The meiotic recombination hot spot created by the single-base substitution ade6-M26 results in remodeling of chromatin structure in fission yeast. Mizuno K, et al. **Genes Dev** 1997 Apr 1;11(7):876–86

Essential functions of Pax5 (BSAP) in pro-B cell development: difference between fetal and adult B lymphopoiesis and reduced V-to-DJ recombination at the IgH locus. Nutt SL, et al. **Genes Dev** 1997 Feb 15; 11(4):476–91

PARP is important for genomic stability but dispensable in apoptosis. Wang ZQ, et al. **Genes Dev** 1997 Sep 15; 11(18):2347–58

Roles of the recG gene product of Escherichia coli in recombination repair: effects of the delta recG mutation on cell division and chromosome partition. Ishioka K, et al. **Genes Genet Syst** 1997 Apr;72(2):91–9

Recombination load associated with selection for increased recombination. Charlesworth B, et al. **Genet Res** 1996 Feb; 67(1):27–41

Using the variance of pairwise differences to estimate the recombination rate. Wakeley J. **Genet Res** 1997 Feb; 69(1):45–8

Gene replacement with linear DNA fragments in wild-type Escherichia coli: enhancement by Chi sites. Dabert P, et al. **Genetics** 1997 Apr;145(4):877–89

Mutations in the RNA polymerase II transcription machinery suppress the hyperrecombination mutant hpr1 delta of Saccharomyces cerevisiae. Fan HY, et al. **Genetics** 1996 Mar;142(3):749–59

Competition between adjacent meiotic recombination hotspots in the yeast Saccharomyces cerevisiae. Fan QQ, et al. **Genetics** 1997 Mar;145(3):661–70

Recombination and the progression of meiosis in Saccharomyces cerevisiae. Galbraith AM, et al. **Genetics** 1997 Jun;146(2):481–9

Pathways for homologous recombination between chromosomal direct repeats in Salmonella typhimurium. Galitski T, et al. **Genetics** 1997 Jul;146(3):751–67

The efficiency of meiotic recombination between dispersed sequences in Saccharomyces cerevisiae depends upon their chromosomal location. Goldman AS, et al. **Genetics** 1996 Sep;144(1):43–55

P-element-induced recombination in Drosophila melanogaster: hybrid element insertion. Gray YH, et al. **Genetics** 1996 Dec;144(4):1601–10

Opposing roles of the holliday junction processing systems of Escherichia coli in recombination-dependent adaptive mutation. Harris RS, et al. **Genetics** 1996 Mar;142(3):681–91

Contrasting histories of three gene regions associated with In(3L)Payne of Drosophila melanogaster. Hasson E, et al. **Genetics** 1996 Dec;144(4):1565–75

Recombination creates novel L1 (LINE-1) elements in Rattus norvegicus. Hayward BE, et al. **Genetics** 1997 Jun; 146(2):641–54

A coalescent estimator of the population recombination rate. Hey J, et al. **Genetics** 1997 Mar;145(3):833–46

Estimating meiotic exchange patterns from recombination data: an application to humans. Lamb NE, et al. **Genetics** 1997 Jul;146(3):1011–7

Genetic recombination in Escherichia coli: disputation at Cold Spring Harbor, 1946–1996. Lederberg J. **Genetics** 1996 Oct;144(2):439–43

Karyotype variability in yeast caused by nonallelic recombination in haploid meiosis. Loidl J, et al. **Genetics** 1997 May;146(1):79–88

Correlation of genetic and physical maps at the A mating-type locus of Coprinus cinereus. Lukens L, et al. **Genetics** 1996 Dec;144(4):1471–7

Cloning of the Drosophila melanogaster meiotic recombination gene mei-218: a genetic and molecular analysis of interval 15E. McKim KS, et al. **Genetics** 1996 Sep;144(1):215–28

Meiotic recombination initiated by a double-strand break in rad50 delta yeast cells otherwise unable to initiate meiotic recombination. Malkova A, et al. **Genetics** 1996 Jun; 143(2):741–54

Analysis of meiotic recombination pathways in the yeast Saccharomyces cerevisiae. Mao-Draayer Y, et al. **Genetics** 1996 Sep;144(1):71–86

Length variation of CAG/CAA trinucleotide repeats in natural populations of Drosophila melanogaster and its relation to the recombination rate. Michalakis Y, et al. **Genetics** 1996 Aug;143(4):1713–25

Heterogeneity in rates of recombination across the mouse genome. Nachman MW, et al. **Genetics** 1996 Feb; 142(2):537–48

Recombination and gene flux caused by gene conversion and crossing over in inversion heterokaryotypes. Navarro A, et al. **Genetics** 1997 Jun;146(2):695–709

Induction of Ty recombination in yeast by cDNA and transcription: role of the RAD1 and RAD52 genes. Nevo-Caspi Y, et al. **Genetics** 1996 Nov;144(3):947–55

Double-strand break-induced mitotic intrachromosomal recombination in the fission yeast Schizosaccharomyces pombe. Osman F, et al. **Genetics** 1996 Feb;142(2):341–57

Homology requirements for double-strand break-mediated recombination in a phage lambda-td intron model system. Parker MM, et al. **Genetics** 1996 Jul;143(3):1057–68

Mutations in the yeast SRB2 general transcription factor suppress hpr1-induced recombination and show defects in DNA repair. Piruat JI, et al. **Genetics** 1996 Aug; 143(4):1533–42

Homologous and homeologous intermolecular gene conversion are not differentially affected by mutations in the DNA damage or the mismatch repair genes RAD1, RAD50, RAD51, RAD52, RAD54, PMS1 and MSH2. Porter G, et al. **Genetics** 1996 Jun;143(2):755–67

Flanking duplications and deletions associated with P-induced male recombination in Drosophila. Preston CR, et al. **Genetics** 1996 Dec;144(4):1623–38

Isolation of COM1, a new gene required to complete meiotic double-strand break-induced recombination in Saccharomyces cerevisiae. Prinz S, et al. **Genetics** 1997 Jul; 146(3):781–95

Evidence for both 3' and 5' single-strand DNA ends in intermediates in chi-stimulated recombination in vivo. Razavy H, et al. **Genetics** 1996 Feb;142(2):333–9

Recombination-dependent growth in exonuclease-depleted recBC sbcBC strains of Escherichia coli K-12. Ryder L, et al. **Genetics** 1996 Jul;143(3):1101–14

The yeast HRS1 gene encodes a polyglutamine-rich nuclear protein required for spontaneous and hpr1-induced deletions between direct repeats. Santos-Rosa H, et al. **Genetics** 1996 Mar;142(3):705–16

Requirement of mismatch repair genes MSH2 and MSH3 in the RAD1-RAD10 pathway of mitotic recombination in Saccharomyces cerevisiae. Saparbaev M, et al. **Genetics** 1996 Mar;142(3):727–36

The maize transposable element Ac induces recombination between the donor site and an homologous ectopic sequence. Shalev G, et al. **Genetics** 1997 Jul;146(3):1143–51

Transgene Coplacement and high efficiency site-specific recombination with the Cre/loxP system in Drosophila. Siegal ML, et al. **Genetics** 1996 Oct;144(2):715–26

Genetic recombination through double-strand break repair: shift from two-progeny mode to one-progeny mode by heterologous inserts. Takahashi NK, et al. **Genetics** 1997 May;146(1):9–26

Region-specific cis- and trans-acting factors contribute to genetic variability in meiotic recombination in maize. Timmermans MC, et al. **Genetics** 1997 Jul;146(3):1101–13

Characterization of a meiotic crossover in maize identified by a restriction fragment length polymorphism-based method. Timmermans MC, et al. **Genetics** 1996 Aug; 143(4):1771–83

Effects of mutations of RAD50, RAD51, RAD52, and related genes on illegitimate recombination in Saccharomyces cerevisiae. Tsukamoto Y, et al. **Genetics** 1996 Feb; 142(2):383–91

Fine-scale mapping of quantitative trait loci using historical recombinations. Xiong M, et al. **Genetics** 1997 Apr; 145(4):1201–18

Fine-structure mapping of meiosis-specific double-strand DNA breaks at a recombination hotspot associated with an insertion of telomeric sequences upstream of the HIS4 locus in yeast. Xu F, et al. **Genetics** 1996 Jul;143(3):1115–25

Recombination hot spots and human disease. Purandare SM, et al. **Genome Res** 1997 Aug;7(8):773–86 (102 ref.)

Hyper-recombination and Bloom's syndrome: microbes again provide clues about cancer. Rothstein R, et al. **Genome Res** 1995 Dec;5(5):421–6 (30 ref.)

Genomic structure and chromosomal localization of the gene encoding translin, a recombination hotspot binding protein. Aoki K, et al. **Genomics** 1997 Jul 15;43(2):237–41

Sequence analysis in the olfactory receptor gene cluster on human chromosome 17: recombinatorial events affecting receptor diversity. Glusman G, et al. **Genomics** 1996 Oct 15;37(2):147–60

Two distinct deletions in the IDS gene and the gene W: a novel type of mutation associated with the Hunter syndrome. Karsten SL, et al. **Genomics** 1997 Jul 15; 43(2):123–9

High-resolution recombinational map of mouse chromosome 16. Reeves RH, et al. **Genomics** 1997 Jul 15;43(2):202–8

A novel gene, G7e, resembling a viral envelope gene, is located at the recombinational hot spot in the class III region of the mouse MHC. Snoek M, et al. **Genomics** 1996 Nov 15;38(1):5–12

Genetic polymorphism and recombination in the subtelomeric region of chromosome 14q. Wintle RF, et al. **Genomics** 1997 Mar 15;40(3):409–14

Evidence for intragenic recombination within a novel genetic marker that distinguishes mussels in the Mytilus edulis species complex. Rawson PD, et al. **Heredity** 1996 Dec; 77 (Pt 6):599–607

A novel adenovirus-adeno-associated virus hybrid vector that displays efficient rescue and delivery of the AAV genome. Fisher KJ, et al. **Hum Gene Ther** 1996 Nov 10; 7(17):2079–87

Partial reconstitution of a replication-competent retrovirus in helper cells with partial overlaps between vector and helper cell genomes. Martinez I, et al. **Hum Gene Ther** 1996 Apr 10;7(6):705–12

Carbonic anhydrase II (CA II) deficiency in Maghrebian patients: evidence for founder effect and genomic recombination at the CA II locus. Fathallah DM, et al. **Hum Genet** 1997 May;99(5):634–7

The involvement of Alu repeats in recombination events at the alpha-globin gene cluster: characterization of two alphazero-thalassaemia deletion breakpoints. Harteveld KL, et al. **Hum Genet** 1997 Apr;99(4):528–34

Recombination in a balanced complex translocation of a mother leading to a balanced reciprocal translocation in the child. Review of 60 cases of balanced complex translocations. Madan K, et al. **Hum Genet** 1997 Jun; 99(6):806–15 (72 ref.)

A de novo recombination in the ABO blood group gene and evidence for the occurence of recombination products. Suzuki K, et al. **Hum Genet** 1997 Apr;99(4):454–61

Interethnic polymorphism of EWS intron 6: genome plasticity mediated by Alu retroposition and recombination. Zucman-Rossi J, et al. **Hum Genet** 1997 Mar;99(3):357–63

Primate origin of the CMT1A-REP repeat and analysis of a putative transposon-associated recombinational hotspot. Kiyosawa H, et al. **Hum Mol Genet** 1996 Jun;5(6):745–53

Recombination and nondisjunction in humans and flies. Koehler KE, et al. **Hum Mol Genet** 1996;5 Spec No:1495–504 (54 ref.)

A model for testing recombinogenic sequences in the mouse germline. Moynahan ME, et al. **Hum Mol Genet** 1996 Jul; 5(7):875–86

A conserved degradation signal regulates RAG-2 accumulation during cell division and links V(D)J recombination to the cell cycle. Li Z, et al. **Immunity** 1996 Dec;5(6):575–89

Characterization and expression of the recombination activating genes (rag1 and rag2) of zebrafish. Willett CE, et al. **Immunogenetics** 1997;45(6):394–404

Fine mapping of 12 microsatellites and two new recombinants in the distal H2 complex on mouse chromosome 17. Xiao H, et al. **Immunogenetics** 1997;45(4):274–7

Human Fab fragments specific for the Haemophilus influenzae b polysaccharide isolated from a bacteriophage combinatorial library use variable region gene combinations and express an idiotype that mirrors in vivo expression. Reason DC, et al. **Infect Immun** 1997 Jan;65(1):261–6

Recombinant vaccinia viruses for the characterization of Plasmodium falciparum-specific cytotoxic T lymphocytes:

recognition of processed antigen despite limited re-stimulation efficacy. Aidoo M, et al. **Int Immunol** 1997 May;9(5):731-7

Apparent and real recombination frequencies in multicopy plasmids: the need for a novel approach in frequency determination. Chédin F, et al. **J Bacteriol** 1997 Feb; 179(3):754-61

Modulation of recombination and DNA repair by the RecG and PriA helicases of Escherichia coli K-12. Al-Deib AA, et al. **J Bacteriol** 1996 Dec;178(23):6782-9

A hot spot in plasmid F for site-specific recombination mediated by Tn21 integron integrase. Francia MV, et al. **J Bacteriol** 1997 Jul;179(13):4419-25

Analysis of DNA inversions in the shufflon of plasmid R64. Gyohda A, et al. **J Bacteriol** 1997 Mar;179(6):1867-71

Convenient and reversible site-specific targeting of exogenous DNA into a bacterial chromosome by use of the FLP recombinase: the FLIRT system. Huang LC, et al. **J Bacteriol** 1997 Oct;179(19):6076-83

Integration of narrow-host-range vectors from Escherichia coli into the genomes of amino acid-producing corynebacteria after intergeneric conjugation. Mateos LM, et al. **J Bacteriol** 1996 Oct;178(19):5768-75

Role of enzymes of homologous recombination in illegitimate plasmid recombination in Bacillus subtilis. Meima R, et al. **J Bacteriol** 1997 Feb;179(4):1219-29

Positions of strand exchange in mycobacteriophage L5 integration and characterization of the attB site. Peña CE, et al. **J Bacteriol** 1996 Sep;178(18):5533-6

Integration of heterologous plasmid DNA into multiple sites on the genome of Campylobacter coli following natural transformation. Richardson PT, et al. **J Bacteriol** 1997 Mar; 179(5):1809-12

Inversion of Moraxella lacunata type 4 pilin gene sequences by a Neisseria gonorrhoeae site-specific recombinase. Rozsa FW, et al. **J Bacteriol** 1997 Apr;179(7):2382-8

Fis is required for illegitimate recombination during formation of lambda bio transducing phage. Shanado Y, et al. **J Bacteriol** 1997 Jul;179(13):4239-45

Topological analysis of the role of homology in Flp-mediated recombination. Azam N, et al. **J Biol Chem** 1997 Mar 28; 272(13):8731-8

Purification and characterization of HP1 Cox and definition of its role in controlling the direction of site-specific recombination. Esposito D, et al. **J Biol Chem** 1997 Mar 28;272(13):8660-70

Interaction of Escherichia coli RecA protein with LexA repressor. II. Inhibition of DNA strand exchange by the uncleavable LexA S119A repressor argues that recombination and SOS induction are competitive processes. Harmon FG, et al. **J Biol Chem** 1996 Sep 27; 271(39):23874-83

The translin ring specifically recognizes DNA ends at recombination hot spots in the human genome. Kasai M, et al. **J Biol Chem** 1997 Apr 25;272(17):11402-7

Recombination-dependent repair of DNA double-strand breaks with purified proteins from Escherichia coli. Morel P, et al. **J Biol Chem** 1997 Jul 4;272(27):17091-6

Misincorporation by HIV-1 reverse transcriptase promotes recombination via strand transfer synthesis. Palaniappan C, et al. **J Biol Chem** 1996 Sep 13;271(37):22331-8

RecA filament dynamics during DNA strand exchange reactions. Shan Q, et al. **J Biol Chem** 1997 Apr 25; 272(17):11063-73

Mammalian mitochondria possess homologous DNA recombination activity. Thyagarajan B, et al. **J Biol Chem** 1996 Nov 1;271(44):27536-43

Elevated homologous recombination activity in fanconi anemia fibroblasts. Thyagarajan B, et al. **J Biol Chem** 1997 Sep 12;272(37):23328-33

Gene recombination in postmitotic cells. Targeted expression of Cre recombinase provokes cardiac-restricted, site-specific rearrangement in adult ventricular muscle in vivo. Agah R, et al. **J Clin Invest** 1997 Jul 1;100(1):169-79

Oral tolerization to adenoviral antigens permits long-term gene expression using recombinant adenoviral vectors. Ilan Y, et al. **J Clin Invest** 1997 Mar 1;99(5):1098-106

Evidence for recombination in the flagellin locus of Campylobacter jejuni: implications for the flagellin gene typing scheme. Harrington CS, et al. **J Clin Microbiol** 1997 Sep;35(9):2386-92

Potential for gene transfer among enterococci from a single patient and the possibility of confounding typing results. Petts DN, et al. **J Clin Microbiol** 1997 Jul;35(7):1722-7

Junctional diversity in signal joints from T cell receptor beta and delta loci via terminal deoxynucleotidyl transferase and exonucleolytic activity. Candéias S, et al. **J Exp Med** 1996 Nov 1;184(5):1919-26

Ku70 is required for DNA repair but not for T cell antigen receptor gene recombination In vivo. Ouyang H, et al. **J Exp Med** 1997 Sep 15;186(6):921-9

Replication of in vitro tobravirus recombinants shows that the specificity of template recognition is determined by 5' non-coding but not 3' non-coding sequences. Mueller AM, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):2085-8

Evidence that DNA-A of a geminivirus associated with severe cassava mosaic disease in Uganda has arisen by interspecific recombination. Zhou X, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):2101-11

Analysis of a hot spot for DNA insertion suggests a mechanism for Ig switch recombination. Baar J, et al. **J Immunol** 1996 Oct 15;157(8):3430-5

On the modification of recombination with sex-dependent fitnesses and linkage. Liberman U, et al. **J Math Biol** 1996; 34(3):230-52

Recombinations defining centromeric and telomeric borders for the hereditary haemochromatosis locus. Ajioka RS, et al. **J Med Genet** 1997 Jan;34(1):28-33

Identification of a recombination event narrowing the Lafora disease gene region. Maddox LO, et al. **J Med Genet** 1997 Jul;34(7):590-1

Inhibition of Holliday structure resolving endonuclease VII of bacteriophage T4 by recombination enzymes UvsX and UvsY. Birkenkamp-Demtröder K, et al. **J Mol Biol** 1997 Mar 21;267(1):150-62

Quantitation of the inhibition of Hfr x F- recombination by the mutagenesis complex UmuD'C. Boudsocq F, et al. **J Mol Biol** 1997 Jul 11;270(2):201-11

Sequence of the human immunoglobulin diversity (D) segment locus: a systematic analysis provides no evidence for the use of DIR segments, inverted D segments, "minor" D segments or D-D recombination. Corbett SJ, et al. **J Mol Biol** 1997 Jul 25;270(4):587-97

Recombinase binding specificity at the chromosome dimer resolution site dif of Escherichia coli. Hayes F, et al. **J Mol Biol** 1997 Feb 28;266(3):525-37

Characterization of a mutant RecA protein that facilitates homologous genetic recombination but not recombinational DNA repair: RecA423. Ishimori K, et al. **J Mol Biol** 1996 Dec 13;264(4):696-712

Identification of V(D)J recombination coding end intermediates in normal thymocytes. Livák F, et al. **J Mol Biol** 1997 Mar 21;267(1):1-9

Tn3 resolvase catalyses multiple recombination events without intermediate rejoining of DNA ends. McIlwraith MJ, et al. **J Mol Biol** 1997 Feb 14;266(1):108-21

IS911-mediated transpositional recombination in vitro. Polard P, et al. **J Mol Biol** 1996 Nov 22;264(1):68-81

Short-homology-independent illegitimate recombination in Escherichia coli: distinct mechanism from short-homology-dependent illegitimate recombination. Shimizu H, et al. **J Mol Biol** 1997 Feb 21;266(2):297-305

Single-stranded DNA binding properties of the uvsY recombination protein of bacteriophage T4. Sweezy MA, et al. **J Mol Biol** 1997 Mar 14;266(5):927-38

Recognition and manipulation of branched DNA structure by junction-resolving enzymes. White MF, et al. **J Mol Biol** 1997 Jun 27;269(5):647-64 (140 ref.)

Effect of DNA topology on Holliday junction resolution by Escherichia coli RuvC and bacteriophage T7 endonuclease I. Zerbib D, et al. **J Mol Biol** 1997 Aug 1;270(5):663-73

Recombination between sequences of hepatitis B virus from different genotypes. Bollyky PL, et al. **J Mol Evol** 1996 Feb;42(2):97-102

A comparison of the nucleotide sequences of the adk and recA genes of pathogenic and commensal Neisseria species: evidence for extensive interspecies recombination within adk. Feil E, et al. **J Mol Evol** 1996 Dec;43(6):631-40

Cloning of adeno-associated virus type 4 (AAV4) and generation of recombinant AAV4 particles. Chiorini JA, et al. **J Virol** 1997 Sep;71(9):6823-33

Inhibition of recombinant human immunodeficiency virus type 1 replication by a site-specific recombinase. Flowers CC, et al. **J Virol** 1997 Apr;71(4):2685-92

Genetic exchange by recombination or reassortment is infrequent in natural populations of a tripartite RNA plant virus. Fraile A, et al. **J Virol** 1997 Feb;71(2):934-40

Human immunodeficiency virus type 1 intersubtype (B/E) recombination in a superinfected chimpanzee. Fultz PN, et al. **J Virol** 1997 Oct;71(10):7990-5

The heterosexual human immunodeficiency virus type 1 epidemic in Thailand is caused by an intersubtype (A/E) recombinant of African origin. Gao F, et al. **J Virol** 1996 Oct;70(10):7013-29

Generation of a tumorigenic milk-borne mouse mammary tumor virus by recombination between endogenous and exogenous viruses. Golovkina TV, et al. **J Virol** 1997 May; 71(5):3895-903

Nonhomologous RNA-RNA recombination events at the 3' nontranslated region of the Sindbis virus genome: hot spots and utilization of nonviral sequences. Hajjou M, et al. **J Virol** 1996 Aug;70(8):5153-64

Molecular characterization of replication-competent variants of adenovirus vectors and genome modifications to prevent their occurrence. Hehir KM, et al. **J Virol** 1996 Dec; 70(12):8459-67

RNA-RNA recombination in Sindbis virus: roles of the 3' conserved motif, poly(A) tail, and nonviral sequences of template RNAs in polymerase recognition and template switching. Hill KR, et al. **J Virol** 1997 Apr;71(4):2693-704

Homologous recombination occurs in a distinct retroviral subpopulation and exhibits high negative interference. Hu WS, et al. **J Virol** 1997 Aug;71(8):6028-36

The rapid spread of recombinants during a natural in vitro infection with two human immunodeficiency virus type 1 strains. Kuwata T, et al. **J Virol** 1997 Sep;71(9):7088-91

Engineering of homologous recombination hotspots with AU-rich sequences in brome mosaic virus. Nagy PD, et al. **J Virol** 1997 May;71(5):3799-810

Generation of coronavirus spike deletion variants by high-frequency recombination at regions of predicted RNA secondary structure. Rowe CL, et al. **J Virol** 1997 Aug;71(8):6183-90

Evolution and probable transmission of intersubtype recombinant human immunodeficiency virus type 1 in a Zambian couple. Salminen MO, et al. **J Virol** 1997 Apr; 71(4):2647-55

Development of high-titer retroviral producer cell lines by using Cre-mediated recombination. Vanin EF, et al. **J Virol** 1997 Oct;71(10):7820-6

Direct repeats of the herpes simplex virus a sequence promote nonconservative homologous recombination that is not dependent on XPF/ERCC4. Yao XD, et al. **J Virol** 1997 Sep;71(9):6842-9

Molecular characterization of HIV viruses generated after in vivo ligation. Guillon C, et al. **J Virol Methods** 1997 Jul;66(2):237-46

Nuclear proteins binding to the recombination hotspot region of the retinoic acid receptor alpha gene. Tashiro S, et al. **Leukemia** 1997 Apr;11 Suppl 3:285-6

Strain distribution patterns for genetic markers in the LSXSS recombinant-inbred series. Markel PD, et al. **Mamm Genome** 1996 Jun;7(6):408-12

Microsatellite typing of CXB recombinant inbred and parental mouse strains. Panoutsakopoulou V, et al. **Mamm Genome** 1997 May;8(5):357-61

Scrambler, a new neurological mutation of the mouse with abnormalities of neuronal migration. Sweet HO, et al. **Mamm Genome** 1996 Nov;7(11):798-802

A simplified method of screening for isolation of recombination vaccinia virus. Chen H, et al. **Methods Mol Biol** 1997;62:199-206

Chromosome engineering in yeast with a site-specific recombination system from a heterologous yeast plasmid. Oshima Y, et al. **Methods Mol Biol** 1996;53:217-25 (10 ref.)

In vitro recombination and mutagenesis by overlap extension PCR. Pogulis RJ, et al. **Methods Mol Biol** 1996;57:167-76 (19 ref.)

Delivery of recombinant HIV-1-directed antisense and ribozyme genes. Sczakiel G, et al. **Methods Mol Biol** 1997; 63:389-400

Control of recombination rate during transformation of Streptococcus pneumoniae: an overview. Mortier-Barriere I, et al. **Microb Drug Resist** 1997 Fall;3(3):233-42 (53 ref.)

Domain-specific rearrangement between the two Arg-gingipain-encoding genes in Porphyromonas gingivalis: possible involvement of nonreciprocal recombination. Nakayama K. **Microbiol Immunol** 1997; 41(3):185-96

Stable DNA replication: interplay between DNA replication, homologous recombination, and transcription. Kogoma T. **Microbiol Mol Biol Rev** 1997 Jun;61(2):212-38 (266 ref.)

Analysis of sequences flanking the vap regions of Dichelobacter nodosus: evidence for multiple integration events, a killer system, and a new genetic element. Bloomfield GA, et al. **Microbiology** 1997 Feb;143 (Pt 2):553-62

Mutants of Streptomyces roseosporus that express enhanced recombination within partially homologous genes. Hosted TJ, et al. **Microbiology** 1996 Oct;142 (Pt 10):2803-13

Group II intron from Pseudomonas alcaligenes NCIB 9867 (P25X): entrapment in plasmid RP4 and sequence analysis. Yeo CC, et al. **Microbiology** 1997 Aug;143 (Pt 8):2833-40

Targeting of exogenous DNA into Trypanosoma brucei requires a high degree of homology between donor and target DNA. Blundell PA, et al. **Mol Biochem Parasitol** 1996 Feb-Mar;76(1-2):215-29

Self-fertilisation in Trypanosoma brucei. Tait A, et al. **Mol Biochem Parasitol** 1996 Feb-Mar;76(1-2):31-42

A likelihood method for the detection of selection and recombination using nucleotide sequences. Grassly NC, et al. **Mol Biol Evol** 1997 Mar;14(3):239-47

High nucleotide sequence variation in a region of low recombination in Drosophila simulans is consistent with the background selection model. Hamblin MT, et al. **Mol Biol Evol** 1996 Oct;13(8):1133-40

Palindrome resolution and recombination in the mammalian germ line. Akgün E, et al. **Mol Cell Biol** 1997 Sep; 17(9):5559-70

Positive selection of FLP-mediated unequal sister chromatid exchange products in mammalian cells. Aladjem MI, et al. **Mol Cell Biol** 1997 Feb;17(2):857-61

Requirements for ectopic homologous recombination in mammalian somatic cells. Baker MD, et al. **Mol Cell Biol** 1996 Dec;16(12):7122-32

ERCC4 (XPF) encodes a human nucleotide excision repair protein with eukaryotic recombination homologs. Brookman KW, et al. **Mol Cell Biol** 1996 Nov; 16(11):6553-62

The mismatch repair system reduces meiotic homeologous recombination and stimulates recombination-dependent chromosome loss. Chambers SR, et al. **Mol Cell Biol** 1996 Nov;16(11):6110-20

The composition of coding joints formed in V(D)J recombination is strongly affected by the nucleotide sequence of the coding ends and their relationship to the recombination signal sequences. Ezekiel UR, et al. **Mol Cell Biol** 1997 Jul;17(7):4191-7

Recombination induced by triple-helix-targeted DNA damage in mammalian cells. Faruqi AF, et al. **Mol Cell Biol** 1996 Dec;16(12):6820-8

Exonuclease I of Saccharomyces cerevisiae functions in mitotic recombination in vivo and in vitro. Fiorentini P, et al. **Mol Cell Biol** 1997 May;17(5):2764-73

Processing of DNA prior to illegitimate recombination in mouse cells. Henderson G, et al. **Mol Cell Biol** 1997 Jul;

17(7):3779–85
Characterization of excised DNA intermediates associated with V(D)J recombination at the T-cell receptor delta locus. Nakajima PB, et al. **Mol Cell Biol** 1997 May; 17(5):2631–41
Chromosome end elongation by recombination in the mosquito Anopheles gambiae. Roth CW, et al. **Mol Cell Biol** 1997 Sep;17(9):5176–83
Fine-resolution analysis of products of intrachromosomal homeologous recombination in mammalian cells. Yang D, et al. **Mol Cell Biol** 1997 Jul;17(7):3614–28
Tomato chromosome 1: high resolution genetic and physical mapping of the short arm in an interspecific Lycopersicon esculentum x L. peruvianum cross. Bonnema G, et al. **Mol Gen Genet** 1997 Jan 27;253(4):455–62
Saccharomyces cerevisiae mutants defective in plasmid-chromosome recombination. Elias-Arnanz M, et al. **Mol Gen Genet** 1996 Oct 16;252(5):530–8
A physical assay for meiotic recombination in Coprinus cinereus. Freedman T, et al. **Mol Gen Genet** 1997 Apr 28; 254(4):372–8
Illegitimate integration of single-stranded DNA in Saccharomyces cerevisiae. Gjuračić K, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):173–81
Human DNA topoisomerases II alpha and II beta can functionally substitute for yeast TOP2 in chromosome segregation and recombination. Jensen S, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):79–86
Recombination of mitochondrial DNAs following transmission of mitochondria among incompatible strains of black Aspergilli. Kevei F, et al. **Mol Gen Genet** 1997 Apr 28;254(4):379–88
A second site-specific recombination event in the lambdoid bacteriophage HK022. Kolot M, et al. **Mol Gen Genet** 1996 Dec 13;253(3):362–9
Double-strand breaks increase the incidence of genetic deletion associated with intermolecular recombination in bacteriophage T7. Yang Y, et al. **Mol Gen Genet** 1997 Jul; 255(3):277–84
Homologous recombination involving cox2 is responsible for a mutation in the cmS-specific mitochondrial locus of Petunia. Yesodi V, et al. **Mol Gen Genet** 1997 Jun; 255(1):106–14
The role of chromatin-associated protein Hbsu in beta-mediated DNA recombination is to facilitate the joining of distant recombination sites. Alonso JC, et al. **Mol Microbiol** 1995 Nov;18(3):471–8
Isolation of a dnaE mutation which enhances RecA-independent homologous recombination in the Escherichia coli chromosome. Bierne H, et al. **Mol Microbiol** 1997 Jun;24(6):1225–34
Cis and trans in site-specific recombination [letter] Blakely GW, et al. **Mol Microbiol** 1996 Apr;20(1):234–7
Replacement of the lysine residue in the consensus ATP-binding sequence of the AddA subunit of AddAB drastically affects chromosomal recombination in transformation and transduction of Bacillus subtilis. Haijema BJ, et al. **Mol Microbiol** 1996 Sep;21(5):989–99
Recombination in mycobacteria. McFadden J. **Mol Microbiol** 1996 Jul;21(2):205–11 (36 ref.)
Allelic polymorphism and site-specific recombination in the opc locus of Neisseria meningitidis. Seiler A, et al. **Mol Microbiol** 1996 Feb;19(4):841–56
System to study horizontal gene exchange among microorganisms without cultivation of recipients. Strätz M, et al. **Mol Microbiol** 1996 Oct;22(2):207–15
Construction and analysis of a recombination-deficient (radA) mutant of Haloferax volcanii. Woods WG, et al. **Mol Microbiol** 1997 Feb;23(4):791–7
Interspecies recombination, and phylogenetic distortions, within the glutamine synthetase and shikimate dehydrogenase genes of Neisseria meningitidis and commensal Neisseria species. Zhou J, et al. **Mol Microbiol** 1997 Feb;23(4):799–812
Recent research in DNA repair, mutation and recombination: a report of the DNA Repair Network meeting, held at City University, London on 18 December 1995. Jones NJ, et al. **Mutat Res** 1996 Sep 2;364(1):13–23
Damage-induced ectopic recombination in the yeast Saccharomyces cerevisiae. Kupiec M, et al. **Mutat Res** 1997 Jun 9;384(1):33–44
Absence of UV-induced non-homologous recombination in repair-deficient CHO cell lines transfected with ERCC genes. Rainaldi G, et al. **Mutat Res** 1996 Oct 18;364(2):73–9
Report on the meeting held at City University, London on 16 December 1996: recent progress in DNA repair, mutation and recombination. Strike P, et al. **Mutat Res** 1997 Aug;384(2):135–44
Spontaneous X chromosome MI and MII nondisjunction events in Drosophila melanogaster oocytes have different recombinational histories [see comments] Koehler KE, et al. **Nat Genet** 1996 Dec;14(4):406–14. Comment in: Nat Genet 1996 Dec;14(4):374–6.
A critical junction for RuvA [news] Lilley DM. **Nat Struct Biol** 1996 Dec;3(12):984–6
Structure of Cre recombinase complexed with DNA in a site-specific recombination synapse. Guo F, et al. **Nature** 1997 Sep 4;389(6646):40–6
Animal mitochondrial DNA recombination [letter] Lunt DH, et al. **Nature** 1997 May 15;387(6630):247
A meiotic recombination checkpoint controlled by mitotic checkpoint genes. Lydall D, et al. **Nature** 1996 Oct 31; 383(6603):840–3
DNA recombination. Four pins for four petals [news] Mitchell A. **Nature** 1996 Nov 7;384(6604):26
Recombination of protein domains facilitated by co-translational folding in eukaryotes [see comments] Netzer WJ, et al. **Nature** 1997 Jul 24;388(6640):343–9. Comment in: Nature 1997 Jul 24;388(6640):329, 331.
Cell-free V(D)J recombination [see comments] Ramsden DA, et al. **Nature** 1997 Jul 31;388(6641):488–91. Comment in: Nature 1997 Jul 31;388(6641):428–9.
Gene acquisition in HIV and SIV [letter] Sharp PM, et al. **Nature** 1996 Oct 17;383(6601):586–7
Silencing factors participate in DNA repair and recombination in Saccharomyces cerevisiae [see comments] Tsukamoto Y, et al. **Nature** 1997 Aug 28;388(6645):900–3 . Comment in: Nature 1997 Aug 28;388(6645):829–30.
V(D)J recombination. From RAGs to stitches [news; comment] Weaver DT, et al. **Nature** 1997 Jul 31; 388(6641):428–9. Comment on: Nature 1997 Jul 31;388(6641):488–91. Comment on: Nature 1997 Jul 31;388(6641):492–5. Comment on: Nature 1997 Jul 31;388(6641):495–8.
Preclinical testing of recombinant adenoviral herpes simplex virus-thymidine kinase gene therapy for central nervous system malignancies. Vincent AJ, et al. **Neurosurgery** 1997 Aug;41(2):442–51; discussion 451–2
Cre-mediated somatic site-specific recombination in mice. Akagi K, et al. **Nucleic Acids Res** 1997 May 1;25(9):1766–73
Different thermostabilities of FLP and Cre recombinases: implications for applied site-specific recombination. Buchholz F, et al. **Nucleic Acids Res** 1996 Nov 1; 24(21):4256–62
Isolating large nested deletions in bacterial and P1 artificial chromosomes by in vivo P1 packaging of products of Cre-catalysed recombination between the endogenous and a transposed loxP site. Chatterjee PK, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2205–12
Analysis of immunoglobulin Sgamma3 recombination breakpoints by PCR: implications for the mechanism of isotype switching. Du J, et al. **Nucleic Acids Res** 1997 Aug 1;25(15):3066–73
Double strand break-induced recombination in Chlamydomonas reinhardtii chloroplasts. Dürrenberger F, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3323–31
FLP-mediated DNA mobilization to specific target sites in Drosophila chromosomes. Golic MM, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3665–71
A complex of RAG-1 and RAG-2 proteins persists on DNA after single-strand cleavage at V(D)J recombination signal sequences. Grawunder U, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1375–82
In vivo analysis of the plasmid pAM beta 1 resolution system. Jannière L, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3431–6
Stabilization of yeast artificial chromosome clones in a rad54-3 recombination-deficient host strain. Le Y, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1248–53
FLP-mediated recombination of FRT sites in the maize genome. Lyznik LA, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3784–9
Efficient combination of large DNA in vitro: in gel site specific recombination (IGSSR) of PAC fragments containing alpha satellite DNA and the human HPRT gene locus. Schindelhauer D, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2241–3
Optimization of DNA shuffling for high fidelity recombination. Zhao H, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1307–8
Inactivation of p53 results in high rates of homologous recombination. Mekeel KL, et al. **Oncogene** 1997 Apr 17; 14(15):1847–57
Enhancement of somatic intrachromosomal homologous recombination in Arabidopsis by the HO endonuclease. Chiurazzi M, et al. **Plant Cell** 1996 Nov;8(11):2057–66
Meiotic recombination break points resolve at high rates at the 5' end of a maize coding sequence. Xu X, et al. **Plant Cell** 1995 Dec;7(12):2151–61
Integration of T-DNA binary vector 'backbone' sequences into the tobacco genome: evidence for multiple complex patterns of integration. Kononov ME, et al. **Plant J** 1997 May;11(5):945–57
Characterization and mapping of Ds-GUS-T-DNA lines for targeted insertional mutagenesis. Smith D, et al. **Plant J** 1996 Oct;10(4):721–32
Fine-scale molecular genetic (RFLP) and physical mapping of a 8.9 cM region on the top arm of Arabidopsis chromosome 5 encompassing the male sterility gene, ms1. Thorlby GJ, et al. **Plant J** 1997 Aug;12(2):471–9
Ds excision from extrachromosomal geminivirus vector DNA is coupled to vector DNA replication in maize. Wirtz U, et al. **Plant J** 1997 Jan;11(1):125–35
Single-site manipulation of tomato chromosomes in vitro and in vivo using Cre-lox site-specific recombination. Stuurman J, et al. **Plant Mol Biol** 1996 Dec;32(5):901–13
Resolution of Holliday junctions in genetic recombination: RuvC protein nicks DNA at the point of strand exchange. Bennett RJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12217–22
The recombination hotspot Chi is recognized by the translocating RecBCD enzyme as the single strand of DNA containing the sequence 5'-GCTGGTGG-3'. Bianco PR, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6706–11
The hotspot conversion paradox and the evolution of meiotic recombination. Boulton A, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8058–63
Double strand breaks at the HIS2 recombination hot spot in Saccharomyces cerevisiae. Bullard SA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13054–9
Integration of Agrobacterium tumefaciens T-DNA in the Saccharomyces cerevisiae genome by illegitimate recombination. Bundock P, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15272–5
Resolution of an early RecA-recombination intermediate by a junction-specific endonuclease. Chiu SK, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6079–83
Recombinational construction in Escherichia coli of infectious adenoviral genomes. Crouzet J, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1414–9
Ligand-activated site-specific recombination in mice. Feil R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10887–90
A mutation in the putative RNA polymerase gene inhibits nonhomologous, but not homologous, genetic recombination in an RNA virus. Figlerowicz M, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2073–8
Position- and orientation-independent activity of the Schizosaccharomyces pombe meiotic recombination hot spot M26. Fox ME, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7446–51
Ku70-deficient embryonic stem cells have increased ionizing radiosensitivity, defective DNA end-binding activity, and inability to support V(D)J recombination. Gu Y, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8076–81
Activities of human recombination protein Rad51. Gupta RC, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):463–8
Single-strand DNA intermediates in phage lambda's Red recombination pathway. Hill SA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2951–6
Highly selective isolation of human DNAs from rodent-human hybrid cells as circular yeast artificial chromosomes by transformation-associated recombination cloning. Larionov V, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13925–30
Gene targeting by linear duplex DNA frequently occurs by assimilation of a single strand that is subject to preferential mismatch correction. Leung W, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6851–6
Rad51 expression and localization in B cells carrying out class switch recombination. Li MJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10222–7
Chromosomal double-strand break repair in Ku80-deficient cells. Liang F, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8929–33
The recombination signals for adeno-associated virus site-specific integration. Linden RM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7966–72
The specificity of the secondary DNA binding site of RecA protein defines its role in DNA strand exchange. Mazin AV, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10673–8
Crossover isomer bias is the primary sequence-dependent property of immobilized Holliday junctions. Miick SM, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9080–4
DNA strand annealing is promoted by the yeast Rad52 protein. Mortensen UH, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10729–34
Loss of heterozygosity induced by a chromosomal double-strand break. Moynahan ME, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):8988–93
Identification of genes induced by factor deprivation in hematopoietic cells undergoing apoptosis using gene-trap mutagenesis and site-specific recombination. Russ AP, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15279–84
Synaptonemal complex (SC) component Zip1 plays a role in meiotic recombination independent of SC polymerization along the chromosomes. Storlazzi A, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9043–8
Role of Saccharomyces cerevisiae Msh2 and Msh3 repair proteins in double-strand break-induced recombination. Sugawara N, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9214–9
Reversible immortalization of mammalian cells mediated by retroviral transfer and site-specific recombination. Westerman KA, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8971–6
A complex major histocompatibility complex D locus variant generated by an unusual recombination mechanism in mice. Yun TJ, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1384–9
Barriers to recombination between closely related bacteria: MutS and RecBCD inhibit recombination between Salmonella typhimurium and Salmonella typhi. Zahrt TC, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9786–91
Functional and nonfunctional mutations distinguished by random recombination of homologous genes. Zhao H, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7997–8000
recA-independent DNA recombination between repetitive sequences: mechanisms and implications. Bi X, et al. **Prog Nucleic Acid Res Mol Biol** 1996;54:253–92 (86 ref.)
Homologous genetic recombination in Xenopus: mechanism and implications for gene manipulation. Carroll D. **Prog Nucleic Acid Res Mol Biol** 1996;54:101–25 (79 ref.)
Developmental genome reorganization in ciliated protozoa: the transposon link. Klobutcher LA, et al.

Prog Nucleic Acid Res Mol Biol 1997;56:1–62 (153 ref.)
Double-strand break-induced recombination in eukaryotes. Osman F, et al. **Prog Nucleic Acid Res Mol Biol** 1998; 58:263–99 (143 ref.)
RecA protein: structure, function, and role in recombinational DNA repair. Roca AI, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:129–223 (428 ref.)
Recombination patterns around the breakpoints of a balanced 1;11 autosomal translocation associated with major mental illness. He L, et al. **Psychiatr Genet** 1996 Winter;6(4):201–8
An ionizing radiation-sensitive CHO mutant cell line: irs-20. IV. Genetic complementation, V(D)J recombination and the scid phenotype. Lin JY, et al. **Radiat Res** 1997 Feb; 147(2):166–71
Poliovirus RNA recombination in cell-free extracts. Tang RS, et al. **RNA** 1997 Jun;3(6):624–33
The transcription factor Oct2A enhances V(D)J recombination in fibroblasts. Döbbeling U. **Scand J Immunol** 1996 Oct;44(4):323–9
V(D)J recombinase activity in a subset of germinal center B lymphocytes [see comments] Han S, et al. **Science** 1997 Oct 10;278(5336):301–5. Comment in: Science 1997 Oct 10;278(5336):238–9.
The cis–trans paradox of integrase [see comments] Jayaram M. **Science** 1997 Apr 4;276(5309):49–51 (22 ref.). Comment in: Science 1997 Apr 4;276(5309):126–31.
Flexibility in DNA recombination: structure of the lambda integrase catalytic core [see comments] Kwon HJ, et al. **Science** 1997 Apr 4;276(5309):126–31. Comment in: Science 1997 Apr 4;276(5309):49.
V(D)J recombination in mature B cells: a mechanism for altering antibody responses [see comments] Papavasiliou F, et al. **Science** 1997 Oct 10;278(5336):298–301. Comment in: Science 1997 Oct 10;278(5336):238–9.
Crystal structure of DNA recombination protein RuvA and a model for its binding to the Holliday junction. Rafferty JB, et al. **Science** 1996 Oct 18;274(5286):415–21
Selecting the needle. Sikorski R, et al. **Science** 1997 Aug 15;277(5328):975
Essential and perilous: V(D)J recombination and DNA damage checkpoints in lymphocyte precursors. Danska JS, et al. **Semin Immunol** 1997 Jun;9(3):199–206 (81 ref.)
V(D)J recombination moves in vitro. Schatz DG. **Semin Immunol** 1997 Jun;9(3):149–59 (67 ref.)
Accessibility and the developmental regulation of V(D)J recombination. Schlissel MS, et al. **Semin Immunol** 1997 Jun;9(3):161–70 (65 ref.)
The end-joining reaction in V(D)J recombination. Smider V, et al. **Semin Immunol** 1997 Jun;9(3):189–97 (76 ref.)
Homologous junctions formed between a vector and human genomic repetitive LINE-1 elements as a result of one-sided invasion. Richard M, et al. **Somat Cell Mol Genet** 1997 Jan;23(1):75–81
Localization of the recombination points in a family with two DR/DP recombinations. Thomsen M, et al. **Tissue Antigens** 1996 Jun;47(6):492–7
FLP-mediated site-specific recombination in microinjected murine zygotes. Ludwig DL, et al. **Transgenic Res** 1996 Nov;5(6):385–95
PCR-based gene targeting of the inducible nitric oxide synthase (NOS2) locus in murine ES cells, a new and more cost-effective approach. Randolph DA, et al. **Transgenic Res** 1996 Nov;5(6):413–20
Enhanced selection for homologous-recombinant embryonic stem cell clones with a neomycin phosphotransferase gene in antisense orientation. Skryabin BV, et al. **Transgenic Res** 1997 Jan;6(1):27–35
Processing the holliday junction in homologous recombination. Shinagawa H, et al. **Trends Biochem Sci** 1996 Mar;21(3):107–11 (49 ref.)
Genetic barriers among bacteria. Matic I, et al. **Trends Microbiol** 1996 Feb;4(2):69–72 (51 ref.)
Adenovirus serotype evolution is driven by illegitimate recombination in the hypervariable regions of the hexon protein. Crawford-Miksza LK, et al. **Virology** 1996 Oct 15;224(2):357–67
Characterization of chimeric turnip yellow mosaic virus genomes that are infectious in the absence of aminoacylation. Goodwin JB, et al. **Virology** 1997 Mar 31; 230(1):113–24
DNA replication promotes high-frequency homologous recombination during Autographa californica multiple nuclear polyhedrosis virus infection. Martin DW, et al. **Virology** 1997 Jun 9;232(2):300–9
Chimeric papillomavirus-like particles. Müller M, et al. **Virology** 1997 Jul 21;234(1):93–111
New insights into the mechanisms of RNA recombination. Nagy PD, et al. **Virology** 1997 Aug 18;235(1):1–9 (80 ref.)
An in vitro system for the investigation of heterologous RNA recombination. Qiao X, et al. **Virology** 1997 Jan 6; 227(1):103–10
Construction of ovine adenovirus recombinants by gene insertion or deletion of related terminal region sequences. Xu ZZ, et al. **Virology** 1997 Mar 31;230(1):62–71
Recombinant genomic RNA of coronavirus MHV-A59 after coreplication with a DI RNA containing the MHV-RI spike gene. Zhang L, et al. **Virology** 1997 Mar 31; 230(1):93–102
Use of persistent infections with vaccinia virus recombinants to introduce alterations in foreign proteins: an application to HIV-1 env protein. Esteban M, et al. **Virus Res** 1996 Dec;46(1–2):45–56
The yeast Rad6 protein: a mediator of homologous recombination across the scaffold attached region at the replication origin ARS1. Markvart MB, et al. **Yeast** 1996 Nov;12(14):1427–38
[Effects of in vivo instillation of genes coding for cytokines on pulmonary fibrosis] Hayashi S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec;34 Suppl:190–4 (19 ref.) (Eng. Abstr.) **(Jpn)**
[Analysis of EBV infection in various cell types with recombinant EBV] Shimizu N. **Nippon Rinsho** 1997 Feb; 55(2):311–5 (16 ref.) (Eng. Abstr.) **(Jpn)**
[Developmental regulation of V(D)J type recombination in the antigen receptor genes in lymphocytes] Sakano H. **Seikagaku** 1996 Aug;68(8):1470–4 (18 ref.) **(Jpn)**
[Recombination of chromosomes] Morita T, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2386–92 (33 ref.) **(Jpn)**
[Vaccinia virus recombinants carrying ras oncogene induce neoplastic cell transformation] Grinenko NF, et al. **Dokl Akad Nauk** 1996 Sep;350(3):427–30 **(Rus)**
[Associated changes in recombination length, number of exchanges, and interference in Drosophila chromosome 2] Chadov BF, et al. **Genetika** 1997 Jun;33(6):776–83 (Eng. Abstr.) **(Rus)**
[Phenotypic characterization of Bacillus subtilis mutants with decreased exonuclease I activity] Dzhanga AA, et al. **Genetika** 1997 Mar;33(3):314–20 (Eng. Abstr.) **(Rus)**
[Recombination in Drosophila melanogaster males exposed at a thermoelectric power plant] Filatova LP, et al. **Genetika** 1997 Jan;33(1):123–5 (Eng. Abstr.) **(Rus)**
[Effect of the transposon at the singed locus on recombination in Drosophila melanogaster] Iurchenko NN, et al. **Genetika** 1997 Mar;33(3):333–8 (Eng. Abstr.) **(Rus)**
[Behavior of heterologous recombinant plasmid pCET in cells of Bacillus anthracis] Pomerantsev AP, et al. **Genetika** 1996 Apr;32(4):500–9 (Eng. Abstr.) **(Rus)**
[Hyperrecombination of plasmids is characteristic for hyperresistant strains of Escherichia coli] Zavil'gel'skiĭ GV, et al. **Genetika** 1997 Jun;33(6):757–61 (Eng. Abstr.) **(Rus)**
[Phenotypic variability of a recombinant luminescent strain of Escherichia coli in water microcosms] Kargatova TV, et al. **Mikrobiologiia** 1997 Jan–Feb;66(1):101–6 (Eng. Abstr.) **(Rus)**
[Approaches to identification of recombination-active DNA sites in human genome] Karpukhin AV, et al. **Mol Biol (Mosk)** 1996 Nov–Dec;30(6):1339–47 **(Rus)**
[Construction of recombinant variants or orthopoxviruses by inserting foreign genes into intragenic region of viral genome] Serpinskiĭ OI, et al. **Mol Biol (Mosk)** 1996 Sep–Oct;30(5):1055–65 **(Rus)**
[Expression of the ribozyme gene in the recombinant defective adenovirus genome] Zakharchuk AN, et al. **Mol Biol (Mosk)** 1997 Jan–Feb;31(1):81–5 **(Rus)**
[Recombinant vaccinia virus expressing Japanese encephalitis virus protein E] Cheshenko NV, et al. **Mol Gen Mikrobiol Virusol** 1997;(3):24–7 (Eng. Abstr.) **(Rus)**
[Recombination of alpha-viruses during mixed infection in cultured cells. Formation of hybrid forms of RNA of Venezuelan equine encephalomyelitis virus and Karelian fever virus in the region of genes for nucleocapsid and envelope proteins] Sokolova TM, et al. **Vopr Virusol** 1996 Nov–Dec;41(6):245–52 (Eng. Abstr.) **(Rus)**
[Genetic recombination during protoplast fusion in Streptomyces antibioticus, the producer of oleandomycin] Luk'ianchuk VV, et al. **Mikrobiol Z** 1996 Jul–Aug; 58(4):38–42 (Eng. Abstr.) **(Ukr)**

DRUG EFFECTS

Genotoxicity of aflatoxin B1: evidence for a recombination-mediated mechanism in Saccharomyces cerevisiae [published erratum appears in Cancer Res 1997 Feb 15;57(4):793] Sengstag C, et al. **Cancer Res** 1996 Dec 1;56(23):5457–65
O6-methylguanine induces intrachromosomal homologous recombination in human cells. Zhang H, et al. **Carcinogenesis** 1996 Oct;17(10):2229–35
Recombinagenic activity of integerrimine, a pyrrolizidine alkaloid from Senecio brasiliensis, in somatic cells of Drosophila melanogaster. Campesato VR, et al. **Environ Mol Mutagen** 1997;29(1):91–7
The influence of IL-7 V(D)J recombination. Döbbeling U. **Immunology** 1996 Dec;89(4):569–72
Effect of nalidixic acid on recombination and DNA repair of Escherichia coli K-12 strains. Inan S, et al. **Indian J Exp Biol** 1996 Oct;34(10):949–53
The molecular mechanism of aflatoxin B1-induced liver cancer: is mitotic recombination involved? Sengstag C. **Mol Carcinog** 1997 Jul;19(3):147–52 (22 ref.)
Anti-recombinogenic and convertible co-mutagenic effects of (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVDU) and other 5-substituted pyrimidine nucleoside analogs in S. cerevisiae MP1. Fahrig R. **Mutat Res** 1996 Nov 11; 372(1):133–9
Effects of Salmonella assay negative and positive carcinogens on intrachromosomal recombination in G1-arrested yeast cells. Galli A, et al. **Mutat Res** 1996 Oct 1;370(3–4):209–21
Sodium azide induces mitotic recombination in Drosophila melanogaster larvae. González-César E, et al. **Mutat Res** 1997 Mar 17;389(2–3):157–65
Chrysotile asbestos fibers mediate homologous recombination in Rat2 lambda fibroblasts: implications for carcinogenesis. Lezon-Geyda K, et al. **Mutat Res** 1996 Dec 12; 361(2–3):113–20
The effects of cyclosporin A on V(D)J recombination activity. Döbbeling U. **Scand J Immunol** 1997 May; 45(5):494–8

GENETICS

Quantitative trait locus analyses of sleep-times induced by sedative-hypnotics in LSXSS recombinant inbred strains of mice. Christensen SC, et al. **Alcohol Clin Exp Res** 1996 May;20(3):543–50
The extent, mechanism, and consequences of genetic variation, for recombination rate [editorial; comment] Robinson WP. **Am J Hum Genet** 1996 Dec;59(6):1175–83 . Comment on: Am J Hum Genet 1996 Dec;59(6):1186–92.
Meiotic segregation, recombination, and gamete aneuploidy assessed in a t(1;10)(p22.1;q22.3) reciprocal translocation carrier by three- and four-probe multicolor FISH in sperm. Van Hummelen P, et al. **Am J Hum Genet** 1997 Sep; 61(3):651–9
Individual variation in recombination among human males [see comments] Yu J, et al. **Am J Hum Genet** 1996 Dec; 59(6):1186–92. Comment in: Am J Hum Genet 1996 Dec;59(6):1175–83.
Mitotic recombination among acrocentric chromosomes' short arms. Guissani U, et al. **Ann Hum Genet** 1996 Mar; 60 (Pt 2):91–7
A note on the combination of estimates of a recombination fraction. Lin S, et al. **Ann Hum Genet** 1996 May;60 (Pt 3):251–7
Meiotic recombination hotspots. Lichten M, et al. **Annu Rev Genet** 1995;29:423–44 (157 ref.)
Hypothetical quantitative trait loci (QTL) for circadian period of locomotor activity in CXB recombinant inbred strains of mice. Mayeda AR, et al. **Behav Genet** 1996 Sep; 26(5):505–11
Identification of quantitative trait loci involved in contextual and auditory-cued fear conditioning in BXD recombinant inbred strains. Owen EH, et al. **Behav Neurosci** 1997 Apr; 111(2):292–300
Genomic imprinting in unstable DNA diseases. Petronis A. **Bioessays** 1996 Jul;18(7):587–90
Relationship between opacity of transformed E. coli colonies and over-expression of the recombinant transcript. Barik S. **Biotechniques** 1997 Jan;22(1):112–8
Improved screening method for recombinant retrovirus producing clones. Havenga M, et al. **Biotechniques** 1996 Dec;21(6):1004–7
Reduced X-ray resistance and homologous recombination frequencies in a RAD54-/- mutant of the chicken DT40 cell line. Bezzubova O, et al. **Cell** 1997 Apr 18;89(2):185–93
Nonhomologous RNA recombination in a cell-free system: evidence for a transesterification mechanism guided by secondary structure. Chetverin AB, et al. **Cell** 1997 Feb 21;88(4):503–13
Disruption of mouse RAD54 reduces ionizing radiation resistance and homologous recombination. Essers J, et al. **Cell** 1997 Apr 18;89(2):195–204
A super new twist on the initiation of meiotic recombination. Haber JE. **Cell** 1997 Apr 18;89(2):163–6 (21 ref.)
A stable RAG1-RAG2-DNA complex that is active in V(D)J cleavage. Hiom K, et al. **Cell** 1997 Jan 10;88(1):65–72
The recombination hot spot chi is embedded within islands of preferred DNA pairing sequences in the E. coli genome [letter] Tracy RB, et al. **Cell** 1997 Jul 25;90(2):205–6
Patterns of meiotic double-strand breakage on native and artificial yeast chromosomes. Klein S, et al. **Chromosoma** 1996 Dec;105(5):276–84
Chromosome mapping of the mouse homologue of DMC1, the yeast meiosis-specific homologous recombination gene. Matsuda Y, et al. **Chromosome Res** 1996 Apr;4(3):249–50
Homologous recombination in the fission yeast Schizosaccharomyces pombe: different requirements for the rhp51+, rhp54+ and rad22+ genes. Muris DFR, et al. **Curr Genet** 1997 Mar;31(3):248–54
cDNA-mediated Ty recombination can take place in the absence of plus-strand cDNA synthesis, but not in the absence of the integrase protein. Nevo-Caspi Y, et al. **Curr Genet** 1997 Jul;32(1):32–40
Transfer of an autonomously replicating vector between vegetatively incompatible biotypes of Colletotrichum gloeosporioides. Poplawski AM, et al. **Curr Genet** 1997 Jul; 32(1):66–72
Specificity in V(D)J recombination: new lessons from biochemistry and genetics. Ramsden DA, et al. **Curr Opin Immunol** 1997 Feb;9(1):114–20 (42 ref.)
Molecular analysis of the Pseudomonas aeruginosa genes, ruvA, ruvB and ruvC, involved in processing of homologous recombination intermediates. Hishida T, et al. **Gene** 1996 Dec 5;182(1–2):63–70
A new view of V(D)J recombination. Gellert M. **Genes Cells** 1996 Mar;1(3):269–75 (40 ref.)
Alpha2p controls donor preference during mating type interconversion in yeast by inactivating a recombinational enhancer of chromosome III. Szeto L, et al. **Genes Dev** 1997 Aug 1;11(15):1899–911
Meiotic cells monitor the status of the interhomolog recombination complex. Xu L, et al. **Genes Dev** 1997 Jan 1;11(1):106–18
Heterogeneity in rates of recombination in the 6-Mb region telomeric to the human major histocompatibility complex.

Malfroy L, et al. **Genomics** 1997 Jul 15;43(2):226–31

Lack of site-specific integration of the recombinant adeno-associated virus 2 genomes in human cells. Ponnazhagan S, et al. **Hum Gene Ther** 1997 Feb 10; 8(3):275–84

Double-strand breaks may initiate the inversion mutation causing the Hunter syndrome. Lagerstedt K, et al. **Hum Mol Genet** 1997 Apr;6(4):627–33

A new type of illegitimate recombination is dependent on restriction and homologous interaction. Kusano K, et al. **J Bacteriol** 1997 Sep;179(17):5380–90

The transmission disadvantage of yeast mitochondrial intergenic mutants is eliminated in the mgt1 (cce1) background. Piskur J. **J Bacteriol** 1997 Sep;179(17):5614–7

The Bacteroides mobilizable transposon Tn4555 integrates by a site-specific recombination mechanism similar to that of the gram-positive bacterial element Tn916. Tribble GD, et al. **J Bacteriol** 1997 Apr;179(8):2731–9

Integration specificities of two lambdoid phages (21 and e14) that insert at the same attB site. Wang H, et al. **J Bacteriol** 1997 Sep;179(18):5705–11

V(D)J recombination: modulation of RAG1 and RAG2 cleavage activity on 12/23 substrates by whole cell extract and DNA-bending proteins. Sawchuk DJ, et al. **J Exp Med** 1997 Jun 2;185(11):2025–32

Report of a critical recombination further narrowing the TSC1 region. Au KS, et al. **J Med Genet** 1996 Jul; 33(7):559–61

Detection of the CMT1A/HNPP recombination hotspot in unrelated patients of European descent. Timmerman V, et al. **J Med Genet** 1997 Jan;34(1):43–9

Bypass of DNA heterologies during RuvAB-mediated three- and four-strand branch migration. Adams DE, et al. **J Mol Biol** 1996 Nov 8;263(4):582–96

Contribution of mutation and RNA recombination to the evolution of a plant pathogenic RNA. Aranda MA, et al. **J Mol Evol** 1997 Jan;44(1):81–8

Illegitimate recombination leading to allelic loss and unbalanced translocation in p53-mutated human lymphoblastoid cells. Honma M, et al. **Mol Cell Biol** 1997 Aug;17(8):4774–81

A basic motif in the N-terminal region of RAG1 enhances V(D)J recombination activity. McMahan CJ, et al. **Mol Cell Biol** 1997 Aug;17(8):4544–52

Enhancer control of local accessibility to V(D)J recombinase. McMurry MT, et al. **Mol Cell Biol** 1997 Aug;17(8):4553–61

Influence of DNA sequence identity on efficiency of targeted gene replacement. Negritto MT, et al. **Mol Cell Biol** 1997 Jan;17(1):278–86

Repair of site-specific double-strand breaks in a mammalian chromosome by homologous and illegitimate recombination. Sargent RG, et al. **Mol Cell Biol** 1997 Jan; 17(1):267–77

Altered replication and inverted repeats induce mismatch repair-independent recombination between highly diverged DNAs in yeast. Tran H, et al. **Mol Cell Biol** 1997 Feb;17(2):1027–36

Region-specific meiotic recombination in Schizosaccharomyces pombe: the rec11 gene. Li YF, et al. **Mol Microbiol** 1997 Mar;23(5):869–78

Analysis of spontaneous and double-strand break-induced recombination in rad mutants of S. pombe. Fortunato EA, et al. **Mutat Res** 1996 Dec 2;364(3):14–60

Allelism of PSO4 and PRP19 links pre-mRNA processing with recombination and error-prone DNA repair in Saccharomyces cerevisiae. Grey M, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4009–14

The presence of direct repeats does not influence coding joint formation during V(D)J recombination. Nourrit F, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):3968–73

Recombination-mediated PCR-directed plasmid construction in vivo in yeast. Oldenburg KR, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):451–2

Characterization of homologous DNA recombination activity in normal and immortal mammalian cells. Thyagarajan B, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):4084–91

Increase of spontaneous intrachromosomal homologous recombination in mammalian cells expressing a mutant p53 protein. Bertrand P, et al. **Oncogene** 1997 Mar 6; 14(9):1117–22

Increased Ac excision (iae): Arabidopsis thaliana mutations affecting Ac transposition. Jarvis P, et al. **Plant J** 1997 May;11(5):907–19

RecQ DNA helicase is a suppressor of illegitimate recombination in Escherichia coli. Hanada K, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3860–5

Deleterious mutations, variable epistatic interactions, and the evolution of recombination. Otto SP, et al. **Theor Popul Biol** 1997 Apr;51(2):134–47 (37 ref.)

HLA-A*3004: a new A30 allele identified in an Australian Caucasoid population. Lienert K, et al. **Tissue Antigens** 1995 Nov;46(5):394–7

Linkage disequilibrium in HLA cannot be explained by selective recombination. Termijtelen A, et al. **Tissue Antigens** 1995 Nov;46(5):387–90

Exchanging partners: recombination in E. coli. Eggleston AK, et al. **Trends Genet** 1996 Jan;12(1):20–6 (65 ref.)

Deletions in the 3' untranslated region of cowpea chlorotic mottle virus transgene reduce recovery of recombinant viruses in transgenic plants. Greene AE, et al. **Virology** 1996 Nov 1;225(1):231–4

[Induction of tumor-specific cytotoxic T-lymphocytes by non-replicating, Melan-A27-35 expressing recombinant Vaccinia viruses in vitro] Marti WR, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:85–9 (Eng. Abstr.) **(Ger)**

[Non-replicating recombinant Vaccinia viruses are potent vectors for gene expression of T-cell co-stimulating molecules in vitro] Oertli D, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:79–84 (Eng. Abstr.) **(Ger)**

[Use of recombinant DNA techniques in circulatory system diseases. Use of DNA analysis for evaluating diseases of circulation] Buraczyńska M, et al. **Pol Merkuriusz Lek** 1996 Aug;1(2):143–6 (31 ref.) **(Pol)**

[Use of recombinant DNA technique in circulatory system diseases. A short outline of recombinant DNA methods] Buraczyńska M, et al. **Pol Merkuriusz Lek** 1996 Aug; 1(2):139–42 (18 ref.) (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Specificity in V(D)J recombination: new lessons from biochemistry and genetics. Ramsden DA, et al. **Curr Opin Immunol** 1997 Feb;9(1):114–20 (42 ref.)

Identification of a recombinational breakpoint at the BAT5 locus in three intra-H-2 recombinant inbred mouse strains. Mathew PA, et al. **Exp Clin Immunogenet** 1995;12(4):261–7

Coding joint formation in a cell-free V(D)J recombination system. Leu TM, et al. **Immunity** 1997 Aug;7(2):303–14

The effects of transfected mutant and wild type RAG genes in different cell types. Döbbeling U. **Immunol Invest** 1996 Sep-Nov;25(5–6):469–79

The role of recombination signal sequences in the preferential joining by deletion in DH-JH recombination and in the ordered rearrangement of the IgH locus. Pan PY, et al. **Int Immunol** 1997 Apr;9(4):515–22

Interdependence of N nucleotide addition and recombination site choice in V(D)J rearrangement. Kepler TB, et al. **J Immunol** 1996 Nov 15;157(10):4451–7

Definition of a large region of RAG1 that is important for coimmunoprecipitation of RAG2. McMahan CJ, et al. **J Immunol** 1997 Mar 1;158(5):2202–10

PHYSIOLOGY

Interhomolog bias during meiotic recombination: meiotic functions promote a highly differentiated interhomolog-only pathway. Schwacha A, et al. **Cell** 1997 Sep 19;90(6):1123–35

Meiotic recombination in yeast: coronation of the double-strand-break repair model. Stahl F. **Cell** 1996 Dec 13;87(6):965–8 (10 ref.)

Anti-(U1)snRNP autoantibodies inhibit homologous pairing activity of the human recombination complex. Dowjat K. **DNA Cell Biol** 1997 Jul;16(7):819–27

Purification and characterization of XRad51.1 protein, Xenopus RAD51 homologue: recombinant XRad51.1 promotes strand exchange reaction. Maeshima K, et al. **Genes Cells** 1996 Dec;1(12):1057–68

Conditional mutagenesis in mice: the Cre/loxP recombination system. Plück A. **Int J Exp Pathol** 1996 Dec;77(6):269–78 (15 ref.)

Biochemical properties of RuvBD113N: a mutation in helicase motif II of the RuvB hexamer affects DNA binding and ATPase activities. Mézard C, et al. **J Mol Biol** 1997 Sep 5;271(5):704–17

Communications between distant sites on supercoiled DNA from non-exponential kinetics for DNA synapsis by resolvase. Oram M, et al. **J Mol Biol** 1997 Jul 18; 270(3):396–412

Random walk models for DNA synapsis by resolvase. Sessions RB, et al. **J Mol Biol** 1997 Jul 18;270(3):413–25

The Drosophila melanogaster RAD54 homolog, DmRAD54, is involved in the repair of radiation damage and recombination. Kooistra R, et al. **Mol Cell Biol** 1997 Oct; 17(10):6097–104

The Bacillus subtilis chromatin-associated protein Hbsu is involved in DNA repair and recombination. Fernández S, et al. **Mol Microbiol** 1997 Mar;23(6):1169–79

Solving the cis/trans paradox in the Int family of recombinases [news] Mondragón A. **Nat Struct Biol** 1997 Jun;4(6):427–9

RADIATION EFFECTS

Cell cycle dependence of radiation-induced homologous recombination in cultured monkey cells. Cao J, et al. **Mutat Res** 1997 Mar 21;374(2):233–43

Increase in the mitotic recombination frequency in Drosophila melanogaster by magnetic field exposure and its suppression by vitamin E supplement. Koana T, et al. **Mutat Res** 1997 Jan 3;373(1):55–60

Low doses of ionizing radiation induce nuclear activity in human tumour cell lines which catalyzes homologous double-strand recombination. Lehnert S, et al. **Radiat Environ Biophys** 1997 Feb;36(1):67–70

RECORD LINKAGE, MEDICAL see **MEDICAL RECORD LINKAGE**

RECORDS

Association of use of a log book and experience as a preregistration house officer: interview survey. Paice E, et al. **BMJ** 1997 Jan 18;314(7075):213–5

Update: World War II—Certificate of Service papers [letter; comment] Duncan WH. **Del Med J** 1996 Aug;68(8):413. Comment on: Del Med J 1994 Dec;66(12):653–88.

Identifying deaths before 1979 using the Social Security Administration Death Master File. Schnorr TM, et al. **Epidemiology** 1997 May;8(3):321–3

Evolution of consanguinity in the Archbishopric of Santiago de Compostela (Spain) during 1900–1979. Varela TA, et al. **Hum Biol** 1997 Aug;69(4):517–31

The importance of long-term records in public health surveillance: the US weekly sanitary reports, 1888–1912, revisited. Cliff AD, et al. **J Public Health Med** 1997 Mar; 19(1):76–84

Development of a model angiography informed consent form based on a multiinstitutional survey of current forms. Briguglio J, et al. **J Vasc Interv Radiol** 1995 Nov–Dec; 6(6):971–8

From the Centers for Disease Control and Prevention. Community report cards—United States, 1996. **JAMA** 1997 Aug 6;278(5):382

Edward Jenner's 1794 accompt-book for the pocket or desk. Kirkup J. **Med Hist** 1996 Oct;40(4):487–98

Validation of interviewer- and self-administered physical activity checklists for fifth grade students. Sallis JF, et al. **Med Sci Sports Exerc** 1996 Jul;28(7):840–51

Characteristics of community report cards—United States, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Jul 18; 46(28):647–8, 655

Laboratory record keeping. Garabedian TE. **Nat Biotechnol** 1997 Aug;15(8):799–800

Harvard faces questions on missing data [news] Dalton R. **Nature** 1997 Mar 20;386(6622):206

California backs off destruction of records [news] Lehrman S. **Nature** 1996 Oct 10;383(6600):470

California drops plan to destroy records [news] Lehrman S. **Nature** 1996 Oct 24;383(6602):657

Understanding the etiology of serious medical events involving children: implications for pediatricians and their risk managers. Pichert JW, et al. **Pediatr Ann** 1997 Mar; 26(3):160–4, 167–8, 170–2

Narcotic regulation in the United States: taking the pain out of analgesic therapy. Davidson G. **Semin Vet Med Surg (Small Anim)** 1997 May;12(2):133–42

Computer automation in veterinary hospitals. Rogers H. **Semin Vet Med Surg (Small Anim)** 1996 May;11(2):63–73

Protecting confidentiality in small population health and environmental statistics. Cox LH. **Stat Med** 1996 Sep 15–30; 15(17–18):1895–905

LEGISLATION & JURISPRUDENCE

Public can check doctors' background under new US law [news] Rutter T. **BMJ** 1996 Nov 9;313(7066):1165

Report charges "cover-up" by Canada's blood overseers [news] Kondro W. **Lancet** 1997 Feb 1;349(9048):336

STANDARDS

Evidence for and impact of selective reporting of trauma triage mechanism criteria. Burstein JL, et al. **Acad Emerg Med** 1996 Nov;3(11):1011–5

Vocabulary for use in measurement procedures and description of reference materials in laboratory medicine. Dybkaer R. **Eur J Clin Chem Clin Biochem** 1997 Feb; 35(2):141–73

Feasibility of an antibiotic order form. First experience in the department of internal medicine of a university hospital. Blok WL, et al. **Pharm World Sci** 1996 Aug;18(4):137–41

STATISTICS & NUMERICAL DATA

Utility of telephone company records for epidemiologic studies of cellular telephones [see comments] Funch DP, et al. **Epidemiology** 1996 May;7(3):299–302. Comment in: Epidemiology 1996 May;7(3):219. Comment in: Epidemiology 1997 Jul;8(4):466–7.

The assessment of refill compliance using pharmacy records: methods, validity, and applications. Steiner JF, et al. **J Clin Epidemiol** 1997 Jan;50(1):105–16 (61 ref.)

Reinventing SSI statistics: SSA's new longitudinal file. Pickett CD, et al. **Soc Secur Bull** 1996 Summer;59(2):31–56

VETERINARY

Evaluation of postoperative complications following elective surgeries of dogs and cats at private practices using computer records. Pollari FL, et al. **Can Vet J** 1996 Nov; 37(11):672–8

Benefits of a national database for patient medical records. Featherston RH. **J Am Vet Med Assoc** 1997 Jan 15; 210(2):173–4

FELASA recommendations for the health monitoring of mouse, rat, hamster, gerbil, guinea pig and rabbit experimental units. Report of the Federation of European Laboratory Animal Science Associations (FELASA) Working Group on Animal Health accepted by the FELASA Board of Management, November 1995. Rehbinder C, et al. **Lab Anim** 1996 Jul;30(3):193–208

RECORDS CONTROL see **FORMS AND RECORDS CONTROL**

RECOVERY PERIOD, ANESTHESIA see **ANESTHESIA**

RECOVERY PERIOD, ANESTHESIA

RECOVERY PERIOD

RECOVERY ROOM

Postoperative hypoxaemia during transport and in the recovery area. George JM, et al.
Ann Acad Med Singapore 1995 Nov;24(6):807–11

ECONOMICS

[Evaluation of direct theoretical cost of passage in anesthesia recovery room] Tibi-Lévy Y, et al.
Ann Fr Anesth Reanim 1996;15(7):1113–20 (Eng. Abstr.) **(Fre)**

MANPOWER

A statistical method for predicting postanesthesia care unit staffing needs. Dexter F, et al. **AORN J** 1997 May; 65(5):947–50, 952–3, 955–7

RECOVERY ROOM NURSING see **POSTANESTHESIA NURSING**

RECREATION

The effect of a chocolate bar supplementation on moderate exercise recovery of recreational runners. Chen JD, et al. **Biomed Environ Sci** 1996 Sep;9(2–3):247–55
Significant changes in thyroid hormone parameters after a four week recreation period at the North Sea without alterations of iodine intake. Reinhardt W, et al.
Eur J Med Res 1997 May 28;2(5):209–14
Leprosy among circus workers. Kaur M, et al.
Indian J Lepr 1996 Oct–Dec;68(4):363–6
Physical activity levels of 5–11-year-old children in England: cumulative evidence from three direct observation studies. Sleap M, et al. **Int J Sports Med** 1996 May;17(4):248–53
Emergency medicine at a large rock festival [letter; comment] Reddy IS, et al. **J Accid Emerg Med** 1996 Jul;13(4):303. Comment on: J Accid Emerg Med 1996 Jan;13(1):26–7.
Personal watercraft-related injuries in Arkansas: 1994–1996. Jones CS. **J Ark Med Soc** 1997 Aug;94(3):111–2
Spinal cord injuries in Louisiana due to falls from deer stands, 1985–1994. Lawrence DW, et al. **J La State Med Soc** 1996 Feb;148(2):77–9
From the Centers for Disease Control and Prevention. Outbreak of leptospirosis among white-water rafters—Costa Rica, 1996. **JAMA** 1997 Sep 10; 278(10):808–9
From the Centers for Disease Control and Prevention. Hunting-associated injuries and wearing "hunter" orange clothing—New York, 1989–1995. **JAMA** 1996 Nov 13; 276(18):1462, 1464
Personal watercraft-related injuries. A growing public health concern. Branche CM, et al. **JAMA** 1997 Aug 27; 278(8):663–5
Immunization carnivals for the hard-to-reach. Brown SG, et al. **MCN Am J Matern Child Nurs** 1996 Mar–Apr; 21(2):100–3
Sports and recreation for physically challenged athletes in Maryland and beyond. Herman G. **Md Med J** 1996 Aug; 45(8):691–4
Hunting-associated injuries and wearing "hunter" orange clothing—New York, 1989–1995.
MMWR Morb Mortal Wkly Rep 1996 Oct 18;45(41):884–7
Outbreak of leptospirosis among white-water rafters—Costa Rica, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Jun 27; 46(25):577–9
Interpersonal deficits and time spent in exercise or active recreation. Pinto RM, et al. **Psychol Rep** 1996 Feb; 78(1):323–8
Recreational exercise in arthritis. Minor MA, et al.
Rheum Dis Clin North Am 1996 Aug;22(3):563–77 (51 ref.)
Risk perception, federal spending, and the Savannah River Site: attitudes of hunters and fishermen. Burger J, et al. **Risk Anal** 1997 Jun;17(3):313–20
[Instead of vacation at shoal resort, a stay in the hospital—aspects of illness during vacation] Klewer I, et al. **Rehabilitation (Stuttg)** 1996 Aug;35(3):179–82 (Eng. Abstr.) **(Ger)**
[The conceptual characteristics of developing family rest and physician activities at the sanatorium-health resort stage for the rehabilitation of different patient contingents] Vinokurov BL, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Nov-Dec;(6):33–8 **(Rus)**
[The climatic and recreational potential of the Far East seaside region] Derkacheva LN.
Vopr Kurortol Fizioter Lech Fiz Kult 1997 May–Jun; (3):31–3 **(Rus)**
[Problems in the systematization of natural ecological factors in recreation] Veremchuk LV.
Vopr Kurortol Fizioter Lech Fiz Kult 1996 Jul–Aug;(4):32–3 **(Rus)**

PHYSIOLOGY

Anthropometric, strength, endurance and flexibility characteristics of elite and recreational climbers. Grant S, et al. **J Sports Sci** 1996 Aug;14(4):301–9

RECREATIONAL DRUGS see **STREET DRUGS**

RECRUITMENT (NEUROLOGY)

Artificial control of glottic adduction for aspiration by orderly recruitment in the canine. Broniatowski M, et al. **Dysphagia** 1997 Spring;12(2):93–7
Motor unit recruitment order during voluntary and electrically induced contractions in the tibialis anterior. Feiereisen P, et al. **Exp Brain Res** 1997 Mar;114(1):117–23
Recruitment of triceps surae motor units in the decerebrate cat. I. Independence of type S units in soleus and medial gastrocnemius muscles. Dacko SM, et al.
J Neurophysiol 1996 May;75(5):1997–2004

PHYSIOLOGY

The kindling-activated neuronal network: recruitment of somatostatin-synthesizing neurons. Pretel S, et al.
Brain Res Bull 1996;41(4):237–47
Motor unit recruitment strategy changes with skill acquisition. Bernardi M, et al. **Eur J Appl Physiol** 1996; 74(1–2):52–9
Recruitment characteristics of nerve fascicles stimulated by a multigroove electrode. Koole P, et al.
IEEE Trans Rehabil Eng 1997 Mar;5(1):40–50
In vivo IIX and IIB fiber recruitment in gastrocnemius muscle of the rat is compartment related. De Ruiter CJ, et al. **J Appl Physiol** 1996 Aug;81(2):933–42
Frequency-dependent changes of regional cerebral blood flow during finger movements: functional MRI compared to PET. Sadato N, et al. **J Cereb Blood Flow Metab** 1997 Jun;17(6):670–9
Recruitment of GABAergic inhibition and synchronization of inhibitory interneurons in rat neocortex. Benardo LS. **J Neurophysiol** 1997 Jun;77(6):3134–44
Recruitment of triceps surae motor units in the decerebrate cat. II. Heterogeneity among soleus motor units. Sokoloff AJ, et al. **J Neurophysiol** 1996 May;75(5):2005–16
Activation of type-identified motor units during centrally evoked contractions in the cat medial gastrocnemius muscle. I. Motor-unit recruitment. Tansey KE, et al.
J Neurophysiol 1996 Jan;75(1):26–37
One-trial adaptation of movement to changes in load. Weeks DL, et al. **J Neurophysiol** 1996 Jan;75(1):60–74
Contraction patterns of intrinsic laryngeal muscles induced by orderly recruitment in the canine. Broniatowski M, et al. **Laryngoscope** 1996 Dec;106(12 Pt 1):1510–5
Synaptic recruitment during long-term potentiation at synapses of the medial perforant pathway in the dentate gyrus of the rat brain. Wang S, et al. **Synapse** 1996 Jan; 22(1):78–86

RECRUITMENT DETECTION (AUDIOLOGY)

METHODS

[Recruitment detection—a comparison of category loudness scaling and classical supra-threshold audiometry] Kiessling J, et al. **Laryngorhinootologie** 1996 Jan;75(1):10–7 (Eng. Abstr.) **(Ger)**

RECRUITMENT, LOUDNESS

Simulation of the effect of threshold elevation and loudness recruitment combined with reduced frequency selectivity on the intelligibility of speech in noise. Nejime Y, et al.
J Acoust Soc Am 1997 Jul;102(1):603–15
Effect of hearing aid experience on preferred insertion gain selection. Kuk FK, et al. **J Am Acad Audiol** 1996 Aug; 7(4):274–81

RECTAL DISEASES

Anorectal disease: how to relieve pain and improve other symptoms. Hyman NH. **Geriatrics** 1997 Apr;52(4):75–6, 85–8, 91 (0 ref.)
The Tripartite Meeting. London, England, 8–10 July 1996. Abstracts. **Int J Colorectal Dis** 1996;11(3):123–56
Association of Coloproctology of Great Britain and Ireland annual meeting, June 16, 1997 and the ECCP biennial meeting, June 17–19, 1997. Abstracts.
Int J Colorectal Dis 1997;12(3):117–203
HPV infection and disease in men. Palefsky JM, et al.
Obstet Gynecol Clin North Am 1996 Dec;23(4):895–916 (43 ref.)
[Perianal glands of Hermann and their pathology. Review of the literature. Apropos of a cyst case] Gullino D, et al. **J Chir (Paris)** 1996;133(9–10):422–6 (31 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Pre- and postoperative state of coagulation and fibrinolysis in plasma of patients with benign and malignant colorectal disease—a preliminary study. Iversen LH, et al.
Thromb Haemost 1996 Oct;76(4):523–8

CHEMICALLY INDUCED

Rectal malacoplakia in a renal transplant recipient. Ourahma S, et al. **Transplant Proc** 1996 Oct;28(5):2824
[Caustic proctitis after lavage: an African cause of rectal hemorrhage (letter)] Iiboudo D, et al. **Med Trop (Mars)** 1996;56(2):204–5 **(Fre)**

COMPLICATIONS

Human immunodeficiency virus infection in Mexico City. Rectal bleeding and anal warts as risk factors among men reporting sex with men. Coplan PM, et al.
Am J Epidemiol 1996 Nov 1;144(9):817–27
Systemic lupus erythematosus and amyloidosis. Al-Hoqail I, et al. **Clin Rheumatol** 1997 Jun;16(4):422–4
Initial North American experience with botulinum toxin type A for treatment of anismus. Joo JS, et al.
Dis Colon Rectum 1996 Oct;39(10):1107–11
Internal rectal intussusception seldom develops into total rectal prolapse. Mellgren A, et al. **Dis Colon Rectum** 1997 Jul;40(7):817–20
Endometriosis of the rectum causing bowel obstruction: a case report. Midorikawa Y, et al.
Hepatogastroenterology 1997 May–Jun;44(15):706–9
Primary adenocarcinoma in the urethrorectal fistula. Takaki R, et al. **Int J Urol** 1997 Jan;4(1):97–8
An unusual case of ischio rectal abscess presenting as acute urinary retention. Lennon GM, et al. **Ir J Med Sci** 1997 Jan–Mar;166(1):26–7
[Anorectal causes of constipation problems in dogs] Neumann S. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct; 103(10):428–30 (7 ref.) (Eng. Abstr.) **(Ger)**
[Hypomelanosis of Ito: autism, segmental dilatation of colon and unusual neuroimaging findings] Hermida A, et al.
Rev Neurol 1997 Jan;25(137):71–4 (Eng. Abstr.) **(Spa)**

CONGENITAL

Tail-gut cyst. Jain P, et al. **Australas Radiol** 1997 May; 41(2):207–10 (10 ref.)
Tailgut Cyst, an unusual evolution. Roche B, et al.
Swiss Surg 1997;3(1):21–4

DIAGNOSIS

Lymphoid hyperplasia of lower rectum mimics a polypoid type of malignant lymphoma [letter] Morita H, et al.
Am J Gastroenterol 1996 Nov;91(11):2453–4
Re: manometric tests of anorectal function in the management of defecation disorders [letter; comment] Wexner SD.
Am J Gastroenterol 1997 Aug;92(8):1400. Comment on: Am J Gastroenterol 1997 Mar;92(3):469–75.
Colorectal diseases. Isbister WH. **Aust N Z J Surg** 1997 Jul; 67(7):457–67 (65 ref.)
Viscous fluid expulsion in the evaluation of the constipated patient. Alstrup N, et al. **Dis Colon Rectum** 1997 May; 40(5):580–4
Diagnosis and outcome of isolated rectal tuberculosis. Puri AS, et al. **Dis Colon Rectum** 1996 Oct;39(10):1126–9
Imaging of the anorectal region. Hussain SM, et al.
Eur J Radiol 1996 May;22(2):116–22 (19 ref.)
Rectal Dieulafoy's or angiodysplasia? [letter] Kalman DR, et al. **Gastrointest Endosc** 1997 Jul;46(1):91–2
Bleeding anorectal varices: successful treatment with transjugular intrahepatic portosystemic shunting (TIPS). Fantin AC, et al. **Gut** 1996 Jun;38(6):932–5
Tailgut cyst: multilocular cystic appearance on MRI. Kim MJ, et al. **J Comput Assist Tomogr** 1997 Sep–Oct; 21(5):731–2
Importance of unreported rectal bleeding. Chambliss L, et al. **J Fam Pract** 1997 Apr;44(4):341–2
Case report: endoscopic ultrasonographic findings of mucosal prolapse syndrome. Motomura Y, et al.
J Gastroenterol Hepatol 1997 Mar;12(3):207–10
MR imaging of anorectal Crohn disease: a pictorial essay. O'Donovan AN, et al. **Radiographics** 1997 Jan–Feb; 17(1):101–7
[Colorectal hemorrhages] Dell'Antonio A, et al.
Ann Ital Chir 1996 Mar–Apr;67(2):197–203 (Eng. Abstr.) **(Ita)**
[Emergencies in colorectal diseases: role of the endoscopist] Frezza M, et al. **Ann Ital Chir** 1996 Mar–Apr;67(2):161–9 (Eng. Abstr.) **(Ita)**
[Emergencies in colorectal surgery: diagnostic imaging] Zernich RC. **Ann Ital Chir** 1996 Mar–Apr;67(2):155–9 (Eng. Abstr.) **(Ita)**
[Hematoma of the rectus sheath as a gynecologic problem] Czekanowski R, et al. **Ginekol Pol** 1996 Jun;67(6):322–4 (Eng. Abstr.) **(Pol)**

DIET THERAPY

Effect of fiber supplements on internal bleeding hemorrhoids. Perez-Miranda M, et al. **Hepatogastroenterology** 1996 Nov-Dec;43(12):1504–7

DRUG THERAPY

Initial North American experience with botulinum toxin type A for treatment of anismus. Joo JS, et al.
Dis Colon Rectum 1996 Oct;39(10):1107–11
Diagnosis and outcome of isolated rectal tuberculosis. Puri AS, et al. **Dis Colon Rectum** 1996 Oct;39(10):1126–9

ETIOLOGY

Rectal bleeding: a rare complication of abdominal pregnancy. Saravanane C, et al. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):124–5
The incidence and causes of rectal bleeding [letter; comment] Edwards A, et al. **Br J Gen Pract** 1996 Oct;46(411):625. Comment on: Br J Gen Pract 1996 Mar;46(404):161–4.

Predicting late rectal complications following prostate conformal radiotherapy using biologically effective doses and normalized dose-surface histograms. MacKay RI, et al. **Br J Radiol** 1997 May;70(833):517–26

Prevalence and factors influencing hemorrhoids, anorectal varices, and colopathy in patients with portal hypertension. Misra SP, et al. **Endoscopy** 1996 May;28(4):340–5

Rectal stricture caused by actinomycosis of the pelvis. Bertram P, et al. **Eur J Surg** 1996 Oct;162(10):837–9 (8 ref.)

Metastatic pulmonary and rectal calcifications secondary to primary hyperparathyroidism. De Nardi P, et al. **Eur J Surg** 1996 Sep;162(9):735–8

Solitary rectal ulcer syndrome: stopping the prolapse heals the ulceration. Frizelle FA, et al. **G Chir** 1996 Jun–Jul; 17(6–7):320–2

Anorectal diseases. Parè AA, et al. **Gastroenterol Clin North Am** 1997 Jun;26(2):367–76 (68 ref.)

Repetitive sigmoid stimulation induces rectal hyperalgesia in patients with irritable bowel syndrome. Munakata J, et al. **Gastroenterology** 1997 Jan;112(1):55–63

The prediction of late rectal complications in patients treated with high dose-rate brachytherapy for carcinoma of the cervix. Clark BG, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15;38(5):989–93

Conformal irradiation of the prostate: estimating long-term rectal bleeding risk using dose-volume histograms. Hartford AC, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):721–30

Late rectal sequelae following definitive radiation therapy for carcinoma of the uterine cervix: a dosimetric analysis. Roeske JC, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):351–8

Rectal bleeding after conformal 3D treatment of prostate cancer: time to occurrence, response to treatment and duration of morbidity. Teshima T, et al. **Int J Radiat Oncol Biol Phys** 1997 Aug 1;39(1):77–83

Rectal bleeding from a mucous fistula secondary to a Dieulafoy's lesion. Abdelmalek MF, et al. **J Clin Gastroenterol** 1997 Jun;24(4):259–61

Massive gastrointestinal bleeding from a Dieulafoy-like lesion of the rectum. Eguchi S, et al. **J Clin Gastroenterol** 1997 Jun;24(4):262–3 (6 ref.)

Recognition and treatment of venous malformations of the rectum. Keljo DJ, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):442–6

Intrascrotal epidermoid cyst with extension to the rectum wall: a case report. Picanço-Neto JM, et al. **J Pediatr Surg** 1997 May;32(5):766–7

Complicated anorectal sepsis. Gilliland R, et al. **Surg Clin North Am** 1997 Feb;77(1):115–53 (205 ref.)

[Factitious rectorrhagia: a case of Münchausen syndrome (letter)] Louvety S, et al. **Gastroenterol Clin Biol** 1997; 21(4):345–6 **(Fre)**

[Rectal malacoplakia in a patient with renal transplantation (letter)] Ourahma S, et al. **Presse Med** 1996 Nov 9; 25(34):1650 **(Fre)**

[A case of mesenteric panniculitis associated ulcerative lesion of the rectum during follow-up] Nakano O, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Mar;94(3):204–9 **(Jpn)**

[Anorectal diseases in patients with human immunodeficiency virus (HIV) infection] Rius J, et al. **Rev Gastroenterol Mex** 1996 Apr–Jun;61(2):139–46 (18 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

High frequency of K-ras mutations in human colorectal hyperplastic polyps [see comments] Otori K, et al. **Gut** 1997 May;40(5):660–3. Comment in: Gut 1997 May;40(5):691–2.

[Uncommon familial disease of female transmission] Disdier P, et al. **Rev Med Interne** 1997;18 Suppl 3:311s–313s **(Fre)**

MICROBIOLOGY

AIDS-related extrapulmonary Pneumocystis carinii infection presenting as a solitary rectal ulcer. Yoshida EM, et al. **Can J Gastroenterol** 1996 Oct;10(6):401–4

Rectal stricture: a complication of tuberculosis. Das PC, et al. **J Pediatr Surg** 1996 Jul;31(7):983–4

PATHOLOGY

Pathology of idiopathic megarectum and megacolon. Gattuso JM, et al. **Gut** 1997 Aug;41(2):252–7

Metaplastic (hyperplastic) polyps of the large bowel: benign neoplasms after all? [comment] Williams GT. **Gut** 1997 May;40(5):691–2. Comment on: Gut 1997 May;40(5):660–3.

Enteric innervation in idiopathic megarectum and megacolon. Gattuso JM, et al. **Int J Colorectal Dis** 1996; 11(6):264–71

Reproducible rat model for comparing late rectal toxicity from different brachytherapy techniques. White JR, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1155–61

An unusual rectal polyp. Bhandarkar DS, et al. **Postgrad Med J** 1997 May;73(859):313–4

[A case of death from hemorrhoidal hemorrhaging] Barinov EKh, et al. **Sud Med Ekspert** 1996 Oct–Dec;39(4):49 **(Rus)**

PHYSIOPATHOLOGY

Re: manometric tests of anorectal function in the management of defecation disorders [letter; comment] Wexner SD. **Am J Gastroenterol** 1997 Aug;92(8):1400. Comment on: Am J Gastroenterol 1997 Mar;92(3):469–75.

Anal sensitivity test: what does it measure and do we need it? Cause or derivative of anorectal complaints. Felt-Bersma RJ, et al. **Dis Colon Rectum** 1997 Jul; 40(7):811–6

Does surgical repair of a rectocele improve rectal emptying? Karlbom U, et al. **Dis Colon Rectum** 1996 Nov; 39(11):1296–302

Variation in pudendal nerve terminal motor latency according to disease. Pfeifer J, et al. **Dis Colon Rectum** 1997 Jan;40(1):79–83

Paroxysmal anal hyperkinesis: a characteristic feature of proctalgia fugax. Rao SS, et al. **Gut** 1996 Oct;39(4):609–12

Anterior rectocele and anorectal dysfunction. Pucciani F, et al. **Int J Colorectal Dis** 1996;11(1):1–9

Physiology and pathophysiology of anal function. Rasmussen OO, et al. **Scand J Gastroenterol Suppl** 1996;216:169–74 (46 ref.)

[A new approach of functional recto-anal exploration: the compliance of the rectum and the anal canal] Arsac M, et al. **Bull Acad Natl Med** 1996 Apr;180(4):747–64; discussion 765–8 (Eng. Abstr.) **(Fre)**

[Anorectal dynamic disorders] Pigot F, et al. **Gastroenterol Clin Biol** 1997;21(1):17–27 (100 ref.) **(Fre)**

PREVENTION & CONTROL

Control of vancomycin-resistant enterococcus [letter; comment] Lai KK. **Ann Intern Med** 1997 Jun 15; 126(12):1000–1. Comment on: Ann Intern Med 1996 Sep 15;125(6):448–56.

RADIOGRAPHY

Defaeco-peritoneography in the diagnosis of rectal intussusception and rectal prolapse. Bremmer S, et al. **Acta Radiol** 1997 Jul;38(4 Pt 1):578–83

Dynamic cystoproctography: a unifying diagnostic approach to pelvic floor and anorectal dysfunction. Maglinte DD, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):759–67

Role of defecography in predicting clinical outcome of rectocele repair. van Dam JH, et al. **Dis Colon Rectum** 1997 Feb;40(2):201–7

Computed tomography of the rectosigmoid region. Dixon AK. **Eur J Radiol** 1996 May;22(2):107–15 (39 ref.)

[The computed tomographic finding of sigmoid-rectal invagination and the radiological-macropathological correlation] Rodekohr S, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):78–80 (10 ref.) **(Ger)**

[Diagnosis with defecography of puborectal muscle syndrome] Salzano A, et al. **Radiol Med (Torino)** 1997 Apr; 93(4):396–400 (Eng. Abstr.) **(Ita)**

SURGERY

Outcome after incision and drainage with fistulotomy for ischiorectal abscess. Cox SW, et al. **Am Surg** 1997 Aug; 63(8):686–9

Outcome of laparoscopic colorectal surgery in older patients. Reissman P, et al. **Am Surg** 1996 Dec;62(12):1060–3

Laparoscopic-assisted large bowel resection. Kok KY, et al. **Ann Acad Med Singapore** 1996 Sep;25(5):650–2

Emergency colorectal surgery: our results and complications. Repše S, et al. **Ann Ital Chir** 1996 Mar–Apr;67(2):205–9

Anorectal surgery in patients infected with human immunodeficiency virus: factors associated with delayed wound healing. Lord RV. **Ann Surg** 1997 Jul;226(1):92–9

The management of left-sided large bowel obstruction: an audit [see comments] Isbister WH, et al. **Aust N Z J Surg** 1996 Sep;66(9):602–4. Comment in: Aust N Z J Surg 1996 Sep;66(9):584.

Colorectal diseases. Isbister WH. **Aust N Z J Surg** 1997 Jul; 67(7):457–67 (65 ref.)

The management of large bowel obstruction [comment] McLeish A. **Aust N Z J Surg** 1996 Sep;66(9):584. Comment on: Aust N Z J Surg 1996 Sep;66(9):602–4.

Rectovaginal septum adenomyotic nodules: a series of 500 cases. Donnez J, et al. **Br J Obstet Gynaecol** 1997 Sep; 104(9):1014–8

Posterior colporrhaphy: its effect on bowel and sexual function [letter; comment] Hogston P. **Br J Obstet Gynaecol** 1997 Aug;104(8):972–3. Comment on: Br J Obstet Gynaecol 1997 Jan;104(1):82–6.

Posterior colporrhaphy: its effects on bowel and sexual function [see comments] Kahn MA, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):82–6. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):972–3.

Removal of the anus during proctectomy. Frizelle FA, et al. **Br J Surg** 1997 Jan;84(1):68

Endorectal repair of rectocele revisited [see comments] Khubchandani IT, et al. **Br J Surg** 1997 Jan;84(1):89–91. Comment in: Br J Surg 1997 Jul;84(7):1034.

Transanal resection of a low rectal stenosis by rectal advancement and rectoanal anastomosis. Panis Y, et al. **Br J Surg** 1997 Jan;84(1):92–3

A new way to prevent leakage of glycine during endoscopic transanal resection of rectal lesions [letter; comment] Ramanand BS, et al. **Br J Surg** 1997 Apr;84(4):581. Comment on: Br J Surg 1996 Oct;83(10):1467.

Endorectal repair of rectocoele revisited [letter; comment] Rao GN, et al. **Br J Surg** 1997 Jul;84(7):1034. Comment on: Br J Surg 1997 Jan;84(1):89–91.

Management of benign rectal stricture by implantation of a self-expanding prosthesis. Salinas JC, et al. **Br J Surg** 1997 May;84(5):674

Anorectal abscesses: need for accurate anatomical localization of the disease. Nomikos IN. **Clin Anat** 1997; 10(4):239–44

Current advances and controversies in the surgical therapy for anorectal motility disorders. Nyam DC, et al. **Dig Dis** 1997;15 Suppl 1:93–103 (72 ref.)

Intraoperative laparoscopic complications. Are we getting better? Agachan F, et al. **Dis Colon Rectum** 1996 Oct;39(10 Suppl):S14–9

Acute colonic surgery and unrecognized hypothyroidism: a warning. Report of six cases. Bergeron E, et al. **Dis Colon Rectum** 1997 Jul;40(7):859–61

Restorative proctocolectomy for idiopathic megarectum: postoperative recovery of hypotonic anal sphincters. Report of two cases. Brown SR, et al. **Dis Colon Rectum** 1997 May;40(5):625–7

Fecal diversion in management of large infected perianal lesions. Ger R. **Dis Colon Rectum** 1996 Nov;39(11):1327–9

Outcomes of anorectal disease in a health maintenance organization setting. The need for colorectal surgeons. Goldstein ET. **Dis Colon Rectum** 1996 Nov;39(11):1193–8

Fistulotomy in the management of acute anorectal sepsis [letter] Grace R. **Dis Colon Rectum** 1997 Sep;40(9):1130–1

Avoidance of anastomotic complications in low anterior resection of the rectum. Hirsch CJ, et al. **Dis Colon Rectum** 1997 Jan;40(1):42–6

Does surgical repair of a rectocele improve rectal emptying? Karlbom U, et al. **Dis Colon Rectum** 1996 Nov; 39(11):1296–302

Use of epidural anesthesia and spontaneous ventilation during transabdominal colon and rectal procedures in selected high-risk patient groups. Kolker AR, et al. **Dis Colon Rectum** 1997 Mar;40(3):339–43

Complications of laparoscopic colorectal surgery. Analysis and comparison of early vs. latter experience. Larach SW, et al. **Dis Colon Rectum** 1997 May;40(5):592–6

Excellent outcome using selective criteria for rectocele repair. Murthy VK, et al. **Dis Colon Rectum** 1996 Apr; 39(4):374–8

Mechanical bowel preparation for elective colorectal surgery. A prospective, randomized, surgeon-blinded trial comparing sodium phosphate and polyethylene glycol-based oral lavage solutions. Oliveira L, et al. **Dis Colon Rectum** 1997 May;40(5):585–91

Hook-needle puncture. A new technique of local anesthesia for anorectal surgery. Sobrado CW, et al. **Dis Colon Rectum** 1996 Nov;39(11):1330–1

Prospective randomized trial of drainage alone vs. drainage and fistulotomy for acute perianal abscesses with proven internal opening. Tang CL, et al. **Dis Colon Rectum** 1996 Dec;39(12):1415–7

Role of defecography in predicting clinical outcome of rectocele repair. van Dam JH, et al. **Dis Colon Rectum** 1997 Feb;40(2):201–7

Treatment of colorectal and ileoanal anastomotic sinuses. Whitlow CB, et al. **Dis Colon Rectum** 1997 Jul;40(7):760–3

Treatment of bowel endometriosis: a report of six cases of colorectal endometriosis and a survey of the literature. Verspyck E, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jan;71(1):81–4 (24 ref.)

Prerectal peritoneal pouch with herniating small bowel -- a unique cause of severe constipation in a child. Wester T, et al. **Eur J Pediatr Surg** 1997 Feb;7(1):50–1

Functional results after abdominal suture rectopexy for rectal prolapse or intussusception. Graf W, et al. **Eur J Surg** 1996 Nov;162(11):905–11

Coloanal anastomosis for benign lesions: long term functional results in 11 patients. Panis Y, et al. **Eur J Surg** 1996 Jul; 162(7):555–9

A randomized prospective study of endoscopic bipolar electrocoagulation and heater probe treatment of chronic rectal bleeding from radiation telangiectasia. Jensen DM, et al. **Gastrointest Endosc** 1997 Jan;45(1):20–5

Laparoscopic colo-rectal surgery: analysis of 113 cases. Boulez J, et al. **Hepatogastroenterology** 1997 Jan–Feb; 44(13):40–4

IIIrd European Workshop on Digestive Surgery. Brussels, Belgium, 13–14 May 1997. **Int J Colorectal Dis** 1997; 12(2):97–105

Large bowel volvulus. Isbister WH. **Int J Colorectal Dis** 1996; 11(2):96–8

Early postoperative feeding after elective colorectal surgery is not a benefit unique to laparoscopy-assisted procedures [see comments] Ortiz H, et al. **Int J Colorectal Dis** 1996; 11(5):246–9. Comment in: Int J Colorectal Dis 1997;12(1):51–2.

Suprapubic versus transurethral catheterisation of males undergoing pelvic colorectal surgery. Ratnaval CD, et al. **Int J Colorectal Dis** 1996;11(4):177–9

Buttonhole ulceration and perforation of the rectum. Khare VK, et al. **J Am Assoc Gynecol Laparosc** 1993 Nov; 1(1):12–5

Rectal atresia and stenosis [letter; comment] Demircan M, et al. **J Pediatr Surg** 1996 Oct;31(10):1465. Comment on: J Pediatr Surg 1995 Nov;30(11):1546–50.

Randomised comparison of leucocyte-depleted versus buffy-coat-poor blood transfusion and complications after colorectal surgery [see comments] Jensen LS, et al. **Lancet** 1996 Sep 28;348(9031):841–5. Comment in: Lancet 1996 Dec 14;348(9042):1665–6.

A comparison between colorectal surgical admissions in Maori and nonMaori. Isbister WH. **N Z Med J** 1996 Nov 22;109(1034):442–4

Repair of a long-standing coccygeal hernia and open wound. Zook NL, et al. **Plast Reconstr Surg** 1997 Jul;100(1):96–9 (14 ref.)

Massive arterial bleeding from a single rectal vessel. Harrison JD, et al. **Postgrad Med J** 1997 May;73(859):303–4

Surgical therapy for Crohn's disease of the colon and rectum. Fazio VW, et al. **Surg Clin North Am** 1997 Feb; 77(1):197–210 (89 ref.)

Complicated anorectal sepsis. Gilliland R, et al. **Surg Clin North Am** 1997 Feb;77(1):115–53 (205 ref.)

Transanal endoscopic microsurgery. Saclarides TJ. **Surg Clin North Am** 1997 Feb;77(1):229–39 (10 ref.)

Laparoscopic colorectal surgery. Do we get faster? Agachan F, et al. **Surg Endosc** 1997 Apr;11(4):331–5

Laparoscopic surgery for lower gastrointestinal fistulas. Joo JS, et al. **Surg Endosc** 1997 Feb;11(2):116–8

Laparoscopic colorectal surgery: analysis of 140 cases. Wexner SD, et al. **Surg Endosc** 1996 Feb;10(2):133–6

Anorectal stenosis in a neonate: report of a case and review of the Japanese literature. Hamada Y, et al. **Surg Today** 1996;26(10):814–7 (20 ref.)

Retractile mesenteritis of the large bowel: report of a case and review of the literature. Ikoma A, et al. **Surg Today** 1996;26(6):435–8 (21 ref.)

Laparoscopic colorectal surgery: ascending the learning curve. Reissman P, et al. **World J Surg** 1996 Mar–Apr; 20(3):277–81; discussion 282

[Current anesthesia problems in minor proctological operations] Khinev S, et al. **Khirurgiia (Sofiia)** 1996; 49(6):38–9 (Eng. Abstr.) **(Bul)**

[Problems of postoperative drug analgesia in proctological surgery] Khinev S, et al. **Khirurgiia (Sofiia)** 1996;49(6):40–1 (Eng. Abstr.) **(Bul)**

[Leukocyte filtration in elective colorectal surgery. Reduced transfusion associated immunosuppression after bedside procedures] Jensen LS, et al. **Ugeskr Laeger** 1997 Aug 18; 159(34):5093–7 (Eng. Abstr.) **(Dan)**

[Bowel endometriosis. Eight cases of colorectal resection] Canis M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996; 25(7):699–709 (63 ref.) (Eng. Abstr.) **(Fre)**

[Treatment of rectovaginal endometriosis] Querleu D. **Presse Med** 1997 May 17;26(16):774–7 (10 ref.) (Eng. Abstr.) **(Fre)**

[A rare form of pelvic floor hernia. Combined (intra- and extraperitoneal) monolateral, trans-levator, posterior perineal hernia] Hehl AJ, et al. **Chirurg** 1996 Dec; 67(12):1270–2 (Eng. Abstr.) **(Ger)**

[Mason paracoccygeal trans-sphincteric approach to the rectum: good outcome only in highly selective indications?] Meissner K, et al. **Chirurg** 1996 Feb;67(2):145–9 (Eng. Abstr.) **(Ger)**

[Sources of hazards in laparoscopic colon surgery and how to avoid them] Christen D, et al. **Swiss Surg** 1996;2(5):203–7 (11 ref.) (Eng. Abstr.) **(Ger)**

[The need for blood transfusions in elective colon surgery—is preoperative autotransfusion useful?] Spalinger R, et al. **Swiss Surg** 1996;2(5):208–11 (Eng. Abstr.) **(Ger)**

[Emergencies in colorectal diseases: role of the endoscopist] Frezza M, et al. **Ann Ital Chir** 1996 Mar–Apr;67(2):161–9 (Eng. Abstr.) **(Ita)**

[Emergencies in colorectal diseases. Conclusions] Tendella E. **Ann Ital Chir** 1996 Mar–Apr;67(2):215 (Eng. Abstr.) **(Ita)**

[Emergencies in colorectal diseases. Introduction] Tendella E. **Ann Ital Chir** 1996 Mar–Apr;67(2):151–2 (Eng. Abstr.) **(Ita)**

[Emergencies in colorectal surgery: diagnostic imaging] Zernich RC. **Ann Ital Chir** 1996 Mar–Apr;67(2):155–9 (Eng. Abstr.) **(Ita)**

THERAPY

A novel therapeutic approach for rectal varices: a case report of rectal varices treated with double balloon-occluded embolotherapy. Kimura T, et al. **Am J Gastroenterol** 1997 May;92(5):883–6 (14 ref.)

Sengstaken tube for bleeding rectal angiodysplasia [letter; comment] Basso L, et al. **Br J Surg** 1996 Dec;83(12):1795 . Comment on: Br J Surg 1996 Aug;83(8):1111.

Long-term expandable stent as a definitive treatment for benign rectal stenosis. Cascales-Sanchez P, et al. **Br J Surg** 1997 Jun;84(6):840–1

Sengstaken tube for bleeding rectal angiodysplasia [see comments] [published erratum appears in Br J Surg 1996 Oct;83(10):1477] Roy MK, et al. **Br J Surg** 1996 Aug; 83(8):1111. Comment in: Br J Surg 1996 Dec;83(12):1795.

Aggressive giant condyloma acuminatum associated with oncogenic human papilloma virus: a case report. Kibrité A, et al. **Can J Surg** 1997 Apr;40(2):143–5 (10 ref.)

Technical report: perirectal abscess drainage—a simple modification in technique using a vascular sheath. D'Costa H, et al. **Clin Radiol** 1997 Jun;52(6):469–71

The anal sphincter in idiopathic megarectum: effects of manual disimpaction under general anesthetic. Gattuso JM, et al. **Dis Colon Rectum** 1996 Apr;39(4):435–9

Biofeedback for intractable rectal pain: outcome and predictors of success. Gilliland R, et al. **Dis Colon Rectum** 1997 Feb;40(2):190–6

Endoscopic dilation of rectal strictures: a prospective study of 18 cases. Johansson C. **Dis Colon Rectum** 1996 Apr; 39(4):423–8

Endoscopic balloon dilation of strictures complicating solitary rectal ulcer syndrome. Over H, et al. **Endoscopy** 1997 Jun;29(5):427–9

Dieulafoy's lesion in the rectum. Yeoh KG, et al. **Gastrointest Endosc** 1996 Jun;43(6):614–6

The management of infectious and noninfectious anorectal complications in patients with leukemia. North JH Jr, et al. **J Am Coll Surg** 1996 Oct;183(4):322–8

ULTRASONOGRAPHY

Endoluminal ultrasound diagnosis and operative management of rectal endometriosis. Schröder J, et al. **Dis Colon Rectum** 1997 May;40(5):614–7

Endosonography in colitis cystica profunda and solitary rectal ulcer syndrome. Petritsch W, et al. **Gastrointest Endosc** 1996 Dec;44(6):746–51

[Report of experiences of 3 years' use of rectal endosonography in a surgical department of basic and routine care] Templin F, et al. **Chirurg** 1997 Feb; 68(2):Suppl 42–6 **(Ger)**

VETERINARY

Thrombosis resulting in rectal perforation in a horse. Guglick MA, et al. **J Am Vet Med Assoc** 1996 Sep 15;209(6):1125–7

Anorectal lymphadenopathy causing colic, perirectal abscesses, or both in five young horses. Magee AA, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):804–7

Use of colostomy to manage rectal disease in dogs. Hardie EM, et al. **Vet Surg** 1997 Jul–Aug;26(4):270–4

RECTAL DRUG ADMINISTRATION see **ADMINISTRATION, RECTAL**

RECTAL FISTULA

[Magnetic resonance study of complex anal fistulae. Preliminary results apropos of 28 cases] Grandjean JP, et al. **Ann Chir** 1997;51(4):314–7 (Eng. Abstr.) **(Fre)**

[Complex anal fistulas] Correa Rovelo JM, et al. **Rev Gastroenterol Mex** 1996 Apr–Jun;61(2):147–51 (30 ref.) (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Basal cell carcinoma arising in a fistula-in-ano. Kulaylat MN, et al. **Am Surg** 1996 Dec;62(12):1000–2 (26 ref.)

Calculi within an anal fistula tract. Fahal AH, et al. **Br J Surg** 1997 Jul;84(7):1001

An unusual variant of rectal atresia with rectovestibular fistula. Kulshrestha S, et al. **J Pediatr Surg** 1997 Jun; 32(6):921–2

Adenocarcinoma in the anal canal associated with a fistula: report of a case. Taniguchi S, et al. **Surg Today** 1996; 26(9):707–10

CONGENITAL

Urologic problems in anorectal malformations. Part 2: functional urologic sequelae. Boemers TM, et al. **J Pediatr Surg** 1996 May;31(5):634–7

Perineal canal. Wakhlu A, et al. **Pediatr Surg Int** 1997 Apr; 12(4):283–5

DIAGNOSIS

Rectal perflubron: new application in MRI of perirectal fistulae. Mergo PJ, et al. **J Comput Assist Tomogr** 1997 Mar–Apr;21(2):259–64

Anorectal fistula: an unusual presentation in a Crohn's disease patient. Tsui BC, et al. **J Emerg Med** 1997 Jan–Feb; 15(1):39–43

Clostridium tertium meningitis as the presenting sign of a meningocele in a twelve-year-old child. Kourtis AP, et al. **Pediatr Infect Dis J** 1997 May;16(5):527–9

[Magnetic resonance study of complex anal fistulae. Preliminary results apropos of 28 cases] Grandjean JP, et al. **Ann Chir** 1997;51(4):314–7 (Eng. Abstr.) **(Fre)**

[Anorectal abscess and fistula] De Lorenzi D. **Ther Umsch** 1997 Apr;54(4):197–201 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Rectourethral fistula due to Crohn's disease. Cools P, et al. **Acta Urol Belg** 1996 Sep;64(3):47–8

Malakoplakia of the prostate forming a fistulous tract to rectum: a case report. Chang KM, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Dec; 58(6):439–43

Perianal abscess in Crohn's disease. Makowiec F, et al. **Dis Colon Rectum** 1997 Apr;40(4):443–50

Fistulae and abscesses in symptomatic perianal Crohn's disease. Solomon MJ. **Int J Colorectal Dis** 1996;11(5):222–6

Perineal ileal conduit—cutaneous fistula. Anjum MI, et al. **Int Urol Nephrol** 1997;29(2):189–93

MICROBIOLOGY

Fistula-in-ano: don't forget tuberculosis [letter] Korman TM, et al. **Med J Aust** 1997 Apr 7;166(7):387, 390

PATHOLOGY

Adenocarcinoma complicating an anorectal sinus in a patient with Crohn's disease. Lumley JW, et al. **Aust N Z J Surg** 1997 Jan;67(1):66–7

Perianal abscess and fistula in ano in infancy and childhood: a clinicopathological study. al-Salem AH, et al. **Pediatr Pathol Lab Med** 1996 Sep–Oct;16(5):755–64

RADIOGRAPHY

[Paraproctic fistula in acetabulum loosening after implantation of a total hip endoprosthesis. A rare complication] Loggen B, et al. **Unfallchirurg** 1997 May; 100(5):402–5 (Eng. Abstr.) **(Ger)**

SURGERY

The York Mason approach to repair of iatrogenic rectourinary fistulae. Fengler SA, et al. **Am J Surg** 1997 Mar;173(3):213–7

Outcome after incision and drainage with fistulotomy for ischiorectal abscess. Cox SW, et al. **Am Surg** 1997 Aug; 63(8):686–9

Fistula-in-ano: a prospective study of 107 patients. Barwood N, et al. **Aust N Z J Surg** 1997 Feb–Mar;67(2–3):98–102

Practice parameters for treatment of fistula-in-ano. The Standards Practice Task Force. The American Society of Colon and Rectal Surgeons. **Dis Colon Rectum** 1996 Dec; 39(12):1361–2

Practice parameters for treatment of fistula-in-ano—supporting documentation. The Standards Practice Task Force. The American Society of Colon and Rectal Surgeons. **Dis Colon Rectum** 1996 Dec; 39(12):1363–72 (62 ref.)

Fistulotomy in the management of acute anorectal sepsis [letter] Grace R. **Dis Colon Rectum** 1997 Sep;40(9):1130–1

Long-term, indwelling setons for low transsphincteric and intersphincteric anal fistulas. Experience with 108 cases. Lentner A, et al. **Dis Colon Rectum** 1996 Oct; 39(10):1097–101 (15 ref.)

Audit of sphincter repair. Factors associated with poor outcome. Nikiteas N, et al. **Dis Colon Rectum** 1996 Oct; 39(10):1164–70

Prospective randomized trial of drainage alone vs. drainage and fistulotomy for acute perianal abscesses with proven internal opening. Tang CL, et al. **Dis Colon Rectum** 1996 Dec;39(12):1415–7

Double seton—a new modified approach to high transsphincteric anal fistula. Walfisch S, et al. **Dis Colon Rectum** 1997 Jun;40(6):731–2

"Fistula in ano: a surgical audit" [letter; comment] Isbister WH. **Int J Colorectal Dis** 1996;11(4):200. Comment on: Int J Colorectal Dis 1995;10(4):235.

Anorectal malformation: a new anatomic variant resembling an H-type fistula. Willems M, et al. **J Pediatr Surg** 1996 Dec;31(12):1682–4

Experience with 30 posttraumatic rectourethral fistulas: presentation of posterior transsphincteric anterior rectal wall advancement. al-Ali M, et al. **J Urol** 1997 Aug; 158(2):421–4

What is new in the treatment of perianal fistulae in Crohn's disease? Delemarre JB. **Neth J Med** 1996 Feb;48(2):74–6

[Current anesthesia problems in minor proctological operations] Khinev S, et al. **Khirurgiia (Sofiia)** 1996; 49(6):38–9 (Eng. Abstr.) **(Bul)**

[Endo-anal and transperineal continence preserving closure techniques in surgical treatment of Crohn fistulas. A prospective long-term study of 186 patients] Athanasiadis S, et al. **Chirurg** 1996 Jan;67(1):59–71 (Eng. Abstr.) **(Ger)**

[Anodermal advancement flap-plasty as alternative treatment method to endorectal closure techniques in therapy of high anal fistulas. A prospective study of 31 patients] Köhler A, et al. **Chirurg** 1996 Dec;67(12):1244–50 (Eng. Abstr.) **(Ger)**

[Results with a new therapy concept in anal fistula: suture of the anal sphincter] Gemsenjäger E. **Schweiz Med Wochenschr** 1996 Nov 23;126(47):2021–5 (Eng. Abstr.) **(Ger)**

[Preserving continence in treatment of inflammatory bowel disease associated anal fistulas] Farthmann EH, et al. **Schweiz Rundsch Med Prax** 1997 Jun 18;86(25–26):1068–70 (11 ref.) (Eng. Abstr.) **(Ger)**

[Surgery of anal fistulas] Ricchi E, et al. **Minerva Chir** 1997 Jun;52(6):735–41 (Eng. Abstr.) **(Ita)**

[Fistulectomy with closure by first intention in the treatment of perianal fistulae] Toccaceli S, et al. **Minerva Chir** 1997 Apr;52(4):377–81 (Eng. Abstr.) **(Ita)**

[Recto-cutaneous penile fistula. A description of a clinical case and review of the literature] Brunero M, et al. **Minerva Pediatr** 1996 Sep;48(9):393–6 (Eng. Abstr.) **(Ita)**

[Simultaneous treatment of an anal abscess and fistula] Vrzgula A, et al. **Rozhl Chir** 1996 Apr;75(4):219–21 (Eng. Abstr.) **(Slo)**

THERAPY

Ksharsootra (medicated seton) treatment for fistula-in-ano. Mohite JD, et al. **Indian J Gastroenterol** 1997 Jul;16(3):96–7

Percutaneous ureteral clipping: long-term results and complications. Farrell T, et al. **J Vasc Interv Radiol** 1997

May-Jun;8(3):453-6

ULTRASONOGRAPHY

Endosonographic detection of a mucinous adenocarcinoma in an anal fistula. Cerwenka H, et al. **Endoscopy** 1997 May; 29(4):335

[Transanal ultrasonography in the study of fistulas of perianal abscess] Piccinini EE, et al. **Minerva Chir** 1996 Sep; 51(9):653-9 (Eng. Abstr.) **(Ita)**

VETERINARY

Surgical correction of anorectal atresia and rectovaginal fistula in an alpaca cria. Carraro DB, et al. **Aust Vet J** 1996 Nov;74(5):352-4

RECTAL GLAND see SALT GLAND

RECTAL NEOPLASMS

Perineal and perirectal sarcomas: report of two cases. Kessler KJ, et al. **Dis Colon Rectum** 1996 Apr;39(4):468-72 (27 ref.)

Anorectal melanoma in The Netherlands: a report of 63 patients. Roumen RM. **Eur J Surg Oncol** 1996 Dec; 22(6):598-601

Colorectal polyps and their relationship to cancer. Kim EC, et al. **Gastroenterol Clin North Am** 1997 Mar;26(1):1-17 (56 ref.)

Comparison of two techniques of transrectal ultrasonography for the assessment of local extent of polypoid tumours of the rectum. Rafaelsen SR, et al. **Int J Colorectal Dis** 1996; 11(4):183-6

NCCN Colorectal Cancer Practice Guidelines. The National Comprehensive Cancer Network. Engstrom PF, et al. **Oncology (Huntingt)** 1996 Nov;10(11 Suppl):140-75

Case report of primary squamous carcinoma of the rectum. Martinez-Gonzalez MD, et al. **Rev Invest Clin** 1996 Nov-Dec;48(6):453-6

Application of rectal stents for palliation of obstructing rectosigmoid cancer. Dohmoto M, et al. **Surg Endosc** 1997 Jul;11(7):758-61

Local and regional recurrence of carcinoma of the colon and rectum: I. Tumour-host factors and adjuvant therapy. Lee YT. **Surg Oncol** 1995;4(6):283-93 (42 ref.)

Neoplasms in long-term Hartmann's pouches. Thaemert BC, et al. **Wis Med J** 1996 Feb;95(2):105-7

[Rectal lymphomas and human immunodeficiency virus (letter)] Amiel V, et al. **Gastroenterol Clin Biol** 1997; 21(1):82-3 **(Fre)**

[Cancer of the rectum: staging and curative surgical treatment] De Calan L, et al. **Gastroenterol Clin Biol** 1996; 20(8-9):645-56 (115 ref.) **(Fre)**

[Malignant melanoma of the esophagus and anorectum] Stremmel C, et al. **Dtsch Med Wochenschr** 1996 Dec 13; 121(50):1573-5 (16 ref.) **(Ger)**

[A case report of primary Burkitt lymphoma of the rectum] Arano Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Oct;93(10):743-6 **(Jpn)**

[Regression of 4th-stage cancer of the rectum] Petrov VP, et al. **Khirurgiia (Mosk)** 1996;(2):119 **(Rus)**

BLOOD

Blood lipid and lipoprotein levels and the risk of cancer of the colon and rectum. A prospective study of 62,173 Norwegian men and women. Gaard M, et al. **Scand J Gastroenterol** 1997 Feb;32(2):162-8

BLOOD SUPPLY

Angiogenesis in colorectal cancer. Saclarides TJ. **Surg Clin North Am** 1997 Feb;77(1):253-60 (56 ref.)

CHEMISTRY

Ki-67 index in fine needle aspiration cytology specimens from primary and recurrent rectal cancer. Wiig JN, et al. **Acta Oncol** 1996;35 Suppl 8:119-21

Expression of tissue-type plasminogen activator, plasminogen activator inhibitor and von Willebrand factor in the supernatant of endothelial cell cultures in response to the seeding of adenocarcinoma cell line HRT-18. Morganti M, et al. **Biomed Pharmacother** 1996;50(8):373-5

The flow cytometric analysis of total p53 protein content and proliferation indices in colorectal cancer, in relation to clinical outcome. Rew DA, et al. **Eur J Surg Oncol** 1996 Oct;22(5):508-15

Relationship between hormone receptor levels and cell-kinetics in human colorectal cancer. Korenaga D, et al. **Hepatogastroenterology** 1997 Jan-Feb;44(13):78-83

COMPLICATIONS

EBV-associated anorectal lymphomas in patients with acquired immune deficiency syndrome. Ioachim HL, et al. **Am J Surg Pathol** 1997 Sep;21(9):997-1006 (56 ref.)

Bullous pemphigoid associated with internal malignancies: identification of 180-kDa antigen by western immunoblotting. Muramatsu T, et al. **Br J Dermatol** 1996 Nov;135(5):782-4

Imaging appearances of ileouterine fistula complicating recurrent adenocarcinoma of the rectum. Hession P, et al. **Br J Radiol** 1997 Apr;70:415-7

Successful outcome of treating hemolytic uremic syndrome associated with cancer chemotherapy with immunoadsorption. D'Souza RJ, et al. **Clin Nephrol** 1997 Jan;47(1):58-9

Papuloerythroderma of Ofuji: a report of 2 cases including the first European case associated with visceral carcinoma. Schepers C, et al. **Dermatology** 1996;193(2):131-5 (22 ref.)

Cancer in the anal canal (transitional zone) after restorative proctocolectomy with stapled ileal pouch-anal anastomosis. Sequens R. **Int J Colorectal Dis** 1997; 12(4):254-5

Unsuspected rectal adenocarcinoma causing a urinoma. Sayeed R, et al. **Int J Urol** 1997 Jan;4(1):99-100

Primary adenocarcinoma in the urethrorectal fistula. Takaki R, et al. **Int J Urol** 1997 Jan;4(1):97-8

Inflammatory cloacogenic polyp: an unrecognized cause of hematochezia and tenesmus in childhood. Poon KK, et al. **J Pediatr** 1997 Feb;130(2):327-9 (13 ref.)

Role of transanal endoscopic microsurgery in the palliative treatment of rectal cancer. Türler A, et al. **Scand J Gastroenterol** 1997 Jan;32(1):58-61

Perianal extramammary Paget's disease associated with primary linitis plastica of the rectum: report of a case. Ikoma A, et al. **Surg Today** 1996;26(9):711-4

Gastrointestinal lymphonodular hyperplasia and lymphoid polyps of the rectum--a rare coincidence. Rutsch F, et al. **Z Gastroenterol** 1997 Apr;35(4):271-5

[Cavernous hemangioma of the rectum: an uncommon cause of pelvic pain. Apropos of 2 cases] Lautard M, et al. **Chirurgie** 1997;122(2):149-52 (18 ref.) (Eng. Abstr.) **(Fre)**

[The acute toxicity of the simultaneous radiochemotherapy of rectal carcinoma] Rödel C, et al. **Strahlenther Onkol** 1997 Aug;173(8):415-21 (Eng. Abstr.) **(Ger)**

[A case of IGF-II producing rectal cancer with recurrent hypoglycemia] Yasuda T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Mar;94(3):210-4 **(Jpn)**

CONGENITAL

Congenital anorectal teratoma: report of a case. Jona JZ. **J Pediatr Surg** 1996 May;31(5):709-10

DIAGNOSIS

Is magnetic resonance imaging the method of choice in the diagnosis of recurrent rectal carcinoma [editorial; comment] Krestin GP. **Abdom Imaging** 1997 May-Jun; 22(3):343-5. Comment on: Abdom Imaging 1997 May-Jun;22(3):338-42.

MRI of recurrent rectosigmoid carcinoma [see comments] Markus J, et al. **Abdom Imaging** 1997 May-Jun;22(3):338-42 . Comment in: Abdom Imaging 1997 May-Jun;22(3):343-5.

Rectal tumours--MR imaging with endorectal and/or phased-array coils, and histopathological staging on giant sections. A comparative study. Blomqvist L, et al. **Acta Radiol** 1997 May;38(3):437-44

MR imaging, CT and CEA scintigraphy in the diagnosis of local recurrence of rectal carcinoma. Blomqvist L, et al. **Acta Radiol** 1996 Sep;37(5):779-84

Lymphoid hyperplasia of lower rectum mimics a polypoid type of malignant lymphoma [letter] Morita H, et al. **Am J Gastroenterol** 1996 Nov;91(11):2453-4

The potential role of fecal carbonic anhydrase II in screening for colorectal cancer. Yokoyama S, et al. **Am Surg** 1997 Mar;63(3):243-6; discussion 246-7

Modified clearing technique to identify lymph node metastases in post-irradiated surgical specimens from rectal adenocarcinoma. Sanchez W, et al. **Arch Med Res** 1996 Spring;27(1):31-6

Prostatic cancer presenting as a rectal mass: a surgical pitfall. Papa MZ, et al. **Br J Surg** 1997 Jan;84(1):69-70

Selective decrease of serum immunoglobulin G1 as a marker of malignant transformation in colorectal tissue. Schauenstein E, et al. **Cancer** 1997 Apr 15;79(8):1482-6

Case report: serous atrophy of bone marrow and subcutaneous tissue enhancement associated with recurrent rectal carcinoma: MR appearances. Amano Y, et al. **Comput Med Imaging Graph** 1996 May-Jun;20(3):183-5

Relationship between fecal sampling times and sensitivity and specificity of immunochemical fecal occult blood tests for colorectal cancer: a comparative study. Nakama H, et al. **Dis Colon Rectum** 1997 Jul;40(7):781-4

Retrorectal tumors complicating pregnancy. Report of two cases. Sobrado CW, et al. **Dis Colon Rectum** 1996 Oct; 39(10):1176-9 (13 ref.)

Small colorectal serrated adenomas: endoscopic findings. Jaramillo E, et al. **Endoscopy** 1997 Jan;29(1):1-3

Oesophageal cancer coexisting with colorectal lesions. Kuwano H, et al. **Eur J Surg** 1996 Oct;162(10):797-800

Suture granuloma in rectal anastomosis mistaken for locally recurrent cancer. Hizawa K, et al. **J Clin Gastroenterol** 1996 Jul;23(1):78-9

Diffuse cavernous hemangioma of the rectum: MR imaging with endorectal surface coil and sphincter-saving surgery. Hasegawa H, et al. **J Gastroenterol** 1996 Dec;31(6):875-9

Rectal carcinoma: prospective comparison of conventional and gadopentetate dimeglumine enhanced fat-suppressed MR imaging. Okizuka H, et al. **J Magn Reson Imaging** 1996 May-Jun;6(3):465-71

Synchronous multiple colorectal adenocarcinomas. Takeuchi H, et al. **J Surg Oncol** 1997 Apr;64(4):304-7

MR endoscopy: preliminary experience in human trials [published erratum appears in Radiology 1997 May;203(2):580] Feldman DR, et al. **Radiology** 1997 Mar; 202(3):868-70

Significance of serum iron and ferritin in patients with colorectal adenomas. Kishida T, et al. **Scand J Gastroenterol** 1997 Mar;32(3):233-7

[Patients' perception of symptoms in colorectal cancer. A cause of delay in diagnosis and treatment] Hansen HJ, et al. **Ugeskr Laeger** 1997 Mar 24;159(13):1941-4 (Eng. Abstr.) **(Dan)**

[Preoperative evaluation of cancers of the rectum] Detry R, et al. **Ann Chir** 1997;51(1):32-5 (Eng. Abstr.) **(Fre)**

[Malignant anorectal melanoma: description of a clinical case and review of the literature] Malaguarnera M, et al. **Bull Cancer** 1997 Apr;84(4):423-6 (35 ref.) (Eng. Abstr.) **(Fre)**

[Incidental detection of rectal lymphoma (letter)] Verger P, et al. **Presse Med** 1996 Sep 14;25(26):1213 **(Fre)**

[Paraneoplastic encephalomyeloneuritis with anti-Hu antibodies and cancer of the rectum] de Toffol B, et al. **Rev Neurol (Paris)** 1997 Mar;153(2):135-7 (Eng. Abstr.) **(Fre)**

[Malignant schwannoma of the rectum] Reinbold WD, et al. **Radiologe** 1996 Aug;36(8):663-6 (Eng. Abstr.) **(Ger)**

[Bladder and rectal infiltration by uterine carcinomas: the accuracy of CT and MRI compared to endoscopic procedures] Krestin GP, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Aug;167(2):125-31 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography and endosonography in the preoperative staging of advanced rectal carcinomas after hyperthermoradiochemotherapy] Schröder RJ, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Mar;166(3):199-205 (Eng. Abstr.) **(Ger)**

[Simultaneous occurrence of small intestine mesenchymoma and rectal carcinoma] Tasi R, et al. **Orv Hetil** 1997 Mar 30;138(13):805-6 (Eng. Abstr.) **(Hun)**

[Non-Hodgkin's lymphoma with perianal localization in patients with acquired immunodeficiency syndrome: a case report] Bianchi C, et al. **Ann Ital Chir** 1996 Mar-Apr; 67(2):277-80 (Eng. Abstr.) **(Ita)**

[Study on diagnostic and therapeutic behavior in tumors of the medial-lower third of the rectum in 2 Italian regions] Gennari L, et al. **Ann Ital Chir** 1996 Sep-Oct;67(5):653-7; discussion 657-9 (Eng. Abstr.) **(Ita)**

[Primary gastrointestinal localization of N-H lymphoma: authors' experience] Versaci A, et al. **G Chir** 1997 Jun-Jul; 18(6-7):340-3 (40 ref.) (Eng. Abstr.) **(Ita)**

[Role of computerized tomography following transrectal air insufflation and hypotonization and transrectal ultrasonography in the staging of rectal tumors] Osti MF, et al. **Radiol Med (Torino)** 1996 Nov;92(5):581-7 (Eng. Abstr.) **(Ita)**

[Clinical usefulness of serum CYFRA21-1 in colorectal cancer] Miyashita T, et al. **Gan To Kagaku Ryoho** 1996 Oct;23(12):1693-6 (Eng. Abstr.) **(Jpn)**

[A case of early rectal cancer with the sign of Leser-Trélat] Hattori M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Nov;93(11):841-4 **(Jpn)**

[Carcinoids of the large intestine] Petrov VP. **Vestn Khir Im I I Grek** 1996;(1):38-40 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Fluorouracil and high-dose leucovorin with radiotherapy as adjuvant therapy for rectal cancer. Results of a phase II study. Giralt J, et al. **Acta Oncol** 1997;36(1):51-4

Retrospective comparative analysis of 5FU + low-dose folinic acid vs. 5FU + high-dose folinic acid in the treatment of metastatic colorectal cancer. The Ottawa experience. Maroun JA, et al. **Am J Clin Oncol** 1997 Aug; 20(4):387-92

Double modulation with methotrexate and L-leucovorin of weekly 24- hour fluorouracil infusion in fluorouracil-refractory colorectal cancer. Colleoni M, et al. **Anticancer Res** 1996 Sep-Oct;16(5B):3101-4

Randomized controlled trial of postoperative radiotherapy and short-term time-scheduled 5-fluorouracil against surgery alone in the treatment of Dukes B and C rectal cancer. Norwegian Adjuvant Rectal Cancer Project Group. Tveit KM, et al. **Br J Surg** 1997 Aug;84(8):1130-5

Uracil and tegafur modulated with leucovorin: an effective regimen with low toxicity for the treatment of colorectal carcinoma in the elderly. Oncopaz Cooperative Group. Feliu J, et al. **Cancer** 1997 May 15;79(10):1884-9

Neoadjuvant intra-arterial polychemotherapy of locally advanced rectal cancer. Braun EM, et al. **Eur J Surg Oncol** 1997 Jun;23(3):228-32

"Sandwich" preoperative and postoperative combined chemotherapy and radiation in tethered and fixed rectal cancer: impact of treatment intensity on local control and survival. Chan AK, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):629-37

Locally advanced primary colorectal cancer: intraoperative electron and external beam irradiation +/- 5-FU. Gunderson LL, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):601-14

Preoperative 5-FU, low-dose leucovorin, and radiation therapy for locally advanced and unresectable rectal cancer. Minsky BD, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):289-95

A phase I pilot study of pelvic radiation and alpha-2A interferon in patients with locally advanced or recurrent

rectal cancer. Perera F, et al.
Int J Radiat Oncol Biol Phys 1997 Jan 15;37(2):297–303

Neoadjuvant treatment of local recurrence of rectal cancer: our experience. Iannace C, et al. **J Chemother** 1997 Apr; 9(2):147–8

Phase II study of trimetrexate, fluorouracil, and leucovorin for advanced colorectal cancer. Blanke CD, et al.
J Clin Oncol 1997 Mar;15(3):915–20

Fluorouracil and leucovorin with or without interferon alfa–2b in advanced colorectal cancer: analysis of a prospective randomized phase III trial. Hellenic Cooperative Oncology Group. Kosmidis PA, et al.
J Clin Oncol 1996 Oct;14(10):2682–7

Phase II study of irinotecan in the treatment of advanced colorectal cancer in chemotherapy–naive patients and patients pretreated with fluorouracil–based chemotherapy. Rougier P, et al. **J Clin Oncol** 1997 Jan;15(1):251–60

Adjuvant postoperative fluorouracil–modulated chemotherapy combined with pelvic radiation therapy for rectal cancer: initial results of intergroup 0114. Tepper JE, et al. **J Clin Oncol** 1997 May;15(5):2030–9

Re: A quality–adjusted time without symptoms or toxicity (Q–TWiST) analysis of adjuvant radiation therapy and chemotherapy for resectable rectal cancer [letter; comment] DeCosse JJ, et al. **J Natl Cancer Inst** 1996 Nov 20;88(22):1686. Comment on: J Natl Cancer Inst 1996 Aug 7;88(15):1039–45.

Postsurgical sequential methotrexate, fluorouracil, and leucovorin for advanced colorectal carcinoma: a preliminary study. Tokunaga Y, et al. **J Surg Oncol** 1997 Sep;66(1):45–50

Month–long postoperative radiotherapy and 5–FU improve survival in rectal cancer [news] **Oncology (Huntingt)** 1996 Sep;10(9):1311

Multidisciplinary management of resectable rectal cancer. Minsky BD. **Oncology (Huntingt)** 1996 Nov;10(11):1701–8, 1713–4; discussion 1714–18 (77 ref.)

Infusional chemoradiation for operable rectal cancer: post–, pre–, or nonoperative management? Rich TA.
Oncology (Huntingt) 1997 Mar;11(3):295–300, 305; discussion 306 passim (13 ref.)

Postoperative adjuvant chemoradiotherapy for rectal cancer: analysis of acute and chronic toxicity. Bertuccelli M, et al. **Tumori** 1997 Mar–Apr;83(2):599–603

Isolated pelvic perfusion for the treatment of unresectable primary or recurrent rectal cancer. Vaglini M, et al.
Tumori 1996 Sep–Oct;82(5):459–62

[Preoperative intraluminal 5–FU osmosis chemotherapy as an adjuvant to radical resection for rectal cancer] Lu J, et al. **Chung Hua Wai Ko Tsa Chih** 1996 Jan;34(1):54–6 (Eng. Abstr.) **(Chi)**

[Adjuvant combined radiochemotherapy of rectum carcinoma with long–term 5–fluorouracil infusion] Fischbach W. **Z Gastroenterol** 1997 Mar;35(3):227–8 **(Ger)**

[Low–dose cisplatin added to continuous infusion of 5–fluorouracil or oral administration of UFT for inoperable advanced or recurrent colorectal cancer] Asano M, et al.
Gan To Kagaku Ryoho 1997 Jan;24(1):55–60 (Eng. Abstr.) **(Jpn)**

[Moderately differentiated adenocarcinoma of the rectum: a case report of remarkable response to preoperative administration of FT suppository] Izumi M, et al.
Gan To Kagaku Ryoho 1997 Aug;24(10):1321–5 (10 ref.) (Eng. Abstr.) **(Jpn)**

[The current status of postoperative adjuvant chemotherapy for colorectal cancer] Kodaira S.
Gan To Kagaku Ryoho 1997 Aug;24(10):1230–8 (Eng. Abstr.) **(Jpn)**

[Preoperative chemoradiation therapy for lower rectal cancer] Murotani M, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1482–5 (Eng. Abstr.) **(Jpn)**

[A randomized comparative study of surgical adjuvant chemotherapy using 5–fluorouracil and dl–leucovorin with CDDP 5–FU and dl–leucovorin for colorectal cancer] Okabo S, et al. **Gan To Kagaku Ryoho** 1997 May; 24(7):849–54 (Eng. Abstr.) **(Jpn)**

[Case of prolonged use of high doses of opiates and opioids by oncologic surgical patient] Petrova VV, et al.
Anesteziol Reanimatol 1996 Jul–Aug;(4):21–2 **(Rus)**

[The intra–arterial chemotherapy of tumorous lesions of the stomach, rectum and liver] Hladkyĭ OV, et al.
Lik Sprava 1997 Mar–Apr;(2):86–90 (Eng. Abstr.) **(Ukr)**

ENZYMOLOGY

Evaluation of cathepsin D immunostaining in colorectal adenocarcinoma. Theodoropoulos GE, et al.
J Surg Oncol 1997 Aug;65(4):242–8

EPIDEMIOLOGY

Plasma carotenoids and the prevalence of adenomatous polyps of the distal colon and rectum. Shikany JM, et al.
Am J Epidemiol 1997 Mar 15;145(6):552–7

Colorectal carcinoma in different age groups: a population–based investigation. Fante R, et al.
Am J Gastroenterol 1997 Sep;92(9):1505–9

A prospective study of colon and rectal cancer among Hawaii Japanese men. Chyou PH, et al. **Ann Epidemiol** 1996 Jul; 6(4):276–82

Rectal cancer risk in hereditary nonpolyposis colorectal cancer after abdominal colectomy. International Collaborative Group on HNPCC. Rodríguez–Bigas MA, et al. **Ann Surg** 1997 Feb;225(2):202–7

A comparison of breast, colorectal, lung, and prostate cancers reported to the National Cancer Data Base and the Surveillance, Epidemiology, and End Results Program. Mettlin CJ, et al. **Cancer** 1997 May 15;79(10):2052–61

Annual changes in colorectal carcinoma incidence in Japan. Analysis of survey data on incidence in Aomori Prefecture. Tamura K, et al. **Cancer** 1996 Sep 15;78(6):1187–94

Nutrition and colorectal cancer. Potter JD.
Cancer Causes Control 1996 Jan;7(1):127–46 (278 ref.)

Dietary intake of specific carotenoids and vitamins A, C, and E, and prevalence of colorectal adenomas. Enger SM, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Mar; 5(3):147–53

Clinical features, frequency and prognosis of Dukes' A colorectal carcinoma: a population–based investigation. Di Gregorio C, et al. **Eur J Cancer** 1996 Oct;32A(11):1957–62

Local recurrence and survival in patients with rectal cancer, diagnosed 1981–86: a community hospital–based study in the south–east Netherlands. Mollen RM, et al.
Eur J Surg Oncol 1997 Feb;23(1):20–3

Distal hyperplastic polyps do not predict proximal adenomas: results from a multicentric study of colorectal adenomas. Sciallero S, et al. **Gastrointest Endosc** 1997 Aug; 46(2):124–30

Cancer of the colon and rectum in the first three decades of life. Shahrudin MD, et al. **Hepatogastroenterology** 1997 Mar–Apr;44(14):441–4

Food groups and risk of colorectal cancer in Italy. Franceschi S, et al. **Int J Cancer** 1997 Jul 3;72(1):56–61

Green tea consumption and the risk of pancreatic and colorectal cancers. Ji BT, et al. **Int J Cancer** 1997 Jan 27; 70(3):255–8

Association between age and local recurrence of rectal cancer: results from a retrospective study of 902 patients. Damhuis RA, et al. **Int J Colorectal Dis** 1997;12(4):235–9

A marked increase in the incidence of colorectal cancer over two decades in southwest Finland. Kemppainen M, et al.
J Clin Epidemiol 1997 Feb;50(2):147–51

On the role of aging in carcinogenesis. Benson D, et al.
Mutat Res 1996 Sep 23;356(2):209–16

Vegetables, fruits, and risk of colorectal cancer: a case–control study from Uruguay. Deneo–Pellegrini H, et al. **Nutr Cancer** 1996;25(3):297–304

Disease profile of colon and rectum carcinoma at Pelonomi Hospital, Bloemfontein. Bonnet GC, et al. **S Afr J Surg** 1997 May;35(2):63–5; discussion 65–7

Blood lipid and lipoprotein levels and the risk of cancer of the colon and rectum. A prospective study of 62,173 Norwegian men and women. Gaard M, et al.
Scand J Gastroenterol 1997 Feb;32(2):162–8

[Colorectal cancer] Kronborg O. **Ugeskr Laeger** 1997 Feb 17;159(8):1064–5 **(Dan)**

[Simultaneous screening of cancers of the breast, cervix, colon and rectum. The Isère experience] Exbrayat C, et al. **Bull Cancer** 1996 Aug;83(8):641–8 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Peutz–Jeghers syndrome associated with primary malignant melanoma of the rectum. Wong SS, et al.
Br J Dermatol 1996 Sep;135(3):439–42

Serum levels of vitamin D metabolites and the subsequent risk of colon and rectal cancer in Finnish men. Tangrea J, et al. **Cancer Causes Control** 1997 Jul;8(4):615–25

Supplementary iron intake and risk of cancer: reversed causality? Ullén H, et al. **Cancer Lett** 1997 Mar 19; 114(1–2):215–6

Fate of the rectal stump after colectomy and ileorectal anastomosis for familial adenomatous polyposis. Heiskanen I, et al. **Int J Colorectal Dis** 1997;12(1):9–13

Malignant fibrous histiocytoma after radiation therapy for prostate cancer: case report. Miro AG, et al.
J Chemother 1997 Apr;9(2):162

[A case of rectal cancer in adenoma diagnosed 7 years after renal transplantation] Kobayashi T, et al.
Nippon Shokakibyo Gakkai Zasshi 1996 Oct;93(10):738–42 **(Jpn)**

GENETICS

K–ras gene mutation is a useful predictor of the survival of early stage colorectal cancers. Lee JC, et al.
Anticancer Res 1996 Nov–Dec;16(6B):3839–44

K–ras mutation and loss of heterozygosity of chromosome 17p and survival in colorectal cancer. Fung C, et al.
Aust N Z J Surg 1997 May;67(5):239–44

Overexpression of p53 mRNA in colorectal cancer and its relationship to p53 gene mutation. el–Mahdani N, et al.
Br J Cancer 1997;75(4):528–36

Muir–Torre syndrome: clinical features and molecular genetic analysis. Esche C, et al. **Br J Dermatol** 1997 Jun; 136(6):913–7

The significance of allelic deletions and aneuploidy in colorectal carcinoma. Results of a 5–year follow–up study. Cohn KH, et al. **Cancer** 1997 Jan 15;79(2):233–44

Multiple synchronous primaries of the gastrointestinal tract: a molecular case report. Herring JA, et al. **Cancer Lett** 1996 Dec 20;110(1–2):1–9

Rectal adenosquamous carcinoma and carcinoma stomach in two family members. Misra V, et al.
Indian J Gastroenterol 1997 Apr;16(2):66–7

Microsatellite instability in sporadic–colon–cancer patients with and without liver metastases. Chen WS, et al.
Int J Cancer 1997 Aug 22;74(4):470–4

Similar rectal carcinoid tumors of two siblings with curative endoscopic snare resection. Maroy B.
J Clin Gastroenterol 1997 Mar;24(2):124–5

p53 gene mutation is not directly related to tumoricidal effects of preoperative radiochemohyperthermia therapy for rectal cancers. Ichikawa D, et al. **J Surg Oncol** 1996 Oct;63(2):87–90

A very large villous adenoma with an adjacent cancer of the rectum: an informative case for testing the proposed molecular basis of colorectal tumorigenesis. Kanaoka S, et al. **Jpn J Clin Oncol** 1996 Oct;26(5):384–90

[nm23 gene product/NDPK expression and its clinical significance in human colorectal carcinoma] Wang C, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1995 Dec; 24(6):356–8 (Eng. Abstr.) **(Chi)**

[Genetic and environmental factors in colorectal cancer. Mutations in the familial adenomatous polyposis gene] Steffensen IL, et al. **Tidsskr Nor Laegeforen** 1997 May 30; 117(14):2046–51 (25 ref.) (Eng. Abstr.) **(Nor)**

IMMUNOLOGY

Expression of tumor–related antigens Lewis(a) Lewis(b), X, Y, Span–1 and CEA in relation to differentiation and prognosis in rectal adenocarcinomas. Sun XF, et al.
APMIS 1996 Nov;104(11):784–8

Humoral immune response against p53 protein in patients with colorectal carcinoma. Angelopoulou K, et al.
Int J Cancer 1997 Jan 6;70(1):46–51

Cytotoxic T–cell clone against rectal carcinoma induced by stimulation of a patient's peripheral blood mononuclear cells with autologous cultured tumor cells. Jacob L, et al.
Int J Cancer 1997 May 2;71(3):325–32

[Detection of T–antigen in colorectal adenocarcinoma and polyps] Xu S, et al. **Chung Hua Nei Ko Tsa Chih** 1995 Oct;34(10):693–5 (Eng. Abstr.) **(Chi)**

[The relationship between selenium and immunity in large bowel cancer] Yu B, et al.
Chung Hua Wai Ko Tsa Chih 1996 Jan;34(1):50–3 (Eng. Abstr.) **(Chi)**

[The role of cell adhesion molecules in inflammatory bowel disease and colorectal cancer] Pedersen G, et al.
Ugeskr Laeger 1997 Aug 18;159(34):5077–84 (40 ref.) (Eng. Abstr.) **(Dan)**

[Carcinoembryonic antigen, CEA, in colorectal cancer. An insensitive marker which may be excluded from follow–ups] Wählby L. **Lakartidningen** 1997 Apr 30; 94(18):1716–8 (34 ref.) **(Swe)**

METABOLISM

Determination of protein synthesis in human rectal cancer in situ by continuous [1–13C]leucine infusion. Hartl WH, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E796–802

Immunohistochemical p53 overexpression correlated to c–erbB–2 and cathepsin D proteins in colorectal cancer. Caruso ML, et al. **Anticancer Res** 1996 Nov–Dec; 16(6B):3813–8

NM–23 H1 immunohistochemistry is not useful as predictor of metastatic potential of colorectal cancer. Lindmark G.
Br J Cancer 1996 Nov;74(9):1413–8

Prognostic significance of cytoplasmic p53 overexpression in colorectal cancer. An immunohistochemical analysis. Flamini G, et al. **Eur J Cancer** 1996 May;32A(5):802–6

Prognostic significance of p53 nuclear and cytoplasmic overexpression in right and left colorectal adenocarcinomas. Sun XF, et al. **Eur J Cancer** 1996 Oct; 32A(11):1963–7

p53 nuclear protein overexpression in colorectal cancer: a dominant predictor of survival in patients with advanced hepatic metastases. Belluco C, et al. **J Clin Oncol** 1996 Oct; 14(10):2696–701

The positive relationship between the expression of CD44 variant 6 and prognosis in colorectal cancer. Nihei Z, et al. **Surg Today** 1996;26(9):760–1

MICROBIOLOGY

[Intestinal bacterial flora and cancer of the large bowel] Yang FJ, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1996 Feb;17(1):52–3 (20 ref.) **(Chi)**

MORTALITY

Rectal carcinoma: are we making a difference? Hurst R, et al. **Am Surg** 1996 Oct;62(10):806–10

Carcinoid tumors of the rectum: effect of size, histopathology, and surgical treatment on metastasis free survival. Koura AN, et al. **Cancer** 1997 Apr 1;79(7):1294–8

Survival of colorectal carcinoma in the elderly. A prospective study of colorectal carcinoma and a five–year follow–up. Avital S, et al. **Dis Colon Rectum** 1997 May; 40(5):523–9

Rectal cancer: the influence of type of operation on local recurrence and survival. Bjerkeset T, et al. **Eur J Surg** 1996 Aug;162(8):643–8

Does lateral lymph node dissection improve survival in rectal carcinoma? Examination of node metastases by the clearing method. Hida J, et al. **J Am Coll Surg** 1997 May; 184(5):475–80

[Randomized population study of screening for intestinal cancer with Hemoccult-II] Kronborg O, et al. **Ugeskr Laeger** 1997 Aug 11;159(33):4977-81 (Eng. Abstr.) **(Dan)**

PATHOLOGY

Cathepsin B in the growth of colorectal cancer: increased activity of cathepsin B in human colorectal cancer. Satoh Y, et al. **Acta Med Okayama** 1996 Dec;50(6):305-11

Rim enhancement in colorectal metastases at CT during infusion hepatic arteriography. Does it represent liver parenchyma or live tumor cell zone? Irie T, et al. **Acta Radiol** 1997 May;38(3):416-21

Preoperative staging of rectal carcinoma using double-contrast MR imaging. Technical aspects and early clinical experiences. Wallengren NO, et al. **Acta Radiol** 1996 Sep;37(5):791-8

Accuracy of staging rectal tumors with contrast-enhanced transrectal MR imaging. Vogl TJ, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1427-34

Comparison of classic and quantitative prognostic factors in colorectal cancer. Ropponen K, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3875-82

Colorectal cancer after pelvic irradiation: case reports. Tsunoda A, et al. **Anticancer Res** 1997 Jan-Feb; 17(1B):729-32

The effect of tamoxifen on established human colorectal cancer cell lines in vitro. Ziv Y, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3767-71

Prognostic significance of radial margins of clearance in rectal cancer [letter; comment] Bozzetti F. **Br J Surg** 1996 Dec;83(12):1798. Comment on: Br J Surg 1996 Jun;83(6):781-5.

Brush cytology for the diagnosis of rectal carcinoma [letter; comment] al-Fallouji M, et al. **Br J Surg** 1997 Apr; 84(4):584. Comment on: Br J Surg 1996 Oct;83(10):1456-8.

Brush cytology for the diagnosis of rectal carcinoma [published erratum appears in Br J Surg 1996 Dec;83(12):1794] [see comments] Farouk R, et al. **Br J Surg** 1996 Oct;83(10):1456-8. Comment in: Br J Surg 1997 Apr;84(4):584.

Preoperative staging of rectal carcinoma by magnetic resonance imaging with a pelvic phased-array coil. Hadfield MB, et al. **Br J Surg** 1997 Apr;84(4):529-31

Brush cytology for the diagnosis of rectal carcinoma [letter; comment] Webb AJ. **Br J Surg** 1997 Apr;84(4):584. Comment on: Br J Surg 1996 Oct;83(10):1456-8.

Anorectal malignant melanoma. A clinicopathologic study, including immunohistochemistry and DNA flow cytometry. Ben-Izhak O, et al. **Cancer** 1997 Jan 1; 79(1):18-25

S-phase fraction and tumor aneuploidy in colorectal carcinoma of young patients. Cascinu S, et al. **Cancer** 1996 Nov 1;78(9):1857-60

Cancer cell morphology at the invasive front and expression of cell adhesion-related carbohydrate in the primary lesion of patients with colorectal carcinoma with liver metastasis. Ono M, et al. **Cancer** 1996 Sep 15;78(6):1179-86

Histologic features and clinical significance of venous invasion in colorectal carcinoma with hepatic metastasis. Ouchi K, et al. **Cancer** 1996 Dec 1;78(11):2313-7

Consecutive maintenance of human solitary and hereditary colorectal polyps in SCID mice. Kawaguchi T, et al. **Cancer Detect Prev** 1997;21(2):148-57

Second primary cancers after cancers of the colon and rectum in New South Wales, Australia, 1972-1991. McCredie M, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Mar; 6(3):155-60

Signet-ring cell carcinoma of the rectum with tonsillar metastasis: a case report. Wang WS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep; 58(3):209-12

Distal intramural spread in adenocarcinoma of the lower third of the rectum treated with total rectal resection and coloanal anastomosis. Andreola S, et al. **Dis Colon Rectum** 1997 Jan;40(1):25-9

Coexpression of Bcl-2, c-Myc, and p53 oncoproteins as prognostic discriminants in patients with colorectal carcinoma. Bhatavdekar JM, et al. **Dis Colon Rectum** 1997 Jul;40(7):785-90

Synchronous anorectal malignant melanoma and rectal adenocarcinoma: report of a case. Delikaris P, et al. **Dis Colon Rectum** 1997 Jan;40(1):105-8

Carcinoma of the rectum. Possible cellular predictors of metastatic potential and response to radiation therapy. Desai GR, et al. **Dis Colon Rectum** 1996 Oct;39(10):1090-6

Feasibility study for use of brush cytology as a complementary method for diagnosis of rectal cancer. Farouk R, et al. **Dis Colon Rectum** 1997 May;40(5):609-13

Analysis of regional lymph node metastases from rectal carcinoma by the clearing method. Justification of the use of sigmoid in J-pouch construction after low anterior resection. Hida J, et al. **Dis Colon Rectum** 1996 Nov; 39(11):1282-5

Preoperative staging of irradiated rectal cancers using digital rectal examination, computed tomography, endorectal ultrasound, and magnetic resonance imaging does not accurately predict T0,N0 pathology. Kahn H, et al. **Dis Colon Rectum** 1997 Feb;40(2):140-4

Selective chemoembolization in the management of hepatic metastases in refractory colorectal carcinoma: a phase II trial. Sanz-Altamira PM, et al. **Dis Colon Rectum** 1997 Jul; 40(7):770-5

Endoscopic appearance of primary anorectal melanoma. Gupta R, et al. **Endoscopy** 1997 Mar;29(3):230

Oxaliplatin with high-dose leucovorin and 5-fluorouracil 48-hour continuous infusion in pretreated metastatic colorectal cancer. de Gramont A, et al. **Eur J Cancer** 1997 Feb;33(2):214-9

A short diagnostic delay is more important for rectal cancer than for colonic cancer. Arbman G, et al. **Eur J Surg** 1996 Nov;162(11):899-904

Endoluminal ultrasound and low-field magnetic resonance imaging are superior to clinical examination in the preoperative staging of rectal cancer. Starck M, et al. **Eur J Surg** 1995 Nov;161(11):841-5

Neoadjuvant intra-arterial polychemotherapy of locally advanced rectal cancer. Braun EM, et al. **Eur J Surg Oncol** 1997 Jun;23(3):228-32

Pathological downstaging does not guide the need for IORT in primary locally advanced rectal cancer. Willett CG, et al. **Front Radiat Ther Oncol** 1997;31:245-6

A case of malignant melanoma in the anorectal region: colonoscopic features [letter] Amano K, et al. **Gastrointest Endosc** 1997 Jun;45(6):536-7

Growth of colorectal polyps: redetection and evaluation of unresected polyps for a period of three years [see comments] Hofstad B, et al. **Gut** 1996 Sep;39(3):449-56. Comment in: Gut 1996 Sep;39(3):492.

Effect of cereal fibre source and processing on rectal epithelial cell proliferation. Macrae FA, et al. **Gut** 1997 Aug;41(2):239-44

Redetection and growth of colorectal polyps [comment] Talbot IC. **Gut** 1996 Sep;39(3):492. Comment on: Gut 1996 Sep;39(3):449-56.

The regrowth of rectal adenocarcinoma after pre-operative radiotherapy with a report of two cases. Kotera H, et al. **Hepatogastroenterology** 1997 Mar-Apr;44(14):394-7

Differential activation of total and EGF receptor (EGF-R) tyrosine kinase (tyr-k) in the rectal mucosa in patients with adenomatous polyps, ulcerative colitis and colon cancer. Malecka-Panas E, et al. **Hepatogastroenterology** 1997 Mar-Apr;44(14):435-40

Metastatic potential of colorectal adenoma containing carcinoma determined by pre-operative assessment of morphology. Orita H, et al. **Hepatogastroenterology** 1997 Mar-Apr;44(14):452-7

Cytotoxic T-cell clone against rectal carcinoma induced by stimulation of a patient's peripheral blood mononuclear cells with autologous cultured tumor cells. Jacob L, et al. **Int J Cancer** 1997 May 2;71(3):325-32

Preoperative lymph node staging in rectal cancer: a difficult challenge. Detry RJ, et al. **Int J Colorectal Dis** 1996; 11(5):217-21

Pathological features of rectal cancer after preoperative radiochemotherapy. Dworak O, et al. **Int J Colorectal Dis** 1997;12(1):19-23

Evaluation of digitally guided fine needle aspiration cytology versus fine needle core biopsy for the diagnosis of recurrent rectal cancer. Wiig JN, et al. **Int J Colorectal Dis** 1996; 11(6):272-5

Endorectal magnetic resonance imaging in the preoperative staging of rectal tumors. Indinnimeo M, et al. **Int Surg** 1996 Oct-Dec;81(4):419-22

Large bowel adenomas: markers of risk and endpoints. Baron JA. **J Cell Biochem Suppl** 1996;25:142-8 (34 ref.)

Liver resection for colorectal metastases. Fong Y, et al. **J Clin Oncol** 1997 Mar;15(3):938-46

Colorectal cancer pathology reporting: a regional audit. Bull AD, et al. **J Clin Pathol** 1997 Feb;50(2):138-42

Peritoneal involvement by rectal cancer [letter; comment] Newland RC, et al. **J Clin Pathol** 1996 Aug;49(8):694-5. Comment on: J Clin Pathol 1995 Sep;48(9):849-55.

Florid oral manifestations in an atypical familial adenomatous polyposis family with late presentation of colorectal polyps. Thakker NS, et al. **J Oral Pathol Med** 1996 Sep; 25(8):459-62

Assessment of rectal tumor infiltration utilizing endorectal MR imaging and comparison with endoscopic rectal sonography. Zagoria RJ, et al. **J Surg Oncol** 1997 Apr; 64(4):312-7

Rectal adenocarcinoma with rhabdoid phenotype. Mačák J, et al. **Pathologica** 1995 Dec;87(6):696-9

An unusual rectal polyp. Bhandarkar DS, et al. **Postgrad Med J** 1997 May;73(859):313-4

Rectal cancer: evaluation of staging with endosonography. Lindmark GE, et al. **Radiology** 1997 Aug;204(2):533-8

Natural history of superficial depressed colorectal cancer: retrospective radiographic and histologic analysis. Matsui T, et al. **Radiology** 1996 Oct;201(1):226-32

Endobronchial metastasis from rectal adenocarcinoma. Lee YC, et al. **Respir Med** 1997 Apr;91(4):245-8

Colorectal cancer and peritoneal carcinomatosis. Cintron JR, et al. **Semin Surg Oncol** 1996 Jul-Aug;12(4):267-78 (17 ref.)

Management of pulmonary metastases from colorectal cancer. Vigneswaran WT. **Semin Surg Oncol** 1996 Jul-Aug; 12(4):264-6 (19 ref.)

Comparison by carcinoembryonic antigen doubling time of hepatic injection and infusion for unresectable hepatic metastasis from colorectal cancer. Ichikawa W, et al. **Surg Oncol** 1995;4(5):271-6

Re-resection for colorectal liver metastasis. Bismuth H, et al. **Surg Oncol Clin N Am** 1996 Apr;5(2):353-64 (52 ref.)

Nodal metastases in rectal cancer: the role of surgery in outcome. MacFarlane JK. **Surg Oncol Clin N Am** 1996 Jan;5(1):191-202 (41 ref.)

Primary malignant lymphoma of the rectum with distant metastasis to the stomach: report of a case. Nyui S, et al. **Surg Today** 1997;27(4):349-52

Carcinoids of the rectum: an evaluation of 1271 reported cases. Soga J. **Surg Today** 1997;27(2):112-9 (16 ref.)

Clinical significance of extrabowel skipped cancer infiltration in rectal cancer. Ueno H, et al. **Surg Today** 1997; 27(7):617-22

Temporomandibular joint metastasis from rectal carcinoma: CT findings before and after radiotherapy. A case report. Balestreri L, et al. **Tumori** 1997 May-Jun;83(3):718-20 (6 ref.)

Ureteroscopic diagnosis of intraluminal metastatic rectal carcinoma. Fazeli-Matin S, et al. **Urology** 1997 Jun; 49(6):955-6

[In situ observation of the relationship between apoptosis and proliferation in large bowel carcinoma and its precancerous lesion] Sun B, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Nov;76(11):848-51 (Eng. Abstr.) **(Chi)**

[A clinicopathological study of 3 dimensional structure in adenoma of large intestine] Zhang Y, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1995 Dec;24(6):363-5 (Eng. Abstr.) **(Chi)**

[Linitis plastica of the digestive tract. A case with involvement of the stomach and rectum] Berrada S, et al. **Ann Gastroenterol Hepatol (Paris)** 1996 May-Jun; 32(3):120-2 (Eng. Abstr.) **(Fre)**

[Primary ano-rectal melanoma. Report of 9 cases] de Pinieux G, et al. **Ann Pathol** 1996 Dec;16(6):463-6 (Eng. Abstr.) **(Fre)**

[Endosonographic diagnosis in preoperative radiotherapy of locally advanced rectal carcinoma] Kuntz C, et al. **Chirurg** 1997 Jan;68(1):57-62 (Eng. Abstr.) **(Ger)**

[Photochemotherapy with indocyanine green in cutaneous metastases of rectal carcinoma] Karrer S, et al. **Dtsch Med Wochenschr** 1997 Sep 12;122(37):1111-4 (Eng. Abstr.) **(Ger)**

[The staging of rectal tumors with endorectal study technics: the demonstration of a possible source of error] Gossmann A, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jul;167(1):96-8 (7 ref.) **(Ger)**

[Minute carcinoid tumor in the rectum with liver metastasis] Okumura Y, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:307-12 (Eng. Abstr.) **(Jpn)**

[Intrahepatic arterial infusion chemotherapy for the colon cancer patients with liver metastases--a comparison of arterial embolization chemotherapy versus continuous arterial infusion chemotherapy] Tanada M, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1440-2 (Eng. Abstr.) **(Jpn)**

[Pulmonary metastatic carcinoma of the rectum growing extensively in the bronchial lumen--a case report] Tanaka Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Nov; 44(11):2100-3 (Eng. Abstr.) **(Jpn)**

[Tumors originating in the muscularis mucosae of the recto-sigma] Martín Fernández J, et al. **Rev Esp Enferm Dig** 1996 Dec;88(12):868-72 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Ambulatory manometric examination in patients with a colonic J pouch and in normal controls [see comments] Romanos J, et al. **Br J Surg** 1996 Dec;83(12):1744-6. Comment in: Br J Surg 1997 Jul;84(7):1031-2.

Increased apoptosis rate by hyperthermochemoradiotherapy for advanced rectal cancers. Sakakura C, et al. **Surg Today** 1997;27(8):773-6

PREVENTION & CONTROL

Completion proctectomy in ulcerative colitis. O'Riordain DS, et al. **Br J Surg** 1997 Apr;84(4):436-7

The anti-human tumor effect and generation of human cytotoxic T cells in SCID mice given human peripheral blood lymphocytes by the in vivo transfer of the Interleukin-6 gene using adenovirus vector. Tanaka F, et al. **Cancer Res** 1997 Apr 1;57(7):1335-43

The risk factor profile of recto-sigmoid adenomas: a prospective screening study of 665 patients in a clinical rehabilitation centre. Manus B, et al. **Eur J Cancer Prev** 1997 Feb;6(1):38-43

Correlation of polypoid lesions in the distal colorectum and proximal colon in asymptomatic screening subjects [see comments] Nusko G, et al. **Eur J Gastroenterol Hepatol** 1996 Apr;8(4):351-4. Comment in: Eur J Gastroenterol Hepatol 1996 Apr;8(4):335-6.

Surveillance of familial adenomatous polyposis patients after ileorectal anastomosis or ileoanal pouch anastomosis. Tytgat GNJ. **Gastrointest Endosc Clin N Am** 1997 Jan; 7(1):111-27 (55 ref.)

[Screening for colorectal cancer with fecal occult blood--an offer to the population?] Kronborg O. **Ugeskr Laeger** 1997 Aug 11;159(33):4991-2 **(Dan)**

[Mass screening of colorectal cancer: where are we up to?] Tazi MA, et al. **Bull Cancer** 1996 Sep;83(9):746-9 (21 ref.) (Eng. Abstr.) **(Fre)**

[Screening for colorectal cancer?] Hoff G, et al. **Tidsskr Nor Laegeforen** 1997 May 30;117(14):2017-8 **(Nor)**

RECTAL NEOPLASMS

RADIOGRAPHY

Reducing data size and radiation dose for CT colonography. Hara AK, et al. **AJR Am J Roentgenol** 1997 May; 168(5):1181–4

Computed tomography of the rectosigmoid region. Dixon AK. **Eur J Radiol** 1996 May;22(2):107–15 (39 ref.)

Comparison between transrectal ultrasonography and computed tomography with rectal inflation of gas in preoperative staging of lower rectal cancer. Osti MF, et al. **Eur Radiol** 1997;7(1):26–30

Improved accuracy of computed tomography in local staging of rectal cancer using water enema. Lupo L, et al. **Int J Colorectal Dis** 1996;11(2):60–4

Ossification of a rectal tumor: CT evaluation. Beauchamp NJ, et al. **J Comput Assist Tomogr** 1997 Jul–Aug; 21(4):671–3 (8 ref.)

New barium paste mixture for helical (slip-ring) CT evaluation of rectal carcinoma. Ogawa Y, et al. **J Comput Assist Tomogr** 1997 May–Jun;21(3):398–401

Natural history of superficial depressed colorectal cancer: retrospective radiographic and histologic analysis. Matsui T, et al. **Radiology** 1996 Oct;201(1):226–32

[The locoregional recurrence of rectal carcinoma. A computed tomographic analysis and a target volume concept for adjuvant radiotherapy] Bagatzounis A, et al. **Strahlenther Onkol** 1997 Feb;173(2):68–75 (Eng. Abstr.) **(Ger)**

[Role of endorectal ultrasonography and CT in preoperative staging of rectal cancer. Personal experience] Garretti L, et al. **Minerva Chir** 1997 Jun;52(6):717–25 (Eng. Abstr.) **(Ita)**

RADIONUCLIDE IMAGING

Local recurrence of rectal cancer: evaluation with F-18 fluorodeoxyglucose PET imaging. Keogan MT, et al. **Abdom Imaging** 1997 May–Jun;22(3):332–7

Fluorine-18 fluoro-2-deoxyglucose positron emission tomography in recurrent rectal cancer: relation to tumour size and cellularity. Ito K, et al. **Eur J Nucl Med** 1996 Oct;23(10):1372–7

Imaging of recurrent intestinal carcinoma with indium-111-labeled anti-carcinoembryonic antigen monoclonal antibody CEA102. Nakada K, et al. **Jpn J Cancer Res** 1997 Jun;88(6):605–13

Biodistribution of anti-CEA F(ab')2 fragments after intra-arterial and intravenous injection in patients with liver metastases due to colorectal carcinoma. Buchegger F, et al. **Nucl Med Commun** 1996 Jun;17(6):500–3

New methods for the staging of colorectal cancer using noninvasive techniques. Blend MJ, et al. **Semin Surg Oncol** 1996 Jul–Aug;12(4):253–63 (57 ref.)

Use of monoclonal antibodies in colorectal cancer: a review. Schulte WJ. **World J Surg** 1996 Feb;20(2):238–40 (6 ref.)

RADIOTHERAPY

Rectal cancer. Blomgren H. **Acta Oncol** 1996;35 Suppl 7:64–9

Fluorouracil and high-dose leucovorin with radiotherapy as adjuvant therapy for rectal cancer. Results of a phase II study. Giralt J, et al. **Acta Oncol** 1997;36(1):51–4

Adjuvant radiation therapy in resectable rectal cancer: should local recurrence rates affect the decision? Kim NK, et al. **Am Surg** 1997 Jul;63(7):579–84; discussion 584–5

Indications for and results of irradiation +/- chemotherapy for rectal cancer. Gunderson LL, et al. **Ann Acad Med Singapore** 1996 May;25(3):448–59 (32 ref.)

Randomized study on preoperative radiotherapy in rectal carcinoma. Stockholm Colorectal Cancer Study Group [see comments] **Ann Surg Oncol** 1996 Sep;3(5):423–30. Comment in: Ann Surg Oncol 1996 Sep;3(5):419–20.

Patterns of recurrence following pelvic exenteration and external radiotherapy for locally advanced primary rectal adenocarcinoma. Luna-Perez P, et al. **Ann Surg Oncol** 1996 Nov;3(6):526–33

Preoperative radiotherapy for rectal cancer: benefits and controversies [editorial; comment] Ota DM. **Ann Surg Oncol** 1996 Sep;3(5):419–20. Comment on: Ann Surg Oncol 1996 Sep;3(5):423–30.

Postoperative radiotherapy for Dukes' B and C rectal cancer: Peter MacCallum Cancer Institute experience [see comments] Guiney MJ, et al. **Australas Radiol** 1996 Aug; 40(3):326–30. Comment in: Australas Radiol 1997 May;41(2):223.

Adjuvant VHF therapy in locally recurrent and primary unresectable rectal cancer [letter] Holt J, et al. **Australas Radiol** 1997 Aug;41(3):317–8

Postoperative radiotherapy for Duke's B and C rectal cancer: Peter MacCallum Cancer Institute experience [letter; comment] Leung JT. **Australas Radiol** 1997 May;41(2):223 . Comment on: Australas Radiol 1996 Aug;40(3):326–30.

Adjuvant VHF therapy in locally recurrent and primary unresectable rectal cancer. Trotter JM, et al. **Australas Radiol** 1996 Aug;40(3):298–305

Radical surgery and postoperative radiotherapy as combined treatment in rectal cancer. Final results of a phase III study of the European Organization for Research and Treatment of Cancer. Arnaud JP, et al. **Br J Surg** 1997 Mar; 84(3):352–7

Randomized controlled trial of postoperative radiotherapy and short-term time-scheduled 5-fluorouracil against surgery alone in the treatment of Dukes B and C rectal cancer. Norwegian Adjuvant Rectal Cancer Project Group. Tveit KM, et al. **Br J Surg** 1997 Aug;84(8):1130–5

The role of radiotherapy in the management of pelvic recurrence of rectal cancer. Wong R, et al. **Can J Oncol** 1996 Feb;6 Suppl 1:39–47 (18 ref.)

The absence of an adverse effect of prolongation of radiation treatment of primary rectal adenocarcinoma. Brierley JD, et al. **Clin Oncol (R Coll Radiol)** 1996;8(2):97–101

Staged delivery of Nd:YAG laser therapy for palliation of advanced rectal carcinoma. Farouk R, et al. **Dis Colon Rectum** 1997 Feb;40(2):156–60

Intraoperative electron and external beam irradiation with or without 5-fluorouracil and maximum surgical resection for previously unirradiated, locally recurrent colorectal cancer. Gunderson LL, et al. **Dis Colon Rectum** 1996 Dec; 39(12):1379–95

Intraoperative radiation therapy in integrated treatment of rectal cancers. Results of phase II study. Sofo L, et al. **Dis Colon Rectum** 1996 Dec;39(12):1396–403

Palliative endoscopic therapy of rectal carcinoma [letter; comment] Glynne-Jones R, et al. **Eur J Cancer** 1996 Oct; 32A(11):2031. Comment on: Eur J Cancer 1996 Jan;32A(1):25–9.

Local recurrence rate in a randomised multicentre trial of preoperative radiotherapy compared with operation alone in resectable rectal carcinoma. Swedish Rectal Cancer Trial. **Eur J Surg** 1996 May;162(5):397–402

Fixed rectal cancer at laparatomy: a simple operation to protect the small bowel from radiation enteritis. Smedh K, et al. **Eur J Surg** 1997 Jul;163(7):547–8

IORT in primary rectal cancer (T3–4Nx): multi-institutional experience with conventional treatment sequence. Spanish Group of IORT. Azinovic I, et al. **Front Radiat Ther Oncol** 1997;31:193–5

IORT: a randomized trial in primary rectal cancer by the French group of IORT. Bussières E, et al. **Front Radiat Ther Oncol** 1997;31:217–20

IORT for recurrent rectal carcinoma. Eble MJ, et al. **Front Radiat Ther Oncol** 1997;31:229–33

IORT as a surgical adjuvant for pelvic recurrence of rectal cancer. Merrick HW 3rd, et al. **Front Radiat Ther Oncol** 1997;31:234–7

Late effects of integrated therapies, including IORT, on lumbosacral plexus and anorectal physiology in patients treated for rectal cancer. Ratto C, et al. **Front Radiat Ther Oncol** 1997;31:41–4

IORT in integrated treatment of high-risk rectal cancers. Sofo L, et al. **Front Radiat Ther Oncol** 1997;31:209–12

Combined treatment with lasertherapy (Nd:YAG) and endocavitary radiation in the palliation of rectal cancer. Conio M, et al. **Hepatogastroenterology** 1996 Nov–Dec; 43(12):1518–22

Colonic J pouch-anal reconstruction with gluteus maximus transposition for a post-irradiation rectovaginal fistula. Kusunoki M, et al. **Hepatogastroenterology** 1996 Sep–Oct; 43(11):1339–42

Preoperative radiotherapy for resectable cancer of the middle-distal rectum: its effect on the primary lesion as determined by endorectal ultrasound using flexible echo colonoscope. Bozzetti F, et al. **Int J Colorectal Dis** 1996; 11(6):283–6

Preoperative radiotherapy (RT) for rectal cancer: predictive factors of tumor downstaging and residual tumor cell density (RTCD): prognostic implications. Berger C, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):619–27

"Sandwich" preoperative and postoperative combined chemotherapy and radiation in tethered and fixed rectal cancer: impact of treatment intensity on local control and survival. Chan AK, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):629–37

Efficacy of a belly board device with CT-simulation in reducing small bowel volume within pelvic irradiation fields. Das IJ, et al. **Int J Radiat Oncol Biol Phys** 1997 Aug 1;39(1):67–76

Regarding Minsky, IJROBP 34:961–962; 1996 [letter; comment] Gerard JP. **Int J Radiat Oncol Biol Phys** 1996 Aug 1;36(1):269. Comment on: Int J Radiat Oncol Biol Phys 1996 Mar 1;34(4):961–2.

Radiotherapy in addition to radical surgery in rectal cancer: evidence for a dose-response effect favoring preoperative treatment. Glimelius B, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):281–7 (55 ref.)

Radiotherapy treatment for isolated loco-regional recurrence of rectosigmoid cancer following definitive surgery: Peter MacCallum Cancer Institute experience, 1981–1990. Guiney MJ, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15;38(5):1019–25

Locally advanced primary colorectal cancer: intraoperative electron and external beam irradiation +/- 5-FU. Gunderson LL, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):601–14

Locally advanced rectal carcinoma: pelvic control and morbidity following preoperative radiation therapy, resection, and intraoperative radiation therapy. Kim HK, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):777–83

Treatment planning for adenocarcinoma of the rectum and sigmoid: a patterns of care study. PCS Committee. Kline RW, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15; 37(2):305–11 (3 ref.)

Palliative reirradiation for recurrent rectal cancer. Lingareddy V, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):785–90

Abdominoperineal resection combined with pre- and postoperative radiation therapy in the treatment of low-lying rectal carcinoma. Lusinchi A, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 1;37(1):59–65

Preoperative 5-FU, low-dose leucovorin, and radiation therapy for locally advanced and unresectable rectal cancer. Minsky BD, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):289–95

Preoperative radiotherapy in rectal cancer: are all protocols comparable? [letter] Nguyen TD, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):987–8

A phase I pilot study of pelvic radiation and alpha-2A interferon in patients with locally advanced or recurrent rectal cancer. Perera F, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):297–303

Transanal excision and postoperative radiation therapy in selected patients with cancer of the low rectum. Romano G, et al. **Int Surg** 1996 Jan–Mar;81(1):40–4

Adjuvant postoperative fluorouracil-modulated chemotherapy combined with pelvic radiation therapy for rectal cancer: initial results of intergroup 0114. Tepper JE, et al. **J Clin Oncol** 1997 May;15(5):2030–9

Re: A quality-adjusted time without symptoms or toxicity (Q-TWiST) analysis of adjuvant radiation therapy and chemotherapy for resectable rectal cancer [letter; comment] DeCosse JJ, et al. **J Natl Cancer Inst** 1996 Nov 20;88(22):1686. Comment on: J Natl Cancer Inst 1996 Aug 7;88(15):1039–45.

Results of preoperative intraluminal brachytherapy combined with radical surgery for middle and lower rectal carcinomas. Yanagi H, et al. **J Surg Oncol** 1997 Jun; 65(2):76–81

Randomised trial of surgery alone versus radiotherapy followed by surgery for potentially operable locally advanced rectal cancer. Medical Research Council Rectal Cancer Working Party [see comments] **Lancet** 1996 Dec 14;348(9042):1605–10. Comment in: Lancet 1996 Dec 14;348(9042):1600. Comment in: Lancet 1997 Mar 22;349(9055):877; discussion 877–8.

Randomised trial of surgery alone versus surgery followed by radiotherapy for mobile cancer of the rectum. Medical Research Council Rectal Cancer Working Party [see comments] **Lancet** 1996 Dec 14;348(9042):1610–4. Comment in: Lancet 1996 Dec 14;348(9042):1600. Comment in: Lancet 1997 Mar 22;349(9055):877; discussion 877–8.

Surgery versus radiotherapy for advanced rectal cancer [letter; comment] Dworak O, et al. **Lancet** 1997 Mar 22; 349(9055):877; discussion 877–8. Comment on: Lancet 1996 Dec 14;348(9042):1605–10.

Surgery versus radiotherapy for advanced rectal cancer [letter; comment] Norstein J, et al. **Lancet** 1997 Mar 22; 349(9055):877; discussion 877–8. Comment on: Lancet 1996 Dec 14;348(9042):1605–10. Comment on: Lancet 1996 Dec 14;348(9042):1610–4.

Anterior-posterior treatment localization in pelvic radiotherapy: tattoos or fixed couch-to-isocentre distance. Greer PB, et al. **Med Dosim** 1997 Spring;22(1):43–6

A three-dimensional approach for re-irradiation of recurrent colorectal adenocarcinoma. Watson B, et al. **Med Dosim** 1996 Summer;21(2):79–82

Improved survival with preoperative radiotherapy in resectable rectal cancer. Swedish Rectal Cancer Trial [see comments] [published erratum appears in N Engl J Med 1997 May 22;336(21):1539] **N Engl J Med** 1997 Apr 3; 336(14):980–7. Comment in: N Engl J Med 1997 Apr 3;336(14):1016–7. Comment in: N Engl J Med 1997 Jul 31;337(5):346–7; discussion 347–8. Comment in: N Engl J Med 1997 Jul 31;337(5):347; discussion 347–8.

Radiotherapy for rectal cancer [letter; comment] Heriot AG, et al. **N Engl J Med** 1997 Jul 31;337(5):347; discussion 347–8 . Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Radiotherapy for rectal cancer [letter; comment] Lavery IC, et al. **N Engl J Med** 1997 Jul 31;337(5):346–7; discussion 347–8. Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Adjuvant therapy for rectal cancer--a good first step [editorial; comment] Minsky BD. **N Engl J Med** 1997 Apr 3;336(14):1016–7. Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Radiotherapy for rectal cancer [letter; comment] Vikram B. **N Engl J Med** 1997 Jul 31;337(5):347; discussion 347–8. Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Month-long postoperative radiotherapy and 5-FU improve survival in rectal cancer [news] **Oncology (Huntingt)** 1996 Sep;10(9):1311

Sphincter-preserving operations for rectal cancer. Enker WE. **Oncology (Huntingt)** 1996 Nov;10(11):1673–84, 1689; discussion 1690–2 (32 ref.)

Multidisciplinary management of resectable rectal cancer. Minsky BD. **Oncology (Huntingt)** 1996 Nov;10(11):1701–8, 1713–4; discussion 1714–18 (77 ref.)

Infusional chemoradiation for operable rectal cancer: post-, pre-, or nonoperative management? Rich TA. **Oncology (Huntingt)** 1997 Mar;11(3):295–300, 305; discussion 306 passim (13 ref.)

Adjuvant postoperative radiotherapy in rectal cancer: 148 cases treated at Florence University with 8 years median follow-up. Cionini L, et al. **Radiother Oncol** 1996 Aug; 40(2):127–35

Acute lumbosacral plexopathy during and after preoperative radiotherapy of rectal adenocarcinoma. Frykholm GJ, et

al. **Radiother Oncol** 1996 Feb;38(2):121–30
Combined curative radiation therapy alone in (T1) T2–3 rectal adenocarcinoma: a pilot study of 29 patients. Gerard JP, et al. **Radiother Oncol** 1996 Feb;38(2):131–7
Short–term preoperative radiotherapy results in down–staging of rectal cancer: a study of 1316 patients. Graf W, et al. **Radiother Oncol** 1997 May;43(2):133–7
Comparative treatment planning between proton and X–ray therapy in locally advanced rectal cancer. Isacsson U, et al. **Radiother Oncol** 1996 Dec;41(3):263–72
Long source–skin distance rectal irradiation technique: a review of results. Mahajan A, et al. **Radiother Oncol** 1996 Jul;40(1):63–7
Quality assurance procedures in radiotherapy of rectal neoplasms. Valentini V, et al. **Rays** 1996 Oct–Dec; 21(4):649–62 **(Eng, Ita)**
Preoperative and postoperative radiotherapy in rectal carcinoma. Budach V, et al. **Recent Results Cancer Res** 1996;142:257–79 (79 ref.)
Adjuvant radiation therapy for adenocarcinoma of the rectum. Fleshman JW, et al. **Surg Clin North Am** 1997 Feb; 77(1):15–25 (31 ref.)
Morbidity and mortality following preoperative radiation therapy and total pelvic exenteration for primary rectal adenocarcinoma. Luna–Perez P, et al. **Surg Oncol** 1995; 4(6):295–301
Postoperative adjuvant chemoradiotherapy for rectal cancer: analysis of acute and chronic toxicity. Bertuccelli M, et al. **Tumori** 1997 Mar–Apr;83(2):599–603
[Importance of preoperative radiotherapy in the comprehensive treatment of malignant tumors of the rectum] Vysloužil K, et al. **Rozhl Chir** 1996 Nov; 75(11):521–4 (Eng. Abstr.) **(Cze)**
[Intraoperative radiotherapy in cancers of the pancreas and in recurrent colorectal cancers] Houry S, et al. **Ann Chir** 1996;50(6):438–44 (31 ref.) (Eng. Abstr.) **(Fre)**
[Effect radiotherapy on postoperative staging and residual tumor cell density in rectal cancers] Berger C, et al. **Cancer Radiother** 1997;1(3):240–8 (31 ref.) (Eng. Abstr.) **(Fre)**
[Results of the treatment with fast neutrons (d.T 13 MeV) in recurrent rectal carcinoma] Prott FJ, et al. **Strahlenther Onkol** 1997 Jun;173(6):316–22 (Eng. Abstr.) **(Ger)**
[Brain metastases of colon and rectum carcinomas] Nieder C, et al. **Wien Klin Wochenschr** 1997 Apr 11;109(7):239–43 (Eng. Abstr.) **(Ger)**
[Preoperative chemoradiation therapy for lower rectal cancer] Murotani M, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1482–5 (Eng. Abstr.) **(Jpn)**
[Endocavitary radiotherapy of distal rectal tumors] Tanum G, et al. **Tidsskr Nor Laegeforen** 1997 Feb 20;117(5):654–6 (Eng. Abstr.) **(Nor)**

SECONDARY

Application of self–expanding stents in prostate cancer with rectal involvement. Report of two cases and review of the literature. Lujan M, et al. **Eur Urol** 1997;31(2):251–3 (13 ref.)

SURGERY

Sphincter–saving resection, or not, for cancer of the midrectum. Huguier M, et al. **Am J Surg** 1997 Jul; 174(1):11–5
Inadvertent perforation of the rectum during abdominoperineal resection [see comments] Porter GA, et al. **Am J Surg** 1996 Oct;172(4):324–7. Comment in: Am J Surg 1997 May;173(5):458.
Video endoscopic transanal–rectal tumor excision. Swanstrom LL, et al. **Am J Surg** 1997 May;173(5):383–5
Rectal carcinoma: are we making a difference? Hurst R, et al. **Am Surg** 1996 Oct;62(10):806–10
A local sphincter–saving treatment of distal rectal cancer (editorial)] Viola G. **Ann Ital Chir** 1996 Sep–Oct; 67(5):603–6
Total mesorectal excision—the new golden standard of surgery for rectal cancer. Enker WE. **Ann Med** 1997 Apr; 29(2):127–33 (27 ref.)
Surgeons' follow–up practice after resection of colorectal cancer. Mella J, et al. **Ann R Coll Surg Engl** 1997 May; 79(3):206–9
Primary signet–ring cell carcinoma of the colon and rectum. Anthony T, et al. **Ann Surg Oncol** 1996 Jul;3(4):344–8
Follow–up in colorectal cancer patients: a cost–benefit analysis. Audisio RA, et al. **Ann Surg Oncol** 1996 Jul; 3(4):349–57
Total rectal resection, mesorectum excision, and coloendoanal anastomosis: a therapeutic option for the treatment of low rectal cancer. Leo E, et al. **Ann Surg Oncol** 1996 Jul;3(4):336–43
Patterns of recurrence following pelvic exenteration and external radiotherapy for locally advanced primary rectal adenocarcinoma. Luna–Perez P, et al. **Ann Surg Oncol** 1996 Nov;3(6):526–33
The anatomical substrate for a difference in surgical approach to rectal cancer in male and female patients. Verschueren RC, et al. **Anticancer Res** 1997 Jan–Feb;17(1B):637–41 (18 ref.)
Modified clearing technique to identify lymph node metastases in post–irradiated surgical specimens from rectal adenocarcinoma. Sanchez W, et al. **Arch Med Res** 1996 Spring;27(1):31–6
Gut function and immune and inflammatory responses in patients perioperatively fed with supplemented enteral formulas. Braga M, et al. **Arch Surg** 1996 Dec; 131(12):1257–64; discussion 1264–5
Laparoscopic–assisted resection of rectosigmoid carcinoma. Immediate and medium–term results. Leung KL, et al. **Arch Surg** 1997 Jul;132(7):761–4; discussion 765
Rectal carcinoma in pregnancy. Gard GB, et al. **Aust N Z J Obstet Gynaecol** 1996 May;36(2):161–4
Ileostomy dysfunction with adjuvant chemoradiation for rectal carcinoma requiring in–hospital management: a cause for concern. Chen FC, et al. **Aust N Z J Surg** 1996 Sep; 66(9):641–2
Colonic J–pouch as a neorectum: functional assessment. Chew SB, et al. **Aust N Z J Surg** 1997 Sep;67(9):607–10
Pre–operative radiotherapy and chemotherapy for non–resectable rectal cancer. Leong T, et al. **Aust N Z J Surg** 1997 Sep;67(9):603–6
Adenocarcinoma complicating an anorectal sinus in a patient with Crohn's disease. Lumley JW, et al. **Aust N Z J Surg** 1997 Jan;67(1):66–7
Total mesorectal excision: evaluating the evidence. McCall JL. **Aust N Z J Surg** 1997 Sep;67(9):599–602 (50 ref.)
Best practice parameters for management of rectal cancer: recommendations of the Colorectal Surgical Society of Australia [letter; comment] MacLeod C, et al. **Aust N Z J Surg** 1997 Apr;67(4):215; discussion 216–7. Comment on: Aust N Z J Surg 1996 Aug;66(8):508–14.
Morbidity and mortality after single– and double–stapled colorectal anastomoses in patients with carcinoma of the rectum. Moore JW, et al. **Aust N Z J Surg** 1996 Dec; 66(12):820–3 (22 ref.)
Lymphovascular clearance in laparoscopically assisted right hemicolectomy is similar to open surgery. Moore JW, et al. **Aust N Z J Surg** 1996 Sep;66(9):605–7
Best practice parameters for management of rectal cancer: recommendations of the Colorectal Surgical Society of Australia [letter; comment] Penniment M. **Aust N Z J Surg** 1997 Apr;67(4):215–6; discussion 216–7 . Comment on: Aust N Z J Surg 1996 Aug;66(8):508–14.
A new way to prevent leakage of glycine during endoscopic transanal resection of rectal lesions [see comments] Abbasakoor F, et al. **Br J Surg** 1996 Oct;83(10):1467. Comment in: Br J Surg 1997 Apr;84(4):581.
Radical surgery and postoperative radiotherapy as combined treatment in rectal cancer. Final results of a phase III study of the European Organization for Research and Treatment of Cancer. Arnaud JP, et al. **Br J Surg** 1997 Mar; 84(3):352–7
TUR syndrome and endoscopic transanal resection: no evidence for a clinically important association in 38 procedures. Boyle JR, et al. **Br J Surg** 1997 Jun;84(6):831–3
Disruption of the internal anal sphincter can occur after transanal stapling. Farouk R, et al. **Br J Surg** 1996 Oct; 83(10):1400
Evaluation of a policy of total mesorectal excision for rectal and rectosigmoid cancers. Hainsworth PJ, et al. **Br J Surg** 1997 May;84(5):652–6
Influence of hospital– and surgeon–related factors on outcome after treatment of rectal cancer with or without preoperative radiotherapy. Holm T, et al. **Br J Surg** 1997 May;84(5):657–63
Anoabdominal rectal resection and colonic J pouch–anal anastomosis: 10 years' experience. Kusunoki M, et al. **Br J Surg** 1997 Sep;84(9):1277–80
Anatomical basis of autonomic nerve–preserving total mesorectal excision for rectal cancer [letter; comment] Liang JT, et al. **Br J Surg** 1997 Apr;84(4):586–7. Comment on: Br J Surg 1996 Mar;83(3):384–8.
Prognosis after surgery in patients with incurable rectal cancer: a population–based study. Mahteme H, et al. **Br J Surg** 1996 Aug;83(8):1116–20
Colonic pouches in the treatment of low rectal cancer [letter; comment] Marzouk DM. **Br J Surg** 1997 May;84(5):731. Comment on: Br J Surg 1996 Jul;83(7):881–2.
Indications and results of local treatment of rectal cancer. Mentges B, et al. **Br J Surg** 1997 Mar;84(3):348–51
Pathological evidence in support of total mesorectal excision in the management of rectal cancer. Reynolds JV, et al. **Br J Surg** 1996 Aug;83(8):1112–5
Local recurrence of low rectal cancer after abdominoperineal and anterior resection. Rullier E, et al. **Br J Surg** 1997 Apr;84(4):525–8
Tactile feedback in laparoscopic colonic surgery. Scott HJ, et al. **Br J Surg** 1997 Jul;84(7):1005
Local recurrence following total mesorectal excision for rectal cancer [letter; comment] Scott NA, et al. **Br J Surg** 1996 Aug;83(8):1162–3. Comment on: Br J Surg 1996 Mar;83(3):375–9.
Adenocarcinoma arising on the site of a Gelpi retractor after coloanal anastomosis for rectal cancer [letter] Thomson WH. **Br J Surg** 1997 Aug;84(8):1176
Adenocarcinoma arising on the site of a Gelpi retractor after coloanal anastomosis for rectal cancer. Zinzindohoue F, et al. **Br J Surg** 1997 Mar;84(3):362
Results of local excision for rectal carcinoma. Obrand DI, et al. **Can J Surg** 1996 Dec;39(6):463–8
Designing the optimal surgery for rectal carcinoma [editorial; comment] Enker WE. **Cancer** 1996 Nov 1;78(9):1847–50. Comment on: Cancer 1996 Nov 1;78(9):1871–80.
Sphincter preservation therapy for distal rectal carcinoma: a review. Ng AK, et al. **Cancer** 1997 Feb 15;79(4):671–83 (69 ref.)
Pelvic autonomic nerve preservation for patients with rectal carcinoma. Oncologic and functional outcome [see comments] Sugihara K, et al. **Cancer** 1996 Nov 1; 78(9):1871–80. Comment in: Cancer 1996 Nov 1;78(9):1847–50.
The effect of wheat bran fiber and calcium supplementation on rectal mucosal proliferation rates in patients with resected adenomatous colorectal polyps. Alberts DS, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Mar;6(3):161–9
Distal intramural spread in adenocarcinoma of the lower third of the rectum treated with total rectal resection and coloanal anastomosis. Andreola S, et al. **Dis Colon Rectum** 1997 Jan;40(1):25–9
Prospective evaluation of local excision for small rectal cancers. Bleday R, et al. **Dis Colon Rectum** 1997 Apr; 40(4):388–92
Factors affecting survival after excision of the rectum for cancer: a multivariate analysis. Bokey EL, et al. **Dis Colon Rectum** 1997 Jan;40(1):3–10
Salvage therapy for pelvic recurrence following curative rectal cancer resection. Cunningham JD, et al. **Dis Colon Rectum** 1997 Apr;40(4):393–400
Absorption of glycine irrigating solution during endoscopic transanal resection of rectal tumors. Debras B, et al. **Dis Colon Rectum** 1996 Nov;39(11):1245–8
Total anorectal reconstruction with a double dynamic graciloplasty after abdominoperineal reconstruction for low rectal cancer. Geerdes BP, et al. **Dis Colon Rectum** 1997 Jun;40(6):698–705
Early postoperative results of a prospective series of laparoscopic vs. Open anterior resections for rectosigmoid cancers. Goh YC, et al. **Dis Colon Rectum** 1997 Jul; 40(7):776–80
Preliminary results of preoperative 5–fluorouracil, low–dose leucovorin, and concurrent radiation therapy for clinically resectable T3 rectal cancer. Grann A, et al. **Dis Colon Rectum** 1997 May;40(5):515–22
Physiologic characteristics of straight and colonic J–pouch anastomoses after rectal excision for cancer. Hallböök O, et al. **Dis Colon Rectum** 1997 Mar;40(3):332–8
Role of peptide YY and enteroglucagon after low anterior resection. Comparison between straight and colonic J–pouch anastomosis. Hallböök O, et al. **Dis Colon Rectum** 1996 Oct;39(10):1153–8
Abdominoperineal excision of the rectum—an endangered operation. Norman Nigro Lectureship. Heald RJ, et al. **Dis Colon Rectum** 1997 Jul;40(7):747–51
Analysis of regional lymph node metastases from rectal carcinoma by the clearing method. Justification of the use of sigmoid in J–pouch construction after low anterior resection. Hida J, et al. **Dis Colon Rectum** 1996 Nov; 39(11):1282–5
More effective endoscopic resection with a two–channel colonoscope for carcinoid tumors of the rectum. Iishi H, et al. **Dis Colon Rectum** 1996 Dec;39(12):1438–9
Functional results after transanal endoscopic microsurgery. Kreis ME, et al. **Dis Colon Rectum** 1996 Oct;39(10):1116–21
Male sexual function after autonomic nerve–preserving operation for rectal cancer. Masui H, et al. **Dis Colon Rectum** 1996 Oct;39(10):1140–5
Prediction of incontinence following low anterior resection for rectal carcinoma. Matsushita K, et al. **Dis Colon Rectum** 1997 May;40(5):575–9
Early detection of anastomotic leaks after low anterior resection of the rectum. Miller K, et al. **Dis Colon Rectum** 1996 Oct;39(10):1081–5
The usefulness of carcinoembryonic antigen in postoperative colorectal cancer patients [letter; comment] Nelson RL. **Dis Colon Rectum** 1997 Jul;40(7):866–7. Comment on: Dis Colon Rectum 1997 Feb;40(2):145–9.
Aggressive surgical management of recurrent rectal cancer—is it worthwhile? Ogunbiyi OA, et al. **Dis Colon Rectum** 1997 Feb;40(2):150–5
Improved surgical results after combining preoperative hyperthermia with chemotherapy and radiotherapy for patients with carcinoma of the rectum. Ohno S, et al. **Dis Colon Rectum** 1997 Apr;40(4):401–6
Causes of rectal incontinence after sphincter–preserving operations for rectal cancer. Otto IC, et al. **Dis Colon Rectum** 1996 Dec;39(12):1423–7
Adenosquamous carcinoma of the colon and rectum. Petrelli NJ, et al. **Dis Colon Rectum** 1996 Nov;39(11):1265–8
Transanal MULTIFIRE ENDO GIA technique for rectal polypectomy. Qureshi MA, et al. **Dis Colon Rectum** 1997 Jan;40(1):116
Colonic J–pouch rectal reconstruction—is it really a neorectum? Ramirez JM, et al. **Dis Colon Rectum** 1996 Nov; 39(11):1286–8
Total rectal and mesorectal excision is important in low rectal cancers [letter] Seow–Choen F. **Dis Colon Rectum** 1997 Sep;40(9):1129–30
Variations in treatment of rectal cancer: the influence of hospital type and caseload. Simons AJ, et al. **Dis Colon Rectum** 1997 Jun;40(6):641–6
Neoplasia in ileal pouch mucosa after total proctocolectomy for juvenile polyposis: report of a case. Stoltenberg RL, et al. **Dis Colon Rectum** 1997 Jun;40(6):726–30
Anorectal melanoma—an incurable disease? Thibault C, et al. **Dis Colon Rectum** 1997 Jun;40(6):661–8
Abdominoperineal resection and perineal colostomy for low

rectal cancer. The Lazaro da Silva technique. Velitchkov NG, et al. **Dis Colon Rectum** 1997 May;40(5):530–3

Pelvic floor reconstruction after major cancer surgery. Voros D, et al. **Dis Colon Rectum** 1996 Nov;39(11):1232–4

Stapled colonic J-pouch–anal anastomosis without a diverting colostomy for rectal carcinoma. Wang JY, et al. **Dis Colon Rectum** 1997 Jan;40(1):30–4

Applications of laparoscopic instrumentation to conventional abdominal and rectal surgery. Wise WE Jr, et al. **Dis Colon Rectum** 1996 Oct;39(10):1180–Z

Metastasis of rectal cancer to lymph nodes and tissues around the autonomic nerves spared for urinary and sexual function. Yamakoshi H, et al. **Dis Colon Rectum** 1997 Sep; 40(9):1079–84

Extracorporeal polypectomy. Aydin A, et al. **Endoscopy** 1997 Jan;29(1):57–8

Effectiveness of local endoscopic resection of rectal carcinoid tumors. Higaki S, et al. **Endoscopy** 1997 Mar;29(3):171–5

Endoscopic resection of rectal carcinoid tumors using aspiration lumpectomy. Imada-Shirakata Y, et al. **Endoscopy** 1997 Jan;29(1):34–8

Endosonographic follow-up after local excision of a pT1 rectal carcinoma. Maunoury V. **Endoscopy** 1996 Jun; 28(5):468

Rectal cancer: the influence of type of operation on local recurrence and survival. Bjerkeset T, et al. **Eur J Surg** 1996 Aug;162(8):643–8

Management of the pelvic space with or without omentoplasty after abdominoperineal resection for carcinoma of the rectum: a prospective multicenter study. The French Association for Surgical Research. Hay JM, et al. **Eur J Surg** 1997 Mar;163(3):199–206

Transanal surgery with a new anal retractor and a stapler for tumours in the proximal rectum. Maeda K, et al. **Eur J Surg** 1997 Mar;163(3):219–21

Prospective evaluation of different diagnostic techniques for the detection of liver metastases at the time of primary resection of colorectal carcinoma. Nies C, et al. **Eur J Surg** 1996 Oct;162(10):811–6

Anterior resection controls cancer of the rectum as well as abdominoperineal excision. Pakkastie TE, et al. **Eur J Surg** 1995 Nov;161(11):833–9

Ileal pouch–anal anastomosis with mesorectal excision for rectal cancer complicating familial adenomatous polyposis. Panis Y, et al. **Eur J Surg** 1996 Oct;162(10):817–21

Surgical strategies in the treatment of colorectal cancer. Bergamaschi R. **Eur J Surg Suppl** 1995;(575):1–22 (317 ref.)

Simultaneous radical prostatectomy and partial rectum resection without colostomy. Baur H, et al. **Eur Urol** 1997; 31(3):380–1

Endoscopic snare excision of "giant" colorectal polyps [see comments] Binmoeller KF, et al. **Gastrointest Endosc** 1996 Mar;43(3):183–8. Comment in: Gastrointest Endosc 1996 Mar;43(3):256–7. Comment in: Gastrointest Endosc 1996 Nov;44(5):631–2.

Injection–incision––assisted snare resection of large sessile colorectal polyps [see comments] Kanamori T, et al. **Gastrointest Endosc** 1996 Mar;43(3):189–95. Comment in: Gastrointest Endosc 1996 Mar;43(3):256–7.

Band ligation–assisted endoscopic resection of a flat rectal adenoma containing infiltrating adenocarcinoma. Van Os EC, et al. **Gastrointest Endosc** 1997 Mar;45(3):322–4

Combined treatment with lasertherapy (Nd:YAG) and endocavitary radiation in the palliation of rectal cancer. Conio M, et al. **Hepatogastroenterology** 1996 Nov–Dec; 43(12):1518–22

Clinical outcome of surgical treatment for invasive early colorectal cancer in Japan. Kitamura K, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):108–15

Circular stapling techniques for low anterior resection of rectal carcinoma. Miller K, et al. **Hepatogastroenterology** 1996 Jul–Aug;43(10):823–31

Clinico–physiological results after sphincter–saving resection for rectal carcinoma. Ikeuchi H, et al. **Int J Colorectal Dis** 1996;11(4):172–6

A preliminary comparison of a consecutive series of open versus laparoscopic abdomino–perineal resection for rectal adenocarcinoma. Seow-Choen F, et al. **Int J Colorectal Dis** 1997;12(2):88–90

Rectal cancer recurrence after prior resection and radiotherapy: palliation following additional surgery. Verrees JF, et al. **Int J Colorectal Dis** 1996;11(5):211–6

Radiotherapy in addition to radical surgery in rectal cancer: evidence for a dose–response effect favoring preoperative treatment. Glimelius B, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):281–7 (55 ref.)

Locally advanced rectal carcinoma: pelvic control and morbidity following preoperative radiation therapy, resection, and intraoperative radiation therapy. Kim HK, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):777–83

Abdominoperineal resection combined with pre- and postoperative radiation therapy in the treatment of low-lying rectal carcinoma. Lusinchi A, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 1;37(1):59–65

Pelvic recurrence following resection of rectal cancer: a multivariate predictive model. Romano G, et al. **Int Surg** 1997 Jan–Mar;82(1):67–71

Transanal excision and postoperative radiation therapy in selected patients with cancer of the low rectum. Romano G, et al. **Int Surg** 1996 Jan–Mar;81(1):40–4

Symposium on endoscopic hemostasis in gastric diseases. 5. Endoscopic treatment of early colorectal cancer––indication and limitations. Tada M. **Intern Med** 1997 Feb;36(2):131–3

Functional outcome after coloanal versus low colorectal anastomosis for rectal carcinoma. Benoist S, et al. **J Am Coll Surg** 1997 Aug;185(2):114–9

Lymph node metastases detected in the mesorectum distal to carcinoma of the rectum by the clearing method: justification of total mesorectal excision. Hida J, et al. **J Am Coll Surg** 1997 Jun;184(6):584–8

Local recurrence after operative treatment of rectal carcinoma: a strategy for change. Søreide O, et al. **J Am Coll Surg** 1997 Jan;184(1):84–92 (77 ref.)

Octreotide may prevent definitive intestinal obstruction. Mercadante S, et al. **J Pain Symptom Manage** 1997 Jun; 13(6):352–5

New application of endoloop for rectal polypectomy. Fowler CL. **J Pediatr Surg** 1996 Dec;31(12):1685

Stromal cell tumour of rectum treated by transanal endoscopic microsurgery. Butler JD, et al. **J R Soc Med** 1997 Jun;90(6):338–9

Colorectal surgery as a specialty [editorial] [see comments] Goligher J. **J R Soc Med** 1996 Nov;89(11):601–3. Comment in: J R Soc Med 1997 Jan;90(1):59.

Results of preoperative intraluminal brachytherapy combined with radical surgery for middle and lower rectal carcinomas. Yanagi H, et al. **J Surg Oncol** 1997 Jun; 65(2):76–81

Randomised trial of surgery alone versus radiotherapy followed by surgery for potentially operable locally advanced rectal cancer. Medical Research Council Rectal Cancer Working Party [see comments] **Lancet** 1996 Dec 14;348(9042):1605–10. Comment in: Lancet 1996 Dec 14;348(9042):1600. Comment in: Lancet 1997 Mar 22;349(9055):877; discussion 877–8.

Randomised trial of surgery alone versus surgery followed by radiotherapy for mobile cancer of the rectum. Medical Research Council Rectal Cancer Working Party [see comments] **Lancet** 1996 Dec 14;348(9042):1610–4. Comment in: Lancet 1996 Dec 14;348(9042):1600. Comment in: Lancet 1997 Mar 22;349(9055):877; discussion 877–8.

Surgery versus radiotherapy for advanced rectal cancer [letter; comment] Dworak O, et al. **Lancet** 1997 Mar 22; 349(9055):877; discussion 877–8. Comment on: Lancet 1996 Dec 14;348(9042):1605–10.

Surgery versus radiotherapy for advanced rectal cancer [letter; comment] Norstein J, et al. **Lancet** 1997 Mar 22; 349(9055):877; discussion 877–8. Comment on: Lancet 1996 Dec 14;348(9042):1605–10. Comment on: Lancet 1996 Dec 14;348(9042):1610–4.

Surgery of local recurrence in rectal cancer. Fabbri C, et al. **Minerva Chir** 1997 Jan–Feb;52(1–2):21–4

Improved survival with preoperative radiotherapy in resectable rectal cancer. Swedish Rectal Cancer Trial [see comments] [published erratum appears in N Engl J Med 1997 May 22;336(21):1539] **N Engl J Med** 1997 Apr 3; 336(14):980–7. Comment in: N Engl J Med 1997 Apr 3;336(14):1016–7. Comment in: N Engl J Med 1997 Jul 31;337(5):346–7; discussion 347–8. Comment in: N Engl J Med 1997 Jul 31;337(5):347; discussion 347–8.

Radiotherapy for rectal cancer [letter; comment] Heriot AG, et al. **N Engl J Med** 1997 Jul 31;337(5):347; discussion 347–8 . Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Radiotherapy for rectal cancer [letter; comment] Lavery IC, et al. **N Engl J Med** 1997 Jul 31;337(5):346–7; discussion 347–8. Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Adjuvant therapy for rectal cancer––a good first step [editorial; comment] Minsky BD. **N Engl J Med** 1997 Apr 3;336(14):1016–7. Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Radiotherapy for rectal cancer [letter; comment] Vikram B. **N Engl J Med** 1997 Jul 31;337(5):347; discussion 347–8. Comment on: N Engl J Med 1997 Apr 3;336(14):980–7.

Sphincter–preserving operations for rectal cancer. Enker WE. **Oncology (Huntingt)** 1996 Nov;10(11):1673–84, 1689; discussion 1690–2 (32 ref.)

Spindle cell stromal tumour of the rectum treated by restorative resection. Harrison JD, et al. **Postgrad Med J** 1996 May;72(847):304–6

Current aspects of sphincter preservation in the surgical therapy of rectal cancer. Schlag PM. **Recent Results Cancer Res** 1996;142:249–56 (25 ref.)

Quality of life measurement after rectal excision for cancer. Comparison between straight and colonic J-pouch anastomosis. Hallböök O, et al. **Scand J Gastroenterol** 1997 May;32(5):490–3

A silver cup [letter] Larsen IF. **Scand J Gastroenterol** 1996 Dec;31(12):1228

Role of transanal endoscopic microsurgery in the palliative treatment of rectal cancer. Türler A, et al. **Scand J Gastroenterol** 1997 Jan;32(1):58–61

Sphincter–saving surgery for rectal and colorectal disorders. Van Tets WF, et al. **Scand J Gastroenterol Suppl** 1996; 218:34–7

Laparoscopic surgery for colon and rectal cancer [editorial] Eu KW, et al. **Singapore Med J** 1996 Dec;37(6):570–1

Outpatient bowel preparation for elective colon resection. Le TH, et al. **South Med J** 1997 May;90(5):526–30

Personalized surgery for rectal tumours: the patient's opinion counts. Audisio RA, et al. **Support Care Cancer** 1997 Jan; 5(1):17–21 (77 ref.)

Preservation of the anus in the therapy of distal rectal cancers. Breen E, et al. **Surg Clin North Am** 1997 Feb; 77(1):71–83 (51 ref.)

Laparoscopic colorectal resection. A multicenter Italian study. Huscher C, et al. **Surg Endosc** 1996 Sep;10(9):875–9

A new technique to facilitate laparoscopic resection of low rectal tumors. Lezoche E, et al. **Surg Laparosc Endosc** 1997 Feb;7(1):9–12

Abdominoperineal resection: laparoscopic versus conventional. Ramos JR, et al. **Surg Laparosc Endosc** 1997 Apr;7(2):148–52

Local and regional recurrence of carcinoma of the colon and rectum: II. Factors relating to operative technique. Lee YT. **Surg Oncol** 1996 Feb;5(1):1–13 (71 ref.)

Anorectal malignant melanoma. Luna-Perez P, et al. **Surg Oncol** 1996 Aug;5(4):165–8

Utility of mapping lymph nodes cleared from rectal adenocarcinoma specimens. Sanchez-Maldonado W, et al. **Surg Oncol** 1996 Jun;5(3):123–6

Nodal metastases in rectal cancer: the role of surgery in outcome. MacFarlane JK. **Surg Oncol Clin N Am** 1996 Jan;5(1):191–202 (41 ref.)

Surgical excision of large rectal villous adenomas. Whitlow CB, et al. **Surg Oncol Clin N Am** 1996 Jul;5(3):723–34 (56 ref.)

Results of the double stapling procedure in colorectal surgery. Fu CG, et al. **Surg Today** 1997;27(8):706–9

Functional results after "high" coloanal anastomosis and "low" coloanal anastomosis with a colonic J-pouch for rectal carcinoma. Ikeuchi H, et al. **Surg Today** 1997;27(8):702–5

Extraperitonealization of the anastomosis and sacral drain in restorative surgery for rectal carcinoma: a safety mechanism in the absence of a covering stoma. Jatzko GR, et al. **Surg Today** 1996;26(8):591–6

Primary linitis plastica of the rectum: report of four cases and review of the literature. Murayama H, et al. **Surg Today** 1996;26(11):875–81 (22 ref.)

An improved technique for low anterior resection using a PDS endoloop. Terashima S, et al. **Surg Today** 1996; 26(10):857–9

Pelvic exenteration for locally advanced rectal carcinoma: factors predicting improved survival. Meterissian SH, et al. **Surgery** 1997 May;121(5):479–87 (31 ref.)

Primary vaginal urinary calculus following abdominoperineal resection of rectum. Dhall JC, et al. **Urol Int** 1997; 58(3):197–8

Surgical management for carcinoid tumors of small bowel, appendix, colon, and rectum. Stinner B, et al. **World J Surg** 1996 Feb;20(2):183–8 (26 ref.)

Nodal metastasis in the distal mesorectum: need for total mesorectal excision of rectal cancer. Choi JS, et al. **Yonsei Med J** 1996 Aug;37(4):243–50

[Pitfalls of deep pelvic anastomoses in rectal carcinoma] Michek J, et al. **Rozhl Chir** 1996 May;75(5):263–5 (Eng. Abstr.) **(Cze)**

[Importance of preoperative radiotherapy in the comprehensive treatment of malignant tumors of the rectum] Vysloužil K, et al. **Rozhl Chir** 1996 Nov; 75(11):521–4 (Eng. Abstr.) **(Cze)**

[Therapy of malignant tumors of the rectum––the extent and significance of radical surgical therapy] Vysloužil K, et al. **Rozhl Chir** 1996 Nov;75(11):517–20 (Eng. Abstr.) **(Cze)**

[Laparoscopic excision of the rectum. An advanced technique or true clinical progress?] Bardram L, et al. **Ugeskr Laeger** 1996 Oct 14;158(42):5911–4 (32 ref.) (Eng. Abstr.) **(Dan)**

[Anastomotic leakage after low anterior resection for rectal cancer (see comments)] Bülow S, et al. **Ugeskr Laeger** 1997 Jan 13;159(3):297–301 (Eng. Abstr.). Comment in: Ugeskr Laeger 1997 May 19;159(21):3194. **(Dan)**

[Anastomosis leakage––risk factors (letter; comment)] Jensen LS. **Ugeskr Laeger** 1997 May 19;159(21):3194. Comment on: Ugeskr Laeger 1997 Jan 13;159(3):297–301. **(Dan)**

[Posterior rectotomy––a minimally invasive procedure?] Kristiansen VB, et al. **Ugeskr Laeger** 1997 Mar 17; 159(12):1755–7 (Eng. Abstr.) **(Dan)**

[Local treatment of tumors of the rectum with transanal endoscopic microsurgical technique] Møller P, et al. **Ugeskr Laeger** 1996 Oct 14;158(42):5925–7 (Eng. Abstr.) **(Dan)**

[Palliative cryosurgery in rectum carcinoma (letter)] Eliel M. **Ned Tijdschr Geneeskd** 1996 Nov 23;140(47):2360 **(Dut)**

[Palliative cryosurgery in rectal carcinoma] Meijer S, et al. **Ned Tijdschr Geneeskd** 1996 Aug 31;140(35):1766–70 (Eng. Abstr.) **(Dut)**

[Vestigial retrorectal cystic formations in adults. Apropos of 3 cases] Barthod F, et al. **Ann Chir** 1996;50(10):906–12 (Eng. Abstr.) **(Fre)**

[Penile metastasis of recto-sigmoid adenocarcinoma. Apropos of a case] Lange G, et al. **Ann Chir** 1997; 51(3):294–6 (Eng. Abstr.) **(Fre)**

[Palliative treatment of rectal cancer by the trans-anal approach using a urologic prostatectomy device] Arnaud JP, et al. **Chirurgie** 1996;121(6):437–40; discussion 440–1 (Eng. Abstr.) **(Fre)**

[Has amputation of the rectum by pure perineal approach or Lisfranc operation still a role in the treatment of rectal cancer?] Gautier-Benoit C, et al. **Chirurgie** 1996; 121(3):193–6; discussion 196–7 (Eng. Abstr.) **(Fre)**

[Cancer of the rectum: is it possible to decrease therapeutic sequelae and improve quality of life?] Tiret E. **Gastroenterol Clin Biol** 1996;20(11):946–54 (47 ref.) **(Fre)**

[Primary anorectal melanoma. Apropos of 19 cases] Dubé P, et al. **J Chir (Paris)** 1997 May;134(1):3–8 (Eng. Abstr.) **(Fre)**

[Ileus in extensive intra-abdominal calcinosis after peritonitis] Angele M, et al. **Chirurg** 1997 Jun;68(6):646–8 (Eng. Abstr.) **(Ger)**

[Results of deep rectum resection and intersphincteric rectum excision] Bruch HP, et al. **Chirurg** 1997 Jul;68(7):689–92 (Eng. Abstr.) **(Ger)**

[Technique and indications for sphincter-saving transanal resection in rectal carcinoma] Buess G, et al. **Chirurg** 1996 Feb;67(2):121–8 (22 ref.) (Eng. Abstr.) **(Ger)**

[Intestinal schistosomiasis, a facultative precancerous condition? Review of the literature with reference to Schistosoma japonicum associated rectum carcinoma] Jatzko G, et al. **Chirurg** 1997 Jul;68(7):727–31 (24 ref.) (Eng. Abstr.) **(Ger)**

[Restorative proctectomy. A comparison of direct colo-anal and colon-pouch-anal anastomoses for reconstructing continuity] Kienle P, et al. **Chirurg** 1997 Jun;68(6):630–2 (Eng. Abstr.) **(Ger)**

[Retroperitoneal phlegmon after transanal endoscopic microsurgical excision of rectal adenoma] Klaue HJ, et al. **Chirurg** 1997 Jan;68(1):84–6 (Eng. Abstr.) **(Ger)**

[Mason paracoccygeal trans-sphincteric approach to the rectum: good outcome only in highly selective indications?] Meissner K, et al. **Chirurg** 1996 Feb;67(2):145–9 (Eng. Abstr.) **(Ger)**

[Local therapy of rectum carcinoma. A prospective follow-up study] Mentges B, et al. **Chirurg** 1996 Feb; 67(2):133–8 (Eng. Abstr.) **(Ger)**

[Lymph node dissection, stage migration and perioperative risk in rectal carcinoma] Mörschel M, et al. **Chirurg** 1996 Sep;67(9):915–20 (Eng. Abstr.) **(Ger)**

[Surgical therapy and prognosis of not curatively resectable rectum carcinoma. Results of a multicenter study of the Colorectal Carcinoma Study Group] Riedl S. **Chirurg** 1996 Feb;67(2):155–60 (Eng. Abstr.) **(Ger)**

[Anterior rectum resection] Rosen HR, et al. **Chirurg** 1996 Feb;67(2):99–109 (62 ref.) (Eng. Abstr.) **(Ger)**

[Recurrence and survival rate after surgical therapy of rectal carcinoma] Safi F. **Chirurg** 1996 Aug;67(8):821–5 (Eng. Abstr.) **(Ger)**

[10 years experiences with transanal endoscopic microsurgery. Histopathologic and clinical analysis] Said S, et al. **Chirurg** 1996 Feb;67(2):139–44 (Eng. Abstr.) **(Ger)**

[Intersphincteric rectum resection with radical mesorectum excision and colo-anal anastomosis] Schumpelick V, et al. **Chirurg** 1996 Feb;67(2):110–20 (Eng. Abstr.) **(Ger)**

[Surgical relevance of preoperative diagnosis of tumors of the gastrointestinal tract—decision making in esophageal, stomach, colon and rectal carcinoma] Siewert JR, et al. **Chirurg** 1997 Apr;68(4):317–24 (29 ref.) (Eng. Abstr.) **(Ger)**

[Vital preoperative function diagnosis in deep anterior rectum resection] Stern J, et al. **Chirurg** 1996 Feb;67(2):129–32 (20 ref.) (Eng. Abstr.) **(Ger)**

[Endosonography control of percutaneous paracoccygeal drainage of deep pelvic abscesses after rectum resection] Truong S, et al. **Chirurg** 1997 Jun;68(6):633–7 (Eng. Abstr.) **(Ger)**

[The laser treatment of rectal carcinoma] Riedl S. **Dtsch Med Wochenschr** 1997 Jan 24;122(4):105 **(Ger)**

[Development and clinical anatomy of the rectal adventitia. significance for radical operation of rectal carcinoma] Fritsch H, et al. **Langenbecks Arch Chir** 1996;381(4):237–43 (Eng. Abstr.) **(Ger)**

[Restorative proctectomy, reconstruction of continuity with or without colon J pouch] Kienle P, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:262–4 (Eng. Abstr.) **(Ger)**

[Local therapy of early rectal carcinoma with curative intent: implications for a change in oncologic strategy] Mentges B, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:543–6 (Eng. Abstr.) **(Ger)**

[Does the surgeon modify risk of local recurrence in rectal carcinoma?] Mörschel M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:222–4 (Eng. Abstr.) **(Ger)**

[Microsurgery in prospective comparison with conventional transanal excision or anterior rectum resection in adenomas and superficial carcinomas] Winde G, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:265–8 (Eng. Abstr.) **(Ger)**

[Reduction of local recurrence and distant metastases in advanced rectal carcinoma by preoperative radiotherapy--results of a randomized study by the MRC (Medical Research Council)] Fietkau R. **Strahlenther Onkol** 1997 Sep;173(9):488–9 **(Ger)**

[Therapy of rectal carcinoma: oncologically adequate surgery is crucial] Maurer CA, et al. **Ther Umsch** 1996 Nov; 53(11):829–38 (31 ref.) (Eng. Abstr.) **(Ger)**

[Compression phenomenon of the popliteal veins by bilateral compartment syndromes after many hours of surgery in lithotomy position] Atamer C, et al. **Vasa** 1996;25(3):295–8 (Eng. Abstr.) **(Ger)**

[Phospholipase A2—acute phase protein after liver surgery?] Gerhard F, et al. **Z Gastroenterol** 1997 Apr;35(4):247–53 (Eng. Abstr.) **(Ger)**

[Local excision of rectal carcinoma] Heintz A, et al. **Zentralbl Chir** 1996;121(3):184–9 (Eng. Abstr.) **(Ger)**

[Prognostic factors in local recurrence rate after surgical therapy of rectal carcinomas] Mörschel M, et al. **Zentralbl Chir** 1996;121(3):177–83 (Eng. Abstr.) **(Ger)**

[The effect of blood transfusion on the late results of the surgical treatment of rectal cancer] Görög D, et al. **Orv Hetil** 1996 Aug 4;137(31):1693–8 (39 ref.) (Eng. Abstr.) **(Hun)**

[Lymphadenectomy and nerve sparing technique in radical surgery of rectal cancer (editorial)] Di Matteo G, et al. **Ann Ital Chir** 1996 Sep-Oct;67(5):593–602 (Eng. Abstr.) **(Ita)**

[Study on diagnostic and therapeutic behavior in tumors of the medial-lower third of the rectum in 2 Italian regions] Gennari L, et al. **Ann Ital Chir** 1996 Sep-Oct;67(5):653–7; discussion 657–9 (Eng. Abstr.) **(Ita)**

[Neurovascular implications in total meso-rectal excisions. A prospective study of sexual function after surgery for rectal cancer] Prete F. **G Chir** 1996 Aug-Sep;17(8–9):393–8 (Eng. Abstr.) **(Ita)**

[Functional results of sphincter-saving techniques in cancer of the low rectum] Santoro GA, et al. **G Chir** 1996 Oct; 17(10):547–50 (25 ref.) (Eng. Abstr.) **(Ita)**

[Minimally invasive surgery and neoplasms of the inferior third of the rectum: personal technique] Trignano M, et al. **G Chir** 1997 Apr;18(4):241–4 (Eng. Abstr.) **(Ita)**

[Perioperative complications in traditional surgery of the rectum] Fontanili M, et al. **Minerva Chir** 1997 Mar; 52(3):217–24 (Eng. Abstr.) **(Ita)**

[Prognostic significance of postoperative septic complications in surgery of rectal carcinoma] Pérez Ruiz L, et al. **Minerva Chir** 1996 Jun;51(6):447–50 (Eng. Abstr.) **(Ita)**

[Intra-abdominal desmoid tumor in a patient surgically treated for rectal carcinoma. Report of a case] Capra S, et al. **Radiol Med (Torino)** 1996 Jul-Aug;92(1–2):141–2 **(Ita)**

[Experience with surgery for synchronous double cancer of rectum and lung detected after long-term follow-up for pneumoconiosis] Tsuji K, et al. **Kyobu Geka** 1996 Dec; 49(13):1130–3 (Eng. Abstr.) **(Jpn)**

[Present state and problems of laparoscopic surgery for colon and rectal carcinoma] Miyajima N, et al. **Nippon Geka Gakkai Zasshi** 1997 Mar;98(3):380–4 (Eng. Abstr.) **(Jpn)**

[The autonomic nerve preserving radical resection for the patients with lower rectal cancer] Mori T, et al. **Nippon Geka Gakkai Zasshi** 1997 Mar;98(3):385–90 (Eng. Abstr.) **(Jpn)**

[Sphincter saving procedure for low rectal carcinoma] Sugihara K, et al. **Nippon Geka Gakkai Zasshi** 1997 Mar; 98(3):391–5 (Eng. Abstr.) **(Jpn)**

[Follow up after potential curative surgery of colorectal cancer. Guidelines from the Norwegian Gastrointestinal Cancer Group] Norum J, et al. **Tidsskr Nor Laegeforen** 1997 Aug 30;117(20):2965–8 (Eng. Abstr.) **(Nor)**

[Adjuvant treatment in operable colonic and rectal cancer. A new possibility] Tveit KM. **Tidsskr Nor Laegeforen** 1997 Aug 30;117(20):2991–2 **(Nor)**

[Case of prolonged use of high doses of opiates and opioids by oncologic surgical patient] Petrova VV, et al. **Anesteziol Reanimatol** 1996 Jul-Aug;(4):21–2 **(Rus)**

[Prevention of incompetence of sigmoidorectal anastomosis after anterior resection of the rectum in cancer] Briusov PG, et al. **Khirurgiia (Mosk)** 1996;(2):45–8 (Eng. Abstr.) **(Rus)**

[Antibiotic prophylaxis of postoperative infective complications in patients with rectal and colonic cancers] Dmitrieva NV, et al. **Khirurgiia (Mosk)** 1997;(6):56–61 (Eng. Abstr.) **(Rus)**

[Peritoneo-anal resection with remucosation of the anal canal in the treatment of cancer of the middle ampullary section of the rectum] Bondar' GV, et al. **Klin Khir** 1996;(4):8–10 **(Rus)**

[Abdomino-anal resection of the rectum with the bringing down of the demesenterized colon into the anal canal] Bondar' GV, et al. **Klin Khir** 1997;(1):31–3 (Eng. Abstr.) **(Rus)**

[Use of peritoneo-anal resection with levator sphincteroplasty in the treatment of cancer of the lower ampullary part of the rectum] Bondar' GV, et al. **Klin Khir** 1996;(6):22–4 **(Rus)**

[Causes and prognostic factors in etiology of local recurrence of rectal cancer] Braun EM, et al. **Klin Khir** 1996;(6):39–41 **(Rus)**

[Changes in plasma levels of lipid peroxidation products and myoglobin in patients with malignant tumors in the early postoperative period] Sloventantor VIu, et al. **Vestn Ross Akad Med Nauk** 1996;(12):32–4 (Eng. Abstr.) **(Rus)**

[The Miles-Thompson-Bricker method of total pelvic exenteration in malignant tumors of the rectum with urinary bladder infiltration] Ignjatović D, et al. **Vojnosanit Pregl** 1996 Nov-Dec;53(6):471–5 (Eng. Abstr.) **(Scr)**

[Options in the surgical treatment of diffuse cavernous hemangioma of the rectum] Castellví J, et al. **Rev Esp Enferm Dig** 1996 Aug;88(8):566–8 (Eng. Abstr.) **(Spa)**

[Sphincter-preserving surgery in rectal cancer] Belmonte Montes C, et al. **Rev Gastroenterol Mex** 1996 Apr-Jun; 61(2):124–33 (80 ref.) (Eng. Abstr.) **(Spa)**

[Therapeutic results in rectal cancer surgery. Surgical technique is of great significance] Holm T, et al. **Lakartidningen** 1997 Jun 18;94(25):2391–4 **(Swe)**

[A case of rectal cancer and extra-abdominal desmoid] Ievtushenko AV, et al. **Klin Khir** 1995;(2):51 **(Ukr)**

THERAPY

Adjuvant therapy for colon and rectal cancer. Ratkin GA. **Am Fam Physician** 1997 May 15;55(7):2487–92, 2495–6

Do we need adjuvant treatment for rectal cancer? [editorial] Sjödahl R. **Ann Med** 1997 Apr;29(2):91–3

Where are we now with adjuvant therapy for rectal cancer? Chapuis P, et al. **Aust N Z J Surg** 1997 Sep;67(9):588–90 (30 ref.)

A phase II study of recombinant interferon-beta (r-hIFN-beta 1a) in combination with 5-fluorouracil (5-FU) in the treatment of patients with advanced colorectal carcinoma. Joffe JK, et al. **Br J Cancer** 1997; 75(3):423–6

Aggressive multimodality treatment for locally advanced irresectable rectal cancer. Farouk R, et al. **Br J Surg** 1997 Jun;84(6):741–9 (95 ref.)

Phase I/II trial of combined 131I anti-CEA monoclonal antibody and hyperthermia in patients with advanced colorectal adenocarcinoma. Mittal BB, et al. **Cancer** 1996 Nov 1;78(9):1861–70

Where next in the treatment of rectal cancer? [editorial] James RD. **Clin Oncol (R Coll Radiol)** 1997;9(3):144–7 (17 ref.)

Case report: palliative treatment of a rectal tumour with a self-expanding metallic stent. Maclennan AC, et al. **Clin Radiol** 1997 Aug;52(8):633–5

Organ preservation in anal and rectal cancers. Willett CG. **Curr Opin Oncol** 1996 Jul;8(4):329–33 (25 ref.)

A clinical trial to evaluate the worth of preoperative multimodality therapy in patients with operable carcinoma of the rectum: a progress report of National Surgical Breast and Bowel Project Protocol R-03. Hyams DM, et al. **Dis Colon Rectum** 1997 Feb;40(2):131–9

Palliation of large-bowel obstruction due to recurrent rectosigmoid tumor using self-expandable endoprostheses. Feretis C, et al. **Endoscopy** 1996 Mar;28(3):319–22

Palliative endoscopic therapy of rectal carcinoma [letter; comment] Bosset JF, et al. **Eur J Cancer** 1996 Oct; 32A(11):2031–2. Comment on: Eur J Cancer 1996 Jan;32A(1):25–9.

Substantial variation in therapy for colorectal cancer across Europe: EUROCARE analysis of cancer registry data for 1987. Gatta G, et al. **Eur J Cancer** 1996 May;32A(5):831–5

Intense local therapy in primary rectal cancer: multi-institutional results with preoperative chemo-radiation therapy plus IORT. Spanish Group of IORT. Azinovic I, et al. **Front Radiat Ther Oncol** 1997; 31:196–9

IORT as adjuvant treatment in primary rectal carcinomas: multi-modality treatment. Eble MJ, et al. **Front Radiat Ther Oncol** 1997;31:200–3

Combined modality treatment including IORT in locally advanced and recurrent rectal cancer: results from a prospective Norwegian study. Tveit KM, et al. **Front Radiat Ther Oncol** 1997;31:221–3

Chemoradiation therapy and IORT in locally advanced rectal cancer: preliminary results in 36 patients. Valentini V, et al. **Front Radiat Ther Oncol** 1997;31:213–6

Pathological features of rectal cancer after preoperative radiochemotherapy. Dworak O, et al. **Int J Colorectal Dis** 1997;12(1):19–23

Simulation studies promote technological development of radiofrequency phased array hyperthermia. Wust P, et al. **Int J Hyperthermia** 1996 Jul-Aug;12(4):477–94

Superantigen-based immunotherapy: a phase I trial of PNU-214565, a monoclonal antibody-staphylococcal enterotoxin A recombinant fusion protein, in advanced pancreatic and colorectal cancer. Giantonio BJ, et al. **J Clin Oncol** 1997 May;15(5):1994–2007

Postoperative combined radiohyperthermia in Astler-Coller stages B2 and C distal rectal cancer. Caporale A, et al. **J Exp Clin Cancer Res** 1997 Jun;16(2):195–9

Locally advanced rectal cancer with a pelvic kidney complicating adjuvant radiation therapy. Bokhari MB, et al. **J Surg Oncol** 1996 Sep;63(1):57–60 (14 ref.)

p53 gene mutation is not directly related to tumoricidal effects of preoperative radiochemohyperthermia therapy for rectal cancers. Ichikawa D, et al. **J Surg Oncol** 1996 Oct;63(2):87–90

Progress in rectal cancer [comment] Fuchs CS. **Lancet** 1996 Dec 14;348(9042):1600. Comment on: Lancet 1996 Dec 14;348(9042):1605–10. Comment on: Lancet 1996 Dec 14;348(9042):1610–4. Comment on: Lancet 1997 Feb 22;349(9051):576.

Treatment of rectal cancer [letter; comment] Heriot AG, et al. **Lancet** 1997 Feb 22;349(9051):576. Comment on: Lancet 1996 Dec 14;348(9042):1600.

Regression of mucosa-associated lymphoid-tissue lymphoma of rectum after eradication of Helicobacter pylori [letter] Matsumoto T, et al. **Lancet** 1997 Jul 12;350(9071):115–6

Adjuvant treatment of colon and rectal cancer: impact of chemotherapy, radiotherapy, and immunotherapy on routine postsurgical patient management. Forschungsgruppe Onkologie Gastrointestinaler Tumoren (FOGT). Link KH, et al. **Recent Results Cancer Res** 1996;

142:311–52 (185 ref.)
Hyperthermia in the multimodal therapy of advanced rectal carcinomas. Wust P, et al. **Recent Results Cancer Res** 1996; 142:281–309 (136 ref.)
Treatment of colorectal cancer: hepatic metastasis. Fong Y, et al. **Semin Surg Oncol** 1996 Jul–Aug;12(4):219–52 (215 ref.)
Effect of radiation therapy alone or in combination with surgery and/or chemotherapy on tumor and symptom control of recurrent rectal cancer. Knol HP, et al. **Strahlenther Onkol** 1997 Jan;173(1):43–9
Adjuvant medical therapy for colorectal cancer. Diaz–Canton EA, et al. **Surg Clin North Am** 1997 Feb; 77(1):211–28 (67 ref.)
Application of rectal stents for palliation of obstructing rectosigmoid cancer. Dohmoto M, et al. **Surg Endosc** 1997 Jul;11(7):758–61
Aggressive versus conventional strategies in the treatment of rectal adenocarcinoma. Havenga K, et al. **Surg Oncol** 1996 Aug;5(4):183–8
Increased apoptosis rate by hyperthermochemoradiotherapy for advanced rectal cancers. Sakakura C, et al. **Surg Today** 1997;27(8):773–6
[Treatment of colorectal cancer with monoclonal antibodies (see comments)] Nielsen SE. **Ugeskr Laeger** 1997 May 19; 159(21):3134–9 (40 ref.) (Eng. Abstr.). Comment in: Ugeskr Laeger 1997 Aug 18;159(34):5110–1. **(Dan)**
[Contribution of cancer registries to the evaluation of cancer treatment: on the example of rectal cancer] Maurel J, et al. **Ann Chir** 1996;50(10):865–74 (Eng. Abstr.) **(Fre)**
[Malignant anorectal melanoma: description of a clinical case and review of the literature] Malaguarnera M, et al. **Bull Cancer** 1997 Apr;84(4):423–6 (35 ref.) (Eng. Abstr.) **(Fre)**
[Adjuvant radio–chemotherapy of cancers of the rectum] Piedbois P, et al. **Cancer Radiother** 1997;1(1):42–51 (48 ref.) (Eng. Abstr.) **(Fre)**
[Adjuvant therapy of cancer of the rectum (see comments)] Ducreux M, et al. **Gastroenterol Clin Biol** 1996; 20(10):858–72 (112 ref.). Comment in: Gastroenterol Clin Biol 1997;21(5):430–2. **(Fre)**
[Remarks on the update titled: adjuvant treatment of rectal cancer (letter; comment)] Huguier M. **Gastroenterol Clin Biol** 1997;21(5):430–2. Comment on: Gastroenterol Clin Biol 1996;20(10):858–72. **(Fre)**
[Cancer of the rectum: from disparity of therapeutic practices to disparity of results (editorial)] Lazorthes F. **Gastroenterol Clin Biol** 1996;20(8–9):623–5 **(Fre)**
[Medical treatment of colorectal cancer] Díaz–Cantón EA, et al. **Medicina (B Aires)** 1996;56(4):414–22 (49 ref.) (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

Endosonography for preoperative staging of rectal tumours. Nielsen MB, et al. **Acta Radiol** 1996 Sep;37(5):799–803
Endoscopic ultrasound for rectal carcinoid tumors [letter] Bhutani MS. **Am J Gastroenterol** 1996 Dec;91(12):2651
Three–dimensional endosonography for staging of rectal cancer. Hünerbein M, et al. **Ann Surg** 1997 Apr; 225(4):432–8
Early detection of locally recurrent rectal cancer by endosonography. Rotondano G, et al. **Br J Radiol** 1997 Jun;70(834):567–71
Evaluation and biopsy of recurrent rectal cancer using three–dimensional endosonography. Hünerbein M, et al. **Dis Colon Rectum** 1996 Dec;39(12):1373–8
Three–dimensional endoluminal ultrasound: new staging technique in patients with rectal cancer. Ivanov KD, et al. **Dis Colon Rectum** 1997 Jan;40(1):47–50
Preoperative detection of distal intramural spread of lower rectal carcinoma using transrectal ultrasonography. Yanagi H, et al. **Dis Colon Rectum** 1996 Nov;39(11):1210–4
Endosonographic detection of a mucinous adenocarcinoma in an anal fistula. Cerwenka H, et al. **Endoscopy** 1997 May; 29(4):335
Endosonographic follow–up after local excision of a pT1 rectal carcinoma. Maunoury V. **Endoscopy** 1996 Jun; 28(5):468
Endoluminal ultrasound and low–field magnetic resonance imaging are superior to clinical examination in the preoperative staging of rectal cancer. Starck M, et al. **Eur J Surg** 1995 Nov;161(11):841–5
Comparison between transrectal ultrasonography and computed tomography with rectal inflation of gas in preoperative staging of lower rectal cancer. Osti MF, et al. **Eur Radiol** 1997;7(1):26–30
Interobserver variability in endoscopic ultrasonography: a prospective evaluation. Roubein LD, et al. **Gastrointest Endosc** 1996 Nov;44(5):573–7
Preoperative radiotherapy for resectable cancer of the middle–distal rectum: its effect on the primary lesion as determined by endorectal ultrasound using flexible echo colonoscope. Bozzetti F, et al. **Int J Colorectal Dis** 1996; 11(6):283–6
Endorectal ultrasonography in the follow–up of rectal cancer. Is it a better way to detect early local recurrence? Novell F, et al. **Int J Colorectal Dis** 1997;12(2):78–81
The value of endorectal ultrasound in the assessment of adenomas, T1– and T2–carcinomas. Sailer M, et al. **Int J Colorectal Dis** 1997;12(4):214–9
Pitfalls and sources of error in staging rectal cancer with endorectal us. Kruskal JB, et al. **Radiographics** 1997 May–Jun;17(3):609–26
Rectal cancer: evaluation of staging with endosonography. Lindmark GE, et al. **Radiology** 1997 Aug;204(2):533–8
Peritumoral tissue reaction at transrectal US as a possible cause of overstaging in rectal cancer: histopathologic correlation. Maier AG, et al. **Radiology** 1997 Jun; 203(3):785–9
[Consensus conference 1994 on treatments of cancer of the rectum: what can we expect from endorectal ultrasonography?] Burtin P, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1001–3 (30 ref.) **(Fre)**
[How I examine cancer of the rectum using echoendoscopy] Gast P. **Rev Med Liege** 1997 Jun;52(6):439–41 **(Fre)**
[Role of endoluminal ultrasonography in the treatment of rectal carcinoma] Richter M, et al. **Rev Med Suisse Romande** 1997 Apr;117(4):331–6 (Eng. Abstr.) **(Fre)**
[Report of experiences of 3 years' use of rectal endosonography in a surgical department of basic and routine care] Templin F, et al. **Chirurg** 1997 Feb; 68(2):Suppl 42–6 **(Ger)**
[Anorectal endosonography in tumor after–care] Leppert R, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:559–61 (Eng. Abstr.) **(Ger)**
[Endosonographic anatomy of the pelvic floor] Schaeff B, et al. **Zentralbl Chir** 1996;121(8):617–23 (Eng. Abstr.) **(Ger)**
[Neurogenic tumor of the perirectal region (letter)] Benkö KJ. **Orv Hetil** 1997 Aug 10;138(32):2043 **(Hun)**
[Role of endorectal ultrasonography and CT in preoperative staging of rectal cancer. Personal experience] Garretti L, et al. **Minerva Chir** 1997 Jun;52(6):717–25 (Eng. Abstr.) **(Ita)**
[Ultrasonographic study of rectal carcinoid tumors] Nomura M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Nov; 93(11):797–805 (Eng. Abstr.) **(Jpn)**
[Endorectal echography. Its usefulness in the study of neoplasms of the rectum] Navarro A, et al. **Rev Esp Enferm Dig** 1996 Oct;88(10):661–6 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

[Radiation pathomorphism after a single large–fractionated preoperative irradiation of rectal cancer (electron microscopic study)] Izvekova OV, et al. **Arkh Patol** 1997 Jan–Feb;59(1):37–41 (Eng. Abstr.) **(Rus)**

RECTAL PROLAPSE

Rectocele. Brubaker L. **Curr Opin Obstet Gynecol** 1996 Oct; 8(5):876–9 (14 ref.)

COMPLICATIONS

Fecal incontinence in women with urinary incontinence and pelvic organ prolapse. Jackson SL, et al. **Obstet Gynecol** 1997 Mar;89(3):423–7

DIAGNOSIS

The impact of anismus on the clinical outcome of rectocele repair. van Dam JH, et al. **Int J Colorectal Dis** 1996; 11(5):238–42

DRUG THERAPY

[A successful treatment for mucosal prolapse syndrome by the steroid enema therapy in a postoperative patient of mesenteric panniculitis] Kato K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Aug;93(8):565–8 **(Jpn)**

ETIOLOGY

Internal rectal intussusception seldom develops into total rectal prolapse. Mellgren A, et al. **Dis Colon Rectum** 1997 Jul;40(7):817–20

PHYSIOPATHOLOGY

Results of perineal procedures for the treatment of rectal prolapse. Agachan F, et al. **Am Surg** 1997 Jan;63(1):9–12
Functional problems in adult rectal prolapse and controversies in surgical treatment. Eu KW, et al. **Br J Surg** 1997 Jul;84(7):904–11 (140 ref.)
Pudendal nerve terminal motor latency influences surgical outcome in treatment of rectal prolapse. Birnbaum EH, et al. **Dis Colon Rectum** 1996 Nov;39(11):1215–21
[Rectal prolapse] Christen D. **Ther Umsch** 1997 Apr; 54(4):193–6 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Defaeco–peritoneography in the diagnosis of rectal intussusception and rectal prolapse. Bremmer S, et al. **Acta Radiol** 1997 Jul;38(4 Pt 1):578–83
[Role of radiologic diagnosis in rectal mucosal prolapse] Salzano A, et al. **Radiol Med (Torino)** 1996 Jul–Aug; 92(1–2):82–6 (Eng. Abstr.) **(Ita)**

SURGERY

Results of perineal procedures for the treatment of rectal prolapse. Agachan F, et al. **Am Surg** 1997 Jan;63(1):9–12
The Delorme procedure: a useful operation for complicated rectal prolapse in the elderly. Kling KM, et al. **Am Surg** 1996 Oct;62(10):857–60
Re: The Delorme procedure: a useful operation for complicated rectal prolapse in the elderly [letter] Parikh V. **Am Surg** 1997 Sep;63(9):845
Functional problems in adult rectal prolapse and controversies in surgical treatment. Eu KW, et al. **Br J Surg** 1997 Jul;84(7):904–11 (140 ref.)
Management of recurrent rectal prolapse. Fengler SA, et al. **Dis Colon Rectum** 1997 Jul;40(7):832–4
Surgical treatment of recurrent complete rectal prolapse: a thirty–year experience. Hool GR, et al. **Dis Colon Rectum** 1997 Mar;40(3):270–2
Comparison of polyglycolic acid and polypropylene mesh for rectopexy in the treatment of rectal prolapse. Galili Y, et al. **Eur J Surg** 1997 Jun;163(6):445–8
Functional results after abdominal suture rectopexy for rectal prolapse or intussusception. Graf W, et al. **Eur J Surg** 1996 Nov;162(11):905–11
Solitary rectal ulcer syndrome: stopping the prolapse heals the ulceration. Frizelle FA, et al. **G Chir** 1996 Jun–Jul; 17(6–7):320–2
Vaginal repair of rectocele after dynamic graciloplasty for fecal incontinence due to imperforate anus. Altomare DF, et al. **Int J Colorectal Dis** 1996;11(5):243–5
The risk of infection of three synthetic materials used in rectopexy with or without colonic resection for rectal prolapse. Athanasiadis S, et al. **Int J Colorectal Dis** 1996; 11(1):42–4
Abdominal resection rectopexy versus Delorme's procedure for rectal prolapse: comparison of clinical and physiological outcomes [letter] [see comments] Chow PK, et al. **Int J Colorectal Dis** 1996;11(4):201–2. Comment in: Int J Colorectal Dis 1997;12(1):49–50.
Abdominal resection rectopexy versus Delorme's procedure for rectal prolapse: a predictable outcome [letter; comment] Penninckx F, et al. **Int J Colorectal Dis** 1997;12(1):49–50 . Comment on: Int J Colorectal Dis 1996;11(4):201–2.
Laparoscopic rectocele repair using polyglactin mesh. Lyons TL, et al. **J Am Assoc Gynecol Laparosc** 1997 May; 4(3):381–4
Perineal repair of rectal prolapse. Whitlow CB, et al. **J La State Med Soc** 1997 Jan;149(1):22–6
Laparoscopic–assisted rectopexy using a novel hand–access port. Gorey TF, et al. **J Laparoendosc Surg** 1996 Oct; 6(5):325–8
Paediatric rectal prolapse in Rwanda. Chaloner EJ, et al. **J R Soc Med** 1996 Dec;89(12):688–9
Mucosal plication in the treatment of partial rectal prolapse. Shafik A. **Pediatr Surg Int** 1997 Jul;12(5–6):386–8
Surgical treatment of prolapse of the rectum--evaluation of distant results. Dadan H, et al. **Rocz Akad Med Bialymst** 1996;41(2):505–14
The use of laparoscopic techniques in the surgical management of rectal prolapse [editorial] Eu KW. **Singapore Med J** 1996 Oct;37(5):464–5
Comparison of three perineal procedures for the treatment of rectal prolapse. Agachan F, et al. **South Med J** 1997 Sep;90(9):925–32
The best operation for rectal prolapse. Jacobs LK, et al. **Surg Clin North Am** 1997 Feb;77(1):49–70 (51 ref.)
Laparoscopic–assisted abdominoperineal proctosigmoidectomy for rectal prolapse. A new technique. Allam M, et al. **Surg Endosc** 1997 Feb;11(2):150–1
Laparoscopic rectopexy for complete rectal prolapse. Clinical outcome and anorectal function tests. Poen AC, et al. **Surg Endosc** 1996 Sep;10(9):904–8
[Laparoscopic rectopexy] Herold A, et al. **Zentralbl Chir** 1997;122(7):578–85 (Eng. Abstr.) **(Ger)**
[Surgical therapy of rectal prolapse] Leppert R, et al. **Zentralbl Chir** 1996;121(8):698–703 (42 ref.) (Eng. Abstr.) **(Ger)**
[Rehn–Delorme operation in pelvic floor insufficiency] Müller–Lobeck H, et al. **Zentralbl Chir** 1996;121(8):692–7 (Eng. Abstr.) **(Ger)**
[The surgical correction of anterior rectocele. Our experience] Boccasanta P, et al. **Minerva Chir** 1997 May; 52(5):549–56 (Eng. Abstr.) **(Ita)**
[The prolapse of the rectum. Treatment with fibrin adhesive] Ibáñez V, et al. **Cir Pediatr** 1997 Jan;10(1):21–4 (Eng. Abstr.) **(Spa)**
[Rectal prolapse] Medina González S. **Rev Gastroenterol Mex** 1996 Apr–Jun;61(2):119–23 (27 ref.) (Eng. Abstr.) **(Spa)**

THERAPY

Sucrose as an aid to manual reduction of incarcerated rectal prolapse. Coburn WM 3rd, et al. **Ann Emerg Med** 1997 Sep;30(3):347–9

VETERINARY

Laparoscopic diagnosis of ischemic necrosis of the descending colon after rectal prolapse and rupture of the mesocolon in two postpartum mares. Ragle CA, et al. **J Am Vet Med Assoc** 1997 Jun 1;210(11):1646–8
Management of post–partum cervical uterine or rectal prolapses in ewes using caudal epidural xylazine and lignocaine injection. Scott PR, et al. **Vet J** 1997 Jan; 153(1):115–6
Intracellular Campylobacter–like organisms associated with rectal prolapse and proliferative enteroproctitis in emus

(Dromaius novaehollandiae). Lemarchand TX, et al. **Vet Pathol** 1997 Mar;34(2):152–6

RECTAL SURGERY (SPECIALTY) see **COLON AND RECTAL SURGERY (SPECIALTY)**

RECTOCOLITIS see **PROCTOCOLITIS**

RECTOCOLITIS, HEMORRHAGIC see **COLITIS, ULCERATIVE**

RECTOCOLITIS, ULCERATIVE see **COLITIS, ULCERATIVE**

RECTOSIGMOIDITIS see **PROCTOCOLITIS**

RECTOVAGINAL FISTULA

A rectovaginal fistula in a sexually assaulted child. Kellogg ND, et al. **Clin Pediatr (Phila)** 1996 Jul;35(7):369–71

COMPLICATIONS

Acquired rectovaginal fistulae in South Africa [letter] Banieghbal B, et al. **Arch Dis Child** 1997 Jul;77(1):94

CONGENITAL

Repair of congenital H-type vestibuloanorectal fistula through the posterior midsagittal approach: case report. Keramidas DC, et al. **Eur J Pediatr Surg** 1997 Jun; 7(3):174–6

Perineal canal. Wakhlu A, et al. **Pediatr Surg Int** 1997 Apr; 12(4):283–5

ETIOLOGY

Aerosol cap and rectovaginal fistula: unusual findings at routine cervical smear [letter] Meniru GI, et al. **Int J Gynaecol Obstet** 1996 Feb;52(2):179–80

Schistosomiasis as a cause of rectovaginal fistula: a brief case report. Kunin J, et al. **Isr J Med Sci** 1996 Nov; 32(11):1109–11

Isolated H-type recto-vaginal fistula associated with a vulval abscess. White DW, et al. **Pediatr Radiol** 1997 Jul; 27(7):586–7

[Acquired recto-vaginal fistula in children: is HIV infection a cause?] Bankole Sanni R, et al. **Bull Soc Pathol Exot** 1997;90(2):111–2 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

The problem of post-partum fistulas in developing countries. Steiner AK. **Acta Trop** 1996 Dec 30;62(4):217–23 (10 ref.)

SURGERY

The problem of post-partum fistulas in developing countries. Steiner AK. **Acta Trop** 1996 Dec 30;62(4):217–23 (10 ref.)

Surgical approaches to low anovaginal fistula in Crohn's disease. Hull TL, et al. **Am J Surg** 1997 Feb;173(2):95–8

1995 Brown Craig Travelling Fellowship. Destination: Ethiopia. Goh JT, et al. **Aust N Z J Obstet Gynaecol** 1996 Aug;36(3):335–8

New option for recurrent rectovaginal fistulas. Haray PN, et al. **Dis Colon Rectum** 1996 Apr;39(4):463–4

Posterior sagittal anorectoplasty: primary repair of a rectovaginal fistula in an adult: report of a case. Simmang CL, et al. **Dis Colon Rectum** 1997 Sep;40(9):1119–23

Non-surgical repair of rectovaginal fistulae. Shafik A. **Eur J Obstet Gynecol Reprod Biol** 1996 Jul;67(1):17–20

Colonic J pouch-anal reconstruction with gluteus maximus transposition for a post-irradiation rectovaginal fistula. Kusunoki M, et al. **Hepatogastroenterology** 1996 Sep–Oct; 43(11):1339–42

The repair of multiple rectovaginal fistulas with the neurovascular pudendal thigh flap (Singapore flap). Gürlek A, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2071–3

Rectovaginal fistulas. Therapeutic options. Tsang CB, et al. **Surg Clin North Am** 1997 Feb;77(1):95–114 (59 ref.)

Laparoscopic resection of high rectovaginal fistula with intracorporeal colorectal anastomosis and omentoplasty. Schwenk W, et al. **Surg Endosc** 1997 Feb;11(2):147–9

[Posterior rectotomy—a minimally invasive procedure?] Kristiansen VB, et al. **Ugeskr Laeger** 1997 Mar 17; 159(12):1755–7 (Eng. Abstr.) **(Dan)**

THERAPY

Management of genital fistulas in patients with cervical cancer. Emmert C, et al. **Arch Gynecol Obstet** 1996; 259(1):19–24

Device for occlusion of rectovaginal fistula: clinical trials. Lee BH, et al. **Radiology** 1997 Apr;203(1):65–9

RECTUM

consider also terms at PROCT-

Rectal temperature in marathon runners [letter; comment] Ash CJ, et al. **Ann Emerg Med** 1997 May;29(5):693. Comment on: Ann Emerg Med 1996 Oct;28(4):414–7.

A possible thermodynamic approach to the change of rectal temperature of rabbits due to forced restricting conditions. Nakajima T, et al. **Biol Pharm Bull** 1997 Jul;20(7):743–8

Prostate cancer screening with PSA, DRE and TRUS. Cusan L. **Can J Oncol** 1994 Nov;4 Suppl 1:63–4

Unusual rectal foreign body: treatment using argon-beam coagulation. Glaser J, et al. **Endoscopy** 1997 Mar; 29(3):230–1

Detection of aberrant crypt foci by magnifying colonoscopy. Yokota T, et al. **Gastrointest Endosc** 1997 Jul;46(1):61–5

Digital rectal examination during early acute MI [editorial] Lee JR, et al. **Hosp Pract (Off Ed)** 1997 Sep 15;32(9):15–6 (11 ref.)

Whisky bottle in the rectum [letter] Singla S, et al. **Indian J Gastroenterol** 1996 Jul;15(3):113

And now, a needle in the rectum [letter] Soni NK, et al. **Indian J Gastroenterol** 1997 Apr;16(2):77–8

Indications for excluding the seminal vesicles when treating clinically localized prostatic adenocarcinoma with radiotherapy alone. Katcher J, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 1;37(4):871–6

An analysis of the effect of ovoid shields in a selectron-LDR cervical applicator on dose distributions in rectum and bladder. Steggerda MJ, et al. **Int J Radiat Oncol Biol Phys** 1997 Aug 1;39(1):237–45

Dose-volume histograms for bladder and rectum. Ting JY, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15; 38(5):1105–11

The effect of treatment positioning on normal tissue dose in patients with prostate cancer treated with three-dimensional conformal radiotherapy. Zelefsky MJ, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 1;37(1):13–9

Mouse anococcygeus muscle: sexual dimorphism and responsiveness to sex hormones. Fukazawa Y, et al. **J Endocrinol** 1997 Feb;152(2):229–37

Suppression of human colorectal mucosal prostaglandins: determining the lowest effective aspirin dose. Ruffin MT 4th, et al. **J Natl Cancer Inst** 1997 Aug 6;89(15):1152–60

Management of colorectal foreign bodies. Cohen JS, et al. **J R Coll Surg Edinb** 1996 Oct;41(5):312–5

Management of foreign bodies of the rectum: report of 21 cases. Kouraklis G, et al. **J R Coll Surg Edinb** 1997 Aug; 42(4):246–7

Rectal sonography for diagnosing hematocolpometra. A case report. Kushnir O, et al. **J Reprod Med** 1997 Aug; 42(8):519–20

[A case from practice (370). Rectal foreign body] Kleeman D, et al. **Schweiz Rundsch Med Prax** 1996 Dec 17; 85(51–52):1666–8 **(Ger)**

[Comparison of calculated and measured rectal doses in HDR brachytherapy with Ir-192 source] Kakinohana Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Apr; 57(5):265–70 (Eng. Abstr.) **(Jpn)**

[Rectal palpation when justified—a final reply (letter)] Andersson R. **Lakartidningen** 1996 Oct 9;93(41):3552 **(Swe)**

ABNORMALITIES

Urorectal septal defects in a female and her offspring. Mills PL, et al. **Am J Med Genet** 1997 Jun 13;70(3):250–2

Colostomy complications in infants and children. Nour S, et al. **Ann R Coll Surg Engl** 1996 Nov;78(6):526–30

Sacrococcygeal teratoma and anorectal malformation. Ng WT, et al. **Aust N Z J Surg** 1997 Apr;67(4):218–20 (28 ref.)

Fetus in fetu and cystic rectal duplication in a newborn. Sanal M, et al. **Eur J Pediatr Surg** 1997 Apr;7(2):120–1

Rectovesical fistula: a possible cause of postnatal lethality in F1 Dh/+ male mice between DDD female and DH (Dh/+) male. Suto J, et al. **Exp Anim** 1996 Oct; 45(4):399–402

Anatomy of the nerve supply of the rectum, bladder, and internal genitalia in anorectal dysgenesis in the male. Davies MR. **J Pediatr Surg** 1997 Apr;32(4):536–41

A comparison of anal endosonography with electromyography and manometry in high and intermediate anorectal anomalies. Fukata R, et al. **J Pediatr Surg** 1997 Jun;32(6):839–42

A unique presentation of atypical complete duplication of terminal ileum, colon, rectum, and urinary bladder. Gopal SC, et al. **J Pediatr Surg** 1997 Aug;32(8):1250–1

An unusual variant of rectal atresia with rectovestibular fistula. Kulshrestha S, et al. **J Pediatr Surg** 1997 Jun; 32(6):921–2

Currarino triad: anorectal malformation, sacral bony abnormality, and presacral mass—a review of 11 cases. Lee SC, et al. **J Pediatr Surg** 1997 Jan;32(1):58–61

The tethered spinal cord in patients with anorectal malformations. Levitt MA, et al. **J Pediatr Surg** 1997 Mar; 32(3):462–8

Segmental colonic motility in patients with anorectal malformations. Rintala RJ, et al. **J Pediatr Surg** 1997 Mar; 32(3):453–6

Do children with repaired low anorectal malformations have normal bowel function? Rintala RJ, et al. **J Pediatr Surg** 1997 Jun;32(6):823–6

Cloacal duplication. Salman AB. **J Pediatr Surg** 1996 Nov; 31(11):1587–8

Anterior sagittal anorectoplasty for anorectal malformations and perineal trauma in the female child. Wakhlu A, et al. **J Pediatr Surg** 1996 Sep;31(9):1236–40

Anorectal malformation: a new anatomic variant resembling an H-type fistula. Willems M, et al. **J Pediatr Surg** 1996 Dec;31(12):1682–4

Rectal ectasia associated with anorectal anomalies. Zia-ul-Miraj M, et al. **J Pediatr Surg** 1997 Apr;32(4):621–3

Accessory scrotum and anorectal malformation associated with "pseudo" prune belly in a neonate. Shoshany G, et al. **J Perinatol** 1996 May-Jun;16(3 Pt 1):224–6 (25 ref.)

The genetic male with absent penis and urethrorectal communication: experience with 5 patients. Hendren WH. **J Urol** 1997 Apr;157(4):1469–74

Role of the antegrade continence enema in the management of the most debilitating childhood recto-urogenital anomalies. Sheldon CA, et al. **J Urol** 1997 Sep;158(3 Pt 2):1277–9; discussion 1279–80

Imperforate anus (anal agenesis) with rectal and sigmoid atresias in a newborn. Ein SH. **Pediatr Surg Int** 1997 Jul; 12(5–6):449–51

Anorectal anomalies: anorectal manometric function and anal endosonography in relation to functional outcome. Emblem R, et al. **Pediatr Surg Int** 1997 Sep;12(7):516–9

Cystic rectal duplication: a rare cause of neonatal intestinal obstruction. Mboyo A, et al. **Pediatr Surg Int** 1997 Jul; 12(5–6):452–4

Evolution of sonographic findings in a fetus with agenesis of the urethra, vagina, and rectum. Carroll SG, et al. **Prenat Diagn** 1996 Oct;16(10):931–3

[Currarino triad : a case report] Miyake S, et al. **No Shinkei Geka** 1996 Feb;24(2):189–93 (Eng. Abstr.) **(Jpn)**

[Relationship between adaptation mechanisms and the level of functioning of the cardiovascular system in children with abnormalities of the large intestine and anorectal region] Agzamkhodzhaev TS, et al. **Anesteziol Reanimatol** 1996 Nov-Dec;(6):27–31 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

The discovery and a study of the adventitia rectalis, a fibrous layer of the rectal wall. Fu M, et al. **J Pediatr Surg** 1997 Jan;32(1):7–11

Chemical shift imaging of human colorectal tissue (ex vivo). Ende D, et al. **NMR Biomed** 1996 Jun;9(4):179–83

BLOOD SUPPLY

Study of the arterial pattern of the rectum and its clinical application. Shafik A, et al. **Acta Anat (Basel)** 1996; 157(1):80–6

Ischemic proctosigmoiditis. Bharucha AE, et al. **Am J Gastroenterol** 1996 Nov;91(11):2305–9

Transjugular embolization of the inferior mesenteric vein for bleeding anorectal varices after unsuccessful transjugular intrahepatic portosystemic shunt. Demirel H, et al. **Am J Gastroenterol** 1997 Jul;92(7):1226–7

Effect of hypothermia on rectal mucosal perfusion in infants undergoing cardiopulmonary bypass. Booker PD, et al. **Br J Anaesth** 1996 Nov;77(5):591–6

Submucosal anal injection in the treatment of pelvic malignancies [letter] Shafik A. **Dis Colon Rectum** 1997 May; 40(5):629–30

Idiopathic non-familial rectal and colonic varices requiring sigmoidorectal resection and coloanal anastomosis. Detry RJ, et al. **Eur J Gastroenterol Hepatol** 1996 Oct; 8(10):1023–6 (32 ref.)

Rectal Dieulafoy's or angiodysplasia? [letter] Kalman DR, et al. **Gastrointest Endosc** 1997 Jul;46(1):91–2

Bleeding anorectal varices: successful treatment with transjugular intrahepatic portosystemic shunting (TIPS). Fantin AC, et al. **Gut** 1996 Jun;38(6):932–5

The use of transjugular intrahepatic portosystemic shunt and surgical portocaval H-shunt for the treatment of colorectal variceal bleeding. Uemoto S, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):557–60

Innovative indications for tips. Conn HO. **Hepatology** 1997 Jun;25(6):1543–5

Rectal bleeding from a mucous fistula secondary to a Dieulafoy's lesion. Abdelmalek MF, et al. **J Clin Gastroenterol** 1997 Jun;24(4):259–61

Massive gastrointestinal bleeding from a Dieulafoy-like lesion of the rectum. Eguchi S, et al. **J Clin Gastroenterol** 1997 Jun;24(4):262–3 (6 ref.)

Recognition and treatment of venous malformations of the rectum. Keljo DJ, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):442–6

Endosonographic evaluation of the rectum in children with extrahepatic portal venous obstruction. Yachha SK, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):438–41

Massive arterial bleeding from a single rectal vessel. Harrison JD, et al. **Postgrad Med J** 1997 May;73(859):303–4

[Colorectal ischemic necrosis following reconstructive surgery of the abdominal aorta. Report of 2 clinical cases] Tridico F, et al. **Minerva Chir** 1996 Sep;51(9):739–43 (Eng. Abstr.) **(Ita)**

[A case of massive bleeding from rectal varices treated with endoscopic variceal ligation (EVL)] Kojima T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Feb;93(2):114–9 (16 ref.) **(Jpn)**

[A case of rectal varices treated with endoscopic injection sclerotherapy] Zeniya A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):38–43 (19 ref.) **(Jpn)**

CHEMISTRY

Substance P containing nerve fibers in rectal mucosa of ulcerative colitis. Watanabe T, et al. **Dis Colon Rectum** 1997 Jun;40(6):718–25

Laminins, tenascin and type VII collagen in colorectal

mucosa. Lohi J, et al. **Histochem J** 1996 Jun;28(6):431–40

CYTOLOGY

Selective depletion of rectal lamina propria rather than lymphoid aggregate CD4 lymphocytes in HIV infection. Clayton F, et al. **Clin Exp Immunol** 1997 Feb;107(2):288–92

Study of cell kinetics in the normal colorectal mucosa of subjects at risk of developing colorectal carcinoma. De Franceschi L, et al. **Oncology** 1997 Mar–Apr;54(2):129–33

DRUG EFFECTS

Effects of psyllium therapy on stool characteristics, colon transit and anorectal function in chronic idiopathic constipation. Ashraf W, et al. **Aliment Pharmacol Ther** 1995 Dec;9(6):639–47

Effect of some amino acids on the rectal irritation caused by sodium caprate in conscious rats. Kinouchi Y, et al. **Biol Pharm Bull** 1996 Mar;19(3):375–8

The enhancing mechanism of capric acid (C10) from a suppository on rectal drug absorption through a paracellular pathway. Takahashi H, et al. **Biol Pharm Bull** 1997 Apr;20(4):446–8

Pharmacology of the internal anal sphincter and abnormalities in faecal incontinence. Speakman CT. **Eur J Gastroenterol Hepatol** 1997 May;9(5):442–6 (56 ref.)

The effect of orally and rectally administered delta 9-tetrahydrocannabinol on spasticity: a pilot study with 2 patients. Brenneisen R, et al. **Int J Clin Pharmacol Ther** 1996 Oct;34(10):446–52

A novel method for the preclinical assessment of rectal irritation. Kinouchi Y, et al. **J Pharm Pharmacol** 1996 Mar; 48(3):310–5

Noxious colorectal distention induced-c-Fos protein in limbic brain structures in the rat. Traub RJ, et al. **Neurosci Lett** 1996 Sep 13;215(3):165–8

Effects of loperamide oxide on gastrointestinal transit time and anorectal function in patients with chronic diarrhoea and faecal incontinence. Sun WM, et al. **Scand J Gastroenterol** 1997 Jan;32(1):34–8

Morphological observations of diarrhea in mice caused by experimental ciguatoxicosis. Ito E, et al. **Toxicon** 1996 Jan; 34(1):111–22

Application of formaldehyde for treatment of hemorrhagic radiation-induced proctitis. Roche B, et al. **World J Surg** 1996 Oct;20(8):1092–4; discussion 1094–5

EMBRYOLOGY

Development of the urorectal septum and differentiation of the urogenital sinus in human embryos of stages 13 to 19. Kromer P. **Folia Morphol (Warsz)** 1996;55(4):362–3

ENZYMOLOGY

Low O6-alkylguanine DNA-alkyltransferase activity in normal colorectal tissue is associated with colorectal tumours containing a GC-->AT transition in the K-ras oncogene. Jackson PE, et al. **Carcinogenesis** 1997 Jul; 18(7):1299–302

IMMUNOLOGY

Comparison of the oral, rectal, and vaginal immunization routes for induction of antibodies in rectal and genital tract secretions of women. Kozlowski PA, et al. **Infect Immun** 1997 Apr;65(4):1387–94

Mucosal or targeted lymph node immunization of macaques with a particulate SIVp27 protein elicits virus-specific CTL in the genito-rectal mucosa and draining lymph nodes. Klavinskis LS, et al. **J Immunol** 1996 Sep 15; 157(6):2521–7

INJURIES

Management of selected rectal injuries by primary repair. Levine JH, et al. **Am J Surg** 1996 Nov;172(5):575–8; discussion 578–9

Inadvertent perforation of the rectum during abdominoperineal resection [see comments] Porter GA, et al. **Am J Surg** 1996 Oct;172(4):324–7. Comment in: Am J Surg 1997 May;173(5):458.

Inadvertent perforation of rectum during abdominoperineal resection [letter; comment] Sing RF, et al. **Am J Surg** 1997 May;173(5):458. Comment on: Am J Surg 1996 Oct;172(4):324–7.

Rectal packing as initial management of grade 3 rectal tears. Baird AN, et al. **Equine Vet J Suppl** 1989 Jun;(7):121–3

Spontaneous rupture of the rectum with evisceration of the small intestine through the anus. Ellul JP, et al. **Eur J Surg** 1995 Dec;161(12):925–7

Screwing a carrot out of the rectum [letter] Vashist MG, et al. **Indian J Gastroenterol** 1997 Jul;16(3):120

Rectal sexual trauma including foreign bodies [editorial] Irizarry E, et al. **Int J STD AIDS** 1996 May-Jun;7(3):166–9 (21 ref.)

Blunt traumatic injuries to the colon and rectum. Carrillo EH, et al. **J Am Coll Surg** 1996 Dec;183(6):548–52

Medical management of a full-thickness tear of the retroperitoneal portion of the rectum in a horse with hyperadrenocorticism. Mazan MR. **J Am Vet Med Assoc** 1997 Mar 1;210(5):665–7

Colorectal injury by compressed air--a report of 2 cases. Suh HH, et al. **J Korean Med Sci** 1996 Apr;11(2):179–82

Subcutaneous emphysema, pneumomediastinum, pneumothorax, pneumopericardium, and pneumoperitoneum from rectal barotrauma. Mirzayan R, et al. **J Trauma** 1996 Dec;41(6):1073–5

Experience with 30 posttraumatic rectourethral fistulas: presentation of posterior transsphincteric anterior rectal wall advancement. al-Ali M, et al. **J Urol** 1997 Aug; 158(2):421–4

Accidental anorectal impalement in children. Jona JZ. **Pediatr Emerg Care** 1997 Feb;13(1):40–3

Ventral peritoneal rectal tear repair in a mare. David A, et al. **Vet Rec** 1997 Jul 12;141(2):51–2

[Problems with continence in rectal injuries] Michek J, et al. **Rozhl Chir** 1996 Nov;75(11):532–4 (Eng. Abstr.) **(Cze)**

[How to manage a rectal lesion in horses in clinical practice] Peters JW. **Tijdschr Diergeneeskd** 1997 Feb 15; 122(4):96–101 (Eng. Abstr.) **(Dut)**

[Rectal lesions in horses (letter)] Warmerdam EP. **Tijdschr Diergeneeskd** 1997 Apr 1;122(7):196–7 **(Dut)**

[Surgical treatment concept in traumatic sphincter lesions] Ecker KW, et al. **Zentralbl Chir** 1996;121(8):681–7 (Eng. Abstr.) **(Ger)**

[Thermal colorectal lesions] Neves C, et al. **Acta Med Port** 1996 Oct–Dec;9(10–12):407–8 (Eng. Abstr.) **(Por)**

[Strategy of the surgeon in rectal injuries] Khubezov AT, et al. **Khirurgiia (Mosk)** 1996;(2):49–50 (Eng. Abstr.) **(Rus)**

[The diagnosis and treatment of gunshot wounds of the rectum] Voĭnovskiĭ EA, et al. **Voen Med Zh** 1996 Oct; 317(10):35–9 **(Rus)**

[War injuries of the rectum and perineum] Stanković N, et al. **Vojnosanit Pregl** 1997 Mar–Apr;54(2):103–7 (Eng. Abstr.) **(Scr)**

[Complications after primary surgical management of war injuries of the colon and rectum] Stanković N, et al. **Vojnosanit Pregl** 1997 May-Jun;54(3):203–8 (Eng. Abstr.) **(Scr)**

INNERVATION

Use of positron emission tomography and evoked potentials in the detection of cortical afferents from the gastrointestinal tract. Rothstein RD, et al. **Am J Gastroenterol** 1996 Nov;91(11):2372–6

Synaptic inputs to morphologically identified myenteric neurons in guinea pig rectum from pelvic nerves. Tamura K. **Am J Physiol** 1997 Jul;273(1 Pt 1):G49–55

Cathepsin D in intestinal ganglion cells. A potential aid to diagnosis in suspected Hirschsprung's disease. Abu-Alfa AK, et al. **Am J Surg Pathol** 1997 Feb;21(2):201–5

Pudendal nerve terminal motor latency influences surgical outcome in treatment of rectal prolapse. Birnbaum EH, et al. **Dis Colon Rectum** 1996 Nov;39(11):1215–21

Variation in pudendal nerve terminal motor latency according to disease. Pfeifer J, et al. **Dis Colon Rectum** 1997 Jan;40(1):79–83

Metastasis of rectal cancer to lymph nodes and tissues around the autonomic nerves spared for urinary and sexual function. Yamakoshi H, et al. **Dis Colon Rectum** 1997 Sep; 40(9):1079–84

Immunohistochemical studies on the intramural nerve in the chicken intestine. Suzuki M, et al. **Eur J Histochem** 1996; 40(2):109–18

Acetylcholinesterase (ACE) staining shows the abnormal innervation of a pulled-through rectum in a case of repaired anorectal malformation. Shono T, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):248–51

Anorectal sensitivity in patients with obstructed defaecation. Solana A, et al. **Int J Colorectal Dis** 1996;11(2):65–70

Recto-colic reflex: role in the defecation mechanism. Shafik A. **Int Surg** 1996 Jul–Sep;81(3):292–4

Dysplastic nitrergic neurons in the rectum of a patient with rectal ectasia. Cuffari C, et al. **J Pediatr Surg** 1997 Aug; 32(8):1237–40

Anatomy of the nerve supply of the rectum, bladder, and internal genitalia in anorectal dysgenesis in the male. Davies MR. **J Pediatr Surg** 1997 Apr;32(4):536–41

Pectinatoplasty: a technique for treatment of sensory fecal incontinence. Shafik A. **J Pediatr Surg** 1996 Nov; 31(11):1520–3

Rectal afferent function in patients with inflammatory and functional intestinal disorders. Bernstein CN, et al. **Pain** 1996 Aug;66(2-3):151–61

Reinnervation of the rectum with a somatic nerve: a canine study. Shafik A. **Spinal Cord** 1997 Jan;35(1):53–7

The hypertonic rectosigmoid junction: description of a new clinicopathologic entity causing constipation. Shafik A. **Surg Laparosc Endosc** 1997 Apr;7(2):116–20

[Neurovascular implications in total meso-rectal excisions. A prospective study of sexual function after surgery for rectal cancer] Prete F. **G Chir** 1996 Aug–Sep;17(8–9):393–8 (Eng. Abstr.) **(Ita)**

METABOLISM

Combination effects of alpha-cyclodextrin and xanthan gum on rectal absorption and metabolism of morphine from hollow-type suppositories in rabbits. Kondo T, et al. **Biol Pharm Bull** 1996 Feb;19(2):280–6

Formation and differential removal of C-8 and N2-guanine adducts of the food carcinogen 2-amino-3-methylimidazo[4,5-f]quinoline in the liver, kidney, and colorectum of the rat. Turesky RJ, et al. **Chem Res Toxicol** 1996 Mar;9(2):397–402

South Asians with ulcerative colitis exhibit altered lectin binding compared with matched European cases. McMahon RF, et al. **Histochem J** 1997 Jun;29(6):469–77

Abnormal neuropeptide concentration in rectal mucosa of patients with inflammatory bowel disease. Yamamoto H, et al. **J Gastroenterol** 1996 Aug;31(4):525–32

Congenital chloride-losing diarrhoea: absence of the anion-exchange mechanism in the rectum. Jenkins HR, et al. **J Pediatr Gastroenterol Nutr** 1997 May;24(5):518–21

Rectal absorption of omeprazole from suppository in humans. Choi MS, et al. **J Pharm Sci** 1996 Aug;85(8):893–4

Decreased substance P content in the rectal mucosa of diabetics with diarrhea and constipation. Lysy J, et al. **Metabolism** 1997 Jul;46(7):730–4

Mechanism of absorption enhancement in humans after rectal administration of ampicillin in suppositories containing sodium caprate. Lindmark T, et al. **Pharm Res** 1997 Jul; 14(7):930–5

Usefulness of rectal dialysis to determine intrarectal eicosanoids release in ulcerative colitis. Casellas F, et al. **Rev Esp Enferm Dig** 1997 Apr;89(4):280–8 **(Eng, Spa)**

MICROBIOLOGY

Recovery of nosocomial fecal flora from frozen stool specimens and rectal swabs: comparison of preservatives for epidemiological studies. Bonten MJ, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):103–6

In situ characterization of inflammatory responses in the rectal mucosae of patients with shigellosis. Islam D, et al. **Infect Immun** 1997 Feb;65(2):739–49

Evidence against colonic mucosa colonisation by Helicobacter pylori. Lack of a specific antibody response in homogenates of rectal endoscopic biopsies. Luzza F, et al. **Ital J Gastroenterol** 1996 Oct-Nov;28(8):447–51

PATHOLOGY

Preoperative staging of rectal carcinoma using double-contrast MR imaging. Technical aspects and early clinical experiences. Wallengren NO, et al. **Acta Radiol** 1996 Sep;37(5):791–8

Accuracy of staging rectal tumors with contrast-enhanced transrectal MR imaging. Vogl TJ, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1427–34

Genetic alterations and epithelial dysplasia in juvenile polyposis syndrome and sporadic juvenile polyps. Wu TT, et al. **Am J Pathol** 1997 Mar;150(3):939–47

Nuclear texture measurements in normal colorectal glands. Hamilton PW, et al. **Anal Quant Cytol Histol** 1995 Dec; 17(6):397–405

Brush cytology for the diagnosis of rectal carcinoma [letter; comment] al-Fallouji M, et al. **Br J Surg** 1997 Apr; 84(4):584. Comment on: Br J Surg 1996 Oct;83(10):1456–8.

Brush cytology for the diagnosis of rectal carcinoma [letter; comment] Webb AJ. **Br J Surg** 1997 Apr;84(4):584. Comment on: Br J Surg 1996 Oct;83(10):1456–8.

Effect of indomethacin suppositories on rectal polyposis in patients with familial adenomatous polyposis. Hirota C, et al. **Cancer** 1996 Oct 15;78(8):1660–5

The effect of wheat bran fiber and calcium supplementation on rectal mucosal proliferation rates in patients with resected adenomatous colorectal polyps. Alberts DS, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Mar;6(3):161–9

Folic acid supplementation and cell kinetics of rectal mucosa in patients with ulcerative colitis. Biasco G, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jun;6(6):469–71

Quantification of proliferating cell nuclear antigen in large intestinal crypt by computer-assisted image analysis. Lin HC, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Feb; 5(2):109–14

Reliability of whole crypt mitotic count as a measure of cellular proliferation in rectal biopsies. Tosteson TD, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Jun;5(6):437–9

Rectal protection during prostate cryosurgery: design and characterization of an insulating probe. Bischof JC, et al. **Cryobiology** 1997 Feb;34(1):80–92

A new method of obtaining rectal mucosal biopsy during rigid sigmoidoscopy. Oksüzoğlu G, et al. **Endoscopy** 1997 Jan;29(1):55

Rectal biopsy diagnosis in horses with clinical signs of intestinal disorders: a retrospective study of 116 cases [see comments] Lindberg R, et al. **Equine Vet J** 1996 Jul; 28(4):275–84. Comment in: Equine Vet J 1996 Jul;28(4):254–5.

Rectal biopsy--a piece of the diagnostic jigsaw puzzle [editorial; comment] Ricketts SW. **Equine Vet J** 1996 Jul; 28(4):254–5. Comment on: Equine Vet J 1996 Jul;28(4):275–84.

Decreased substance P levels in rectal biopsies from patients with slow transit constipation. Tzavella K, et al. **Eur J Gastroenterol Hepatol** 1996 Dec;8(12):1207–11

Pathology of idiopathic megarectum and megacolon. Gattuso JM, et al. **Gut** 1997 Aug;41(2):252–7

Clinical features of idiopathic megarectum and idiopathic megacolon. Gattuso JM, et al. **Gut** 1997 Jul;41(1):93–9

Differential activation of total and EGF receptor (EGF-R) tyrosine kinase (tyr-k) in the rectal mucosa in patients with adenomatous polyps, ulcerative colitis and colon cancer. Malecka-Panas E, et al. **Hepatogastroenterology** 1997

Mar-Apr;44(14):435-40
Normal rectal mucosa. Should we biopsy? Robinson RJ, et al. **Hepatogastroenterology** 1997 May-Jun;44(15):703-5
Reliability of rectal biopsy in distinguishing between chronic inflammatory bowel disease and acute self-limiting colitis. Dundas SA, et al. **Histopathology** 1997 Jul;31(1):60-6
In situ characterization of inflammatory responses in the rectal mucosae of patients with shigellosis. Islam D, et al. **Infect Immun** 1997 Feb;65(2):739-49
Endorectal magnetic resonance imaging in the preoperative staging of rectal tumors. Indinnimeo M, et al. **Int Surg** 1996 Oct-Dec;81(4):419-22
Histological patchiness and sparing of the rectum in ulcerative colitis: refuting the dogma [letter; comment] Bernstein CN, et al. **J Clin Pathol** 1997 Apr;50(4):354-5. Comment on: J Clin Pathol 1996 Apr;49(4):319-23.
Simple objective criteria for diagnosis of causes of acute diarrhoea on rectal biopsy. Jenkins D, et al. **J Clin Pathol** 1997 Jul;50(7):580-5
Factors that influence bleeding in superficial-type colorectal tumors: study of endoscopic and histologic correlates. Hirano K, et al. **J Gastroenterol** 1996 Aug;31(4):518-24
An evaluation of the role of suction rectal biopsy in the diagnosis of intestinal neuronal dysplasia. Cord-Udy CL, et al. **J Pediatr Gastroenterol Nutr** 1997 Jan;24(1):1-6; discussion 7-8
Dysplastic nitrergic neurons in the rectum of a patient with rectal ectasia. Cuffari C, et al. **J Pediatr Surg** 1997 Aug; 32(8):1237-40
Surgical evaluation and management of refractory constipation in older children. Simpson BB, et al. **J Pediatr Surg** 1996 Aug;31(8):1040-2
A new instrument for suction rectal biopsy in the diagnosis of Hirschsprung's disease. Freeman JK. **Pediatr Surg Int** 1997;12(1):76-7
Rectal cancer: evaluation of staging with endosonography. Lindmark GE, et al. **Radiology** 1997 Aug;204(2):533-8
Endocrine cells in rectal biopsy specimens from patients with familial amyloidotic polyneuropathy. El-Salhy M, et al. **Scand J Gastroenterol** 1996 Jan;31(1):68-73
[Comparative study on hepatic and intestinal pathological changes in different animals with schistosomiasis japonica] Zhou J, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):292-4 (Eng. Abstr.) **(Chi)**
[Prostate-specific antigen, acid phosphatases and rectal exploration in the diagnosis of prostatic cancer] Andersen BR, et al. **Ugeskr Laeger** 1997 Apr 21;159(17):2538-42 (Eng. Abstr.) **(Dan)**
[Clinical anatomy of the continence organ] Fritsch H. **Zentralbl Chir** 1996;121(8):613-6 (14 ref.) (Eng. Abstr.) **(Ger)**
[Bacteremia caused by Campylobacter fetus secondary to rectal biopsy (letter)] Arnal J, et al. **Enferm Infecc Microbiol Clin** 1997 Apr;15(4):227-8 **(Spa)**
[Rectal biopsies from HIV-infected patients] Matinez C, et al. G E N 1995 Oct-Dec;49(4):267-72 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Anorectal manometry in women with urinary stress incontinence. Kjølhede P, et al. **Acta Obstet Gynecol Scand** 1997 Mar;76(3):266-70
Effects of transmural field stimulation in isolated smooth muscle of human rectum and internal anal sphincter. Glavind EB, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1075-82
Calcitonin gene-related peptide in viscerosensitive response to colorectal distension in rats. Plourde V, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G191-6
Agreement between rectal and tympanic membrane temperatures in marathon runners [see comments] Roth RN, et al. **Ann Emerg Med** 1996 Oct;28(4):414-7. Comment in: Ann Emerg Med 1997 May;29(5):693.
K-ras gene mutations in normal colorectal tissues from K-ras mutation-positive colorectal cancer patients. Zhu D, et al. **Cancer Res** 1997 Jun 15;57(12):2485-92
Sigmoido-rectal junction reflex: role in the defecation mechanism. Shafik A. **Clin Anat** 1996;9(6):391-4
Current techniques of assessing defecation dynamics. Rao SS, et al. **Dig Dis** 1997;15 Suppl 1:64-77 (62 ref.)
Physiology of rectal sensations: a mathematic approach. Rao GN, et al. **Dis Colon Rectum** 1997 Mar;40(3):298-306
Test-retest repeatability of anorectal physiology tests in healthy volunteers. Ryhammer AM, et al. **Dis Colon Rectum** 1997 Mar;40(3):287-92
Role of nitric oxide in relaxation of the longitudinal layer of rectal smooth muscle. Stebbing JF, et al. **Dis Colon Rectum** 1997 Jun;40(6):706-10
Existence of a high pressure zone at the rectosigmoid junction in normal Indian men. Wadhwa RP, et al. **Dis Colon Rectum** 1996 Oct;39(10):1122-5
Thermal status of wet-suited divers using closed circuit O2 apparatus in sea water of 17-18.5 degrees C. Arieli R, et al. **Eur J Appl Physiol** 1997;76(1):69-74
Rectal response of cardiac origin in the cat: involvement of nitric oxide and acetylcholine. Koley J, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):181-7
Rectal distention-induced colonic net water secretion in rats involves tachykinins, capsaicin sensory, and vagus nerves. Eutamene H, et al. **Gastroenterology** 1997 May; 112(5):1595-602
Incremental elastic modulus--a challenge to compliance. Rao GN, et al. **Int J Colorectal Dis** 1997;12(1):33-6
Anorectal manometry before, during and after estrogen replacement therapy. Schellart RP, et al. **Int Urogynecol J Pelvic Floor Dysfunct** 1996;7(2):77-80
The effect of pelvic nerve stimulation on recto-anal motility in the cat. Buntzen S, et al. **J Auton Nerv Syst** 1996 Dec 14;61(3):243-7
Motor activity of refashioned colorectoanus in patients with total colonic aganglionosis. Endo M, et al. **J Pediatr Surg** 1996 Feb;31(2):283-90
Effects of cecal ligation and colostomy on motility of the rectum, ileum, and cecum in turkeys. Karasawa Y, et al. **Poult Sci** 1995 Dec;74(12):2029-34
The Favre system for anorectal manometry: comparison with other manometry systems in vitro and in healthy volunteers. Kreis ME, et al. **Scand J Gastroenterol** 1997 Sep;32(9):888-93
Age and anorectal sensibility in normal women. Ryhammer AM, et al. **Scand J Gastroenterol** 1997 Mar;32(3):278-84
[A new approach of functional recto-anal exploration: the compliance of the rectum and the anal canal] Arsac M, et al. **Bull Acad Natl Med** 1996 Apr;180(4):747-64; discussion 765-8 (Eng. Abstr.) **(Fre)**
[NANC relaxation and potassium channel in rat colon and rectum] Kishi M, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):462-5 **(Jpn)**

PHYSIOPATHOLOGY

Characterization of afferent mechanisms in ileoanal pouches [published erratum appears in Am J Gastroenterol 19997 Aug;92(8):1409] Bernstein CN, et al. **Am J Gastroenterol** 1997 Jan;92(1):103-8
How useful are manometric tests of anorectal function in the management of defecation disorders? [see comments] Rao SS, et al. **Am J Gastroenterol** 1997 Mar;92(3):469-75 . Comment in: Am J Gastroenterol 1997 Aug;92(8):1400.
Evaluation of rectal mucosal hemodynamics in patients with liver cirrhosis using reflectance spectrophotometry. Tezuka T, et al. **Am J Gastroenterol** 1997 Jun;92(6):1022-5
Re: manometric tests of anorectal function in the management of defecation disorders [letter; comment] Wexner SD. **Am J Gastroenterol** 1997 Aug;92(8):1400. Comment on: Am J Gastroenterol 1997 Mar;92(3):469-75.
A case of idiopathic fecal incontinence. Evaluation and management. Marin R, et al. **Am J Phys Med Rehabil** 1997 Jul-Aug;76(4):333-7
Adaptation of the rectal wall to distension in children with constipation. Bouchoucha M, et al. **Clin Invest Med** 1997 Feb;20(1):35-40
Pain from rectal distension in women with irritable bowel syndrome: relationship to sexual abuse. Whitehead WE, et al. **Dig Dis Sci** 1997 Apr;42(4):796-804
Modification of visceral sensitivity and pain in irritable bowel syndrome by 5-HT3 antagonism (ondansetron). Goldberg PA, et al. **Digestion** 1996 Nov-Dec;57(6):478-83
Extent of smooth muscle resection during mucosectomy and ileal pouch-anal anastomosis affects anorectal physiology and functional outcome [published erratum appears in Dis Colon Rectum 1997 Jul;40(7):763] Becker JM, et al. **Dis Colon Rectum** 1997 Jun;40(6):653-60
Does surgical repair of a rectocele improve rectal emptying? Karlbom U, et al. **Dis Colon Rectum** 1996 Nov; 39(11):1296-302
Clinical value of anorectal manometry index in neurogenic fecal incontinence. Meshkinpour H, et al. **Dis Colon Rectum** 1997 Apr;40(4):457-61
Transanal ultrasound and anorectal physiology findings affecting continence after sphincteroplasty. Ternent CA, et al. **Dis Colon Rectum** 1997 Apr;40(4):462-7
Disturbances in anorectal function in patients with diabetes mellitus and faecal incontinence. Sun WM, et al. **Eur J Gastroenterol Hepatol** 1996 Oct;8(10):1007-12
Resolution of anorectal incontinence in herpes proctitis confirmed by anorectal manometry. Joseph D, et al. **Gastrointest Endosc** 1997 May;45(5):429-32 (14 ref.)
Rectal mucosal electrosensitivity - what is being tested? Meagher AP, et al. **Int J Colorectal Dis** 1996;11(1):29-33
Anterior rectocele and anorectal dysfunction. Pucciani F, et al. **Int J Colorectal Dis** 1996;11(1):1-9
Rectal hypersensitivity in the irritable bowel syndrome. Slater BJ, et al. **Int J Colorectal Dis** 1997;12(1):29-32
Who should care for anorectal dysfunction in women? [editorial] Sangalli MR, et al. **Int Urogynecol J Pelvic Floor Dysfunct** 1996;7(1):1-2
Anorectal dysfunction in systemic sclerosis. Kim KC, et al. **J Korean Med Sci** 1996 Jun;11(3):244-9
Disturbances of ano-rectal function in multiple sclerosis. Nordenbo AM, et al. **J Neurol** 1996 Jun;243(6):445-51
Effects of kappa opioid receptor-selective agonists on responses of pelvic nerve afferents to noxious colorectal distension. Su X, et al. **J Neurophysiol** 1997 Aug; 78(2):1003-12
Response characteristics of nucleus submedius neurons to colo-rectal distension in the rat. Kawakita K, et al. **Neurosci Res** 1997 May;28(1):59-66
Significance of rectal contraction noted on multichannel urodynamics [letter; comment] Thorpe AC. **Neurourol Urodyn** 1996;15(5):577-8. Comment on: Neurourol Urodyn 1995;14(1):73-80.
[Initial experience with anorectal manometry with the PC Polygraf apparatus in surgery] Slauf P, et al. **Rozhl Chir** 1997 Mar;76(3):151-5 (Eng. Abstr.) **(Cze)**

RADIATION EFFECTS

Development of an experimental model for high dose rate endocavitary irradiation of the rat rectum. Johannessen HO, et al. **Br J Radiol** 1996 Oct;69(826):946-52
Predicting late rectal complications following prostate conformal radiotherapy using biologically effective doses and normalized dose-surface histograms. MacKay RI, et al. **Br J Radiol** 1997 May;70(833):517-26
Effect of radiotherapy on anorectal function in patients with cervical cancer. Iwamoto T, et al. **Dis Colon Rectum** 1997 Jun;40(6):693-7
Late effects of integrated therapies, including IORT, on lumbosacral plexus and anorectal physiology in patients treated for rectal cancer. Ratto C, et al. **Front Radiat Ther Oncol** 1997;31:41-4
Pulsed low dose rate brachytherapy in a rat model: dependence of late rectal injury on radiation pulse size. Armour EP, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):825-34
Conformal irradiation of the prostate: estimating long-term rectal bleeding risk using dose-volume histograms. Hartford AC, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):721-30
Late rectal sequelae following definitive radiation therapy for carcinoma of the uterine cervix: a dosimetric analysis. Roeske JC, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):351-8
High-dose-rate intracavitary brachytherapy (HDR-IC) in treatment of cervical carcinoma: 5-year results and implication of increased low-grade rectal complication on initiation of an HDR-IC fractionation scheme. Wang CJ, et al. **Int J Radiat Oncol Biol Phys** 1997 May 1;38(2):391-8
Reproducible rat model for comparing late rectal toxicity from different brachytherapy techniques. White JR, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1155-61
Reduction of the rectal dose in gynecological brachytherapy: modification to the Fletcher-Suit applicator. Rosenblatt E, et al. **Med Dosim** 1996 Fall;21(3):139-43
Dosimetry of intracavitary applications in carcinoma of the cervix: rectal dose analysis. Deshpande DD, et al. **Radiother Oncol** 1997 Feb;42(2):163-6

RADIOGRAPHY

Dynamic MR imaging compared with evacuation proctography when evaluating anorectal configuration and pelvic floor movement. Healy JC, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):775-9
Dynamic cystoproctography of female pelvic floor defects and their interrelationships. Kelvin FM, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):769-74
Dynamic cystoproctography: a unifying diagnostic approach to pelvic floor and anorectal dysfunction. Maglinte DD, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):759-67
Dynamic cystoproctography and physiological testing in women with urinary stress incontinence and urogenital prolapse. Halligan S, et al. **Clin Radiol** 1996 Nov; 51(11):785-90
Surgical treatment and role of dynamic defecography after ileal pouch-anal anastomosis: technical solutions to a difficult problem. Silvis R, et al. **Dis Colon Rectum** 1997 Jan;40(1):84-8
Role of defecography in predicting clinical outcome of rectocele repair. van Dam JH, et al. **Dis Colon Rectum** 1997 Feb;40(2):201-7
Analysis of the dose-surface histogram and dose-wall histogram for the rectum and bladder. Li S, et al. **Med Phys** 1997 Jul;24(7):1107-16
Defecation disorders and the role of defecography. Newman J. **Radiol Technol** 1997 May-Jun;68(5):399-416; quiz 417-20 (104 ref.)
Defecography in healthy subjects: comparison of three contrast media. Ikenberry S, et al. **Radiology** 1996 Oct; 201(1):233-8
[The locoregional recurrence of rectal carcinoma. A computed tomographic analysis and a target volume concept for adjuvant radiotherapy] Bagatzounis A, et al. **Strahlenther Onkol** 1997 Feb;173(2):68-75 (Eng. Abstr.) **(Ger)**

SECRETION

A two-site lectinoenzymatic assay for determination of tumour marker glycoproteins in rectal secretions. Orntoft TF, et al. **Glycoconj J** 1997 Feb;14(2):191-9

SURGERY

Minimum number of lymph nodes to be recovered from colorectal resection specimens [letter; comment] Bush ST. **Am J Clin Pathol** 1997 Apr;107(4):494; discussion 494-5. Comment on: Am J Clin Pathol 1996 Aug;106(2):209-16.
Minimum number of lymph nodes to be recovered from colorectal resection specimens [letter; comment] Frankel K. **Am J Clin Pathol** 1997 Apr;107(4):494; discussion 494-5 . Comment on: Am J Clin Pathol 1996 Aug;106(2):209-16.
Management of selected rectal injuries by primary repair. Levine JH, et al. **Am J Surg** 1996 Nov;172(5):575-8; discussion 578-9
Cardiac arrest after mesenteric manipulation in a patient

undergoing abdominal surgery. Hayashi R, et al. **Anesth Analg** 1997 Jun;84(6):1382–3

Total mesorectal excision—the new golden standard of surgery for rectal cancer. Enker WE. **Ann Med** 1997 Apr; 29(2):127–33 (27 ref.)

Re: Rectosigmoid neocolpopoiesis for male–to–female transsexuals: Amsterdam experience [letter; comment] [see comments] Laub DR Sr, et al. **Ann Plast Surg** 1996 Jun; 36(6):662–3. Comment on: Ann Plast Surg 1996 Apr;36(4):388–91. Comment in: Ann Plast Surg 1997 Feb;38(2):195–6.

Transecting the rectum: the 'clean out' approach [letter; comment] Ribeiro BF. **Ann R Coll Surg Engl** 1996 Nov; 78(6):558. Comment on: Ann R Coll Surg Engl 1996 May;78(3 (Pt 1)):191.

The electrically stimulated gracilis neosphincter incorporated as part of total anorectal reconstruction after abdominoperineal excision of the rectum. Mander BJ, et al. **Ann Surg** 1996 Dec;224(6):702–9; discussion 709–11

A new device for the treatment of coloproctostomic stricture after double stapling anastomoses. Shimada S, et al. **Ann Surg** 1996 Nov;224(5):603–8

Total rectal resection, mesorectum excision, and coloendoanal anastomosis: a therapeutic option for the treatment of low rectal cancer. Leo E, et al. **Ann Surg Oncol** 1996 Jul;3(4):336–43

Colonic J–pouch as a neorectum: functional assessment. Chew SB, et al. **Aust N Z J Surg** 1997 Sep;67(9):607–10

Use of a cotton tape tie in laparoscopic colorectal surgery. Chung CC, et al. **Aust N Z J Surg** 1997 May;67(5):293–4

A modification of single stapled colorectal anastomosis using the transanal insertion device (TAIS). Hoffmann DC, et al. **Aust N Z J Surg** 1996 Nov;66(11):768–9

Colorectal surgery in the elderly: an audit of surgery in octogenarians. Isbister WH. **Aust N Z J Surg** 1997 Aug; 67(8):557–61

Morbidity and mortality after single– and double–stapled colorectal anastomoses in patients with carcinoma of the rectum. Moore JW, et al. **Aust N Z J Surg** 1996 Dec; 66(12):820–3 (22 ref.)

A prospective randomized controlled trial comparing suprapubic with urethral catheterization in rectal surgery. Perrin LC, et al. **Aust N Z J Surg** 1997 Aug;67(8):554–6

Surgical correction of anorectal atresia and rectovaginal fistula in an alpaca cria. Carraro DB, et al. **Aust Vet J** 1996 Nov;74(5):352–4

Advanced laparoscopic surgery for the removal of rectovaginal septum endometriotic or adenomyotic nodules. Donnez J, et al. **Baillieres Clin Obstet Gynaecol** 1995 Dec;9(4):769–74

Anoabdominal rectal resection and colonic J pouch–anal anastomosis: 10 years' experience. Kusunoki M, et al. **Br J Surg** 1997 Sep;84(9):1277–80

Transposition of the anorectum to the abdominal wall. Williams NS, et al. **Br J Surg** 1996 Dec;83(12):1739–40

Morphometry of the small intestine in pigs with ileo–rectal anastomosis. Redlich J, et al. **Can J Vet Res** 1997 Jan; 61(1):21–7

Sphincter preservation therapy for distal rectal carcinoma: a review. Ng AK, et al. **Cancer** 1997 Feb 15;79(4):671–83 (69 ref.)

Progressive release of the left colon for a tension–free colorectal or coloanal anastomosis. Sugarbaker PH. **Cancer Treat Res** 1996;82:255–61

Low–dose, single–shot perioperative antibiotic prophylaxis in colorectal surgery. Peiper C, et al. **Chemotherapy** 1997 Jan–Feb;43(1):54–9

Current practices of preoperative bowel preparation among North American colorectal surgeons. Nichols RL, et al. **Clin Infect Dis** 1997 Apr;24(4):609–19

The action of the rectus femoris muscle following distal tendon transfer: does it generate knee flexion moment? Riewald SA, et al. **Dev Med Child Neurol** 1997 Feb; 39(2):99–105

Quality of life after prophylactic colectomy and ileorectal anastomosis in patients with familial adenomatous polyposis. Church JM, et al. **Dis Colon Rectum** 1996 Dec; 39(12):1404–8

Total anorectal reconstruction with a double dynamic graciloplasty after abdominoperineal reconstruction for low rectal cancer. Geerdes BP, et al. **Dis Colon Rectum** 1997 Jun;40(6):698–705

Abdominoperineal excision of the rectum—an endangered operation. Norman Nigro Lectureship. Heald RJ, et al. **Dis Colon Rectum** 1997 Jul;40(7):747–51

Avoidance of anastomotic complications in low anterior resection of the rectum. Hirsch CJ, et al. **Dis Colon Rectum** 1997 Jan;40(1):42–6

Inpatient vs. outpatient bowel preparation for elective colorectal surgery. Lee EC, et al. **Dis Colon Rectum** 1996 Apr;39(4):369–73

Laparoscopic total abdominal colectomy with ileorectal anastomosis for familial adenomatous polyposis. Milsom JW, et al. **Dis Colon Rectum** 1997 Jun;40(6):675–8

Intracolonic bypass procedure [letter; comment] Ravo B. **Dis Colon Rectum** 1997 May;40(5):628–9. Comment on: Dis Colon Rectum 1994 Oct;37(10):1046–7. Comment on: Dis Colon Rectum 1995 Oct;38(10):1108–9.

Effect of epidural anesthesia on colorectal anastomosis: a tonometric assessment. Sala C, et al. **Dis Colon Rectum** 1997 Aug;40(8):958–61

Hook–needle puncture. A new technique of local anesthesia for anorectal surgery. Sobrado CW, et al. **Dis Colon Rectum** 1996 Nov;39(11):1330–1

Triple–stapled low colorectal anastomosis for the narrow pelvis. Sugihara K, et al. **Dis Colon Rectum** 1997 Jan; 40(1):117

Guided imagery: a significant advance in the care of patients undergoing elective colorectal surgery. Tusek DL, et al. **Dis Colon Rectum** 1997 Feb;40(2):172–8

The risk of thromboembolism in patients undergoing colorectal surgery. McLeod RS. **Drugs** 1996;52 Suppl 7:38–41 (25 ref.)

Rectal packing as initial management of grade 3 rectal tears. Baird AN, et al. **Equine Vet J Suppl** 1989 Jun;(7):121–3

Idiopathic non–familial rectal and colonic varices requiring sigmoidorectal resection and coloanal anastomosis. Detry RJ, et al. **Eur J Gastroenterol Hepatol** 1996 Oct; 8(10):1023–6 (32 ref.)

Duhamel operation 40 years after: a multicentric study. Bourdelat D, et al. **Eur J Pediatr Surg** 1997 Apr;7(2):70–6

Functional results after abdominal suture rectopexy for rectal prolapse or intussusception. Graf W, et al. **Eur J Surg** 1996 Nov;162(11):905–11

A new technique for providing a wide surgical field for low anterior resection with the Autosuture device in a narrow pelvis [letter] Kitamura K, et al. **Eur J Surg** 1996 Oct; 162(10):847–8

Stapled anastomoses in colorectal surgery: a prospective study. Memon AA, et al. **Eur J Surg** 1996 Oct; 162(10):805–10 (40 ref.)

Ileal pouch–anal anastomosis with mesorectal excision for rectal cancer complicating familial adenomatous polyposis. Panis Y, et al. **Eur J Surg** 1996 Oct;162(10):817–21

Simultaneous radical prostatectomy and partial rectum resection without colostomy. Baur H, et al. **Eur Urol** 1997; 31(3):380–1

Surveillance of familial adenomatous polyposis patients after ileorectal anastomosis or ileoanal pouch anastomosis. Tytgat GNJ. **Gastrointest Endosc Clin N Am** 1997 Jan; 7(1):111–27 (55 ref.)

Transcolonic approach for a stapled end–to–end colorectal anastomosis in low anterior resection. Korenaga D, et al. **Hepatogastroenterology** 1996 Jul–Aug;43(10):832–4

The risk of infection of three synthetic materials used in rectopexy with or without colonic resection for rectal prolapse. Athanasiadis S, et al. **Int J Colorectal Dis** 1996; 11(1):42–4

Fate of the rectal stump after colectomy and ileorectal anastomosis for familial adenomatous polyposis. Heiskanen I, et al. **Int J Colorectal Dis** 1997;12(1):9–13

Continence after colorectal reconstruction following resection: impact of level of anastomosis. Matzel KE, et al. **Int J Colorectal Dis** 1997;12(2):82–7

Is early postoperative feeding feasible in elective colon and rectal surgery? [see comments] Ortiz H, et al. **Int J Colorectal Dis** 1996;11(3):119–21. Comment in: Int J Colorectal Dis 1996;11(6):303.

Anterior resection: do the patients perceive any clinical benefit? Ortiz H, et al. **Int J Colorectal Dis** 1996;11(4):191–5

Anterior resection syndrome is secondary to sympathetic denervation. Rao GN, et al. **Int J Colorectal Dis** 1996; 11(5):250–8

A preliminary comparison of a consecutive series of open versus laparoscopic abdomino–perineal resection for rectal adenocarcinoma. Seow–Choen F, et al. **Int J Colorectal Dis** 1997;12(2):88–90

Rectal cancer recurrence after prior resection and radiotherapy: palliation following additional surgery. Verrees JF, et al **Int J Colorectal Dis** 1996;11(5):211–6

"Is early postoperative feeding feasible in elective colon and rectal surgery?" [letter; comment] Wexner SD. **Int J Colorectal Dis** 1996;11(6):303. Comment on: Int J Colorectal Dis 1996;11(3):119–21.

Functional outcome after coloanal versus low colorectal anastomosis for rectal carcinoma. Benoist S, et al. **J Am Coll Surg** 1997 Aug;185(2):114–9

Stapled anastomotic leaks [editorial; comment] Kodner IJ. **J Am Coll Surg** 1997 Aug;185(2):185–6. Comment on: J Am Coll Surg 1997 Aug;185(2):105–13.

Factors associated with the occurrence of leaks in stapled rectal anastomoses: a review of 1,014 patients [see comments] Vignali A, et al. **J Am Coll Surg** 1997 Aug; 185(2):105–13. Comment in: J Am Coll Surg 1997 Aug;185(2):185–6.

Continence and rectoanal sphincteric inhibitory reflex after posterior sagittal anorectoplasty. Lin CL, et al. **J Formos Med Assoc** 1996 Apr;95(4):303–7

Colorectal surgery using a biofragmentable anastomotic ring. Wang SM, et al. **J Formos Med Assoc** 1996 Oct; 95(10):798–801

Laparoscopic–assisted rectopexy using a novel hand–access port. Gorey TF, et al. **J Laparoendosc Surg** 1996 Oct; 6(5):325–8

Anterior sagittal transanorectal approach to the urogenital sinus in adrenogenital syndrome: preliminary report. Dòmini R, et al. **J Pediatr Surg** 1997 May;32(5):714–6

Anal reeducation for postoperative fecal incontinence in congenital diseases of the rectum and anus. Ménard C, et al. **J Pediatr Surg** 1997 Jun;32(6):867–9

Does the posterior sagittal approach with perirectal dissection impair fecal continence in a normal rectum? Pintér AB, et al. **J Pediatr Surg** 1996 Oct;31(10):1349–53

Laparoscopic pull–through procedures using the harmonic scalpel in infants and children with Hirschsprung's disease. Rothenberg SS, et al. **J Pediatr Surg** 1997 Jun;32(6):894–6

Efficacy of the straight endorectal pull–through in the management of familial adenomatous polyposis—a 16–year experience. Shilyansky J, et al. **J Pediatr Surg** 1997 Aug; 32(8):1139–43

Long–term stooling patterns in infants undergoing primary endorectal pull–through for Hirschsprung's disease. Teitelbaum DH, et al. **J Pediatr Surg** 1997 Jul; 32(7):1049–52; discussion 1052–3

Anterior sagittal anorectoplasty for anorectal malformations and perineal trauma in the female child. Wakhlu A, et al. **J Pediatr Surg** 1996 Sep;31(9):1236–40

Anastomoses involving the colon and rectum: an 8 year experience [letter] Cripps NP. **J R Coll Surg Edinb** 1997 Jun;42(3):206–7

Distal mucus fistula following resection for perforated sigmoid diverticular disease [see comments] Kumar P, et al. **J R Coll Surg Edinb** 1996 Oct;41(5):316–8. Comment in: J R Coll Surg Edinb 1997 Aug;42(4):286.

Effect of anorectal eversion on long–term clinical outcome of restorative proctocolectomy. DeFriend DJ, et al. **J R Soc Med** 1997 Jul;90(7):375–8

Results of preoperative intraluminal brachytherapy combined with radical surgery for middle and lower rectal carcinomas. Yanagi H, et al. **J Surg Oncol** 1997 Jun; 65(2):76–81

The genetic male with absent penis and urethrorectal communication: experience with 5 patients. Hendren WH. **J Urol** 1997 Apr;157(4):1469–74

Avoiding stomas with total anorectal reconstruction [news] Jack D. **Lancet** 1997 Jun 14;349(9067):1750

Sphincter–preserving operations for rectal cancer. Enker WE. **Oncology (Huntingt)** 1996 Nov;10(11):1673–84, 1689; discussion 1690–2 (32 ref.)

Complications in colon and rectal surgery. Early diagnosis and management. Kollmorgen CF, et al. **Rev Gastroenterol Mex** 1996 Apr–Jun;61(2):93–9 (48 ref.)

Current status in laparoscopic colorectal surgery. Milsom JW, et al. **Rev Gastroenterol Mex** 1996 Apr–Jun;61(2):113–8 (51 ref.)

Comparison of three perineal procedures for the treatment of rectal prolapse. Agachan F, et al. **South Med J** 1997 Sep;90(9):925–32

Reinnervation of the rectum with a somatic nerve: a canine study. Shafik A. **Spinal Cord** 1997 Jan;35(1):53–7

The best operation for rectal prolapse. Jacobs LK, et al. **Surg Clin North Am** 1997 Feb;77(1):49–70 (51 ref.)

Rectovaginal fistulas. Therapeutic options. Tsang CB, et al. **Surg Clin North Am** 1997 Feb;77(1):95–114 (59 ref.)

Laparoscopic–assisted abdominoperineal proctosigmoidectomy for rectal prolapse. A new technique. Allam M, et al. **Surg Endosc** 1997 Feb;11(2):150–1

Laparoscopic colon and rectal surgery at a VA hospital. Analysis of the first 50 cases. Begos DG, et al. **Surg Endosc** 1996 Nov;10(11):1050–6

Intracorporeal colorectal anastomosis following laparoscopic left colon resection. Bergamaschi R, et al. **Surg Endosc** 1997 Aug;11(8):800–1

Laparoscopy in colorectal surgery [editorial] Forde KA, et al. **Surg Endosc** 1996 Nov;10(11):1039–40

Successful treatment of a rectal anastomotic stenosis by transanal endoscopic microsurgery (TEM) using the contact Nd:YAG laser. Kato K, et al. **Surg Endosc** 1997 May;11(5):485–7 (11 ref.)

Laparoscopic resection of high rectovaginal fistula with intracorporeal colorectal anastomosis and omentoplasty. Schwenk W, et al. **Surg Endosc** 1997 Feb;11(2):147–9

Laparoscopically assisted colorectal anastomose post–Hartmann's procedure. Regadas FS, et al. **Surg Laparosc Endosc** 1996 Feb;6(1):1–4

An improved technique for low anterior resection using a PDS endoloop. Terashima S, et al. **Surg Today** 1996; 26(10):857–9

Markers of fibrin formation in colorectal surgery: fibrinopeptide A and soluble fibrin. Iversen LH, et al. **Thromb Res** 1996 Mar 1;81(5):569–76

Transperineal prostate needle biopsy guided by transurethral ultrasound in patients without a rectum [letter; comment] Kirby KA. **Urology** 1997 Feb;49(2):306. Comment on: Urology 1996 Mar;47(3):353–5.

Ventral peritoneal rectal tear repair in a mare. David A, et al. **Vet Rec** 1997 Jul 12;141(2):51–2

Restorative proctocolectomy or rectum–preserving surgery in patients with familial adenomatous polyposis: results of a prospective study. Tonelli F, et al. **World J Surg** 1997 Jul–Aug;21(6):653–8; discussion 659

Nodal metastasis in the distal mesorectum: need for total mesorectal excision of rectal cancer. Choi JS, et al. **Yonsei Med J** 1996 Aug;37(4):243–50

[Endocavitary echography following abdominoperineal extirpation of the rectum] Tankova L, et al. **Khirurgiia (Sofiia)** 1996;49(2):14–6 (Eng. Abstr.) **(Bul)**

[Progresses in pediatric surgery in China, 1996] Jin B. **Chung Hua I Hsueh Tsa Chih** 1996 Dec;76(12):908–9 (0 ref.) **(Chi)**

[Problems with continence in rectal injuries] Michek J, et al. **Rozhl Chir** 1996 Nov;75(11):532–4 (Eng. Abstr.) **(Cze)**

[Laparoscopic excision of the rectum. An advanced technique or true clinical progress?] Bardram L, et al. **Ugeskr Laeger** 1996 Oct 14;158(42):5911–4 (32 ref.) (Eng.

Abstr.) **(Dan)**

[Posterior rectotomy--a minimally invasive procedure?] Kristiansen VB, et al. **Ugeskr Laeger** 1997 Mar 17; 159(12):1755-7 (Eng. Abstr.) **(Dan)**

[Subtotal colectomy with ceco-rectal anastomosis (Deloyers) for severe idiopathic constipation: an alternative to total colectomy reducing risks of digestive sequelae] Costalat G, et al. **Ann Chir** 1997;51(3):248-55 (33 ref.) (Eng. Abstr.) **(Fre)**

[Has amputation of the rectum by pure perineal approach or Lisfranc operation still a role in the treatment of rectal cancer?] Gautier-Benoit C, et al. **Chirurgie** 1996; 121(3):193-6; discussion 196-7 (Eng. Abstr.) **(Fre)**

[Results of deep rectum resection and intersphincteric rectum excision] Bruch HP, et al. **Chirurg** 1997 Jul;68(7):689-92 (Eng. Abstr.) **(Ger)**

[Technique and indications for sphincter-saving transanal resection in rectal carcinoma] Buess G, et al. **Chirurg** 1996 Feb;67(2):121-8 (22 ref.) (Eng. Abstr.) **(Ger)**

[Anterior rectum resection] Rosen HR, et al. **Chirurg** 1996 Feb;67(2):99-109 (62 ref.) (Eng. Abstr.) **(Ger)**

[Intersphincteric rectum resection with radical mesorectum excision and colo-anal anastomosis] Schumpelick V, et al. **Chirurg** 1996 Feb;67(2):110-20 (Eng. Abstr.) **(Ger)**

[Vital preoperative function diagnosis in deep anterior rectum resection] Stern J, et al. **Chirurg** 1996 Feb;67(2):129-32 (20 ref.) (Eng. Abstr.) **(Ger)**

[Development and clinical anatomy of the rectal adventitia. significance for radical operation of rectal carcinoma] Fritsch H, et al. **Langenbecks Arch Chir** 1996;381(4):237-43 (Eng. Abstr.) **(Ger)**

[Therapy of rectal carcinoma: oncologically adequate surgery is crucial] Maurer CA, et al. **Ther Umsch** 1996 Nov; 53(11):829-38 (31 ref.) (Eng. Abstr.) **(Ger)**

[Low ileorectal anastomosis in the surgery of ulcerative rectocolitis] Cavallaro V, et al. **Minerva Chir** 1997 Apr; 52(4):337-45 (Eng. Abstr.) **(Ita)**

[Perioperative complications in traditional surgery of the rectum] Fontanili M, et al. **Minerva Chir** 1997 Mar; 52(3):217-24 (Eng. Abstr.) **(Ita)**

[Access to the rectum via a posterior route and via a combined abdominal-posterior route: when and why] Stabilini L, et al. **Minerva Chir** 1997 Apr;52(4):499-502 (Eng. Abstr.) **(Ita)**

[Dilatation of benign colo-colonic and colo-rectal anastomotic stenosis with radiology-guided balloon catheter] Meloni GB, et al. **Radiol Med (Torino)** 1996 Jul-Aug;92(1-2):97-100 (Eng. Abstr.) **(Ita)**

[Laparoscopic colo-rectal surgery] Hayashi K, et al. **Nippon Rinsho** 1996 May;54(5):1312-21 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Prevention of incompetence of sigmoidorectal anastomosis after anterior resection of the rectum in cancer] Briusov PG, et al. **Khirurgiia (Mosk)** 1996;(2):45-8 (Eng. Abstr.) **(Rus)**

[Strategy of the surgeon in rectal injuries] Khubezov AT, et al. **Khirurgiia (Mosk)** 1996;(2):49-50 (Eng. Abstr.) **(Rus)**

[Lower anterior (mesenteric) resection of the rectum] Knysh VI, et al. **Khirurgiia (Mosk)** 1996;(2):42-4 (Eng. Abstr.) **(Rus)**

[Abdomino-anal resection of the rectum with the bringing down of the demesenterized colon into the anal canal] Bondar' GV, et al. **Klin Khir** 1997;(1):31-3 (Eng. Abstr.) **(Rus)**

[Complications after primary surgical management of war injuries of the colon and rectum] Stanković N, et al. **Vojnosanit Pregl** 1997 May-Jun;54(3):203-8 (Eng. Abstr.) **(Scr)**

[Colorectal surgery in Mexico] Takahashi T. **Rev Gastroenterol Mex** 1996 Apr-Jun;61(2):84 **(Spa)**

ULTRASONOGRAPHY

Endosonography for preoperative staging of rectal tumours. Nielsen MB, et al. **Acta Radiol** 1996 Sep;37(5):799-803

Transanal ultrasound and anorectal physiology findings affecting continence after sphincteroplasty. Ternent CA, et al. **Dis Colon Rectum** 1997 Apr;40(4):462-7

Endorectal ultrasonography in the follow-up of rectal cancer. Is it a better way to detect early local recurrence? Novell F, et al. **Int J Colorectal Dis** 1997;12(2):78-81

Incremental elastic modulus--a challenge to compliance. Rao GN, et al. **Int J Colorectal Dis** 1997;12(1):33-6

The value of endorectal ultrasound in the assessment of adenomas, T1- and T2-carcinomas. Sailer M, et al. **Int J Colorectal Dis** 1997;12(4):214-9

A comparison of anal endosonography with electromyography and manometry in high and intermediate anorectal anomalies. Fukata R, et al. **J Pediatr Surg** 1997 Jun;32(6):839-42

Assessment of rectal tumor infiltration utilizing endorectal MR imaging and comparison with endoscopic rectal sonography. Zagoria RJ, et al. **J Surg Oncol** 1997 Apr; 64(4):312-7

Brief report: evaluation of fecal incontinence using rectal ultrasound. O'Connor JJ. **Md Med J** 1996 Apr;45(4):308-9

Pitfalls and sources of error in staging rectal cancer with endorectal us. Kruskal JB, et al. **Radiographics** 1997 May-Jun;17(3):609-26

Peritumoral tissue reaction at transrectal US as a possible cause of overstaging in rectal cancer: histopathologic correlation. Maier AG, et al. **Radiology** 1997 Jun; 203(3):785-9

[Endocavitary echography following abdominoperineal extirpation of the rectum] Tankova L, et al. **Khirurgiia (Sofiia)** 1996;49(2):14-6 (Eng. Abstr.) **(Bul)**

ULTRASTRUCTURE

A quantitative study of silver-stained NORs in different segments of the normal human colorectal crypt. Morais M, et al. **J Anat** 1996 Jun;188 (Pt 3):521-7

Intestinal spirochetosis: first cases reported in Brazil and the use of immunohistochemistry as an aid in histopathological diagnosis. De Brito T, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jan-Feb;38(1):45-52

VIROLOGY

Mucosal transmission of cell-associated and cell-free feline immunodeficiency virus. Burkhard MJ, et al. **AIDS Res Hum Retroviruses** 1997 Mar 1;13(4):347-55

Intrarectal transmission of simian immunodeficiency virus in rhesus macaques: selective amplification and host responses to transient or persistent viremia. Trivedi P, et al. **J Virol** 1996 Oct;70(10):6876-83

RECTUS ABDOMINIS

Spontaneous rectus sheath hematoma during pregnancy mimicking abruptio placenta. Ramirez MM, et al. **Am J Perinatol** 1997 Jul;14(6):321-3

The rectus sheathblock: a medical intra-operative approach for postoperative analgesia [letter; comment] Dean VS, et al. **Anaesthesia** 1997 Mar;52(3):287. Comment on: Anaesthesia 1996 Sep;51(9):893-4.

The rectus sheath block--well worth remembering [letter] [see comments] Muir J, et al. **Anaesthesia** 1996 Sep; 51(9):893-4. Comment in: Anaesthesia 1997 Mar;52(3):287.

Rectus abdominis muscle flap (RAMF) technique for the management of bladder exstrophies: late clinical outcome and urodynamic findings. Celayir S, et al. **Br J Urol** 1997 Feb;79(2):276-8

Rectus abdominis muscle flap technique for the management of large defects [letter] Dewan PA. **Br J Urol** 1997 Sep; 80(3):511

Hematoma of the rectus abdominis muscle: case report and review of the literature. Dubinsky IL. **J Emerg Med** 1997 Mar-Apr;15(2):165-7 (07 ref.)

Rectus fascial sling suspension of the vesicourethral anastomosis after radical prostatectomy. Jorion JL. **J Urol** 1997 Mar;157(3):926-8

Extraskeletal mesenchymal chondrosarcoma of the rectus sheath. Johnson DB, et al. **Skeletal Radiol** 1997 Aug; 26(8):501-4

BLOOD SUPPLY

Ultrasonography and computed tomography reduce unnecessary surgery in abdominal rectus sheath haematoma. Moreno Gallego A, et al. **Br J Surg** 1997 Sep; 84(9):1295-7

The effect of the delay phenomenon on the vascularity of rabbit rectus abdominis muscles. Cederna PS, et al. **Plast Reconstr Surg** 1997 Jan;99(1):194-205

Preoperative color-Doppler assessment of vascularisation of the rectus abdominis: anatomic basis of breast reconstruction with a transverse rectus abdominis myocutaneous flap--a prospective study. Meunier B, et al. **Surg Radiol Anat** 1997;19(1):35-40

Evaluation of the cranial rectus abdominus muscle pedicle flap as a blood supply for the caudal superficial epigastric skin flap in dogs. Degner DA, et al. **Vet Surg** 1996 Jul-Aug; 25(4):292-9

INNERVATION

An anatomical analysis of the relationships between the intercostal nerves and the thoracic and abdominal muscles in man. I. Ramification of the intercostal nerves. Sakamoto H, et al. **Acta Anat (Basel)** 1996;156(2):132-42

METABOLISM

Osteoinduction in porous hydroxyapatite implanted in heterotopic sites of different animal models. Ripamonti U. **Biomaterials** 1996 Jan;17(1):31-5

Incorporation of [3-3H]glucose and 2-[1-14C]deoxyglucose into glycogen in heart and skeletal muscle in vivo: implications for the quantitation of tissue glucose uptake. Virkamäki A, et al. **Diabetes** 1997 Jul;46(7):1106-10

Effects of aging on muscle fibers and collagen content of the diaphragm: a comparison with the rectus abdominis muscle. Rodrigues CJ, et al. **Gerontology** 1996;42(4):218-28

Secondary ischemia caused by venous or arterial occlusion shows differential effects on myocutaneous island flap survival and muscle ATP levels. Hauge EM, et al. **Plast Reconstr Surg** 1997 Mar;99(3):825-33

PATHOLOGY

Magnetic resonance imaging of the TRAM flap donor site. Suominen S, et al. **Ann Plast Surg** 1997 Jan;38(1):23-8

PHYSIOLOGY

The role of Na+ channels in twitch generation during exposure of the frog rectus abdominis to Ca-free Ringer solution with Na2EDTA. Seçilmiş A, et al. **Acta Med Okayama** 1997 Jun;51(3):115-20

PHYSIOPATHOLOGY

Abdominal sequelae after pedicled TRAM flap breast reconstruction. Petit JY, et al. **Plast Reconstr Surg** 1997 Mar;99(3):723-9

SURGERY

Should diastasis recti be corrected? Nahas FX, et al. **Aesthetic Plast Surg** 1997 Jul-Aug;21(4):285-9

Rectus turnover flaps for the reconstruction of large midline abdominal wall defects. DeFranzo AJ, et al. **Ann Plast Surg** 1996 Jul;37(1):18-23

Aesthetic breast reconstruction using a combination of free transverse rectus abdominis musculocutaneous flaps and breast implants. Miller MJ, et al. **Ann Plast Surg** 1996 Sep; 37(3):258-64

Endoscope-assisted rectus abdominis muscle flap harvest for chest wall reconstruction: early experience. Sawaizumi M, et al. **Ann Plast Surg** 1996 Sep;37(3):317-21

Rectus fascia colpopexy in posthysterectomy vaginal prolapse: analysis of 18 cases. Girão MJ, et al. **Int Urogynecol J Pelvic Floor Dysfunct** 1997;8(1):25-8; discussion 29

Abdominal sequelae after pedicled TRAM flap breast reconstruction. Petit JY, et al. **Plast Reconstr Surg** 1997 Mar;99(3):723-9

Modified rectus fascial suburethral sling. Ghoniem GM. **Tech Urol** 1996 Spring;2(1):16-21

Evaluation of the cranial rectus abdominus muscle pedicle flap as a blood supply for the caudal superficial epigastric skin flap in dogs. Degner DA, et al. **Vet Surg** 1996 Jul-Aug; 25(4):292-9

[The rectus abdominis free flap in reconstructive surgery of the head and neck] Pompei S, et al. **Acta Otorhinolaryngol Ital** 1995 Aug;15(4):294-300 (Eng. Abstr.) **(Ita)**

TRANSPLANTATION

Total scrotal reconstruction after Fournier's gangrene--a case report using rectus abdominis myocutaneous flap. Tan BK, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):890-2

What you see is what you get: lack of significant postoperative contour change in muscle transplants to the lower leg. Isenberg JS. **Ann Plast Surg** 1997 Jan;38(1):46-9

Immediate breast reconstruction in Chinese women using the transverse rectus abdominis myocutaneous (TRAM) flap [letter] Lim LH. **Aust N Z J Surg** 1997 Jan;67(1):59-60

The donor site morbidity of free DIEP flaps and free TRAM flaps for breast reconstruction. Blondeel N, et al. **Br J Plast Surg** 1997 Jul;50(5):322-30

Complications concerning free rectus abdominis muscle flaps in patients with portal hypertension. Ferraro FJ, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1415-7

TRAM flap breast reconstruction and adriamycin therapy [letter] Gargan TJ. **Plast Reconstr Surg** 1997 Jan;99(1):256

Laparoscopic cholecystectomy through prolene mesh after bilateral TRAM flap [letter] Ghavami B, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2103-5

The TRAM flap for breast reconstruction [letter; comment] Johnson RM. **Plast Reconstr Surg** 1997 Jun;99(7):2111-3. Comment on: Plast Reconstr Surg 1996 Jul;98(1):74-7.

One-stage reconstruction of established facial paralysis using a rectus abdominis muscle transfer. Koshima I, et al. **Plast Reconstr Surg** 1997 Jan;99(1):234-8

Timing, magnitude, and utility of surgical delay in the TRAM flap: II. Clinical studies. Restifo RJ, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1217-23

Timing, magnitude, and utility of surgical delay in the TRAM flap: I. Animal studies. Restifo RJ, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1211-6

[Single stage excision for an intractable brain abscess and free rectus abdominis flap for reconstruction of the anterior skull base] Katoh M, et al. **No Shinkei Geka** 1997 May; 25(5):461-5 (Eng. Abstr.) **(Jpn)**

ULTRASONOGRAPHY

Preoperative color-Doppler assessment of vascularisation of the rectus abdominis: anatomic basis of breast reconstruction with a transverse rectus abdominis myocutaneous flap--a prospective study. Meunier B, et al. **Surg Radiol Anat** 1997;19(1):35-40

RECURRENCE

see related
NEOPLASM RECURRENCE, LOCAL

RECURRENT LARYNGEAL NERVE

ABNORMALITIES

Non-recurrent laryngeal nerve: identification during thyroid surgery. Srinivasan V, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan-Feb; 59(1):57-9

ANATOMY & HISTOLOGY

Communication between the superior cervical sympathetic

ganglion and the inferior laryngeal nerve [letter] Sato I, et al. **J Anat** 1997 Jan;190 (Pt 1):147–8

Stretch-induced nerve injury as a cause of paralysis secondary to the anterior cervical approach. Weisberg NK, et al. **Otolaryngol Head Neck Surg** 1997 Mar;116(3):317–26

INJURIES

Complications of thyroid surgery. Moulton-Barrett R, et al. **Int Surg** 1997 Jan–Mar;82(1):63–6

Recurrent laryngeal nerve dysfunction following carotid endarterectomy. Curran AJ, et al. **J R Coll Surg Edinb** 1997 Jun;42(3):168–70

Stretch-induced nerve injury as a cause of paralysis secondary to the anterior cervical approach. Weisberg NK, et al. **Otolaryngol Head Neck Surg** 1997 Mar;116(3):317–26

[Transtracheal monitoring of the recurrent laryngeal nerve. Prototype of a new tube] Lamadé W, et al. **Chirurg** 1997 Feb;68(2):193–5 (Eng. Abstr.) **(Ger)**

[Electromyography study and follow-up of bilateral recurrent laryngeal nerve paralysis after thyroid gland operations] Schneider W, et al. **HNO** 1997 Jul;45(7):551–5 (Eng. Abstr.) **(Ger)**

[Intraoperative recurrent laryngeal nerve monitoring by recording summation action potentials of the vagus nerve] Hanack U, et al.
Langenbecks Arch Chir Suppl Kongressbd 1997;114:765–8 (Eng. Abstr.) **(Ger)**

[Risk factors and follow-up of recurrent laryngeal nerve paralysis after first surgeries of benign thyroid diseases. Results of a retrospective analysis of 1,556 patients] Joosten U, et al. **Zentralbl Chir** 1997;122(4):236–45 (Eng. Abstr.) **(Ger)**

[Surgical treatment of benign recurrent goiter with pre-existing unilateral recurrent laryngeal nerve paralysis—a report of experiences] Wasiak J, et al.
Zentralbl Chir 1996;121(7):584–6 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Preservation of recurrent laryngeal nerve invaded by differentiated thyroid cancer. Nishida T, et al.
Ann Surg 1997 Jul;226(1):85–91

Loss of large myelinated nerve fibres of the recurrent laryngeal nerve in patients with multiple system atrophy and vocal cord palsy. Hayashi M, et al.
J Neurol Neurosurg Psychiatry 1997 Mar;62(3):234–8

[An isolated lesion of the recurrent nerve in Recklinghausen's disease] Bruns VA, et al. **Klin Med (Mosk)** 1996;74(2):52–3 **(Rus)**

PHYSIOLOGY

Motor innervation of the cricopharyngeus muscle by the recurrent laryngeal nerve. Hammond CS, et al.
J Appl Physiol 1997 Jul;83(1):89–94

Experimental study on neurorrhaphy of the recurrent laryngeal nerve in dogs. Rubio A, et al.
J Laryngol Otol 1996 Aug;110(8):748–53

SURGERY

The NIM-2 nerve integrity monitor in thyroid and parathyroid surgery. Barwell J, et al. **Br J Surg** 1997 Jun; 84(6):854

Experimental study on neurorrhaphy of the recurrent laryngeal nerve in dogs. Rubio A, et al.
J Laryngol Otol 1996 Aug;110(8):748–53

Physiologic motion after laryngeal nerve reinnervation: a new method. Sercarz JA, et al.
Otolaryngol Head Neck Surg 1997 Apr;116(4):466–74

[Ansa cervicalis to the adductor division of the recurrent laryngeal nerve anastomosis for unilateral vocal cord paralysis] Zheng H, et al.
Chung Hua Erh Pi Yen Hou Ko Tsa Chih 1995;30(6):347–50 (Eng. Abstr.) **(Chi)**

[Must the recurrent nerve in thyroid gland resection always be exposed? A prospective randomized study] Koch B, et al. **Chirurg** 1996 Sep;67(9):927–32; discussion 932 (Eng. Abstr.) **(Ger)**

RECYCLING see **CONSERVATION OF NATURAL RESOURCES**

RECYCLING, EQUIPMENT see **EQUIPMENT REUSE**

RED BLOOD CELL COUNT see **ERYTHROCYTE COUNT**

RED BLOOD CELL MEMBRANE SIALOGLYCOPROTEIN see **GLYCOPHORIN**

RED BLOOD CELL TRANSFUSION see **ERYTHROCYTE TRANSFUSION**

RED BLOOD CELLS see **ERYTHROCYTES**

RED BUGS see **TROMBICULID MITES**

RED-CELL APLASIA, PURE

Response: pure red blood cell aplasia: association with large granular lymphocyte leukemia and the prognostic value of cytogenetic abnormalities [letter] Tefferi A, et al.
Blood 1996 Oct 15;88(8):3245–6

Pure red cell aplasia: its clinical association and treatment [letter; comment] Wong KF, et al. **Blood** 1996 Oct 15; 88(8):3244–5. Comment on: Blood 1996 Apr 1;87(7):3000–6.

Pure red-cell aplasia: a review. Erslev AJ, et al.
Blood Rev 1996 Mar;10(1):20–8 (98 ref.)

CHEMICALLY INDUCED

Pure red cell aplasia during carbamazepine monotherapy. Tagawa T, et al. **Brain Dev** 1997 Jun;19(4):300–2

Association of NSAID with red cell aplasia [letter; comment] Weinberger KA. **J Rheumatol** 1997 Jul;24(7):1444. Comment on: J Rheumatol 1996 Oct;23(10):1803–5.

Azathioprine induced macrocytosis and red cell aplasia in renal transplant patients [letter] Zazgornik J.
Nephrol Dial Transplant 1997 Mar;12(3):628

Drug-induced pure red cell aplasia. Thompson DF, et al.
Pharmacotherapy 1996 Nov-Dec;16(6):1002–8 (74 ref.)

[Bone marrow aplasia and ticlopidine (letter)] Gaspar Alonso-Vega G, et al. **Med Clin (Barc)** 1997 Apr 19; 108(15):596–7 (10 ref.) **(Spa)**

COMPLICATIONS

Pure red cell aplasia with thymona: evidence of T-cell clonal disorder. Masuda M, et al. **Am J Hematol** 1997 Apr; 54(4):324–8

The association of pure red cell aplasia and primary Sjögren's syndrome [letter; comment] Ibkhatra S, et al.
Clin Exp Rheumatol 1997 Jan–Feb;15(1):119–20. Comment on: Clin Exp Rheumatol 1996 May–Jun;14(3):344–5.

Severe acute hepatitis A associated with acute pure red cell aplasia. Tomida S, et al. **J Gastroenterol** 1996 Aug; 31(4):612–7 (26 ref.)

A patient with myeloma who still has pure red cell aplasia despite the most intensive immune modulation. Orchard J, et al. **Leuk Res** 1997 Apr;21(4):353–4

Pure red cell aplasia in a man with RA. Tsai CY, et al.
Scand J Rheumatol 1997;26(4):329–31

[T-cell large granular lymphocytic leukemia associated with pure red cell aplasia, successfully treated with cyclophosphamide] Mátrai Z, et al. **Orv Hetil** 1997 Aug 17;138(33):2075–80 (45 ref.) (Eng. Abstr.) **(Hun)**

[Erythroblastopenia during recurrence of a thymoma associated with myasthenia gravis. Apropos of a new case] Montserrat I, et al. **Sangre (Barc)** 1996 Jun;41(3):249–52 (Eng. Abstr.) **(Spa)**

[Erythroblastopenia associated with a myelodysplastic syndrome (letter) (see comments)] Rodriguez Garcia JA, et al. **Sangre (Barc)** 1996 Jun;41(3):260. Comment in: Sangre (Barc) 1996 Dec;41(6):483. **(Spa)**

DRUG THERAPY

Pure red-cell aplasia requiring cytotoxic chemotherapy: presence of clonal T-lymphocytes without characteristics of chronic lymphocytic leukemia [letter] Nezu M, et al.
Am J Hematol 1996 Oct;53(2):145–7

Cyclophosphamide therapy for pure red cell aplasia associated with granular lymphocyte-proliferative disorders. Yamada O, et al. **Br J Haematol** 1997 May; 97(2):392–9

Successful treatment with cyclosporin A of pure red cell aplasia associated with rheumatoid arthritis [see comments] Fujii T, et al. **J Rheumatol** 1996 Oct;23(10):1803–5. Comment in: J Rheumatol 1997 Jul;24(7):1444.

Successful treatment of a patient with a thymoma and pure red-cell aplasia with octreotide and prednisone [published erratum appears in N Engl J Med 1997 Apr 3;336(14):1039] Palmieri G, et al. **N Engl J Med** 1997 Jan 23;336(4):263–5

ETIOLOGY

Pure red-cell aplasia occurring 12 years after thymectomy: successful treatment with cyclosporine [letter] Inokuchi K, et al. **Am J Hematol** 1996 Oct;53(2):141

Concomitant association of myasthenia gravis and pure red cell aplasia after chemotherapy for Hodgkin's disease [letter] Mohri H, et al. **Am J Hematol** 1997 Apr;54(4):343

AIDS and pure red cell aplasia [letter; comment] Stricker RB, et al. **Am J Hematol** 1997 Mar;54(3):264. Comment on: Am J Hematol 1996 Feb;51(2):171.

Barmah Forest virus causing anaemia? [letter] Marshall CL, et al. **Aust N Z J Med** 1997 Jun;27(3):345–6

Sjögren's syndrome and pure red cell aplasia [letter] [see comments] Giordano N, et al. **Clin Exp Rheumatol** 1996 May–Jun;14(3):344–5. Comment in: Clin Exp Rheumatol 1997 Jan–Feb;15(1):119–20.

The complement system in chronic lymphocytic leukemia: a possible role in autoimmune manifestations. Lugassy G, et al. **Leuk Lymphoma** 1996 May;21(5–6):501–3

Pure red cell aplasia after major ABO-incompatible bone marrow transplantation: two case reports of treatment with recombinant human erythropoietin. Fujisawa S, et al.
Transpl Int 1996;9(5):506–8

[Comparison of chemiluminescence and polynuclear neutrophil count after aplasia in hematologic malignancies] Cheze S, et al. **Pathol Biol (Paris)** 1996 Oct;44(8):705–9 (Eng. Abstr.) **(Fre)**

[Four cases of thymoma associated with pure red cell aplasia] Mukaida T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jan;45(1):96–101 (Eng. Abstr.) **(Jpn)**

[A case of chronic GBV-C hepatitis with diabetes mellitus which developed pure red cell aplasia] Kaneko T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Feb;94(2):133–8 **(Jpn)**

IMMUNOLOGY

Antibodies to recombinant human erythropoietin causing pure red cell aplasia. Prabhakar SS, et al. **Clin Nephrol** 1997 May;47(5):331–5

PATHOLOGY

[Erythroblastopenia, myelodysplastic syndrome and cytogenetic study (letter; comment)] Gil García S, et al. **Sangre (Barc)** 1997 Feb;42(1):85. Comment on: Sangre (Barc) 1996 Dec;41(6):483. **(Spa)**

PHYSIOPATHOLOGY

Pure red cell aplasia associated with hepatitis C infection. al-Awami Y, et al. **Am J Med Sci** 1997 Aug;314(2):113–7 (48 ref.)

Pure red cell aplasia: clinical features and treatment results in 16 cases. Kwong YL, et al. **Ann Hematol** 1996 Mar; 72(3):137–40

THERAPY

Pure red cell aplasia: clinical features and treatment results in 16 cases. Kwong YL, et al. **Ann Hematol** 1996 Mar; 72(3):137–40

Apheresis therapy for prolonged red cell aplasia after major ABO-mismatched bone marrow transplantation. Ohta S, et al. **Intern Med** 1997 Jul;36(7):487–91

VETERINARY

Pancytopenia associated with bone marrow aplasia in a Holstein heifer. Ammann VJ, et al. **Can Vet J** 1996 Aug; 37(8):493–5

VIROLOGY

Transient erythroblastopenia of childhood associated with human herpesvirus type 6, variant B. Penchansky L, et al. **Am J Clin Pathol** 1997 Aug;108(2):127–32

Pure red cell aplasia due to parvovirus B19 infection in solid organ transplantation. Ahsan N, et al. **Clin Transplant** 1997 Aug;11(4):265–70 (26 ref.)

Polymerase chain reaction amplification of archival material for parvovirus B19 in children with transient erythroblastopenia of childhood. Rogers BB, et al.
Pediatr Pathol Lab Med 1996 May–Jun;16(3):471–8

RED CELL GHOST see **ERYTHROCYTE MEMBRANE**

RED CELL INDICES see **ERYTHROCYTE INDICES**

RED CELL MASS see **ERYTHROCYTE VOLUME**

RED CELL SUBSTITUTES see **BLOOD SUBSTITUTES**

RED CROSS

"For any shortcomings on the part of the Red Cross, we are deeply sorry" [letter; comment] Davey M, et al.
CMAJ 1997 Aug 1;157(3):245–6. Comment on: Can Med Assoc J 1997 May 15;156(10):1401–2.

"For any shortcomings on the part of the Red Cross, we are deeply sorry" [letter; comment] Jackson FI. **CMAJ** 1997 Aug 1;157(3):246. Comment on: Can Med Assoc J 1997 May 15;156(10):1401–2.

"For any shortcomings on the part of the Red Cross, we are deeply sorry" [letter; comment] Normand A. **CMAJ** 1997 Aug 1;157(3):245; discussion 246. Comment on: Can Med Assoc J 1997 May 15;156(10):1401–2.

HISTORY

Red Cross only positive result of horrifying 1859 bloodbath. Brooks J. **Can Med Assoc J** 1996 Oct 15;155(8):1180–2

The International Red Cross and Red Crescent Movement and lessons from its experience of war surgery. Vassallo DJ. **J R Army Med Corps** 1994 Oct;140(3):146–54

[The Red Cross Society medals issued to Russian physicians and nurses for their selfless medical assistance] Gribanov ED. **Probl Sotsialnoi Gig Istor Med** 1995 Sep–Oct;(5):56–8 **(Rus)**

ORGANIZATION & ADMINISTRATION

The Australian Red Cross Blood Service [editorial] Hetzel R, et al. **Med J Aust** 1997 May 5;166(9):453–4

[Care by the Geriatrics Unit of patients admitted to the Traumatology Unit (letter)] Reig Puig L, et al.
An Med Interna 1996 Jun;13(6):305–6 **(Spa)**

RED DYE NO. 2 see **AMARANTH**

RED MARROW see **BONE MARROW**

RED MITES see **TROMBICULID MITES**

RED MONKEY see **ERYTHROCEBUS PATAS**

RED NUCLEUS

CYTOLOGY

Axotomy induces retraction of the dendritic arbor of adult rat rubrospinal neurons. Tseng GF, et al. **Acta Anat (Basel)** 1996;155(3):184–93

Axotomy affects the retrograde labeling of cervical and lumbar–cord–projecting rubrospinal neurons differently. Tseng GF, et al. **Anat Embryol (Berl)** 1996 Nov; 194(5):457–64

Rubral astrocytic reactions to proximal and distal axotomy of rubrospinal neurons in the rat. Tseng GF, et al. **Brain Res** 1996 Dec 2;742(1–2):115–28

DRUG EFFECTS

Noradrenaline modifies the spontaneous spiking activity of red nucleus neurons in the rat by activation of alpha 2– and beta–adrenoceptors. Ciranna L, et al. **Brain Res** 1996 Dec 16;743(1–2):284–93

BMY–14802 reversed the sigma receptor agonist–induced neck dystonia in rats. Okumura K, et al. **J Neural Transm** 1996;103(10):1153–61

Behavioural effects of selective serotonin reuptake inhibitors following direct micro injection into the left red nucleus of the rat. Faherty CJ, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):53–8

METABOLISM

Compartmentalization of calbindin and parvalbumin in different parts of rat rubrospinal neurons. Wang YJ, et al. **Neuroscience** 1996 Sep;74(2):427–34

PATHOLOGY

Huntington's disease and dentatorubral–pallidoluysian atrophy: proteins, pathogenesis and pathology. Ross CA, et al. **Brain Pathol** 1997 Jul;7(3):1003–16 (137 ref.)

A unique origin and multistep process for the generation of expanded DRPLA triplet repeats. Yanagisawa H, et al. **Hum Mol Genet** 1996 Mar;5(3):373–9

The relationship between (CAG)n repeat number and age of onset in a family with dentatorubral–pallidoluysian atrophy (DRPLA): diagnostic implications of confirmatory and predictive testing. Potter NT. **J Med Genet** 1996 Feb; 33(2):168–70

Axotomy–induced alterations in the red nucleus revealed by monoclonal antibody, Py, following a low thoracic spinal cord lesion in the adult rat. Brook GA, et al. **Spinal Cord** 1997 Jul;35(7):474–81

[A sporadic case of dentatorubral–pallidoluysian atrophy (DRPLA) having an elderly age of onset] Horikawa H, et al. **Rinsho Shinkeigaku** 1996 Apr;36(4):584–6 (Eng. Abstr.) **(Jpn)**

[A family with dentato–rubro–pallido–luysian atrophy (DRPLA): an intergenerational contraction of the CAG repeat] Murata K, et al. **Rinsho Shinkeigaku** 1997 Feb; 37(2):127–30 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Does the red nucleus provide the tonic support against which fractionated movements occur? A study on forepaw movements used in skilled reaching by the rat. Whishaw IQ, et al. **Behav Brain Res** 1996 Jan;74(1–2):79–90

Perineuronal microglial reactivity following proximal and distal axotomy of rat rubrospinal neurons. Tseng GF, et al. **Brain Res** 1996 Apr 9;715(1–2):32–43

Efferent projections of the retrorubral nucleus to the substantia nigra and ventral tegmental area in cats as shown by anterograde tracing. Arts MP, et al. **Brain Res Bull** 1996; 40(3):219–28

Innervation of the caudate nucleus, thalamus and red nucleus by the remaining sensorimotor cortex in cats with fetal or neonatal unilateral frontal cortex removal. Carlson–Kuhta P, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):234–46

The projections of the retrorubral field A8 to the hippocampal formation in the rat. Gasbarri A, et al. **Exp Brain Res** 1996 Nov;112(2):244–52

Analysis of potentials induced in red nucleus neurones from the somaesthetic pathway stimulated at the bulbar level. Padel Y, et al. **Exp Brain Res** 1995;106(3):377–90

Somatosensory and movement–related properties of red nucleus: a single unit study in the turtle. Sarrafizadeh R, et al. **Exp Brain Res** 1996 Feb;108(1):1–17

Analysis of ion channel expression by astrocytes in red nucleus brain stem slices of the rat. Akopian G, et al. **Glia** 1997 Mar;19(3):234–46

Effects of red nucleus inactivation on burst discharge in turtle cerebellum in vitro: evidence for positive feedback. Keifer J. **J Neurophysiol** 1996 Oct;76(4):2200–10

Synaptic plasticity of the interpositorubral pathway functionally related to forelimb flexion movements. Pananceau M, et al. **J Neurophysiol** 1996 Jun;75(6):2542–61

Red nucleus lesions abolish the biphasic respiratory response to isocapnic hypoxia in decerebrate young rabbits. Waites BA, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):217–25

Retrospinal tract [letter; comment] Kennedy PR. **Neurology** 1997 May;48(5):1472–3. Comment on: Neurology 1996 Aug;47(2):588–91.

Homozygosity for an allele carrying intermediate CAG repeats in the dentatorubral–pallidoluysian atrophy (DRPLA) gene results in spastic paraplegia. Kurohara K, et al. **Neurology** 1997 Apr;48(4):1087–90

A nigro–rubro–bulbar pathway to the parvicellular reticular formation in the rat. Yasui Y, et al. **Neuroreport** 1996 Apr 26;7(6):1157–60

Membrane properties and inhibitory connections of normal and upper cervically axotomized rubrospinal neurons in the rat. Chen JR, et al. **Neuroscience** 1997 Jul;79(2):449–62

PHYSIOPATHOLOGY

Bipolar disorders, dystonia, and compulsion after dysfunction of the cerebellum, dentatorubrothalamic tract, and substantia nigra. Lauterbach EC. **Biol Psychiatry** 1996 Oct 15;40(8):726–30 (65 ref.)

Characteristic evoked potentials in childhood–onset dentatorubral–pallidoluysian atrophy. Miyazaki M, et al. **Brain Dev** 1996 Sep–Oct;18(5):389–93

Fetal spinal cord transplants rescue some axotomized rubrospinal neurons from retrograde cell death in adult rats. Mori F, et al. **Exp Neurol** 1997 Jan;143(1):45–60

RED TIDE see **DINOFLAGELLIDA**

REDOX see **OXIDATION–REDUCTION**

REDUCED GRAVITY see **HYPOGRAVITY**

REDUCING AGENTS

Refined exposure assessment for ingestion of tapwater contaminated with hexavalent chromium: consideration of exogenous and endogenous reducing agents. Kerger BD, et al. **J Expo Anal Environ Epidemiol** 1996 Apr–Jun; 6(2):163–79

CHEMISTRY

Substitution effect of purine nucleosides on diisobutylaluminum hybride reduction. Hirota K, et al. **Nucleic Acids Symp Ser** 1995;(34):15–6

PHARMACOLOGY

Evidence for a specific interaction of vitronectin with arginine: effects of reducing agents on the expression of functional domains and immunoepitopes. Seiffert D, et al. **Biochimie** 1997 Apr;79(4):205–10

Different effects of reducing agents on omega–conotoxin GVIA inhibition of [3H]–acetylcholine release from rat cortical slices and guinea–pig myenteric plexus. Casali TA, et al. **Br J Pharmacol** 1997 Jan;120(1):88–92

Effects of an aminomethacrylate on epithelial cell lipid metabolism. Schuster GS, et al. **J Biomater Sci Polym Ed** 1997;8(5):363–75

Effects of reducing agents and oxidants on excitation–contraction coupling in skeletal muscle fibres of rat and toad. Posterino GS, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):809–25

REDUCTANTS see **REDUCING AGENTS**

REDUCTASES see **OXIDOREDUCTASES**

REDUVIIDAE see **TRIATOMINAE**

REED–STERNBERG CELLS

see related
HODGKIN'S DISEASE

Hodgkin and Reed–Sternberg cells in Hodgkin's disease represent the outgrowth of a dominant tumor clone derived from (crippled) germinal center B cells. Kanzler H, et al. **J Exp Med** 1996 Oct 1;184(4):1495–505

Clonal relapse in Hodgkin's disease [letter] Jox A, et al. **N Engl J Med** 1997 Aug 14;337(7):499

CHEMISTRY

Anomalous retinoblastoma protein expression in Sternberg–Reed cells in Hodgkin's disease: a comparative study with p53 and Ki67 expression. Sánchez–Beato M, et al. **Br J Cancer** 1996 Oct;74(7):1056–62

An immunohistochemical analysis of Reed–Sternberg–like cells in posttransplantation lymphoproliferative disorders: the possible pathogenetic relationship to Reed–Sternberg cells in Hodgkin's disease and Reed–Sternberg–like cells in non–Hodgkin's lymphomas and reactive conditions. Chetty R, et al. **Hum Pathol** 1997 Apr;28(4):493–8

IMMUNOLOGY

Immunophenotype of Reed–Sternberg and Hodgkin's cells in sequential biopsy specimens of Hodgkin's disease: a paraffin–section immunohistochemical study using the heat–induced epitope retrieval method. Vasef MA, et al. **Am J Clin Pathol** 1997 Jul;108(1):54–9

Isolation of Epstein–Barr virus (EBV)–specific cytotoxic T lymphocytes that lyse Reed–Sternberg cells: implications for immune–mediated therapy of EBV+ Hodgkin's disease. Sing AP, et al. **Blood** 1997 Mar 15;89(6):1978–86

Expression of B7–2 (CD86) molecules by Reed–Sternberg cells of Hodgkin's disease. Van Gool SW, et al. **Leukemia** 1997 Jun;11(6):846–51

METABOLISM

P53 expression in Reed–Sternberg cells does not correlate with gene mutations in Hodgkin's disease. Elenitoba–Johnson KS, et al. **Am J Clin Pathol** 1996 Dec; 106(6):728–38

Fascin, a sensitive new marker for Reed–Sternberg cells of hodgkin's disease. Evidence for a dendritic or B cell derivation? Pinkus GS, et al. **Am J Pathol** 1997 Feb; 150(2):543–62

Expression of heat shock protein 70 (HSP70) and EBV latent membrane protein 1 (LMP1) in Reed–Sternberg cells of Hodgkin's disease. Takahashi H, et al. **Anal Cell Pathol** 1996 Nov;12(2):71–83

NPM/ALK fusion mRNA expression in Hodgkin and Reed–Sternberg cells is rare but does occur: results from single–cell cDNA analysis. Trümper L, et al. **Ann Oncol** 1997;8 Suppl 2:83–7

Expression of p53 and mdm–2 proteins in Hodgkin's Disease. Absence of correlation with the presence of Epstein–Barr virus. Tzardi M, et al. **Anticancer Res** 1996 Sep–Oct; 16(5A):2813–9

Reed–Sternberg cells of classical Hodgkin's disease react with the plasma cell–specific monoclonal antibody B–B4 and express human syndecan–1. Carbone A, et al. **Blood** 1997 May 15;89(10):3787–94

EBV latent membrane protein (LMP–1) and bcl–2 protein expression in Reed–Sternberg–like cells in post–transplant lymphoproliferative disorders. Chetty R, et al. **Histopathology** 1996 Mar;28(3):257–60

Absence of T–cell– and B–cell–specific transcription factors TCF–1, GATA–3, and BSAP in Hodgkin's Reed–Sternberg cells. Hsu PL, et al. **Lab Invest** 1996 Feb; 74(2):395–405

Expression of the LMP1 oncoprotein in the EBV negative Hodgkin's disease cell line L–428 is associated with Reed–Sternberg cell morphology. Knecht H, et al. **Oncogene** 1996 Sep 5;13(5):947–53

PATHOLOGY

Single cell analysis of H/RS cells. Chan WC, et al. **Ann Oncol** 1996;7 Suppl 4:41–3 (18 ref.)

Single cell PCR for the analysis of Hodgkin's disease: four years later. Küpper M, et al. **Ann Oncol** 1996;7 Suppl 4:35–9 (24 ref.)

Single cell analysis of Hodgkin/Reed–Sternberg cells. Küppers R, et al. **Ann Oncol** 1996;7 Suppl 4:27–30 (27 ref.)

Report on the workshop biology of the Third International Symposium on Hodgkin's Lymphoma in Cologne 1995. Wolf J, et al. **Ann Oncol** 1996;7 Suppl 4:45–7 (8 ref.)

Classical Hodgkin and Reed–Sternberg cells demonstrate a non–clonal immature B lymphoid lineage: evidence from a single cell assay and in situ hybridization. Ohshima K, et al. **Hematol Oncol** 1996 Sep;14(3):123–36

Orbital immunocytoma simulating Hodgkin's disease by mimicking Hodgkin– and Reed–Sternberg–like cells. Radner W, et al. **Int Ophthalmol** 1997;21(1):5–7

Abortive mitoses and nuclear DNA fragmentation in CD30+ large cells of Hodgkin's disease. Leoncini L, et al. **Leuk Lymphoma** 1996 Jun;22(1–2):119–24, follow. 186, color plate XI

T–cell–rich B–cell lymphoma––a distinct clinicopathologic entity? Schmidt U, et al. **Leuk Lymphoma** 1996 Sep; 23(1–2):17–24 (39 ref.)

[Hodgkin's disease: clonality and derivation of Reed–Sternberg cells (editorial)] Orazi A. **Pathologica** 1996 Aug;88(4):259–62 **(Ita)**

[Are there cases of Hodgkin's disease with polyclonal Reed Sternberg cells?] Ruco LP. **Pathologica** 1996 Apr; 88(2):147–8 **(Ita)**

PHYSIOLOGY

Ig rearrangements in isolated Reed–Sternberg cells: conclusions from four different studies. Hummel M, et al. **Ann Oncol** 1996;7 Suppl 4:31–3 (13 ref.)

Single cell PCR for the analysis of Hodgkin's disease: four years later. Küpper M, et al. **Ann Oncol** 1996;7 Suppl 4:35–9 (24 ref.)

VIROLOGY

Variable expression of Epstein–Barr virus latent membrane protein I in Reed–Sternberg cells of Hodgkin's disease. Teramoto N, et al. **Acta Med Okayama** 1996 Oct; 50(5):267–70

Lack of correlation between EBV serology and presence of EBV in the Hodgkin and Reed–Sternberg cells of patients with Hodgkin's disease. Enblad G, et al. **Int J Cancer** 1997 Jul 29;72(3):394–7

REELER MICE see **MICE, NEUROLOGIC MUTANTS**

REFERENCE BOOKS

see related
TEXTBOOKS

A library for internists IX. Recommendations from the American College of Physicians. Frisse ME, et al. **Ann Intern Med** 1997 May 15;126(10):836–46

The ICD family of classifications. Gersenovic M. **Methods Inf Med** 1995 Mar;34(1–2):172–5

Diversity of eukaryotic microorganisms: computer–based

REFERENCE BOOKS

resources, "The Handbook of Protoctista" and its "Glossary". Margulis L, et al. **Microbiologia** 1996 Mar; 12(1):29–42

[Farmacotherapeutisch Kompas 1997 (letter)] Houwink PE. **Ned Tijdschr Geneeskd** 1997 Apr 19;141(16):796 **(Dut)**

STANDARDS

Incorrect overdose management advice in the Physicians' Desk Reference. Mullen WH, et al. **Ann Emerg Med** 1997 Feb;29(2):255–61

REFERENCE BOOKS, MEDICAL

The 'Clinical Audit Enabler'—a clinical audit resource reference guide'. Atherton R. **Health Bull (Edinb)** 1996 Nov;54(6):447–8

Standard method of diagnosis versus use of a computer database in the evaluation of skeletal dysplasias. Harned RK 2nd, et al. **Pediatr Radiol** 1996 Dec;26(12):887–90

Medical history. BeSaw L. **Tex Med** 1997 Jan;93(1):53–6

[Medical databases, index books and library services] Suutarinen P. **Duodecim** 1995;111(19):1838–43 (6 ref.) **(Fin)**

[Opposable medical references in angiology (editorial)] Plettner JL. **J Mal Vasc** 1996;21(2):65–7 **(Fre)**

[An analysis of the information in the Medicom International Vade Mecum with respect to drugs with vitamin A] Palop Larrea V, et al. **Aten Primaria** 1997 May 31;19(9):459–64 (Eng. Abstr.) **(Spa)**

REFERENCE RANGES see **REFERENCE VALUES**

REFERENCE STANDARDS

Toward quality assurance for metaphase FISH: a multi-center experience. Dewald G, et al. **Am J Med Genet** 1996 Sep 6;64(4):539–45

Comparison of the French and U.S. national 3H (tritiated H2O) standards by 4 pi beta liquid scintillation spectrometry. Zimmerman BE, et al. **Appl Radiat Isot** 1997 Apr;48(4):521–6

The WHO growth chart: historical considerations and current scientific issues. de Onis M, et al. **Bibl Nutr Dieta** 1996;(53):74–89 (39 ref.)

Use of elastase as an internal standard in immunoblotting techniques. Bazan A, et al. **Biochimie** 1996;78(4):273–6

Problems and practical considerations in assessing accuracy with NIST SRM 909a: report of defective vials [see comments] De BK, et al. **Clin Chem** 1996 Nov; 42(11):1832–7. Comment in: Clin Chem 1996 Nov;42(11):1878.

Comments concerning report of defective NIST SRM 909a vials [letter; comment] Gills TE, et al. **Clin Chem** 1996 Nov;42(11):1878. Comment on: Clin Chem 1996 Nov;42(11):1832–7.

How useful are reference materials? [editorial] Miller G. **Clin Chem** 1996 Nov;42(11):1733–4

Ordinary least squares dipole localization is influenced by the reference. Huizenga HM, et al. **Electroencephalogr Clin Neurophysiol** 1996 Dec;99(6):562–7

Setting standards for the levels of endotoxin in the embryo culture media of human in vitro fertilization and embryo transfer. Nagata Y, et al. **Fertil Steril** 1996 Mar;65(3):614–9

Improving ion mass ratio performance at low concentrations in methamphetamine GC–MS assay through internal standard selection. Urry FM, et al. **J Anal Toxicol** 1996 Nov–Dec;20(7):592–5

Inferences for likelihood ratios in the absence of a "gold standard". Joseph L, et al. **Med Decis Making** 1996 Oct–Dec;16(4):412–7 (18 ref.)

Computer help with medical diagnosis and procedure codes. Mercando AD. **Pacing Clin Electrophysiol** 1997 Feb;20(2 Pt 1):349–53

[Analysis of normality of data on the basis of the mean and standard deviations] Dinya E. **Orv Hetil** 1997 May 11; 138(19):1207–8 (Eng. Abstr.) **(Hun)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 9. The background for the basic group composed of healthy reference Igarashi S. **Rinsho Byori** 1996 May;Suppl 101:90–101 **(Jpn)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 4. An IFCC international reference for plasma protein (CRM 470/RPPHS)—its Itoh Y, et al. **Rinsho Byori** 1996 May;Suppl 101:24–37 **(Jpn)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 10. The results of the analysis conducted to set reference ranges for 13 Saito K, et al. **Rinsho Byori** 1996 May;Suppl 101:102–206 **(Jpn)**

[Quantitative determination of low concentrations of cDNA using polymerase chain reaction and amplicon as an internal standard] Savochkina LP, et al. **Mol Biol (Mosk)** 1996 Jul–Aug;30(4):786–800 **(Rus)**

REFERENCE VALUES

Statistical methods of computing reference values for side-to-side differences in nerve conduction studies. Chang AS, et al. **Am J Phys Med Rehabil** 1996 Nov–Dec; 75(6):437–42

The range of normal. Olive DL. **Semin Reprod Endocrinol** 1996 May;14(2):119–23 (11 ref.)

[What is normal? (editorial)] Hørder M. **Ugeskr Laeger** 1997 Sep 22;159(39):5780 **(Dan)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 6. Statistical methods for setting reference criteria—Problems Ichihara K. **Rinsho Byori** 1996 May;Suppl 101:48–73 **(Jpn)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 3. Determination of reference intervals] Kanno T. **Rinsho Byori** 1996 May;Suppl 101:9–23 **(Jpn)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 2. The organization and activities of a project to set the reference Kawai T. **Rinsho Byori** 1996 May;Suppl 101:5–8 **(Jpn)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 11. A practical list of reference intervals for 13 items of serum proteins] Kawai T, et al. **Rinsho Byori** 1996 May;Suppl 101:207–9 **(Jpn)**

[Standards for ranges of 13 items of blood proteins among Japanese adults—results of a joint project of 7 organizations based on NCCLS Document C28–P and International Reference CRM470. 1. Current status and problems related to setting reference criteria (normal Kawai T. **Rinsho Byori** 1996 May;Suppl 101:1–4 **(Jpn)**

REFERRAL AND CONSULTATION

Referral out from the ED—appropriate? [letter; comment] Merigian KS, et al. **Acad Emerg Med** 1996 Nov; 3(11):1071–3. Comment on: Acad Emerg Med 1996 Mar;3(3):189–91. Comment on: Acad Emerg Med 1996 Mar;3(3):252–7.

Dynamic multivariate modelling: day care and consultation rate for acute otitis media. Sorri M, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):299–301

General practitioners' views of an open referral system to a community mental health service. Puri BK, et al. **Acta Psychiatr Scand** 1996 Aug;94(2):133–6

The illustrated radiology report [see comments] Gelfand DW, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1099–100. Comment in: AJR Am J Roentgenol 1997 Jun;168(6):1621.

Appropriateness of imaging procedure requests: do radiologists agree? Kahn CE Jr, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):11–4

The contemporary radiologist: consultant or film reader? [comment] Kessler HB. **AJR Am J Roentgenol** 1997 Aug; 169(2):353–4. Comment on: AJR Am J Roentgenol 1997 Aug;169(2):351–2.

A recommendation on recommendations [see comments] Lawson DE, et al. **AJR Am J Roentgenol** 1997 Aug; 169(2):351–2. Comment in: AJR Am J Roentgenol 1997 Aug;169(2):353–4.

Re: The illustrated radiology report [letter; comment] Pochaczevsky R. **AJR Am J Roentgenol** 1997 Jun; 168(6):1621. Comment on: AJR Am J Roentgenol 1996 Nov;167(5):1099–100.

Communicating with the referring physician: the standard of care. Schreiber MH. **AJR Am J Roentgenol** 1997 Aug; 169(2):343–5

Re: Physicians' opinions on the delivery of mammographic screening services [letter; comment] Weg N. **AJR Am J Roentgenol** 1997 Aug;169(2):596–7. Comment on: AJR Am J Roentgenol 1996 Aug;167(2):377–9.

Referral pattern to the allergist for hay fever in a health-care system with open access to specialists. Francillon C, et al. **Allergy** 1995 Dec;50(12):959–63

Age and referral to coronary angiography after an abnormal treadmill thallium test. Lauer MS, et al. **Am Heart J** 1997 Feb;133(2):139–46

Higher prevalence and greater severity of coronary disease in short versus tall men referred for coronary arteriography. Nwasokwa ON, et al. **Am Heart J** 1997 Feb; 133(2):147–52

Outcome of trauma patients after brief intervention by a substance abuse consultation service. Greber RA, et al. **Am J Addict** 1997 Winter;6(1):38–47

A substance abuse consultation service. Enhancing the care of hospitalized substance abusers and providing training in addiction psychiatry. McDuff DR, et al. **Am J Addict** 1997 Summer;6(3):256–65 (43 ref.)

Medical referrals for hypnotherapy: opinions of physicians, residents, family practice outpatients, and psychiatry outpatients. Elkins GR, et al. **Am J Clin Hypn** 1996 Apr; 38(4):254–62

Second opinions in surgical pathology [see comments] Leslie KO, et al. **Am J Clin Pathol** 1996 Oct;106(4 Suppl 1):S58–64 (17 ref.). Comment in: Am J Clin Pathol 1997 Apr;107(4):497–8.

Effectiveness of a consultation intervention to promote tobacco control policies in Northwest Indian tribes: integrating experimental evaluation and service delivery. Lichtenstein E, et al. **Am J Community Psychol** 1996 Oct; 24(5):639–55

A comparison of the Johnson Intervention with four other methods of referral to outpatient treatment. Loneck B, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):233–46

Are patients who undergo open-access endoscopy more anxious about their procedures than patients referred from the GI clinic? [see comments] Mahajan RJ, et al. **Am J Gastroenterol** 1996 Dec;91(12):2505–8. Comment in: Am J Gastroenterol 1997 Aug;92(8):1403–4.

Memory disorders consultation service [letter] Gong WC, et al. **Am J Health Syst Pharm** 1997 Jan 1;54(1):92, 95

Physician agreement with pharmacist-suggested drug therapy changes for elderly outpatients. Hanlon JT, et al. **Am J Health Syst Pharm** 1996 Nov 15;53(22):2735–7

The labyrinth of IDEA: school decisions on referred students with subaverage general intelligence. MacMillan DL, et al. **Am J Ment Retard** 1996 Sep;101(2):161–74

Factors predicting re-referral following crisis intervention for community-based persons with developmental disabilities and behavioral and psychiatric disorders. Shoham-Vardi I, et al. **Am J Ment Retard** 1996 Sep; 101(2):109–17

What is the problem with third-party prescription in school-based practice? Royeen CB. **Am J Occup Ther** 1996 Oct;50(9):750–1

Teacher consultation: impact on teachers' effectiveness and students' cognitive competence and achievement. Goldman RK, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):374–84

Consultation system for diagnosis of gastric lesions. Enchev V, et al. **Anal Quant Cytol Histol** 1997 Feb;19(1):13–8

Is an outpatient appointment required for patients referred for a minor operation under local anaesthetic? Johnson RC, et al. **Ann R Coll Surg Engl** 1996 Sep;78(5 Suppl):223–5

Appropriateness of referrals for open-access endoscopy. How do physicians in different medical specialties do? [see comments] Mahajan RJ, et al. **Arch Intern Med** 1996 Oct 14;156(18):2065–9. Comment in: Arch Intern Med 1997 Apr 28;157(8):924.

Emergency medical services for children: early referral to PM&R [editorial] Christopher RP. **Arch Phys Med Rehabil** 1997 Apr;78(4):339

Disease and illness. The GP perspective. Gawthorn EC. **Aust Fam Physician** 1996 Nov;25(11):1699–702

Liaison psychiatry in an HIV/AIDS unit. Judd FK, et al. **Aust N Z J Psychiatry** 1997 Jun;31(3):391–7

The psychiatric care of people with intellectual disabilities: the perceptions of consultant psychiatrists in Victoria. Lennox N, et al. **Aust N Z J Psychiatry** 1996 Dec; 30(6):774–80

To whom do you refer? A referrer satisfaction study. Parker G, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):337–42

When is referral of Heaf test positive schoolchildren worth while? Prospective study [see comments] Booth H, et al. **BMJ** 1996 Sep 21;313(7059):726–7. Comment in: BMJ 1997 Jan 4;314(7073):71; discussion 72. Comment in: BMJ 1997 Jan 4;314(7073):71–2.

Recorded consultations for children under 5 have increased considerably in general practice [letter] Del Mar AR. **BMJ** 1996 Nov 23;313(7068):1334

Women with urinary incontinence should be referred to a specialist [letter; comment] Duckett JR. **BMJ** 1996 Sep 21;313(7059):754. Comment on: BMJ 1996 Jun 8;312(7044):1459–62.

Dictating clinic letters in front of the patient. Letting patients see copy of consultant's letter is being studied in trial [letter; comment] Hamilton W, et al. **BMJ** 1997 May 10; 314(7091):1416. Comment on: BMJ 1997 Feb 1;314(7077):347–8.

Dictating clinic letters in front of the patient. Effect of sending clients a personalised summary letter is being studied [letter; comment] Humfress H, et al. **BMJ** 1997 May 10;314(7091):1416–7. Comment on: BMJ 1997 Feb 1;314(7077):347–8.

Bureaucracy of purchaser-provider split delays treatment [letter] Hutchison J, et al. **BMJ** 1997 Apr 26;314(7089):1275

A randomised controlled trial of dictating the clinic letter in front of the patient [see comments] Lloyd BW. **BMJ** 1997 Feb 1;314(7077):347–8. Comment in: BMJ 1997 May 10;314(7091):1416. Comment in: BMJ 1997 May 10;314(7091):1416–7.

Commentary: interesting idea, but case not proved. Pringle M. **BMJ** 1997 Feb 1;314(7077):348

Do general practitioners act consistently in real practice when they meet the same patient twice? Examination of intradoctor variation using standardised (simulated) patients. Rethans JJ, et al. **BMJ** 1997 Apr 19; 314(7088):1170–3

Dictating clinic letters in front of the patient. Further research should be qualitative [letter] Waterston T. **BMJ** 1997 May 10;314(7091):1416

Patient satisfaction with time use in audiological consultations. Kargas S, et al. **Br J Audiol** 1996 Dec; 30(6):355–61

General practitioner referrals [letter; comment] Williams H. **Br J Dermatol** 1997 Apr;136(4):634–5. Comment on: Br J Dermatol 1996 Jul;135(1):70–3.

Repeat radiographs in GP referrals to an orthopaedic clinic. Beggs I. **Br J Gen Pract** 1997 May;47(418):313

Referral letters: are form letters better? Jenkins S, et al.

Br J Gen Pract 1997 Feb;47(415):107–8

How useful is qualitative research? [letter; comment] Marshall M. **Br J Gen Pract** 1996 Nov;46(412):685. Comment on: Br J Gen Pract 1996 Sep;46(410):525–8.

'Within practice' review of referrals significantly alters referral rates––a pilot project [letter] Rowlands G. **Br J Gen Pract** 1997 Feb;47(415):124–5

Does providing more accessible primary care psychology services lower the clinical threshold for referrals? Tata P, et al. **Br J Gen Pract** 1996 Aug;46(409):469–72

Ethnicity and paediatric referral in Amsterdam [letter] Wolf BH, et al. **Br J Gen Pract** 1997 Jul;47(420):466

Unrecognized psychiatric illness in general practice [editorial] [see comments] Wright AF. **Br J Gen Pract** 1996 Jun;46(407):327–8. Comment in: Br J Gen Pract 1996 Nov;46(412):690–1. Comment in: Br J Gen Pract 1997 Jan;47(414):55–6.

The appropriateness of referral of medically compromised dental patients to hospital. Absi EG, et al. **Br J Oral Maxillofac Surg** 1997 Apr;35(2):133–6

Factors influencing the uptake of orthodontic treatment. O'Brien K, et al. **Br J Orthod** 1996 Nov;23(4):331–4

Audit of general practitioner referrals to a surgical assessment unit: new methods to improve the efficacy of the acute surgical service [see comments] Dookeran KA, et al. **Br J Surg** 1996 Nov;83(11):1544–7. Comment in: Br J Surg 1997 May;84(5):727–8.

Audit of general practitioner referrals to a surgical assessment unit: new methods to improve the efficiency of the acute surgical service [letter; comment] Wilkins DC. **Br J Surg** 1997 May;84(5):727–8. Comment on: Br J Surg 1996 Nov;83(11):1544–7.

Psychiatry behind the walls: mental health services in jails and prisons. Osofsky HJ. **Bull Menninger Clin** 1996 Fall; 60(4):464–79

CQ sources/bibliography. **Camb Q Healthc Ethics** 1997 Summer;6(3):302–5

Gatekeeping in primary-health care. Challenging a sacred myth [editorial] Gass DA. **Can Fam Physician** 1997 Aug; 43:1334–5, 1338–9 **(Eng, Fre)**

Family physicians and specialist-consultants. Ties that bind. Gutkin C. **Can Fam Physician** 1996 Nov;42:2308, 2307, 2306 **(Eng, Fre)**

Referral for psychosocial assessment [letter; comment] Johnston D. **Can Fam Physician** 1997 Jul;43:1205, 1207. Comment on: Can Fam Physician 1997 Apr;43:705–8, 711–3.

Something is better than nothing [letter] Johnston DG. **Can Fam Physician** 1996 Nov;42:2135

Referral to specialized geriatric services. Which elderly people living in the community are likely to benefit? Man-Son-Hing M, et al. **Can Fam Physician** 1997 May; 43:925–30

Child psychiatric consultation service to community agencies: a collaborative approach involving three community agencies. Froese A, et al. **Can J Psychiatry** 1997 Aug;42(6):656–8

Findings of negligence followed communication lapses in BC aneurysm case [see comments] Capen K. **Can Med Assoc J** 1997 Jan 1;156(1):49–51. Comment in: CMAJ 1997 Jul 1;157(1):18, 20.

Consultation and counselling via e-mail [letter; comment] Geddes JA. **Can Med Assoc J** 1997 Feb 15;156(4):484–5. Comment on: Can Med Assoc J 1996 Dec 1;155(11):1606–7.

Those third-party reports [letter; comment] Zabrodski R. **Can Med Assoc J** 1997 Mar 1;156(5):634. Comment on: Can Med Assoc J 1997 Jan 1;156(1):73–5.

Diagnostic discrepancies and their clinical impact in a neuropathology referral practice [see comments] Bruner JM, et al. **Cancer** 1997 Feb 15;79(4):796–803. Comment in: Cancer 1996 Feb 15;79(4):665–7.

A needs assessment for referral to occupational therapy. Nurses' judgment in acute cancer care. Söderback I, et al. **Cancer Nurs** 1997 Aug;20(4):267–73

Letter writing to parents following paediatric outpatient consultation: a survey of parent and GP views. Cowper DM, et al. **Child Care Health Dev** 1996 Sep;22(5):303–10

Referring and reporting research participants at risk: views from urban adolescents. Fisher CB, et al. **Child Dev** 1996 Oct;67(5):2086–100

Development and prospective validation of a clinical index to predict survival in ambulatory patients referred for cardiac transplant evaluation [see comments] Aaronson KD, et al. **Circulation** 1997 Jun 17;95(12):2660–7. Comment in: Circulation 1997 Jun 17;95(12):2597–9.

"Curbside" consultation and informal communication in medical practice: a medicolegal perspective. Fox BC, et al. **Clin Infect Dis** 1996 Sep;23(3):616–22

A prospective study of 2,092 "curbside" questions asked of two infectious disease consultants in private practice in the midwest. Manian FA, et al. **Clin Infect Dis** 1996 Feb; 22(2):303–7

Out-patient management by junior staff: the value of consultant supervision. Watters GW, et al. **Clin Otolaryngol** 1993 Oct;18(5):372–4

FPs have vital role in ensuring success of breast cancer screening programs. Cohen L. **CMAJ** 1997 Aug 15; 157(4):442–4

Regional variation in nonmedical factors affecting family physicians' decisions about referral for consultation. Langley GR, et al. **CMAJ** 1997 Aug 1;157(3):265–72

A quality assurance review of the patient referral process and user satisfaction of outpatient general anaesthesia services for dental treatment. Podesta JR, et al. **Community Dent Health** 1996 Dec;13(4):228–31

Consultation to residential psychosocial rehabilitation agencies. Kupers TA. **Community Ment Health J** 1996 Aug; 32(4):403–13; discussion 415–8 (32 ref.)

The violence of despair: consultation to a HeadStart program following the Los Angeles uprising of 1992. Stuber ML, et al. **Community Ment Health J** 1997 Jun;33(3):235–41

Short-term outcome following referral to a psychiatric emergency service. Spooren D, et al. **Crisis** 1997;18(2):80–5

Bits and pieces [editorial] Weary PE. **Cutis** 1996 Nov; 58(5):322

Volunteer melanoma screenings. Follow-up, compliance, and outcome. de Rooij MJ, et al. **Dermatol Surg** 1997 Mar; 23(3):197–201

Guidelines for seeking and offering consultations in cytopathology. Hoda RS, et al. **Diagn Cytopathol** 1997 Apr; 16(4):366–7

Childhood cancers in a referral hospital in Kenya: a review. Macharia WM. **East Afr Med J** 1996 Oct;73(10):647–50

Immunizations and travel. Thanassi WT, et al. **Emerg Med Clin North Am** 1997 Feb;15(1):43–70 (30 ref.)

Which patients should be referred for open-access endoscopy? [editorial] [comment] Axon A. **Endoscopy** 1996 Oct;28(8):722–3. Comment on: Endoscopy 1996 Oct;28(8):661–6.

Appropriateness and diagnostic yield of upper gastrointestinal endoscopy in an open-access endoscopy unit [see comments] Gonvers JJ, et al. **Endoscopy** 1996 Oct; 28(8):661–6. Comment in: Endoscopy 1996 Oct;28(8):722–3.

Entry into the health care system: the family's decision-making process. Dowds BN, et al. **Fam Med** 1996 Feb;28(2):114–8

Effect of primary care referral on emergency department use: evaluation of a statewide Medicaid program. Gill JM, et al. **Fam Med** 1996 Mar;28(3):178–82

What do patients expect from consultations for upper respiratory tract infections? Chan CS. **Fam Pract** 1996 Jun; 13(3):229–35

Sampling for qualitative research using quantitative methods. 2. Characteristics of GPs who agree to video-taping of consultations. Coleman T. **Fam Pract** 1996 Dec;13(6):531–5

Consumerism and the consultation: the doctor's view [editorial] Fairhurst K, et al. **Fam Pract** 1995 Dec; 12(4):389–91

Consultation-liaison psychiatry database (1996 update). **Gen Hosp Psychiatry** 1996 Sep;18(5):293–375

Alexithymic features do not predict compliance with psychotherapy in consultation-liaison patients. Äärelä E, et al. **Gen Hosp Psychiatry** 1997 May;19(3):229–33

Psychiatric evaluations of small intestine transplantation patients. DiMartini A, et al. **Gen Hosp Psychiatry** 1996 Nov;18(6 Suppl):25S–29S

The multisite field trial of the consultation-liaison psychiatry assessment instrument. Muskin PR, et al. **Gen Hosp Psychiatry** 1997 Jan;19(1):16–23

Assessment and follow-up of alcohol-dependent liver transplantation patients. A clinical cohort. Tringali RA, et al. **Gen Hosp Psychiatry** 1996 Nov;18(6 Suppl):70S–77S

Engaging and retaining women in outpatient alcohol and other drug treatment: the effect of referral intensity. Loneck B, et al. **Health Soc Work** 1997 Feb;22(1):38–46

The effect on patients of non-referral for skull radiography following mild head injury. McNally E, et al. **Injury** 1996 Jul;27(6):429–31

Improving consultations between health-care professionals and older clients: implications for pharmacists. Morrow D. **Int J Aging Hum Dev** 1997;44(1):47–72 (98 ref.)

General practitioner consultations after a paediatric tonsillectomy. Jones TM, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):97–102

The attitudes of medical inpatients toward psychiatric consultation: a re-examination. Klein DA, et al. **Int J Psychiatry Med** 1996;26(3):287–93

Pattern of uveitis in a referral uveitis clinic in India. Biswas J, et al. **Int Ophthalmol** 1996–97;20(4):223–8

Mail consultations in ophthalmology. The Tenth Richard E. Hoover Lecture. Shields JA, et al. **Int Ophthalmol** 1995–96; 19(3):161–7

Characterization of patients refusing professional psychiatric treatment in a primary care clinic. Ben-Noun L. **Isr J Psychiatry Relat Sci** 1996;33(3):167–74

Family demographics of clinically referred children: what we know and what we need to know. Phares V, et al. **J Abnorm Child Psychol** 1996 Dec;24(6):787–801 (56 ref.)

Predictors of cross-informant syndromes among children and youths referred for mental health services. Stanger C, et al. **J Abnorm Child Psychol** 1996 Oct;24(5):597–614

Sex differences in referral rates of children with gender identity disorder: some hypotheses. Zucker KJ, et al. **J Abnorm Child Psychol** 1997 Jun;25(3):217–27

Unnecessary delays in accident and emergency departments: do medical and surgical senior house officers need to vet admissions? [see comments] O'Connor PM, et al. **J Accid Emerg Med** 1995 Dec;12(4):251–4. Comment in: J Accid Emerg Med 1996 Sep;13(5):365–6.

Oral and maxillofacial surgery in accident and emergency departments. Wood GD, et al. **J Accid Emerg Med** 1995 Dec;12(4):270–2

Conduct disorder with and without mania in a referred sample of ADHD children. Biederman J, et al. **J Affect Disord** 1997 Jul;44(2–3):177–88

Lessons from a hematology/oncology psychosocial conference. Drell MJ. **J Am Acad Child Adolesc Psychiatry** 1996 Mar;35(3):392–4

Male–female referral patterns [letter; comment] Maloney MJ, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Sep; 35(9):1105–6. Comment on: J Am Acad Child Adolesc Psychiatry 1995 Nov;34(11):1536–43.

Etiology of chronic cough in a population of children referred to a pediatric pulmonologist. Callahan CW. **J Am Board Fam Pract** 1996 Sep–Oct;9(5):324–7

28th Bethesda Conference. Task Force 4: Referral guidelines and the collaborative care of patients with cardiovascular disease. Fye WB, et al. **J Am Coll Cardiol** 1997 May; 29(6):1162–70 (73 ref.)

A geriatric consultation team in the emergency department. Gold S, et al. **J Am Geriatr Soc** 1997 Jun;45(6):764–7

The influence of the opinion of an infectious disease consultant on the appropriateness of antibiotic treatment in a general hospital. Gómez J, et al. **J Antimicrob Chemother** 1996 Aug;38(2):309–14

Child and family factors influencing the clinical referral of children with hyperactivity: a research note. Woodward L, et al. **J Child Psychol Psychiatry** 1997 May;38(4):479–85

Relationships between primary care physicians and consultants in managed care. Brett AS. **J Clin Ethics** 1997 Spring;8(1):60–5 (13 ref.)

The quality of primary care/consultant relationships in managed care: have we gone forward or backward? Povar GJ. **J Clin Ethics** 1997 Spring;8(1):66–70

Pharmacy consultation and over-the-counter medication purchasing outcomes. Over-the-Counter Medication Intervention Project Team. Sclar DA, et al. **J Clin Pharm Ther** 1996 Jun;21(3):177–84

Auto-faxing imaging reports to referring physicians. Robertson P, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):109–12

War and peace––part 2 [letter] Scoccianti M. **J Endovasc Surg** 1996 Feb;3(1):124

Patients with HIV/AIDS: physicians' knowledge, attitudes, and referral practices. Fournier PO, et al. **J Fam Pract** 1997 Jan;44(1):85–9

Referrals of adult patients from primary care: demographic disparities and their relationship to HMO insurance. Franks P, et al. **J Fam Pract** 1997 Jul;45(1):47–53

Types of pain treatment facilities referral selection criteria: are they medically and cost effective? Rosomoff HL, et al. **J Fla Med Assoc** 1997 Jan;84(1):41–5 (17 ref.)

Assessment of joint review of radiologic studies by a primary care physician and a radiologist. Knollmann BC, et al. **J Gen Intern Med** 1996 Oct;11(10):608–12

Chiropractic referrals reduce neuromusculoskeletal health care costs. Weis GR. **J Health Care Finance** 1996 Winter; 23(2):88–9

Interprofessional contacts between chiropractors and other health-care professionals in Sweden as seen from a chiropractic perspective. Leboeuf-Yde C, et al. **J Manipulative Physiol Ther** 1997 May;20(4):241–5

Contribution of consultants to care of compromised pregnancies. Bird JS Jr, et al. **J Natl Med Assoc** 1996 Feb; 88(2):97–100

Influence of obtaining a neurological opinion on the diagnosis and management of hospital inpatients [letter] Steiger MJ, et al. **J Neurol Neurosurg Psychiatry** 1996 Dec;61(6):653–4

Psychiatric consultations in obstetric inpatients. Tsai SJ, et al. **J Obstet Gynaecol Res** 1996 Dec;22(6):603–7

An Angelman syndrome clinic: report on 24 patients. Leitner RP, et al. **J Paediatr Child Health** 1996 Apr;32(2):94–8

Pyloric stenosis in the age of ultrasonography: fading skills, better patients? [see comments] Chen EA, et al. **J Pediatr Surg** 1996 Jun;31(6):829–30. Comment in: J Pediatr Surg 1997 Feb;32(2):382.

The case for widening the referral system [see comments] Craig G. **J R Coll Physicians Lond** 1996 Jan–Feb;30(1):80–2 . Comment in: J R Coll Physicians Lond 1996 May–Jun;30(3):267.

The case for widening the referral system [letter] Gbolade BA. **J R Coll Physicians Lond** 1996 May–Jun;30(3):267

The case for widening the referral system [letter; comment] Merrick J. **J R Coll Physicians Lond** 1996 May–Jun; 30(3):267. Comment on: J R Coll Physicians Lond 1996 Jan–Feb;30(1):80–2.

Slowing the rate of acute medical admissions. Wanklyn P, et al. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):173–6

Direct listing for adult tonsillectomy. Shah C, et al. **J R Coll Surg Edinb** 1997 Feb;42(1):45–6

Medical consultations: ethics and etiquette [editorial; comment] Bryan CS. **J S C Med Assoc** 1996 Jan;92(1):26–7 . Comment on: J S C Med Assoc 1996 Jan;92(1):14–7.

Conflicts in consultation [see comments] Stinson MS. **J S C Med Assoc** 1996 Jan;92(1):14–7. Comment in: J S C Med Assoc 1996 Jan;92(1):26–7.

Interpretation of fracture follow-up roentgenograms: is a second opinion routinely necessary? de Araujo W, et al. **J South Orthop Assoc** 1996 Summer;5(2):83–6

Medical-legal aspects of curbside consultation [letter] Fox BC. **JAMA** 1996 Nov 27;276(20):1635–6

A randomized trial of a consultation service to reduce falls in nursing homes [see comments] Ray WA, et al. **JAMA** 1997 Aug 20;278(7):557–62. Comment in: JAMA 1997 Aug 20;278(7):595–6.

Mortality among appropriately referred patients refused admission to intensive-care units [see comments] Metcalfe MA, et al. **Lancet** 1997 Jul 5;350(9070):7–11. Comment in: Lancet 1997 Jul 5;350(9070):2.

Problems with bulky patient files in storage [letter] Bowler SD. **Med J Aust** 1997 Mar 3;166(5):280

Deployment telemedicine: the Walter Reed Army Medical Center experience. Walters TJ. **Mil Med** 1996 Sep; 161(9):531–6

The consultation. Struve JK. **Minn Med** 1996 Aug;79(8):12–3

Evolution of cardiologic consultation. Kuhn LA. **Mt Sinai J Med** 1996 Jan;63(1):39–43

The dental referral process. New insights. Goldenberg AS. **N Y State Dent J** 1997 Mar;63(3):44–7

Patient referrals. Plunkett LR. **N Y State Dent J** 1997 Jun–Jul;63(6):6–9

Insurance company referrals from Fiji to Australia and New Zealand. Schramm M, et al. **N Z Med J** 1996 Sep 27; 109(1030):367–8

Tacrine and nursing home placement [letter] Thal LJ, et al. **Neurology** 1997 Sep;49(3):897–9

Worth of neurologists [letter; comment] Weiner WJ, et al. **Neurology** 1996 Oct;47(4):1108. Comment on: Neurology 1996 Jan;46(1):276–7.

Worth of neurologists [letter; comment] Whelan MA. **Neurology** 1996 Oct;47(4):1108. Comment on: Neurology 1996 Jan;46(1):276–7.

Consultation etiquette [editorial] Peterson LJ. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):185–6

Gatekeepers: an endangered species? [editorial] D'Ambrosia R. **Orthopedics** 1997 Feb;20(2):97

Assessment of cancer pain: a prospective evaluation in 2266 cancer patients referred to a pain service. Grond S, et al. **Pain** 1996 Jan;64(1):107–14

An investigation of general practitioner referrals to palliative care services. Pugh EM. **Palliat Med** 1996 Jul;10(3):251–7

Broadsheet number 41: frozen section and intra-operative diagnosis. Challis D. **Pathology** 1997 May;29(2):165–74

Just tell me what I need to know [editorial] Altemeier WA 3rd. **Pediatr Ann** 1997 Feb;26(2):74–6

A pediatrician's views: run or pass? [editorial] Altemeier WA 3rd. **Pediatr Ann** 1997 Apr;26(4):212–3, 217

A pediatrician's view. The transport [editorial] Altemeier WA 3rd. **Pediatr Ann** 1996 Jul;25(7):362, 367, 378

Influence of referring physicians on interventions by a pediatric and neonatal critical care transport team. Kronick JB, et al. **Pediatr Emerg Care** 1996 Apr;12(2):73–7

Mitochondrial DNA depletion: prevalence in a pediatric population referred for neurologic evaluation. Macmillan CJ, et al. **Pediatr Neurol** 1996 Apr;14(3):203–10

Role of intelligence tests in speech/language referrals. Sparks R, et al. **Percept Mot Skills** 1996 Aug;83(1):195–204

The referral pattern of patients with ESRD is a determinant in the choice of dialysis modality. Lameire N, et al. **Perit Dial Int** 1997;17 Suppl 2:S161–6

A comparison of resource use and cost in direct access versus physician referral episodes of physical therapy. Mitchell JM, et al. **Phys Ther** 1997 Jan;77(1):10–8

Common urologic disorders. When to treat and when to refer. Gottesman J, et al. **Postgrad Med** 1997 Aug; 102(2):235–40, 243, 246 (18 ref.)

Clinical decision-making and mammography referral. Grady KE, et al. **Prev Med** 1996 May–Jun;25(3):327–38

The telephone in primary care. Studdiford JS III, et al. **Prim Care** 1996 Mar;23(1):83–102 (76 ref.)

Facilitating physician referrals on the World Wide Web: representation and appropriate utilization of clinical expertise. McHolm G, et al. **Proc AMIA Annu Fall Symp** 1996;:724–8

Mean MMPI profile of referrals to a shyness clinic. Henderson L. **Psychol Rep** 1997 Apr;80(2):695–702

Effects of teacher assistance teams on special education referrals in elementary schools. Short RJ, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1431–8

Consultations for 'maladaptive denial of illness' in patients with cancer: psychiatric disorders that result in noncompliance. Kunkel EJ, et al. **Psychooncology** 1997 Jun; 6(2):139–49

Psychiatric comorbidity among hospitalized AIDS patients vs. non-AIDS patients referred for psychiatric consultation [see comments] Bialer PA, et al. **Psychosomatics** 1996 Sep–Oct;37(5):469–75. Comment in: Psychosomatics 1996 Sep–Oct;37(5):407–12.

Determining the effect that consultation-liaison psychiatry in primary care has on family physicians' psychiatric knowledge and practice. Carr VJ, et al. **Psychosomatics** 1997 May–Jun;38(3):217–29 (51 ref.)

Clinical ethics. An important role for the consultation-liaison psychiatrist. Kornfeld DS. **Psychosomatics** 1997 Jul–Aug; 38(4):307–8

Making a situational diagnosis. Psychiatrists at the interface of psychiatry and ethics in the consultation-liaison setting. Lederberg MS. **Psychosomatics** 1997 Jul–Aug;38(4):327–38

Consultation-liaison psychiatry and clinical ethics. Representative cases. Powell T. **Psychosomatics** 1997 Jul–Aug;38(4):321–6

What, why, and how of consultation-liaison psychiatry. An analysis of the consultation process in the 1990s at five urban teaching hospitals. Ramchandani D, et al. **Psychosomatics** 1997 Jul–Aug;38(4):349–55

Past mental health or substance use treatment history and psychiatric differential diagnosis in consultation-liaison patients. Rundell JR, et al. **Psychosomatics** 1997 May–Jun; 38(3):262–8

Psychiatric characteristics of consecutively evaluated outpatient renal transplant candidates and comparisons with consultation-liaison inpatients. RundelL JR, et al. **Psychosomatics** 1997 May–Jun;38(3):269–76

Organic mental disorders in the consultation-liaison psychiatry setting. A multi-site study. Smith GC, et al. **Psychosomatics** 1997 Jul–Aug;38(4):363–73

A model for evaluating the impact of consultation-liaison psychiatry activities on referral patterns. Vaz FJ, et al. **Psychosomatics** 1996 May–Jun;37(3):289–98

Guidelines for consultation-liaison psychiatry training [letter; comment] Williams KS, et al. **Psychosomatics** 1996 Sep–Oct;37(5):489–90. Comment on: Psychosomatics 1996 Jan–Feb;37(1):3–11.

Reengineering consultation-liaison psychiatry [editorial] Wise TN, et al. **Psychosomatics** 1996 Mar–Apr;37(2):91–2

Consultation-liaison psychiatry and clinical ethics. Historical parallels and diversions. Youngner SJ. **Psychosomatics** 1997 Jul–Aug;38(4):309–12

General practitioners use of hospital and community based paediatric out-patient services in Nottingham. Blair M, et al. **Public Health** 1997 Mar;111(2):97–100

Referral reasons for psychological services for adults with mental retardation. Edelstein TM, et al. **Res Dev Disabil** 1997 Jan–Feb;18(1):45–59

The quality and relationship of referral and reply letters. The effect of introducing a pro forma letter. Couper ID, et al. **S Afr Med J** 1996 Dec;86(12):1540–2

Communication remains the name of the game [editorial] Jacobs P. **S Afr Med J** 1996 Oct;86(10):1253–4

Appropriateness of referrals for the hypertensive disorders of pregnancy from the MOUs in Cape Town [letter] van Coeverden de Groot HA, et al. **S Afr Med J** 1996 Sep; 86(9 Suppl):1207–8

A list system can help to reduce the proportion of out of hours referrals for male patients. Vehviläinen AT, et al. **Scand J Prim Health Care** 1996 Sep;14(3):148–51

Patients' and referring doctors' perceptions of treatment on an in-patient neuropsychiatry/epilepsy unit: a study of three cohorts. Goldstein LH, et al. **Seizure** 1997 Feb; 6(1):13–20

Current medical treatment and indications for surgical referral for gastroesophageal reflux disease (GERD). Katz PO, et al. **Semin Thorac Cardiovasc Surg** 1997 Apr; 9(2):169–72 (20 ref.)

Child psychiatric consultation and liaison in paediatrics. Chan S. **Singapore Med J** 1996 Apr;37(2):194–6

Using self-reported questionnaire data to prioritize OSA patients for polysomnography. Pouliot Z, et al. **Sleep** 1997 Mar;20(3):232–6

Urban ecological structure and perceived child and adolescent psychological disorder. Leclair JA, et al. **Soc Sci Med** 1997 Jun;44(11):1649–59

Duration of general practice consultations: association with patient occupational and educational status. Wiggers JH, et al. **Soc Sci Med** 1997 Apr;44(7):925–34

Listening or telling? Thoughts on responsibility in clinical ethics consultation. Zaner RM. **Theor Med** 1996 Sep; 17(3):255–77 (74 ref.)

Time course from first symptom to treatment in patients with non-small cell lung cancer referred for radiotherapy: a report by the CHART Steering Committee. Dische S, et al. **Thorax** 1996 Dec;51(12):1262–5

Determinants of adherence among health department patients referred for a mammogram. Crane LA, et al. **Women Health** 1996;24(2):43–64

[The present status of psychiatric consultation in Chang Gung Memorial Hospital, Keelung: a report of clinical characteristics] Chen CY, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):331–6 (Eng. Abstr.) **(Chi)**

[Psychiatric emergency consultation in a general hospital] Tsai SJ, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):337–42 (Eng. Abstr.) **(Chi)**

[A second look at hematologic biopsies (letter; comment)] Fakan F, et al. **Cesk Patol** 1996 Aug;32(3):118–9. Comment on: Cesk Patol 1995 Dec;31(4):122–4. **(Cze)**

[Suggested guidelines for consultation in diagnostic pathology (letter)] Povýšil C. **Cesk Patol** 1996 Aug; 32(3):119 **(Cze)**

[A second look at biopsy findings (letter; comment)] Povýšil C. **Cesk Patol** 1996 Aug;32(3):118. Comment on: Cesk Patol 1995 Dec;31(4):122–4. **(Cze)**

[Physician time and the direct contact with patients at Roskilde County Hospital Fjorden] Søgaard U, et al. **Ugeskr Laeger** 1997 Apr 21;159(17):2546–50 (Eng. Abstr.) **(Dan)**

[The Standard 'Threatened) Miscarriage' of the Dutch Society of Family Physicians (letter; comment)] de Kleine MJ, et al. **Ned Tijdschr Geneeskd** 1997 Jan 11;141(2):116–7 . Comment on: Ned Tijdschr Geneeskd 1996 Sep 28;140(39):1935–9. Comment on: Ned Tijdschr Geneeskd 1996 Sep 28;140(39):1939–40. Comment on: Ned Tijdschr Geneeskd 1996 Sep 28;140(39):1956–9. **(Dut)**

[Cause for referral by family physicians and obstetricians in Amsterdam in (threatened) miscarriage as reflected in the guideline '(Threatened) abortion' of the Dutch Society for Family Physicians (see comments)] Fleuren MA, et al. **Ned Tijdschr Geneeskd** 1996 Sep 28;140(39):1956–9 (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1996 Sep 28;140(39):1935–9. Comment in: Ned Tijdschr Geneeskd 1996 Sep 28;140(39):1939–40. Comment in: Ned Tijdschr Geneeskd 1997 Jan 11;141(2):114–5. Comment in: Ned Tijdschr Geneeskd 1997 Jan 11;141(2):116–7. Comment in: Ned Tijdschr Geneeskd 1997 Jan 11;141(2):117–8. Comment in: Ned Tijdschr Geneeskd 1997 Jan 11;141(2):118–9. **(Dut)**

[The sentinel function of the family physician examined with referrals and referral cards (letter; comment)] Mol R. **Ned Tijdschr Geneeskd** 1996 Sep 21;140(38):1923. Comment on: Ned Tijdschr Geneeskd 1996 Jul 20;140(29):1499–504. **(Dut)**

[The Standard '(Threatened) Miscarriage' of the Dutch Society of Family Physicians (letter; comment)] van der Horst HE, et al. **Ned Tijdschr Geneeskd** 1997 Jan 11; 141(2):118–9. Comment on: Ned Tijdschr Geneeskd 1996 Sep 28;140(39):1956–9. **(Dut)**

[Hospital biology laboratories are sick of gurus and other consultants (letter)] Pinon G. **Ann Biol Clin (Paris)** 1997 Jul–Aug;55(4):358–9 **(Fre)**

[Role of advisory boards attached to agencies: the example of the French Marketing Authorization Committee] Caulin C. **Bull Acad Natl Med** 1997 May;181(5):835–40 (Eng. Abstr.) **(Fre)**

[From support relationship to psychotherapeutic intervention. When to refer and to whom] Szafran AW. **Rev Med Brux** 1996 Sep;17(4):215–7 (Eng. Abstr.) **(Fre)**

[The pitfalls of liaison psychiatry] Dongier M, et al. **Rev Med Liege** 1996 Sep;51(9):590–8 (45 ref.) **(Fre)**

["Second opinion" in online radiology via Internet: report on implementation and analysis of reliability of findings in sectional images] Ricke J, et al. **Aktuelle Radiol** 1997 Jan;7(1):50–5 (Eng. Abstr.) **(Ger)**

[Diagnosis of brain death in the admission department of the Neurologic Clinic of Erlangen University from 1984 to 1994 (see comments)] Heckmann JG, et al. **Dtsch Med Wochenschr** 1996 Nov 1;121(44):1349–53 (Eng. Abstr.). Comment in: Dtsch Med Wochenschr 1997 Feb 28;122(9):279. **(Ger)**

[Prejudice and judgment: psychiatric consultation from the viewpoint of the patient] Windgassen K, et al. **Psychiatr Prax** 1997 May;24(3):134–7 (Eng. Abstr.) **(Ger)**

[Attitude of established physicians to medical rehabilitation: an empirical study of the access to rehabilitation problem] Vogel H, et al. **Rehabilitation (Stuttg)** 1997 May; 36(2):96–105 (Eng. Abstr.) **(Ger)**

[Regional differences in referral for heart transplantation] Brunner-La Rocca HP, et al. **Schweiz Med Wochenschr** 1997 Apr 19;127(16):675–81 (Eng. Abstr.) **(Ger)**

[Prevalence rate, place of hospitalization and source of referral of complex nursing care patients in geriatric hospitalization] Bentur N, et al. **Harefuah** 1997 Apr 15; 132(8):539–44, 608, 607 (Eng. Abstr.) **(Heb)**

[Geriatric consultations in a general hospital] Leibovitz A, et al. **Harefuah** 1996 Nov 15;131(10):393–7, 455 (Eng. Abstr.) **(Heb)**

[The pediatric physician and consultation in ophthalmology] Boles Carenini B, et al. **Minerva Pediatr** 1995 Dec; 47(12):493–504 (46 ref.) **(Ita)**

[Problems in preoperative evaluation of patients--differences in viewpoint among physicians] Katayama H, et al. **Masui** 1996 Dec;45 Suppl:S139–42 (0 ref.) **(Jpn)**

[Role of crisis intervention in psychiatric emergent system--effectiveness of home visit by a doctor, consultation by phone and walk-in services in general hospitals] Tohyama T. **Nippon Koshu Eisei Zasshi** 1996 Oct; 43(10):909–17 **(Jpn)**

[Medical expert consultation. Is there an alternative? (letter; comment)] Brekke D. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1188. Comment on: Tidsskr Nor Laegeforen 1997 Jan 20;117(2):248–50. **(Nor)**

[Five hospitals and one patient in need for hip surgery] Hjort H. **Tidsskr Nor Laegeforen** 1996 Aug 30;116(20):2485–6 **(Nor)**

[Is a consultation a consultation? (letter)] Schumann-Anderson J. **Tidsskr Nor Laegeforen** 1996 Oct 10;116(24):2939–40 **(Nor)**

[Pathomorphologic consultations--pathologist checking, friendly help or proper medical practice and a possibility of continous learning in cyt o- and histopathology?] Stachura J, et al. **Pol J Pathol** 1996;47(3):99–100 **(Pol)**

[Acute pericarditis in childhood. The 9-year experience of a tertiary referral center] Farinha NJ, et al. **Acta Med Port** 1997 Feb–Mar;10(2–3):157–60 (Eng. Abstr.) **(Por)**

[Referring a patient: who, how, when and why? Psychiatry in relation to primary health care] Sarmento CM. **Acta Med Port** 1997 May;10(5):339–44 (Eng. Abstr.) **(Por)**

[Devalued consultation. Cause or consequence of the abuse in the use of medical technology?] de Andrade PJ. **Arq Bras Cardiol** 1996 Mar;66(3):167–8 **(Por)**

[Interconsultation psychiatry in general hospitals: initial communication of an experience] Spinelli MA, et al. **Rev Assoc Med Bras** 1996 Jul–Sep;42(3):175–84 (Eng. Abstr.) **(Por)**

[Number of consultations in an outpatient clinic practice] Togunov I. **Probl Sotsialnoi Gig Istor Med** 1996 Mar–Apr; (2):49–51 (Eng. Abstr.) **(Rus)**

[The diagnostic potentials for the consulting surgeon in a medical aviation department] Verushkin IuI, et al.

Vestn Khir Im I I Grek 1996;155(3):86–8 **(Rus)**
[The Child Nutrition Diagnostic Consultation Center: the tasks and outlook] Mamonova LG. **Vopr Pitan** 1996; (5):62–3 **(Rus)**
[Referral to the psychiatrist in the general hospital: a psychodynamic approach] Botega NJ.
Actas Luso Esp Neurol Psiquiatr Cienc Afines 1997 Mar–Apr;25(2):100–4 (Eng. Abstr.) **(Spa)**
[Taking the arterial pressure during consultation (letter; comment)] Alonso Martínez MM, et al. **Aten Primaria** 1997 May 15;19(8):445–6. Comment on: Aten Primaria 1996 Oct 15;18(6):321–3. **(Spa)**
[Coordination of general and specialized medicine. Evaluation in the Burgos area] Rivas Crespo JC, et al.
Aten Primaria 1997 Mar 31;19(5):257–61 (Eng. Abstr.) **(Spa)**
[The evaluation of the approach to the patient in primary care medical consultations] Torío Durántez J, et al.
Aten Primaria 1997 Jun 15;20(1):17–23 (Eng. Abstr.) **(Spa)**
[Cooperation is task of the profession! High expectations put on consultants in general practice] Eliasson G.
Lakartidningen 1997 Jun 18;94(25):2347–9 **(Swe)**

CLASSIFICATION

The usefulness of distinguishing different types of general practice consultation, or are needed skills always the same? Winefield HR, et al. **Fam Pract** 1995 Dec;12(4):402–7

ECONOMICS

Substance abuse treatment for Ontario residents in the United States. Rush B, et al. **Addiction** 1996 May;91(5):671–85
Cost and usage impacts of treatment initiation: a comparison of alcoholism and drug abuse treatments. Goodman AC, et al. **Alcohol Clin Exp Res** 1997 Aug;21(5):931–8
Cost effectiveness of an allergy consultation in the management of asthma. Westley CR, et al.
Allergy Asthma Proc 1997 Jan–Feb;18(1):15–8
Health care costs of people referred to an aged care assessment team: the effect of cognitive impairment. LoGiudice D, et al. **Aust N Z J Public Health** 1997 Jun; 21(3):311–5
Determining the size of a total purchasing site to manage the financial risks of rare costly referrals: computer simulation model [see comments] Bachmann MO, et al.
BMJ 1996 Oct 26;313(7064):1054–7. Comment in: BMJ 1996 Oct 26;313(7064):1057.
What is total purchasing? Total Purchasing National Evaluation Team. Mays N, et al. **BMJ** 1997 Sep 13; 315(7109):652–5
'Xtra' contractual referrals. Hughes H. **Br J Hosp Med** 1997 May 7–20;57(9):466–7
Infectious diseases consultation: impact on outcomes for hospitalized patients and results of a preliminary study. Classen DC, et al. **Clin Infect Dis** 1997 Mar;24(3):468–70
Good times are coming. Landrum SE. **J Ark Med Soc** 1996 May;92(12):608–9
Medicaid reimbursement for school nursing services: a position paper of the National Association of State School Nurse Consultants. **J Sch Health** 1996 Mar;66(3):95–6
How much does a MCO enrollee need to know about provider financial incentives? Lederberg MB.
Med Health R I 1997 Aug;80(8):268–9
A pediatrician's view: 'don't look at that light. It could burn your eyes out.' Altemeier WA 3rd. **Pediatr Ann** 1996 Feb; 25(2):68–71
Maximising the cost effectiveness of BMD referral for DXA using ultrasound as a selective population pre–screen. Langton CM, et al. **Technol Health Care** 1997 Jul; 5(3):235–41
[Second opinion—from the medical insurance viewpoint] Bär E. **Swiss Surg** 1996;2(4):163–6 (Eng. Abstr.) **(Ger)**
[Second opinion in Switzerland. Design of program and evaluation study] Frei A. **Swiss Surg** 1996;2(4):145–7 (Eng. Abstr.) **(Ger)**
[Managed health care—second opinion. Introduction to the topic from the orthopedic viewpoint] Imhoff AB.
Swiss Surg 1996;2(4):143–4 **(Ger)**
[Managed health care—second opinion from the viewpoint of Swiss orthopedists] Jakob RP. **Swiss Surg** 1996; 2(4):167–70 (Eng. Abstr.) **(Ger)**
[A cost–benefit evaluation of prenatal diagnosis performed at a referral center with a population with a genetic or abnormality risk] Tomé T, et al. **Acta Med Port** 1997 Feb–Mar;10(2–3):167–72 (Eng. Abstr.) **(Por)**

HISTORY

[Health regimen of Anonymus Luneburgensis in 1442. 2: Medical consultations—Anonymus Luneburgensis consultations] Keil G. **Fortschr Med** 1996 Dec 20; 114(35–36):505–8 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

Profiles of criminal–justice clients in drug treatment: implications for intervention. Kline A. **Addict Behav** 1997 Mar–Apr;22(2):263–8
The legal and ethical implications of gag clauses in physician contracts. Martin JA, et al. **Am J Law Med** 1996; 22(4):433–76 (351 ref.)
Liability of ethics consultants: a case analysis. DuVal G.
Camb Q Healthc Ethics 1997 Summer;6(3):269–81
Ethical and legal implications of managed care. Hall RC.
Gen Hosp Psychiatry 1997 May;19(3):200–8 (88 ref.)
Combatting fraud and abuse. Anti–kickback statute. Boyd W 3rd. **Iowa Med** 1997 Jan;87(1):23–4
In fiduciaries we trust. Sfikas PM. **J Am Dent Assoc** 1997 Sep;128(9):1318–20
Knowing the limits of one's skill—referrals. Hannah HW.
J Am Vet Med Assoc 1997 Jan 1;210(1):31–2
Gatekeeping and assisted reproductive technology. The ethical rights and responsibilities of doctors. Pearn JH.
Med J Aust 1997 Sep 15;167(6):318–20
Shared care–responsibilities of the doctors. Beran RG.
Med Law 1997;16(2):235–43
De facto gatekeeping and informed consent in intensive care. Burrows RC, et al. **Med Law** 1997;16(1):17–27
Survey of the understanding and expectations of patients referred for observation. Williams F, et al. **Med Law** 1997; 16(1):41–7
Gatekeeper liability and managed care. Platt JB.
Minn Med 1996 Sep;79(9):25–7
Round two: dentist victorious in AIDS discrimination case. Plunkett LR. **N Y State Dent J** 1997 May;63(5):6–7
Referral for abortion [letter; comment] O'Neill P.
N Z Med J 1997 Jan 24;110(1036):18. Comment on: N Z Med J 1996 Sep 13;109(1029):346.
Referral for abortion [letter] [see comments] Sparrow M.
N Z Med J 1996 Sep 13;109(1029):346. Comment in: N Z Med J 1997 Jan 24;110(1036):18.
Gatekeepers: increased liability could be their demise [editorial] D'Ambrosia R. **Orthopedics** 1996 Jun;19(6):495
[Communication in environmental health protection and in environmental medicine counseling] Preuss S, et al.
Gesundheitswesen 1997 Jun;59(6):400–4 (Eng. Abstr.) **(Ger)**
[Legal implications, patient education responsibilities for referring and treating physicians] Ulsenheimer K.
Z Kardiol 1996 Aug;85(8):529–36 (29 ref.) **(Ger)**

ORGANIZATION & ADMINISTRATION

Second opinions in surgical pathology [letter; comment] Morris DJ. **Am J Clin Pathol** 1997 Apr;107(4):497–8. Comment on: Am J Clin Pathol 1996 Oct;106(4 Suppl 1):S58–64.
Audit of diabetes care by caseload. Baumer JH, et al.
Arch Dis Child 1997 Aug;77(2):102–7; discussion 107–8
General practice referrals to a community team for mental health in the elderly: information and the mode of referral. Ball C, et al. **Br J Gen Pract** 1997 Aug;47(421):503–4
Should general practitioners refer patients directly to physical therapists? Robert G, et al. **Br J Gen Pract** 1997 May; 47(418):314–8 (26 ref.)
Urgency in the emergency [letter; comment] Drummond A.
Can Med Assoc J 1996 Oct 15;155(8):1038. Comment on: Can Med Assoc J 1996 May 1;154(9):1345–51.
Promoting inter–agency collaboration in child services. Bradford R. **Child Care Health Dev** 1993 Nov–Dec; 19(6):355–67
Primary care physician access and gatekeeping: a key to reducing emergency department use. Franco SM, et al.
Clin Pediatr (Phila) 1997 Feb;36(2):63–8
The impact of an electroconvulsive therapy consultation service on ECT use at a university teaching hospital. Leatherman ME, et al. **Convuls Ther** 1995 Dec;11(4):253–9
Long–term follow–up in outpatient clinics. 2: The view from the specialist clinic. Burkey Y, et al. **Fam Pract** 1997 Feb; 14(1):29–33
P–R–A–C–T–I–C–A–L: a step–by–step model for conducting the consultation in general practice. Larsen JH, et al. **Fam Pract** 1997 Aug;14(4):295–301
Long–term follow–up in outpatient clinics. 1: The view from general practice. Reeve H, et al. **Fam Pract** 1997 Feb; 14(1):24–8
General practitioners' attitudes to variations in referral rates and how these could be managed. Wright J, et al.
Fam Pract 1996 Jun;13(3):259–63
Supervised integrated screening of low–back pain patients by a neurologist. A randomized clinical trial. Meeuwesen L, et al. **Gen Hosp Psychiatry** 1996 Nov;18(6):385–94
Access to psychiatric care; the results of the Pathways to Care study in Preston. Harrison J, et al.
J Public Health Med 1997 Mar;19(1):69–75
Gatekeepers no more: family practitioners as power brokers and fence wanderers. Frost BR. **N Z Med J** 1997 Apr 11; 110(1041):129–30
Meeting the diverse needs of clients in the community: effective use of the referral process. McGuire SL, et al.
Nurs Outlook 1996 Sep–Oct;44(5):218–22 (11 ref.)
A flawed study? [letter; comment] Hedquist PM.
Psychiatr Serv 1997 Mar;48(3):401–2. Comment on: Psychiatr Serv 1996 Nov;47(11):1233–8.
Effect of centralized intake on outcomes of substance abuse treatment [see comments] Rohrer JE, et al.
Psychiatr Serv 1996 Nov;47(11):1233–8. Comment in: Psychiatr Serv 1997 Mar;48(3):401–2.
A study of the referral patterns of obstetric clinics and the performance of receiving neonatal intensive care units in Taiwan. Wang ST, et al. **Public Health** 1997 May; 111(3):149–52
Early detection and intervention for initial episodes of schizophrenia. Falloon IR, et al. **Schizophr Bull** 1996; 22(2):271–82
The pathways to primary mental health care in high–density suburbs in Harare, Zimbabwe. Patel V, et al.
Soc Psychiatry Psychiatr Epidemiol 1997 Feb;32(2):97–103
[An analysis of the organization of consultative care for the adult population of the Soviet District in the city of Omsk] Gusev IuS. **Stomatologiia (Mosk)** 1996;Spec No:20–1 **(Rus)**
[Care by the Geriatrics Unit of patients admitted to the Traumatology Unit (letter)] Reig Puig L, et al.
An Med Interna 1996 Jun;13(6):305–6 **(Spa)**
[Means for further improvement in the activities of hospital consultation committees as support systems for the management of the quality of medical care (based on data from Kiev)] Taranchuk VS. **Lik Sprava** 1995 Sep–Dec; (9–12):192–3 **(Ukr)**

STANDARDS

Indications for and referrals to oral care for cancer patients in a county hospital. Ohrn KE, et al. **Acta Oncol** 1996; 35(6):743–8
Evaluating an ethics consultation service [letter; comment] McClung JA. **Am J Med** 1997 Aug;103(2):167–8. Comment on: Am J Med 1996 Aug;101(2):135–41.
The independent medical examiner [editorial] Gould JS.
Am J Orthop 1997 Jun;26(6):390
Accuracy of general practitioner referrals to a breast clinic [letter; comment] Dworkin MJ, et al.
Ann R Coll Surg Engl 1996 Nov;78(6):559. Comment on: Ann R Coll Surg Engl 1996 May;78(3 (Pt 1)):203–5.
Stroke rehabilitation management in the Department of Veterans Affairs: impact of patient referral source on outcomes. O'Donnell JC, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):929–37
Opinions of dental consultants on the standard of referral letters in dentistry [published erratum appears in Br Dent J 1997 Feb 22;182(4):133] McAndrew R, et al.
Br Dent J 1997 Jan 11;182(1):22–5
Characteristics of practices, general practitioners and patients related to levels of patients' satisfaction with consultations. Baker R. **Br J Gen Pract** 1996 Oct;46(411):601–5
Sending a copy of the letter to the general practitioner also to the parents in a child development centre: does it work? Bailey G, et al. **Child Care Health Dev** 1996 Nov; 22(6):411–9
Women worried about their familial breast cancer risk—a study on genetic advice in general practice. de Bock GH, et al. **Fam Pract** 1997 Feb;14(1):40–3
An audit of general practitioner referrals for pelvic ultrasound. McIlvenny S, et al. **Fam Pract** 1995 Dec; 12(4):438–42
Doctors' willingness to refer elderly patients for elective surgery. Ryynänen OP, et al. **Fam Pract** 1997 Jun; 14(3):216–9
Responding to juvenile crime: lessons learned. Greenwood PW. **Future Child** 1996 Winter;6(3):75–85
The medical context of hypochondriacal traits. Mabe PA, et al. **Int J Psychiatry Med** 1996;26(4):443–59
Analysis of chronic obstructive pulmonary disease referrals for lung volume reduction surgery. The University of California San Diego Emphysema Treatment Group. Colt HG, et al. **J Cardiopulm Rehabil** 1997 Jul–Aug;17(4):248–52
What are the goals of ethics consultation? A consensus statement. Fletcher JC, et al. **J Clin Ethics** 1996 Summer; 7(2):122–6 (06 ref.)
Evaluating outcomes in ethics consultation research. Fox E, et al. **J Clin Ethics** 1996 Summer;7(2):127–38 (47 ref.)
Evaluation research and the future of ethics consultation. Fox E, et al. **J Clin Ethics** 1996 Summer;7(2):146–9
Concepts in evaluation applied to ethics consultation research. Fox E. **J Clin Ethics** 1996 Summer;7(2):116–21
The three deadly sins of ethics consultation. Howe EG.
J Clin Ethics 1996 Summer;7(2):99–108
Physicians' collaboration with chaplains: difficulties and benefits. Thiel MM, et al. **J Clin Ethics** 1997 Spring; 8(1):94–103 (23 ref.)
Evaluating ethics consultation: framing the questions. Tulsky JA, et al. **J Clin Ethics** 1996 Summer;7(2):109–15 (24 ref.)
Obstacles and opportunities in the design of ethics consultation evaluation. Tulsky JA, et al. **J Clin Ethics** 1996 Summer;7(2):139–45
Use of an occupational therapy motor performance checklist by a school health service: a pilot study. Gwynne K, et al. **J Paediatr Child Health** 1996 Oct;32(5):386–90
Accuracy of referral to a glaucoma clinic. Bell RW, et al.
Ophthalmic Physiol Opt 1997 Jan;17(1):7–11
Psychiatrists as gatekeepers: a matter of perspective [editorial] Christensen RC. **Psychiatr Serv** 1997 May; 48(5):583
Poor feedback from specialists [letter] Marais PG.
S Afr Med J 1997 Jun;87(6):766, 768
The quality and relationship of referral and reply letters [letter] Schramm R. **S Afr Med J** 1997 May;87(5):624

STATISTICS & NUMERICAL DATA

Problem type and referral to HMO mental health treatment. Kimball JM, et al. **Adm Policy Ment Health** 1997 May; 24(5):399–409
A comparison of studies from the United States and western Europe on psychiatric hospitalization referrals for youths exhibiting suicidal behavior. Safer DJ.
Ann Clin Psychiatry 1996 Sep;8(3):161–8 (142 ref.)

Resource implications of outpatient referrals to a general urological service. Payne SR, et al. **Ann R Coll Surg Engl** 1997 Mar;79(2):111–4

Factors influencing age at referral of children with congenital heart disease. Perlstein MA, et al. **Arch Pediatr Adolesc Med** 1997 Sep;151(9):892–7

Referral to low vision services by ophthalmologists. Keeffe JE, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):207–14

If the referral fits: bridging the gap between patient and referrer requirements in a tertiary referral unit. Eyers K, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):332–6

Consultation–liaison psychiatry service [letter; comment] Loke B. **Aust N Z J Psychiatry** 1996 Oct;30(5):703. Comment on: Aust N Z J Psychiatry 1996 Feb;30(1):63–73. Comment on: Aust N Z J Psychiatry 1996 Feb;30(1):82–9.

The effect of deprivation on variations in general practitioners' referral rates: a cross sectional study of computerised data on new medical and surgical outpatient referrals in Nottinghamshire. Hippisley–Cox J, et al. **BMJ** 1997 May 17;314(7092):1458–61

General practitioners' workload in primary care led NHS. Practice's consultation rates have increased by three quarters in past 25 years [letter] Sidford I. **BMJ** 1997 Aug 30;315(7107):546–7

Do dentists refer orthodontic patients inappropriately? O'Brien K, et al. **Br Dent J** 1996 Aug 24;181(4):132–6

Children referred for specialist care: a nationwide study in Dutch general practice. van Suijlekom–Smit LW, et al. **Br J Gen Pract** 1997 Jan;47(414):19–23

The referral practice of general medical practitioners to the surgical specialties: implications for the future. McArdle PJ, et al. **Br J Oral Maxillofac Surg** 1996 Oct;34(5):394–9

Recent registration and referrals from general practitioners [letter] Glen T, et al. **Br J Psychiatry** 1997 Mar;170:288–9

Working on the interface between primary and secondary care [letter] Taylor JR, et al. **Br J Psychiatry** 1997 May; 170:486

The Bentham Unit: a pilot remand and assessment service for male mentally disordered remand prisoners. II: Report of an independent evaluation. Weaver T, et al. **Br J Psychiatry** 1997 May;170:462–6

Day–case transfer of inpatients for diagnostic and therapeutic endoscopic retrograde cholangiopancreatography. Kyriakides C, et al. **Br J Surg** 1997 Sep;84(9):1260–3

Correlates of therapy referral in foster children. Cantos AL, et al. **Child Abuse Negl** 1996 Oct;20(10):921–31

Management of minor ailments in primary schoolchildren in rural and urban areas. Cantrill JA, et al. **Child Care Health Dev** 1996 May;22(3):167–74

Prevalence of fetal maldispositions in equine referral hospital dystocias. Frazer GS, et al. **Equine Vet J** 1997 Mar; 29(2):111–6

Repeated psychiatric referrals to Belgian emergency departments: a survival analysis of the time interval between first and second episodes. Spooren DJ, et al. **Eur J Emerg Med** 1997 Jun;4(2):61–7

Overuse of emergency care in psychiatry? Zdanowicz N, et al. **Eur J Emerg Med** 1996 Mar;3(1):48–51

Fetal medicine in an unselected pregnant population. Daryani Y, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Feb; 64(2):185–8

Evaluation of general practitioner referrals to a specialist breast clinic according to the UK national guidelines. Cochrane RA, et al. **Eur J Surg Oncol** 1997 Jun; 23(3):198–201

The journey of incontinent women from community to university clinic; implications for selection bias, gatekeeper function, and primary care. Hunskaar S, et al. **Fam Pract** 1996 Aug;13(4):363–8

Time study of psychiatric emergency service evaluations. Breslow RE, et al. **Gen Hosp Psychiatry** 1997 Jan;19(1):1–4

Open access gastroscopy: second survey of current practice in the United Kingdom. Silcock JG, et al. **Gut** 1997 Feb; 40(2):192–5

Referrals of smear–positive leprosy cases at an urban centre [letter] Chulawala RG, et al. **Indian J Lepr** 1997 Apr–Jun; 69(2):195

The changing referral pattern in Danish dermatology—Rigshospitalet, Copenhagen, 1986–1995. Jemec GB, et al. **Int J Dermatol** 1997 Jun;36(6):453–6

Hospital or general practice? Results of two experiments limiting the number of self referrals of patients with injuries to hospitals in The Netherlands. Sixma HJ, et al. **J Accid Emerg Med** 1996 Jul;13(4):264–8

Patients' opinions regarding direct access to dermatologic specialty care. Owen SA, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):250–6

Gender differences in depressive symptoms in adolescence: comparison of national samples of clinically referred and nonreferred youths. Compas BE, et al. **J Consult Clin Psychol** 1997 Aug;65(4):617–26

Patient profile, referral sources, and consultant utilization in a primary care sports medicine clinic. Butcher JD, et al. **J Fam Pract** 1996 Dec;43(6):556–60

Sex differences in health problems, diagnostic testing, and referral in primary care. Stoverinck MJ, et al. **J Fam Pract** 1996 Dec;43(6):567–76

In–patient psychiatric referrals in a teaching hospital: a case controlled report. Adeyemi JD. **J Psychosom Res** 1996 Nov;41(5):427–33

From consultation to complexity of care prediction and health service needs assessment [editorial] Huyse FJ. **J Psychosom Res** 1997 Sep;43(3):233–40

Army Cardiac Unit — cardiac catheter patients, 1991—a review. Kiltie AE, et al. **J R Army Med Corps** 1994 Jun; 140(2):79–85

General practice referrals to a department of neurology. Wiles CM, et al. **J R Coll Physicians Lond** 1996 Sep–Oct; 30(5):426–31

A comprehensive investigation of inpatient intravenous colchicine use shows more education is needed. Evans TI, et al. **J Rheumatol** 1996 Jan;23(1):143–8

Diagnostic and referral reliability in an alcoholism treatment network. Mather DB, et al. **J Subst Abuse** 1996;8(1):81–91

Predictors of missed appointments for psychiatric consultations in a primary care clinic. Grunebaum M, et al. **Psychiatr Serv** 1996 Aug;47(8):848–52

The list system can reduce the waiting time and number of consultations in a centralized primary care centre that provides out of hours medical care. Takala J, et al. **Scand J Prim Health Care** 1997 Mar;15(1):48–51

Reasons for referral from general practice in Finland. Vehviläinen AT, et al. **Scand J Prim Health Care** 1997 Mar;15(1):43–7

Help–seeking behaviours among child psychiatric clinic attenders in Hong Kong. Ho TP, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Sep;31(5):292–8

Childhood chronic lung disease in the United Arab Emirates. Dawson KP, et al. **Trop Doct** 1997 Jul;27(3):151–3

[More of the Surinam and Antilles drug addicts involved in the GG&GD (Community Medical and Health Service) methadone program in Amsterdam should be referred to the family physician for their methadone maintenance] de Vries HJ, et al. **Ned Tijdschr Geneeskd** 1997 Feb 8; 141(6):288–91 (Eng. Abstr.) **(Dut)**

[Epidemiologic characteristics of pediatric emergency room referral and hospitalization for diarrhea in the Negev] Benifla M, et al. **Harefuah** 1997 Apr 15;132(8):534–8, 608 (Eng. Abstr.) **(Heb)**

[Consultation–liaison–psychiatry in Norway. Use of psychiatric services in somatic departmetns] Malt EA, et al. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1753–6 (Eng. Abstr.) **(Nor)**

[Patient encounters in general practice. An epidemiological survey in Møre and Romsdal] Rokstad K, et al. **Tidsskr Nor Laegeforen** 1997 Feb 20;117(5):659–64 (Eng. Abstr.) **(Nor)**

[Medical consultation about Pakistani immigrants. The pattern of consultations and diagnosis at a health center in Oslo] Steihaug S, et al. **Tidsskr Nor Laegeforen** 1997 Jun 30;117(17):2440–3 (Eng. Abstr.) **(Nor)**

[Referral and family therapy. A systemic analysis] Garberi Pedros R, et al. **Aten Primaria** 1996 Jun 30;18(2):70–4 (Eng. Abstr.) **(Spa)**

TRENDS

Progress and evaluation of a consultation–liaison psychiatry service to an obstetric–gynaecology hospital [see comments] Phillips N, et al. **Aust N Z J Psychiatry** 1996 Feb;30(1):82–9. Comment in: Aust N Z J Psychiatry 1996 Oct;30(5):703.

The development of a provincial radiation oncology service: the first year report and its implications for future developments. Byram D, et al. **Australas Radiol** 1996 Aug; 40(3):306–9

Consumers. The gate swings wider. Blecher MB. **Hosp Health Netw** 1997 Jun 20;71(12):65–6

Referrals to a rheumatologist [letter] Sant SM, et al. **Ir Med J** 1996 Sep–Oct;89(5):162

Evaluation research and the future of ethics consultation. Fox E, et al. **J Clin Ethics** 1996 Summer;7(2):146–9

Early intervention: professional views and referral practices of Australian paediatricians. Reddihough DS, et al. **J Paediatr Child Health** 1996 Jun;32(3):246–50

An analytical study of the changing health of a hospice population 1978–89. Duke S. **Palliat Med** 1997 Mar; 11(2):145–51

Lymphoid lesions. Burke JS. **Pathology (Phila)** 1996; 3(2):503–12 (32 ref.)

Urinary tract and male genital system. Coulson WF. **Pathology (Phila)** 1996;3(2):493–502 (17 ref.)

Liver. Ferrell LD, et al. **Pathology (Phila)** 1996;3(2):367–78 (36 ref.)

Gastrointestinal tract. Goldstein NS, et al. **Pathology (Phila)** 1996;3(2):349–65 (65 ref.)

Soft tissue. Kempson RL. **Pathology (Phila)** 1996;3(2):545–53 (11 ref.)

Lung. Lombard CM. **Pathology (Phila)** 1996;3(2):321–38 (16 ref.)

The female genital tract. Longacre TA, et al. **Pathology (Phila)** 1996;3(2):427–92 (26 ref.)

The mediastinum. Marchevsky A. **Pathology (Phila)** 1996; 3(2):339–48 (19 ref.)

Salivary gland. Ranchod M. **Pathology (Phila)** 1996; 3(2):305–19 (12 ref.)

Intraoperative consultation: introduction and general principles. Ranchod M. **Pathology (Phila)** 1996;3(2):259–71 (7 ref.)

Parathyroid gland. Ranchod M. **Pathology (Phila)** 1996; 3(2):405–16 (28 ref.)

The pancreas and peripancreatic area. Ranchod M, et al. **Pathology (Phila)** 1996;3(2):379–87 (20 ref.)

Thyroid gland. Ranchod M. **Pathology (Phila)** 1996; 3(2):389–403 (24 ref.)

Bone. Ranchod M, et al. **Pathology (Phila)** 1996;3(2):535–44 (11 ref.)

Skin. Smoller BR, et al. **Pathology (Phila)** 1996;3(2):285–98 (15 ref.)

Central nervous system. Vinters HV, et al. **Pathology (Phila)** 1996;3(2):513–34 (39 ref.)

Breast. Weidner N, et al. **Pathology (Phila)** 1996;3(2):417–26 (23 ref.)

[Psychiatric consultation service at the Psychiatric Clinic of the Görlitz Municipal Clinic GmbH, ECLW] Fiebiger D, et al. **Psychiatr Prax** 1997 May;24(3):129–33 (Eng. Abstr.) **(Ger)**

UTILIZATION

Radiologic consultation: effect on inpatient diagnostic imaging evaluation in a teaching hospital. Gottlieb RH, et al. **Acad Radiol** 1997 Mar;4(3):217–21

Contacts of suicide attempters with GPs prior to the event: a comparison between Stockholm and Bern. Michel K, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):94–9

Psychiatric morbidity in primary public health care: a multicentre investigation. Part II. Hidden morbidity and choice of treatment. Munk–Jørgensen P, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):6–12

Psychiatric referrals associated with substance use disorders: prevalence and gender differences. European Consultation–Liaison Workgroup. Alaja R, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):620–6

Orthopaedic referrals from a cardiothoracic transplant population. Johnson DS, et al. **Ann R Coll Surg Engl** 1997 Mar;79(2):134–7

Consultation–liaison psychiatry in general practice. Carr VJ, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):85–94

Consultation–liaison psychiatry in an Australian oncology unit. Kissane DW, et al. **Aust N Z J Psychiatry** 1996 Jun; 30(3):397–404

A possible explanation for the increased referral of atopic dermatitis from the Asian community in Leicester. George S, et al. **Br J Dermatol** 1997 Apr;136(4):494–7

An audit of knee radiographs performed for general practitioners. Morgan B, et al. **Br J Radiol** 1997 Mar; 70:256–60

Geropsychiatric consultation for African–American and Caucasian patients. Leo RJ, et al. **Gen Hosp Psychiatry** 1997 May;19(3):216–22

An analysis of cases referred for thyroid function disorder in a teaching hospital of Calcutta. Chauduri S, et al. **Indian J Public Health** 1996 Apr–Jun;40(2):50–1

General practice consultation patterns preceding diagnosis of eating disorders. Ogg EC, et al. **Int J Eat Disord** 1997 Jul;22(1):89–93

A study of aggression among referrals to a community–based psychiatry of old age service. Gibbons P, et al. **Int J Geriatr Psychiatry** 1997 Mar;12(3):384–8

Longitudinal study of early childhood injuries and acute illnesses in the offspring of adolescent mothers who were aggressive, withdrawn, or aggressive–withdrawn in childhood. Serbin LA, et al. **J Abnorm Psychol** 1996 Nov; 105(4):500–7

Review of clinical activity by microbiologists [letter; comment] Chadwick PR, et al. **J Clin Pathol** 1996 Sep; 49(9):780. Comment on: J Clin Pathol 1996 May;49(5):429–31.

Effect of mandatory radiology consultation on inpatient imaging use. A randomized controlled trial [see comments] Bree RL, et al. **JAMA** 1996 Nov 20;276(19):1595–8. Comment in: JAMA 1996 Nov 20;276(19):1599–600.

Meeting of managerial science with medicine. The pace quickens [editorial; comment] Forman HP, et al. **JAMA** 1996 Nov 20;276(19):1599–600. Comment on: JAMA 1996 Nov 20;276(19):1595–8.

Reducing rates of diagnostic imaging [letter] Greenberg JO. **JAMA** 1997 Feb 12;277(6):459–60

Dental recall status and unscheduled dental attendances in British warships. Alexander DC. **Mil Med** 1996 May; 161(5):268–72

Clinical characteristics of children referred to a child development center for evaluation of speech, language, and communication disorders. Harel S, et al. **Pediatr Neurol** 1996 Nov;15(4):305–11

Usefulness of physical examinations in the psychiatric emergency service. Schuster JM, et al. **Psychiatr Serv** 1996 Jun;47(6):575–6

Effects of teacher assistance teams on special education referrals in elementary schools. Short RJ, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1431–8

Utilization of medical specialists by anxiety disorder patients. Kennedy BL, et al. **Psychosomatics** 1997 Mar–Apr; 38(2):109–12

The timing of psychiatric consultation requests. Utilization, liaison, and diagnostic considerations. Ormont MA, et al. **Psychosomatics** 1997 Jan–Feb;38(1):38–44

Geographical variation in the referral of patients with chronic end stage renal failure for renal replacement therapy. Boyle PJ, et al. **QJM** 1996 Feb;89(2):151–7

Results of a radiology performance report for a health maintenance organization [see comments] Kessler HB, et al. **Radiology** 1997 Mar;202(3):735–8. Comment in: Radiology 1997 Mar;202(3):635–6.

Patients frequently consulting general practitioners at a primary health care centre in Sweden—a comparative study. Andersson SO, et al. **Scand J Soc Med** 1995 Dec;

23(4):251–7
Management and referral patterns of epilepsy in india. Thomas SV, et al. **Seizure** 1996 Dec;5(4):303–6
[Experience in the sociological study of the reasons for the refusal of the population to consult for medical care] Ordina NB, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Jul–Aug; (4):38–9 **(Rus)**
[An analysis of the referrals of primary care physicians to a hospital hypertension unit] Galgo Nafría A, et al. **Aten Primaria** 1997 Apr 15;19(6):296–300 (Eng. Abstr.) **(Spa)**
[The evaluation of evening hours in a primary care pediatrics office] Gorrotxategi Gorrotxategi P, et al. **Aten Primaria** 1997 May 15;19(8):423–5 (Eng. Abstr.) **(Spa)**
[The reason for medical consultations in patients with psychiatric diseases: somatization phenomena and suicide attempts (see comments)] García–Campayo J, et al. **Med Clin (Barc)** 1997 Mar 8;108(9):321–4 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Mar 8;108(9):341–3. **(Spa)**

REFETOFF SYNDROME see **THYROID HORMONE RESISTANCE SYNDROME**

REFLEX

Venous reflex testing in glaucoma. Bojić L, et al. **Acta Med Croatica** 1997;51(3):163–5
Binaural interaction of stapedius reflex. Iguchi Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;524:33–5
Comparative assessment of peripheral sympathetic function by postural vasoconstriction arteriolar reflex and sympathetic skin response in NIDDM patients. Cacciatori V, et al. **Am J Med** 1997 Apr;102(4):365–70
Conscious obese rats have impaired reflex bradycardia and enhanced norepinephrine sensitivity. Buñag RD, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R654–60
Substance P as a mediator of colonic secretory reflexes. Cooke HJ, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G238–45
Reflex vascular responses to abdominal venous distension in the anesthetized dog. Doe CP, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1049–56
Cardiac sympathetic afferent reflex in dogs with congestive heart failure. Wang W, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R751–6
Reflex stimulation of renal sympathetic nerve activity and blood pressure in response to apnea. O'Donnell CP, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1763–70
Focal subcortical reflex myoclonus. A clinical and neurophysiological study. Cantello R, et al. **Arch Neurol** 1997 Feb;54(2):187–96
Shock of birth. Evaluation of neurologic status of term newborn in the first 48 hours of life. Riesgo R dos S, et al. **Arq Neuropsiquiatr** 1996 Sep;54(3):361–8
Long–latency reflexes of hand muscles in idiopathic focal dystonia and their modification by botulinum toxin. Naumann M, et al. **Brain** 1997 Mar;120 (Pt 3):409–16
Blindsight in man and monkey. Stoerig P, et al. **Brain** 1997 Mar;120 (Pt 3):535–59 (173 ref.)
Prognosis of infants with ankle clonus within the first year of life. Futagi Y, et al. **Brain Dev** 1997 Jan;19(1):50–4
Medial gastrocnemius is more activated than lateral gastrocnemius in sural nerve induced reflexes during human gait. Duysens J, et al. **Brain Res** 1996 Jul 15;727(1–2):230–2
Identification of hypothalamic vasopressin and oxytocin neurons activated during the exercise pressor reflex in cats. Li J, et al. **Brain Res** 1997 Mar 28;752(1–2):45–51
Are 5–HT1A receptors involved in the control of reflex bradycardia induced by intracoronary injection of contrast medium in humans? Hatab SA, et al. **Braz J Med Biol Res** 1996 Jun;29(6):769–72
Volume reflex in diabetes. Patel KP. **Cardiovasc Res** 1997 Apr;34(1):81–90 (78 ref.)
Blink reflex in meningomyelocele, with special reference to its usefulness in the evaluation of brainstem dysfunction. Nishimura T, et al. **Childs Nerv Syst** 1996 Jan;12(1):2–12
Short–term exercise training enhances reflex cholinergic nitric oxide–dependent coronary vasodilation in conscious dogs. Zhao G, et al. **Circ Res** 1997 Jun;80(6):868–76
Chemoreflexes in heart failure [letter] Chua TP, et al. **Circulation** 1997 Sep 16;96(6):2090–1
Cardiac vagal reflex modulates intestinal vascular capacitance and ventricular preload in anesthetized dogs with acute myocardial infarction. Wang SY, et al. **Circulation** 1996 Aug 1;94(3):529–33
Role of angiotensin II in reflex tachycardia during hypotension caused by a calcium channel blocker. Sato K, et al. **Clin Exp Hypertens** 1996 Jul;18(5):607–24
Effects of stapedial arch fractures on conductive hearing loss and stapedial reflexes. Simmons MJ, et al. **Ear Hear** 1996 Dec;17(6):559–63
Histamine H3 receptors do not modulate reflex–evoked peristaltic motility in the isolated guinea–pig ileum. Poli E, et al. **Eur J Pharmacol** 1997 May 26;327(1):49–56
The alien grasp reflex. Silva MT, et al. **Eur Neurol** 1996; 36(1):55–6
Olfactory–corporeal reflex: description of a new reflex and its role in the erectile process. Shafik A. **Eur Urol** 1997; 32(1):105–9
Sacral glutamatergic transmission in the descending limb of the micturition reflex in the cat. Iwabuchi N. **Fukuoka Igaku Zasshi** 1997 Feb;88(2):30–8
Distinct 5–HT receptors mediate the peristaltic reflex induced by mucosal stimuli in human and guinea pig intestine. Foxx–Orenstein AE, et al. **Gastroenterology** 1996 Nov;111(5):1281–90
Ciliospinal reflex response in cluster headache. Havelius U, et al. **Headache** 1996 Oct;36(9):568–73
Role of angiotensin–(1–7) in the modulation of the baroreflex in renovascular hypertensive rats. Britto RR, et al. **Hypertension** 1997 Sep;30(3 Pt 2):549–56
Acute and chronic effects of exercise on baroreflexes in spontaneously hypertensive rats. Silva GJ, et al. **Hypertension** 1997 Sep;30(3 Pt 2):714–9
Epicardial bradykinin B2 receptors elicit a sympathoexcitatory reflex in rats. Veelken R, et al. **Hypertension** 1996 Oct;28(4):615–21
The ankle clonus test for assessment of the integrity of the spinal cord during operations for scoliosis. Hoppenfeld S, et al. **J Bone Joint Surg Am** 1997 Feb;79(2):208–12
Continence and rectoanal sphincteric inhibitory reflex after posterior sagittal anorectoplasty. Lin CL, et al. **J Formos Med Assoc** 1996 Apr;95(4):303–7
Relationship between mechanical properties of the carotid artery wall and baroreflex function in acutely treated hypertensive patients. Carretta R, et al. **J Hypertens** 1996 Sep;14(9):1105–10
Evaluation of reproducibility of spontaneous baroreflex sensitivity at rest and during laboratory tests. Iellamo F, et al. **J Hypertens** 1996 Sep;14(9):1099–104
Validation of a continuous baroreceptor reflex sensitivity index calculated from spontaneous fluctuations of blood pressure and pulse interval in rats. Oosting J, et al. **J Hypertens** 1997 Apr;15(4):391–9
Autonomic control of ultradian and circadian rhythms of blood pressure, heart rate, and baroreflex sensitivity in spontaneously hypertensive rats. Oosting J, et al. **J Hypertens** 1997 Apr;15(4):401–10
Sleep and blood pressure: spontaneous baroreflex sensitivity in dippers and non–dippers. Vaile JC, et al. **J Hypertens** 1996 Dec;14(12):1427–32
Assessment of autonomic dysreflexia in patients with spinal cord injury. Curt A, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):473–7
Altered pupillary size and darkness and light reflexes in Alzheimer's disease. Prettyman R, et al. **J Neurol Neurosurg Psychiatry** 1997 Jun;62(6):665–8
A simplified preparation for relating cellular events to behavior: mechanisms contributing to habituation, dishabituation, and sensitization of the Aplysia gill–withdrawal reflex. Cohen TE, et al. **J Neurosci** 1997 Apr 15;17(8):2886–99
Common sense [editorial; comment] Accardo PJ. **J Pediatr** 1997 May;130(5):683–4. Comment on: J Pediatr 1997 May;130(5):704–11.
Decreased reflex tearing is associated with lymphocytic infiltration in lacrimal glands. Tsubota K, et al. **J Rheumatol** 1996 Feb;23(2):313–20
Reflex muscle contraction in anterior shoulder instability. Wallace DA, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr; 6(2):150–5
Comparison of perioral reflex modulation in the upper and lower lip. Barlow SM, et al. **J Speech Hear Res** 1996 Feb; 39(1):55–75
Reflex responses of lip muscles in young and older women. Wohlert AB. **J Speech Hear Res** 1996 Jun;39(3):578–89
Branham's sign is an exaggerated Bezold–Jarisch reflex of arteriovenous fistula [letter] Wattanasirichaigoon S, et al. **J Vasc Surg** 1997 Jul;26(1):171–2
Familial cortical myoclonic tremor as a unique form of cortical reflex myoclonus. Terada K, et al. **Mov Disord** 1997 May;12(3):370–7
Latency of onset of the masseter inhibitory reflex in peripheral neuropathies. Auger RG. **Muscle Nerve** 1996 Jul;19(7):910–1
Trigeminofacial reflex in lingual neuropathy [letter; comment] Pavesi G, et al. **Muscle Nerve** 1996 Dec; 19(12):1636–7. Comment on: Muscle Nerve 1996 Jan;19(1):111–2.
Brain stem reflexes in patients with Wallenberg's syndrome: correlation with clinical and magnetic resonance imaging (MRI) findings. Vallis–Solé J, et al. **Muscle Nerve** 1996 Sep;19(9):1093–9
The effects of prenatal cocaine use on neonatal neurobehavioral status. Richardson GA, et al. **Neurotoxicol Teratol** 1996 Sep–Oct;18(5):519–28
Neurobehavioral study of prenatal exposure to hyperthermia combined with irradiation in mice. Zhong DZ, et al. **Neurotoxicol Teratol** 1996 Nov–Dec;18(6):703–9
The heart rate response to carotid artery massage in a sample of healthy elderly people. Jeffreys M, et al. **Pacing Clin Electrophysiol** 1996 Oct;19(10):1488–92
[Gastroesophageal reflux and esophageal motility disorders in infants with vagal hyperreflectivity presenting severe syncope] Michaud L, et al. **Arch Pediatr** 1997 Feb; 4(2):133–9 (Eng. Abstr.) **(Fre)**
[Assessment of cardiovascular reflexes in patients with mitral valve prolapse syndrome] Silva EP, et al. **Rev Port Cardiol** 1996 Jul–Aug;15(7–8):585–9, 549 (Eng. Abstr.) **(Por)**
[The use of Foll's method of reflex diagnosis in orthodontics] Porokhina EV, et al. **Stomatologiia (Mosk)** 1996;75(4):40–2 (Eng. Abstr.) **(Rus)**
[Acoustic reflexometry in newborn] Sequí Canet JM, et al. **An Esp Pediatr** 1997 Apr;46(4):414–5 **(Spa)**
[Diagnosis of otitis media with effusion by acoustic reflectometry] Sequí Canet JM, et al. **An Esp Pediatr** 1996 Nov;45(5):483–6 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Differential effects of pre–treatment with intrathecal or intravenous morphine on the prevention of spinal cord hyperexcitability following sciatic nerve section in the rat. Luo L, et al. **Acta Anaesthesiol Scand** 1996 Jan;40(1):91–5
Intrarenal administration of angiotensin II does not moderate afferent renal nerve mediated cardiovascular reflexes in the anaesthetized rabbit. Ashton N, et al. **Acta Physiol Scand** 1996 Nov;158(3):233–40
Differential effects of ethanol in adolescent and adult rats. Little PJ, et al. **Alcohol Clin Exp Res** 1996 Nov; 20(8):1346–51
Electrophysiological–anatomic correlates of ATP–triggered vagal reflex in the dog. III. Role of cardiac afferents. Katchanov G, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1785–90
Effect of topical diphenhydramine on the laryngeal chemoreflex. Boyer HC, et al. **Arch Otolaryngol Head Neck Surg** 1996 Oct;122(10):1112–6
Postnatal development and behaviour of Wistar rats after prenatal toluene exposure. Thiel R, et al. **Arch Toxicol** 1997; 71(4):258–65
Increases in vocalization and motor reflex thresholds generated by the intrathecal administration of serotonin or norepinephrine. Borszcz GS, et al. **Behav Neurosci** 1996 Aug;110(4):809–22
Spinal 5–HT–receptors and tonic modulation of transmission through a withdrawal reflex pathway in the decerebrated rabbit. Clarke RW, et al. **Br J Pharmacol** 1996 Nov; 119(6):1167–76
Analysis of contributions of acetylcholine and tachykinins to neuro–neuronal transmission in motility reflexes in the guinea–pig ileum. Johnson PJ, et al. **Br J Pharmacol** 1996 Jun;118(4):973–83
Anticonvulsant effects of 7–nitroindazole in rodents with reflex epilepsy may result from L–arginine accumulation or a reduction in nitric oxide or L–citrulline formation. Smith SE, et al. **Br J Pharmacol** 1996 Sep;119(1):165–73
Rilmenidine and reflex renal sympathetic nerve activation in Wistar and hypertensive rats. Zhang T, et al. **Br J Pharmacol** 1996 Nov;119(6):1248–54
Potentiation of fentanyl suppression of the jaw–opening reflex by transcranial electrical stimulation. Alantar A, et al. **Brain Res** 1997 Jul 18;763(1):14–20
Microinjection of NMDA antagonist into the NTS of conscious rats blocks the Bezold–Jarisch reflex. Chianca DA Jr, et al. **Brain Res** 1996 Apr 29;718(1–2):185–8
Serotonergic effects on hypoglossal neural activity and reflex responses. Douse MA, et al. **Brain Res** 1996 Jul 8; 726(1–2):213–22
AMPA/kainate receptors mediate sympathetic chemoreceptor reflex in the rostral ventrolateral medulla. Miyawaki T, et al. **Brain Res** 1996 Jul 8;726(1–2):64–8
Nocifensive reflex thresholds in rats: measures of central nervous system effects of barbiturates. Archer DP, et al. **Can J Anaesth** 1997 Jul;44(7):765–74
Interaction between prostacyclin and nitric oxide in the reflex control of the coronary circulation in conscious dogs. Zhao G, et al. **Cardiovasc Res** 1996 Nov;32(5):940–8
Effects of clonidine on a C–fibre reflex in the rat. Gozariu M, et al. **Eur J Pharmacol** 1996 Oct 10;313(1–2):51–62
Dipyrone into the nucleus raphe magnus inhibits the rat nociceptive tail–flick reflex. Jones SL. **Eur J Pharmacol** 1996 Dec 27;318(1):37–40
Tachykinin NK1 receptor antagonist RP67580 attenuates progressive hypersensitivity of flexor reflex during experimental inflammation in rats. Ma QP, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):165–71
Facilitation by substance P and inhibition by (+)–tubocurarine of the 5–HT3 receptor–mediated Bezold–Jarisch reflex in rats. Malinowska B, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):159–64
Effects of NK433, a new centrally acting muscle relaxant, on masticatory muscle reflexes in rats. Ozawa Y, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):57–62
Fragments of galanin message–associated peptide (GMAP) modulate the spinal flexor reflex in rat. Xu XJ, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):301–6
Picolinic acid and indole–2–carboxylic acid: two types of glycinergic compounds modulate motor function differentially. Tonohiro T, et al. **Gen Pharmacol** 1997 Apr; 28(4):555–60
Pulmonary chemoreflexes elicited by intravenous injection of lactic acid in anesthetized rats [see comments] Lee LY, et al. **J Appl Physiol** 1996 Dec;81(6):2349–57. Comment in: J Appl Physiol 1996 Dec;81(6):2347–8.
"Pulmonary chemoreflex elicited by intravenous injection of lactic acid in anesthetized rats" [editorial; comment] Sant'Ambrogio G. **J Appl Physiol** 1996 Dec;81(6):2347–8 . Comment on: J Appl Physiol 1996 Dec;81(6):2349–57.
Endogenous bradykinin in the thoracic spinal cord contributes to the exercise pressor reflex. Stebbins CL, et al. **J Appl Physiol** 1996 Sep;81(3):1288–94
Bezold–Jarisch reflex in myocardial infarcted rats. Meyrelles SS, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):144–52

Capsaicin inhibits detrusor contractility but not the micturition reflex in capsaicin-desensitized rats. Kuo HC. **J Formos Med Assoc** 1997 Sep;96(9):691-6

Cyclosporine-induced hypertension: evidence for maintained baroreflex circulatory control. Lucini D, et al. **J Heart Lung Transplant** 1997 Jun;16(6):615-20

Sensory-evoked pocket scratch motor patterns in the in vitro turtle spinal cord: reduction of excitability by an N-methyl-D-aspartate antagonist. Currie SN, et al. **J Neurophysiol** 1996 Jul;76(1):81-92

Modulation of spontaneous and reflex activity of crayfish leg motor neurons by octopamine and serotonin. Gill MD, et al. **J Neurophysiol** 1996 Nov;76(5):3535-49

Octopamine induces steady-state reflex reversal in crayfish thoracic ganglia. Skorupski P. **J Neurophysiol** 1996 Jul; 76(1):93-108

Beta-endorphin immunoreactivity levels in CSF after laryngeal chemoreflex activation correlate with apnoea duration in piglets. Storm H, et al. **J Perinat Med** 1996; 24(4):363-72

Effects of intrathecal or intracerebroventricular administration of nonsteroidal anti-inflammatory drugs on a C-fiber reflex in rats. Bustamante D, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1381-91

Suppression of bladder hyperreflexia by intravesical resiniferatoxin [letter] Cruz F, et al. **Lancet** 1997 Aug 30; 350(9078):640-1

Effect of angiotensin II on a spinal nociceptive reflex in the rat: receptor and mechanism of action. Toma N, et al. **Life Sci** 1997;61(5):503-13

Desflurane and the sensitivity of upper airway reflexes. Park GR. **Middle East J Anesthesiol** 1995 Oct;13(3):281-9

No effects on heart-rate variability and cardiovascular reflex tests after botulinum toxin treatment of cervical dystonia [letter] Nebe A, et al. **Mov Disord** 1996 May;11(3):337-9

Do D1/D2 interactions regulate prepulse inhibition in rats? Wan FJ, et al. **Neuropsychopharmacology** 1996 Apr; 14(4):265-74

Involvement of the presynaptic dopamine D2 receptor in the depression of spinal reflex by apomorphine. Gajendiran M, et al. **Neuroreport** 1996 Jan 31;7(2):513-6

Nitrous oxide depresses somatocardiac sympathetic A- and C-reflexes in anesthetized rats. Adachi T, et al. **Neurosci Lett** 1996 Jul 26;213(1):57-60

The nitric oxide synthase inhibitor L-NAME reduces inhibitory components of somato-vesical parasympathetic reflexes in the rat. Morrison JF, et al. **Neurosci Res** 1996 Jan;24(2):195-9

Intrathecal pituitary adenylate cyclase activating polypeptide facilitates the spinal nociceptive flexor reflex in the rat. Xu XJ, et al. **Neuroscience** 1996 Jun;72(3):801-4

Enhanced withdrawal responses to heat and mechanical stimuli following intraplantar injection of capsaicin in rats. Gilchrist HD, et al. **Pain** 1996 Sep;67(1):179-88

Effects of p-chlorophenylalanine on reflexive and noncontact penile erections in male rats. Matsumoto T, et al. **Physiol Behav** 1997 Feb;61(2):165-8

Long-term effects of antidepressants on balance, equilibrium, and postural reflexes. Li X, et al. **Psychiatry Res** 1996 Jul 31;63(2-3):191-6

Reflexes of the cutaneous microcirculation in amitriptyline and in fluoxetine treated patients. Mück-Weymann M, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):241-4

Effects of long-term high oxygen concentration breathing on defensive respiratory reflexes in guinea-pigs. Hanacek J, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):367-8

The role of partial laryngeal denervation on the cough reflex in awake guinea-pigs, rats and rabbits. Tatar M, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):371-2

The effect of intranasal fluticasone propionate on the diving reflex in patients with non-eosinophilic non-allergic rhinitis. Cook JA, et al. **Rhinology** 1996 Sep;34(3):144-6

[The role of quinine chlorhydrate in the conditioned inhibition of the tarsal reflex in Drosophila melanogaster] Bouhouche A, et al. **Can J Exp Psychol** 1995 Dec; 49(4):520-9 (Eng. Abstr.) **(Fre)**

[Effect of dilantin on the inhibition of neocortical and hippocampal neurons during the interaction of an alien stimulus and the dominant state of a defensive reflex] Shul'gina GI, et al. **Fiziol Cheloveka** 1997 Jul-Aug; 23(4):46-51 **(Rus)**

GENETICS

Central phenotype and related varieties of spinocerebellar ataxia 2 (SCA2): a clinical and genetic study with a pedigree in the Japanese. Sasaki H, et al. **J Neurol Sci** 1996 Dec;144(1-2):176-81

Brain chimeras in birds: application to the study of a genetic form of reflex epilepsy. Batini C, et al. **Trends Neurosci** 1996 Jun;19(6):246-52

IMMUNOLOGY

Autonomic reflexes and non-allergic rhinitis. Jones AS. **Allergy** 1997;52(36 Suppl):14-9 (53 ref.)

PHYSIOLOGY

Postural stability, neck proprioception and tension neck. Koskimies K, et al. **Acta Otolaryngol Suppl (Stockh)** 1997; 529:95-7

Effects of preceding movements and contractions on the tonic vibration reflex of human finger extensor muscles. Nordin M, et al. **Acta Physiol Scand** 1996 Apr; 156(4):435-40

Peripheral chemoreflex in chronic heart failure: friend and foe [editorial] Chugh SS, et al. **Am Heart J** 1996 Oct; 132(4):900-4 (42 ref.)

Heartburn: could the heart be really burning? Sivaram CA, et al. **Am J Gastroenterol** 1997 Jan;92(1):178-9

Stapedius reflex measurements during surgery for cochlear implantation in children. van den Borne B, et al. **Am J Otol** 1996 Jul;17(4):554-8

Pronator teres reflex: reliability and normal value. Shehab D, et al. **Am J Phys Med Rehabil** 1996 Sep-Oct; 75(5):328-31

Pituitary and adrenals are required for hyperglycemic reflex initiated by stimulation of CBR with cyanide. Alvarez-Buylla R, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R392-9

Role of endogenous angiotensin II on sympathetic reflexes in conscious rabbits. Bendle RD, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1816-25

Construction of a model demonstrating neural pathways and reflex arcs. Chan V, et al. **Am J Physiol** 1996 Dec;271(6 Pt 3):S14-42 (4 ref.)

NMDA as well as non-NMDA receptors in phrenic nucleus mediate respiratory effects of carotid chemoreflex. Chitravanshi VC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R302-10

Reflex vagal control of atrial repolarization. Euler DE, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H870-5

Alterations in the cardiovascular control by the chemoreflex and the baroreflex in old rats. Franchini KG, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R310-3

NMDA receptor blockade in cat dorsal horn blunts reflex pressor response to muscle contraction and stretch. Hand GA, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H500-8

Laryngeal reflex apnea is blunted during and after hindlimb muscle contraction in sheep. Haouzi P, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R586-92

Effects of inhalation anesthetics on parasympathetic reflex vasodilation in the lower lip and palate of the cat. Izumi H, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R168-74

Characterization of an esophagocardiovascular reflex in the rat. Loomis CW, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1783-91

Vagal hepatopancreatic reflex effect evoked by intraportal appearance of tGLP-1. Nakabayashi H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E808-13

Coronary chemoreflex evoked by intrapericardial nicotine has a somatic component. Pickar JG. **Am J Physiol** 1997 Feb;272(2 Pt 2):H827-34

Static muscular contraction elicits a pressor reflex in the chicken. Solomon IC, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R759-65

Neural reflexes controlling intestinal microcirculation. Vanner S, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):G223-30 (66 ref.)

Subthreshold stimulation of a serotonin 5-HT3 reflex attenuates cardiovascular reflexes. Veelken R, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1500-6

Gastrogastric reflexes regulating gastric tone and their relationship to perception. Villanova N, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G464-9

The bulbocavernosus reflex in the assessment of neurogenic impotence in diabetic and non-diabetic men. Ho KH, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):558-61

The influence of attentional factors on short- and long-latency jaw reflexes in man. Cadden SW, et al. **Arch Oral Biol** 1996 Oct;41(10):995-8

Effects of remote deep somatic noxious stimuli on a jaw reflex in man. Maillou P, et al. **Arch Oral Biol** 1997 Apr; 42(4):323-7

Latency of the jaw-opening reflex in the premature, preweaning and adolescent pig (hanford strain miniature pig, Sus scrofa). Thexton AJ, et al. **Arch Oral Biol** 1995 Dec;40(12):1133-5

Conditions for excitatory or inhibitory masseteric reflexes elicited by tooth pressure in man. Türker KS, et al. **Arch Oral Biol** 1997 Feb;42(2):121-8

Characteristics of laryngeal receptors analyzed by presynaptic recording from the cat medulla oblongata. Esaki H, et al. **Auris Nasus Larynx** 1997;24(1):73-83

Habituation of ocular following reflex requires corpus callosum for interhemispheric transfer. Zernicki B, et al. **Behav Brain Res** 1997 Mar;84(1-2):269-74

Tail-flick test: II. The role of supraspinal systems and avoidance learning. King TE, et al. **Behav Neurosci** 1997 Aug;111(4):754-67

Effects of tap withdrawal response habituation on other withdrawal behaviors: the localization of habituation in the nematode Caenorhabditis elegans. Wicks SR, et al. **Behav Neurosci** 1997 Apr;111(2):342-53

Habituation and dishabituation of the proleg withdrawal reflex in larvae of the sphinx hawk, Manduca sexta. Wiel DE, et al. **Behav Neurosci** 1996 Oct;110(5):1133-47

Activity-dependent regulation of neural networks: the role of inhibitory synaptic plasticity in adaptive gain control in the siphon withdrawal reflex of Aplysia. Fischer TM, et al. **Biol Bull** 1997 Feb;192(1):164-6

Waveform reliability of the phase related external suction baroreceptor manipulation method. Rau H, et al. **Biol Psychol** 1996 Apr 12;43(2):187-94

Functional evidence of inhibitory reno-renal reflexes in spontaneously hypertensive rats. Protasoni G, et al. **Blood Press** 1996 Sep;5(5):305-11

Reflex inhibition following electrical stimulation over muscle tendons in man. Burne JA, et al. **Brain** 1996 Aug;119 (Pt 4):1107-14

The role of torus longitudinalis in equilibrium orientation measured with the dorsal light reflex. Gibbs MA, et al. **Brain Behav Evol** 1996;48(3):115-20

Activation of hypothalamic neurons by intraovarian pressure signals in a teleost fish, Clarias batrachus: role of mechanosensitive channels. Subhedar N, et al. **Brain Behav Evol** 1996;47(4):179-84

Longitudinal profile of early motor recovery following severe traumatic brain injury. Swaine BR, et al. **Brain Inj** 1996 May;10(5):347-66

Trigeminal-parabrachial connections: possible pathway for nociception-induced cardiovascular reflex responses. Allen GV, et al. **Brain Res** 1996 Apr 9;715(1-2):125-35

Effects of remote noxious stimulation on exteroceptive reflexes in human jaw-closing muscles. Cadden SW, et al. **Brain Res** 1996 Jul 8;726(1-2):189-97

Neurotransmission of the Bezold-Jarisch reflex in the nucleus tractus solitarii of sino-aortic deafferentated rats. Chianca DA Jr, et al. **Brain Res** 1997 May 9;756(1-2):46-51

On the development of voluntary and reflexive components in human saccade generation. Fischer B, et al. **Brain Res** 1997 Apr 18;754(1-2):285-97

Histological and functional evaluation of experimental spinal cord injury: evidence of a stepwise response to graded compression. Gruner JA, et al. **Brain Res** 1996 Aug 5; 729(1):90-101

Changes in nociceptive reflex facilitation during carrageenan-induced arthritis. Herrero JF, et al. **Brain Res** 1996 Apr 22;717(1-2):62-8

Physiological adjustments in a reflex pathway following partial loss of target neurons. Holmberg P, et al. **Brain Res** 1996 Aug 26;731(1-2):155-60

The roles of periodontal ligament mechanoreceptors in the reflex control of human jaw-closing muscles. Louca C, et al. **Brain Res** 1996 Aug 26;731(1-2):63-71

Changes in Fos-like immunoreactivity evoked by maturation of the sneeze reflex triggered by nasal air puff stimulation in kittens. Masmoudi K, et al. **Brain Res** 1997 May 16; 757(1):102-10

Examination of the afferent fiber responsible for the suppression of jaw-opening reflex in heat, cold, and manual acupuncture stimulation in rats. Okada K, et al. **Brain Res** 1996 Nov 18;740(1-2):201-7

Intense peripheral electrical stimulation differentially inhibits tail vs. limb withdrawal reflexes in the rat. Romita VV, et al. **Brain Res** 1996 May 13;720(1-2):45-53

Intense peripheral electrical stimulation evokes brief and persistent inhibition of the nociceptive tail withdrawal reflex in the rat. Romita VV, et al. **Brain Res** 1997 Jul 4;761(2):192-202

Interaction of nociceptive and non-nociceptive cutaneous afferents from foot sole in common reflex pathways to tibialis anterior motoneurones in humans. Rossi A, et al. **Brain Res** 1996 Apr 1;714(1-2):76-86

Cutaneous reflex activity of the cat forelimb during fictive locomotion. Seki K, et al. **Brain Res** 1997 Apr 4; 753(1):56-62

Inhibition of tongue reflex in rats by tooth pulp stimulation during cerebral ventricle perfusion with (6-11) substance P analogs. Zubrzycka M, et al. **Brain Res** 1997 Apr 4; 753(1):128-32

The pressor reflex evoked by static contraction: neurochemistry at the site of the first synapse. Wilson LB, et al. **Brain Res Brain Res Rev** 1997 Apr;23(3):196-209 (120 ref.)

Spatial orientation perception and reflexive eye movements--a perspective, an overview, and some clinical implications. Guedry FE. **Brain Res Bull** 1996; 40(5-6):505-12 (77 ref.)

Orienting a spatial attention--its reflexive, compensatory, and voluntary mechanisms. Hikosaka O, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1-2):1-9 (32 ref.)

Nature of the interaction between central and peripheral chemoreceptor drives in human subjects. St. Croix CM, et al. **Can J Physiol Pharmacol** 1996 Jun;74(6):640-6

Dysautonomic and reflex syncope syndromes. Grubb BP, et al. **Cardiol Clin** 1997 May;15(2):257-68 (49 ref.)

Aging effects on swallowing reflex [letter] Kobayashi H, et al. **Chest** 1997 May;111(5):1466

Sympathetic activation and loss of reflex sympathetic control in mild congestive heart failure [letter; comment] Osterziel KJ. **Circulation** 1996 Nov 1;94(9):2310-1. Comment on: Circulation 1995 Dec 1;92(11):3206-11.

Tonic chemoreflex activation does not contribute to elevated muscle sympathetic nerve activity in heart failure. van de Borne P, et al. **Circulation** 1996 Sep 15;94(6):1325-8

Sigmoido-rectal junction reflex: role in the defecation mechanism. Shafik A. **Clin Anat** 1996;9(6):391-4

Sympathetic vasoconstrictor reflexes in Parkinson's disease with autonomic dysfunction. Andersen EB, et al. **Clin Auton Res** 1997 Feb;7(1):5-11

The Valsalva manoeuvre as a cardiovascular reflex test in healthy children and teenagers. de Jong-de Vos van Steenwijk CC, et al. **Clin Auton Res** 1997 Aug;7(4):167-71

Reflexes mediated by cardiac sympathetic afferents during myocardial ischaemia: role of adenosine. Thames MD, et al. **Clin Exp Pharmacol Physiol** 1996 Aug;23(8):709-14 (33

ref.)
Effects of nutritional factors on reproduction, growth, preweaning reflex development and postweaning learning performance in SHRSP. Matsuo T, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S294–6
Negative myoclonus. Tassinari CA, et al. **Clin Neurosci** 1995–96;3(4):209–13 (19 ref.)
On the history of the ideas of efference copy and reafference. Grüsser OJ. **Clio Med** 1995;33:35–55
Eye–centering: the basic ocular motor reflex––literature review, observations and hypotheses. Jampel RS, et al. **Curr Eye Res** 1996 Aug;15(8):890–8 (41 ref.)
The heart rate deceleratory response in low–risk human fetuses: effect of stimulus intensity on response topography. Groome LJ, et al. **Dev Psychobiol** 1997 Mar;30(2):103–13
Evaluation of skin vasomotor reflexes in response to deep inspiration in diabetic patients by laser Doppler flowmetry. A new approach to the diagnosis of diabetic peripheral autonomic neuropathy. Aso Y, et al. **Diabetes Care** 1997 Aug;20(8):1324–8
Primitive reflexes and the determination of fetal presentation at birth. Bartlett D, et al. **Early Hum Dev** 1997 May 28; 48(3):261–73
The deep breath vasoconstriction reflex––a new tool for autonomic assessment in infancy? Inwald D, et al. **Early Hum Dev** 1996 Jul 5;45(1–2):55–61
Clinical use of polysynaptic flexion reflexes in the management of spasticity with intrathecal baclofen. Parise M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Apr; 105(2):141–8
Electrographic study of brainstem reflex myoclonus. Oguro K, et al. **Electromyogr Clin Neurophysiol** 1997 Mar; 37(2):99–106
Measurement of patellar and ankle tendon reflexes in normal subjects. Struys MA, et al. **Electromyogr Clin Neurophysiol** 1997 Jan–Feb;37(1):13–8
The effect of a rise in body temperature on the central–chemoreflex ventilatory response to carbon dioxide. Baker JF, et al. **Eur J Appl Physiol** 1996; 72(5–6):537–41
The synapse between LE sensory neurons and gill motoneurons makes only a small contribution to the Aplysia gill–withdrawal reflex. Hickie C, et al. **Eur J Neurosci** 1997 Apr;9(4):627–36
Characteristics of vagal reflex–mediated tracheal response induced by bronchoconstriction in guinea pigs. Takahashi Y, et al. **Eur J Pharmacol** 1996 Apr 29;302(1–3):89–97
Neurophysiological mechanism of the unloading reflex as a prognostic factor in the early stages of idiopathic adolescent scoliosis. Dobosiewicz K. **Eur Spine J** 1997; 6(2):93–7
Optically induced plasticity of the cervico–ocular reflex in patients with bilateral absence of vestibular function. Heimbrand S, et al. **Exp Brain Res** 1996 Dec;112(3):372–80
Conditioned and unconditioned forelimb reflex systems in the cat: involvement of the intermediate cerebellum. Kolb FP, et al. **Exp Brain Res** 1997 Apr;114(2):255–70
The contribution of transcortical pathways to long–latency stretch and tactile reflexes in human hand muscles. Macefield VG, et al. **Exp Brain Res** 1996 Feb;108(1):147–54
Short– and long–latency reflex responses during different motor tasks in elbow flexor muscles. Nakazawa K, et al. **Exp Brain Res** 1997 Aug;116(1):20–8
Convergence of skin reflex and corticospinal effects in segmental and propriospinal pathways to forelimb motoneurones in the cat. Sasaki M, et al. **Exp Brain Res** 1996;107(3):422–34
The significance of somatosensory stimulations to the human foot in the control of postural reflexes. Wu G, et al. **Exp Brain Res** 1997 Mar;114(1):163–9
Neural regulation of coronary vascular resistance: role of nitric oxide in reflex cholinergic coronary vasodilation in normal and pathophysiologic states. Zhao G, et al. **EXS** 1996;76:1–19 (94 ref.)
Mucosal secretory reflexes. Carey HJ. **Gastroenterology** 1996 Jun;110(6):2021–3
Reflex stimulation of continuously oscillatory firing alpha and gamma–motoneurons in patients with spinal cord lesion. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug; 15 Suppl 1:75–93
Study of the intramural oviduct response to tubal and uterine distension: identification of tubo–uterine sphincter and reflex. Shafik A. **Hum Reprod** 1996 Nov;11(11):2527–30
Skin vasomotor reflexes during inspiratory gasp: standardization by spirometric control does not improve reproducibility. du Buf–Vereijken PW, et al. **Int J Microcirc Clin Exp** 1997 Mar–Apr;17(2):86–92
Evaluation of two sympathetic cutaneous vasomotor reflexes using laser Doppler fluxmetry. Netten PM, et al. **Int J Microcirc Clin Exp** 1996 May–Jun;16(3):124–8
A between–subjects comparison of respiratory sinus arrhythmia and baroreceptor cardiac reflex sensitivity as non–invasive measures of tonic parasympathetic cardiac control. del Paso GA, et al. **Int J Psychophysiol** 1996 Jun–Jul;22(3):163–71
Recto–colic reflex: role in the defecation mechanism. Shafik A. **Int Surg** 1996 Jul–Sep;81(3):292–4
Neurally mediated hypotension, chronic fatigue syndrome and upper aerodigestive tract reflexes [letter] Chester AC. **Integr Physiol Behav Sci** 1997 Apr–Jun;32(2):160–1
Origin of tapetal–like reflexes in carriers of X–linked retinitis pigmentosa. Berendschot TT, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2716–23
Sensory neurophysiology of the cough reflex. Widdicombe JG. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 2):S84–9; discussion S89–90 (40 ref.)
Cardioesophageal reflex: a mechanism for "linked angina" [letter; comment] Koelz HR, et al. **J Am Coll Cardiol** 1997 Mar 1;29(3):705. Comment on: J Am Coll Cardiol 1996 Jun;27(7):1621–8.
Reactive oxygen species modify reflex cardiovascular responses to static contraction. Bonigut S, et al. **J Appl Physiol** 1996 Sep;81(3):1207–12
Reflex peripheral vasoconstriction is diminished in older men. Kenney WL, et al. **J Appl Physiol** 1996 Feb;80(2):512–5
Reflex apneic response evoked by laryngeal exposure to wood smoke in rats: neural and chemical mechanisms. Lin YS, et al. **J Appl Physiol** 1997 Sep;83(3):723–30
Head and body positions affect thermoregulatory tonus in deltoid muscles. Meigal AY, et al. **J Appl Physiol** 1996 Apr;80(4):1397–400
Venous and arterial reflex responses to positive–pressure breathing and lower body negative pressure. Peters JK, et al. **J Appl Physiol** 1997 Jun;82(6):1889–96
Noxious stimuli do not determine reflex cardiorespiratory effects in anesthetized rabbits. Raimondi G, et al. **J Appl Physiol** 1996 Dec;81(6):2421–7
Computer simulation of the enteric neural circuits mediating an ascending reflex: roles of fast and slow excitatory outputs of sensory neurons. Bornstein JC, et al. **J Auton Nerv Syst** 1997 Jun 6;64(2–3):143–57
Electrophysiological evidence of ipsilateral reno–renal reflexes in the cat. Genovesi S, et al. **J Auton Nerv Syst** 1997 Jul 14;65(1):45–8
Asymmetry and time–course of cutaneous sympathetic reflex responses following sustained excitation of chemosensitive nociceptors in humans. Magerl W, et al. **J Auton Nerv Syst** 1996 Feb 5;57(1–2):63–72
Reflex haemodynamic responses caused by distension of the uterus in anaesthetized pigs. Vacca G, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):1–11
Esophageal distension induced gastric relaxation is mediated in part by vagal peripheral reflex mechanism in rats. Wei JY, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):12–8
Distension–evoked ascending and descending reflexes in the isolated guinea–pig stomach. Yuan SY, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):94–102
Baroreceptor modulation of regional haemodynamic responses to acute stress in rat. Zhang ZQ, et al. **J Auton Nerv Syst** 1996 Aug 27;60(1–2):23–30
In situ identification and visualization of neurons that mediate enteric and enteropancreatic reflexes. Kirchgessner AL, et al. **J Comp Neurol** 1996 Jul 22;371(2):270–86
The integration of antagonistic reflexes revealed by laser ablation of identified neurons determines habituation kinetics of the Caenorhabditis elegans tap withdrawal response. Wicks SR, et al. **J Comp Physiol [A]** 1996 Nov; 179(5):675–85
Neural correlates of habituation of the proleg withdrawal reflex in larvae of the hawk moth, Manduca sexta. Wood ER, et al. **J Comp Physiol [A]** 1997 Jun;180(6):639–57
Differential effects of noxious conditioning stimulation of the cheek by capsaicin on human sensory and inhibitory masseter reflex responses evoked by tooth pulp stimulation. Kemppainen P, et al. **J Dent Res** 1997 Sep;76(9):1561–8
Bilateral reflex vasodilation in the palatal mucosa evoked by unilateral tooth–pulp stimulation in the cat. Shoji N. **J Dent Res** 1996 Sep;75(9):1637–43
Ligamentomuscular protective reflex in the elbow. Phillips D, et al. **J Hand Surg [Am]** 1997 May;22(3):473–8
Somatovisceral reflexes. Sato A. **J Manipulative Physiol Ther** 1995 Nov–Dec;18(9):597–602
Quantitative evaluation of normal muscle tone. Pisano F, et al. **J Neurol Sci** 1996 Feb;135(2):168–72
Backward and forward walking use different patterns of phase–dependent modulation of cutaneous reflexes in humans. Duysens J, et al. **J Neurophysiol** 1996 Jul; 76(1):301–10
Loop gain of reflexes controlling human standing measured with the use of postural and vestibular disturbances. Fitzpatrick R, et al. **J Neurophysiol** 1996 Dec; 76(6):3994–4008
On the voluntary movement of compliant (inertial–viscoelastic) loads by parcellated control mechanisms. Gottlieb GL. **J Neurophysiol** 1996 Nov; 76(5):3207–29
Realistic simulation of the Aplysia siphon–withdrawal reflex circuit: roles of circuit elements in producing motor output. Lieb JR Jr, et al. **J Neurophysiol** 1997 Mar;77(3):1249–68
Normal and adapted visuooculomotor reflexes in goldfish. Marsh E, et al. **J Neurophysiol** 1997 Mar;77(3):1099–118
Dorsal root reflexes in articular afferents occur bilaterally in a chronic model of arthritis in rats. Rees H, et al. **J Neurophysiol** 1996 Dec;76(6):4190–3
Role of ventral respiratory group bulbospinal expiratory neurons in vestibular–respiratory reflexes. Shiba K, et al. **J Neurophysiol** 1996 Oct;76(4):2271–9
Effect of MLF transection on the vertical vestibulocollic reflex in decerebrate cats. Thomson DB, et al. **J Neurophysiol** 1995 Oct;74(4):1815–8
Utriculoocular reflex arc of the cat. Uchino Y, et al. **J Neurophysiol** 1996 Sep;76(3):1896–903
Sacculocollic reflex arcs in cats. Uchino Y, et al. **J Neurophysiol** 1997 Jun;77(6):3003–12
Cutaneous reflexes during human gait: electromyographic and kinematic responses to electrical stimulation. Zehr EP, et al. **J Neurophysiol** 1997 Jun;77(6):3311–25
A simplified preparation for relating cellular events to behavior: contribution of LE and unidentified siphon sensory neurons to mediation and habituation of the Aplysia gill– and siphon–withdrawal reflex. Frost L, et al. **J Neurosci** 1997 Apr 15;17(8):2900–13
Respiratory neurons mediating the Breuer–Hering reflex prolongation of expiration in rat. Hayashi F, et al. **J Neurosci** 1996 Oct 15;16(20):6526–36
Developmental adaptation of rat nociceptive withdrawal reflexes after neonatal tendon transfer. Holmberg H, et al. **J Neurosci** 1997 Mar 15;17(6):2071–8
Site specificity of short–term and long–term habituation in the tail–elicited siphon withdrawal reflex of Aplysia. Stopfer M, et al. **J Neurosci** 1996 Aug 15;16(16):4923–32
Heterosynaptic facilitation of tail sensory neuron synaptic transmission during habituation in tail–induced tail and siphon withdrawal reflexes of Aplysia. Stopfer M, et al. **J Neurosci** 1996 Aug 15;16(16):4933–48
Dynamic control of location–specific information in tactile cutaneous reflexes from the foot during human walking. Van Wezel BM, et al. **J Neurosci** 1997 May 15; 17(10):3804–14
Mechanically induced stumbling during human treadmill walking. Schillings AM, et al. **J Neurosci Methods** 1996 Jul;67(1):11–7
Electromyographic evidence for a digastric reflex evoked by perioral stimuli in humans. Cadden SW, et al. **J Oral Rehabil** 1997 Jun;24(6):439–43
A multiparametric analysis of occlusal and periodontal jaw reflex characteristics in young adults with normal occlusion. Suda S, et al. **J Oral Rehabil** 1997 Aug; 24(8):610–3
Reflex response times of vastus medialis oblique and vastus lateralis in normal subjects and in subjects with patellofemoral pain [letter; comment] Karst GM, et al. **J Orthop Sports Phys Ther** 1997 Aug;26(2):108–10. Comment on: J Orthop Sports Phys Ther 1996 Sep;24(3):160–5.
The rectoanal relaxation reflex and continence in repaired anorectal malformations with and without an internal sphincter–saving procedure. Lin CL, et al. **J Pediatr Surg** 1996 May;31(5):630–3
Ventilatory chemoreflexes at rest following a brief period of heavy exercise in man. Clement ID, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):875–84
Developmental adaptation of withdrawal reflexes to early alteration of peripheral innervation in the rat. Holmberg H, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):399–409
Postnatal development of the nociceptive withdrawal reflexes in the rat: a behavioural and electromyographic study. Holmberg H, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):239–52
On–going and reflex synaptic events in rat superior cervical ganglion cells. McLachlan EM, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):165–81
Excitatory amino acid–mediated chemoreflex excitation of respiratory neurones in rostral ventrolateral medulla in rats. Sun MK, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):559–71
Perception and gut reflexes induced by stimulation of gastrointestinal thermoreceptors in humans. Villanova N, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):215–22
Cutaneous inhibitory receptive fields of withdrawal reflexes in the decerebrate spinal rat. Weng HR, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):253–65
Influence of short–term ischemia on segmental spinal cord reflex functions in cats. Kolenda H, et al. **J Spinal Disord** 1997 Feb;10(1):68–79
Reorganization of somato–urethral reflexes following spinal cord injury in the rat. Kakizaki H, et al. **J Urol** 1997 Oct; 158(4):1562–7
Changes in gain and spatiotemporal properties of the vestibulospinal reflex after injection of a GABA–A agonist in the cerebellar anterior vermis. Manzoni D, et al. **J Vestib Res** 1997 Jan–Feb;7(1):7–20
Na concentration of CSF and cardiovascular adjustment in thermally dehydrated rats. Chen M. **Jpn J Physiol** 1996 Feb;46(1):83–92
Inhibitory effects of acupuncture manipulation and focal electrical stimulation of the nucleus submedius on a viscerosomatic reflex in anesthetized rats. Sumiya E, et al. **Jpn J Physiol** 1997 Feb;47(1):121–30
Is detrusor instability a prematurely activated (but otherwise normal) micturition reflex? [letter; comment] [see comments] Petros P, et al. **Lancet** 1997 Feb 15; 349(9050):505. Comment on: Lancet 1996 Nov 23;348(9039):1395. Comment in: Lancet 1997 Apr 26;349(9060):1255–6.
Influence of gravity on cardiovascular reflexes from skeletal muscle receptors. Essfeld D, et al. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S23–8 (26 ref.)
The influence of the asymmetric tonic neck reflex on the H–reflex in human temporal muscle. Macaluso GM, et al. **Minerva Stomatol** 1996 Sep;45(9):387–92
Axon reflexes or ephaptic responses simulating blink reflex R1 after XII–VII nerve anastomosis. Montero J, et al. **Muscle Nerve** 1996 Jul;19(7):848–52
Bilateral bulbocavernosus reflexes: crossing of nerve pathways or artifact? Rechthand E. **Muscle Nerve** 1997

May;20(5):616–8
Peripheral nerve dysfunction is reflected by loss of ankle reflexes but not by autonomic neuropathy in diabetic patients. Sundkvist G, et al. **Muscle Nerve** 1997 Jun; 20(6):740–3
Quantification of the oesophageal peristaltic reflex in man. Penagini R, et al. **Neurogastroenterol Motil** 1996 Jun; 8(2):89–94
Reliability of the NINDS Myotatic Reflex Scale. Litvan I, et al. **Neurology** 1996 Oct;47(4):969–72
Object-based visual attention in luminance increment detection? Stuart GW, et al. **Neuropsychologia** 1997 Jun; 35(6):843–53
Evoked related potentials associated with and without an orienting reflex. Bahramali H, et al. **Neuroreport** 1997 Aug 18;8(12):2665–9
Neural control of micturition in man examined with single photon emission computed tomography using 99mTc-HMPAO. Fukuyama H, et al. **Neuroreport** 1996 Nov 25;7(18):3009–12
Cerebellar activation during classical conditioning of the human flexion reflex: a PET study. Timmann D, et al. **Neuroreport** 1996 Aug 12;7(12):2056–60
Nociceptive inhibition of withdrawal reflex responses increases over time in spinalized rats. Weng HR, et al. **Neuroreport** 1996 May 17;7(7):1310–4
Contemporary state of reflex theory. Batuev AS. **Neurosci Behav Physiol** 1996 Jul-Aug;26(4):324–8 (18 ref.)
Reflex relationships between the cervical esophagus and the respiratory system in cats. Barthélémy P, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):81–4
Assessment of an airway-to-pulmonary circulation reflex in cats. Barthélémy P, et al. **Neurosci Lett** 1996 Jun 21; 211(2):89–92
Glycinergic inhibition in the turtle spinal cord regulates the intensity and pattern of fictive flexion reflex motor output. Currie SN, et al. **Neurosci Lett** 1996 Feb 23;205(2):75–8
Effects of a prepulse stimulus on the masseteric inhibitory reflex in humans. Gómez-Wong E, et al. **Neurosci Lett** 1996 Apr 26;208(3):183–6
Depressor pathway involved in somatosympathetic reflex in cats. Goo YS, et al. **Neurosci Lett** 1996 Jan 26;203(3):187–90
The role of the spinal cord as a reflex center for the somatically induced reflex responses of splenic sympathetic and natural killer cell activity in anesthetized rats. Kagitani F, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):109–12
Single electrical shock of a somatic afferent nerve elicits A- and C-reflex discharges in gastric vagal efferent nerves in anesthetized rats. Kimura A, et al. **Neurosci Lett** 1996 May 24;210(1):53–6
Systemic hypoxia facilitates somato-cardiac sympathetic A- and C-reflexes in anesthetized rats. Li WM, et al. **Neurosci Lett** 1996 Oct 4;216(3):175–8
Vesico-sympathetic reflexes in cat vasoconstrictor neurones supplying skin and skeletal muscle depend on the integrity of the sacral bladder afferents. Michaelis M, et al. **Neurosci Lett** 1996 Nov 22;219(2):99–102
Excitatory and inhibitory A- and C-reflexes in pelvic parasympathetic efferent nerves elicited by single shock to A and C afferent fibers of perineal and limb somatic nerves in anesthetized rats. Morrison JF, et al. **Neurosci Lett** 1996 Jul 5;212(1):25–8
Modulation of the arterial baroreceptor reflex by the vasopressin receptor in the area postrema of the hypertensive rats. Nakayama Y, et al. **Neurosci Lett** 1997 May 2;226(3):179–82
Functional modulation of the human flexion and crossed extension reflexes by body position. Paquet N, et al. **Neurosci Lett** 1996 May 17;209(3):215–7
Contribution of vagal afferents to the volume-timing response to expiratory loads in neonatal lambs. Webb B, et al. **Neurosci Lett** 1996 Apr 5;207(3):147–50
Role of pre-inspiratory neurons in vestibular and laryngeal reflexes and in swallowing and vomiting. Zheng Y, et al. **Neurosci Lett** 1997 Apr 11;225(3):161–4
A- and C-reflexes elicited in cardiac sympathetic nerves by single shock to a somatic afferent nerve include spinal and supraspinal components in anesthetized rats. Kimura A, et al. **Neurosci Res** 1996 May;25(1):91–6
Vibration-induced finger flexion reflex and inhibitory effect of acupuncture on this reflex in cervical spinal cord injury patients. Takakura N, et al. **Neurosci Res** 1996 Dec; 26(4):391–4
Metabotropic glutamate receptor activation contributes to nociceptive reflex activity in the rat spinal cord in vitro. Boxall SJ, et al. **Neuroscience** 1996 Sep;74(1):13–20
Reflex-related activation of putative pain facilitating neurons in rostral ventromedial medulla requires excitatory amino acid transmission. Heinricher MM, et al. **Neuroscience** 1997 Jun;78(4):1159–65
Excitation of hypoglossal motoneurons responsible for tongue protrusions is associated with palatally induced jaw-closing reflex. Tomioka S, et al. **Neuroscience** 1997 May;78(2):603–12
Dissociation of the ascending excitatory reflex from peristalsis in the guinea-pig small intestine. Tonini M, et al. **Neuroscience** 1996 Jul;73(1):287–97
Age-related muscle stiffness: predominance of non-reflex factors. Wolfarth S, et al. **Neuroscience** 1997 Jul; 79(2):617–28
Intraoperative recording of the bulbocavernosus reflex. Deletis V, et al. **Neurosurgery** 1997 Jan;40(1):88–92; discussion 92–3
Pelviureteral inhibitory reflex and ureteropelvic excitatory reflex: role of the two reflexes in regulation of urine flow from the renal pelvis to the ureter. Shafik A. **Neurourol Urodyn** 1997;16(4):315–24; discussion 324–5
Sensitization of the tail-flick reflex following exposure to either a single prolonged test trial or behavioral testing under the analgesic influence of morphine. Baldwin AE, et al. **Pain** 1996 Sep;67(1):163–72
Suppression of an inhibitory jaw reflex by the anticipation of pain in man. Scott AJ, et al. **Pain** 1996 Aug; 66(2–3):125–31
Inhibitory effects of electrically evoked activation of ventrolateral orbital cortex on the tail-flick reflex are mediated by periaqueductal gray in rats. Zhang YQ, et al. **Pain** 1997 Aug;72(1–2):127–35
Reflex adrenal medullary secretion during coronary occlusion mediated by cardiac receptors with afferent vagal fibres in the rat. Godin-Ribuot D, et al. **Pflugers Arch** 1997 Jun;434(2):159–65
A reliable method for sustaining a pre-defined pre-innervation level. Kolb FP, et al. **Pflugers Arch** 1997 May;434(1):137–43
Mechanically evoked bulbocavernosus reflex and pudendal somatosensory responses in children. Podnar S, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R293–4
Modulation of the baroreceptor reflex by stimulation of the hypothalamic defense and vigilance areas. Duan YF, et al. **Physiol Behav** 1996 Jun;59(6):1093–8
A noninvasive method for studying quantitatively heat-evoked nocifensive hindlimb withdrawal reflexes in lightly anesthetized rats. Hämäläinen MM, et al. **Physiol Behav** 1996 Feb;59(2):389–92
Differential effects of intrathecal thyrotropin-releasing hormone (TRH) on perineal reflexes in male rats. Holmes GM, et al. **Physiol Behav** 1997 Jan;61(1):57–63
Cardiorespiratory parameters and respiratory reflexes in rabbits during hyperthermia. Javorka K, et al. **Physiol Res** 1996;45(6):439–47
Neural control of renal function. DiBona GF, et al. **Physiol Rev** 1997 Jan;77(1):75–197 (1736 ref.)
Cerebellar contributions to the acquisition and execution of learned reflex and volitional movements. Bloedel JR, et al. **Prog Brain Res** 1997;114:499–509 (38 ref.)
Spinal interneurons and preganglionic neurons in sacral autonomic reflex pathways. deGroat WC, et al. **Prog Brain Res** 1996;107:97–111 (90 ref.)
Spinal cord reflex organization of sympathetic systems. Jänig W. **Prog Brain Res** 1996;107:43–77 (131 ref.)
Sensori-sensory afferent conditioning with leg movement: gain control in spinal reflex and ascending paths. Brooke JD, et al. **Prog Neurobiol** 1997 Mar;51(4):393–421 (180 ref.)
Multiple time scales in simple habituation. Staddon JE, et al. **Psychol Rev** 1996 Oct;103(4):720–33
The pupillary light reflex cannot be used to measure sleepiness. Ranzijn R, et al. **Psychophysiology** 1997 Jan; 34(1):17–22
The varying time courses of attentional and affective modulation of the startle eyeblink reflex. Vanman EJ, et al. **Psychophysiology** 1996 Nov;33(6):691–7
The role of capsaicin-sensitive C-fibre afferent nerves in the cough reflex. Karlsson JA. **Pulm Pharmacol** 1996 Oct-Dec; 9(5–6):315–21
Cough and other reflexes on irritation of airway mucosa in man. Nishino T, et al. **Pulm Pharmacol** 1996 Oct-Dec; 9(5–6):285–92
Beta 2- but not beta 1-adrenoceptors mediate the adrenergic component of reflex tracheal dilatation during bronchoconstriction in guinea pigs in vivo. Takahashi Y, et al. **Res Commun Mol Pathol Pharmacol** 1996 Sep; 93(3):301–18
Involvement of NO-ergic neural pathway in reflex tracheal dilatation during bronchoconstriction in guinea pigs. Takahashi Y, et al. **Res Commun Mol Pathol Pharmacol** 1996 Sep;93(3):289–99
The Hering-Breuer reflex in ventilated children. Giffin F, et al. **Respir Med** 1996 Sep;90(8):463–6
The sniff-like aspiration reflex evoked by electrical stimulation of the nasopharynx. Benacka R, et al. **Respir Physiol** 1995 Dec;102(2–3):163–74
Reflex effects of stimulation of sympathetic afferents on the triangularis sterni. Coon RL, et al. **Respir Physiol** 1995 Dec; 102(2–3):187–94
Muscle relaxation attenuates the reflex response to laryngeal negative pressure. Janczewski WA. **Respir Physiol** 1997 Mar;107(3):219–30
Airway protective reflexes elicited by laryngeal ammonia: role of C-fiber afferents. Naida AM, et al. **Respir Physiol** 1996 Jan;103(1):11–7
Reflex reversal of apnoeic episodes by electrical stimulation of upper airway in cats. Tomori Z, et al. **Respir Physiol** 1995 Dec;102(2–3):175–85
Development of respiratory chemoreflexes to hypoxia and CO2 in unanaesthetized kittens. Watanabe T, et al. **Respir Physiol** 1996 Dec;106(3):247–54
Effect of ambient temperature on respiratory chemoreflex in unanaesthetized kittens. Watanabe T, et al. **Respir Physiol** 1996 Dec;106(3):239–46
Course of neurological recovery and cerebral prognostic signs during cardio-pulmonary resuscitation. Jørgensen EO. **Resuscitation** 1997 Aug;35(1):9–16
Hyperthermic seizures: an animal model for hot-water epilepsy. Ullal GR, et al. **Seizure** 1996 Sep;5(3):221–8
Ureterovesical junction inhibitory reflex and vesicoureteral junction excitatory reflex: description of two reflexes and their role in the ureteric antireflux mechanism. Shafik A. **Urol Res** 1996;24(6):339–43
Central neural circuits for the light-mediated reflexive control of choroidal blood flow in the pigeon eye: a laser Doppler study. Fitzgerald ME, et al. **Vis Neurosci** 1996 Jul-Aug;13(4):655–69
A model for optokinetic eye movements in turtles that incorporates properties of retinal-slip neurons. Rosenberg AF, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):375–83
[Pulmonary vagal afferents in man] Paleček F. **Cesk Fysiol** 1997 Jun;46(2):57–63 (90 ref.) (Eng. Abstr.) **(Cze)**
[Significance of hypotension and vasovagal reflex during echo-stress using high doses of dobutamine] Scandura S, et al. **Cardiologia** 1997 Mar;42(3):287–92 (Eng. Abstr.) **(Ita)**
[Reflex hypertension--cardiogenic hypertensive chemoreflex] Imamura K, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):155–8 (15 ref.) **(Jpn)**
[Systemic arterial pressure of cats during chemoreceptors stimulation of vertebral artery reflex zone] Kupriianov SV. **Aviakosm Ekolog Med** 1996;30(1):60–2 **(Rus)**
[New facts in the history of the doctrine of reflex control of the cardiovascular system (letter)] Bokser OIa, et al. **Fiziol Cheloveka** 1997 Jan-Feb;23(1):143–4 **(Rus)**
[Role of the processes of disinhibition of pacemakers in reflex activity of neural centers] Gurin VN, et al. **Fiziol Cheloveka** 1997 Mar-Apr;23(2):147–9 **(Rus)**
[Neurohumoral regulation of gastric secretion in middle-aged and old people] Korkushko OV, et al. **Fiziol Cheloveka** 1996 Nov-Dec;22(6):66–70 **(Rus)**
[The local reflex responses of rat tracheal smooth muscle] Fedin AN, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul; 82(7):67–73 (Eng. Abstr.) **(Rus)**
[The neuronal organization of the amygdala-visceral reflex arch] Baklavadzhian OG, et al. **Usp Fiziol Nauk** 1996 Jul-Sep;27(3):51–77 (193 ref.) (Eng. Abstr.) **(Rus)**

REFLEX, ABDOMINAL

Postoperative pain and superficial abdominal reflexes after posterolateral thoracotomy. Benedetti F, et al. **Ann Thorac Surg** 1997 Jul;64(1):207–10

PHYSIOLOGY

Abdominal reflexes. Yngve D. **J Pediatr Orthop** 1997 Jan-Feb;17(1):105–8

REFLEX, ABNORMAL

Miller Fisher syndrome in infancy. Benito-León J, et al. **Childs Nerv Syst** 1996 Sep;12(9):559–61
Cold caloric microcirculatory reflex disturbance in patients with Parkinson's disease. Kolev OI, et al. **Clin Auton Res** 1997 Apr;7(2):81–3
Brief report: HIV-exposed newborns show inferior orienting and abnormal reflexes on the Brazelton Scale. Scafidi F, et al. **J Pediatr Psychol** 1997 Feb;22(1):105–12
Acute management of autonomic dysreflexia: adults with spinal cord injury presenting to health-care facilities. Consortium for spinal cord. **J Spinal Cord Med** 1997 Jul; 20(3):284–308
Autonomic hyperreflexia associated with exacerbation of reflex sympathetic dystrophy. Clinchot DM, et al. **J Spinal Cord Med** 1996 Oct;19(4):255–7
Autonomic dysreflexia/hyperreflexia. Comarr AE, et al. **J Spinal Cord Med** 1997 Jul;20(3):345–54 (92 ref.)
Surgical aspects of autonomic dysreflexia. Eltorai IM, et al. **J Spinal Cord Med** 1997 Jul;20(3):361–4
Autonomic dysreflexia: pharmacological management of hypertensive crises in spinal cord injured patients. Naftchi NE, et al. **J Spinal Cord Med** 1997 Jul;20(3):355–60 (34 ref.)
Autonomic dysreflexia and detrusor-sphincter dyssynergia in spinal cord injury patients. Perkash I. **J Spinal Cord Med** 1997 Jul;20(3):365–70
Vasomotor reflex testing in leprosy patients, healthy contacts and controls: a cross-sectional study in western Nepal. Wilder-Smith E, et al. **Lepr Rev** 1996 Dec;67(4):306–17
Autonomic hyperreflexia associated with recurrent cardiac arrest: case report. Colachis SC 3rd, et al. **Spinal Cord** 1997 Apr;35(4):256–7
[A case of atypical Miller-Fisher syndrome treated with intravenous immunoglobulins (letter)] Auzou P, et al. **Ann Med Interne (Paris)** 1996;147(6):458–9 (12 ref.) **(Fre)**
[Fisher's syndrome with profound hypotension] Arai M, et al. **Rinsho Shinkeigaku** 1996 Jun;36(6):797–9 (Eng. Abstr.) **(Jpn)**
[Immunoadsorption therapy for Fisher's syndrome: analysis of the recovery process of external ophthalmoplegia and the removal ability of anti-GQ1b antibodies] Chida K, et al. **Rinsho Shinkeigaku** 1996 Apr;36(4):551–6 (Eng. Abstr.) **(Jpn)**
[A case of relapsing Guillain-Barré syndrome following Miller Fisher syndrome] Mochizuki A, et al. **Rinsho Shinkeigaku** 1996 May;36(5):675–9 (18 ref.) (Eng. Abstr.) **(Jpn)**

["Forced mouth opening reaction" associated with corticobasal degeneration] Ohkawa S, et al. **Rinsho Shinkeigaku** 1997 Apr;37(4):275–82 (Eng. Abstr.) **(Jpn)**

[Treatment of the reflex syndromes of lumbar osteochondrosis at a central district hospital] Efremov VP. **Lik Sprava** 1995 Sep–Dec;(9–12):134–7 (Eng. Abstr.) **(Rus)**

[A case of Miller Fisher syndrome with good response to immunoglobulins (letter)] Lorente L, et al. **An Med Interna** 1996 Jun;13(6):304 **(Spa)**

DRUG EFFECTS

Heart rate responses to intravenous serotonin in rats with acute chagasic myocarditis. Torres A, et al. **Braz J Med Biol Res** 1996 Jun;29(6):817–22

Inhalation cough challenge in the investigation of the cough reflex and antitussives. Morice AH. **Pulm Pharmacol** 1996 Oct–Dec;9(5–6):281–4 (25 ref.)

GENETICS

Startle disease--hyperekplexia (two sibling cases). Altunbaşak S, et al. **Seizure** 1996 Dec;5(4):313–5

PHYSIOLOGY

Startle syndrome: the blink reflex study suggests the private involvement of lower brainstem in the pathophysiology [letter] Gatzonis S, et al. **Acta Neurol Scand** 1996 Apr; 93(4):303–5

Reflex apnoea response and inflammatory mediators in infants with respiratory tract infection. Lindgren C, et al. **Acta Paediatr** 1996 Jul;85(7):798–803

Respiratory syncytial virus infection enhances the response to laryngeal chemostimulation and inhibits arousal from sleep in young lambs. Lindgren C, et al. **Acta Paediatr** 1996 Jul;85(7):789–97

Sensitivity of the cough reflex in young and elderly subjects. Newnham DM, et al. **Age Ageing** 1997 May;26(3):185–8

Effects of exercise during head-down bed rest on postural control. Davis JE, et al. **Aviat Space Environ Med** 1997 May;68(5):392–5

Effect of an upper respiratory tract infection on upper airway reactivity. Nandwani N, et al. **Br J Anaesth** 1997 Apr; 78(4):352–5

Differences in detrusor contractile function in women with neuropathic and idiopathic detrusor instability. Gray R, et al. **Br J Urol** 1997 Aug;80(2):222–6

The late blink reflex response abnormality due to lesion of the lateral tegmental field. Aramideh M, et al. **Brain** 1997 Sep;120 (Pt 9):1685–92

MRI of an infant with Fisher syndrome. Suzuki K, et al. **Childs Nerv Syst** 1997 Feb;13(2):95–6

Reflex hyperexcitability and muscle contracture in relation to spastic hypertonia. O'Dwyer NJ, et al. **Curr Opin Neurol** 1996 Dec;9(6):451–5 (38 ref.)

Primitive reflexes and early motor development. Bartlett D. **J Dev Behav Pediatr** 1997 Jun;18(3):151–7

Utility of developmental reflexes in the differential diagnosis and prognosis of incontinence in Alzheimer's disease. Franssen EH, et al. **J Geriatr Psychiatry Neurol** 1997 Jan; 10(1):22–8

Autonomic neuropathy in extra-hepatic portal vein thrombosis: evidence for impaired autonomic reflex arc. Voigt MD, et al. **J Hepatol** 1997 Mar;26(3):634–41

Stretch hyperreflexia of triceps surae muscles in the conscious cat after dorsolateral spinal lesions. Taylor JS, et al. **J Neurosci** 1997 Jul 1;17(13):5004–15

Prognostic significance of the delayed plantar reflex following spinal cord injury. Weinstein DE, et al. **J Spinal Cord Med** 1997 Apr;20(2):207–11

Myoclonus in corticobasal degeneration. Carella F, et al. **Mov Disord** 1997 Jul;12(4):598–603

Neurophysiological investigations in patients with head tremor. Valls-Solé J, et al. **Mov Disord** 1997 Jul; 12(4):576–84

Detrusor contractility in hyperreflexic bladders (from intracerebral neuropathies) versus unstable and stable unobstructed ones. Cucchi A. **Neurourol Urodyn** 1996; 15(2):109–15; discussion 115–7

A case of reflex anuria and uremia related to a unilateral ureteral stone. Hayashi K, et al. **Nippon Jinzo Gakkai Shi** 1996 Oct;38(10):460–2 (5 ref.)

Autonomic hyperreflexia revisited. Schurch B, et al. **Urol Int** 1997;58(3):148–52

[Anal sphincter electromyography, bulbocavernosus reflex and pudendal somatosensory evoked potentials in diagnosis of neurogenic lumbosacral lesions with disorders of bladder and large intestine emptying and erectile dysfunction] Ziemann U, et al. **Nervenarzt** 1996 Feb;67(2):140–6 (Eng. Abstr.) **(Ger)**

[Carotid baroreflex in sleep apnea patients] Klawe JJ, et al. **Pneumologie** 1997 Aug;51 Suppl 3:744–6 (Eng. Abstr.) **(Ger)**

[Chemoreflex and baroreflex sensitivity in patients with survived sudden cardiac death] Hennersdorf M, et al. **Z Kardiol** 1997 Mar;86(3):196–203 (Eng. Abstr.) **(Ger)**

[Problems in carrying out baroreflex sensitivity measurements in clinical routine practice: practicability and complications] Schwick N, et al. **Z Kardiol** 1997 Mar; 86(3):165–70 (Eng. Abstr.) **(Ger)**

[The Miller Fisher syndrome. Review of the cases of the Santa Maria Hospital] Carvalho M, et al. **Acta Med Port** 1996 Apr–Jun;9(4–6):167–70 (Eng. Abstr.) **(Por)**

[Endaural reflex diagnosis of cochleovestibular dysfunctions in patients with vascular brain diseases] Troshin OV. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(5):59–63 (Eng. Abstr.) **(Rus)**

REFLEX, ACOUSTIC

Otolith–ocular responses in familial episodic ataxia linked to chromosome 19p. Furman JM. **Ann Neurol** 1997 Aug; 42(2):189–93

Auditory performance and acoustic reflexes in young adults reporting listening difficulties. Higson JM, et al. **Br J Audiol** 1996 Dec;30(6):381–7

The acoustic reflex in adults with histories of otitis media in childhood. Stephenson H, et al. **Ear Hear** 1997 Feb; 18(1):62–72

The acoustic reflex at a 1000 Hz probe frequency: phasor and vector analysis. Ferguson J, et al. **S Afr J Commun Disord** 1995;42:29–34

DRUG EFFECTS

The effect of levodopa on the habituation of the acoustic-palpebral reflex in Parkinson's disease. Rey RD, et al. **Electromyogr Clin Neurophysiol** 1996 Sep; 36(6):357–60

PHYSIOLOGY

Abnormal audiograms and elevated acoustic reflex thresholds in obligate carriers of autosomal recessive non-syndromic hearing loss. Cohen M, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):337–42

Hearing assessment in children with stapedius reflex threshold measurements--an alternative objective approach. Jauhiainen T, et al. **Adv Otorhinolaryngol** 1997; 51:1–7

Roles of the amygdala and bed nucleus of the stria terminalis in fear and anxiety measured with the acoustic startle reflex. Possible relevance to PTSD. Davis M, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:305–31 (76 ref.)

Click-rate induced facilitation of the acoustic reflex using constant number of pulses. Rawool VW. **Audiology** 1996 Jul–Aug;35(4):171–9

Binaural summation of the acoustic reflex. Higson JM, et al. **Ear Hear** 1996 Aug;17(4):334–40

Frequency summation observed in the human acoustic reflex. Kawase T, et al. **Hear Res** 1997 Jun;108(1–2):37–45

Effect of the middle ear reflex on sound transmission to the inner ear of rat. Pilz PK, et al. **Hear Res** 1997 Mar; 105(1–2):171–82

Validity of the ipsilateral acoustic reflex as a screening parameter. Sells JP, et al. **J Am Acad Audiol** 1997 Apr; 8(2):132–6

Adenosine A2a receptors in the nucleus accumbens modulate prepulse inhibition of the startle response. Hauber W, et al. **Neuroreport** 1997 Apr 14;8(6):1515–8

Acoustic reflex monitoring during the presentation of 1000 clicks at high repetition rates. Rawool VW. **Scand Audiol** 1996;25(4):239–45

[Recruitment detection--a comparison of category loudness scaling and classical supra-threshold audiometry] Kiessling J, et al. **Laryngorhinootologie** 1996 Jan;75(1):10–7 (Eng. Abstr.) **(Ger)**

REFLEX, BABINSKI

The Babinski sign: 100 years on [editorial] [see comments] Ditunno JF, et al. **BMJ** 1996 Oct 26;313(7064):1029–30. Comment in: BMJ 1997 Feb 1;314(7077):374.

The Babinski sign. Reliability of new technology must be alarmingly low [letter; comment] Hughes T. **BMJ** 1997 Feb 1;314(7077):374. Comment on: BMJ 1996 Oct 26;313(7064):1029–30.

The Babinski sign. Eliciting the sign brings out doctors' masochistic tendencies [letter; comment] Rayner PH. **BMJ** 1997 Feb 1;314(7077):374. Comment on: BMJ 1996 Oct 26;313(7064):1029–30.

The Babinski sign: the first hundred years. van Gijn J. **J Neurol** 1996 Oct;243(10):675–83

A hundred years of the Babinski reflex [see comments] Sahadevan MG. **J R Coll Physicians Lond** 1996 Jan–Feb; 30(1):83. Comment in: J R Coll Physicians Lond 1996 Mar–Apr;30(2):190.

One century after the description of the "sign": Joseph Babinski and his contribution to neurosurgery. Lanzino G, et al. **Neurosurgery** 1997 Apr;40(4):822–8; discussion 828

[Doubtful Babinski reflex and the Szapiro method] Krawczyk M. **Neurol Neurochir Pol** 1996 Sep–Oct;30(5):887–8 **(Pol)**

[The extension cutaneous-plantar reflex (Babinski, 1896/1898) (letter; comment)] Araujo AO. **Arq Neuropsiquiatr** 1995 Dec;53(4):862–4. Comment on: Arq Neuropsiquiatr 1995 Jun;53(2):318–23. **(Por)**

PHYSIOLOGY

[Abduction of the toes and the fan sign (Babinski, 1903)] de Oliveira-Souza R, et al. **Arq Neuropsiquiatr** 1996 Sep; 54(3):519–24 **(Fre, Por)**

REFLEX, BARORECEPTOR see **BAROREFLEX**

REFLEX, BLINK see **BLINKING**

REFLEX, CONDITIONED see **CONDITIONING, CLASSICAL**

REFLEX, CORNEAL see **BLINKING**

REFLEX, MONOSYNAPTIC

DRUG EFFECTS

Inhibition of spinal monosynaptic reflex in newborn rats by aurintricarboxylic acid. Sun X, et al. **Neurosci Res** 1997 Apr;27(4):371–6

Diisopropylfluorophosphate-induced depression of segmental monosynaptic transmission in neonatal rat spinal cord is also mediated by increased axonal activity. Deshpande SB, et al. **Toxicol Lett** 1997 Feb 7; 90(2–3):177–82

[Effects of halothane, isoflurane, enflurane, and sevoflurane on the monosynaptic reflex response in the isolated spinal cord of newborn rats] Tsutahara S, et al. **Masui** 1996 Jul; 45(7):829–36 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Mental simulation of an action modulates the excitability of spinal reflex pathways in man. Bonnet M, et al. **Brain Res Cogn Brain Res** 1997 Mar;5(3):221–8

Further evidence for non-monosynaptic group I excitation of motoneurones in the human lower limb. Chaix Y, et al. **Exp Brain Res** 1997 Jun;115(1):35–46

Monosynaptic input from cutaneous sensory afferents to fin motoneurons in lamprey. el Manira A, et al. **J Comp Neurol** 1996 Jun 10;369(4):533–42

Mechanical actions of heterogenic reflexes among ankle stabilizers and their interactions with plantarflexors of the cat hindlimb. Bonasera SJ, et al. **J Neurophysiol** 1996 May; 75(5):2050–70

Membrane properties and monosynaptic retinal excitation of neurons in the turtle accessory optic system. Kogo N, et al. **J Neurophysiol** 1997 Aug;78(2):614–27

The influence of muscle spindle discharge on the human H reflex and the monosynaptic reflex in the cat. Wood SA, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):279–90

REFLEX, OCULOCARDIAC

The oculocardiac reflex in cataract surgery in the elderly [letter] Gao L, et al. **Br J Ophthalmol** 1997 Jul;81(7):614

Low incidence of the oculocardiac reflex and postoperative nausea and vomiting in adults undergoing strabismus surgery. Tramèr MR, et al. **Can J Anaesth** 1997 Aug; 44(8):830–5

Prolonged oculocardiac reflex during strabismus surgery under topical anesthesia. Arnold RW, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jul–Aug;34(4):252–4

DRUG EFFECTS

[Effect of locally applied lidocaine on expression of the oculocardiac reflex] Ruta U, et al. **Ophthalmologe** 1997 May;94(5):354–9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Estimation of fast vagal response by time-dependent analysis of heart rate variability in normal subjects. Keselbrener L, et al. **Clin Auton Res** 1996 Dec;6(6):321–7

REFLEX, ORBICULARIS OCULI see **BLINKING**

REFLEX, PHARYNGEAL see **GAGGING**

REFLEX, PSYCHOGALVANIC see **GALVANIC SKIN RESPONSE**

REFLEX, PUPILLARY

see related
ADIE'S SYNDROME

Significance of pupillary reactivity in poor-grade aneurysm patients as a prognostic factor and an indication for active treatment. Yoshimoto Y, et al. **Br J Neurosurg** 1997 Feb; 11(1):25–31

Impact of disease duration on cardiovascular and pupillary autonomic nervous function in IDDM and NIDDM patients. Straub RH, et al. **Diabetes Care** 1996 Sep; 19(9):960–7

Accommodation, convergence, pupil diameter and eye blinks at a CRT display flickering near fusion limit. Jaschinski W, et al. **Ergonomics** 1996 Jan;39(1):152–64

Ciliospinal reflex response in cluster headache. Havelius U, et al. **Headache** 1996 Oct;36(9):568–73

Nonlinear shunting model of the pupil light reflex. Bressloff PC, et al. **Proc R Soc Lond B Biol Sci** 1996 Aug 22; 263(1373):953–60

DRUG EFFECTS

Sympathetic nervous system does not mediate reflex pupillary dilation during desflurane anesthesia. Larson MD, et al. **Anesthesiology** 1996 Oct;85(4):748–54

REFLEX, PUPILLARY

Effect of locally applied prazosin on the kinetics of the pupillary light reflex. Mortlock SA, et al. **Br J Clin Pharmacol** 1996 Aug;42(2):236–8

Pupillometric assessment of compensatory effort in a memory search task under physical and pharmacologically-induced suboptimal states. Deijen JB, et al. **Can J Exp Psychol** 1995 Sep;49(3):387–96

[Sleep modifies anticholinergic mydriasis] Krastel H, et al. **Ophthalmologe** 1996 Aug;93(4):476–8 (Eng. Abstr.) **(Ger)**

[Pupillary diameter and pupillary reactions in heroin dependent patients and in patients participating in a methadone and morphine replacement program] Linzmayer L, et al. **Wien Med Wochenschr** 1997;147(3):67–9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Sympathetic nervous system does not mediate reflex pupillary dilation during desflurane anesthesia. Larson MD, et al. **Anesthesiology** 1996 Oct;85(4):748–54

Assessing aspects of auditory handicap by means of pupil dilatation. Kramer SE, et al. **Audiology** 1997 May–Jun; 36(3):155–64

Behavior of luminance neurons in the pretectal olivary nucleus during the pupillary near response. Zhang H, et al. **Exp Brain Res** 1996 Nov;112(1):158–62

Further characterization of autonomic involvement in multiple system atrophy: a pupillometric study. Micieli G, et al. **Funct Neurol** 1995 Nov–Dec;10(6):273–80

Retinoscopic reflexes: theoretical basis and effects of monochromatic aberrations. Roorda A, et al. **J Am Optom Assoc** 1996 Oct;67(10):610–8

Afferent pupillary defects and the swinging flashlight test. What you thought you already knew. Modica PA. **Optom Clin** 1996;5(3–4):1–15 (24 ref.)

[Measuring leukocyte velocity in macular capillaries using a miniaturized blue field simulator: effect of aperture of the pupil] Petrig BL, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):305–7 (Eng. Abstr.) **(Ger)**

[Pupillography for objective vigilance assessment. Methodological problems and possible solutions] Wilhelm B, et al. **Ophthalmologe** 1996 Aug;93(4):446–50 (Eng. Abstr.) **(Ger)**

[The pupil and retrogeniculate visual pathway. Overview] Wilhelm H. **Ophthalmologe** 1996 Aug;93(4):319–24 (24 ref.) (Eng. Abstr.) **(Ger)**

[Pupillography as an objective attention test] Wilhelm B, et al. **Wien Med Wochenschr** 1996;146(13–14):387–9 (Eng. Abstr.) **(Ger)**

[Pupilography in early diagnosis of primary open-angle glaucoma] Khadikova ÉV, et al. **Vestn Oftalmol** 1997 May–Jun;113(3):12–4 (Eng. Abstr.) **(Rus)**

REFLEX, STRETCH

Relation of early neuromotor and cranial signs with neuropsychological outcome at 4 years. Amiel-Tison C, et al. **Brain Dev** 1996 Jul–Aug;18(4):280–6

Impaired stretch reflex and joint torque modulation during spastic gait in multiple sclerosis patients. Sinkjaer T, et al. **J Neurol** 1996 Aug;243(8):566–74

Robert Whytt and the stretch reflex. Pearce JM. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):484

Gain of the triceps surae stretch reflex in decerebrate and spinal cats during postural and locomotor activities. Bennett DJ, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):837–50

Preservation of reflex movement in a pediatric patient with a complete spinal cord injury: case report. Maliner LI, et al. **J Trauma** 1997 Jul;43(1):134–6

[Immunoadsorption therapy for Fisher's syndrome: analysis of the recovery process of external ophthalmoplegia and the removal ability of anti-GQ1b antibodies] Chida K, et al. **Rinsho Shinkeigaku** 1996 Apr;36(4):551–6 (Eng. Abstr.) **(Jpn)**

[A case of relapsing Guillain-Barré syndrome following Miller Fisher syndrome] Mochizuki A, et al. **Rinsho Shinkeigaku** 1996 May;36(5):675–9 (18 ref.) (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Increase of flexor reflex latency in patients with amyotrophic lateral sclerosis treated with riluzole [letter] Riepe MW, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):427

The influence of dizocilpine (MK-801) on the reserpine-enhanced electromyographic stretch reflex in rats. Ossowska K, et al. **Neurosci Lett** 1996 Jan 19; 203(2):73–6

GENETICS

Arch fingerprints, hypotonia, and areflexia associated with X linked mental retardation. Stevenson RE, et al. **J Med Genet** 1997 Jun;34(6):465–9

PHYSIOLOGY

Erb's explanation for the tendon reflexes. Links between science and the clinic. Louis ED, et al. **Arch Neurol** 1996 Nov;53(11):1187–9

Sensitivity of the jaw-jerk reflex in patients with myogenous temporomandibular disorder. Lobbezoo F, et al. **Arch Oral Biol** 1996 Jun;41(6):553–63

Age-dependent effects of muscle vibration and the Jendrassik maneuver on the patellar tendon reflex response. Burke JR, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):600–4

The optokinetic cervical reflex in pilots of high-performance aircraft. Merryman RF, et al. **Aviat Space Environ Med** 1997 Jun;68(6):479–87

Aviation spatial orientation in relationship to head position and attitude interpretation. Patterson FR, et al. **Aviat Space Environ Med** 1997 Jun;68(6):463–71

Aviation spatial orientation in relationship to head position, altitude interpretation, and control. Smith DR, et al. **Aviat Space Environ Med** 1997 Jun;68(6):472–8

Motor unit recruitment patterns during reflex compensation of muscle yield investigated by computer simulations. Boskov D, et al. **Biol Cybern** 1996 Sep;75(3):211–7

Influences of muscle stretch reflexes on voluntary, velocity-controlled movements in spastic paraparesis. Knutsson E, et al. **Brain** 1997 Sep;120 (Pt 9):1621–33

Spinal NK1 receptors contribute to the increased excitability of the nociceptive flexor reflex during persistent peripheral inflammation. Parsons AM, et al. **Brain Res** 1996 Nov 11; 739(1–2):263–75

Biceps femoris tendon jerk reflexes are enhanced at the end of the swing phase in humans. Van de Crommert HW, et al. **Brain Res** 1996 Sep 23;734(1–2):341–4

Normal values of patellar and ankle tendon reflex latencies. Frijns CJ, et al. **Clin Neurol Neurosurg** 1997 Feb;99(1):31–6

Soleus muscle length, stretch reflex excitability, and the contractile properties of muscle in children and adults: a study of the functional joint angle. Lin JP, et al. **Dev Med Child Neurol** 1997 Jul;39(7):469–80

Effect of manual therapy techniques on the stretch reflex in normal human quadriceps. Newham DJ, et al. **Disabil Rehabil** 1997 Aug;19(8):326–31

Relationship between the degree of inhibited stretch reflex activities of the wrist flexor and reaction time during quick extension movements. Kizuka T, et al. **Electroencephalogr Clin Neurophysiol** 1997 Aug; 105(4):302–8

Reflexes evoked in human erector spinae muscles by tapping during voluntary activity. Tani T, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jun; 105(3):194–200

Early onset cerebellar ataxia with retained tendon reflexes (EOCA): an electromyographic study. Pal PK, et al. **Electromyogr Clin Neurophysiol** 1996 Jul–Aug;36(5):287–93

Effects of differently induced stretch loads on neuromuscular control in drop jump exercise. Avela J, et al. **Eur J Appl Physiol** 1996;72(5–6):553–62

Stretch shortening cycle fatigue: interactions among joint stiffness, reflex, and muscle mechanical performance in the drop jump [corrected] [published erratum appears in Eur J Appl Physiol 1996;74(6):575] Horita T, et al. **Eur J Appl Physiol** 1996;73(5):393–403

Reduced stretch-reflex sensitivity after exhausting stretch-shortening cycle exercise. Nicol C, et al. **Eur J Appl Physiol** 1996;72(5–6):401–9

Tracking performance with sinusoidal and irregular targets under different conditions of peripheral feedback. Cathers I, et al. **Exp Brain Res** 1996 Oct;111(3):437–46

Responses of motor cortical cells to short trains of vibration. Fourment A, et al. **Exp Brain Res** 1996 Sep;111(2):208–14

Symmetric force response of human masticatory muscles to stretch and unloading. Miles TS, et al. **Exp Brain Res** 1997 Apr;114(2):371–6

Tendon tap induces a single long-lasting excitatory reflex in the motoneurons of human soleus muscle. Türker KS, et al. **Exp Brain Res** 1997 Jun;115(1):169–73

Identification of intrinsic and reflex contributions to human ankle stiffness dynamics. Kearney RE, et al. **IEEE Trans Biomed Eng** 1997 Jun;44(6):493–504

A comparative study of changes operated by sympathetic nervous system activation on spindle afferent discharge and on tonic vibration reflex in rabbit jaw muscles. Passatore M, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):163–7

Strain distribution on rat medial gastrocnemius (MG) during passive stretch. van Bavel H, et al. **J Biomech** 1996 Aug; 29(8):1069–74

Unequal atrial stretch in dogs increases dispersion of refractoriness conducive to developing atrial fibrillation. Satoh T, et al. **J Cardiovasc Electrophysiol** 1996 Sep; 7(9):833–42

Modulation of the mandibular stretch reflex sensitivity during various phases of rhythmic open-close movements in humans. van der Bilt A, et al. **J Dent Res** 1997 Apr; 76(4):839–47

Eye opening reflex triggered by flexion of an arm: a manifestation of decerebrate response in diffuse bilateral hemispheric damage [letter] Ohkawa S, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):424–5

Central modifications of reflex parameters may underlie the fastest arm movements. Adamovich SV, et al. **J Neurophysiol** 1997 Mar;77(3):1460–9

Age-related impaired reflex sensitivity in a human hand muscle. Corden DM, et al. **J Neurophysiol** 1996 Oct; 76(4):2701–6

Regional variability of stretch reflex amplitude in the cat medial gastrocnemius muscle during a postural task. Eng JJ, et al. **J Neurophysiol** 1997 Aug;78(2):1150–4

Neural mechanisms of reflex reversal in coxo-basipodite depressor motor neurons of the crayfish. Le Ray D, et al. **J Neurophysiol** 1997 Apr;77(4):1963–78

Implications of positive feedback in the control of movement. Prochazka A, et al. **J Neurophysiol** 1997 Jun;77(6):3237–51

Stretch hyperreflexia of triceps surae muscles in the conscious cat after dorsolateral spinal lesions. Taylor JS, et al. **J Neurosci** 1997 Jul 1;17(13):5004–15

Hyperactive pectoralis reflex as an indicator of upper cervical spinal cord compression. Report of 15 cases. Watson JC, et al. **J Neurosurg** 1997 Jan;86(1):159–61

Quantitative evaluation of the tonic vibration reflex (TVR) in the masseter muscle. Takata Y, et al. **J Oral Maxillofac Surg** 1996 Nov;54(11):1307–13

Reflex responses of the masseter muscle in patients with chronic arthritis or internal derangement of the temporomandibular joint. A comparison with symptomfree subjects. Bjørnland T, et al. **J Oral Rehabil** 1996 Dec; 23(12):805–10

Reflex (unloading) and (defensive capitulation) responses in human neck muscle. Corna S, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):589–96

Excitatory and inhibitory motor reflexes in the isolated guinea-pig stomach. Hennig GW, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):197–212

A mechanism for altered flexibility in human skeletal muscle. Magnusson SP, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):291–8

Spindle and motoneuronal contributions to the phase advance of the human stretch reflex and the reduction of tremor. Matthews PB. **J Physiol (Lond)** 1997 Jan 1;498 (Pt 1):249–75

Pulsatile motor output in human finger movements is not dependent on the stretch reflex. Wessberg J, et al. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):895–908

The influence of stretching and warm-up exercises on Achilles tendon reflex activity. Rosenbaum D, et al. **J Sports Sci** 1995 Dec;13(6):481–90

[A physiological study on instability in Parkinson's disease] Mitoma H. **Nippon Rinsho** 1997 Jan;55(1):168–72 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Osteotendinous or myotatic reflex? (letter)] Ulla Anes M. **Med Clin (Barc)** 1997 Feb 22;108(7):279 **(Spa)**

REFLEX SYMPATHETIC DYSTROPHY

Complex regional pain syndromes: including "reflex sympathetic dystrophy" and "causalgia". Walker SM, et al. **Anaesth Intensive Care** 1997 Apr;25(2):113–25 (76 ref.)

Reflex sympathetic dystrophy. The controversy continues. Nath RK, et al. **Clin Plast Surg** 1996 Jul;23(3):435–46 (86 ref.)

Reflex sympathetic dystrophy syndrome: diagnosis and treatment. Borg AA. **Disabil Rehabil** 1996 Apr;18(4):174–80 (56 ref.)

Osteopathic medical considerations of reflex sympathetic dystrophy. Nelson KE. **J Am Osteopath Assoc** 1997 May; 97(5):286–9 (30 ref.)

Complex regional pain syndrome. Colton AM, et al. **J Foot Ankle Surg** 1996 Jul–Aug;35(4):284–96 (42 ref.)

Reflex sympathetic dystrophy. Timely diagnosis and treatment can prevent severe contractures. Lopez RF. **Postgrad Med** 1997 Apr;101(4):185–90 (21 ref.)

[Primary algodystrophy of the elbow: an unusual location] Bruscas C, et al. **An Med Interna** 1996 Sep;13(9):447–9 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

[Reflex sympathetic dystrophy syndrome associated with phenobarbital (letter)] Gabriel Botella F, et al. **An Med Interna** 1996 Jul;13(7):336–8 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Spontaneous fusion of the midfoot following reflex sympathetic dystrophy. A case report and review of the literature. Stratton NJ, et al. **Am J Orthop** 1996 Jul; 25(7):497–9 (16 ref.)

Reflex sympathetic dystrophy syndrome with microtrabecular fracture in a patient with osteogenesis imperfecta. Neri R, et al. **Clin Rheumatol** 1997 Jun; 16(4):363–6

Anterior knee pain syndromes in the adolescent. Stanitski CL. **Instr Course Lect** 1994;43:211–20 (77 ref.)

Reflex sympathetic dystrophy with mutilating ulcerations suspicious of a factitial origin. Lipp KE, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):843–5

Development and preliminary validation of a pain measure specific to neuropathic pain: the Neuropathic Pain Scale. Galer BS, et al. **Neurology** 1997 Feb;48(2):332–8

Two new case-reports of reflex sympathetic dystrophy syndrome in patients with osteogenesis imperfecta. Review of the literature [letter] Bouvier M, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):202–4 (14 ref.)

[A pain syndrome of compression-reflex origin: the mechanisms of its development and the means for its therapeutic management] Seleznev AN. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(3):26–31 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Objective tests exist to aid diagnosis of hand-arm vibration

syndrome [letter; comment] Lawson IJ, et al. **BMJ** 1996 Nov 2;313(7065):1148. Comment on: BMJ 1996 Jul 27;313(7051):223–6.
Reflex sympathetic dystrophy. Gordon N. **Brain Dev** 1996 Jul–Aug;18(4):257–62 (49 ref.)
Cervical mass lesion presenting as reflex sympathetic dystrophy of the hand. Bhatnagar A, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):101–4
Validation of thermography in the diagnosis of reflex sympathetic dystrophy. Bruehl S, et al. **Clin J Pain** 1996 Dec;12(4):316–25
Stress infrared telethermography is useful in the diagnosis of complex regional pain syndrome, type I (formerly reflex sympathetic dystrophy). Gulevich SJ, et al. **Clin J Pain** 1997 Mar;13(1):50–9
Pseudodystrophy at the lower limb in children. Herregods P, et al. **Clin Rheumatol** 1997 Jun;16(4):425–8
Reflex sympathetic dystrophy: the clinician's perspective. Hardy MA, et al. **J Hand Ther** 1997 Apr–Jun;10(2):137–50 (153 ref.)
Münchausen's syndrome simulating reflex sympathetic dystrophy. Chevalier X, et al. **J Rheumatol** 1996 Jun; 23(6):1111–2
Abnormal movements in a patient with reflex sympathetic dystrophy [letter; comment] Feinstein A. **Mov Disord** 1997 May;12(3):470–1. Comment on: Mov Disord 1997 Mar;12(2):243–5.
Movement disorder in reflex sympathetic dystrophy: a case proven to be psychogenic by surveillance video monitoring [see comments] Kurlan R, et al. **Mov Disord** 1997 Mar; 12(2):243–5. Comment in: Mov Disord 1997 May;12(3):470–1.
Two new case-reports of reflex sympathetic dystrophy syndrome in patients with osteogenesis imperfecta. Review of the literature [letter] Bouvier M, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):202–4 (14 ref.)
An X-ray absorptiometry study of reflex sympathetic dystrophy syndrome. Laroche M, et al. **Rev Rhum Engl Ed** 1997 Feb;64(2):106–11 (17 ref.)
[Algodystrophies: diagnosis] Estève M, et al. **Cah Anesthesiol** 1996;44(4):377–82 (15 ref.) **(Fre)**
[Inflammation of the lower leg] Lehmann S. **Schweiz Rundsch Med Prax** 1997 Apr 16;86(16):673–4 **(Ger)**
[Reflex sympathetic dystrophy] Danilov AB, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(4):15–9 (Eng. Abstr.) **(Rus)**
[Sympathetic reflex dystrophy: an uncommon illness in childhood] Valdivielso Serna A, et al. **An Esp Pediatr** 1996 Aug;45(2):189–92 **(Spa)**

DRUG THERAPY

Intravenous guanethidine in patients with reflex sympathetic dystrophy [see comments] Kaplan R, et al. **Acta Anaesthesiol Scand** 1996 Nov;40(10):1216–22. Comment in: Acta Anaesthesiol Scand 1996 Nov;40(10):1171–2.
Reflex sympathetic dystrophy treated with guanethidine. Time for a change of name and strategy [editorial; comment] Valentin N. **Acta Anaesthesiol Scand** 1996 Nov; 40(10):1171–2. Comment on: Acta Anaesthesiol Scand 1996 Nov;40(10):1216–22.
Bisphosphonate therapy of reflex sympathetic dystrophy syndrome. Adami S, et al. **Ann Rheum Dis** 1997 Mar; 56(3):201–4
Reflex sympathetic dystrophy treated with gabapentin. Mellick GA, et al. **Arch Phys Med Rehabil** 1997 Jan; 78(1):98–105
Calcitonin treatment in reflex sympathetic dystrophy: a preliminary study. Hamamci N, et al. **Br J Clin Pract** 1996 Oct–Nov;50(7):373–5
Re: Long-term treatment of intractable reflex sympathetic dystrophy with intrathecal morphine [letter; comment] Berry H. **Can J Neurol Sci** 1996 May;23(2):156–7. Comment on: Can J Neurol Sci 1995 May;22(2):153–9.
Complex regional pain syndrome (reflex sympathetic dystrophy and causalgia): management with the calcium channel blocker nifedipine and/or the alpha-sympathetic blocker phenoxybenzamine in 59 patients. Muizelaar JP, et al. **Clin Neurol Neurosurg** 1997 Feb;99(1):26–30
Treatment of severe, recalcitrant reflex sympathetic dystrophy: assessment of efficacy and safety of the second generation bisphosphonate pamidronate. Cortet B, et al. **Clin Rheumatol** 1997 Jan;16(1):51–6
The pharmacologic approach to the painful hand. Czop C, et al. **Hand Clin** 1996 Nov;12(4):633–42 (42 ref.)
Reflex sympathetic dystrophy: treatment with long-acting intramuscular corticosteroids. Grundberg AB. **J Hand Surg [Am]** 1996 Jul;21(4):667–70
Dual energy X-ray absorptiometry in patients with lower limb reflex sympathetic dystrophy syndrome [see comments] Chapurlat RD, et al. **J Rheumatol** 1996 Sep; 23(9):1557–9. Comment in: J Rheumatol 1997 Apr;24(4):812–4.
Phantom pain with probable reflex sympathetic dystrophy: efficacy of fentanyl infiltration of the stellate ganglion. Wassef MR. **Reg Anesth** 1997 May–Jun;22(3):287–90

EPIDEMIOLOGY

Eating disorders and reflex sympathetic dystrophy syndrome: is there a common pathway? Silber TJ. **Med Hypotheses** 1997 Mar;48(3):197–200 (21 ref.)
Reply to Veldman and Goris, PAIN, 64 (1996) 463–466 [letter; comment] Malleson P. **Pain** 1997 Jun;71(2):207–8. Comment on: Pain 1996 Mar;64(3):463–6.
[Algodystrophy after distal radius fractures] Zyluk A. **Chir Narzadow Ruchu Ortop Pol** 1996;61(4):349–55 (Eng. Abstr.) **(Pol)**

ETIOLOGY

"Complex regional pain syndrome" after trauma from high-heeled shoe [letter] Engelhart M, et al. **Acta Derm Venereol** 1997 Jul;77(4):331–2
Reflex sympathetic dystrophy following neck dissections. Kiroğlu MM, et al. **Am J Otolaryngol** 1997 Mar–Apr; 18(2):103–6
Reflex sympathetic dystrophy. Gordon N. **Brain Dev** 1996 Jul–Aug;18(4):257–62 (49 ref.)
Reflex sympathetic dystrophy after a burn injury. van der Laan L, et al. **Burns** 1996 Jun;22(4):303–6
Reflex sympathetic dystrophy syndrome following acute gouty arthritis. Zucchi F, et al. **Clin Exp Rheumatol** 1996 Jul–Aug;14(4):417–20
Reflex sympathetic dystrophy, patella infera contracture syndrome, and loss of motion following anterior cruciate ligament surgery. Bach BR Jr, et al. **Instr Course Lect** 1997; 46:251–60 (25 ref.)
Reflex sympathetic dystrophy and pain dysfunction in the lower extremity. Lindenfeld TN, et al. **Instr Course Lect** 1997;46:261–8 (51 ref.)
Subtalar dislocations. A study of 19 cases [letter; comment] Rodriguez-Merchan EC. **Int Orthop** 1997;21(2):142. Comment on: Int Orthop 1996;20(2):83–6.
Algodystrophy is an early complication of Colles' fracture. What are the implications? Field J, et al. **J Hand Surg [Br]** 1997 Apr;22(2):178–82
Autonomic hyperreflexia associated with exacerbation of reflex sympathetic dystrophy. Clinchot DM, et al. **J Spinal Cord Med** 1996 Oct;19(4):255–7
Reflex sympathetic dystrophy syndrome following air-bag inflation [letter] Shah N, et al. **N Engl J Med** 1997 Aug 21;337(8):574
The reflex sympathetic dystrophy syndrome in patients who have had a spinal cord injury. Gallien P, et al. **Paraplegia** 1995 Dec;33(12):715–20
Reflex sympathetic dystrophy of the lower extremity in tetraplegia: case report. Lefkoe TP, et al. **Spinal Cord** 1996 Apr;34(4):239–42
[Surgical treatment of therapy refractory Sudeck's dystrophy by transaxillary decompression of the neurovascular bundle and sympathectomy. On the pathogenesis of Sudeck's disease] Wilhelm A. **Handchir Mikrochir Plast Chir** 1997 Mar;29(2):60–72 (Eng. Abstr.) **(Ger)**
[Sympathetic reflex dystrophy in circumscribed stenosis of the abdominal aorta. Case report and discussion of pathophysiologic principles] Haarmeier T, et al. **Nervenarzt** 1997 Feb;68(2):147–9 (Eng. Abstr.) **(Ger)**
[Inflammation theory for etiopathogenesis of algodystrophy] Zyluk A. **Chir Narzadow Ruchu Ortop Pol** 1996;61(5):493–8 (25 ref.) (Eng. Abstr.) **(Pol)**
[Lower limb injury and Sudeck's syndrome] Kotela I. **Przegl Lek** 1996;53(6):501–3 (19 ref.) (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Recovery of upper limb motor function in tetraplegia with stellate ganglion block treatment of reflex sympathetic dystrophy: a case report. Levy CE, et al. **Am J Phys Med Rehabil** 1996 Nov–Dec;75(6):479–82
Complex regional pain syndrome type I (RSD) or peripheral mononeuropathy? A discussion of three cases. Thimineur MA, et al. **Clin J Pain** 1996 Jun;12(2):145–50
Orofacial pain mechanisms and their clinical application. Merrill RL. **Dent Clin North Am** 1997 Apr;41(2):167–88 (71 ref.)
The painful hand. Koman LA, et al. **Hand Clin** 1996 Nov; 12(4):757–64 (34 ref.)
The reflex sympathetic dystrophy syndrome: a review with special reference to chronic pain and motor impairments. Ribbers G, et al. **Int J Rehabil Res** 1995 Dec;18(4):277–95 (78 ref.)
Quantitative evaluation of sympathetic nervous system dysfunction in patients with reflex sympathetic dystrophy. Ide J, et al. **J Hand Surg [Br]** 1997 Feb;22(1):102–6
Re: Urological symptomatology in patients with reflex sympathetic dystrophy [letter; comment] Zimmern PE, et al. **J Urol** 1996 Nov;156(5):1782–3. Comment on: J Urol 1996 Feb;155(2):634–7.
Development and preliminary validation of a pain measure specific to neuropathic pain: the Neuropathic Pain Scale. Galer BS, et al. **Neurology** 1997 Feb;48(2):332–8
Reflex sympathetic dystrophy: skin blood flow, sympathetic vasoconstrictor reflexes and pain before and after surgical sympathectomy. Baron R, et al. **Pain** 1996 Oct; 67(2–3):317–26
Sudomotor function in sympathetic reflex dystrophy. Birklein F, et al. **Pain** 1997 Jan;69(1–2):49–54
Response to Stanton-Hicks et al. [letter] van der Laan L, et al. **Pain** 1997 Aug;72(1–2):291
Multiple reflex sympathetic dystrophy. Which patients are at risk for developing a recurrence of reflex sympathetic dystrophy in the same or another limb [see comments] Veldman PH, et al. **Pain** 1996 Mar;64(3):463–6. Comment in: Pain 1997 Jun;71(2):207–8.
Thermal grill illusion and complex regional pain syndrome type I (reflex sympathetic dystrophy). Heavner JE, et al. **Reg Anesth** 1997 May–Jun;22(3):257–9
Haemodynamic changes in early phase reflex sympathetic dystrophy. Matsumura H, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Jun; 30(2):133–8
[Sudeck's syndrome. Was Sudeck right?] van der Laan L, et al. **Unfallchirurg** 1997 Feb;100(2):90–9 (70 ref.) (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Psychological distress associated with algodystrophy. Field J, et al. **J Hand Surg [Br]** 1997 Feb;22(1):100–1
Psychological differences between reflex sympathetic dystrophy and non-RSD chronic pain patients [see comments] Bruehl S, et al. **Pain** 1996 Sep;67(1):107–14. Comment in: Pain 1997 Jun;71(2):209–10.
Psychological dysfunction in patients with reflex sympathetic dystrophy. Ciccone DS, et al. **Pain** 1997 Jul;71(3):323–33
Comment on Bruehl et al., PAIN, 67 (1996) 107–114 [letter; comment] Galer BS. **Pain** 1997 Jun;71(2):209–10. Comment on: Pain 1996 Sep;67(1):107–14.
Reflex sympathetic dystrophy/conversion disorder. Anderson RC, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):1043–6

RADIOGRAPHY

Dual energy X-ray absorptiometry in patients with lower limb reflex sympathetic dystrophy syndrome [see comments] Chapurlat RD, et al. **J Rheumatol** 1996 Sep; 23(9):1557–9. Comment in: J Rheumatol 1997 Apr;24(4):812–4.
Dual energy X-ray absorptiometry in reflex sympathetic dystrophy [letter; comment] Lovy MR, et al. **J Rheumatol** 1997 Apr;24(4):812–4. Comment on: J Rheumatol 1996 Sep;23(9):1557–9.

RADIONUCLIDE IMAGING

Five phase bone scintigraphy supports the pathophysiological concept of a subclinical inflammatory process in reflex sympathetic dystrophy. Leitha T, et al. **Q J Nucl Med** 1996 Jun;40(2):188–93
Ulnar distribution of reflex sympathetic dystrophy due to compression of the brachial plexus by a primary venous malformation. Magnussen JS, et al. **Skeletal Radiol** 1997 May;26(5):303–5

REHABILITATION

Recovery of upper limb motor function in tetraplegia with stellate ganglion block treatment of reflex sympathetic dystrophy: a case report. Levy CE, et al. **Am J Phys Med Rehabil** 1996 Nov–Dec;75(6):479–82
What makes treatment for reflex sympathetic dystrophy successful? Hareau J. **J Hand Ther** 1996 Oct–Dec; 9(4):367–70 (10 ref.)
Reflex sympathetic dystrophy in an 8-year-old: successful treatment by physical therapy. Hood-White R, et al. **Orthopedics** 1997 Jan;20(1):73–4

SURGERY

An 11-year-old girl with reflex sympathetic dystrophy successfully treated by thoracoscopic sympathectomy. Honjyo K, et al. **Acta Paediatr** 1997 Aug;86(8):903–5
Retroperitoneoscopic lumbar sympathectomy. Cheshire NJ, et al. **Br J Surg** 1997 Aug;84(8):1094–5
Reflex sympathetic dystrophy: skin blood flow, sympathetic vasoconstrictor reflexes and pain before and after surgical sympathectomy. Baron R, et al. **Pain** 1996 Oct; 67(2–3):317–26
A young female patient with reflex sympathetic dystrophy of the upper limb in whom amputation became inevitable. Geertzen JH, et al. **Prosthet Orthot Int** 1997 Aug; 21(2):159–61
[Sudeck's syndrome (editorial)] Wippermann B, et al. **Unfallchirurg** 1997 Feb;100(2):89 **(Ger)**

THERAPY

Treatment of algodystrophy using intravenous guanethidine regional block. Jacquemoud G, et al. **Ann Chir Main** 1982; 1(1):57–64 (16 ref.) **(Eng, Fre)**
Correlation of pain with temperature and blood-flow changes in the lower limb following chemical lumbar sympathectomy in reflex sympathetic dystrophy. A case report. Cooke ED, et al. **Int Angiol** 1995 Sep;14(3):226–8
Reflex sympathetic dystrophy: the clinician's perspective. Hardy MA, et al. **J Hand Ther** 1997 Apr–Jun;10(2):137–50 (153 ref.)
Spinal cord stimulation is effective in the management of reflex sympathetic dystrophy. Kumar K, et al. **Neurosurgery** 1997 Mar;40(3):503–8; discussion 508–9
[Clinical observation on treatment of 40 cases of apoplexy hemiplegia complicated shoulder-hand syndrome with electro-acupuncture] Guo ZX, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Nov; 15(11):646–8 (Eng. Abstr.) **(Chi)**
[Reflex dystrophy] Pohjolainen T. **Duodecim** 1995; 111(18):1783–9 (24 ref.) **(Fin)**

REFLEX SYMPATHETIC DYSTROPHY

[A case of reflex sympathetic dystrophy following a retinous surgery] Morimoto Y, et al. **Masui** 1997 Apr;46(4):549–51 (Eng. Abstr.) **(Jpn)**

URINE

Phosphate excretion in reflex sympathetic dystrophy syndrome before and after a single infusion of pamidronate. Laroche M, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):172–6

REFLEX, TENDON see **REFLEX, STRETCH**

REFLEX THERAPY see **REFLEXOTHERAPY**

REFLEX, VESTIBULO-OCULAR

Comparison of linear vs. non-linear methods for analysing the vestibulo-ocular reflex (VOR). Galiana HL, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):585–96

Effects of anxiety arousal and mental stress on the vestibulo-ocular reflex. Yardley L, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):597–602

Testing the vestibulo-ocular reflex. Halmagyi GM, et al. **Adv Otorhinolaryngol** 1997;53:132–54 (24 ref.)

Otolith-ocular responses in familial episodic ataxia linked to chromosome 19p. Furman JM. **Ann Neurol** 1997 Aug; 42(2):189–93

The human vertical vestibulo-ocular reflex during combined linear and angular acceleration with near-target fixation. Viirre ES, et al. **Exp Brain Res** 1996 Nov;112(2):313–24

Vestibular areflexia as a cause of delayed motor skill development in children with the CHARGE association. Admiraal RJ, et al. **Int J Pediatr Otorhinolaryngol** 1997 Apr 11;39(3):205–22

The unmodulated oculocephalic reflex: clinical feature of the persistent vegetative state in the neonate. Sheth RD, et al. **J Child Neurol** 1996 May;11(3):255–6

Behavioral analysis of signals that guide learned changes in the amplitude and dynamics of the vestibulo-ocular reflex. Raymond JL, et al. **J Neurosci** 1996 Dec 1;16(23):7791–802

Suppression of vestibular nystagmus by forced convergence in normal human subjects. Shirado O, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jan–Feb;34(1):52–7

Torticollis due to disinhibition of the vestibulo-collic reflex in a patient with Steele-Richardson-Olszewski syndrome. Bisdorff AR, et al. **Mov Disord** 1997 May;12(3):328–36

Cross axis vestibulo-ocular reflex induced by pursuit training in alert monkeys. Fukushima K, et al. **Neurosci Res** 1996 Jul;25(3):255–65

Idiopathic Dandy's syndrome. Syms CA 3rd, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):75–8

DRUG EFFECTS

Optokinetic and vestibulo-ocular reflex adjustment by GABA antagonists. Reber A, et al. **Behav Brain Res** 1996 Nov;81(1–2):89–97

Otoneurological study in workers exposed to styrene in the fiberglass industry. Calabrese G, et al. **Int Arch Occup Environ Health** 1996;68(4):219–23

Acute effects of tetrahydrobiopterin on the dynamic characteristics and adaptability of of vestibulo-ocular reflex in normal and flocculus lesioned rabbits. Nagao S, et al. **Neurosci Lett** 1997 Aug 1;231(1):41–4

Recent advances in the pharmacology of the vestibulo-ocular reflex system. Smith PF, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):421–7 (60 ref.)

PHYSIOLOGY

The synaptic organization of the horizontal vestibulo-ocular reflex in the frog. Dieringer N, et al. **Acta Biol Hung** 1996; 47(1–4):61–72 (37 ref.)

Ocular counterrolling in response to asymmetric radial acceleration [published erratum appears in Acta Otolaryngol (Stockh) 1996 Nov;116(6):919] Clarke AH, et al. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):652–6

Plasticity of responses to off-vertical axis rotation. Koizuka I, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):321–4

Influence of the extraocular muscle proprioceptors on the orientation of the vestibulo-ocular reflex. Pettorossi VE, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):198–200

Otolithic and extraocular muscle proprioceptive influences on the spatial organization of the vestibulo- and cervico-ocular quick phases. Pettorossi VE, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):139–42

The contribution of the vertical semicircular canals to high-velocity horizontal vestibulo-ocular reflex (VOR) in normal subjects and patients with unilateral vestibular nerve section. Tusa RJ, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):507–12

Canal and otolith vestibulo-ocular reflexes to vertical and off vertical axis rotations in children learning to walk. Wiener-Vacher SR, et al. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):657–65

Phase difference of vestibulo-ocular reflex in head autorotation test. Hirvonen TP, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:98–100

Changes in vestibulo-ocular reflex of elderly people. Hirvonen TP, et al. **Acta Otolaryngol Suppl (Stockh)** 1997; 529:108–10

Vestibulo-ocular reflex and visual vestibulo-ocular reflex during sinusoidal rotation in children. Sakaguchi M, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;528:70–3

Visual processing during high frequency head oscillation. Flipse JP, et al. **Aviat Space Environ Med** 1996 Jul; 67(7):625–32

Microgravity effect on the vestibulo-ocular reflex is dependent on otolith and vision contributions. Grigorova VK, et al. **Aviat Space Environ Med** 1996 Oct;67(10):947–54

Visual vestibular interaction in the dynamic visual acuity test during voluntary head rotation. Lee MH, et al. **Aviat Space Environ Med** 1997 Feb;68(2):111–7

Measurement of the vestibulo-ocular reflex by magnetometry during active head movement. Aldren CP, et al. **Br J Audiol** 1996 Oct;30(5):325–31

Changes in sensitivity of vestibular nucleus neurons induced by cross-axis adaptation of the vestibulo-ocular reflex in the cat. Quinn KJ, et al. **Brain Res** 1996 Apr 29; 718(1–2):176–80

Three-dimensional orientation of the eye rotation axis during the Purkinje sensation. Fetter M. **Brain Res Bull** 1996; 40(5–6):315–8; discussion 318–9

Transaural linear vestibulo-ocular reflexes from a single utricle. Lempert T, et al. **Brain Res Bull** 1996;40(5–6):311–3

Vestibulo-ocular reflex of the squirrel monkey during eccentric rotation with centripetal acceleration along the naso-occipital axis. Merfeld DM. **Brain Res Bull** 1996; 40(5–6):303–9

Behavior and physiology of the macaque vestibulo-ocular reflex response to sudden off-axis rotation: computing eye translation. Snyder LH, et al. **Brain Res Bull** 1996; 40(5–6):293–301; discussion 302

Computational problems in the analysis of eye movement signals in the determination of vestibulo-ocular reflex. Juhola M, et al. **Comput Biomed Res** 1997 Feb;30(1):49–60

Interaction of linear and angular vestibulo-ocular reflexes of human subjects in response to transient motion. Anastasopoulos D, et al. **Exp Brain Res** 1996 Aug; 110(3):465–72

The oculomotor integrator: testing of a neural network model. Arnold DB, et al. **Exp Brain Res** 1997 Jan; 113(1):57–74

A bilateral model integrating vergence and the vestibulo-ocular reflex. Cova AC, et al. **Exp Brain Res** 1996;107(3):435–52

The human horizontal vestibulo-ocular reflex during combined linear and angular acceleration. Crane BT, et al. **Exp Brain Res** 1997 Apr;114(2):304–20

The three-dimensional human vestibulo-ocular reflex: response to long-duration yaw angular accelerations. Haslwanter T, et al. **Exp Brain Res** 1996 May;109(2):303–11

The dynamic contributions of the otolith organs to human ocular torsion. Merfeld DM, et al. **Exp Brain Res** 1996 Jul;110(2):315–21

Altered gravitational experience during early periods of life affects the static vestibulo-ocular reflex of tadpoles of the southern clawed toad, Xenopus laevis Daudin. Sebastian C, et al. **Exp Brain Res** 1996 Nov;112(2):213–22

Canal-otolith interactions driving vertical and horizontal eye movements in the squirrel monkey. Telford L, et al. **Exp Brain Res** 1996 Jun;109(3):407–18

Absence of vestibular habituation of the vestibulo-ocular reflex in the vertical plane in the cat. Torte MP, et al. **Exp Brain Res** 1997 Aug;116(1):73–82

Combined head and eye tracking system for dynamic testing of the vestibular system. Allison RS, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1073–82

Horizontal angular VOR changes in orbital and parabolic flight: human neurovestibular studies on SLS-2. Oman CM, et al. **J Appl Physiol** 1996 Jul;81(1):69–81

Adaptation of primate vestibuloocular reflex to altered peripheral vestibular inputs. I. Frequency-specific recovery of horizontal VOR after inactivation of the lateral semicircular canals. Angelaki DE, et al. **J Neurophysiol** 1996 Nov;76(5):2941–53

Adaptation of primate vestibuloocular reflex to altered peripheral vestibular inputs. II Spatiotemporal properties of the adapted slow-phase eye velocity. Angelaki DE, et al. **J Neurophysiol** 1996 Nov;76(5):2954–71

Three-dimensional organization of otolith-ocular reflexes in rhesus monkeys. I. Linear acceleration responses during off-vertical axis rotation. Angelaki DE, et al. **J Neurophysiol** 1996 Jun;75(6):2405–24

Three-dimensional organization of otolith-ocular reflexes in rhesus monkeys. II. Inertial detection of angular velocity. Angelaki DE, et al. **J Neurophysiol** 1996 Jun;75(6):2425–40

Three-dimensional vector analysis of the human vestibuloocular reflex in response to high-acceleration head rotations. I. Responses in normal subjects. Aw ST, et al. **J Neurophysiol** 1996 Dec;76(6):4009–20

Three-dimensional vector analysis of the human vestibuloocular reflex in response to high-acceleration head rotations. II. responses in subjects with unilateral vestibular loss and selective semicircular canal occlusion. Aw ST, et al. **J Neurophysiol** 1996 Dec;76(6):4021–30

Hair cell regeneration and recovery of the vestibuloocular reflex in the avian vestibular system. Carey JP, et al. **J Neurophysiol** 1996 Nov;76(5):3301–12

Behavior of eye-movement-related cells in the vestibular nuclei during combined rotational and translational stimuli. McConville KM, et al. **J Neurophysiol** 1996 Nov; 76(5):3136–48

Effect of temperature on the normal and adapted vestibulo-ocular reflex in the goldfish. McElligott JG, et al. **J Neurophysiol** 1995 Oct;74(4):1463–72

Interaction of smooth pursuit and the vestibuloocular reflex in three dimensions. Misslisch H, et al. **J Neurophysiol** 1996 Jun;75(6):2520–32

Modulation of the human vestibuloocular reflex during saccades: probing by high-frequency oscillation and torque pulses of the head. Tabak S, et al. **J Neurophysiol** 1996 Nov;76(5):3249–63

Contribution of vestibular commissural pathways to spatial orientation of the angular vestibuloocular reflex. Wearne S, et al. **J Neurophysiol** 1997 Aug;78(2):1193–7

Neural recordings and behavioral observations in the monkey vestibulo-ocular reflex constrain the cellular mechanisms for cerebellum-dependent behavioral learning. Lisberger SG, et al. **J Physiol Paris** 1996;90(5–6):381–2

"Torso rotation" experiments; 1: Adaptation to motion sickness does not correlate with changes in VOR gain. Bouyer LJ, et al. **J Vestib Res** 1996 Sep–Oct;6(5):367–75

"Torso rotation" experiments; 3: Effects of acute changes in vestibular function on the control of voluntary head movements. Bouyer LJ, et al. **J Vestib Res** 1996 Sep–Oct; 6(5):387–93

Tilt suppression, OKAN, and head-shaking nystagmus at long-term follow-up after unilateral vestibular neurectomy. Brantberg K, et al. **J Vestib Res** 1996 Jul–Aug; 6(4):235–41

Visual influence on head shaking using the vestibular autorotation test. Cheung B, et al. **J Vestib Res** 1996 Nov–Dec;6(6):411–22

Vertical and horizontal eye displacement during static pitch and roll postures. Citek K, et al. **J Vestib Res** 1996 May–Jun;6(3):213–28

Visual-vestibular interaction during standing, walking, and running. Demer JL, et al. **J Vestib Res** 1996 Jul–Aug; 6(4):295–313

The vestibulo-ocular reflex and seasickness susceptibility. Gordon CR, et al. **J Vestib Res** 1996 Jul–Aug;6(4):229–33

Difference in quick phases induced by horizontal and vertical vestibular stimulations: role of the otolithic input. Pettorossi VE, et al. **J Vestib Res** 1997 Mar–Jun;7(2–3):89–99

Phase-shifted direction adaptation of the vestibulo-ocular reflex in cat. Powell KD, et al. **J Vestib Res** 1996 Jul–Aug; 6(4):277–93

A model that relates canal-ocular to otolith-ocular responses. Wall C 3rd, et al. **J Vestib Res** 1996 May–Jun;6(3):159–71

Modification of vertical OKN and vertical OKAN asymmetry in humans during parabolic flight. Wei G, et al. **J Vestib Res** 1997 Jan–Feb;7(1):21–34

Induction of periodic alternating nystagmus in intact goldfish by sinusoidal rotation. Dow ER, et al. **Neuroreport** 1997 Aug 18;8(12):2755–9

Violation of superposition by the vestibulo-ocular reflex of the goldfish. Dow ER, et al. **Neuroreport** 1996 May 17; 7(7):1305–9

A hypergravity related sensitive period during the development of the roll induced vestibuloocular reflex in an amphibian (Xenopus laevis). Horn E, et al. **Neurosci Lett** 1996 Sep 20;216(1):25–8

Changes in dorsal neck muscle activity related to imposed eye movement in the decerebrate pigeon. Hayman MR, et al. **Neuroscience** 1997 Aug;79(3):943–56

Behavioural analysis of Purkinje cell output from the horizontal zone of the cat flocculus. Cheron G, et al. **Prog Brain Res** 1997;114:347–56

Further evidence for the specific involvement of the flocculus in the vertical vestibulo-ocular reflex (VOR). Fukushima K, et al. **Prog Brain Res** 1996;112:431–40

Role of the Y-group of the vestibular nuclei and flocculus of the cerebellum in motor learning of the vertical vestibulo-ocular reflex. Highstein SM, et al. **Prog Brain Res** 1997;114:383–97

Characterization of Purkinje cells in the goldfish cerebellum during eye movement and adaptive modification of the vestibulo-ocular reflex. Pastor AM, et al. **Prog Brain Res** 1997;114:359–81

Control of the three-dimensional dynamic characteristics of the angular vestibulo-ocular reflex by the nodulus and uvula. Wearne S, et al. **Prog Brain Res** 1997;114:321–34 (104 ref.)

Recent advances in the pharmacology of the vestibulo-ocular reflex system. Smith PF, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):421–7 (60 ref.)

Gaze stabilization by optokinetic reflex (OKR) and vestibulo-ocular reflex (VOR) during active head rotation in man. Schweigart G, et al. **Vision Res** 1997 Jun; 37(12):1643–52

[Optokinetic nystagmus and visual-vestibular interaction in subjects with "whiplash injuries"] Salami A, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2):91–8 (Eng. Abstr.) **(Ita)**

[Three-dimensional analysis of vestibulo-ocular reflexes--the relation between head position and eye movement] Suzuki K. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Dec; 99(12):1751–7 (Eng. Abstr.) **(Jpn)**

[Geocentric orientation of rats after space flight] Bokhov BB, et al. **Aviakosm Ekolog Med** 1996;30(1):62–4 **(Rus)**

REFLEXOLOGY see **MASSAGE**

REFLEXOTHERAPY

[The use of laser reflexotherapy in the combined treatment of patients with atherosclerotic circulatory

encephalopathy] Makhmutova GF. **Lik Sprava** 1997 Jan-Feb;(1):58-61 **(Rus)**

[Analysis of the use of reflex therapy in functional disorders of the larynx] Karpova OIu. **Vestn Otorinolaringol** 1996 May-Jun;(3):33-5 (Eng. Abstr.) **(Rus)**

[Reflex therapy in the treatment of cochleo-vestibular and olfactory disorders] Shibina LM, et al. **Vestn Otorinolaringol** 1996 May-Jun;(3):48-50 (Eng. Abstr.) **(Rus)**

REFRACTION, OCULAR

Retinoscopy after excimer laser photorefractive treatments. Nagy ZZ, et al. **Acta Chir Hung** 1995-96;35(3-4):307-13

Refractive results after photorefractive excimer laser treatment in mild myopic and in mild hyperopic eyes. Nagy ZZ, et al. **Acta Chir Hung** 1995-96;35(3-4):315-24

Pre-term delivery and subsequent ocular development. A 7-10 year follow-up of children screened 1982-84 for ROP. 3) Refraction. Myopia of prematurity. Fledelius HC. **Acta Ophthalmol Scand** 1996 Jun;74(3):297-300

Refractive outcome of radial keratotomy: does the result of the first eye predict outcome in the second eye? Batra VN, et al. **Am J Ophthalmol** 1997 Feb;123(2):165-73

Non-arteritic anterior ischemic optic neuropathy and refraction. Philips B, et al. **Bull Soc Belge Ophtalmol** 1995; 259:183-7

The evaluation of normal corneal topography in emmetropic eyes with computer-assisted videokeratography. Kanpolat A, et al. **CLAO J** 1997 Jul;23(3):168-71

Refractive index contours in the human lens. Pierscionek BK. **Exp Eye Res** 1997 Jun;64(6):887-93

The refractive index along the optic axis of the bovine lens. Pierscionek BK. **Eye** 1995;9 (Pt 6):776-82

A comparison of slit-lamp supported versus hand-held biometry. Whelehan IM, et al. **Eye** 1996;10 (Pt 4):514-6

Morphological and biomorphometrical observations on laser thermal keratoplasty. Histological and biomorphometrical examination of the relationship between refractive change and the volume following Cr:Tm:Ho:YAG laser treatment. Gerling G, et al. **Ger J Ophthalmol** 1996 Mar;5(2):84-91

Nomogram generation for keratomileusis: an introduction to multivariate analysis and neural nets. Sánchez-Thorin JC, et al. **Int Ophthalmol Clin** 1996 Fall;36(4):39-44 (9 ref.)

Integration of a sensory component into the accommodation model reveals differences between emmetropia and late-onset myopia. Jiang BC. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1511-6

The subordination of refraction [editorial] Goss DA, et al. **J Am Optom Assoc** 1996 Oct;67(10):580-2

Reliability of refraction--a literature review. Goss DA, et al. **J Am Optom Assoc** 1996 Oct;67(10):619-30 (31 ref.)

A new subjective refraction method--the meridional polarized vernier optometer. Salmon TO, et al. **J Am Optom Assoc** 1996 Oct;67(10):599-605

Problems of refraction after photorefractive keratectomy. Siow KL, et al. **J Am Optom Assoc** 1996 Dec;67(12):755-61 (7 ref.)

Subjective refraction of the peripheral field using contrast detection acuity. Wang YZ, et al. **J Am Optom Assoc** 1996 Oct;67(10):584-9

Refractory intraocular pressure increase after photorefractive keratectomy. Levy Y, et al. **J Cataract Refract Surg** 1997 May;23(4):593-4

Predicting the refractive result after cataract surgery. Olsen T. **J Cataract Refract Surg** 1996 Jun;22(5):575-8

Photorefractive keratectomy for myopia of -8.00 to -24.00 diopters. Goes FJ. **J Refract Surg** 1996 Jan-Feb;12(1):91-7 (14 ref.)

Centration for keratorefractive surgery [letter] Hall GW. **J Refract Surg** 1996 Nov-Dec;12(7):755-7

Prevalence of myopia in adults: implications for refractive surgeons [see comments] McCarty CA, et al. **J Refract Surg** 1997 May-Jun;13(3):229-34 (41 ref.). Comment in: J Refract Surg 1997 May-Jun;13(3):213-5.

Calibration and validity of an eccentric photorefractor. Chan OY, et al. **Ophthalmic Physiol Opt** 1996 May;16(3):203-10

Changes in ocular dimensions and refraction with accommodation. Garner LF, et al. **Ophthalmic Physiol Opt** 1997 Jan;17(1):12-7

Variation during autorefraction: influence of two different target types. Rubin A, et al. **Ophthalmic Physiol Opt** 1997 Jan;17(1):38-43

An integrated system for measuring static and dynamic accommodation with a Canon Autoref R-1 refractometer. Wetzel PA, et al. **Ophthalmic Physiol Opt** 1996 Nov; 16(6):520-7

Cycloplegic refractions in Japanese children: a comparison of atropine and cyclopentolate. Kawamoto K, et al. **Ophthalmologica** 1997;211(2):57-60

The impact of early lens opacity progression on visual acuity and refraction. Rouhiainen P, et al. **Ophthalmologica** 1997; 211(4):242-6

PRK zone decentration: measuring and reporting the angle of decentration [letter; comment] Webber SK, et al. **Ophthalmology** 1995 Sep;102(9):1258-60. Comment on: Ophthalmology 1995 Jan;102(1):42-7.

Refraction and keratometry: departures from and transformations toward multivariate normality [see comments] Blackie CA, et al. **Optom Vis Sci** 1997 Jun; 74(6):452-8. Comment in: Optom Vis Sci 1997 Jun;74(6):339-41.

The refractive group. Campbell C. **Optom Vis Sci** 1997 Jun; 74(6):381-7 (13 ref.)

Repeatability and accuracy of automated refraction: a comparison of the Nikon NRK-8000, the Nidek AR-1000, and subjective refraction [see comments] Elliott M, et al. **Optom Vis Sci** 1997 Jun;74(6):434-8. Comment in: Optom Vis Sci 1997 Jun;74(6):339-41.

Changes in equivalent and gradient refractive index of the crystalline lens with accommodation. Garner LF, et al. **Optom Vis Sci** 1997 Feb;74(2):114-9

Measurement of astigmatism by automated infrared photoretinoscopy. Gekeler F, et al. **Optom Vis Sci** 1997 Jul;74(7):472-82

Meridional profiles of variance-covariance of symmetric dioptric power: classes of variation that are uniform across the meridians of the eye. Harris WF. **Optom Vis Sci** 1997 Jun;74(6):397-413 (44 ref.)

Multimeridional refraction: dependence of the measurement accuracy on the number of meridians refracted. Oechsner U, et al. **Optom Vis Sci** 1997 Jun;74(6):425-33

Clinical refraction in three-dimensional dioptric space revisited [see comments] Raasch T. **Optom Vis Sci** 1997 Jun;74(6):376-80 (28 ref.). Comment in: Optom Vis Sci 1997 Jun;74(6):339-41.

Variability of the refractive state: meridional profiles and uniform variation [see comments] Rubin A, et al. **Optom Vis Sci** 1997 Jun;74(6):414-9. Comment in: Optom Vis Sci 1997 Jun;74(6):339-41.

Use of liquid-crystal adaptive-optics to alter the refractive state of the eye. Thibos LN, et al. **Optom Vis Sci** 1997 Jul;74(7):581-7

Refractive variation under accommodative demand: curvital and scaled torsional variances and covariance across the meridians of the eye [see comments] van Gool RD, et al. **Optom Vis Sci** 1997 Jun;74(6):445-51. Comment in: Optom Vis Sci 1997 Jun;74(6):339-41.

Oblique (off-axis) astigmatism of the reduced schematic eye with elliptical refracting surface. Wang YZ, et al. **Optom Vis Sci** 1997 Jul;74(7):557-62

Significance of refractive status in branch retinal vein occlusion. A case-control study. Majji AB, et al. **Retina** 1997;17(3):200-4

[The differences in corneal shape between myopic and normal eyes] Liu Z, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Jul;31(4):282-4 (Eng. Abstr.) **(Chi)**

[References for assessing refraction after excimer laser surgery (letter)] Bodanowitz S, et al. **Klin Monatsbl Augenheilkd** 1996 Nov;209(5):330 **(Ger)**

[Objective determination of refractive changes in silicon oil filled eyes--effect of head position on refraction] Dick B, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):459-66 (Eng. Abstr.) **(Ger)**

[Visual image in high ametropia. Computer-assisted simulation with optic ray calculation] Fink W, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):472-6 (Eng. Abstr.) **(Ger)**

[Modification of axial length and astigmatism by scleral buckling surgery] Grimm G, et al. **Klin Monatsbl Augenheilkd** 1997 Mar;210(3):144-6 (16 ref.) (Eng. Abstr.) **(Ger)**

[Intraoperative skiascopy for determining the refractive value of an implantable intraocular lens] Happe W, et al. **Klin Monatsbl Augenheilkd** 1997 Apr;210(4):207-12 (Eng. Abstr.) **(Ger)**

[Fourier analysis as a mathematical model for evaluating and presenting postoperative corneal topography data after non-mechanical perforating keratoplasty] Langenbucher A, et al. **Klin Monatsbl Augenheilkd** 1997 Apr; 210(4):197-206 (Eng. Abstr.) **(Ger)**

[Visual acuity and use of eyeglasses after implantation of a diffractive multifocal lens] Pieh S, et al. **Klin Monatsbl Augenheilkd** 1997 Jan;210(1):38-42 (Eng. Abstr.) **(Ger)**

[Limbo-sclerotomy--a refractive procedure outside the cornea. Preliminary report] Schatilowa TA, et al. **Klin Monatsbl Augenheilkd** 1996 Nov;209(5):269-74 (Eng. Abstr.) **(Ger)**

[Correlation between prognostically predicted and actually attained refraction] Wilhelm F, et al. **Klin Monatsbl Augenheilkd** 1996 Aug-Sep;209(2-3):114-6 (Eng. Abstr.) **(Ger)**

[Vector analysis of surgically-induced astigmatism in cataract operation with 4 tunnel incision techniques] Haubrich T, et al. **Ophthalmologe** 1996 Feb;93(1):12-6 (Eng. Abstr.) **(Ger)**

[Effect of various ablation levels on endothelial density in the enucleated pig eye. Experimental study with the 193 nm Excimer laser] Kohlhaas M, et al. **Ophthalmologe** 1997 Jul;94(7):475-80 (Eng. Abstr.) **(Ger)**

[Comparative studies with various corneal topography measurement devices] Koop N, et al. **Ophthalmologe** 1997 Feb;94(2):120-6 (Eng. Abstr.) **(Ger)**

[Studies of the development of refractive effects in intrastromal refractive corneal surgery with the picosecond laser] Vogel A, et al. **Ophthalmologe** 1997 Jul;94(7):467-74 (Eng. Abstr.) **(Ger)**

[The postoperative change of depth of anterior chamber, refraction and anterior capsulorhexis size after intraocular lens implantation] Nishigaki S, et al. **Nippon Ganka Gakkai Zasshi** 1996 Feb;100(2):156-8 (Eng. Abstr.) **(Jpn)**

[The correlations between the biometric determination of pseudophakic power and postoperative refraction] Cârstocea B, et al. **Oftalmologia** 1996 Jul-Sep;40(3):219-22 (Eng. Abstr.) **(Rum)**

[The characteristics of conducting aviation medical expertise and dynamic medical observation of flight personnel with differing ocular refraction] Liul'ko OM, et al. **Lik Sprava** 1995 Mar-Apr;(3-4):179-81 (Eng. Abstr.) **(Rus)**

[The AP-94 device for examination of ocular refraction] Volkov BP, et al. **Med Tekh** 1997 Jan-Feb;(1):47-8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

[Effects of topical application of adrenergic agents on refraction and accommodation] Otsuka N, et al. **Nippon Ganka Gakkai Zasshi** 1997 May;101(5):400-6 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Lack of diurnal variation in vision, refraction, or keratometry after excimer laser photorefractive keratectomy. Goldberg MA, et al. **Am J Ophthalmol** 1997 Mar;123(3):407-8

Autorefraction/autokeratometry and subjective refraction in untreated and photorefractive keratectomy-treated eyes. Oyo-Szerenyi KD, et al. **Arch Ophthalmol** 1997 Feb; 115(2):157-64

Long-term influence of insulin dependent diabetes mellitus on refraction and its components: a population based twin study [see comments] Løgstrup N, et al. **Br J Ophthalmol** 1997 May;81(5):343-9. Comment in: Br J Ophthalmol 1997 May;81(5):337.

Disentangling the influence of insulin dependent diabetes mellitus on refraction [editorial; comment] Smith AF. **Br J Ophthalmol** 1997 May;81(5):337. Comment on: Br J Ophthalmol 1997 May;81(5):343-9.

Comparison between the refractive results of combined penetrating keratoplasty/transsclerally sutured posterior chamber lens implantation and the triple procedure. Djalilian AR, et al. **Cornea** 1997 May;16(3):319-21

Prediction of refractive outcome in penetrating keratoplasty for keratoconus. Doyle SJ, et al. **Cornea** 1996 Sep; 15(5):441-5

Keratokyphosis in rabbits: a functional and morphologic study. Kruse H, et al. **Cornea** 1996 Nov;15(6):622-32

Retinoscopic reflexes: theoretical basis and effects of monochromatic aberrations. Roorda A, et al. **J Am Optom Assoc** 1996 Oct;67(10):610-8

Magnification and visual acuity in highly myopic phakic eyes corrected with an anterior chamber intraocular lens versus by other methods. Garcia M, et al. **J Cataract Refract Surg** 1996 Dec;22(10):1416-22

Predicted and actual refraction after intraocular lens implantation in eyes with silicone oil. Grinbaum A, et al. **J Cataract Refract Surg** 1996 Jul-Aug;22(6):726-9

Prospective evaluation of early visual and refractive effects with small clear corneal incision for cataract surgery. Lyle WA, et al. **J Cataract Refract Surg** 1996 Dec;22(10):1456-60

Visual properties of the foldable Array multifocal intraocular lens. Weghaupt H, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1313-7

Human contrast sensitivity in coherent Maxwellian view: effect of coherent noise and comparison with speckle. Felipe A, et al. **J Opt Soc Am A** 1997 May;14(5):972-83

Optical density of the human lens. Xu J, et al. **J Opt Soc Am A** 1997 May;14(5):953-60

Age-related refractive shifts in simple myopia [see comments] Ellingsen KL, et al. **J Refract Surg** 1997 May-Jun; 13(3):223-8. Comment in: J Refract Surg 1997 May-Jun;13(3):213-5.

Ten-year refractive and visual results of radial keratotomy [see comments] Sawelson H, et al. **Ophthalmology** 1995 Dec;102(12):1892-901. Comment in: Ophthalmology 1996 Aug;103(8):1164-5.

Subjective depth-of-focus of the eye. Atchison DA, et al. **Optom Vis Sci** 1997 Jul;74(7):511-20

Short-term keratometric variation in the human eye. Cronje S, et al. **Optom Vis Sci** 1997 Jun;74(6):420-4

A perspective from Mopane [editorial; comment] Harris WF. **Optom Vis Sci** 1997 Jun;74(6):339-41. Comment on: Optom Vis Sci 1997 Jun;74(6):349-66. Comment on: Optom Vis Sci 1997 Jun;74(6):367-75. Comment on: Optom Vis Sci 1997 Jun;74(6):376-80. Comment on: Optom Vis Sci 1997 Jun;74(6):388-92. Comment on: Optom Vis Sci 1997 Jun;74(6):393-6. Comment on: Optom Vis Sci 1997 Jun;74(6):414-9. Comment on: Optom Vis Sci 1997 Jun;74(6):434-8. Comment on: Optom Vis Sci 1997 Jun;74(6):439-44. Comment on: Optom Vis Sci 1997 Jun;74(6):445-51. Comment on: Optom Vis Sci 1997 Jun;74(6):452-8.

Excess of autorefraction over subjective refraction: dependence on age [see comments] Joubert L, et al. **Optom Vis Sci** 1997 Jun;74(6):439-44. Comment in: Optom Vis Sci 1997 Jun;74(6):339-41.

Changes in ocular refraction and its components among medical students--a 5-year longitudinal study. Lin LL, et al. **Optom Vis Sci** 1996 Jul;73(7):495-8

Spherical aberration of the reduced schematic eye with elliptical refracting surface. Thibos LN, et al. **Optom Vis Sci** 1997 Jul;74(7):548-56 (26 ref.)

Corneal curvatures and refractions of central American frogs.

REFRACTION, OCULAR

Howland HC, et al. **Vision Res** 1997 Jan;37(2):169–74

[Detection of resting state of accommodation by accommodative microfluctuation] Kajita M, et al. **Nippon Ganka Gakkai Zasshi** 1997 May;101(5):413–6 (Eng. Abstr.) **(Jpn)**

[A new method for accommodation training] Belozerov AE, et al. **Vestn Oftalmol** 1997 Mar–Apr;113(2):25–8 (Eng. Abstr.) **(Rus)**

REFRACTIVE ERRORS

COMPLICATIONS

The association of strabismus, amblyopia, and refractive errors in spasmus nutans. Young TL, et al. **Ophthalmology** 1997 Jan;104(1):112–7

Monocular diplopia caused by ocular aberrations and hyperopic defocus. Woods RL, et al. **Vision Res** 1996 Nov; 36(22):3597–606

[Hygienic problems in the use of computers by school children with refractive disorders] Gumener PI, et al. **Gig Sanit** 1996 Jul–Aug;(4):19–22 (Eng. Abstr.) **(Rus)**

[Ophthalmological exploration of children with Down's syndrome. Main results and comparison with a control group] González Viejo I, et al. **An Esp Pediatr** 1996 Aug; 45(2):137–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Effects of optical correction media on contrast sensitivity. Heng WJ, et al. **Ann Acad Med Singapore** 1997 Jan; 26(1):18–21

Refractive problems of the eye. Toh HB, et al. **Aust Fam Physician** 1996 May;25(5):699–702, 705–6

Preschool vision screening: outcome of children referred to the hospital eye service. Newman DK, et al. **Br J Ophthalmol** 1996 Dec;80(12):1077–82

Automated compensation of defocusing errors in videokeratography. Oltrup T, et al. **CLAO J** 1997 Jul; 23(3):157–60

Preschool vision screening: a prospective comparative evaluation. Bray LC, et al. **Eye** 1996;10 (Pt 6):714–8

Effect of contralateral fog during refractive error assessment. Chiu NN, et al. **J Am Optom Assoc** 1997 May;68(5):305–8

Reliability of refraction—a literature review. Goss DA, et al. **J Am Optom Assoc** 1996 Oct;67(10):619–30 (31 ref.)

A new subjective refraction method—the meridional polarized vernier optometer. Salmon TO, et al. **J Am Optom Assoc** 1996 Oct;67(10):599–605

Subjective refraction of the peripheral field using contrast detection acuity. Wang YZ, et al. **J Am Optom Assoc** 1996 Oct;67(10):584–9

Off-axis photorefractive eye screening in children. Morgan KS, et al. **J Cataract Refract Surg** 1997 Apr;23(3):423–8

The artifact of retinoscopy revisited: comparison of refractive error measured by retinoscopy and visual evoked potential in the rat. Mutti DO, et al. **Optom Vis Sci** 1997 Jul; 74(7):483–8

Accuracy and precision of the Tomey ViVA infrared photorefractor. Thompson AM, et al. **Optom Vis Sci** 1996 Oct;73(10):644–52

[Measuring device for determining monochromatic aberration of the human eye] Mierdel P, et al. **Ophthalmologe** 1997 Jun;94(6):441–5 (Eng. Abstr.) **(Ger)**

[Selected problems with ocular accommodation in children and youth] Kubatko-Zielińska A, et al. **Klin Oczna** 1996; 98(6):459–61 (4 ref.) (Eng. Abstr.) **(Pol)**

[The AP-94 device for examination of ocular refraction] Volkov BP, et al. **Med Tekh** 1997 Jan–Feb;(1):47–8 (Eng. Abstr.) **(Rus)**

[Ophthalmological exploration of children with Down's syndrome. Main results and comparison with a control group] González Viejo I, et al. **An Esp Pediatr** 1996 Aug; 45(2):137–9 (Eng. Abstr.) **(Spa)**

ECONOMICS

A physician's analysis of the business of refractive surgery. Friedlaender MH. **Int Ophthalmol Clin** 1997 Winter; 37(1):149–54

EPIDEMIOLOGY

VDU work: longitudinal survey on refractive defects. Rechichi C, et al. **Acta Ophthalmol Scand** 1996 Dec; 74(6):629–31

Prevalence and risk factors for refractive errors in an adult inner city population. Katz J, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):334–40

A population-based survey of the prevalence of refractive error in Malawi. Lewallen S, et al. **Ophthalmic Epidemiol** 1995 Dec;2(3):145–9

[Ocular refraction in Zaire] Kaimbo Wa Kaimbo D, et al. **Bull Soc Belge Ophtalmol** 1996;261:101–5 (Eng. Abstr.) **(Fre)**

[Changes in the visual system in low birth weight children] Gralek M, et al. **Klin Oczna** 1995 Sep–Oct;97(9–10):296–8 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Can we avoid an epidemic of refractive 'surprises' after cataract surgery? [editorial; comment] McDonneil PJ. **Arch Ophthalmol** 1997 Apr;115(4):542–3. Comment on: Arch Ophthalmol 1997 Apr;115(4):457–61.

Complications of combined radial thermokeratoplasty and incisional keratotomy. Hargrave SL, et al. **CLAO J** 1997 Jul;23(3):205–8

The ophthalmological course of Usher syndrome type III. Pakarinen L, et al. **Int Ophthalmol** 1995–96;19(5):307–11

Refractive regression after excimer laser photorefractive keratectomy [letter; comment] [see comments] Abad JC, et al. **J Refract Surg** 1996 Nov–Dec;12(7):757. Comment on: J Refract Surg 1996 Mar–Apr;12(3):370–81. Comment in: J Refract Surg 1997 Jan–Feb;13(1):11.

Refractive regression after photorefractive keratectomy [letter; comment] Ramirez-Florez S, et al. **J Refract Surg** 1997 Jan–Feb;13(1):11. Comment on: J Refract Surg 1996 Nov–Dec;12(7):757.

Effects of continuous light on experimental refractive errors in chicks. Guo SS, et al. **Ophthalmic Physiol Opt** 1996 Nov; 16(6):486–90

Corneal aberrations increase with the magnitude of radial keratotomy refractive correction. Applegate RA, et al. **Optom Vis Sci** 1996 Sep;73(9):585–9

[Occurrence of refractive errors in relation to retinopathy of prematurity] Válková Z. **Cesk Slov Oftalmol** 1997 Feb; 53(1):27–31 (Eng. Abstr.) **(Cze)**

PATHOLOGY

Inferior steepening is associated with thinning of the inferotemporal cornea. Colin J, et al. **J Refract Surg** 1996 Sep–Oct;12(6):697–9

Reproducibility of videokeratographic digital subtraction maps after excimer laser photorefractive keratectomy. Johnson DA, et al. **Ophthalmology** 1996 Sep;103(9):1392–8

[Myelin fibers in Zairian patients] Kaimbo DK, et al. **Bull Soc Belge Ophtalmol** 1995;259:127–31 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Induced refractive anomalies affect chick orbital bone structure. Wilson KT, et al. **Exp Eye Res** 1997 May; 64(5):675–82

Effects of refractive error on detection acuity and resolution acuity in peripheral vision. Wang YZ, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2134–43

The relationship between corneal eccentricity and improvement in visual acuity with orthokeratology. Joe JJ, et al. **J Am Optom Assoc** 1996 Feb;67(2):87–97

Visual function following trabeculectomy: effect on corneal topography and contrast sensitivity. Dietze PJ, et al. **J Glaucoma** 1997 Apr;6(2):99–103

Occlusion edge blur: a cue to relative visual depth. Marshall JA, et al. **J Opt Soc Am A** 1996 Apr;13(4):681–8

The sensitivity of the chick eye to refractive defocus. Schmid KL, et al. **Ophthalmic Physiol Opt** 1997 Jan;17(1):61–7

Le Grand eye for the study of ocular chromatic aberration. Villegas ER, et al. **Ophthalmic Physiol Opt** 1996 Nov; 16(6):528–31

Pulsatile ocular blood flow variations with axial length and refractive error. Ravalico G, et al. **Ophthalmologica** 1997; 211(5):271–3

Biologic and environmental risk factors for regression after photorefractive keratectomy. Corbett MC, et al. **Ophthalmology** 1996 Sep;103(9):1381–91

Capsular management and refractive error in pediatric intraocular lenses. Plager DA, et al. **Ophthalmology** 1997 Apr;104(4):600–7

Clinical vision characteristics of the congenital achromatopsias. I. Visual acuity, refractive error, and binocular status. Haegerstrom-Portnoy G, et al. **Optom Vis Sci** 1996 Jul;73(7):446–56

Effect of small focal errors on vision. Miller AD, et al. **Optom Vis Sci** 1997 Jul;74(7):521–6

Significance of refractive status in branch retinal vein occlusion. A case-control study. Majji AB, et al. **Retina** 1997;17(3):200–4

[Visual image in high ametropia. Computer-assisted simulation with optic ray calculation] Fink W, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):472–6 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Two infant vision screening programmes: prediction and prevention of strabismus and amblyopia from photo- and videorefractive screening. Atkinson J, et al. **Eye** 1996;10 (Pt 2):189–98

REHABILITATION

Disposable contact lenses: where we have been—what we have learned [editorial] Freeman MI. **CLAO J** 1997 Jan; 23(1):10, 12

[Prescription of special optical aids for visual defects. I] Dotřelová D, et al. **Cesk Slov Oftalmol** 1997 Feb; 53(1):18–23 (Eng. Abstr.) **(Cze)**

[Prescription of special optical aids for visual defects. II] Dotřelová D, et al. **Cesk Slov Oftalmol** 1997 Feb;53(1):24–6 (Eng. Abstr.) **(Cze)**

[Transconjunctival electro-ophthalmic stimulation in the medical and occupational rehabilitation of flight personnel with refractive anomalies] Okovitov VV. **Voen Med Zh** 1997 Mar;318(3):58–61 **(Rus)**

SURGERY

Photorefractive keratectomy (PRK) in the military aviator: an aeromedical perspective. Ivan DJ, et al. **Aviat Space Environ Med** 1996 Aug;67(8):770–6 (44 ref.)

Update in cataract and refractive surgery. MacInnis BJ. **Can J Ophthalmol** 1996 Apr;31(3):111–2 (14 ref.)

Release of TGF-beta 1 and VEGF in tears following photorefractive keratectomy. Vesaluoma M, et al. **Curr Eye Res** 1997 Jan;16(1):19–25

Corneal haze after mechanical debridement for overcorrection after myopic photorefractive keratectomy. Förster W, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):278–9

Surgical technique for laser-assisted in situ keratomileusis. Duplessie M. **Int Ophthalmol Clin** 1996 Fall;36(4):45–51 (7 ref.)

Surgical correction of refractive errors after penetrating keratoplasty. Hardten DR, et al. **Int Ophthalmol Clin** 1997 Winter;37(1):1–35 (118 ref.)

Midinfrared photorefractive surgery: technical standards and clinical aspects. Mrochen M, et al. **Int Ophthalmol Clin** 1996 Fall;36(4):73–7 (12 ref.)

Excimer laser phototherapeutic keratectomy. Rapuano CJ. **Int Ophthalmol Clin** 1996 Fall;36(4):127–36 (11 ref.)

Corneal wound healing in laser in situ keratomileusis. Rocha G, et al. **Int Ophthalmol Clin** 1996 Fall;36(4):9–20 (41 ref.)

A comparison of modern incisional keratotomy and photorefractive keratectomy. Shapiro DR. **Int Ophthalmol Clin** 1997 Winter;37(1):65–81 (56 ref.)

Advances in lamellar corneal refractive surgery. Slade SG, et al. **Int Ophthalmol Clin** 1997 Winter;37(1):103–22 (91 ref.)

Ophthalmic lasers and liability [editorial] Classé JG. **J Am Optom Assoc** 1996 Dec;67(12):714–5

Refractive surgery [letter; comment] Press LJ. **J Am Optom Assoc** 1997 Jan;68(1):10. Comment on: J Am Optom Assoc 1996 Jul;67(7):377; discussion 379–81.

Cost and demand analysis of excimer laser use: first World Wide Web Internet survey of the interest in refractive surgery. Borer MJ, et al. **J Cataract Refract Surg** 1996 Jul–Aug;22(6):709–12

Additional thoughts on polysulfone corneal inlays [letter; comment] Choyce DP. **J Cataract Refract Surg** 1997 Jan–Feb;23(1):8–9. Comment on: J Cataract Refract Surg 1996 Oct;22(8):1045–51.

Radial keratotomy before and after retinal detachment surgery [letter] Davis DB 2nd. **J Cataract Refract Surg** 1997 Jan–Feb;23(1):10–1

Accuracy of Goldmann tonometry after refractive surgery. Faucher A, et al. **J Cataract Refract Surg** 1997 Jul–Aug; 23(6):832–8

Twelve year follow-up of unfenestrated polysulfone intracorneal lenses in human sighted eyes [see comments] Horgan SE, et al. **J Cataract Refract Surg** 1996 Oct; 22(8):1045–51. Comment in: J Cataract Refract Surg 1997 Jan–Feb;23(1):8–9.

An aphoristic guide to building a refractive surgical practice [editorial; comment] Koch DD. **J Cataract Refract Surg** 1996 Jun;22(5):513–4. Comment on: J Cataract Refract Surg 1996 Jun;22(5):542–50.

The challenge of self-restraint: our responsibility as refractive surgeons [editorial] Lane SS. **J Cataract Refract Surg** 1997 Apr;23(3):303–4

Practice styles and preferences of ASCRS members—1996 survey [see comments] Leaming DV. **J Cataract Refract Surg** 1997 May;23(4):527–35. Comment in: J Cataract Refract Surg 1997 May;23(4):457.

Intraocular folding of an acrylic lens for explantation through a small incision cataract wound. Neuhann TH. **J Cataract Refract Surg** 1996;22 Suppl 2:1383–6

Considering corneal and lenticular techniques of refractive surgery [editorial; comment] Rosen ES. **J Cataract Refract Surg** 1997 Jun;23(5):689–91 (13 ref.). Comment on: J Cataract Refract Surg 1997 Jun;23(5):731–5.

Dry eyes and refractive surgery [letter; comment] Stonecipher KG. **J Cataract Refract Surg** 1996 Nov; 22(9):1130–1. Comment on: J Cataract Refract Surg 1996 Jul–Aug;22(6):702–8.

The happy patient [editorial] Van Rij G. **J Cataract Refract Surg** 1997 Jan–Feb;23(1):3

Casebeer System for refractive keratotomy: patient satisfaction. Werblin TP, et al. **J Cataract Refract Surg** 1997 Apr;23(3):407–12

Refractive surgery, optical aberrations, and visual performance [see comments] Applegate RA, et al. **J Refract Surg** 1997 May–Jun;13(3):295–9 (17 ref.). Comment in: J Refract Surg 1997 May–Jun;13(3):213–5.

Centration for keratorefractive surgery [letter] Hall GW. **J Refract Surg** 1996 Nov–Dec;12(7):755–7

Laser center companies develop US market [news] Moretti M. **J Refract Surg** 1996 May–Jun;12(4):451–3

Marketing of photorefractive keratectomy escalates [news] Moretti M. **J Refract Surg** 1996 Sep–Oct;12(6):675

Evolving coverage in reporting refractive surgery in the popular press. Shah S, et al. **J Refract Surg** 1996 Jul–Aug; 12(5):638–41 (19 ref.)

Variability in corneal thickness before, during, and after radial keratotomy [see comments] Terry MA, et al. **J Refract Surg** 1996 Sep–Oct;12(6):700–4. Comment in: J Refract Surg 1997 Jan–Feb;13(1):12.

Quality of vision and freedom from optical correction after

refractive surgery [editorial; comment] Waring GO 3rd. **J Refract Surg** 1997 May–Jun;13(3):213–5. Comment on: J Refract Surg 1997 May–Jun;13(3):223–8. Comment on: J Refract Surg 1997 May–Jun;13(3):229–34. Comment on: J Refract Surg 1997 May–Jun;13(3):246–54. Comment on: J Refract Surg 1997 May–Jun;13(3):295–9. Comment on: J Refract Surg 1997 May–Jun;13(3):300–1.

20/20—how close must we get? [see comments] Werblin TP. **J Refract Surg** 1997 May–Jun;13(3):300–1 (3 ref.). Comment in: J Refract Surg 1997 May–Jun;13(3):213–5.

Current trends in cataract and refractive surgery in Japan—1995 survey. Oshika T, et al. **Jpn J Ophthalmol** 1996;40(3):419–33

PPA: automated lamellar keratoplasty [letter; comment] Binder PS. **Ophthalmology** 1996 Nov;103(11):1714–5. Comment on: Ophthalmology 1996 May;103(5):852–61.

Complications of small clear-zone RK [letter; comment] Casebeer JC. **Ophthalmology** 1997 May;104(5):735–6. Comment on: Ophthalmology 1996 Sep;103(9):1348–56.

Complications of small clear-zone radial keratotomy [see comments] Grimmett MR, et al. **Ophthalmology** 1996 Sep; 103(9):1348–56. Comment in: Ophthalmology 1997 May;104(5):735–6. Comment in: Ophthalmology 1997 Aug;104(8):1209–12.

Ocular integrity after refractive procedures. Peacock LW, et al. **Ophthalmology** 1997 Jul;104(7):1079–83

PRK zone decentration: measuring and reporting the angle of decentration [letter; comment] Webber SK, et al. **Ophthalmology** 1995 Sep;102(9):1258–60. Comment on: Ophthalmology 1995 Jan;102(1):42–7.

Refractive surgery. Heffler KF. **Pa Med** 1996 Mar;99 Suppl:57–62 (45 ref.)

[Refractive surgery: techniques and application at the Corneal and Refractive Surgical Center Jules Gonin in Lausanne] Geinoz J, et al. **Rev Med Suisse Romande** 1996 Jan;116(1):37–43 **(Fre)**

[Corneal endothelium after photorefractive keratectomy procedures] Wojciechowska R, et al. **Klin Oczna** 1996; 98(5):361–3 (Eng. Abstr.) **(Pol)**

THERAPY

Treatment of refractive errors. Toh HB, et al. **Aust Fam Physician** 1996 May;25(5):707, 709, 711

Extended wear disposable soft contact lenses as an alternative to photorefractive keratectomy: report of 4 years experience. Buckley CA, et al. **Aust N Z J Ophthalmol** 1997 May;25(2):111–6

Correction of subtle refractive error in aviators. Rabin J. **Aviat Space Environ Med** 1996 Feb;67(2):161–4

Multifocal contact lenses—look again! Hutnik CM, et al. **Can J Ophthalmol** 1997 Apr;32(3):201–5

Clinical performance of the Optima toric contact lens versus the CSI toric contact lens. Bucci FA Jr, et al. **CLAO J** 1997 Jan;23(1):43–8

Prospective clinical evaluation of Sunsoft Multifocal contact lens. Key JE, et al. **CLAO J** 1996 Jul;22(3):179–84

Contact lens use after contact lens–associated infectious ulcers [see comments] Lois N, et al. **CLAO J** 1997 Jul; 23(3):192–5. Comment in: CLAO J 1997 Jul;23(3):148.

Regular replacement of extended wear rigid gas permeable contact lenses. Woods CA, et al. **CLAO J** 1996 Jul; 22(3):172–8

Checking the small things [editorial] Brown MD. **J Am Optom Assoc** 1997 Jul;68(7):405–6

The subordination of refraction [editorial] Goss DA, et al. **J Am Optom Assoc** 1996 Oct;67(10):580–2

Superposition of sphero-cylindrical lenses using contour graphs [see comments] Hemenger RP. **J Am Optom Assoc** 1996 Oct;67(10):606–9. Comment in: J Am Optom Assoc 1997 Apr;68(4):214, 270.

The relationship between corneal eccentricity and improvement in visual acuity with orthokeratology. Joe JJ, et al. **J Am Optom Assoc** 1996 Feb;67(2):87–97

No calculations required [letter; comment] Lowther GE. **J Am Optom Assoc** 1997 Apr;68(4):214, 270. Comment on: J Am Optom Assoc 1996 Oct;67(10):606–9.

Contact lens correction of patients with Marfan syndrome. Yeung KK, et al. **J Am Optom Assoc** 1997 Jun;68(6):367–72

Night halos after automated lamellar keratoplasty. **J Refract Surg** 1996 Nov–Dec;12(7):809–12

Contact lenses for children. Jurkus JM. **Optom Clin** 1996; 5(2):91–104 (29 ref.)

Fitting characteristics of 1-day and 14-day Acuvue disposable contact lenses. Le AH, et al. **Optom Vis Sci** 1996 Dec;73(12):750–3

Hard contact lenses alter accommodative gain but do not prevent refractive adaptation in chicks. Schmid KL, et al. **Optom Vis Sci** 1997 Jan;74(1):20–7

Power vectors: an application of Fourier analysis to the description and statistical analysis of refractive error [see comments] Thibos LN, et al. **Optom Vis Sci** 1997 Jun; 74(6):367–75 (44 ref.). Comment in: Optom Vis Sci 1997 Jun;74(6):339–41.

The new visual optics [editorial] Thibos LN. **Optom Vis Sci** 1997 Jul;74(7):465–6

VETERINARY

Effect of optical defocus on visual acuity in dogs. Murphy CJ, et al. **Am J Vet Res** 1997 Apr;58(4):414–8

REFRACTIVE INDEX see **REFRACTOMETRY**

REFRACTOMETRY

Analytical and clinical evaluation of refractive index-matched anomalous diffraction (RIMAD) for assessment of fetal lung maturation. Rohlfs EM, et al. **Clin Chem** 1996 Nov;42(11):1861–8

Viscosity and refractive index of follicular fluid in relation to in vitro fertilization. Fisch B, et al. **J Assist Reprod Genet** 1996 Jul;13(6):468–71

Radiative transfer implies a modified reciprocity relation. Aronson R. **J Opt Soc Am A** 1997 Feb;14(2):486–90

METHODS

Refractive-index detection by interferometric backscatter in packed-capillary high-performance liquid chromatography. Kenmore CK, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):219–25

Variation during autorefraction: influence of two different target types. Rubin A, et al. **Ophthalmic Physiol Opt** 1997 Jan;17(1):38–43

REFRACTORY ANEMIA see **ANEMIA, REFRACTORY**

REFRACTORY ANEMIA WITH EXCESS OF BLASTS see **ANEMIA, REFRACTORY, WITH EXCESS OF BLASTS**

REFRACTORY PERIOD, NEUROLOGIC

Differing sympathetic and vagal effects on atrial fibrillation in dogs: role of refractoriness heterogeneity. Liu L, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H805–16

Relationship between "extension of refractoriness" and probability of successful defibrillation. Tovar OH, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H1011–9

Shock-induced depolarization of refractory myocardium prevents wave-front propagation in defibrillation. Kwaku KF, et al. **Circ Res** 1996 Nov;79(5):957–73

Effect of atrial fibrillation on atrial refractoriness in humans. Daoud EG, et al. **Circulation** 1996 Oct 1;94(7):1600–6

Differential effects of changes in local myocardial refractoriness on atrial and ventricular latency. Fananapazir L, et al. **Circulation** 1996 Sep 15;94(6):1364–71

Relationship between local atrial fibrillation interval and refractory period in the isolated canine atrium. Kim KB, et al. **Circulation** 1996 Dec 1;94(11):2961–7

Effects of atrial dilatation on refractory period and vulnerability to atrial fibrillation in the isolated Langendorff-perfused rabbit heart. Ravelli F, et al. **Circulation** 1997 Sep 2;96(5):1686–95

Refractory interval after transcardiac shocks during ventricular fibrillation. Sweeney RJ, et al. **Circulation** 1996 Dec 1;94(11):2947–52

Ventricular fibrillation interval as an index of ventricular refractoriness: when to catch the fibrillation electrograms? [letter; comment] Wang L. **Circulation** 1997 Jan 21; 95(2):531–2. Comment on: Circulation 1995 May 15;91(10):2566–72.

Refractory period extension during ventricular pacing at fibrillatory pacing rates. Gill RM, et al. **Pacing Clin Electrophysiol** 1997 Mar;20(3 Pt 1):647–53

DRUG EFFECTS

Electrophysiologic effects of a class I antiarrhythmic agent, cibenzoline, on the refractoriness and conduction of the human atrium in vivo. Esato M, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):321–7

Influence of duration of rapid ventricular pacing on ventricular refractoriness in the presence of propafenone and lidocaine. Stark U, et al. **Pacing Clin Electrophysiol** 1997 Jan;20(1 Pt 1):43–50

Indomethacin antagonises the effects of adenosine receptor agonists on the contractility and effective refractory period of guinea pig papillary muscle. Kocić I. **Pharmacol Res** 1996 Sep–Oct;34(3–4):143–7

[Effects of anesthesia with inhalation anesthetics on excitation, conduction and refractory parameters of the heart. Experiments in dogs] Hahn N, et al. **Arzneimittelforschung** 1996 Mar;46(3):251–6 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Estimates of the axonal refractory period of midbrain dopamine neurons: their relevance to brain stimulation reward. Anderson RM, et al. **Brain Res** 1996 Apr 29; 718(1–2):83–8

Genetic variation in immediate and delayed postictal refractory period in rats. Francis A, et al. **Brain Res** 1996 May 20;721(1–2):150–4

Effects of spinal cord ischemia on the refractory period of descending spinal cord evoked potential. Ishikawa M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan; 102(1):54–63

Effects of a class III antiarrhythmic drug and biphasic shocks on the postdefibrillation refractory period of relatively refractory myocardium. Murakawa Y, et al. **J Cardiovasc Electrophysiol** 1996 Jul;7(7):603–11

A new method for estimating spinal cord function. Refractory period of conductive spinal cord evoked potentials. Ishikawa M, et al. **Spine** 1997 May 1; 22(9):1007–12

REFRACTORY PERIOD, PSYCHOLOGICAL

[Analysis of interference effects in simultaneous processing of 2 problems] Schubert T. **Z Exp Psychol** 1996; 43(4):625–56 (Eng. Abstr.) **(Ger)**

REFRIGERATION

see related
HYPOTHERMIA, INDUCED

Cold chain in a hot climate. Guthridge SL, et al. **Aust N Z J Public Health** 1996 Dec;20(6):657–60

Oxidative stability and alpha-tocopherol retention in turkey burgers during refrigerated and frozen storage as influenced by dietary alpha-tocopheryl acetate. Wen J, et al. **Br Poult Sci** 1996 Sep;37(4):787–95

Power cuts and EPI vaccine storage. Senanayake MP, et al. **Ceylon Med J** 1997 Jun;42(2):69–71

Experience with veterinary vaccines in warm climates. Tulasne JJ, et al. **Dev Biol Stand** 1996;87:33–42 (20 ref.)

Vaccine transport and storage: environmental challenges. Zaffran M. **Dev Biol Stand** 1996;87:9–17 (14 ref.)

An evaluation of cold chain in Maharashtra & Karnataka states by potency testing of field samples of oral poliovirus vaccine. Deshpande JM, et al. **Indian J Med Res** 1995 Aug; 102:60–5

Listeriolysin O production and pathogenicity of non-growing Listeria monocytogenes stored at refrigeration temperature. Buncic S, et al. **Int J Food Microbiol** 1996 Aug; 31(1–3):133–47

Temperature distribution and prevalence of Listeria spp. in domestic, retail and industrial refrigerators in Greece. Sergelidis D, et al. **Int J Food Microbiol** 1997 Feb; 34(2):171–7

Chilling can cause problems [letter; comment] Nieforth KA. **J Am Pharm Assoc (Wash)** 1996 Sep;NS36(9):539. Comment on: J Am Pharm Assoc (Wash) 1996 Jul;NS36(7):439–42.

Reconstituted botulinum toxin type A does not lose potency in humans if it is refrozen or refrigerated for 2 weeks before use. Sloop RR, et al. **Neurology** 1997 Jan;48(1):249–53

INSTRUMENTATION

Temperature variations in upright mechanical freezers. Su SC, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Feb; 5(2):139–40

Solar energy and rural health care. **Indian Pediatr** 1996 Oct; 33(10):883–5

METHODS

Methods of refrigerated transport of corneas for transplantation. Madden PW, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):17–20

REFSUM DISEASE

COMPLICATIONS

[Pauci-symptomatic sensory polyneuropathy in Refsum's disease] Lévy R, et al. **Rev Neurol (Paris)** 1996 Jun–Jul; 152(6–7):469–72 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Phytanoyl-coenzyme A hydroxylase deficiency — the enzyme defect in Refsum's disease [letter] Jansen GA, et al. **N Engl J Med** 1997 Jul 10;337(2):133–4

METABOLISM

Phytanic acid oxidation: normal activation and transport yet defective alpha-hydroxylation of phytanic acid in peroxisomes from Refsum disease and rhizomelic chondrodysplasia punctata. Pahan K, et al. **J Lipid Res** 1996 May;37(5):1137–43

THERAPY

Lipapheresis: an immunoglobulin-sparing treatment for Refsum's disease. Gutsche HU, et al. **Acta Neurol Scand** 1996 Sep;94(3):190–3

Refsum's disease: long term treatment preserves sensory nerve action potentials and motor function [letter] Lou JS, et al. **J Neurol Neurosurg Psychiatry** 1997 Jun;62(6):671–2

REFSUM DISEASE, INFANTILE see **PEROXISOMAL DISORDERS**

REFSUM'S DISEASE see **REFSUM DISEASE**

REFSUM'S SYNDROME see **REFSUM DISEASE**

REFUGEES

Community outreach to refugee parents [letter] Chin NP, et al. **Acad Med** 1996 Aug;71(8):817

Burmese political dissidents in Thailand: trauma and survival among young adults in exile. Allden K, et al. **Am J Public Health** 1996 Nov;86(11):1561–9

Asthma in a Vietnamese refugee population. Ries AL, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1895–901

Tuberculosis prevention among foreign-born persons in

Seattle--King County, Washington. Wells CD, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):573–7

The public health aspects of complex emergencies and refugee situations. Toole MJ, et al. **Annu Rev Public Health** 1997;18:283–312 (61 ref.)

Sri Lankan refugees are not at risk of persecution [letter] [see comments] **BMJ** 1997 Mar 22;314(7084):905. Comment in: BMJ 1997 Jul 12;315(7100):123.

Sri Lankan refugees. Comments are like those of white South Africans not so long ago [letter; comment] **BMJ** 1997 Jul 12;315(7100):123. Comment on: BMJ 1997 Mar 22;314(7084):905.

Sri Lankan refugees. Tamils have become soft targets [letter] **BMJ** 1997 Jul 12;315(7100):123

Refugee doctors in Britain: a wasted resource [editorial] Berlin A, et al. **BMJ** 1997 Aug 2;315(7103):264–5

Asylum seekers who claim to have been tortured should have right to independent medical examination [letter] Bulstrode C. **BMJ** 1996 Sep 28;313(7060):822

Psychiatrists plan network to help asylum seekers [news] Bunce C. **BMJ** 1997 Feb 22;314(7080):535

Sri Lankan refugees. Refugee council's assessment of human rights situation in Sri Lanka is accurate [letter] Forrest D, et al. **BMJ** 1997 Jul 12;315(7100):123

Sri Lankan refugees. Ethnic cleansing is in progress [letter] Pothalingam S. **BMJ** 1997 Jul 12;315(7100):122–3

Sri Lankan refugees. Tamils are victims of unjust politics, not economic refugees [letter] Rajayogeswaran V. **BMJ** 1997 Jul 12;315(7100):124

Sri Lankan refugees. Government denies legitimate rights of minorities [letter] Ratneswaren S. **BMJ** 1997 Jul 12; 315(7100):123–4

Detaining asylum seekers [editorial] Salinsky M. **BMJ** 1997 Feb 15;314(7079):456

Overseas screening for tuberculosis in immigrants and refugees to the United States: current status. Binkin NJ, et al. **Clin Infect Dis** 1996 Dec;23(6):1226–32 (21 ref.)

The use of bilingual, bicultural paraprofessionals in mental health services: issues for hiring, training, and supervision. Musser-Granski J, et al. **Community Ment Health J** 1997 Feb;33(1):51–60

Knowledge and power: a critique of an international relief operation. Hendrie B. **Disasters** 1997 Mar;21(1):57–76

Environmental causes and impact of refugee movements: a critique of the current debate. Kibreab G. **Disasters** 1997 Mar;21(1):20–38 (90 ref.)

Cruel wars and safe havens: humanitarian aid in Liberia 1989–1996. Outram Q. **Disasters** 1997 Sep;21(3):189–205 (60 ref.)

Workshop on refugees, energy and environment, Nairobi, Kenya, 28–30 November 1995. Owen M, et al. **Disasters** 1996 Sep;20(3):274–5

Why aid agencies need better understanding of the communities they assist: the experience of food aid in Rwandan refugee camps. Pottier J. **Disasters** 1996 Dec; 20(4):324–37

Food aid and nutritional programmes during the Rwandan emergency. Shoham J. **Disasters** 1996 Dec;20(4):338–52

Epidemic cholera among refugees in Malawi, Africa: treatment and transmission. Swerdlow DL, et al. **Epidemiol Infect** 1997 Jun;118(3):207–14

Body mass index and body fat distribution in newly-arrived Vietnamese refugees in Sydney, Australia. Bermingham M, et al. **Eur J Clin Nutr** 1996 Oct;50(10):698–700

Oral health status and treatment needs in immigrants and refugees in Italy. Angelillo IF, et al. **Eur J Epidemiol** 1996 Aug;12(4):359–65

Tuberculosis in asylum seekers in Belgium. VRGT (Flemish Lung and Tuberculosis Association). Van den Brande P, et al. **Eur Respir J** 1997 Mar;10(3):610–4

Sexually transmitted diseases in mobile populations. Mabey D, et al. **Genitourin Med** 1997 Feb;73(1):18–22 (33 ref.)

STD rapid assessment in Rwandan refugee camps in Tanzania. Mayaud P, et al. **Genitourin Med** 1997 Feb; 73(1):33–8

Internal exposure to hazardous substances of persons from various continents: investigations on exposure to different organochlorine compounds. Schmid K, et al. **Int Arch Occup Environ Health** 1997;69(6):399–406

Expectations in giving and receiving help among nurses and Russian refugees. de Montigny Korb M. **Int J Nurs Stud** 1996 Oct;33(5):479–86

Caring for Myanmar refugees in Thailand. Fox PG, et al. **Int Nurs Rev** 1996 Sep–Oct;43(5):154–8

Antipersonnel mines: who are the victims? Jeffrey SJ. **J Accid Emerg Med** 1996 Sep;13(5):343–6

Effects of war trauma on Cambodian refugee adolescents' functional health and mental health status. Mollica RF, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1098–106

The role of the community health nurse in military humanitarian operations: lessons from operation sea signal--Guantanamo Bay, Cuba. Samuels GL, et al. **J Community Health Nurs** 1997;14(2):73–9

Presentation of recent torture survivors to a family practice center. Gavagan T, et al. **J Fam Pract** 1997 Feb; 44(2):209–12

Rwanda 1994: a study of medical support in military humanitarian operations. Hawley A. **J R Army Med Corps** 1997 Jun;143(2):75–82

Tuberculosis among Tibetan immigrants from India and Nepal in Minnesota, 1992–1995. Truong DH, et al. **JAMA** 1997 Mar 5;277(9):735–8

Refugees and AIDS [news] Voelker R. **JAMA** 1997 May 14;277(18):1427

Cancer in north west Pakistan and Afghan refugees. Khan SM, et al. **JPMA J Pak Med Assoc** 1997 Apr;47(4):122–4

Emergency medical aid is not for amateurs [editorial] [see comments] **Lancet** 1996 Nov 23;348(9039):1393. Comment in: Lancet 1997 Jan 18;349(9046):212–3. Comment in: Lancet 1997 Jan 18;349(9046):213.

Emergency medical aid for refugees [letter; comment] Banatvala N, et al. **Lancet** 1997 Jan 18;349(9046):212–3. Comment on: Lancet 1996 Nov 23;348(9039):1393.

Emergency medical aid for refugees [letter; comment] Boelaert M, et al. **Lancet** 1997 Jan 18;349(9046):213. Comment on: Lancet 1996 Nov 23;348(9039):1393.

Refugee relief rations [letter] Boelaert M, et al. **Lancet** 1997 Jun 14;349(9067):1775

Targeting the vulnerable in emergency situations: who is vulnerable? [see comments] Davis AP. **Lancet** 1996 Sep 28;348(9031):868–71. Comment in: Lancet 1996 Sep 28;348(9031):840. Comment in: Lancet 1996 Dec 14;348(9042):1663.

Demographic and nutritional consequences of civil war in Liberia [letter] Nabeth P, et al. **Lancet** 1997 Jan 4; 349(9044):59–60

Health situation of refugees in eastern Zaire [letter] Nabeth P, et al. **Lancet** 1997 Apr 5;349(9057):1031–2

Vulnerability in emergency situations [editorial; comment] Toole MJ. **Lancet** 1996 Sep 28;348(9031):840. Comment on: Lancet 1996 Sep 28;348(9031):868–71.

What should be done in acute emergencies? [letter; comment] Van Damme W, et al. **Lancet** 1996 Dec 14;348(9042):1663. Comment on: Lancet 1996 Sep 28;348(9031):868–71.

Culture, trauma, and psychotrauma programmes [letter; comment] Van Ommeren M, et al. **Lancet** 1997 Aug 23; 350(9077):595. Comment on: Lancet 1997 May 31;349(9065):1568.

War-wounded refugees: the types of injury and influence of disability on well-being and social integration. Hermansson AC, et al. **Med Confl Surviv** 1996 Oct–Dec; 12(4):284–302

An encounter with a Haitian refugee boat. Galbraith AJ, et al. **Med J Aust** 1996 Dec 2–16;165(11–12):678–9

Asylum seekers: general health status and problems with access to health care. Sinnerbrink I, et al. **Med J Aust** 1996 Dec 2–16;165(11–12):634–7

Army community health nurses' role in humanitarian relief effort, Operation Sea Signal, Guantanamo Bay, Cuba. Samuels GL. **Mil Med** 1997 Mar;162(3):190–3

Health needs of Cambodian and Vietnamese refugees in Porirua. Blakely T. **N Z Med J** 1996 Oct 11; 109(1031):381–4

Immigrant transitions and health care: an action plan [news] Meleis AI. **Nurs Outlook** 1997 Jan–Feb;45(1):42

Missing front teeth in exile Tamils--an unresolved phenomenon. Wolf M. **Soc Sci Med** 1996 Oct;43(7):1057–62

Alcohol and drug use among displaced persons: an overview. Johnson TP. **Subst Use Misuse** 1996 Nov;31(13):1853–89 (80 ref.)

Meningococcal meningitis in patients with falciparum malaria. Wolday D, et al. **Trop Doct** 1996 Oct;26(4):157–9

Torture and war trauma survivors in primary care practice. Weinstein HM, et al. **West J Med** 1996 Sep;165(3):112–8 (30 ref.)

Refugees: do not forget the basics. Malé S. **World Health Stat Q** 1996;49(3–4):221–5 (19 ref.)

[Tuberculosis in asylum seekers in The Netherlands] Kuyvenhoven JV, et al. **Ned Tijdschr Geneeskd** 1997 Mar 22;141(12):581–4 (Eng. Abstr.) **(Dut)**

[Rwanda, a retrospective to aid rendered following the 1994 genocide] Veeken H. **Ned Tijdschr Geneeskd** 1997 Apr 19; 141(16):785–8 (Eng. Abstr.) **(Dut)**

[Fever of unknown origin (FUO) in the camps of Rwandan refugees in the Goma region of in Zaire (September 1994)] Rey JL, et al. **Bull Soc Pathol Exot** 1996;89(3):204–8 (Eng. Abstr.) **(Fre)**

[Cholera in Goma, July 1994. Bioforce] **Rev Epidemiol Sante Publique** 1996 Aug;44(4):358–63 (Eng. Abstr.) **(Fre)**

[Asylum seekers and refugees in ambulatory health care: communication between physician and patient] Blöchliger C, et al. **Schweiz Rundsch Med Prax** 1997 May 7; 86(19):800–10 (Eng. Abstr.) **(Ger)**

[The treatment of torture and war victims] Frey C, et al. **Schweiz Rundsch Med Prax** 1997 May 21;86(21):899–905 (Eng. Abstr.) **(Ger)**

[Physician among refugees (letter)] Andreassen G. **Tidsskr Nor Laegeforen** 1997 Feb 28;117(6):846–7 **(Nor)**

[Tuberculosis in refugees from foreign countries] Rybka LN, et al. **Probl Tuberk** 1996;(3):12–4 (Eng. Abstr.) **(Rus)**

[The organization of the work of the State Epidemiological Health Service of the Russian Federation in ensuring the sanitary and epidemiological wellbeing of refugees and forced migrants] Khalilullina AS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 May-Jun; (3):52–7 **(Rus)**

[Migration and health (editorial)] Litvinjenko S. **Srp Arh Celok Lek** 1997 Jul–Aug;125(7–8):191–6 (Eng. Abstr.) **(Scc)**

[Medical ethics and refugee politics. A statement from the Medical Society is needed] Lindberg T. **Lakartidningen** 1997 May 7;94(19):1779 **(Swe)**

[The refugee problem and cost savings challenge medical ethics. A new Internet forum may be instructive] Malmström C. **Lakartidningen** 1997 May 7;94(19):1768–70 **(Swe)**

[The field of migration medicine is more and more important. Responsibility of primary health care for refugees' health requires more knowledge] Orn P. **Lakartidningen** 1997 Apr 16;94(16):1444–5 **(Swe)**

HISTORY

The Jewish physician in the post Columbus era: the 15th century Spanish inquisition and expulsion revisited in 20th century Germany and Austria. Cohen SG. **Allergy Asthma Proc** 1997 Jul–Aug;18(4):269–81

LEGISLATION & JURISPRUDENCE

Doctors complain about treatment of asylum seekers in Britain [news] Bunce C. **BMJ** 1997 Feb 8;314(7078):393

The sleep of reason produces monsters — human costs of economic sanctions [editorial; comment] [see comments] Eisenberg L. **N Engl J Med** 1997 Apr 24;336(17):1248–50. Comment on: N Engl J Med 1997 Apr 24;336(17):1251–3. Comment in: N Engl J Med 1997 Aug 28;337(9):642–3; discussion 644. Comment in: N Engl J Med 1997 Aug 28;337(9):643; discussion 644. Comment in: N Engl J Med 1997 Aug 28;337(9):643–4; discussion 644.

Human costs of economic sanctions [letter; comment] Sartin JS. **N Engl J Med** 1997 Aug 28;337(9):643; discussion 644. Comment on: N Engl J Med 1997 Apr 24;336(17):1248–50.

PSYCHOLOGY

Acculturative stress among Amerasian refugees: gender and racial differences. Nwadiora E, et al. **Adolescence** 1996 Summer;31(122):477–87

School performance and emotional problems in refugee children. Rousseau C, et al. **Am J Orthopsychiatry** 1996 Apr;66(2):239–51

Refugees' time perspective and mental health. Beiser M, et al. **Am J Psychiatry** 1997 Jul;154(7):996–1002

Psychiatric implications of displacement: contributions from the psychology of place [see comments] Fullilove MT. **Am J Psychiatry** 1996 Dec;153(12):1516–23 (84 ref.). Comment in: Am J Psychiatry 1997 Sep;154(9):1328–9.

The uses of psychosocial epidemiology in promoting refugee health [editorial] Neugebauer R. **Am J Public Health** 1997 May;87(5):726–8

Psychological well-being of Cambodian women in resettlement. Catolico O. **ANS Adv Nurs Sci** 1997 Jun; 19(4):75–84 (52 ref.)

Patterns of symptomatology and patterns of torture and trauma experiences in resettled refugees. Cunningham M, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):555–65

Homeless, helpless and hospitalised: the travails of a Chinese refugee. Looi JC, et al. **Aust N Z J Psychiatry** 1996 Oct; 30(5):694–7

Comparative levels of psychological distress in a pre-migratory refugee population. McKelvey RS, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):543–8

A prospective study of psychological distress related to refugee camp experience. McKelvey RS, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):549–54

Celebrating difference. Tizard DC. **Aust N Z J Psychiatry** 1995 Dec;29(4):559–64

Mental disorder among refugees and the impact of persecution and exile: some findings from an out-patient population. Lavik NJ, et al. **Br J Psychiatry** 1996 Dec; 169(6):726–32

Anxiety, depression and PTSD in asylum-seekers: assocations with pre-migration trauma and post-migration stressors. Silove D, et al. **Br J Psychiatry** 1997 Apr; 170:351–7

Refugee children in Sweden: post-traumatic stress disorder in Iranian preschool children exposed to organized violence. Almqvist K, et al. **Child Abuse Negl** 1997 Apr; 21(4):351–66

Psychological testing as a diagnostic and therapeutic tool in the treatment of traumatized Latin American and African refugees. Nieves-Grafals S. **Cult Divers Ment Health** 1995; 1(1):19–27

Predictors of hostility in a group of relocated refugees. Westermeyer J, et al. **Cult Divers Ment Health** 1997; 3(1):53–60

Predictors of English fluency among Hmong refugees in Minnesota: a longitudinal study. Westermeyer J, et al. **Cult Divers Ment Health** 1996;2(2):125–32

Neurasthenia, depression and somatoform disorder in a Chinese-Vietnamese woman migrant. Cheung F, et al. **Cult Med Psychiatry** 1997 Jun;21(2):247–58

Refugee density and dependence: practical implications of camp size. Cosgrave J. **Disasters** 1996 Sep;20(3):261–70 (11 ref.)

Does PTSD transcend cultural barriers? A study from the Khmer Adolescent Refugee Project. Sack WH, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jan;36(1):49–54

The Khmer Adolescent Project: III. A study of trauma from Thailand's Site II refugee camp. Savin D, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Mar;35(3):384–91

Predictors of depression among refugees from Vietnam: a longitudinal study of new arrivals. Hinton WL, et al. **J Nerv Ment Dis** 1997 Jan;185(1):39–45

Compounding of premigration trauma and postmigration

stress in asylum seekers. Sinnerbrink I, et al. **J Psychol** 1997 Sep;131(5):463–70
Refugees' and immigrants' mental health: association of demographic and post-immigration factors. Pernice R, et al. **J Soc Psychol** 1996 Aug;136(4):511–9
The validity of posttraumatic stress disorder among Vietnamese refugees. Fawzi MC, et al. **J Trauma Stress** 1997 Jan;10(1):101–8
Modification of CAPS-1 for diagnosis of PTSD in Afghan refugees. Malekzai AS, et al. **J Trauma Stress** 1996 Oct; 9(4):891–8
Self-mutilation and malingering among Cuban migrants detained at Guantanamo Bay [see comments] Andrews TC, et al. **N Engl J Med** 1997 Apr 24;336(17):1251–3. Comment in: N Engl J Med 1997 Apr 24;336(17):1248–50. Comment in: N Engl J Med 1997 Aug 28;337(9):642–3; discussion 644.
The sleep of reason produces monsters — human costs of economic sanctions [editorial; comment] [see comments] Eisenberg L. **N Engl J Med** 1997 Apr 24;336(17):1248–50 . Comment on: N Engl J Med 1997 Apr 24;336(17):1251–3. Comment in: N Engl J Med 1997 Aug 28;337(9):642–3; discussion 644. Comment in: N Engl J Med 1997 Aug 28;337(9):643; discussion 644. Comment in: N Engl J Med 1997 Aug 28;337(9):643–4; discussion 644.
The influence of culture on psychiatric assessment: the Vietnamese refugee. Phan T, et al. **Psychiatr Serv** 1997 Jan;48(1):86–90 (59 ref.)
Satisfaction of Vietnamese patients and their families with refugee and mainstream mental health services. Silove D, et al. **Psychiatr Serv** 1997 Aug;48(8):1064–9
Physical disorders among Southeast Asian refugee outpatients with psychiatric disorders. Ta K, et al. **Psychiatr Serv** 1996 Sep;47(9):975–9
Not without a trace: resilience and remembering among Bosnian refugees (commentary on "a family survives genocide"). Jenkins JH. **Psychiatry** 1997 Spring;60(1):40–3
MMPI performance of central American refugees and Mexican immigrants. Clark S, et al. **Psychol Rep** 1996 Dec; 79(3 Pt 1):819–24
The effects of violence on health and adjustment of Southeast Asian refugee children: an integrative review. Fox PG, et al. **Public Health Nurs** 1994 Jun;11(3):195–201 (28 ref.)
Tuberculosis beliefs among recent Vietnamese refugees in New York State. Carey JW, et al. **Public Health Rep** 1997 Jan–Feb;112(1):66–72
Factor analysis of the impact of event scale with children in war. Dyregrov A, et al. **Scand J Psychol** 1996 Dec; 37(4):339–50
The influence of culture and context on the pre- and post-migration experience of school-aged refugees from Central America and Southeast Asia in Canada. Rousseau C, et al. **Soc Sci Med** 1997 Apr;44(8):1115–27
Post-traumatic responses to aerial bombing. Somasundaram DJ. **Soc Sci Med** 1996 Jun;42(11):1465–71
Afghan refugee issues in the U.S. social environment. Lipson JG, et al. **West J Nurs Res** 1997 Feb;19(1):110–26
[A study of post-traumatic stress reactions among war refugees based on medical records. A standard model may support the treatment] Apitzsch H, et al. **Lakartidningen** 1996 Nov 20;93(47):4285–8, 4291–4 (Eng. Abstr.) **(Swe)**

STATISTICS & NUMERICAL DATA

The uses of psychosocial epidemiology in promoting refugee health [editorial] Neugebauer R. **Am J Public Health** 1997 May;87(5):726–8
Refugee density and dependence: practical implications of camp size. Cosgrave J. **Disasters** 1996 Sep;20(3):261–70 (11 ref.)
Morbidity pattern among refugees in Eastern Ethiopia. Bisrat F, et al. **East Afr Med J** 1995 Nov;72(11):728–30
Prevalence study of different hepatitis markers among pregnant Albanian refugees in Greece. Malamitsi-Puchner A, et al. **Eur J Epidemiol** 1996 Jun;12(3):297–301
Copper and zinc content in human milk in Croatia. Mandić Z, et al. **Eur J Epidemiol** 1997 Feb;13(2):185–8
Health problems of refugees. Ackerman LK. **J Am Board Fam Pract** 1997 Sep–Oct;10(5):337–48 (72 ref.)
Diagnosing posttraumatic stress disorder in multicultural patients in a Stockholm psychiatric clinic. Ekblad S, et al. **J Nerv Ment Dis** 1997 Feb;185(2):102–7
Palestinian refugees in the West Bank and Gaza Strip: health = development. Husseini AS. **Med Confl Surviv** 1996 Apr–Jun;12(2):131–7
Civilian eye casualties in east Jerusalem and the occupied territories. Jaouni ZM, et al. **Med Confl Surviv** 1996 Apr–Jun;12(2):138–48
Impact of a psychiatric outreach service for homeless persons with schizophrenia. Buhrich N, et al. **Psychiatr Serv** 1996 Jun;47(6):644–6
The influence of exile and repatriation on mental and physical health. A population-based study. Sundquist J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Jan;31(1):21–8
Southeast Asians: Asian-Pacific Americans at risk for substance misuse. D'Avanzo CE. **Subst Use Misuse** 1997 Jun;32(7–8):829–48 (65 ref.)
Available resources for investigating substance use among homeless, immigrant, and refugee populations. Johnson TP. **Subst Use Misuse** 1997 Jun;32(7–8):1005–10
Substance use among homeless, immigrant, and refugee populations: an international perspective. Introduction. Johnson TP. **Subst Use Misuse** 1997 Jun;32(7–8):793–803
Drug problems among immigrants and refugees in The Netherlands and the Dutch health care and treatment system. van de Wijngaart GF. **Subst Use Misuse** 1997 Jun; 32(7–8):909–38 (60 ref.)
[Epidemiology of individual front tooth gaps in exiled Tamilians] Wolf M, et al. **Gesundheitswesen** 1996 Oct; 58(10):547–50 (Eng. Abstr.) **(Ger)**

REFUSAL OF TREATMENT see **TREATMENT REFUSAL**

REFUSAL TO TREAT

Reassessing medical students' willingness to treat HIV-infected patients. Carter D, et al. **Acad Med** 1996 Nov;71(11):1250–2
Differences between Asian-American and white American dentists in attitudes toward treatment of HIV-positive patients. Raphael KG, et al. **AIDS Educ Prev** 1996 Apr; 8(2):155–64
MOD settles over Down's syndrome child [news] Dyer C. **BMJ** 1997 May 10;314(7091):1368
Children have rights to medicines [letter; comment] Essex C, et al. **BMJ** 1997 Jul 5;315(7099):62. Comment on: BMJ 1997 Mar 8;314(7082):698.
Woman dies two months after food withdrawal [news] Kmietowicz Z. **BMJ** 1997 May 24;314(7093):1503
Row over force feeding of patients with Alzheimer's disease [news] Sheldon T. **BMJ** 1997 Aug 9;315(7104):327
Physicians' refusal to provide life-prolonging medical interventions. Paris JJ, et al. **Clin Perinatol** 1996 Sep; 23(3):563–71 (31 ref.)
Medical care in old age: what do nurses in long-term care consider appropriate? Gillick MR, et al. **J Am Geriatr Soc** 1996 Nov;44(11):1322–5
Reluctance of paramedics and emergency medical technicians to perform mouth-to-mouth resuscitation. Hew P, et al. **J Emerg Med** 1997 May–Jun;15(3):279–84
HIV infection, risk taking, and the duty to treat. Smolkin D. **J Med Philos** 1997 Feb;22(1):55–74
The abandonment of the patient [news] Fagin CM, et al. **Nurs Outlook** 1996 May–Jun;44(3):147–9
The decision to terminate services: minimizing liability in the process. Midwest Medical Insurance Company Risk Management Committee. **S D J Med** 1996 Aug;49(8):261
[May elderly patients be denied heart surgery? Risk analysis and follow-up of patients over 80 years of age] Deiwick M, et al. **Fortschr Med** 1996 Mar 10;114(7):33–7 **(Ger)**

LEGISLATION & JURISPRUDENCE

Can doctors place limits on their medical practices? Capen K. **Can Med Assoc J** 1997 Mar 15;156(6):839–40
Managed care ... Medicare's 4 million HMO members can demand hearings if they are refused medical services [news] **Hosp Health Netw** 1996 Dec 5;70(23):10–1
Tube feeding dilemmas: can artificial nutrition and hydration be legally or ethically withheld or withdrawn? Goodhall L. **J Adv Nurs** 1997 Feb;25(2):217–22
Patient rights, provider rights: balancing the conflict. Sfikas JD. **J Am Dent Assoc** 1997 Jun;128(6):763–6
Parting company. Sfikas PM. **J Am Dent Assoc** 1996 Nov; 127(11):1660–2
Patient rights, provider rights: balancing the conflict. Sfikas PM. **J Am Dent Assoc** 1997 Jul;128(7):1029–33
U.S. court rules refusal to have children an HIV disability [news] **J Can Dent Assoc** 1997 May;63(5):333–4
Requests for "inappropriate" treatment based on religious beliefs. Orr RD, et al. **J Med Ethics** 1997 Jun;23(3):142–7
The child, the doctor and the judge. Balcombe J. **J R Soc Med** 1996;89 Suppl 28:3–9
Avoiding the claim of patient abandonment. Thieman S. **Mo Med** 1996 Oct;93(10):634–5
Dental offices open to the public [news] **N Y State Dent J** 1996 Nov;62(9):67
The Americans with Disabilities Act: should it compel cosmetic treatment for HIV-positive individuals? Friedland B. **Plast Reconstr Surg** 1997 Sep;100(4):1061–9

STATISTICS & NUMERICAL DATA

Predicting dentists' willingness to treat HIV-infected patients. Sadowsky D, et al. **AIDS Care** 1996 Oct;8(5):581–8
The decision to terminate resuscitative efforts: results of a questionnaire. Mohr M, et al. **Resuscitation** 1997 Feb; 34(1):51–5

REFUSE DISPOSAL

Disposable containers as larval habitats for Aedes aegypti in a city with regular refuse collection: a study in Marilia, São Paulo State, Brazil. Mazine CA, et al. **Acta Trop** 1996 Sep;62(1):1–13
Mortality among workers at municipal waste incinerators in Rome: a retrospective cohort study. Rapiti E, et al. **Am J Ind Med** 1997 May;31(5):659–61
Comparison of a self-administered questionnaire and a telephone interview of 146 Danish waste collectors. van Ooijen M, et al. **Am J Ind Med** 1997 May;31(5):653–8
Shigellosis on Indian reserves in Manitoba, Canada: its relationship to crowded housing, lack of running water, and inadequate sewage disposal. Rosenberg T, et al. **Am J Public Health** 1997 Sep;87(9):1547–51
Aedes albopictus and Ae. triseriatus eggs survive waste tire processing. Hanson SM, et al. **J Am Mosq Control Assoc** 1996 Dec;12(4):728–9
Avoiding solid waste contamination problems from iodine-131 patients [news] Marcus CS, et al. **J Nucl Med** 1997 Sep;38(9):26N
Levels of chromosomal damage in hepatocytes of wild rats living within the area of a waste disposal plant. Eckl PM, et al. **Sci Total Environ** 1997 Mar 20;196(2):141–9
Estimation of heavy metal transformations in municipal solid waste. Flyhammar P. **Sci Total Environ** 1997 May 30; 198(2):123–33
Urinary 1-hydroxypyrene levels of garbage collectors with low-level exposure to polycyclic aromatic hydrocarbons. Hara K, et al. **Sci Total Environ** 1997 Jun 20; 199(1–2):159–64
Disposal of rendered specified offal [letter] Scrimgeour EM, et al. **Vet Rec** 1996 Aug 31;139(9):219–20

ECONOMICS

Comparison of waste composition in a continuing-care retirement community. Kim T, et al. **J Am Diet Assoc** 1997 Apr;97(4):396–400

METHODS

Biomethanation of a mixture of salty cheese whey and poultry waste or cattle dung. A study of effect of temperature and retention time. Patel C, et al. **Appl Biochem Biotechnol** 1996 Aug;60(2):159–66
Burning remnants of war [news] **Environ Health Perspect** 1996 Dec;104(12):1274–5
The NIEHS recycles [news] **Environ Health Perspect** 1997 Apr;105(4):377
Composting alternative for animal carcass disposal. Glanville TD, et al. **J Am Vet Med Assoc** 1997 Apr 15;210(8):1116–20 (23 ref.)
Waste away. Campbell SL. **Occup Health Saf** 1994 Oct; 63(10):160–4, 166
Disease risk from "fox middens' [letter] Milne EM, et al. **Vet Rec** 1997 Feb 1;140(5):135–6
[Evaluation of methods for preparing chicken feces from the veterinary hygienic aspect] Dorn W, et al. **Zentralbl Veterinarmed [B]** 1997 Apr;44(2):105–18 (Eng. Abstr.) **(Ger)**

STANDARDS

Infectious waste generator annual reports. Murphy ML. **Del Med J** 1997 Jan;69(1):31–3

REGENERATION

see related
WOUND HEALING

Regeneration of articular cartilage defects in rabbits by osteogenic protein-1 (bone morphogenetic protein-7). Grgić M, et al. **Acta Med Croatica** 1997;51(1):23–7
Downregulation of E-cadherin in the reparative epithelium of the human gastrointestinal tract. Hanby AM, et al. **Am J Pathol** 1996 Mar;148(3):723–9
Increased transforming growth factor-beta 1 expression in regenerating rat renal tubules following ischemic injury. Basile DP, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F500–9
Expression of bcl-2 and bax in regenerating rat renal tubules following ischemic injury. Basile DP, et al. **Am J Physiol** 1997 May;272(5 Pt 2):F640–7
Regeneration and revascularization of a nerve-intact skeletal muscle graft in the spontaneously hypertensive rat. Carlsen RC, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R153–61
Regeneration of tactile lamellar corpuscles of the rat after postnatal freeze injury. Jirmanová I, et al. **Anat Embryol (Berl)** 1997 Apr;195(4):363–74
Osteopontin and bone sialoprotein expression in regenerating rat periodontal ligament and alveolar bone. Lekic P, et al. **Anat Rec** 1996 Jan;244(1):50–8
Hair cell regeneration in the avian cochlea. Cotanche DA. **Ann Otol Rhinol Laryngol Suppl** 1997 May;168:9–15 (61 ref.)
Muscle flap reconstruction aids in urethral regeneration. Beckenstein M, et al. **Ann Plast Surg** 1996 Jun;36(6):641–3
A quantitative morphometric study of the kinetics of tissue regeneration after administration of cisplatin. Sela J, et al. **Anticancer Drugs** 1996 Jul;7(5):579–85
Morphological and flow cytofluorometrical analyses of regenerated rat thymus after irradiation. Fujikura Y, et al. **Arch Histol Cytol** 1997 Mar;60(1):79–87
Expression of VCAM-1 in rabbit iliac arteries is associated with vasodilator dysfunction of regenerated endothelium following balloon injury. Krejcy K, et al. **Atherosclerosis** 1996 Apr 26;122(1):59–67
Molecular cloning of up-regulated cytoskeletal genes from regenerating skeletal muscle: potential role of myocyte enhancer factor 2 proteins in the activation of muscle-regeneration-associated genes. Akkila WM, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):87–93
Changes in mRNA levels of the sarcoplasmic/endoplasmic-reticulum Ca(2+)-ATPase isoforms in the rat soleus muscle regenerating from notexin-induced necrosis. Zádor E, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):107–13
Retinoid signalling and retinoid receptors in amphibian limb regeneration. Brockes JP. **Biochem Soc Symp** 1996; 62:137–42 (22 ref.)

REGENERATION

Weak extremely-low-frequency magnetic field-induced regeneration anomalies in the planarian Dugesia tigrina. Jenrow KA, et al. **Bioelectromagnetics** 1996;17(6):467-74

Recent advances in tissue synthesis in vivo by use of collagen-glycosaminoglycan copolymers. Ellis DL, et al. **Biomaterials** 1996 Feb;17(3):291-9 (70 ref.)

Calcification of cross-linked collagen-elastin membrane implants in vivo and their proposed use in bone regeneration. Vardaxis NJ, et al. **Biomaterials** 1996 Aug; 17(15):1489-97

The renewal of the epidermis: a topological mechanism. Dubertret B, et al. **Biophys J** 1997 Jul;73(1):38-44

Early myosin switching induced by nerve activity in regenerating slow skeletal muscle. Jerkovic R, et al. **Cell Struct Funct** 1997 Feb;22(1):147-53

Regeneration of skeletal muscle in two teleost fish: Sparus aurata and Brachydanio rerio. Rowlerson A, et al. **Cell Tissue Res** 1997 Aug;289(2):311-22

Accelerated restitution of endothelial integrity and endothelium-dependent function after phVEGF165 gene transfer. Asahara T, et al. **Circulation** 1996 Dec 15; 94(12):3291-302

Activation of a single retinoic acid receptor isoform mediates proximodistal respecification. Pecorino LT, et al. **Curr Biol** 1996 May 1;6(5):563-9

Growth factors in skeletal muscle regeneration. Husmann I, et al. **Cytokine Growth Factor Rev** 1996 Oct;7(3):249-58 (108 ref.)

Lens regeneration in larval Xenopus laevis: experimental analysis of the decline in the regenerative capacity during development. Filoni S, et al. **Dev Biol** 1997 Jul 1; 187(1):13-24

Neural crest-like cells originate from the spinal cord during tail regeneration in adult amphibian urodeles. Benraiss A, et al. **Dev Dyn** 1997 May;209(1):15-28

Clonal cell cultures from adult spinal cord of the amphibian urodele Pleurodeles waltl to study the identity and potentialities of cells during tail regeneration. Benraiss A, et al. **Dev Dyn** 1996 Feb;205(2):135-49

Reactivation and graded axial expression pattern of Wnt-10a gene during early regeneration stages of adult tail in amphibian urodele Pleurodeles waltl. Caubit X, et al. **Dev Dyn** 1997 Feb;208(2):139-48

Shh expression in developing and regenerating limb buds of Xenopus laevis. Endo T, et al. **Dev Dyn** 1997 Jun; 209(2):227-32

Fibroblast growth factor receptors and regeneration of the eye lens. McDevitt DS, et al. **Dev Dyn** 1997 Feb; 208(2):220-6

Cellular localisation of transforming growth factor-beta 2 and -beta 3 (TGF-beta2, TGF-beta3) in damaged and regenerating skeletal muscles. McLennan IS, et al. **Dev Dyn** 1997 Feb;208(2):278-89

Appropriate pattern formation following regulative regeneration in the hindbrain neural tube. Díaz C, et al. **Development** 1996 Oct;122(10):3095-105

Nerve dependency of regeneration: the role of Distal-less and FGF signaling in amphibian limb regeneration. Mullen LM, et al. **Development** 1996 Nov;122(11):3487-97

alpha-Cell neogenesis in an animal model of IDDM. O'Reilly LA, et al. **Diabetes** 1997 Apr;46(4):599-606

The upper dermal sheath has a potential to regenerate the hair in the rat follicular epidermis. Matsuzaki T, et al. **Differentiation** 1996 Sep;60(5):287-97

Phenotypic changes and proliferation of adrenocortical cells during adrenal regeneration in rats. Engeland WC, et al. **Endocr Res** 1996 Nov;22(4):395-400

Quantitative assessment of degenerative changes in soleus muscle after hindlimb suspension and recovery. Bigard AX, et al. **Eur J Appl Physiol** 1997;75(5):380-7

Effect of increased physical activity on growth and differentiation of regenerating rat soleus muscle. Ferry A, et al. **Eur J Appl Physiol** 1997;76(3):270-6

Creatine kinase release from regenerated muscles after eccentric contractions in rats. Sakamoto K, et al. **Eur J Appl Physiol** 1996;73(6):516-20

Lymphangiogenesis: mechanisms, significance and clinical implications. Witte MH, et al. **EXS** 1997;79:65-112 (172 ref.)

Selection and use of ligands for receptor-mediated gene delivery to myogenic cells. Feero WG, et al. **Gene Ther** 1997 Jul;4(7):664-74

A role for FGF-6 in skeletal muscle regeneration. Floss T, et al. **Genes Dev** 1997 Aug 15;11(16):2040-51

Regeneration processes in rabbit endometrium: a photodynamic therapy model. Wyss P, et al. **Hum Reprod** 1996 Sep;11(9):1992-7

An in vivo model for evaluating wound repair and regeneration microenvironments. Sicard RE, et al. **In Vivo** 1996 Sep-Oct;10(5):477-81

Spinal cord regeneration: a phenomenon unique to urodeles? Chernoff EA. **Int J Dev Biol** 1996 Aug;40(4):823-31 (78 ref.)

Re-examining jaw regeneration in urodeles: what have we learnt? Ferretti P. **Int J Dev Biol** 1996 Aug;40(4):807-11 (30 ref.)

Molecular mechanisms in the control of limb regeneration: the role of homeobox genes. Gardiner DM, et al. **Int J Dev Biol** 1996 Aug;40(4):797-805 (76 ref.)

The cellular basis of limb regeneration in urodeles. Mescher AL. **Int J Dev Biol** 1996 Aug;40(4):785-95 (102 ref.)

Mechanisms of retina regeneration in urodeles. Mitashov VI. **Int J Dev Biol** 1996 Aug;40(4):833-44 (140 ref.)

Competition-based head versus foot decision in chimeric hydras. Müller WA. **Int J Dev Biol** 1996 Dec;40(6):1133-9

Heart development and regeneration in urodeles. Neff AW, et al. **Int J Dev Biol** 1996 Aug;40(4):719-25 (76 ref.)

A conceptual framework for analyzing axial patterning in regenerating urodele limbs. Stocum DL. **Int J Dev Biol** 1996 Aug;40(4):773-83 (108 ref.)

Can insights into urodele limb regeneration be achieved with cell cultures and retroviruses? Tsonis PA, et al. **Int J Dev Biol** 1996 Aug;40(4):813-6 (13 ref.)

Is retinoic acid an endogenous ligand during urodele limb regeneration? Viviano CM, et al. **Int J Dev Biol** 1996 Aug; 40(4):817-22 (42 ref.)

Epithelial repair of the uterine cervix: assessment of morphologic features and correlations with cytologic diagnosis. Yelverton CL, et al. **Int J Gynecol Pathol** 1996 Oct;15(4):338-44

No CD117 expression on B progenitors in the regenerating bone marrow [letter] Muroi K, et al. **Int J Hematol** 1997 Aug;66(2):245-7

Long-term isoprenaline administration and its effect on the revascularisation and regeneration of skeletal muscle transplants in mice. Roberts P, et al. **J Anat** 1996 Jun;188 (Pt 3):705-12

Hydra regeneration from recombined ectodermal and endodermal tissue. I. Epibolic ectodermal spreading is driven by cell intercalation. Kishimoto Y, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):763-72

Cross-linking of the dermo-epidermal junction of skin regenerating from keratinocyte autografts. Anchoring fibrils are a target for tissue transglutaminase. Raghunath M, et al. **J Clin Invest** 1996 Sep 1;98(5):1174-84

Muscle activity in autotomized tails of a lizard (Gekko gecko): a naturally occurring spinal preparation. Rumping JM, et al. **J Comp Physiol [A]** 1996 Oct;179(4):525-38

Restoration of gap junctions in the regenerative process of ethanol-induced gastric mucosal injury. Endo K, et al. **J Gastroenterol Hepatol** 1995 Sep-Oct;10(5):589-94

Gap junctions in regenerating gastric mucosa. Tarnawski A, et al. **J Gastroenterol Hepatol** 1995 Sep-Oct;10(5):602-3

Early events during avian skin appendage regeneration: dependence on epithelial-mesenchymal interaction and order of molecular reappearance. Chuong CM, et al. **J Invest Dermatol** 1996 Oct;107(4):639-46

Role of organized intestinal lymphoid aggregates in intestinal regeneration. Saxena SK, et al. **J Invest Surg** 1997 May-Jun;10(3):97-103

Adaptive range of myosin heavy chain expression in regenerating soleus is broader than in mature muscle. Snoj-Cvetko E, et al. **J Muscle Res Cell Motil** 1996 Aug; 17(4):401-9

Angiogenic and inflammatory responses following skeletal muscle injury are altered by immune neutralization of endogenous basic fibroblast growth factor, insulin-like growth factor-1 and transforming growth factor-beta 1. Lefaucheur JP, et al. **J Neuroimmunol** 1996 Oct;70(1):37-44

Changes in satellite cell population associated with regenerating muscle fibers in rats. Luque E, et al. **J Submicrosc Cytol Pathol** 1996 Jul;28(3):305-11

Regenerative healing of incisional wounds in midgestational murine hearts in organ culture. Blewett CJ, et al. **J Thorac Cardiovasc Surg** 1997 May;113(5):880-5

Development and regenerative ability of bladder in the transgenic epidermal growth factor receptor gene knockout mouse. DiSandro MJ, et al. **J Urol** 1997 Sep;158(3 Pt 2):1058-65

The ontogeny of canine small intestinal submucosa regenerated bladder. Pope JC 4th, et al. **J Urol** 1997 Sep; 158(3 Pt 2):1105-10

Renal tubule regeneration after ischemic injury is coupled to the up-regulation and activation of cyclins and cyclin dependent kinases. Park SK, et al. **Kidney Int** 1997 Sep; 52(3):706-14

Morphometric changes in free neurovascular latissimus dorsi flaps: an experimental study. Becker MH, et al. **Microsurgery** 1995;16(12):786-92

Deflazacort but not prednisone improves both muscle repair and fiber growth in diaphragm and limb muscle in vivo in the mdx dystrophic mouse. Anderson JE, et al. **Muscle Nerve** 1996 Dec;19(12):1576-85

Leukemia inhibitory factor and interleukin-6 are produced by diseased and regenerating skeletal muscle. Kurek JB, et al. **Muscle Nerve** 1996 Oct;19(10):1291-301

Long-term external calcium dependence of autotransplanted and sliced extensor digitorum longus muscle contractility. Louboutin JP, et al. **Muscle Nerve** 1997 Aug;20(8):1032-4

A scientific basis for the biologic regeneration of synovial joints. Luyten FP. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jan;83(1):167-9 (169 ref.)

Mucosal regeneration during radiotherapy. Trans Tasman Radiation Oncology Group (TROG). Denham JW, et al. **Radiother Oncol** 1996 Nov;41(2):109-18

Amphibian limb regeneration: rebuilding a complex structure. Brockes JP. **Science** 1997 Apr 4;276(5309):81-7 (55 ref.)

Wound healing--aiming for perfect skin regeneration. Martin P. **Science** 1997 Apr 4;276(5309):75-81 (92 ref.)

New tissues from old [editorial] Stocum DL. **Science** 1997 Apr 4;276(5309):15

Epithelial barrier formation by airway basal cells. Erjefält JS, et al. **Thorax** 1997 Mar;52(3):213-7

Functional restoration of rat bladder after subtotal cystectomy: in vivo cystometry and in vitro study of whole bladder. Saito M, et al. **Urol Res** 1996;24(3):171-5

[Osteocartilaginous reconstruction, research and clinical application] Eberlin JL, et al. **Swiss Surg** 1996;2(6):264-8 (Eng. Abstr.) **(Fre)**

[A pathomorphological study on damage and repair process of tubuli after renal ischemia] Takeda T. **Nippon Jinzo Gakkai Shi** 1996 Nov;38(11):493-501 (Eng. Abstr.) **(Jpn)**

[Relation between the sialic acid/fucose ratio in airway secretions and the degree of airway remodeling in bronchial asthma—reversibility of airflow limitation by beta-agonists and airway remodeling in bronchial asthma] Kobayashi H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec;34 Suppl:54-8 (Eng. Abstr.) **(Jpn)**

[Regenerating hematopoietic tissue as a source for a low molecular weight factor that inhibits leukemic cell proliferation] Sheleg SV, et al. **Biokhimiia** 1996 Apr; 61(4):621-8 (Eng. Abstr.) **(Rus)**

[Current views on the structural basis of repair regeneration of testis in mammals and humans] Kurnosova TR, et al. **Biull Eksp Biol Med** 1994 Apr;117(4):396-9 (50 ref.) **(Rus)**

[Morphometric analysis of regeneration of the pancreas after its resection] Zharkov VP, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):345-7 **(Rus)**

[The effect of pulsed ultrasound on regeneration of locally irradiated mammalian skeletal muscles] Buliakova NV, et al. **Dokl Akad Nauk** 1996 Sep;350(2):263-7 **(Rus)**

[Participation of thymus cells in post-traumatic regeneration of irradiated skeletal muscles after their treatment with pulsed ultrasound] Zubkova SM, et al. **Dokl Akad Nauk** 1996 Sep;350(3):418-20 **(Rus)**

[Patterns in the restoration of skin derivatives in warm-blooded animals] Efimov EA. **Izv Akad Nauk Ser Biol** 1997 Mar-Apr;(2):142-8 (Eng. Abstr.) **(Rus)**

[Traditional and molecular biology approaches in the study of regeneration (based on materials from 3 international conferences). The 15th Singer Symposium on Regeneration (London, 20-21 March 1996), the 5th International Conference on the Development and Regeneration of the Extremities (University of York, 24-27 March 1996), the Conference of the British Society for Cell Biology and for Developmental Biology (University of York, 27-30 March 1996)] Mitashov VI. **Izv Akad Nauk Ser Biol** 1996 Nov-Dec;(6):762-5 **(Rus)**

[The morphofunctional characteristics of connective tissue regeneration in the rat dermis after a gunshot injury] Danilov RK, et al. **Morfologiia** 1997;111(1):70-4 (Eng. Abstr.) **(Rus)**

[The regeneration of skeletal muscle tissue after a gunshot injury] Danilov RK, et al. **Morfologiia** 1996;110(5):86-90 (Eng. Abstr.) **(Rus)**

[Spinal cord trauma: the current concepts of the mechanisms of the damage, regeneration and means for its correction] Grishenkova LN, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr-Jun; (2):37-44 (173 ref.) **(Rus)**

DRUG EFFECTS

Chondroitin 4-sulfate stimulates regeneration of goldfish retinal axons. Challacombe JF, et al. **Exp Neurol** 1997 Jan; 143(1):10-7

The exogenous administration of basic fibroblast growth factor to regenerating skeletal muscle in mice does not enhance the process of regeneration. Mitchell CA, et al. **Growth Factors** 1996;13(1-2):37-55

IL-11 synergizes with IL-3 in promoting the recovery of the immune system after irradiation. Frasca D, et al. **Int Immunol** 1996 Nov;8(11):1651-7

Correlation between RA-induced apoptosis and patterning defects in regenerating fins and limbs. Géraudie J, et al. **Int J Dev Biol** 1997 Jun;41(3):529-32

Regeneration of lower and upper jaws in urodeles is differentially affected by retinoic acid. Ghosh S, et al. **Int J Dev Biol** 1996 Dec;40(6):1161-70

Effects of "in situ" vitamin E on fibroblast differentiation and on collagen fibril development in the regenerating tendon. González Santander R, et al. **Int J Dev Biol** 1996;Suppl 1:181S-182S

Treatment of axolotls with retinoids for limb regeneration studies. Scadding SR. **Int J Dev Biol** 1996 Aug;40(4):909-10

Tetracycline demineralization of dentin: the effects of concentration and application time. Sterrett JD, et al. **J Clin Periodontol** 1997 Jul;24(7):457-63

Inhibition of gastric mucosal regeneration by tyrphostin: evaluation of the role of epidermal growth factor receptor tyrosine kinase. Majumdar AP, et al. **J Lab Clin Med** 1996 Aug;128(2):173-80

The recovery of long-term denervated rat muscles after Marcaine treatment and grafting. Billington L, et al. **J Neurol Sci** 1996 Dec;144(1-2):147-55

Natural complex of cytokines is a potent stimulant to posttraumatic regeneration in rabbit cornea. Kovalchuk LV, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):271-9

Comparative effects of platelet-derived growth factor-BB and insulin-like growth factor-I, individually and in combination, on periodontal regeneration in Macaca fascicularis. Giannobile WV, et al. **J Periodontal Res** 1996 Jul;31(5):301-12

The synthesis of 5-alpha-dihydrotestosterone from androgens by human gingival tissues and fibroblasts in culture in response to TGF-beta and PDGF. Kasasa SC, et al. **J Periodontal Res** 1996 Jul;31(5):313-22

The effect of age on the expression of mineralized tissue progenitors in the periodontium--the effect of bFGF. Pitaru S, et al. **J Periodontal Res** 1997 Jan;32(1 Pt 2):179-82

Effects of hydroxyapatite particles on periodontal ligament fibroblast-like cell behavior. Alliot-Licht B, et al. **J Periodontol** 1997 Feb;68(2):158-65

Periodontal regeneration by application of recombinant human bone morphogenetic protein-2 to horizontal circumferential defects created by experimental periodontitis in beagle dogs. Kinoshita A, et al. **J Periodontol** 1997 Feb;68(2):103-9

The effect of prostacyclin analogue--iloprost on the pancreas regeneration after caerulein-induced acute pancreatitis in rats. Jurkowska G, et al. **J Physiol Pharmacol** 1996 Dec; 47(4):629-40

Effect of 5-bromo-2'-deoxyuridine on the proliferative activity of thymus and regenerating adrenal cortex. Malendowicz LK, et al. **Life Sci** 1997;61(6):641-3

Local and systemic alterations in cyclic 3',5' AMP phosphodiesterase activity in relation to tail regeneration under hypothyroidism and T4 replacement in the lizard, Mabuya carinata. Ramachandran AV, et al. **Mol Reprod Dev** 1996 Sep;45(1):48-51

The role of leukemia inhibitory factor in skeletal muscle regeneration. Kurek JB, et al. **Muscle Nerve** 1997 Jul; 20(7):815-22

Proliferation in the auditory receptor epithelium mediated by a cyclic AMP-dependent signaling pathway [see comments] Navaratnam DS, et al. **Nat Med** 1996 Oct; 2(10):1136-9. Comment in: Nat Med 1996 Oct;2(10):1082-3.

Leukaemia inhibitory factor treatment stimulates muscle regeneration in the mdx mouse. Kurek J, et al. **Neurosci Lett** 1996 Jul 19;212(3):167-70

Effect of zinc administration on pancreatic regeneration after 80% pancreatectomy. Kato K, et al. **Pancreas** 1997 Mar; 14(2):158-65

Mineralocorticoids, salt and high blood pressure. Gómez-Sánchez EP, et al. **Steroids** 1996 Apr;61(4):184-8 (51 ref.)

Renal cell regeneration following oxidant exposure: inhibition by TGF-beta1 and stimulation by ascorbic acid. Nowak G, et al. **Toxicol Appl Pharmacol** 1997 Jul;145(1):175-83

Effects of cyclosporine A on the regenerating endothelium following direct arterial injury. Cartier R, et al. **Transplant Proc** 1997 May;29(3):1886-90

[Effect of ACTH on long-term outcome of muscle regeneration after nerve injuries] Sparmann M, et al. **Handchir Mikrochir Plast Chir** 1997 Mar;29(2):73-8 (Eng. Abstr.) **(Ger)**

[Modified chitosan as a stimulant of reparative skin regeneration] Tolstikova TG, et al. **Dokl Akad Nauk** 1996 Oct;350(4):557-9 **(Rus)**

[The effect of carbacholine and noradrenaline on intertissue connections during the reparative process] Grabovoĭ AN. **Lik Sprava** 1996 Oct-Dec;(10-12):104-7 (Eng. Abstr.) **(Rus)**

[Experimental validation of the use of betamecil in ophthalmology] Egorov EA, et al. **Vestn Oftalmol** 1996 Apr-Jun;112(2):27-9 (Eng. Abstr.) **(Rus)**

GENETICS

Normal tubular regeneration and differentiation of the post-ischemic kidney in mice lacking vimentin. Terzi F, et al. **Am J Pathol** 1997 Apr;150(4):1361-71

Analysis of MyoD, myogenin, and muscle-specific gene mRNAs in regenerating Xenopus skeletal muscle. Nicolas N, et al. **Dev Dyn** 1996 Sep;207(1):60-8

A novel family of T-box genes in urodele amphibian limb development and regeneration: candidate genes involved in vertebrate forelimb/hindlimb patterning. Simon HG, et al. **Development** 1997 Apr;124(7):1355-66

Regenerative lesions in ulcerative colitis are characterized by microsatellite mutation. Heinen CD, et al. **Genes Chromosomes Cancer** 1997 Jul;19(3):170-5

Hox genes disobey colinearity and do not distinguish head from tail during planarian regeneration. Bayascas JR, et al. **Int J Dev Biol** 1996;Suppl 1:173S-174S

Myosin heavy chain gene in Dugesia (G.) tigrina: a tool for studying muscle regeneration in planarians. Cebrià F, et al. **Int J Dev Biol** 1996;Suppl 1:177S-178S

Regenerating (reg) and insulin genes are expressed in prepancreatic mouse embryos. Perfetti R, et al. **J Mol Endocrinol** 1996 Aug;17(1):79-88

Expression of Sonic hedgehog gene in regenerating newt limb blastemas recapitulates that in developing limb buds. Imokawa Y, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9159-64

Towards a molecular understanding of regeneration. 15th Singer Symposium on Models of Regeneration: Lower versus Higher Vertebrates. Institute of Child Health, London, UK, 21-22 March 1996. Tanaka E, et al. **Trends Genet** 1996 Jul;12(7):278

[Molecular mechanism of morphogenesis: a theory of locational DNA] Olovnikov AM. **Biokhimiia** 1996 Nov; 61(11):1948-70 (69 ref.) (Eng. Abstr.) **(Rus)**

[Differential gene expression during the reparative regeneration of differing polarities in planarians] Bogdanova EA, et al. **Ontogenez** 1997 Mar-Apr; 28(2):132-7 (Eng. Abstr.) **(Rus)**

[An analysis of the expression of the genes containing the LeR-1 and VeR-1 sequences in the embryogenesis, regeneration and in the intact tissues of newts] Markitantova IuV, et al. **Ontogenez** 1997 Jul-Aug; 28(4):262-70 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Pathways of T-cell regeneration in mice and humans: implications for bone marrow transplantation and immunotherapy. Mackall CL, et al. **Immunol Rev** 1997 Jun; 157:61-72 (68 ref.)

Enhanced expression of HLA-DR, Fc gamma receptor 1 (CD64) and leukocyte common antigen (CD45) indicate activation of monocytes in regenerative training periods of endurance athletes. Gabriel H, et al. **Int J Sports Med** 1997 Feb;18(2):136-41

Macrophages and dendritic cells in normal and regenerating murine skeletal muscle. Pimorady-Esfahani A, et al. **Muscle Nerve** 1997 Feb;20(2):158-66

PHYSIOLOGY

Regeneration of myelinated fiber after crush injury is retarded in sciatic nerves of mutant Japanese quails deficient in neurofilaments. Jiang XM, et al. **Acta Neuropathol (Berl)** 1996 Nov;92(5):467-72

Spontaneous central nervous system remyelination in strain A mice after infection with the Daniel's (DA) strain of Theiler's virus. Miller DJ, et al. **Acta Neuropathol (Berl)** 1996;91(6):559-65

Regeneration of rat corneal epithelium is delayed by the inhibitory epidermal pentapeptide (EPP). Wang XL, et al. **Acta Ophthalmol Scand** 1996 Aug;74(4):361-3

Target-specific guidance cues for regenerating axons are reexpressed in the lesioned adult mammalian central nervous system. Bähr M. **Adv Neurol** 1997;73:83-90 (49 ref.)

Novel molecular correlates of neuronal death and regeneration. Chen SC, et al. **Adv Neurol** 1996;71:433-49; discussion 449-50 (166 ref.)

Perilesional cortical dysfunction and reorganization. Eysel UT. **Adv Neurol** 1997;73:195-206 (38 ref.)

Restriction of plastic fiber growth after lesions by central nervous system myelin-associated neurite growth inhibitors. Kapfhammer JP. **Adv Neurol** 1997;73:7-27 (180 ref.)

Microimplantation of glial cells to promote regeneration of a lesioned fiber tract in the adult mammalian brain. Müller HW, et al. **Adv Neurol** 1997;73:29-36 (34 ref.)

Lesion-induced neuronal reorganization in the spinal cord: morphological aspects. Nacimiento W, et al. **Adv Neurol** 1997;73:37-59 (102 ref.)

Perspective: a suggested role for basement membrane structures during newt limb regeneration. Neufeld DA, et al. **Anat Rec** 1996 Oct;246(2):155-61

Does arthroscopic abrasion arthroplasty promote cartilage regeneration in osteoarthritic knees with eburnation? A prospective study of high tibial osteotomy with abrasion arthroplasty versus high tibial osteotomy alone. Akizuki S, et al. **Arthroscopy** 1997 Feb;13(1):9-17

Techniques of cartilage growth enhancement: a review of the literature. Wirth CJ, et al. **Arthroscopy** 1996 Jun; 12(3):300-8 (96 ref.)

Experimental skeletal muscle grafts as a model of regeneration. Lawson-Smith MJ, et al. **Aust N Z J Surg** 1997 Jan;67(1):35-9 (53 ref.)

Activation of protein kinase C during newt limb regeneration: effect of denervation. Martelly I, et al. **Biochem Cell Biol** 1997;75(1):27-32

Meniscal tissue regeneration in porous 50/50 copoly(L-lactide/epsilon-caprolactone) implants. de Groot JH, et al. **Biomaterials** 1997 Apr;18(8):613-22

Regenerating sensory neurones of diabetic rats express reduced levels of mRNA for GAP-43, gamma-preprotachykinin and the nerve growth factor receptors, trkA and p75NGFR. Maeda K, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1-2):166-74

Molecular basis of skeletal muscle regeneration. Chambers RL, et al. **Can J Appl Physiol** 1996 Jun;21(3):155-84 (133 ref.)

The potential role of insulin-like growth factors in skeletal muscle regeneration. MacGregor J, et al. **Can J Appl Physiol** 1996 Aug;21(4):236-50 (35 ref.)

Regeneration versus neoplastic growth. Prehn RT. **Carcinogenesis** 1997 Aug;18(8):1439-44

Fibrillations in regenerating muscle in dystrophic myopathies. Heuss D, et al. **Clin Neuropathol** 1996 Jul-Aug;15(4):200-8

Principles of cartilage repair and regeneration. Caplan AI, et al. **Clin Orthop** 1997 Sep;(342):254-69

Biochemistry of periodontal connective tissues and their regeneration: a current perspective. Narayanan AS, et al. **Connect Tissue Res** 1996;34(3):191-201 (91 ref.)

Tissue engineering, morphogenesis, and regeneration of the periodontal tissues by bone morphogenetic proteins. Ripamonti U, et al. **Crit Rev Oral Biol Med** 1997; 8(2):154-63 (86 ref.)

Photoreceptor repair in response to RPE transplants in RCS rats: outer segment regeneration. Lin N, et al. **Curr Eye Res** 1996 Oct;15(10):1069-77

A role for midline closure in the reestablishment of dorsoventral pattern following dorsal hindbrain ablation. Buxton P, et al. **Dev Biol** 1997 Mar 15;183(2):150-65

Stimulation of tentacle and bud formation by the neuropeptide head activator in Hydra magnipapillata. Hobmayer B, et al. **Dev Biol** 1997 Mar 1;183(1):1-8

Reduction of the current of injury leaving the amputation inhibits limb regeneration in the red spotted newt. Jenkins LS, et al. **Dev Biol** 1996 Sep 15;178(2):251-62

Transdifferentiation of muscle to electric organ: regulation of muscle-specific proteins is independent of patterned nerve activity. Patterson JM, et al. **Dev Biol** 1997 Jun 1; 186(1):115-26

Developmental potential of rat L6 myoblasts in vivo following injection into regenerating muscles. Pin CL, et al. **Dev Biol** 1997 Aug 1;188(1):147-66

Role of thyroid hormone and retinoid receptors in the homeotic transformation of tails into limbs in frogs. Maden M, et al. **Dev Genet** 1996;19(1):85-93

Requirement of fibroblast growth factor signaling for regeneration of epiphyseal morphology in rabbit full-thickness defects of articular cartilage. Otsuka Y, et al. **Dev Growth Differ** 1997 Apr;39(2):143-56

Expression of integrins during axolotl limb regeneration. Tsonis PA, et al. **Dev Growth Differ** 1997 Feb;39(1):9-14

Nerve-blastema interactions induce fibroblast growth factor-1 release during limb regeneration in Pleurodeles waltl. Zenjari C, et al. **Dev Growth Differ** 1997 Feb; 39(1):15-22

Demonstration of two different processes of beta-cell regeneration in a new diabetic mouse model induced by selective perfusion of alloxan. Waguri M, et al. **Diabetes** 1997 Aug;48(8):1281-90

Specific immunohistochemical detection of cardiac/fetal alpha-actin in human cardiomyocytes and regenerating skeletal muscle cells. Franke WW, et al. **Differentiation** 1996 Jul;60(4):245-50

Role of endogenous hypergastrinemia in regenerating endocrine pancreas after partial pancreatectomy. Xu G, et al. **Dig Dis Sci** 1996 Dec;41(12):2433-9

Biochemical changes during regeneration of sunflower (Helianthus annuus L.). Martinelli L, et al. **Electrophoresis** 1996 Jan;17(1):191-7

Electroencephalogram activity, catecholamines, and lymphocyte subpopulations after resistance exercise and during regeneration. Stock C, et al. **Eur J Appl Physiol** 1996;72(3):235-41

Partial regeneration of the sciatic nerve in rats enhances motor excitability to magnetic stimulation. Kraus KH, et al. **Exp Neurol** 1997 Jan;143(1):18-24

Effect of a dipeptide inhibiting ubiquitin-mediated protein degradation nerve-dependent limb regeneration in the newt. Taban CH, et al. **Experientia** 1996 Sep 15; 52(9):865-70

Role of endogenous cholecystokinin in the regeneration of pancreatic tissue after acute hemorrhagic pancreatitis in rats. Song W, et al. **Fukuoka Igaku Zasshi** 1996 Jan; 87(1):14-22

Bile ducts and portal and central veins are major producers of tumor necrosis factor alpha in regenerating rat liver. Loffreda S, et al. **Gastroenterology** 1997 Jun;112(6):2089-98

Extracellular matrix is reduced by inhibition of transforming growth factor beta1 in pancreatitis in the rat. Menke A, et al. **Gastroenterology** 1997 Jul;113(1):295-303

Regulation of thrombospondin in the regenerating mouse facial motor nucleus. Möller JC, et al. **Glia** 1996 Jun; 17(2):121-32

Islet regeneration in IFNgamma transgenic mice. Jones EM, et al. **Horm Metab Res** 1997 Jun;29(6):308-10 (32 ref.)

Regeneration of encapsulated protocorms of Phaius tankervilliae stored at low temperature. Malemnganba H, et al. **Indian J Exp Biol** 1996 Aug;34(8):802-5

Formation of neoureter from peritoneum in live animal model (dog). Matapurkar BG, et al. **Indian J Exp Biol** 1996 Oct; 34(10):954-8

Myosin light chains in regenerating graft in chick gastrocnemii. Sood A, et al. **Indian J Exp Biol** 1996 Aug; 34(8):799-801

Urodele limb and tail regeneration in early biological thought: an essay on scientific controversy and social change. Dinsmore CE. **Int J Dev Biol** 1996 Aug;40(4):621-7

Combinatorial expression patterns of the connexins 26, 32, and 43 during development, homeostasis, and regeneration of rat teeth. Fried K, et al. **Int J Dev Biol** 1996 Oct; 40(5):985-95

Effects of "in situ" vitamin E on fibroblast differentiation and on collagen fibril development in the regenerating tendon. González Santander R, et al. **Int J Dev Biol** 1996;Suppl 1:181S-182S

Cell to cell interactions during teleosts fin regeneration. Mari-Beffa M, et al. **Int J Dev Biol** 1996;Suppl 1:179S-180S

An antiserum against ceratotrichia (selachian) recognizes actinotrichia in teleost regenerating fins. Santamaria JA, et al. **Int J Dev Biol** 1996;Suppl 1:175S-176S

Cell proliferation in fin fish regeneration. Santos Ruiz L, et al. **Int J Dev Biol** 1996;Suppl 1:183S-184S

Regionalisation along the anteroposterior axis of the freshwater planarian Dugesia(Girardia)tigrina by TCEN49 protein. Vispo M, et al. **Int J Dev Biol** 1996;Suppl 1:209S-210S

Experimental evidence for FGF-1 control of blastema cell proliferation during limb regeneration of the amphibian Pleurodeles waltl. Zenjari C, et al. **Int J Dev Biol** 1996 Oct;40(5):965-71

Injury-induced alterations in newly synthesized sulphated proteoglycans from rabbit arterial neointima covered by regenerated endothelium. Ismail NA, et al. **Int J Exp Pathol** 1997 Apr;78(2):71-9

Regeneration of myoepithelial cells in rat submandibular glands after yttrium aluminium garnett laser irradiation. Takahashi S, et al. **Int J Exp Pathol** 1997 Apr;78(2):91-9

Survival and regeneration of adult human and other mammalian photoreceptors in culture. Gaudin C, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2258-68

A morphometric technique for the histological quantification of skeletal muscle regeneration. Marlow SA, et al. **J Anat** 1996 Aug;189 (Pt 1):151-8

Investigation of the influence of the Mm musculus MyoD1 allele on the efficiency of skeletal muscle regeneration. Marlow SA, et al. **J Anat** 1997 Feb;190 (Pt 2):223-7

Endurance training affects myosin heavy chain phenotype in regenerating fast-twitch muscle. Bigard XA, et al. **J Appl Physiol** 1996 Dec;81(6):2658-65

Myosin heavy chain of immature soleus muscle grafts adapts to hyperthyroidism more than to physical activity. Devor ST, et al. **J Appl Physiol** 1996 Mar;80(3):789-94

Process of basement membrane re-formation after intimal denudation. Yokoyama M, et al. **J Atheroscler Thromb** 1994;1(1):60-70

Incorporation of bromodeoxyuridine in regenerating fin tissue of the goldfish Carassius auratus. Santamaría JA, et al. **J Exp Zool** 1996 Jul 1;275(4):300-7

Regenerating gene expression in normal gastric mucosa and indomethacin-induced mucosal lesions of the rat. Kawanami C, et al. **J Gastroenterol** 1997 Feb;32(1):12-8

Timing of fiber arrival and dennervation of postsynaptic neurons is required for restoration of visual perception by regenerating axons. Thanos S, et al. **J Hirnforsch** 1996; 37(2):255-67

Use of enzyme overlay membranes to survey proteinase activity in frozen sections: cathepsin-like and plasmin-like activity in regenerating newt limbs. Day FA, et al. **J Histochem Cytochem** 1997 Jun;45(6):779-83

Human hair follicle regeneration following amputation and grafting into the nude mouse. Jahoda CA, et al. **J Invest Dermatol** 1996 Dec;107(6):804-7

Expression of type XII collagen by wound epithelial, mesenchymal, and ependymal cells during blastema formation in regenerating newt (Notophthalmus viridescens) tails. Wei Y, et al. **J Morphol** 1996 Nov; 230(2):177-86

Mass and functional capacity of regenerating muscle is enhanced by myoblast transfer. Arcila ME, et al. **J Neurobiol** 1997 Aug;33(2):185-98

Hair cell regeneration and recovery of the vestibuloocular reflex in the avian vestibular system. Carey JP, et al. **J Neurophysiol** 1996 Nov;76(5):3301-12

The synthesis of 5-alpha-dihydrotestosterone from androgens by human gingival tissues and fibroblasts in culture in response to TGF-beta and PDGF. Kasasa SC, et al. **J Periodontal Res** 1996 Jul;31(5):313-22

Bacterial colonization of bioabsorbable barrier material and periodontal regeneration. De Sanctis M, et al. **J Periodontol** 1996 Nov;67(11):1193-200

Hepatic protein synthesis and serum aminoacid levels during liver regeneration in young and old malnourished rats. Carrillo MC, et al. **Mech Ageing Dev** 1996 Oct 4;91(1):55-64

Effects of the aged microenvironment on CD4+ T cell maturation. Thoman ML. **Mech Ageing Dev** 1997 Jun; 96(1-3):75-88

Tissue regeneration as the basic oncogenic factor. Korystov YN. **Med Hypotheses** 1996 Sep;47(3):183-90 (51 ref.)

Reinnervation and regeneration of denervated rat soleus muscles. Billington L. **Muscle Nerve** 1997 Jun;20(6):744-6

Tight junctions between the axon and Schwann cell during PNS regeneration. Dezawa M, et al. **Neuroreport** 1996 Jul 29;7(11):1829-32

Retardation of pancreatic regeneration after partial pancreatectomy in a strain of rats without CCK-A receptor gene expression. Miyasaka K, et al. **Pancreas** 1997 May; 14(4):391-9

Regeneration of bronchial epithelium on chronic inflammatory changes under laser treatment. Polosukhin VV. **Pathol Res Pract** 1996 Sep;192(9):909-18

Cultured epithelial autografts: diving from surgery into matrix biology. Raghunath M, et al. **Pediatr Surg Int** 1997 Sep;12(7):478-83 (52 ref.)

Regulation of dihydropyridine receptor and ryanodine receptor gene expression in regenerating skeletal muscle. Péréon Y, et al. **Pflugers Arch** 1997 Jan;433(3):221-9

An investigation of lymphatic function following free-tissue transfer. Slavin SA, et al. **Plast Reconstr Surg** 1997 Mar; 99(3):730-41; discussion 742-3

Hepatocyte growth factor as mitogen, motogen and morphogen, and its roles in organ regeneration. Nakamura T. **Princess Takamatsu Symp** 1994;24:195-213 (76 ref.)

Inflammatory cells in renal regeneration. Ghielli M, et al. **Ren Fail** 1996 May;18(3):355-75 (106 ref.)

In vivo response of the normal and regenerating adrenal glands to thyroid manipulation in rats. Udoye MO, et al. **Res Commun Mol Pathol Pharmacol** 1997 Feb;95(2):221-4

Evidence for multiple satellite cell populations and a non-myogenic cell type that is regulated differently in regenerating and growing skeletal muscle. Molnar G, et al. **Tissue Cell** 1996 Oct;28(5):547-56

Towards a molecular understanding of regeneration. 15th Singer Symposium on Models of Regeneration: Lower versus Higher Vertebrates. Institute of Child Health, London, UK, 21-22 March 1996. Tanaka E, et al. **Trends Genet** 1996 Jul;12(7):278

Growth cones and the cues that repel them. Kolodkin AL. **Trends Neurosci** 1996 Nov;19(11):507-13 (64 ref.)

Regeneration processes in human myocardium after acute ischaemia--quantitative determination of DNA, cell number and collagen content. Adler CP, et al. **Virchows Arch** 1997 Feb;430(2):149-53

[Degeneration and regeneration of striated skeletal muscle fibers in Duchenne muscular dystrophy] Brasseur G, et al. **Bull Assoc Anat (Nancy)** 1997 Mar;81(252):9-13 (Eng. Abstr.) **(Fre)**

[Cell growth factors and tissue repair] Vaillant P. **Rev Mal Respir** 1996 Dec;13(6):555-8 (15 ref.) **(Fre)**

[Nitrogen monoxide: mediator of tissue repair?] Schäffer M, et al. **Dtsch Med Wochenschr** 1997 Mar 14;122(11):339-45 (50 ref.) **(Ger)**

[Tissue engineering of human cartilage tissue for reconstructive surgery using biocompatible resorbable fibrin gel and polymer carriers] Haisch A, et al. **HNO** 1996 Nov;44(11):624-9 (Eng. Abstr.) **(Ger)**

[Kinetics of myelopoietic regeneration and mobilization of CD34-positive cells within the scope of the NB90 Neuroblastoma Therapy Study] Sauter S, et al. **Klin Padiatr** 1997 Jul-Aug;209(4):191-5 (Eng. Abstr.) **(Ger)**

[Is TGF-beta a repair and regeneration promotor after acute pancreatitis?] Berberat P, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:387-93 (Eng. Abstr.) **(Ger)**

[Limbus stem cells and their significance for regeneration of of the corneal surface] Kruse FE. **Ophthalmologe** 1996 Oct;93(5):633-43 (32 ref.) **(Ger)**

[Experimental study on injury of the rat nasal mucosa by distilled water irrigation, and its regeneration] Suzuki S, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jun; 100(6):694-705 (Eng. Abstr.) **(Jpn)**

[The role of natural growth stimulators in regulation of regeneration processes in small intestinal epithelium after irradiation] Dziekiewicz M. **Przegl Lek** 1996;53(8):610-3 (21 ref.) (Eng. Abstr.) **(Pol)**

[The problem of regeneration of the gastrointestinal tract mucosa in erosive-ulcerous lesions] Potkhin PP, et al. **Arkh Patol** 1997 Mar-Apr;59(2):68-71 (47 ref.) (Eng. Abstr.) **(Rus)**

[Mediator aspects of the inflammatory process] Shubich MG, et al. **Arkh Patol** 1997 Mar-Apr;59(2):3-8 (50 ref.) (Eng. Abstr.) **(Rus)**

[Chronic inflammation of mucous membranes: integration of immunity and regeneration] Zinov'ev AS, et al. **Arkh Patol** 1997 May-Jun;59(3):18-24 (50 ref.) (Eng. Abstr.) **(Rus)**

[Organ and tissue regeneration in lower vertebrate animals during space flight and after its completion] Brushilinskaia NV, et al. **Ontogenez** 1997 May-Jun;28(3):198-210 (Eng. Abstr.) **(Rus)**

[Molecular mechanisms of cell-to-cell interactions during the progress and healing of tuberculosis] Kaminskaia GO, et al. **Probl Tuberk** 1996;(6):19-22 (31 ref.) (Eng. Abstr.) **(Rus)**

[Reparative phenomena in acute infectious inflammation] Tatarko SV, et al. **Fiziol Zh** 1995 Sep-Dec;41(5-6):103-6 (Eng. Abstr.) **(Ukr)**

RADIATION EFFECTS

Regeneration-blocked mdx muscle: in vivo model for testing treatments. Quinlan JG, et al. **Muscle Nerve** 1997 Aug; 20(8):1016-23

Regeneration of bronchial epithelium on chronic inflammatory changes under laser treatment. Polosukhin VV. **Pathol Res Pract** 1996 Sep;192(9):909-18

[Effect of pulsed infrared laser radiation on post-traumatic regeneration of locally-irradiated skeletal muscles and status of the rat thymus] Buliakova NV, et al. **Dokl Akad Nauk** 1996 Jul;349(1):124-8 **(Rus)**

REGENERATION, GUIDED TISSUE see **GUIDED TISSUE REGENERATION**

REGIONAL BLOOD FLOW

Assessment of the ophthalmic artery as a collateral to the cerebral circulation. A comparison of transorbital Doppler ultrasonography and regional cerebral blood flow measurements. Kerty E, et al. **Acta Neurol Scand** 1996 May; 93(5):374-9

Lateralized changes in regional cerebral blood flow during performance of verbal and facial recognition tasks: correlations with performance and "effort". Gur RC, et al. **Brain Cogn** 1997 Apr;33(3):388-414

Brain functional profiles in formal and semantic fluency tasks: a SPECT study in normals. Cardebat D, et al. **Brain Lang** 1996 Feb;52(2):305-13

A relationship between apoptosis and flow during programmed capillary regression is revealed by vital analysis. Meeson A, et al. **Development** 1996 Dec; 122(12):3929-38

Divergent changes of flow through individual blood vessels upon localized heating. Rhee JG, et al. **Int J Hyperthermia** 1996 Nov-Dec;12(6):757-69

Regional cerebral blood flow and neuropsychological performance in a Danish family with X-linked bulbo-spinal neuronopathy. Tedeschi E, et al. **Int J Neurosci** 1995 Nov; 83(1-2):59-68

Regional blood flow and hemorrhage. How far do the protective mechanisms go? [editorial; comment] Hemmer M. **Intensive Care Med** 1996 Oct;22(10):1006-8 (15 ref.). Comment on: Intensive Care Med 1996 Oct;22(10):1026-33.

A model for the coupling between cerebral blood flow and oxygen metabolism during neural stimulation. Buxton RB, et al. **J Cereb Blood Flow Metab** 1997 Jan;17(1):64-72 (53 ref.)

Vascular dysfunction induced by elevated glucose levels in rats is mediated by vascular endothelial growth factor. Tilton RG, et al. **J Clin Invest** 1997 May 1;99(9):2192-202

Regional blood flow in microgravity: adaptation and deconditioning. Arbeille P, et al. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S70-9

Basic ideas and principles for quantifying regional blood flow with nuclear medical techniques. Herzog H. **Nuklearmedizin** 1996 Oct;35(5):181-5

Quantitative regional cerebral flow measured by Tc-99M HMPAO SPECT in mood disorder. Iidaka T, et al. **Psychiatry Res** 1997 Feb 7;68(2-3):143-54

Regional cerebral blood flow in patients with schizophrenia: relevance to symptom structures. Kawasaki Y, et al. **Psychiatry Res** 1996 May 31;67(1):49-58

Attention and regional cerebral blood flow in posttraumatic stress disorder patients with substance abuse histories. Semple WE, et al. **Psychiatry Res** 1996 May 31;67(1):17-28

Inhalation injury increases the anastomotic bronchial blood flow in the pouch model of the left ovine lung. Hinder F, et al. **Shock** 1997 Aug;8(2):131-5

The relation between crossed cerebellar blood flow and severities of hemiplegia: a technetium-(99m) hexamethylpropylene amine oxine SPECT study using Patlak plot method. Watanabe H, et al. **Tohoku J Exp Med** 1996 Jul;179(3):177-81

[Relation between frontal lobe blood flow and cognitive performance in Huntington's disease] Gómez-Tortosa E, et al. **Neurologia** 1996 Aug-Sep;11(7):251-6 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

T-kinin has endothelium-dependent vasodilator activity in the cat. Santiago JA, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1491-8

Regional blood flow in Dahl-Iwai salt-sensitive rats and the effects of dietary L-arginine supplementation. Tomohiro A, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1013-9

Sexual dimorphism in regional blood flow responses to vasopressin in conscious rats. Wang YX, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1126-31

Cholinesterase inhibition improves blood flow in the ischemic cerebral cortex. Scremin OU, et al. **Brain Res Bull** 1997; 42(1):59-70

Inhibition of nitric oxide synthase induces a selective reduction in tumor blood flow that is reversible with L-arginine. Tozer GM, et al. **Cancer Res** 1997 Mar 1; 57(5):948-55

Role of bradykinin in mediating vascular effects of angiotensin-converting enzyme inhibitors in humans. Hornig B, et al. **Circulation** 1997 Mar 4;95(5):1115-8

Potent and long-lasting vasodilatory effects of adrenomedullin in humans. Comparisons between normal subjects and patients with chronic heart failure. Nakamura M, et al. **Circulation** 1997 Mar 4;95(5):1214-21

Simvastatin, an HMG-coenzyme A reductase inhibitor, improves endothelial function within 1 month. O'Driscoll G, et al. **Circulation** 1997 Mar 4;95(5):1126-31

Bosentan improves renal regional blood flow in rats with experimental congestive heart failure. Gurbanov K, et al. **Eur J Pharmacol** 1996 Aug 29;310(2-3):193-6

Sodium metabisulphite causes epithelial damage and increases sheep tracheal blood flow and permeability. Wells UM, et al. **Eur Respir J** 1996 May;9(5):976-83

Central IGF-1 decreases systemic blood pressure and increases blood flow in selective vascular beds. Hu Y, et al. **Horm Metab Res** 1996 May;28(5):211-4

Neural circulatory responses to carbon monoxide in healthy humans. Hausberg M, et al. **Hypertension** 1997 May; 29(5):1114-8

Treatment with the type IV phosphodiesterase inhibitor Ro 20-1724 protects renal and mesenteric blood flow in endotoxemic rats treated with norepinephrine. Carcillo JA, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1197-204

Regional effects of dobutamine in endotoxic shock. De Backer D, et al. **J Surg Res** 1996 Oct;65(2):93-100

Augmenting of tumor uptake of anti-melanoma antibody MEM136: influence of interferon. Li J, et al. **Nucl Med Biol** 1996 Oct;23(7):873-9

Effects of dietary supplementation with arachidonic acid rich oils on nerve conduction and blood flow in streptozotocin-diabetic rats. Cotter MA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 May; 56(5):337-43

Effects of hypertonic saline on regional function and blood flow in canine hearts during acute coronary occlusion. Kien ND, et al. **Shock** 1997 Apr;7(4):274-81

PHYSIOLOGY

Modeling blood flow in vessels with changeable caliber for physiology and biophysics courses. Kozlova EK, et al. **Am J Physiol** 1997 Jun;272(6 Pt 3):S26–30

Confirmation and initial documentation of thoracic and abdominal aortic helical flow. An ultrasound study. Frazin LJ, et al. **ASAIO J** 1996 Nov–Dec;42(6):951–6

The effect of distension of the stomach on peripheral blood flow in anaesthetized pigs. Vacca G, et al. **Exp Physiol** 1996 May;81(3):385–96

Effects of pH on vascular tension: which are the important mechanisms? Aalkjaer C, et al. **J Vasc Res** 1996 Sep–Oct; 33(5):347–59 (109 ref.)

Doppler assessment of flow velocity in the uterine artery during pubertal maturation. Laursen EM, et al. **Ultrasound Obstet Gynecol** 1996 Nov;8(5):341–5

[Disorders of organ perfusion. IV. Interdisciplinary Symposium of Clinical Physiological Anesthesiology. V., 9/20–21/1996, Heidelberg] Weigand MA. **Anaesthesist** 1996 Dec;45(12):1239–43 **(Ger)**

RADIATION EFFECTS

Late effects of X irradiation on regulation of cerebral blood flow after whole-brain exposure in rats. Keyeux A, et al. **Radiat Res** 1997 May;147(5):621–30

REGIONAL HEALTH PLANNING

The impact of regionalization on a surgery program in the Canadian health care system. Hamilton SM, et al. **Arch Surg** 1997 Jun;132(6):605–9; discussion 609–11

Appropriateness of primary total hip and knee replacements in regions of Ontario with high and low utilization rates [see comments] van Walraven CV, et al. **Can Med Assoc J** 1996 Sep 15;155(6):697–706. Comment in: Can Med Assoc J 1996 Dec 1;155(11):1549–50.

High hospital admission rates and inappropriate care [see comments] Restuccia J, et al. **Health Aff (Millwood)** 1996 Winter;15(4):156–63. Comment in: Health Aff (Millwood) 1996 Winter;15(4):164–7.

Development of a statewide trauma system: classification of levels of care available to injured patients. Svenson JE, et al. **J Ky Med Assoc** 1996 Feb;94(2):63–9

Appropriateness in health care: application to prescribing. Buetow SA, et al. **Soc Sci Med** 1997 Jul;45(2):261–71 (115 ref.)

Evolution and organization of a regional Gamma Knife Center. Barnett GH. **Stereotact Funct Neurosurg** 1996;66 Suppl 1:365–9

[Health, marginality and regional development] Urbina-Fuentes M, et al. **Gac Med Mex** 1996 Nov–Dec; 132(6):575–97 (Eng. Abstr.) **(Spa)**

[Inappropriate hospital admission and stay according to the Appropriateness Evaluation Protocol. Study of point prevalence in a geriatric department (letter; comment)] Ochoa Calvo P, et al. **Med Clin (Barc)** 1997 Jun 28; 109(5):195. Comment on: Med Clin (Barc) 1996 Jun 22;107(4):124–9. **(Spa)**

ECONOMICS

Appropriate use of interventional radiology is cost-effective. Tan L. **Acad Radiol** 1996 Apr;3 Suppl 1:S109–10

Liabilities of cutting costs through preventive medicine and regionalization [letter] Shenkin HA. **Health Aff (Millwood)** 1996 Fall;15(3):285

LEGISLATION & JURISPRUDENCE

Whether to fight or to switch--or both [editorial] [see comments] Slobodien HD. **N J Med** 1996 Aug;93(8):13–4 . Comment in: N J Med 1996 Nov;93(11):10.

Early citizen review: does it make a difference? Jennings MA, et al. **Soc Work** 1996 Mar;41(2):224–31

METHODS

The estimation of caries prevalence in small areas. Leroux BG, et al. **J Dent Res** 1996 Dec;75(12):1947–56

Estimating the burden of disease in an English region. Bowie C, et al. **J Public Health Med** 1997 Mar;19(1):87–92

Setting targets for CABG surgery in the north western region. Pain CH, et al. **J Public Health Med** 1996 Dec; 18(4):449–56

ORGANIZATION & ADMINISTRATION

Devolving authority for health care in Canada's provinces: 1. An introduction to the issues. Lomas J, et al. **Can Med Assoc J** 1997 Feb 1;156(3):371–7

Public hospitals. Putting people first. Lumsdon K. **Hosp Health Netw** 1996 Oct 20;70(20):62

Visceral leishmaniasis control in India through primary health care system--a successful experiment of district level planning. Saxena NB, et al. **J Commun Dis** 1996 Jun; 28(2):122–8

Managed behavioral health care: a key component of integrated regional delivery systems. Nauert RC. **J Health Care Finance** 1997 Spring;23(3):49–61 (2 ref.)

The Nursing Work Force Beyond 2000 Project. The Greater Coastal Bend Region of Texas. Johnston CL, et al. **J Nurs Adm** 1997 Jun;27(6):4–6

California strategic planning committee for nursing. Experiences and challenges. Lewis EM, et al. **J Nurs Adm** 1997 Mar;27(3):3–5

Colleagues in Caring. Rapson MF, et al. **J Nurs Adm** 1997 Jan;27(1):5–8

Overview of the regional collaboratives. Rice RB, et al. **J Nurs Adm** 1997 Feb;27(2):11–5

Outcomes data collection technology: observations and lessons from year one. Alles P. **Wis Med J** 1996 Feb; 95(2):93–5

Medical outcomes research: arming ourselves for a future of change [editorial] Flaherty K. **Wis Med J** 1996 Feb; 95(2):96–7

Piloting outcomes research: some observations for the first year. Wencel SL. **Wis Med J** 1996 Feb;95(2):89–92

[Regional health care administration following the Netaniahu Commission] Scharf S. **Harefuah** 1997 May 1;132(9):676–7 **(Heb)**

STATISTICS & NUMERICAL DATA

[Future population growth in the Augsburg area--model calculations using the DEPOP model] Dinkel RH, et al. **Gesundheitswesen** 1997 Apr;59 Suppl 1:5–10 (Eng. Abstr.) **(Ger)**

TRENDS

[Significance of regional public health research (editorial)] Gostomzyk JG. **Gesundheitswesen** 1997 Apr;59 Suppl 1:1–2 **(Ger)**

[Regional disparities in accessibility of inpatient treatment for elderly patients] Klein T, et al. **Z Gerontol Geriatr** 1996 Jan-Feb;29(1):65–75 (Eng. Abstr.) **(Ger)**

REGIONAL HOSPITAL PLANNING see **HOSPITAL PLANNING**

REGIONAL HOSPITAL PLANNINGS see **HOSPITAL PLANNING**

REGIONAL MEDICAL PROGRAMS

The effects of regionalization on clinical outcomes for a high risk surgical procedure: a study of the Whipple procedure in New York State. Imperato PJ, et al. **Am J Med Qual** 1996 Winter;11(4):193–7

The management of cervical carcinoma within the south west region of England [letter; comment] Murdoch JB. **Br J Obstet Gynaecol** 1997 Jul;104(7):869. Comment on: Br J Obstet Gynaecol 1997 Feb;104(2):123–6.

The Baltimore City Health Department program of directly observed therapy for tuberculosis. Chaulk CP, et al. **Clin Chest Med** 1997 Mar;18(1):149–54 (5 ref.)

Initial assessment and outcome of head injured patients transferred to a regional neurosurgical service: what do we miss? Grant PT, et al. **J Accid Emerg Med** 1997 Jan; 14(1):10–2

Contribution of regional networks to the nutrition education of physicians. Deen DD Jr, et al. **J Am Coll Nutr** 1996 Aug;15(4):413–7

[Sick leave II for backache--municipality of Kristiansand. A one-year follow up with and without an outpatient program] Strøm V, et al. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1440–4 (Eng. Abstr.) **(Nor)**

[The first results of the international project "Tuberculosis in the Tomsk region"] Strelis AK, et al. **Probl Tuberk** 1997; (1):10–2 (0 ref.) **(Rus)**

[Gestational diabetes: the use of an intensive treatment program at the regional level] Balsells M, et al. **Rev Clin Esp** 1997 Jan;197(1):14–7 (Eng. Abstr.) **(Spa)**

[Local agreements in health care are based on programs for mental illness. They stimulate measurements of quality and results] Gerle M, et al. **Lakartidningen** 1997 Mar 26; 94(13):1188 **(Swe)**

ECONOMICS

Addressing implementation problems of Texas Medicaid reform. Begley CE. **Tex Med** 1996 Dec;92(12):23–4

ORGANIZATION & ADMINISTRATION

Impact of a statewide trauma system on rural emergency department patient assessment documentation. OHSU Rural Trauma Research Group. Hedges JR, et al. **Acad Emerg Med** 1997 Apr;4(4):268–76

Managed care merged with the German model [see comments] Weil TP. **Am J Med Qual** 1997 Spring; 12(1):19–24 (22 ref.). Comment in: Am J Med Qual 1997 Spring;12(1):25–7.

Outposts and regions. Kane E. **Br J Hosp Med** 1996 Jun 5–18;55(11):717–8

Regional Plan of Action on HIV/AIDS Control 1996–1999 and NGO-government collaboration. **Bull Pan Am Health Organ** 1996 Mar;30(1):82–4

Devolving authority for health care in Canada's provinces: 3. Motivations, attitudes and approaches of board members. Lomas J, et al. **Can Med Assoc J** 1997 Mar 1;156(5):669–76

SEOPF high-grade match algorithm: the effect of HLA matching with ROP trays in transplanting highly sensitized patients. Southern Organ Procurement Foundation. Tardif GN, et al. **Clin Transplant** 1996 Dec;10(6 Pt 2):594–7

An integrated regional emergency psychiatry service. Kates N, et al. **Gen Hosp Psychiatry** 1996 Jul;18(4):251–6

Toward effective regional trauma networks: management auditing initiatives in Ontario. Caro DH. **Health Care Manage Rev** 1997 Spring;22(2):21–32 (46 ref.)

Regional standards in trauma care [letter; comment] Gray AJ, et al. **J Accid Emerg Med** 1996 Sep;13(5):365. Comment on: J Accid Emerg Med 1996 Jan;13(1):9–10.

A proposal for the training of regional medical experts. Johnson DE. **Mil Med** 1997 Aug;162(8):533–6 (11 ref.)

Training in reproductive health and sexuality: the case of a regional program in Latin America. Ramos S, et al. **Womens Health Issues** 1997 Mar-Apr;7(2):109–12

[Senegal: regionalization, a spring-board for health] Mane I, et al. **Med Trop (Mars)** 1997;57(2):127–35 (11 ref.) **(Fre)**

[Use of population based registries in developing a regional medical program against cancer. Example of the Rhone-Alpes region] Ménégoz F, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S40–5 (Eng. Abstr.) **(Fre)**

[Problems in optimizing the management of the territorial organs in medical support for the troops] Korbut VB. **Voen Med Zh** 1996 Nov;317(11):4–8, 79 (Eng. Abstr.) **(Rus)**

[The initial results of organizing epidemiological health surveillance in the transition to the territorial principle of medical support for the troops] Sibilev VI, et al. **Voen Med Zh** 1996 Oct;317(10):11–2 **(Rus)**

STANDARDS

Regional experience of evaluation of professional practice and quality assurance implementation in Aquitaine. Michel P, et al. **Int J Qual Health Care** 1997 Jun;9(3):221–3

Quality management for health care in the Middle East and north Africa: professional cooperation as part of the peace process. Habib J, et al. **Jt Comm J Qual Improv** 1997 Jan; 23(1):65–8 (0 ref.)

Outcomes of acute myocardial infarction in the Department of Veterans Affairs: does regionalization of health care work? Wright SM, et al. **Med Care** 1997 Feb;35(2):128–41

The evaluation of pediatric trauma care using audit filters. Kissoon N, et al. **Pediatr Emerg Care** 1996 Aug;12(4):272–6

UTILIZATION

Does a centralized radiotherapy system provide adequate access to care? Mackillop WJ, et al. **J Clin Oncol** 1997 Mar;15(3):1261–71

REGIONAL PERFUSION see **PERFUSION, REGIONAL**

REGISTRIES

Gender patterns in minor head and neck injuries: an analysis of casualty register data. Bring G, et al. **Accid Anal Prev** 1996 May;28(3):359–69

Earnings and schooling: an overview of economic research based on the Australian Twin Register. Miller P, et al. **Acta Genet Med Gemellol (Roma)** 1996;45(4):417–29 (19 ref.)

Health registries. Ethics and security. Iversen T. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):875–6

Multiple primary malignant tumors in a national cancer registry--reliability of reporting. Frödin JE, et al. **Acta Oncol** 1997;36(5):465–9

Cancer in Circumpolar Inuit. Background information for cancer patterns in Canadian Inuit. Gaudette LA, et al. **Acta Oncol** 1996;35(5):527–33

Cancer registration in the Arctic--a useful research tool [editorial] Storm HH, et al. **Acta Oncol** 1996;35(5):521–2

The spread of AIDS and the re-emergence of tuberculosis in Catalonia, Spain. Vall Mayans M, et al. **AIDS** 1997 Mar 15;11(4):499–505

Epidemiologic characteristics, management, and outcome of deep venous thrombosis in a tertiary-care hospital: the Brigham and Women's Hospital DVT registry. Piccioli A, et al. **Am Heart J** 1996 Nov;132(5):1010–4

Register of dietary assessment calibration-validation studies: a status report. Thompson FE, et al. **Am J Clin Nutr** 1997 Apr;65(4 Suppl):1142S–1147S

Ability of Medicare claims data and cancer registries to identify cancer cases and treatment. McClish DK, et al. **Am J Epidemiol** 1997 Feb 1;145(3):227–33

Alkylamine antihistamine toxicity and review of Pediatric Toxicology Registry of the National Association of Medical Examiners. Report 4: Alkylamines. Jumbelic MI, et al. **Am J Forensic Med Pathol** 1997 Mar;18(1):65–9

Estimating underreported pesticide poisonings in Nicaragua. Keifer M, et al. **Am J Ind Med** 1996 Aug;30(2):195–201

Injury and illness in the American workplace: a comparison of data sources. Murphy PL, et al. **Am J Ind Med** 1996 Aug;30(2):130–41

CDC and ATSDR electronic information resources for health officers [see comments] Friede A, et al. **Am J Infect Control** 1996 Dec;24(6):440–54 (9 ref.). Comment in: Am J Infect Control 1996 Dec;24(6):417–20.

Pancreatic cancer and comparison of a hospital-based tumor registry with a National Cancer Data Base. Enayati PG, et al. **Am J Surg** 1997 May;173(5):436–40

Predictors of misclassification of Hispanic ethnicity in a population-based cancer registry. Swallen KC, et al. **Ann Epidemiol** 1997 Apr;7(3):200–6

How to define coronary heart disease in register-based follow-up studies: experience from the Helsinki Heart

Study. Pietilä K, et al. **Ann Med** 1997 Jun;29(3):253–9

Apolipoprotein E genotypes in a neuropathological series from the Consortium to Establish a Registry for Alzheimer's Disease. Welsh-Bohmer KA, et al. **Ann Neurol** 1997 Sep;42(3):319–25

Trends in cancer incidence and mortality in Vaud, Switzerland, 1974–1993 [see comments] Levi F, et al. **Ann Oncol** 1996 Jul;7(5):497–504. Comment in: Ann Oncol 1996 Jul;7(5):439–40.

Connective tissue disease registries. Mayes MD, et al. **Arthritis Rheum** 1997 Sep;40(9):1556–9 (4 ref.)

Non-Hodgkin's lymphoma and other cancers among a cohort of patients with systemic lupus erythematosus. Mellemkjaer L, et al. **Arthritis Rheum** 1997 Apr;40(4):761–8

Estimation of cumulative HIV incidence in Australia, based on national case reporting. Law MG, et al. **Aust N Z J Public Health** 1996 Apr;20(2):215–7

NRA investigates drug reactions [news] **Aust Vet J** 1996 Sep; 74(3):193

Pentalogy of Cantrell: detection through fetal board registry and fetal pathology. Kousseff BG, et al. **Birth Defects Orig Artic Ser** 1996;30(1):189–202

National system for monitoring all drug use in pregnancy already exists [letter; comment] Bateman DN, et al. **BMJ** 1997 May 10;314(7091):1414–5. Comment on: BMJ 1997 Feb 22;314(7080):603.

Cancer registration: integrate or disintegrate? [editorial] [see comments] Day NE, et al. **BMJ** 1996 Oct 12;313(7062):896 . Comment in: BMJ 1996 Nov 2;313(7065):1149.

Need for a national arthroplasty register. Funding is important [letter; comment] Fender D, et al. **BMJ** 1996 Oct 19;313(7063):1007. Comment on: BMJ 1996 Jul 13;313(7049):66–7.

Registering a fetus papyraceus. Health professionals can exercise discretion [letter; comment] [see comments] Griffiths M. **BMJ** 1997 Feb 8;314(7078):442. Comment on: BMJ 1996 Oct 19;313(7063):1004. Comment in: BMJ 1997 May 3;314(7090):1352–3.

Regulations on registration of a fetus papyraceus need to be revised [letter; comment] Heys RF. **BMJ** 1997 May 3; 314(7090):1352–3. Comment on: BMJ 1997 Feb 8;314(7078):441–2. Comment on: BMJ 1997 Feb 8;314(7078):442.

Congenital anterior abdominal wall defects. A national congenital malformations register is needed [letter; comment] [see comments] Luck C, et al. **BMJ** 1997 Feb 1;314(7077):371. Comment on: BMJ 1996 Oct 12;313(7062):903–6. Comment in: BMJ 1997 Apr 26;314(7089):1278.

The diabetes audit and research in Tayside Scotland (DARTS) study: electronic record linkage to create a diabetes register. DARTS/MEMO Collaboration. Morris AD, et al. **BMJ** 1997 Aug 30;315(7107):524–8

Registering a fetus papyraceus. Registration is important for research into cerebral palsy [letter; comment] [see comments] Pharoah PO, et al. **BMJ** 1997 Feb 8; 314(7078):441–2. Comment on: BMJ 1996 Oct 19;313(7063):1004. Comment in: BMJ 1997 May 3;314(7090):1352–3.

Need for a national arthroplasty register. Intensive Care Society has set up a centre for national audit [letter; comment] Rowan K. **BMJ** 1996 Oct 19;313(7063):1007–8 . Comment on: BMJ 1996 Jul 13;313(7049):66–7.

An advisory committee on cancer registration has now been established [letter; comment] Winyard G. **BMJ** 1996 Nov 2;313(7065):1149. Comment on: BMJ 1996 Oct 12;313(7062):896.

The challenge of pooling national registries in pediatric bone marrow transplantation. Paolucci P, et al. **Bone Marrow Transplant** 1996 Nov;18 Suppl 2:13–6

Comparison of the diagnosis of leukaemia from death certificates, cancer registration and histological reports – implications for occupational case-control studies. Rushton L, et al. **Br J Cancer** 1997;75(11):1694–8

Continued inadequacies in data sources for the evaluation of cancer services. Smith SJ, et al. **Br J Cancer** 1997; 75(1):131–3

Seasonal patterns in the diagnosis of cutaneous malignant melanoma: analysis of the data of the German Central Malignant Melanoma Registry [letter] Blum A, et al. **Br J Dermatol** 1997 Jun;136(6):968–9

Focus on psychiatry. Supervision registers: caring or controlling? Kingdon D. **Br J Hosp Med** 1996 Nov 6–19; 56(9):470–2

Cancer in Gabon, 1984–1993: a pathology registry based relative frequency study. Nze-Nguema F, et al. **Bull Cancer** 1996 Sep;83(9):693–6

Botulism Reference Service for Canada. Austin J, et al. **Can Commun Dis Rep** 1996 Nov 1;22(21):183–4 **(Eng, Fre)**

New Ontario familial breast cancer registry to facilitate genetic and epidemiologic studies. Andrulis IL, et al. **Can Fam Physician** 1997 May;43:949–50

A preventive registry for hereditary nonpolyposis colorectal cancer. Madlensky L, et al. **Can J Oncol** 1995 Jul; 5(2):355–60

What are the facts concerning the number of residency positions in Canada? [editorial] [see comments] Dauphinee D, et al. **Can Med Assoc J** 1997 Mar 1;156(5):665–7 (2 ref.) . Comment in: CMAJ 1997 Jul 15;157(2):134, 136; discussion 139. Comment in: CMAJ 1997 Jul 15;157(2):136; discussion 139. Comment in: CMAJ 1997 Jul 15;157(2):136, 138; discussion 139. Comment in: CMAJ 1997 Jul 15;157(2):138.

Recent trends in Canadian infant mortality rates: effect of changes in registration of live newborns weighing less than 500 g [see comments] Joseph KS, et al. **Can Med Assoc J** 1996 Oct 15;155(8):1047–52. Comment in: Can Med Assoc J 1997 Jan 15;156(2):161–3.

An alternative approach to monitoring cancer patient survival. Brenner H, et al. **Cancer** 1996 Nov 1;78(9):2004–10

National Cancer Data Base report on esophageal carcinoma. Daly JM, et al. **Cancer** 1996 Oct 15;78(8):1820–8

International Union Against Cancer, Committee on International Collaborative Activities: workshop on the development of a European cancer data base. Denis L, et al. **Cancer** 1997 Mar 15;79(6):1248–53

Global variations in cancer survival. Study Group on Cancer Survival in Developing Countries. Sankaranarayanan R, et al. **Cancer** 1996 Dec 15;78(12):2461–4

Issues to consider when choosing a computer program to assist Native American collection of accurate cancer data. Wiggins CL. **Cancer** 1996 Oct 1;78(7 Suppl):1569–73

The National Cancer Data Base report on breast carcinoma characteristics and outcome in relation to age. Winchester DP, et al. **Cancer** 1996 Oct 15;78(8):1838–43

Risk factor information found in medical records of lung and prostate cancer cases, New Mexico Tumor Registry (United States). Gilliland FD, et al. **Cancer Causes Control** 1997 Jul;8(4):598–604

Relationship of food groups and water intake to colon cancer risk. Shannon J, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Jul;5(7):495–502

Safety of intracoronary ultrasound: data from a Multicenter European Registry. Batkoff BW, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):238–41

Five year trends in cardiac catheterization: a report from the Registry of the Society for Cardiac Angiography and Interventions. Krone RJ, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):31–5

The analysis of registry data in relation to various different types of hypothesis regarding the geographical distribution of disease. Draper GJ. **Cent Eur J Public Health** 1997 Jun; 5(2):90–2 (14 ref.)

Environmental epidemiology at the Medical Birth Registry of Norway; strengths and limitations. Lie RT. **Cent Eur J Public Health** 1997 Jun;5(2):57–9 (6 ref.)

Using the Hungarian Birth Defects Registry for surveillance, research and intervention. Siffel C, et al. **Cent Eur J Public Health** 1997 Jun;5(2):79–81

Baseline characteristics of enrollees in the National Heart, Lung and Blood Institute Registry of alpha 1-antitrypsin deficiency. Alpha 1-Antitrypsin Deficiency Registry Study Group. McElvaney NG, et al. **Chest** 1997 Feb; 111(2):394–403

Association between thrombolytic treatment and the prognosis of hemodynamically stable patients with major pulmonary embolism: results of a multicenter registry [see comments] Konstantinides S, et al. **Circulation** 1997 Aug 5;96(3):882–8. Comment in: Circulation 1997 Aug 5;96(3):716–8.

Chromosome 22q11 deletion and other chromosome aberrations in cases with cleft palate, congenital heart defects and/or mental disability. A survey based on the Danish Facial Cleft Register. Brøndum-Nielsen K, et al. **Clin Genet** 1996 Sep;50(3):116–20

Bloom's syndrome. XIX. Cytogenetic and population evidence for genetic heterogeneity. German J, et al. **Clin Genet** 1996 May;49(5):223–31

Comparing a computer-based childhood vaccination registry with parental vaccination cards: a population-based study of Delaware children. Ortega AN, et al. **Clin Pediatr (Phila)** 1997 Apr;36(4):217–21

Worldwide transplant center directory. **Clin Transpl** 1996; :519–675

The UNOS Scientific Renal Transplant Registry. Cecka JM. **Clin Transpl** 1996;:1–14

The UNOS scientific renal transplant registry. United Network for Organ Sharing. Cecka JM, et al. **Clin Transpl** 1995;:1–18

A multi-factor analysis of kidney graft outcomes at one and five years posttransplantation: 1996 UNOS Update. Gjertson DW. **Clin Transpl** 1996;:343–60

Pancreas transplantation in the United States (US) and non-US as reported to the United Network for Organ Sharing (UNOS) and the International Pancreas Transplant Registry (IPTR). Gruessner A, et al. **Clin Transpl** 1996; :47–67

The UNOS OPTN Waiting List and Donor Registry: 1988–1996. Harper AM, et al. **Clin Transpl** 1996;:69–90

Worldwide thoracic organ transplantation: a report from the UNOS/ISHLT International Registry for Thoracic Organ Transplantation. Keck BM, et al. **Clin Transpl** 1996;:31–45

Worldwide thoracic organ transplantation: a report from the UNOS/ISHLT International Registry for Thoracic Organ Transplantation. Keck BM, et al. **Clin Transpl** 1995;:35–48

The Spanish model of organ donation: the National Organization of Transplants (ONT) Registry report 1994. Matesanz R, et al. **Clin Transpl** 1995;:111–5

Report from the International Bone Marrow Transplant Registry and Autologous Blood and Marrow Transplant Registry – North America. Passweg JR, et al. **Clin Transpl** 1995;:117–27

Pancreas transplantation in the United States as reported to the United Network for Organ Sharing (UNOS) and analyzed by the International Pancreas Transplant Registry. Sutherland DE, et al. **Clin Transpl** 1995;:49–67

The Canadian Organ Replacement Register. Walker SR, et al. **Clin Transpl** 1996;:91–107

Infections causing fetal and infant deaths. **Commun Dis Rep CDR Wkly** 1996 Sep 6;6(36):311, 314

Development of a prospective register of smoking cessation trials. Silagy C, et al. **Control Clin Trials** 1996 Jun; 17(3):235–41

The Danish Conscription Registry: a resource for epidemiological research. Green A. **Dan Med Bull** 1996 Dec;43(5):464–7

The Danish Twin Register. Kyvik KO, et al. **Dan Med Bull** 1996 Dec;43(5):467–70

The Danish Psychiatric Central Register. Munk-Jørgensen P, et al. **Dan Med Bull** 1997 Feb;44(1):82–4

Danish health registries. A valuable tool in medical research [editorial] Sørensen HT, et al. **Dan Med Bull** 1996 Dec; 43(5):463

Diabetes monitoring system in The Netherlands. Ruwaard D, et al. **Diabetes Res Clin Pract** 1996 Oct;34 Suppl:S85–8

Transanal endoscopic microsurgery. Initial registry results. Smith LE, et al. **Dis Colon Rectum** 1996 Oct;39(10 Suppl):S79–84

Wound recurrence following laparoscopic colon cancer resection. Results of the American Society of Colon and Rectal Surgeons Laparoscopic Registry. Vukasin P, et al. **Dis Colon Rectum** 1996 Oct;39(10 Suppl):S20–3

The Oxfordshire Head Injury Register. Moss NE, et al. **Disabil Rehabil** 1996 Apr;18(4):169–73

DNA profiling and plant variety registration: 1. The use of random amplified DNA polymorphisms to discriminate between varieties of oilseed rape. Lee D, et al. **Electrophoresis** 1996 Jan;17(1):261–5

The UK register of HIV seroconverters: methods and analytical issues. UK register of HIV seroconverters (UKRHS) Steering Committee. **Epidemiol Infect** 1996 Oct; 117(2):305–12

The future of psychiatric case register studies [editorial] Mortensen PB. **Epidemiol Psichiatr Soc** 1997 Jan-Apr; 6(1):21–3

Mortality effects of community socioeconomic status. Anderson RT, et al. **Epidemiology** 1997 Jan;8(1):42–7

Underreporting and misclassification of urinary tract cancer cases on death certificates. Chow WH, et al. **Epidemiology** 1996 Sep;7(5):517–20

Angioplasty registries: wide open for audit? [editorial; comment] De Bono DP. **Eur Heart J** 1997 Jul;18(7):1042–3 . Comment on: Eur Heart J 1997 Jul;18(7):1110–4.

Follow-up of atrial fibrillation: The initial experience of the Canadian Registry of Atrial Fibrillation. Kerr C, et al. **Eur Heart J** 1996 Jul;17 Suppl C:48–51 (12 ref.)

Variation in the use of coronary angiography in patients with unstable angina is related to differences in patient population and availability of angiography facilities, without affecting prognosis. van Miltenburg-van Zijl AJ, et al. **Eur Heart J** 1996 Dec;17(12):1828–35

PTCA registry of German community hospitals. Arbeitsgemeinschaft Leitender Kardiologischer Krankenhausärzte (ALKK) Study Group [see comments] Vogt A, et al. **Eur Heart J** 1997 Jul;18(7):1110–4. Comment in: Eur Heart J 1997 Jul;18(7):1042–3.

Colorectal cancer survival--population-based rates in the province of Florence. Crocetti E, et al. **Eur J Cancer Prev** 1996 Jun;5(3):189–95

Epidemiology of HIV-2 infection in Spain. The HIV-2 Spanish Study Group. Soriano V, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):383–8

Comorbid occurrence of cholelithiasis and gastrointestinal cancer. Bansal P, et al. **Eur J Gastroenterol Hepatol** 1996 Oct;8(10):985–8

Is the Glasgow Dyspepsia Severity Score a tool for the global measurement of dyspepsia? [letter; comment] Talley NJ, et al. **Eur J Gastroenterol Hepatol** 1997 Apr;9(4):413–4. Comment on: Eur J Gastroenterol Hepatol 1996 Oct;8(10):967–71.

HLA class II region nucleotide sequences, 1994 [published erratum appears in Eur J Immunogenet 1995 Apr;22(2):225–8] Marsh SG, et al. **Eur J Immunogenet** 1994 Dec;21(6):519–51

Adjusting outcome measurements for case-mix in a vascular surgical register--is it possible and desirable? Elfström J, et al. **Eur J Vasc Endovasc Surg** 1996 Nov;12(4):459–63

RITA--registry of industrial toxicology animal-data--guides for organ sampling and trimming procedures in rats. Bahnemann R, et al. **Exp Toxicol Pathol** 1995 Sep; 47(4):247–66

Clinical trial registries and ethics review boards: the results of a survey by the FICHTRE project. Boissel JP, et al. **Fundam Clin Pharmacol** 1997;11(3):281–4

The 1995 staging requirement for approved cancer programs [editorial] Donaldson ES. **Gynecol Oncol** 1996 Mar; 60(3):345–6

The Italian Registry of Antiphospholipid Antibodies. Finazzi G. **Haematologica** 1997 Jan-Feb;82(1):101–5 (25 ref.)

Impact of continuous quality improvement on selection of pacing mode and rate of complications in permanent pacing. Møller JE, et al. **Heart** 1997 Apr;77(4):357–62

The United Kingdom Heart Valve Registry: the first 10 years [editorial] Taylor K. **Heart** 1997 Apr;77(4):295–6

HLA gene haplotype frequencies in bone marrow donors

worldwide registries. Schipper RF, et al. **Hum Immunol** 1997 Jan;52(1):54–71

Registers of in-vitro fertilization and assisted conception. Lancaster PA. **Hum Reprod** 1996 Dec;11 Suppl 4:89–104; discussion 105–9 (49 ref.)

Registration of congenital anomalies in ART populations: pitfalls. Simpson JL. **Hum Reprod** 1996 Dec;11 Suppl 4:81–8 (19 ref.)

BTKbase: XLA–mutation registry. Vihinen M. **Immunol Today** 1996 Nov;17(11):502–6

Noncoronary Cardiac Interventions. The first report of the Noncoronary Cardiac Interventions Registry of India, the Cardiological Society of India. Bahl VK, et al. **Indian Heart J** 1997 Jan–Feb;49(1):97–101

National PTCA registry of India data for 1996. Sharma S, et al. **Indian Heart J** 1997 Mar–Apr;49(2):213–7

Retrospective analysis of 194 leprosy cases in the Republic of Yemen. Mekhlafi GA, et al. **Indian J Lepr** 1996 Jul–Sep; 68(3):227–34

The contribution of "cure by dapsone monotherapy' to the reduction of prevalence of leprosy in the State of Orissa, India, 1983–1993. Patnaik PK, et al. **Indian J Lepr** 1996 Jul–Sep;68(3):223–6

Community based estimation of perinatal mortality through record linkage. Singh A, et al. **Indian Pediatr** 1996 May; 33(5):367–72

An international registry for toxic inhalation and pulmonary edema: notes from work in progress. Guidotti TL. **Int Arch Occup Environ Health** 1996;68(6):380–6 (28 ref.)

The incidence rate of familial adenomatous polyposis. Results from the Danish Polyposis Register. Bülow S, et al. **Int J Colorectal Dis** 1996;11(2):88–91

Intestinal haemorrhage after strictureplasty for Crohn's disease. Gardiner KR, et al. **Int J Colorectal Dis** 1996; 11(4):180–2

Occurrence of desmoid tumours in familial adenomatous polyposis and results of treatment. Heiskanen I, et al. **Int J Colorectal Dis** 1996;11(4):157–62

Child survival in Beirut during wartime: time trends and socio-religious differentials. Deeb M, et al. **Int J Epidemiol** 1997 Feb;26(1):110–9

Registration of births, stillbirths and infant deaths in Jamaica. McCaw-Binns AM, et al. **Int J Epidemiol** 1996 Aug; 25(4):807–13

Epidemiology of HTLV-I infection in Spain. HTLV Spanish Study Group. Soriano V, et al. **Int J Epidemiol** 1996 Apr; 25(2):443–9

Systematic small-area variation in mortality for malignant neoplasms in Sweden 1975–1990. Westerling R. **Int J Epidemiol** 1995 Dec;24(6):1086–93

Unrelated donor marrow transplantation in Japan. Mori M. **Int J Hematol** 1996 Aug;64(2):85–6

An evaluation of the need for shared blood donor deferral registries. Domen RE, et al. **Int J Qual Health Care** 1997 Feb;9(1):35–41

The Guillain-Barrè syndrome (GBS). Implementation of a register of the disease on a nationwide basis. Italian GBS Study Group. Beghi E, et al. **Ital J Neurol Sci** 1996 Oct; 17(5):355–61

Four-year follow-up of patients undergoing percutaneous balloon mitral commissurotomy. A report from the National Heart, Lung, and Blood Institute Balloon Valvuloplasty Registry. Dean LS, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1452–7

The American College of Cardiology National Database: progress and challenges. American College of Cardiology Database Committee. Weintraub WS, et al. **J Am Coll Cardiol** 1997 Feb;29(2):459–65

NATIONAL TRACS/ABA Burn Registry—the quest for quality burn data management. McDonald-Smith GP. **J Burn Care Rehabil** 1996 Sep–Oct;17(5):454–6

The current status of the NATIONAL TRACS/ABA Burn Registry. Saffle JR. **J Burn Care Rehabil** 1997 Mar–Apr; 18(2):172–5

Referral bias in Alzheimer's disease [letter; comment] Barnhart RL, et al. **J Clin Epidemiol** 1997 Mar;50(3):365–6 . Comment on: J Clin Epidemiol 1996 Jan;49(1):79–83.

Accuracy of administrative data for assessing outcomes after knee replacement surgery. Hawker GA, et al. **J Clin Epidemiol** 1997 Mar;50(3):265–73

National adaptations of the ICD rules for classification—a problem in the evaluation of cause-of-death trends. Jansson B, et al. **J Clin Epidemiol** 1997 Apr;50(4):367–75

Developing a population-based registry for patients with paraproteinemias or multiple myeloma. Ong F, et al. **J Clin Epidemiol** 1997 Aug;50(8):909–15

Primary immunodeficiency syndrome in Spain: first report of the National Registry in Children and Adults. Matamoros Florí N, et al. **J Clin Immunol** 1997 Jul; 17(4):333–9

Benefits and limitations of pathology databases to cancer registries [see comments] Brewster DH, et al. **J Clin Pathol** 1996 Nov;49(11):947–9. Comment in: J Clin Pathol 1997 Apr;50(4):354.

Benefits and limitations of pathology databases to cancer registries [letter; comment] Newcombe RG. **J Clin Pathol** 1997 Apr;50(4):354. Comment on: J Clin Pathol 1996 Nov;49(11):947–9.

Death registration: history, methods, and legal issues. Hanzlick R. **J Forensic Sci** 1997 Mar;42(2):265–9

The International Registry of the Ross procedure: 1996 results [editorial] Oury JH. **J Heart Valve Dis** 1997 Jul; 6(4):333–4

Infection registration underestimates the risk of surgical wound infections. Poulsen KB, et al. **J Hosp Infect** 1996 Jul;33(3):207–15

Louisiana Tumor registry: new developments and services provided. Chen VW, et al. **J La State Med Soc** 1996 Apr; 148(4):186–8

Louisiana Cancer and Lung Trust Fund Board. Whiting RS, et al. **J La State Med Soc** 1996 Apr;148(4):151–4

The epidemiology of anotia and microtia. Harris J, et al. **J Med Genet** 1996 Oct;33(10):809–13

A genetic register for von Hippel-Lindau disease. Maddock IR, et al. **J Med Genet** 1996 Feb;33(2):120–7

Hypertension registry as the base for population health care. Matoković B, et al. **J Med Syst** 1996 Apr;20(2):111–28

Physical illness among all discharged psychiatric inpatients in a national case register. Rabinowitz J, et al. **J Ment Health Adm** 1997 Winter;24(1):82–9

Case report: Mississippi's new central cancer registry design and implementation. Penman AD, et al. **J Miss State Med Assoc** 1996 Apr;37(4):537–9

Statistical and epidemiological treatment of the SEER incidence data [letter; comment] Levy PS, et al. **J Neuropathol Exp Neurol** 1996 Dec;55(12):1280. Comment on: J Neuropathol Exp Neurol 1996 Nov;55(11):1115–23.

Oklahoma's Central Cancer Registry now in operation [news] **J Okla State Med Assoc** 1997 Jul–Aug;90(6):255–6

New South Wales population-based birthweight percentile charts. Beeby PJ, et al. **J Paediatr Child Health** 1996 Dec; 32(6):512–8

Prevalence and impact of chronic childhood conditions in Auckland, New Zealand. Vogel AM, et al. **J Paediatr Child Health** 1996 Dec;32(6):484–90 (50 ref.)

Calling all psychiatric rehabilitation practitioners: are you registered? [news] **J Psychosoc Nurs Ment Health Serv** 1997 Jan;35(1):8

The public health uses of the Scottish Community Health Index (CHI). Womersley J. **J Public Health Med** 1996 Dec; 18(4):465–72

Registers in the study of pediatric rheumatic diseases—limitations and potential [editorial; comment] Gäre BA. **J Rheumatol** 1996 Nov;23(11):1834–7 (32 ref.). Comment on: J Rheumatol 1996 Nov;23(11):1981–7.

The incidence of pediatric rheumatic diseases: results from the Canadian Pediatric Rheumatology Association Disease Registry [see comments] Malleson PN, et al. **J Rheumatol** 1996 Nov;23(11):1981–7. Comment in: J Rheumatol 1996 Nov;23(11):1834–7.

A Canadian National Trauma Registry: the time is now. McLellan BA. **J Trauma** 1997 May;42(5):763–8

Validation of family history of breast cancer and identification of the BRCA1 and other syndromes using a population-based cancer registry. Garber JE. **J Womens Health** 1997 Jun;6(3):349–51

Multi-centre glomerulonephritis registry—basis for optimised therapy. Risler T, et al. **Kidney Blood Press Res** 1997; 20(3):184–7 (14 ref.)

A useful collagenous colitis registry. Weldon M. **Lancet** 1997 May 17;349(9063):1410–1

Comment: newly 'registered' vs 'diagnosed' leprosy patients in the literature [letter; comment] Kaur P. **Lepr Rev** 1996 Sep;67(3):231–2. Comment on: Lepr Rev 1994 Sep;65(3):239–47.

Histopathological reporting of breast biopsies and mastectomies for carcinoma of the breast. Looi LM. **Malays J Pathol** 1994 Dec;16(2):173 (0 ref.)

Pseudonyms for cancer registries. Pommerening K, et al. **Methods Inf Med** 1996 Jun;35(2):112–21

Michigan Children's Immunization Registry: An important tool in reaching & maintaining 100% rates among two-year-olds. Haveman JK Jr. **Mich Med** 1996 Aug; 95(8):28

Michigan takes a shot at immunization registry. Jensen ME. **Mich Med** 1997 Sep;96(9):50–1

A conceptual-methodological framework for a participatory use of the EDTA registry [editorial] Tognoni G. **Nephrol Dial Transplant** 1997 Feb;12(2):251–3

Report on management of renal failure in Europe, XXVI, 1995. A conceptual and practical framework for interactive use of the ERA-EDTA Registry. Tognoni G. **Nephrol Dial Transplant** 1996;11 Suppl 7:1–3

Report on management of renale failure in Europe, XXVI, 1995. Rare diseases in renal replacement therapy in the ERA-EDTA Registry. Tsakiris D, et al. **Nephrol Dial Transplant** 1996;11 Suppl 7:4–20

Report on management of renale failure in Europe, XXVI, 1995. Report based on the Centre Questionnaire, 1995. The ERA-EDTA Registry. Vanrenterghem Y, et al. **Nephrol Dial Transplant** 1996;11 Suppl 7:28–32

Traumatic brain injury registry in Taiwan. Chiu WT, et al. **Neurol Res** 1997 Jun;19(3):261–4

Overview: clinical sites, case material, and special studies. Heyman A, et al. **Neurology** 1997 Sep;49(3 Suppl 3):S2–6

Clinical assessment of Alzheimer's disease. Morris JC. **Neurology** 1997 Sep;49(3 Suppl 3):S7–10

Your cancer registry can include quality-of-life, administrative, and extended clinical data. Cartwright-Alcarese F, et al. **Oncol Nurs Forum** 1996 Jul; 23(6):973

A uveitis register at the Leicester Royal Infirmary. Thean LH, et al. **Ophthalmic Epidemiol** 1996 Dec;3(3):151–8

The Registry of Ophthalmic Pathology [editorial] McLean IW. **Ophthalmology** 1996 Oct;103(10):1523–4

Malignant salivary gland tumours in Sweden 1960–1989—an epidemiological study. Ostman J, et al. **Oral Oncol** 1997 May;33(3):169–76

Physician practices in the prevention of deep vein thrombosis: the MassPRO DVT Study. Anderson FA Jr, et al. **Orthopedics** 1996 Aug;19 Suppl:9–11

Is urban frostbite a psychiatric disorder? Pinzur MS, et al. **Orthopedics** 1997 Jan;20(1):43–5

The hospital burden of vertebral fracture in Europe: a study of national register sources. Johnell O, et al. **Osteoporos Int** 1997;7(2):138–44

Data linkage methods used in maternally-linked birth and infant death surveillance data sets from the United States (Georgia, Missouri, Utah and Washington State), Israel, Norway, Scotland and Western Australia. Herman AA, et al. **Paediatr Perinat Epidemiol** 1997 Jan;11 Suppl 1:5–22

The Israeli Maternal Perinatal Database: methods and preliminary evaluation. Zadka P, et al. **Paediatr Perinat Epidemiol** 1997 Jan;11 Suppl 1:23–30

International practice patterns by age and severity of lung disease in cystic fibrosis: data from the Epidemiologic Registry of Cystic Fibrosis (ERCF). Koch C, et al. **Pediatr Pulmonol** 1997 Aug;24(2):147–54; discussion 159–61

Hyponatremia in relation to treatment with antidepressants: a survey of reports in the World Health Organization data base for spontaneous reporting of adverse drug reactions. Spigset O, et al. **Pharmacotherapy** 1997 Mar–Apr; 17(2):348–52

The Electronic Plant Gene Register. **Plant Physiol** 1997 May; 114(1):395–6

Planning the 2001 census: only four years to go. Jones GC. **Popul Trends** 1997 Summer;(88):31–5

GTDS—a tool for tumor registries to support shared patient care. Altmann U, et al. **Proc AMIA Annu Fall Symp** 1996; :512–6

Relative mortality in lower limb amputees with diabetes mellitus. Ebskov LB. **Prosthet Orthot Int** 1996 Dec; 20(3):147–52

The quality of histopathology data in a computerised cancer registration system: implications for future audit of care. Moss SM, et al. **Public Health** 1997 Mar;111(2):101–6

Adverse events with radiographic contrast agents: results of the SCVIR Contrast Agent Registry. Bettmann MA, et al. **Radiology** 1997 Jun;203(3):611–20

Chemical sensitivities and the Gulf War: Department of Veterans Affairs Research Center in basic and clinical science studies of environmental hazards. Fiedler N, et al. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 2):S129–38

Register of lay use of advisory defibrillators in Europe [letter] Marsden AK. **Resuscitation** 1995 Dec;30(3):268

The government and organ transplantation [editorial] Barnard CN. **S Afr Med J** 1996 Jun;86 Suppl 3:C128

Polypectomy of adenomas in the prevention of colorectal cancer: 10 years' follow-up of the Telemark Polyp Study I. A prospective, controlled population study. Hoff G, et al. **Scand J Gastroenterol** 1996 Oct;31(10):1006–10

Incidence and relative risk for hepatitis A, hepatitis B and tuberculosis and occurrence of malaria among merchant seamen. Hansen HL, et al. **Scand J Infect Dis** 1996; 28(2):107–10

Aortic reconstruction and concomitant renal artery revascularization using the retroperitoneal approach: techniques and results. Darling RC 3rd, et al. **Semin Vasc Surg** 1996 Sep;9(3):231–5

The presymptomatic molecular diagnosis of familial adenomatous polyposis in Singapore. Khine K, et al. **Singapore Med J** 1995 Oct;36(5):521–4

Myocardial infarction in patients aged 40 years and below: an angiographic review. Lim YT, et al. **Singapore Med J** 1996 Aug;37(4):352–5

Breast cancer—a comparative study between Malaysian and Singaporean women. Yip CH, et al. **Singapore Med J** 1996 Jun;37(3):264–7

Cost of traumatic spinal cord injury in a population-based registry. Johnson RL, et al. **Spinal Cord** 1996 Aug; 34(8):470–80

Childhood leukaemia in Sweden: using GIS and a spatial scan statistic for cluster detection. Hjalmars U, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):707–15

The Tel Aviv Stroke Registry. 3600 consecutive patients. Bornstein NM, et al. **Stroke** 1996 Oct;27(10):1770–3

Seasonal variation in the occurrence of stroke in a Finnish adult population. The FINMONICA Stroke Register. Finnish Monitoring Trends and Determinants in Cardiovascular Disease. Jakovljević D, et al. **Stroke** 1996 Oct;27(10):1774–9

Computer database for melanoma registry. A clinical management and research tool to monitor outcomes and ensure continuous quality improvement. Reintgen D, et al. **Surg Clin North Am** 1996 Dec;76(6):1273–85 (20 ref.)

First 25 years of the Hungarian congenital abnormality registry. Czeizel AE. **Teratology** 1997 May;55(5):299–305

Accuracy of mortality data for interstitial lung diseases in New Mexico, USA. Coultas DB, et al. **Thorax** 1996 Jul; 51(7):717–20

Development of registries of HLA-typed volunteer marrow donors [editorial; comment] Hansen JA. **Tissue Antigens** 1996 Jun;47(6):460–3. Comment on: Tissue Antigens 1996 Jun;47(6):457–9.

Large-scale DRB and DQB1 oligonucleotide typing for the NMDP registry: progress report from year 2. Ng J, et al.

Tissue Antigens 1996 Jan;47(1):21–6

Validation of large data sets, an essential prerequisite for data analysis: an analytical survey of the Bone Marrow Donors Worldwide. Schipper RF, et al. **Tissue Antigens** 1996 Mar; 47(3):169–78 (10 ref.)

Development of PCR–SSOP for HLA–A typing of bone marrow registry donors. Williams F, et al. **Tissue Antigens** 1997 Jan;49(1):61–6

The potential for bias due to attrition in the National Exposure Registry: an examination of reasons for nonresponse, nonrespondent characteristics, and the response rate. Burg JA, et al. **Toxicol Ind Health** 1997 Jan–Feb;13(1):1–13

The National Transplantation Pregnancy Registry: comparison between pregnancy outcomes in diabetic cyclosporine –treated female kidney recipients and CyA–treated female pancreas–kidney recipients. Armenti VT, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):669–70

EUROTOLD: an overview of the study. Donnelly P. **Transplant Proc** 1996 Dec;28(6):3551–2

1993 Renal Transplantation Annual Data Report: Dialysis and Renal Transplantation Register of the Latin American Society of Nephrology and Hypertension. González–Martínez F, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):257–60

Renal transplantation in Warsaw: a registry report. Lao M, et al. **Transplant Proc** 1996 Dec;28(6):3497–503

A comparison between ultrasound and a reliable last menstrual period as predictors of the day of delivery in 15,000 examinations. Tunón K, et al. **Ultrasound Obstet Gynecol** 1996 Sep;8(3):178–85

The importance of diabetes registries and clinical biology for the study and treatment of type 1 (insulin–dependent) diabetes mellitus. Gorus FK. **Verh K Acad Geneeskd Belg** 1996;58(5):539–86 (143 ref.)

Induction of immune tolerance, the future of the Registry. Ewing NP. **Vox Sang** 1996;70 Suppl 1:47–51 (43 ref.)

The international registry of immune tolerance: 1994 update. Ghirardini A, et al. **Vox Sang** 1996;70 Suppl 1:42–6

Occupational lead exposure and management. Seward JP. **West J Med** 1996 Oct;165(4):222–4

[Registration and archiving of health services data. A new initiative from the Danish Research Fund] Jørgensen PH, et al. **Ugeskr Laeger** 1997 Feb 10;159(7):963–4 **(Dan)**

[Reporting of induced abortions in 1994. A comparison between the data in the Registry of Legally Induced Abortions and the National Patient Registry] Krebs L, et al. **Ugeskr Laeger** 1997 Mar 10;159(11):1607–11 (Eng. Abstr.) **(Dan)**

[Statement by the Board for Evaluation of Drugs (news)] **Ned Tijdschr Geneeskd** 1996 Nov 16;140(46):2304–5 **(Dut)**

[I&R (identification and registration) system cattle: an analysis of its use during a foot–and–mouth–disease outbreak in The Netherlands] Nielen M, et al. **Tijdschr Diergeneeskd** 1996 Oct 15;121(20):576–81 (Eng. Abstr.) **(Dut)**

[Contribution of cancer registries to the evaluation of cancer treatment: on the example of rectal cancer] Maurel J, et al. **Ann Chir** 1996;50(10):865–74 (Eng. Abstr.) **(Fre)**

[Belgian registry of thyroid cancer. Preliminary epidemiological characteristics revealed by a retrospective study (1988–1995). Belgian Thyroid Cancer Study Group] Meurisse M, et al. **Ann Endocrinol (Paris)** 1997;58(3):163–71 (Eng. Abstr.) **(Fre)**

[Epidemiological study of intestinal atresias: central–eastern France Registry 1976–1992] Francannet C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(5):485–94 (Eng. Abstr.) **(Fre)**

[Complications of laparoscopy caused by trocars. Preliminary study from the national registry of the French Society of Gynecologic Endoscopy] Marret H, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(4):405–12 (Eng. Abstr.) **(Fre)**

[Use of registries for specific evaluation studies: example of ischemic cardiopathies] Amouyel P. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S62–9 (9 ref.) (Eng. Abstr.) **(Fre)**

[Value of registries in decision making in public health: the example of trisomy 21] Aymé S. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S82–9 (Eng. Abstr.) **(Fre)**

[Coronary disease in France: data from the MONICA registers (1985–1991)] Cambou JP, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S46–52 (Eng. Abstr.) **(Fre)**

[Cancer trends and health care planning: toward a better use of cancer registries] Coleman MP, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S2–6 (Eng. Abstr.) **(Fre)**

[Diagnosis of insulin–dependent diabetes in children: data from the incidence registry] Doutreix J, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S90–6 (Eng. Abstr.) **(Fre)**

[Management of stroke. The value of the Dijon Stroke Registry] Giroud M, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S70–7 (12 ref.) (Eng. Abstr.) **(Fre)**

[Value of cancer registries in the evaluation of colorectal cancer treatment] Launoy G, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S22–32 (10 ref.) (Eng. Abstr.) **(Fre)**

[Use of population based registries in developing a regional medical program against cancer. Example of the Rhone–Alpes region] Ménégoz F, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S40–5 (Eng. Abstr.) **(Fre)**

[Example of teratogen detection using a birth defects registry: depakine and spina bifida] Robert E. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S78–81 (Eng. Abstr.) **(Fre)**

[The role of cancer registries in the evaluation of breast cancer screening] Schaffer P, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S15–21 (Eng. Abstr.) **(Fre)**

[Surgical health care patterns and cancer cost: two studies using population registry data] Schraub S, et al. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S33–9 (Eng. Abstr.) **(Fre)**

[Neuchatel Tumor Registry : evaluation and results of 25 years of activity] Levi F, et al. **Rev Med Suisse Romande** 1997 Jul;117(7):537–86 **(Fre)**

[European registration of drugs] Juillet Y. **Therapie** 1996 Jul–Aug;51(4):449–52 **(Fre)**

[Benefits and effects of the cancer registry law] Schön D. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:150–8 **(Ger)**

[Mesothelioma. Pathology/pathogenesis/mesothelioma register] Müller KM. **Pneumologie** 1997 Apr;51(4):335–44 (18 ref.) **(Ger)**

[Familial adenomatous polyposis: establishing a registry and genetic and molecular analysis] Shomrat R, et al. **Harefuah** 1997 Jan 15;132(2):81–6, 151, 152 (Eng. Abstr.) **(Heb)**

[The use of a check list for quality assurance of the treatment of acute myocardial infarction in the coronary care unit] Meinardi F, et al. **G Ital Cardiol** 1996 Dec;26(12):1375–83 (Eng. Abstr.) **(Ita)**

[Radiology information system project at the National Tumor Institute of Milan] Bifano F, et al. **Radiol Med (Torino)** 1997 May;93(5):582–5 **(Ita)**

[A comparative study of the effects of granisetron alone and a combination of granisetron plus steroids on CDDP–based combination chemotherapy–induced emesis—outcomes of a multicenter randomized comparative study using the central registration method. Nara Medical University Kytril Study Group] Ozono S, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):349–56 (Eng. Abstr.) **(Jpn)**

[Improvement in detection, registration and estimation of occupational diseases of the railroad transport] Kaptsov VA, et al. **Gig Sanit** 1997 Jan–Feb;(1):17–9 (Eng. Abstr.) **(Rus)**

[Conception and implementation of the federal computer system for families with hereditary diseases] Kobrinskiĭ BA, et al. **Med Tekh** 1997 May–Jun;(3):37–9 (Eng. Abstr.) **(Rus)**

[National Register of Rheumatic Diseases in Children. The Spanish group of pediatric rheumatology] **An Esp Pediatr** 1996 Oct;45(4):346–50 **(Spa)**

[National registry of percutaneous mitral commissurotomy. 8–year's experience] Ledesma Velasco M, et al. **Arch Inst Cardiol Mex** 1996 May–Jun;66(3):244–53 (Eng. Abstr.) **(Spa)**

[A computerized system for a pediatrics registry (letter)] Acuña Aller R, et al. **Aten Primaria** 1996 Feb 15;17(2):170 **(Spa)**

[A computerized system for a registry (letter; comment)] Sangrós J, et al. **Aten Primaria** 1996 Feb 15;17(2):170–1. Comment on: Aten Primaria 1995 Apr 30;15(7):431–4, 436–8. **(Spa)**

[National registry of heart transplantation. Seventh report (1984–1995)] Arizón del Prado JM. **Rev Esp Cardiol** 1996 Nov;49(11):781–7 (Eng. Abstr.) **(Spa)**

[Basis for a hospital registry of acute myocardial infarction in Spain. The PRIAMO study. Project of a Hospital Registry of Acute Myocardial Infarction] Cabadés A, et al. **Rev Esp Cardiol** 1996 Jun;49(6):393–404 (Eng. Abstr.) **(Spa)**

[Cardiovascular surgery in Spain in 1994. Registry of Interventions of the Spanish Society of Cardiovascular Surgery (SECCV)] Llorens R, et al. **Rev Esp Cardiol** 1996 Sep;49(9):627–37 (Eng. Abstr.) **(Spa)**

[Registry of activities at the Section of Hemodynamics and Interventional Cardiology in 1995] Zueco J, et al. **Rev Esp Cardiol** 1996 Oct;49(10):714–22 (Eng. Abstr.) **(Spa)**

[More unified registration in two databases. Easier exchange of esperiences on the cause of medical errors] Andersson D, et al. **Lakartidningen** 1997 May 28;94(22):2113–5 **(Swe)**

[The possibility to register everything directs all work (letter)] Asplund J. **Lakartidningen** 1997 Jan 29;94(5):316 **(Swe)**

[1,4 millions Swedes are on the donation registry. Still several thousands newly registered persons per month] Gäbel H, et al. **Lakartidningen** 1997 May 28;94(22):2105–8 **(Swe)**

[Big Brother presents a puzzle: don't give in! (letter)] Heyman C. **Lakartidningen** 1997 Feb 12;94(7):500 **(Swe)**

[The SFAM (Swedish Society of General Practice) appeals to the general practitioners: don't accept the prescription registry] Orn P. **Lakartidningen** 1997 Feb 12;94(7):485 **(Swe)**

[Irrelevant analysis in an editorial of the diagnosis registration on prescription forms (letter)] Ortendahl C. **Lakartidningen** 1997 Jun 11;94(24):2254 **(Swe)**

[A way of killing a registry (letter)] Westborg CJ. **Lakartidningen** 1997 Feb 26;94(9):709 **(Swe)**

CLASSIFICATION

The Dutch Uniform Multicenter Registration system for genetic disorders and malformation syndromes. Zwamborn–Hanssen AM, et al. **Am J Med Genet** 1997 Jun 27;70(4):444–7

STANDARDS

The importance of operational factors for the interpretation of indicators in the Hansen's disease endemic in Brazil. Andrade V, et al. **Acta Leprol** 1997;10(3):131–9

Data quality in population–based cancer registration: an assessment of the Merseyside and Cheshire Cancer Registry. Seddon DJ, et al. **Br J Cancer** 1997;76(5):667–74

Estimating the completeness of under–5 death registration in Egypt. Becker S, et al. **Demography** 1996 Aug; 33(3):329–39

Problems related to the coding of multiple primary cancers [see comments] Crocetti E, et al. **Eur J Cancer** 1996 Jul; 32A(8):1366–70. Comment in: Eur J Cancer 1996 Jul;32A(8):1279–80.

Multiple primary cancers in population–based cancer registries [editorial; comment] Hawkins MM. **Eur J Cancer** 1996 Jul;32A(8):1279–80. Comment on: Eur J Cancer 1996 Jul;342A(8):1366–70.

Accuracy and completeness of the registration of childhood leukaemia in The Netherlands, 1989–1992. Schouten LJ, et al. **Eur J Cancer** 1997 May;33(6):891–4

Reliability of cancer registration data [editorial] Stiller CA. **Eur J Cancer** 1997 May;33(6):812–4

Nordic Medical Birth Registers in epidemiological research. Gissler M, et al. **Eur J Epidemiol** 1997 Feb;13(2):169–75 (28 ref.)

The validity of hospital discharge register data on coronary heart disease in Finland. Mähönen M, et al. **Eur J Epidemiol** 1997 Jun;13(4):403–15

Validity of diagnoses of major coronary events in national registers of hospital diagnoses and deaths in Finland. Rapola JM, et al. **Eur J Epidemiol** 1997 Feb;13(2):133–8

UK Cancer Registry statistics—can the partially sighted lead the blind? Skidmore FD. **Eur J Surg Oncol** 1996 Oct; 22(5):467–8

ICPC as a standard classification in Norway. Brage S, et al. **Fam Pract** 1996 Aug;13(4):391–6

Declining induced abortion rate in Finland: data quality of the Finnish abortion register. Gissler M, et al. **Int J Epidemiol** 1996 Apr;25(2):376–80

A framework for evaluation of secondary data sources for epidemiological research. Sorensen HT, et al. **Int J Epidemiol** 1996 Apr;25(2):435–42 (66 ref.)

Variability of skin cancer registration practice in the United Kingdom. Maudsley G, et al. **J Epidemiol Community Health** 1997 Jun;51(3):337–8

Accuracy of the family health services authority register in Newcastle upon Tyne, UK as a sampling frame for population studies. O'Mahony PG, et al. **J Epidemiol Community Health** 1997 Apr;51(2):206–7

Data quality of administratively collected hospital discharge data for liver cirrhosis epidemiology. Vestberg K, et al. **J Med Syst** 1997 Feb;21(1):11–20

Trauma registry injury coding is superfluous: a comparison of outcome prediction based on trauma registry International Classification of Diseases–Ninth Revision (ICD–9) and hospital information system ICD–9 codes. Osler TM, et al. **J Trauma** 1997 Aug;43(2):253–6; discussion 256–7

Cancer–registry data in Latvia [letter] Stengrevics A. **Lancet** 1997 Aug 16;350(9076):523

Identifying the active general practice workforce in one division of general practice: the utility of public domain databases [see comments] Gill GF, et al. **Med J Aust** 1997 Feb 17;166(4):208–10. Comment in: Med J Aust 1997 Jun 16;166(12):671–2.

Background and purpose of the Consortium to Establish a Registry for Alzheimer's Disease. Buckholtz N. **Neurology** 1997 Sep;49(3 Suppl 3):S1

The quality of vital perinatal statistics data, with special reference to prenatal care [comment] Kirby RS. **Paediatr Perinat Epidemiol** 1997 Jan;11(1):122–8. Comment on: Paediatr Perinat Epidemiol 1997 Jan;11(1):105–21.

Evaluation of prenatal care information on birth certificates [see comments] McDermott J, et al. **Paediatr Perinat Epidemiol** 1997 Jan;11(1):105–21. Comment in: Paediatr Perinat Epidemiol 1997 Jan;11(1):122–8.

The time taken to register a death. Devis T, et al. **Popul Trends** 1997 Summer;(88):48–55

Completeness of case ascertainment in a Scottish regional cancer registry for the year 1992. Brewster DH, et al. **Public Health** 1997 Sep;111(5):339–43

Agreement estimate among three Italian cancer registries in the coding of multiple primary cancers. Buiatti E, et al. **Tumori** 1996 Nov–Dec;82(6):533–8

[Registries of morbimortality in cardiology: methods] Marrugat J, et al. **Rev Esp Cardiol** 1997 Jan;50(1):48–57 (Eng. Abstr.) **(Spa)**

[National registries have no quality guarantee.The data used

should be from an unidentified material from the counties] Lindman A, et al. **Lakartidningen** 1997 Mar 5;94(10):871–3, 875–6 **(Swe)**

[Abuse of data from registries 1. Uncertain data on infarction, results are exaggerated] Taube A. **Lakartidningen** 1996 Dec 11;93(50):4620–2 **(Swe)**

[Abuse of registry data 2. Thirteen surgeons work with statistical sections] Taube A. **Lakartidningen** 1997 Jan 8; 94(1–2):61–2 **(Swe)**

STATISTICS & NUMERICAL DATA

Cancer in Circumpolar Inuit. Background information for the cancer pattern in Greenland. Nielsen NH, et al. **Acta Oncol** 1996;35(5):535–7

Cancer among Circumpolar Inuit 1969–1988. Introduction and methods. Nielsen NH, et al. **Acta Oncol** 1996; 35(5):539–43

Cancer of the digestive system in Circumpolar Inuit. Storm HH, et al. **Acta Oncol** 1996;35(5):553–70

Current trends in newly registered blindness in Denmark. Rosenberg T, et al. **Acta Ophthalmol Scand** 1996 Aug; 74(4):395–8

The incidence of registered blindness caused by age-related macular degeneration. Rosenberg T, et al. **Acta Ophthalmol Scand** 1996 Aug;74(4):399–402

The use of a case register to evaluate the costs of psychiatric care. Amaddeo F, et al. **Acta Psychiatr Scand** 1997 Mar; 95(3):189–98

Schizophrenia with childhood and adolescent onset--a nationwide register-based study. Thomsen PH. **Acta Psychiatr Scand** 1996 Sep;94(3):187–93

NAS-NRC Twin Registry Survey [letter] Reed T, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):381

Use of record linkage between a statewide genetics service and a Birth Defects/Congenital Malformations Register to determine use of genetic counselling services. Halliday J, et al. **Am J Med Genet** 1997 Oct 3;72(1):3–10

International registry of inferior vena cava leiomyosarcoma: analysis of a world series on 218 patients. Mingoli A, et al. **Anticancer Res** 1996 Sep–Oct;16(5B):3201–5

Identification of randomised clinical trials in the Australian and New Zealand Journal of Psychiatry for the Cochrane Collaboration. White P. **Aust N Z J Psychiatry** 1996 Aug; 30(4):531–3

The mortality experience of individuals on the Salford Psychiatric Case Register. I. All-cause mortality. Baxter DN. **Br J Psychiatry** 1996 Jun;168(6):772–9

Salivary gland tumors among atomic bomb survivors, 1950–1987. Saku T, et al. **Cancer** 1997 Apr 15;79(8):1465–75

Bloom's syndrome. XX. The first 100 cancers. German J. **Cancer Genet Cytogenet** 1997 Jan;93(1):100–6

Registry of multicenter clinical trials: 14th and 15th report 1992–1993. Bossard N, et al. **Control Clin Trials** 1996 Apr; 17(2):130–75

Parental history of diabetes in an insulin-treated diabetes registry. Riley MD, et al. **Diabet Med** 1997 Jan;14(1):35–41

Patient administrative system as a tool to validate the ascertainment in the diabetes incidence study in Sweden (DISS). Littorin B, et al. **Diabetes Res Clin Pract** 1996 Jul; 33(2):129–33

Routine registration of deviations from the norm in cardiac surgery: a potent clinical research tool and quality assurance measure. Aberg T, et al. **Eur J Cardiothorac Surg** 1997 Jan;11(1):10–2, 13–6

The Concerted Action 'Heart' European registry on clinical application of mechanical circulatory support systems: bridge to transplant. The Registry Scientific Committee. Quaini E, et al. **Eur J Cardiothorac Surg** 1997 Jan; 11(1):182–8

Review of experience with retinopathy of prematurity from the Pavia registry (1990–1993). Bianchi PE, et al. **Eur J Ophthalmol** 1996 Apr–Jun;6(2):187–91

Use of multiple primary cancers to indicate associations between smoking and cancer incidence: an analysis of 500,000 cancer cases diagnosed in Norway during 1953–93. Engeland A, et al. **Int J Cancer** 1997 Feb 7;70(4):401–7

Cancer incidence in Conakry, Guinea: first results from the Cancer Registry 1992–1995. Koulibaly M, et al. **Int J Cancer** 1997 Jan 6;70(1):39–45

An Australian registrar's experience of a psychogeriatric service in London. Kirby D. **Int J Geriatr Psychiatry** 1997 Feb;12(2):261–2

High-dose chemotherapy with autologous hematopoietic stem-cell support for breast cancer in North America. Antman KH, et al. **J Clin Oncol** 1997 May;15(5):1870–9

Systematic identification of twins by computerised searches of NHS patient registers in the UK. Strachan DP, et al. **J Epidemiol Community Health** 1997 Feb;51(1):96–100

The Registry of the International Society for Heart and Lung Transplantation: thirteenth official report--1996. Hosenpud JD, et al. **J Heart Lung Transplant** 1996 Jul;15(7):655–74

The Registry of the International Society for Heart and Lung Transplantation: fourteenth official report--1997. Hosenpud JD, et al. **J Heart Lung Transplant** 1997 Jul; 16(7):691–712

Limitations of using a cancer registry to identify incident primary intracranial tumours. Counsell CE, et al. **J Neurol Neurosurg Psychiatry** 1997 Jul;63(1):94–7

Validity of the stage of lung cancer in records of the Maastricht cancer registry, The Netherlands. Schouten LJ, et al. **Lung Cancer** 1997 May;17(1):115–22

Determinants of homonym and synonym rates of record linkage in disease registration. Brenner H, et al. **Methods Inf Med** 1996 Mar;35(1):19–24

Incorporating lag effects in register-based age-of-onset distributions in schizophrenia. Welham JL, et al. **Schizophr Res** 1996 May;20(1–2):125–32

Concerns regarding carotid artery angioplasty and stenting [letter; comment] Ammar AD. **Stroke** 1996 Nov; 27(11):2143–4. Comment on: Stroke 1996 Feb;27(2):197–8.

Cardiac surgery in Germany during 1995. A report by the German Society for Thoracic and Cardiovascular Surgery. Kalmár P, et al. **Thorac Cardiovasc Surg** 1996 Jun; 44(3):161–4

Familial testicular cancer in a population-based cancer registry. Polednak AP. **Urol Int** 1996;56(4):238–40

Firearms injury reporting system needed [editorial] Doyle JE. **Wis Med J** 1996 May;95(5):267

[Patient questionnaire for an epidemiologic cancer registry--results of an initial trial] Menke S, et al. **Gesundheitswesen** 1997 Jun;59(6):372–7 (Eng. Abstr.) **(Ger)**

[The triple test scenario for Styria. With data of the Styria Abnormalities Register] Häusler MC, et al. **Gynakol Geburtshilfliche Rundsch** 1996;36(3):169–77 (Eng. Abstr.) **(Ger)**

[Contribution of the clinical cancer register to internal quality assurance in surgical oncology] Altendorf-Hofmann A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:159–61 (Eng. Abstr.) **(Ger)**

[New blindness incidents in Württemberg-Hohenzollern] Krumpaszky HG, et al. **Ophthalmologe** 1997 Mar; 94(3):234–6 (Eng. Abstr.) **(Ger)**

[Report by the Scientific Working Group for Therapy of Lung Diseases: German Fibrosis Register with initial results] Schweisfurth H. **Pneumologie** 1996 Dec; 50(12):899–901 (Eng. Abstr.) **(Ger)**

[Urologic tumors in Germany. Initial data of 56,013 cases from clinical cancer registers] Fischer CG, et al. **Urologe A** 1997 Mar;36(2):143–50 (Eng. Abstr.) **(Ger)**

[The Austrian Metabolic Register] Fang-Kircher S. **Wien Klin Wochenschr** 1997 Feb 14;109(3):89–92 (Eng. Abstr.) **(Ger)**

[The scientific rationale and basic methodological principles for creating government statistics on childhood disability in the Russian Federation] Ignat'eva RK, et al. **Probl Sotsialnoi Gig Istor Med** 1994 Nov-Dec;(6):13–20 (Eng. Abstr.) **(Rus)**

[The epidemiology of cerebral stroke in Siberia based on registry data] Feigin VL, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):59–65 (Eng. Abstr.) **(Rus)**

REGRESSION (PSYCHOLOGY)

Transference and regression in and beyond analytic group psychotherapy: revisiting some timeless thoughts [comment] Kauff PF. **Int J Group Psychother** 1997 Apr; 47(2):201–10. Comment on: Int J Group Psychother 1997 Apr;47(2):183–99.

The psychoanalytic group situation. Lamoureux P, et al. **Int J Group Psychother** 1997 Jan;47(1):47–70

Transference neurosis in group psychotherapy: the concept and the reality [comment] Stone WN. **Int J Group Psychother** 1997 Apr;47(2):211–25. Comment on: Int J Group Psychother 1997 Apr;47(2):183–99.

The creative potential of play and regression in analytical training: a personal reflection. Addenbrooke M. **J Anal Psychol** 1997 Jul;42(3):507–20; discussion 521

The analytic initiation: the effect of the archetype of initiation on the personal unconscious. Sullivan M. **J Anal Psychol** 1996 Oct;41(4):509–27 (13 ref.)

A cognitive approach to validation of the fixated-regressed typology of child molesters. Johnston FA, et al. **J Clin Psychol** 1997 Jun;53(4):361–8

Regression: a reconsideration of topographic theory. Schwartz C. **Psychoanal Rev** 1996 Dec;83(6):813–25

REGRESSION ANALYSIS

Intraclass correlation among measures related to tobacco use by adolescents: estimates, correlates, and applications in intervention studies. Murray DM, et al. **Addict Behav** 1997 Jan-Feb;22(1):1–12

Use of statistical methods to estimate body composition. Guo SS, et al. **Am J Clin Nutr** 1996 Sep;64(3 Suppl):428S–435S

Regression calibration method for correcting measurement-error bias in nutritional epidemiology. Spiegelman D, et al. **Am J Clin Nutr** 1997 Apr;65(4 Suppl):1179S–1186S (35 ref.)

Method comparison: evaluation of least squares, Deming and Passing/Bablok regression procedures using computer simulation. Payne RB. **Ann Clin Biochem** 1997 May;34 (Pt 3):319–20

Extension of the Haseman-Elston method to multiple alleles and multiple loci: theory and practice for candidate genes. Stoesz MR, et al. **Ann Hum Genet** 1997 May;61 (Pt 3):263–74

An improved method for analysis of competitive agonist/antagonist interactions by non-linear regression. Lew MJ, et al. **Ann N Y Acad Sci** 1997 May 30;812:179–81

Regression models for mixed discrete and continuous responses with potentially missing values. Fitzmaurice GM, et al. **Biometrics** 1997 Mar;53(1):110–22

Testing for treatment effect in the presence of regression toward the mean. George V, et al. **Biometrics** 1997 Mar; 53(1):49–59

Validity and efficiency of approximation methods for tied survival times in Cox regression. Hertz-Picciotto I, et al. **Biometrics** 1997 Sep;53(3):1151–6

Modeling of time trends and interactions in vital rates using restricted regression splines. Heuer C. **Biometrics** 1997 Mar; 53(1):161–77

Parameter estimation from incomplete data in binomial regression when the missing data mechanism is nonignorable. Ibrahim JG, et al. **Biometrics** 1996 Sep; 52(3):1071–8

A latent process regression model for spatially correlated count data. McShane LM, et al. **Biometrics** 1997 Jun; 53(2):698–706

Using projection for testing goodness-of-fit in regression models for repeated measures. Qu RP, et al. **Biometrics** 1996 Dec;52(4):1259–67

A regression survival model for testing the proportional hazards hypothesis. Quantin C, et al. **Biometrics** 1996 Sep; 52(3):874–85

Fully parametric and semi-parametric regression models for common events with covariate measurement error in main study/validation study designs. Spiegelman D, et al. **Biometrics** 1997 Jun;53(2):395–409

Regression calibration in failure time regression. Wang CY, et al. **Biometrics** 1997 Mar;53(1):131–45

Regression estimator in ranked set sampling. Yu PL, et al. **Biometrics** 1997 Sep;53(3):1070–80

Regression analysis with missing covariate data using estimating equations. Zhao LP, et al. **Biometrics** 1996 Dec; 52(4):1165–82

Application of regression analysis to examination of degree of loss of hearing. Zaborski L, et al. **Bull Inst Marit Trop Med Gdynia** 1996;47(1–4):85–92

The causal relationship between clinical activity and journal use in a hospital library as analyzed by multiple regression. Colglazier ML Jr. **Bull Med Libr Assoc** 1996 Oct; 84(4):569–71

A computer program for regression analysis of ordered categorical repeated measurements. Davis CS, et al. **Comput Methods Programs Biomed** 1996 Nov;51(3):153–69

MIXREG: a computer program for mixed-effects regression analysis with autocorrelated errors. Hedeker D, et al. **Comput Methods Programs Biomed** 1996 May;49(3):229–52

MIXOR: a computer program for mixed-effects ordinal regression analysis. Hedeker D, et al. **Comput Methods Programs Biomed** 1996 Mar;49(2):157–76

Efficient exponential regression with exact fiducial limits to fit cardiac pressure data. Langer SF. **Comput Methods Programs Biomed** 1997 May;53(1):57–64

A SAS macro for stepwise correlated binary regression. Nuamah IF, et al. **Comput Methods Programs Biomed** 1996 May;49(3):199–210

Controlling for continuous confounders in epidemiologic research [see comments] Brenner H, et al. **Epidemiology** 1997 Jul;8(4):429–34. Comment in: Epidemiology 1997 Jul;8(4):453–63.

Understanding logistic regression analysis through example [see comments] Ely JW, et al. **Fam Med** 1996 Feb; 28(2):134–40; discussion 141–3. Comment in: Fam Med 1996 Jul-Aug;28(7):462–3. Comment in: Fam Med 1997 Mar;29(3):159.

Logistic regression formula corrected [letter; comment] Wallhagen MI. **Fam Med** 1997 Mar;29(3):159. Comment on: Fam Med 1996 Feb;28(2):134–40; discussion 141–3.

Stepwise regression is an alternative to splines for fitting noisy data. Burkholder TJ, et al. **J Biomech** 1996 Feb;29(2):235–8

Generalized ridge analysis with application to population pharmacokinetics/dynamics. Minor JM, et al. **J Biopharm Stat** 1996 Mar;6(1):105–14

Two-stage designs for the logistic regression model in single-agent bioassays. Myers WR, et al. **J Biopharm Stat** 1996 Jul;6(3):283–301

Drop-outs and a random regression model. Overall JE. **J Biopharm Stat** 1997 Jul;7(3):383–402

Now you see it, now you don't: a comparison of traditional versus random-effects regression models in the analysis of longitudinal follow-up data from a clinical trial. Nich C, et al. **J Consult Clin Psychol** 1997 Apr;65(2):252–61

Classification tree methods for analysis of mesoscale distribution of Ixodes ricinus (Acari:Ixodidae) in Trentino, Italian Alps. Merler S, et al. **J Med Entomol** 1996 Nov; 33(6):888–93

Systematic and random errors in compression testing of trabecular bone. Keaveny TM, et al. **J Orthop Res** 1997 Jan;15(1):101–10

Re: The rough and ready jackknife' (erratum) [letter] Resnick B. **Nurs Res** 1996 Sep–Oct;45(5):311

The influence of study characteristics on the healthy worker effect: a multiple regression analysis. Chen R, et al. **Occup Med (Oxf)** 1996 Oct;46(5):345–50

Vitreal alterations in retinitis pigmentosa: biomicroscopic appearance and statistical evaluation. Vingolo EM, et al. **Ophthalmologica** 1996;210(2):104–7

Comparing estimates of the effects of air pollution on human mortality obtained using different regression methodologies. Baxter LA, et al. **Risk Anal** 1997 Jun; 17(3):273–8

Regression analysis and multivariate analysis. Duleba AJ, et al. **Semin Reprod Endocrinol** 1996 May;14(2):139–53 (10

ref.)
Blinded subjective rankings as a method of assessing treatment effect: a large sample example from the Systolic Hypertension in the Elderly Program (SHEP). Brittain E, et al. **Stat Med** 1997 Mar 30;16(6):681–93
A Bayesian analysis of regression models with continuous errors with application to longitudinal studies. Broemeling LD, et al. **Stat Med** 1997 Feb 28;16(4):321–32
Regression models for interval censored survival data: application to HIV infection in Danish homosexual men. Carstensen B. **Stat Med** 1996 Oct 30;15(20):2177–89
Global tests for analysis of multiple tumour data from animal carcinogenicity experiments. Chen JJ. **Stat Med** 1996 Jun 15;15(11):1217–25
Reparametrization of autoregressive models with coefficients depending on covariables: application to EEG spectrum maturation. Clark I, et al. **Stat Med** 1997 Aug 15; 16(15):1745–52
Models for diagnosing chest pain: is CART helpful? Crichton NJ, et al. **Stat Med** 1997 Apr 15;16(7):717–27
Assessing interactions of binary time-dependent covariates with time in cox proportional hazards regression models using cubic spline functions. Heinzl H, et al. **Stat Med** 1996 Dec 15;15(23):2589–601
Comparison of non parallel immunoassay curves resulting from mixtures of competing antigens. Kaiser MS, et al. **Stat Med** 1997 May 30;16(10):1151–66
Segmented regression with errors in predictors: semi-parametric and parametric methods. Küchenhoff H, et al. **Stat Med** 1997 Jan 15–Feb 15;16(1–3):169–88
Re-using data from case-control studies. Lee AJ, et al. **Stat Med** 1997 Jun 30;16(12):1377–89
A marginal regression modelling framework for evaluating medical diagnostic tests. Leisenring W, et al. **Stat Med** 1997 Jun 15;16(11):1263–81
A test of missing completely at random for longitudinal data with missing observations. Park T, et al. **Stat Med** 1997 Aug 30;16(16):1859–71
Some methods to address collinearity among pollutants in epidemiological time series. Pitard A, et al. **Stat Med** 1997 Mar 15;16(5):527–44
Comparison of population pharmacokinetic modeling methods using simulated data: results from the Population Modeling Workgroup. Roe DJ. **Stat Med** 1997 Jun 15; 16(11):1241–57; discussion 1257–62
Testing for treatment differences with dropouts present in clinical trials--a composite approach. Shih WJ, et al. **Stat Med** 1997 Jun 15;16(11):1225–39
Ordinal regression methodology for ROC curves derived from correlated data. Toledano AY, et al. **Stat Med** 1996 Aug 30;15(16):1807–26
Regression models for recurrent event data: parametric random effects models with measurement error. Turnbull BW, et al. **Stat Med** 1997 Apr 30;16(8):853–64
Simulation study of hierarchical regression. Witte JS, et al. **Stat Med** 1996 Jun 15;15(11):1161–70
Non-normal variation and regression to the mean. Chesher A. **Stat Methods Med Res** 1997 Jun;6(2):147–66
The impact and implication of regression to the mean on the design and analysis of medical investigations. Chuang-Stein C, et al. **Stat Methods Med Res** 1997 Jun; 6(2):115–28
Using regression models for prediction: shrinkage and regression to the mean. Copas JB.
Stat Methods Med Res 1997 Jun;6(2):167–83
Innovative strategies using SUDAAN for analysis of health surveys with complex samples. LaVange LM, et al.
Stat Methods Med Res 1996 Sep;5(3):311–29
Adjusting for regression toward the mean when variables are normally distributed. Lin HM, et al.
Stat Methods Med Res 1997 Jun;6(2):129–46
The use of sampling weights for survey data analysis. Pfeffermann D. **Stat Methods Med Res** 1996 Sep; 5(3):239–61 (42 ref.)
Regression towards the mean, historically considered. Stigler SM. **Stat Methods Med Res** 1997 Jun;6(2):103–14 (22 ref.)
[Update on regression: softening relationships]
Sânchez-Cantalejo Ramírez E, et al. **Gac Sanit** 1997 Jan-Feb;11(1):24–32 (25 ref.) (Eng. Abstr.) **(Spa)**
[Regression to the median in research and clinical practice]
Guallar E, et al. **Med Clin (Barc)** 1997 May 31;109(1):23–6 **(Spa)**

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REGULATORY SEQUENCES, NUCLEIC ACID

Characterization of a cis-regulatory element and trans-acting protein that regulates transcription of the angiotensin II type 1a receptor gene. Murasawa S, et al.
Adv Exp Med Biol 1996;396:1–10
Characterization of an element resembling an androgen response element (ARE) in the human aldose reductase promoter. Ruepp BU, et al. **Adv Exp Med Biol** 1997; 414:515–9
Expression of a cosmid containing the LCR, (A)gamma, delta, and beta globin genes in mouse erythroleukemia cells. Flamm M, et al. **Am J Hematol** 1996 Nov;53(3):181–7
Functional and structural features of a tandem duplication of the human mtDNA promoter region. Hao H, et al.
Am J Hum Genet 1997 Jun;60(6):1363–72
Systematic screening for mutations in the 5'-regulatory region of the human dopamine D1 receptor (DRD1) gene in patients with schizophrenia and bipolar affective disorder. Cichon S, et al. **Am J Med Genet** 1996 Jul 26; 67(4):424–8
The 5' flanking region of the monogamous prairie vole oxytocin receptor gene directs tissue-specific expression in transgenic mice. Young LJ, et al.
Ann N Y Acad Sci 1997 Jan 15;807:514–7
Effect of G:C-->A:T transition, potentially arising from O6-guanine alkylation, in the transcription regulation of c-fos serum response element. Bonfanti M, et al.
Anticancer Res 1997 May-Jun;17(3C):2019–24
Purification and characterization of a rat liver protein that recognizes CCAAT-homologous sequences of the metallothionein promoter and trans-activates this promoter. Aniskovitch LP, et al. **Arch Biochem Biophys** 1997 May 15;341(2):337–46
The chicken malic enzyme gene: structural organization and identification of triiodothyronine response elements in the 5'-flanking DNA. Hodnett DW, et al.
Arch Biochem Biophys 1996 Oct 15;334(2):309–24
Enhanced translation of rat beta-glucuronidase cDNA is conferred by 155-bp segment of internal coding sequence. Islam MR, et al. **Arch Biochem Biophys** 1996 Sep 15; 333(2):385–93
Salt concentration determines 1,25-dihydroxyvitamin D3 dependency of vitamin D receptor-retinoid X receptor--vitamin D-responsive element complex formation. Kimmel-Jehan C, et al.
Arch Biochem Biophys 1997 May 1;341(1):75–80
Characterization of a silencer regulatory element in the rat PAP I gene which confers tissue-specific expression and is promoter-dependent. Ortiz EM, et al.
Arch Biochem Biophys 1997 Apr 1;340(1):111–6
Brevetoxin-6 (PbTx-6), a nonaromatic marine neurotoxin, is a ligand of the aryl hydrocarbon receptor. Washburn BS, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):149–56
Crosslinking of SRF to the c-fos SRE CArG box guanines using photo-active thioguanine oligodeoxynucleotides. Cahill MA, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):170–5
An alternative form of nucleolysin binds to a T-cluster DNA in the silencer element of platelet factor 4 gene. Doi T, et al. **Biochem Biophys Res Commun** 1997 Jun 27; 235(3):625–30
URE, an initiator (Inr)-like site, suppresses the promoter of the rat dynorphin gene. Gu J, et al.
Biochem Biophys Res Commun 1997 Feb 3;231(1):172–7
Two regulatory regions controlling basal and cellulose-induced expression of the gene encoding cellobiohydrolase I of Trichoderma reesei are adjacent to its TATA box. Henrique-Silva F, et al.
Biochem Biophys Res Commun 1996 Nov 12;228(2):229–37
Multiple regulatory elements and binding proteins of the 5'-flanking region of the human estrogen-responsive finger protein (efp) gene. Ikeda K, et al.
Biochem Biophys Res Commun 1997 Jul 30;236(3):765–71
Distal regulatory regions of the rat MRF4 gene. Kerkvliet CM, et al. **Biochem Biophys Res Commun** 1997 Aug 8; 237(1):170–6
Expression and induction by IL-6 of the normal and variant genes for human plasminogen. Kida M, et al.
Biochem Biophys Res Commun 1997 Jan 3;230(1):129–32
NFY transcription factor binds to regulatory element AIC and transactivates the human apolipoprotein A-I promoter in HEPG2 cells. Novak EM, et al.
Biochem Biophys Res Commun 1997 Feb 3;231(1):140–3
Expression of human inducible nitric oxide synthase is regulated by both promoter and 3'-regions. Nunokawa Y, et al. **Biochem Biophys Res Commun** 1997 Apr 17; 233(2):523–6
The hepatitis B virus posttranscriptional regulatory element contains a highly stable RNA secondary structure. Patzel V, et al. **Biochem Biophys Res Commun** 1997 Feb 24; 231(3):864–7
Identification of cis-acting DNA elements of the human gamma-glutamylcysteine synthetase heavy subunit gene. Tomonari A, ct al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):522–7
The mitochondrion as a primary site of action of glucocorticoids: mitochondrial nucleotide sequences, showing similarity to hormone response elements, confer dexamethasone inducibility to chimaeric genes transfected in LATK- cells. Tsiriyotis C, et al.
Biochem Biophys Res Commun 1997 Jun 18;235(2):349–54
The gnd gene encoding a novel 6-phosphogluconate dehydrogenase and its adjacent region of Actinobacillus actinomycetemcomitans chromosomal DNA. Yoshida Y, et al. **Biochem Biophys Res Commun** 1997 Jan 3; 230(1):220–5
Geographic population structure and sequence divergence in the mitochondrial DNA control region of the Japanese wild boar (Sus scrofa leucomystax), with reference to those of domestic pigs. Okumura N, et al. **Biochem Genet** 1996 Jun;34(5–6):179–89
Two regulatory elements of similar structure and placed in tandem account for the repressive activity of the first intron of the human apolipoprotein A-II gene. Bossu JP, et al.
Biochem J 1996 Sep 1;318 (Pt 2):547–53
Existence of two translation initiation sites leading to the expression of two proteins from the rat high-affinity neurotensin-receptor cDNA: possible regulation by the 5' end non-coding region. Botto JM, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):389–93
Regulation of the human alpha 2(1) procollagen gene by sequences adjacent to the CCAAT box. Collins M, et al.
Biochem J 1997 Feb 15;322 (Pt 1):199–206
Chicken vigilin gene: a distinctive pattern of hypersensitive sites is characteristic for its transcriptional activity. Grünweller A, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):601–7
Identification and characterization of the MUC2 (human intestinal mucin) gene 5'-flanking region: promoter activity in cultured cells. Gum JR, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):259–67
Multiple factors regulating the expression of human thromboxane synthase gene. Lee KD, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):783–91
Two different negative regulatory elements control the transcription of T-cell activation gene 3 in activated mast cells. Oh CK, et al. **Biochem J** 1997 Apr 15;323 (Pt 2):511–9
Regulatory elements in the first intron of the rat fatty acid synthase gene. Oskouian B, et al. **Biochem J** 1997 May 15;324 (Pt 1):113–21
The down-regulation of MHC class I antigens in rat oligodendrocytes is mediated by negative regulatory elements in the class I promoter. Mavria G, et al.
Biochem Soc Trans 1997 May;25(2):165S
Mapping nutrient regulatory sequences in the insulin gene. Read ML, et al. **Biochem Soc Trans** 1996 May;24(2):240S
Regulation of the fatty acid synthase gene by retinoic acid in HepG2 cells is mediated by an E-box-containing multihormonal response element and two neighbouring upstream sequences. Roder KH, et al.
Biochem Soc Trans 1997 May;25(2):157S
Identification of a motif within the 5' regulatory region of pS2 which is responsible for AP-1 binding and TCDD-mediated suppression. Gillesby BE, et al.
Biochemistry 1997 May 20;36(20):6080–9
Interactions of structural C and regulatory N domains of troponin C with repeated sequence motifs in troponin I. Pearlstone JR, et al. **Biochemistry** 1997 Jun 17; 36(24):7601–6
Molecular cloning, upstream sequence and promoter studies of the human gene for the regulatory subunit RII alpha of cAMP-dependent protein kinase. Foss KB, et al.
Biochim Biophys Acta 1997 Jan 3;1350(1):98–108
Expression of different forms of the heat-shock factor during the life cycle of the parasitic helminth Schistosoma mansoni. Levy-Holtzman R, et al.
Biochim Biophys Acta 1996 Oct 7;1317(1):1–4
Analysis of carbon source-regulated gene expression by the upstream region of the Candida tropicalis malate synthase gene in Saccharomyces cerevisiae. Umemura K, et al.
Biochim Biophys Acta 1997 Jan 3;1350(1):80–8
A simple vectorial representation of DNA sequences for the detection of replication origins in bacteria. Lobry JR.
Biochimie 1996;78(5):323–6
Cis-regulatory sequences from the first intron of the rat glutamine synthetase gene are involved in hepatocyte specific expression of the enzyme. Gaunitz F, et al.
Biol Chem 1997 Jan;378(1):11–8
Effect of transcriptional regulatory sequences on autonomous replication of plasmids in transient mammalian systems. Yokoyama M, et al. **Biol Pharm Bull** 1997 Jun;20(6):613–20

Regulation of the plasminogen activator inhibitor type-2 gene in monocytes: localization of an upstream transcriptional silencer. Antalis TM, et al. **Blood** 1996 Nov 15;88(10):3686-97

Inhibition of human immunodeficiency virus-1 (HIV-1) replication after transduction of granulocyte colony-stimulating factor-mobilized CD34+ cells from HIV-1-infected donors using retroviral vectors containing anti-HIV-1 genes. Bauer G, et al. **Blood** 1997 Apr 1; 89(7):2259-67

Activation of delta-globin gene expression by erythroid Krupple-like factor: a potential approach for gene therapy of sickle cell disease. Donze D, et al. **Blood** 1996 Nov 15; 88(10):4051-7

High-level globin gene expression mediated by a recombinant adeno-associated virus genome that contains the 3'gamma globin gene regulatory element and integrates as tandem copies in erythroid cells. Hargrove PW, et al. **Blood** 1997 Mar 15;89(6):2167-75

Brain specific proteins binding to the 3'UTR of the 5-HT2C receptor mRNA. Kao HT, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1-2):174-84

Methylation of the 5'CpG island of the endothelin B receptor gene is common in human prostate cancer. Nelson JB, et al. **Cancer Res** 1997 Jan 1;57(1):35-7

Induction of large DNA palindrome formation in yeast: implications for gene amplification and genome stability in eukaryotes. Butler DK, et al. **Cell** 1996 Dec 13; 87(6):1115-22

The recombination hot spot chi is embedded within islands of preferred DNA pairing sequences in the E. coli genome [letter] Tracy RB, et al. **Cell** 1997 Jul 25;90(2):205-6

The 5' part of the human H19 RNA contains cis-acting elements hampering its translatability. Joubel A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1159-72

Sequence and functional analysis of the 5'-flanking region of the mouse growth inhibitory factor gene. Watabe M, et al. **Cell Mol Neurobiol** 1997 Apr;17(2):235-43

High-resolution fluorescence in situ hybridization of RBM- and TSPY-related cosmids on released Y chromatin in humans and pygmy chimpanzees. Conrad C, et al. **Chromosome Res** 1996 Apr;4(3):201-6

Site-specific base deletions in human alpha-satellite monomer DNAs are associated with regularly distributed CENP-B boxes. Yoda K, et al. **Chromosome Res** 1997 May; 5(3):207-11

PCR-SSCP analysis of the glucocorticoid-responsive element of the atrial natriuretic peptide gene in familial primary open-angle glaucoma. Richardson KA, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):427-9

Computation of DNA structural variability--a new predictor of DNA regulatory regions. Benham CJ. **Comput Appl Biosci** 1996 Oct;12(5):375-81

Syntactic recognition of regulatory regions in Escherichia coli. Rosenblueth DA, et al. **Comput Appl Biosci** 1996 Oct; 12(5):415-22

Interfering contexts of regulatory sequence elements. Trifonov EN. **Comput Appl Biosci** 1996 Oct;12(5):423-9

A probable cis-regulatory element on yeast mitochondrial DNA responsible for cAMP-mediated transcription. Iqbal J, et al. **Curr Genet** 1996 Dec;30(6):493-501

Common themes in the function of transcription and splicing enhancers. Hertel KJ, et al. **Curr Opin Cell Biol** 1997 Jun; 9(3):350-7 (68 ref.)

The role of insulator elements in defining domains of gene expression. Geyer PK. **Curr Opin Genet Dev** 1997 Apr; 7(2):242-8 (49 ref.)

Regulation of beta-globin gene expression: straightening out the locus. Martin DI, et al. **Curr Opin Genet Dev** 1996 Aug;6(4):488-95 (65 ref.)

Life and death in the cytoplasm: messages from the 3' end. Wickens M, et al. **Curr Opin Genet Dev** 1997 Apr; 7(2):220-32 (105 ref.)

Searching for regulatory elements in human noncoding sequences. Duret L, et al. **Curr Opin Struct Biol** 1997 Jun; 7(3):399-406 (48 ref.)

Transgenic analysis of a potential Hoxd-11 limb regulatory element present in tetrapods and fish. Beckers J, et al. **Dev Biol** 1996 Dec 15;180(2):543-53

A conserved element in the protein-coding sequence is required for normal expression of replication-dependent histone genes in developing Xenopus embryos. Ficzycz A, et al. **Dev Biol** 1997 Feb 1;182(1):21-32

Multiple positive cis elements regulate the asymmetric expression of the SpHE gene along the sea urchin embryo animal-vegetal axis. Wei Z, et al. **Dev Biol** 1997 Jul 1; 187(1):71-8

Neural and skin cell-specific expression pattern conferred by steel factor regulatory sequence in transgenic mice. Yoshida H, et al. **Dev Dyn** 1996 Oct;207(2):222-32

Modular elements of the MLC 1f/3f locus confer fiber-specific transcription regulation in transgenic mice. Neville C, et al. **Dev Genet** 1996;19(2):157-62

The human beta-globin locus control region confers an early embryonic erythroid-specific expression pattern to a basic promoter driving the bacterial lacZ gene. Tewari R, et al. **Development** 1996 Dec;122(12):3991-9

Quantitative functional interrelations within the cis-regulatory system of the S. purpuratus Endo16 gene. Yuh CH, et al. **Development** 1996 Dec;122(12):4045-56

Human insulin gene expression in transgenic mice: mutational analysis of the regulatory region. Itier JM, et al. **Differentiation** 1996 Sep;60(5):309-16

FMR1 enhancer is regulated by cAMP through a cAMP-responsive element. Hwu WL, et al. **DNA Cell Biol** 1997 Apr;16(4):449-53

The promoter activity of the phospholipase C-gamma2 gene is regulated by a cell-type-specific control element. Lee SJ, et al. **DNA Cell Biol** 1997 Apr;16(4):485-92

RXR-mediated regulation of the alpha-fetoprotein gene through an upstream element. Li C, et al. **DNA Cell Biol** 1996 Nov;15(11):955-63

Identification of essential cis-acting regulatory elements for transcription of the rat DAN gene. Ozaki T, et al. **DNA Cell Biol** 1997 Jun;16(6):779-86

Identification of the control regions for mouse c-kit gene transcription induced by retinoic acid. Hayashi S, et al. **DNA Res** 1995 Oct 31;2(5):211-8

Compilation of all genes encoding two-component phosphotransfer signal transducers in the genome of Escherichia coli. Mizuno T. **DNA Res** 1997 Apr 28; 4(2):161-8

Detection of somatic mutations in the mitochondrial DNA control region of colorectal and gastric tumors by heteroduplex and single-strand conformation analysis. Alonso A, et al. **Electrophoresis** 1997 May;18(5):682-5

Multiple interactions amongst floral homeotic MADS box proteins. Davies B, et al. **EMBO J** 1996 Aug 15; 15(16):4330-43

Participation of the human p53 3'UTR in translational repression and activation following gamma-irradiation. Fu L, et al. **EMBO J** 1997 Jul 1;16(13):4117-25

Myc-Max heterodimers activate a DEAD box gene and interact with multiple E box-related sites in vivo. Grandori C, et al. **EMBO J** 1996 Aug 15;15(16):4344-57

Co-localization of Polycomb protein and GAGA factor on regulatory elements responsible for the maintenance of homeotic gene expression. Strutt H, et al. **EMBO J** 1997 Jun;16(12):3621-32

The Pto kinase conferring resistance to tomato bacterial speck disease interacts with proteins that bind a cis-element of pathogenesis-related genes. Zhou J, et al. **EMBO J** 1997 Jun 2;16(11):3207-18

Transcriptional regulatory region for expression of the rat ATP citrate-lyase gene. Fukuda H, et al. **Eur J Biochem** 1997 Jul 15;247(2):497-502

Effect of glucocorticoid hormones on viral gene expression, growth, and dysplastic differentiation in HPV16-immortalized ectocervical cells. Khare S, et al. **Exp Cell Res** 1997 May 1;232(2):353-60

Transcriptional regulatory regions for expression of the rat fatty acid synthase. Fukuda H, et al. **FEBS Lett** 1997 Apr 14;406(3):243-8

Potential CRE suppression by familial Alzheimer's mutants of APP independent of adenylyl cyclase regulation. Giambarella U, et al. **FEBS Lett** 1997 Jul 21;412(1):97-101

Characterization of the 5'-flanking regions of plasminogen-related genes A and B. Kida M, et al. **FEBS Lett** 1997 Mar 3;404(1):95-9

Analysis of a regulatory element in the 5'-untranslated region of the bcl-2 gene. Körner I, et al. **FEBS Lett** 1997 Apr 7;406(1-2):31-2

Expression of a pepT homologue from Bacillus subtilis. Schrögel O, et al. **FEMS Microbiol Lett** 1996 Dec 15; 145(3):341-8

Pseudo-transposition of a Tn5 derivative in Neisseria gonorrhoeae. Thomas CE, et al. **FEMS Microbiol Lett** 1996 Dec 15;145(3):371-6

Negative regulation of the alpha-foetoprotein gene in fibroblasts: identification and characterization of cis and trans elements. Henriette MF, et al. **Folia Biol (Praha)** 1997; 43(1):5-13

Putative regulatory sequence in human papillomavirus type 16 E2 open reading frame. Kitasato H, et al. **Folia Biol (Praha)** 1997;43(1):41-4

A negative regulatory region of the murine Hox11 gene. Arai Y, et al. **Gene** 1997 Jul 1;193(1):73-9

An H3 coding region regulatory element is common to all four nucleosomal classes of mouse histone-encoding genes. Bowman TL, et al. **Gene** 1996 Oct 17;176(1-2):1-8

Molecular organization of the alcohol dehydrogenase loci of Drosophila grimshawi and Drosophila hawaiiensis. Brennan MD, et al. **Gene** 1996 Nov 28;181(1-2):51-5

Evaluation of novel control elements by construction of eukaryotic expression vectors. Furebring C, et al. **Gene** 1997 Apr 1;188(2):191-8

Identification of regulatory sequences of juvenile hormone-sensitive and -insensitive serum protein-encoding genes. Jones G, et al. **Gene** 1996 Sep 16;173(2):209-14

Functional characterization of the 5'-flanking region of the gene encoding human 2-oxoglutarate dehydrogenase. Koike K, et al. **Gene** 1997 Feb 20;186(1):45-53

A retinoic acid/cAMP-responsive enhancer containing a cAMP responsive element is required for the activation of the mouse thrombomodulin-encoding gene in differentiating F9 cells. Niforas P, et al. **Gene** 1996 Oct 17;176(1-2):139-47

Transcription of the human hepatic lipase gene is modulated by multiple negative elements in HepG2 cells. Oka K, et al. **Gene** 1996 Nov 21;180(1-2):69-80

In vitro display of DNA elements that modulate the RNA transcription in cis or in trans directions. Reifenrath-Biesel B, et al. **Gene** 1996 Nov 28;181(1-2):135-7

Analysis of the negative transcriptional regulatory element in the angiotensin-converting enzyme gene. Kessler SP, et al. **Gene Expr** 1996;6(2):73-85

Chi-activated RecBCD enzyme possesses 5'-->3' nucleolytic activity, but RecBC enzyme does not: evidence suggesting that the alteration induced by Chi is not simply ejection of the RecD subunit. Anderson DG, et al. **Genes Cells** 1997 Feb;2(2):117-28

Signalling from endoplasmic reticulum to nucleus: transcription factor with a basic-leucine zipper motif is required for the unfolded protein-response pathway. Mori K, et al. **Genes Cells** 1996 Sep;1(9):803-17

Long-range chromatin analysis of the human MYC locus by pulsed-field gel electrophoresis. Mautner J, et al. **Genes Chromosomes Cancer** 1996 Aug;16(4):247-53

The recombination hot spot chi is a regulatory element that switches the polarity of DNA degradation by the RecBCD enzyme. Anderson DG, et al. **Genes Dev** 1997 Mar 1; 11(5):571-81

The Nanos gradient in Drosophila embryos is generated by translational regulation. Dahanukar A, et al. **Genes Dev** 1996 Oct 15;10(20):2610-20

In vivo targeted mutagenesis of a regulatory element required for positioning the Hoxd-11 and Hoxd-10 expression boundaries. Gérard M, et al. **Genes Dev** 1996 Sep 15; 10(18):2326-34

Fab-7 functions as a chromatin domain boundary to ensure proper segment specification by the Drosophila bithorax complex. Hagstrom K, et al. **Genes Dev** 1996 Dec 15; 10(24):3202-15

smaug protein represses translation of unlocalized nanos mRNA in the Drosophila embryo. Smibert CA, et al. **Genes Dev** 1996 Oct 15;10(20):2600-9

The Fab-7 element of the bithorax complex attenuates enhancer-promoter interactions in the Drosophila embryo. Zhou J, et al. **Genes Dev** 1996 Dec 15;10(24):3195-201

Interactions of Drosophila Ultrabithorax regulatory regions with native and foreign promoters. Casares F, et al. **Genetics** 1997 Jan;145(1):123-37

Isolation and identification of genes activating UAS2-dependent ADH2 expression in Saccharomyces cerevisiae. Donoviel MS, et al. **Genetics** 1996 Jul; 143(3):1137-48

The role of Sas2, an acetyltransferase homologue of Saccharomyces cerevisiae, in silencing and ORC function. Ehrenhofer-Murray AE, et al. **Genetics** 1997 Apr; 145(4):923-34

Evolution of anthocyanin biosynthesis in maize kernels: the role of regulatory and enzymatic loci. Hanson MA, et al. **Genetics** 1996 Jul;143(3):1395-407

Large-scale comparative sequence analysis of the human and murine Bruton's tyrosine kinase loci reveals conserved regulatory domains. Oeltjen JC, et al. **Genome Res** 1997 Apr;7(4):315-29

The complete sequences of the galago and rabbit beta-globin locus control regions: extended sequence and functional conservation outside the cores of DNase hypersensitive sites. Slightom JL, et al. **Genomics** 1997 Jan 1;39(1):90-4

Dinucleotide repeat in the 3' flanking region provides a clue to the molecular evolution of the Duffy gene. Li J, et al. **Hum Genet** 1997 May;99(5):573-7

A family exhibiting heteroplasmy in the human mitochondrial DNA control region reveals both somatic mosaicism and pronounced segregation of mitotypes. Wilson MR, et al. **Hum Genet** 1997 Aug;100(2):167-71

Cloning and sequencing of the blood meal-induced late trypsin gene from the mosquito Aedes aegypti and characterization of the upstream regulatory region. Barillas-Mury C, et al. **Insect Mol Biol** 1993;2(1):7-12

Cascade regulation of the toluene-3-monooxygenase operon (tbuA1UBVA2C) of Burkholderia pickettii PKO1: role of the tbuA1 promoter (PtbuA1) in the expression of its cognate activator, TbuT. Byrne AM, et al. **J Bacteriol** 1996 Nov;178(21):6327-37

Characterization of the pecT control region from Erwinia chrysanthemi 3937. Castillo A, et al. **J Bacteriol** 1997 Aug; 179(15):4909-18

Effect of regulatory protein levels on utilization of starch by Bacteroides thetaiotaomicron. D'Elia JN, et al. **J Bacteriol** 1996 Dec;178(24):7180-6

Functional features of an ssi signal of plasmid pGKV21 in Escherichia coli. Jeong JY, et al. **J Bacteriol** 1997 Sep; 179(18):5795-801

Genetic analysis of the dsz promoter and associated regulatory regions of Rhodococcus erythropolis IGTS8. Li MZ, et al. **J Bacteriol** 1996 Nov;178(22):6409-18

Localization of the nic site of IncN conjugative plasmid pCU1 through formation of a hybrid oriT. Paterson ES, et al. **J Bacteriol** 1997 Sep;179(18):5768-76

The existence of thyroid hormone responsive element, TRE, was confirmed in the first intron of rat alpha 1-acid glycoprotein gene. Matsukawa T, et al. **J Biochem (Tokyo)** 1996 May;119(5):934-9

Effect of macromolecular-translocation inhibitor-III on binding of activated glucocorticoid-receptor complex to specific DNA. Okamoto K, et al. **J Biochem (Tokyo)** 1996 May;119(5):920-5

Characterization of rat liver-specific methionine adenosyltransferase gene promoter. Role of distal upstream cis-acting elements in the regulation of the transcriptional activity. Alvarez L, et al. **J Biol Chem** 1997 Sep 5; 272(36):22875-83

Interaction of the nuclear matrix-associated region

(MAR)-binding proteins, SATB1 and CDP/Cux, with a MAR element (L2a) in an upstream regulatory region of the mouse CD8a gene. Banan M, et al. **J Biol Chem** 1997 Jul 18;272(29):18440-52

Estrogen receptor ligands modulate its interaction with DNA. Cheskis BJ, et al. **J Biol Chem** 1997 Apr 25; 272(17):11384-91

Identification of functional elements in the promoter region of the human gene for thymidylate synthase and nuclear factors that regulate the expression of the gene. Horie N, et al. **J Biol Chem** 1997 Jul 18;272(29):18375-81

Transcriptional regulation of the human alpha2(I) collagen gene. Combined action of upstream stimulatory and inhibitory cis-acting elements. Ihn H, et al. **J Biol Chem** 1996 Oct 25;271(43):26717-23

Different DNA elements can modulate the conformation of thyroid hormone receptor heterodimer and its transcriptional activity. Ikeda M, et al. **J Biol Chem** 1996 Sep 20;271(38):23096-104

The keratinocyte-specific Epstein-Barr virus ED-L2 promoter is regulated by phorbol 12-myristate 13-acetate through two cis-regulatory elements containing E-box and Krüppel-like factor motifs. Jenkins TD, et al. **J Biol Chem** 1997 Sep 26;272(39):24433-42

A 3' cis-acting element is involved in tumor necrosis factor-alpha gene expression in astrocytes. Kwon J, et al. **J Biol Chem** 1996 Sep 13;271(37):22383-90

Binding of upstream stimulatory factor and a cell-specific activator to the calcitonin/calcitonin gene-related peptide enhancer. Lanigan TM, et al. **J Biol Chem** 1997 Jul 18; 272(29):18316-24

Identification of direct repeat 4 as a positive regulatory element for the human TR4 orphan receptor. A modulator for the thyroid hormone target genes. Lee YF, et al. **J Biol Chem** 1997 May 2;272(18):12215-20

Twist-mediated activation of the NK-4 homeobox gene in the visceral mesoderm of Drosophila requires two distinct clusters of E-box regulatory elements. Lee YM, et al. **J Biol Chem** 1997 Jul 11;272(28):17531-41

Requirement of an upstream AP-1 motif for the constitutive and phorbol ester-inducible expression of the urokinase-type plasminogen activator receptor gene. Lengyel E, et al. **J Biol Chem** 1996 Sep 20;271(38):23176-84

Identification of a bimodal regulatory element encompassing a canonical AP-1 binding site in the proximal promoter region of the human decorin gene. Mauviel A, et al. **J Biol Chem** 1996 Oct 4;271(40):24824-9

Structural and functional analysis of the chick chondroitin sulfate proteoglycan (aggrecan) promoter and enhancer region. Pirok EW 3rd, et al. **J Biol Chem** 1997 Apr 25; 272(17):11566-74

Activation of hypoxia-inducible factor-1; definition of regulatory domains within the alpha subunit. Pugh CW, et al. **J Biol Chem** 1997 Apr 25;272(17):11205-14

Elements regulating cardiomyocyte expression of the human sarcomeric mitochondrial creatine kinase gene in transgenic mice. Qin W, et al. **J Biol Chem** 1997 Oct 3;272(40):25210-6

Chromatin remodeling by transcriptional activation domains in a yeast episome. Stafford GA, et al. **J Biol Chem** 1997 Apr 25;272(17):11526-34

A minimal murine Msx-1 gene promoter. Organization of its cis-regulatory motifs and their role in transcriptional activation in cells in culture and in transgenic mice. Takahashi T, et al. **J Biol Chem** 1997 Sep 5; 272(36):22667-78

Stimulation of mouse osteopontin promoter by v-Src is mediated by a CCAAT box-binding factor. Tezuka Ki, et al. **J Biol Chem** 1996 Sep 13;271(37):22713-7

The mechanism of GT element-mediated cell type-specific transcriptional control. Villain P, et al. **J Biol Chem** 1996 Dec 20;271(51):32593-8

Identification of a novel cis-acting negative regulatory element affecting expression of the CYP1A1 gene in rat epidermal cells. Walsh AA, et al. **J Biol Chem** 1996 Sep 13;271(37):22746-53

Arginine-specific regulation mediated by the Neurospora crassa arg-2 upstream open reading frame in a homologous, cell-free in vitro translation system. Wang Z, et al. **J Biol Chem** 1997 Jan 3;272(1):255-61

A novel lipopolysaccharide-response element contributes to induction of nitric oxide synthase. Xie Q. **J Biol Chem** 1997 Jun 6;272(23):14867-72

Plasma lipoprotein(a) levels and expression of the apolipoprotein(a) gene are dependent on the nucleotide polymorphisms in its 5'-flanking region. Suzuki K, et al. **J Clin Invest** 1997 Mar 15;99(6):1361-6

The 44-kDa regulatory subunit of the Paramecium cAMP-dependent protein kinase lacks a dimerization domain and may have a unique autophosphorylation site sequence. Carlson GL, et al. **J Eukaryot Microbiol** 1996 Jul-Aug;43(4):347-56

Paramecium has two regulatory subunits of cyclic AMP-dependent protein kinase, one unique to cilia. Hochstrasser M, et al. **J Eukaryot Microbiol** 1996 Jul-Aug; 43(4):356-62

JC virus regulatory region rearrangements and genotypes in progressive multifocal leukoencephalopathy: two independent aspects of virus variation. Agostini HT, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):659-64

Activity of JC virus archetype and PML-type regulatory regions in glial cells. Ault GS. **J Gen Virol** 1997 Jan;78 (Pt 1):163-9

Subpopulations of non-coding control region variants within a cell culture-passaged stock of BK virus: sequence comparisons and biological characteristics. Johnsen JI, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1571-81

Tissue culture adaptation of natural isolates of simian virus 40: changes occur in viral regulatory region but not in carboxy-terminal domain of large T-antigen. Lednicky JA, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1697-705

A CD8 genomic fragment that directs subset-specific expression of CD8 in transgenic mice. Hostert A, et al. **J Immunol** 1997 May 1;158(9):4270-81

The 3' untranslated region of IL-1beta regulates protein production. Kern JA, et al. **J Immunol** 1997 Feb 1; 158(3):1187-93

Up-regulation of hormone response of human papillomavirus type 16 expression and increased DNA-protein binding by consensus mutations of viral glucocorticoid response elements. Khare S, et al. **J Med Virol** 1996 Nov; 50(3):254-62

Glial and muscle embryonal carcinoma cell-specific independent regulation of expression of human JC virus early promoter by cyclic AMP response elements and adjacent nuclear factor 1 binding sites. Kumar KU, et al. **J Med Virol** 1996 Jul;49(3):199-204

A dynamic in vivo view of the HIV-I Rev-RRE interaction. Charpentier B, et al. **J Mol Biol** 1997 Mar 14;266(5):950-62

A statistical model for locating regulatory regions in genomic DNA. Crowley EM, et al. **J Mol Biol** 1997 Apr 25; 268(1):8-14

In vitro binding of the response regulator CitB and of its carboxy-terminal domain to A + T-rich DNA target sequences in the control region of the divergent citC and citS operons of Klebsiella pneumoniae. Meyer M, et al. **J Mol Biol** 1997 Jun 27;269(5):719-31

Filamentous phage IKe mRNAs conserve form and function despite divergence in regulatory elements. Stump MD, et al. **J Mol Biol** 1997 Feb 14;266(1):51-65

A novel A/T-rich element mediates ANF gene expression during cardiac myocyte hypertrophy. Harris AN, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):515-25

Evidence for translational control elements within the 5'-untranslated region of GLUT1 glucose transporter mRNA. Boado RJ, et al. **J Neurochem** 1996 Oct; 67(4):1335-43

Demonstration of an E-box and its CNS-related binding factors for transcriptional regulation of the mouse type 1 inositol 1,4,5-trisphosphate receptor gene. Konishi Y, et al. **J Neurochem** 1997 Aug;69(2):476-84

Species differences in central oxytocin receptor gene expression: comparative analysis of promoter sequences. Young LJ, et al. **J Neuroendocrinol** 1996 Oct;8(10):777-83

Analysis of ligand dependence and hormone response element synergy in transcription by estrogen receptor. Mattick S, et al. **J Steroid Biochem Mol Biol** 1997 Mar; 60(5-6):285-94

In vitro binding of vitamin D receptor occupied by 24R,25-dihydroxyvitamin D3 to vitamin D responsive element of human osteocalcin gene. Uchida M, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3-4):181-7

Modelling the activity of the Ultrabithorax parasegment-specific regulatory domains around their anterior boundaries. Singh PB, et al. **J Theor Biol** 1997 Jun 21;186(4):397-413

A novel C/EBP beta-YY1 complex controls the cell-type-specific activity of the human papillomavirus type 18 upstream regulatory region. Bauknecht T, et al. **J Virol** 1996 Nov;70(11):7695-705

Efficient transcription from the rice tungro bacilliform virus promoter requires elements downstream of the transcription start site. Chen G, et al. **J Virol** 1996 Dec; 70(12):8411-21

cis elements that contribute to geminivirus transcriptional regulation and the efficiency of DNA replication. Eagle PA, et al. **J Virol** 1997 Sep;71(9):6947-55

The HNF1/HNF4-dependent We2 element of woodchuck hepatitis virus controls viral replication and can activate the N-myc2 promoter. Fourel G, et al. **J Virol** 1996 Dec; 70(12):8571-83

Identification of cis-acting sequences in the promoter of the herpes simplex virus type 1 latency-associated transcripts required for activation by nerve growth factor and sodium butyrate in PC12 cells. Frazier DP, et al. **J Virol** 1996 Nov; 70(11):7433-44

cis-Acting sequences in addition to donor and acceptor sites are required for template switching during synthesis of plus-strand DNA for duck hepatitis B virus. Havert MB, et al. **J Virol** 1997 Jul;71(7):5336-44

Utilization of the herpes simplex virus type 1 latency-associated regulatory region to drive stable reporter gene expression in the nervous system. Lachmann RH, et al. **J Virol** 1997 Apr;71(4):3197-207

The initiator element of the adenovirus major late promoter has an important role in transcription initiation in vivo. Lu H, et al. **J Virol** 1997 Jan;71(1):102-9

cis- and trans-acting elements involved in reactivation of vaccinia virus early transcription. Masternak K, et al. **J Virol** 1996 Dec;70(12):8737-46

Previously unsuspected cis-acting sequences for DNA replication revealed by characterization of a chimeric heron/duck hepatitis B virus. Mueller-Hill K, et al. **J Virol** 1996 Dec;70(12):8310-7

The Epstein-Barr virus EBNA-1 promoter Qp requires an initiator-like element. Nonkwelo C, et al. **J Virol** 1997 Jan; 71(1):354-61

A dual role of the putative RNA dimerization initiation site of human immunodeficiency virus type 1 in genomic RNA packaging and proviral DNA synthesis. Paillart JC, et al. **J Virol** 1996 Dec;70(12):8348-54

CCAAT displacement protein, a regulator of differentiation-specific gene expression, binds a negative regulatory element within the 5' end of the human papillomavirus type 6 long control region. Pattison S, et al. **J Virol** 1997 Mar;71(3):2013-22

Cell and viral regulatory elements enhance the expression and function of a human immunodeficiency virus inhibitory gene. Ranga U, et al. **J Virol** 1997 Sep;71(9):7020-9

Internal entry of ribosomes is directed by the 5' noncoding region of classical swine fever virus and is dependent on the presence of an RNA pseudoknot upstream of the initiation codon. Rijnbrand R, et al. **J Virol** 1997 Jan; 71(1):451-7

cis-Acting inhibitory elements within the pol-env region of human T-cell leukemia virus type 1 possibly involved in viral persistence. Saiga A, et al. **J Virol** 1997 Jun; 71(6):4485-94

Host range phenotype induced by mutations in the internal ribosomal entry site of poliovirus RNA. Shiroki K, et al. **J Virol** 1997 Jan;71(1):1-8

Identification of an RNA sequence within an intracisternal-A particle element able to replace Rev-mediated posttranscriptional regulation of human immunodeficiency virus type 1. Tabernero C, et al. **J Virol** 1997 Jan; 71(1):95-101

Identification of nucleotide sequences that regulate transcription of the MCF13 murine leukemia virus long terminal repeat in activated T cells. Yoshimura FK, et al. **J Virol** 1997 Mar;71(3):2572-6

The cellular YY1 transcription factor binds a cis-acting, negatively regulating element in the Epstein-Barr virus BRLF1 promoter. Zalani S, et al. **J Virol** 1997 Apr; 71(4):3268-74

A coupled PCR and restriction digest method for the detection and analysis of the SV40 regulatory region in infected-cell lysates and clinical samples. Lednicky JA, et al. **J Virol Methods** 1997 Feb;64(1):1-9

HIRF: a novel nuclear factor that binds to the human T-cell leukemia virus type I internal regulatory element (HIRE). Ariumi Y, et al. **Leukemia** 1997 Apr;11 Suppl 3:29-31

Variability in the upstream promoter and intron sequences of the human, mouse and chick type X collagen genes. Beier F, et al. **Matrix Biol** 1996 Dec;15(6):415-22

Distal cis-acting elements restrict expression of the CyIIIb actin gene in the aboral ectoderm of the sea urchin embryo. Xu N, et al. **Mech Dev** 1996 Dec;60(2):151-62

Methods for studying the biochemical properties of an Inr element binding protein: TFII-I. Novina CD, et al. **Methods** 1997 Jul;12(3):254-63

Guanine-adenine ligation-mediated PCR in vivo footprinting. Strauss EC, et al. **Methods** 1997 Feb; 11(2):164-70

Identifying regulators of transcript elongation in eukaryotes. Edwards AM, et al. **Methods Enzymol** 1996;274:419-36

Amplification of gene-regulating regions with single-sided specificity. Luo MZ, et al. **Methods Mol Biol** 1997; 67:239-45

Sequence inversion by Flip-PCR. Schanke JT. **Methods Mol Biol** 1997;67:203-8

Regulatory sequences of two flagellin genes in Bacillus thuringiensis subsp. alesti. Ankarloo J, et al. **Microbiology** 1996 Feb;142 (Pt 2):315-20

Bradyzoite-specific gene expression in Toxoplasma gondii requires minimal genomic elements. Bohne W, et al. **Mol Biochem Parasitol** 1997 Mar;85(1):89-98

Analysis of the E-cadherin and P-cadherin promoters in murine keratinocyte cell lines from different stages of mouse skin carcinogenesis. Faraldo ML, et al. **Mol Carcinog** 1997 Sep;20(1):33-47

Analysis of a meiosis-specific URS1 site: sequence requirements and involvement of replication protein A. Gailus-Durner V, et al. **Mol Cell Biol** 1997 Jul; 17(7):3536-46

Functional equivalency and diversity of cis-acting elements among yeast replication origins. Lin S, et al. **Mol Cell Biol** 1997 Sep;17(9):5473-84

Purification and characterization of FBI-1, a cellular factor that binds to the human immunodeficiency virus type 1 inducer of short transcripts. Pessler F, et al. **Mol Cell Biol** 1997 Jul;17(7):3786-98

Purkinje cell protein-2 cis-elements mediate repression of T3-dependent transcriptional activation. Anderson GW, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):79-87

Identification of a carbohydrate response element in rat S14 gene. Harmon JS, et al. **Mol Cell Endocrinol** 1996 Oct 14; 123(1):37-44

Functional role of a conformationally flexible homopurine/homopyrimidine domain of the androgen receptor gene promoter interacting with Sp1 and a pyrimidine single strand DNA-binding protein. Chen S, et al. **Mol Endocrinol** 1997 Jan;11(1):3-15

An androgen response element in a far upstream enhancer region is essential for high, androgen-regulated activity of the prostate-specific antigen promoter. Cleutjens KB, et al. **Mol Endocrinol** 1997 Feb;11(2):148-61

DNA sequences and their binding proteins required for

Sertoli cell-specific transcription of the rat androgen-binding protein gene. Fenstermacher DA, et al. **Mol Endocrinol** 1997 Aug;11(9):1387–400

Vitamin D receptor binding to the negative human parathyroid hormone vitamin D response element does not require the retinoid x receptor. Mackey SL, et al. **Mol Endocrinol** 1996 Mar;10(3):298–305

DNA sequences downstream from the vitamin D response element of the rat osteocalcin gene are required for ligand-dependent transactivation. Sneddon WB, et al. **Mol Endocrinol** 1997 Feb;11(2):210–7

Characterization of the human mineralocorticoid receptor gene 5'-regulatory region: evidence for differential hormonal regulation of two alternative promoters via nonclassical mechanisms. Zennaro MC, et al. **Mol Endocrinol** 1996 Dec;10(12):1549–60

A simple signal element mediates transcription termination and mRNA 3' end formation in the DEG1 gene of Saccharomyces cerevisiae. Brambilla A, et al. **Mol Gen Genet** 1997 May;254(6):681–8

Extensive maternal representation of DNA-binding proteins that interact with regulatory target sites of the Strongylocentrotus purpuratus CyIIIa gene. Calzone FJ, et al. **Mol Mar Biol Biotechnol** 1997 Jun;6(2):79–83

Structure of medaka transferrin gene and its 5'-flanking region. Mikawa N, et al. **Mol Mar Biol Biotechnol** 1996 Sep;5(3):225–9

STAB-SD: a Shine-Dalgarno sequence in the 5' untranslated region is a determinant of mRNA stability. Agaisse H, et al. **Mol Microbiol** 1996 May;20(3):633–43

Suppression of transcription polarity in the Escherichia coli haemolysin operon by a short upstream element shared by polysaccharide and DNA transfer determinants. Nieto JM, et al. **Mol Microbiol** 1996 Feb;19(4):705–13

Mycobacterial recA is cotranscribed with a potential regulatory gene called recX. Papavinasasundaram KG, et al. **Mol Microbiol** 1997 Apr;24(1):141–53

Identification and characterization of FrzZ, a novel response regulator necessary for swarming and fruiting-body formation in Myxococcus xanthus. Trudeau KG, et al. **Mol Microbiol** 1996 May;20(3):645–55

DNA elements recognizing NF-Y and Sp1 regulate the human multidrug-resistance gene promoter. Sundseth R, et al. **Mol Pharmacol** 1997 Jun;51(6):963–71

Promoter mapping of the mouse Tcp-10bt gene in transgenic mice identifies essential male germ cell regulatory sequences. Ewulonu UK, et al. **Mol Reprod Dev** 1996 Mar; 43(3):290–7

Binding of transcription factors to widely-separated cis-regulatory elements of the murine FGF-4 gene. Lamb K, et al. **Mol Reprod Dev** 1996 Aug;44(4):460–71

Effects of oxidation and reduction on the binding of transcription factors to cis-regulatory elements located in the FGF-4 gene. Lickteig K, et al. **Mol Reprod Dev** 1996 Jun;44(2):146–52

Severe position effects imposed on a 1 kb mouse whey acidic protein gene promoter are overcome by heterologous matrix attachment regions. McKnight RA, et al. **Mol Reprod Dev** 1996 Jun;44(2):179–84

Extension of chromatin accessibility by nuclear matrix attachment regions. Jenuwein T, et al. **Nature** 1997 Jan 16;385(6613):269–72

The human neuronal alpha 1-chimaerin gene contains a position-dependent negative regulatory element in the first exon. Dong JM, et al. **Neurochem Res** 1996 Sep; 21(9):1023–30

Forced evolution of a regulatory RNA helix in the HIV-1 genome. Berkhout B, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):940–7

mRNA turnover in yeast promoted by the MATalpha1 instability element. Caponigro G, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4304–12

Differential expression of lacZ in the liver and kidney of transgenic mice carrying chimeric lacZ-erythropoietin gene constructs with or without its 1.2 kb 3'-flanking sequence. Haidar MA, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3621–8

Sequences within and flanking hypersensitive sites 3 and 2 of the beta-globin locus control region required for synergistic versus additive interaction with the epsilon-globin gene promoter. Jackson JD, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4327–35

A muscle-specific enhancer within intron 1 of the human dystrophin gene is functionally dependent on single MEF-1/E box and MEF-2/AT-rich sequence motifs. Klamut HJ, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1618–25

Structural analysis of mouse rDNA: coincidence between nuclease hypersensitive sites, DNA curvature and regulatory elements in the intergenic spacer. Längst G, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):511–7

The murine IgM secretory poly(A) site contains dual upstream and downstream elements which affect polyadenylation. Phillips C, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2344–51

Structure and function of the zeta-globin upstream regulatory element. Sabath DE, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4978–86

Characterization of nuclear proteins that bind to the regulatory TGATTGGC motif in the human immunodeficiency virus type 1 long terminal repeat. Schwartz C, et al. **Nucleic Acids Res** 1997 Mar 15; 25(6):1177–84

Splicing efficiency of human immunodeficiency virus type 1 tat RNA is determined by both a suboptimal 3' splice site and a 10 nucleotide exon splicing silencer element located within tat exon 2. Si Z, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):861–7

Retinoic acid response elements as positive and negative regulators of the expression of the homeobox b-1 gene. De Luca LM, et al. **Nutr Rev** 1996 Feb;54(2 Pt 1):61–3 (17 ref.)

Isolation of and effector for metastasis-inducing DNAs from a human metastatic carcinoma cell line. Chen H, et al. **Oncogene** 1997 Apr 3;14(13):1581–8

Characterization of CYP1A1 gene regulatory elements in cancer-prone Atlantic tomcod. Roy NK, et al. **Pharmacogenetics** 1996 Jun;6(3):273–7

Molecular dissection of the AGAMOUS control region shows that cis elements for spatial regulation are located intragenically. Sieburth LE, et al. **Plant Cell** 1997 Mar; 9(3):355–65

Nucleotide sequence and transcriptional analysis of the flanking region of the gene (spb) for the trans-acting factor that controls light-mediated expression of the puf operon in Rhodobacter sphaeroides. Mizoguchi H, et al. **Plant Cell Physiol** 1997 May;38(5):558–67

Light-responsive elements of the tobacco PSI-D gene are located both upstream and within the transcribed region. Yamamoto YY, et al. **Plant J** 1997 Aug;12(2):255–65

Different sequences for 5'-untranslated leaders of nuclear genes for plastid proteins affect the expression of the beta-glucuronidase gene. Bolle C, et al. **Plant Mol Biol** 1996 Dec;32(5):861–8

GUS expression in Arabidopsis directed by 5' regions of the pea metallothionein-like gene PsMTA. Fordham-Skelton AP, et al. **Plant Mol Biol** 1997 Jul;34(4):659–68

Footprinting of the spinach nitrite reductase gene promoter reveals the preservation of nitrate regulatory elements between fungi and higher plants. Rastogi R, et al. **Plant Mol Biol** 1997 Jun;34(3):465–76

Protein complexes binding to cis elements of the plant histone gene promoters: multiplicity, phosphorylation and cell cycle alteration. Shen WH, et al. **Plant Mol Biol** 1997 Feb; 33(3):367–79

Sequences necessary for nitrate-dependent transcription of Arabidopsis nitrate reductase genes. Hwang CF, et al. **Plant Physiol** 1997 Mar;113(3):853–62

The neuron-restrictive silencer element: a dual enhancer/silencer crucial for patterned expression of a nicotinic receptor gene in the brain. Bessis A, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5906–11

Hydrogenase genes from Rhizobium leguminosarum bv. viciae are controlled by the nitrogen fixation regulatory protein nifA. Brito B, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6019–24

Characterization of the chicken beta-globin insulator. Chung JH, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21; 94(2):575–80

A cellular 65-kDa protein recognizes the negative regulatory element of human papillomavirus late mRNA. Dietrich-Goetz W, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):163–8

Developmental expression of synthetic cis-regulatory systems composed of spatial control elements from two different genes. Kirchhamer CV, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13849–54

Mutation of gene-proximal regulatory elements disrupts human epsilon-, gamma-, and beta-globin expression in yeast artificial chromosome transgenic mice. Liu Q, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):169–74

An upstream activator of transcription coordinately increases the level and epigenetic stability of gene expression. Magis W, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13914–8

The two alpha subunits of Escherichia coli RNA polymerase are asymmetrically arranged and contact different halves of the DNA upstream element. Murakami K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1709–14

GATA-1 transcription is controlled by distinct regulatory mechanisms during primitive and definitive erythropoiesis. Onodera K, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4487–92

Identification of a glucocorticoid repressor domain in the rat beta 1-adrenergic receptor gene. Bahouth SW, et al. **Recept Signal Transduct** 1996;6(3-4):141–9

Cell-type specific activation of the polyomavirus F9-1 regulatory region in transgenic mice. Neubauer A, et al. **Transgenic Res** 1996 Nov;5(6):373–83

Silencers and locus control regions: opposite sides of the same coin. Kamakaka RT. **Trends Biochem Sci** 1997 Apr; 22(4):124–8 (42 ref.)

Involvement of human immunodeficiency virus type-1 splice sites in the cytoplasmic accumulation of viral RNA. Borg KT, et al. **Virology** 1997 Sep 15;236(1):95–103

Interaction of transcription factors RFX1 and MIBP1 with the gamma motif of the negative regulatory element of the hepatitis B virus core promoter. Buckwold VE, et al. **Virology** 1997 Jan 20;227(2):515–8

The strain-specific cis-acting element of beet curly top geminivirus DNA replication maps to the directly repeated motif of the ori. Choi IR, et al. **Virology** 1996 Dec 1; 226(1):122–6

The effect of regulatory sequence elements upon the initiation of DNA replication of the minute virus of mice. Cossons N, et al. **Virology** 1996 Oct 1;224(1):320–5

HPV6 variants from malignant tumors with sequence alterations in the regulatory region do not reveal differences in the activities of the oncogene promoters but do contain amino acid exchanges in the E6 and E7 proteins. Grassmann K, et al. **Virology** 1996 Sep 1;223(1):185–97

Use of cis- and trans-acting viral regulatory sequences to improve expression of human immunodeficiency virus vectors in human lymphocytes. Parolin C, et al. **Virology** 1996 Aug 15;222(2):415–22

Analysis of the 3' terminal sequence recognized by the Rift Valley fever virus transcription complex in its ambisense S segment. Prehaud C, et al. **Virology** 1997 Jan 6; 227(1):189–97

Mason-Pfizer monkey virus (MPMV) constitutive transport element (CTE) functions in a position-dependent manner. Rizvi TA, et al. **Virology** 1997 Sep 15;236(1):118–29

In vitro mutational and inhibitory analysis of the cis-acting translational elements within the 5' untranslated region of coxsackievirus B3: potential targets for antiviral action of antisense oligomers. Yang D, et al. **Virology** 1997 Feb 3; 228(1):63–73

Identification of cis-regulatory elements in the upstream regulatory region of human papillomavirus type 59. Rho J, et al. **Virus Res** 1997 Feb;47(2):155–66

[Comparison of positions of attachment sites of DNA loops to nuclear matrix, MAR-elements, and autonomously replicating sequences in the elongated region of Drosophila melanogaster X-chromosome] Iarovaia OV, et al. **Mol Biol (Mosk)** 1996 Sep-Oct;30(5):1184–92 **(Rus)**

[TRRD: a database of transcription regulatory regions in eukaryotic genes] Kel' AE, et al. **Mol Biol (Mosk)** 1997 Jul-Aug;31(4):626–36 **(Rus)**

[Composite regulatory elements: classification and description in the COMPEL database] Kel' OV, et al. **Mol Biol (Mosk)** 1997 Jul-Aug;31(4):601–15 **(Rus)**

[The MGL computer system--an instrument for generating, graphically representing, and analyzing regulatory genomic sequences] Kolpakov FA, et al. **Mol Biol (Mosk)** 1997 Jul-Aug;31(4):647–55 **(Rus)**

[Distribution of parallel complementary sequences in the regulatory region of human mitochondrial DNA] Maliarchuk BA, et al. **Mol Biol (Mosk)** 1996 Mar-Apr; 30(2):273–8 **(Rus)**

[Analysis of transcriptional regulatory regions based on detecting transcription factor binding sites and studies of their mutual position] Quandt K, et al. **Mol Biol (Mosk)** 1997 Jul-Aug;31(4):749–58 **(Rus)**

GENETICS

Positive and negative regulatory regions in promoters of human glutathione transferase alpha genes. Lorper M, et al. **Biol Chem Hoppe Seyler** 1996 Jan;377(1):39–46

Determination of the functional domain of a mouse autonomous replicating sequence. Hayashi C, et al. **Biol Pharm Bull** 1997 Jun;20(6):690–3

A recurring translocation, t(3;6)(q27;p21), in non-Hodgkin's lymphoma results in replacement of the 5' regulatory region of BCL6 with a novel H4 histone gene. Akasaka T, et al. **Cancer Res** 1997 Jan 1;57(1):7–12

Mutations in the long control region of human papillomavirus DNA in oral cancer cells, and their functional consequences. Chen Z, et al. **Cancer Res** 1997 Apr 15; 57(8):1614–9

Heterochromatin effects on the frequency and duration of LCR-mediated gene transcription. Milot E, et al. **Cell** 1996 Oct 4;87(1):105–14

Transcriptional regulation of intercellular adhesion molecule 1 by phorbol ester in human neuroblastoma cell line SK-N-SH involves jun- and fos-containing activator protein 1 site binding complex(es). Farina AR, et al. **Cell Growth Differ** 1997 Jul;8(7):789–800

Two distinct regulatory elements control quail cdc2 transcription: possible involvement in the control of retinoblast differentiation. North S, et al. **Cell Growth Differ** 1996 Mar;7(3):339–49

Characterization of 5'-proximal sequence of mouse GABA transporter gene (GAT-1). Fei J, et al. **Cell Res** 1997 Jun; 7(1):61–7

Small genetic effects in complex diseases: a review of regulatory sequence variants in dyslipoproteinemia and atherosclerosis. Hegele RA. **Clin Biochem** 1997 Apr; 30(3):183–8 (56 ref.)

The hardwiring of development: organization and function of genomic regulatory systems. Arnone MI, et al. **Development** 1997 May;124(10):1851–64 (119 ref.)

Isolation and genomic analysis of the rat polymeric immunoglobulin receptor gene terminal domain and transcriptional control region. Fodor E, et al. **DNA Cell Biol** 1997 Feb;16(2):215–25

A negative regulatory region containing a glucocorticosteroid response element (nGRE) in the human interleukin-1beta gene. Zhang G, et al. **DNA Cell Biol** 1997 Feb;16(2):145–52

Isolatioa of human purH gene expressed in the rodent transformant cells by subtractive enrichment of 3'-untranslated region of human transcript. Yamauchi M, et al. **DNA Res** 1995 Dec 31;2(6):269–75

Genomic structure and complete nucleotide sequence of the Batten disease gene, CLN3. Mitchison HM, et al. **Genomics** 1997 Mar 1;40(2):346–50

Mapping of the glutamate-cysteine ligase catalytic subunit gene (GLCLC) to human chromosome 6p12 and mouse chromosome 9D-E and of the regulatory subunit gene (GLCLR) to human chromosome 1p21-p22 and mouse chromosome 3H1-3. Tsuchiya K, et al. **Genomics** 1995 Dec 10;30(3):630-2

A repeated element in the regulatory region of the MNK gene and its deletion in a patient with occipital horn syndrome. Levinson B, et al. **Hum Mol Genet** 1996 Nov; 5(11):1737-42

Transcriptional regulation of the TGF-beta 2 gene in choriocarcinoma cells and breast carcinoma cells: differential utilization of Cis-regulatory elements. Kingsley-Kallesen M, et al.
In Vitro Cell Dev Biol Anim 1997 Apr;33(4):294-301

Functional characterization of naturally occurring mutants of human papillomavirus type 16 with large deletions in the non-coding region [letter] Grassmann K, et al.
Int J Cancer 1996 Oct 9;68(2):265-9

Hypermethylation of calcitonin gene regulatory sequences in human breast cancer as revealed by genomic sequencing. Hakkarainen M, et al. **Int J Cancer** 1996 Dec 20;69(6):471-4

Separate cis-acting elements determine the expression of mouse Dbx gene in multiple spatial domains of the central nervous system. Lu S, et al. **Mech Dev** 1996 Aug; 58(1-2):193-202

Volatility of internal eliminated segments in germ line genes of hypotrichous ciliates. DuBois ML, et al.
Mol Cell Biol 1997 Jan;17(1):326-37

The activity of the scs and scs' insulator elements is not dependent on chromosomal context. Dunaway M, et al. **Mol Cell Biol** 1997 Jan;17(1):182-9

An Ssn6-Tup1-dependent negative regulatory element controls sporulation-specific expression of DIT1 and DIT2 in Saccharomyces cerevisiae. Friesen H, et al.
Mol Cell Biol 1997 Jan;17(1):123-34

Elements in the 3' untranslated region of procyclin mRNA regulate expression in insect forms of Trypanosoma brucei by modulating RNA stability and translation. Furger A, et al. **Mol Cell Biol** 1997 Aug;17(8):4372-80

Regulation of the replication of the murine immunoglobulin heavy chain gene locus: evaluation of the role of the 3' regulatory region. Michaelson JS, et al. **Mol Cell Biol** 1997 Oct;17(10):6167-74

A minimal regulatory region maintains constitutive expression of the max gene. Peters MA, et al.
Mol Cell Biol 1997 Mar;17(3):1037-48

Sheltering of gamma-globin expression from position effects requires both an upstream locus control region and a regulatory element 3' to the A gamma-globin gene. Stamatoyannopoulos JA, et al. **Mol Cell Biol** 1997 Jan; 17(1):240-7

Coordinated activation of as-1-type elements and a tobacco glutathione S-transferase gene by auxins, salicylic acid, methyl-jasmonate and hydrogen peroxide. Xiang C, et al. **Plant Mol Biol** 1996 Nov;32(3):415-26

Arabidopsis thaliana CBF1 encodes an AP2 domain-containing transcriptional activator that binds to the C-repeat/DRE, a cis-acting DNA regulatory element that stimulates transcription in response to low temperature and water deficit. Stockinger EJ, et al.
Proc Natl Acad Sci U S A 1997 Feb 4;94(3):1035-40

[Phenotypic expression of a 100-pair nucleotide deletion in the regulatory region of the Bacillus subtilis riboflavin operon] Kreneva RA, et al. **Genetika** 1997 May; 33(5):599-603 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Inhibitory receptors, ITIM sequences and phosphatases. Unkeless JC, et al. **Curr Opin Immunol** 1997 Jun;9(3):338-43 (42 ref.)

HLA-G gene transcriptional regulation in trophoblasts and blood cells: differential binding of nuclear factors to a regulatory element located 1.1 kb from exon 1. Moreau P, et al. **Hum Immunol** 1997 Jan;52(1):41-6

Partitioning of genetic variation between regulatory and coding gene segments: the predominance of software variation in genes encoding introvert proteins. Mitchison A. **Immunogenetics** 1997;46(1):46-52 (48 ref.)

Specific versus cooperative regulatory mechanisms of the cytokine genes that are clustered on the same chromosome. Koyano-Nakagawa N, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S174-82

Regulatory elements of the mb-1 gene encoding the Ig-alpha component of the human B-cell antigen receptor. Leduc I, et al. **Mol Immunol** 1996 Dec;33(17-18):1277-86

Evolutionarily conserved transcription regulatory elements within the 5'-flanking region of the human CD5 gene. Calvo J, et al. **Tissue Antigens** 1996 Mar;47(3):257-61

HLA-DQB1 upstream regulatory region polymorphism and type I diabetes. Knight SW, et al. **Tissue Antigens** 1996 Mar;47(3):231-6

PHYSIOLOGY

Transcription regulation of the PDGF A-chain gene by first intron elements. Nobuyoshi M, et al.
Biochem Biophys Res Commun 1997 Jan 23;230(3):569-72

Derepression of gene expression mediated by the 5' upstream region of the isocitrate lyase gene of Candida tropicalis is controlled by two distinct regulatory pathways in Saccharomyces cerevisiae. Umemura K, et al.
Eur J Biochem 1997 Feb 1;243(3):748-52

The RY sequence is necessary but not sufficient for the transcription activation of a winged bean chymotrypsin inhibitor gene in developing seeds. Sakata Y, et al.
Plant Mol Biol 1997 May;34(2):191-7

Comparison of the role of 5' terminal sequences of alfalfa mosaic virus RNAs 1, 2, and 3 in viral RNA replication. Van Rossum CM, et al. **Virology** 1997 Sep 1;235(2):333-41

REGULON

Two-stage gene regulation of the superoxide stress response soxRS system in Escherichia coli. Nunoshiba T.
Crit Rev Eukaryot Gene Expr 1996;6(4):377-89 (92 ref.)

Role of rpoS regulon in resistance to oxidative stress and near-UV radiation in delta oxyR suppressor mutants of Escherichia coli. Ivanova AB, et al.
Free Radic Biol Med 1997;23(4):627-36

Redox signaling and gene control in the Escherichia coli soxRS oxidative stress regulon--a review. Demple B.
Gene 1996 Nov 7;179(1):53-7 (25 ref.)

Expression of the AsbA1, OXA-12, and AsbM1 beta-lactamases in Aeromonas jandaei AER 14 is coordinated by a two-component regulon. Alksne LE, et al. **J Bacteriol** 1997 Mar;179(6):2006-13

Transcriptional regulation of the Escherichia coli oxyR gene as a function of cell growth. González-Flecha B, et al.
J Bacteriol 1997 Oct;179(19):6181-6

cse15, cse60, and csk22 are new members of mother-cell-specific sporulation regulons in Bacillus subtilis. Henriques AO, et al. **J Bacteriol** 1997 Jan; 179(2):389-98

Repressor for the sn-glycerol 3-phosphate regulon of Escherichia coli K-12: primary structure and identification of the DNA-binding domain. Zeng G, et al.
J Bacteriol 1996 Dec;178(24):7080-9

Organization of the leading region of IncN plasmid pKM101 (R46): a regulation controlled by CUP sequence elements. Delver EP, et al. **J Mol Biol** 1997 Aug 8;271(1):13-30

What is the size of the group A streptococcal vir regulon? The Mga regulator affects expression of secreted and surface virulence factors. Podbielski A, et al.
Med Microbiol Immunol (Berl) 1996 Nov;185(3):171-81

PhoP/Q regulated genes in Salmonella typhi identification of melittin sensitive mutants. Baker SJ, et al.
Microb Pathog 1997 Mar;22(3):165-79

A flexible partnership: the CytR anti-activator and the cAMP-CRP activator protein, comrades in transcription control. Valentin-Hansen P, et al. **Mol Microbiol** 1996 May; 20(3):461-6 (26 ref.)

Differential expression of the ToxR regulon in classical and E1 Tor biotypes of Vibrio cholerae is due to biotype-specific control over toxT expression. DiRita VJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7991-5

GENETICS

Characterization of csgA, a new member of the forespore-expressed sigmaG-regulon from Bacillus subtilis. Shcheptov M, et al. **Gene** 1997 Jan 3;184(1):133-40

Functional characterization of roles of GalR and GalS as regulators of the gal regulon. Geanacopoulos M, et al.
J Bacteriol 1997 Jan;179(1):228-34

Characterization of DinR, the Bacillus subtilis SOS repressor. Winterling KW, et al. **J Bacteriol** 1997 Mar;179(5):1698-703

Virulence regulon polymorphism in group A streptococci revealed by long PCR and implications for epidemiological and evolutionary studies. Hookey JV, et al.
J Med Microbiol 1996 Oct;45(4):285-93

Ambidextrous transcriptional activation by SoxS: requirement for the C-terminal domain of the RNA polymerase alpha subunit in a subset of Escherichia coli superoxide-inducible genes. Jair KW, et al.
Mol Microbiol 1996 Jan;19(2):307-17

Carbon-source regulation of virulence gene expression in Listeria monocytogenes. Milenbachs AA, et al.
Mol Microbiol 1997 Mar;23(5):1075-85

Antitermination of transcription of catabolic operons. Rutberg B. **Mol Microbiol** 1997 Feb;23(3):413-21 (71 ref.)

PHYSIOLOGY

Constitutive expression in gal7 mutants of Kluyveromyces lactis is due to internal production of galactose as an inducer of the Gal/Lac regulon. Cardinali G, et al.
Mol Cell Biol 1997 Mar;17(3):1722-30

REGURGITATION, GASTRIC see
GASTROESOPHAGEAL REFLUX

REHABILITATION

see related
DISABILITY EVALUATION
EARLY INTERVENTION (EDUCATION)
HALFWAY HOUSES

Workshop of European countries in Transition on Health Care Technology Assessment in Rehabilitation (WSHK '95). Hradec Králové, Czech Republic, October 1995. Tošnerová V, et al. **Acta Medica (Hradec Kralove)** 1996; 39(1):45-7

Uniform data system for medical rehabilitation: report of first admissions for 1995. Fiedler RC, et al.
Am J Phys Med Rehabil 1997 Jan-Feb;76(1):76-81

Team decision making in rehabilitation [letter; comment] Patil JJ. **Am J Phys Med Rehabil** 1997 Jul-Aug;76(4):348 . Comment on: Am J Phys Med Rehabil 1996 Nov-Dec;75(6):483-6.

A method to risk-adjust rehabilitation outcomes using functional related groups. Turpin RS, et al.
Am J Phys Med Rehabil 1997 Mar-Apr;76(2):138-43

Roles of religiousness and spirituality in medical rehabilitation and the lives of persons with disabilities. A commentary. Underwood-Gordon L, et al.
Am J Phys Med Rehabil 1997 May-Jun;76(3):255-7

Team decision-making in rehabilitation: a commentary [see comments] Unsworth C. **Am J Phys Med Rehabil** 1996 Nov-Dec;75(6):483-6 (24 ref.). Comment in: Am J Phys Med Rehabil 1997 Jul-Aug;76(4):348.

Emergency medical services for children: early referral to PM&R [editorial] Christopher RP.
Arch Phys Med Rehabil 1997 Apr;78(4):339

Industrial rehabilitation medicine. 1. Why is industrial rehabilitation medicine unique? Robinson JP, et al.
Arch Phys Med Rehabil 1997 Mar;78(3 Suppl):S3-9 (81 ref.)

Discharge motor FIM-function related groups. Stineman MG, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):980-5

Impairment-specific dimensions within the Functional Independence Measure. Stineman MG, et al.
Arch Phys Med Rehabil 1997 Jun;78(6):636-43

Accreditation and the use of outcomes-oriented information systems. Wilkerson DL. **Arch Phys Med Rehabil** 1997 Aug; 78(8 Suppl 4):S31-5

Predicting patient scores between the functional independence measure and the minimum data set: development and performance of a FIM-MDS "crosswalk". Williams BC, et al. **Arch Phys Med Rehabil** 1997 Jan; 78(1):48-54

Back to the grind and back on your feet [letter; comment] McDougall JD. **Can Med Assoc J** 1997 May 15; 156(10):1382. Comment on: Can Med Assoc J 1997 Mar 1;156(5):680A-680F.

Rehabilitation interventions: ideas based on a South Pacific example. Gregory RJ. **Disabil Rehabil** 1996 Jan;18(1):47-51

Disablement observed, addressed, and experienced: integrating subjective experience into disablement models. Peters DJ. **Disabil Rehabil** 1996 Dec;18(12):593-603 (44 ref.)

Physical performance measures for the elderly rehabilitated at home. Bohannon RW. **Int J Rehabil Res** 1997 Mar; 20(1):107-9

Eleventh Nathalie Barr Lecture. The source of our strength. Evans RB. **J Hand Ther** 1997 Jan-Mar;10(1):14-23

No one ever died from a weak ankle [editorial] Falkel JE.
J Orthop Sports Phys Ther 1996 Aug;24(2):55-6

Rehabilitation research and development reports 1995.
J Rehabil Res Dev 1996 Jun;33:1-359

The functional independence measure in Sweden: experience for outcome measurement in rehabilitation medicine. Grimby G, et al. **Scand J Rehabil Med** 1996 May; 28(2):51-62

Subject and author index for the journal's first 25 years, 1969-1993. Volumes 1-25, supplements 1-29.
Scand J Rehabil Med Suppl 1997;36:1-115

Muscular response to sudden load. A tool to evaluate fatigue and rehabilitation. Wilder DG, et al. **Spine** 1996 Nov 15; 21(22):2628-39

[Patient "satisfaction" in medical rehabilitation--a useful outcome indicator?] Raspe H, et al. **Gesundheitswesen** 1996 Jul;58(7):372-8 (Eng. Abstr.) **(Ger)**

[Assessment of health related quality of life with the SF-36 Health Survey] Bullinger M. **Rehabilitation (Stuttg)** 1996 Aug;35(3):XVII-XXVII; quiz XXVII-XXIX (Eng. Abstr.) **(Ger)**

[18th World Congress, member assembly 1996 and professional board meeting of Rehabilitation International (RI) 9/13-9/20 in Auckland, New Zealand] Kirsten H, et al. **Rehabilitation (Stuttg)** 1997 Feb;36(1):60-3 **(Ger)**

[Attitude of established physicians to medical rehabilitation: an empirical study of the access to rehabilitation problem] Vogel H, et al. **Rehabilitation (Stuttg)** 1997 May; 36(2):96-105 (Eng. Abstr.) **(Ger)**

[Geriatric rehabilitation needs in Cologne: the concept of "integrated geriatric rehabilitation"] Zimmermann H, et al. **Rehabilitation (Stuttg)** 1997 Feb;36(1):26-33 (Eng. Abstr.) **(Ger)**

[Rehabilitation as interdisciplinary responsibility--the medical specialty "physical and rehabilitative medicine"] Gehrk A. **Z Arztl Fortbild (Jena)** 1996 Oct;90(6):471-8 (7 ref.) (Eng. Abstr.) **(Ger)**

[Specialty fair EUROMED '95--Leipzig 17. March 1995, Plenary session. The chronic severely ill patient] Seige K. **Z Arztl Fortbild (Jena)** 1995 Dec;89(8):883-6 **(Ger)**

[The "mixed" hospital department for clinical and rehabilitation purposes] Leggeri A. **Ann Ital Chir** 1997 Mar-Apr;68(2):137-45 **(Ita)**

[Aiming for the establishment of 10-year mental health planing] **Seishin Shinkeigaku Zasshi** 1995;97(12):1071-95; discussion 1095-9 **(Jpn)**

[The results of an expert evaluation of continuity in the rehabilitation of the patients from hospitals and outpatient institutions] Logvinenko IA, et al. **Lik Sprava** 1996 Jan-Feb;(1-2):186-8 **(Rus)**

[Several theoretical aspects of rehabilitology] Guseva NK, et al. **Med Tekh** 1996 Nov-Dec;(6):37-9 **(Rus)**

[Current problems in the correction of functional states and rehabilitation in aerospace medicine] Egorov SV. **Voen Med Zh** 1997 Apr;318(4):77–8 **(Rus)**

[The principles and staging of medical rehabilitation] Ivanov EM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Mar–Apr;(2):40–4 **(Rus)**

ECONOMICS

The missing link: structured dialogue between the payer and provider communities on the costs and benefits of medical rehabilitation. Cervelli L. **Arch Phys Med Rehabil** 1997 Aug;78(8 Suppl 4):S36–8

Can clinical practice guidelines increase the cost–effectiveness of geriatric rehabilitation? Small Work Group minority report. Johnston MV. **Med Care** 1997 Jun; 35(6 Suppl):JS87–9

Can clinical practice increase the cost–effectiveness of geriatric rehabilitation? Small Work Group majority report. Laouri M. **Med Care** 1997 Jun;35(6 Suppl):JS84–6

[Implications of the federal government's austerity package in the field of intramural medical rehabilitation] Boschke WL. **Rehabilitation (Stuttg)** 1997 Feb;36(1):12–5 (Eng. Abstr.) **(Ger)**

[Economizing potential in rehabilitation—through targetted patient selection] Grigoleit H. **Rehabilitation (Stuttg)** 1997 Feb;36(1):7–11 (Eng. Abstr.) **(Ger)**

[Consequences of the need for cost control in rehabilitation] Schliehe F. **Rehabilitation (Stuttg)** 1997 Feb;36(1):1–6 (Eng. Abstr.) **(Ger)**

[Quo vadis, rehabilitation? Comments on the cost savings package by the federal government] Steinke B. **Rehabilitation (Stuttg)** 1996 Nov;35(4):195–200 (Eng. Abstr.) **(Ger)**

[What is the situation for rehabilitation money recipients after the support ceases?] Andersen E, et al. **Tidsskr Nor Laegeforen** 1996 Sep 20;116(22):2690–4 (Eng. Abstr.) **(Nor)**

[The Dagmar funds were correctly used in Värmland (letter)] Eriksen T, et al. **Lakartidningen** 1997 May 28;94(22):2070 **(Swe)**

EDUCATION

Medical school achievements as predictors of performance in a physical medicine and rehabilitation residency. Amos DE, et al. **Acad Med** 1996 Jun;71(6):678–80

Development of an objective structured clinical examination (OSCE) for physical medicine and rehabilitation residents. Jain SS, et al. **Am J Phys Med Rehabil** 1997 Mar–Apr; 76(2):102–6

Development of an academic productivity scale for departments of physical medicine and rehabilitation. Kaplan PE, et al. **Arch Phys Med Rehabil** 1997 Sep; 78(9):938–41

From system changes to workplace accommodation: rehabilitation trends in training, education, and the system of professions in Australia. Remenyi A. **Disabil Rehabil** 1996 Aug;18(8):415–28

Simulated disability exercises and their impact on attitudes toward persons with disabilities. Grayson E, et al. **Int J Rehabil Res** 1996 Jun;19(2):123–31

Interventions for attitude change towards people with disabilities: how successful are they? Pernice R, et al. **Int J Rehabil Res** 1996 Jun;19(2):171–4

Therapists' experiences with computer–assisted instruction in hand therapy. Toth–Cohen S, et al. **J Hand Ther** 1997 Jan–Mar;10(1):41–5

Rehabilitation needs and experiential learning. Brown VM, et al. **J Nurs Educ** 1997 Mar;36(3):140–3

The obstacle course: a tool for the assessment of functional balance and mobility in the elderly. Means KM. **J Rehabil Res Dev** 1996 Oct;33(4):413–29

HISTORY

The history of physical medicine and rehabilitation as recorded in the diary of Dr. Frank Krusen: Part 2. Forging ahead (1943–1947). Folz TJ, et al. **Arch Phys Med Rehabil** 1997 Apr;78(4):446–50

The history of physical medicine and rehabilitation as recorded in the diary of Dr. Frank Krusen: Part 1. Gathering momentum (the years before 1942). Opitz JL, et al. **Arch Phys Med Rehabil** 1997 Apr;78(4):442–5

[The 60th anniversary of the Azerbaijan Research Institute of Medical Rehabilitation and Natural Therapeutic Factors] Musaev AV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Mar–Apr; (2):45–8 **(Rus)**

INSTRUMENTATION

Activities and users' views of a special seating clinic. Datta D, et al. **Disabil Rehabil** 1996 Jul;18(7):365–8

Ergonomic data of elderly people and their application in rehabilitation design. Rogers N, et al. **Disabil Rehabil** 1996 Oct;18(10):487–96 (59 ref.)

Outcomes of assistive technology use on quality of life. Scherer MJ. **Disabil Rehabil** 1996 Sep;18(9):439–48

Measurement of isometric elbow and shoulder moments: position–dependent strength of posterior deltoid–to–triceps muscle tendon transfer in tetraplegia. Kirsch RF, et al. **IEEE Trans Rehabil Eng** 1996 Dec;4(4):403–9 (10 ref.)

Detection of static and dynamic activities using uniaxial accelerometers. Veltink PH, et al. **IEEE Trans Rehabil Eng** 1996 Dec;4(4):375–85 (17 ref.)

Application of hydrogen absorbing alloys to medical and rehabilitation equipment. Wakisaka Y, et al. **IEEE Trans Rehabil Eng** 1997 Jun;5(2):148–57

Technical aids for the physically handicapped: a psychological study of the master robot. Morvan JS, et al. **Int J Rehabil Res** 1997 Jun;20(2):193–7

The transfer of technology towards the European assistive technology industry: current impediments and future opportunities. Vernardakis N, et al. **Int J Rehabil Res** 1997 Jun;20(2):189–92

Human performance: an appropriate measure of instrument reliability? Fess EE. **J Hand Ther** 1997 Jan–Mar;10(1):46–7

Life–cycle analysis of depot versus rehabilitation manual wheelchairs. Cooper RA, et al. **J Rehabil Res Dev** 1996 Feb;33(1):45–55

Computer–assisted hand–held dynamometer: low–cost instrument for muscle function assessment in rehabilitation medicine. Harlaar J, et al. **Med Biol Eng Comput** 1996 Sep; 34(5):329–35

Implications of the emerging home systems technologies for rehabilitation. Cooper M, et al. **Med Eng Phys** 1996 Apr; 18(3):176–80

Quality framework for force plate testing. Fleming HE, et al. **Proc Inst Mech Eng [H]** 1997;211(3):213–9

[Prescription for aids and using aids after geriatric rehabilitation—do we prescribe the proper aids? (published erratum appears in Z Gerontol Geriatr 1996 Sep–Oct;29(5):382)] Krause D, et al. **Z Gerontol Geriatr** 1996 Jul–Aug;29(4):267–72 (Eng. Abstr.) **(Ger)**

[Modern technology and the rehabilitation of the disabled] Azaria M, et al. **Harefuah** 1996 Jul;131(1–2):57–9 (28 ref.) **(Heb)**

[Methodical approaches to formation of an organizational model for supplying the disabled with rehabilitative industrial products] Guseva NK, et al. **Med Tekh** 1996 Nov–Dec;(6):40–1 **(Rus)**

LEGISLATION & JURISPRUDENCE

[Experience in applying legal conditions according to the nursing insurance regulation—ambulatory rehabilitation, nursing aids and nursing care eligibility] Lucke M, et al. **Gesundheitswesen** 1997 Mar;59(3):168–73 (Eng. Abstr.) **(Ger)**

[Resolution of the Federal Rehabilitation Council's Governing Board concerning a 2nd bill to refocus self–government and self–responsibility in statutory health insurance] **Rehabilitation (Stuttg)** 1997 Feb;36(1):56–7 **(Ger)**

MANPOWER

Introducing an innovative method in team conferences. Jelles F, et al. **Disabil Rehabil** 1996 Jul;18(7):374–9

A North American survey of educational background and job responsibilities of cardiopulmonary rehabilitation program directors. Sharratt MT, et al. **J Cardiopulm Rehabil** 1997 Jan–Feb;17(1):9–15

METHODS

Rehabilitation of elderly fallers: pilot study of a low to moderate intensity exercise program. Means KM, et al. **Arch Phys Med Rehabil** 1996 Oct;77(10):1030–6

Improving treatment compliance among adolescent suicide attempters. Spirito A. **Crisis** 1996;17(4):152–4 (18 ref.)

Motor control research in rehabilitation medicine. Latash ML, et al. **Disabil Rehabil** 1996 Jun;18(6):293–9 (40 ref.)

Investigation of spectral content from discrete plantar areas during adult gait: an expansion of rehabilitation technology. Harris GF, et al. **IEEE Trans Rehabil Eng** 1996 Dec; 4(4):360–74 (20 ref.)

Effective teamwork in rehabilitation. Bakheit AM. **Int J Rehabil Res** 1996 Dec;19(4):301–6 (27 ref.)

Relative role of ambulatory and residential rehabilitation. Cobelli F, et al. **J Cardiovasc Risk** 1996 Apr;3(2):172–5 (20 ref.)

Providing rehabilitation integrated systems using existing rehabilitation technology. Cherry AD, et al. **Med Eng Phys** 1996 Apr;18(3):187–92

Pets helping to heal the elderly. Propsner N. **N J Med** 1997 Sep;94(9):32

[Rehabilitation especially needs a holistic approach] Barolin GS. **Ther Umsch** 1996 Mar;53(3):228–36 (Eng. Abstr.) **(Ger)**

[Ambulatory geriatric rehabilitation—concepts, chances and responsibilities of participating physicians] Stamm T, et al. **Z Arztl Fortbild (Jena)** 1995 Dec;89(8):847–57 (Eng. Abstr.) **(Ger)**

[Inpatient rehabilitation with balneotherapy in the elderly—our experience over the last 10 years] Kurabayashi H, et al. **Nippon Ronen Igakkai Zasshi** 1997 Feb;34(2):135–8 (Eng. Abstr.) **(Jpn)**

NURSING

Motivation in geriatric rehabilitation. Resnick B. **Image J Nurs Sch** 1996 Spring;28(1):41–5

The introduction of case management on a rehabilitation floor. Waterman H, et al. **J Adv Nurs** 1996 Nov;24(5):960–7

ORGANIZATION & ADMINISTRATION

Ethics, values, and world culture: the impact on rehabilitation. Banja JD. **Disabil Rehabil** 1996 Jun; 18(6):279–84 (7 ref.)

Seventh World Congress of the International Rehabilitation Medicine Association (IRMA VII, Washington DC, 9–16 April 1994). Towards the 21st century: challenges for rehabilitation [editorial] Tuel SM. **Disabil Rehabil** 1996 Jun; 18(6):277–8

Brand central [interview by Chris Serb] Scrushy R. **Hosp Health Netw** 1997 May 20;71(10):30

Geriatrics. No–rush rehab. Swan H. **Hosp Health Netw** 1997 Mar 5;71(5):44

What's new in ... rehabilitation medicine. Leonard JW, et al. **Wis Med J** 1997 Jan;96(1):51–3

[The organization of the rehabilitation of children from ecologically unhealthy territories] Shchepliagina LA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Jan–Feb;(1):31–3 **(Rus)**

PSYCHOLOGY

Home alone: the role of cognition in return to independent living. MacNeill SE, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):755–8

Building a relationship: communications and relationships between staff and stroke patients on a rehabilitation ward. Jones M, et al. **J Adv Nurs** 1997 Jul;26(1):101–10

Rehabilitation care and outcomes from the patient's perspective. Report: Group E. Materson R. **Med Care** 1997 Jun;35(6 Suppl):JS64–7

Physical therapists' perceptions of family involvement in the rehabilitation process. Ryan NP, et al. **Physiother Res Int** 1996;1(3):159–79

[Are there signs of hospitalism in the rehabilitation process?] Barolin GS. **Rehabilitation (Stuttg)** 1997 Feb;36(1):51–5 (Eng. Abstr.) **(Ger)**

[Psychological contributions to rehabilitation in ambulatory health care] Vogel H. **Z Arztl Fortbild (Jena)** 1996 Oct; 90(6):519–25 (23 ref.) (Eng. Abstr.) **(Ger)**

[Assessment of a patient satisfaction scale in rehabilitation] Franchignoni F, et al. **Minerva Med** 1997 Jun;88(6):237–44 (Eng. Abstr.) **(Ita)**

STANDARDS

Are standardized outcomes measures valid for small rehabilitation units? A commentary. Haig AJ. **Am J Phys Med Rehabil** 1997 Mar–Apr;76(2):147–8

Potential for use of a House of Quality Matrix technique in rehabilitation engineering. Logan GD, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):106–15

Outcome assessment in cardiac rehabilitation. Health–related quality of life and economic evaluation. Oldridge NB. **J Cardiopulm Rehabil** 1997 May–Jun;17(3):179–94 (169 ref.)

Quality improvement process/outcomes research [editorial] Pritham CH. **J Rehabil Res Dev** 1996 Jul;33(3):vii–viii

Boston Working Group on Improving Health Care Outcomes Through Geriatric Rehabilitation. Proceedings from the conference. May 16–18, 1996. **Med Care** 1997 Jun;35(6 Suppl):JS1–133

Boston Working Group on Improving Health Care Outcomes Through Geriatric Rehabilitation. **Med Care** 1997 Jun;35(6 Suppl):JS4–20

Disablement outcomes in geriatric rehabilitation. Jette AM. **Med Care** 1997 Jun;35(6 Suppl):JS28–37; discussion JS38–44 (25 ref.)

Improving outcomes in rehabilitation. A call to arms (and legs). Kane RL. **Med Care** 1997 Jun;35(6 Suppl):JS21–7 (8 ref.)

Rehabilitation care and outcomes from the patient's perspective. Kramer AM. **Med Care** 1997 Jun;35(6 Suppl):JS48–57; discussion JS58–63 (20 ref.)

Improving health care outcomes through geriatric rehabilitation. Conference summary. Lohr KN. **Med Care** 1997 Jun;35(6 Suppl):JS121–30

Rehabilitation care and outcomes from the patient's perspective. Report: Group E. Materson R. **Med Care** 1997 Jun;35(6 Suppl):JS64–7

Can clinical practice guidelines increase the cost–effectiveness of geriatric rehabilitation? Stason WB. **Med Care** 1997 Jun;35(6 Suppl):JS68–77; discussion JS78–83 (2 ref.)

Disablement outcomes in geriatric rehabilitation. Report: Group D. Whiteneck GG. **Med Care** 1997 Jun;35(6 Suppl):JS45–7

Quality framework for force plate testing. Fleming HE, et al. **Proc Inst Mech Eng [H]** 1997;211(3):213–9

Cognitive remediation of persons with severe and persistent mental illness. Cassidy JJ, et al. **Psychiatr Q** 1996 Winter; 67(4):313–21

STATISTICS & NUMERICAL DATA

Black–white differences in risk of becoming disabled and recovering from disability in old age: a longitudinal analysis of two EPESE populations. Mendes de Leon CF, et al. **Am J Epidemiol** 1997 Mar 15;145(6):488–97

Re–admission of elderly patients after in–patient rehabilitation. Haines–Wood J, et al. **Ulster Med J** 1996 Nov;65(2):142–4

[Goals in rehabilitation: assessment and outcome evaluation] Meier–Baumgartner HP, et al. **Ther Umsch** 1997 Jun;

54(6):337–9 (22 ref.) (Eng. Abstr.) **(Ger)**

TRENDS

Rehabilitation across the continuum: managing the challenges. Dixon TP. **Arch Phys Med Rehabil** 1997 Feb; 78(2):115–9

From system changes to workplace accommodation: rehabilitation trends in training, education, and the system of professions in Australia. Remenyi A. **Disabil Rehabil** 1996 Aug;18(8):415–28

Physical medicine and rehabilitation. Goldstein B, et al. **JAMA** 1997 Jun 18;277(23):1891–2

Integrating assistive technologies: current practices and future possibilities. Nisbet P. **Med Eng Phys** 1996 Apr; 18(3):193–202

[Rehabilitation and social medicine] Raspe H. **Gesundheitswesen** 1996 Oct;58 Suppl 3:183–7 **(Ger)**

[Linkage between ambulatory and inpatient rehabilitation in the Euregio Model] Zilvold G, et al. **Rehabilitation (Stuttg)** 1996 Nov;35(4):201–4 (Eng. Abstr.) **(Ger)**

REHABILITATION CENTERS

Predictors of successful vs. unsuccessful outcome of a 12–step inpatient alcohol rehabilitation program. Craig TJ, et al. **Am J Addict** 1997 Summer;6(3):232–6

Parvovirus B19 outbreak in a developmental center. Lohiya GS, et al. **Am J Infect Control** 1995 Dec;23(6):373–6

Transfers from a hospital–based rehabilitation unit caused by medical complications. Bonner FJ Jr, et al. **Am J Phys Med Rehabil** 1996 Sep–Oct;75(5):384–6

Toward a National Information System for traumatic brain injury: foreword and overview. Johnston MV. **Arch Phys Med Rehabil** 1997 Aug;78(8 Suppl 4):S1–4

Risk factors for death and emergency transfer in acute and subacute inpatient rehabilitation. Wright RE, et al. **Arch Phys Med Rehabil** 1996 Oct;77(10):1049–55

The influence of age on length of stay, functional independence and discharge destination of rehabilitation inpatients in Italy. Tesio L, et al. **Disabil Rehabil** 1996 Oct; 18(10):502–8

Disability and the need for rehabilitative facilities in the young Albanian population of the Lezha district. Palombi L, et al. **Funct Neurol** 1996 Nov–Dec;11(6):301–6

Nosocomial transmission of Trichophyton tonsurans tinea corporis in a rehabilitation hospital. Lewis SM, et al. **Infect Control Hosp Epidemiol** 1997 May;18(5):322–5

Evaluation of infantilizing speech in a rehabilitation setting: relation to age. Whitmer RA, et al. **Int J Aging Hum Dev** 1997;44(2):129–36

Access to rehabilitation facilities in an unselected hospital population affected by acute stroke. Cavestri R, et al. **Ital J Neurol Sci** 1997 Feb;18(1):9–16

A successful rehabilitation service for older amputees at Waikato Hospital. Weatherall M. **N Z Med J** 1997 Aug 8;110(1049):289–90

Stroke units: how they can help. O'Neill PA. **Practitioner** 1996 Dec;240(1569):693–6, 698

Avian companionship in alleviation of depression, loneliness, and low morale of older adults in skilled rehabilitation units [see comments] Jessen J, et al. **Psychol Rep** 1996 Feb; 78(1):339–48. Comment in: Psychol Rep 1996 Apr;78(2):482.

"Ruling in" and "ruling out": two approaches to the micro–rationing of health care. Hughes D, et al. **Soc Sci Med** 1997 Mar;44(5):589–99

[Conservative management of alcohol intoxicated patients] Kaden M. **Fortschr Med** 1997 Feb 28;115(6):54–7 **(Ger)**

[From spas and convalescent homes to retraining institutions] Nilsen KH. **Tidsskr Nor Laegeforen** 1996 Oct 30; 116(26):3115–7 (Eng. Abstr.) **(Nor)**

[Sanatorium rehabilitation of cardiosurgical patients] Kosov VA, et al. **Klin Med (Mosk)** 1997;75(8):40–4 (Eng. Abstr.) **(Rus)**

[The conceptual characteristics of developing family rest and physician activities at the sanatorium–health resort stage for the rehabilitation of different patient contingents] Vinokurov BL, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Nov–Dec;(6):33–8 **(Rus)**

[The treatment of patients with chronic obstructive bronchitis by using a low–power laser at a general rehabilitation center] Vorotnev AI, et al. **Ter Arkh** 1997;69(3):17–9 (Eng. Abstr.) **(Rus)**

[Lars–Otto Dandenell, rehabilitation physician in Tranås: spas and thermal baths strengthen both body and soul] Landquist A. **Lakartidningen** 1997 Jun 25;94(26–27):2441–2 **(Swe)**

[The existence of centers for the victims of torture is at risk] Malmström C. **Lakartidningen** 1997 Apr 9;94(15):1348–50, 1355 **(Swe)**

ECONOMICS

Physician awareness of rehabilitation costs. Kuiken T, et al. **Am J Phys Med Rehabil** 1996 Nov–Dec;75(6):416–21

Human and financial costs of noninvasive mechanical ventilation in patients affected by COPD and acute respiratory failure. Nava S, et al. **Chest** 1997 Jun; 111(6):1631–8

The cost of cardiac rehabilitation services in England and Wales. Gray AM, et al. **J R Coll Physicians Lond** 1997 Jan–Feb;31(1):57–61

Outcomes and costs after hip fracture and stroke. A comparison of rehabilitation settings. Kramer AM, et al. **JAMA** 1997 Feb 5;277(5):396–404

The effect of Medicare's payment system for rehabilitation hospitals on length of stay, charges, and total payments. Chan L, et al. **N Engl J Med** 1997 Oct 2;337(14):978–85

Head injury rehabilitation in the U.K.: an economic perspective. McGregor K, et al. **Soc Sci Med** 1997 Jul; 45(2):295–303 (65 ref.)

[Memorandum on the discussion concerning quality assurance in vocational rehabilitation centers for handicapped patients] **Rehabilitation (Stuttg)** 1996 Nov; 35(4):237–40 **(Ger)**

[Medical rehabilitation between politics and demographic development––consequences for quality management in rehabilitation clinics] Weber A. **Rehabilitation (Stuttg)** 1997 May;36(2):92–5 (Eng. Abstr.) **(Ger)**

ORGANIZATION & ADMINISTRATION

Controlling the spread of vancomycin–resistant enterococci with a rehabilitation cohort unit. Duerden ME, et al. **Arch Phys Med Rehabil** 1997 May;78(5):553–5

Stroke rehabilitation: are highly structured units more conducive to physical activity than less structured units? Mackey F, et al. **Arch Phys Med Rehabil** 1996 Oct; 77(10):1066–70

Managed care and the transformation of the medical rehabilitation industry. Wheatley B, et al. **Health Care Manage Rev** 1997 Summer;22(3):25–39

Reengineering. Revolution in the slow lane. Nordhaus–Bike AM. **Hosp Health Netw** 1997 May 20;71(10):74, 76

Cardiac rehabilitation services in England and Wales: a national survey. Thompson DR, et al. **Int J Cardiol** 1997 May 23;59(3):299–304

Continuing health care criteria: their use in a specialist disability service. Wade DT. **J R Coll Physicians Lond** 1997 May–Jun;31(3):287–90

Development of a stroke and neurological rehabilitation unit in a district general hospital. Wood VA, et al. **J R Coll Physicians Lond** 1996 Nov–Dec;30(6):533–7

STANDARDS

The development of an outcomes management system for acute medical rehabilitation. Cohen BA, et al. **Am J Med Qual** 1997 Spring;12(1):28–32

Good news for people with spinal cord injuries. Clarke AM. **N Z Med J** 1997 Sep 12;110(1051):325–6

STATISTICS & NUMERICAL DATA

Long–term outcome after discharge from a stroke rehabilitation unit. Dijkerman HC, et al. **J R Coll Physicians Lond** 1996 Nov–Dec;30(6):538–46

Incidence of falls in three different types of geriatric care. A Swedish prospective study. Nyberg L, et al. **Scand J Soc Med** 1997 Mar;25(1):8–13

[Treatment effectiveness of patients with ocular tuberculosis at specialized sanatoria] Aleksandrov EI, et al. **Probl Tuberk** 1997;(4):21–3 (Eng. Abstr.) **(Rus)**

SUPPLY & DISTRIBUTION

Cardiac rehabilitation in Scotland: is current provision satisfactory? Campbell NC, et al. **J Public Health Med** 1996 Dec;18(4):478–80

TRENDS

Geriatric rehabilitation ('alters–rehabilitation')–the new challenge for social medicine and science. Barolin GS. **Int J Rehabil Res** 1996 Sep;19(3):201–18

Gillette children's special healthcare. For kids' sake. Whitten JC. **Minn Med** 1997 May;80(5):22–5

[The Republican Rehabilitation Center for Occupational Qualification of Handicapped Patients in Latvia] Hallwachs H. **Rehabilitation (Stuttg)** 1996 Nov;35(4):241–7 (Eng. Abstr.) **(Ger)**

[Memorandum on the position and development of rehabilitation for patients with rheumatic diseases] Jäckel WH, et al. **Z Rheumatol** 1996 Nov–Dec;55(6):410–22 **(Ger)**

UTILIZATION

Gender difference in the utilization and users' characteristics of community rehabilitation programs for cerebrovascular disease patients in Japan. Tamiya N, et al. **Int J Qual Health Care** 1996 Aug;8(4):359–66

Prediction of length of hospital stay following stroke. Brock K, et al. **J Qual Clin Pract** 1997 Mar;17(1):37–46

The effect of Medicare's payment system for rehabilitation hospitals on length of stay, charges, and total payments. Chan L, et al. **N Engl J Med** 1997 Oct 2;337(14):978–85

REHABILITATION CENTERS, DRUG see **SUBSTANCE ABUSE TREATMENT CENTERS**

REHABILITATION NURSING

Staff stress in head injury rehabilitation; Brain Injury, 10(10): 779 [letter; comment] van den Broek M, et al. **Brain Inj** 1997 Jun;11(6):465–6. Comment on: Brain Inj 1996 Oct;10(10):779.

Home–based cardiac rehabilitation and lifestyle modification: the MULTIFIT model [see comments] Miller NH, et al. **J Cardiovasc Nurs** 1996 Oct;11(1):76–87. Comment in: J Cardiovasc Nurs 1996 Oct;11(1):v–vii. Comment in: J Cardiovasc Nurs 1997 Jan;11(2):ix.

STATISTICS & NUMERICAL DATA

An evaluation of risk factors for in–patient falls in acute and rehabilitation elderly care wards. Gluck T, et al. **Gerontology** 1996;42(2):104–7

REHABILITATION, VOCATIONAL

see related
EMPLOYMENT
SHELTERED WORKSHOPS

Benefits of a multidisciplinary predialysis program in maintaining employment among patients on home dialysis. Rasgon SA, et al. **Adv Perit Dial** 1996;12:132–5

Supportive and rehabilitative programs. **Am Ann Deaf** 1997 Apr;142(2):233–64

A survey of vocational rehabilitation counselors concerning American Indian and Alaska Native clients with alcohol and other drug abuse disorders. Schacht RM, et al. **Am Indian Alsk Native Ment Health Res** 1997;7(3):50–67

Analysis of directions, responses, and consequences involving persons with mental retardation in employment and vocational training settings. Chadsey–Rusch J, et al. **Am J Ment Retard** 1996 Mar;100(5):481–592

Return to work after posterolateral fusion with transpedicular instrumentation for spondylarthrosis of the lumbosacral spine. Pihlajamäki H, et al. **Ann Chir Gynaecol** 1996; 85(1):63–6

Patients with traumatic brain injury referred to a rehabilitation and re–employment programme: social and professional outcome for 508 Finnish patients 5 or more years after injury. Asikainen I, et al. **Brain Inj** 1996 Dec; 10(12):883–99

Utility of a verbal reasoning test in indicating vocational readiness following traumatic brain injury. MacDonald S, et al. **Brain Inj** 1996 Jul;10(7):531–42

Addressing work disability through vocational rehabilitation services. Straaton KV, et al. **Bull Rheum Dis** 1997 May; 46(3):1–3

Prediction of vocational outcome based on clinical and demographic indicators among vocationally ready clients. Rogers ES, et al. **Community Ment Health J** 1997 Apr; 33(2):99–112

Vocational achievements following spinal cord injury in Australia. Athanasou JA, et al. **Disabil Rehabil** 1996 Apr; 18(4):191–6

Relationship between use of technology and employment rates for people with physical disabilities in Australia: implications for education and training programmes. Pell SD, et al. **Disabil Rehabil** 1997 Aug;19(8):332–8

Voucher–based reinforcement of attendance by unemployed methadone patients in a job skills training program. Silverman K, et al. **Drug Alcohol Depend** 1996 Jul; 41(3):197–207

Return to work and quality of life measurement in coronary artery bypass grafting. Speziale G, et al. **Eur J Cardiothorac Surg** 1996;10(10):852–8

TEACCH–supported employment program. Keel JH, et al. **J Autism Dev Disord** 1997 Feb;27(1):3–9

Meta–analytic evaluation of skills training research for individuals with severe mental illness. Dilk MN, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1337–46

Mental illness and the Americans with Disabilities Act. Understanding the fundamentals. Wasserbauer LI. **J Psychosoc Nurs Ment Health Serv** 1997 Jan;35(1):22–6 (13 ref.)

A comparison of measures of disability and health status in people with physical disabilities undergoing vocational rehabilitation. Kelly S, et al. **J Public Health Med** 1996 Jun;18(2):169–74

Epilepsy and employment: the Americans with Disabilities Act and its protections against employment discrimination. Troxell J. **Med Law** 1997;16(2):375–84

Factors related to successful work hardening outcomes. Beissner KL, et al. **Phys Ther** 1996 Nov;76(11):1188–201

Adding a vocational focus to mental health rehabilitation. Blankertz L, et al. **Psychiatr Serv** 1996 Nov;47(11):1216–22

Characteristics of participants in a supported education program for adults with psychiatric disabilities. Mowbray CT, et al. **Psychiatr Serv** 1996 Dec;47(12):1371–7

Evidence for limited validity of the revised global assessment of functioning scale. Roy–Byrne P, et al. **Psychiatr Serv** 1996 Aug;47(8):864–6

Appraisal, coping, motivational factors and gender in vocational rehabilitation. Andersson SI. **Scand J Soc Med** 1996 Sep;24(3):161–8

Relationships between social competence, psychopathology and work performance and their predictive value for vocational rehabilitation of schizophrenic outpatients. Hoffmann H, et al. **Schizophr Res** 1997 Jan 17;23(1):69–79

Labour force participation and employment among a sample of Australian patients with a spinal cord injury. Murphy G, et al. **Spinal Cord** 1997 Apr;35(4):238–44

[Work disability and alcohol problems] Holopainen A, et al. **Duodecim** 1995;111(17):1683–4 **(Fin)**

[Musculoskeletal pain disorders] Klockars M. **Duodecim** 1995; 111(17):1671–4 (10 ref.) **(Fin)**

[Work capacity of coronary disease patients after coronary balloon dilatation and coronary artery bypass] Leinonen H. **Duodecim** 1995;111(17):1667–9 **(Fin)**

[Prolonged intensive care stay after abdominal surgery interventions with special reference to quality of life, occupational rehabilitation and economics] Neipp M, et al. **Chirurg** 1997 Apr;68(4):410–5 (Eng. Abstr.) **(Ger)**

[Social medicine evaluation and rehabilitation in diabetes mellitus] Karl EL. **Gesundheitswesen** 1996 Feb;58(2):115–6 **(Ger)**

["Full shift light masonry work". Apparently a crux--social medicine epicrisis] Piechowiak H. **Gesundheitswesen** 1996 Oct;58(10):557–9 **(Ger)**

["Index for rehabilitation eligibility" for screening social insurance workers] Potthoff P, et al. **Gesundheitswesen** 1997 Jun;59(6):362–71 (Eng. Abstr.) **(Ger)**

[Medical, occupational, social rehabilitation of psychiatric patients in an organized systems] Schottky L. **Gesundheitswesen** 1996 Nov;58(11):611–5 (Eng. Abstr.) **(Ger)**

[Rehabilitation of hand injured co-workers from the occupational medicine viewpoint (exemplified by a chassis and montage automobile industry] Harwerth A. **Handchir Mikrochir Plast Chir** 1997 Jul;29(4):218–21 (Eng. Abstr.) **(Ger)**

[Improvement in occupational rehabilitation of myocardial infarct patients--results of a model study in Rhineland-Pfalz] Häussler B, et al. **Rehabilitation (Stuttg)** 1997 May;36(2):106–10 (Eng. Abstr.) **(Ger)**

[Return to work after occupational accidents and occupational diseases] Mehrhoff F. **Rehabilitation (Stuttg)** 1997 May;36(2):84–91 (Eng. Abstr.) **(Ger)**

[Sports and work capacity after stabilization of recurrent shoulder joint dislocations] Richter J, et al. **Unfallchirurg** 1997 Mar;100(3):198–204 (Eng. Abstr.) **(Ger)**

[Evaluating work capacity after myocardial infarct] Mende W. **Versicherungsmedizin** 1997 Feb 1;49(1):20–4 (Eng. Abstr.) **(Ger)**

[Rehabilitation of rheumatic diseases (editorial; comment)] Jäckel WH. **Z Rheumatol** 1996 Jul–Aug;55(4):221–2. Comment on: Z Rheumatol 1996 Jul–Aug;55(4):223–9. **(Ger)**

[Deficiencies in rehabilitation measures in the course of early chronic polyarthritis (see comments)] Mau W, et al. **Z Rheumatol** 1996 Jul–Aug;55(4):223–9 (Eng. Abstr.). Comment in: Z Rheumatol 1996 Jul–Aug;55(4):221–2. **(Ger)**

[Indicators of work incapacity in the first year of chronic polyarthritis (see comments)] Mau W, et al. **Z Rheumatol** 1996 Jul–Aug;55(4):233–40 (Eng. Abstr.). Comment in: Z Rheumatol 1996 Jul–Aug;55(4):230–2. **(Ger)**

[Indicators of work incapacity in patients with musculoskeletal diseases and functional disorders (editorial; comment)] Stucki G. **Z Rheumatol** 1996 Jul–Aug; 55(4):230–2. Comment on: Z Rheumatol 1996 Jul–Aug;55(4):233–40. **(Ger)**

[Is the governmental vocational rehabilitation program too ambitious?] Grünfeld B, et al. **Tidsskr Nor Laegeforen** 1997 Feb 10;117(4):536–8 (Eng. Abstr.) **(Nor)**

[Ways of optimizing microclimate in vocational training enterprise of the All-Russian Society of the Blind] Butovskiĭ ME, et al. **Gig Sanit** 1997 Jan–Feb;(1):19–21 **(Rus)**

[Several aspects of formation of occupational recommendations for health examinations and employment of the disabled] Guseva NK, et al. **Med Tr Prom Ekol** 1996; (12):34–7 (Eng. Abstr.) **(Rus)**

[Hemipelvectomy due to blast injuries: possibilities of occupational rehabilitation] Cesarec M, et al. **Arh Hig Rada Toksikol** 1996 Sep;47(3):289–93 (Eng. Abstr.) **(Scr)**

[No one can be rehabilitated for non-existent work] Nilzén R. **Lakartidningen** 1997 Sep 3;94(36):3006–7 **(Swe)**

ECONOMICS

Occupational therapy practice: focusing on occupational performance. Baum CM, et al. **Am J Occup Ther** 1997 Apr; 51(4):277–88 (39 ref.)

[The future of vocational rehabilitation--vocational rehabilitation for the future. An explanation with the federal government's austerity measures] Wittwer U. **Rehabilitation (Stuttg)** 1997 Feb;36(1):22–5 (Eng. Abstr.) **(Ger)**

[Flexibility of cardiologic rehabilitation exemplified by the Königsfeld (Ennepetal) model] Karoff M, et al. **Versicherungsmedizin** 1997 Feb 1;49(1):14–9 (Eng. Abstr.) **(Ger)**

HISTORY

[Sociotherapy by Goethe: Wilhelm Meister's education. 5th book, chapter 16] Finzen A, et al. **Psychiatr Prax** 1997 Jan;24(1):41–2 **(Ger)**

METHODS

Team-building in vocational rehabilitation: the Horizon Telecentre project. Chaplin JE, et al. **Disabil Rehabil** 1996 Jul;18(7):369–73

Disability management in industry: the new paradigm in injured worker rehabilitation. Shrey DE. **Disabil Rehabil** 1996 Aug;18(8):408–14

Assessing and developing readiness for psychiatric rehabilitation. Cohen MR, et al. **Psychiatr Serv** 1997 May; 48(5):644–6

Occupational therapy evaluation and intervention in an employment program for homeless youths. Kannenberg K, et al. **Psychiatr Serv** 1997 May;48(5):631–3

[Community mental health activities based at a local workshop] Kawamura T. **Seishin Shinkeigaku Zasshi** 1996; 98(11):953–6 **(Jpn)**

PSYCHOLOGY

Quality of life as a measure of rehabilitation outcome in patients with multiple sclerosis. Jønsson A, et al. **Acta Neurol Scand** 1996 Apr;93(4):229–35

Patient dynamics in early stages of vocational rehabilitation: a pilot study. Hoffmann H, et al. **Compr Psychiatry** 1996 May–Jun;37(3):216–21

Rehabilitation efforts before and after tightening eligibility for disability benefits in Norway. Claussen B. **Int J Rehabil Res** 1997 Jun;20(2):139–47

The biopsychosocial disease consequence model in rehabilitation: model development in the Finnish 'work hardening' programme for chronic pain. Talo S, et al. **Int J Rehabil Res** 1996 Jun;19(2):93–109 (35 ref.)

Using self-management procedures to improve the productivity of adults with developmental disabilities in a competitive employment setting. Christian L, et al. **J Appl Behav Anal** 1997 Spring;30(1):169–72

Blending two realities into a unique perspective [interview by Shirley A. Smoyak] Deegan P. **J Psychosoc Nurs Ment Health Serv** 1996 Sep;34(9):39–46

Overcoming schizophrenia [interview by Shirley A. Smoyak] Fisher DB. **J Psychosoc Nurs Ment Health Serv** 1996 Sep; 34(9):33–8

Comparison of factors influencing mothers' perceptions about the futures of their adolescent children with and without disabilities. Lehmann JP, et al. **Ment Retard** 1996 Feb; 34(1):27–38

Psychological testing variables as predictors of return to work by chronic pain patients. Robbins RA, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1317–8

Work stories: psychological responses to work in a population of dually diagnosed adults. Harris M, et al. **Psychiatr Q** 1997 Summer;68(2):131–53

Initiating requests during community-based vocational training by students with mental retardation and sensory impairments. Heller KW, et al. **Res Dev Disabil** 1996 May–Jun;17(3):173–84

Time use of unemployed and employed single male schizophrenia subjects. Hayes RL, et al. **Schizophr Bull** 1996;22(4):659–69

["Full shift light masonry work" (letter)] Böhm HM. **Gesundheitswesen** 1997 Jun;59(6):415 **(Ger)**

STANDARDS

NAMI report criticizes vocational rehabilitation services for failing to help severely mentally ill [news] **Psychiatr Serv** 1997 Mar;48(3):414–5

Case management at work for SSA disability beneficiaries: process results of the Project NetWork return-to-work demonstration. Leiter V, et al. **Soc Secur Bull** 1997; 60(1):29–48

STATISTICS & NUMERICAL DATA

Return to employment after burn. Tanttula K, et al. **Burns** 1997 Jun;23(4):341–4

Test-retest reliability of information about employment provided in surveys by people with spinal cord injuries. Murphy GC, et al. **Psychol Rep** 1997 Aug;81(1):25–6

TRENDS

An innovation in psychiatric rehabilitation programming. Supported education. Palmer-Erbs VK, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jan;35(1):16–21

[Rehabilitation of psychiatrically ill and handicapped patients--historical, conceptual and scientific aspects] Eikelmann B, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):72–8 (Eng. Abstr.) **(Ger)**

[Considerations for the continuing development of vocational rehabilitation from the viewpoint of the Federal Institute for Employment] Demmin M. **Rehabilitation (Stuttg)** 1997 Feb;36(1):16–21 (Eng. Abstr.) **(Ger)**

[The Republican Rehabilitation Center for Occupational Qualification of Handicapped Patients in Latvia] Hallwachs H. **Rehabilitation (Stuttg)** 1996 Nov;35(4):241–7 (Eng. Abstr.) **(Ger)**

[The future of vocational rehabilitation--vocational rehabilitation for the future. An explanation with the federal government's austerity measures] Wittwer U. **Rehabilitation (Stuttg)** 1997 Feb;36(1):22–5 (Eng. Abstr.) **(Ger)**

[Occupational rehabilitation after the turn of the century] Wittwer U. **Rehabilitation (Stuttg)** 1997 May;36(2):127–31 **(Ger)**

[Ready for the year 2000. The Federation of German Vocational Rehabilitation Centers has revised the fundamental concepts] Wolf B. **Rehabilitation (Stuttg)** 1996 Nov;35(4):211–4 (Eng. Abstr.) **(Ger)**

[Overcoming age barriers in occupational life--problem field regarding qualifications] Frerichs F. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):318–22 (Eng. Abstr.) **(Ger)**

REHYDRATION see **FLUID THERAPY**

REHYDRATION, ORAL see **FLUID THERAPY**

REHYDRATION SOLUTIONS

Hypo-osmolar sucrose oral rehydration solutions in acute diarrhoea: a pilot study. Faruque AS, et al. **Acta Paediatr** 1996 Oct;85(10):1247–8

Compliance of mothers in home management of acute diarrhea. Chaturvedi S, et al. **Indian Pediatr** 1996 Apr; 33(4):318–20

Water and electrolyte replenishment in the exercising child. Bar-Or O, et al. **Int J Sport Nutr** 1996 Jun;6(2):93–9 (26 ref.)

Pre-exercise glycerol hydration improves cycling endurance time. Montner P, et al. **Int J Sports Med** 1996 Jan; 17(1):27–33

High-sodium crystalloid solution for treatment of hypernatremia in a Vietnamese pot-bellied pig. Banks P, et al. **J Am Vet Med Assoc** 1996 Oct 1;209(7):1268–70

Glucose-based oral rehydration therapy. Richardson CR. **J Fam Pract** 1996 Oct;43(4):344–5

Rehydration of two patients with secondary glucose intolerance by using rice-oral rehydration solution (R-ORS) [letter] Yurdakök K, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):509–10

Effect of CHO ingestion on exercise metabolism and performance in different ambient temperatures. Febbraio MA, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1380–7

Influence of carbohydrate supplementation early in exercise on endurance running capacity. Tsintzas OK, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1373–9

Surviving extreme conditions with thirst quenchers. Petty M. **Occup Health Saf** 1996 Sep;65(9):72–3

ADMINISTRATION & DOSAGE

Strategies for voluntary rehydration in horses during endurance exercise. Nyman S, et al. **Equine Vet J Suppl** 1996 Jul;(22):99–106

Cardiac troponin T and troponin I release during coronary artery surgery using cold crystalloid and cold blood cardioplegia. Caputo M, et al. **Eur J Cardiothorac Surg** 1997 Aug;12(2):254–60

Lipid peroxidation, antioxidant status and troponin-T following cardiopulmonary bypass. A comparison between intermittent crossclamp with fibrillation and crystalloid cardioplegia. Cohen AS, et al. **Eur J Cardiothorac Surg** 1997 Aug;12(2):248–53

Penile intracorporeal infusion--possible access to the systemic circulation. Pressure flow studies in dogs and humans. Gofrit ON, et al. **Eur J Surg** 1997 Jun; 163(6):457–61

L-arginine in low concentration improves rat intestinal water and sodium absorption from oral rehydration solutions. Wapnir RA, et al. **Gut** 1997 May;40(5):602–7

ADVERSE EFFECTS

Sports drinks hazard to teeth. Milosevic A. **Br J Sports Med** 1997 Mar;31(1):28–30

Oral rehydration therapy--a dental perspective. Ogunbodede EO, et al. **Int Dent J** 1996 Dec;46(6):565–71

CHEMISTRY

Oral rehydration solutions: enhanced sodium absorption with gum arabic. Wapnir RA, et al. **J Am Coll Nutr** 1996 Aug; 15(4):377–82

How the sweet killer ORS was killed [letter] Tiwari DK. **J Indian Med Assoc** 1996 Mar;94(3):119–20

METABOLISM

Upper limit for intestinal absorption of a dilute glucose solution in men at rest. Duchman SM, et al. **Med Sci Sports Exerc** 1997 Apr;29(4):482–8

PHARMACOKINETICS

The effects of tonicity, glucose concentration and temperature of an oral rehydration solution on its absorption and elimination. Sosa León LA, et al. **Equine Vet J Suppl** 1995 Nov;(20):140–6

PHARMACOLOGY

Prospective crossover study of the effect of phlebotomy and intravenous crystalloid on hematocrit. Kass LE, et al. **Acad Emerg Med** 1997 Mar;4(3):198–201

Acute effects of intravenously administered hypertonic saline solution on transruminal rehydration in dairy cows. Roeder BL, et al. **Am J Vet Res** 1997 May;58(5):549–54

[The effect of rehydration on the elasticity modulus and strength of lyophilised and irradiated femur bone in the human] Grzegorczyn S, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):593–9 (Eng. Abstr.) **(Pol)**

REHYDRATION SOLUTIONS

STANDARDS

Efficacy of standard glucose-based and reduced-osmolarity maltodextrin-based oral rehydration solutions: effect of sugar malabsorption. el-Mougi M, et al. **Bull World Health Organ** 1996;74(5):471-7

THERAPEUTIC USE

Fluid replacement in burned patients. Bortolani A, et al. **Acta Chir Plast** 1996;38(4):132-6

Small-volume resuscitation using hypertonic saline improves organ perfusion in burned rats. Kien ND, et al. **Anesth Analg** 1996 Oct;83(4):782-8

Randomised double blind study of hypotonic oral rehydration solution in diarrhoea. Rautanen T, et al. **Arch Dis Child** 1997 Mar;76(3):272-4

Management of infectious diarrhoea in childhood [editorial] Sibal A, et al. **Br J Hosp Med** 1997 May 21-Jun 3; 57(10):484-7

Diarrhea management in some Jhuggi clusters of Delhi. Taneja DK, et al. **Indian Pediatr** 1996 Feb;33(2):117-9

Treatment of acute infantile diarrhoea with a commercial rice-based oral rehydration solution. Guiraldes E, et al. **J Diarrhoeal Dis Res** 1995 Dec;13(4):207-11

Can a super oral rehydration solution stimulate intestinal repair in acute viral enteritis? Rhoads JM, et al. **J Diarrhoeal Dis Res** 1996 Sep;14(3):175-81

Prescribing pattern by doctors for acute diarrhoea in children in Delhi, India. Singh J, et al. **J Diarrhoeal Dis Res** 1995 Dec;13(4):229-31

A controlled trial comparing the efficacy of rice-based and hypotonic glucose oral rehydration solutions in infants and young children with gastroenteritis. Wall CR, et al. **J Gastroenterol Hepatol** 1997 Jan;12(1):24-8

Fluid management in gastroenteritis [letter; comment] Howard K. **J Paediatr Child Health** 1996 Aug;32(4):354. Comment on: J Paediatr Child Health 1996 Feb;32(1):16-7. Comment on: J Paediatr Child Health 1996 Feb;32(1):18-21.

Comparison of two regimens of feeding and oral electrolyte solutions in infants with diarrhea. Goepp JG, et al. **J Pediatr Gastroenterol Nutr** 1997 Apr;24(4):374-9

Sagodana based verses rice based oral rehydration solution in the management of acute diarrhoea in Pakistani children. Ibrahim S, et al. **JPMA J Pak Med Assoc** 1997 Jan; 47(1):16-9

Oral rehydration solutions [letter; comment] Greenough WB 3d. **Lancet** 1996 Oct 12;348(9033):1030. Comment on: Lancet 1996 Jul 20;348(9021):193-4.

Reduced osmolarity oral rehydration salt in Cholera. Faruque AS, et al. **Scand J Infect Dis** 1996;28(1):87-90

Fallibility of plasma urea and creatinine as indices of renal function in diarrhoeic calves treated with conventional or nutritional oral rehydration solutions. Brooks HW, et al. **Vet J** 1997 Jul;154(1):35-9

REICHEL'S SYNDROME see **CHONDROMATOSIS, SYNOVIAL**

REIMBURSEMENT, FEE-FOR-SERVICE see **FEE-FOR-SERVICE PLANS**

REIMBURSEMENT, HEALTH INSURANCE see **INSURANCE, HEALTH, REIMBURSEMENT**

REIMBURSEMENT, INCENTIVE

Annotation: patients on the auction block. Woolhandler S, et al. **Am J Public Health** 1996 Dec;86(12):1699-700

A new payment method for inpatient care [letter; comment] Robinow AL. **Health Aff (Millwood)** 1996 Winter;15(4):212; discussion 216-20. Comment on: Health Aff (Millwood) 1996 Summer;15(2):145-54.

The effect of Medicare's payment system for rehabilitation hospitals on length of stay, charges, and total payments. Chan L, et al. **N Engl J Med** 1997 Oct 2;337(14):978-85

LEGISLATION & JURISPRUDENCE

Regulation of managed care incentive payments to physicians. Latham SR. **Am J Law Med** 1996;22(4):399-432

HCFA regulates physician risk taking [news] Schwartz HE. **Md Med J** 1996 Aug;45(8):613-4

ORGANIZATION & ADMINISTRATION

Financial incentives and productive efficiency in Finnish health centres. Luoma K, et al. **Health Econ** 1996 Sep-Oct; 5(5):435-45

TRENDS

Reducing the inappropriate utilization of clinical laboratory tests. Wu AH. **Conn Med** 1997 Jan;61(1):15-21

REIMBURSEMENT MECHANISMS

Emergency department authorization for health maintenance organizations? Just say no! [letter; comment] Bitterman RA. **Acad Emerg Med** 1996 Dec;3(12):1172-6. Comment on: Acad Emerg Med 1996 Apr;3(4):338-44.

Medicare reimbursement for oral antiemetics in management of chemotherapy-induced emesis [letter] Ignoffo RJ. **Am J Health Syst Pharm** 1997 Apr 1;54(7):830-1

The resource utilization groups system of nursing home reimbursement policies: influences on occupational therapy practice. Thomesen M. **Am J Occup Ther** 1996 Nov-Dec; 50(10):790-7

Physician work effort and reimbursement for ruptured abdominal aortic aneurysms. Morehouse DL, et al. **Am J Surg** 1997 Aug;174(2):136-9

A serious threat to the medical chief residency [letter] Crausman RS, et al. **Ann Intern Med** 1997 Aug 1; 127(3):248-9

Reimbursement for cardiac procedures: past, present, and future. Levitsky S. **Ann Thorac Surg** 1996 Nov;62(5 Suppl):S14-7; discussion S31-2

Health professional shortage areas, health status, and reform [letter] Good RG. **Arch Fam Med** 1996 Apr;5(4):196-7

Counseling typically provided for depression. Role of clinician specialty and payment system. Meredith LS, et al. **Arch Gen Psychiatry** 1996 Oct;53(10):905-12

Pediatric carve outs. The use of disease-specific conditions as risk adjusters in capitated payment systems. Andrews JS, et al. **Arch Pediatr Adolesc Med** 1997 Mar;151(3):236-42

Deprivation payments to general practitioners. Standard of service provided by practice should also be taken into account [letter; comment] Ashworth M, et al. **BMJ** 1997 Jan 18;314(7075):228. Comment on: BMJ 1996 Sep 14;313(7058):641-2. Comment on: BMJ 1996 Sep 14;313(7058):669-70.

Deprivation payments to general practitioners. Scores should be based on enumeration districts, and payments should be phased in gradually [letter; comment] Jarman B. **BMJ** 1997 Jan 18;314(7075):228-9. Comment on: BMJ 1996 Sep 14;313(7058):641-2. Comment on: BMJ 1996 Sep 14;313(7058):669-70.

Deprivation payments to general practitioners. Payments bear little relation to practices' actual level of deprivation [letter; comment] Lyons R, et al. **BMJ** 1997 Jan 18; 314(7075):228. Comment on: BMJ 1996 Sep 14;313(7058):641-2.

Deprivation payments to general practitioners. New group has been formed to try to bring about change [letter; comment] Oliver M. **BMJ** 1997 Jan 18;314(7075):229. Comment on: BMJ 1996 Sep 14;313(7058):641-2.

The truth is the truth, and HCFA knows it [editorial; comment] Block AJ. **Chest** 1997 Mar;111(3):531. Comment on: Chest 1997 Mar;111(3):537-43.

Truth in billing [letter] Frank GW. **Chest** 1997 Sep;112(3):856

Psychiatric complications and comorbidities in medical inpatients: the inadequacy of attestation at discharge. Goldberg RJ, et al. **Gen Hosp Psychiatry** 1996 Mar; 18(2):102-5

Neither Adam nor Eve seems worth very much anymore [editorial; comment] Berman ML. **Gynecol Oncol** 1997 Mar; 64(3):369-71. Comment on: Gynecol Oncol 1997 Mar;64(3):372-7.

Is Adam worth more than Eve? The financial impact of gender bias in the federal reimbursement of gynecological procedures [see comments] Goff BA, et al. **Gynecol Oncol** 1997 Mar;64(3):372-7. Comment in: Gynecol Oncol 1997 Mar;64(3):369-71.

The role of payment policy in Medicare managed care growth [letter; comment] Mueller KJ. **Health Aff (Millwood)** 1997 Jan-Feb;16(1):225-6. Comment on: Health Aff (Millwood) 1996 Fall;15(3):201-14.

Global budgets and excess demand for hospital care. Feldman R, et al. **Health Econ** 1997 Mar-Apr;6(2):187-96 (20 ref.)

Prescribing cost savings by GP fundholders: long-term or short-term? Whynes DK, et al. **Health Econ** 1997 Mar-Apr;6(2):209-11

How has the care of eating disorder patients been altered and upset by payment and insurance issues? Let me count the ways. [letter] Sigman G. **J Adolesc Health** 1996 Nov; 19(5):317-8

Physician payment and the game of risk. Grumbach K. **J Am Board Fam Pract** 1996 Sep-Oct;9(5):360-5

Reimbursement and patient assistance programs for biotech drugs. Kennedy HG, et al. **J Am Pharm Assoc (Wash)** 1997 Mar-Apr;NS37(2):136-7

Use of the DSM-PC and implications for reimbursement. Rappo PD. **J Dev Behav Pediatr** 1997 Jun;18(3):175-7

Elderly veterans receiving care at a Veterans Affairs Medical Center while enrolled in Medicare-financed HMOs. Is the taxpayer paying twice? [see comments] Passman LJ, et al. **J Gen Intern Med** 1997 Apr;12(4):247-9. Comment in: J Gen Intern Med 1997 Apr;12(4):256-7.

Coverage of public reimbursement scheme for traffic accident victims in Thailand. Suriyawongpaisal P, et al. **J Med Assoc Thai** 1997 Jun;80(6):391-5

Rural clinics become bonanza. Emmerich W. **J Miss State Med Assoc** 1996 Nov;37(11):833-4

Should reimbursement be denied for liver transplantation in patients with hepatocellular carcinoma? [letter] Marsh JW, et al. **JAMA** 1997 Jul 16;278(3):203-5

Quality of health care. Part 5: Payment by capitation and the quality of care [see comments] Berwick DM. **N Engl J Med** 1996 Oct 17;335(16):1227-31. Comment in: N Engl J Med 1997 Mar 13;336(11):805; discussion 807.

General practitioner obstetrics [letter] Hoogerbrug M. **N Z Med J** 1997 Apr 11;110(1041):132

The power of nurse practitioners [news] Sharp N. **Nurse Pract** 1997 Feb;22(2):141-4, 147

Healthcare reform must not compromise patient care [letter] Murphy MC. **Oncol Nurs Forum** 1996 Oct;23(9):1373-4

Medicare risk plans and the POS benefit. Olmstead DL. **Pa Med** 1997 Apr;100(4):16-7

Physician rewards for different kinds of service: the RBRVS versus the CPR system. Brent RJ, et al. **Plast Reconstr Surg** 1997 Jul;100(1):51-7

The economic motivations for clinical information systems. Clayton PD, et al. **Proc AMIA Annu Fall Symp** 1996;:660-8

Comprehensive reimbursement model: an alternative to fee-for-service reimbursement by blood centers. Fuller MJ, et al. **Transfus Med Rev** 1997 Jan;11(1):38-43 (4 ref.)

[Efficiency based financing--why does the reimbursement go to the county councils?] Grøtting T. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2820-1 **(Nor)**

[Efficiency based financing from the point of view of the physician-in-chief] Kåresen R, et al. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2822-4 **(Nor)**

CLASSIFICATION

Selling high quality and low cost: market conditions and successful quality improvement projects. Uttermohlen DM. **J Soc Health Syst** 1996;5(2):73-81

ECONOMICS

Medicaid reimbursement for school nursing services: a position paper of the National Association of State School Nurse Consultants. **J Sch Health** 1996 Mar;66(3):95-6

Low payments jeopardize care. Medicaid reimbursement affects doctors and patients. DeShano CL. **Mich Med** 1997 Jun;96(6):38-9

MMA calls for fair Medicare reimbursement. Christensen RG. **Minn Med** 1997 May;80(5):34

Balancing the scales of practice expense [letter] Bean GO. **N C Med J** 1996 May-Jun;57(3):127

Revision total joint arthroplasty: does medicare reimbursement justify time spent? Ritter MA, et al. **Orthopedics** 1996 Feb;19(2):137-9

Effect of Medicaid reimbursement rates on children's access to dental care. Nainar SM, et al. **Pediatr Dent** 1997 Jul-Aug;19(5):315-6

GP fundholding and prescribing in UK general practice: evidence from two rural, English Family Health Services Authorities. Baines DL, et al. **Public Health** 1997 Sep; 111(5):321-5

Access to cancer care and clinical trials: a time for reappraisal [editorial] Runowicz CD, et al. **Womens Health Issues** 1996 Mar-Apr;6(2):112-3

[Distribution of reimbursement based on federal and regional data. Emphasis: Pathology in the first quarter of 1996. Presentation at the Meeting of the Board and Directors of the Professional Society of German Pathologists e.v. 9 November 1996 in Dusseldorf] Kempny G, et al. **Pathologe** 1997 Mar;18(2):174-81 **(Ger)**

[Where does the path of reimbursement politics lead?] Fischer J. **Radiologe** 1997 Apr;37(4):M49 **(Ger)**

LEGISLATION & JURISPRUDENCE

The 11th commandment: thou shalt create a compliance program. Reiling M, et al. **Iowa Med** 1997 May-Jun; 87(5):192-5

The impact of the NHS reforms 1991-1995: a review of research evidence. Robinson R. **J Public Health Med** 1996 Sep;18(3):337-42 (91 ref.)

1997 legislative prospectus. Preston M. **Md Med J** 1996 Dec; 45(12):984-6

Ramstad proposes Medicare equity bill [news] **Minn Med** 1997 Mar;80(3):40

[Temporary legal protection in fee conflicts. When can the social court help] Bruns W, et al. **Chirurg** 1997 Jul; 68(7):suppl 194-6 **(Ger)**

[Proceeding and reimbursement for diagnostic tests] Wienke A. **HNO** 1996 Jan;44(1):48-9 **(Ger)**

[Contract physician services on private accounts and possibilities for bypassing the reimbursement conditions] Willms KJ. **Klin Monatsbl Augenheilkd** 1997 Mar; 210(3):aA5-7 **(Ger)**

[ICPM-independent documentation of new reimbursement forms--method and 1995 results] Huber FX, et al. **Langenbecks Arch Chir** 1997;382(2):69-73 (Eng. Abstr.) **(Ger)**

[Evaluate your reimbursement distribution guidelines for legal conformity!] Dierks C. **Radiologe** 1997 Apr; 37(4):M47-8 **(Ger)**

ORGANIZATION & ADMINISTRATION

Medicaid and primary care. Rushton FE. **J S C Med Assoc** 1997 Feb;93(2):63-7 (12 ref.)

STANDARDS

An examination of cross-specialty linkage applied to the resource-based relative value scale. Glickman ME, et al. **Med Care** 1997 Aug;35(8):843-66

TRENDS

"Resource-based" practice expense: how we got where we are today. Wilbur RH. **Ann Thorac Surg** 1997 Jun; 63(6):1821-3

Payment versus pricing: which is the central issue? [letter;

comment] Witter DM Jr. **Health Aff (Millwood)** 1996 Winter;15(4):215–6; discussion 216–20. Comment on: Health Aff (Millwood) 1996 Summer;15(2):145–54.
Payment hassles [see comments] BeSaw L. **Tex Med** 1997 Jan;93(1):36–9 (0 ref.). Comment in: Tex Med 1997 Mar;93(3):7–8.

REIMBURSEMENT, PROSPECTIVE see **PROSPECTIVE PAYMENT SYSTEM**

REIMPLANTATION see **REPLANTATION**

REIMPLANTATION, TOOTH see **TOOTH REPLANTATION**

REINDEER

Gastrointestinal nematodes depress food intake in naturally infected reindeer. Arneberg P, et al. **Parasitology** 1996 Feb; 112 (Pt 2):213–9
Descriptive epidemiology of captive cervid herds in Michigan, USA. Bruning-Fann CS, et al. **Vet Res** 1997 May–Jun;28(3):295–302
Influence of diet on the occurrence of intraepithelial microabscesses and foreign bodies in the ruminal mucosa of reindeer calves (Rangifer tarandus tarandus). Josefsen TD, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):249–57

ANATOMY & HISTOLOGY

Morphological peculiarities of respiratory compartments of arctic animal lungs. Shishkin GS, et al. **Anat Rec** 1997 Apr; 247(4):496–500

BLOOD

Seasonal levels of reproductive hormones and their relationship to the antler cycle of male and female reindeer (Rangifer tarandus). Bubenik GA, et al.
Comp Biochem Physiol B Biochem Mol Biol 1997 Feb; 116(2):269–77

GENETICS

Comparative FISH mapping of bovine cosmids to reindeer chromosomes demonstrates conservation of the X-chromosome. Prakash B, et al. **Chromosome Res** 1996 Apr;4(3):214–7
Characterization of microsatellite loci in caribou Rangifer tarandus, and their use in other artiodactyls. Wilson GA, et al. **Mol Ecol** 1997 Jul;6(7):697–9

GROWTH & DEVELOPMENT

Seasonal levels of reproductive hormones and their relationship to the antler cycle of male and female reindeer (Rangifer tarandus). Bubenik GA, et al.
Comp Biochem Physiol B Biochem Mol Biol 1997 Feb; 116(2):269–77

METABOLISM

Regional variation in radionuclide concentrations and radiation dose in caribou (Rangifer tarandus) in the Canadian Arctic; 1992–94. Macdonald CR, et al.
Sci Total Environ 1996 Apr 5;182(1–3):53–73
[The dynamics of the radiation load on reindeer on Novaya Zemlya] Klevezal' GA, et al. **Radiats Biol Radioecol** 1997 Jan–Feb;37(1):98–104 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Experimental Toxoplasma gondii infection leading to fatal enteritis in reindeer (Rangifer tarandus). Oksanen A, et al.
J Parasitol 1996 Oct;82(5):843–5
Trapping oestrid parasites of reindeer: the response of Cephenemyia trompe and Hypoderma tarandi to baited traps. Anderson JR, et al. **Med Vet Entomol** 1996 Oct; 10(4):337–46
Trapping oestrid parasites of reindeer: the relative age, fat body content and gonotrophic conditions of Cephenemyia trompe and Hypoderma tarandi females caught in baited traps. Anderson JR, et al. **Med Vet Entomol** 1996 Oct; 10(4):347–53
Cross-infection of moose (Alces alces) and reindeer (Rangifer tarandus) with Elaphostrongylus alces and Elaphostrongylus rangiferi (Nematoda, Protostrongylidae): effects on parasite morphology and prepatent period. Stéen M, et al. **Vet Parasitol** 1997 Jul 15;71(1):27–38

PHYSIOLOGY

Influence of various types of species-specific acoustic signals on the heart rate of mammals. Movchan VN.
Neurosci Behav Physiol 1996 Jul–Aug;26(4):295–300

REINFORCEMENT (PSYCHOLOGY)

Some potential contributions of reinforcement and consumer-demand theory to reducing cocaine use. Higgins ST. **Addict Behav** 1996 Nov–Dec;21(6):803–16 (50 ref.)
Ethanol as an oral reinforcer in normal weight rhesus monkeys: dose-response functions. Stewart RB, et al.
Alcohol 1996 Jul–Aug;13(4):341–6
Dopamine receptors in the medial prefrontal cortex influence ethanol and sucrose-reinforced responding. Hodge CW, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1631–8
Mobilizing positive reinforcement in communities to reduce youth access to tobacco. Biglan A, et al.
Am J Community Psychol 1996 Oct;24(5):625–38
Integrating caregiver report with systematic choice assessment to enhance reinforcer identification. Fisher WW, et al. **Am J Ment Retard** 1996 Jul;101(1):15–25
Sensitivity theory and mental retardation: why functional analysis is not enough. Reiss S, et al.
Am J Ment Retard 1997 May;101(6):553–66
Capsaicin attenuates feeding suppression but not reinforcement by intestinal nutrients. Lucas F, et al.
Am J Physiol 1996 May;270(5 Pt 2):R1059–64
Reinforcing value of food in obese and non-obese women. Saelens BE, et al. **Appetite** 1996 Aug;27(1):41–50
Place the problem where it belongs [editorial] Teuscher GW.
ASDC J Dent Child 1996 Sep–Oct;63(5):320
Behavioral momentum. Implications and development from reinforcement theories. Plaud JJ, et al. **Behav Modif** 1996 Apr;20(2):183–201 (38 ref.)
Origins of antisocial behavior. Negative reinforcement and affect dysregulation of behavior as socialization mechanisms in family interaction. Snyder J, et al.
Behav Modif 1997 Apr;21(2):187–215
Early auditory filial learning in degus (Octodon degus): behavioral and autoradiographic studies. Poeggel G, et al.
Brain Res 1996 Dec 16;743(1–2):162–70
The ascending neuromodulatory systems in learning by reinforcement: comparing computational conjectures with experimental findings. Pennartz CM.
Brain Res Brain Res Rev 1995 Nov;21(3):219–45 (235 ref.)
Serial learning in the pigeon in a free correction procedure: role of reinforcing values. Castéras V, et al.
C R Acad Sci III 1997 May;320(5):375–84
Neural basis of utility estimation. Shizgal P.
Curr Opin Neurobiol 1997 Apr;7(2):198–208 (76 ref.)
Antagonism of the response rate-decreasing effects of meperidine and morphine by beta-funaltrexamine and naltrexone in squirrel monkeys. Hughes CE, et al.
Drug Alcohol Depend 1997 May 2;45(3):197–206
Alprazolam-reinforced medication use in outpatients with anxiety. Roache JD, et al. **Drug Alcohol Depend** 1997 May 2;45(3):143–55
Voucher-based reinforcement of attendance by unemployed methadone patients in a job skills training program. Silverman K, et al. **Drug Alcohol Depend** 1996 Jul; 41(3):197–207
The reinforcing effects of brief exposures to nitrous oxide in healthy volunteers. Zacny JP, et al.
Drug Alcohol Depend 1996 Nov;42(3):197–200
The reinforcing properties of nicotine are associated with a specific patterning of c-fos expression in the rat brain. Pagliusi SR, et al. **Eur J Neurosci** 1996 Nov;8(11):2247–56
Effects of diabetes on methamphetamine-induced place preference in mice. Kamei J, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):251–6
Kappa-opioid receptor agonist U50,488H modulates cocaine and morphine self-administration in drug-naive rats and mice. Kuzmin AV, et al. **Eur J Pharmacol** 1997 Mar 5; 321(3):265–71
Dextromethorphan reduces intravenous cocaine self-administration in the rat. Pulvirenti L, et al.
Eur J Pharmacol 1997 Mar 5;321(3):279–83
Nigrostriatal dopamine system may contribute to behavioral learning through providing reinforcement signals to the striatum. Kimura M, et al. **Eur Neurol** 1997;38 Suppl 1:11–7 (33 ref.)
Effects of decreasing sedentary behaviors on activity choice in obese children. Epstein LH, et al. **Health Psychol** 1997 Mar;16(2):107–13
Inconsistency of mothers' feedback and toddlers' misbehavior and negative affect. Acker MM, et al.
J Abnorm Child Psychol 1996 Dec;24(6):703–14
Evaluation of a multiple-stimulus presentation format for assessing reinforcer preferences. DeLeon IG, et al.
J Appl Behav Anal 1996 Winter;29(4):519–32; quiz 532–3
Noncontingent delivery of arbitrary reinforcers as treatment for self-injurious behavior. Fischer SM, et al.
J Appl Behav Anal 1997 Summer;30(2):239–49
Using reinforcement-based methods to enhance membership recruitment in a volunteer organization. Herndon EJ, et al. **J Appl Behav Anal** 1996 Winter;29(4):577–80
Evaluation of the "control over reinforcement" component in functional communication training. Kahng S, et al.
J Appl Behav Anal 1997 Summer;30(2):267–76; quiz 277
In pursuit of general behavioral relations. Mace FC.
J Appl Behav Anal 1996 Winter;29(4):557–63 (37 ref.)
Differential reinforcement of alternative behavior and demand fading in the treatment of escape-maintained destructive behavior. Piazza CC, et al.
J Appl Behav Anal 1996 Winter;29(4):569–72
Self-restraint as positive reinforcement for self-injurious behavior [see comments] Smith RG, et al.
J Appl Behav Anal 1996 Spring;29(1):99–102. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.
Using obsessions as reinforcers with and without mild reductive procedures to decrease inappropriate behaviors of children with autism. Charlop-Christy MH, et al.
J Autism Dev Disord 1996 Oct;26(5):527–46
Vicarious learning revisited: a contemporary behavior analytic interpretation. Masia CL, et al.
J Behav Ther Exp Psychiatry 1997 Mar;28(1):41–51
Reinforcement history: a concept underutilized in behavior analysts. Salzinger K. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):199–207
Reinforcing operants other than abstinence in drug abuse treatment: an effective alternative for reducing drug use. Iguchi MY, et al. **J Consult Clin Psychol** 1997 Jun; 65(3):421–8
A logical functional analysis of reinforcement-based disorders: alcoholism and pedophilia. Wulfert E, et al.
J Consult Clin Psychol 1996 Dec;64(6):1140–51
Relative sensitivity to reinforcer amount and delay in a self-control choice situation. Ito M, et al.
J Exp Anal Behav 1996 Sep;66(2):219–29
Neurotoxic lesions of basolateral, but not central, amygdala interfere with Pavlovian second-order conditioning and reinforcer devaluation effects. Hatfield T, et al.
J Neurosci 1996 Aug 15;16(16):5256–65
Excitotoxic lesions of the amygdala fail to produce impairment in visual learning for auditory secondary reinforcement but interfere with reinforcer devaluation effects in rhesus monkeys. Málková L, et al. **J Neurosci** 1997 Aug 1;17(15):6011–20
Behavior-relevant changes in nucleus accumbens dopamine transmission elicited by food reinforcement: an electrochemical study in rat. Richardson NR, et al.
J Neurosci 1996 Dec 15;16(24):8160–9
Differential reinforcing effects of cocaine and GBR-12909: biochemical evidence for divergent neuroadaptive changes in the mesolimbic dopaminergic system. Tella SR, et al.
J Neurosci 1996 Dec 1;16(23):7416–27
T-maze and food reinforcement: an inexpensive drug discrimination procedure. Colombo G, et al.
J Neurosci Methods 1996 Aug;67(2):83–7
The reinforcing and discriminative stimulus effects of the novel cocaine analog 2beta-propanoyl-3beta-(4-tolyl)-tropane in rhesus monkeys. Nader MA, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):541–50
Inhibition of reinforcing effects of morphine and motivational aspects of naloxone-precipitated opioid withdrawal by N-methyl-D-aspartate receptor antagonist, memantine. Popik P, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):854–65
Naloxone inhibits the reinforcing and motivational aspects of cocaine addiction in mice. Kuzmin AV, et al.
Life Sci 1997;60(18):PL-257–64
Reinforcement processes in opiate addiction: a homeostatic model. Schulteis G, et al. **Neurochem Res** 1996 Nov; 21(11):1437–54 (133 ref.)
Active avoidance learning using brain stimulation applied to the inferior colliculus as negative reinforcement in rats: evidence for latent inhibition. Brandão ML, et al.
Neuropsychobiology 1997;35(1):30–5
Activation of the human brain by monetary reward. Thut G, et al. **Neuroreport** 1997 Mar 24;8(5):1225–8
Reinforcement concept in investigations on simple nervous systems. Balaban PM. **Neurosci Behav Physiol** 1997 Jul–Aug;27(4):435–40 (15 ref.)
Dopamine and the reinforcing system of the brain. Petrov ES, et al. **Neurosci Behav Physiol** 1997 May–Jun; 27(3):309–11
Motivation and reinforcement in the systemic mechanisms of behavior: dynamic reinforcement engrams. Sudakov KV. **Neurosci Behav Physiol** 1996 Sep–Dec;26(5):445–53 (40 ref.)
A systems process of reinforcement. Sudakov KV.
Neurosci Behav Physiol 1997 Jul–Aug;27(4):370–80 (60 ref.)
Capacity of birds for transitive inference: the solution of the Gillan test by corvids and pigeons. Zorina ZA, et al.
Neurosci Behav Physiol 1996 Sep–Dec;26(5):454–9
A critique of fixed and progressive ratio schedules used to examine the neural substrates of drug reinforcement. Arnold JM, et al. **Pharmacol Biochem Behav** 1997 Jul; 57(3):441–7 (70 ref.)
Cellular mechanisms underlying reinforcement-related processing in the nucleus accumbens: electrophysiological studies in behaving animals. Carelli RM, et al.
Pharmacol Biochem Behav 1997 Jul;57(3):495–504 (55 ref.)
Ethanol and cocaine intake by rats selectively bred for oral opioid acceptance. Carlson KR, et al.
Pharmacol Biochem Behav 1997 May–Jun;57(1–2):309–13
A role for D2, but not D1, dopamine receptors in the response-reinstating effects of food reinforcement. Chausmer AL, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):681–5
Concurrent positive and negative goalbox events produce runway behaviors comparable to those of cocaine-reinforced rats. Geist TD, et al.
Pharmacol Biochem Behav 1997 May–Jun;57(1–2):145–50
The influence of alternative reinforcers on cocaine use and abuse: a brief review. Higgins ST.
Pharmacol Biochem Behav 1997 Jul;57(3):419–27 (24 ref.)
Acute reinforcing effects of low-dose nicotine nasal spray in humans. Perkins KA, et al.
Pharmacol Biochem Behav 1997 Feb;56(2):235–41
Bidirectional effects of dopamine D2 receptor antagonists on responding for a conditioned reinforcer. Smith JK, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):843–9
Amphetamine-induced disruption of latent inhibition is not reinforcer-mediated. Weiner I, et al.
Pharmacol Biochem Behav 1997 Apr;56(4):817–26
Schedule induction conditions not only exaggerate intake but

also enhance drug solution choice. Falk JL, et al. **Physiol Behav** 1997 Sep;62(3):479–83

Receiving grooming as a reinforcer for the monkey. Taira K, et al. **Physiol Behav** 1996 Jun;59(6):1189–92

Flavor–postingestive consequence associations incorporate the behaviorally opposing effects of positive reinforcement and anticipated satiety: implications for interpreting two-bottle tests. Warwick ZS, et al. **Physiol Behav** 1996 Sep;60(3):711–5

A post–tetanic time window for the reinforcement of long–term potentiation by appetitive and aversive stimuli. Seidenbecher T, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1494–9

Adolescent reinforcement survey schedule: summary of research and future directions. Holmes GR, et al. **Psychol Rep** 1996 Feb;78(1):76–8

Evaluation of the cocaine–like discriminative stimulus effects and reinforcing effects of modafinil. Gold LH, et al. **Psychopharmacology (Berl)** 1996 Aug;126(4):286–92

Alprazolam, caffeine and their interaction: relating DRL performance to pharmacokinetics. Lau CE, et al. **Psychopharmacology (Berl)** 1996 Jul;126(2):115–24

Serotonergic mechanisms involved in the discriminative stimulus, reinforcing and subjective effects of cocaine. Walsh SL, et al. **Psychopharmacology (Berl)** 1997 Mar; 130(1):41–58 (157 ref.)

Differences in salivation to repeated food cues in obese and nonobese women. Epstein LH, et al. **Psychosom Med** 1996 Mar–Apr;58(2):160–4

Effects of rate of reinforcement and rate of change on choice behaviour in transition. Mazur JE. **Q J Exp Psychol B** 1997 May;50(2):111–28

[Biochemical mechanism of reinforcement: findings in the studies of self–stimulation] Nakajima S. **Shinrigaku Kenkyu** 1996 Feb;66(6):449–56 (57 ref.) (Eng. Abstr.) **(Jpn)**

[Short intertrial interval as a phrasing cue in the serial pattern learning in rats] Yazawa H. **Shinrigaku Kenkyu** 1995 Dec; 66(5):373–8 (Eng. Abstr.) **(Jpn)**

[Learning by mice of Y–maze using drinking reinforcement and aversive olfactory stimulus (beneficial effect of ginsenosides)] Chepurnov SA, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):253–7 **(Rus)**

[The concept of reinforcement in research on simple nervous systems] Baladan PM. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar–Apr; 47(2):280–5 (13 ref.) (Eng. Abstr.) **(Rus)**

[Interneuronal relationships in the basolateral amygdala of cats trained for choice in the quality of food reinforcement] Merzhanova GKh, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun; 47(3):500–6 (Eng. Abstr.) **(Rus)**

[The individual characteristics of dogs with a free choice of the probability and value of food reinforcement] Preobrazhenskiĭ LA. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun; 47(3):487–99 (Eng. Abstr.) **(Rus)**

[The systems process of reinforcement] Sudakov KV. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul–Aug; 46(4):643–55 (60 ref.) (Eng. Abstr.) **(Rus)**

REINFORCEMENT SCHEDULE

Impairment of schedule–controlled behavior by pre– and postnatal exposure to hexachlorobenzene in rats. Lilienthal H, et al. **Arch Toxicol** 1996;70(3–4):174–81

Intermittent rewards raise self–stimulation thresholds. Fouriezos G, et al. **Behav Brain Res** 1996 Jan;74(1–2):57–64

The hippocampus and reward: effects of hippocampal lesions on progressive–ratio responding. Schmelzeis MC, et al. **Behav Neurosci** 1996 Oct;110(5):1049–66

The effectiveness of DRL in the management and treatment of severe behaviour disorders following brain injury [published erratum appears in Brain Inj 1997 Jul;11(7):541–2] Alderman N, et al. **Brain Inj** 1997 Feb; 11(2):79–101

Effects of remoxipride, an atypical antipsychotic, on cocaine self–administration in the rat using fixed– and progressive–ratio schedules of reinforcement. Bourland JA, et al. **Drug Alcohol Depend** 1995 Dec;40(2):111–4

Cytotoxic lesions of the retrohippocampal region attenuate latent inhibition but spare the partial reinforcement extinction effect. Yee BK, et al. **Exp Brain Res** 1997 Jun; 115(2):247–56

Effects of equal and unequal reinforcer duration during functional analysis. Fisher WW, et al. **J Appl Behav Anal** 1996 Spring;29(1):117–20

Reducing the illegal sales of cigarettes to minors: analysis of alternative enforcement schedules. Jason L, et al. **J Appl Behav Anal** 1996 Fall;29(3):333–44

Noncontingent reinforcement as treatment for severe problem behavior: some procedural variations. Lalli JS, et al. **J Appl Behav Anal** 1997 Spring;30(1):127–36; quiz 136–7

Combining noncontingent reinforcement and differential reinforcement schedules as treatment for aberrant behavior. Marcus BA, et al. **J Appl Behav Anal** 1996 Spring; 29(1):43–51

An experimental comparison of three different schedules of reinforcement of drug abstinence using cigarette smoking as an exemplar. Roll JM, et al. **J Appl Behav Anal** 1996 Winter;29(4):495–504; quiz 504–5

Negative side effects of noncontingent reinforcement. Vollmer TR, et al. **J Appl Behav Anal** 1997 Spring; 30(1):161–4

The effects of meal schedule and quantity on problematic behavior. Wacker DP, et al. **J Appl Behav Anal** 1996 Spring;29(1):79–87

Preference between variable–ratio and fixed–ratio schedules: local and extended relations. Field DP, et al. **J Exp Anal Behav** 1996 Nov;66(3):283–95

Body weight and response acquisition with delayed reinforcement. Lattal KA, et al. **J Exp Anal Behav** 1997 Jan;67(1):131–43

Temporal control by progressive–interval schedules of reinforcement. Leinenweber A, et al. **J Exp Anal Behav** 1996 Nov;66(3):311–26

Effects of D–amphetamine on response acquisition with immediate and delayed reinforcement. LeSage MG, et al. **J Exp Anal Behav** 1996 Nov;66(3):349–67

Within–session changes in responding during concurrent schedules with different reinforcers in the components. McSweeney FK, et al. **J Exp Anal Behav** 1996 Nov; 66(3):369–90

Key–peck probability and topography in a concurrent variable–interval variable–interval schedule with food and water reinforcers. Ploog BO, et al. **J Exp Anal Behav** 1997 Jan;67(1):109–29

Determination of discount functions in rats with an adjusting–amount procedure. Richards JB, et al. **J Exp Anal Behav** 1997 May;67(3):353–66

Behavior of rats under fixed consecutive number schedules: effects of drugs of abuse. Snodgrass SH, et al. **J Exp Anal Behav** 1997 Jul;68(1):117–32

Effects of cocaine on briefly signaled versus completely signaled delays to reinforcement. Walker DJ, et al. **J Exp Anal Behav** 1996 Mar;65(2):375–88

Conditioned reinforcement dynamics in three–link chained schedules. Williams BA. **J Exp Anal Behav** 1997 Jan; 67(1):145–59

Key pecking during extinction after intermittent or continuous reinforcement as a function of the number of reinforcers delivered during training. Zarcone TJ, et al. **J Exp Anal Behav** 1997 Jan;67(1):91–108

Models of ratio schedule performance. Bizo LA, et al. **J Exp Psychol Anim Behav Process** 1997 Jul;23(3):351–67

Rats use an ordinal timer in a daily time–place learning task. Carr JA, et al. **J Exp Psychol Anim Behav Process** 1997 Apr;23(2):232–47

Reinforced variability decreases with approach to reinforcers. Cherot C, et al. **J Exp Psychol Anim Behav Process** 1996 Oct;22(4):497–508

Adjusting to changes in the time of reinforcement: peak–interval transitions in rats. Lejeune H, et al. **J Exp Psychol Anim Behav Process** 1997 Apr;23(2):211–31

Captopril alters schedule induced polydipsia, urination, and defecation in rats. Bowers RL, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):353–9

Effects of d–amphetamine on temporal distributions of schedule–induced polydipsia. Flores P, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):81–7

Tolerance and sensitization to the behavioral effects of cocaine in rats: relationship to benzodiazepine receptors. Goeders NE, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):43–56

MDMA and d–amphetamine produce comparable effects in pigeons performing under a multiple fixed–ratio interresponse–time–greater–than–t schedule of food delivery. LeSage M, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):173–7

Acute and chronic effects of morphine in pigeons responding under a progressive–ratio schedule of food delivery. Poling A, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):485–90

Food deprivation and food–delay effects on the development of adjunctive drinking. Lamas E, et al. **Physiol Behav** 1997 Feb;61(2):153–8

Conditioned reactions to cancer chemotherapy: percent reinforcement predicts anticipatory nausea. Tomoyasu N, et al. **Physiol Behav** 1996 Feb;59(2):273–6

Learning the temporal dynamics of behavior. Machado A. **Psychol Rev** 1997 Apr;104(2):241–65

Rebound responding following a single dose of drug using an amphetamine–vehicle–haloperidol drug discrimination. Caul WF, et al. **Psychopharmacology (Berl)** 1996 Dec; 128(3):274–9

Progressive ratio and behavioral economic evaluation of the reinforcing efficacy of orally delivered phencyclidine and ethanol in monkeys: effects of feeding conditions. Rodefer JS, et al. **Psychopharmacology (Berl)** 1996 Dec; 128(3):265–73

The effect of noncontingent sensory reinforcement, contingent sensory reinforcement, and response interruption on stereotypical and self–injurious behavior. Sprague J, et al. **Res Dev Disabil** 1997 Jan–Feb;18(1):61–77

[Non–photic entrainment of human circadian clock––effects of forced sleep–wake schedule on the circadian rhythm in plasma melatonin] Nakamura K. **Hokkaido Igaku Zasshi** 1996 May;71(3):403–22 (Eng. Abstr.) **(Jpn)**

REINFORCEMENT, SOCIAL

Self–enhancing effect of social feedback on cognitive task performance. Waldie KE, et al. **Am J Ment Retard** 1996 May;100(6):620–31

Stimulus control and resistance to extinction in attention–maintained SIB. Hanley GP, et al. **Res Dev Disabil** 1997 Jul–Aug;18(4):251–60

REINFORCEMENT, VERBAL

When reprimand consistency may and may not matter. Sherrill JT, et al. **Behav Modif** 1996 Apr;20(2):226–36

Explanations of body image disturbance: a test of maturational status, negative verbal commentary, social comparison, and sociocultural hypotheses. Stormer SM, et al. **Int J Eat Disord** 1996 Mar;19(2):193–202

Lateralization of visual–spatial perception in man in conditions of verbal reinforcement. Tsagareli MG. **Neurosci Behav Physiol** 1996 Nov–Dec;26(6):526–31

[The effect of verbal reinforcement on visual–space perception in chronic alcoholism] Tsagareli MG. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):105–6 **(Rus)**

REINFORCING FACTORS see **CAUSALITY**

REITER'S DISEASE

[Reiter's syndrome] Kobayashi S, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):376–8 (14 ref.) **(Jpn)**

[Recent concept and clinical manifestations of reactive arthritis] Kobayashi S. **Ryumachi** 1997 Jun;37(3):504–13 (46 ref.) **(Jpn)**

[Reiter's disease in an 11–year–old boy] Mesihović H, et al. **Med Arh** 1995;49(1–2):49–51 (Eng. Abstr.) **(Scr)**

CHEMICALLY INDUCED

Epididymo–orchitis and Reiter's disease. Two infrequent complications after intravesical bacillus Calmette–Guérin therapy. Hansen CP, et al. **Scand J Urol Nephrol** 1997 Jun; 31(3):317–8

Reiter syndrome following intracavitary BCG administration. Saporta L, et al. **Scand J Urol Nephrol** 1997 Apr;31(2):211–2

COMPLICATIONS

Bilateral multifocal choroiditis in Reiter syndrome. Needham AD, et al. **Arch Ophthalmol** 1997 May;115(5):684–5

Acute anterior uveitis in juvenile Reiter's syndrome. Fischel JD, et al. **Clin Rheumatol** 1996 Jan;15(1):83–5

Reiter's syndrome–like pattern in AIDS–associated psoriasiform dermatitis. Romaní J, et al. **Int J Dermatol** 1996 Jul;35(7):484–8

Arthritis associated with HIV infection in Zimbabwe. Stein CM, et al. **J Rheumatol** 1996 Mar;23(3):506–11

[Development of ulcerative colitis in a male patient during exacerbation of Reiter's syndrome symptoms] Karaś Z, et al. **Pol Merkuriusz Lek** 1997 Jan;2(7):40–1 (Eng. Abstr.) **(Pol)**

[Reiter's disease manifestations on oral and pharyngeal mucosa] Laretus VF, et al. **Vestn Otorinolaringol** 1997; (2):53 **(Rus)**

[Cardiac involvement in Reiter's disease] Dzhus MB, et al. **Lik Sprava** 1995 Sep–Dec;(9–12):168–9 (10 ref.) (Eng. Abstr.) **(Ukr)**

DIAGNOSIS

Reiter syndrome initially misdiagnosed as Kawasaki disease. Bauman C, et al. **J Pediatr** 1996 Mar;128(3):366–9

[Reiter's disease in children] Glazyrina GA, et al. **Khirurgiia (Mosk)** 1996;(4):70–2 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Successful treatment of severe recurrent Reiter's syndrome with cyclosporine. Kiyohara A, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):482–3

ETIOLOGY

Reiter's syndrome associated with cryptosporidial gastroenteritis. Cron RQ, et al. **J Rheumatol** 1995 Oct; 22(10):1962–3

IMMUNOLOGY

False–negative serological HLA–B27 typing results may be due to altered antigenic epitopes and can be detected by polymerase chain reaction. Kirveskari J, et al. **Br J Rheumatol** 1997 Feb;36(2):185–9

PHYSIOPATHOLOGY

Handicap in inflammatory arthritis. Harwood RH, et al. **Br J Rheumatol** 1996 Sep;35(9):891–7

Anatomic predilection of the spondyloarthropathies(–)a case of the nerves? Segal AH. **J Rheumatol** 1996 Mar; 23(3):491–4 (60 ref.)

RADIOGRAPHY

The seronegative spondyloarthropathies. Kettering JM, et al. **Semin Roentgenol** 1996 Jul;31(3):220–8 (18 ref.)

REJECTION (PSYCHOLOGY)

Comparison of socially accepted and rejected children with mental retardation. Siperstein GN, et al. **Am J Ment Retard** 1997 Jan;101(4):339–51

Abandonment and intrusion fears in borderline personality disorder [letter; comment] Chabrol H. **Am J Psychiatry** 1997 Sep;154(9):1329. Comment on: Am J Psychiatry 1996 Jun;153(6):752–8.

Interaction between birth complications and early maternal rejection in predisposing individuals to adult violence: specificity to serious, early-onset violence. Raine A, et al. **Am J Psychiatry** 1997 Sep;154(9):1265–71

Parental correlates of socially neglected, rejected, and average children. A laboratory study. Franz DZ, et al. **Behav Modif** 1996 Apr;20(2):170–82

Recognition bias for critical faces in social phobics. Lundh LG, et al. **Behav Res Ther** 1996 Oct;34(10):787–94

Short-term stability of aggression, peer rejection, and depressive symptoms in middle childhood. Dumas JE, et al. **J Abnorm Child Psychol** 1996 Feb;24(1):105–19

What they want and what they get: the social goals of boys with ADHD and comparison boys. Melnick SM, et al. **J Abnorm Child Psychol** 1996 Apr;24(2):169–85

Loss-grief addiction model. Beechem MH, et al. **J Drug Educ** 1996;26(2):183–98

Social identity and physical health: accelerated HIV progression in rejection-sensitive gay men. Cole SW, et al. **J Pers Soc Psychol** 1997 Feb;72(2):320–35

Interpersonal forgiving in close relationships. McCullough ME, et al. **J Pers Soc Psychol** 1997 Aug;73(2):321–36

Reliability of retrospective reports of perceived maternal acceptance-rejection in childhood. Cournoyer DE, et al. **Psychol Rep** 1996 Feb;78(1):147–50

Theresa O'Hanley, persona non grata. Maltsberger JT. **Suicide Life Threat Behav** 1996 Summer;26(2):187–8; discussion 188–94

REL GENES see **ONCOGENES**

RELAPSING FEVER

DIAGNOSIS

GlpQ: an antigen for serological discrimination between relapsing fever and Lyme borreliosis. Schwan TG, et al. **J Clin Microbiol** 1996 Oct;34(10):2483–92

Relapsing fever: a differential diagnosis to malaria. Poulsen LW, et al. **Scand J Infect Dis** 1996;28(4):419–20

[Tick-borne recurrent fever. Description of 5 cases] Sánchez-Yebra W, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):77–81 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

In vivo activities of ceftriaxone and vancomycin against Borrelia spp. in the mouse brain and other sites. Kazragis RJ, et al. **Antimicrob Agents Chemother** 1996 Nov; 40(11):2632–6

The effect of antibody against TNF alpha on cytokine response in Jarisch-Herxheimer reactions of louse-borne relapsing fever. Coxon RE, et al. **QJM** 1997 Mar; 90(3):213–21

EPIDEMIOLOGY

A focus of tick-borne relapsing fever in southern Zaire. Dupont HT, et al. **Clin Infect Dis** 1997 Jul;25(1):139–44

ETIOLOGY

Physical mapping of the Borrelia miyamotoi HT31 chromosome in comparison with that of Borrelia turicatae, an etiological agent of tick-borne relapsing fever. Takahashi Y, et al. **Clin Diagn Lab Immunol** 1996 Sep; 3(5):533–40

HISTORY

[Plague of Athens. War and lice] Mariel C, et al. **Presse Med** 1997 Feb 15;26(4):169–71 **(Fre)**

MICROBIOLOGY

Phylogenesis of relapsing fever Borrelia spp. Ras NM, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):859–65

PARASITOLOGY

Ticks and Borrelia: model systems for investigating pathogen-arthropod interactions. Schwan TG. **Infect Agents Dis** 1996 Jun;5(3):167–81 (120 ref.)

Images in clinical medicine. Relapsing fever. Newton JA, et al. **N Engl J Med** 1996 Oct 17;335(16):1197

RELATIVE BIOLOGICAL EFFECTIVENESS

Predicting realistic RBE values for clinically relevant radiotherapy schedules. Denekamp J, et al. **Int J Radiat Biol** 1997 Jun;71(6):681–94

Calculation of integrated biological response in brachytherapy. Dale RG, et al. **Int J Radiat Oncol Biol Phys** 1997 Jun 1;38(3):633–42

Microdosimetric evaluation of relative biological effectiveness for 103Pd, 125I, 241Am, and 192Ir brachytherapy sources. Wuu CS, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):689–97

Biological equivalance of low dose rate to multifractionated high dose rate irradiations: investigations in mouse lip mucosa. Stüben G, et al. **Radiother Oncol** 1997 Feb; 42(2):189–96

RELATIVE RISK see **RISK**

RELATIVE VALUE SCALES

A relative-value-based system for calculating faculty productivity in teaching, research, administration, and patient care. Hilton C, et al. **Acad Med** 1997 Sep; 72(9):787–93

Physician work effort and reimbursement for ruptured abdominal aortic aneurysms. Morehouse DL, et al. **Am J Surg** 1997 Aug;174(2):136–9

CMPA fees [letter; comment] Stefanovich C. **Can Med Assoc J** 1997 May 15;156(10):1378–9. Comment on: Can Med Assoc J 1997 Mar 1;156(5):685–7.

Is Adam worth more than Eve? The financial impact of gender bias in the federal reimbursement of gynecological procedures [see comments] Goff BA, et al. **Gynecol Oncol** 1997 Mar;64(3):372–7. Comment in: Gynecol Oncol 1997 Mar;64(3):369–71.

Comparison of 1997 Medicare relative value units for gender-specific procedures: is Adam still worth more than Eve? Goff BA, et al. **Gynecol Oncol** 1997 Aug;66(2):313–9

The valuation of health care intangible assets. Reilly RF, et al. **Health Care Manage Rev** 1997 Spring;22(2):55–64 (0 ref.)

Dr. Griffin's special article on CPT coding, RBRVS, and reimbursement issues [letter; comment] Redwine DB. **J Am Assoc Gynecol Laparosc** 1995 Aug;2(4):493–5. Comment on: J Am Assoc Gynecol Laparosc 1995 Feb;2(2):125–9.

Establishment of total and intraservice work by chiropractic physicians in providing spinal manipulative therapy and evaluation and management services. Hess JA, et al. **J Manipulative Physiol Ther** 1997 Jan;20(1):13–23

Vascular surgery and the Resource-based Relative Value Scale five-year review. Zwolak RM, et al. **J Vasc Surg** 1997 Jun;25(6):1077–86

HCACC: a payment system primer—uniform reimbursement system includes potential for physician fee regulation [news] Preston M, et al. **Md Med J** 1996 Nov;45(11):895–7

An examination of cross-specialty linkage applied to the resource-based relative value scale. Glickman ME, et al. **Med Care** 1997 Aug;35(8):843–66

Analyzing practice costs utilizing Relative Value Units (RVUs). White GM. **Mo Med** 1996 Apr;93(4):166–9

Medicare's resource-based relative value scale, a de facto national fee schedule: its implications and uses for neurologists. Sigsbee B. **Neurology** 1997 Aug;49(2):315–20

Gender bias? Or is it really less work to care for women? [editorial] Harer WB Jr. **Obstet Gynecol Surv** 1996 Sep; 51(9):507–8

RBRVS: the second coming. Saksena S. **Pacing Clin Electrophysiol** 1996 Feb;19(2):252–3

Physician rewards for different kinds of service: the RBRVS versus the CPR system. Brent RJ, et al. **Plast Reconstr Surg** 1997 Jul;100(1):51–7

Resource-Based Relative Value Scale (RBRVS), coding, and Medicare reimbursement. Zwolak RM. **Semin Vasc Surg** 1997 Jun;10(2):119–27

1996 Medicare Part B changes summarized. Bicha A, et al. **Wis Med J** 1996 Feb;95(2):119–24

RELATIVE-VALUE SCHEDULES see **RELATIVE VALUE SCALES**

RELAXATION

Relaxation dynamics of spontaneous otoacoustic emissions perturbed by external tones. III. Response to a single tone at multiple suppression levels. Murphy WJ, et al. **J Acoust Soc Am** 1996 Dec;100(6):3979–82

Effects of excitative and sedative music on subjective and physiological relaxation. Iwanaga M, et al. **Percept Mot Skills** 1997 Aug;85(1):287–96

Exercise and relaxation in health promotion. Shephard RJ. **Sports Med** 1997 Apr;23(4):211–7 (51 ref.)

PHYSIOLOGY

Ironic effects of trying to relax under stress. Wegner DM, et al. **Behav Res Ther** 1997 Jan;35(1):11–21

Absorption and imagery locate immune responses in the body. Gregerson MB, et al. **Biofeedback Self Regul** 1996 Jun;21(2):149–65

Topographic EEG mapping of the relaxation response. Jacobs GD, et al. **Biofeedback Self Regul** 1996 Jun; 21(2):121–9

Determination of the optimal walking speed for neural relaxation in healthy elderly women using electromyogram and electroencephalogram analyses. Shibata M, et al. **Eur J Appl Physiol** 1997;75(3):206–11

Behavioral assessment of relaxation: the validity of a Behavioral Rating Scale. Norton M, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):129–37

Secretory immunoglobulin A increases during relaxation in children with and without recurrent upper respiratory tract infections. Hewson-Bower B, et al. **J Dev Behav Pediatr** 1996 Oct;17(5):311–6

Effects of self-induced mental imagery on autonomic reactivity in children. Lee LH, et al. **J Dev Behav Pediatr** 1996 Oct;17(5):323–7

Testing the alexithymia hypothesis: physiological and subjective responses during relaxation and stress. Friedlander L, et al. **J Nerv Ment Dis** 1997 Apr; 185(4):233–9

The effects of effleurage backrub on the physiological components of relaxation: a meta-analysis. Labyak SE, et al. **Nurs Res** 1997 Jan-Feb;46(1):59–62

[Dynamics of alpha-band frequency components in the electroencephalogram of 9–10-year-old children under conditions of relaxation] Gorev AS. **Fiziol Cheloveka** 1996 Sep-Oct;22(5):45–8 **(Rus)**

[Changes in parameters of mental activity as a result of voluntary relaxation] Legostaev GN. **Fiziol Cheloveka** 1996 Sep-Oct;22(5):135–7 **(Rus)**

[Change in EEG spectral characteristics in man during relaxation using local warm air exposure] Umriukhin EA, et al. **Fiziol Cheloveka** 1997 Jul-Aug;23(4):136–8 **(Rus)**

PSYCHOLOGY

Effects of self-induced mental imagery on autonomic reactivity in children. Lee LH, et al. **J Dev Behav Pediatr** 1996 Oct;17(5):323–7

Testing the alexithymia hypothesis: physiological and subjective responses during relaxation and stress. Friedlander L, et al. **J Nerv Ment Dis** 1997 Apr; 185(4):233–9

RELAXATION TECHNIQUES

Massage and relaxation therapies' effects on depressed adolescent mothers. Field T, et al. **Adolescence** 1996 Winter; 31(124):903–11

Job stress reduction therapies. Field T, et al. **Altern Ther Health Med** 1997 Jul;3(4):54–6

Voluntary control of vascular tone by using skin-temperature biofeedback-relaxation in patients with advanced heart failure [see comments] Moser DK, et al. **Altern Ther Health Med** 1997 Jan;3(1):51–9. Comment in: Altern Ther Health Med 1997 May;3(3):18, 21.

Applying hypnosis in a preschool family asthma education program: uses of storytelling, imagery, and relaxation. Kohen DP, et al. **Am J Clin Hypn** 1997 Jan;39(3):169–81

Using breathing to supplement pain control. Smith N. **Am J Nurs** 1997 Feb;97(2):16

Nondrug measures for painful procedures. Smith NK, et al. **Am J Nurs** 1997 Aug;97(8):18–20

Effect of chronic aerobic exercise and progressive relaxation on motor performance and affect following acute stress. Anshel MH. **Behav Med** 1996 Winter;21(4):186–96

A controlled comparison on the effect of muscle and cognitive relaxation procedures on blood pressure: implications for the behavioural treatment of borderline hypertensives. Yung PM, et al. **Behav Res Ther** 1996 Oct; 34(10):821–6

A retrospective, follow-up study of biofeedback-assisted relaxation therapy in patients with posttraumatic headache. Ham LP, et al. **Biofeedback Self Regul** 1996 Jun; 21(2):93–104

Racial and gender effects on the relaxation response: implications for the development of hypertension. Roberts G, et al. **Biofeedback Self Regul** 1996 Mar;21(1):51–62

Relaxation: mapping an uncharted world. Smith JC, et al. **Biofeedback Self Regul** 1996 Mar;21(1):63–90

Self-management in the treatment of ataxia: a case study in reducing ataxic tremor through relaxation and biofeedback. Guercio J, et al. **Brain Inj** 1997 May;11(5):353–62

Analysis of recent literature concerning relaxation and imagery interventions for cancer pain. Wallace KG. **Cancer Nurs** 1997 Apr;20(2):79–87 (45 ref.)

Self-hypnotic relaxation during interventional radiological procedures: effects on pain perception and intravenous drug use. Lang EV, et al. **Int J Clin Exp Hypn** 1996 Apr; 44(2):106–19

Relaxation-induced EEG alterations in panic disorder patients. Knott V, et al. **J Anxiety Disord** 1997 Jul-Aug; 11(4):365–76

Stress reactivity of intraocular pressure after relaxation training in open-angle glaucoma patients. Kaluza G, et al. **J Behav Med** 1996 Dec;19(6):587–98

The effect of selected classical music and spontaneous imagery on plasma beta-endorphin. McKinney CH, et al. **J Behav Med** 1997 Feb;20(1):85–99

Evaluating the response of mild hypertensives to biofeedback-assisted relaxation using a mental stress test. Paran E, et al. **J Behav Ther Exp Psychiatry** 1996 Jun; 27(2):157–67

The efficacy of relaxation response interventions with adult patients: a review of the literature [see comments] Mandle CL, et al. **J Cardiovasc Nurs** 1996 Apr;10(3):4–26 (88 ref.) . Comment in: J Cardiovasc Nurs 1996 Apr;10(3):v–x.

Self-hypnosis reduces anxiety following coronary artery bypass surgery. A prospective, randomized trial. Ashton C Jr, et al. **J Cardiovasc Surg (Torino)** 1997 Feb;38(1):69–75

Psychological influences on pain perception and non-pharmacologic approaches to the treatment of pain. DePalma MT, et al. **J Hand Ther** 1997 Apr-Jun;

10(2):183–91 (68 ref.)
A comparison of the effects of four therapy procedures on concentration and responsiveness in people with profound learning disabilities. Lindsay WR, et al. **J Intellect Disabil Res** 1997 Jun;41 (Pt 3):201–7
The effects of behavioural relaxation on cognitive performance in adults with severe intellectual disabilities. Lindsay WR, et al. **J Intellect Disabil Res** 1996 Aug;40 (Pt 4):285–90
Effectiveness of psychological interventions for people with poorly controlled epilepsy. Goldstein LH. **J Neurol Neurosurg Psychiatry** 1997 Aug;63(2):137–42 (61 ref.)
Variability in breathing patterns during latent labor. A pilot study. Hesson K, et al. **J Nurse Midwifery** 1997 Mar–Apr; 42(2):99–103
Positive intrasurgical suggestion fails to affect postsurgical pain. Melzack R, et al. **J Pain Symptom Manage** 1996 Feb; 11(2):103–7
A randomized controlled prospective outcome study of a psychological and pharmacological intervention protocol for procedural distress in pediatric leukemia. Kazak AE, et al. **J Pediatr Psychol** 1996 Oct;21(5):615–31
A school-based, nurse-administered relaxation training for children with chronic tension-type headache. Larsson B, et al. **J Pediatr Psychol** 1996 Oct;21(5):603–14
Centering: reducing rape trauma syndrome anxiety during a gynecologic examination. Dole PJ. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):32–7
The effects of relaxation response training on menopausal symptoms. Irvin JH, et al. **J Psychosom Obstet Gynaecol** 1996 Dec;17(4):202–7
Use of a projective technique to assess young children's appraisal and coping responses to a venipuncture. Caty S, et al. **J Soc Pediatr Nurs** 1997 Apr–Jun;2(2):83–92
Facilitation of internal locus of control in adolescent alcoholics through a brief biofeedback-assisted autogenic relaxation training procedure. Sharp C, et al. **J Subst Abuse Treat** 1997 Jan–Feb;14(1):55–60
Maxed out? Mellow out with these personal stress management strategies. Campbell SJ. **MCN Am J Matern Child Nurs** 1996 May–Jun;21(3):123–6
The impact of a relaxation technique on the lipid profile. Carson MA. **Nurs Res** 1996 Sep–Oct;45(5):271–6
Calming the newborn tummy. Mott-Smith M. **Nurse Pract** 1997 Feb;22(2):162
Comparison of changes in autonomic and respiratory parameters of girls after yoga and games at a community home. Telles S, et al. **Percept Mot Skills** 1997 Feb; 84(1):251–7
Comparison of relaxation techniques, routine blood pressure measurements, and self-learning packages in hypertension control. Yen LL, et al. **Prev Med** 1996 May–Jun; 25(3):339–45
Liaison psychiatry and HIV infection (II): Application of relaxation in HIV positive patients. Fukunishi I, et al. **Psychiatry Clin Neurosci** 1997 Feb;51(1):5–8
Application of the relaxation technique in general hospital psychiatry. Hosaka T, et al. **Psychiatry Clin Neurosci** 1995 Dec;49(5–6):259–62
Psychosocial and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. Whitehouse WG, et al. **Psychosom Med** 1996 May–Jun;58(3):249–63
Agoraphobia and panic disorder: 3.5 years after alprazolam and/or exposure treatment. Kiliç C, et al. **Psychother Psychosom** 1997;66(4):175–8
Immune effects of relaxation during chemotherapy for ovarian cancer. Lekander M, et al. **Psychother Psychosom** 1997;66(4):185–91
'Functional relaxation' reduces acute airway obstruction in asthmatics as effectively as inhaled terbutaline. Loew TH, et al. **Psychother Psychosom** 1996;65(3):124–8
Biofeedback, relaxation training, and cognitive behaviour modification as treatments for lower functional gastrointestinal disorders. Bassotti G, et al. **QJM** 1997 Aug; 90(8):545–50 (69 ref.)
Dynamic training versus relaxation training as home exercise for patients with inflammatory rheumatic diseases. A randomized controlled study. Stenström CH, et al. **Scand J Rheumatol** 1996;25(1):28–33
Biofeedback assisted relaxation in essential hypertension: short-term follow-up of contributing effects of pharmacotherapy on blood pressure and heart rate. "Brief communication". Cengiz E, et al. **Yonsei Med J** 1997 Apr; 38(2):86–90
[Regulative music therapy and training as a means for enhancing adaptive potentials and for overcoming fatigue and stress] Tsenova B. **Probl Khig** 1996;21:44–51 (Eng. Abstr.) **(Bul)**
[Favorable effects of breathing and relaxation instructions in heart rehabilitation: a randomized 5-year follow-up study] van Dixhoorn J. **Ned Tijdschr Geneeskd** 1997 Mar 15;141(11):530–4 (Eng. Abstr.) **(Dut)**
[Group techniques and relaxation in the treatment of several subtypes of anxiety: a non-randomized controlled trial] Tello Bernabé ME, et al. **Aten Primaria** 1997 Feb 15; 19(2):67–71 (Eng. Abstr.) **(Spa)**

STANDARDS

Effects of relaxation and music on postoperative pain: a review. Good M. **J Adv Nurs** 1996 Nov;24(5):905–14 (51 ref.)
A cognitive behavioural approach to preventing anxiety during magnetic resonance imaging. Lukins R, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):97–104
Cognitive-behavioral stress management decreases dysphoric mood and herpes simplex virus-type 2 antibody titers in symptomatic HIV-seropositive gay men. Lutgendorf SK, et al. **J Consult Clin Psychol** 1997 Feb;65(1):31–43
Promoting parental use of nonpharmacologic techniques with children during lumbar punctures. Pederson C. **J Pediatr Oncol Nurs** 1996 Jan;13(1):21–30

STATISTICS & NUMERICAL DATA

Behavioral assessment of relaxation: the validity of a Behavioral Rating Scale. Norton M, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):129–37

RELAXATION THERAPY see **RELAXATION TECHNIQUES**

RELAXIN

Recombinant human relaxin as a cervical ripening agent. Brennand JE, et al. **Br J Obstet Gynaecol** 1997 Jul; 104(7):775–80

ADMINISTRATION & DOSAGE

Continuous infusion of relaxin on periparturient progesterone, oxytocin and relaxin plasma concentrations and time of parturition in beef heifers. Smith KH, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):15–25

ANALYSIS

Relaxin: an ovarian hormone in an avian species (Gallus domesticus). Brackett KH, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):155–63

BIOSYNTHESIS

Local relaxin biosynthesis in the ovary and uterus through the oestrous cycle and early pregnancy in the female marmoset monkey (Callithrix jacchus). Einspanier A, et al. **Hum Reprod** 1997 Jun;12(6):1325–37
Role of high-performance liquid chromatographic protein analysis in developing fermentation processes for recombinant human growth hormone, relaxin, antibody fragments and lymphotoxin. Jacobson FS, et al. **J Chromatogr A** 1997 Feb 28;763(1–2):31–48
Stimulation of primate luteal function by recombinant human chorionic gonadotropin and modulation of steroid, but not relaxin, production by an inhibitor of 3 beta-hydroxysteroid dehydrogenase during simulated early pregnancy. Duffy DM, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2307–13

BLOOD

Serum relaxin, symphyseal pain, and back pain during pregnancy. Kristiansson P, et al. **Am J Obstet Gynecol** 1996 Nov;175(5):1342–7
Postimplantation increase in plasma fibrinogen concentration with increase in relaxin concentration in pregnant dogs. Concannon PW, et al. **Am J Vet Res** 1996 Sep;57(9):1382–5
Continuous infusion of relaxin on periparturient progesterone, oxytocin and relaxin plasma concentrations and time of parturition in beef heifers. Smith KH, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):15–25
Pathogenetic relevance of the pregnancy hormone relaxin to inborn hip instability. Forst J, et al. **Arch Orthop Trauma Surg** 1997;116(4):209–12
Circulating levels of relaxin are normal in pregnant women with pelvic pain. Albert H, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jul;74(1):19–22
Supraphysiological serum relaxin concentration during pregnancy achieved by in-vitro fertilization is strongly correlated to the number of growing follicles in the treatment cycle. Kristiansson P, et al. **Hum Reprod** 1996 Sep;11(9):2036–40
[Relaxin in amniotic fluid and serum of pregnant patients] Wiest E, et al. **Z Geburtshilfe Neonatol** 1997 Jan–Feb; 201(1):21–5 (Eng. Abstr.) **(Ger)**

CHEMICAL SYNTHESIS

The chemical synthesis of rat relaxin and the unexpectedly high potency of the synthetic hormone in the mouse. Büllesbach EE, et al. **Eur J Biochem** 1996 Oct 15; 241(2):533–7

CHEMISTRY

Use of synthetic canine relaxin to develop a rapid homologous radioimmunoassay. Steinetz BG, et al. **Biol Reprod** 1996 Jun;54(6):1252–60
Effects of reducing sugars on the chemical stability of human relaxin in the lyophilized state. Li S, et al. **J Pharm Sci** 1996 Aug;85(8):873–7
Inhibitory effect of sugars and polyols on the metal-catalyzed oxidation of human relaxin. Li S, et al. **J Pharm Sci** 1996 Aug;85(8):868–72
Stability and characterization of recombinant human relaxin. Nguyen TH, et al. **Pharm Biotechnol** 1996;9:247–74 (63 ref.)

GENETICS

Marsupial relaxin: complementary deoxyribonucleic acid sequence and gene expression in the female and male tammar wallaby, Macropus eugenii. Parry LJ, et al. **Biol Reprod** 1997 Jul;57(1):119–27
Expression of human relaxin genes: characterization of a novel alternatively-spliced human relaxin mRNA species. Gunnersen JM, et al. **Mol Cell Endocrinol** 1996 Apr 19; 118(1–2):85–94

ISOLATION & PURIFICATION

Identification of a glycosylated relaxin-like molecule from the male Atlantic stingray, Dasyatis sabina. Büllesbach EE, et al. **Biochemistry** 1997 Sep 2;36(35):10735–41
Purification and characterization of porcine prorelaxin. Layden SS, et al. **J Biochem Biophys Methods** 1996 Jan 11;31(1–2):69–80

METABOLISM

Identification of a glycosylated relaxin-like molecule from the male Atlantic stingray, Dasyatis sabina. Büllesbach EE, et al. **Biochemistry** 1997 Sep 2;36(35):10735–41
Identification of specific relaxin-binding cells in the cervix, mammary glands, nipples, small intestine, and skin of pregnant pigs. Min G, et al. **Biol Reprod** 1996 Dec; 55(6):1243–52
The effect of relaxin on collagen metabolism in the nonpregnant rat pubic symphysis: the influence of estrogen and progesterone in regulating relaxin activity. Samuel CS, et al. **Endocrinology** 1996 Sep;137(9):3884–90
Relaxin binds to and elicits a response from cells of the human monocytic cell line, THP-1. Parsell DA, et al. **J Biol Chem** 1996 Nov 1;271(44):27936–41
Expression and localization of relaxin in the ovary of the mare. Ryan PL, et al. **J Reprod Fertil** 1997 Jul; 110(2):329–38
Placental localization of relaxin in the pregnant mare. Klonisch T, et al. **Placenta** 1997 Mar–Apr;18(2–3):121–8

PHARMACOLOGY

Effects of relaxin on rat atrial myocytes. I. Inhibition of I(to) via PKA-dependent phosphorylation. Piedras-Rentería ES, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1791–7
Effects of relaxin on rat atrial myocytes. II. Increased calcium influx derived from action potential prolongation. Piedras-Rentería ES, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1798–803
Relaxin and estrogen synergistically accelerate growth and development in the uterine cervix of prepubertal pigs. Huang CJ, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):149–58
Relaxin and decidualization in mice: a reappraisal. Finn CA, et al. **Biol Reprod** 1996 Dec;55(6):1415–8
An autocrine/paracrine role of human decidual relaxin. II. Stromelysin-1 (MMP-3) and tissue inhibitor of matrix metalloproteinase-1 (TIMP-1). Qin X, et al. **Biol Reprod** 1997 Apr;56(4):812–20
An autocrine/paracrine role of human decidual relaxin. I. Interstitial collagenase (matrix metalloproteinase-1) and tissue plasminogen activator. Qin X, et al. **Biol Reprod** 1997 Apr;56(4):800–11
Effects of relaxin on lactational performance in ovariectomized gilts. Zaleski HM, et al. **Biol Reprod** 1996 Sep;55(3):671–5
Relaxin and breast cancer. Bani D. **Bull Cancer** 1997 Feb; 84(2):179–82
Evidence that endogenous relaxin promotes growth of the vagina and uterus during pregnancy in gilts. Min G, et al. **Endocrinology** 1997 Feb;138(2):560–5
Relaxin increases insulin-like growth factors (IGFs) and IGF-binding proteins of the pig uterus in vivo. Ohleth KM, et al. **Endocrinology** 1997 Sep;138(9):3652–8
The effect of relaxin on collagen metabolism in the nonpregnant rat pubic symphysis: the influence of estrogen and progesterone in regulating relaxin activity. Samuel CS, et al. **Endocrinology** 1996 Sep;137(9):3884–90
The chemical synthesis of rat relaxin and the unexpectedly high potency of the synthetic hormone in the mouse. Büllesbach EE, et al. **Eur J Biochem** 1996 Oct 15; 241(2):533–7
No effects of human relaxin on the active and passive biomechanical properties of isolated cervical specimens from nonpregnant women. Petersen LK, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jun;73(2):183–7
The effects of relaxin on the response of intramammary pressure and mammary blood flow to exogenous oxytocin in the goat. Peaker M, et al. **Exp Physiol** 1995 Nov; 80(6):1047–52
Relaxin, a potent microcirculatory effector, is not angiogenic. Norrby K, et al. **Int J Microcirc Clin Exp** 1996 Sep–Oct; 16(5):227–31
Relaxin binds to and elicits a response from cells of the human monocytic cell line, THP-1. Parsell DA, et al. **J Biol Chem** 1996 Nov 1;271(44):27936–41
Relaxin induces an extracellular matrix-degrading phenotype in human lung fibroblasts in vitro and inhibits lung fibrosis in a murine model in vivo. Unemori EN, et al. **J Clin Invest** 1996 Dec 15;98(12):2739–45
Relaxin stimulates atrial natriuretic peptide secretion in perfused rat heart. Toth M, et al. **J Endocrinol** 1996 Sep; 150(3):487–95

Distribution of Fos immunoreactivity in the lamina terminalis and hypothalamus induced by centrally administered relaxin in conscious rats. McKinley MJ, et al. **J Neuroendocrinol** 1997 Jun;9(6):431–7

The role of a cAMP-dependent pathway in the uterine relaxant action of relaxin in rats. Hughes SJ, et al. **J Reprod Fertil** 1997 Mar;109(2):289–96

Relaxin-induced expression of Fos in the forebrain of the late pregnant rat. Heine PA, et al. **Neuroendocrinology** 1997 Jul;66(1):38–46

PHYSIOLOGY

Relaxin modulates the ovulatory process and increases secretion of different gelatinases from granulosa and theca-interstitial cells in rats. Hwang JJ, et al. **Biol Reprod** 1996 Dec;55(6):1276–83

An autocrine/paracrine role of human decidual relaxin. I. Interstitial collagenase (matrix metalloproteinase-1) and tissue plasminogen activator. Qin X, et al. **Biol Reprod** 1997 Apr;56(4):800–11

A speculative review of parturition in the mare. Thorburn GD. **Equine Vet J Suppl** 1993 Apr;(14):41–9 (72 ref.)

Relaxin: a pleiotropic hormone. Bani D. **Gen Pharmacol** 1997 Jan;28(1):13–22 (136 ref.)

The role of relaxin in glycodelin secretion. Stewart DR, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):839–46

Evidence that systemic relaxin promotes moderate water consumption during late pregnancy in rats. Omi EC, et al. **J Endocrinol** 1997 Apr;153(1):33–40

SECRETION

Pattern and source of secretion of relaxin in the reproductive cycle of the spotted hyena (Crocuta crocuta). Steinetz BG, et al. **Biol Reprod** 1997 May;56(5):1301–6

THERAPEUTIC USE

Effects of porcine relaxin on induced parturition in beef heifers. Smith DE, et al. **Domest Anim Endocrinol** 1996 Nov;13(6):469–76

Relaxin counteracts asthma-like reaction induced by inhaled antigen in sensitized guinea pigs. Bani D, et al. **Endocrinology** 1997 May;138(5):1909–15

TOXICITY

Twelve-month evaluation of rhesus monkey dams and infants after relaxin (hRlx-2) infusion in late pregnancy. Golub MS, et al. **Reprod Toxicol** 1996 Jan-Feb;10(1):29–36

URINE

Urinary excretion of relaxin after estradiol treatment of postmenopausal women. Lippert TH, et al. **Clin Exp Obstet Gynecol** 1996;23(2):65–9

RELIABILITY AND VALIDITY see **REPRODUCIBILITY OF RESULTS**

RELIEF WORK

Evaluating the international humanitarian system: rationale, process and management of the joint evaluation of the international response to the Rwanda genocide. Dabelstein N. **Disasters** 1996 Dec;20(4):286–94

Knowledge and power: a critique of an international relief operation. Hendrie B. **Disasters** 1997 Mar;21(1):57–76

Ten criteria for evaluating the management of community disasters. Quarantelli EL. **Disasters** 1997 Mar;21(1):39–56

Setting and evaluating the energy content of emergency rations. Schofield EC, et al. **Disasters** 1996 Sep; 20(3):248–60

Food aid and nutritional programmes during the Rwandan emergency. Shoham J. **Disasters** 1996 Dec;20(4):338–52

An assessment of disaster risk and its management in Thailand. Shook G. **Disasters** 1997 Mar;21(1):77–88

Doing the right thing: relief agencies, moral dilemmas and responsibility in political emergencies and war. Slim H. **Disasters** 1997 Sep;21(3):244–57 (15 ref.)

Exploring the determinants of support provision: provider characteristics, personal networks, community contexts, and support following life events. Haines VA, et al. **J Health Soc Behav** 1996 Sep;37(3):252–64 (48 ref.)

Operation Harlech, September 1995. Gibson AR. **J R Nav Med Serv** 1996 Spring;82(1):15–7

Voluntary and professional disaster-workers: similarities and differences in reactions. Dyregrov A, et al. **J Trauma Stress** 1996 Jul;9(3):541–55

A piece of my mind. Fanya kazi pamoja. Austin E. **JAMA** 1997 Sep 3;278(9):697

What kind of volunteering is this, anyway? Metalios E. **JAMA** 1996 Nov 6;276(17):1439

Humanitarianism under the gun. Sharp VL, et al. **JAMA** 1997 Jul 9;278(2):160

Physician, nurse relief workers killed in Rwanda [news] Voelker R. **JAMA** 1997 Feb 12;277(6):446

Refugee relief rations [letter] Boelaert M, et al. **Lancet** 1997 Jun 14;349(9067):1775

Targeting the vulnerable in emergency situations: who is vulnerable? [see comments] Davis AP. **Lancet** 1996 Sep 28;348(9031):868–71. Comment in: Lancet 1996 Sep 28;348(9031):840. Comment in: Lancet 1996 Dec 14;348(9042):1663.

Vulnerability in emergency situations [editorial; comment] Toole MJ. **Lancet** 1996 Sep 28;348(9031):840. Comment on: Lancet 1996 Sep 28;348(9031):868–71.

What should be done in acute emergencies? [letter; comment] Van Damme W, et al. **Lancet** 1996 Dec 14;348(9042):1663. Comment on: Lancet 1996 Sep 28;348(9031):868–71.

Utilization of Special Forces medical assets during disaster relief: the Hurricane Andrew experience. Godbee DC, et al. **Mil Med** 1997 Feb;162(2):92–5

Military medicine in operations other than war. Part II: Humanitarian relief missions for Naval Reserve fleet hospitals. Ryals PA, et al. **Mil Med** 1996 Sep;161(9):502–4

Army community health nurses' role in humanitarian relief effort, Operation Sea Signal, Guantanamo Bay, Cuba. Samuels GL. **Mil Med** 1997 Mar;162(3):190–3

Illnesses and injuries reported at Disaster Application Centers following the 1994 Northridge Earthquake. Teeter DS. **Mil Med** 1996 Sep;161(9):526–30

Waging a noble war against a river. Carter KR, et al. **Minn Med** 1997 Aug;80(8):12–3, 57

Going to Extremes. Feldman MK. **Minn Med** 1997 Jan; 80(1):8–10

Rescue worker and population protection in large-scale contamination disasters. Koscheyev VS, et al. **Minn Med** 1997 Jan;80(1):23–7

Public health response to the 1997 Minnesota flood. Lessons learned. Leitheiser AT, et al. **Minn Med** 1997 Aug; 80(8):25–8

Floodwaters bring docs to the front. Stensrud KM. **Minn Med** 1997 Aug;80(8):14–9

Disaster response in North Carolina. Alson RL, et al. **N C Med J** 1997 Jul-Aug;58(4):248–52

Lessons learned from providing disaster counseling after TWA flight 800. Cohen NL. **Psychiatr Serv** 1997 Apr; 48(4):461–2

Health sector approach to vulnerability reduction and emergency preparedness. Ben Yahmed S, et al. **World Health Stat Q** 1996;49(3–4):172–8

[Catastrophy management in the large clinic. Bridges between fundamental research and rescue practice] Kröger F, et al. **Gesundheitswesen** 1997 Jul;59(7):473–8 (Eng. Abstr.) **(Ger)**

[Avalanche emergency. New aspects of the pathophysiology and therapy of buried avalanche victims] Brugger H, et al. **Wien Klin Wochenschr** 1997 Mar 14;109(5):145–59 (114 ref.) (Eng. Abstr.) **(Ger)**

HISTORY

Historical roots of famine relief paradigms: ideas on dependency and free trade in India in the 1870s. Hall-Matthews D. **Disasters** 1996 Sep;20(3):216–30

ORGANIZATION & ADMINISTRATION

The public health aspects of complex emergencies and refugee situations. Toole MJ, et al. **Annu Rev Public Health** 1997;18:283–312 (61 ref.)

Estimating the capacity of warehouses. Cosgrave J. **Disasters** 1997 Jun;21(2):155–65 (31 ref.)

Refugee density and dependence: practical implications of camp size. Cosgrave J. **Disasters** 1996 Sep;20(3):261–70 (11 ref.)

Social contract and deterring famine: first thoughts. de Waal A. **Disasters** 1996 Sep;20(3):194–205 (25 ref.)

The symphony of the damned: racial discourse, complex political emergencies and humanitarian aid. Duffield M. **Disasters** 1996 Sep;20(3):173–93 (45 ref.)

First International Conference on Emergency Settlement, University of Wisconsin, Madison, Wisconsin, 15–20 April 1996. Hamilton D. **Disasters** 1996 Dec;20(4):353–6

From relief to development: food for work in Bangladesh. Hyder M. **Disasters** 1996 Mar;20(1):21–33

Information exchange in the disaster zone: interaction between aid workers and recipients in south Sudan. Jok JM. **Disasters** 1996 Sep;20(3):206–15 (6 ref.)

Disaster management and government intervention in PNG: the case of Lae. Kaitilla S, et al. **Disasters** 1996 Mar; 20(1):61–7

The fate of information in the disaster zone [editorial] Keen D, et al. **Disasters** 1996 Sep;20(3):169–72

A disaster continuum [letter; comment] Kelly C. **Disasters** 1996 Sep;20(3):276–7. Comment on: Disasters 1995 Dec;19(4):362–6.

Conflict, the continuum and chronic emergencies: a critical analysis of the scope for linking relief, rehabilitation and development planning in Sudan. Macrae J, et al. **Disasters** 1997 Sep;21(3):223–43 (23 ref.)

Cruel wars and safe havens: humanitarian aid in Liberia 1989–1996. Outram Q. **Disasters** 1997 Sep;21(3):189–205 (60 ref.)

Workshop on refugees, energy and environment, Nairobi, Kenya, 28–30 November 1995. Owen M, et al. **Disasters** 1996 Sep;20(3):274–5

Local institutional development and relief in Ethiopia: a kire-based seed distribution programme in North Wollo. Pratten DT. **Disasters** 1997 Jun;21(2):138–54

Disaster mitigation, preparedness and response: an audit of UK assets. Sanderson D. **Disasters** 1996 Sep;20(3):271–3

Research in the war zones of Eritrea and northern Ethiopia. Silkin T, et al. **Disasters** 1997 Jun;21(2):166–76 (15 ref.)

A research note about military-civilian humanitarianism: more questions than answers. Weiss TG. **Disasters** 1997 Jun;21(2):95–117 (116 ref.)

The role of the community health nurse in military humanitarian operations: lessons from operation sea signal--Guantanamo Bay, Cuba. Samuels GL, et al. **J Community Health Nurs** 1997;14(2):73–9

Rwanda 1994: a study of medical support in military humanitarian operations. Hawley A. **J R Army Med Corps** 1997 Jun;143(2):75–82

Emergency medical aid is not for amateurs [editorial] [see comments] **Lancet** 1996 Nov 23;348(9039):1393. Comment in: Lancet 1997 Jan 18;349(9046):212–3. Comment in: Lancet 1997 Jan 18;349(9046):213.

Emergency medical aid for refugees [letter; comment] Banatvala N, et al. **Lancet** 1997 Jan 18;349(9046):212–3. Comment on: Lancet 1996 Nov 23;348(9039):1393.

Emergency medical aid for refugees [letter; comment] Boelaert M, et al. **Lancet** 1997 Jan 18;349(9046):213. Comment on: Lancet 1996 Nov 23;348(9039):1393.

Training for operational readiness [letter] Knuth TE. **Mil Med** 1997 Aug;162(8):iv, xiii

Psychosocial support in war areas using community-based rehabilitation strategy [letter] Kocijan-Hercigonja D, et al. **Scand J Soc Med** 1997 Mar;25(1):14–6

SUMA (Supply Management Project), a management tool for post-disaster relief supplies. de Ville de Goyet C, et al. **World Health Stat Q** 1996;49(3–4):189–94

[The All-Russia Disaster Medical Service in the organization of the cleanup of the aftermath of radiation accidents] Avetisov GM, et al. **Voen Med Zh** 1996 Jun;317(6):47–56 **(Rus)**

[The organization of the work of the State Epidemiological Health Service of the Russian Federation in ensuring the sanitary and epidemiological wellbeing of refugees and forced migrants] Khalilullina AS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 May-Jun; (3):52–7 **(Rus)**

STANDARDS

An account of co-ordination mechanisms for humanitarian assistance during the international response to the 1994 crisis in Rwanda. Borton J. **Disasters** 1996 Dec; 20(4):305–23

Standardization of health relief items needed in the early phase of emergencies. Gray R. **World Health Stat Q** 1996; 49(3–4):218–20

STATISTICS & NUMERICAL DATA

Risk of heat-related injury to disaster relief workers in a slow-onset flood disaster. Dellinger AM, et al. **J Occup Environ Med** 1996 Jul;38(7):689–92

RELIGION

Practical issues when confronting the patient who refuses blood transfusion therapy. Bennett DR, et al. **Am J Clin Pathol** 1997 Apr;107(4 Suppl 1):S23–7 (17 ref.)

Religious orientation and pain management. Low JF. **Am J Occup Ther** 1997 Mar;51(3):215–9 (22 ref.)

Religion, psychopathology, and substance use and abuse; a multimeasure, genetic-epidemiologic study. Kendler KS, et al. **Am J Psychiatry** 1997 Mar;154(3):322–9

Religion index for psychiatric research [letter] Koenig H, et al. **Am J Psychiatry** 1997 Jun;154(6):885–6

Frequent attendance at religious services and mortality over 28 years. Strawbridge WJ, et al. **Am J Public Health** 1997 Jun;87(6):957–61

Towards wholeness: transcending the barriers between religion and psychiatry [editorial] Carey G. **Br J Psychiatry** 1997 May;170:396–7

Age and religion selection biases in HIV-1 prevalence data from antenatal clinics in Manicaland, Zimbabwe. Gregson S, et al. **Cent Afr J Med** 1995 Nov;41(11):339–46

Family values, religiosity, and emotional reactions to schizophrenia in Mexican and Anglo-American cultures. Weisman AG, et al. **Fam Process** 1996 Jun;35(2):227–37

Age differences in patterns and correlates of the frequency of prayer. Levin JS, et al. **Gerontologist** 1997 Feb; 37(1):75–88

Religiosity and perceived rewards of black and white caregivers. Picot SJ, et al. **Gerontologist** 1997 Feb; 37(1):89–101

Post-coital sperm retrieval could lead to the wider approval of assisted conception by some religions. Hirsh A. **Hum Reprod** 1996 Feb;11(2):245–7 (26 ref.)

Epidemiology of inflammatory bowel disease in different ethnic and religious groups: limitations and aetiological clues. Probert CS, et al. **Int J Colorectal Dis** 1996;11(1):25–8 (29 ref.)

Religious affiliation and all-cause mortality: a prospective population study in middle-aged men in eastern Finland. Räsänen J, et al. **Int J Epidemiol** 1996 Dec;25(6):1244–9

The relation of religious preference and practice to depressive symptoms among 1,855 older adults. Kennedy GJ, et al. **J Gerontol B Psychol Sci Soc Sci** 1996 Nov;51(6):P301–8

Religion and subjective health among black and white elders. Musick MA. **J Health Soc Behav** 1996 Sep;37(3):221–37 (60 ref.)

Holy water--a risk factor for hospital-acquired infection [see comments] Rees JC, et al. **J Hosp Infect** 1996 Jan;32(1):51–5. Comment in: J Hosp Infect 1996 Aug;33(4):301. Comment in: J Hosp Infect 1996 Aug;33(4):302. Comment in: J Hosp

Infect 1997 Jan;35(1):71–2.
Exploring a fourth dimension: spirituality as a resource for the couple therapist. Anderson DA, et al. **J Marital Fam Ther** 1997 Jan;23(1):3–12 (32 ref.)
The religious needs and resources of psychiatric inpatients. Fitchett G, et al. **J Nerv Ment Dis** 1997 May;185(5):320–6
Psychiatrist explores apocalyptic violence in Heaven's Gate and Aum Shinrikyo cults [news] Lamberg L. **JAMA** 1997 Jul 16;278(3):191–3
Compatibility of Islam and science [letter] Pearlstein E. **Nature** 1997 May 29;387(6632):448
Wellness spirituality in the older adult. Assessment and intervention protocol. Leetun MC. **Nurse Pract** 1996 Aug; 21(8):60, 65–70 (36 ref.)
Psychosocial and spiritual issues in terminal care. Kashiwagi T. **Psychiatry Clin Neurosci** 1995 May;49 Suppl 1:S123–7 (4 ref.)
Suicide in Indian states and religion. Lester D. **Psychol Rep** 1996 Aug;79(1):342
Racial differences in adolescent drug use: the impact of religion. Amey CH, et al. **Subst Use Misuse** 1996 Aug; 31(10):1311–32
Living donor transplantation: ethical, social, legal and religious aspects in Albania. Myftar B, et al. **Transplant Proc** 1996 Dec;28(6):3582–3
[Neurobiology of the numinous] Rubia Vila FJ. **An R Acad Nac Med (Madr)** 1996;113(2):513–27; discussion 528–31 **(Spa)**

PSYCHOLOGY see RELIGION AND PSYCHOLOGY

RELIGION AND MEDICINE

Children, medicine, religion, and the law. Swan R. **Adv Pediatr** 1997;44:491–543 (205 ref.)
Doctor, why won't the pain go away? [editorial] Crenshaw R. **Ala Med** 1996 Feb–Apr;65(8–10):23–4
Was the fetal alcohol syndrome recognized in the ancient Near East? Abel EL. **Alcohol Alcohol** 1997 Jan–Feb; 32(1):3–7
Comments on the nature of prayer research [letter; comment] Miners S. **Altern Ther Health Med** 1997 Jul;3(4):19–20, 22 . Comment on: Altern Ther Health Med 1997 Mar;3(2):8–15.
Medical student and patient attitudes toward religion and spirituality in the recovery process. Goldfarb LM, et al. **Am J Drug Alcohol Abuse** 1996 Nov;22(4):549–61
Cistercian medicinal herbs for renal therapy in the 15th century. Iorio L, et al. **Am J Nephrol** 1997;17(3–4):286–8
Influence of Judaism and Jewish physicians on Greek and Byzantine medicine and their contribution to nephrology. Massry SG, et al. **Am J Nephrol** 1997;17(3–4):233–40
Roles of religiousness and spirituality in medical rehabilitation and the lives of persons with disabilities. A commentary. Underwood-Gordon L, et al. **Am J Phys Med Rehabil** 1997 May–Jun;76(3):255–7
Life without hemoglobin [editorial] Zander R, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):488–90 **(Eng, Ger)**
Severe hyponatremia after "purification" [letter] al-Zaki T, et al. **Ann Emerg Med** 1997 Jan;29(1):194–5
On the spirituality of the doctor–patient relationship. Voljč B. **Ann N Y Acad Sci** 1997 Feb 20;809:80–2
The papal contribution to the development of modern medicine. Weisz GM. **Aust N Z J Surg** 1997 Jul;67(7):472–5
Urological treatments in Byzantine hagiographical texts (324–1453 AD): miracles or reality? Lascaratos J, et al. **Br J Urol** 1997 Feb;79(2):153–8
Minority minors and moral research medicine. Bonkovsky FO. **Camb Q Healthc Ethics** 1997 Winter;6(1):39–47
Open-heart surgery in Jehovah's Witness patients. Chikada M, et al. **Cardiovasc Surg** 1996 Jun;4(3):311–4
A sixth-century Irish headache cure and its use in a south German monastery. Isler H, et al. **Cephalalgia** 1996 Dec; 16(8):536–40
Medical abortion: ethics, laws and religious points of view, A study by the 1994–1995 Ethics and Morals Committee of the ISPN. Hirsch JF, et al. **Childs Nerv Syst** 1996 Sep; 12(9):507–14
Patron saints of medicine. Peltier LF. **Clin Orthop** 1997 Jan; (334):374–9
What went wrong: multiple perspectives on an adolescent's decision to refuse blood transfusions [see comments] Lawry K, et al. **Clin Pediatr (Phila)** 1996 Jun;35(6):317–21. Comment in: Clin Pediatr (Phila) 1996 Jun;35(6):327–8.
Failure to thrive during Ramadan: a patient report. Najib N, et al. **Clin Pediatr (Phila)** 1996 Jun;35(6):323–5
Liver transplantation for fulminant hepatic failure in a Jehovah's Witness. Seu P, et al. **Clin Transplant** 1996 Oct; 10(5):404–7
Spiritual issues and bioethics in the intensive care unit: the role of the chaplain. Wagner JT, et al. **Crit Care Clin** 1996 Jan;12(1):15–27 (09 ref.)
Illness and morality in the Mombasa Swahili community: a metaphorical model in an Islamic culture. Swartz MJ. **Cult Med Psychiatry** 1997 Mar;21(1):89–114
Magico-religious mercury exposure [letter; comment] Wendroff AP. **Environ Health Perspect** 1997 Mar; 105(3):266. Comment on: Environ Health Perspect 1996 Aug;104(8):826–30.
Teaching tips for clinical faculty from the Zen tradition. Neher JO, et al. **Fam Med** 1997 Jul–Aug;29(7):513–6
Religious issues in the capacity evaluation. Waldfogel S, et al. **Gen Hosp Psychiatry** 1996 May;18(3):173–82
Religious insistence on medical treatment. Christian theology and re-imagination. Connors RB Jr, et al. **Hastings Cent Rep** 1996 Jul–Aug;26(4):23–30
Choosing to die [see comments] Botticelli MG. **Hawaii Med J** 1996 Dec;55(12):257. Comment in: Hawaii Med J 1996 Dec;55(12):255–6.
Cultural issues in death and dying. Braun KL, et al. **Hawaii Med J** 1996 Dec;55(12):260–4
A view of death and dying among the Chinese and Japanese. Char DF, et al. **Hawaii Med J** 1996 Dec;55(12):286–90, 295
Euthanasia: murder or mercy? Phifer KW. **Hawaii Med J** 1996 Dec;55(12):270–2, 292
Religious affiliation and all-cause mortality: a prospective population study in middle-aged men in eastern Finland. Räsänen J, et al. **Int J Epidemiol** 1996 Dec;25(6):1244–9
Successful treatment of a Jehovah's Witness with acute promyelocytic leukemia [letter] Fujita H, et al. **Int J Hematol** 1997 Jun;65(4):415–6
Gems from the Talmud public health in Jewish lore: physicians' fees. Kottek SS. **Isr J Med Sci** 1996 Nov; 32(11):1147–9
Death: an enemy? Reflections on 1 Corinthians 15:26. Fleischmann RR. **Issues Law Med** 1996 Spring;11(4):411–30
Religious discrimination in the selection of medical students: a case study. Gunn AE, et al. **Issues Law Med** 1996 Spring; 11(4):363–78
Encyclical, Evangelium Vitae. Paul PJ 2d. **Issues Law Med** 1996 Spring;11(4):443–53
Separation of church and state (of health) [editorial] Parmley WW. **J Am Coll Cardiol** 1996 Oct;28(4):1047–8
Open heart operations without transfusion using a multimodality blood conservation strategy in 50 Jehovah's Witness patients: implications for a "bloodless" surgical technique. Rosengart TK, et al. **J Am Coll Surg** 1997 Jun; 184(6):618–29
Jehovah's Witnesses: unique problems in a unique trauma population. Victorino G, et al. **J Am Coll Surg** 1997 May; 184(5):458–68
Religious freedom, reproductive health care, and hospital mergers. Gallagher J. **J Am Med Womens Assoc** 1997 Spring;52(2):65–8
Spirituality in the chronos of AIDS [editorial] O'Kane P. **J Assoc Nurses AIDS Care** 1996 Jul–Aug;7(4):17–8
Ramadan fasting--effects on health and disease. Malik GM, et al. **J Assoc Physicians India** 1996 May;44(5):332–4 (15 ref.)
High risk cardiac surgery in Jehovah's Witnesses. Grebenik CR, et al. **J Cardiovasc Surg (Torino)** 1996 Oct;37(5):511–5
Anemia and perioperative myocardial ischemia in a Jehovah's Witness patient. Botero C, et al. **J Clin Anesth** 1996 Aug; 8(5):386–91
Prayer in office practice [letter; comment] Daaleman TP. **J Fam Pract** 1997 Jun;44(6):525–6. Comment on: J Fam Pract 1997 Mar;44(3):254–6.
Integrating faith and illness into practice [letter; comment] Lijoi AF. **J Fam Pract** 1997 Jul;45(1):15. Comment on: J Fam Pract 1997 Mar;44(3):254–6.
Prayer in office practice: on the threshold of integration [editorial] [see comments] Magaletta PR, et al. **J Fam Pract** 1997 Mar;44(3):254–6. Comment in: J Fam Pract 1997 Jun;44(6):525–6. Comment in: J Fam Pract 1997 Jul;45(1):15.
Principles of practice concerning the Jewish patient. Rosner F. **J Gen Intern Med** 1996 Aug;11(8):486–9
Faith-based health needs assessment: implications for empowerment of the Faith community. Cook C. **J Health Care Poor Underserved** 1997 Aug;8(3):300–1; discussion 302
New insights and interventions: churches uniting to reach the African American community with health information. Sanders EC 2nd. **J Health Care Poor Underserved** 1997 Aug;8(3):373–5; discussion 375–6
The bone called luz. Reichman E, et al. **J Hist Med Allied Sci** 1996 Jan;51(1):52–65
Use of holy water in hospitals [letter; comment] [see comments] Galloway A. **J Hosp Infect** 1996 Aug;33(4):302 . Comment on: J Hosp Infect 1996 Jan;32(1):51–5. Comment in: J Hosp Infect 1997 Jan;35(1):71–2.
Holy water--a risk factor for hospital-acquired infection [letter; comment] Nye K. **J Hosp Infect** 1996 Aug;33(4):301 . Comment on: J Hosp Infect 1996 Jan;32(1):51–5.
A daily devotional [editorial] Burns CD. **J Ky Med Assoc** 1997 Jun;95(6):245
Requests for "inappropriate" treatment based on religious beliefs. Orr RD, et al. **J Med Ethics** 1997 Jun;23(3):142–7
Buddhism, euthanasia and the sanctity of life. Perrett RW. **J Med Ethics** 1996 Oct;22(5):309–13
The Catholic physician and the teachings of Roman Catholicism. Llano A. **J Med Philos** 1996 Dec;21(6):639–49
Routine neonatal circumcision: symbol of the birth of the therapeutic state. Szasz T. **J Med Philos** 1996 Apr; 21(2):137–48
Public health--everybody's business: inequalities in health. St. Catherine's College, Oxford, 14–15 December 1995. The Church and inequalities in health. Harries R. **J Public Health Med** 1997 Mar;19(1):61–4
Fire walking in Singapore: a profile of the burn patient. Sayampanathan SR, et al. **J R Coll Surg Edinb** 1997 Apr; 42(2):131–4
Religion and spirituality in medicine: research and education. Levin JS, et al. **JAMA** 1997 Sep 3;278(9):792–3
A piece of my mind. For everything a blessing. Prager KM. **JAMA** 1997 May 28;277(20):1589
Xenotransplantation: social, ethical, religious, and political issues. First MR. **Kidney Int Suppl** 1997 Mar;58:S46–7
The Islamic view in genetic preventive procedures [letter] el-Hashemite N. **Lancet** 1997 Jul 19;350(9072):223
Court ruling means that Egypt embraces female circumcision again [news] Kandela P. **Lancet** 1997 Jul 5;350(9070):41
Discourse, power, and the diagnosis of weakness: encountering practitioners in Bangladesh. Wilce JM. **Med Anthropol Q** 1997 Sep;11(3):352–74
Holy springs and Protestantism in early modern Denmark: a medical rationale for a religious practice. Johansen JC. **Med Hist** 1997 Jan;41(1):59–69
A need for options [letter] Dorsen PJ. **Minn Med** 1996 Dec; 79(12):43
On science and the soul [editorial] Meyer C. **Minn Med** 1996 Dec;79(12):2
Involuntary confinement for tuberculosis control: the Jewish view. Rosner F. **Mt Sinai J Med** 1996 Jan;63(1):44–8 (27 ref.)
Interview with Mark Aita, MD, SJ [interview by Robin K. Levinson] Aita M. **N J Med** 1997 May;94(5):23–4
Neurosurgery and the Holy Bible. Moskopp D. **Neurosurg Rev** 1996;19(2):97–104
Doctor James Young Simpson, Rabbi Abraham De Sola, and Genesis Chapter 3, verse 16. Cohen J. **Obstet Gynecol** 1996 Nov;88(5):895–8
Chaplaincy: a continuum of caring. Handzo RG. **Oncology (Huntingt)** 1996 Sep;10(9 Suppl):45–7
Open heart surgery in the pediatric Jehovah's Witness population: no longer "Russian roulette" [letter] Rosengart TK, et al. **Pediatr Cardiol** 1997 May–Jun;18(3):245–6
Religious objections to medical care. American Academy of Pediatrics Committee on Bioethics. **Pediatrics** 1997 Feb; 99(2):279–81
Testing the power of belief [letter; comment] [see comments] Heilig JS. **Science** 1997 May 9;276(5314):881. Comment on: Science 1997 Apr 18;276(5311):357–9. Comment in: Science 1997 Jun 13;276(5319):1630–1. Comment in: Science 1997 Jun 13;276(5319):1631.
Morbidity and Irish Catholic descent in Britain: an ethnic and religious minority 150 years on. Abbotts J, et al. **Soc Sci Med** 1997 Jul;45(1):3–14
The spiritual dimension of hospice: the secularization of an ideal. Bradshaw A. **Soc Sci Med** 1996 Aug;43(3):409–19 (44 ref.)
Attitudes and beliefs within the Sikh community regarding organ donation: a pilot study. Exley C, et al. **Soc Sci Med** 1996 Jul;43(1):23–8
The healing significance of the Negev's Bedouin Dervish. al-Krenawi A, et al. **Soc Sci Med** 1996 Jul;43(1):13–21
How religion influences morbidity and health: reflections on natural history, salutogenesis and host resistance. Levin JS. **Soc Sci Med** 1996 Sep;43(5):849–64 (67 ref.)
Dilemmas and solutions for the pathologist and clinician encountering religious views of the autopsy [see comments] Davis GJ, et al. **South Med J** 1996 Nov;89(11):1041–4 (29 ref.). Comment in: South Med J 1996 Nov;89(11):1125–6.
Autopsy consent and family resistance: the role of the clinician [editorial; comment] Hill RB. **South Med J** 1996 Nov;89(11):1125–6. Comment on: South Med J 1996 Nov;89(11):1041–4.
Article is excellent overview of spiritual side of health [letter] Morrow J. **Tex Med** 1996 Feb;92(2):9–10
Duties to science, duties to God: medical theory, physiology, and the discourse on morality in nineteenth-century America. Mullins JA. **Trans Stud Coll Physicians Phila** 1995 Dec;17:45–60
[Sects, sectarisms and authentic spiritual pathways: can we learn to discern between them in order to counsel?] Wulliemier F. **Rev Med Suisse Romande** 1997 Jun; 117(6):525–33 (24 ref.) **(Fre)**
[Comment on the Mini-Symposium, "Extreme anemia in transfusion refusal" (letter)] Biscoping J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):470, 472–3 **(Ger)**
[Legal comment on refusal of blood transfusions] Bock RW. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):506–7 **(Ger)**
[Tolerating extreme intraoperative blood loss by a Jehovah's Witness patient] Busse J, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):498–501 **(Ger)**
[Arguments of Jehovah's Witnesses for refusing blood transfusions] Kahle R, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):490–1 **(Ger)**
[Noninvasive monitoring of cerebral oxygen saturation after severe craniocerebral trauma in a Jehovah's witness] Logemann F, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jun; 32(6):385–90 (Eng. Abstr.) **(Ger)**
[Has evolution made a mistake? Living with hemoglobin! (letter)] Michaelis G. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):471–3 **(Ger)**
[Fatal hemorrhagic shock in a Jehovah's Witness] Schweitzer M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct;

31(8):504–6 **(Ger)**

[Survival of very severe hemorrhage-induced anemia in a Jehovah's Witness] Tessmann R, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):501–4 **(Ger)**

[Oxygen supply and acid-base status in extreme anemia] Zander R. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):492–4 (30 ref.) **(Ger)**

[History of menstruation—an aspect of the medical history of the woman] Backe J. **Gynakol Geburtshilfliche Rundsch** 1996;36(4):201–7 (Eng. Abstr.) **(Ger)**

[Leprosy in a mural of Monreale] Knipp D. **Medizinhist J** 1997;32(1):3–27 **(Ger)**

["Born from the flank"—discussion concerning "cesarean section" in animals in the Talmud] Schäffer J. **Sudhoffs Arch Z Wissenschaftsgesch** 1996;80(2):198–204 (Eng. Abstr.) **(Ger)**

[Geriatric orthopedic treatment of Jehovah's Witnesses?] Schulz R, et al. **Versicherungsmedizin** 1997 Apr 1;49(2):52–5 (Eng. Abstr.) **(Ger)**

[Cardiopulmonary resuscitation already in Egypt 5,000 years ago?] Ocklitz A. **Wien Klin Wochenschr** 1997 Jun 6; 109(11):406–12 (Eng. Abstr.) **(Ger)**

[Theological moral considerations of advance directives] Virt G. **Wien Med Wochenschr** 1997;147(6):130–4 (Eng. Abstr.) **(Ger)**

[Halachic aspects of the right of the terminally ill to know] Weiner Y. **Harefuah** 1997 Jun 15;132(12):894–6 **(Heb)**

[Religious affiliation and mental health—is there a connection? Health survey in Finnmark 1990] Arnes SM, et al. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3598–601 (Eng. Abstr.) **(Nor)**

[Martin Luther's somatic diseases. A short life-history 450 years after his death] Iversen OH. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3643–6 (Eng. Abstr.) **(Nor)**

[Euthanasia, abortion, ethics, religion and medicine (letter)] Molvaer OI. **Tidsskr Nor Laegeforen** 1996 Oct 20; 116(25):3047 **(Nor)**

[Asklepius. The compassionate god] Vatle A. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3607–10 (Eng. Abstr.) **(Nor)**

[Truths and misconceptions about human diseases, medicine and therapy] Dizdarević Z, et al. **Med Arh** 1997; 51(1–2):15–6 (Eng. Abstr.) **(Scr)**

[Medical aspects of fasting] Gavrankapetanović F. **Med Arh** 1997;51(1–2):25–7 (Eng. Abstr.) **(Scr)**

[The effect of Islam on the development of health conditions worldwide and in Bosnia] Konjhodžić F. **Med Arh** 1997; 51(1–2):17–9 (Eng. Abstr.) **(Scr)**

[Public health and Islam (editorial)] Mašić I. **Med Arh** 1997; 51(1–2):3–4 **(Scr)**

[Achlak and professional ethics of the therapeutic professions] Mašić I. **Med Arh** 1997;51(1–2):31–4 (Eng. Abstr.) **(Scr)**

[AIDS and Islam] Ridanović Z. **Med Arh** 1997;51(1–2):45–6 (Eng. Abstr.) **(Scr)**

[Logic-delirium dualism in the thinking of Martin Luther and its subsequent evolution to religious reform. Medico-psychological essay of the personality of the heretic monk] Alvarez-Sala Moris J. **An R Acad Nac Med (Madr)** 1996;113(2):279–310 **(Spa)**

[Judaism and medical development. Saving a life is saving a world] Einhorn S. **Lakartidningen** 1997 Jan 8;94(1–2):62–4 **(Swe)**

[Jehovah's witnesses and blood transfusion (see comments)] Jacobsson L. **Lakartidningen** 1996 Sep 18;93(38):3227. Comment in: Lakartidningen 1996 Dec 4;93(49):4523. **(Swe)**

[Ramadan. A month of fasting with risk for both nocturnal overeating, dehydration and starving] Rössner S. **Lakartidningen** 1997 May 21;94(21):2017 **(Swe)**

[A high price for religious faith] Oostvogel P. **Nord Med** 1997 Jan;112(1):7–8 **(Swe)**

RELIGION AND PSYCHOLOGY

What do Israeli Jewish and Arab adolescents know about drinking and driving? Weiss S. **Accid Anal Prev** 1996 Nov; 28(6):765–9

Religiosity as a protective or prognostic factor of depression in later life; results from a community survey in The Netherlands. Braam AW, et al. **Acta Psychiatr Scand** 1997 Sep;96(3):199–205

Lifestyle and risk of premature sexual activity in a high school population of Seventh-Day Adventists: Valuegenesis 1989. Weinbender ML, et al. **Adolescence** 1996 Summer;31(122):265–81

Spirituality in medicine [news] Moore NG. **Altern Ther Health Med** 1996 Nov;2(6):24–6, 103–5

"When I am lonely the mountains call me": the impact of sacred geography on Navajo psychological well being. Griffin-Pierce T. **Am Indian Alsk Native Ment Health Res** 1997;7(3):1–10

Control beliefs and faith as stress moderators for Korean American versus Caucasian American protestants. Bjorck JP, et al. **Am J Community Psychol** 1997 Feb;25(1):61–72

Characteristics of participants in secular organizations for sobriety (SOS). Connors GJ, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):281–95

Psychosocial predictors of mental health in a population of elderly women. Test of an explanatory model. Bienenfeld D, et al. **Am J Geriatr Psychiatry** 1997 Winter;5(1):43–53

Modeling the cross-sectional relationships between religion, physical health, social support, and depressive symptoms. Koenig HG, et al. **Am J Geriatr Psychiatry** 1997 Spring; 5(2):131–44

Religion and psychiatry [letter] Arya DK. **Aust N Z J Psychiatry** 1997 Aug;31(4):606

Spirituality and psychiatry [letter] Avery TL. **Aust N Z J Psychiatry** 1997 Aug;31(4):606–7

Religion, spirituality and psychiatry: conceptual, cultural and personal challenges. Turbott J. **Aust N Z J Psychiatry** 1996 Dec;30(6):720–7; discussion 728–30 (65 ref.)

Experiences in religious psychotherapy [letter] Varma S, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):147–9

Religion and psychiatry [letter] Varma SL, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):604–6

Quaker belief and child psychiatry [letter; comment] Allchin WH. **Br J Psychiatry** 1996 Oct;169(4):526. Comment on: Br J Psychiatry 1996 Jul;169(1):1–5.

Quaker belief and child psychiatry [editorial] [see comments] Graham P. **Br J Psychiatry** 1996 Jul;169(1):1–5. Comment in: Br J Psychiatry 1996 Oct;169(4):526.

Delusion, the overvalued idea and religious beliefs: a comparative analysis of their characteristics. Jones E, et al. **Br J Psychiatry** 1997 Apr;170:381–6

Issues in forensic psychiatry in Islamic jurisprudence. Chaleby KS. **Bull Am Acad Psychiatry Law** 1996; 24(1):117–24 (21 ref.)

Political bias, moral values, and spirituality in the training of psychotherapists. Aponte HJ. **Bull Menninger Clin** 1996 Fall;60(4):488–502

The antichrist delusion as a delusional misidentification syndrome of the self [letter] Silva JA, et al. **Can J Psychiatry** 1997 Feb;42(1):90

Psychological aspects of sexual functioning among cleric and noncleric alleged sex offenders. Haywood TW, et al. **Child Abuse Negl** 1996 Jun;20(6):527–36

Religiosity and suicide: findings from a nationwide psychological autopsy study. Sorri H, et al. **Crisis** 1996; 17(3):123–7

A comparison of the geometric reasoning of students attending Israeli ultraorthodox and mainstream schools. Dembo Y, et al. **Dev Psychol** 1997 Jan;33(1):92–103

Knowledge and experience of drug use amongst church affiliated young people. Cook CC, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):9–17

The impact of personality and religion on attitude towards substance use among 13–15 year olds. Francis LJ. **Drug Alcohol Depend** 1997 Mar 14;44(2–3):95–103

Ethnic and religious identity and some age characteristics of alcohol use. Akabaliev V, et al. **Folia Med (Plovdiv)** 1996;38(3–4):5–10

Religious issues in the capacity evaluation. Waldfogel S, et al. **Gen Hosp Psychiatry** 1996 May;18(3):173–82

Religious attendance and psychological well-being in Mexican Americans: a panel analysis of three-generations data. Levin JS, et al. **Gerontologist** 1996 Aug;36(4):454–63

Nurses' willingness to care for AIDS patients and spirituality, social support, and death anxiety. Sherman DW. **Image J Nurs Sch** 1996 Fall;28(3):205–13

Winnicott and the capacity to believe. Hopkins B. **Int J Psychoanal** 1997 Jun;78 (Pt 3):485–97

The Yiddish theatre, the Oklahoma theatre and Kafka's salvation. Jeffrey WD. **Int J Psychoanal** 1995 Oct;76 (Pt 5):1007–15

Towards a rhetoric of spirituality in mental health care. Nolan P, et al. **J Adv Nurs** 1997 Aug;26(2):289–94 (27 ref.)

The macho Don Juan: a reply to Javier and Yussef [comment] Díaz de Chumaceiro CL. **J Am Acad Psychoanal** 1996 Fall; 24(3):555–62. Comment on: J Am Acad Psychoanal 1995 Spring;23(1):79–97.

Beyond unity: religious experience, creativity, and psychology. Fauteux K. **J Am Acad Psychoanal** 1995 Winter;23(4):619–34

Faith and denial. Stern T. **J Am Acad Psychoanal** 1996 Fall; 24(3):545–54

Coping with crises: an examination of the impact of traumatic events on religious beliefs. Overcash WS, et al. **J Genet Psychol** 1996 Dec;157(4):455–64

The relation of religious preference and practice to depressive symptoms among 1,855 older adults. Kennedy GJ, et al. **J Gerontol B Psychol Sci Soc Sci** 1996 Nov;51(6):P301–8

Death anxiety and the paranormal: the primacy of belief over experience. Lange R, et al. **J Nerv Ment Dis** 1997 Sep; 185(9):584–6

The neural substrates of religious experience. Saver JL, et al. **J Neuropsychiatry Clin Neurosci** 1997 Summer; 9(3):498–510 (145 ref.)

Chronic and predispositional guilt: relations to mental health, prosocial behavior, and religiosity. Quiles ZN, et al. **J Pers Assess** 1997 Aug;69(1):104–26

Stress resilience, locus of control, and religion in children of Holocaust victims. Baron L, et al. **J Psychol** 1996 Sep; 130(5):513–25

Religious ritual and dissociation in India and Australia. Dorahy MJ, et al. **J Psychol** 1997 Sep;131(5):471–6

A comparison of the effects of sacred and secular music on elderly people. Lowis MJ, et al. **J Psychol** 1997 Jan; 131(1):45–55

Difficulties in integrating spirituality into psychotherapy. Schultz-Ross RA, et al. **J Psychother Pract Res** 1997 Spring;6(2):130–8

Changes in premarital counseling as related to older cohorts of married couples. Schumm W, et al. **J Sex Marital Ther** 1997 Summer;23(2):98–102

Religiosity and sphere-specific just world beliefs in 16- to 18-year-olds. Crozier S, et al. **J Soc Psychol** 1997 Aug; 137(4):510–3

Prayer and self-esteem among 8- to 11-year-olds in the United Kingdom. Francis LJ, et al. **J Soc Psychol** 1996 Dec;136(6):791–3

Church attendance, denomination, and suicide ideology. Siegrist M. **J Soc Psychol** 1996 Oct;136(5):559–66

"Cults"—can the law and medicine mitigate the damage they do? Hornby SA. **Med Leg J** 1996;64 (Pt 4):158–73

Measuring religiousness of parents of children with developmental disabilities. Haworth AM, et al. **Ment Retard** 1996 Oct;34(5):271–9

The healing power of spirituality. Colón K. **Minn Med** 1996 Dec;79(12):12–8

A call for open mindedness. George P. **Minn Med** 1996 Dec; 79(12):10–1, 46

Healing body and spirit. Sugerman D. **Minn Med** 1996 Dec; 79(12):8–9, 44–5

Spiritual well-being, religiosity, hope, depression, and other mood states in elderly people coping with cancer. Fehring RJ, et al. **Oncol Nurs Forum** 1997 May;24(4):663–71

"I would kill in God's name:" role of sex, weekly church attendance, report of a religious experience, and limbic lability. Persinger MA. **Percept Mot Skills** 1997 Aug; 85(1):128–30

Suicide and Hinduism [letter; comment] Ineichen B. **Psychiatr Serv** 1996 Oct;47(10):1128. Comment on: Psychiatr Serv 1996 May;47(5):517–21.

A case of possessive state with onset influenced by 'door-to-door' sales. Satoh S, et al. **Psychiatry Clin Neurosci** 1996 Dec;50(6):313–6

The imaginative use of religious symbols in subjective experiences of anorexia nervosa. Banks CG. **Psychoanal Rev** 1997 Apr;84(2):227–36

Psychoanalysis and Kabbalah. Berke JH. **Psychoanal Rev** 1996 Dec;83(6):849–63

Spiritual healing and human development in the Native American church: toward a cultural psychiatry of peyote. Calabrese JD. **Psychoanal Rev** 1997 Apr;84(2):237–55

T. S. Eliot: his religion, his poetry, his roles. Sherman MH. **Psychoanal Rev** 1997 Feb;84(1):73–107

The state component in self-reported worldviews and religious beliefs of older adults: the MacArthur Successful Aging Studies. Kim JE, et al. **Psychol Aging** 1996 Sep; 11(3):396–407

On sin, symptom substitution, and simplicity: a response to "preventing relapse in weight control" [comment] Baker RC. **Psychol Rep** 1996 Apr;78(2):680–2. Comment on: Psychol Rep 1995 Oct;77(2):651–6.

Religion and psychological well-being in later life. Francis LJ, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):1050

Prayer, church attendance, and personality revisited: a study among 16- to 19-yr.-old girls. Francis LJ, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1265–6

Religiosity in adolescence and young adulthood: implications for identity formation. Glover RJ. **Psychol Rep** 1996 Apr; 78(2):427–31

Religion and suicide. Lester D. **Psychol Rep** 1996 Jun;78(3 Pt 2):1090

Comment on "catholicism and indices of social pathology in the states" [comment] Lester D. **Psychol Rep** 1997 Jun; 80(3 Pt 1):1005–6. Comment on: Psychol Rep 1995 Apr;76(2):573–4.

Possession by the 'Zar' among Ethiopian immigrants to Israel: psychopathology or culture-bound syndrome? Grisaru N, et al. **Psychopathology** 1997;30(4):223–33

Magico-religious beliefs and psychosis. Vlachos IO, et al. **Psychopathology** 1997 Mar-Apr;30(2):93–9

Religious involvement and depression in older Dutch citizens. Braam AW, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):284–91

Experiences of religious healing in psychiatric patients in south India. Campion J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May;32(4):215–21

The costs and benefits of boundary maintenance: stress, religion and culture among Jews in Britain. Loewenthal KM, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May; 32(4):200–7

The church and community psychiatric services in a region of northern Norway. Sørgaard KW, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Sep;31(5):266–71

Wat Thamkrabok: a Buddhist drug rehabilitation program in Thailand. Barrett ME. **Subst Use Misuse** 1997 Mar; 32(4):435–59

The influence of religious affiliation on sociocultural predictors of drinking among Black and White Americans. Herd D. **Subst Use Misuse** 1996 Jan;31(1):35–63

Spiritual interventions provided by mental health nurses. Tuck I, et al. **West J Nurs Res** 1997 Jun;19(3):351–63

[God is dead—Friedrich Nietzsche's Oedipus complex] Wilkes J. **Prax Kinderpsychol Kinderpsychiatr** 1997 Apr; 46(4):268–77 (Eng. Abstr.) **(Ger)**

[Significance of membership in new religious movements for regulation of self concept exemplified by the Hare Krischna movement] Kraus D, et al. **Psychother Psychosom Med Psychol** 1997 Jan;47(1):21–6

RELIGION AND PSYCHOLOGY

(Eng. Abstr.) **(Ger)**

[Who and why accept new religions?] Inoue M. **Seishin Shinkeigaku Zasshi** 1996;98(9):590–6 (6 ref.) **(Jpn)**

[Religion and psychology—review of the concept] Tsuchiya H. **Seishin Shinkeigaku Zasshi** 1996;98(9):583–90 (14 ref.) **(Jpn)**

[Religious affiliation and mental health—is there a connection? Health survey in Finnmark 1990] Arnes SM, et al. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3598–601 (Eng. Abstr.) **(Nor)**

[Ibn Sina—psychology and psychological disorders] Cerić I, et al. **Med Arh** 1997;51(1–2):21–3 (Eng. Abstr.) **(Scr)**

RELIGION AND SCIENCE

The word of God and the word of science: nutrition science and the Jewish dietary laws in Germany, 1820–1920. Schlich T. **Clio Med** 1995;32:97–128

Nehushtan: the Tower of Babel, diversity or guidelines. Goihman–Yahr M. **Int J Dermatol** 1997 May;36(5):338–9

Facing creationist challenges. Walker PL. **Lancet** 1996 Nov 23;348(9039):1397–8

Papal confession: Darwin was right about evolution [news] Abbott A. **Nature** 1996 Oct 31;383(6603):753

Geologist loses 'creationism' challenge [news] Pockley P. **Nature** 1997 Jun 5;387(6633):540

The fourth state of consciousness: the Thuriya Avastha. Ramamurthi B. **Psychiatry Clin Neurosci** 1995 May; 49(2):107–10 (0 ref.)

Science and God: a warming trend? [news] Easterbrook G. **Science** 1997 Aug 15;277(5328):890–3

Evolution teaching [letter; comment] Edge D. **Science** 1996 Nov 8;274(5289):904. Comment on: Science 1996 Jul 26;273(5274):420–2.

Evolution teaching [letter; comment] Erpino MJ. **Science** 1996 Nov 8;274(5289):904. Comment on: Science 1996 Jul 26;273(5274):420–2.

The Vatican's position evolves [news] Holden C. **Science** 1996 Nov 1;274(5288):717

Evolution teaching [letter] Silverstein TP. **Science** 1996 Nov 8;274(5289):904–5

Duties to science, duties to God: medical theory, physiology, and the discourse on morality in nineteenth–century America. Mullins JA. **Trans Stud Coll Physicians Phila** 1995 Dec;17:45–60

[Contribution of Arab–Islamic bibliographies to the development of science] Budalica A. **Med Arh** 1997; 51(1–2):61–2 (Eng. Abstr.) **(Scr)**

RELIGION AND SEX

Female genital mutilation: an overview. Wright J. **J Adv Nurs** 1996 Aug;24(2):251–9 (54 ref.)

The macho Don Juan: a reply to Javier and Yussef [comment] Díaz de Chumaceiro CL. **J Am Acad Psychoanal** 1996 Fall; 24(3):555–62. Comment on: J Am Acad Psychoanal 1995 Spring;23(1):79–97.

Homosexuality and totalitarianism. Birken L. **J Homosex** 1997;33(1):1–16

Jewish responses to AIDS. Schlesinger Y, et al. **J Homosex** 1997;33(1):17–34

Therapeutic implications of conservative clergy views on sexuality: an empirical analysis. Kennedy P, et al. **J Sex Marital Ther** 1997 Summer;23(2):140–53

T. S. Eliot: his religion, his poetry, his roles. Sherman MH. **Psychoanal Rev** 1997 Feb;84(1):73–107

Religious crusade. School health is at center of battle for control of state's education system. Ortolon K. **Tex Med** 1996 Feb;92(2):30–3

RELIGIOUS BELIEFS see **RELIGION**

RELIGIOUS HOSPITALS see **HOSPITALS, RELIGIOUS**

REMANTADINE see **RIMANTADINE**

REMEDIAL TEACHING

Remediation of sentence processing deficits in aphasia using a computer–based microworld. Crerar MA, et al. **Brain Lang** 1996 Jan;52(1):229–75

Assessing the elements contributing to a "mapping" deficit: a targeted treatment study. Haendiges AN, et al. **Brain Lang** 1996 Jan;52(1):276–302

The treatment of anomia resulting from output lexical damage: analysis of two cases. Miceli G, et al. **Brain Lang** 1996 Jan;52(1):150–74

Training wh–question production in agrammatic aphasia: analysis of argument and adjunct movement. Thompson CK, et al. **Brain Lang** 1996 Jan;52(1):175–228

Premorbid and postmorbid school functioning in bipolar adolescents: description and suggested academic interventions. Quackenbush D, et al. **Can J Psychiatry** 1996 Feb;41(1):16–22

Instrument for locating students with suspected learning disabilities: a quantitative approach. Engel R. **Int J Rehabil Res** 1997 Jun;20(2):169–81

Effects of response cards during lesson closure on the academic performance of secondary students in an earth science course. Cavanaugh RA, et al. **J Appl Behav Anal** 1996 Fall;29(3):403–6

The remediation of executive functions in children with cognitive disorders: the Vygotsky–Luria neuropsychological approach. Akhutina TV. **J Intellect Disabil Res** 1997 Apr;41 (Pt 2):144–51

A training procedure for remediating WCST deficits in chronic psychotic patients: an adaptation of errorless learning principles. Kern RS, et al. **J Psychiatr Res** 1996 Jul–Aug;30(4):283–94

Effects of achievement motivation and study habits on Nigerian secondary school students' academic performance. Jegede JO, et al. **J Psychol** 1997 Sep; 131(5):523–9

K–TEA Mathematics scores of learning disabled students in resource and inclusive settings. Brasher G, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):773–4

Remediation of children with developmental language disorders. Dunn M. **Semin Pediatr Neurol** 1997 Jun; 4(2):135–42 (22 ref.)

REMINDER SYSTEMS

Evaluation of three methods for improving mammography rates in a managed care plan. Davis NA, et al. **Am J Prev Med** 1997 Jul–Aug;13(4):298–302

Use of automated reminders for tuberculin skin test return. Tanke ED, et al. **Am J Prev Med** 1997 May–Jun; 13(3):189–92

Borderline mnemonic [letter] Senger HL. **Am J Psychiatry** 1997 Sep;154(9):1321

The effectiveness of a mail reminder system for depot medroxyprogesterone injections. Madlon–Kay DJ. **Arch Fam Med** 1996 Apr;5(4):234–6

Registers, recalls and reminders. Frank OR. **Aust Fam Physician** 1997 Jan;26(1):42–7

Tetanus boosters not cost–effective [letter] Rosser WW. **Can Fam Physician** 1997 May;43:841

The effect of patient and physician reminders on use of screening mammography in a health maintenance organization. Results of a randomized controlled trial. Burack RC, et al. **Cancer** 1996 Oct 15;78(8):1708–21

Effectiveness of a call/recall system in improving compliance with cervical cancer screening: a randomized controlled trial [see comments] Buehler SK, et al. **CMAJ** 1997 Sep 1;157(5):521–6. Comment in: CMAJ 1997 Sep 1;157(5):543–5.

Pharmaceuticals. A dose of reality. Meyer H. **Hosp Health Netw** 1997 May 20;71(10):73–4

A randomized trial of "corollary orders" to prevent errors of omission. Overhage JM, et al. **J Am Med Inform Assoc** 1997 Sep–Oct;4(5):364–75

A meta–analysis of 16 randomized controlled trials to evaluate computer–based clinical reminder systems for preventive care in the ambulatory setting [see comments] Shea S, et al. **J Am Med Inform Assoc** 1996 Nov–Dec; 3(6):399–409. Comment in: ACP J Club 1997 May–Jun;126(3):80.

A test of two interventions to improve compliance with scheduled mammography appointments [see comments] Margolis KL, et al. **J Gen Intern Med** 1996 Sep; 11(9):539–41. Comment in: J Gen Intern Med 1996 Sep;11(9):563–4.

A randomized trial to improve follow–up care in severe uncontrolled hypertensives at an inner–city walk–in clinic. Ahluwalia JS, et al. **J Health Care Poor Underserved** 1996 Nov;7(4):377–89

Evaluation of NeuroPage: a new memory aid. Wilson BA, et al. **J Neurol Neurosurg Psychiatry** 1997 Jul;63(1):113–5

Computer reminders improve on–time immunization rates. Alemi F, et al. **Med Care** 1996 Oct;34(10 Suppl):OS45–51

Computer–generated recall letters for underimmunized children: how cost–effective? Lieu TA, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):28–33

Electronically distributed, computer–generated, individualized feedback enhances the use of a computerized practice guideline. Lobach DF. **Proc AMIA Annu Fall Symp** 1996;:493–7

Representing CARE rules in a decision–theoretic formalism. Wagner MM, et al. **Proc AMIA Annu Fall Symp** 1996; :582–6

Older women and physical activity: using the telephone to walk. Jarvis KL, et al. **Womens Health Issues** 1997 Jan–Feb; 7(1):24–9

INSTRUMENTATION

Improving oral medication compliance with an electronic aid. Szeto AY, et al. **IEEE Eng Med Biol Mag** 1997 May–Jun;16(3):48–54, 58

STANDARDS

Recruiting women for breast screening. Family Physician Model strategy [see comments] McAuley RG, et al. **Can Fam Physician** 1997 May;43:883–8. Comment in: Can Fam Physician 1997 May;43 :821–2, 826–7.

Understanding and enhancing compliance with the second dose of hepatitis B vaccine: a cohort analysis and a randomized controlled trial. Sellors J, et al. **CMAJ** 1997 Jul 15;157(2):143–8

Compliance with mammography screening in Israeli women: the impact of a pre–scheduled appointment and of the letter–style. Ore L, et al. **Isr J Med Sci** 1997 Feb; 33(2):103–11

A randomized trial of the impact of telephone and recorded delivery reminders on the response rate to research questionnaires. Tai SS, et al. **J Public Health Med** 1997 Jun;19(2):219–21

Promoting screening mammography in inner–city settings. The sustained effectiveness of computerized reminders in a randomized controlled trial. Burack RC, et al. **Med Care** 1997 Sep;35(9):921–31

STATISTICS & NUMERICAL DATA

Types of advance notification in reminder letters and response rates [letter] Koo MM, et al. **Epidemiology** 1996 Mar;7(2):215–6

REMISSION INDUCTION

see related

DISEASE–FREE SURVIVAL

Clear clinical remission of a diffuse metastasized ovarian clear cell carcinoma with third line chemotherapy. Debois JM. **Acta Obstet Gynecol Scand** 1997 Aug;76(7):709–12

[IDA–FLAG (idarubicin, fludarabine, high dosage cytarabine and G–CSF)—an effective therapy regimen in treatment of recurrent acute myelocytic leukemia in children and adolescents. Initial results of a pilot study] Fleischhack G, et al. **Klin Padiatr** 1996 Jul–Aug; 208(4):229–35 (Eng. Abstr.) **(Ger)**

[SCE rate and lymphocyte differentiation in children with acute lymphoblastic leukemia and SCE rates of leukemia patients in long–term remission] Mertens R, et al. **Klin Padiatr** 1996 Mar–Apr;208(2):73–6 (Eng. Abstr.) **(Ger)**

REMISSION, SPONTANEOUS

Connectionist modeling of the recovery of language functions following brain damage. Harley TA. **Brain Lang** 1996 Jan; 52(1):7–24 (71 ref.)

REMISSION, SPONTANEOUS NEOPLASM see **NEOPLASM REGRESSION, SPONTANEOUS**

REMOTE CONSULTATION

Teaching interviewing skills using telecommunications [letter] Antonelli MA, et al. **Acad Med** 1996 May;71(5):418

Videoconferencing systems [letter] Reznich CB. **Acad Med** 1997 Jul;72(7):565–6

Pediatric radiology at a rural hospital: value of teleradiology and subspecialty consultation. Franken EA Jr, et al. **AJR Am J Roentgenol** 1997 May;168(5):1349–52

A remote conference system for image diagnosis on the World–Wide Web. Ohki M, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):627–9

Telemedicine in Psychiatry: making the dream reality [letter] Bear D, et al. **Am J Psychiatry** 1997 Jun;154(6):884–5

E–mail therapy [letter] Rothchild E. **Am J Psychiatry** 1997 Oct;154(10):1476–7

The department without walls. Acceptability, cost, and utilization of interactive video technology. Crump WJ, et al. **Arch Fam Med** 1997 May–Jun;6(3):273–8

The electronic house call. Consequences of telemedicine consultations for physicians, patients, and society. Ostbye T, et al. **Arch Fam Med** 1997 May–Jun;6(3):266–71

Transcontinental consults in surgical pathology via the Internet. Eusebi V, et al. **Hum Pathol** 1997 Jan;28(1):13–6

Diagnostic accuracy of an international static–imaging telepathology consultation service. Halliday BE, et al. **Hum Pathol** 1997 Jan;28(1):17–21

Reliability of dermatology teleconsultations with the use of teleconferencing technology. Phillips CM, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):398–402

Dobutamine stress tele–echocardiography for evaluation of emergency department patients with chest pain. Trippi JA, et al. **J Am Coll Cardiol** 1997 Sep;30(3):627–32

Remote analysis of physiological data from neurosurgical ICU patients [published erratum appears in J Am Med Inform Assoc 1997 Jan–Feb;4(1):70] Nenov V, et al. **J Am Med Inform Assoc** 1996 Sep–Oct;3(5):318–27

Applicability of telemedicine for assessing patients with schizophrenia: acceptance and reliability. Zarate CA Jr, et al. **J Clin Psychiatry** 1997 Jan;58(1):22–5

Remote stereotactic visualization for image–guided surgery: technical innovation. Millesi W, et al. **J Craniomaxillofac Surg** 1997 Jun;25(3):136–8

Teleradiology for remote diagnosis: a prospective multi–year evaluation. Gale ME, et al. **J Digit Imaging** 1997 May; 10(2):47–50

Personal computer teleradiology interhospital image transmission of neonatal radiographs to facilitate tertiary neonatology telephone consultation and patient transfer. Yamamoto LG, et al. **J Perinatol** 1996 Jul–Aug;16(4):292–8

Medical decision support for remote general practitioners using telemedicine. Armstrong IJ, et al. **J Telemed Telecare** 1997;3(1):27–34

Telepsychiatry: 'tele' yes, but what about the 'psychiatry'? Baigent MF, et al. **J Telemed Telecare** 1997;3 Suppl 1:3–5

A referrer and patient evaluation of a telepsychiatry consultation–liaison service in South Australia. Clarke PH. **J Telemed Telecare** 1997;3 Suppl 1:12–4

Benefits and pitfalls of telemedicine in neurosurgery. Gray W, et al. **J Telemed Telecare** 1997;3(2):108–10

Is there a role for telemedicine in an urban environment? Harrison RM, et al. **J Telemed Telecare** 1997;3 Suppl 1:15–7
Distributed clinical neurophysiology. Loula P, et al. **J Telemed Telecare** 1997;3(2):89–95
A portable digital imaging system in dermatology: diagnostic and educational applications. Lyon CC, et al. **J Telemed Telecare** 1997;3 Suppl 1:81–3
Interpersonal communications and telemedicine: hypotheses and methods. McLaren PM, et al. **J Telemed Telecare** 1997; 3 Suppl 1:5–7
Remote consultation for computerized tomography and magnetic resonance studies by means of teleradiology--experience at the Singapore General Hospital. Png MA, et al. **J Telemed Telecare** 1997;3 Suppl 1:54–5
Teledermatology trial in Finland [letter] Suhonen R. **J Telemed Telecare** 1997;3(1):61–2
Using the Internet for rapid exchange of photographs and X-ray images to evaluate potential extremity replantation candidates. Buntic RF, et al. **J Trauma** 1997 Aug; 43(2):342–4
Telesurgical consultation. Cheriff AD, et al. **J Urol** 1996 Oct; 156(4):1391–3
Minds and machines. Interactive voice response technology to detect mental disorders [editorial; comment] Glass RM. **JAMA** 1997 Sep 17;278(11):945–6. Comment on: JAMA 1997 Sep 17;278(11):905–10.
A computer-administered telephone interview to identify mental disorders [see comments] Kobak KA, et al. **JAMA** 1997 Sep 17;278(11):905–10. Comment in: JAMA 1997 Sep 17;278(11):945–6.
HIV risk assessment: a video doctor seeks patient disclosure. Gerbert B, et al. **MD Comput** 1997 Jul–Aug;14(4):288–94
Extended telemedical consultation using Arden Syntax based decision support, hypertext and WWW technique. Karlsson D, et al. **Methods Inf Med** 1997 Feb;36(2):108–14
Fine-needle aspiration cytology of the breast: a preliminary report on telepathology through Internet multimedia electronic mail. Della Mea V, et al. **Mod Pathol** 1997 Jun; 10(6):636–41
Diagnostic accuracy of teledermatology: results of a preliminary study in New Zealand. Oakley AM, et al. **N Z Med J** 1997 Feb 28;110(1038):51–3
Assessment of a cooperative workstation. Beuscart RJ, et al. **Proc AMIA Annu Fall Symp** 1996;:742–6
[Evaluation of pediatric advise asked by telephone in emergency units] Carbajal R, et al. **Arch Pediatr** 1996 Oct; 3(10):959–63 (Eng. Abstr.) **(Fre)**
[Telephonic advice by an emergency department given in a simulated pediatric case] Carbajal R, et al. **Arch Pediatr** 1996 Oct;3(10):964–8 (Eng. Abstr.) **(Fre)**
[Teleradiology: use of multimedia PC for access to electronic patient records and teleconsultation] Ricke J, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Aug;165(2):188–91 (Eng. Abstr.) **(Ger)**
[The internet--its uses in traumatology] Willy C, et al. **Unfallchirurg** 1997 Feb;100(2):159–67 (Eng. Abstr.) **(Ger)**
[Electronic medical consultation] Deutsch T. **Orv Hetil** 1997 Jun 8;138(23):1515–7 (Eng. Abstr.) **(Hun)**
[The digital image archive--its clinical applications and importance in cardiology consulting by telemedicine] Fiuza M, et al. **Rev Port Cardiol** 1997 Feb;16(2):127–39, 123 (44 ref.) (Eng. Abstr.) **(Por)**
[Patient in the IT-age (letter)] Hellsing AL. **Lakartidningen** 1997 Sep 10;94(37):3128 **(Swe)**

INSTRUMENTATION

A field trial of the NASA Telemedicine Instrument Pack in a family practice. Crump WJ, et al. **Aviat Space Environ Med** 1996 Nov;67(11):1080–5
Effect of camera performance on diagnostic accuracy: preliminary results from the Northern Ireland arms of the UK Multicentre Teledermatology Trial. Loane MA, et al. **J Telemed Telecare** 1997;3(2):83–8
Preliminary results from the Northern Ireland arms of the UK Multicentre Teledermatology Trial: effect of camera performance on diagnostic accuracy. Loane MA, et al. **J Telemed Telecare** 1997;3 Suppl 1:73–5
[Radiologic medical desktop conferences--clinical evaluation of the KAMEDIN teleradiology system in routine practice of a radiologic institute] Bolte R, et al. **Aktuelle Radiol** 1996 Jul;6(4):199–202 (Eng. Abstr.) **(Ger)**
[Technical requirements and possibilities of teleconsultation in laparoscopic interventions] Ungeheuer A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:628–30 (Eng. Abstr.) **(Ger)**
[Scientific role of German ophthalmology in the European telecommunication project OPHTEL] Mertz M, et al. **Ophthalmologe** 1997 Jul;94(7):523–8 (Eng. Abstr.) **(Ger)**

METHODS

The substitution of digital images for dermatologic physical examination. Kvedar JC, et al. **Arch Dermatol** 1997 Feb; 133(2):161–7
Practising oncology via telemedicine. Doolittle GC, et al. **J Telemed Telecare** 1997;3(2):63–70 (14 ref.)
Use of telecommunications in a rural emergency. Brain surgery by fax. Rottger J, et al. **J Telemed Telecare** 1997; 3(1):59–60
Diabetes intervention in the information age. Albisser AM, et al. **Med Inf (Lond)** 1996 Oct–Dec;21(4):297–316
Telepathologic review: utility, diagnostic accuracy, and interobserver variability on a difficult case consultation service. Raab SS, et al. **Mod Pathol** 1997 Jun;10(6):630–5

ORGANIZATION & ADMINISTRATION

Telephone medical care administered by internal medicine residents: concerns of program directors and implications for residency training. Cykert S, et al. **Am J Med Sci** 1997 Sep;314(3):198–202
Teleconsultation: a new neurosurgical image transfer system for daily routine and emergency cases--a four-year study. Urban V, et al. **Eur J Emerg Med** 1996 Mar;3(1):5–8
Implementation of in-home telemedicine in rural kansas: answering an elderly patient's needs [see comments] Lindberg CC. **J Am Med Inform Assoc** 1997 Jan–Feb; 4(1):14–7. Comment in: J Am Med Inform Assoc 1997 Jan–Feb;4(1):69–70.
A novel tele-medical environment appropriate for use in tele-advisory and tele-surgery cases. Chatzipapadopoulos F, et al. **Technol Health Care** 1996 Aug;4(2):187–91

STANDARDS

Agreement between face-to-face and telephone-administered mood ratings in patients with rapid cycling bipolar disorder. Feldman-Naim S, et al. **Psychiatry Res** 1997 Jul 4;71(2):129–32

STATISTICS & NUMERICAL DATA

Can telemedicine be used to improve communication between primary and secondary care? [see comments] Harrison R, et al. **BMJ** 1996 Nov 30;313(7069):1377–80; discussion 1380–1. Comment in: BMJ 1997 Feb 15;314(7079):520–1.

TRENDS

Innovators. Sign on and say 'ah-h-h-h-h'. Greene J. **Hosp Health Netw** 1997 Apr 20;71(8):45–6
Telemedicine and geriatric psychiatry. Jones BN 3rd, et al. **Psychiatr Serv** 1997 Jun;48(6):783–5
Telemedicine in emergency psychiatry. Meltzer B. **Psychiatr Serv** 1997 Sep;48(9):1141–2
[Possibilities of telecommunications in surgery] Feussner H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:525–7 (Eng. Abstr.) **(Ger)**

UTILIZATION

Teleradiology consultation for a rural hospital: patterns of use. Franken EA Jr, et al. **Acad Radiol** 1997 Jul;4(7):492–6

REMOTE OPERATIONS (ROBOTICS) see **ROBOTICS**

REMOXIPRIDE

ADVERSE EFFECTS

Quality of life and response of negative symptoms in schizophrenia to haloperidol and the atypical antipsychotic remoxipride. The Canadian Remoxipride Group. Awad AG, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):244–8
[Difference in prolaction response of schizophrenic patients to equivalent doses of haloperidol, remoxipride and sulpiride] Liu KL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1996 Dec; 12(12):685–90 (Eng. Abstr.) **(Chi)**

PHARMACOKINETICS

Disposition of remoxipride in plasma and cerebrospinal fluid in sheep. Main DC, et al. **J Vet Pharmacol Ther** 1996 Oct; 19(5):402–4

PHARMACOLOGY

Effects of remoxipride, an atypical antipsychotic, on cocaine self-administration in the rat using fixed- and progressive-ratio schedules of reinforcement. Bourland JA, et al. **Drug Alcohol Depend** 1995 Dec;40(2):111–4
Behavioural analysis of changes in nociceptive thresholds produced by remoxipride in sheep and rats. Main DC, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):221–31
An assessment of the peripheral antinociceptive potential of remoxipride, clonidine and fentanyl in sheep using the forelimb tourniquet. Main DC, et al. **J Vet Pharmacol Ther** 1997 Jun;20(3):220–8
Investigation into the antinociceptive potential of remoxipride administered intrathecally in sheep. Main DC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):524–30
Enhancement of latent inhibition in the rat by the atypical antipsychotic agent remoxipride. Trimble KM, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):809–16
Prolonged treatment with the atypical antipsychotic agent remoxipride reduces extracellular glutamate levels in the striatum of freely moving rats. Magnusson O, et al. **Pharmacol Toxicol** 1997 Jul;81(1):53–6

THERAPEUTIC USE

An atypical neuroleptic drug in the treatment of behavioural disturbances and psychotic symptoms in elderly people. Robertsson B, et al. **Dementia** 1996 May–Jun;7(3):142–6
Remoxipride in the treatment of levodopa-induced psychosis. Sandor P, et al. **J Clin Psychopharmacol** 1996 Oct; 16(5):395–9

RENAISSANCE MEDICINE see **HISTORY OF MEDICINE, MEDIEVAL**

RENAL AGENTS

ADMINISTRATION & DOSAGE

Prolongation of antidiuretic response to desmopressin acetate by iontophoretic transdermal delivery in rats. Nakakura M, et al. **Biol Pharm Bull** 1997 May;20(5):537–40
Hemostatic and fibrinolytic response to desmopressin in uremic patients. Chen KS, et al. **Blood Purif** 1997; 15(2):84–91
Long-term treatment of nocturnal enuresis with desmopressin intranasal spray. Uygur MC, et al. **Clin Pediatr (Phila)** 1997 Aug;36(8):455–9
Primary nocturnal enuresis and desmopressin treatment: do psychosocial factors affect outcome? Dittmann RW, et al. **Eur Child Adolesc Psychiatry** 1996 Jun;5(2):101–9
Oral desmopressin as a new treatment modality for primary nocturnal enuresis in adolescents and adults: a double-blind, randomized, multicenter study. Dutch Enuresis Study Group. Janknegt RA, et al. **J Urol** 1997 Feb;157(2):513–7
Oral desmopressin: a randomized double-blind placebo controlled study of effectiveness in children with primary nocturnal enuresis. Skoog SJ, et al. **J Urol** 1997 Sep;158(3 Pt 2):1035–40
Low-dose intranasal desmopressin (DDAVP) for uremic bleeding [letter] Ozen S, et al. **Nephron** 1997;75(1):119–20
Desmopressin tablet treatment: factors influencing gastrointestinal absorption. Rittig S, et al. **Scand J Urol Nephrol Suppl** 1997;183:51–2
Are repeated desmopressin treatment attempts successful? Wikström S, et al. **Scand J Urol Nephrol Suppl** 1997; 183:33–4; discussion 34–5
Effect of a 15-minute infusion of DDAVP on the pharmacokinetics and pharmacodynamics of REVASC during a four-hour intravenous infusion in healthy male volunteers. Amin DM, et al. **Thromb Haemost** 1997 Jan; 77(1):127–32

ADVERSE EFFECTS

Hyponatremia in patients with nocturnal enuresis treated with DDAVP. Robson WL, et al. **Eur J Pediatr** 1996 Nov; 155(11):959–62 (32 ref.)
Hyponatraemia and cerebral convulsion due to DDAVP administration in patients with enuresis nocturna or urine concentration testing [letter] Schwab M, et al. **Eur J Pediatr** 1997 Aug;156(8):668
Central nervous system ischemia after varicella infection and desmopressin therapy for enuresis. Wieting JM, et al. **J Am Osteopath Assoc** 1997 May;97(5):293–5
Intranasal desmopressin-associated hyponatremia: a case report and literature review. Bernstein SA, et al. **J Fam Pract** 1997 Feb;44(2):203–8 (21 ref.)
Water intoxication in a patient with the Prader-Willi syndrome treated with desmopressin for nocturnal enuresis. Robson WL, et al. **J Urol** 1997 Feb;157(2):646–7
Water intoxication in patients treated with desmopressin [comment] Robson WL. **Pharmacotherapy** 1996 Sep–Oct; 16(5):969–70. Comment on: Pharmacotherapy 1996 Jan–Feb;16(1):66–74.
[Remote effect of Tripterygium wilfordii and chlorambucil on the function of sex glands of child with nephropathy] Zhang WZ, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Feb; 16(2):113–4 **(Chi)**
[Acute water intoxication caused by intranasal desmopression--Minirin (see comments)] Jensen SS, et al. **Ugeskr Laeger** 1997 Jan 13;159(3):306–7 (Eng. Abstr.). Comment in: Ugeskr Laeger 1997 May 5;159(19):2889. **(Dan)**
[Acute water intoxication caused by intranasal desmopressin--Minirine (letter; comment)] Wagner A, et al. **Ugeskr Laeger** 1997 May 5;159(19):2889. Comment on: Ugeskr Laeger 1997 Jan 13;159(3):306–7. **(Dan)**
[Water intoxication following desmopressin overdose] Segal-Kuperschmit D, et al. **Harefuah** 1997 Apr 1; 132(7):465–7, 527, 526 (Eng. Abstr.) **(Heb)**

BLOOD

Intracranial volume receptors: possible role on ADH homeostatic control. Satta A, et al. **J Endocrinol Invest** 1996 Jul–Aug;19(7):455–62

DIAGNOSTIC USE

Effect of desmopressin on ACTH and cortisol secretion in states of ACTH excess. Colombo P, et al. **Clin Endocrinol (Oxf)** 1997 Jun;46(6):661–8

PHARMACOKINETICS

Improved oral delivery of desmopressin via a novel vehicle: mucoadhesive submicron emulsion. Ilan E, et al. **Pharm Res** 1996 Jul;13(7):1083–7
Bioavailability and pharmacokinetics of desmopressin in elderly men. Hougaard C, et al.

Scand J Urol Nephrol Suppl 1997;183:53–4

Desmopressin tablet treatment: factors influencing gastrointestinal absorption. Rittig S, et al. **Scand J Urol Nephrol Suppl** 1997;183:51–2

PHARMACOLOGY

Sex differences in the cardiovascular and renal actions of vasopressin in conscious rats. Wang YX, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R370–6

Platelet plasma membrane in subjects with primary nocturnal enuresis: effect of desmopressin. Giorgi PL, et al. **Biol Cell** 1996;86(2–3):135–7

Effect of pulse on iontophoretic delivery of desmopressin acetate in rats. Nakakura M, et al. **Biol Pharm Bull** 1996 May;19(5):738–40

Renal excretion and pharmacokinetics of foscarnet in HIV sero-positive patients: effect of probenecid pretreatment. Noormohamed FH, et al. **Br J Clin Pharmacol** 1997 Jan; 43(1):112–5

Effect of emodin on c-myc proto-oncongen expression in cultured rat mesangial cells. Liu ZH, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan;17(1):61–3

Abnormal desmopressin-induced forearm vasodilatation in patients with heart failure: dependence on nitric oxide synthase activity. Rector TS, et al. **Clin Pharmacol Ther** 1996 Dec;60(6):667–74

Vascular effects of [Arg8]vasopressin in the isolated perfused rat kidney. Barthelmebs M, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):325–32

Receptor subtype for vasopressin-induced release of nitric oxide from rat kidney. Hirata Y, et al. **Hypertension** 1997 Jan;29(1 Pt 1):58–64

Synthesis and secretion of natriuretic peptides in the hypertensive TGR(mREN-2)27 transgenic rat. Marttila M, et al. **Hypertension** 1996 Dec;28(6):995–1004

In human patients, vascular water retention during DDAVP-related hyponatremia occurs mainly in the plasma volume and not in the erythrocyte. Namias B, et al. **J Lab Clin Med** 1996 Dec;128(6):612–7

Role of protein phosphatase in the regulation of Na+-K+-ATPase by vasopressin in the cortical collecting duct. Blot-Chabaud M, et al. **J Membr Biol** 1996 Oct;153(3):233–9

V2 receptor antagonism of DDAVP-induced release of hemostasis factors in conscious dogs. Bernat A, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):597–602

Hyposmolality-induced enhancement of ADH action on amiloride-sensitive Isc in renal epithelial A6 cells. Niisato N, et al. **Jpn J Physiol** 1997 Feb;47(1):131–7

Cellular signaling and proliferative action of AVP in mesangium of SHR: effect of low density lipoprotein. Ishikawa S, et al. **Kidney Int** 1996 Nov;50(5):1506–14

Effect of vasopressin on intracellular Na+ concentration in cortical collecting duct. Breyer MD, et al. **Kidney Int Suppl** 1996 Dec;57:S57–61

Arginine vasopressin increases renal sodium excretion in the anesthetized rat through V1 receptors. Musabayane CT, et al. **Ren Fail** 1997 Jan;19(1):23–32

[The tyrosine kinase inhibitor genistein potentiates the antidiuretic effect of vasopressin and its analogs] Bagrov IaIu, et al. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):70–4 (Eng. Abstr.) **(Rus)**

[Protein phosphorylation in the vasopressin-sensitive sections of rat nephrons] Khegai II, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul;82(7):105–10 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

The effect of paclitaxel on the progression of polycystic kidney disease in rodents. Martinez JR, et al. **Am J Kidney Dis** 1997 Mar;29(3):435–44

Treatment of oligohydramnios with maternal 1-deamino-[8-D-arginine] vasopressin-induced plasma hypoosmolality. Ross MG, et al. **Am J Obstet Gynecol** 1996 May;174(5):1608–13

The effects of desmopressin and 6% hydroxyethyl starch on factor VIII:C [see comments] Conroy JM, et al. **Anesth Analg** 1996 Oct;83(4):804–7. Comment in: Anesth Analg 1997 Jun;84(6):1391.

DDAVP, thromboelastography, and uremia [letter] Pivalizza EG. **Anesth Analg** 1996 Nov;83(5):1132

Evaluation of a new point-of-care test that measures PAF-mediated acceleration of coagulation in cardiac surgical patients. Despotis GJ, et al. **Anesthesiology** 1996 Dec;85(6):1311–23

Desmopressin in the management of nocturia in patients with multiple sclerosis. A double-blind, crossover trial. Valiquette G, et al. **Arch Neurol** 1996 Dec;53(12):1270–5

Desmopressin and imipramine in the management of nocturnal enuresis: a multicentre study. Vertucci P, et al. **Br J Clin Pract** 1997 Jan-Feb;51(1):27–31

Desmopressin for nocturnal enuresis: urinary osmolality and response. Folwell AJ, et al. **Br J Urol** 1997 Sep;80(3):480–4

Primary nocturnal enuresis and desmopressin treatment: do psychosocial factors affect outcome? Dittmann RW, et al. **Eur Child Adolesc Psychiatry** 1996 Jun;5(2):101–9

Nocturnal enuresis and daytime wetting: a multicentric trial with oxybutynin and desmopressin. Caione P, et al. **Eur Urol** 1997;31(4):459–63

Central diabetes insipidus in dogs: 20 cases (1986–1995). Harb MF, et al. **J Am Vet Med Assoc** 1996 Dec 1;209(11):1884–8

DDAVP therapy controls bleeding in Ehlers-Danlos syndrome. Stine KC, et al. **J Pediatr Hematol Oncol** 1997 Mar-Apr;19(2):156–8

Cure of nocturnal enuresis: why isn't desmopressin very effective? Koff SA. **Pediatr Nephrol** 1996 Oct;10(5):667–70 (21 ref.)

Amitriptyline versus vasopressin in the treatment of nocturnal enuresis [letter; comment] Robson WL, et al. **Pediatr Nephrol** 1996 Jun;10(3):396–7. Comment on: Pediatr Nephrol 1995 Aug;9(4):438–40.

Combination therapy for nocturnal enuresis with desmopressin and an alarm device. Bradbury M. **Scand J Urol Nephrol Suppl** 1997;183:61–3

Spot urine osmolality, age and bladder capacity as predictors of response to desmopressin in nocturnal enuresis. Eller DA, et al. **Scand J Urol Nephrol Suppl** 1997;183:41–5

Genetic factors as predictors for desmopressin treatment success. Hogg RJ. **Scand J Urol Nephrol Suppl** 1997; 183:37–9 (12 ref.)

Long-term home studies of water balance in patients with nocturnal enuresis. Rittig S, et al. **Scand J Urol Nephrol Suppl** 1997;183:25–6; discussion 26–7

Nocturnal enuresis in Hong Kong: different Chinese phenotypes. Yeung CK. **Scand J Urol Nephrol Suppl** 1997; 183:17–21

Desmopressin: twenty years after [letter] Mannucci PM, et al. **Thromb Haemost** 1997 Aug;78(2):958

[Drug therapy of enuresis] von Gontard A, et al. **Z Kinder Jugenpsychiatr** 1996 Mar;24(1):18–33 (65 ref.) **(Ger)**

RENAL ARTERY

Diagnosis of renovascular hypertension by echo-Doppler velocimetry. Fuse S, et al. **Acta Paediatr Jpn** 1996 Aug; 38(4):370–3

Embolization with cellulose porous beads, I: An experimental study. Hamada J, et al. **AJNR Am J Neuroradiol** 1996 Nov-Dec;17(10):1895–9

Aneurysms of the visceral and renal arteries. Panayiotopoulos YP, et al. **Ann R Coll Surg Engl** 1996 Sep;78(5):412–9 (85 ref.)

Endovascular treatment of renal artery aneurysms with conventional non-detachable microcoils and Guglielmi detachable coils. Klein GE, et al. **Br J Urol** 1997 Jun; 79(6):852–60

Failure of pre-operative imaging to distinguish renal artery aneurysm from renal cell carcinoma. Padmore D, et al. **Br J Urol** 1996 Nov;78(5):794–5

Fibromuscular dysplasia of the renal artery--rapid progression with formation of aneurysm: case report. Langis P, et al. **Can Assoc Radiol J** 1997 Feb;48(1):8–10

Thrombosed fusiform basilar aneurysm associated with Klippel-Trenaunay-Weber syndrome: case report. Ouellet MC, et al. **Can Assoc Radiol J** 1997 Feb;48(1):28–32

Renal artery aneurysm: a report of 28 cases. Lumsden AB, et al. **Cardiovasc Surg** 1996 Apr;4(2):185–9

The effect of endovascular aortic stents placed across the renal arteries. Malina M, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):207–13

The effect of placing an aortic Wallstent across the renal artery origins in an animal model. Whitbread T, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):154–8

Arteriovenous fistula following nephrectomy. Kajbafzadeh AM, et al. **Eur Urol** 1997;31(1):112–4 (12 ref.)

Enalapril-induced renal artery thrombosis in unilateral renal artery stenosis. Kothari SS, et al. **Indian Heart J** 1997 Mar-Apr;49(2):192–4

Successful embolization of a renal artery aneurysm with preservation of renal blood flow. Tateno T, et al. **Int Urol Nephrol** 1996;28(3):283–7

Coarctation of the abdominal aorta with left renal artery and splenic artery aneurysms. Dogan R, et al. **J Cardiovasc Surg (Torino)** 1996 Oct;37(5):457–61

Transcatheter embolization for retroperitoneal hemorrhage secondary to acquired cystic kidney disease. Friedberg EB, et al. **J Vasc Interv Radiol** 1996 Mar-Apr;7(2):291–4

Effect of renal-artery stenting on progression of renovascular renal failure [letter; comment] Boero R, et al. **Lancet** 1997 Jun 21;349(9068):1840. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Effect of renal-artery stenting on progression of renovascular renal failure [letter; comment] Geroulakos G, et al. **Lancet** 1997 Jun 21;349(9068):1840. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Effect of renal-artery stenting on progression of renovascular renal failure [see comments] Harden PN, et al. **Lancet** 1997 Apr 19;349(9059):1133–6. Comment in: Lancet 1997 Apr 19;349(9059):1115–6. Comment in: Lancet 1997 Jun 21;349(9068):1839–40. Comment in: Lancet 1997 Jun 21;349(9068):1840.

Effect of renal-artery stenting on progression of renovascular renal failure [letter; comment] McLaughlin K. **Lancet** 1997 Jun 21;349(9068):1839–40. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Prospects with renal artery stenting [comment] Stockx L, et al. **Lancet** 1997 Apr 19;349(9059):1115–6. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Visceral artery aneurysms secondary to collateral circulation. Porcellini M, et al. **Minerva Cardioangiol** 1996 Sep; 44(9):443–5

Renal artery embolism successfully revascularized by surgery after 5 days' anuria. Is it never too late? Fort J, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1843–5

Renal artery stenting. Krumme B, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2507–8

Renal artery embolization after back massage in a patient with aortic occlusion. Mikhail A, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):797–8

Extracranial aneurysm and arteriovenous fistula: embolization with the Guglielmi detachable coil. Klein GE, et al. **Radiology** 1996 Nov;201(2):489–94

Lack of inhibitory effect of atrial natriuretic factor on renin release induced by renal hypotension. Naess PA, et al. **Scand J Clin Lab Invest** 1996 Nov;56(7):665–70

Management of renal artery aneurysms. Cinat M, et al. **Semin Vasc Surg** 1996 Sep;9(3):236–44 (50 ref.)

Aortic reconstruction in patients with horseshoe or ectopic kidneys. de Virgilio C, et al. **Semin Vasc Surg** 1996 Sep; 9(3):245–52 (12 ref.)

Up-regulation of endothelin-converting enzyme during the development of transplant renal arteriosclerosis in human renal allografts. Tanabe S, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1517–9

A major renal artery aneurysm as the cause of a hydronephrosis with renovascular hypertension. Bernhardt J, et al. **Urol Int** 1996;57(4):237–9

Intrarenal pseudoaneurysm presenting 15 years after penetrating renal injury. Chazen MD, et al. **Urology** 1997 May;49(5):774–6

Renal artery thrombosis in the newborn infant. Kavaler E, et al. **Urology** 1997 Aug;50(2):282–4 (6 ref.)

[Arterial fibromuscular dysplasia and Bourneville's tuberous sclerosis] Paraf F, et al. **Ann Pathol** 1996;16(3):203–6 (Eng. Abstr.) **(Fre)**

[Idiopathic renal arteriovenous fistula] Bennani S, et al. **Prog Urol** 1996 Jun;6(3):429–33 (Eng. Abstr.) **(Fre)**

[Hydrocalicosis caused by a large renal artery aneurysm] Groell R, et al. **Aktuelle Radiol** 1997 Mar;7(2):100–2 (Eng. Abstr.) **(Ger)**

[Renal cell carcinoma associated with renal artery aneurysm] Yazawa K, et al. **Hinyokika Kiyo** 1997 May;43(5):343–5 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Renal arteritis] Hiromura K. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):323–5 (8 ref.) **(Jpn)**

[Renovascular fibromuscular hyperplasia (dysplasia)] Kanazawa M, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):334–7 (2 ref.) **(Jpn)**

[Renal artery aneurysm] Kato T, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):338–40 (9 ref.) **(Jpn)**

[Renal thrombotic microangiopathy] Sakakibara K. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):316–9 (18 ref.) **(Jpn)**

[Renal arteriovenous fistula] Taniyama Y, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):320–2 (10 ref.) **(Jpn)**

[Renal arterial thrombosis, renal arterial embolism, renal artery occlusion] Yoshimura M, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):330–3 (8 ref.) **(Jpn)**

[Embolism of the small branches of the pulmonary artery in x-ray endovascular occlusion of the renal vessels in cancer] Iurin AG. **Arkh Patol** 1996 Nov-Dec;58(6):62–4 (9 ref.) (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Holt-Oram syndrome with malformations of renal and cerebral arteries. Koutlas ED, et al. **Acta Cardiol** 1996; 51(4):373–6

Arteriovenous malformation of the ureter--a rare cause of haematuria. Tang CN, et al. **Br J Urol** 1997 Sep;80(3):500–1

Remarks on the arterial vascularization of double kidney. Kosiński H. **Folia Morphol (Warsz)** 1996;55(4):345–7

Aberrant renal vascular morphology and renin expression in mutant mice lacking angiotensin-converting enzyme. Hilgers KF, et al. **Hypertension** 1997 Jan;29(1 Pt 2):216–21

Renal artery origin from the superior mesenteric artery [letter] Pendarvis RW, et al. **J Vasc Interv Radiol** 1997 May-Jun;8(3):480–1

Ear buzzing and lumbar pain revealing a late arteriovenous fistula of the kidney. Badid C, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1150–2

Spontaneous renal arteriovenous fistula as a cause of haematuria. Fogazzi GB, et al. **Nephrol Dial Transplant** 1997 Feb;12(2):350–6 (67 ref.)

Transcatheter intravascular embolotherapy of renal arteriovenous fistula--method of choice [letter] Schwab M, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2523–4

Renovascular hypertension and encephalopathy in a patient with tuberculous abdominal lymphadenopathy. Roux P, et al. **Pediatrics** 1997 May;99(5):743–5

Transplantation of kidneys with vascular anomalies or harvesting injury into pediatric recipients. Kaliciński P, et al. **Transplant Proc** 1996 Dec;28(6):3463–5

A case of gross hematuria arising during embolization for renal arteriovenous malformation. Kamai T, et al. **Urol Int** 1997;58(1):55–7

[Case of bilateral retroperitoneal ganglioneuroma and renal artery abnormality with spasmodic hypertension, excessive catecholamine secretion after the removal of the tumor near right adrenal gland] Kojima M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jun 10;85(6):922–4 **(Jpn)**

[Multiple renal arteries] Yamada M, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):297–300 (11 ref.) **(Jpn)**

[Complications of renal oligobiopsy with regard to highly selective renal artery embolization as a method treatment—case report] Hyla-Klekot L, et al. **Przegl Lek** 1996;53(7):582–4 (Eng. Abstr.) **(Pol)**

ANATOMY & HISTOLOGY

Branching patterns of the renal artery of the pig. Evan AP, et al. **Anat Rec** 1996 Oct;246(2):217–23

MR angiography of the renal artery: comparison of breath-hold two-dimensional phase-contrast cine technique with the phased-array coil and breath-hold two-dimensional time-of-flight technique with the body coil. Masui T, et al. **Eur J Radiol** 1997 Jul;25(1):62–6

Optimization of contrast timing for breath-hold three-dimensional MR angiography. Hany TF, et al. **J Magn Reson Imaging** 1997 May-Jun;7(3):551–6

MR angiography of the renal arteries. King BF Jr. **Semin Ultrasound CT MR** 1996 Aug;17(4):398–403 (15 ref.)

CHEMISTRY

Increased tenascin expression is an early feature of the development of transplant renal arteriopathy in humans. Tanabe S, et al. **Transpl Int** 1996;9 Suppl 1:S45–8

DRUG EFFECTS

Role of intracellular calcium stores in contrast medium-induced renal vasoconstriction. Drescher P, et al. **Acad Radiol** 1996 Nov;3(11):912–8

Comparison of the vasodilatory effects of bradykinin in isolated dog renal arteries and in buffer-perfused dog kidneys. Malomvölgyi B, et al. **Acta Physiol Hung** 1996; 84(1):9–18

Stereospecific effects of epoxyeicosatrienoic acids on renal vascular tone and K(+)-channel activity. Zou AP, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F822–32

Comparison of the contractile effects and binding kinetics of endothelin-1 and sarafotoxin S6b in rat isolated renal artery. Devadason PS, et al. **Br J Pharmacol** 1997 May; 121(2):253–63

A neuromodulatory role for neuronal nitric oxide in the rabbit renal artery. Vials AJ, et al. **Br J Pharmacol** 1997 May;121(2):213–20

Angiotensin II antagonism and pre-glomerular arterial wall dimensions in the kidney of the spontaneously hypertensive rat. Anderson WP, et al. **Clin Exp Hypertens** 1997 Jul–Aug; 19(5–6):965–79

Dopamine-induced relaxation in isolated intrarenal arteries from adult stroke-prone spontaneously hypertensive rats [published erratum appears in Clin Exp Pharmacol Physiol 1996 Jun-Jul;23(6-7):625] Gao YJ, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S96–8

Effects of vasopressin on human renal arteries. Medina P, et al. **Eur J Clin Invest** 1996 Nov;26(11):966–72

Multiple vasoactive factors in epidermal secretions of the Arabian Gulf catfish, Arius bilineatus (Valenciennes). al-Bow HA, et al. **Gen Pharmacol** 1997 May;28(5):737–44

Immunosuppressant HR-325 attenuates progression of malignant arteritis in the kidney of Dahl salt-sensitive rats. Uehara Y, et al. **Hypertens Res** 1997 Jun;20(2):91–7

Comparison of iodinated contrast media-induced renal vasoconstriction in human, rabbit, dog, and pig arteries. Rauch D, et al. **Invest Radiol** 1997 Jun;32(6):315–9

Vasoconstriction of rat renal interlobar arteries by noradrenaline and neuropeptide Y. Chen H, et al. **J Auton Pharmacol** 1997 Jun;17(3):137–46

Effect of calcium channel blockade or angiotensin-converting enzyme inhibition on structure of coronary, renal, and other small arteries in spontaneously hypertensive rats. Li JS, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):68–74

Mechanism of resistance to alpha-adrenergic receptor antagonists of renal nerve stimulation-induced vasoconstriction at low frequencies. Sehic E, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):97–108

Betaxolol, a beta 1-adrenoceptor antagonist, inhibits Ca(2+)-induced contraction in skinned renal artery of the dog. Kitada Y. **Jpn J Pharmacol** 1996 Feb;70(2):191–4

Contribution of tubuloglomerular feedback to renal arteriolar angiotensin II responsiveness. Ikenaga H, et al. **Kidney Int** 1996 Jan;49(1):34–9

Effect of epinine on tension of human renal arteries. Schwinger RH, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):343–7

Acetylcholine relaxation of renal artery and nitric oxide synthase activity of renal cortex increase with fetal and postnatal age. Thompson LP, et al. **Pediatr Res** 1996 Aug; 40(2):192–7

EMBRYOLOGY

[Accessory renal arteries in human fetuses] Gościcka D, et al. **Anat Anz** 1996 Dec;178(6):559–63 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Increased kallikrein activity in the rabbit renal vasculature during low sodium intake. Kuo JJ, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):153–6

GROWTH & DEVELOPMENT

[Biomorphosis of the kidney boundary interstitium and intrarenal arteries] Strauch G. **Frankf Z Pathol** 1966; 75(4):336–41 **(Ger)**

INJURIES

Iatrogenic renal vascular injuries and their radiological management. Phadke RV, et al. **Clin Radiol** 1997 Feb; 52(2):119–23

Bilateral renal artery thrombosis secondary to blunt trauma [letter] Peterson NE, et al. **J Trauma** 1997 Sep;43(3):561–2

Arteriovenous fistula: a complication following renal biopsy of suspected bilateral Wilms' tumor [clinical conference] Coppes MJ, et al. **Med Pediatr Oncol** 1997 Jun;28(6):455–61

A young man with acute renal failure and severe loin pain. Izumi M, et al. **Nephron** 1997;76(2):215–7

Transplantation of kidneys with vascular anomalies or harvesting injury into pediatric recipients. Kaliciński P, et al. **Transplant Proc** 1996 Dec;28(6):3463–5

[Post-traumatic hypertension. Apropos of a case] Squali J, et al. **Cah Anesthesiol** 1996;44(3):239–40 **(Fre)**

[Thrombosis of the renal artery of traumatic origin] Rubulotta S, et al. **Minerva Chir** 1997 Mar;52(3):309–15 (Eng. Abstr.) **(Ita)**

[Embolization of iatrogenic renal vascular lesions with coaxial catheters and microcoils] Castrucci M, et al. **Radiol Med (Torino)** 1997 May;93(5):576–81 (Eng. Abstr.) **(Ita)**

INNERVATION

Effect of sodium nitroprusside on norepinephrine overflow and antidiuresis induced by stimulation of renal nerves in anesthetized dogs. Maekawa H, et al. **J Cardiovasc Pharmacol** 1996 Feb;27(2):211–7

METABOLISM

Extracellular ATP increases cytosolic calcium in cultured rat renal arterial smooth muscle cells. Inscho EW, et al. **Clin Exp Pharmacol Physiol** 1996 Jun-Jul;23(6-7):503–7

Increased kallikrein activity in the rabbit renal vasculature during low sodium intake. Kuo JJ, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):153–6

Characterization of sodium-calcium exchange in rabbit renal arterioles. Fowler BC, et al. **Kidney Int** 1996 Dec; 50(6):1856–62

Induction of ICE and inhibition of c-fos, jun D and zif 268 in 12-month old spontaneously hypertensive rats. Chen H, et al. **Life Sci** 1997;61(2):PL27–31

Renal artery thromboembolism and immunosuppressive therapy [letter] Kronenberg F, et al. **Nephron** 1996; 72(1):101

Endothelin-1 and in vitro evidence of renal artery vasoconstriction after liver transplantation. Yokoyama I, et al. **Res Exp Med (Berl)** 1995;195(6):381–7

MICROBIOLOGY

Endovascular infection after renal artery stent placement [see comments] Gordon GI, et al. **J Vasc Interv Radiol** 1996 Sep-Oct;7(5):669–72. Comment in: J Vasc Interv Radiol 1997 Mar-Apr;8(2):302.

PATHOLOGY

Effect of gadolinium on phase-contrast MR angiography of the renal arteries. Bass JC, et al. **AJR Am J Roentgenol** 1997 Jan;168(1):261–6

Balloon-occluded retrograde transvenous obliteration for gastric varices with gastrorenal or gastrocaval collaterals. Koito K, et al. **AJR Am J Roentgenol** 1996 Nov; 167(5):1317–20

Breath-hold ultrafast three-dimensional gadolinium-enhanced MR angiography of the renovascular system. Siegelman ES, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1035–40

High-renin hypertension of unsuspected origin [letter] Pauletto P, et al. **Am J Hypertens** 1996 Oct;9(10 Pt 1):1044–5

Ruptured renal artery aneurysm during pregnancy. Yang JC, et al. **Ann Vasc Surg** 1996 Jul;10(4):370–2

Analysis of renal artery geometry may assist in the design of new stents for endovascular aortic aneurysm repair. Wijesinghe LD, et al. **Br J Surg** 1997 Jun;84(6):797–9

Angiotensin II antagonism and pre-glomerular arterial wall dimensions in the kidney of the spontaneously hypertensive rat. Anderson WP, et al. **Clin Exp Hypertens** 1997 Jul–Aug; 19(5–6):965–79

Spontaneous rupture of the renal artery in a patient with Ehlers-Danlos syndrome type IV. Oyen O, et al. **Eur J Vasc Endovasc Surg** 1997 May;13(5):509–12

Ex vivo surgery for renal artery aneurysms. Toshino A, et al. **Int J Urol** 1996 Nov;3(6):421–5

Application of thermosensitive polymers as a new embolic material for intravascular neurosurgery. Matsumaru Y, et al. **J Biomater Sci Polym Ed** 1996;7(9):795–804

Contrast-enhanced, K-space-centered, breath-hold MR angiography of the renal arteries and the abdominal aorta. Steffens JC, et al. **J Magn Reson Imaging** 1997 Jul–Aug; 7(4):617–22

Histopathologic appearance of arterial occlusions with hydrogel and polyvinyl alcohol embolic material in domestic swine. Link DP, et al. **J Vasc Interv Radiol** 1996 Nov-Dec;7(6):897–905

Vasoactive hormones and renal sclerosis. Egido J. **Kidney Int** 1996 Feb;49(2):578–97 (229 ref.)

True aneurysm of non-functional renal allograft artery. Balaji V, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2344–6

Significative improvement of renal function after correction of critical renal artery stenoses in patients with impaired renal function [letter] Campieri C, et al. **Nephron** 1996; 74(1):243–4

Renal artery aneurysm manifested as parapelvic cyst on abdominal sonography [letter] Kwon HS, et al. **Nephron** 1996;74(1):229

Fluoroscopically triggered contrast-enhanced three-dimensional MR angiography with elliptical centric view order: application to the renal arteries. Wilman AH, et al. **Radiology** 1997 Oct;205(1):137–46

MR angiography of the renal arteries. King BF Jr. **Semin Ultrasound CT MR** 1996 Aug;17(4):398–403 (15 ref.)

Donor kidney vasculopathy: impact on outcome in kidney transplantation. Minakawa R, et al. **Transpl Immunol** 1996 Dec;4(4):309–12

Intravascular malignant T-cell lymphoma (malignant angioendotheliomatosis) in a cat. Lapointe JM, et al. **Vet Pathol** 1997 May;34(3):247–50

[Virtual intravascular endoscopy in the renal arteries: a new way of observing 3-D-MIR angiography data sets] Davis CP, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):257–63 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Cholesterol feeding does not alter renal hemodynamic response to acetylcholine and angiotensin II in rabbits. Carroll JF, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R940–7

Myogenic contribution to agonist-induced renal vasoconstriction during normoxia and hypoxia. Eichinger MR, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1945–51

Intrinsic tone and passive mechanics of isolated renal arteries from virgin and late-pregnant rats. Gandley RE, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R22–7

Inhibition of intrarenal NO stimulates renin secretion through a macula densa-mediated mechanism. Schnackenberg CG, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R879–86

Noninvasive analysis of renal artery blood flow dynamics with MR cine phase-contrast flow measurements. Schoenberg SO, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2477–84

Alterations in rat interlobar artery membrane potential and K+ channels in genetic and nongenetic hypertension. Martens JR, et al. **Circ Res** 1996 Aug;79(2):295–301

Cerebral and renal artery blood flow velocity before and after birth. Kempley ST, et al. **Early Hum Dev** 1996 Sep 20;46(1–2):165–74

Alpha 1D- and alpha 1A-adrenoceptors mediate contraction in rat renal artery. Villalobos-Molina R, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):225–7

Mechanical stress-cell function relationships in renal cells [editorial] Harris RC, et al. **Exp Nephrol** 1997 Jul–Aug; 5(4):263–70 (85 ref.)

Volumetric evaluation of blood flow in normal renal arteries with a Doppler flow wire: a feasibility study. Savader SJ, et al. **J Vasc Interv Radiol** 1997 Mar–Apr;8(2):209–14

Renal R2 chemoreceptor activity is attenuated after back heating in the rat. Wu MS, et al. **Neurosci Lett** 1997 Jun 27;229(2):101–4

Effect of maternal meal ingestion on fetal renal artery resistance. Yasuhi I, et al. **Obstet Gynecol** 1997 Sep; 90(3):340–3

Hemodynamic imaging with pulsatility-index and resistive-index color Doppler US. Lin GS, et al. **Radiology** 1997 Sep;204(3):870–3

[The rate of physiological fibrinolysis in the mesenteric and renal vessels of rabbits] Andrushko IA, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul;82(7):61–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Maternal renal artery blood flow velocimetry in normal and hypertensive pregnancies. Kublickas M, et al. **Acta Obstet Gynecol Scand** 1996 Sep;75(8):715–9

Renal resistive index and left ventricular hypertrophy in essential hypertension: a close link. Alterini B, et al. **Ann Ital Med Int** 1996 Apr-Jun;11(2):107–13

The pulsatility index and the resistive index in renal arteries. Associations with long-term progression in chronic renal failure. Petersen LJ, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1376–80

Volumetric flow estimation in vivo and in vitro using pulsed-Doppler ultrasound. Holland CK, et al. **Ultrasound Med Biol** 1996;22(5):591–603

RADIOGRAPHY

Helical CT angiography for examination of living renal donors. Cochran ST, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1569–73

Angiography/interventional case of the day. Polyarteritis nodosa (PAN). LiPuma JP, et al.

AJR Am J Roentgenol 1997 Jul;169(1):260, 264–5
Precaval right renal artery: have you seen this? [letter] Petit P, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):317–8
Helical CT angiography of renal artery stenosis [letter; comment] Rubin GD, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1109–11. Comment on: AJR Am J Roentgenol 1996 Aug;167(2):495–501.
Stent embolization during intracoronary stenting. Alfonso F, et al. **Am J Cardiol** 1996 Oct 1;78(7):833–5
Images in cardiovascular medicine. Takayusu's arteritis involving the abdominal aorta and renal arteries. Reddy SC, et al. **Circulation** 1997 Jan 21;95(2):529
Assessment of accuracy of renal artery stenosis grading in helical CT angiography using maximum intensity projections. Van Hoe L, et al. **Eur Radiol** 1996;6(5):658–64
Types of renal arteries in aspect of the reconstruction operation of the abdominal aorta. Kuczmik W, et al. **Folia Morphol (Warsz)** 1996;55(4):367–8
Proximal ureter obstruction caused by a lower polar renal artery: demonstration with spiral CT angiography. Lee JY, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):641–2 (7 ref.)
Renal cell carcinoma: preoperative assessment for enucleative surgery with angiography, CT, and MRI. Takahashi S, et al. **J Comput Assist Tomogr** 1996 Nov–Dec;20(6):863–70
Renal artery pseudoaneurysm: a cause of delayed hematuria in blunt trauma. Farrell TM, et al. **J Trauma** 1996 Dec; 41(6):1067–8
Image magnification in renal and superior mesenteric angiography: CT calculation and assessment of variables. Rose SC, et al. **J Vasc Interv Radiol** 1996 Jul–Aug; 7(4):573–8
Renal infarction in a patient without underlying diseases [letter] Ikeda Y, et al. **Nephron** 1996;74(2):447–8
Renal artery stenosis: detection and quantification with spiral CT angiography versus optimized digital subtraction angiography. Kaatee R, et al. **Radiology** 1997 Oct; 205(1):121–7
Renal artery origins: best angiographic projection angles. Verschuyl EJ, et al. **Radiology** 1997 Oct;205(1):115–20
Renal artery origins: location and distribution in the transverse plane at CT. Verschuyl EJ, et al. **Radiology** 1997 Apr;203(1):71–5
Spiral (helical) CT of the renal vasculature. Rubin GD. **Semin Ultrasound CT MR** 1996 Aug;17(4):374–97 (33 ref.)
Diagnostic value of renal arteriography in polyarteritis nodosa. Tekin N, et al. **Turk J Pediatr** 1996 Jan–Mar; 38(1):101–5
[Calcified aneurysm of the right renal artery] Delval O, et al. **J Radiol** 1997 Apr;78(4):317–9 **(Fre)**
[A case of papillary renal cell carcinoma with abnormal vascularity revealed by pharmacoangiography] Tanomogi H, et al. **Hinyokika Kiyo** 1996 Dec;42(12):957–9 (Eng. Abstr.) **(Jpn)**
[The angiographic evaluation of the collateral circulation in an inoperable kidney tumor after embolization] Polikarpov AA, et al. **Urol Nefrol (Mosk)** 1996 May–Jun;(3):15–7 (Eng. Abstr.) **(Rus)**
[Aortorenal angiography and other approaches in the diagnosis of arterial hypertension of renal origin] Savić SB. **Srp Arh Celok Lek** 1996;124 Suppl 1:202–4 (Eng. Abstr.) **(Scc)**

RADIONUCLIDE IMAGING

Variable kidney position mimicking renal artery branch stenosis in a Tc-99m-DTPA captopril scintigraphy. Demirçali AE, et al. **Ann Nucl Med** 1996 May;10(2):237–9
Segmental ATN in a kidney with a single artery transplanted from living related donor. Uğur O, et al. **Nuklearmedizin** 1996 Oct;35(5):190–2

SURGERY

Techniques in renal artery reconstruction: Part I. Benjamin ME, et al. **Ann Vasc Surg** 1996 May;10(3):306–14
Techniques in renal artery reconstruction: part II. Benjamin ME, et al. **Ann Vasc Surg** 1996 Jul;10(4):409–14
Bilateral splenorenal bypass and axillofemoral graft for management of juxtarenal mycotic aneurysm. Marty-Ané C, et al. **Cardiovasc Surg** 1996 Jun;4(3):331–4
Kidney salvage in a case of ruptured renal artery aneurysm: case report and literature review. Schorn B, et al. **Cardiovasc Surg** 1997 Feb;5(1):134–6 (21 ref.)
Access to the right renal artery from the left retroperitoneal approach. Shah DM, et al. **Cardiovasc Surg** 1996 Dec; 4(6):763–5
Late stenosis of an aortorenal bypass graft fashioned from pericardium. Ilyas M, et al. **Clin Nephrol** 1996 Aug; 46(2):139–40
Ruptured aneurysm of the renal artery in a woman with a solitary kidney. Witz M, et al. **Eur J Surg** 1996 Dec; 162(12):989–91
Renal arteries covered by aortic stents: clinical experience from endovascular grafting of aortic aneurysms. Malina M, et al. **Eur J Vasc Endovasc Surg** 1997 Aug;14(2):109–13
Ex vivo surgery for renal artery aneurysms. Toshino A, et al. **Int J Urol** 1996 Nov;3(6):421–5
Surgical repair of aneurysm in the transplanted kidney following a percutaneous needle biopsy. Yagisawa T, et al. **Int Urol Nephrol** 1996;28(5):729–32
Renal revascularisation by gastroduodenal–renal bypass as treatment of renal artery stenosis. Little DM, et al. **Ir Med J** 1997 Jan–Feb;90(1):23–4
Grafting of the renal artery of a transplanted kidney by transfer of the iliac arteries. Prêtre R, et al. **J Am Coll Surg** 1997 Aug;185(2):195–6
Experience with revascularizing renal artery aneurysms: is it feasible, safe and worth attempting? Seki T, et al. **J Urol** 1997 Aug;158(2):357–62
Renal artery repair in African-Americans. Deitch JS, et al. **J Vasc Surg** 1997 Sep;26(3):465–72; discussion 473
Supraceliac aortorenal bypass. Hagino RT, et al. **J Vasc Surg** 1997 Sep;26(3):482–9; discussion 490–1
Endovascular treatment of infrarenal abdominal aneurysms by the Stentor system: preliminary results of 79 cases. Stentor Retrospective Study Group. Mialhe C, et al. **J Vasc Surg** 1997 Aug;26(2):199–209
Idiopathic renal hematuria in a dog; the usefulness of a method of partial occlusion of the renal artery. Mishina M, et al. **J Vet Med Sci** 1997 Apr;59(4):293–5
Successful surgical revascularization of a kidney transplant after PTA-induced arterial dissection of the allograft renal artery. Renders L, et al. **Nephrol Dial Transplant** 1997 Jun; 12(6):1264–6
Surgical methods for renal revascularization. Fujitani RM, et al. **Semin Vasc Surg** 1996 Sep;9(3):198–217 (58 ref.)
Abdominal aortic aneurysm and congenital pelvic kidney. A rare association. Glock Y, et al. **Tex Heart Inst J** 1997; 24(2):131–3 (5 ref.)
A technique for management of multiple renal arteries after laparoscopic donor nephrectomy. Kuo PC, et al. **Transplantation** 1997 Sep 15;64(5):779–80
Surgical revascularization in children with renovascular hypertension. Seki T, et al. **Urol Int** 1996;57(2):110–4
[Simultaneous operation of aortic valve replacement and renal artery reconstruction in a patient of aortitis syndrome: a case report] Ikeda M, et al. **Kyobu Geka** 1996 Nov; 49(12):1005–7 (Eng. Abstr.) **(Jpn)**
[Clinical evaluation of donor renal artery reconstruction in kidney transplantation] Miura M, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 May;88(5):566–70 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Segmental ATN in a kidney with a single artery transplanted from living related donor. Uğur O, et al. **Nuklearmedizin** 1996 Oct;35(5):190–2
Transplanted renal artery: detection of stenosis with color Doppler US. Loubeyre P, et al. **Radiology** 1997 Jun; 203(3):661–5

ULTRASONOGRAPHY

Interobserver and intraobserver variation in determining intrarenal parameters by Doppler sonography. Gottlieb RH, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):627–31
A prospective study of disease progression in patients with atherosclerotic renal artery stenosis. Zierler RE, et al. **Am J Hypertens** 1996 Nov;9(11):1055–61
Use of Doppler ultrasonography to evaluate renal arterial blood flow in horses. Hoffmann KL, et al. **Am J Vet Res** 1997 Jul;58(7):697–701
Renal resistive index and left ventricular hypertrophy in essential hypertension: a close link. Alterini B, et al. **Ann Ital Med Int** 1996 Apr–Jun;11(2):107–13
The use of duplex sonography in the diagnosis of renal artery stenosis. Riehl J, et al. **Eur J Med Res** 1997 Jan;2(1):14–22 (62 ref.)
Maternal renal and interlobar arteries waveforms evaluation with color Doppler ultrasound in pregnancy-induced hypertension. Boemi G, et al. **Fetal Diagn Ther** 1996 Mar–Apr;11(2):132–6
Ability of a phase shift US contrast agent to improve imaging of the main renal arteries. Melany ML, et al. **Radiology** 1997 Oct;205(1):147–52
Three-dimensional ultrasonic angiography using power-mode Doppler. Ritchie CJ, et al. **Ultrasound Med Biol** 1996;22(3):277–86
[Role of color Doppler echography (ECD) in the diagnosis and follow-up of post-biopsy arteriovenous fistula in the transplanted kidney] Carrieri G, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):87–9 (Eng. Abstr.) **(Ita)**
[Doppler flow-velocity analysis of the renal arteries in left ventricular dysfunction] Vigna C, et al. **G Ital Cardiol** 1996 Jun;26(6):639–46 (Eng. Abstr.) **(Ita)**

RENAL ARTERY OBSTRUCTION

see related
HYPERTENSION, RENOVASCULAR

New thoughts and unsolved problems in atheromatous renovascular disease. Missouris CG, et al. **Contrib Nephrol** 1996;119:39–44 (11 ref.)
Management of renal artery stenosis in conjunction with aortic aneurysm. Ballard JL. **Semin Vasc Surg** 1996 Sep; 9(3):221–30 (57 ref.)
[Renal artery stenosis] Kanazawa M, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):326–9 (5 ref.) **(Jpn)**
[Renal arterial thrombosis, renal arterial embolism, renal artery occlusion] Yoshimura M, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):330–3 (8 ref.) **(Jpn)**

BLOOD

[Level of vasopressin in renal venous blood of patients with renovascular hypertension due to unilateral stenosis of renal arteries] Kiersztejn M, et al. **Pol Arch Med Wewn** 1997 Mar;97(3):211–5 (Eng. Abstr.) **(Pol)**

COMPLICATIONS

Renal artery stenosis and unilateral focal and segmental glomerulosclerosis. Alkhunaizi AM, et al. **Am J Kidney Dis** 1997 Jun;29(6):936–41
Fibromuscular dysplasia of the renal artery and adrenal adenoma in a 36-year-old woman with hypertension. Mattix H, et al. **Am J Med Sci** 1997 Jul;314(1):51–3
Combined renal artery stenosis and aortic aneurysm: treatment options. Ballard JL, et al. **Ann Vasc Surg** 1996 Jul;10(4):361–4
Perioperative myocardial infarction in peripheral vascular surgery. Presence of renal artery stenosis may indicate risk [letter; comment] Missouris CG, et al. **BMJ** 1996 Sep 21; 313(7059):750; discussion 750–1. Comment on: BMJ 1996 Jun 1;312(7043):1396–7.
The haemodynamic effects of GR 32191, a thromboxane A2 receptor antagonist, in patients with renal artery stenosis and hypertension. Lyons D, et al. **Br J Clin Pharmacol** 1993 Sep;36(3):271–3
Fibromuscular dysplasia of the renal artery—rapid progression with formation of aneurysm: case report. Langis P, et al. **Can Assoc Radiol J** 1997 Feb;48(1):8–10
Chronic congestive heart failure associated with bilateral renal artery stenosis. Ducloux D, et al. **Clin Nephrol** 1997 Jul;48(1):54–5
Recurrent acute pulmonary edema as a presentation of renal artery stenosis in a renal transplant patient [letter] Mansy H, et al. **Clin Nephrol** 1996 Sep;46(3):216–7
Ischemic renal failure. Zucchelli P, et al. **Contrib Nephrol** 1996;119:59–66 (45 ref.)
Enalapril-induced renal artery thrombosis in unilateral renal artery stenosis. Kothari SS, et al. **Indian Heart J** 1997 Mar–Apr;49(2):192–4
A case of renal artery stenosis complicating pregnancy. Kriplani A, et al. **J Indian Med Assoc** 1997 Jan;95(1):24
Renovascular disease: the fifth frontier. Nicholls A. **J R Soc Med** 1997 Jun;90(6):315–8 (43 ref.)
Erythropoietin production in rats with post-ischemic acute renal failure. Tan CC, et al. **Kidney Int** 1996 Dec; 50(6):1958–64
Renal arterial disease and hypertension. Dustan HP. **Med Clin North Am** 1997 Sep;81(5):1199–212 (65 ref.)
Renal artery aneurysm and fibromuscular dysplasia. Krumme B, et al. **Nephrol Dial Transplant** 1997 May;12(5):1067–9
Unsuspected atherosclerotic renal artery stenosis causing renal failure in a patient with adult polycystic kidney disease. Makanjuola D, et al. **Nephrol Dial Transplant** 1997 Mar;12(3):591–2
[Hypertension and renal artery stenosis; a combination with a difficult diagnosis and treatment (see comments)] Postma CT, et al. **Ned Tijdschr Geneeskd** 1996 Oct 26; 140(43):2109–12. Comment in: Ned Tijdschr Geneeskd 1997 Jan 4;141(1):65–6. **(Dut)**
[Renovascular hypertension. The most common curable form of hypertension and chronic renal failure] Rettig R. **Fortschr Med** 1997 Feb 28;115(6):25 (Eng. Abstr.) **(Ger)**
[Bilateral renal artery stenosis diagnosed during pregnancy] Rigó J, et al. **Orv Hetil** 1997 Aug 31;138(35):2187–90 (Eng. Abstr.) **(Hun)**

DIAGNOSIS

Phase-contrast MR angiography for detection of arteriosclerotic renal artery stenosis. Duda SH, et al. **Acta Radiol** 1997 Mar;38(2):287–91
Effect of gadolinium on phase-contrast MR angiography of the renal arteries. Bass JC, et al. **AJR Am J Roentgenol** 1997 Jan;168(1):261–6
Evaluation of renal artery stenosis with dynamic gadolinium-enhanced MR angiography. Rieumont MJ, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):39–44
T2*-weighted dynamic MR imaging in renal artery or vein stenosis. Tsushima Y, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1041–3
Colour Doppler ultrasound in renal artery stenosis: intrarenal waveform analysis. Baxter GM, et al. **Br J Radiol** 1996 Sep;69(825):810–5
New developments in X-ray and MR angiography. Impact on interventional radiology. **Cardiovasc Intervent Radiol** 1997 Jan;20(1 Suppl):1–12
Images in cardiovascular medicine. An "ACE' of a test. Narula J, et al. **Circulation** 1997 May 20;95(10):2456–7
Radiographic evaluation of the renal vasculature. Textor SC, et al. **Curr Opin Nephrol Hypertens** 1996 Nov;5(6):541–51 (61 ref.)
Pattern recognition of loss of early systolic peak by Doppler ultrasound has a low sensitivity for the detection of renal artery stenosis. Postma CT, et al. **J Hum Hypertens** 1996 Mar;10(3):181–4
Clinical and biochemical criteria in the detection of renal artery stenosis. Bijlstra PJ, et al. **J Hypertens** 1996 Aug; 14(8):1033–40
Superiority of acceleration and acceleration time over pulsatility and resistance indices as screening tests for renal artery stenosis. Burdick L, et al. **J Hypertens** 1996 Oct; 14(10):1229–35

Renal artery stenosis towards the year 2000. Derkx FH, et al. **J Hypertens Suppl** 1996 Dec;14(5):S167–72 (28 ref.)
Screening of renal artery stenosis: assessment with magnetic resonance angiography at 1.0 T. Laissy JP, et al. **Magn Reson Imaging** 1996;14(9):1033–41
Renal MR angiography. Borrello JA. **Magn Reson Imaging Clin N Am** 1997 Feb;5(1):83–93 (49 ref.)
Renal vascular lesions in the elderly: nephrosclerosis or atheromatous renal disease? Meyrier A. **Nephrol Dial Transplant** 1996;11 Suppl 9:45–52 (60 ref.)
Renal artery stenosis: value of screening with three-dimensional phase-contrast MR angiography with a phased-array multicoil. De Cobelli F, et al. **Radiology** 1996 Dec;201(3):697–703
Evaluation of the aortoiliac and renal arteries: comparison of breath-hold, contrast-enhanced, three-dimensional MR angiography with conventional catheter angiography. Hany TF, et al. **Radiology** 1997 Aug;204(2):357–62
Hemodynamically significant atherosclerotic renal artery stenosis: MR angiographic features. Prince MR, et al. **Radiology** 1997 Oct;205(1):128–36
Renal artery stenosis: grading of hemodynamic changes with cine phase-contrast MR blood flow measurements. Schoenberg SO, et al. **Radiology** 1997 Apr;203(1):45–53
Hemodynamic significance of renal artery stenosis: digital subtraction angiography versus systolically gated three-dimensional phase-contrast MR angiography. Wasser MN, et al. **Radiology** 1997 Feb;202(2):333–8
Noninvasive assessment of renal artery stenosis. Dawson DL. **Semin Vasc Surg** 1996 Sep;9(3):172–81 (65 ref.)
Magnetic resonance angiography for the detection of transplant renal artery stenosis. Cahen R, et al. **Transplant Proc** 1996 Oct;28(5):2830
[New diagnostic methods in renal artery stenosis] Pedersen EB, et al. **Ugeskr Laeger** 1997 Feb 3;159(6):768–9 **(Dan)**
[Diagnosis and therapy of hypertension with renal artery stenosis (see comments)] Postma CT, et al. **Ned Tijdschr Geneeskd** 1996 Oct 26;140(43):2114–8 (22 ref.) . Comment in: Ned Tijdschr Geneeskd 1997 Jan 4;141(1):64–5. **(Dut)**
[Diagnosis and therapy of hypertension with renal artery stenosis (letter; comment)] van Venrooij FV, et al. **Ned Tijdschr Geneeskd** 1997 Jan 4;141(1):64–5. Comment on: Ned Tijdschr Geneeskd 1996 Oct 26;140(43):2114–8. **(Dut)**
[Nephrology update—III. Renal artery stenosis—rational diagnosis] Sperschneider H, et al. **Med Klin** 1996 Aug 15; 91(8):517–20 (21 ref.) **(Ger)**
[Value of contrast-enhanced 3D magnetic resonance angiography of the renal arteries] Hany TF, et al. **Radiologe** 1997 Jul;37(7):547–53 (Eng. Abstr.) **(Ger)**
[Virtual intravascular endoscopy in the renal arteries: a new way of observing 3-D-MIR angiography data sets] Davis CP, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):257–63 (Eng. Abstr.) **(Ger)**
[Ultrafast contrast-enhanced 3D MR angiography of the aorta and renal arteries in apnea] Hany TF, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 May;166(5):397–405 (Eng. Abstr.) **(Ger)**
[Diagnosis of renovascular disease by heart catheterization] de Sequera P, et al. **Med Clin (Barc)** 1997 Apr 12; 108(14):539–41 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Brief report: acute renal failure after losartan treatment in a patient with bilateral renal artery stenosis. Holm EA, et al. **Blood Press** 1996 Nov;5(6):360–2
Intra-arterial fibrinolytic treatment for mesenteric arterial embolus: a case report. Kwauk ST, et al. **Can J Surg** 1996 Apr;39(2):163–6
Simultaneous thrombolysis of superior mesenteric artery and bilateral renal artery thromboembolisms with three transfemoral catheters. Hirota S, et al. **Cardiovasc Intervent Radiol** 1997 Sep–Oct;20(5):397–400
Deterioration in renal function with enalapril but not losartan in a patient with renal artery stenosis in a solitary kidney [letter] Missouris CG, et al. **Heart** 1997 Apr;77(4):391–2
ACE inhibitors and unilateral renal artery stenosis—what price? Kothari SS. **Int J Cardiol** 1996 Mar;53(3):199–201 (22 ref.)
Renal artery occlusion model in dogs for the evaluation of thrombolytic agents. Haberstroh J, et al. **J Invest Surg** 1997 Jul–Aug;10(4):183–8

ENZYMOLOGY

Genetic risk for renal artery stenosis: association with deletion polymorphism in angiotensin 1-converting enzyme gene. Missouris CG, et al. **Kidney Int** 1996 Feb;49(2):534–7

EPIDEMIOLOGY

Prevalence and predictors of renal artery stenosis in patients with myocardial infarction. Uzu T, et al. **Am J Kidney Dis** 1997 May;29(5):733–8
Prevalence of renal artery stenosis in patients with peripheral vascular disease and hypertension. Wachtell K, et al. **J Hum Hypertens** 1996 Feb;10(2):83–5

ETIOLOGY

Stent angioplasty for renovascular disease associated with acute aortic dissection. Hata M, et al. **Ann Thorac Surg** 1997 Jan;63(1):244–6
Renal artery stenosis complicating Cogan's syndrome [letter] Vella JP, et al. **Clin Nephrol** 1997 Jun;47(6):407–8
Atherosclerotic renovascular disease: clinical clues and natural history. Gosset J, et al. **J Endovasc Surg** 1997 Aug; 4(3):316–20 (27 ref.)
Atherosclerosis and the kidney. Scoble JE. **J R Coll Physicians Lond** 1997 Jan–Feb;31(1):19–22 (19 ref.)
Bilateral renal artery thrombosis secondary to blunt trauma: case report and review of the literature. Frassinelli P, et al. **J Trauma** 1997 Feb;42(2):330–2
Five ways to be fooled by phaeochromocytoma—renal and urological complications. Crowe AV, et al. **Nephrol Dial Transplant** 1997 Feb;12(2):337–40
Epstein-Barr-virus-associated post-transplant B-cell lymphoma presenting as allograft artery stenosis. Hestin D, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1164–7
Renal artery embolization after back massage in a patient with aortic occlusion. Mikhail A, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):797–8
Clinical quiz. Left perirenal phaeochromocytoma and left upper pole renal artery stenosis. Combined excision of tumor and left total nephroadrenalectomy, after full alpha- and beta-adrenergic blockade was achieved. Eason JD, et al. **Pediatr Nephrol** 1996 Dec;10(6):804–7
Noninvasive arterial occlusion using MRI-guided focused ultrasound. Hynynen K, et al. **Ultrasound Med Biol** 1996; 22(8):1071–7

GENETICS

Genetic risk for renal artery stenosis: association with deletion polymorphism in angiotensin 1-converting enzyme gene. Missouris CG, et al. **Kidney Int** 1996 Feb;49(2):534–7
Acute renal artery thrombosis associated with factor V Leiden mutation. Le Moine A, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):2067–9

PATHOLOGY

Atherosclerotic renal artery stenosis. Scoble JE, et al. **Br J Surg** 1997 Sep;84(9):1188–9

PHYSIOPATHOLOGY

Slow pressor effect of angiotensin II in normotensive rats with renal artery stenosis. Melaragno MG, et al. **Clin Exp Pharmacol Physiol** 1996 Feb;23(2):140–4
Prostaglandins and renal function in hypertensive patients with unilateral renal artery stenosis and patients with essential hypertension. Milot A, et al. **J Hypertens** 1996 Jun;14(6):765–71
Revascularization of the occluded renal artery. Chaikof EL. **Semin Vasc Surg** 1996 Sep;9(3):218–20 (22 ref.)

PREVENTION & CONTROL

Renal artery stenosis in the nineties: screening dilemmas. Salvetti A, et al. **Contrib Nephrol** 1996;119:45–53 (26 ref.)

RADIOGRAPHY

Median arcuate ligament syndrome with multivessel involvement: diagnosis with spiral CT angiography. Kopecky KK, et al. **Abdom Imaging** 1997 May–Jun; 22(3):318–20
Helical CT angiography of renal artery stenosis [letter; comment] Rubin GD, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1109–11. Comment on: AJR Am J Roentgenol 1996 Aug;167(2):495–501.
Helical CT angiography of renal artery stenosis [letter; comment] Van Hoe L, et al. **AJR Am J Roentgenol** 1997 May;168(5):1380–1. Comment on: AJR Am J Roentgenol 1996 Aug;167(2):495–501.
'Hypertension resistant to two-drug treatment' is a useful criterion to select patients for angiography: the 'Dutch Renal Artery Stenosis Intervention Cooperative' (DRASTIC) study. van Jaarsveld BC, et al. **Contrib Nephrol** 1996;119:54–8
Assessment of accuracy of renal artery stenosis grading in helical CT angiography using maximum intensity projections. Van Hoe L, et al. **Eur Radiol** 1996;6(5):658–64
A phantom study: evaluation of renal artery stenosis using helical CT and 3D reconstructions. Davros WJ, et al. **J Comput Assist Tomogr** 1997 Jan–Feb;21(1):156–61
Is there a role for non-invasive screening tests in diagnosing renal artery stenosis? [editorial] Pickering TG, et al. **J Hypertens** 1996 Nov;14(11):1265–6 (9 ref.)
Renal artery stenosis: detection and quantification with spiral CT angiography versus optimized digital subtraction angiography. Kaatee R, et al. **Radiology** 1997 Oct; 205(1):121–7
[Renal artery occlusion diagnosed with spiral computerized tomography (CT-angiography). Report of a case and comparison with other imaging techniques] Vannucchi L, et al. **Radiol Med (Torino)** 1996 Oct;92(4):484–6 **(Ita)**
[Diagnostic imaging of renal pedicle injury] Shima H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Jan;57(1):5–11 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

What role, if any, does nuclear medicine play in the evaluation of nonhypertensive renal artery stenosis? Lamkhi LM, et al. **AJR Am J Roentgenol** 1997 Jun; 168(6):1615–6
The place of renal scintigraphy in the diagnosis of renal artery stenosis. Fifteen years of clinical experience. van Jaarsveld BC, et al. **Arch Intern Med** 1997 Jun 9;157(11):1226–34
Diagnosis of renal artery branch stenosis using captopril intervention scintirenography. Prakash R, et al. **Australas Radiol** 1996 Aug;40(3):213–7
Diagnosing renal artery stenosis: a comparison between conventional renography, captopril renography and ultrasound Doppler in a large consecutive series of patients with arterial hypertension. Pedersen EB, et al. **Blood Press** 1996 Nov;5(6):342–8
Acute proximal occlusion of a nonaneurysmal abdominal aorta and renal arteries detected by renal imaging. Gilbert LA, et al. **Clin Nucl Med** 1997 Apr;22(4):231–4
Noninvasive diagnosis of renovascular hypertension due to bilateral renal artery stenosis using captopril intervention scintirenography: the value of computer-generated renogram data. Prakash R, et al. **Indian Heart J** 1996 Nov–Dec;48(6):710–2
Interpretation of captopril transplant renography using a feed forward neural network. Hamilton D, et al. **J Nucl Med** 1996 Oct;37(10):1649–52
Baseline and postcaptopril renal blood flow measurements in hypertensives suspected of renal artery stenosis. Schreij G, et al. **J Nucl Med** 1996 Oct;37(10):1652–5
Nuclear medicine imaging in renovascular disease: the nephrologist's view [editorial] Scoble JE. **Nucl Med Commun** 1997 Jun;18(6):503–4 (13 ref.)
Distal vessel atherosclerosis as a cause for false-positive renal scintigraphy. Cristol L, et al. **Ren Fail** 1996 Nov; 18(6):923–30
[Diagnostic value of renal scintigraphy with MAG 3 and DTPA in the diagnosis of renal artery stenosis] Tremel F, et al. **Arch Mal Coeur Vaiss** 1996 Aug;89(8):1035–9 (Eng. Abstr.) **(Fre)**

SURGERY

David M. Hume memorial lecture. Surgical treatment of renovascular hypertension. Stanley JC. **Am J Surg** 1997 Aug;174(2):102–10 (75 ref.)
Techniques in renal artery reconstruction: Part I. Benjamin ME, et al. **Ann Vasc Surg** 1996 May;10(3):306–14
Late renal function in patients undergoing renal revascularization for control of hypertension and/or renal preservation. Acher CW, et al. **Cardiovasc Surg** 1996 Oct; 4(5):602–6
Prognostic significance of intrarenal resistance indices in patients with renal artery interventions: a preliminary duplex sonographic study. Frauchiger B, et al. **Cardiovasc Surg** 1996 Jun;4(3):324–30
Late stenosis of an aortorenal bypass graft fashioned from pericardium. Ilyas M, et al. **Clin Nephrol** 1996 Aug; 46(2):139–40
Renal artery stenosis [letter; comment] Geroulakos G, et al. **Eur J Vasc Endovasc Surg** 1997 Mar;13(3):342. Comment on: Eur J Vasc Endovasc Surg 1996 Apr;11(3):375–7.
Treatment of ostial renal-artery stenoses with vascular endoprostheses after unsuccessful balloon angioplasty. Novick AC. **J Urol** 1997 Sep;158(3 Pt 1):983
Long-term survival after surgical revascularization for atherosclerotic renal artery disease. Steinbach F, et al. **J Urol** 1997 Jul;158(1):38–41
Aortic stents covering the renal arteries ostia: an animal study. Desgranges P, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):77–82
Effect of renal-artery stenting on progression of renovascular renal failure [letter; comment] Boero R, et al. **Lancet** 1997 Jun 21;349(9068):1840. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.
Effect of renal-artery stenting on progression of renovascular renal failure [letter; comment] Geroulakos G, et al. **Lancet** 1997 Jun 21;349(9068):1840. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.
Effect of renal-artery stenting on progression of renovascular renal failure [letter; comment] McLaughlin K. **Lancet** 1997 Jun 21;349(9068):1839–40. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.
Progressive renal dysfunction despite successful renal artery angioplasty in a single kidney [letter] Mikhail A, et al. **Lancet** 1997 Mar 29;349(9056):926
Successful surgical revascularization of a kidney transplant after PTA-induced arterial dissection of the allograft renal artery. Renders L, et al. **Nephrol Dial Transplant** 1997 Jun; 12(6):1264–6
Aortic reconstruction and concomitant renal artery revascularization using the retroperitoneal approach: techniques and results. Darling RC 3rd, et al. **Semin Vasc Surg** 1996 Sep;9(3):231–5
The use of captopril testing in the selection of patients for renal artery repair. Duschek S, et al. **Semin Vasc Surg** 1996 Sep;9(3):182–7 (26 ref.)
Surgical methods for renal revascularization. Fujitani RM, et al. **Semin Vasc Surg** 1996 Sep;9(3):198–217 (58 ref.)
Revascularization of the solitary kidney: a challenging problem in a high risk population. Reilly JM, et al. **Surgery** 1996 Oct;120(4):732–6; discussion 736–7

RENAL ARTERY OBSTRUCTION

Renal fibromuscular dysplasia treated with partial nephrectomy. Van Poppel H, et al. **Urol Int** 1996; 56(1):36–40

[Therapy of renovascular hypertension in neurofibromatosis: surgical revascularization versus percutaneous transluminal angioplasty] Türler A, et al. **Vasa** 1996;25(4):368–72 (34 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Treatment of renal angioplasty failure by percutaneous renal artery stenting with Palmaz stents: midterm technical and clinical results. Boisclair C, et al.
AJR Am J Roentgenol 1997 Jan;168(1):245–51

Stent angioplasty for renovascular disease associated with acute aortic dissection. Hata M, et al. **Ann Thorac Surg** 1997 Jan;63(1):244–6

Complications during renal artery stent placement for atherosclerotic ostial stenosis. Beek FJ, et al.
Cardiovasc Intervent Radiol 1997 May–Jun;20(3):184–90

Partial renal embolization for pediatric renovascular hypertension secondary to fibromuscular dysplasia. Ishijima H, et al. **Cardiovasc Intervent Radiol** 1997 Sep–Oct; 20(5):383–6

Brachial artery access for percutaneous renal artery interventions. Kaukanen ET, et al.
Cardiovasc Intervent Radiol 1997 Sep–Oct;20(5):353–8

Effect of primary balloon expandable renal artery stents on long–term patency, renal function, and blood pressure in hypertensive and renal insufficient patients with renal artery stenosis [see comments] Iannone LA, et al.
Cathet Cardiovasc Diagn 1996 Mar;37(3):243–50. Comment in: Cathet Cardiovasc Diagn 1996 Mar;37(3):251.

The renal oculosten(t)otic reflex [editorial; comment] White CJ. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):251. Comment on: Cathet Cardiovasc Diagn 1996 Mar;37(3):243–50.

Renal artery stent placement in renal artery stenosis: technical and early clinical results. Taylor A, et al. **Clin Radiol** 1997 Jun;52(6):451–7

A four–year audit of interventional treatment for atheromatous renal artery stenosis. Donohoe P, et al.
Contrib Nephrol 1996;119:78–82

Late improvement of renal function in patients treated by percutaneous transluminal renal angioplasty. Zuccalà A, et al. **Contrib Nephrol** 1996;119:74–7

Renal revascularisation by gastroduodenal–renal bypass as treatment of renal artery stenosis. Little DM, et al.
Ir Med J 1997 Jan–Feb;90(1):23–4

Renal artery stenosis managed by Palmaz stent insertion: technical and clinical outcome. MacLeod M, et al.
J Hypertens 1995 Dec;13(12 Pt 2):1791–5

Renal artery stenosis towards the year 2000. Derkx FH, et al. **J Hypertens Suppl** 1996 Dec;14(5):S167–72 (28 ref.)

Endovascular infection after renal artery stent placement [see comments] Gordon GI, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):669–72. Comment in: J Vasc Interv Radiol 1997 Mar–Apr;8(2):302.

Stent placement in the renal artery: three–year experience with the Palmaz stent. Henry M, et al.
J Vasc Interv Radiol 1996 May–Jun;7(3):343–50

Results of percutaneous transluminal angioplasty for atherosclerotic renal artery stenosis: a follow–up study with duplex ultrasonography. Tullis MJ, et al. **J Vasc Surg** 1997 Jan;25(1):46–54

Patency of percutaneous transluminal renal angioplasty: a prospective sonographic study. Baumgartner I, et al.
Kidney Int 1997 Mar;51(3):798–803

Effect of renal–artery stenting on progression of renovascular renal failure [see comments] Harden PN, et al. **Lancet** 1997 Apr 19;349(9059):1133–6. Comment in: Lancet 1997 Apr 19;349(9059):1115–6. Comment in: Lancet 1997 Jun 21;349(9068):1839–40. Comment in: Lancet 1997 Jun 21;349(9068):1840.

Prospects with renal artery stenting [comment] Stockx L, et al. **Lancet** 1997 Apr 19;349(9059):1115–6. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Treatment of ostial renal–artery stenoses with vascular endoprostheses after unsuccessful balloon angioplasty [see comments] Blum U, et al. **N Engl J Med** 1997 Feb 13; 336(7):459–65. Comment in: N Engl J Med 1997 Jul 10;337(2):132–3.

Treatment of ostial renal–artery stenoses with vascular endoprostheses [letter; comment] Postma CT, et al.
N Engl J Med 1997 Jul 10;337(2):132–3. Comment on: N Engl J Med 1997 Feb 13;336(7):459–65.

Management of renal artery stenosis in conjunction with aortic aneurysm. Ballard JL. **Semin Vasc Surg** 1996 Sep; 9(3):221–30 (57 ref.)

Revascularization of the occluded renal artery. Chaikof EL. **Semin Vasc Surg** 1996 Sep;9(3):218–20 (22 ref.)

The indications and results of percutaneous transluminal angioplasty and stenting in renal artery stenosis. Kidney DD, et al. **Semin Vasc Surg** 1996 Sep;9(3):188–97 (54 ref.)

[Hypertension and renal artery stenosis; a combination with a difficult diagnosis and treatment (see comments)] Postma CT, et al. **Ned Tijdschr Geneeskd** 1996 Oct 26; 140(43):2109–12. Comment in: Ned Tijdschr Geneeskd 1997 Jan 4;141(1):65–6. **(Dut)**

[Diagnosis and therapy of hypertension with renal artery stenosis (see comments)] Postma CT, et al.
Ned Tijdschr Geneeskd 1996 Oct 26;140(43):2114–8 (22 ref.) . Comment in: Ned Tijdschr Geneeskd 1997 Jan 4;141(1):64–5. **(Dut)**

[Diagnosis and therapy of hypertension with renal artery stenosis (letter; comment)] van de Ven PJ, et al.
Ned Tijdschr Geneeskd 1997 Jan 4;141(1):65–6. Comment on: Ned Tijdschr Geneeskd 1996 Oct 26;140(43):2109–12. **(Dut)**

[Renal artery dilatation in renovascular hypertension. Acute and long–term outcome in a large patient sample] Lenz T, et al. **Med Klin** 1996 Jul 15;91(7):442–6 (Eng. Abstr.) **(Ger)**

[Percutaneous removal of a stripped–off Palmaz stent in the renal artery] Schmitz–Rode T, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1996 Sep;165(3):293–5 **(Ger)**

[The successful percutaneous revascularization of a subacute renal artery obstruction] Weishaupt D, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1997 Mar;166(3):269–72 (15 ref.) **(Ger)**

[Percutaneous stenting of the renal arteries] Rabbia C, et al.
Cardiologia 1997 Jul;42(7):757–60 **(Ita)**

[Case of bilateral renal artery stenosis with successful weaning from hemodialysis following percutaneous transluminal angioplasty] Nakae H, et al.
Nippon Naika Gakkai Zasshi 1997 May 10;86(5):846–8 **(Jpn)**

[Treatment of arterial stenosis of the kidney graft with transluminal angioplasty] Gómez dos Santos V, et al.
Arch Esp Urol 1996 Jun;49(5):493–8 (Eng. Abstr.) **(Spa)**

[The long–term results on arterial pressure and kidney function after the percutaneous transluminal dilatation of renal artery stenosis] Rodríguez Pérez JC, et al.
Med Clin (Barc) 1997 Mar 15;108(10):366–72 (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

Preliminary assessment of captopril sonography in screening for renal artery stenosis. Gottlieb RH, et al.
Acad Radiol 1996 Jan;3(1):57–62

Interobserver and intraobserver variation in determining intrarenal parameters by Doppler sonography. Gottlieb RH, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):627–31

Color–coded duplex sonography for noninvasive diagnosis and grading of renal artery stenosis. Spies KP, et al.
Am J Hypertens 1995 Dec;8(12 Pt 1):1222–31

A prospective study of disease progression in patients with atherosclerotic renal artery stenosis. Zierler RE, et al.
Am J Hypertens 1996 Nov;9(11):1055–61

Renal hilar Doppler analysis is of value in the management of patients with renovascular disease. Nazzal MM, et al.
Am J Surg 1997 Aug;174(2):164–8

Intra–renal Doppler wave–form analysis as a screening test for renal artery stenosis. Lucas P, et al.
Australas Radiol 1996 Aug;40(3):276–82

Diagnosing renal artery stenosis: a comparison between conventional renography, captopril renography and ultrasound Doppler in a large consecutive series of patients with arterial hypertension. Pedersen EB, et al.
Blood Press 1996 Nov;5(6):342–8

The use of duplex sonography in the diagnosis of renal artery stenosis. Riehl J, et al. **Eur J Med Res** 1997 Jan;2(1):14–22 (62 ref.)

Coefficient of variation: a powerful Doppler ultrasonographic parameter for detection of renal artery stenosis. Eibenberger K, et al. **J Ultrasound Med** 1996 Jul; 15(7):505–12

Increased cortical echogenicity of the normal kidney in infants with unilateral renal artery stenosis: report of two cases. Enríquez G, et al. **J Ultrasound Med** 1997 Jan; 16(1):59–63

Diagnosis of renovascular disease by intra– and extrarenal Doppler scanning. Krumme B, et al. **Kidney Int** 1996 Oct; 50(4):1288–92

Colour Doppler sonography to screen for renal artery stenosis––technical points to consider [editorial] Krumme B, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2385–9

Renal artery stenosis: evaluation with colour duplex ultrasonography. Riehl J, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1608–14

Value of Doppler ultrasound for the diagnosis of renal artery stenosis in children. Brun P, et al. **Pediatr Nephrol** 1997 Feb;11(1):27–30

Transplanted renal artery: detection of stenosis with color Doppler US. Loubeyre P, et al. **Radiology** 1997 Jun; 203(3):661–5

Ability of a phase shift US contrast agent to improve imaging of the main renal arteries. Melany ML, et al. **Radiology** 1997 Oct;205(1):147–52

Renal artery stenosis and the value of transabdominal US with intrarenal Doppler spectral analysis [letter; comment] Restrepo IK, et al. **Radiology** 1997 Apr;203(1):291–2. Comment on: Radiology 1996 Jul;200(1):165–8.

Doppler ultrasound of the kidney. Platt JF.
Semin Ultrasound CT MR 1997 Feb;18(1):22–32 (81 ref.)

Duplex Doppler evaluation of acute renal obstruction. Platt JF. **Semin Ultrasound CT MR** 1997 Apr;18(2):147–53 (36 ref.)

[Echo–Doppler and stenosis of the renal arteries. Report of 86 cases] Sevestre MA, et al. **J Mal Vasc** 1996;21(2):72–7 (Eng. Abstr.) **(Fre)**

[Doppler sonography in the assessment of renal artery stenosis: methods, criteria, significance] Braunschweig M. **Ther Umsch** 1997 Jan;54(1):13–7 (Eng. Abstr.) **(Ger)**

URINE

Increased urinary catecholamines in a hypertensive child with renal artery stenosis. Berard E, et al.
Pediatr Nephrol 1996 Dec;10(6):761–3

RENAL ARTERY STENOSIS see **RENAL ARTERY OBSTRUCTION**

RENAL BLOOD FLOW see **RENAL CIRCULATION**

RENAL BLOOD FLOW, EFFECTIVE

Measurement of effective renal plasma flow (ERPF) with 123I–orthoiodohippurate (I–123–OIH). Nakashima R, et al.
Radiat Med 1996 May–Jun;14(3):147–50

PHYSIOLOGY

Glomerular hemodynamics in acute renal failure. Boim MA, et al. **Ren Fail** 1997 Mar;19(2):209–12 (17 ref.)

RENAL CALCULI see **KIDNEY CALCULI**

RENAL CIRCULATION

Renal gluconeogenesis and blood flow during endotoxic shock. Maitra SR, et al. **Acad Emerg Med** 1996 Nov; 3(11):1006–10

Effect of ultrasound contrast medium in color Doppler and power Doppler visualization of blood flow in canine kidneys. Abildgaard A, et al. **Acta Radiol** 1997 May; 38(3):445–53

Sequential external counterpulsation increases cerebral and renal blood flow. Applebaum RM, et al. **Am Heart J** 1997 Jun;133(6):611–5

Antihypertensive effect of thymectomy in Lyon hypertensive rats. Vascular reactivity, renal histology, and sodium excretion. Bataillard A, et al. **Am J Hypertens** 1996 Feb; 9(2):171–7

Renal and systemic hemodynamics, in falciparum malaria. Sitprija V, et al. **Am J Nephrol** 1996;16(6):513–9

Differential regulation of renal glomerular and preglomerular vascular angiotensin II receptors. Amiri F, et al.
Am J Physiol 1996 May;270(5 Pt 1):E810–5

Role of the renal medulla in volume and arterial pressure regulation. Cowley AW Jr. **Am J Physiol** 1997 Jul;273(1 Pt 2):R1–15 (109 ref.)

Spontaneous blood pressure fluctuations and renal blood flow dynamics. Cupples WA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F82–9

Facilitated transport in vasa recta: theoretical effects on solute exchange in the medullary microcirculation. Edwards A, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F505–14

Sensitivity of the renal medullary circulation to plasma vasopressin. Franchini KG, et al. **Am J Physiol** 1996 Sep; 271(3 Pt 2):R647–53

Participation of adenosine in the renal hemodynamic abnormalities of hypothyroidism. Franco M, et al.
Am J Physiol 1996 Feb;270(2 Pt 2):F254–62

Coexistence of two types of Ca(2+)–activated K+ channels in rat renal arterioles. Gebremedhin D, et al.
Am J Physiol 1996 Jan;270(1 Pt 2):F69–81

An oral platelet–activating factor antagonist, Ro–24–4736, protects the rat kidney from ischemic injury. Kelly KJ, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1061–7

Responses of fetal sheep to reduced maternal renal blood flow and maternal hypertension. Lumbers ER, et al.
Am J Physiol 1996 Dec;271(6 Pt 2):R1691–700

Medullary blood flow responses to changes in arterial pressure in canine kidney. Majid DS, et al.
Am J Physiol 1996 May;270(5 Pt 2):F833–8

Renal hemodynamics in rats with myocardial infarction: selective antagonism of angiotensin receptor subtypes. Mento PF, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2306–12

Human kidney free fatty acid and glucose uptake: evidence for a renal glucose–fatty acid cycle. Meyer C, et al.
Am J Physiol 1997 Sep;273(3 Pt 1):E650–4

Uninephrectomy reduces apoptotic cell death and enhances renal tubular cell regeneration in ischemic ARF in rats. Nakajima T, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F846–53

Ischemia–induced receptor for activated C kinase (RACK1) expression in rat kidneys. Padanilam BJ, et al.
Am J Physiol 1997 Feb;272(2 Pt 2):F160–6

Altered EGF expression and thyroxine metabolism in kidneys following acute ischemic injury in rat. Rogers SA, et al.
Am J Physiol 1996 Jan;270(1 Pt 2):F21–30

Mechanisms compensating Na and water retention induced by long–term reduction of renal perfusion pressure. Seeliger E, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R646–54

Aging is not accompanied by sympathetic hyperresponsiveness to air–jet stress. Stauss HM, et al.
Am J Physiol 1996 Aug;271(2 Pt 2):H768–75

Renal 131I–hippurate clearance overestimates true renal blood flow in the instrumented conscious dog. Visscher CA, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F269–74

Endothelial Ca2+ in afferent arterioles during myogenic activity. Wagner AJ, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F170–8

Control of renal and mesenteric conductance during

hemorrhage in conscious hypertensive rabbits. Weichert G, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1531–40

[Ca2+]i in rat afferent arteriole during constriction measured with confocal fluorescence microscopy. Yip KP, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1004–11

Angiotensin II–receptor stimulation of cytosolic calcium concentration in cultured renal resistance arterioles. Zhu Z, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1239–47

Microvascular changes in renal allografts associated with FK506 (Tacrolimus) therapy. Randhawa PS, et al. **Am J Surg Pathol** 1996 Mar;20(3):306–12

Three–dimensional modeling of renal glomerular capillary networks. Kaczmarek E, et al. **Anal Quant Cytol Histol** 1997 Apr;19(2):93–101

Alteration of renal blood flow during epidural anesthesia in normal subjects. Suleiman MY, et al. **Anesth Analg** 1997 May;84(5):1076–80

Impact of systemic depulsation on tissue perfusion and sympathetic nerve activity. Toda K, et al. **Ann Thorac Surg** 1996 Dec;62(6):1737–42

Renal blood flow detection with Doppler ultrasonography in patients with hepatic cirrhosis. Celebi H, et al. **Arch Intern Med** 1997 Mar 10;157(5):564–6

Relationship between circadian changes in renal hemodynamics and circadian changes in urinary glycosaminoglycan excretion in normal rats. Pons M, et al. **Chronobiol Int** 1996 Nov;13(5):349–58

Role of endothelium–related mechanisms in the pathophysiology of renal ischemia/reperfusion in normal rabbits. Caramelo C, et al. **Circ Res** 1996 Nov;79(5):1031–8

Modulation of renal cortical blood flow during static exercise in humans. Middlekauff HR, et al. **Circ Res** 1997 Jan; 80(1):62–8

Doppler spectrum analysis in the differential diagnosis of renal transplant dysfunction. Merkus JW, et al. **Clin Transplant** 1996 Oct;10(5):420–8

Vasculitis and the kidney. Rees AJ. **Curr Opin Nephrol Hypertens** 1996 May;5(3):273–81 (122 ref.)

Radiographic evaluation of the renal vasculature. Textor SC, et al. **Curr Opin Nephrol Hypertens** 1996 Nov;5(6):541–51 (61 ref.)

Nitric oxide in ischaemic acute renal failure of streptozotocin diabetic rats. Goor Y, et al. **Diabetologia** 1996 Sep; 39(9):1036–40

Pressure natriuresis and renal medullary blood flow in dogs. Majid DS, et al. **Hypertension** 1997 Apr;29(4):1051–7

The effects of artery occlusion on temperature homogeneity during hyperthermia in rabbit kidneys in vivo. Jia ZQ, et al. **Int J Hyperthermia** 1997 Jan–Feb;13(1):21–37

Evaluation of renal resistive index, maximum velocity, and mean arterial flow velocity in a hydronephrotic partially obstructed pig model. Cole TC Jr, et al. **Invest Radiol** 1997 Mar;32(3):154–60

Purinoceptor–mediated regulation of the renal microvasculature. Inscho EW. **J Auton Pharmacol** 1996 Dec;16(6):385–8 (20 ref.)

The effects of pulsatile cardiopulmonary bypass on cerebral and renal blood flow in dogs. Cook DJ, et al. **J Cardiothorac Vasc Anesth** 1997 Jun;11(4):420–7

The glomerular filtration rate, effective renal plasma flow, and renal blood flow in the adult male chacma baboon (Papio ursinus). Evans JP, et al. **J Med Primatol** 1996 Dec; 25(6):382–6

Developmental changes in renal blood flow velocity [letter; comment] Glickstein JS, et al. **J Pediatr** 1997 Feb; 130(2):336. Comment on: J Pediatr 1996 Aug;129(2):251–7.

Urineless estimation of glomerular filtration rate and renal plasma flow in the rat. Rönnhedh C, et al. **J Pharmacol Toxicol Methods** 1996 Nov;36(3):123–9

The effect of intestinal reperfusion on renal function and perfusion. LaNoue JL Jr, et al. **J Surg Res** 1996 Jul 15; 64(1):19–25

Assessment of preservation induced reperfusion injury via intraoperative renal transplant blood flow and endothelin concentration studies. Bretan PN Jr, et al. **J Urol** 1997 Sep;158(3 Pt 1):714–8

Clinical vignette. Renal arteriovenous malformation in a quarter horse foal. Schott HC 2nd, et al. **J Vet Intern Med** 1996 Jul–Aug;10(4):204–6

Comparison of systemic and renal hemodynamics measured by Doppler ultrasonography in canine experimental hypovolemia. Miyamoto T, et al. **J Vet Med Sci** 1997 May; 59(5):347–52

Diurnal pattern of sodium excretion in dogs with and without chronically reduced renal perfusion pressure. Corea M, et al. **Kidney Blood Press Res** 1996;19(1):16–23

Vasculitis and the kidney. Kallenberg CG. **Kidney Blood Press Res** 1997;20(3):194–7 (15 ref.)

Renal microcirculation and tissue damage during acute ureteral obstruction in the rat: effect of saline infusion, indomethacin and radiocontrast. Heyman SN, et al. **Kidney Int** 1997 Mar;51(3):653–63

Intrarenal hemodynamic abnormalities in diabetic nephropathy measured by duplex Doppler sonography. Ishimura E, et al. **Kidney Int** 1997 Jun;51(6):1920–7

Renal tubule regeneration after ischemic injury is coupled to the up–regulation and activation of cyclins and cyclin dependent kinases. Park SK, et al. **Kidney Int** 1997 Sep; 52(3):706–14

Autoregulation of renal blood flow and pressure–dependent renin release in autosomal dominant polycystic kidney disease of rats. Braun C, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:52–7

Renal function in cancer patients treated with hyperthermic isolated limb perfusion with recombinant tumor necrosis factor–alpha and melphalan. Zwaveling JH, et al. **Nephron** 1997;76(2):146–52

Ochratoxin A disturbs pH homeostasis in the kidney: increases in pH and HCO3– in the tubules and vasa recta. Kuramochi G, et al. **Pflugers Arch** 1997 Aug;434(4):392–7

Differential effects of acute thermal injury on rat splanchnic and renal blood flow and prostanoid release. Myers SI, et al. **Prostaglandins Leukot Essent Fatty Acids** 1995 Dec; 53(6):439–44

Early systole in the healthy kidney: variability of Doppler US waveform parameters. Kliewer MA, et al. **Radiology** 1997 Oct;205(1):109–13

Does pneumoperitoneum with different gases, body positions, and intraperitoneal pressures influence renal and hepatic blood flow? Junghans T, et al. **Surgery** 1997 Feb; 121(2):206–11

Biphasic changes in glomerular filtration rate precede the onset of increased renal vascular resistance during hypothermic perfusion preservation. Lewis R, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1318–21

Higher renal functional reserve in well–functioning renal grafts. Nakamura H, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):231–2

Methods of renal blood flow measurement. Young LS, et al. **Urol Res** 1996;24(3):149–60 (85 ref.)

Heparin attenuated neutrophil infiltration but did not affect renal injury induced by ischemia reperfusion. Shin CS, et al. **Yonsei Med J** 1997 Jun;38(3):133–41

Renal ischemia–reperfusion injury does not induce pulmonary dysfunction in sheep. Shin CS, et al. **Yonsei Med J** 1997 Jun;38(3):142–50

[Vasoactive factors in chronic glomerulonephritis] Knotková V, et al. **Cas Lek Cesk** 1996 Nov 6;135(21):687–90 (Eng. Abstr.) **(Cze)**

[Evaluation of renal allograft dysfunction employing dynamic SPECT with 99mTc–MAG3 and graph plot analysis] Akahira H. **Kaku Igaku** 1996 Nov;33(11):1227–37 (Eng. Abstr.) **(Jpn)**

[Endothelin levels after extracorporeal shock waves, effects of renal function and blood pressure in rats] Masui N, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Aug; 87(8):1018–25 (Eng. Abstr.) **(Jpn)**

[Renal blood circulation in patients with vasorenal hypertension (based on ultrasonic dopplerography data)] Shcherbak OIu, et al. **Lik Sprava** 1996 Jan–Feb; (1–2):137–40 (Eng. Abstr.) **(Ukr)**

DRUG EFFECTS

Effects of desflurane on systemic, preportal and renal circulatory responses to infra–renal aortic cross–clamping in the pig. Sundeman H, et al. **Acta Anaesthesiol Scand** 1996 Sep;40(8 Pt 1):876–82

Short–term treatment with ramipril normalizes renal haemodynamics and the natriuretic response to a sodium load in type 1 diabetic patients with early nephropathy. Stenvinkel P, et al. **Acta Diabetol** 1997 Mar;34(1):10–7

Comparison of the vasodilatory effects of bradykinin in isolated dog renal arteries and in buffer–perfused dog kidneys. Malomvölgyi B, et al. **Acta Physiol Hung** 1996; 84(1):9–18

Effects of contrast media on renal microcirculation and oxygen tension. An experimental study in the rat. Liss P. **Acta Radiol Suppl** 1997;409:1–29

Effects of L–arginine infusion on renal hemodynamics and sodium excretion during hypo–, normo–, and hyperinsulinemia, as studied in dogs. García–Robles R, et al. **Am J Hypertens** 1996 Jul;9(7):681–6

The effects of isradipine and spirapril as monotherapy and combined therapy on blood pressure, renal hemodynamics, natriuresis, and urinary kallikrein in hypertensive nephropathy. Maccariello ER, et al. **Am J Hypertens** 1997 May;10(5 Pt 1):541–5

Insulin resistance and salt sensitivity. A renal hemodynamic abnormality? Weir MR. **Am J Hypertens** 1996 Dec;9(12 Pt 2):193S–199S (74 ref.)

Comparative acute nephrotoxicity of FK–506 and ciclosporin in an isolated in situ autoperfused rat kidney model. Bagnis C, et al. **Am J Nephrol** 1997;17(1):17–24

Effects of systemic NO synthesis inhibition on RPF, GFR, UNa, and vasoactive hormones in healthy humans. Bech JN, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F845–51

Cholesterol feeding does not alter renal hemodynamic response to acetylcholine and angiotensin II in rabbits. Carroll JF, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R940–7

Enhanced renal vasoconstriction induced by vasopressin in SHR is mediated by V1 receptors. Feng JJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F304–13

Differential regulation of renal regional blood flow by endothelin–1. Gurbanov K, et al. **Am J Physiol** 1996 Dec; 271(6 Pt 2):F1166–72

Basal nitric oxide production curtails arteriolar vasoconstrictor responses to ANG II in rat kidney. Ikenaga H, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F365–73

Afferent arteriolar responses to ANG II involve activation of PLA2 and modulation by lipoxygenase and P–450 pathways. Imig JD, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F274–82

Atrial natriuretic peptide in preeclampsia: metabolic clearance, sodium excretion and renal hemodynamics. Irons DW, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F483–7

Antibody and complement reduce renal hemodynamic function in isolated perfused rat kidney. Jocks T, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F179–85

Reduction in renin release and renal vascular resistance by H(+)–K(+)–ATPase inhibition. Lin H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F457–62

Membrane potential measurements in renal afferent and efferent arterioles: actions of angiotensin II. Loutzenhiser R, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F307–14

Endothelin–mediated effect of erythropoietin on blood pressure and renal hemodynamics in hypertensive rats. Tojo A, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R744–8

Vasopressin constricts outer medullary descending vasa recta isolated from rat kidneys. Turner MR, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F147–51

Effect of nitric oxide synthase inhibition on renal hemodynamics in humans: reversal by L–arginine. Wolzt M, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):F178–82

20–HETE is an endogenous inhibitor of the large–conductance Ca(2+)–activated K+ channel in renal arterioles. Zou AP, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R228–37

Low dose angiotensin II infusions into the renal artery induce chronic hypertension in conscious dogs. Fitzgerald SM, et al. **Blood Press** 1997 Jan;6(1):52–61

Lack of specific renal haemodynamic effects of different doses of dopamine after infrarenal aortic surgery [see comments] Girbes AR, et al. **Br J Anaesth** 1996 Dec; 77(6):753–7. Comment in: Br J Anaesth 1997 Apr;78(4):350–1.

Effect of intrarenally infused parathyroid hormone–related protein on renal blood flow and glomerular filtration rate in the anaesthetized rat. Massfelder T, et al. **Br J Pharmacol** 1996 Aug;118(8):1995–2000

Renal vascular effects of the selective endothelin receptor antagonists in anaesthetized rats. Matsuura T, et al. **Br J Pharmacol** 1997 Sep;122(1):81–6

Modulation by nitric oxide and prostaglandin of the renal vascular response to angiotensin II (3–8). Yoshida M, et al. **Br J Pharmacol** 1996 Mar;117(5):885–90

Pharmacological modulation of spontaneous renal blood flow dynamics. Ajikobi DO, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):964–72

Natriuretic effect of nitrendipine is preceded by transient systemic and renal hemodynamic effects. Krekels MM, et al. **Cardiovasc Drugs Ther** 1997 Mar;11(1):33–8

Adenosine–induced renal vasoconstriction in man. Marraccini P, et al. **Cardiovasc Res** 1996 Nov;32(5):949–53

Effects of renin inhibition compared to angiotensin converting enzyme inhibition in conscious dogs with pacing–induced heart failure. Shannon RP, et al. **Cardiovasc Res** 1997 Jun;34(3):464–72

4–(3,4–Dihydroxyphenyl)–1,2,3,4–tetrahydroisoquinoline derivatives. II. Their renal vasodilation activity and structure–activity relationship. Anan H, et al. **Chem Pharm Bull (Tokyo)** 1996 Oct;44(10):1865–70

Beneficial hemodynamic and renal effects of adrenomedullin in an ovine model of heart failure. Rademaker MT, et al. **Circulation** 1997 Sep 16;96(6):1983–90

Endothelin–1 produces heterogeneous regional haemodynamic effects in conscious rabbits. Roberts–Thomson P, et al. **Clin Exp Hypertens** 1996 Feb; 18(2):145–69

Role of nitric oxide in the control of the renal medullary circulation. Mattson DL, et al. **Clin Exp Pharmacol Physiol** 1997 Aug;24(8):587–90

Effects of losartan on the cardiovascular system, renal haemodynamics and function and lung liquid flow in fetal sheep. Stevenson KM, et al. **Clin Exp Pharmacol Physiol** 1996 Feb;23(2):125–33

Subpressor doses of angiotensin II do not increase albumin excretion in humans. Erley CM, et al. **Clin Nephrol** 1996 Nov;46(5):312–8

Discordant effects of guanidines on renal structure and function and on regional vascular dysfunction and collagen changes in diabetic rats. Nyengaard JR, et al. **Diabetes** 1997 Jan;46(1):94–106

Effect of long–acting somatostatin analog (Somatulin) on renal hyperfiltration in patients with IDDM. Jacobs ML, et al. **Diabetes Care** 1997 Apr;20(4):632–6

Effects of insulin and lipid emulsion on renal haemodynamics and renal sodium handling in IDDM patients. Pelikánová T, et al. **Diabetologia** 1996 Sep;39(9):1074–82

Effect of dopexamine hydrochloride on renal vascular resistance index and haemodynamic responses following coronary artery bypass graft surgery. Sherry E, et al. **Eur J Anaesthesiol** 1997 Mar;14(2):184–9

Effects of endothelin ETA receptor antagonism with PD 156707 on hemodynamics and renal vascular resistance in rabbits. Ignasiak DP, et al. **Eur J Pharmacol** 1997 Mar 5; 321(3):295–300

Differential effects of sulindac on renal hemodynamics and function in the rat. Kramp RA, et al. **Eur J Pharmacol** 1997 Jul 9;330(2–3):165–76

Renal hemodynamic and excretory responses in anesthetized rats to FK409, a novel nitric oxide donor. Urabe K, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):195–200

Characterization of the high sensitivity of rabbits to the effects of TCV–116, an angiotensin II receptor antagonist.

Sato K, et al. **Fundam Appl Toxicol** 1997 Jan;35(1):49–54

Nifedipine attenuates systemic and renal vasoconstriction during nitric oxide inhibition in humans. Dijkhorst-Oei LT, et al. **Hypertension** 1997 May;29(5):1192–8

Roles of prostaglandins and nitric oxide in the effect of endothelin-1 on renal hemodynamics. Lin H, et al. **Hypertension** 1996 Sep;28(3):372–8

Reduced sensitivity of the renal circulation to angiotensin II in pregnant rats. Novak J, et al. **Hypertension** 1997 Sep; 30(3 Pt 2):580–4

Renal hemodynamic response to an angiotensin II antagonist, eprosartan, in healthy men. Price DA, et al. **Hypertension** 1997 Aug;30(2 Pt 1):240–6

Cardiorespiratory and renal responses to arterial chemoreceptor stimulation in early hypertension. Ledderhos C, et al. **Int J Clin Pharmacol Ther** 1996 Nov; 34(11):470–6

Renal blood flow and serotonin metabolism in tacrolimus treated rats. Mugiya S, et al. **Int J Urol** 1996 May; 3(3):187–90

Beneficial influence of ketanserin on autoregulation of blood flow in post-ischemic kidneys. Verbeke M, et al. **J Am Soc Nephrol** 1996 Apr;7(4):621–7

Cardiovascular and renal actions of the endothelin(B) receptor in pigs. Cirino M, et al. **J Cardiovasc Pharmacol** 1997 Jun;29(6):704–12

Kallistatin is a potent new vasodilator. Chao J, et al. **J Clin Invest** 1997 Jul 1;100(1):11–7

Regulation of angiotensin II receptor AT1 subtypes in renal afferent arterioles during chronic changes in sodium diet. Ruan X, et al. **J Clin Invest** 1997 Mar 1;99(5):1072–81

Effect of verapamil on renal haemodynamics in a portal hypertensive rat model. Lay CS, et al. **J Gastroenterol Hepatol** 1996 Apr;11(4):391–5

Changes in reactivity towards 5-hydroxytryptamine in the renal vasculature of the diabetic spontaneously hypertensive rat. Boston PC, et al. **J Hypertens** 1997 Jul; 15(7):769–74

Effects of angiotensin converting enzyme inhibitor on renal haemodynamics during mental stress. Schmieder RE, et al. **J Hypertens** 1996 Oct;14(10):1201–7

Impaired renal haemodynamic response to amino acid infusion in essential hypertension during angiotensin converting enzyme inhibitor treatment. Tietze IN, et al. **J Hypertens** 1997 May;15(5):551–60

Renal haemodynamic and protective effects of calcium antagonists in hypertension. Zanchi A, et al. **J Hypertens** 1995 Dec;13(12 Pt 1):1363–75 (134 ref.)

Threshold sodium excretory and renal blood flow effects of angiotensin converting enzyme inhibition. Zhang X, et al. **J Hypertens** 1995 Dec;13(12 Pt 1):1413–19

Baseline and postcaptopril renal blood flow measurements in hypertensives suspected of renal artery stenosis. Schreij G, et al. **J Nucl Med** 1996 Oct;37(10):1652–5

Renovascular responses to high and low perfusate calcium steady-state experiments in the isolated perfused rat kidney with baseline vascular tone. Castelli I, et al. **J Surg Res** 1996 Feb 15;61(1):51–7

Insulin and amino acid infusion after cardiac operations: effects on systemic and renal perfusion. Jeppsson A, et al. **J Thorac Cardiovasc Surg** 1997 Mar;113(3):594–602

Selective blockade of endothelin receptor subtypes on systemic and renal vascular responses to endothelin-1 and IRL1620, a selective endothelin ETB-receptor agonist, in anesthetized rats. Matsuura T, et al. **Jpn J Pharmacol** 1996 Jul;71(3):213–22

Impact of nitric oxide on renal hemodynamics and glomerular function: modulation by atherogenic lipoproteins? Galle J, et al. **Kidney Blood Press Res** 1996;19(1):2–15 (180 ref.)

Effects of nitric oxide inhibition on systemic and renal hemodynamics in the hemorrhaged rat. Lieberthal W, et al. **Kidney Blood Press Res** 1996;19(6):340–6

Autonomy of the renin system in type II diabetes mellitus: dietary sodium and renal hemodynamic responses to ACE inhibition. De'Oliveira JM, et al. **Kidney Int** 1997 Sep; 52(3):771–7

Diverse effects of calcium antagonists on glomerular hemodynamics. Arima S, et al. **Kidney Int Suppl** 1996 Jun; 55:S132–4

Losartan protects the rat kidney from ischemic injury. Heller J, et al. **Kidney Int Suppl** 1996 Jun;55:S113–4

The renal hemodynamic response to an oral protein load is normal in IgA nephropathy. De Santo NG, et al. **Nephron** 1997;76(4):406–10

Effects of neuropeptide Y on intrarenal hemodynamics, plasma renin activity and urinary sodium excretion in rats. Evéquoz D, et al. **Nephron** 1996;73(3):467–72

Renal hemodynamic changes induced by captopril and angiotensin-converting enzyme gene polymorphism. Mizuiri S, et al. **Nephron** 1997;75(3):310–4

Changes in renal microcirculation induced by infusion of (Fe3+)-and (Fe2+)-myoglobin during hemorrhagic hypotension in the anesthetized rat: influence of L-NAME and 8-Br-cyclic GMP. Vetterlein F, et al. **Nephron** 1996; 73(2):243–50

Renovascular and tubular effects of neuropeptide Y are discriminated by PP56 (D-myo-inositol 1,2,6-triphosphate) in anaesthetized rats. Bischoff A, et al. **Pflugers Arch** 1997 May;434(1):57–62

Blockade of nitric oxide decreases the renal vasodilatory effect of neuropeptide Y in the insulin-treated diabetic rat. Torffvit O, et al. **Pflugers Arch** 1997 Aug;434(4):445–50

Effects of captopril on renal functions, renal and portal hemodynamics in patients with cirrhosis. Tsai YT, et al. **Proc Natl Sci Counc Repub China B** 1996 Apr;20(2):44–50

Direct renovascular effect of somatostatin in the dog. Tóth-Heyn P, et al. **Regul Pept** 1996 Dec 3;67(2):103–6

Free radical scavenging by lazaroids improves renal blood flow during sepsis. Krysztopik RJ, et al. **Surgery** 1996 Oct; 120(4):657–62

Effects of endothelin-1 on renal microvasculature measured using quantitative ultrasound. Insana MF, et al. **Ultrasound Med Biol** 1995;21(9):1143–51

Renal hemodynamic response to ureteral obstruction during converting enzyme inhibition. Frøkiaer J, et al. **Urol Res** 1996;24(4):217–27

[Renal hemodynamics and proteinuria in chronic glomerulonephritis treated with beta-receptor blockers or ace inhibitors] Erley CM, et al. **Dtsch Med Wochenschr** 1997 Aug 1;122(31–32):953–8 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Review article: renal circulatory changes in cirrhosis--pathogenesis and therapeutic prospects. Forrest EH, et al. **Aliment Pharmacol Ther** 1996 Jun;10(3):219–31 (121 ref.)

Angiotensin II release from rabbit intrarenal arteries: a critical assessment. Zimmerman BG, et al. **Am J Hypertens** 1997 Mar;10(3):306–14

Formation and actions of 20-hydroxyeicosatetraenoic acid in rat renal arterioles. Imig JD, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R217–27

Frequency-dependent modulation of renal blood flow by renal nerve activity in conscious rabbits. Janssen BJ, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R597–608

Role of nitric oxide in the arterial pressure and renal adaptations to long-term changes in sodium intake. Manning RD Jr, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1162–9

Flow versus pressure in the control of renin release in conscious dogs. Nafz B, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F200–5

Renal oxygenases: differential contribution to vasoconstriction induced by ET-1 and ANG II. Oyekan A, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R293–300

Role of prostaglandins in renal medullary circulation: response to different vasoconstrictors. Parekh N, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F653–8

Nitric oxide modulates angiotensin II- and norepinephrine-dependent vasoconstriction in rat kidney. Parekh N, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R630–5

Age-related changes in renal hemodynamics in female rats: role of multiple pregnancy and NO. Reckelhoff JF. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1985–9

Calcium entry and mobilization signaling pathways in ANG II-induced renal vasoconstriction in vivo. Ruan X, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F398–405

Systemic and renal hemodynamic effects of hemorrhage in conscious lambs. Smith FG, et al. **Am J Physiol** 1997 Jul; 273(1 Pt 2):H339–46

Thyroid, renal, and splanchnic circulation in horses at rest and during short-term exercise. Manohar M, et al. **Am J Vet Res** 1995 Oct;56(10):1356–61

Renal hemodynamic mechanisms of blood pressure rhythms. Pons M, et al. **Ann N Y Acad Sci** 1996 Aug 15;783:95–112 (66 ref.)

Resuscitation with diaspirin crosslinked hemoglobin increases cerebral and renal blood perfusion in hemorrhaged rats. Kumar A, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jan-Mar; 25(1-2):85–94

Effect of pulsatile and nonpulsatile assist on heart and kidney microcirculation with cardiogenic shock. Nakata K, et al. **Artif Organs** 1996 Jun;20(6):681–4

Renal circulation and cellular metabolism during left ventricular assisted circulation: comparison study of pulsatile and nonpulsatile assists. Sezai A, et al. **Artif Organs** 1997 Jul;21(7):830–5

Role of endogenous angiotensin II in renal hemodynamic and excretory responses to L-arginine infusion. Urabe K, et al. **Biol Pharm Bull** 1996 Sep;19(9):1149–53

Pharmacological modulation of spontaneous renal blood flow dynamics. Ajikobi DO, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):964–72

Prostaglandins maintain renal vasodilation and hyperfiltration during chronic nitric oxide synthase blockade in conscious pregnant rats. Danielson LA, et al. **Circ Res** 1996 Dec; 79(6):1161–6

Identification of a putative microvascular oxygen sensor. Harder DR, et al. **Circ Res** 1996 Jul;79(1):54–61

Dopaminergic receptor-mediated effects in the mesenteric vasculature and renal vasculature of the chronically instrumented newborn piglet. Pearson RJ, et al. **Crit Care Med** 1996 Oct;24(10):1706–12

Physiological role of endothelin in cardiovascular and renal hemodynamics: studies in animals. Gellai M. **Curr Opin Nephrol Hypertens** 1997 Jan;6(1):64–8 (50 ref.)

Physiological role of the endothelin system in human cardiovascular and renal haemodynamics. Webb D. **Curr Opin Nephrol Hypertens** 1997 Jan;6(1):69–73 (46 ref.)

Regulation of renal sodium and water excretion in the nephrotic syndrome and cirrhosis of the liver. Jespersen B. **Dan Med Bull** 1997 Apr;44(2):191–207 (230 ref.)

Interactions of the kallikrein-kinin and renin-angiotensin systems in experimental diabetes. Vora JP, et al. **Diabetes** 1997 Jan;46(1):107–12

Changes in renal blood flow measured by radionuclide angiography following exhausting exercise in humans. Suzuki M, et al. **Eur J Appl Physiol** 1996;74(1-2):1–7

Adrenomedullin: a new peptide involved in cardiorenal homeostasis? Edwards RM, et al. **Exp Nephrol** 1997 Jan-Feb;5(1):18–22 (25 ref.)

The role of carotid chemoreceptors in the effects of hypoxia on renal blood flow in the late gestation sheep fetus. Green LR, et al. **Exp Physiol** 1997 Jan;82(1):183–92

Remarks on the structure and course of renal afferent glomerular arterioles. Kosiński H. **Folia Morphol (Warsz)** 1995;54(4):259–65

Remarks on the structure and course of renal efferent glomerular arterioles. Kosiński H. **Folia Morphol (Warsz)** 1995;54(4):267–72

Reduction in renal blood flow following acute increase in the portal pressure: evidence for the existence of a hepatorenal reflex in man? Jalan R, et al. **Gut** 1997 May; 40(5):664–70

Aging and severity of hypertension attenuate endothelium-dependent renal vascular relaxation in humans. Higashi Y, et al. **Hypertension** 1997 Aug;30(2 Pt 1):252–8

Roles of prostaglandins and nitric oxide in the effect of endothelin-1 on renal hemodynamics. Lin H, et al. **Hypertension** 1996 Sep;28(3):372–8

Regulation of angiotensin II receptor AT1 subtypes in renal afferent arterioles during chronic changes in sodium diet. Ruan X, et al. **J Clin Invest** 1997 Mar 1;99(5):1072–81

Renal vasoactive mediator generation in portal hypertensive and bile duct ligated rats. Ackerman Z, et al. **J Hepatol** 1996 Apr;24(4):478–86

Natriuretic response to the combination of atrial natriuretic peptide and terlipressin in patients with cirrhosis and refractory ascites. Gadano A, et al. **J Hepatol** 1997 Jun; 26(6):1229–34

Neuropeptide Y-enhanced diuresis and natriuresis in anaesthetized rats is independent of renal blood flow reduction. Bischoff A, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):525–34

The adrenal-renal vascular connection contributes to increase in renal vascular resistance during an experimental hypotension in the rat. Zięcina R, et al. **J Physiol Pharmacol** 1997 Jun;48(2):179–84

Influence of the renal endothelin system on the autoregulation of renal blood flow in spontaneously hypertensive rats. Braun C, et al. **Kidney Blood Press Res** 1997;20(1):6–10

Nitric oxide and renal autoregulation. Just A. **Kidney Blood Press Res** 1997;20(3):201–4 (60 ref.)

Dissociation of blood pressure and blood flow. Nafz B, et al. **Kidney Blood Press Res** 1997;20(3):205–9

Renal tubular dynamics in the intact canine kidney. Lerman LO, et al. **Kidney Int** 1996 Oct;50(4):1358–62

Parathyroid hormone-related protein detection and interaction with NO and cyclic AMP in the renovascular system. Massfelder T, et al. **Kidney Int** 1996 Nov; 50(5):1591–603

Pathogenesis of chronic renal failure in the primary glomerulopathies, renal vasculopathies, and chronic interstitial nephritides. Bohle A, et al. **Kidney Int Suppl** 1996 May;54:S2–9 (44 ref.)

Vasoconstriction of the afferent arteriole and defective renal synthesis of nitric oxide in essential hypertension. Gómez-Alamillo C, et al. **Kidney Int Suppl** 1996 Jun; 55:S129–31

Renal hemodynamics in hypertensive renal allograft recipients: effects of calcium antagonists and ACE inhibitors. Grekas D, et al. **Kidney Int Suppl** 1996 Jun; 55:S97–100

TGF and nitric oxide: effects of salt intake and salt-sensitive hypertension. Wilcox CS, et al. **Kidney Int Suppl** 1996 Jun; 55:S9–13

Glomerular capillary network of cortical nephrons is reduced in male but not in female aging rats. Francois V, et al. **Mech Ageing Dev** 1996 Oct 4;91(1):11–22

Intradialytic renal haemodynamics--potential consequences for the management of the patient with acute renal failure [editorial] Manns M, et al. **Nephrol Dial Transplant** 1997 May;12(5):870–2 (18 ref.)

Effects of hypercholesterolemia of renal hemodynamics: study in patients with nephrotic syndrome. Fuiano G, et al. **Nephron** 1996;73(3):430–5

Renal hemodynamic response to gradated ureter obstruction in the pig. Hvistendahl JJ, et al. **Nephron** 1996;74(1):168–74

Effects of dietary salt restriction on blood pressure and the renal vasoactive system in the congenitally bilateral hydronephrotic rat. Kanehara H, et al. **Nephron** 1996; 73(2):286–92

Recovery from ischemic acute renal failure: independence from dialysis membrane type. Kränzlin B, et al. **Nephron** 1996;73(4):644–51

Effect of maternal meal ingestion on fetal renal artery resistance. Yasuhi I, et al. **Obstet Gynecol** 1997 Sep; 90(3):340–3

Renal vascular resistance in normal children--a color Doppler study. Lin GJ, et al. **Pediatr Nephrol** 1997 Apr; 11(2):182–5

Analysis of the dynamics of renal vascular resistance and urine flow rate in the cat following electrical stimulation

of the renal nerves. Celler BG, et al. **Physiol Meas** 1996 Aug;17(3):213–28
Neural control of renal function. DiBona GF, et al. **Physiol Rev** 1997 Jan;77(1):75–197 (1736 ref.)
The renal hemodynamic basis of diabetic nephropathy. O'Bryan GT, et al. **Semin Nephrol** 1997 Mar;17(2):93–100 (110 ref.)
Renal functional reserve in patients with severe chronic obstructive pulmonary disease [see comments] Sharkey RA, et al. **Thorax** 1997 May;52(5):411–5. Comment in: Thorax 1997 May;52(5):401–2.
[Vascular bench surgery in renal transplant] Casolino V, et al. **Minerva Cardioangiol** 1997 Mar;45(3):75–8 (Eng. Abstr.) **(Ita)**
[Analysis of renal blood flow velocity in hydronephrosis] Tsuji Y, et al. **Nippon Jinzo Gakkai Shi** 1997 Mar; 39(2):161–6 (Eng. Abstr.) **(Jpn)**

RENAL CORTICAL NECROSIS see **KIDNEY CORTEX NECROSIS**

RENAL DIALYSIS, HOME see **HEMODIALYSIS, HOME**

RENAL DIALYSIS UNITS, HOSPITAL see **HEMODIALYSIS UNITS, HOSPITAL**

RENAL DISEASE, END-STAGE see **KIDNEY FAILURE, CHRONIC**

RENAL FAILURE see **KIDNEY FAILURE**

RENAL FAILURE, ACUTE see **KIDNEY FAILURE, ACUTE**

RENAL FAILURE, CHRONIC see **KIDNEY FAILURE, CHRONIC**

RENAL FAILURE, END-STAGE see **KIDNEY FAILURE, CHRONIC**

RENAL INSUFFICIENCY see **KIDNEY FAILURE**

RENAL INSUFFICIENCY, ACUTE see **KIDNEY FAILURE, ACUTE**

RENAL INSUFFICIENCY, CHRONIC see **KIDNEY FAILURE, CHRONIC**

RENAL OSTEODYSTROPHY

Renal osteodystrophy. Hruska KA. **Baillieres Clin Endocrinol Metab** 1997 Apr;11(1):165–94 (86 ref.)

BLOOD

Serum magnesium concentration and PTH levels. Is long-term chronic hypermagnesemia a risk factor for adynamic bone disease? Navarro JF, et al. **Scand J Urol Nephrol** 1997 Jun;31(3):275–80
[Alkaline phosphatase of bone origin in hemodialyzed patients. 110 assays] Ureña P, et al. **Presse Med** 1996 Oct 5;25(29):1320–5 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Clinical images: aluminum-modified renal osteopathy. Buttgereit F, et al. **Arthritis Rheum** 1997 Sep;40(9):1724
Does renal osteodystrophy develop and/or progress during the course of rhGH treatment? Watkins SL. **Br J Clin Pract Symp Suppl** 1996 Aug;85:59–60

COMPLICATIONS

Spinal cord compression in renal osteodystrophy. Macfarlane JD, et al. **Eur Spine J** 1995;4(6):362–5
Case report: renal osteodystrophy in association with spinal stenosis in achondroplasia. Ong JS, et al. **Ir J Med Sci** 1996 Jul–Sep;165(3):155–6
Slipped capital femoral epiphysis associated with renal failure osteodystrophy. Loder RT, et al. **J Pediatr Orthop** 1997 Mar–Apr;17(2):205–11 (33 ref.)
Surgical correction of angular deformity of the knee in children with renal osteodystrophy. Oppenheim WL, et al. **J Pediatr Orthop** 1997 Jan–Feb;17(1):41–9
Bone resorption and mRNA expression of IL-6 and IL-6 receptor in patients with renal osteodystrophy. Langub MC Jr, et al. **Kidney Int** 1996 Aug;50(2):515–20
Hypercalcemia and pancreatitis in a child with adynamic bone disease. Osorio A, et al. **Pediatr Nephrol** 1997 Apr; 11(2):223–5
Is severe renal osteodystrophy a contraindication for recombinant human growth hormone treatment? Watkins SL. **Pediatr Nephrol** 1996 Jun;10(3):351–4 (22 ref.)
Coexisting hyperparathyroidism, renal osteodystrophy and psoriatic arthritis. Marhoffer W, et al. **Rheumatol Int** 1997; 17(2):79–82
[Renal osteomalacia] Eguchi J, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):17–20 (12 ref.) **(Jpn)**

DIAGNOSIS

Evaluation of bone mineral density in CAPD patients with dual energy X-ray absorptiometry. Pasadakis P, et al. **Adv Perit Dial** 1996;12:245–9
Bone disease in moderate renal failure: cause, nature and prevention. Bushinsky DA. **Annu Rev Med** 1997;48:167–76 (46 ref.)
Thoracic complications in uremic patients and in patients undergoing dialytic treatment: state of the art. Gavelli G, et al. **Eur Radiol** 1997;7(5):708–17 (76 ref.)
Biochemical markers for non-invasive diagnosis of hyperparathyroid bone disease and adynamic bone in patients on haemodialysis. Gerakis A, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2430–8
Assessment of renal osteodystrophy in dialysis patients: use of bone alkaline phosphatase, bone mineral density and parathyroid ultrasound in comparison with bone histology. Fletcher S, et al. **Nephron** 1997;75(4):412–9
[Management of renal osteopathy in patients with chronic dialysis] Kiss D, et al. **Schweiz Med Wochenschr** 1996 Oct 19;126(42):1792–8 (Eng. Abstr.) **(Ger)**
[Serum and urinary pyridinium cross-links in patients with predialysis chronic renal failure] Kagebayashi Y, et al. **Nippon Jinzo Gakkai Shi** 1996 Jun;38(6):248–53 (Eng. Abstr.) **(Jpn)**
[The importance of the metacarpal bone index in the evaluation of uremic osteopathy] Cakalaroski K, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:112–4 (Eng. Abstr.) **(Scc)**

DRUG THERAPY

Vitamin D analogs: from renal bone disease to osteoporosis. Kanis JA. **Calcif Tissue Int** 1997 Jan;60(1):106–10 (42 ref.)
Practical guidelines for effective treatment of the osteodystrophic uraemic syndrome with intravenous calcitriol. Cannella G, et al. **Nephrol Dial Transplant** 1996; 11 Suppl 3:50–3
Use of erythropoietin, active vitamin D3 metabolites, and alkali agents in predialysis patients. Ismail N. **Semin Nephrol** 1997 Jul;17(4):270–84 (112 ref.)
[Current treatment of renal osteodystrophy in children] Macher MA, et al. **Arch Pediatr** 1997;4(2 Suppl 2):91s–94s (20 ref.) **(Fre)**
[Effects of vitamin D on protein turnover in children with renal osteopathy] Denisova SN, et al. **Vopr Pitan** 1996; (6):31–4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Bone alkaline phosphatase isoenzyme in renal osteodystrophy. Jarava C, et al. **Nephrol Dial Transplant** 1996;11 Suppl 3:43–6

ETIOLOGY

The aplastic form of renal osteodystrophy. Sherrard DJ, et al. **Nephrol Dial Transplant** 1996;11 Suppl 3:29–31
Renal osteodystrophy. Bardin T. **Rev Rhum Engl Ed** 1997 Jun 30;64(6 Suppl):114S–118S (27 ref.)
[Radiographic manifestations in teeth and jaws in chronic kidney insufficiency] Scutellari PN, et al. **Radiol Med (Torino)** 1996 Oct;92(4):415–20 (Eng. Abstr.) **(Ita)**
[Injuries to the knee extensor system in patients with longterm hemodialysis] Twaróg Z, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(4):393–6 (Eng. Abstr.) **(Pol)**

GENETICS

[Idiopathic tubular proteinuria (Dent's disease)] Igarashi T. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):670–3 (17 ref.) **(Jpn)**

HISTORY

History of vitamin D treatment of renal osteodystrophy. Morii H, et al. **Am J Nephrol** 1997;17(3–4):382–6

IMMUNOLOGY

Role of cytokines in renal osteodystrophy. Monier-Faugere MC, et al. **Curr Opin Nephrol Hypertens** 1997 Jul; 6(4):327–32 (87 ref.)

METABOLISM

Suppressive effect of calcium on parathyroid hormone release in adynamic renal osteodystrophy and secondary hyperparathyroidism. Goodman WG, et al. **Kidney Int** 1997 May;51(5):1590–5

PATHOLOGY

Can bone histomorphometry be predicted by clinical assessment and noninvasive techniques in peritoneal dialysis? Joffe P, et al. **Miner Electrolyte Metab** 1996; 22(4):224–33
Trends in renal osteodystrophy: a survey from 1983 to 1995 in a total of 2248 patients. Monier-Faugere MC, et al. **Nephrol Dial Transplant** 1996;11 Suppl 3:111–20
Bone biopsy—beyond light microscopy and histodynamics [editorial] Moore PR, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):659–63 (21 ref.)
Renal osteodystrophy in rats with reduced renal mass. Moscovici A, et al. **Nephrol Dial Transplant** 1996;11 Suppl 3:146–52
Assessment of renal osteodystrophy in dialysis patients: use of bone alkaline phosphatase, bone mineral density and parathyroid ultrasound in comparison with bone histology. Fletcher S, et al. **Nephron** 1997;75(4):412–9
Macrognathia of renal osteodystrophy in dialysis patients. Damm DD, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):489–95

PHYSIOPATHOLOGY

Effect of CAPD and hemodialysis on parathyroid function. Malberti F, et al. **Adv Perit Dial** 1996;12:239–44

RADIOGRAPHY

Osteitis fibrosa cystica and chronic renal failure. Spaulding CM, et al. **J Am Podiatr Med Assoc** 1997 May;87(5):238–40
[Radiographic changes in the sella turcica in female patients on chronic hemodialysis] Dimitrijević Z, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:119–20 (Eng. Abstr.) **(Scc)**

SURGERY

Long-term results after surgical treatment of renal hyperparathyroidism when fewer than four glands are identified at operation. Donckier V, et al. **J Am Coll Surg** 1997 Jan;184(1):70–4
[Prospective observational study of surgical therapy of renal hyperparathyroidism] Walgenbach S, et al. **Chirurg** 1997 Feb;68(2):147–53 (Eng. Abstr.) **(Ger)**
[Results of surgical therapy in renal hyperparathyroidism. Follow-up of 143 patients] Dotzenrath C, et al. **Langenbecks Arch Chir** 1996;381(1):46–50 (Eng. Abstr.) **(Ger)**

THERAPY

Low calcium (1.25 mmol/L) dialysate can normalize relative hypoparathyroidism in CAPD patients with low bone turnover. Shigematsu T, et al. **Adv Perit Dial** 1996;12:250–6
Renal osteodystrophy. González EA, et al. **Curr Ther Endocrinol Metab** 1997;6:540–6 (4 ref.)
Renal hypophosphatemic rickets. Hanna JD, et al. **Curr Ther Endocrinol Metab** 1997;6:533–40 (19 ref.)
Effect of treatment with 1.25 and 1.75 mmol/l calcium dialysate on bone mineral density in haemodialysis patients. Van der Niepen P, et al. **Nephrol Dial Transplant** 1995 Dec; 10(12):2253–8
The treatment of renal osteodystrophy. Rigden SP. **Pediatr Nephrol** 1996 Oct;10(5):653–5
The management of renal osteodystrophy. Salusky IB, et al. **Pediatr Nephrol** 1996 Oct;10(5):651–3

RENAL PAPILLITIS, NECROTIZING see **KIDNEY PAPILLARY NECROSIS**

RENAL PLASMA FLOW

DRUG EFFECTS

The response of renal plasma flow to angiotensin II infusion in a population-based sample and its association with the parental history of essential hypertension. Kardia SL, et al. **J Hypertens** 1997 May;15(5):483–93
Relationship between renal plasma flow response to angiotensin II and blood pressure in a population-based sample. Turner ST, et al. **J Hypertens** 1997 May; 15(5):495–502

PHYSIOLOGY

Elevated ambulatory blood pressure in microalbuminuric IDDM patients is inversely associated with renal plasma flow. A compensatory mechanism? Poulsen PL, et al. **Diabetes Care** 1997 Mar;20(3):429–32
Renal response to acute dietary protein loading in young and old people [letter] Mulkerrin E, et al. **J Am Geriatr Soc** 1997 Mar;45(3):389–91
Effects of SWL on glomerular filtration rate and renal plasma flow in uninephrectomized minipigs. Willis LR, et al. **J Endourol** 1997 Feb;11(1):27–32

RENAL PLASMA FLOW, EFFECTIVE

Comparison of long-term renal function after spinal cord injury using different urinary management methods. Sekar P, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):992–7
Simplified determination of technetium-99m ethylenedicysteine clearance from a single plasma sample: what is the upper normal range? [letter; comment] Kabasakal L, et al. **Eur J Nucl Med** 1996 Nov;23(11):1556–7 . Comment on: Eur J Nucl Med 1996 Apr;23(4):365–70.
Compartmental analysis of the complete dynamic scan data for scintigraphic determination of effective renal plasma flow. Dagli MS, et al. **J Nucl Med** 1997 Aug;38(8):1285–90
99Tcm-MAG3 renal studies: effective renal plasma flow in patients with spinal cord injuries. Kao CH, et al. **Nucl Med Commun** 1996 Dec;17(12):1068–71
Multicenter trial validation of a camera-based method to measure Tc-99m mercaptoacetyltriglycine, or Tc-99m MAG3, clearance. Taylor A Jr, et al. **Radiology** 1997 Jul; 204(1):47–54
[The measurement of renal plasma flow] Nagai T. **Nippon Rinsho** 1997 Apr;55 Suppl 2:597–600 (6 ref.) **(Jpn)**

RENAL PLASMA FLOW, EFFECTIVE

DRUG EFFECTS

Captopril–induced changes in effective renal plasma flow in hypertensive renal transplant recipients. Sud K, et al. **Clin Transplant** 1996 Aug;10(4):337–40

Renal hemodynamic changes induced by captopril and angiotensin–converting enzyme gene polymorphism. Mizuiri S, et al. **Nephron** 1997;75(3):310–4

RENAL REPLACEMENT THERAPY

see related
KIDNEY
KIDNEY DISEASES

Reflections on renal replacement therapy (particularly on dialysis). Bonomini V. **Acta Med Croatica** 1996;50(3):115–8

HIV infection: challenges for dialysis personnel. Bradley–Springer L. **Adv Ren Replace Ther** 1996 Oct; 3(4):293–7 (35 ref.)

Hepatitis: implications for dialysis personnel. Campbell MA. **Adv Ren Replace Ther** 1996 Oct;3(4):284–6

Stranger in my body. Chant S. **Adv Ren Replace Ther** 1997 Jul;4(3):285–7

Implementing a continuous renal replacement therapies program. Craig MA, et al. **Adv Ren Replace Ther** 1996 Oct;3(4):348–50

Staphylococcus aureus vaccination for dialysis patients—an update. Fattom AI, et al. **Adv Ren Replace Ther** 1996 Oct; 3(4):302–8 (57 ref.)

Hepatitis C in dialysis patients. Natov SN, et al. **Adv Ren Replace Ther** 1996 Oct;3(4):275–83 (83 ref.)

Core indicators: a consumer's perspective. Nix W. **Adv Ren Replace Ther** 1997 Apr;4(2):182

Maintenance of employment on dialysis. Rasgon S, et al. **Adv Ren Replace Ther** 1997 Apr;4(2):152–9 (26 ref.)

Transport characteristics of the slow therapies: implications for achieving adequacy of dialysis in acute renal failure. Sigler MH. **Adv Ren Replace Ther** 1997 Jan;4(1):68–80 (38 ref.)

Continuous Renal Replacement Therapies, International Conference. San Diego, California, November 8–10, 1995. Abstracts. **Blood Purif** 1995 Nov–Dec;13(6):385–402

Renal replacement therapy in acute renal failure. McCarthy JT. **Curr Opin Nephrol Hypertens** 1996 Nov;5(6):480–4 (38 ref.)

Renal replacement therapy for hemophiliacs [editorial] Roy–Chaudhury P, et al. **Int J Artif Organs** 1997 May; 20(5):241–3

Extracorporeal therapy requirements for patients with acute renal failure. Clark WR, et al. **J Am Soc Nephrol** 1997 May;8(5):804–12

Protein losses in continuous renal replacement therapies. Mokrzycki MH, et al. **J Am Soc Nephrol** 1996 Oct; 7(10):2259–63

Why is it difficult for staff to discuss advance directives with chronic dialysis patients? Perry E, et al. **J Am Soc Nephrol** 1996 Oct;7(10):2160–8

Risk factors for hospital utilization in chronic dialysis patients. Southeastern Kidney Council (Network 6). Rocco MV, et al. **J Am Soc Nephrol** 1996 Jun;7(6):889–96

Early death in dialysis patients: risk factors and impact on incidence and mortality rates. Soucie JM, et al. **J Am Soc Nephrol** 1996 Oct;7(10):2169–75

Dialysis for surgical acute renal failure. Davison AM. **J R Soc Med** 1996;89 Suppl 29:17

Clearance of pentosidine, an advanced glycation end product, by different modalities of renal replacement therapy. Miyata T, et al. **Kidney Int** 1997 Mar;51(3):880–7

Increased lymphocytic Na+/H+ exchange activity after hemodialysis: evidence for an endogenous inhibitor of Na+/H+ exchange in patients with end–stage renal failure. Tepel M, et al. **Life Sci** 1996;59(18):1545–52

Advances in nephrology and dialysis. Proceedings of the 27th San Carlo Course. Milan, Italy, December 8–11, 1995. **Nephrol Dial Transplant** 1997;12 Suppl 1:1–88

Profiling Dialysis in the Year 2000. Basic Knowledge and Clinical Application. Proceedings of a conference. Edinburgh, United Kingdom, 24 May 1996. **Nephrol Dial Transplant** 1996;11 Suppl 8:1–67

De novo diabetes in dialysis patients: when diabetes is not diabetic nephropathy [editorial] Catalano C. **Nephrol Dial Transplant** 1996 Jun;11(6):938–41 (21 ref.)

The impact of diabetes on patients' survival in dialysis patients with non–diabetic renal disease and in patients who develop diabetes during chronic dialysis. Catalano C, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1124–8

Units of measurement and collaborative European medical research [letter] Daly C, et al. **Nephrol Dial Transplant** 1995 Dec;10(12):2380–1

Will pimagidine improve survival of diabetics on dialysis? Friedman EA. **Nephrol Dial Transplant** 1996 Aug; 11(8):1524–7 (44 ref.)

Renal replacement therapy in the elderly: an old problem with young solutions [editorial] Ismail N. **Nephrol Dial Transplant** 1997 May;12(5):873–6 (31 ref.)

Prognostic markers in older patients starting renal replacement therapy. Jassal SV, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1052–7

The changing population on renal replacement therapy: its clinical and economic impact in Europe. Mallick NP, et al. **Nephrol Dial Transplant** 1996;11 Suppl 2:2–5

Incidence of analgesic nephropathy among patients undergoing renal replacement therapy in Czech Republic and Slovak Republic. The Group of Czech and Slovak Nephrologists. Matoušovic K, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1048–51

Outcome of renal replacement therapy in autosomal dominant polycystic kidney disease. Pirson Y, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:24–8 (31 ref.)

Diabetic patients on renal replacement therapy [letter; comment] Stein G, et al. **Nephrol Dial Transplant** 1996 Aug; 11(8):1669–70. Comment on: Nephrol Dial Transplant 1995;10(4):462–7.

Report on management of renale failure in Europe, XXVI, 1995. Rare diseases in renal replacement therapy in the ERA–EDTA Registry. Tsakiris D, et al. **Nephrol Dial Transplant** 1996;11 Suppl 7:4–20

Withdrawal of renal replacement therapy [letter; comment] Watt DA. **Nephrol Dial Transplant** 1996 Sep;11(9):1895. Comment on: Nephrol Dial Transplant 1996 Jan;11(1):133–9.

Autosomal dominant polycystic kidney disease—the patient on renal replacement therapy. Zeier M, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:18–20 (17 ref.)

Age at renal replacement therapy in autosomal dominant polycystic kidney disease [letter] Gonzalo A, et al. **Nephron** 1996;74(3):620

Renal replacement therapy in the elderly. Mandigers CM, et al. **Neth J Med** 1996 Oct;49(4):135–42

Optimizing end–stage renal disease therapy for the patient with diabetes mellitus. Friedlander MA, et al. **Semin Nephrol** 1997 Jul;17(4):331–45 (107 ref.)

Renal transplantation is well established as the preferred form of replacement therapy for most patients with endstage renal disease [editorial] Novick AC. **World J Urol** 1996; 14(4):205

[Dialysis an the elderly] Huisman RM. **Ned Tijdschr Geneeskd** 1997 Feb 1;141(5):229–33 (Eng. Abstr.) **(Dut)**

[Uremia: pathophysiologic sequelae and indications for kidney replacement therapy] Jakob SM, et al. **Schweiz Med Wochenschr** 1997 Jun 21;127(25):1077–81 (20 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Can cardiovascular complications be prevented in dialysis patients? Raine AE. **Adv Nephrol Necker Hosp** 1996; 25:317–39 (103 ref.)

Kinetics of intradialytic disequilibria: the problem, the causes, and new methods for the alleviation of patient morbidity. Kelly TD. **Nephrol Dial Transplant** 1996;11 Suppl 8:3–9 (40 ref.)

Should hyperlipidaemia in dialysis patients be treated? [editorial] Wheeler DC. **Nephrol Dial Transplant** 1997 Jan; 12(1):19–21 (10 ref.)

Macrognathia of renal osteodystrophy in dialysis patients. Damm DD, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):489–95

[The epiphyseal plate in hemodialysis, peritoneal dialysis and following kidney transplantation] Fink B, et al. **Z Orthop Ihre Grenzgeb** 1996 Jul–Aug;134(4):317–23 (Eng. Abstr.) **(Ger)**

HISTORY

The start of clinical nephrology in Austria and developments in the treatment of patients with end stage renal disease over the last decades. Watschinger B, et al. **Wien Klin Wochenschr** 1997 Jun 27;109(12–13):499–503

INSTRUMENTATION

Dynamical control of the dialysis process. Part II: An improved algorithm for the solution of a tracking problem. Bachhiesl P, et al. **Biomed Tech (Berl)** 1996 Sep;41(9):228, 231–5

Impact of single use versus reuse of cellulose dialyzers on clinical parameters and indices of biocompatibility. Pereira BJ, et al. **J Am Soc Nephrol** 1996 Jun;7(6):861–70

METHODS

Bionic artificial kidney. Bonomini V, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 Jan; 24(1):1–10

Kinetics of intradialytic disequilibria: the problem, the causes, and new methods for the alleviation of patient morbidity. Kelly TD. **Nephrol Dial Transplant** 1996;11 Suppl 8:3–9 (40 ref.)

Urea, sodium, and water changes in profiling dialysis. Mann H, et al. **Nephrol Dial Transplant** 1996;11 Suppl 8:10–5 (12 ref.)

The diabetic patient with ESRD: how to select the modality of renal replacement [editorial] Pirson Y. **Nephrol Dial Transplant** 1996 Aug;11(8):1511–3

Options for renal replacement therapy: special considerations. Becker BN, et al. **Semin Nephrol** 1997 May;17(3):176–87 (71 ref.)

[Indications for and problems in active therapy of uremic patients (editorial)] Forsström J. **Duodecim** 1995; 111(15):1395–8 (8 ref.) **(Fin)**

[Active treatment of renal disease in Finland] Stenman S, et al. **Duodecim** 1995;111(15):1497–504 (17 ref.) **(Fin)**

[Choice of renal replacement therapy] Favre H. **Schweiz Med Wochenschr** 1997 Jun 21;127(25):1082–7 (19 ref.) (Eng. Abstr.) **(Fre)**

PSYCHOLOGY

Medical and psychosocial rehabilitation of young adults receiving renal replacement therapy since childhood: a single–centre experience [news] Querfeld U, et al. **Nephrol Dial Transplant** 1997 Jan;12(1):33–7

TRENDS

Current status of renal replacement therapy in Japan: results of the annual survey of the Japanese Society for Dialysis Therapy [news] [corrected and republished article originally printed in Nephrol Dial Transplant 1996 Nov;11(11):2143–50] Shinzato T, et al. **Nephrol Dial Transplant** 1997 May;12(5):889–98

UTILIZATION

The need for renal replacement therapy in Scotland. Junor BJ. **Health Bull (Edinb)** 1996 Nov;54(6):474–85

The need and demand for renal replacement therapy in ethnic minorities in England. Roderick PJ, et al. **J Epidemiol Community Health** 1996 Jun;50(3):334–9

Nephrology and renal replacement therapy in Romania. Ursea N, et al. **Nephrol Dial Transplant** 1997 Apr; 12(4):684–90

RENAL TRANSPLANTATION see **KIDNEY TRANSPLANTATION**

RENAL TUBULAR TRANSPORT, INBORN ERRORS

DIAGNOSIS

Severe hyperchloriduria–hyperkaliuria: a new congenital renal tubular abnormality? Meyburg J, et al. **J Pediatr** 1996 Mar;128(3):376–8

RENAL VEINS

Resolution of proteinuria secondary to bilateral renal vein thrombosis after treatment with systemic thrombolytic therapy. Morrissey EC, et al. **Am J Kidney Dis** 1997 Apr; 29(4):615–9

Suprarenal inferior vena cava filter placement prior to transcatheter arterial embolization (TAE) of a renal cell carcinoma with large renal vein tumor thrombus: prevention of pulmonary tumor emboli after TAE. Hirota S, et al. **Cardiovasc Intervent Radiol** 1997 Mar–Apr; 20(2):139–41

Arteriovenous fistula following nephrectomy. Kajbafzadeh AM, et al. **Eur Urol** 1997;31(1):112–4 (12 ref.)

Idiopathic and spontaneously regressing thrombus in right renal vein and inferior vena cava. Chikaraishi T, et al. **Int J Urol** 1997 Jan;4(1):83–5

Renal vein thrombosis and metastasis to the bladder: an unusual presentation of malignant melanoma. Ergen A, et al. **Int Urol Nephrol** 1995;27(5):547–9

Successful systemic low–dose lysis of a caval thrombus by rt–PA in a neonate with congenital nephrotic syndrome. Kändler C, et al. **J Pediatr Hematol Oncol** 1997 Jul–Aug; 19(4):348–50

Leiomyosarcoma of the renal vein. Brandes SB, et al. **J Surg Oncol** 1996 Nov;63(3):195–200 (26 ref.)

Microscopic vascular invasion is the most relevant prognosticator after radical nephrectomy for clinically nonmetastatic renal cell carcinoma. Van Poppel H, et al. **J Urol** 1997 Jul;158(1):45–9

The factor V Leiden mutation and risk of renal vein thrombosis in patients with nephrotic syndrome. Irish AB. **Nephrol Dial Transplant** 1997 Aug;12(8):1680–3

Retroperitoneal lymphangiectasia associated with bilateral renal vein thrombosis. Riehl J, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1701–3

Bilateral renal venous thrombosis in a neonate associated with resistance to activated protein C. Haffner D, et al. **Pediatr Nephrol** 1996 Dec;10(6):737–9

Spontaneous kidney allograft rupture and cyclosporine immunosuppressive therapy. Grochowiecki T, et al. **Transplant Proc** 1996 Dec;28(6):3461–2

Bilateral renal vein thrombosis in a newborn: a case of prenatal renal vein thrombosis. Cozzolino DJ, et al. **Urology** 1997 Jul;50(1):128–31

[Intravenous leiomyomatosis of uterine origin with cardiac extension. A case report and review of the literature] Tribondeau P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(2):187–92 (33 ref.) (Eng. Abstr.) **(Fre)**

[Thrombosis of the renal vein and hemorrhagic rectocolitis] Miroux F, et al. **J Radiol** 1996 Sep;77(9):671–3 (Eng. Abstr.) **(Fre)**

[Idiopathic renal arteriovenous fistula] Bennani S, et al. **Prog Urol** 1996 Jun;6(3):429–33 (Eng. Abstr.) **(Fre)**

[Renal vein thrombosis and constitutional protein S deficiency] Albitar S, et al. **Rev Med Interne** 1996; 17(9):746–8 (Eng. Abstr.) **(Fre)**

[Extensive postpartum, bilateral ovarian vein thrombosis] Kaufman N, et al. **Harefuah** 1996 Jul;131(1–2):12–4, 71 (Eng. Abstr.) **(Heb)**

[Renal vein thrombosis] Matsui N. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):312–5 (15 ref.)

(Jpn)

[Renal arteriovenous fistula] Taniyama Y, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):320–2 (10 ref.) (Jpn)

[Leiomyosarcoma originating in the renal vein. A special case] Alcover Garcia J, et al. **Arch Esp Urol** 1996 Jul–Aug; 49(6):638–42 (Eng. Abstr.) (Spa)

ABNORMALITIES

Large extrahepatic portosystemic shunt without portal hypertension. Konno K, et al. **Abdom Imaging** 1997 Jan–Feb;22(1):79–81

Primary Budd–Chiari syndrome due to complex venous anomalies. Sakamoto N, et al. **Abdom Imaging** 1997 Sep–Oct;22(5):499–501

MR venography of left renal vein anomalies. Roditi GH, et al. **Clin Radiol** 1996 Dec;51(12):861–4

A retrocaval right testicular artery passing through a hiatus in a bifid right renal vein [letter] Mirapeix RM, et al. **J Anat** 1996 Dec;189 (Pt 3):689–90

Insertion of an inferior vena caval filter and vena cavography. Vesely T. **J Vasc Interv Radiol** 1997 Mar–Apr;8(2):225–6

Ear buzzing and lumbar pain revealing a late arteriovenous fistula of the kidney. Badid C, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1150–2

Spontaneous renal arteriovenous fistula as a cause of haematuria. Fogazzi GB, et al. **Nephrol Dial Transplant** 1997 Feb;12(2):350–6 (67 ref.)

Transcatheter intravascular embolotherapy of renal arteriovenous fistula––method of choice [letter] Schwab M, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2523–4

An anomalous case of paraportal circulation. A case of an abnormal, enlarged, communicating vein between the left gastric vein and a gastro–renal shunt. Sakamoto H, et al. **Surg Radiol Anat** 1997;19(1):49–51

Two types of major venous anomalies associated with abdominal aneurysmectomy: a report of two cases. Nonami Y, et al. **Surg Today** 1996;26(11):940–4

Transplantation of kidneys with vascular anomalies or harvesting injury into pediatric recipients. Kaliciński P, et al. **Transplant Proc** 1996 Dec;28(6):3463–5

A case of gross hematuria arising during embolization for renal arteriovenous malformation. Kamai T, et al. **Urol Int** 1997;58(1):55–7

[Malformation of the renal venous and caudal caval system disclosed by recurrent hematuria (letter; comment)] Lenoir S, et al. **Prog Urol** 1996 Jun;6(3):459. Comment on: Prog Urol 1995 Dec;5(6):992–6. (Fre)

[Complications of renal oligobiopsy with regard to highly selective renal artery embolization as a method treatment––case report] Hyla–Klekot L, et al. **Przegl Lek** 1996;53(7):582–4 (Eng. Abstr.) (Pol)

[Extrahepatic portal hypertension caused by a developmental anomaly of the left renal vein] Rusyn VI, et al. **Klin Khir** 1995;(2):53 (Ukr)

ANATOMY & HISTOLOGY

On a complex arrangement of the vascular pedicle of the left kidney. Caggiati A, et al. **Anat Anz** 1997 Jun; 179(3):269–71

Absence of renal vein valves in humans and baboons. Satyapal KS, et al. **Anat Anz** 1996 Oct;178(5):481–4

INJURIES

Renal vein thrombosis after vascular pedicle injury[clin conference] Blankenship B, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1574

Massive hemorrhage from renal vein injury during percutaneous renal surgery: endourological management. Gupta M, et al. **J Urol** 1997 Mar;157(3):795–7

Transplantation of kidneys with vascular anomalies or harvesting injury into pediatric recipients. Kaliciński P, et al. **Transplant Proc** 1996 Dec;28(6):3463–5

PATHOLOGY

T2*–weighted dynamic MR imaging in renal artery or vein stenosis. Tsushima Y, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1041–3

Salvage of a renal allograft with renal vein occlusion secondary to extrinsic compression. Humar A, et al. **Am J Kidney Dis** 1996 Oct;28(4):622–3

Direct invasion of the renal vein by metastatic testicular cancer. Effert PJ, et al. **Eur Urol** 1997;31(1):119–21

Intravascular papillary endothelial hyperplasia in a thrombosed renal allograft vein. Steffee CH, et al. **Hum Pathol** 1996 Sep;27(9):986–9

Venous aneurysms: MR diagnosis with the "layered gadolinium" sign. Krinsky G, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):623–7 (12 ref.)

Images in hepatology. Large splenorenal shunt in portal venous obstruction. Dhiman RK, et al. **J Hepatol** 1997 Jul; 27(1):216

Renal MR angiography. Borrello JA. **Magn Reson Imaging Clin N Am** 1997 Feb;5(1):83–93 (49 ref.)

Acquired vein stenosis of renal allograft––percutaneous treatment with self–expanding metallic stent. Cercueil JP, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):825–6

Early graft dysfunction due to renal vein compression. Yang CW, et al. **Nephron** 1996;73(3):480–1

[Nutcracker phenomenon] Ubara Y, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):289–92 (20 ref.) (Jpn)

PHYSIOLOGY

Hemodynamic imaging with pulsatility–index and resistive–index color Doppler US. Lin GS, et al. **Radiology** 1997 Sep;204(3):870–3

RADIOGRAPHY

Helical CT angiography for examination of living renal donors. Cochran ST, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1569–73

Problem in diagnostic imaging: behind the left renal vein. Pilcher JM, et al. **Clin Anat** 1997;10(5):349–52

Experimental study of self–expandable metallic inferior vena caval stent crossing the renal vein in rabbits. Radiologic–pathologic correlation. Kim JK, et al. **Invest Radiol** 1996 Jun;31(6):311–5

Helical and electron beam CT scanning in the evaluation of renal vein involvement in patients with renal cell carcinoma. Welch TJ, et al. **J Comput Assist Tomogr** 1997 May–Jun;21(3):467–71

[Varicocele as a symptom of renal venous hypertension] Derevianko IM, et al. **Urol Nefrol (Mosk)** 1996 Nov–Dec; (6):29–31 (Eng. Abstr.) (Rus)

[Clinical application of X–ray endovascular revascularization of pyelonephritic kidney: first experience] Galkin EV, et al. **Vestn Rentgenol Radiol** 1997 Jul–Aug;(4):18–20 (Eng. Abstr.) (Rus)

SURGERY

Acquired vein stenosis of renal allograft––percutaneous treatment with self–expanding metallic stent. Cercueil JP, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):825–6

Leiomyosarcoma of the inferior vena cava: novel surgical reconstruction preserves renal function. Babatasi G, et al. **Thorac Cardiovasc Surg** 1997 Feb;45(1):43–5

TRANSPLANTATION

Simultaneous aortorenal homograft transplantation: expanding the indications for renal and vascular replacement [letter; comment] Jamieson CW. **Br J Surg** 1996 Dec;83(12):1797. Comment on: Br J Surg 1996 Jul;83(7):918.

Intravascular papillary endothelial hyperplasia in a thrombosed renal allograft vein. Steffee CH, et al. **Hum Pathol** 1996 Sep;27(9):986–9

ULTRASONOGRAPHY

Renal vein aneurysm: diagnosis with color Doppler sonography. Kabaalioğlu A, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):645–6 (8 ref.)

Left renal vein entrapment syndrome in two girls with orthostatic proteinuria. Lee SJ, et al. **Pediatr Nephrol** 1997 Apr;11(2):218–20

Antenatal and neonatal renal vein thrombosis: new ultrasonic features with high frequency transducers. Wright NB, et al. **Pediatr Radiol** 1996 Sep;26(9):686–9

[Role of color Doppler echography (ECD) in the diagnosis and follow–up of post–biopsy arteriovenous fistula in the transplanted kidney] Carrieri G, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):87–9 (Eng. Abstr.) (Ita)

RENIN

Relationship of polymorphisms in the renin–angiotensin system and in E–selectin of patients with early severe coronary heart disease. Wenzel K, et al. **J Mol Med** 1997 Jan;75(1):57–61

ADMINISTRATION & DOSAGE

Dose effects of human renin in rats transgenic for human angiotensinogen. Bohlender J, et al. **Hypertension** 1997 Apr;29(4):1031–8

ANALYSIS

Presence of renin within intramitochondrial dense bodies of the rat adrenal cortex. Peters J, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E439–50

Detection of coagulating gland renin by hybridohistochemistry. Kon Y, et al. **Anat Histol Embryol** 1996 Dec;25(4):289–94

Expression of angiotensinogen mRNA and localization of angiotensin II and renin in peripheral adrenergic neurons in primary culture. Wang JM, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):876–81

Prorenin, renin, angiotensinogen, and angiotensin–converting enzyme in normal and failing human hearts. Evidence for renin binding. Danser AH, et al. **Circulation** 1997 Jul 1; 96(1):220–6

Prorenin and renin in human tissues and plasma––immunochemical identification. Kataoka K, et al. **Immunopharmacology** 1996 May;32(1–3):146–8

The renin–angiotensin system in cats with chronic renal failure. Taugner F, et al. **J Comp Pathol** 1996 Oct; 115(3):239–52

The distribution of renin containing cells in scarred kidneys. Konda R, et al. **J Urol** 1996 Oct;156(4):1450–4

Adrenaline cells of the rat adrenal cortex and medulla contain renin and prorenin. Berka JL, et al. **Mol Cell Endocrinol** 1996 May 31;119(2):175–84

Immunocytochemical localization of renin in the developing ovine fetus. Rawashdeh NM, et al. **Reprod Fertil Dev** 1996; 8(1):97–101

ANTAGONISTS & INHIBITORS

Remikiren (Ro 42–5892)––an orally active renin inhibitor in essential hypertension. Effects on blood pressure and the renin–angiotensin–aldosterone system. Himmelmann A, et al. **Am J Hypertens** 1996 Jun;9(6):517–22

Inhibitory effect of Ca2+ on renin secretion elicited by chemiosmotic stimuli through actomyosin mediation. Park CS, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C248–54

Inhibition of renin secretion by Ca2+ through activation of myosin light chain kinase. Park CS, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C242–7

Interferon–gamma inhibits the synthesis and release of renin from human decidual cells. Jikihara H, et al. **Biol Reprod** 1996 Jun;54(6):1311–6

Assessment of the role of the renin–angiotensin system in cardiac contractility utilizing the renin inhibitor remikiren. van Kats JP, et al. **Br J Pharmacol** 1996 Mar;117(5):891–901

Renin inhibitors: cardiovascular drugs of the future? Wood JM, et al. **Cardiovasc Drugs Ther** 1996 Jul;10(3):309–12 (31 ref.)

Effects of renin inhibition compared to angiotensin converting enzyme inhibition in conscious dogs with pacing–induced heart failure. Shannon RP, et al. **Cardiovasc Res** 1997 Jun;34(3):464–72

Spontaneous inhibition or inactivation of renin in rat plasma. De Vito E, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Jan;116(1):55–60

Several polyhydroxymonoamide renin inhibitors assume similar conformations in the unbound and renin–bound states. Laplante SR, et al. **Int J Pept Protein Res** 1996 Nov; 48(5):401–10

Prediction of ligand–receptor binding thermodynamics by free energy force field (FEFF) 3D–QSAR analysis: application to a set of peptidometic renin inhibitors. Tokarski JS, et al. **J Chem Inf Comput Sci** 1997 Jul–Aug; 37(4):792–811

Constructing protein models for ligand–receptor binding thermodynamic simulations: an application to a set of peptidometic renin inhibitors. Tokarski JS, et al. **J Chem Inf Comput Sci** 1997 Jul–Aug;37(4):779–91

Hepatobiliary elimination of certain peptide–mimicking drugs: linear hydrophobic and hydrophilic renin–inhibitors and hydrophobic cyclopeptides. Ziegler K, et al. **J Hepatol** 1996;24 Suppl 1:47–52 (22 ref.)

New renin inhibitors containing novel analogues of statine. Jones DM, et al. **J Pept Res** 1997 Aug;50(2):109–21

Modulation of plasminogen activator inhibitor–1 in vivo: a new mechanism for the anti–fibrotic effect of renin–angiotensin inhibition. Oikawa T, et al. **Kidney Int** 1997 Jan;51(1):164–72

Is the antiproteinuric response to inhibition of the renin–angiotensin system less effective during the night? Buter H, et al. **Nephrol Dial Transplant** 1997;12 Suppl 2:53–6

Effects of central alpha–adrenergic agonists on hormone–induced 3% NaCl and water intake. de Paula PM, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):155–8

Effect of renin–angiotensin inhibition on glomerular injuries in DOCA–salt hypertensive rats. Oishi T, et al. **Regul Pept** 1996 Apr 23;62(2–3):89–95

BIOSYNTHESIS

Thyroid hormone stimulates renin synthesis in rats without involving the sympathetic nervous system. Kobori H, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):E227–32

Acute hypoxia stimulates renin secretion and renin gene expression in vivo but not in vitro. Ritthaler T, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1105–11

Beta–adrenergic regulation of renin expression in differentiated U–937 monocytic cells. Jikihara H, et al. **Biochem Pharmacol** 1997 Jun 15;53(12):1883–8

Interferon–gamma inhibits the synthesis and release of renin from human decidual cells. Jikihara H, et al. **Biol Reprod** 1996 Jun;54(6):1311–6

Renin, prorenin, and renin gene expression in rats with acute nephrotic syndrome. Ibarra–Rubio ME, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):408–14

Regulation of renin synthesis in the juxtaglomerular cells. Della Bruna R, et al. **Curr Opin Nephrol Hypertens** 1996 Jan;5(1):16–9 (33 ref.)

Biosynthesis of renin in mouse kidney tumor As4.1 cells. Jones CA, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):181–90

Opposite feedback control of renin and aldosterone biosynthesis in the adrenal cortex by angiotensin II AT1–subtype receptors. Gigante B, et al. **Hypertension** 1997 Sep;30(3 Pt 2):563–8

Adrenomedullin stimulates renin release and renin mRNA in mouse juxtaglomerular granular cells. Jensen BL, et al. **Hypertension** 1997 May;29(5):1148–55

Chimeric mice carrying 'regional' targeted deletion of the angiotensin type 1A receptor gene. Evidence against the role for local angiotensin in the in vivo feedback regulation

of renin synthesis in juxtaglomerular cells. Matsusaka T, et al. **J Clin Invest** 1996 Oct 15;98(8):1867–77
Altered age–dependent modulation of tissue renin messenger RNA levels in the spontaneously hypertensive rat. Yu H, et al. **J Hypertens** 1996 Jul;14(7):871–80
Activation of renin synthesis is dependent on intact nitric oxide production. Tharaux PL, et al. **Kidney Int** 1997 Jun; 51(6):1780–7
Genetic analysis of renin gene expression in the central nervous system of spontaneously hypertensive rats. Shimoike H, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):133–6
[Juxtaglomerular cell tumor] Tanabe A, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):33–5 (9 ref.) **(Jpn)**

BLOOD

Arginine vasopressin and renin in acutely ill children: implication for fluid therapy. Gerigk M, et al. **Acta Paediatr** 1996 May;85(5):550–3
Association of plasma renin activity and echocardiographic left ventricular hypertrophy with frequency of new coronary events and new atherothrombotic brain infarction in older persons with systemic hypertension. Aronow WS, et al. **Am J Cardiol** 1997 Jun 1;79(11):1543–5
Plasma renin activity: a risk factor for myocardial infarction in hypertensive patients. Alderman MH, et al. **Am J Hypertens** 1997 Jan;10(1):1–8
High–renin hypertension of unsuspected origin [letter] Pauletto P, et al. **Am J Hypertens** 1996 Oct;9(10 Pt 1):1044–5
Plasma renin activity and plasma prorenin are not suppressed in hypertensives surviving to old age. Trenkwalder P, et al. **Am J Hypertens** 1996 Jul;9(7):621–7
Developmental studies demonstrate age–dependent elevation of renin activity in TGR(mRen2)27 rats. Véniant M, et al. **Am J Hypertens** 1995 Dec;8(12 Pt 1):1167–76
Inappropriately high plasma renin activity accompanies chronic loss of renal function. Yeyati NL, et al. **Am J Nephrol** 1996;16(6):471–7
Sympathetic activation cannot fully account for increased plasma renin levels during water deprivation. Blair ML, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1197–203
Liddle's disease: abnormal regulation of amiloride–sensitive Na+ channels by beta–subunit mutation. Bubien JK, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C208–13
Impaired renin response to hemorrhage in hypertensive rabbits. Courneya CA. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1524–30
Plasma renin activity in heart failure–prone SHHF/Mcc–facp rats. Holycross BJ, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H228–33
Role of kinin and renal ANG II blockade in acute effects of ACE inhibitors in low–renin hypertension. Naitoh M, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H679–87
Endocrine effects of pregnancy and exposure to a simulated open field in rats. Smith FG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1053–7
Amylin binding in rat renal cortex, stimulation of adenylyl cyclase, and activation of plasma renin. Wookey PJ, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):F289–94
Plasma renin activity and angiotensin I and aldosterone concentrations in cats with hypertension associated with chronic renal disease. Jensen J, et al. **Am J Vet Res** 1997 May;58(5):535–40
Cold–induced salt intake in mice and catecholamine, renin and thermogenesis mechanisms. Dejima Y, et al. **Appetite** 1996 Jun;26(3):203–19
Cardiovascular deconditioning through head–down tilt bed rest increases blood pressure variability and plasma renin activity. Schmedtje JF Jr, et al. **Aviat Space Environ Med** 1996 Jun;67(6):539–46
A case of renin–producing juxtaglomerular tumor: effect of ACE inhibitor or angiotensin II receptor antagonist. Kashiwabara H, et al. **Blood Press** 1997 May;6(3):147–53
Parathyroid hypertensive factor predicts efficacy in the treatment of essential hypertension with verapamil. Lewanczuk RZ, et al. **Blood Press** 1996 Mar;5(2):98–104
Ethnic differences of renin–sodium profile and renal prostaglandins in the pathogenesis of systemic arterial hypertension. Somova L, et al. **Cent Afr J Med** 1996 Jun; 42(6):170–5
Effects of estrogen replacement therapy on the renin–angiotensin system in postmenopausal women. Schunkert H, et al. **Circulation** 1997 Jan 7;95(1):39–45
More on renin [letter; comment] Derkx FH, et al. **Clin Chem** 1997 Apr;43(4):694–7. Comment on: Clin Chem 1996 Jul;42(7):993–4.
Plasma renin activity: temperature optimum at approximately 45 degrees C. Roding JH, et al. **Clin Chem** 1997 Jul; 43(7):1243–4
The role of plasma renin activity in evaluating the adequacy of mineralocorticoid replacement in primary adrenal insufficiency. Flad TM, et al. **Clin Endocrinol (Oxf)** 1996 Nov;45(5):529–34
Effect of felodipine on blood pressure, body sodium, plasma renin activity and plasma aldosterone in hypertensive and normotensive rats. Ledingham JM, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S323–5
Plasma renin activity as a marker of renovascular injury in patients with rheumatoid arthritis. Mavrikakis ME, et al. **Clin Exp Rheumatol** 1996 Nov–Dec;14(6):613–7
Relationship between blood pressure and renin, angiotensin II and atrial natriuretic factor after renal transplantation. Hestin D, et al. **Clin Nephrol** 1997 Aug;48(2):98–103
Low–dose brain natriuretic peptide infusion in normal men and the influence of endopeptidase inhibition. Florkowski CM, et al. **Clin Sci (Colch)** 1997 Mar;92(3):255–60
Erythrocyte cation transport systems, plasma–inactive renin and albuminuria in insulin–dependent diabetics. Lijnen P, et al. **Contrib Nephrol** 1996;119:125–29
Reversible hyperkalemia at the initiation of ACE inhibitors in a young diabetic patient with latent hyporeninemic hypoaldosteronism [letter] Bonnet F, et al. **Diabetes Care** 1996 Jul;19(7):781
Alterations in plasma volume, plasma constituents, renin activity and aldosterone induced by maximal exercise in the horse. Masri M, et al. **Equine Vet J Suppl** 1990 Jun; (9):72–7
Diurnal rhythms of plasma renin activity, atrial natriuretic peptide and arterial pressure during head–down bed rest in humans. Gauquelin G, et al. **Eur J Appl Physiol** 1996; 73(6):536–43
Fluid balance and renal response following dehydrating exercise in well–trained men and women. Stachenfeld NS, et al. **Eur J Appl Physiol** 1996;72(5–6):468–77
Relationship of plasma renin activity with caffeine intake and physical training in mild hypertensive men. HARVEST Study Group. Palatini P, et al. **Eur J Epidemiol** 1996 Oct; 12(5):485–91
Severe hypokalaemia due to hyperreninaemia and secondary hyperaldosteronism in a boy with pheochromocytoma [letter] Göpel W, et al. **Eur J Pediatr** 1996 Feb;155(2):147–8
Value of direct measurement of active renin concentrations in congenital adrenal hyperplasia due to 21–hydroxylase deficiency. Krüger C, et al. **Eur J Pediatr** 1996 Oct; 155(10):858–61
Preclinical assessment of a new transdermal delivery system for clonidine (M–5041T). Naruse T, et al. **Fundam Clin Pharmacol** 1996;10(1):47–55
Relationship between prorenin, IGF–I, IGF–binding proteins and retinopathy in diabetic patients. Elias AN, et al. **Gen Pharmacol** 1996 Mar;27(2):329–32
Effects of adenosine infusion on renal function, plasma ANP and ADH concentrations and central hemodynamics in anesthetized pigs. Elias AN, et al. **Gen Pharmacol** 1997 Mar;28(3):429–33
Effect of aging and sodium deprivation on plasma concentration of aldosterone and on plasma renin activity in the rat. Brudieux R, et al. **Gerontology** 1996;42(4):229–34
Prorenin and active renin concentrations in plasma and ascites during severe ovarian hyperstimulation syndrome. Delbaere A, et al. **Hum Reprod** 1997 Feb;12(2):236–40
Additive effects of losartan and enalapril on blood pressure and plasma active renin. Azizi M, et al. **Hypertension** 1997 Feb;29(2):634–40
High human renin hypertension in transgenic rats. Bohlender J, et al. **Hypertension** 1997 Jan;29(1 Pt 2):428–34
Effect of bilateral nephrectomy on active renin, angiotensinogen, and renin glycoforms in plasma and myocardium. Katz SA, et al. **Hypertension** 1997 Aug;30(2 Pt 1):259–66
Prorenin and renin in human tissues and plasma––immunochemical identification. Kataoka K, et al. **Immunopharmacology** 1996 May;32(1–3):146–8
Influence of hemodynamic changes on neuroendocrine response in acute heart failure. Pohar B, et al. **Int J Cardiol** 1997 Aug 8;60(3):263–71
Dose–ranging study of the angiotensin II receptor antagonist irbesartan (SR 47436/BMS–186295) on blood pressure and neurohormonal effects in salt–deplete men. McIntyre M, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):101–6
Genetic variation in P450c11AS in Chilean patients with low renin hypertension. Fardella CE, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4347–51
Ovarian origin of plasma and peritoneal fluid prorenin in early pregnancy and in patients with ovarian hyperstimulation syndrome. Itskovitz–Eldor J, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):461–4
5–HT2 receptors are partially involved in the relationship between renin release and delta relative power. Brandenberger G, et al. **J Endocrinol Invest** 1996 Sep; 19(8):556–62
Effect of dibutyryl cyclic AMP on plasma renin activity in normal men and patients with primary aldosteronism. Fukuda N, et al. **J Endocrinol Invest** 1997 Jan;20(1):13–7
Evaluation of plasma aldosterone to plasma renin activity ratio in patients with primary aldosteronism. Ignatowska–Switalska H, et al. **J Hum Hypertens** 1997 Jun; 11(6):373–8
Sodium sensitivity of blood pressure in hypertensives is not related to sodium, but rather to renin. Krekels MM, et al. **J Hum Hypertens** 1996 Sep;10 Suppl 3:S127–30
High plasma endothelin–1 levels in hypertensive patients with low–renin essential hypertension. Letizia C, et al. **J Hum Hypertens** 1997 Jul;11(7):447–51
Plasma concentrations of inactive renin in adult life are related to indicators of foetal growth. Martyn CN, et al. **J Hypertens** 1996 Jul;14(7):881–6
Effects of adenosine–receptor agonists on renin release in anaesthetized rats. Protasoni G, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1753–7
Plasma renin activity levels influence the effect of converting enzyme inhibitors in preserving renal function in hypertension. Sanchez RA, et al. **J Hypertens** 1996 Aug; 14(8):1025–31
Hemodynamic, renal, and hormonal responses to lower body positive pressure in human subjects. Mannix ET, et al. **J Lab Clin Med** 1996 Dec;128(6):585–93
Elevated intra–abdominal pressure increases plasma renin activity and aldosterone levels. Bloomfield GL, et al. **J Trauma** 1997 Jun;42(6):997–1004; discussion 1004–5
Serum total renin is increased before microalbuminuria in diabetics. Allen TJ, et al. **Kidney Int** 1996 Sep;50(3):902–7
Circadian rhythms of plasma atriopeptin, plasma renin activity and plasma aldosterone in patients with hepatorenal syndrome. Pasqualetti P, et al. **Life Sci** 1997;60(4–5):289–97
Plasma renin activity and metabolic clearance rate of angiotensin II in the unstressed aging rat. Baylis C, et al. **Mech Ageing Dev** 1997 Aug;97(2):163–72
Effects of perindopril treatment on plasma and urine of kallikrein activity and the stable metabolite of prostaglandin E2 in patients with essential hypertension. Zacharieva S, et al. **Methods Find Exp Clin Pharmacol** 1996 Apr; 18(3):205–9
Autoregulation of renal blood flow and pressure–dependent renin release in autosomal dominant polycystic kidney disease of rats. Braun C, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:52–7
Effects of neuropeptide Y on intrarenal hemodynamics, plasma renin activity and urinary sodium excretion in rats. Evéquoz D, et al. **Nephron** 1996;73(3):467–72
Uninephrectomy prevents the ischemia–induced increase in renin activity. Kato A, et al. **Nephron** 1997;75(1):72–6
Hyperreninemia, hypertension, and congestive heart failure in focal interstitial nephritis. Matsui A, et al. **Nephron** 1996; 74(2):405–8
A case of isolated ACTH deficiency with hyporeninemic hypoaldosteronism. Okada K, et al. **Nephron** 1996; 73(2):301–4
Low peripheral plasma renin activity as a critical marker in pediatric hypertension. Yiu VW, et al. **Pediatr Nephrol** 1997 Jun;11(3):343–6
Centrally administered losartan inhibits the reduction in plasma renin concentration caused by intracerebroventricular hypertonic saline in Na–depleted sheep. McKinley MJ, et al. **Regul Pept** 1996 Oct 8; 66(1–2):37–40
The influence of endocrine changes in donors and recipients on the immediate outcome of kidney transplantation. Rowiński W, et al. **Transplant Proc** 1996 Dec;28(6):3494–6
Peripheral renin activity predicts blood pressure control after bilateral nephrectomy in renal transplant patients. Teixeira MC, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):220–1
[Plasma renin activity in tachistin–stimulated hypercalcemia and under the effect of chlorazine] Ilieva G, et al. **Eksp Med Morfol** 1994;32(3–4):1–8 (Eng. Abstr.) **(Bul)**
[Blood pressure and renin in long–term hemodialysis patients] Shin J, et al. **Nippon Jinzo Gakkai Shi** 1996 Jan;38(1):13–21 (Eng. Abstr.) **(Jpn)**
[The effect of hypervolemia on electrolyte level and and level of volume regulating hormones in patients with autosomal dominant polycystic kidney disease] Michalski A, et al. **Pol Arch Med Wewn** 1996 Oct;96(4):329–43 (Eng. Abstr.) **(Pol)**
[Renin plasma profile and sodium sensitivity of blood pressure in hypertensive patients with or without a family history of hypertension] Więcek A, et al. **Pol Arch Med Wewn** 1996 Nov;96(5):451–7 (Eng. Abstr.) **(Pol)**
[Is the aldosterone–renin ratio useful in screening for primary aldosteronism?] Kreze A Jr, et al. **Vnitr Lek** 1996 Sep; 42(9):649–51 (Eng. Abstr.) **(Slo)**

CHEMISTRY

A renin–like enzyme in the leech Theromyzon tessulatum. Salzet M, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):1–8
Recombinant human renin produced in different expression systems: biochemical properties and 3D structure. Mathews S, et al. **Protein Expr Purif** 1996 Feb;7(1):81–91

DEFICIENCY

Renin–1 is essential for normal renal juxtaglomerular cell granulation and macula densa morphology. Clark AF, et al. **J Biol Chem** 1997 Jul 18;272(29):18185–90

DRUG EFFECTS

Mechanism and pressor relevance of the short–term cardiovascular and renin excitatory actions of the selective A2A–adenosine receptor agonists. Alberti C, et al. **J Cardiovasc Pharmacol** 1997 Sep;30(3):320–4
Effects of estrogens and progestogens on the renin–aldosterone system and blood pressure. Oelkers WK. **Steroids** 1996 Apr;61(4):166–71 (50 ref.)
[Plasma renin activity in tachistin–stimulated hypercalcemia and under the effect of chlorazine] Ilieva G, et al. **Eksp Med Morfol** 1994;32(3–4):1–8 (Eng. Abstr.) **(Bul)**

GENETICS

Renal and antihypertensive effects of neutral endopeptidase inhibition in transgenic rats with an extra renin gene. Stasch JP, et al. **Am J Hypertens** 1996 Aug;9(8):795–802
Prostaglandins stimulate renin secretion and renin mRNA in mouse renal juxtaglomerular cells. Jensen BL, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F659–69
Dietary sodium effects on renin and angiotensinogen gene

expression in preweanling WKY and SHR. Kirby RF, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1439–46

Proximal tubular fluid, kidney, and plasma levels of angiotensin II in hypertensive ren–2 transgenic rats. Mitchell KD, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F246–53

Circadian rhythms in renal function in hypertensive TGR(mRen–2)27 rats and their normotensive controls. Pons M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1002–8

Differential regulation of rat glomerular and proximal tubular renin mRNA following uninephrectomy [published errata appear in Am J Physiol 1996 Jul;271(1 Pt 2):section F following table of contents and 1996 Dec;271(6 Pt 3):section F following table of contents] Tank JE, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F776–83

Regulation of human renin gene transcription by cAMP. Germain S, et al. **Clin Exp Hypertens** 1997 Jul–Aug; 19(5–6):543–50

Role of the circulating renin–angiotensin system in the pathogenesis of hypertension in transgenic rats. TGR(mREN2)27. Peters J, et al. **Clin Exp Hypertens** 1996 Oct;18(7):933–48

PCR–SSCP analysis of the promoter region of the renin gene in patients with aldosterone–producing adenomas. Ballantine DM, et al. **Clin Exp Pharmacol Physiol** 1996 Jun–Jul;23(6–7):584–6

Renin, prorenin, and renin gene expression in rats with acute nephrotic syndrome. Ibarra–Rubio ME, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):408–14

Novel mutation in the first intron of the spontaneously hypertensive rat renin gene upstream of the tandem repeat element. Di Nicolantonio R, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S10–11

A role of lysine–43 in the inactivation of rat prorenin. Suzuki F, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S15–4

Development of polyuria in Tsukuba hypertensive mice carrying human renin and angiotensinogen genes. Uehara S, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S12–4

Association of the renin gene polymorphism with essential hypertension in a Chinese population. Chiang FT, et al. **Clin Genet** 1997 Jun;51(6):370–4

Chromosomal mapping of human angiotensinogen gene and human renin gene by fluorescence in situ hybridization (FISH) in transgenic mice. Watanabe Y, et al. **Exp Anim** 1996 Jul;45(3):265–9

Regulation of human renin secretion and gene transcription in Calu–6 cells. Germain S, et al. **FEBS Lett** 1997 Apr 28;407(2):177–83

Cardiorenal consequences of dual angiotensin converting enzyme and neutral endopeptidase 24.11 inhibition in transgenic rats with an extra renin gene. Wegner M, et al. **Hypertens Res** 1996 Sep;19(3):151–9

Neutral endopeptidase inhibition potentiates the effects of natriuretic peptides in renin transgenic rats. Wegner M, et al. **Hypertens Res** 1996 Dec;19(4):229–38

Induction of renin in medial smooth muscle cells by balloon injury. Iwai N, et al. **Hypertension** 1997 Apr;29(4):1044–50

Transfer of a salt–resistant renin allele raises blood pressure in Dahl salt–sensitive rats. Jiang J, et al. **Hypertension** 1997 Feb;29(2):619–27

Downregulation of renin gene expression by interleukin–1. Petrovic N, et al. **Hypertension** 1997 Aug;30(2 Pt 1):230–5

Targeted inactivation of the Ren–2 gene in mice. Sharp MG, et al. **Hypertension** 1996 Dec;28(6):1126–31

Noradrenergic transmission in the tail artery of hypertensive rats transgenic for the mouse renin gene Ren–2. Arribas SM, et al. **J Auton Pharmacol** 1996 Apr;16(2):69–77

Role of proximal promoter elements in regulation of renin gene transcription. Petrovic N, et al. **J Biol Chem** 1996 Sep 13;271(37):22499–505

A novel proximal element mediates the regulation of mouse Ren–1C promoter by retinoblastoma protein in cultured cells. Tamura K, et al. **J Biol Chem** 1997 Jul 4; 272(27):16845–51

Transactivation of the human renin promoter by the cyclic AMP/protein kinase A pathway is mediated by both cAMP–responsive element binding protein–1 (CREB)–dependent and CREB–independent mechanisms in Calu–6 cells. Ying L, et al. **J Biol Chem** 1997 Jan 24; 272(4):2412–20

Complementation of reduced survival, hypotension, and renal abnormalities in angiotensinogen–deficient mice by the human renin and human angiotensinogen genes. Davisson RL, et al. **J Clin Invest** 1997 Mar 15;99(6):1258–64

Analysis of phenotypic consequences of renin gene polymorphism in Lyon rats. Kaiser M, et al. **J Hypertens** 1997 Apr;15(4):365–72

Sodium intake regulates renin gene expression differently in the hypothalamus and kidney of rats. Nishimura M, et al. **J Hypertens** 1997 May;15(5):509–16

Progression of renal failure after subtotal nephrectomy in transgenic rats carrying an additional renin gene [TGR(mREN2)27]. Wagner J, et al. **J Hypertens** 1997 Apr; 15(4):441–9

Cardiovascular end–organ damage in Ren–2 transgenic rats compared to spontaneously hypertensive rats. Pinto YM, et al. **J Mol Med** 1997 May;75(5):371–7

Enalapril and pressure–diuresis in hypertensive rats transgenic for mouse renin gene. Springate J, et al. **Kidney Blood Press Res** 1997;20(1):1–5

Evidence that renal and chorionic tissues contain similar nuclear binding proteins that recognize the human renin promoter. Konoshita T, et al. **Kidney Int** 1996 Nov; 50(5):1515–24

Endothelins inhibit cyclic–AMP induced renin gene expression in cultured mouse juxtaglomerular cells. Ritthaler T, et al. **Kidney Int** 1996 Jul;50(1):108–15

Reduction of cardiac hypertrophy in TGR(mREN2)27 by angiotensin II receptor blockade. Böhm M, et al. **Mol Cell Biochem** 1996 Oct–Nov;163–164:217–21

Inappropriate splicing of a chimeric gene containing a large internal exon results in exon skipping in transgenic mice. Davisson RL, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):4023–8

Local stress, not systemic factors, regulate gene expression of the cardiac renin–angiotensin system in vivo: a comprehensive study of all its components in the dog. Lee YA, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):11035–40

Recombinant human renin produced in different expression systems: biochemical properties and 3D structure. Mathews S, et al. **Protein Expr Purif** 1996 Feb;7(1):81–91

Normotensive blood pressure in mice with a disrupted renin Ren–1d gene. Bertaux F, et al. **Transgenic Res** 1997 May; 6(3):191–6

[Development of a model of human renin hypertension in rats] Bohlender J, et al. **Arch Mal Coeur Vaiss** 1996 Aug; 89(8):1009–11 (Eng. Abstr.) **(Fre)**

[Restriction fragment length polymorphism of human renin gene in essential hypertension] Dzida G. **Pol Arch Med Wewn** 1996 Aug;96(2):105–10 (Eng. Abstr.) **(Pol)**

ISOLATION & PURIFICATION

Purification and assay methods for angiotensin–converting enzyme. Meng QC, et al. **J Chromatogr A** 1996 Aug 30; 743(1):105–22 (113 ref.)

A renin–like enzyme in the leech Theromyzon tessulatum. Salzet M, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):1–8

METABOLISM

Effects of chronic infusion of angiotensin II on renin and blood pressure in the late–gestation fetal sheep. Stanley JR, et al. **Am J Obstet Gynecol** 1997 Apr;176(4):931–7

Macula densa stimulation of renin is reversed by selective inhibition of neuronal nitric oxide synthase. Beierwaltes WH. **Am J Physiol** 1997 May;272(5 Pt 2):R1359–64

Blockade of chloride channels by DIDS stimulates renin release and inhibits contraction of afferent arterioles. Jensen BL, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F718–27

Flow versus pressure in the control of renin release in conscious dogs. Nafz B, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F200–5

Expression and localization of renin and angiotensinogen in rat heart after myocardial infarction. Passier RC, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1040–8

Renin and angiotensin II receptor expression in the brains of DES–treated Syrian hamsters. Dodge AH, et al. **Anat Rec** 1997 Jul;248(3):442–6

Is increased renin activity as a paraneoplastic phenomenon in acute leukemia a protective mechanism against hyperkalemia? [letter; comment] Demiroğlu H. **Ann Hematol** 1997 May;74(5):251–2. Comment on: Ann Hematol 1996 Sep;73(3):139–41.

Angiotensin II receptors and renin in the porcine uterus: myometrial AT2 and endometrial AT1 receptors are down–regulated during gestation. Nielsen AH, et al. **Clin Exp Pharmacol Physiol** 1997 May;24(5):309–14

Changes in renal renin gene expression in fetal sheep. Zhang DY, et al. **Clin Exp Pharmacol Physiol** 1996 Aug; 23(8):682–4

Tissue expression of components of the renin–angiotensin system in experimental post–infarction heart failure in rats: effects of heart failure and angiotensin–converting enzyme inhibitor treatment. Kelly MP, et al. **Clin Sci (Colch)** 1997 May;92(5):455–65

Tetralogy of Fallot repair results in activation of the renin–angiotensin–aldosterone system. Mainwaring RD, et al. **Eur Heart J** 1996 Sep;17(9):1421–5

Selective monitoring of peptidase activities with synthetic polypeptide substrates and polyion–sensitive membrane electrode detection. Han IS, et al. **FASEB J** 1996 Dec; 10(14):1621–6

Captopril increases renin release stimulated by furosemide and hypotension in isolated perfused guinea pig kidneys. Mokuda O, et al. **Horm Metab Res** 1996 May;28(5):227–9

Cyclooxygenase–2 mediates increased renal renin content induced by low–sodium diet. Harding P, et al. **Hypertension** 1997 Jan;29(1 Pt 2):297–302

Aberrant renal vascular morphology and renin expression in mutant mice lacking angiotensin–converting enzyme. Hilgers KF, et al. **Hypertension** 1997 Jan;29(1 Pt 2):216–21

Effect of bilateral nephrectomy on active renin, angiotensinogen, and renin glycoforms in plasma and myocardium. Katz SA, et al. **Hypertension** 1997 Aug;30(2 Pt 1):259–66

Central effects of caffeine on renal renin secretion and norepinephrine spillover. Tofovic SP, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):302–13

Ovarian origin of plasma and peritoneal fluid prorenin in early pregnancy and in patients with ovarian hyperstimulation syndrome. Itskovitz–Eldor J, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):461–4

Vascular damage without hypertension in transgenic rats expressing prorenin exclusively in the liver. Veniant M, et al. **J Clin Invest** 1996 Nov 1;98(9):1966–70

Albuminuria in untreated patients with primary aldosteronism or essential hypertension. Halimi JM, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1801–2

Demonstration of renin gene expression in nephroblastoma by in situ hybridization. McKenzie KJ, et al. **J Pathol** 1996 Sep;180(1):71–3

Elevated concentrations of prorenin and renin in amniotic fluid of women with chorioamnionitis. Mitchell MD, et al. **J Perinatol** 1997 Mar–Apr;17(2):116–8

Effect of HDL and atherogenic lipoproteins on formation of O2– and renin release in juxtaglomerular cells. Galle J, et al. **Kidney Int** 1997 Jan;51(1):253–60

Prorenin activation and prohormone convertases in the mouse As4.1 cell line. Laframboise M, et al. **Kidney Int** 1997 Jan;51(1):104–9

Specific receptor binding of renin on human mesangial cells in culture increases plasminogen activator inhibitor–1 antigen. Nguyen G, et al. **Kidney Int** 1996 Dec; 50(6):1897–903

Beta–adrenoceptor activation–induced placental prorenin secretion is mediated by increased renin messenger RNA and protein synthesis. Downing GJ, et al. **Mol Pharmacol** 1997 Feb;51(2):201–8

Blockade of nitric oxide formation inhibits the stimulation of the renin system by a low salt intake. Schricker K, et al. **Pflugers Arch** 1996 Jun;432(2):187–91

The role of angiotensin II in the feedback control of renin gene expression. Shricker K, et al. **Pflugers Arch** 1997 Jun; 434(2):166–72

Body fluids, circadian blood pressure and plasma renin during growth hormone administration: a placebo–controlled study with two growth hormone doses in healthy adults. Moller J, et al. **Scand J Clin Lab Invest** 1995 Dec; 55(8):663–9

PHARMACOKINETICS

Renin–angiotensin system components in the interstitial fluid of the isolated perfused rat heart. Local production of angiotensin I. de Lannoy LM, et al. **Hypertension** 1997 Jun;29(6):1240–51

PHARMACOLOGY

Evidence for a dopaminergic involvement in the natriuretic action of centrally administered renin. Israel A, et al. **Brain Res Bull** 1996;39(6):401–5

Differential regulation of angiotensinogen transcripts after renin infusion. Milsted A, et al. **Hypertension** 1996 Oct; 28(4):678–81

Effect of renin on brain arterioles and cerebral blood flow in rabbits. Haberl RL, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):714–9

Renin stimulates decidual prostaglandin production via a novel mechanism that is independent of angiotensin II formation. Mitchell MD, et al. **Placenta** 1996 Jul–Aug; 17(5–6):299–305

PHYSIOLOGY

Local renin–angiotensin system: especially in coagulating glands of mice. Kon Y. **Arch Histol Cytol** 1996 Dec; 59(5):399–420 (207 ref.)

A role of lysine–43 in the inactivation of rat prorenin. Suzuki F, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S15–4

Renin–angiotensin system in stretch–induced hypertrophy of cultured neonatal rat heart cells. Miyata S, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):81–8

p53 Induces myocyte apoptosis via the activation of the renin–angiotensin system. Pierzchalski P, et al. **Exp Cell Res** 1997 Jul 10;234(1):57–65

Differential alteration in vascular structure of resistance arteries isolated from the cerebral and mesenteric vascular beds of transgenic [(mRen–2)27], hypertensive rats. Dunn WR, et al. **Hypertension** 1997 May;29(5):1140–7

Renin–1 is essential for normal renal juxtaglomerular cell granulation and macula densa morphology. Clark AF, et al. **J Biol Chem** 1997 Jul 18;272(29):18185–90

Follicular maturation and atresia—possible role of intraovarian regulatory factors. Mukhopadhyay AK, et al. **J Reprod Fertil Suppl** 1996;50:105–12

Autonomy of the renin system in type II diabetes mellitus: dietary sodium and renal hemodynamic responses to ACE inhibition. De Oliveira JM, et al. **Kidney Int** 1997 Sep; 52(3):771–7

Role of endothelins for renin regulation. Krämer BK, et al. **Kidney Int Suppl** 1996 Jun;55:S119–21

Role of the renin–angiotensin system on cardiac diseases. De Mello WC. **P R Health Sci J** 1996 Sep;15(3):193–4

SECRETION

The effect of microtubule–disrupting drugs on morphology, progesterone and prorenin secretion of bovine cultured ovarian theca cells. Brunswig–Spickenheier B, et al. **Acta Histochem** 1996 Nov;98(4):389–98

Renin secretion in conscious Lyon hypertensive rats. Bertolino S, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1199–204

Prostaglandins stimulate renin secretion and renin mRNA in mouse renal juxtaglomerular cells. Jensen BL, et al.

Am J Physiol 1996 Sep;271(3 Pt 2):F659–69
Reduction in renin release and renal vascular resistance by H(+)–K(+)–ATPase inhibition. Lin H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F457–62
Inhibition of intrarenal NO stimulates renin secretion through a macula densa–mediated mechanism. Schnackenberg CG, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R879–86
Serotonergic regulation of renin and prolactin secretion. Van de Kar LD, et al. **Behav Brain Res** 1996;73(1–2):203–8 (44 ref.)
Effect of amlodipine on renin secretion and renin gene expression in rats. Schricker K, et al. **Br J Pharmacol** 1996 Oct;119(4):744–50
Residents' corner. Answer to case of the month #40. Hypertension caused by left renal reninoma. Noël B, et al. **Can Assoc Radiol J** 1996 Oct;47(5):378–80
Giant renin secretory granules in beige mouse renal afferent arterioles. Jensen BL, et al. **Cell Tissue Res** 1997 May; 288(2):399–406
Renin secretion in Lyon hypertensive rats. Julien C, et al. **Clin Exp Hypertens** 1997 Jul–Aug;19(5–6):699–711 (26 ref.)
Forebrain pathways mediating stress–induced renin secretion. Van de Kar LD. **Clin Exp Pharmacol Physiol** 1996 Feb; 23(2):166–70
Regulation of human renin secretion and gene transcription in Calu–6 cells. Germain S, et al. **FEBS Lett** 1997 Apr 28;407(2):177–83
Pressure–dependent renin release during chronic blockade of nitric oxide synthase. Knoblich PR, et al. **Hypertension** 1996 Nov;28(5):738–42
Prohormone convertase PC5 is a candidate processing enzyme for prorenin in the human adrenal cortex. Mercure C, et al. **Hypertension** 1996 Nov;28(5):840–6
Dopamine D1A receptors and renin release in rat juxtaglomerular cells. Yamaguchi I, et al. **Hypertension** 1997 Apr;29(4):962–8
Comments on different states of secretory autonomy of juxtaglomerular cell tumors of the kidney [editorial] Kihara I. **Intern Med** 1996 Apr;35(4):239–40 (13 ref.)
Human chorionic gonadotropin stimulates placental prorenin secretion: evidence for autocrine/paracrine regulation. Downing GJ, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1027–30
Role of kinins in basal and furosemide–stimulated renin secretion. Chiu N, et al. **J Hypertens** 1997 May; 15(5):517–21
Beta–adrenoceptor activation–induced placental prorenin secretion is mediated by increased renin messenger RNA and protein synthesis. Downing GJ, et al. **Mol Pharmacol** 1997 Feb;51(2):201–8
Lack of inhibitory effect of atrial natriuretic factor on renin release induced by renal hypotension. Naess PA, et al. **Scand J Clin Lab Invest** 1996 Nov;56(7):665–70
Hypertension induced in pregnant mice by placental renin and maternal angiotensinogen [see comments] Takimoto E, et al. **Science** 1996 Nov 8;274(5289):995–8. Comment in: Science 1996 Nov 8;274(5289):922.

RENIN–ANGIOTENSIN–ALDOSTERONE SYSTEM see **RENIN–ANGIOTENSIN SYSTEM**

RENIN–ANGIOTENSIN SYSTEM

see related
ANGIOTENSIN–CONVERTING ENZYME INHIBITORS

The renin–angiotensin system and compensatory renal hypertrophy in the rat. Valentin JP, et al. **Am J Hypertens** 1997 Apr;10(4 Pt 1):397–402
Hypovolemia in syncope and orthostatic intolerance role of the renin–angiotensin system. Jacob G, et al. **Am J Med** 1997 Aug;103(2):128–33
Renin angiotensin system in development of mice and men [comment] Fogo A, et al. **Am J Pathol** 1996 Dec; 149(6):1797–801 (32 ref.). Comment on: Am J Pathol 1996 Dec;149(6):2067–79.
The renin–angiotensin–aldosterone system in experimental mineralocorticoid–salt–induced cardiac fibrosis. Young MJ, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E883–8
The role of the renin–angiotensin system in the pathophysiology of cardiac remodeling. Booz GW, et al. **Blood Press Suppl** 1996;2:10–8 (67 ref.)
Relationship between some humoral factors and left ventricular hypertrophy in essential hypertension. Hui Y, et al. **Chin Med J (Engl)** 1996 Nov;109(11):885–7
Functional and biochemical analysis of angiotensin II–forming pathways in the human heart. Wolny A, et al. **Circ Res** 1997 Feb;80(2):219–27
Role of the circulating renin–angiotensin system in the pathogenesis of hypertension in transgenic rats. TGR(mREN2)27. Peters J, et al. **Clin Exp Hypertens** 1996 Oct;18(7):933–48
Tetralogy of Fallot repair results in activation of the renin–angiotensin–aldosterone system. Mainwaring RD, et al. **Eur Heart J** 1996 Sep;17(9):1421–5
Local renin–angiotensin system in sympathetic overactivity of spontaneously hypertensive rats. Nagase M, et al. **Hypertens Res** 1996 Sep;19(3):171–7
Modulation of target tissue response to angiotensin II and sodium sensitivity in Japanese patients with essential hypertension. Ozono R, et al. **Hypertens Res** 1996 Sep; 19(3):141–5
Mouse glomerular epithelial cells in culture with features of podocytes in vivo express aminopeptidase A and angiotensinogen but not other components of the renin–angiotensin system. Mentzel S, et al. **J Am Soc Nephrol** 1997 May;8(5):706–19
Plasma concentrations of inactive renin in adult life are related to indicators of foetal growth. Martyn CN, et al. **J Hypertens** 1996 Jul;14(7):881–6
Non–modulating hypertension: evidence for the involvement of kallikrein/kinin activity associated with overactivity of the renin–angiotensin system. Successful blood pressure control during long–term Na+ restriction. Sanchez R, et al. **J Hypertens** 1996 Nov;14(11):1287–91
Cyclical changes in the renin–angiotensin–aldosterone system during the menstrual cycle of the baboon (Papio hamadryas). Harewood WJ, et al. **J Med Primatol** 1996 Aug;25(4):267–71
The renin–angiotensin system in the rabbit eye. Ramirez M, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):299–312
A local renin–angiotensin system in the bone marrow. Haznedaroğlu IC, et al. **Med Hypotheses** 1996 Jun; 46(6):507–10
Role of cardiac renin–angiotensin system in the development of pressure–overload left ventricular hypertrophy in rats with abdominal aortic constriction. Reddy DS, et al. **Mol Cell Biochem** 1996 Feb 9;155(1):1–11
Role of the renin–angiotensin system on cardiac diseases. De Mello WC. **P R Health Sci J** 1996 Sep;15(3):193–4
[The significance of changes in plasma renin angiotensin aldosterone system and atrial natriuretic factor in patients with high altitude myocardial hypoxidosis] Li Y, et al. **Chung Hua Nei Ko Tsa Chih** 1995 Dec;34(12):812–5 (Eng. Abstr.) **(Chi)**
[Changes in the renin–angiotensin–aldosterone system and water–salt exchange in mining workers in coal mines] Rebrov BA. **Lik Sprava** 1996 Jul–Sep;(7–9):89–92 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of angiotensin–converting enzyme inhibition and angiotensin II AT1 receptor antagonism on cardiac parameters in left ventricular hypertrophy. Zhu YC, et al. **Am J Cardiol** 1997 Aug 4;80(3A):110A–117A (65 ref.)
Remikiren (Ro 42–5892)––an orally active renin inhibitor in essential hypertension. Effects on blood pressure and the renin–angiotensin–aldosterone system. Himmelmann A, et al. **Am J Hypertens** 1996 Jun;9(6):517–22
Effects of long–term treatment with enalapril or hydralazine on the renin–angiotensin–aldosterone system and fluid balance in dogs with naturally acquired mitral valve regurgitation. Häggström J, et al. **Am J Vet Res** 1996 Nov; 57(11):1645–52
Tissue renin–angiotensin system: a site of drug action? Zimmerman BG, et al. **Annu Rev Pharmacol Toxicol** 1997; 37:53–69 (87 ref.)
Angiotensin II type 1 receptor induced signal–transduction pathways as new targets for pharmacological treatment of the renin–angiotensin system. Schorb W, et al. **Basic Res Cardiol** 1996;91 Suppl 2:91–6 (35 ref.)
Comparison of angiotensin II type 1 receptor blockade and angiotensin–converting enzyme inhibition in pregnant sheep during late gestation. Forhead AJ, et al. **Br J Pharmacol** 1996 Sep;119(2):393–401
Assessment of the role of the renin–angiotensin system in cardiac contractility utilizing the renin inhibitor remikiren. van Kats JP, et al. **Br J Pharmacol** 1996 Mar;117(5):891–901
Effects of the angiotensin converting enzyme (ACE) inhibitor, captopril, on the cardiovascular, endocrine, and renal responses to furosemide in conscious lambs. de Wildt SN, et al. **Can J Physiol Pharmacol** 1997 Apr;75(4):263–70
Effects of inhibition of the maternal renin–angiotensin system on maternal and fetal responses to drainage of fetal fluids. Lumbers ER, et al. **Can J Physiol Pharmacol** 1996 Aug; 74(8):973–82
Left ventricular diastolic function during adrenergic stress in essential hypertension: acute and chronic effects of ACE inhibition. Covi G, et al. **Cardiovasc Drugs Ther** 1996 Jul; 10(3):321–9
Renin inhibitors: cardiovascular drugs of the future? Wood JM, et al. **Cardiovasc Drugs Ther** 1996 Jul;10(3):309–12 (31 ref.)
The effect of nebulized albuterol on the activity of the renin–angiotensin system in asthma. Millar EA, et al. **Chest** 1997 Jan;111(1):71–4
Effects of estrogen replacement therapy on the renin–angiotensin system in postmenopausal women. Schunkert H, et al. **Circulation** 1997 Jan 7;95(1):39–45
Pharmacological demonstration of the additive effects of angiotensin–converting enzyme inhibition and angiotensin II antagonism in sodium depleted healthy subjects. Azizi M, et al. **Clin Exp Hypertens** 1997 Jul–Aug;19(5–6):937–51
Renin–angiotensin system in the antihypertensive effect of isoteoline in spontaneously hypertensive rats. Markov M, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S368–70
Inhibition of the renin–angiotensin–aldosterone system in heart failure: new insights from basic clinical research. Cleland JG, et al. **Curr Opin Cardiol** 1996 May;11(3):252–62 (101 ref.)
Renal responses to antagonism of the renin–angiotensin system. Braam B, et al. **Curr Opin Nephrol Hypertens** 1996 Jan;5(1):89–96 (69 ref.)
Angiotensin II receptor antagonists. Potential in elderly patients with cardiovascular disease. Burrell LM, et al. **Drugs Aging** 1997 Jun;10(6):421–34 (65 ref.)
Impact of renin–angiotensin system blockade on structure and function of glomerular membrane components in animal models of kidney disease. Remuzzi A, et al. **Exp Nephrol** 1996;4 Suppl 1:27–33 (57 ref.)
Interruption of prolonged ramipril treatment in hypertensive patients: effects on the renin–angiotensin system. Stephan D, et al. **Fundam Clin Pharmacol** 1996;10(5):474–83
Hypertension in obese Zucker rats. Role of angiotensin II and adrenergic activity. Alonso–Galicia M, et al. **Hypertension** 1996 Dec;28(6):1047–54
Brain "ouabain" and angiotensin II in salt–sensitive hypertension in spontaneously hypertensive rats. Huang BS, et al. **Hypertension** 1996 Dec;28(6):1005–12
Effects of renin–angiotensin blockade on sympathetic reactivity and beta–adrenergic pathway in the spontaneously hypertensive rat. K.–Laflamme A, et al. **Hypertension** 1997 Aug;30(2 Pt 1):278–87
Combined sympathetic suppression and angiotensin–converting enzyme inhibition in congestive heart failure. Manolis AJ, et al. **Hypertension** 1997 Jan;29(1 Pt 2):525–30
Acute effects of digitalis and enalapril on the neurohormonal profile of chagasic patients with severe congestive heart failure. Khoury AM, et al. **Int J Cardiol** 1996 Nov 15; 57(1):21–9
Mechanism and pressor relevance of the short–term cardiovascular and renin excitatory actions of the selective A2A–adenosine receptor agonists. Alberti C, et al. **J Cardiovasc Pharmacol** 1997 Sep;30(3):320–4
Differing early blood pressure and renin–angiotensin system responses to the first dose of angiotensin–converting enzyme inhibitors in congestive heart failure [published erratum appears in J Cardiovasc Pharmacol 1996 Sep;28(3):479] Squire IB, et al. **J Cardiovasc Pharmacol** 1996 May;27(5):657–66
Effects of nifedipine treatment on the renin–angiotensin–aldosterone axis. Fiad TM, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):457–60
Impact of the renin–angiotensin–aldosterone system on blood pressure response to intravenous enalaprilat in patients with hypertensive crises. Hirschl MM, et al. **J Hum Hypertens** 1997 Mar;11(3):177–83
Population characteristics and the modulation of the renin–angiotensin system in the treatment of hypertension. Weir MR. **J Hum Hypertens** 1997 Jan;11(1):17–21 (29 ref.)
Effects of chronic hormone replacement on the renin–angiotensin system in cynomolgus monkeys. Brosnihan KB, et al. **J Hypertens** 1997 Jul;15(7):719–26
Renal function in one–kidney, one clip sodium–restricted rats: influence of enalapril and losartan. Demeilliers B, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1764–6
Blockade of the renin–angiotensin system in heart failure in conscious dogs. Murakami M, et al. **J Hypertens** 1995 Dec; 13(12 Pt 1):1405–12
Effect of administered potassium on the renin–aldosterone axis in young blacks compared with whites. Pratt JH, et al. **J Hypertens** 1997 Aug;15(8):877–83
Selective blockade of AT1 angiotensin II receptors abolishes ischemic preconditioning in isolated rabbit hearts. Diaz RJ, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):129–39
Effects of prolonged blockade of the renin angiotensin system on striated muscle microcirculation of spontaneously hypertensive rats. Scheidegger KJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1276–81
Cyclosporine and the renin–angiotensin axis. Lee DB. **Kidney Int** 1997 Jul;52(1):248–60
Inhibitors of the renin–angiotensin system. Krum H. **Med J Aust** 1997 Jul 7;167(1):38–40 (19 ref.)
The molecular basis of increased glomerulosclerosis after blockade of the renin angiotensin system in growth hormone transgenic mice. Peten EP, et al. **Mol Med** 1994 Nov;1(1):104–15
Is the antiproteinuric response to inhibition of the renin–angiotensin system less effective during the night? Buter H, et al. **Nephrol Dial Transplant** 1997;12 Suppl 2:53–6
Effects of drugs affecting the renin–angiotensin system on venous thrombosis in normotensive rats. Chabielska E, et al. **Pol J Pharmacol** 1996 Jan–Feb;48(1):89–91
Gene expression of central and peripheral renin–angiotensin system components upon dietary sodium intake in rats. Jo H, et al. **Regul Pept** 1996 Dec 3;67(2):115–21
[The influence of perindopril on intrarenal RAS in experimental diabetic rats] Liu Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jul;76(7):512–5 (Eng. Abstr.) **(Chi)**
[Contribution of the renin–angiotensin system to the variability of blood pressure in hypertensive rat after blockade of nitric oxide synthesis] Gouédard O, et al. **Arch Mal Coeur Vaiss** 1996 Aug;89(8):1013–7 (Eng. Abstr.) **(Fre)**
[Inhibition of the renin–angiotensin system: ACE inhibitors and angiotensin II receptor blockers] Pichler M, et al. **Wien Med Wochenschr** 1996;146(11):228–31 (35 ref.) (Eng. Abstr.) **(Ger)**
[Pathophysiological mechanisms of the renin–angiotensin system and its pharmacologic modification by ACE inhibitors or angiotensin II (type 1) receptor blockers in cardiovascular diseases] Huber K, et al. **Z Kardiol** 1997 Apr;86(4):239–50 (124 ref.) (Eng. Abstr.) **(Ger)**

[The use of angiotensin-converting enzyme inhibitors and the function of the renin-angiotensin-aldosterone system in chronic glomerulonephritis (a review of the literature and the author's own data)] Ospanova TS. **Lik Sprava** 1996 Jul-Sep;(7-9):22-6 (29 ref.) **(Rus)**

GENETICS

Early expression of all the components of the renin-angiotensin-system in human development [see comments] Schütz S, et al. **Am J Pathol** 1996 Dec; 149(6):2067-79. Comment in: Am J Pathol 1996 Dec;149(6):1797-801.

Adaptive and genetic alterations of the renin angiotensin system in cardiac hypertrophy and failure. Holmer SR, et al. **Basic Res Cardiol** 1996;91 Suppl 2:65-71 (53 ref.)

Hypertensive and hypotensive mice produced by the introduction and disruption of genes on the renin-angiotensin system. Murakami K, et al. **Blood Press Suppl** 1996;2:36-40

Effect of angiotensin-converting enzyme genotype on renin-angiotensin components in hypertensives. Zee RY, et al. **Clin Chim Acta** 1996 Aug 15;252(1):33-9

Hypertension, thermotolerance, and the "African gene": an hypothesis. Moskowitz DW. **Clin Exp Hypertens** 1996 Jan; 18(1):1-19 (97 ref.)

Genetic variants of proteins from the renin angiotensin system are associated with pressure load cardiac hypertrophy. Wong KK, et al. **Clin Exp Pharmacol Physiol** 1996 Jun-Jul;23(6-7):587-90

Transgenic rats: tools to study the function of the renin-angiotensin system. Bader M, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S81-7 (80 ref.)

Genetics of the renin-angiotensin system and renal disease: a progress report. Schmidt S, et al. **Curr Opin Nephrol Hypertens** 1997 Mar;6(2):146-51 (57 ref.)

Genetic approach to diagnostic and therapeutic decisions in human hypertension [see comments] Williams GH, et al. **Curr Opin Nephrol Hypertens** 1997 Mar;6(2):199-204 (64 ref.). Comment in: Curr Opin Nephrol Hypertens 1997 Mar;6(2):167-8.

Examination of two genetic polymorphisms within the renin-angiotensin system: no evidence for an association with nephropathy in IDDM. Chowdhury TA, et al. **Diabetologia** 1996 Sep;39(9):1108-14

Genetic variants of the renin-angiotensin system, diabetic nephropathy and hypertension. Ringel J, et al. **Diabetologia** 1997 Feb;40(2):193-9

The renin-angiotensin system and renal function in transgenic (mRen2)27 rats. Gross V, et al. **Exp Nephrol** 1996;4 Suppl 1:20-6

Gene targeting in nephrology. Matsusaka T, et al. **Exp Nephrol** 1997 Mar-Apr;5(2):168-73 (40 ref.)

Cardiovascular disease and genetics of the renin-angiotensin system. Harrap SB. **Heart** 1996 Nov;76(3 Suppl 3):13-7 (52 ref.)

Genetic polymorphisms of the renin-angiotensin system and angiographic extent and severity of coronary artery disease: the CORGENE study. Jeunemaitre X, et al. **Hum Genet** 1997 Jan;99(1):66-73

Linkage analysis between loci in the renin-angiotensin axis and end-stage renal disease in African Americans. Yu H, et al. **J Am Soc Nephrol** 1996 Dec;7(12):2559-64

Contribution of genetic polymorphism in the renin-angiotensin system to the development of renal complications in insulin-dependent diabetes: Genetique de la Nephropathie Diabetique (GENEDIAB) study group. Marre M, et al. **J Clin Invest** 1997 Apr 1;99(7):1585-95

Genetic variants of the renin-angiotensin system and ambulatory blood pressure in essential hypertension. Beige J, et al. **J Hypertens** 1997 May;15(5):503-8

Renin-angiotensin system gene polymorphisms influence blood pressure and the response to angiotensin converting enzyme inhibition. Hingorani AD, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1602-9

Genetic studies of the renin-angiotensin system in arterial hypertension associated with non-insulin-dependent diabetes mellitus. Lesage S, et al. **J Hypertens** 1997 Jun; 15(6):601-6

Potential risk factors associated with progressive renal damage in childhood urological diseases: the role of angiotensin-converting enzyme gene polymorphism. Brock JW 3rd, et al. **J Urol** 1997 Sep;158(3 Pt 2):1308-11

Polymorphisms of the renin-angiotensin system genes in progressive renal diseases [editorial] Yoshida H, et al. **Kidney Int** 1996 Sep;50(3):732-44 (137 ref.)

Acceleration of atherosclerotic lesions in transgenic mice with hypertension by the activated renin-angiotensin system. Sugiyama F, et al. **Lab Invest** 1997 Jun;76(6):835-42

Molecular genetics of the renin-angiotensin-aldosterone system in human hypertension. Corvol P, et al. **Pathol Biol (Paris)** 1997 Mar;45(3):229-39 (74 ref.)

[Genetic polymorphism of the renin-angiotensin system and cardiovascular diseases] Castellano M, et al. **Cardiologia** 1997 Aug;42(8):803-13 (127 ref.) **(Ita)**

[Does a genetic predisposition for infarction expansion exist? Evaluation of genetic polymorphisms of the renin-angiotensin system] Zedda N, et al. **Cardiologia** 1997 Mar;42(3):281-5 (Eng. Abstr.) **(Ita)**

[Pathogenetic importance of gene polymorphisms in the renin-angiotensin system] Chudek J, et al. **Pol Arch Med Wewn** 1996 Oct;96(4):369-77 (79 ref.) **(Pol)**

[The role of DNA polymorphism in the renin-angiotensin system and the pathogenesis of cardiovascular diseases] Stajszczyk M, et al. **Postepy Hig Med Dosw** 1997; 51(2):171-83 (56 ref.) (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

The renin-angiotensin system and fibrinolysis. Vaughan DE. **Am J Cardiol** 1997 Mar 6;79(5A):12-6 (29 ref.)

The angiotensin converting enzyme and blood pressure in Jamaicans. Forrester T, et al. **Am J Hypertens** 1997 May; 10(5 Pt 1):519-24

The implication of renin-angiotensin system on renal injury seen in Dahl salt-sensitive rats. Hirawa N, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):102S-106S (19 ref.)

Effect of acute and chronic losartan treatment on glucose tolerance and insulin sensitivity in fructose-fed rats. Iyer SN, et al. **Am J Hypertens** 1996 Jul;9(7):662-8

Vasopressin and renin-angiotensin maintain arterial pressure during PEEP in nonexpanded, conscious dogs. Kaczmarczyk G, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1396-402

Role of the renin-angiotensin system in cardiac hypertrophy induced in rats by hyperthyroidism. Kobori H, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H593-9

Role of paraventricular angiotensin AT1 receptors in salt-sensitive hypertension in mRen-2 transgenic rats. Li P, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1178-81

Control of cell proliferation in the rat adrenal gland in vivo by the renin-angiotensin system. McEwan PE, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E192-8

Relationship of renin-angiotensin system and ET-1 system activation in long-lasting response to postural changes. Modesti PA, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1200-6

Blockade of the renin-angiotensin-aldosterone system prevents growth hormone-induced fluid retention in humans. Møller J, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E803-8

Renin-angiotensin system modulates renal bradykinin production. Siragy HM, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1090-5

Ouabain increases aldosterone release from bovine adrenal glomerulosa cells: role of renin-angiotensin system. Tamura M, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):E27-35

Effects of naturally acquired decompensated mitral valve regurgitation on the renin-angiotensin-aldosterone system and atrial natriuretic peptide concentration in dogs. Häggström J, et al. **Am J Vet Res** 1997 Jan;58(1):77-82

Local renin-angiotensin system: especially in coagulating glands of mice. Kon Y. **Arch Histol Cytol** 1996 Dec; 59(5):399-420 (207 ref.)

The effects of renin-angiotensin system inhibition on aortic cholesterol content in cholesterol-fed rabbits. Sugano M, et al. **Atherosclerosis** 1996 Nov 15;127(1):123-9

Activated tissue renin-angiotensin systems add to the progression of heart failure. Pinto YM, et al. **Basic Res Cardiol** 1996;91 Suppl 2:85-90 (25 ref.)

Effect of the renin-angiotensin-aldosterone system on the cardiac interstitium in heart failure. Wilke A, et al. **Basic Res Cardiol** 1996;91 Suppl 2:79-84 (33 ref.)

Stretch-induced MAP kinase activation in cardiomyocytes of angiotensinogen-deficient mice. Nyui N, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):36-41

Effect of low dietary calcium intake on blood pressure and pressure natriuresis response in rats: a possible role of the renin-angiotensin system. Yuasa S, et al. **Blood Press** 1996 Mar;5(2):121-7

Physiologic and pharmacologic implications of AT1 versus AT2 receptors. Chung O, et al. **Blood Press Suppl** 1996; 2:47-52 (48 ref.)

Contribution of the renin-angiotensin system to short-term blood pressure variability during blockade of nitric oxide synthesis in the rat. Gouédard O, et al. **Br J Pharmacol** 1996 Nov;119(6):1085-92

Behaviour of the transgenic (mREN2)27 rat. Wilson W, et al. **Brain Res** 1996 Aug 5;729(1):1-9

Blood pressure control by the renin-angiotensin system and its interaction with the sympathetic nervous system in fish. Platzack B. **Braz J Med Biol Res** 1995 Nov-Dec; 28(11-12):1227-31 (31 ref.)

Effects of inhibition of the maternal renin-angiotensin system on maternal and fetal responses to drainage of fetal fluids. Lumbers ER, et al. **Can J Physiol Pharmacol** 1996 Aug; 74(8):973-82

Responses of plasma catecholamines, renin-angiotensin-aldosterone system, and atrial natriuretic peptide to exercise in patients with essential hypertension. Kinugawa T, et al. **Cardiology** 1997 May-Jun;88(3):238-45

Activation of the neuroendocrine response in heart failure: adaptive or maladaptive process? Ferrari R, et al. **Cardiovasc Drugs Ther** 1996 Nov;10 Suppl 2:623-9 (68 ref.)

Pathologic consequences of increased angiotensin II activity. Ferrario CM, et al. **Cardiovasc Drugs Ther** 1996 Nov; 10(5):511-8 (100 ref.)

Role of the renin-angiotensin system as a risk factor for control of morbidity and mortality in coronary artery disease. Riegger GA. **Cardiovasc Drugs Ther** 1996 Nov;10 Suppl 2:613-5 (19 ref.)

Prevention of neointima formation by mibefradil after vascular injury in rats: comparison with ACE inhibition. Schmitt R, et al. **Cardiovasc Drugs Ther** 1996 May; 10(2):101-5

Stretching the evidence in the case of cardiac growth [see comments] Yamazaki T, et al. **Cardiovasc Res** 1996 Apr; 31(4):493-8 (45 ref.). Comment in: Cardiovasc Res 1996 Apr;31(4):492.

Pressure and angiotensin II synergistically induce aortic fibronectin expression in organ culture model of rabbit aorta. Evidence for a pressure-induced tissue renin-angiotensin system. Bardy N, et al. **Circ Res** 1996 Jul;79(1):70-8

In vitro modulation of a resistance artery diameter by the tissue renin-angiotensin system of a large donor artery. Henrion D, et al. **Circ Res** 1997 Feb;80(2):189-95

Evidence for the existence of a functional cardiac renin-angiotensin system in humans. Neri Serneri GG, et al. **Circulation** 1996 Oct 15;94(8):1886-93

The renin-angiotensin-aldosterone system in pre-eclampsia. Brown MA, et al. **Clin Exp Hypertens** 1997 Jul-Aug; 19(5-6):713-26 (46 ref.)

Target organ damage and renin-angiotensin-aldosterone system in essential hypertensives with and without metabolic risk factors [letter] Fabbian F, et al. **Clin Nephrol** 1997 Feb;47(2):137-8

Postrenal transplant erythrocytosis, ACE inhibitors and a hypothetical local renin-angiotensin system in the bone marrow [letter; comment] Haznedaroğlu IC. **Clin Nephrol** 1997 Jul;48(1):60. Comment on: Clin Nephrol 1996 Sep;46(3):217.

Effective role of the renin-angiotensin system in the control of prostanoid synthesis and renal function in healthy women with moderate salt depletion. Agnoli GC, et al. **Clin Physiol** 1996 Jan;16(1):41-59

Update on local cardiac renin-angiotensin system. Ruzicka M, et al. **Curr Opin Cardiol** 1997 Jul;12(4):347-53 (30 ref.)

Interactions of the kallikrein-kinin and renin-angiotensin systems in experimental diabetes. Vora JP, et al. **Diabetes** 1997 Jan;46(1):107-12

Emerging concepts about the renin angiotensin system: present and future clinical applications. McLigeyo SO. **East Afr Med J** 1996 Sep;73(9):607-10 (39 ref.)

Role of the tissue renin-angiotensin system in the response of the rat adrenal to exogenous angiotensin II. Vinson GP, et al. **Endocr Res** 1996 Nov;22(4):589-93

Role of the renin-angiotensin system in the development of thyroxine-induced hypertension. García del Rio C, et al. **Eur J Endocrinol** 1997 Jun;136(6):656-60

Contribution of the renin-angiotensin and kallikrein-kinin systems to short-term variability of blood pressure in two-kidney, one-clip hypertensive rats. Ponchon P, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):61-70

In vivo inhibition of nitric oxide synthesis does not depend on renin-angiotensin system activation. Zappellini A, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):285-91

Angiotensin I-converting enzyme, blood groups, and a local marrow-specific renin-angiotensin system [letter; comment] Haznedaroğlu IC. **Exp Hematol** 1997 Feb; 25(2):93. Comment on: Exp Hematol 1996 Jun;24(7):790-4.

The renin-angiotensin system and renal function in transgenic (mRen2)27 rats. Gross V, et al. **Exp Nephrol** 1996;4 Suppl 1:20-6

The intrarenal renin-angiotensin system: a paracrine system for the local control of renal function separate from the systemic axis. Harris RC, et al. **Exp Nephrol** 1996;4 Suppl 1:2-7 (66 ref.)

Impact of renin-angiotensin system blockade on structure and function of glomerular membrane components in animal models of kidney disease. Remuzzi A, et al. **Exp Nephrol** 1996;4 Suppl 1:27-33 (57 ref.)

Changes in the maternal and fetal renin-angiotensin systems in response to angiotensin II type 1 receptor blockade and angiotensin-converting enzyme inhibition in pregnant sheep during late gestation. Forhead AJ, et al. **Exp Physiol** 1997 Jul;82(4):761-76

The ovarian renin-angiotensin system in reproductive physiology. Yoshimura Y. **Front Neuroendocrinol** 1997 Jul; 18(3):247-91 (235 ref.)

Interrenal function in larval Ambystoma tigrinum. IV. Acid-base balance and the renin-angiotensin system. Eskandari S, et al. **Gen Comp Endocrinol** 1997 Jan; 105(1):18-30

The kallikrein-kinin and renin-angiotensin systems in the kidney of an African lungfish, Protopterus annectens. Masini MA, et al. **Gen Comp Endocrinol** 1996 Jul; 103(1):93-100

Responses of catecholamines, renin-angiotensin system, and atrial natriuretic peptide to exercise in untrained men and women. Kinugawa T, et al. **Gen Pharmacol** 1997 Feb; 28(2):225-8

Is there a link between the circulating renin-angiotensin system and coronary disease? A buoyant view. Alderman MH. **Heart** 1996 Nov;76(3 Suppl 3):18-22 (20 ref.)

Neuroendocrine activation after myocardial infarction: causes and consequences. Cleland JG, et al. **Heart** 1996 Nov;76(3 Suppl 3):53-9 (68 ref.)

The renin-angiotensin system and the heart: a historical review. Cleland SJ, et al. **Heart** 1996 Nov;76(3 Suppl 3):7-12

Is there an internal cardiac renin-angiotensin system? Danser AH, et al. **Heart** 1996 Nov;76(3 Suppl 3):28-32 (39 ref.)

The renin-angiotensin system and coronary vasomotion. Ertl G, et al. **Heart** 1996 Nov;76(3 Suppl 3):45-52 (106 ref.)

The renin-angiotensin-aldosterone system and cardiac ischaemia. Ikram H. **Heart** 1996 Nov;76(3 Suppl 3):60-7

(99 ref.)
The renin-angiotensin system and cardiac remodelling after acute myocardial infarction. Ikram H. **Heart** 1996 Nov;76(3 Suppl 3):68–72 (33 ref.)
The renin-angiotensin system and the heart: beyond 2000. Morgan T, et al. **Heart** 1996 Nov;76(3 Suppl 3):98–103 (42 ref.)
The renin-angiotensin system and the heart [editorial] Nicholls MG, et al. **Heart** 1996 Nov;76(3 Suppl 3):2
The renin-angiotensin-aldosterone system and the cardiac natriuretic peptides. Richards AM. **Heart** 1996 Nov;76(3 Suppl 3):36–44 (80 ref.)
Associations between circulating components of the renin-angiotensin-aldosterone system and left ventricular mass. Schunkert H, et al. **Heart** 1997 Jan;77(1):24–31
Is there a link between the circulating renin-angiotensin system and coronary disease? A sceptical view. Swales JD. **Heart** 1996 Nov;76(3 Suppl 3):23–7 (40 ref.)
The renin-angiotensin system and cardiac hypertrophy. Yamazaki T, et al. **Heart** 1996 Nov;76(3 Suppl 3):33–5 (30 ref.)
Pseudohypoaldosteronism: family studies to identify asymptomatic carriers by stimulation of the renin-aldosterone system. Kuhnle U, et al. **Horm Res** 1996; 46(3):124–9
Dual role of angiotensin II in the human endometrium. Li XF, et al. **Hum Reprod** 1996 Oct;11 Suppl 2:95–108 (74 ref.)
Tissue renin-angiotensin systems and reproduction. Vinson GP, et al. **Hum Reprod** 1997 Apr;12(4):651–62 (176 ref.)
Hypertension in obese Zucker rats. Role of angiotensin II and adrenergic activity. Alonso-Galicia M, et al. **Hypertension** 1996 Dec;28(6):1047–54
Insulin-induced hypertension in rats depends on an intact renin-angiotensin system. Brands MW, et al. **Hypertension** 1997 Apr;29(4):1014–9
Regulation of growth of the adrenal gland in DOC-salt hypertension. Role of angiotensin II receptor subtypes. Elijovich F, et al. **Hypertension** 1997 Jan;29(1 Pt 2):408–13
Renal immunocytochemical distribution and pharmacological properties of the dual angiotensin II/AVP receptor. Gonzalez CB, et al. **Hypertension** 1997 Apr;29(4):957–61
Renal determinants for sodium sensitivity of blood pressure [letter; comment] Kimura G, et al. **Hypertension** 1996 Dec; 28(6):1102–3. Comment on: Hypertension 1996 Feb;27(2):202–8.
Synthesis and secretion of natriuretic peptides in the hypertensive TGR(mREN-2)27 transgenic rat. Marttila M, et al. **Hypertension** 1996 Dec;28(6):995–1004
Prohormone convertase PC5 is a candidate processing enzyme for prorenin in the human adrenal cortex. Mercure C, et al. **Hypertension** 1996 Nov;28(5):840–6
Reversal of microvascular rarefaction and reduced renal mass hypertension. Rieder MJ, et al. **Hypertension** 1997 Jul;30(1 Pt 1):120–7
Disproportional arterial hypertrophy in hypertensive mRen-2 transgenic rats. Struijker-Boudier HA, et al. **Hypertension** 1996 Nov;28(5):779–84
The renin-angiotensin system in patients with repeated anaphylactic reactions during hymenoptera venom hyposensitization and sting challenge. Hermann K, et al. **Int Arch Allergy Immunol** 1997 Mar;112(3):251–6
The renin-angiotensin system and vascular hypertrophy. Rosendorff C. **J Am Coll Cardiol** 1996 Oct;28(4):803–12 (131 ref.)
Lifelong angiotensin-converting enzyme inhibition, pressure natriuresis, and renin-angiotensin system gene expression in transgenic (mRen-2)27 rats. Lippoldt A, et al. **J Am Soc Nephrol** 1996 Oct;7(10):2119–29
Features of the Renin-angiotensin system in ascites and pleural effusion during severe ovarian hyperstimulation syndrome. Delbaere A, et al. **J Assist Reprod Genet** 1997 May;14(5):241–4
Changes of blood pressure, sodium excretion and sodium balance due to variations of the renin-angiotensin-aldosterone system. Reinhardt HW, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):184–7
Responses of plasma norepinephrine and renin-angiotensin-aldosterone system to dynamic exercise in patients with congestive heart failure. Kato M, et al. **J Card Fail** 1996 Jun;2(2):103–10
The role of the cardiac renin-angiotensin system in load-induced cardiac hypertrophy. Sadoshima J, et al. **J Card Fail** 1996 Dec;2(4 Suppl):S1–6 (43 ref.)
Catecholamine and renin-angiotensin response during controlled hypotension induced by prostaglandin E1 combined with hemodilution during isoflurane anesthesia. Fukusaki M, et al. **J Clin Anesth** 1997 Jun;9(4):321–7
Activity of the renin-angiotensin-aldosterone axis is dependent on the occurrence of edema in growth hormone (GH)-deficient adults treated with GH [letter] Hayes FJ, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):322–3
The renin-angiotensin system in cats with chronic renal failure. Taugner F, et al. **J Comp Pathol** 1996 Oct; 115(3):239–52
Effect of manipulation of the renin-angiotensin system in control of drinking in juvenile Atlantic salmon (Salmo salar L) in fresh water and after transfer to sea water. Fuentes J, et al. **J Comp Physiol [B]** 1997 Aug;167(6):438–43
Impact of the renin-angiotensin-aldosterone system on blood pressure response to intravenous enalaprilat in patients with hypertensive crises. Hirschl MM, et al. **J Hum Hypertens** 1997 Mar;11(3):177–83
Serum angiotensin-converting enzyme activity correlates positively with plasma angiotensin II: a population-based study of ambulatory blood pressure and the renin-angiotensin system. Nyström F, et al. **J Hum Hypertens** 1997 May;11(5):301–6
Importance of the renin-angiotensin system in the generation of kidney failure in renovascular hypertension. Abdi A, et al. **J Hypertens** 1996 Sep;14(9):1131–7
An abnormal sodium metabolism in Japanese patients with essential hypertension, judged by serum sodium distribution, renal function and the renin-aldosterone system. Komiya I, et al. **J Hypertens** 1997 Jan;15(1):65–72
Growth or antigrowth: angiotensin and the endothelium. Stoll M, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1529–34 (48 ref.)
Progression of renal failure after subtotal nephrectomy in transgenic rats carrying an additional renin gene [TGR(mREN2)27]. Wagner J, et al. **J Hypertens** 1997 Apr; 15(4):441–9
Cardiovascular end-organ damage in Ren-2 transgenic rats compared to spontaneously hypertensive rats. Pinto YM, et al. **J Mol Med** 1997 May;75(5):371–7
The role of the renin-angiotensin system in the renal response to moderate hypoxia in the rat. Neylon M, et al. **J Physiol (Lond)** 1996 Mar 1;491 (Pt 2):479–88
Follicular maturation and atresia--possible role of intraovarian regulatory factors. Mukhopadhyay AK, et al. **J Reprod Fertil Suppl** 1996;50:105–12
Renin angiotensin system in rabbit corpus cavernosum: functional characterization of angiotensin II receptors. Park JK, et al. **J Urol** 1997 Aug;158(2):653–8
Alterations of signal transduction system in heart failure. Kawaguchi H, et al. **Jpn Heart J** 1997 May;38(3):317–32 (48 ref.)
Interaction of nitric oxide and the renin angiotensin system in renal hypertensive rats. Lee BH, et al. **Jpn J Pharmacol** 1997 May;74(1):83–90
Ontogeny of hormonal and excretory function of the meso- and metanephros in the ovine fetus. Wintour EM, et al. **Kidney Int** 1996 Nov;50(5):1624–33
Transforming growth factor beta 1 and renal injury following subtotal nephrectomy in the rat: role of the renin-angiotensin system. Wu LL, et al. **Kidney Int** 1997 May;51(5):1553–67
Activated and inactivated renin-angiotensin system in transgenic animals: from genes to blood pressure. Fukamizu A, et al. **Lab Anim Sci** 1997 Apr;47(2):127–31 (36 ref.)
The renin angiotensin system and nociception in spontaneously hypertensive rats. Irvine RJ, et al. **Life Sci** 1995 Feb 17;56(13):1073–8
The application of molecular genetic techniques to the study of hypertensive diseases. Re RN. **Med Clin North Am** 1997 Sep;81(5):1099–112 (126 ref.)
Angiotensinogen gene activation by angiotensin II is mediated by the rel A (nuclear factor-kappaB p65) transcription factor: one mechanism for the renin angiotensin system positive feedback loop in hepatocytes. Li J, et al. **Mol Endocrinol** 1996 Mar;10(3):252–64
The molecular basis of increased glomerulosclerosis after blockade of the renin angiotensin system in growth hormone transgenic mice. Peten EP, et al. **Mol Med** 1994 Nov;1(1):104–15
Ageing and the renin-angiotensin system [editorial] Anderson S. **Nephrol Dial Transplant** 1997 Jun;12(6):1093–4
Haematopoietic effects of ACE inhibitors and local bone marrow renin-angiotensin system: An hypothesis [letter; comment] Haznedaroğlu IC. **Nephrol Dial Transplant** 1996 Nov;11(11):2373. Comment on: Nephrol Dial Transplant 1996 Apr;11(4):749–751.
Diurnal urinary excretion of cortisol and aldosterone in kidney graft recipients. Stefanovic V, et al. **Pathol Biol (Paris)** 1995 Nov;43(9):766–71
Modulators of the renin-angiotensin-aldosterone system and cough in childhood [letter] Donati-Genet P, et al. **Pediatr Nephrol** 1996 Aug;10(4):545–6
Insulin, the renin-angiotensin-aldosterone system and blood pressure. Tait JF, et al. **Perspect Biol Med** 1997 Winter; 40(2):246–59 (64 ref.)
The renin-angiotensin-aldosterone system: focus on its distinct role in arterial hypertension and its various inhibitors as a therapeutic strategy to effectively lower blood pressure. Soldner A, et al. **Pharmazie** 1996 Nov; 51(11):783–99 (239 ref.)
Antagonism of the renin-angiotensin system and water deprivation-induced NaCl intake in rats. Sato MA, et al. **Physiol Behav** 1996 Oct;60(4):1099–104
Lack of evidence for the interaction between renin-angiotensin-aldosterone system and endothelin in vivo. Widimský J Jr, et al. **Physiol Res** 1996;45(3):241–3
Stress-induced regulation of the renal peripheral benzodiazepine receptor: possible role of the renin-angiotensin system. Holmes PV, et al. **Psychoneuroendocrinology** 1994;19(1):43–54
Evidence of a kallikrein inhibitor in human kidney. A new ring of the kallikrein-renin-angiotensin-aldosterone chain. Malinovsky L, et al. **Recenti Prog Med** 1997 Mar; 88(3):120–3
Gene expression of central and peripheral renin-angiotensin system components upon dietary sodium intake in rats. Jo H, et al. **Regul Pept** 1996 Dec 3;67(2):115–21
Neurohumoral systems in patients with cirrhosis. Monte JC, et al. **Ren Fail** 1997 Mar;19(2):335–42
The atrial natriuretic peptide-renin-aldosterone system in hepatorenal syndrome. Pasqualetti P, et al. **Riv Eur Sci Med Farmacol** 1996 Jul-Aug;18(4):137–41
[Ovarian renin-angiotensin system] Wu X, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Jul;31(7):434–6 (17 ref.) **(Chi)**
[Postnatal development of the kidney concentrating ability, the renin-angiotensin system and the adrenal cortex hormones in the calf] Abouzite M, et al. **Reprod Nutr Dev** 1997 May-Jun;37(3):285–92 (Eng. Abstr.) **(Fre)**
[Effect of the cardiac renin-angiotensin system on hypertrophy] Ertl G, et al. **Z Kardiol** 1996;85 Suppl 6:233–40 (58 ref.) (Eng. Abstr.) **(Ger)**
[The cardiac renin-angiotensin system and its role in ventricular hypertrophy associated with arterial hypertension] Rubattu S, et al. **Cardiologia** 1997 Jan; 42(1):47–50 (36 ref.) **(Ita)**
[The ovarian renin-angiotensin-aldosterone system] Pizzo A, et al. **Minerva Ginecol** 1996 Dec;48(12):539–44 (33 ref.) (Eng. Abstr.) **(Ita)**
[Role of the renin-angiotensin system in cardiovascular and renal diseases] Kim S. **Nippon Yakurigaku Zasshi** 1997 May; 109(5):223–33 (41 ref.) (Eng. Abstr.) **(Jpn)**
[Vascular remodeling and nitric oxide] Takemoto M, et al. **Rinsho Byori** 1997 Feb;Suppl 104:216–23 **(Jpn)**
[Association of atherosclerosis and cardiac cell dysfunction] Yonemochi H, et al. **Rinsho Byori** 1996 Nov;44(11):1037–42 (Eng. Abstr.) **(Jpn)**
[Selected components of the kallikrein-kinin system and of the renin-angiotensin-aldosterone system in offspring of parents with hypertension] Marzęcka J. **Ann Acad Med Stetin** 1996;42:123–38 (Eng. Abstr.) **(Pol)**
[The role of renin-angiotensin system in the regulation of noradrenaline inactivation in lungs during immobilization stress in rats] Bonetskiĭ AA, et al. **Biull Eksp Biol Med** 1994 May;117(5):468–9 **(Rus)**
[The interaction of the renin-angiotensin and enkephalinergic systems of the brain and hypophysis in normal rats and in experimental pathology of the hypothalamo-hypophyseal-adrenal complex] Kalinskaia LN, et al. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):60–4 (Eng. Abstr.) **(Rus)**
[The participation of the renin-angiotensin-aldosterone system in the pathogenesis of acute kidney failure in endotoxemia] Krishtal' NV, et al. **Lik Sprava** 1995 Mar-Apr;(3-4):92–4 (Eng. Abstr.) **(Rus)**
[Content of components of the renin-angiotensin-aldosterone system and prostaglandins series E, F in various organs after suturing of peripheral nerves during treatment with dehydrating agents] Nechipurenko NI, et al. **Patol Fiziol Eksp Ter** 1996 Oct-Dec;(4):44–6 (Eng. Abstr.) **(Rus)**
[Genetics of human hypertension: renin-angiotensin-aldosterone system] Markel' AL, et al. **Vestn Ross Akad Med Nauk** 1997;(7):59–66 (60 ref.) **(Rus)**
[Tissue angiotensin II and its impact in the treatment of arterial hypertension] Escobar-Morreale HF, et al. **Med Clin (Barc)** 1997 Jan 25;108(3):105–8 (63 ref.) **(Spa)**
[Chronology of portal hypertension, decreased sodium excretion, and activation of the renin-angiotensin system in experimental biliary cirrhosis] Poo JL, et al. **Rev Invest Clin** 1997 Jan-Feb;49(1):15–23 (Eng. Abstr.) **(Spa)**

RENIN-SUBSTRATE see **ANGIOTENSINOGEN**

RENNIN see **CHYMOSIN**

RENOGRAPHY see **RADIOISOTOPE RENOGRAPHY**

REOPERATION

Early secondary corrections after septorhinoplasty. Szalay L. **Aesthetic Plast Surg** 1996 Sep-Oct;20(5):429–32
The role of second-look laparotomy in the long-term survival in ovarian cancer [see comments] Tuxen MK, et al. **Ann Oncol** 1997 Jul;8(7):643–8. Comment in: Ann Oncol 1997 Jul;8(7):627–9.
More than 20 years second-look surgery in advanced epithelial ovarian cancer: what did we learn? [editorial; comment] van der Burg ME. **Ann Oncol** 1997 Jul;8(7):627–9 . Comment on: Ann Oncol 1997 Jul;8(7):643–8.
A study of second-look laparoscopy after acute salpingitis. Gerber B, et al. **Arch Gynecol Obstet** 1996;258(4):193–200
Intraoperative electrophysiological and objective tests after cochlear re-implantation in a young child. Mason SM, et al. **Br J Audiol** 1996 Apr;30(2):67–70
Should second eye cataract surgery be rationed? [letter; comment] Harrad RA, et al. **Eye** 1996;10 (Pt 4):530. Comment on: Eye 1995;9 (Pt 6 Su):47–9.
Prophylactic replacement of Björk-Shiley convexo-concave heart valves: an easy-to-use tool to aid decision-making in individual patients [letter; comment] Amsel BJ. **Heart** 1997 May;77(5):487–8. Comment on: Heart 1996 Sep;76(3):264–8.
Heterogeneity in cellular and cytokine profiles from multiple samples of tissue surrounding revised hip prostheses. Goodman SB, et al. **J Biomed Mater Res** 1996 Jul;

31(3):421–8
Surgical second look in ovarian cancer: a randomized study in patients with laparoscopic complete remission--a Northeastern Oncology Cooperative Group-Ovarian Cancer Cooperative Group Study. Nicoletto MO, et al. **J Clin Oncol** 1997 Mar;15(3):994–9
Optimal timing of a second-look operation for advanced epithelial ovarian cancer. Ushijima K, et al. **Kurume Med J** 1997;44(1):15–21
Correlation of computed tomography with second-look laparotomy in ovarian carcinoma. Sandhu M, et al. **Natl Med J India** 1996 Jan-Feb;9(1):13–6
Retransplantation of patients with severe posttransplant hepatitis B in the first allograft. Ishitani M, et al. **Transplantation** 1997 Aug 15;64(3):410–4
[The Slovak Surgical Society and the First Surgical Clinic and Medical School of Comenius University of Bratislava 49th seminar held in Bratislava. 8 December 1995. Principal theme: reoperations in surgery] **Bratisl Lek Listy** 1996 Dec; 97(12):720–56 **(Slo)**

ECONOMICS

[Concomitant calculation of GOA positions 2006 and 200] **Chirurg** 1996 Sep;67(9):suppl 221–3 **(Ger)**

INSTRUMENTATION

[Treatment of eventrations with a special apparatus] Izmailov SG. **Khirurgiia (Mosk)** 1997;(1):55–8 (Eng. Abstr.) **(Rus)**

METHODS

Clinical results and survival of cementless revisions after 49 to 93 months. Savilahti S, et al. **Ann Chir Gynaecol** 1996; 85(4):340–6
Revision total hip replacement using the bias proximal porous-coated femoral component. Suominen S, et al. **Ann Chir Gynaecol** 1996;85(4):347–51
Revision of failed prosthetic anterior cruciate ligament reconstruction. Greis PE, et al. **Clin Orthop** 1996 Apr; (325):78–90 (34 ref.)
Revision anterior cruciate ligament surgery: experience from Pittsburgh. Johnson DL, et al. **Clin Orthop** 1996 Apr; (325):100–9
Uncemented revision total hip arthroplasty: a 4-to-6-year review. Mulliken BD, et al. **Clin Orthop** 1996 Apr; (325):156–62
Revision anterior cruciate ligament surgery: experience from Cincinnati. Noyes FR, et al. **Clin Orthop** 1996 Apr; (325):116–29
Graft selection in anterior cruciate ligament revision surgery. Ritchie JR, et al. **Clin Orthop** 1996 Apr;(325):65–77 (58 ref.)
Technical considerations of revision anterior cruciate ligament surgery. Safran MR, et al. **Clin Orthop** 1996 Apr; (325):50–64 (24 ref.)
Revision anterior cruciate ligament surgery: experience from Miami. Uribe JW, et al. **Clin Orthop** 1996 Apr;(325):91–9
Revision anterior cruciate ligament surgery: experience from Germany. Wirth CJ, et al. **Clin Orthop** 1996 Apr; (325):110–5
Cementless revision of total hip arthroplasty using the anatomic porous replacement revision prosthesis. Buoncristiani AM, et al. **J Arthroplasty** 1997 Jun; 12(4):403–15
Tissue expansion for staged reimplantation of infected total knee arthroplasty. Namba RS, et al. **J Arthroplasty** 1997 Jun;12(4):471–4
Tissue expansion prior to revision total knee arthroplasty. Santore RF, et al. **J Arthroplasty** 1997 Jun;12(4):475–8
Closed removal of a segmental intramedullary rod: a technical report. Randall RL, et al. **J Orthop Trauma** 1996; 10(5):363–5
[Clinical significance and subject of second look operation] Yakushiji M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Aug;48(8):761–8 (19 ref.) **(Jpn)**

REOVIRIDAE

Serotype-dependent induction of pulmonary neutrophilia and inflammatory cytokine gene expression by reovirus. Farone AL, et al. **J Virol** 1996 Oct;70(10):7079–84
Reovirus-induced acute myocarditis in mice correlates with viral RNA synthesis rather than generation of infectious virus in cardiac myocytes. Sherry B, et al. **J Virol** 1996 Oct;70(10):6709–15

DRUG EFFECTS

Effect of protectants in L-drying on the conformation and infectivity of rice dwarf phytoreovirus. Fukumoto F, et al. **Arch Virol** 1996;141(8):1579–85
Antiviral activity of galangin isolated from the aerial parts of Helichrysum aureonitens. Meyer JJ, et al. **J Ethnopharmacol** 1997 Apr;56(2):165–9
Inhibition of reovirus-stimulated murine natural killer cell cytotoxicity by cyclosporine. al-Sheboul S, et al. **Life Sci** 1996;59(20):1675–82

ENZYMOLOGY

Core protein mu2 is a second determinant of nucleoside triphosphatase activities by reovirus cores. Noble S, et al. **J Virol** 1997 Oct;71(10):7728–35

GENETICS

The M(r) 43K major capsid protein of rice ragged stunt oryzavirus is a post-translationally processed product of a M(r) 67,348 polypeptide encoded by genome segment 8. Upadhyaya NM, et al. **Arch Virol** 1996;141(9):1689–701
Genome segment 5 of rice ragged stunt virus encodes a virion protein. Li Z, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3155–60
Cloning, sequence analysis and expression of the major outer capsid protein gene of an aquareovirus. Lupiani B, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1379–83
Rice ragged stunt Oryzavirus genome segment 9 encodes a 38 600 Mr structural protein. Uyeda I, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):975–8
Nonrandom segregation of parental alleles in reovirus reassortants. Nibert ML, et al. **J Virol** 1996 Oct; 70(10):7295–300
Polycistronic (tri- or bicistronic) phytoreoviral segments translatable in both plant and insect cells. Suzuki N, et al. **J Virol** 1996 Nov;70(11):8155–9
Construction and characterization of a reovirus double temperature-sensitive mutant. Roner MR, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6826–30
Preferential translation of reovirus mRNA by a sigma3-dependent mechanism. Schmechel S, et al. **Virology** 1997 May 26;232(1):62–73
Assembly of the reovirus outer capsid requires mu 1/sigma 3 interactions which are prevented by misfolded sigma 3 protein in temperature-sensitive mutant tsG453. Shing M, et al. **Virus Res** 1996 Dec;46(1-2):19–29

IMMUNOLOGY

Prevalence of antibodies against respiratory viruses (parainfluenza virus type 3, respiratory syncytial virus, reovirus and adenovirus) in relation to productivity in Syrian Awassi sheep. Giangaspero M, et al. **Trop Anim Health Prod** 1997 May;29(2):83–91

ISOLATION & PURIFICATION

Characterization of a nonradioactive cloned cDNA probe for detecting avian reoviruses. Liu HJ, et al. **Avian Dis** 1997 Apr-Jun;41(2):374–8
In situ detection of reovirus in formalin-fixed, paraffin-embedded chicken tissues using a digoxigenin-labeled cDNA probe. Liu HJ, et al. **Avian Dis** 1997 Apr-Jun;41(2):447–51
Identification of a new genogroup of aquareovirus by RNA-RNA hybridization. Subramanian K, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1385–8
Infection of the gonads of the SimES strain of Drosophila simulans by the hereditary reovirus DSV. López Ferber M, et al. **J Invertebr Pathol** 1997 Sep;70(2):143–9
Reovirus type 1 associated with meningitis. Johansson PJ, et al. **Scand J Infect Dis** 1996;28(2):117–20 (11 ref.)

METABOLISM

The M(r) 43K major capsid protein of rice ragged stunt oryzavirus is a post-translationally processed product of a M(r) 67,348 polypeptide encoded by genome segment 8. Upadhyaya NM, et al. **Arch Virol** 1996;141(9):1689–701
Characterization of the nucleoside triphosphate phosphohydrolase and helicase activities of the reovirus lambda1 protein. Bisaillon M, et al. **J Biol Chem** 1997 Jul 18;272(29):18298–303
Localization of a C-terminal region of lambda2 protein in reovirus cores. Luongo CL, et al. **J Virol** 1997 Oct; 71(10):8035–40
Persistent reovirus infections of L cells select mutations in viral attachment protein sigma1 that alter oligomer stability. Wilson GJ, et al. **J Virol** 1996 Oct;70(10):6598–606
Double-stranded RNA-dependent protein kinase (PKR) is regulated by reovirus structural proteins. Yue Z, et al. **Virology** 1997 Aug 4;234(2):364–71
Assembly of the reovirus outer capsid requires mu 1/sigma 3 interactions which are prevented by misfolded sigma 3 protein in temperature-sensitive mutant tsG453. Shing M, et al. **Virus Res** 1996 Dec;46(1-2):19–29

PATHOGENICITY

The loss of outer capsid protein P2 results in nontransmissibility by the insect vector of rice dwarf phytoreovirus. Tomaru M, et al. **J Virol** 1997 Oct; 71(10):8019–23
P2 protein encoded by genome segment S2 of rice dwarf phytoreovirus is essential for virus infection. Yan J, et al. **Virology** 1996 Oct 15;224(2):539–41

PHYSIOLOGY

The loss of outer capsid protein P2 results in nontransmissibility by the insect vector of rice dwarf phytoreovirus. Tomaru M, et al. **J Virol** 1997 Oct; 71(10):8019–23
Reovirus variants selected during persistent infections of L cells contain mutations in the viral S1 and S4 genes and are altered in viral disassembly. Wetzel JD, et al. **J Virol** 1997 Feb;71(2):1362–9

ULTRASTRUCTURE

A nonoccluded reovirus of the olive fly, Dacus oleae. Anagnou-Veroniki M, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):259–63
The structure of aquareovirus shows how the different geometries of the two layers of the capsid are reconciled to provide symmetrical interactions and stabilization. Shaw AL, et al. **Structure** 1996 Aug 15;4(8):957–67

REOVIRIDAE INFECTIONS

Persistent reovirus infections of L cells select mutations in viral attachment protein sigma1 that alter oligomer stability. Wilson GJ, et al. **J Virol** 1996 Oct;70(10):6598–606

DIAGNOSIS

Reovirus type 1 associated with meningitis. Johansson PJ, et al. **Scand J Infect Dis** 1996;28(2):117–20 (11 ref.)

IMMUNOLOGY

Predominant T-cell receptor Vbeta usage of intraepithelial lymphocytes during the immune response to enteric reovirus infection. Chen D, et al. **J Virol** 1997 May; 71(5):3431–6
Enhanced mucosal and systemic immune responses to intestinal reovirus infection in beta2-microglobulin-deficient mice. Major AS, et al. **J Virol** 1997 Aug;71(8):5782–9
Suppressor macrophages mediate depressed lymphoproliferation in chickens infected with avian reovirus. Pertile TL, et al. **Vet Immunol Immunopathol** 1996 Sep;53(1-2):129–45

PATHOLOGY

Respiratory reovirus 1/L induction of intraluminal fibrosis. A model for the study of bronchiolitis obliterans organizing pneumonia. Bellum SC, et al. **Am J Pathol** 1997 Jun; 150(6):2243–54

PHYSIOPATHOLOGY

Reovirus infection and tissue injury in the mouse central nervous system are associated with apoptosis. Oberhaus SM, et al. **J Virol** 1997 Mar;71(3):2100–6

PREVENTION & CONTROL

Orally administered microencapsulated reovirus can bypass suckled, neutralizing maternal antibody that inhibits active immunization of neonates. Periwal SB, et al. **J Virol** 1997 Apr;71(4):2844–50

VETERINARY

In situ detection of reovirus in formalin-fixed, paraffin-embedded chicken tissues using a digoxigenin-labeled cDNA probe. Liu HJ, et al. **Avian Dis** 1997 Apr-Jun;41(2):447–51
Characterization of a nonradioactive cloned cDNA probe for detecting avian reoviruses. Liu HJ, et al. **Avian Dis** 1997 Apr-Jun;41(2):374–8
Development of PCR-based tests for the identification of North American isolates of epizootic haemorrhagic disease virus. Harding MJ, et al. **Can J Vet Res** 1996 Jan; 60(1):59–64
Serogrouping and topotyping of Sudanese and United States strains of epizootic hemorrhagic disease virus using PCR. Aradaib IE, et al. **Comp Immunol Microbiol Infect Dis** 1997 Jun;20(3):211–8
Interaction of epizootic hemorrhagic disease virus with bovine erythrocytes in vitro: electron microscope study. Aradaib IE, et al. **Comp Immunol Microbiol Infect Dis** 1997 Jun;20(3):281–3
Evaluation of a competitive ELISA for detection of antibodies to epizootic hemorrhagic disease virus of deer. Afshar A, et al. **J Vet Diagn Invest** 1997 Jul;9(3):309–11
Isolation of reovirus type 2 from diarrheal feces of pigs. Fukutomi T, et al. **J Vet Med Sci** 1996 Jun;58(6):555–7
Cell-mediated immune response and IL-2 production in white-tailed deer experimentally infected with hemorrhagic disease viruses. Quist CF, et al. **Vet Immunol Immunopathol** 1997 May;56(3-4):283–97
Application of molecular biological techniques for detection of epizootic hemorrhagic disease virus (EHDV-318) recovered from a sentinel calf in central Sudan. Mohammed ME, et al. **Vet Microbiol** 1996 Oct;52(3-4):201–8

VIROLOGY

Reovirus-induced acute myocarditis in mice correlates with viral RNA synthesis rather than generation of infectious virus in cardiac myocytes. Sherry B, et al. **J Virol** 1996 Oct;70(10):6709–15
Reovirus variants selected during persistent infections of L cells contain mutations in the viral S1 and S4 genes and are altered in viral disassembly. Wetzel JD, et al. **J Virol** 1997 Feb;71(2):1362–9

REOVIRUS INFECTIONS see REOVIRIDAE INFECTIONS

REOVIRUS 1 see ORTHOREOVIRUS

REOVIRUS 2

REOVIRUS 2 see **ORTHOREOVIRUS**

REOVIRUS 3

DRUG EFFECTS

Mutations in reovirus outer-capsid protein sigma3 selected during persistent infections of L cells confer resistance to protease inhibitor E64. Baer GS, et al. **J Virol** 1997 Jul; 71(7):4921-8

ENZYMOLOGY

Characterization of an ATPase activity in reovirus cores and its genetic association with core-shell protein lambda1. Noble S, et al. **J Virol** 1997 Mar;71(3):2182-91

GENETICS

Linkage between reovirus-induced apoptosis and inhibition of cellular DNA synthesis: role of the S1 and M2 genes. Tyler KL, et al. **J Virol** 1996 Nov;70(11):7984-91

Translation of the reovirus M1 gene initiates from the first AUG codon in both infected and transfected cells. Zou S, et al. **Virus Res** 1996 Jan;40(1):75-89

GROWTH & DEVELOPMENT

Reovirus-induced apoptosis of MDCK cells is not linked to viral yield and is blocked by Bcl-2. Rodgers SE, et al. **J Virol** 1997 Mar;71(3):2540-6

IMMUNOLOGY

The reovirus nonstructural protein sigma1NS is recognized by murine cytotoxic T lymphocytes. Hoffman LM, et al. **J Virol** 1996 Nov;70(11):8160-4

METABOLISM

Mutations in type 3 reovirus that determine binding to sialic acid are contained in the fibrous tail domain of viral attachment protein sigma1. Chappell JD, et al. **J Virol** 1997 Mar;71(3):1834-41

PHYSIOLOGY

Reovirus infection and tissue injury in the mouse central nervous system are associated with apoptosis. Oberhaus SM, et al. **J Virol** 1997 Mar;71(3):2100-6

Efficiency of viral entry determines the capacity of murine erythroleukemia cells to support persistent infections by mammalian reoviruses. Wetzel JD, et al. **J Virol** 1997 Jan; 71(1):299-306

REOVIRUSES, AQUATIC see **REOVIRIDAE**

REPEAT CESAREAN SECTION see **CESAREAN SECTION, REPEAT**

REPERFUSION

Repermeation of partially embolized cerebral arteriovenous malformations: a clinical, radiologic, and histologic study. Gruber A, et al. **AJNR Am J Neuroradiol** 1996 Aug; 17(7):1323-31

Ischemic preconditioning attenuates postischemic leukocyte adhesion and emigration. Akimitsu T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H2052-9

Protease inhibition attenuates microvascular dysfunction in postischemic skeletal muscle. Carden DL, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1947-52

Increased histamine and 5-HT in portal vein plasma and mesenteric lymph during brief ischemia and reperfusion. Fu LW, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1135-41

Inhaled nitric oxide prevents pulmonary endothelial dysfunction after mesenteric ischemia-reperfusion. Fullerton DA, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):L326-31

Distinct expression of heat shock and acute phase genes during regional hepatic ischemia-reperfusion. Gingalewski C, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R634-40

Neutrophil enhancement of reperfusion-induced capillary fluid filtration associated with hypercholesterolemia. Harris NR, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1755-61

Role of oxygen-derived free radicals in free growth retardation induced by ischemia-reperfusion in rats. Ishimoto H, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H701-5

Skeletal muscle ischemia-reperfusion causes transitory increase in microvascular protein permeability. Kupinski AM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H303-9

Purine nucleotides and phospholipids in ischemic and reperfused rat skeletal muscle: effect of ascorbate. Lagerwall K, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H83-90

Oxidized low-density lipoproteins and microvascular responses to ischemia-reperfusion. Liao L, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2508-14

Sequential ischemia/reperfusion results in contralateral skeletal muscle salvage. Liauw SK, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1407-13

Postischemic vasodilation in human forearm is dependent on endothelium-derived nitric oxide. Meredith IT, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1435-40

Effect of high-molecular weight dextran macromolecules on low-flow ischemia and reperfusion of the large colon in horses. Moore RM, et al. **Am J Vet Res** 1996 Jul; 57(7):1067-73

Alterations in colonic arterial and venous plasma neuropeptide concentrations in horses during low-flow ischemia and reperfusion of the large colon. Moore RM, et al. **Am J Vet Res** 1996 Aug;57(8):1200-5

The relationship between extracellular lactate and tumour pH in a murine tumour model of ischaemia-reperfusion. Parkins CS, et al. **Br J Cancer** 1997;75(3):319-23

Temporal impairment of microcirculatory perfusion following focal cerebral ischemia in the spontaneously hypertensive rat. Dawson DA, et al. **Brain Res** 1997 Feb 28;749(2):200-8

Adenosine transport inhibition ameliorates postischemic hypoperfusion in pigs. Gidday JM, et al. **Brain Res** 1996 Sep 23;734(1-2):261-8

Role of platelet-activating factor and thromboxane A2 in radical production during ischemia and reperfusion of the rat brain. Matsuo Y, et al. **Brain Res** 1996 Feb 19; 709(2):296-302

Nicardipine and MK-801 attenuate platelet-activating factor increases following cerebral ischemia-reperfusion in gerbils. Nishida K, et al. **Brain Res** 1996 Sep 16; 733(2):203-10

Brain nitrite production during global ischemia and reperfusion: an in vivo microdialysis study. Shibata M, et al. **Brain Res** 1996 Sep 23;734(1-2):86-90

Inductions of Cu/Zn superoxide dismutase- and nitric oxide synthase-like immunoreactivities in rabbit spinal cord after transient ischemia. Watanabe M, et al. **Brain Res** 1996 Sep 2;732(1-2):69-74

Role of endothelium-related mechanisms in the pathophysiology of renal ischemia/reperfusion in normal rabbits. Caramelo C, et al. **Circ Res** 1996 Nov;79(5):1031-8

The MAP kinase cascades are activated during post-ischemic liver reperfusion. Bendinelli P, et al. **FEBS Lett** 1996 Dec 2;398(2-3):193-7

Detection of hydroxyl and carbon-centred radicals by EPR spectroscopy after ischaemia and reperfusion of the rat kidney. Kadkhodaee M, et al. **Free Radic Res** 1996 Jul; 25(1):31-42

Induction of ferritin synthesis in ischemic-reperfused rat liver: analysis of the molecular mechanisms. Tacchini L, et al. **Gastroenterology** 1997 Sep;113(3):946-53

Neutrophil elastase inhibitor reduces neutrophil chemoattractant production after ischemia-reperfusion in rat liver. Yamaguchi Y, et al. **Gastroenterology** 1997 Feb; 112(2):551-60

Repeat positron emission tomographic studies in transient middle cerebral artery occlusion in cats: residual perfusion and efficacy of postischemic reperfusion. Heiss WD, et al. **J Cereb Blood Flow Metab** 1997 Apr;17(4):388-400

Cerebral energy metabolism during severe ischemia of varying duration and following reperfusion. Phillis JW, et al. **J Neurochem** 1996 Oct;67(4):1525-31

Ischemic preconditioning--a new concept in orthopedic and reconstructive surgery. Gürke L, et al. **J Surg Res** 1996 Feb 15;61(1):1-3

Ischemia/reperfusion alters uric acid and ascorbic acid levels in liver. Layton ME, et al. **J Surg Res** 1996 Jul 15;64(1):1-5

IL-6 release after intestinal ischemia/reperfusion in rats is under partial control of TNF. Yao YM, et al. **J Surg Res** 1997 Jun;70(1):21-6

Swine lungs expressing human complement-regulatory proteins are protected against acute pulmonary dysfunction in a human plasma perfusion model. Daggett CW, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):390-8

Are studies of early reperfusion after a stroke worthwhile? Fieschi C, et al. **Lancet** 1996 Nov 16;348(9038):1327-8

Splenectomy-reduced hepatic injury induced by ischemia/reperfusion in the rat. Okuaki Y, et al. **Liver** 1996 Jun;16(3):188-94

Effect of brain, body, and magnet bore temperatures on energy metabolism during global cerebral ischemia and reperfusion monitored by magnetic resonance spectroscopy in rats. Shimizu H, et al. **Magn Reson Med** 1997 Jun; 37(6):833-9

Effects of dexamethasone on the contractile function of reperfused skeletal muscle. Chen LE, et al. **Microsurgery** 1996;17(6):313-20

Enterocyte viability and mitochondrial function after graded intestinal ischemia and reperfusion in rats. Madesh M, et al. **Mol Cell Biochem** 1997 Feb;167(1-2):81-7

Synaptosomal Na, K-ATPase during forebrain ischemia in Mongolian gerbils. Matejovičová M, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):67-78

Non-NMDA glutamate receptor binding in canine brain after global cerebral ischemia and reperfusion. Wei H, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):37-52

Macroscopic indices of lipid peroxidation in cerebral ischemia/reperfusion: validity and sensitivity enhancement in terms of conjugated diene detection. Watson BD, et al. **Neurochem Int** 1996 Aug;29(2):173-86

Volume expansion during cardiopulmonary resuscitation reduces cerebral no-reflow. Fischer M, et al. **Resuscitation** 1996 Oct;32(3):227-40 (66 ref.)

Combined neuroprotection and reperfusion therapy for stroke. Effect of lubeluzole and diaspirin cross-linked hemoglobin in experimental focal ischemia. Aronowski J, et al. **Stroke** 1996 Sep;27(9):1571-6; discussion 1576-7

Plasma antioxidant consumption associated with ischemia/reperfusion during carotid endarterectomy. Bacon PJ, et al. **Stroke** 1996 Oct;27(10):1808-11

Reperfusion decreases myogenic reactivity and alters middle cerebral artery function after focal cerebral ischemia in rats. Cipolla MJ, et al. **Stroke** 1997 Jan;28(1):176-80

Energy metabolism and xanthine oxidase enzyme system during ischemia reperfusion in rat small intestine. Nakao M, et al. **Transplant Proc** 1996 Oct;28(5):2614

Activation of apoptosis during early phase of reperfusion after liver transplantation. Sasaki H, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):406-7

Cell detachment during sinusoidal reperfusion after liver preservation: an in vitro model. Gerlach JC, et al. **Transplantation** 1997 Sep 27;64(6):907-12

[Effect of superoxide production on nitric oxide release from the pulmonary vascular endothelium during reperfusion after warm ischemia] Takeda T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1704-8 (Eng. Abstr.) **(Jpn)**

[Intestinal reperfusion: the physiopathological fundamentals of its therapeutic prospects] Rodríguez García JI, et al. **Rev Esp Enferm Dig** 1997 Jan;89(1):39-45 (74 ref.) **(Spa)**

ADVERSE EFFECTS

Early reperfusion induces alveolar injury in pulmonary embolism. Fukahori M, et al. **Chest** 1997 Jan;111(1):198-203

Unilateral renal ischemia reperfusion in the rat: effect of blood volume trapped in the kidney, sucrose infusion, and antioxidant treatments. Zurovsky Y, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):471-8

METHODS

Relative importance of prostaglandin/cyclic adenosine monophosphate and nitric oxide/cyclic guanosine monophosphate pathways in lung preservation. Bhabra MS, et al. **Ann Thorac Surg** 1996 Nov;62(5):1494-9

Impact of retrograde cerebral perfusion on ascending aortic and arch aneurysm repair. Safi HJ, et al. **Ann Thorac Surg** 1997 Jun;63(6):1601-7

Controlled limb reperfusion in patients having cardiac operations [letter; comment] Schlensak C, et al. **Ann Thorac Surg** 1997 Jul;64(1):286-7. Comment on: Ann Thorac Surg 1995 Jul;60(1):209-10.

Hypertonic saline infusion with or without dextran 70 in the reperfusion phase of experimental acute limb ischaemia. Waagstein LM, et al. **Eur J Vasc Endovasc Surg** 1997 Mar; 13(3):285-95

Passive retrograde cerebral perfusion during routine cardiac valve surgery reverses middle cerebral artery blood flow and reduces the risk of stroke. Quigley RL, et al. **J Heart Valve Dis** 1997 May;6(3):288-91

Controlled limb reperfusion in patients with severe limb ischemia [letter; comment] Sakakibara Y, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):425-6. Comment on: J Thorac Cardiovasc Surg 1996 Apr;111(4):873-81.

Successful controlled limb reperfusion after severe prolonged ischemia. Defraigne JO, et al. **J Vasc Surg** 1997 Aug; 26(2):346-50

[Reduction of amputation incidence and mortality following prolonged ischemia of the lower limbs. Value of a controlled reperfusion?] Defraigne JO, et al. **Rev Med Liege** 1996 Aug;51(8):534-44 (57 ref.) **(Fre)**

[Significance of superoxide dismutase in revitalization of severely warm ischemia damaged livers using retrograde oxygen persufflation] Klauke H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:153-6 (Eng. Abstr.) **(Ger)**

[Controlled reperfusion of the extremities for preventing local and systemic damage after prolonged ischemia. An experimental study with the swine model] Mitrev Z, et al. **Zentralbl Chir** 1996;121(9):774-87 (Eng. Abstr.) **(Ger)**

REPERFUSION INJURY

Effects of dextran on microvascular ischemia-reperfusion injury in striated muscle. Steinbauer M, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1710-6

Liver ischemic preconditioning is mediated by the inhibitory action of nitric oxide on endothelin. Peralta C, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):264-70

Ischemia: reperfusion syndrome of the lower limbs. Magnoni F, et al. **Int Angiol** 1996 Dec;15(4):350-3

Protective effect of cyclosporine A (CyA) against the hepatic injury associated with ischemia and reperfusion. Sakr MF, et al. **Int Surg** 1996 Apr-Jun;81(2):180-3

Maternal infusion of antioxidants (Trolox and ascorbic acid) protects the fetal heart in rabbit fetal hypoxia. Tan S, et al. **Pediatr Res** 1996 Mar;39(3):499-503

Recovery of endothelium-dependent relaxations four weeks after ischemia and progressive reperfusion in canine coronary arteries. Lee JJ, et al. **Proc Assoc Am Physicians** 1996 Sep;108(5):362-7

Reperfusion of the brain after global ischemia: hemodynamic disturbances. Hossmann KA. **Shock** 1997 Aug;8(2):95-101; discussion 102-3 (129 ref.)

Initial ischemia/reperfusion injury influences late functional and structural changes in the kidney. Azuma H, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1528-9

Transplantation-induced injuries of the intestinal muscularis and its innervation: from preservation to chronic rejection.

Bauer AJ. **Transplant Proc** 1996 Oct;28(5):2539–41 (11 ref.)

Risk factors for severe ischemic injury after liver transplantation. Bilbao I, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):368–70

Fullerenols in canine renal preservation––a preliminary report. Chueh SC, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1313–5

Beneficial effect on rat kidney preservation of the antiischemic agent trimetazidine during cold storage and reperfusion: assessment by 31P nuclear magnetic resonance spectroscopy. Hauet T, et al. **Transplant Proc** 1997 Aug; 29(5):2343–4

Ischemia and reperfusion injury of the human colon and ileum. Kawashima Y, et al. **Transplant Proc** 1996 Oct; 28(5):2624–5

Early acute rejection after hepatic graft reperfusion: association with ischemic injury with good function, oxygenation heterogeneity, and leukocyte adhesion without aggregation. Kiuchi T, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):364–5

Early assessment of reperfusion injury by intraoperative quantification of hepatic microcirculation in patients. Klar E, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):362–3

Glutamine improves cold–preserved small bowel graft structure and function following ischemia and reperfusion. Lew JI, et al. **Transplant Proc** 1996 Oct;28(5):2605–6

Energy metabolism and xanthine oxidase enzyme system during ischemia reperfusion in rat small intestine. Nakao M, et al. **Transplant Proc** 1996 Oct;28(5):2614

Correlation between nitric oxide production and preservation injury of sinusoidal endothelial cells during cold ischemia. Oishi A, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1338–9

Influence of ischemia–reperfusion injury on rejection after liver transplantation. Pirenne J, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):366–7

Which injury is the most important for rat heart preservation: flush, cold storage, and/or reperfusion injury? The effect of each injury on coronary endothelial function. Saitoh Y, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1342–5

Nonspecific primary ischemia/reperfusion injury in combination with secondary specific acute rejection–mediated injury of human kidney allografts contributes mainly to development of chronic transplant failure. Schneeberger H, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):948–9

Optimal flushing pressure for rat small bowel transplants. Sonnino RE. **Transplant Proc** 1996 Oct;28(5):2628

Role of secretory phospholipase A2 (sPLA2) in ischemic injury to intestinal grafts during 24–hour preservation. Sonnino RE, et al. **Transplant Proc** 1996 Oct;28(5):2603–4

Liver preservation and nitric oxide: no nonsense? van Suylichem PT, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):408–9

Influence of cyclosporin A on the damage and regeneration of the kidney after severe ischemia/reperfusion injury. Ysebaert DK, et al. **Transplant Proc** 1997 Aug; 29(5):2348–51

Evaluation of solutions for canine small bowel preservation. Zhang S, et al. **Transplant Proc** 1996 Oct;28(5):2612–3

[Progresses in physiopathology in China, 1996] Jin H. **Chung Hua I Hsueh Tsa Chih** 1996 Dec;76(12):945–6 (0 ref.) **(Chi)**

[Pneumatic tourniquets in orthopedics] Estebe JP, et al. **Ann Fr Anesth Reanim** 1996;15(2):162–78 (211 ref.) (Eng. Abstr.) **(Fre)**

[Myonephropathic metabolic syndrome (MNMS)] Shimai S, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):469–71 (11 ref.) **(Jpn)**

BLOOD

Effects of ischaemia and reperfusion on vasoactive neuropeptide levels in the canine infrarenal aortic revascularization model. Dovgan PS, et al. **Cardiovasc Surg** 1996 Aug;4(4):470–5

Changes in neutrophil rheology after acute ischemia and reperfusion in the rat hindlimb. Buttrum SM, et al. **J Lab Clin Med** 1996 Nov;128(5):506–14

The effect of LPS on cytokine synthesis and lung neutrophil influx after hepatic ischemia/reperfusion injury in the rat. Carrick JB, et al. **J Surg Res** 1997 Feb 15;68(1):16–23

Liver ischemia/reperfusion induces an increase of microvascular leukocyte flux, but not heterogeneity of leukocyte trafficking. Vollmar B, et al. **Liver** 1997 Apr; 17(2):93–8

Release of markers of myocardial and endothelial injury following cold cardioplegic arrest in pigs. Valen G, et al. **Scand Cardiovasc J** 1997;31(1):45–50

Met–enkephalin and catecholamine release during feline intestinal ischemia–reperfusion. Aneman A, et al. **Shock** 1996 Jun;5(6):434–9

Ischemia/reperfusion–induced leukocyte–endothelial interactions in postcapillary venules. Eppihimer MJ, et al. **Shock** 1997 Jul;8(1):16–25 (85 ref.)

Endothelin–1 levels in portal venous blood in relation to hepatic tissue microcirculation disturbance and hepatic cell injury after ischemia/reperfusion. Ota T, et al. **Surg Today** 1997;27(4):313–20

Effects of platelet–activating factor antagonist E5880 on intrahepatic and systemic metabolic responses to transient hepatic inflow occlusion and reperfusion in the rabbit. Nakatani T, et al. **World J Surg** 1996 Oct;20(8):1060–7; discussion 1067–8

[Neutrophils and ischemia reperfusion injury] Xing X, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 Mar;12(2):138–40 (25 ref.) **(Chi)**

CHEMICALLY INDUCED

Relationship between changes of active oxygen metabolism and blood flow and formation, progression, and recovery of lesions is gastric mucosa of rats with a single treatment of compound 48/80, a mast cell degranulator. Ohta Y, et al. **Dig Dis Sci** 1997 Jun;42(6):1221–32

COMPLICATIONS

Gut decontamination reduces bowel ischemia–induced lung injury in rats [see comments] Sorkine P, et al. **Chest** 1997 Aug;112(2):491–5. Comment in: Chest 1997 Aug;112(2):304–6.

Hextend (hetastarch solution) decreases multiple organ injury and xanthine oxidase release after hepatoenteric ischemia–reperfusion in rabbits. Nielsen VG, et al. **Crit Care Med** 1997 Sep;25(9):1565–74

Enhanced renal susceptibility to ischemia–reperfusion injury in the rat with obstructive jaundice. Tajiri K, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):789–95

Complement–mediated lung injury and neutrophil retention after intestinal ischemia–reperfusion. Xiao F, et al. **J Appl Physiol** 1997 May;82(5):1459–65

Reperfusion injury as the mechanism of brain damage after perinatal asphyxia. Fellman V, et al. **Pediatr Res** 1997 May; 41(5):599–606 (138 ref.)

Is reperfusion injury an important cause of mucosal damage after porcine intestinal ischemia? Blikslager AT, et al. **Surgery** 1997 May;121(5):526–34

Renal function changes over time in adult recipients of small pediatric kidneys. Evidence against hyperperfusion injury. al–Bader W el–R, et al. **Transplantation** 1996 Sep 15; 62(5):611–5

Compartment syndrome due to reperfusion injury. Maharaj D, et al. **West Indian Med J** 1996 Dec;45(4):125–6

DIAGNOSIS

Response to clamping of the inferior vena cava as a factor for predicting postreperfusion syndrome during liver transplantation. Garutti Martinez I, et al. **Anesth Analg** 1997 Feb;84(2):254–9

Partial cardiopulmonary bypass in rats for evaluating ischemia–reperfusion injury. Sasaki S, et al. **ASAIO J** 1996 Nov–Dec;42(6):1027–30

Experimental acute cerebral ischemia with reperfusion. Evaluation with gadolinium–texaphyrin. Young SW, et al. **Invest Radiol** 1996 Jun;31(6):353–8

Assessment of reperfusion injury by means of MR contrast agents in rat liver. Reimer P, et al. **J Magn Reson Imaging** 1997 May–Jun;7(3):490–4

The temporal evolution of MRI tissue signatures after transient middle cerebral artery occlusion in rat. Jiang Q, et al. **J Neurol Sci** 1997 Jan;145(1):15–23

Evaluation of normothermic ischemia and simple cold preservation injury in pig kidney by proton nuclear magnetic resonance spectroscopy. Hauet T, et al. **J Surg Res** 1997 Mar;68(2):116–25

Assessment of preservation induced reperfusion injury via intraoperative renal transplant blood flow and endothelin concentration studies. Bretan PN Jr, et al. **J Urol** 1997 Sep;158(3 Pt 1):714–8

Usefulness of intraluminal tonometry as a method for assessment of graft ischemia after small bowel transplantation. López F, et al. **Transplant Proc** 1996 Oct; 28(5):2648–9

[Behavior of the lactate level in occlusion and reperfusion of the right superior mesenteric artery. An animal experiment study] Jonas J, et al. **Langenbecks Arch Chir** 1996;381(1):1–6 (Eng. Abstr.) **(Ger)**

[Evaluation of ischemic liver reperfusion injury by plasma phosphatidylcholine hydroperoxide] Fukuhara K, et al. **Nippon Geka Gakkai Zasshi** 1997 Apr;98(4):470 **(Jpn)**

DIET THERAPY

Fatty acid oxidation in the heart. Grynberg A, et al. **J Cardiovasc Pharmacol** 1996;28 Suppl 1:S11–7 (21 ref.)

DRUG THERAPY

Reduced ischemia–reperfusion injury in muscle. Experiments in rats with EPC–K1, a new radical scavenger. Hirose J, et al. **Acta Orthop Scand** 1997 Aug;68(4):369–73

Effects of the spin trap–alpha–phenyl–N–tert–butyl nitrone (PBN) in transient forebrain ischaemia in the rat. Pahlmark K, et al. **Acta Physiol Scand** 1996 May;157(1):41–51

Effects of various timings and concentrations of inhaled nitric oxide in lung ischemia–reperfusion. The Paris–Sud University Lung Transplantation Group. Murakami S, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):454–8

Alpha–alpha diaspirin crosslinked hemoglobin, nitric oxide, and cerebral ischemic injury in rats. Cole DJ, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jan–Mar; 25(1–2):141–52

Reduction of hydroxyl radical generation in a rat hindlimb model of ischemia–reperfusion injury using crosslinked hemoglobin–superoxide dismutase–catalase. D'Agnillo F, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jan–Mar;25(1–2):163–80

Crosslinked hemoglobin–superoxide dismutase–catalase scavenges free radicals in a rat model of intestinal ischemia–reperfusion injury. Razack S, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jan–Mar; 25(1–2):181–92

Beneficial effects of TDN–345, a novel Ca2+ antagonist, on ischemic brain injury and cerebral glucose metabolism in experimental animal models with cerebrovascular lesions. Nakayama T, et al. **Brain Res** 1997 Jul 11; 762(1–2):203–10

alpha–Lipoic acid protects against reperfusion injury following cerebral ischemia in rats. Panigrahi M, et al. **Brain Res** 1996 Apr 22;717(1–2):184–8

The effects of selective A1 and A2a adenosine receptor antagonists on cerebral ischemic injury in the gerbil. Phillis JW. **Brain Res** 1995 Dec 24;705(1–2):79–84

Clenbuterol protects mouse cerebral cortex and rat hippocampus from ischemic damage and attenuates glutamate neurotoxicity in cultured hippocampal neurons by induction of NGF. Semkova I, et al. **Brain Res** 1996 Apr 22;717(1–2):44–54

Timing of administration of dexamethasone or the nitric oxide synthase inhibitor, nitro–L–arginine methyl ester, is critical for effective treatment of ischaemia–reperfusion injury to rat skeletal muscle. Zhang B, et al. **Clin Sci (Colch)** 1997 Aug;93(2):167–74

Rebamipide ameliorates hepatic dysfunction induced by ischemia/reperfusion in rats. Lee SM, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):41–6

Effect of a novel histamine H2 receptor antagonist, IT–066, on acute gastric injury induced by ischemia–reperfusion in rats, and its antioxidative properties. Naito Y, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):47–54

Postischemic infusion of Cu/Zn superoxide dismutase or SOD:Tet451 reduces cerebral infarction following focal ischemia/reperfusion in rats. Francis JW, et al. **Exp Neurol** 1997 Aug;146(2):435–43

Pathophysiological and histomorphological evaluation of polyacryloylmorpholine vs polyethylene glycol modified superoxide dismutase in a rat model of ischaemia/reperfusion injury. Rocca M, et al. **Int J Artif Organs** 1996 Dec;19(12):730–4

Effect of the duration of room–temperature ischemia on function of the vascular endothelium: the role of adrenomedullin in reperfusion injury. Kato T, et al. **J Bone Joint Surg Am** 1997 May;79(5):647–55

Alpha–melanocyte–stimulating hormone protects against renal injury after ischemia in mice and rats. Chiao H, et al. **J Clin Invest** 1997 Mar 15;99(6):1165–72

Effect of the endothelin receptor antagonist bosentan on postischemic oxygen supply of the liver. Spiegel HU, et al. **J Invest Surg** 1996 Nov–Dec;9(6):439–45

L–Deprenyl does not reduce brain damage in global forebrain ischemia in adult gerbils (Meriones ungiculatus). Ballabriga J, et al. **J Neurol Sci** 1997 May 1;148(1):1–5

Glial cell line–derived neurotrophic factor protects against ischemia–induced injury in the cerebral cortex. Wang Y, et al. **J Neurosci** 1997 Jun 1;17(11):4341–8

Pentoxifylline reduces venular leukocyte adherence ("reflow paradox") but not microvascular "no reflow" in hepatic ischemia/reperfusion. Müller JM, et al. **J Surg Res** 1997 Jul 15;71(1):1–6

Beneficial effects of cyclosporine and rapamycin in small bowel ischemic injury. Puglisi RN, et al. **J Surg Res** 1996 Oct;65(2):115–8

Amelioration of ischemia–reperfusion injury by human thioredoxin in rabbit lung. Okubo K, et al. **J Thorac Cardiovasc Surg** 1997 Jan;113(1):1–9

Attenuation of acute lung injury caused by hind–limb ischemia–reperfusion injury by butyrolactone anti–inflammatory agent FL1003. Cohen SM, et al. **J Trauma** 1997 Aug;43(2):247–52; discussion 252

Effect of acetylsalicylic acid on metabolism and contractility in the ischemic reperfused heart. Kawabata H, et al. **Jpn Circ J** 1996 Dec;60(12):961–71

Cardioprotective effect of K–7259, a novel dilazep derivative, against ischemia–reperfusion damage in isolated, working rat hearts. Hoque AN, et al. **Jpn J Pharmacol** 1997 Apr; 73(4):365–9

Response of the intrarenal insulin–like growth factor–I axis to acute ischemic injury and treatment with growth hormone and epidermal growth factor. Fervenza FC, et al. **Kidney Int** 1996 Feb;49(2):344–54

Ornithine decarboxylase activity in cerebral post–ischemic reperfusion damage: effect of methionine sulfoximine. Di Giacomo C, et al. **Neurochem Res** 1997 Sep;22(9):1145–50

Citicoline for treatment of experimental focal ischemia: histologic and behavioral outcome. Aronowski J, et al. **Neurol Res** 1996 Dec;18(6):570–4

Post–ischemic treatment with a lazaroid (U74389G) prevents transient global ischemic damage in rat hippocampus. Tseng MT, et al. **Neurol Res** 1997 Aug;19(4):431–4

Amelioration of brain edema by topical application of glial cell line–derived neurotrophic factor in reperfused rat brain. Abe K, et al. **Neurosci Lett** 1997 Aug 1;231(1):37–40

An immunosuppressant, FK506, protects hippocampal neurons from forebrain ischemia in the mongolian gerbil. Ide T, et al. **Neurosci Lett** 1996 Feb 9;204(3):157–60

Effect of 2–cyclohexene–1–one–induced glutathione diminution on ischemia/reperfusion–induced alterations in the physical state of brain synaptosomal membrane proteins

and lipids. Hall NC, et al. **Neuroscience** 1997 Mar; 77(1):283–90

Oxidative stress during post–hypoxic–ischemic reperfusion in the newborn lamb: the effect of nitric oxide synthesis inhibition. Dorrepaal CA, et al. **Pediatr Res** 1997 Mar; 41(3):321–6

Response of immobilized hepatocytes in a perfusion system to anoxia/reoxygenation: effect of cyclosporine A pretreatment. Farghali H, et al. **Physiol Res** 1996; 45(3):227–33

Ischemia and reperfusion injury: prevention of pulmonary hypertension and leukosequestration following lower limb ischemia. Bengisun J, et al.
Prostaglandins Leukot Essent Fatty Acids 1997 Feb; 56(2):117–20

The effect of 3–aminobenzamide, an inhibitor of poly–ADP–ribose polymerase, on ischemia/reperfusion damage in rat retina. Lam TT.
Res Commun Mol Pathol Pharmacol 1997 Mar;95(3):241–52

Intravitreal injection of ganglioside GM1 after ischemia reduces retinal damage in rats. Mohand–Said S, et al.
Stroke 1997 Mar;28(3):617–21; discussion 622

CP–0597, a selective bradykinin B2 receptor antagonist, inhibits brain injury in a rat model of reversible middle cerebral artery occlusion. Relton JK, et al. **Stroke** 1997 Jul;28(7):1430–6

Effect of pentoxifylline on hepatic ischemia and reperfusion injury. Fabia R, et al. **Surgery** 1997 May;121(5):520–5

Attenuation of rat lung isograft reperfusion injury with a combination of anti–ICAM–1 and anti–beta2 integrin monoclonal antibodies. DeMeester SR, et al.
Transplantation 1996 Nov 27;62(10):1477–85

Treatment of experimental ischemia/reperfusion injury with S–adenyosylmethionine: evidence that donor pretreatment complements other regimens. Dunne JB, et al.
Transplantation 1997 Feb 27;63(4):500–6

[Modification of ischemia–/ reperfusion damage after liver transplantation by N–acetylcysteine. Results of the Heidelberg pilot study] Thies JC, et al.
Langenbecks Arch Chir Suppl Kongressbd 1997;114:531–4 **(Ger)**

[Pharmacologic modification of intestinal reperfusion injury in the animal experiment] Lehmann C, et al.
Zentralbl Chir 1996;121(1):70–6 (Eng. Abstr.) **(Ger)**

[The effect of calcium antagonist on ischemia–reperfusion injury of the rabbit retina] Mori T, et al.
Nippon Ganka Gakkai Zasshi 1996 Oct;100(10):773–6 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Role of ICE–like proteases in endothelial cell hypoxic and reperfusion injury. Harrison–Shostak DC, et al.
Biochem Biophys Res Commun 1997 Feb 24;231(3):844–7

Beneficial effects of 3–aminobenzamide, an inhibitor of poly (ADP–ribose) synthetase in a rat model of splanchnic artery occlusion and reperfusion. Cuzzocrea S, et al.
Br J Pharmacol 1997 Jul;121(6):1065–74

Transient cerebral ischemia decreases calcium/calmodulin–dependent protein kinase II immunoreactivity, but not mRNA levels in the gerbil hippocampus. Babcock AM, et al. **Brain Res** 1995 Dec 24; 705(1–2):307–14

L–arginine treatment alters the kinetics of nitric oxide and superoxide release and reduces ischemia/reperfusion injury in skeletal muscle [see comments] Huk I, et al.
Circulation 1997 Jul 15;96(2):667–75. Comment in: Circulation 1997 Jul 15;96(2):379–82.

Phospholipase A2 secretion during intestinal graft ischemia. Sonnino RE, et al. **Dig Dis Sci** 1997 May;42(5):972–81

Assessment of xanthine oxidase in human lung and lung transplantation. Kinnula VL, et al. **Eur Respir J** 1997 Mar; 10(3):676–80

Inducible nitric oxide synthase in retinal ischemia–reperfusion injury. Hangai M, et al. **Exp Eye Res** 1996 Nov;63(5):501–9

Reperfusion after liver transplantation in rats differentially activates the mitogen–activated protein kinases [see comments] Bradham CA, et al. **Hepatology** 1997 May; 25(5):1128–35. Comment in: Hepatology 1997 May;25(5):1276–8.

Ischemia–reperfusion: the liver under stress [editorial; comment] Marra F. **Hepatology** 1997 May;25(5):1276–8. Comment on: Hepatology 1997 May;25(5):1128–35.

In situ analysis of ischaemia/reperfusion injury in rat liver studied in three different models. Straatsburg IH, et al.
Int J Exp Pathol 1997 Jun;78(3):149–61

Decreased nitric–oxide synthase activity causes impaired endothelium–dependent relaxation in the postischemic heart. Giraldez RR, et al. **J Biol Chem** 1997 Aug 22; 272(34):21420–6

Heat shock–induced manganese superoxide dismutase enhances the tolerance of cardiac myocytes to hypoxia–reoxygenation injury. Yamashita N, et al.
J Mol Cell Cardiol 1997 Jul;29(7):1805–13

Effects of ischemia–reperfusion on individual cytochrome P450 isoforms in the rat kidney. Tamura Y, et al.
Life Sci 1997;60(2):143–9

Regional difference in induction of heme oxygenase–1 protein following rat transient forebrain ischemia. Takeda A, et al. **Neurosci Lett** 1996 Mar 1;205(3):169–72

Changes of catalase activity after ischemia–reperfusion in rat retina. Lewden O, et al. **Ophthalmic Res** 1996;28(6):331–5

Manganese superoxide dismutase: a marker of ischemia–reperfusion injury in acute pancreatitis? Simovic MO, et al. **Pancreas** 1997 Jul;15(1):78–82

Is HSP70 involved in nitric oxide–induced protection of the heart? Malyshev IYu, et al. **Physiol Res** 1996;45(4):267–72

Inhibition of the activity of poly(ADP ribose) synthetase reduces ischemia–reperfusion injury in the heart and skeletal muscle. Thiemermann C, et al.
Proc Natl Acad Sci U S A 1997 Jan 21;94(2):679–83

Phospholipase A2 is activated in the kidney, but not in the liver during ischemia–reperfusion. Terao Y, et al.
Res Commun Mol Pathol Pharmacol 1997 Jun;96(3):277–89

Loss of rat glomerular ATP diphosphohydrolase activity during reperfusion injury is associated with oxidative stress reactions. Candinas D, et al. **Thromb Haemost** 1996 Nov; 76(5):807–12

Neutrophil elastase: a determinant of endothelial damage and reperfusion injury after liver transplantation? Bzeizi KI, et al. **Transplantation** 1996 Oct 15;62(7):916–20

Determination of hepatocellular enzymes in effluent of human liver grafts for preoperative evaluation of transplant quality. Lange R, et al. **Transplantation** 1996 Nov 15; 62(9):1255–9

Nitric oxide synthase activity in renal ischemia–reperfusion injury in the rat: implications for renal transplantation. Shoskes DA, et al. **Transplantation** 1997 Feb 27; 63(4):495–500

[The role of xanthine dehydrogenase (xanthine oxidase) in ischemia–reperfusion injury in rat kidney] Okabe H.
Nippon Jinzo Gakkai Shi 1996 Dec;38(12):577–84 (Eng. Abstr.) **(Jpn)**

[The role of the thrombocyte–activating factor in inhibiting Na+,K(+)–ATPase in different tissues after ischemia and reperfusion of the small intestine] Vavilova GL, et al.
Ukr Biokhim Zh 1996 Mar–Apr;68(2):42–7 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Randomized controlled trial to evaluate flush and reperfusion techniques in liver transplantation. Millis JM, et al.
Transplantation 1997 Feb 15;63(3):397–403

ETIOLOGY

Reperfusion injury after liver preservation for transplantation. Lemasters JJ, et al.
Annu Rev Pharmacol Toxicol 1997;37:327–38 (89 ref.)

Hypothermic ischaemia of the liver: a re–perfusion phenomenon. Bell R, et al. **Aust N Z J Surg** 1997 Jul; 67(7):442–7

The role of nitric oxide and cell adhesion molecules on the microcirculation in ischaemia–reperfusion. Lefer AM, et al. **Cardiovasc Res** 1996 Oct;32(4):743–51 (70 ref.)

Peroxynitrite, the product of nitric oxide and superoxide, causes myocardial injury in the isolated perfused rat heart. Lopez BL, et al. **Coron Artery Dis** 1997 Mar–Apr; 8(3–4):149–53

Potentiation of ischemia–reperfusion liver injury by hyperthyroidism in the rat. Troncoso P, et al.
Free Radic Biol Med 1997;23(1):19–25

Reperfusion damage to the bile canaliculi in transplanted human liver. Cutrin JC, et al. **Hepatology** 1996 Nov; 24(5):1053–7

The central role of sinusoidal endothelial cells in hepatic hypoxia–reoxygenation injury in the rat. Samarasinghe DA, et al. **Hepatology** 1996 Nov;24(5):1230–7

Role of noradrenaline uptake inhibition and alpha–adrenoceptors in reperfusion ventricular arrhythmias in vivo and in vitro. Shekher A, et al.
Indian J Exp Biol 1996 Nov;34(11):1085–90

Platelet activation with massive formation of thromboxane A2 during and after cardiopulmonary resuscitation. Gando S, et al. **Intensive Care Med** 1997 Jan;23(1):71–6

The role of the B7 costimulatory pathway in experimental cold ischemia/reperfusion injury. Takada M, et al.
J Clin Invest 1997 Sep 1;100(5):1199–203

The pattern of inflammation in rat sepsis due to enterotoxin–producing Staphylococcus aureus: a comparison with ischemia–reperfusion injury. Lin RY, et al. **J Med** 1996;27(5–6):303–17

Cerebral hyperperfusion injury after percutaneous transluminal angioplasty of extracranial arteries. Schoser BG, et al. **J Neurol** 1997 Feb;244(2):101–4

Role of exogenous L–arginine in hepatic ischemia–reperfusion injury. Shiraishi M, et al.
J Surg Res 1997 May;69(2):429–34

E– and L–selectin adhesion molecules in musculocutaneous flap reperfusion injury. Stotland MA, et al.
Plast Reconstr Surg 1997 Jun;99(7):2010–20

The role of platelet–activating factor in musculocutaneous flap reperfusion injury. Stotland MA, et al.
Plast Reconstr Surg 1997 Jun;99(7):1989–99; discussion 2000–1

Release of markers of myocardial and endothelial injury following cold cardioplegic arrest in pigs. Valen G, et al.
Scand Cardiovasc J 1997;31(1):45–50

Liposoluble antioxidants are not consumed in the pancreas after reperfusion in human simultaneous pancreas–kidney transplantation. Benz S, et al. **Transpl Int** 1996;9 Suppl 1:S258–60

No attenuation of ischemic and reperfusion injury in Kupffer cell–depleted, cold–preserved rat livers. Reinders ME, et al. **Transplantation** 1997 Feb 15;63(3):449–54

Influence of experimental spermatic cord torsion on the contralateral testis in rats. Evaluation of tissue free oxygen radical scavenger enzyme levels. Sarica K, et al.
Urol Int 1997;58(4):208–12

GENETICS

Bidirectional effects of hepatic ischemia/reperfusion on E. coli–induced TNF–alpha gene expression. Epperly NA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R289–97

Implication of DNA damage during reperfusion of ischemic myocardium. Cordis GA, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:427–30

Hepatic leukostasis and hypoxic stress in adhesion molecule–deficient mice after gut ischemia/reperfusion. Horie Y, et al. **J Clin Invest** 1997 Feb 15;99(4):781–8

Damage, repair, and mutagenesis in nuclear genes after mouse forebrain ischemia–reperfusion. Liu PK, et al.
J Neurosci 1996 Nov 1;16(21):6795–806

Quantitative analysis of cyclooxygenase–2 gene expression on acute gastric injury induced by ischemia–reperfusion in rats. Kishimoto Y, et al. **Life Sci** 1997;60(8):PL127–33

IMMUNOLOGY

Prolonged ischemia is associated with more pronounced rejection in the lung allograft. Serrick C, et al.
Ann Thorac Surg 1997 Jan;63(1):202–8

Immunohistochemical manifestations of unilateral kidney ischemia. Ibrahim S, et al. **Clin Transplant** 1996 Dec;10(6 Pt 2):646–52

CD4(+) T–lymphocytes mediate ischemia/reperfusion–induced inflammatory responses in mouse liver. Zwacka RM, et al. **J Clin Invest** 1997 Jul 15;100(2):279–89

Intracellular adhesion molecule–1 and lymphocyte function–associated antigen–1 expression in a rat forebrain reperfusion model. Yoshimoto T, et al.
Neurol Med Chir (Tokyo) 1996 Feb;36(2):67–71

Hypoxia, but not reoxygenation, induces interleukin 6 gene expression through NF–kappa B activation. Muraoka K, et al. **Transplantation** 1997 Feb 15;63(3):466–70

[Biological significance of the vascular cell adhesion molecule–1 (VCAM–1, CD 106) for post–ischemic leukocyte/endothelium interaction in skin muscle of the BALB/c mouse] Pickelmann S, et al.
Langenbecks Arch Chir Suppl Kongressbd 1997;114:643–6 (Eng. Abstr.) **(Ger)**

[Early perioperative suppression of inducible leukocytic cytokine gene expression after electric abdominal aortic aneurysm repair] Ziegenfuss T, et al.
Langenbecks Arch Chir Suppl Kongressbd 1997;114:691–4 (Eng. Abstr.) **(Ger)**

METABOLISM

High energy phosphates and direct calorimetry as predictive parameters for metabolic recovery of the rat liver following ischemia. Bach F, et al. **Acta Anaesthesiol Scand** 1996 Sep; 40(8 Pt 1):940–7

The role of reactive oxygen species in ischemia–reperfusion injury of rat lung. Tütüncü AS, et al.
Adv Exp Med Biol 1996;388:483–8

Mediators of ischemia–reperfusion injury of rat lung. Eppinger MJ, et al. **Am J Pathol** 1997 May;150(5):1773–84

Expression of bcl–2 and bax in regenerating rat renal tubules following ischemic injury. Basile DP, et al.
Am J Physiol 1997 May;272(5 Pt 2):F640–7

Detection of nitric oxide production and its role in pancreatic ischemia–reperfusion in rats. Tanaka S, et al.
Am J Physiol 1996 Sep;271(3 Pt 1):G405–9

Role of iron in ischemia–reperfusion oxidative injury of rat lungs. Zhao G, et al. **Am J Respir Cell Mol Biol** 1997 Mar; 16(3):293–9

Lung injury after hepatoenteric ischemia–reperfusion: role of xanthine oxidase. Nielsen VG, et al.
Am J Respir Crit Care Med 1996 Nov;154(5):1364–9

Free radicals and heat shock protein in the heart. Kukreja RC, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:108–22 (64 ref.)

Ischemia–induced transplant arteriosclerosis in the rat. Induction of peptide growth factor expression. Waltenberger J, et al. **Arterioscler Thromb Vasc Biol** 1996 Dec;16(12):1516–23

Influence of verapamil on the efficacy of vitamin E in preventing the ischemia–reperfusion–induced biochemical dearrangement in cerebral cortex of rat. Shaheen AA, et al. **Arzneimittelforschung** 1996 Jul;46(7):670–3

Propofol attenuates formation of lipid peroxides in tourniquet–induced ischaemia–reperfusion injury. Kahraman S, et al. **Br J Anaesth** 1997 Mar;78(3):279–81

Glyceryl trinitrate prevents neutrophil activation but not thromboxane release following ischaemia–reperfusion injury [see comments] Barry MC, et al. **Br J Surg** 1996 Aug;83(8):1095–1100. Comment in: Br J Surg 1997 Jan;84(1):139.

Effect of allopurinol on lipid peroxidation induced in corporeal tissue by veno–occlusive priapism in a rat model. Evliyaoglu Y, et al. **Br J Urol** 1997 Sep;80(3):476–9

Ischemic tolerance phenomenon from an approach of energy metabolism and the mitochondrial enzyme activity of pyruvate dehydrogenase in gerbils. Katayama Y, et al.
Brain Res 1997 Jan 23;746(1–2):126–32

Hyperthermia enhances spectrin breakdown in transient focal

cerebral ischemia. Morimoto T, et al. **Brain Res** 1997 Jan 23;746(1-2):43-51

Delayed neuronal death prevented by inhibition of increased hydroxyl radical formation in a transient cerebral ischemia. Yamamoto T, et al. **Brain Res** 1997 Jul 11;762(1-2):240-2

Ontogenetic differences in energy metabolism and inhibition of protein synthesis in hippocampal slices during in vitro ischemia and 24 h of recovery. Berger R, et al. **Brain Res Dev Brain Res** 1996 Feb 26;91(2):281-91

Heat shock-induced myocardial protection against ischemic injury: a role for Hsp70? Plumier JC, et al. **Cell Stress Chaperones** 1996 Apr;1(1):13-7 (51 ref.)

Effects of selective head cooling on brain cell membrane activity during postischemic reperfusion. Duan M, et al. **Chin Med J (Engl)** 1996 Jun;109(6):463-6

The effect of anisodamine on cerebral resuscitation of rats in acute cerebral ischemia from cardiac arrest. Peng X, et al. **Chin Med Sci J** 1995 Dec;10(4):237-9

Direct measurement of free radicals in ischemic/reperfused diabetic rat retina. Szabo ME, et al. **Clin Neurosci** 1997; 4(5):240-5 (40 ref.)

Generation of free radicals during anoxia and reoxygenation in perfused osteoblastlike cells. Gasbarrini A, et al. **Clin Orthop** 1997 May;(338):247-52

Heat shock protein 70 messenger RNA reflects the severity of ischemia/hypoxia-reperfusion injury in the perfused rat liver. Aoe T, et al. **Crit Care Med** 1997 Feb;25(2):324-9

Role of granulocyte elastase in ischemia/reperfusion injury of rat liver. Kushimoto S, et al. **Crit Care Med** 1996 Nov; 24(11):1908-12

Expression of adhesion molecules and leukocyte recruitment into gastric mucosa following ischemia-reperfusion. Andrews FJ, et al. **Dig Dis Sci** 1997 Feb;42(2):326-32

Gastric mucosal injury induced by local ischemia-reperfusion in rats. Role of endogenous endothelin-1 and free radical. Hassan M, et al. **Dig Dis Sci** 1997 Jul;42(7):1375-80

Differential effect of nitric oxide inhibition as a function of preservation period in pancreas transplantation. Pi F, et al. **Dig Dis Sci** 1997 May;42(5):962-71

Glutathione and nitric oxide concentrations in glutamine-infused rabbits with intestinal ischaemia/reperfusion. Başoğlu M, et al. **Eur J Clin Chem Clin Biochem** 1997 Jun;35(6):415-9

Involvement of Na+-Ca2+ exchanger in reperfusion-induced delayed cell death of cultured rat astrocytes. Matsuda T, et al. **Eur J Neurosci** 1996 May; 8(5):951-8

Metabolic and clonogenic consequences of ischaemia reperfusion insult in solid tumours. Parkins CS, et al. **Exp Physiol** 1997 Mar;82(2):361-8 (22 ref.)

Influence of vitamin E treatment on glutathione system after renal ischemia in immature and adult rats. Fleck C, et al. **Exp Toxicol Pathol** 1997 Feb;49(1-2):81-6

Free sterols in the rat white matter following experimental global ischemia. Wender M, et al. **Exp Toxicol Pathol** 1997 Feb;49(1-2):57-9

Xanthine oxidase and superoxide radicals in portal triad crossclamping-induced microvascular reperfusion injury of the liver. Müller MJ, et al. **Free Radic Biol Med** 1996; 21(2):189-97

Prophylactic administration of L-arginine improves the intestinal barrier function after mesenteric ischaemia. Schleiffer R, et al. **Gut** 1996 Aug;39(2):194-8

Kupffer cell production of cytokine-induced neutrophil chemoattractant following ischemia/reperfusion injury in rats. Hisama N, et al. **Hepatology** 1996 Nov;24(5):1193-8

Protective effect of preconditioning on the injury associated to hepatic ischemia-reperfusion in the rat: role of nitric oxide and adenosine. Peralta C, et al. **Hepatology** 1997 Apr; 25(4):934-7

Tumor necrosis factor-induced, superoxide-mediated neutrophil accumulation in cold ischemic/reperfused rat liver. Shibuya H, et al. **Hepatology** 1997 Jul;26(1):113-20

Differential activation of heat shock and nuclear factor kappaB transcription factors in postischemic reperfused rat liver. Tacchini L, et al. **Hepatology** 1997 Jul;26(1):186-91

Pretreatment with activated protein C or active human urinary thrombomodulin attenuates the production of cytokine-induced neutrophil chemoattractant following ischemia/reperfusion in rat liver. Yamaguchi Y, et al. **Hepatology** 1997 May;25(5):1136-40

Vitamin E prevents neutrophil accumulation and attenuates tissue damage in ischemic-reperfused human skeletal muscle. Formigli L, et al. **Histol Histopathol** 1997 Jul; 12(3):663-9

Ischemia/reperfusion injury in the rat colon. Murthy S, et al. **Inflammation** 1997 Apr;21(2):173-90

Increase of protein tyrosine phosphorylation in rat retina after ischemia-reperfusion injury. Hayashi A, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2146-56

Phospholipase A2: a potentially important determinant of adenosine triphosphate levels during hypoxic-reoxygenation tubular injury. Zager RA, et al. **J Am Soc Nephrol** 1996 Nov;7(11):2327-39

Differential decrease in connexin 32 expression in ischemic and nonischemic regions of rat liver during ischemia/reperfusion. Gingalewski C, et al. **J Cell Physiol** 1997 Apr;171(1):20-7

E-selectin in focal cerebral ischemia and reperfusion in the rat. Zhang RL, et al. **J Cereb Blood Flow Metab** 1996 Nov; 16(6):1126-36

Role of endogenous acid in gastric mucosal injury induced by local ischemia-reperfusion in the rat. Seno K, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S108-12

Production of heparin binding epidermal growth factor-like growth factor in the early phase of regeneration after acute renal injury. Isolation and localization of bioactive molecules. Sakai M, et al. **J Clin Invest** 1997 May 1; 99(9):2128-38

The cytokine-adhesion molecule cascade in ischemia/reperfusion injury of the rat kidney. Inhibition by a soluble P-selectin ligand. Takada M, et al. **J Clin Invest** 1997 Jun 1;99(11):2682-90

Analysis of localization of adult T-cell leukemia-derived factor in the transient ischemic rat retina after treatment with OP-1206 alpha-CD, a prostaglandin E1 analogue. Yamamoto M, et al. **J Histochem Cytochem** 1997 Jan; 45(1):63-70

Role of nitric oxide in hepatic ischemia-reperfusion with endotoxemia. Liu P, et al. **J Inflamm** 1995-96;46(3):144-54

L-Arginine infusion after ischaemia-reperfusion of rat kidney enhances lipid peroxidation. Cristol JP, et al. **J Lipid Mediat Cell Signal** 1996 Jan;13(1):9-17

Poly-phosphoinositide-mediated messengers in focal cerebral ischemia and reperfusion. Sun GY, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):137-45 (19 ref.)

Distribution of ankyrin isoforms and their proteolysis after ischemia and reperfusion in rat brain. Harada K, et al. **J Neurochem** 1997 Jul;69(1):371-6

Changes in cerebral acyl-CoA concentrations following ischemia-reperfusion in awake gerbils. Rabin O, et al. **J Neurochem** 1997 May;68(5):2111-8

Transient elevation of interstitial N-acetylaspartate in reversible global brain ischemia. Sager TN, et al. **J Neurochem** 1997 Feb;68(2):675-82

Glycogen accumulated in the brain following insults is not degraded during a subsequent period of ischemia. Folbergrova J, et al. **J Neurol Sci** 1996 Apr;137(1):7-13

Taurine in gerbil retina: changes during ischemia reperfusion/insult (I.R.I.) and aging. Delbarre B, et al. **J Ocul Pharmacol Ther** 1996 Spring;12(1):65-73

The relationship between the adenine nucleotide metabolism and the conversion of the xanthine oxidase enzyme system in ischemia-reperfusion of the rat small intestine. Hirata Y, et al. **J Pediatr Surg** 1996 Sep;31(9):1199-204

Endothelial cell swelling and brain perfusion. Kempski O, et al. **J Trauma** 1997 May;42(5 Suppl):S38-40

Involvement of cytokine production in pathogenesis of transient cerebral ischemic damage. Yamasaki Y, et al. **Keio J Med** 1996 Sep;45(3):225-9 (16 ref.)

Ischemic-reperfusion injury in the kidney: overexpression of colonic H+-K+-ATPase and suppression of NHE-3. Wang Z, et al. **Kidney Int** 1997 Apr;51(4):1106-15

Use of spin-traps during warm ischemia-reperfusion in rat liver: comparative effect on energetic metabolism studied using 31P nuclear magnetic resonance. Delmas-Beauvieux MC, et al. **MAGMA** 1997 Mar;5(1):45-52

Ischemia-reperfusion injury in the spinal cord of rabbits strongly enhances lipid peroxidation and modifies phospholipid profiles. Lukáčová N, et al. **Neurochem Res** 1996 Aug;21(8):869-73

Free radicals and the ischemia-evoked extracellular accumulation of amino acids in rat cerebral cortex. O'Regan MH, et al. **Neurochem Res** 1997 Mar;22(3):273-80

Effect of hyperglycemia on reperfusion-associated recovery of intracellular pH and high energy phosphates after transient cerebral ischemia in gerbils. Dempsey RJ, et al. **Neurol Res** 1996 Dec;18(6):546-52

The time course of glucose metabolism in rat cerebral ischemia with middle cerebral artery occlusion-reperfusion model and the effect of MK-801. Liu Y, et al. **Neurol Res** 1996 Dec;18(6):505-8

Hypothermia suppresses nitric oxide elevation during reperfusion after focal cerebral ischemia in rats. Kumura E, et al. **Neurosci Lett** 1996 Dec 6;220(1):45-8

The effect of hypothermia on H2O2 production during ischemia and reperfusion: a microdialysis study in the gerbil hippocampus. Lei B, et al. **Neurosci Lett** 1997 Jan 31; 222(2):91-4

The effects of ischemia-reperfusion on endothelial cell function in postnatal intestine. Nowicki PT. **Pediatr Res** 1996 Feb;39(2):267-74

Nonprotein-bound iron in postasphyxial reperfusion injury of the newborn. Dorrepaal CA, et al. **Pediatries** 1996 Nov; 98(5):883-9

Extrahepatic ischemia-reperfusion injury reduces hepatic oxidative drug metabolism as determined by serial antipyrine clearance. Gurley BJ, et al. **Pharm Res** 1997 Jan;14(1):67-72

Uptake, reflux, and excretion of bromosulfophthalein in ischaemia-reperfusion injury of rat liver. Kukan M, et al. **Physiol Res** 1995;44(6):415-9

Calpain is a mediator of preservation-reperfusion injury in rat liver transplantation. Kohli V, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9354-9

The effect of aqueous garlic extract on the levels of arachidonic acid metabolites (leukotriene C4 and prostaglandin E2) in rat forebrain after ischemia-reperfusion injury. Batirel HF, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Apr; 54(4):289-92

Captopril prevents the oxidative damage to proteins after renal ischemia reperfusion injury: role of endothelin-1. Günal O, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 Jan; 56(1):23-7

Long-term resuscitation of hemorrhage/reperfusion injury (H/R) stimulates renal PGE2 release. Myers SI, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 May; 54(5):335-9

The effects of indomethacin, NDGA, allopurinol and superoxide dismutase on prostaglandin E2 and leukotriene C4 levels after mesenteric ischemia-reperfusion injury. Sare M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Dec;55(6):379-83

Lipid peroxidation after acute renal ischemia and reperfusion in rats: the effect of trimetazidine. Grekas D, et al. **Ren Fail** 1996 Jul;18(4):545-52

Endothelin release is augmented with captopril in rat ischemia-reperfusion injury of the liver. Güllüoğlu BM, et al. **Res Exp Med (Berl)** 1996;196(4):227-33

The effect of vitamin E on ipsilateral and contralateral testis following unilateral testicular torsion in rats. Turan C, et al. **Res Exp Med (Berl)** 1996;196(4):243-6

Post-ischemic shunt following hepatic ischemia/reperfusion does not affect tissue chemokine levels of tissue injury. Colletti LM, et al. **Shock** 1996 May;5(5):371-7

Liver ischemia and reperfusion induces a systemic inflammatory response through Kupffer cell activation. Wanner GA, et al. **Shock** 1996 Jan;5(1):34-40

Visceral ischemia-reperfusion injury promotes tumor necrosis factor (TNF) and interleukin-1 (IL-1) dependent organ injury in the mouse. Welborn MB 3rd, et al. **Shock** 1996 Sep;6(3):171-6

Selective impairment of response to acetylcholine after ischemia/reperfusion in mice. Rosenblum WI. **Stroke** 1997 Feb;28(2):448-51; discussion 451-2

Reperfusion injury of postischemic skeletal muscle is attenuated by the 21-aminosteroids U-74389F and U-74500A independent of iron binding. Fantini GA, et al. **Surgery** 1996 Nov;120(5):859-65

Impact of adhesion molecules of the selectin family on liver microcirculation at reperfusion following cold ischemia. Hamamoto I, et al. **Transpl Int** 1996;9(5):454-60

Hyaluronic acid uptake in the assessment of sinusoidal endothelial cell damage after cold storage and normothermic reperfusion of rat livers. Reinders ME, et al. **Transpl Int** 1996;9(5):446-53

Assessment of hepatic graft injury by graft effluent in rodents: N-acetyl-beta-glucosaminidase and type III procollagen peptide. Wakiyama S, et al. **Transpl Int** 1996;9(4):359-63

Prevention of reperfusion-induced, free radical-mediated acute endothelial injury by superoxide dismutase as an effective tool to delay/prevent chronic renal allograft failure: a review. Land W, et al. **Transplant Proc** 1997 Sep; 29(6):2567-8 (7 ref.)

Effect of prolonged hypothermic ischemia and reperfusion on oxygen consumption and total mechanical energy in rat myocardium: participation of mitochondrial oxidative phosphorylation. Kuwabara M, et al. **Transplantation** 1997 Aug 27;64(4):577-83

Hypoxia, but not reoxygenation, induces interleukin 6 gene expression through NF-kappa B activation. Muraoka K, et al. **Transplantation** 1997 Feb 15;63(3):466-70

[L-arginine nitric oxide pathway in acute renal ischemia reperfusion injury of the aged rats] Chen A, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Aug;76(8):572-7 (Eng. Abstr.) **(Chi)**

[In vitro evaluation of metabolic change in forebrain ischemia model of rat using proton magnetic resonance spectroscopy] Tanaka N. **Hokkaido Igaku Zasshi** 1997 May; 72(3):329-42 (Eng. Abstr.) **(Jpn)**

[The expression of ICAM-1 and cytokines in the reperfusional state] Yoshimoto T. **Hokkaido Igaku Zasshi** 1997 Jan;72(1):97-112 (Eng. Abstr.) **(Jpn)**

[Low-energy He-Ne-laser-induced neurochemical changes during brain ischemia/reperfusion and their integral estimation using a factor analysis model] Karagezian KG, et al. **Dokl Akad Nauk** 1996 Oct;350(6):837-41 **(Rus)**

MORTALITY

Mortality following lower limb ischemia-reperfusion: a systemic inflammatory response? Yassin MM, et al. **World J Surg** 1996 Oct;20(8):961-6; discussion 966-7

PATHOLOGY

Mediators of ischemia-reperfusion injury of rat lung. Eppinger MJ, et al. **Am J Pathol** 1997 May;150(5):1773-84

Renal ischemic-reperfusion injury in L-selectin-deficient mice. Rabb H, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F408-13

Effects of warm ischemia on valve endothelium. Pompilio G, et al. **Ann Thorac Surg** 1997 Mar;63(3):656-62

Disorganization of microtubular network in postischemic liver dysfunction: its functional and morphological changes. Shinohara H, et al. **Biochim Biophys Acta** 1996 Oct 7; 1317(1):27-35

Cortical infarct volume is dependent on the ischemic reduction of perifocal cerebral blood flow in a three-vessel intraluminal MCA occlusion/reperfusion model in the rat. Soriano MA, et al. **Brain Res** 1997 Feb 7;747(2):273-8

Perfluorocarbon emulsion prevents eicoasanoid release in skeletal muscle ischemia and reperfusion. Gennaro M, et al. **Cardiovasc Surg** 1996 Jun;4(3):399-404

Endothelial damage caused by ischemia and reperfusion and different ventilatory strategies in the lung. Moore TM, et al. **Chin J Physiol** 1996;39(2):65–81 (132 ref.)
Assessment of ischemia and reperfusion injury. Urbaniak JR, et al. **Clin Orthop** 1997 Jan;(334):30–6
Immunohistochemical manifestations of unilateral kidney ischemia. Ibrahim S, et al. **Clin Transplant** 1996 Dec;10(6 Pt 2):646–52
Expression of adhesion molecules and leukocyte recruitment into gastric mucosa following ischemia–reperfusion. Andrews FJ, et al. **Dig Dis Sci** 1997 Feb;42(2):326–32
Propofol neuroprotection in a rat model of ischaemia reperfusion injury. Young Y, et al. **Eur J Anaesthesiol** 1997 May;14(3):320–6
Unpredictability of triphenyltetrazolium chloride in staining irreversible ischaemia–reperfusion injury in the skeletal muscle of rats. Cheng HT, et al. **Eur J Surg** 1996 May; 162(5):407–12
Unilateral renal ischemia reperfusion in the rat: effect of blood volume trapped in the kidney, sucrose infusion, and antioxidant treatments. Zurovsky Y, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):471–8
Filamin redistribution in an endothelial cell reoxygenation injury model. Hastie LE, et al. **Free Radic Biol Med** 1997; 22(6):955–66
High intraocular pressure–induced ischemia and reperfusion injury in the optic nerve and retina in rats. Adachi M, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul; 234(7):445–51
Monocytes and lymphocytes as active participants in the pathogenesis of experimental shock. Altavilla D, et al. **Inflamm Res** 1996 Aug;45(8):398–404
Genistein, a protein tyrosine kinase inhibitor, ameliorates retinal degeneration after ischemia–reperfusion injury in rat. Hayashi A, et al. **Invest Ophthalmol Vis Sci** 1997 May; 38(6):1193–202
PGE1, dexamethasone, U–74389G, or Bt2–cAMP as an additive to promote protection by UW solution in I/R injury. Chiang CH, et al. **J Appl Physiol** 1997 Aug; 83(2):583–90
Alpha–melanocyte–stimulating hormone protects against renal injury after ischemia in mice and rats. Chiao H, et al. **J Clin Invest** 1997 Mar 15;99(6):1165–72
Out on first [editorial] Furie BC. **J Clin Invest** 1997 Jun 1; 99(11):2557–8
Effect of oligosaccharides on rejection and reperfusion injury after lung transplantation. Brandt M, et al. **J Heart Lung Transplant** 1997 Mar;16(3):352–9
Reduction of brain injury using heparin to inhibit leukocyte accumulation in a rat model of transient focal cerebral ischemia. II. Dose–response effect and the therapeutic window. Yanaka K, et al. **J Neurosurg** 1996 Dec; 85(6):1108–12
The effect of cyclosporine in gut ischemic injury: a computerized morphometric and enzymatic analysis. Puglisi RN, et al. **J Pediatr Surg** 1996 Feb;31(2):319–22
Ischemia–reperfusion injury on the pancreas in rats: identification of acinar cell apoptosis. Fujimoto K, et al. **J Surg Res** 1997 Aug;71(2):127–36
TNF–alpha potentiates oxidant and reperfusion–induced endothelial cell injury. Gilmont RR, et al. **J Surg Res** 1996 Feb 15;61(1):175–82
Rabbit rectus femoris muscle for ischemia–reperfusion studies: an improved model. Hoballah JJ, et al. **J Surg Res** 1996 Nov;66(1):21–4
Cerebral protection during moderate hypothermic circulatory arrest: histopathology and magnetic resonance spectroscopy of brain energetics and intracellular pH in pigs. Filgueiras CL, et al. **J Thorac Cardiovasc Surg** 1996 Oct;112(4):1073–80
Cold ischemia–induced damage to vascular endothelium results in permeability alterations in transplanted lungs. Hidalgo MA, et al. **J Thorac Cardiovasc Surg** 1996 Oct; 112(4):1027–35
Exogenously administered interleukin–10 decreases pulmonary neutrophil infiltration in a tumor necrosis factor–dependent murine model of acute visceral ischemia. Hess PJ, et al. **J Vasc Surg** 1997 Jul;26(1):113–8
A new gastric ulcer model induced by ischemia–reperfusion in the rat: role of leukocytes on ulceration in rat stomach. Wada K, et al. **Life Sci** 1996;59(19):PL295–301
Leukocyte activity and tissue injury following ischemia–reperfusion in skeletal muscle. Forbes TL, et al. **Microvasc Res** 1996 May;51(3):275–87
N omega–nitro–L–arginine attenuates early ischemic neuronal damage of prolonged focal cerebral ischemia and recirculation in rats. Matsui T, et al. **Neurol Res** 1997 Apr; 19(2):192–203
Attenuation of ischemia–reperfusion injury in the rat neocortex by the hydroxyl radical scavenger nicaraven. Toyoda T, et al. **Neurosurgery** 1997 Feb;40(2):372–7; discussion 377–8
Intraischemic hypothermia attenuates neutrophil infiltration in the rat neocortex after focal ischemia–reperfusion injury. Toyoda T, et al. **Neurosurgery** 1996 Dec;39(6):1200–5
Ischemia–reperfusion injury in the intestines of newborn pigs. Papparella A, et al. **Pediatr Res** 1997 Aug;42(2):180–8
Effects of sucralfate on acute gastric mucosal injury and gastric ulcer induced by ischemia–reperfusion in rats. Wada K, et al. **Pharmacology** 1997 Feb;54(2):57–63
Effect of stobadine on gastric mucosal injury after ischaemia/reperfusion. Mojžiš J, et al. **Physiol Res** 1996; 45(5):399–403
No increasing injury during early reperfusion of skeletal muscle. Hvaal K, et al. **Scand J Clin Lab Invest** 1996 Feb; 56(1):11–6
Consequences of cold and warm ischemia on pulmonary mitochondrial respiratory function. Detry O, et al. **Transplant Proc** 1997 Aug;29(5):2338–9
Serotonin (5–HT): an enteroendocrine marker of reperfusion injury after liver–small bowel allotransplantation in the pig. Galmarini D, et al. **Transplant Proc** 1997 May;29(3):1833–5
Visualization of liver sinusoidal endothelial cell repair behavior after preservation by in vitro time–lapse video microscopy. Gerlach JC, et al. **Transplantation** 1997 Feb 15;63(3):455–9
Heparin attenuated neutrophil infiltration but did not affect renal injury induced by ischemia reperfusion. Shin CS, et al. **Yonsei Med J** 1997 Jun;38(3):133–41
[Transendothelial oxygen radical formation and periportal lipid peroxidation after warm ischemia and reperfusion of the liver] Meyer zu Vilsendorf A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:677–80 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Continuous measurement of tissue oxygen and carbon dioxide gas tensions in dog liver in ischemia/reperfusion. Urakami A, et al. **Acta Med Okayama** 1996 Dec;50(6):285–92
The functional damages of ischemic/reperfused skeletal muscle. Rácz IB, et al. **Acta Physiol Hung** 1996; 84(3):205–16
Effect of a new inhibitor of lipid peroxidation on kidney function after ischaemia–reperfusion. A study on rat and rabbit kidneys. Sørensen V, et al. **Acta Physiol Scand** 1996 Jun;157(2):289–97
Role of platelet–activating factor in skeletal muscle ischemia–reperfusion injury. Silver D, et al. **Adv Exp Med Biol** 1996;416:217–21
Effects of leukocyte capillary plugging in skeletal muscle ischemia–reperfusion injury. Harris AG, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2653–60
Role of leukocyte plugging and edema in skeletal muscle ischemia–reperfusion injury. Harris AG, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H989–96
Temporal and spatial relationship between no–reflow phenomenon and postischemic necrosis in skeletal muscle. Hickey MJ, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1277–86
Hypoxia compared with normoxia alters the effects of nitric oxide in ischemia–reperfusion lung injury. Huang YC, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L504–12
Arteriolar constriction in skeletal muscle during vascular stunning: role of mast cells. Keller MW. **Am J Physiol** 1997 May;272(5 Pt 2):H2154–63
Role of calmodulin and myosin light–chain kinase in lung ischemia–reperfusion injury. Khimenko PL, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L121–5
Ischemia/reperfusion–induced microvascular dysfunction: role of oxidants and lipid mediators. Kurose I, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2976–82
Ischemia–reperfusion lung injury: contribution of ischemia, neutrophils, and hydrostatic pressure. Lu YT, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):L46–54
Role of nitric oxide in lung ischemia and reperfusion injury. Moore TM, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1970–7
Facilitation of postischemic reperfusion with alpha–PBN: assessment using NMR and Doppler flow techniques. Schulz JB, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1986–95
In vitro negative inotropic effect of plasma collected at the time of reperfusion in humans undergoing liver transplantation. Chemla D, et al. **Anesthesiology** 1997 Aug; 87(2):378–86
Inflammatory cascade. A final common pathway for perioperative injury? [editorial; comment] Herskowitz A, et al. **Anesthesiology** 1996 Nov;85(5):957–60. Comment on: Anesthesiology 1996 Nov;85(5):965–76.
Effects of oral administration of purified micronized flavonoid fraction on increased microvascular permeability induced by various agents and on ischemia/reperfusion in the hamster cheek pouch. Bouskela E, et al. **Angiology** 1997 May;48(5):391–9
Protection by preconditioning and cardiac pacing against ventricular arrhythmias resulting from ischemia and reperfusion. Parratt JR, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:98–107 (42 ref.)
Reduction of ischemic reperfusion edema with corticotropin–releasing factor (CRF) in rat hind limb replantation. Whitney TM, et al. **Ann Plast Surg** 1997 Apr; 38(4):416–9; discussion 419–20
Contralateral lung injury associated with single–lung ischemia–reperfusion injury. Watanabe A, et al. **Ann Thorac Surg** 1996 Dec;62(6):1644–9
Study of the changes of serum hyaluronic acid during porcine liver transplantation: influence of warm ischemia. Nakajima Y, et al. **Artif Organs** 1996 Oct;20(10):1125–9
The role of Na+/H+ exchange in ischemia–reperfusion. Piper HM, et al. **Basic Res Cardiol** 1996 May–Jun; 91(3):191–202 (91 ref.)
In vivo adenovirus–mediated gene transfer and the expression in ischemic and reperfused rat brain. Abe K, et al. **Brain Res** 1997 Jul 25;763(2):191–201
Reperfusion following focal cerebral ischemia alters distribution of neuronal cells with DNA fragmentation in mice. Murakami K, et al. **Brain Res** 1997 Mar 14; 751(1):160–4
Brain lactate, not glucose, fuels the recovery of synaptic function from hypoxia upon reoxygenation: an in vitro study. Schurr A, et al. **Brain Res** 1997 Jan 2;744(1):105–11
Heat shock protects cultured rat astrocytes in a model of reperfusion injury. Takuma K, et al. **Brain Res** 1996 Oct 7;735(2):265–70
Effects of hypothyroidism on the vulnerability to ventricular fibrillation in dogs: a comparative study with amiodarone. Liu P, et al. **Cardiovasc Drugs Ther** 1996 Jul;10(3):369–78
Endothelial damage caused by ischemia and reperfusion and different ventilatory strategies in the lung. Moore TM, et al. **Chin J Physiol** 1996;39(2):65–81 (132 ref.)
Reoxygenation of hypoxic human umbilical vein endothelial cells activates the classic complement pathway. Collard CD, et al. **Circulation** 1997 Jul 1;96(1):326–33
Ischemic injury of optic nerve axons: the nuts and bolts. Fern R, et al. **Clin Neurosci** 1997;4(5):246–50 (32 ref.)
Reperfusion damage following focal ischemia: pathophysiology and therapeutic windows. Kuroda S, et al. **Clin Neurosci** 1997;4(4):199–212 (211 ref.)
Intestinal motility during hypoxia and reoxygenation in vitro. Bielefeldt K, et al. **Dig Dis Sci** 1997 May;42(5):878–84
Modulation and mechanisms of electroretinogram recovery after short–term retinal ischemic injury. Tarn DM, et al. **Doc Ophthalmol** 1995–96;91(2):109–16
Inhaled nitric oxide after lung ischemia reperfusion; effect on hemodynamics and oxygen free radical scavenger system. Fukahara K, et al. **Eur J Cardiothorac Surg** 1997 Feb;11(2):343–9
The functional and morphological damage of ischemic reperfused skeletal muscle. Rácz IB, et al. **Eur Surg Res** 1997;29(4):254–63
Spinal cord gray matter layers rich in NADPH diaphorase–positive neurons are refractory to ischemia–reperfusion–induced injury: a histochemical and silver impregnation study in rabbit. Marsala J, et al. **Exp Neurol** 1997 May;145(1):165–79
Metabolic and clonogenic consequences of ischaemia reperfusion insult in solid tumours. Parkins CS, et al. **Exp Physiol** 1997 Mar;82(2):361–8 (22 ref.)
Unilateral renal ischemia reperfusion in the rat: effect of blood volume trapped in the kidney, sucrose infusion, and antioxidant treatments. Zurovsky Y, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):471–8
Hepatic tissue microcirculation, oxygenation and energy charge in ischemia–reperfusion subjected cirrhotic rat liver. Eleftheriadis E, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1187–92
The effects of N–acetylcysteine and anti–intercellular adhesion molecule–1 monoclonal antibody against ischemia–reperfusion injury of the rat steatotic liver produced by a choline–methionine–deficient diet. Nakano H, et al. **Hepatology** 1997 Sep;26(3):670–8
Effects of cold ischemia on reflow patterns in the rat cremaster muscle microcirculation. Beris AE, et al. **Int Angiol** 1995 Sep;14(3):248–52
Tissue changes at different periods of ischemia. Brunelli GA, et al. **Int Angiol** 1995 Sep;14(3):253–63
The effects of two levels of vasomotor tone at physiologic suffusate PO2 on acetylcholine– and sodium nitroprusside–induced relaxation of cremaster third–order arterioles in 5–hour ischemia–reperfusion control rats. Borsch DM, et al. **Int J Microcirc Clin Exp** 1997 May–Jun; 17(3):113–22
Effects of thromboxane A2 synthesis inhibitor (OKY–046) on total liver ischemia in rats. Kobayashi T, et al. **Int Surg** 1996 Apr–Jun;81(2):115–8
Downstream effects of splanchnic ischemia–reperfusion injury on renal function and eicosanoid release. Rothenbach P, et al. **J Appl Physiol** 1997 Aug;83(2):530–6
Mechanisms of postischemic injury in skeletal muscle: intervention strategies. Rubin BB, et al. **J Appl Physiol** 1996 Feb;80(2):369–87 (220 ref.)
The microvascular cell and ischemia–reperfusion injury. Verrier E. **J Cardiovasc Pharmacol** 1996;27 Suppl 1:S26–30 (20 ref.)
Hemorrhagic transformation and microvascular integrity during focal cerebral ischemia/reperfusion. Hamann GF, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1373–8
Premedication with cyclosporine and perindopril modifies the ischaemia–reperfusion injury during liver resection in rats. Hardy KJ, et al. **J Gastroenterol Hepatol** 1996 Jul; 11(7):652–7
Pathophysiological changes caused by occlusion of blood flow into the liver during hepatectomy in dogs with obstructive jaundice: effects of intestinal congestion. Takahashi K, et al. **J Gastroenterol Hepatol** 1996 Oct; 11(10):963–70
Reperfusion injury in single–lung transplant recipients with pulmonary hypertension and emphysema. Boujoukos AJ, et al. **J Heart Lung Transplant** 1997 Apr;16(4):439–48
Effect of pentoxifylline in a canine and porcine model of pulmonary allograft reperfusion injury [letter; comment] Schmid RA, et al. **J Heart Lung Transplant** 1997 Mar; 16(3):366–7. Comment on: J Heart Lung Transplant 1995 Jul–Aug;14(4):676–83.
Inhibition of nitric oxide synthesis in ischemia/reperfusion of the rat liver is followed by impairment of hepatic

microvascular blood flow. Koeppel TA, et al. **J Hepatol** 1997 Jul;27(1):163–9

Time course of tolerance to ischemia–reperfusion injury and induction of heat shock protein 72 by heat stress in the rat heart. Yamashita N, et al. **J Mol Cell Cardiol** 1997 Jul; 29(7):1815–21

Differential effect of ischemia/reperfusion on pigmented and albino rabbit retina. Muller A, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):337–42

Calcitonin gene–related peptide and reperfusion injury. Allen DM, et al. **J Orthop Res** 1997 Mar;15(2):243–8

Quantification of P–selectin expression after renal ischemia and reperfusion. Zizzi HC, et al. **J Pediatr Surg** 1997 Jul; 32(7):1010–3

Neutrophils accentuate renal cold ischemia–reperfusion injury. Dose–dependent protective effect of a platelet–activating factor receptor antagonist. Riera M, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):786–94

Characterization of renal ischemia–reperfusion injury in rats. Williams P, et al. **J Pharmacol Toxicol Methods** 1997 Feb; 37(1):1–7

Protection against ischemic–reperfusion injury of skeletal muscle: role of ischemic preconditioning and adenosine pretreatment. Lee HT, et al. **J Reconstr Microsurg** 1996 Aug;12(6):383–8 (39 ref.)

Induction of heat shock protein 72kDa expression is associated with attenuation of ischaemia–reperfusion induced microvascular injury. Chen G, et al. **J Surg Res** 1997 May;69(2):435–9

Exogenous human recombinant interleukin–10 attenuates hindlimb ischemia–reperfusion injury. Engles RE, et al. **J Surg Res** 1997 May;69(2):425–8

The effect of intestinal reperfusion on renal function and perfusion. LaNoue JL Jr, et al. **J Surg Res** 1996 Jul 15; 64(1):19–25

Time course of leukocyte adhesion to endothelium in ischemia–reperfusion. Milazzo VJ, et al. **J Surg Res** 1996 Feb 15;61(1):139–42

The influence of resuscitation on hemodynamics and oxygen radical–induced reperfusion injury after arterialized liver transplantation in the rat. Walcher F, et al. **J Surg Res** 1996 Sep;65(1):9–14

Attenuation of lung graft reperfusion injury by a nitric oxide donor. Bhabra MS, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):327–33; discussion 333–4

Regulatory effects of interleukin–10 on lung ischemia–reperfusion injury. Eppinger MJ, et al. **J Thorac Cardiovasc Surg** 1996 Nov;112(5):1301–5; discussion 1305–6

Basal nitric oxide expresses endogenous cardioprotection during reperfusion by inhibition of neutrophil–mediated damage after surgical revascularization. Sato H, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):399–409

Nicorandil, a potent adenosine triphosphate–sensitive potassium–channel opener, ameliorates lung allograft reperfusion injury. Yamashita M, et al. **J Thorac Cardiovasc Surg** 1996 Nov;112(5):1307–14

Postural vasoregulation and mediators of reperfusion injury in venous ulceration. He CF, et al. **J Vasc Surg** 1997 Apr; 25(4):647–53

Role of endothelin in the pathophysiology of renal ischemia–reperfusion in normal rabbits. Espinosa G, et al. **Kidney Int** 1996 Sep;50(3):776–82

A method for long duration anaesthesia for a new hindlimb ischaemia–reperfusion model in mice. Wiersema AM, et al. **Lab Anim** 1997 Apr;31(2):151–6

Allopurinol improves scavenging ability of the liver after ischemia/reperfusion injury. Karwinski W, et al. **Liver** 1997 Jun;17(3):139–43

Ischemia and reperfusion in pancreas. Hoffmann TF, et al. **Microsc Res Tech** 1997 Jun 1–15;37(5–6):557–71

Characterization of microvascular vasoconstriction following ischemia/reperfusion in skeletal muscle using videomicroscopy. Pemberton M, et al. **Microsurgery** 1996; 17(1):9–16

Platelet–activating factor modulates leukocyte adhesion to endothelium in ischemia–reperfusion. Durán WN, et al. **Microvasc Res** 1996 Jan;51(1):108–115

Platelet–activating factor and nitric oxide mediate microvascular permeability in ischemia–reperfusion injury. Noel AA, et al. **Microvasc Res** 1996 Nov;52(3):210–20

Ubiquitin–mediated stress response in a rat model of brain transient ischemia/hypoxia. Gubellini P, et al. **Neurochem Res** 1997 Jan;22(1):93–100

Neuronal lesions and behavioral modifications in rat following cerebral ischemia and reperfusion. Martinez G, et al. **Neurochem Res** 1996 Jun;21(6):667–4

Astroglial cells inhibit the increasing permeability of brain endothelial cell monolayer following hypoxia/reoxygenation. Kondo T, et al. **Neurosci Lett** 1996 Apr 19;208(2):101–4

Selective induction of fibroblast growth factor receptor–1 mRNA after transient focal ischemia in the cerebral cortex of rats. Masumura M, et al. **Neurosci Lett** 1996 Aug 2; 213(2):119–22

Contribution of cerebrovascular parasympathetic and sensory innervation to the development of cerebral edema in rat focal ischemia and reperfusion. Umemura A, et al. **Neurosci Lett** 1996 Sep 6;215(2):134–6

Reperfusion injury. Ar Rajab A, et al. **New Horiz** 1996 May; 4(2):224–34 (115 ref.)

Shock: ischemia, reperfusion, and inflammation. Waxman K. **New Horiz** 1996 May;4(2):153–60 (69 ref.)

Pretreatment with an inhibitor of mac–1 alters regional and systemic platelet function during ischemia–reperfusion in swine. Gurbel PA, et al. **Pharmacology** 1996 Aug; 53(2):79–86

Mac–1 inhibitor affects certain hemostatic parameters during myocardial stunning in swine. Serebruany VL, et al. **Pharmacology** 1996 Aug;53(2):87–97

Role of hepatovasculature in warm ischaemia–reperfusion injury of rat liver. Kukan M, et al. **Physiol Res** 1996; 45(5):427–30

Secondary ischemia caused by venous or arterial occlusion shows differential effects on myocutaneous island flap survival and muscle ATP levels. Hauge EM, et al. **Plast Reconstr Surg** 1997 Mar;99(3):825–33

Ischemia–reperfusion injury in myocutaneous flaps: role of leukocytes and leukotrienes. Kirschner RE, et al. **Plast Reconstr Surg** 1997 May;99(6):1485–93; discussion 1494–5

Lack of nitric oxide contributes to vasospasm during ischemia/reperfusion injury. Wang WZ, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1099–108

Ischemia–reperfusion injury in skeletal muscle: CD 18–dependent neutrophil–endothelial adhesion and arteriolar vasoconstriction. Zamboni WA, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2002–7; discussion 2008–9

Failure to express the P–selectin gene or P–selectin blockade confers early pulmonary protection after lung ischemia or transplantation. Naka Y, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):757–61

The cerebral 'no–reflow' phenomenon after cardiac arrest in rats—influence of low–flow reperfusion. Böttiger BW, et al. **Resuscitation** 1997 Feb;34(1):79–87

A comparative study of EEG suppressions induced by global cerebral ischemia and anoxia. Zagrean L, et al. **Rom J Physiol** 1995 Jan–Dec;32(1–4):39–44

Ischaemia–reperfusion mechanisms in acute pancreatitis. Toyama MT, et al. **Scand J Gastroenterol Suppl** 1996; 219:20–3 (24 ref.)

Remodeling of hepatic microvascular responsiveness after ischemia/reperfusion. Clemens MG, et al. **Shock** 1997 Aug; 8(2):80–5 (66 ref.)

Hepatic reticuloendothelial system dysfunction after intestinal ischemia–reperfusion. Haglind E, et al. **Shock** 1996 Jan;5(1):72–5

Effect of endotoxin–enhanced hepatic reperfusion injury on endothelium–dependent relaxation in rat aorta. McKenna R, et al. **Shock** 1996 Aug;6(2):106–11

Capillary dysfunction in striated muscle ischemia/reperfusion: on the mechanisms of capillary "no–reflow". Menger MD, et al. **Shock** 1997 Jul;8(1):2–7 (47 ref.)

The effect of anti–L–selectin (EL–246) on remote lung injury after infrarenal ischemia/reperfusion. Seekamp A, et al. **Shock** 1997 Jun;7(6):447–54

The pathophysiological role of peroxynitrite in shock, inflammation, and ischemia–reperfusion injury. Szabó C. **Shock** 1996 Aug;6(2):79–88 (162 ref.)

Methods for studying microvascular barrier function in ischemia–reperfusion injury. Tucker VL, et al. **Shock** 1997 Jul;8(1):8–15 (48 ref.)

Somatosensory– and motor–evoked potentials in a rabbit model of spinal cord ischemia and reperfusion injury. Zhao M, et al. **Spine** 1997 May 1;22(9):1013–7

A near–infrared spectroscopic study of cerebral ischemia and ischemic tolerance in gerbils. Li JY, et al. **Stroke** 1997 Jul; 28(7):1451–6; discussion 1456–7

Rapid disruption of an astrocyte interaction with the extracellular matrix mediated by integrin alpha 6 beta 4 during focal cerebral ischemia/reperfusion. Wagner S, et al. **Stroke** 1997 Apr;28(4):858–65

Early reperfusion in the anesthetized baboon reduces brain damage following middle cerebral artery occlusion: a quantitative analysis of infarction volume [published erratum appears in Stroke 1997 May;28(5):1092] Young AR, et al. **Stroke** 1997 Mar;28(3):632–7; discussion 637–8

Low cerebral blood flow and perfusion reserve induce hyperperfusion after surgical revascularization: case reports and analysis of cerebral hemodynamics. Yoshimoto T, et al. **Surg Neurol** 1997 Aug;48(2):132–8; discussion 138–9

Impairment of endothelial–dependent pulmonary vasorelaxation after mesenteric ischemia/reperfusion. Fullerton DA, et al. **Surgery** 1996 Nov;120(5):879–84

The role of leukocyte and endothelial adhesion molecules in ischemia–reperfusion injury. Thiagarajan RR, et al. **Thromb Haemost** 1997 Jul;78(1):310–4 (35 ref.)

Interaction between ischemia/reperfusion–induced leukocyte emigration and translocating bacterial enterotoxins on enteric muscle function. Cicalese L, et al. **Transplant Proc** 1997 May;29(3):1815

Hemodynamic analysis of post–reperfusion syndrome and the effect of preventing this syndrome using thromboxane A2 synthetase inhibitor (OKY–046) in swine liver transplantation. Ishine N, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):378–81

Interleukin–1 receptor blockade attenuates oxygen–derived free radical production and microcirculatory disturbances in ischemia/reperfusion injury in the liver. Shirasugi N, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):371–3

The heat–shock protein 70 family reduces ischemia/reperfusion injury in small intestine. Tsuruma T, et al. **Transplant Proc** 1996 Oct;28(5):2629–30

Influence of cyclic guanosine monophosphate changes on hemodynamics after reperfusion in liver transplantation. Bzeizi KI, et al. **Transplantation** 1997 Feb 15;63(3):403–6

Tacrolimus (FK506) down–regulates free radical tissue levels, serum cytokines, and neutrophil infiltration after severe liver ischemia. Garcia–Criado FJ, et al. **Transplantation** 1997 Aug 27;64(4):594–8

Effect of prolonged hypothermic ischemia and reperfusion on oxygen consumption and total mechanical energy in rat myocardium: participation of mitochondrial oxidative phosphorylation. Kuwabara M, et al. **Transplantation** 1997 Aug 27;64(4):577–83

Thermotolerance attenuates ischemia–reperfusion induced renal injury and increased expression of ICAM–1. Stokes KY, et al. **Transplantation** 1996 Oct 27;62(8):1143–9

Resuscitation of ischemically damaged pancreas by the two–layer (University of Wisconsin solution/perfluorochemical) mild hypothermic storage method. Matsumoto S, et al. **World J Surg** 1996 Oct; 20(8):1030–4

Renal ischemia–reperfusion injury does not induce pulmonary dysfunction in sheep. Shin CS, et al. **Yonsei Med J** 1997 Jun;38(3):142–50

[Changes in surface microcirculation of extensor digitorum longus tendon after ischemia–reperfusion of rabbit hindlimbs] Xing X, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 Jul;11(4):270–3 (Eng. Abstr.) **(Chi)**

[Reduction of amputation incidence and mortality following prolonged ischemia of the lower limbs. Value of a controlled reperfusion?] Defraigne JO, et al. **Rev Med Liege** 1996 Aug;51(8):534–44 (57 ref.) **(Fre)**

[Improvement in ischemia–reperfusion damage to the liver. Blockade of endothelin receptors inhibits vasoconstriction] Uhlmann D. **Fortschr Med** 1997 Apr 30;115(12):48 **(Ger)**

[Microcirculation in the human pancreas in combined kidney–/pancreas transplantation] Benz S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:555–9 (Eng. Abstr.) **(Ger)**

[TNF–alpha and endothelin concentration kinetics during normothermic liver ischemia and reperfusion—indications for a potentially protective function of increased TNF level] Bredt M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:681–5 (Eng. Abstr.) **(Ger)**

[Systemic genotoxic effect caused by ischemia–/reperfusion–/surgical trauma of the lower extremity—detection of DNA chain breaks in leukocytes with the Comet Assay] Dahouk S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:601–5 (Eng. Abstr.) **(Ger)**

[Preconditioning with brief ischemia and reperfusion cycles improves ischemia tolerance of skeletal muscle in the rat] Mattei A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:495–8 (Eng. Abstr.) **(Ger)**

[Studies of the small intestine of the cat for temporal and quantitative differentiation of classical oxygen generators after intestinal ischemia] Poch B, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:743–8 (Eng. Abstr.) **(Ger)**

[Significance of nitric oxide synthesis on effectiveness of superoxide dismutase in reperfusion damage to the liver] Saad S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:695–8 (Eng. Abstr.) **(Ger)**

[Successful transplantation of livers of non–heart–beating donors after normothermic extracorporeal liver perfusion in the pig model] Schön MR, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:725–31 (Eng. Abstr.) **(Ger)**

['Ischemic tolerance' in ischemia–reperfusion injury in the optic nerve in rats] Adachi M, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jan;101(1):24–9 (Eng. Abstr.) **(Jpn)**

[Analysis of oxidative stress in rat fetus induced by clamping and reperfusion of uterine vessels] Maeda M. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Feb;48(2):111–7 (Eng. Abstr.) **(Jpn)**

[Post–reperfusion syndrome in orthotopic liver transplantation (see comments)] Acosta F, et al. **Rev Esp Anestesiol Reanim** 1996 Oct;43(8):276–80 (Eng. Abstr.). Comment in: Rev Esp Anestesiol Reanim 1997 Apr;44(4):162–4. **(Spa)**

[The post–reperfusion syndrome in liver transplantation (comment)] Pérez–Cerdá F, et al. **Rev Esp Anestesiol Reanim** 1997 Apr;44(4):162–4. Comment on: Rev Esp Anestesiol Reanim 1996 Oct;43(8):276–80. **(Spa)**

[The basic patterns of the ischemic and reperfusion changes in the tissues of the ischemic extremity and in the whole body] Tsapenko MV. **Klin Khir** 1996;(9):44–9 (49 ref.) **(Ukr)**

PREVENTION & CONTROL

Effects of halothane, isoflurane and sevoflurane on ischemia–reperfusion injury in the perfused liver of fasted rats. Imai M, et al. **Acta Anaesthesiol Scand** 1996 Nov; 40(10):1242–8

Reduction of ischemia–reperfusion syndrome after abdominal aortic aneurysmectomy by N–acetylcysteine but not

mannitol. Kretzschmar M, et al. **Acta Anaesthesiol Scand** 1996 Jul;40(6):657–64

Protective effect of taurine against reperfusion injury in cultured rat astrocytes. Matsuda T, et al. **Adv Exp Med Biol** 1996;403:491–7

Taurine reduces experimental liver injury after cold ischemic preservation and a period of rewarming prior to reperfusion. Minor T, et al. **Adv Exp Med Biol** 1996; 403:157–61

Blocking L-selectin function attenuates reperfusion injury following hemorrhagic shock in rabbits. Ramamoorthy C, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1871–7

Glycine minimizes reperfusion injury in a low-flow, reflow liver perfusion model in the rat. Zhong Z, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):G332–8

C1-esterase inhibitor prevents early pulmonary dysfunction after lung transplantation in the dog. Salvatierra A, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1147–54

Vitamin E protects human skeletal muscle from damage during surgical ischemia-reperfusion. Novelli GP, et al. **Am J Surg** 1997 Mar;173(3):206–9

Inhaled nitric oxide pretreatment but not posttreatment attenuates ischemia-reperfusion-induced pulmonary microvascular leak. Chetham PM, et al. **Anesthesiology** 1997 Apr;86(4):895–902

Isoflurane attenuates early neutrophil-independent hypoxia-reoxygenation injuries in the reperfused liver in fasted rats. Kon S, et al. **Anesthesiology** 1997 Jan; 86(1):128–36

Mild and moderate hypothermia provide better protection than a burst-suppression dose of thiopental against ischemic spinal cord injury in rabbits. Matsumoto M, et al. **Anesthesiology** 1997 May;86(5):1120–7

Protection of rat retina from ischemia-reperfusion injury by vasoactive intestinal peptide (VIP): the effect of VIP on lipid peroxidation and antioxidant enzyme activity of retina and choroid. Tunçel N, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:489–98

Low-dose nitric oxide inhalation during initial reperfusion enhances rat lung graft function. Bhabra MS, et al. **Ann Thorac Surg** 1997 Feb;63(2):339–44

Intratracheal surfactant administration preserves airway compliance during lung reperfusion. Buchanan SA, et al. **Ann Thorac Surg** 1996 Dec;62(6):1617–21

Donor treatment with the lazeroid U74389G reduces ischemia-reperfusion injury in a rat lung transplant model. Hausen B, et al. **Ann Thorac Surg** 1997 Sep;64(3):814–20

Low-dose sodium nitroprusside reduces pulmonary reperfusion injury. King RC, et al. **Ann Thorac Surg** 1997 May;63(5):1398–404

Prevention of reperfusion injury by inhaled nitric oxide in lungs harvested from non-heart-beating donors. Paris-Sud University Lung Transplantation Group. Murakami S, et al. **Ann Thorac Surg** 1996 Dec;62(6):1632–8

L-arginine administration during reperfusion improves pulmonary function. Shiraishi Y, et al. **Ann Thorac Surg** 1996 Dec;62(6):1580–6; discussion 1586–7

Cooling strangulated intestine before and following release of an obstruction protects from ischemia/reperfusion injury. Udassin R, et al. **Arch Surg** 1997 Apr;132(4):406–9

Influence of verapamil on the efficacy of vitamin E in preventing the ischemia-reperfusion-induced biochemical dearrangement in cerebral cortex of rat. Shaheen AA, et al. **Arzneimittelforschung** 1996 Jul;46(7):670–3

Ischaemic preconditioning of the liver: a preliminary study. Hardy KJ, et al. **Aust N Z J Surg** 1996 Oct;66(10):707–10

The effects of recombinant human granulocyte-colony stimulating factor on vascular dysfunction and splanchnic ischaemia-reperfusion injury. Squadrito F, et al. **Br J Pharmacol** 1997 Jan;120(2):333–9

Mild hypothermia protects against ischaemia-reperfusion injury in rabbit skeletal muscle. Wilson YT, et al. **Br J Plast Surg** 1997 Jul;50(5):343–8

Randomized controlled trial of the effect of mannitol on renal reperfusion injury during aortic aneurysm surgery [see comments] Nicholson ML, et al. **Br J Surg** 1996 Sep; 83(9):1230–3. Comment in: Br J Surg 1997 Apr;84(4):587.

Randomized controlled trial of the effect of mannitol on renal reperfusion injury during aortic aneurysm surgery [letter; comment] Tisi PV, et al. **Br J Surg** 1997 Apr;84(4):587. Comment on: Br J Surg 1996 Sep;83(9):1230–3.

Ischaemia-reperfusion injury in the rat kidney: the effect of preconditioning. Islam CF, et al. **Br J Urol** 1997 Jun; 79(6):842–7

Neuroprotection by the pyridoindole stobadine: a minireview. Stolc S, et al. **Brain Res Bull** 1997;42(5):335–40 (55 ref.)

Superoxide dismutase and catalase in protection of cardiopulmonary bypass-induced cardiac dysfunction and cellular injury. Prasad K, et al. **Can J Cardiol** 1996 Oct; 12(10):1083–91

Effect of ischaemic preconditioning on vascular dysfunction induced by ischaemia and reperfusion in rat hindquarters. Loke KE, et al. **Cardiovasc Res** 1996 Dec;32(6):1081–7

Efficacy and mechanisms of dopexamine in the prevention of ischemia-reperfusion induced organ damage: role of oxygen free radicals. Jacinto SM, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):181–90

A randomized controlled trial of pentoxifylline for the prevention of delayed graft function in cadaveric kidney graft. Noël C, et al. **Clin Transplant** 1997 Jun;11(3):169–73

Aldose reductase inhibition protects diabetic and nondiabetic rat hearts from ischemic injury. Ramasamy R, et al. **Diabetes** 1997 Feb;46(2):292–300

Effects of mixed ETA and ETB-receptor antagonist (Ro-47-0203) on hepatic microcirculation after warm ischemia. Koeppel TA, et al. **Dig Dis Sci** 1997 Jun; 42(6):1316–21

Treatment with bifemelane for optic nerve damage following high intraocular pressure in rat eyes. Adachi M, et al. **Eur J Ophthalmol** 1996 Oct-Dec;6(4):415–20

Melatonin affords protection against gastric lesions induced by ischemia-reperfusion possibly due to its antioxidant and mucosal microcirculatory effects. Konturek PC, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):73–7

Differential effects of lower limb revascularisation on organ injury and the role of the amino acid taurine. Barry MC, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):193–201

A monoclonal antibody against ICAM-1 suppresses hepatic ischemia-reperfusion injury in rats. Kuzume M, et al. **Eur Surg Res** 1997;29(2):93–100

Amelioration of hepatocellular integrity and inhibition of sinusoidal oxidative stress by N-acetylcysteine pretreatment in cold ischemia-reperfusion injury of rat liver. Nakano H, et al. **Eur Surg Res** 1996 Jul-Aug; 28(4):245–55

Morphofunctional effects of moderate forebrain ischemia combined with short-term hypoxia in rats—protective effects of Cerebrolysin. Schwab M, et al. **Exp Toxicol Pathol** 1997 Feb;49(1-2):29–37

Lipo-PGE1, prostaglandin E1 incorporated in lipid microspheres, protects injury of the liver caused by warm ischemia reperfusion. Egashira T, et al. **Free Radic Biol Med** 1996;21(3):353–6

The effect of 2-chloroadenosine on lipid peroxide level during experimental cerebral ischemia-reperfusion in gerbils. Yavuz O, et al. **Free Radic Biol Med** 1997; 22(1-2):337–41

Prophylactic administration of L-arginine improves the intestinal barrier function after mesenteric ischaemia. Schleiffer R, et al. **Gut** 1996 Aug;39(2):194–8

Oxidative damage in the liver induced by ischemia-reperfusion: protection by melatonin. Sewerynek E, et al. **Hepatogastroenterology** 1996 Jul-Aug; 43(10):898–905

The role of prostanoid in hepatic damage during hepatectomy. Shirabe K, et al. **Hepatogastroenterology** 1996 May-Jun;43(9):596–601

Angiotensin-converting enzyme inhibition by enalapril: a novel approach to reduce ischemia/reperfusion damage after experimental liver transplantation. Anthuber M, et al. **Hepatology** 1997 Mar;25(3):648–51

Hepatoprotective effect of the endothelin receptor antagonist TAK-044 against ischemia-reperfusion injury in the canine liver. Kitayama Y, et al. **Hepatology** 1997 Apr;25(4):938–42

Protective effect of preconditioning on the injury associated to hepatic ischemia-reperfusion in the rat: role of nitric oxide and adenosine. Peralta C, et al. **Hepatology** 1997 Apr; 25(4):934–7

Nitric oxide enhances 12-HETE versus LTB4 generation in pancreatic transplantation. Hotter G, et al. **Inflammation** 1996 Feb;20(1):23–31

The effects of nimodipine on ischemic injury of the spinal cord during thoracic aortic cross-clamping. Rhee RY, et al. **Int Angiol** 1996 Jun;15(2):153–61

Short-term low dose intracoronary diltiazem administered at the onset of reperfusion reduces myocardial infarct size. Herzog WR, et al. **Int J Cardiol** 1997 Mar;59(1):21–7

Thrombolysis using plasminogen activator and heparin reduces cerebral no-reflow after resuscitation from cardiac arrest: an experimental study in the cat. Fischer M, et al. **Intensive Care Med** 1996 Nov;22(11):1214–23

Involvement of adenosine in retinal ischemia. Studies on the rat. Larsen AK, et al. **Invest Ophthalmol Vis Sci** 1996 Dec; 37(13):2603–11

Lazaroid U-74500A for warm ischemia and reperfusion injury of the canine small intestine. Tanaka H, et al. **J Am Coll Surg** 1997 Apr;184(4):389–96

Prevention of ischemia-reperfusion lung injury by sulfated Lewis(a) pentasaccharide. The Paris-Sud University Lung Transplantation Group. Reignier J, et al. **J Appl Physiol** 1997 Apr;82(4):1058–63

Mechanisms of postischemic injury in skeletal muscle: intervention strategies. Rubin BB, et al. **J Appl Physiol** 1996 Feb;80(2):369–87 (220 ref.)

Methylprednisolone and full-dose aprotinin reduce reperfusion injury after cardiopulmonary bypass. Diego RP, et al. **J Cardiothorac Vasc Anesth** 1997 Feb;11(1):29–31

Rapid preconditioning protects rats against ischemic neuronal damage after 3 but not 7 days of reperfusion following global cerebral ischemia. Pérez-Pinzón MA, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):175–82

Monoclonal antibody to ICAM-1 preserves postischemic blood flow and reduces infarct size after ischemia-reperfusion in rabbit. Zhao ZQ, et al. **J Leukoc Biol** 1997 Sep;62(3):292–300

Delayed intravenous administration of basic fibroblast growth factor (bFGF) reduces infarct volume in a model of focal cerebral ischemia/reperfusion in the rat. Jiang N, et al. **J Neurol Sci** 1996 Aug;139(2):173–9

Reduction of brain injury using heparin to inhibit leukocyte accumulation in a rat model of transient focal cerebral ischemia. II. Dose-response effect and the therapeutic window. Yanaka K, et al. **J Neurosurg** 1996 Dec; 85(6):1108–12

Oxygenated intraluminal perfluorocarbon protects intestinal muscosa from ischemia/reperfusion injury. O'Donnell KA, et al. **J Pediatr Surg** 1997 Feb;32(2):361–5

Pentoxifylline inhibits overflow and reduces intestinal reperfusion injury. Savaş C, et al. **J Pediatr Surg** 1997 Jun; 32(6):905–10

Effect of extract of Agkistrodon blomhoffii on acute gastric mucosal lesions induced by ischaemia-reperfusion in rats [letter] Wada K, et al. **J Pharm Pharmacol** 1997 Feb; 49(2):227–8

Neutrophils accentuate renal cold ischemia-reperfusion injury. Dose-dependent protective effect of a platelet-activating factor receptor antagonist. Riera M, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):786–94

Endopeptidase inhibitors decrease myocardial ischemia/reperfusion injury in an in vivo rabbit model. Schriefer JA, et al. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1034–9

The role of allopurinol in preventing oxygen free radical injury to skeletal muscle and endothelial cells after ischemia-reperfusion. Ferrari RP, et al. **J Reconstr Microsurg** 1996 Oct;12(7):447–50

Thrombolysis at a controlled pressure prolongs the survival of skin flaps treated with superoxide dismutase. Hirigoyen MB, et al. **J Reconstr Microsurg** 1996 Apr;12(3):195–9

Protection against ischemic-reperfusion injury of skeletal muscle: role of ischemic preconditioning and adenosine pretreatment. Lee HT, et al. **J Reconstr Microsurg** 1996 Aug;12(6):383–8 (39 ref.)

Limiting impairment of muscle function following ischemia and reperfusion in rabbits. Zavitsanos G, et al. **J Reconstr Microsurg** 1996 Apr;12(3):183–7

Pentoxifylline prevents endothelial damage due to ischemia and reperfusion injury. Coe DA, et al. **J Surg Res** 1997 Jan;67(1):21–5

Sulfo-Lewis(x) diminishes neutrophil infiltration and free radicals with minimal effect on serum cytokines after liver ischemia and reperfusion. Garcia-Criado FJ, et al. **J Surg Res** 1997 Jul 1;70(2):187–94

Reduced ischemia-reperfusion injury with isoproterenol in non-heart-beating donor lungs. Jones DR, et al. **J Surg Res** 1997 May;69(2):385–92

Fish oil-supplemented feeding does not attenuate warm liver ischemia and reperfusion injury in the rat. Lo CJ, et al. **J Surg Res** 1997 Jul 15;71(1):54–60

21-Aminosteroids block neutrophil infiltration and provide liver protection independent of NO2-/NO3- levels. Palma-Vargas JM, et al. **J Surg Res** 1996 Dec;66(2):131–7

A perfluorochemical prevents ischemia-reperfusion injury of muscle. Yabe Y, et al. **J Surg Res** 1996 Jul 15;64(1):89–94

Both blood and crystalloid-based extracellular solutions are superior to intracellular solutions for lung preservation. Binns OA, et al. **J Thorac Cardiovasc Surg** 1996 Dec; 112(6):1515–21

Inhaled nitric oxide and pentoxifylline in rat lung transplantation from non-heart-beating donors. The Paris-Sud University Lung Transplantation Group. Murakami S, et al. **J Thorac Cardiovasc Surg** 1997 May; 113(5):821–9

Amelioration of pulmonary allograft injury by administering a second rinse solution. Serrick CJ, et al. **J Thorac Cardiovasc Surg** 1996 Oct;112(4):1010–6

Influence of oxygen in inflation gas during lung ischemia on ischemia-reperfusion injury. Watanabe A, et al. **J Thorac Cardiovasc Surg** 1997 Sep;114(3):332–8

Nicorandil, a potent adenosine triphosphate-sensitive potassium-channel opener, ameliorates lung allograft reperfusion injury. Yamashita M, et al. **J Thorac Cardiovasc Surg** 1996 Nov;112(5):1307–14

Dehydroepiandrosterone protects muscle flap microcirculatory hemodynamics from ischemia/reperfusion injury: an experimental in vivo study. Lohman R, et al. **J Trauma** 1997 Jan;42(1):74–80

Antisense oligonucleotides for ICAM-1 attenuate reperfusion injury and renal failure in the rat. Haller H, et al. **Kidney Int** 1996 Aug;50(2):473–80

Prevention of cerebral edema and infarct in cerebral reperfusion injury by an antibody to interleukin-8. Matsumoto T, et al. **Lab Invest** 1997 Aug;77(2):119–25

Insulin-like growth factor-1 attenuates apoptosis in hippocampal neurons caused by cerebral ischemia and reperfusion in stroke-prone spontaneously hypertensive rats. Tagami M, et al. **Lab Invest** 1997 May;76(5):613–7

Phosphoramidon, an endothelin converting enzyme inhibitor attenuates local gastric ischemia-reperfusion injury in rats. Hassan M, et al. **Life Sci** 1997;61(10):PL 141–7

Assessment of microvascular integrity in the isolated perfused rat liver by contrast-enhanced MRI. Attenuation of reperfusion injury by conjugated deferoxamine. Colet JM, et al. **Magn Reson Med** 1996 Nov;36(5):753–7

Tissue injury by free radicals and the protective effects of flavonoids. de Groot H, et al. **Methods Find Exp Clin Pharmacol** 1996;18 Suppl B:23–5

Uninephrectomy prevents the ischemia-induced increase in renin activity. Kato A, et al. **Nephron** 1997;75(1):72–6

Delayed treatment with alpha-phenyl-N-tert-butyl nitrone (PBN) attenuates secondary mitochondrial dysfunction after transient focal cerebral ischemia in the rat. Kuroda S, et al. **Neurobiol Dis** 1996 Apr;3(2):149–57

Minimizing hypoxic injury during cardiac arrest. Becker LB. **New Horiz** 1997 May;5(2):145–52

Modest hypothermia provides partial neuroprotection when used for immediate resuscitation after brain ischemia. Laptook AR, et al. **Pediatr Res** 1997 Jul;42(1):17–23

The platelet–activating factor antagonist BN 52021 attenuates hypoxic–ischemic brain injury in the immature rat. Liu XH, et al. **Pediatr Res** 1996 Dec;40(6):797–803

Cardioprotective effects of adenosine A1 and A2A receptor agonists in the isolated rat heart. Lozza G, et al. **Pharmacol Res** 1997 Jan;35(1):57–64

Protective effect of acetaminophen against acute gastric mucosal lesions induced by ischemia–reperfusion in the rat. Nakamoto K, et al. **Pharmacology** 1997 Apr;54(4):203–10

The role of platelet–activating factor antagonists in the prophylaxis of posttransplant acute tubular necrosis. Grinyó JM, et al. **Ren Fail** 1996 May;18(3):445–51 (45 ref.)

Gastroprotective activity of melatonin and its precursor, L–tryptophan, against stress–induced and ischaemia–induced lesions is mediated by scavenge of oxygen radicals. Konturek PC, et al. **Scand J Gastroenterol** 1997 May;32(5):433–8

Inhibition of warm ischemic injury to rat liver, pancreas, and heart grafts by controlling the nutritional status of both donor and recipient. Nishihara V, et al. **Surg Today** 1997; 27(7):645–50

Reperfusion injury of postischemic skeletal muscle is attenuated by the 21–aminosteroids U–74389F and U–74500A independent of iron binding. Fantini GA, et al. **Surgery** 1996 Nov;120(5):859–65

Interleukin–10 reduces the systemic inflammatory response in a murine model of intestinal ischemia/reperfusion. Lane JS, et al. **Surgery** 1997 Aug;122(2):288–94

Protective effect of monoclonal antibodies to adhesion molecules on rat liver ischemia–reperfusion injury. Marubayashi S, et al. **Surgery** 1997 Jul;122(1):45–52

Insulin pretreatment protects the liver from ischemic damage during Pringle's maneuver. Morimoto Y, et al. **Surgery** 1996 Nov;120(5):808–15

Impact of enalapril on microvascular perfusion and leukocyte adherence in a model of rat liver transplantation assessed by in vivo microscopy. Anthuber M, et al. **Transpl Int** 1996; 9 Suppl 1:S93–6

Effect of pre–reperfusion portal venous blood flush on early liver transplant function. Mirza DF, et al. **Transpl Int** 1996; 9 Suppl 1:S188–90

Ascorbic acid prevents ischemia–reperfusion injury in the rat small intestine. Nakamura M, et al. **Transpl Int** 1997; 10(2):89–95

Ebselen, a novel anti–oxidant compound, protects the rat liver from ischemia–reperfusion injury. Ozaki M, et al. **Transpl Int** 1997;10(2):96–102

Intravital studies on beneficial effects of warm Ringer's lactate rinse in liver transplantation. Rentsch M, et al. **Transpl Int** 1996;9(5):461–7

Carolina rinse solution reduces myeloperoxidase activity in small bowel grafts after reperfusion. Anveden–Hertzberg L, et al. **Transplant Proc** 1996 Oct;28(5):2602

Administration of oral allopurinol as a means of preventing ischemia and reperfusion damage to the intestine. Argibay P, et al. **Transplant Proc** 1996 Oct;28(5):2640–1

Pilot study: Carolina Rinse Solution improves graft function after orthotopic liver transplantation in humans. Bachmann S, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):390–2

Mechanism and protection from ischemic intestinal injury. Banda MA, et al. **Transplant Proc** 1996 Oct;28(5):2595–7 (27 ref.)

A new organ preservation solution, Celsior, is superior to Euro–Collins and University of Wisconsin solutions in decreasing lung reperfusion injury. Barr ML, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1357–8

Pyruvate prevents mucosal reperfusion injury, oxygen free–radical production, and neutrophil infiltration after rat small bowel preservation and transplantation. Cicalese L, et al. **Transplant Proc** 1996 Oct;28(5):2611

Protective effect of L–arginine on liver ischemia–reperfusion injury. Ferraresso M, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):393–4

Prophylactic administration of prostaglandin E1 in liver transplantation: results of a pilot trial. Giostra E, et al. **Transplant Proc** 1997 Aug;29(5):2381–4

Reperfusion injury. Grinyó JM. **Transplant Proc** 1997 Feb–Mar;29(1–2):59–62 (67 ref.)

Lazaroid U74006F for canine small bowel preservation. Hamada N, et al. **Transplant Proc** 1996 Oct;28(5):2607–8

Donor pretreatment with hydrophilic bile salts protects the liver from preservation and reperfusion injury in the rat. Hertl M, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):388–9

Infusion of hydrophilic bile salts protects the liver from reperfusion injury in the rat. Hertl M, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):386–7

Hemodynamic analysis of post–reperfusion syndrome and the effect of preventing this syndrome using thromboxane A2 synthetase inhibitor (OKY–046) in swine liver transplantation. Ishine N, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):378–81

Comparison of various lazaroid compounds for protection against ischemic liver injury. Ishizaki N, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1333–4

Attenuation of ischemic liver injury by a non–selective endothelin receptor antagonist. Jin MB, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1335

Effect of pretreatment with coenzyme Q10 and monoclonal antibodies to adhesion molecules on ischemic small intestine preservation. Marubayashi S, et al. **Transplant Proc** 1996 Oct;28(5):2600–1

Thromboxane A2 synthesis inhibitor OKY046 ameliorates vascular endothelial injury of pancreas graft during preservation by the two–layer UW solution/perfluorochemical method at 20 degrees C. Matsumoto S, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1359–62

Early cellular and molecular changes in ischemia/reperfusion injury: inhibition by a selectin antagonist, P–selectin glycoprotein ligand–1. Takada M, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1324–5

Human small bowel preservation injury in University of Wisconsin solution. Tesi RJ, et al. **Transplant Proc** 1996 Oct;28(5):2609–10

Efficacy of perfluorotributylamine/pluronic F–68 stem–emulsion (FC43se) against reperfusion injury in ischemic rabbit lungs. Ueno T, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1349–53

Hepatropic soluble vitamin E derivative EPC–K1 prevents warm ischemia/reperfusion injury of non–heart–beating donor liver transplantation in pigs. Yagi T, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1390–3

Apoptosis in pig endothelial cells after reperfusion and its prevention by genetic induction of human Cu, Zn–SOD cDNA. Yokoyama I, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1364

Effect of energy substrates on the preservation outcome of hepatocytes and sinusoidal endothelial cells in an experimental hypoxia/reoxygenation model. Zeilinger K, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):403–5

Effect of endogenous adenosine augmentation on ischemia and reperfusion injury to the liver. Zhang S, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1336–7

Inhaled nitric oxide attenuates reperfusion injury in non–heartbeating–donor lung transplantation. Paris–Sud University Lung Transplantation Group. Bacha EA, et al. **Transplantation** 1997 May 27;63(10):1380–6

Protection by Carolina rinse solution, acidotic pH, and glycine against lethal reperfusion injury to sinusoidal endothelial cells of rat livers stored for transplantation. Currin RT, et al. **Transplantation** 1996 Dec 15; 62(11):1549–58

Renoprotective effects of the 21–aminosteroid U74389G in ischemia–reperfusion injury and cold storage preservation. Garvin PJ, et al. **Transplantation** 1997 Jan 27;63(2):194–201

EUK–134, a synthetic superoxide dismutase and catalase mimetic, protects rat kidneys from ischemia–reperfusion–induced damage. Gianello P, et al. **Transplantation** 1996 Dec 15;62(11):1664–6

Comparison of various lazaroid compounds for protection against ischemic liver injury. Ishizaki N, et al. **Transplantation** 1997 Jan 27;63(2):202–8

Serotonin as a useful parameter for cold and warm ischemic injury in small bowel transplantation. Kaihara S, et al. **Transplantation** 1997 Aug 15;64(3):405–10

Rationale for the use of antioxidant vitamins in clinical organ transplantation. Lehr HA, et al. **Transplantation** 1996 Nov 15;62(9):1197–9 (47 ref.)

Protective effect of superoxide dismutase and polyethylene glycol–linked superoxide dismutase against renal warm ischemia/reperfusion injury. Morpurgo E, et al. **Transplantation** 1996 Nov 15;62(9):1221–3

Interleukin 1 receptor blockade reduces tumor necrosis factor production, tissue injury, and mortality after hepatic ischemia–reperfusion in the rat. Shito M, et al. **Transplantation** 1997 Jan 15;63(1):143–8

Protective effect of UW solution on postischemic injury in rat liver: suppression of reduction in hepatic antioxidants during reperfusion. Sumimoto K, et al. **Transplantation** 1996 Nov 27;62(10):1391–8

Attenuation of ischemic liver injury by augmentation of endogenous adenosine. Todo S, et al. **Transplantation** 1997 Jan 27;63(2):217–23

Protective effects of antithrombin III supplementation on warm ischemia and reperfusion injury in rat liver. Okano K, et al. **World J Surg** 1996 Oct;20(8):1069–75

[The protective effects of dichloroacetate on cerebral ischemia after reperfusion of fed rats] Peng J, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jul;76(7):509–11 (Eng. Abstr.) **(Chi)**

[Deferoxamine–conjugated hydroxyethyl starch reduces reperfusion injury to the liver following hemorrhagic shock] Bauer C, et al. **Anaesthesist** 1997 Jan;46(1):53–6 (Eng. Abstr.) **(Ger)**

[Controlled reperfusion of the extremities for preventing local and systemic damage after prolonged ischemia. An experimental study with the swine model] Mitrev Z, et al. **Zentralbl Chir** 1996;121(9):774–87 (Eng. Abstr.) **(Ger)**

[The effect of nitric oxide synthase inhibitor on reperfusion injury to the brain under hypothermic circulatory arrest] Segawa D, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May;45(5):687–93 (Eng. Abstr.) **(Jpn)**

[Effectiveness of continuous pulmonary perfusion during total cardiopulmonary bypass to prevent lung reperfusion injury] Suzuki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jan;45(1):31–6 (Eng. Abstr.) **(Jpn)**

[Protective effect of L–histidine (singlet oxygen scavenger) on transient forebrain ischemia in the rat] Kawamoto T, et al. **No To Shinkei** 1997 Jul;49(7):612–8 (Eng. Abstr.) **(Jpn)**

SURGERY

Hemodynamic effects of isovolemic hemodilution during descending thoracic aortic cross clamping and lower torso reperfusion. Poli de Figueiredo LF, et al. **Surgery** 1997 Jul;122(1):32–8

THERAPY

Anti–adhesion therapy. Cornejo CJ, et al. **Adv Pharmacol** 1997;39:99–142 (200 ref.)

Intraischemic hypothermia attenuates neutrophil infiltration in the rat neocortex after focal ischemia–reperfusion injury. Toyoda T, et al. **Neurosurgery** 1996 Dec;39(6):1200–5

Therapeutic approaches for clinical ischemia and reperfusion injury. Cryer HG. **Shock** 1997 Jul;8(1):26–32 (23 ref.)

Anti–selectin therapy modifies skeletal muscle ischemia and reperfusion injury. Weiser MR, et al. **Shock** 1996 Jun; 5(6):402–7

Therapeutic modulation of free radical–mediated reperfusion injury of the liver and its surgical implications. Marubayashi S, et al. **Surg Today** 1996;26(8):573–80 (97 ref.)

VETERINARY

The effects of allopurinol on the ultrastructure of ischaemic and reperfused large intestine of sheep. Ahmadinejad M, et al. **Aust Vet J** 1996 Aug;74(2):135–9

The effects of ischemia and reperfusion on mucosal respiratory function, adenosine triphosphate, electrolyte, and water content in the ascending colon of ponies. McAnulty JF, et al. **Vet Surg** 1997 May–Jun;26(3):172–81

REPERFUSION INJURY, MYOCARDIAL see **MYOCARDIAL REPERFUSION INJURY**

REPERFUSION, MYOCARDIAL see **MYOCARDIAL REPERFUSION**

REPETITION STRAIN INJURY see **CUMULATIVE TRAUMA DISORDERS**

REPETITIVE REGION see **REPETITIVE SEQUENCES, NUCLEIC ACID**

REPETITIVE SEQUENCES, NUCLEIC ACID

Interactions of rat repetitive sequence MspI8 with nuclear matrix proteins during spermatogenesis. Rogoliński J, et al. **Acta Biochim Pol** 1996;43(2):319–24

Genetic variability and function of the long terminal repeat from syncytium–inducing and non–syncytium–inducing human immunodeficiency virus type 1. Simm M, et al. **AIDS Res Hum Retroviruses** 1996 Jun 10;12(9):801–9

Phylogenetic characterization of simian T lymphotropic virus type I (STLV–I) from the Ethiopian sacred baboon (Papio hamadryas). Voevodin A, et al. **AIDS Res Hum Retroviruses** 1996 Feb 10;12(3):255–8

Different mechanisms underlie DNA instability in Huntington disease and colorectal cancer. Goellner GM, et al. **Am J Hum Genet** 1997 Apr;60(4):879–90

Functional and structural features of a tandem duplication of the human mtDNA promoter region. Hao H, et al. **Am J Hum Genet** 1997 Jun;60(6):1363–72

Identification of mutations in the duplicated region of the polycystic kidney disease 1 gene (PKD1) by a novel approach. Peral B, et al. **Am J Hum Genet** 1997 Jun; 60(6):1399–410

Mild phenotype associated with inv dup 8 (q21.2–q22.3) of maternal origin. Tupler R, et al. **Am J Med Genet** 1996 Mar 15;62(2):160–3

Inability to induce fragile sites at CTG repeats in congenital myotonic dystrophy. Wenger SL, et al. **Am J Med Genet** 1996 Dec 2;66(1):60–3

Tandem sequence repeats in urea transporters: identification of an urea transporter signature sequence [letter] Rousselet G, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F554–5

Species–specific sequence in the repeat 3 region of the gene encoding a putative Loa loa allergen: a diagnostic tool for occult loiasis. Toure FS, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):57–60

Typically unstable long tandem repeats in Escherichia coli show increased stability in strain PMC107 and are stable when incorporated into the Drosophila melanogaster genome. Raman V, et al. **Anal Biochem** 1997 Feb 15; 245(2):242–5

Characterization of CR1 repeat random PCR markers for mapping the chicken genome. Okimoto R, et al. **Anim Genet** 1997 Apr;28(2):139–45

Mapping of 22 YACs on human chromosomes by fish using yeast DNA Alu–PCR products for competition. Goguel AF, et al. **Ann Genet** 1996;39(2):64–8

Sequence analysis of the CAG triplet repeats region in the Huntington disease gene (IT15) in several mammalian species. Pêcheux C, et al. **Ann Genet** 1996;39(2):81–6

Analysis of allelic structures at the D7S21 (MS31A) locus in the Japanese, using minisatellite variant repeat mapping by PCR (MVR–PCR). Huang XL, et al. **Ann Hum Genet** 1996 Jul;60 (Pt 4):271–9

Association of myopathy with large–scale mitochondrial DNA duplications and deletions: which is pathogenic? Manfredi G, et al. **Ann Neurol** 1997 Aug;42(2):180–8

A 964 bp repetitive DNA in Entamoeba histolytica is associated with linear "chromosomal" DNAs of variable sizes. Huang M, et al. **Arch Med Res** 1997;28 Spec No:1–4

A proposal for a molecular biologic system for classifying isolates of Entamoeba histolytica and Entamoeba dispar. Samuelson J, et al. **Arch Med Res** 1997;28 Spec No:274–5

Investigation of the transfection capability of cloned tandemly–repeated chicken anaemia virus DNA fragments. Todd D, et al. **Arch Virol** 1996;141(8):1523–34

Predictive diagnosis of multiple endocrine neoplasia (MEN 1) in four Australian kindreds. Grimmond SM, et al. **Aust N Z J Med** 1996 Feb;26(1):27–32

Molecular cloning of human MUC3 cDNA reveals a novel 59 amino acid tandem repeat region. Van Klinken BJ, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):143–8

Identification and interpretation of latent periodicity within DNA sequences. Phoenix DA, et al. **Biochem Soc Trans** 1996 Aug;24(3):422S

Investigation of the structural basis for thermodynamic stabilities of tandem GU wobble pairs: NMR structures of (rGGAGUUCC)2 and (rGGAUGUCC)2. McDowell JA, et al. **Biochemistry** 1997 Jul 1;36(26):8030–8

Interactions of structural C and regulatory N domains of troponin C with repeated sequence motifs in troponin I. Pearlstone JR, et al. **Biochemistry** 1997 Jun 17; 36(24):7601–6

Epigenetic modification of transgenes under the control of the mouse mammary tumor virus LTR: tissue–dependent influence on transcription of the transgenes. Betzl G, et al. **Biol Chem** 1996 Nov;377(11):711–9

Isolation and characterization of a cDNA encoding a human TFIID subunit containing a variety of putative structural motifs including direct repeats. Kuzuhara T, et al. **Biol Pharm Bull** 1996 Jan;19(1):122–6

A dual–function palindromic sequence regulates testis–specific transcription of the mouse lactate dehydrogenase c gene in vitro. Zhou W, et al. **Biol Reprod** 1996 Jan;54(1):84–90

Authentication of animal cell cultures by direct visualization of repetitive DNA, aldolase gene PCR and isoenzyme analysis. Stacey GN, et al. **Biologicals** 1997 Mar;25(1):75–85

DNA–binding studies of XSPTSPSZ, derivatives of the intercalating heptad repeat of RNA polymerase II. Harding MM, et al. **Biopolymers** 1997 Oct 5;42(4):387–98

In vitro synthesis and cloning of long CAG repeats. Ordway JM, et al. **Biotechniques** 1996 Oct;21(4):609–10, 612

Directional PCR cloning of multiple repeat sequences. Potter PM. **Biotechniques** 1996 Aug;21(2):198, 200

Rapid bright–field detection of oligonucleotide primed in situ (PRINS)–labeled DNA in chromosome preparations and frozen tissue sections. Speel EJ, et al. **Biotechniques** 1996 Feb;20(2):226–34

Rapid generation of DNA probes by amplification of tandem repeats. Trendelenburg G, et al. **Biotechniques** 1997 Aug; 23(2):242–4, 246

Agarose–based system for separation of short tandem repeat loci. White HW, et al. **Biotechniques** 1997 May;22(5):976–80

Strategy using pooled DNA to identify 56 short tandem repeat polymorphisms for the Bolivian squirrel monkey. Zhong F, et al. **Biotechniques** 1996 Oct;21(4):580, 582, 584, 586

High–level globin gene expression mediated by a recombinant adeno–associated virus genome that contains the 3' gamma globin gene regulatory element and integrates as tandem copies in erythroid cells. Hargrove PW, et al. **Blood** 1997 Mar 15;89(6):2167–75

Two novel alleles of the ATCT variable number tandem repeat locus VWF.VNTR I in intron 40 of the von Willebrand factor gene. Haddad AP, et al. **Br J Haematol** 1997 Feb;96(2):298–300

DNA allelic alterations within VNTR loci of scleroderma families. Artlett CM, et al. **Br J Rheumatol** 1996 Dec; 35(12):1216–22

Identification and sizing of the GAA trinucleotide repeat expansion of Friedreich's ataxia in 56 patients. Clinical and genetic correlates. Lamont PJ, et al. **Brain** 1997 Apr;120 (Pt 4):673–80

Two different pathological conditions of photoparoxysmal responses in hereditary dentatorubral–pallidoluysian atrophy. Takahashi Y, et al. **Brain Dev** 1997 Jun;19(4):285–9

Prion disease associated with a novel nine octapeptide repeat insertion in the PRNP gene. Krasemann S, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):173–6

Cloning and expression of a novel gene for a protein with leucine–rich repeats in the developing mouse nervous system. Taniguchi H, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):45–52

Phylogenetic relationships among Indriidae (Primates, Strepsirhini) inferred from highly repeated DNA band patterns. Razafindraibe H, et al. **C R Acad Sci III** 1997 Jun;320(6):469–75

Telomeric repeat fragment lengths are not correlated to histological grading in 85 breast cancers. Rogalla P, et al. **Cancer Lett** 1996 Sep 10;106(2):155–61

A 1–kb Alu–mediated germ–line deletion removing BRCA1 exon 17. Puget N, et al. **Cancer Res** 1997 Mar 1;57(5):828–31

Three–dimensional structure of the armadillo repeat region of beta–catenin. Huber AH, et al. **Cell** 1997 Sep 5; 90(5):871–82

A putative leucine–rich repeat receptor kinase involved in brassinosteroid signal transduction [see comments] Li J, et al. **Cell** 1997 Sep 5;90(5):929–38. Comment in: Cell 1997 Sep 5;90(5):825–7.

TLP1: a gene encoding a protein component of mammalian telomerase is a novel member of WD repeats family. Nakayama J, et al. **Cell** 1997 Mar 21;88(6):875–84

Focal altered compartmentation of repetitive B2 (Alu–like) sequences in rat liver following hepatocarcinogen exposure. Clawson GA, et al. **Cell Growth Differ** 1996 May; 7(5):635–46

Characterization of human proteins that bind the repeated sequences in the squirrel monkey retrovirus enhancer. Ikeda S, et al. **Cell Mol Biol (Noisy–le–grand)** 1995 Dec; 41(8):1113–8

Identification of Porto–1, a new repeated sequence that localises close to the centromere of chromosome 2 of Drosophila melanogaster. Coelho PA, et al. **Chromosoma** 1996 Oct;105(4):211–22

The molecular organisation of a B chromosome tandem repeat sequence from Brachycome dichromosomatica. Franks TK, et al. **Chromosoma** 1996 Oct;105(4):223–30

Isolation of DNA from the centromere of human chromosome 7 by microdissection. Behrens F, et al. **Chromosome Res** 1997 Jun;5(4):215–20

Chromosomal localization of a highly repeated EcoRI DNA fragment in Megoura viciae (Homoptera, Aphididae) by nick translation and fluorescence in situ hybridization. Bizzaro D, et al. **Chromosome Res** 1996 Aug;4(5):392–6

Multiple repetitive DNA sequences in the paracentromeric regions of Arabidopsis thaliana L. Brandes A, et al. **Chromosome Res** 1997 Jun;5(4):238–46

Molecular cytogenetics of Alstroemeria: identification of parental genomes in interspecific hybrids and characterization of repetitive DNA families in constitutive heterochromatin. Kuipers AG, et al. **Chromosome Res** 1997 Feb;5(1):31–9

Evidence for a sequence–directed conformation periodicity in the genomic highly repetitive DNA detectable with single–strand–specific chemical probe potassium permanganate. Matyášek R, et al. **Chromosome Res** 1996 Aug;4(5):340–9

Differences in the chromosomal distribution of telomeric (TTAGGG)n sequences in two species of the vespertilionid bats. Ono T, et al. **Chromosome Res** 1997 May;5(3):203–5

Transcription of lampbrush chromosomes of a centromerically localized highly repeated DNA in pigeon (Columba) relates to sequence arrangement. Solovei IV, et al. **Chromosome Res** 1996 Dec;4(8):588–603

Dynamic mutations pose unique challenges for the molecular diagnostics laboratory [comment] McGlennen RC. **Clin Chem** 1996 Oct;42(10):1582–8 (16 ref.). Comment on: Clin Chem 1996 Oct;42(10):1601–3.

Nonisotopic method for precise detection of (CAG)n repeats [letter; comment] Melegh B, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1096–7. Comment on: Clin Chem 1996 Oct;42(10):1601–3.

Nonisotopic method for accurate detection of (CAG)n repeats causing Huntington disease [see comments] Muglia M, et al. **Clin Chem** 1996 Oct;42(10):1601–3. Comment in: Clin Chem 1996 Oct;42(10):1582–8. Comment in: Clin Chem 1997 Jun;43(6 Pt 1):1096–7. Comment in: Clin Chem 1997 Aug;43(8 Pt 1):1463.

Genomic distribution of 5' TTCCA 3' repeat motif and its diagnostic potential in human Y–chromosome–related anomalies. Gauri, et al. **Clin Genet** 1996 Nov;50(5):358–65

Short sequence repeats in intron 2 of the insulin receptor gene among black and white South Africans. Panz VR, et al. **Clin Genet** 1996 Dec;50(6):529–30

Latent sequence periodicity of some oncogenes and DNA–binding protein genes. Korotkov EV, et al. **Comput Appl Biosci** 1997 Feb;13(1):37–44

Detection of significant patterns by compression algorithms: the case of approximate tandem repeats in DNA sequences. Rivals E, et al. **Comput Appl Biosci** 1997 Apr;13(2):131–6

A portion of IS100 regulates gene expression in Yersinia pseudotuberculosis and shares essentially identical sequence homology with a repetitive sequence isolated from Yersinia pestis. Torosian SD, et al. **Contrib Microbiol Immunol** 1995; 13:314–7

Transposable elements: how non–LTR retrotransposons do it. Finnegan DJ. **Curr Biol** 1997 Apr 1;7(4):R245–8 (16 ref.)

Zp3–cre, a transgenic mouse line for the activation or inactivation of loxP–flanked target genes specifically in the female germ line. Lewandoski M, et al. **Curr Biol** 1997 Feb 1;7(2):148–51

Expansion of the IR in the chloroplast genomes of buckwheat species is due to incorporation of an SSC sequence that could be mediated by an inversion. Aii J, et al. **Curr Genet** 1997 Mar;31(3):276–9

A novel repeat sequence (CKRS–1) containing a tandemly repeated sub–element (kre) accounts for differences between Candida krusei strains fingerprinted with the probe CkF1,2. Carlotti A, et al. **Curr Genet** 1997 Mar;31(3):255–63

The highly rearranged chloroplast genome of Trachelium caeruleum (Campanulaceae): multiple inversions, inverted repeat expansion and contraction, transposition, insertions/deletions, and several repeat families. Cosner ME, et al. **Curr Genet** 1997 May;31(5):419–29

Organisation and molecular analysis of repeated DNA sequences in the rice blast fungus Magnaporthe grisea. Kachroo P, et al. **Curr Genet** 1997 Apr;31(4):361–9

Short inverted repeats function as hotspots of intermolecular recombination giving rise to oligomers of deleted plastid DNAs (ptDNAs). Kawata M, et al. **Curr Genet** 1997 Feb; 31(2):179–84

The origin of interspersed repeats in the human genome. Smit AF. **Curr Opin Genet Dev** 1996 Dec;6(6):743–8 (54 ref.)

The rat 5S rRNA bona fide gene repeat maps to chromosome 19q12—>qter and the pseudogene repeat maps to 12q12. Frederiksen S, et al. **Cytogenet Cell Genet** 1997; 76(1–2):101–6

Undermethylation of Alu sequences in ICF syndrome: molecular and in situ analysis. Miniou P, et al. **Cytogenet Cell Genet** 1997;77(3–4):308–13

Analysis of ribosomal and alphoid repetitive DNA by fiber–FISH. Shiels C, et al. **Cytogenet Cell Genet** 1997; 76(1–2):20–2

Horseradish peroxidase–labeled oligonucleotides and fluorescent tyramides for rapid detection of chromosome–specific repeat sequences. van Gijlswijk RP, et al. **Cytogenet Cell Genet** 1996;75(4):258–62

Automatic correction of the interfering effect of unsuppressed interspersed repetitive sequences in comparative genomic hybridization analysis. Kirchhoff M, et al. **Cytometry** 1997 Jun 1;28(2):130–4

New gene, nel, encoding a Mr 91 K protein with EGF–like repeats is strongly expressed in neural tissues of early stage chick embryos. Matsuhashi S, et al. **Dev Dyn** 1996 Oct; 207(2):233–4

A fluorescent method for detection of telomerase activity. Aldous WK, et al. **Diagn Mol Pathol** 1997 Apr;6(2):102–10

Length and sequence variation in D7S22 (g3) alleles studied by high resolution length measurements and nucleotide sequencing. Andreassen R, et al. **Electrophoresis** 1997 May; 18(5):675–81

Evaluation of the ALF DNA sequencer for high–speed sizing of short tandem repeat alleles. Decorte R, et al. **Electrophoresis** 1996 Oct;17(10):1542–9

Detection of conformation bias between the complementary strands of deoxynucleotide repeat (TG/AC)n. Dobi A, et al. **Electrophoresis** 1997 Jan;18(1):12–6

Validation of the Applied Biosystems Prism 377 automated sequencer for the forensic short tandem repeat analysis. Frazier RR, et al. **Electrophoresis** 1996 Oct;17(10):1550–2

Northern blot analysis of simple repetitive sequence transcription in plants. Gortner G, et al. **Electrophoresis** 1996 Jul;17(7):1183–9

Validation of highly discriminating multiplex short tandem repeat amplification systems for individual identification. Kimpton CP, et al. **Electrophoresis** 1996 Aug;17(8):1283–93

Five cases of forensic short tandem repeat DNA typing. Schmitt C, et al. **Electrophoresis** 1997 May;18(5):690–4

Data–adaptive algorithms for calling alleles in repeat polymorphisms. Stoughton R, et al. **Electrophoresis** 1997 Jan;18(1):1–5

High–resolution capillary array electrophoretic sizing of multiplexed short tandem repeat loci using energy–transfer fluorescent primers. Wang Y, et al. **Electrophoresis** 1996 Sep;17(9):1485–90

Variable telomeric repeat synthesis in Paramecium tetraurelia is consistent with misincorporation by telomerase. McCormick–Graham M, et al. **EMBO J** 1997 Jun 2; 16(11):3233–42

Recombination between DNA repeats in yeast hpr1delta cells is linked to transcription elongation. Prado F, et al. **EMBO J** 1997 May 15;16(10):2826–35

Myrosinase–binding proteins are derived from a large wound–inducible and repetitive transcript. Taipalensuu J, et al. **Eur J Biochem** 1997 Feb 1;243(3):605–11

The DNA structures at the ends of eukaryotic chromosomes. Wellinger RJ, et al. **Eur J Cancer** 1997 Apr;33(5):735–49 (244 ref.)

Occurrence of DNA sequence differences in C–heterochromatin of Eulemur coronatus and Eulemur macaco, as revealed by fluorescence resonance energy transfer. Ronchetti E, et al. **Eur J Histochem** 1997; 41(2):79–90

Molecular analysis of the IT15 gene in patients with apparently 'sporadic' Huntington's disease. Mandich P, et al. **Eur Neurol** 1996;36(6):348–52

Nuclear protein binding and functional activity of a variant insulin gene found in non–insulin–dependent diabetes mellitus. Yildiz N, et al. **Exp Clin Endocrinol Diabetes** 1996; 104(3):218–27

Echinococcus granulosus: cloning and characterization of a tandemly repeated DNA element. Rosenzvit MC, et al. **Exp Parasitol** 1997 Sep;87(1):65–8

Role of the terminal repeat GAGC trimer, the major Rep78 binding site, in adeno–associated virus DNA replication. Bishop BM, et al. **FEBS Lett** 1996 Nov 11;397(1):97–100

Function of the repeated sequence in the 3' flanking region of the Escherichia coli rnpB gene on transcription termination and RNA processing. Kim S, et al. **FEBS Lett** 1997 May 5;407(3):353–6

The liver–specific promoter of the human insulin–like growth factor–II gene contains two negative regulatory elements. Rodenburg RJ, et al. **FEBS Lett** 1996 Sep 23;394(1):25–30

Highly repetitive sequences and characteristics of genomic DNA in unicellular cyanobacterial strains. Asayama M, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):175–81

Genotyping human and bovine isolates of Cryptosporidium parvum by polymerase chain reaction–restriction fragment length polymorphism analysis of a repetitive DNA sequence. Bonnin A, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):207–11

Further validation of a multiplex STR system for use in

routine forensic identity testing. Andersen JF, et al. **Forensic Sci Int** 1996 Mar 5;78(1):47–64

The utility of 'substrate controls' in relation to 'contamination'. Gill P. **Forensic Sci Int** 1997 Feb 28; 85(2):105–11

Report of the European DNA profiling group (EDNAP): an investigation of the complex STR loci D21S11 and HUMFIBRA (FGA). Gill P, et al. **Forensic Sci Int** 1997 Apr 18;86(1–2):25–33

The screening of 13 short tandem repeat loci in the Chinese population. Lee JC, et al. **Forensic Sci Int** 1997 Jun 6; 87(2):137–44

Genotyping of five short tandem repeat loci via triplex and duplex PCR. Rostedt I, et al. **Forensic Sci Int** 1996 Oct 25;82(3):217–26

Multiplex amplification of STR loci with gender alleles using infrared fluorescence detection. Steffens DL, et al. **Forensic Sci Int** 1997 Mar 14;85(3):225–32

Mapping of repetitive and non-repetitive DNA probes to chromosomes of the microsporidian Encephalitozoon cuniculi. Biderre C, et al. **Gene** 1997 May 20;191(1):39–45

Recent polymorphic insertion of an Alu repeat in the baboon lipoprotein lipase (LPL) gene. Cole SA, et al. **Gene** 1997 Jul 9;193(2):197–201

Characterization of the rat carbonic anhydrase II gene structure: sequence analysis of the 5' flanking region and 3' UTR. McGowan MH, et al. **Gene** 1997 Feb 28; 186(2):181–8

Insertion of a short Alu sequence into the hMSH2 gene following a double cross over next to sequences with chi homology. Marshall B, et al. **Gene** 1996 Sep 26;174(1):175–9

Transposon-like sequences at the TOX2 locus of the plant-pathogenic fungus Cochliobolus carbonum. Panaccione DG, et al. **Gene** 1996 Oct 17;176(1–2):103–9

A novel member of an ancient superfamily: sponge (Geodia cydonium, Porifera) putative protein that features scavenger receptor cysteine-rich repeats. Pancer Z, et al. **Gene** 1997 Jul 9;193(2):211–8

The involucrin gene of the tree shrew: recent repeat additions and the relocation of cysteine codons. Phillips M, et al. **Gene** 1997 Mar 10;187(1):29–34

Study of Alu sequences at the hypoxanthine phosphoribosyltransferase (hprt) encoding region of man. Renwick PJ, et al. **Gene** 1997 Jan 15;184(2):155–62

Cloning and characterization of a repetitive DNA detected by HindIII in the genome of Raja montagui (Batoidea, Chondrichthyes). Rocco L, et al. **Gene** 1996 Oct 17; 176(1–2):185–9

Specific binding sites for a pol III transcriptional repressor and pol II transcription factor YY1 within the internucleosomal spacer region in primate Alu repetitive elements. Humphrey GW, et al. **Gene Expr** 1996; 6(3):151–68

A novel transcriptional initiator activity of the GABP factor binding ets sequence repeat from the murine cytochrome c oxidase Vb gene. Sucharov C, et al. **Gene Expr** 1995; 5(2):93–111

Analysis of the cell cycle in the budding yeast Candida albicans by positioning of chromosomes by fluorescence in situ hybridization (FISH) with repetitive sequences. Chibana H, et al. **Genes Cells** 1996 Aug;1(8):727–40

Specific nicking at the 3' ends of the terminal inverted repeat sequences in transposon Tn3 by transposase and an E. coli protein ACP. Maekawa T, et al. **Genes Cells** 1996 Nov; 1(11):1017–30

Alu-polymerase chain reaction genomic fingerprinting technique identifies multiple genetic loci associated with pancreatic tumourigenesis. McKie AB, et al. **Genes Chromosomes Cancer** 1997 Jan;18(1):30–41

Polyploid-specific repetitive DNA sequences from triploid ginbuna (Japanese silver crucian carp, Carassius auratus langsdorfi). Murakami M, et al. **Genes Genet Syst** 1997 Apr; 72(2):107–13

Identification and characterization of two tandem repeat sequences (TrsB and TrsC) and a retrotransposon (RIRE1) as genome-general sequences in rice. Nakajima R, et al. **Genes Genet Syst** 1996 Dec;71(6):373–82

The use of cloned repetitive sequences as hybridization competitors to detect single copy sequences. Chung IB, et al. **Genet Anal** 1997 Mar;14(1):13–5

Application of repetitive sequence-based PCR (inter-LINE PCR) for the analysis of genomic rearrangements and for the genome characterization on different taxonomic levels. Smida J, et al. **Genet Anal** 1996 Oct;13(4):95–8

In situ detection of tandem DNA repeat length. Yaar R, et al. **Genet Anal** 1996 Nov;13(5):113–8

Pegasus, a small terminal inverted repeat transposable element found in the white gene of Anopheles gambiae. Besansky NJ, et al. **Genetica** 1996 Oct;98(2):119–29

Enrichment of middle repetitive element Bm-1 transcripts in translationally active RNA fractions of the silkmoth, Bombyx mori. Gao GP, et al. **Genetica** 1996 Mar; 97(2):173–82

Identification of new medium reiteration frequency repeats in the genomes of Primates, Rodentia and Lagomorpha. Jurka J, et al. **Genetica** 1996–97;98(3):235–47

Evolution of B2 repeats: the muroid explosion. Kass DH, et al. **Genetica** 1997;99(1):1–13

Evolution of mouse T-box genes by tandem duplication and cluster dispersion. Agulnik SI, et al. **Genetics** 1996 Sep; 144(1):249–54

A sex-influenced modifier in Drosophila that affects a broad spectrum of target loci including the histone repeats. Bhadra U, et al. **Genetics** 1997 Jul;146(3):903–17

Pathways for homologous recombination between chromosomal direct repeats in Salmonella typhimurium. Galitski T, et al. **Genetics** 1997 Jul;146(3):751–67

A newly isolated family of short interspersed repetitive elements (SINEs) in coregonid fishes (whitefish) with sequences that are almost identical to those of the SmaI family of repeats: possible evidence for the horizontal transfer of SINEs. Hamada M, et al. **Genetics** 1997 May; 146(1):355–67

Studies of the inheritance of human ribosomal DNA variants detected in two-dimensional separations of genomic restriction fragments. Kuick R, et al. **Genetics** 1996 Sep; 144(1):307–16

Increased length of long terminal repeats inhibits Ty1 transposition and leads to the formation of tandem multimers. Lauermann V, et al. **Genetics** 1997 Apr; 145(4):911–22

Details of retropositional genome dynamics that provide a rationale for a generic division: the distinct branching of all the pacific salmon and trout (Oncorhynchus) from the Atlantic salmon and trout (Salmo). Murata S, et al. **Genetics** 1996 Mar;142(3):915–26

Hermes, a functional non-Drosophilid insect gene vector from Musca domestica. O'Brochta DA, et al. **Genetics** 1996 Mar;142(3):907–14

Rearrangements involving repeated sequences within a P element preferentially occur between units close to the transposon extremities. Pâques F, et al. **Genetics** 1996 Feb; 142(2):459–70

Two classes of Tn10 transposase mutants that suppress mutations in the Tn10 terminal inverted repeat. Sakai J, et al. **Genetics** 1996 Nov;144(3):861–70

The salmon SmaI family of short interspersed repetitive elements (SINEs): interspecific and intraspecific variation of the insertion of SINEs in the genomes of chum and pink salmon. Takasaki N, et al. **Genetics** 1997 May; 146(1):369–80

The prevention of repeat-associated deletions in Saccharomyces cerevisiae by mismatch repair depends on size and origin of deletions. Tran HT, et al. **Genetics** 1996 Aug;143(4):1579–87

Evolution of repeated sequence arrays in the D-loop region of bat mitochondrial DNA. Wilkinson GS, et al. **Genetics** 1997 Jul;146(3):1035–48

A NOR-associated repetitive element present in the genome of two Salmo species (Salmo salar and Salmo trutta). Abuín M, et al. **Genome** 1996 Aug;39(4):671–9

Distribution of highly repeated DNA sequences in species of the genus Secale. Cuadrado A, et al. **Genome** 1997 Jun; 40(3):309–17

Genome analysis of South American Elymus (Triticeae) and Leymus (Triticeae) species based on variation in repeated nucleotide sequences. Dubcovsky J, et al. **Genome** 1997 Aug;40(4):505–20

Survey of microsatellite DNA in pine. Echt CS, et al. **Genome** 1997 Feb;40(1):9–17

A new P element subfamily from Drosophila tristis, D. ambigua, and D. obscura. Hagemann S, et al. **Genome** 1996 Oct;39(5):978–85

Simple sequence repeats in watermelon (Citrullus lanatus (Thunb.) Matsum. & Nakai). Jarret RL, et al. **Genome** 1997 Aug;40(4):433–41

Structure and organization of the P element related sequences in Drosophila madeirensis. Paricio N, et al. **Genome** 1996 Oct;39(5):823–9

Chloroplast DNA variability in wild and cultivated rice (Oryza spp.) revealed by polymorphic chloroplast simple sequence repeats. Provan J, et al. **Genome** 1997 Feb; 40(1):104–10

The molecular structure, chromosomal organization, and interspecies distribution of a family of tandemly repeated DNA sequences of Antirrhinum majus L. Schmidt T, et al. **Genome** 1996 Apr;39(2):243–8

The organization of the gamma-glutamyl transferase genes and other low copy repeats in human chromosome 22q11. Collins JE, et al. **Genome Res** 1997 May;7(5):522–31

A transposon-based strategy for sequencing repetitive DNA in eukaryotic genomes. Devine SE, et al. **Genome Res** 1997 May;7(5):551–63

Sensitivity, reproducibility, and accuracy in short tandem repeat genotyping using capillary array electrophoresis. Mansfield ES, et al. **Genome Res** 1996 Sep;6(9):893–903

Structure of the human alpha 2 subunit gene of the glycine receptor--use of vectorette and Alu-exon PCR [letter] Monani U, et al. **Genome Res** 1996 Dec;6(12):1200–6

Human repeat-mediated integration of selectable markers into somatic cell hybrids. Watson JE, et al. **Genome Res** 1995 Dec;5(5):444–52

Characterization of Alu repeats that are associated with trinucleotide and tetranucleotide repeat microsatellites. Yandava CN, et al. **Genome Res** 1997 Jul;7(7):716–24

Overall informativity, OI, in DNA polymorphisms revealed by inter-Alu PCR: detection of genomic rearrangements. Jarnik M, et al. **Genomics** 1996 Sep 15;36(3):388–98

A novel tandem repeat sequence located on human chromosome 4p: isolation and characterization. Kogi M, et al. **Genomics** 1997 Jun 1;42(2):278–83

Delineation of 7q11.2 deletions associated with Williams-Beuren syndrome and mapping of a repetitive sequence to within and to either side of the common deletion. Robinson WP, et al. **Genomics** 1996 May 15; 34(1):17–23

Mouse submandibular gland salivary apomucin contains repeated N-glycosylation sites. Denny PC, et al. **Glycobiology** 1996 Jan;6(1):43–50

Characterization of four short tandem repeat loci (THO1, VWA31/A, CD4, and TP53) in northern Portugal. Gusmão L, et al. **Hum Biol** 1997 Feb;69(1):31–40

In vitro and in vivo liposome-mediated gene transfer leads to human MDR1 expression in mouse bone marrow progenitor cells. Aksentijevich I, et al. **Hum Gene Ther** 1996 Jun 10;7(9):1111–22

Two partial deletion mutations involving the same Alu sequence within intron 8 of the LDL receptor gene in Korean patients with familial hypercholesterolemia. Chae JJ, et al. **Hum Genet** 1997 Feb;99(2):155–63

Removal of repetitive sequences from FISH probes using PCR-assisted affinity chromatography. Craig JM, et al. **Hum Genet** 1997 Sep;100(3–4):472–6

The involvement of Alu repeats in recombination events at the alpha-globin gene cluster: characterization of two alphazero-thalassaemia deletion breakpoints. Harteveld KL, et al. **Hum Genet** 1997 Apr;99(4):528–34

Polymorphisms in the PMP-22 gene region (17p11.2-12) are crucial for simplified diagnosis of duplications/deletions. Haupt A, et al. **Hum Genet** 1997 May;99(5):688–91

Mermaid: a not-so-new family of human repetitive elements [letter; comment] Makałowski W. **Hum Genet** 1997 May; 99(5):696–8. Comment on: Hum Genet 1996 Jan;97(1):117–20.

Recurrent and unexpected segregation of the FMR1 CGG repeat in a family with fragile X syndrome. Mornet E, et al. **Hum Genet** 1996 Apr;97(4):512–5

Locations of crossover breakpoints within the CMT1A-REP repeat in Japanese patients with CMT1A and HNPP. Yamamoto M, et al. **Hum Genet** 1997 Feb;99(2):151–4

Interethnic polymorphism of EWS intron 6: genome plasticity mediated by Alu retroposition and recombination. Zucman-Rossi J, et al. **Hum Genet** 1997 Mar;99(3):357–63

Automated selection of short tandem repeat polymorphism markers for whole genome screening for segmental aneusomy. Biesecker LG, et al. **Hum Hered** 1997 Mar-Apr; 47(2):76–85

The BRC repeats are conserved in mammalian BRCA2 proteins. Bignell G, et al. **Hum Mol Genet** 1997 Jan; 6(1):53–8

Mosaic methylation of the repeat unit of the human ribosomal RNA genes. Brock GJ, et al. **Hum Mol Genet** 1997 Mar; 6(3):451–6

Interchromosomal duplications of the adrenoleukodystrophy locus: a phenomenon of pericentromeric plasticity. Eichler EE, et al. **Hum Mol Genet** 1997 Jul;6(7):991–1002

Chromosomal stabilisation by a subtelomeric rearrangement involving two closely related Alu elements. Flint J, et al. **Hum Mol Genet** 1996 Aug;5(8):1163–9

Primate origin of the CMT1A-REP repeat and analysis of a putative transposon-associated recombinational hotspot. Kiyosawa H, et al. **Hum Mol Genet** 1996 Jun;5(6):745–53

Reduced penetrance of the Huntington's disease mutation. McNeil SM, et al. **Hum Mol Genet** 1997 May;6(5):775–9

A unique origin and multistep process for the generation of expanded DRPLA triplet repeats. Yanagisawa H, et al. **Hum Mol Genet** 1996 Mar;5(3):373–9

Rapid characterization of the variable length polythymidine tract in the cystic fibrosis (CFTR) gene: association of the 5T allele with selected CFTR mutations and its incidence in atypical sinopulmonary disease. Friedman KJ, et al. **Hum Mutat** 1997;10(2):108–15

Unequal homologous crossing over resulting in duplication of 36 base pairs within exon 47 of the COL4A5 gene in a family with Alport syndrome. Hämäläinen ER, et al. **Hum Mutat** 1996;8(3):265–9

Facilitated diagnosis of CMT1A duplication in chromosome 17p11.2-12: analysis with a CMT1A-REP repeat probe and photostimulated luminescence imaging. Ikegami T, et al. **Hum Mutat** 1997;9(6):563–6

Repeat offenders: simple repeat sequences and complex genetic problems. Richards RI, et al. **Hum Mutat** 1996; 8(1):1–7 (66 ref.)

The hemagglutinin gene A (hagA) of Porphyromonas gingivalis 381 contains four large, contiguous, direct repeats. Han N, et al. **Infect Immun** 1996 Oct;64(10):4000–7

Transposition of the Hermes element in embryos of the vector mosquito, Aedes aegypti. Sarkar A, et al. **Insect Biochem Mol Biol** 1997 May;27(5):359–63

Analysis of eriophyid mite rDNA internal transcribed spacer sequences reveals variable simple sequence repeats. Fenton B, et al. **Insect Mol Biol** 1997 Feb;6(1):23–32

Preferential codon usage and two types of repetitive motifs in the fibroin gene of the Chinese oak silkworm, Antheraea pernyi. Yukuhiro K, et al. **Insect Mol Biol** 1997 Feb; 6(1):89–95

Human tenascin-C: identification of a novel type III repeat in oral cancer and of novel splice variants in normal, malignant and reactive oral mucosae. Mighell AJ, et al. **Int J Cancer** 1997 Jul 17;72(2):236–40

DNA recommendations. Further report of the DNA Commission of the ISFH regarding the use of short tandem repeat systems. International Society for Forensic Haemogenetics [editorial] Bär W, et al. **Int J Legal Med** 1997;110(4):175–6

Forensic evaluation of HUMCD4: an Italian database.

Casarino L, et al. **Int J Legal Med** 1996;109(1):49–51

Analysis of the STR loci HUMF13A01, HUMFXIIIB, HUMLIPOL, HUMTH01, HUMTPOX and HUMVWFA31 in a Japanese population. Nagai A, et al. **Int J Legal Med** 1996;109(1):34–6

Spontaneous tandem sequence duplications reverse the thermal stability of carboxyl-terminal modified 3-isopropylmalate dehydrogenase. Akanuma S, et al. **J Bacteriol** 1996 Nov;178(21):6300–4

Detection of an IS2-encoded 46-kilodalton protein capable of binding terminal repeats of IS2. Hu ST, et al. **J Bacteriol** 1996 Oct;178(19):5652–9

A suppressor of mutations in the region adjacent to iterons of pSC101 ori. Ohkubo S, et al. **J Bacteriol** 1997 Mar; 179(6):2089–91

Characterization of an NF-1/CTF family member as a functional activator of the mouse mammary tumor virus long terminal repeat 5' enhancer. Kusk P, et al. **J Biol Chem** 1996 Dec 6;271(49):31269–76

Identification of direct repeat 4 as a positive regulatory element for the human TR4 orphan receptor. A modulator for the thyroid hormone target genes. Lee YF, et al. **J Biol Chem** 1997 May 2;272(18):12215–20

Novel repeat elements direct rat proenkephalin transcription during spermatogenesis. Liu F, et al. **J Biol Chem** 1997 Feb 21;272(8):5056–62

An Alu-linked repetitive sequence corresponding to 280 amino acids is expressed in a novel bovine protein, but not in its human homologue. Nobukuni T, et al. **J Biol Chem** 1997 Jan 31;272(5):2801–7

Synthesis of the mammalian telomere lagging strand in vitro. Reveal PM, et al. **J Biol Chem** 1997 May 2; 272(18):11678–81

Avian retrovirus U3 and U5 DNA inverted repeats. Role Of nonsymmetrical nucleotides in promoting full-site integration by purified virion and bacterial recombinant integrases. Vora AC, et al. **J Biol Chem** 1997 Sep 19; 272(38):23938–45

DNA secondary structures and the evolution of hypervariable tandem arrays. Weitzmann MN, et al. **J Biol Chem** 1997 Apr 4;272(14):9517–23

Phosphorylation of the carboxy-terminal repeat domain in RNA polymerase II by cyclin-dependent kinases is sufficient to inhibit transcription. Gebara MM, et al. **J Cell Biochem** 1997 Mar 1;64(3):390–402

Inverted repeats, stem-loops, and cruciforms: significance for initiation of DNA replication. Pearson CE, et al. **J Cell Biochem** 1996 Oct;63(1):1–22 (225 ref.)

PTL-1, a microtubule-associated protein with tau-like repeats from the nematode Caenorhabditis elegans. Goedert M, et al. **J Cell Sci** 1996 Nov;109 (Pt 11):2661–72

Androgen receptor CAG repeat lengths in prostate cancer: correlation with age of onset. Hardy DO, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4400–5

Characterization of Mycobacterium tuberculosis complex direct repeat sequence for use in cycling probe reaction. Beggs ML, et al. **J Clin Microbiol** 1996 Dec;34(12):2985–9

DNA fingerprinting of Candida rugosa via repetitive sequence-based PCR. Redkar RJ, et al. **J Clin Microbiol** 1996 Jul;34(7):1677–81

Sequence alignment with tandem duplication. Benson G. **J Comput Biol** 1997 Fall;4(3):351–67

The effects of fingermark enhancement light sources on subsequent PCR-STR DNA analysis of fresh bloodstains. Andersen J, et al. **J Forensic Sci** 1997 Mar;42(2):303–6

Validation studies of the CTT STR multiplex system. Budowle B, et al. **J Forensic Sci** 1997 Jul;42(4):701–7

A set of African swine fever virus tandem repeats shares similarities with SAR-like sequences. Almazán F, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):729–40

Sequence analysis and transcriptional activity of the LTR of OLV-CU1, a North American ovine lentivirus. Campbell BJ, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):2999–3004

The role of repetitive DNA sequences in the size variation of Epstein-Barr virus (EBV) nuclear antigens, and the identification of different EBV isolates using RFLP and PCR analysis. Falk K, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):779–90

Use of the bovine leukaemia virus LTR U3 promoter for expressing antisense antiviral RNAs and competitive inhibition of viral infection in cell culture. Shayakhmetov D, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1941–8

Demonstration of apoptotic cells in tissue sections by in situ hybridization using digoxigenin-labeled poly(A) oligonucleotide probes to detect thymidine-rich DNA sequences. Hilton DA, et al. **J Histochem Cytochem** 1997 Jan;45(1):13–20

A tandem GC box motif is necessary for lipopolysaccharide-induced transcription of the type II TNF receptor gene. Bethea JR, et al. **J Immunol** 1997 Jun 15;158(12):5815–23

Short tandem repeat polymorphisms in Japanese families with phenylketonuria. Kang Y, et al. **J Inherit Metab Dis** 1996; 19(3):375–6

Allele frequency and its forensic application of STR Y27 in Korean males. Lee SD, et al. **J Korean Med Sci** 1996 Oct;11(5):386–9

Extrahepatic biliary atresia in twins: zygosity determination by short tandem repeat loci. Poovorawan Y, et al. **J Med Assoc Thai** 1996 Dec;79 Suppl 1:S119–24

Direct identification by PCR of EBV types and variants in clinical samples. Falk KI, et al. **J Med Virol** 1997 Apr; 51(4):355–63

Separate binding sites on nuclear transport factor 2 (NTF2) for GDP-Ran and the phenylalanine-rich repeat regions of nucleoporins p62 and Nsp1p. Clarkson WD, et al. **J Mol Biol** 1996 Nov 8;263(4):517–24

Organization of the leading region of IncN plasmid pKM101 (R46): a regulation controlled by CUP sequence elements. Delver EP, et al. **J Mol Biol** 1997 Aug 8;271(1):13–30

A novel method to develop highly specific models for regulatory units detects a new LTR in GenBank which contains a functional promoter. Frech K, et al. **J Mol Biol** 1997 Aug 1;270(5):674–87

Leading strand specific spontaneous mutation corrects a quasipalindrome by an intermolecular strand switch mechanism. Rosche WA, et al. **J Mol Biol** 1997 Jun 6; 269(2):176–87

cDNAs derived from primary and small cytoplasmic Alu (scAlu) transcripts. Shaikh TH, et al. **J Mol Biol** 1997 Aug 15;271(2):222–34

HTLV-1 21 bp repeat sequences facilitate stable association between Tax and CREB to increase CREB binding affinity. Yin MJ, et al. **J Mol Biol** 1996 Nov 22;264(1):20–31

Tandemly repeated satellite DNA of Dolichopoda schiavazzii: a test for models on the evolution of highly repetitive DNA. Bachmann L, et al. **J Mol Evol** 1996 Aug; 43(2):135–44

Alu repeats and human evolution. Response. Batzer MA, et al. **J Mol Evol** 1997 Jul;45(1):7–8

Artiodactyl interspersed DNA repeats in cetacean genomes. Buntjer JB, et al. **J Mol Evol** 1997 Jul;45(1):66–9

Intragenomic distribution and stability of transposable elements in euchromatin and heterochromatin of Drosophila melanogaster: elements with inverted repeats Bari 1, hobo, and pogo. Di Franco C, et al. **J Mol Evol** 1997 Sep;45(3):247–52

Restriction endonuclease analysis of highly repetitive DNA as a phylogenetic tool. Grechko VV, et al. **J Mol Evol** 1997 Sep;45(3):332–6

Phylogenetic analysis of DNA length mutations in a repetitive region of the Hawaiian Drosophila yolk protein gene Yp2. Ho KF, et al. **J Mol Evol** 1996 Aug;43(2):116–24

A family of differentially amplified repetitive DNA sequences in the genus Beta reveals genetic variation in Beta vulgaris subspecies and cultivars. Kubis S, et al. **J Mol Evol** 1997 Mar;44(3):310–20

Higher-order organization of subrepeats and the evolution of cervid satellite I DNA. Lee C, et al. **J Mol Evol** 1997 Mar;44(3):327–35

Gypsy/Ty3-like elements in the genome of the terrestrial Salamander hydromantes (Amphibia, Urodela). Marracci S, et al. **J Mol Evol** 1996 Dec;43(6):584–93

A dimorphic Alu Sb-like insertion in COL3A1 is ethnic-specific. Milewicz DM, et al. **J Mol Evol** 1996 Feb; 42(2):117–23

Population genetics of Y-chromosome short tandem repeats in humans. Pérez-Lezaun A, et al. **J Mol Evol** 1997 Sep; 45(3):265–70

Sequence simplicity and evolution of the 3' untranslated region of the histone H1o gene. Ponte I, et al. **J Mol Evol** 1996 Aug;43(2):125–34

Complex evolution of tandem-repetitive DNA in the Chironomus thummi species group. Ross R, et al. **J Mol Evol** 1997 Mar;44(3):321–6

Alu repeats and human evolution. Stanley SE. **J Mol Evol** 1997 Jul;45(1):6–7

Characterization of species-specifically amplified SINEs in three salmonid species--chum salmon, pink salmon, and kokanee: the local environment of the genome may be important for the generation of a dominant source gene at a newly retroposed locus. Takasaki N, et al. **J Mol Evol** 1996 Feb;42(2):103–16

Polyglutamine domains are substrates of tissue transglutaminase: does transglutaminase play a role in expanded CAG/poly-Q neurodegenerative diseases? Cooper AJ, et al. **J Neurochem** 1997 Jul;69(1):431–4

Deletion of the S component inverted repeat sequence c' and the nonessential genes U(S)1 through U(S)5 from the herpes simplex virus type 1 genome substantially impairs productive viral infection in cell culture and pathogenesis in the rat central nervous system. Rasty S, et al. **J Neurovirol** 1997 Aug;3(4):247–64

Mutation rates in LTR of HTLV-1 in HAM/TSP patients and the carriers are similarly high to Tax/Rex-coding sequence [see comments] Saito M, et al. **J Neurovirol** 1996 Oct;2(5):330–5. Comment in: J Neurovirol 1996 Oct;2(5):297–8.

UVB irradiation-induced transcription from the long terminal repeat of intracisternal A particles and UVB-induced secretion of an extracellular factor that induces transcription of the intracisternal A particles in unirradiated cells. Faure E, et al. **J Photochem Photobiol B** 1996 Oct;36(1):61–6

Effects of melatonin on mammary gland lesions in transgenic mice overexpressing N-ras proto-oncogene. Mediavilla MD, et al. **J Pineal Res** 1997 Mar;22(2):86–94

The cellular stress response enhances human T-cell lymphotropic virus type 1 basal gene expression through the core promoter region of the long terminal repeat. Andrews JM, et al. **J Virol** 1997 Jan;71(1):741–5

Adeno-associated virus Rep78 protein and terminal repeats enhance integration of DNA sequences into the cellular genome. Balagúe C, et al. **J Virol** 1997 Apr;71(4):3299–306

Function of the human T-cell leukemia virus type 1 21-base-pair repeats in basal transcription. Barnhart MK, et al. **J Virol** 1997 Jan;71(1):337–44

Characterization of the spliced pol transcript of feline foamy virus: the splice acceptor site of the pol transcript is located in gag of foamy viruses. Bodem J, et al. **J Virol** 1996 Dec; 70(12):9024–7

Cre/loxP-mediated excision of a neomycin resistance expression unit from an integrated retroviral vector increases long terminal repeat-driven transcription in human hematopoietic cells. Fernex C, et al. **J Virol** 1997 Oct;71(10):7533–40

Roles of the auxiliary genes and AP-1 binding site in the long terminal repeat of feline immunodeficiency virus in the early stage of infection in cats. Inoshima Y, et al. **J Virol** 1996 Dec;70(12):8518–26

Mutations within DR2 independently reduce the amount of both minus- and plus-strand DNA synthesized during duck hepatitis B virus replication. Loeb DD, et al. **J Virol** 1996 Dec;70(12):8684–90

The a sequence is dispensable for isomerization of the herpes simplex virus type 1 genome. Martin DW, et al. **J Virol** 1996 Dec;70(12):8801–12

Localized sequence heterogeneity in the long terminal repeats of in vivo isolates of equine infectious anemia virus. Maury W, et al. **J Virol** 1997 Jul;71(7):4929–37

Neutralization sensitivity of cell culture-passaged simian immunodeficiency virus. Means RE, et al. **J Virol** 1997 Oct;71(10):7895–902

STAT1 pathway is involved in activation of caprine arthritis-encephalitis virus long terminal repeat in monocytes. Sepp T, et al. **J Virol** 1997 Jan;71(1):771–7

Sp1 binds to the precise locus of end processing within the terminal repeats of Epstein-Barr virus DNA. Sun R, et al. **J Virol** 1997 Aug;71(8):6136–43

Chicken YB-2, a Y-box protein, is a potent activator of Rous sarcoma virus long terminal repeat-driven transcription in avian fibroblasts. Swamynathan SK, et al. **J Virol** 1997 Apr; 71(4):2873–80

Interaction of the human T-lymphotropic virus type 1 Tax dimer with CREB and the viral 21-base-pair repeat. Tie F, et al. **J Virol** 1996 Dec;70(12):8368–74

Complete nucleotide sequence of the new simian T-lymphotropic virus, STLV-PH969 from a Hamadryas baboon, and unusual features of its long terminal repeat. Van Brüssel M, et al. **J Virol** 1997 Jul;71(7):5464–72

Adeno-associated virus type 2 DNA replication in vivo: mutation analyses of the D sequence in viral inverted terminal repeats. Wang XS, et al. **J Virol** 1997 Apr; 71(4):3077–82

Direct repeats of the herpes simplex virus a sequence promote nonconservative homologous recombination that is not dependent on XPF/ERCC4. Yao XD, et al. **J Virol** 1997 Sep;71(9):6842–9

Utilization of nonhomologous minus-strand DNA transfer to generate recombinant retroviruses. Yin PD, et al. **J Virol** 1997 Mar;71(3):2487–94

Identification of nucleotide sequences that regulate transcription of the MCF13 murine leukemia virus long terminal repeat in activated T cells. Yoshimura FK, et al. **J Virol** 1997 Mar;71(3):2572–6

A non-radioactive method for identifying enzyme-amplified products of the reticuloendotheliosis proviral env and LTR genes using psoralen-biotin labelled probes. Davidson I, et al. **J Virol Methods** 1996 May;59(1-2):113–9

Long Y-associated (GATA)n alleles were observed in a few ethnic groups in Asia. Lin SJ, et al. **Jpn J Hum Genet** 1996 Jun;41(2):243–6

Dinucleotide repeat polymorphism at the D8S1223 locus. Mitsuda N, et al. **Jpn J Hum Genet** 1996 Jun;41(2):265–6

Two dinucleotide repeat polymorphisms at the D8S1444 and D8S1445 loci. Nakura J, et al. **Jpn J Hum Genet** 1996 Jun; 41(2):261–3

Two dinucleotide repeat polymorphisms at the D8S1218 and D8S1219 loci. Ye L, et al. **Jpn J Hum Genet** 1996 Jun; 41(2):257–9

Sequence of a human E2F-4 pseudogene with shortened AGC trinucleotide repeats. Cheng CM, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jul; 13(7):448–52

Factors affecting induction of neurological disorder in mice by PVC viruses and the sequence of env-LTR region of PVC441. Kai K, et al. **Leukemia** 1997 Apr;11 Suppl 3:236–8

Internal tandem duplication of the flt3 gene found in acute myeloid leukemia. Nakao M, et al. **Leukemia** 1996 Dec; 10(12):1911–8

Regulation of gene expression directed by the long terminal repeats of feline leukemia viruses. Nishigaki K, et al. **Leukemia** 1997 Apr;11 Suppl 3:189–92

Involvement of a human endogenous retroviral sequence (THE-7) in a t(7;14)(q21;q32) chromosomal translocation associated with a B cell chronic lymphocytic leukemia. Wahbi K, et al. **Leukemia** 1997 Aug;11(8):1214–9

Differential effects of retroviral long terminal repeats on interleukin-3 gene expression and autocrine transformation. Wang XY, et al. **Leukemia** 1997 Oct;11(10):1711–25

AP-1 derived from mature monocytes and astrocytes preferentially interacts with the HTLV-I promoter central 21 bp repeat. Wessner R, et al. **Leukemia** 1997 Apr;11 Suppl 3:21–4

Sp family members preferentially interact with the promoter

proximal repeat within the HTLV-I enhancer. Wessner R, et al. **Leukemia** 1997 Apr;11 Suppl 3:10–3

Internal tandem duplication of the FLT3 gene is preferentially seen in acute myeloid leukemia and myelodysplastic syndrome among various hematological malignancies. A study on a large series of patients and cell lines. Yokota S, et al. **Leukemia** 1997 Oct;11(10):1605–9

Characterization and localization of the mProx1 gene directly upstream of the mouse alpha-globin gene cluster: identification of a polymorphic direct repeat in the 5'UTR. Kielman MF, et al. **Mamm Genome** 1996 Dec;7(12):877–80

The structure of DXF34, a human X-linked sequence family with homology to a transcribed mouse Y-linked repeat. Laval SH, et al. **Mamm Genome** 1997 Sep;8(9):689–91

Comparative mapping of novel simple sequence repeat markers in a hypertension-related region on rat chromosome 1. Nabika T, et al. **Mamm Genome** 1997 Mar; 8(3):215–7

Construction of a swine YAC library allowing an efficient recovery of unique and centromeric repeated sequences. Rogel-Gaillard C, et al. **Mamm Genome** 1997 Mar; 8(3):186–92

A novel family of repeat sequences in the mouse genome responsive to retinoic acid. Sam M, et al. **Mamm Genome** 1996 Oct;7(10):741–8

Direct repeat sequences are not required at the breakpoints of age-associated mitochondrial DNA deletions in rhesus monkeys. Lee CM, et al. **Mech Ageing Dev** 1994 Jul; 75(1):69–79

Molecular characterization of two species-specific tandemly repeated DNAs from entomopathogenic nematodes Steinernema and Heterorhabditis (Nematoda:Rhabditida). Grenier E, et al. **Mol Biochem Parasitol** 1996 Dec 2; 83(1):47–56

Repetitive sequences within the first internal transcribed spacer of ribosomal DNA in schistosomes contain a Chi-like site. Kane RA, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):265–9

A region containing repeated elements is associated with transcriptional termination of Leishmania infantum ribosomal RNA genes. Requena JM, et al. **Mol Biochem Parasitol** 1997 Jan;84(1):101–10

PF20 gene product contains WD repeats and localizes to the intermicrotubule bridges in Chlamydomonas flagella. Smith EF, et al. **Mol Biol Cell** 1997 Mar;8(3):455–67

Nonneutral evolution of tandem repeats in the mitochondrial DNA control region of lagomorphs. Casane D, et al. **Mol Biol Evol** 1997 Aug;14(8):779–89

A retrotransposon of the non-long terminal repeat class from the human blood fluke Schistosoma mansoni. Similarities to the chicken-repeat-1-like elements of vertebrates. Drew AC, et al. **Mol Biol Evol** 1997 Jun;14(6):602–10

Enrichment of chromosome specific hncDNAs by magnetic bead coupled Alu sequences. Overmyer K, et al. **Mol Biol Rep** 1995–96;22(1):53–7

A deletion polymorphism due to Alu-Alu recombination in intron 2 of the retinoblastoma gene: association with human gliomas. Rothberg PG, et al. **Mol Carcinog** 1997 Jun; 19(2):69–73

Palindrome resolution and recombination in the mammalian germ line. Akgün E, et al. **Mol Cell Biol** 1997 Sep; 17(9):5559–70

The Chinese hamster Alu-equivalent sequence: a conserved highly repetitious, interspersed deoxyribonucleic acid sequence in mammals has a structure suggestive of a transposable element. Haynes SR, et al. **Mol Cell Biol** 1981 Jul;1(7):573–83

Sequence requirements for high affinity retinoid X receptor-alpha homodimer binding. Castelein H, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):11–20

Tissue-specific regulation by vitamin D3 of a novel protein containing ankyrin-like repeats. Xu J, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):101–7

Two polymorphic repeats in the candidate region for the haemochromatosis gene. Grifa A, et al. **Mol Cell Probes** 1996 Dec;10(6):469–70

Denaturing gradient gel electrophoresis (DGGE) increases resolution and informativity of Alu-directed inter-repeat PCR. van Orsouw NJ, et al. **Mol Cell Probes** 1997 Apr; 11(2):95–101

Isolation and characterization of simple sequence repeats in the genome of the common shrew. Wyttenbach A, et al. **Mol Ecol** 1997 Aug;6(8):797–800

Use of competitive PCR to assay copy number of repetitive elements in banana. Baurens FC, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):57–64

Repeated sequences from the Arabidopsis thaliana genome function as enhancers in transgenic tobacco. Ott RW, et al. **Mol Gen Genet** 1996 Oct 16;252(5):563–71

A novel repetitive sequence associated with the centromeric regions of Arabidopsis thaliana chromosomes. Thompson H, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):247–52

Artificial circularization of the chromosome with concomitant deletion of its terminal inverted repeats enhances genetic instability and genome rearrangement in Streptomyces lividans. Volff JN, et al. **Mol Gen Genet** 1997 Feb 27;253(6):753–60

Nucleotide sequence analysis of the junctions of the terminal inverted repeats of the Streptomyces lividans linear chromosome. Volff JN, et al. **Mol Gen Genet** 1997 Feb 27;253(6):761–5

Control of P1 plasmid replication by iterons. Abeles AL, et al. **Mol Microbiol** 1995 Dec;18(5):903–12

Multiple copies of MATE elements support autonomous plasmid replication in Aspergillus nidulans. Aleksenko A, et al. **Mol Microbiol** 1996 Apr;20(2):427–34

Sequence interruptions in enterobacterial repeated elements retain their ability to encode well-folded RNA secondary structures [letter] Cromie G, et al. **Mol Microbiol** 1997 Jun; 24(6):1311–4

Tandem repeats of the tetramer 5'-CAAT-3' present in lic2A are required for phase variation but not lipopolysaccharide biosynthesis in Haemophilus influenzae. High NJ, et al. **Mol Microbiol** 1996 Apr;20(1):165–74

Repetitive sequences found in the chromosome of the myxobacterium Nannocystis exedens are similar to msDNA: a possible retrotransposition event in bacteria. Lampson BC, et al. **Mol Microbiol** 1997 Feb;23(4):813–23

Palindrome-induced deletion in enterobacterial repetitive sequences [letter] Sharp PM, et al. **Mol Microbiol** 1996 Dec;22(5):1055–6

Insertions within ERIC sequences [letter] Sharp PM. **Mol Microbiol** 1997 Jun;24(6):1314–5

Nucleotide sequence and role in DNA amplification of the direct repeats composing the amplifiable element AUD1 of Streptomyces lividans 66. Volff JN, et al. **Mol Microbiol** 1996 Sep;21(5):1037–47

Sequence analysis of the conserved protamine gene cluster shows that it contains a fourth expressed gene. Schlüter G, et al. **Mol Reprod Dev** 1996 Jan;43(1):1–6

Effects of CTG trinucleotide repeat expansion in leukocytes on quantitative muscle histopathology in myotonic dystrophy. Tohgi H, et al. **Muscle Nerve** 1997 Feb; 20(2):232–4

The recovery of a B2 insertion in the lacI gene of a rat cell line containing a lambda/LIZ shuttle vector. de Boer JG, et al. **Mutat Res** 1997 Apr 14;375(1):79–82

Damage-induced ectopic recombination in the yeast Saccharomyces cerevisiae. Kupiec M, et al. **Mutat Res** 1997 Jun 9;384(1):33–44

LINEs and Alus--the polyA connection [news; comment] Boeke JD. **Nat Genet** 1997 May;16(1):6–7. Comment on: Nat Genet 1997 May;16(1):37–43.

The relationship between chromosome structure and function at a human telomeric region. Flint J, et al. **Nat Genet** 1997 Mar;15(3):252–7

Cloning of the gene for spinocerebellar ataxia 2 reveals a locus with high sensitivity to expanded CAG/glutamine repeats [see comments] Imbert G, et al. **Nat Genet** 1996 Nov;14(3):285–91. Comment in: Nat Genet 1996 Nov;14(3):237–8.

What is expanded in progressive myoclonus epilepsy? [letter] Lalioti MD, et al. **Nat Genet** 1997 Sep;17(1):17

Many human L1 elements are capable of retrotransposition [see comments] Sassaman DM, et al. **Nat Genet** 1997 May; 16(1):37–43. Comment in: Nat Genet 1997 May;16(1):6–7.

Dodecamer repeat expansion in cystatin B gene in progressive myoclonus epilepsy [see comments] Lalioti MD, et al. **Nature** 1997 Apr 24;386(6627):847–51. Comment in: Nature 1997 Apr 24;386(6627):767–9.

Human genetics. Breaking the rule of three [news; comment] Mandel JL. **Nature** 1997 Apr 24;386(6627):767–9. Comment on: Nature 1997 Apr 24;386(6627):847–51.

Characterization of an expanded glutamine repeat androgen receptor in a neuronal cell culture system. Brooks BP, et al. **Neurobiol Dis** 1997;3(4):313–23

Homozygosity for an allele carrying intermediate CAG repeats in the dentatorubral-pallidoluysian atrophy (DRPLA) gene results in spastic paraplegia. Kurohara K, et al. **Neurology** 1997 Apr;48(4):1087–90

Somatic mosaicism for Friedreich's ataxia GAA triplet repeat expansions in the central nervous system. Montermini L, et al. **Neurology** 1997 Aug;49(2):606–10

Variation of CTG-repeat number of the DMPK gene in muscle tissue. Ansved T, et al. **Neuromuscul Disord** 1997 May;7(3):152–5

Increased prevalence of the seven-repeat variant of the dopamine D4 receptor gene in patients with obsessive-compulsive disorder with tics. Cruz C, et al. **Neurosci Lett** 1997 Aug 1;231(1):1–4

Clinical presentation and patterns of regional cerebral atrophy related to the length of trinucleotide repeat expansion in patients with adult onset Huntington's disease. Sieradzan K, et al. **Neurosci Lett** 1997 Mar 28;225(1):45–8

STR typing in a deficiency case of disputed paternity. Fukuda M, et al. **Nippon Hoigaku Zasshi** 1996 Dec;50(6):422–6

Production of monoclonal anti-thymine-dimer antibody and its use for detection of STR alleles. Fukuda M, et al. **Nippon Hoigaku Zasshi** 1996 Oct;50(5):343–8

STR typing of plasma DNA in a deficiency case of disputed maternity against a patient dying in the hospital. Tamaki Y, et al. **Nippon Hoigaku Zasshi** 1996 Dec;50(6):427–9

Analysis of the short tandem repeat systems HUMF13B and HUMvWF in Chinese (Liaoning). Wang X, et al. **Nippon Hoigaku Zasshi** 1996 Oct;50(5):357–60

Biochemical and molecular basis of Bernard-Soulier syndrome: a review. de la Salle C, et al. **Nouv Rev Fr Hematol** 1995;37(4):215–22 (58 ref.)

Conserved RY-repeats mediate transactivation of seed-specific promoters by the developmental regulator PvALF. Bobb AJ, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):641–7

Monomeric scAlu and nascent dimeric Alu RNAs induced by adenovirus are assembled into SRP9/14-containing RNPs in HeLa cells. Chang DY, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4165–70

A highly conserved nucleotide in the Alu domain of SRP RNA mediates translation arrest through high affinity binding to SRP9/14. Chang DY, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1117–22

Native DNA repeats and methylation in Ascobolus. Goyon C, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3348–56

The importance of the linker connecting the repeats of the c-Myb oncoprotein may be due to a positioning function. Hegvold AB, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):3990–5

Advances in quantification and characterization of telomerase activity by the telomeric repeat amplification protocol (TRAP). Kim NW, et al. **Nucleic Acids Res** 1997 Jul 1; 25(13):2595–7

Stability of an inverted repeat in a human fibrosarcoma cell. Kramer PR, et al. **Nucleic Acids Res** 1996 Nov 1; 24(21):4234–41

Stabilization of yeast artificial chromosome clones in a rad54-3 recombination-deficient host strain. Le Y, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1248–53

A cruciform-dumbbell model for inverted dimer formation mediated by inverted repeats. Lin CT, et al. **Nucleic Acids Res** 1997 Aug 1;25(15):3009–16

Recent evolutionary acquisition of alternative pre-mRNA splicing and 3' processing regulations induced by intronic B2 SINE insertion. Michel D, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3228–34

DIR: a novel DNA rearrangement associated with inverted repeats. Pinder DJ, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):523–9

A new family of site-specific retrotransposons, SART1, is inserted into telomeric repeats of the silkworm, Bombyx mori. Takahashi H, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1578–84

The RNase P RNA from cyanobacteria: short tandemly repeated repetitive (STRR) sequences are present within the RNase P RNA gene in heterocyst-forming cyanobacteria. Vioque A. **Nucleic Acids Res** 1997 Sep 1; 25(17):3471–7

Analysis of protein binding to the Sma/Cla DNA repeat in pathogenic Neisseriae. Wainwright LA, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1362–8

Structure of repetitive DNA element isolated from Osphariichthys uncirostris. Kato M, et al. **Nucleic Acids Symp Ser** 1995;(34):95–6

Molecular phylogenetic studies on Brugia filariae using Hha I repeat sequences. Xie H, et al. **Parasite** 1994 Sep; 1(3):255–60

Use of species-specific satellite DNAs as diagnostic probes in the identification of Steinernematidae and Heterorhabditidae entomopathogenic nematodes. Grenier E, et al. **Parasitology** 1996 Nov;113 (Pt 5):483–9

Clinicopathology of spinocerebellar degeneration: its correlation to the unstable CAG repeat of the affected gene. Yagishita S, et al. **Pathol Int** 1997 Jan;47(1):1–15 (114 ref.)

UVB irradiation upregulation of the Drosophila 1731 retrotransposon LTR requires the same short sequence of U3 region in a human epithelial cell line as in Drosophila cells. Faure E, et al. **Photochem Photobiol** 1996 Nov; 64(5):807–13

T-DNA integration patterns in co-transformed plant cells suggest that T-DNA repeats originate from co-integration of separate T-DNAs. De Neve M, et al. **Plant J** 1997 Jan; 11(1):15–29

Analysis of the ribosomal RNA gene repeat from the moss Funaria hygrometrica. Capesius I. **Plant Mol Biol** 1997 Feb; 33(3):559–64

The promoter of the tobacco Tnt1 retrotransposon is induced by wounding and by abiotic stress. Mhiri C, et al. **Plant Mol Biol** 1997 Jan;33(2):257–66

Mrs, a new subfamily of Tourist transposable elements. Río A, et al. **Plant Mol Biol** 1996 Dec;32(6):1221–6

Characteristic enrichment of DNA repeats in different genomes. Cox R, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5237–42

DNA repeats identify novel virulence genes in Haemophilus influenzae. Hood DW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11121–5

Helical repeat of DNA in the region of homologous pairing. Kiianitsa K, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22; 94(15):7837–40

Three functional luciferase domains in a single polypeptide chain. Li L, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):8954–8

Interaction between human tRNA synthetases involves repeated sequence elements. Rho SB, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10128–33

Folding of the N-terminal, ligand-binding region of integrin alpha-subunits into a beta-propeller domain. Springer TA. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):65–72

The [(G/C)3NN]n motif: a common DNA repeat that excludes nucleosomes. Wang YH, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8863–7

Telomeric repeats (TTAGGC)n are sufficient for chromosome capping function in Caenorhabditis elegans. Wicky C, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):8983–8

A single G-to-C change causes human centromere TGGAA repeats to fold back into hairpins. Zhu L, et al.

Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12159–64

Telomeres in the mouse have large inter–chromosomal variations in the number of T2AG3 repeats. Zijlmans JM, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7423–8

Structural characterization of the tumor suppressor p16, an ankyrin–like repeat protein. Boice JA, et al. **Protein Sci** 1996 Sep;5(9):1776–84

Nuclear magnetic resonance assignment and secondary structure of an ankyrin–like repeat–bearing protein: myotrophin. Yang Y, et al. **Protein Sci** 1997 Jun; 6(6):1347–51

Structure of a variable number tandem repeat of the serotonin transporter gene and association with affective disorder. Battersby S, et al. **Psychiatr Genet** 1996 Winter;6(4):177–81

Two forms of human double–stranded RNA–specific editase 1 (hRED1) generated by the insertion of an Alu cassette. Gerber A, et al. **RNA** 1997 May;3(5):453–63

Self–primed reverse transcription is a mechanism shared by several LTR–containing retrotransposons [letter] Lin JH, et al. **RNA** 1997 Sep;3(9):952–3

Genetic data and the African origin of humans [letter; comment] Pritchard JK, et al. **Science** 1996 Nov 29; 274(5292):1548–9. Comment on: Science 1996 Mar 8;271(5254):1380–7.

ARF1, a transcription factor that binds to auxin response elements. Ulmasov T, et al. **Science** 1997 Jun 20; 276(5320):1865–8

Homologous junctions formed between a vector and human genomic repetitive LINE–1 elements as a result of one–sided invasion. Richard M, et al. **Somat Cell Mol Genet** 1997 Jan;23(1):75–81

Comparative analysis of plant genome architecture. Heslop–Harrison JS. **Symp Soc Exp Biol** 1996;50:17–23

Do non–long terminal repeat retrotransposons have nuclease activity? [letter] Martin F, et al. **Trends Biochem Sci** 1996 Aug;21(8):283–5

Pleckstrin's repeat performance: a novel domain in G–protein signaling? Ponting CP, et al. **Trends Biochem Sci** 1996 Jul; 21(7):245–6

Simple sequence repeats as a source of quantitative genetic variation. Kashi Y, et al. **Trends Genet** 1997 Feb;13(2):74–8 (82 ref.)

Epigenetic phenomena in filamentous fungi: useful paradigms or repeat–induced confusion? [see comments] Selker EU. **Trends Genet** 1997 Aug;13(8):296–301 (57 ref.). Comment in: Trends Genet 1997 Aug;13(8):293–5.

Determination of CAG repeat length in the androgen–receptor gene using frozen serum. Sartor O, et al. **Urology** 1997 Feb;49(2):301–4

Comparison of different genetic markers for molecular epidemiology of bovine tuberculosis. Romano MI, et al. **Vet Microbiol** 1996 May;50(1–2):59–71

Comparative analyses of LTRs of the ERV–H family of primate–specific retrovirus–like elements isolated from marmoset, African green monkey, and man. Anderssen S, et al. **Virology** 1997 Jul 21;234(1):14–30

Activation of collagenase IV gene expression and enzymatic activity by the Moloney murine leukemia virus long terminal repeat. Faller DV, et al. **Virology** 1997 Jan 20; 227(2):331–42

Common modular structure of lentivirus LTRs. Frech K, et al. **Virology** 1996 Oct 1;224(1):256–67

Dual NF1–requiring effect of human neurotropic JC virus composite pentanucleotide repeat elements on early and late viral gene expression. Liu M, et al. **Virology** 1997 Jan 6;227(1):7–12

Activation of the HTLV–I long terminal repeat by the hepatitis B virus X protein. Marriott SJ, et al. **Virology** 1996 Oct 1;224(1):206–13

The long terminal repeats of human immunodeficiency virus type–1 and human T–cell leukemia virus type–I are activated by 12–O–tetradecanoylphorbol–13–acetate through different pathways. Mor–Vaknin N, et al. **Virology** 1997 Jun 9;232(2):337–44

Long terminal repeat U3 length polymorphism of human foamy virus. Schmidt M, et al. **Virology** 1997 Apr 14; 230(2):167–78

Regulation of the long terminal repeat in visna virus by a transcription factor related to the AML/PEBP2/CBF superfamily [published erratum appears in Virology 1997 Jul 21;234(1):176] Sutton KA, et al. **Virology** 1997 Mar 3; 229(1):240–50

R7, a spontaneous mutant of Moloney murine sarcoma virus 124 with three direct repeats and an in–frame truncated gag–mos gene, induces brain lesions. Yuen PH, et al. **Virology** 1997 Sep 15;236(1):213–8

Reverse transcriptase: mediator of genomic plasticity. Brosius J, et al. **Virus Genes** 1995;11(2–3):163–79 (259 ref.)

Bovine herpesvirus 1 isolates contain variable copy numbers of GC–rich tandem repeats in the gI non–coding regions of their genomes. Nadin–Davis SA, et al. **Virus Genes** 1996; 13(3):263–8

Insertion of tandem direct repeats consisting of avian leukosis virus LTR sequences into the inverted repeat region of Marek's disease virus type 1 DNA. Sakaguchi M, et al. **Virus Genes** 1997;14(2):157–62

A variable region of Anticarsia gemmatalis nuclear polyhedrosis virus contains tandemly repeated DNA sequences. Garcia–Maruniak A, et al. **Virus Res** 1996 Apr; 41(2):123–32

The inverted repeat regions of the simian varicella virus and varicella–zoster virus genomes have a similar genetic organization. Gray WL, et al. **Virus Res** 1995 Dec; 39(2–3):181–93

Regulatory properties of the integrated long terminal repeat of the feline immunodeficiency virus. Ikeda Y, et al. **Virus Res** 1996 Apr;41(2):201–7

A large duplication in the 3'–untranslated region of a subpopulation of RNA2 of the UK–M isolate of barley mild mosaic bymovirus. Peerenboom E, et al. **Virus Res** 1997 Jan;47(1):1–6

Virulence–associated sequence duplication at the hemagglutinin cleavage site of avian influenza viruses. Perdue ML, et al. **Virus Res** 1997 Jun;49(2):173–86

Simian immunodeficiency viruses containing mutations in the long terminal repeat NF–kappa B or Sp1 binding sites replicate efficiently in T cells and PHA–stimulated PBMCs. Zhang J, et al. **Virus Res** 1997 Jun;49(2):205–13

Tandemly repeated 147 bp elements cause structural and functional variation in divergent MAL promoters of Saccharomyces cerevisiae. Bell PJ, et al. **Yeast** 1997 Sep 30;13(12):1135–44

Functional characterization of the repeated UASINO element in the promoters of the INO1 and CHO2 genes of yeast. Koipally J, et al. **Yeast** 1996 Jun 15;12(7):653–65

Non–enzymatic, low temperature fluorescence in situ hybridization of human chromosomes with a repetitive alpha–satellite probe. Durm M, et al. **Z Naturforsch [C]** 1997 Jan–Feb;52(1–2):82–8

[The sequences of intron 50 and 51 of DMD gene and the deletion mechanism of 51st exon] Sheng W, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Nov;76(11):852–4 (Eng. Abstr.) **(Chi)**

[Gene diagnosis for hepatolenticular degeneration by genetic linkage analysis with four short tandem repeat polymorphisms] Wu Z, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Aug;76(8):578–81 (Eng. Abstr.) **(Chi)**

[Sequencing of right terminal fragment of canine adenovirus type 1 vaccine strain DNA] Tang Q, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Feb; 18(1):1–4 (Eng. Abstr.) **(Chi)**

[Population genetics of short tandem repeat locus HUMTH01] Hou Y, et al. **I Chuan Hsueh Pao** 1996; 23(3):174–82 (Eng. Abstr.) **(Chi)**

[Haplotype analysis using two tetrameric loci within the vWF gene: its frequency in Japanese and application in forensic medicine] Dewa K. **Nippon Hoigaku Zasshi** 1996 Oct; 50(5):349–56 (Eng. Abstr.) **(Jpn)**

[Locations of crossover breakpoints within the CMT 1 A–REP repeat in patients with hereditary neuropathy with liability to pressure palsy––detection by recombinant chromosome–specific polymerase chain reaction] Yamamoto M, et al. **No To Shinkei** 1997 May;49(5):443–7 (Eng. Abstr.) **(Jpn)**

[A new member of the MER2 repeat family is detected in the promoter region of the human X11 gene] Gel'fand MS, et al. **Dokl Akad Nauk** 1997 Jun;354(5):690–5 **(Rus)**

[A novel class of small RNP (alpha–RNP) in human cell line K–562 and coordinated control of expression of Alu–containing messenger RNA] Konstantinova IM, et al. **Dokl Akad Nauk** 1996 Sep;350(2):268–71 **(Rus)**

[A new PCR–primer for specific amplification of human DNA fragments selected on the basis of computer analysis of the nucleotide sequences of MER1 dispersed repeats in man] Iantsen EI, et al. **Genetika** 1997 Feb;33(2):243–8 (Eng. Abstr.) **(Rus)**

["SPELT1"––a new family of tandem repeats in grasses] Salina EA, et al. **Genetika** 1997 Apr;33(4):437–42 (Eng. Abstr.) **(Rus)**

[Structural features of the modified BARE–retroelement in the barley (Hordeum vulgare L.) genome] Shcherban' AB, et al. **Genetika** 1997 Apr;33(4):431–6 (Eng. Abstr.) **(Rus)**

[Restriction mapping of a highly–repetitive DNA sequence in studying the genetic relationship of lower taxons of animal] Grechno VV, et al. **Mol Biol (Mosk)** 1997 Mar–Apr;31(2):244–52 **(Rus)**

[Approaches to identification of recombination–active DNA sites in human genome] Karpukhin AV, et al. **Mol Biol (Mosk)** 1996 Nov–Dec;30(6):1339–47 **(Rus)**

[A model prokaryotic promoter. IV.Properties of constructs containing regular repeats of Pribnow sequence] Koroleva ON, et al. **Mol Biol (Mosk)** 1996 Sep–Oct;30(5):1032–43 **(Rus)**

[Pericentromeric alpha–satellite DNA in human chromosome 21 bordering with euchromatin DNA] Mashkova TD, et al. **Mol Biol (Mosk)** 1996 Sep–Oct;30(5):1044–54 **(Rus)**

[Highly repetitive elements in the genome of plague pathogen] Mozharov OT, et al. **Mol Gen Mikrobiol Virusol** 1997;(1):26–30 (Eng. Abstr.) **(Rus)**

[The structure of Alu–like DNA nucleotide sequences in cyclostomes and fishes] Anatskiĭ SIu, et al. **Tsitologiia** 1996; 38(12):1255–60 (Eng. Abstr.) **(Rus)**

[Use of CA repeat polymorphism in direct and indirect diagnosis of Duchenne and Becker muscular dystrophy] Mušová Z, et al. **Cas Lek Cesk** 1997 Feb 5;136(3):90–4 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

Tandem duplication in ermC translational attenuator of the macrolide–lincosamide–streptogramin B resistance plasmid pSES6 from Staphylococcus equorum. Lodder G, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):215–7

Effect of nuclear protein HMG1 on in vitro slippage synthesis of the tandem repeat dTG x dCA. Gibb CL, et al. **Biochemistry** 1997 May 6;36(18):5418–24

Pleiotropic effects of immobilized versus soluble recombinant HIV–1 Tat protein on CD3–mediated activation, induction of apoptosis, and HIV–1 long terminal repeat transactivation in purified CD4+ T lymphocytes. Zauli G, et al. **J Immunol** 1996 Sep 1;157(5):2216–24

Prolactin, epidermal growth factor or transforming growth factor–alpha activate a mammary cell–specific enhancer in mouse mammary tumor virus–long terminal repeat. Haraguchi S, et al. **Mol Cell Endocrinol** 1997 May 16; 129(2):145–55

Role of 7,8–dihydroneopterin in T–cell apoptosis and HTLV–1 transcription in vitro. Baier–Bitterlich G, et al. **Oncogene** 1996 Nov 21;13(10):2281–5

GENETICS

A repetitive DNA sequence 5' to the human myelin basic protein gene may be linked to MS in Danes. Ibsen SN, et al. **Acta Neurol Scand** 1996 Apr;93(4):236–40

Comparison of Hae–III–generated VNTR profiles of Chinese in Hong Kong and Singapore. Chow ST, et al. **Am J Forensic Med Pathol** 1997 Mar;18(1):60–4

DNA identification [letter; comment] Morton NE. **Am J Hum Genet** 1996 Dec;59(6):1398–400. Comment on: Am J Hum Genet 1996 Feb;58(2):398–407.

Neonatal severe hyperparathyroidism, secondary hyperparathyroidism, and familial hypocalciuric hypercalcemia: multiple different phenotypes associated with an inactivating Alu insertion mutation of the calcium–sensing receptor gene. Cole DE, et al. **Am J Med Genet** 1997 Aug 8;71(2):202–10

Analysis of clozapine response and polymorphisms of the dopamine D4 receptor gene (DRD4) in schizophrenic patients. Shaikh S, et al. **Am J Med Genet** 1995 Dec 18; 60(6):541–5

A swine SINE (PRE–1 sequence) distribution in swine–related animal species and its phylogenetic analysis in swine genome. Yasue H, et al. **Anim Genet** 1996 Apr; 27(2):95–8

Non–random deletions in human foamy virus long terminal repeat during viral infection. De Celis–Kosmas J, et al. **Arch Virol** 1997;142(6):1237–46

Comparative diagnoses of twin zygosity by SSLP variant analysis, questionnaire, and dermatoglyphic analysis. Spitz E, et al. **Behav Genet** 1996 Jan;26(1):55–63

Two chicken repeat one (CR1) elements lacking a silencer–like region upstream of the chicken avidin–related genes Avr4 and Avr5. Wallén MJ, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):193–6

Chromosomal instability and alteration of telomere repeat sequences. Pommier JP, et al. **Biochimie** 1995;77(10):817–25 (75 ref.)

The relationship between telomere length and therapy–associated cytogenetic responses in patients with chronic myeloid leukemia. Iwama H, et al. **Cancer** 1997 Apr 15;79(8):1552–60

Quantitative detection of ultraviolet–specific p53 mutations in normal skin from Japanese patients. Ouhtit A, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jun;6(6):433–8

Minimal residual disease in acute monocytic leukemia patient with trisomy 11 and partial tandem duplication of MLL. Satake N, et al. **Cancer Genet Cytogenet** 1997 Jul 1; 96(1):26–9

A cereal centromeric sequence. Aragón–Alcaide L, et al. **Chromosoma** 1996 Dec;105(5):261–8

Analysis of the organisation and localisation of the FSHD–associated tandem array in primates: implications for the origin and evolution of the 3.3 kb repeat family. Clark LN, et al. **Chromosoma** 1996 Sep;105(3):180–9

Physical mapping of repetitive DNA sequences and 5S and 18S–26S rDNA in five wild species of the genus Hordeum. de Bustos A, et al. **Chromosome Res** 1996 Nov;4(7):491–9

Ends of Chromosomes in Polycelis tenuis (Platyhelminthes) have telomere repeat TTAGGG. Joffee BI, et al. **Chromosome Res** 1996 Jun;4(4):323–4

Distribution and linkage of repetitive clusters from the heterochromatic region of human chromosome 22. Müllenbach R, et al. **Chromosome Res** 1996 Jun;4(4):282–7

Molecular diversification of tandemly organized DNA sequences and heterochromatic chromosome regions in some Triticeae species. Vershinin AV, et al. **Chromosome Res** 1996 Nov;4(7):517–25

Novel mutation in the first intron of the spontaneously hypertensive rat renin gene upstream of the tandem repeat element. Di Nicolantonio R, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S10–11

CENSOR––a program for identification and elimination of repetitive elements from DNA sequences. Jurka J, et al. **Comput Chem** 1996 Mar;20(1):119–21

Glutamine repeats and inherited neurodegenerative diseases: molecular aspects. Perutz MF. **Curr Opin Struct Biol** 1996 Dec;6(6):848–58 (62 ref.)

Molecular analysis of a putative transposable retroelement from the Zea genus with internal clusters of tandem repeats. Monfort A, et al. **DNA Res** 1995 Dec 31;2(6):255–61

The chromosomal organization of the human endogenous retrovirus–like sequence HERV–H: clustering of the HERV–H sequences in a 300–kb region close to the GRPR locus on the X chromosome. Shiraishi M, et al. **DNA Res** 1996 Dec 31;3(6):425–9

3'-Inverted repeats in plant mitochondrial mRNAs are processing signals rather than transcription terminators. Dombrowski S, et al. **EMBO J** 1997 Aug 15;16(16):5069–76

Misdivision analysis of centromere structure in maize. Kaszás E, et al. **EMBO J** 1996 Oct 1;15(19):5246–55

Concerted evolution of the tandemly repeated genes encoding human U2 snRNA (the RNU2 locus) involves rapid intrachromosomal homogenization and rare interchromosomal gene conversion. Liao D, et al. **EMBO J** 1997 Feb 3;16(3):588–98

A nuclear protein factor binds specifically to the 3'-regulatory module of the long-interspersed-nuclear-element-like Dictyostelium repetitive element. Geier A, et al. **Eur J Biochem** 1996 Oct 1;241(1):70–6

Seeding of YACs over regions 1q41–q42.3 and 11q14.3–q23 with microdissection clones. Petit J, et al. **Eur J Hum Genet** 1995;3(6):351–6

Repetitive and arbitrary primer DNA sequences in PCR-mediated fingerprinting of outbreak and sporadic isolates of Campylobacter jejuni. Iriarte MP, et al. **FEMS Immunol Med Microbiol** 1996 Aug;15(1):17–22

Yeast linear plasmids with T2AG3 telomeres: TEL+CEN antagonism and genetic and molecular stability. Guerrini AM, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):165–71

Considerations from the European DNA profiling group (EDNAP) concerning STR nomenclature. Gill P, et al. **Forensic Sci Int** 1997 Jun 23;87(3):185–92 (27 ref.)

DNA recommendations—further report of the DNA Commission of the ISFH regarding the use of short tandem repeat systems. Lincoln PJ. **Forensic Sci Int** 1997 Jun 23; 87(3):181–4 (4 ref.)

Multiplexing of Y chromosome specific STRs and performance for mixed samples. Prinz M, et al. **Forensic Sci Int** 1997 Mar 14;85(3):209–18

Portuguese population data on the six short tandem repeat loci—CSF1PO, TPOX, THO1, D3S1358, VWA and FGA. Santos SM, et al. **Forensic Sci Int** 1996 Dec 27;83(3):229–35

The HumD21S11 system of short tandem repeat DNA polymorphisms in Japanese and Chinese. Zhou HG, et al. **Forensic Sci Int** 1997 Apr 18;86(1–2):109–18

Transforming growth factor beta type II receptor gene mutations in adenomas from hereditary nonpolyposis colorectal cancer [see comments] Akiyama Y, et al. **Gastroenterology** 1997 Jan;112(1):33–9. Comment in: Gastroenterology 1997 Jan;112(1):297–302.

A tandemly repetitive DNA sequence is present at diverse locations in the genome of Ostertagia circumcincta. Callaghan MJ, et al. **Gene** 1996 Oct 3;174(2):273–9

The RLEP-flanked polA gene from Mycobacterium leprae is not transcribed in Mycobacterium smegmatis. Gordhan BG, et al. **Gene** 1997 Mar 10;187(1):63–6

A novel leaf-specific myb-related protein with a single binding repeat. Kirik V, et al. **Gene** 1996 Dec 12; 183(1–2):109–13

The LTR, v-src, LTR provirus in H-19 hamster tumor cell line is integrated adjacent to the negative regulatory region. Machoň O, et al. **Gene** 1996 Sep 26;174(1):9–17

Evaluation of relative promoter strengths of the HIV-1-LTR and a chimeric RSV-LTR in T lymphocytic cells and peripheral blood mononuclear cells: promoters for anti-HIV-1 gene therapies. Mukhtar M, et al. **Gene Ther** 1996 Aug;3(8):725–30

A 1.5 kb repeat sequence flanks the suppressor of forked gene at the euchromatin-heterochromatin boundary of the Drosophila melanogaster X chromosome. Tudor M, et al. **Genet Res** 1996 Dec;68(3):191–202

Increased concentration of some transcription factor binding sites in human retroposons of the Alu family. Kazakov VI, et al. **Genetica** 1996 Jan;97(1):15–22

Evidence for a regulatory protein complex on RNA polymerase III promoter of human retroposons of Alu family. Kropotov AV, et al. **Genetica** 1996–97;98(3):223–33

First isolation of tandemly repeated DNA sequences in New World vultures and phylogenetic implications. Keyser C, et al. **Genome** 1996 Feb;39(1):31–9

Complex arrangement of dispersed repeated DNA sequences in Oryza officinalis. Kiefer-Meyer MC, et al. **Genome** 1996 Feb;39(1):183–90

A moderately repetitive DNA sequence in alfalfa is transcribed in a floral-specific manner. Xia X, et al. **Genome** 1996 Feb;39(1):9–16

Alu fossil relics—distribution and insertion polymorphism [letter] Arcot SS, et al. **Genome Res** 1996 Nov; 6(11):1084–92

Differential subsequence conservation of interspersed repetitive Streptococcus pneumoniae BOX elements in diverse bacteria. Koeuth T, et al. **Genome Res** 1995 Nov; 5(4):408–18

Linkage analysis with multiplexed short tandem repeat polymorphisms using infrared fluorescence and M13 tailed primers. Oetting WS, et al. **Genomics** 1995 Dec 10; 30(3):450–8

Amplification of human short tandem repeats from medieval teeth and bone samples. Zierdt H, et al. **Hum Biol** 1996 Apr;68(2):185–99

Data on six short-tandem repeat polymorphisms in an autochthonous Basque population. Iriondo M, et al. **Hum Hered** 1997 May-Jun;47(3):131–7

Endogenous retroviral long terminal repeats of the HLA-DQ region are associated with susceptibility to insulin-dependent diabetes mellitus. Badenhoop K, et al. **Hum Immunol** 1996 Oct;50(2):103–10

A repeated element in the regulatory region of the MNK gene and its deletion in a patient with occipital horn syndrome. Levinson B, et al. **Hum Mol Genet** 1996 Nov; 5(11):1737–42

Dysfunction of the Orleans reeler gene arising from exon skipping due to transposition of a full-length copy of an active L1 sequence into the skipped exon. Takahara T, et al. **Hum Mol Genet** 1996 Jul;5(7):989–93

Evidence for subtelomeric exchange of 3.3 kb tandemly repeated units between chromosomes 4q35 and 10q26: implications for genetic counselling and etiology of FSHD1. van Deutekom JC, et al. **Hum Mol Genet** 1996 Dec;5(12):1997–2003

Changes in the carboxyl-terminal repeat region affect extracellular activity and glucan products of Streptococcus gordonii glucosyltransferase. Vickerman MM, et al. **Infect Immun** 1996 Dec;64(12):5117–28

Population genetics of STR loci in Caucasians. Balding DJ, et al. **Int J Legal Med** 1996;108(6):300–5

Sequence analysis and allelic designation of the two short tandem repeat loci D18S51 and D8S1179. Barber MD, et al. **Int J Legal Med** 1996;109(2):62–5

The STR systems HumVWA and HumACTBP2 in a Hungarian population. Csete K, et al. **Int J Legal Med** 1996; 108(6):316–7

Statistical analysis of data for three British ethnic groups from a new STR multiplex. Evett IW, et al. **Int J Legal Med** 1997;110(1):5–9

Statistical analysis of a large file of data from STR profiles of British Caucasians to support forensic casework. Evett IW, et al. **Int J Legal Med** 1996;109(4):173–7

Hungarian population data on six STR loci—HUMVWFA31, HUMTH01, HUMCSF1PO, HUMFES/FPS, HUMTPOX, and HUMHPRTB—derived using multiplex PCR amplification and manual typing. Füredi S, et al. **Int J Legal Med** 1996;109(2):100–1

Population study of the STRs HUMTH01 (including a new variant) and HUMVWA31A in Catalonia (northeast Spain). Gené M, et al. **Int J Legal Med** 1996;108(6):318–20

Population data for the STR systems HumTH01, HumVWA and FES/FPS in a population sample from lower Franconia. Günther S, et al. **Int J Legal Med** 1996; 109(2):102–3

Failed PCR amplifications of MBP-STR alleles due to polymorphism in the primer annealing region. Gusmão L, et al. **Int J Legal Med** 1996;108(6):313–5

Sequence variation of allele 27 at the D1S80 locus. Harashima N, et al. **Int J Legal Med** 1997;110(1):22–6

Analysis of the short tandem repeat systems HumVWA and HumF13B in a population sample from northern Thailand. Horst B, et al. **Int J Legal Med** 1997;110(4):235–7

Genetic variation at five STR loci in subpopulations living in Turkey. Iwasa M, et al. **Int J Legal Med** 1997; 110(3):170–2

Evaluation of Y-chromosomal STRs: a multicenter study. Kayser M, et al. **Int J Legal Med** 1997;110(3):125–33, 141–9

Short tandem repeat polymorphism at the HUMCD4 and HUMF13B loci in a Croatian population. Kubat M, et al. **Int J Legal Med** 1997;110(4):230–1

Analysis of the STR myelin basic protein locus in Koreans. Lee SD, et al. **Int J Legal Med** 1997;110(3):173–4

Allele frequencies of nine STR systems in the Flemish population and application in parentage testing. Mertens G, et al. **Int J Legal Med** 1997;110(4):177–80

A concordance of nucleotide substitutions in the first and second hypervariable segments of the human mtDNA control region. Miller KW, et al. **Int J Legal Med** 1996; 109(3):107–13

A Dutch population study of the STR loci D21S11 and HUMFIBRA. Ovington A, et al. **Int J Legal Med** 1997; 110(1):14–7

Frequencies for five short tandem repeat (STR) systems in a population from north Poland. Pawlowski R, et al. **Int J Legal Med** 1997;110(1):10–3

The validation of a 7-locus multiplex STR test for use in forensic casework. (I). Mixtures, ageing, degradation and species studies. Sparkes R, et al. **Int J Legal Med** 1996; 109(4):186–94

The validation of a 7-locus multiplex STR test for use in forensic casework. (II), Artefacts, casework studies and success rates. Sparkes R, et al. **Int J Legal Med** 1996; 109(4):195–204

Allele detection and population study in Japanese using two STR loci (CYP19 and HUMTH01). Takahashi M, et al. **Int J Legal Med** 1996;108(6):321–2

DNA typing of epithelial cells after strangulation. Wiegand P, et al. **Int J Legal Med** 1997;110(4):181–3

Evaluation of new primers for CSF1PO. Yoshida K, et al. **Int J Legal Med** 1997;110(1):36–8

The phylogeny and molecular epidemiology of human T-cell lymphotropic virus type II. Heneine W. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S236–41 (17 ref.)

Rapid communication: variable number of tandem repeat marker, RVF9405, in rainbow trout. Ishikawa A, et al. **J Anim Sci** 1996 Jul;74(7):1737

A 53-base-pair inverted repeat negatively regulates expression of the adjacent and divergently oriented cytochrome P450(BM-1) gene and its regulatory gene, bm1P1, in Bacillus megaterium. Shaw GC, et al. **J Bacteriol** 1997 Jan;179(1):280–3

Specific deactivation of the mouse mammary tumor virus long terminal repeat promoter upon continuous hormone treatment. Boronat S, et al. **J Biol Chem** 1997 Aug 29; 272(35):21803–10

The tandem repeat domain in the Listeria monocytogenes ActA protein controls the rate of actin-based motility, the percentage of moving bacteria, and the localization of vasodilator-stimulated phosphoprotein and profilin. Smith GA, et al. **J Cell Biol** 1996 Nov;135(3):647–60

Functional analysis of the MAP2 repeat domain. Ludin B, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):91–9

Rapid identification and fingerprinting of Candida krusei by PCR-based amplification of the species-specific repetitive polymorphic sequence CKRS-1. Carlotti A, et al. **J Clin Microbiol** 1997 Jun;35(6):1337–43

Highly informative single-stranded conformation polymorphism (SSCP) of short tandem repeats in DNA identification. Lucas M, et al. **J Forensic Sci** 1997 Jan; 42(1):118–20

Genetic variations at four tetrameric tandem repeat loci in Korean population. Park SJ, et al. **J Forensic Sci** 1997 Jan; 42(1):125–9

Population study of the HUMTH01, HUMVWA31A, HUMF13A1, and HUMFES/FPS STR polymorphisms in the north of Portugal. Pinheiro F, et al. **J Forensic Sci** 1997 Jan;42(1):121–4

HUMTH01 validation studies: effect of substrate, environment, and mixtures. van Oorschot RA, et al. **J Forensic Sci** 1996 Jan;41(1):142–5

Detection of the CMT1A/HNPP recombination hotspot in unrelated patients of European descent. Timmerman V, et al. **J Med Genet** 1997 Jan;34(1):43–9

Repetitive sequence families in Alces alces americana. Blake RD, et al. **J Mol Evol** 1997 May;44(5):509–20

Retroviral oligonucleotide distributions correlate with biased nucleotide compositions of retrovirus sequences, suggesting a duplicative stepwise molecular evolution. Laprevotte I, et al. **J Mol Evol** 1997 Feb;44(2):214–25

Comparisons of the nucleotide substitution process among repetitive segments of the alpha- and beta-spectrin genes. Muse SV, et al. **J Mol Evol** 1997 May;44(5):492–500

The 3' ends of tRNA-derived SINEs originated from the 3' ends of LINEs: a new example from the bovine genome. Okada N, et al. **J Mol Evol** 1997;44 Suppl 1:S52–6

Functional identification of nucleotides conferring substrate specificity to retroviral integrase reactions. Balakrishnan M, et al. **J Virol** 1997 Feb;71(2):1025–35

Identification of a cis-acting element in the class I major histocompatibility complex gene promoter responsive to activation by retroviral sequences. Choi SY, et al. **J Virol** 1997 Feb;71(2):965–70

Importance of a c-Myb binding site for lymphomagenesis by the retrovirus SL3-3. Nieves A, et al. **J Virol** 1997 Feb; 71(2):1213–9

A novel 165-base-pair terminal repeat sequence is the sole cis requirement for the adeno-associated virus life cycle. Xiao X, et al. **J Virol** 1997 Feb;71(2):941–8

Nine-bp repeat polymorphism in exon 1 of the hMSH3 gene. Nakajima E, et al. **Jpn J Hum Genet** 1995 Dec;40(4):343–5

Primed in situ labeling (PRINS) detection of the telomeric (CCCTAA) sequences in chromosomes of domestic animals. Gu F, et al. **Mamm Genome** 1996 Mar;7(3):231–2

Analysis of mammalian MUC1 genes reveals potential functionally important domains. Spicer AP, et al. **Mamm Genome** 1995 Dec;6(12):885–8

Pig genome analysis: differential distribution of SINE and LINE sequences is less pronounced than in the human and mouse genomes. Thomsen PD, et al. **Mamm Genome** 1996 Jan;7(1):42–6

A polymorphic interstitial telomere array near the center of mouse chromosome 8. Yen CH, et al. **Mamm Genome** 1996 Mar;7(3):218–21

An interstitial telomere array proximal to the distal telomere of mouse chromosome 13. Yen CH, et al. **Mamm Genome** 1997 Jun;8(6):411–7

Organization of trans-sialidase genes in Trypanosoma cruzi. Egima CM, et al. **Mol Biochem Parasitol** 1996 May; 77(2):115–25

Diversity in repeat-containing surface proteins of Leishmania major. McKean PG, et al. **Mol Biochem Parasitol** 1997 Jun;86(2):225–35

Sequence diversity in the amino-terminal 47 kDa fragment of the Plasmodium falciparum serine repeat antigen. Morimatsu K, et al. **Mol Biochem Parasitol** 1997 Jun; 86(2):249–54

The decline in human Alu retroposition was accompanied by an asymmetric decrease in SRP9/14 binding to dimeric Alu RNA and increased expression of small cytoplasmic Alu RNA. Sarrowa J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1144–51

Altered replication and inverted repeats induce mismatch repair-independent recombination between highly diverged DNAs in yeast. Tran H, et al. **Mol Cell Biol** 1997 Feb;17(2):1027–36

Identification of a human endogenous LTR-like sequence using HIV-1 LTR specific primers. Menin C, et al. **Mol Cell Probes** 1996 Dec;10(6):443–51

Allele frequency distributions at several variable number of tandem repeat (VNTR) and short tandem repeat (STR) loci in a restricted Caucasian population from south Italy and their evaluation for paternity and forensic use. Pastore L, et al. **Mol Cell Probes** 1996 Aug;10(4):299–308

Ebb and flow of the chloroplast inverted repeat. Goulding SE, et al. **Mol Gen Genet** 1996 Aug 27;252(1-2):195-206

A highly repetitive sequence isolated from genomic DNA of the medaka (Oryzias latipes). Uchiyama T, et al. **Mol Mar Biol Biotechnol** 1996 Sep;5(3):220-4

Mutation detection in Machado-Joseph disease using repeat expansion detection. Lindblad K, et al. **Mol Med** 1996 Jan; 2(1):77-85

The iteron bases and spacers of the P1 replication origin contain information that specifies the formation of a complex structure involved in initiation. Brendler TG, et al. **Mol Microbiol** 1997 Feb;23(3):559-67

The unstable region of Streptomyces ambofaciens includes 210 kb terminal inverted repeats flanking the extremities of the linear chromosomal DNA. Leblond P, et al. **Mol Microbiol** 1996 Jan;19(2):261-71

Pneumocystis carinii telomere repeats are composed of TTAGGG and the subtelomeric sequence contains a gene encoding the major surface glycoprotein. Underwood AP, et al. **Mol Microbiol** 1996 Jan;19(2):273-81

A polymorphic dinucleotide repeat in the human dopamine D5 receptor gene promoter. Beischlag TV, et al. **Neurosci Lett** 1996 Mar 1;205(3):173-6

Automated DNA typing of ACTBP2: a comparison of allelic ladder with GS 2500 as internal marker. Harashima N, et al. **Nippon Hoigaku Zasshi** 1996 Feb;50(1):27-9

Sequence variation found in the flanking region of a trimeric short tandem repeat at the PLA2 locus: its considerable effect on estimating alleles. Kurosaki K, et al. **Nippon Hoigaku Zasshi** 1996 Feb;50(1):1-5

STR typing of buccal swabs for paternity testing with reference to Japanese population data on the D20S85, D14S118, and D14S543 loci. Okazaki K, et al. **Nippon Hoigaku Zasshi** 1996 Dec;50(6):404-11

Frequency of the three STR loci (TPOX, CSF1PO, THo1), in a Japanese population determined using a Gene Print STR multiplex kit. Yamaguchi H, et al. **Nippon Hoigaku Zasshi** 1996 Jun;50(3):163-7

The SRP9/14 subunit of the human signal recognition particle binds to a variety of Alu-like RNAs and with higher affinity than its mouse homolog. Bovia F, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):318-26

The presence of direct repeats does not influence coding joint formation during V(D)J recombination. Nourrit F, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):3968-73

The Cryner element in the murine gamma-crystallin promoters interacts with lens proteins. Stöger T, et al. **Ophthalmic Res** 1997;29(3):161-71

CTG repeat analysis in lymphocytes, muscles and fibroblasts in patients with myotonic dystrophy. Peterlin B, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R199-200

Gene identification in a complex chromosomal continuum by local genomic cross-referencing. Avramova Z, et al. **Plant J** 1996 Dec;10(6):1163-8

Analysis of the occurrence and nature of repeated DNA in an 850 kb region of Arabidopsis thaliana chromosome 4. Thompson HL, et al. **Plant Mol Biol** 1996 Nov;32(3):553-7

Purification and characterization of a CENP-B homologue protein that binds to the centromeric K-type repeat DNA of Schizosaccharomyces pombe. Lee JK, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8427-32

Evolution, expression, and possible function of a master gene for amplification of an interspersed repeated DNA family in rodents. Deininger PL, et al. **Prog Nucleic Acid Res Mol Biol** 1996;52:67-88 (62 ref.)

Measures of variation at DNA repeat loci under a general stepwise mutation model. Kimmel M, et al. **Theor Popul Biol** 1996 Dec;50(3):345-67

Application of HUMF13A01 (AAAG)n STR polymorphism to the genetic diagnosis of coagulation factor XIII deficiency. Kangsadalampai S, et al. **Thromb Haemost** 1996 Dec;76(6):879-82

Repetitive element sequence based polymerase chain reaction for typing of Brucella strains. Tcherneva E, et al. **Vet Microbiol** 1996 Jul;51(1-2):169-78

Selective inhibition of 1 kappaB alpha phosphorylation and HIV-1 LTR-directed gene expression by novel antioxidant compounds. Lee R, et al. **Virology** 1997 Aug 4; 234(2):277-90

Functional analysis of simian immunodeficiency virus SIVAGM long terminal repeat. Sakuragi J, et al. **Virus Genes** 1996;12(1):21-5

[Cloning, sequencing and characterizing repetitive DNA of Glycine max] Hui D, et al. **I Chuan Hsueh Pao** 1995; 22(6):455-62 (Eng. Abstr.) **(Chi)**

[Reproducibility of aDNA typing] Schmerer WM, et al. **Anthropol Anz** 1997 Jun;55(2):199-206 (Eng. Abstr.) **(Ger)**

[Classification of isolated skeletal elements using aDNA typing] Schultes T, et al. **Anthropol Anz** 1997 Jun; 55(2):207-16 (Eng. Abstr.) **(Ger)**

[Structural polymorphism of ACTBP2 STR region] Yoshii T, et al. **Nippon Hoigaku Zasshi** 1997 Feb;51(1):18-25 (Eng. Abstr.) **(Jpn)**

[Structural characteristics of four long terminal repeats (LTR) of human endogenous retroviruses and features of their integration sites] Khil' PP, et al. **Bioorg Khim** 1997 May;23(5):434-40 (Eng. Abstr.) **(Rus)**

[The physical mapping of human chromosomes. II. The production of unique chromosome-specific DNA fragments using the polymerase chain reaction with oligonucleotide primers to conservative regions of Alu repeats] Kazakov VI, et al. **Tsitologiia** 1996;38(4-5):510-6 (Eng. Abstr.) **(Rus)**

[A theoretical analysis of the primary structure of the yeast SEC59 gene product. Topology in the membrane, identification of the repetitive sequences and internal symmetry] Shpakov AO. **Zh Evol Biokhim Fiziol** 1996 Sep-Oct;32(5):545-55 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Epitope mapping of the variable repetitive region with the MB antigen of Ureaplasma urealyticum. Zheng X, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):774-8

Human antibodies against the polymorphic epithelial mucin in ovarian cancer patients recognise a novel sequence in the tandem repeat region. Petrarca C, et al. **Eur J Cancer** 1996 Nov;32A(12):2155-63

CAG repeat mutation in the mouse IL-2 gene enables concurrent assessment of T- and B-cell-specific gene expression by northern analysis. Szebeni J, et al. **Exp Clin Immunogenet** 1996;13(2):117-9

Antibodies to the leucine-rich repeat region of internalin block entry of Listeria monocytogenes into cells expressing E-cadherin. Mengaud J, et al. **Infect Immun** 1996 Dec; 64(12):5430-3

An intronic polymorphic repeat sequence modulates interleukin-1 alpha gene regulation. Bailly S, et al. **Mol Immunol** 1996 Aug;33(11-12):999-1006

PHYSIOLOGY

Repeat-induced gene silencing: common mechanisms in plants and fungi. Meyer P. **Biol Chem Hoppe Seyler** 1996 Feb;377(2):87-95 (91 ref.)

Induction of large DNA palindrome formation in yeast: implications for gene amplification and genome stability in eukaryotes. Butler DK, et al. **Cell** 1996 Dec 13; 87(6):1115-22

Structure, subnuclear distribution, and nuclear matrix association of the mammalian telomeric complex. Ludérus ME, et al. **J Cell Biol** 1996 Nov;135(4):867-81

Moloney murine leukemia virus long terminal repeat activates monocyte chemotactic protein-1 protein expression and chemotactic activity. Faller DV, et al. **J Cell Physiol** 1997 Aug;172(2):240-52

Gene conversions mediating antigenic variation in Trypanosoma brucei can occur in variant surface glycoprotein expression sites lacking 70-base-pair repeat sequences. McCulloch R, et al. **Mol Cell Biol** 1997 Feb; 17(2):833-43

Cloning of a WD-repeat-containing gene from alfalfa (Medicago sativa): a role in hormone-mediated cell division? McKhann HI, et al. **Plant Mol Biol** 1997 Jul; 34(5):771-80

Comparison of the role of 5' terminal sequences of alfalfa mosaic virus RNAs 1, 2, and 3 in viral RNA replication. Van Rossum CM, et al. **Virology** 1997 Sep 1;235(2):333-41

RADIATION EFFECTS

Induction of transcription from the long terminal repeat of the intracysternal particles type A (IAP) by X-irradiation. Faure E, et al. **Arch Physiol Biochem** 1997 Apr;105(2):183-9

X-irradiation activates the Drosophila 1731 retrotransposon LTR and stimulates secretion of an extracellular factor that induces the 1731-LTR transcription in nonirradiated cells. Faure E, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):313-9

REPLACEMENT THERAPY, ESTROGEN see **ESTROGEN REPLACEMENT THERAPY**

REPLANTATION

Complications and reimplantation. Aschendorff A, et al. **Adv Otorhinolaryngol** 1997;52:167-70

Cutaneous pulse oximetry in the preoperative assessment of devascularized digits [letter] Isenberg JS, et al. **Ann Plast Surg** 1996 Jun;36(6):659-61

Replantation of ring avulsion of index, long, and ring fingers. Tseng OF, et al. **Ann Plast Surg** 1996 Jun;36(6):625-8

Regeneration of sudomotor and sensory nerve fibres after digital replantation and microneurovascular toe-to-hand transfer. Ahčan U, et al. **Br J Plast Surg** 1997 Jun; 50(4):227-35

Finger replantation in a 12-month-old child: a long-term follow-up. Nagase T, et al. **Br J Plast Surg** 1996 Dec; 49(8):555-8

Reinsertion of the distal common bile duct into the resection cavity during duodenum-preserving resection of the head of the pancreas for chronic pancreatitis. Izbicki JR, et al. **Br J Surg** 1997 Jun;84(6):791-2

Thumb reconstruction. Brunelli GA, et al. **Bull Hosp Jt Dis** 1996;54(4):245-8 (21 ref.)

Epidural anaesthesia for ureteral reimplantation in an infant with congenital tracheal stenosis. Concha M, et al. **Can J Anaesth** 1997 Jun;44(6):666-8

Stent placement in surgically reimplanted left main coronary artery in patient with anomalous origin of left main coronary artery from pulmonary artery. Ohmoto Y, et al. **Cathet Cardiovasc Diagn** 1997 Sep;42(1):48-50

Morphological changes of autoclaved autogenic bone implantation and autoclaved autogenic bone supplemented with allogenic demineralized bone matrix in rat parietal bone. Young TQ, et al. **Histol Histopathol** 1996 Apr; 11(2):361-9

Mandibular reconstruction by secondary reimplantation of resected segments: a preliminary report [letter; comment] Sailer HF. **Int J Oral Maxillofac Surg** 1996 Feb;25(1):86 . Comment on: Int J Oral Maxillofac Surg 1995 Aug;24(4):288-92.

Tissue expansion for staged reimplantation of infected total knee arthroplasty. Namba RS, et al. **J Arthroplasty** 1997 Jun;12(4):471-4

Replantation and revascularization at the transmetacarpal level: long-term functional results. Weinzweig N, et al. **J Hand Surg [Am]** 1996 Sep;21(5):877-83

Replantation-revascularization and primary amputation in major hand injuries. Resources spent on treatment and the indirect costs of sick leave in Sweden. Holmberg J, et al. **J Hand Surg [Br]** 1996 Oct;21(5):576-80

Clinical outcome of digital replantation using the fibrin glue-assisted microvascular anastomosis technique. Isogai N, et al. **J Hand Surg [Br]** 1996 Oct;21(5):573-5

Local intravenous thrombolysis with recombinant tissue plasminogen activator for salvage of forearm replantation. Hashim HA, et al. **J Reconstr Microsurg** 1996 Nov; 12(8):543-6

Replantation and revascularization of the digits in a community microsurgical practice. Pomerance J, et al. **J Reconstr Microsurg** 1997 Apr;13(3):163-70

Using the Internet for rapid exchange of photographs and X-ray images to evaluate potential extremity replantation candidates. Buntic RF, et al. **J Trauma** 1997 Aug; 43(2):342-4

Decision making and results in subtotal and total lower leg amputations: reconstruction versus amputation. Hierner R, et al. **Microsurgery** 1995;16(12):830-9

One hundred sixty-seven thumb replantations and revascularisations: early microvascular results. Janezic TF, et al. **Microsurgery** 1996;17(5):259-63

Functional results of 46 thumb replantations and revascularisations. Janezic TF, et al. **Microsurgery** 1996; 17(5):264-7

Eight years experience in crush and avulsion type finger amputation. Ozerkan F, et al. **Microsurgery** 1995; 16(11):739-42

Tubular proteinuria in reflux nephropathy: post ureteric re-implantation. Goonasekera CD, et al. **Pediatr Nephrol** 1996 Oct;10(5):559-63

Replantation of the complete external genitals. Becker M, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1165-8

Microsurgical replantation of the avulsed scalp [letter; comment] Bickel KD. **Plast Reconstr Surg** 1997 Jun; 99(7):2105. Comment on: Plast Reconstr Surg 1996 May;97(6):1099-106; discussion 1107-8.

Effect of postoperative treatment with a combination of chuangxiong and electret on functional recovery of muscle grafts: an experimental study in the dog. Hua J, et al. **Plast Reconstr Surg** 1996 Oct;98(5):851-5

Total ear replantation. Kind GM, et al. **Plast Reconstr Surg** 1997 Jun;99(7):1858-67 (21 ref.)

Ear replantation without microsurgery. Pribaz JJ, et al. **Plast Reconstr Surg** 1997 Jun;99(7):1868-72

Recovery of finger sensibility and somatosensory evoked potentials following digit-to-digit replantation in man. Chu NS. **Scand J Rehabil Med** 1996 Sep;28(3):125-31

The difference between the changes in systemic oxygen consumption during orthotopic liver transplantation and those during extracorporeal hepatic resection. Irita K, et al. **Tohoku J Exp Med** 1996 Nov;180(3):217-23

Use of a subcutaneous tunnel following replantation of an amputated penis. Harris DD, et al. **Urology** 1996 Oct; 48(4):628-30

Penile replantation using the leech Hirudo medicinalis. Pantuck AJ, et al. **Urology** 1996 Dec;48(6):953-6

[In vitro culture of growth cartilage and in situ reimplantation] Jouve JL. **Chirurgie** 1996;121(4):273-8; discussion 278-9 (Eng. Abstr.) **(Fre)**

[Replantation of amputated limb and digit] Tamai S. **Nippon Seikeigeka Gakkai Zasshi** 1996 Jul;70(7):380-90 (8 ref.) **(Jpn)**

[Structural rearrangement of lymphatic and blood capillaries in the rat replanted limb] Volodina AV, et al. **Patol Fiziol Eksp Ter** 1996 Oct-Dec;(4):30-3 (Eng. Abstr.) **(Rus)**

[The restoration of the sensitive function of the nerves in replanted upper extremities] Rezkov GI. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):29-32 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Clinical use of leeches in reconstructive surgery. Daane S, et al. **Am J Orthop** 1997 Aug;26(8):528-32 (36 ref.)

HISTORY

Composite graft replacement of digital tips. 1. Before 1850 and after 1950. Elliot D, et al. **J Hand Surg [Br]** 1997 Jun; 22(3):341-5

INSTRUMENTATION

Distraction lengthening following growth cessation due to thumb replantation in a child. Hallock GG. **Ann Plast Surg** 1996 Dec;37(6):624-8

METHODS

Replantation by arterialization of the venous system of amputated parts. Veselý J, et al. **Acta Chir Plast** 1995; 37(3):67–70

Above–elbow arm replantation during pregnancy. Haws MJ, et al. **Ann Plast Surg** 1996 Jan;36(1):93–6

Salvage of fingertip amputated at nail level: new surgical principles and treatments. Hirase Y. **Ann Plast Surg** 1997 Feb;38(2):151–7

Reduction of ischemic reperfusion edema with corticotropin–releasing factor (CRF) in rat hind limb replantation. Whitney TM, et al. **Ann Plast Surg** 1997 Apr; 38(4):416–9; discussion 419–20

Total intercostal artery reimplantation for descending thoracic aortic replacement. Usui A, et al. **Ann Thorac Surg** 1996 Nov;62(5):1523–5

Nasal amputation due to human bite: microsurgical replantation. Hussain G, et al. **Aust N Z J Surg** 1997 Jun; 67(6):382–4

Temporary ectopic implantation for salvage of amputated digits [letter; comment] Cooper TM. **Br J Plast Surg** 1997 Feb;50(2):144. Comment on: Br J Plast Surg 1996 Apr;49(3):174–7.

Replantation of part of an ear as an open fan composite graft. Lin SC, et al. **Br J Plast Surg** 1997 Feb;50(2):135–8

Advances in digital replantation. Merle M, et al. **Clin Plast Surg** 1997 Jan;24(1):87–105 (27 ref.)

Replantation of four severed limbs in one patient. Pei GX, et al. **Injury** 1997 Jan;28(1):73–6

Tissue changes at different periods of ischemia. Brunelli GA, et al. **Int Angiol** 1995 Sep;14(3):253–63

The effect of exposure time on microsurgical anastomoses of experimentally crushed arteries. Su WF, et al. **Int Angiol** 1995 Sep;14(3):243–7

Very distal finger amputations: replantation or "reposition–flap" repair? Dubert T, et al. **J Hand Surg [Br]** 1997 Jun;22(3):353–8

Composite graft replacement of digital tips. 2. A study in children. Moiemen NS, et al. **J Hand Surg [Br]** 1997 Jun; 22(3):346–52

Replantation of the avulsion of the scalp: a case report. Srimuninnimit V, et al. **J Med Assoc Thai** 1996 Sep; 79(9):608–12

Avulsive amputations of the thumb: comparison of replantation techniques. Cao X, et al. **Microsurgery** 1996; 17(1):17–20

Replantation of a completely detached degloved thumb. Chen L, et al. **Microsurgery** 1996;17(1):48–50

Transosseous reconstruction of temporalis muscle for pterional craniotomy: technical note. Brunori A, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):22–3

The venocutaneous fistula: a new technique for reducing venous congestion in replanted fingertips. Kamei K, et al. **Plast Reconstr Surg** 1997 May;99(6):1771–4

Leiomyosarcoma of the inferior vena cava: novel surgical reconstruction preserves renal function. Babatasi G, et al. **Thorac Cardiovasc Surg** 1997 Feb;45(1):43–5

Microsurgical replantation of the amputated penis and scrotum in a 29–year–old man. Darewicz J, et al. **Urol Int** 1996;57(3):197–8

A simplified technique for ureteroneocystostomy in renal transplantation. Caparrós J, et al. **World J Urol** 1996; 14(4):236–8

[Ureteral reimplantation] Aboutaieb R, et al. **Ann Urol (Paris)** 1996;30(5):240–3 (Eng. Abstr.) **(Fre)**

[Restoration of replanted extremity function with use of microsurgical tissue autotransplantation] Shibaev EI, et al. **Khirurgiia (Mosk)** 1997;(2):56–61 (Eng. Abstr.) **(Rus)**

STANDARDS

1457 years of microsurgical experience. Glicksman A, et al. **Plast Reconstr Surg** 1997 Aug;100(2):355–63

REPLANTATION, TOOTH see TOOTH REPLANTATION

REPLICA TECHNIQUES

Ultrastructure of the rat periodontal ligament as observed with quick–freeze, deep–etch and replica methods: arrangement of collagen and related structures. Kuroiwa M, et al. **Acta Anat (Basel)** 1996;157(4):291–302

Evaluation of human skin irritation by carboxylic acids, alcohols, esters and aldehydes, with nitrocellulose–replica method and closed patch testing. Sato A, et al. **Contact Dermatitis** 1996 Jan;34(1):12–6

REPLICATION ORIGIN

An origin of DNA replication from Lactococcus lactis bacteriophage c2. Waterfield NR, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1452–3

The ori of filamentous phage phi Lf is located within the gene encoding the replication initiation protein. Lin NT, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):246–51

Conditional requirement for sequences distinct from the replication origin during episomal establishment of the BPV1 genome. Pierrefite V, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):445–8

Two steps to binding replication origins? DNA–protein interactions. Dean FB, et al. **Curr Biol** 1996 Aug 1; 6(8):931–4 (14 ref.)

Large, complex modular structure of a fission yeast DNA replication origin. Dubey DD, et al. **Curr Biol** 1996 Apr 1;6(4):467–73

Chromatin proteins involved in the initiation of DNA replication. Rowles A, et al. **Curr Opin Genet Dev** 1997 Apr;7(2):152–7 (57 ref.)

Mechanism of anucleate cell production in the oriC–deleted mutants of Bacillus subtilis. Moriya S, et al. **DNA Res** 1997 Apr 28;4(2):115–26

Bacteriophage T4 UvsW protein is a helicase involved in recombination, repair and the regulation of DNA replication origins. Carles–Kinch K, et al. **EMBO J** 1997 Jul 1;16(13):4142–51

Why is the initiation nick site of an AT–rich rolling circle plasmid at the tip of a GC–rich cruciform? Jin R, et al. **EMBO J** 1997 Jul 16;16(14):4456–66

ORC– and Cdc6–dependent complexes at active and inactive chromosomal replication origins in Saccharomyces cerevisiae. Santocanale C, et al. **EMBO J** 1996 Dec 2; 15(23):6671–9

The initiator protein E1 binds to the bovine papillomavirus origin of replication as a trimeric ring–like structure. Sedman J, et al. **EMBO J** 1996 Sep 16;15(18):5085–92

Nucleotide sequence of a nicking site of the Streptomyces plasmid pSN22 replicating by the rolling circle mechanism. Suzuki I, et al. **FEMS Microbiol Lett** 1997 May 15; 150(2):283–8

Replication of the R6K gamma origin in vitro: dependence on wt pi and hyperactive piS87N protein variant. Levchenko I, et al. **Gene** 1997 Jul 1;193(1):97–103

Mapping of the replication origin of the Bacillus subtilis chromosome by the two–dimensional gel method. Moriya S, et al. **Gene** 1996 Oct 17;176(1–2):81–4

Identification of a putative DNA replication origin in the gamma–aminobutyric acid receptor subunit beta3 and alpha5 gene cluster on human chromosome 15q11–q13, a region associated with parental imprinting and allele–specific replication timing. Sinnett D, et al. **Gene** 1996 Sep 16;173(2):171–7

ORC–dependent and origin–specific initiation of DNA replication at defined foci in isolated yeast nuclei. Pasero P, et al. **Genes Dev** 1997 Jun 15;11(12):1504–18

A suppressor of mutations in the region adjacent to iterons of pSC101 ori. Ohkubo S, et al. **J Bacteriol** 1997 Mar; 179(6):2089–91

Protein–DNA interactions in the ori region of the Mycobacterium fortuitum plasmid pAL5000. Stolt P, et al. **J Bacteriol** 1996 Dec;178(23):6693–700

Interaction of Escherichia coli primase with a phage G4ori(c)–E. coli SSB complex. Sun W, et al. **J Bacteriol** 1996 Dec;178(23):6701–5

In vivo determination of replication origins of human mitochondrial DNA by ligation–mediated polymerase chain reaction. Kang D, et al. **J Biol Chem** 1997 Jun 13; 272(24):15275–9

Molecular design of inhibitors of in vitro oriC DNA replication based on the potential to block the ATP binding of DnaA protein. Mizushima T, et al. **J Biol Chem** 1996 Oct 11;271(41):25178–83

Absence of an unusual "densely methylated island" at the hamster dhfr ori–beta. Rein T, et al. **J Biol Chem** 1997 Apr 11;272(15):10021–9

The ColE1 unidirectional origin acts as a polar replication fork pausing site. Viguera E, et al. **J Biol Chem** 1996 Sep 13;271(37):22414–21

Deletion analysis of ors12, a centromeric, early activated, mammalian origin of DNA replication. Pelletier R, et al. **J Cell Biochem** 1997 Jul 1;66(1):87–97

Chromosome architecture can dictate site–specific initiation of DNA replication in Xenopus egg extracts. Lawlis SJ, et al. **J Cell Biol** 1996 Dec;135(5):1207–18

Stringent structural and sequence requirements of the human herpesvirus 6B lytic–phase origin of DNA replication. Dykes C, et al. **J Gen Virol** 1997 May;78 (Pt 5):1125–9

RNA–DNA hybrid formation at a bacteriophage T4 replication origin. Carles–Kinch K, et al. **J Mol Biol** 1997 Mar 14;266(5):915–26

Analysis of the tobacco chloroplast DNA replication origin (oriB) downstream of the 23 S rRNA gene. Kunnimalaiyaan M, et al. **J Mol Biol** 1997 May 2; 268(2):273–83

Isolation of an amino–terminal region of bovine papillomavirus type 1 E1 protein that retains origin binding and E2 interaction capacity. Leng X, et al. **J Virol** 1997 Jan;71(1):848–52

Mapping and characterization of the origin of DNA replication of porcine circovirus. Mankertz A, et al. **J Virol** 1997 Mar;71(3):2562–6

Replication of simian virus 40 origin–containing DNA during infection with a recombinant Autographa californica multiple nuclear polyhedrosis virus expressing large T antigen. Martin DW, et al. **J Virol** 1997 Jan;71(1):501–6

Kissing of the two predominant hairpin loops in the coxsackie B virus 3' untranslated region is the essential structural feature of the origin of replication required for negative–strand RNA synthesis. Melchers WJ, et al. **J Virol** 1997 Jan;71(1):686–96

A replication function associated with the activation domain of the Epstein–Barr virus Zta transactivator. Sarisky RT, et al. **J Virol** 1996 Dec;70(12):8340–7

Evidence that the UL84 gene product of human cytomegalovirus is essential for promoting oriLyt–dependent DNA replication and formation of replication compartments in cotransfection assays. Sarisky RT, et al. **J Virol** 1996 Nov;70(11):7398–413

Insufficient levels of NF1II and its low affinity for the origin of adenovirus type 12 (Ad12) DNA replication contribute to the abortive infection of BHK21 hamster cells by Ad12. Schiedner G, et al. **J Virol** 1996 Nov;70(11):8003–9

Binding of the E1 and E2 proteins to the origin of replication of bovine papillomavirus. Sedman T, et al. **J Virol** 1997 Apr;71(4):2887–96

Identification and analysis of a lytic–phase origin of DNA replication in human herpesvirus 7. van Loon N, et al. **J Virol** 1997 Apr;71(4):3279–84

Initiation of baculovirus DNA replication: early promoter regions can function as infection–dependent replicating sequences in a plasmid–based replication assay. Wu Y, et al. **J Virol** 1996 Oct;70(10):6967–72

Genetic and physiological analysis of DNA replication in fission yeast. MacNeill SA, et al. **Methods Enzymol** 1997; 283:440–59

Denaturation of the simian virus 40 origin of replication mediated by human replication protein A. Iftode C, et al. **Mol Cell Biol** 1997 Jul;17(7):3876–83

Functional equivalency and diversity of cis–acting elements among yeast replication origins. Lin S, et al. **Mol Cell Biol** 1997 Sep;17(9):5473–84

A transcriptional insulator element, the su(Hw) binding site, protects a chromosomal DNA replication origin from position effects. Lu L, et al. **Mol Cell Biol** 1997 Apr; 17(4):2202–6

High–resolution mapping of the origin of DNA replication in the hamster dihydrofolate reductase gene domain by competitive PCR. Pelizon C, et al. **Mol Cell Biol** 1996 Oct; 16(10):5358–64

An origin of replication and a centromere are both needed to establish a replicative plasmid in the yeast Yarrowia lipolytica. Vernis L, et al. **Mol Cell Biol** 1997 Apr; 17(4):1995–2004

The localized melting of mini–F origin by the combined action of the mini–F initiator protein (RepE) and HU and DnaA of Escherichia coli. Kawasaki Y, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):42–9

HU protein binding to the replication origin of the rolling–circle plasmid pKYM enhances DNA replication. Yasukawa H, et al. **Mol Gen Genet** 1997 May 20; 254(5):548–54

Co–ordination between membrane oriC sequestration factors and a chromosome partitioning protein, TolC (MukA). Bahloul A, et al. **Mol Microbiol** 1996 Oct;22(2):275–82

The A184V missense mutation of the dnaA5 and dnaA46 alleles confers a defect in ATP binding and thermolability in initiation of Escherichia coli DNA replication. Carr KM, et al. **Mol Microbiol** 1996 Jun;20(6):1307–18

Streptomyces linear plasmids that contain a phage–like, centrally located, replication origin. Chang PC, et al. **Mol Microbiol** 1996 Dec;22(5):789–800

Escherichia coli strains in which chromosome replication is controlled by a P1 or F replicon integrated into oriC. Eliasson A, et al. **Mol Microbiol** 1996 Jun;20(5):1013–23

Random initiation of replication of plasmids P1 and F (oriS) when integrated into the Escherichia coli chromosome. Eliasson A, et al. **Mol Microbiol** 1996 Jun;20(5):1025–32

A comprehensive set of DnaA–box mutations in the replication origin, oriC, of Escherichia coli. Langer U, et al. **Mol Microbiol** 1996 Jul;21(2):301–11

Organization of the origins of replication of the chromosomes of Mycobacterium smegmatis, Mycobacterium leprae and Mycobacterium tuberculosis and isolation of a functional origin from M. smegmatis. Salazar L, et al. **Mol Microbiol** 1996 Apr;20(2):283–93

An improved version of suicide vector pKNG101 for gene replacement in gram–negative bacteria [letter] Sarker MR, et al. **Mol Microbiol** 1997 Jan;23(2):410–1

Herpes simplex virus: selection of origins of DNA replication. Hammarsten O, et al. **Nucleic Acids Res** 1997 May 1; 25(9):1753–60

Utilization of the same DNA replication origin by human cells of different derivation. Kumar S, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3289–94

Identification of a predominant replication origin in fission yeast. Okuno Y, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):530–7

A particular DNA structure is required for the function of a cis–acting component of the Epstein–Barr virus OriLyt origin of replication. Portes–Sentis S, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1347–54

The Escherichia coli Fis protein prevents initiation of DNA replication from oriC in vitro. Wold S, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3527–32

The origin of transfer (oriT) of the enterococcal, pheromone–responding, cytolysin plasmid pAD1 is located within the repA determinant. An FY, et al. **Plasmid** 1997; 37(1):87–94

Molecular analysis of the replication origin of the Lactococcus lactis plasmid pCJ305. Foley S, et al. **Plasmid** 1996 Sep;36(2):125–41

Site–specific nicking in vitro at ori T by the DNA relaxase of Tn5252. Srinivas P, et al. **Plasmid** 1997;37(1):42–50

Three single–strand origins located on both strands of the Streptomyces rolling circle plasmid pSN22. Suzuki I, et al. **Plasmid** 1997;37(1):51–64

Minus-strand origin of filamentous phage versus transcriptional promoters in recognition of RNA polymerase. Higashitani A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2909-14

The Ku-like protein from Saccharomyces cerevisiae is required in vitro for the assembly of a stable multiprotein complex at a eukaryotic origin of replication. Shakibai N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11569-74

Cell cycle-dependent establishment of a late replication program. Raghuraman MK, et al. **Science** 1997 May 2; 276(5313):806-9

EBNA1 and E2: a new paradigm for origin-binding proteins? Grossman SR, et al. **Trends Microbiol** 1996 Mar;4(3):87-9

Intracellular localization of the herpes simplex virus type-1 origin binding protein, UL9 [published erratum appears in Virology 1997 Jan 6;227(1):268] Malik AK, et al. **Virology** 1996 Oct 15;224(2):380-9

The location and sequence composition of the murine cytomegalovirus replicator (oriLyt). Masse MJ, et al. **Virology** 1997 Apr 14;230(2):350-60

The Epstein-Barr virus (EBV) DNA polymerase accessory protein, BMRF1, activates the essential downstream component of the EBV oriLyt. Zhang Q, et al. **Virology** 1997 Mar 31;230(1):22-34

Cloning and sequence analysis of a Marek's disease virus origin binding protein (OBP) reveals strict conservation of structural motifs among OBPs of divergent alphaherpesviruses. Wu TF, et al. **Virus Genes** 1996; 13(2):143-57

The yeast Rad6 protein: a mediator of homologous recombination across the scaffold attached region at the replication origin ARS1. Markvart MB, et al. **Yeast** 1996 Nov;12(14):1427-38

[Structure of origin of replication] Ariga H, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2254-8 (23 ref.) **(Jpn)**

[Replication of chromosomal DNA: process for its initiation] Matsukage A. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2369-77 (35 ref.) **(Jpn)**

DRUG EFFECTS

A lesion in the DNA replication initiation factor Mcm10 induces pausing of elongation forks through chromosomal replication origins in Saccharomyces cerevisiae. Merchant AM, et al. **Mol Cell Biol** 1997 Jun;17(6):3261-71

GENETICS

Sequence comparison of mitochondrial tRNA genes and origin of light strand replication in Bos taurus and Nellore (Bos indicus) breeds. Pegoraro L, et al. **Anim Genet** 1996 Apr;27(2):91-4

Archaea and the origin(s) of DNA replication proteins. Edgell DR, et al. **Cell** 1997 Jun 27;89(7):995-8 (27 ref.)

Bipolar localization of the replication origin regions of chromosomes in vegetative and sporulating cells of B. subtilis. Webb CD, et al. **Cell** 1997 Mar 7;88(5):667-74

Bifunctionality of the AcMNPV homologous region sequence (hr1): enhancer and ori functions have different sequence requirements. Habib S, et al. **DNA Cell Biol** 1996 Sep;15(9):737-47

Cis-element, oriR, involved in the initiation of (-) strand poliovirus RNA: a quasi-globular multi-domain RNA structure maintained by tertiary ('kissing') interactions. Pilipenko EV, et al. **EMBO J** 1996 Oct 1;15(19):5428-36

Description of a novel plasmid replicative origin from a genetically distinct family of conjugative plasmids associated with phytosphere microflora. Viegas CA, et al. **FEMS Microbiol Lett** 1997 Apr 1;149(1):121-7

Recognition mechanisms of the minus-strand origin of phage f1 by Escherichia coli RNA polymerase. Higashitani N, et al. **Genes Cells** 1996 Sep;1(9):829-41

RNase mitochondrial RNA processing correctly cleaves a novel R loop at the mitochondrial DNA leading-strand origin of replication. Lee DY, et al. **Genes Dev** 1997 Mar 1;11(5):582-92

Common structural features of replication origins in all life forms. Boulikas T. **J Cell Biochem** 1996 Mar 1; 60(3):297-316 (162 ref.)

Sequence and context effects on origin function in mammalian cells. Dijkwel PA, et al. **J Cell Biochem** 1996 Aug;62(2):210-22 (85 ref.)

Active mammalian replication origins are associated with a high-density cluster of mCpG dinucleotides. Rein T, et al. **Mol Cell Biol** 1997 Jan;17(1):416-26

CDC45, a novel yeast gene that functions with the origin recognition complex and Mcm proteins in initiation of DNA replication. Zou L, et al. **Mol Cell Biol** 1997 Feb; 17(2):553-63

The iteron bases and spacers of the P1 replication origin contain information that specifies the formation of a complex structure involved in initiation. Brendler TG, et al. **Mol Microbiol** 1997 Feb;23(3):559-67

Replication of minichromosomes in a host in which chromosome replication is random. Eliasson A, et al. **Mol Microbiol** 1997 Mar;23(6):1215-20

Transcriptional activation of the dnaA gene encoding the initiator for oriC replication by IciA protein, an inhibitor of in vitro oriC replication in Escherichia coli. Lee YS, et al. **Mol Microbiol** 1996 Jan;19(2):389-96

Fine mapping of replication origins (ori A and ori B) in Nicotiana tabacum chloroplast DNA. Kunnimalaiyaan M, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3681-6

Characterization of replication origins flanking the 23S rRNA gene in tobacco chloroplast DNA. Lu Z, et al. **Plant Mol Biol** 1996 Nov;32(4):693-706

Genetic analysis of the replication region of the Lactobacillus plasmid vector pPSC22. Cocconcelli PS, et al. **Res Microbiol** 1996 Oct;147(8):619-24

Characterization of human amniotic epithelial cells transformed with origin-defective SV40 T-antigen gene. Tohyama J, et al. **Tohoku J Exp Med** 1997 May; 182(1):75-82

PHYSIOLOGY

Importance of the replication origin sequestration in cell division of Escherichia coli. Meury J, et al. **Biochimie** 1995; 77(11):875-9

Coordinate binding of ATP and origin DNA regulates the ATPase activity of the origin recognition complex. Klemm RD, et al. **Cell** 1997 Feb 21;88(4):493-502

Genome replication in early mouse embryos follows a defined temporal and spatial order. Ferreira J, et al. **J Cell Sci** 1997 Apr;110 (Pt 7):889-97

The replication origin decision point is a mitogen-independent, 2-aminopurine-sensitive, G1-phase event that precedes restriction point control. Wu JR, et al. **Mol Cell Biol** 1997 Aug;17(8):4312-21

REPLICATION UNIT see **REPLICON**

REPLICON

Construction and use of a versatile set of broad-host-range cloning and expression vectors based on the RK2 replicon. Blatny JM, et al. **Appl Environ Microbiol** 1997 Feb; 63(2):370-9

Evidence for a megareplicon covering megabases of centromeric chromosome segments. Holló G, et al. **Chromosome Res** 1996 Apr;4(3):240-7

Molecular characterization of the replicon of the Pediococcus pentosaceus 43200 pediocin A plasmid pMD136. Kantor A, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):237-44

Nucleotide sequence and characterization of the cryptic Bacillus thuringiensis plasmid pGI3 reveal a new family of rolling circle replicons. Hoflack L, et al. **J Bacteriol** 1997 Aug;179(16):5000-8

Role of the RepA1 protein in RepFIC plasmid replication. Maas R, et al. **J Bacteriol** 1997 Apr;179(7):2163-8

Sindbis virus replicons and Sindbis virus: assembly of chimeras and of particles deficient in virus RNA. Frolov I, et al. **J Virol** 1997 Apr;71(4):2819-29

Packaging signals in alphaviruses. Frolova E, et al. **J Virol** 1997 Jan;71(1):248-58

In vivo DNA expression of functional brome mosaic virus RNA replicons in Saccharomyces cerevisiae. Ishikawa M, et al. **J Virol** 1997 Oct;71(10):7781-90

Use of viral replicons for the expression of genes in plants. Porta C, et al. **Mol Biotechnol** 1996 Jun;5(3):209-21 (73 ref.)

Molecular analysis of the replication region of the theta-replicating plasmid pUCL287 from Tetragenococcus (Pediococcus) halophilus ATCC33315. Benachour A, et al. **Mol Gen Genet** 1997 Aug;255(5):504-13

Escherichia coli strains in which chromosome replication is controlled by a P1 or F replicon integrated into oriC. Eliasson A, et al. **Mol Microbiol** 1996 Jun;20(5):1013-23

Identification of an essential core element and stimulatory sequences in a Kluyveromyces lactis ARS element, KARS101. Fabiani L, et al. **Mol Microbiol** 1996 Feb; 19(4):756-66

Functional analysis of the Enterococcus faecalis plasmid pAD1-encoded stability determinant par. Weaver KE, et al. **Mol Microbiol** 1996 Apr;20(1):53-63

How many replicons make a nodule? [letter; comment] Perret X, et al. **Nature** 1997 Jun 19;387(6635):767. Comment on: Nature 1997 May 22;387(6631):352-4.

Expression of functional elements inserted into the 35S promoter region of infectious cauliflower mosaic virus replicons. Noad RJ, et al. **Nucleic Acids Res** 1997 Mar 15; 25(6):1123-9

Molecular analysis of the replication elements of the broad-host-range RepA/C replicon. Llanes C, et al. **Plasmid** 1996 Jul;36(1):26-35

Instability of Rts1 (drug-resistant factor) replicon: stabilization by DNA fragments derived from Rts1. Yonemitsu H, et al. **Plasmid** 1996 Nov;36(3):143-52

Crystallization and preliminary crystallographic analysis of RepA1, a replication control protein of the RepFIC replicon of enterotoxin plasmid EntP307. Song H, et al. **Proteins** 1996 May;25(1):137-8

Regulation of replicon size in Xenopus egg extracts. Walter J, et al. **Science** 1997 Feb 14;275(5302):993-5

Increased expression of the N protein of respiratory syncytial virus stimulates minigenome replication but does not alter the balance between the synthesis of mRNA and antigenome. Fearns R, et al. **Virology** 1997 Sep 15; 236(1):188-201

Expression of parvovirus LuIII NS1 from a Sindbis replicon for production of LuIII-luciferase transducing virus. Corsini J, et al. **Virus Res** 1996 Dec;46(1-2):95-104

RNA-dependent RNA polymerase activity related to the 20S RNA replicon of Saccharomyces cerevisiae. Ribas JC, et al. **Yeast** 1996 Sep 30;12(12):1219-28

[The gene for Duchenne muscular dystrophy is organized into several replicons] Verbovaia LV, et al. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1334-8 **(Rus)**

GENETICS

Characterization and replication mode determination of the minimal replicon of Tetragenococcus halophila ATCC33315 plasmid pUCL287. Benachour A, et al. **Biochimie** 1995;77(11):868-74

Organization of DNA into foci during replication. Newport J, et al. **Curr Opin Cell Biol** 1996 Jun;8(3):365-8 (17 ref.)

Genetic map of the virulence plasmid of Salmonella enteritidis and nucleotide sequence of its replicons. Rodríguez-Peña JM, et al. **Gene** 1997 Mar 25;188(1):53-61

Sequencing the 500-kb GC-rich symbiotic replicon of Rhizobium sp. NGR234 using dye terminators and a thermostable "sequenase": a beginning. Freiberg C, et al. **Genome Res** 1996 Jul;6(7):590-600

Suppression of initiation defects of chromosome replication in Bacillus subtilis dnaA and oriC-deleted mutants by integration of a plasmid replicon into the chromosomes. Hassan AK, et al. **J Bacteriol** 1997 Apr;179(8):2494-502

Subgenomic replicons of the flavivirus Kunjin: construction and applications. Khromykh AA, et al. **J Virol** 1997 Feb; 71(2):1497-505

Molecular analysis of RepHI1B, a replicon specific to IncHI1 plasmids. Ouazzani Chahdi A, et al. **Mol Gen Genet** 1997 Aug;255(5):477-86

Replicon rescue: a novel strategy to clone the genomic DNA flanking insertions of integrating shuttle vector DNA. McMahon TL, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):4096-7

IMMUNOLOGY

Immunization of mice with poliovirus replicons expressing the C-fragment of tetanus toxin protects against lethal challenge with tetanus toxin. Porter DC, et al. **Vaccine** 1997 Feb;15(3):257-64

PHYSIOLOGY

The bacteriophage P1 lytic replicon: directionality of replication and cis-acting elements. Cohen G, et al. **Gene** 1996 Oct 10;175(1-2):151-5

A Brevibacterium linens pRBL1 replicon functional in Corynebacterium glutamicum. Ankri S, et al. **Plasmid** 1996 Jul;36(1):36-41

Structural and segregational stability of various replicons in Actinobacillus actinomycetemcomitans. Galli DM, et al. **Plasmid** 1996 Jul;36(1):42-8

REPORTER GENES see **GENES, REPORTER**

REPRESSED MEMORY see **REPRESSION**

REPRESSION

Advantages and safeguards in using the ideomotor signaling technique: a commentary of Walsh and clinical practice [comment] Hammond DC. **Am J Clin Hypn** 1997 Jul; 40(1):360-7. Comment on: Am J Clin Hypn 1997 Jul;40(1):349-59.

Goldfinger: a framework for resolving affect using ideomotor questioning [see comments] Walsh BJ. **Am J Clin Hypn** 1997 Jul;40(1):349-59. Comment in: Am J Clin Hypn 1997 Jul;40(1):360-7.

Is repression adaptive? Relationships to socioemotional adjustment, academic performance, and self-image. Bybee J, et al. **Am J Orthopsychiatry** 1997 Jan;67(1):59-69

Cultural psychopathology and the false memory syndrome debates: a view from psychoanalysis [letter; comment] Daily LG. **Am J Psychother** 1997 Winter;51(1):137-40. Comment on: Am J Psychother 1996 Spring;50(2):167-77.

On the "true-false" memory syndrome: the problem of clinical evidence. Friedman S. **Am J Psychother** 1997 Winter; 51(1):102-22

Ethical issues in the search for repressed memories. Merskey H. **Am J Psychother** 1996 Summer;50(3):323-35

Beyond "true" and "false" memories: remembering and recovery in the survival of childhood sexual abuse. Hall JM, et al. **ANS Adv Nurs Sci** 1997 Jun;19(4):37-54 (109 ref.)

Repressed memory and false memory [see comments] Lego S. **Arch Psychiatr Nurs** 1996 Apr;10(2):110-5. Comment in: Arch Psychiatr Nurs 1996 Dec;10(6):342-6.

False memory syndrome [letter; comment] Spragg GS. **Aust N Z J Psychiatry** 1995 Dec;29(4):695-6. Comment on: Aust N Z J Psychiatry 1995 Sep;29(3):516-7.

Recovered memories [letter; comment] Brewin CR. **Br J Psychiatry** 1997 Apr;170:388. Comment on: Br J Psychiatry 1996 Nov;169(5):665-6.

False memory syndrome [letter; comment] Freyd P. **Br J Psychiatry** 1996 Dec;169(6):794-5. Comment on: Br J Psychiatry 1996 Aug;169(2):131-4.

Recovered memories [letter; comment] [see comments] Merskey H. **Br J Psychiatry** 1996 Nov;169(5):665-6. Comment on: Br J Psychiatry 1996 Aug;169(2):131-4. Comment in: Br J Psychiatry 1997 Apr;170:388.

Repressive coping style and the architecture of emotion-related memories: is their relationship that simple?

Orbach I, et al. **Br J Soc Psychol** 1996 Dec;35 (Pt 4):459–71

Delayed traumatic recall in adults: a synthesis with legal, clinical, and forensic recommendations. Beahrs JO, et al. **Bull Am Acad Psychiatry Law** 1996;24(1):45–55 (63 ref.)

Guttmacher lecture at the 1994 AAPL meetings [letter; comment] [see comments] Kroll J. **Bull Am Acad Psychiatry Law** 1996;24(1):144–5. Comment on: Bull Am Acad Psychiatry Law 1995;23(1):5–17. Comment in: Bull Am Acad Psychiatry Law 1996;24(3):422–3.

Memory distortion and false memory creation. Loftus EF. **Bull Am Acad Psychiatry Law** 1996;24(3):281–95 (45 ref.)

Adult recovered memories of childhood sexual abuse [see comments] Blackshaw S, et al. **Can J Psychiatry** 1996 Jun; 41(5):305–8. Comment in: Can J Psychiatry 1996 Dec;41(10):665–6. **(Eng, Fre)**

Re: Recovered memories [letter] Gutowski WD. **Can J Psychiatry** 1996 Oct;41(8):534–5

Re: Adult recovered memories of childhood sexual abuse [letter; comment] Keystone M. **Can J Psychiatry** 1996 Dec; 41(10):665–6. Comment on: Can J Psychiatry 1996 Jun;41(5):305–8.

Re: Recovered memories [letter; comment] Stein E, et al. **Can J Psychiatry** 1996 Oct;41(8):533–5. Comment on: Can J Psychiatry 1996 May;41(4):199–200.

Truth lies in the eye of the beholder [letter; comment] Leyton E. **Can Med Assoc J** 1997 May 1;156(9):1265. Comment on: Can Med Assoc J 1996 Sep 15;155(6):647–53. Comment on: Can Med Assoc J 1997 Feb 1;156(3):344; discussion 345. Comment on: Can Med Assoc J 1997 Feb 1;156(3):344–5.

Repressed memories: middle ground or no man's land? [letter; comment] [see comments] Mak AJ. **Can Med Assoc J** 1997 Feb 1;156(3):344–5. Comment on: Can Med Assoc J 1996 Sep 15;155(6):647–53. Comment in: Can Med Assoc J 1997 May 1;156(9):1265.

The repressed memory controversy: is there middle ground? [see comments] Penfold PS. **Can Med Assoc J** 1996 Sep 15;155(6):647–53 (90 ref.). Comment in: Can Med Assoc J 1997 Feb 1;156(3):344; discussion 345. Comment in: Can Med Assoc J 1997 Feb 1;156(3):344–5. Comment in: Can Med Assoc J 1997 May 1;156(9):1265.

Repressed memories: middle ground or no man's land? [letter; comment] [see comments] Tyroler P. **Can Med Assoc J** 1997 Feb 1;156(3):344; discussion 345. Comment on: Can Med Assoc J 1996 Sep 15;155(6):647–53. Comment in: Can Med Assoc J 1997 May 1;156(9):1265.

Different forms of childhood abuse and memory. Melchert TP, et al. **Child Abuse Negl** 1997 Feb;21(2):125–35

Extent of sexual abuse [letter] Berman LH. **Community Ment Health J** 1997 Aug;33(4):371

Addressing the repressed needs of the Arabic client. Dwairy M. **Cult Divers Ment Health** 1997;3(1):1–12

"Recovered memory" therapy for eating disorders: implications of the Ramona verdict. Pope HG Jr, et al. **Int J Eat Disord** 1996 Mar;19(2):139–45

Problems in the concept of repression and proposals for their resolution. Maze JR, et al. **Int J Psychoanal** 1996 Dec;77 (Pt 6):1085–100 (36 ref.)

Memory, repression, and child sexual abuse: forensic implications for the mental health professional. Corelli TB, et al. **J Am Acad Psychiatry Law** 1997;25(1):31–47 (62 ref.)

The reconstruction of a repressed sexual molestation fifty years later. Viederman M. **J Am Psychoanal Assoc** 1995; 43(4):1169–219

Impact of the repressive personality style on the measurement of psychological distress in children and adolescents with chronic illness: an example from hemophilia. Drotar D, et al. **J Pediatr Psychol** 1996 Apr;21(2):283–93

Repressive coping: distraction using pleasant thoughts and memories. Boden JM, et al. **J Pers Soc Psychol** 1997 Jul; 73(1):45–62

A new look at defensive projection: thought suppression, accessibility, and biased person perception. Newman LS, et al. **J Pers Soc Psychol** 1997 May;72(5):980–1001

Memories out of order: thought suppression and the disturbance of sequence memory. Wegner DM, et al. **J Pers Soc Psychol** 1996 Oct;71(4):680–91

Posttraumatic stress disorder, flashbacks, and pseudomemories in closed head injury. Bryant RA. **J Trauma Stress** 1996 Jul;9(3):621–9

Authenticity of recovered sexual abuse memories: a Rorschach study. Leavitt F, et al. **J Trauma Stress** 1996 Jul;9(3):483–96

False memory syndrome--an issue clouded by emotion. Winbolt B. **Med Sci Law** 1996 Apr;36(2):100–9

Emotional control, depression and suicidality. Diggs KA, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):774

Severe paroxysmal hypertension. An automatic syndrome and its relationship to repressed emotions. Mann SJ. **Psychosomatics** 1996 Sep–Oct;37(5):444–50

REPRESSION-SENSITIZATION

Kindling versus quenching. Implications for the evolution and treatment of posttraumatic stress disorder. Post RM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:285–95 (50 ref.)

Early avoidance of traumatic stimuli predicts chronicity of intrusive thoughts following burn injury. Lawrence JW, et al. **Behav Res Ther** 1996 Aug;34(8):643–6

Repression-sensitization and response to public information: null findings from a pilot survey. Ingold CH. **Psychol Rep** 1997 Feb;80(1):209–10

REPRESSION-SENSITIZATION SCALES see **REPRESSION-SENSITIZATION**

REPRESSOR MOLECULES see **REPRESSOR PROTEINS**

REPRESSOR PROTEINS

Inducible expression of bcl-2 by the lac operator/repressor system in MDCK cells. Lin HH, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F300–6

The energy landscape of a fast-folding protein mapped by Ala-->Gly substitutions. Burton RE, et al. **Nat Struct Biol** 1997 Apr;4(4):305–10

ANALYSIS

Tuberin loss from cerebral tissues [letter; comment] Vinters HV, et al. **Ann Neurol** 1997 Aug;42(2):270–2. Comment on: Ann Neurol 1996 Dec;40(6):941–4.

Detection of mouse skeletal muscle-specific product, which includes ZF5 zinc fingers and a VP16 acidic domain, by reverse transcriptase PCR. Numoto M, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):20–5

The presence of human papillomavirus-16/-18 E6, p53, and Bcl-2 protein in cervicovaginal smears from patients with invasive cervical cancer. Pillai MR, et al. **Cancer Epidemiol Biomarkers Prev** 1996 May;5(5):329–35

A large protein complex containing the yeast Sin3p and Rpd3p transcriptional regulators. Kasten MM, et al. **Mol Cell Biol** 1997 Aug;17(8):4852–8

BIOSYNTHESIS

Expression of the TSC2 product tuberin and its target Rap1 in normal human tissues. Wienecke R, et al. **Am J Pathol** 1997 Jan;150(1):43–50

Reduced TSC2 RNA and protein in sporadic astrocytomas and ependymomas. Wienecke R, et al. **Ann Neurol** 1997 Aug;42(2):230–5

Induction of heat shock proteins DnaK, GroEL, and GroES by salt stress in Lactococcus lactis. Kilstrup M, et al. **Appl Environ Microbiol** 1997 May;63(5):1826–37

A cDNA cloning of human AEBP1 from primary cultured osteoblasts and its expression in a differentiating osteoblastic cell line. Ohno I, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):411–4

Preadipocyte factor-1 expression in the mouse embryo and placenta. Butterwith SC, et al. **Biochem Soc Trans** 1996 May;24(2):164S

Localization of tuberous sclerosis 2 mRNA and its protein product tuberin in normal human brain and in cerebral lesions of patients with tuberous sclerosis [see comments] Kerfoot C, et al. **Brain Pathol** 1996 Oct;6(4):367–75. Comment in: Brain Pathol 1996 Oct;6(4):375–6. Comment in: Brain Pathol 1996 Oct;6(4):376–7.

Tuberous sclerosis and tuberin: what do we learn from in situ localization data in the human brain? [editorial; comment] Wiestler OD, et al. **Brain Pathol** 1996 Oct; 6(4):376–7. Comment on: Brain Pathol 1996 Oct;6(4):367–77.

Drosophila development. Delimiting patterns by repression. Ip YT, et al. **Curr Biol** 1997 Apr 1;7(4):R216–8 (19 ref.)

Parameters affecting the use of the lac repressor system in eukaryotic cells and transgenic animals. Wyborski DL, et al. **Environ Mol Mutagen** 1996;28(4):447–58

The plant homologue of the defender against apoptotic death gene is down-regulated during senescence of flower petals. Orzáez D, et al. **FEBS Lett** 1997 Mar 10;404(2–3):275–8

Oxidative stress induces the levels of a MafG homolog in hamster HA-1 cells. Crawford DR, et al. **Free Radic Biol Med** 1996;21(4):521–5

Cloning and sequencing of the hrcA gene of Bacillus stearothermophilus. Mogk A, et al. **Gene** 1997 Jul 18; 194(1):133–6

Purification of Vibrio cholerae fur and estimation of its intracellular abundance by antibody sandwich enzyme-linked immunosorbent assay. Watnick PI, et al. **J Bacteriol** 1997 Jan;179(1):243–7

NFI-B3, a novel transcriptional repressor of the nuclear factor I family, is generated by alternative RNA processing. Liu Y, et al. **J Biol Chem** 1997 Apr 18;272(16):10739–45

Use of tetracycline-controlled gene expression systems to study mammalian cell cycle. Freundlieb S, et al. **Methods Enzymol** 1997;283:159–73

Tissue and cell-type specific expression of the tuberous sclerosis gene, TSC2, in human tissues. Menchine M, et al. **Mod Pathol** 1996 Nov;9(11):1071–80

Two new members of the murine Sim gene family are transcriptional repressors and show different expression patterns during mouse embryogenesis. Ema M, et al. **Mol Cell Biol** 1996 Oct;16(10):5865–75

Studies of the repressor (BlaI) of beta-lactamase synthesis in Staphylococcus aureus. Gregory PD, et al. **Mol Microbiol** 1997 Jun;24(5):1025–37

Expression of the tuberous sclerosis 2 gene product, tuberin, in adult and developing nervous system tissues. Geist RT, et al. **Neurobiol Dis** 1996 Apr;3(2):111–20

Decrease in neuron-restrictive silencer factor (NRSF) mRNA levels during differentiation of cultured neuroblastoma cells. Nishimura E, et al. **Neurosci Lett** 1996 Jun 21;211(2):101–4

Light-induced expression of transcription factor ICER (inducible cAMP early repressor) in rat suprachiasmatic nucleus is phase-restricted. Stehle JH, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):169–72

The Evi-1 proto-oncogene encodes a transcriptional repressor activity associated with transformation. Bartholomew C, et al. **Oncogene** 1997 Feb 6;14(5):569–77

dad-1, A putative programmed cell death suppressor gene in rice. Tanaka Y, et al. **Plant Cell Physiol** 1997 Mar; 38(3):379–83

Genetic and developmental control of nuclear accumulation of COP1, a repressor of photomorphogenesis in Arabidopsis. von Arnim AG, et al. **Plant Physiol** 1997 Jul; 114(3):779–88

Embryonic neuronal markers in tuberous sclerosis: single-cell molecular pathology. Crino PB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14152–7

Expression, purification, and functional analysis of the TyrR protein of Haemophilus influenzae. Zhu Q, et al. **Protein Expr Purif** 1997 Jul;10(2):237–46

CHEMICAL SYNTHESIS

Construction and characterization of monomeric tryptophan repressor: a model for an early intermediate in the folding of a dimeric protein. Shao X, et al. **Biochemistry** 1997 Aug 12;36(32):9941–9

CHEMISTRY

Sequestration stabilizes lac repressor-DNA complexes during gel electrophoresis. Vossen KM, et al. **Anal Biochem** 1997 Feb 1;245(1):85–92

A cDNA cloning of human AEBP1 from primary cultured osteoblasts and its expression in a differentiating osteoblastic cell line. Ohno I, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):411–4

Telomeric and tetraplex DNA binding properties of qTBP42: a homologue of the CArG box binding protein CBF-A. Sarig G, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):617–23

Oligomerization of the amide sensor protein AmiC by x-ray and neutron scattering and molecular modeling. Chamberlain D, et al. **Biochemistry** 1997 Jul 1; 36(26):8020–9

Urea and thermal equilibrium denaturation studies on the dimerization domain of Escherichia coli Trp repressor. Gloss LM, et al. **Biochemistry** 1997 May 13;36(19):5612–23

Anisotropic molecular rotational diffusion in 15N spin relaxation studies of protein mobility. Luginbühl P, et al. **Biochemistry** 1997 Jun 17;36(24):7305–12

Quantitative determination of conformational, dynamic, and kinetic parameters of a ligand-protein/DNA complex from a complete relaxation and conformational exchange matrix analysis of intermolecular transferred NOESY. Moseley HN, et al. **Biochemistry** 1997 May 6;36(18):5293–9

Three-dimensional solution structure and stability of phage 434 Cro protein. Padmanabhan S, et al. **Biochemistry** 1997 May 27;36(21):6424–36

Equilibrium stability and sub-millisecond refolding of a designed single-chain Arc repressor. Robinson CR, et al. **Biochemistry** 1996 Nov 5;35(44):13878–84

Construction and characterization of monomeric tryptophan repressor: a model for an early intermediate in the folding of a dimeric protein. Shao X, et al. **Biochemistry** 1997 Aug 12;36(32):9941–9

Backbone and side chain dynamics of lac repressor headpiece (1–56) and its complex with DNA. Slijper M, et al. **Biochemistry** 1997 Jan 7;36(1):249–54

Characterization of the role of side-chain interactions in the binding of ligands to apo trp repressor: pH dependence studies. Kavanoor M, et al. **Biophys Chem** 1997 May 21; 66(1):43–55

Molecular mechanics analysis of Tet repressor TRP-43 fluorescence. Silvi Antonini P, et al. **Biophys J** 1997 Apr; 72(4):1800–11

Protein-protein communication: structural model of the repression complex formed by CytR and the global regulator CRP. Kallipolitis BH, et al. **Cell** 1997 Jun 27; 89(7):1101–9

NMR studies of the Escherichia coli Trp repressor.trpRs operator complex. Evans PD, et al. **Eur J Biochem** 1996 Dec 15;242(3):567–75

Rapid estimation of relative amide proton exchange rates of 15 N-labelled proteins by a straightforward water selective NOESY-HSQC experiment. Böckmann A, et al. **FEBS Lett** 1996 Apr 1;383(3):191–5

Electrospray ionization mass spectrometry analysis of the apo- and metal-substituted forms of the Fur protein. Michaud-Soret I, et al. **FEBS Lett** 1997 Aug 25; 413(3):473–6

Dimerization specificity of P22 and 434 repressors is determined by multiple polypeptide segments. Donner AL, et al. **J Bacteriol** 1997 Feb;179(4):1253–61

Effect of dimerization on signal transduction and biological function of oncogenic Ros, insulin, and insulin-like growth factor I receptors. Chan JL, et al. **J Biol Chem** 1997 Jan 3;272(1):146–53

Zik1, a transcriptional repressor that interacts with the heterogeneous nuclear ribonucleoprotein particle K protein. Denisenko ON, et al. **J Biol Chem** 1996 Nov 1; 271(44):27701–6

Efficient insertion of odd-numbered transmembrane

segments of the tetracycline resistance protein requires even-numbered segments. Guo D, et al. **J Biol Chem** 1996 Nov 29;271(48):30829-34

Preferential modification of nuclear proteins by a novel ubiquitin-like molecule. Kamitani T, et al. **J Biol Chem** 1997 May 30;272(22):14001-4

A new function for the C-terminal zinc finger of the glucocorticoid receptor. Repression of RelA transactivation. Liden J, et al. **J Biol Chem** 1997 Aug 22; 272(34):21467-72

The rat glucocorticoid receptor mutant K461A differentiates between two different mechanisms of transrepression. Meyer T, et al. **J Biol Chem** 1997 Aug 22;272(34):21090-5

Combinatorial mutations of lac repressor. Stability of monomer-monomer interface is increased by apolar substitution at position 84. Nichols JC, et al. **J Biol Chem** 1997 Jul 25;272(30):18550-7

The X-ray structure of the PurR-guanine-purF operator complex reveals the contributions of complementary electrostatic surfaces and a water-mediated hydrogen bond to corepressor specificity and binding affinity. Schumacher MA, et al. **J Biol Chem** 1997 Sep 5;272(36):22648-53

DNA mobility in crystals of a nonspecific lambda cro/DNA complex. Klimenko DE, et al. **J Biomol Struct Dyn** 1995 Dec;13(3):529-36

Design and optimization of a capillary electrophoretic mobility shift assay involving trp repressor-DNA complexes. Stebbins MA, et al. **J Chromatogr B Biomed Appl** 1996 Aug 9;683(1):77-84

Microsecond protein folding through a compact transition state. Burton RE, et al. **J Mol Biol** 1996 Oct 25; 263(2):311-22

An aromatic stacking interaction between subunits helps mediate DNA sequence specificity: operator site discrimination by phage lambda cI repressor. Huang YT, et al. **J Mol Biol** 1997 Mar 28;267(2):403-17

Three-dimensional structure of the DNA-binding domain of the fructose repressor from Escherichia coli by 1H and 15N NMR. Penin F, et al. **J Mol Biol** 1997 Jul 18; 270(3):496-510

Structural role of a buried salt bridge in the 434 repressor DNA-binding domain. Pervushin K, et al. **J Mol Biol** 1996 Dec 20;264(5):1002-12

A possible tertiary structure change induced by acrylamide in the DNA-binding domain of the Tn10-encoded Tet repressor. A fluorescence study. Bousquet JA, et al. **J Protein Chem** 1996 Feb;15(2):205-18

Effects on protein structure and function of replacing tryptophan with 5-hydroxytryptophan: single-tryptophan mutants of the N-terminal domain of the bacteriophage lambda repressor. Kombo DC, et al. **J Protein Chem** 1996 Jan;15(1):77-86

A fluorescence study of Tn10-encoded tet repressor. Wasylewski Z, et al. **J Protein Chem** 1996 Jan;15(1):45-58

Conformation of Lac repressor tetramer in solution, bound and unbound to operator DNA. Ruben GC, et al. **Microsc Res Tech** 1997 Mar 1;36(5):400-16

Functional domains of the human orphan receptor ARP-1/COUP-TFII involved in active repression and transrepression. Achatz G, et al. **Mol Cell Biol** 1997 Sep; 17(9):4914-32

The MEF2A 3' untranslated region functions as a cis-acting translational repressor. Black BL, et al. **Mol Cell Biol** 1997 May;17(5):2756-63

Comparative analysis in three fungi reveals structurally and functionally conserved regions in the Mig1 repressor. Cassart JP, et al. **Mol Gen Genet** 1997 Jun;255(1):9-18

A component of the transcriptional repressor MeCP1 shares a motif with DNA methyltransferase and HRX proteins. Cross SH, et al. **Nat Genet** 1997 Jul;16(3):256-9

An atomic view of the L-tryptophan binding site of trp repressor [letter] Lawson CL. **Nat Struct Biol** 1996 Dec; 3(12):986-7

Formation of the hinge helix in the lac repressor is induced upon binding to the lac operator [letter] Spronk CA, et al. **Nat Struct Biol** 1996 Nov;3(11):916-9

Two receptor interaction domains in the corepressor, N-CoR/RIP13, are required for an efficient interaction with Rev-erbA alpha and RVR: physical association is dependent on the E region of the orphan receptors. Downes M, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4379-86

The ZiN/POZ domain of ZF5 is required for both transcriptional activation and repression. Kaplan J, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1108-16

Conformational changes of purine repressor DNA-binding domain upon complexation with DNA. Nagadoi A, et al. **Nucleic Acids Symp Ser** 1995;(34):63-4

Structure and function of Escherichia coli met repressor: similarities and contrasts with trp repressor. Phillips SE, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 Apr 29; 351(1339):527-35 (42 ref.)

The extreme C terminus of progesterone receptor contains a transcriptional repressor domain that functions through a putative corepressor. Xu J, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12195-9

Engineering of DNA binding proteins into site-specific cutters: reactivity of Trp repressor-1,10-phenanthroline chimeras. Landgraf R, et al. **Protein Eng** 1996 Jul; 9(7):603-10

Preparation and properties of pure, full-length IclR protein of Escherichia coli. Use of time-of-flight mass spectrometry to investigate the problems encountered. Donald LJ, et al. **Protein Sci** 1996 Aug;5(8):1613-24

A comparative study of dynamic structures between phage 434 Cro and repressor proteins by normal mode analysis. Wako H, et al. **Proteins** 1996 Sep;26(1):72-80

Structural basis for ligand-regulated oligomerization of AraC. Soisson SM, et al. **Science** 1997 Apr 18; 276(5311):421-5

Lac repressor at last. Sauer RT. **Structure** 1996 Mar 15; 4(3):219-22 (21 ref.)

The SANT domain: a putative DNA-binding domain in the SWI-SNF and ADA complexes, the transcriptional co-repressor N-CoR and TFIIIB. Aasland R, et al. **Trends Biochem Sci** 1996 Mar;21(3):87-8 (16 ref.)

[VHL gene and TSC 2 gene] Hino O. **Gan To Kagaku Ryoho** 1997 Sep;24(11):1386-91 (27 ref.) (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Molecular analysis of lacI mutations in Rat2 cells exposed to 7,12-dimethylbenz[a]anthracene: evidence for DNA sequence and DNA strand biases for mutation. Manjanatha MG, et al. **Mutat Res** 1996 Nov 11;372(1):53-64

GENETICS

Tuberous sclerosis: between genetic and physical analysis. Halley DJ. **Acta Genet Med Gemellol (Roma)** 1996; 45(1-2):63-75 (39 ref.)

Tuberous sclerosis-like lesions in epileptogenic human neocortex lack allelic loss at the TSC1 and TSC2 regions. Wolf HK, et al. **Acta Neuropathol (Berl)** 1997 Jan;93(1):93-6

Expression of the TSC2 product tuberin and its target Rap1 in normal human tissues. Wienecke R, et al. **Am J Pathol** 1997 Jan;150(1):43-50

Sustained cardiomyocyte DNA synthesis in whole embryo cultures lacking the TSC2 gene product. Pajak L, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1619-27

Typically unstable long tandem repeats in Escherichia coli show increased stability in strain PMC107 and are stable when incorporated into the Drosophila melanogaster genome. Raman V, et al. **Anal Biochem** 1997 Feb 15; 245(2):242-5

Loss of tuberin from cerebral tissues with tuberous sclerosis and astrocytoma [see comments] Mizuguchi M, et al. **Ann Neurol** 1996 Dec;40(6):941-4. Comment in: Ann Neurol 1997 Aug;42(2):270-2.

The Polycomb and trithorax group proteins of Drosophila: trans-regulators of homeotic gene function. Kennison JA. **Annu Rev Genet** 1995;29:289-303 (83 ref.)

Alleviation of glucose repression of maltose metabolism by MIG1 disruption in Saccharomyces cerevisiae. Klein CJ, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4441-9

Silencing MIG1 in Saccharomyces cerevisiae: effects of antisense MIG1 expression and MIG1 gene disruption. Olsson L, et al. **Appl Environ Microbiol** 1997 Jun; 63(6):2366-71

Expression of co-factors (SMRT and Trip-1) for retinoic acid receptors in human neuroectodermal cell lines. Bernardini S, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):278-82

Identification and characterization of the SMT3 cDNA and gene from nematode Caenorhabditis elegans. Choudhury BK, et al. **Biochem Biophys Res Commun** 1997 May 29; 234(3):788-91

Cloning of Xenopus Dr1 (TBP-binding repressor) and its expression in oocytes and early embryos. Nagano M, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):561-5

Cloning and expression of a new HOXC6 transcript encoding a repressing protein. Chariot A, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):91-7

Combinations of the alpha-helix-turn-alpha-helix motif of TetR with respective residues from LacI or 434Cro: DNA recognition, inducer binding, and urea-dependent denaturation. Backes H, et al. **Biochemistry** 1997 May 6; 36(18):5311-22

Expression cloning and intracellular localization of a human ZF5 homologue. Sugiura K, et al. **Biochim Biophys Acta** 1997 May 2;1352(1):23-6

Use of engineered thrombin cleavage site for determination of translational reading frames. Zeng G, et al. **Biotechniques** 1996 Nov;21(5):822-4

Human MafG is a functional partner for p45 NF-E2 in activating globin gene expression. Blank V, et al. **Blood** 1997 Jun 1;89(11):3925-35

Does tuberin function as a tumor suppressor in the cerebral lesions of tuberous sclerosis? Early observations [editorial; comment] Short MP. **Brain Pathol** 1996 Oct;6(4):375-6. Comment on: Brain Pathol 1996 Oct;6(4):367-77.

Overexpression, purification, and analysis of the c1 repressor protein of Pseudomonas aeruginosa bacteriophage D3. Farinha MA, et al. **Can J Microbiol** 1997 Mar;43(3):220-6

Analysis of mutations in the creA gene involved in carbon catabolite repression in Aspergillus nidulans. Shroff RA, et al. **Can J Microbiol** 1996 Sep;42(9):950-9

Species-specific differences in hepatic mutant frequency and mutational spectrum among lambda/lacI transgenic rats and mice following exposure to aflatoxin B1. Dycaico MJ, et al. **Carcinogenesis** 1996 Nov;17(11):2347-56

Agreement of mutational characteristics of heterocyclic amines in lacI of the Big Blue mouse with those in tumor related genes in rodents. Okonogi H, et al. **Carcinogenesis** 1997 Apr;18(4):745-8

A novel mechanism for regulating activity of a transcription factor that controls the unfolded protein response [see comments] Cox JS, et al. **Cell** 1996 Nov 1;87(3):391-404 . Comment in: Cell 1996 Nov 1;87(3):357-9.

Histone deacetylase activity is required for full transcriptional repression by mSin3A. Hassig CA, et al. **Cell** 1997 May 2;89(3):341-7

Repression by Ume6 involves recruitment of a complex containing Sin3 corepressor and Rpd3 histone deacetylase to target promoters. Kadosh D, et al. **Cell** 1997 May 2; 89(3):365-71

roX1 RNA paints the X chromosome of male Drosophila and is regulated by the dosage compensation system. Meller VH, et al. **Cell** 1997 Feb 21;88(4):445-57

MeCP2 is a transcriptional repressor with abundant binding sites in genomic chromatin. Nan X, et al. **Cell** 1997 Feb 21;88(4):471-81

tRNA ligase is required for regulated mRNA splicing in the unfolded protein response [see comments] Sidrauski C, et al. **Cell** 1996 Nov 1;87(3):405-13. Comment in: Cell 1996 Nov 1;87(3):357-9.

GFP tagging of budding yeast chromosomes reveals that protein-protein interactions can mediate sister chromatid cohesion. Straight AF, et al. **Curr Biol** 1996 Dec 1; 6(12):1599-608

Complete coding sequence, exon/intron arrangement and chromosome location of ZNF45, a KRAB-domain-containing gene. Constantinou Deltas C, et al. **Cytogenet Cell Genet** 1996;75(4):230-3

Grg3, a murine Groucho-related gene, is expressed in the developing nervous system and in mesenchyme-induced epithelial structures. Leon C, et al. **Dev Dyn** 1997 Jan; 208(1):11-24

Functional relationships between Notch, Su(H) and the bHLH genes of the E(spl) complex: the E(spl) genes mediate only a subset of Notch activities during imaginal development. de Celis JF, et al. **Development** 1996 Sep; 122(9):2719-28

Concentration-dependent patterning by an ectopic expression domain of the Drosophila gap gene knirps. Kosman D, et al. **Development** 1997 Apr;124(7):1343-54

CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5 homeobox gene pathway. Zou Y, et al. **Development** 1997 Feb;124(4):793-804

A simple improvement in expression cloning. Takemoto Y, et al. **DNA Cell Biol** 1997 Jun;16(6):797-9

The inducible lactose operator-repressor system is functional in the whole animal. Wu JD, et al. **DNA Cell Biol** 1997 Jan;16(1):17-22

hairy mediates dominant repression in the Drosophila embryo. Barolo S, et al. **EMBO J** 1997 May 15; 16(10):2883-91

Spacing of promoter elements regulates the basal expression of the soxS gene and converts SoxR from a transcriptional activator into a repressor. Hidalgo E, et al. **EMBO J** 1997 Mar 3;16(5):1056-65

Mechanism and Bicoid-dependent control of hairy stripe 7 expression in the posterior region of the Drosophila embryo. La Rosée A, et al. **EMBO J** 1997 Jul 16; 16(14):4403-11

Rox, a novel bHLHZip protein expressed in quiescent cells that heterodimerizes with Max, binds a non-canonical E box and acts as a transcriptional repressor. Meroni G, et al. **EMBO J** 1997 May 15;16(10):2892-906

Efg1p, an essential regulator of morphogenesis of the human pathogen Candida albicans, is a member of a conserved class of bHLH proteins regulating morphogenetic processes in fungi. Stoldt VR, et al. **EMBO J** 1997 Apr 15; 16(8):1982-91

TTF-2, a new forkhead protein, shows a temporal expression in the developing thyroid which is consistent with a role in controlling the onset of differentiation. Zannini M, et al. **EMBO J** 1997 Jun 2;16(11):3185-97

Growth hormone and prolactin stimulate the expression of rat preadipocyte factor-1/delta-like protein in pancreatic islets: molecular cloning and expression pattern during development and growth of the endocrine pancreas. Carlsson C, et al. **Endocrinology** 1997 Sep;138(9):3940-8

Database and software for the analysis of mutations at the lacI gene in both transgenic rodents and bacteria. Cariello NF, et al. **Environ Mol Mutagen** 1996;28(4):397-404

Mutational spectra of tamoxifen-induced mutations in the livers of lacI transgenic rats. Davies R, et al. **Environ Mol Mutagen** 1996;28(4):430-3

Spectrum of mutations in kidney, stomach, and liver from lacI transgenic mice recovered after treatment with tris(2,3-dibromopropyl)phosphate. de Boer JG, et al. **Environ Mol Mutagen** 1996;28(4):418-23

An efficient laboratory protocol for the sequencing of large numbers of lacI mutants recovered from Big Blue transgenic animals. Erfle HL, et al. **Environ Mol Mutagen** 1996;28(4):393-6

Mutagenic response to benzene and tris(2,3-dibromopropyl)-phosphate in the lambda lacI transgenic mouse mutation assay: a standardized approach to in vivo mutation analysis. Provost GS, et al. **Environ Mol Mutagen** 1996;28(4):342-7

Assessment of 1,3-butadiene mutagenicity in the bone marrow of B6C3F1 lacI transgenic mice (Big Blue): a review of mutational spectrum and lacI mutant frequency after a 5-day 625 ppm 1,3-butadiene exposure. Recio L,

et al. **Environ Mol Mutagen** 1996;28(4):424–9
Mutagenic response of the endogenous hprt gene and lacI transgene in benzo[a]pyrene–treated Big Blue B6C3F1 mice. Skopek TR, et al. **Environ Mol Mutagen** 1996; 28(4):376–84
The genetic analysis of lacI mutations in sectored plaques from Big Blue transgenic mice. Stuart GR, et al. **Environ Mol Mutagen** 1996;28(4):385–92
Organ variation in the mutagenicity of dimethylnitrosamine in Big Blue mice. Suzuki T, et al. **Environ Mol Mutagen** 1996;28(4):348–53
Parameters affecting the use of the lac repressor system in eukaryotic cells and transgenic animals. Wyborski DL, et al. **Environ Mol Mutagen** 1996;28(4):447–58
Spontaneous and ethylnitrosourea–induced mutation fixation and molecular spectra at the lacI transgene in the Big Blue rat–2 embryo cell line. Zimmer DM, et al. **Environ Mol Mutagen** 1996;28(4):325–33
Glycosylation analysis and protein structure determination of murine fetal antigen 1 (mFA1)—the circulating gene product of the delta–like protein (dlk), preadipocyte factor 1 (Pref–1) and stromal–cell–derived protein 1 (SCP–1) cDNAs. Krogh TN, et al. **Eur J Biochem** 1997 Mar 1; 244(2):334–42
Cloning and characterization of the Oxytricha granulifera chaperonin containing tailless complex polypeptide 1 gamma gene. Palmedo G, et al. **Eur J Biochem** 1997 Aug 1;247(3):877–83
Complementation of a yeast delta pkc1 mutant by the Arabidopsis proteinANT. Vergani P, et al. **FEBS Lett** 1997 Jan 3;400(2):243–6
Mutations in Bacillus subtilis PyrR, the pyr regulatory protein, with defects in regulation by pyrimidines. Ghim SY, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):13–8
Analysis of CcpA mutations defective in carbon catabolite repression in Bacillus megaterium. Kraus A, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):221–6
Involvement of iclR and rpoS in the induction of acs, the gene for acetyl coenzyme A synthetase of Escherichia coli K–12. Shin S, et al. **FEMS Microbiol Lett** 1997 Jan 1; 146(1):103–8
Analysis of Cre1 binding sites in the Trichoderma reesei cbh1 upstream region. Takashima S, et al. **FEMS Microbiol Lett** 1996 Dec 15;145(3):361–6
Role of rpoS regulon in resistance to oxidative stress and near–UV radiation in delta oxyR suppressor mutants of Escherichia coli. Ivanova AB, et al. **Free Radic Biol Med** 1997;23(4):627–36
The fur gene from Klebsiella pneumoniae: characterization, genomic organization and phylogenetic analysis. Achenbach LA, et al. **Gene** 1997 Feb 7;185(2):201–7
A tightly regulated high level expression vector that utilizes a thermosensitive lac repressor: production of the human T cell receptor V beta 5.3 in Escherichia coli. Andrews B, et al. **Gene** 1996 Dec 5;182(1–2):101–9
Characterization of Campylobacter upsaliensis fur and its localization in a highly conserved region of the Campylobacter genome. Bourke B, et al. **Gene** 1996 Dec 12;183(1–2):219–24
Cloning and sequencing of a Haemophilus ducreyi fur homolog. Carson SD, et al. **Gene** 1996 Oct 17; 176(1–2):125–9
Interference of Myb transactivation activity by a conditional dominant negative protein: functional interference in a cytotoxic T–cell line results in G1 arrest. Lyon JJ, et al. **Gene** 1996 Dec 5;182(1–2):123–8
Cloning and sequencing of the hrcA gene of Bacillus stearothermophilus. Mogk A, et al. **Gene** 1997 Jul 18; 194(1):133–6
Organization of the gene encoding transcriptional repressor deltaEF1 and cross–species conservation of its domains. Sekido R, et al. **Gene** 1996 Sep 16;173(2):227–32
The Saccharomyces cerevisiae SSD1 gene is involved in the tolerance to high concentration of Ca2+ with the participation of HST1/NRC1/BFR1. Tsuchiya E, et al. **Gene** 1996 Oct 17;176(1–2):35–8
The Schizosaccharomyces pombe mra1 gene, which is required for cell growth and mating, can suppress the mating inefficiency caused by a deficit in the Ras1 activity. Hakuno F, et al. **Genes Cells** 1996 Mar;1(3):303–15
The various strategies within the TyrR regulation of Escherichia coli to modulate gene expression. Pittard J. **Genes Cells** 1996 Aug;1(8):717–25 (48 ref.)
Microtubule–associated coiled–coil protein Ssm4 is involved in the meiotic development in fission yeast. Yamashita A, et al. **Genes Cells** 1997 Feb;2(2):155–66
Apparent preferential loss of heterozygosity at TSC2 over TSC1 chromosomal region in tuberous sclerosis hamartomas. Carbonara C, et al. **Genes Chromosomes Cancer** 1996 Jan;15(1):18–25
smaug protein represses translation of unlocalized nanos mRNA in the Drosophila embryo. Smibert CA, et al. **Genes Dev** 1996 Oct 15;10(20):2600–9
An extragenic suppressor of the mitosis–defective bimD6 mutation of Aspergillus nidulans codes for a chromosome scaffold protein. Holt CL, et al. **Genetics** 1996 Mar; 142(3):777–87
The new RGA locus encodes a negative regulator of gibberellin response in Arabidopsis thaliana. Silverstone AL, et al. **Genetics** 1997 Jul;146(3):1087–99
C–terminal deletions can suppress temperature–sensitive mutations and change dominance in the phage Mu repressor. Vogel JL, et al. **Genetics** 1996 Mar;142(3):661–72
Yeast mutants that produce a novel type of ascus containing asci instead of spores. Xue Z, et al. **Genetics** 1996 Nov; 144(3):979–89
Genomic organization of the murine Miller–Dieker/lissencephaly region: conservation of linkage with the human region [letter] Hirotsune S, et al. **Genome Res** 1997 Jun;7(6):625–34
Long–range organization of reiterated sequences, including the SSX1 cDNA at the OATL1 cluster in Xp11.23. Chand A, et al. **Genomics** 1995 Dec 10;30(3):545–52
Assignment of the REST gene to 4q12 by fluorescence in situ hybridization. Cowan JM, et al. **Genomics** 1996 Jun 1;34(2):260–2
SMT3A, a human homologue of the S. cerevisiae SMT3 gene, maps to chromosome 21qter and defines a novel gene family. Lapenta V, et al. **Genomics** 1997 Mar 1;40(2):362–6
The tuberin (TSC2), autosomal dominant polycystic kidney disease (PKD1), and somatostatin type V receptor (SSTR5) genes form a synteny group in the Fugu genome. Sandford R, et al. **Genomics** 1996 Nov 15;38(1):84–6
The human gene ZFP161 on 18p11.21–pter encodes a putative c–myc repressor and is homologous to murine Zfp161 (Chr 17) and Zfp161–rs1 (X Chr). Sobek–Klocke I, et al. **Genomics** 1997 Jul 15;43(2):156–64
The Nab2 and Stat6 genes share a common transcription termination region. Svaren J, et al. **Genomics** 1997 Apr 1;41(1):33–9
Localization of Staf50, a member of the Ring finger family, to 11p15 by fluorescence in situ hybridization. Tissot C, et al. **Genomics** 1996 May 15;34(1):151–3
Novel mutations detected in the TSC2 gene from both sporadic and familial TSC patients. Wilson PJ, et al. **Hum Mol Genet** 1996 Feb;5(2):249–56
A novel splice site mutation (156 + 1G–>A) in the TSC2 gene. Kumar A, et al. **Hum Mutat** 1997;9(1):64–5
Lack of expression of the global regulator OxyR in Haemophilus influenzae has a profound effect on growth phenotype. Maciver I, et al. **Infect Immun** 1996 Nov; 64(11):4618–29
Isolation and characterization of the lacA gene encoding beta–galactosidase in Bacillus subtilis and a regulator gene, lacR. Daniel RA, et al. **J Bacteriol** 1997 Sep;179(17):5636–8
Interactions of OxyR with the promoter region of the oxyR and ahpC genes from Mycobacterium leprae and Mycobacterium tuberculosis. Dhandayuthapani S, et al. **J Bacteriol** 1997 Apr;179(7):2401–9
The hupTUV operon is involved in negative control of hydrogenase synthesis in Rhodobacter capsulatus. Elsen S, et al. **J Bacteriol** 1996 Sep;178(17):5174–81
The linker region of AraC protein. Eustance RJ, et al. **J Bacteriol** 1996 Dec;178(24):7025–30
Transcriptional regulation of the Escherichia coli oxyR gene as a function of cell growth. González–Flecha B, et al. **J Bacteriol** 1997 Oct;179(19):6181–6
An operon containing fumC and sodA encoding fumarase C and manganese superoxide dismutase is controlled by the ferric uptake regulator in Pseudomonas aeruginosa: fur mutants produce elevated alginate levels. Hassett DJ, et al. **J Bacteriol** 1997 Mar;179(5):1452–9
Plasmid–amplified comS enhances genetic competence and suppresses sinR in Bacillus subtilis. Liu L, et al. **J Bacteriol** 1996 Sep;178(17):5144–52
Regulation of expression of the Lactobacillus pentosus xylAB operon. Lokman BC, et al. **J Bacteriol** 1997 Sep; 179(17):5391–7
Isolation and analysis of the Xanthomonas alkyl hydroperoxide reductase gene and the peroxide sensor regulator genes ahpC and ahpF–oxyR–orfX. Loprasert S, et al. **J Bacteriol** 1997 Jun;179(12):3944–9
Transcriptional attenuation of the Bacillus subtilis pyr operon by the PyrR regulatory protein and uridine nucleotides in vitro. Lu Y, et al. **J Bacteriol** 1996 Dec;178(24):7206–11
The nucleotide sequence of the Pseudomonas aeruginosa pyrE–crc–rph region and the purification of the crc gene product. MacGregor CH, et al. **J Bacteriol** 1996 Oct; 178(19):5627–35
Lrp is a direct repressor of the dad operon in Escherichia coli. Mathew E, et al. **J Bacteriol** 1996 Dec;178(24):7234–40
Characterization of transcription organization and analysis of unique expression patterns of an alkyl hydroperoxide reductase C gene (ahpC) and the peroxide regulator operon ahpF–oxyR–orfX from Xanthomonas campestris pv. phaseoli. Mongkolsuk S, et al. **J Bacteriol** 1997 Jun; 179(12):3950–5
Identification and characterization of hydrogen peroxide–sensitive mutants of Escherichia coli: genes that require OxyR for expression. Mukhopadhyay S, et al. **J Bacteriol** 1997 Jan;179(2):330–8
Insertion mutagenesis of the lac repressor and its implications for structure–function analysis. Nelson BD, et al. **J Bacteriol** 1997 Jun;179(11):3721–8
Cloning and characterization of argR, a gene that participates in regulation of arginine biosynthesis and catabolism in Pseudomonas aeruginosa PAO1. Park SM, et al. **J Bacteriol** 1997 Sep;179(17):5300–8
A Tn10 derivative (T–POP) for isolation of insertions with conditional (tetracycline–dependent) phenotypes. Rappleye CA, et al. **J Bacteriol** 1997 Sep;179(18):5827–34
aarC, an essential gene involved in density–dependent regulation of the 2'–N–acetyltransferase in Providencia stuartii. Rather PN, et al. **J Bacteriol** 1997 Apr; 179(7):2267–73
Negative regulation of L–arabinose metabolism in Bacillus subtilis: characterization of the araR (araC) gene. Sá–Nogueira I, et al. **J Bacteriol** 1997 Mar;179(5):1598–608
Regulation of glycerol metabolism in Pseudomonas aeruginosa: characterization of the glpR repressor gene. Schweizer HP, et al. **J Bacteriol** 1996 Sep;178(17):5215–21
The tpl promoter of Citrobacter freundii is activated by the TyrR protein. Smith HQ, et al. **J Bacteriol** 1997 Sep; 179(18):5914–21
oxyR–dependent induction of Escherichia coli grx gene expression by peroxide stress. Tao K. **J Bacteriol** 1997 Sep; 179(18):5967–70
RpoS– and OxyR–independent induction of HPI catalase at stationary phase in Escherichia coli and identification of rpoS mutations in common laboratory strains. Visick JE, et al. **J Bacteriol** 1997 Jul;179(13):4158–63
Repression of the aroP gene of Escherichia coli involves activation of a divergent promoter. Wang P, et al. **J Bacteriol** 1997 Jul;179(13):4213–8
The kilE locus of promiscuous IncP alpha plasmid RK2 is required for stable maintenance in Pseudomonas aeruginosa. Wilson JW, et al. **J Bacteriol** 1997 Apr; 179(7):2339–47
Cyclic AMP receptor protein functions as a repressor of the osmotically inducible promoter proP P1 in Escherichia coli. Xu J, et al. **J Bacteriol** 1997 Apr;179(7):2410–7
Identification of the algZ gene upstream of the response regulator algR and its participation in control of alginate production in Pseudomonas aeruginosa. Yu H, et al. **J Bacteriol** 1997 Jan;179(1):187–93
Repressor for the sn–glycerol 3–phosphate regulon of Escherichia coli K–12: primary structure and identification of the DNA–binding domain. Zeng G, et al. **J Bacteriol** 1996 Dec;178(24):7080–9
Nuclear factor 1 family proteins bind to the silencer element in the rat glutathione transferase P gene. Osada S, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):355–63
Allosteric mechanism of induction of CytR–regulated gene expression. Cytr repressor–cytidine interaction. Barbier CS, et al. **J Biol Chem** 1997 Jul 4;272(27):16962–71
The role of the variable region in Tet repressor for inducibility by tetracycline. Berens C, et al. **J Biol Chem** 1997 Mar 14;272(11):6936–42
Identification of glycerol–3–phosphate acyltransferase as an adipocyte determination and differentiation factor 1– and sterol regulatory element–binding protein–responsive gene. Ericsson J, et al. **J Biol Chem** 1997 Mar 14;272(11):7298–305
SUG1, a putative transcriptional mediator and subunit of the PA700 proteasome regulatory complex, is a DNA helicase. Fraser RA, et al. **J Biol Chem** 1997 Mar 14;272(11):7122–6
Overexpression of nreB, a new GATA factor–encoding gene of Penicillium chrysogenum, leads to repression of the nitrate assimilatory gene cluster. Haas H, et al. **J Biol Chem** 1997 Sep 5;272(36):22576–82
DNA–based loss of specificity mutations. Effects of DNA sequence on the contacted and non–contacted base preferences of bacteriophage P22 repressor. Hilchey SP, et al. **J Biol Chem** 1997 Jan 17;272(3):1646–53
Characterization of TreR, the major regulator of the Escherichia coli trehalose system. Horlacher R, et al. **J Biol Chem** 1997 May 16;272(20):13026–32
Repression of transcriptional enhancer factor–1 and activator protein–1–dependent enhancer activity by vascular actin single–stranded DNA binding factor 2. Kelm RJ Jr, et al. **J Biol Chem** 1996 Sep 27;271(39):24278–85
The bacillus subtilis dinR gene codes for the analogue of Escherichia coli LexA. Purification and characterization of the DinR protein. Miller MC, et al. **J Biol Chem** 1996 Dec 27;271(52):33502–8
Combinatorial mutations of lac repressor. Stability of monomer–monomer interface is increased by apolar substitution at position 84. Nichols JC, et al. **J Biol Chem** 1997 Jul 25;272(30):18550–7
Transcriptional control of the forkhead thyroid transcription factor TTF–2 by thyrotropin, insulin, and insulin–like growth factor I. Ortiz L, et al. **J Biol Chem** 1997 Sep 12; 272(37):23334–9
Characterization of a leucine zipper–containing protein identified by retroviral insertion in avian neuroretina cells. Proux V, et al. **J Biol Chem** 1996 Nov 29;271(48):30790–7
Genesis, a winged helix transcriptional repressor with expression restricted to embryonic stem cells. Sutton J, et al. **J Biol Chem** 1996 Sep 20;271(38):23126–33
Genomic footprinting of Mig1p in the MAL62 promoter. Binding is dependent upon carbon source and competitive with the Mal63p activator. Wang J, et al. **J Biol Chem** 1997 Feb 14;272(7):4613–22
Selectively 13C–enriched DNA: evidence from 13C1' relaxation rate measurements of an internal dynamics sequence effect in the lac operator. Paquet F, et al. **J Biomol NMR** 1996 Oct;8(3):252–60
Identification of a polymorphic nucleotide in oxyR specific for Mycobacterium bovis. Sreevatsan S, et al. **J Clin Microbiol** 1996 Aug;34(8):2007–10
Identification of a nonsense mutation at the 5' end of the TSC2 gene in a family with a presumptive diagnosis of tuberous sclerosis complex. Vrtel R, et al. **J Med Genet** 1996 Jan;33(1):47–51
Escherichia coli lac repressor–lac operator interaction and the influence of allosteric effectors. Horton N, et al. **J Mol Biol** 1997 Jan 10;265(1):1–7

Gene organization and transcriptional regulation of the gntRKU operon involved in gluconate uptake and catabolism of Escherichia coli. Izu H, et al. **J Mol Biol** 1997 Apr 11;267(4):778–93

Regulation of the "tetCD" genes of transposon Tn10. Pepe CM, et al. **J Mol Biol** 1997 Jul 4;270(1):14–25

Characterization of charge change super-repressor mutants of trp repressor: effects on oligomerization conformation, ligation and stability. Reedstrom RJ, et al. **J Mol Biol** 1996 Nov 22;264(1):32–45

USF in the Lytechinus sea urchin embryo may act as a transcriptional repressor in non-aboral ectoderm cells for the cell lineage-specific expression of the LpS1 genes. Seid CA, et al. **J Mol Biol** 1996 Nov 22;264(1):7–19

The activation defect of a lambda cI positive control mutant. Whipple FW, et al. **J Mol Biol** 1997 Jan 24;265(3):261–5

Reported translational bypass in a trpR'-lacZ' fusion is accounted for by unusual initiation and +1 frameshifting. Wills NM, et al. **J Mol Biol** 1997 Aug 29;271(4):491–8

A novel splice site associated polymorphism in the tuberous sclerosis 2 (TSC2) gene may predispose to the development of sporadic gangliogliomas. Platten M, et al. **J Neuropathol Exp Neurol** 1997 Jul;56(7):806–10

Somatic mutation of the tuberous sclerosis (Tsc2) tumor suppressor gene in chemically induced rat renal carcinoma cell. Urakami S, et al. **J Urol** 1997 Jul;158(1):275–8

Transrepression of lck gene expression by human T-cell leukemia virus type 1–encoded p40tax. Lemasson I, et al. **J Virol** 1997 Mar;71(3):1975–83

Mutational analysis of ICP0R, a transrepressor protein created by alternative splicing of the ICP0 gene of herpes simplex virus type 1. Spatz SJ, et al. **J Virol** 1996 Nov; 70(11):7360–70

Intragenic Tsc2 somatic mutations as Knudson's second hit in spontaneous and chemically induced renal carcinomas in the Eker rat model [see comments] Kobayashi T, et al. **Jpn J Cancer Res** 1997 Mar;88(3):254–61. Comment in: Jpn J Cancer Res 1997 Mar;88(3):inside front cover.

Identification of a leader exon and a core promoter for the rat tuberous sclerosis 2 (Tsc2) gene and structural comparison with the human homolog. Kobayashi T, et al. **Mamm Genome** 1997 Aug;8(8):554–8

Expression and differential splicing of the mouse TSC2 homolog. Olsson PG, et al. **Mamm Genome** 1996 Mar; 7(3):212–5

A role for Xenopus Gli-type zinc finger proteins in the early embryonic patterning of mesoderm and neuroectoderm. Marine JC, et al. **Mech Dev** 1997 May;63(2):211–25

Screening of peptide libraries linked to lac repressor. Schatz PJ, et al. **Methods Enzymol** 1996;267:171–91

Molecular analysis of the bvg-repressed urease of Bordetella bronchiseptica. McMillan DJ, et al. **Microb Pathog** 1996 Nov;21(5):379–94

Expression of heat shock protein D 48.5 of Escherichia coli is subject to modulation by catabolite repression. Peruski LF Jr. **Microbiol Res** 1996 Aug;151(3):273–80

Cra-mediated regulation of Escherichia coli adenylate cyclase. Crasnier-Mednansky M, et al. **Microbiology** 1997 Mar;143 (Pt 3):785–92

The autoregulatory protein Mor and OxyR are identicial [letter] Henderson I, et al. **Microbiology** 1997 May;143 (Pt 5):1482

Divergence and conservation of the partitioning and global regulation functions in the central control region of the IncP plasmids RK2 and R751. Macartney DP, et al. **Microbiology** 1997 Jul;143 (Pt 7):2167–77

MIG1 overexpression causes flocculation in Saccharomyces cerevisiae. Shankar CS, et al. **Microbiology** 1996 Sep;142 (Pt 9):2663–7

Expression of the exoY gene, required for exopolysaccharide synthesis in Agrobacterium, is activated by the regulatory ros gene. Tiburtius A, et al. **Microbiology** 1996 Sep;142 (Pt 9):2621–9

The cydR gene product, required for regulation of cytochrome bd expression in the obligate aerobe Azotobacter vinelandii, is an Fnr-like protein. Wu G, et al. **Microbiology** 1997 Jul;143 (Pt 7):2197–207

Tetracycline-controlled gene expression in Entamoeba histolytica. Hamann L, et al. **Mol Biochem Parasitol** 1997 Jan;84(1):83–91

A tetracycline-inducible gene expression system in Entamoeba histolytica. Ramakrishnan G, et al. **Mol Biochem Parasitol** 1997 Jan;84(1):93–100

Yeast counterparts of subunits S5a and p58 (S3) of the human 26S proteasome are encoded by two multicopy suppressors of nin1-1. Kominami K, et al. **Mol Biol Cell** 1997 Jan; 8(1):171–87

Negative protein 1, which is required for function of the chicken lysozyme gene silencer in conjunction with hormone receptors, is identical to the multivalent zinc finger repressor CTCF. Burcin M, et al. **Mol Cell Biol** 1997 Mar;17(3):1281–8

The Rb family contains a conserved cyclin-dependent-kinase-regulated transcriptional repressor motif. Chow KN, et al. **Mol Cell Biol** 1996 Dec; 16(12):7173–81

Two evolutionarily conserved repression domains in the Drosophila Kruppel protein differ in activator specificity. Hanna-Rose W, et al. **Mol Cell Biol** 1997 Aug;17(8):4820–9

A novel repressor, par-4, modulates transcription and growth suppression functions of the Wilms' tumor suppressor WT1. Johnstone RW, et al. **Mol Cell Biol** 1996 Dec; 16(12):6945–56

Reconstitution of a MEC1-independent checkpoint in yeast by expression of a novel human fork head cDNA. Pati D, et al. **Mol Cell Biol** 1997 Jun;17(6):3037–46

Homologous segments in three subunits of the guanine nucleotide exchange factor eIF2B mediate translational regulation by phosphorylation of eIF2. Pavitt GD, et al. **Mol Cell Biol** 1997 Mar;17(3):1298–313

Characterization of the Wtm proteins, a novel family of Saccharomyces cerevisiae transcriptional modulators with roles in meiotic regulation and silencing. Pemberton LF, et al. **Mol Cell Biol** 1997 Aug;17(8):4830–41

Saccharomyces cerevisiae BUR6 encodes a DRAP1/NC2alpha homolog that has both positive and negative roles in transcription in vivo. Prelich G. **Mol Cell Biol** 1997 Apr;17(4):2057–65

Molecular genetic analysis of Rts1p, a B' regulatory subunit of Saccharomyces cerevisiae protein phosphatase 2A. Shu Y, et al. **Mol Cell Biol** 1997 Jun;17(6):3242–53

A novel endozepine-like peptide (ELP) is exclusively expressed in male germ cells. Pusch W, et al. **Mol Cell Endocrinol** 1996 Aug 30;122(1):69–80

An EcoRV polymorphism in exon 40 of the tuberous sclerosis 2 (TSC2) gene. van Bakel I, et al. **Mol Cell Probes** 1997 Feb;11(1):75–6

Competition between negative acting YY1 versus positive acting serum response factor and tinman homologue Nkx-2.5 regulates cardiac alpha-actin promoter activity. Chen CY, et al. **Mol Endocrinol** 1997 Jun;11(6):812–22

Molecular cloning of TA16, a transcriptional repressor that may mediate glucocorticoid-induced growth arrest of leiomyosarcoma cells. Fan W, et al. **Mol Endocrinol** 1997 Aug;11(9):1342–52

Two receptor interacting domains in the nuclear hormone receptor corepressor RIP13/N-CoR. Seol W, et al. **Mol Endocrinol** 1996 Dec;10(12):1646–55

Gene silencing by chicken ovalbumin upstream promoter-transcription factor I (COUP-TFI) is mediated by transcriptional corepressors, nuclear receptor-corepressor (N-CoR) and silencing mediator for retinoic acid receptor and thyroid hormone receptor (SMRT). Shibata H, et al. **Mol Endocrinol** 1997 Jun; 11(6):714–24

Thyroid hormone resistance syndrome manifests as an aberrant interaction between mutant T3 receptors and transcriptional corepressors. Yoh SM, et al. **Mol Endocrinol** 1997 Apr;11(4):470–80

SOM 1, a small new gene required for mitochondrial inner membrane peptidase function in Saccharomyces cerevisiae. Esser K, et al. **Mol Gen Genet** 1996 Sep 25;252(4):437–45

The role of cysteine residues in the homeodomain protein Mat alpha 2 in mating-type control of Saccharomyces cerevisiae. Mukai Y, et al. **Mol Gen Genet** 1997 Jun; 255(2):166–71

Ferric uptake regulator mutants of Pseudomonas aeruginosa with distinct alterations in the iron-dependent repression of exotoxin A and siderophores in aerobic and microaerobic environments. Barton HA, et al. **Mol Microbiol** 1996 Sep; 21(5):1001–17

Deletion mutagenesis of Tn 10 Tet repressor--localization of regions important for dimerization and inducibility in vivo. Berens C, et al. **Mol Microbiol** 1995 Nov;18(3):437–48

Genetic evidence of separate repressor and activator activities of the XylR regulator of the TOL plasmid, pWW0, of Pseudomonas putida. Bertoni G, et al. **Mol Microbiol** 1997 Mar;23(6):1221–7

Catabolite repression mediated by the catabolite control protein CcpA in Staphylococcus xylosus. Egeter O, et al. **Mol Microbiol** 1996 Aug;21(4):739–49

Surface proteins and a novel transcription factor regulate the expression of the S-layer gene in Thermus thermophilus HB8. Fernández-Herrero LA, et al. **Mol Microbiol** 1997 Apr;24(1):61–72

Disruption of hspR, the repressor gene of the dnaK operon in Streptomyces albus G. Grandvalet C, et al. **Mol Microbiol** 1997 Jan;23(1):77–84

The leucine-responsive regulatory protein (Lrp) acts as a specific repressor for sigma s-dependent transcription of the Escherichia coli aidB gene. Landini P, et al. **Mol Microbiol** 1996 Jun;20(5):947–55

Countertranscript-driven attenuation system of the pAM beta 1 repE gene. Le Chatelier E, et al. **Mol Microbiol** 1996 Jun;20(5):1099–112

The local repressor AcrR plays a modulating role in the regulation of acrAB genes of Escherichia coli by global stress signals. Ma D, et al. **Mol Microbiol** 1996 Jan; 19(1):101–12

Mutual control of the PecS/PecM couple, two proteins regulating virulence-factor synthesis in Erwinia chrysanthemi. Praillet T, et al. **Mol Microbiol** 1997 May; 24(4):803–14

Substrate induction and glucose repression of maltose utilization by Streptomyces coelicolor A3(2) is controlled by malR, a member of the lacI-galR family of regulatory genes. van Wezel GP, et al. **Mol Microbiol** 1997 Feb; 23(3):537–49

Effects of systematic variation of the minimal Escherichia coli met consensus operator site: in vivo and in vitro met repressor binding. Wild CM, et al. **Mol Microbiol** 1996 Sep; 21(6):1125–35

rosR, a determinant of nodulation competitiveness in Rhizobium etli. Bittinger MA, et al. **Mol Plant Microbe Interact** 1997 Mar;10(2):180–6

The RsmA- mutants of Erwinia carotovora subsp. carotovora strain Ecc71 overexpress hrpNEcc and elicit a hypersensitive reaction-like response in tobacco leaves. Cui Y, et al. **Mol Plant Microbe Interact** 1996 Sep; 9(7):565–73

Mutagenicity of the potent rat hepatocarcinogen 6BT to the liver of transgenic (lacI) rats: consideration of a reduced mutation assay protocol. Lefevre PA, et al. **Mutagenesis** 1997 Jan;12(1):45–7

A novel lacI transgenic mutation-detection system and its application to establish baseline mutation frequencies in the scid mouse. Andrew SE, et al. **Mutat Res** 1996 Oct 25; 357(1-2):57–66

The mutational specificity of furazolidone in the lacI gene of Escherichia coli. Bertenyi KK, et al. **Mutat Res** 1996 Oct 25;357(1-2):199–208

The recovery of a B2 insertion in the lacI gene of a rat cell line containing a lambda/LIZ shuttle vector. de Boer JG, et al. **Mutat Res** 1997 Apr 14;375(1):79–82

Statistical analysis of the lacI transgenic mouse mutagenicity assay. Fung KY, et al. **Mutat Res** 1997 Mar 4;374(1):21–40 (32 ref.)

Evaluation of lacI mutation in germ cells and micronuclei in peripheral blood after treatment of male lacI transgenic mice with ethylnitrosourea, isopropylmethane sulfonate or methylmethane sulfonate. Gorelick NJ, et al. **Mutat Res** 1997 Feb 14;388(2-3):187–95

Molecular analysis of lacI mutations in Rat2 cells exposed to 7,12-dimethylbenz[a]anthracene: evidence for DNA sequence and DNA strand biases for mutation. Manjanatha MG, et al. **Mutat Res** 1996 Nov 11;372(1):53–64

Mutational specificity of glyoxal, a product of DNA oxidation, in the lacI gene of wild-type Escherichia coli W3110. Murata-Kamiya N, et al. **Mutat Res** 1997 Jul 3; 377(2):255–62

Towards validation of the Big Blue transgenic mouse mutagenesis assay: the mutational spectrum of ex vivo pinpoint mutant plaques. Nishino H, et al. **Mutat Res** 1996 Nov 11;372(1):97–105

Evaluation of spontaneous and chemical-induced lacI mutations in germ cells from lambda/lacI transgenic mice. Putman DL, et al. **Mutat Res** 1997 Feb 14;388(2-3):137–43

Mutant frequency of lacI in transgenic mice following benzo[a]pyrene treatment and partial hepatectomy. Shane BS, et al. **Mutat Res** 1997 Jun 9;377(1):1–11

Assessment of the in vivo mutagenicity of ethylene oxide in the tissues of B6C3F1 lacI transgenic mice following inhalation exposure. Sisk SC, et al. **Mutat Res** 1997 Jul 14;391(3):153–64

A 3 milliTesla 60 Hz magnetic field is neither mutagenic nor co-mutagenic in the presence of menadione and MNU in a transgenic rat cell line. Suri A, et al. **Mutat Res** 1996 Nov 11;372(1):23–31

In vivo mutagenicity of ethylene oxide at the hprt locus in T-lymphocytes of B6C3F1 lacI transgenic mice following inhalation exposure. Walker VE, et al. **Mutat Res** 1997 Aug 14;392(3):211–22

The telomere binding protein of Euplotes crassus prevents non-specific transcription initiation but has no role in positioning transcription initiation complexes. Bender J, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2877–82

Glucose represses the lactose-galactose regulon in Kluyveromyces lactis through a SNF1 and MIG1-dependent pathway that modulates galactokinase (GAL1) gene expression. Dong J, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3657–64

Atomic force microscopic demonstration of DNA looping by GalR and HU. Lyubchenko YL, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):873–6

Expression of the gene for the POU domain transcription factor Tst-1/Oct6 is regulated by an estrogen-dependent enhancer. Renner K, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4552–7

Temporal control of the Cre recombinase in transgenic mice by a tetracycline responsive promoter. St-Onge L, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3875–7

Loss of heterozygosity and reduced expression of the CUTL1 gene in uterine leiomyomas. Zeng WR, et al. **Oncogene** 1997 May 15;14(19):2355–65

dad-1, A putative programmed cell death suppressor gene in rice. Tanaka Y, et al. **Plant Cell Physiol** 1997 Mar; 38(3):379–83

A highly sensitive plant hybrid protein assay system based on the Spm promoter and TnpA protein for detection and analysis of transcription activation domains. Schläppi M, et al. **Plant Mol Biol** 1996 Nov;32(4):717–25

Annexin-like protein from Arabidopsis thaliana rescues delta oxyR mutant of Escherichia coli from H2O2 stress. Gidrol X, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):11268–73

SMRT corepressor interacts with PLZF and with the PML-retinoic acid receptor alpha (RARalpha) and PLZF-RARalpha oncoproteins associated with acute promyelocytic leukemia. Hong SH, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9028–33

Suppression of tumorigenicity by the wild-type tuberous sclerosis 2 (Tsc2) gene and its C-terminal region. Jin F, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9154–9

Acquisition and amplification of a testis-expressed autosomal gene, SSL, by the Drosophila Y chromosome. Kalmykova AI, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;

94(12):6297–302
Transgenic rescue from embryonic lethality and renal carcinogenesis in the Eker rat model by introduction of a wild-type Tsc2 gene. Kobayashi T, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3990–3
Changing the mechanism of transcriptional activation by phage lambda repressor. Li M, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3691–6
Function of RNA secondary structures in transcriptional attenuation of the Bacillus subtilis pyr operon. Lu Y, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14462–7
A single zinc finger motif in the silencing factor REST represses the neural-specific type II sodium channel promoter. Tapia-Ramírez J, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1177–82
Lac repressor genetic map in real space. Pace HC, et al. **Trends Biochem Sci** 1997 Sep;22(9):334–9 (19 ref.)
Loss of oxyR in Mycobacterium tuberculosis. Deretic V, et al. **Trends Microbiol** 1997 Sep;5(9):367–72 (49 ref.)
Reciprocal regulation of the early promoter region of bacteriophage HP1 by the Cox and Cl proteins. Esposito D, et al. **Virology** 1997 Aug 4;234(2):267–76
SHM1: a multicopy suppressor of a temperature-sensitive null mutation in the HMG1-like abf2 gene. Kao LR, et al. **Yeast** 1996 Sep 30;12(12):1239–50
Genetic aspects of carbon catabolite repression of the STA2 glucoamylase gene in Saccharomyces cerevisiae. Kartasheva NN, et al. **Yeast** 1996 Oct;12(13):1297–300
Meiotic inheritance of functional Gal80S gene product in Saccharomyces cerevisiae. Keller AD, et al. **Yeast** 1997 Apr;13(5):441–7
[Cloning and analysis of prophage PBSX repressor gene from Bacillus subtilis] Li N, et al. **I Chuan Hsueh Pao** 1995; 22(6):478–86 (Eng. Abstr.) **(Chi)**
[Attenuation of bacteriophage phi80 repression] Kozyrev DP, et al. **Genetika** 1996 Sep;32(9):1172–5 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purification and characterization of an arginine regulatory protein, ArgR, from Pseudomonas aeruginosa and its interactions with the control regions for the car, argF, and aru operons. Park SM, et al. **J Bacteriol** 1997 Sep; 179(17):5309–17
Purification of Vibrio cholerae fur and estimation of its intracellular abundance by antibody sandwich enzyme-linked immunosorbent assay. Watnick PI, et al. **J Bacteriol** 1997 Jan;179(1):243–7
Fast large-scale purification of tetracycline repressor variants from overproducing Escherichia coli strains. Ettner N, et al. **J Chromatogr A** 1996 Aug 23;742(1–2):95–105
Isolation of an AP-1 repressor by a novel method for detecting protein-protein interactions. Aronheim A, et al. **Mol Cell Biol** 1997 Jun;17(6):3094–102
Bipolar localization of a chromosome partition protein in Bacillus subtilis. Lin DCH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4721–6
Expression, purification, and functional analysis of the TyrR protein of Haemophilus influenzae. Zhu Q, et al. **Protein Expr Purif** 1997 Jul;10(2):237–46

METABOLISM

Dampening of bait proteins in the two-hybrid system. Cormack RS, et al. **Anal Biochem** 1997 May 15;248(1):184–6
Loss of tuberin from cerebral tissues with tuberous sclerosis and astrocytoma [see comments] Mizuguchi M, et al. **Ann Neurol** 1996 Dec;40(6):941–4. Comment in: Ann Neurol 1997 Aug;42(2):270–2.
An extracellular factor regulating expression of the chromosomal aminoglycoside 2'-N-acetyltransferase of Providencia stuartii. Rather PN, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1749–54
Transcriptional regulation by competition between ELP isoforms and nuclear receptors. Kotomura N, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):407–12
The E. coli cAMP receptor protein can be used in a eukaryotic system as a repressor activated by cAMP. Filippo V. **Biochem Soc Trans** 1997 May;25(2):188S
Combinations of the alpha-helix-turn-alpha-helix motif of TetR with respective residues from LacI or 434Cro: DNA recognition, inducer binding, and urea-dependent denaturation. Backes H, et al. **Biochemistry** 1997 May 6; 36(18):5311–22
Energetics of folding and DNA binding of the MAT alpha 2 homeodomain. Carra JH, et al. **Biochemistry** 1997 Jan 21;36(3):526–35
Preferential interactions of the Escherichia coli LexA repressor with anions and protons are coupled to binding the recA operator. Relan NK, et al. **Biochemistry** 1997 Feb 4;36(5):1077–84
Probing contacts to the DNA backbone in the trp repressor-operator sequence-specific protein-nucleic acid complex using diastereomeric methylphosphonate analogues. Smith SA, et al. **Biochemistry** 1997 May 20; 36(20):6046–58
Cux/CDP homeodomain protein binds to an enhancer in the rat c-mos locus and represses its activity. Higgy NA, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):313–24
Proteolysis that is inhibited by hedgehog targets Cubitus interruptus protein to the nucleus and converts it to a repressor. Aza-Blanc P, et al. **Cell** 1997 Jun 27; 89(7):1043–53
Histone deacetylase activity is required for full transcriptional repression by mSin3A. Hassig CA, et al. **Cell** 1997 May 2;89(3):341–7
A proteinaceous gene regulatory thermometer in Salmonella. Hurme R, et al. **Cell** 1997 Jul 11;90(1):55–64
Histone deacetylases associated with the mSin3 corepressor mediate mad transcriptional repression. Laherty CD, et al. **Cell** 1997 May 2;89(3):349–56
Nuclear receptor repression mediated by a complex containing SMRT, mSin3A, and histone deacetylase. Nagy L, et al. **Cell** 1997 May 2;89(3):373–80
Histone deacetylases and SAP18, a novel polypeptide, are components of a human Sin3 complex. Zhang Y, et al. **Cell** 1997 May 2;89(3):357–64
Physical interaction between a novel domain of the receptor Notch and the transcription factor RBP-J kappa/Su(H). Tamura K, et al. **Curr Biol** 1995 Dec 1;5(12):1416–23
Drosophila development: homeodomains and translational control. Zamore PD, et al. **Curr Biol** 1996 Jul 1;6(7):773–5 (17 ref.)
Expression of the Sclerotinia sclerotiorum polygalacturonase pg1 gene: possible involvement of CREA in glucose catabolite repression. Reymond-Cotton P, et al. **Curr Genet** 1996 Aug;30(3):240–5
Carbon regulation of the cuticle-degrading enzyme PR1 from Metarhizium anisopliae may involve a trans-acting DNA-binding protein CRR1, a functional equivalent of the Aspergillus nidulans CREA protein. Screen S, et al. **Curr Genet** 1997 Jun;31(6):511–8
Activation and repression of E. coli promoters. Gralla JD. **Curr Opin Genet Dev** 1996 Oct;6(5):526–30 (41 ref.)
Lac repressor-operator complex. Kercher MA, et al. **Curr Opin Struct Biol** 1997 Feb;7(1):76–85 (97 ref.)
The Xenopus homolog of Drosophila Suppressor of Hairless mediates Notch signaling during primary neurogenesis. Wettstein DA, et al. **Development** 1997 Feb;124(3):693–702
CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5 homeobox gene pathway. Zou Y, et al. **Development** 1997 Feb;124(4):793–804
Repressor induced site-specific binding of HU for transcriptional regulation. Aki T, et al. **EMBO J** 1997 Jun; 16(12):3666–74
The gypsy insulator can function as a promoter-specific silencer in the Drosophila embryo. Cai HN, et al. **EMBO J** 1997 Apr 1;16(7):1732–41
In vivo interactions of the Drosophila Hairy and Runt transcriptional repressors with target promoters. Jiménez G, et al. **EMBO J** 1996 Dec 16;15(24):7088–98
The transcriptional corepressor DSP1 inhibits activated transcription by disrupting TFIIA-TBP complex formation. Kirov NC, et al. **EMBO J** 1996 Dec 16; 15(24):7079–87
Protein-induced fit: the CRP activator protein changes sequence-specific DNA recognition by the CytR repressor, a highly flexible LacI member. Pedersen H, et al. **EMBO J** 1997 Apr 15;16(8):2108–18
A model for extradenticle function as a switch that changes HOX proteins from repressors to activators. Pinsonneault J, et al. **EMBO J** 1997 Apr 15;16(8):2032–42
TNF alpha-mediated inhibition and reversal of adipocyte differentiation is accompanied by suppressed expression of PPARgamma without effects on Pref-1 expression. Xing H, et al. **Endocrinology** 1997 Jul;138(7):2776–83
Formation of the early-region-2 transcription-factor-1-retinoblastoma-protein (E2F-1-RB) transrepressor and release of the retinoblastoma protein from nuclear complexes containing cyclin A is induced by interferon alpha in U937V cells but not in interferon-alpha-resistant U937VR cells. Kirch HC, et al. **Eur J Biochem** 1997 Jun 15;246(3):736–44
Analysis of Cre1 binding sites in the Trichoderma reesei cbh1 upstream region. Takashima S, et al. **FEMS Microbiol Lett** 1996 Dec 15;145(3):361–6
Separate domains of MBP-1 involved in c-myc promoter binding and growth suppressive activity. Ray RB, et al. **Gene** 1997 Feb 28;186(2):175–80
Detection of tetramerization domains in vivo by cooperative DNA binding to tandem lambda operator sites. Zeng X, et al. **Gene** 1997 Feb 7;185(2):245–9
Specific binding sites for a pol III transcriptional repressor and pol II transcription factor YY1 within the internucleosomal spacer region in primate Alu repetitive elements. Humphrey GW, et al. **Gene Expr** 1996; 6(3):151–68
Histone-like protein HU as a specific transcriptional regulator: co-factor role in repression of gal transcription by GAL repressor. Aki T, et al. **Genes Cells** 1996 Feb; 1(2):179–88
Alpha2p controls donor preference during mating type interconversion in yeast by inactivating a recombinational enhancer of chromosome III. Szeto L, et al. **Genes Dev** 1997 Aug 1;11(15):1899–911
HBP1: a HMG box transcriptional repressor that is targeted by the retinoblastoma family. Tevosian SG, et al. **Genes Dev** 1997 Feb 1;11(3):383–96
A novel Rap1p-interacting factor, Rif2p, cooperates with Rif1p to regulate telomere length in Saccharomyces cerevisiae. Wotton D, et al. **Genes Dev** 1997 Mar 15; 11(6):748–60
Stoichiometric and steric principles governing repression by nuclear hormone receptors. Zamir I, et al. **Genes Dev** 1997 Apr 1;11(7):835–46
An iron- and fur-repressed Legionella pneumophila gene that promotes intracellular infection and encodes a protein with similarity to the Escherichia coli aerobactin synthetases. Hickey EK, et al. **Infect Immun** 1997 Jan; 65(1):133–43
Mck1, a member of the glycogen synthase kinase 3 family of protein kinases, is a negative regulator of pyruvate kinase in the yeast Saccharomyces cerevisiae. Brazill DT, et al. **J Bacteriol** 1997 Jul;179(13):4415–8
In vivo evidence that acyl coenzyme A regulates DNA binding by the Escherichia coli FadR global transcription factor. Cronan JE Jr. **J Bacteriol** 1997 Mar;179(5):1819–23
Role of the Escherichia coli FadR regulator in stasis survival and growth phase-dependent expression of the uspA, fad, and fab genes. Farewell A, et al. **J Bacteriol** 1996 Nov; 178(22):6443–50
Evidence that TolC is required for functioning of the Mar/AcrAB efflux pump of Escherichia coli. Fralick JA. **J Bacteriol** 1996 Oct;178(19):5803–5
Functional characterization of roles of GalR and GalS as regulators of the gal regulon. Geanacopoulos M, et al. **J Bacteriol** 1997 Jan;179(1):228–34
Critical base pairs and amino acid residues for protein-DNA interaction between the TyrR protein and tyrP operator of Escherichia coli. Hwang JS, et al. **J Bacteriol** 1997 Feb; 179(4):1051–8
Evidence that the Bacillus subtilis pyrimidine regulatory protein PyrR acts by binding to pyr mRNA at three sites in vivo. Lu Y, et al. **J Bacteriol** 1996 Oct;178(19):5806–9
The MtrR repressor binds the DNA sequence between the mtrR and mtrC genes of Neisseria gonorrhoeae. Lucas CE, et al. **J Bacteriol** 1997 Jul;179(13):4123–8
Evidence that the PBP 5 synthesis repressor (psr) of Enterococcus hirae is also involved in the regulation of cell wall composition and other cell wall-related properties. Massidda O, et al. **J Bacteriol** 1996 Sep; 178(17):5272–8
Regulation of gene expression by repressor localization: biochemical evidence that membrane and DNA binding by the PutA protein are mutually exclusive. Muro-Pastor AM, et al. **J Bacteriol** 1997 Apr;179(8):2788–91
A mutation at proline-115 in the A-factor receptor protein of Streptomyces griseus abolishes DNA-binding ability but not ligand-binding ability. Onaka H, et al. **J Bacteriol** 1997 Apr;179(8):2748–52
Purification and characterization of an arginine regulatory protein, ArgR, from Pseudomonas aeruginosa and its interactions with the control regions for the car, argF, and aru operons. Park SM, et al. **J Bacteriol** 1997 Sep; 179(17):5309–17
Catabolite repression resistance of gnt operon expression in Bacillus subtilis conferred by mutation of His-15, the site of phosphoenolpyruvate-dependent phosphorylation of the phosphocarrier protein HPr. Reizer J, et al. **J Bacteriol** 1996 Sep;178(18):5480–6
CodY is required for nutritional repression of Bacillus subtilis genetic competence. Serror P, et al. **J Bacteriol** 1996 Oct; 178(20):5910–5
HupUV proteins of Rhodobacter capsulatus can bind H2: evidence from the H-D exchange reaction. Vignais PM, et al. **J Bacteriol** 1997 Jan;179(1):290–2
Characterization of DinR, the Bacillus subtilis SOS repressor. Winterling KW, et al. **J Bacteriol** 1997 Mar;179(5):1698–703
Nuclear factor 1 family proteins bind to the silencer element in the rat glutathione transferase P gene. Osada S, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):355–63
Characterization of an upstream activation sequence and two Rox1p-responsive sites controlling the induction of the yeast HEM13 gene by oxygen and heme deficiency. Amillet JM, et al. **J Biol Chem** 1996 Oct 4;271(40):24425–32
Expression of neuronal traits in pancreatic beta cells. Implication of neuron-restrictive silencing factor/repressor element silencing transcription factor, a neuron-restrictive silencer. Atouf F, et al. **J Biol Chem** 1997 Jan 17; 272(3):1929–34
Interaction of the nuclear matrix-associated region (MAR)-binding proteins, SATB1 and CDP/Cux, with a MAR element (L2a) in an upstream regulatory region of the mouse CD8a gene. Banan M, et al. **J Biol Chem** 1997 Jul 18;272(29):18440–52
Regulation of murine cytochrome oxidase Vb gene expression in different tissues and during myogenesis. Role of a YY-1 factor-binding negative enhancer. Basu A, et al. **J Biol Chem** 1997 Feb 28;272(9):5899–908
Transcriptional repression of the prointerleukin 1beta gene by heat shock factor 1. Cahill CM, et al. **J Biol Chem** 1996 Oct 4;271(40):24874–9
MyoD functions as a transcriptional repressor in proliferating myoblasts. Chu C, et al. **J Biol Chem** 1997 Feb 7; 272(6):3145–8
Zik1, a transcriptional repressor that interacts with the heterogeneous nuclear ribonucleoprotein particle K protein. Denisenko ON, et al. **J Biol Chem** 1996 Nov 1; 271(44):27701–6
Two distinct factor-binding DNA elements in cardiac myosin light chain 2 gene are essential for repression of its expression in skeletal muscle. Isolation of a cDNA clone for repressor protein Nished. Dhar M, et al. **J Biol Chem** 1997 Jul 18;272(29):18490–7
Identification of phosphorylation sites in the translational regulator, PHAS-I, that are controlled by insulin and

rapamycin in rat adipocytes. Fadden P, et al. **J Biol Chem** 1997 Apr 11;272(15):10240–7

Recognition of nonconserved bases in the P22 operator by P22 repressor requires specific interactions between repressor and conserved bases. Hilchey SP, et al. **J Biol Chem** 1997 Aug 8;272(32):19898–905

Comparison of the DNA association kinetics of the Lac repressor tetramer, its dimeric mutant LacIadi, and the native dimeric Gal repressor. Hsieh M, et al. **J Biol Chem** 1997 Aug 29;272(35):22092–6

Repression of transcriptional enhancer factor-1 and activator protein-1-dependent enhancer activity by vascular actin single-stranded DNA binding factor 2. Kelm RJ Jr, et al. **J Biol Chem** 1996 Sep 27;271(39):24278–85

High affinity binding of the pleckstrin homology domain of mSos1 to phosphatidylinositol (4,5)-bisphosphate. Kubiseski TJ, et al. **J Biol Chem** 1997 Jan 17; 272(3):1799–804

Copper-specific transcriptional repression of yeast genes encoding critical components in the copper transport pathway. Labbé S, et al. **J Biol Chem** 1997 Jun 20; 272(25):15951–8

Hormone-dependent transactivation by estrogen receptor chimeras that do not interact with hsp90. Evidence for transcriptional repressors. Lee HS, et al. **J Biol Chem** 1996 Oct 18;271(42):25727–30

Control of the translational regulators PHAS-I and PHAS-II by insulin and cAMP in 3T3-L1 adipocytes. Lin TA, et al. **J Biol Chem** 1996 Nov 22;271(47):30199–204

Sp3 is a bifunctional transcription regulator with modular independent activation and repression domains. Majello B, et al. **J Biol Chem** 1997 Feb 14;272(7):4021–6

A p56(lck) ligand serves as a coactivator of an orphan nuclear hormone receptor. Marcus SL, et al. **J Biol Chem** 1996 Nov 1;271(44):27197–200

Expression of the rat m4 muscarinic acetylcholine receptor gene is regulated by the neuron-restrictive silencer element/repressor element 1. Mieda M, et al. **J Biol Chem** 1997 Feb 28;272(9):5854–60

Multiple specific CytR binding sites at the Escherichia coli deoP2 promoter mediate both cooperative and competitive interactions between CytR and cAMP receptor protein. Perini LT, et al. **J Biol Chem** 1996 Dec 27;271(52):33242–55

A complex composed of tup1 and ssn6 represses transcription in vitro. Redd MJ, et al. **J Biol Chem** 1997 Apr 25; 272(17):11193–7

Binding of THZif-1, a MAZ-like zinc finger protein to the nuclease-hypersensitive element in the promoter region of the c-MYC protooncogene. Sakatsume O, et al. **J Biol Chem** 1996 Dec 6;271(49):31322–33

Identification of native complexes containing the yeast coactivator/repressor proteins NGG1/ADA3 and ADA2. Saleh A, et al. **J Biol Chem** 1997 Feb 28;272(9):5571–8

Phosphorylation events modulate the ability of interferon consensus sequence binding protein to interact with interferon regulatory factors and to bind DNA. Sharf R, et al. **J Biol Chem** 1997 Apr 11;272(15):9785–92

CopY is a copper-inducible repressor of the Enterococcus hirae copper ATPases. Strausak D, et al. **J Biol Chem** 1997 Apr 4;272(14):8932–6

The yeast homeodomain protein MATalpha2 shows extended DNA binding specificity in complex with Mcm1. Zhong H, et al. **J Biol Chem** 1997 Mar 28;272(13):8402–9

A pathway for targeting soluble misfolded proteins to the yeast vacuole. Hong E, et al. **J Cell Biol** 1996 Nov; 135(3):623–33

Both A type and B type Epstein-Barr virus nuclear antigen 6 interact with RBP-2N. Young DB, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1671–4

Protection against Fas/APO-1- and tumor necrosis factor-mediated cell death by a novel protein, sentrin. Okura T, et al. **J Immunol** 1996 Nov 15;157(10):4277–81

Translational regulation of lipoprotein lipase by thyroid hormone is via a cytoplasmic repressor that interacts with the 3' untranslated region. Kern PA, et al. **J Lipid Res** 1996 Nov;37(11):2332–40

The effect of self-association on the interaction of the Escherichia coli regulatory protein TyrR with DNA. Bailey MF, et al. **J Mol Biol** 1996 Nov 15;263(5):671–84

Repressor assembly at trp binding sites is dependent on the identity of the intervening dinucleotide between the binding half sites. Bareket-Samish A, et al. **J Mol Biol** 1997 Mar 21;267(1):103–17

Quantitative specificity of the Mnt repressor. Fields DS, et al. **J Mol Biol** 1997 Aug 15;271(2):178–94

Thermodynamics of the interactions of lac repressor with variants of the symmetric lac operator: effects of converting a consensus site to a non-specific site. Frank DE, et al. **J Mol Biol** 1997 Apr 18;267(5):1186–206

Cooperative and non-cooperative DNA binding modes of catabolite control protein CcpA from Bacillus megaterium result from sensing two different signals. Gösseringer R, et al. **J Mol Biol** 1997 Mar 7;266(4):665–76

Escherichia coli lac repressor-lac operator interaction and the influence of allosteric effectors. Horton N, et al. **J Mol Biol** 1997 Jan 10;265(1):1–7

Partitioning of plasmid R1. The ParM protein exhibits ATPase activity and interacts with the centromere-like ParR-parC complex. Jensen RB, et al. **J Mol Biol** 1997 Jun 20;269(4):505–13

Design of CytR regulated, cAMP-CRP dependent class II promoters in Escherichia coli: RNA polymerase-promoter interactions modulate the efficiency of CytR repression. Kristensen HH, et al. **J Mol Biol** 1997 Mar 14;266(5):866–76

How AraC interacts specifically with its target DNAs. Niland P, et al. **J Mol Biol** 1996 Dec 13;264(4):667–74

Single-chain repressors containing engineered DNA-binding domains of the phage 434 repressor recognize symmetric or asymmetric DNA operators. Simoncsits A, et al. **J Mol Biol** 1997 Mar 21;267(1):118–31

Role of operator subsites in Arc repression. Smith TL, et al. **J Mol Biol** 1996 Nov 29;264(2):233–42

Plasmid pIP501 encoded transcriptional repressor CopR binds asymmetrically at two consecutive major grooves of the DNA. Steinmetzer K, et al. **J Mol Biol** 1997 Jun 27;269(5):684–93

Communication of ClpXP protease hypersensitivity to bacteriophage Mu repressor isoforms. Welty DJ, et al. **J Mol Biol** 1997 Sep 12;272(1):31–41

The ARP-1 orphan receptor represses steroid-mediated stimulation of human placental lactogen gene expression. Stephanou A, et al. **J Mol Endocrinol** 1996 Jun;16(3):221–7

Lac repressor-operator interaction: N-terminal peptide backbone 1H and 15N chemical shifts upon complex formation with DNA. Artz PG, et al. **J Mol Recognit** 1996 Jan-Feb;9(1):13–22

Binding of Escherichia coli LexA repressor to the RecA operator. Shaner SL, et al. **J Mol Recognit** 1996 Sep-Dec; 9(5-6):468–73

Tet repressor-tetracycline interaction. Kaszycki P, et al. **J Protein Chem** 1996 Oct;15(7):607–19

Effects on protein structure and function of replacing tryptophan with 5-hydroxytryptophan: single-tryptophan mutants of the N-terminal domain of the bacteriophage lambda repressor. Kombo DC, et al. **J Protein Chem** 1996 Jan;15(1):77–86

Heme binding by a bacterial repressor protein, the gene product of the ferric uptake regulation (fur) gene of Escherichia coli. Smith A, et al. **J Protein Chem** 1996 Aug; 15(6):575–83

Specific repression of Tax trans-activation by TAR RNA-binding protein TRBP. Donzeau M, et al. **J Virol** 1997 Apr;71(4):2628–35

The UL84 protein of human cytomegalovirus acts as a transdominant inhibitor of immediate-early-mediated transactivation that is able to prevent viral replication. Gebert S, et al. **J Virol** 1997 Sep;71(9):7048–60

CCAAT displacement protein, a regulator of differentiation-specific gene expression, binds a negative regulatory element within the 5' end of the human papillomavirus type 6 long control region. Pattison S, et al. **J Virol** 1997 Mar;71(3):2013–22

Possible involvement of double-stranded RNA-activated protein kinase in cell death by influenza virus infection. Takizawa T, et al. **J Virol** 1996 Nov;70(11):8128–32

Human papillomavirus type 11 and 16 E5 represses p21(Waf1/Sdi1/Cip1) gene expression in fibroblasts and keratinocytes. Tsao YP, et al. **J Virol** 1996 Nov; 70(11):7535–9

Approaches to the study of Rox1 repression of the hypoxic genes in the yeast Saccharomyces cerevisiae. Zitomer RS, et al. **Methods** 1997 Mar;11(3):279–88

Reading of DNA sequence logos: prediction of major groove binding by information theory. Schneider TD. **Methods Enzymol** 1996;274:445–55

Groucho-dependent and -independent repression activities of Runt domain proteins. Aronson BD, et al. **Mol Cell Biol** 1997 Sep;17(9):5581–7

Mad proteins contain a dominant transcription repression domain. Ayer DE, et al. **Mol Cell Biol** 1996 Oct; 16(10):5772–81

tau4/tau c/AF-2 of the thyroid hormone receptor relieves silencing of the retinoic acid receptor silencer core independent of both tau4 activation function and full dissociation of corepressors. Baniahmad A, et al. **Mol Cell Biol** 1997 Aug;17(8):4259–71

Novel Gal3 proteins showing altered Gal80p binding cause constitutive transcription of Gal4p-activated genes in Saccharomyces cerevisiae. Blank TE, et al. **Mol Cell Biol** 1997 May;17(5):2566–75

The Gfi-1 proto-oncoprotein contains a novel transcriptional repressor domain, SNAG, and inhibits G1 arrest induced by interleukin-2 withdrawal. Grimes HL, et al. **Mol Cell Biol** 1996 Nov;16(11):6263–72

The mammalian transcriptional repressor RBP (CBF1) regulates interleukin-6 gene expression. Kannabiran C, et al. **Mol Cell Biol** 1997 Jan;17(1):1–9

Residues in the WD repeats of Tup1 required for interaction with alpha2. Komachi K, et al. **Mol Cell Biol** 1997 Oct; 17(10):6023–8

The Drosophila P-element KP repressor protein dimerizes and interacts with multiple sites on P-element DNA. Lee CC, et al. **Mol Cell Biol** 1996 Oct;16(10):5616–22

A conformational switch in nuclear hormone receptors is involved in coupling hormone binding to corepressor release. Lin BC, et al. **Mol Cell Biol** 1997 Oct;17(10):6131–8

Rapid phosphorylation of Ets-2 accompanies mitogen-activated protein kinase activation and the induction of heparin-binding epidermal growth factor gene expression by oncogenic Raf-1. McCarthy SA, et al. **Mol Cell Biol** 1997 May;17(5):2401–12

The human cut homeodomain protein can repress gene expression by two distinct mechanisms: active repression and competition for binding site occupancy. Mailly F, et al. **Mol Cell Biol** 1996 Oct;16(10):5346–57

The murine Sim-2 gene product inhibits transcription by active repression and functional interference. Moffett P, et al. **Mol Cell Biol** 1997 Sep;17(9):4933–47

Rgt1p of Saccharomyces cerevisiae, a key regulator of glucose-induced genes, is both an activator and a repressor of transcription. Özcan S, et al. **Mol Cell Biol** 1996 Nov; 16(11):6419–26

Cleavage of membrane-associated pref-1 generates a soluble inhibitor of adipocyte differentiation. Smas CM, et al. **Mol Cell Biol** 1997 Feb;17(2):977–88

Repression of gonadotropin-releasing hormone promoter activity by the POU homeodomain transcription factor SCIP/Oct-6/Tst-1: a regulatory mechanism of phenotype expression? Wierman ME, et al. **Mol Cell Biol** 1997 Mar; 17(3):1652–65

Functional dissection of a human Dr1-DRAP1 repressor complex. Yeung K, et al. **Mol Cell Biol** 1997 Jan; 17(1):36–45

Two receptor interacting domains in the nuclear hormone receptor corepressor RIP13/N-CoR. Seol W, et al. **Mol Endocrinol** 1996 Dec;10(12):1646–55

Differential effects of nuclear receptor corepressor (N-CoR) expression levels on retinoic acid receptor-mediated repression support the existence of dynamically regulated corepressor complexes. Söderström M, et al. **Mol Endocrinol** 1997 Jun;11(6):682–92

The localized melting of mini-F origin by the combined action of the mini-F initiator protein (RepE) and HU and DnaA of Escherichia coli. Kawasaki Y, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):42–9

The role of cysteine residues in the homeodomain protein Mat alpha 2 in mating-type control of Saccharomyces cerevisiae. Mukai Y, et al. **Mol Gen Genet** 1997 Jun; 255(2):166–71

The arginine operon of Bacillus stearothermophilus: characterization of the control region and its interaction with the heterologous B. subtilis arginine repressor. Savchenko A, et al. **Mol Gen Genet** 1996 Aug 27; 252(1-2):69–78

Identification and characterization of AlgZ, an AlgT-dependent DNA-binding protein required for Pseudomonas aeruginosa algD transcription. Baynham PJ, et al. **Mol Microbiol** 1996 Oct;22(1):97–108

Autoregulation of luxR: the Vibrio harveyi lux-operon activator functions as a repressor. Chatterjee J, et al. **Mol Microbiol** 1996 Apr;20(2):415–25

DNA binding of Escherichia coli arginine repressor mutants altered in oligomeric state. Chen SH, et al. **Mol Microbiol** 1997 Jun;24(6):1143–56

Examination of AsmA and its effect on the assembly of Escherichia coli outer membrane proteins. Deng M, et al. **Mol Microbiol** 1996 Aug;21(3):605–12

Expression of the Bacillus subtilis gabP gene is regulated independently in response to nitrogen and amino acid availability. Ferson AE, et al. **Mol Microbiol** 1996 Nov; 22(4):693–701

A newly identified gene cluster in Aspergillus nidulans comprises five novel genes localized in the alc region that are controlled both by the specific transactivator AlcR and the general carbon-catabolite repressor CreA. Fillinger S, et al. **Mol Microbiol** 1996 May;20(3):475–88

FIS is a regulator of metabolism in Escherichia coli. González-Gil G, et al. **Mol Microbiol** 1996 Oct;22(1):21–9

Studies of the repressor (BlaI) of beta-lactamase synthesis in Staphylococcus aureus. Gregory PD, et al. **Mol Microbiol** 1997 Jun;24(5):1025–37

Accessory proteins impose site selectivity during ColE1 dimer resolution. Guhathakurta A, et al. **Mol Microbiol** 1996 May;20(3):613–20

Co-operative binding of two Trp repressor dimers to alpha- or beta-centred trp operators. Günes C, et al. **Mol Microbiol** 1996 Apr;20(2):375–84

DnaA initiator--also a transcription factor. Messer W, et al. **Mol Microbiol** 1997 Apr;24(1):1–6 (68 ref.)

Definition of a consensus DNA-binding site for the Escherichia coli pleiotropic regulatory protein, FruR. Nègre D, et al. **Mol Microbiol** 1996 Jul;21(2):257–66

DNA-binding activity of the A-factor receptor protein and its recognition DNA sequences. Onaka H, et al. **Mol Microbiol** 1997 Jun;24(5):991–1000

Purification and functional characterization of PecS, a regulator of virulence-factor synthesis in Erwinia chrysanthemi. Praillet T, et al. **Mol Microbiol** 1996 Apr; 20(2):391–402

Interaction of CodY, a novel Bacillus subtilis DNA-binding protein, with the dpp promoter region. Serror P, et al. **Mol Microbiol** 1996 May;20(4):843–52

A flexible partnership: the CytR anti-activator and the cAMP-CRP activator protein, comrades in transcription control. Valentin-Hansen P, et al. **Mol Microbiol** 1996 May; 20(3):461–6 (26 ref.)

Integration host factor alleviates the H-NS-mediated repression of the early promoter of bacteriophage Mu. van Ulsen P, et al. **Mol Microbiol** 1996 Aug;21(3):567–78

Action at a distance for glp repressor control of glpTQ transcription in Escherichia coli K-12. Yang B, et al. **Mol Microbiol** 1997 May;24(3):511–21

Repression of MHC class II gene transcription in trophoblast cells by novel single-stranded DNA binding proteins. Murphy SP, et al. **Mol Reprod Dev** 1997 Aug;47(4):390–403

Different DNA contact schemes are used by two winged

helix proteins to recognize a DNA binding sequence. Bravieri R, et al. **Nucleic Acids Res** 1997 Jul 15; 25(14):2888–96

Recognition of DNA by single-chain derivatives of the phage 434 repressor: high affinity binding depends on both the contacted and non-contacted base pairs. Chen J, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2047–54

Protein-protein interaction between the transcriptional repressor E4BP4 and the TBP-binding protein Dr1. Cowell IG, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3607–13

Transcriptional repression by Rev-erbA alpha is dependent on the signature motif and helix 5 in the ligand binding domain: silencing does not involve an interaction with N-CoR. Downes M, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3490–8

The ZiN/POZ domain of ZF5 is required for both transcriptional activation and repression. Kaplan J, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1108–16

Contacts between Bacillus subtilis catabolite regulatory protein CcpA and amyO target site. Kim JH, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3490–6

Transcriptional repression by RING finger protein TIF1 beta that interacts with the KRAB repressor domain of KOX1. Moosmann P, et al. **Nucleic Acids Res** 1996 Dec 15; 24(24):4859–67

Saccharomyces cerevisiae IRE2/HAC1 is involved in IRE1-mediated KAR2 expression. Nikawa J, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4222–6

Zn2+-sensing by the cyanobacterial metallothionein repressor SmtB: different motifs mediate metal-induced protein-DNA dissociation. Turner JS, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3714–21

The XPB subunit of repair/transcription factor TFIIH directly interacts with SUG1, a subunit of the 26S proteasome and putative transcription factor. Weeda G, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2274–83

Conformational changes of purine repressor DNA-binding domain upon complexation with DNA. Nagadoi A, et al. **Nucleic Acids Symp Ser** 1995;(34):63–4

The HMG-box transcription factor HBP1 is targeted by the pocket proteins and E1A. Lavender P, et al. **Oncogene** 1997 Jun 5;14(22):2721–8

Human small Maf proteins form heterodimers with CNC family transcription factors and recognize the NF-E2 motif. Toki T, et al. **Oncogene** 1997 Apr 24;14(16):1901–10

Co-localization of the TSC2 product tuberin with its target Rap1 in the Golgi apparatus. Wienecke R, et al. **Oncogene** 1996 Sep 5;13(5):913–23

Interaction with DNA of oligopeptides related to the Arc repressor. Helbecque N, et al. **Pept Res** 1996 Jan-Feb; 9(1):21–7

Structure and function of Escherichia coli met repressor: similarities and contrasts with trp repressor. Phillips SE, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 Apr 29; 351(1339):527–35 (42 ref.)

Interaction of Gal repressor with inducer and operator: induction of gal transcription from repressor-bound DNA. Chatterjee S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2957–62

SMRT isoforms mediate repression and anti-repression of nuclear receptor heterodimers. Chen JD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7567–71

Transcriptional regulation in Archaea: in vivo demonstration of a repressor binding site in a methanogen. Cohen-Kupiec R, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1316–20

A novel member of the RING finger family, KRIP-1, associates with the KRAB-A transcriptional repressor domain of zinc finger proteins. Kim SS, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15299–304

Mycoparasitic interaction relieves binding of the Cre1 carbon catabolite repressor protein to promoter sequences of the ech42 (endochitinase-encoding) gene in Trichoderma harzianum. Lorito M, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14868–72

The molecular chaperone hsp40 regulates the activity of P58IPK, the cellular inhibitor of PKR. Melville MW, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):97–102

Protein p4 represses phage phi 29 A2c promoter by interacting with the alpha subunit of Bacillus subtilis RNA polymerase. Monsalve M, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8913–8

Dual-function regulators: the cAMP receptor protein and the CytR regulator can act either to repress or to activate transcription depending on the context. Rasmussen PB, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10151–5

Transcriptional repression at a distance through exclusion of activator binding in vivo. Shimizu M, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):790–5

Dual regulation of open-complex formation and promoter clearance by Arc explains a novel repressor to activator switch. Smith TL, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8868–72

CDP/cut is the DNA-binding subunit of histone gene transcription factor HiNF-D: a mechanism for gene regulation at the G1/S phase cell cycle transition point independent of transcription factor E2F. van Wijnen AJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11516–21

cAMP-response element modulator tau is a positive regulator of testis angiotensin converting enzyme transcription. Zhou Y, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12262–6

Lactose repressor protein: functional properties and structure. Matthews KS, et al. **Prog Nucleic Acid Res Mol Biol** 1998;58:127–64 (243 ref.)

Flexibility of DNA binding domain of trp repressor required for recognition of different operator sequences. Gryk MR, et al. **Protein Sci** 1996 Jun;5(6):1195–7

In vivo association of protein fragments giving active AraC. Eustance RJ, et al. **Proteins** 1996 Aug;25(4):501–5

Computational design of a substrate specificity mutant of a protein. Honda N, et al. **Proteins** 1996 Dec;26(4):459–64

CcpA and HPr(ser-P): mediators of catabolite repression in Bacillus subtilis. Chauvaux S. **Res Microbiol** 1996 Jul-Sep; 147(6-7):518–22 (20 ref.)

Cra and the control of carbon flux via metabolic pathways. Ramseier TM. **Res Microbiol** 1996 Jul-Sep;147(6-7):489–93 (17 ref.)

Regulated poly(A) tail shortening in somatic cells mediated by cap-proximal translational repressor proteins and ribosome association. Muckenthaler M, et al. **RNA** 1997 Sep;3(9):983–95

Control of filament formation in Candida albicans by the transcriptional repressor TUP1 [see comments] Braun BR, et al. **Science** 1997 Jul 4;277(5322):105–9. Comment in: Science 1997 Jul 4;277(5322):52–3.

Phosphorylation of the translational repressor PHAS-I by the mammalian target of rapamycin. Brunn GJ, et al. **Science** 1997 Jul 4;277(5322):99–101

DNA looping and lac repressor-CAP interaction [letter; comment] Fried MG, et al. **Science** 1996 Dec 13; 274(5294):1930–1; discussion 1931-2. Comment on: Science 1996 Mar 1;271(5253):1247–54.

Which came first, the hypha or the yeast? [comment] Magee PT. **Science** 1997 Jul 4;277(5322):52–3. Comment on: Science 1997 Jul 4;277(5322):105–9.

Nucleosome mobility and the maintenance of nucleosome positioning. Pazin MJ, et al. **Science** 1997 May 2; 276(5313):809–12

DNA looping and lac repressor-CAP interaction [letter; comment] Perros M, et al. **Science** 1996 Dec 13; 274(5294):1929–30; discussion 1931-2. Comment on: Science 1996 Mar 1;271(5253):1247–54.

Silencers and locus control regions: opposite sides of the same coin. Kamakaka RT. **Trends Biochem Sci** 1997 Apr; 22(4):124–8 (42 ref.)

Active repression mechanisms of eukaryotic transcription repressors. Hanna-Rose W, et al. **Trends Genet** 1996 Jun; 12(6):229–34 (46 ref.)

Epstein-Barr nuclear antigen-3 and -4 interact with RBP-2N, a major isoform of RBP-J kappa in B lymphocytes. Krauer KG, et al. **Virology** 1996 Dec 15; 226(2):346–53

Mutations in CR1 of E1A 12S yield dominant negative suppressors of immortalization and the lytic cycle. Malladi A, et al. **Virology** 1997 Jun 23;233(1):51–62

PHARMACOLOGY

Overexpression of Bcl-X(L) inhibits Ara-C-induced mitochondrial loss of cytochrome c and other perturbations that activate the molecular cascade of apoptosis. Kim CN, et al. **Cancer Res** 1997 Aug 1;57(15):3115–20

Effect of mutations on the sensitivity of human beta-cell glucokinase to liver regulatory protein. Veiga-da-Cunha M, et al. **Diabetologia** 1996 Oct;39(10):1173–9

Inducible retroviral vectors regulated by lac repressor in mammalian cells. Chang BD, et al. **Gene** 1996 Dec 12; 183(1-2):137–42

In vitro transcriptional analysis of TyrR-mediated activation of the mtr and tyrP+3 promoters of Escherichia coli. Yang J, et al. **J Bacteriol** 1996 Nov;178(21):6389–93

The 58-kDa cellular inhibitor of the double stranded RNA-dependent protein kinase requires the tetratricopeptide repeat 6 and DnaJ motifs to stimulate protein synthesis in vivo. Tang NM, et al. **J Biol Chem** 1996 Nov 8;271(45):28660–6

Protection against Fas/APO-1- and tumor necrosis factor-mediated cell death by a novel protein, sentrin. Okura T, et al. **J Immunol** 1996 Nov 15;157(10):4277–81

Coactivator and corepressor regulation of the agonist/antagonist activity of the mixed antiestrogen, 4-hydroxytamoxifen. Smith CL, et al. **Mol Endocrinol** 1997 Jun;11(6):657–66

Escherichia coli OxyR protein represses the unmethylated bacteriophage Mu mom operon without blocking binding of the transcriptional activator C. Sun W, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4042–9

PHYSIOLOGY

Inducible gene expression in Entamoeba histolytica mediated by a tetracycline responsive prokaryotic repressor. Hamann L, et al. **Arch Med Res** 1997;28 Spec No:32–3

The nuclear receptor corepressor SMRT inhibits interstitial collagenase (MMP-1) transcription through an HRE-independent mechanism. Schroen DJ, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):52–8

The octamer-binding proteins Oct-1 and Oct-2 repress the HIV long terminal repeat promoter and its transactivation by Tat. Liu YZ, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):155–8

A thymocyte factor SATB1 suppresses transcription of stably integrated matrix-attachment region-linked reporter genes. Kohwi-Shigematsu T, et al. **Biochemistry** 1997 Oct 7; 36(40):12005–10

Constitutive activity of the murine IL-1 beta promoter is regulated by a transcriptional repressor. Lebedeva TV, et al. **Biochim Biophys Acta** 1997 Jul 17;1353(1):32–8

The LAZ3/BCL6 oncogene encodes a sequence-specific transcriptional inhibitor: a novel function for the BTB/POZ domain as an autonomous repressing domain. Deweindt C, et al. **Cell Growth Differ** 1995 Dec; 6(12):1495–503

Expression of memory, differentiation, and repression of c-myc and p53 genes in human RD/TE-671 cells induced by a ureido-derivative of pyridine (UDP-4). Pappas IS, et al. **Cell Growth Differ** 1996 Jun;7(6):797–809

E-selectin gene expression in vascular smooth muscle cells. Evidence for a tissue-specific repressor protein. Chen XL, et al. **Circ Res** 1997 Mar;80(3):305–11

Splicing together the unfolded-protein response. Shamu CE. **Curr Biol** 1997 Feb 1;7(2):R67–70 (15 ref.)

Functional analysis of Drosophila and mammalian cut proteins in files. Ludlow C, et al. **Dev Biol** 1996 Aug 25; 178(1):149–59

Temporal and spatial regulation of a putative transcriptional repressor implicates it as playing a role in thyroid hormone-dependent organ transformation. Ishizuya-Oka A, et al. **Dev Genet** 1997;20(4):329–37

c-Myb and Ets proteins synergize to overcome transcriptional repression by ZEB. Postigo AA, et al. **EMBO J** 1997 Jul 1;16(13):3924–34

ZEB, a vertebrate homolog of Drosophila Zfh-1, is a negative regulator of muscle differentiation. Postigo AA, et al. **EMBO J** 1997 Jul 1;16(13):3935–43

Key elements involved in the negative regulation of the TSH receptor: G protein-coupled receptor kinases, arrestin and inducible cAMP early repressor. Kopp P. **Eur J Endocrinol** 1997 Mar;136(3):269–70

MetR-mediated repression of the glyA gene in Escherichia coli. Lorenz E, et al. **FEMS Microbiol Lett** 1996 Nov 1; 144(2-3):229–33

The PecM protein is necessary for the DNA-binding capacity of the PecS repressor, one of the regulators of virulence-factor synthesis in Erwinia chrysanthemi. Praillet T, et al. **FEMS Microbiol Lett** 1997 Sep 15;154(2):265–70

Evidence for regulation of the NADH peroxidase gene (npr) from Enterococcus faecalis by OxyR. Ross RP, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):177–83

Carbon repression in Aspergilli. Ruijter GJ, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):103–14 (51 ref.)

Signalling from endoplasmic reticulum to nucleus: transcription factor with a basic-leucine zipper motif is required for the unfolded protein-response pathway. Mori K, et al. **Genes Cells** 1996 Sep;1(9):803–17

Drosophila Jun kinase regulates expression of decapentaplegic via the ETS-domain protein Aop and the AP-1 transcription factor DJun during dorsal closure. Riesgo-Escovar JR, et al. **Genes Dev** 1997 Jul 1; 11(13):1717–27

An interleukin-2 signal relieves BSAP (Pax5)-mediated repression of the immunoglobulin J chain gene. Rinkenberger JL, et al. **Immunity** 1996 Oct;5(4):377–86

The phenylacetic acid uptake system of Aspergillus nidulans is under a creA-independent model of catabolic repression which seems to be mediated by acetyl-CoA. Fernández-Cañón JM, et al. **J Antibiot (Tokyo)** 1997 Jan; 50(1):45–52

Regulation of the dnaK operon of Streptomyces coelicolor A3(2) is governed by HspR, an autoregulatory repressor protein. Bucca G, et al. **J Bacteriol** 1997 Oct; 179(19):5999–6004

Molecular genetic analysis suggesting interactions between AppA and PpsR in regulation of photosynthesis gene expression in Rhodobacter sphaeroides 2.4.1. Gomelsky M, et al. **J Bacteriol** 1997 Jan;179(1):128–34

The role of fur in the acid tolerance response of Salmonella typhimurium is physiologically and genetically separable from its role in iron acquisition. Hall HK, et al. **J Bacteriol** 1996 Oct;178(19):5683–91

The hepatitis B virus X protein enhances the DNA binding potential and transcription efficacy of bZip transcription factors. Barnabas S, et al. **J Biol Chem** 1997 Aug 15; 272(33):20684–90

Function of nuclear co-repressor protein on thyroid hormone response elements is regulated by the receptor A/B domain. Hollenberg AN, et al. **J Biol Chem** 1996 Nov 8; 271(45):28516–20

Mutual transcriptional interference between RelA and androgen receptor. Palvimo JJ, et al. **J Biol Chem** 1996 Sep 27;271(39):24151–6

The tuberous sclerosis 2 gene product, tuberin, functions as a Rab5 GTPase activating protein (GAP) in modulating endocytosis. Xiao GH, et al. **J Biol Chem** 1997 Mar 7; 272(10):6097–100

Identification of a novel repressive element that contributes to neuron-specific gene expression. Weber JRM, et al. **J Neurosci** 1997 Oct 15;17(20):7583–93

Graded effect of tailless on posterior gut development: molecular basis of an allelic series of a nuclear receptor gene. Diaz RJ, et al. **Mech Dev** 1996 Jan;54(1):119–30

The product of the Saccharomyces cerevisiae RSS1 gene, identified as a high-copy suppressor of the rat7-1 temperature-sensitive allele of the RAT7/NUP159 nucleoporin, is required for efficient mRNA export. Del

Priore V, et al. **Mol Biol Cell** 1996 Oct;7(10):1601–21

Regulated nuclear translocation of the Mig1 glucose repressor. De Vit MJ, et al. **Mol Biol Cell** 1997 Aug; 8(8):1603–18

The product of the murine homolog of the Drosophila extra sex combs gene displays transcriptional repressor activity. Denisenko ON, et al. **Mol Cell Biol** 1997 Aug;17(8):4707–17

Multiple mechanisms of transcriptional repression by YY1. Galvin KM, et al. **Mol Cell Biol** 1997 Jul;17(7):3723–32

The nuclear orphan receptors COUP-TF and ARP-1 positively regulate the trout estrogen receptor gene through enhancing autoregulation. Lazennec G, et al. **Mol Cell Biol** 1997 Sep;17(9):5053–66

Recombination signal sequence binding protein Jkappa is constitutively bound to the NF-kappaB site of the interleukin-6 promoter and acts as a negative regulatory factor. Plaisance S, et al. **Mol Cell Biol** 1997 Jul; 17(7):3733–43

RING1 is associated with the polycomb group protein complex and acts as a transcriptional repressor. Satijn DP, et al. **Mol Cell Biol** 1997 Jul;17(7):4105–13

Interference with the expression of a novel human polycomb protein, hPc2, results in cellular transformation and apoptosis. Satijn DP, et al. **Mol Cell Biol** 1997 Oct; 17(10):6076–86

Hir1p and Hir2p function as transcriptional corepressors to regulate histone gene transcription in the Saccharomyces cerevisiae cell cycle. Spector MS, et al. **Mol Cell Biol** 1997 Feb;17(2):545–52

Role of alpha2 protein in donor locus selection during mating type interconversion. Szeto L, et al. **Mol Cell Biol** 1997 Feb;17(2):751–9

Nuclear receptor corepressors activate rather than suppress basal transcription of genes that are negatively regulated by thyroid hormone. Tagami T, et al. **Mol Cell Biol** 1997 May;17(5):2642–8

A nuclear hormone receptor corepressor mediates transcriptional silencing by receptors with distinct repression domains. Zamir I, et al. **Mol Cell Biol** 1996 Oct; 16(10):5458–65

Repression of cAMP-induced expression of the mouse P450 17 alpha-hydroxylase/C17-20 lyase gene (Cyp17) by androgens. Burgos-Trinidad M, et al. **Mol Endocrinol** 1997 Jan;11(1):87–96

The partial agonist activity of antagonist-occupied steroid receptors is controlled by a novel hinge domain-binding coactivator L7/SPA and the corepressors N-CoR or SMRT. Jackson TA, et al. **Mol Endocrinol** 1997 Jun; 11(6):693–705

Role for N-CoR and histone deacetylase in Sin3-mediated transcriptional repression [see comments] Alland L, et al. **Nature** 1997 May 1;387(6628):49–55. Comment in: Nature 1997 May 1;387(6628):16–7.

A complex containing N-CoR, mSin3 and histone deacetylase mediates transcriptional repression [see comments] Heinzel T, et al. **Nature** 1997 May 1; 387(6628):43–8. Comment in: Nature 1997 May 1;387(6628):16–7.

Transcriptional control. Sinful repression [news; comment] Wolffe AP. **Nature** 1997 May 1;387(6628):16–7. Comment on: Nature 1997 May 1;387(6628):43–8. Comment on: Nature 1997 May 1;387(6628):49–55.

Negative regulation of gene expression in eukaryotes. Imagawa M. **Neurochem Int** 1996 Dec;29(6):565–72 (35 ref.)

Sp3 encodes multiple proteins that differ in their capacity to stimulate or repress transcription. Kennett SB, et al. **Nucleic Acids Res** 1997 Aug 1;25(15):3110–7

The world according to Maf. Motohashi H, et al. **Nucleic Acids Res** 1997 Aug 1;25(15):2953–59 (60 ref.)

Avian winged helix proteins CWH-1, CWH-2 and CWH-3 repress transcription from Qin binding sites. Freyaldenhoven BS, et al. **Oncogene** 1997 Jul 24; 15(4):483–8

Myb binding sites within the N-ras promoter repress transcription. Ganter B, et al. **Oncogene** 1997 Jul 10; 15(2):193–202

TATA-less promoters of some Ets-family genes are efficiently repressed by wild-type p53. Iotsova V, et al. **Oncogene** 1996 Dec 5;13(11):2331–7

Role of suppressor of hairless in the delta-activated Notch signaling pathway. Lecourtois M, et al. **Perspect Dev Neurobiol** 1997;4(4):305–11 (50 ref.)

The Dr1/DRAP1 heterodimer is a global repressor of transcription in vivo. Kim S, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):820–5

Hematopoietic activity of a stromal cell transmembrane protein containing epidermal growth factor-like repeat motifs. Moore KA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4011–6

Role of co-activators and co-repressors in the mechanism of steroid/thyroid receptor action. Shibata H, et al. **Recent Prog Horm Res** 1997;52:141–64; discussion 164–5 (119 ref.)

Genetic aspects of carbon catabolite repression of the STA2 glucoamylase gene in Saccharomyces cerevisiae. Kartasheva NN, et al. **Yeast** 1996 Oct;12(13):1297–300

[VHL gene and TSC 2 gene] Hino O. **Gan To Kagaku Ryoho** 1997 Sep;24(11):1386–91 (27 ref.) (Eng. Abstr.) **(Jpn)**

[Role of yeast global repressors, Bel2 and Tup1, in chromatin-and nucleosome-mediated transcriptional regulation] Harashima S. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1187–97 (31 ref.) **(Jpn)**

REPRODUCIBILITY OF RESULTS

Statistical methodology: II. Reliability and variability assessment in study design, Part A. Karras DJ. **Acad Emerg Med** 1997 Jan;4(1):64–71

Statistical methodology: II. Reliability and validity assessment in study design, Part B. Karras DJ. **Acad Emerg Med** 1997 Feb;4(2):144–7

Reliability of diagnostic tests. Gjørup T. **Acta Obstet Gynecol Scand Suppl** 1997;166:9–14

Reliability and validity of stationary cystometry, stationary cysto-urethrometry and ambulatory cysto-urethro-vaginometry. Kulseng-Hanssen S. **Acta Obstet Gynecol Scand Suppl** 1997;166:33–8 (36 ref.)

The Kleinian Psychoanalytic Diagnostic Scale (revised version): presentation and study of reliability. Aguilar J, et al. **Acta Psychiatr Scand** 1996 Aug;94(2):69–78

Statistical design of calibration studies. Carroll RJ, et al. **Am J Clin Nutr** 1997 Apr;65(4 Suppl):1187S–1189S (9 ref.)

Test-retest reliability of psychoactive substance abuse and dependence diagnoses in telephone interviews using a modified Diagnostic Interview Schedule-Substance Abuse Module. Aktan GB, et al. **Am J Drug Alcohol Abuse** 1997 May;23(2):229–48

Low power, type II errors, and other statistical problems in recent cardiovascular research. Williams JL, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H487–93

Domain specificity of the subtests of the Mini-Mental State Examination. Tierney MC, et al. **Arch Neurol** 1997 Jun; 54(6):713–6

Reproducibility of data collected by patient interview. Lim LL, et al. **Aust N Z J Public Health** 1996 Oct;20(5):517–20

The reliability of the diagnostic features in patients with narcolepsy. Folkerts M, et al. **Biol Psychiatry** 1996 Aug 1;40(3):208–14

Receiver operating characteristic studies and measurement errors. Coffin M, et al. **Biometrics** 1997 Sep;53(3):823–37

Measurement error [corrected and republished article originally printed in BMJ 1996 Jun 29;312(7047):1654] [see comments] Bland JM, et al. **BMJ** 1996 Sep 21;313(7059):744 . Comment in: BMJ 1997 Jan 11;314(7074):147. Comment in: BMJ 1997 Jan 11;314(7074):147–8.

Measurement error. Measurement error is that which we have not yet explained [letter; comment] Doyle JR, et al. **BMJ** 1997 Jan 11;314(7074):147–8. Comment on: BMJ 1996 Sep 21;313(7059):744.

Measurement error. A constant within subject standard deviation cannot be assumed a priori [letter; comment] Massé J. **BMJ** 1997 Jan 11;314(7074):147. Comment on: BMJ 1996 Sep 21;313(7059):744.

Looking for statistical stability: a new method of evaluating reliability of statistical tests. De Martini D. **Boll Soc Ital Biol Sper** 1996 May-Jun;72(5–6):179–86

A comparison of test-retest variability of caloric induced nystagmus in a normal population using an air stimulus presented via a standard and modified irrigating probe. Moon J, et al. **Br J Audiol** 1996 Jun;30(3):221–6

Understanding error grid analysis [editorial; comment] Cox DJ, et al. **Diabetes Care** 1997 Jun;20(6):911–2 (36 ref.). Comment on: Diabetes Care 1997 Jun;20(6):1034–6.

Reservations on the use of error grid analysis for the validation of blood glucose assays [see comments] Gough DA, et al. **Diabetes Care** 1997 Jun;20(6):1034–6. Comment in: Diabetes Care 1997 Jun;20(6):911–2.

Silent period following transcranial magnetic stimulation: a study of intra- and inter-examiner reliability. Fritz C, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jun; 105(3):235–40

Some variables affecting reproducibility in capillary electrophoresis. Shihabi ZK, et al. **Electrophoresis** 1995 Nov;16(11):2159–63

Replication [editorial; comment] Cohen AJ. **Epidemiology** 1997 Jul;8(4):341–3. Comment on: Epidemiology 1997 Jul;8(4):364–70. Comment on: Epidemiology 1997 Jul;8(4):371–7.

Repeatability of three-day dietary records in the EURODIAB IDDM Complications Study. Toeller M, et al. **Eur J Clin Nutr** 1997 Feb;51(2):74–80

An unattended device for sleep-related breathing disorders: validation study in suspected obstructive sleep apnoea syndrome. Zucconi M, et al. **Eur Respir J** 1996 Jun; 9(6):1251–6

Global assessment of relational functioning scale (GARF): II. Reliability and validity in a sample of families of bipolar patients. Dausch BM, et al. **Fam Process** 1996 Jun; 35(2):175–89

Coder gender and potential for hostility ratings. Davidson K, et al. **Health Psychol** 1996 Jul;15(4):298–302

Discordance among expert pathologists in diagnosis of melanocytic neoplasms [editorial] [see comments] Ackerman AB. **Hum Pathol** 1996 Nov;27(11):1115–6. Comment in: Hum Pathol 1997 Apr;28(4):512–4. Comment in: Hum Pathol 1997 Apr;28(4):514.

Interlaboratory reproducibility of the interpretation of flow cytometric DNA histograms [letter; comment] Seidman JD. **Hum Pathol** 1997 Feb;28(2):257–8. Comment on: Hum Pathol 1996 Jun;27(6):553–60.

Intra- and inter-tester reliability of sensibility testing in leprosy. van Brakel WH, et al. **Int J Lepr Other Mycobact Dis** 1996 Sep;64(3):287–98

Pneumococcal antibody assay standardization [letter; comment] Hamilton RG. **J Allergy Clin Immunol** 1997 Feb; 99(2):270. Comment on: J Allergy Clin Immunol 1996 Jul;98(1):205–15.

The autism survey: an evaluation of reliability and validity. Campbell DG, et al. **J Autism Dev Disord** 1996 Dec; 26(6):621–34

Negative values of the intraclass correlation coefficient are not theoretically possible [letter; comment] Giraudeau B. **J Clin Epidemiol** 1996 Oct;49(10):1205–6. Comment on: J Clin Epidemiol 1995 Sep;48(9):1123–32.

Evaluation of automated basophil counting by using fluorescence-labelled monoclonal antibodies. Hübl W, et al. **J Clin Lab Anal** 1996;10(4):177–83

Criterion validity of the Language Background Questionnaire: a self-assessment instrument. Metz DE, et al. **J Commun Disord** 1997 Jan-Feb;30(1):23–31; quiz 31–2

Perspective: validating surrogate markers--are we being naive? De Gruttola V, et al. **J Infect Dis** 1997 Feb; 175(2):237–46 (21 ref.)

When is a confirmatory randomized clinical trial needed? [editorial; comment] Berry DA. **J Natl Cancer Inst** 1996 Nov 20;88(22):1606–7. Comment on: J Natl Cancer Inst 1996 Nov 20;88(22):1645–51.

Assessing whether to perform a confirmatory randomized clinical trial [see comments] Parmar MK, et al. **J Natl Cancer Inst** 1996 Nov 20;88(22):1645–51. Comment in: J Natl Cancer Inst 1996 Nov 20;88(22):1606–7.

Changing conceptions of measurement validity [see comments] Goodwin LD. **J Nurs Educ** 1997 Mar; 36(3):102–7 (44 ref.). Comment in: J Nurs Educ 1997 Mar;36(3):99–101.

A new look for measurement validity [editorial; comment] Stewart BJ, et al. **J Nurs Educ** 1997 Mar;36(3):99–101. Comment on: J Nurs Educ 1997 Mar;36(3):102–7.

Using qualitative data for estimating construct validity of standardized measures. Aroian KJ, et al. **J Nurs Meas** 1996 Summer;4(1):59–74

Internal consistency analysis: making the most of what you've got [editorial] Strickland OL. **J Nurs Meas** 1996 Summer; 4(1):3–4

Can reliability and validity be "established?" [editorial] Strickland OL. **J Nurs Meas** 1995 Winter;3(2):91–2

Relative validity of 16-year recall of calcium intake by a dairy questionnaire in young Dutch adults. Welten DC, et al. **J Nutr** 1996 Nov;126(11):2843–50

Reproducibility and comparison of growth hormone secretion tests. Ropelato MG, et al. **J Pediatr Endocrinol Metab** 1996 Jan-Feb;9(1):41–50

Four-month test-retest reliability of the MMPI-2 with normal male clergy. Putnam SH, et al. **J Pers Assess** 1996 Oct;67(2):341–53

A nonparametric subject-specific population method for deconvolution: I. Description, internal validation, and real data examples. Fattinger KE, et al. **J Pharmacokinet Biopharm** 1995 Dec;23(6):581–610

A nonparametric subject-specific population method for deconvolution: II. External validation. Fattinger KE, et al. **J Pharmacokinet Biopharm** 1995 Dec;23(6):611–34

The validity of self-reported diagnosis of rheumatoid arthritis: results from a population survey followed by clinical examinations. Kvien TK, et al. **J Rheumatol** 1996 Nov;23(11):1866–71

Validity, reliability, and sensitivity to change of a French version of the arthritis impact measurement scales 2 (AIMS2) in patients with rheumatoid arthritis treated with methotrexate. Pouchot J, et al. **J Rheumatol** 1996 Jan; 23(1):52–60

Methods for assessing the accuracy of measuring instruments, Part II. Kachoyeanos MK. **MCN Am J Matern Child Nurs** 1997 Jan-Feb;22(1):53

Reliability of the chest radiograph in the diagnosis of lower respiratory infections in young children [see comments] Davies HD, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):600–4 . Comment in: Pediatr Infect Dis J 1997 Jan;16(1):85–6.

Calculation of 6-hour D/P creatinine ratio from the 4-hour peritoneal equilibration test. The effect of dwell duration on the results. Mehrotra R, et al. **Perit Dial Int** 1997 May-Jun;17(3):273–8

Using computer simulated results of a bulk drug substance assay to determine acceptance criteria for method validation. Bunnell RD. **Pharm Res** 1997 Feb;14(2):156–63

Reliability of the Japanese version of the Inventory to Diagnose Depression. Uehara T, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):235–8

A systematic approach for evaluating the quality of experimental toxicological and ecotoxicological data. Klimisch HJ, et al. **Regul Toxicol Pharmacol** 1997 Feb; 25(1):1–5

Influence of sampling on the reproducibility of ovarian follicle counts in mouse toxicity studies. Bucci TJ, et al. **Reprod Toxicol** 1997 Sep-Oct;11(5):689–96

Validity of statistical techniques in assessing conclusions drawn from serologic tests [editorial; comment] Case J. **Transfusion** 1997 Aug;37(8):773–4. Comment on: Transfusion 1997 Aug;37(8):816–22. Comment on: Transfusion 1997 Aug;37(8):877.

Reproducibility of the amniotic fluid index: its effect on clinical practice. Chang TC, et al. **Ultrasound Obstet Gynecol** 1995 Dec;6(6):416–20

[Qualitative methods in empirical health research. II. Validity requirements] Maunsbach M, et al. **Nord Med** 1997

Feb;112(2):63–5 (Eng. Abstr.) **(Dan)**
[Validation and study of the transferability of the selected technique by SFBC for the determination of creatinine in plasma] Labbé D, et al. **Ann Biol Clin (Paris)** 1996; 54(8–9):299–308 (Eng. Abstr.) **(Fre)**
[Pulse oximetry. Reproducibility of two nights' recordings] Grebstad JA, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10; 117(7):926–8 (Eng. Abstr.) **(Nor)**

REPRODUCTION

Reproductive health beyond Cairo and Beijing. Liljestrand J. **Acta Obstet Gynecol Scand** 1997 Apr;76(4):291–3
Reproductive seasonality of corriedale rams under extensive rearing conditions. Pérez R, et al. **Acta Vet Scand** 1997; 38(1):109–17
Natural family planning and reproductive health awareness: expanding options and improving health. Symposium proceedings. Washington, D.C., April 2–5, 1997. **Adv Contracept** 1997 Jun–Sep;13(2–3):vii–ix, 81–384
Reproductive Health, a Human Right and a Pillar of Human Dignity. Proceedings of a symposium in celebration of the 75th birthday of Professor Egon Diczfalusy. **Adv Contracept** 1996 Dec;12(4):241–337
Changing behavior: a challenge for reproductive health awareness. Andreasen AR. **Adv Contracept** 1997 Jun–Sep; 13(2–3):351–3 (0 ref.)
Reproductive health before and after the childbearing age: the Japanese scene. Aso T. **Adv Contracept** 1996 Dec; 12(4):305–8 (0 ref.)
Body/self awareness and interpersonal communications: fundamental components of reproductive health awareness. Aumack–Yee K. **Adv Contracept** 1997 Jun–Sep; 13(2–3):319–23 (6 ref.)
Reproductive health as an essential human right. Benagiano G. **Adv Contracept** 1996 Dec;12(4):243–50 (20 ref.)
Reproductive health in the People's Republic of China. Bilian X. **Adv Contracept** 1996 Dec;12(4):257–63 (11 ref.)
Reproductive health: the Thai experience. Boonkasemsanti W. **Adv Contracept** 1996 Dec;12(4):271–4 (0 ref.)
Reproductive health of the young and the elderly in the USA. Brenner PF. **Adv Contracept** 1996 Dec;12(4):297–303 (27 ref.)
The WHO Research and Training Centre in Human Reproduction at the Karolinska Institute between 1970 and 1995. Bygdeman M. **Adv Contracept** 1996 Dec;12(4):319–24 (12 ref.)
Implementing reproductive health awareness: progress to date. Cachan J, et al. **Adv Contracept** 1997 Jun–Sep; 13(2–3):363–71 (3 ref.)
A woman-centered agenda for the twenty-first century. Fathalla MF. **Adv Contracept** 1996 Dec;12(4):331–4 (0 ref.)
STDs, AIDS and reproductive health. Johannisson E. **Adv Contracept** 1996 Dec;12(4):281–4 (0 ref.)
The potential contribution of sexuality and gender awareness. Kopp Z. **Adv Contracept** 1997 Jun–Sep;13(2–3):325–9 (5 ref.)
The WHO Collaborating Center in Szeged; the history of successful international collaboration in complicated times. Kovács L. **Adv Contracept** 1996 Dec;12(4):325–30
Reproductive tract malignancies: a neglected aspect of reproductive health. López de la Osa E. **Adv Contracept** 1996 Dec;12(4):293–6 (8 ref.)
Reproductive health awareness: an integrated approach to obtaining a high quality of health. Marshall M, et al. **Adv Contracept** 1997 Jun–Sep;13(2–3):313–8 (0 ref.)
Reproductive health in Mexico and Latin America. Perez–Palacios G. **Adv Contracept** 1996 Dec;12(4):251–6 (0 ref.)
Reproductive health awareness: an important dimension to be integrated into existing sexual and reproductive health programs. Pyper C. **Adv Contracept** 1997 Jun–Sep; 13(2–3):331–8 (5 ref.)
Reproductive health in India. Saxena BN. **Adv Contracept** 1996 Dec;12(4):265–70 (0 ref.)
Breaking the mold: expanding options for reproductive health awareness: the CARE experience. Schubert J, et al. **Adv Contracept** 1997 Jun–Sep;13(2–3):355–61 (0 ref.)
Issues to consider in operationalizing reproductive health. Spicehandler J. **Adv Contracept** 1997 Jun–Sep; 13(2–3):345–50 (12 ref.)
The reproductive health awareness (RHA) model: a qualitative perspective. Wilson A. **Adv Contracept** 1997 Jun–Sep;13(2–3):339–42 (3 ref.)
Reproductive health in the formerly socialist economies in Europe. Zalányi S, et al. **Adv Contracept** 1996 Dec; 12(4):275–9
Constructing reproductive histories by linking vital records. Adams MM, et al. **Am J Epidemiol** 1997 Feb 15; 145(4):339–48
Hormone replacement therapy, reproductive factors, and cataract. The Blue Mountains Eye Study. Cumming RG, et al. **Am J Epidemiol** 1997 Feb 1;145(3):242–9
Environmental factors, reproductive history, and selective fertility in farmers' sibships. Kristensen P, et al. **Am J Epidemiol** 1997 May 1;145(9):817–25
Uncertainty and sensitivity analysis of the basic reproductive rate. Tuberculosis as an example. Sanchez MA, et al. **Am J Epidemiol** 1997 Jun 15;145(12):1127–37
Effects of prolonged autovehicle driving on male reproduction function: a study among taxi drivers. Figà–Talamanca I, et al. **Am J Ind Med** 1996 Dec; 30(6):750–8
Risk perception after CF carrier testing and impact of the test result on reproductive decision making. Denayer L, et al. **Am J Med Genet** 1997 Apr 14;69(4):422–8
Criteria of reproductive success. Rhine RJ. **Am J Primatol** 1997;41(2):87–101
Reproductive history, socioeconomic status, and self-reported health status of women aged 50 years or older. Kington R, et al. **Am J Public Health** 1997 Jan; 87(1):33–7
Characterization of polypeptides synthesized and secreted by oviductal epithelial cell explants obtained from young, fertile and aged, subfertile mares. Brinsko SP, et al. **Am J Vet Res** 1996 Sep;57(9):1346–53
Specific neuroendocrine mechanisms not involving generalized stress mediate social regulation of female reproduction in cooperatively breeding marmoset monkeys. Abbott DH, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:219–38 (106 ref.)
Circulating oxytocin in male guinea pigs affected by the female cohabitation and reproductive condition. Barth R, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:593–5
Intra- and extra-pair behavior and initial clutch success in captive zebra finch colonies. Oliva–Purdy J, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:549–51
Toxicology of male reproduction in animals and humans. De Celis R, et al. **Arch Androl** 1996 Nov–Dec;37(3):201–18 (156 ref.)
How knockout mouse lines will be used to study the role of drug–metabolizing enzymes and their receptors during reproduction and development, and in environmental toxicity, cancer, and oxidative stress. Nebert DW, et al. **Biochem Pharmacol** 1997 Feb 7;53(3):249–54 (44 ref.)
13th Annual meeting of the Society for the Study of Reproduction. Portland, Oregon, August 2–5, 1997. Abstracts. **Biol Reprod** 1997;56 Suppl 1:83–243
Society for the Study of Reproduction 29th annual meeting. London, Ontario, Canada, July 27–30, 1996. Abstracts. **Biol Reprod** 1996;54 Suppl 1:51–203
Life–long moderate caloric restriction prolongs reproductive life span in rats without interrupting estrous cyclicity: effects on the gonadotropin–releasing hormone/luteinizing hormone axis. McShane TM, et al. **Biol Reprod** 1996 Jan; 54(1):70–5
Crossbreeding effects on reproductive traits in two strains of duck (Anas platyrhynchos): brown Tsaiya and Pekin. Velez A, et al. **Br Poult Sci** 1996 Jul;37(3):571–7
Reproductive biology knowledge, and behaviour of teenagers in East, Central and Southern Africa: the Zimbabwe case study. Mbizvo MT, et al. **Cent Afr J Med** 1995 Nov; 41(11):346–54
Trends in reproductive health knowledge following a health education intervention among adolescents in Zimbabwe. Rusakaniko S, et al. **Cent Afr J Med** 1997 Jan;43(1):1–6
The expression of locomotor circadian rhythm in female German cockroach, Blattella germanica (L.). Lin TM, et al. **Chronobiol Int** 1996 Jul;13(2):81–91
Plasma vitellogenin levels during the annual reproductive cycle of the female rainbow trout (Oncorhynchus mykiss): establishment and validation of an ELISA. Bon E, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 May; 117(1):75–84
Naked mole-rats on the move. Behavioural ecology. Bromham L, et al. **Curr Biol** 1996 Sep 1;6(9):1082–3 (10 ref.)
Reproduction in mice lacking a functional type 1 IL–1 receptor. Abbondanzo SJ, et al. **Endocrinology** 1996 Aug; 137(8):3598–601
Reproductive toxicology. Feed restriction in Swiss CD–1 mice. **Environ Health Perspect** 1997 Feb;105 Suppl 1:377–8
Reproductive toxicology. Feed restriction in Swiss CD–1 mice. **Environ Health Perspect** 1997 Feb;105 Suppl 1:379–80
Reproductive toxicology. Feed restriction in rats. **Environ Health Perspect** 1997 Feb;105 Suppl 1:381–2
Reproductive factors, oral contraceptive use, and risk of colorectal cancer. Troisi R, et al. **Epidemiology** 1997 Jan; 8(1):75–9
Environmental effects on reproductive health: the endocrine disruption hypothesis. Hollander D. **Fam Plann Perspect** 1997 Mar–Apr;29(2):82–6, 89 (37 ref.)
Revised American Society for Reproductive Medicine classification of endometriosis: 1996. **Fertil Steril** 1997 May; 67(5):817–21
Correlation of reproductive aging with function in selected organ systems. Miller PB, et al. **Fertil Steril** 1997 Sep; 68(3):443–8
Procreation after death or mental incompetence: medical advance or technology gone awry? Ohl DA, et al. **Fertil Steril** 1996 Dec;66(6):889–95 (24 ref.)
Menstrual and reproductive history of mothers of galactosemic children. Sayle AE, et al. **Fertil Steril** 1996 Mar;65(3):534–8
Ontogenetic variation in small-bodied New World primates: implications for patterns of reproduction and infant care. Garber PA, et al. **Folia Primatol (Basel)** 1997;68(1):1–22
Null mutation of the prolactin receptor gene produces multiple reproductive defects in the mouse. Ormandy CJ, et al. **Genes Dev** 1997 Jan 15;11(2):167–78
Hybridogenetic reproduction and maternal ancestry of polyploid Iberian fish: the Tropidophoxinellus alburnoides complex. Carmona JA, et al. **Genetics** 1997 Jul; 146(3):983–93
Galanin gene expression in hypothalamic GnRH–containing neurons of the rat: a model for autocrine regulation. Rossmanith WG, et al. **Horm Metab Res** 1996 Jun; 28(6):257–66 (64 ref.)
Infertility revisited: the state of the art today and tomorrow. The ESHRE Capri Workshop. European Society for Human Reproduction and Embryology. **Hum Reprod** 1996 Aug;11(8):1779–807 (254 ref.)
Introduction: from reproductive endocrinology to reproductive health. The short history of a new departure by ESHRE. European Society for Human Reproduction and Embryology. Diczfalusy E, et al. **Hum Reprod** 1996 Aug;11(8):1776–7
Axel Munthe Award 1996—Professor Luigi Mastrioanni Jr. Edwards RG. **Hum Reprod** 1997 Jun;12(6):1365
Secular trends in monitors of reproductive hazard. James WH. **Hum Reprod** 1997 Mar;12(3):417–21 (53 ref.)
The pineal gland and reproduction. Aleandri V, et al. **Hum Reprod Update** 1996 May–Jun;2(3):225–35 (115 ref.)
Reproductive failure due to spontaneous abortion and recurrent miscarriage. Bulletti C, et al. **Hum Reprod Update** 1996 Mar–Apr;2(2):118–36 (209 ref.)
FIGO committee guidelines. Report of the FIGO committee for the study of ethical aspects of human reproduction. International Federation of Gynecology and Obstetrics. **Int J Gynaecol Obstet** 1996 Jun;53(3):297–302
FIGO News. Report of the FIGO Committee for the Study of Ethical Aspects of Human Reproduction. International Federation of Gynecologists and Obstetrics [news] Schenker JG. **Int J Gynaecol Obstet** 1997 Jun;57(3):333–7
Report of the FIGO Committee for the Study of Ethical Aspects of Human Reproduction. International Federation of Gynecology and Obstetrics. Schenker JG. **Int J Gynaecol Obstet** 1997 Apr;57(1):95–9
Women's reproductive health: the role of body mass index in early and adult life. Lake JK, et al. **Int J Obes Relat Metab Disord** 1997 Jun;21(6):432–8
The influence of intensity of infection by a trematode parasite on the reproductive biology of Gammarus insensibilis (Amphipoda). Thomas F, et al. **Int J Parasitol** 1996 Nov; 26(11):1205–9
Feminine subjectivity, embodiment, and reproduction. Van Buren J. **J Am Acad Psychoanal** 1996 Fall;24(3):431–43
Patient rights, provider rights: balancing the conflict. Sfikas JD. **J Am Dent Assoc** 1997 Jun;128(6):763–6
American Society of Andrology, 21st annual meeting. Minneapolis, Minnesota, April 25–29, 1996. Abstracts. **J Androl** 1996 Jan–Feb;Suppl:P21–58
Seasonal timing of reproduction in a tropical bird, the Seychelles warbler: a field experiment using translocation. Komdeur J. **J Biol Rhythms** 1996 Dec;11(4):333–46
U.S. court rules refusal to have children an HIV disability [news] **J Can Dent Assoc** 1997 May;63(5):333–4
Modifying effect of reproductive risk factors on the age at onset of breast cancer for German BRCA1 mutation carriers. Chang–Claude J, et al. **J Cancer Res Clin Oncol** 1997;123(5):272–9
Assessing individual risk for breast cancer: risky business. McTiernan A, et al. **J Clin Epidemiol** 1997 May; 50(5):547–56 (60 ref.)
Medicine, eugenics, and the Supreme Court: from coercive sterilization to reproductive freedom. Lombardo PA. **J Contemp Health Law Policy** 1996 Fall;13(1):1–25
Effect of whole cottonseed on serum constituents, fragility of erythrocyte cells, and reproduction of growing Holstein heifers. Colin–Negrete J, et al. **J Dairy Sci** 1996 Nov; 79(11):2016–23
Dairy herd management types assessed from indicators of health, reproduction, replacement, and milk production. Enevoldsen C, et al. **J Dairy Sci** 1996 Jul;79(7):1221–36
Review: dairy cattle reproductive physiology research and management—past progress and future prospects. Foote RH. **J Dairy Sci** 1996 Jun;79(6):980–90 (82 ref.)
Altered neuroendocrine control of GH secretion in normal women of advanced reproductive age. Coiro V, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jul;52(4):M254–8
Prediction of psychological functioning one year after the predictive test for Huntington's disease and impact of the test result on reproductive decision making. Decruyenaere M, et al. **J Med Genet** 1996 Sep;33(9):737–43
Reproductive and neonatal outcomes in captive bred baboons (Papio hamadryas). Birrell AM, et al. **J Med Primatol** 1996 Aug;25(4):287–93
Ethics, women with HIV, and procreation: implications for nursing practice. Locher AW. **J Obstet Gynecol Neonatal Nurs** 1996 Jul–Aug;25(6):465–9
Moral development and reproductive health decisions. McFadden EA. **J Obstet Gynecol Neonatal Nurs** 1996 Jul–Aug;25(6):507–12
Issues in sexuality and gynecologic care of women with developmental disabilities. Sulpizi LK. **J Obstet Gynecol Neonatal Nurs** 1996 Sep;25(7):609–14 (24 ref.)
Effect of trauma and pelvic fracture on female genitourinary, sexual, and reproductive function. Copeland CE, et al. **J Orthop Trauma** 1997 Feb–Mar;11(2):73–81
Variation in the ability of a long day followed by a short day photoperiod signal to initiate reproductive activity in ewes at different times of the year. Sweeney T, et al. **J Reprod Fertil** 1997 Jan;109(1):121–7
Regulation of complex host dynamics by a macroparasite. White KA, et al. **J Theor Biol** 1997 May 7;186(1):81–91

LiteratureWatch. **J Womens Health** 1997 Aug;6(4):491–500
Health in countries torn by conflict: lessons from Sarajevo [see comments] Carballo M, et al. **Lancet** 1996 Sep 28; 348(9031):872–4. Comment in: Lancet 1996 Dec 7;348(9041):1592.
Reproductive schedules in a density-dependent recruitment model. Silva JA. **Math Biosci** 1997 Aug;144(1):1–22
Lucina sine concubitu. Aronson SM. **Med Health R I** 1996 Feb;79(2):46–7
Cytokines in mammalian reproduction and speculation about their possible involvement in nonmammalian viviparity. Paulesu L. **Microsc Res Tech** 1997 Jul 1–15;38(1–2):188–94 (79 ref.)
Role for glycoconjugates in cellular communication in the human reproductive system. Clark GF, et al. **Mol Hum Reprod** 1996 Jul;2(7):513–7 (35 ref.)
The relationship of body mass index to reproductive factors in pre- and postmenopausal African-American women with and without breast cancer. Adams-Campbell LL, et al. **Obes Res** 1996 Sep;4(5):451–6
Epidemiology of reproductive hazards in the workplace. Lemasters GK. **Occup Med** 1996 Jul-Sep;11(3):545–60 (80 ref.)
Reproductive hazards and firefighters. McDiarmid MA, et al. **Occup Med** 1995 Oct-Dec;10(4):829–41 (84 ref.)
Individual interests, societal interests, and reproductive technologies. Baird P. **Perspect Biol Med** 1997 Spring; 40(3):440–51
Assortative fertilization in Drosophila. Markow TA. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7756–60
Nutritional issues for women in developing countries. Walker SP. **Proc Nutr Soc** 1997 Mar;56(1B):345–56 (66 ref.)
The effect of diabetes mellitus on endocrine and reproductive function. Steger RW, et al. **Proc Soc Exp Biol Med** 1997 Jan;214(1):1–11 (164 ref.)
Social structure, reproductive health and the knowledge-behaviour gap. Jagdeo TP. **Promot Educ** 1996 Sep;3(3):11–4, 45
A health promotion approach to adolescent sexual and reproductive health: a discussion of intervention targets and problem focus. Nyamwaya D. **Promot Educ** 1996 Sep; 3(3):18–21, 46
Reproductive health as a global issue: new opportunities for health promotion and education? [editorial] Rice M. **Promot Educ** 1996 Sep;3(3):3–5, 43–5 **(Eng, Fre, Spa)**
A framework for developing health promotion and education initiatives in reproductive health. Rice M. **Promot Educ** 1996 Sep;3(3):7–10, 45
Approaches to adolescent reproductive health: audience-specific strategies. Sikes OJ. **Promot Educ** 1996 Sep;3(3):15–7, 46
A description of an occupational reproductive health nurse consultant practice and women's occupational exposures during pregnancy. Hewitt JB, et al. **Public Health Nurs** 1996 Oct;13(5):365–73
African bats: evolution of reproductive patterns and delays. Bernard RT, et al. **Q Rev Biol** 1997 Sep;72(3):253–74 (137 ref.)
Papers from the Boden Research Conference on Marsupial Gametes and Embryos. New South Wales, 1–4 February 1995. **Reprod Fertil Dev** 1996;8(4):483–834
Possum biocontrol: prospects for fertility regulation. Cowan PE. **Reprod Fertil Dev** 1996;8(4):655–60 (38 ref.)
The influence of dominance rank on the reproductive success of female chimpanzees [see comments] Pusey A, et al. **Science** 1997 Aug 8;277(5327):828–31. Comment in: Science 1997 Aug 8;277(5327):774–5.
Subtle, secret female chimpanzees [comment] Wrangham RW. **Science** 1997 Aug 8;277(5327):774–5. Comment on: Science 1997 Aug 8;277(5327):828–31.
Senegal 1992–93: results from the demographic and health survey. **Stud Fam Plann** 1995 Nov-Dec;26(6):368–72
Contraceptive choice and reproductive morbidity in Istanbul. Bulut A, et al. **Stud Fam Plann** 1997 Mar;28(1):35–43
Incentives, population policy, and reproductive rights: ethical issues. Isaacs SL. **Stud Fam Plann** 1995 Nov-Dec; 26(6):363–7
Establishment probability in fluctuating environments: a branching process model. Haccou P, et al. **Theor Popul Biol** 1996 Dec;50(3):254–80
Reproductive performance of sows in the tropics. Dan TT, et al. **Trop Anim Health Prod** 1996 Aug;28(3):247–56
Mating patterns and reproductive wastage in commercial lowland ewes in west Somerset. Smith KC, et al. **Vet Rec** 1996 Dec 7;139(23):563–6
Decisions to have a baby by HIV-infected women. Sowell RL, et al. **West J Nurs Res** 1997 Feb;19(1):56–70
Reproductive health and blurred professional boundaries. Chavkin W, et al. **Womens Health Issues** 1996 Mar-Apr; 6(2):89–96 (46 ref.)
Training in reproductive health and sexuality: the case of a regional program in Latin America. Ramos S, et al. **Womens Health Issues** 1997 Mar-Apr;7(2):109–12
[20 years of research in epidemiology of human reproduction] Spira A. **Rev Epidemiol Sante Publique** 1996 Nov; 44(6):588–95 (19 ref.) (Eng. Abstr.) **(Fre)**
[The female condition. Reflections of a gynecologist] Lambotte R. **Rev Med Liege** 1996 Dec;51(12):749–53 **(Fre)**
[Morphophysiological and reproductive changes in the water vole (Arvicola terretris L.) caused by helminth infections] Galaktionov IuK, et al. **Dokl Akad Nauk** 1996 Jul; 349(2):272–4 **(Rus)**
[Medico-social aspects of sexual and reproductive behavior of young people] Konovalov OE. **Probl Sotsialnoi Gig Istor Med** 1997 Jan-Feb;(1):23–6 (Eng. Abstr.) **(Rus)**
[Cervical cancer in developing countries. A threat to reproductive health] Tristen C, et al. **Lakartidningen** 1996 Sep 25;93(39):3374–6 **(Swe)**

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The reproductive toxicology of intravenously administered MnDPDP in the rat and rabbit. Grant D, et al. **Acta Radiol** 1997 Jul;38(4 Pt 2):759–69
The effect of beta-carotene and vitamins A, D3 and E on some reproductive parameters in cows. Iwańska S, et al. **Acta Vet Hung** 1997;45(1):95–107
The effect of phenyl mercury on reproductive performance in laying hens. Pribilincová J, et al. **Acta Vet Hung** 1996; 44(3):377–87
Drafting guidelines for occupational exposure to chemicals: the Dutch experience with the assessment of reproductive risks. Stijkel A, et al. **Am J Ind Med** 1996 Dec;30(6):705–17
Enhanced reproductive responses to melatonin in juvenile Siberian hamsters. Prendergast BJ, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1041–6
Behavior of captive american kestrels hatched from o,p'-dicofol exposed females. MacLellan KN, et al. **Arch Environ Contam Toxicol** 1997 May;32(4):411–5
Reproductive and morphological effects of o,p'-dicofol on two generations of captive American kestrels. MacLellan KN, et al. **Arch Environ Contam Toxicol** 1996 Mar; 30(3):364–72
Effects of polyhalogenated aromatic hydrocarbons and related contaminants on common tern reproduction: integration of biological, biochemical, and chemical data. Murk AJ, et al. **Arch Environ Contam Toxicol** 1996 Jul; 31(1):128–40
Effects of dietary exposure to fumonisins from Fusarium moniliforme culture material (M-1325) on the reproductive performance of female mink. Powell DC, et al. **Arch Environ Contam Toxicol** 1996 Aug;31(2):286–92
Effects of esfenvalerate on the reproductive success of the bluegill sunfish, Lepomis macrochirus in littoral enclosures. Tanner DK, et al. **Arch Environ Contam Toxicol** 1996 Aug; 31(2):244–51
Toxicity of ebrotidine on reproduction. Toxicity on fertility and general reproductive performance, embryo-fetal toxicity and peri- and postnatal toxicity. Romero A, et al. **Arzneimittelforschung** 1997 Apr;47(4A):504–10
Effects of 3,6-dimethylpyrazine-2-thiol on reproductive and accessory reproductive organs in male rats. Yamada K, et al. **Biol Pharm Bull** 1996 Mar;19(3):360–3
Ethanol elimination by rats as a function of reproductive state, gender and nutritional status. da-Silva VA, et al. **Braz J Med Biol Res** 1996 May;29(5):651–7
Carp reproduction in highly eutrophic pond conditions. Bieniarz K, et al. **Bull Environ Contam Toxicol** 1996 Nov; 57(5):842–8
Reproductive toxicology of 3,3',4,4'-tetrachlorobiphenyl in mice. Rodriguez J, et al. **Bull Environ Contam Toxicol** 1997 Jun;58(6):999–1005
Effects of methyl parathion on reproduction in the Japanese quail. Solecki R, et al. **Bull Environ Contam Toxicol** 1996 Dec;57(6):902–8
Effects of sublethal exposure to zinc chloride on the reproduction of the water flea, Moina irrasa (Cladocera). Zou E. **Bull Environ Contam Toxicol** 1997 Mar;58(3):437–41
Introduction of Norplant implants in four counties of rural China: a two-year evaluation. Zenger E, et al. **Contraception** 1995 Dec;52(6):349–55
Methoxychlor as a model for environmental estrogens. Cummings AM. **Crit Rev Toxicol** 1997 Jul;27(4):367–79 (75 ref.)
Ovarian stimulation for assisted reproduction. Meldrum DR. **Curr Opin Obstet Gynecol** 1996 Jun;8(3):166–70 (33 ref.)
In vitro effects of gamma-hexachlorocyclohexane on in vitro biosynthesis and metabolism of steroids in goldfish Carassius auratus. Kime DE, et al. **Ecotoxicol Environ Saf** 1996 Jul;34(2):165–73
Effect of Zn, Cu, Pb, and Cd on fitness in snails (Helix aspersa). Laskowski R, et al. **Ecotoxicol Environ Saf** 1996 Jun;34(1):59–69
Effects of metal-contaminated soils on the growth, sexual development, and early cocoon production of the earthworm Eisenia fetida, with particular reference to zinc. Spurgeon DJ, et al. **Ecotoxicol Environ Saf** 1996 Oct; 35(1):86–95
Triiodothyronine-induced hyperthyroidism and reproduction in female rats. Lu MH, et al. **Endocr Res** 1996 Aug;22(3):237–60
Reproductive toxicology. Ethylene glycol monomethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:383–4
Reproductive toxicology. Ethylene glycol monomethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:385–6
Reproductive toxicology. Ethylene glycol monomethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:387–8
Reproductive toxicology. Ethylene glycol monomethyl ether: litter five. **Environ Health Perspect** 1997 Feb;105 Suppl 1:389–91
Reproductive toxicology. Ethylene glycol monomethyl ether: litter two. **Environ Health Perspect** 1997 Feb;105 Suppl 1:393–5
Reproductive toxicology. Ethoxyacetic acid. **Environ Health Perspect** 1997 Feb;105 Suppl 1:211–2
Reproductive toxicology. Ethylene glycol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:213–4
Reproductive toxicology. Ethylene glycol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:215–6
Reproductive toxicology. Ethylene glycol monobutyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:217–8
Reproductive toxicology. Ethylene glycol monoethyl ether (2-ethoxyethanol). **Environ Health Perspect** 1997 Feb;105 Suppl 1:219–20
Reproductive toxicology. Ethylene glycol monoethyl ether acetate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:221–2
Reproductive toxicology. Ethylene glycol monomethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:223–4
Reproductive toxicology. Ethylene glycol monophenyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:225–6
Reproductive toxicology. Methoxyacetic acid. **Environ Health Perspect** 1997 Feb;105 Suppl 1:227–8
Reproductive toxicology. Oxalic acid. **Environ Health Perspect** 1997 Feb;105 Suppl 1:229–30
Reproductive toxicology. Propylene glycol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:231–2
Reproductive toxicology. Propylene glycol monomethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:233–4
Reproductive toxicology. Triethylene glycol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:235–6
Reproductive toxicology. Triethylene glycol diacetate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:237–8
Reproductive toxicology. Triethylene glycol dimethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:239–40
Reproductive toxicology. Diethylhexyl phthalate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:241–2
Reproductive toxicology. Diethylhexyl phthalate, juvenile exposure, mice. **Environ Health Perspect** 1997 Feb;105 Suppl 1:243–4
Reproductive toxicology. Diethylphthalate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:245–6
Reproductive toxicology. Di-n-butylphthalate, mice. **Environ Health Perspect** 1997 Feb;105 Suppl 1:247–8
Reproductive toxicology. Di-n-butylphthalate, rats. **Environ Health Perspect** 1997 Feb;105 Suppl 1:249–50
Reproductive toxicology. Di-n-hexylphthalate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:251–2
Reproductive toxicology. Di-n-octylphthalate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:253–4
Reproductive toxicology. Di-n-pentylphthalate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:255–6
Reproductive toxicology. Di-n-propylphthalate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:257–8
Reproductive toxicology. Acrylamide. **Environ Health Perspect** 1997 Feb;105 Suppl 1:259–60
Reproductive toxicology. Methacrylamide. **Environ Health Perspect** 1997 Feb;105 Suppl 1:261–2
Reproductive toxicology. Methylenebisacrylamide. **Environ Health Perspect** 1997 Feb;105 Suppl 1:263–4
Reproductive toxicology. N-(hydroxymethyl)acrylamide. **Environ Health Perspect** 1997 Feb;105 Suppl 1:265–6
Reproductive toxicology. Acetaminophen. **Environ Health Perspect** 1997 Feb;105 Suppl 1:267–8
Reproductive toxicology. 9-Aminoacridine hydrochloride. **Environ Health Perspect** 1997 Feb;105 Suppl 1:269–70
Reproductive toxicology. 2,2-bis(bromomethyl)-1,3-propanediol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:271–2
Reproductive toxicology. Bisphenol A. **Environ Health Perspect** 1997 Feb;105 Suppl 1:273–4
Reproductive toxicology. Boric acid. **Environ Health Perspect** 1997 Feb;105 Suppl 1:275–6
Reproductive toxicology. Bromoform. **Environ Health Perspect** 1997 Feb;105 Suppl 1:277–8
Reproductive toxicology. Caffeine. **Environ Health Perspect** 1997 Feb;105 Suppl 1:279–80
Reproductive toxicology. Caffeine. **Environ Health Perspect** 1997 Feb;105 Suppl 1:281–2
Reproductive toxicology. Carisoprodol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:283–4
Reproductive toxicology. Chloroform. **Environ Health Perspect** 1997 Feb;105 Suppl 1:285–6
Reproductive toxicology. 2-Chloronitrobenzene. **Environ Health Perspect** 1997 Feb;105 Suppl 1:287–8
Reproductive toxicology. 4-Chloronitrobenzene. **Environ Health Perspect** 1997 Feb;105 Suppl 1:289–90
Reproductive toxicology. 1-Chloro-2-propanol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:291–2
Reproductive toxicology. o-Cresol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:293–4
Reproductive toxicology. m-/p-cresol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:295–6
Reproductive toxicology. Diazepam. **Environ Health Perspect** 1997 Feb;105 Suppl 1:297–8
Reproductive toxicology. Dibromochloropropane. **Environ Health Perspect** 1997 Feb;105 Suppl 1:299–300
Reproductive toxicology. Diethylstilbestrol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:301–2
Reproductive toxicology. Diethylstilbestrol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:303–4
Reproductive toxicology. N,N-dimethylformamide. **Environ Health Perspect** 1997 Feb;105 Suppl 1:305–7
Reproductive toxicology. Ethanol. **Environ Health Perspect** 1997 Feb;105 Suppl 1:309–10

Reproductive toxicology. Formamide.
Environ Health Perspect 1997 Feb;105 Suppl 1:311–2
Reproductive toxicology.
2–Hydroxy–4–methoxybenzophenone.
Environ Health Perspect 1997 Feb;105 Suppl 1:313–4
Reproductive toxicology. Lead acetate trihydrate.
Environ Health Perspect 1997 Feb;105 Suppl 1:315–6
Reproductive toxicology. Lead acetate trihydrate.
Environ Health Perspect 1997 Feb;105 Suppl 1:317–8
Reproductive toxicology. Methylphenidate hydrochloride.
Environ Health Perspect 1997 Feb;105 Suppl 1:319–20
Reproductive toxicology. Methyl salicylate.
Environ Health Perspect 1997 Feb;105 Suppl 1:321–2
Reproductive toxicology. Methyl salicylate.
Environ Health Perspect 1997 Feb;105 Suppl 1:323–4
Reproductive toxicology. m–Nitrobenzoic acid.
Environ Health Perspect 1997 Feb;105 Suppl 1:325–6
Reproductive toxicology. p–Nitrobenzoic acid.
Environ Health Perspect 1997 Feb;105 Suppl 1:327–8
Reproductive toxicology. Nitrofurantoin.
Environ Health Perspect 1997 Feb;105 Suppl 1:329–30
Reproductive toxicology. Nitrofurazone.
Environ Health Perspect 1997 Feb;105 Suppl 1:331–3
Reproductive toxicology. Phenolphthalein.
Environ Health Perspect 1997 Feb;105 Suppl 1:335–6
Reproductive toxicology. Primaclone.
Environ Health Perspect 1997 Feb;105 Suppl 1:337–8
Reproductive toxicology. Propantheline bromide.
Environ Health Perspect 1997 Feb;105 Suppl 1:339–40
Reproductive toxicology. Salicylazosulfapyridine.
Environ Health Perspect 1997 Feb;105 Suppl 1:341–3
Reproductive toxicology. Sodium nitrite.
Environ Health Perspect 1997 Feb;105 Suppl 1:345–6
Reproductive toxicology. Sodium saccharin.
Environ Health Perspect 1997 Feb;105 Suppl 1:347–8
Reproductive toxicology. Sulfamethazine.
Environ Health Perspect 1997 Feb;105 Suppl 1:349–50
Reproductive toxicology. 1,2,4,5–Tetrachlorobenzene.
Environ Health Perspect 1997 Feb;105 Suppl 1:351–2
Reproductive toxicology. Theobromine.
Environ Health Perspect 1997 Feb;105 Suppl 1:353–4
Reproductive toxicology. Theophylline.
Environ Health Perspect 1997 Feb;105 Suppl 1:355–6
Reproductive toxicology. Trichloroethylene.
Environ Health Perspect 1997 Feb;105 Suppl 1:357–8
Reproductive toxicology. Trichloroethylene.
Environ Health Perspect 1997 Feb;105 Suppl 1:359–60
Reproductive toxicology. 1,2,3–Trichloropropane.
Environ Health Perspect 1997 Feb;105 Suppl 1:361–2
Reproductive toxicology. Tricresyl phosphate.
Environ Health Perspect 1997 Feb;105 Suppl 1:363–4
Reproductive toxicology. Tris(2–chloroethyl)phosphate.
Environ Health Perspect 1997 Feb;105 Suppl 1:365–6
Reproductive toxicology. 4–Vinylcyclohexene.
Environ Health Perspect 1997 Feb;105 Suppl 1:367–8
Reproductive toxicology. Chemical mixture.
Environ Health Perspect 1997 Feb;105 Suppl 1:369–70
Reproductive toxicology. Chemical mixture.
Environ Health Perspect 1997 Feb;105 Suppl 1:371–2
Reproductive toxicology. Pesticide/fertilizer mix II (California). **Environ Health Perspect** 1997 Feb;105 Suppl 1:373–4
Reproductive toxicology. Pesticide/fertilizer mix III (Iowa).
Environ Health Perspect 1997 Feb;105 Suppl 1:375–6
Reproductive toxicology. Diethylene glycol.
Environ Health Perspect 1997 Feb;105 Suppl 1:207–8
Reproductive toxicology. Diethylene glycol monoethyl ether. **Environ Health Perspect** 1997 Feb;105 Suppl 1:209–10
Environmental health summit report: research blueprint for the 21st century. Baldwin CM. **Environ Health Perspect** 1996 Feb;104(2):210–3
Reproductive assessment by continuous breeding: evolving study design and summaries of ninety studies. Chapin RE, et al. **Environ Health Perspect** 1997 Feb;105 Suppl 1:199–205
Analysis of the effects of overexpression of metallothionein–I in transgenic mice on the reproductive toxicology of cadmium. Dalton T, et al. **Environ Health Perspect** 1996 Jan;104(1):68–76
Stress proteins in reproductive toxicology. Dix DJ.
Environ Health Perspect 1997 Apr;105(4):436–8
The new antiepileptic drugs and women: efficacy, reproductive health, pregnancy, and fetal outcome. Morrell MJ. **Epilepsia** 1996;37 Suppl 6:S34–44 (107 ref.)
Reproductive and neurobehavioural effects of lac dye administered in the diet to mice. Tanaka T.
Food Addit Contam 1997 May–Jun;14(4):373–80
Developmental toxicity study of mangafodipir trisodium injection (MnDPDP) in New Zealand white rabbits. Blazak WF, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):11–5
The relationships among reproductive endpoints in Swiss mice, using the reproductive assessment by Continuous Breeding database. Chapin RE, et al.
Fundam Appl Toxicol 1997 Aug;38(2):129–42
Fertility and general reproduction studies in rats with the HMG–CoA reductase inhibitor, atorvastatin. Dostal LA, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):285–92
Nonclinical toxicology studies with zidovudine: reproductive toxicity studies in rats and rabbits. Greene JA, et al.
Fundam Appl Toxicol 1996 Aug;32(2):140–7
Inhalation teratology and reproduction studies with 1,1–dichloro–2,2,2–trifluoroethane (HCFC–123).
Malinverno G, et al. **Fundam Appl Toxicol** 1996 Dec; 34(2):276–87
Reproductive toxicity evaluation of methylethyl ketoxime by gavage in CD rats. Tyl RW, et al.
Fundam Appl Toxicol 1996 Jun;31(2):149–61
Polysaccharopeptide from the mushroom Coriolus versicolor possesses analgesic activity but does not produce adverse effects on female reproductive or embryonic development in mice. Ng TB, et al. **Gen Pharmacol** 1997 Aug; 29(2):269–73
Reproductive toxicity and toxicokinetics of lindane in the male offspring of rats exposed during lactation. Dalsenter PR, et al. **Hum Exp Toxicol** 1997 Mar;16(3):146–53
The preclinical toxicological evaluation of sumatriptan. Owen K, et al. **Hum Exp Toxicol** 1995 Dec;14(12):959–73
Effects of 2–bromopropane on the female reproductive function in Sprague–Dawley rats. Lim CH, et al.
Ind Health 1997 Apr;35(2):278–84
Effect of inorganic or organic selenium at two dietary levels on reproductive performance and tissue selenium concentrations in first–parity gilts and their progeny. Mahan DC, et al. **J Anim Sci** 1996 Nov;74(11):2711–8
Two–generation reproductive toxicity study of methyl tertiary–butyl ether (MTBE) in rats. Bevan C, et al.
J Appl Toxicol 1997 May;17 Suppl 1:S13–9
Effect of intraruminal monensin capsules on reproductive performance and milk production of dairy cows fed pasture. Hayes DP, et al. **J Dairy Sci** 1996 Jun;79(6):1000–8
Endocrine disruptors and reproductive development: a weight–of–evidence overview. Cooper RL, et al.
J Endocrinol 1997 Feb;152(2):159–66 (71 ref.)
Reproductive and developmental toxicity studies of toluene. II. Effects of inhalation exposure on fertility in rats. Ono A, et al. **J Environ Pathol Toxicol Oncol** 1996;15(1):9–20
ACOEM reproductive hazard management guidelines. American College of Occupational and Environmental Medicine. Fedoruk MJ. **J Occup Environ Med** 1996 Jan; 38(1):83–90
Perspectives on Canadian field studies examining the potential of pulp and paper mill effluent to affect fish reproduction. Kovacs TG, et al.
J Toxicol Environ Health 1997 Jul;51(4):305–52 (77 ref.)
Biochemical and molecular changes at the cellular level in response to exposure to environmental estrogen–like chemicals. Roy D, et al. **J Toxicol Environ Health** 1997 Jan;50(1):1–29 (180 ref.)
FIFRA Subdivision F testing Guidelines: are these tests adequate to detect potential hormonal activity for crop protection chemicals? Federal Insecticide, Fungicide, and Rodenticide Act. Stevens JT, et al.
J Toxicol Environ Health 1997 Apr 11;50(5):415–31 (35 ref.)
Assessment of male reproductive toxicity in rats under ICH guidelines. Cukierski MA. **J Toxicol Sci** 1996 Dec; 21(5):457–8
Standard protocols based on the ICH guidelines for reproductive and developmental toxicity studies: an international implementation. Horimoto M.
J Toxicol Sci 1996 Dec;21(5):451–5
Fortifying food with folic acid [letter] Johnston RB Jr, et al. **J Womens Health** 1997 Apr;6(2):233–4
Reproductive health hazards in the pharmaceutical industry. Clement JD. **Occup Med** 1997 Jan–Mar;12(1):131–43 (61 ref.)
Modification of reproductive function in the rat by 3–methylcholanthrene. Konstandi M, et al.
Pharmacol Res 1997 Feb;35(2):107–11
New guidelines for preclinical testing of novel medicines for their effects on reproduction: clarity or confusion? Sutherland MF. **Regul Toxicol Pharmacol** 1996 Jun; 23(3):300–3 (19 ref.)
Two–generation reproduction study of erythritol in rats. Waalkens–Berendsen DH, et al.
Regul Toxicol Pharmacol 1996 Oct;24(2 Pt 2):S237–46
The effects of antirheumatic drugs on reproductive function. Brent LH, et al. **Reprod Toxicol** 1997 Jul–Aug;11(4):561–77 (324 ref.)
Reproductive effects of chronic administration of murine interferon–gamma. Bussiere JL, et al. **Reprod Toxicol** 1996 Sep–Oct;10(5):379–91
Environmental estrogens and reproductive health: a discussion of the human and environmental data. Daston GP, et al. **Reprod Toxicol** 1997 Jul–Aug;11(4):465–81 (148 ref.)
An assessment of boric acid and borax using the IEHR Evaluative Process for Assessing Human Developmental and Reproductive Toxicity of Agents. Expert Scientific Committee. Moore JA. **Reprod Toxicol** 1997 Jan–Feb; 11(1):123–60 (137 ref.)
Reproductive effects of prenatal exposure to 5–bromo–2'–deoxyuridine on male rats. Nagao T, et al.
Reprod Toxicol 1997 Jan–Feb;11(1):37–45
Effects of prenatal exposure to 5–bromo–2'–deoxyuridine on reproductive function in male mouse offspring. Nagao T, et al. **Reprod Toxicol** 1997 Sep–Oct;11(5):663–73
Two–generation reproduction study of sulfur mustard in rats. Sasser LB, et al. **Reprod Toxicol** 1996 Jul–Aug;10(4):311–9
Early onset of reproductive function in normal female mice treated with leptin. Chehab FF, et al. **Science** 1997 Jan 3;275(5296):88–90
Reprotoxic and genotoxic studies of vanadium pentoxide in male mice. Altamirano–Lozano M, et al.
Teratog Carcinog Mutagen 1996;16(1):7–17
Teratogen update: smoking and reproductive outcomes. Werler MM. **Teratology** 1997 Jun;55(6):382–8 (101 ref.)
In utero and lactational exposure to 2,3,7,8–tetrachlorodibenzo–rho–dioxin: effects on development of the male and female reproductive system of the mouse. Theobald HM, et al.
Toxicol Appl Pharmacol 1997 Jul;145(1):124–35
Consortium for the Health Assessment of Great Lakes Sport Fish Consumption. Anderson H, et al.
Toxicol Ind Health 1996 May–Aug;12(3–4):369–73
Fish consumption and other characteristics of reproductive–aged Michigan anglers––a potential population for studying the effects of consumption of Great Lakes fish on reproductive health. Courval JM, et al.
Toxicol Ind Health 1996 May–Aug;12(3–4):347–59
Reproductive and thyroid hormone levels in rats following 90–day dietary exposure to PCB 28 (2,4,4'–trichlorobiphenyl) or PCB 77 (3,3'4,4'–tetrachlorobiphenyl). Desaulniers D, et al.
Toxicol Ind Health 1997 Sep–Oct;13(5):627–38
Environmental contaminants and reproductive abnormalities in wildlife: implications for public health? Guillette LJ Jr, et al. **Toxicol Ind Health** 1996 May–Aug;12(3–4):537–50 (64 ref.)
Reproductive toxicity screen of ammonium dinitramide administered in the drinking water of Sprague–Dawley rats. Kinkead ER, et al. **Toxicol Ind Health** 1995 Jul–Aug; 11(4):437–48
Assessment of reproductive health effects of hazardous waste. Kipen HM. **Toxicol Ind Health** 1996 Mar–Apr;12(2):211–24 (43 ref.)
Multigeneration reproduction study of policosanol in rats. Rodriguez MD, et al. **Toxicol Lett** 1997 Feb 7; 90(2–3):97–106
Review of reproductive and developmental toxicity of 1,3–butadiene. Christian MS. **Toxicology** 1996 Oct 28; 113(1–3):137–43 (26 ref.)
Effect of a paramunity inducer on reproductive performance of gilts. Kyriakis SC, et al. **Zentralbl Veterinarmed A** 1996 Oct;43(8):483–7
[Reproductive toxicological fundamental investigations on adult male rats of the WIST/Lppt stock on the determination of swelling after administration of cadmium chloride] Richter M, et al.
DTW Dtsch Tierarztl Wochenschr 1997 May;104(5):176–8 (Eng. Abstr.) **(Ger)**
[The effect of low molecular weight ovarian peptides on the reproductive function during its partial inhibition by food deprivation] Zelenina NV, et al. **Biull Eksp Biol Med** 1996 Jun;121(6):610–3 **(Rus)**
[The effect of C–ring transformed estrogens on the reproductive system] Ivanenko TI, et al.
Eksp Klin Farmakol 1996 Jul–Aug;59(4):34–7 (Eng. Abstr.) **(Rus)**
[The effect of a peptide preparation made from ovaries on reproductive function] Zelenina NV, et al.
Eksp Klin Farmakol 1996 Jul–Aug;59(4):31–3 (Eng. Abstr.) **(Rus)**
[Evaluation of chemical mutagenic factor in workers] Pimenova MN, et al. **Med Tr Prom Ekol** 1997;(6):19–22 (Eng. Abstr.) **(Rus)**
[The effect of organic solvents on the child–bearing function of women painters (an epidemiological hygiene study] Tikhonova GI, et al. **Med Tr Prom Ekol** 1997;(3):20–4 (Eng. Abstr.) **(Rus)**
[Recovery of various parameters of the functional state of the reproductive system in thymectomized rats as affected by thymic membrane factor] Reznikov AG, et al.
Patol Fiziol Eksp Ter 1996 Apr–Jun;(2):30–2 (Eng. Abstr.) **(Rus)**

GENETICS

Genetic factors in reproduction and their evolutionary significance. Gill TJ 3rd. **Am J Reprod Immunol** 1997 Jan; 37(1):7–16
Lack of association of bovine MHC class I alleles with carcass and reproductive traits. Arriëns MA, et al.
Anim Genet 1996 Dec;27(6):429–31
Abnormal uterine stromal and glandular function associated with maternal reproductive defects in Hoxa–11 null mice. Gendron RL, et al. **Biol Reprod** 1997 May;56(5):1097–105
Immunogenetics of reproduction: an overview. Ober C, et al. **Curr Top Microbiol Immunol** 1997;222:1–23 (124 ref.)
Race, genetics, and human reproductive strategies. Rushton JP. **Genet Soc Gen Psychol Monogr** 1996 Feb;122(1):21–53
Sex and death in the mouse: genetically delayed reproduction and senescence. Biddle FG, et al. **Genome** 1997 Apr; 40(2):229–35
Isolation, characterization and inactivation of the mouse Mgat3 gene: the bisecting N–acetylglucosamine in asparagine–linked oligosaccharides appears dispensable for viability and reproduction. Priatel JJ, et al.
Glycobiology 1997 Feb;7(1):45–56
Patterns of postmating reproductive isolation in a newly discovered species pair, Aquarius remigis and A. remigoides (Hemiptera;Gerridae). Gallant SL, et al.
Heredity 1997 Jun;78 (Pt 6):571–7
Breed–specific adjustment factors for reproductive traits in Duroc, Hampshire, Landrace, and Yorkshire swine. Culbertson MS, et al. **J Anim Sci** 1997 Sep;75(9):2362–7
Genetic analysis of discrete reproductive traits in sheep using

linear and nonlinear models: I. Estimation of genetic parameters. Matos CA, et al. **J Anim Sci** 1997 Jan; 75(1):76–87

Genetic analysis of discrete reproductive traits in sheep using linear and nonlinear models: II. Goodness of fit and predictive ability. Matos CA, et al. **J Anim Sci** 1997 Jan; 75(1):88–94

Effects of selection for scrotal circumference in Limousin bulls on reproductive and growth traits of progeny. Moser DW, et al. **J Anim Sci** 1996 Sep;74(9):2052–7

Genetic variation and covariation for ewe reproduction, lamb growth, and lamb scrotal circumference in a fall-lambing sheep flock. al-Shorepy SA, et al. **J Anim Sci** 1996 Jul; 74(7):1490–8

Transcriptional and post-transcriptional regulation of prolactin during the turkey reproductive cycle. Tong Z, et al. **J Mol Endocrinol** 1997 Jun;18(3):223–31

Percolation on the fitness hypercube and the evolution of reproductive isolation. Gavrilets S, et al. **J Theor Biol** 1997 Jan 7;184(1):51–64

Postglacial genetic differentiation of reproductive ecotypes of kokanee Oncorhynchus nerka in Okanagan Lake, British Columbia. Taylor EB, et al. **Mol Ecol** 1997 Jun;6(6):503–17

Effects of an Igf1 gene null mutation on mouse reproduction. Baker J, et al. **Mol Endocrinol** 1996 Jul;10(7):903–18

A mutation of the circadian timing system (tau gene) in the seasonally breeding Syrian hamster alters the reproductive response to photoperiod change. Stirland JA, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):345–50

Mutant female mice carrying a single mZP3 allele produce eggs with a thin zona pellucida, but reproduce normally. Wassarman PM, et al. **Proc R Soc Lond B Biol Sci** 1997 Mar 22;264(1380):323–8

[The problem of breeding for fertility] Jansen S, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):414–6 (14 ref.) (Eng. Abstr.) **(Ger)**

[Reproduction of the water voles (Arvicola terrestris) polymorphic for the aguti locus] Bazhan NM, et al. **Genetika** 1996 Aug;32(8):1125–30 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Selected papers from the 6th International Congress of Reproductive Immunology. Washington, D.C., July 19–23, 1995. **Am J Reprod Immunol** 1996 Mar;35(3):127–287

Proceedings of the 4th Banff Conference on Reproductive Immunology. Thomas G. Wegmann Memorial Symposium. September 10–13, 1996. **Am J Reprod Immunol** 1997 Jun; 37(6):409–505

Selected papers from the 6th International Congress of Reproductive Immunology. Washington, D.C., July 19–23, 1995. **Am J Reprod Immunol** 1996 Apr;35(4):291–433

Role of the major histocompatibility complex region in reproduction, cancer, and autoimmunity. Gill TJ 3rd. **Am J Reprod Immunol** 1996 Mar;35(3):211–5 (14 ref.)

Genetic factors in reproduction and their evolutionary significance. Gill TJ 3rd. **Am J Reprod Immunol** 1997 Jan; 37(1):7–16

Influence of histocompatibility antigens in recurrent spontaneous abortion couples and on their reproductive performances [see comments] Sbracia M, et al. **Am J Reprod Immunol** 1996 Feb;35(2):85–92. Comment in: Am J Reprod Immunol 1997 Feb;37(2):213–4.

Immunoteratology: where we are and where to go. Toder V, et al. **Am J Reprod Immunol** 1996 Feb;35(2):114–7 (33 ref.)

Lack of association of bovine MHC class I alleles with carcass and reproductive traits. Arriëns MA, et al. **Anim Genet** 1996 Dec;27(6):429–31

Clinical rheumatologic applications of reproductive immunology. Facts, fiction, and fancy. Wallace DJ, et al. **Arthritis Rheum** 1997 Feb;40(2):209–16 (68 ref.)

Immunogenetics of reproduction: an overview. Ober C, et al. **Curr Top Microbiol Immunol** 1997;222:1–23 (124 ref.)

NK cells and reproduction. King A, et al. **Immunol Today** 1997 Feb;18(2):64–6 (15 ref.)

1st International Conference on Experimental and Clinical Reproductive Immunobiology. Charlottesville, Virginia, USA, 30 September–3 October, 1997. Abstracts. **J Reprod Immunol** 1997 Aug;34(1):1–102

The importance of mucosal immunology to problems in human reproduction. Anderson DJ. **J Reprod Immunol** 1996 Aug;31(1–2):3–19 (75 ref.)

Highlights of the Thomas G. Wegmann Memorial Symposium on Reproductive Immunology, Banff, Canada: 10–12 September 1996. Head JR. **J Reprod Immunol** 1997 Feb;32(3):193–200

Immunology update: topics in basic and clinically applied reproductive immunology. Hunt JS. **J Reprod Immunol** 1996 May;30(2–3):187–9

Reproductive immunology update: the 52nd annual meeting of the American Society of Reproductive Medicine. Kauma SW. **J Reprod Immunol** 1997 Feb;32(3):265–8

BSI workshop on cytokines in reproduction. Searle R. **J Reprod Immunol** 1996 May;30(2–3):191–3

The Thomas G. Wegmann Memorial Symposium on Reproductive Immunology. Banff, Alberta, Canada, 12 September 1996. Vince G. **Placenta** 1997 Mar–Apr; 18(2–3):234–5

An apparent effect of immunopotentiation during late gestation on the postpartum reproductive performance of Nili-Ravi buffaloes (Bubalus bubalis). Qureshi ZI, et al. **Vet Res Commun** 1997 Jul;21(5):375–80

PHYSIOLOGY

Immunocytochemical studies on the pituitary pars distalis of the tropical vespertilionid bat, Scotophilus heathi, with reference to the ovarian cycle. Singh UP, et al. **Acta Anat (Basel)** 1996;155(2):104–12

Effects of melatonin infused into the III ventricle on prolactin, beta-endorphin and luteotropin secretion in ewes during the different stages of the reproductive cycle. Misztal T, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(3):769–78 (32 ref.)

Influence of a deficient intake of high and low degradable protein on body composition, metabolic adaptation, production and reproductive performance in early lactation dairy cows. Fekete S, et al. **Acta Vet Hung** 1996; 44(3):309–33

Comparison of ketosis, clinical mastitis, somatic cell count, and reproductive performance between free stall and tie stall barns in Norwegian dairy herds with automatic feeding. Valde JP, et al. **Acta Vet Scand** 1997;38(2):181–92

Interactions between genetic and reproductive factors in breast cancer risk in a French family sample. Andrieu N, et al. **Am J Hum Genet** 1997 Sep;61(3):678–90

Reproduction in free-ranging Propithecus verreauxi: estrus and the relationship between multiple partner matings and fertilization. Brockman DK, et al. **Am J Phys Anthropol** 1996 May;100(1):57–69

Photoperiod and population density interact to affect reproductive and immune function in male prairie voles. Nelson RJ, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R571–7

Social and reproductive conditions modulate urinary cortisol excretion in black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Am J Primatol** 1997;42(4):253–67

Behavioral and endocrine characteristics of the reproductive cycle in wild muriqui monkeys, Brachyteles arachnoides. Strier KB, et al. **Am J Primatol** 1997;42(4):299–310

Fertility: past, present, and future. Evans VJ. **Am J Reprod Immunol** 1996 Mar;35(3):131–9 (9 ref.)

Women, reproductive health, and the future. Wirth TE. **Am J Reprod Immunol** 1996 Mar;35(3):127–30

Comparison of seasonal changes in reproductive parameters of adult male European fallow deer (Dama dama dama) and hybrid Mesopotamian x European fallow deer (D. d. mesopotamica x D. d. dama). Asher GW, et al. **Anim Reprod Sci** 1996 Dec 16;45(3):201–15

The hypothalamic-pituitary-adrenal axis and the female reproductive system. Magiakou MA, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:42–56 (69 ref.)

Ecological constraints and the evolution of hormone-behavior interrelationships. Wingfield JC, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:22–41 (67 ref.)

The influence of the reproductive cycle on levels of some metabolism indices in ewes. Brzostowski H, et al. **Arch Vet Pol** 1995;35(1–2):53–62

Reproductive stresses in undernourished and well-nourished women. Prentice AM, et al. **Bibl Nutr Dieta** 1996;(53):1–10 (22 ref.)

Age-related changes in the photoperiodic response of Siberian hamsters. Bernard DJ, et al. **Biol Reprod** 1997 Jul; 57(1):172–7

Cell-cell interactions related to reproductive biology: report of National Institutes of Health Workshop, June 11, 1995, Bethesda, Maryland. Leszczynski DE, et al. **Biol Reprod** 1996 Jun;54(6):1430–3

Validation of radioimmunoassays for two salmon gonadotropins (GTH I and GTH II) and their plasma concentrations throughout the reproductivecycle in male and female rainbow trout (Oncorhynchus mykiss). Prat F, et al. **Biol Reprod** 1996 Jun;54(6):1375–82

Pattern and source of secretion of relaxin in the reproductive cycle of the spotted hyena (Crocuta crocuta). Steinetz BG, et al. **Biol Reprod** 1997 May;56(5):1301–6

Influence of previous photoperiodic exposure on the reproductive response to a specific photoperiod signal in ewes. Sweeney T, et al. **Biol Reprod** 1997 Apr;56(4):916–20

Effect of thyroidectomy on maintenance of seasonal reproductive suppression in the ewe. Thrun LA, et al. **Biol Reprod** 1997 Apr;56(4):1035–40

Reproductive control in wild baboons measured by fecal steroids. Wasser SK. **Biol Reprod** 1996 Aug;55(2):393–9

Molecular cloning, tissue distribution, and expression of the prolactin receptor during various reproductive states in Meleagris gallopavo. Zhou JF, et al. **Biol Reprod** 1996 Nov; 55(5):1081–90

Adhesion molecules in reproduction. Klentzeris LD. **Br J Obstet Gynaecol** 1997 Apr;104(4):401–9 (53 ref.)

Effect of altered reproductive function and lowered testosterone levels on bone density in male endurance athletes. Bennell KL, et al. **Br J Sports Med** 1996 Sep; 30(3):205–8 (59 ref.)

Photorefractory period of the Muscovy duck (Cairina moschata): endocrine and neuroendocrine responses to day length after a full reproductive cycle. Jacquet JM. **Br Poult Sci** 1997 May;38(2):209–16

Repeatability and phenotypic correlations for body weight and reproduction in commercial ostrich breeding pairs. van Schalkwyk SJ, et al. **Br Poult Sci** 1996 Dec;37(5):953–62

Hormone replacement therapy, reproductive history, and colon cancer: a multicenter, case-control study in the United States [see comments] Kampman E, et al. **Cancer Causes Control** 1997 Mar;8(2):146–58. Comment in: Cancer Causes Control 1997 Mar;8(2):127–9.

Preservation of reproductive function before therapy for cancer: new options involving sperm and ovary cryopreservation [editorial] Opsahl MS, et al. **Cancer J Sci Am** 1997 Jul–Aug;3(4):189–91 (12 ref.)

Glycodelins as regulators of early events of reproduction. Seppälä M, et al. **Clin Endocrinol (Oxf)** 1997 Apr; 46(4):381–6 (46 ref.)

Effects of nutritional factors on reproduction, growth, preweaning reflex development and postweaning learning performance in SHRSP. Matsuo T, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S294–6

Standard values for reproductive and clinical chemistry parameters of Japanese quail. Faqi AS, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 May;104(5):167–9

Extrapituitary prolactin: distribution, regulation, functions, and clinical aspects. Ben-Jonathan N, et al. **Endocr Rev** 1996 Dec;17(6):639–69 (368 ref.)

Endotoxin inhibits the reproductive neuroendocrine axis while stimulating adrenal steroids: a simultaneous view from hypophyseal portal and peripheral blood. Battaglia DF, et al. **Endocrinology** 1997 Oct;138(10):4273–81

Dopaminergic A14/A15 neurons are activated during estradiol negative feedback in anestrous, but not breeding season, ewes. Lehman MN, et al. **Endocrinology** 1996 Oct; 137(10):4443–50

A critical period for thyroid hormone action on seasonal changes in reproductive neuroendocrine function in the ewe. Thrun LA, et al. **Endocrinology** 1997 Aug; 138(8):3402–9

Sexually dimorphic processing of somatosensory and chemosensory inputs to forebrain luteinizing hormone-releasing hormone neurons in mated ferrets. Wersinger SR, et al. **Endocrinology** 1997 Mar;138(3):1121–9

Menstrual and reproductive factors and biliary tract cancers. Tavani A, et al. **Eur J Cancer Prev** 1996 Aug;5(4):241–7

Transgenic animal models in reproductive endocrine research. Reventós J, et al. **Eur J Endocrinol** 1997 Jun; 136(6):566–80 (128 ref.)

In search of human dignity: reproductive health and healthy aging. Diczfalusy E. **Eur J Obstet Gynecol Reprod Biol** 1997 Feb;71(2):123–33

Age and reproductive status affect basal venous tone in the rat. Hohmann M, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Sep;68(1–2):185–9

Relationships between insulin-like growth hormone factor-I and estradiol in reproductive aging. Blake EJ, et al. **Fertil Steril** 1997 Apr;67(4):697–701

Autoimmunity and reproduction. Geva E, et al. **Fertil Steril** 1997 Apr;67(4):599–611 (100 ref.)

Inhibin, activin, and follistatin in reproductive medicine. Halvorson LM, et al. **Fertil Steril** 1996 Mar;65(3):459–69 (110 ref.)

Integrins and reproductive physiology: expression and modulation in fertilization, embryogenesis, and implantation. Sueoka K, et al. **Fertil Steril** 1997 May; 67(5):799–811 (100 ref.)

Roles of inhibins, activins, and follistatin in the female reproductive system. Knight PG. **Front Neuroendocrinol** 1996 Oct;17(4):476–509 (231 ref.)

The ovarian renin-angiotensin system in reproductive physiology. Yoshimura Y. **Front Neuroendocrinol** 1997 Jul; 18(3):247–91 (235 ref.)

Endocrine modulation of reproduction. Chapin RE, et al. **Fundam Appl Toxicol** 1996 Jan;29(1):1–17

c-fos- and c-jun-like mRNA expression in frog (Rana esculenta) testis during the annual reproductive cycle. Cobellis G, et al. **Gen Comp Endocrinol** 1997 Apr; 106(1):23–9

Ovarian steroid levels in Salamandra salamandra infraimmaculata during the reproductive cycle. Degani G, et al. **Gen Comp Endocrinol** 1997 Jun;106(3):356–60

Gonadotropins beta-GtHI and beta-GtHII from the gilthead seabream, Sparus aurata. Elizur A, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):39–46

Plasma corticosterone levels are not significantly related to reproductive stage in female common geckos (Hoplodactylus maculatus). Girling JE, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):273–81

Plasma insulin-like growth factor-I concentration during the reproductive cycle of the American alligator (Alligator mississippiensis). Guillette LJ Jr, et al. **Gen Comp Endocrinol** 1996 Oct;104(1):116–22

Active immunization against vasoactive intestinal peptide prevents photo-induced prolactin secretion in turkeys. el Halawani ME, et al. **Gen Comp Endocrinol** 1996 Oct; 104(1):76–83

Isolation, characterization, and radioimmunoassay of Atlantic halibut somatolactin and plasma levels during stress and reproduction in flatfish. Johnson LL, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):194–209

Vasoactive intestinal peptide concentrations in turkey hypophysial portal blood differ across the reproductive cycle. Youngren O, et al. **Gen Comp Endocrinol** 1996 Sep; 103(3):323–30

An essential role for C/EBPbeta in female reproduction. Sterneck E, et al. **Genes Dev** 1997 Sep 1;11(17):2153–62

Leptin: a hormone of reproduction [editorial] Conway GS, et al. **Hum Reprod** 1997 Apr;12(4):633–5

Utility of follicle stimulating hormone (FSH), luteinizing hormone (LH), oestradiol and FSH:LH ratio in predicting reproductive age in normal women. Kim YK, et al. **Hum Reprod** 1997 Jun;12(6):1152–5

Tissue renin-angiotensin systems and reproduction. Vinson

GP, et al. **Hum Reprod** 1997 Apr;12(4):651–62 (176 ref.)
Comparison of urinary component levels in 4 strains of mice with different physiological characteristics. Yasuda M, et al. **In Vivo** 1997 Mar–Apr;11(2):109–13
General and reproductive health of adolescent girls in rural south India. Joseph GA, et al. **Indian Pediatr** 1997 Mar; 34(3):242–5
Milk production and reproductive performance in dairy cows given bovine respiratory syncytial virus vaccine prior to parturition. Ferguson JD, et al. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1779–83
Association between lactation length and sow reproductive performance and longevity. Xue J, et al. **J Am Vet Med Assoc** 1997 Apr 1;210(7):935–8
In the male brown–Norway (BN) male rat, reproductive aging is associated with decreased LH–pulse amplitude and area. Bonavera JJ, et al. **J Androl** 1997 Jul–Aug; 18(4):359–65
Polyamine levels in testes and seminal vesicles from adult golden hamsters during gonadal regression–recrudescence. Frungieri MB, et al. **J Androl** 1996 Nov–Dec;17(6):683–91
Biotechnological advances in goat reproduction. Amoah EA, et al. **J Anim Sci** 1997 Feb;75(2):578–85 (74 ref.)
Growth, reproductive performance, mammary development, and milk production of beef heifers as influenced by prepubertal dietary energy and administration of bovine somatotropin. Buskirk DD, et al. **J Anim Sci** 1996 Nov; 74(11):2649–62
Effects of sire, dam traits, calf traits, and environment on dystocia and subsequent reproduction of two–year–old heifers. Colburn DJ, et al. **J Anim Sci** 1997 Jun; 75(6):1452–60
Effect of body composition at selection on reproductive development in large white gilts. Gaughan JB, et al. **J Anim Sci** 1997 Jul;75(7):1764–72
Feed intake pattern during lactation and subsequent reproductive performance of sows. Koketsu Y, et al. **J Anim Sci** 1996 Dec;74(12):2875–84
Relationships of serum insulin–like growth factor II concentrations to growth, compositional, and reproductive traits of swine. Lamberson WR, et al. **J Anim Sci** 1996 Aug;74(8):1753–6
Influence of timing of gain on growth and reproductive performance of beef replacement heifers. Lynch JM, et al. **J Anim Sci** 1997 Jul;75(7):1715–22
Riboflavin nutrition of sows. Pettigrew JE, et al. **J Anim Sci** 1996 Sep;74(9):2226–30
Effect of forage:concentrate ratio on digestion and reproduction in primiparous beef heifers. Reed BK, et al. **J Anim Sci** 1997 Jul;75(7):1708–14
Prolactin administration to seasonally anestrous mares: reproductive, metabolic, and hair–shedding responses. Thompson DL Jr, et al. **J Anim Sci** 1997 Apr;75(4):1092–9
Glucose tolerance, luteinizing hormone release, and reproductive performance of first–litter sows fed two levels of energy during gestation. Xue JL, et al. **J Anim Sci** 1997 Jul;75(7):1845–52
Leptin in human reproduction: serum leptin levels in pregnant and lactating women. Butte NF, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):585–9
Reproductive aging: accelerated ovarian follicular development associated with a monotropic follicle–stimulating hormone rise in normal older women. Klein NA, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1038–45
The effects of nerve growth factor and anti–nerve growth factor antibody on the neuroendocrine reproductive system in the European starling Sturnus vulgaris. Bentley GE, et al. **J Comp Physiol [A]** 1997 Aug;181(2):133–41
Reproductive and immune responses to photoperiod and melatonin are linked in Peromyscus subspecies. Demas GE, et al. **J Comp Physiol [A]** 1996 Dec;179(6):819–25
Effects of tallow and escape protein on lactational and reproductive performance of dairy cows. Son J, et al. **J Dairy Sci** 1996 May;79(5):822–30
Direct regulation of mammalian reproductive organs by serotonin and melatonin. Sirotkin AV, et al. **J Endocrinol** 1997 Jul;154(1):1–5 (60 ref.)
Influence of melatonin and photoperiod on animal and human reproduction. Cagnacci A, et al. **J Endocrinol Invest** 1996 Jun;19(6):382–411 (419 ref.)
The physiology of massive zinc accumulation in the liver of female squirrelfish and its relationship to reproduction. Hogstrand C, et al. **J Exp Biol** 1996 Nov;199 (Pt 11):2543–54
Length of delay to birth of a second litter in dwarf hamsters (Phodopus): evidence for post–implantation embryonic diapause. Newkirk KD, et al. **J Exp Zool** 1997 Jun 1; 278(2):106–14
Menstrual and reproductive factors related to the risk of breast cancer in Korea. Ovarian hormone effect on breast cancer. Suh JS, et al. **J Korean Med Sci** 1996 Dec; 11(6):501–8
Epidemiological pitfalls using Medicaid data in reproductive health research. Grisso JA, et al. **J Matern Fetal Med** 1997 Jul–Aug;6(4):230–6
Transcriptional and post–transcriptional regulation of prolactin during the turkey reproductive cycle. Tong Z, et al. **J Mol Endocrinol** 1997 Jun;18(3):223–31
Atrophy and degeneration of peptidergic neurons and cessation of egg laying in the aging pond snail Lymnaea stagnalis. Janse C, et al. **J Neurobiol** 1996 Feb;29(2):202–12
Hypothalamic cellular and molecular mechanisms helping to satisfy axiomatic requirements for reproduction. Pfaff DW, et al. **J Neuroendocrinol** 1996 May;8(5):325–36 (114 ref.)
Effects of photoperiod duration and melatonin signal characteristics on the reproductive system of male Syrian hamsters. Powers JB, et al. **J Neuroendocrinol** 1997 Jun; 9(6):451–66
Leptin involvement in reproductive performance [letter] Frühbeck G. **J Nutr** 1997 Aug;127(8):1533
The role of growth hormone (GH), GH–receptor and GH–binding protein in reproduction and ovulation induction. Blumenfeld Z, et al. **J Pediatr Endocrinol Metab** 1996 Mar–Apr;9(2):145–62 (82 ref.)
Afternoon injections of melatonin in the Djungarian hamster Phodopus sungorus: long lasting sex–specific effects and influence of acute treatment on the endogenous pineal melatonin rhythm. Niklowitz P, et al. **J Pineal Res** 1996 Nov;21(4):231–8
Changes in content of mRNA encoding oxytocin in the pig uterus during the oestrous cycle, pregnancy, at parturition and in lactational anoestrus. Boulton MI, et al. **J Reprod Fertil** 1996 Nov;108(2):219–27
Rank and reproduction in the female spotted hyaena. Holekamp KE, et al. **J Reprod Fertil** 1996 Nov; 108(2):229–37
A preliminary investigation of the relationship between ovarian steroids, LH, reproductive behaviour and vaginal changes in lesser bushbabies (Galago moholi). Lipschitz DL. **J Reprod Fertil** 1996 Jul;107(2):167–74
Influence of breeding season and reproductive status on male reproductive characteristics in the common mole–rat, Cryptomys hottentotus hottentotus. Spinks AC, et al. **J Reprod Fertil** 1997 Jan;109(1):79–86
A survey of reproductive parameters in the free–ranging chimpanzees of Gombe National Park. Wallis J. **J Reprod Fertil** 1997 Mar;109(2):297–307
Effect of different bedding materials on the reproductive performance of mice. Potgieter FJ, et al. **J S Afr Vet Assoc** 1997 Mar;68(1):8–15
Evolution of the self–reproducing system to the biosynthesis of the membrane: an approach from the amino acid sequence similarity in proteins. Fukuchi S, et al. **J Theor Biol** 1996 Sep 21;182(2):117–36
Induction of canine deciduoma in some reproductive stages with the different condition of corpora lutea. Nomura K. **J Vet Med Sci** 1997 Mar;59(3):185–90
Reproductive performance and changes in blood lipids in breeding females and in growing Watanabe heritable hyperlipidaemic and New Zealand White rabbits. Mortensen A, et al. **Lab Anim** 1996 Jul;30(3):252–9
Monitoring and controlling reproduction in captive common marmosets on the basis of urinary oestrogen metabolites. Nievergelt C, et al. **Lab Anim** 1996 Apr;30(2):162–70
Influence of unsuccessful lactation on subsequent reproduction and age of onset of mammary tumours in SHN mice. Tsunoda S, et al. **Lab Anim** 1996 Apr; 30(2):158–61
Mechanisms regulating the reproduction and fertility of some mammalian species in their natural environments. Hearn JP. **Lab Anim Sci** 1996 Apr;46(2):152–8 (31 ref.)
Transient alteration of the reproductive function in nephrotic rats. Menjivar M, et al. **Life Sci** 1997;61(12):1159–67
Reproduction and development in Drosophila are dependent upon catecholamines. Pendleton RG, et al. **Life Sci** 1996; 59(24):2083–91
Nature's knockout: the Mel1b receptor is not necessary for reproductive and circadian responses to melatonin in Siberian hamsters. Weaver DR, et al. **Mol Endocrinol** 1996 Nov;10(11):1478–87
Integrins and human reproduction. Bronson RA, et al. **Mol Hum Reprod** 1996 Mar;2(3):153–68 (160 ref.)
Matrix metalloproteinases as mediators of reproductive function. Hulboy DL, et al. **Mol Hum Reprod** 1997 Jan; 3(1):27–45 (211 ref.)
Symposium on colony–stimulating factor in development and disease. Ames, Iowa, September 1995. Proceedings. **Mol Reprod Dev** 1997 Jan;46(1):1–108
Role of colony–stimulating factor–1 in reproduction and development. Pollard JW. **Mol Reprod Dev** 1997 Jan; 46(1):54–60; discussion 60–1 (31 ref.)
The reproductive side of leptin [news; comment] Chehab FF. **Nat Med** 1997 Sep;3(9):952–3. Comment on: Nat Med 1997 Sep;3(9):1029–33.
Reproductive senescence predicts cognitive decline in aged female monkeys. Roberts JA, et al. **Neuroreport** 1997 May 27;8(8):2047–51
Time to pregnancy: a measure of reproductive function in either sex. Asclepios Project. Joffe M. **Occup Environ Med** 1997 May;54(5):289–95 (20 ref.)
Corticosterone, reproductive status, and body mass in a cooperative breeder, the Florida scrub–jay (Aphelocoma coerulescens). Schoech SJ, et al. **Physiol Zool** 1997 Jan–Feb;70(1):68–73
Associated effects of divergent selection for residual feed consumption on reproduction, sperm characteristics, and mitochondria of spermatozoa. Morisson M, et al. **Poult Sci** 1997 Mar;76(3):425–31
Leptospira interrogans serovar icterohaemorrhagiae seropositivity and the reproductive performance of sows. Ferreira Neto JS, et al. **Prev Vet Med** 1997 Jul; 31(1–2):87–93
Models of selective mating and the initiation of the Fisherian process. Takahasi K. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):839–44
Circadian control of reproduction in the female rat. van der Beek EM. **Prog Brain Res** 1996;111:295–320 (172 ref.)
The biochemical role of platelet–activating factor in reproduction. Frenkel RA, et al. **Prog Lipid Res** 1996; 35(2):155–68 (101 ref.)
Aging of the female reproductive system: a window into brain aging. Wise PM, et al. **Recent Prog Horm Res** 1997; 52:279–303; discussion 303–5 (104 ref.)
Changes in expression of the prolactin and growth hormone gene during different reproductive stages in the pituitary gland of turkeys. Karatzas CN, et al. **Reprod Nutr Dev** 1997;37(1):69–79
Reproduction and feeding behavior of Oxybelis wilsoni, a new species of vine snake (Serpentes: Colubridae). Groves JD. **Rev Biol Trop** 1995 Apr–Dec;43(1–3):307–9
Reproductive fitness in familial schizophrenia. Bassett AS, et al. **Schizophr Res** 1996 Sep 18;21(3):151–60
Stress and behaviorally induced reproductive dysfunction in primates. Cameron JL. **Semin Reprod Endocrinol** 1997 Feb; 15(1):37–45 (56 ref.)
The effect of endurance training on reproductive function in male runners. A 'volume threshold' hypothesis. De Souza MJ, et al. **Sports Med** 1997 Jun;23(6):357–74 (79 ref.)
Steroidogenic factor 1 acts at all levels of the reproductive axis. Caron KM, et al. **Steroids** 1997 Jan;62(1):53–6
Anatomy and physiology of the bull's reproductive system. Fayrer–Hosken R. **Vet Clin North Am Food Anim Pract** 1997 Jul;13(2):195–202 (7 ref.)
The effects of age and reproductive status on serum and blood parameters in merino breed sheep. Alonso AJ, et al. **Zentralbl Veterinarmed A** 1997 Jun;44(4):223–31
[Reproductive physiology in New World camelids. Review] Gauly M. **Tierarztl Prax** 1997 Jan;25(1):74–9 (41 ref.) (Eng. Abstr.) **(Ger)**
[Apoptosis in the reproductive system] Nakano R, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Aug; 48(8):721–32 (4 ref.) **(Jpn)**
[Effect of 120–day antiorthostatic hypokinesia on the reproductive function in women] Goncharova AG, et al. **Aviakosm Ekolog Med** 1997;31(1):63–8 (Eng. Abstr.) **(Rus)**
[Spermatogenesis and the testosterone level in young male silver foxes in their reproductive period] Osadchuk LV, et al. **Fiziol Zh Im I M Sechenova** 1996 May–Jun; 82(5–6):102–8 (Eng. Abstr.) **(Rus)**
[The functional morphology of the Langerhans cells in the female reproductive tract] Bykov VL. **Morfologiia** 1997; 111(2):7–16 (109 ref.) (Eng. Abstr.) **(Rus)**
[The role of oxytocin and vasopressin in the regulation of mammalian reproduction] Grinevich VV, et al. **Morfologiia** 1997;111(2):17–27 (96 ref.) (Eng. Abstr.) **(Rus)**
[Effect of soybean products on the reproductive system of sexually mature female albino rats] Goncharova EN, et al. **Vopr Pitan** 1997;(1):17–20 (Eng. Abstr.) **(Rus)**
[The effect of the selection of Mustela vison mink for behavior on their folliculogenesis and reproductive function] Klochkov DV, et al. **Zh Evol Biokhim Fiziol** 1996 Sep–Oct;32(5):620–8 (Eng. Abstr.) **(Rus)**
[Participation of growth factors in human reproduction] Marín–Cantú VA, et al. **Ginecol Obstet Mex** 1997 Jan; 65:27–32 (68 ref.) (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

60–Hz magnetic field exposure effects on the melatonin rhythm and photoperiod control of reproduction. Yellon SM. **Am J Physiol** 1996 May;270(5 Pt 1):E816–21
Sensitivity of reproducing sows and suckling pigs to stray voltage. Robert S, et al. **Am J Vet Res** 1996 Aug; 57(8):1245–9
Age–related changes in the photoperiodic response of Siberian hamsters. Bernard DJ, et al. **Biol Reprod** 1997 Jul; 57(1):172–7
Reproductive photoresponsiveness in unmanipulated male Fischer 344 laboratory rats. Heideman PD, et al. **Biol Reprod** 1997 Jul;57(1):134–8
Effect of UVA radiation on development and hatching success in Oryzias latipes, the Japanese Medaka. Bass EL, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):537–42
Environmental radiation and male reproduction. Hoyes KP, et al. **Int J Androl** 1996 Aug;19(4):199–204 (75 ref.)
A study of reproductive function in patients with seminoma treated with radiotherapy and orchidectomy: (SWOG–8711). Southwest Oncology Group. Gordon W Jr, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1; 38(1):83–94
Reproductive health hazards in the pharmaceutical industry. Clement JD. **Occup Med** 1997 Jan–Mar;12(1):131–43 (61 ref.)
A mutation of the circadian timing system (tau gene) in the seasonally breeding Syrian hamster alters the reproductive response to photoperiod change. Stirland JA, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):345–50

REPRODUCTION, ASEXUAL

Heterozygosity, heteromorphy, and phylogenetic trees in asexual eukaryotes. Birky CW Jr. **Genetics** 1996 Sep; 144(1):427–37

REPRODUCTION, ASEXUAL

Continuous stability and evolutionary convergence. Eshel I, et al. **J Theor Biol** 1997 Apr 7;185(3):333–43

DRUG EFFECTS

Inhibitory effects of nucleoside 5'-alkylphosphates on sexual agglutination in Saccharomyces cerevisiae. Machida K, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):17–22

GENETICS

RNA editing in metazoan mitochondria: staying fit without sex. Börner GV, et al. **FEBS Lett** 1997 Jun 16;409(3):320–4 (34 ref.)

PHYSIOLOGY

Neuronal signal substances in asexual multiplication and development in flatworms. Reuter M, et al. **Cell Mol Neurobiol** 1996 Oct;16(5):591–616 (75 ref.)

REPRODUCTION TECHNIQUES

Intrauterine insemination with husband's semen as alternative to other assisted reproduction techniques. Ferraro F, et al. **Acta Eur Fertil** 1995 Mar–Apr;26(2):63–7

Use of assisted reproductive techniques for treatment of ejaculatory disorders. Denil J, et al. **Andrologia** 1996;28 Suppl 1:43–51 (62 ref.)

Ovarian stimulation in assisted reproduction. Gips H, et al. **Andrologia** 1996;28 Suppl 1:3–7 (16 ref.)

Prospects for human reproductive medicine--applications of experimental techniques used in farm animal breeding. Michelmann HW, et al. **Andrologia** 1996;28 Suppl 1:93–5 (0 ref.)

Assisted reproductive technology: the state of the ART. Hummel WP, et al. **Ann Med** 1997 Jun;29(3):207–14 (44 ref.)

Hemizona assay: evaluation of fertility potential in patients with vasectomy reversal. Coddington CC, et al. **Arch Androl** 1997 Mar–Apr;38(2):143–50

The hemizona assay: a simplified technique. Janssen M, et al. **Arch Androl** 1997 Mar–Apr;38(2):127–31

Whose life is it anyway? Goodman NW. **Br J Hosp Med** 1996 Sep 4–17;56(5):240

Comparison of second trimester biometry in singleton and twin pregnancies conceived with assisted reproductive techniques. Gardosi J, et al. **Br J Obstet Gynaecol** 1997 Jun;104(6):737–40

The case against new reproductive technologies in developing countries [see comments] Okonofua FE. **Br J Obstet Gynaecol** 1996 Oct;103(10):957–62 (37 ref.). Comment in: Br J Obstet Gynaecol 1997 Mar;104(3):385. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):969; discussion 969–70. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):970.

Fetal motherhood: toward a compulsion to generate lives? Bonnicksen AL. **Camb Q Healthc Ethics** 1997 Winter; 6(1):19–30

Infertility and subsequent pregnancy. Hoxsey R, et al. **Clin Perinatol** 1997 Jun;24(2):321–42 (95 ref.)

Reproductive endocrinology. **Curr Opin Obstet Gynecol** 1997 Jun;9(3):B99–116

In vitro fertilisation. A review of drug therapy and clinical management. Jennings JC, et al. **Drugs** 1996 Sep; 52(3):313–43 (180 ref.)

The history of assisted human conception with especial reference to endocrinology. Edwards RG. **Exp Clin Endocrinol Diabetes** 1996;104(3):183–204 (99 ref.)

Assisted reproductive technology in the United States and Canada: 1994 results generated from the American Society for Reproductive Medicine/Society for Assisted Reproductive Technology Registry. **Fertil Steril** 1996 Nov; 66(5):697–705

Female age is an important parameter to predict treatment outcome in intracytoplasmic sperm injection. Abdelmassih R, et al. **Fertil Steril** 1996 Mar;65(3):573–7

Noninvasive methods to obtain sperm [letter; comment] Belker AM. **Fertil Steril** 1997 Jun;67(6):1181. Comment on: Fertil Steril 1996 Oct;66(4):620–3. Comment on: Fertil Steril 1996 Oct;66(4):660–1.

Clinical application of nonselective assisted hatching of human embryos. Hu Y, et al. **Fertil Steril** 1996 Dec; 66(6):991–4

Patient dropout in an assisted reproductive technology program: implications for pregnancy rates. Land JA, et al. **Fertil Steril** 1997 Aug;68(2):278–81

Induction of acrosome reaction in human spermatozoa accelerates the time of pronucleus formation of hamster oocytes after intracytoplasmic sperm injection. Lee DR, et al. **Fertil Steril** 1997 Feb;67(2):315–20

Intracytoplasmic sperm injection using microsurgically retrieved epididymal and testicular sperm. Mansour RT, et al. **Fertil Steril** 1996 Mar;65(3):566–72

Mouse in vitro fertilization, embryo development and viability, and human sperm motility in substances used for human sperm preparation for assisted reproduction. Scott L, et al. **Fertil Steril** 1997 Feb;67(2):372–81

Now that we have painted ourselves in a corner [editorial] Soules MR. **Fertil Steril** 1996 Nov;66(5):693–6

Heterotopic pregnancy after ovulation induction and assisted reproductive technologies: a literature review from 1971 to 1993. Tal J, et al. **Fertil Steril** 1996 Jul;66(1):1–12 (77 ref.)

Testicular and epididymal sperm in a microinjection program: methods of retrieval and results. Watkins W, et al. **Fertil Steril** 1997 Mar;67(3):527–35

On the welfare of possible persons [letter] Mahowald MB. **Hastings Cent Rep** 1997 Jan–Feb;27(1):2

Social workers' attitudes toward participants' rights in adoption and new reproductive technologies. Holbrook SM. **Health Soc Work** 1996 Nov;21(4):257–66

Zona opening of human embryos using a non-contact UV laser for assisted hatching in patients with poor prognosis of pregnancy. Antinori S, et al. **Hum Reprod** 1996 Nov; 11(11):2488–92

Human egg activation, cryopreservation, and fertilization using a haploid pronucleus. Azambuja R, et al. **Hum Reprod** 1996 Sep;11(9):1990–1

Posthumous assisted reproduction. Posthumous assisted reproduction (PAR): cancer patients, potential cases, counselling and consent. Bahadur G. **Hum Reprod** 1996 Dec;11(12):2573–5

Procreatics and honesty. Barri PN. **Hum Reprod** 1996 Jul; 11(7):1368–9

Reconsideration of testicular biopsy and follicle-stimulating hormone measurement in the era of intracytoplasmic sperm injection for non-obstructive azoospermia? Chen CS, et al. **Hum Reprod** 1996 Oct;11(10):2176–9

Human Reproduction 1997: highest impact factors in reproductive medicine and soon to be published on the Web [editorial] Edwards R, et al. **Hum Reprod** 1997 Jan; 12(1):1

Birth of normal mice after removal of the supernumerary male pronucleus from polyspermic zygotes. Feng YL, et al. **Hum Reprod** 1996 Feb;11(2):341–4

Pregnancy after intracytoplasmic sperm injection of spermatozoa extracted from frozen-thawed testicular biopsy. Fischer R, et al. **Hum Reprod** 1996 Oct; 11(10):2197–9

Post-coital sperm retrieval could lead to the wider approval of assisted conception by some religions. Hirsh A. **Hum Reprod** 1996 Feb;11(2):245–7 (26 ref.)

Natural spermatoceles in irreversible obstructive azoospermia--reservoirs of viable spermatozoa for assisted conception. Hirsh AV, et al. **Hum Reprod** 1996 Sep; 11(9):1919–22

Vas deferens aspiration and intracytoplasmic injection of frozen-thawed spermatozoa in a case of anejaculation in a diabetic man. Hovatta O, et al. **Hum Reprod** 1996 Feb; 11(2):334–5

Intracytoplasmic sperm injection without polyvinylpyrrolidone: an essential precaution? [letter; comment] Jean M, et al. **Hum Reprod** 1996 Oct;11(10):2332 . Comment on: Hum Reprod 1993 Jul;8(7):1061–6.

Prognostic factors for the success rate of embryo freezing. Karlström PO, et al. **Hum Reprod** 1997 Jun;12(6):1263–6

Intracytoplasmic sperm injection without polyvinylpyrrolidone: an essential precaution? [letter; comment] McDermott A, et al. **Hum Reprod** 1996 Oct; 11(10):2332. Comment on: Hum Reprod 1995 Feb;10(2):436–8.

Fertilizing ability of immotile spermatozoa after intracytoplasmic sperm injection. Nijs M, et al. **Hum Reprod** 1996 Oct;11(10):2180–5

Endometrial thickness as a predictor of pregnancy after in-vitro fertilization but not after intracytoplasmic sperm injection. Rinaldi L, et al. **Hum Reprod** 1996 Jul; 11(7):1538–41

Premature chromosome condensation of the sperm nucleus after intracytoplasmic sperm injection. Schmiady H, et al. **Hum Reprod** 1996 Oct;11(10):2239–45

The role of an ethics advisory board in self-regulation. Seibel MM. **Hum Reprod** 1996 Aug;11(8):1595–6

The clinical value of transvaginal colour Doppler ultrasound in assisted reproductive technology procedures [see comments] Tekay A, et al. **Hum Reprod** 1996 Aug; 11(8):1589–91. Comment in: Hum Reprod 1996 Oct;11(10):2333.

Preimplantation diagnosis of common aneuploidies in infertile couples of advanced maternal age. Verlinsky Y, et al. **Hum Reprod** 1996 Oct;11(10):2076–7

Cytogenetic and fluorescent in-situ hybridization chromosomal studies on in-vitro fertilized and intracytoplasmic sperm injected 'failed-fertilized' human oocytes. Wall MB, et al. **Hum Reprod** 1996 Oct; 11(10):2230–8

Development, pharmacology and clinical experience with clomiphene citrate. Dickey RP, et al. **Hum Reprod Update** 1996 Nov–Dec;2(6):483–506 (108 ref.)

The role of ultrasonography in the evaluation of endometrial receptivity following assisted reproductive treatments: a critical review. Friedler S, et al. **Hum Reprod Update** 1996 Jul–Aug;2(4):323–35 (64 ref.)

Recent scientific and medical advances in assisted human conception. Edwards RG. **Int J Dev Biol** 1997 Apr; 41(2):255–62 (81 ref.)

Global importance of infertility and its treatment: role of fertility technologies. Hamberger L, et al. **Int J Gynaecol Obstet** 1997 Jul;58(1):149–58

Bioethics body needed [letter] Feenan D. **Ir Med J** 1996 Nov–Dec;89(6):234

"Resolved: with recent advances in micromanipulation, there is no longer a need for the male infertility specialist." [letter] Northcutt RC. **J Androl** 1996 Sep–Oct;17(5):597

10th World Congress on In Vitro Fertilization and Assisted Reproduction. Vancouver, British Columbia, Canada, May 24–28, 1997. Abstracts. **J Assist Reprod Genet** 1997 May; 14(5 Suppl):5S–265S

Parenting and secrecy issues related to children of assisted reproduction. Golombok S. **J Assist Reprod Genet** 1997 Aug;14(7):375–8

Feminist critiques of new fertility technologies: implications for social policy. Donchin A. **J Med Philos** 1996 Oct; 21(5):475–98

What can progress in reproductive technology mean for women? Purdy LM. **J Med Philos** 1996 Oct;21(5):499–514

Fetal subjects and maternal objects: reproductive technology and the new fetal/maternal relation. Squier S. **J Med Philos** 1996 Oct;21(5):515–35

Current status of assisted reproductive technology in Asia and Oceania. Chang YS, et al. **J Obstet Gynaecol Res** 1996 Aug;22(4):305–30 (0 ref.)

Society for the Study of Fertility, British Fertility Society and British Andrology Society, joint meeting. York, 1997. Abstracts. **J Reprod Fertil Abstr Ser** 1997 Jul;(19):1–74

Assisted conception options for patients with good-prognosis cervical cancer [letter] Meniru GI, et al. **Lancet** 1997 Feb 22;349(9051):542

The effects of smoking on ovarian function and fertility during assisted reproduction cycles. Van Voorhis BJ, et al. **Obstet Gynecol** 1996 Nov;88(5):785–91

Advanced maternal age and perinatal outcome: oocyte recipiency versus natural conception. Wolff KM, et al. **Obstet Gynecol** 1997 Apr;89(4):519–23

Individual interests, societal interests, and reproductive technologies. Baird P. **Perspect Biol Med** 1997 Spring; 40(3):440–51

Down's syndrome screening marker levels following assisted reproduction. Barkai G, et al. **Prenat Diagn** 1996 Dec; 16(12):1111–4

Early singleton pregnancy outcome: effects of maternal age and mode of conception. Benson CB, et al. **Radiology** 1997 May;203(2):399–403

Genetics, reproductive technologies, euthanasia and the search for a new societal paradigm [editorial] Somerville MA. **Soc Sci Med** 1996 Jun;42(12):ix–xii

Assisted reproductive technologies. Paulson RJ. **West J Med** 1996 Dec;165(6):377–8

Accountability in the advertising and marketing of assisted reproduction. **Womens Health Issues** 1997 May–Jun; 7(3):167–71

Panel two: reporting and advertising success rates--the Gordian Knot of assisted reproductive technology. The role of a federal regulatory agency. Katz M. **Womens Health Issues** 1997 May–Jun;7(3):192–4; discussion 194–6

[Contribution of pathology in procedures for medically assisted reproduction] Ceresa-Manoux A, et al. **Ann Pathol** 1996 Nov;16(5):392–4 (10 ref.) **(Fre)**

[The proposed position statement on the preliminary screening of hepatitis B and hepatitis C of tentative intra-couple medically assisted reproduction. The BLEFCO Federation] **Contracept Fertil Sex** 1997 Apr; 25(4):313–24 (Eng. Abstr.) **(Fre)**

[A child at all costs? At what price? Consequences for the child: experimental data] Auroux M. **Contracept Fertil Sex** 1997 Apr;25(4):277–9 (19 ref.) **(Fre)**

[Could male infertility become hereditary?] Barbaux S, et al. **Contracept Fertil Sex** 1997 Mar;25(3):192–3 **(Fre)**

[Prognostic value of high FSH concentrations] Galtier-Dereure F, et al. **Contracept Fertil Sex** 1996 Sep; 24(9):635–8 (Eng. Abstr.) **(Fre)**

[Oocyte maturation. From animal experiments to human reproduction techniques] Lefèvre B. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):559–63 (34 ref.) (Eng. Abstr.) **(Fre)**

[Is human embryo research necessary? What are the limits of animal experimentation?] Plachot M. **Contracept Fertil Sex** 1996 Nov;24(11):802–4 **(Fre)**

[The desire for children in HIV sero-different couples] Plachot M. **Contracept Fertil Sex** 1997 Apr; 25(4):XVI–XVIII **(Fre)**

[Ovarian hyperstimulation in medically assisted reproduction: which practical approach?] Priou G. **Contracept Fertil Sex** 1996 Sep;24(9):647–9 (Eng. Abstr.) **(Fre)**

[Need for knowledge and ethics] Thibault C. **Contracept Fertil Sex** 1996 Dec;24(12):863–8 **(Fre)**

[Ethical questions and marginal problems in assisted reproduction] Körner U. **Wien Med Wochenschr** 1997; 147(4–5):94–8 (Eng. Abstr.) **(Ger)**

[Quality control and cytogenetic analysis of human pre-embryos fertilized and cultured in vitro] Kubo H, et al. **Hum Cell** 1997 Mar;10(1):11–20 (Eng. Abstr.) **(Jpn)**

[Electroejaculation and assisted reproductive techniques in the patients with spinal cord injury] Yamamoto M, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Mar;88(3):420–6 (Eng. Abstr.) **(Jpn)**

[Elucidation of the mechanism of fertilization and clinical application of assisted reproductive technology] Hiroi M. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Aug; 48(8):578–90 (18 ref.) (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Irregular chromosome segregation following ICSI? [letter; comment] Rosenbusch B, et al. **Hum Reprod** 1996 Oct;

11(10):2337–8. Comment on: Hum Reprod 1996 May;11(5):926–8.
Registration of congenital anomalies in ART populations: pitfalls. Simpson JL. **Hum Reprod** 1996 Dec;11 Suppl 4:81–8 (19 ref.)
Heterotopic pregnancy and assisted reproduction--an update. Rojansky N, et al. **J Assist Reprod Genet** 1996 Aug; 13(7):594–601 (58 ref.)
Genomic imprinting abnormalities: a new potential risk of assisted reproduction. Tesarik J, et al. **Mol Hum Reprod** 1996 May;2(5):295–8 (28 ref.)
[A child at all costs? At what price? Consequences for the mother] Belaisch–Allart J, et al. **Contracept Fertil Sex** 1997 Apr;25(4):279–84 (44 ref.) **(Fre)**

ECONOMICS

Sex, lies, and health insurance: employer–provided health insurance coverage of abortion and infertility services and the ADA. Millsap D. **Am J Law Med** 1996;22(1):51–84 (309 ref.)
Assessing the costs of assisted reproductive techniques [letter; comment] Bevan RK, et al. **Br J Obstet Gynaecol** 1996 Oct;103(10):1049; discussion 1049–50. Comment on: Br J Obstet Gynaecol 1996 Mar;103(3):198–201.
Assessing the costs of assisted reproductive techniques [letter; comment] Souter V, et al. **Br J Obstet Gynaecol** 1996 Oct; 103(10):1049; discussion 1049–50. Comment on: Br J Obstet Gynaecol 1996 Mar;103(3):198–201.
Preprogrammed, unmonitored ovarian stimulation reduces expense without compromising the outcome of assisted reproduction. Hurst BS, et al. **Fertil Steril** 1997 Aug; 68(2):282–6
A cost and outcome model of fertility treatment in a managed care environment. Rabin DS, et al. **Fertil Steril** 1996 Dec; 66(6):896–903
Cost–effectiveness of infertility treatments: a cohort study. Van Voorhis BJ, et al. **Fertil Steril** 1997 May;67(5):830–6
Using willingness to pay to assess the benefits of assisted reproductive techniques. Ryan M. **Health Econ** 1996 Nov–Dec;5(6):543–58
ART in women 40 and over. Is the cost worth it? Legro RS, et al. **J Reprod Med** 1997 Feb;42(2):76–82
Panel one: marketing strategies and informing the patient/consumer. A fertility center describes its shared–risk program. Levy MJ. **Womens Health Issues** 1997 May–Jun;7(3):172–6; discussion 186–7

HISTORY

Legal, ethical and historical aspects of assisted human reproduction. Austin CR. **Int J Dev Biol** 1997 Apr; 41(2):263–5 (4 ref.)

LEGISLATION & JURISPRUDENCE

Approaches responsive to reproductive technologies: a need for critical assessment and directions for further study. Kondratowicz DM. **Camb Q Healthc Ethics** 1997 Spring; 6(2):148–56 (49 ref.)
A consensus for regulation? [letter; comment] Aronson DD, et al. **Fertil Steril** 1996 Nov;66(5):862–3. Comment on: Fertil Steril 1996 Jun;65(6):1090–2.
Comparing the British and American approaches to regulating ART programmes. Feinman M, et al. **Hum Reprod** 1996 Jul;11(7):1366–7
Registers of in–vitro fertilization and assisted conception. Lancaster PA. **Hum Reprod** 1996 Dec;11 Suppl 4:89–104; discussion 105–9 (49 ref.)
French law concerning medically–assisted reproduction. Lansac J. **Hum Reprod** 1996 Sep;11(9):1843–7
ART reporting: the American view. Lobo RA. **Hum Reprod** 1996 Jul;11(7):1369–70
ART regulation: the Australia viewpoint. Matthews CD. **Hum Reprod** 1996 Jul;11(7):1365–6
Assisted reproduction practice in Europe: legal and ethical aspects. Schenker JG. **Hum Reprod Update** 1997 Mar–Apr; 3(2):173–84 (34 ref.)
Legal, ethical and historical aspects of assisted human reproduction. Austin CR. **Int J Dev Biol** 1997 Apr; 41(2):263–5 (4 ref.)
The current status of sperm donation in assisted reproduction technology: ethical and legal considerations. Meirow D, et al. **J Assist Reprod Genet** 1997 Mar;14(3):133–8
Modern reproductive technologies. Legal issues concerning cryopreservation and posthumous conception. Shah M. **J Leg Med** 1996 Dec;17(4):547–71
A role model of rigidity [editorial] **Lancet** 1996 Nov 9; 348(9037):1253
The baby market [editorial] **Lancet** 1997 May 24; 349(9064):1487
A unique case of frozen sperm export? Brahams D. **Lancet** 1997 Feb 15;349(9050):448
Gatekeeping and assisted reproductive technology. The ethical rights and responsibilities of doctors. Pearn JH. **Med J Aust** 1997 Sep 15;167(6):318–20
Legal and ethical aspects of new reproductive technologies; the case of prenatal diagnosis. Hendriks A. **Med Law** 1996; 15(4):677–89
[The impact of the new reproductive techniques on the family: present and future] Pérez–Duarte AE. **Gac Med Mex** 1996 May–Jun;132(3):347–50 **(Spa)**

NURSING

The perioperative nurse's role in assisted–fertility procedures. Robinson BJ. **AORN J** 1997 Jan;65(1):87–9, 92–3

PSYCHOLOGY

Does psychological support and counseling reduce the stress experienced by couples involved in assisted reproductive technology? Greenfeld DA. **J Assist Reprod Genet** 1997 Apr;14(4):186–8
Infertility and assisted reproductive technology: the role of the perinatal social worker. Greenfeld DA. **Soc Work Health Care** 1997;24(3–4):39–46 (12 ref.)
[The biggest wish: a completely normal in vitro child] Wagner B. **Fortschr Med** 1996 Sep 30;114(27):26, 28 **(Ger)**

STANDARDS

FIGO Committee for the study of ethical aspects of human reproduction. Guidelines regarding informed consent. International Federation of Gynecology and Obstetrics. Schenker JG. **Ginekol Pol** 1996 Nov;67(11):581–2
The duties of ethical committees applied to human reproduction [see comments] Eisenberg VH, et al. **J Assist Reprod Genet** 1996 Oct;13(9):689–97. Comment in: J Assist Reprod Genet 1997 Jul;14(6):364–5.

STATISTICS & NUMERICAL DATA

Reproductive health care policies around the world. ART practice in Singapore. Ng SC, et al. **J Assist Reprod Genet** 1996 Aug;13(7):527–35
[1995 evaluation of the CECOS Federation. Use of different methods of assisted reproductive techniques] Le Lannou D. **Contracept Fertil Sex** 1996 Sep;24(9):688–90 (Eng. Abstr.) **(Fre)**

TRENDS

IVF: out–of–date evidence, or not [comment] [see comments] Wagner M. **Lancet** 1996 Nov 23;348(9039):1394. Comment on: Lancet 1996 Nov 23;348(9039):1402–6. Comment in: Lancet 1997 Jan 25;349(9047):284.
Innovations in infertility treatment and the rush to market. Robertson JA. **Womens Health Issues** 1997 May–Jun; 7(3):162–6
[Twins and triplets are more uncommon after fertility therapy today (interview by Dr. rer. nat. Katharina Amheim)] Blondel B. **Fortschr Med** 1996 Sep 30;114(27):22–4 **(Ger)**

UTILIZATION

[Reproductive medicine and assisted reproduction--present status and perspectives in the Czech Republic] Mardešič T. **Ceska Gynekol** 1996 Oct;61(5):307–10 **(Cze)**

VETERINARY

Effects of equine chorionic gonadotropin, human chorionic gonadotropin, and laparoscopic artificial insemination on embryo, endocrine, and luteal characteristics in the domestic cat. Roth TL, et al. **Biol Reprod** 1997 Jul; 57(1):165–71
Comparison between in vivo–derived and in vitro–produced pre–elongation embryos from domestic ruminants. Thompson JG. **Reprod Fertil Dev** 1997;9(3):341–54 (133 ref.)

REPRODUCTIVE HISTORY

Reproductive characteristics of a population of urban Swiss women. Morabia A, et al. **Acta Obstet Gynecol Scand** 1996 Oct;75(9):838–42
Gynecologic and reproductive issues in women on dialysis. Holley JL, et al. **Am J Kidney Dis** 1997 May;29(5):685–90
Evaluating the relationships among maternal reproductive history, birth characteristics, and infant leukemia: a report from the Children's Cancer Group. Ross JA, et al. **Ann Epidemiol** 1997 Apr;7(3):172–9
Reproductive factors and prognosis of uterine cervical cancer in Norway. Bjørge T, et al. **Br J Cancer** 1996 Dec; 74(11):1843–6
Association of body mass index, physical activity, and reproductive histories with breast cancer: a case–control study in Gifu, Japan. Hu YH, et al. **Breast Cancer Res Treat** 1997 Mar;43(1):65–72
Risk factors for breast cancer: a case–control study of screen–detected breast cancer in Miyagi Prefecture, Japan. Minami Y, et al. **Breast Cancer Res Treat** 1997 Jul; 44(3):225–33
Proliferation of the breast epithelium in relation to menstrual cycle phase, hormonal use, and reproductive factors. Olsson H, et al. **Breast Cancer Res Treat** 1996;40(2):187–96
Harvard report on cancer prevention. Causes of human cancer. Reproductive factors. **Cancer Causes Control** 1996 Nov;7 Suppl 1:S29–31
Reproductive factors and incidence of epithelial ovarian cancer: a Norwegian prospective study. Albrektsen G, et al. **Cancer Causes Control** 1996 Jul;7(4):421–7
Evaluation of nature–nurture impact on reproductive health using half–siblings [see comments] Olsen J, et al. **Epidemiology** 1997 Jan;8(1):6–11 (22 ref.). Comment in: Epidemiology 1997 Jan;8(1):2–4.
Reproductive factors and risk of uterine fibroids. Parazzini F, et al. **Epidemiology** 1996 Jul;7(4):440–2
Association of adult glioma with medical conditions, family and reproductive history. Cicuttini FM, et al. **Int J Cancer** 1997 Apr 10;71(2):203–7
Gender and social differences in adolescent sexuality and reproduction in Nicaragua. Zelaya E, et al. **J Adolesc Health** 1997 Jul;21(1):39–46
Menopause, menstrual and reproductive history, and bone density in northern Italy. Parazzini F, et al. **J Epidemiol Community Health** 1996 Oct;50(5):519–23
Factors associated with inadequate prenatal care during the second pregnancies among African–American women. McDermott JM, et al. **J Nurse Midwifery** 1996 Sep–Oct; 41(5):368–76
Menstrual and reproductive factors and hip fractures in post menopausal women. Parazzini F, et al. **Maturitas** 1996 Jul; 24(3):191–6
Breast cancer risk: protective effect of an early first full–term pregnancy versus increased risk of induced abortion. Canty L. **Oncol Nurs Forum** 1997 Jul;24(6):1025–31 (60 ref.)
Influence of hormonal and reproductive factors on the risk of vertebral deformity in European women. European Vertebral Osteoporosis Study Group. O'Neill TW, et al. **Osteoporos Int** 1997;7(1):72–8
A case–control study of parity, age at first full–term pregnancy, breast feeding and breast cancer in Taiwanese women. Lai FM, et al. **Proc Natl Sci Counc Repub China B** 1996 Jul;20(3):71–7
Urbanisation, household composition and the reproductive health of women in a South African city. Pick WM, et al. **Soc Sci Med** 1996 Nov;43(10):1431–41
[Reproductive history of Chilean puerperal women hospitalized in a public hospital of the metropolitan region] Henríquez R, et al. **Rev Med Chil** 1996 Oct;124(10):1275–80 (Eng. Abstr.) **(Spa)**

REPRODUCTIVE MEDICINE

see related

REPRODUCTION TECHNIQUES

Access to assisted human reproduction services by minority groups. Daniels KR, et al. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):79–85
1996 Carl G. Hartman Award. Virendra B. Mahesh. **Biol Reprod** 1997 Feb;56(2):337–8
SSR Research Award. Eli Y. Adashi. **Biol Reprod** 1997 Feb; 56(2):338
WHO is producing a reproductive health library for developing countries [letter] Gülmezoglu AM, et al. **BMJ** 1997 Jun 7;314(7095):1695
Sexual medicine. Genitourinary medicine clinics are an obvious place for treatment of sexual dysfunction [letter; comment] Kell P, et al. **BMJ** 1997 Aug 16;315(7105):429 . Comment on: BMJ 1997 May 17;314(7092):1432.
Differences between doctor and patient estimates of outcome in male sub–fertility clinic attenders. Glover L, et al. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):531–42
Management of involuntary childlessness [see comments] Himmel W, et al. **Br J Gen Pract** 1997 Feb;47(415):111–8 (166 ref.). Comment in: Br J Gen Pract 1997 Feb;47(415):69–70. Comment in: Br J Gen Pract 1997 Jun;47(419):404.
The case against new reproductive technologies in developing countries [letter; comment] Edouard L, et al. **Br J Obstet Gynaecol** 1997 Aug;104(8):969; discussion 969–70. Comment on: Br J Obstet Gynaecol 1996 Oct;103(10):957–62.
The case against new reproductive technologies in developing countries [letter; comment] Harry TC. **Br J Obstet Gynaecol** 1997 Mar;104(3):385. Comment on: Br J Obstet Gynaecol 1996 Oct;103(10):957–62.
Potential health hazards of assisted human reproduction. Possible immunological complications. Narayanan M, et al. **Hum Reprod** 1996 Apr;11(4):701–2 (25 ref.)
Religious freedom, reproductive health care, and hospital mergers. Gallagher J. **J Am Med Womens Assoc** 1997 Spring;52(2):65–8
Reproductive health care policies around the world. On basic and clinical research within the human assisted reproduction setting. Oehninger S, et al. **J Assist Reprod Genet** 1997 Feb;14(2):69–72
Society for the Study of Fertility, British Fertility Society and British Andrology Society, joint meeting. York, 1997. Abstracts. **J Reprod Fertil Abstr Ser** 1997 Jul;(19):1–74
Cairo dreams shattered. Potts M. **Lancet** 1996 Oct 12; 348(9033):976
Reproductive medicine and the social state of childlessness. Jansen RP. **Med J Aust** 1997 Sep 15;167(6):321–3
Ethics, advertising, and assisted reproduction: the goals and methods of advertising. Dyer AR. **Womens Health Issues** 1997 May–Jun;7(3):143–8
Assisted reproductive technologies, ads, and ethics: philosophical, ethical, and clinical perspectives on the use of advertising in reproductive medicine. A conference held by the National Advisory Board on Ethics in Reproduction. Macklin R, et al. **Womens Health Issues** 1997 May–Jun;7(3):127–31 (0 ref.)
Cooperation yields best results for improved reproductive health care [letter; comment] Pollack AE. **Womens Health Issues** 1996 Sep–Oct;6(5):307. Comment on: Womens Health Issues 1996 Mar–Apr;6(2):115.

REPRODUCTIVE MEDICINE

Commodification, commercialization, and embodiment. Verhey A. **Womens Health Issues** 1997 May-Jun; 7(3):132-42

[Reproductive medicine and assisted reproduction--present status and perspectives in the Czech Republic] Mardešič T. **Ceska Gynekol** 1996 Oct;61(5):307-10 **(Cze)**

[Report on the 2nd Baltic-German Symposium of Andrology and Reproduction Medicine] Haidl G. **Hautarzt** 1997 Apr; 48(4):275 **(Ger)**

EDUCATION

The teaching of evidence-based reproductive health in developing countries. Olatunbosun OA, et al. **Int J Gynaecol Obstet** 1997 Feb;56(2):171-6

LEGISLATION & JURISPRUDENCE

Medically-assisted procreation: a maturing technology or a premature fear? Response to Testart and Sèle. Fiddler M, et al. **Hum Reprod** 1996 Apr;11(4):708-9 (9 ref.)

Genetics, the free market and reproductive medicine. Johnson MH. **Hum Reprod** 1997 Mar;12(3):408-10

Legislation on reproductive technologies in India [editorial] Kumar TC. **Hum Reprod** 1996 Apr;11(4):685

Health policy and third-generation oral contraceptives. Michaels MA, et al. **Hum Reprod** 1996 Apr;11(4):691-2 (10 ref.)

METHODS

Breast cancer and the reproductive endocrinologist [editorial] [see comments] Kazer RR. **Fertil Steril** 1996 Mar; 65(3):470-1. Comment in: Fertil Steril 1996 Nov;66(5):859; discussion 860-1. Comment in: Fertil Steril 1996 Nov;66(5):859-61. Comment in: Fertil Steril 1996 Nov;66(5):861-2.

ORGANIZATION & ADMINISTRATION

Sexual medicine. Models of integrated sexual health services already exist [letter; comment] Rowlands S, et al. **BMJ** 1997 Aug 16;315(7105):429. Comment on: BMJ 1997 May 17;314(7092):1432.

Sexual medicine. Integrated services for sexual health care are the way forward [letter; comment] Thomas M. **BMJ** 1997 Aug 16;315(7105):429. Comment on: BMJ 1997 May 17;314(7092):1432.

REPTILASE

Application of thrombin based fibrin glue and non-thrombin based batroxobin glue on intact human blood vessels: evidence for transmural thrombin activity. Dascombe WH, et al. **Thromb Haemost** 1997 Aug;78(2):947-51

ADMINISTRATION & DOSAGE

Local treatment with an antithrombotic drug reduces thrombus size in coronary and peripheral thrombosed arteries. Tomaru T, et al. **Heart Vessels** 1996;11(3):133-44

New model for in vivo studies of pharmacological interventions with endogenous fibrinolysis: effects of thrombin inhibitors. Lenfors S, et al. **Semin Thromb Hemost** 1996;22(4):335-42

PHARMACOLOGY

Suppression of cell-transferred experimental autoimmune encephalomyelitis in defibrinated Lewis rats. Inoue A, et al. **J Neuroimmunol** 1996 Dec;71(1-2):131-7

Batroxobin accelerates lipid accumulation of peroxidized low density lipoprotein in mouse peritoneal macrophages. Yu S, et al. **Pathobiology** 1996;64(5):275-8

REPTILASE-DEF see **REPTILASE**

REPTILASE TIME see **THROMBIN TIME**

REPTILES

Purification, partial characterization and peptide sequences of vitellogenin from a reptile, the tuatara (Sphenodon punctatus). Brown MA, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):159-68

Guanylyl cyclase receptors and guanylin-like peptides in reptilian intestine. Krause WJ, et al. **Gen Comp Endocrinol** 1997 Aug;107(2):229-39

The molecular structure of reptilian keratin. Fraser RD, et al. **Int J Biol Macromol** 1996 Oct;19(3):207-11

Venomous insects and reptiles. Normann SA. **J Fla Med Assoc** 1996 Mar;83(3):183-6

Tyrannosaurs suffered from gout [letter] Rothschild BM, et al. **Nature** 1997 May 22;387(6631):357

Heme compounds in dinosaur trabecular bone. Schweitzer MH, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10; 94(12):6291-6

Infectious and parasitic disease of captive reptiles and amphibians, with special emphasis on husbandry practices which prevent or promote diseases. Ippen R, et al. **Rev Sci Tech** 1996 Mar;15(1):43-54 (1 ref.)

Quarantine protocols and preventive medicine procedures for reptiles, birds and mammals in zoos. Miller RE. **Rev Sci Tech** 1996 Mar;15(1):183-9 (1 ref.)

Ultraviolet lights for reptiles [letter] Divers SJ. **Vet Rec** 1996 Jun 22;138(25):627-8

Ultraviolet lights for reptiles [letter] Harcourt-Brown F. **Vet Rec** 1996 May 25;138(21):528

ANATOMY & HISTOLOGY

Squamate Harderian gland: an overview. Rehorek SJ. **Anat Rec** 1997 Jul;248(3):301-6 (53 ref.)

The gastro-enteric-pancreatic neuroendocrine system in two reptilian species: Chalcides chalcides and Zoonosaurus madascariensis (Sauridae). Morescalchi AM, et al. **Eur J Histochem** 1997;41(1):29-40

GENETICS

Reanalysis of published DNA sequence amplified from cretaceous dinosaur egg fossil [letter] Wang HL, et al. **Mol Biol Evol** 1997 May;14(5):589-91

[Re-analysis of DNA sequence data from a dinosaur egg fossil unearthed in Xixia of Henan Province] Wang H. **I Chuan Hsueh Pao** 1996;23(3):183-9 (Eng. Abstr.) **(Chi)**

[Sequence analysis of the cytochrome b gene fragment in a dinosaur egg] Yin Z, et al. **I Chuan Hsueh Pao** 1996; 23(3):190-5 (Eng. Abstr.) **(Chi)**

[Restriction mapping of a highly-repetitive DNA sequence in studying the genetic relationship of lower taxons of animal] Grechno VV, et al. **Mol Biol (Mosk)** 1997 Mar-Apr;31(2):244-52 **(Rus)**

METABOLISM

Standard and maximal metabolic rates of goannas (Squamata:Varanidae). Thompson GG, et al. **Physiol Zool** 1997 May-Jun;70(3):307-23

The composition and function of reptilian pulmonary surfactant. Daniels CB, et al. **Respir Physiol** 1995 Dec; 102(2-3):121-35 (50 ref.)

MICROBIOLOGY

Review of the literature and investigations on the prevalence and consequences of yeasts in reptiles. Kostka VM, et al. **Vet Rec** 1997 Mar 15;140(11):282-7 (36 ref.)

PARASITOLOGY

Axenic culture of reptilian Blastocystis isolates in monophasic medium and speciation by karyotypic typing. Singh M, et al. **Parasitol Res** 1996;82(2):165-9

PHYSIOLOGY

Estivation in South American amphibians and reptiles. Abe AS. **Braz J Med Biol Res** 1995 Nov-Dec;28(11-12):1241-7 (38 ref.)

The influence of temperature, phylogeny, and lung structure on the lipid composition of reptilian pulmonary surfactant. Daniels CB, et al. **Exp Lung Res** 1996 May-Jun; 22(3):267-81

Protamines of reptiles. Hunt JG, et al. **J Biol Chem** 1996 Sep 20;271(38):23547-57

The evolution of viviparity and placentation revisited [letter] Qualls CP, et al. **J Theor Biol** 1997 Mar 7;185(1):129-35

Cytokines in mammalian reproduction and speculation about their possible involvement in nonmammalian viviparity. Paulesu L. **Microsc Res Tech** 1997 Jul 1-15;38(1-2):188-94 (79 ref.)

[Anesthesia in domestic animals (small mammals, psittacines and reptiles)] Kuntze A. **Tierarztl Prax** 1996 Dec; 24(6):600-3 (24 ref.) (Eng. Abstr.) **(Ger)**

[New data on the characteristics of sleep and the organization of the wakefulness-sleep cycle in cold-blooded vertebrates] Karmanova IG. **Zh Evol Biokhim Fiziol** 1996 Jul-Aug; 32(4):511-35 (10 ref.) **(Rus)**

REQUEST FOR PROPOSAL see **COMPETITIVE BIDDING**

RESCUE WORK

see related
RELIEF WORK

Unexpected nerve gas exposure in the city of Matsumoto: report of rescue activity in the first sarin gas terrorism. Okudera H, et al. **Am J Emerg Med** 1997 Sep;15(5):527-8

Injuries to rescue workers following the Oklahoma City bombing. Dellinger AM, et al. **Am J Ind Med** 1997 Jun; 31(6):727-32

Physiological, psychophysical, and psychological responses of firefighters to firefighting training drills. Smith DL, et al. **Aviat Space Environ Med** 1996 Nov;67(11):1063-8

Voluntary and professional disaster-workers: similarities and differences in reactions. Dyregrov A, et al. **J Trauma Stress** 1996 Jul;9(3):541-55

Posttraumatic stress symptoms in nonexposed, victims, and spontaneous rescuers after an avalanche. Johnsen BH, et al. **J Trauma Stress** 1997 Jan;10(1):133-40

Military medicine responds to Ecuador crisis [news] Gunby P. **JAMA** 1996 Dec 18;276(23):1862-3

The ED and the PC. Internet resources for emergency and disaster care. Sikorski R, et al. **JAMA** 1997 Sep 10; 278(10):869-70

Helping the helpers after the bombing in Dhahran: critical-incident stress services for an air rescue squadron. Budd MF. **Mil Med** 1997 Aug;162(8):515-20

Prompt diagnosis, treatment critical in workplace burn emergency response. Scully T, et al. **Occup Health Saf** 1994 Mar;63(3):80-1

Emergency response to environmental toxic incidents: the role of the occupational physician. McCunney RJ. **Occup Med (Oxf)** 1996 Dec;46(6):397-401

[Chemical accidents and organization of medical services] Musiichuk IuI. **Med Tr Prom Ekol** 1997;(6):27-30 (Eng. Abstr.) **(Rus)**

[Medical efforts during the Estonian ship wreck] Kulling P, et al. **Lakartidningen** 1997 Mar 26;94(13):1189-91 **(Swe)**

[Naval rescue workers and post-traumatic stress syndrome. Relieving conversation made coping easier] Lundin T. **Lakartidningen** 1997 Mar 26;94(13):1204-6 **(Swe)**

[Conference on the risks of travelling. Infections and accidents dominate travel medicine] Norrbohm O. **Lakartidningen** 1997 Aug 27;94(35):2929-31 **(Swe)**

MANPOWER

Pharmacist's role in rescue efforts after plane crash in Indian Ocean [letter] Berod T, et al. **Am J Health Syst Pharm** 1997 May 1;54(9):1110

METHODS

Liferaft evacuation from a ditched helicopter: dry shod vs. swim away method. Brooks CJ, et al. **Aviat Space Environ Med** 1997 Jan;68(1):35-40

The Kobe earthquake: the system response. A disaster report from Japan. Tanaka K. **Eur J Emerg Med** 1996 Dec; 3(4):263-9 (7 ref.)

ORGANIZATION & ADMINISTRATION

Evaluation of repatriation parameters: an analysis of patient data of the German Air Rescue. Kramer W, et al. **Aviat Space Environ Med** 1996 Sep;67(9):885-9

Training for operational readiness [letter] Knuth TE. **Mil Med** 1997 Aug;162(8):iv, xiii

STATISTICS & NUMERICAL DATA

Risk factors for coronary heart disease among firefighters in Cincinnati. Glueck CJ, et al. **Am J Ind Med** 1996 Sep; 30(3):331-40

Epidemiology of hazardous materials responses by Massachusetts district HAZMAT teams. Kales SN, et al. **J Occup Environ Med** 1996 Apr;38(4):394-400

RESEARCH

see related
DENTAL RESEARCH
INFORMATION SERVICES
NURSING RESEARCH
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Development of the multiorganizational document regarding emergency research consent [editorial] Biros MH. **Acad Emerg Med** 1996 Feb;3(2):101-5

Can emergency medicine residents perform quality research? [letter] Levitt MA. **Acad Emerg Med** 1997 Feb;4(2):154-6

Informed consent for medical research: common discrepancies and readability. White LJ, et al. **Acad Emerg Med** 1996 Aug;3(8):745-50

Research in the Veterans Health Administration: new paradigm or changing priorities? Feussner JR. **Acad Med** 1996 Oct;71(10):1072-3

Factors associated with family physicians' involvement in research in Israel. Giveon S, et al. **Acad Med** 1997 May; 72(5):388-90

Contributions and challenges of medical education research. McGuire CH. **Acad Med** 1996 Oct;71(10 Suppl):S121-9

"Bimodal" medical schools: excelling in research and primary care [see comments] Osborn EH, et al. **Acad Med** 1996 Sep;71(9):941-9. Comment in: Acad Med 1997 Feb;72(2):87.

Capturing the promise of science in medical schools. Ralston HJ 3rd, et al. **Acad Med** 1996 Dec;71(12):1314-23

The MD-PhD researcher: what species of investigator? [published erratum appears in Acad Med 1996 Oct;71(10):1063] Sutton J, et al. **Acad Med** 1996 May; 71(5):454-9

Earnings and schooling: an overview of economic research based on the Australian Twin Register. Miller P, et al. **Acta Genet Med Gemellol (Roma)** 1996;45(4):417-29 (19 ref.)

Review of research on the clinical presentation of acquired childhood aphasia [see comments] Paquier PF, et al. **Acta Neurol Scand** 1996 Jun;93(6):428-36 (101 ref.). Comment in: Acta Neurol Scand 1997 Apr;95(4):253-5.

Review of research on the clinical presentation of acquired childhood aphasia [letter; comment] Van Hout A. **Acta Neurol Scand** 1997 Apr;95(4):253-5. Comment on: Acta Neurol Scand 1996 Jun;93(6):428-36.

Introduction -- binge eating: clinical and research directions. Marcus MD. **Addict Behav** 1995 Nov-Dec;20(6):691-3

Contemplating the Stages of Change [news] Mason P. **Addiction** 1996 Apr;91(4):605-8

Factors influencing subject willingness to participate in clinical gerontologic research. Rosenberg R, et al. **Aging (Milano)** 1996 Dec;8(6):400-8

Our research approaches must meet the goal of improving

patient care. Edwards RA. **Altern Ther Health Med** 1997 Jan;3(1):100, 99

Spiritual healing and folklore research: evaluating the hypnosis/placebo theory. McClenon J. **Altern Ther Health Med** 1997 Jan;3(1):61–6

Ethical evaluation of hypnosis research: a survey of investigators and their institutional review boards. Council JR, et al. **Am J Clin Hypn** 1997 Apr;39(4):258–65

Research directions in emergency medicine [see comments] Aghababian RV, et al. **Am J Emerg Med** 1996 Nov; 14(7):681–3. Comment in: Am J Emerg Med 1997 Jul;15(4):440.

Creating solutions to meet the challenges facing biomedical research: report of the 1996 APM Fall Symposium. **Am J Med** 1997 Feb;102(2):133–40

Teaching versus research in academia [letter; comment] Refinetti R. **Am J Physiol** 1997 Jun;272(6 Pt 3):S51–2. Comment on: Am J Physiol 1996 Dec;271(6 Pt 3):S68–70.

Physiology research in the developing world [letter; comment] [see comments] Sircar SS. **Am J Physiol** 1996 Dec;271(6 Pt 3):S71. Comment on: Am J Physiol 1995 Dec;269(6 Pt 3):S61–7. Comment in: Am J Physiol 1997 Jun;272(6 Pt 3):S50–1.

A protocol for community–based research. Brown L, et al. **Am J Prev Med** 1996 Jul–Aug;12(4 Suppl):4–5

Increased health care utilization as a function of participation in trauma research. Sansone RA, et al. **Am J Psychiatry** 1997 Jul;154(7):1025–7

Where's the bias? [editorial; comment] Davidoff F. **Ann Intern Med** 1997 Jun 15;126(12):986–8. Comment on: Ann Intern Med 1996 Jul 15;125(2):81–8.

Reshaping Italian AIDS research [news] Bindi R. **Ann Oncol** 1997 Jun;8(6):508–9

Continual importance of descriptive epidemiology in cancer research [editorial; comment] Boyle P. **Ann Oncol** 1996 Jul;7(5):439–40. Comment on: Ann Oncol 1996 Jul;7(5):497–504.

Outcomes research: a primer for plastic surgeons. Wilkins EG, et al. **Ann Plast Surg** 1996 Jul;37(1):1–11

UK pediatric clinical research under threat [letter] Chambers TL. **Arch Dis Child** 1997 Aug;77(2):186

Clinical lecturer posts under threat [letter] David TJ. **Arch Dis Child** 1997 Aug;77(2):186–7

Acknowledgements and authors [see comments] Moncrieff M. **Arch Dis Child** 1996 Nov;75(5):366. Comment in: Arch Dis Child 1997 May;76(5):478. Comment in: Arch Dis Child 1997 May;76(5):479.

Parent and adolescent perceived need for parental consent involving research with minors. Sikand A, et al. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):603–7

Volunteer bias in human sexuality research: evidence for both sexuality and personality differences in males. Bogaert AF. **Arch Sex Behav** 1996 Apr;25(2):125–40

Arctic medical research in the Nordic countries to continue after all [editorial] Akerblom HK. **Arctic Med Res** 1996 Oct;55(4):154–5

Research as an educational tool [editorial] Clarke PS. **Aust Fam Physician** 1996 May;25(5):621, 626

The relevance of general practice research [editorial] Fabb W. **Aust Fam Physician** 1996 Sep;25(9 Suppl 2):S49–50

Absence of evidence is not evidence of absence. Altman DG, et al. **Aust Vet J** 1996 Oct;74(4):311

Manual–based treatments: the clinical application of research findings. Wilson GT. **Behav Res Ther** 1996 Apr; 34(4):295–314 (120 ref.)

Scientific reasoning in an imperfect world [editorial] Parascandola M. **Bioessays** 1997 Sep;19(9):745–6

Informed consent in medical research. South African study raises the ghosts of Nuremberg and apartheid [letter; comment] Ana JN. **BMJ** 1997 May 17;314(7092):1479–80 . Comment on: BMJ 1997 Apr 12;314(7087):1077–81; discussion 1081–4.

Informed consent in medical research. The whole population must be mobilised in the war against cancer [letter; comment] Baum M. **BMJ** 1997 May 17;314(7092):1482. Comment on: BMJ 1997 Apr 12;314(7087):1107–11. Comment on: BMJ 1997 Apr 12;314(7087):1111–4.

Informed consent in medical research. Let readers judge for themselves [letter; comment] Bland M. **BMJ** 1997 May 17; 314(7092):1477–8. Comment on: BMJ 1997 Apr 12;314(7087):1071–6; discussion 1076–7. Comment on: BMJ 1997 Apr 12;314(7087):1077–81; discussion 1081–4.

Informed consent in medical research. Doctors are arrogant to think they need to debate issue of patient consent [letter; comment] Bratt DE. **BMJ** 1997 May 17;314(7092):1477. Comment on: BMJ 1997 Apr 12;314(7087):1059–60.

Informed consent in medical research. Risk of bias may be another reason not to seek consent [letter; comment] Chanter DO. **BMJ** 1997 May 17;314(7092):1478. Comment on: BMJ 1997 Apr 12;314(7087):1107–11.

Tobacco industry memo reveals passive smoking strategy [news] Chapman S. **BMJ** 1997 May 31;314(7094):1569

Informed consent in medical research. Failure to publish completed randomised controlled trials is unethical in itself [letter; comment] Counsell CE, et al. **BMJ** 1997 May 17; 314(7092):1481. Comment on: BMJ 1997 Apr 12;314(7087):1059–60.

Informed consent in medical research. Journals should not publish research to which patients have not given fully informed consent—with three exceptions [see comments] Doyal L. **BMJ** 1997 Apr 12;314(7087):1107–11. Comment in: BMJ 1997 Apr 12;314(7087):1059–60. Comment in: BMJ 1997 May 17;314(7092):1477. Comment in: BMJ 1997 May 17;314(7092);1478. Comment in: BMJ 1997 May 17;314(7092);1480. Comment in: BMJ 1997 May 17;314(7092);1480–1. Comment in: BMJ 1997 May 17;314(7092):1481. Comment in: BMJ 1997 May 17;314(7092):1482. Comment in: BMJ 1997 Jul 26;315(7102):247. Comment in: BMJ 1997 Jul 26;315(7102):248. Comment in: BMJ 1997 Jul 26;315(7102):250. Comment in: BMJ 1997 Jul 26;315(7102):253. Comment in: BMJ 1997 Jul 26;315(7102):254.

Informed consent in medical research. In routine practice the consent form is a request form and informed consent is informed choice [letter; comment] Frosh AC, et al. **BMJ** 1997 May 17;314(7092):1482–3. Comment on: BMJ 1997 Apr 12;314(7087):1059–60.

Exploitative collaborative research must be discouraged [letter; comment] Gbolade BA. **BMJ** 1997 May 3; 314(7090):1347. Comment on: BMJ 1997 Feb 8;314(7078):390.

Clinical academic medicine: a Socratic dialogue. Grahame–Smith DG. **BMJ** 1997 Sep 6;315(7108):593–5 (21 ref.)

Informed consent in medical research. Research in patients with mental retardation poses special problems [letter; comment] Hassiotis A. **BMJ** 1997 May 17;314(7092):1480–1 . Comment on: BMJ 1997 Apr 12;314(7087):1059–60. Comment on: BMJ 1997 Apr 12;314(7087):1107–11. Comment on: BMJ 1997 Apr 12;314(7087):1111–4.

Informed consent in medical research. Minimum ethical standards should not vary among countries [letter; comment] Holmes W. **BMJ** 1997 May 17;314(7092):1479. Comment on: BMJ 1997 Apr 12;314(7087):1059–60.

Informed consent in medical research. Studies with important conclusions but without patient consent should be published [letter; comment] Hulbert MF. **BMJ** 1997 May 17;314(7092):1481. Comment on: BMJ 1997 Apr 12;314(7087):1107–11. Comment on: BMJ 1997 Apr 12;314(7087):1111–4.

Consumer participation in research and health care [editorial] Liberati A. **BMJ** 1997 Aug 30;315(7107):499

Informed consent in medical research. Ethics committees and BMJ should continue to consider the overall benefit to patients [letter; comment] Little P, et al. **BMJ** 1997 May 17;314(7092):1478. Comment on: BMJ 1997 Apr 12;314(7087):1071–6; discussion 1076–7.

Erasing the global divide in health research [editorial] [see comments] Mari JJ, et al. **BMJ** 1997 Feb 8;314(7078):390 . Comment in: BMJ 1997 May 3;314(7090):1347.

Informed consent in medical research. Patients may not understand enough to give their informed consent [letter; comment] Montgomery C, et al. **BMJ** 1997 May 17; 314(7092):1482. Comment on: BMJ 1997 Apr 12;314(7087):1059–60.

Informed consent in medical research. Consent is not always practical in emergency treatments [letter; comment] Morley C. **BMJ** 1997 May 17;314(7092):1480. Comment on: BMJ 1997 Apr 12;314(7087):1059–60.

Whose data are they anyway? Access to raw data would need legislation [letter; comment] Oswald I. **BMJ** 1997 Mar 8;314(7082):749. Comment on: BMJ 1996 May 18;312(7041):1241–2.

Informed consent in medical research. Children from the age of 5 should be presumed competent [letter; comment] Paul M. **BMJ** 1997 May 17;314(7092):1480. Comment on: BMJ 1997 Apr 12;314(7087):1107–11.

Why the impact factor of journals should not be used for evaluating research. Seglen PO. **BMJ** 1997 Feb 15; 314(7079):498–502

Whose data are they anyway? Datasharing would cause problems in nuclear industry [letter; comment] Slovak AJ, et al. **BMJ** 1997 Mar 8;314(7082):749–50. Comment on: BMJ 1996 May 18;312(7041):1241–2.

Informed consent in medical research. No one has a monopoly on deciding what is ethical [letter; comment] Soutter P. **BMJ** 1997 May 17;314(7092):1477. Comment on: BMJ 1997 Apr 12;314(7087):1059–60. Comment on: BMJ 1997 Apr 12;314(7087):1071–6; discussion 1076–7. Comment on: BMJ 1997 Apr 12;314(7087):1077–81; discussion 1081–4. Comment on: BMJ 1997 Apr 12;314(7087):1107–11. Comment on: BMJ 1997 Apr 12;314(7087):1111–4.

Informed consent in medical research. Clinicians are being disingenuous with themselves [letter] Stewart–Brown S. **BMJ** 1997 May 17;314(7092):1478–9

Research and development programme begins to bite [interview by Hilary Bower] Swales J. **BMJ** 1997 Feb 15; 314(7079):466

Informed consent in medical research. We all have a responsibility to contribute to research [letter; comment] Thornton H. **BMJ** 1997 May 17;314(7092):1479. Comment on: BMJ 1997 Apr 12;314(7087):1111–4.

Informed consent in medical research. Subjects may be coerced into participating in studies [letter; comment] [see comments] Wilmshurst P. **BMJ** 1997 May 17; 314(7092):1481. Comment on: BMJ 1997 Apr 12;314(7087):1059–60. Comment in: BMJ 1997 Jul 26;315(7102):248.

Informed consent in medical research. Communication with potential subjects needs to be effective [letter; comment] Wiltshire C. **BMJ** 1997 May 17;314(7092):1482. Comment on: BMJ 1997 Apr 12;314(7087):1107–11. Comment on: BMJ 1997 Apr 12;314(7087):1111–4.

Whose data are they anyway? Food industry could be misusing data [letter; comment] Winkler JT. **BMJ** 1997 Mar 8;314(7082):750. Comment on: BMJ 1996 May 18;312(7041):1241–2.

Institute of Biomedical Science 1995 Congress. Birmingham, United Kingdom, 30 October–3 November 1995: Abstracts. **Br J Biomed Sci** 1996 Mar;53(1):1–89

The science of perpetual change. Haines A. **Br J Gen Pract** 1996 Feb;46(403):115–9

Commentary on Joffe (1996) AIDS research and prevention: a social representation approach. Fife–Schaw C. **Br J Med Psychol** 1997 Mar;70 (Pt 1):65–73

Juxtaposing positivist and non–positivist approaches to social scientific AIDS research: reply to Fife–Schaw's commentary. Joffe H. **Br J Med Psychol** 1997 Mar;70 (Pt 1):75–83

Quality of statistics in psychiatric research [letter] Sedgwick P. **Br J Psychiatry** 1996 Mar;168(3):385

Parasites, pawns and partners: disability research and the role of non–disabled researchers. Stone E, et al. **Br J Sociol** 1996 Dec;47(4):699–716

Advances in post mortem molecular neurochemistry and neuropathology: examples from schizophrenia research. Harrison PJ. **Br Med Bull** 1996 Jul;52(3):527–38 (62 ref.)

Comments on the 1995 Gordon Memorial Lecture [letter; comment] Hughes BO, et al. **Br Poult Sci** 1996 Sep; 37(4):869–72. Comment on: Br Poult Sci 1996 Mar;37(1):5–14.

Clinical and research contributions of the intracarotid amobarbital procedure to neuropsychology. Jones–Gotman M, et al. **Brain Cogn** 1997 Feb;33(1):1–6 (20 ref.)

Clinical and experimental research. Future directions in neurolinguistics in general and brain and language in particular [editorial] Whitaker HA. **Brain Lang** 1996 Jan; 52(1):1–2

Reinvigorating New York's academic biomedical research enterprise. Rowe JW, et al. **Bull N Y Acad Med** 1997 Summer;74(1):15–9

Cq sources/bibliography. **Camb Q Healthc Ethics** 1996 Summer;5(3):422–4

Evaluation of the Heart and Stroke Foundation of Canada Research Scholarship Program: research productivity and impact. Armstrong PW, et al. **Can J Cardiol** 1997 May; 13(5):507–16

Basic research: a continuing imperative for clinical practice. Olley PM. **Can J Cardiol** 1996 Oct;12(10):1007–11

Health research in the developing world: a gastroenterological view from Bangladesh. Hamilton JR. **Can J Gastroenterol** 1997 Jan–Feb;11(1):94–8 (25 ref.)

Publish or perish [letter; comment] Jones G. **Can Med Assoc J** 1997 May 15;156(10):1382–3. Comment on: Can Med Assoc J 1996 Oct 1;155(7):877–82. Comment on: Can Med Assoc J 1996 Oct 1;155(7):897–8.

Diabetes research: are we getting anywhere? [editorial; comment] Zinman B. **Can Med Assoc J** 1996 Nov 1; 155(9):1271–4. Comment on: Can Med Assoc J 1996 Nov 1;155(9):1306–8.

An ethicist's commentary on the case of the infected research animal. Rollin BE. **Can Vet J** 1997 Mar;38(3):136

An agenda for clinical research in geriatrics. Cohen HJ. **Cancer** 1997 Oct 1;80(7):1294–301

The biology of aging: the current research agenda. Ershler WB, et al. **Cancer** 1997 Oct 1;80(7):1284–93 (103 ref.)

The role of advocacy in cancer research: not a monster. Langer AS. **Cancer Invest** 1997;15(5):500–2

World Medical Association Declaration of Helsinki. Recommendations guiding physicians in biomedical research involving human subjects. **Cardiovasc Res** 1997 Jul;35(1):2–3

Differential electrophysiology of repolarisation from clone to clinic. Coronel R, et al. **Cardiovasc Res** 1997 Mar; 33(3):503–17 (30 ref.)

Sense and nonsense about the impact factor. Opthof T. **Cardiovasc Res** 1997 Jan;33(1):1–7

Special emphasis panel on integrative research [news] Heistad DD, et al. **Circulation** 1997 Apr 15;95(8):1977

Surrogates, semantics, and sensible public policy. Sobel BE, et al. **Circulation** 1997 Mar 18;95(6):1661–3

What are you waiting for? [editorial] Woolley M. **Circulation** 1996 Oct 15;94(8):1802–3

Beyond statistics: what is really important in medicine? Feinstein AR. **Cleve Clin J Med** 1997 Mar;64(3):127–8

Experience with nurturing clinical investigation in Alberta. Magnan JW, et al. **Clin Invest Med** 1997 Aug;20(4):273–6

Report from the University of Toronto Department of Medicine Ad Hoc Committee on career development of clinician scientists. Siminovitch K. **Clin Invest Med** 1997 Aug;20(4):265–7

Women in biomedical research—addressing the challenges. Whiteside C, et al. **Clin Invest Med** 1997 Aug;20(4):268–72

Maternal nutrition and the outcome of pregnancy. A renaissance in research. Brown JE, et al. **Clin Perinatol** 1997 Jun;24(2):433–49 (101 ref.)

Dissemination of research results to clinicians an art in itself. Silversides A. **CMAJ** 1997 Jun 15;156(12):1746–7

From graduate student to ethnic researcher: a challenging journey. Gonzalez V. **Cult Divers Ment Health** 1995; 1(2):107–24

Careless talk costs grants [letter] Akers A. **Curr Biol** 1996 Sep 1;6(9):1047

Taking chances. James AA. **Curr Biol** 1996 Jul 1;6(7):761

Secrecy in research: cooperation and costimulation in immunology [editorial] Rosenberg SA. **Curr Opin Immunol** 1996 Oct;8(5):611–2

Research priorities for the WHO Global Programme for Vaccines and Immunization. Lambert PH. **Dev Biol Stand** 1996;87:45–9 (0 ref.)

Outcomes research [editorial] Banta JV. **Dev Med Child Neurol** 1997 Jun;39(6):357

Are research and policy advocacy two separate worlds? [letter] Glasgow RE. **Diabetes Care** 1996 Oct;19(10):1165–6

To bridge science and patient care in diabetes [published erratum appears in Diabetologia 1996 Sep;39(9):1130] Berger M. **Diabetologia** 1996 Jul;39(7):749–57 (85 ref.)

European Dimension of Diabetes Research. de Leiva A, et al. **Diabetologia** 1996 Sep;39(9):suppl 5–11

Complete and restricted alternating treatments designs [letter] Rubinstein A. **Ear Hear** 1996 Feb;17(1):78

International meeting on research advances and rabies control in the Americas [news] Rupprecht CE. **Emerg Infect Dis** 1996 Jul–Sep;2(3):243

Service utilization research: goals and prospects. Sytema S. **Epidemiol Psichiatr Soc** 1997 Jan–Apr;6(1 Suppl):127–36

Foreword: the key role of research in making rational mental health services. Tansella M. **Epidemiol Psichiatr Soc** 1997 Jan–Apr;6(1 Suppl):XIII–XVI

Institutional racism and the medical/health complex: a conceptual analysis. King G. **Ethn Dis** 1996 Winter–Spring; 6(1–2):30–46 (99 ref.)

Why we should continue to study race...but do a better job: an essay on race, racism and health. La Veist TA. **Ethn Dis** 1996 Winter–Spring;6(1–2):21–9 (85 ref.)

Changing views: new perspectives in child psychiatric research. Remschmidt H. **Eur Child Adolesc Psychiatry** 1996 Apr;5(1):2–10

The role of basic arrhythmia research. The continued need for experiments in the intact heart and organism. Allessie A, et al. **Eur Heart J** 1995 Nov;16(11):1469–75 (81 ref.)

Scientific creativity in biomedical research: some case histories. Holmes FL. **Eur J Clin Chem Clin Biochem** 1996 Dec;34(12):941–8 (26 ref.)

Concept of bridging studies and ethical concerns [letter; comment] Koch HJ. **Eur J Clin Pharmacol** 1996;50(3):245–6 . Comment on: Eur J Clin Pharmacol 1995;48(6):421–8.

Ethics and research. Carriero A, et al. **Eur Radiol** 1996;6 Suppl 1:S11–5 (21 ref.)

How to present research data consistently in a scientific paper. Laniado M. **Eur Radiol** 1996;6 Suppl 1:S16–8

Organization of research in radiology: the American model. Saini S. **Eur Radiol** 1996;6 Suppl 1:S3–4

Family practice residency program directors' views on research. DeHaven MJ, et al. **Fam Med** 1997 Jan;29(1):33–7

Research on abortion is objectionable [letter; comment] Foley EC. **Fam Med** 1996 Jul–Aug;28(7):464. Comment on: Fam Med 1996 Mar;28(3):198–203.

Exploring qualitative research in general practice. Proceedings of a conference. Durham, United Kingdom, 19 March 1996. **Fam Pract** 1996 Dec;13 Suppl 1:S1–30

The use of historical study in medical research. Jackson M. **Fam Pract** 1996 Dec;13 Suppl 1:S17–21

Qualitative research: challenges for integration support and dissemination. Jones R. **Fam Pract** 1996 Dec;13 Suppl 1:S22–6

Biomedical research: a Louisiana Purchase for the 21st Century. Rogers PG. **FASEB J** 1997 Apr;11(5):305–7

Ten steps to writing a research proposal [editorial] Barbieri RL, et al. **Fertil Steril** 1996 Nov;66(5):690–2

Foot and ankle research priority: report from the Research Council of the American Orthopaedic Foot and Ankle Society. Saltzman CL, et al. **Foot Ankle Int** 1997 Jul; 18(7):447–8

Why: gene therapy? [editorial] Dalgleish AG. **Gene Ther** 1997 Jul;4(7):629–30

Incapacitated research. Capron AM. **Hastings Cent Rep** 1997 Mar–Apr;27(2):25–7

Hope and the limits of research. Daugherty CK, et al. **Hastings Cent Rep** 1996 Sep–Oct;26(5):20; discussion 20–2

Trust, The fragile foundation of contemporary biomedical research. Kass NE, et al. **Hastings Cent Rep** 1996 Sep–Oct; 26(5):25–9

Implications of genetic research for medical practice and education. Tam EK. **Hawaii Med J** 1997 Jun;56(6):140–1

Evolving market will change clinical research. Burnett DA. **Health Aff (Millwood)** 1996 Fall;15(3):90–2

Research needs for managed care. Cutler CM. **Health Aff (Millwood)** 1996 Fall;15(3):93–4

Getting research into practice. Bouchier IA. **Health Bull (Edinb)** 1997 Jan;55(1):62–7 (14 ref.)

Measurement of body composition: applications in hormone research. Pierson RN Jr, et al. **Horm Res** 1997;48 Suppl 1:56–62 (17 ref.)

Ethics ... National Institutes of health has endorsed a controversial needle exchange research project [news] **Hosp Health Netw** 1997 Jan 20;71(2):19

Research stimulating programme for interns. Bansal RK. **Indian J Med Sci** 1996 Jun;50(6):185–9

Risk and cause in medical science. Kumar R, et al. **Indian Pediatr** 1995 Sep;32(9):1031–5 (5 ref.)

Research communication media: creating an outstanding impression with abstracts, poster exhibits, and slides. Russell JA, et al. **Instr Course Lect** 1994;43:625–37 (29 ref.)

Research priorities in leprosy: an operational perspective. Feenstra P. **Int J Lepr Other Mycobact Dis** 1996 Dec;64(4 Suppl):S50–1

Bangkok Workshop on Leprosy Research. Research needs of the post-elimination phase. Pirayavaraporn C. **Int J Lepr Other Mycobact Dis** 1996 Dec;64(4 Suppl):S56–7

Bangkok Workshop on Leprosy Research. Research needs related to disabilities and rehabilitation. Smith WC, et al. **Int J Lepr Other Mycobact Dis** 1996 Dec;64(4 Suppl):S52–4; discussion S54–5 (12 ref.)

On the integration of research [letter] Björntorp P. **Int J Obes Relat Metab Disord** 1996 Oct;20(10):973

A national survey to medical and dental schools to assess the level of undergraduate teaching and research about HIV/AIDS in the UK. Carter YH, et al. **Int J STD AIDS** 1997 Feb;8(2):88–94

Ethical issues concerning research in patients with dementia. Società Italiana di Neurologia (SIN)--Working Group "Bioethics and Neurology" [published erratum appears in Ital J Neurol Sci 1997 Feb;18(1):68] **Ital J Neurol Sci** 1996 Oct;17(5):371–5

Role of neurological research in rehabilitation after central nervous system diseases [letter; comment] Mari F, et al. **Ital J Neurol Sci** 1996 Jun;17(3):255–6. Comment on: Ital J Neurol Sci 1995 Oct;16(7):473–7.

Science, politics, and AIDS prevention policy. Bayer R. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997;14 Suppl 2:S22–9 (20 ref.)

Investigating attitudes to research in primary health care teams. Hicks C, et al. **J Adv Nurs** 1996 Nov;24(5):1033–41

Problems in family therapy research [letter; comment] Hodes M. **J Am Acad Child Adolesc Psychiatry** 1996 Sep; 35(9):1105. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Jan;35(1):6–16.

President's page: cardiovascular research—is something missing? [news] Lewis RP. **J Am Coll Cardiol** 1997 Feb; 29(2):457–8

Clinical research on weight loss must also have practical application [letter; comment] Kenney JJ. **J Am Diet Assoc** 1997 Aug;97(8):840. Comment on: J Am Diet Assoc 1997 Feb;97(2):151–6.

Emergency research and research involving subjects with cognitive impairment: ethical connections and contrasts [editorial; comment] Dresser R, et al. **J Am Geriatr Soc** 1997 Apr;45(4):521–3. Comment on: J Am Geriatr Soc 1997 Apr;45(4):474–81.

DOs climb back on the research bandwagon [letter] Patriquin DA. **J Am Osteopath Assoc** 1996 May;96(5):275–6

Research programs of the AOA and their role in osteopathic medical education. Retz KC, et al. **J Am Osteopath Assoc** 1996 Nov;96(11):679–83

Morally relevant differences between animals and human beings justifying the use of animals in biomedical research [see comments] Dennis JU. **J Am Vet Med Assoc** 1997 Mar 1;210(5):612–8. Comment in: J Am Vet Med Assoc 1997 Apr 15;210(8):1100; discussion 1100–1. Comment in: J Am Vet Med Assoc 1997 Apr 15;210(8):1100–1.

More letters on article about nonhuman animal research [letter; comment] Harvey SB. **J Am Vet Med Assoc** 1996 Aug 15;209(4):714–5. Comment on: J Am Vet Med Assoc 1996 Jun 1;208(11):1798–801.

Evaluation of a survey of the diplomates of the American College of Laboratory Animal Medicine on use of analgesic agents in animals used in biomedical research. Hubbell JA, et al. **J Am Vet Med Assoc** 1996 Sep 1;209(5):918–21

More letters on article about nonhuman animal research [letter; comment] Kraus AL. **J Am Vet Med Assoc** 1996 Aug 15;209(4):715–6; discussion 716–7. Comment on: J Am Vet Med Assoc 1996 Jun 1;208(11):1798–801.

More letters on article about nonhuman animal research [letter; comment] McPherson C. **J Am Vet Med Assoc** 1996 Aug 15;209(4):714; discussion 716–7. Comment on: J Am Vet Med Assoc 1996 Jun 1;208(11):1798–801.

More letters on article about nonhuman animal research [letter; comment] Silverman J. **J Am Vet Med Assoc** 1996 Aug 15;209(4):713–4; discussion 716–7. Comment on: J Am Vet Med Assoc 1996 Jun 1;208(11):1798–801.

The myth of stolen-animal trafficking [letter] Strandberg J. **J Am Vet Med Assoc** 1997 Jul 1;211(1):27

Comments on bovine tuberculosis research and testing [letter; comment] Waldrup KA. **J Am Vet Med Assoc** 1996 Dec 15;209(12):1996. Comment on: J Am Vet Med Assoc 1996 Nov 1;209(9):1529–30.

Animal rights groups target NASA's Bion projects [news] Walker E. **J Am Vet Med Assoc** 1996 Dec 15; 209(12):1988–9

More letters on article about nonhuman animal research [letter; comment] Ward GM. **J Am Vet Med Assoc** 1996 Aug 15;209(4):713; discussion 716–7. Comment on: J Am Vet Med Assoc 1996 Jun 1;208(11):1798–801.

Protein levels in beef cattle finishing diets: industry application, university research, and systems results. Galyean ML. **J Anim Sci** 1996 Nov;74(11):2860–70 (33 ref.)

Potential bias in classroom research: comparison of children with permission and those who do not receive permission to participate. Noll RB, et al. **J Clin Child Psychol** 1997 Mar;26(1):36–42

Diagnostic interpretation of electrocardiograms in population-based research: computer program research physicians, or cardiologists? de Bruyne MC, et al. **J Clin Epidemiol** 1997 Aug;50(8):947–52

Family dynamics and children in medical research [see comments] Gordon VM, et al. **J Clin Ethics** 1996 Winter; 7(4):349–54; discussion 362–4. Comment in: J Clin Ethics 1996 Winter;7(4):355–61.

Audience and authority: the story in front of the story [comment] Zoloth-Dorfman L. **J Clin Ethics** 1996 Winter; 7(4):355–61. Comment on: J Clin Ethics 1996 Winter;7(4):349–54; discussion 362–4.

The clinical investigator: bewitched, bothered, and bewildered--but still beloved [editorial] Goldstein JL, et al. **J Clin Invest** 1997 Jun 15;99(12):2803–12 (38 ref.)

Passing the baton at high speed: time to hand over to a new editorial board [editorial] Varki AP, et al. **J Clin Invest** 1997 Feb 15;99(4):553–4

Publication productivity of clinical and counseling psychologists. Brems C, et al. **J Clin Psychol** 1996 Nov; 52(6):723–5

The ecology of psychotherapy research. Anderson T, et al. **J Consult Clin Psychol** 1996 Aug;64(4):776–82

Introduction to the special section on the contribution of psychotherapy and pharmacotherapy research to national mental health care. Barchas JD, et al. **J Consult Clin Psychol** 1996 Aug;64(4):635–7

Epilogue: bridging the gap between research on attachment and psychopathology. del Carmen R, et al. **J Consult Clin Psychol** 1996 Apr;64(2):291–4 (33 ref.)

Meta-analytic evaluation of skills training research for individuals with severe mental illness. Dilk MN, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1337–46

Structural analysis of social behavior as a common metric for programmatic psychopathology and psychotherapy research. Henry WP. **J Consult Clin Psychol** 1996 Dec; 64(6):1263–75

Random versus nonrandom assignment in controlled experiments: do you get the same answer? Shadish WR, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1290–305 (169 ref.)

The progress of lay involvement in the NHS Research and Development Programme. Oliver S. **J Eval Clin Pract** 1996 Nov;2(4):273–80

Career paths for clinical scientists. Farrell GC. **J Gastroenterol Hepatol** 1996 Sep;11(9):891–4

A commentary on: career paths for basic scientists in medical research. Ramm GA. **J Gastroenterol Hepatol** 1996 Sep; 11(9):882–4

Myths and realities in clinical research. Ward M. **J Gastroenterol Hepatol** 1996 Sep;11(9):887–91

Conducting research as a busy clinician–teacher or trainee. Starting blocks, hurdles, and finish lines. Kroenke K. **J Gen Intern Med** 1996 Jun;11(6):360–5

How can clinicians incorporate research advances into practice? Larson EB. **J Gen Intern Med** 1997 Apr;12 Suppl 2:S20–4 (13 ref.)

Remote operation: a selective review of research into visual depth perception. Reinhardt-Rutland AH. **J Gen Psychol** 1996 Jul;123(3):237–48 (54 ref.)

Research and politics in policymaking for Social Security [editorial] Berkowitz ED. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):S115–6

Translating research into practice: controlled clinical trials and their influence on glaucoma management. Wilson MR, et al. **J Glaucoma** 1996 Apr;5(2):139–46

Translational research and responsibility [editorial] Collins NH. **J Hematother** 1996 Dec;5(6):597–8

The ethics of research into the cause(s) of homosexuality. Schüklenk U, et al. **J Homosex** 1996;31(3):5–30 (85 ref.)

The interdisciplinary nature of surgical research [editorial] Smith AC. **J Invest Surg** 1997 Jul–Aug;10(4):iii–iv

The American Federation for Medical Research, Southern section annual meetings. New Orleans, Louisiana, February 1997. Abstracts. **J Investig Med** 1997 Jan;45(1):1A–73A

The American Federation for Medical Research, Western section annual meetings. Carmel, California, February 1997. Abstracts. **J Investig Med** 1997 Jan;45(1):74A–179A

Biomedicine '97. Medical research from bench to bedside. Washington, D.C., April 25–27, 1997. Abstracts. **J Investig Med** 1997 Mar;45(3):197A–293A

The American Federation for Clinical Research, Midwestern section and Eastern section annual meetings. 1996. Abstracts. **J Investig Med** 1996 Sep;44(7):339A–417A

The JIM interview. Art Levinson, PhD [interview] Levinson A. **J Investig Med** 1997 Jun;45(5):230–7

Use of human tissues in research: clarifying clinician and researcher roles and information flows. Merz JF, et al. **J Investig Med** 1997 Jun;45(5):252–7

The state of the art of research on chiropractic education. Adams AH, et al. **J Manipulative Physiol Ther** 1997 Mar–Apr;20(3):179–84

Basic science research in chiropractic: the state of the art and recommendations for a research agenda. Brennan PC, et al. **J Manipulative Physiol Ther** 1997 Mar–Apr; 20(3):150–68 (182 ref.)

The National Workshop to Develop the Chiropractic Research Agenda [published erratum appears in J Manipulative Physiol Ther 1997 May;20(4):302] Hawk C, et al. **J Manipulative Physiol Ther** 1997 Mar–Apr; 20(3):147–9

Clinical research within the chiropractic profession: status, needs and recommendations. Sawyer C, et al. **J Manipulative Physiol Ther** 1997 Mar–Apr;20(3):169–78

Research attitudes among chiropractic college students. Zhang JQ. **J Manipulative Physiol Ther** 1996 Sep; 19(7):446–53

Animal research [letter; comment] Bernstein J. **J Med Ethics** 1997 Apr;23(2):119. Comment on: J Med

Ethics 1996 Oct;22(5):300–1; discussion 302–3.
Ethical problems of futile research [editorial] Evans JG. **J Med Ethics** 1997 Feb;23(1):5–6
Ethical problems in psychiatric research. Lehrman NS, et al. **J Ment Health Adm** 1997 Spring;24(2):227–50
Fisher suit against Pitt and the federal government settled [news] **J Natl Cancer Inst** 1997 Sep 17;89(18):1336–7
The public applauds cancer research but not how research priorities are set [news] Jenks S. **J Natl Cancer Inst** 1997 Mar 5;89(5):350–1
Panel grapples with the legacy of "race medicine" in research [news] Reynolds T. **J Natl Cancer Inst** 1997 Jun 4; 89(11):758–61
Major cancer groups form "Friends of Cancer Research" [news] Smeltz KJ. **J Natl Cancer Inst** 1997 Feb 5; 89(3):192–4
Meunier crafts new approach to European clinical cancer research [news] Steimle S. **J Natl Cancer Inst** 1997 Feb 19;89(4):277–9
Strategic planning workshop on research needs for neutron capture therapy. Feinendegen LE. **J Neurooncol** 1997 May; 33(1–2):179–85
Nutrition in pediatric HIV infection: setting the research agenda. Working group session report: setting the clinical research agenda: domestic and international perspectives. Oleske JM, et al. **J Nutr** 1996 Oct;126(10 Suppl):2681S–2683S
Nutrition in pediatric HIV infection: setting the research agenda. Keynote address. Paul W. **J Nutr** 1996 Oct;126(10 Suppl):2599S–2601S
This I have learned from over 40 years of personality research. Epstein S. **J Pers** 1997 Mar;65(1):3–32 (75 ref.)
Low-end specificity of four depression measures: findings and suggestions for the research use of depression tests. Beebe DW, et al. **J Pers Assess** 1996 Oct;67(2):272–84
Scientific research on the pineal gland and melatonin: a bibliometric study for the period 1966–1994. López-Muñoz F, et al. **J Pineal Res** 1996 Apr;20(3):115–24
Depression: a need for new directions in practice and research. Snaith RP. **J Psychosom Res** 1995 Nov; 39(8):943–5
Getting research into practice. Smith HE, et al. **J R Coll Physicians Lond** 1996 Jul–Aug;30(4):385–9
On the importance of procedural descriptions in treatment efficacy research: a response to Snow, Swisher, McNamara, and Kiernan (1996) [letter] Camarata S, et al. **J Speech Hear Res** 1996 Feb;39(1):222–3
A potential limitation of treatment efficacy research: a comment on Camarata, Nelson, and Camarata (1994) [letter] Snow D, et al. **J Speech Hear Res** 1996 Feb; 39(1):221–2
News from the Society for the Advancement of Women's Health Research [news] Greenberger P. **J Womens Health** 1997 Feb;6(1):31–3
Withholding research results in academic life science. Evidence from a national survey of faculty. Blumenthal D, et al. **JAMA** 1997 Apr 16;277(15):1224–8
The 1996 Albert Lasker Medical Research Awards. The discovery of endothelium-derived relaxing factor and its importance in the identification of nitric oxide. Furchgott RF. **JAMA** 1996 Oct 9;276(14):1186–8
Legacies of Nuremberg. Medical ethics and human rights [editorial] [see comments] Grodin MA, et al. **JAMA** 1996 Nov 27;276(20):1682–3. Comment in: JAMA 1997 Mar 5;277(9):712; discussion 713–4. Comment in: JAMA 1997 Mar 5;277(9):712–3; discussion 713–4. Comment in: JAMA 1997 Mar 5;277(9):713; discussion 713–4.
Rapid research response emphasized in unique prostate cancer program [news] Gunby P. **JAMA** 1997 Mar 26; 277(12):945–8
Learning from the past [editorial] Huang LY. **JAMA** 1997 Oct 1;278(13):1114
A piece of my mind. Subject to payment? McGee G. **JAMA** 1997 Jul 16;278(3):199–200
The 1996 Albert Lasker Medical Research Awards. Signal transduction using nitric oxide and cyclic guanosine monophosphate. Murad F. **JAMA** 1996 Oct 9; 276(14):1189–92
Breast cancer researchers cleared of charges [news] Skolnick AA. **JAMA** 1997 Mar 26;277(12):950
The cotton rat in biomedical research. Faith RE, et al. **Lab Anim Sci** 1997 Aug;47(4):337–45 (90 ref.)
Good manners for the pharmaceutical industry [editorial] **Lancet** 1997 Jun 7;349(9066):1635
A research culture that asks too much [editorial] [see comments] **Lancet** 1997 Feb 22;349(9051):515. Comment in: Lancet 1997 Apr 12;349(9058):1104–5. Comment in: Lancet 1997 Apr 12;349(9058):1105.
HIV-1 researchers talk cautiously of a good year [news] Atterstam I. **Lancet** 1997 Sep 27;350(9082):937
Malaria vaccine [letter; comment] Collins WE, et al. **Lancet** 1996 Nov 16;348(9038):1377. Comment on: Lancet 1996 Sep 14;348(9029):695. Comment on: Lancet 1996 Sep 14;348(9029):701–7.
A research culture that asks too much [letter; comment] Cook GC. **Lancet** 1997 Apr 12;349(9058):1105. Comment on: Lancet 1997 Feb 22;349(9051):515.
Biomedical research in an era of unlimited aspirations and limited resources. Fauci AS. **Lancet** 1996 Oct 12; 348(9033):1002–3
Would you trust a surrogate respondent? Gluud C, et al. **Lancet** 1997 Mar 8;349(9053):665–6
A research culture that asks too much [letter; comment] Kay LA. **Lancet** 1997 Apr 12;349(9058):1104–5. Comment on: Lancet 1997 Feb 22;349(9051):515.
UK country profile [letter] Rees J. **Lancet** 1997 Aug 30; 350(9078):670
Thoughts for humble servants of science [letter] Skelton J, et al. **Lancet** 1997 Jan 11;349(9045):139–40
European research on Alzheimer's disease [letter; comment] Winblad B, et al. **Lancet** 1997 Jul 5;350(9070):73–4. Comment on: Lancet 1997 May 24;349(9064):1546–9.
Daffodils and cancer [editorial] Burton RC, et al. **Med J Aust** 1997 Aug 18;167(4):180–1
Fraud and misconduct in medical research. Lock S. **Med Leg J** 1996;64 (Pt 4):139–52
Research on physical activity and disability: an emerging national priority. Rimmer JH, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1366–72
Report of the First Brazilian Symposium on Basic Research in HIV/AIDS. Galvão-Castro B, et al. **Mem Inst Oswaldo Cruz** 1996 May–Jun;91(3):329–34
Medical informatics, art or science? van Bemmel JH. **Methods Inf Med** 1996 Sep;35(3):157–72; discussion 173–201 (54 ref.)
U.S. military overseas medical research laboratories. Gambel JM, et al. **Mil Med** 1996 Nov;161(11):638–45
The Whitehead Institute for Biomedical Research. Fink GR. **Mol Med** 1996 Sep;2(5):530–2
The Walter and Eliza Hall Institute of Medical Research. Nossal GJ. **Mol Med** 1996 Mar;2(2):165–8
New research on psychiatric genetics at the 149th annual meeting of the American Psychiatric Association [news] Hu RJ. **Mol Psychiatry** 1996 Jul;1(3):174–5
Drug abuse and addiction research: implications for the field of psychiatry [editorial] Leshner AI. **Mol Psychiatry** 1996 Jul;1(3):168–9
Research and/or training on the newly dead: the Jewish perspective. Rosner F. **Mt Sinai J Med** 1997 Mar; 64(2):120–4
Research in emergency medicine. Manning JE. **N C Med J** 1997 Jul–Aug;58(4):296–9
The messenger under attack — intimidation of researchers by special-interest groups. Deyo RA, et al. **N Engl J Med** 1997 Apr 17;336(16):1176–80
The politics of human-embryo research [letter; comment] Fletcher JC, et al. **N Engl J Med** 1996 Oct 17;335(16):1243; discussion 1243–4. Comment on: N Engl J Med 1996 May 16;334(20):1329–32.
The politics of human-embryo research [letter; comment] Green RM, et al. **N Engl J Med** 1996 Oct 17;335(16):1243; discussion 1243–4. Comment on: N Engl J Med 1996 May 16;334(20):1329–32.
Protecting the patentability of your collaborative research. Bennett VC, et al. **Nat Biotechnol** 1997 May;15(5):472–4
Boehringer networks to get ahead in gene therapy [news] Johnson E. **Nat Biotechnol** 1997 Jan;15(1):12–3
Ethical issues in genetic research: disclosure and informed consent. Reilly PR, et al. **Nat Genet** 1997 Jan;15(1):16–20
Research and the researcher [editorial] **Nat Med** 1997 Aug; 3(8):815
The Howard Hughes Medical Institute and science in Central Europe, the Baltics and the former Soviet Union. Choppin PW. **Nat Med** 1997 Sep;3(9):949–50
Cloning research a possibility [news] Cimons M. **Nat Med** 1997 Jul;3(7):710
FDA research [letter] Epstein SL, et al. **Nat Med** 1997 Aug; 3(8):816
Researching alternative medicine. Jonas WB. **Nat Med** 1997 Aug;3(8):824–7
Two cheers for the multilateral malaria initiative [editorial] [see comments] **Nature** 1997 Jul 17;388(6639):211. Comment in: Nature 1997 Jul 31;388(6641):416.
Games people play with authors' names [editorial] [see comments] **Nature** 1997 Jun 26;387(6636):831. Comment in: Nature 1997 Jul 24;388(6640):320. Comment in: Nature 1997 Sep 4;389(6646):11.
Redesigning drug discovery. **Nature** 1996 Nov 7;384(6604 Suppl):1–5
Priorities for AIDS research set out by US task force [news] **Nature** 1996 Dec 19–26;384(6610):606
European convention allows use of human embryos [news] Abbot A. **Nature** 1996 Nov 28;384(6607):298
Europe seeks to rally regional research [news] Abbott A. **Nature** 1997 Jan 16;385(6613):192–3
Malaria meeting charts rocky path ahead [news] [see comments] Butler D. **Nature** 1997 Jul 17;388(6639):219. Comment in: Nature 1997 Jul 31;388(6641):416.
BSE researchers bemoan 'ministry secrecy' [news] Butler D. **Nature** 1996 Oct 10;383(6600):467–8
Research 'essential' for control strategy [news] Butler D, et al. **Nature** 1997 Apr 10;386(6625):537
Patent threat to research [letter] [see comments] Dalton H, et al. **Nature** 1997 Feb 20;385(6618):672. Comment in: Nature 1997 Apr 17;386(6626):641.
Miami AIDS researcher denies charges over billing irregularities [news] Dalton R. **Nature** 1997 Aug 21; 388(6644):704
Power games in Austrian science [letter] Holzer P. **Nature** 1996 Dec 5;384(6608):404
Skewed medical goals' revealed by Indian survey [news] Jayaraman KS. **Nature** 1997 Jul 31;388(6641):410
Acceptance of marijuana therapy prompts call for more research [news] Lehrman S. **Nature** 1996 Nov 14; 384(6605):95
Researchers resist copyright laws that could endanger data access [news] Macilwain C. **Nature** 1996 Oct 24; 383(6602):653
British scientists seek recognition of role in 'life on Mars' debate... [news] Masood E. **Nature** 1996 Nov 7; 384(6604):3–4
US air pollution rules stir up a stink about research [news] Reichhardt T. **Nature** 1997 Jul 3;388(6637):5
Molecular biologists in Asia and Pacific plan research network [news] Swinbanks D. **Nature** 1997 Jul 3; 388(6637):3
The dog did nothing in the night-time [letter] Thomas A, et al. **Nature** 1997 May 8;387(6629):119
Japan's life sciences take integrated road [news] Triendl R, et al. **Nature** 1997 Jul 17;388(6639):216
Advances encourage Nobel winner to head AIDS vaccine effort [news] Wadman M. **Nature** 1996 Dec 19–26; 384(6610):604
Cloning for research 'should be allowed' [news] Wadman M. **Nature** 1997 Jul 3;388(6637):6
Marijuana research gets backing at NIH [news] [see comments] Wadman M. **Nature** 1997 Feb 27;385(6619):756 . Comment in: Nature 1997 Mar 27;386(6623):320.
Congress and Varmus in clash over 'illegal' embryo research [news; comment] Wadman M. **Nature** 1997 Jun 26; 387(6636):833–4. Comment on: Nature 1997 Jan 16;385(6613):190.
Exonerated researcher settles for $3m [news] Wadman M. **Nature** 1997 Sep 4;389(6646):3
Whodunnit? [letter] White B. **Nature** 1997 Sep 25; 389(6649):326
Subjects, data, and videotapes. Heacock P, et al. **Nurs Res** 1996 Nov-Dec;45(6):336–8
Gender bias in health care [letter] Fisher NM. **Nurse Pract** 1997 Jun;22(6):208, 210, 212–3
Research and development on functional foods in Malaysia. Ahmad S. **Nutr Rev** 1996 Nov;54(11 Pt 2):S169–71 (13 ref.)
The importance of outcomes research in documenting the benefit of nutrition intervention [editorial] Voss AC, et al. **Nutrition** 1996 Jan;12(1):59–60
Reference listings in cancer research. **Oncol Res** 1995; 7(9):481–5
Medical scholarship: how can a practicing surgeon do research? [editorial] Neely JG, et al. **Otolaryngol Head Neck Surg** 1996 Oct;115(4):275–7
Local research ethics committees in the UK. Clein P. **Palliat Med** 1997 Jan;11(1):55–6
The ethical boundaries of drug research in pediatrics. Rowell M, et al. **Pediatr Clin North Am** 1997 Feb;44(1):27–40 (47 ref.)
Society for Pediatric Research presidential address 1996: Star Wars empiricism—will the empire (SPR) strike back? Abramson JS. **Pediatr Res** 1996 Dec;40(6):784–9
Wrong turns in sudden infant death syndrome research [see comments] Bergman AB. **Pediatrics** 1997 Jan;99(1):119–21 . Comment in: Pediatrics 1997 Jun;99(6):924–5.
Closing the gap between alcoholism research and practice: the case for pharmacotherapy. Meza E, et al. **Psychiatr Serv** 1996 Sep;47(9):917–20 (49 ref.)
ICD-10 field trial of the Diagnostic Criteria for Research in German-speaking countries. Introduction. Dilling H, et al. **Psychopathology** 1996;29(5):258–9
Design of the ICD-10 field trial of the Diagnostic Criteria for Research in German-speaking countries. Stieglitz RD, et al. **Psychopathology** 1996;29(5):260–6
The need for randomized controlled trials. The Cochran Initiative [editorial] Wise TN, et al. **Psychosomatics** 1996 Nov-Dec;37(6):499–501
The Internet: a modern Pandora's box? Mayer M, et al. **Qual Life Res** 1996 Dec;5(6):568–71
Considerations for toxicology studies of respiratory drug products. DeGeorge JJ, et al. **Regul Toxicol Pharmacol** 1997 Apr;25(2):189–93 (16 ref.)
Readability of written informed consent forms used in exercise and sport psychology research. Cardinal BJ, et al. **Res Q Exerc Sport** 1996 Sep;67(3):360–2
Future directions for resuscitation research. I. Advanced airway control measures. Benson D, et al. **Resuscitation** 1996 Jul;32(1):51–62 (51 ref.)
Future directions for resuscitation research. II. External cardiopulmonary resuscitation basic life support. Bircher N, et al. **Resuscitation** 1996 Jul;32(1):63–75 (68 ref.)
Cardiac arrest research in humans—insights into failure. Paradis NA. **Resuscitation** 1996 Apr;31(2):93–100 (30 ref.)
Future directions for resuscitation research: introduction. Safar P, et al. **Resuscitation** 1996 Jul;32(1):45–50 (20 ref.)
Taking research forward at MEDUNSA. Priority-setting, research infrastructure and capacity development [editorial] Aspinall S. **S Afr Med J** 1996 Dec;86(12):1527
Establishment of human DNA and plasma or serum banks for research purposes—a proposal [letter] de St Jean van der Reit F. **S Afr Med J** 1997 May;87(5):622–3
Desegregating health statistics and health research in South Africa [see comments] Ellison GT, et al. **S Afr Med J** 1996 Oct;86(10):1257–62. Comment in: S Afr Med J 1996 Dec;86(12):1559. Comment in: S Afr Med J 1997 Mar;87(3):329–31.
Race as a research parameter [letter; comment] Szabo CP. **S Afr Med J** 1996 Dec;86(12):1559. Comment on: S Afr Med J 1996 Oct;86(10):1257–62.
Animal research is wasteful and misleading. Barnard ND,

et al. **Sci Am** 1997 Feb;276(2):80–2
Animal research is vital to medicine. Botting JH, et al. **Sci Am** 1997 Feb;276(2):83–5
The benefits and ethics of animal research. Rowan AN. **Sci Am** 1997 Feb;276(2):79
Russia steps into AIDS research arena [news] **Science** 1997 Apr 4;276(5309):23
South wants place at table in new collaborative effort [news] Bagla P. **Science** 1997 Sep 26;277(5334):1918–9
Research and regulation at FDA [letter] [see comments] Berkower I. **Science** 1997 Apr 11;276(5310):183–4. Comment in: Science 1997 May 2;276(5313):661.
The reluctant man of the year [news] Cohen J. **Science** 1997 Jan 17;275(5298):298
All roads lead to Rome [editorial] Daie J, et al. **Science** 1996 Nov 1;274(5288):701
Approaches to AIDS research [letter] Desrosiers RC. **Science** 1997 Jan 3;275(5296):13
Life-sciences R&D, national prosperity, and industrial competitiveness. Fears R, et al. **Science** 1997 May 2; 276(5313):759–60
"Man of the Year" [letter; comment] Gorman C. **Science** 1997 Feb 21;275(5303):1049. Comment on: Science 1997 Jan 17;275(5298):298–9.
Draft research code raises hackles [news] Holden C. **Science** 1996 Dec 6;274(5293):1604
FDA under siege: the public at risk [editorial] Korn D. **Science** 1997 Jun 13;276(5319):1627
Beating scientists into plowshares. Kurland CG. **Science** 1997 May 2;276(5313):761–2
Database access fight heats up [news] Lawler A. **Science** 1996 Nov 15;274(5290):1074
African malaria studies draw attention [news] Marshall E. **Science** 1997 Jan 17;275(5298):299
Embryologists dismayed by sanctions against geneticist [news] Marshall E. **Science** 1997 Jan 24;275(5299):472
Varmus grilled over breach of embryo research ban [news] Marshall E. **Science** 1997 Jun 27;276(5321):1963
Need a reagent? Just sign here...[news] Marshall E. **Science** 1997 Oct 10;278(5336):212–3
Korean institute ponders role in global eradication efforts [news] Normile D. **Science** 1996 Dec 6;274(5293):1607
Labs form biomedical network [news] Normile D. **Science** 1997 Jun 27;276(5321):1964
EU stops fiddling while cows burn [news] O'Brien C. **Science** 1996 Nov 22;274(5291):1297–8
Animal rights: teaching or deceiving kids [editorial] Runkle D, et al. **Science** 1997 Sep 5;277(5331):1419
Continuous innovation in health [editorial] [see comments] Shine KI. **Science** 1997 Jan 3;275(5296):9. Comment in: Science 1997 Mar 28;275(5308):1863–4.
Kessler's legacy: unfinished reform [news] Stone R. **Science** 1996 Dec 6;274(5293):1603–4
Bibliography of recent literature in sleep research. **Sleep** 1996 Sep;19(7):602–8
Bibliography of recent literature in sleep research. **Sleep** 1996 Nov;19(9):749–55
Bibliography of recent literature in sleep research. **Sleep** 1996 Dec;19(10):856–64
Citations retrieved by brain information service. **Sleep** 1996 Feb;19(2):180–6
Bibliography of recent literature in sleep research. **Sleep** 1996 Jun;19(5):445–51
Bibliography of recent literature in sleep research. **Sleep** 1996 Apr;19(3):258–73
Bibliography of recent literature in sleep research. **Sleep** 1996 Oct;19(8):668–76
The International Spinal Research Trust's strategic approach to the development of treatments for the repair of spinal cord injury. Harper GP, et al. **Spinal Cord** 1996 Aug; 34(8):449–59 (57 ref.)
An agenda for primary care research on low back pain. Borkan JM, et al. **Spine** 1996 Dec 15;21(24):2880–4 (6 ref.)
The linking of research and service. Nurco DN, et al. **Subst Use Misuse** 1996 Jun;31(8):1059–62
Society of University Surgeons. Presidential address: discovery. Dunn DL. **Surgery** 1997 Aug;122(2):123–8
Interpretability of a clinical measure [letter; comment] Graham AJ, et al. **Surgery** 1997 Jan;121(1):113. Comment on: Surgery 1996 Mar;119(3):241–4.
Problems in teratology research [letter] Johnson EM. **Teratology** 1996 Apr;53(4):225–6
Conflicts of interest. BeSaw L. **Tex Med** 1997 May; 93(5):38–41
Utilization of the Diabetes Research International Network. Moudry-Munns K, et al. **Transplant Proc** 1997 Jun; 29(4):2266–7
Clinical research in the tropics [editorial] Hall AJ. **Trop Med Int Health** 1997 Jun;2(6):511–2
Progress in urodynamic research on the upper urinary tract: implications for practical urology [editorial] Kinn AC. **Urol Res** 1996;24(1):1–7 (39 ref.)
Applications and transfer of information technology in veterinary research in developing countries: the Nigerian experience. Chiejina SN, et al. **Vet Parasitol** 1996 Aug; 64(1–2):121–8
Communications: technology transfer in the developed world. Murrell KD. **Vet Parasitol** 1996 Aug;64(1–2):107–20 (19 ref.)
Research and education of veterinary parasitology in Japan. Suzuki N. **Vet Parasitol** 1996 Aug;64(1–2):3–11
Research on the welfare of pigs [letter] Hancock R. **Vet Rec** 1996 Sep 28;139(13):324
[Qualitative methods in empirical health research. V. Analyzing data and coding procedures] Maunsbach M, et al. **Nord Med** 1997 Jun;112(6):216–20 (Eng. Abstr.) **(Dan)**
[Medical research in Greenland—circumpolar health] Bjerregaard P. **Ugeskr Laeger** 1996 Dec 16;158(51):7375–8 **(Dan)**
[Follow up of the interdisciplinary researcgh program BIOTEK] Christiansen G. **Ugeskr Laeger** 1997 Apr 7; 159(15):2238 **(Dan)**
[The randomized trials: a mantra of clinical research? (letter)] Hansen NE, et al. **Ugeskr Laeger** 1997 Jun 2;159(23):3621–2 **(Dan)**
[Hearing on research quality and continuing education, Wednesday, 19 March 1997] Højgaard L. **Ugeskr Laeger** 1997 May 5;159(19):2882–3 **(Dan)**
[Danish scientific research—in international journals and in the Ugeskrift (editorial) (see comments)] Højgaard L. **Ugeskr Laeger** 1997 Mar 31;159(14):2071. Comment in: Ugeskr Laeger 1997 Jul 7;159(28):4411–3. **(Dan)**
[Registration and archiving of health services data. A new initiative from the Danish Research Fund] Jørgensen PH, et al. **Ugeskr Laeger** 1997 Feb 10;159(7):963–4 **(Dan)**
[Physician time spent on training, supervision and research at the Roskilde county hospital Fjorden] Lindhardt A, et al. **Ugeskr Laeger** 1997 Apr 21;159(17):2554–8 (Eng. Abstr.) **(Dan)**
[The need for humanistic research in medicine] Lunde IM. **Ugeskr Laeger** 1997 Mar 31;159(14):2077–81 (20 ref.) (Eng. Abstr.) **(Dan)**
[Historical misleading (letter)] Nørby S. **Ugeskr Laeger** 1997 Mar 3;159(10):1472 **(Dan)**
[Brain research: the black box is open] Olesen J. **Ugeskr Laeger** 1997 Jan 20;159(4):401–2 **(Dan)**
[The clinician and good clinical practice standards (editorial)] Rasmussen SN. **Ugeskr Laeger** 1997 Jan 20;159(4):398 **(Dan)**
[Knowledge of good clinical practice among Danish physicians. A questionnaire study among hospital-employed physicians in the Copenhagen area] Sørensen GB, et al. **Ugeskr Laeger** 1997 Jan 20;159(4):414–8 (Eng. Abstr.) **(Dan)**
[Danish medical research—in international journals and in the Ugeskrift (letter)] Sørensen TI. **Ugeskr Laeger** 1997 Sep 8;159(37):5549 **(Dan)**
[Danish medical research—in international journals and in the Ugeskrift (letter; comment)] Sørensen TI. **Ugeskr Laeger** 1997 Jul 7;159(28):4411–3. Comment on: Ugeskr Laeger 1997 Mar 31;159(14):2071. **(Dan)**
[Medical science in the Dutch language] Walvoort HC. **Ned Tijdschr Geneeskd** 1997 Jan 4;141(1):5–7 (Eng. Abstr.) **(Dut)**
[Cultured mammalian cells in homeopathy research. The similia principle in self recovery] Menges GT. **Tijdschr Diergeneeskd** 1996 Nov 15;121(22):660–1 **(Dut)**
[Am I to be a researcher?] Palo J. **Duodecim** 1995; 111(19):1827–30 **(Fin)**
[Is it worthwhile to utilize commercially research results] Ranki-Pesonen M, et al. **Duodecim** 1995;111(19):1865–71 **(Fin)**
[What is good research? (editorial)] Saksela E. **Duodecim** 1995;111(19):1811–3 **(Fin)**
[Research plan and follow-up of the project] Sariola H. **Duodecim** 1995;111(19):1833–7 **(Fin)**
[How to write a scientific paper] Teppo L, et al. **Duodecim** 1995;111(19):1860–4 **(Fin)**
[Clinical research and Huriet's law in medical oncology. Results of a French investigation among medical oncologists] Hoerni B. **Bull Cancer** 1997 Mar;84(3):305–10 (Eng. Abstr.) **(Fre)**
[Is human embryo research necessary? What are the limits of animal experimentation?] Plachot M. **Contracept Fertil Sex** 1996 Nov;24(11):802–4 **(Fre)**
[Is embryo research necessary? If yes, what are the limits and constraints?] Sureau C, et al. **Contracept Fertil Sex** 1996 Nov;24(11):800–1 **(Fre)**
[225 years of the Veterinary Institute—modern research in historic buildings] Brenig B. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):374–5 (Eng. Abstr.) **(Ger)**
[Advance through research] **Internist (Berl)** 1994 Aug;35(8 Suppl):1–8 **(Ger)**
[The structure of morality] Schroeder HE. **Schweiz Monatsschr Zahnmed** 1997;107(3):225–6 **(Ger)**
[Indications for orthopedic surgery. What does the established orthopedist need? (editorial)] Debrunner AM. **Z Orthop Ihre Grenzgeb** 1996 Nov-Dec;134(6):Oa1–2, Oa4 **(Ger)**
[Globalization of psychiatric research] Molnár G. **Orv Hetil** 1996 Nov 3;137(44):2470–1 **(Hun)**
[Scientometry, impact factor, citation index: thoughts and considerations] Varró V. **Orv Hetil** 1996 Jul 14; 137(28):1558–9 **(Hun)**
[Medical research. Letter] de Vincentiis I. **Acta Otorhinolaryngol Ital** 1996 Oct;16(5):474–5 **(Ita)**
[The Internet for medical research] Della Mea V, et al. **Pathologica** 1995 Oct;87(5):485–91 (22 ref.) (Eng. Abstr.) **(Ita)**
[Ethical issues in public health activity with special emphasis on nonclinical biomedical study] Inaba Y. **Nippon Koshu Eisei Zasshi** 1996 Oct;43(10):879–81 **(Jpn)**
[University medicine in Silicon Valley] Bogen B. **Tidsskr Nor Laegeforen** 1997 Apr 30;117(11):1641–2 **(Nor)**
[Industrial development and medical research (letter)] Flaten O. **Tidsskr Nor Laegeforen** 1996 Oct 20;116(25):3049 **(Nor)**
[Unacceptable quality in certain sectors of medical research] Høiseth A. **Tidsskr Nor Laegeforen** 1997 Feb 10; 117(4):531–5 (14 ref.) (Eng. Abstr.) **(Nor)**
[Defensive medical research] Holm HA. **Tidsskr Nor Laegeforen** 1997 Apr 30;117(11):1581 **(Nor)**
[Shortage of scholarship recipients—a will to take action? (letter)] Lundin KE. **Tidsskr Nor Laegeforen** 1997 Jun 20; 117(16):2363 **(Nor)**
[Recruitment problems in medical research?] Røttingen JA. **Tidsskr Nor Laegeforen** 1997 Jun 20;117(16):2352–3 **(Nor)**
[Research and development of the Norwegian drug industry in 1995 (letter)] Slettevold L, et al. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1812 **(Nor)**
[Research on immigrants and health. Curiosity or benefit? (see comments)] Stoltenberg C. **Tidsskr Nor Laegeforen** 1997 Jun 30;117(17):2435. Comment in: Tidsskr Nor Laegeforen 1997 Aug 20;117(19):2839. **(Nor)**
[Graduation in Medicine: admission criteria vs. scientific production] Paranhos FR. **Rev Assoc Med Bras** 1995 Nov-Dec;41(6):386–90 (Eng. Abstr.) **(Por)**
[Citation rates in the assessment of the scientific output of medical scientists as a model study method in scientometry] Uvarenko AR, et al. **Lik Sprava** 1997 Jan–Feb;(1):111–4 **(Rus)**
[Experience with integration of research institutes if the Russian Academy of Medical Sciences with the departments if higher educational establishments of the IM Sechenov is an effective type of teaching and research intensification] Paltsev MA, et al. **Vestn Ross Akad Med Nauk** 1997;(3):54–8 (0 ref.) **(Rus)**
[The factors related to the research activities of primary care physicians] de la Fuente JA, et al. **Aten Primaria** 1997 Apr 15;19(6):283–9 (Eng. Abstr.) **(Spa)**
[Challenges of development: scientific activity as an axis for health personnel training] Lage A. **Educ Med Salud** 1995 Jul-Dec;29(3–4):243–56 **(Spa)**
[Research and post-graduate studies (editorial)] Meléndez-Nucette L. **Invest Clin** 1996 Jun;37(2):79–81 **(Spa)**
[Clinical-basic or basic-clinical research? (see comments)] Celada A. **Med Clin (Barc)** 1996 Jun 29;107(5):178–81. Comment in: Med Clin (Barc) 1997 Jul 5;109(6):237–8. **(Spa)**
[Various errors often made in scientific studies (letter)] Martín JF, et al. **Med Clin (Barc)** 1997 May 3;108(17):678–9 **(Spa)**
[The real significance of basic research and the present status of CONICET (letter; comment)] Charreau EH. **Medicina (B Aires)** 1995;55(5 Pt 1):473–4. Comment on: Medicina (B Aires) 1995;55(4):373–5. **(Spa)**
[Kenya: scientific savanna] Mayor A. **Microbiologia** 1996 Dec;12(4):651–8 **(Spa)**
[Does research make for better doctors? (letter)] Arrese J M. **Rev Med Chil** 1995 Oct;123(10):1289–91 **(Spa)**
[Assessment of the use of statistical methods in health research] Cumsille F, et al. **Rev Med Chil** 1996 Sep; 124(9):1137–41 (Eng. Abstr.) **(Spa)**
[Who finances medical research in Chile?] Reyes H, et al. **Rev Med Chil** 1995 Oct;123(10):1243–51 (Eng. Abstr.) **(Spa)**
[Production of scientific articles about health in six Latin American countries, 1973–1992] Pellegrini Filho A, et al. **Rev Panam Salud Publica** 1997 Jan;1(1):23–34 (Eng. Abstr.) **(Spa)**
[Women's research. Research not only about or by women] Carlstedt G, et al. **Lakartidningen** 1996 Dec 11; 93(50):4629–30, 4635–6 **(Swe)**
[Research on women is questioned and misinterpreted all the time. The target is change—not frustration] Carlstedt G, et al. **Lakartidningen** 1997 Apr 2;94(14):1308–9 **(Swe)**
[Powerlessness and scientific theories. A comprehensive gender research is necessary] Dahlström A, et al. **Lakartidningen** 1997 Feb 5;94(6):446–8 **(Swe)**
[An efficient health care needs more time for teaching and research (letter)] Hemmingsson A. **Lakartidningen** 1997 Mar 26;94(13):1165 **(Swe)**
[Who should guarantee research ethics? Voluntary scrutiny is better than the one prescribed by law] Jacobsson L. **Lakartidningen** 1997 Jul 23;94(30–31):2623–4 **(Swe)**
[Surgical research is falling behind. Evaluation of new methods is too slow] Jeppsson B. **Lakartidningen** 1996 Oct 16;93(42):3669–70 **(Swe)**
[Is Good Clinical Practice necessary? How to avoid a painful experience] Karlmark B. **Lakartidningen** 1997 Aug 6; 94(32–33):2740–1 **(Swe)**
[TDR—a functioning model for international cooperation. Four tropical diseases are close to eradication] Landquist A. **Lakartidningen** 1997 Jul 23;94(30–31):2616–22 **(Swe)**
[Do we have ethical/unethical borderlines in Sweden? (letter)] Larsson C. **Lakartidningen** 1997 Mar 12; 94(11):939–40 **(Swe)**
[Professor Conny Nordin: pathological gambling—a challenging phenomenon!] Lind J. **Lakartidningen** 1997 Apr 23;94(17):1565–70 **(Swe)**
[Research ethics] Lind J. **Lakartidningen** 1996 Oct 9;

93(41):3534–40 **(Swe)**
[No new research on living fetuses. The National Board of Health and Welfare stops research on hereditary diseases] Orn P. **Lakartidningen** 1997 Mar 12;94(11):910 **(Swe)**
[Informed consent is required for research with human participants. Ethical convention may inhibit the research] Petersson B, et al. **Lakartidningen** 1996 Nov 20; 93(47):4235–7 **(Swe)**
[A reply on research ethics: scientists' awareness is not a sufficient guarantee] Rynning E. **Lakartidningen** 1997 Jul 23;94(30–31):2626–7 **(Swe)**
[Research on emotions is advancing. Psychotherapists are leaving the trenches] Törneke N. **Lakartidningen** 1997 Apr 23;94(17):1628, 1631–3 (13 ref.) **(Swe)**
[Discussion on ethics in France. Scietists want the embryo research to be permitted] Trenning-Himmelsbach A. **Lakartidningen** 1997 Jun 11;94(24):2245 **(Swe)**
[Can we trust the science and its megaphones? (letter; comment)] Werkö L. **Lakartidningen** 1996 Nov 13; 93(46):4134. Comment on: Lakartidningen 1996 Sep 25;93(39):3348. **(Swe)**
[Compensation to participants in experiments, is it considered as salary?] Westerhäll L. **Lakartidningen** 1997 Jan 22; 94(4):212–3 **(Swe)**

ECONOMICS

The cost of VA-sponsored research. Barnett PG, et al. **Acad Med** 1996 Oct;71(10):1074–8
Importance and difficulty of determining the cost of clinical research. Stedman D, et al. **Acad Med** 1996 Nov; 71(11):1164–7
The role of outcome studies in allergy and clinical immunology. Blaiss MS. **Allergy Asthma Proc** 1996 Nov-Dec;17(6):355–8 (15 ref.)
Financial impact of clinical research on a health system. Wermeling DP, et al. **Am J Health Syst Pharm** 1997 Aug 1;54(15):1742–51
Drug research—a change of paradigms [editorial] Müllner S. **Arzneimittelforschung** 1997 Jan;47(1):105
Impact of exporting dependence on livestock production systems, industry structure, and research. Macmillan KL, et al. **J Anim Sci** 1997 Feb;75(2):522–32 (25 ref.)
A proposal for funding clinical research trials by health care insurers. Paller MS. **J Investig Med** 1997 Apr;45(4):139–42
Setting priorities for research is no easy task at NIH [news] Smeltz KJ. **J Natl Cancer Inst** 1997 Sep 17;89(18):1338–9
Effect of integrated research programs on health care systems and costs. Brown A, et al. **Mil Med** 1996 Nov;161(11):691–5
Biomedical research and insider trading. Ferguson JR. **N Engl J Med** 1997 Aug 28;337(9):631–4
Columbia/HCA and the hospital business [letter; comment] Mark JB. **N Engl J Med** 1996 Dec 19;335(25):1920; discussion 1922. Comment on: N Engl J Med 1996 Aug 1;335(5):362–7. Comment on: N Engl J Med 1996 Aug 8;335(6):446–51.
The bottom line [editorial] Culliton BJ. **Nat Med** 1997 Apr; 3(4):365
Making malaria research bite. MacLean M, et al. **Nat Med** 1997 Jan;3(1):14–6
Avoid financial 'correctness' [editorial] **Nature** 1997 Feb 6; 385(6616):469
Limit the number of grants per person [letter] Sachs F. **Nature** 1997 Jul 17;388(6639):222
Study discloses financial interests behind papers [news] Wadman M. **Nature** 1997 Jan 30;385(6615):376
Medical centre repays 'overbilled' $15.5m [news] Wadman M. **Nature** 1997 Apr 17;386(6626):637
An economic analysis of unilateral refusals to license intellectual property. Gilbert RJ, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12749–55
Trends and patterns in research and development expenditures in the United States. Jaffe AB. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12658–63
Long-term change in the organization of inventive activity. Lamoreaux NR, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12686–92
National policies for technical change: where are the increasing returns to economic research? Pavitt K. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12693–700
How to do research on a shoestring [editorial] Berk M, et al. **S Afr Med J** 1996 Jun;86(6 Suppl):725–6
Research 'summit' ponders health funding shortfall [news] [see comments] Cohen J. **Science** 1996 Oct 25; 274(5287):491–2. Comment in: Science 1997 Jan 3;275(5296):13–4.
The costs of animal research: origins and options. Cork LC, et al. **Science** 1997 May 2;276(5313):758–9
A 'reforestation plan' for biomedical research [news] Kondro W. **Science** 1996 Oct 25;274(5287):492
A scientific result without the science [news] Vogel G. **Science** 1997 May 30;276(5317):1327
[A scholar, fund holder, insurance and tax authority] Elovainio L. **Duodecim** 1995;111(19):1897–901 **(Fin)**

EDUCATION

Ensuring the survival of the clinician-scientist. Schrier RW. **Acad Med** 1997 Jul;72(7):589–94
From the scientific idea to its realisation—principles and strategies in neurosurgery. Fahlbusch R. **Acta Neurochir Suppl (Wien)** 1997;69:120–5
Role of surgical research in the training of neurosurgeons. Messmer K, et al. **Acta Neurochir Suppl (Wien)** 1997; 69:111–5
When should residents be exposed to research? Reulen HJ. **Acta Neurochir Suppl (Wien)** 1997;69:106–10
Research in neurosurgical training: clinical reviews and trials. Teasdale GM. **Acta Neurochir Suppl (Wien)** 1997;69:116–9
The WHO Research and Training Centre in Human Reproduction at the Karolinska Institute between 1970 and 1995. Bygdeman M. **Adv Contracept** 1996 Dec;12(4):319–24 (12 ref.)
Research activities survey of professional programs. Parham LD, et al. **Am J Occup Ther** 1997 Jul-Aug;51(7):622–6
Research in the training of general surgeons: results of a survey [letter; comment] Burnand KG, et al. **Ann R Coll Surg Engl** 1997 Jan;79(1):72–3. Comment on: Ann R Coll Surg Engl 1996 May;78(3 Pt 1):188–91.
General practice research [letter; comment] Douglas JD. **Br J Gen Pract** 1996 Jul;46(408):439–40. Comment on: Br J Gen Pract 1996 Feb;46(403):124.
How to get the most out of a period of research. Carlson G, et al. **Br J Hosp Med** 1996 Sep 18–Oct 1;56(6):275–7
Training clinical academics for the future [editorial] Paice E, et al. **Br J Hosp Med** 1996 Aug 21–Sep 3;56(4):130–1
Physician resource variables and their impact on the future pool of research expertise among psychiatrists: the Canadian Association of Professors of Psychiatry and Canadian Psychiatric Association Survey. el-Guebaly N, et al. **Can J Psychiatry** 1996 Apr;41(3):150–5
Research training and productivity among faculty: the Canadian Association of Professors of Psychiatry and the Canadian Psychiatric Association Survey. el-Guebaly N, et al. **Can J Psychiatry** 1996 Apr;41(3):144–9
Confessions of an American clinical anatomist. Seifert MF. **Clin Anat** 1997;10(3):208–9
Royal College of Physicians and Surgeons of Canada Clinician Investigator Program. **Clin Invest Med** 1997 Aug; 20(4):261
Training models: introduction. **Clin Invest Med** 1997 Aug; 20(4):249–50
The Surgical Scientist Program at the University of Toronto: a model for training clinician investigators. Langer B. **Clin Invest Med** 1997 Aug;20(4):257–8
Clinical/research residency programs for the clinician scientist. Phillipson EA. **Clin Invest Med** 1997 Aug; 20(4):259–60
The United States Medical Scientist Training Program. Shapiro B. **Clin Invest Med** 1997 Aug;20(4):251–4
MD/PhD programs—the Canadian experience. Silverman M, et al. **Clin Invest Med** 1997 Aug;20(4):255–6
The learning environment and the clinician scientist. Sweeney GD. **Clin Invest Med** 1997 Aug;20(4):248
Developing research skills for medical school faculty. Henry R. **Fam Med** 1997 Apr;29(4):258–61
College majors and career choices of minority high school student research apprentices. Thurmond VB, et al. **J Assoc Acad Minor Phys** 1996;7(1):22–4
A novel curriculum for teaching research methodology. Fraker LD, et al. **J Emerg Med** 1996 Jul-Aug;14(4):503–8
What ranks for research doctoral programs? [see comments] Mac Lane S. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):8816–7. Comment in: Proc Natl Acad Sci U S A 1996 Aug 20;93(17):8818–9.
Rating, not ranking [comment] Stigler SM. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8818–9. Comment on: Proc Natl Acad Sci U S A 1996 Aug 20;93(17):8816–7.
[International research programs and training of researchers] Helander E, et al. **Duodecim** 1995;111(19):1872–6 (0 ref.) **(Fin)**
[Research physician education has started] Jänne OA, et al. **Duodecim** 1995;111(19):1817, 1819, 1821 **(Fin)**
[Where to get funds for research—the possibilities for getting funds as a young researcher] Karma P, et al. **Duodecim** 1995;111(19):1888–96 **(Fin)**
[Research and teaching in medical education] Lima-Gonçalves E. **Rev Hosp Clin Fac Med Sao Paulo** 1995 Nov-Dec;50(6):339–43 (Eng. Abstr.) **(Por)**

HISTORY

Biomedical research in Quebec: the history of the Fonds de la recherche en santé du Québec. Genest J. **Can Med Assoc J** 1996 Sep 15;155(6):639–44
Cancer research prior to the National Cancer Act and activities before and after the signing. Baker CG. **Cancer** 1996 Dec 15;78(12):2592–3
The use of animals in research and ethical considerations [editorial; comment] Lore W. **East Afr Med J** 1996 Nov; 73(11):697–8. Comment on: East Afr Med J 1996 Nov;73(11):699–702.
American physicians and sex research and expertise, 1900–1990. Bullough VL. **J Hist Med Allied Sci** 1997 Apr; 52(2):236–53
Surgical education and research [editorial] Qayumi AK. **J Invest Surg** 1997 Jan-Apr;10(1–2):v–vii
The social responsibilities of health professionals. Lessons from their role in Nazi Germany [comment] [see comments] Sidel VW. **JAMA** 1996 Nov 27;276(20):1679–81. Comment on: JAMA 1996 Nov 27;276(20):1657–61. Comment on: JAMA 1996 Nov 27;276(20):1676–8. Comment in: JAMA 1997 Mar 5;277(9):711; discussion 711–2.
The Medical Research Council, laboratory of molecular biology. Perutz MF. **Mol Med** 1996 Nov;2(6):659–62
A historic-quantitative approach to psychophysiological research: the first three decades of the journal Psychophysiology (1964–1993). Sanchez-Hernandez A, et al. **Psychophysiology** 1996 Nov;33(6):629–36
[Original articles in the Nederlands Tijdschrift voor Geneeskunde in the last 40 years] Maas KL, et al. **Ned Tijdschr Geneeskd** 1997 Jan 4;141(1):53–5 (Eng. Abstr.) **(Dut)**
[The establishment and changes in ethical values in therapy and research] Engelhardt D. **Pharm Unserer Zeit** 1997 Mar; 26(2):64–75 **(Ger)**
[Medical research of military physicians during the Great Patriotic War] Aleksanyan IV, et al. **Probl Sotsialnoi Gig Istor Med** 1995 May-Jun;(3):32–5 **(Rus)**
[Main results of basic researches on complex problems of medicine in 1995] Frolov NI, et al. **Vestn Ross Akad Med Nauk** 1997;(8):50–3 **(Rus)**

INSTRUMENTATION

New instrumentation for in vivo determinations of brain function. Ray CD. **Clin Neurosurg** 1971;18:121–54
The Biomedical Primate Research Centre—new opportunities for EU-sponsored immunotherapy research in non-human primates. **Immunol Today** 1996 Sep; 17(9):400–1
Further developments of the laser scanning confocal microscope in biomedical research. Paddock SW. **Proc Soc Exp Biol Med** 1996 Oct;213(1):24–31 (54 ref.)

LEGISLATION & JURISPRUDENCE

Technology transfer: trends in the federalization of biomedical research. Bulleit TN Jr, et al. **Acad Med** 1996 Jul;71(7):709–15
Durable power of attorney and informed consent with Alzheimer's disease patients: a clinical study. Dukoff R, et al. **Am J Psychiatry** 1997 Aug;154(8):1070–5
In case of emergency: no need for consent. Brody BA, et al. **Hastings Cent Rep** 1997 Jan–Feb;27(1):7; discussion 7–12
Research on the cognitively impaired: lessons and warnings from the emergency research debate [see comments] Karlawish JH, et al. **J Am Geriatr Soc** 1997 Apr; 45(4):474–81 (65 ref.). Comment in: J Am Geriatr Soc 1997 Apr;45(4):521–3.
A proposed draft protocol for the European Convention on Biomedicine relating to research on the human embryo and fetus. Byk JC. **J Med Ethics** 1997 Feb;23(1):32–7
Lockwood on human identity and the primitive streak [see comments] Howsepian AA. **J Med Ethics** 1997 Feb; 23(1):38–41. Comment in: J Med Ethics 1997 Feb;23(1):42–4.
Of persons and organisms: a reply to Howsepian [comment] Lockwood M. **J Med Ethics** 1997 Feb;23(1):42–4. Comment on: J Med Ethics 1997 Feb;23(1):38–41.
Setting priorities for research is no easy task at NIH [news] Smeltz KJ. **J Natl Cancer Inst** 1997 Sep 17;89(18):1338–9
US medical researchers, the Nuremberg Doctors Trial, and the Nuremberg Code. A review of findings of the Advisory Committee on Human Radiation Experiments. Faden RR, et al. **JAMA** 1996 Nov 27;276(20):1667–71
Nuremberg and the issue of wartime experiments on US prisoners. The Green Committee. Harkness JM. **JAMA** 1996 Nov 27;276(20):1672–5
The Nuremberg Code and the Nuremberg Trial. A reappraisal [see comments] Katz J. **JAMA** 1996 Nov 27; 276(20):1662–6. Comment in: JAMA 1997 Mar 5;277(9):709; discussion 709–10.
Bioethics Advisory Commission holds first meeting to define governing principles of ethical research [news] Marwick C. **JAMA** 1996 Nov 27;276(20):1627
Protecting human subjects of biomedical research [news] Marwick C. **JAMA** 1997 Feb 5;277(5):369
From the Food and Drug Administration. Nightingale SL. **JAMA** 1996 Nov 27;276(20):1632
President limits secret experiments on humans [news] Skolnick AA. **JAMA** 1997 May 28;277(20):1583
Use of human tissue blocks for research [editorial] LiVolsi VA. **Mod Pathol** 1996 May;9(5):467–8
Subpoenas and science—when lawyers force their way into the laboratory [see comments] Black B. **N Engl J Med** 1997 Mar 6;336(10):725–7. Comment in: N Engl J Med 1997 Jul 24;337(4):282–3. Comment in: N Engl J Med 1997 Jul 24;337(4):283.
Biomedical research and insider trading. Ferguson JR. **N Engl J Med** 1997 Aug 28;337(9):631–4
Fight over Italian research policy threatens chance for reform [news] Abbott A. **Nature** 1997 Aug 14; 388(6643):609–10
France is urged to loosen ban on embryo research [news] Butler D. **Nature** 1997 May 15;387(6630):218
UCSF settles lawsuit over research costs [news] [see comments] Dalton R. **Nature** 1997 Jan 30;385(6615):377. Comment in: Nature 1997 Apr 17;386(6626):642–3.
UK embryo research law 'may need changes' [news] Dickson D. **Nature** 1997 Mar 13;386(6621):98
Are patents and research compatible? [see comments] Ducor P. **Nature** 1997 May 1;387(6628):13–4. Comment in: Nature 1997 Jun 5;387(6633):546.
Deserving of trust [letter; comment] Herskowitz A. **Nature** 1997 Apr 17;386(6626):642–3. Comment on: Nature 1997 Jan 30;385(6615):377.

Swiss researchers facing 'anti-transgenics' vote [news] Schiermeier Q. **Nature** 1997 Jul 24;388(6640):315
Breach of embryo ban leads to resignation [news] Wadman M. **Nature** 1997 Feb 13;385(6617):570
An economic analysis of unilateral refusals to license intellectual property. Gilbert RJ, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12749–55
Privacy rules set no new research curbs [news] Kaiser J. **Science** 1997 Sep 19;277(5333):1757
Biologists mobilize against anti-genetics referendum [news] Koenig R. **Science** 1997 Jan 31;275(5300):607–8
Cloning sparks calls for new laws [news] Williams N. **Science** 1997 Mar 7;275(5305):1415
Technology transfer at US universities: seeking public benefit from the results of basic research. Goodwin CD. **Technol Health Care** 1996 Sep;4(3):323–30 (6 ref.)
[Clinical research and informed consent. Ethical and deontologic aspects] Hoerni B. **Bull Cancer** 1997 Mar; 84(3):311–2 **(Fre)**

METHODS

Ethics in orthopedic research [editorial] Nilstun T, et al. **Acta Orthop Scand** 1997 Jun;68(3):205–6
Towards guidelines for survey research in remote Aboriginal communities [see comments] Donovan RJ, et al. **Aust N Z J Public Health** 1997 Feb;21(1):89–95. Comment in: Aust N Z J Public Health 1997 Feb;21(1):96–7.
Commentary: don't forget the plumber: research in remote Aboriginal communities [comment] Miller P, et al. **Aust N Z J Public Health** 1997 Feb;21(1):96–7. Comment on: Aust N Z J Public Health 1997 Feb;21(1):89–95.
Standardizing experiments with NOD mice [letter] Beales PE, et al. **Autoimmunity** 1996;24(2):127–9
Finite mixture models for proportions. Brooks SP, et al. **Biometrics** 1997 Sep;53(3):1097–115
Sample size calculations for studies with correlated observations. Liu G, et al. **Biometrics** 1997 Sep;53(3):937–47
Latent variable modeling of diagnostic accuracy. Yang I, et al. **Biometrics** 1997 Sep;53(3):948–58
A dynamic frailty model for multivariate survival data. Yue H, et al. **Biometrics** 1997 Sep;53(3):785–93
Methods for comparing the means of two independent log-normal samples. Zhou XH, et al. **Biometrics** 1997 Sep; 53(3):1129–35
Reconcilable differences: the marriage of qualitative and quantitative methods [see comments] Goering PN, et al. **Can J Psychiatry** 1996 Oct;41(8):491–7. Comment in: Can J Psychiatry 1996 Oct;41(8):489–90. Comment in: Can J Psychiatry 1997 Jun;42(5):529–30.
Approaches to psychiatric research [editorial; comment] Kingstone E. **Can J Psychiatry** 1996 Oct;41(8):489–90. Comment on: Can J Psychiatry 1996 Oct;41(8):491–7. Comment on: Can J Psychiatry 1996 Oct;41(8):498–502.
Qualitative and quantitative research methods [letter; comment] Chambers LW. **Can J Public Health** 1997 Jan–Feb;88(1):9–10. Comment on: Can J Public Health 1997 Mar–Apr;88(2):141.
The methodologies of qualitative research [letter] Schreiber R, et al. **Can J Public Health** 1997 May–Jun;88(3):153, 158
Space age biomedical research methods. Jones WL. **Clin Neurosurg** 1971;18:106–20
Transdisciplinary approach in women's health research: a study on urban middle class women. Mukhopadhyay S. **Coll Antropol** 1997 Jun;21(1):41–6
Review of research methodology used in clinical trials of magnesium and myocardial infarction--why does controversy persist despite ISIS-4? Woods KL. **Coron Artery Dis** 1996 May;7(5):348–51 (24 ref.)
Impact of knockout mice in toxicology. Ryffel B. **Crit Rev Toxicol** 1997 Mar;27(2):135–54 (120 ref.)
The use of standardized patients in research in general practice. Beullens J, et al. **Fam Pract** 1997 Feb;14(1):58–62 (36 ref.)
In vivo gene transfer and gene modulation in hypertension research. Dzau VJ, et al. **Hypertension** 1996 Dec; 28(6):1132–7 (44 ref.)
Research methodologic issues in evaluating behavioral disturbances of dementia. Finkel SI. **Int Psychogeriatr** 1996; 8 Suppl 2:149–50
Implantation of an EEG telemetric transmitter in the rat. Cotugno M, et al. **Ital J Neurol Sci** 1996 Apr;17(2):131–4
Female adolescents and onset of sexual intercourse: a theory-based review of research from 1984 to 1994. Goodson P, et al. **J Adolesc Health** 1997 Sep;21(3):147–56 (75 ref.)
Testing informatics innovations: the value of negative trials [editorial; comment] Tierney WM, et al. **J Am Med Inform Assoc** 1996 Sep–Oct;3(5):358–9. Comment on: J Am Med Inform Assoc 1996 Sep–Oct;3(5):340–8.
Pseudoreplication: what does it mean, and how does it relate to biological experiments? [letter] Cilek JE, et al. **J Am Mosq Control Assoc** 1997 Mar;13(1):102–3
Technique for repetitive recording from fetal respiratory neurons. Ioffe S, et al. **J Appl Physiol** 1996 Mar; 80(3):1057–60
Reexamination of tympanic membrane temperature as a core temperature. Sato KT, et al. **J Appl Physiol** 1996 Apr; 80(4):1233–9
Research in primary care: a worm's-eye view. Naveh P, et al. **J Clin Epidemiol** 1996 Nov;49(11):1323–4
Variability and consistency of electric and magnetic field occupational exposure measurements [published erratum appears in J Expo Anal Environ Epidemiol 1996 Oct–Dec;6(4):527] Bracken TD, et al. **J Expo Anal Environ Epidemiol** 1996 Jul–Sep;6(3):355–74 (27 ref.)
Modifications of the Brandel Superfusion 600 system and other revisions in superfusion technique improve the measurement of endogenous dopamine release in vitro. Delle Donne KT, et al. **J Neurosci Methods** 1996 Oct; 68(2):289–96
A method to study the effects of an epileptic focus on non-epileptic nervous tissue. Wiemann M, et al. **J Neurosci Methods** 1996 Oct;68(2):137–41
Nutrition in pediatric HIV infection: setting the research agenda. Work group session report: priorities, recommendations, and strategies for supporting the research agenda. Hamilton F. **J Nutr** 1996 Oct;126(10 Suppl):2688S–2690S
Nutrition in pediatric HIV infection: setting the research agenda. Working group session report: coordination of domestic and international effort in executing a research agenda in nutrition and pediatric HIV infection. Solomons N, et al. **J Nutr** 1996 Oct;126(10 Suppl):2684S–2687S
Statistics in medical research--V. Some non-parametric tests. Bowalekar SK. **J Postgrad Med** 1994 Apr–Jun;40(2):96–101
Secular trends in menopause age. Flint MP. **J Psychosom Obstet Gynaecol** 1997 Jun;18(2):65–72 (34 ref.)
Menopause in different cultures. Richters JM. **J Psychosom Obstet Gynaecol** 1997 Jun;18(2):73–80 (34 ref.)
Making original data from clinical studies available for alternative analysis [editorial] Kirwan JR. **J Rheumatol** 1997 May;24(5):822–5
Chaos in the brickyard revisited: on research integration, accumulated knowledge and evidence-based practice in the exercise and sport sciences [editorial] Biddle S. **J Sports Sci** 1997 Aug;15(4):383–4
Calcium-channel blockers and cancer [letter; comment] James MA. **Lancet** 1996 Oct 26;348(9035):1168. Comment on: Lancet 1996 Aug 24;348(9026):487.
Data trawling: to fish or not to fish. Michels KB, et al. **Lancet** 1996 Oct 26;348(9035):1152–3
A new biological framework for cancer research. Schipper H, et al. **Lancet** 1996 Oct 26;348(9035):1149–51 (33 ref.)
Statistical principles underlying the applications of laboratory methods to field studies. Guo SS, et al. **Muscle Nerve Suppl** 1997;5:S32–4 (7 ref.)
Confounding variables and comorbidity in sarcopenia research. Miller JP. **Muscle Nerve Suppl** 1997;5:S35–8 (4 ref.)
Human research on cardiopulmonary resuscitation: current constraints on implementation. Cummins RO. **New Horiz** 1997 May;5(2):120–7 (82 ref.)
"To be of use": enhancing the utility of qualitative research. Sandelowski M. **Nurs Outlook** 1997 May–Jun;45(3):125–32 (58 ref.)
Evaluating research—a not-so-great British experience [editorial] Bullimore MA. **Optom Vis Sci** 1997 Mar; 74(3):123–4
Research interviewing. Plant H. **Palliat Med** 1996 Oct; 10(4):339–41 (16 ref.)
Repeated blood collection in the laboratory mouse by tail incision--modification of an old technique. Dürschlag M, et al. **Physiol Behav** 1996 Dec;60(6):1565–8
Using a focus group of clinicians to develop a research project on therapeutic process for clients with dual diagnoses. Loneck B, et al. **Soc Work** 1997 Jan;42(1):107–11
Efficiency robust tests of independence in contingency tables with ordered classifications. Podgor MJ, et al. **Stat Med** 1996 Oct 15;15(19):2095–105
Gene-targeting studies: new methods, old problems. Crusio WE. **Trends Neurosci** 1996 May;19(5):186–7; discussion 188–9
[Qualitative methods in empirical health research. II. Validity requirements] Maunsbach M, et al. **Nord Med** 1997 Feb;112(2):63–5 (Eng. Abstr.) **(Dan)**
[The impedance method in biomedical research and its outfitting with equipment] Khastsaev BD. **Med Tekh** 1996 May–Jun;(3):34–40 (Eng. Abstr.) **(Rus)**
[Basic or applied research?] Olivares J. **Microbiologia** 1996 Dec;12(4):661–2 **(Spa)**

ORGANIZATION & ADMINISTRATION

Our basic need for basic science research [editorial; comment] Biros MH. **Acad Emerg Med** 1997 Jul;4(7):652–3. Comment on: Acad Emerg Med 1997 Jul;4(7):662–73.
Ensuring the survival of the clinician-scientist. Schrier RW. **Acad Med** 1997 Jul;72(7):589–94
A national strategy for research and development: lessons from England. Black N. **Annu Rev Public Health** 1997; 18:485–505 (48 ref.)
Priorities in medical research [editorial] Swales JD. **Br J Hosp Med** 1996 Aug 21–Sep 3;56(4):127–8
Organizing the future of patient-oriented research? Liang TJ. **Gastroenterology** 1997 Oct;113(4):1061
Developing a research unit within a hospital social work department. Christ GH, et al. **Health Soc Work** 1995 Feb; 20(1):60–9
Sources of animal science research information: usefulness and reliability. Owens FN. **J Anim Sci** 1997 Feb;75(2):331–8
Strategies for enhancing research and research training programs for African Americans: viewing barriers as opportunities. Curry C. **J Health Care Poor Underserved** 1997 Aug;8(3):318–21
Forging alliances to meet future research and training needs. Ruffin J. **J Health Care Poor Underserved** 1997 Aug; 8(3):311–6; discussion 316–7
Cancer review panel recommends a major overhaul of prevention research [news] **J Natl Cancer Inst** 1997 Aug 20;89(16):1187–8
Germany needs national council for cancer research. Steimle S. **J Natl Cancer Inst** 1996 Dec 18;88(24):1805–7
Nutrition in pediatric HIV infection: setting the research agenda; Work group session report: technology transfer. Greene H, et al. **J Nutr** 1996 Oct;126(10 Suppl):2691S–2693S
Dedicated research institute keeps Wyeth-Ayerst focused on women's health. Levy RI. **J Womens Health** 1997 Feb; 6(1):45–7
Improving the links between research and health policy in Pakistan [editorial] Qazi SA, et al. **JPMA J Pak Med Assoc** 1997 Feb;47(2):36–7
International collaboration in genetics research [letter; comment] Chatterji S, et al. **Nat Genet** 1997 Feb;15(2):124 . Comment on: Nat Genet 1996 Jun;13(2):142.
Fight over Italian research policy threatens chance for reform [news] Abbott A. **Nature** 1997 Aug 14; 388(6643):609–10
American Cancer Society restructures research and professional training programs [news] **Oncology (Huntingt)** 1996 Feb;10(2):259
Using formative research to lay the foundation for community level HIV prevention efforts: an example from the AIDS Community Demonstration Projects. Higgins DL, et al. **Public Health Rep** 1996;111 Suppl 1:28–35
Developing a consensus on quality criteria [editorial] DeWoskin RS. **Qual Assur** 1997 Jan–Mar;5(1):v–vii
Desegregating health statistics and health research in South Africa [letter; comment] [published erratum appears in S Afr Med J 1997 Apr;87(4):478] Walker AR, et al. **S Afr Med J** 1997 Mar;87(3):329–31. Comment on: S Afr Med J 1996 Oct;86(10):1257–62.
Some statistical issues in project prioritization in the pharmaceutical industry. Senn S. **Stat Med** 1996 Dec 30; 15(24):2689–702
Herd monitoring in traditional cattle husbandry as a tool for productivity research and livestock development. van Klink EG, et al. **Trop Anim Health Prod** 1996 Nov; 28(4):273–9
[The Gods must be crazy! (letter)] Rolland M. **Arch Pediatr** 1997 Jul;4(7):686 **(Fre)**
[Experience in the organization of joint research work with research institutes and practical departments] Zaslavskiĭ GI, et al. **Sud Med Ekspert** 1997 Jan–Mar;40(1):43–5 **(Rus)**

STANDARDS

Human-subjects research today: final report of the Advisory Committee on Human Radiation Experiments. Faden RR. **Acad Med** 1996 May;71(5):482–3
Advice to individuals involved in misconduct accusations. Friedman PJ. **Acad Med** 1996 Jul;71(7):716–23
The logical geography of concepts and shared responsibilities concerning research misconduct. Guenin LM. **Acad Med** 1996 Jun;71(6):595–603
A relative-value-based system for calculating faculty productivity in teaching, research, administration, and patient care. Hilton C, et al. **Acad Med** 1997 Sep; 72(9):787–93
How to assess a research study [see comments] Rankin M, et al. **Am J Nurs** 1996 Dec;96(12):32–6; quiz 37 (10 ref.) . Comment in: Am J Nurs 1997 Mar;97(3):23.
Low power, type II errors, and other statistical problems in recent cardiovascular research. Williams JL, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H487–93
Clone sheds light on research, ethical questions [news] Inserro JC. **Am J Vet Res** 1997 May;58(5):444–5
Is research in normal and ill children involving radiation exposure ethical? [letter; comment] Morton CT. **Arch Gen Psychiatry** 1996 Nov;53(11):1059–61. Comment on: Arch Gen Psychiatry 1993 May;50(5):333–40.
The role of veterinarians on animal experimentation ethics committees. Australian Veterinarians Associated with Scientific Establishments. Scott LR, et al. **Aust Vet J** 1996 Oct;74(4):309–11
Standardizing experiments with NOD mice [letter] Beales PE, et al. **Autoimmunity** 1996;24(2):127–9
Is research into ethnicity and health racist, unsound, or important science? [see comments] Bhopal R. **BMJ** 1997 Jun 14;314(7096):1751–6 (62 ref.). Comment in: BMJ 1997 Jun 14;314(7096):1703–4.
Are research ethics committees behaving unethically? Some suggestions for improving performance and accountability [see comments] Savulescu J, et al. **BMJ** 1996 Nov 30; 313(7069):1390–3. Comment in: BMJ 1997 Mar 1;314(7081):676. Comment in: BMJ 1997 Mar 1;314(7081):676–7. Comment in: BMJ 1997 Jul 5;315(7099):60–1.
Review by a local medical research ethics committee of the conduct of approved research projects, by examination of patients' case notes, consent forms, and research records and by interview. Smith T, et al. **BMJ** 1997 May 31; 314(7094):1588–90
From evidence to conclusions in psychiatric research. Bilsker D. **Can J Psychiatry** 1996 May;41(4):227–32 (19 ref.)
Threats to population-based research [editorial; comment]

Gabriel SE. **Curr Opin Rheumatol** 1997 Mar;9(2):87–9. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):90–4. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):95–101. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):102–5. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):106–11. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):118–25. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):126–32.

Simple guidelines for experimental reports, documentation and storage of data. A new initiative to further research integrity. Clausen T, et al. **Dan Med Bull** 1997 Feb; 44(1):85–7

The ethics of animal research. A special lecture to the Japanese Association of Laboratory Animal Science 6th June 1995. Matfield M. **Exp Anim** 1996 Jul;45(3):209–15

Health care for research animals is essential and affordable. Jacoby RO, et al. **FASEB J** 1997 Jul;11(8):609–14 (6 ref.)

Ethical issues in international collaborative research on the human genome: the HGP and the HGDP. Knoppers BM, et al. **Genomics** 1996 Jun 1;34(2):272–82

Removable surface contamination at a biomedical research institution. Klein RC, et al. **Health Phys** 1997 Feb; 72(2):296–9

Consensus radiation protection practices for academic research institutions. Schiager KJ, et al. **Health Phys** 1996 Dec;71(6):960–5

The challenges of assessing fat intake in cancer research investigations. Wynder EL, et al. **J Am Diet Assoc** 1997 Jul;97(7 Suppl):S5–8 (39 ref.)

Additional opinions on the mortality of animal research [letter] Apostolou A. **J Am Vet Med Assoc** 1997 May 1; 210(9):1265; discussion 1268

Additional opinions on the mortality of animal research [letter] Bonacquisti JP. **J Am Vet Med Assoc** 1997 May 1;210(9):1267–8

Additional opinions on the mortality of animal research [letter] Dahlinger J. **J Am Vet Med Assoc** 1997 May 1; 210(9):1266; discussion 1268

Additional opinions on the morality of animal research [letter] Feldmann BM. **J Am Vet Med Assoc** 1997 May 1;210(9):1267; discussion 1268

Additional opinions on the mortality of animal research [letter] Griffiths AO. **J Am Vet Med Assoc** 1997 May 1; 210(9):1264–5; discussion 1268

Clone sheds light on research, ethical questions [news] Inserro JC. **J Am Vet Med Assoc** 1997 May 1;210(9):1246–7, 1255

Dialogue on use of animals in research continues [letter; comment] Klinger MM. **J Am Vet Med Assoc** 1996 Sep 15;209(6):1060. Comment on: J Am Vet Med Assoc 1996 Jun 1;208(11):1798–801.

Additional opinions on the morality of animal research [letter] Koltveit AJ. **J Am Vet Med Assoc** 1997 May 1; 210(9):1265–6; discussion 1268

In support of animal rights dialogue [letter] Kraus AL. **J Am Vet Med Assoc** 1997 May 15;210(10):1412–3

Who is right about animal rights? [letter; comment] Rowan AN. **J Am Vet Med Assoc** 1997 Apr 15;210(8):1100–1. Comment on: J Am Vet Med Assoc 1997 Mar 1;210(5):612–8.

Additional opinions on the mortality of animal research [letter] Sutor S. **J Am Vet Med Assoc** 1997 May 1; 210(9):1266–7; discussion 1268

Women and health research: working for change. Baylis F. **J Clin Ethics** 1996 Fall;7(3):229–42

Academic research: policies and practice. Bertha SL. **J Ethnopharmacol** 1996 Apr;51(1–3):59–73 (7 ref.)

The quality of health data obtained in a new survey of elderly Americans: a validation study of the proposed Medicare Beneficiary Health Status Registry (MBHSR). Turner CF, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jan; 52(1):S49–58

Human performance: an appropriate measure of instrument reliability? Fess EE. **J Hand Ther** 1997 Jan–Mar;10(1):46–7

The ethics of scientific research: an analysis of focus groups of scientists and institutional representatives. Wenger NS, et al. **J Investig Med** 1997 Aug;45(6):371–80

Delays and diversity in the practice of local research ethics committees. Ahmed AH, et al. **J Med Ethics** 1996 Oct; 22(5):263–6

Research ethics committees at work: the experience of one multi-location study. While AE. **J Med Ethics** 1996 Dec; 22(6):352–5

Medicine in Germany [letter; comment] Bodamer OA. **Lancet** 1997 Feb 15;349(9050):508. Comment on: Lancet 1996 Dec 14;348(9042):1631–9.

Medicine in Germany [letter; comment] Brody S. **Lancet** 1997 Feb 15;349(9050):508. Comment on: Lancet 1996 Dec 14;348(9042):1631–9.

Medicine in Germany [letter; comment] Ernst E. **Lancet** 1997 Feb 15;349(9050):508. Comment on: Lancet 1996 Dec 14;348(9042):1631–9.

Peer review and grant applications [letter; comment] Foëx BA. **Lancet** 1997 Jan 4;349(9044):63. Comment on: Lancet 1996 Nov 9;348(9037):1293–5.

Peer review and grant applications [letter; comment] Grewal N. **Lancet** 1997 Jan 4;349(9044):63. Comment on: Lancet 1996 Nov 9;348(9037):1293–5.

Peer review of grant applications: a harbinger for mediocrity in clinical research? [see comments] Horrobin DF. **Lancet** 1996 Nov 9;348(9037):1293–5. Comment in: Lancet 1996 Nov 9;348(9037):1255–6. Comment in: Lancet 1997 Jan 4;349(9044):63.

Prizes, publications, and promotion. Horton R. **Lancet** 1996 Nov 23;348(9039):1398

Health state descriptions. Purposes, issues, a proposal. Llewellyn-Thomas HA. **Med Care** 1996 Dec;34(12 Suppl):DS109–18 (39 ref.)

Do medical informaticists pursue legitimate research? [editorial] Clayton PD. **Methods Inf Med** 1996 Sep; 35(3):194–5

EPA issues, USDA amends respective biotech rules [news] Fox JL. **Nat Biotechnol** 1997 Jun;15(6):503

Vulnerable groups at risk from "commercial" ethical review boards [news] Brower V. **Nat Med** 1997 Jul;3(7):705

A man for our season. Lawrence PA, et al. **Nature** 1997 Apr 24;386(6627):757–8

Journals joust over policy on authors' interests [news] Wadman M. **Nature** 1997 Apr 17;386(6626):634

Ethics of private panels comes under scrutiny [news] Wadman M. **Nature** 1997 May 29;387(6632):445

Ethical review is needed for public health studies [letter; comment] Allander E. **Public Health Rep** 1997 Jul–Aug; 112(4):266. Comment on: Public Health Rep 1997 Jan–Feb;112(1):29–32. Comment on: Public Health Rep 1997 Jan–Feb;112(1):33–6.

Public confidence in public health research ethics [comment] [see comments] Mariner WK. **Public Health Rep** 1997 Jan–Feb;112(1):33–6 (17 ref.). Comment on: Public Health Rep 1997 Jan–Feb;112(1):29–32. Comment in: Public Health Rep 1997 Jul–Aug;112(4):266.

Defining research when it comes to public health [see comments] Snider DE Jr, et al. **Public Health Rep** 1997 Jan–Feb;112(1):29–32 (19 ref.). Comment in: Public Health Rep 1997 Jan–Feb;112(1):33–6. Comment in: Public Health Rep 1997 Jul–Aug;112(4):266.

Profile: Thereza Imanishi-Kari. Beardsley T. **Sci Am** 1996 Nov;275(5):50, 52

Meeting standards [news; comment] Borelli T, et al. **Science** 1996 Dec 20;274(5295):1995. Comment on: Science 1996 Oct 4;274(5284):28.

Ethics: sending out the message [editorial] Gunsalus CK. **Science** 1997 Apr 18;276(5311):335

Allegations prompt debate in Germany [news] Koenig R. **Science** 1997 Jul 11;277(5323):172

Is data-hoarding slowing the assault on pathogens? [news] [see comments] Marshall E. **Science** 1997 Feb 7; 275(5301):777–80. Comment in: Science 1997 Mar 28;275(5308):1861–2.

Risks in collaboration? [letter; comment] Taylor IE. **Science** 1997 Feb 21;275(5303):1051. Comment on: Science 1997 Jan 3;275(5296):14.

A scientific result without the science [news] Vogel G. **Science** 1997 May 30;276(5317):1327

The politicizing of science: when "protection" of subjects' rights leads to a wrong. Beauvais F. **Subst Use Misuse** 1997 Jan;32(1):77–82

Uniform standards for substance user treatment research: an example from Germany for the United States and other countries. Platt JJ, et al. **Subst Use Misuse** 1996 Mar; 31(4):479–92

[Veterinary medicine a fantastic science (letter)] van de Werken PH. **Tijdschr Diergeneeskd** 1997 Jan 1;122(1):19–20 **(Dut)**

[Senationalism and responsibility in scientific research (editorial)] Falk R. **Harefuah** 1996 Jun 16;130(12):825–6 **(Heb)**

[Ethical guidelines for scientific research in human individuals supported by FAPESP. Bioethics Group and Population Research] **Rev Assoc Med Bras** 1996 Jul–Sep; 42(3):167–8 (Eng. Abstr.) **(Por)**

[The management in clinical trials of pharmacological agents] Kurmanova LV. **Probl Sotsialnoi Gig Istor Med** 1995 Sep–Oct;(5):33–5 (Eng. Abstr.) **(Rus)**

[Good clinical practices and the Pandora's box (I). Clinical research ethics committees] Vallvé C. **Med Clin (Barc)** 1996 Nov 16;107(17):657–9 **(Spa)**

STATISTICS & NUMERICAL DATA

Comments on the case of Mary Putnam Jacobi [letter; comment] Bickel J. **Acad Med** 1996 Sep;71(9):933–4. Comment on: Acad Med 1996 May;71(5):470–7.

Examining which medical specialties are the most active in producing research. Gourgoulianis KI, et al. **Acad Med** 1996 May;71(5):511–2

Using statistical equivalence testing in clinical biofeedback research. Hatch JP. **Biofeedback Self Regul** 1996 Jun; 21(2):105–19

An evaluation of immunology in Brazil (1981–1993). Rumjanek VM, et al. **Braz J Med Biol Res** 1996 Aug; 29(8):923–31

Assessing research productivity in an oncology research institute: the role of the documentation center. Ugolini D, et al. **Bull Med Libr Assoc** 1997 Jan;85(1):33–8

Maintaining standards: differences between the standard deviation and standard error, and when to use each [see comments] Streiner DL. **Can J Psychiatry** 1996 Oct; 41(8):498–502. Comment in: Can J Psychiatry 1996 Oct;41(8):489–90.

Sources of error in clinical research. Kumar R, et al. **Indian Pediatr** 1996 Dec;33(12):1029–32

Impact of using weighted versus unweighted measures to assess optometry faculty productivity in research. Doughty MJ, et al. **J Am Optom Assoc** 1996 Jul;67(7):410–20 (28 ref.)

The three faces of performance measurement: improvement, accountability, and research. Solberg LI, et al. **Jt Comm J Qual Improv** 1997 Mar;23(3):135–47

Issues and challenges in coding interventions for meta-analysis of prevention research. Devine EC. **NIDA Res Monogr** 1997;170:130–46

Issues in classification in meta-analysis in substance abuse prevention research. Hansen WB, et al. **NIDA Res Monogr** 1997;170:183–201

Development of a faculty research interest resource. Fowler J, et al. **Proc AMIA Annu Fall Symp** 1996;:363–7

Overcoming feelings of powerlessness in "aging" researchers: a primer on statistical power in analysis of variance designs. Levin JR. **Psychol Aging** 1997 Mar;12(1):84–106 (45 ref.)

National trends of research in psychology and psychiatry (1981–1995) [editorial] Fava GA, et al. **Psychother Psychosom** 1997;66(4):169–74

Cancer risk among workers in biomedical research. Cordier S, et al. **Scand J Work Environ Health** 1995 Dec;21(6):450–9

[Impact, quality or meditation?] (editorial)] Huttunen MO. **Duodecim** 1995;111(19):1815, 1817 **(Fin)**

[Research activity and research quality of German gastroenterologists reflected by citation indices] Ell C, et al. **Z Gastroenterol** 1997 Jan;35(1):23–8 (Eng. Abstr.) **(Ger)**

[A simplified method for the statistical evaluation of experimental data] Shadrintsev IS. **Aviakosm Ekolog Med** 1996;30(3):50–1 (Eng. Abstr.) **(Rus)**

[Spanish research in international pharmacy and pharmacology journals from 1980 to 1989] Bordons M, et al. **Med Clin (Barc)** 1996 Jan 20;106(2):51–9 (Eng. Abstr.) **(Spa)**

[Regression to the median in research and clinical practice] Guallar E, et al. **Med Clin (Barc)** 1997 May 31;109(1):23–6 **(Spa)**

TRENDS

Implications of cognitive research for ambulatory care education. Gruppen LD. **Acad Med** 1997 Feb;72(2):117–20

Reengineering academic medical centers: reengineering academic values? Korn D. **Acad Med** 1996 Oct; 71(10):1033–43

A pitfall in future research? [editorial] Ehlers N. **Acta Ophthalmol Scand** 1996 Dec;74(6):521

CHD in the elderly: knowledge for clinicians and researchers [editorial; comment] Glynn RJ, et al. **Aging (Milano)** 1996 Apr;8(2):73–4. Comment on: Aging (Milano) 1996 Apr;8(2):75–89—.

Resolving issues raised by the Fort Bragg evaluation. New directions for mental health services research. Bickman L. **Am Psychol** 1997 May;52(5):562–5

Dialyzers and dialysis membranes. Research directions [editorial] Leypoldt JK. **ASAIO J** 1996 May–Jun; 42(3):133–5 (24 ref.)

Research and practice in the 21st century. Butler K. **ASHA** 1996 Fall;38(4):9

Tourette's syndrome in the year 2000. Robertson MM, et al. **Aust N Z J Psychiatry** 1996 Dec;30(6):749–59 (136 ref.)

The use of pound dogs in teaching and research. Bellenger CR. **Aust Vet J** 1996 Dec;74(6):473–5

Science and medicine at the millennium. Kornberg A. **Biochem Mol Med** 1997 Aug;61(2):121–6

Research priorities in the field of vaccinology. Fracchia GN. **Biologicals** 1997 Jun;25(2):117–9

The Heberden Oration. Calman KC. **Br J Rheumatol** 1997 Jan;36(1):6–8

Librarians and collaborative research: toward a better scientific base for information practice [editorial] Humphreys BL. **Bull Med Libr Assoc** 1996 Jul;84(3):433–6

Report of the National Heart, Lung, and Blood Institute Special Emphasis Panel on Heart Failure Research. Cohn JN, et al. **Circulation** 1997 Feb 18;95(4):766–70

Survival of clinician scientists. Roy CC. **Clin Invest Med** 1997 Aug;20(4):283–8

Behavioral and social research in rheumatology [see comments] Callahan LF, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):126–32 (40 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87–9.

Report of the research and development group. Tooke J, et al. **Diabet Med** 1996 Sep;13(9 Suppl 4):S77–89

Implications of acclimatization for hearing aid fitting practices and research [comment] Byrne D. **Ear Hear** 1996 Jun;17(3 Suppl):25S–26S. Comment on: Ear Hear 1996 Jun;17(3 Suppl):14S–25S.

Outcome measures for hearing aid evaluation--properties and requirements in acclimatization research [comment] Gatehouse S. **Ear Hear** 1996 Jun;17(3 Suppl):26S–28S. Comment on: Ear Hear 1996 Jun;17(3 Suppl):14S–25S.

Late-onset auditory deprivation: a review of past research and an assessment of future research needs. Neuman AC. **Ear Hear** 1996 Jun;17(3 Suppl):3S–13S

A review of past research on changes in hearing aid benefit over time [see comments] Turner CW, et al. **Ear Hear** 1996 Jun;17(3 Suppl):14S–25S. Comment in: Ear Hear 1996 Jun;17(3 Suppl):25S–26S. Comment in: Ear Hear 1996 Jun;17(3 Suppl):26S–28S.

The impact of managed care on clinical research: a preliminary investigation. Mechanic RE, et al. **Health Aff (Millwood)** 1996 Fall;15(3):72–89

Future directions for research on endometrial bleeding. Findlay JK. **Hum Reprod** 1996 Oct;11 Suppl 2:179–83 (6

ref.)
The Biomedical Primate Research Centre--new opportunities for EU-sponsored immunotherapy research in non-human primates. **Immunol Today** 1996 Sep; 17(9):400-1
Scientific underpinnings for the profession: dietitians in research. Dwyer JT. **J Am Diet Assoc** 1997 Jun;97(6):593-7 (15 ref.)
Research lacking in osteopathic medical profession. Wood DL. **J Am Osteopath Assoc** 1997 Jan;97(1):23
Trends in--original research published from the United Kingdom in the antimicrobial chemotherapy literature, 1980-1994. Williams AR, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1097-101
Medical research - what, when, and how? [editorial] Hegde BM. **J Assoc Physicians India** 1995 May;43(5):317-8
Review: dairy cattle reproductive physiology research and management--past progress and future prospects. Foote RH. **J Dairy Sci** 1996 Jun;79(6):980-90 (82 ref.)
The Journal of Human Hypertension: looking back over 10 years of research and thinking of the future [editorial] Beevers DG, et al. **J Hum Hypertens** 1997 Jan;11(1):1-5 (36 ref.)
Some imperatives for clinical research. Shine KI. **JAMA** 1997 Jul 16;278(3):245-6
Preventing the extinction of the clinical research ecosystem [published erratum appears in JAMA 1997 Aug 6;278(5):388] Thompson JN, et al. **JAMA** 1997 Jul 16; 278(3):241-5
State of biostatistics in medical education and research in Pakistan. Mahmood Z. **JPMA J Pak Med Assoc** 1996 Jul; 46(7):161-3
Lessons from and about AIDS.... Feinberg MB. **Lancet** 1996 Nov 2;348(9036):1188
Different kind of drug-company freebie. McNamee D. **Lancet** 1996 Oct 19;348(9034):1048
Future direction of research in Tourette syndrome. Kurlan R. **Neurol Clin** 1997 May;15(2):451-6 (49 ref.)
Research involving critically ill subjects in emergency circumstances: new regulations, new challenges. Wichman A, et al. **Neurology** 1997 May;48(5):1151-5
Research on CPR: reordering priorities. Weil MH. **New Horiz** 1997 May;5(2):106-11
Academic surgery in crisis: a worldwide phenomenon? Does it also affect other disciplines? [editorial] [see comments] Ahren B. **Nutrition** 1996 Mar;12(3):214. Comment in: Nutrition 1996 Mar;12(3):215.
A decline of research at the expense of clinical demands: a realignment in education? [editorial; comment] Hammond WG. **Nutrition** 1996 Mar;12(3):215. Comment on: Nutrition 1996 Mar;12(3):214.
Measuring science: an exploration. Adams J, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12664-70
The future of the national laboratories. Cohen LR, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12678-85
Sematech: purpose and performance. Irwin DA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12739-42
Flows of knowledge from universities and federal laboratories: modeling the flow of patent citations over time and across institutional and geographic boundaries. Jaffe AB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12671-7
Long-term change in the organization of inventive activity. Lamoreaux NR, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12686-92
National policies for technical change: where are the increasing returns to economic research? Pavitt K. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12693-700
Current topics in complement research. Lachmann PJ. **Res Immunol** 1996 Feb;147(2):69-70 (4 ref.)
Future directions for resuscitation research. III. External cardiopulmonary resuscitation advanced life support. Ornato JP, et al. **Resuscitation** 1996 Sep;32(2):139-58 (128 ref.)
Future directions for resuscitation research. V. Ultra-advanced life support. Tisherman SA, et al. **Resuscitation** 1997 Jun;34(3):281-93 (93 ref.)
Romanian contribution to stress research. Derevenco P. **Rom J Physiol** 1996 Jan-Dec;33(1-4):101-12 (60 ref.)
Trends in animal research. Mukerjee M. **Sci Am** 1997 Feb; 276(2):86-93
Partnership between Europe and developing countries in health research. De Bruycker M, et al. **Trop Med Int Health** 1996 Oct;1(5):553-7
Use of the Internet for research [letter] Easson W. **Vet Rec** 1997 Jun 14;140(24):636
Wooldridge Memorial Lecture. Structure and function in veterinary education: can what we have deliver what we want? Lanyon LE. **Vet Rec** 1996 Dec 14;139(24):581-6
[Medical research at German universities] van de Loo J. **Geburtshilfe Frauenheilkd** 1996 Sep;56(9):M146-7 **(Ger)**
[Quality promotion in public health research] Dunkel W, et al. **Gesundheitswesen** 1997 Feb;59(2):95-101 (Eng. Abstr.) **(Ger)**
[Future developments in medicine: expert assessment] Wild C. **Gesundheitswesen** 1997 Jul;59(7):467-72 (Eng. Abstr.) **(Ger)**
[Magic of the impact factor--differentiation of a phenomenon (editorial)] Lindner UK, et al. **Ophthalmologe** 1997 Apr; 94(4):261-2 **(Ger)**
[Transgenic animals and the future of medical research in Switzerland (editorial)] Stadler BM. **Schweiz Med Wochenschr** 1996 Oct 19;126(42):1775-8 **(Ger)**
[Science needs experimental animals] Kunstyr I. **Tierarztl Prax** 1996 Dec;24(6):532-6 (7 ref.) (Eng. Abstr.) **(Ger)**
[Future trend in research for infectious diseases] Shimizu K. **Kansenshogaku Zasshi** 1997 Apr;71(4):293-8 (0 ref.) **(Jpn)**
[The analysis of expert assessments as a method for the identification and forecasting of trends in the development of scientific and medical problems] Duplenko IuK, et al. **Lik Sprava** 1996 Jan-Feb;(1-2):175-9 **(Rus)**
[The real importance of basic research and the present status of CONICET (editorial) (see comments)] Pasqualini CD. **Medicina (B Aires)** 1995;55(4):373-5. Comment in: Medicina (B Aires) 1995;55(5 Pt 1):473-4. **(Spa)**
[Research in the frontline. Consequences for hospital function and hospital structure] Eriksson H. **Nord Med** 1996 Feb; 111(2):35-9 **(Swe)**
[Research must be profiled within a new health care structure (interview by Eva Oldinger)] Lindsten J. **Nord Med** 1996 Feb;111(2):41-2 **(Swe)**

RESEARCH, CLINICAL NURSING see **CLINICAL NURSING RESEARCH**

RESEARCH, DENTAL see **DENTAL RESEARCH**

RESEARCH DESIGN

Statistical methodology: I. Incorporating the prevalence of disease into the sample size calculation for sensitivity and specificity [see comments] Buderer NM. **Acad Emerg Med** 1996 Sep;3(9):895-900 (5 ref.). Comment in: Acad Emerg Med 1996 Sep;3(9):824.
Statistical methodology: II. Reliability and variability assessment in study design, Part A. Karras DJ. **Acad Emerg Med** 1997 Jan;4(1):64-71
Statistical methodology: II. Reliability and validity assessment in study design, Part B. Karras DJ. **Acad Emerg Med** 1997 Feb;4(2):144-7
Statistical methodology and effective emergency medicine: what is the connection? [editorial; comment] Lewis RJ. **Acad Emerg Med** 1996 Sep;3(9):824. Comment on: Acad Emerg Med 1996 Sep;3(9):895-900.
A critical analysis of cartilage repair [letter; comment] Brittberg M, et al. **Acta Orthop Scand** 1997 Apr; 68(2):186-91. Comment on: Acta Orthop Scand 1996 Oct;67(5):523-9.
How to become a true scientist: a guide to minimizing pesky treatment effects [letter; comment] Moos RH. **Addiction** 1997 Apr;92(4):481-2, 485. Comment on: Addiction 1996 Jun;91(6):779-85.
Statistical issues in prevention and therapeutic trials of Alzheimer disease. Brookmeyer R, et al. **Alzheimer Dis Assoc Disord** 1996 Fall;10 Suppl 1:27-30
Is a randomized trial of antioxidants in the primary prevention of Alzheimer disease warranted? Evans DA, et al. **Alzheimer Dis Assoc Disord** 1996 Fall;10 Suppl 1:45-9
Rationale and design of a multicenter study of selegiline and alpha-tocopherol in the treatment of Alzheimer disease using novel clinical outcomes. Alzheimer's Disease Cooperative Study. Sano M, et al. **Alzheimer Dis Assoc Disord** 1996 Fall;10(3):132-40
The use of genetic information in large-scale clinical trials: applications to Alzheimer research. Schork NJ, et al. **Alzheimer Dis Assoc Disord** 1996 Fall;10 Suppl 1:22-6
Design criteria for studies examining individual fatty acid effects on cardiovascular disease risk factors: human and animal studies. Kris-Etherton PM, et al. **Am J Clin Nutr** 1997 May;65(5 Suppl):1590S-1596S (25 ref.)
The INTERSALT Study: background, methods, findings, and implications. Stamler J. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):626S-642S (153 ref.)
Invited commentary: confounding, measurement error, and publication bias in studies of passive smoking. Kawachi I, et al. **Am J Epidemiol** 1996 Nov 15;144(10):909-15 (57 ref.)
Assessment of weighting methodology for the National Comorbidity Survey. Little RJ, et al. **Am J Epidemiol** 1997 Sep 1;146(5):439-49
Logistic regression when the outcome is measured with uncertainty. Magder LS, et al. **Am J Epidemiol** 1997 Jul 15;146(2):195-203
Two-stage sampling for etiologic studies. Sample size and power. Schaubel D, et al. **Am J Epidemiol** 1997 Sep 1; 146(5):450-8
Design and baseline participant characteristics of the Human Immunodeficiency Virus Epidemiology Research (HER) Study: a prospective cohort study of human immunodeficiency virus infection in US women. Smith DK, et al. **Am J Epidemiol** 1997 Sep 15;146(6):459-69
Optimal strategies for mapping complex diseases in the presence of multiple loci. Goldgar DE, et al. **Am J Hum Genet** 1997 May;60(5):1222-32
Cost-effective sib-pair designs in the mapping of quantitative-trait loci. Zhao H, et al. **Am J Hum Genet** 1997 May;60(5):1211-21
Identifying comparison groups for evaluating occupational hearing loss: a statistical assessment of 22 industrial populations. Adera T, et al. **Am J Ind Med** 1997 Feb; 31(2):243-9
Methodological challenges to the study of occupational injury--an international epidemiology workshop. Courtney TK, et al. **Am J Ind Med** 1997 Aug;32(2):103-5 (15 ref.)
Methodological limitations in the study of video display terminal use and upper extremity musculoskeletal disorders. Gerr F, et al. **Am J Ind Med** 1996 Jun;29(6):649-56 (38 ref.)
Design factors in epidemiologic cohort studies of work-related low back injury or pain. Kraus JF, et al. **Am J Ind Med** 1997 Aug;32(2):153-63 (50 ref.)
Alternative approaches to analytical designs in occupational injury epidemiology. Mittleman MA, et al. **Am J Ind Med** 1997 Aug;32(2):129-41 (58 ref.)
Cancer feasibility studies among migrant farmworkers. The Farmworker Epidemiology Research Group. Zahm SH, et al. **Am J Ind Med** 1997 Sep;32(3):301-2
Design and conduct of occupational injury intervention studies: a review of evaluation strategies. Zwerling C, et al. **Am J Ind Med** 1997 Aug;32(2):164-79 (105 ref.)
Selecting a control group in studies of the familial coaggregation of two disorders: a quantitative genetics perspective. Roy MA, et al. **Am J Med Genet** 1997 May 31;74(3):296-303
A case for case study research. Colborn AP. **Am J Occup Ther** 1996 Jul-Aug;50(7):592-4
Low power, type II errors, and other statistical problems in recent cardiovascular research. Williams JL, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H487-93
Divergences between clinical and research methods for assessing personality disorders: implications for research and the evolution of axis II [see comments] Westen D. **Am J Psychiatry** 1997 Jul;154(7):895-903. Comment in: Am J Psychiatry 1997 Jul;154(7):891-3.
Hispanic Health and Nutrition Examination Survey: methodological considerations. Delgado JL, et al. **Am J Public Health** 1990 Dec;80 Suppl:6-10
Current research in the epidemiology and public health of aging--the need for more diverse strategies [editorial; comment] Kasl SV. **Am J Public Health** 1997 Mar; 87(3):333-4. Comment on: Am J Public Health 1997 Mar;87(3):371-7. Comment on: Am J Public Health 1997 Mar;87(3):438-40. Comment on: Am J Public Health 1997 Mar;87(3):440-2.
Can herd immunity influence the assessment of vaccine efficacy in nonrandomized studies? [letter] Mühlemann K, et al. **Am J Public Health** 1997 Jan;87(1):113-4
Some principles in study design for preventing HIV transmission: rigor or reality. Susser M. **Am J Public Health** 1996 Dec;86(12):1713-6 (14 ref.)
Flawed gun policy research could endanger public safety. Webster DW, et al. **Am J Public Health** 1997 Jun; 87(6):918-21
A statistics primer. Hypothesis testing. Kuhn JE, et al. **Am J Sports Med** 1996 Sep-Oct;24(5):702-3
A statistics primer. Types of studies in the medical literature. Kuhn JE, et al. **Am J Sports Med** 1997 Mar-Apr; 25(2):272-4
The evaluable subject [editorial; comment] Galant SP. **Ann Allergy Asthma Immunol** 1997 Sep;79(3):173-5. Comment on: Ann Allergy Asthma Immunol 1997 Sep;79(3):226-8.
The Women's Health Trial Feasibility Study in Minority Populations: design and baseline descriptions. Bowen D, et al. **Ann Epidemiol** 1996 Nov;6(6):507-19
The HERITAGE Family Study: quality assurance and quality control. Gagnon J, et al. **Ann Epidemiol** 1996 Nov; 6(6):520-9
Improving question wording in surveys of culturally diverse populations. Warnecke RB, et al. **Ann Epidemiol** 1997 Jul; 7(5):334-42
Race and health: basic questions, emerging directions [see comments] Williams DR. **Ann Epidemiol** 1997 Jul; 7(5):322-33 (120 ref.). Comment in: Ann Epidemiol 1997 Jul;7(5):320-1.
Hyperkalemia and trimethoprim-sulfamethoxazole [letter; comment] [published erratum appears in Ann Intern Med 1996 Dec 15;125(12):1015] Watanakunakorn C. **Ann Intern Med** 1996 Nov 1;125(9):778; discussion 779-80 . Comment on: Ann Intern Med 1996 Feb 1;124(3):316-20.
A contemporary research paradigm for the genetic analysis of a common chronic disease. Boerwinkle E. **Ann Med** 1996 Oct;28(5):451-7 (52 ref.)
Design of parenteral synthetic dipeptides for clinical nutrition: in vitro and in vivo utilization. Fürst P, et al. **Ann Nutr Metab** 1997;41(1):10-21 (64 ref.)
Are task-based exposure levels a valuable index of exposure for epidemiology? [letter; comment] Cherrie JW. **Ann Occup Hyg** 1996 Dec;40(6):715-22. Comment on: Ann Occup Hyg 1995 Apr;39(2):193-201.
Workshop on phase I study design. Ninth NCI/EORTC New Drug Development Symposium, Amsterdam, March 12, 1996. Arbuck SG. **Ann Oncol** 1996 Aug;7(6):567-73 (8 ref.)
Measuring social class in US public health research: concepts, methodologies, and guidelines. Krieger N, et al. **Annu Rev Public Health** 1997;18:341-78 (202 ref.)
Pharmacoeconomics: state of the art in 1997. Schulman KA, et al. **Annu Rev Public Health** 1997;18:529-48 (50 ref.)
Explicating middle-range theory through methodological diversity. Acton GJ, et al. **ANS Adv Nurs Sci** 1997 Mar; 19(3):78-85 (22 ref.)
Comparing two methods of follow up in a multicentre

randomised trial. Fooks J, et al. **Arch Dis Child** 1997 Apr; 76(4):369–76

Lessons from psychosocial studies of chronic renal failure. Postlethwaite RJ, et al. **Arch Dis Child** 1996 Nov; 75(5):455–9 (26 ref.)

Methodological studies of systematic reviews: is there publication bias? [letter; comment] Laupacis A. **Arch Intern Med** 1997 Feb 10;157(3):357–8. Comment on: Arch Intern Med 1996 Mar 25;156(6):661–6.

Corticosteroids and risk of complicated varicella [letter; comment] Nishioka SA. **Arch Pediatr Adolesc Med** 1996 Dec;150(12):1314. Comment on: Arch Pediatr Adolesc Med 1996 Apr;150(4):409–14.

Single subject experimentation for psychiatric nursing. Elder JH. **Arch Psychiatr Nurs** 1997 Jun;11(3):133–8 (17 ref.)

Causal inference from indirect experiments. Pearl J. **Artif Intell Med** 1995 Dec;7(6):561–82

Need for evidence about fluoridation [letter] Herbison P. **Aust N Z J Public Health** 1997 Jun;21(3):344–5

Evidence on fluoridation [letter; comment] Webb PM, et al. **Aust N Z J Public Health** 1997 Jun;21(3):345–6. Comment on: Aust N Z J Public Health 1997 Apr;21(2):187–90.

IABS/ECVAM/PEI/RIVM symposium: replacement, reduction and refinement of animal experiments in the development and control of biological products Langen, Germany, 2–4 November 1994. van de Donk HJ. **Biologicals** 1995 Dec;23(4):313–6

Optimum allocation of treatments for Welch's test in equivalence assessment. Dette H, et al. **Biometrics** 1997 Sep; 53(3):1143–50

Statistics notes. Trials randomised in clusters. Bland JM, et al. **BMJ** 1997 Sep 6;315(7108):600 (8 ref.)

Papers that go beyond numbers (qualitative research). Greenhalgh T, et al. **BMJ** 1997 Sep 20;315(7110):740–3 (21 ref.)

Is this the end of research as we know it? [news] Proctor S. **BMJ** 1997 Aug 16;315(7105):388

Hyperbaric oxygen and gas gangrene [letter; comment] Lindsey D. **Br J Hosp Med** 1996 Feb 7–20;55(3):147. Comment on: Br J Hosp Med 1995 May 3–16;53(9):424–6.

Surgical research and randomized trials. Bell PR. **Br J Surg** 1997 Jun;84(6):737–8

Laryngeal transplantation. Birchall MA. **Br J Surg** 1997 Jun; 84(6):739–40

Request for research proposals. Division of STD Prevention and Control, bureau of HIV/AIDS and STD, Laboratory Centre for Disease Control. **Can Commun Dis Rep** 1996 Oct 15;22(20):173–4 **(Eng, Fre)**

What we want. Part 5: Reports of surveys [editorial] Leduc CP, et al. **Can Fam Physician** 1996 Dec;42:2325–6, 2335–7 **(Eng, Fre)**

Recent progress in drug advertising [letter; comment] McElwain M. **Can Fam Physician** 1997 Jun;43:1041–2. Comment on: Can Fam Physician 1997 Apr;43:594–6, 602–5.

Study design in clinical research: sample size estimation and power analysis [published erratum appears in Can J Anaesth 1996 Aug;43(8):880] Lerman J. **Can J Anaesth** 1996 Feb;43(2):184–91 (11 ref.)

The hypertensive response to intubation. Do researchers acknowledge previous work? Smith AJ, et al. **Can J Anaesth** 1997 Jan;44(1):9–13

Clinical trial design in metastatic breast cancer: a commentary. Levine M. **Can J Oncol** 1995 Dec;5 Suppl 1:40–2

The validity of qualitative research [letter; comment] Lippman A. **Can J Public Health** 1997 Mar–Apr;88(2):141 . Comment on: Can J Public Health 1997 Jan–Feb;88(1):9–10.

Quality of life research in pediatric oncology. Research methods and barriers. Bradlyn AS, et al. **Cancer** 1996 Sep 15;78(6):1333–9

Introducing specific antibodies into electropermeabilized cells is a valuable tool for eliminating specific cell functions. Verspohl EJ, et al. **Cell Biochem Funct** 1997 Jun; 15(2):127–34

Problems in method comparison studies [letter; comment] Siziya S. **Cent Afr J Med** 1996 Oct;42(10):304; discussion 305. Comment on: Cent Afr J Med 1996 Aug;42(8):230–2.

The use and abuse of participatory action research [editorial] Hagey RS. **Chronic Dis Can** 1997;18(1):1–4

Specific issues in the design and implementation of an efficacy trial for a Lyme disease vaccine. Meurice F, et al. **Clin Infect Dis** 1997 Jul;25 Suppl 1:S71–5

Contributions of risk-factor research to developmental psychopathology. Kazdin AE, et al. **Clin Psychol Rev** 1997; 17(4):375–406 (84 ref.)

Episiotomy and perineal tears: cause and effect [letter] Labrecque M. **CMAJ** 1997 Aug 15;157(4):365–6

Interpreting studies of exercise and osteoporosis: a call for rigor. Block JE. **Control Clin Trials** 1997 Feb;18(1):54–7

Design of the multicenter study of hydroxyurea in sickle cell anemia. Investigators of the Multicenter Study of Hydroxyurea. Charache S, et al. **Control Clin Trials** 1995 Dec;16(6):432–46

The efficiency of the matched-pairs design of the Community Intervention Trial for Smoking Cessation (COMMIT). Freedman LS, et al. **Control Clin Trials** 1997 Apr; 18(2):131–9

Blinding during data analysis and writing of manuscripts. Gøtzsche PC. **Control Clin Trials** 1996 Aug;17(4):285–90; discussion 290–3

A note on conventional null hypothesis testing in active control equivalence studies [letter; comment] Hauschke D, et al. **Control Clin Trials** 1996 Aug;17(4):347–50. Comment on: Control Clin Trials 1995 Oct;16(5):356–8.

Patient managed clinical trial. Hokkanen T, et al. **Control Clin Trials** 1997 Apr;18(2):140–50

Data monitoring committees and problems of lower-than-expected accrual or events rates. Korn EL, et al. **Control Clin Trials** 1996 Dec;17(6):526–35 (38 ref.)

Trial of Calcium for Preeclampsia Prevention (CPEP): rationale, design, and methods. Levine RJ, et al. **Control Clin Trials** 1996 Oct;17(5):442–69

A comparison of quantitative computerized and human panel coronary endpoint measures: implications for the design of angiographic trials. Mack WJ, et al. **Control Clin Trials** 1997 Apr;18(2):168–79

The clinical-economic trial: promise, problems, and challenges. Powe NR, et al. **Control Clin Trials** 1995 Dec; 16(6):377–94 (56 ref.)

Sample size calculations for repeated measures experiments [letter; comment] Rochon J. **Control Clin Trials** 1995 Dec; 16(6):449–52. Comment on: Control Clin Trials 1994 Apr;15(2):100–23. Comment on: Control Clin Trials 1994 Jun;15(3):165–72.

A note on quantifying follow-up in studies of failure time. Schemper M, et al. **Control Clin Trials** 1996 Aug; 17(4):343–6

The economic evaluation of the FIRST study: design of a prospective analysis alongside a multinational phase III clinical trial. Flolan International Randomized Survival Trial. Schulman KA, et al. **Control Clin Trials** 1996 Aug; 17(4):304–15

Statistical methods for cost-effectiveness analyses [published erratum appears in Control Clin Trials 1997 Apr;18(2):185] Siegel C, et al. **Control Clin Trials** 1996 Oct;17(5):387–406

The Lipoprotein and Coronary Atherosclerosis Study (LCAS): design, methods, and baseline data of a trial of fluvastatin in patients without severe hypercholesterolemia. West MS, et al. **Control Clin Trials** 1996 Dec;17(6):550–83

Benefit-risk ratios in the assessment of the clinical evidence of a new therapy. Willan AR, et al. **Control Clin Trials** 1997 Apr;18(2):121–30

Design and baseline characteristics of participants in the African American Study of Kidney Disease and Hypertension (AASK) Pilot Study. Wright JT Jr, et al. **Control Clin Trials** 1996 Aug;17(4 Suppl):3S–16S

Evidence based medicine in critical care: will it take us over the cutting edge? [editorial; comment] Niederman MS. **Crit Care Med** 1997 Sep;25(9):1448–9. Comment on: Crit Care Med 1997 Sep;25(9):1502–13.

Implications of different study designs for the evaluation of acellular pertussis vaccines. Fine PE. **Dev Biol Stand** 1997; 89:123–33 (5 ref.)

A miracle of salamization: positive divided by two equals negative [letter; comment] Gürlek A, et al. **Diabet Med** 1997 Apr;14(4):334–5. Comment on: Diabet Med 1996 Apr;13(4):365–70.

Implant outcomes: towards a mixed methodology for evaluating the efficacy of adult cochlear implant programmes. Hogan A. **Disabil Rehabil** 1997 Jun; 19(6):235–43

Mutational spectra in transgenic animal research: data analysis and study design based upon the mutant or mutation frequency. Carr GJ, et al. **Environ Mol Mutagen** 1996;28(4):405–13

The merits of unrealistic scenarios [comment] Brenner H, et al. **Epidemiology** 1997 Jul;8(4):457. Comment on: Epidemiology 1997 Jul;8(4):453–6.

Magnetic field exposure assessment in a case-control study of childhood leukemia. Kleinerman RA, et al. **Epidemiology** 1997 Sep;8(5):575–83

Collaboration produces a whole that is greater than the sum of its parts [editorial; comment] Selevan SG. **Epidemiology** 1997 Jul;8(4):340–1. Comment on: Epidemiology 1997 Jul;8(4):355–63.

How statistics can 'lie' [editorial] Abt K. **Eur J Anaesthesiol** 1996 Sep;13(5):427–31

Methods used to conduct the survey on consumer attitudes to food, nutrition and health on nationally representative samples of adults from each member state of the European Union. Kearney M, et al. **Eur J Clin Nutr** 1997 Jun;51 Suppl 2:S3–7

Practical experience and issues in designing and performing population pharmacokinetic/pharmacodynamic studies. Aarons L, et al. **Eur J Clin Pharmacol** 1996;49(4):251–4

Hypothermia in trauma patients [letter] Van Camp LA, et al. **Eur J Emerg Med** 1996 Mar;3(1):59–60

Clinical relevance of response and improvement in psychopharmacology: European College of Neuropsychopharmacology. **Eur Neuropsychopharmacol** 1995 Dec;5(4):531–3 (0 ref.)

Research project design in diagnostic radiology. Debatin JF. **Eur Radiol** 1996;6 Suppl 1:S5–10 (35 ref.)

How to organize animal research in radiology. Hamm B, et al. **Eur Radiol** 1996;6 Suppl 1:S19–22

Experimental design and husbandry. Festing MF. **Exp Gerontol** 1997 Jan–Apr;32(1–2):39–47 (19 ref.)

More on RESPECT [letter] Herceg-Baron R, et al. **Fam Plann Perspect** 1995 Sep–Oct;27(5):218–9

Qualitative research interviewing by general practitioners. A personal view of the opportunities and pitfalls. Hoddinott P, et al. **Fam Pract** 1997 Aug;14(4):307–12

Critical factors in the determination of focus group size. Tang KC, et al. **Fam Pract** 1995 Dec;12(4):474–5 (13 ref.)

Mapping and/or discovering meaning in family therapy: an e-mail conversation [comment] Beels CC, et al. **Fam Process** 1997 Jun;36(2):127–32. Comment on: Fam Process 1997 Jun;36(2):101–26.

Design of the cardiac insufficiency bisoprolol study II (CIBIS II). The CIBIS II Scientific Committee. **Fundam Clin Pharmacol** 1997;11(2):138–42

Analysis of case-control/family sampling design. Liang KY, et al. **Genet Epidemiol** 1996;13(3):253–70

Experimental design and error detection for polyploid radiation hybrid mapping. Lunetta KL, et al. **Genome Res** 1995 Sep;5(2):151–63

A postmodern perspective on feminist gerontology. Ray RE. **Gerontologist** 1996 Oct;36(5):674–80 (64 ref.)

An economic approach to clinical trial design and research priority-setting. Claxton K, et al. **Health Econ** 1996 Nov–Dec;5(6):513–24

Using economics alongside clinical trials: why we cannot choose the evaluation technique in advance [letter] Donaldson C, et al. **Health Econ** 1996 May–Jun;5(3):267–9

Natural variability of transient myocardial ischaemia during daily life: an obstacle when assessing efficacy of anti-ischaemic agents? Patel DJ, et al. **Heart** 1996 Dec; 76(6):477–82

Clostridium difficile and sucralfate [letter] Jensen G, et al. **Infect Control Hosp Epidemiol** 1996 Nov;17(11):712–3

Challenging the validity of conclusions based on P-values alone: a critique of contemporary clinical research design and methods. Ebramzadeh E, et al. **Instr Course Lect** 1994; 43:587–600 (26 ref.)

Moving promising research findings to the clinic: methodological issues in the design and conduct of clinical trials of retinoids. Arnold A. **Int J Cancer** 1997 Feb 7; 70(4):467–9 (11 ref.)

Research on the psychotherapy of bulimia nervosa: half empty or half full. Mitchell JE, et al. **Int J Eat Disord** 1996 Nov;20(3):219–29 (23 ref.)

The selectivity of inclusion and exclusion criteria in bulimia nervosa treatment studies. Mitchell JE, et al. **Int J Eat Disord** 1997 Nov;22(3):243–52

Effects of recruitment strategy on response rates and risk factor profile in two cardiovascular surveys. Eastwood BJ, et al. **Int J Epidemiol** 1996 Aug;25(4):763–9

Health care delivery and the status of the population's health in the current crises in former Yugoslavia using EPI-design methodology. Legetic B, et al. **Int J Epidemiol** 1996 Apr; 25(2):341–8

Epidemiological research on ageing: an orientation. Miettenen OS. **Int J Epidemiol** 1991;20 Suppl 1:S2–7

The Australian Vietnam Veterans Health Study: I. study design and response bias. O'Toole BI, et al. **Int J Epidemiol** 1996 Apr;25(2):307–18

Cluster versus individual randomization in adolescent tobacco and alcohol studies: illustrations for design decisions. Slymen DJ, et al. **Int J Epidemiol** 1997 Aug; 26(4):765–71

Is good clinical research practice for clinical trials good clinical practice? Yastrubetskaya O, et al. **Int J Geriatr Psychiatry** 1997 Feb;12(2):227–31

The use and misuse of N-of-one studies [editorial] O'Brien PC. **Int J Oral Maxillofac Implants** 1997 May–Jun; 12(3):293

The likelihood of detecting differences between groups of sheep following deliberate infection with Ostertagia circumcincta. Stear MJ, et al. **Int J Parasitol** 1996 Jun; 26(6):657–60

Re: Kapp editorial IJROBP 35:189–194; 1996 [letter; comment] Thrall DE, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):989. Comment on: Int J Radiat Oncol Biol Phys 1996 Apr 1;35(1):189–94.

Opportunities and difficulties in long-term studies of growth. Roche AF, et al. **Int J Sports Med** 1997 Jul;18 Suppl 3:S151–61

Problems and solutions in longitudinal research: from theory to practice. van Mechelen W, et al. **Int J Sports Med** 1997 Jul;18 Suppl 3:S238–45

Economic analysis alongside clinical trials. Bias in the assessment of economic outcomes. Ellwein LB, et al. **Int J Technol Assess Health Care** 1996 Fall;12(4):691–7

Costing methods in the Canadian literature on the economic evaluation of health care. A survey and assessment. Jacobs P, et al. **Int J Technol Assess Health Care** 1996 Fall; 12(4):721–34 (59 ref.)

Can resource use be extracted from randomized controlled trials to calculate costs? A review of smoking cessation interventions in general practice. Rigby K, et al. **Int J Technol Assess Health Care** 1996 Fall;12(4):714–20

How should we research unconventional therapies? A panel report from the Conference on Complementary and Alternative Medicine Research Methodology, National Institutes of Health. Vickers A, et al. **Int J Technol Assess Health Care** 1997 Winter;13(1):111–21

Rationale, design and performance of a clinical trial to investigate interferon-gamma (Imukin) in the prophylactic treatment of severe burns-related infections. Ioannovich JD, et al. **Intensive Care Med** 1996 Oct;22 Suppl 4:S468–73

The effect of a closed system suctioning on airway pressure in an experimental mode [letter] Van Hooser T, et al. **Intensive Care Med** 1996 Dec;22(12):1465–6

RESEARCH DESIGN

Animal handling [letter; comment] Aguirre GD. **Invest Ophthalmol Vis Sci** 1997 May;38(6):1053. Comment on: Invest Ophthalmol Vis Sci 1996 Oct;37(11):2219–27.

Choice of research setting in understanding adolescent health problems. Gans JE, et al. **J Adolesc Health** 1995 Nov; 17(5):306–13

A review of statistical methods in the Journal of Advanced Nursing. Anthony D. **J Adv Nurs** 1996 Nov;24(5):1089–94 (10 ref.)

Finding your way around qualitative methods in nursing research. Bailey PH. **J Adv Nurs** 1997 Jan;25(1):18–22 (21 ref.)

The telephone survey method: a discussion paper. Barriball KL, et al. **J Adv Nurs** 1996 Jul;24(1):115–21

Using triangulation in nursing research. Begley CM. **J Adv Nurs** 1996 Jul;24(1):122–8 (35 ref.)

Analysis of data over time: a difficult statistical issue. Faithfull S. **J Adv Nurs** 1997 Apr;25(4):853–8

Mixed messages in nursing research: their contribution to the persisting hiatus between evidence and practice. Hicks C, et al. **J Adv Nurs** 1997 Mar;25(3):595–601 (20 ref.)

Methodological issues conducting sensitive research on lesbian and gay men's experience of nursing care. Platzer H, et al. **J Adv Nurs** 1997 Mar;25(3):626–33 (32 ref.)

Case puzzles and research designs [letter] Arnold LE. **J Am Acad Child Adolesc Psychiatry** 1997 Jan;36(1):5–6

The best studies do one thing well [editorial; comment] Patterson MM. **J Am Osteopath Assoc** 1997 Apr;97(4):204 . Comment on: J Am Osteopath Assoc 1997 Apr;97(4):207–14.

Status of research on gender differences. Berg MJ. **J Am Pharm Assoc (Wash)** 1997 Jan–Feb;NS37(1):43–56 (70 ref.)

How should zoster trials be conducted? Wood MJ, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1089–1101 (28 ref.)

Branching design of the bronchial tree based on a diameter-flow relationship. Kitaoka H, et al. **J Appl Physiol** 1997 Mar;82(3):968–76

Research for medical illustrators. Part 1: The research process and planning research. Young S, et al. **J Audiov Media Med** 1996 Dec;19(4):167–70

Clinical trial designs--made to order. Andersen JS. **J Biopharm Stat** 1996 Nov;6(4):515–22 (10 ref.)

The assessment of individual and population bioequivalence. Chinchilli VM. **J Biopharm Stat** 1996 Mar;6(1):1–14

Two-stage designs for the logistic regression model in single-agent bioassays. Myers WR, et al. **J Biopharm Stat** 1996 Jul;6(3):283–301

False-positive error rates in routine application of repeated measurements ANOVA. Overall JE, et al. **J Biopharm Stat** 1996 Mar;6(1):69–81

Analysis of paired ordered categorical data in a factorial design. Patel HI, et al. **J Biopharm Stat** 1996 Mar;6(1):15–36

Using aspects of study design in sample size estimation. Phillips A, et al. **J Biopharm Stat** 1997 May;7(2):215–26

The prospective, randomized, double-blind clinical trial in orthopaedic surgery [editorial; comment] Clark CR. **J Bone Joint Surg Am** 1997 Aug;79(8):1119–20. Comment on: J Bone Joint Surg Am 1997 Aug;79(8):1121–31.

A model for developing effective treatments: progression and interplay of theory, research, and practice. Kazdin AE. **J Clin Child Psychol** 1997 Jun;26(2):114–29 (66 ref.)

Comment on physical activity [letter; comment] Tsakok AD. **J Clin Epidemiol** 1997 May;50(5):631. Comment on: J Clin Epidemiol 1996 Feb;49(2):125–34.

Effect on measurement error on tests of statistical significance. Charter RA. **J Clin Exp Neuropsychol** 1997 Jun;19(3):458–62

The choice of controls in toothpaste studies. The effect of a number of commercially available toothpastes compared to water on 4-day plaque regrowth. Binney A, et al. **J Clin Periodontol** 1996 May;23(5):456–9

Research in the community: recruiting and retaining practices. Carey TS, et al. **J Community Health** 1996 Oct; 21(5):315–27

Insightful comments on clinical trials in sepsis [editorial; comment] Gutierrez G. **J Crit Care** 1997 Mar;12(1):1–2. Comment on: J Crit Care 1997 Mar;12(1):3–6.

Clinical trials in sepsis: where do we stand? [see comments] Vincent JL. **J Crit Care** 1997 Mar;12(1):3–6 (17 ref.). Comment in: J Crit Care 1997 Mar;12(1):1–2.

Intraclass correlation among measures related to alcohol use by school aged adolescents: estimates, correlates and applications in intervention studies. Murray DM, et al. **J Drug Educ** 1996;26(3):207–30

Qualitative research in health care: II. A structured review and evaluation of studies. Boulton M, et al. **J Eval Clin Pract** 1996 Aug;2(3):171–9

Loss to follow-up in a sample of Americans 70 years of age and older: The LSOA 1984–1990. Mihelic AH, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jan;52(1):S37–48

How to translate science into community action. Hamet P, et al. **J Hum Hypertens** 1996 Feb;10 Suppl 1:S89–92

Error budgets: a system to characterize error source in health care experimentation. Caruso BJ. **J Manipulative Physiol Ther** 1996 Jul–Aug;19(6):385–90 (10 ref.)

Accelerated titration designs for phase I clinical trials in oncology. Simon R, et al. **J Natl Cancer Inst** 1997 Aug 6;89(15):1138–47

Decreasing the burden of measurement [editorial] Strickland OL. **J Nurs Meas** 1996 Winter;4(2):99–101

Interpreting epidemiologic studies of diet–disease relationships. Tarasuk VS, et al. **J Nutr** 1997 Sep; 127(9):1847–52 (68 ref.)

Planning the design phase of a clinical study. Madison M. **J Orthop Trauma** 1997 Jan;11(1):63–7 (19 ref.)

Progression of scoliosis [letter; comment] Galasko CS. **J Pediatr Orthop** 1997 May–Jun;17(3):407. Comment on: J Pediatr Orthop 1996 May–Jun;16(3):332–5.

Experimental design strategies in the optimization and robustness testing of adsorptive stripping voltammetric conditions for kynurenic acid determination. Furlanetto S, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1585–94

Analysis of animal pharmacokinetic data: performance of the one point per animal design. Ette EI, et al. **J Pharmacokinet Biopharm** 1995 Dec;23(6):551–66

Comparison of some practical sampling strategies for population pharmacokinetic studies. Jonsson EN, et al. **J Pharmacokinet Biopharm** 1996 Apr;24(2):245–63

Statistical power and implications of meta-analysis for clinical research in psychosocial oncology [editorial] Meyer TJ, et al. **J Psychosom Res** 1996 Nov;41(5):409–13

The use and abuse of statistics in sports and exercise sciences [editorial] Bartlett R. **J Sports Sci** 1997 Feb;15(1):1–2

Research design and mental practice. Goginsky AM, et al. **J Sports Sci** 1996 Oct;14(5):381–92

Designing evaluations for a women's health education program. Nieman LZ, et al. **J Womens Health** 1997 Feb; 6(1):63–71

PACE-setting research. Engels EA, et al. **Lancet** 1997 Sep 6;350(9079):677–8

Measuring the effects of redesign. Kachoyeanos MK. **MCN Am J Matern Child Nurs** 1997 May–Jun;22(3):163

Studying knowledge, culture, and behavior in applied medical anthropology [see comments] Pelto PJ, et al. **Med Anthropol Q** 1997 Jun;11(2):147–63 (29 ref.). Comment in: Med Anthropol Q 1997 Jun;11(2):252–5.

Single-subject methodology: an alternative approach. Bates BT. **Med Sci Sports Exerc** 1996 May;28(5):631–8

Statistical considerations in the use and analysis of single-subject designs. Reboussin DM, et al. **Med Sci Sports Exerc** 1996 May;28(5):639–44

Correction of risk estimates for measurement error in epidemiology. Bashir SA, et al. **Methods Inf Med** 1995 Dec; 34(5):503–10

Knowledge representation for computer-aided planning of controlled clinical trials: the PATriCIa project. Haag U. **Methods Inf Med** 1997 Aug;36(3):172–8

Choosing the best strength measure in frail older persons: importance of task specificity. Chandler J, et al. **Muscle Nerve Suppl** 1997;5:S47–51 (34 ref.)

Noninvasive measures of central and peripheral activation in human muscle fatigue. Kent-Braun JA. **Muscle Nerve Suppl** 1997;5:S98–101 (12 ref.)

Measurement of synthesis rates of specific muscle proteins using needle biopsy samples. Rooyackers OE, et al. **Muscle Nerve Suppl** 1997;5:S93–6

Carvedilol in patients with chronic heart failure [letter; comment] Moyé LA, et al. **N Engl J Med** 1996 Oct 24; 335(17):1318; discussion 1319–20. Comment on: N Engl J Med 1996 May 23;334(21):1349–55.

Carvedilol in patients with chronic heart failure [letter; comment] von Olshausen K, et al. **N Engl J Med** 1996 Oct 24;335(17):1318–9; discussion 1319–20. Comment on: N Engl J Med 1996 May 23;334(21):1349–55.

Issues in clinical trial design. II: Selection of end point measures. Bromberg MB, et al. **Neurology** 1996 Oct;47(4 Suppl 2):S100–2

Issues in clinical trial design I: Use of natural history controls. An antagonist view. Sufit RL. **Neurology** 1996 Oct;47(4 Suppl 2):S98–9

Use and misuse of repeated measures designs. Barcikowski RS, et al. **NIDA Res Monogr** 1994;142:302–41 (44 ref.)

Gathering epidemiologic information on inhalant abuse: some methodological issues. Frank B. **NIDA Res Monogr** 1995; 148:260–73 (12 ref.)

Experiments versus quasi-experiments: do they yield the same answer? Shadish WR, et al. **NIDA Res Monogr** 1997; 170:147–64

Analysis and use of qualitative data. Sidani S, et al. **NIDA Res Monogr** 1996;166:292–309

Compensating for deficiencies in perinatal data sets: parametric perspectives. Tippetts AS, et al. **NIDA Res Monogr** 1996;166:272–91

"To be of use": enhancing the utility of qualitative research. Sandelowski M. **Nurs Outlook** 1997 May–Jun;45(3):125–32 (58 ref.)

Resubmission of a grant application: breastfeeding services for LBW infants. Brown LP, et al. **Nurs Res** 1997 Mar–Apr; 46(2):119–22

Using the Solomon Four Design. Michel Y, et al. **Nurs Res** 1996 Nov–Dec;45(6):367–9

Incorporating auxiliary variables into probability sampling designs. Trinkoff AM, et al. **Nurs Res** 1997 May–Jun; 46(3):182–5

Methodological issues in psychoneuroimmunology research. Zeller JM, et al. **Nurs Res** 1996 Sep–Oct;45(5):314–8 (39 ref.)

Research design and methods of quantitative synthesis of medical evidence. Peipert JF, et al. **Obstet Gynecol** 1997 Sep;90(3):473–8 (23 ref.)

Chronic occupational respiratory disease. Attfield MD, et al. **Occup Med** 1996 Jul–Sep;11(3):451–65 (53 ref.)

Occupational epidemiologic study design and application. Blair A, et al. **Occup Med** 1996 Jul–Sep;11(3):403–19 (112 ref.)

Planning research. Coggon D. **Occup Med (Oxf)** 1997 May; 47(4):247–8

Is there a research paradigm for palliative care? Corner J. **Palliat Med** 1996 Jul;10(3):201–8 (26 ref.)

Simon's experiments and stimulus-response compatibility: hypothesis of two automatic responses. Ghozlan A. **Percept Mot Skills** 1997 Feb;84(1):35–45

Drug monitoring studies as a method of analyzing response criteria. Lehmann E, et al. **Pharmacopsychiatry** 1997 Jan; 30(1 Suppl):52–6

Mentoring physician-scientists: fear of the unknown and scientific opportunity [see comments] Haynes BF. **Pharos** 1997 Summer;60(3):10–2. Comment in: Pharos 1997 Summer;60(3):44–5.

Health status measures: strategies and analytic methods for assessing change scores. Stratford PW, et al. **Phys Ther** 1996 Oct;76(10):1109–23 (33 ref.)

The use and interpretation of the Friedman test in the analysis of ordinal-scale data in repeated measures designs. Sheldon MR, et al. **Physiother Res Int** 1996;1(4):221–8 (28 ref.)

Place cells and place navigation. Bures J, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):343–50 (63 ref.)

Growing placebo response rate: the problem in recent therapeutic trials? Uhlenhuth EH, et al. **Psychopharmacol Bull** 1997;33(1):31–9

Effect sizes and p values: what should be reported and what should be replicated? Greenwald AG, et al. **Psychophysiology** 1996 Mar;33(2):175–83

Standardizing practices: a socio-history of experimental systems in classical genetic and virological cancer research, ca. 1920–1978. Fujimura JH. **Pubbl Stn Zool Napoli II** 1996; 18(1):3–54

Survey data collection: operationalizing the research design. Hildebrandt E. **Public Health Nurs** 1996 Apr;13(2):135–40

The redesign of the National Health Interview Survey. Fowler FJ Jr. **Public Health Rep** 1996 Nov–Dec; 111(6):508–11

Short-term effects of air pollution on health: a European approach using epidemiologic time series data. The APHEA Project. Air Pollution Health Effects--A European Approach. Katsouyanni K, et al. **Public Health Rev** 1997;25(1):7–18; discussion 19–28

A behavioural preparation for the study of human Pavlovian conditioning. Arcediano F, et al. **Q J Exp Psychol B** 1996 Aug;49(3):270–83

The PACE (population-adjusted clinical epidemiology) strategy: a new approach to multi-centred clinical research. Charlton BG, et al. **QJM** 1997 Feb;90(2):147–51

Influence of sampling on the reproducibility of ovarian follicle counts in mouse toxicity studies. Bucci TJ, et al. **Reprod Toxicol** 1997 Sep–Oct;11(5):689–96

Reporting approval by research ethics committees and subjects' consent in human resuscitation research. Olson CM, et al. **Resuscitation** 1996 Jun;31(3):255–63

Design and statistical problems in prevention. Gullberg B. **Scand J Rheumatol Suppl** 1996;103:108–10

Statistical significance--a misconstrued notion in medical research. Nurminen M. **Scand J Work Environ Health** 1997 Jun;23(3):232–5

Concept developmental analysis [letter] Hupcey JE, et al. **Sch Inq Nurs Pract** 1997 Spring;11(1):80

Concept analysis in nursing research: a critical appraisal. Morse JM, et al. **Sch Inq Nurs Pract** 1996 Fall;10(3):253–77 (104 ref.)

Design of controlled clinical trials for diabetic polyneuropathy. Sima AA, et al. **Semin Neurol** 1996 Jun; 16(2):187–91 (22 ref.)

Study design for the evaluation of diagnostic tests. Daya S. **Semin Reprod Endocrinol** 1996 May;14(2):101–9 (10 ref.)

Study design for the evaluation of treatment. Morales AJ. **Semin Reprod Endocrinol** 1996 May;14(2):111–8 (13 ref.)

Human immunodeficiency virus transmission and the role of other sexually transmitted diseases. Measures of association and study design. Boily MC, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):312–32 (69 ref.)

Assessment of two clinical trials: interferon-gamma therapy in severe injury. Mock CN, et al. **Shock** 1996 Apr; 5(4):235–40

The role of meta-analysis in monitoring clinical trials. Begg CB. **Stat Med** 1996 Jun 30;15(12):1299–306; discussion 1307–11 (25 ref.)

Incorporating variability in estimates of heterogeneity in the random effects model in meta-analysis. Biggerstaff BJ, et al. **Stat Med** 1997 Apr 15;16(7):753–68

Rule-based ranking schemes for antiretroviral trials. Bjorling LE, et al. **Stat Med** 1997 May 30;16(10):1175–91

Changes in clinical trials mandated by the advent of meta-analysis. Chalmers TC, et al. **Stat Med** 1996 Jun 30; 15(12):1263–8; discussion 1269–72

Meta-analysis in the design and monitoring of clinical trials. DerSimonian R. **Stat Med** 1996 Jun 30;15(12):1237–48; discussion 1249–52

An alternative to the use of two-sided tests in clinical trials. Dunnett CW, et al. **Stat Med** 1996 Aug 30;15(16):1729–38

Bayesian inference in two-phase prevalence studies. Erkanli A, et al. **Stat Med** 1997 May 30;16(10):1121–33

Meta-analysis and meta-analytic monitoring of clinical trials. Feinstein AR. **Stat Med** 1996 Jun 30;15(12):1273–80;

discussion 1281–3 (12 ref.)
Cohort versus cross-sectional design in large field trials: precision, sample size, and a unifying model. Feldman HA, et al. **Stat Med** 1994 Jan 15;13(1):61–78
Bayesian interim analysis of phase II cancer clinical trials. Heitjan DF. **Stat Med** 1997 Aug 30;16(16):1791–802
Bayesian and mixed Bayesian/likelihood criteria for sample size determination. Joseph L, et al. **Stat Med** 1997 Apr 15;16(7):769–81
The validity and power of tests for equality of two correlated proportions. May WL, et al. **Stat Med** 1997 May 30; 16(10):1081–96
The role of external evidence in data monitoring of a clinical trial. Pocock SJ. **Stat Med** 1996 Jun 30;15(12):1285–93; discussion 1295–7 (18 ref.)
A comparative study of several antibiotic formulations using a design based on a combination of balanced incomplete blocks and Latin squares. Prescott P, et al. **Stat Med** 1994 Jan 15;13(1):11–21
Design considerations for estimation of exposure effects on disease risk, using aggregate data studies. Sheppard L, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1849–58
Play the winner for phase II/III clinical trials. Yao Q, et al. **Stat Med** 1996 Nov 15–30;15(21–22):2413–23; discussion 2455–8
Complex surveys [editorial] Dunn G.
Stat Methods Med Res 1996 Sep;5(3):213
Modelling the sampling design in the analysis of health surveys. Graubard BI, et al. **Stat Methods Med Res** 1996 Sep;5(3):263–81 (53 ref.)
Innovative strategies using SUDAAN for analysis of health surveys with complex samples. LaVange LM, et al.
Stat Methods Med Res 1996 Sep;5(3):311–29
Variance estimation for complex surveys using replication techniques. Rust KF, et al. **Stat Methods Med Res** 1996 Sep;5(3):283–310 (52 ref.)
Considerations in the design of clinical trials of neuroprotective therapy in acute stroke. Dorman PJ, et al. **Stroke** 1996 Sep;27(9):1507–15 (85 ref.)
Ethnography: an overview. Agar MH. **Subst Use Misuse** 1997 Jul;32(9):1155–73 (19 ref.)
Maternal substance use: epidemiology, treatment outcome, and developmental effects: an annotated bibliography, 1995. Coles CD, et al. **Subst Use Misuse** 1997 Jan;32(2):149–68
A selected bibliography on the drug use(r) "career". Hunt DE. **Subst Use Misuse** 1997 Feb;32(3):283–91
Strategies for follow-up of drug users: field research guidelines. Spotts D, et al. **Subst Use Misuse** 1996 Nov; 31(13):1891–927
Composite outcome measures in alcoholism treatment research: problems and potentialities. Zweben A, et al. **Subst Use Misuse** 1996 Nov;31(13):1783–805 (36 ref.)
Methodology of trials with antiemetics. Tonato M, et al. **Support Care Cancer** 1996 Jul;4(4):281–6 (9 ref.)
Organophosphate pesticides—neurological and respiratory toxicity [letter; comment] Maurissen JP.
Toxicol Ind Health 1997 Jan–Feb;13(1):91–3, 95–7. Comment on: Toxicol Ind Health 1995 Jan–Feb;11(1):33–9.
New research avenues in combustion toxicology.
Toxicology 1996 Dec 31;115(1–3):185–200
New research avenues in toxicology: 7-gas N-Gas Model, toxicant suppressants, and genetic toxicology. Levin BC. **Toxicology** 1996 Dec 31;115(1–3):89–106 (41 ref.)
Conducting a descriptive survey: 1. Planning the survey. Macfarlane SB. **Trop Doct** 1996 Oct;26(4):161–4 (9 ref.)
Parameters potentially affecting interpretation of immunogenicity and efficacy data in vaccine trials: are they adequately reported? Poirier MK, et al. **Vaccine** 1996 Jan; 14(1):25–7
Unanticipated results of continuity of care research with the elderly—Part 1: Design issues. Anderson MA, et al.
West J Nurs Res 1997 Jun;19(3):406–13
A triangulation approach to testing a family instrument. Friedemann ML, et al. **West J Nurs Res** 1997 Jun; 19(3):364–78
[Consultant service in research methodology and statistics (editorial)] Keiding N, et al. **Ugeskr Laeger** 1996 Dec 16; 158(51):7373 **(Dan)**
[Research plan and follow-up of the project] Sariola H.
Duodecim 1995;111(19):1833–7 **(Fin)**
[May the lack of significance in a trial of therapeutics methods be of equal value? The result of beta-error in the planning and interpretation of clinical studies] Tryba M.
Anaesthesist 1997 Jul;46(7):571–3 **(Ger)**
[Criminology in biomedical research] Varró V. **Orv Hetil** 1996 Mar 24;137(12):633–6 (Eng. Abstr.) **(Hun)**
[The short-term effect of a smoking prevention program for the upper graders of elementary schools—the results of intervention study for two years with quasi-experimental design] Nishioka N, et al. **Nippon Koshu Eisei Zasshi** 1996 Jun;43(6):434–45 (Eng. Abstr.) **(Jpn)**
[When figures are not enough—use of qualitative methods in medical research] Klepp KI. **Tidsskr Nor Laegeforen** 1997 Feb 20;117(5):639–40 **(Nor)**
[Clinical experimental research in hematology: planning, data management and the presentation of the results] Kulikov SM, et al. **Ter Arkh** 1996;68(7):65–72 **(Rus)**
["Blank controls" (the complete simulation of the experiment): a comparison of different groups of "control" mice by their indices of spontaneous motor activity] Lapin IP.
Zh Vyssh Nerv Deiat Im I P Pavlova 1996 Sep–Oct; 46(5):957–60 **(Rus)**
[Application of the case-control method to the evaluation of screening tests] Weiss NS. **Bol Oficina Sanit Panam** 1996 Oct;121(4):310–7 **(Spa)**
[Guideline for the evaluation of health science research projects. Group of Evaluation of the Activities of the Fund for Health Research from 1988 to 1995] Guallar E, et al. **Med Clin (Barc)** 1997 Mar 29;108(12):460–71 **(Spa)**
[Statistical design in clinical trials] Rubio Terrés C.
Med Clin (Barc) 1996 Sep 14;107(8):303–9 **(Spa)**
[Research methods in clinical cardiology (I). Types of basic designs. Observational studies in clinical cardiology (I)] Gabriel Sánchez R, et al. **Rev Esp Cardiol** 1996 Nov; 49(11):837–51 (Eng. Abstr.) **(Spa)**
[Manipulation of genes causing diseases] Monckeberg F.
Rev Med Chil 1996 Mar;124(3):371–6 (28 ref.) (Eng. Abstr.) **(Spa)**
[The decisive steps cost billions. Extensive studies provide answers for many questions] Wallström A, et al.
Lakartidningen 1997 Jul 23;94(30–31):2653–7 **(Swe)**

LEGISLATION & JURISPRUDENCE

FDA regulation of analyte-specific reagents (ASRs). Implications for nucleic acid-based molecular testing [news] Garrett CT, et al. **Diagn Mol Pathol** 1996 Sep; 5(3):151–3
The founding of the EURO-DURG, the European Drug Utilization Research Group. Schubert I.
Int J Clin Pharmacol Ther 1996 Sep;34(9):410–3

STANDARDS

Recommended guidelines for reviewing, reporting, and conducting research on in-hospital resuscitation: the in-hospital "Utstein style". A statement for health care professionals from the American Heart Association, the European Resuscitation Council, the Heart and Stroke Foundation of Canada, the Australian Resuscitation Council, and the Resuscitation Councils of Southern Africa [see comments] **Acad Emerg Med** 1997 Jun;4(6):603–27. Comment in: Acad Emerg Med 1997 Jun;4(6):536–7.
Cranial computed tomography for nontrauma patients: critical appraisal of a decision rule [editorial; comment] Stiell IG. **Acad Emerg Med** 1997 Jul;4(7):650–2. Comment on: Acad Emerg Med 1997 Jul;4(7):654–61.
Safety-belt effectiveness: the influence of crash severity and selective recruitment. Evans L. **Accid Anal Prev** 1996 Jul; 28(4):423–33
Reflections on the design and reporting of STD/HIV behavioral intervention research. O'Leary A, et al.
AIDS Educ Prev 1997 Feb;9(1 Suppl):1–14
A review of problems in clinical acupuncture research. Ernst E, et al. **Am J Chin Med** 1997;25(1):3–11 (31 ref.)
Ultrasound retrieval of foreign bodies [editorial; comment] Storrow AB, et al. **Ann Emerg Med** 1997 Jun;29(6):779–8 . Comment on: Ann Emerg Med 1997 Jun;29(6):731–4.
The virtue of qualitative and quantitative research [editorial; comment] Inui TS. **Ann Intern Med** 1996 Nov 1; 125(9):770–1. Comment on: Ann Intern Med 1996 Nov 1;125(9):730–7.
Rethinking the conduct of psychiatric research [comment] [see comments] Appelbaum PS. **Arch Gen Psychiatry** 1997 Feb;54(2):117–20 (29 ref.). Comment on: Arch Gen Psychiatry 1997 Feb;54(2):105–11. Comment on: Arch Gen Psychiatry 1997 Feb;54(2):113–6. Comment on: Arch Gen Psychiatry 1997 Feb;54(2):121–3. Comment in: Arch Gen Psychiatry 1997 Feb;54(2):121–3.
National Institute of Mental Health Collaborative Multimodal Treatment Study of Children with ADHD (the MTA). Design challenges and choices. Arnold LE, et al. **Arch Gen Psychiatry** 1997 Sep;54(9):865–70
The rationale and ethics of medication-free research in schizophrenia [see comments] Carpenter WT Jr, et al.
Arch Gen Psychiatry 1997 May;54(5):401–7 (58 ref.). Comment in: Arch Gen Psychiatry 1997 May;54(5):412–3. Comment in: Arch Gen Psychiatry 1997 May;54(5):415–6.
The call of the sirens. Navigating the ethics of medication-free research in schizophrenia [comment] Fins JJ, et al. **Arch Gen Psychiatry** 1997 May;54(5):415–6. Comment on: Arch Gen Psychiatry 1997 May;54(5):401–7.
Medication-free research with schizophrenic patients. A European perspective [comment] Henn FA, et al.
Arch Gen Psychiatry 1997 May;54(5):412–3. Comment on: Arch Gen Psychiatry 1997 May;54(5):401–7.
Caveat emptor? Caveat lector (reader beware)! [letter] Roberts KB, et al. **Arch Pediatr Adolesc Med** 1997 Sep; 151(9):959–60
Time to retire preventable death studies [editorial] Civil ID.
Aust N Z J Surg 1997 Sep;67(9):587
Preventable death studies: an inappropriate tool for evaluating trauma systems. Kelly AM, et al.
Aust N Z J Surg 1997 Sep;67(9):591–2 (25 ref.)
Fraud and misconduct in medical research. Wells F.
Br J Clin Pharmacol 1997 Jan;43(1):3–7
A guide to interpreting discordant systematic reviews. Jadad AR, et al. **Can Med Assoc J** 1997 May 15;156(10):1411–6
Hormone replacement therapy and early clinical appearance of low grade breast cancer [letter; comment] Berrino F, et al. **Cancer Causes Control** 1997 Jul;8(4):672; discussion 673. Comment on: Cancer Causes Control 1996 Jul;7(4):449–57.
Alternatives to mega-trials in cardiovascular disease. Hampton JR. **Cardiovasc Drugs Ther** 1997 Jan;10(6):759–65 (34 ref.)
Confounding and effect modification: their significance in medical research [letter] Olayinka BA. **Cent Afr J Med** 1997 Jan;43(1):27–8
Scope of urinary pathogens isolated in the Public Health Bacteriology Laboratory, Harare: antibiotic susceptibility patterns of isolates and incidence of haemolytic bacteria [letter; comment] Rusakaniko S. **Cent Afr J Med** 1997 Jan; 43(1):26–7. Comment on: Cent Afr J Med 1996 Aug;42(8):244–9.
The design of clinical trials aimed at assessing the DC-ART properties of new molecules in rheumatoid arthritis. Ortiz Z, et al. **Clin Exp Rheumatol** 1997 May–Jun;15 Suppl 17:S39–44 (33 ref.)
Bias in studies of venous thromboembolism in relation to the use of new formulations of oral contraceptives [letter; comment] Weiss NS. **Contraception** 1997 Mar;55(3):189–90; discussion 192–4. Comment on: Contraception 1996 Jul;54(1):5–13.
How to use an article on therapy or prevention: pneumonia prevention using subglottic secretion drainage [see comments] Cook DJ, et al. **Crit Care Med** 1997 Sep; 25(9):1502–13 (78 ref.). Comment in: Crit Care Med 1997 Sep;25(9):1448–9.
How to use diagnostic test articles in the intensive care unit: diagnosing weanability using f/Vt. Jaeschke RZ, et al.
Crit Care Med 1997 Sep;25(9):1514–21 (24 ref.)
Either a paradigm shift or no mental measurement: the nonscience and the nonsense of The Bell Curve. Hilliard AG 3rd. **Cult Divers Ment Health** 1996;2(1):1–20 (37 ref.)
Guidelines for the presentation of research plans and protocols, data documentation and data storage in clinical and clinical-epidemiological research. Danish Medical Research Council and Danish Committee on Scientific Dishonesty. Nexø E, et al. **Dan Med Bull** 1997 Feb; 44(1):88–9
Multiparous species present problems (and possibilities) to developmentalists. Zorrilla EP. **Dev Psychobiol** 1997 Mar; 30(2):141–50 (49 ref.)
Bisphenol-A dental sealants: the inappropriateness of continued reference to a single female patient [letter; comment] Ashby J. **Environ Health Perspect** 1997 Apr; 105(4):362. Comment on: Environ Health Perspect 1996 Mar;104(3):298–305.
Purpose and guidelines for toxicokinetic studies within the National Toxicology Program. Buchanan JR, et al.
Environ Health Perspect 1997 May;105(5):468–71 (4 ref.)
Replication [editorial; comment] Cohen AJ. **Epidemiology** 1997 Jul;8(4):341–3. Comment on: Epidemiology 1997 Jul;8(4):364–70. Comment on: Epidemiology 1997 Jul;8(4):371–7.
Estimating the risk of breast cancer in relation to the interval since last term pregnancy [see comments] Cummings P, et al. **Epidemiology** 1997 Sep;8(5):488–94 (18 ref.). Comment in: Epidemiology 1997 Sep;8(5):471–3.
Sensitivity of the relation between cumulative magnetic field exposure and brain cancer mortality to choice of monitoring data grouping scheme. Kromhout H, et al.
Epidemiology 1997 Jul;8(4):442–5
The importance of critically interpreting simulation studies [comment] [see comments] Maldonado G, et al.
Epidemiology 1997 Jul;8(4):453–6. Comment on: Epidemiology 1997 Jul;8(4):429–34. Comment in: Epidemiology 1997 Jul;8(4):457.
What trials, which designs? [editorial; comment] French JA.
Epilepsia 1997 Mar;38(3):263–5. Comment on: Epilepsia 1997 Mar;38(3):294–300.
Scientific quality of clinical research. An analysis of 40 research projects in pharmacology/pharmacotherapy. Winther FO, et al. **Eur J Clin Pharmacol** 1997;51(5):351–4
Interpreting the term selection bias in medical research. Mark DH. **Fam Med** 1997 Feb;29(2):132–6
The measurement of public opinion on abortion: the effects of survey design. Bumpass LL. **Fam Plann Perspect** 1997 Jul–Aug;29(4):177–80
Empowering research: statistical power in general practice research. Fox N, et al. **Fam Pract** 1997 Aug;14(4):324–9 (7 ref.)
A review of recently published qualitative research in general practice. More methodological questions than answers? Hoddinott P, et al. **Fam Pract** 1997 Aug;14(4):313–9 (33 ref.)
Guidelines for international collaborative research. Rosser WW, et al. **Fam Pract** 1997 Aug;14(4):330–4 (14 ref.)
The best measure of uncertainty—hypothesis tests or tests of estimation? [letter; comment] Grimes DA.
Fertil Steril 1997 Jul;68(1):177–8. Comment on: Fertil Steril 1997 Jan;67(1):30–3.
Economical designs for detecting and characterizing departure from additivity in mixtures of many chemicals. Gennings C. **Food Chem Toxicol** 1996 Nov–Dec; 34(11–12):1053–8 (22 ref.)
Statistical designs in combination toxicology: a matter of choice. Schoen ED. **Food Chem Toxicol** 1996 Nov–Dec; 34(11–12):1059–65 (17 ref.)
Experimental designs, statistics and interpretation. Simmons JE, et al. **Food Chem Toxicol** 1996 Nov–Dec; 34(11–12):1169–71 (3 ref.)
Analysis of clinical grading scales for the foot and ankle. Kitaoka HB, et al. **Foot Ankle Int** 1997 Jul;18(7):443–6
How to do a simple epidemiological study. I. Planning.

Bowker TJ. **Int J Cardiol** 1996 Dec 6;57(2):105–17 (23 ref.)

Matched–pair case–control studies when risk factors are correlated within the pairs. Gladen BC. **Int J Epidemiol** 1996 Apr;25(2):420–5

A search for recall bias in a case–control study of diet and breast cancer. Holmberg L, et al. **Int J Epidemiol** 1996 Apr;25(2):235–44

Trends and patterns in suicide in England and Wales [letter; comment] Rodrigues L. **Int J Epidemiol** 1996 Apr; 25(2):458–9. Comment on: Int J Epidemiol 1995;24 Suppl 1:S45–52.

Designs for studies evaluating tests. Dewey ME. **Int J Geriatr Psychiatry** 1997 Apr;12(4):492–4

EUR–ASSESS Project Subgroup report on Methodology. Methodological guidance for the conduct of health technology assessment. Liberati A, et al. **Int J Technol Assess Health Care** 1997 Spring;13(2):186–219 (55 ref.)

Risk prediction: judging the judges [editorial] Angus DC, et al. **Intensive Care Med** 1997 Apr;23(4):363–5

Saline–lavaged lung injury and pressure support ventilation [letter; comment] Guery BP, et al. **Intensive Care Med** 1997 May;23(5):600–1. Comment on: Intensive Care Med 1996 Dec;22(12):1445–52.

Validation of a quality of life questionnaire for critically ill patients [letter; comment] Ridley SA. **Intensive Care Med** 1997 Apr;23(4):483–4. Comment on: Intensive Care Med 1996 Oct;22(10):1034–42.

Selecting topics for scientific investigation. Morrey BF. **Iowa Orthop J** 1997;17:139–40

Design issues addressed in published evaluations of adolescent HIV–risk reduction interventions: a review [see comments] Stanton B, et al. **J Adolesc Health** 1996 Jun; 18(6):387–96 (61 ref.). Comment in: J Adolesc Health 1996 Jun;18(6):379.

A re–examination of the experimental design for nursing research. Poole K, et al. **J Adv Nurs** 1996 Jul;24(1):108–14 (64 ref.)

An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. Twinn S. **J Adv Nurs** 1997 Aug;26(2):418–23

Nursing–home–acquired pneumonia: how and where to treat? [editorial; comment] Mehr DR. **J Am Board Fam Pract** 1997 Mar–Apr;10(2):168–70. Comment on: J Am Board Fam Pract 1997 Mar–Apr;10(2):82–7.

"Conflicts of interest" and "political science". Seltzer CC. **J Clin Epidemiol** 1997 May;50(5):627–9

Are community health interventions evaluated appropriately? A review of six journals. Smith PJ, et al. **J Clin Epidemiol** 1997 Feb;50(2):137–46

Use and abuse of the Children's Depression Inventory. Fristad MA, et al. **J Consult Clin Psychol** 1997 Aug; 65(4):699–702 (21 ref.)

The influence of clinical study design on cost–effectiveness projections for the treatment of gram–negative sepsis with human anti–endotoxin antibody. Linden PK, et al. **J Crit Care** 1995 Dec;10(4):154–64

Detecting poor design, erroneous analysis and misinterpretation of studies. Appleton DR. **J Eval Clin Pract** 1995 Nov;1(2):113–7 (8 ref.)

On evidence, embellishment and efficacy. Morgan WK. **J Eval Clin Pract** 1997 Apr;3(2):117–22 (12 ref.)

The case for failed meta–analyses. Naylor CD. **J Eval Clin Pract** 1995 Nov;1(2):127–30 (21 ref.)

Criteria for conducting quantitative risk assessments for silica. Goldsmith DF, et al. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):367–75

Appropriateness of antibiotics [letter; comment] Keegan JM. **J Fam Pract** 1996 Oct;43(4):330–1. Comment on: J Fam Pract 1996 Apr;42(4):357–61.

Outcome for tiny babies beyond the nursery [editorial; comment] Doyle LW. **J Paediatr Child Health** 1997 Apr; 33(2):96–7. Comment on: J Paediatr Child Health 1997 Apr;33(2):98–101.

The social and educational outcome of a cohort of rural children in relation to the racial and socioeconomic groupings of their parents [letter; comment] McDermott R, et al. **J Paediatr Child Health** 1997 Apr;33(2):175–6. Comment on: J Paediatr Child Health 1996 Apr;32(2):99–102.

Social and educational outcome of rural children [letter; comment] Stanley F. **J Paediatr Child Health** 1997 Apr; 33(2):174; discussion 175–6. Comment on: J Paediatr Child Health 1996 Apr;32(2):99–102.

Methods controversies and agreement. Design and interpretation of evaluations. **Med Care** 1996 Dec;34(12 Suppl):DS146–50

How convergence of research paradigms can improve research on diagnostic judgment. Hammond KR. **Med Decis Making** 1996 Jul–Sep;16(3):281–7 (30 ref.)

Challenges in measuring patient outcomes. Strickland OL. **Nurs Clin North Am** 1997 Sep;32(3):495–512 (23 ref.)

Flawed research: is it the design, methods, or the wrong conclusions? [editorial] Anderson CA. **Nurs Outlook** 1996 Sep–Oct;44(5):209–10

How should we evaluate a cohort study? Study design [editorial] Klein R, et al. **Ophthalmology** 1997 Oct; 104(10):1533–4

Fumes from the spleen [letter] **Paediatr Perinat Epidemiol** 1997 Apr;11(2):136–8

The organisation of a national survey for evaluating child psychomotor development in Argentina. Lejarraga H, et al. **Paediatr Perinat Epidemiol** 1997 Jul;11(3):359–73

How many subjects are needed in a research sample in palliative care? Faithfull S. **Palliat Med** 1996 Jul; 10(3):259–61

Operational design and quality control in the CATCH multicenter Trial. Stone EJ, et al. **Prev Med** 1996 Jul–Aug; 25(4):384–99

Prostate cancer, race, and socioeconomic status: inadequate adjustment for social factors in assessing racial differences. Dale W, et al. **Prostate** 1996 Nov;29(5):271–81 (53 ref.)

Increased rates of schizophrenia among immigrants: some methodological concerns raised by Danish findings. Mortensen PB, et al. **Psychol Med** 1997 Jul;27(4):813–20

Evidence–based intervention for musculoskeletal disorders [editorial] Malmivaara A. **Scand J Work Environ Health** 1997 Jun;23(3):161–3

Vocational outcome of intervention for low–back pain. van der Weide WE, et al. **Scand J Work Environ Health** 1997 Jun;23(3):165–78

Early detection and intervention in schizophrenia: research. McGlashan TH. **Schizophr Bull** 1996;22(2):327–45 (34 ref.)

Studying the quality of life after organ transplantation: research problems and solutions. Joralemon D, et al. **Soc Sci Med** 1997 May;44(9):1259–69 (100 ref.)

A call for consistency in definition of breastfeeding behaviors. Labbok MH, et al. **Soc Sci Med** 1997 Jun;44(12):1931–2

Olfactory remediation: current evidence and possible applications. Martin GN. **Soc Sci Med** 1996 Jul;43(1):63–70 (75 ref.)

An index for assessing blindness in a multi–centre clinical trial: disulfiram for alcohol cessation––a VA cooperative study. James KE, et al. **Stat Med** 1996 Jul 15;15(13):1421–34

Modelling and design of cross–over trials. Jones B, et al. **Stat Med** 1996 Jul 15;15(13):1435–46

Statistical power and design of focused clustering studies. Waller LA. **Stat Med** 1996 Apr 15–May 15;15(7–9):765–82 (39 ref.)

[Randomized study of n–of–1 trials versus standard practice (news)] Chatellier G. **Rev Epidemiol Sante Publique** 1996 Aug;44(4):382–3 **(Fre)**

STATISTICS & NUMERICAL DATA

Comparing methods of measurements. Ludbrook J. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):193–203 (34 ref.)

Statistical considerations concerning clinical studies designed to assess DC–ARTs. Della Casa–Alberighi O, et al. **Clin Exp Rheumatol** 1997 May–Jun;15 Suppl 17:S45–52 (48 ref.)

Bias against the null hypothesis in maternal–fetal pharmacology and toxicology. Koren G. **Clin Pharmacol Ther** 1997 Jul;62(1):1–5 (21 ref.)

An introduction to the statistical design of phase III cancer clinical trials. Sylvester R. **Eur Urol** 1997;31 Suppl 1:65–71 (8 ref.)

The effect of sampling error and measurement error and its correlation on the estimation of multi–locus fixed–bin VNTR RFLP genotype probabilities. Hartmann JM, et al. **J Forensic Sci** 1997 Mar;42(2):241–5

Making a case for single case research [editorial] Hasson S. **J Orthop Sports Phys Ther** 1996 Jul;24(1):1–3

Statistical principles underlying the applications of laboratory methods to field studies. Guo SS, et al. **Muscle Nerve Suppl** 1997;5:S32–4 (7 ref.)

Observer variability in volumetric blood flow measurements in leg arteries using duplex ultrasound. Hussain ST, et al. **Ultrasound Med Biol** 1996;22(3):287–91

[Evaluation of using statistical methods in selected national medical journals] Sych Z. **Ann Acad Med Stetin** 1996; 42:67–84 (Eng. Abstr.) **(Pol)**

TRENDS

Advancing epidemiologic studies of occupational injury––approaches and future directions. Burdorf A, et al. **Am J Ind Med** 1997 Aug;32(2):180–3

Are human subject volunteers still players in aeromedical research as we enter the 21st century? Popper SE, et al. **Aviat Space Environ Med** 1997 Aug;68(8):746–50

RESEARCH, HEALTH SERVICES see **HEALTH SERVICES RESEARCH**

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RESEARCH, NURSING METHODOLOGY see **NURSING METHODOLOGY RESEARCH**

RESEARCH PERSONNEL

The vexed question of authorship: views of researchers in a British medical faculty [see comments] Bhopal R, et al. **BMJ** 1997 Apr 5;314(7086):1009–12. Comment in: BMJ 1997 Apr 5;314(7086):992.

Rating authors' contributions to collaborative research: the PICNIC survey of university departments of pediatrics. Pediatric Investigators' Collaborative Network on Infections in Canada [see comments] Davies HD, et al. **Can Med Assoc J** 1996 Oct 1;155(7):877–82. Comment in: Can Med Assoc J 1996 Oct 1;155(7):897–8. Comment in: Can Med Assoc J 1997 May 15;156(10):1382–3.

Authors: who contributes what? [editorial; comment] [see comments] Squires BP. **Can Med Assoc J** 1996 Oct 1; 155(7):897–8. Comment on: Can Med Assoc J 1996 Oct 1;155(7):877–82. Comment in: Can Med Assoc J 1997 May 15;156(10):1382–3.

Expanding the role of the nurse in clinical trials: the nursing summaries. Di Giulio P, et al. **Cancer Nurs** 1996 Oct; 19(5):343–7

Experience with nurturing clinical investigation in Alberta. Magnan JW, et al. **Clin Invest Med** 1997 Aug;20(4):273–6

Report from the University of Toronto Department of Medicine Ad Hoc Committee on career development of clinician scientists. Siminovitch K. **Clin Invest Med** 1997 Aug;20(4):265–7

Women in biomedical research––addressing the challenges. Whiteside C, et al. **Clin Invest Med** 1997 Aug;20(4):268–72

Qualitative research interviewing by general practitioners. A personal view of the opportunities and pitfalls. Hoddinott P, et al. **Fam Pract** 1997 Aug;14(4):307–12

Howard Hughes Medical Institute dose assessment survey. O'Brien SL, et al. **Health Phys** 1996 Dec;71(6):966–9

Nurse researcher: a study of a contradiction in terms? Hicks C. **J Adv Nurs** 1996 Aug;24(2):357–63

The clinical investigator: bewitched, bothered, and bewildered––but still beloved [editorial] Goldstein JL, et al. **J Clin Invest** 1997 Jun 15;99(12):2803–12 (38 ref.)

Chilton, Fertig, Fleiss, and the Task Force on Design and Analysis in Dental and Oral Research. Kingman A, et al. **J Dent Res** 1997 Jun;76(6):1239–43

The basic scientist in a clinical department. Eadie MJ. **J Gastroenterol Hepatol** 1996 Sep;11(9):880–2

Women in medical research: headaches and hurdles. Hart P. **J Gastroenterol Hepatol** 1996 Sep;11(9):885–7

A commentary on: career paths for basic scientists in medical research. Ramm GA. **J Gastroenterol Hepatol** 1996 Sep; 11(9):882–4

Credentialing of research surgeons: can computers help in the process? [editorial] Othersen HB Jr, et al. **J Invest Surg** 1996 May–Jun;9(3):159–60

The role of the clinical research coordinator in multicenter clinical trials. Pelke S, et al. **J Obstet Gynecol Neonatal Nurs** 1997 May–Jun; 26(3):279–85 (14 ref.)

Ho joins Montagnier in AIDS centres project [news] **Nature** 1997 May 22;387(6631):330

Individuals' rights and wrongs [letter; comment] Brown D. **Nature** 1996 Oct 10;383(6600):474. Comment on: Nature 1996 Sep 12;383(6596):107–8.

Karolinska Institute disowns work of cancer researcher [news] Butler D. **Nature** 1997 Aug 28;388(6645):816

Going to work in genes catches on. Horton B. **Nature** 1996 Oct 24;383(6602):739–40

Individuals' rights and wrongs [letter; comment] Rosen J. **Nature** 1996 Oct 10;383(6600):474. Comment on: Nature 1996 Sep 12;383(6596):107–8.

Long–term change in the organization of inventive activity. Lamoreaux NR, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12686–92

Star scientists and institutional transformation: patterns of invention and innovation in the formation of the biotechnology industry. Zucker LG, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12709–16

Looking for alternatives. A scientist's death raises questions about a toxic mercury compound [news] Zacks R. **Sci Am** 1997 Sep;277(3):20

Stanford researcher fights dismissal in hospital spat [news] Holden C. **Science** 1997 Oct 3;278(5335):27

NIH case ends with mysteries unsolved [news] Kaiser J. **Science** 1997 Sep 26;277(5334):1920

Swift justice salvages reputations [news] Kaiser J. **Science** 1996 Oct 18;274(5286):338

Work in clinical research––without a medical degree. Ruediger N. **Science** 1997 Oct 3;278(5335):153

The consequences of knowing: ethical and legal liabilities in illicit drug research. Fitzgerald J, et al. **Soc Sci Med** 1996 Dec;43(11):1591–600 (35 ref.)

[Laboratory animals as a cause of occupational allergy] Krakowiak A, et al. **Med Pr** 1996;47(5):523–31 (55 ref.) (Eng. Abstr.) **(Pol)**

EDUCATION

Developing a paradigm for training cardiovascular clinical investigators [editorial] Domanski M, et al. **Am J Cardiol** 1996 Oct 15;78(8):943–4

Cancer prevention and control investigators: the need for high quality training programs. Love RR, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Feb;5(2):141–2

The learning environment and the clinician scientist. Sweeney GD. **Clin Invest Med** 1997 Aug;20(4):248

Consensus radiation protection practices for academic research institutions. Schiager KJ, et al. **Health Phys** 1996 Dec;71(6):960–5

Developmental stages of clinical research programs, Part I. Smith AB, et al. **MCN Am J Matern Child Nurs** 1997 May–Jun;22(3):123–6

LEGISLATION & JURISPRUDENCE

AIDS researcher loses libel fight against French newspaper [news] **Nature** 1996 Nov 7;384(6604):10

ORGANIZATION & ADMINISTRATION

Enhancing the role of community–health workers in research. Hill MN, et al. **Image J Nurs Sch** 1996 Fall; 28(3):221–6

Effect of a research nurse on patient enrollment in a clinical study. Isaacman DJ, et al. **Pediatr Emerg Care** 1996 Oct; 12(5):340–2

PSYCHOLOGY

Equipoise as a means of managing uncertainty: personal, communal and proxy. Alderson P. **J Med Ethics** 1996 Jun; 22(3):135–9

Developmental stages of clinical research programs, Part I. Smith AB, et al. **MCN Am J Matern Child Nurs** 1997 May–Jun;22(3):123–6

A crisis in scientific morale. Pollack R. **Nature** 1997 Feb 20;385(6618):673–4

Conducting research on child maltreatment: effects on researchers. Kinard EM. **Violence Vict** 1996 Spring; 11(1):65–9

STANDARDS

Feasibility of using volunteer research staff to deliver and evaluate a low–fat dietary intervention: the American Cancer Society Breast Cancer Dietary Intervention Project. Kristal AR, et al.
Cancer Epidemiol Biomarkers Prev 1997 Jun;6(6):459–67

SUPPLY & DISTRIBUTION

The continuing dilemma in clinical investigation and the future of American health care: a system–wide problem requiring collaborative solutions. Crowley WF Jr, et al. **Acad Med** 1996 Nov;71(11):1154–63

Research in the community: recruiting and retaining practices. Carey TS, et al. **J Community Health** 1996 Oct; 21(5):315–27

Generation of physician–scientists manpower: a follow–up study of the first 294 graduates of the Harvard–MIT Program of Health Sciences and Technology. Abelmann WH, et al. **J Investig Med** 1997 Jun;45(5):272–5

TRENDS

Survival of clinician scientists. Roy CC. **Clin Invest Med** 1997 Aug;20(4):283–8

RESEARCH PRIORITIES see **RESEARCH**

RESEARCH PROTOCOLS, CLINICAL see **CLINICAL PROTOCOLS**

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RESEARCH SUPPORT

Educational loan repayment/forgiveness programs: a creative solution to a serious problem. Horowitz MS. **Acad Med** 1996 Sep;71(9):986–7

The Ad Hoc Group for Medical Research Funding: 15 years of uniting the community. Knapp RM. **Acad Med** 1997 Apr;72(4):290–1

From the scientific idea to its realisation––principles and strategies in neurosurgery. Fahlbusch R.
Acta Neurochir Suppl (Wien) 1997;69:120–5

An historical error in the tribute to the late Mark Keller [letter] Roizen R. **Addiction** 1997 Feb;92(2):221

Voice of the victims––the key to consensus and support for alcoholism research. O'Neill JT. **Alcohol Alcohol** 1996 Mar; 31 Suppl 1:83–7

Disclosure of financial interest: a new policy for Alzheimer disease and associated disorders [editorial] Whitehouse PJ, et al. **Alzheimer Dis Assoc Disord** 1996 Spring;10(1):1–2

Take off the stethoscope and put on a microphone. Woolley M, et al. **Am J Med** 1996 Sep;101(3):241–3

Is the use of life history and narrative in clinical practice fundable as research? [see comments] Duchek JM, et al. **Am J Occup Ther** 1996 May;50(5):393–6. Comment in: Am J Occup Ther 1997 Apr;51(4):313–7.

The making of a winner. Orthopedic research keeps professional athletes on the playing field [editorial] Szabo RM, et al. **Am J Orthop** 1996 Nov;25(11):742, 747

Request for disclosure of financial interest [letter; comment] Aguirre GD. **Am J Vet Res** 1997 Jun;58(6):568–9. Comment on: Am J Vet Res 1997 Jan;58(1):23–7.

Relationship between NIH dollars and percentage of residents matched through the National Residency Matching Program [letter] Wu CL, et al. **Anesthesiology** 1997 Aug;87(2):454–6

Dispute over breast cancer research funds in the US [news] **Ann Oncol** 1997 Jan;8(1):2–3

The strategy of the Commission for cancer research [news] Abbott A. **Ann Oncol** 1997 Jun;8(6):505

University, industry, and governmental consortia: alliances for a new era. Moskowitz J. **Ann Thorac Surg** 1997 Sep; 64(3):906–7

Remarks of Louis W. Sullivan, MD, before the annual AIMBE meeting. Sullivan LW. **ASAIO J** 1997 Jan–Feb; 43(1):5–7

Funded researchers produce more, share less data.
Biomed Instrum Technol 1997 Mar–Apr;31(2):171

Regulating complementary medicine. Only 0.08% of funding for research in NHS goes to complementary medicine [letter] Ernst E. **BMJ** 1996 Oct 5;313(7061):882

Medical Research Council is to abolish project grants [news] Wise J. **BMJ** 1997 May 31;314(7094):1571

Research general practices: what, who and why? Smith LF. **Br J Gen Pract** 1997 Feb;47(415):83–6

Financial equivalent, industry sponsored research and conflict of interest. Pullmann R. **Bratisl Lek Listy** 1997 Jan;98(1):5–7

NLM extramural program: frequently asked questions. Zink S, et al. **Bull Med Libr Assoc** 1996 Apr;84(2):165–81

STD research grants available [news] **Can Med Assoc J** 1996 Nov 1;155(9):1301

The management of pancreatic carcinoma ...a continuing challenge: introduction [letter] Rosner F. **Cancer** 1997 Feb 1;79(3):626; discussion 627–8

Acknowledgement of your research sponsor. It pays to advertise [news] Lenfant C. **Circulation** 1996 Aug 1; 94(3):234–5

What are you waiting for? [editorial] Woolley M.
Circulation 1996 Oct 15;94(8):1802–3

Relationships between the academic community and the pharmaceutical industry: the legislative background and its effect on spending on medical research and development. Matthews JH. **Clin Invest Med** 1996 Dec; 19(6):470–8

A 10–year (1986–1995) review of data on scholar awardees in the Faculty of Medicine, University of Toronto. Yip CC, et al. **Clin Invest Med** 1997 Aug;20(4):280–2

Are the lean days for research funding finally coming to an end? Gray C. **CMAJ** 1997 Jun 15;156(12):1748–9

Funding nursing informatics activities. Internet access to announcements of government funding. McCormick KA, et al. **Comput Nurs** 1996 Nov–Dec;14(6):315–22 (10 ref.)

My word. Money isn't everything [editorial] Arata Y.
Curr Biol 1997 Apr 1;7(4):R203

Published literature on faculty development programs. Meurer LN, et al. **Fam Med** 1997 Apr;29(4):248–50 (21 ref.)

Support and rewards for scholarly activity in family medicine: a national survey. Oeffinger KC, et al.
Fam Med 1997 Jul–Aug;29(7):508–12

Ten steps to writing a research proposal [editorial] Barbieri RL, et al. **Fertil Steril** 1996 Nov;66(5):690–2

Financing gene therapy beyond phase II [news] Michael A. **Gene Ther** 1996 Dec;3(12):1035–8

The Chief Scientist reports ... Research notes.
Health Bull (Edinb) 1997 Jan;55(1):68

Basic science, epidemiology, clinical practice, and philanthropy [editorial] Joseph H, et al. **J Addict Dis** 1996; 15(4):xv–xviii

Industry–funded research and conflict of interest: an analysis of research sponsored by the tobacco industry through the Center for Indoor Air Research. Barnes DE, et al.
J Health Polit Policy Law 1996 Fall;21(3):515–42

Louisiana Cancer and Lung Trust Fund Board. Whiting RS, et al. **J La State Med Soc** 1996 Apr;148(4):151–4

"Funding first" launched by Lasker trust [news]
J Natl Cancer Inst 1997 Jun 4;89(11):758

Congressional actions affect cancer research [news] Bennett S. **J Natl Cancer Inst** 1996 Oct 16;88(20):1432–3

IOM study will probe NIH–supported cancer research affecting minorities [news] Eastman P.
J Natl Cancer Inst 1997 May 21;89(10):685

Friends of Cancer Research testify at Senate: cancer funding should be doubled [news] Smeltz KJ.
J Natl Cancer Inst 1997 Jun 4;89(11):756–8

House appropriations hearing: NCI requests $61 million increase; asks for $2.2 billion [news] Tisevich D.
J Natl Cancer Inst 1997 Apr 2;89(7):477–8

Funds for nutrition related research. Aging. Starke–Reed PE.
J Nutr 1996 Oct;126(10):2593–4

Tipping the balance between science and industry. Kjervik DK. **J Prof Nurs** 1997 Jul–Aug;13(4):207

Purchasing evidence: the corollary of evidence–based purchasing. Gray SF, et al. **J Public Health Med** 1997 Mar; 19(1):6–10

Women's health, the media, and the science establishment: hope from the Ottawa Women's Health Forum [editorial] Haseltine FP. **J Womens Health** 1997 Feb;6(1):5–6

Federal report on academic research funding [news] Marwick C. **JAMA** 1997 Sep 17;278(11):886–7

Pentagon–funded research takes aim at agents of biological warfare [news] Stephenson J. **JAMA** 1997 Aug 6; 278(5):373–5

Collaboration needed for HIV vaccine success [news] [published erratum appears in JAMA 1997 Apr 2;277(13):1038] Voelker R. **JAMA** 1997 Jan 1;277(1):9

European health research [letter; comment] Amaducci L.
Lancet 1997 Jun 28;349(9069):1917. Comment on: Lancet 1997 May 10;349(9062):1335.

USA accused of funding placebo–controlled AIDS trials [news] Ault A. **Lancet** 1997 May 3;349(9061):1305

Biomedical research in an era of unlimited aspirations and limited resources. Fauci AS. **Lancet** 1996 Oct 12; 348(9033):1002–3

Support for UK biomedical research from tobacco industry [letter; comment] Froggatt P. **Lancet** 1997 May 3; 349(9061):1329. Comment on: Lancet 1997 Mar 15;349(9054):778.

NIH resists research funding linked to patient load [news] Greenberg DS. **Lancet** 1997 Apr 26;349(9060):1229

Another boost for US biomedical research [news] Greenberg DS. **Lancet** 1997 Sep 13;350(9080):791

Industry–sponsored research [comment] Heagerty AM.
Lancet 1997 Mar 1;349(9052):588. Comment on: Lancet 1997 Mar 1;349(9052):644–7.

Sponsorship, authorship, and a tale of two media. Horton R. **Lancet** 1997 May 17;349(9063):1411–2

Support for UK biomedical research from tobacco industry [letter] [see comments] Lewison G, et al. **Lancet** 1997 Mar 15;349(9054):778. Comment in: Lancet 1997 May 3;349(9061):1329.

Trumping science in BSE [letter; comment] Maddocks A, et al. **Lancet** 1996 Nov 30;348(9040):1520. Comment on: Lancet 1996 Sep 28;348(9031):835.

Support for UK biomedical research from tobacco industry [letter; comment] Proctor C. **Lancet** 1997 May 3; 349(9061):1329. Comment on: Lancet 1997 Mar 15;349(9054):778.

Priorities in tropical medicine [comment] Sharp D.
Lancet 1997 Jun 21;349(9068):1786. Comment on: Lancet 1997 Jun 21;349(9068):1825–9.

Peer review and grant applications [letter; comment] Waldron HA. **Lancet** 1997 Jan 4;349(9044):63. Comment on: Lancet 1996 Nov 9;348(9037):1293–5.

Grant writing. Kachoyeanos MK.
MCN Am J Matern Child Nurs 1997 Sep–Oct;22(5):267

Research fellowships for medical students in Norway. Sundnes SL. **Med Educ** 1996 Nov;30(6):459–60

Science and medicine––1996 [editorial] Bloom FE.
Mol Med 1996 Jul;2(4):397–9

Malaria genome project gets a funding boost [news] O'Brien C. **Mol Med Today** 1997 Jan;3(1):3

National Institute of Mental Health: an update on women and minorities in research. Martinez RA.
Mt Sinai J Med 1996 Oct–Nov;63(5–6):332–4

Participation of life–science faculty in research relationships with industry. Blumenthal D, et al. **N Engl J Med** 1996 Dec 5;335(23):1734–9

Money matters [editorial] **Nat Med** 1997 Jun;3(6):589

Research and the researcher [editorial] **Nat Med** 1997 Aug; 3(8):815

Cardiovascular disease burden increases, NIH funding decreases. Breslow JL. **Nat Med** 1997 Jun;3(6):600–1

Biomedical research funding in India [editorial] Saxena RK.
Natl Med J India 1997 May–Jun;10(3):105–6

Planting a sound idea [editorial] **Nature** 1997 Jul 24; 388(6640):309

Funds earmarked for AIDS vaccine centre [news] **Nature** 1997 Aug 7;388(6642):510

Can the West contribute more to Human Frontiers? [editorial] [see comments] **Nature** 1997 Mar 13;386(6621):95. Comment in: Nature 1997 Apr 24;386(6627):755.

NIH may drop special funds for 'new investigators' [news] **Nature** 1997 Jun 26;387(6636):834

Malaria initiative needs drug industry's backing [editorial] **Nature** 1997 Aug 21;388(6644):699

Biologists call on Brussels to bolster basic research [news] Abbott A. **Nature** 1996 Oct 31;383(6603):750

Funding cuts put pressure on peer review [news] [see comments] Abbott A. **Nature** 1996 Oct 17;383(6601):567. Comment in: Nature 1997 Jan 9;385(6612):110.

Value–added Frontiers programme [letter; comment] Blundell T. **Nature** 1997 Apr 24;386(6627):755. Comment on: Nature 1997 Mar 13;386(6621):95.

Roslin unfunded [letter; comment] Bulfield G. **Nature** 1997 Mar 6;386(6620):12. Comment on: Nature 1997 Feb 27;385(6619):810–3.

Funding row delays Brussels BSE research [news] Butler D. **Nature** 1996 Oct 17;383(6601):565

Global agencies hold the financial key [news] Butler D, et al. **Nature** 1997 Apr 10;386(6625):539

Funding assured for international malaria sequencing project [news] Butler D. **Nature** 1997 Aug 21;388(6644):701

AIDS 'cure' scientists go to top for funds [news] Cherry M. **Nature** 1997 Feb 6;385(6616):474

Peer review is a two–way process [letter] Fielder A, et al.
Nature 1997 Aug 28;388(6645):822

Peer review is a two–way process [letter] Grant D.
Nature 1997 Aug 28;388(6645):822

Funding for malaria genome sequencing [letter; comment] Hoffman SL, et al. **Nature** 1997 Jun 12;387(6634):647. Comment on: Nature 1997 Apr 10;386(6625):535–6.

Make marijuana research easier, panel urges NIH [news] Lehrman S. **Nature** 1997 Aug 14;388(6643):613

Mellow mood fosters marijuana research [news] Lehrman S. **Nature** 1997 Feb 6;385(6616):475

NIH and genome project set for more funds [news] Macilwain C. **Nature** 1997 Jul 24;388(6640):316

NSF urged to increase plant genome sequencing effort [news] Macilwain C. **Nature** 1997 Jul 24;388(6640):312

RESEARCH SUPPORT

NIH retains research funds for the future [news] Macilwain C. **Nature** 1996 Nov 21;384(6606):203
Hughes confirms its faith in excellence [news] Macilwain C. **Nature** 1997 May 15;387(6630):223
Goldin wants more NASA biologists as Gore is briefed on space plans [news] Macilwain C. **Nature** 1996 Dec 19–26; 384(6610):601
NIH drops plan for multiyear grants [news] Macilwain C. **Nature** 1996 Dec 19–26;384(6610):601
UK redraws medical research funding [news] Masood E. **Nature** 1997 May 29;387(6632):441
Structural biology gets UK funding boost [news] Masood E. **Nature** 1997 May 1;387(6628):6
Japan bids to widen brain research funds [news] Nathan R. **Nature** 1997 Mar 13;386(6621):100
Republican senators promote a doubling of funds for research [news] [see comments] Reichhardt T. **Nature** 1997 Jan 30; 385(6615):375. Comment in: Nature 1997 Mar 13;386(6621):114.
'Neutral' mechanism sought to fund environmental research [news] Reichhardt T. **Nature** 1997 Aug 14;388(6643):612
NASA to fund life science beam line at Brookhaven? [news] Reichhardt T. **Nature** 1997 Sep 25;389(6649):320
Limit the number of grants per person [letter] Sachs F. **Nature** 1997 Jul 17;388(6639):222
Canada wins biotech boost of cancer vaccine project [news] Spurgeon D. **Nature** 1997 Jul 17;388(6639):214
Germans learn to bet on biotech. Stiegler G. **Nature** 1996 Oct 24;383(6602):744
Italian grants [letter; comment] Strata P. **Nature** 1997 Jan 9;385(6612):110. Comment on: Nature 1996 Oct 17;383(6601):567.
US support for malaria research [letter; comment] Varmus H. **Nature** 1997 Jul 31;388(6641):416. Comment on: Nature 1997 Jul 17;388(6639):211. Comment on: Nature 1997 Jul 17;388(6639):219.
Clinton woos women's votes with cancer genetics funds [news] Wadman M. **Nature** 1996 Oct 31;383(6603):753
Commercial backing 'could impair academic influence' [news] Wadman M. **Nature** 1996 Dec 12;384(6609):501
Insurance levy could fund medical centres [news] Wadman M. **Nature** 1997 Jan 30;385(6615):375
US increases health funds but ducks AIDS allocation [news] Wadman M. **Nature** 1996 Oct 3;383(6599):373
NIH backers take Clinton to task over impact of budget pact [news] Wadman M. **Nature** 1997 Jun 19;387(6635):745
Policy differences 'threaten Israel's biotech potential' [news] Watzman H. **Nature** 1996 Dec 5;384(6608):396
Public support for medical research [letter; comment] Woolley M. **Nature** 1997 Mar 13;386(6621):114. Comment on: Nature 1997 Jan 30;385(6615):375.
Japanese grant system is a lottery [letter] Yokoyama S. **Nature** 1996 Dec 5;384(6608):402–3
Advocacy for health research means advocacy for patient care [news] Woolley M. **Nurs Outlook** 1997 Jan–Feb; 45(1):44
Resubmission of a grant application: breastfeeding services for LBW infants. Brown LP, et al. **Nurs Res** 1997 Mar–Apr; 46(2):119–22
Where's the payback for nutrition research? King AB. **Nutrition** 1996 Jul–Aug;12(7–8):562–3
The potential tragedy of the clinical research "commons". Meyer GS. **Nutrition** 1996 Nov–Dec;12(11–12):830–1
Funding sources for research for advanced education students in pediatric dentistry. Seale NS. **Pediatr Dent** 1997 May;19(3):182–4
Perspectives on research support: toward a more signal-averaged view. Spooner PM. **Physiologist** 1995 Aug; 38(4):115, 120–5
Evaluating the federal role in financing health-related research. Garber AM, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12717–24
Sematech: purpose and performance. Irwin DA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12739–42
Science, technology, and economic growth. Pakes A, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12655–7
No crystals no grant [editorial] Lattman EE. **Proteins** 1996 Sep;26(1):i–ii
A curbstone consult to applicants for National Institute of Mental Health grant support. Rush AJ, et al. **Psychopharmacol Bull** 1996;32(3):311–20
NIDR study examines coronary-periodontal disease link [news] **Public Health Rep** 1996 Nov–Dec;111(6):478
Foundation funding opportunities. Bowers B. **Radiology** 1996 Nov;201(2):28A
Is federal funding a necessary condition to defining the role of nurse researcher? [editorial] Schmitt MH. **Res Nurs Health** 1996 Dec;19(6):449
The MRC and tobacco funding for research [letter] Saloojee Y. **S Afr Med J** 1996 Aug;86(8):979–80
Shot in the arm for AIDS vaccine [news] **Science** 1997 Mar 14;275(5306):1573
Scientists with clout [news] Balter M. **Science** 1996 Nov 22; 274(5291):1292–5
Cancer charity's rehabilitation set back [news] Balter M. **Science** 1996 Oct 18;274(5286):336
Netherlands pulls top teams' funding [news] Balter M. **Science** 1997 Sep 19;277(5333):1757
UCSF case raises questions about grant idea ownership [news] Barinaga M. **Science** 1997 Sep 5;277(5331):1430–1
AIDS research. Program funding, Italian style [news] Biggin S. **Science** 1997 Apr 11;276(5310):191
Funding sequencing efforts [letter; comment] Bond E, et al. **Science** 1997 Feb 21;275(5303):1051–2. Comment on: Science 1996 Oct 25;274(5287):546, 563–7.
Meeting standards [news; comment] Borelli T, et al. **Science** 1996 Dec 20;274(5295):1995. Comment on: Science 1996 Oct 4;274(5284):28.
AIDS: a justifiable share [news] Cohen J. **Science** 1997 Apr 18;276(5311):345
Research 'summit' ponders health funding shortfall [news] [see comments] Cohen J. **Science** 1996 Oct 25; 274(5287):491–2. Comment in: Science 1997 Jan 3;275(5296):13–4.
The costs of animal research: origins and options. Cork LC, et al. **Science** 1997 May 2;276(5313):758–9
Swedish biomedical research funding [letter; comment] Eliasson K. **Science** 1997 Jan 3;275(5296):13–4. Comment on: Science 1996 Oct 25;274(5287):491–2.
Rethinking grant peer review [editorial] Fliesler SJ. **Science** 1997 Mar 7;275(5305):1399
Brain, drugs and society [editorial] Gazzaniga MS. **Science** 1997 Jan 24;275(5299):459
New funds plant seeds for genome research effort [news] Kahn P. **Science** 1997 Jan 3;275(5296):25–6
Drug industry misses target for funding work on campus [news] Kondro W. **Science** 1997 Jan 3;275(5296):23–4
A 'reforestation plan' for biomedical research [news] Kondro W. **Science** 1996 Oct 25;274(5287):492
Beating scientists into plowshares. Kurland CG. **Science** 1997 May 2;276(5313):761–2
Small business grant proposals [letter] Lader P. **Science** 1996 Nov 15;274(5290):1065
NASA slices biology program on station [news] Lawler A. **Science** 1996 Oct 25;274(5287):495
Selling science: at what price? [news] Lawler A. **Science** 1997 Jan 17;275(5298):296–7
Gibbons warns of decline in R&D [news] Lawler A. **Science** 1996 Dec 13;274(5294):1830
Hughes network expands by a big leap [news] Marshall E. **Science** 1997 May 23;276(5316):1189
Lobbyists seek to reslice NIH's pie [news] Marshall E. **Science** 1997 Apr 18;276(5311):344–6
Embryologists dismayed by sanctions against geneticist [news] Marshall E. **Science** 1997 Jan 24;275(5299):472
Activists vote $14 million for research [news] Marshall E. **Science** 1996 Nov 15;274(5290):1077
Too radical for NIH? Try DARPA [news] Marshall E. **Science** 1997 Feb 7;275(5301):744–6
Senate bills back huge increases [news] Mervis J. **Science** 1997 Jan 31;275(5300):608
New institute seen as brains behind big boost in spending [news] Normile D. **Science** 1997 Mar 14;275(5306):1562–3
A zebrafish genome project? [news] Roush W. **Science** 1997 Feb 14;275(5302):923
Continuous innovation in health [editorial] [see comments] Shine KI. **Science** 1997 Jan 3;275(5296):9. Comment in: Science 1997 Mar 28;275(5308):1863–4.
Corn genome initiative [letter; comment] Sorrells ME, et al. **Science** 1997 Aug 15;277(5328):884–5. Comment on: Science 1997 Jun 27;276(5321):1960–2.
Funding inequality threatens novel bioscience program [news] Williams N. **Science** 1996 Dec 13;274(5294):1832–3
Partners heed Japan's funding plea [news] Williams N. **Science** 1997 Jun 6;276(5318):1493–4
Guidelines for budgeting biostatistics involvement in research projects. Lesser ML. **Stat Med** 1996 Oct 30;15(20):2127–33
Acknowledgment of research sponsors: it pays to advertise. Lenfant C. **Transfusion** 1996 Oct;36(10):935–6
Bristol-Myers Squibb Unrestricted Biomedical Research Grants Programme. **Trends Pharmacol Sci** 1997 May; 18(5):151–2
[More applicants for reduced research funds] Nexø E. **Ugeskr Laeger** 1997 Feb 3;159(6):774–5 **(Dan)**
[Peer review in requests for subsidy] Jennekens FG, et al. **Ned Tijdschr Geneeskd** 1997 Mar 29;141(13):643–4 (Eng. Abstr.) **(Dut)**
[Where to get funds for research--the possibilities for getting funds as a young researcher] Karma P, et al. **Duodecim** 1995;111(19):1888–96 **(Fin)**
[Future research for the treatment of intractable diseases] Mizushima Y. **Ryumachi** 1995 Dec;35(6):877–9 (6 ref.) **(Jpn)**
[The development of the occupational physician support system--OPST research report] Jahng DJ. **Sangyo Ika Daigaku Zasshi** 1996 Sep 1;18(3):185–92 (8 ref.) **(Jpn)**
[The practical theory of occupational health planning: Part Two--The theoretical background from the priority setting procedure to the post project appraisal making procedure (OPST research report 3)] Jahng DJ, et al. **Sangyo Ika Daigaku Zasshi** 1996 Sep 1;18(3):203–11 (17 ref.) (Eng. Abstr.) **(Jpn)**
[Untenable conditions for research scientists at the medical faculty in Oslo (letter)] Berg TJ, et al. **Tidsskr Nor Laegeforen** 1997 Apr 10;117(9):1338 **(Nor)**
[Increased concentration on research of women's health] Schei B, et al. **Tidsskr Nor Laegeforen** 1997 Apr 30; 117(11):1634–6 (42 ref.) **(Nor)**
[Assessment of strategies of science and technology management: a case study] Pereira JC, et al. **Rev Saude Publica** 1995 Aug;29(4):308–17 (Eng. Abstr.) **(Por)**
[Who finances medical research in Chile?] Reyes H, et al. **Rev Med Chil** 1995 Oct;123(10):1243–51 (Eng. Abstr.) **(Spa)**
[The Dagmar funds were correctly used in Värmland (letter)] Eriksen T, et al. **Lakartidningen** 1997 May 28;94(22):2070 **(Swe)**
[The Dagmar fund--was it used correctly?] Sörensen S, et al. **Lakartidningen** 1997 Mar 26;94(13):1163–4 **(Swe)**

ECONOMICS

Cost-effectiveness research in radiology. Hunink MG. **Acad Radiol** 1996 Apr;3 Suppl 1:S13–6
Vertical integration: model for success in the managed care environment? Zylak CJ. **Acad Radiol** 1996 Apr;3 Suppl 1:S69–71
Diet, nutrition, and cancer prevention. Research opportunities, approaches, and pitfalls. Yang CS, et al. **Adv Exp Med Biol** 1996;401:231–8
Research without external funding in North American psychiatry. Silberman EK, et al. **Am J Psychiatry** 1997 Aug;154(8):1159–60
Year's end: years' beginning [editorial] Rae-Grant Q. **Can J Psychiatry** 1996 Feb;41(1):1
"While you're up, get me a grant": a guide to grant writing. Streiner DL. **Can J Psychiatry** 1996 Apr;41(3):137–43 (2 ref.)
Cardiovascular research: an NIH perspective [editorial] Lenfant C. **Cardiovasc Surg** 1997 Feb;5(1):4–5
Federal funding and university science: lessons learned from lobbying government. Murphy RA. **Clin Invest Med** 1997 Aug;20(4):289–95
The HIV/AIDS grants economy in New York City, 1983–1992. Chambré SM. **Health Aff (Millwood)** 1996 Fall; 15(3):250–60
Education ... Citizens for Public Research and Education Funding [news] **Hosp Health Netw** 1997 Mar 5;71(5):14
An appeal to the readership regarding NIH/NIDDK funding for urologic research not related to cancer [editorial] Babayan RK. **J Endourol** 1997 Jun;11(3):ix–x
A proposal for funding clinical research trials by health care insurers. Paller MS. **J Investig Med** 1997 Apr;45(4):139–42
AACR issues statement on the proposed tobacco settlement [news] **J Natl Cancer Inst** 1997 Sep 3;89(17):1259
Peer review and grant applications [letter; comment] Foëx BA. **Lancet** 1997 Jan 4;349(9044):63. Comment on: Lancet 1996 Nov 9;348(9037):1293–5.
How does the NIGMS support program project grants? Where is current information available about this mechanism? [news] Long RM. **Pharm Res** 1997 Jul; 14(7):839
What is the NIGMS doing to help smooth out the irregularities in funding for ongoing research programs that almost inevitably occur over time in today's fiscal climate? [news] Long RM. **Pharm Res** 1997 Jan;14(1):1
[A scholar, fund holder, insurance and tax authority] Elovainio L. **Duodecim** 1995;111(19):1897–901 **(Fin)**
[EVO-funds are a shot for Finnish research] Vihko R. **Duodecim** 1995;111(19):1821–3, 1825 **(Fin)**

HISTORY

Longitude, the Longitude Act, scurvy, and the beginning of government-supported research [editorial] Roberts WC. **Am J Cardiol** 1997 Aug 15;80(4):540–1
Recollections of the first chairman of the National Cancer Advisory Board at the National Institutes of Health. Rhoads JE. **Cancer** 1996 Dec 15;78(12):2594–6
United Medical Research Foundation. A brief chapter in the history of North Carolina medicine. Alexander E Jr. **N C Med J** 1997 May–Jun;58(3):206–7

LEGISLATION & JURISPRUDENCE

Science and the drinks industry: cause for concern [editorial] [see comments] Babor TF, et al. **Addiction** 1996 Jan; 91(1):5–9. Comment in: Addiction 1996 Dec;91(12):1869. Comment in: Addiction 1996 Dec;91(12):1870. Comment in: Addiction 1996 Dec;91(12):1870–1. Comment in: Addiction 1996 Dec;91(12):1871–2. Comment in: Addiction 1996 Dec;91(12):1875–6. Comment in: Addiction 1996 Dec;91(12):1876–7.
The legitimacy of life history and narrative approaches in the study of occupation [comment] Clark F, et al. **Am J Occup Ther** 1997 Apr;51(4):313–7. Comment on: Am J Occup Ther 1996 May;50(5):393–6.
Stanton Glantz on snuffing tobacco research [interview by Thomasine Kushner] Glantz S. **Camb Q Healthc Ethics** 1996 Summer;5(3):415–21
"The Alzheimerization of aging": a response [letter; comment] Gilman S, et al. **Gerontologist** 1996 Feb;36(1):9–10. Comment on: Gerontologist 1995 Aug;35(4):526–32.
Extracting the teeth from the False Claims Act. Walter C, et al. **IEEE Eng Med Biol Mag** 1997 May–Jun;16(3):93–5
Congress adjourns: major cancer program actions in the works [news] Bennett S. **J Natl Cancer Inst** 1997 Aug 6; 89(15):1099–100
104th Congress adjourns in a flurry of activity. Hoeksema MJ, et al. **J Natl Cancer Inst** 1996 Nov 6;88(21):1524–6
Bill promotes Medicare coverage of clinical trials [news] Smeltz KJ. **J Natl Cancer Inst** 1997 Apr 16;89(8):546–7
Breast cancer gets the hard sell [editorial] **Lancet** 1997 Aug 9;350(9075):377
Heat rises over UCSD 'misconduct' charge [news] Dalton R. **Nature** 1997 Feb 13;385(6617):566

US panel to back longer cloning ban, ducks thornier questions [news] Wadman M. **Nature** 1997 May 15;387(6630):217–8
Clinton's 1997 budget includes small increases for research, cuts in funds for service programs [news] **Psychiatr Serv** 1996 May;47(5):548
The False Claims Act: litigating scientific misconduct II. Sherman S. **Public Health Rep** 1997 May–Jun;112(3):248
Panel weighs a law against cloning [news] Marshall E. **Science** 1997 May 23;276(5316):1185–6

METHODS

Overmanaged medical research [editorial] **Lancet** 1997 Jan 18;349(9046):145

ORGANIZATION & ADMINISTRATION

Research and development in the NHS. Davies SC. **Br J Hosp Med** 1996 Dec 11–1997 Jan 14;56(11):606–8
Restructuring: meeting the challenges [news] Beatty JD. **Can J Oncol** 1995 Mar;5(1):VII–IX
Cardiovascular research support by the American Heart Association in Louisiana. Sheridan FM, et al. **J La State Med Soc** 1997 May;149(5):164–7
Research and development in the new NHS: another challenge for the profession. Pickles H. **J R Coll Physicians Lond** 1996 Nov–Dec;30(6):509–11
Imperfect plans for health research in Europe [editorial; comment] [see comments] **Lancet** 1997 May 10; 349(9062):1335. Comment on: Lancet 1997 May 10;349(9062):1341–6. Comment in: Lancet 1997 Jun 28;349(9069):1917.
Development of a rural oncology nursing conference: proposal through implementation. Forney DF, et al. **Oncol Nurs Forum** 1997 Apr;24(3):537–43

STANDARDS

The logical geography of concepts and shared responsibilities concerning research misconduct. Guenin LM. **Acad Med** 1996 Jun;71(6):595–603
Health care for research animals is essential and affordable. Jacoby RO, et al. **FASEB J** 1997 Jul;11(8):609–14 (6 ref.)

STATISTICS & NUMERICAL DATA

Derivation and validation of a methodology for tracking academic stature of medical schools. Task Force on the Development of Emergency Medicine. Gallagher EJ, et al. **Acad Emerg Med** 1997 Jul;4(7):742–5
Research funding in the four major emergency medicine journals. Ernst AA, et al. **Am J Emerg Med** 1997 May; 15(3):268–70
The new portfolio of American Heart Association National Research Awards: initial experience [news] Barry WH. **Circulation** 1997 Aug 19;96(4):1068–9
Linkage between research sponsorship and patented eye-care technology. Ellwein LB, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2495–503
Academic–industry research relationships in genetics: a field apart. Blumenthal D, et al. **Nat Genet** 1997 May;16(1):104–8

TRENDS

The continuing dilemma in clinical investigation and the future of American health care: a system-wide problem requiring collaborative solutions. Crowley WF Jr, et al. **Acad Med** 1996 Nov;71(11):1154–63
NIH funding opportunities: tempora mutantur et nos mutamur in illis! (times are changing and we are changing with them). McClure ME. **Am J Reprod Immunol** 1997 Jan;37(1):144–8
Revolutions and counterrevolutions in prevention [comment] Albee GW. **Am Psychol** 1996 Nov;51(11):1130–3. Comment on: Am Psychol 1996 Nov;51(11):1109–15. Comment on: Am Psychol 1996 Nov;51(11):1116–22. Comment on: Am Psychol 1996 Nov;51(11):1123–7.
Losing ground: NIH funding to New York State researchers. Sturman LS, et al. **Bull N Y Acad Med** 1997 Summer; 74(1):6–14
Researchers in psychiatry in Canada [editorial] Kingstone E. **Can J Psychiatry** 1996 Apr;41(3):135–6
Drugs & money. In the high-stakes hunt for blockbuster pharmaceuticals, companies are pouring billions each year into R & D—with no guarantee that their products will ultimately pass FDA scrutiny. Novarro L. **Hosp Health Netw** 1997 Aug 5;71(15):54–6
The impact of managed care on women's health research: innovation versus renovation. Moore DL, et al. **J Am Med Womens Assoc** 1997 Spring;52(2):83–4
Enriching research through diversity. Pinn VW. **J Am Med Womens Assoc** 1996 Aug–Oct;51(4):139–40
Psychoanalytic research: an investment in the future. Galatzer-Levy R, et al. **J Am Psychoanal Assoc** 1997; 45(1):9–12
How the new NIH Guidelines on Inclusion of Women and Minorities apply: efficacy trials, effectiveness trials, and validity. Hohmann AA, et al. **J Consult Clin Psychol** 1996 Oct;64(5):851–5
Introduction to the special section on recruiting and retaining minorities in psychotherapy research. Miranda J. **J Consult Clin Psychol** 1996 Oct;64(5):848–50
Research in American Indian and Alaska Native communities: navigating the cultural universe of values and process. Norton IM, et al. **J Consult Clin Psychol** 1996 Oct;64(5):856–60
Changes in attitude, changes in latitude [editorial] Pinsky MR. **J Crit Care** 1995 Dec;10(4):151–3
Relationship between market competition and the activities and attitudes of medical school faculty. Campbell EG, et al. **JAMA** 1997 Jul 16;278(3):222–6
Managing the interface between medical schools, hospitals, and clinical research. Gallin JI, et al. **JAMA** 1997 Feb 26; 277(8):651–4
Relationship between National Institutes of Health research awards to US medical schools and managed care market penetration. Moy E, et al. **JAMA** 1997 Jul 16;278(3):217–21
Some imperatives for clinical research. Shine KI. **JAMA** 1997 Jul 16;278(3):245–6
Funding for patient-oriented research. Critical strain on a fundamental linchpin. Williams GH, et al. **JAMA** 1997 Jul 16;278(3):227–31
Current trends in financing graduate medical education. Silversmith J. **Minn Med** 1996 Mar;79(3):26–31
Biomedical research and the pharmaceutical industry [letter; comment] Rosenfield G. **Pharos** 1996 Summer;59(3):46. Comment on: Pharos 1995 Fall;58(4):2–4. Comment on: Pharos 1995 Fall;58(4):33.
Public–private interaction in pharmaceutical research. Cockburn I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12725–30
The future of the national laboratories. Cohen LR, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12678–85
Trends and patterns in research and development expenditures in the United States. Jaffe AB. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12658–63
Investing in veterinary medicines [letter] Harding R. **Vet Rec** 1997 May 3;140(18):488
Current and future NIH support of biomedical research. Lenfant C. **West J Med** 1997 Jul;167(1):15–8
[Prospects in prehistoric anthropology?] Herrmann B. **Anthropol Anz** 1997 Jun;55(2):97–100 (Eng. Abstr.) **(Ger)**
[The development of science under current economic conditions] Bezrukov VM, et al. **Stomatologiia (Mosk)** 1996; Spec No:12–3 **(Rus)**

RESEARCHERS see **RESEARCH PERSONNEL**

RESERPINE

ADMINISTRATION & DOSAGE

Different concepts in first-line treatment of essential hypertension. Comparison of a low-dose reserpine–thiazide combination with nitrendipine monotherapy. German Reserpine in Hypertension Study Group. Krönig B, et al. **Hypertension** 1997 Feb;29(2):651–8
Clozapine–reserpine combination for refractory psychosis [letter] Healy DJ, et al. **Schizophr Res** 1997 Jun 20; 25(3):259–60
Risperidone–reserpine combination in refractory psychosis [letter] Solon EN. **Schizophr Res** 1996 Dec 15;22(3):265–6

ADVERSE EFFECTS

Reserpine: a tragic victim of myths, marketing, and fashionable prescribing. Fraser HS. **Clin Pharmacol Ther** 1996 Oct;60(4):368–73 (57 ref.)
Effects of amphetamine and 6-hydroxydopamine lesions on reserpine-induced oral dyskinesia. Neisewander JL, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):13–21

ANTAGONISTS & INHIBITORS

[Effect of lithium oxybutyrate on the circadian rhythm of brain level of serotonin and plasma level of corticosteroids in mice treated with reserpine] Zamoshchina TA, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):101–5 **(Rus)**

BLOOD

Quantitative ionspray liquid chromatographic/tandem mass spectrometric determination of reserpine in equine plasma. Anderson MA, et al. **J Mass Spectrom** 1997 Feb;32(2):152–8

CHEMISTRY

Analytical application of the reserpine oxidation with cerium (IV) sulphate. Sánchez M, et al. **Biomed Chromatogr** 1997 Mar–Apr;11(2):96

PHARMACOKINETICS

Reserpine- and tetrabenazine-sensitive transport of (3)H-histamine by the neuronal isoform of the vesicular monoamine transporter. Erickson JD, et al. **J Mol Neurosci** 1995;6(4):277–87

PHARMACOLOGY

Effect of reserpine treatment and hypophysectomy on the nitric oxide synthase immunoreactivity and NADPH-diaphorase staining in the rat adrenal gland. Afework M, et al. **Anat Rec** 1996 Dec;246(4):545–8
Reserpine-induced increases in neuropeptide Y mRNA of guinea pig sympathetic ganglia using in situ hybridization. Schmidt EA, et al. **Anat Rec** 1996 Dec;246(4):561–4
Effects of reserpine treatment on the dopamine receptor binding of [3H/11C]nemonapride in the mouse and rat brain. Ishiwata K, et al. **Ann Nucl Med** 1997 Feb;11(1):21–6
Effect of cabergoline, a long-acting dopamine D2 agonist, on reserpine-treated rodents. Miyagi M, et al. **Biol Pharm Bull** 1996 Nov;19(11):1499–502
5-Hydroxytryptamine (5-HT) agonists: effects on neocortical slow wave activity after combined muscarinic and serotonergic blockade. Dringenberg HC, et al. **Brain Res** 1996 Jul 29;728(2):181–7
Reserpine affects differentially the density of the vesicular monoamine transporter and dihydrotetrabenazine binding sites. Naudon L, et al. **Eur J Neurosci** 1996 Apr;8(4):842–6
NMDA receptor antagonists increase the release of dopamine in the substantia nigra of reserpine-treated rats. Biggs CS, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):83–91
Vesicular monoamine transport inhibitors. Novel action at calcium channels to prevent catecholamine secretion. Mahata M, et al. **Hypertension** 1996 Sep;28(3):414–20
Prejunctional regulation of reserpine-resistant sympathetic vasoconstriction and release of neuropeptide Y in the pig. Modin A, et al. **J Auton Nerv Syst** 1996 Feb 5;57(1–2):13–21
Mutations affecting substrate specificity of the Bacillus subtilis multidrug transporter Bmr. Klyachko KA, et al. **J Bacteriol** 1997 Apr;179(7):2189–93
Cytochemical localization of ouabain-sensitive, K(+)-dependent p-nitrophenylphosphatase activity in the facial nerve of reserpinized guinea pigs. Kanoh N. **J Histochem Cytochem** 1997 Aug;45(8):1129–35
Adrenergic agents inhibit rapid increases in cerebellar Purkinje cell glutamic acid decarboxylase (GAD67) mRNA levels after climbing fiber lesions or reserpine treatment. Drengler SM, et al. **J Neurosci** 1996 Mar 1; 16(5):1844–51
AP-1 mediates trans-synaptic induction of tyrosine hydroxylase gene expression in adrenal medulla but not in superior cervical ganglia. Trocmé C, et al. **J Neurosci Res** 1997 Jun 15;48(6):489–98
Interactions between a novel cholinergic ion channel agonist, SIB-1765F and L-DOPA in the reserpine model of Parkinson's disease in rats. Menzaghi F, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):393–401
Serotonin synthesis increased in terminals four days after reserpine treatment: an autoradiographic study in rat brain. Mück-Seler D, et al. **Neurochem Res** 1997 Jan;22(1):11–6
Reserpine-induced immunocytochemical change of neuropeptide Y in the hypothalamic arcuate nucleus. Okamura H, et al. **Neurochem Res** 1996 Feb;21(2):239–43
Reserpine potentiates NMDA-induced c-fos mRNA expression in the mouse brain. Ferré S, et al. **Neurosci Lett** 1996 Jul 19;212(3):147–50
The influence of dizocilpine (MK-801) on the reserpine-enhanced electromyographic stretch reflex in rats. Ossowska K, et al. **Neurosci Lett** 1996 Jan 19; 203(2):73–6
Morphologically distinct subpopulations of neurotensin-immunoreactive striatal neurons observed in rat following dopamine depletions and D2 receptor blockade project to the globus pallidus. Brog JS, et al. **Neuroscience** 1996 Oct;74(3):805–12
Differential effects of intrastriatal and intranigral injections of glutamate antagonists on motor behaviour in the reserpine-treated rat. Kaur S, et al. **Neuroscience** 1997 Jan; 76(2):345–54
Immunohistochemical mapping of brain triiodothyronine reveals prominent localization in central noradrenergic systems. Rozanov CB, et al. **Neuroscience** 1996 Oct; 74(3):897–915
Reserpine-induced sulphomucin production by goblet cells in the jejunum of rats and its significance in the establishment of intestinal helminths. Ishikawa N, et al. **Parasite Immunol** 1995 Nov;17(11):581–6
Effect of reserpine-induced depletion of synaptic dopamine on [11C]raclopride binding to D2-dopamine receptors in the monkey brain. Ginovart N, et al. **Synapse** 1997 Apr; 25(4):321–5
D1 dopamine receptor stimulation inhibits firing activity of midbrain dopamine neurons in reserpine treated rats: an effect eliminated after hemitransection of diencephalon. Sun BC, et al. **Synapse** 1996 Sep;24(1):29–38
Concentrations of biogenic amines in fundal layers in chickens with normal visual experience, deprivation, and after reserpine application. Ohngemach S, et al. **Vis Neurosci** 1997 May–Jun;14(3):493–505
[The role of relationship between the epiphysis and the sympathetico-adrenal system in the depressogenic effect of reserpine] Arushanian EB, et al. **Biull Eksp Biol Med** 1996 Jun;121(6):651–3 **(Rus)**
[The effect of lithium chloride on the desynchronization of "reserpine-induced depression"] Zamoshchina TA, et al. **Eksp Klin Farmakol** 1997 Jan–Feb;60(1):3–6 (Eng. Abstr.) **(Rus)**
[Effect of ethanol, diazepam, and reserpine on the activity of angiotensin-converting enzyme and carboxypeptidase in normal state and during stress] Vernigora AN, et al. **Vopr Med Khim** 1996 Apr–Jun;42(2):127–30 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effect of atenolol and reserpine on selected events in the systolic hypertension in the elderly program (SHEP). Kostis JB, et al. **Am J Hypertens** 1995 Dec;8(12 Pt 1):1147–53
[The treatment with antihypertensive and nootropic preparations of hypertension patients working under

neuroemotional stress] Dasaeva LA, et al. **Ter Arkh** 1996; 68(12):60–3 (Eng. Abstr.) **(Rus)**

RESIDENCE CHARACTERISTICS

Household and dwelling contact as risk factors for leprosy in northern Malawi. Fine PE, et al. **Am J Epidemiol** 1997 Jul 1;146(1):91–102

African–American homeless and low–income housed mothers: comparison of parenting practices. Koblinsky SA, et al. **Am J Orthopsychiatry** 1997 Jan;67(1):37–47

Living arrangements, changes in living arrangements, and survival among community dwelling older adults [see comments] Davis MA, et al. **Am J Public Health** 1997 Mar; 87(3):371–7. Comment in: Am J Public Health 1997 Mar;87(3):333–4.

Substance use in the US college–age population: differences according to educational status and living arrangement. Gfroerer JC, et al. **Am J Public Health** 1997 Jan;87(1):62–5

Region of birth and mortality from circulatory diseases among black Americans [see comments] Schneider D, et al. **Am J Public Health** 1997 May;87(5):800–4. Comment in: Am J Public Health 1997 May;87(5):724–6.

Health insurance coverage among foreign–born US residents: the impact of race, ethnicity, and length of residence [see comments] Thamer M, et al. **Am J Public Health** 1997 Jan; 87(1):96–102. Comment in: Am J Public Health 1997 Jan;87(1):12–4.

Region of birth and mortality among black Americans [editorial; comment] Vågerö D. **Am J Public Health** 1997 May;87(5):724–6. Comment on: Am J Public Health 1997 May;87(5):800–4.

Britain has become less equal in death [news] Wise J. **BMJ** 1997 Aug 16;315(7105):384

The influence of psychiatric hospital and community residence labels on social rejection of the mentally ill. Ingamells S, et al. **Br J Clin Psychol** 1996 Sep;35 (Pt 3):359–67

Are sociodemographic factors predictive of preterm birth? A reappraisal of the 1958 British Perinatal Mortality Survey. Wildschut HI, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):57–63

Neurology and the community. Murray TJ. **Can J Neurol Sci** 1996 Aug;23(3):231–3

Re: Freeman–Longo, R.E. (1996). Invited commentary: feel good legislation: prevention or calamity [letter; comment] Berliner L. **Child Abuse Negl** 1996 Nov;20(11):1133–5. Comment on: Child Abuse Negl 1996 Feb;20(2):95–101.

Understanding the relationship between neighborhood poverty and specific types of child maltreatment. Drake B, et al. **Child Abuse Negl** 1996 Nov;20(11):1003–18

Management of children with potential anaphylactic reactions in the community: a training package and proposal for good practice. Vickers DW, et al. **Clin Exp Allergy** 1997 Aug;27(8):898–903

Provision of public dental services in urban, rural and remote locations. Brennan DS, et al. **Community Dent Health** 1996 Sep;13(3):157–62

Neighbors' perceptions of group homes. Cook JR. **Community Ment Health J** 1997 Aug;33(4):287–99

The mobility experience and neighborhood attachment. Bolan M. **Demography** 1997 May;34(2):225–37

Making a place in the metropolis: locational attainment in cities and suburbs. Logan JR, et al. **Demography** 1996 Nov; 33(4):443–53

Hearing impairment, disability and handicap in elderly people living in residential care and in the community. Stumer J, et al. **Disabil Rehabil** 1996 Feb;18(2):76–82

Maternal residential proximity to hazardous waste sites and risk for selected congenital malformations [see comments] Croen LA, et al. **Epidemiology** 1997 Jul;8(4):347–54. Comment in: Epidemiology 1997 Jul;8(4):337–9.

Segregation, discrimination and mortality in U.S. blacks. Polednak AP. **Ethn Dis** 1996 Winter–Spring;6(1–2):99–108 (67 ref.)

Prevalence of and risk factors for Helicobacter pylori infection in the western part of Germany. Breuer T, et al. **Eur J Gastroenterol Hepatol** 1996 Jan;8(1):47–52

Does where you live predict health related behaviours?: a case study in Glasgow. Ellaway A, et al. **Health Bull (Edinb)** 1996 Nov;54(6):443–6

Where to be born? A normative approach of life duration inequalities in the world. Attias E, et al. **Health Econ** 1996 Nov–Dec;5(6):559–72

Marriage: distance between birthplaces and age difference between mates. Bouckaert A, et al. **Hum Biol** 1997 Apr; 69(2):241–51

Nativity, race, and mortality: favorable impact of birth outside the United States on mortality in New York City. Fang J, et al. **Hum Biol** 1997 Oct;69(5):689–701

People and places: contrasting perspectives on the association between social class and health. Kaplan GA. **Int J Health Serv** 1996;26(3):507–19

Influence of location and staff knowledge on quality of retail pharmacy prescribing for childhood diarrhea in Kenya. Goel PK, et al. **Int J Qual Health Care** 1996 Dec; 8(6):519–26

Hazard proximities of childhood cancers in Great Britain from 1953–80. Knox EG, et al. **J Epidemiol Community Health** 1997 Apr;51(2):151–9

Health, health care utilization and living conditions in foreign–born diabetic patients in southern Sweden. Hjelm K, et al. **J Intern Med** 1997 Aug;242(2):131–41

Geographic origin and its impact on practice location in Kentucky. Elam CL, et al. **J Ky Med Assoc** 1996 Oct; 94(10):446–50

Dispersal of American house dust mites (Acari:Pyroglyphidae) in a residence. Mollet JA, et al. **J Med Entomol** 1996 Sep;33(5):844–7

Psychological reaction to perceived erasure of community boundaries. Puddifoot JE. **J Soc Psychol** 1997 Jun; 137(3):343–55

The association between birthplace and mortality from cardiovascular causes among black and white residents of New York City [see comments] Fang J, et al. **N Engl J Med** 1996 Nov 21;335(21):1545–51. Comment in: N Engl J Med 1996 Nov 21;335(21):1597–9. Comment in: N Engl J Med 1997 May 1;336(18):1321; discussion 1321–2.

Promoting healthy communities through neighborhood nursing. Reinhard SC, et al. **Nurs Outlook** 1996 Sep–Oct; 44(5):223–8

Case–control study on maternal residential proximity to high voltage power lines and congenital anomalies in France. Robert E, et al. **Paediatr Perinat Epidemiol** 1996 Jan; 10(1):32–8

"Interfacility" transport from the home or office. King B. **Pediatr Emerg Care** 1997 Apr;13(2):164–8

Geographic differences in mortality of young children with sickle cell disease in the United States [published erratum appears in Public Health Rep 1997 Mar–Apr;112(2):89] Davis H, et al. **Public Health Rep** 1997 Jan–Feb;112(1):52–8

The epidemiology of atopic diseases in Germany: an east–west comparison. Trepka MJ, et al. **Rev Environ Health** 1996 Jul–Sep;11(3):119–31 (49 ref.)

Neighborhood quality, environmental hazards, personality traits, and resident actions. Greenberg M, et al. **Risk Anal** 1997 Apr;17(2):169–75

Magnetic fields and leukemia—risk for adults living close to power lines. Verkasalo PK. **Scand J Work Environ Health** 1996;22 Suppl 2:1–56 (145 ref.)

Neighborhoods and violent crime: a multilevel study of collective efficacy. Sampson RJ, et al. **Science** 1997 Aug 15;277(5328):918–24

Factors associated with the geographic variation of reported Chlamydia infection in Minnesota. Belongia EA, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):70–5

Regional variation in infant survival in China. Ren XS. **Soc Biol** 1996 Spring–Summer;43(1–2):1–19

Socio–regional context as a determinant of adolescents' health behaviour in Finland. Karvonen S, et al. **Soc Sci Med** 1996 Nov;43(10):1467–74

Regional inequities in health expectancy in Belgium. Van Oyen H, et al. **Soc Sci Med** 1996 Dec;43(11):1673–8

Disease mapping with errors in covariates. Bernardinelli L, et al. **Stat Med** 1997 Apr 15;16(7):741–52

Exploratory analysis as a sequel to suspected increased rate of cancer in a small residential or workplace community. Chen R. **Stat Med** 1996 Apr 15–May 15;15(7–9):807–16

An introduction of smoothing incidence rates by penalized likelihood. Downer RG. **Stat Med** 1996 Apr 15–May 15; 15(7–9):907–17

Cluster: a software system for epidemiologic cluster analysis. Hall HI, et al. **Stat Med** 1996 Apr 15–May 15; 15(7–9):943–50

Tests of geographical correlation with adjustment for explanatory variables: an application to dyspnoea in the elderly. Jacqmin–Gadda H, et al. **Stat Med** 1997 Jun 15; 16(11):1283–97

Disease cluster statistics for imprecise space–time locations. Jacquez GM. **Stat Med** 1996 Apr 15–May 15; 15(7–9):873–85 (29 ref.)

Surveillance of clustering near point sources. Le ND, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):727–40

Localization of disease clusters using regional measures of spatial autocorrelation. Munasinghe RL, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):893–905

Realistic power simulations compare point– and area–based disease cluster tests. Oden N, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):783–806

Exploratory spatial analysis of birth defect rates in an urban population. Rushton G, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):717–26

Covariate adjusted mixture models and disease mapping with the program DismapWin [see comments] Schlattmann P, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):919–29. Comment in: Stat Med 1996 Apr 15–May 15;15(7–9):931.

The computer package DismapWin [comment] Schlattmann P. **Stat Med** 1996 Apr 15–May 15;15(7–9):931. Comment on: Stat Med 1996 Apr 15–May 15;15(7–9):919–29.

The spatial autocorrelation coefficient Moran's I under heteroscedasticity. Waldhör T. **Stat Med** 1996 Apr 15–May 15;15(7–9):887–92

Cluster analysis with constraints: its use with breast cancer mortality rates in Argentina. Wojdyla D, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):741–6

Modernization and geographical diffusion as explanations for regional differences in the consumption of wine and beer in the European Community. Knibbe RA, et al. **Subst Use Misuse** 1996 Sep–Oct;31(11–12):1639–55

[Illegal drug use by secondary school children in Belgium: north–south differences] Navarro FJ, et al. **Rev Epidemiol Sante Publique** 1996 Oct;44(5):395–406 (41 ref.) (Eng. Abstr.) **(Fre)**

[Living conditions of prostitutes: consequences for the prevention of HIV infection] Serre A, et al. **Rev Epidemiol Sante Publique** 1996 Oct;44(5):407–16 (Eng. Abstr.) **(Fre)**

[Distribution of Biomphalaria straminae in the southern neotropical region of Brazil] Teles HM. **Rev Saude Publica** 1996 Aug;30(4):341–9 (Eng. Abstr.) **(Por)**

STATISTICS & NUMERICAL DATA

Relation between residence in the southeast region of the United States and stroke incidence. The NHANES I Epidemiologic Followup Study. Gillum RF, et al. **Am J Epidemiol** 1996 Oct 1;144(7):665–73

Measuring spatial focusing in a migration system. Plane DA, et al. **Demography** 1997 May;34(2):251–62

Does area of residence affect body size and shape? Ellaway A, et al. **Int J Obes Relat Metab Disord** 1997 Apr; 21(4):304–8

Prevalence of stages of change for physical activity in rural, suburban and inner–city communities. Potvin L, et al. **J Community Health** 1997 Feb;22(1):1–13

Isolation, car ownership, and small area variation in incidence of acute lymphoblastic leukaemia in children. Alexander FE, et al. **Paediatr Perinat Epidemiol** 1996 Oct;10(4):411–7

Living arrangements of SSI recipients. Kochhar S, et al. **Soc Secur Bull** 1997;60(1):18–28

RESIDENCY, DENTAL see **INTERNSHIP AND RESIDENCY**

RESIDENCY, MEDICAL see **INTERNSHIP AND RESIDENCY**

RESIDENCY, NONMEDICAL see **INTERNSHIP, NONMEDICAL**

RESIDENTIAL FACILITIES

Educational programs for deaf students. **Am Ann Deaf** 1997 Apr;142(2):107–208

Basic premises, guiding principles, and competent practices for a positive youth development approach to working with gay, lesbian, and bisexual youths in out–of home care. Mallon GP. **Child Welfare** 1997 Sep–Oct;76(5):591–609

How many psychiatric beds: towards a needs based portfolio of residential care. Harrison G. **Epidemiol Psichiatr Soc** 1997 Jan–Apr;6(1 Suppl):49–57

Factors associated with staff support and resident lifestyle in services for people with multiple disabilities: a path analytic approach. Hatton C, et al. **J Intellect Disabil Res** 1996 Oct;40 (Pt 5):466–77

Professionals' perceptions of psychotropic medication in residential facilities for individuals with mental retardation. Singh NN, et al. **J Intellect Disabil Res** 1996 Feb;40 (Pt 1):1–7

Sexual behaviors and attitudes of geriatric residents in long–term care facilities. Spector IP, et al. **J Sex Marital Ther** 1996 Winter;22(4):235–46

Aging parents' residential plans for adult children with mental retardation. Freedman RI, et al. **Ment Retard** 1997 Apr;35(2):114–23

Nutrition knowledge and obesity of adults in community residences. Golden E, et al. **Ment Retard** 1997 Jun; 35(3):177–84

Focusing on values and lifestyle outcomes in an effort to improve the quality of residential services in Oregon. Newton JS, et al. **Ment Retard** 1996 Feb;34(1):1–12

Outbreak of Tinea capitis caused by Microsporum ferrugineum in Thailand. Wisuthsarewong W, et al. **Mycopathologia** 1996;135(3):157–61

Training basic teaching skills to community and institutional support staff for people with severe disabilities: a one–day program. Parsons MB, et al. **Res Dev Disabil** 1996 Nov–Dec;17(6):467–85

Mental impairment and utilization of community services: a study of the elderly in a parish of Stockholm. Rönnberg L, et al. **Scand J Soc Med** 1996 Sep;24(3):185–92

CLASSIFICATION

The mental health residential care study: classification of facilities and description of residents. Lelliott P, et al. **Br J Psychiatry** 1996 Aug;169(2):139–47

HISTORY

Dr. George Logan: physician to the Charleston Orphan House 1810–1854. King SL. **J S C Med Assoc** 1996 Jan; 92(1):19–25

METHODS

'Talk to me' patient communication in a long–term care facility. Morse JM, et al. **J Psychosoc Nurs Ment Health Serv** 1997 May;35(5):34–9

ORGANIZATION & ADMINISTRATION

Driving quality through Hoshin planning. Hyde RS, et al. **Jt Comm J Qual Improv** 1996 Jan;22(1):27–35

Maternal mortality and the problem of accessibility to obstetric care; the strategy of maternity waiting homes.

Figà-Talamanca I. **Soc Sci Med** 1996 May;42(10):1381-90

STANDARDS

Architectural features and perceptions of community residences for people with mental retardation. Thompson T, et al. **Am J Ment Retard** 1996 Nov;101(3):292-314

Interdependence of architectural features and program variables in community residences for people with mental retardation. Thompson T, et al. **Am J Ment Retard** 1996 Nov;101(3):315-27

Food safety training needs exist for staff and consumers in a variety of community-based homes for people with developmental disabilities. Walter A, et al. **J Am Diet Assoc** 1997 Jun;97(6):619-25

Treatment Protocol Effectiveness Study. A White Paper of the Office of National Drug Control Policy Barry R. McCaffrey, Director March, 1996. Treatment Outcome Working Group. **J Subst Abuse Treat** 1996 Jul-Aug; 13(4):295-319

A PASS 3 evaluation of community residences in Wales. Felce D, et al. **Ment Retard** 1997 Jun;35(3):170-6

STATISTICS & NUMERICAL DATA

Personal characteristics associated with episodes of injury in a residential facility. Konarski EA Jr, et al. **Am J Ment Retard** 1997 Jul;102(1):37-44

Clock drawing test in elderly schizophrenia patients. Heinik J, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):653-5

The effect of the Community Care Act 1990 on discharge from a psychogeriatric unit to residential and nursing homes. Shah A. **Med Sci Law** 1996 Oct;36(4):328-30

TRENDS

The TAPS project. 36: the most difficult to place long-stay psychiatric in-patients. Outcome one year after relocation. Team for the Assessment of Psychiatric Services. Trieman N, et al. **Br J Psychiatry** 1996 Sep;169(3):289-92

UTILIZATION

Comparison of states' utilization of large residential settings for persons with mental retardation. Rotholz DA, et al. **Ment Retard** 1996 Oct;34(5):303-11

Deinstitutionalization of the elderly in Finland, 1981-91. Aro S, et al. **Scand J Soc Med** 1997 Jun;25(2):136-43

RESIDENTIAL MOBILITY

Effect of migration and related environmental changes on serum lipid levels in southwestern Chinese men. He J, et al. **Am J Epidemiol** 1996 Nov 1;144(9):839-48

Psychiatric implications of displacement: contributions from the psychology of place [see comments] Fullilove MT. **Am J Psychiatry** 1996 Dec;153(12):1516-23 (84 ref.). Comment in: Am J Psychiatry 1997 Sep;154(9):1328-9.

The mobility experience and neighborhood attachment. Bolan M. **Demography** 1997 May;34(2):225-37

Geographic mobility of scientists: sex differences and family constraints. Shauman KA, et al. **Demography** 1996 Nov; 33(4):455-68

Environmental causes and impact of refugee movements: a critique of the current debate. Kibreab G. **Disasters** 1997 Mar;21(1):20-38 (90 ref.)

Going home with AIDS [news] **J Psychosoc Nurs Ment Health Serv** 1996 Jul;34(7):12

Effects of substance abuse on housing stability of homeless mentally Ill persons in supported housing. Hurlburt MS, et al. **Psychiatr Serv** 1996 Jul;47(7):731-6

STATISTICS & NUMERICAL DATA

Changing patterns of internal migration 1970-1990: a comparative analysis of Jews and whites in the United States. Rebhun U. **Demography** 1997 May;34(2):213-23

Homelessness, severe mental illness, and the institutional circuit. Hopper K, et al. **Psychiatr Serv** 1997 May; 48(5):659-65

TRENDS

Patterns of geographic mobility of persons with AIDS in Canada from time of AIDS index diagnosis to death. Hogg RS, et al. **Clin Invest Med** 1997 Apr;20(2):77-83

Changing patterns of internal migration 1970-1990: a comparative analysis of Jews and whites in the United States. Rebhun U. **Demography** 1997 May;34(2):213-23

Evidence of an increasing AIDS burden in rural America. Fordyce EJ, et al. **Stat Bull Metrop Insur Co** 1997 Apr-Jun; 78(2):2-9

RESIDENTIAL TREATMENT

Hospital-based behavior modification program for adolescents: evaluation and predictors of outcome. al Ansari A, et al. **Adolescence** 1996 Summer;31(122):469-76

Adolescents in therapeutic communities. Mann-Feder VR. **Adolescence** 1996 Spring;31(121):17-28

Perceived social support and treatment retention on an inpatient addiction treatment unit. Westreich L, et al. **Am J Addict** 1997 Spring;6(2):144-9

Changes in HIV risk behavior following alternative residential programs of drug abuse treatment and AIDS education. McCusker J, et al. **Ann Epidemiol** 1996 Mar; 6(2):119-25

Encopresis and sexual abuse in a sample of boys in residential treatment. Morrow J, et al. **Child Abuse Negl** 1997 Jan; 21(1):11-8

Factors associated with staff support and resident lifestyle in services for people with multiple disabilities: a path analytic approach. Hatton C, et al. **J Intellect Disabil Res** 1996 Oct;40 (Pt 5):466-77

Posttreatment outcomes for substance-abusing probationers mandated to residential treatment. Hiller ML, et al. **J Psychoactive Drugs** 1996 Jul-Sep;28(3):291-6

An outcome measure for postdischarge follow-up of residential treatment. Force RC. **Psychiatr Serv** 1996 May; 47(5):481-2

FIRO-B scores and success in a positive peer-culture residential treatment program. Lee RE. **Psychol Rep** 1996 Feb;78(1):215-20

[Documentation of treatment and quality assurance: recommendations for a practical solution] Lorenz AL. **Prax Kinderpsychol Kinderpsychiatr** 1996 Jan;45(1):19-24 (Eng. Abstr.) **(Ger)**

ECONOMICS

The mental health residential care study: predicting costs from resident characteristics. Chisholm D, et al. **Br J Psychiatry** 1997 Jan;170:37-42

LEGISLATION & JURISPRUDENCE

A ten-year review of the effect of OBRA-87 on psychotropic prescribing practices in an academic nursing home. Lantz MS, et al. **Psychiatr Serv** 1996 Sep;47(9):951-5 (34 ref.)

METHODS

A short-term, family-oriented, child and adolescent psychiatric inpatient treatment program. Sourander A, et al. **Fam Process** 1996 Mar;35(1):103-11

Relative role of ambulatory and residential rehabilitation. Cobelli F, et al. **J Cardiovasc Risk** 1996 Apr;3(2):172-5 (20 ref.)

Dual diagnosis treatment for patients with schizophrenia who are substance dependent. Tsuang JW, et al. **Psychiatr Serv** 1997 Jul;48(7):887-9

ORGANIZATION & ADMINISTRATION

The market for residential and day schools for children with severe emotional disturbance. Spencer CS, et al. **J Ment Health Adm** 1997 Winter;24(1):72-81

A multimodal, second generation, posttraumatic stress disorder rehabilitation program. Hutzell RR, et al. **J Trauma Stress** 1997 Jan;10(1):109-16

STANDARDS

One-year status of homeless mentally ill clients who completed a transitional residential program. Murray R, et al. **Community Ment Health J** 1997 Feb;33(1):43-50

A longitudinal evaluation of prevalent negative beliefs about residential placement for troubled adolescents. Friman PC, et al. **J Abnorm Child Psychol** 1996 Jun;24(3):299-324

Evaluation of a residential program using the Addiction Severity Index and stages of change. Campbell WG. **J Addict Dis** 1997;16(2):27-39

Effectiveness of treatment foster care with children and adolescents: a review of outcome studies. Reddy LA, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):581-8

Object relations as a predictor of treatment outcome with chronic posttraumatic stress disorder. Ford JD, et al. **J Consult Clin Psychol** 1997 Aug;65(4):547-59

Housing status among formerly homeless dually diagnosed adults. Bebout RR, et al. **Psychiatr Serv** 1997 Jul; 48(7):936-41

Strategies for follow-up of drug users: field research guidelines. Spotts D, et al. **Subst Use Misuse** 1996 Nov; 31(13):1891-927

STATISTICS & NUMERICAL DATA

Combined pharmacotherapy in children and adolescents in a residential treatment center. Connor DF, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):248-54

RESIDUAL CANCER see **NEOPLASM, RESIDUAL**

RESIDUAL TUMOR see **NEOPLASM, RESIDUAL**

RESIN-BONDED ACID-ETCHED FIXED PARTIAL DENTURE see **DENTURE, PARTIAL, FIXED, RESIN-BONDED**

RESIN-BONDED BRIDGE see **DENTURE, PARTIAL, FIXED, RESIN-BONDED**

RESIN-BONDED FIXED PARTIAL DENTURE see **DENTURE, PARTIAL, FIXED, RESIN-BONDED**

RESIN CEMENTS

Bond strength of orthodontic composite cement to treated porcelain. Cochran D, et al. **Am J Orthod Dentofacial Orthop** 1997 Mar;111(3):297-300

A new approach to indirect bonding using light-cure composites. Kasrovi PM, et al. **Am J Orthod Dentofacial Orthop** 1997 Jun;111(6):652-6

A clinical trial comparing the failure rates of two orthodontic bonding systems. Trimpeneers LM, et al. **Am J Orthod Dentofacial Orthop** 1996 Nov;110(5):547-50

An in vitro caries inhibition of photopolymerized glass ionomer liners. Donly KJ, et al. **ASDC J Dent Child** 1997 Mar-Apr;64(2):128-30

A laboratory evaluation of the construction of resin-bonded cast restorations. Chana HS, et al. **Br Dent J** 1997 Aug 23;183(4):130-4

Bonding of resin cements to a metal substrate: influence of pretreatment on the adherence energy. Asmussen E, et al. **Eur J Oral Sci** 1996 Oct-Dec;104(5-6):595-9

A clinical evaluation of the effectiveness of including fluoride into an orthodontic bonding adhesive. Banks PA, et al. **Eur J Orthod** 1997 Aug;19(4):391-5

A clinical evaluation of a glass ionomer cement as an orthodontic bonding adhesive compared with an acrylic resin. Norevall LI, et al. **Eur J Orthod** 1996 Aug; 18(4):373-84

Two-year clinical evaluation of an amalgam adhesive. Belcher MA, et al. **J Am Dent Assoc** 1997 Mar; 128(3):309-14

Using a resin-modified glass ionomer as an occlusal sealant: a one-year clinical study. Winkler MM, et al. **J Am Dent Assoc** 1996 Oct;127(10):1508-14

A 4-year retrospective clinical study of Class I and Class II composite restorations. Geurtsen W, et al. **J Dent** 1997 May-Jul;25(3-4):229-32

Effects of adhesive primers for noble metals on shear bond strengths of resin cements. Yoshida K, et al. **J Dent** 1997 Jan;25(1):53-8

Early and long-term wear of conventional and resin-modified glass ionomers. de Gee AJ, et al. **J Dent Res** 1996 Aug;75(8):1613-9

The effect of metal surface treatment on the shear bond strengths of base and noble metals bonded to enamel. Breeding LC, et al. **J Prosthet Dent** 1996 Oct;76(4):390-3

Steele's facing repair with a 4-META cement. Chang JC, et al. **J Prosthet Dent** 1997 Mar;77(3):339

Tensile bond strength of a resinous cement to a nickel-chromium alloy modified with five surface treatments. Coelho CM, et al. **J Prosthet Dent** 1996 Sep; 76(3):246-9

Root reinforcement with a resin-bonded preformed post. Mendoza DB, et al. **J Prosthet Dent** 1997 Jul;78(1):10-4

Gold inlays bonded with a resin cement: a clinical report. Miya DM. **J Prosthet Dent** 1997 Sep;78(3):233-5

Retention of metal ceramic crowns cemented with resin cements: effects of preparation taper and height. el-Mowafy OM, et al. **J Prosthet Dent** 1996 Nov; 76(5):524-9

Long-term durability of adhesive systems bonded to fresh amalgam. Pilo R, et al. **J Prosthet Dent** 1996 Oct; 76(4):431-6

Effect of convergence angle on retention of resin-bonded retainers cemented with resinous cements. Sarafianou A, et al. **J Prosthet Dent** 1997 May;77(5):475-81

Relative gap formation of resin-cemented ceramic inlays and dentin bonding agents. Sorensen JA, et al. **J Prosthet Dent** 1996 Oct;76(4):374-8

CHEMISTRY

Time-related bond strengths of light-cured and chemically cured bonding systems: an in vitro study. Chamda RA, et al. **Am J Orthod Dentofacial Orthop** 1996 Oct; 110(4):378-82

In vitro evaluation of matrix-bound fluoride-releasing orthodontic bonding adhesives. Sinha PK, et al. **Am J Orthod Dentofacial Orthop** 1997 Mar;111(3):276-82

Enamel and dentin bond strength and bonding mechanism to dentin of Gluma CPS to primary teeth. Fritz U, et al. **ASDC J Dent Child** 1997 Jan-Feb;64(1):32-8

Factors contributing to the temperature rise during polymerization of resin-modified glass-ionomer cements. Kanchanavasita W, et al. **Biomaterials** 1996 Dec; 17(24):2305-12

Light initiation of dental resins: dynamics of the polymerization. Venhoven BA, et al. **Biomaterials** 1996 Dec;17(24):2313-8

Resin-modified glass ionomer cements: fluoride release and influence on Streptococcus mutans growth. Friedl KH, et al. **Eur J Oral Sci** 1997 Feb;105(1):81-5

Dental materials and estrogenicity [letter] Habib CM, et al. **J Am Dent Assoc** 1996 Sep;127(9):1292

The effects of pH on N-methacryloyl glycine primer on bond strength to acid-etched dentin. Nishiyama N, et al. **J Biomed Mater Res** 1996 Jul;31(3):379-84

Bonding of silver-palladium-copper-gold alloy with thiol derivative primers and tri-n-butylborane initiated luting agents. Matsumura H, et al. **J Oral Rehabil** 1997 Apr; 24(4):291-6

The optimum curing cycle for a light- and heat-cured composite inlay material. Razak AA, et al. **J Oral Rehabil** 1997 Apr;24(4):297-302

Curing of a silane coupling agent and its effect on the transverse strength of autopolymerizing polymethylmethacrylate-glass fibre composite. Vallittu PK. **J Oral Rehabil** 1997 Feb;24(2):124-30

Influence of enamel conditioning on bond strength of resin-modified glass ionomer restorative materials and

polyacid-modified composites. Attin T, et al. **J Prosthet Dent** 1996 Jul;76(1):29–33

Influence of different metal restorations bonded with resin on fracture resistance of endodontically treated maxillary premolars. Costa LC, et al. **J Prosthet Dent** 1997 Apr; 77(4):365–9

Shear bond strengths of a two-paste system resin luting agent used to bond alloys to enamel. Dixon DL, et al. **J Prosthet Dent** 1997 Aug;78(2):132–5

Relative gap formation adjacent to ceramic inlays with combinations of resin cements and dentin bonding agents. Sorensen JA, et al. **J Prosthet Dent** 1996 Nov;76(5):472–6

Effect of dowel lubrication on resistance to dislodgment of dowels cemented with a 4-META resinous cement. Walmann JO, et al. **J Prosthet Dent** 1996 Jul;76(1):15–8

[Characterization of glass ionomer cements containing resin] Gladys S, et al. **Rev Belge Med Dent** 1996;51(1):36–53 (24 ref.) (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

The Gluma bonding system: a clinical evaluation of its various components for the treatment of hypersensitive root dentin. Davidson DF, et al. **J Can Dent Assoc** 1997 Jan; 63(1):38–41

TOXICITY

Gingival response to a new multipurpose dental adhesive: a histologic study in dogs. Redlich M, et al. **J Prosthet Dent** 1996 Oct;76(4):379–85

RESINS

Allergic contact dermatitis to multiple sawdust allergens. Cook DK, et al. **Australas J Dermatol** 1997 May;38(2):77–9

A radiological-anatomical comparison between formalin-preserved organs and "plastinated" ones. Brizzi E, et al. **Ital J Anat Embryol** 1994 Jul–Sep;99(3):145–55

Epoxy-embedded versus nonembedded TEM examination of the resin-dentin interface. Van Meerbeek B, et al. **J Biomed Mater Res** 1997 May;35(2):191–7

Isolation of genomic DNA from milk samples by using Chelex resin. Amills M, et al. **J Dairy Res** 1997 May; 64(2):231–8

A novel method for the non-chromatographic purification of technetium-99m-labeled monoclonal antibodies: a study with B72.3 monoclonal antibody. Rosenzweig HS, et al. **Nucl Med Biol** 1994 Feb;21(2):171–8

ADVERSE EFFECTS

Is contact allergy to toluene sulphonamide-formaldehyde resin common? [letter] Fuchs T, et al. **Br J Dermatol** 1996 Dec;135(6):1013–4

Allergic contact dermatitis from colophony in lipsticks. Batta K, et al. **Contact Dermatitis** 1997 Mar;36(3):171–2

Occupational allergic contact dermatitis from colophony in depilatory wax. de Argila D, et al. **Contact Dermatitis** 1996 May;34(5):369

Photodermatitis from plant derivatives in topical and oral medicaments. Fernández de Corrès L, et al. **Contact Dermatitis** 1996 Sep;35(3):184–5

Patch testing with allergens from modified rosin (colophony) discloses additional cases of contact allergy. Gäfvert E, et al. **Contact Dermatitis** 1996 Nov;35(5):290–8

Airborne contact dermatitis from unexpected exposure to rosin (colophony). Rosin sources revealed with chemical analyses. Karlberg AT, et al. **Contact Dermatitis** 1996 Nov; 35(5):272–8

Isolated colophony allergens as screening substances for contact allergy. Karlberg AT, et al. **Contact Dermatitis** 1996 Oct;35(4):201–7

A study of dermatitis in the lacquerware industry. Kullavanijaya P, et al. **Contact Dermatitis** 1997 May; 36(5):244–6

Occupational contact dermatitis in a beautician. O'Reilly FM, et al. **Contact Dermatitis** 1996 Jul;35(1):47–8

Relapse of colophony dermatitis from lottery tickets. Pereira F, et al. **Contact Dermatitis** 1997 Jul;37(1):43

Adverse effects of colophony. Keira T, et al. **Ind Health** 1997;35(1):1–7 (63 ref.)

Basic methods for sensitivity analysis of biases. Greenland S. **Int J Epidemiol** 1996 Dec;25(6):1107–16

ANALYSIS

Pulp mill sourced organic compounds and sodium levels in water and sediments from the Tarawera River, New Zealand. Wilkins AL, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):434–41

Rosin components identified in diapers. Karlberg AT, et al. **Contact Dermatitis** 1996 Mar;34(3):176–8O

Colophony, formaldehyde and mercury in mascaras. Sainio EL, et al. **Contact Dermatitis** 1996 May;34(5):364–5

CHEMICAL SYNTHESIS

Automated chemical synthesis: from resins to instruments. Porco JA Jr, et al. **Mol Divers** 1997 Apr;2(4):197–206

CHEMISTRY

Measuring column void volumes with NMR. Perkins TW, et al. **Anal Chem** 1997 Aug 15;69(16):3293–8

Influence of compliance of the substrate materials on polymerization contraction stress in thin resin composite layers. Alster D, et al. **Biomaterials** 1997 Feb;18(4):337–41

Demonstration of dimer formation of the cytoplasmic domain of a transmembrane osmosensor protein, EnvZ, of Escherichia coli using Ni-histidine tag affinity chromatography. Hidaka Y, et al. **FEBS Lett** 1997 Jan 3; 400(2):238–42

Structural investigation of resin glycosides from Ipomoea lonchophylla. MacLeod JK, et al. **J Nat Prod** 1997 May; 60(5):467–71

Unexpected lability of cysteine acetamidomethyl thiol protecting group. Tyrosine ring alkylation and disulfide bond formation upon acidolysis. Engebretsen M, et al. **J Pept Res** 1997 Apr;49(4):341–6

Improvements to the TMSBr method of peptide resin deprotection and cleavage: application to large peptides. Sparrow JT, et al. **Pept Res** 1996 Sep–Oct;9(5):218–22

RESINS, RESTORATIVE see **DENTAL CEMENTS**

RESINS, SYNTHETIC

A 12-month clinical comparison of resin-modified light-activated adhesives for the cementation of orthodontic molar bands. Fricker JP. **Am J Orthod Dentofacial Orthop** 1997 Sep;112(3):239–43

Clinical and microbiologic evaluation of a resin modified glass ionomer cement for orthodontic bonding. Wright AB, et al. **Am J Orthod Dentofacial Orthop** 1996 Nov; 110(5):469–75

On the three-point flexural tests of dental polymeric resins. Oshida Y, et al. **Biomed Mater Eng** 1997;7(2):111–9

Microanatomy of the vasa vasorum of the human thoracic aorta: a study utilizing a polyester resin casting technique. Tsikaras DP, et al. **Bull Assoc Anat (Nancy)** 1997 Mar; 81(252):21–2

Clinical guidelines for indirect resin restorations. Shannon A. **J Can Dent Assoc** 1997 Jun;63(6):432–7

Solid-phase extraction of phospholipids from hemoglobin solutions using Empore styrene-divinylbenzene disks. Horne T, et al. **J Chromatogr B Biomed Sci Appl** 1997 Aug 1;695(2):259–67

Clinical experience with the Björk-Shiley Delrin tilting disc heart valve. Dellsperger KC, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S169–77

Surface and edge wear of Björk-Shiley Delrin heart valve discs. Engel PA, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S190–205

Theory of wear as related to the Björk-Shiley Delrin disc heart valve. Engel PA, et al. **J Heart Valve Dis** 1996 Aug; 5 Suppl 2:S216–28

Summary and recommendations. Stein PD, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S246–8 (10 ref.)

Evaluation of disc retention of Björk-Shiley Delrin heart valves. Thyagarajan K, et al. **J Heart Valve Dis** 1996 Aug; 5 Suppl 2:S243–5

A comparison of wear patterns in vivo and in vitro for Björk-Shiley Delrin heart valve discs. Thyagarajan K, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S206–15

The Björk-Shiley Delrin tilting disc heart valve: historical perspective, design and need for scientific analyses after 25 years. Wieting DW. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S157–68 (37 ref.)

An in vivo method for testing hemocompatibility of materials used in prosthetic heart valves. Yang Y, et al. **J Heart Valve Dis** 1996 Sep;5(5):526–31

The effects of adding chlorhexidine and polyhexamethylene bisguanide to a light-cured periodontal dressing material. Thorstensen AE, et al. **J Oral Rehabil** 1996 Nov; 23(11):729–32

Custom-cast post fabrication with a thermoplastic material. Rosenstiel SF, et al. **J Prosthet Dent** 1997 Feb;77(2):209–11

Marginal fidelity of crowns fabricated from six proprietary provisional materials. Tjan AH, et al. **J Prosthet Dent** 1997 May;77(5):482–5

The impact of polystyrene resins in solid-phase organic synthesis. MacDonald AA, et al. **Mol Divers** 1996 May; 1(3):183–6

[Noise as a factor of work environment in manufacturing of synthetic fiber] Tsaneva L. **Gig Sanit** 1996 Jul–Aug; (4):41–2 **(Rus)**

ADVERSE EFFECTS

Evaluation of genotoxic potential of styrene in furniture workers using unsaturated polyester resins. Karakaya AE, et al. **Mutat Res** 1997 Aug 14;392(3):261–8

CHEMISTRY

Bond strengths of two ceramic brackets using argon laser, light, and chemically cured resin systems. Weinberger SJ, et al. **Angle Orthod** 1997;67(3):173–8

Comparative shear bond strength of some orthodontic bonding resins to enamel. Trimpeneers LM, et al. **Eur J Orthod** 1996 Feb;18(1):89–95

Consolidation of particle beds and packing of chromatographic columns. Guiochon G, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):83–8 (38 ref.)

Delrin material characteristics. Clark ES. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S184–9 (20 ref.)

Long-term biostability of polyacetal (Delrin) implants. McKellop HA, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S238–42

Structural analysis of the Björk-Shiley Delrin heart valve occluder. McMeeking RM, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S229–37

Bond strengths of resin-to-metal bonding systems. Kourtis SG. **J Prosthet Dent** 1997 Aug;78(2):136–45

Structure and properties of TentaGel resin beads: implications for combinatorial library chemistry. Quarrell R, et al. **Mol Divers** 1996 Aug;1(4):223–32

PHARMACOKINETICS

Bioavailability of components of resin-based materials which are applied to teeth. Hume WR, et al. **Crit Rev Oral Biol Med** 1996;7(2):172–9 (93 ref.)

TOXICITY

[The effect of polymeric materials on the animal organism in ontogeny] Aksenova LP, et al. **Gig Sanit** 1997 Mar–Apr; (2):41–3 **(Rus)**

RESISTANCE FACTORS see **R FACTORS**

RESISTANCE, NATURAL see **IMMUNITY, NATURAL**

RESISTANCE TRANSFER FACTOR see **F FACTOR**

RESISTANT OVARY SYNDROME see **OVARIAN FAILURE, PREMATURE**

RESOCYANINE see **HYMECROMONE**

RESORCINOLS

The proper use of glue: a 20-year experience with the GRF glue in acute aortic dissection. Bachet J, et al. **J Card Surg** 1997 Mar–Apr;12(2 Suppl):243–53; discussion 253–5 (30 ref.)

[Clinical experience with the gelatin-resorcine-formol biological glue in acute type A aortic dissection] Moriyama Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May; 45(5):682–6 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Long-term efficacy and safety of Jessner's solution and 35% trichloroacetic acid vs 5% fluorouracil in the treatment of widespread facial actinic keratoses. Witheiler DD, et al. **Dermatol Surg** 1997 Mar;23(3):191–6

Medium-depth chemical peeling. Otley CC, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):145–54 (23 ref.)

ADVERSE EFFECTS

Methemoglobinemia induced by an over-the-counter medication. Tush GM, et al. **Ann Pharmacother** 1996 Nov; 30(11):1251–4

The topical application of resorcinol can provoke a systemic allergic reaction [letter] Barbaud A, et al. **Br J Dermatol** 1996 Dec;135(6):1014–5

Contact dermatitis among cashew nut workers. Diogenes MJ, et al. **Contact Dermatitis** 1996 Aug;35(2):114–5

CHEMISTRY

Fitting competitive adsorption isotherms to the experimental distribution data in reversed-phase systems. Jandera P, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):3–13

IMMUNOLOGY

Resorcinols and catechols: a clinical study of cross-sensitivity. Knight TE, et al. **Am J Contact Dermat** 1996 Sep;7(3):138–45

PHARMACOLOGY

Involvement of glucokinase translocation in the mechanism by which resorcinol inhibits glycolysis in hepatocytes. Agius L. **Biochem J** 1997 Aug 1;325 (Pt 3):667–73

Enhancement of NMDA responses by group I metabotropic glutamate receptor activation in striatal neurones. Pisani A, et al. **Br J Pharmacol** 1997 Mar;120(6):1007–14

Antimutagenic activity of alkylresorcinols from cereal grains. Gąsiorowski K, et al. **Cancer Lett** 1996 Aug 23; 106(1):109–15

Pneumostatic effect of gelatin-resorcinol formaldehyde-glutaraldehyde glue on thermal injury of the lung: an experimental study on rats. Kodama K, et al. **Eur J Cardiothorac Surg** 1997 Feb;11(2):333–7

Investigation of the inhibitory effect of broussochalcone A on respiratory burst in neutrophils. Wang JP, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):201–8

Kinetics of the course of inactivation of yeast alcohol dehydrogenase by 4-(2-pyridylazo)-resorcinol. Zhang YX, et al. **J Enzyme Inhib** 1996;10(4):239–250

Fate of gelatin-resorcinol-formaldehyde/glutaraldeyde adhesive on femoral vessel morphology. Walker JD, et al. **J Surg Res** 1997 Jul 15;71(1):73–8

The novel metabotropic glutamate receptor agonist 2R,4R-APDC potentiates stimulation of phosphoinositide hydrolysis in the rat hippocampus by 3,5-dihydroxyphenylglycine: evidence for a synergistic interaction between group 1 and group 2 receptors. Schoepp DD, et al. **Neuropharmacology** 1996;

35(12):1661–72
Potentiation of synaptic transmission in the rat dentate gyrus in vitro by (S)–3,5–dihydroxyphenylglycine ((S)–DHPG). O'Leary DM, et al. **Neurosci Lett** 1997 Jun 20;229(1):29–32

THERAPEUTIC USE

Gelatin–resorcinol–formaldehyde–glutaraldehyde glue–spread stapler prevents air leakage from the lung. Nomori H, et al. **Ann Thorac Surg** 1997 Feb;63(2):352–5
Experimental gluing of the bronchial stump after pneumonectomy in rats. Wertzel H, et al. **Eur J Cardiothorac Surg** 1997 Jul;12(1):88–91
Treatment of melasma with Jessner's solution versus glycolic acid: a comparison of clinical efficacy and evaluation of the predictive ability of Wood's light examination. Lawrence N, et al. **J Am Acad Dermatol** 1997 Apr; 36(4):589–93
Experimental gluing of lung parenchyma in rats. Wertzel H, et al. **Thorac Cardiovasc Surg** 1997 Apr;45(2):83–7
[Surgery for acute aortic dissection extending to the aortic root using gelatine–resorcine–formol biological glue—a case report] Uchida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul;45(7):1024–7 (Eng. Abstr.) **(Jpn)**

TOXICITY

Mutagenic, carcinogenic and cocarcinogenic activity of cashewnut shell liquid. George J, et al. **Cancer Lett** 1997 Jan 15;112(1):11–6

RESORTS see **HEALTH RESORTS**

RESOURCE ALLOCATION see **HEALTH CARE RATIONING**

RESOURCE–BASED RELATIVE VALUE SCALE see **RELATIVE VALUE SCALES**

RESPIRATION

see related
APNEA
BREATH TESTS
BREATHING EXERCISES
DYSPNEA
MOUTH BREATHING

A tube in the pharynx for emergency ventilation. Bund M, et al. **Acta Anaesthesiol Scand** 1997 Apr;41(4):529–30
Ventilatory effects of laparoscopic cholecystectomy. Bures E, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):566–73
Reduced hypoxic chemosensitivity in partially paralysed man. A new property of muscle relaxants? Eriksson LI. **Acta Anaesthesiol Scand** 1996 May;40(5):520–3
Continuous non–invasive monitoring of energy expenditure, oxygen consumption and alveolar ventilation during controlled ventilation: validation in an oxygen consuming lung model. Holk K, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):530–7
Bronchoscopy in airway management. Kuylenstierna R. **Acta Anaesthesiol Scand Suppl** 1997;110:68
Fetal breathing recorded by actocardiogram and real—time ultrasonography. A comparison. Malcus P, et al. **Acta Obstet Gynecol Scand** 1997 Jan;76(1):33–7
Relationship between oral breathing and nasal obstruction in patients with obstructive sleep apnea. Ohki M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:228–30
The static–charge–sensitive bed in the monitoring of respiration during sleep in infants and young children. Kirjavainen T, et al. **Acta Paediatr** 1996 Oct;85(10):1146–52
Effects of energy imbalance on energy expenditure and respiratory quotient in young and older men: a summary of data from two metabolic studies. Saltzman E, et al. **Aging (Milano)** 1996 Dec;8(6):370–8
The effects of age, sex, lung size, and hyperinflation on CT lung densitometry. Gevenois PA, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1169–73
Ghosting of pulmonary nodules with respiratory motion: comparison of helical and conventional CT using an in vitro pediatric model. Luker GD, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1189–93
Spontaneous cervicothoracic epidural hematoma following prolonged valsalva secondary to trumpet playing. David S, et al. **Am J Emerg Med** 1997 Jan;15(1):73–5
Using breathing to supplement pain control. Smith N. **Am J Nurs** 1997 Feb;97(2):16
Patterns of fetal perinasal fluid flow in cases of congenital diaphragmatic hernia. Fox HE, et al. **Am J Obstet Gynecol** 1997 Apr;176(4):807–12; discussion 812–3
Sleep in multiple pregnancy: breathing patterns, oxygenation, and periodic leg movements. Nikkola E, et al. **Am J Obstet Gynecol** 1996 May;174(5):1622–5
Activity levels and the relationship to lung function and nutritional status in children with cystic fibrosis. Boucher GP, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug; 76(4):311–5
Spinal muscular atrophy: kinematic breathing analysis. Lissoni A, et al. **Am J Phys Med Rehabil** 1996 Sep–Oct; 75(5):332–9
Ventilatory function in cervical and high thoracic spinal cord injury. Relationship to level of injury and tone. Roth EJ, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug;76(4):262–7
Effect of inspiratory training on mitochondrial DNA and cytochrome–c oxidase expression in the diaphragm. Akiyama Y, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):L320–5
Neurocardiac response to esophageal electric stimulation in humans: effects of varying stimulation frequencies. Bajwa A, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R896–901
Convection as one of the limiting factors of human respiration during normoxic exercise. Heller H, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1874–9
Effects of Stroop color–word conflict test on the autonomic nervous system responses. Hoshikawa Y, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1113–21
Influence of forced respiration on nonlinear dynamics in heart rate variability. Kanters JK, et al. **Am J Physiol** 1997 Apr; 272(4 Pt 2):R1149–54
Estimation of cardiorespiratory transfer under spontaneous breathing conditions: a theoretical study. Kim TS, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H1012–23
Ventilation–induced pulmonary vasodilation at birth is modulated by potassium channel activity. Tristani–Firouzi M, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2353–9
Partitioning of inspiratory muscle workload and pressure assistance in ventilator–dependent COPD patients. Appendini L, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1301–9
Changes in breathing and ventilatory muscle recruitment patterns induced by lung volume reduction surgery. Benditt JO, et al. **Am J Respir Crit Care Med** 1997 Jan; 155(1):279–84
Depressed baroreflex sensitivity in patients with obstructive sleep apnea. Carlson JT, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1490–6
Effect of inspiratory flow rate on respiratory rate in intubated ventilated patients. Corne S, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):304–8
Nocturnal periodic breathing and the development of acute high altitude illness. Eichenberger U, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1748–54
Influence of gender and endotracheal tube size on preextubation breathing pattern [published erratum appears in Am J Respir Crit Care Med 1997 Jun;155(6):2115] Epstein SK, et al. **Am J Respir Crit Care Med** 1996 Dec; 154(6 Pt 1):1647–52
Extubation outcome after spontaneous breathing trials with T–tube or pressure support ventilation. The Spanish Lung Failure Collaborative Group. Esteban A, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):459–65
Improved arterial oxygenation after oleic acid lung injury in the pig using a computer–controlled mechanical ventilator. Lefevre GR, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1567–72
Ventilatory and hemodynamic effects of continuous positive airway pressure in left heart failure. Lenique F, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):500–5
Respiratory muscle and cardiopulmonary function during exercise in very severe COPD. Montes de Oca M, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1284–9
Proportional assist ventilation in acute respiratory failure: effects on breathing pattern and inspiratory effort. Navalesi P, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1330–8
Glottic aperture and effective minute ventilation during nasal two–level positive pressure ventilation in spontaneous mode. Parreira VF, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1857–63
Determinants of lung volume in spontaneously breathing preterm infants. Poets CF, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):649–53
Ventilatory mechanics at rest and during exercise in patients with cystic fibrosis. Regnis JA, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1418–25
Production of nitric oxide (NO) in intrathoracic airways of normal humans. Tsujino I, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1370–4
Diaphragm muscle fiber injury after inspiratory resistive breathing. Zhu E, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1110–6
Effect of nasal occlusion on tracheal and pharyngeal pressures in horses. Holcombe SJ, et al. **Am J Vet Res** 1996 Sep;57(9):1258–60
Cardiorespiratory and metabolic effects of walking, standing, and standing with a splint during the recuperative period from maximal exercise in horses. Hubbell JA, et al. **Am J Vet Res** 1997 Sep;58(9):1003–9
Effect of combined staphylectomy and laryngotomy on upper airway mechanics in clinically normal horses. O'Rielly JL, et al. **Am J Vet Res** 1997 Sep;58(9):1018–21
Ventilatory effects of the single–breath CO2 test, compared with eructation, in cattle. Rollin F, et al. **Am J Vet Res** 1997 Mar;58(3):310–6
Respiratory variables during thoracotomy for PDA ligation. Puri GD, et al. **Anaesth Intensive Care** 1996 Jun;24(3):375–8
The Mapleson breathing systems [letter; comment] Dorrington KL. **Anaesthesia** 1996 Oct;51(10):988. Comment on: Anaesthesia 1996 Apr;51(4):371–85.
Acute intraoperative endotracheal tube obstruction associated with a heat and moisture exchanger in an infant [letter] Casta A, et al. **Anesth Analg** 1997 Apr;84(4):939–40
Continuous ventilation during transnasal fiberoptic intubation [letter; comment] Cavdarski A. **Anesth Analg** 1996 Nov; 83(5):1133. Comment on: Anesth Analg 1996 Mar;82(3):674.
Work (?) of breathing [letter; comment] Gunter JB. **Anesth Analg** 1997 Mar;84(3):702–3. Comment on: Anesth Analg 1996 Sep;83(3):488–92.
Uptake of desflurane and isoflurane during closed–circuit anesthesia with spontaneous and controlled mechanical ventilation [see comments] Hendrickx JF, et al. **Anesth Analg** 1997 Feb;84(2):413–8. Comment in: Anesth Analg 1997 Feb;84(2):239–40.
Single breath induction technique: comparison of sevoflurane and isoflurane [letter; comment] Lewis MC, et al. **Anesth Analg** 1996 Oct;83(4):890–1. Comment on: Anesth Analg 1996 Mar;82(3):528–32.
Pressure support ventilation augments spontaneous breathing with improved thoracoabdominal synchrony in neonates with congenital heart disease. Tokioka H, et al. **Anesth Analg** 1997 Oct;85(4):789–93
Influence of acute pain induced by activation of cutaneous nociceptors on ventilatory control. Sarton E, et al. **Anesthesiology** 1997 Aug;87(2):289–96
Heat loss from the upper airways and selective brain cooling in humans. Cabanac M, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:613–6
Respiratory inputs to central cardiovascular neurons. Pilowsky P, et al. **Ann N Y Acad Sci** 1996 Aug 15;783:64–70 (36 ref.)
Effects of breathing cold and warm air on lung function and physical performance in asthmatic and nonasthmatic athletes during exercise in the cold. Sandsund M, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:751–6
Improved nasal breathing reduces snoring and morning tiredness. A 6–month follow–up study. Löth S, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec; 122(12):1337–40
The diagnostic value of the respiratory rate in febrile children younger than 2 years [letter; comment] Lopes AA. **Arch Pediatr Adolesc Med** 1997 Jul;151(7):747–8. Comment on: Arch Pediatr Adolesc Med 1995 Mar;149(3):283–7.
Parkinson's disease: an investigation of exercise capacity, respiratory function, and gait. Canning CG, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):199–207
Cardiorespiratory response to progressive leg exercise under acute normobaric hypoxia. Zattara–Hartmann MC, et al. **Arch Physiol Biochem** 1996;104(3):272–81
A single pulsatile pump for total biventricular cardiac support using patient lung ventilation. Ottmers SE, et al. **ASAIO J** 1996 Sep–Oct;42(5):M796–9
Mathematical model for the calculation of oxygen concentrations in a closed circuit oxygen rebreathing apparatus. Neubauer B, et al. **Aviat Space Environ Med** 1997 Aug;68(8):722–5
2nd Annual meeting of the International Society of the Advancement of Respiratory Psychophysiology (ISARP). Toronto, Canada, 9–11 October 1995. Abstracts. **Biol Psychol** 1996 Jun 28;43(3):241–70
Volumetric analysis of aeration in the lungs during general anaesthesia [letter; comment] Drummond GB. **Br J Anaesth** 1996 Nov;77(5):697–8. Comment on: Br J Anaesth 1996 Jun;76(6):760–6.
Can prolonged expiration manoeuvres improve the prediction of arterial PCO2 from end–tidal PCO2? Tavernier B, et al. **Br J Anaesth** 1997 May;78(5):536–40
Birth under water—to breathe or not to breathe [letter; comment] Hofmeyr GJ, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):121. Comment on: Br J Obstet Gynaecol 1996 Mar;103(3):202–8.
Airway efficiency during the use of SCUBA diving mouthpieces. Hobson RS. **Br J Sports Med** 1996 Jun; 30(2):145–7
Locomotory, ventilatory and metabolic responses of the subterranean Stenasellus virei (Crustacea, Isopoda) to severe hypoxia and subsequent recovery. Hervant F, et al. **C R Acad Sci III** 1997 Feb;320(2):139–48
Haemodynamic and ventilatory changes during laparoscopic cholecystectomy in elderly ASA III patients. Dhoste K, et al. **Can J Anaesth** 1996 Aug;43(8):783–8
Respiratory mechanics and arterial blood gases during and after laparoscopic cholecystectomy. Iwasaka H, et al. **Can J Anaesth** 1996 Feb;43(2):129–33
Airway and respiratory management following non–lethal hanging. Kaki A, et al. **Can J Anaesth** 1997 Apr; 44(4):445–50 (15 ref.)
A simple method with no additional cost for monitoring ETCO2 using a standard nasal cannulae [letter] Tsui BC. **Can J Anaesth** 1997 Jul;44(7):787–8
Sympathetic nervous system alterations in sleep apnea. The relative importance of respiratory disturbance, hypoxia, and sleep quality. Dimsdale JE, et al. **Chest** 1997 Mar; 111(3):639–42
Comparison of the effects of heat and moisture exchangers and heated humidifiers on ventilation and gas exchange during weaning trials from mechanical ventilation. Le Bourdellès G, et al. **Chest** 1996 Nov;110(5):1294–8
Development of ventilatory responses to exercise in normal white children. A longitudinal study. Rowland TW, et al. **Chest** 1997 Feb;111(2):327–32
Pulmonary hemodynamics and hypoxemia in sleep apnea [letter; comment] Sajkov D, et al. **Chest** 1997 Jan; 111(1):256–7. Comment on: Chest 1996 Feb;109(2):380–6.
Airway management in children with craniofacial anomalies. Perkins JA, et al. **Cleft Palate Craniofac J** 1997 Mar;

34(2):135–40
Pressure-controlled and volume-cycled mechanical ventilation. McKibben AW, et al. **Clin Chest Med** 1996 Sep;17(3):395–410 (78 ref.)
Changes in cross-sectional area of the lungs on end expiratory computed tomography in normal individuals. Mitchell AW, et al. **Clin Radiol** 1996 Nov;51(11):804–6
The unassisted respiratory rate/tidal volume ratio accurately predicts weaning outcome in postoperative patients. Jacob B, et al. **Crit Care Med** 1997 Feb;25(2):253–7
In vivo diaphragm metabolism: comparison of paced and inspiratory resistive loaded breathing in piglets. Radell PJ, et al. **Crit Care Med** 1997 Feb;25(2):339–45
Variation of nitric oxide concentration during inspiration. Sydow M, et al. **Crit Care Med** 1997 Feb;25(2):365–71
Comparative review of techniques for recording respiratory events at rest and during deglutition. Tarrant SC, et al. **Dysphagia** 1997 Winter;12(1):24–38
Thermal and cardiorespiratory responses of horses to submaximal exercise under hot and humid conditions. Geor RJ, et al. **Equine Vet J Suppl** 1995 Nov;(20):125–32
Ventilatory response to exercise and to carbon dioxide in patients with heart failure. Andreas S, et al. **Eur Heart J** 1996 May;17(5):750–5
The effect of general anaesthesia on breathing patterns in elderly patients during the early post-operative period. Loick HM, et al. **Eur J Anaesthesiol** 1997 May;14(3):258–65
Role of decreased carbohydrate oxidation on slower rises in ventilation with increasing exercise intensity after training. MacRae HS, et al. **Eur J Appl Physiol** 1995; 71(6):523–9
Hypoxic ventilatory response during rest and exercise after a Himalayan expedition. Steinacker JM, et al. **Eur J Appl Physiol** 1996;73(3–4):202–9
Sensation of breathlessness and respiratory oxygen cost during cycle exercise with and without conscious entrainment of the breathing rhythm. Takano N, et al. **Eur J Appl Physiol** 1997;76(3):209–13
Vitamin C status and respiratory function. Ness AR, et al. **Eur J Clin Nutr** 1996 Sep;50(9):573–9
Exhaled nitric oxide during acute changes of airways calibre in asthma. Garnier P, et al. **Eur Respir J** 1996 Jun; 9(6):1134–8
Dead space and slope indices from the expiratory carbon dioxide tension-volume curve. Kars AH, et al. **Eur Respir J** 1997 Aug;10(8):1829–36
European Respiratory Society (ERS) annual congress. Stockholm, Sweden, September 7–11, 1996. Abstracts. **Eur Respir J Suppl** 1996 Sep;23:1S–527S
Proceedings of the 5th International Inhalation Symposium. Hannover, Germany, 20–24 February 1995. **Exp Toxicol Pathol** 1996 Nov;48(6):477–550
Ozone uptake in healthy adult males during quiet breathing. Wiester MJ, et al. **Fundam Appl Toxicol** 1996 Jan; 29(1):102–9
The increased ventilatory response to exercise in chronic heart failure: relation to pulmonary pathology. Clark AL, et al. **Heart** 1997 Feb;77(2):138–46
Ventilation/carbon dioxide production ratio in early exercise predicts poor functional capacity in congestive heart failure. Milani RV, et al. **Heart** 1996 Nov;76(5):393–6
Uncertainties in CT-based radiation therapy treatment planning associated with patient breathing. Balter JM, et al. **Int J Radiat Oncol Biol Phys** 1996 Aug 1;36(1):167–74
Potential benefits of eliminating planning target volume expansions for patient breathing in the treatment of liver tumors. Ten Haken RK, et al. **Int J Radiat Oncol Biol Phys** 1997 Jun 1;38(3):613–7
The reproducibility of cardiopulmonary responses to exercise using a swim bench. Swaine IL, et al. **Int J Sports Med** 1996 Feb;17(2):140–4
Physiological responses to swimming while wearing a wet suit. Trappe TA, et al. **Int J Sports Med** 1996 Feb; 17(2):111–4
Oxygen uptake efficiency slope: a new index of cardiorespiratory functional reserve derived from the relation between oxygen uptake and minute ventilation during incremental exercise. Baba R, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1567–72
Enhanced ventilatory and exercise performance in athletes with slight expiratory resistive loading. Fee LL, et al. **J Appl Physiol** 1997 Aug;83(2):503–10
Ventilatory stability to transient CO2 disturbances in hyperoxia and normoxia in awake humans. Lai J, et al. **J Appl Physiol** 1997 Aug;83(2):466–76
Comparison of effects of sustained isocapnic hypoxia on ventilation in men and women. Sajkov D, et al. **J Appl Physiol** 1997 Aug;83(2):599–607
Curtailed respiration by repeated vs. isolated hypoxia in maturing piglets is unrelated to NTS ME or SP levels. Waters KA, et al. **J Appl Physiol** 1997 Aug;83(2):522–9
Cardiorespiratory changes in patients undergoing pulmonary resection using different anesthetic management techniques. Boldt J, et al. **J Cardiothorac Vasc Anesth** 1996 Dec; 10(7):854–9
Respiratory function after cardiac surgery. Johnson D, et al. **J Cardiothorac Vasc Anesth** 1996 Aug;10(5):571–7
Helicopter transport of patients with marginal respiratory function/status [letter; comment] Benumof JL. **J Clin Anesth** 1996 Nov;8(7):621. Comment on: J Clin Anesth 1995 Dec;7(8):689–90.
Principles & guidelines for respiratory monitoring on the general care floor. The Consortium on Respiratory Monitoring on the General Care Floor. **J Clin Monit** 1996 Sep;12(5):411–6
Assessment of errors when expiratory condensate PCO2 is used as a proxy for mixed expired PCO2 during mechanical ventilation. Imanaka H, et al. **J Clin Monit** 1997 Jul; 13(4):215–22
Respiratory monitoring during postoperative analgesia [letter; comment] Ladner E, et al. **J Clin Monit** 1996 Sep; 12(5):417. Comment on: J Clin Monit 1995 Nov;11(6):365–72.
Heart and respiratory rates and their significance for convective oxygen transport rates in the smallest mammal, the Etruscan shrew Suncus etruscus. Jürgens KD, et al. **J Exp Biol** 1996 Dec;199 (12):2579–84
The role of the nucleus isthmi in respiratory pattern formation in bullfrogs. Kinkead R, et al. **J Exp Biol** 1997 Jun;200 (Pt 12):1781–93
MR of focal liver lesions: comparison of breath-hold and non-breath-hold hybrid RARE and conventional spin-echo T2-weighted pulse sequences. Carpenter KD, et al. **J Magn Reson Imaging** 1996 Jul-Aug;6(4):596–602
Abdominal phase-contrast MR angiography: breath-hold versus non-breath-hold techniques. Hara AK, et al. **J Magn Reson Imaging** 1996 Jan-Feb;6(1):94–8
Dynamic contrast-enhanced breath-hold MR imaging of thoracic malignancy using cardiac compensation. Low RN, et al. **J Magn Reson Imaging** 1996 Jul-Aug;6(4):625–31
Comparison of single-breath-hold fast spin-echo sequences with routine non-breath-hold techniques: application to MRI of renal masses. Melki PS, et al. **J Magn Reson Imaging** 1996 Jul-Aug;6(4):608–14
Respiratory and postprandial changes in portal flow rate: assessment by phase contrast MR imaging. Sadek AG, et al. **J Magn Reson Imaging** 1996 Jan-Feb;6(1):90–3
Breathing--what's the "right" answer? [editorial; comment] Givan DC, et al. **J Pediatr** 1996 Dec;129(6):781–2 (18 ref.) . Comment on: J Pediatr 1996 Dec;129(6):804–8.
Anemia in children with breath-holding spells [letter; comment] Yilmaz S, et al. **J Pediatr** 1996 Mar;128(3):440–1 . Comment on: J Pediatr 1995 Mar;126(3):395–7.
On the intercostal muscle compensation for diaphragmatic paralysis in the dog. Brichant JF, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):245–53
Postnatal development of the pattern of respiratory and cardiovascular response to systemic hypoxia in the piglet: the roles of adenosine. Elnazir B, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):573–85
Chemosensitive medullary neurones in the brainstem--spinal cord preparation of the neonatal rat. Kawai A, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):277–92
Cognitive-linguistic demands and speech breathing. Mitchell HL, et al. **J Speech Hear Res** 1996 Feb;39(1):93–104
Speech breathing and the Lombard effect. Winkworth AL, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):159–69
Ventilatory and blood lactate responses to maximal treadmill exercise during the menstrual cycle. Bemben DA, et al. **J Sports Med Phys Fitness** 1995 Dec;35(4):257–62
Lactic threshold vs ventilatory threshold during a ramp test on a cycle ergometer. Chicharro JL, et al. **J Sports Med Phys Fitness** 1997 Jun;37(2):117–21
Breathing when chest wall muscle are tonically contracted for isometric, non-respiratory tasks. Barnas GM, et al. **J Sports Sci** 1996 Oct;14(5):425–32
Dependence of tissue oxygen on oxygen delivery. Slate RK, et al. **J Surg Res** 1996 Feb 15;61(1):201–5
Speech breathing during reading in women with vocal nodules. Sapienza CM, et al. **J Voice** 1997 Jun; 11(2):195–201
Respiratory responses to passive and active recovery from exercise. Takahashi T, et al. **Jpn J Physiol** 1997 Feb; 47(1):59–65
Exercise performance after PTMC in mitral stenosis: the relation with hemodynamics, ventilatory response and skeletal muscle function. Kakimoto T, et al. **Kobe J Med Sci** 1996 Oct;42(5):307–23
Effects of maternal smoking during pregnancy and a family history of asthma on respiratory function in newborn infants. Stick SM, et al. **Lancet** 1996 Oct 19; 348(9034):1060–4
Amplitude demodulation of the electrocardiogram signal (ECG) for respiration monitoring and compensation during MR examinations. Felblinger J, et al. **Magn Reson Med** 1997 Jul;38(1):129–36
Motion-adapted gating based on k-space weighting for reduction of respiratory motion artifacts. Weiger M, et al. **Magn Reson Med** 1997 Aug;38(2):322–33
Optical aspects of a fibre-optic sensor for respiratory rate monitoring. Pettersson H, et al. **Med Biol Eng Comput** 1996 Nov;34(6):448–52
Monitoring of heart and respiratory rates by photoplethysmography using a digital filtering technique. Nakajima K, et al. **Med Eng Phys** 1996 Jul;18(5):365–72
Cardiorespiratory capacity of individuals with mental retardation including Down syndrome. Fernhall B, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):366–71
Effect of training on lactate/ventilatory thresholds: a meta-analysis. Londeree BR. **Med Sci Sports Exerc** 1997 Jun;29(6):837–43
The equilibrium CO2 rebreathing method does not affect resting or exercise blood pressure. Turner MJ, et al. **Med Sci Sports Exerc** 1996 Jul;28(7):921–5
Influence of water run training on the maintenance of aerobic performance. Wilber RL, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):1056–62
Oxygen intake efficiency slope: a new index of cardiorespiratory functional reserve derived from the relationship between oxygen consumption and minute ventilation during incremental exercise. Baba R, et al. **Nagoya J Med Sci** 1996 Mar;59(1–2):55–62
Transcutaneous carbon dioxide measurement after craniotomy in spontaneously breathing patients. Drummond KJ, et al. **Neurosurgery** 1997 Aug;41(2):361–5; discussion 365–7
Lung cinescintigraphy in the dynamic assessment of ventilation and mucociliary clearance of asbestos cement workers. Di Lorenzo L, et al. **Occup Environ Med** 1996 Sep;53(9):628–35
Comparison of the respiratory and hemodynamic responses of healthy subjects to exercise in three different protocols. Bogaard HJ, et al. **Occup Med (Oxf)** 1996 Aug;46(4):293–8
An ophthalmic drape with a built-in breathing outlet. Miller GR, et al. **Ophthalmic Surg Lasers** 1996 Aug;27(8):725–7
Spontaneous breathing with the use of a laryngeal mask airway in children: comparison of sevoflurane and isoflurane. Komatsu H, et al. **Paediatr Anaesth** 1997; 7(2):111–5
Association of fetal junctional rhythm and respiratory arrhythmia detected by magnetocardiography. Wakai RT, et al. **Pediatr Cardiol** 1997 May-Jun;18(3):201–3
Longitudinal follow-up of lung function from childhood to adolescence in prematurely born patients with neonatal chronic lung disease. Koumbourlis AC, et al. **Pediatr Pulmonol** 1996 Jan;21(1):28–34
Detection of pulmonary metastases with pathological correlation: effect of breathing on the accuracy of spiral CT. Coakley FV, et al. **Pediatr Radiol** 1997 Jul;27(7):576–9
Umbilical arterial blood flow and plasma prostaglandin E2 concentrations during arousal and breathing movements in fetal sheep. Hasan SU, et al. **Pediatr Res** 1996 Nov; 40(5):723–31
Dynamics of respiratory patterning in normal infants and infants who subsequently died of the sudden infant death syndrome. Schechtman VL, et al. **Pediatr Res** 1996 Oct; 40(4):571–7
Effects of assistive devices on cardiorespiratory demands in older adults [see comments] Foley MP, et al. **Phys Ther** 1996 Dec;76(12):1313–9. Comment in: Phys Ther 1997 May;77(5):561, 563.
Respiratory, blood-gas transport, and acid-base response of Leptograpsus variegatus to long-term immersion and hyposaline exposure. Cooper AR, et al. **Physiol Zool** 1997 Mar-Apr;70(2):181–92
Respiratory response to cigarette smoking among adolescent smokers: a pilot study. Prokhorov AV, et al. **Prev Med** 1996 Sep-Oct;25(5):633–40
Working underground: respiratory adaptations in the blind mole rat. Widmer HR, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2062–7
Reducing misregistration of mask image in hepatic DSA. Katsuda T, et al. **Radiol Technol** 1997 Jul-Aug;68(6):487–90
Coronary arteries: three-dimensional MR imaging with retrospective respiratory gating. Li D, et al. **Radiology** 1996 Dec;201(3):857–63
Two-dimensional coronary MR angiography without breath holding. Oshinski JN, et al. **Radiology** 1996 Dec; 201(3):737–43
Ventilation abnormalities in obstructive airways disorder: detection with pulmonary dynamic densitometry by means of spiral CT versus dynamic Xe-133 SPECT. Suga K, et al. **Radiology** 1997 Mar;202(3):855–62
A comparison of pulse oximetry and respiratory rate in patient screening. Mower WR, et al. **Respir Med** 1996 Nov; 90(10):593–9
Water lung and body wall contributions to respiration in an echiuran worm. Julian D, et al. **Respir Physiol** 1996 Nov; 106(2):187–98
Effect of heart failure and physical training on the acute ventilatory response to hypoxia at rest and during exercise. Barlow CW, et al. **Respiration** 1997;64(2):131–7
Pulmonary function is diminished in older asymptomatic smokers and ex-smokers with low attenuation areas on high-resolution computed tomography. Betsuyaku T, et al. **Respiration** 1996;63(6):333–8
Effects of willful ventilatory control on respiratory sensation during hypercapnia. Oku Y, et al. **Respiration** 1996; 63(3):137–43
Breathing pattern and respiratory mechanics in chronically tracheostomized patients with chronic obstructive pulmonary disease breathing spontaneously through a hygroscopic condenser humidifier. Vitacca M, et al. **Respiration** 1997;64(4):263–7
Guidelines for the advanced management of the airway and ventilation during resuscitation. A statement by the Airway and Ventilation Management of the Working Group of the European Resuscitation Council. **Resuscitation** 1996 Jun; 31(3):201–30
Guidelines for the basic management of the airway and ventilation during resuscitation. A statement by the Airway and Ventilation Management Working Group of the European Resuscitation Council. **Resuscitation** 1996 Jun; 31(3):187–200
The relationship between airway carbon dioxide excretion and cardiac output during cardiopulmonary resuscitation.

Blumenthal SR, et al. **Resuscitation** 1997 Jun;34(3):263–70

Detection of respiratory frequency in the recordings of electrocardiogram, blood pressure or sympathetic nerve activity in the conscious rat. Nakamura T, et al. **Sangyo Ika Daigaku Zasshi** 1996 Sep 1;18(3):177–84

Accessing chemosensitivity and ventilatory stability from transient stimuli. Bruce EN. **Sleep** 1996 Dec;19(10 Suppl):S157–9

Rebreathing of exhaled gases: importance as a mechanism for the causal association between prone sleep and sudden infant death syndrome. Kemp JS. **Sleep** 1996 Dec;19(10 Suppl):S263–6

Sleep state effects on nonpanting breathing during preoptic/anterior hypothalamic warming in cats and kittens. Schechtman VL, et al. **Sleep** 1997 Jan;20(1):1–10

Long-term alterations of respiratory function in adolescents wearing a brace for idiopathic scoliosis. Korovessis P, et al. **Spine** 1996 Sep 1;21(17):1979–84

Comparison of partially attended night time respiratory recordings and full polysomnography in patients with suspected sleep apnoea/hypopnoea syndrome. Lloberes P, et al. **Thorax** 1996 Oct;51(10):1043–7

[The characteristics of changes in the hemodynamics and respiratory function of children with severe closed abdominal trauma] Tsareva M, et al. **Khirurgiia (Sofiia)** 1996;49(3):24–9 (Eng. Abstr.) **(Bul)**

[Comparison of hemodynamic and ventilatory effects of pneumoperitoneum using carbon dioxide or abdominal suspension during laparoscopic cholecystectomy] Demers P, et al. **Ann Chir** 1996;50(8):593–600 (Eng. Abstr.) **(Fre)**

[Influence of respiration and pulsatility on the accuracy of MR-phase contrast flow measurements: "in vitro" evaluation] Schoenenberger AW, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Aug;165(2):130–6 (Eng. Abstr.) **(Ger)**

[Effects on ventilation secondary to laparoscopic and laparotomic cholecystectomy] Delogu G, et al. **Ann Ital Chir** 1997 Jan–Feb;68(1):81–5 (Eng. Abstr.) **(Ita)**

[Intraoperative continuous epidural block influences postoperative changes in breathing pattern and thoracoabdominal movement associated with upper abdominal surgery] Mitsuhashi S, et al. **Masui** 1996 Jul; 45(7):813–7 (Eng. Abstr.) **(Jpn)**

[Severity and prognosis of congenital diaphragmatic hernia from the viewpoint of perioperative respiratory function] Nakae Y, et al. **Masui** 1997 Jun;46(6):827–34 (Eng. Abstr.) **(Jpn)**

[Preoperative evaluation for volume reduction surgery of pulmonary emphysema using MRI: usefulness of HASTE (half-Fourier single-shot turbo SE) sequence during deep respiration] Togami I, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Jul;57(8):520–2 (Eng. Abstr.) **(Jpn)**

[Ventilatory threshold in Japanese--as the basis for exercise prescription for health promotion] Miura K. **Nippon Koshu Eisei Zasshi** 1996 Mar;43(3):220–30 (Eng. Abstr.) **(Jpn)**

[Prediction and the results of postoperative performance status in patients with giant bulla--prospective study of 47 patients] Ohta M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Oct; 44(10):1847–52 (Eng. Abstr.) **(Jpn)**

[Effects of pulmonary rehabilitation on vital capacity in patients with chronic pulmonary emphysema] Inoue M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Nov; 34(11):1182–8 (Eng. Abstr.) **(Jpn)**

[Effect of percutaneous transluminal mitral commissurotomy on pulmonary function and on the pulmonary vasculature] Ohnuma N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar;35(3):261–6 (Eng. Abstr.) **(Jpn)**

[Relationship of disorders of transcapillary fluid exchange in the lungs and respiratory mechanics in postoperative pulmonary complications] Timerbaev VKh, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):65–8 (Eng. Abstr.) **(Rus)**

[Biochemical evaluation of various respiration conditions during simulation of extended flight] Nagornev SN, et al. **Aviakosm Ekolog Med** 1996;30(2):20–6 (Eng. Abstr.) **(Rus)**

[The characteristics of external respiratory function in students] Burkhanov AI, et al. **Gig Sanit** 1997 Mar–Apr; (2):32–4 **(Rus)**

[An aspiration device imitating the regime of human breathing] Sysoev VA, et al. **Gig Sanit** 1997 Jan–Feb; (1):52–3 **(Rus)**

[Dynamics of external respiration indicators after laparoscopic and open surgery] Bondarenko EN. **Klin Khir** 1997;(1):22–3 (Eng. Abstr.) **(Rus)**

[Pulmonary hemodynamics and external respiratory function in patients with chronic obstructive lung diseases. The diagnostic value of complex radiologic study] Fushtei IM, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):71–5 (Eng. Abstr.) **(Rus)**

[Correction of the breathing in the treatment of bronchial asthma by means of biological feedback] Anokhin MI, et al. **Med Tekh** 1996 Jan–Feb;(1):26–9 (Eng. Abstr.) **(Rus)**

[Respiratory water loss in the evaluation of the functional state of the respiratory system in sailors] Pospelov AM, et al. **Med Tr Prom Ekol** 1996;(12):37–40 **(Rus)**

[A new device for measuring occlusion pressure] Belda J, et al. **Arch Bronconeumol** 1996 Oct;32(8):410–3 (Eng. Abstr.) **(Spa)**

[Animal respiration as a combustion phenomenon. A historical overview] de Micheli A. **Arch Inst Cardiol Mex** 1996 Nov–Dec;66(6):519–24 (20 ref.) **(Spa)**

[Anesthesia in laparoscopic cholecystectomy with CO2: comparison of the hemodynamic and respiratory behavior using 2 different anesthetic techniques (see comments)] Rubio-Martínez CJ, et al. **Rev Esp Anestesiol Reanim** 1996 Jan;43(1):12–6 (Eng. Abstr.). Comment in: Rev Esp Anestesiol Reanim 1996 Jun–Jul;43(6):227–8. **(Spa)**

[Anesthesia for laparoscopic cholecystectomy with CO2: comparison of hemodynamic and ventilatory behavior using 2 different anesthetic techniques (letter; comment)] Sabaté A, et al. **Rev Esp Anestesiol Reanim** 1996 Jun–Jul; 43(6):227–8. Comment on: Rev Esp Anestesiol Reanim 1996 Jan;43(1):12–6. **(Spa)**

DRUG EFFECTS

Interaction between sufentanil and U-50488H with respect to antinociception and respiratory depression in rats. Verborgh CM, et al. **Acta Anaesthesiol Scand** 1997 Aug; 41(7):895–902

Respiratory effects of serotonin challenge to pulmonary and laryngeal circulation in anaesthetized cats. Szereda-Przestaszewska M, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(4):889–96

A phospholipase C inhibitor impedes the hypoxic ventilatory response in the cat. Pokorski M, et al. **Adv Exp Med Biol** 1996;410:397–403

Alcohol consumption, gamma-glutamyl transpeptidase (GGT), and pulmonary function: a cross-sectional and longitudinal study in working men. Zureik M, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1507–11

Thyrotropin-releasing hormone stimulates perinatal rat respiration in vitro. Greer JJ, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1160–4

Nitric oxide increases cutaneous and respiratory heat dissipation in conscious rabbits. Mathai ML, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1691–7

Effects of bronchomotor tone and gas density on time dependence of forced expiratory vital capacity maneuver. D'Angelo E, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1318–22

O2-induced change in ventilation and ventilatory drive in COPD. Dick CR, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):609–14

Respiratory response to CO2 during pressure-support ventilation in conscious normal humans. Georgopoulos D, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):146–54

Repetitive prenatal glucocorticoids improve lung function and decrease growth in preterm lambs. Ikegami M, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):178–84

Airway anesthesia and respiratory adaptations to dead space loading and exercise. Krishnan BS, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):459–65

Nasal inhalation of l-menthol reduces respiratory discomfort associated with loaded breathing. Nishino T, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):309–13

The determinants of respiratory rate during mechanical ventilation. Tobert DG, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):485–92

Physiologic effects of anesthesia induced and maintained by intravenous administration of a climazolam-ketamine combination in ponies premedicated with acepromazine and xylazine. Bettschart-Wolfensberger R, et al. **Am J Vet Res** 1996 Oct;57(10):1472–7

Cardiopulmonary effects of propofol infusion in llamas. Duke T, et al. **Am J Vet Res** 1997 Feb;58(2):153–6

Comparative cardiopulmonary effects of intramuscularly administered etorphine and carfentanil in goats. Heard DJ, et al. **Am J Vet Res** 1996 Jan;57(1):87–96

Cardiopulmonary effects of sevoflurane, compared with halothane, enflurane, and isoflurane, in dogs. Mutoh T, et al. **Am J Vet Res** 1997 Aug;58(8):885–90

Effects of a carfentanil-xylazine combination on cardiopulmonary function and plasma catecholamine concentrations in female bongo antelopes. Schumacher J, et al. **Am J Vet Res** 1997 Feb;58(2):157–61

Cardiopulmonary and anesthetic effects of propofol in wild turkeys. Schumacher J, et al. **Am J Vet Res** 1997 Sep; 58(9):1014–7

Cardiopulmonary and gastrointestinal motility effects of xylazine/ketamine-induced anesthesia in horses previously treated with glycopyrrolate. Singh S, et al. **Am J Vet Res** 1996 Dec;57(12):1762–70

Comparison of antinociceptive, cardiovascular, and respiratory effects, head ptosis, and position of pelvic limbs in mares after caudal epidural administration of xylazine and detomidine hydrochloride solution. Skarda RT, et al. **Am J Vet Res** 1996 Sep;57(9):1338–45

Evaluation of analgesia and cardiorespiratory effects of epidurally administered butorphanol in isoflurane-anesthetized dogs. Troncy E, et al. **Am J Vet Res** 1996 Oct;57(10):1478–82

Profound respiratory depression with morphine patient-controlled analgesia in an elderly patient [letter] Morley AD. **Anaesth Intensive Care** 1996 Apr;24(2):287

The effects of a nonsteroidal antiinflammatory drug (ketoprofen) on morphine respiratory depression: a double-blind, randomized study in volunteers. Moren J, et al. **Anesth Analg** 1997 Aug;85(2):400–5

Intraabdominal carbon dioxide insufflation in the pregnant ewe. Uterine blood flow, intraamniotic pressure, and cardiopulmonary effects. Cruz AM, et al. **Anesthesiology** 1996 Dec;85(6):1395–402

Effect of flumazenil on ventilatory drive during sedation with midazolam and alfentanil. Gross JB, et al. **Anesthesiology** 1996 Oct;85(4):713–20

Prevention of methacholine-induced changes in respiratory mechanics in piglets: a comparison of sevoflurane and halothane. Habre W, et al. **Anesthesiology** 1997 Sep; 87(3):585–90

Nitric oxide synthase inhibition modulates the ventilatory depressant and antinociceptive actions of fourth ventricular infusions of morphine in the awake dog. Pelligrino DA, et al. **Anesthesiology** 1996 Dec;85(6):1367–77

Effects of R-84760, a selective kappa-opioid receptor agonist, on nociception, locomotion and respiration in rats. Fujibayashi K, et al. **Arch Int Pharmacodyn Ther** 1996 Mar–Apr;331(2):153–62

The effects of morphine on the relationship between fetal EEG, breathing and blood pressure signals using fast wavelet transform. Akay M, et al. **Biol Cybern** 1996 Apr; 74(4):367–72

Cardiovascular, respiratory, and panic reactions to epinephrine in panic disorder patients. van Zijderveld GA, et al. **Biol Psychiatry** 1997 Jan 15;41(2):249–51

Effect of domperidone on the ventilatory response to transient hyperoxia in patients anaesthetized with isoflurane. Foo IT, et al. **Br J Anaesth** 1997 Jul;79(1):41–6

Cardioventilatory coupling during anaesthesia. Galletly DC, et al. **Br J Anaesth** 1997 Jul;79(1):35–40

Coupling of spontaneous ventilation to heart beat during benzodiazepine sedation. Galletly DC, et al. **Br J Anaesth** 1997 Jan;78(1):100–1

Influence of 0.2 minimum alveolar concentration of enflurane on the ventilatory response to sustained hypoxia in humans. Nagyova B, et al. **Br J Anaesth** 1997 Jun;78(6):707–13

Ventilatory effects of eltanolone during induction of anaesthesia: comparison with propofol and thiopentone. Spens HJ, et al. **Br J Anaesth** 1996 Aug;77(2):194–9

Pharmacodynamics and pharmacokinetics of BAY x 7195 aerosol, a new and selective receptor antagonist of cysteinyl-leukotrienes, in normal volunteers. Wensing G, et al. **Br J Clin Pharmacol** 1996 Aug;42(2):171–8

Pattern of ventilation during halothane anaesthesia in infants less than two months of age. Brown KA. **Can J Anaesth** 1996 Feb;43(2):121–8

Humidification reduces coughing and breath-holding during inhalation induction with isoflurane in children. Cregg N, et al. **Can J Anaesth** 1996 Nov;43(11):1090–4

Respiratory depression after low-dose caudal morphine. Karl HW, et al. **Can J Anaesth** 1996 Oct;43(10):1065–7

Ventilatory parameters in children during propofol anaesthesia: a comparison with halothane. Kulkarni P, et al. **Can J Anaesth** 1996 Jul;43(7):653–9

Low dose indomethacin via fetal vein or cerebral ventricle stimulates breathing movements in fetal sheep. Adamson SL, et al. **Can J Physiol Pharmacol** 1997 Feb;75(2):135–42

Effect of prolonged catecholamine infusion on heart rate, blood pressure, breathing, and growth in fetal sheep. Bocking AD, et al. **Can J Physiol Pharmacol** 1995 Dec; 73(12):1750–8

Ventilatory effects of angiotensin and vasopressin in conscious rats. Walker JK, et al. **Can J Physiol Pharmacol** 1996 Nov;74(11):1258–64

Fetal breathing is not inhibited by ethanol exposure during prolonged reduced uterine blood flow. Watson CS, et al. **Can J Physiol Pharmacol** 1996 Sep;74(9):1016–24

Effects of repeated administration of zolpidem on sleep, diurnal and nocturnal respiratory function, vigilance, and physical performance in patients with COPD. Girault C, et al. **Chest** 1996 Nov;110(5):1203–11

Suberogorgin vs N-cyclohexyl suberogorgamide effects on urine, respiration, and blood pressure in rat and cat. Peng WD, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan; 17(1):58–60

Effects of sodium lactate on ventilation and acid-base balance in healthy humans. Tappy L, et al. **Clin Physiol** 1996 Jul; 16(4):393–401

Investigating the effect of maternal alcohol intake on human fetal breathing rate using adaptive time-frequency analysis methods. Akay M, et al. **Early Hum Dev** 1996 Sep 20; 46(1–2):153–64

Maternal polydrug use including cocaine and postnatal infant sleep architecture: preliminary observations and implications for respiratory control and behavior. Gingras JL, et al. **Early Hum Dev** 1995 Nov 24;43(3):197–204

A comparison of injectable anaesthetic regimens in Mammoth asses. Matthews NS, et al. **Equine Vet J Suppl** 1992 Feb; (11):37–40

Evidence for mu1-opioid receptor involvement in fentanyl-mediated respiratory depression. Chen SW, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):241–4

Naloxonazine antagonism of levorphanol-induced antinociception and respiratory depression in rhesus monkeys [published erratum appears in Eur J Pharmacol 1996 Oct 3;312(3):389] Gatch MB, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):31–6

Bupropion induces sniffing: a possible dopaminergic mechanism. Zarrindast MR, et al. **Eur Neuropsychopharmacol** 1996 Nov;6(4):299–303

RESPIRATION

The effect of dipyridamole and theophylline on hypercapnic ventilatory responses: the role of adenosine. Griffiths TL, et al. **Eur Respir J** 1997 Jan;10(1):156–60

Breathing pattern during bronchial challenge in humans. Meessen NE, et al. **Eur Respir J** 1997 May;10(5):1059–63

Benzodiazepine receptor antagonist (flumazenil) does not affect sleep–related breathing disorders. Schönhofer B, et al. **Eur Respir J** 1996 Sep;9(9):1816–20

Evaluation of the sensory irritation potential of volatile organic chemicals from carpets—alone and in combination. Stadler JC, et al. **Food Chem Toxicol** 1996 Nov–Dec; 34(11–12):1125–30

Respiratory toxicity of direct lytic factor in the venom of the southern Chinese cobra (N. naja atra) in dogs. Huang SJ, et al. **Hum Exp Toxicol** 1996 Aug;15(8):629–32

Effects of alcohol on sympathetic activity, hemodynamics, and chemoreflex sensitivity. van de Borne P, et al. **Hypertension** 1997 Jun;29(6):1278–83

Estimation of chemoreflex loop gain using pseudorandom binary CO2 stimulation. Ghazanshahi SD, et al. **IEEE Trans Biomed Eng** 1997 May;44(5):357–66

Age–related changes in ventilatory and heart rate responses to acute ozone exposure in the conscious rat. Arito H, et al. **Ind Health** 1997;35(1):78–86

Respiratory effects of occupational exposure to asbestos. Mukhtar MS, et al. **Indian J Physiol Pharmacol** 1996 Jan; 40(1):98–102

Postnatal maturation of peripheral chemoreceptor ventilatory response to O2 and CO2 in newborn lambs [published errata appear in J Appl Physiol 1996 Nov;81(5):1861 and 1996 Dec;81(6):2766] Canet E, et al. **J Appl Physiol** 1996 Jun;80(6):1928–33

Effects of inspired gas on sleep–related apnea in the rat. Christon J, et al. **J Appl Physiol** 1996 Jun;80(6):2102–7

Surfactant dysfunction after inhalation of nitric oxide. Hallman M, et al. **J Appl Physiol** 1996 Jun;80(6):2026–34

Modulation of respiratory rhythm in vitro: role of Gi/o protein–mediated mechanisms. Johnson SM, et al. **J Appl Physiol** 1996 Jun;80(6):2120–33

Oxygen pulse in guinea pigs in hyperbaric helium and hydrogen. Kayar SR, et al. **J Appl Physiol** 1997 Mar; 82(3):988–97

Paradoxical helium and sulfur hexafluoride single–breath washouts in short–term vs. sustained microgravity. Lauzon AM, et al. **J Appl Physiol** 1997 Mar;82(3):859–65

Pulmonary chemoreflexes elicited by intravenous injection of lactic acid in anesthetized rats [see comments] Lee LY, et al. **J Appl Physiol** 1996 Dec;81(6):2349–57. Comment in: J Appl Physiol 1996 Dec;81(6):2347–8.

Decompression comparison of helium and hydrogen in rats. Lillo RS, et al. **J Appl Physiol** 1997 Mar;82(3):892–901

Effect of N–methyl–D–aspartate–receptor blockade on hypoxic ventilatory response in unanesthetized piglets. Lin J, et al. **J Appl Physiol** 1996 May;80(5):1759–63

"Exhaled nitric oxide during exercise: site of release and modulation by ventilation and blood flow" [editorial] Massaro AF, et al. **J Appl Physiol** 1996 Jun;80(6):1863–4

Effects of neonatal immunization and repeated allergen exposure on airway responsiveness in the rabbit. Minshall E, et al. **J Appl Physiol** 1996 Jun;80(6):2108–19

Effects of lung volume on airway resistance during induced constriction in papain–treated rabbits. Nagase T, et al. **J Appl Physiol** 1996 Jun;80(6):1872–9

Respiration during acute hypoxia: angiotensin– and vasopressin–receptor blocks. Overgaard CB, et al. **J Appl Physiol** 1996 Mar;80(3):810–7

Exhaled nitric oxide during exercise: site of release and modulation by ventilation and blood flow. Phillips CR, et al. **J Appl Physiol** 1996 Jun;80(6):1865–71

"Pulmonary chemoreflex elicited by intravenous injection of lactic acid in anesthetized rats" [editorial; comment] Sant'Ambrogio G. **J Appl Physiol** 1996 Dec;81(6):2347–8 . Comment on: J Appl Physiol 1996 Dec;81(6):2349–57.

Comparison of the effects of endotoxin on limb, respiratory, and cardiac muscles. Supinski G, et al. **J Appl Physiol** 1996 Sep;81(3):1370–8

Effects of inhaled CO2 and added dead space on idiopathic central sleep apnea. Xie A, et al. **J Appl Physiol** 1997 Mar; 82(3):918–26

The central respiratory effects of acetylcholine vary with CSF pH. Burton MD, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):27–32

Spectral analysis of intercycle heart fluctuations in the diethyl–ether–anaesthetized or pithed rat treated with l–hyoscyamine. Bernardi M, et al. **J Auton Pharmacol** 1997 Feb;17(1):27–34

Dual effect of aminophylline on the ventilatory response to hypoxia in the rat. Maskrey M, et al. **J Basic Clin Physiol Pharmacol** 1994 Jul–Dec;5(3–4):227–38

Effect of CO2 on Vth nerve inhibition of respiration in isolated rat nervous system. Tarasiuk A, et al. **J Basic Clin Physiol Pharmacol** 1994 Jul–Dec;5(3–4):239–52

Effects of carbon dioxide pneumoperitoneum in pigs with impaired pulmonary function. Dörsam J, et al. **J Endourol** 1997 Jun;11(3):185–9

Assessment of respiratory effect of air pollution: study design on general population samples. Baldacci S, et al. **J Environ Pathol Toxicol Oncol** 1997;16(2–3):77–83

Factors affecting the neonatal response to artificial surfactant. Skelton R, et al. **J Paediatr Child Health** 1996 Jun; 32(3):236–41

Influence of Escherichia coli endotoxin on the pharmacokinetics and respiratory depressant effect of alfentanil in rabbits. Björkman S, et al. **J Pharm Sci** 1996 Jul;85(7):680–4

Pharmacogenetic determinants of codeine induction by rifampin: the impact on codeine's respiratory, psychomotor and miotic effects. Caraco Y, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):330–6

Kinetics of respiratory depression in rats induced by buprenorphine and its metabolite, norbuprenorphine. Ohtani M, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):428–33

Ventilation in morphine–maintained rhesus monkeys. I: Effects of naltrexone and abstinence–associated withdrawal. Paronis CA, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):348–54

Ventilation in morphine–maintained rhesus monkeys. II: Tolerance to the antinociceptive but not the ventilatory effects of morphine. Paronis CA, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):355–62

Protein kinase C pathways modulate respiratory pattern generation in the cat. Haji A, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):297–306

Central effects of 5–HT on activity of respiratory and hypoglossally innervated muscles in newborn kittens. Khater–Boidin J, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):255–65

The effect of low–dose acetazolamide on the ventilatory CO2 response curve in the anaesthetized cat. Wagenaar M, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):227–37

Laryngeal constriction produced by capsaicin in the cat. Szereda–Przestaszewska M, et al. **J Physiol Pharmacol** 1996 Jun;47(2):351–60

Cardiovascular and respiratory effects of detomidine in isoflurane–anaesthetised horses. Still J, et al. **J S Afr Vet Assoc** 1996 Dec;67(4):199–203

Respiratory and circulatory parameters of African elephants (Loxodonta africana) anaesthetised with etorphine and azaperone. Still J, et al. **J S Afr Vet Assoc** 1996 Sep; 67(3):123–7

Cardiopulmonary effects of combined nitric oxide inhibition and inhaled nitric oxide in porcine endotoxic shock. Offner PJ, et al. **J Trauma** 1996 Oct;41(4):641–6

Cardiopulmonary responses to capsaicin instillation to the laryngeal lumen and their reflex mechanisms in rats. Hishida N, et al. **J Vet Med Sci** 1996 Aug;58(8):761–7

Midazolam and ketamine induction before halothane anaesthesia in ponies: cardiorespiratory, endocrine and metabolic changes. Luna SP, et al. **J Vet Pharmacol Ther** 1997 Apr;20(2):153–9

Cardiopulmonary effects of carfentanil in dama gazelles (Gazella dama). Schumacher J, et al. **J Zoo Wildl Med** 1997 Jun;28(2):166–70

Effect of beta–carboline–3–carboxoylate–t–butyl ester on ventilatory control. Greenberg HE, et al. **Life Sci** 1997; 60(7):485–92

Effect of acute bicarbonate administration on exercise responses of COPD patients. Coppoolse R, et al. **Med Sci Sports Exerc** 1997 Jun;29(6):725–32

Respiratory effects of intravenous midazolam. Zacharias M, et al. **N Z Dent J** 1996 Sep;92(409):76–9

Involvement of nitric oxide in cardiorespiratory regulation in the nucleus tractus solitarii. Vitagliano S, et al. **Neuropharmacology** 1996 May;35(5):625–31

Cardiorespiratory response to bicuculline during resistive loaded breathing in anesthetized rabbits. Delpierre S, et al. **Neurosci Lett** 1996 Jul 26;213(1):13–6

GABA(B) receptor blockade reduces resistive loading–induced hypoventilation in anesthetized rabbits. Delpierre S, et al. **Neurosci Lett** 1997 Apr 25;226(2):83–6

Cardiorespiratory effects of cocaine and procaine at the ventral brainstem. Dehkordi O, et al. **Neurotoxicology** 1996 Summer;17(2):387–95

Maternal theophylline administration and breathing movements in late–gestation human fetuses. Ishikawa M, et al. **Obstet Gynecol** 1996 Dec;88(6):973–8

Changes in respiratory function after one and three hours of exposure to formaldehyde in non–smoking subjects. Akbar–Khanzadeh F, et al. **Occup Environ Med** 1997 May; 54(5):296–300

Ketorolac does not depress ventilation in children [letter] Hamunen K, et al. **Paediatr Anaesth** 1996;6(1):79

Respiratory depression following epidural morphine in an infant of three months of age. Vilà R, et al. **Paediatr Anaesth** 1997;7(1):61–4

Respiratory depression following administration of low dose buprenorphine as postoperative analgesic after fentanyl balanced anaesthesia. Zanette G, et al. **Paediatr Anaesth** 1996;6(5):419–22

Experimental pain stimulates respiration and attenuates morphine–induced respiratory depression: a controlled study in human volunteers [see comments] Borgbjerg FM, et al. **Pain** 1996 Jan;64(1):123–8. Comment in: Pain 1996 May–Jun;65(2–3):287.

Pain and respiration [letter; comment] Bourke DL. **Pain** 1996 May–Jun;65(2–3):287. Comment on: Pain 1996 Jan;64(1):123–8.

The influence of midazolam and nitrous oxide on respiratory depression in laboratory rats. Henry RJ, et al. **Pediatr Dent** 1996 Jul–Aug;18(4):281–6

Influence of sedation on arousal and cardiorespiratory responses to airflow obstruction in sleeping lambs. Jakubowska AE, et al. **Pediatr Res** 1996 Oct;40(4):564–70

Cardio–pulmonary function during acute unilateral occlusion of the pulmonary artery in broilers fed diets containing normal or high levels of arginine–HCl. Wideman RF Jr, et al. **Poult Sci** 1996 Dec;75(12):1587–602

Cardiopulmonary effects of desflurane in the dog during spontaneous and artificial ventilation. Clarke KW, et al. **Res Vet Sci** 1996 Jul;61(1):82–6

Effects of M1–selective antimuscarinics on respiratory chemosensitivity in humans. Akiyama Y, et al. **Respir Physiol** 1996 Feb;103(2):127–35

Ventilation and respiratory mechanics during exercise in younger subjects breathing CO2 or HeO2. Babb TG. **Respir Physiol** 1997 Jul;109(1):15–28

Effect of nicotine exposure on postnatal ventilatory responses to hypoxia and hypercapnia. Bamford OS, et al. **Respir Physiol** 1996 Oct;106(1):1–11

Ozone–induced vagal reflex modulates airways reactivity in rabbits. Freed AN, et al. **Respir Physiol** 1996 Aug; 105(1–2):95–102

Papaverine injection into the hindlimb circulation stimulates ventilation in sheep. Haouzi P, et al. **Respir Physiol** 1996 Aug;105(1–2):143–53

Carbon dioxide respiratory response during positive inspiratory pressure in COPD patients. Heyer L, et al. **Respir Physiol** 1997 Jul;109(1):29–37

Prenatal cocaine: effect on hypoxic ventilatory responsiveness in neonatal rats. Lipton JW, et al. **Respir Physiol** 1996 Nov;106(2):161–9

Airway and tissue constrictions are greater in closed than in open–chest conditions. Suki B, et al. **Respir Physiol** 1997 May;108(2):129–41

Cardiorespiratory effects of L–glutamate microinjected into the rat ventral medulla. Tolentino–Silva FP, et al. **Respir Physiol** 1997 Apr;108(1):23–33

Development of respiratory chemoreflexes to hypoxia and CO2 in unanaesthetized kittens. Watanabe T, et al. **Respir Physiol** 1996 Dec;106(3):247–54

Interaction of serotonergic excitatory drive to hypoglossal motoneurons with carbachol–induced, REM sleep–like atonia. Kubin L, et al. **Sleep** 1996 Apr;19(3):187–95

The lack of respiratory effects of the ocular hypotensive drug latanoprost in patients with moderate–steroid treated asthma. Hedner J, et al. **Surv Ophthalmol** 1997 Feb;41 Suppl 2:S111–5

Effects of cessation of terbutaline treatment on airway obstruction and responsiveness in patients with chronic obstructive pulmonary disease. de Jong JW, et al. **Thorax** 1996 Jul;51(7):684–8

Effects of regular salmeterol on lung function and exercise capacity in patients with chronic obstructive airways disease. Grove A, et al. **Thorax** 1996 Jul;51(7):689–93

Cardiopulmonary effects of desflurane in ponies, after induction of anaesthesia with xylazine and ketamine. Clarke KW, et al. **Vet Rec** 1996 Aug 24;139(8):180–5

Cardiovascular and pulmonary effects of sevoflurane anesthesia in horses. Aida H, et al. **Vet Surg** 1996 Mar–Apr; 25(2):164–70

Comparisons of sevoflurane, isoflurane, and halothane anesthesia in spontaneously breathing cats. Hikasa Y, et al. **Vet Surg** 1996 May–Jun;25(3):234–43

Influence of vaporizer setting on mask induction of dogs with isoflurane using an in–circuit vaporizer. Karas AZ, et al. **Vet Surg** 1996 May–Jun;25(3):244–8

[The effect of midazolam after intranasal administration on spontaneous respiration and respiratory control in young children] Fösel T, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Feb; 31(1):22–5 (Eng. Abstr.) **(Ger)**

[The effects of chronic beta–blocker administration on respiratory sinus arrhythmia] Pitzalis MV, et al. **Cardiologia** 1997 Feb;42(2):201–4 (Eng. Abstr.) **(Ita)**

[The effect of low–rose prostaglandin E1 on circulation, respiration and body temperature during surgical anesthesia] Hayashida M, et al. **Masui** 1997 Mar; 46(3):363–72 (Eng. Abstr.) **(Jpn)**

[Effect of calcium and its antagonists on hemodynamics and respiration] Sanotskaia NV, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):138–43 **(Rus)**

[Respiration and blood circulation impairment during experimental poisoning with organophosphorus pesticides] Tarakanov IA, et al. **Biull Eksp Biol Med** 1994 May; 117(5):470–5 **(Rus)**

[The effect of Imovane on sleep structure and respiratory indices during sleep in insomnia patients] Eligulashvili TS, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(4):50–2 (Eng. Abstr.) **(Rus)**

GENETICS

Genetic control of differential baseline breathing pattern. Tankersley CG, et al. **J Appl Physiol** 1997 Mar;82(3):874–81

PHYSIOLOGY

Assessment of respiration during video fluoroscopy of dysphagic patients. Nilsson H, et al. **Acad Radiol** 1997 Jul; 4(7):503–7

Cardiorespiratory variables during a continuous ramp exercise protocol in normal young adults. Matthys D, et al. **Acta Cardiol** 1996;51(5):451–9

Observations on hand movements in Rett syndrome: a pilot study. Elian M, et al. **Acta Neurol Scand** 1996 Sep; 94(3):212–4

Influence of vestibular organ stimulation on stomach movement and respiration. Hoshino I, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;524:16–20

Respiratory pattern of newborn infants exposed to heat stress [letter; comment] Sulyok E. **Acta Paediatr** 1996 Dec; 85(12):1516–7. Comment on: Acta Paediatr 1996 Apr;85(4):467–70.

Inhalation of nasally derived nitric oxide modulates pulmonary function in humans. Lundberg JO, et al. **Acta Physiol Scand** 1996 Dec;158(4):343–7

Distribution of pulmonary ventilation and perfusion measured simultaneously in awake goats. Melsom MN, et al. **Acta Physiol Scand** 1997 Mar;159(3):199–208

An isolated blood–perfused guinea–pig lung model for simultaneous registration of haemodynamic, microvascular and respiratory variables. Nyhlén K, et al. **Acta Physiol Scand** 1997 Apr;159(4):293–302

Ventilatory and upper airway muscle responses to upper airway CO2 in anaesthetized neonatal guinea–pigs. Curran AK, et al. **Adv Exp Med Biol** 1996;410:449–52

The role of carotid body CO2 during ventilatory acclimatization to hypoxia in the goat. Dwinell MR, et al. **Adv Exp Med Biol** 1996;410:387–90

Modelling the peripheral chemosensory drive of ventilation on basis of homogenous sensory units. Eugenín J. **Adv Exp Med Biol** 1996;410:405–10

Central pH chemosensitivity in the newborn opossum Monodelphis domestica. Eugenín J. **Adv Exp Med Biol** 1996;410:217–20

Augmented ventilatory response to sustained normocapnic hypoxia following 100% O2 breathing in humans. Honda Y, et al. **Adv Exp Med Biol** 1996;410:371–5

Afferent input from peripheral chemoreceptors in response to hypoxia and amino acid neurotransmitter generation in the medulla. Kazemi H, et al. **Adv Exp Med Biol** 1996; 410:365–9

The effect of sympathetic nerve stimulation on ventilation and upper airway resistance in the anaesthetized rat. O'Halloran KD, et al. **Adv Exp Med Biol** 1996;410:443–7

Regulation of neuronal nitric oxide synthase gene expression by hypoxia. Role of nitric oxide in respiratory adaptation to low pO2. Prabhakar NR, et al. **Adv Exp Med Biol** 1996; 410:345–8

Upper airway influences on breathing. Sant'Ambrogio G. **Adv Exp Med Biol** 1995;381:37–46 (26 ref.)

Carotid chemoreflex. Neural pathways and transmitters. Sapru HN. **Adv Exp Med Biol** 1996;410:357–64 (22 ref.)

Prolegomena. Chemoreception upstream of transmitters. Torrance RW. **Adv Exp Med Biol** 1996;410:13–38 (49 ref.)

Physiologic response of end–tidal carbon dioxide concentration to paced and induced tachycardias in human beings: basis for design of an automatic external physiologic defibrillator. Cohen TJ, et al. **Am Heart J** 1997 Mar; 133(3):375–7

Study of respirator effect on nasal–oral flow partition. Harber P, et al. **Am J Ind Med** 1997 Oct;32(4):408–12

Paralysis of the preterm rabbit fetus inhibits the pulmonary uptake of intraamniotic iron dextran. Galan HL, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):42–9

The effects of oligohydramnios and cervical cord transection on lung growth in experimental pulmonary hypoplasia in rabbits. Yoshimura S, et al. **Am J Obstet Gynecol** 1997 Jul; 177(1):72–7

Prolonged apnea in the preterm infant is not a random event. al–Saedi SA, et al. **Am J Perinatol** 1997 Apr;14(4):195–200

Fetal breathing movements within 24 hours of delivery in prematurity are related to histologic and clinical evidence of amnionitis. Sherer DM, et al. **Am J Perinatol** 1997 Jul; 14(6):337–40

Frequency domain characteristics of muscle sympathetic nerve activity in heart failure and healthy humans. Ando S, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R205–12

NMDA as well as non–NMDA receptors in phrenic nucleus mediate respiratory effects of carotid chemoreflex. Chitravanshi VC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R302–10

Nitrite oxidation of myoglobin in perfused myocardium: implications for energy coupling in respiration. Chung Y, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1166–73

Deriving respiration from pulse wave: a new signal–processing technique. De Meersman RE, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1672–5

Adrenergic, respiratory, and cardiovascular effects of core cooling in humans. Frank SM, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R557–62

Role of pulmonary stretch receptor feedback in control of episodic breathing in the bullfrog. Kinkead R, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R497–508

CO2–sensitive olfactory and pulmonary receptor modulation of episodic breathing in bullfrogs. Kinkead R, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R134–44

Transfer function analysis of ventilatory influence on systemic arterial pressure in the rat. Kuo TB, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H2108–15

Nitric oxide increases cutaneous and respiratory heat dissipation in conscious rabbits. Mathai ML, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1691–7

Role of excitatory amino acid receptors in cardiorespiratory coupling in ventrolateral medulla. Miyawaki T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1221–30

Development of heart rate power spectra reveals neonatal peculiarities of cardiorespiratory control. Patzak A, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1025–32

Airway hyperreactivity produced by short–term exposure to hyperoxia in neonatal guinea pigs. Schulman SR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):L1211–6

Coupled oscillators account for the slow rhythms in sympathetic nerve discharge and phrenic nerve activity. Zhong S, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1314–24

Effect of elastic loading on variational activity of breathing. Brack T, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1341–8

Actions of the inspiratory intercostal muscles in flail chest. Cappello M, et al. **Am J Respir Crit Care Med** 1997 Mar; 155(3):1085–9

Determinants of nitric oxide in exhaled gas in the isolated rabbit lung. Carlin RE, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):922–7

Effects of menopause and nasal occlusion on breathing during sleep. Carskadon MA, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):205–10

The protective effect of beta–carotene and retinol on ventilatory function in an asbestos–exposed cohort. Chuwers P, et al. **Am J Respir Crit Care Med** 1997 Mar; 155(3):1066–71

Infant respiratory function after RSV–proven bronchiolitis. Dezateux C, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1349–55

Nitric oxide modulates ventilatory responses to hypoxia in the developing rat. Gozal D, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1755–62

Respiratory–related pharyngeal constrictor muscle activity in normal human adults. Kuna ST, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1991–9

Respiratory sensation related to resistive loads in lung transplant recipients. Peiffer C, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):924–30

The determinants of respiratory rate during mechanical ventilation. Tobert DG, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):485–92

Differential inspiratory muscle pressure contributions to breathing during dynamic hyperinflation. Yan S, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):497–503

Ventilatory and arterial blood gas tension adjustments to strenuous exercise in standardbreds. Art T, et al. **Am J Vet Res** 1995 Oct;56(10):1332–7

A simple method for the continuous noninvasive estimate of cardiac output using the Maxima breathing system. A pilot study. Miller DM, et al. **Anaesth Intensive Care** 1997 Feb;25(1):23–8

The paradox of the StatCap carbon dioxide indicator. An experimental evaluation of rebreathing. Kapoor V, et al. **Anaesthesia** 1996 Sep;51(9):846–8

Turbulence in the Magill and Lack breathing systems [letter; comment] Nott MR, et al. **Anaesthesia** 1996 Oct; 51(10):988–9. Comment on: Anaesthesia 1980 Apr;35(4):393–4.

Heart rate variability, respiratory sinus arrhythmia, and mathematical modeling of acetylcholine pharmacokinetics/pharmacodynamics in sinus node neuroeffector junctions [letter] Dexter F. **Anesth Analg** 1997 Jun;84(6):1393

Dynamic ventilatory characteristics during weaning in postoperative critically ill patients. Rivera L, et al. **Anesth Analg** 1997 Jun;84(6):1250–5

Respiratory function and immunologic status in workers processing dried fruits and teas. Zuskin E, et al. **Ann Ailergy Asthma Immunol** 1996 Nov;77(5):417–22

Respiratory rate and body mass in the first three years of life. The working party on respiratory rate. Gagliardi L, et al. **Arch Dis Child** 1997 Feb;76(2):151–4

Oronasal distribution of ventilation at different ages. James DS, et al. **Arch Environ Health** 1997 Mar–Apr;52(2):118–23

Coordination between respiration and deglutition in a preterm infant mammal, Sus scrofa. German RZ, et al. **Arch Oral Biol** 1996 Jun;41(6):619–22

Cardiorespiratory function, flexibility, and body composition among geriatric Tai Chi Chuan practitioners. Lan C, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):612–6

Acute hypoxemia depresses the cardiorespiratory response during phase I constant load exercise and unloaded cycling. Zattara–Hartmann MC, et al. **Arch Physiol Biochem** 1996; 104(2):212–9

Breathing retraining: a three–year follow–up study of treatment for hyperventilation syndrome and associated functional cardiac symptoms. DeGuire S, et al. **Biofeedback Self Regul** 1996 Jun;21(2):191–8

Highlights of the annual meeting of the International Society for the Advancement of Respiratory Psychophysiology and the 14th International Symposium on Respiratory Psychophysiology. Ley R, et al. **Biofeedback Self Regul** 1996 Sep;21(3):241–60

Cardiac rhythm effects of .125–Hz paced breathing through a resistive load: implications for paced breathing therapy and the polyvagal theory. Sargunaraj D, et al. **Biofeedback Self Regul** 1996 Jun;21(2):131–47

Respiratory influences on non–linear dynamics of heart rate variability in humans. Fortrat JO, et al. **Biol Cybern** 1997 Jul;77(1):1–10

Characterization and developmental aspects of anoxia–induced gasping in the rat. Gozal D, et al. **Biol Neonate** 1996;70(5):280–8

Influence of sleep state and respiratory pattern on cyclical fluctuations of cerebral blood flow velocity in healthy preterm infants. Rehan VK, et al. **Biol Neonate** 1996; 69(6):357–67

3rd International Society for the Advancement of Respiratory Psychophysiology (ISARP) Congress. Nijmegen, The Netherlands, August 26–27, 1996. Abstracts. **Biol Psychol** 1997 Jun 20;46(1):73–97

The sensation of respiration in men experiencing high–altitude chronic hypoxia. Noël–Jorand MC, et al. **Biol Psychol** 1996 Mar 8;43(1):1–12

Automated fetal breathing movement detection from internal small displacement measurement. Yamakoshi Y, et al. **Biomed Tech (Berl)** 1996 Sep;41(9):242–7

Feeding and breathing in lampreys. Rovainen CM. **Brain Behav Evol** 1996;48(5):297–305 (67 ref.)

Asymmetrical hemispheric activation and emotion: the effects of unilateral forced nostril breathing. Schiff BB, et al. **Brain Cogn** 1995 Dec;29(3):217–31

Bilateral connections from ventral group inspiratory neurons to phrenic motoneurons in the rat determined by cross–correlation. Duffin J, et al. **Brain Res** 1995 Oct 2; 694(1–2):55–60

Medullary post–inspiratory neuronal and diaphragm post–inspiratory activities during spontaneous augmented breaths in anesthetized rats. Takeda M, et al. **Brain Res** 1997 May 30;758(1–2):218–22

Pontomedullary efferent projections of the ventral respiratory neuronal subsets of the rat. Gaytán SP, et al. **Brain Res Bull** 1997;42(4):323–34

Developmental aspects of the interaction between the controls of heart rate and respiratory rhythm––linear and nonlinear components of diverse activity states in childhood. Schubert E, et al. **Bratisl Lek Listy** 1996 Sep; 97(9):510–5

Is the short–term modulation of heart rate in teleost fish physiologically significant? Assessment by spectral analysis techniques. Altimiras J, et al. **Braz J Med Biol Res** 1995 Nov–Dec;28(11–12):1197–206

Interactions between body temperature regulation and blood acid–base status in anuran amphibians. Branco LG. **Braz J Med Biol Res** 1995 Nov–Dec;28(11–12):1191–6 (54 ref.)

The frog brainstem preparation as a model for studying the central control of breathing in tetrapods. Perry SF, et al. **Braz J Med Biol Res** 1995 Nov–Dec;28(11–12):1339–46 (24 ref.)

Relationship between aerobic fitness and metabolic recovery from intermittent exercise in endurance athletes . Bell GJ, et al. **Can J Appl Physiol** 1997 Feb;22(1):78–85

Augmented hyperventilation via normoxic helium breathing does not prevent exercise–induced hypoxemia. Buono MJ, et al. **Can J Appl Physiol** 1996 Aug;21(4):264–70

The pattern of breathing following a 10–breath voluntary hyperventilation during hyperoxic rebreathing. Chatha D, et al. **Can J Appl Physiol** 1997 Jun;22(3):256–67

Peripheral chemoreflex drive in moderate–intensity exercise. St. Croix CM, et al. **Can J Appl Physiol** 1996 Aug; 21(4):285–300

Heart rate, breathing, and subjective responses of a limited–symptom panic patient to 35% carbon dioxide challenge [letter] Bakal D, et al. **Can J Psychiatry** 1996 Dec;41(10):669–70

Aerobic capacity and functional classification of patients with severe left–ventricular dysfunction. Meyer K, et al. **Cardiology** 1996 Sep–Oct;87(5):443–9

Unusual respiratory variation in right ventricular pressure following balloon pulmonary valvuloplasty in a pregnant patient [letter] Shah C, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):227–8

The effect of sepsis on breathing pattern and weaning outcomes in patients recovering from respiratory failure. Amoateng–Adjepong Y, et al. **Chest** 1997 Aug;112(2):472–7

Evaluation of respiratory inductive plethysmography: accuracy for analysis of respiratory waveforms. Carry PY, et al. **Chest** 1997 Apr;111(4):910–5

Effects of obesity and fat distribution on ventilatory function: the normative aging study [see comments] Lazarus R, et al. **Chest** 1997 Apr;111(4):891–8. Comment in: Chest 1997 Apr;111(4):844–5.

The effects of changes in ventilation and cardiac output on expired nitric oxide. Mehta S, et al. **Chest** 1997 Apr; 111(4):1045–9

Influence of autonomic neuropathy of different severities on the hypercapnic drive to breathing in diabetic patients. Tantucci C, et al. **Chest** 1997 Jul;112(1):145–53

Respiratory–related facial nerve activity in response to activation of the rostral ventrolateral medulla in the cat. Wu JS, et al. **Chin J Physiol** 1997 Jun 30;40(2):97–105

The efficiency of respiratory muscle strengthening training programs in pilots. Ji S, et al. **Chin Med J (Engl)** 1996 Dec;109(12):930–2

Origin of respiratory sinus arrhythmia in conscious humans. An important role for arterial carotid baroreceptors. Piepoli M, et al. **Circulation** 1997 Apr 1;95(7):1813–21

Activities of superior pharyngeal constrictor and levator veli palatini muscles related to respiration in dogs. Kogo M, et al. **Cleft Palate Craniofac J** 1997 Jul;34(4):338–41

The non–invasive acetylene rebreathing method for estimation of cardiac output: influence of breath–by–breath variation. Hansen S, et al. **Clin Physiol** 1997 Mar; 17(2):193–202

Changes in the period of no respiratory sensation and total

breath-holding time in successive breath-holding trials. Nishino T, et al. **Clin Sci (Colch)** 1996 Dec;91(6):755-61

Bibliography of comparative biochemistry and physiology A generated from the Current Awareness in Biological Sciences database. **Comp Biochem Physiol A Physiol** 1997 Feb;116(2):I-VIII

Functional consequences of acute and chronic hypoxia on respiratory and skeletal muscles in mammals. Jammes Y, et al. **Comp Biochem Physiol A Physiol** 1997 Sep; 118(1):15-22 (54 ref.)

Noninvasive capnometry monitoring for respiratory status during pediatric seizures. Abramo TJ, et al. **Crit Care Med** 1997 Jul;25(7):1242-6

Evaluation of skin vasomotor reflexes in response to deep inspiration in diabetic patients by laser Doppler flowmetry. A new approach to the diagnosis of diabetic peripheral autonomic neuropathy. Aso Y, et al. **Diabetes Care** 1997 Aug;20(8):1324-8

Diurnal rhythms in cardiorespiratory function of the fetal baboon. Fletcher KL, et al. **Early Hum Dev** 1996 Sep 20; 46(1-2):27-42

The deep breath vasoconstriction reflex--a new tool for autonomic assessment in infancy? Inwald D, et al. **Early Hum Dev** 1996 Jul 5;45(1-2):55-61

Fetal breathing movements in late diabetic pregnancy: relationship to fetal heart rate patterns and Braxton Hicks' contractions. Mulder EJ, et al. **Early Hum Dev** 1995 Nov 24;43(3):225-32

Evaluation of diaphragm electromyogram contamination during progressive inspiratory maneuvers in humans. Weinberg J, et al. **Electromyogr Clin Neurophysiol** 1997 Apr-May;37(3):143-53

The avian respiratory system: a unique model for studies of respiratory toxicosis and for monitoring air quality. Brown RE, et al. **Environ Health Perspect** 1997 Feb;105(2):188-200 (108 ref.)

The relationship between peak expiratory sound intensity and peak expiratory flow rate in the thoroughbred horse during exercise. Attenburrow DP, et al. **Equine Vet J Suppl** 1990 Jun;(9):43-6

Cardiorespiratory drift during exercise in the horse [see comments] Thomas DP, et al. **Equine Vet J Suppl** 1990 Jun;(9):61-5. Comment in: Equine Vet J Suppl 1990 Jun;(9):5-6.

Cardiorespiratory and subjective responses to prolonged arm and leg exercise in healthy young and older men. Aminoff T, et al. **Eur J Appl Physiol** 1997;75(4):363-8

The effect of a rise in body temperature on the central-chemoreflex ventilatory response to carbon dioxide. Baker JF, et al. **Eur J Appl Physiol** 1996; 72(5-6):537-41

Increased ventilation in runners during running as compared to walking at similar metabolic rates. Berry MJ, et al. **Eur J Appl Physiol** 1996;73(3-4):245-50

Maximal breath-holding time and immediate tissue CO2 storage capacity during head-out immersion in humans. Chang LP, et al. **Eur J Appl Physiol** 1996;73(3-4):210-8

Factors which alter the relationship between ventilation and carbon dioxide production during exercise in normal subjects. Clark AL, et al. **Eur J Appl Physiol** 1996; 73(1-2):144-8

Relationship of critical velocity to marathon running performance. Florence S, et al. **Eur J Appl Physiol** 1997; 75(3):274-8

Effects of combined beta-adrenergic and cholinergic blockade on the initial ventilatory response to exercise in humans. Ishida K, et al. **Eur J Appl Physiol** 1997; 76(3):230-5

The effect of exercise duration on the fast component of exercise hyperpnoea at work rates below the first ventilatory threshold. Koehle M, et al. **Eur J Appl Physiol** 1996;74(6):548-52

Ventilatory response at the onset of voluntary exercise and passive movement in endurance runners. Miyamura M, et al. **Eur J Appl Physiol** 1997;76(3):221-9

Differential cardiorespiratory response to combined exercise with different combinations of forearm and calf exercise. Ogita F, et al. **Eur J Appl Physiol** 1996;73(6):511-5

Blood flow in the carotid artery during breath-holding in relation to diving bradycardia. Pan AW, et al. **Eur J Appl Physiol** 1997;75(5):388-95

Pre-adaptation, adaptation and de-adaptation to high altitude in humans: cardio-ventilatory and haematological changes. Savourey G, et al. **Eur J Appl Physiol** 1996;73(6):529-35

Respiratory variability in R-R interval during sinusoidal exercise. Sone R, et al. **Eur J Appl Physiol** 1997;75(1):39-46

Statistical analysis of blood- to breath-alcohol ratio data in the logarithm-transformed and non-transformed modes. Labianca DA, et al. **Eur J Clin Chem Clin Biochem** 1996 Feb;34(2):111-7

Serotonergic modulation of central respiratory activity in the neonatal mouse: an in vitro study. Hilaire G, et al. **Eur J Pharmacol** 1997 Jun 25;329(2-3):115-20

Breathing pattern during sleep disruptive snoring. Bloch KE, et al. **Eur Respir J** 1997 Mar;10(3):576-86

The effect of lung transplantation on the neural drive to the diaphragm in patients with severe COPD. Brath H, et al. **Eur Respir J** 1997 Feb;10(2):424-9

Is pulmonary arterial impedance affected by breathing? [letter] Castiglioni P, et al. **Eur Respir J** 1997 Aug; 10(8):1933-4

Does spontaneous respiration alter pulmonary artery input impedance? Castiglioni P, et al. **Eur Respir J** 1996 Nov; 9(11):2328-34

Voluntary decrease in breathing frequency in exercising asthmatic subjects. Ceugniet F, et al. **Eur Respir J** 1996 Nov;9(11):2273-9

Obstructive sleep apnoea syndrome: is the "half-night polysomnography" an adequate method for evaluating sleep profile and respiratory events? Fanfulla F, et al. **Eur Respir J** 1997 Aug;10(8):1725-9

Control of breathing in mechanically ventilated patients. Georgopoulos D, et al. **Eur Respir J** 1996 Oct; 9(10):2151-60 (67 ref.)

Influence of awareness of the recording of breathing on respiratory pattern in healthy humans. Han JN, et al. **Eur Respir J** 1997 Jan;10(1):161-6

Unsteadiness of breathing in patients with hyperventilation syndrome and anxiety disorders. Han JN, et al. **Eur Respir J** 1997 Jan;10(1):167-76

Residual effect of nCPAP applied for part of the night in patients with obstructive sleep apnoea [see comments] Hers V, et al. **Eur Respir J** 1997 May;10(5):973-6. Comment in: Eur Respir J 1997 May;10(5):969-70.

Respiratory muscle function and control of breathing in patients with acromegaly. Iandelli I, et al. **Eur Respir J** 1997 May;10(5):977-82

Respiratory challenge induces high frequency spiking on the static charge sensitive bed (SCSB). Kirjavainen T, et al. **Eur Respir J** 1996 Sep;9(9):1810-5

Relationship between breathlessness and hypoxic and hypercapnic ventilatory response in patients with COPD. Kobayashi S, et al. **Eur Respir J** 1996 Nov;9(11):2340-5

A new correction technique for measuring respiratory impedance through an endotracheal tube. Lorino AM, et al. **Eur Respir J** 1996 May;9(5):1079-86

The influence of breathhold on peak expiratory flow in normal and asthmatic children. Matsumoto I, et al. **Eur Respir J** 1996 Jul;9(7):1363-7

Effects of exercise and CO2 inhalation on intersubject variability in ventilatory and heart rate responses to progressive hypoxia. Sato F, et al. **Eur Respir J** 1996 May; 9(5):960-7

The effect of sleep deprivation on sleep states, breathing events, peripheral chemoresponsiveness and arousal propensity in healthy 3 month old infants. Thomas DA, et al. **Eur Respir J** 1996 May;9(5):932-8

Breathing pattern and respiratory mechanics in patients with amyotrophic lateral sclerosis. Vitacca M, et al. **Eur Respir J** 1997 Jul;10(7):1614-21

Interactions between medullary and spinal respiratory rhythm generators in the in vitro brainstem spinal cord preparation from newborn rats. Dubayle D, et al. **Exp Brain Res** 1996 Apr;109(1):1-8

The possible role of C5 segment inspiratory interneurons investigated by cross-correlation with phrenic motoneurons in decerebrate cats. Duffin J, et al. **Exp Brain Res** 1996 Nov;112(1):35-40

Convergence of central respiratory and locomotor rhythms onto single neurons of the lateral reticular nucleus. Ezure K, et al. **Exp Brain Res** 1997 Feb;113(2):230-42

Spinal connections of ventral-group bulbospinal inspiratory neurons studied with cross-correlation in the decerebrate rat. Tian GF, et al. **Exp Brain Res** 1996 Sep;111(2):178-86

Pulmonary vagal reflexes and breathing pattern are not altered in elastase-induced emphysema in rats. Mansoor JK, et al. **Exp Lung Res** 1997 Sep-Oct;23(5):441-57

Cardiopulmonary interactions following REM sleep deprivation in Sprague-Dawley rats. Radulovacki M, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):371-5

Unilateral cooling in the region of locus coeruleus blocks the fall in respiratory output during hypoxia in anaesthetized neonatal sheep. Moore PJ, et al. **Exp Physiol** 1996 Nov;81(6):983-94

Behavioural and arousal-related influences on breathing in humans. Shea SA. **Exp Physiol** 1996 Jan;81(1):1-26 (162 ref.)

Breathing volume and deposition in the respiratory tract. Legáth L, et al. **Exp Toxicol Pathol** 1997 Feb;49(1-2):71-4

Fetal breathing movements are associated with changes in compliance of the left ventricle. Miyague NI, et al. **Fetal Diagn Ther** 1997 Mar-Apr;12(2):72-5

Cardiac, respiratory, and locomotor coordination during walking in humans. Niizeki K, et al. **Folia Primatol (Basel)** 1996;66(1-4):226-39

Contribution of peripheral chemoreceptors to ventilation and the effects of their suppression on exercise tolerance in chronic heart failure. Chua TP, et al. **Heart** 1996 Dec; 76(6):483-9

Nonlinear analysis of heart rate and respiratory dynamics. Hoyer D, et al. **IEEE Eng Med Biol Mag** 1997 Jan-Feb; 16(1):31-9

A versatile mechanical ventilator (DIGIT) with high flow stability and a programmable inspiratory phase flow pattern. Grianti F, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1062-72

Respiration response curve analysis of heart rate variability. Zhang PZ, et al. **IEEE Trans Biomed Eng** 1997 Apr; 44(4):321-5

Respiratory function during warm-up exercise in athletes. Kesavachandran C, et al. **Indian J Physiol Pharmacol** 1997 Apr;41(2):159-63

Influence of respiration on human sympathetic skin response. Krishnamurthy N, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):350-4

Monitoring respiratory function. Jacobsohn E, et al. **Int Anesthesiol Clin** 1996 Summer;34(3):1-36 (50 ref.)

Pulmonary function and symptoms of welders. Wolf C, et al. **Int Arch Occup Environ Health** 1997;69(5):350-3

Building intelligent alarm systems by combining mathematical models and inductive machine learning techniques Part 2--sensitivity analysis. Müller B, et al. **Int J Biomed Comput** 1996 Aug;42(3):165-79

A between-subjects comparison of respiratory sinus arrhythmia and baroreceptor cardiac reflex sensitivity as non-invasive measures of tonic parasympathetic cardiac control. del Paso GA, et al. **Int J Psychophysiol** 1996 Jun-Jul;22(3):163-71

Dynamics of respiratory response to sinusoidal work load in humans. Fukuoka Y, et al. **Int J Sports Med** 1997 May; 18(4):264-9

The pressor response to submaximal cycle ergometry while using aerodynamic handlebars. Heil DP. **Int J Sports Med** 1997 Jan;18(1):1-7

The asthmatic athlete: metabolic and ventilatory responses to exercise with and without pre-exercise medication. Ienna TM, et al. **Int J Sports Med** 1997 Feb;18(2):142-8

Inspiratory resistance effects on exercise breathing pattern relationships to chemoresponsiveness. Muza SR, et al. **Int J Sports Med** 1996 Jul;17(5):344-50

Lower respiratory rates without decreases in oxygen consumption during neonatal synchronized intermittent mandatory ventilation. Smith KM, et al. **Intensive Care Med** 1997 Apr;23(4):463-8

Beat-to-beat variability of left ventricular indexes measured by acoustic quantification: influence of heart rate and respiration--correlation with M-mode echocardiography. Seliem MA, et al. **J Am Soc Echocardiogr** 1996 May-Jun; 9(3):221-30

Differential respiratory activity of four abdominal muscles in humans. Abe T, et al. **J Appl Physiol** 1996 Apr; 80(4):1379-89

Effects of unilateral lesions of retrotrapezoid nucleus on breathing in awake rats. Akilesh MR, et al. **J Appl Physiol** 1997 Feb;82(2):469-79

A modified rebreathing technique using an infrared gas analyzer. Barazanji KW, et al. **J Appl Physiol** 1996 Apr; 80(4):1258-62

Analysis of diaphragm EMG signals: comparison of gating vs. subtraction for removal of ECG contamination. Bartolo A, et al. **J Appl Physiol** 1996 Jun;80(6):1898-902

Cardiorespiratory interactions during fixed-pace resistive breathing. Blaber AP, et al. **J Appl Physiol** 1996 May; 80(5):1618-26

Temporal variations in the pattern of breathing. Bruce EN. **J Appl Physiol** 1996 Apr;80(4):1079-87 (94 ref.)

Periodic breathing induced on demand in awake newborn lamb. Canet E, et al. **J Appl Physiol** 1997 Feb;82(2):607-12

Cardiorespiratory kinetics during exercise of different muscle groups and mass in old and young. Chilibeck PD, et al. **J Appl Physiol** 1996 Sep;81(3):1388-94

Inhibitory effect of an intellectual task on breathing after voluntary hyperventilation. Chin K, et al. **J Appl Physiol** 1996 Sep;81(3):1379-87

Scalp topography of the short-latency components of the respiratory-related evoked potential in children. Davenport PW, et al. **J Appl Physiol** 1996 May; 80(5):1785-91

Flow limitation in normal infants: a new method for forced expiratory maneuvers from raised lung volumes. Feher A, et al. **J Appl Physiol** 1996 Jun;80(6):2019-25

Human cerebral activity with increasing inspiratory force: a study using positron emission tomography. Fink GR, et al. **J Appl Physiol** 1996 Sep;81(3):1295-305

Human respiratory input impedance between 32 and 800 Hz, measured by interrupter technique and forced oscillations. Frey U, et al. **J Appl Physiol** 1997 Mar;82(3):1018-23

Changes in breath 13CO2/12CO2 during exercise of different intensities. Gautier JF, et al. **J Appl Physiol** 1996 Sep; 81(3):1096-102

Interaction between carotid and cardiopulmonary baroreflexes [letter; comment] Halliwill JR, et al. **J Appl Physiol** 1997 Feb;82(2):716-8. Comment on: J Appl Physiol 1996 Jun;80(6):1903-10.

Cardiovascular and ventilatory response to isocapnic hypoxia at sea level and at 5,050 m. Insalaco G, et al. **J Appl Physiol** 1996 May;80(5):1724-30

Technique for repetitive recording from fetal respiratory neurons. Ioffe S, et al. **J Appl Physiol** 1996 Mar; 80(3):1057-60

Prolongation in expiration evoked from ventrolateral pons of adult rats [see comments] Jodkowski JS, et al. **J Appl Physiol** 1997 Feb;82(2):377-81. Comment in: J Appl Physiol 1997 Feb;82(2):375-6.

Dilution acidosis: evidence for a role of intracellular pH in the control of ventilation. Kasserra CE, et al. **J Appl Physiol** 1996 May;80(5):1804-10

Ventilatory dynamics during transient arousal from NREM sleep: implications for respiratory control stability. Khoo MC, et al. **J Appl Physiol** 1996 May;80(5):1475-84

Inspiratory coactivation of the genioglossus enlarges retroglossal space in laryngectomized humans. Kobayashi I, et al. **J Appl Physiol** 1996 May;80(5):1595-1604

Respiratory function of velopharyngeal constrictor muscles during wakefulness in normal adults. Launois SH, et al. **J Appl Physiol** 1997 Feb;82(2):584-91

Mechanical advantage of sternomastoid and scalene muscles in dogs. Legrand A, et al. **J Appl Physiol** 1997 May; 82(5):1517–22

Mediolateral gradient of mechanical advantage in the canine parasternal intercostals. Legrand A, et al. **J Appl Physiol** 1996 Jun;80(6):2097–101

Vasomotor instability preceding tilt–induced syncope: does respiration play a role? Lipsitz LA, et al. **J Appl Physiol** 1997 Aug;83(2):383–90

Effect on breathing of ventral medullary surface cooling in neonatal goats. Lowry TF, et al. **J Appl Physiol** 1996 Jun; 80(6):1949–57

Task failure with lack of diaphragm fatigue during inspiratory resistive loading in human subjects. McKenzie DK, et al. **J Appl Physiol** 1997 Jun;82(6):2011–9

Effect of hypoxia on abdominal motor unit activities in spontaneously breathing cats. Mateika JH, et al. **J Appl Physiol** 1996 Dec;81(6):2428–35

Respiratory and sympathetic activity during recovery from hypoxic depression and gasping in cats. Melton JE, et al. **J Appl Physiol** 1996 Jun;80(6):1940–8

Effect of lung volume on the respiratory action of the canine sternomastoid. Muza SR, et al. **J Appl Physiol** 1996 Mar; 80(3):852–6

Anatomic dead space in infants and children. Numa AH, et al. **J Appl Physiol** 1996 May;80(5):1485–9

Airway closure and reopening assessed by the alveolar capsule oscillation technique. Otis DR Jr, et al. **J Appl Physiol** 1996 Jun;80(6):2077–84

Respiratory system mechanics in sedated, paralyzed, morbidly obese patients. Pelosi P, et al. **J Appl Physiol** 1997 Mar;82(3):811–8

Effect of expiratory flow limitation on respiratory mechanical impedance: a model study. Peslin R, et al. **J Appl Physiol** 1996 Dec;81(6):2399–406

Assessment of respiratory pressure–volume nonlinearity in rabbits during mechanical ventilation. Peslin R, et al. **J Appl Physiol** 1996 May;80(5):1637–48

Anomalous behavior of helium and sulfur hexafluoride during single–breath tests in sustained microgravity. Prisk GK, et al. **J Appl Physiol** 1996 Apr;80(4):1126–32

Delay time adjustments to minimize errors in breath–by–breath measurement of Vo2 during exercise. Proctor DN, et al. **J Appl Physiol** 1996 Dec;81(6):2495–9

Respiratory control during volume–cycled ventilation in normal humans. Puddy A, et al. **J Appl Physiol** 1996 May; 80(5):1749–58

Noxious stimuli do not determine reflex cardiorespiratory effects in anesthetized rabbits. Raimondi G, et al. **J Appl Physiol** 1996 Dec;81(6):2421–7

"Prolongation in expiration evoked from ventrolateral pons of adult rats" [editorial; comment] St. John WM. **J Appl Physiol** 1997 Feb;82(2):375–6. Comment on: J Appl Physiol 1997 Feb;82(2):377–81.

A model of the spontaneously breathing patient: applications to intrinsic PEEP and work of breathing. Schuessler TF, et al. **J Appl Physiol** 1997 May;82(5):1694–703

Arterial and cardiopulmonary baroreflexes in 60– to 69– vs. 18– to 36–yr–old humans [see comments] Shi X, et al. **J Appl Physiol** 1996 Jun;80(6):1903–10. Comment in: J Appl Physiol 1997 Feb;82(2):716–8.

Influence of global inspiratory muscle fatigue on breathing during exercise. Sliwiński P, et al. **J Appl Physiol** 1996 Apr;80(4):1270–8

Respiratory transfer impedance between 8 and 384 Hz in guinea pigs before and after bronchial challenge. Sobh JF, et al. **J Appl Physiol** 1997 Jan;82(1):172–81

Effects of pursed–lips breathing and expiratory resistive loading in healthy subjects. Spahija JA, et al. **J Appl Physiol** 1996 May;80(5):1772–84

Delayed and diminished pressor response to muscle sympathetic nerve activity in the elderly. Sugiyama Y, et al. **J Appl Physiol** 1996 Mar;80(3):869–75

Glutathione metabolic responses to loaded breathing: variation among respiratory muscles. Supinski G, et al. **J Appl Physiol** 1996 Sep;81(3):1362–9

Specific ventilation distribution in microgravity. Verbanck S, et al. **J Appl Physiol** 1996 May;80(5):1458–65

Regional lung volume trajectories during expiratory flow in dogs. Wilson TA, et al. **J Appl Physiol** 1996 Apr; 80(4):1144–8

Involvement of the fastigial nuclei in vagally mediated respiratory responses. Xu F, et al. **J Appl Physiol** 1997 Jun;82(6):1853–61

Frequency dependence of forced oscillatory respiratory mechanics in horses with heaves. Young SS, et al. **J Appl Physiol** 1997 Mar;82(3):983–7

Respiratory modulation of blood flow in normal and sympathectomized skin in humans. Baron R, et al. **J Auton Nerv Syst** 1996 Sep 12;60(3):147–53

RET proto–oncogene is important for the development of respiratory CO2 sensitivity. Burton MD, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):137–43

Effects of acute hypoxia and hyperoxia on ventilation in spontaneously hypertensive and normotensive rat. Grisk O, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):177–80

Two distinct mechanisms generate the respiratory modulation in fibre activity of the rat cervical sympathetic trunk. Häbler HJ, et al. **J Auton Nerv Syst** 1996 Nov 6; 61(2):116–22

The brainstem network involved in coordination of inspiratory activity and cholinergic outflow to the airways. Haxhiu MA, et al. **J Auton Nerv Syst** 1996 Nov 6; 61(2):155–61

Presence of vasomotor and respiratory rhythms in the discharge of single medullary neurons involved in the regulation of cardiovascular system. Montano N, et al. **J Auton Nerv Syst** 1996 Feb 5;57(1–2):116–22

Cardiovascular periodicities in healthy humans in the absence of breathing and under reduced chemical drive of respiration. Trzebski A, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):144–8

Interaction of heart–rate fluctuations and respiration in 12 to 14–year–old children during sleeping and waking. Unbehaun A, et al. **J Auton Nerv Syst** 1996 Mar 7; 57(3):141–3

Trigeminally–mediated alteration of cardiorespiratory rhythms during nasal application of carbon dioxide in the rat. Yavari P, et al. **J Auton Nerv Syst** 1996 Nov 6; 61(2):195–200

Effect of exposure time on the survival of immature pigs in a confined atmosphere. Arieli R, et al. **J Basic Clin Physiol Pharmacol** 1996;7(2):83–96

The effect of hypothermia on gas exchange in anaesthetized rats in a confined atmosphere. Arieli R, et al. **J Basic Clin Physiol Pharmacol** 1994 Jul–Dec;5(3–4):277–94

Alteration of energy–linked functions in rat hepatic mitochondria following aflatoxin B1 administration. Sajan MP, et al. **J Biochem Toxicol** 1996;11(5):235–41

Respiratory outcomes with early extubation after coronary artery bypass surgery. Johnson D, et al. **J Cardiothorac Vasc Anesth** 1997 Jun;11(4):474–80

Use of adaptive Hilbert transformation for EEG segmentation and calculation of instantaneous respiration rate in neonates. Arnold M, et al. **J Clin Monit** 1996 Jan; 12(1):43–60

Monitoring oxygenation and ventilation during magnetic resonance imaging: a pictorial essay. Bell C, et al. **J Clin Monit** 1996 Jan;12(1):71–4

Cardiogenic oscillations may be masked by the breathing system configuration. Haridas RP, et al. **J Clin Monit** 1997 Jul;13(4):269–72

Distribution and connections of inspiratory premotor neurons in the brainstem of the pigeon (Columba livia). Reinke H, et al. **J Comp Neurol** 1997 Mar 17;379(3):347–62

Improved respiratory function and analgesia control after endovascular AAA repair. Boyle JR, et al. **J Endovasc Surg** 1997 Feb;4(1):62–5

The interaction of pulmonary ventilation and the right–left shunt on arterial oxygen levels. Wang T, et al. **J Exp Biol** 1996 Oct;199 (Pt 10):2121–9 (28 ref.)

Simulated hibernation of sea turtles in the laboratory: I. Feeding, breathing frequency, blood pH, and blood gases. Moon DY, et al. **J Exp Zool** 1997 Aug 15;278(6):372–80

Mechanical effects of respiration and stepping on systolic arterial pressure variability during treadmill exercise. Piazza S, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1643–7

The effect of the presentation of visual and auditory stimuli on the breathing patterns of two girls with Rett syndrome. Woodyatt GC, et al. **J Intellect Disabil Res** 1996 Jun;40 (Pt 3):252–9

Motion artifact in T2–weighted fast spin–echo images of the liver: effect on image contrast and reduction of artifact using respiratory triggering in normal volunteers. Choe KA, et al. **J Magn Reson Imaging** 1997 Mar–Apr; 7(2):298–302

An infrared device for monitoring the respiration of small rodents during magnetic resonance imaging. Lemieux SK, et al. **J Magn Reson Imaging** 1996 May–Jun;6(3):561–4

Breath–holding in healthy and pulmonary–compromised populations: effects of hyperventilation and oxygen inspiration. Marks B, et al. **J Magn Reson Imaging** 1997 May–Jun;7(3):595–7

Effect of slow versus fast desaturation on the ventilatory response to hypoxia. Sugimori K, et al. **J Med** 1996; 27(5–6):277–92

Auditory and inspiratory gasp–evoked sympathetic skin response: age effects. Hay JE, et al. **J Neurol Sci** 1997 May 1;148(1):19–23

GABA– and glycine–mediated fall of intracellular pH in rat medullary neurons in situ. Lückermann M, et al. **J Neurophysiol** 1997 Apr;77(4):1844–52

Modification of mastication and respiration during swallowing in the adult human. McFarland DH, et al. **J Neurophysiol** 1995 Oct;74(4):1509–17

Changes in outflow to respiratory pump muscles produced by natural vestibular stimulation. Rossiter CD, et al. **J Neurophysiol** 1996 Nov;76(5):3274–84

Multiple actions of 1S,3R–ACPD in modulating endogenous synaptic transmission to spinal respiratory motoneurons. Dong XW, et al. **J Neurosci** 1996 Aug 15;16(16):4971–82

Respiratory neurons mediating the Breuer–Hering reflex prolongation of expiration in rat. Hayashi F, et al. **J Neurosci** 1996 Oct 15;16(20):6526–36

Variability in breathing patterns during latent labor. A pilot study. Hesson K, et al. **J Nurse Midwifery** 1997 Mar–Apr; 42(2):99–103

Comparison of continuous versus intermittent sucking in very–low–birth–weight infants. Shiao SY. **J Obstet Gynecol Neonatal Nurs** 1997 May–Jun;26(3):313–9

Cardiorespiratory function before and after corrective surgery in pectus excavatum [letter; comment] Driscoll DJ, et al. **J Pediatr** 1996 Dec;129(6):943–4. Comment on: J Pediatr 1996 May;128(5 Pt 1):638–43.

Effects of an external nasal dilator on sleep and breathing patterns in newborn infants with and without congestion [see comments] Scharf MB, et al. **J Pediatr** 1996 Dec; 129(6):804–8. Comment in: J Pediatr 1996 Dec;129(6):781–8.

Cardiorespiratory reactivity during the Brazelton Scale in term and preterm infants. Lester BM, et al. **J Pediatr Psychol** 1996 Dec;21(6):771–83

Respiratory mechanics during exhaustive submaximal exercise at high altitude in healthy humans. Cibella F, et al. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):881–90

A comparison of the ventilatory response of sleeping newborn lambs to step and progressive hypoxaemia. Cohen G, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):203–13

The characteristics and frequency of augmented breaths during CO2–induced hyperpnoea of newborn infants. Cohen G, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):551–7

Neurones in the ventrolateral pons are required for post–hypoxic frequency decline in rats. Coles SK, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):79–94

Rostrocaudal gradient of mechanical advantage in the parasternal intercostal muscles of the dog. De Troyer A, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):239–46

Role of chloride–mediated inhibition in respiratory rhythmogenesis in an in vitro brainstem of tadpole, Rana catesbeiana. Galante RJ, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):545–58

On the dominant rhythm in the discharges of single postganglionic sympathetic neurones innervating the rat tail artery. Johnson CD, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):241–59

Coherent inspiratory oscillation of cranial nerve discharges in perfused neonatal cat brainstem in vitro. Kato F, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):539–49

The effects of locomotor–respiratory coupling on the pattern of breathing in horses. Lafortuna CL, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):587–96

Rostrocaudal gradient of electrical activation in the parasternal intercostal muscles of the dog. Legrand A, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):247–54

Respiratory activity in the facial nucleus in an in vitro brainstem of tadpole, Rana catesbeiana. Liao G–S, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):529–44

Nitric oxide and exercise in the horse. Mills PC, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):863–74

ATP–sensitive K+ channels are functional in expiratory neurones of normoxic cats. Pierrefiche O, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):399–409

Excitatory amino acid–mediated chemoreflex excitation of respiratory neurones in rostral ventrolateral medulla in rats. Sun MK, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):559–71

Individual differences in breathlessness during exercise, as related to ventilatory chemosensitivities in humans. Takano N, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):843–8

Long–term facilitation of ventilation following repeated hypoxic episodes in awake goats. Turner DL, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):543–50

Red nucleus lesions abolish the biphasic respiratory response to isocapnic hypoxia in decerebrate young rabbits. Waites BA, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):217–25

Managing pregnancy–related nocturnal nasal congestion. The external nasal dilator. Turnbull GL, et al. **J Reprod Med** 1996 Dec;41(12):897–902

Respiratory and body movements as indicators of sleep stage and wakefulness in infants and young children. Kirjavainen T, et al. **J Sleep Res** 1996 Sep;5(3):186–94

Normal respiratory pattern during sleep in young fragile X–syndrome patients [letter] Musumeci SA, et al. **J Sleep Res** 1996 Dec;5(4):272

Developmental changes in laryngeal and respiratory function with variations in sound pressure level. Stathopoulos ET, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):595–614

The effect of exercise induced glycogen depletion on the lactate, ventilatory and electromyographic thresholds. Glass C, et al. **J Sports Med Phys Fitness** 1997 Mar; 37(1):32–40

Tracheal, circulatory, and respiratory responses to femoral nerve stimulation. Kanazawa O, et al. **Jpn J Physiol** 1996 Aug;46(4):319–25

Cardiorespiratory changes when balancing one's whole body on one leg with eyes closed. Kita I, et al. **Jpn J Physiol** 1996 Apr;46(2):145–53

Immediate response to inspiratory resistive loading in anesthetized patients with kyphoscoliosis: spirometric and neural effects. Baydur A, et al. **Lung** 1996;174(2):99–118

Effects of vagal and carotid chemoreceptor afferents on the frequency and pattern of spontaneous augmented breaths in rabbits. Matsumoto S, et al. **Lung** 1997;175(3):175–86

Breathhold imaging of the upper abdomen using a circular polarized–array coil: comparison with standard body coil imaging. Gauger J, et al. **MAGMA** 1996 Jun;4(2):93–104

Non–breath–hold lung magnetic resonance imaging with real–time navigation. Schmidt MA, et al. **MAGMA** 1997 Jun;5(2):123–8

In vivo MR imaging and spectroscopy using hyperpolarized 129Xe. Wagshul ME, et al. **Magn Reson Med** 1996 Aug; 36(2):183–91

Breathing pattern in tetraplegics during exposure to hypoxia and hypercapnia. Pokorski M, et al. **Mater Med Pol** 1995 Jul–Sep;27(3):97–100

Nonlinearity identified by neural network models in Pco2 control system in humans. Fukuoka Y, et al. **Med Biol Eng Comput** 1997 Jan;35(1):33–9

Figuring out why we breathe. Farnsworth WE. **Med Hypotheses** 1997 Mar;48(3):229–36 (54 ref.)

Ventilatory sensitivity to carbon dioxide: the influence of exercise and athleticism. McConnell AK, et al. **Med Sci Sports Exerc** 1996 Jun;28(6):685–91

Prognostic significance of peak oxygen uptake in hypertension. Pardaens K, et al. **Med Sci Sports Exerc** 1996 Jul;28(7):794–800

Cross validation of the 1-mile walking test for men with mental retardation. Rintala P, et al. **Med Sci Sports Exerc** 1997 Jan;29(1):133–7

Breathlessness and control of breathing in patients with COPD. Ferrari K, et al. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):18–23

Effects of the iron lung on respiratory function in chronic hypercapnic COPD patients. Goti P, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):427–32

Sleep and neuromuscular disease: frequency of sleep-disordered breathing in a neuromuscular disease clinic population. Labanowski M, et al. **Neurology** 1996 Nov;47(5):1173–80

Sleep state, cardiorespiratory and electrocortical activity in infants with transposition of great vessels. Sahni R, et al. **Neuropediatrics** 1997 Jun;28(3):162–7

Rostral ventrolateral medulla and respiratory rhythmogenesis in mice. Hilaire G, et al. **Neurosci Lett** 1997 Mar 7; 224(1):13–6

Contribution of vagal afferents to the volume-timing response to expiratory loads in neonatal lambs. Webb B, et al. **Neurosci Lett** 1996 Apr 5;207(3):147–50

Activity of the intercostal muscle spindle afferents in the lower thoracic segments during spontaneous breathing in the cat. Hirai N, et al. **Neurosci Res** 1996 Jul;25(3):301–4

Optical imaging of respiratory burst activity in newborn rat medullary block preparations. Onimaru H, et al. **Neurosci Res** 1996 Jun;25(2):183–90

Effects on symptoms and lung function in humans experimentally exposed to diesel exhaust. Rudell B, et al. **Occup Environ Med** 1996 Oct;53(10):658–62

New integrated sensor pacemaker: comparison of rate responses between an integrated minute ventilation and activity sensor and single sensor modes during exercise and daily activities and nonphysiological interference. Leung SK, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1664–71

Age and sex related changes in heart rate to ventilation coupling: implications for rate adaptive pacemaker algorithms. Rickli H, et al. **Pacing Clin Electrophysiol** 1997 Jan;20(1 Pt 1):104–11

Experimental pain stimulates respiration and attenuates morphine-induced respiratory depression: a controlled study in human volunteers [see comments] Borgbjerg FM, et al. **Pain** 1996 Jan;64(1):123–8. Comment in: Pain 1996 May-Jun;65(2-3):287.

Clinical signs of acute lower respiratory tract infections in malnourished infants and children. Cherian T, et al. **Pediatr Infect Dis J** 1997 May;16(5):490–4

Occlusion maneuver to detect the relative contribution of the rib cage and abdomen to tidal volume using respiratory inductive plethysmography in infants. Gagliardi L, et al. **Pediatr Pulmonol** 1996 Feb;21(2):132–7

Why do infants and small children breathe faster? Kerem E. **Pediatr Pulmonol** 1996 Jan;21(1):65–8

Changes in respiratory rate affect tidal expiratory flow indices in infants with airway obstruction. Rusconi F, et al. **Pediatr Pulmonol** 1996 Apr;21(4):236–40

Effect of positioning on pulmonary function of newborns: comparison of supine and prone position. Shen XM, et al. **Pediatr Pulmonol** 1996 Mar;21(3):167–70

Initiation and maintenance of continuous breathing at birth. Kuipers IM, et al. **Pediatr Res** 1997 Aug;42(2):163–8

The effect of hypercapnia and hypercapnia associated with central cooling on breathing in unanesthetized fetal lambs. Kuipers IM, et al. **Pediatr Res** 1997 Jan;41(1):90–5

Cardiovascular and respiratory consequences of body warming during hypoxia in conscious newborn cats. Rohlicek CV, et al. **Pediatr Res** 1996 Jul;40(1):1–5

Respiratory sinus arrhythmia in blood phobic subjects. Angrilli A, et al. **Percept Mot Skills** 1997 Apr;84(2):505–6

Comparison of changes in autonomic and respiratory parameters of girls after yoga and games at a community home. Telles S, et al. **Percept Mot Skills** 1997 Feb; 84(1):251–7

Breathing--homeostatic function and voluntary motor activity. Waurick S, et al. **Pflugers Arch** 1996;432(3 Suppl):R120–6

A theoretical study of the robustness of the isovolume calibration method for a two-compartment model of breathing, based on an analysis of the connected cylinders model. Augousti AT. **Phys Med Biol** 1997 Feb;42(2):283–91

Cardiorespiratory components of defense reaction elicited from paraventricular nucleus. Duan YF, et al. **Physiol Behav** 1997 Feb;61(2):325–30

Thermally-induced changes in the metabolism of the eye of the crayfish Paranephrops planifrons: respiration and substrate utilization at three distinct temperatures. Taylor PR, et al. **Physiol Behav** 1997 Apr;61(4):613–8

Gravity-dependent phenomena in lung ventilation determined by functional EIT. Frerichs I, et al. **Physiol Meas** 1996 Nov;17 Suppl 4A:A149–57

The first derivation of the Frank Lead ECG at alterations of pulmonary ventilation in young healthy women. Kujanik S, et al. **Physiol Res** 1995;44(5):321–6

Comparison of different algorithms for evaluation of respiratory sinus arrhytmia: cross-correlation histogram analysis and regression analysis. Schmitz JM, et al. **Physiol Res** 1995;44(3):197–203

Midbrain and medullary regulation of respiration and vocalization. Davis PJ, et al. **Prog Brain Res** 1996; 107:315–25 (61 ref.)

Rostral brain regions contributing to respiratory control. Harper RM, et al. **Prog Brain Res** 1996;107:145–56 (76 ref.)

Ventilatory responses to imagined exercise. Gallego J, et al. **Psychophysiology** 1996 Nov;33(6):711–9

Bradycardia during baroreflex stimulation and active or passive stressor tasks: cardiorespiratory fitness and hostility. Graham RE, et al. **Psychophysiology** 1996 Sep;33(5):566–75

Phase-sensitive interaction of cardiac and respiratory timing in humans. Jennings JR, et al. **Psychophysiology** 1996 Sep; 33(5):514–21

Heritability of respiratory sinus arrhythmia: dependency on task and respiration rate. Snieder H, et al. **Psychophysiology** 1997 May;34(3):317–28

Autonomic patterns during respiratory suspensions: possible markers of Transcendental Consciousness. Travis F, et al. **Psychophysiology** 1997 Jan;34(1):39–46

Airway obstruction in asthmatic and healthy individuals: inspiratory and expiratory thin-section CT findings. Park CS, et al. **Radiology** 1997 May;203(2):361–7

Arousal responses of the newborn piglet to airways obstruction and rebreathing during normothermia and hyperthermia. Galland BC, et al. **Reprod Fertil Dev** 1996; 8(3):365–71

Respiratory responses to preoptic/anterior hypothalamic warming during sleep in kittens. Ni H, et al. **Reprod Fertil Dev** 1996;8(1):79–86

Regulation of fetal breathing. Rigatto H. **Reprod Fertil Dev** 1996;8(1):23–33 (67 ref.)

Use of the monofrequency forced oscillation technique to measure changes in upper airway resistance in Friesian and blue Belgian calves. Reinhold P, et al. **Res Vet Sci** 1996 Nov;61(3):227–30

The Hering-Breuer reflex in ventilated children. Giffin F, et al. **Respir Med** 1996 Sep;90(8):463–6

The effect of exercise on diaphragmatic activation in horses. Ainsworth DM, et al. **Respir Physiol** 1996 Oct;106(1):35–46

Stimulus-response characteristics of CO2-induced air hunger in normal subjects. Banzett RB, et al. **Respir Physiol** 1996 Jan;103(1):19–31

Dynamic response characteristics of CO2-induced air hunger. Banzett RB. **Respir Physiol** 1996 Aug; 105(1–2):47–55

Respiratory mechanics in the open chest: effects of parietal pleurae. Barnas GM, et al. **Respir Physiol** 1996 Apr-May; 104(1):63–70

Deflation-related variability of breathing pattern persists with intact upper airway. Bruce EN. **Respir Physiol** 1996 Dec;106(3):273–83

Inspiratory gas flow induced by cardiac systole. Colebatch HJ, et al. **Respir Physiol** 1996 Aug;105(1–2):103–8

Prematurity alters hypoxic and hypercapnic ventilatory responses in developing lambs. Davey MG, et al. **Respir Physiol** 1996 Aug;105(1–2):57–67

Site of facilitation of diaphragm EMG to corticospinal stimulation during inspiration. Davey NJ, et al. **Respir Physiol** 1996 Nov;106(2):127–35

Characterization of ventilatory responses to hypoxia in neonatal rats. Fung ML, et al. **Respir Physiol** 1996 Jan; 103(1):57–66

Influence of thoracoabdominal pattern of breathing on respiratory resistance. Gallego J, et al. **Respir Physiol** 1997 May;108(2):143–52

Reappraisal of the inspiratory effect of Bötzinger complex on phrenic nerve discharge. Gang S, et al. **Respir Physiol** 1996 Aug;105(1–2):17–21

A tidal breathing model of the forced inspired inert gas sinewave technique. Gavaghan DJ, et al. **Respir Physiol** 1996 Nov;106(2):209–21

Roles of the pontine pneumotaxic and micturition centers in respiratory inhibition during bladder contractions. Gdovin MJ, et al. **Respir Physiol** 1997 Jan;107(1):15–25

Respiratory rhythm generation in a precocial rodent in vitro preparation. Greer JJ, et al. **Respir Physiol** 1996 Feb; 103(2):105–12

Control of breathing in man; insights from the 'locked-in' syndrome. Heywood P, et al. **Respir Physiol** 1996 Oct; 106(1):13–20

Age-related changes in the static and dynamic mechanical properties of mouse lungs. Hirai T, et al. **Respir Physiol** 1995 Dec;102(2–3):195–203

Dynamics of periodic breathing and arousal during sleep at extreme altitude. Khoo MC, et al. **Respir Physiol** 1996 Jan; 103(1):33–43

Reduced voluntary drive to the human diaphragm at low lung volumes. McKenzie DK, et al. **Respir Physiol** 1996 Aug;105(1–2):69–76

Frequency and volume thresholds for inhibition of inspiratory motor output during mechanical ventilation. Manchanda S, et al. **Respir Physiol** 1996 Aug;105(1–2):1–16

Contribution of vagal afferents to breathing pattern in rats with lung fibrosis. Mansoor JK, et al. **Respir Physiol** 1997 Apr;108(1):45–61

Ventilatory response to hypoxia in rats: gender differences. Mortola JP, et al. **Respir Physiol** 1996 Oct;106(1):21–34

Influence of external loading and assisted ventilation on chest wall mechanical properties. Peslin R, et al. **Respir Physiol** 1997 May;108(2):153–64

gamma-Aminobutyric acid contributes to modulation of cardiorespiratory control after chronic ventilatory loading. Rao RS, et al. **Respir Physiol** 1997 Apr;108(1):35–44

Analysis of coordination between breathing and walking rhythms in humans. Rassler B, et al. **Respir Physiol** 1996 Dec;106(3):317–27

A reconciliation of continuous and tidal ventilation gas exchange models. Sainsbury MC, et al. **Respir Physiol** 1997 Apr;108(1):89–99

Nasal mechanoreceptors in guinea pigs. Sekizawa S, et al. **Respir Physiol** 1996 Dec;106(3):223–30

The effect of chest wall transcutaneous electrical nerve stimulation on dyspnoea. Torry M, et al. **Respir Physiol** 1996 Apr-May;104(1):23–8

Effects of altered FIO2 on maximum VO2 in the horse. Wagner PD, et al. **Respir Physiol** 1996 Aug; 105(1–2):123–34

Effect of ambient temperature on respiratory chemoreflex in unanaesthetized kittens. Watanabe T, et al. **Respir Physiol** 1996 Dec;106(3):239–46

Respiratory responses to rapid-onset, repetitive vs. continuous hypoxia in piglets. Waters KA, et al. **Respir Physiol** 1996 Aug;105(1–2):135–42

Oxygen transport with oscillations of inspired oxygen concentration. Williams EM, et al. **Respir Physiol** 1997 Apr; 108(1):79–87

Factors affecting opening and filling pressures in the lungs of the lizard Pogona vitticeps. Wood PG, et al. **Respir Physiol** 1996 Feb;103(2):203–10

Lack of ventilatory threshold in patients with chronic obstructive pulmonary disease. Midorikawa J, et al. **Respiration** 1997;64(1):76–80

The effect of exercise on the development of respiratory depression during sustained isocapnic hypoxia in humans Pandit JJ, et al. **Respiration** 1997;64(1):86–95

Breathing pattern awake and asleep in myotonic dystrophy. Ververs CC, et al. **Respiration** 1996;63(1):1–7

The cerebral regulation of cardiovascular and respiratory functions. Harper RM. **Semin Pediatr Neurol** 1996 Mar; 3(1):13–22 (81 ref.)

A comparison of the ventilatory responses to exercise in pregnant, postpartum, and nonpregnant women. Jaque-Fortunato SV, et al. **Semin Perinatol** 1996 Aug; 20(4):263–76

Respiratory responses to tracheobronchial stimulation during sleep and wakefulness in the adult cat. Anderson CA, et al. **Sleep** 1996 Jul;19(6):472–8

Accessing chemosensitivity and ventilatory stability from transient stimuli. Bruce EN. **Sleep** 1996 Dec;19(10 Suppl):S157–9

Excitatory drive to the respiratory system in REM sleep. Orem J. **Sleep** 1996 Dec;19(10 Suppl):S154–6 (18 ref.)

Sleep-related breathing disorders in patients with multiple system atrophy and vocal fold palsy. Sadaoka T, et al. **Sleep** 1996 Jul;19(6):479–84

Effects of respiratory muscle training and electrical stimulation of abdominal muscles on respiratory capabilities in tetraplegic patients. Zupan A, et al. **Spinal Cord** 1997 Aug;35(8):540–5

Potassium and breathing in exercise. Paterson DJ. **Sports Med** 1997 Mar;23(3):149–63 (80 ref.)

Hemodynamic and respiratory changes during laparoscopic cholecystectomy with high and reduced intraabdominal pressure. Rishimani AS, et al. **Surg Laparosc Endosc** 1996 Jun;6(3):201–4

Longitudinal effects of change in body mass on measurements of ventilatory capacity. Chinn DJ, et al. **Thorax** 1996 Jul; 51(7):699–704

Breathing pattern and carbon dioxide retention in severe chronic obstructive pulmonary disease. Gorini M, et al. **Thorax** 1996 Jul;51(7):677–83

Abdominal muscle recruitment and PEEPi during bronchoconstriction in chronic obstructive pulmonary disease. Gorini M, et al. **Thorax** 1997 Apr;52(4):355–61

Primordial respiratory-like rhythm generation in the vertebrate embryo. Champagnat J, et al. **Trends Neurosci** 1997 Mar;20(3):119–24 (40 ref.)

Doppler assessment of tracheal and nasal fluid flow during fetal breathing movements: preliminary observations. Kalache KD, et al. **Ultrasound Obstet Gynecol** 1997 Apr; 9(4):257–61

Diver respiratory responses to a tunable closed-circuit breathing apparatus. Fothergill DM, et al. **Undersea Hyperb Med** 1997 Jun;24(2):91–105

Simulating respiratory loads and tuning of closed-circuit underwater breathing apparatus. Joye DD, et al. **Undersea Hyperb Med** 1997 Jun;24(2):81–9

Cardiorespiratory consequences to hobble restraint. Roeggla M, et al. **Wien Klin Wochenschr** 1997 May 23; 109(10):359–61

[Influence of different combination of mental activity and respiratory cycle on heart rate variability] Sun FL, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Mar; 16(3):153–5 (Eng. Abstr.) **(Chi)**

[Role of nitric oxide in respiratory physiology and in the physiopathology of pulmonary diseases] Dinh-Xuan AT.

Rev Mal Respir 1996;13(4):381–8 (30 ref.) (Eng. Abstr.) **(Fre)**

[Respiratory mechanics in animals. 1. Physiological bases and conventional measurement methods—review] Reinhold P. **Berl Munch Tierarztl Wochenschr** 1997 Jul–Aug; 110(7–8):251–6 (73 ref.) (Eng. Abstr.) **(Ger)**

[Respiratory mechanics in animals. 2. The forced oscillation technique—review] Reinhold P. **Berl Munch Tierarztl Wochenschr** 1997 Jul–Aug; 110(7–8):257–66 (77 ref.) (Eng. Abstr.) **(Ger)**

[Determination of respiratory frequency from respiratory sinus arrhythmia] Bettermann H, et al. **Biomed Tech (Berl)** 1996 Nov;41(11):319–23 (Eng. Abstr.) **(Ger)**

[Cardiorespiratory coupling in obstructive sleep apnea (OSA)] Grote L, et al. **Pneumologie** 1997 Apr;51 Suppl 2:423–9 (Eng. Abstr.) **(Ger)**

[Chronobiology of the bronchial system] Marek W. **Pneumologie** 1997 Apr;51 Suppl 2:430–9 (59 ref.) (Eng. Abstr.) **(Ger)**

[Respiratory function diagnosis during sleep: possibilities and limitations] Penzel T, et al. **Pneumologie** 1997 Apr;51 Suppl 2:444–9 (Eng. Abstr.) **(Ger)**

[Postnatal development of breathing control] Schäfer T, et al. **Pneumologie** 1997 Apr;51 Suppl 2:411–4 (Eng. Abstr.) **(Ger)**

[Control and development of breathing, pathophysiological aspects] Schläfke ME. **Pneumologie** 1997 Apr;51 Suppl 2:398–402 (10 ref.) (Eng. Abstr.) **(Ger)**

[Deterministic-chaotic and spectral-functional analysis of heart rate and respiratory movements] Zwiener U, et al. **Pneumologie** 1997 Apr;51 Suppl 2:415–22 (48 ref.) (Eng. Abstr.) **(Ger)**

[Sleep structure in relation to respiration and heart rate in children in puberty] Unbehaun A, et al. **Wien Med Wochenschr** 1996;146(13–14):329–31 (Eng. Abstr.) **(Ger)**

[Changes in cerebral vasomotor reactivity in relation to respiratory and metabolic stimuli: an analysis of its behavior in hypertensive and normotensive subjects] Signorelli SS, et al. **Clin Ter** 1996 Oct;147(10):469–74 (Eng. Abstr.) **(Ita)**

[Evaluation of the respiratory function by lung scintigraphy in patients candidates for pulmonary resection] Leone G, et al. **G Chir** 1997 May;18(5):301–7 (Eng. Abstr.) **(Ita)**

[Laparoscopic cholecystectomy and respiratory function] Tocchi A, et al. **G Chir** 1997 Mar;18(3):87–90 (Eng. Abstr.) **(Ita)**

[Influence of the dead space induced by the face mask on the measure of heart rate variability] Furutani Y, et al. **J Cardiol** 1997 Mar;29(3):171–6 (Eng. Abstr.) **(Jpn)**

[Blood flow measurement of portal vein with fast cine phase contrast MR imaging under breath-holding] Inaba F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Mar; 56(4):217–9 (Eng. Abstr.) **(Jpn)**

[Changes in ventilation efficacy due to pulmonary resection and postoperative exercise restricting factors] Akiyama H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Nov; 44(11):2040–9 (Eng. Abstr.) **(Jpn)**

[Pulmonary function during exercise before and after radical esophagectomy for esophageal cancer] Maeda F. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jan;45(1):1–11 (Eng. Abstr.) **(Jpn)**

[Maximal inspiratory and expiratory pressures long after lung resection] Nomori H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33(12):1382–1385 (Eng. Abstr.) **(Jpn)**

[Psychological and physiological changes accompanying pulmonary rehabilitation in patients with chronic pulmonary emphysema] Ohtsu I, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec; 34(12):1337–42 (Eng. Abstr.) **(Jpn)**

[Periodic breathing at high altitude relation to acclimatization and acute mountain sickness] Sugie T. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33(12):1355–60 (Eng. Abstr.) **(Jpn)**

[Effect of aging on respiratory system] Nishimura S, et al. **Nippon Ronen Igakkai Zasshi** 1996 Nov;33(11):825–8 **(Jpn)**

[QRS axis shift in deep breathing] Uematsu Y, et al. **Rinsho Byori** 1997 Jun;45(6):595–8 (Eng. Abstr.) **(Jpn)**

[Respiratory arrhythmia] Hayashi H. **Ryoikibetsu Shokogun Shirizu** 1996;(12):274–6 (20 ref.) **(Jpn)**

[Ultradian rhythms in the nasal cycle as measured by a new method] Fukuhara H. **Shinrigaku Kenkyu** 1996 Feb; 66(6):437–42 (Eng. Abstr.) **(Jpn)**

[Circadian variation of lung function in health persons] Franczuk M, et al. **Pneumonol Alergol Pol** 1997; 65(1–2):96–103 (26 ref.) **(Pol)**

[Quality of sleep and periodic breathing during sleep in healthy persons at a height of 3200 meters] Koziej M, et al. **Pneumonol Alergol Pol** 1996;64(9–10):651–7 (Eng. Abstr.) **(Pol)**

[Involvement of pulmonary function in patients treated with rotated chest muscle flap surgery for the treatment of sternal wound complications after heart surgery] Blacher C, et al. **Arq Bras Cardiol** 1996 Oct;67(4):243–7 (Eng. Abstr.) **(Por)**

[Cortical and thalamic regulating mechanisms of the pulse neuron activity of oblongata medulla respiration center of the rats in normal condition and during hypoxia] Akopian NS, et al. **Aviakosm Ekolog Med** 1996;30(1):36–42 (Eng. Abstr.) **(Rus)**

[Quantification of combined effect of physical-chemical factors by the parameters of human external breathing] Iseev LR, et al. **Aviakosm Ekolog Med** 1996;30(1):32–6 (Eng. Abstr.) **(Rus)**

[The effect of inhibition of subretrofascial region on the central inspiratory activity of the respiratory center and reaction of respiration to hypercapnia] Piatin VF, et al. **Biull Eksp Biol Med** 1997 May;123(5):491–3 **(Rus)**

[Sensitivity of the respiratory system to oxygen during activation of brain GABAergic structures] Tarakanov IA. **Biull Eksp Biol Med** 1997 Mar;123(3):264–8 **(Rus)**

[Adaptation of the cardiovascular system in adolescents] Agadzhanian NA, et al. **Fiziol Cheloveka** 1997 Jan–Feb; 23(1):93–7 **(Rus)**

[Regulation of respiration in people with hypothermic and euthermic reactions during exposure to cold] Divert GM, et al. **Fiziol Cheloveka** 1996 Nov–Dec;22(6):118–23 **(Rus)**

[Status of the cardiorespiratory system in representatives of various climato-geographic regions during adaptation to to the hot climate of Central Asia] Fedorova OI, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):25–8 **(Rus)**

[Simulation of the effect of respiration on the amplitude of the T-wave of the electrocardiogram: theoretical and applied aspects] Frolov MV, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):57–65 **(Rus)**

[Distribution of the moment of onset of inhalation within the ECG R–R interval] Kuz'menko VA. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):130–2 **(Rus)**

[The role of pulmonary heterogeneity caused by a change in the rigidity of intrapulmonary respiratory tracts in limitation of air flow during resting breathing] Kuznetsova VK, et al. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):74–82 **(Rus)**

[The effect of increasing and decreasing physical loading on the breathing changes under additional resistance] Pogodin Ma, et al. **Fiziol Cheloveka** 1997 May–Jun;23(3):44–7 **(Rus)**

[Physiologic features of the cardiovascular and respiratory systems in patients undergoing heart surgery under artificial circulation] Shevchenko IuL. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):100–6 **(Rus)**

[Correlational adaptometry as a method for evaluating cardiovascular and respiratory interaction] Svetlichnaia GN, et al. **Fiziol Cheloveka** 1997 May–Jun;23(3):58–62 **(Rus)**

[Role of hypocapnia in the mechanisms of induction of altered states of consciousness] Terekhin PI. **Fiziol Cheloveka** 1996 Nov–Dec;22(6):100–5 **(Rus)**

[The influence of the limbic cortex and hypothalamus on the impulse activity of the bulbar respiratory neurons and on respiration under hypoxia] Akopian NS, et al. **Fiziol Zh** 1997;43(1–2):50–6 (Eng. Abstr.) **(Rus)**

[Systems evaluation of physiological functions of humans at a workplace] Sudakov KV. **Vestn Ross Akad Med Nauk** 1997;(4):18–24 (Eng. Abstr.) **(Rus)**

[The works of A. G. Ginetsinskiĭ on the physiology of respiration] Likhnitskaia II. **Zh Evol Biokhim Fiziol** 1996 Nov–Dec;32(6):710–3 **(Rus)**

[Hypercapnic stimulation and ventilation response in the syndrome of sleep obstructive apnea. Comparison of reinhalation and steady state (published erratum appears in Arch Bronconeumol 1996 Nov;32(9):452)] Soto Campos JG, et al. **Arch Bronconeumol** 1996 Aug–Sep;32(7):341–7 (Eng. Abstr.) **(Spa)**

[Non-apneic respiratory arousal in obstructive sleep apnea syndrome] Pareja JA, et al. **Neurologia** 1996 Aug–Sep; 11(7):244–7 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Body heating induced by sub-resonant (350 MHz) microwave irradiation: cardiovascular and respiratory responses in anesthetized rats. Jauchem JR, et al. **Bioelectromagnetics** 1997;18(4):335–8

Spatial heterogeneity of the volume effect for radiation pneumonitis in mouse lung. Travis EL, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15;38(5):1045–54

Age does not affect thermal and cardiorespiratory responses to microwave heating in calorically restricted rats. Ryan KL, et al. **Shock** 1997 Jul;8(1):55–60

RESPIRATION, ARTIFICIAL

see related

VENTILATORS, MECHANICAL

Tetrodotoxin infusion: nonventilatory effects and role in toxicity models. Mackenzie CF, et al. **Acad Emerg Med** 1996 Dec;3(12):1106–12

Continuous end-tidal carbon dioxide monitoring during normofrequent jet-ventilation. Bach LF, et al. **Acta Anaesthesiol Scand** 1996 Nov;40(10):1238–41

A simple method of ventilation via the laryngeal mask during transportation and recovery from anaesthesia [letter] Brimacombe J, et al. **Acta Anaesthesiol Scand** 1996 Nov; 40(10):1258

Continuous non-invasive monitoring of energy expenditure, oxygen consumption and alveolar ventilation during controlled ventilation: validation in an oxygen consuming lung model. Holk K, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):530–7

Continuous low-flow tracheal gas insufflation during partial liquid ventilation in rabbits. Meszaros E, et al. **Acta Anaesthesiol Scand** 1997 Aug;41(7):861–7

Bacterial airway filters in combination with inhalation therapy in the ICU. Rösblad PG, et al. **Acta Anaesthesiol Scand** 1997 Aug;41(7):947–8

Amrinone improves lung compliance in patients receiving mechanical ventilation for cardiogenic pulmonary edema. Takeda S, et al. **Acta Anaesthesiol Scand** 1997 May; 41(5):624–8

Nitric oxide administration after the ventilator: evaluation of mixing conditions. Westfelt UN, et al. **Acta Anaesthesiol Scand** 1997 Feb;41(2):266–73

Low-frequency and high-frequency jet ventilation technical basics and special considerations for clinical application in various areas. Aloy A, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:147–9

Reduction of NO2 by a NO2-selective scavenger. Gilly H, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:83–4

Cardiopulmonary interactions. Hiesmayr M, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:44–5

The importance of patient/ventilator interactions during non-invasive mechanical ventilation. Hubmayr RD. **Acta Anaesthesiol Scand Suppl** 1996;109:46–7

Modern strategies for ventilatory support. Mutz NJ, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:41–4

Strategies of ventilation and weaning in infants and toddlers. Novak W. **Acta Anaesthesiol Scand Suppl** 1996;109:47–8

Inhaled nitric oxide in pediatric intensive care. Zobel G, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:92–6

The effect of cimetidine versus ranitidine on the gastric emptying rate of intensive care unit patients sustained on artificial respiration. Pelfrene E, et al. **Acta Gastroenterol Belg** 1996 Oct–Dec;59(4):229–33

The effect of pneumotachometer dead space on transcutaneously measured PCO2 in ventilated newborn infants [letter] Figueras J, et al. **Acta Paediatr** 1997 Mar; 86(3):334

Epidermal growth factor in tracheal aspirates of ventilated premature infants. Ichiba H, et al. **Acta Paediatr Jpn** 1996 Dec;38(6):705–7

Mechanical ventilation in ARDS. Kesecioğlu J. **Adv Exp Med Biol** 1996;388:533–8 (30 ref.)

The outcome of prolonged mechanical ventilation in elderly patients: are the efforts worthwhile? [see comments] Meinders AJ, et al. **Age Ageing** 1996 Sep;25(5):353–6. Comment in: Age Ageing 1997 May;26(3):238.

Is noninvasive determination of pulmonary artery pressure feasible using deceleration phase Doppler flow velocity characteristics in mechanically ventilated children with congenital heart disease? van Dijk AP, et al. **Am J Cardiol** 1996 Dec 15;78(12):1394–9

Procedures used in withdrawal of mechanical ventilation [see comments] Daly BJ, et al. **Am J Crit Care** 1996 Sep; 5(5):331–8. Comment in: Am J Crit Care 1996 Sep;5(5):323–5.

How to withdraw mechanical ventilation: more studies are needed [comment] Gilligan T, et al. **Am J Crit Care** 1996 Sep;5(5):323–5. Comment on: Am J Crit Care 1996 Sep;5(5):331–8.

Response to dexamethasone in ventilated preterm infants: effect of radiographic subtype of chronic lung disease. Kothadia JM, et al. **Am J Perinatol** 1996 Aug;13(6):377–81

Heart rate variability during artificial ventilation and apnea in brain-damaged rabbits. Kawamoto M, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H410–6

Alveolar surfactant aggregate conversion in ventilated normal and injured rabbits. Veldhuizen RA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):L152–8

Partitioning of inspiratory muscle workload and pressure assistance in ventilator-dependent COPD patients. Appendini L, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1301–9

Prone position in mechanically ventilated patients with severe acute respiratory failure. Chatte G, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):473–8

Effect of inspiratory flow rate on respiratory rate in intubated ventilated patients. Corne S, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):304–8

Inhaled bronchodilator therapy in mechanically ventilated patients. Dhand R, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):3–10 (78 ref.)

Serum albuterol levels in mechanically ventilated patients and healthy subjects after metered-dose inhaler administration. Duarte AG, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1658–63

Cellular association of antiproteases in lavages from ventilated preterm human neonates. Griese M, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2064–71

Small airway closure and positive end-expiratory pressure in mechanically ventilated patients with chronic obstructive pulmonary disease. Guerin C, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1949–56

Cisapride improves gastric emptying in mechanically ventilated, critically ill patients. A randomized, double-blind trial. Heyland DK, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1678–83

Nasal mask pressure waveform and inspiratory muscle rest during nasal assisted ventilation. Jounieaux V, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2096–101

The accuracy of pneumotachograph measurements during

mechanical ventilation. Kreit JW, et al.
Am J Respir Crit Care Med 1996 Oct;154(4 Pt 1):913–7

Intermittent enteral feeding: the influence on respiratory and digestive tract colonization in mechanically ventilated intensive-care-unit patients [letter; comment] Metersky M, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1817–8 . Comment on: Am J Respir Crit Care Med 1996 Aug;154(2 Pt 1):394–9.

Intraalveolar expression of tumor necrosis factor-alpha gene during conventional and high-frequency ventilation. Takata M, et al. **Am J Respir Crit Care Med** 1997 Jul; 156(1):272–9

Inflammatory chemical mediators during conventional mechanical ventilation and during high frequency oscillatory ventilation [letter; comment] Teramoto S, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2114–5. Comment on: Am J Respir Crit Care Med 1994 Dec;150(6 Pt 1):1550–4.

Dobutamine increases alveolar liquid clearance in ventilated rats by beta-2 receptor stimulation. Tibayan FA, et al.
Am J Respir Crit Care Med 1997 Aug;156(2 Pt 1):438–44

Ventilatory strategies for acute respiratory failure. Moore FA, et al. **Am J Surg** 1997 Jan;173(1):53–6; discussion 57–8 (15 ref.)

Changes in oxygenation and compliance as related to body position in acute lung injury. Bittner E, et al. **Am Surg** 1996 Dec;62(12):1038–41

Factors predicting prolonged mechanical ventilation in critically injured patients: introducing a simplified quantitative risk score. Velmahos GC, et al. **Am Surg** 1997 Sep;63(9):811–7

Tracheostomy in a neuro-intensive care setting: indications and timing. Koh WY, et al. **Anaesth Intensive Care** 1997 Aug;25(4):365–8

The Mapleson breathing systems [letter; comment] Dorrington KL. **Anaesthesia** 1996 Oct;51(10):988. Comment on: Anaesthesia 1996 Apr;51(4):371–85.

The paradox of the StatCap carbon dioxide indicator. An experimental evaluation of rebreathing. Kapoor V, et al. **Anaesthesia** 1996 Sep;51(9):846–8

Breathing system terminology [letter; comment] Lowe DM, et al. **Anaesthesia** 1997 May;52(5):506–7. Comment on: Anaesthesia 1996 Dec;51(12):1089–92.

Uptake of desflurane and isoflurane during closed-circuit anesthesia with spontaneous and controlled mechanical ventilation [see comments] Hendrickx JF, et al.
Anesth Analg 1997 Feb;84(2):413–8. Comment in: Anesth Analg 1997 Feb;84(2):239–40.

Hemodynamic effects, myocardial ischemia, and timing of tracheal extubation with propofol-based anesthesia for cardiac surgery [see comments] Myles PS, et al.
Anesth Analg 1997 Jan;84(1):12–9. Comment in: Anesth Analg 1997 Jul;85(1):228–9.

Heli-NO: enhanced gas exchange with nitric oxide in helium [letter] Petros AJ, et al. **Anesth Analg** 1996 Oct;83(4):888–9

Airway pressure changes during one-lung ventilation. Szegedi LL, et al. **Anesth Analg** 1997 May;84(5):1034–7

Noninvasive monitoring of carbon dioxide during respiratory failure in toddlers and infants: end-tidal versus transcutaneous carbon dioxide. Tobias JD, et al.
Anesth Analg 1997 Jul;85(1):55–8

Pressure support ventilation augments spontaneous breathing with improved thoracoabdominal synchrony in neonates with congenital heart disease. Tokioka H, et al.
Anesth Analg 1997 Oct;85(4):789–93

Failure to ventilate due to glass ampule fragment occlusion of the breathing circuit [letter] Gallacher BP, et al.
Anesthesiology 1997 Jul;87(1):180

Permissive hypercapnia with and without expiratory washout in patients with severe acute respiratory distress syndrome. Kalfon P, et al. **Anesthesiology** 1997 Jul;87(1):6–17; discussion 25A–26A

Pulmonary blood flow distribution in sheep: effects of anesthesia, mechanical ventilation, and change in posture. Walther SM, et al. **Anesthesiology** 1997 Aug;87(2):335–42

Predicting death in mechanically ventilated recipients of bone marrow transplants [letter] Hennessy BJ, et al.
Ann Intern Med 1997 Jul 1;127(1):88

Therapeutic aerosol delivery during mechanical ventilation. Coleman DM, et al. **Ann Pharmacother** 1996 Jun; 30(6):644–55 (54 ref.)

The effect of ICU sedation guidelines and pharmacist interventions on clinical outcomes and drug cost. Devlin JW, et al. **Ann Pharmacother** 1997 Jun;31(6):689–95

A method to produce sedation in critically ill patients [see comments] Watling SM, et al. **Ann Pharmacother** 1996 Nov; 30(11):1227–31. Comment in: Ann Pharmacother 1997 May;31(5):647–8.

Early extubation after coronary bypass [letter; comment] Das T, et al. **Ann Thorac Surg** 1997 Apr;63(4):1219. Comment on: Ann Thorac Surg 1996 Oct;62(4):1164–71.

Postpneumonectomy stump fistula in a ventilated patient. De Groot M, et al. **Ann Thorac Surg** 1997 Feb;63(2):552–4

Determinants of prolonged mechanical ventilation after coronary artery bypass grafting [see comments] Habib RH, et al. **Ann Thorac Surg** 1996 Oct;62(4):1164–71. Comment in: Ann Thorac Surg 1997 Apr;63(4):1219.

Stress, severity of illness, and outcome in ventilated preterm infants. Barker DP, et al.
Arch Dis Child Fetal Neonatal Ed 1996 Nov;75(3):F187–90

Association between blood lactate and acid-base status and mortality in ventilated babies. Deshpande SA, et al.
Arch Dis Child Fetal Neonatal Ed 1997 Jan;76(1):F15–20

Utilizing temporal data abstraction for data validation and therapy planning for artificially ventilated newborn infants. Miksch S, et al. **Artif Intell Med** 1996 Nov;8(6):543–76

Advances in the management of respiratory failure. Advanced strategies for mechanical ventilation in severe acute respiratory failure. Conrad SA. **ASAIO J** 1996 May-Jun;42(3):204–6 (15 ref.)

The respiratory system. Zifko U, et al.
Baillieres Clin Neurol 1996 Oct;5(3):477–95 (69 ref.)

Rescue high frequency oscillatory ventilation for preterm infants: neurodevelopmental outcome and its prediction. Cheung PY, et al. **Biol Neonate** 1997;71(5):282–91

Respiratory support, surface activity and protein content during nosocomial infection in preterm neonates. Griese M, et al. **Biol Neonate** 1996;70(5):271–9

Resuscitation strategy and surfactant therapy. Werner O, et al. **Biol Neonate** 1997;71 Suppl 1:32–4 (10 ref.)

Home ventilation of a child with motor and sensory neuropathy. Study aims to set up national database of children receiving ventilatory support [letter; comment] Jardine E, et al. **BMJ** 1996 Oct 12;313(7062):940–1. Comment on: BMJ 1996 Jul 20;313(7050):153–4; discussion 154–5.

Premature baby was not put on ventilator [news] Kmietowicz Z. **BMJ** 1996 Oct 19;313(7063):963

Local anaesthesia to the airway reduces sedation requirements in patients undergoing artificial ventilation [letter; comment] Bapat P, et al. **Br J Anaesth** 1997 Apr; 78(4):479–80. Comment on: Br J Anaesth 1996 Dec;77(6):731–4.

A study of mixing conditions during nitric oxide administration using simultaneous fast response chemiluminescence and capnography. Foubert L, et al.
Br J Anaesth 1997 Apr;78(4):436–8

Permissive hypercapnia and gas exchange in lungs with high Qs/Qt: a mathematical model. Joyce CJ, et al.
Br J Anaesth 1996 Nov;77(5):678–83

Isoflurane for sedation in a case of congenital myasthenia gravis. McBeth C, et al. **Br J Anaesth** 1996 Nov;77(5):672–4

Local anaesthesia to the airway reduces sedation requirements in patients undergoing artificial ventilation [see comments] Mallick A, et al. **Br J Anaesth** 1996 Dec; 77(6):731–4. Comment in: Br J Anaesth 1997 Apr;78(4):479–80.

Leakage of fluid past the tracheal tube cuff in a benchtop model. Young PJ, et al. **Br J Anaesth** 1997 May; 78(5):557–62

A prospective comparison of fibre-optic and fluid-filled single lumen bolt subdural pressure transducers in ventilated neurosurgical patients. Bavetta S, et al.
Br J Neurosurg 1996 Jun;10(3):279–84

Early intragastric feeding of seriously burned and long-term ventilated patients: a review of 55 patients. Raff T, et al. **Burns** 1997 Feb;23(1):19–25

Cricoid pressure impedes positioning and ventilation through the laryngeal mask airway. Aoyama K, et al.
Can J Anaesth 1996 Oct;43(10):1035–40

Lung ventilation and bronchopleural fistula [letter] McGuive GP. **Can J Anaesth** 1996 Dec;43(12):1275–6

Multivariate determinants of the need for postoperative ventilation in myasthenia gravis. Naguib M, et al.
Can J Anaesth 1996 Oct;43(10):1006–13

Deciding about mechanical ventilation in end-stage chronic obstructive pulmonary disease: how respirologists perceive their role. McNeely PD, et al. **Can Med Assoc J** 1997 Jan 15;156(2):177–83

Home mechanical ventilation: investigation of 34 cases in Taiwan. Lin MC, et al. **Chang Keng I Hsueh** 1996 Mar; 19(1):42–9

Proportional assist ventilation and exercise tolerance in subjects with COPD. Dolmage TE, et al. **Chest** 1997 Apr; 111(4):948–54

Effect of failed extubation on the outcome of mechanical ventilation. Epstein SK, et al. **Chest** 1997 Jul;112(1):186–92

Predicting eventual success or failure to wean in patients receiving long-term mechanical ventilation [published erratum appears in Chest 1997 Mar;111(3):836] Gluck EH. **Chest** 1996 Oct;110(4):1018–24

Usefulness of quantitative cultures of BAL fluid for diagnosing nosocomial pneumonia in ventilated patients. Jourdain B, et al. **Chest** 1997 Feb;111(2):411–8

The impact of gender on outcome from mechanical ventilation. Kollef MH, et al. **Chest** 1997 Feb;111(2):434–41

The effect of volume infusion on dead space in mechanically ventilated patients with severe asthma. Manthous CA, et al. **Chest** 1997 Sep;112(3):843–6

Post-ICU mechanical ventilation: treatment of 1,123 patients at a regional weaning center. Scheinhorn DJ, et al.
Chest 1997 Jun;111(6):1654–9

The role of intermittent enteral feeding in reducing gastric colonization in mechanically ventilated patients [letter; comment] Skiest DJ, et al. **Chest** 1997 May;111(5):1474–5 . Comment on: Chest 1996 Jul;110(1):243–8.

Is the duration of mechanical ventilation predictable? Troché G, et al. **Chest** 1997 Sep;112(3):745–51

Assisted ventilation does not improve outcome in a porcine model of single-rescuer bystander cardiopulmonary resuscitation. Berg RA, et al. **Circulation** 1997 Mar 18; 95(6):1635–41

Negative-pressure ventilation improves cardiac output after right heart surgery. Shekerdemian LS, et al. **Circulation** 1996 Nov 1;94(9 Suppl):II49–55

Patient-ventilator interactions. Dick CR, et al.
Clin Chest Med 1996 Sep;17(3):423–38 (99 ref.)

Monitoring during mechanical ventilation. Jubran A, et al.
Clin Chest Med 1996 Sep;17(3):453–73 (117 ref.)

Mechanical ventilation in obstructive lung disease. Leatherman JW. **Clin Chest Med** 1996 Sep;17(3):577–90 (83 ref.)

Mechanical ventilation of the newborn. An overview. Mammel MC, et al. **Clin Chest Med** 1996 Sep;17(3):603–13 (45 ref.)

Evolving concepts in the ventilatory management of acute respiratory distress syndrome. Marini JJ.
Clin Chest Med 1996 Sep;17(3):555–75 (116 ref.)

Adjuncts to mechanical ventilation. Nahum A, et al.
Clin Chest Med 1996 Sep;17(3):491–511 (168 ref.)

Mortality due to ventilator-associated pneumonia or colonization with Pseudomonas or Acinetobacter species: assessment by quantitative culture of samples obtained by a protected specimen brush. Fagon JY, et al.
Clin Infect Dis 1996 Sep;23(3):538–42

Can and should level II nurseries care for newborns who require mechanical ventilation? Meadow W, et al.
Clin Perinatol 1996 Sep;23(3):551–61

Effect of detergent combined with large tidal volume ventilation on alveolocapillary permeability. Taskar V, et al. **Clin Physiol** 1996 Mar;16(2):103–14

Components of carbon monoxide transfer at different alveolar volumes during mechanical ventilation in pigs. te Nijenhuis FC, et al. **Clin Physiol** 1997 May;17(3):225–36

Transfer of carbon monoxide during an inspiratory pause procedure in mechanically ventilated pigs. te Nijenhuis FC, et al. **Clin Physiol** 1996 Nov;16(6):621–32

The use of hyperventilation and its impact on cerebral ischemia in the treatment of traumatic brain injury. Yundt KD, et al. **Crit Care Clin** 1997 Jan;13(1):163–84 (85 ref.)

Effects of prolonged controlled mechanical ventilation on diaphragmatic function in healthy adult baboons [see comments] Anzueto A, et al. **Crit Care Med** 1997 Jul; 25(7):1187–90. Comment in: Crit Care Med 1997 Jul;25(7):1106–7.

Monitoring interactions between spontaneous respiration and mechanical inflations in preterm neonates. Bignall S, et al.
Crit Care Med 1997 Mar;25(3):545–53

Influence of prone position on the extent and distribution of lung injury in a high tidal volume oleic acid model of acute respiratory distress syndrome. Broccard AF, et al.
Crit Care Med 1997 Jan;25(1):16–27

Increased artificial deadspace ventilation is a safe and reliable method for deliberate hypercapnia [see comments] Caronia C, et al. **Crit Care Med** 1997 Jul;25(7):1175–8. Comment in: Crit Care Med 1997 Jul;25(7):1102–3.

Delivery of metered dose inhaler aerosols to paralyzed and nonparalyzed rabbits. Fok TF, et al. **Crit Care Med** 1997 Jan;25(1):140–4

Oxygen delivery, oxygen consumption, and gastric intramucosal pH are not improved by a computer-controlled, closed-loop, vecuronium infusion in severe sepsis and septic shock. Freebairn RC, et al.
Crit Care Med 1997 Jan;25(1):72–7

Insights into the increased oxygen demand during chest physiotherapy. Horiuchi K, et al. **Crit Care Med** 1997 Aug; 25(8):1347–51

A randomized, controlled trial of protocol-directed versus physician-directed weaning from mechanical ventilation. Kollef MH, et al. **Crit Care Med** 1997 Apr;25(4):567–74

Low levels of nitric oxide as contaminant in hospital compressed air: physiologic significance? Lee KH, et al.
Crit Care Med 1997 Jul;25(7):1143–6

Ventilatory muscles and mechanical ventilatory support [editorial; comment] MacIntyre NR. **Crit Care Med** 1997 Jul;25(7):1106–7. Comment on: Crit Care Med 1997 Jul;25(7):1187–90.

A comparison of cisatracurium (51W89) and atracurium by infusion in critically ill patients. Newman PJ, et al.
Crit Care Med 1997 Jul;25(7):1139–42

Safety and yield of transbronchial biopsy in mechanically ventilated patients. O'Brien JD, et al. **Crit Care Med** 1997 Mar;25(3):440–6

Tracheostomy tube occlusion protocol predicts significant tracheal obstruction to air flow in patients requiring prolonged mechanical ventilation. Rumbak MJ, et al.
Crit Care Med 1997 Mar;25(3):413–7

Significant reduction in minute ventilation and peak inspiratory pressures with arteriovenous CO2 removal during severe respiratory failure. Tao W, et al.
Crit Care Med 1997 Apr;25(4):689–95

Technical and methodologic considerations for performance of indirect calorimetry in ventilated and nonventilated preterm infants. Thureen PJ, et al. **Crit Care Med** 1997 Jan;25(1):171–80

Randomized, controlled trial of selective digestive decontamination in 600 mechanically ventilated patients in a multidisciplinary intensive care unit. Verwaest C, et al.
Crit Care Med 1997 Jan;25(1):63–71

Continuous noninvasive measurement of cerebral arterial and venous oxygen saturation at the bedside in mechanically ventilated neonates. Wolf M, et al. **Crit Care Med** 1997 Sep;25(9):1579–82

Hemodynamic effects of intravenous morphine infusion in ventilated preterm babies. Sabatino G, et al.
Early Hum Dev 1997 Feb 20;47(3):263–70

Effect of intra-operative mechanical ventilation using 50% inspired oxygen on pulmonary oxygenation. Lentschener C, et al. **Eur J Anaesthesiol** 1997 Jul;14(4):385-8

Early tracheostomy in trauma patients. Kluger Y, et al. **Eur J Emerg Med** 1996 Jun;3(2):95-101

Long-term survival of recipients of allogeneic bone-marrow transplantation after mechanical ventilation. Hollmig KA, et al. **Eur J Med Res** 1997 Feb 21;2(2):62-6

The effect of blood transfusion on oxygenation in premature ventilated neonates. James L, et al. **Eur J Pediatr** 1997 Feb;156(2):139-41

Initial treatment of preterm infants--continuous positive airway pressure or ventilation? Lundstrøm KE. **Eur J Pediatr** 1996 Aug;155 Suppl 2:S25-9 (34 ref.)

Reaction of term newborns with prolonged postnatal dyspnoea to early oxygen, mask CPAP and volume expansion: a prospective randomized clinical trial [letter; comment] Roberton NR. **Eur J Pediatr** 1997 May; 156(5):419-20. Comment on: Eur J Pediatr 1996 Sep;155(9):805-10.

Prediction of chronic neonatal lung disease on day 4 of life. Ryan SW, et al. **Eur J Pediatr** 1996 Aug;155(8):668-71

Bronchopulmonary dysplasia in infants with respiratory distress syndrome in a developing country: a prospective single centre-based study. Smith J, et al. **Eur J Pediatr** 1996 Aug;155(8):672-7

Gastric intramucosal pH: an indicator of weaning outcome from mechanical ventilation in COPD patients. Bouachour G, et al. **Eur Respir J** 1996 Sep;9(9):1868-73

New strategies in mechanical ventilation for acute lung injury. Burchardi H. **Eur Respir J** 1996 May;9(5):1063-72 (80 ref.)

Long-term home care programmes may reduce hospital admissions in COPD with chronic hypercapnia. Clini E, et al. **Eur Respir J** 1996 Aug;9(8):1605-10

Fatal ball-valve airway obstruction by an extensive blood clot during mechanical ventilation. Foucher P, et al. **Eur Respir J** 1996 Oct;9(10):2181-2

Control of breathing in mechanically ventilated patients. Georgopoulos D, et al. **Eur Respir J** 1996 Oct; 9(10):2151-60 (67 ref.)

Additive nature of distension and surfactant perturbation on alveolocapillary permeability. John J, et al. **Eur Respir J** 1997 Jan;10(1):192-9

Weaning from mechanical ventilation. Mancebo J. **Eur Respir J** 1996 Sep;9(9):1923-31 (71 ref.)

Do quantitative cultures of protected brush specimens modify the initial empirical therapy in ventilated patients with suspected pneumonia? Rodriguez de Castro F, et al. **Eur Respir J** 1996 Jan;9(1):37-41

Physiologically based indices of volumetric capnography in patients receiving mechanical ventilation. Romero PV, et al. **Eur Respir J** 1997 Jun;10(6):1309-15

Pulmonary hyperinflation and ventilator-dependent patients. Rossi A, et al. **Eur Respir J** 1997 Jul;10(7):1663-74 (90 ref.)

Acute exacerbations in patients with COPD: predictors of need for mechanical ventilation. Vitacca M, et al. **Eur Respir J** 1996 Jul;9(7):1487-93

Postnatal follow-up of the oxygenation index, arterial to alveolar oxygen tension ratio and alveolar arterial oxygen tension difference values in neonates with the respiratory distress syndrome treated with conventional ventilatory support. Atanasov A, et al. **Folia Med (Plovdiv)** 1997; 39(1):13-23

Left ventricular dysfunction and duration of mechanical ventilatory support in the chronically critically ill: a survival analysis. Sereika SM, et al. **Heart Lung** 1996 Jan-Feb;25(1):45-51

Left ventricular dysfunction and mechanical ventilation discontinuance [letter] Sieber D. **Heart Lung** 1996 Nov-Dec;25(6):500

Resuscitation of asphyxiated newborn [letter; comment] Mamman KC. **Indian Pediatr** 1996 Oct;33(10):870-1. Comment on: Indian Pediatr 1996 Apr;33(4):326-9.

Association of private isolation rooms with ventilator-associated Acinetobacter baumanii pneumonia in a surgical intensive-care unit. Mulin B, et al. **Infect Control Hosp Epidemiol** 1997 Jul;18(7):499-503

Mechanical ventilation and adjuncts in acute respiratory distress syndrome. Deb B, et al. **Int Anesthesiol Clin** 1997 Winter;35(1):109-24 (115 ref.)

Extracorporeal support of oxygenation and ventilation. Furukawa S. **Int Anesthesiol Clin** 1997 Winter;35(1):169-76 (34 ref.)

Considerations for mechanical ventilation in patients with obstructive airways disease. Gal TJ. **Int Anesthesiol Clin** 1997 Winter;35(1):125-37 (25 ref.)

Mechanical ventilation for pediatric patients. Hammer GB, et al. **Int Anesthesiol Clin** 1997 Winter;35(1):139-67 (119 ref.)

The monitoring of mechanically ventilated patients. Kirby RR. **Int Anesthesiol Clin** 1997 Winter;35(1):65-86 (61 ref.)

Indications for mechanical ventilation. Tung A. **Int Anesthesiol Clin** 1997 Winter;35(1):1-17 (40 ref.)

Current status of mechanical ventilation decision support systems: a review. Rudowski R, et al. **Int J Clin Monit Comput** 1996 Aug;13(3):157-66 (39 ref.)

Simulation of mechanical respiration using a multicompartment model for ventilation mechanics and gas exchange. Winkler T, et al. **Int J Clin Monit Comput** 1995; 12(4):231-9

Percutaneous dilatational cricothyroidotomy: outcome with 44 consecutive patients. Barrachina F, et al. **Intensive Care Med** 1996 Sep;22(9):937-40

Routine daily chest radiography is not indicated for ventilated patients in a surgical ICU. Bhagwanjee S, et al. **Intensive Care Med** 1996 Dec;22(12):1335-8

Measurement of cardiac output by transesophageal echocardiography in mechanically ventilated patients. Comparison with thermodilution. Estagnasié P, et al. **Intensive Care Med** 1997 Jul;23(7):753-9

Impaired gastric emptying in mechanically ventilated, critically ill patients. Heyland DK, et al. **Intensive Care Med** 1996 Dec;22(12):1339-44

Use of the flow-volume loop to detect secretions in ventilated children [letter] Leclerc F, et al. **Intensive Care Med** 1996 Jan;22(1):88

Prognosis of stroke patients undergoing mechanical ventilation [letter; comment] Lessire H, et al. **Intensive Care Med** 1996 Feb;22(2):174-5. Comment on: Intensive Care Med 1994;20(1):32-6.

Skeletal muscle paralysis and respiratory compliance [letter; comment] Numa A. **Intensive Care Med** 1997 Mar; 23(3):359-60. Comment on: Intensive Care Med 1996 May;22(5):486-91.

The effect of single-dose and continuous skeletal muscle paralysis on respiratory system compliance in paediatric intensive care patients [see comments] Schindler MB, et al. **Intensive Care Med** 1996 May;22(5):486-91. Comment in: Intensive Care Med 1997 Mar;23(3):359-60.

Heat-moisture exchangers [letter; comment] Seakins P. **Intensive Care Med** 1996 Jul;22(7):714. Comment on: Intensive Care Med 1995 Feb;21(2):142-8.

Evaluation by polymerase chain reaction of cytomegalovirus reactivation in intensive care patients under mechanical ventilation. Stéphan F, et al. **Intensive Care Med** 1996 Nov; 22(11):1244-9

Non-invasive mechanical ventilation in severe chronic obstructive lung disease and acute respiratory failure: short- and long-term prognosis. Vitacca M, et al. **Intensive Care Med** 1996 Feb;22(2):94-100

Continuous arterial gas monitoring: initial experience with the Paratrend 7 in children. Weiss IK, et al. **Intensive Care Med** 1996 Dec;22(12):1414-7 (13 ref.)

Ultrasonographic bedside evaluation of maxillary sinus disease in mechanically ventilated patients. Westergren V, et al. **Intensive Care Med** 1997 Apr;23(4):393-8

Distribution of alveolar edema in ventilated and unventilated canine lung lobes. Iancu DM, et al. **Invest Radiol** 1996 Jul; 31(7):423-32

Prehospital emergency rapid sequence induction of anaesthesia. Graham CA, et al. **J Accid Emerg Med** 1997 Jul;14(4):219-21

How older patient preferences are influenced by consideration of future health outcomes. Mazur DJ. **J Am Geriatr Soc** 1997 Jun;45(6):725-8

Air hunger induced by acute increase in PCO2 adapts to chronic elevation of PCO2 in ventilated humans. Bloch-Salisbury E, et al. **J Appl Physiol** 1996 Aug; 81(2):949-56

Interaction between airway edema and lung inflation on responsiveness of individual airways in vivo. Brown RH, et al. **J Appl Physiol** 1997 Aug;83(2):366-70

Pressure-controlled ventilation for the long-range aeromedical transport of patients with burns. Barillo DJ, et al. **J Burn Care Rehabil** 1997 May-Jun;18(3):200-5

Correction for respiration artifact in pulmonary blood pressure signals of ventilated patients. Hoeksel SA, et al. **J Clin Monit** 1996 Sep;12(5):397-403

Assessment of errors when expiratory condensate PCO2 is used as a proxy for mixed expired PCO2 during mechanical ventilation. Imanaka H, et al. **J Clin Monit** 1997 Jul; 13(4):215-22

Continuous monitoring of ventilatory mechanics during one-lung ventilation. Iwasaka H, et al. **J Clin Monit** 1996 Mar;12(2):161-4

Evaluation of electrochemical nitric oxide and nitrogen dioxide analyzers suitable for use during mechanical ventilation. Purtz EP, et al. **J Clin Monit** 1997 Jan; 13(1):25-34

FIx controller: an instrument to automatically adjust inspired oxygen fraction using feedback control from a pulse oximeter. Raemer DB, et al. **J Clin Monit** 1997 Mar; 13(2):91-101

Tracheal gas insufflation improves ventilatory efficiency during metacholine-induced bronchospasm. Miro AM, et al. **J Crit Care** 1997 Mar;12(1):13-21

A look at recent hyperventilation studies: outcomes and recommendations for early use in the head-injured patient. Geraci E, et al. **J Neurosci Nurs** 1996 Aug;28(4):222-4, 229-33 (35 ref.)

Bronchopulmonary dysplasia and very low birthweight: lung function at 11 years of age. Doyle LW, et al. **J Paediatr Child Health** 1996 Aug;32(4):339-43

Characteristics of hypoxemic episodes in very low birth weight infants on ventilatory support. Dimaguila MA, et al. **J Pediatr** 1997 Apr;130(4):577-83

Relationship between blood pressure and cardiac output in preterm infants requiring mechanical ventilation. Kluckow M, et al. **J Pediatr** 1996 Oct;129(4):506-12

A trial of the safety of inhaled beclomethasone in ventilator-treated neonates. Liu EA, et al. **J Pediatr** 1996 Jul;129(1):154-6

Routine use of fentanyl infusions for pain and stress reduction in infants with respiratory distress syndrome [see comments] Orsini AJ, et al. **J Pediatr** 1996 Jul;129(1):140-5 . Comment in: J Pediatr 1997 Mar;130(3):498-9.

Surfactant rescue in the fetal lamb model of congenital diaphragmatic hernia. O'Toole SJ, et al. **J Pediatr Surg** 1996 Aug;31(8):1105-8; discussion 1108-9

Ventilatory management casebook. Gastric perforation probably caused by glucocorticoid administration. McGettigan MC, et al. **J Perinatol** 1996 Jul-Aug; 16(4):309-12

Effect of five days of dexamethasone therapy on ventilator dependence and adrenocorticotropic hormone-stimulated cortisol concentrations. Scott SM, et al. **J Perinatol** 1997 Jan-Feb;17(1):24-8

Loculated pneumothoraces in patients with acute respiratory disease treated with mechanical ventilation: preliminary observations after image-guided drainage. Boland GW, et al. **J Vasc Interv Radiol** 1996 Mar-Apr;7(2):247-52

Laser bronchoscopy with transglottic/supraglottic ventilation to relieve dysphonia and subglottic obstruction. Gallivan GJ, et al. **J Voice** 1997 Mar;11(1):115-23

Viability, morbidity, and resource use among newborns of 501- to 800-g birth weight. National Institute of Child Health and Human Development Neonatal Research Network. Tyson JE, et al. **JAMA** 1996 Nov 27; 276(20):1645-51

Accuracy of 30-minute indirect calorimetry studies in predicting 24-hour energy expenditure in mechanically ventilated, critically ill patients. Smyrnios NA, et al. **JPEN J Parenter Enteral Nutr** 1997 May-Jun;21(3):168-74

Ventilation in the prone position. The Prone-Supine Study Collaborative Group [letter] Gattinoni L, et al. **Lancet** 1997 Sep 13;350(9080):815

Methaemoglobinaemia after inhalation of nitric oxide for treatment of hydrochlorothiazide-induced pulmonary oedema [letter] Hovenga S, et al. **Lancet** 1996 Oct 12; 348(9033):1035-6

Improved oxygen delivery by positive pressure ventilation with continuous negative external chest pressure [letter] Scholz SE, et al. **Lancet** 1997 May 3;349(9061):1295-6

Ventilation in the prone position. Webster NR. **Lancet** 1997 Jun 7;349(9066):1638-9

Effect of mechanical ventilation on regional variation of pleural liquid thickness in rabbits. Wang PM, et al. **Lung** 1997;175(3):165-73

Causes and outcome of mechanical ventilation in patients with hemispheric ischemic stroke. Wijdicks EF, et al. **Mayo Clin Proc** 1997 Mar;72(3):210-3

Respiratory support in refractory ARDS. Keogh BF. **Middle East J Anesthesiol** 1996 Jun;13(5):461-93 (56 ref.)

Asthma: analysis of intubated patients over a one-year period. Kurohara ML, et al. **Mil Med** 1996 Sep;161(9):567-70

Measured versus calculated energy expenditure in pressure support ventilated ICU patients. Casati A, et al. **Minerva Anestesiol** 1996 May;62(5):165-70

Effects of mechanical ventilation on control of breathing. Georgopoulos DB, et al. **Monaldi Arch Chest Dis** 1997 Jun; 52(3):253-62 (45 ref.)

Lungs at home. Petty TL. **Monaldi Arch Chest Dis** 1996 Feb; 51(1):60-3 (20 ref.)

Home mechanical ventilation in children: techniques, outcomes and ethics. Shneerson JM. **Monaldi Arch Chest Dis** 1996 Oct;51(5):426-30 (23 ref.)

Effect on the duration of mechanical ventilation of identifying patients capable of breathing spontaneously [see comments] Ely EW, et al. **N Engl J Med** 1996 Dec 19; 335(25):1864-9. Comment in: N Engl J Med 1996 Dec 19;335(35):1916-7. Comment in: ACP J Club 1997 May-Jun;126(3):74. Comment in: N Engl J Med 1997 May 29;336(22):1610; discussion 1611. Comment in: N Engl J Med 1997 May 29;336(22):1611.

Urinary excretion of human epidermal growth factor in premature infants requiring assisted ventilation over the first week of life [letter] Plebani M, et al. **Nephron** 1997; 76(2):225-6

Concealed lung abscess in critically ill, mechanically ventilated patients. Boon ES, et al. **Neth J Med** 1996 Mar; 48(3):100-4

Mechanical ventilation in stroke patients--is it worthwhile? [see comments] el-Ad B, et al. **Neurology** 1996 Sep; 47(3):657-9. Comment in: Neurology 1997 Jul;49(1):311; discussion 311-2.

Mechanical ventilation [letter; comment] Krieger D, et al. **Neurology** 1997 Jul;49(1):311; discussion 311-2. Comment on: Neurology 1996 Sep;47(3):657-9.

Mechanical ventilation [letter; comment] Meschia JF. **Neurology** 1997 Jul;49(1):311; discussion 311-2. Comment on: Neurology 1996 Sep;47(3):657-9.

Myasthenic crisis: clinical features, mortality, complications, and risk factors for prolonged intubation. Thomas CE, et al. **Neurology** 1997 May;48(5):1253-60

Respiratory insufficiency and ventilatory support. 39th ENMC International Workshop, Naarden, The Netherlands, 26-28 January 1996. European Consortium on Chronic Respiratory Insufficiency. Rutgers M, et al. **Neuromuscul Disord** 1996 Dec;6(6):431-5 (0 ref.)

Therapeutic options for severe, refractory status asthmaticus: inhalational anaesthetic agents, extracorporeal membrane oxygenation and helium/oxygen ventilation. Tobias JD, et al. **Paediatr Anaesth** 1997;7(1):47-57

Continuous ketamine infusion for the treatment of refractory

asthma in a mechanically ventilated infant: case report and review of the pediatric literature. Nehama J, et al. **Pediatr Emerg Care** 1996 Aug;12(4):294–7 (20 ref.)

Alterations of end-tidal carbon dioxide during the intrahospital transport of children. Tobias JD, et al. **Pediatr Emerg Care** 1996 Aug;12(4):249–51

Effectiveness of budesonide aerosol in ventilator-dependent preterm babies: a preliminary report. Arnon S, et al. **Pediatr Pulmonol** 1996 Apr;21(4):231–5

Chronic lung disease following neonatal ventilation. I. incidence in two geographically defined populations. Fenton AC, et al. **Pediatr Pulmonol** 1996 Jan;21(1):20–3

Chronic lung disease following neonatal ventilation. II. Changing incidence in a geographically defined population. Fenton AC, et al. **Pediatr Pulmonol** 1996 Jan;21(1):24–7

Liquid assisted ventilation: an alternative ventilatory strategy for acute meconium aspiration injury. Foust R 3rd, et al. **Pediatr Pulmonol** 1996 May;21(5):316–22

Intrasubject variability of repeated pulmonary function measurements in preterm ventilated infants. Gonzalez A, et al. **Pediatr Pulmonol** 1996 Jan;21(1):35–41

Influence of different methods of synchronized mechanical ventilation on ventilation, gas exchange, patient effort, and blood pressure fluctuations in premature neonates. Hummler H, et al. **Pediatr Pulmonol** 1996 Nov;22(5):305–13

Dornase alpha in the management of a mechanically ventilated infant with cystic fibrosis [letter] Kling S, et al. **Pediatr Pulmonol** 1997 Aug;24(2):124–5

Effect of leak around the endotracheal tube on measurements of pulmonary compliance and resistance during mechanical ventilation: a lung model study. Kuo CY, et al. **Pediatr Pulmonol** 1996 Jul;22(1):35–43

Inspiratory work of breathing in ventilated preterm infants. Lorino H, et al. **Pediatr Pulmonol** 1996 May;21(5):323–7

Patient-triggered ventilation: a comparison of tidal volume and chestwall and abdominal motion as trigger signals. Nikischin W, et al. **Pediatr Pulmonol** 1996 Jul;22(1):28–34

Comparison of dynamic and passive respiratory mechanics in ventilated newborn infants [letter; comment] Stocks J, et al. **Pediatr Pulmonol** 1996 Oct;22(4):280–2. Comment on: Pediatr Pulmonol 1995 Oct;20(4):258–64.

Early postnatal dexamethasone therapy may lessen lung inflammation in premature infants with respiratory distress syndrome on mechanical ventilation. Wang JY, et al. **Pediatr Pulmonol** 1997 Mar;23(3):193–7

Glucose production and gluconeogenesis are negatively related to body weight in mechanically ventilated, very low birth weight neonates. Keshen T, et al. **Pediatr Res** 1997 Jan;41(1):132–8

Endothelin receptor blockade does not alter the increase in pulmonary blood flow due to oxygen ventilation in fetal lambs. Winters JW, et al. **Pediatr Res** 1996 Jul;40(1):152–7

Morphometrics of normal and hypoplastic lungs in preterm lambs with gas and partial liquid ventilation. Major D, et al. **Pediatr Surg Int** 1997 Feb;12(2–3):121–5

Elective, postoperative ventilation in the management of esophageal atresia and tracheoesophageal fistula. Al-Salem AH, et al. **Pediatr Surg Int** 1997 Apr;12(4):261–3

Intubation rates in extremely low birth weight infants [letter; comment] Bucher HU, et al. **Pediatrics** 1997 Jun;99(6):925 . Comment on: Pediatrics 1996 Jul;98(1):24–7.

Pulmonary effect of inhaled furosemide in ventilated infants with severe bronchopulmonary dysplasia. Kugelman A, et al. **Pediatrics** 1997 Jan;99(1):71–5

Pulmonary effect of inhaled furosemide in ventilated infants with severe bronchopulmonary dysplasia [letter] Prabhu VG. **Pediatrics** 1997 Sep;100(3 Pt 1):420–1

Systemic filling pressure in the intact circulation determined with a slow inflation procedure. Hartog EA, et al. **Pflugers Arch** 1996 Apr;431(6):863–7

US-guided thoracentesis: requirement for postprocedure chest radiography in patients who receive mechanical ventilation versus patients who breathe spontaneously. Gervais DA, et al. **Radiology** 1997 Aug;204(2):503–6

Acute respiratory distress syndrome: CT findings during partial liquid ventilation. Meaney JF, et al. **Radiology** 1997 Feb;202(2):570–3

Prediction of the need for mechanical ventilation in acute severe asthma. de Diego A, et al. **Respiration** 1996; 63(2):73–7

Guidelines for the basic management of the airway and ventilation during resuscitation. A statement by the Airway and Ventilation Management Working Group of the European Resuscitation Council. **Resuscitation** 1996 Jun; 31(3):187–200

Guidelines for the advanced management of the airway and ventilation during resuscitation. A statement by the Airway and Ventilation Management of the Working Group of the European Resuscitation Council. **Resuscitation** 1996 Jun; 31(3):201–30

Tidal volumes which are perceived to be adequate for resuscitation [see comments] Baskett P, et al. **Resuscitation** 1996 Jun;31(3):231–4. Comment in: Resuscitation 1997 Jan;33(3):281–2.

Quality of mechanical, manual standard and active compression-decompression CPR on the arrest site and during transport in a manikin model. Sunde K, et al. **Resuscitation** 1997 Jun;34(3):235–42

Strategies of invasive ventilatory support in ARDS. Kirkpatrick AW, et al. **Shock** 1996;6 Suppl 1:S17–22 (64 ref.)

Ventilatory stability during sleep studied with proportional assist ventilation (PAV). Meza S, et al. **Sleep** 1996 Dec; 19(10 Suppl):S164–6

Late return of diaphragm function in a ventilator-dependent patient with a high cervical tetraplegia: case report, and interactive review. McKinley WO. **Spinal Cord** 1996 Oct; 34(10):626–9

Prognosis of stroke patients requiring mechanical ventilation in a neurological critical care unit. Steiner T, et al. **Stroke** 1997 Apr;28(4):711–5

Validation and clinical application of a continuous P0.1 measurement using standard respiratory equipment. Kuhlen R, et al. **Technol Health Care** 1996 Dec;4(4):415–24

Nosocomial pneumonia during mechanical ventilation [letter; comment] Torres A, et al. **Thorax** 1996 Jul;51(7):771–2. Comment on: Thorax 1995 Nov;50(11):1128–30.

Malpositioned nasogastric tube: a cause of ventilatory volume loss [letter] Saini S, et al. **Trop Doct** 1997 Apr;27(2):125

Effects of positive expiratory pressure (PEP), continuous positive airway pressure (CPAP) and hyperventilation in COPD patients with chronic hypercapnea. Herala M, et al. **Ups J Med Sci** 1995;100(3):223–32

Experimental studies on lung mechanics, gas exchange and oxygen delivery under open lung conditions. Mechanical ventilation with decelerating versus constant inspiratory flow. Markström A. **Ups J Med Sci** 1997;102(1):1–20

Under open lung conditions inverse ratio ventilation causes intrinsic PEEP and hemodynamic impairment. Markström AM, et al. **Ups J Med Sci** 1996;101(3):257–71

Advances in the treatment of respiratory failure in newborns. Durand DJ. **West J Med** 1997 May;166(5):338–9

Continuous monitoring of brain tissue PO2: a new tool to minimize the risk of ischemia caused by hyperventilation therapy. Dings J, et al. **Zentralbl Neurochir** 1996; 57(4):177–83

[Diagnostic procedures in artificially ventilated patients with pneumonia] Clementsen PS, et al. **Ugeskr Laeger** 1996 Sep 30;158(40):5595–9 (33 ref.) (Eng. Abstr.) **(Dan)**

[Diagnosis of pneumonia in artificially ventilated patients (editorial)] Vestbo J. **Ugeskr Laeger** 1996 Sep 30; 158(40):5587 **(Dan)**

[Successful heart transplantation in long-term ventilated patients (letter; comment)] Bredée JJ, et al. **Ned Tijdschr Geneeskd** 1997 Feb 15;141(7):353–5. Comment on: Ned Tijdschr Geneeskd 1996 Nov 23;140(47):2353–5. **(Dut)**

[Non-invasive modalities of mechanical ventilation [editorial]] Brochard L. **Presse Med** 1996 Oct 19; 25(31):1407–9 (Eng. Abstr.) **(Fre)**

[Experimental changes in the alveolo-capillary barrier induced by artificial ventilation] Dreyfuss D, et al. **Schweiz Med Wochenschr** 1997 Jun 14;127(24):1023–9 (30 ref.) (Eng. Abstr.) **(Fre)**

[Augmented spontaneous breathing] Hachenberg T. **Anaesthesist** 1996 Sep;45(9):839–55 (143 ref.) (Eng. Abstr.) **(Ger)**

[Remarks on the work of J. Rathgeber et al. Respiratory gas acclimatization with an efficient HME (heat and moisture exchanger)--an effective and cost saving alternative to active humidifying of the ventilated patient. Anaesthesist (1996) 45: 518–525 (letter; comment)] Thäle H, et al. **Anaesthesist** 1996 Dec;45(12):1270–2. Comment on: Anaesthesist 1996 Jun;45(6):518–25. **(Ger)**

[Ventilation during cardiopulmonary resuscitation (CPR). A literature study and analysis of ventilation strategies] Wenzel V, et al. **Anaesthesist** 1997 Feb;46(2):133–41 (32 ref.) (Eng. Abstr.) **(Ger)**

[Ventilation methods with kinetic therapy (editorial)] Busse J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):240–1 **(Ger)**

[Mucociliary clearance function and medicamentous modification] Konrad F. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep; 31(7):404–8 (38 ref.) (Eng. Abstr.) **(Ger)**

[Clinical concepts for differentiated ventilation] Mang H, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):242–5 **(Ger)**

[Continuous axial position change in post-traumatic lung failure--preventive or therapeutic indications?] Pape HC, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):245–9 **(Ger)**

[Effect of endoscopic surgery techniques in children on ventilation] Schäfer R, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jun; 32(6):343–7 (Eng. Abstr.) **(Ger)**

[Treatment strategies in intensive care of patients with severe thoracic injuries and lung contusions] Stiletto R, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr; 32(4):241–2 **(Ger)**

[Risks and side effects of diagnostic bronchoalveolar lavage in ventilated patients] Zimmermann P, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Mar; 32(3):169–74 (62 ref.) (Eng. Abstr.) **(Ger)**

[Puncture tracheotomy in long-term ventilated intensive care patients] Joosten U, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:356–9 (Eng. Abstr.) **(Ger)**

[Home respiratory care and respirator weaning. Annual meeting of the work group for home and longterm respiratory care. Marburg, 11–13 April 1996] **Med Klin** 1997 Apr 28;92 Suppl 1:1–139 **(Ger)**

[New therapy aspects of chronic respiratory insufficiency] Karg O. **Med Klin** 1997 Apr 28;92 Suppl 1:14–7 (25 ref.) (Eng. Abstr.) **(Ger)**

[Guidelines for home oxygen and home ventilation therapy. German Society of Pneumology, German Society of Sleep Medicine, Working Group of Nocturnal Respiratory and Cardiovascular Disorders, Working Circle of Home and Long-Term Ventilation] Köhler D, et al. **Med Klin** 1997 Jan 15;92(1):2–6 **(Ger)**

[Guidelines for management of home ventilation patients. Home and Long-Term Ventilation Working Group] Laier-Groeneveld G. **Med Klin** 1996 Oct 15;91(10):615–6 **(Ger)**

[Diagnosis of pneumonia in artificial ventilation: principles, techniques, results, preliminary recommendations] Ewig S, et al. **Pneumologie** 1996 Oct;50(10):718–31 (87 ref.) **(Ger)**

[Partial liquid ventilation with perflubron in premature infants with severe respiratory distress syndrome] Quintel M. **Pneumologie** 1997 Feb;51(2):104–5 **(Ger)**

[Perspectives in mechanical ventilation in ARDS] Max M, et al. **Schweiz Med Wochenschr** 1997 Jun 14;127(24):1030–8 (68 ref.) (Eng. Abstr.) **(Ger)**

[Acute rhabdomyolysis in status asthmaticus] Eisenhuber E, et al. **Wien Klin Wochenschr** 1996;108(16):521–4 (Eng. Abstr.) **(Ger)**

[Medical intensive care aspects in treatment of amyotrophic lateral sclerosis] Mamoli B. **Wien Med Wochenschr** 1996; 146(9–10):188–90 (Eng. Abstr.) **(Ger)**

[Reversal of a right-left shunt and permanent improvement of oxygenation by inhalation of nitrogen monoxide in a premature infant with lung hypoplasia and asphyxia] Hoehn T, et al. **Z Geburtshilfe Neonatol** 1997 May-Jun; 201(3):105–7 (Eng. Abstr.) **(Ger)**

[Intensive care in increased intracranial pressure. II: General intensive care treatment of patients with increased intracranial pressure. Ventilation. Intensive Care Committee of the German Society of Anesthesia and Intensive care] Burchardi H, et al. **Zentralbl Neurochir** 1997;58(2):76–82 (37 ref.) **(Ger)**

[Airway management of the multiple trauma patient] Ben-Abraham R, et al. **Harefuah** 1997 Jun 15; 132(12):897–902 (35 ref.) **(Heb)**

[Cardiopulmonary support in high-risk percutaneous coronary angioplasty] Bartorelli AL. **Cardiologia** 1997 May; 42(5):533–9 (5 ref.) **(Ita)**

[Experience of an intermediate respiratory intensive therapy in the treatment of prolonged weaning from mechanical ventilation] Vitacca M, et al. **Minerva Anestesiol** 1996 Mar; 62(3):57–64 (23 ref.) (Eng. Abstr.) **(Ita)**

[A case of bilateral pneumothorax successfully treated with surgery associated with amyotrophic lateral sclerosis having been controlled with artificial ventilation] Morita H, et al. **Kyobu Geka** 1997 Jun;50(6):511–3 (Eng. Abstr.) **(Jpn)**

[Respiratory management after closure of a bronchial-fistula with an omental pedicled gastric flap] Tanaka T, et al. **Masui** 1996 Dec;45(12):1516–8 (Eng. Abstr.) **(Jpn)**

[Mechanical ventilation and long-term respiratory care in the intensive care unit of a general hospital] Chonabayashi N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33 Suppl:159–67 (Eng. Abstr.) **(Jpn)**

[Recovery from descending necrotizing mediastinitis and multiple organic failure after seven months of mechanical ventilation] Ohno K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):1021–9 (Eng. Abstr.) **(Jpn)**

[Long-term mechanical ventilation in Japan, with special reference to home mechanical ventilation] Satoh M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:168–72 (Eng. Abstr.) **(Jpn)**

[A case of fluminant Mycoplasma pneumonia and bronchiolitis managed by artificial respiration] Jingu K, et al. **Nippon Naika Gakkai Zasshi** 1997 Jun 10;86(6):1039–41 **(Jpn)**

[Tracheal deformity observed in tracheostomized Duchenne muscular dystrophy patients who can speak with appropriately inflated cuff of tracheal tube] Shinoe T, et al. **Rinsho Shinkeigaku** 1996 Feb;36(2):355–7 (Eng. Abstr.) **(Jpn)**

[Bacterial flora of the respiratory tract in artificially ventilated patients] Jarosz-Cencora B, et al. **Pol Merkuriusz Lek** 1996 Jul;1(1):15–7 (Eng. Abstr.) **(Pol)**

[Transesophageal echocardiography in patients treated with ventilation at a polyvalent intensive care unit] Marcelino P, et al. **Rev Port Cardiol** 1997 Mar;16(3):259–63, 241 (Eng. Abstr.) **(Por)**

[Current systems of ventilation of the lungs and methods of their monitoring] Al'es VF, et al. **Anesteziol Reanimatol** 1996 Nov-Dec;(6):67–71 (80 ref.) **(Rus)**

[Analysis of respiratory complications during artificial ventilation of the lungs in patients with organophosphorus compound poisoning] Egorov VM, et al. **Anesteziol Reanimatol** 1997 Jan-Feb;(1):71–4 (Eng. Abstr.) **(Rus)**

[Cessation of prolonged artificial ventilation of the lungs and transition to spontaneous respiration of surgical patients] Gologorskiĭ VA, et al. **Anesteziol Reanimatol** 1997 Jan-Feb; (1):4–10 **(Rus)**

[Criteria in discontinuing artificial ventilation of the lungs after planned and emergency surgical interventions] Gologorskiĭ VA, et al. **Anesteziol Reanimatol** 1997 Mar-Apr;(2):4–10 **(Rus)**

[Artificial ventilation of the lungs in respiratory failure caused by lesions of the peripheral neuron] Levit AL, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):86–7 (Eng. Abstr.) **(Rus)**

[Respiratory aid to patients with severe forms of suppurative meningitis] Zhukov VV, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):28–31 (Eng. Abstr.) **(Rus)**

[The importance of the cytological study of the tracheobronchial aspirate in newborn infants with the respiratory distress syndrome who are on artificial pulmonary ventilation] Bubnova NI, et al. **Arkh Patol** 1996 Nov–Dec;58(6):22–5 (Eng. Abstr.) **(Rus)**

[Gas exchange and gas transport in deeply cooled rats during slow and rapid warming using artificial pulmonary ventilation] Chufkin AE, et al. **Fiziol Zh Im I M Sechenova** 1996 May–Jun;82(5–6):77–86 (Eng. Abstr.) **(Rus)**

[High frequency oscillatory ventilation in the newborn infant] Gutiérrez Laso A, et al. **An Esp Pediatr** 1997 Feb; 46(2):183–8 (Eng. Abstr.) **(Spa)**

[Routes of endotracheal colonization in patients with mechanical ventilation] Luaces Cubells C, et al. **An Esp Pediatr** 1997 Jan;46(1):20–3 (Eng. Abstr.) **(Spa)**

[High frequency oscillatory ventilation in the preterm newborn infants with respiratory distress syndrome] Tejera Ramírez C, et al. **An Esp Pediatr** 1997 Feb;46(2):177–82 (Eng. Abstr.) **(Spa)**

[Ultrastructure of the tracheal epithelium in preterm neonates treated with mechanical ventilation] Villegas Castrejon H, et al. **Ginecol Obstet Mex** 1997 May;65:194–201 (Eng. Abstr.) **(Spa)**

[Non-invasive mechanical ventilation in intensive care] Montiel G, et al. **Medicina (B Aires)** 1996;56(1):85–96 (Eng. Abstr.) **(Spa)**

[Ventilatory management during anesthesia in the patient with congenital cardiopathy undergoing non-cardiac surgery (letter; comment)] Reinoso-Barbero F. **Rev Esp Anestesiol Reanim** 1996 Jun–Jul;43(6):222. Comment on: Rev Esp Anestesiol Reanim 1995 Oct;42(8):336–40. **(Spa)**

[Management of patients with severe pneumonia in mechanical ventilation: usefulness of bronchoalveolar lavage] Saldías F, et al. **Rev Med Chil** 1996 Aug; 124(8):950–8 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Rupture of the stomach caused by manual ventilation during laryngospasm. Larsen KM, et al. **Acta Anaesthesiol Scand** 1996 Jan;40(1):130–1

Pneumoperitoneum complicating mechanical ventilation in congenital myotonic dystrophy. Kobayashi Y, et al. **Acta Paediatr Jpn** 1997 Jun;39(3):379–81

Negative slope of exhaled CO2 profile: implications for ventilation heterogeneity during partial liquid ventilation. Mates EA, et al. **Adv Exp Med Biol** 1996;388:585–97

Risk factors for pneumonia, and colonization of respiratory tract and stomach in mechanically ventilated ICU patients. Bonten MJ, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1339–46

Nasal inhalation of l-menthol reduces respiratory discomfort associated with loaded breathing. Nishino T, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):309–13

The value of routine microbial investigation in ventilator-associated pneumonia. Rello J, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):196–200

Mechanical hyperinflation PEA [letter] Pohl MN. **Ann Emerg Med** 1997 Mar;29(3):427

Ventilation patterns, surfactant and lung injury. Jonson B. **Biol Neonate** 1997;71 Suppl 1:13–7 (24 ref.)

Obstruction of a breathing system filter [letter] Stacey MR, et al. **Can J Anaesth** 1996 Dec;43(12):1276

An asthmatic becomes hypotensive on mechanical ventilator support. **Chest** 1996 Dec;110(6):1613–4

Early diagnosis of ventilator-associated pneumonia. Is it possible to define a cutoff value of infected cells in BAL fluid? Allaouchiche B, et al. **Chest** 1996 Dec;110(6):1558–65

Reproducibility of the histologic diagnosis of pneumonia among a panel of four pathologists: analysis of a gold standard. Corley DE, et al. **Chest** 1997 Aug;112(2):458–65

Selective decontamination of the digestive tract. Consider cross-infection of Staphylococcus aureus? [letter; comment] Hurley J. **Chest** 1996 Dec;110(6):1625–6. Comment on: Chest 1996 Mar;109(3):765–72.

The diagnosis of ventilator-associated pneumonia: a comparison of histologic, microbiologic, and clinical criteria. Kirtland SH, et al. **Chest** 1997 Aug;112(2):445–57

Patient transport from intensive care increases the risk of developing ventilator-associated pneumonia. Kollef MH, et al. **Chest** 1997 Sep;112(3):765–73

Impact of BAL data on the therapy and outcome of ventilator-associated pneumonia. Luna CM, et al. **Chest** 1997 Mar;111(3):676–85

Diagnosis and treatment of ventilator-associated pneumonia—impact on survival. A decision analysis. Sterling TR, et al. **Chest** 1996 Oct;110(4):1025–34

The outcome of terminal liver cirrhosis patients requiring mechanical ventilation. Lee KC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Feb;59(2):88–94

Complications of mechanical ventilation. A bedside approach. Keith RL, et al. **Clin Chest Med** 1996 Sep; 17(3):439–51 (37 ref.)

Effects of continuous bed rotation and prolonged mechanical ventilation on healthy, adult baboons [see comments] Anzueto A, et al. **Crit Care Med** 1997 Sep;25(9):1560–4. Comment in: Crit Care Med 1997 Sep;25(9):1456–7.

How to use an article on therapy or prevention: pneumonia prevention using subglottic secretion drainage [see comments] Cook DJ, et al. **Crit Care Med** 1997 Sep; 25(9):1502–13 (78 ref.). Comment in: Crit Care Med 1997 Sep;25(9):1448–9.

Clinical spectrum of ventilator-associated pneumonia caused by methicillin-sensitive Staphylococcus aureus. Bergmans D, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jun; 15(6):437–45

Sinusitis in mechanically ventilated patients and its role in the pathogenesis of nosocomial pneumonia. Bert F., et al. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):533–44 (84 ref.)

Noninvasive mechanical ventilation in acute respiratory failure. Ambrosino N. **Eur Respir J** 1996 Apr;9(4):795–807 (116 ref.)

Protected bronchoalveolar lavage in the diagnosis of ventilator-associated pneumonia [see comments] Barreiro B, et al. **Eur Respir J** 1996 Jul;9(7):1500–7. Comment in: Eur Respir J 1996 Jul;9(7):1339–41.

"Blind" protected specimen brushing versus bronchoscopic techniques in the aetiolological diagnosis of ventilator-associated pneumonia [see comments] Bello S, et al. **Eur Respir J** 1996 Jul;9(7):1494–9. Comment in: Eur Respir J 1996 Jul;9(7):1339–41.

Diagnosis of ventilator-associated pneumonia: nonroutine tools for routine practice [editorial; comment] Ewig S. **Eur Respir J** 1996 Jul;9(7):1339–41. Comment on: Eur Respir J 1996 Jul;9(7):1494–9. Comment on: Eur Respir J 1996 Jul;9(7):1500–7.

Stomach as a source of colonization of the respiratory tract during mechanical ventilation: association with ventilator-associated pneumonia. Torres A, et al. **Eur Respir J** 1996 Aug;9(8):1729–35 (55 ref.)

Cervical osteomyelitis after percutaneous transtracheal ventilation and tracheotomy. Newlands SD, et al. **Head Neck** 1996 May–Jun;18(3):295–8

Anesthesia ventilators with descending bellows: the need for appropriate monitoring. **Health Devices** 1996 Oct; 25(10):391–3

Delayed pneumo-mediastinum in congenital diaphragmatic hernia [letter] Radhakrishna K, et al. **Indian Pediatr** 1996 Jul;33(7):608

Nosocomial pneumonia. Diagnosis and prevention. Mayhall CG. **Infect Dis Clin North Am** 1997 Jun;11(2):427–57 (103 ref.)

Saline-lavaged lung injury and pressure support ventilation [letter; comment] Guery BP, et al. **Intensive Care Med** 1997 May;23(5):600–1. Comment on: Intensive Care Med 1996 Dec;22(12):1445–52.

Pressure-limited ventilation with permissive hypercapnia and minimum PEEP in saline-lavaged rabbits allows progressive improvement in oxygenation, but does not avoid ventilator-induced lung injury [see comments] Hickling KG, et al. **Intensive Care Med** 1996 Dec; 22(12):1445–52. Comment in: Intensive Care Med 1997 May;23(5):600–1.

Critical illness polyneuropathy in multiple organ dysfunction syndrome and weaning from the ventilator [see comments] Leijten FS, et al. **Intensive Care Med** 1996 Sep;22(9):856–61 . Comment in: Intensive Care Med 1996 Sep;22(9):841–3.

Comparison of A-mode ultrasound and computed tomography: detection of secretion in maxillary and frontal sinuses in ventilated patients. Lucchin F, et al. **Intensive Care Med** 1996 Nov;22(11):1265–8

The role of gallium-67 scintigraphy in diagnosing sources of fever in ventilated patients. Meduri GU, et al. **Intensive Care Med** 1996 May;22(5):395–403

Short-term impact of the European Consensus Conference on the use of selective decontamination of the digestive tract with antibiotics in ICU patients. Misset B, et al. **Intensive Care Med** 1996 Sep;22(9):981–4

Continuous infusion of ketamine in mechanically ventilated children with refractory bronchospasm. Youssef-Ahmed MZ, et al. **Intensive Care Med** 1996 Sep;22(9):972–6

Quadriparesia following permissive hypercapnia and inhalational anesthesia in a patient with severe status asthmaticus [letter] Zender HO, et al. **Intensive Care Med** 1996 Sep;22(9):1001

Left, but not right, one-lung ventilation causes hypoxemia during endoscopic transthoracic sympathectomy. Katz Y, et al. **J Cardiothorac Vasc Anesth** 1996 Feb;10(2):207–9

Reproducibility of quantitative cultures of endotracheal aspirates from mechanically ventilated patients. Bergmans DC, et al. **J Clin Microbiol** 1997 Mar;35(3):796–8

Accidental pulmonary barotrauma: a tale of circuit DYS-connects. Doyle DJ. **J Clin Monit** 1996 Jan; 12(1):75–7

Factors influencing acquired upper airway obstruction in newborn infants receiving assisted ventilation because of respiratory failure: an overview. da Silva OP. **J Perinatol** 1996 Jul–Aug;16(4):272–5 (35 ref.)

Mitigation of injury in canine lung grafts by exogenous surfactant therapy. Novick RJ, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):342–53

Comparison of nonbronchoscopic techniques with bronchoscopic brushing in the diagnosis of ventilator-associated pneumonia. Wearden PD, et al. **J Trauma** 1996 Oct;41(4):703–7

Relationship of microbiologic diagnostic criteria to morbidity and mortality in patients with ventilator-associated pneumonia [see comments] [published erratum appears in JAMA 1997 Jul 2;278(1):25] Bregeon F, et al. **JAMA** 1997 Feb 26;277(8):655–62. Comment in: JAMA 1997 Jul 2;278(1):24–5.

Identifying the causative organism in patients with ventilator-associated pneumonia [letter; comment] Marik P, et al. **JAMA** 1997 Jul 2;278(1):24–5. Comment on: JAMA 1997 Feb 26;277(8):655–62.

Pulmonary pathology of patients treated with partial liquid ventilation. Bruch LA, et al. **Mod Pathol** 1997 May; 10(5):463–8

Ventilator-associated pneumonia. Dottorini M. **Monaldi Arch Chest Dis** 1996 Aug;51(4):331–4 (47 ref.)

The diagnosis of nosocomial pneumonia in ventilated patients. Nardini S. **Monaldi Arch Chest Dis** 1996 Aug; 51(4):342–4 (6 ref.)

Could invasive diagnostic techniques for ventilator-associated pneumonia be associated with reduced antibiotic usage in the ICU? Brun-Buisson C. **New Horiz** 1996 Aug;4(3):345–52 (58 ref.)

Neonatal airway colonization with gram-negative bacilli: association with severity of bronchopulmonary dysplasia. Cordero L, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):18–23

Conditional evaluation of broncho-alveolar lavage in mechanically ventilated patients with suspected unilateral lobar pneumonia. Prekates A, et al. **S Afr Med J** 1997 May; 87(5 Suppl):643–8

New etiopathogenic concepts of ventilator-associated pneumonia. Cassiere HA, et al. **Semin Respir Infect** 1996 Mar;11(1):13–23 (55 ref.)

Nosocomial pneumonia in mechanically ventilated adult patients: epidemiology and prevention in 1996. Craven DE, et al. **Semin Respir Infect** 1996 Mar;11(1):32–53 (188 ref.)

Microbial causes of ventilator-associated pneumonia. Rello J, et al. **Semin Respir Infect** 1996 Mar;11(1):24–31 (37 ref.)

Histology and microbiology of ventilator-associated pneumonias. Rouby JJ. **Semin Respir Infect** 1996 Mar; 11(1):54–61 (20 ref.)

Neurological complications of severe illness and prolonged mechanical ventilation. Wiles CM. **Thorax** 1996 Aug;51 Suppl 2:S40–4 (27 ref.)

Two cases of pneumothorax during mechanical ventilation in Vietnamese potbellied pigs. Lukasik VM, et al. **Vet Surg** 1996 Jul–Aug;25(4):356–60

Tension pneumoperitoneum. Chan SY, et al. **West J Med** 1996 Jul–Aug;165(1–2):61–4 (33 ref.)

[Permissive hypercapnia. From choice to unavoidable decision [editorial]] Perret C, et al. **Presse Med** 1996 Oct 19;25(31):1415–6 (Eng. Abstr.) **(Fre)**

[Prevention of acquired pneumonia during artificial ventilation (excluding the use of anti-infectious agents)] Fagon JY, et al. **Rev Mal Respir** 1997 Jan;14(1):13–9 (43 ref.) (Eng. Abstr.) **(Fre)**

[Ipsilateral pneumothorax in one-lung respiration. A rare, recently diagnosed and atypical complication of a double lumen tube] Stühmeier KD, et al. **Anaesthesist** 1997 Jan; 46(1):43–5 (Eng. Abstr.) **(Ger)**

[Pathophysiology of hypercapnia] Pakulski C, et al. **Przegl Lek** 1997;54(3):185–8 (23 ref.) (Eng. Abstr.) **(Pol)**

[Prophylaxis and treatment of aspiration syndrome and complications of artificial lung ventilation with endotracheal laser therapy] Chesnov VS, et al. **Anesteziol Reanimatol** 1996 Jul–Aug;(4):78–9 (3 ref.) **(Rus)**

ECONOMICS

Home ventilation of a child with motor and sensory neuropathy. Central funding and a central resource providing information are needed [letter; comment] Barker I. **BMJ** 1996 Oct 12;313(7062):940. Comment on: BMJ 1996 Jul 20;313(7050):153–4; discussion 154–5.

Home ventilation of a child with motor and sensory neuropathy. Life does have a price, and the rest of us have to pay it [letter; comment] Hadden FM. **BMJ** 1996 Oct 12;313(7062):940. Comment on: BMJ 1996 Jul 20;313(7050):153–4; discussion 154–5.

Human and financial costs of noninvasive mechanical ventilation in patients affected by COPD and acute respiratory failure. Nava S, et al. **Chest** 1997 Jun; 111(6):1631–8

Economic value of caregiver effort in maintaining long-term ventilator-assisted individuals at home. Sevick MA, et al. **Heart Lung** 1997 Mar–Apr;26(2):148–57

The cost of ventilator-dependent spinal cord injuries-patients in the hospital and at home. Bötel U, et al. **Spinal Cord** 1997 Jan;35(1):40–2

HISTORY

[Reconstruction of an ancient Egytian mouth-opening device. As early as 5000 years ago artificial respiration was basically possible] Ocklitz A. **Anaesthesist** 1997 Jul; 46(7):599–603 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

A comparison of the laryngeal mask and tracheal tube for controlled ventilation. Voyagis GS, et al. **Acta Anaesthesiol Belg** 1996;47(2):81–4

Cost analysis and clinical impact of weekly ventilator circuit changes in patients in intensive care unit. Kotilainen HR,

et al. **Am J Infect Control** 1997 Apr;25(2):117–20

Mechanical ventilation with or without daily changes of in-line suction catheters. Kollef MH, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):466–72

Emergency ventilation in a child using the suction port of an Ayre's T-piece [letter] Denton R, et al. **Anaesth Intensive Care** 1996 Aug;24(4):511–2

Anaesthetic machine and breathing system contamination and the efficacy of bacterial/viral filters. Hogarth I. **Anaesth Intensive Care** 1996 Apr;24(2):154–63 (74 ref.)

A ventilation-exchange bougie for fibreoptic intubations with the laryngeal mask airway. Atherton DP, et al. **Anaesthesia** 1996 Dec;51(12):1123–6

Modification to the ventilation-exchange bougie [letter] Atherton DP, et al. **Anaesthesia** 1997 Jun;52(6):611–2

A new critical incident monitor for use with the paediatric T-piece. In vitro evaluation and clinical experience with the Magtrak Infanta Electronic Respirometer [see comments] Hatch DJ, et al. **Anaesthesia** 1996 Sep; 51(9):839–42. Comment in: Anaesthesia 1997 Feb;52(2):185.

Independent placement of a bronchial blocker for single-lung ventilation: an alternative method for the difficult airway. Harvey SC, et al. **Anesth Analg** 1996 Dec;83(6):1330–1

Applying standardized electromagnetic compatibility testing methods for evaluating radiofrequency interference with ventilators. Casamento JP, et al. **Biomed Instrum Technol** 1996 Sep-Oct;30(5):418–25

Correlation between simple clinical parameters and the in vitro humidification characteristics of filter heat and moisture exchangers. Groupe de Travail sur les Respirateurs [see comments] Beydon L, et al. **Chest** 1997 Sep;112(3):739–44. Comment in: Chest 1997 Sep;112(3):581.

Flow-proportional administration of nitric oxide with a new delivery system: inspiratory nitric oxide concentration fluctuation during different flow conditions. Sydow M, et al. **Chest** 1997 Aug;112(2):496–504

Unloadiing of the work of breathing by proportional assist ventilation in a lung model. Bigatello LM, et al. **Crit Care Med** 1997 Feb;25(2):267–72

Experimental study of double-lumen, two-stage endotracheal tube during conventional mechanical ventilation in rabbits. Chen XN, et al. **Crit Care Med** 1997 Mar;25(3):492–5

Tracheal gas insufflation during pressure-control ventilation: effect of using a pressure relief valve. Gowski DT, et al. **Crit Care Med** 1997 Jan;25(1):145–52

Variation of nitric oxide concentration during inspiration. Sydow M, et al. **Crit Care Med** 1997 Feb;25(2):365–71

Comparison of jet and ultrasonic nebulizer pulmonary aerosol deposition during mechanical ventilation. Harvey CJ, et al. **Eur Respir J** 1997 Apr;10(4):905–9

Anesthesia ventilators with descending bellows: the need for appropriate monitoring. **Health Devices** 1996 Oct; 25(10):391–3

A versatile mechanical ventilator (DIGIT) with high flow stability and a programmable inspiratory phase flow pattern. Grianti F, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1062–72

Building intelligent alarm systems by combining mathematical models and inductive machine learning techniques Part 2--sensitivity analysis. Müller B, et al. **Int J Biomed Comput** 1996 Aug;42(3):165–79

Intracorporeal gas exchange: current status and future development [editorial] Bidani A, et al. **Intensive Care Med** 1996 Feb;22(2):91–3

One-lung ventilation in a patient with a fresh tracheostomy using the tracheostomy tube and a Univent endobronchial blocker [letter] Dhamee MS. **J Cardiothorac Vasc Anesth** 1997 Feb;11(1):124–5

Evaluation of a simple technique for rapid access to left main bronchus. Tripathi M, et al. **J Indian Med Assoc** 1996 Dec; 94(12):447–8

Complications of endotracheal intubation in mechanically ventilated patients in a general intensive care unit. Khan FH, et al. **JPMA J Pak Med Assoc** 1996 Sep;46(9):195–8

A numerical model of an intensive care ventilator-humidifier system. Drew T, et al. **Med Eng Phys** 1996 Apr; 18(3):251–61

When is liquid oxygen really needed? Donner CF, et al. **Monaldi Arch Chest Dis** 1996 Feb;51(1):72–3

Comparison of total resistive work of breathing in two generations of ventilators in an animal model. Heulitt MJ, et al. **Pediatr Pulmonol** 1996 Jul;22(1):58–66

Comparison of face mask, head hood, and canopy for breath sampling in flow-through indirect calorimetry to measure oxygen consumption and carbon dioxide production of preterm infants < 1500 grams. Bauer K, et al. **Pediatr Res** 1997 Jan;41(1):139–44

The Humphrey ADE block [letter; comment] Milner Q. **Trop Doct** 1997 Jul;27(3):190–1. Comment on: Trop Doct 1995;25 Suppl 1:34–9.

[Is Ambu ventilation of newborn infants a simple question of finger-touch?] Ganga-Zandzou PS, et al. **Arch Pediatr** 1996 Dec;3(12):1270–2 (Eng. Abstr.) **(Fre)**

[Comparative study of the efficiency of bacterial filters in long-term mechanical ventilation. Remarks on the work of H. J. Nielsen et al. Anaesthesist (1996) 34:814–818 (letter; comment)] Lacour M, et al. **Anaesthesist** 1997 Jun; 46(6):568–9. Comment on: Anaesthesist 1996 Sep;45(9):814–8. **(Ger)**

[Concepts of noninvasive ventilation] Becker HF, et al. **Internist (Berl)** 1996 May;37(5):500–10 (82 ref.) **(Ger)**

[Simultaneous measurements of end-expiratory and transcutaneous carbon dioxide partial pressure in ventilated premature and newborn infants] Arsowa S, et al. **Klin Padiatr** 1997 Mar-Apr;209(2):47–53 (Eng. Abstr.) **(Ger)**

[Non-invasive ventilation in acute respiratory insufficiency] Karg O, et al. **Pneumologie** 1996 Nov;50(11):759–63 (31 ref.) (Eng. Abstr.) **(Ger)**

[Home and Long-Term Ventilation Study Group: guidelines for equipment needed for home ventilation. Home and Long-Term Ventilation Study Group] Laier-Groeneveld G. **Pneumologie** 1996 Aug;50(8):532–4 **(Ger)**

[Proportional assisted ventilation--advantages and limits of a new ventilation concept] Stahl CA, et al. **Pneumologie** 1997 Mar;51(3):264–9 (7 ref.) **(Ger)**

[Spiral CT and 3-D reconstruction of the tracheobronchial tree for the selection of the proper double-lumen tubes before individual lung ventilation] Vogel N, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Feb;166(2):159–61 (Eng. Abstr.) **(Ger)**

[Mechanical ventilation with laryngeal mask in anesthesia. Personal experience] D'Apote AL. **Minerva Anestesiol** 1995 Jul-Aug;61(7–8):313–8 (Eng. Abstr.) **(Ita)**

[Assisted ventilation: experimental evaluation in vitro] Elena A, et al. **Minerva Anestesiol** 1995 Sep;61(9):359–65 (Eng. Abstr.) **(Ita)**

[Mouth mask method for fiberoptic tracheal intubation in difficult intubations] Arai T, et al. **Masui** 1996 Feb; 45(2):244–8 (Eng. Abstr.) **(Jpn)**

[A diaphragmatic pacemaker in the treatment of ventilatory failure] Ponce P, et al. **Acta Med Port** 1995 Nov; 8(11):639–42 (10 ref.) (Eng. Abstr.) **(Por)**

[Assisted ventilation using a nasal mask in patients hospitalized in a pneumology ward with decompensation due to chronic airflow obstruction [letter] Barbé F, et al. **Arch Bronconeumol** 1996 Aug-Sep;32(7):373–4 **(Spa)**

METHODS

Effects of three techniques of lung management on pulmonary function during cardiopulmonary bypass. Cogliati AA, et al. **Acta Anaesthesiol Belg** 1996;47(2):73–80

A comparison of pressure- and volume-controlled ventilation at different inspiratory to expiratory ratios. Ludwigs U, et al. **Acta Anaesthesiol Scand** 1997 Jan;41(1 Pt 1):71–7

The combination of external high-frequency oscillation and pressure support ventilation in acute respiratory failure. Takeda S, et al. **Acta Anaesthesiol Scand** 1997 Jun; 41(6):670–4

Partial liquid ventilation (PLV) in acute respiratory failure. Quintel M, et al. **Acta Anaesthesiol Scand Suppl** 1996; 109:73–4

Comparison of body surface and airway triggered ventilation in extremely premature infants. Laubscher B, et al. **Acta Paediatr** 1997 Jan;86(1):102–4

Assessment of ventilation inhomogeneity and gas exchange with volume controlled ventilation and pressure regulated volume controlled ventilation on pigs with surfactant depleted lungs. Kesecioğlu J, et al. **Adv Exp Med Biol** 1996; 388:539–44

Effects of different modes of ventilation on right ventricular function in patients with ARDS. Köprülü G, et al. **Adv Exp Med Biol** 1996;388:637–42

Negative slope of exhaled CO2 profile: implications for ventilation heterogeneity during partial liquid ventilation. Mates EA, et al. **Adv Exp Med Biol** 1996;388:585–97

Estimation of occlusion pressure during assisted ventilation in patients with intrinsic PEEP. Conti G, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):907–12

Efficacy of combined inspiratory intercostal and expiratory muscle pacing to maintain artificial ventilation. DiMarco AF, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):122–6

Chest X-ray changes in air space disease are associated with parameters of mechanical ventilation in ICU patients. Ely EW, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1543–50

Patient-triggered ventilation in neonates: comparison of a flow-and an impedance-triggered system. Hummler HD, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1049–54

Comparison of assisted ventilator modes on triggering, patient effort, and dyspnea. Leung P, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1940–8

Inverse ratio ventilation (I/E = 2/1) in acute respiratory distress syndrome: a six-hour controlled study. Mercat A, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1637–42

Proportional assist ventilation in acute respiratory failure: effects on breathing pattern and inspiratory effort. Navalesi P, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1330–8

Pressure-volume curves in acute respiratory failure: automated low flow inflation versus occlusion. Servillo G, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1629–36

The determinants of respiratory rate during mechanical ventilation. Tobert DG, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):485–92

Emergency transtracheal ventilation [letter; comment] Down MP. **Anaesthesia** 1997 Jan;52(1):91–2. Comment on: Anaesthesia 1996 Aug;51(8):764–8.

Baratrauma during percutaneous dilatational tracheostomy [letter] Sun KO. **Anaesthesia** 1996 Nov;51(11):1076–7

Ventilation of small children with adult circuits [letter; comment] Hall JK. **Anesth Analg** 1996 Oct;83(4):889–90. Comment on: Anesth Analg 1996 Apr;82(4):719–23.

Auto-PEEP may improve oxygenation during one-lung ventilation [letter; comment] Myles PS. **Anesth Analg** 1996 Nov;83(5):1131. Comment on: Anesth Analg 1996 May;82(5):1007–10.

Inaccuracies of nitric oxide delivery systems during adult mechanical ventilation. Imanaka H, et al. **Anesthesiology** 1997 Mar;86(3):676–88

Refractory asthma, Part 2: Airway interventions and management. Jagoda A, et al. **Ann Emerg Med** 1997 Feb; 29(2):275–81 (59 ref.)

Re-engineering ventilatory support to decrease days and improve resource utilization. Kirton OC, et al. **Ann Surg** 1996 Sep;224(3):396–402; discussion 402–4

Advances in the management of respiratory failure. Liquid ventilation in the setting of respiratory failure. Hirschl RB. **ASAIO J** 1996 May-Jun;42(3):209–10 (22 ref.)

Effects of positive and negative pressure breathing on muscle sympathetic nerve activity in humans. Ikeda T, et al. **Aviat Space Environ Med** 1997 Jun;68(6):494–8

Partial liquid ventilation--turning back a PAGE on evolution [editorial] Kelly KP. **Br J Anaesth** 1997 Jan;78(1):1–2

Fuzzy logic control of mechanical ventilation during anaesthesia. Schäublin J, et al. **Br J Anaesth** 1996 Nov; 77(5):636–41

Non-invasive ventilation in chronic obstructive pulmonary disease. Elliott MW. **Br J Hosp Med** 1997 Feb 5–18; 57(3):83–6

Non-invasive ventilation in neuromuscular disease. Simonds AK. **Br J Hosp Med** 1997 Feb 5–18;57(3):87–90

Controlled mechanical hypoventilation in a paediatric burn patient as treatment of acute respiratory distress syndrome. Trop M, et al. **Burns** 1997 Mar;23(2):166–9

Jet ventilation in management of the difficult airway [letter] Gottschalk A. **Can J Anaesth** 1997 Mar;44(3):337

Treatment of acute respiratory failure by prolonged non-invasive ventilation in a child. Marino P, et al. **Can J Anaesth** 1997 Jul;44(7):727–31

Management of bronchopleural fistula with a variable-resistance valve and a single ventilator. Carvalho P, et al. **Chest** 1997 May;111(5):1452–4

Comparative physiologic effects of noninvasive assist-control and pressure support ventilation in acute hypercapnic respiratory failure [see comments] Girault C, et al. **Chest** 1997 Jun;111(6):1639–48. Comment in: Chest 1997 Jun;111(6):1482–3.

Pressure vs flow triggering during pressure support ventilation. Goulet R, et al. **Chest** 1997 Jun;111(6):1649–53

Pressure-controlled inverse ratio ventilation [letter; comment] Guery BP, et al. **Chest** 1997 Jul;112(1):290–1. Comment on: Chest 1996 Aug;110(2):486–93.

Safety of combined heat and moisture exchanger filters in long-term mechanical ventilation. Hurni JM, et al. **Chest** 1997 Mar;111(3):686–91

Combination of tracheal gas insufflation and airway pressure release ventilation. Okamoto K, et al. **Chest** 1997 May; 111(5):1366–74

Prone postioning and low-volume pressure-limited ventilation improve survival in patients with severe ARDS. Stocker R, et al. **Chest** 1997 Apr;111(4):1008–17

Comparison of pressure support ventilation and assist-control ventilation in the treatment of respiratory failure. Tejeda M, et al. **Chest** 1997 May;111(5):1322–5

New modes of mechanical ventilation. MacIntyre NR. **Clin Chest Med** 1996 Sep;17(3):411–21 (63 ref.)

Pressure-controlled and volume-cycled mechanical ventilation. McKibben AW, et al. **Clin Chest Med** 1996 Sep;17(3):395–410 (78 ref.)

Independent lung ventilation. Ost D, et al. **Clin Chest Med** 1996 Sep;17(3):591–601 (57 ref.)

Hyperventilation in traumatic brain injury: friend or foe? [editorial; comment] Chesnut RM. **Crit Care Med** 1997 Aug;25(8):1275–8. Comment on: Crit Care Med 1997 Aug;25(8):1402–9.

Influence of inspired oxygen concentration on deadspace, respiratory drive, and PaCO2 in intubated patients with chronic obstructive pulmonary disease [see comments] Crossley DJ, et al. **Crit Care Med** 1997 Sep;25(9):1522–6 . Comment in: Crit Care Med 1997 Sep;25(9):1450–1.

Partial liquid ventilation enhances surfactant phospholipid synthesis [letter; comment] Godinez RI, et al. **Crit Care Med** 1997 Jul;25(7):1255. Comment on: Crit Care Med 1996 Jul;24(7):1252–6.

Tracheal gas insufflation during pressure-control ventilation: effect of using a pressure relief valve. Gowski DT, et al. **Crit Care Med** 1997 Jan;25(1):145–52

Randomized, prospective trial of bilevel versus continuous positive airway pressure in acute pulmonary edema. Mehta S, et al. **Crit Care Med** 1997 Apr;25(4):620–8

Volume-controlled versus biphasic positive airway pressure [letter] Putensen C. **Crit Care Med** 1997 Jan;25(1):203–5

Behavior of nitric oxide infused at constant flow rates directly into a breathing circuit during controlled mechanical ventilation [see comments] Skimming JW, et al. **Crit Care Med** 1997 Aug;25(8):1410–6. Comment in: Crit Care Med 1997 Aug;25(8):1273–4.

Effect of hyperventilation on regional cerebral blood flow in head-injured children [see comments] Skippen P, et al. **Crit Care Med** 1997 Aug;25(8):1402–9. Comment in: Crit Care Med 1997 Aug;25(8):1275–8.

Comparison of pressure- and flow-triggered pressure-support ventilation on weaning parameters in

patients recovering from acute respiratory failure. Tütüncü AS, et al. **Crit Care Med** 1997 May;25(5):756–60

Nitric oxide infusion during controlled mechanical ventilation [editorial; comment] Valley RD, et al. **Crit Care Med** 1997 Aug;25(8):1273–4. Comment on: Crit Care Med 1997 Aug;25(8):1410–6.

Reduced airway resistance and work of breathing during mechanical ventilation with an ultra–thin, two–stage polyurethane endotracheal tube (the Kolobow tube). Velarde CA, et al. **Crit Care Med** 1997 Feb;25(2):276–9

Increased artificial deadspace for deliberate hypercapnia [editorial; comment] Venkataraman S. **Crit Care Med** 1997 Jul;25(7):1102–3. Comment on: Crit Care Med 1997 Jul;25(7):1175–8.

Intratracheal pressure monitoring during synchronized intermittent mandatory ventilation and pressure controlled–inverse ratio ventilation. Warters RD, et al. **Crit Care Med** 1997 Feb;25(2):227–30

Home oxygen and ventilation therapies in pediatric patients. Voter KZ, et al. **Curr Opin Pediatr** 1996 Jun;8(3):221–5 (30 ref.)

Use of epidural anesthesia and spontaneous ventilation during transabdominal colon and rectal procedures in selected high–risk patient groups. Kolker AR, et al. **Dis Colon Rectum** 1997 Mar;40(3):339–43

Liquid ventilation: an alternative ventilation strategy for management of neonatal respiratory distress. Shaffer TH, et al. **Eur J Pediatr** 1996 Aug;155 Suppl 2:S30–4 (48 ref.)

A comparison of intratracheal and intravenous administration of gentamicin during liquid ventilation. Zelinka MA, et al. **Eur J Pediatr** 1997 May;156(5):401–4

Controlled expiration in mechanically–ventilated patients with chronic obstructive pulmonary disease (COPD). Aerts JG, et al. **Eur Respir J** 1997 Mar;10(3):550–6

Noninvasive mechanical ventilation in acute respiratory failure. Ambrosino N. **Eur Respir J** 1996 Apr;9(4):795–807 (116 ref.)

Negative pressure ventilation in the treatment of acute respiratory failure: an old noninvasive technique reconsidered. Corrado A, et al. **Eur Respir J** 1996 Jul; 9(7):1531–44 (113 ref.)

Expiratory flow limitation during mechanical ventilation detected by the forced oscillation method. Vassiliou M, et al. **Eur Respir J** 1996 Apr;9(4):779–86

Conservative management of persistent pulmonary hypertension [letter] Daga SR, et al. **Indian Pediatr** 1996 May;33(5):432–4

Neonatal ventilation in a public sector hospital. Shukla R, et al. **Indian Pediatr** 1996 Nov;33(11):944–6

Conventional modes of mechanical ventilation. Botz GH, et al. **Int Anesthesiol Clin** 1997 Winter;35(1):19–27 (25 ref.)

Noninvasive ventilation. Murray MJ, et al. **Int Anesthesiol Clin** 1997 Winter;35(1):45–64 (46 ref.)

Tidal volume in acute respiratory distress syndrome [letter; comment] Blanch L, et al. **Intensive Care Med** 1996 Dec; 22(12):1467–8. Comment on: Intensive Care Med 1996 Mar;22(3):192–8.

The effects of inverse ratio ventilation on intracranial pressure: a preliminary report. Clarke JP. **Intensive Care Med** 1997 Jan;23(1):106–9

Breathing pattern and additional work of breathing in spontaneously breathing patients with different ventilatory demands during inspiratory pressure support and automatic tube compensation. Fabry B, et al. **Intensive Care Med** 1997 May;23(5):545–52

Clinical evaluation of diminished early expiratory flow (DEEF) ventilation in mechanically ventilated COPD patients. Gültuna I, et al. **Intensive Care Med** 1996 Jun; 22(6):539–45

Theoretical interactions between ventilator settings and proximal deadspace ventilation during tracheal gas insufflation. Hotchkiss JR Jr, et al. **Intensive Care Med** 1996 Oct;22(10):1112–9

Combining partial liquid ventilation with nitric oxide to improve gas exchange in acute lung injury [see comments] Houmes RJ, et al. **Intensive Care Med** 1997 Feb;23(2):163–9 . Comment in: Intensive Care Med 1997 Feb;23(2):139–40.

Unfavorable mechanical effects of heat and moisture exchangers in ventilated patients. Iotti GA, et al. **Intensive Care Med** 1997 Apr;23(4):399–405

Nitric oxide in partial liquid ventilation: better matching ventilation to perfusion in ARDS? [editorial; comment] Kaisers U, et al. **Intensive Care Med** 1997 Feb;23(2):139–40 . Comment on: Intensive Care Med 1997 Feb;23(2):163–9.

The hemodynamic consequences of mechanical ventilation: an evolving story. Pinsky MR. **Intensive Care Med** 1997 May;23(5):493–503 (93 ref.)

Lower respiratory rates without decreases in oxygen consumption during neonatal synchronized intermittent mandatory ventilation. Smith KM, et al. **Intensive Care Med** 1997 Apr;23(4):463–8

The effect of a closed system suctioning on airway pressure in an experimental mode [letter] Van Hooser T, et al. **Intensive Care Med** 1996 Dec;22(12):1465–6

Cross–talk between the lungs in piglets. Versprille A, et al. **Intensive Care Med** 1996 Oct;22(10):1082–9

Haemodynamic and respiratory conditions during alternating and synchronous ventilation of both lungs. Versprille A, et al. **Intensive Care Med** 1996 Aug;22(8):813–7

Delivery and monitoring of inhaled nitric oxide. Young JD, et al. **Intensive Care Med** 1996 Jan;22(1):77–86 (61 ref.)

The mechanism of respiratory rhythm generation during constant flow assisted mechanical ventilation in the decerebrated dog. Kondo T, et al. **Intern Med** 1997 Aug; 36(8):543–9

Case 1—1997. Diagnosis and management of dynamic hyperinflation during lung transplantation [clinical conference] Myles PS, et al. **J Cardiothorac Vasc Anesth** 1997 Feb;11(1):100–4

Near–sitting position and two–lung ventilation for endoscopic transthoracic sympathectomy. Rozenberg B, et al. **J Cardiothorac Vasc Anesth** 1996 Feb;10(2):210–2

Partial liquid ventilation provides effective gas exchange in a large animal model. Overbeck MC, et al. **J Crit Care** 1996 Mar;11(1):37–42

Synchronized ventilation in low birth weight infants [letter; comment] Hummler H. **J Pediatr** 1996 Dec;129(6):945–6. Comment on: J Pediatr 1996 Apr;128(4):453–63.

Randomized multicenter trial comparing synchronized and conventional intermittent mandatory ventilation in neonates [letter; comment] Shekhawat P, et al. **J Pediatr** 1996 Dec;129(6):948–50. Comment on: J Pediatr 1996 Apr;128(4):453–63.

Partial liquid ventilation (PLV) and lung injury: is PLV able to modify pulmonary vascular resistance? Aly H, et al. **J Pediatr Surg** 1997 Feb;32(2):197–201; discussion 201–2

The use of perfluorocarbon–associated gas exchange to improve ventilation and decrease mortality after inhalation injury in a neonatal swine model. Fitzpatrick JC, et al. **J Pediatr Surg** 1997 Feb;32(2):192–6

The effect of pre–ECLS ventilation time on survival and respiratory morbidity in the neonatal population. Lewis DA, et al. **J Pediatr Surg** 1996 Aug;31(8):1110–4; discussion 1114–5

Partial liquid ventilation in newborn patients with congenital diaphragmatic hernia. Pranikoff T, et al. **J Pediatr Surg** 1996 May;31(5):613–8

Partial liquid ventilation and nitric oxide in congenital diaphragmatic hernia. Wilcox DT, et al. **J Pediatr Surg** 1997 Aug;32(8):1211–5

Technique for one–lung ventilation during video–assisted thoracoscopic surgical interruption of patent ductus arteriosus in children [letter] Muralidhar K, et al. **J Thorac Cardiovasc Surg** 1997 Aug;114(2):300

Comparison of volume control and pressure control ventilation: is flow waveform the difference? Davis K Jr, et al. **J Trauma** 1996 Nov;41(5):808–14

Noninvasive mechanical ventilation in acute on chronic respiratory failure: determinants of success and failure. Ambrosino N. **Monaldi Arch Chest Dis** 1997 Feb;52(1):73–5 (26 ref.)

Noninvasive pressure support ventilation: physiological and clinical results in patients with COPD and acute respiratory failure. Brochard L. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):64–7 (20 ref.)

Central alveolar hypoventilation (Ondine's curse) treated with negative pressure ventilation. Cirignotta F, et al. **Monaldi Arch Chest Dis** 1996 Feb;51(1):22–6

Patient ventilator interfaces: practical aspects in the chronic situation. Clini E. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):76–9 (27 ref.)

Negative pressure ventilation in COPD [editorial] Goldstein RS. **Monaldi Arch Chest Dis** 1995 Dec;50(6):421–2

Effects of the iron lung on respiratory function in chronic hypercapnic COPD patients. Goti P, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):427–32

Noninvasive mechanical ventilation and acute respiratory failure: indications and limitations. Muir JF, et al. **Monaldi Arch Chest Dis** 1997 Feb;52(1):56–9 (20 ref.)

Update in mechanical ventilation. Tobin MJ. **Monaldi Arch Chest Dis** 1996 Dec;51(6):510–3 (19 ref.)

Where and how must we perform noninvasive mechanical ventilation? Vitacca M. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):80–2 (17 ref.)

Perflubron in infants with severe respiratory distress syndrome [letter; comment] Salon JE. **N Engl J Med** 1997 Feb 27;336(9):660. Comment on: N Engl J Med 1996 Sep 12;335(11):761–7.

Jet ventilation via the suction port during fibreoptic bronchoscopy in a child [letter] Baraka A. **Paediatr Anaesth** 1997;7(1):87–8

Comparison of perfluorochemical fluids used for liquid ventilation: effect of endotracheal tube flow resistance. Fox WW, et al. **Pediatr Pulmonol** 1997 Jun;23(6):449–56

On pressure–controlled ventilation in severe asthma [letter] López–Herce J, et al. **Pediatr Pulmonol** 1996 Jun; 21(6):401–3

Effect of high–frequency oscillatory ventilation on intracranial pressure in a child with herpes encephalitis and acute respiratory distress syndrome. Reyes G, et al. **Pediatr Pulmonol** 1997 Aug;24(2):115–8

Liquid ventilation in premature lambs: uptake, biodistribution and elimination of perfluorodecalin liquid. Shaffer TH, et al. **Reprod Fertil Dev** 1996;8(3):409–16

Halothane administration during liquid ventilation. Kimless–Garber DB, et al. **Respir Med** 1997 May; 91(5):255–62

A comparison of three methods of bag valve mask ventilation. Wheatley S, et al. **Resuscitation** 1997 Jan; 33(3):207–10

Perfluorocarbon protects lung epithelial cells from neutrophil–mediated injury in an in vitro model of liquid ventilation therapy. Varani J, et al. **Shock** 1996 Nov; 6(5):339–44

Ventilator management of infants before extracorporeal membrane oxygenation. Edwards G, et al. **South Med J** 1997 Jun;90(6):627–32

Techniques in mechanical ventilation: principles and practice. Shneerson JM. **Thorax** 1996 Jul;51(7):756–61 (23 ref.)

Non–invasive ventilation for exacerbations of respiratory failure in chronic obstructive pulmonary disease. Wedzicha JA. **Thorax** 1996 Aug;51 Suppl 2:S35–9 (25 ref.)

[Ventilation of patients in prone position in the acute respiratory distress syndrome (letter; comment)] Pöll JS. **Ned Tijdschr Geneeskd** 1997 Jan 25;141(4):216. Comment on: Ned Tijdschr Geneeskd 1996 Nov 9;140(45):2213–6. **(Dut)**

[Artificial ventilation in acute respiratory distress syndrome in adults. Towards an individual optimization] Joly LM, et al. **Presse Med** 1996 Oct 19;25(31):1473–8 (24 ref.) (Eng. Abstr.) **(Fre)**

[Role of non–invasive ventilation in internal medicine] Weber T. **Rev Med Liege** 1996 May;51(5):355–8 (21 ref.) **(Fre)**

[Assisted ventilation in chronic neuromuscular diseases. The Vincre Group] Kohler A, et al. **Rev Med Suisse Romande** 1997 Jun;117(6):479–84 (16 ref.) **(Fre)**

[Ventilation modes and strategies in intensive care medicine] Rathgeber J. **Anaesthesiol Reanim** 1997;22(1):4–14 (63 ref.) (Eng. Abstr.) **(Ger)**

[Comparative study of the efficiency of bacterial filters in long–term mechanical ventilation (comment) (see comments)] Nielsen HJ, et al. **Anaesthesist** 1996 Sep; 45(9):814–8 (Eng. Abstr.). Comment on: Anaesthesist 1996 Sep;45(9):814–8. Comment in: Anaesthesist 1997 Jun;46(6):568–9. **(Ger)**

[Adaptive lung ventilation (AVL). Evaluation of new closed loop regulated respiration algorithm for operation in the hyperextended lateral position] Weiler N, et al. **Anaesthesist** 1996 Oct;45(10):950–6 (Eng. Abstr.) **(Ger)**

[Current concepts and techniques in home ventilation therapy] Raschke F, et al. **Pneumologie** 1997 Apr;51 Suppl 2:450–5 (18 ref.) (Eng. Abstr.) **(Ger)**

[Noninvasive ventilation in intensive care] Jolliet P, et al. **Schweiz Med Wochenschr** 1997 Jan 25;127(4):107–21 (85 ref.) (Eng. Abstr.) **(Ger)**

[Two cases of severe cytomegalovirus pneumonitis treated with permissive hypercapnia] Kameue T, et al. **Masui** 1996 Aug;45(8):1018–21 (Eng. Abstr.) **(Jpn)**

[Hyperbaric medicine and anesthesiology] Manubens E, et al. **Rev Esp Anestesiol Reanim** 1996 Nov;43(9):321–6 (14 ref.) **(Spa)**

[Evaluation and management of the difficult airway (see comments)] Rodrigo MP, et al. **Rev Esp Anestesiol Reanim** 1996 Jan;43(1):34–41 (25 ref.) . Comment in: Rev Esp Anestesiol Reanim 1997 Apr;44(4):167–9. **(Spa)**

[Extracorporeal respiratory assistance. Experience in the treatment of severe acute respiratory failure] Castillo L, et al. **Rev Med Chil** 1996 Jan;124(1):45–56 (Eng. Abstr.) **(Spa)**

MORTALITY

Outcome of elderly patients requiring ventilatory support [letter; comment] Dardaine V, et al. **Age Ageing** 1997 May; 26(3):238. Comment on: Age Ageing 1996 Sep;25(5):353–6.

Mortality is direotly related to the duration of mechanical ventilation before the initiation of extracorporeal life support for severe respiratory failure. Pranikoff T, et al. **Crit Care Med** 1997 Jan;25(1):28–32

NURSING

Outcomes of long–term ventilator patients: a descriptive study. Douglas SL, et al. **Am J Crit Care** 1997 Mar; 6(2):99–105

Interactions between nurses and patients on ventilators. Hall DS. **Am J Crit Care** 1996 Jul;5(4):293–7

How to guide ventilator–dependent patients from hospital to home. Kanacki L. **Am J Nurs** 1997 Feb;97(2):37–9

Human and financial costs of noninvasive mechanical ventilation in patients affected by COPD and acute respiratory failure. Nava S, et al. **Chest** 1997 Jun; 111(6):1631–8

Patient–focused care for the ventilator–dependent patient. Lough ME. **Prog Cardiovasc Nurs** 1997 Spring;12(2):41–2

PSYCHOLOGY

How to guide ventilator–dependent patients from hospital to home. Kanacki L. **Am J Nurs** 1997 Feb;97(2):37–9

Qualitative analysis of patients' work during mechanical ventilation and weaning. Logan J, et al. **Heart Lung** 1997 Mar–Apr;26(2):140–7

The influence of physician explanations on patient preferences about future health–care states. Mazur DJ, et al. **Med Decis Making** 1997 Jan–Mar;17(1):56–60

Evaluation of the psychological status of ventilatory–supported patients with ALS/MND. McDonald ER, et al. **Palliat Med** 1996 Jan;10(1):35–41

[Living and experiencing with compensated respiratory insufficiency. From ventilator dependence under water] Brandt I. **Med Klin** 1997 Apr 28;92 Suppl 1:133–6 **(Ger)**

[Ventilation—and what then? Report of experiences from the viewpoint of the German Society of Muscular Diseases e.V. DGM] Klier H. **Med Klin** 1997 Apr 28;92 Suppl

1:137-9 (Eng. Abstr.) **(Ger)**
[Managing life and death wishes of invasively ventilated amyotrophic lateral sclerosis patients] Winterholler M, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:90-2 (Eng. Abstr.) **(Ger)**

STANDARDS

Saline-lavaged lung injury and pressure support ventilation [letter; comment] Guery BP, et al. **Intensive Care Med** 1997 May;23(5):600-1. Comment on: Intensive Care Med 1996 Dec;22(12):1445-52.
[Guidelines for home mechanical ventilation. Swiss Association for the control of Tuberculosis and Lung Diseases (ASTP). Swiss Society of Pneumology (SSP)] **Schweiz Med Wochenschr** 1996 Dec 28;126(51-52):2245-50 **(Fre)**
[Guidelines for mechanical home ventilation. SVTL (Swiss Society against Tuberculosis and Lung Diseases). SGP (Swiss Society for Pneumology)] **Schweiz Med Wochenschr** 1996 Dec 14;126(50):2191-6 **(Ger)**

STATISTICS & NUMERICAL DATA

Survey of occupancy of paediatric intensive care units by children who are dependent on ventilators. Fraser J, et al. **BMJ** 1997 Aug 9;315(7104):347-8
The Mayo Ventilator-Dependent Rehabilitation Unit: a 5-year experience. Gracey DR, et al. **Mayo Clin Proc** 1997 Jan;72(1):13-9

TRENDS

Advances in neonatal conventional ventilation. Sinha SK, et al. **Arch Dis Child Fetal Neonatal Ed** 1996 Sep; 75(2):F135-40 (25 ref.)
The need for the development of a wearable home respiratory assist device [editorial] Nosé Y. **Artif Organs** 1996 Aug; 20(8):821

UTILIZATION

Effectiveness of a continuous quality improvement program aiming to reduce unplanned extubation: a prospective study [see comments] Chiang AA, et al. **Intensive Care Med** 1996 Nov;22(11):1269-71. Comment in: Intensive Care Med 1997 Feb;23(2):143-5.
Assisted ventilation and survival of extremely low birthweight infants. Doyle LW, et al. **J Paediatr Child Health** 1996 Apr;32(2):138-42
Reducing the use of mechanical ventilation [editorial; comment] Luce JM. **N Engl J Med** 1996 Dec 19; 335(25):1916-7. Comment on: N Engl J Med 1996 Dec 19;335(25):1864-9.
Severe asthma [see comments] Lee KH, et al. **Singapore Med J** 1997 Jun;38(6):238-40, 243. Comment in: Singapore Med J 1997 Jun;38(6):235-6.
[Mechanical ventilation near large centers. The experience of a perinatal care unit] Vale P, et al. **Acta Med Port** 1997 Feb-Mar;10(2-3):181-3 (Eng. Abstr.) **(Por)**

VETERINARY

Cardiopulmonary effects of lying position in anesthetized and mechanically ventilated dogs. Bornscheuer A, et al. **J Exp Anim Sci** 1996 Aug;38(1):20-7

RESPIRATION, CELL see **CELL RESPIRATION**

RESPIRATION DISORDERS

Respiratory control disorders in infancy and childhood. Silvestri JM, et al. **Curr Opin Pediatr** 1996 Jun;8(3):216-20 (44 ref.)

BLOOD

[Study of auto-rosette formation in circulating blood] Belchenko DI. **Klin Lab Diagn** 1993 May-Jun;(3):58-62 (Eng. Abstr.) **(Rus)**
[Influence of cardiac or respiratory pathology in the gasometric evolution during laparoscopic cholecystectomy] Vila C, et al. **Rev Esp Anestesiol Reanim** 1996 Nov;43(9):310-3 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Side effects of opioids in postoperative pain treatment. Camu F. **Acta Anaesthesiol Belg** 1996;47(3):105-9 (28 ref.)
Review of trimellitic anhydride (TMA) induced respiratory response. Grammer LC, et al. **Allergy Asthma Proc** 1997 Jul-Aug;18(4):235-7 (14 ref.)
Pulmonary effects of machining fluids in guinea pigs and mice. Thorne PS, et al. **Am Ind Hyg Assoc J** 1996 Dec; 57(12):1168-72
Exposure assessment for a field investigation of the acute respiratory effects of metalworking fluids. I. Summary of findings. Woskie SR, et al. **Am Ind Hyg Assoc J** 1996 Dec; 57(12):1154-62
Exacerbation of respiratory symptoms in patients with panic disorder [letter] Bouwer CD, et al. **Am J Psychiatry** 1997 May;154(5):712-3
The airways and anaesthesia II. Pathophysiology. Burwell DR, et al. **Anaesthesia** 1996 Oct;51(10):943-54 (108 ref.)
Tachypnoea following vital capacity induction with sevoflurane [letter] Hall JE, et al. **Anaesthesia** 1996 Sep; 51(9):890
Some consequences of ozone exposure on health. Paz C. **Arch Med Res** 1997 Summer;28(2):163-70 (96 ref.)
Respiratory disorders induced by Chinese medicines on the increase [editorial; comment] Izumi T. **Intern Med** 1996 Jun;35(6):433. Comment on: Intern Med 1996 Jun;35(6):494-6.
Cardiorespiratory problems with clozapine [letter; comment] Frankenburg FR, et al. **J Clin Psychiatry** 1996 Nov; 57(11):548-9. Comment on: J Clin Psychiatry 1995 May;56(5):180-5.
Exposure to hydrogen fluoride: an experimental study in humans of concentrations of fluoride in plasma, symptoms, and lung function. Lund K, et al. **Occup Environ Med** 1997 Jan;54(1):32-7
Airway responsiveness, respiratory symptoms, and exposures to soluble oil mist in mechanical workers. Massin N, et al. **Occup Environ Med** 1996 Nov;53(11):748-52
Monitoring opioids. Mulroy MF. **Reg Anesth** 1996 Nov-Dec; 21(6 Suppl):89-93 (27 ref.)
Controlled human studies of ozone exposure. Bylin G. **Scand J Work Environ Health** 1996;22 Suppl 3:52-71 (113 ref.)
Terpene exposure and respiratory effects among sawmill workers. Eriksson KA, et al. **Scand J Work Environ Health** 1996 Jun;22(3):182-90
Respiratory depression in a child unintentionally exposed to transdermal fentanyl patch. Hardwick WE Jr, et al. **South Med J** 1997 Sep;90(9):962-4
[Iatrogenic disorders in the active respiratory systems (respiratory center and its performance] Similowski T, et al. **Rev Mal Respir** 1996;13(4):361-79 (221 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Sleep-related breathing and movement disorders in healthy elderly and demented subjects. Bader GG, et al. **Dementia** 1996 Sep-Oct;7(5):279-87
Influences of dysfunctional respiratory mechanics on orofacial pain. Hruska RJ Jr. **Dent Clin North Am** 1997 Apr;41(2):211-27 (71 ref.)
Musculoskeletal complaints and fibromyalgia in patients attending a respiratory sleep disorders clinic. Donald F, et al. **J Rheumatol** 1996 Sep;23(9):1612-6
Dysphagia with respiratory/pulmonary presentation: assessment and management. Brodsky L. **Semin Speech Lang** 1997 Feb;18(1):13-22; quiz 22-3
[Respiratory dyskinesia induced by veralipride] Marta-Moreno E, et al. **Rev Neurol** 1997 Feb;25(138):245-7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Thoracic impedance used for measuring chest wall movement in postoperative patients. Drummond GB, et al. **Br J Anaesth** 1996 Sep;77(3):327-32
A 58-year-old man with shortness of breath, ascites, and leg edema [clinical conference] Kronzon I, et al. **Circulation** 1996 Sep 15;94(6):1483-8
Should patients with sleep apnoea/hypopnoea syndrome be diagnosed and managed on the basis of home sleep studies? [see comments] Parra O, et al. **Eur Respir J** 1997 Aug; 10(8):1720-4. Comment in: Eur Respir J 1997 Aug;10(8):1699-700.
Lung function testing: methods and reference values for forced expiratory volume (FEV1) and transfer factor (TL). Cotes JE, et al. **Occup Environ Med** 1997 Jul;54(7):457-65
Noninvasive capnometry in a pediatric population with respiratory emergencies. Abramo TJ, et al. **Pediatr Emerg Care** 1996 Aug;12(4):252-4
The value of end-tidal CO2 monitoring when comparing three methods of conscious sedation for children undergoing painful procedures in the emergency department. Hart LS, et al. **Pediatr Emerg Care** 1997 Jun; 13(3):189-93
[Closing volume measurement and its clinical significance] Yoshida K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:22-6 (11 ref.) **(Jpn)**
[The respiratory symptoms of acute appendicitis] Ostrovs'kyi VP, et al. **Klin Khir** 1995;(2):48 **(Ukr)**

DRUG THERAPY

Treatment of apneustic respiratory disturbance with a serotonin-receptor agonist. Wilken B, et al. **J Pediatr** 1997 Jan;130(1):89-94
Exogenous surfactant therapy in non-respiratory distress syndrome. Greenough A. **Turk J Pediatr** 1996 Jan-Mar; 38(1):45-50 (13 ref.)

ECONOMICS

The cost of ventilator-dependent spinal cord injuries-patients in the hospital and at home. Bötel U, et al. **Spinal Cord** 1997 Jan;35(1):40-2

EPIDEMIOLOGY

The incidence of acute neonatal respiratory disorders in Padova county: an epidemiological survey. Bonafé L, et al. **Acta Paediatr** 1996 Oct;85(10):1236-40
Predictive factors for respiratory complications after tonsillectomy and adenoidectomy in children. Biavati MJ, et al. **Arch Otolaryngol Head Neck Surg** 1997 May; 123(5):517-21
Lung function in children of upper Silesian industrial zone, Poland: results of the cross-sectional study in two towns of different ambient air pollution levels. Zejda JE, et al. **Cent Eur J Public Health** 1996 Dec;4(4):252-6
Asthma and respiratory symptoms in 6-7 yr old Italian children: gender, latitude, urbanization and socioeconomic factors. SIDRIA (Italian Studies on Respiratory Disorders in Childhood and the Environment). **Eur Respir J** 1997 Aug;10(8):1780-6
Combined smoke inhalation and body surface burns injury does not necessarily imply long-term respiratory health consequences. Bourbeau J, et al. **Eur Respir J** 1996 Jul; 9(7):1470-4
Exposure to isocyanates and organic solvents, and pulmonary-function changes in workers in a polyurethane molding process [published erratum appears in J Occup Environ Med 1997 Apr;39(4):338] Akbar-Khanzadeh F, et al. **J Occup Environ Med** 1996 Dec;38(12):1205-12
Airway reactivity in welders: a controlled prospective cohort study. Beckett WS, et al. **J Occup Environ Med** 1996 Dec; 38(12):1229-38
Respiratory health of workers exposed to low levels of chromium in stainless steel production. Huvinen M, et al. **Occup Environ Med** 1996 Nov;53(11):741-7
Airway responsiveness, respiratory symptoms, and exposures to soluble oil mist in mechanical workers. Massin N, et al. **Occup Environ Med** 1996 Nov;53(11):748-52
Physician based surveillance system for occupational respiratory diseases: the experience of PROPULSE, Québec, Canada. Provencher S, et al. **Occup Environ Med** 1997 Apr;54(4):272-6
The respiratory health of goldminers [editorial] White N, et al. **S Afr Med J** 1996 Jul;86(7):793-4
Terpene exposure and respiratory effects among workers in Swedish joinery shops. Eriksson KA, et al. **Scand J Work Environ Health** 1997 Apr;23(2):114-20

ETIOLOGY

Perioperative respiratory events in smokers and nonsmokers undergoing general anaesthesia. Schwilk B, et al. **Acta Anaesthesiol Scand** 1997 Mar;41(3):348-55
Pneumocephalus and respiratory depression after accidental dural puncture during epidural analgesia--a case report. Lin HY, et al. **Acta Anaesthesiol Sin** 1997 Jun;35(2):119-23
Respiratory symptoms and spirometry in experienced coal miners: effects of both distant and recent coal mine dust exposures. Henneberger PK, et al. **Am J Ind Med** 1997 Sep;32(3):268-74
Exposure to mineral oil mist and respiratory symptoms in marine engineers. Svendsen K, et al. **Am J Ind Med** 1997 Jul;32(1):84-9
Postoperative pulmonary function after laparoscopic and open cholecystectomy. Karayiannakis AJ, et al. **Br J Anaesth** 1996 Oct;77(4):448-52
Lung development and early origins of childhood respiratory illness. Dezateux C, et al. **Br Med Bull** 1997 Jan;53(1):40-57 (74 ref.)
Prevalence of and risk factors for respiratory dyskinesia. Hayashi T, et al. **Clin Neuropharmacol** 1996 Oct;19(5):390-8
Cooking fuel smoke and respiratory symptoms among women in low-income areas in Maputo. Ellegård A. **Environ Health Perspect** 1996 Sep;104(9):980-5
Respiratory complications of bone cement insertion during total hip replacement under spinal anaesthesia. Lewis RN. **Eur J Anaesthesiol** 1997 Jan;14(1):52-4
Respiratory dysfunction and white cell activation following cardiopulmonary bypass: comparison of membrane and bubble oxygenators. Martin W, et al. **Eur J Cardiothorac Surg** 1996;10(9):774-83
Case of the month: a newborn with tachypnoea and consolidation of the right lung. Karperien A, et al. **Eur J Pediatr** 1996 Sep;155(9):827-9
Mice lacking brain-derived neurotrophic factor exhibit visceral sensory neuron losses distinct from mice lacking NT4 and display a severe developmental deficit in control of breathing. Erickson JT, et al. **J Neurosci** 1996 Sep 1; 16(17):5361-71
Pulmonary embolism is associated with the combination of isolated calf vein thrombosis and respiratory symptoms. Passman MA, et al. **J Vasc Surg** 1997 Jan;25(1):39-45
Respiratory dysfunction related to diaphragmatic shoulder pain after abdominal and pelvic laparoscopy. Di Massa A, et al. **Minerva Anestesiol** 1996 May;62(5):171-6
Comparison of dust related respiratory effects in Dutch and Canadian grain handling industries: a pooled analysis. Peelen SJ, et al. **Occup Environ Med** 1996 Aug;53(8):559-66
Relation between decline in FEV1 and exposure to dust and tobacco smoke in aluminium potroom workers. Søyseth V, et al. **Occup Environ Med** 1997 Jan;54(1):27-31
Episode of toxic gas exposure in sewer workers. Watt MM, et al. **Occup Environ Med** 1997 Apr;54(4):277-80
An unusual cause of tachypnea. Faro A, et al. **Pediatr Pulmonol** 1996 May;21(5):341-2
Neonatal morbidity after elective repeat cesarean section and trial of labor. Hook B, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):348-53
Nocturnal and respiratory disturbances in Steele-Richardson-Olszewski syndrome (progressive supranuclear palsy). De Bruin VS, et al.

Postgrad Med J 1996 May;72(847):293–6
Apneustic breathing provoked by limbic influences. Stewart J, et al. **Postgrad Med J** 1996 Sep;72(851):559–61
Respiratory complications of gastroesophageal reflux disease. Siegel PD, et al. **Prim Care** 1996 Sep;23(3):433–41 (42 ref.)
Modafinil decreases hypersomnolence in the English bulldog, a natural animal model of sleep–disordered breathing. Panckeri KA, et al. **Sleep** 1996 Oct;19(8):626–31
Cardiorespiratory function in Duchenne and Becker muscular dystrophy. Taşdemir HA, et al.
Turk J Pediatr 1996 Jul–Sep;38(3):307–14
Myxoma: life–threatening benign nonepithelial tumor of the larynx. Kim KM, et al. **Yonsei Med J** 1997 Jun;38(3):187–9
[Respiratory arrest after retrobulbar anesthesia. Apropos of 2 cases] el Harrar N, et al. **Cah Anesthesiol** 1996;44(4):355–6 **(Fre)**
[Obesity and cardiorespiratory disease] Bonsignore G, et al. **Cardiologia** 1996 Jul;41(7):613–9 (32 ref.) **(Ita)**
[Respiratory disorders in type–1 hereditary motor and sensory neuropathy] Akiba Y, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1996 Aug; 34(8):850–5 (Eng. Abstr.) **(Jpn)**
[Features of respiration disorders in pre– and postoperative periods in patients with the tongue and face form of myasthenia] Peliukhovskii SV. **Klin Khir** 1996;(10):12–4 **(Rus)**
[Sleep respiratory disorders in fibromyalgia syndrome] Alvarez Lario B, et al. **Arch Bronconeumol** 1997 Mar; 33(3):143–7 (73 ref.) **(Spa)**
[Surgical treatment of adenotonsillar hypertrophy in children with sleep respiratory disorders: changes in polysomnographic patterns] Sánchez Armengol A, et al. **Arch Bronconeumol** 1997 Mar;33(3):124–8 (Eng. Abstr.) **(Spa)**
[Respiratory disorders during sleep in chronic obstructive lung disease] Togores Solivellas B, et al.
Arch Bronconeumol 1996 Jan;32(1):32–9 (78 ref.) **(Spa)**

IMMUNOLOGY

Review of trimellitic anhydride (TMA) induced respiratory response. Grammer LC, et al. **Allergy Asthma Proc** 1997 Jul–Aug;18(4):235–7 (14 ref.)

PHYSIOPATHOLOGY

Respiratory function of textile workers employed in dyeing cotton and wool fibers. Zuskin E, et al. **Am J Ind Med** 1997 Mar;31(3):344–52
Functional respiratory disorders. Butani L, et al.
Ann Allergy Asthma Immunol 1997 Aug;79(2):91–9; quiz 99–101 (65 ref.)
Clinical implications of maximal respiratory pressure determinations for individuals with Duchenne muscular dystrophy. Hahn A, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):1–6
Pulmonary function after laparoscopic cholecystectomy in the elderly [letter; comment] Wallace DH, et al.
Br J Surg 1996 Dec;83(12):1795–6. Comment on: Br J Surg 1996 Aug;83(8):1059–61.
Respiratory symptoms and peak expiratory flow in survivors of the Nyos disaster. Afane Ze E, et al. **Chest** 1996 Nov; 110(5):1278–81
Medical perspectives of nitric oxide. Wang Z.
Chin Med J (Engl) 1996 Jan;109(1):60–2 (0 ref.)
A flow model of respiration in health and disease. Nisell O. **Clin Physiol** 1996 Mar;16(2):131–43
Respiratory challenge induces high frequency spiking on the static charge sensitive bed (SCSB). Kirjavainen T, et al. **Eur Respir J** 1996 Sep;9(9):1810–5
Lung function testing: methods and reference values for forced expiratory volume (FEV1) and transfer factor (TL). Cotes JE, et al. **Occup Environ Med** 1997 Jul;54(7):457–65
Dysphagia with respiratory/pulmonary presentation: assessment and management. Brodsky L.
Semin Speech Lang 1997 Feb;18(1):13–22; quiz 22–3
[Respiratory disorders during sleep in children] Kirjavainen T, et al. **Duodecim** 1995;111(12):1154–64 (44 ref.) **(Fin)**
[The maximal duration of respiratory arrest during hypothermia in white rats which it is possible to reverse by an increase in brain temperature] Slepchuk NA.
Fiziol Zh Im I M Sechenova 1996 Oct–Nov; 82(10–11):115–21 (Eng. Abstr.) **(Rus)**
[Peripheral muscle fatigue and ventilatory response to effort in chronic airflow limitation] Güell R, et al.
Arch Bronconeumol 1996 Feb;32(2):79–84 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Effect of bi–level positive airway pressure (BiPAP) nasal ventilation on the postoperative pulmonary restrictive syndrome in obese patients undergoing gastroplasty. Joris JL, et al. **Chest** 1997 Mar;111(3):665–70
[Primary prevention: environmental modification and changes in chronic respiratory pathology in workers in a metallurgical industry] Picciotto D, et al.
G Ital Med Lav Ergon 1996 Jan–May;18(1–3):77–82 (Eng. Abstr.) **(Ita)**

PSYCHOLOGY

Functional respiratory disorders. Butani L, et al.
Ann Allergy Asthma Immunol 1997 Aug;79(2):91–9; quiz 99–101 (65 ref.)

REHABILITATION

[Application of neonatal ECMO in Spain. The foundations and the roof] Moral A. **An Esp Pediatr** 1997 Mar; 46(3):259–60 **(Spa)**
[Extracorporeal membrane oxygenation (ECMO). I. Is it really needed in Spain?] Valls i Soler A, et al.
An Esp Pediatr 1997 Mar;46(3):261–5 (Eng. Abstr.) **(Spa)**
[Extracorporeal membrane oxygenation (ECMO). II. The development of an experimental model in newborn lambs] Valls i Soler A, et al. **An Esp Pediatr** 1997 Mar;46(3):266–71 (Eng. Abstr.) **(Spa)**

SURGERY

Recognition and surgical management of the upper airway resistance syndrome. Newman JP, et al. **Laryngoscope** 1996 Sep;106(9 Pt 1):1089–93

THERAPY

Partial liquid ventilation—turning back a PAGE on evolution [editorial] Kelly KP. **Br J Anaesth** 1997 Jan;78(1):1–2
Home oxygen and ventilation therapies in pediatric patients. Voter KZ, et al. **Curr Opin Pediatr** 1996 Jun;8(3):221–5 (30 ref.)
Should patients with sleep apnoea/hypopnoea syndrome be diagnosed and managed on the basis of home sleep studies? [see comments] Parra O, et al. **Eur Respir J** 1997 Aug; 10(8):1720–4. Comment in: Eur Respir J 1997 Aug;10(8):1699–700.
[Oxygen therapy in pulmonology] Manakova EIu.
Ter Arkh 1993;65(2):93–4 **(Rus)**
[Outpatient emergency care in pneumology. A method to alleviate pressure of hospital emergency services] Soto Campos JG, et al. **Arch Bronconeumol** 1997 Jun; 33(6):268–71 (Eng. Abstr.) **(Spa)**

RESPIRATOR WEANING see **VENTILATOR WEANING**

RESPIRATORS see **VENTILATORS, MECHANICAL**

RESPIRATORS, AIR–PURIFYING see **RESPIRATORY PROTECTIVE DEVICES**

RESPIRATORS, INDUSTRIAL see **RESPIRATORY PROTECTIVE DEVICES**

RESPIRATORS, NEGATIVE–PRESSURE see **VENTILATORS, NEGATIVE–PRESSURE**

RESPIRATORS, PULMONARY, NEGATIVE–PRESSURE see **VENTILATORS, NEGATIVE–PRESSURE**

RESPIRATORY ACIDOSIS see **ACIDOSIS, RESPIRATORY**

RESPIRATORY AIRFLOW see **PULMONARY VENTILATION**

RESPIRATORY ALKALOSIS see **ALKALOSIS, RESPIRATORY**

RESPIRATORY BURST

see related
GRANULOMATOUS DISEASE, CHRONIC

The origin of the oxidative burst in plants. Bolwell GP.
Biochem Soc Trans 1996 May;24(2):438–42 (50 ref.)
Targeted disruption of guanosine diphosphate–dissociation inhibitor for Rho–related proteins, GDID4: normal hematopoietic differentiation but subtle defect in superoxide production by macrophages derived from in vitro embryonal stem cell differentiation. Guillemot JC, et al. **Blood** 1996 Oct 1;88(7):2722–31
Neutrophils from patients after burn injury express a deficiency of the oxidase components p47–phox and p67–phox. Rosenthal J, et al. **Blood** 1996 Dec 1; 88(11):4321–9
Flow–cytometric study of granulocyte activation during hemodialysis with different membranes. Mordacchini M, et al. **Blood Purif** 1995 Nov–Dec;13(6):322–6
Signalling defect in FMLP–induced neutrophil respiratory burst in myelodysplastic syndromes. Nakaseko C, et al.
Br J Haematol 1996 Dec;95(3):482–8
Protein kinase A downregulates the phosphorylation of p47 phox in human neutrophils: a possible pathway for inhibition of the respiratory burst. Bengis–Garber C, et al.
Cell Signal 1996 Jun;8(4):291–6
Oxidative burst of neutrophils in patients with rheumatoid arthritis: influence of various cytokines and medication. Mur E, et al. **Clin Exp Rheumatol** 1997 May–Jun; 15(3):233–7
Phagocytic activity and oxidative burst of granulocytes in persons with myeloperoxidase deficiency. Gerber CE, et al. **Eur J Clin Chem Clin Biochem** 1996 Nov;34(11):901–8
Increased neutrophil respiratory burst in myeloproliferative disorders: selective enhancement of superoxide release triggered by receptor–mediated agonists and low responsiveness to in vitro cytokine stimulation. Iki S, et al. **Exp Hematol** 1997 Jan;25(1):26–33
Oxidation of N(G)–hydroxyl–L–arginine to nitric oxide mediated by respiratory burst: an alternative pathway to NO synthesis. Modolell M, et al. **FEBS Lett** 1997 Jan 20; 401(2–3):123–6
The oxidative burst protects plants against pathogen attack: mechanism and role as an emergency signal for plant bio–defence—a review. Doke N, et al. **Gene** 1996 Nov 7; 179(1):45–51 (40 ref.)
Changes of fatty acid composition and oxidative metabolism of human neutrophils migrating into an inflammatory exudate. Carletto A, et al. **Inflammation** 1996 Apr; 20(2):123–37
A controlled study of leukocyte activation in septic patients. Pascual C, et al. **Intensive Care Med** 1997 Jul;23(7):743–8
Chloride ion efflux regulates adherence, spreading, and respiratory burst of neutrophils stimulated by tumor necrosis factor–alpha (TNF) on biologic surfaces. Menegazzi R, et al. **J Cell Biol** 1996 Oct;135(2):511–22
Preinfection in vitro chemotaxis, phagocytosis, oxidative burst, and expression of CD11/CD18 receptors and their predictive capacity on the outcome of mastitis induced in dairy cows with Escherichia coli. Van Werven T, et al.
J Dairy Sci 1997 Jan;80(1):67–74
Absence of respiratory burst in X–linked chronic granulomatous disease mice leads to abnormalities in both host defense and inflammatory response to Aspergillus fumigatus. Morgenstern DE, et al. **J Exp Med** 1997 Jan 20;185(2):207–18
A sensitive flow cytometric method for measuring the oxidative burst. Model MA, et al. **J Immunol Methods** 1997 Mar 28;202(2):105–11
Phagocytosis and burst activity of granulocytes and monocytes after stem cell transplantation. Miyagawa B, et al. **J Lab Clin Med** 1997 Jun;129(6):634–7
A cytosolic calcium transient is not necessary for degranulation or oxidative burst in immune complex–stimulated neutrophils. Seetoo KF, et al.
J Leukoc Biol 1997 Sep;62(3):329–40
Rupture of an abdominal aortic aneurysm causes priming of phagocytic oxidative burst. Lindsay TF, et al.
J Vasc Surg 1997 Apr;25(4):599–610
Oxidative burst response of neutrophils primed with PreS1 antigen of hepatitis B virus in patients with chronic hepatitis B and convalescents. Sułowska Z, et al. **J Viral Hepat** 1996 Nov;3(6):293–9
Superoxide, hydrogen peroxide, and the respiratory burst of fungally infected plant cells. Jacks TJ, et al.
Mol Cell Biochem 1996 May 10;158(1):77–9
Simultaneous flow cytometric measurement of phagocytotic and oxidative burst activity of polymorphonuclear leukocytes in whole bovine blood. Smits E, et al.
Vet Immunol Immunopathol 1997 May;56(3–4):259–69
[Improvement of respiratory burst by individual neutrophils from a patient with chronic granulomatous disease, type X91– under treatment by granulocyte colony–stimulating factor for multiple liver abscess] Ito Y, et al.
Rinsho Ketsueki 1997 Jun;38(6):550–2 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Magnesium attenuates the neutrophil respiratory burst in adult asthmatic patients [see comments] Cairns CB, et al.
Acad Emerg Med 1996 Dec;3(12):1093–7. Comment in: Acad Emerg Med 1996 Dec;3(12):1082–4. Comment in: Acad Emerg Med 1996 Dec;3(12):1084–5.
Chemoattractant–induced respiratory burst: increases in cytosolic Ca2+ concentrations are essential and synergize with a kinetically distinct second signal. Foyouzi–Youssefi R, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):709–18
Cord blood neutrophil responses to polyunsaturated fatty acids: effects on degranulation and oxidative respiratory burst. Ferrante A, et al. **Biol Neonate** 1996;69(6):368–75
Arachidonic acid activation of monocyte and neutrophil reactive oxygen in lung cancer patients undergoing pulmonary resection. Leaver HA, et al. **Biologicals** 1996 Dec;24(4):319–24
Stimulation of primed neutrophils by soluble immune complexes. Watson F, et al. **Biologicals** 1996 Dec; 24(4):307–11
The thermal potentiation of acetaminophen–inhibited PMN oxidative metabolism in vitro. Shalabi EA, et al.
Biopharm Drug Dispos 1996 Aug;17(6):501–9
Fibronectin enhances in vitro lipopolysaccharide priming of polymorphonuclear leukocytes. Bortolussi R, et al.
Blood 1997 Jun 1;89(11):4182–9
Recombinant human eotaxin induces oxygen radical production, Ca(2+)–mobilization, actin reorganization, and CD11b upregulation in human eosinophils via a pertussis toxin–sensitive heterotrimeric guanine nucleotide–binding protein. Tenscher K, et al. **Blood** 1996 Oct 15;88(8):3195–9
Effects of volatile anaesthetics on human neutrophil oxidative response to the bacterial peptide FMLP. Fröhlich D, et al. **Br J Anaesth** 1997 Jun;78(6):718–23
Flow cytometry [letter; comment] Galley HF, et al.
Br J Anaesth 1997 Feb;78(2):227–8. Comment on: Br J Anaesth 1996 Sep;77(3):387–92.
Flow cytometry evaluation of the in vitro influence of four i.v. anaesthetics on respiratory burst of neutrophils [see comments] Heine J, et al. **Br J Anaesth** 1996 Sep; 77(3):387–92. Comment in: Br J Anaesth 1997 Feb;78(2):227–8.
Cellular localization of the inhibitory action of abruquinone

A against respiratory burst in rat neutrophils. Hsu MF, et al. **Br J Pharmacol** 1997 Mar;120(5):917–25

Characterization of inositol hexakisphosphate (InsP6)–mediated priming in human neutrophils: lack of extracellular [3H]–InsP6 receptors. Kitchen E, et al. **Br J Pharmacol** 1996 Mar;117(5):979–85

Investigation of the inhibition by acetylshikonin of the respiratory burst in rat neutrophils. Wang JP, et al. **Br J Pharmacol** 1997 Jun;121(3):409–16

Inhibition by HAJ11 of respiratory burst in neutrophils and the involvement of protein tyrosine phosphorylation and phospholipase D activation. Wang JP, et al. **Br J Pharmacol** 1997 Jan;120(1):79–87

The effect in vitro of high–density lipoprotein from healthy and infected humans on the oxidative metabolism of polymorphonuclear leukocytes. Furlaneto C, et al. **Cell Biochem Funct** 1997 Mar;15(1):39–45

Inhibitory effect of salmeterol on the respiratory burst of adherent human neutrophils. Ottonello L, et al. **Clin Exp Immunol** 1996 Oct;106(1):97–102

Improved dextran preparation of human leucocytes for chemiluminescence analysis of the oxidative burst of polymorphonuclear cells. Cíž M, et al. **Clin Lab Haematol** 1997 Mar;19(1):49–51

Pretreatment with inhaled nitric oxide inhibits neutrophil migration and oxidative activity resulting in attenuated sepsis–induced acute lung injury [see comments] Bloomfield GL, et al. **Crit Care Med** 1997 Apr;25(4):584–93 . Comment in: Crit Care Med 1997 Apr;25(4):563–5.

Tumor necrosis factor–alpha modulates the selective interference of hypnotics and sedatives to suppress N–formyl–methionyl–leucyl–phenylalanine–induced oxidative burst formation in neutrophils. Weiss M, et al. **Crit Care Med** 1997 Jan;25(1):128–34

Effects of nedocromil sodium on the oxidative burst of polymorphonuclear leukocytes: comparison with salbutamol. Braga PC, et al. **Drugs Exp Clin Res** 1997; 23(1):33–8

Does the appearance of drug resistance during therapy alter bacterial susceptibility to opsonophagocytosis? Gemmell CG. **Drugs Exp Clin Res** 1996;22(2):51–5

Thiopentone and propofol, but not methohexitone nor midazolam, inhibit neutrophil oxidative responses to the bacterial peptide FMLP. Fröhlich D, et al. **Eur J Anaesthesiol** 1996 Nov;13(6):582–8

The effect of propofol on the neutrophil respiratory burst. Murphy PG, et al. **Eur J Anaesthesiol** 1996 Sep;13(5):471–3

Activation of signaling pathways in HL60 cells and human neutrophils by farnesylthiosalicylate. Tisch D, et al. **Eur J Biochem** 1996 Dec 15;242(3):529–36

Effects of protein kinase inhibitors on the stimulated neutrophil responses by degraded immunoglobulin G. Ahn SK, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):175–80

Effects of atrial natriuretic peptide on phagocytosis and respiratory burst in murine macrophages. Vollmar AM, et al. **Eur J Pharmacol** 1997 Jan 29;319(2–3):279–85

Investigation of the inhibitory effect of broussochalcone A on respiratory burst in neutrophils. Wang JP, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):201–8

Palmitic acid anilide–induced respiratory burst in human polymorphonuclear leukocytes is inhibited by a protein kinase C inhibitor, Ro 31–8220. Heiskanen KM, et al. **Free Radic Biol Med** 1997;22(7):1175–82

Protective effect of natural flavonoids on rat peritoneal macrophages injury caused by asbestos fibers. Kostyuk VA, et al. **Free Radic Biol Med** 1996;21(4):487–93

Effects of respiratory burst inhibitors on nitric oxide production by human neutrophils. Carreras MC, et al. **Free Radic Res** 1997 Apr;26(4):325–34

Oxygen–dependent inhibition of neutrophil respiratory burst by nitric oxide. Iha S, et al. **Free Radic Res** 1996 Dec; 25(6):489–98

Effect of amphotericin B associated with a lipid emulsion on the oxidative burst of human polymorphonuclear leukocytes. Marzzullo L, et al. **Gen Pharmacol** 1997 Feb; 28(2):203–7

Lack of effect of antineutrophil cytoplasmic antibodies associated with ulcerative colitis on superoxide anion production from neutrophils. Gionchetti P, et al. **Gut** 1997 Jan;40(1):102–4

Association of cytotoxin production and neutrophil activation by strains of Helicobacter pylori isolated from patients with peptic ulceration and chronic gastritis [see comments] Zhang QB, et al. **Gut** 1996 Jun;38(6):841–5. Comment in: Gut 1997 Mar;40(3):431.

Human neutrophil NADPH–oxidase activity is inhibited by lazaroids. Theron AJ, et al. **Inflammation** 1996 Apr; 20(2):139–50

Priming of neutrophils with tumor necrosis factor–alpha measured as Fc gamma receptor–mediated respiratory burst correlates with increased complement receptor 3 membrane density. Asman B, et al. **Int J Clin Lab Res** 1996;26(4):236–9

The effect of cetirizine on the integrin–dependent respiratory burst of normodense eosinophils. Piacentini GL, et al. **J Asthma** 1996;33(6):417–23

Inhibition of neutrophil oxidative burst and granule secretion by wortmannin: potential role of MAP kinase and renaturable kinases. Sue–A–Quan AK, et al. **J Cell Physiol** 1997 Jul;172(1):94–108

The loss of recombinant human granulocyte colony–stimulating factor and recombinant human TNF–alpha priming effects on the superoxide–generating response in exudated neutrophils is associated with a decrease in their receptor affinities. Niwa M, et al. **J Immunol** 1996 Nov 1;157(9):4147–53

Peroxynitrite augments fMLP–stimulated chemiluminescence by neutrophils in human whole blood. Bednar MM, et al. **J Leukoc Biol** 1996 Nov;60(5):619–24

Mechanisms involved in sodium arsenite–induced apoptosis of human neutrophils. Watson RW, et al. **J Leukoc Biol** 1996 Nov;60(5):625–32

A pharmacological analysis of the burst events induced in midbrain dopaminergic neurons by electrical stimulation of the prefrontal cortex in the rat. Overton PG, et al. **J Neural Transm Gen Sect** 1996;103(5):523–40

Synergistic inhibition of human polymorphonuclear function by prostaglandin E1 and linsidomine. Gladis–Villanueva M, et al. **J Pharm Pharmacol** 1996 Jul;48(7):706–11

Is inhibition of oxygen radical production of neutrophils by sympathomimetics mediated via beta–2 adrenoceptors? Weiss M, et al. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1105–13

Azotemia, TNF alpha, and LPS prime the human neutrophil oxidative burst by distinct mechanisms. McLeish KR, et al. **Kidney Int** 1996 Aug;50(2):407–16

Influence of the age and sex on respiratory burst of human monocytes. Alvarez E, et al. **Mech Ageing Dev** 1996 Sep 18;90(2):157–61

Effect of tolrestat, an aldose reductase inhibitor, on neutrophil respiratory burst activity in diabetic patients. Ihm SH, et al. **Metabolism** 1997 Jun;46(6):634–8

Pentoxifylline pretreatment enhances the oxidative burst activity of human peripheral blood mononuclear cells. Chang FY, et al. **Microbiol Immunol** 1996;40(10):787–90

Suppression of the oxidative burst in murine microglia by nitric oxide. Kiprianova I, et al. **Neurosci Lett** 1997 Apr 25;226(2):75–8

Priming of monocyte respiratory burst by beta–amyloid fragment (25–35). Meda L, et al. **Neurosci Lett** 1996 Nov 22;219(2):91–4

Interaction between polyalkylcyanoacrylate nanoparticles and peritoneal macrophages: MTT metabolism, NBT reduction, and NO production. Cruz T, et al. **Pharm Res** 1997 Jan;14(1):73–9

Interaction between fulvic acids of different origins and active oxygen radicals. Wang C, et al. **Sci China C Life Sci** 1996 Jun;39(3):267–75

Dose–response effect of in vivo administration of endotoxin on polymorphonuclear leukocytes oxidative burst. Kajdacsy–Balla A, et al. **Shock** 1996 May;5(5):357–61

Casein effects on the myeloperoxidase–mediated oxygen–dependent bactericidal activity of bovine neutrophils. Cooray R. **Vet Immunol Immunopathol** 1996 May;51(1–2):55–65

[Study of the membrane oxidative response of phagocytes after treatment with marbofloxacin in healthy cattle] Spehner V, et al. **C R Seances Soc Biol Fil** 1996; 190(5–6):633–9 (Eng. Abstr.) **(Fre)**

[Modulation of the oxidative burst of human neutrophils by pro– and anti–inflammatory cytokines] Gougerot–Podicalo MA, et al. **Pathol Biol (Paris)** 1996 Jan;44(1):36–41 (14 ref.) (Eng. Abstr.) **(Fre)**

[Effect of five fluoroquinolones on the bactericidal activity of human polymorphonuclear leukocytes against Staphylococcus aureus] Ballesta S, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):600–3 (Eng. Abstr.) **(Spa)**

GENETICS

Adenovirus–mediated gene transfer into monocyte–derived macrophages of patients with X–linked chronic granulomatous disease: ex vivo correction of deficient respiratory burst. Schneider SD, et al. **Gene Ther** 1997 Jun; 4(6):524–32

IMMUNOLOGY

The comparison of the neutrophil respiratory burst elicited by human secretory IgA or serum IgA. Hutchings AB, et al. **Biochem Soc Trans** 1997 May;25(2):322S

Human neutrophil Fc alpha R and Fc gamma RIIa but not Fc gamma RIIIb generate intracellular calcium signals which trigger the respiratory burst. Lang ML, et al. **Biochem Soc Trans** 1997 May;25(2):333S

Surface–related triggering of the neutrophil respiratory burst. Characterization of the response induced by IgG adsorbed to hydrophilic and hydrophobic glass surfaces. Liu L, et al. **Clin Exp Immunol** 1997 Jul;109(1):204–10

Deactivation of primed respiratory burst response of goldfish macrophages by leukocyte–derived macrophage activating factor(s). Neumann NF, et al. **Dev Comp Immunol** 1996 Nov–Dec;20(6):427–39

In vitro studies on the regulation of rainbow trout (Oncorhynchus mykiss) macrophage respiratory burst activity. Novoa B, et al. **Dev Comp Immunol** 1996 May–Jun; 20(3):207–16

The oxidative burst triggered by Salmonella typhimurium in differentiated U937 cells requires complement and a complete bacterial lipopolysaccharide. Château MT, et al. **FEMS Immunol Med Microbiol** 1997 Jan;17(1):57–66

Mechanisms of stimulation of the respiratory burst by TNF in nonadherent neutrophils: its independence of lipidic transmembrane signaling and dependence on protein tyrosine phosphorylation and cytoskeleton. Dusi S, et al. **J Immunol** 1996 Nov 15;157(10):4615–23

Interleukin–10 down–regulates oxidative metabolism and antibody–dependent cellular cytotoxicity of human neutrophils. Capsoni F, et al. **Scand J Immunol** 1997 Mar; 45(3):269–75

Auditory stress induces changes in membrane functions of mouse peritoneal macrophages. Spehner V, et al. **Scand J Immunol** 1996 Dec;44(6):643–7

NADPH oxidase and the respiratory burst. Wientjes FB, et al. **Semin Cell Biol** 1995 Dec;6(6):357–65 (82 ref.)

PHYSIOLOGY

Resazurin reduction as a function of respiratory burst in bovine neutrophils. Fang W, et al. **Am J Vet Res** 1997 Jun;58(6):601–7

The monocyte locomotion inhibitory factor (MLIF) produced by axenically grown Entamoeba histolytica fails to affect the locomotion and the respiratory burst of human eosinophils in vitro. Rico G, et al. **Arch Med Res** 1997;28 Spec No:233–4

Phospholipase D involvement in the plant oxidative burst. Schroeder Taylor AT, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):10–5

Inhibition of neutrophil priming by inhibitors of farnesyl transferase. Elmore MA, et al. **Biochem Soc Trans** 1997 May;25(2):253S

Phosphotyrosine phosphatase activity in the macrophage is enhanced by lipopolysaccharide, tumor necrosis factor alpha, and granulocyte/macrophage–colony stimulating factor: correlation with priming of the respiratory burst. Bassal S, et al. **Biochim Biophys Acta** 1997 Mar 1; 1355(3):343–52

Involvement of the extracellular calcium in the release of elastase and the human neutrophils oxidative burst. Khalfi F, et al. **Cell Mol Biol (Noisy–le–grand)** 1996 Dec; 42(8):1211–8

Kinetics of oxygen metabolism during respiratory burst in Japanese eel neutrophils. Itou T, et al. **Dev Comp Immunol** 1996 Sep–Oct;20(5):323–30

Exercise and the neutrophil oxidative burst: biological and experimental variability. Pyne DB, et al. **Eur J Appl Physiol** 1996;74(6):564–71

Activation of NF kappa B by the respiratory burst of macrophages [see comments] Kaul N, et al. **Free Radic Biol Med** 1996;21(3):401–5. Comment in: Free Radic Biol Med 1997;23(1):177–9.

Neutrophil antioxidant capacity during the respiratory burst: loss of glutathione induced by chloramines. Ogino T, et al. **Free Radic Biol Med** 1997;23(3):445–52

Effect of synthetic metalloproteinase inhibitor or citrate on neutrophil chemotaxis and the respiratory burst. Pfister RR, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1340–9

Modulatory effects of the colonic milieu on neutrophil oxidative burst: a possible pathogenic mechanism of ulcerative colitis. Keshavarzian A, et al. **J Lab Clin Med** 1997 Aug;130(2):216–25

Relative role of chloramines, hypochlorous acid, and proteases in the activation of human polymorphonuclear leukocyte collagenase. Claesson R, et al. **J Leukoc Biol** 1996 Nov;60(5):598–602

Model with distributed vectorial premotor bursters accounts for the component stretching of oblique saccades. Quaia C, et al. **J Neurophysiol** 1997 Aug;78(2):1120–34

Oxygenation activities of chicken polymorphonuclear leukocytes investigated by selective chemiluminigenic probes. Merrill GA, et al. **Lab Anim Sci** 1996 Oct; 46(5):530–8

Strychnine eliminates reciprocation and augmentation of respiratory bursts of the in vitro frog brainstem. Kimura N, et al. **Neurosci Lett** 1997 Mar 28;225(1):9–12

The neutrophil oxidative burst in diarrhoea–associated haemolytic uraemic syndrome. Hughes DA, et al. **Pediatr Nephrol** 1996 Aug;10(4):445–7

Respiratory burst activity of phagocytic cells isolated from the mammary glands and blood of camels (Camelus bactrianus). Cooray R, et al. **Zentralbl Veterinarmed [B]** 1997 Mar;44(1):29–37

RESPIRATORY CARE UNITS

A regional weaning center for patients requiring mechanical ventilation: an 18–month experience. Scalise PJ, et al. **Conn Med** 1997 Jul;61(7):387–9

The incidence of nosocomial infections in a pneumology division and intermediate intensive care unit. Grassi G, et al. **Monaldi Arch Chest Dis** 1996 Aug;51(4):270–4

Environmental noise as a cause of sleep disruption in an intermediate respiratory care unit. Aaron JN, et al. **Sleep** 1996 Nov;19(9):707–10

[Evaluation of a respiratory care unit on a 45–bed hospital ward] Kiyama T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:141–4 (Eng. Abstr.) **(Jpn)**

RESPIRATORY CENTER

ABNORMALITIES

Heaven on earth. Burch L. **S D J Med** 1996 May;49(5):161–2

ANATOMY & HISTOLOGY

Projections of the dorsomedial nucleus of the intercollicular complex (DM) in relation to respiratory-vocal nuclei in the brainstem of pigeon (Columba livia) and zebra finch (Taeniopygia guttata). Wild JM, et al. **J Comp Neurol** 1997 Jan 20;377(3):392–413

CHEMISTRY

Substance P receptors in brain stem respiratory centers of the rat: regulation of NK1 receptors by hypoxia. Mazzone SB, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1547–56

CYTOLOGY

Medullary respiratory neuronal activity modulated by stimulation of the fastigial nucleus of the cerebellum. Xu F, et al. **Brain Res** 1995 Dec 24;705(1–2):53–64

DRUG EFFECTS

[Iatrogenic disorders in the active respiratory systems (respiratory center and its performance] Similowski T, et al. **Rev Mal Respir** 1996;13(4):361–79 (221 ref.) (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Phosphate-activated glutaminase immunoreactivity in brainstem respiratory neurons. Pilowsky P, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):85–90

PHYSIOLOGY

Effect of elastic loading on variational activity of breathing. Brack T, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1341–8

Most inspiratory neurons in the pre-Bötzinger complex are suppressed during vomiting in dogs. Fukuda H, et al. **Brain Res** 1997 Jul 18;763(1):30–8

Interactions between medullary and spinal respiratory rhythm generators in the in vitro brainstem spinal cord preparation from newborn rats. Dubayle D, et al. **Exp Brain Res** 1996 Apr;109(1):1–8

The nucleus retroambigualis controls laryngeal muscle activity during vocalization in the cat. Shiba K, et al. **Exp Brain Res** 1997 Jul;115(3):513–9

The Kölliker-Fuse nucleus mediates the trigeminally induced apnoea in the rat. Dutschmann M, et al. **Neuroreport** 1996 May 31;7(8):1432–6

[The effect of inhibition of subretrofascial region on the central inspiratory activity of the respiratory center and reaction of respiration to hypercapnia] Piatin VF, et al. **Biull Eksp Biol Med** 1997 May;123(5):491–3 **(Rus)**

[Changes of diaphragmatic nerve activity during stimulation of rostral parts of ventral surface of rat's medulla oblongata] Piatin VF, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):617–9 **(Rus)**

[The loss of sensitivity of the respiratory system to carbon dioxide during activation of GABAergic brain structures] Tarakanov IA. **Biull Eksp Biol Med** 1997 Apr; 123(4):385–90 **(Rus)**

[Effect of acclimatization to cold on the hypoxic sensitivity of the respiratory center] Krivoshchekov SG, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):51–6 **(Rus)**

[The influence of the limbic cortex and hypothalamus on the impulse activity of the bulbar respiratory neurons and on respiration under hypoxia] Akopian NS, et al. **Fiziol Zh** 1997;43(1–2):50–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

[Effects of nasal continuous positive airway pressure on breathing pattern and respiratory drive in patients with obstructive sleep apnea syndrome] Zhao X, et al. **Chung Hua Nei Ko Tsa Chih** 1995 Dec;34(12):808–11 (Eng. Abstr.) **(Chi)**

[Estimation of SIDS with measurement of cardio-respiratory contribution ratio through multivariate autoregressive modelling approach] Kojo M, et al. **No To Hattatsu** 1996 Sep;28(5):379–84 (Eng. Abstr.) **(Jpn)**

[Cortical and thalamic regulating mechanisms of the pulse neuron activity of oblongata medulla respiration center of the rats in normal condition and during hypoxia] Akopian NS, et al. **Aviakosm Ekolog Med** 1996;30(1):36–42 (Eng. Abstr.) **(Rus)**

RESPIRATORY CHAIN see **ELECTRON TRANSPORT**

RESPIRATORY CIRCULATION

PHYSIOLOGY

An on-demand system of delivering pre-mixed inspiratory gas for use during physical activity. Taylor AD, et al. **Aust J Sci Med Sport** 1996 Sep;28(3):76–8

RESPIRATORY DEAD SPACE

Increased artificial deadspace ventilation is a safe and reliable method for deliberate hypercapnia [see comments] Caronia C, et al. **Crit Care Med** 1997 Jul;25(7):1175–8. Comment in: Crit Care Med 1997 Jul;25(7):1102–3.

Increased artificial deadspace for deliberate hypercapnia [editorial; comment] Venkataraman S. **Crit Care Med** 1997 Jul;25(7):1102–3. Comment on: Crit Care Med 1997 Jul;25(7):1175–8.

Dead space and slope indices from the expiratory carbon dioxide tension-volume curve. Kars AH, et al. **Eur Respir J** 1997 Aug;10(8):1829–36

[Influence of the dead space induced by the face mask on the measure of heart rate variability] Furutani Y, et al. **J Cardiol** 1997 Mar;29(3):171–6 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Airway anesthesia and respiratory adaptations to dead space loading and exercise. Krishnan BS, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):459–65

The effect of volume infusion on dead space in mechanically ventilated patients with severe asthma. Manthous CA, et al. **Chest** 1997 Sep;112(3):843–6

PHYSIOLOGY

Theoretical interactions between ventilator settings and proximal deadspace ventilation during tracheal gas insufflation. Hotchkiss JR Jr, et al. **Intensive Care Med** 1996 Oct;22(10):1112–9

Anatomic dead space in infants and children. Numa AH, et al. **J Appl Physiol** 1996 May;80(5):1485–9

RESPIRATORY DISTRESS SYNDROME

[Current aspects of acute respiratory distress syndrome in children] Durand P, et al. **Arch Pediatr** 1997 Jan;4(1):61–77 (110 ref.) (Eng. Abstr.) **(Fre)**

[Report on the 24th Neonatal and Infant Respiratory Symposium in Aspen, Colorado, March 1997] Holzki J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):466–9 **(Ger)**

[Report on the XXIII Neonatal and Infant Respiratory Symposium 10 to 15 March 1996 in Vail, Colorado] Holzki J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep;31(7):442–5 **(Ger)**

BLOOD

Plasma somatostatin and cholecystokinin levels in sick preterm infants during their first six weeks of life. Törnhage CJ, et al. **Acta Paediatr** 1997 Aug;86(8):847–50

Plasma concentrations of granulocyte colony stimulating factor in preterm infants in the first few hours of life [letter; comment] Yurdakök M, et al. **Acta Paediatr** 1996 Nov; 85(11):1389–90. Comment on: Acta Paediatr 1996 Mar;85(3):351–5.

Plasma protein Z levels in early respiratory distress syndrome [letter] Yurdakök M, et al. **Am J Hematol** 1997 Feb; 54(2):171–2

Comparison of effects of 95% and 90% oxygen saturations in respiratory distress syndrome. Bard H, et al. **Arch Dis Child Fetal Neonatal Ed** 1996 Sep;75(2):F94–6

Number and activation of circulating polymorphonuclear leukocytes and platelets are associated with neonatal respiratory distress syndrome severity. Brus F, et al. **Pediatrics** 1997 May;99(5):672–80

Antithrombin deficiency in special clinical syndromes--Part I: neonatal and pediatric/physiologic deficiency: extracorporeal membrane oxygenation. Shapiro A. **Semin Hematol** 1995 Oct;32(4 Suppl 2):33–6 (10 ref.)

[Simultaneous measurements of end-expiratory and transcutaneous carbon dioxide partial pressure in ventilated premature and newborn infants] Arsowa S, et al. **Klin Padiatr** 1997 Mar–Apr;209(2):47–53 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Bronchopulmonary dysplasia in infants with respiratory distress syndrome in a developing country: a prospective single centre-based study. Smith J, et al. **Eur J Pediatr** 1996 Aug;155(8):672–7

Strategies to prevent chronic neonatal lung disease. Schindler MB. **J Paediatr Child Health** 1996 Dec;32(6):477–9 (33 ref.)

Adult respiratory distress syndrome in patients with malignant astrocytoma--three case reports. Kumabe T, et al. **Neurol Med Chir (Tokyo)** 1997 Jul;37(7):560–5

Bronchopulmonary dysplasia and family history of asthma [editorial; comment] Nickerson B. **Pediatr Pulmonol** 1995 Nov;20(5):276. Comment on: Pediatr Pulmonol 1995 Nov;20(5):277–83.

[Congenital pulmonary lymphangiectasia with chylothorax. Different evolution of 2 cases with severe neonatal respiratory distress] Distefano G, et al. **Pediatr Med Chir** 1996 Sep–Oct;18(5):519–23 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Ethanol resistive microbubble test: a modification of the stable microbubble test used to predict respiratory distress syndrome. Cho K, et al. **Acta Paediatr Jpn** 1996 Aug; 38(4):322–7

Interpretation of the TDx-FLM fluorescence polarization assay in pregnancies complicated by diabetes mellitus. Del Valle GO, et al. **Am J Perinatol** 1997 May;14(5):241–4

Influence of neonatal idiopathic respiratory distress syndrome on serum enzyme activities in premature healthy and asphyxiated newborns. Lackmann GM. **Am J Perinatol** 1996 Aug;13(6):329–34

Performance of the dipalmitoyl phosphatidylcholine test in predicting respiratory distress syndrome in contaminated samples of amniotic fluid [see comments] Cohen B, et al. **Obstet Gynecol** 1997 May;89(5 Pt 1):719–22. Comment in: Obstet Gynecol 1997 Aug;90(2):319–20.

Performance of the dipalmitoyl phosphatidylcholine test in predicting respiratory distress syndrome in contaminated samples of amniotic fluid [letter; comment] Lenke R. **Obstet Gynecol** 1997 Aug;90(2):319–20. Comment on: Obstet Gynecol 1997 May;89(5 Pt 1):719–22.

Prediction of surfactant dysfunction in term infants by the click test. Bhuta T, et al. **Pediatr Pulmonol** 1997 Apr; 23(4):287–91

A new microtransducer catheter for measuring esophageal pressure in infants. Gappa M, et al. **Pediatr Pulmonol** 1996 Aug;22(2):117–24

Modification of the open circuit N2 washout technique for measurement of functional residual capacity in premature infants. Hentschel R, et al. **Pediatr Pulmonol** 1997 Jun; 23(6):434–41

Amniotic fluid polarization of fluorescence and lecithin/sphingomyelin ratio decision criteria assessed. Bernstein LH, et al. **Yale J Biol Med** 1995 May–Aug; 68(3–4):101–17

[Concentration of blood ICAM-1s in the newborn at risk of infection. A prospective study in the first 2 weeks of life] Distefano G, et al. **Pediatr Med Chir** 1997 Jan–Feb; 19(1):27–30 (Eng. Abstr.) **(Ita)**

[Mucoviscidosis with respiratory symptomatology in the neonatal period] Lamy S, et al. **Acta Med Port** 1997 Feb–Mar;10(2–3):209–12 (34 ref.) (Eng. Abstr.) **(Por)**

DRUG THERAPY

Changes in EEG, systemic circulation and blood gas parameters following two or six aliquots of porcine surfactant. Lundstrøm KE, et al. **Acta Paediatr** 1996 Jun; 85(6):708–12

Chemiluminescence activity of phagocytes from tracheal aspirates of premature infants after surfactant therapy [see comments] Schrod L, et al. **Acta Paediatr** 1996 Jun; 85(6):719–23. Comment in: Acta Paediatr 1996 Jun;85(6):641.

A simplified surfactant dosing procedure in respiratory distress syndrome: the "side-hole" randomized study. Spanish Surfactant Collaborative Group. Valls-i-Soler A, et al. **Acta Paediatr** 1997 Jul;86(7):747–51

Surfactant therapy. Clinical implications [editorial; comment] Zetterström R. **Acta Paediatr** 1996 Jun;85(6):641 (2 ref.). Comment on: Acta Paediatr 1996 Jun;85(6):642–6. Comment on: Acta Paediatr 1996 Jun;85(6):713–8. Comment on: Acta Paediatr 1996 Jun;85(6):719–23.

Costs and outcomes associated with colfosceril versus beractant for the treatment of neonatal respiratory distress syndrome [letter] Wyble L, et al. **Ann Pharmacother** 1997 Jun;31(6):787–8

New Perspectives of Surfactant Research. Proceedings of the 12th International Workshop on Surfactant Replacement. Stockholm, Sweden, May 29–June 1, 1997. **Biol Neonate** 1997;71 Suppl 1:1–69

From bubbles to babies: the evolution of surfactant replacement therapy. Enhorning G. **Biol Neonate** 1997;71 Suppl 1:28–31 (12 ref.)

Clinical trials of surfactant replacement in Europe. Halliday HL. **Biol Neonate** 1997;71 Suppl 1:8–12 (31 ref.)

Testing surfactant treatment responses: a comparison of two models. Henry MD, et al. **Biol Neonate** 1997;71(3):181–9

Surfactant therapy in the USA: trials and current routines. Soll RF. **Biol Neonate** 1997;71 Suppl 1:1–7 (39 ref.)

Pulmonary pathology in surfactant-treated preterm infants with respiratory distress syndrome: an autopsy study. Toti P, et al. **Biol Neonate** 1996;70(1):21–8

The use of inhaled nitric oxide in the acute respiratory distress syndrome [editorial] Young JD. **Br J Hosp Med** 1997 Feb 19–Mar 4;57(4):126–7

Inhaled nitric oxide in neonatal and pediatric acute respiratory distress syndrome: dose response, prolonged inhalation, and weaning. Demirakça S, et al. **Crit Care Med** 1996 Nov;24(11):1913–9

Lyso-phosphatidylcholine and outcome of preterm babies with respiratory distress syndrome treated with surfactant. O'Hare MM, et al. **Early Hum Dev** 1997 Sep 19; 49(2):135–41

Effect of dexamethasone therapy on cerebral and ocular blood flow velocity in premature infants studied by colour Doppler flow imaging. Cabañas F, et al. **Eur J Pediatr** 1997 Jan;156(1):41–6

Surfactant proteins and stable microbubbles in tracheal aspirates of infants with respiratory distress syndrome: relation to the degree of respiratory failure and response to exogenous surfactant. Chida S, et al. **Eur J Pediatr** 1997 Feb;156(2):131–8

Appropriate surfactant usage in 1996. Soll RF. **Eur J Pediatr** 1996 Aug;155 Suppl 2:S8–13

Surfactant inhibition by plasma: gestational age and surfactant treatment effects in preterm lambs. Ikegami M, et al. **J Appl Physiol** 1996 Dec;81(6):2517–22

Factors affecting the neonatal response to artificial surfactant. Skelton R, et al. **J Paediatr Child Health** 1996 Jun; 32(3):236–41

Nitric oxide inhalation in infants with respiratory distress syndrome. Skimming JW, et al. **J Pediatr** 1997 Feb;

130(2):225–30
Controversies: synthetic or natural surfactant. The case for natural surfactant. Halliday HL. **J Perinat Med** 1996; 24(5):417–26 (54 ref.)
Controversies: synthetic or natural surfactant treatment for respiratory distress syndrome? The case for synthetic surfactant. Whitelaw A. **J Perinat Med** 1996;24(5):427–35 (17 ref.)
Nitrovasodilator therapy for severe respiratory distress syndrome. Benitz WE, et al. **J Perinatol** 1996 Nov–Dec; 16(6):443–8
Does surfactant therapy prolong dying? Age at in-hospital death of extremely premature babies. Coulter DM, et al. **J Perinatol** 1996 May–Jun;16(3 Pt 1):166–70; quiz 171–2
Comparison of the changes in the a/A oxygen ratio after administration of two surfactants for the treatment of neonatal respiratory distress syndrome. Bassiouny MR, et al. **J Trop Pediatr** 1997 Feb;43(1):38–41
Nitric oxide inhalation therapy in acute respiratory distress syndrome: intended effects and possible side effects. Rossaint R, et al. **Methods Enzymol** 1996;269:442–53 (55 ref.)
Cell Therapeutics Inc. reports novel therapy for acute respiratory distress syndrome—the largest cause of mortality in patients with multiple traumatic injuries. **Mol Biotechnol** 1996 Feb;5(1):66
Short-course, high-dose corticosteroid treatment in six children with late ARDS [letter] Martinot A, et al. **Pediatr Pulmonol** 1997 Apr;23(4):314–6
Surfactant aerosol treatment of respiratory distress syndrome in the spontaneously breathing premature rabbit. Ellyett KM, et al. **Pediatr Res** 1996 Jun;39(6):953–7
Comparison of Infasurf (calf lung surfactant extract) to Survanta (Beractant) in the treatment and prevention of respiratory distress syndrome. Bloom BT, et al. **Pediatrics** 1997 Jul;100(1):31–8
Safety and pharmacokinetics of multiple doses of recombinant human CuZn superoxide dismutase administered intratracheally to premature neonates with respiratory distress syndrome. Davis JM, et al. **Pediatrics** 1997 Jul;100(1):24–30
Acute response to inhaled nitric oxide in newborns with respiratory failure and pulmonary hypertension. Day RW, et al. **Pediatrics** 1996 Oct;98(4 Pt 1):698–705
Steroids, surfactant and lung disease [editorial; comment] Postle AD, et al. **Thorax** 1996 Sep;51(9):880–1. Comment on: Thorax 1996 Sep;51(9):907–13.
Measurement of pulmonary status and surfactant protein levels during dexamethasone treatment of neonatal respiratory distress syndrome [see comments] Wang JY, et al. **Thorax** 1996 Sep;51(9):907–13. Comment in: Tidsskr Prakt Tandlaeg 1996 Sep;51(9):880–1.
[Value of surfactant in the treatment of acute respiratory distress syndrome in a child] Fraisse A, et al. **Arch Pediatr** 1996 Sep;3(9):891–5 (Eng. Abstr.) **(Fre)**
[Treatment of neonatal respiratory distress syndrome with Alveofact—results of a prospective observational study] Wauer RR, et al. **Klin Padiatr** 1996 Nov–Dec;208(6):355–65 (Eng. Abstr.) **(Ger)**
[Surfactant update. International Symposium on current aspects and developments] **Z Geburtshilfe Neonatol** 1995 Nov–Dec;199(6 Suppl):1–16 **(Ger)**
[Nitric oxide via inhalation in the newborn infant and the child with acute hypoxemic respiratory failure] Biban P, et al. **Pediatr Med Chir** 1996 May–Jun;18(3):245–51 (44 ref.) (Eng. Abstr.) **(Ita)**
[Systemic and pulmonary hemodynamics in the course of substitute therapy with exosurf neonatal in newborn infants with respiratory distress syndrome] Milenin OB, et al. **Anesteziol Reanimatol** 1996 Nov–Dec;(6):7–10 (Eng. Abstr.) **(Rus)**
[Acute effects of inhaled nitric oxide in children] López-Herce Cid J, et al. **An Esp Pediatr** 1997 Jun; 46(6):581–6 (Eng. Abstr.) **(Spa)**
[Nitric oxide treatment in children: clinical course, toxicity and factors influencing its effects] López-Herce Cid J, et al. **An Esp Pediatr** 1997 Jun;46(6):542–8 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

The incidence of acute neonatal respiratory disorders in Padova county: an epidemiological survey. Bonafé L, et al. **Acta Paediatr** 1996 Oct;85(10):1236–40
Morbidity of survivors of neonatal respiratory distress syndrome under four years of age. Yang PH. **Acta Paediatr Sin** 1996 Mar–Apr;37(2):103–6
Amniotic fluid tumor necrosis factor-alpha and the risk of respiratory distress syndrome among preterm infants. Hitti J, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):50–6
Neonatal respiratory distress syndrome in Karachi: some epidemiological considerations. Bhutta ZA, et al. **Paediatr Perinat Epidemiol** 1997 Jan;11(1):37–43
[Prevalence of RDS in diabetic pregnancy] Matti P, et al. **Minerva Ginecol** 1996 Oct;48(10):409–13 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Neonatal respiratory distress in near-term infants—consider surfactant protein B deficiency. Sleight E, et al. **Acta Paediatr** 1997 Apr;86(4):428–30
Neonatal respiratory distress caused by cryptic dacryoceles. Arnold RW, et al. **Alaska Med** 1996 Jul–Sep;38(3):86–8
Surfactant protein-B deficiency. Nogee LM. **Chest** 1997 Jun; 111(6 Suppl):129S–135S (43 ref.)
Neurenteric cyst: antenatal diagnosis and therapeutic approach. Daher P, et al. **Eur J Pediatr Surg** 1996 Oct; 6(5):306–9
A nasopharyngeal dermoid causing neonatal airway obstruction. Kayhan FT, et al. **Int J Pediatr Otorhinolaryngol** 1997 Jun 20;40(2–3):195–201
Atraumatic pneumopericardium in a full-term newborn with fetal tachycardia. Johnson NA, et al. **J Am Board Fam Pract** 1997 Jan–Feb;10(1):55–8
Recurrent respiratory distress syndrome in successive preterm pregnancies. Nagourney BA, et al. **J Pediatr** 1996 Oct;129(4):591–6
Intrathoracic enteric foregut duplication cyst. Birmole BJ, et al. **J Postgrad Med** 1994 Oct–Dec;40(4):228–30
Immature epithelial Na+ channel expression is one of the pathogenetic mechanisms leading to human neonatal respiratory distress syndrome. O'Brodovich HM. **Proc Assoc Am Physicians** 1996 Sep;108(5):345–55 (86 ref.)
Effects of suboptimal intra-uterine growth on preterm infants between 30 and 32 weeks' gestation. Cooper PA, et al. **S Afr Med J** 1997 Mar;87(3):314–8
Causes of early neonatal respiratory distress in the former Venda—a community-based study. van Rijswijk P, et al. **S Afr Med J** 1996 Nov;86(11):1413–6
Unilateral pulmonary agenesis: an unusual cause of respiratory distress in the newborn. Tan KK, et al. **Singapore Med J** 1996 Dec;37(6):668–9
[Acute respiratory distress due to fat embolism] Liet JM, et al. **Arch Pediatr** 1997 Jun;4(6):547–9 (Eng. Abstr.) **(Fre)**
[A case of Wilson-Mikity syndrome with marked and monoclonal elevation of IgM in blood] Kurata C, et al. **Rinsho Byori** 1997 Mar;45(3):282–5 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Interleukin 8 and granulocyte elastase alpha 1 proteinase inhibitor complex in the tracheobronchial aspirate of infants with chronic lung disease following respiratory distress syndrome. Takasaki J, et al. **Acta Paediatr Jpn** 1996 Oct; 38(5):434–9
Phagocyte chemiluminescence in pre-term infants. Pierce LA, et al. **Int J Clin Lab Res** 1996;26(2):112–8
Activation of circulating polymorphonuclear leukocytes in preterm infants with severe idiopathic respiratory distress syndrome. Brus F, et al. **Pediatr Res** 1996 Mar;39(3):456–63

METABOLISM

Calorie intake in sick versus respiratory stable very low birthweight babies. Lee JK, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):449–54
Influence of respiratory distress syndrome on body composition after preterm birth. Tang W, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul;77(1):F28–31
Surface tension measurements on pharyngeal and tracheal aspirate samples from newborns without and with respiratory distress syndrome. Friedrich W, et al. **Biol Neonate** 1996;70(2):75–83
Uric acid and ascorbic acid redox ratios in plasma and tracheal aspirate of preterm babies with acute and chronic lung disease. Moison RM, et al. **Free Radic Biol Med** 1997; 23(2):226–34
Endotoxin induces expression of type II phospholipase A2 in macrophages during acute lung injury in guinea pigs: involvement of TNF-alpha in lipopolysaccharide-induced type II phospholipase A2 synthesis. Arbibe L, et al. **J Immunol** 1997 Jul 1;159(1):391–400
Decreased sodium ion absorption across nasal epithelium of very premature infants with respiratory distress syndrome [see comments] Barker PM, et al. **J Pediatr** 1997 Mar; 130(3):373–7. Comment in: J Pediatr 1997 Mar;130(3):342–4.
Respiratory distress syndrome: the importance of effective transport [editorial; comment] O'Brodovich HM. **J Pediatr** 1997 Mar;130(3):342–4. Comment on: J Pediatr 1997 Mar;130(3):373–7.
Regulatory role for macrophage migration inhibitory factor in acute respiratory distress syndrome [see comments] Donnelly SC, et al. **Nat Med** 1997 Mar;3(3):320–3. Comment in: Nat Med 1997 Mar;3(3):272–3.
Mucosal tumor necrosis factor-alpha production and extensive disruption of sulfated glycosaminoglycans begin within hours of birth in neonatal respiratory distress syndrome. Murch SH, et al. **Pediatr Res** 1996 Sep; 40(3):484–9
Early production of macrophage inflammatory protein-1 alpha occurs in respiratory distress syndrome and is associated with poor outcome. Murch SH, et al. **Pediatr Res** 1996 Sep;40(3):490–7
Plasminogen activator activity in preterm infants with respiratory distress syndrome: relationship to the development of bronchopulmonary dysplasia. Singhal KK, et al. **Pediatr Res** 1996 Feb;39(2):229–35
Crossroads of L-arginine/arachidonate metabolism. Gryglewski RJ, et al. **Thromb Haemost** 1997 Jul;78(1):191–4
[Molecular aspects of pulmonary surfactant in neonatal respiratory distress syndrome and surfactant replacement therapy] Chida S, et al. **Nippon Rinsho** 1996 Feb; 54(2):346–52 (20 ref.) (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Chlamydia trachomatis-associated respiratory disease in the very early neonatal period. Colarizi P, et al. **Acta Paediatr** 1996 Aug;85(8):991–4

MORTALITY

Prematurity in Greenland. A study of infants with a birthweight below 2000 g [see comments] Jacobsen T, et al. **Acta Paediatr** 1996 Jan;85(1):100–3. Comment in: Acta Paediatr 1996 Jan;85(1):5–6.
Profile and outcome of the respiratory distress syndrome among newborns in Karachi: risk factors for mortality. Bhutta ZA, et al. **J Trop Pediatr** 1997 Jun;43(3):143–8

PATHOLOGY

Pulmonary pathology in surfactant-treated preterm infants with respiratory distress syndrome: an autopsy study. Toti P, et al. **Biol Neonate** 1996;70(1):21–8
TNF receptors in the microvascular pathology of acute respiratory distress syndrome and cerebral malaria. Lucas R, et al. **J Leukoc Biol** 1997 May;61(5):551–8 (65 ref.)
[The importance of the cytological study of the tracheobronchial aspirate in newborn infants with the respiratory distress syndrome who are on artificial pulmonary ventilation] Bubnova NI, et al. **Arkh Patol** 1996 Nov–Dec;58(6):22–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Mechanisms of tissue injury by oxygen radicals: implications for neonatal disease. Saugstad OD. **Acta Paediatr** 1996 Jan; 85(1):1–4 (32 ref.)
Surface tension measurements on pharyngeal and tracheal aspirate samples from newborns without and with respiratory distress syndrome. Friedrich W, et al. **Biol Neonate** 1996;70(2):75–83
Surfactant proteins and stable microbubbles in tracheal aspirates of infants with respiratory distress syndrome: relation to the degree of respiratory failure and response to exogenous surfactant. Chida S, et al. **Eur J Pediatr** 1997 Feb;156(2):131–8
Temporary impairment of lung function in infants with anterior abdominal wall defects who have undergone surgery. Dimitriou G, et al. **J Pediatr Surg** 1996 May; 31(5):670–2
Respiratory distress and selective muscle involvement in central core disease: report of a case. Chen SL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1996 Nov; 12(11):650–6
Cytokines and the acute respiratory distress syndrome (ARDS): a question of balance [news; comment] Martin TR. **Nat Med** 1997 Mar;3(3):272–3. Comment on: Nat Med 1997 Mar;3(3):320–3.
Supranormal cardiac output in the dopamine- and dobutamine-dependent preterm infant. Lopez SL, et al. **Pediatr Cardiol** 1997 Jul–Aug;18(4):292–6
Cerebral blood flow velocity and pulsation in neonatal respiratory distress syndrome and periventricular hemorrhage. Mullaart RA, et al. **Pediatr Neurol** 1997 Feb; 16(2):118–25
Intrasubject variability of repeated pulmonary function measurements in preterm ventilated infants. Gonzalez A, et al. **Pediatr Pulmonol** 1996 Jan;21(1):35–41
Inspiratory work of breathing in ventilated preterm infants. Lorino H, et al. **Pediatr Pulmonol** 1996 May;21(5):323–7
Patient-triggered ventilation: a comparison of tidal volume and chestwall and abdominal motion as trigger signals. Nikischin W, et al. **Pediatr Pulmonol** 1996 Jul;22(1):28–34
Long-term pulmonary functional outcome of bronchopulmonary dysplasia and premature birth. Parat S, et al. **Pediatr Pulmonol** 1995 Nov;20(5):289–96
Lung volumes and pressure-volume relations of the respiratory system in small ventilated neonates with severe respiratory distress syndrome. Vilstrup CT, et al. **Pediatr Res** 1996 Jan;39(1):127–33
High endothelin-1 in the airways of preterm infants is associated with less severe respiratory distress during the early postnatal period. Andersson S, et al. **Pediatrics** 1997 Apr;99(4):545–7
[The exogenous surfactant and its effect on the respiratory distress syndrome (RDS)] Brabec R, et al. **Cesk Fysiol** 1996 Sep;45(3):139–45 (40 ref.) (Eng. Abstr.) **(Cze)**
[Animal experiment and clinical studies of the significance of carnitine for energy metabolism in pregnant patients and the fetus during the pre- and perinatal period] Lohninger A, et al. **Wien Klin Wochenschr** 1996;108(2):33–9 (64 ref.) (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Evaluation of hypothalamic-pituitary-adrenal axis in premature infants treated with dexamethasone. Alkalay AL, et al. **Am J Perinatol** 1996 Nov;13(8):473–7
A retrospective analysis of the effect of antenatal steroid administration on the incidence of respiratory distress syndrome in preterm twin pregnancies. Turrentine MA, et al. **Am J Perinatol** 1996 Aug;13(6):351–4
Systematic review of prophylactic vs rescue surfactant. Morley CJ. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul; 77(1):F70–4
Pulmonary function changes after nebulised and intravenous frusemide in ventilated premature infants. Prabhu VG, et

al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul;77(1):F32–5

Trends and variations in use of antenatal corticosteroids to prevent neonatal respiratory distress syndrome: recommendations for national and international comparative audit [letter; comment] Chow P, et al. **Br J Obstet Gynaecol** 1996 Nov;103(11):1177. Comment on: Br J Obstet Gynaecol 1996 Jun;103(6):534–40.

Labor pain before elective cesarean section reduces neonatal respiratory distress. Yang JY, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Jan–Feb;38(1):38–43

Intraamniotic surfactant for prevention of neonatal respiratory distress syndrome (IRDS): rationale and personal experience. Cosmi EV, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Feb;71(2):135–9

Antenatal ambroxol treatment does not prevent the respiratory distress syndrome in premature infants. Dani C, et al. **Eur J Pediatr** 1997 May;156(5):392–3

Prophylaxis of respiratory distress syndrome by treatment with modified porcine surfactant at birth: a multicentre prospective randomized trial. Bevilacqua G, et al. **J Perinat Med** 1996;24(6):609–20

Surfactant administration to the human fetus in utero: a new approach to prevention of neonatal respiratory distress syndrome (RDS). Cosmi EV, et al. **J Perinat Med** 1996; 24(2):191–3

Prenatal ritodrine administration and the incidence of respiratory distress syndrome in premature infants. Kerem E, et al. **J Perinatol** 1997 Mar–Apr;17(2):101–6

Lamellar body count in amniotic fluid as a rapid screening test for fetal lung maturity. Lee IS, et al. **J Perinatol** 1996 May–Jun;16(3 Pt 1):176–80

Combined effects of antenatal corticosteroids and surfactant supplementation on the outcome of very low birth weight infants. Modanlou HD, et al. **J Perinatol** 1996 Nov–Dec; 16(6):422–8; quiz 429–30

Preterm premature ruptured membranes: a randomized trial of steroids after treatment with antibiotics. Lewis DF, et al. **Obstet Gynecol** 1996 Nov;88(5):801–5

Effect of prenatal T4 treatment in neonatal morbidity: preliminary findings. Reyes G, et al. **P R Health Sci J** 1997 Mar;16(1):5–8

The ACTOBAT debate [letter] Crowther C. **Pediatrics** 1997 Sep;100(3 Pt 1):418–9

Australian Collaborative Trial of Antenatal Thyrotropin-Releasing Hormone: adverse effects at 12-month follow-up. ACTOBAT Study Group [see comments] Crowther CA, et al. **Pediatrics** 1997 Mar; 99(3):311–7. Comment in: Pediatrics 1997 Mar;99(3):476–8.

A multicenter randomized masked comparison trial of synthetic surfactant versus calf lung surfactant extract in the prevention of neonatal respiratory distress syndrome. Hudak ML, et al. **Pediatrics** 1997 Jul;100(1):39–50

The credibility of the ACTOBAT follow-up study [see comments] McCormick MC. **Pediatrics** 1997 Mar; 99(3):476–8. Comment in: Pediatrics 1997 Mar;99(3):311–7.

[Prenatal lung maturation with corticosteroids--an overview] Hildebrand K, et al. **Z Geburtshilfe Neonatol** 1996 Nov–Dec;200(6):207–12 (54 ref.) (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Memory and processing speed in preterm children at eleven years: a comparison with full-terms. Rose SA, et al. **Child Dev** 1996 Oct;67(5):2005–21

The effects of neonatal jaundice and respiratory complications on learning and habituation in 5- to 11-month-old infants. Weir C, et al. **J Child Psychol Psychiatry** 1997 Feb;38(2):199–206

RADIOGRAPHY

The first chest radiograph in neonates exhibiting respiratory distress at birth. Kurl S, et al. **Clin Pediatr (Phila)** 1997 May;36(5):285–9

Radiological changes after therapeutic use of surfactant in infants with respiratory distress syndrome. Dinger J, et al. **Pediatr Radiol** 1997 Jan;27(1):26–31

SURGERY

Lung transplantation for treatment of infants with surfactant protein B deficiency. Hamvas A, et al. **J Pediatr** 1997 Feb; 130(2):231–9

THERAPY

High frequency oscillation and exogenous surfactant in the treatment of neonatal respiratory distress syndrome. Claris O, et al. **Acta Paediatr** 1997 Apr;86(4):339–41 (18 ref.)

Influence of early postnatal dexamethasone therapy on ventilator dependency in surfactant-substituted preterm infants [see comments] Suske G, et al. **Acta Paediatr** 1996 Jun;85(6):713–8. Comment in: Acta Paediatr 1996 Jun;85(6):641. Comment in: Acta Paediatr 1996 Jun;85(6):757.

Systemic air embolism in a very-low-birth weight neonate treated with synthetic surfactant. Lu MY, et al. **Acta Paediatr Sin** 1996 Mar–Apr;37(2):142–4

Is chronic lung disease (CLD) in premature infants preventable? [editorial] Yeh TF. **Acta Paediatr Sin** 1996 Jul–Aug;37(4):241–3 (17 ref.)

Laerdal infant resuscitators are unreliable as free-flow oxygen delivery devices. Martell RJ, et al. **Am J Perinatol** 1997 Jul;14(6):347–51

The relationship between physician behaviors and blood gas values in the first hours of life—implications for "standards" of medical care for infants with respiratory distress. Meadow W, et al. **Am J Perinatol** 1996 Nov;13(8):457–64

Changes in lung volume and static expiratory pressure-volume diagram after surfactant rescue treatment of neonates with established respiratory distress syndrome. Björklund LJ, et al. **Am J Respir Crit Care Med** 1996 Oct; 154(4 Pt 1):918–23

Patient-triggered ventilation in neonates: comparison of a flow-and an impedance-triggered system. Hummler HD, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1049–54

Tracheal gas insufflation reduces requirements for mechanical ventilation in a rabbit model of respiratory distress syndrome. Bernath MA, et al. **Anaesth Intensive Care** 1997 Feb;25(1):15–22

Comparison of effects of 95% and 90% oxygen saturations in respiratory distress syndrome. Bard H, et al. **Arch Dis Child Fetal Neonatal Ed** 1996 Sep;75(2):F94–6

Systematic review of prophylactic vs rescue surfactant. Morley CJ. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul; 77(1):F70–4

Use of methohexital for elective intubation in neonates. Naulaers G, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul;77(1):F61–4

Graphic analysis of pulmonary mechanics in neonates receiving assisted ventilation. Sinha SK, et al. **Arch Dis Child Fetal Neonatal Ed** 1996 Nov;75(3):F213–8

Randomised controlled trial of an aggressive nutritional regimen in sick very low birthweight infants. Wilson DC, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul;77(1):F4–11

Advances in the management of respiratory failure. Liquid ventilation in the setting of respiratory failure. Hirschl RB. **ASAIO J** 1996 May–Jun;42(3):209–10 (22 ref.)

Management of acute airway obstruction using extracorporeal membrane oxygenation. Morneault L, et al. **ASAIO J** 1996 Jul–Aug;42(4):321–3

Partial liquid ventilation in a child on extracorporeal life support. Pranikoff T, et al. **ASAIO J** 1996 Jul–Aug; 42(4):317–20

Rescue high frequency oscillatory ventilation for preterm infants: neurodevelopmental outcome and its prediction. Cheung PY, et al. **Biol Neonate** 1997;71(5):282–91

Ventilation patterns, surfactant and lung injury. Jonson B. **Biol Neonate** 1997;71 Suppl 1:13–7 (24 ref.)

Controlled mechanical hypoventilation in a paediatric burn patient as treatment of acute respiratory distress syndrome. Trop M, et al. **Burns** 1997 Mar;23(2):166–9

High-frequency oscillatory ventilation--a new management for respiratory distress syndrome and intractable respiratory failure. Jeng MJ, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Mar–Apr;38(2):87–97 (70 ref.)

Partial liquid ventilation with Perflubron in premature infants with severe respiratory distress syndrome. Spitzer AR, et al. **Clin Pediatr (Phila)** 1997 Mar;36(3):181–2

Early nasal continuous positive airway pressure treatment reduces the need for intubation in very low birth weight infants. Gittermann MK, et al. **Eur J Pediatr** 1997 May; 156(5):384–8

The impact of surfactant replacement therapy on cerebral and systemic circulation and lung function. Schipper JA, et al. **Eur J Pediatr** 1997 Mar;156(3):224–7

Liquid ventilation: an alternative ventilation strategy for management of neonatal respiratory distress. Shaffer TH, et al. **Eur J Pediatr** 1996 Aug;155 Suppl 2:S30–4 (48 ref.)

Response to high frequency jet ventilation may predict the need for extracorporeal membrane oxygenation. Stewart DL, et al. **Eur Respir J** 1996 Jun;9(6):1257–60

Postnatal follow-up of the oxygenation index, arterial to alveolar oxygen tension ratio and alveolar arterial oxygen tension difference values in neonates with the respiratory distress syndrome treated with conventional ventilatory support. Atanasov A, et al. **Folia Med (Plovdiv)** 1997; 39(1):13–23

Partial liquid ventilation in neonates. Rajeshwari K. **Indian Pediatr** 1997 Feb;34(2):166–7

Effects of high-frequency oscillatory ventilation on circulation in neonates with pulmonary interstitial emphysema or RDS. Nelle M, et al. **Intensive Care Med** 1997 Jun;23(6):671–6

High frequency ventilation. Ramsden CA, et al. **J Paediatr Child Health** 1997 Apr;33(2):85–7 (23 ref.)

A multicenter randomized, masked comparison trial of natural versus synthetic surfactant for the treatment of respiratory distress syndrome. Hudak ML, et al. **J Pediatr** 1996 Mar;128(3):396–406

A trial of the safety of inhaled beclomethasone in ventilator-treated neonates. Liu EA, et al. **J Pediatr** 1996 Jul;129(1):154–6

Routine use of fentanyl infusions for pain and stress reduction in infants with respiratory distress syndrome [see comments] Orsini AJ, et al. **J Pediatr** 1996 Jul;129(1):140–5 . Comment in: J Pediatr 1997 Mar;130(3):498–9.

High-frequency pressure-control ventilation with high positive end-expiratory pressure in children with acute respiratory distress syndrome. Paulson TE, et al. **J Pediatr** 1996 Oct;129(4):566–73

Analgesic use in the neonatal intensive care unit [letter; comment] Templeton KE. **J Pediatr** 1997 Mar;130(3):498–9 . Comment on: J Pediatr 1996 Jul;129(1):140–5.

Hepatitis C infection in children who received extracorporeal membrane oxygenation. Nelson SP, et al. **J Pediatr Surg** 1996 May;31(5):644–8

Partial liquid ventilation in newborn patients with congenital diaphragmatic hernia. Pranikoff T, et al. **J Pediatr Surg** 1996 May;31(5):613–8

Factors influencing acquired upper airway obstruction in newborn infants receiving assisted ventilation because of respiratory failure: an overview. da Silva OP. **J Perinatol** 1996 Jul–Aug;16(4):272–5 (35 ref.)

Risk factors for intracranial hemorrhage in the extracorporeal membrane oxygenation patient. Dela Cruz TV, et al. **J Perinatol** 1997 Jan–Feb;17(1):18–23

Controlled prospective randomized comparison of high-frequency jet ventilation and conventional ventilation in neonates with respiratory failure and persistent pulmonary hypertension. Engle WA, et al. **J Perinatol** 1997 Jan–Feb;17(1):3–9

Ventilatory management casebook. Gastric perforation probably caused by glucocorticoid administration. McGettigan MC, et al. **J Perinatol** 1996 Jul–Aug; 16(4):309–12

Effect of five days of dexamethasone therapy on ventilator dependence and adrenocorticotropic hormone-stimulated cortisol concentrations. Scott SM, et al. **J Perinatol** 1997 Jan–Feb;17(1):24–8

Effects of early indomethacin administration on oxygenation and surfactant requirement in low birth weight infants. Yaseen H, et al. **J Trop Pediatr** 1997 Feb;43(1):42–6

Perflubron in infants with severe respiratory distress syndrome [letter; comment] Salon JE. **N Engl J Med** 1997 Feb 27;336(9):660. Comment on: N Engl J Med 1996 Sep 12;335(11):761–7.

Urinary excretion of human epidermal growth factor in premature infants requiring assisted ventilation over the first week of life [letter] Plebani M, et al. **Nephron** 1997; 76(2):225–6

Lung volume measurements immediately after extubation by prediction of "extubation failure" in premature infants. Dimitriou G, et al. **Pediatr Pulmonol** 1996 Apr;21(4):250–4

Experience with intubated patients does not affect the accidental extubation rate in pediatric intensive care units and intensive care nurseries. Frank BS, et al. **Pediatr Pulmonol** 1997 Jun;23(6):424–8

Early postnatal dexamethasone therapy may lessen lung inflammation in premature infants with respiratory distress syndrome on mechanical ventilation. Wang JY, et al. **Pediatr Pulmonol** 1997 Mar;23(3):193–7

Intraventricular hemorrhage and high-frequency ventilation: a meta-analysis of prospective clinical trials. Clark RH, et al. **Pediatrics** 1996 Dec;98(6 Pt 1):1058–61

The Provo multicenter early high-frequency oscillatory ventilation trial: improved pulmonary and clinical outcome in respiratory distress syndrome [see comments] Gerstmann DR, et al. **Pediatrics** 1996 Dec;98(6 Pt 1):1044–57. Comment in: Pediatrics 1996 Dec;98(6 Pt 1):1196–7.

Multicenter controlled clinical trial of high-frequency jet ventilation in preterm infants with uncomplicated respiratory distress syndrome. Keszler M, et al. **Pediatrics** 1997 Oct;100(4):593–9

J'accuse!-M. LeComte de LaPlace a Prohibé le Recrutement des Alvéoles du Poumon [Can high-frequency ventilation conscript alveolar recruits and encourage re-enlistment?] [comment] Nelson NM. **Pediatrics** 1996 Dec;98(6 Pt 1):1196–7 (15 ref.). Comment on: Pediatrics 1996 Dec;98(6 Pt 1):1044–57.

Continuous negative extrathoracic pressure in neonatal respiratory failure. Samuels MP, et al. **Pediatrics** 1996 Dec; 98(6 Pt 1):1154–60

High-frequency jet ventilation in the early management of respiratory distress syndrome is associated with a greater risk for adverse outcomes. Wiswell TE, et al. **Pediatrics** 1996 Dec;98(6 Pt 1):1035–43

Coagulopathic-induced membrane dysfunction during extracorporeal membrane oxygenation: a case report. Stammers AH, et al. **Perfusion** 1997 Mar;12(2):143–9

Surfactant and respiratory distress syndrome. Milner AD. **Turk J Pediatr** 1996 Jan–Mar;38(1):37–43 (27 ref.)

Advances in the treatment of respiratory failure in newborns. Durand DJ. **West J Med** 1997 May;166(5):338–9

Assessment of lung function in neonates during extracorporeal membrane oxygenation. Reiterer F, et al. **Wien Klin Wochenschr** 1997 Mar 28;109(6):192–6

[High frequency oscillatory ventilation in pediatrics] Laubscher B. **Rev Med Suisse Romande** 1996 Dec; 116(12):975–8 **(Fre)**

[Liquid ventilation with perfluorocarbons (see comments)] Quintel M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):461–9 (72 ref.) (Eng. Abstr.). Comment in: Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct;31(8):459–60. **(Ger)**

[Peculiarities of endotracheal intubation in the child (letter; comment)] Zander R. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Feb; 32(2):130–1. Comment on: Anasthesiol Intensivmed Notfallmed Schmerzther 1995 Dec;30(8):479–82. **(Ger)**

[Partial liquid ventilation with perflubron in premature infants with severe respiratory distress syndrome] Quintel

M. **Pneumologie** 1997 Feb;51(2):104–5 **(Ger)**

[Reversal of a right–left shunt and permanent improvement of oxygenation by inhalation of nitrogen monoxide in a premature infant with lung hypoplasia and asphyxia] Hoehn T, et al. **Z Geburtshilfe Neonatol** 1997 May–Jun; 201(3):105–7 (Eng. Abstr.) **(Ger)**

[Extracorporeal membrane oxygenation (ECMO) in the newborn infant and the child with intractable respiratory failure] Pettenazzo A, et al. **Pediatr Med Chir** 1996 May–Jun;18(3):235–42 (32 ref.) (Eng. Abstr.) **(Ita)**

[Molecular aspects of pulmonary surfactant in neonatal respiratory distress syndrome and surfactant replacement therapy] Chida S, et al. **Nippon Rinsho** 1996 Feb; 54(2):346–52 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Natural surfactant in routine treatment of neonatal respiratory distress syndrome. Experiences from two central hospitals] Grønn M, et al. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1453–6 (Eng. Abstr.) **(Nor)**

[High frequency oscillatory ventilation in the preterm newborn infants with respiratory distress syndrome] Tejera Ramírez C, et al. **An Esp Pediatr** 1997 Feb;46(2):177–82 (Eng. Abstr.) **(Spa)**

[Effects of surfactant administration in premature infants with severe respiratory distress syndrome] Morón A, et al. **Med Clin (Barc)** 1996 Jun 29;107(5):165–8 (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

[Prognostic value of Doppler flow measurement of the middle cerebral artery for morbidity of premature infants with null or negative flow in umbilical arteries] Ulrich S, et al. **Zentralbl Gynakol** 1996;118(11):605–9 (Eng. Abstr.) **(Ger)**

VETERINARY

Prophylaxis of respiratory distress syndrome in premature calves by administration of dexamethasone or a prostaglandin F2 alpha analogue to their dams before parturition. Zaremba W, et al. **Am J Vet Res** 1997 Apr; 58(4):404–7

A profile of amino acid and catecholamine levels during endotoxin–induced acute lung injury in sheep: searching for potential markers of the acute respiratory distress syndrome. Hofford JM, et al. **J Lab Clin Med** 1996 Dec; 128(6):545–51

RESPIRATORY DISTRESS SYNDROME, ADULT

Adult respiratory distress syndrome: a radical perspective. Louie S, et al. **Adv Pharmacol** 1997;38:457–90 (197 ref.)

Biological markers of acute lung injury: prognostic and pathogenetic significance. Pittet JF, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1187–205 (257 ref.)

Computed tomography in adult respiratory distress syndrome: what has it taught us? Pelosi P, et al. **Eur Respir J** 1996 May;9(5):1055–62 (36 ref.)

Adult respiratory distress syndrome: a disorder in need of improved outcome [see comments] Brandstetter RD, et al. **Heart Lung** 1997 Jan–Feb;26(1):3–14 (84 ref.). Comment in: Heart Lung 1997 May–Jun;26(3):252.

Acute respiratory distress syndrome in pregnancy. Van Hook JW. **Semin Perinatol** 1997 Aug;21(4):320–7 (42 ref.)

[Further recognition on the adult respiratory distress syndrome (editorial)] Mao B. **Chung Hua Nei Ko Tsa Chih** 1995 Dec;34(12):795–6 **(Chi)**

[Respiratory distress syndrome in adults with trauma or some other diseases] Gembitskiĭ EV, et al. **Klin Med (Mosk)** 1997; 75(6):8–12 (18 ref.) **(Rus)**

[Respiratory distress syndrome in adults] Celikić S. **Vojnosanit Pregl** 1997 May–Jun;54(3):227–32 (23 ref.) **(Scr)**

BLOOD

Circulating IL–1ra and IL–10 levels are increased but do not predict the development of acute respiratory distress syndrome in at–risk patients. Parsons PE, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1469–73

Plasma hypoxanthine levels in ARDS: implications for oxidative stress, morbidity, and mortality. Quinlan GJ, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):479–84

Standardizing oxygen measurements [letter; comment] Petty TL. **Crit Care Med** 1997 Aug;25(8):1437. Comment on: Crit Care Med 1997 Jan;25(1):6–8. Comment on: Crit Care Med 1997 Jan;25(1):41–5.

Endothelin production in sepsis and the adult respiratory distress syndrome. Sanai L, et al. **Intensive Care Med** 1996 Jan;22(1):52–6

Improved oxygenation utilizing a prone positioner in patients with acute respiratory distress syndrome. Vollman KM, et al. **Intensive Care Med** 1996 Oct;22(10):1105–11

Sustained high levels of circulatory interleukin–8 are associated with a poor outcome in patients with adult respiratory distress syndrome [see comments] Ikuta N, et al. **Intern Med** 1996 Nov;35(11):855–60. Comment in: Intern Med 1996 Nov;35(11):835–6.

Interleukin–8 and adult respiratory distress syndrome [editorial; comment] Kanazawa M. **Intern Med** 1996 Nov; 35(11):835–6. Comment on: Intern Med 1996 Nov;35(11):855–60.

Studies on the interaction of IL–8 with human plasma alpha 2–macroglobulin: evidence for the presence of IL–8 complexed to alpha 2–macroglobulin in lung fluids of patients with adult respiratory distress syndrome. Kurdowska A, et al. **J Immunol** 1997 Feb 15;158(4):1930–40

Eicosanoids and fat emulsions in acute respiratory distress syndrome patients. Planas M, et al. **Nutrition** 1997 Mar; 13(3):202–5

CHEMICALLY INDUCED

Chemical pneumonitis following household exposure to hydrofluoric acid. Bennion JR, et al. **Am J Ind Med** 1997 Apr;31(4):474–8

Acute respiratory distress syndrome after aprotinin infusion. Vucicevic Z, et al. **Ann Pharmacother** 1997 Apr; 31(4):429–32

Chlorine gas induced acute lung injury in isolated rabbit lung. Menaouar A, et al. **Eur Respir J** 1997 May;10(5):1100–7

Intratracheal aerosolization of endotoxin (LPS) in the rat: a comprehensive animal model to study adult (acute) respiratory distress syndrome. van Helden HP, et al. **Exp Lung Res** 1997 Jul–Aug;23(4):297–316

The intratracheal administration of endotoxin: X. Dexamethasone downregulates neutrophil emigration and cytokine expression in vivo. Yi ES, et al. **Inflammation** 1996 Apr;20(2):165–75

Sulfide poisoning [editorial; comment] Smith RP. **J Toxicol Clin Toxicol** 1997;35(3):305–6. Comment on: J Toxicol Clin Toxicol 1997 ;35(3):299–303.

Non–cardiogenic pulmonary oedema after scorpion envenomation: a true entity? [letter] Gueron M, et al. **Toxicon** 1996 Apr;34(4):393–5

[Analysis of respiratory complications during artificial ventilation of the lungs in patients with organophosphorus compound poisoning] Egorov VM, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):71–4 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

The acute respiratory distress syndrome: definitions, severity and clinical outcome. An analysis of 101 clinical investigations [see comments] Krafft P, et al. **Intensive Care Med** 1996 Jun;22(6):519–29. Comment in: Intensive Care Med 1996 Jun;22(6):517–8.

COMPLICATIONS

The role of adult respiratory distress syndrome in the multiple organ dysfunction syndrome. Gullo A, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:70–3

The regional production of cytokines and lactate in sepsis–related multiple organ failure. Douzinas EE, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):53–9

A comparative study of the vasodilator effects of prostaglandin E1 in patients with pulmonary hypertension after mitral valve replacement and with adult respiratory distress syndrome. Kunimoto F, et al. **Anesth Analg** 1997 Sep;85(3):507–13

Pustular and erythrodermic psoriasis complicated by acute respiratory distress syndrome. Sadeh JS, et al. **Arch Dermatol** 1997 Jun;133(6):747–50

Legionella pneumophila pneumonia associated with acute respiratory distress syndrome successfully treated with imipenem. Mofredj A, et al. **Chemotherapy** 1997 Jan–Feb; 43(1):51–3

Why does lactic acidosis occur in acute lung injury? [editorial; comment] Effros RM, et al. **Chest** 1997 May; 111(5):1157–8. Comment on: Chest 1997 May;111(5):1301–5.

Reversible hepatic cytolysis during almitrine bismesylate treatment for posttraumatic ARDS [letter] Sicsic JC, et al. **Intensive Care Med** 1996 Feb;22(2):173–4

Acute lung injury fibroblast migration and invasion of a fibrin matrix is mediated by CD44. Svee K, et al. **J Clin Invest** 1996 Oct 15;98(8):1713–27

Pulmonary lactate release in patients with sepsis and the adult respiratory distress syndrome. Brown SD, et al. **J Crit Care** 1996 Mar;11(1):2–8

Staphylococcal tracheitis, pneumonia, and adult respiratory distress syndrome. Horowitz IN. **Pediatr Emerg Care** 1996 Aug;12(4):288–90 (14 ref.)

Acute pulmonary hypertension and right ventricular failure in adult respiratory distress syndrome. Coetzee A, et al. **S Afr Med J** 1996 Jun;86 Suppl 3:C147–51

Gas exchange indices—how valid are they? Coetzee A, et al. **S Afr Med J** 1995 Nov;85(11 Suppl):1227–32

Nitric oxide has little effect on acute pulmonary hypertension and right ventricular function during acute respiratory distress syndrome. Luyt S, et al. **S Afr Med J** 1997 May; 87(5 Suppl):639–42

DIAGNOSIS

Pseudopulmonary embolism: acute respiratory distress in the syndrome of heparin–induced thrombocytopenia. Popov D, et al. **Am J Kidney Dis** 1997 Mar;29(3):449–52 (12 ref.)

Serum ferritin as a predictor of the acute respiratory distress syndrome. Connelly KG, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):21–5

Markers for predicting the development of acute respiratory distress syndrome. Connelly KG, et al. **Annu Rev Med** 1997; 48:429–45 (67 ref.)

Indices of hypoxemia in patients with acute respiratory distress syndrome: reliability, validity, and clinical usefulness [editorial; comment] [see comments] Gould MK, et al. **Crit Care Med** 1997 Jan;25(1):6–8. Comment on: Crit Care Med 1997 Jan;25(1):41–45. Comment in: Crit Care Med 1997 Aug;25(8):1437.

Variability of indices of hypoxemia in adult respiratory distress syndrome [see comments] Gowda MS, et al. **Crit Care Med** 1997 Jan;25(1):41–5. Comment in: Crit Care Med 1997 Jan;25(1):6–8. Comment in: Crit Care Med 1997 Aug;25(8):1437.

Diagnosis and therapy of acute respiratory distress syndrome in adults: an international survey. Carmichael LC, et al. **J Crit Care** 1996 Mar;11(1):9–18

Prediction of posttraumatic adult respiratory distress syndrome by albumin excretion rate eight hours after admission. Pallister I, et al. **J Trauma** 1997 Jun; 42(6):1056–61

Predicting ARDS: problems and prospects. Hudson LD, et al. **Lancet** 1997 Jun 21;349(9068):1783

Motor neuron disease presenting as acute respiratory failure: electrophysiological studies. Chen R, et al. **Muscle Nerve** 1997 Apr;20(4):517–9

Assessment of pulmonary function in the early phase of ARDS in pediatric patients. Newth CJ, et al. **Pediatr Pulmonol** 1997 Mar;23(3):169–75

[Severe HELLP syndrome with temporary kidney and lung failure] Ulrich S, et al. **Geburtshilfe Frauenheilkd** 1996 Aug; 56(8):443–6 (Eng. Abstr.) **(Ger)**

[A comment on "nitric oxide inhalation test in patients with ARDS" (letter; comment)] Fusari M, et al. **Minerva Anestesiol** 1995 Sep;61(9):401–3. Comment on: Minerva Anestesiol 1995 Apr;61(4):127–32. **(Ita)**

[Pathophysiology and Diagnosis of the acute respiratory distress syndrome] Kanazawa M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:245–50 (Eng. Abstr.) **(Jpn)**

[Diagnosis of acute respiratory distress syndrome: analysis of bronchoalveolar lavage fluid] Taniguchi H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:251–6 (Eng. Abstr.) **(Jpn)**

[Diagnosis of the stage of adult respiratory distress syndrome in patients with peritonitis] Zarubina TV, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):26–30 (Eng. Abstr.) **(Rus)**

[A case of a favorable outcome in a large–focus myocardial infarct with the adult respiratory distress syndrome] Shvyrkova NM, et al. **Ter Arkh** 1996;68(5):80–1 (7 ref.) **(Rus)**

DRUG THERAPY

Supportive pharmacotherapy for patients with acute respiratory distress syndrome. Krafft P, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:65–9

Surfactant for acute respiratory distress syndrome. Jobe AH, et al. **Adv Intern Med** 1997;42:203–30 (70 ref.)

Effects of nitric oxide inhalation on pulmonary serial vascular resistances in ARDS. Rossetti M, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1375–81

Ultrasonic nebulization for efficient delivery of surfactant in a model of acute lung injury. Impact on gas exchange. Schermuly R, et al. **Am J Respir Crit Care Med** 1997 Aug; 156(2 Pt 1):445–53

Inhaled prostacyclin (PGI2) versus inhaled nitric oxide in adult respiratory distress syndrome. Zwissler B, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1671–7

Inhaled aerosolized prostacyclin and nitric oxide as selective pulmonary vasodilators in ARDS—a pilot study. Van Heerden PV, et al. **Anaesth Intensive Care** 1996 Oct; 24(5):564–8

Improvement in oxygenation by phenylephrine and nitric oxide in patients with adult respiratory distress syndrome [see comments] Doering EB, et al. **Anesthesiology** 1997 Jul; 87(1):18–25. Comment in: Anesthesiology 1997 Jul;87(1):1–3.

Phenylephrine and inhaled nitric oxide in adult respiratory distress syndrome. When are two better than one? [editorial; comment] Pearl RG. **Anesthesiology** 1997 Jul;87(1):1–3 (16 ref.). Comment on: Anesthesiology 1997 Jul;87(1):18–25.

A trial of antioxidants N–acetylcysteine and procysteine in ARDS. The Antioxidant in ARDS Study Group. Bernard GR, et al. **Chest** 1997 Jul;112(1):164–72

Inhaled nitric oxide in neonatal and pediatric acute respiratory distress syndrome: dose response, prolonged inhalation, and weaning. Demirakça S, et al. **Crit Care Med** 1996 Nov;24(11):1913–9

Inhaled nitric oxide in adult respiratory distress syndrome: do we know the risks versus benefits? [editorial; comment] Eichacker PQ. **Crit Care Med** 1997 Apr;25(4):563–5. Comment on: Crit Care Med 1997 Apr;25(4):584–93.

Effects of eicosapentaenoic and gamma–linolenic acid on lung permeability and alveolar macrophage eicosanoid synthesis in endotoxic rats. Mancuso P, et al. **Crit Care Med** 1997 Mar;25(3):523–32

Efficacy of inhaled nitric oxide in oleic acid–induced acute lung injury. Shah NS, et al. **Crit Care Med** 1997 Jan; 25(1):153–8

The role of the host defence response in the progression and outcome of ARDS: pathophysiological correlations and

response to glucocorticoid treatment. Meduri GU.
Eur Respir J 1996 Dec;9(12):2650–70 (219 ref.)
Lazaroid U–74389F attenuates phorbol ester–induced lung injury in rabbits. Miniati M, et al. **Eur Respir J** 1996 Apr; 9(4):758–64
Combined effects of NO inhalation and intravenous PGF2 alpha on pulmonary circulation and gas exchange in an ovine ARDS model. Kobayashi H, et al.
Intensive Care Med 1996 Jul;22(7):656–63
Effects of nebulized salbutamol on respiratory mechanics in adult respiratory distress syndrome. Moriña P, et al.
Intensive Care Med 1997 Jan;23(1):58–64
Timing of exogenous surfactant administration in a rabbit model of acute lung injury. Ito Y, et al.
J Appl Physiol 1996 Apr;80(4):1357–64
Partial liquid ventilation provides effective gas exchange in a large animal model. Overbeck MC, et al. **J Crit Care** 1996 Mar;11(1):37–42
High–dose furosemide alters gas exchange in a model of acute lung injury. Waugh JB, et al. **J Crit Care** 1996 Sep; 11(3):129–37
Dose response to inhaled nitric oxide in pediatric patients with pulmonary hypertension and acute respiratory distress syndrome. Nakagawa TA, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):63–9
Mitigation of injury in canine lung grafts by exogenous surfactant therapy. Novick RJ, et al.
J Thorac Cardiovasc Surg 1997 Feb;113(2):342–53
Should we treat acute respiratory distress syndrome with inhaled nitric oxide? [letter] Troncy E, et al. **Lancet** 1997 Jul 12;350(9071):111–2
Nitric oxide in the pulmonary circulation. Adnot S, et al.
Monaldi Arch Chest Dis 1996 Dec;51(6):519–27 (30 ref.)
Pulmonary surfactant function following endotoxin: effects of exogenous surfactant treatment. Picone A, et al.
Shock 1996 Apr;5(4):304–10
[NO and alternative inhalational therapy approaches in pulmonary hypertension] Walmrath D, et al.
Internist (Berl) 1997 May;38(5):453–60 (55 ref.) **(Ger)**
[Surfactant update. International Symposium on current aspects and developments] **Z Geburtshilfe Neonatol** 1995 Nov–Dec;199(6 Suppl):1–16 **(Ger)**
[Inhaled nitrous oxide (NO) for the treatment of ARDS] Olivei MC, et al. **Minerva Anestesiol** 1997 Mar;63(3):61–8 (Eng. Abstr.) **(Ita)**
[Recurrence of the acute respiratory distress syndrome in a patient with liver cirrhosis and diabetes mellitus] Kishimoto T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1996 May; 34(5):586–91 (Eng. Abstr.) **(Jpn)**
[Basic evaluation of nitric oxide inhalation therapy] Kobayashi H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1995 Dec;33 Suppl:193–8 (Eng. Abstr.) **(Jpn)**
[Gas exchange and hemodynamic effects of nitric oxide inhalation in patients with acute respiratory distress syndrome] Betbesé AJ, et al. **Med Clin (Barc)** 1996 Jul 6; 107(6):201–6 (Eng. Abstr.) **(Spa)**
[Prolonged inhalation of nitric oxide in adult respiratory distress syndrome in a case] Andresen M, et al.
Rev Med Chil 1996 Jan;124(1):94–102 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Gelatinases in epithelial lining fluid of patients with adult respiratory distress syndrome. Delclaux C, et al.
Am J Physiol 1997 Mar;272(3 Pt 1):L442–51
Increased expression of gelatinases and collagenase in rat lungs exposed to 100% oxygen. Pardo A, et al.
Am J Respir Crit Care Med 1996 Oct;154(4 Pt 1):1067–75
Higher concentrations of matrix metalloproteinases in bronchoalveolar lavage fluid of patients with adult respiratory distress syndrome. Torii K, et al.
Am J Respir Crit Care Med 1997 Jan;155(1):43–6

EPIDEMIOLOGY

Acute respiratory distress syndrome in a community hospital ICU. Nolan S, et al. **Intensive Care Med** 1997 May; 23(5):530–8
Adult respiratory distress syndrome in pregnancy: report of three cases and review of the literature. Catanzarite VA, et al. **Obstet Gynecol Surv** 1997 Jun;52(6):381–92 (69 ref.)

ETIOLOGY

Nebulization of endotoxin during mechanical ventilation: an experimental model of ARDS in pigs. Pompe JC, et al.
Adv Exp Med Biol 1996;388:599–602
Bilateral knee replacement [letter; comment] Carr JB.
Am J Orthop 1996 Sep;25(9):660. Comment on: Am J Orthop 1996 Apr;25(4):292–5.
Babesiosis in Missouri [letter; comment] Byrd RP Jr, et al.
Ann Intern Med 1997 Jan 15;126(2):172. Comment on: Ann Intern Med 1996 Apr 1;124(7):643–50.
Infections and the inflammatory response in acute respiratory distress syndrome. Headley AS, et al. **Chest** 1997 May; 111(5):1306–21
Traumatic adult respiratory distress syndrome. Bass TL, et al. **Chest Surg Clin N Am** 1997 May;7(2):429–42 (71 ref.)
Scrub typhus complicating acute respiratory distress syndrome: a report of two cases. Lee WS, et al.
Chung Hua I Hsueh Tsa Chih (Taipei) 1995 Sep; 56(3):205–10
Pulmonary vascular permeability after cardiopulmonary bypass and its relationship to oxidative stress. Messent M, et al. **Crit Care Med** 1997 Mar;25(3):425–9
Endothelial cell activity varies in patients at risk for the adult respiratory distress syndrome. Moss M, et al.
Crit Care Med 1996 Nov;24(11):1782–6
Mechanisms of acute lung injury. Downey GP, et al.
Curr Opin Pulm Med 1997 May;3(3):234–41 (60 ref.)
L–NAME aggravates pulmonary oxygen toxicity in rats. Capellier G, et al. **Eur Respir J** 1996 Dec;9(12):2531–6
The lung physician and the antiphospholipid syndrome [editorial; comment] Hillerdal G. **Eur Respir J** 1997 Mar; 10(3):511–2. Comment on: Eur Respir J 1997 Mar;10(3):727–30.
Adult respiratory distress syndrome and pancytopenia associated with miliary tuberculosis in a HIV–infected patient. Mofredj A, et al. **Eur Respir J** 1996 Dec; 9(12):2685–7
Adult respiratory distress syndrome: a disorder in need of improved outcome [letter; comment] Alkhuja S.
Heart Lung 1997 May–Jun;26(3):252. Comment on: Heart Lung 1997 Jan–Feb;26(1):3–14.
Acute respiratory distress syndrome (ARDS) in miliary tuberculosis: a twelve year experience. Mohan A, et al.
Indian J Chest Dis Allied Sci 1996 Jul–Sep;38(3):157–62 (17 ref.)
Intramedullary femoral osteosynthesis: an additional cause of ARDS in multiply injured patients? van der Made WJ, et al. **Injury** 1996 Jul;27(6):391–3
ARDS caused by herpes simplex virus pneumonia in a patient with Crohn's disease: a case report. François–Dufresne A, et al. **Intensive Care Med** 1997 Mar;23(3):345–7
Pressure–limited ventilation with permissive hypercapnia and minimum PEEP in saline–lavaged rabbits allows progressive improvement in oxygenation, but does not avoid ventilator–induced lung injury [see comments] Hickling KG, et al. **Intensive Care Med** 1996 Dec; 22(12):1445–52. Comment in: Intensive Care Med 1997 May;23(5):600–1.
Respiratory distress syndrome and septic shock due to varicella in an HIV–infected adult [letter] Mofredj A, et al. **Intensive Care Med** 1996 Aug;22(8):835–6
Liver inflammation and acute respiratory distress syndrome in a patient receiving hepatitis B vaccine: a possible relationship? Ranieri VM, et al. **Intensive Care Med** 1997 Jan;23(1):119–21
Tension pneumoperitoneum. Burdett–Smith P, et al.
J Accid Emerg Med 1996 May;13(3):220–1
Adult respiratory distress syndrome, pneumonia, and mortality following thoracic injury and a femoral fracture treated either with intramedullary nailing with reaming or with a plate. A comparative study. Bosse MJ, et al.
J Bone Joint Surg Am 1997 Jun;79(6):799–809
Life–threatening scrub typhus with meningoencephalitis and acute respiratory distress syndrome [published erratum appears in J Formos Med Assoc 1997 May;96(5):390] Fang CT, et al. **J Formos Med Assoc** 1997 Mar;96(3):213–6
Acute lung injury: clinical concept and experimental approaches to pathogenesis. Kanazawa M. **Keio J Med** 1996 Sep;45(3):131–9 (61 ref.)
Acute non–cardiogenic lung injury in benign tertian malaria [letter] Torres JR, et al. **Lancet** 1997 Jul 5;350(9070):31–2
Organizing diffuse alveolar damage associated with progressive systemic sclerosis. Muir TE, et al.
Mayo Clin Proc 1997 Jul;72(7):639–42
Phaeochromocytoma with adult respiratory distress syndrome mimicking septicaemic shock. Mok CC, et al.
Med J Aust 1997 Jun 16;166(12):634–5
The complications of lung resection in adults: acute respiratory distress syndrome (ARDS). Williams E, et al.
Monaldi Arch Chest Dis 1996 Aug;51(4):310–5 (27 ref.)
Adult respiratory distress syndrome associated with crush syndrome [letter] Nishihara G, et al. **Nephron** 1997; 75(4):488–9
Acute lung injury in isolated traumatic brain injury. Bratton SL, et al. **Neurosurgery** 1997 Apr;40(4):707–12; discussion 712
The expression of adhesion molecule and ARDS. Malik AB, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec;34 Suppl:29–34 (25 ref.)
Acute respiratory distress syndrome caused by respiratory syncytial virus. Hammer J, et al. **Pediatr Pulmonol** 1997 Mar;23(3):176–83
Effect of high–frequency oscillatory ventilation on intracranial pressure in a child with herpes encephalitis and acute respiratory distress syndrome. Reyes G, et al.
Pediatr Pulmonol 1997 Aug;24(2):115–8
Meconium aspiration induces ARDS–like pulmonary response in lungs of ten–week–old pigs. Soukka H, et al.
Pediatr Pulmonol 1997 Mar;23(3):205–11
Severe pulmonary dysfunction following acute respiratory distress syndrome. Smith HR, et al. **Postgrad Med J** 1996 Sep;72(851):555–6
Bordetella bronchoseptica pneumonia with shock in an immunocompetent patient. Tamion F, et al.
Scand J Infect Dis 1996;28(2):197–8
Clinics in diagnostic imaging (19). Acute respiratory distress syndrome (ARDS) secondary to intra–abdominal sepsis [published erratum appears in Singapore Med J 1997 Feb;38(2):53] Ho ET, et al. **Singapore Med J** 1996 Dec; 37(6):653–7
Adult respiratory distress syndrome in Thai medical patients. Kiatboonsri S, et al.
Southeast Asian J Trop Med Public Health 1995 Dec; 26(4):774–80
[Acute respiratory distress revealing an aneurysm of the thoracic aorta. Report of a case (letter)] Ameur A, et al.
J Mal Vasc 1997;22(1):62–3 **(Fre)**
[Anatomoclinical conference: breast cancer, hyperleukocytosis and respiratory failure] Lemaitre F, et al. **Rev Med Brux** 1997 Apr;18(2):75–8 (Eng. Abstr.) **(Fre)**
[Acute respiratory insufficiency after inhaling concrete dust—a case report] Morin AM, et al.
Anasthesiol Intensivmed Notfallmed Schmerzther 1997 Jan; 32(1):56–60 (Eng. Abstr.) **(Ger)**
[ARDS (adult respiratory distress syndrome)] Seeger W.
Pneumologie 1996 Sep;50 Suppl 2:615–7 (15 ref.) **(Ger)**
[Surgical stress and acute lung injury] Takezawa J.
Nippon Geka Gakkai Zasshi 1996 Sep;97(9):739–44 (33 ref.) (Eng. Abstr.) **(Jpn)**
[High concentrations of interleukin–8 in bronchoalveolar lavage fluid from a patient with adult respiratory distress syndrome] Matsubara H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1996 May; 34(5):552–6 (Eng. Abstr.) **(Jpn)**
[Mechanisms and evaluation of multiple organ and system failure after trauma] Fontes B, et al.
Rev Hosp Clin Fac Med Sao Paulo 1996 Mar–Apr; 51(2):72–7 (Eng. Abstr.) **(Por)**
[Adult respiratory distress syndrome caused by miliary tuberculosis in a patient with HIV infection (letter)] Arbol Linde F, et al. **An Med Interna** 1996 Oct;13(10):511 **(Spa)**
[Recurrent ARDS in varicella pneumonia complicated by disseminated candidiasis in a pregnant woman] Prieto Valderrey F, et al. **An Med Interna** 1996 Oct;13(10):491–3 (Eng. Abstr.) **(Spa)**
[Pulmonary hemorrhage and acute respiratory failure secondary to thrombolytic treatment with tissue plasminogen activator (rt–PA) in patients with acute myocardial infarction (letter)] Sandar Núñez D, et al.
Med Clin (Barc) 1997 Mar 1;108(8):318 **(Spa)**

GENETICS

Application of differential display to isolate novel genes in interleukin–2–induced adult respiratory distress syndrome. Neville LF, et al. **Ann N Y Acad Sci** 1996 Oct 31;796:257–71 (52 ref.)
Racial differences in allelic distribution at the human pulmonary surfactant protein B gene locus (SP–B). Veletza SV, et al. **Exp Lung Res** 1996 Jul–Aug;22(4):489–94
[Proliferation of alveolar epithelial cells and gene expression of surfactant proteins in adult respiratory distress syndrome (ARDS)] Sugahara K. **Nippon Rinsho** 1996 Feb;54(2):341–5 (12 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Current concepts of sepsis and acute lung injury. Sessler CN, et al. **Clin Chest Med** 1996 Jun;17(2):213–35 (151 ref.)
Anti–IL–8 autoantibodies in alveolar fluid from patients with the adult respiratory distress syndrome. Kurdowska A, et al. **J Immunol** 1996 Sep 15;157(6):2699–706
Studies on the interaction of IL–8 with human plasma alpha 2–macroglobulin: evidence for the presence of IL–8 complexed to alpha 2–macroglobulin in lung fluids of patients with adult respiratory distress syndrome. Kurdowska A, et al. **J Immunol** 1997 Feb 15;158(4):1930–40
Relationship between respiratory distress and cytokine response after cardiopulmonary bypass. Ito H, et al.
Surg Today 1997;27(3):220–5
The novel chemokine mob–1: involvement in adult respiratory distress syndrome. Abdullah F, et al.
Surgery 1997 Aug;122(2):303–12
Evidence for an unknown component of pancreatic ascites that induces adult respiratory distress syndrome through an interleukin–1 and tumor necrosis factor–dependent mechanism. Denham W, et al. **Surgery** 1997 Aug; 122(2):295–301; discussion 301–2
Relative production of tumour necrosis factor alpha and interleukin 10 in adult respiratory distress syndrome. Armstrong L, et al. **Thorax** 1997 May;52(5):442–6
[Anti–C5a suppresses post–traumatic permeability damage of the lung after severe burn trauma] Schmid E, et al.
Langenbecks Arch Chir Suppl Kongressbd 1997;114:631–4 (Eng. Abstr.) **(Ger)**

METABOLISM

Uptake of inhaled nitric oxide in acute lung injury. Westfelt UN, et al. **Acta Anaesthesiol Scand** 1997 Aug;41(7):818–23
Soluble transforming growth factor–alpha is present in the pulmonary edema fluid of patients with acute lung injury. Chesnutt AN, et al. **Chest** 1997 Mar;111(3):652–6
Release of lactate by the lung in acute lung injury [see comments] Kellum JA, et al. **Chest** 1997 May;111(5):1301–5 . Comment in: Chest 1997 May;111(5):1157–8.
Surfactant protein and CC–10 expression in acute lung injury and in response to keratinocyte growth factor. Yano T, et al. **Chest** 1997 Jun;111(6 Suppl):137S–138S
Pulmonary vascular permeability after cardiopulmonary bypass and its relationship to oxidative stress. Messent M, et al. **Crit Care Med** 1997 Mar;25(3):425–9

High levels of leukaemia inhibitory factor in ARDS. Jorens PG, et al. **Cytokine** 1996 Nov;8(11):873–6

Bronchoalveolar and systemic cytokine profiles in patients with ARDS, severe pneumonia and cardiogenic pulmonary oedema. Schütte H, et al. **Eur Respir J** 1996 Sep; 9(9):1858–67

The pulmonary uptake of intravenously administered liposomal alpha-tocopherol is augmented in acute lung injury. Suntres ZE, et al. **J Drug Target** 1996;4(3):151–9

Right shift of the oxyhemoglobin dissociation curve in acute respiratory distress syndrome. Clerbaux T, et al. **Pathol Biol (Paris)** 1997 Apr;45(4):269–73

[Defensin in plasma and in bronchoalveolar lavage fluid from patients with acute respiratory distress syndrome] Ashitani J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec; 34(12):1349–53 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Positive serology to Legionella longbeachae in patients with adult respiratory distress syndrome. Konecny P, et al. **Anaesth Intensive Care** 1996 Dec;24(6):678–81

Selective inhibition of the inducible isoform of nitric oxide synthase prevents pulmonary transvascular flux during acute endotoxemia. Arkovitz MS, et al. **J Pediatr Surg** 1996 Aug;31(8):1009–15

Pulmonary actinomycosis: a cause of adult respiratory distress syndrome. Crausman RS, et al. **Med Health R I** 1997 Jun;80(6):200–2

Pulmonary blastomycosis with acute respiratory failure as predominant clinical feature. Mukkamala R, et al. **South Med J** 1997 Aug;90(8):847–50

MORTALITY

Increased mortality of older patients with acute respiratory distress syndrome. Suchyta MR, et al. **Chest** 1997 May; 111(5):1334–9

Is outcome from ARDS related to the severity of respiratory failure? Ferring M, et al. **Eur Respir J** 1997 Jun; 10(6):1297–300

The acute respiratory distress syndrome: definitions, severity and clinical outcome. An analysis of 101 clinical investigations [see comments] Krafft P, et al. **Intensive Care Med** 1996 Jun;22(6):519–29. Comment in: Intensive Care Med 1996 Jun;22(6):517–8.

The prognosis of ARDS: appropriate optimism? [editorial] Lemaire F. **Intensive Care Med** 1996 May;22(5):371–3 (18 ref.)

[Are ISS and PTS unsuitable trauma scores for prediction of (possible) post-traumatic lung failure?] Gebhard F, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:331–3 (Eng. Abstr.) **(Ger)**

[Scales for evaluation of mortality of patients with trauma and adult respiratory distress syndrome] Hernández-Gutiérrez P, et al. **Salud Publica Mex** 1997 May–Jun;39(3):201–6 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Acute respiratory distress syndrome due to falciparum malaria in a pregnant woman. Baud M, et al. **Intensive Care Med** 1997 Jul;23(7):787–9

Unusual acute and chronic complications of malaria [see comments] Metha SR, et al. **J Assoc Physicians India** 1996 Jul;44(7):451–3. Comment in: J Assoc Physicians India 1996 Jul;44(7):445–6.

PATHOLOGY

ONO-5046, an elastase inhibitor, attenuates endotoxin-induced acute lung injury in rabbits. Nishina K, et al. **Anesth Analg** 1997 May;84(5):1097–103

Influence of prone position on the extent and distribution of lung injury in a high tidal volume oleic acid model of acute respiratory distress syndrome. Broccard AF, et al. **Crit Care Med** 1997 Jan;25(1):16–27

[Proliferation of alveolar epithelial cells and gene expression of surfactant proteins in adult respiratory distress syndrome (ARDS)] Sugahara K. **Nippon Rinsho** 1996 Feb;54(2):341–5 (12 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Large increase in cardiac output in a patient with ARDS and acute right heart failure during inhalation of nitric oxide. Benzing A, et al. **Acta Anaesthesiol Scand** 1997 May; 41(5):643–6

Delayed derecruitment after removal of PEEP in patients with acute lung injury. Lichtwarck-Aschoff M, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):675–84

Pathophysiology of acute lung failure. Schlag G. **Acta Anaesthesiol Scand Suppl** 1996;109:61–3

Effects of volume controlled ventilation with PEEP, pressure regulated volume controlled ventilation and low frequency positive pressure ventilation with extracorporeal carbon dioxide removal on total static lung compliance and oxygenation in pigs with ARDS. Kesecioğlu J, et al. **Adv Exp Med Biol** 1996;388:629–36

Assessment of ventilation inhomogeneity and gas exchange with volume controlled ventilation and pressure regulated volume controlled ventilation on pigs with surfactant depleted lungs. Kesecioğlu J, et al. **Adv Exp Med Biol** 1996; 388:539–44

Effects of different modes of ventilation on right ventricular function in patients with ARDS. Köprülü G, et al. **Adv Exp Med Biol** 1996;388:637–42

Assessment of pressure-volume curve of the respiratory system in mechanically ventilated patients with ARDS. Tütüncü AS, et al. **Adv Exp Med Biol** 1996;388:569–74

Pathophysiologic basis of acute respiratory distress in patients who fail a trial of weaning from mechanical ventilation [see comments] Jubran A, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):906–15. Comment in: Am J Respir Crit Care Med 1997 Aug;156(2 Pt 1):669–70.

Relationship between soluble CD14, lipopolysaccharide binding protein, and the alveolar inflammatory response in patients with acute respiratory distress syndrome. Martin TR, et al **Am J Respir Crit Care Med** 1997 Mar; 155(3):937–44

Alveolar overdistension is an important mechanism of persistent lung damage following severe protracted ARDS. Finfer S, et al. **Anaesth Intensive Care** 1996 Oct; 24(5):569–73

ONO-5046, an elastase inhibitor, attenuates endotoxin-induced acute lung injury in rabbits. Nishina K, et al. **Anesth Analg** 1997 May;84(5):1097–103

Hypoxic pulmonary vasoconstriction in nonventilated lung areas contributes to differences in hemodynamic and gas exchange responses to inhalation of nitric oxide [see comments] Benzing A, et al. **Anesthesiology** 1997 Jun; 86(6):1254–61. Comment in: Anesthesiology 1997 Jun;86(6):1228–30.

Physiologic determinants of the response to inhaled nitric oxide in patients with acute respiratory distress syndrome. Manktelow C, et al. **Anesthesiology** 1997 Aug;87(2):297–307

Effects of peripheral high energy missile trauma on the oxygenation of lung tissue in the pig. Gustafsson U, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):22–6

The interdependence of lung antioxidants and antiprotease defense in ARDS. Gadek JE, et al. **Chest** 1996 Dec;110(6 Suppl):273S–277S (13 ref.)

Coordination of genetic, epigenetic, and environmental factors in lung development, injury, and repair. Warburton D, et al. **Chest** 1997 Jun;111(6 Suppl):119S–122S (51 ref.)

Adult respiratory distress syndrome (ARDS): current management, future directions. Wiedemann HP, et al. **Cleve Clin J Med** 1997 Jul–Aug;64(7):365–72 (30 ref.)

The prone position in acute respiratory distress syndrome: where we are, and where do we go from here [editorial; comment] Albert RK. **Crit Care Med** 1997 Sep;25(9):1453–4 (36 ref.). Comment on: Crit Care Med 1997 Sep;25(9):1539–44.

Influence of prone position on the extent and distribution of lung injury in a high tidal volume oleic acid model of acute respiratory distress syndrome. Broccard AF, et al. **Crit Care Med** 1997 Jan;25(1):16–27

Partial carbon dioxide rebreathing: a reliable technique for noninvasive measurement of nonshunted pulmonary capillary blood flow. de Abreu MG, et al. **Crit Care Med** 1997 Apr;25(4):675–83

Indices of hypoxemia in patients with acute respiratory distress syndrome: reliability, validity, and clinical usefulness [editorial; comment] [see comments] Gould MK, et al. **Crit Care Med** 1997 Jan;25(1):6–8. Comment on: Crit Care Med 1997 Jan;25(1):41–45. Comment in: Crit Care Med 1997 Aug;25(8):1437.

Variability of indices of hypoxemia in adult respiratory distress syndrome [see comments] Gowda MS, et al. **Crit Care Med** 1997 Jan;25(1):41–5. Comment in: Crit Care Med 1997 Jan;25(1):6–8. Comment in: Crit Care Med 1997 Aug;25(8):1437.

The role of the host defence response in the progression and outcome of ARDS: pathophysiological correlations and response to glucocorticoid treatment. Meduri GU. **Eur Respir J** 1996 Dec;9(12):2650–70 (219 ref.)

Chlorine gas induced acute lung injury in isolated rabbit lung. Menaouar A, et al. **Eur Respir J** 1997 May;10(5):1100–7

Tidal volume in acute respiratory distress syndrome [letter; comment] Blanch L, et al. **Intensive Care Med** 1996 Dec; 22(12):1467–8. Comment on: Intensive Care Med 1996 Mar;22(3):192–8.

Endothelial modification of pulmonary vascular tone. Curzen NP, et al. **Intensive Care Med** 1996 Jun;22(6):596–607 (109 ref.)

The role of nitric oxide in sepsis and ARDS: synopsis of a roundtable conference held in Brussels on 18–20 March 1995. Fink MP, et al. **Intensive Care Med** 1996 Feb; 22(2):158–65 (103 ref.)

New aspects of pulmonary mechanics: "slowly" distensible compartments of the respiratory system, identified by a PEEP step maneuver. Fretschner R, et al. **Intensive Care Med** 1996 Dec;22(12):1328–34

Response to nitric oxide inhalation in early acute lung injury. Lundin S, et al. **Intensive Care Med** 1996 Aug;22(8):728–34

Nitric oxide and right ventricular function [letter; comment] Tritapepe L, et al. **Intensive Care Med** 1996 Jun;22(6):612–3 . Comment on: Intensive Care Med 1995 Mar;21(3):195–6. Comment on: Intensive Care Med 1995 Mar;21(3):197–203.

Improved oxygenation utilizing a prone positioner in patients with acute respiratory distress syndrome. Vollman KM, et al. **Intensive Care Med** 1996 Oct;22(10):1105–11

Phosphodiesterase inhibition overcomes pulmonary vasomotor dysfunction in acute lung injury. Sheridan BC, et al. **J Surg Res** 1997 Aug;71(2):145–9

Pentoxifylline treatment attenuates pulmonary vasomotor dysfunction in acute lung injury. Sheridan BC, et al. **J Surg Res** 1997 Aug;71(2):150–4

Increased neutrophil elastase, persistent intravascular coagulation, and decreased fibrinolytic activity in patients with posttraumatic acute respiratory distress syndrome. Gando S, et al. **J Trauma** 1997 Jun;42(6):1068–72

Vagal and sympathetic denervation in the development of oleic acid–induced pulmonary edema. Du HL, et al. **Respir Physiol** 1997 Mar;107(3):251–61

Role of oxidant stress in the adult respiratory distress syndrome: evaluation of a novel antioxidant strategy in a porcine model of endotoxin-induced acute lung injury. Gonzalez PK, et al. **Shock** 1996;6 Suppl 1:S23–6 (54 ref.)

[Experimental changes in the alveolo-capillary barrier induced by artificial ventilation] Dreyfuss D, et al. **Schweiz Med Wochenschr** 1997 Jun 14;127(24):1023–9 (30 ref.) (Eng. Abstr.) **(Fre)**

[Acute respiratory failure in the adult: pathophysiology, diagnosis and treatment] Lewandowski K, et al. **Pneumologie** 1996 Aug;50(8):505–17 (82 ref.) **(Ger)**

[Adhesion molecules and their role in pathogenesis of ARDS] Skiba-Choińska I, et al. **Przegl Lek** 1996;53(8):627–30 (34 ref.) (Eng. Abstr.) **(Pol)**

[Patients with acute adult respiratory distress syndrome: effects of inhaled nitric oxide on gas exchange and hemodynamics] Andresen M, et al. **Rev Med Chil** 1996 Jul; 124(7):813–9 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Inhaled nitric oxide does not prevent endotoxin-induced lung injury in rabbits. Nishina K, et al. **Acta Anaesthesiol Scand** 1997 Mar;41(3):399–407

The effects of post-treatment with lisofylline, a phosphatidic acid generation inhibitor, on sepsis-induced acute lung injury in pigs. Hasegawa N, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):928–36

Protective effect of B464, a lipid A analog, on endotoxin-induced cellular responses and acute lung injury. Soejima K, et al. **Am J Respir Crit Care Med** 1996 Oct; 154(4 Pt 1):900–6

Postinjury thromboxane receptor blockade ameliorates acute lung injury. Goff CD, et al. **Ann Thorac Surg** 1997 Sep; 64(3):826–9

Effects of selective digestive decontamination on lung injury and outcome: the verdict is not yet in [editorial; comment] Dematte JE, et al. **Chest** 1997 Aug;112(2):304–6. Comment on: Chest 1997 Aug;112(2):491–5.

Gut decontamination reduces bowel ischemia-induced lung injury in rats [see comments] Sorkine P, et al. **Chest** 1997 Aug;112(2):491–5. Comment in: Chest 1997 Aug;112(2):304–6.

Protective effect of interleukin-1 receptor antagonist on oleic acid–induced lung injury. Sun D, et al. **Chin Med J (Engl)** 1996 Jul;109(7):522–6

Pretreatment with inhaled nitric oxide inhibits neutrophil migration and oxidative activity resulting in attenuated sepsis-induced acute lung injury [see comments] Bloomfield GL, et al. **Crit Care Med** 1997 Apr;25(4):584–93 . Comment in: Crit Care Med 1997 Apr;25(4):563–5.

Pressure-limited ventilation with permissive hypercapnia and minimum PEEP in saline-lavaged rabbits allows progressive improvement in oxygenation, but does not avoid ventilator-induced lung injury [see comments] Hickling KG, et al. **Intensive Care Med** 1996 Dec; 22(12):1445–52. Comment in: Intensive Care Med 1997 May;23(5):600–1.

Inhaled nitric oxide improved the outcome of severe right ventricular failure caused by lipopolysaccharide administration. Uchida T, et al. **Intensive Care Med** 1996 Nov;22(11):1203–6

Antibodies against CD14 protect primates from endotoxin-induced shock. Leturcq DJ, et al. **J Clin Invest** 1996 Oct 1;98(7):1533–8

Selective inhibition of the inducible isoform of nitric oxide synthase prevents pulmonary transvascular flux during acute endotoxemia. Arkovitz MS, et al. **J Pediatr Surg** 1996 Aug;31(8):1009–15

Leukocyte and platelet depletion with a blood cell separator [letter; comment] Taggart DP. **J Thorac Cardiovasc Surg** 1996 Nov;112(5):1406. Comment on: J Thorac Cardiovasc Surg 1996 Jan;111(1):45–54.

Prevention of endotoxemia-induced acute respiratory distress syndrome-like lung injury in rabbits by a monoclonal antibody to IL-8. Yokoi K, et al. **Lab Invest** 1997 Mar; 76(3):375–84

Intraoperative maintenance of tissue perfusion prevents ARDS. Adult Respiratory Distress Syndrome. Thangathurai D, et al. **New Horiz** 1996 Nov;4(4):466–74

[Effect of intubation timing on the clinical course of polytrauma patients with lung contusions] Huf R, et al. **Zentralbl Chir** 1996;121(1):21–3 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Lung imaging in the adult respiratory distress syndrome: current practice and new insights. Desai SR, et al. **Intensive Care Med** 1997 Jan;23(1):7–15 (101 ref.)

Acute respiratory distress syndrome: CT findings during partial liquid ventilation. Meaney JF, et al. **Radiology** 1997 Feb;202(2):570–3

Clinics in diagnostic imaging (19). Acute respiratory distress syndrome (ARDS) secondary to intra-abdominal sepsis

[published erratum appears in Singapore Med J 1997 Feb;38(2):53] Ho ET, et al. **Singapore Med J** 1996 Dec; 37(6):653–7

RADIONUCLIDE IMAGING

Radionuclide assessment of pulmonary microvascular permeability. Groeneveld AB. **Eur J Nucl Med** 1997 Apr; 24(4):449–61 (103 ref.)

The role of gallium–67 scintigraphy in diagnosing sources of fever in ventilated patients. Meduri GU, et al. **Intensive Care Med** 1996 May;22(5):395–403

Bedside measurement of pulmonary capillary permeability in patients with acute lung injury. What have we learned? [editorial] Rocker GM. **Intensive Care Med** 1996 Jul; 22(7):619–21 (19 ref.)

THERAPY

High frequency ventilation techniques in ARDS. Lanzenberger–Schragl E, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:157–61

Extracorporeal lung assist in ARDS: history and state of the art. Lennartz H. **Acta Anaesthesiol Scand Suppl** 1996; 109:114–6 (15 ref.)

Present role of nitric oxide inhalation in severe lung failure. Rossaint R, et al. **Acta Anaesthesiol Scand Suppl** 1996; 109:88–92

Keep the lung dry—sense or nonsense? Sporn P. **Acta Anaesthesiol Scand Suppl** 1996;109:63–5

Definition of severity and compiling of entry criteria in patients undergoing ECLA: the use of a fuzzy logic expert system. Steltzer H, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:125–6

Therapeutic approach in early and late ARDS. Suter P. **Acta Anaesthesiol Scand Suppl** 1997;110:48–51

Extracorporeal oxygenation. Esen F. **Adv Exp Med Biol** 1996; 388:513–9 (13 ref.)

Mechanical ventilation in ARDS. Kesecioğlu J. **Adv Exp Med Biol** 1996;388:533–8 (30 ref.)

Assessment of ventilation inhomogeneity and gas exchange with volume controlled ventilation and pressure regulated volume controlled ventilation on pigs with surfactant depleted lungs. Kesecioğlu J, et al. **Adv Exp Med Biol** 1996; 388:539–44

Effects of volume controlled ventilation with PEEP, pressure regulated volume controlled ventilation and low frequency positive pressure ventilation with extracorporeal carbon dioxide removal on total static lung compliance and oxygenation in pigs with ARDS. Kesecioğlu J, et al. **Adv Exp Med Biol** 1996;388:629–36

Effects of different modes of ventilation on right ventricular function in patients with ARDS. Köprülü G, et al. **Adv Exp Med Biol** 1996;388:637–42

The lung in distress. So KL, et al. **Adv Exp Med Biol** 1996; 388:463–71 (46 ref.)

Assessment of pressure–volume curve of the respiratory system in mechanically ventilated patients with ARDS. Tütüncü AS, et al. **Adv Exp Med Biol** 1996;388:569–74

For every thing (turn...turn...turn....) [editorial] Albert RK. **Am J Respir Crit Care Med** 1997 Feb;155(2):393–4

Prone position in mechanically ventilated patients with severe acute respiratory failure. Chatte G, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):473–8

Bovine surfactant therapy for patients with acute respiratory distress syndrome. Gregory TJ, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1309–15

Inverse ratio ventilation (I/E = 2/1) in acute respiratory distress syndrome: a six–hour controlled study. Mercat A, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1637–42

Tracheal gas insufflation is a useful adjunct in permissive hypercapnic management of acute respiratory distress syndrome. Barnett CC, et al. **Am J Surg** 1996 Nov; 172(5):518–21; discussion 521–2

Ventilatory strategies for acute respiratory failure. Moore FA, et al. **Am J Surg** 1997 Jan;173(1):53–6; discussion 57–8 (15 ref.)

Induced hypothermia in intensive care medicine. Bernard S. **Anaesth Intensive Care** 1996 Jun;24(3):382–8 (104 ref.)

The effects of long–term prone positioning in patients with trauma–induced adult respiratory distress syndrome [see comments] Fridrich P, et al. **Anesth Analg** 1996 Dec; 83(6):1206–11. Comment in: Anesth Analg 1996 Dec;83(6):1139–40.

When is a patient prone for prone? [editorial; comment] Pappert D, et al. **Anesth Analg** 1996 Dec;83(6):1139–40. Comment on: Anesth Analg 1996 Dec;83(6):1206–11.

Hypoxic pulmonary vasoconstriction in nonventilated lung areas contributes to differences in hemodynamic and gas exchange responses to inhalation of nitric oxide [see comments] Benzing A, et al. **Anesthesiology** 1997 Jun; 86(6):1254–61. Comment in: Anesthesiology 1997 Jun;86(6):1228–30.

Permissive hypercapnia with and without expiratory washout in patients with severe acute respiratory distress syndrome. Kalfon P, et al. **Anesthesiology** 1997 Jul;87(1):6–17; discussion 25A–26A

The influence of nitric oxide in adult respiratory distress syndrome when Pv(O2) is varied [editorial; comment] Marshall BE, et al. **Anesthesiology** 1997 Jun;86(6):1228–30. Comment on: Anesthesiology 1997 Jun;86(6):1254–61.

Results of extracorporeal membrane oxygenation in children with sepsis. The Extracorporeal Life Support Organization. Meyer DM, et al. **Ann Thorac Surg** 1997 Mar;63(3):756–61

ECMO support for adult patients with acute respiratory failure. Macha M, et al. **ASAIO J** 1996 Sep–Oct; 42(5):M841–4

Successful use of extracorporeal membrane oxygenation in the treatment of acute chest syndrome in a child with severe sickle cell anemia. Trant CA Jr, et al. **ASAIO J** 1996 May–Jun;42(3):236–9

Permissive hypercapnia and gas exchange in lungs with high Qs/Qt: a mathematical model. Joyce CJ, et al. **Br J Anaesth** 1996 Nov;77(5):678–83

Extracorporeal membrane oxygenation, a favourable outcome? [editorial] Peek GJ, et al. **Br J Anaesth** 1997 Mar;78(3):235–7

Extracorporeal membrane oxygenation for transport of hypoxaemic patients with severe ARDS. Rossaint R, et al. **Br J Anaesth** 1997 Mar;78(3):241–6

Portable power supply for continuous mechanical ventilation during intrahospital transport of critically ill patients with ARDS. Barton AC, et al. **Chest** 1997 Aug;112(2):560–3

Interest of a therapeutic optimization strategy in severe ARDS [see comments] Guinard N, et al. **Chest** 1997 Apr; 111(4):1000–7. Comment in: Chest 1997 Apr;111(4):845–6.

Rescue therapy for the acute respiratory distress syndrome (ARDS) [editorial; comment] Kollef MH. **Chest** 1997 Apr; 111(4):845–6. Comment on: Chest 1997 Apr;111(4):1000–7.

Prone postioning and low–volume pressure–limited ventilation improve survival in patients with severe ARDS. Stocker R, et al. **Chest** 1997 Apr;111(4):1008–17

Inhaled nitric oxide does not change transpulmonary angiotensin II formation in patients with acute respiratory distress syndrome. Wenz M, et al. **Chest** 1997 Aug; 112(2):478–83

Hypercapnic respiratory acidosis precipitated by hypercaloric carbohydrate infusion in resolving septic acute respiratory distress syndrome: a case report. Jih KS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Nov; 58(5):359–65

High–frequency oscillatory ventilation for infants and children with adult respiratory distress syndrome. Tang JR, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Mar–Apr;38(2):137–44

Adult respiratory distress syndrome (ARDS): current management, future directions. Wiedemann HP, et al. **Cleve Clin J Med** 1997 Jul–Aug;64(7):365–72 (30 ref.)

Evolving concepts in the ventilatory management of acute respiratory distress syndrome. Marini JJ. **Clin Chest Med** 1996 Sep;17(3):555–75 (116 ref.)

Adjuncts to mechanical ventilation. Nahum A, et al. **Clin Chest Med** 1996 Sep;17(3):491–511 (168 ref.)

High–inflation pressure and positive end–expiratory pressure. Injurious to the lung? No. Nelson LD. **Crit Care Clin** 1996 Jul;12(3):603–25 (110 ref.)

High–inflation pressure and positive end–expiratory pressure. Injurious to the lung? Yes. Papadakos PJ, et al. **Crit Care Clin** 1996 Jul;12(3):627–34 (29 ref.)

Acute respiratory distress syndrome. Sachdeva RC, et al. **Crit Care Clin** 1997 Jul;13(3):503–21 (75 ref.)

Experimental study of double–lumen, two–stage endotracheal tube during conventional mechanical ventilation in rabbits. Chen XN, et al. **Crit Care Med** 1997 Mar;25(3):492–5

High–frequency oscillatory ventilation for adult respiratory distress syndrome—a pilot study [see comments] Fort P, et al. **Crit Care Med** 1997 Jun;25(6):937–47. Comment in: Crit Care Med 1997 Jun;25(6):906–8.

High–frequency oscillatory ventilation for adult respiratory distress syndrome: let's get it right this time! [editorial; comment] Froese AB. **Crit Care Med** 1997 Jun;25(6):906–8. Comment on: Crit Care Med 1997 Jun;25(6):937–47.

Additive beneficial effects of the prone position, nitric oxide, and almitrine bismesylate on gas exchange and oxygen transport in acute respiratory distress syndrome. Jolliet P, et al. **Crit Care Med** 1997 May;25(5):786–94

A "prone dependent" patient with severe adult respiratory distress syndrome. Marik PE, et al. **Crit Care Med** 1997 Jun;25(6):1085–7

Partial liquid ventilation: a comparison using conventional and high–frequency techniques in an animal model of acute respiratory failure [see comments] Smith KM, et al. **Crit Care Med** 1997 Jul;25(7):1179–86. Comment in: Crit Care Med 1997 Jul;25(7):1104–5.

Central venous catheterization in a patient in the prone position [letter] Sunder–Plassmann G, et al. **Crit Care Med** 1997 Aug;25(8):1439–40

Significant reduction in minute ventilation and peak inspiratory pressures with arteriovenous CO2 removal during severe respiratory failure. Tao W, et al. **Crit Care Med** 1997 Apr;25(4):689–95

Comparison of pressure– and flow–triggered pressure–support ventilation on weaning parameters in patients recovering from acute respiratory failure. Tütüncü AS, et al. **Crit Care Med** 1997 May;25(5):756–60

Acute respiratory distress syndrome in children. Beaufils F, et al. **Curr Opin Pediatr** 1997 Jun;9(3):207–12 (47 ref.)

New regimens in the management of posttraumatic respiratory failure. O'Keefe GE, et al. **Curr Opin Pulm Med** 1997 May;3(3):227–33 (47 ref.)

New strategies in mechanical ventilation for acute lung injury. Burchardi H. **Eur Respir J** 1996 May;9(5):1063–72 (80 ref.)

Mechanical ventilation and adjuncts in acute respiratory distress syndrome. Deb B, et al. **Int Anesthesiol Clin** 1997 Winter;35(1):109–24 (115 ref.)

Global and extended coagulation monitoring during extracorporeal lung assist with heparin–coated systems in ARDS patients. Gerlach M, et al. **Int J Artif Organs** 1997 Jan;20(1):29–36

Hemodynamic and gas exchange responses to inhalation of nitric oxide in patients with the acute respiratory distress syndrome and in hypoxemic patients with chronic obstructive pulmonary disease. Blanch L, et al. **Intensive Care Med** 1997 Jan;23(1):51–7

New aspects of pulmonary mechanics: "slowly" distensible compartments of the respiratory system, identified by a PEEP step maneuver. Fretschner R, et al. **Intensive Care Med** 1996 Dec;22(12):1328–34

Nitric oxide in partial liquid ventilation: better matching ventilation to perfusion in ARDS? [editorial; comment] Kaisers U, et al. **Intensive Care Med** 1997 Feb;23(2):139–40. Comment on: Intensive Care Med 1997 Feb;23(2):163–9.

The ongoing mystery of ARDS [editorial; comment] Knaus WA. **Intensive Care Med** 1996 Jun;22(6):517–8. Comment on: Intensive Care Med 1996 Jun;22(6):519–29.

The prognosis of ARDS: appropriate optimism? [editorial] Lemaire F. **Intensive Care Med** 1996 May;22(5):371–3 (18 ref.)

Anti–inflammatory therapies: application of molecular biology techniques in intensive care medicine. Liu M, et al. **Intensive Care Med** 1997 Jul;23(7):718–31 (127 ref.)

Exogenous surfactant therapy for acute respiratory distress in infancy [letter] Moreno M, et al. **Intensive Care Med** 1996 Jan;22(1):87

Surfactant replacement therapy in acute respiratory distress syndrome from viral pneumonia. Putz G, et al. **Intensive Care Med** 1996 Jun;22(6):588–90

Evaluation of exogenous surfactant treatment strategies in an adult model of acute lung injury. Lewis JF, et al. **J Appl Physiol** 1996 Apr;80(4):1156–64

Diagnosis and therapy of acute respiratory distress syndrome in adults: an international survey. Carmichael LC, et al. **J Crit Care** 1996 Mar;11(1):9–18

Extracorporeal membrane oxygenation for early graft dysfunction in lung transplantation: a case report. Ball JW Jr, et al. **J Heart Lung Transplant** 1997 Apr;16(4):468–71

Comparison of volume control and pressure control ventilation: is flow waveform the difference? Davis K Jr, et al. **J Trauma** 1996 Nov;41(5):808–14

Loculated pneumothoraces in patients with acute respiratory disease treated with mechanical ventilation: preliminary observations after image–guided drainage. Boland GW, et al. **J Vasc Interv Radiol** 1996 Mar–Apr;7(2):247–52

Inhaled nitric oxide [letter; comment] Cuthbertson BH, et al. **Lancet** 1996 Nov 23;348(9039):1447; discussion 1448. Comment on: Lancet 1996 Sep 7;348(9028):629–30.

Ventilation in the prone position. The Prone–Supine Study Collaborative Group [letter] Gattinoni L, et al. **Lancet** 1997 Sep 13;350(9080):815

Inhaled nitric oxide [letter; comment] Joannidis M, et al. **Lancet** 1996 Nov 23;348(9039):1448–9. Comment on: Lancet 1996 Sep 7;348(9028):629–30.

Respiratory support in refractory ARDS. Keogh BF. **Middle East J Anesthesiol** 1996 Jun;13(5):461–93 (56 ref.)

PUFA n–3 lipid emulsion—a promising agent in ARDS treatment [editorial] Zadák Z, et al. **Nutrition** 1997 Mar; 13(3):232–3

Surfactant replacement therapy for adult respiratory distress syndrome in children. Evans DA, et al. **Pediatr Pulmonol** 1996 May;21(5):328–36 (100 ref.)

Effect of high–frequency oscillatory ventilation on intracranial pressure in a child with herpes encephalitis and acute respiratory distress syndrome. Reyes G, et al. **Pediatr Pulmonol** 1997 Aug;24(2):115–8

Exogenous surfactant decreases oxygenation in Escherichia coli endotoxin–treated neonatal piglets. Sood SL, et al. **Pediatr Pulmonol** 1996 Dec;22(6):376–86

Prone position for ventilation in patients with severe adult respiratory distress syndrome. Turner JS, et al. **S Afr Med J** 1994 Nov;84(11 Suppl):803–6

The changing prognosis of ARDS. Schuster DP. **Schweiz Med Wochenschr** 1997 Jun 14;127(24):1018–22 (11 ref.)

Strategies of invasive ventilatory support in ARDS. Kirkpatrick AW, et al. **Shock** 1996;6 Suppl 1:S17–22 (64 ref.)

Adult respiratory distress syndrome in Thai medical patients. Kiatboonsri S, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):774–80

Surfactant replacement therapy in ARDS: white knight or noise in the system? Nicholas TE, et al. **Thorax** 1997 Feb; 52(2):195–7

[Ventilation of patients in prone position in acute respiratory distress syndrome (see comments)] Manten A, et al. **Ned Tijdschr Geneeskd** 1996 Nov 9;140(45):2213–6. Comment in: Ned Tijdschr Geneeskd 1997 Jan 25;141(4):216. **(Dut)**

[Ventilation of patients in prone position in the acute respiratory distress syndrome (letter; comment)] Pöll JS. **Ned Tijdschr Geneeskd** 1997 Jan 25;141(4):216. Comment on: Ned Tijdschr Geneeskd 1996 Nov 9;140(45):2213–6. **(Dut)**

[Artificial ventilation in acute respiratory distress syndrome

in adults. Towards an individual optimization] Joly LM, et al. **Presse Med** 1996 Oct 19;25(31):1473–8 (24 ref.) (Eng. Abstr.) **(Fre)**

[Improving pulmonary gas exchange using kinetic therapy] Bein T, et al.
Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Aug; 31(6):391–4 **(Ger)**

[Ventilation methods with kinetic therapy (editorial)] Busse J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):240–1 **(Ger)**

[Clinical concepts for differentiated ventilation] Mang H, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):242–5 **(Ger)**

[Kinetic therapy within the scope of treating septic surgical patients] Muhl E, et al.
Anasthesiol Intensivmed Notfallmed Schmerzther 1997 Apr; 32(4):249–52 **(Ger)**

[Continuous axial position change in post-traumatic lung failure—preventive or therapeutic indications?] Pape HC, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):245–9 **(Ger)**

[Liquid ventilation with perfluorocarbons (see comments)] Quintel M, et al.
Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct; 31(8):461–9 (72 ref.) (Eng. Abstr.). Comment in: Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct;31(8):459–60. **(Ger)**

[Treatment strategies in intensive care of patients with severe thoracic injuries and lung contusions] Stiletto R, et al.
Anasthesiol Intensivmed Notfallmed Schmerzther 1997 Apr; 32(4):241–2 **(Ger)**

[Liquid ventilation—fact or fiction? (editorial; comment)] van Ackern K.
Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct; 31(8):459–60. Comment on: Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct;31(8):461–9. **(Ger)**

[Treatment of postoperative lung failure with prone positioning] Greive H, et al.
Langenbecks Arch Chir Suppl Kongressbd 1996;113:345–8 (Eng. Abstr.) **(Ger)**

[Surfactant administration and laterally independent positive pressure ventilation in acute lung failure and atelectasis after septic abortion. Case report] Hoheisel G, et al.
Pneumologie 1997 Mar;51(3):270–3 (Eng. Abstr.) **(Ger)**

[Perspectives in mechanical ventilation in ARDS] Max M, et al. **Schweiz Med Wochenschr** 1997 Jun 14;127(24):1030–8 (68 ref.) (Eng. Abstr.) **(Ger)**

[Intrabronchial surfactant administration in inhalation trauma of severely burned patients with ARDS. Initial case reports] Pallua N, et al. **Unfallchirurg** 1997 May; 100(5):363–70 (Eng. Abstr.) **(Ger)**

[Extracorporeal membrane oxygenation in adult respiratory distress syndrome. Experience in 2 patients] Alamo M, et al. **Rev Med Chil** 1995 Oct;123(10):1275–83 (29 ref.) (Eng. Abstr.) **(Spa)**

[Extracorporeal respiratory assistance. Experience in the treatment of severe acute respiratory failure] Castillo L, et al. **Rev Med Chil** 1996 Jan;124(1):45–56 (Eng. Abstr.) **(Spa)**

RESPIRATORY DRAINAGE, POSTURAL see **DRAINAGE, POSTURAL**

RESPIRATORY DRUG ADMINISTRATION see **ADMINISTRATION, INHALATION**

RESPIRATORY ENTERIC ORPHAN VIRUSES see **REOVIRIDAE**

RESPIRATORY FAILURE see **RESPIRATORY INSUFFICIENCY**

RESPIRATORY FUNCTION TESTS

Spirometry, bronchodilator test or symptom scoring for the assessment of childhood asthma. Linna O. **Acta Paediatr** 1996 May;85(5):564–9

Correlation of high-resolution CT and pulmonary function in bronchiolitis obliterans: a study based on 24 patients associated with consumption of Sauropus androgynus. Yang CF, et al. **AJR Am J Roentgenol** 1997 Apr; 168(4):1045–50

American Thoracic Society—European Respiratory Society Longitudinal Data Analysis Workshop. Barcelona, Spain, September 21–23, 1995. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S207–84

End-tidal oxygraphy and safe duration of apnoea in young adults and elderly patients [see comments] Bhatia PK, et al. **Anaesthesia** 1997 Feb;52(2):175–8. Comment in: Anaesthesia 1997 Jun;52(6):606–7.

Refractory asthma, Part 2: Airway interventions and management. Jagoda A, et al. **Ann Emerg Med** 1997 Feb; 29(2):275–81 (59 ref.)

Pulmonary function after laparoscopic cholecystectomy in the elderly [letter; comment] Ağalar F, et al. **Br J Surg** 1997 Apr;84(4):579. Comment on: Br J Surg 1996 Aug;83(8):1059–61.

Lung function tests in patients with idiopathic pulmonary fibrosis. Are they helpful for predicting outcome? [see comments] Erbes R, et al. **Chest** 1997 Jan;111(1):51–7. Comment in: Chest 1997 Jan;111(1):7–8.

Pulmonary function tests and idiopathic pulmonary fibrosis. Simple may be better [editorial; comment] Kirtland SH, et al. **Chest** 1997 Jan;111(1):7–8. Comment on: Chest 1997 Jan;111(1):51–7.

Pulmonary alveolar proteinosis: high-resolution CT, chest radiographic, and functional correlations. Lee KN, et al. **Chest** 1997 Apr;111(4):989–95

Pulmonary function in obese subjects with a normal FEV1/FVC ratio. Sahebjami H, et al. **Chest** 1996 Dec; 110(6):1425–9

Cardiorespiratory responses to incremental exercise in patients with systemic sclerosis. Schwaiblmair M, et al. **Chest** 1996 Dec;110(6):1520–5

Preoperative pulmonary function tests do not predict outcome after coronary artery bypass. Jacob B, et al. **Conn Med** 1997 Jun;61(6):327–32

Association between ozone and hospitalization for respiratory diseases in 16 Canadian cities. Burnett RT, et al. **Environ Res** 1997 Jan;72(1):24–31

Association between lifetime ambient ozone exposure and pulmonary function in college freshmen—results of a pilot study. Künzli N, et al. **Environ Res** 1997 Jan;72(1):8–23

Good exercise tolerance and impaired lung function after atrial repair of transposition. Hruda J, et al.
Eur J Cardiothorac Surg 1997 Aug;12(2):184–9

Detection of impaired intrapulmonary convective mixing by aerosol bolus dispersion in patients with emphysema. Kohlhäufl M, et al. **Eur J Med Res** 1997 Mar 24;2(3):121–8

Risk factors for hyperinflation in young schoolchildren born prematurely. Giffin FJ, et al. **Eur J Pediatr** 1997 Feb; 156(2):148–51

Upper abdominal surgery: does a lung function test exist to predict early severe postoperative respiratory complications? Barisione G, et al. **Eur Respir J** 1997 Jun; 10(6):1301–8

Lung function and airway responsiveness in children and adolescents after hyaline membrane disease: a matched cohort study. Cano A, et al. **Eur Respir J** 1997 Apr; 10(4):880–5

Lung function in bronchiectasis: the influence of Pseudomonas aeruginosa. Evans SA, et al. **Eur Respir J** 1996 Aug;9(8):1601–4

A five year follow-up of lung function among chemical workers using flow-volume and impedance measurements. Keman S, et al. **Eur Respir J** 1996 Oct;9(10):2109–15

A new correction technique for measuring respiratory impedance through an endotracheal tube. Lorino AM, et al. **Eur Respir J** 1996 May;9(5):1079–86

Thoracoscopic sympathicolysis for essential hyperhidrosis: effects on pulmonary function. Noppen M, et al.
Eur Respir J 1996 Aug;9(8):1660–4

Published models and local data can bridge the gap between reference values of lung function for children and adults. Nysom K, et al. **Eur Respir J** 1997 Jul;10(7):1591–8

ERS/ATS workshop on longitudinal analysis of pulmonary function data, Barcelona, September 1995 [published erratum appears in Eur Respir J 1997 May;10(5):1197] Rijcken B, et al. **Eur Respir J** 1997 Mar;10(3):758–63

Pulmonary function tests in normal Indian children and changes in respiratory disorders [letter; comment] Sarpotdar VG. **Indian Pediatr** 1996 Jan;33(1):73–4. Comment on: Indian Pediatr 1995 Jun;32(6):629–34.

Effects on the lung function of exposure to carbon black dusts. Results of a study carried out on 677 members of staff of the DEGUSSA factory in Kalscheuren/Germany. Küpper HU, et al. **Int Arch Occup Environ Health** 1996; 68(6):478–83

High resolution computed tomography in cystic fibrosis: correlation with pulmonary function and assessment of prognostic value. Logan PM, et al. **Ir J Med Sci** 1996 Jan-Mar;165(1):27–31

Assessment of local lung impedance by the alveolar capsule oscillator in dogs: a model analysis. Mishima M, et al. **J Appl Physiol** 1996 Apr;80(4):1165–72

Anomalous behavior of helium and sulfur hexafluoride during single-breath tests in sustained microgravity. Prisk GK, et al. **J Appl Physiol** 1996 Apr;80(4):1126–32

Respiratory tissue properties derived from flow transfer function in healthy humans. Tomalak W, et al.
J Appl Physiol 1997 Apr;82(4):1098–106

Measurement of respiratory parameters by using inspired oxygen sinusoidal forcing signals. Williams EM, et al.
J Appl Physiol 1996 Aug;81(2):998–1006

A pulmonary monitoring and treatment plan for children with Duchenne-type muscular dystrophies. Warren RH, et al. **J Ark Med Soc** 1996 Dec;93(7):333–7

Predictive pulmonary function of school children in an area of low air pollution in Taiwan. Tang FC, et al.
J Formos Med Assoc 1997 Jun;96(6):397–404

Canine lung transplantation after more than twenty-four hours of normothermic preservation. Chien S, et al.
J Heart Lung Transplant 1997 Mar;16(3):340–51

Effects of hyperthermic isolated limb perfusion with tumor necrosis factor-alpha and melphalan on pulmonary function assessments. Sleijfer S, et al. **J Immunother** 1997 May; 20(3):202–7

Abnormal pulmonary function among traffic policemen in Bangkok. Saenghirunvattana S, et al. **J Med Assoc Thai** 1995 Dec;78(12):686–7

Improvement in lung function measurements using a flow spirometer that emphasizes computer assessment of test quality. Banks DE, et al. **J Occup Environ Med** 1996 Mar; 38(3):279–83

Bronchopulmonary dysplasia and very low birthweight: lung function at 11 years of age. Doyle LW, et al.
J Paediatr Child Health 1996 Aug;32(4):339–43

Pulmonary capacity in lung cancer patients prior to lung resection—comparison of the unilateral pulmonary artery occlusion test with expired gas analysis during exercise testing. Nagamatsu Y, et al. **Kurume Med J** 1996; 43(4):273–7

Pulmonary dysfunction in type 1 diabetes in relation to metabolic long-term control and to incipient diabetic nephropathy. Schnack C, et al. **Nephron** 1996;74(2):395–400

Follow-up of children with respiratory syncytial virus bronchiolitis in 1986 and 1987: potential effect of ribavirin on long term pulmonary function. The Bronchiolitis Study Group. Krilov LR, et al. **Pediatr Infect Dis J** 1997 Mar; 16(3):273–6

Measurement of lung function in awake 2–4-year-old asthmatic children during methacholine challenge and acute asthma: a comparison of the impulse oscillation technique, the interrupter technique, and transcutaneous measurement of oxygen versus whole-body plethysmography. Klug B, et al. **Pediatr Pulmonol** 1996 May;21(5):290–300

Long-term pulmonary functional outcome of bronchopulmonary dysplasia and premature birth. Parat S, et al. **Pediatr Pulmonol** 1995 Nov;20(5):289–96

Airway function tests and vocal cord paralysis in lung transplant recipients. Zapletal A, et al.
Pediatr Pulmonol 1997 Feb;23(2):87–94

Prospective evaluation of resting energy expenditure, nutritional status, pulmonary function, and genotype in children with cystic fibrosis. Zemel BS, et al.
Pediatr Res 1996 Oct;40(4):578–86

Diagnostic tests of lung function. Voter KZ, et al.
Pediatr Rev 1996 Feb;17(2):53–63

Pulmonary emphysema: comparison of preoperative quantitative CT and physiologic index values with clinical outcome after lung-volume reduction surgery. Gierada DS, et al. **Radiology** 1997 Oct;205(1):235–42

Lung function testing: the dilemma of predicted values in relation to the individual variability. Baur X, et al.
Respiration 1996;63(3):123–30

Are the pulmonary function tests and the markers of activity helpful to establish the prognosis of sarcoidosis? Mañá J, et al. **Respiration** 1996;63(5):298–303

Use of lung function tests in sarcoidosis. Brådvik I.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):59–62 (14 ref.)

Static respiratory pressures in patients with post-traumatic tetraplegia. Gounden P. **Spinal Cord** 1997 Jan;35(1):43–7

[High-resolution computer tomography in the diagnosis of cryptogenic fibrosing alveolitis. Correlation with pulmonary function and bronchoalveolar lavage] Polák J, et al. **Cas Lek Cesk** 1996 Jul 26;135(13):417–22 (Eng. Abstr.) **(Cze)**

[Respiratory insufficiency: calculate the cause] van der Werf TS, et al. **Ned Tijdschr Geneeskd** 1996 Nov 30; 140(48):2381–4 **(Dut)**

[Radiation tolerance of patients after pneumonectomy for bronchial cancer: role of pulmonary function tests] Mornex F, et al. **Cancer Radiother** 1997;1(2):181–5 (Eng. Abstr.) **(Fre)**

[Evaluation methods for respiratory muscle function and their application in respiratory rehabilitation] Delhez L. **J Belge Med Phys Rehabil** 1980;3(1):7–32 (30 ref.) **(Fre)**

[A study of relation between pulmonary function and bronchial hypersensitivity in severe asthmatic children] Matsuda S, et al. **Arerugi** 1996 Jan;45(1):5–10 (Eng. Abstr.) **(Jpn)**

[Pulmonary function tests for diagnosis and management of asthma] Miyazawa N, et al. **Nippon Rinsho** 1996 Nov; 54(11):2914–8 (5 ref.) (Eng. Abstr.) **(Jpn)**

[Lung function and exercise tolerance in patients with chronic major vessel thromboembolic pulmonary hypertension] Zieliński J, et al. **Pneumonol Alergol Pol** 1996; 64(9–10):679–86 (Eng. Abstr.) **(Pol)**

[Respiratory system function in workers from the Mechanical Petrochemical Plant in Płock—influence of the workplace environment] Martusewicz M, et al.
Pol Merkuriusz Lek 1996 Jul;1(1):25–7 (Eng. Abstr.) **(Pol)**

[Eosinophil cationic protein in the asthmatic infant: correlation with the clinic and pulmonary function] Villa Asensi JR, et al. **An Esp Pediatr** 1996 Nov;45(5):479–82 (Eng. Abstr.) **(Spa)**

[Roc curves in the evaluation of diagnostic tests (letter; comment)] Diez Herranz A, et al. **Med Clin (Barc)** 1997 Jan 11;108(1):34–5. Comment on: Med Clin (Barc) 1995 May 6;104(17):661–70. **(Spa)**

INSTRUMENTATION

Inaccuracy of portable peak flow meters: correction is not needed. Dutch CNSLD Study Group. Brand PL, et al. **Acta Paediatr** 1997 Aug;86(8):888–9

Quality control of peak flow meters for multicenter clinical trials. The Asthma Clinical Research Network (ACRN). Irvin CG, et al. **Am J Respir Crit Care Med** 1997 Aug; 156(2 Pt 1):396–402

The accuracy of pneumotachograph measurements during mechanical ventilation. Kreit JW, et al.
Am J Respir Crit Care Med 1996 Oct;154(4 Pt 1):913–7

Evaluation of nasal prongs for estimating nasal flow.

Montserrat JM, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):211–5

A paediatric airway monitor for use with the T-piece [letter; comment] Wilson S, et al. **Anaesthesia** 1997 Feb;52(2):185 . Comment on: Anaesthesia 1996 Sep;51(9):839–42.

Maximal expiratory pressures in spinal cord injury using two mouthpieces. Tully K, et al. **Chest** 1997 Jul;112(1):113–6

A portable device based on the interrupter technique to measure bronchodilator response in schoolchildren [see comments] Bridge PD, et al. **Eur Respir J** 1996 Jul; 9(7):1368–73. Comment in: Eur Respir J 1997 Jun;10(6):1428–9.

Mini-Wright peak flow meters are reliable after 5 years use. Dutch CNSLD Study Group [see comments] Douma WR, et al. **Eur Respir J** 1997 Feb;10(2):457–9. Comment in: Eur Respir J 1997 Jun;10(6):1429.

A system to generate simultaneous forced oscillation and continuous positive airway pressure. Farré R, et al. **Eur Respir J** 1997 Jun;10(6):1349–53

Mini-Wright peak-flow meters are reliable after 5 yrs use [letter; comment] Niggemann B. **Eur Respir J** 1997 Jun; 10(6):1429. Comment on: Eur Respir J 1997 Feb;10(2):457–9.

Evaluation of a new interrupter device for measuring bronchial responsiveness and the response to bronchodilator in 3 year old children [see comments] Phagoo SB, et al. **Eur Respir J** 1996 Jul;9(7):1374–80. Comment in: Eur Respir J 1997 Jun;10(6):1428–9.

Portable peak flow meters. McNaughton JP. **Eur Respir J Suppl** 1997 Feb;24:26S–28S

The Peak Flow Working Group: the characteristics and calibration of devices for recording peak expiratory flow. Miller MR, et al. **Eur Respir J Suppl** 1997 Feb;24:17S–22S

The Peak Flow Working Group: test of portable peak flow meters by explosive decompression. Pedersen OF, et al. **Eur Respir J Suppl** 1997 Feb;24:23S–25S

The Peak Flow Working Group: the definition of peak expiratory flow. Pedersen OF, et al. **Eur Respir J Suppl** 1997 Feb;24:9S–10S

Use of peak expiratory flow meters in adults: practical aspects. Sears MR. **Eur Respir J Suppl** 1997 Feb;24:72S–74S

Measurement of peak flow in children: a comparison between the low-range mini Wright and the low-range Ferraris pocket peak flow meter. Scadding GK, et al. **Int J Pediatr Otorhinolaryngol** 1996 Feb;34(3):225–8

Effects of lung motion and tracer kinetics corrections on PET imaging of pulmonary function. Mijailovich SM, et al. **J Appl Physiol** 1997 Apr;82(4):1154–62

Spiral nerve cuff electrode for recordings of respiratory output. Sahin M, et al. **J Appl Physiol** 1997 Jul;83(1):317–22

Laboratory and clinical evaluation of a portable computerized peak flow meter. Quirce S, et al. **J Asthma** 1997;34(4):305–12

End-tidal carbon dioxide detectors--are they useful in children? Bhende MS. **J Postgrad Med** 1994 Apr-Jun; 40(2):78–82 (51 ref.)

[Reproducibility of inspiratory mouth occlusion pressure with a mobile computer-assisted measuring system] Neumeister W, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:18–21 (Eng. Abstr.) **(Ger)**

[A simple method for improvement of the measurement of respiratory impedance in humans by increasing oropharyngeal impedance using cheek and mouth floor clamps] Barnikol WK, et al. **Pneumologie** 1997 Apr;51 Suppl 2:474–7 (Eng. Abstr.) **(Ger)**

[Technical adaptation of impulse oscillometry to special research conditions] Smith HJ, et al. **Pneumologie** 1997 Apr; 51 Suppl 2:465–8 (Eng. Abstr.) **(Ger)**

[The accuracy of several brands of portable peak flow meter, and the predicted value of peak expiratory flow rate for children] Takamasu T, et al. **Nippon Rinsho** 1996 Nov; 54(11):2933–8 (Eng. Abstr.) **(Jpn)**

[Comparison of different types of peak flow meter and reference values for peak expiratory flow (PEF) for healthy Japanese subjects] Tsukioka K. **Nippon Rinsho** 1996 Nov; 54(11):2927–32 (20 ref.) (Eng. Abstr.) **(Jpn)**

[An automated system for determining tracheobronchial resistance] Ul'kin SV, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov; 82(10–11):126–30 **(Rus)**

[Assessment of 2 portable peak expiratory flow meters and reference values for students 6 to 16 years of age] Cobos Barroso N, et al. **An Esp Pediatr** 1996 Dec;45(6):619–25 (Eng. Abstr.) **(Spa)**

[A new device for measuring occlusion pressure] Belda J, et al. **Arch Bronconeumol** 1996 Oct;32(8):410–3 (Eng. Abstr.) **(Spa)**

METHODS

Effects of bronchomotor tone and gas density on time dependence of forced expiratory vital capacity maneuver. D'Angelo E, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1318–22

Methacholine responsiveness using the raised volume forced expiration technique in infants. Hayden MJ, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1670–5

Validation of the St. George's Respiratory Questionnaire in bronchiectasis. Wilson CB, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):536–41

Assessing lung function. Mecoy RJ. **Aust Fam Physician** 1996 Feb;25(2):153, 156–9 (1 ref.)

Transdiaphragmatic pressure in young adult Singaporean subjects--normal values and a comparison between different respiratory manoeuvres. Chan CC, et al. **Aust N Z J Med** 1996 Feb;26(1):75–81

An algorithm for pulmonary screening of military pilots in Israel. Schwarz YA, et al. **Chest** 1997 Apr;111(4):916–21

How many maneuvers are required to measure maximal inspiratory pressure accurately. Wen AS, et al. **Chest** 1997 Mar;111(3):802–7

Comparison of five measures derived from in vivo pulmonary vascular pressure-flow curves. Lai YL, et al. **Chin J Physiol** 1997;40(1):45–9

Estimation of random errors in respiratory resistance and reactance measured by the forced oscillation technique. Farré R, et al. **Eur Respir J** 1997 Mar;10(3):685–9

Comparison of impedance and inductance ventilation sensors on adults during breathing, motion, and simulated airway obstruction. Cohen KP, et al. **IEEE Trans Biomed Eng** 1997 Jul;44(7):555–66

Temporary main bronchial occlusion under bronchoscopic control in the evaluation of candidates for pneumonectomy. Melloni G, et al. **Int Surg** 1997 Jan-Mar;82(1):34–7

A modified rebreathing technique using an infrared gas analyzer. Barazanji KW, et al. **J Appl Physiol** 1996 Apr; 80(4):1258–62

Flow limitation in normal infants: a new method for forced expiratory maneuvers from raised lung volumes. Feher A, et al. **J Appl Physiol** 1996 Jun;80(6):2019–25

Assessment of regional deposition of inhaled particles in human lungs by serial bolus delivery method. Kim CS, et al. **J Appl Physiol** 1996 Nov;81(5):2203–13

Airway closure and reopening assessed by the alveolar capsule oscillation technique. Otis DR Jr, et al. **J Appl Physiol** 1996 Jun;80(6):2077–84

Correction of thermal artifacts in plethysmographic airway resistance measurements. Peslin R, et al. **J Appl Physiol** 1996 Jun;80(6):2198–203

Respiratory transfer impedance between 8 and 384 Hz in guinea pigs before and after bronchial challenge. Sobh JF, et al. **J Appl Physiol** 1997 Jan;82(1):172–81

A simple method to monitor performance of forced vital capacity. Volta CA, et al. **J Appl Physiol** 1996 Feb; 80(2):693–8

Predischarge respiratory recordings in very low birth weight newborn infants. Barrington KJ, et al. **J Pediatr** 1996 Dec; 129(6):934–40

Incentive spirometry as screening pulmonary test. Dewan AK, et al. **J Surg Oncol** 1996 Nov;63(3):209

Respiratory muscle testing. Moxham J. **Monaldi Arch Chest Dis** 1996 Dec;51(6):483–8 (19 ref.)

Evaluation of pulmonary ventilation and diaphragmatic movement in idiopathic scoliosis using radioaerosol ventilation scintigraphy. Giordano A, et al. **Nucl Med Commun** 1997 Feb;18(2):105–11

Modification of the open circuit N2 washout technique for measurement of functional residual capacity in premature infants. Hentschel R, et al. **Pediatr Pulmonol** 1997 Jun; 23(6):434–41

Measurements of respiratory system resistance by the interrupter technique in healthy and asthmatic children. Oswald-Mammosser M, et al. **Pediatr Pulmonol** 1997 Aug; 24(2):78–85

Deposition of inspired aerosol particles within the respiratory tract of patients with obstructive lung disease. Schiller-Scotland CF, et al. **Toxicol Lett** 1996 Nov; 88(1-3):255–61

Thirty month variability of aerosol pulse dispersion and conventional lung function parameters in healthy middle aged smokers and nonsmokers. Siekmeier R, et al. **Toxicol Lett** 1996 Nov;88(1-3):263–70

[Evaluation of pulmonary function by expiratory CT using helical CT] Eda S, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:45–7 (6 ref.) **(Jpn)**

[Analytical method of lung sounds] Murata A, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:80–3 (6 ref.) **(Jpn)**

[Differential «pulmonary function] Nishio K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:19–21 (11 ref.) **(Jpn)**

[Respiratory muscle functional test] Saito H, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:62–4 (19 ref.) **(Jpn)**

[Pulmonary magnetic field] Sasaki H, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:51–4 (10 ref.) **(Jpn)**

[Medical practice-supporting system in pulmonary function testing] Kino H. **Rinsho Byori** 1997 May;45(5):438–41 (8 ref.) (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Behavioral task-induced bronchodilation in asthma during active and passive tasks: a possible cholinergic link to psychologically induced airway changes. Lehrer PM, et al. **Psychosom Med** 1996 Sep-Oct;58(5):413–22

STANDARDS

Redefining end of test (EOT) criteria for pulmonary function testing in children. Desmond KJ, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):542–5

Response to S.J. Day letter. Stevens MT, et al. **Control Clin Trials** 1995 Dec;16(6):447–8

Transfer factor (diffusing capacity) standardized for alveolar volume: validation, reference values and applications of a new linear model to replace KCO (TL/VA) [see comments] Chinn DJ, et al. **Eur Respir J** 1996 Jun; 9(6):1269–77. Comment in: Eur Respir J 1997 Mar;10(3):764–5.

Measurement of lung volumes in humans: review and recommendations from an ATS/ERS workshop [editorial; comment] Clausen JL, et al. **Eur Respir J** 1997 Jun; 10(6):1205–6. Comment on: Eur Respir J 1997 Jun;10(6):1415–27.

Transfer factor standardized for alveolar volume [letter; comment] Hughes JM. **Eur Respir J** 1997 Mar;10(3):764–5 . Comment on: Eur Respir J 1996 Jun;9(6):1269–77.

A model for standardization of lung function parameters by height. Kostianev S, et al. **Folia Med (Plovdiv)** 1996; 38(3–4):29–33

Predictive value of ventilatory tests in myasthenia gravis [letter; comment] Grad A, et al. **Intensive Care Med** 1996 Jul;22(7):713–4. Comment on: Intensive Care Med 1995 Aug;21(8):663–8.

A simple and reliable method to calibrate respiratory magnetometers and Respitrace [letter; comment] Sackner MA. **J Appl Physiol** 1996 Jul;81(1):516–7. Comment on: J Appl Physiol 1995 Dec;79(6):2169–76.

Choosing optimal values of FEV1 and FEV1/FVC for surveillance for respiratory disorders in occupational populations. Post WK, et al. **J Occup Environ Med** 1996 Jul;38(7):673–80

[Perspectives of a respiratory function analysis] Barnikol WK. **Pneumologie** 1997 Apr;51 Suppl 2:469–73 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

Time series for the analysis of pulmonary health data. Pope CA 3rd, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S229–33

Interpretation of longitudinal studies. An overview. Schouten JP, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S278–84 (39 ref.)

On modeling longitudinal pulmonary function data. Sherrill D, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S217–22

Statistical issues in longitudinal research on respiratory health. Ware JH, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S212–6

Overview of issues in the longitudinal analysis of respiratory data. Weiss ST, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S208–11

Spline and smoothing approaches to fitting flexible models for the analysis of pulmonary function data. Wypij D. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S223–8

Estimation of random errors in respiratory resistance and reactance measured by the forced oscillation technique. Farré R, et al. **Eur Respir J** 1997 Mar;10(3):685–9

Short-term air pollution exposures and responses in Los Angeles area schoolchildren. Linn WS, et al. **J Expo Anal Environ Epidemiol** 1996 Oct-Dec;6(4):449–72

Measurement of infant pulmonary mechanics: comparative analysis of techniques. Davis GM, et al. **Pediatr Pulmonol** 1997 Feb;23(2):105–13

[Cardiopulmonary normal values in geriatrics] Gassmann KG, et al. **Z Gerontol Geriatr** 1997 May-Jun;30(3):193–9 (55 ref.) (Eng. Abstr.) **(Ger)**

VETERINARY

Effect of 5-hydroxytryptamine type-2 receptor blockade on pulmonary function in calves with experimentally induced Pasteurella haemolytica pneumonia. Hare JE, et al. **Am J Vet Res** 1996 Jul;57(7):1034–9

Pulmonary function measurements during repeated environmental challenge of horses with recurrent airway obstruction (heaves). Tesarowski DB, et al. **Am J Vet Res** 1996 Aug;57(8):1214–9

[Respiratory mechanics in animals. 1. Physiological bases and conventional measurement methods--review] Reinhold P. **Berl Munch Tierarztl Wochenschr** 1997 Jul-Aug; 110(7–8):251–6 (73 ref.) (Eng. Abstr.) **(Ger)**

[Respiratory mechanics in animals. 2. The forced oscillation technique--review] Reinhold P. **Berl Munch Tierarztl Wochenschr** 1997 Jul-Aug; 110(7–8):257–66 (77 ref.) (Eng. Abstr.) **(Ger)**

[Effect of various factors on the results of lung function tests using multifrequent impulse oscillometry in calves and young cattle] Strie R, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug;104(8):286–90 (Eng. Abstr.) **(Ger)**

RESPIRATORY HYPERSENSITIVITY

Allergic Lung Disease. Proceedings of a symposium dedicated to Jack Pepys. London, United Kingdom, 22 May 1996. **Clin Exp Allergy** 1997 May;27 Suppl 1:vii, 1–86

Sensitization and enhanced allergen responsiveness. Wardlaw AJ, et al. **Clin Exp Allergy** 1995 Nov;25 Suppl 3:56–9 (0 ref.)

Air pollution and allergic disease. Report of a Working Party of the British Society for Allergy and Clinical Immunology. Wardlaw AJ. **Clin Exp Allergy** 1995 Nov;25 Suppl 3:6–8 (0 ref.)

Pediatric sinusitis: a literature review with emphasis on the role of allergy. Gungor A, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):4–15 (77 ref.)

[Airway hyperreactivity and respiratory allergy in children] **Rev Alerg Mex** 1996;43 Spec No:22–37 (73 ref.) **(Spa)**

RESPIRATORY HYPERSENSITIVITY

CHEMICALLY INDUCED

Allergen–irritant interaction and the role of corticosteroids. Davies RJ, et al. **Allergy** 1997;52(38 Suppl):59–65 (30 ref.)

Mechanisms of pollution–induced airway disease: in vitro studies in the upper and lower airways. Devalia JL, et al. **Allergy** 1997;52(38 Suppl):45–51; discussion 57–8 (37 ref.)

The role of diesel exhaust particles and their associated polyaromatic hydrocarbons in the induction of allergic airway disease. Diaz–Sanchez D. **Allergy** 1997;52(38 Suppl):52–6; discussion 57–8 (16 ref.)

Mechanisms of pollution–induced airway disease: in vivo studies. Peden DB. **Allergy** 1997;52(38 Suppl):37–44; discussion 57–8 (64 ref.)

Ozone, airways and allergic airways disease. Krishna MT, et al. **Clin Exp Allergy** 1995 Dec;25(12):1150–8 (82 ref.)

Impact of the environment on allergic lung diseases. Rusznak C, et al. **Clin Exp Allergy** 1997 May;27 Suppl 1:26–35 (80 ref.)

Is formaldehyde an important cause of allergic respiratory disease? [editorial] Smedley J. **Clin Exp Allergy** 1996 Mar; 26(3):247–9

Toxicology of air pollutants (animal studies). Wardlaw AJ. **Clin Exp Allergy** 1995 Nov;25 Suppl 3:40–3 (0 ref.)

Short–term ventilatory effects in workers exposed to fumes containing zinc oxide: comparison of forced oscillation technique with spirometry. Pasker HG, et al. **Eur Respir J** 1997 Jul;10(7):1523–9

Workshop overview. Identification of respiratory allergens. Kimber I, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):1–10

Reactive airway dysfunction syndrome due to sodium azide inhalation. Weiss JS. **Int Arch Occup Environ Health** 1996; 68(6):469–71

COMPLICATIONS

Nasal hypersensitivity in purulent middle ear effusion. Filiaci F, et al. **Allergol Immunopathol (Madr)** 1997 Mar–Apr; 25(2):91–4

Nasal hypersensitivity and recurrent adenoids disease. Filiaci F, et al. **Allergol Immunopathol (Madr)** 1997 Jul–Aug; 25(4):199–202

Anaphylaxis after ingestion of wheat flour contaminated with mites. Blanco C, et al. **J Allergy Clin Immunol** 1997 Mar; 99(3):308–13

The relation between physician–diagnosed sinusitis, asthma, and skin test reactivity to allergens in 8–year–old children. Lombardi E, et al. **Pediatr Pulmonol** 1996 Sep;22(3):141–6

[Pathogenetic basis of treatment for chronic obstructive pulmonary disease] Kozak–Szkopek E, et al. **Pol Merkuriusz Lek** 1996 Jul;1(1):56–9 (44 ref.) (Eng. Abstr.) **(Pol)**

DIAGNOSIS

The non–specific hypersensitivity of the upper and lower airways in Reinke's edema: preliminary results. Filiaci F, et al. **Allergol Immunopathol (Madr)** 1997 Jan–Feb; 25(1):18–22

Receiver–operating characteristic (ROC) curves: a fundamental tool for improving the clinical usefulness of in vitro IgE tests. Plebani M, et al. **Allergy** 1996 Jun; 51(6):407–11

Detection of eosinophils in hypertonic saline–induced sputum in patients with chronic nonproductive cough. Fujimura M, et al. **J Asthma** 1997;34(2):119–26

Clinical significance of allergic sensitization to cockroaches in patients with mite related respiratory allergy. Liccardi G, et al. **J Investig Allergol Clin Immunol** 1996 Sep–Oct; 6(5):283–7

Are combinations of questions better than individual questions for detecting sensitization to mite allergen? Murray AB, et al. **Pediatr Allergy Immunol** 1996 Aug; 7(3):147–50

[Recombinant allergens and their potential in allergological diagnosis] Crameri R, et al. **Pneumologie** 1996 Jun; 50(6):387–93 (84 ref.) **(Ger)**

[Serologic and skin test diagnosis of birch pollen allergy with recombinant Bet v 1, the chief allergen of birch] Menz G, et al. **Pneumologie** 1996 Sep;50(9):632–40 (Eng. Abstr.) **(Ger)**

[Comment on the contribution by Kardos, P., T. Gebhardt, "Chronic persistent cough in general practice: diagnosis and therapy in 329 patients over 2 years" (letter)] Mülleneisen NK. **Pneumologie** 1996 Nov;50(11):802–3 **(Ger)**

[Not all coughing is asthma—on differential bronchial asthma diagnosis in childhood] Leupold W. **Wien Med Wochenschr** 1996;146(15):419–22 (9 ref.) (Eng. Abstr.) **(Ger)**

[Usefulness of allergen extract Aquagen SQ–Dpt for administering bronchial provocation tests] Siergiejko Z, et al. **Pneumonol Alergol Pol** 1996;64(11–12):750–7 (Eng. Abstr.) **(Pol)**

[The effect of bronchial inhalation provocation tests on levels of interleukin–8 in material from broncho–alveolar fluid of patients with atopic bronchial asthma] Jahnz–Różyk K, et al. **Pol Merkuriusz Lek** 1997 Jan;2(7):32–5 (Eng. Abstr.) **(Pol)**

[Efficacy of a new in vitro test (Phadiatop paediatric) for the diagnosis of allergy in children] Gómez Vera J, et al. **Rev Alerg Mex** 1993 Nov–Dec;40(6):155–9 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

[Controlled clinical comparative evaluation of fluticasone powder inhalation versus flunisolide dose aerosol in patients with mild to moderate asthma] Bergmann KC. **Pneumologie** 1997 Jan;51(1):27–32 (Eng. Abstr.) **(Ger)**

[New drugs in the treatment of respiratory allergic diseases] Gani F, et al. **Recenti Prog Med** 1997 Jul–Aug; 88(7–8):333–41 (38 ref.) (Eng. Abstr.) **(Ita)**

[Evaluation of efficacy and tolerance of an antiasthmatic preparation—Ditec, consisting of low doses of disodium cromoglycate and fenoterol] Siergiejko Z, et al. **Pneumonol Alergol Pol** 1996;64(11–12):758–65 (Eng. Abstr.) **(Pol)**

[The effect of polyunsaturated fatty acids of the omega–3 class on the late phase of the allergic reaction in bronchial asthma patients] Masuev KA. **Ter Arkh** 1997;69(3):31–3 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Quantitation of eosinophil and neutrophil infiltration into rat lung by specific assays for eosinophil peroxidase and myeloperoxidase. Application in a Brown Norway rat model of allergic pulmonary inflammation. Schneider T, et al. **J Immunol Methods** 1996 Oct 30;198(1):1–14

EPIDEMIOLOGY

The Marrara syndrome: a hypersensitivity reaction of the upper respiratory tract and buccopharyngeal mucosa to nymphs of Linguatula serrata. Yagi H, et al. **Acta Trop** 1996 Dec 16;62(3):127–34

Respiratory allergy to parietaria pollen in 348 subjects. Masullo M, et al. **Allergol Immunopathol (Madr)** 1996 Jan–Feb;24(1):3–6

Sensitization to neumoallergens influence in mothers of asthmatic children. Sánchez Palacios A, et al. **Allergol Immunopathol (Madr)** 1996 Jan–Feb;24(1):7–12

Epidemiologic identification of allergic rhinitis. Charpin D, et al. **Allergy** 1996 May;51(5):293–8

The prevalence of asthmatic respiratory symptoms among adults in Estonian and Swedish university cities. Jõgi R, et al. **Allergy** 1996 May;51(5):331–6

Epidemiology of pollution–induced airway disease in Japan. Miyamoto T. **Allergy** 1997;52(38 Suppl):30–4; discussion 35–6 (13 ref.)

Allergic respiratory diseases and environmental pollution: experience in the printing/paper–manufacturing industry. Papa G, et al. **Allergy** 1996 Nov;51(11):833–6

Serum IgE levels, atopy, and asthma in young adults: results from a longitudinal cohort study. Peat JK, et al. **Allergy** 1996 Nov;51(11):804–10

Machining risk of beryllium disease and sensitization with median exposures below 2 micrograms/m3. Kreiss K, et al. **Am J Ind Med** 1996 Jul;30(1):16–25

Lung function in children of upper Silesian industrial zone, Poland: results of the cross–sectional study in two towns of different ambient air pollution levels. Zejda JE, et al. **Cent Eur J Public Health** 1996 Dec;4(4):252–6

Executive summary and future research. **Clin Exp Allergy** 1995 Nov;25 Suppl 3:9–11 (0 ref.)

Epidemiology of the effects of air pollutants on allergic disease in adults. Ayres JG. **Clin Exp Allergy** 1995 Nov; 25 Suppl 3:47–51 (0 ref.)

Epidemiology of the effects of air pollutants on allergic disease in children. Carswell F. **Clin Exp Allergy** 1995 Nov; 25 Suppl 3:52–5 (0 ref.)

Oilseed rape pollen is a potentially relevant allergen. Hemmer W, et al. **Clin Exp Allergy** 1997 Feb;27(2):156–61

The association of respiratory problems in a community sample with self–reported chemical intolerance. Baldwin CM, et al. **Eur J Epidemiol** 1997 Jul;13(5):547–52

Prevalence of respiratory symptoms, bronchial hyperresponsiveness and atopy among adults: west and east Germany. Nowak D, et al. **Eur Respir J** 1996 Dec; 9(12):2541–52

Wheat threshing dust—a "new allergen" in April–May nasobronchial allergy. Lavasa S, et al. **Indian Pediatr** 1996 Jul;33(7):566–70

Occupational respiratory diseases in laboratory animal workers: initial results. Krakowiak A, et al. **Int J Occup Med Environ Health** 1997;10(1):31–6

[Epidemiology of allergic respiratory diseases: many questions, few answers] Senna G, et al. **Recenti Prog Med** 1997 Jul–Aug;88(7–8):303–8 (Eng. Abstr.) **(Ita)**

[Epidemiological research on incidence of atopic disease in infants and children in relation to their nutrition in infancy] Arita M, et al. **Arerugi** 1997 Apr;46(4):354–69 (Eng. Abstr.) **(Jpn)**

[Evaluation of the prevalence sensitization to common inhaled allergens in children of school age using skin tests] Brębborowicz A, et al. **Pediatr Pol** 1996 Jan;71(1):11–4 (Eng. Abstr.) **(Pol)**

[Variability of respiratory system reactions to air pollutants. Epidemiologic study of children in Cracow] Jędrychowski W, et al. **Pneumonol Alergol Pol** 1996;64(5–6):267–75 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Sensitization to Anisakis simplex: an unusual presentation. Estrada Rodríguez JL, et al. **Allergol Immunopathol (Madr)** 1997 Mar–Apr;25(2):95–7

Rhinoreactivity in a patient affected by the Darier–White disease. Zambetti G, et al. **Allergol Immunopathol (Madr)** 1996 Jan–Feb;24(1):29–32

Occupational allergy in saffron workers. Feo F, et al. **Allergy** 1997 Jun;52(6):633–41

Epidemiology of pollution–induced airway disease in Japan. Miyamoto T. **Allergy** 1997;52(38 Suppl):30–4; discussion 35–6 (13 ref.)

Allergen sensitization and exposure to irritants in infancy. Søyseth V, et al. **Allergy** 1996 Oct;51(10):719–23

Review on buckwheat allergy. Wieslander G. **Allergy** 1996 Oct;51(10):661–5 (25 ref.)

Respiratory allergy to rats: exposure–response relationships in laboratory animal workers. Hollander A, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):562–7

Nasal histamine provocation of tenants in a sick–building residential area. Ohm M, et al. **Am J Rhinol** 1997 Mar–Apr; 11(2):167–75

Global increases in allergic respiratory disease: the possible role of diesel exhaust particles. Peterson B, et al. **Ann Allergy Asthma Immunol** 1996 Oct;77(4):263–8; quiz 269–70 (45 ref.)

Human exposure to air pollutants. Ashmore M. **Clin Exp Allergy** 1995 Nov;25 Suppl 3:12–21 (0 ref.)

A clinical evaluation in children of the Pharmacia ImmunoCAP system for inhalant allergens. Gleeson M, et al. **Clin Exp Allergy** 1996 Jun;26(6):697–702

Occupational sensitization to laboratory animals [editorial] Gordon S. **Clin Exp Allergy** 1997 Jun;27(6):603–5

Exposure of laboratory animal workers to airborne rat and mouse urinary allergens. Hollander A, et al. **Clin Exp Allergy** 1997 Jun;27(6):617–26

Sibship size and self–reported inhalant allergy among adult women. ALSPAC Study Team. Strachan DP, et al. **Clin Exp Allergy** 1997 Feb;27(2):151–5

Sensitization to pepper (Capsicum annuum) in a latex–allergic patient. Gallo R, et al. **Contact Dermatitis** 1997 Jul; 37(1):36–7

Danger in the dust. Lang L. **Environ Health Perspect** 1996 Jan;104(1):26–30

Oleaceae pollinosis: a review. Liccardi G, et al. **Int Arch Allergy Immunol** 1996 Nov;111(3):210–7 (67 ref.)

Skin–prick test sensitivity to olive pollen [letter] [corrected and republished in Med J Aust 1996 Oct 21;165(8):460] Azmi MH, et al. **Med J Aust** 1996 Sep 16;165(6):352

Airway hyperreactivity is associated with specific leukocyte subset infiltration in a mouse model of allergic airway inflammation. Lukacs NW, et al. **Pathobiology** 1996; 64(6):308–13

[Occupational respiratory tract allergy in trout processing workers] Tougård AB, et al. **Ugeskr Laeger** 1997 Sep 22; 159(39):5800–4 (Eng. Abstr.) **(Dan)**

[The wheezing child and pediatric respiratory infections] Grimfeld A. **Allerg Immunol (Paris)** 1997 Mar;29(3):73–4; discussion 82 (Eng. Abstr.) **(Fre)**

[Room air allergens: clinical significance, detection and prevention] Müsken H. **Pneumologie** 1996 Feb;50(2):168–76 (119 ref.) **(Ger)**

[Bronchial asthma: extrinsic, intrinsic or mixed?] Virchow JC Jr. **Wien Med Wochenschr** 1996;146(15):415–8 (36 ref.) (Eng. Abstr.) **(Ger)**

[Respiratory symptoms and occupational sensitization in a group of trainee bakers: results of a 6–month follow up] De Zotti R, et al. **Med Lav** 1997 Mar–Apr;88(2):155–65 (Eng. Abstr.) **(Ita)**

[Studies on murine model of nasal allergy] Watanabe M, et al. **Arerugi** 1996 Oct;45(10):1127–32 (Eng. Abstr.) **(Jpn)**

[Laboratory animals as a cause of occupational allergy] Krakowiak A, et al. **Med Pr** 1996;47(5):523–31 (55 ref.) (Eng. Abstr.) **(Pol)**

[Microflora of the air in sawmills as a potential occupational hazard: concentration and composition of microflora and immunologic reactivity of workers to microbial aeroallergens] Dutkiewicz J, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 1:25–31 (Eng. Abstr.) **(Pol)**

[Exposure to organic dust and microorganisms as a factor affecting respiratory function of workers of purebred horse farms] Mackiewicz B, et al. **Pneumonol Alergol Pol** 1996; 64 Suppl 1:19–24 (Eng. Abstr.) **(Pol)**

[Pulmonary funçtion tests and bronchial reactiveness with histamine in patients with atopic dermatitis and bronchial asthma] Paluchowska E, et al. **Pol Merkuriusz Lek** 1996 Nov;1(5):313–5 (Eng. Abstr.) **(Pol)**

[Pollution and indoor allergens in respiratory allergy (editorial)] Peréz–Martín J. **Rev Alerg Mex** 1993 Sep–Oct; 40(5):107–9 **(Spa)**

GENETICS

Levels of tryptase, chymase, and Fc epsilon RI alpha messenger RNA in human skin are unchanged after IgE–dependent stimulation of cutaneous mast cells in vivo. Xia HZ, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):224–6

Reduction of allergic airway responses in P–selectin–deficient mice. De Sanctis GT, et al. **J Appl Physiol** 1997 Sep; 83(3):681–7

Invited editorial on "Reduction of allergic airway responses in P–selectin–deficient mice" [editorial] Moqbel R. **J Appl Physiol** 1997 Sep;83(3):679–80

Induction of tachykinin gene and peptide expression in guinea pig nodose primary afferent neurons by allergic airway

inflammation. Fischer A, et al. **J Clin Invest** 1996 Nov 15;98(10):2284–91

[Clinical significant correlation between to the onset of bronchial asthma in children and family history of allergic diseases. Part 2. The onset of allergic diseases of their parents and bronchial asthma in children] Shiigai N. **Arerugi** 1995 Dec;44(12):1369–78 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Inflammatory responses in skin and airways after allergen challenge in brown Norway rats sensitized to trimellitic anhydride. Andius P, et al. **Allergy** 1996 Aug;51(8):556–62

Epidemiologic identification of allergic rhinitis. Charpin D, et al. **Allergy** 1996 May;51(5):293–8

Enhancement of basophil histamine release by interleukin-3: reduced effect in atopic subjects. Miadonna A, et al. **Allergy** 1996 Aug;51(8):525–31

Allergic respiratory diseases and environmental pollution: experience in the printing/paper-manufacturing industry. Papa G, et al. **Allergy** 1996 Nov;51(11):833–6

Serum IgE levels, atopy, and asthma in young adults: results from a longitudinal cohort study. Peat JK, et al. **Allergy** 1996 Nov;51(11):804–10

Occupational egg allergy in confectionary workers. Valero A, et al. **Allergy** 1996 Aug;51(8):588–9

Antigenicity of the pollen proteins of various cultivars of Olea europaea. Waisel Y, et al. **Allergy** 1996 Nov; 51(11):819–25

Formaldehyde and phenol exposure during an anatomy dissection course: a possible source of IgE-mediated sensitization? Wantke F, et al. **Allergy** 1996 Nov; 51(11):837–41

Interleukin-4 receptor blockade prevents airway responses induced by antigen challenge in mice. Gavett SH, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L253–61

Allergen-specific IgE and IL-5 are essential for the development of airway hyperresponsiveness. Hamelmann E, et al. **Am J Respir Cell Mol Biol** 1997 Jun;16(6):674–82

Cytokine and eosinophil responses in the lung, peripheral blood, and bone marrow compartments in a murine model of allergen-induced airways inflammation [see comments] Ohkawara Y, et al. **Am J Respir Cell Mol Biol** 1997 May; 16(5):510–20. Comment in: Am J Respir Cell Mol Biol 1997 May;16(5):497–500.

Adoptively transferred late allergic airway responses are associated with Th2-type cytokines in the rat. Watanabe A, et al. **Am J Respir Cell Mol Biol** 1997 Jan;16(1):69–74

Antiinterleukin-5 antibody prevents airway hyperresponsiveness in a murine model of airway sensitization. Hamelmann E, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):819–25

Human lung anaphylaxis results in rapid release of interleukin-4. Erger RA, et al. **Ann Allergy Asthma Immunol** 1997 Jun;78(6):566–8

Respiratory function and immunologic status in workers processing dried fruits and teas. Zuskin E, et al. **Ann Allergy Asthma Immunol** 1996 Nov;77(5):417–22

Cytokines in allergic eosinophilic airway inflammation. Lukacs NW. **Biol Signals** 1996 Jul–Aug;5(4):209–14

Elevated serum levels of soluble CD30 are associated with atopic dermatitis, but not with respiratory atopic disorders and allergic contact dermatitis. Dummer W, et al. **Br J Dermatol** 1997 Aug;137(2):185–7

The effect of R 15.7/HO, an anti-CD18 antibody, on the late airway response and airway hyperresponsiveness in an allergic rabbit model. el-Hashim AZ, et al. **Br J Pharmacol** 1997 Jun;121(4):671–8

Allergenic crossreactivity between Lepidoglyphus destructor and Blomia tropicalis. Johansson E, et al. **Clin Exp Allergy** 1997 Jun;27(6):691–9

Characterisation of a novel airway late phase model in the sensitized guinea pig which uses silica and Bordetella pertussis as adjuvant for sensitization. Heuer HO, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):361–8

Immunoregulation of the allergic reaction in the respiratory tract. Holt PG. **Eur Respir J Suppl** 1996 Aug;22:85s–89s (35 ref.)

Short-term exposure to diesel exhaust induces nasal mucosal hyperresponsiveness to histamine in guinea pigs. Kobayashi T, et al. **Fundam Appl Toxicol** 1997 Aug;38(2):166–72

Immunologic responses following respiratory sensitization to house dust mite allergens in mice. O'Brien R, et al. **Immunol Cell Biol** 1996 Apr;74(2):174–9 (23 ref.)

Mite-induced allergic airway inflammation in guinea pigs. Hsiue TR, et al. **Int Arch Allergy Immunol** 1997 Mar; 112(3):295–302

Corticosteroid modulation of human, antigen-specific Th1 and Th2 responses. Braun CM, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):400–7

Occupational asthma caused by hypersensitivity to ground bugs. García Lázaro MA, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):267–8

Failure of aged rats to accumulate eosinophils in allergic inflammation of the airway. Yagi T, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):38–47

Asthma as an inflammatory disease: implications for management. Dolen WK. **J Am Board Fam Pract** 1996 May–Jun;9(3):182–90 (75 ref.)

Induction of tachykinin gene and peptide expression in guinea pig nodose primary afferent neurons by allergic airway inflammation. Fischer A, et al. **J Clin Invest** 1996 Nov 15;98(10):2284–91

Eosinophil recruitment to the lung in a murine model of allergic inflammation. The role of T cells, chemokines, and adhesion receptors. Gonzalo JA, et al. **J Clin Invest** 1996 Nov 15;98(10):2332–45

Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation. Jia GQ, et al. **J Exp Med** 1996 Nov 1;184(5):1939–51

Beta 2-microglobulin-dependent T cells are dispensable for allergen-induced T helper 2 responses. Zhang Y, et al. **J Exp Med** 1996 Oct 1;184(4):1507–12

B7-CD28/CTLA-4 costimulatory pathways are required for the development of T helper cell 2-mediated allergic airway responses to inhaled antigens. Keane-Myers A, et al. **J Immunol** 1997 Mar 1;158(5):2042–9

Immunomodulatory effects of IL-12 on allergic lung inflammation depend on timing of doses. Sur S, et al. **J Immunol** 1996 Nov 1;157(9):4173–80

Sensitivity to Cupressus: allergenic significance in Córdoba (Spain). Guerra F, et al. **J Investig Allergol Clin Immunol** 1996 Mar–Apr;6(2):117–20

Clinical significance of allergic sensitization to cockroaches in patients with mite related respiratory allergy. Liccardi G, et al. **J Investig Allergol Clin Immunol** 1996 Sep–Oct; 6(5):283–7

Serum IgE levels in patients with allergic problems and healthy subjects. Agha F, et al. **JPMA J Pak Med Assoc** 1997 Jun;47(6):166–9

Cellular and molecular mechanisms involved in the regulation of eosinophil trafficking in vivo. Hogan SP, et al. **Med Res Rev** 1996 Sep;16(5):407–32 (205 ref.)

Domestic fungal viable propagules and sensitization in children with IgE mediated allergic diseases. Dill I, et al. **Pediatr Allergy Immunol** 1996 Aug;7(3):151–5

Allergic airway sensitization induces T cell activation but not airway hyperresponsiveness in B cell-deficient mice. Hamelmann E, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1350–5

Magnitude and determinants of short-term tachyphylaxis to methacholine in subjects with symptomatic or asymptomatic airway hyperresponsiveness and in normal controls. Laprise C, et al. **Respiration** 1996;63(5):304–8

Murine strain differences in allergic airway inflammation and immunoglobulin production by a combination of antigen and diesel exhaust particles. Ichinose T, et al. **Toxicology** 1997 Oct 19;122(3):183–92

[Specific immunotherapy of respiratory allergies] Michel FB, et al. **Presse Med** 1997 Apr 12;26(12):567–71 (35 ref.) **(Fre)**

[Pathogenetic significance of IgE-binding epitopes allergens (published erratum appears in Pneumologie 1996 Dec;50(12):938)] Bufe A, et al. **Pneumologie** 1996 Sep; 50(9):625–31 (55 ref.) **(Ger)**

[Oral testing for sulfite asthma] Hein H, et al. **Pneumologie** 1996 Jun;50(6):394–8 (Eng. Abstr.) **(Ger)**

[Important cross-reactive allergens] Helbling A. **Schweiz Med Wochenschr** 1997 Mar 8;127(10):382–9 (56 ref.) (Eng. Abstr.) **(Ger)**

[Specific IgE against inhaled allergens in dystreptic children with food allergy] Bujniewicz E, et al. **Pol Merkuriusz Lek** 1996 Jul;1(1):28–9 (Eng. Abstr.) **(Pol)**

METABOLISM

Heterogeneity of allergic airway responses in sheep: differences in signal transduction? Ahmed T, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):843–9

Cysteinyl leukotrienes do not mediate lipopolysaccharide-induced airway hyperresponsiveness in guinea pigs. Uno T, et al. **Prostaglandins** 1996 Dec; 52(6):447–61

MICROBIOLOGY

Allergic fungal sinusitis: clinicopathological characteristics. Chhabra A, et al. **Mycoses** 1996 Nov–Dec;39(11–12):437–41

PARASITOLOGY

Relationship between allergic manifestations and Toxocara seropositivity: a cross-sectional study among elementary school children. Buijs J, et al. **Eur Respir J** 1997 Jul; 10(7):1467–75

PATHOLOGY

The role of alveolar macrophages and dendritic cells in allergic airway sensitization. Jansen HM. **Allergy** 1996 May; 51(5):279–92 (138 ref.)

Inhibitory effect of betotastine besilate on antigen-induced airway eosinophil infiltration and peripheral blood eosinophilia in mice. Sakai A, et al. **Arzneimittelforschung** 1997 Aug;47(8):954–8

Quantitation of eosinophil and neutrophil infiltration into rat lung by specific assays for eosinophil peroxidase and myeloperoxidase. Application in a Brown Norway rat model of allergic pulmonary inflammation. Schneider T, et al. **J Immunol Methods** 1996 Oct 30;198(1):1–14

International study of asthma and allergies in childhood. Results of the first phase of the I.S.A.A.C. project in Pamplona, Spain. Fernández Benítez M, et al. **J Investig Allergol Clin Immunol** 1996 Sep–Oct;6(5):288–93

Airway hyperreactivity is associated with specific leukocyte subset infiltration in a mouse model of allergic airway inflammation. Lukacs NW, et al. **Pathobiology** 1996; 64(6):308–13

[Dysregulated apoptosis in chronic eosinophilic diseases--new therapeutic strategies for allergies and bronchial asthma] Simon HU. **Pneumologie** 1996 Nov; 50(11):790–6 (56 ref.) **(Ger)**

PHYSIOPATHOLOGY

The role of alveolar macrophages and dendritic cells in allergic airway sensitization. Jansen HM. **Allergy** 1996 May; 51(5):279–92 (138 ref.)

The prevalence of asthmatic respiratory symptoms among adults in Estonian and Swedish university cities. Jõgi R, et al. **Allergy** 1996 May;51(5):331–6

Lactoferrin, a potent tryptase inhibitor, abolishes late-phase airway responses in allergic sheep. Elrod KC, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):375–81

Involvement of NK2 receptors rather than NK1 receptors in bronchial hyperresponsiveness induced by allergic reaction in guinea-pigs. Mizuguchi M, et al. **Br J Pharmacol** 1996 Feb;117(3):443–448

Effect of a bed covering system in children with asthma and house dust mite hypersensitivity. Frederick JM, et al. **Eur Respir J** 1997 Feb;10(2):361–6

Allergic responses reduce the relaxant effect of beta-agonists but not potassium channel openers in guinea-pig isolated trachea. Houjou S, et al. **Eur Respir J** 1996 Oct; 9(10):2050–6

The relationship between airway hyperreactivity (AHR) and sodium, potassium adenosine triphosphatase (Na+,K+ ATPase) enzyme inhibition. Gentile DA, et al. **J Allergy Clin Immunol** 1997 Mar;99(3):367–73

Reduction of allergic airway responses in P-selectin-deficient mice. De Sanctis GT, et al. **J Appl Physiol** 1997 Sep; 83(3):681–7

Airway and tissue behavior during early response in sensitized rats: role of 5-HT and LTD4. Nagase T, et al. **J Appl Physiol** 1996 Feb;80(2):583–90

Ragweed sensitization alters pulmonary vascular responses to bronchoprovocation in beagle dogs. Theodorou A, et al. **J Appl Physiol** 1997 Sep;83(3):912–7

Frequency dependence of forced oscillatory respiratory mechanics in horses with heaves. Young SS, et al. **J Appl Physiol** 1997 Mar;82(3):983–7

Bradykinin-induced airway contraction in two lines of guinea pigs with congenitally different airway sensitivity. Tsubone H, et al. **J Vet Med Sci** 1997 Jul;59(7):613–5

Enhancement of afferent nerve excitability in the airways by allergic inflammation. Riccio MM, et al. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):181–5 (16 ref.)

Role of sensory neuropeptides in PIV-3-infection-induced airway hyperresponsiveness in guinea pigs. Riedel F, et al. **Respiration** 1997;64(3):211–9

Effect of inhaled prostaglandin D2 in normal and atopic subjects, and of pretreatment with leukotriene D4. Sampson SE, et al. **Thorax** 1997 Jun;52(6):513–8

[The role of the autonomic nervous system in airway hyperresponsiveness] Hanzlik J, et al. **Pol Arch Med Wewn** 1996 Aug;96(2):165–9 (23 ref.) **(Pol)**

PREVENTION & CONTROL

Interleukin-4 receptor blockade prevents airway responses induced by antigen challenge in mice. Gavett SH, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L253–61

Evaluation of different techniques for washing cats: quantitation of allergen removed from the cat and the effect on airborne Fel d 1 [see comments] Avner DB, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):307–12. Comment in: J Allergy Clin Immunol 1997 Sep;100(3):290–2.

The effectiveness of Allerpet/c in reducing the cat allergen Fel d 1 [see comments] Perzanowski MS, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):428–30. Comment in: J Allergy Clin Immunol 1997 Sep;100(3):290–2.

In vitro and in vivo effects of SCA40 on guinea pig airways. Buchheit KH, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):217–23

The effect of the selective PAF antagonist CIS-19 on PAF- and antigen-induced bronchoconstriction, microvascular leakage and bronchial hyperreactivity in guinea-pigs. Lin CH, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):210–6

Effect of YM934, a KATP channel opener, on airway hyperresponsiveness induced by platelet activating factor in guinea-pigs. Saitoh C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):203–9

Allergic respiratory disease: strategic targets for primary prevention during childhood [editorial] Holt PG, et al. **Thorax** 1997 Jan;52(1):1–4

Immunological findings in groups of children after compensatory measures. Richter J, et al. **Toxicol Lett** 1996 Nov;88(1–3):165–8

[Encasing evaluation: studies of dust retention and water permeability] Kainka E, et al. **Pneumologie** 1997 Jan; 51(1):2–9 (Eng. Abstr.) **(Ger)**

[Effect of a novel tachykinin NK-2-receptor antagonist, TAC-363, on bronchoconstriction and airway hyperresponsiveness in guinea pigs] Higashide Y, et al.

RESPIRATORY HYPERSENSITIVITY

Nippon Yakurigaku Zasshi 1997 Jan;109(1):19–29 (Eng. Abstr.) **(Jpn)**

THERAPY

Double-blind placebo controlled specific immunotherapy with mixed Cupressaceae taxodiaceae pollens in respiratory allergy to Cupressus sempervirens. Ariano R, et al. **Allergol Immunopathol (Madr)** 1997 Jan–Feb;25(1):23–9

Treatment of cat allergy with T-cell reactive peptides. Norman PS, et al. **Am J Respir Crit Care Med** 1996 Dec; 154(6 Pt 1):1623–8

Nonfatal systemic reactions to subcutaneous immunotherapy: a 10-year experience. Ragusa FV, et al. **J Investig Allergol Clin Immunol** 1997 May–Jun;7(3):151–4

Immunotherapy in the treatment of allergic fungal sinusitis. Mabry RL, et al. **Otolaryngol Head Neck Surg** 1997 Jan; 116(1):31–5

[How great is the value of oral hyposensitization in skin test assessed allergy in comparison with parenteral treatment?] Luger T. **Internist (Berl)** 1996 May;37(5):519–20 **(Ger)**

[Value of selected parameters for monitoring efficacy of specific immunotherapy in allergic disorders] Cichocka-Jarosz E. **Przegl Lek** 1996;53(10):739–43 (35 ref.) (Eng. Abstr.) **(Pol)**

RESPIRATORY INSUFFICIENCY

Intrinsic PEEP and cardiopulmonary interaction in patients with COPD and acute ventilatory failure. Ranieri VM, et al. **Eur Respir J** 1996 Jun;9(6):1283–92 (64 ref.)

The hemodynamic consequences of mechanical ventilation: an evolving story. Pinsky MR. **Intensive Care Med** 1997 May;23(5):493–503 (93 ref.)

Measured versus calculated energy expenditure in pressure support ventilated ICU patients. Casati A, et al. **Minerva Anestesiol** 1996 May;62(5):165–70

BLOOD

Noninvasive monitoring of carbon dioxide during respiratory failure in toddlers and infants: end-tidal versus transcutaneous carbon dioxide. Tobias JD, et al. **Anesth Analg** 1997 Jul;85(1):55–8

Measurement and interpretation of arterial blood gases. Syabbalo N. **Br J Clin Pract** 1997 Apr–May;51(3):173–6 (20 ref.)

Structure and function of the band 3 Cl-/HCO3- transporter in chronic respiratory failure patients. Yang X, et al. **Chin Med J (Engl)** 1996 Sep;109(9):680–3

Relationship between respiratory failure and plasma noradrenaline levels in amyotrophic lateral sclerosis. Yamashita A, et al. **Clin Auton Res** 1997 Aug;7(4):173–7

Continuous arterial gas monitoring: initial experience with the Paratrend 7 in children. Weiss IK, et al. **Intensive Care Med** 1996 Dec;22(12):1414–7 (13 ref.)

CHEMICALLY INDUCED

Glaucoma therapy may take your breath away. Diggory P, et al. **Age Ageing** 1997 Mar;26(2):63–7 (24 ref.)

Respiratory arrest after spinal anesthesia with lidocaine and fentanyl. Cornish PB. **Anesth Analg** 1997 Jun;84(6):1387–8

Respiratory failure following vinorelbine tartrate infusion in a patient with non-small cell lung cancer. Kouroukis C, et al. **Chest** 1997 Sep;112(3):846–8

Respiratory arrest precipitated by codeine in a child with chronic renal failure. Talbott GA, et al. **Clin Pediatr (Phila)** 1997 Mar;36(3):171–3

Elevated amylase is related to the development of respiratory failure in organophosphate poisoning. Matsumiya N, et al. **Hum Exp Toxicol** 1996 Mar;15(3):250–3

Experimental study of the detrimental effect of dopamine/glucagon combination in d,l-propranolol intoxication. Toet AE, et al. **Hum Exp Toxicol** 1996 May; 15(5):411–21

Coma and respiratory arrest after exposure to butyrolactone. Higgins TF Jr, et al. **J Emerg Med** 1996 Jul–Aug; 14(4):435–7

Pepper-spray-induced respiratory failure treated with extracorporeal membrane oxygenation. Billmire DF, et al. **Pediatrics** 1996 Nov;98(5):961–3

Coma, myalagia and hypoxia. Froomes PR, et al. **Postgrad Med J** 1996 Oct;72(852):629–30

Respiratory arrest during dipyridamole stress testing. Hillis GS, et al. **Postgrad Med J** 1997 May;73(859):301–2

Renal and neuromuscular respiratory failure--is this a syndrome associated with cantharidin poisoning? Zouvanis M, et al. **S Afr Med J** 1994 Nov;84(11 Suppl):814–6

Neuromuscular blockade with acute respiratory failure in a patient receiving cibenzoline. Similowski T, et al. **Thorax** 1997 Jun;52(6):582–4

Occurrence of paralytic shellfish poison in the starfish, Asterias amurensis in Kure Bay, Hiroshima Prefecture, Japan. Asakawa M, et al. **Toxicon** 1997 Jul;35(7):1081–7

[Drug-induced pneumopathies accompanied by acute respiratory insufficiency] Mayaud C, et al. **Rev Mal Respir** 1996 Dec;13(6):559–74 (188 ref.) (Eng. Abstr.) **(Fre)**

[NO2 inhalation in two smokers and two non-smokers] Shimatsu Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Oct; 34(10):1145–9 (Eng. Abstr.) **(Jpn)**

[Analysis of respiratory complications during artificial ventilation of the lungs in patients with organophosphorus compound poisoning] Egorov VM, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):71–4 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Duration of mechanical ventilation [letter; comment] Teba L. **N Engl J Med** 1997 May 29;336(22):1611. Comment on: N Engl J Med 1996 Dec 19;335(25):1864–9.

COMPLICATIONS

Endothelial damage in piglet brains during cardiorespiratory failure [letter; comment] Temesvári P, et al. **Acta Neuropathol (Berl)** 1996 Oct;92(4):428–30. Comment on: Acta Neuropathol (Berl) 1995;90(6):582–91.

Anaesthetic management of a quadriplegic patient with severe respiratory insufficiency undergoing caesarean section. Ahmed AB, et al. **Anaesthesia** 1996 Nov; 51(11):1043–5

Management of acute respiratory failure in chronic obstructive pulmonary disease. Zuege DJ, et al. **Curr Opin Pulm Med** 1997 May;3(3):190–7 (58 ref.)

Octreotide treatment in patients with necrotizing pancreatitis and pulmonary failure. Fiedler F, et al. **Intensive Care Med** 1996 Sep;22(9):909–15

An unusual presentation of tracheoesophageal fistula [letter] Serrano N, et al. **Intensive Care Med** 1996 Jul;22(7):717–8

The effect of pre-ECLS ventilation time on survival and respiratory morbidity in the neonatal population. Lewis DA, et al. **J Pediatr Surg** 1996 Aug;31(8):1110–4; discussion 1114–5

Moebius syndrome and central respiratory dysfunction. Igarashi M, et al. **Pediatr Neurol** 1997 Apr;16(3):237–40 (18 ref.)

Stevens-Johnson syndrome and respiratory failure in a 9-year-old boy. Schamberger MS, et al. **South Med J** 1997 Jul;90(7):755–7

Management of subarachnoid hemorrhage patients who presented with respiratory arrest resuscitated with bystander CPR. Shapiro S. **Stroke** 1996 Oct;27(10):1780–2

[Hemorheologic assessment in hypoxic and hypoxic-hypercapnic states] Cortinovis A, et al. **Minerva Med** 1996 Dec;87(12):553–63 (Eng. Abstr.) **(Ita)**

[Selenium deficiency associated with cardiac dysfunction in three patients with chronic respiratory failure] To Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec; 34(12):1406–10 (Eng. Abstr.) **(Jpn)**

[Euthyroid sick syndrome in patients with respiratory failure] Wawrzyńska L, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 2:193–9 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Deep breathing in children with severe malaria: indicator of metabolic acidosis and poor outcome. English M, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):521–4

How to use diagnostic test articles in the intensive care unit: diagnosing weanability using f/Vt. Jaeschke RZ, et al. **Crit Care Med** 1997 Sep;25(9):1514–21 (24 ref.)

A new index for assessing arterial oxygen profile in patients with respiratory failure. Iluchev D. **Folia Med (Plovdiv)** 1996;38(1):39–43

Relative quantification of pulmonary edema with noncontrast-enhanced MRI. Caruthers SD, et al. **J Magn Reson Imaging** 1997 May–Jun;7(3):544–50

Motor neuron disease presenting with respiratory failure. de Carvalho M, et al. **J Neurol Sci** 1996 Aug;139 Suppl:117–22

Scoring of severity in patients admitted to a respiratory intensive care unit. Nava S. **Monaldi Arch Chest Dis** 1997 Feb;52(1):71–2 (15 ref.)

Airtight pediatric fiberoptic bronchoscopy [letter] Duncan AJ, et al. **Pediatr Pulmonol** 1996 Feb;21(2):143

Respiratory failure. Stokes DC. **Pediatr Rev** 1997 Oct; 18(10):361–6 (8 ref.)

Evaluation and treatment of respiratory failure in neuromuscular disease. Teener JW, et al. **Rheum Dis Clin North Am** 1997 May;23(2):277–92 (48 ref.)

[Cardiorespiratory polygraphy in differential diagnosis of respiratory insufficiency in patients after coronary artery bypass operation] Schneider H, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:104–7 (Eng. Abstr.) **(Ger)**

[Bronchoscopy in the diagnosis of diffuse pulmonary infiltrates, and corticosteroid treatment in patients with acute respiratory failure] Katakami N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:145–54 (Eng. Abstr.) **(Jpn)**

[Simultaneous ambulatory electrocardiography and pulse oximetry] Nakamoto T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Feb; 35(2):144–53 (Eng. Abstr.) **(Jpn)**

[Computer-assisted diagnosis of respiratory failure] Nefedov VB, et al. **Probl Tuberk** 1997;(3):61–2 (11 ref.) **(Rus)**

DRUG THERAPY

Additional insights into combined surfactant and nitric oxide therapy [letter; comment] Kapur P, et al. **Ann Thorac Surg** 1997 Jan;63(1):299–300. Comment on: Ann Thorac Surg 1996 May;61(5):1543–5.

Can we treat respiratory failure in Friedreich ataxia? Botez MI, et al. **Arch Neurol** 1997 Aug;54(8):1030–3

Unilateral pharmacologic mydriasis in a patient with respiratory compromise [letter] Goldstein JB, et al. **Arch Ophthalmol** 1997 Jun;115(6):806

Advances in the management of respiratory failure. Nitric oxide. Steinhorn RH. **ASAIO J** 1996 May–Jun; 42(3):199–200 (16 ref.)

Exogenous pulmonary surfactant as a drug delivering agent: influence of antibiotics on surfactant activity. van 't Veen A, et al. **Br J Pharmacol** 1996 Jun;118(3):593–8

Early response to inhaled nitric oxide and its relationship to outcome in children with severe hypoxemic respiratory failure. Goldman AP, et al. **Chest** 1997 Sep;112(3):752–8

Recombinant human growth hormone in chronic and acute respiratory insufficiency. Pichard C, et al. **Horm Res** 1996; 46(4-5):222–9 (72 ref.)

Circulatory and diuretic effects of dopexamine infusion in low-birth-weight infants with respiratory failure. Kawczynski P, et al. **Intensive Care Med** 1996 Jan; 22(1):65–70

Effect of alpha-adrenoreceptor stimulation on the diaphragmatic oxygen delivery-consumption relationship. Ward ME, et al. **J Crit Care** 1996 Mar;11(1):19–26

Doxapram in hypercapnic chronic obstructive pulmonary disease with respiratory failure. Kerr HD. **J Emerg Med** 1997 Jul–Aug;15(4):513–5

Effectiveness of ribavirin in otherwise well infants with respiratory syncytial virus-associated respiratory failure. Pediatric Critical Study Group. Moler FW, et al. **J Pediatr** 1996 Mar;128(3):422–8

Inhaled nitric oxide in burn patients with respiratory failure. Sheridan RL, et al. **J Trauma** 1997 Apr;42(4):629–34

Nitric oxide and acute respiratory failure. Frostell CG. **Monaldi Arch Chest Dis** 1996 Dec;51(6):538–42 (67 ref.)

Inhaled nitric oxide in full-term and nearly full-term infants with hypoxic respiratory failure. The Neonatal Inhaled Nitric Oxide Study Group [published erratum appears in N Engl J Med 1997 Aug 7;337(6):434] **N Engl J Med** 1997 Feb 27;336(9):597–604

A liquid panacea for failing lungs [news] Hirschl RB. **Nat Med** 1996 Nov;2(11):1195–6

Acute ventilatory failure in Lambert-Eaton myasthenic syndrome and its response to 3,4-diaminopyridine. Smith AG, et al. **Neurology** 1996 Apr;46(4):1143–5 (15 ref.)

Continuous ketamine infusion for the treatment of refractory asthma in a mechanically ventilated infant: case report and review of the pediatric literature. Nehama J, et al. **Pediatr Emerg Care** 1996 Aug;12(4):294–7 (20 ref.)

Transferrin modifies surfactant responsiveness in acute respiratory failure: role of iron-free transferrin as an antioxidant. Hallman M, et al. **Pediatr Pulmonol** 1996 Jul; 22(1):14–22

Does adenosine infusion improve oxygenation in term infants with respiratory failure? [letter; comment] LeBlanc MH. **Pediatrics** 1996 Dec;98(6 Pt 1):1224–5. Comment on: Pediatrics 1996 Mar;97(3):295–300.

Oxygen dynamics during partial liquid ventilation in a sheep model of severe respiratory failure. Parent AC, et al. **Surgery** 1997 Mar;121(3):320–7

[Controlled clinical study of doxophylline versus aminophylline in the treatment of acute cardiorespiratory insufficiency syndromes] Checchini M, et al. **Minerva Cardioangiol** 1997 Apr;45(4):185–90 (Eng. Abstr.) **(Ita)**

[Nitric oxide via inhalation in the newborn infant and the child with acute hypoxemic respiratory failure] Biban P, et al. **Pediatr Med Chir** 1996 May–Jun;18(3):245–51 (44 ref.) (Eng. Abstr.) **(Ita)**

[High-dose methylprednisolone pulse therapy for respiratory failure after open heart surgery] Kurata H, et al. **Kyobu Geka** 1997 Apr;50(4):292–7 (Eng. Abstr.) **(Jpn)**

[Bronchoscopy in the diagnosis of diffuse pulmonary infiltrates, and corticosteroid treatment in patients with acute respiratory failure] Katakami N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:145–54 (Eng. Abstr.) **(Jpn)**

[Surfactant treatment of acute pulmonary failure. Other indications than neonatal distress syndrome] Silberg IE, et al. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1456–8 (Eng. Abstr.) **(Nor)**

[The new pathogenetic agent lipin for the treatment of patients with respiratory failure] Iukhimets VA. **Lik Sprava** 1995 Sep–Dec;(9–12):60–3 (Eng. Abstr.) **(Rus)**

ECONOMICS

Human and financial costs of noninvasive mechanical ventilation in patients affected by COPD and acute respiratory failure. Nava S, et al. **Chest** 1997 Jun; 111(6):1631–8

[Noninvasive ventilation in the acute care hospital--a cost factor?] Anderer W, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:119–22 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Elevated amylase is related to the development of respiratory failure in organophosphate poisoning. Matsumiya N, et al. **Hum Exp Toxicol** 1996 Mar;15(3):250–3

EPIDEMIOLOGY

Current status and research on chronic respiratory failure in Japan. Kawakami Y. **Intern Med** 1996 Jun;35(6):436–42

(12 ref.)

ETIOLOGY

Chronic respiratory failure after acquired cytomegalovirus infection in a very low birthweight infant. Suzumura H, et al. **Acta Paediatr Jpn** 1996 Dec;38(6):677–80

Reversible hypercapnia in chronic obstructive pulmonary disease: a distinct pattern of respiratory failure with a favorable prognosis. Costello R, et al. **Am J Med** 1997 Mar; 102(3):239–44

Amyotrophic lateral sclerosis. Successful treatment of mucous plugging by mechanical insufflation–exsufflation. Hanayama K, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug; 76(4):338–9

Caesarean section in a parturient with respiratory failure caused by cystic fibrosis. Bose D, et al. **Anaesthesia** 1997 Jun;52(6):578–82

An unusual presentation in a patient with metachromatic leukodystrophy. Malde AD, et al. **Anaesthesia** 1997 Jul; 52(7):690–4

Palpable purpura and respiratory failure. Dias BM, et al. **Arch Dermatol** 1997 Apr;133(4):435–7

Haemoptysis and rapid onset respiratory failure in a patient with pulmonary epithelioid haemangioendothelioma [letter] Gabbay E, et al. **Aust N Z J Med** 1996 Oct;26(5):712–3

Cardiopulmonary function and autologous bone marrow transplantation: results and predictive value for respiratory failure and mortality. The University of Nebraska Medical Center Bone Marrow Transplantation Pulmonary Study Group. Jain B, et al. **Bone Marrow Transplant** 1996 Apr; 17(4):561–8

Respiratory failure in systemic lupus erythematosus: decisive differentiation between acute pneumonitis and infection [letter] Staudinger T, et al. **Br J Rheumatol** 1997 Feb; 36(2):295–7

Burns and inhalation injury caused by steam. Balakrishnan C, et al. **Burns** 1996 Jun;22(4):313–5

A 60–year–old man with a malignant tumor of the upper airway and unexplained respiratory failure. Ewald FW Jr, et al. **Chest** 1997 Jan;111(1):239–41

Kyphosis secondary to tuberculosis osteomyelitis as a cause of ventilatory failure. Clinical features, mechanisms, and management. Smith IE, et al. **Chest** 1996 Oct; 110(4):1105–10

Respiratory failure following stereotactic neurosurgery in a 53–year–old woman. Swartz MA, et al. **Chest** 1997 Apr; 111(4):1112–4

A case of acute respiratory failure in pregnancy. Bandyopadhyay T, et al. **Conn Med** 1996 Aug;60(8):451–3

Acute respiratory failure in the HIV–seropositive patient. Cowan MJ, et al. **Crit Care Clin** 1997 Jul;13(3):523–52 (155 ref.)

Safety and yield of transbronchial biopsy in mechanically ventilated patients. O'Brien JD, et al. **Crit Care Med** 1997 Mar;25(3):440–6

Tracheostomy tube occlusion protocol predicts significant tracheal obstruction to air flow in patients requiring prolonged mechanical ventilation. Rumbak MJ, et al. **Crit Care Med** 1997 Mar;25(3):413–7

Transfusion–related acute lung injury treated with surfactant in a neonate. Wu TJ, et al. **Eur J Pediatr** 1996 Jul; 155(7):589–91

Respiratory arrest: a complication of Arnold–Chiari malformation in adults. Omer S, et al. **Eur Neurol** 1996; 36(1):36–8

Morphological and histochemical study of nonhemiplegic muscle in acute stroke patients manifesting respiratory failure. Sato Y, et al. **Eur Neurol** 1996;36(1):13–9

Is outcome from ARDS related to the severity of respiratory failure? Ferring M, et al. **Eur Respir J** 1997 Jun; 10(6):1297–300

Acute respiratory failure due to tracheobronchial involvement in Crohn's disease. Lamblin C, et al. **Eur Respir J** 1996 Oct;9(10):2176–8

Bilateral diaphragmatic paralysis—a rare cause of acute respiratory failure managed with nasal mask bilevel positive airway pressure (BiPAP) ventilation. Lin MC, et al. **Eur Respir J** 1997 Aug;10(8):1922–4

Diffuse microvascular pulmonary thrombosis associated with primary antiphospholipid antibody syndrome [see comments] Maggiorini M, et al. **Eur Respir J** 1997 Mar; 10(3):727–30 (19 ref.). Comment in: Eur Respir J 1997 Mar;10(3):511–2.

Chest wall and lung contribution to the elastic properties of the respiratory system in patients with chronic obstructive pulmonary disease. Ranieri VM, et al. **Eur Respir J** 1996 Jun;9(6):1232–9

Blastomycosis–induced respiratory failure: the successful application of continuous positive airway pressure. Booker KJ. **Heart Lung** 1996 Sep–Oct;25(5):384–7

Chronic fatigue and acute respiratory failure in a house painter. Archer TP, et al. **Hosp Pract (Off Ed)** 1997 Sep 15;32(9):150, 153–5

Respiratory system mechanics in the early phase of acute respiratory failure due to severe kyphoscoliosis. Conti G, et al. **Intensive Care Med** 1997 May;23(5):539–44

Myopathy and ventilatory failure in severe sepsis [letter] Iapichino G, et al. **Intensive Care Med** 1997 Jan;23(1):128

Predictors for deterioration of respiratory function [letter; comment] Marx G, et al. **Intensive Care Med** 1996 Dec; 22(12):1466–7. Comment on: Intensive Care Med 1995 Oct;21(10):784–9.

Long–term management of acute respiratory failure in metabolic myopathy. Pfeiffer G, et al. **Intensive Care Med** 1996 Dec;22(12):1406–9

Varicella pneumonia in a healthy adult presenting with severe respiratory failure. Shirai T, et al. **Intern Med** 1996 Apr; 35(4):315–8

Respiratory compromise: a rare complication of transcutaneous electrical nerve stimulation for angina pectoris. Mann CJ. **J Accid Emerg Med** 1996 Jan;13(1):68

Acute respiratory failure—a rare presentation of myasthenia gravis [letter] Nand N, et al. **J Assoc Physicians India** 1996 Mar;44(3):226

Prolonged respiratory depression after anesthesia for parathyroidectomy in a patient with juvenile type of acid maltase deficiency [letter] Kotani N, et al. **J Clin Anesth** 1996 Nov;8(7):620

Rapid diagnosis of acute eosinophilic pneumonia (AEP) in a patient with respiratory failure using bronchoalveolar lavage (BAL) with calcofluor white (CW) staining. Hogan TF, et al. **J Clin Lab Anal** 1997;11(4):202–7 (65 ref.)

A cranio–cervical malformation presenting as acute respiratory failure. Ali MM, et al. **J Emerg Med** 1996 Sep–Oct;14(5):569–72

Sudden respiratory deterioration in the positive pressure ventilated patient: an organized approach to diagnosis and therapy. Beless DJ, et al. **J Emerg Med** 1996 Sep–Oct; 14(5):573–8

Suicidal chloroquine poisoning: clinical course, autopsy findings, and chemical analysis. Muhm M, et al. **J Forensic Sci** 1996 Nov;41(6):1077–9

Pulmonary function changes after laparoscopic surgery: relation to the sites of ports and the duration of pneumoperitoneum. Mohsen AA, et al. **J Laparoendosc Surg** 1996 Feb;6(1):17–23

Hamartoma of the larynx causing neonatal respiratory distress. Linder A. **J Laryngol Otol** 1997 Feb;111(2):166–8

Spectral analysis of heart rate and blood pressure in Guillain–Barré patients with respiratory failure. Pfeiffer G, et al. **J Neurol Sci** 1997 Sep 1;150(1):39–48

Infant thoracic surgery: procedure–dependent pulmonary response. Greenspan JS, et al. **J Pediatr Surg** 1996 Jul; 31(7):878–80

Extracorporeal membrane oxygenation in pediatric respiratory failure secondary to smoke inhalation injury. Lessin MS, et al. **J Pediatr Surg** 1996 Sep;31(9):1285–7

Respiratory insufficiency at birth: a predictor of mortality for infants with omphalocele. Tsakayannis DE, et al. **J Pediatr Surg** 1996 Aug;31(8):1088–90; discussion 1090–1

Inhaled nitric oxide in burn patients with respiratory failure. Sheridan RL, et al. **J Trauma** 1997 Apr;42(4):629–34

Respiratory failure due to insufflated talc [letter] Campos JR, et al. **Lancet** 1997 Jan 25;349(9047):251–2

Long–term nocturnal mechanical ventilation in patients with kyphoscoliosis. Zaccaria S, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):433–7

Lambert–Eaton myasthenic syndrome presenting with severe respiratory failure. Nicolle MW, et al. **Muscle Nerve** 1996 Oct;19(10):1328–33

Multicore myopathy presenting in adulthood with respiratory failure. Zeman AZ, et al. **Muscle Nerve** 1997 Mar; 20(3):367–9

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 40–1996. A 58–year–old man with progressive hypotension and respiratory failure after treatment for apparent pulmonary tuberculosis [clinical conference] **N Engl J Med** 1996 Dec 26; 335(26):1974–82

Nature's high–voltage injuries: sometimes a deadly consequence. Shaw PK, et al. **Neth J Med** 1996 Oct; 49(4):153–9 (20 ref.)

Acute ventilatory failure in Lambert–Eaton myasthenic syndrome and its response to 3,4–diaminopyridine. Smith AG, et al. **Neurology** 1996 Apr;46(4):1143–5 (15 ref.)

Cardiac and respiratory involvement in advanced stage Duchenne muscular dystrophy. Melacini P, et al. **Neuromuscul Disord** 1996 Oct;6(5):367–76

Ventilation–perfusion mismatching as prognostic factor of respiratory failure after pulmonary resection. Volpino P, et al. **Panminerva Med** 1996 Jun;38(2):65–70

Absent pulmonary valve with intact ventricular septum presenting as cardiorespiratory failure at birth. Horigome H, et al. **Pediatr Cardiol** 1997 Mar–Apr;18(2):136–8

Respiratory failure from corn starch aspiration: a hazard of diaper changing. Silver P, et al. **Pediatr Emerg Care** 1996 Apr;12(2):108–10

Cough and respiratory distress in a two–month–old infant. Chan L. **Pediatr Infect Dis J** 1997 Jun;16(6):631–2, 634–5

Respiratory failure in nemaline myopathy. Sasaki M, et al. **Pediatr Neurol** 1997 May;16(4):344–6

Treatment of respiratory failure due to respiratory syncytial virus pneumonia with natural surfactant. Vos GD, et al. **Pediatr Pulmonol** 1996 Dec;22(6):412–5

Pneumonias, asthma, pneumothorax, and respiratory arrest caused by a tracheal mass. Gjonaj ST, et al. **Pediatrics** 1997 Apr;99(4):604–5

Respiratory insufficiency in neuronopathic and neuropathic disorders. Chalmers RM, et al. **QJM** 1996 Jun;89(6):469–76

Hypotensive reactions: a previously uncharacterized complication of platelet transfusion? [see comments] Hume HA, et al. **Transfusion** 1996 Oct;36(10):904–9 (26 ref.). Comment in: Transfusion 1996 Oct;36(10):852–3.

[Risk of respiratory insufficiency caused by thoracic rigidity] Meinesz AF, et al. **Ned Tijdschr Geneeskd** 1997 Apr 12; 141(15):713–7 (Eng. Abstr.) **(Dut)**

[Isolated respiratory insufficiency in Arnold–Chiari malformation] Noseda A, et al. **Rev Mal Respir** 1996; 13(4):440–2 (Eng. Abstr.) **(Fre)**

[Severe pulmonary manifestation in adult–onset Still's disease] Paccalin M, et al. **Rev Med Interne** 1997 Jul; 18(7):575–7 (12 ref.) (Eng. Abstr.) **(Fre)**

[Exertional intolerance in respiratory insufficiency: principal mechanisms] Janssens JP, et al. **Rev Med Suisse Romande** 1997 Jun;117(6):457–64 (22 ref.) **(Fre)**

[A rare cause of chronic respiratory insufficiency: arthrogryposis in adults] Rivaud E, et al. **Rev Pneumol Clin** 1997;53(1):37–40 (Eng. Abstr.) **(Fre)**

[Acute pulmonary syndrome and cavernous pulmonary tuberculosis in a patient with sickle cell disease] Riehl J, et al. **Dtsch Med Wochenschr** 1996 Nov 1;121(44):1354, 1355–8 (Eng. Abstr.) **(Ger)**

[Acute renal failure and fatal respiratory failure in leukemic hyperleukocytosis (clinical conference)] Bar–Dayan Y, et al. **Harefuah** 1997 Jan 1;132(1):63–7 **(Heb)**

[Acute epiglottitis in adults: a rare cause of acute respiratory insufficiency] Pirodda A, et al. **Ann Ital Med Int** 1996 Jul–Sep;11(3):208–10 (Eng. Abstr.) **(Ita)**

[Tetraplegia and acute respiratory insufficiency from an ischemic cervical medulla lesion after cocaine use. A clinical case] Laurenzi L, et al. **Minerva Anestesiol** 1995 Sep;61(9):387–91 (Eng. Abstr.) **(Ita)**

[Relapsing polychondritis: a case with respiratory failure] Kanou A, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Feb;20(1):52–9 (Eng. Abstr.) **(Jpn)**

[Primary varicella pneumonia with respiratory failure] Ogawa K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33(12):1436–40 (Eng. Abstr.) **(Jpn)**

[Atlantoaxial dislocation with ventilatory insufficiency—report of two cases] Nemoto M, et al. **No To Shinkei** 1996 Feb;48(2):155–60 (Eng. Abstr.) **(Jpn)**

[Chronic myelomonocytic leukemia with repeated respiratory failure associated with leukocytosis following splenic arterial embolization and splenectomy] Takimoto Y, et al. **Rinsho Ketsueki** 1996 Nov;37(11):1253–8 (Eng. Abstr.) **(Jpn)**

[Pneumococcal pneumonia with a sever course] Chciałowski A, et al. **Pneumonol Alergol Pol** 1997;65(1–2):86–91 (Eng. Abstr.) **(Pol)**

[Pulmonary function in persons with kyphoscoliosis] Mitić–Milinkić M, et al. **Srp Arh Celok Lek** 1996 Mar–Apr; 124(3–4):62–4 (Eng. Abstr.) **(Scc)**

[Severe respiratory failure secondary to vascular ring. Report of 2 cases] Furuya–Meguro ME, et al. **Arch Inst Cardiol Mex** 1995 Nov–Dec;65(6):520–7 (Eng. Abstr.) **(Spa)**

[Acute respiratory insufficiency after supraclavicular block of the brachial plexus (letter)] Ortells MA, et al. **Rev Esp Anestesiol Reanim** 1996 Aug–Sep;43(7):262–3 **(Spa)**

METABOLISM

Pharmacokinetics of vancomycin in critically ill infants undergoing extracorporeal membrane oxygenation. Amaker RD, et al. **Antimicrob Agents Chemother** 1996 May; 40(5):1139–42

Dramatic effect on oxygenation in patients with severe acute lung insufficiency treated in the prone position [see comments] Mure M, et al. **Crit Care Med** 1997 Sep; 25(9):1539–44. Comment in: Crit Care Med 1997 Sep;25(9):1453–4.

Measured versus calculated energy expenditure in pressure support ventilated ICU patients. Casati A, et al. **Minerva Anestesiol** 1996 May;62(5):165–70

Hormonal modifications in patients admitted to an internal intensive care unit for acute hypoxaemic respiratory failure. Kullmer T, et al. **Respir Med** 1996 Nov;90(10):601–8

[The effect of furosemide and valium on band 3 protein anion transport function in chronic respiratory failure patients] Yang X, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Dec; 18(6):369–71, 384 (Eng. Abstr.) **(Chi)**

MICROBIOLOGY

Bulbar presentation of acute post infectious polyneuropathy: a case report. Day J, et al. **Cent Afr J Med** 1997 Jan; 43(1):25–6

[Respiratory failure caused by myopathy in severe sepsis] Veschi G, et al. **Minerva Anestesiol** 1996 Mar;62(3):89–92 (Eng. Abstr.) **(Ita)**

[Acute respiratory failure secondary to Pneumocystis carinii pneumonia in children] Martínez Marín MI, et al. **An Esp Pediatr** 1996 Dec;45(6):570–4 (Eng. Abstr.) **(Spa)**

MORTALITY

Outcome of elderly patients requiring ventilatory support [letter; comment] Dardaine V, et al. **Age Ageing** 1997 May; 26(3):238. Comment on: Age Ageing 1996 Sep;25(5):353–6.

Mortality is directly related to the duration of mechanical ventilation before the initiation of extracorporeal life support for severe respiratory failure. Pranikoff T, et al. **Crit Care Med** 1997 Jan;25(1):28–32

Assisted ventilation and survival of extremely low birthweight infants. Doyle LW, et al. **J Paediatr Child Health** 1996 Apr;32(2):138–42

Respiratory insufficiency at birth: a predictor of mortality for infants with omphalocele. Tsakayannis DE, et al. **J Pediatr Surg** 1996 Aug;31(8):1088–90; discussion 1090–1

Pulmonary failure as a cause of death in COPD. Braghiroli A, et al. **Monaldi Arch Chest Dis** 1997 Apr;52(2):170–5 (55 ref.)

Causes of death in patients with COPD and chronic respiratory failure [see comments] Zielinski J, et al. **Monaldi Arch Chest Dis** 1997 Feb;52(1):43–7. Comment in: Monaldi Arch Chest Dis 1997 Feb;52(1):3.

Outcome of out-of-hospital cardiac or respiratory arrest in children [see comments] Schindler MB, et al. **N Engl J Med** 1996 Nov 14;335(20):1473–9. Comment in: N Engl J Med 1997 May 1;336(18):1325; discussion 1325–6.

Nutritional status and mortality in respiratory failure caused by tuberculosis. Mehta JB, et al. **Tenn Med** 1996 Oct; 89(10):369–71

[Methodology for controlling healthy worker effect on coal miners' mortality] Qiao R, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar;27(1):90–3 (Eng. Abstr.) **(Chi)**

[The patient with respiratory problems] Senninger N, et al. **Chirurg** 1997 Jul;68(7):662–9 (58 ref.) (Eng. Abstr.) **(Ger)**

[Are ISS and PTS unsuitable trauma scores for prediction of (possible) post-traumatic lung failure?] Gebhard F, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:331–3 (Eng. Abstr.) **(Ger)**

NURSING

Emergency! Acute respiratory failure. Kelly M. **Am J Nurs** 1996 Dec;96(12):46

PARASITOLOGY

Deep breathing in children with severe malaria: indicator of metabolic acidosis and poor outcome. English M, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):521–4

[Acute respiratory insufficiency in parasitic eosinophilic pneumonia] Schinkewitch P, et al. **Rev Mal Respir** 1997 Jan;14(1):61–3 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Hemoptysis, hepatopulmonary syndrome, and respiratory failure: clinical conference on management dilemmas [clinical conference] Schnader J, et al. **Chest** 1997 Jun; 111(6):1724–32

Safety and yield of transbronchial biopsy in mechanically ventilated patients. O'Brien JD, et al. **Crit Care Med** 1997 Mar;25(3):440–6

Pulmonary pathology of patients treated with partial liquid ventilation. Bruch LA, et al. **Mod Pathol** 1997 May; 10(5):463–8

Morbidity and mortality of open lung biopsy in children. Davies L, et al. **Pediatrics** 1997 May;99(5):660–4

PHYSIOPATHOLOGY

Effect of inspiratory flow rate on respiratory rate in intubated ventilated patients. Corne S, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):304–8

Acute chest syndrome in sickle cell disease: clinical presentation and course. Cooperative Study of Sickle Cell Disease. Vichinsky EP, et al. **Blood** 1997 Mar 1; 89(5):1787–92

The effect of sepsis on breathing pattern and weaning outcomes in patients recovering from respiratory failure. Amoateng-Adjepong Y, et al. **Chest** 1997 Aug;112(2):472–7

Use of bronchial blocker to improve gas exchange in respiratory failure and differential lung disease. Boujoukos AJ, et al. **Chest** 1996 Oct;110(4):1110–1

Relationship between respiratory failure and plasma noradrenaline levels in amyotrophic lateral sclerosis. Yamashita A, et al. **Clin Auton Res** 1997 Aug;7(4):173–7

Monitoring interactions between spontaneous respiration and mechanical inflations in preterm neonates. Bignall S, et al. **Crit Care Med** 1997 Mar;25(3):545–53

Evidence for a subclinical involvement of the central nervous system in mild or moderate chronic respiratory insufficiency. Barbieri S, et al. **Electromyogr Clin Neurophysiol** 1996 Mar;36(2):67–72

Respiratory muscle strength after lung resection with special reference to age and procedures of thoracotomy. Nomori H, et al. **Eur J Cardiothorac Surg** 1996;10(5):352–8

Impact of sleep in respiratory failure. McNicholas WT. **Eur Respir J** 1997 Apr;10(4):920–33 (185 ref.)

Effect of blood gas derangement on QTc dispersion in severe chronic obstructive pulmonary disease: evidence of an electropathy? Sarubbi B, et al. **Int J Cardiol** 1997 Feb; 58(3):287–92

Effects of extreme lateral posture on hemodynamics and plasma atrial natriuretic peptide levels in critically ill patients. Bein T, et al. **Intensive Care Med** 1996 Jul; 22(7):651–5

Respiratory system mechanics in the early phase of acute respiratory failure due to severe kyphoscoliosis. Conti G, et al. **Intensive Care Med** 1997 May;23(5):539–44

Right ventricular myocardial function in ARF patients. PEEP as a challenge for the right heart [see comments] Dambrosio M, et al. **Intensive Care Med** 1996 Aug; 22(8):772–80. Comment in: Intensive Care Med 1997 Feb;23(2):237–9.

Evoked potentials in patients with chronic respiratory insufficiency. Nakano S, et al. **Intern Med** 1997 Apr; 36(4):270–5

TNF-alpha and the pathophysiology of endotoxin-induced acute respiratory failure in sheep. Perkowski SZ, et al. **J Appl Physiol** 1996 Feb;80(2):564–73

Electrophysiological monitoring in neurological respiratory insufficiency [letter] Zifko U, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):299–300

Obstructive and restrictive pulmonary dysfunctions in Parkinson's disease. Sabaté M, et al. **J Neurol Sci** 1996 Jun; 138(1-2):114–9

Hemodynamics of respiratory failure in rabbit model: effect of surfactant supplementation. Barsotti M, et al. **Lung** 1996; 174(4):255–68

Respiratory muscles and ventilatory failure. Vassilakopoulos T, et al. **Monaldi Arch Chest Dis** 1996 Dec;51(6):489–98 (42 ref.)

Brainstem encephalopathy with stimulus-sensitive myoclonus leading to respiratory arrest, but with recovery: a description of two cases and review of the literature. Kullmann DM, et al. **Mov Disord** 1996 Nov;11(6):715–8 (22 ref.)

[Respiratory insufficiency: calculate the cause] van der Werf TS, et al. **Ned Tijdschr Geneeskd** 1996 Nov 30; 140(48):2381–4 **(Dut)**

[Exertional intolerance in respiratory insufficiency: principal mechanisms] Janssens JP, et al. **Rev Med Suisse Romande** 1997 Jun;117(6):457–64 (22 ref.) **(Fre)**

[Pathophysiology and clinical aspects of global respiratory insufficiency] Becker HF. **Med Klin** 1997 Apr 28;92 Suppl 1:10–3 (33 ref.) (Eng. Abstr.) **(Ger)**

[Work of breathing in noninvasive proportional assist ventilation in patients with respiratory insufficiency] Gutheil T, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:85–9 (Eng. Abstr.) **(Ger)**

[Anemia increases work of breathing in patients with lung disease] Schönhofer B, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:108–10 (Eng. Abstr.) **(Ger)**

[An application of semiquantitative analysis of pulmonary scintigram to pulmonary tuberculosis sequelae] Uchida K, et al. **Kaku Igaku** 1996 Jul;33(7):753–7 (Eng. Abstr.) **(Jpn)**

[Different mechanism may underlie respiratory failure of myotonic and Duchenne muscular dystrophies--a pulseoxymetric and spirometric study] Ogata K, et al. **Rinsho Shinkeigaku** 1996 Jul;36(7):850–3 (Eng. Abstr.) **(Jpn)**

[Tracheal deformity observed in tracheostomized Duchenne muscular dystrophy patients who can speak with appropriately inflated cuff of tracheal tube] Shinoe T, et al. **Rinsho Shinkeigaku** 1996 Feb;36(2):355–7 (Eng. Abstr.) **(Jpn)**

[Hemodynamic evaluation in patients with chronic respiratory failure] Matos V, et al. **Rev Port Cardiol** 1997 Feb;16(2):217–9 **(Por)**

[Mechanisms of acute respiratory insufficiency in patients with hyperglycemic coma] Aleksandrov VN, et al. **Anesteziol Reanimatol** 1997 Mar-Apr;(2):16–8 (Eng. Abstr.) **(Rus)**

[Mechanism of development of the dead point and threshold of anaerobic metabolism in physical work of a dynamics character] Agadzhanian NA, et al. **Fiziol Cheloveka** 1996 Jan-Feb;22(1):98–103 **(Rus)**

[The clinico-physiological manifestations and the pathophysiological mechanisms of respiratory failure in tuberculosis and nonspecific lung diseases] Nefedov BV, et al. **Probl Tuberk** 1996;(4):11–4 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Noninvasive positive pressure ventilation and not oxygen may prevent overt ventilatory failure in patients with chest wall diseases. Masa JF, et al. **Chest** 1997 Jul;112(1):207–13

Value of body plethysmography in preoperative assessment of thoracotomy candidates. Scholz S, et al. **Eur J Cardiothorac Surg** 1996;10(5):312–9

Effect of pharmacological interventions in the prevention of lipid peroxidation and respiratory depression induced by oxygen free radicals in anesthetized rats. Jacinto SM, et al. **Free Radic Biol Med** 1996;21(6):791–9

PSYCHOLOGY

Environmental factors influencing weaning of a young child from mechanical ventilator support. Lemanek KL, et al. **J Dev Behav Pediatr** 1997 Jun;18(3):166–70

[Report of experiences from the viewpoint of patients. Weaning--an inescapable battle with respiratory insufficiency?] Brandt C. **Med Klin** 1997 Apr 28;92 Suppl 1:129–32 **(Ger)**

[Living and experiencing with compensated respiratory insufficiency. From ventilator dependence under water] Brandt I. **Med Klin** 1997 Apr 28;92 Suppl 1:133–6 **(Ger)**

[Prospective study of the quality of life in intermittent self-ventilation] Hein H, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:93–4 (Eng. Abstr.) **(Ger)**

[Ventilation--and what then? Report of experiences from the viewpoint of the German Society of Muscular Diseases e.V. DGM] Klier H. **Med Klin** 1997 Apr 28;92 Suppl 1:137–9 (Eng. Abstr.) **(Ger)**

[Patient-related rejection of nasal IPPV therapy. Patients, reasons, follow-up] Pahnke J, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:73–4 (Eng. Abstr.) **(Ger)**

[Managing life and death wishes of invasively ventilated amyotrophic lateral sclerosis patients] Winterholler M, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:90–2 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Chest X-ray changes in air space disease are associated with parameters of mechanical ventilation in ICU patients. Ely EW, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1543–50

Routine daily chest radiography is not indicated for ventilated patients in a surgical ICU. Bhagwanjee S, et al. **Intensive Care Med** 1996 Dec;22(12):1335–8

RADIONUCLIDE IMAGING

Volume-dependent pulmonary aspiration of a swallowed radionuclide bolus. Heyman S. **J Nucl Med** 1997 Jan; 38(1):103–4

[An application of semiquantitative analysis of pulmonary scintigram to pulmonary tuberculosis sequelae] Uchida K, et al. **Kaku Igaku** 1996 Jul;33(7):753–7 (Eng. Abstr.) **(Jpn)**

REHABILITATION

The Albany Medical College Ventilator Walker. Smith T, et al. **Arch Phys Med Rehabil** 1996 Dec;77(12):1320–1

[The rehabilitation of chronic respiratory insufficiency] Menier R, et al. **Bull Acad Natl Med** 1997 Mar 18; 181(3):539–52; discussion 552–4 (Eng. Abstr.) **(Fre)**

[Epidemiology and diagnosis of intermittent self-ventilation] Laier-Groeneveld G, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:2–8 (Eng. Abstr.) **(Ger)**

[Increased physical activity due to intermittent self-ventilation in chronic respiratory insufficiency] Schönhofer B, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:26–30 (Eng. Abstr.) **(Ger)**

[Quality of life in home ventilation] Windisch W, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:95–100 (Eng. Abstr.) **(Ger)**

[Recommendations of Bavarian Muscle Centers of the German Neuromuscular Disease Society for home ventilation of neuromuscular diseases of adult patients] Winterholler M, et al. **Nervenarzt** 1997 Apr;68(4):351–7 (23 ref.) (Eng. Abstr.) **(Ger)**

[Innovative respiratory muscle training for patients with Duchenne muscular dystrophy--a psychological evaluation] Ungar D, et al. **Wien Med Wochenschr** 1996; 146(9-10):213–6 (Eng. Abstr.) **(Ger)**

SURGERY

Median sternotomy wound complication: the effect of reconstruction on lung function. Cohen M, et al. **Ann Plast Surg** 1997 Jul;39(1):36–43

The six-minute walk test: a guide to assessment for lung transplantation. Kadikar A, et al. **J Heart Lung Transplant** 1997 Mar;16(3):313–9

Direct bronchial artery revascularization and en bloc double lung transplantation--surgical techniques and early outcome. Pettersson G, et al. **J Heart Lung Transplant** 1997 Mar;16(3):320–33

[Tracheotomy in chronic respiratory insufficiency] Viau F. **Rev Mal Respir** 1996;13(4):443–4 **(Fre)**

[Lung transplantation in lymphangioleiomyomatosis] Welte T. **Pneumologie** 1997 May;51(5):537–8 **(Ger)**

[When may a tracheostomy be closed in patients with neuromuscular diseases? (letter)] Díaz Lobato S, et al. **Med Clin (Barc)** 1996 Jan 27;106(3):117 **(Spa)**

THERAPY

The combination of external high-frequency oscillation and pressure support ventilation in acute respiratory failure. Takeda S, et al. **Acta Anaesthesiol Scand** 1997 Jun; 41(6):670–4

Partial liquid ventilation (PLV) in acute respiratory failure. Quintel M, et al. **Acta Anaesthesiol Scand Suppl** 1996; 109:73–4

Comparison of body surface and airway triggered ventilation in extremely premature infants. Laubscher B, et al. **Acta Paediatr** 1997 Jan;86(1):102–4

Titrating PEEP therapy in patients with acute respiratory failure. Tütüncü AS, et al. **Adv Exp Med Biol** 1996; 388:575–7

Effects of different CPAP systems on weaning parameters in patients recovering from acute respiratory failure. Tütüncü AS, et al. **Adv Exp Med Biol** 1996;388:579–83

Emergent intubation of the difficult pediatric airway using the laryngeal mask airway. Barnes SD. **Am J Crit Care** 1996 Sep;5(5):376–8

Amyotrophic lateral sclerosis. Successful treatment of mucous plugging by mechanical insufflation-exsufflation. Hanayama K, et al. **Am J Phys Med Rehabil** 1997 Jul-Aug; 76(4):338–9

Chest X-ray changes in air space disease are associated with parameters of mechanical ventilation in ICU patients. Ely

EW, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1543–50

Proportional assist ventilation in acute respiratory failure: effects on breathing pattern and inspiratory effort. Navalesi P, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1330–8

Pressure–volume curves in acute respiratory failure: automated low flow inflation versus occlusion. Servillo G, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1629–36

Transfusion for respiratory distress in life–threatening childhood malaria. English M, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):525–30

When is a patient prone for prone? [editorial; comment] Pappert D, et al. **Anesth Analg** 1996 Dec;83(6):1139–40. Comment on: Anesth Analg 1996 Dec;83(6):1206–11.

Effects of proportional assist ventilation on inspiratory muscle effort in patients with chronic obstructive pulmonary disease and acute respiratory failure. Ranieri VM, et al. **Anesthesiology** 1997 Jan;86(1):79–91

Noninvasive positive–pressure ventilation for acute respiratory failure in a medical intensive care unit in Singapore. Ong KC, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):791–6

Rapid–sequence intubation. American College of Emergency Physicians. **Ann Emerg Med** 1997 Apr;29(4):573

Effect of noninvasive positive–pressure ventilation on survival in amyotrophic lateral sclerosis. Aboussouan LS, et al. **Ann Intern Med** 1997 Sep 15;127(6):450–3

A method to produce sedation in critically ill patients [see comments] Watling SM, et al. **Ann Pharmacother** 1996 Nov; 30(11):1227–31. Comment in: Ann Pharmacother 1997 May;31(5):647–8.

High frequency oscillatory ventilation in infants with increased intra–abdominal pressure. Fok TF, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Mar;76(2):F123–5

Spondyloepiphyseal dysplasia congenita with ventilator dependence: two case reports. Augenstein KB, et al. **Arch Phys Med Rehabil** 1996 Nov;77(11):1201–4

Computer aided adjustment of the phrenic pacemaker: automatic functions, documentation, and quality control. Sauermann S, et al. **Artif Organs** 1997 Mar;21(3):216–8

Advances in the management of respiratory failure. Advanced strategies for mechanical ventilation in severe acute respiratory failure. Conrad SA. **ASAIO J** 1996 May–Jun;42(3):204–6 (15 ref.)

The use of a second course of extracorporeal membrane oxygenation in neonatal patients. Dela Cruz TV, et al. **ASAIO J** 1996 May–Jun;42(3):230–2

Advances in the management of respiratory failure. Liquid ventilation in the setting of respiratory failure. Hirschl RB. **ASAIO J** 1996 May–Jun;42(3):209–10 (22 ref.)

The role of the centrifugal pump in hemolysis during neonatal extracorporeal support. McDonald JV, et al. **ASAIO J** 1997 Jan–Feb;43(1):35–8

ECMO support for adult patients with acute respiratory failure. Macha M, et al. **ASAIO J** 1996 Sep–Oct; 42(5):M841–4

Successful use of extracorporeal membrane oxygenation in the treatment of acute chest syndrome in a child with severe sickle cell anemia. Trant CA Jr, et al. **ASAIO J** 1996 May–Jun;42(3):236–9

Advances in the management of respiratory failure. Accelerating lung growth. Wilson JM. **ASAIO J** 1996 May–Jun;42(3):201–3 (12 ref.)

Advances in the management of respiratory failure. Intracorporeal membrane gas exchange: will it still prevail? Zwischenberger JB, et al. **ASAIO J** 1996 May–Jun; 42(3):207–8 (11 ref.)

Non–invasive ventilation in neuromuscular disease. Simonds AK. **Br J Hosp Med** 1997 Feb 5–18;57(3):87–90

Treatment of acute respiratory failure by prolonged non–invasive ventilation in a child. Marino P, et al. **Can J Anaesth** 1997 Jul;44(7):727–31

Criteria for extubation and tracheostomy tube removal for patients with ventilatory failure. A different approach to weaning. Bach JR, et al. **Chest** 1996 Dec;110(6):1566–71

Nocturnal noninvasive positive pressure ventilatory assistance [see comments] Claman DM, et al. **Chest** 1996 Dec;110(6):1581–8 (71 ref.). Comment in: Chest 1997 May;111(5):1471–2.

Therapeutic rigid bronchoscopy allows level of care changes in patients with acute respiratory failure from central airways obstruction. Colt HG, et al. **Chest** 1997 Jul; 112(1):202–6

Comparative physiologic effects of noninvasive assist–control and pressure support ventilation in acute hypercapnic respiratory failure [see comments] Girault C, et al. **Chest** 1997 Jun;111(6):1639–48. Comment in: Chest 1997 Jun;111(6):1482–3.

Predicting eventual success or failure to wean in patients receiving long–term mechanical ventilation [published erratum appears in Chest 1997 Mar;111(3):836] Gluck EH. **Chest** 1996 Oct;110(4):1018–24

Noninvasive positive pressure ventilation for acute respiratory failure: underutilized or overrated? [see comments] Jasmer RM, et al. **Chest** 1997 Jun;111(6):1672–8 (44 ref.). Comment in: Chest 1997 Jun;111(6):1479–82.

Extracorporeal membrane oxygenation for adult respiratory failure. Peek GJ, et al. **Chest** 1997 Sep;112(3):759–64

Comparison of pressure support ventilation and assist–control ventilation in the treatment of respiratory failure. Tejeda M, et al. **Chest** 1997 May;111(5):1322–5

High–frequency oscillatory ventilation—a new management for respiratory distress syndrome and intractable respiratory failure. Jeng MJ, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Mar–Apr;38(2):87–97 (70 ref.)

Noninvasive positive–pressure ventilation in patients with acute respiratory failure. Meduri GU. **Clin Chest Med** 1996 Sep;17(3):513–53 (265 ref.)

Extracorporeal life support for patients with significant orthopaedic trauma. Senunas LE, et al. **Clin Orthop** 1997 Jun;(339):32–40

High–frequency oscillatory ventilation with partial liquid ventilation in a model of acute respiratory failure. Baden HP, et al. **Crit Care Med** 1997 Feb;25(2):299–302

Monitoring interactions between spontaneous respiration and mechanical inflations in preterm neonates. Bignall S, et al. **Crit Care Med** 1997 Mar;25(3):545–53

Investigation of myasthenic crisis [editorial; comment] Hanley DF. **Crit Care Med** 1997 Jul;25(7):1111–2. Comment on: Crit Care Med 1997 Jul;25(7):1228–35.

A comparison of venovenous and venoarterial extracorporeal membrane oxygenation in the treatment of neonatal respiratory failure. Knight GR, et al. **Crit Care Med** 1996 Oct;24(10):1678–83

Tracheal pressure triggering a demand–flow continuous positive airway pressure system decreases patient work of breathing. Messinger G, et al. **Crit Care Med** 1996 Nov; 24(11):1829–34

Dramatic effect on oxygenation in patients with severe acute lung insufficiency treated in the prone position [see comments] Mure M, et al. **Crit Care Med** 1997 Sep; 25(9):1539–44. Comment in: Crit Care Med 1997 Sep;25(9):1453–4.

Mortality is directly related to the duration of mechanical ventilation before the initiation of extracorporeal life support for severe respiratory failure. Pranikoff T, et al. **Crit Care Med** 1997 Jan;25(1):28–32

Volume–controlled versus biphasic positive airway pressure [letter] Putensen C. **Crit Care Med** 1997 Jan;25(1):203–5

Significant reduction in minute ventilation and peak inspiratory pressures with arteriovenous CO2 removal during severe respiratory failure. Tao W, et al. **Crit Care Med** 1997 Apr;25(4):689–95

Management of acute respiratory failure in chronic obstructive pulmonary disease. Zuege DJ, et al. **Curr Opin Pulm Med** 1997 May;3(3):190–7 (58 ref.)

Changes in alveolar–arterial oxygen difference and oxygenation index during low–dose nitric oxide inhalation in 15 newborns with severe respiratory insufficiency. Straňák Z, et al. **Eur J Pediatr** 1996 Oct;155(10):907–10

Noninvasive mechanical ventilation in acute respiratory failure. Ambrosino N. **Eur Respir J** 1996 Apr;9(4):795–807 (116 ref.)

Noninvasive ventilatory support does not facilitate recovery from acute respiratory failure in chronic obstructive pulmonary disease. Barbé F, et al. **Eur Respir J** 1996 Jun; 9(6):1240–5

Negative pressure ventilation in the treatment of acute respiratory failure: an old noninvasive technique reconsidered. Corrado A, et al. **Eur Respir J** 1996 Jul; 9(7):1531–44 (113 ref.)

Transtracheal oxygen therapy: an effective and safe alternative to nasal oxygen administration. Kampelmacher MJ, et al. **Eur Respir J** 1997 Apr;10(4):828–33

Bilateral diaphragmatic paralysis—a rare cause of acute respiratory failure managed with nasal mask bilevel positive airway pressure (BiPAP) ventilation. Lin MC, et al. **Eur Respir J** 1997 Aug;10(8):1922–4

Patient–ventilator interaction and inspiratory effort during pressure support ventilation in patients with different pathologies. Nava S, et al. **Eur Respir J** 1997 Jan; 10(1):177–83

Supplemental oxygen and nasal intermittent positive pressure ventilation. Padkin AJ, et al. **Eur Respir J** 1996 Apr; 9(4):834–6

Effects of long–term nocturnal nasal ventilation on spontaneous breathing during sleep in neuromuscular and chest wall disorders. Piper AJ, et al. **Eur Respir J** 1996 Jul;9(7):1515–22

Comparison of two different modes for noninvasive mechanical ventilation in chronic respiratory failure: volume versus pressure controlled device. Schönhofer B, et al. **Eur Respir J** 1997 Jan;10(1):184–91

Blastomycosis–induced respiratory failure: the successful application of continuous positive airway pressure. Booker KJ. **Heart Lung** 1996 Sep–Oct;25(5):384–7

Extracorporeal support of oxygenation and ventilation. Furukawa S. **Int Anesthesiol Clin** 1997 Winter;35(1):169–76 (34 ref.)

Mechanical ventilation for pediatric patients. Hammer GB, et al. **Int Anesthesiol Clin** 1997 Winter;35(1):139–67 (119 ref.)

Indications for mechanical ventilation. Tung A. **Int Anesthesiol Clin** 1997 Winter;35(1):1–17 (40 ref.)

Treatment of respiratory failure using minitracheotomy and intratracheal oxygenation in selected patients with chronic lung disease. Andrivet P, et al. **Intensive Care Med** 1996 Dec;22(12):1323–7

Percutaneous dilatational cricothyroidotomy: outcome with 44 consecutive patients. Barrachina F, et al. **Intensive Care Med** 1996 Sep;22(9):937–40

Routine daily chest radiography is not indicated for ventilated patients in a surgical ICU. Bhagwanjee S, et al. **Intensive Care Med** 1996 Dec;22(12):1335–8

Breathing pattern and additional work of breathing in spontaneously breathing patients with different ventilatory demands during inspiratory pressure support and automatic tube compensation. Fabry B, et al. **Intensive Care Med** 1997 May;23(5):545–52

Combining partial liquid ventilation with nitric oxide to improve gas exchange in acute lung injury [see comments] Houmes RJ, et al. **Intensive Care Med** 1997 Feb;23(2):163–9 . Comment in: Intensive Care Med 1997 Feb;23(2):139–40.

Right ventricular myocardial function in ARF patients: PEEP as a challenge for right heart [letter; comment] Jardin F, et al. **Intensive Care Med** 1997 Feb;23(2):237–9 . Comment on: Intensive Care Med 1996 Aug;22(8):772–80.

Long–term management of acute respiratory failure in metabolic myopathy. Pfeiffer G, et al. **Intensive Care Med** 1996 Dec;22(12):1406–9

Clinical consequences of the implementation of a weaning protocol. Saura P, et al. **Intensive Care Med** 1996 Oct; 22(10):1052–6

NO treatment in a patient with severe right–to–left shunt due to an intrapulmonary av–fistula [letter] Schölly DM, et al. **Intensive Care Med** 1996 Nov;22(11):1281–2

Non–invasive mechanical ventilation in severe chronic obstructive lung disease and acute respiratory failure: short– and long–term prognosis. Vitacca M, et al. **Intensive Care Med** 1996 Feb;22(2):94–100

Improved oxygenation after discontinuing neuromuscular blockade. Willson DF, et al. **Intensive Care Med** 1997 Feb; 23(2):214–7

Pediatric noninvasive nasal ventilation. Birnkrant DJ, et al. **J Child Neurol** 1997 Jun;12(4):231–6 (31 ref.)

Successful intubation with the Combitube in acute asthmatic respiratory distress by a Parkmedic. Liao D, et al. **J Emerg Med** 1996 Sep–Oct;14(5):561–3

Evaluation of a simple technique for rapid access to left main bronchus. Tripathi M, et al. **J Indian Med Assoc** 1996 Dec; 94(12):447–8

Assisted ventilation and survival of extremely low birthweight infants. Doyle LW, et al. **J Paediatr Child Health** 1996 Apr;32(2):138–42

Invasive monitoring in infants with respiratory syncytial virus infection. Willson DF, et al. **J Pediatr** 1996 Mar; 128(3):357–62

Open lung biopsy in pediatric patients on extracorporeal membrane oxygenation. Bond SJ, et al. **J Pediatr Surg** 1996 Oct;31(10):1376–8

Extracorporeal membrane oxygenation in pediatric respiratory failure secondary to smoke inhalation injury. Lessin MS, et al. **J Pediatr Surg** 1996 Sep;31(9):1285–7

The effect of pre–ECLS ventilation time on survival and respiratory morbidity in the neonatal population. Lewis DA, et al. **J Pediatr Surg** 1996 Aug;31(8):1110–4; discussion 1114–5

Extracorporeal life support for the treatment of viral pneumonia: collective experience from the ELSO registry. Extracorporeal Life Support Organization. Meyer TA, et al. **J Pediatr Surg** 1997 Feb;32(2):232–6

A case of central cord syndrome caused by intubation: a case report. Yan K, et al. **J Spinal Cord Med** 1997 Apr; 20(2):230–2

Weaning from mechanical ventilation. Dries DJ. **J Trauma** 1997 Aug;43(2):372–84 (113 ref.)

Efficacy and acceptability of different modes of oxygen administration in children: implications for a community hospital. Kumar RM, et al. **J Trop Pediatr** 1997 Feb; 43(1):47–9

ECMO for refractory cardiorespiratory failure due to meningococcal disease [letter; comment] De Munter C, et al. **Lancet** 1997 May 10;349(9062):1398. Comment on: Lancet 1997 Feb 15;349(9050):466–9.

Extracorporeal support for intractable cardiorespiratory failure due to meningococcal disease [see comments] Goldman AP, et al. **Lancet** 1997 Feb 15;349(9050):466–9. Comment in: Lancet 1997 May 10;349(9062):1397; discussion 1397–8. Comment in: Lancet 1997 May 10;349(9062):1398.

ECMO for refractory cardiorespiratory failure due to meningococcal disease [letter; comment] Leclerc F, et al. **Lancet** 1997 May 10;349(9062):1397; discussion 1397–8. Comment on: Lancet 1997 Feb 15;349(9050):466–9.

Hospice care for children [letter] Wakai S, et al. **Lancet** 1996 Oct 19;348(9034):1102

Ventilation in the prone position. Webster NR. **Lancet** 1997 Jun 7;349(9066):1638–9

Noninvasive positive pressure ventilation in acute respiratory failure of chronic obstructive pulmonary disease. Clark HE, et al. **Lung** 1997;175(3):143–54 (59 ref.)

Causes and outcome of mechanical ventilation in patients with hemispheric ischemic stroke. Wijdicks EF, et al. **Mayo Clin Proc** 1997 Mar;72(3):210–3

Noninvasive mechanical ventilation in acute respiratory failure. Ambrosino N. **Monaldi Arch Chest Dis** 1996 Dec; 51(6):514–8 (34 ref.)

Noninvasive mechanical ventilation in acute on chronic respiratory failure: determinants of success and failure. Ambrosino N. **Monaldi Arch Chest Dis** 1997 Feb;52(1):73–5 (26 ref.)

Noninvasive pressure support ventilation: physiological and clinical results in patients with COPD and acute respiratory failure. Brochard L. **Monaldi Arch Chest Dis** 1997 Feb;

52(1):64–7 (20 ref.)

Negative pressure ventilation in COPD patients with acute on chronic respiratory failure. Corrado A, et al. **Monaldi Arch Chest Dis** 1997 Feb;52(1):60–3 (44 ref.)

Physiological and clinical consequences of positive end-expiratory pressure. Ganassini A, et al. **Monaldi Arch Chest Dis** 1997 Feb;52(1):68–70 (17 ref.)

Noninvasive mechanical ventilation and acute respiratory failure: indications and limitations. Muir JF, et al. **Monaldi Arch Chest Dis** 1997 Feb;52(1):56–9 (20 ref.)

Home mechanical ventilation in children: techniques, outcomes and ethics. Shneerson JM. **Monaldi Arch Chest Dis** 1996 Oct;51(5):426–30 (23 ref.)

Where and how must we perform noninvasive mechanical ventilation? Vitacca M. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):80–2 (17 ref.)

Long-term nocturnal mechanical ventilation in patients with kyphoscoliosis. Zaccaria S, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):433–7

Effect on the duration of mechanical ventilation of identifying patients capable of breathing spontaneously [see comments] Ely EW, et al. **N Engl J Med** 1996 Dec 19; 335(25):1864–9. Comment in: N Engl J Med 1996 Dec 19;335(35):1916–7. Comment in: ACP J Club 1997 May-Jun;126(3):74. Comment in: N Engl J Med 1997 May 29;336(22):1610; discussion 1611. Comment in: N Engl J Med 1997 May 29;336(22):1611.

Reducing the use of mechanical ventilation [editorial; comment] Luce JM. **N Engl J Med** 1996 Dec 19; 335(25):1916–7. Comment on: N Engl J Med 1996 Dec 19;335(25):1864–9.

Respiratory insufficiency and ventilatory support. 39th ENMC International Workshop, Naarden, The Netherlands, 26–28 January 1996. European Consortium on Chronic Respiratory Insufficiency. Rutgers M, et al. **Neuromuscul Disord** 1996 Dec;6(6):431–5 (0 ref.)

The language of breathlessness [letter; comment] MacLeod R, et al. **Palliat Med** 1997 Mar;11(2):170. Comment on: Palliat Med 1996 Oct;10(4):299–305.

Pulmonary edema and acute hypercapnic respiratory failure treated with bi-level nasal-CPAP: case report. Fiorenzano G, et al. **Panminerva Med** 1997 Mar;39(1):53–5

Guidelines for home care of children with chronic respiratory insufficiency. Panitch HB, et al. **Pediatr Pulmonol** 1996 Jan; 21(1):52–6

Heliox in respiratory failure secondary to bronchiolitis: a new therapy. Paret G, et al. **Pediatr Pulmonol** 1996 Nov; 22(5):322–3

Treatment of respiratory failure due to respiratory syncytial virus pneumonia with natural surfactant. Vos GD, et al. **Pediatr Pulmonol** 1996 Dec;22(6):412–5

Partial liquid ventilation combined with inhaled nitric oxide in acute respiratory failure with pulmonary hypertension in piglets. Zobel G, et al. **Pediatr Res** 1997 Feb;41(2):172–7

Respiratory failure. Stokes DC. **Pediatr Rev** 1997 Oct; 18(10):361–6 (8 ref.)

Inhaled nitric oxide and hypoxic respiratory failure in infants with congenital diaphragmatic hernia. The Neonatal Inhaled Nitric Oxide Study Group (NINOS). **Pediatrics** 1997 Jun;99(6):838–45

Pepper-spray-induced respiratory failure treated with extracorporeal membrane oxygenation. Billmire DF, et al. **Pediatrics** 1996 Nov;98(5):961–3

Evaluation and treatment of respiratory failure in neuromuscular disease. Teener JW, et al. **Rheum Dis Clin North Am** 1997 May;23(2):277–92 (48 ref.)

Noninvasive positive pressure ventilation. Clark DR, et al. **South Med J** 1997 Jan;90(1):72–4

Management of subarachnoid hemorrhage patients who presented with respiratory arrest resuscitated with bystander CPR. Shapiro S. **Stroke** 1996 Oct;27(10):1780–2

Intermittent negative pressure ventilation in the treatment of hypoxic hypercapnic coma in chronic respiratory insufficiency [see comments] Corrado A, et al. **Thorax** 1996 Nov;51(11):1077–82. Comment in: Thorax 1996 Nov;51(11):1069–70.

Non-invasive ventilation for exacerbations of respiratory failure in chronic obstructive pulmonary disease. Wedzicha JA. **Thorax** 1996 Aug;51 Suppl 2:S35–9 (25 ref.)

Beneficial effect of induced hypothermia on mortality and graft survival in renal transplant patients with severe respiratory failure. Matsuno N, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):229–30

[Ventilation effects of added jet air flows in different directions during expiratory phase on dogs with steam inhalation injury] Zhou S, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):212–5 (Eng. Abstr.) **(Chi)**

[Experimental studies of high frequency jet ventilation improved by enhancing expiratory turbulence] Qi G, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Nov;76(11):818–21 (Eng. Abstr.) **(Chi)**

[Nitric oxide treatment of children with impairment of oxygenation] Kristensen BB, et al. **Ugeskr Laeger** 1997 May 5;159(19):2878–80 (Eng. Abstr.) **(Dan)**

[Nasal ventilation in treatment of acute respiratory insufficiency] Brander PE, et al. **Duodecim** 1995; 111(18):1765–71 **(Fin)**

[Inspiratory aid with facial masks during acute respiratory failure without hypercapnia] Chérif A, et al. **Ann Fr Anesth Reanim** 1996;15(2):223–5 (Eng. Abstr.) **(Fre)**

[Non-invasive modalities of mechanical ventilation [editorial]] Brochard L. **Presse Med** 1996 Oct 19; 25(31):1407–9 (Eng. Abstr.) **(Fre)**

[Evaluation of smoking in chronic severe respiratory insufficiency patients treated with long-term oxygen at home] Cornette A, et al. **Rev Mal Respir** 1996;13(4):405–11 (Eng. Abstr.) **(Fre)**

[Noninvasive ventilation at 2 pressure levels (VNI-2P or Bi-PAP)] Sottiaux T, et al. **Rev Med Liege** 1996 Oct; 51(10):635–8 (18 ref.) **(Fre)**

[Role of non-invasive ventilation in internal medicine] Weber T. **Rev Med Liege** 1996 May;51(5):355–8 (21 ref.) **(Fre)**

[Ventilation modes and strategies in intensive care medicine] Rathgeber J. **Anaesthesiol Reanim** 1997;22(1):4–14 (63 ref.) (Eng. Abstr.) **(Ger)**

[Inspiratory pressure support via facial mask in acute respiratory insufficiency] Langenstein H. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep; 31(7):438–41 (Eng. Abstr.) **(Ger)**

[Continuous axial position change in post-traumatic lung failure—preventive or therapeutic indications?] Pape HC, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr;32(4):245–9 **(Ger)**

[Liquid ventilation with perfluorocarbons (see comments)] Quintel M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):461–9 (72 ref.) (Eng. Abstr.). Comment in: Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct;31(8):459–60. **(Ger)**

[Liquid ventilation--fact or fiction? (editorial; comment)] van Ackern K. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):459–60. Comment on: Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Oct;31(8):461–9. **(Ger)**

[Noninvasive ventilation in respiratory insufficiency. Indications—methods—limits] Hamm H, et al. **Fortschr Med** 1997 Jun 10;115(16):52–5 (Eng. Abstr.) **(Ger)**

[Long-term home care of respiratory insufficiency with oxygen and IPPB in France and in my own practice] Steurich F. **Gesundheitswesen** 1996 Dec;58(12):682–4 (Eng. Abstr.) **(Ger)**

[Concepts of noninvasive ventilation] Becker HF, et al. **Internist (Berl)** 1996 May;37(5):500–10 (82 ref.) **(Ger)**

[Home respiratory care and respirator weaning. Annual meeting of the work group for home and longterm respiratory care. Marburg, 11–13 April 1996] **Med Klin** 1997 Apr 28;92 Suppl 1:1–139 **(Ger)**

[Problems in adjustment to negative pressure ventilation] Hein H, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:75–6 (Eng. Abstr.) **(Ger)**

[Noninvasive ventilation in acute respiratory insufficiency] Heindl S, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:114–8 (Eng. Abstr.) **(Ger)**

[Nasal mask ventilation in the postoperative phase] Henning U. **Med Klin** 1997 Apr 28;92 Suppl 1:101–3 (Eng. Abstr.) **(Ger)**

[New therapy aspects of chronic respiratory insufficiency] Karg O. **Med Klin** 1997 Apr 28;92 Suppl 1:14–7 (25 ref.) (Eng. Abstr.) **(Ger)**

[Contra: noninvasive ventilation in acute respiratory insufficiency] Mang H, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:125–8 (Eng. Abstr.) **(Ger)**

[Pro: noninvasive positive pressure ventilation in respiratory insufficiency] Schneider H. **Med Klin** 1997 Apr 28;92 Suppl 1:123–4 (Eng. Abstr.) **(Ger)**

[Pressure versus volume constant ventilation in chronic ventilatory insufficiency] Sonneborn M, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:68–72 (Eng. Abstr.) **(Ger)**

[Present status and future aspects of the respiratory pacemaker] Thoma H, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:77–81 (Eng. Abstr.) **(Ger)**

[6 minute walking test as stress test for patients treated by intermittent self-ventilation] Wehgartner-Winkler S, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:22–4 (Eng. Abstr.) **(Ger)**

[Follow-up of intermittent self-ventilation (ISB). Mortality and causes] Wiebel M, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:63–7 (Eng. Abstr.) **(Ger)**

[Goodpasture syndrome: treatment initiation with plasmapheresis before histologic diagnostic verification] Gartenschläger M, et al. **Pneumologie** 1996 Nov; 50(11):764–8 (Eng. Abstr.) **(Ger)**

[Non-invasive ventilation in acute respiratory insufficiency] Karg O, et al. **Pneumologie** 1996 Nov;50(11):759–63 (31 ref.) (Eng. Abstr.) **(Ger)**

[Intermittent nasal positive pressure ventilation with a ventilator in accordance with the Medical Device Regulation III (MedGV III). Clinical experiences with the BREAS PV 201 in 19 patients] Müller-Pawlowski H, et al. **Pneumologie** 1996 Aug;50(8):518–22 (Eng. Abstr.) **(Ger)**

[The clinical use of an individually fitted nasal mask ("Freiburg Respiratory Mask") within the scope of a case report of controlled BiPAP ventilation] Netzer N, et al. **Pneumologie** 1997 Aug;51 Suppl 3:798–801 (Eng. Abstr.) **(Ger)**

[Proportional assisted ventilation--advantages and limits of a new ventilation concept] Stahl CA, et al. **Pneumologie** 1997 Mar;51(3):264–9 (7 ref.) **(Ger)**

[Long-term oxygen therapy: which form of administration can be recommended?] Tausendpfund C, et al. **Pneumologie** 1996 Mar;50(3):260–7 (Eng. Abstr.) **(Ger)**

[Guidelines for mechanical home ventilation. SVTL (Swiss Society against Tuberculosis and Lung Diseases). SGP (Swiss Society for Pneumology)] **Schweiz Med Wochenschr** 1996 Dec 14;126(50):2191–6 **(Ger)**

[Noninvasive ventilation in intensive care] Jolliet P, et al. **Schweiz Med Wochenschr** 1997 Jan 25;127(4):107–21 (85 ref.) (Eng. Abstr.) **(Ger)**

[Added work of breathing, respiratory pattern and determination of ventilator weaning readiness in inspiratory pressure support and and automatic tube compensation] Stocker R, et al. **Unfallchirurg** 1996 Oct;99(10):764–70 (Eng. Abstr.) **(Ger)**

[Percutaneous puncture tracheostomy in neurosurgical intensive care patients] Gumprecht H, et al. **Zentralbl Neurochir** 1996;57(1):44–6 (Eng. Abstr.) **(Ger)**

[Resuscitation of neonates in the delivery room. Recommendations by the American Heart Association and American Academy of Pediatrics] Hencz P, et al. **Orv Hetil** 1996 Jun 30;137(26):1415–7 (Eng. Abstr.) **(Hun)**

[Effects of PEEP on intrathoracic and extrathoracic blood volumes evaluated with the COLD system in patients with acute respiratory failure. Preliminary study] Brienza N, et al. **Minerva Anestesiol** 1996 Jul-Aug;62(7–8):235–42 (Eng. Abstr.) **(Ita)**

[Experience of an intermediate respiratory intensive therapy in the treatment of prolonged weaning from mechanical ventilation] Vitacca M, et al. **Minerva Anestesiol** 1996 Mar; 62(3):57–64 (23 ref.) (Eng. Abstr.) **(Ita)**

[Extracorporeal membrane oxygenation (ECMO) in the newborn infant and the child with intractable respiratory failure] Pettenazzo A, et al. **Pediatr Med Chir** 1996 May-Jun;18(3):235–42 (32 ref.) (Eng. Abstr.) **(Ita)**

[Application of extracorporeal membrane oxygenation for respiratory failure following septic pulmonary emboli] Kiyama H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Oct;44(10):1912–6 (Eng. Abstr.) **(Jpn)**

[Mechanical ventilation and long-term respiratory care in the intensive care unit of a general hospital] Chonabayashi N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33 Suppl:159–67 (Eng. Abstr.) **(Jpn)**

[Effect of on-demand inhalation of dry oxygen on nasal mucociliary clearance] Nakamura S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Nov; 34(11):1189–93 (Eng. Abstr.) **(Jpn)**

[Long-term mechanical ventilation in Japan, with special reference to home mechanical ventilation] Satoh M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:168–72 (Eng. Abstr.) **(Jpn)**

[Outcome of long-term nasal intermittent positive pressure ventilation in 41 patients with hypercapnic respiratory failure] Tsuboi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):959–67 (Eng. Abstr.) **(Jpn)**

[Temporary use of chest negative pressure ventilation to facilitate closure of a tracheal stoma before domiciliary nasal intermittent positive pressure ventilation] Tsuboi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Oct; 34(10):1163–7 (Eng. Abstr.) **(Jpn)**

[Home oxygen therapy in the elderly] Kobashi Y, et al. **Nippon Ronen Igakkai Zasshi** 1997 Jan;34(1):43–8 (Eng. Abstr.) **(Jpn)**

[Chronic respiratory failure in a case with juvenile-onset acid alpha-glucosidase deficiency; successful therapy with nasal intermittent positive pressure ventilation (NIPPV)] Tanaka C, et al. **No To Hattatsu** 1997 Jan;29(1):51–4 (Eng. Abstr.) **(Jpn)**

[A diaphragmatic pacemaker in the treatment of ventilatory failure] Ponce P, et al. **Acta Med Port** 1995 Nov; 8(11):639–42 (10 ref.) (Eng. Abstr.) **(Por)**

[The treatment of chronic respiratory insufficiency] Mihăltan F. **Pneumoftiziologia** 1996 Jul-Dec;45(3–4):173–82 (69 ref.) **(Rum)**

[Respiratory aid to patients with severe forms of suppurative meningitis] Zhukov VV, et al. **Anesteziol Reanimatol** 1997 Jan-Feb;(1):28–31 (Eng. Abstr.) **(Rus)**

[Effect of oxygen in different concentrations and free radical-anti-radical activity system in patients with chronic pulmonary insufficiency] Aleksandrov OV, et al. **Klin Med (Mosk)** 1997;75(2):31–3 (Eng. Abstr.) **(Rus)**

[Nocturnal pneumology hospitals] Díaz Lobato S, et al. **Arch Bronconeumol** 1997 Feb;33(2):89–91 **(Spa)**

[Are useful the theoretical formulas for the calculation of the concentrations of inhaled nitric oxide? (letter)] López-Herce J, et al. **Med Clin (Barc)** 1996 Dec 7; 107(20):797–8 **(Spa)**

[Home oxygen therapy with transtracheal catheter] Díaz Lobato S, et al. **Rev Clin Esp** 1996 Dec;196(12):846–50 (63 ref.) **(Spa)**

[Migration of an aspired piece of plastics. ECMO in respiratory failure optimizes bronchoscopy] Lindén V, et al. **Lakartidningen** 1997 May 7;94(19):1820–2 **(Swe)**

VETERINARY

Surfactant protein-B and lung function in surfactant-treated preterm lambs. Rebello CM, et al. **Biol Neonate** 1997; 71(5):327–36

The relation of ventilatory failure to pulmonary, respiratory muscle and central nervous system disturbances in calves with an experimentally produced pneumonia. Desmecht

DJ, et al. **J Comp Pathol** 1996 Oct;115(3):203–19

[What is your diagnosis? Pulmonary edema following changes in capillary permeability due to acute respiratory distress syndrome] Dennler R, et al.
Schweiz Arch Tierheilkd 1997;139(3):144–6 **(Ger)**

VIROLOGY

Respiratory distress in a former drug abuser. Muthiah M, et al. **Hosp Pract (Off Ed)** 1997 Jul 15;32(7):141–4

RESPIRATORY MECHANICS

Quantitative chest computed tomography as a means of predicting exercise performance in severe emphysema [letter] Milne EN. **Acad Radiol** 1996 Jan;3(1):88–90

Changes in pulmonary mechanics during laparoscopic gastroplasty in morbidly obese patients. Dumont L, et al. **Acta Anaesthesiol Scand** 1997 Mar;41(3):408–13

Beneficial effects of pre-treatment with vitamin A on cardiac and pulmonary functions in endotoxaemic pigs. Eriksson M, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):538–48

Continuous thoracic epidural analgesia versus combined spinal/thoracic epidural analgesia on pain, pulmonary function and the metabolic response following colonic resection [see comments] Scott NB, et al.
Acta Anaesthesiol Scand 1996 Jul;40(6):691–6. Comment in: Acta Anaesthesiol Scand 1997 Mar;41(3):433–4.

Exercise training by individuals with predialysis renal failure: cardiorespiratory endurance, hypertension, and renal function. Boyce ML, et al. **Am J Kidney Dis** 1997 Aug; 30(2):180–92

Decreased lung compliance and air trapping in heterozygous SP-B–deficient mice. Clark JC, et al.
Am J Respir Cell Mol Biol 1997 Jan;16(1):46–52

Lung function and long term exposure to air pollutants in Switzerland. Study on Air Pollution and Lung Diseases in Adults (SAPALDIA) Team. Ackermann-Liebrich U, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):122–9

Pulmonary function until two years of life in infants with bronchopulmonary dysplasia. Baraldi E, et al.
Am J Respir Crit Care Med 1997 Jan;155(1):149–55

Effect of surgical lung volume reduction on breathing patterns in severe pulmonary emphysema. Bloch KE, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):553–60

Inspiratory dynamic obstruction detected by forced oscillation during CPAP. A model study. Farré R, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):952–6

Passive respiratory mechanics in healthy infants: the effects of growth, gender and smoking [letter; comment] Gappa M, et al. **Am J Respir Crit Care Med** 1997 May; 155(5):1815–6. Comment on: Am J Respir Crit Care Med 1996 Sep;154(3 Pt 1):670–80.

Long-term pulmonary sequelae in children with congenital diaphragmatic hernia. Ijsselstijn H, et al.
Am J Respir Crit Care Med 1997 Jan;155(1):174–80

Pathophysiologic basis of acute respiratory distress in patients who fail a trial of weaning from mechanical ventilation [see comments] Jubran A, et al.
Am J Respir Crit Care Med 1997 Mar;155(3):906–15. Comment in: Am J Respir Crit Care Med 1997 Aug;156(2 Pt 1):669–70.

Passive mechanics of lung and chest wall in patients who failed or succeeded in trials of weaning [letter; comment] Nava S, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):669–70. Comment on: Am J Respir Crit Care Med 1997 Mar;155(3):906–15.

Qualitative aspects of exertional breathlessness in chronic airflow limitation: pathophysiologic mechanisms.
O'Donnell DE, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):109–15

The effect of inhaled leukotriene B4 in normal and in asthmatic subjects. Sampson SE, et al.
Am J Respir Crit Care Med 1997 May;155(5):1789–92

Ventilatory function in British adults after asthma or wheezing illness at ages 0–35. Strachan DP, et al.
Am J Respir Crit Care Med 1996 Dec;154(6 Pt 1):1629–35

Parainfluenza virus–induced persistence of airway inflammation, fibrosis, and dysfunction associated with TGF-beta 1 expression in brown Norway rats. Uhl EW, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1834–42

Airway pressure changes during one-lung ventilation. Szegedi LL, et al. **Anesth Analg** 1997 May;84(5):1034–7

Respiratory mechanics, gastric insufflation pressure, and air leakage of the laryngeal mask airway. Weiler N, et al.
Anesth Analg 1997 May;84(5):1025–8

Graphic analysis of pulmonary mechanics in neonates receiving assisted ventilation. Sinha SK, et al.
Arch Dis Child Fetal Neonatal Ed 1996 Nov;75(3):F213–8

Lung function test findings in patients with chronic fatigue syndrome (CFS) [letter] [see comments] De Lorenzo F, et al. **Aust N Z J Med** 1996 Aug;26(4):563–4. Comment in: Aust N Z J Med 1997 Jun;27(3):346.

Pilot performance of the anti-G straining maneuver: respiratory demands and breathing system effects. Whitley PE. **Aviat Space Environ Med** 1997 Apr;68(4):312–6

Dynamics of the ventilatory response to step changes in end-tidal PCO2 in older humans. Poulin MJ, et al.
Can J Appl Physiol 1997 Aug;22(4):368–83

Lung volume reduction surgery in ventilator-dependent COPD patients. Criner GJ, et al. **Chest** 1996 Oct; 110(4):877–84

Lung function 12 months following emphysema resection. Gelb AF, et al. **Chest** 1996 Dec;110(6):1407–15

The pharyngeal critical pressure. The whys and hows of using nasal continuous positive airway pressure diagnostically. Gold AR, et al. **Chest** 1996 Oct; 110(4):1077–88 (48 ref.)

Long-term change in exercise capacity, body mass, and pulmonary function in adults with cystic fibrosis. Moorcroft AJ, et al. **Chest** 1997 Feb;111(2):338–43

Non-serratus-sparing antero-axillary thoracotomy with disconnection of anterior rib cartilage. Improvement in postoperative pulmonary function and pain in comparison to posterolateral thoracotomy. Nomori H, et al. **Chest** 1997 Mar;111(3):572–6

Patient-ventilator interactions. Dick CR, et al.
Clin Chest Med 1996 Sep;17(3):423–38 (99 ref.)

Prediction of post-operative cardiopulmonary function using perfusion scintigraphy in patients with bronchogenic carcinoma. Larsen KR, et al. **Clin Physiol** 1997 May; 17(3):257–67

The prone position in acute respiratory distress syndrome: where we are, and where do we go from here [editorial; comment] Albert RK. **Crit Care Med** 1997 Sep;25(9):1453–4 (36 ref.). Comment on: Crit Care Med 1997 Sep;25(9):1539–44.

Monitoring interactions between spontaneous respiration and mechanical inflations in preterm neonates. Bignall S, et al. **Crit Care Med** 1997 Mar;25(3):545–53

Experimental study of double-lumen, two-stage endotracheal tube during conventional mechanical ventilation in rabbits. Chen XN, et al. **Crit Care Med** 1997 Mar;25(3):492–5

Ventilatory muscles and mechanical ventilatory support [editorial; comment] MacIntyre NR. **Crit Care Med** 1997 Jul;25(7):1106–7. Comment on: Crit Care Med 1997 Jul;25(7):1187–90.

Air pollution from truck traffic and lung function in children living near motorways. Brunekreef B, et al.
Epidemiology 1997 May;8(3):298–303

Thoracotomy and thoracoscopy: postoperative pulmonary function, pain and chest wall complaints. Furrer M, et al. **Eur J Cardiothorac Surg** 1997 Jul;12(1):82–7

Respiratory control in children with Prader-Willi syndrome. Schlüter B, et al. **Eur J Pediatr** 1997 Jan;156(1):65–8

Long-term follow-up of pulmonary function in chronic eosinophilic pneumonia. Groupe d'Etude en Pathologie Interstitielle de la Société de Pathologie Thoracique du Nord. Durieu J, et al. **Eur Respir J** 1997 Feb;10(2):286–91

Respiratory mechanics and morphometric changes during pneumoperitoneum in normal rats. Moreira LF, et al.
Eur Respir J 1997 Jun;10(6):1321–6

Exercise performance in children with asthma: is it different from that of healthy controls? Santuz P, et al.
Eur Respir J 1997 Jun;10(6):1254–60

Functional impairment in fibrosing alveolitis: relationship to reversible disease on thin section computed tomography. Wells AU, et al. **Eur Respir J** 1997 Feb;10(2):280–5

Lung mechanics and gas exchange in pulmonary embolism. D'Angelo E. **Haematologica** 1997 May-Jun;82(3):371–4 (34 ref.)

Simulation of mechanical respiration using a multicompartment model for ventilation mechanics and gas exchange. Winkler T, et al. **Int J Clin Monit Comput** 1995; 12(4):231–9

New aspects of pulmonary mechanics: "slowly" distensible compartments of the respiratory system, identified by a PEEP step maneuver. Fretschner R, et al.
Intensive Care Med 1996 Dec;22(12):1328–34

Cross-talk between the lungs in piglets. Versprille A, et al.
Intensive Care Med 1996 Oct;22(10):1082–9

The mechanism of respiratory rhythm generation during constant flow assisted mechanical ventilation in the decerebrated dog. Kondo T, et al. **Intern Med** 1997 Aug; 36(8):543–9

Clinical correlates and prognostic significance of the ventilatory response to exercise in chronic heart failure. Chua TP, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1585–90

Residual abnormalities of pulmonary function in asymptomatic young adult asthmatics with childhood-onset asthma. Chiang CH, et al. **J Asthma** 1997; 34(1):15–21

Anatomical and physiological simulation for respiratory mechanics. Kaye J, et al. **J Image Guid Surg** 1995; 1(3):164–71

Does laparoscopy adversely affect gas exchange and pulmonary mechanics in the newborn? An experimental study. Rubin SZ, et al. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S69–73

Functional and oximetric assessment of patients after lung reduction surgery. Bousamra M 2nd, et al.
J Thorac Cardiovasc Surg 1997 Apr;113(4):675–81; discussion 681–2

The effect of incentive spirometry and inspiratory muscle training on pulmonary function after lung resection. Weiner P, et al. **J Thorac Cardiovasc Surg** 1997 Mar;113(3):552–7

Fast breathing in the diagnosis of pneumonia—a reassessment. Gupta D, et al. **J Trop Pediatr** 1996 Aug;42(4):196–9

Description and validation of a technique for the removal of ECG contamination from diaphragmatic EMG signal. Bartolo A, et al. **Med Biol Eng Comput** 1996 Jan;34(1):76–81

Clinical spirometry. Pierce RJ, et al. **Med J Aust** 1997 Jun 16;166(12):658–63

Respiratory-dependent laser-Doppler flux motion in different skin areas and its meaning to autonomic nervous control of the vessels of the skin. Mück-Weymann ME, et al. **Microvasc Res** 1996 Jul;52(1):69–78

Assessment of chest wall kinematics by using optical reflectance movement analysis (ORMA) system in asthma. Scano G, et al. **Monaldi Arch Chest Dis** 1996 Dec; 51(6):479–82

Measurement of infant pulmonary mechanics: comparative analysis of techniques. Davis GM, et al.
Pediatr Pulmonol 1997 Feb;23(2):105–13

Quality of life in patients with cystic fibrosis. de Jong W, et al. **Pediatr Pulmonol** 1997 Feb;23(2):95–100

Intrasubject variability of repeated pulmonary function measurements in preterm ventilated infants. Gonzalez A, et al. **Pediatr Pulmonol** 1996 Jan;21(1):35–41

Pulmonary sequelae in infants treated with extracorporeal membrane oxygenation. Greenspan JS, et al.
Pediatr Pulmonol 1997 Jan;23(1):31–8

Influence of different methods of synchronized mechanical ventilation on ventilation, gas exchange, patient effort, and blood pressure fluctuations in premature neonates. Hummler H, et al. **Pediatr Pulmonol** 1996 Nov;22(5):305–13

Evaluation of pulmonary function and polysomnography in obese children and adolescents. Marcus CL, et al.
Pediatr Pulmonol 1996 Mar;21(3):176–83

Patient-triggered ventilation: a comparison of tidal volume and chestwall and abdominal motion as trigger signals. Nikischin W, et al. **Pediatr Pulmonol** 1996 Jul;22(1):28–34

Childhood asthma and lung function in mid-adult life. Oswald H, et al. **Pediatr Pulmonol** 1997 Jan;23(1):14–20

Comparison of dynamic and passive respiratory mechanics in ventilated newborn infants [letter; comment] Stocks J, et al. **Pediatr Pulmonol** 1996 Oct;22(4):280–2. Comment on: Pediatr Pulmonol 1995 Oct;20(4):258–64.

Lung mechanics in infants with left-to-right shunt congenital heart disease. Yau KI, et al. **Pediatr Pulmonol** 1996 Jan; 21(1):42–7

Optical imaging of the ventral medullary surface of developing kittens during ventilatory challenges. Gozal D, et al. **Reprod Fertil Dev** 1996;8(1):87–95

Involvement of hydroxyl radical in the immediate ventilatory responses to inhaled wood smoke in rats. Kou YR, et al.
Respir Physiol 1997 Jan;107(1):1–13

Effects on pulmonary function of daily exposure to dry or humidified hyperbaric oxygen. Shupak A, et al.
Respir Physiol 1997 Jun;108(3):241–6

Immediate and delayed effects of laparoscopic Nissen fundoplication on pulmonary function. Anvari M, et al.
Surg Endosc 1996 Dec;10(12):1171–5

[Effect of passive tobacco smoking on the status of biomechanical factors of respiration in boys aged 7–13] Gurova OA. **Fiziol Cheloveka** 1996 Jan-Feb;22(1):69–74 **(Rus)**

[Elastic properties of the lungs in middle and old age] Ivanov LA. **Fiziol Cheloveka** 1996 Nov-Dec;22(6):82–5 **(Rus)**

[The effect of positive end-expiratory pressure on respiratory biomechanics in bronchial asthma] Dukov LG, et al.
Ter Arkh 1997;69(3):42–5 (Eng. Abstr.) **(Rus)**

[Correlation between echocardiographic changes and parameters of pulmonary function in patients with arterial hypertension] Najić O. **Med Pregl** 1996;49(11–12):453–7 (Eng. Abstr.) **(Scr)**

[Maximum static respiratory pressures in adults. The reference values for a Mediterranean Caucasian population] Morales P, et al. **Arch Bronconeumol** 1997 May;33(5):213–9 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effect of low dose fentanyl-droperidol administration on respiratory drive, respiratory pattern and gas exchange in ASA 1 spontaneously breathing patients. Pierdominici S, et al. **Acta Anaesthesiol Belg** 1997;48(2):85–91

Substance P-induced respiratory excitation is blunted by delta-receptor specific opioids in the rat medulla oblongata. Chen Z, et al. **Acta Physiol Scand** 1996 Jun;157(2):165–73

Ozone responsiveness in smokers and nonsmokers. Frampton MW, et al. **Am J Respir Crit Care Med** 1997 Jan; 155(1):116–21

Effects of sedation, anesthesia, and endotracheal intubation on respiratory mechanics in adult horses. Tomasic M, et al. **Am J Vet Res** 1997 Jun;58(6):641–6

Respiratory effects of spinal anaesthesia for caesarean section. Kelly MC, et al. **Anaesthesia** 1996 Dec;51(12):1120–2

Pulmonary function changes after nebulised and intravenous frusemide in ventilated premature infants. Prabhu VG, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul;77(1):F32–5

Modifications of breathing pattern induced by inhaled sulphur mustard in mice. Vijayaraghavan R.
Arch Toxicol 1997;71(3):157–64

Evaluation of potentially injurious effects of exogenous surfactant lysophospholipids on the alveolar epithelium and pulmonary mechanics. Fornasier M, et al. **Biol Neonate** 1997;71(5):337–44

Surfactant protein-B and lung function in surfactant-treated preterm lambs. Rebello CM, et al. **Biol Neonate** 1997; 71(5):327–36

Propofol or halothane anaesthesia for children with asthma: effects on respiratory mechanics. Habre W, et al.
Br J Anaesth 1996 Dec;77(6):739–43

Cyclo(Gly-Gln) inhibits the cardiorespiratory depression produced by beta-endorphin and morphine. Unal CB, et al. **Brain Res** 1997 Jan 30;747(1):52–9

Acute effects of inhaled and i.v. cocaine on airway dynamics. Tashkin DP, et al. **Chest** 1996 Oct;110(4):904–10

Health effects of acid aerosols on North American children: pulmonary function. Raizenne M, et al. **Environ Health Perspect** 1996 May;104(5):506–14

Cardiovascular and respiratory actions of U50,488H in the unanaesthetized ovine foetus. Szeto HH, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):77–82

General pharmacology of meloxicam—Part II: Effects on blood pressure, blood flow, heart rate, ECG, respiratory minute volume and interactions with paracetamol, pirenzepine, chlorthalidone, phenprocoumon and tolbutamide. Engelhardt G, et al. **Gen Pharmacol** 1996 Jun; 27(4):679–88

Effects of nebulized salbutamol on respiratory mechanics in adult respiratory distress syndrome. Moriña P, et al. **Intensive Care Med** 1997 Jan;23(1):58–64

Effects of N2O narcosis on breathing and effort sensations during exercise and inspiratory resistive loading. Fothergill DM, et al. **J Appl Physiol** 1996 Oct;81(4):1562–71

Effect of nitric oxide synthase inhibition on cardiorespiratory responses in the conscious rat. Gozal D, et al. **J Appl Physiol** 1996 Nov;81(5):2068–77

Effect of prior O2 breathing on ventilatory response to sustained isocapnic hypoxia in adult humans. Honda Y, et al. **J Appl Physiol** 1996 Oct;81(4):1627–32

Ventilatory response to helium–oxygen breathing during exercise: effect of airway anesthesia. Krishnan BS, et al. **J Appl Physiol** 1997 Jul;83(1):82–8

Dextromethorphan affects ventilation differently in male and female rats. Schlenker EH. **J Appl Physiol** 1996 Nov; 81(5):1911–6

The peripheral NK-1/NK-2 receptor antagonist MDL 105,172A inhibits tachykinin-mediated respiratory effects in guinea-pigs. Kudlacz EM, et al. **J Auton Pharmacol** 1997 Apr;17(2):109–19

Effects of nebulized beta 2-adrenergic agonists on pulmonary mechanics in anesthetized patients with chronic obstructive pulmonary disease. Vichitvejpaisal P, et al. **J Med Assoc Thai** 1996 Dec;79(12):779–84

Exposure to isocyanates and organic solvents, and pulmonary-function changes in workers in a polyurethane molding process [published erratum appears in J Occup Environ Med 1997 Apr;39(4):338] Akbar-Khanzadeh F, et al. **J Occup Environ Med** 1996 Dec;38(12):1205–12

Effects of 10-ppm hydrogen sulfide inhalation on pulmonary function in healthy men and women. Bhambhani Y, et al. **J Occup Environ Med** 1996 Oct;38(10):1012–7

Respiratory mechanics before and after late artificial surfactant rescue. Todd DA, et al. **J Paediatr Child Health** 1995 Dec;31(6):532–6

A comparison of the hemodynamic and ventilatory effects of abdominal insufflation with helium and carbon dioxide in young swine. Liem TK, et al. **J Pediatr Surg** 1996 Feb; 31(2):297–300

Chemosensory and cholinergic stimulation of fictive respiration in isolated CNS of neonatal opossum. Eugenín J, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):425–37

Membrane potentials of respiratory neurones during dizocilpine-induced apneusis in adult cats. Haji A, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):851–61

Effects of salbutamol delivery from a metered dose inhaler versus jet nebulizer on dynamic lung mechanics in very preterm infants with chronic lung disease. Gappa M, et al. **Pediatr Pulmonol** 1997 Jun;23(6):442–8

Partial liquid ventilation combined with inhaled nitric oxide in acute respiratory failure with pulmonary hypertension in piglets. Zobel G, et al. **Pediatr Res** 1997 Feb;41(2):172–7

Serotonergic and noradrenergic effects on respiratory neural discharge in the medullary slice preparation of neonatal rats. Al-Zubaidy ZA, et al. **Pflugers Arch** 1996 Apr; 431(6):942–9

Specificity of a placental factor inhibiting breathing in fetal sheep. Alvaro RE, et al. **Reprod Fertil Dev** 1996;8(3):423–9

Comparative evaluation of impulse oscillometry and a monofrequency forced oscillation technique in clinically healthy calves undergoing bronchochallenges. Reinhold P, et al. **Res Vet Sci** 1996 Nov;61(3):206–13

Respiratory mechanics after chronic diethylcarbamazine. Aires ST, et al. **Respir Physiol** 1997 Apr;108(1):73–7

Morphological determinants of peripheral lung mechanical changes induced by capsaicin. Dolhnikoff M, et al. **Respir Physiol** 1997 Apr;108(1):63–72

Ventilatory responses to CO2: constant fraction vs. constant inflow administration. Niizeki K, et al. **Respir Physiol** 1996 Jul;104(2–3):91–106

gamma-Aminobutyric acid contributes to modulation of cardiorespiratory control after chronic ventilatory loading. Rao RS, et al. **Respir Physiol** 1997 Apr;108(1):35–44

Transitional effects of inspired CO2 on lung mechanics in anesthetized rabbits. Romero PV, et al. **Respir Physiol** 1996 Oct;106(1):57–63

Vagal bronchopulmonary C-fibers and acute ventilatory response to inhaled irritants. Wang AL, et al. **Respir Physiol** 1996 Jul;104(2–3):231–9

Acute effects of summer air pollution on respiratory function in primary school children in southern England. Scarlett JF, et al. **Thorax** 1996 Nov;51(11):1109–14

[Concentration-effect relationship, hemodynamics and respiration after infusion of the steroid anesthetic eltanolone in healthy subjects] Hering W, et al. **Anaesthesist** 1996 Dec; 45(12):1142–50 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Effect of arginine vasopressin on breathing movements of chronically instrumented fetal lambs. Bessho T, et al. **Acta Obstet Gynecol Scand** 1997 Feb;76(2):107–11

Differences in mouth occlusion pressure and breathing pattern between arm and leg incremental exercise. Ramonatxo M, et al. **Acta Physiol Scand** 1996 Dec; 158(4):333–41

Pulmonary mechanics during laparoscopic surgery. Köprülü G, et al. **Adv Exp Med Biol** 1996;388:643–6

Some recent advances in studies on J receptors. Paintal AS. **Adv Exp Med Biol** 1995;381:15–25 (40 ref.)

Upper airway influences on breathing. Sant'Ambrogio G. **Adv Exp Med Biol** 1995;381:37–46 (26 ref.)

Central nervous mechanisms responsible for cardio-respiratory homeostasis. Spyer KM. **Adv Exp Med Biol** 1995;381:73–9 (20 ref.)

Assessment of pressure-volume curve of the respiratory system in mechanically ventilated patients with ARDS. Tütüncü AS, et al. **Adv Exp Med Biol** 1996;388:569–74

Effect of chronic hyperinflation on diaphragm length and surface area. Cassart M, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):504–8

Role of hypoxemia and pulmonary mechanics in exercise limitation in interstitial lung disease. Harris-Eze AO, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):994–1001

Hyperpnea-induced changes in parenchymal lung mechanics in normal subjects and in asthmatics. Kaminsky DA, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1260–6

Chest wall compliance in infants and children with neuromuscular disease. Papastamelos C, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1045–8

Differential inspiratory muscle pressure contributions to breathing during dynamic hyperinflation. Yan S, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):497–503

Effects of sedation, anesthesia, and endotracheal intubation on respiratory mechanics in adult horses. Tomasic M, et al. **Am J Vet Res** 1997 Jun;58(6):641–6

The influence of lung volume reduction surgery on ventilatory mechanics in patients suffering from severe chronic obstructive pulmonary disease. Tschernko EM, et al. **Anesth Analg** 1996 Nov;83(5):996–1001

A new approach for tracking respiratory mechanical parameters in real-time. Avanzolini G, et al. **Ann Biomed Eng** 1997 Jan-Feb;25(1):154–63

Spectral analysis of an acoustic respiratory signal with a view to developing an apnoea monitor. Ajmani A, et al. **Australas Phys Eng Sci Med** 1996 Jun;19(2):46–52

The multilevel mechanical behaviour of the lung during induced bronchoconstriction. Bates JH. **Australas Phys Eng Sci Med** 1996 Jun;19(2):35–45 (41 ref.)

Respiratory changes during initial days of acclimatization to increasing altitudes. Basu CK, et al. **Aviat Space Environ Med** 1996 Jan;67(1):40–5

Effects of chemical defense clothing and individual equipment on ventilatory function and subjective reactions. Muza SR, et al. **Aviat Space Environ Med** 1996 Dec; 67(12):1190–7

Respiratory mechanics after abdominal surgery measured with continuous analysis of pressure, flow and volume signals. Nimmo AF, et al. **Br J Anaesth** 1996 Sep; 77(3):317–26

Depressant effects on inspiratory and expiratory activity produced by chemical activation of Bötzinger complex neurons in the rabbit. Bongianni F, et al. **Brain Res** 1997 Feb 21;749(1):1–9

NMDA as well as non-NMDA receptors mediate the neurotransmission of inspiratory drive to phrenic motoneurons in the adult rat. Chitravanshi VC, et al. **Brain Res** 1996 Apr 9;715(1–2):104–12

Power spectral analysis of inspiratory nerve activity in the anesthetized rat: uncorrelated fast oscillations in different inspiratory nerves. Kocsis B, et al. **Brain Res** 1997 Jan 16; 745(1–2):309–12

Nucleus raphe obscurus evokes 5-HT-1A receptor-mediated modulation of respiratory neurons. Lalley PM, et al. **Brain Res** 1997 Jan 30;747(1):156–9

An electrophysiological demonstration of axonal projections of single ventral inspiratory neurons to the phrenic nucleus of the cat. Sasaki S, et al. **Brain Res** 1995 Dec 1; 701(1–2):108–16

Thyrotropin-releasing hormone immunoreactive boutons form close appositions with medullary expiratory neurons in the rat. Sun QJ, et al. **Brain Res** 1996 Apr 9; 715(1–2):136–44

Discharge patterns of dorsal and ventral respiratory group neurons during spontaneous augmented breaths observed in pentobarbital anesthetized rats. Takeda M, et al. **Brain Res** 1997 Feb 21;749(1):95–100

Perinatal developmental changes in respiratory activity of medullary and spinal neurons: an in vitro study on fetal and newborn rats. Di Pasquale E, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):121–30

The role of CO2/pH chemoreceptors in ventilatory control. Milsom WK. **Braz J Med Biol Res** 1995 Nov-Dec; 28(11–12):1147–60 (113 ref.)

Lower transversal laparotomy has no appreciable effect on respiratory mechanics in guinea pigs. Santos MA, et al. **Braz J Med Biol Res** 1996 Jan;29(1):53–9

Cardiopulmonary effects of laparoscopic surgery, revisited [letter; comment] Fahy BG. **Chest** 1997 Jun;111(6):1787–8 . Comment on: Chest 1996 Sep;110(3):810–5.

Maximal expiratory pressures in spinal cord injury using two mouthpieces. Tully K, et al. **Chest** 1997 Jul;112(1):113–6

Endothelial damage caused by ischemia and reperfusion and different ventilatory strategies in the lung. Moore TM, et al. **Chin J Physiol** 1996;39(2):65–81 (132 ref.)

Coordination between palatal and laryngeal muscle activities in response to rebreathing and lung inflation. Koizumi H, et al. **Cleft Palate Craniofac J** 1996 Nov;33(6):459–62

Determinants of heart rate variability during deep breathing: basic findings and clinical applications. Diehl RR, et al. **Clin Auton Res** 1997 Jun;7(3):131–5

Transfer of carbon monoxide during an inspiratory pause procedure in mechanically ventilated pigs. te Nijenhuis FC, et al. **Clin Physiol** 1996 Nov;16(6):621–32

Effect of sustained inspiratory loading on respiratory sensation and CO2 responsiveness in normal humans. Clague JE, et al. **Clin Sci (Colch)** 1996 Oct;91(4):513–8

The neuronal mechanisms of respiratory rhythm generation. Ramirez JM, et al. **Curr Opin Neurobiol** 1996 Dec; 6(6):817–25 (85 ref.)

Influences of dysfunctional respiratory mechanics on orofacial pain. Hruska RJ Jr. **Dent Clin North Am** 1997 Apr;41(2):211–27 (71 ref.)

Breath-by-breath determinations of airway occlusion pressure in the developing lamb. Milerad J, et al. **Eur J Appl Physiol** 1996;74(1–2):44–51

Cardiovascular and respiratory responses to passive leg cycle exercise in people with spinal cord injuries. Muraki S, et al. **Eur J Appl Physiol** 1996;74(1–2):23–8

Changes in ventilation related to changes in electromyograph activity during repetitive bouts of isometric exercise in simulated sailing. Vogiatzis I, et al. **Eur J Appl Physiol** 1996;72(3):195–203

Pulmonary function in children with homozygous alpha1-protease inhibitor deficiency. Wiebicke W, et al. **Eur J Pediatr** 1996 Jul;155(7):603–7

Breathing pattern during sleep disruptive snoring. Bloch KE, et al. **Eur Respir J** 1997 Mar;10(3):576–86

Low diagnostic value of respiratory impedance measurements in children. Cuijpers CE, et al. **Eur Respir J** 1997 Jan;10(1):88–93

Respiratory mechanics in patients with tense cirrhotic ascites. Duranti R, et al. **Eur Respir J** 1997 Jul;10(7):1622–30

Oscillatory pressure transients after flow interruption during bronchial challenge test in children. Frey U, et al. **Eur Respir J** 1997 Jan;10(1):75–81

Respiratory resistive impedance in obstructive patients: linear regression analysis vs viscoelastic modelling. Lorino AM, et al. **Eur Respir J** 1997 Jan;10(1):150–5

"Intrinsic" PEEP (PEEPi): role of expiratory muscles [editorial; comment] Ninane V. **Eur Respir J** 1997 Mar; 10(3):516–8. Comment on: Eur Respir J 1997 Mar;10(3):522–9.

Chest wall and lung contribution to the elastic properties of the respiratory system in patients with chronic obstructive pulmonary disease. Ranieri VM, et al. **Eur Respir J** 1996 Jun;9(6):1232–9

Breathing pattern and respiratory mechanics in patients with amyotrophic lateral sclerosis. Vitacca M, et al. **Eur Respir J** 1997 Jul;10(7):1614–21

Accurate measurement of intrinsic positive end-expiratory pressure: how to detect and correct for expiratory muscle activity [see comments] Zakynthinos SG, et al. **Eur Respir J** 1997 Mar;10(3):522–9. Comment in: Eur Respir J 1997 Mar;10(3):516–8.

Partial relaxation of diaphragm and lung function parameters. Kostianev S, et al. **Folia Med (Plovdiv)** 1996;38(1):5–8

Effects of resistive load on the phase difference between chest and mouth flow in patients with chronic obstructive pulmonary disease. Mishima M, et al. **Front Med Biol Eng** 1997;8(1):1–18

Sleep disorders and breathing alterations in patients with chronic heart failure. Traversi E, et al. **G Ital Cardiol** 1997 May;27(5):423–9

Comparison of impedance and inductance ventilation sensors on adults during breathing, motion, and simulated airway obstruction. Cohen KP, et al. **IEEE Trans Biomed Eng** 1997 Jul;44(7):555–66

Cardio respiratory changes associated with graded exercise and determination of aerobic power in male medical students (18–19 years). Biswas DA, et al. **Indian J Physiol Pharmacol** 1996 Jan;40(1):79–82

ACOG technical bulletin. Pulmonary disease in pregnancy. Number 224—June 1996. American College of Obstetricians and Gynecologists. **Int J Gynaecol Obstet** 1996 Aug;54(2):187–96 (19 ref.)

The physiological responses induced by superficial acupuncture: a comparative study of acupuncture stimulation during exhalation phase and continuous stimulation. Tanaka TH, et al. **Int J Neurosci** 1997 Jun; 90(1–2):45–58

The effects of active and passive stimulation on chemosensory event-related potentials. Lorig TS, et al. **Int J Psychophysiol** 1996 Oct;23(3):199–205

Respiratory system mechanics in the early phase of acute respiratory failure due to severe kyphoscoliosis. Conti G, et al. **Intensive Care Med** 1997 May;23(5):539–44

The hemodynamic consequences of mechanical ventilation: an evolving story. Pinsky MR. **Intensive Care Med** 1997 May;23(5):493–503 (93 ref.)

Breathing during sleep in myasthenia gravis. Manni R, et

al. **Ital J Neurol Sci** 1995 Dec;16(9):589–94

Hypercapnic and hypoxic ventilatory responses [letter; comment] Abraham K, et al. **J Appl Physiol** 1996 Aug; 81(2):1033–4. Comment on: J Appl Physiol 1994 Jan;76(1):314–20.

Breathing during exercise in dogs—passive or active? Ainsworth DM, et al. **J Appl Physiol** 1996 Aug; 81(2):586–95

Autoregressive spectral analysis of phrenic neurogram during eupnea and gasping. Akay M, et al. **J Appl Physiol** 1996 Aug;81(2):530–40; discussion 528–9

Supraglottic airway pressure–flow relationships during oronasal airflow partitioning in dogs. Amis TC, et al. **J Appl Physiol** 1996 Nov;81(5):1958–64

Effect of different levels of hyperoxia on breathing in healthy subjects. Becker HF, et al. **J Appl Physiol** 1996 Oct; 81(4):1683–90

High lung inflation increases mRNA levels of ECM components and growth factors in lung parenchyma. Berg JT, et al. **J Appl Physiol** 1997 Jul;83(1):120–8

Air hunger induced by acute increase in PCO2 adapts to chronic elevation of PCO2 in ventilated humans. Bloch-Salisbury E, et al. **J Appl Physiol** 1996 Aug; 81(2):949–56

Zone of apposition in the passive diaphragm of the dog. Boriek AM, et al. **J Appl Physiol** 1996 Nov;81(5):1929–40

Effects of hypoxic pulmonary vasoconstriction on pulmonary gas exchange. Brimioulle S, et al. **J Appl Physiol** 1996 Oct; 81(4):1535–43

Breath–to–breath relationships between respiratory cycle variables in humans at fixed end–tidal PCO2 and PO2. Busso T, et al. **J Appl Physiol** 1996 Nov;81(5):2287–96

Effect of convective stretching and folding on aerosol mixing deep in the lung, assessed by approximate entropy. Butler JP, et al. **J Appl Physiol** 1997 Sep;83(3):800–9

Is respiratory sinus arrhythmia a good index of cardiac vagal tone in exercise? Casadei B, et al. **J Appl Physiol** 1996 Aug; 81(2):556–64

Inputs from upper airway affect firing of respiratory–associated midbrain neurons. Chen Z, et al. **J Appl Physiol** 1997 Jul;83(1):196–203

Diaphragm thickening during inspiration. Cohn D, et al. **J Appl Physiol** 1997 Jul;83(1):291–6

Influence of reduced carotid body drive during sustained hypoxia on hypoxic depression of ventilation in humans. Dahan A, et al. **J Appl Physiol** 1996 Aug;81(2):565–72

Aerosol dispersion in human lung: comparison between numerical simulations and experiments for bolus tests. Darquenne C, et al. **J Appl Physiol** 1997 Sep;83(3):966–74

Effects of positive airway pressure on upper airway dilator muscle activity and ventilatory timing. Deegan PC, et al. **J Appl Physiol** 1996 Jul;81(1):470–9

Interaction of chemical and state effects on ventilation during sleep onset. Dunai J, et al. **J Appl Physiol** 1996 Nov; 81(5):2235–43

Forced expirations and maximum expiratory flow–volume curves during sustained microgravity on SLS–1. Elliott AR, et al. **J Appl Physiol** 1996 Jul;81(1):33–43

Effects of N2O narcosis on breathing and effort sensations during exercise and inspiratory resistive loading. Fothergill DM, et al. **J Appl Physiol** 1996 Oct;81(4):1562–71

Interactions among metabolic rate, hypoxia, and control of breathing. Gautier H. **J Appl Physiol** 1996 Aug;81(2):521–7 (67 ref.)

Ventilatory and metabolic responses to ambient hypoxia or hypercapnia in rats exposed to CO hypoxia. Gautier H, et al. **J Appl Physiol** 1997 Jul;83(1):253–61

Contractions of specific abdominal muscles in postural tasks are affected by respiratory maneuvers. Hodges PW, et al. **J Appl Physiol** 1997 Sep;83(3):753–60

Regional ventilation in statically and dynamically hyperinflated dogs. Hubmayr RD, et al. **J Appl Physiol** 1996 Oct;81(4):1815–21

Interaction of cross–sectional area, driving pressure, and airflow of passive velopharynx. Isono S, et al. **J Appl Physiol** 1997 Sep;83(3):851–9

Endogenous nitric oxide contributes to strain–related differences in airway responsiveness in rats. Jia Y, et al. **J Appl Physiol** 1996 Feb;80(2):404–10

Progressive changes in airway resistance during sleep. Kay A, et al. **J Appl Physiol** 1996 Jul;81(1):282–92

Respiratory effort sensation during exercise with induced expiratory–flow limitation in healthy humans. Kayser B, et al. **J Appl Physiol** 1997 Sep;83(3):936–47

Effects of upper airway stimulation on swallowing, gasping, and autoresuscitation in hypoxic mice. Khurana A, et al. **J Appl Physiol** 1996 Feb;80(2):472–7

Relationship between resistive loads and P1 peak of respiratory–related evoked potential. Knafelc M, et al. **J Appl Physiol** 1997 Sep;83(3):918–26

Abdominal muscle fatigue after maximal ventilation in humans. Kyroussis D, et al. **J Appl Physiol** 1996 Oct; 81(4):1477–83

Decreased energy metabolism in brain stem during central respiratory depression in response to hypoxia. LaManna JC, et al. **J Appl Physiol** 1996 Oct;81(4):1772–7

Statistical properties of breath–to–breath variations in ventilation at constant PETCO2 and PETO2 in humans. Liang PJ, et al. **J Appl Physiol** 1996 Nov;81(5):2274–86

Sequential arousal and airway–defensive behavior of infants in asphyxial sleep environments. Lijowska AS, et al. **J Appl Physiol** 1997 Jul;83(1):219–28

Effects of sustained and repetitive isocapnic hypoxia on ventilation and genioglossal and diaphragmatic EMGs. McEvoy RD, et al. **J Appl Physiol** 1996 Aug;81(2):866–75

Response of ventilator–dependent patients to different levels of proportional assist. Marantz S, et al. **J Appl Physiol** 1996 Feb;80(2):397–403

Effects of lung motion and tracer kinetics corrections on PET imaging of pulmonary function. Mijailovich SM, et al. **J Appl Physiol** 1997 Apr;82(4):1154–62

Breathing during wakefulness and NREM sleep in humans without an upper airway. Morrell MJ, et al. **J Appl Physiol** 1996 Jul;81(1):274–81

Development of ventilatory responsiveness to progressive hypoxia and hypercapnia in low–birth–weight lambs. Moss TJ, et al. **J Appl Physiol** 1996 Oct;81(4):1555–61

Lung mechanics during induced bronchoconstriction. Pellegrino R, et al. **J Appl Physiol** 1996 Aug;81(2):964–75

Coordination of breathing and swallowing: effects of bolus consistency and presentation in normal adults. Preiksaitis HG, et al. **J Appl Physiol** 1996 Oct;81(4):1707–14

Control of the respiratory cycle in conscious humans. Rafferty GF, et al. **J Appl Physiol** 1996 Oct;81(4):1744–53

Cardiorespiratory response patterns to afferent stimulation of muscle nerves in the rabbit. Raimondi G, et al. **J Appl Physiol** 1996 Jul;81(1):266–73

Multiple–breath washout and washin experiments in steers. Rollin F, et al. **J Appl Physiol** 1996 Aug;81(2):957–63

Medullary regions for neurogenesis of gasping: noeud vital or noeuds vitals? St John WM. **J Appl Physiol** 1996 Nov; 81(5):1865–77 (92 ref.)

Nonlinear systems identification: autocorrelation vs. autoskewness. Sammon M, et al. **J Appl Physiol** 1997 Sep; 83(3):975–93

Temporal relationships of ventilatory failure, pump failure, and diaphragm fatigue. Sassoon CS, et al. **J Appl Physiol** 1996 Jul;81(1):238–45

Mechanisms for the mechanical response of airway smooth muscle to length oscillation. Shen X, et al. **J Appl Physiol** 1997 Sep;83(3):731–8

Pharmacological modulation of the mechanical response of airway smooth muscle to length oscillation. Shen X, et al. **J Appl Physiol** 1997 Sep;83(3):739–45

Peak ventilatory responses during cycling and swimming in pregnant and nonpregnant women. Spinnewijn WE, et al. **J Appl Physiol** 1996 Aug;81(2):738–42

Breathing and brain blood flow during sleep in patients with chronic mountain sickness. Sun S, et al. **J Appl Physiol** 1996 Aug;81(2):611–8

N–acetylcysteine administration alters the response to inspiratory loading in oxygen–supplemented rats. Supinski GS, et al. **J Appl Physiol** 1997 Apr;82(4):1119–25

Modified control of breathing in genetically obese (ob/ob) mice. Tankersley C, et al. **J Appl Physiol** 1996 Aug; 81(2):716–23

Ventilatory response to exercise in diabetic subjects with autonomic neuropathy. Tantucci C, et al. **J Appl Physiol** 1996 Nov;81(5):1978–86

Contributions of pulmonary perfusion and ventilation to heterogeneity in V(A)/Q measured by PET. Treppo S, et al. **J Appl Physiol** 1997 Apr;82(4):1163–76

Ventilation inhomogeneity in oleic acid–induced pulmonary edema. Tsang JY, et al. **J Appl Physiol** 1997 Apr; 82(4):1040–5

Lateral pharyngeal fat pad pressure during breathing in anesthetized pigs. Winter WC, et al. **J Appl Physiol** 1997 Sep;83(3):688–94

Respiratory–related neurons of the fastigial nucleus in response to chemical and mechanical challenges. Xu F, et al. **J Appl Physiol** 1997 Apr;82(4):1177–84

Association of chest wall motion and tidal volume responses during CO2 rebreathing. Yan S, et al. **J Appl Physiol** 1996 Oct;81(4):1528–34

Automated system for detailed measurement of respiratory mechanics. Green MD, et al. **J Clin Monit** 1996 Jan; 12(1):61–7

Neonatal endotracheal tube leakage and compliance and resistance measurements. Kuo CY. **J Formos Med Assoc** 1996 Mar;95(3):218–24

High–frequency oscillations in membrane potentials of medullary inspiratory and expiratory neurons (including laryngeal motoneurons). Huang WX, et al. **J Neurophysiol** 1996 Sep;76(3):1405–12

cAMP–dependent protein kinase modulates expiratory neurons in vivo. Lalley PM, et al. **J Neurophysiol** 1997 Mar;77(3):1119–31

Modeling neural mechanisms for genesis of respiratory rhythm and pattern. I. Models of respiratory neurons. Rybak IA, et al. **J Neurophysiol** 1997 Apr;77(4):1994–2006

Modeling neural mechanisms for genesis of respiratory rhythm and pattern. II. Network models of the central respiratory pattern generator. Rybak IA, et al. **J Neurophysiol** 1997 Apr;77(4):2007–26

Modeling neural mechanisms for genesis of respiratory rhythm and pattern. III. Comparison of model performances during afferent nerve stimulation. Rybak IA, et al. **J Neurophysiol** 1997 Apr;77(4):2027–39

Respiratory rhythm generation and synaptic inhibition of expiratory neurons in pre–Bötzinger complex: differential roles of glycinergic and GABAergic neural transmission. Shao XM, et al. **J Neurophysiol** 1997 Apr;77(4):1853–60

Role of ventral respiratory group bulbospinal expiratory neurons in vestibular–respiratory reflexes. Shiba K, et al. **J Neurophysiol** 1996 Oct;76(4):2271–9

Biophysics of airflow within the airway: a review. O'Grady K, et al. **J Otolaryngol** 1997 Apr;26(2):123–8 (28 ref.)

Non–NMDA receptors modulate respiratory drive in fetal sheep. Bissonnette JM, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):415–23

Ventilatory chemoreflexes at rest following a brief period of heavy exercise in man. Clement ID, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):875–84

Membrane potentials of respiratory neurones during dizocilpine–induced apneusis in adult cats. Haji A, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):851–61

Lack of importance of respiratory muscle load in ventilatory regulation during heavy exercise in humans. Krishnan B, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):537–50

Attenuation of the hypoxic ventilatory response in adult rats following one month of perinatal hyperoxia. Ling L, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):561–71

Inspiratory drive and phase duration during carotid chemoreceptor stimulation in the cat: medullary neurone correlations. Morris KF, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):241–59

Effect of CO2 on the metabolic and ventilatory responses to ambient temperature in conscious adult and newborn rats. Saiki C, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):261–9

The roles of adenosine in regulating the respiratory and cardiovascular systems in chronically hypoxic, adult rats. Thomas T, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):439–47

Effects of vagal stimulation on slowly adapting pulmonary stretch receptors and lung mechanics in anesthetized rabbits. Matsumoto S. **Lung** 1996;174(5):333–44

Effect of mechanical ventilation on regional variation of pleural liquid thickness in rabbits. Wang PM, et al. **Lung** 1997;175(3):165–73

Respiratory muscle perfusion and energetics during exercise. Dempsey JA, et al. **Med Sci Sports Exerc** 1996 Sep; 28(9):1123–8 (30 ref.)

Contractility of the ventilatory pump muscles. Farkas GA, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1106–14 (101 ref.)

Breathlessness and control of breathing in patients with COPD. Ferrari K, et al. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):18–23

Effects of mechanical ventilation on control of breathing. Georgopoulos DB, et al. **Monaldi Arch Chest Dis** 1997 Jun; 52(3):253–62 (45 ref.)

Localization of the spinal respiratory rhythm generator by an in vitro electrophysiological approach. Dubayle D, et al. **Neuroreport** 1996 Apr 26;7(6):1175–80

Resistive loaded breathing changes the motor drive to arm and leg muscles in man. Fontanari P, et al. **Neurosci Lett** 1996 May 31;210(2):130–4

The morphology and connections of neurons in the gasping centre of adult rats. Fung ML, et al. **Neuroscience** 1997 Feb;76(4):1237–44

Ovine fetal laryngeal chemoreflex thresholds and respiratory effects. Chan K, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):91–6

A new microtransducer catheter for measuring esophageal pressure in infants. Gappa M, et al. **Pediatr Pulmonol** 1996 Aug;22(2):117–24

Interpretation of respiratory input impedance in healthy infants. Jackson AC, et al. **Pediatr Pulmonol** 1996 Dec; 22(6):364–75

Resistive–load detection in healthy school–aged children. McQuaid EL, et al. **Pediatr Pulmonol** 1996 Dec; 22(6):357–63

Assessment of pulmonary function in the early phase of ARDS in pediatric patients. Newth CJ, et al. **Pediatr Pulmonol** 1997 Mar;23(3):169–75

Flow limitation in anesthetized rhesus monkeys: a comparison of rapid thoracoabdominal compression and forced deflation techniques. Hammer J, et al. **Pediatr Res** 1996 Mar;39(3):539–46

Adenosine modulates inspiratory neurons and the respiratory pattern in the brainstem of neonatal rats. Herlenius E, et al. **Pediatr Res** 1997 Jul;42(1):46–53

Serotonergic and noradrenergic effects on respiratory neural discharge in the medullary slice preparation of neonatal rats. Al–Zubaidy ZA, et al. **Pflugers Arch** 1996 Apr; 431(6):942–9

Local mechanics of the lung tissue determined by functional EIT. Hahn G, et al. **Physiol Meas** 1996 Nov;17 Suppl 4A:A159–66

Forced expiration and inspiration under hyperbaric conditions. Hrnčíř E. **Physiol Res** 1996;45(6):471–3

Cardiorespiratory parameters and respiratory reflexes in rabbits during hyperthermia. Javorka K, et al. **Physiol Res** 1996;45(6):439–47

Changes in thoracic dimensions induced by breathing movements in fetal sheep. Harding R, et al. **Reprod Fertil Dev** 1996;8(1):117–24

Electromyographic activity of the hyoepiglotticus muscle in dogs. Amis TC, et al. **Respir Physiol** 1996 Jul; 104(2–3):159–67

Control of epiglottic position in dogs: role of negative upper airway pressure. Amis TC, et al. **Respir Physiol** 1996 Sep; 105(3):187–94

Respiratory mechanics and morphometry after progressive intraperitoneal effusion. Augusto VM, et al.

Respir Physiol 1995 Dec;102(2-3):217-24

Perception of inflation of a single lung lobe in humans. Banzett RB, et al. **Respir Physiol** 1997 Feb;107(2):125-36

Contribution of opening and closing of lung units to lung hysteresis. Cheng W, et al. **Respir Physiol** 1995 Dec; 102(2-3):205-15

Insertional action of the abdominal muscles in rabbits and dogs. D'Angelo E, et al. **Respir Physiol** 1996 Jul; 104(2-3):147-57

Effects of PEEP on respiratory mechanics are tidal volume and frequency dependent. Fahy BG, et al. **Respir Physiol** 1997 Jul;109(1):53-64

Pressure oscillations after flow interruption in relation to lung mechanics. Frey U, et al. **Respir Physiol** 1995 Dec; 102(2-3):225-37

Influence of lung volume on respiratory responses to spontaneous bladder contractions. Gdovin MJ, et al. **Respir Physiol** 1997 Feb;107(2):137-48

Ventilatory and gas exchange response during walking in severe peripheral vascular disease. Haouzi P, et al. **Respir Physiol** 1997 Feb;107(2):181-90

Lesions of regions for in vitro ventilatory genesis eliminate gasping but not eupnea. Huang Q, et al. **Respir Physiol** 1997 Feb;107(2):111-23

Effect of temperature on pressure-volume hysteresis of excised lungs. Jones TA, et al. **Respir Physiol** 1996 Oct; 106(1):47-55

Effects of changes in ventilation on respiratory discomfort during isocapnic exercise. Oku Y, et al. **Respir Physiol** 1996 Jul;104(2-3):107-14

Relationship between respiratory mechanics and postinspiratory muscle activity during muscarinic challenge in rabbits. Romero PV, et al. **Respir Physiol** 1996 Dec; 106(3):285-92

Respiratory mechanics in rabbits ventilated with different tidal volumes. Svantesson C, et al. **Respir Physiol** 1996 Dec; 106(3):307-16

Breath timing, volume and drive to breathe in conscious rats: comparative aspects. Walker JK, et al. **Respir Physiol** 1997 Mar;107(3):241-50

Laryngeal and diaphragmatic activities with a single expiratory load in newborn lambs. Watts TL, et al. **Respir Physiol** 1997 Jan;107(1):27-35

Source of respiratory drive during periodic breathing in lambs. Wilkinson MH, et al. **Respir Physiol** 1996 Jul; 104(2-3):115-26

Divergence of ventilatory responses to isometric contraction in anesthetized cats. Wilson LB, et al. **Respir Physiol** 1996 Jul;104(2-3):137-46

Changes in ventilatory mechanics and diaphragmatic function after lung volume reduction surgery in patients with COPD. Tschernko EM, et al. **Thorax** 1997 Jun;52(6):545-50

The importance of static lung inflation during organ storage: the impact of varying ischemic intervals in a double lung rat transplantation model. Hausen B, et al. **Transplantation** 1996 Dec 27;62(12):1720-5

Patterns of perinasal fluid flow and contractions of the diaphragm in the human fetus. Badalian SS, et al. **Ultrasound Obstet Gynecol** 1996 Aug;8(2):109-13

Functional anatomy observations of the pharyngeal orifice of the equine guttural pouch (auditory tube diverticulum). Baptiste K. **Vet J** 1997 May;153(3):311-9

[Variation in inspiratory gas flow in pressure support ventilation. The effect on respiratory mechanics and respiratory work] Sydow M, et al. **Anaesthesist** 1996 Nov; 45(11):1051-8 (Eng. Abstr.) **(Ger)**

[Adaptive lung ventilation (AVL). Evaluation of new closed loop regulated respiration algorithm for operation in the hyperextended lateral position] Weiler N, et al. **Anaesthesist** 1996 Oct;45(10):950-6 (Eng. Abstr.) **(Ger)**

[Work of breathing in noninvasive proportional assist ventilation in patients with respiratory insufficiency] Gutheil T, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:85-9 (Eng. Abstr.) **(Ger)**

[Dynamics of pressure and flow curves of various expiratory pressure valves] Raschke F, et al. **Med Klin** 1997 Apr 28; 92 Suppl 1:82-4 (Eng. Abstr.) **(Ger)**

[Proportional assisted ventilation--advantages and limits of a new ventilation concept] Stahl CA, et al. **Pneumologie** 1997 Mar;51(3):264-9 (7 ref.) **(Ger)**

[Respiratory function tests in the newborn and the infant] Calbi M, et al. **Pediatr Med Chir** 1996 Sep-Oct;18(5):463-7 (Eng. Abstr.) **(Ita)**

[Effect of human body position on respiratory impedance] D'iachenko AI. **Fiziol Cheloveka** 1996 Jan-Feb; 22(1):104-10 **(Rus)**

[Features of respiratory rhythm and capnogram in the first hours of life in full-term infants] Kosov MN. **Fiziol Cheloveka** 1996 Sep-Oct;22(5):114-7 **(Rus)**

[The morphofunctional basis for the effect of respiratory movements on urine production and the urinary excretory functions of the kidneys in the turtle] Valishin ES. **Morfologiia** 1997;111(2):93-8 (Eng. Abstr.) **(Rus)**

[Respiratory changes during laparoscopic cholecystectomy. A comparative study of three techniques] Gándara MV, et al. **Rev Esp Anestesiol Reanim** 1997 May;44(5):177-81 (Eng. Abstr.) **(Spa)**

[Hemodynamic and respiratory changes during lung transplant] Planas A, et al. **Rev Esp Anestesiol Reanim** 1997 Jun-Jul;44(6):218-22 (Eng. Abstr.) **(Spa)**

RESPIRATORY MUSCLE TRAINING see **BREATHING EXERCISES**

RESPIRATORY MUSCLES

Efficacy of combined inspiratory intercostal and expiratory muscle pacing to maintain artificial ventilation. DiMarco AF, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):122-6

Respiratory muscle fatigue during simulated air combat maneuvering (SACM). Bain B, et al. **Aviat Space Environ Med** 1997 Feb;68(2):118-25

Respiratory muscle length and strength in patients with chronic abdominal distension. Flintrop M, et al. **Respiration** 1997;64(1):66-72

ANATOMY & HISTOLOGY

Airway smooth muscle orientation in intraparenchymal airways. Lei M, et al. **J Appl Physiol** 1997 Jan;82(1):70-7

BLOOD SUPPLY

Modulation of myogenic responsiveness by CO2 in rat diaphragmatic arterioles: role of the endothelium. Nagi MM, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1419-25

Regulation of ventilatory muscle blood flow. Hussain SN. **J Appl Physiol** 1996 Oct;81(4):1455-68 (133 ref.)

DRUG EFFECTS

Effects of inspiratory muscle unloading on the response of respiratory motor output to CO2. Georgopoulos D, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2000-9

Characterization of the anatomical structures involved in the contractile response of the rat lung periphery. Salerno FG, et al. **Br J Pharmacol** 1996 Jun;118(3):734-40

Theophylline improves measurements of respiratory muscle efficiency. Sherman MS, et al. **Chest** 1996 Dec; 110(6):1437-42

Halothane counteracts acetylcholine-induced increase in Ca2+ sensitivity of the contractile apparatus in airway smooth muscle. Kai T, et al. **Eur J Pharmacol** 1996 Nov 21;315(3):313-8

Effects of nandrolone decanoate on respiratory and peripheral muscles in male and female rats. Bisschop A, et al. **J Appl Physiol** 1997 Apr;82(4):1112-8

"Effects of fenoterol on inspiratory effort sensation and fatigue during inspiratory threshold loading" [editorial] Grassino AE. **J Appl Physiol** 1996 Mar;80(3):725-6

Effects of fenoterol on inspiratory effort sensation and fatigue during inspiratory threshold loading. Suzuki J, et al. **J Appl Physiol** 1996 Mar;80(3):727-33

Effects of carnitine on preconditioned latissimus dorsi muscle at different burst frequencies. Katircioglu SF, et al. **J Card Surg** 1997 Mar-Apr;12(2):120-5

Does once-daily dosing of aminoglycosides affect neuromuscular function? Wong J, et al. **J Clin Pharm Ther** 1996 Dec;21(6):407-11

Respiratory muscle pharmacology. Decramer M. **Monaldi Arch Chest Dis** 1996 Dec;51(6):499-503 (47 ref.)

Pharmacotherapy of respiratory muscles in chronic obstructive pulmonary disease. van der Heijden HF, et al. **Respir Med** 1996 Oct;90(9):513-22 (101 ref.)

Na+/K+ ATPase mediates rhythmic spontaneous relaxations in canine airway smooth muscle. Janssen LJ, et al. **Respir Physiol** 1997 May;108(2):187-94

Relationship between respiratory mechanics and postinspiratory muscle activity during muscarinic challenge in rabbits. Romero PV, et al. **Respir Physiol** 1996 Dec; 106(3):285-92

The inhibitory effect of fluoride on carbachol-induced bovine bronchial contraction. Zhao W, et al. **Respir Physiol** 1997 May;108(2):171-9

Effects of fenoterol on ventilatory response to hypercapnia and hypoxia in patients with chronic obstructive pulmonary disease. Suzuki S, et al. **Thorax** 1997 Feb;52(2):125-9

[Iatrogenic disorders in the active respiratory systems (respiratory center and its performance] Similowski T, et al. **Rev Mal Respir** 1996;13(4):361-79 (221 ref.) (Eng. Abstr.) **(Fre)**

[Maximal functional capacity of human respiratory muscles during additional respiratory resistance in the context of altered chemoreceptor stimulus] Isaev GG, et al. **Fiziol Cheloveka** 1997 Mar-Apr;23(2):107-14 **(Rus)**

ENZYMOLOGY

Expression of nitric oxide synthase isoforms in normal ventilatory and limb muscles. Hussain SN, et al. **J Appl Physiol** 1997 Aug;83(2):348-53

INNERVATION

Computer aided adjustment of the phrenic pacemaker: automatic functions, documentation, and quality control. Sauermann S, et al. **Artif Organs** 1997 Mar;21(3):216-8

Immediate response to inspiratory resistive loading in anesthetized patients with kyphoscoliosis: spirometric and neural effects. Baydur A, et al. **Lung** 1996;174(2):99-118

Pharmacological properties of peripherally induced postsynaptic potentials in bulbar respiratory neurons of decerebrate cats. Haji A, et al. **Neurosci Lett** 1996 Jun 14; 211(1):17-20

Brainstem respiratory networks and cough. Shannon R, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):343-7 (20 ref.)

METABOLISM

Histochemical properties of upper airway muscles: comparison of dilator and nondilator muscles. Bracher A, et al. **Eur Respir J** 1997 May;10(5):990-3

Effects of aging and obesity on respiratory muscle phenotype in Zucker rats. Powers SK, et al. **J Appl Physiol** 1996 Sep; 81(3):1347-54

Respiratory muscle perfusion and energetics during exercise. Dempsey JA, et al. **Med Sci Sports Exerc** 1996 Sep; 28(9):1123-8 (30 ref.)

PATHOLOGY

Size and strength of the respiratory and quadriceps muscles in patients with chronic asthma. de Bruin PF, et al. **Eur Respir J** 1997 Jan;10(1):59-64

Mesothelial cell proliferation and biopersistence of wollastonite and crocidolite asbestos fibers. Macdonald JL, et al. **Fundam Appl Toxicol** 1997 Aug;38(2):173-83

Quantitative magnetic resonance imaging of upper airways musculature in an animal model of sleep apnea. Schotland HM, et al. **J Appl Physiol** 1996 Sep;81(3):1339-46

PHYSIOLOGY

Respiratory motor responses to cranial nerve afferent stimulation in rats. Hayashi F, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1054-62

Effects of inspiratory muscle unloading on the response of respiratory motor output to CO2. Georgopoulos D, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2000-9

Maximal inspiratory pressures and dimensions of the diaphragm. McCool FD, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1329-34

Differential inspiratory muscle pressure contributions to breathing during dynamic hyperinflation. Yan S, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):497-503

Vestibular effects on upper airway musculature. Siniaia MS, et al. **Brain Res** 1996 Oct 14;736(1-2):160-4

The efficiency of respiratory muscle strengthening training programs in pilots. Ji S, et al. **Chin Med J (Engl)** 1996 Dec;109(12):930-2

Effect of sustained inspiratory loading on respiratory sensation and CO2 responsiveness in normal humans. Clague JE, et al. **Clin Sci (Colch)** 1996 Oct;91(4):513-8

Time course of exercise capacity, skeletal and respiratory muscle performance after heart-lung transplantation. Ambrosino N, et al. **Eur Respir J** 1996 Jul;9(7):1508-14

Hyperinflation and respiratory muscle interaction. Decramer M. **Eur Respir J** 1997 Apr;10(4):934-41 (53 ref.)

Effect of hyperinflation on the diaphragm. De Troyer A. **Eur Respir J** 1997 Mar;10(3):708-13 (56 ref.)

Respiratory muscle function and control of breathing in patients with acromegaly. Iandelli I, et al. **Eur Respir J** 1997 May;10(5):977-82

Respiratory muscles and weaning failure. Vassilakopoulos T, et al. **Eur Respir J** 1996 Nov;9(11):2383-400 (114 ref.)

Twitch responses dependent on external calcium ions in the mouse diaphragm in a potassium-free bathing solution. Nishimura M, et al. **Gen Pharmacol** 1996 Apr;27(3):459-61

Respiratory muscle fatigue after an ultra-marathon measured as inspiratory task failure. Ker JA, et al. **Int J Sports Med** 1996 Oct;17(7):493-6

Inspiratory muscle fatigue following running to volitional fatigue: the influence of baseline strength. McConnell AK, et al. **Int J Sports Med** 1997 Apr;18(3):169-73

Fatigue of the respiratory muscles. Roussos C, et al. **Intensive Care Med** 1996 Feb;22(2):134-55 (87 ref.)

Differential respiratory activity of four abdominal muscles in humans. Abe T, et al. **J Appl Physiol** 1996 Apr; 80(4):1379-89

Breathing during exercise in dogs--passive or active? Ainsworth DM, et al. **J Appl Physiol** 1996 Aug; 81(2):586-95

Effect of lung inflation and airway muscle tone on airway diameter in vivo. Brown RH, et al. **J Appl Physiol** 1996 May;80(5):1581-8

Effect of lung inflation in vivo on airways with smooth muscle tone or edema. Brown RH, et al. **J Appl Physiol** 1997 Feb;82(2):491-9

Effects of positive airway pressure on upper airway dilator muscle activity and ventilatory timing. Deegan PC, et al. **J Appl Physiol** 1996 Jul;81(1):470-9

Functional role and structure of the scalene: an accessory inspiratory muscle in hamster. Fournier M, et al. **J Appl Physiol** 1996 Dec;81(6):2436-44

Expiratory muscle endurance performance after exhaustive submaximal exercise. Fuller D, et al. **J Appl Physiol** 1996 May;80(5):1495-502

Respiratory muscle work compromises leg blood flow during maximal exercise. Harms CA, et al. **J Appl Physiol** 1997 May;82(5):1573-83

Mechanical advantage of sternomastoid and scalene muscles in dogs. Legrand A, et al. **J Appl Physiol** 1997 May; 82(5):1517-22

Detection of two clusters of mechanical properties of smooth muscle along the airway tree. Ma X, et al. **J Appl Physiol** 1996 Mar;80(3):857-61

Long-term facilitation of upper airway muscle activities in vagotomized and vagally intact cats. Mateika JH, et al. **J Appl Physiol** 1997 Feb;82(2):419-25

Conservation of bronchiolar wall area during constriction and dilation of human airways. Mitchell RW, et al.

J Appl Physiol 1997 Mar;82(3):954–8

Effect of lung volume on the respiratory action of the canine sternomastoid. Muza SR, et al. **J Appl Physiol** 1996 Mar; 80(3):852–6

Control of nasal dilator muscle activities during exercise: role of nasopharyngeal afferents. Sullivan J, et al. **J Appl Physiol** 1996 May;80(5):1520–7

Glutathione metabolic responses to loaded breathing: variation among respiratory muscles. Supinski G, et al. **J Appl Physiol** 1996 Sep;81(3):1362–9

Role of syringeal muscles in controlling the phonology of bird song. Goller F, et al. **J Neurophysiol** 1996 Jul; 76(1):287–300

Changes in outflow to respiratory pump muscles produced by natural vestibular stimulation. Rossiter CD, et al. **J Neurophysiol** 1996 Nov;76(5):3274–84

On the intercostal muscle compensation for diaphragmatic paralysis in the dog. Brichant JF, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):245–53

Rostrocaudal gradient of mechanical advantage in the parasternal intercostal muscles of the dog. De Troyer A, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):239–46

Central effects of 5-HT on activity of respiratory and hypoglossally innervated muscles in newborn kittens. Khater-Boidin J, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):255–65

Lack of importance of respiratory muscle load in ventilatory regulation during heavy exercise in humans. Krishnan B, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):537–50

Breathing when chest wall muscle are tonically contracted for isometric, non-respiratory tasks. Barnas GM, et al. **J Sports Sci** 1996 Oct;14(5):425–32

Contractility of the ventilatory pump muscles. Farkas GA, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1106–14 (101 ref.)

Respiratory muscle fatigue during exercise: implications for performance. Johnson BD, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1129–37 (48 ref.)

Adaptive strategies of respiratory muscles in response to endurance exercise. Powers SK, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1115–22 (54 ref.)

Respiratory muscles: clinical relevance. Gibson GJ. **Monaldi Arch Chest Dis** 1996 Dec;51(6):504–6 (12 ref.)

Respiratory muscle testing. Moxham J. **Monaldi Arch Chest Dis** 1996 Dec;51(6):483–8 (19 ref.)

Mechanisms of oronasal airflow partitioning in dogs. Amis TC, et al. **Respir Physiol** 1996 Jul;104(2–3):169–77

Respiratory training, hypoxic ventilatory response and acute mountain sickness. Markov G, et al. **Respir Physiol** 1996 Sep;105(3):179–86

Influence of external loading and assisted ventilation on chest wall mechanical properties. Peslin R, et al. **Respir Physiol** 1997 May;108(2):153–64

Respiratory muscle coordination in acute spinal dogs. Reinoso MA, et al. **Respir Physiol** 1996 Apr-May; 104(1):29–37

Transitional effects of inspired CO2 on lung mechanics in anesthetized rabbits. Romero PV, et al. **Respir Physiol** 1996 Oct;106(1):57–63

A method for estimating respiratory muscle efficiency using an automated metabolic cart. Sherman M, et al. **Respir Physiol** 1996 Nov;106(2):171–7

Effects of respiratory muscle training and electrical stimulation of abdominal muscles on respiratory capabilities in tetraplegic patients. Zupan A, et al. **Spinal Cord** 1997 Aug;35(8):540–5

Exercise training-induced changes in respiratory muscles. Powers SK, et al. **Sports Med** 1997 Aug;24(2):120–31 (20 ref.)

[Evaluation of the inspiratory muscle strength using the nasal pressure of the sniff] Fitting JW, et al. **Rev Mal Respir** 1996 Oct;13(5):479–84 (Eng. Abstr.) **(Fre)**

[Augmented spontaneous breathing] Hachenberg T. **Anaesthesist** 1996 Sep;45(9):839–55 (143 ref.) (Eng. Abstr.) **(Ger)**

[Reproducibility of inspiratory mouth occlusion pressure with a mobile computer-assisted measuring system] Neumeister W, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:18–21 (Eng. Abstr.) **(Ger)**

[Respiratory muscle functional test] Saito H, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:62–4 (19 ref.) **(Jpn)**

[Function of the respiratory muscles] Sliwiński P. **Pneumonol Alergol Pol** 1996;64(9–10):697–709 (61 ref.) **(Pol)**

[Effect of respiratory muscle fatigue on their function during exercise] Sliwiński P, et al. **Pneumonol Alergol Pol** 1996; 64(9–10):590–603 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Ventilatory function in cervical and high thoracic spinal cord injury. Relationship to level of injury and tone. Roth EJ, et al. **Am J Phys Med Rehabil** 1997 Jul-Aug;76(4):262–7

Relationship between chronic hypercapnia and inspiratory-muscle weakness in myotonic dystrophy. Bégin P, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):133–9

Changes in breathing and ventilatory muscle recruitment patterns induced by lung volume reduction surgery. Benditt JO, et al. **Am J Respir Crit Care Med** 1997 Jan; 155(1):279–84

Lung-volume reduction improves dyspnea, dynamic hyperinflation, and respiratory muscle function. Martinez FJ, et al. **Am J Respir Crit Care Med** 1997 Jun; 155(6):1984–90

Inspiratory pressure support reduces slowing of inspiratory muscle relaxation rate during exhaustive treadmill walking in severe COPD. Polkey MI, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1146–50

Respiratory muscle dysfunction associated with human immunodeficiency virus infection. Schulz L, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1080–4

Fatal GVHD demonstrating an involvement of respiratory muscle following donor leukocyte transfusion (DLT). Oshima Y, et al. **Bone Marrow Transplant** 1997 Apr; 19(7):737–40

Central and peripheral respiratory electrophysiological studies in myotonic dystrophy. Zifko UA, et al. **Brain** 1996 Dec;119 (Pt 6):1911–22

Maximal expiratory pressures in spinal cord injury using two mouthpieces. Tully K, et al. **Chest** 1997 Jul;112(1):113–6

Quantitative research for improving respiratory muscle contraction by breathing exercise. Yan Q, et al. **Chin Med J (Engl)** 1996 Oct;109(10):771–5

Ventilatory muscles and mechanical ventilatory support [editorial; comment] MacIntyre NR. **Crit Care Med** 1997 Jul;25(7):1106–7. Comment on: Crit Care Med 1997 Jul;25(7):1187–90.

Influences of dysfunctional respiratory mechanics on orofacial pain. Hruska RJ Jr. **Dent Clin North Am** 1997 Apr;41(2):211–27 (71 ref.)

Respiratory muscle strength after lung resection with special reference to age and procedures of thoracotomy. Nomori H, et al. **Eur J Cardiothorac Surg** 1996;10(5):352–8

Lung volumes and respiratory muscle strength in adult patients with childhood- or adult-onset growth hormone deficiency: effect of 12 months' growth hormone replacement therapy. Merola B, et al. **Eur J Endocrinol** 1996 Nov;135(5):553–8

Muscle weakness is related to utilization of health care resources in COPD patients. Decramer M, et al. **Eur Respir J** 1997 Feb;10(2):417–23

Respiratory mechanics in patients with tense cirrhotic ascites. Duranti R, et al. **Eur Respir J** 1997 Jul;10(7):1622–30

Inspiratory muscle training in chronic airflow limitation: effect on exercise performance. Lisboa C, et al. **Eur Respir J** 1997 Mar;10(3):537–42

"Intrinsic" PEEP (PEEPi): role of expiratory muscles [editorial; comment] Ninane V. **Eur Respir J** 1997 Mar; 10(3):516–8. Comment on: Eur Respir J 1997 Mar;10(3):522–9.

Peripheral and respiratory muscles in chronic heart failure. Stassijns G, et al. **Eur Respir J** 1996 Oct;9(10):2161–7 (55 ref.)

Effect of surgical lung volume reduction on respiratory muscle function in pulmonary emphysema [see comments] Teschler H, et al. **Eur Respir J** 1996 Sep;9(9):1779–84. Comment in: Eur Respir J 1996 Sep;9(9):1771–2.

Sniff nasal inspiratory pressure in patients with chronic obstructive pulmonary disease. Uldry C, et al. **Eur Respir J** 1997 Jun;10(6):1292–6

Relationship between respiratory muscle function and quality of life in sarcoidosis. Wirnsberger RM, et al. **Eur Respir J** 1997 Jul;10(7):1450–5

Accurate measurement of intrinsic positive end-expiratory pressure: how to detect and correct for expiratory muscle activity [see comments] Zakynthinos SG, et al. **Eur Respir J** 1997 Mar;10(3):522–9. Comment in: Eur Respir J 1997 Mar;10(3):516–8.

Inspiratory muscle endurance in patients with chronic heart failure. Walsh JT, et al. **Heart** 1996 Oct;76(4):332–6

Respiratory muscle function in patients with chronic obstructive pulmonary disease. Breslin EH. **Heart Lung** 1996 Jul-Aug;25(4):271–85; quiz 286–7

Dyspnoea, lung function & respiratory muscle pressures in patients with Graves' disease. Guleria R, et al. **Indian J Med Res** 1996 Nov;104:299–303

Effects of muscle relaxation therapy using specially designed plates in patients with pulmonary emphysema. Fujimoto K, et al. **Intern Med** 1996 Oct;35(10):756–63

Hemodialysis treatment may improve inspiratory muscle strength and endurance. Weiner P, et al. **Isr J Med Sci** 1997 Feb;33(2):134–8

Respiratory motor nerve activities during experimental seizures in cats. Terndrup TE, et al. **J Appl Physiol** 1996 Mar;80(3):924–30

The relation of ventilatory failure to pulmonary, respiratory muscle and central nervous system disturbances in calves with an experimentally produced pneumonia. Desmecht DJ, et al. **J Comp Pathol** 1996 Oct;115(3):203–19

Chronic exertional dyspnea and respiratory muscle function in patients with chronic obstructive pulmonary disease. Ferrari K, et al. **Lung** 1997;175(5):311–9

Respiratory muscles and ventilatory failure. Vassilakopoulos T, et al. **Monaldi Arch Chest Dis** 1996 Dec;51(6):489–98 (42 ref.)

Respiratory muscle involvement in severe sarcoid myositis. Pringle CE, et al. **Muscle Nerve** 1997 Mar;20(3):379–81

Tension-time index of inspiratory muscles in children [editorial; comment] Gaultier C. **Pediatr Pulmonol** 1997 May;23(5):327–9 (18 ref.). Comment on: Pediatr Pulmonol 1997 May;23(5):336–43.

Determinants of the tension-time index of inspiratory muscles in children with cystic fibrosis [see comments] Hayot M, et al. **Pediatr Pulmonol** 1997 May;23(5):336–43. Comment in: Pediatr Pulmonol 1997 May;23(5):327–9.

Respiratory muscle strength and endurance in individuals with tetraplegia. Hopman MT, et al. **Spinal Cord** 1997 Feb; 35(2):104–8

Motor evoked potentials of the respiratory muscles in tetraplegic patients [see comments] Lissens MA, et al. **Spinal Cord** 1996 Nov;34(11):673–8. Comment in: Spinal Cord 1997 Jun;35(6):402.

Motor evoked potentials of the respiratory muscles [letter; comment] Silver J. **Spinal Cord** 1997 Jun;35(6):402. Comment on: Spinal Cord 1996 Nov;34(11):673–8.

Physiological effects of flow and pressure triggering during non-invasive mechanical ventilation in patients with chronic obstructive pulmonary disease. Nava S, et al. **Thorax** 1997 Mar;52(3):249–54

[Measurement of respiratory muscle performance in patients with chronic obstructive pulmonary disease] Lin J, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Oct; 18(5):293–6, 318 (Eng. Abstr.) **(Chi)**

[Measurement of maximal inspiratory flow and forced inspiratory capacity and its clinical application] Xiao X, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar; 27(1):79–81 (Eng. Abstr.) **(Chi)**

[Evaluation methods for respiratory muscle function and their application in respiratory rehabilitation] Delhez L. **J Belge Med Phys Rehabil** 1980;3(1):7–32 (30 ref.) **(Fre)**

[Changes in ventilatory mechanics in emphysema] Wanke T. **Wien Med Wochenschr** 1996;146(23):585–7 (14 ref.) (Eng. Abstr.) **(Ger)**

[Different mechanism may underlie respiratory failure of myotonic and Duchenne muscular dystrophies--a pulseoxymetric and spirometric study] Ogata K, et al. **Rinsho Shinkeigaku** 1996 Jul;36(7):850–3 (Eng. Abstr.) **(Jpn)**

[Abdominal respiratory muscle activity in patients with stable chronic obstructive pulmonary disease] Ortega Ruiz F, et al. **Arch Bronconeumol** 1996 Jan;32(1):23–8 (Eng. Abstr.) **(Spa)**

[Clinical effects of inspiratory muscle training in patients with chronic airflow limitation] Lisboa C, et al. **Rev Med Chil** 1995 Sep;123(9):1108–15 (Eng. Abstr.) **(Spa)**

[Patients with chronic airflow limitation: effects of the inspiratory muscle training with threshold load valve, built with appropriate technology, associated to nutritional support] Vargas M, et al. **Rev Med Chil** 1995 Oct; 123(10):1225–34 (Eng. Abstr.) **(Spa)**

SURGERY

Acute and chronic morbidity differences between muscle-sparing and standard lateral thoracotomies. Landreneau RJ, et al. **J Thorac Cardiovasc Surg** 1996 Nov; 112(5):1346–50; discussion 1350–1

RESPIRATORY PARALYSIS

CHEMICALLY INDUCED

Incidence of intermediate syndrome in organophosphorous poisoning. Samuel J, et al. **J Assoc Physicians India** 1995 May;43(5):321–3

[Diaphragm paralysis and facial diplegia with albumin-cell count dissociation in acute ethylene glycol poisoning (letter)] Auzépy P, et al. **Presse Med** 1997 May 31; 26(18):856 **(Fre)**

COMPLICATIONS

Bilateral diaphragmatic paralysis--a rare cause of acute respiratory failure managed with nasal mask bilevel positive airway pressure (BiPAP) ventilation. Lin MC, et al. **Eur Respir J** 1997 Aug;10(8):1922–4

DIAGNOSIS

An unusual cause of orthopnoea. Donohoe P, et al. **Postgrad Med J** 1996 Jul;72(849):439–45

DRUG THERAPY

4-Aminopyridine improves pulmonary function in quadriplegic humans with longstanding spinal cord injury. Segal JL, et al. **Pharmacotherapy** 1997 May-Jun; 17(3):415–23

ETIOLOGY

Diaphragmatic dysfunction after heart or lung transplantation. Dorffner R, et al. **J Heart Lung Transplant** 1997 May;16(5):566–9

Clinical implications of phrenic nerve injury after pediatric cardiac surgery. Tönz M, et al. **J Pediatr Surg** 1996 Sep; 31(9):1265–7

An unusual cause of orthopnoea. Donohoe P, et al. **Postgrad Med J** 1996 Jul;72(849):439–45

Bilateral diaphragmatic paralysis after mediastinal radiotherapy. De Vito EL, et al. **Respiration** 1996; 63(3):187–90

Hemidiaphragmatic paralysis caused by cervical herpes zoster. Soler JJ, et al. **Respiration** 1996;63(6):403–6

[Fever, progressive tetraparesis and respiratory paralysis in a patient with immune deficiency (clinical conference)] Kovanen J. **Duodecim** 1995;111(16):1566–73 **(Fin)**

[Diaphragm paralysis following pediatric heart surgery. Review of 25 treated cases] Picardo S, et al.

RESPIRATORY PARALYSIS

Minerva Anestesiol 1996 May;62(5):177–81 (Eng. Abstr.) **(Ita)**

[A case of diaphragmatic paralysis following herpes zoster] Fujimoto S, et al. **Rinsho Shinkeigaku** 1996 Feb;36(2):345–7 (Eng. Abstr.) **(Jpn)**

[Diaphragmatic paralysis in the postoperative period after heart surgery in children] Vázquez López P, et al. **An Esp Pediatr** 1996 Dec;45(6):591–6 (Eng. Abstr.) **(Spa)**

[Diaphragmatic paralysis as the first manifestation of infectious mononucleosis (letter)] Tornero C, et al. **An Med Interna** 1996 Dec;13(12):617 **(Spa)**

[Diaphragm paralysis as a complication of internal jugular vein puncture] Haro M, et al. **Arch Bronconeumol** 1996 Feb;32(2):105–7 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

[Primary calcified mediastinal hydatid cyst producing compression] Benzarti M, et al. **Rev Mal Respir** 1997 Jan; 14(1):53–4 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Cervical magnetic stimulation of the phrenic nerves in bilateral diaphragm paralysis. Mills GH, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1565–9

[Clinical classification of ALS patients based on the total course of ALS--proposal of respiratory motor paralysis-preceded type and its significance] Hayashi H, et al. **No To Shinkei** 1997 May;49(5):435–41 (Eng. Abstr.) **(Jpn)**

SURGERY

Diaphragmatic dysfunction after heart or lung transplantation. Dorffner R, et al. **J Heart Lung Transplant** 1997 May;16(5):566–9

[Plication of the diaphragm--a method of surgical treatment of diaphragmatic paralysis in neonates and infants after heart surgery] Matějka T, et al. **Rozhl Chir** 1997 May; 76(5):250–3 (Eng. Abstr.) **(Cze)**

THERAPY

Assessment of the motor pathway to the diaphragm using cortical and cervical magnetic stimulation in the decision-making process of phrenic pacing. Similowski T, et al. **Chest** 1996 Dec;110(6):1551–7

Anaesthesia and diaphragmatic pacing in patients with tetraplegia. A review of peri-operative management in patients over a 10-year period. Devine A, et al. **Eur J Anaesthesiol** 1996 Nov;13(6):553–61

Electrical stimulation to restore respiration. Creasey G, et al. **J Rehabil Res Dev** 1996 Apr;33(2):123–32 (40 ref.)

Electrophrenic respiration after intercostal to phrenic nerve anastomosis on a patient with anterior spinal artery syndrome: technical case report. Fodstad H. **Neurosurgery** 1996 Feb;38(2):420

Idiopathic bilateral diaphragmatic paralysis: effectiveness of bilevel intermittent positive airway pressure. Mínguez S, et al. **Respiration** 1996;63(5):312–3

ULTRASONOGRAPHY

Ultrasound evaluation of the paralyzed diaphragm. Gottesman E, et al. **Am J Respir Crit Care Med** 1997 May; 155(5):1570–4

RESPIRATORY PROTECTIVE DEVICES

Nitrous oxide control in the dental operatory: auxiliary exhaust and mask leakage, design, and scavenging flow rate as factors. Crouch KG, et al. **Am Ind Hyg Assoc J** 1996 Mar;57(3):272–8

Effect of leak location on measured respirator fit. Crutchfield CD, et al. **Am Ind Hyg Assoc J** 1997 Jun;58(6):413–7

Effect of altered vision on constant load exercise performance while wearing a respirator. Johnson AT, et al. **Am Ind Hyg Assoc J** 1997 Aug;58(8):578–82

Study of respirator effect on nasal-oral flow partition. Harber P, et al. **Am J Ind Med** 1997 Oct;32(4):408–12

Respiratory protection guidelines. This official statement of the American Thoracic Society was adopted by the ATS Board of Directors, March 1996. Harber P, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1153–65

Pigeon fancier's lung [editorial] Bourke S, et al. **BMJ** 1997 Jul 12;315(7100):70–1

Personal respiratory protection against Mycobacterium tuberculosis. Fennelly KP. **Clin Chest Med** 1997 Mar; 18(1):1–17 (79 ref.)

Peak oxygen consumption and lactate threshold in full mask versus mouth mask conditions during incremental exercise. Dooly CR, et al. **Eur J Appl Physiol** 1996;73(3–4):311–6

Fitness of a gas mask for the face of a worker handling organic solvents. Tanaka S, et al. **Ind Health** 1997 Apr; 35(2):294–7

Breakthrough times for vapors of organic solvents with low boiling points in steady-state and pulsating flows on respirator cartridges. Tanaka S, et al. **Ind Health** 1996; 34(2):125–31

Respirators and reasonable accommodation. Gunderson S. **Occup Health Saf** 1996 Nov;65(11):36–40

Study options on respiratory protection before permitting confined space entry. Matranga B, et al. **Occup Health Saf** 1994 May;63(5):64–7, 72

The management of aircraft passenger survival in fire. Trimble EJ. **Toxicology** 1996 Dec 31;115(1–3):41–61 (25 ref.)

[Safety evaluation of self-contained-self-rescures--carbon dioxide absorption of SCSRs under heavy work load] Takahashi M, et al. **Sangyo Eiseigaku Zasshi** 1996 Jul; 38(4):149–55 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Cognitive performance during long-term respirator wear while at rest. Caretti DM. **Am Ind Hyg Assoc J** 1997 Feb; 58(2):105–9

Effects of sleeping in a chemical protective mask on sleep quality and cognitive performance. Lieberman HR, et al. **Aviat Space Environ Med** 1996 Sep;67(9):841–8

ECONOMICS

Does a cheaper mask save money? The cost of implementing a respiratory personal protective equipment program. Rivera P, et al. **Infect Control Hosp Epidemiol** 1997 Jan; 18(1):24–7

STANDARDS

An evaluation of respirator maintenance requirements. Brosseau LM, et al. **Am Ind Hyg Assoc J** 1997 Mar; 58(3):242–6

Relation between in-mask and ambient concentration [letter; comment] Cherrie JW, et al. **Am Ind Hyg Assoc J** 1996 Apr;57(4):396–7, 399. Comment on: Am Ind Hyg Assoc J 1995 Mar;56(3):280–3.

Quantitative fit testing techniques and regulations for tight-fitting respirators: current methods measuring aerosol or air leakage, and new developments. Han DH, et al. **Am Ind Hyg Assoc J** 1997 Mar;58(3):219–28

Validity of WPF study defended [letter; comment] Reed LD, et al. **Am Ind Hyg Assoc J** 1996 Apr;57(4):395–6. Comment on: Am Ind Hyg Assoc J 1995 Jul;56(7):717–24.

Penetration of airborne microorganisms through a surgical mask and a dust/mist respirator. Willeke K, et al. **Am Ind Hyg Assoc J** 1996 Apr;57(4):348–55

Respirator cartridge service-life: exposure to mixtures. Yoon YH, et al. **Am Ind Hyg Assoc J** 1996 Sep;57(9):809–19

Removal of Mycobacterium species by breathing circuit filters. Aranha-Creado H, et al. **Infect Control Hosp Epidemiol** 1997 Apr;18(4):252–4

The effect of high-efficiency particulate air respirator design on occupational health: a pilot study balancing risks in the real world. Eck EK, et al. **Infect Control Hosp Epidemiol** 1997 Feb;18(2):122–7

Respirators and fit testing [editorial; comment] Fraser V. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):633–5. Comment on: Infect Control Hosp Epidemiol 1996 Oct;17(10):636–40.

The effect of respirator training on the ability of healthcare workers to pass a qualitative fit test [see comments] Hannum D, et al. **Infect Control Hosp Epidemiol** 1996 Oct; 17(10):636–40. Comment in: Infect Control Hosp Epidemiol 1996 Oct;17(10):633–5.

Fit testing under the new 42 CFR Part 84. Newcomb W. **Occup Health Saf** 1997 Jan;66(1):50

NIOSH respirator testing rules give industry some breathing room. Smith RB. **Occup Health Saf** 1994 Oct;63(10):84–7

TRENDS

Workplace performance studies of half-mask respirators. Colton C. **Occup Health Saf** 1997 Jan;66(1):46–9

RESPIRATORY SOUNDS

Preventive strategies for young children with wheezing bronchitis. Rylander E. **Acta Paediatr** 1997 Jun;86(6):554–6

Wheezing bronchitis reinvestigated at the age of 10 years. Wennergren G, et al. **Acta Paediatr** 1997 Apr;86(4):351–5

Lower respiratory illness, recurrent wheezing, and day care attendance. Marbury MC, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):156–61

Computer-assisted auscultation of a bronchopleurocutaneous fistula during general anesthesia. Manecke GR Jr, et al. **Anesth Analg** 1996 Oct;83(4):880–2

Assessment of breath sounds during ambulance transport. Brown LH, et al. **Ann Emerg Med** 1997 Feb;29(2):228–31

Prevalence of asthma and wheeze in primary school children in northern Jordan. Abuekteish F, et al. **Ann Trop Paediatr** 1996 Sep;16(3):227–31

The prevalence of adult onset wheeze: longitudinal study. Bodner C, et al. **BMJ** 1997 Mar 15;314(7083):792–3

Reduced risk of wheezing in children using feather pillows is confirmed [letter; comment] Strachan D, et al. **BMJ** 1997 Feb 15;314(7079):518. Comment on: BMJ 1996 Oct 12;313(7062):916.

Posture-dependent change of tracheal sounds at standardized flows in patients with obstructive sleep apnea. Pasterkamp H, et al. **Chest** 1996 Dec;110(6):1493–8

Vocal cord dysfunction associated with sexual abuse. Tajchman UW, et al. **Clin Pediatr (Phila)** 1996 Feb; 35(2):105–8

Use of breath sounds to assist difficult intubation of the trachea. Wambani JO. **East Afr Med J** 1997 Feb;74(2):112–3

Night cough in a population-based sample of children: characteristics, relation to symptoms and associations with measures of asthma severity. Brooke AM, et al. **Eur Respir J** 1996 Jan;9(1):65–71

Outcome measures in early childhood asthma and other wheezing disorders. Proceedings of a workshop. Gerona, Spain, 21–23 September 1995. **Eur Respir J Suppl** 1996 Apr; 21:1s–49s

Long-term outcome of early childhood wheezing: population data. Strachan D, et al. **Eur Respir J Suppl** 1996 Apr; 21:42s–47s (59 ref.)

Extubation failure due to post-extubation stridor is better correlated with neurologic impairment than with upper airway lesions in critically ill pediatric patients. Harel Y, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6; 39(2):147–58

Relationship between dyspnea, peak expiratory flow rate and wheeze in obstructive lung disease. Srisawai P. **J Med Assoc Thai** 1997 May;80(5):319–25

Prevalence of wheeze and asthma and relation to atopy in urban and rural Ethiopia. Yemaneberhan H, et al. **Lancet** 1997 Jul 12;350(9071):85–90

Computer-based lung sound simulation. Kompis M, et al. **Med Biol Eng Comput** 1997 May;35(3):231–8

Application of multivariate linear discriminant analysis to lung sounds in some pulmonary diseases. Celebi G, et al. **Monaldi Arch Chest Dis** 1996 Feb;51(1):42–9

Chest surface mapping of lung sounds during methacholine challenge. Pasterkamp H, et al. **Pediatr Pulmonol** 1997 Jan; 23(1):21–30

Managing stridor in children. Clough J. **Practitioner** 1995 Dec;239(1557):724–8 (2 ref.)

All that wheezes is not asthma. Goldman J. **Practitioner** 1997 Jan;241(1570):35–8 (6 ref.)

Lung auscultation in airway challenge testing. Purohit A, et al. **Respir Med** 1997 Mar;91(3):151–7

Effect of fresh fruit consumption on lung function and wheeze in children. Cook DG, et al. **Thorax** 1997 Jul; 52(7):628–33

[Diagnostic significance of fine crackles in interstitial pulmonary disease] Murata A. **Nippon Ika Daigaku Zasshi** 1996 Oct;63(5):404–8 (4 ref.) **(Jpn)**

[Frequency analysis of crackles recorded with a stethoscope-equipped recorder] Kiyokawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33(12):1341–47 (Eng. Abstr.) **(Jpn)**

[Automated analysis of all-night records of tracheal sound to detect sleep disordered breathing] Nakano H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Jul;34(7):765–70 (Eng. Abstr.) **(Jpn)**

[Analytical method of lung sounds] Murata A, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:80–3 (6 ref.) **(Jpn)**

[Origin of vesicular respiratory noises] Korenbaum VI, et al. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):133–5 **(Rus)**

[Use of recording methods and sound analysis of cough in the study of sound phenomena associated with respiration] Vrabec M, et al. **Bratisl Lek Listy** 1997 Mar;98(3):141–5 (Eng. Abstr.) **(Slo)**

CLASSIFICATION

Classification of lung sounds in patients with asthma, emphysema, fibrosing alveolitis and healthy lungs by using self-organizing maps. Malmberg LP, et al. **Clin Physiol** 1996 Mar;16(2):115–29

Separation of pulmonary disorders with two-dimensional discriminant analysis of crackles. Sovijärvi AR, et al. **Clin Physiol** 1996 Mar;16(2):171–81

DIAGNOSIS

A cost-effective approach to the diagnosis and treatment of the wheezing infant. Mamlok R. **Allergy Asthma Proc** 1997 May-Jun;18(3):149–52 (20 ref.)

Anaesthesia for a patient with a mediastinal mass presenting with acute stridor. Lewer BM, et al. **Anaesth Intensive Care** 1996 Oct;24(5):605–8

Lung sounds interpretation [letter; comment] Levins TT. **Ann Emerg Med** 1997 Apr;29(4):555–6. Comment on: Ann Emerg Med 1996 Sep;28(3):309–12.

The value of MRI in diagnosing vascular abnormalities causing stridor. Beekman RP, et al. **Eur J Pediatr** 1997 Jul;156(7):516–20

Inflammatory markers of outcome. Grigg J, et al. **Eur Respir J Suppl** 1996 Apr;21:16s–21s (31 ref.)

Asthma and wheeze in schoolchildren. Taylor MR, et al. **Ir Med J** 1996 Jan–Feb;89(1):34–5

Capnography and ventilatory assessment during ambulatory dentoalveolar surgery. Bennett J, et al. **J Oral Maxillofac Surg** 1997 Sep;55(9):921–5;discussion 925–6

Lung function and airway responsiveness in infancy. Landau LI. **Monaldi Arch Chest Dis** 1996 Aug;51(4):303–5 (23 ref.)

Stridor in neonates. Mancuso RF. **Pediatr Clin North Am** 1996 Dec;43(6):1339–56 (40 ref.)

When to treat the child who wheezes. Connett G. **Practitioner** 1997 Jun;241(1575):336–40 (7 ref.)

DRUG EFFECTS

A wheezy infant unresponsive to bronchodilators [clinical conference] Go RO, et al. **Ann Allergy Asthma Immunol** 1997 May;78(5):449–56

Anti-inflammatory therapy reduces wheezing after bronchiolitis [letter; comment] Hakim A.
Arch Pediatr Adolesc Med 1997 Jan;151(1):108-9. Comment on: Arch Pediatr Adolesc Med 1996 May;150(5):512-7.

Aminophylline is effective on acute exacerbations of asthma in adults—objective improvements in peak flow, spirogram, arterial blood gas measurements and lung sounds. Ohta K, et al. **Clin Exp Allergy** 1996 Mar;26 Suppl 2:32-7

Treatment of recurrent acute wheezing episodes in infancy with oral salbutamol and prednisolone. Fox GF, et al.
Eur J Pediatr 1996 Jun;155(6):512-6

Differential inhibitory effect of regular inhaled corticosteroid on airway responsiveness to adenosine 5' monophosphate, methacholine, and bradykinin in symptomatic children with recurrent wheeze. Doull IJ, et al. **Pediatr Pulmonol** 1997 Jun;23(6):404-11

Aerosol delivery to wheezy infants: a comparison between a nebulizer and two small volume spacers. Wildhaber JH, et al. **Pediatr Pulmonol** 1997 Mar;23(3):212-6

ETIOLOGY

Intractable wheezing in infants with nasopharyngeal reflux. Kuroki H, et al. **Acta Paediatr Jpn** 1996 Aug;38(4):357-60

Thymus hyperplasia, differential diagnosis in the wheezing infant. Pedroza Meléndez A, et al.
Allergol Immunopathol (Madr) 1997 Mar-Apr;25(2):59-62

A 3-week-old with stridor [letter] Kolecki P.
Am J Emerg Med 1997 Jan;15(1):100-1

Race, asthma, and persistent wheeze in Philadelphia schoolchildren [see comments] Cunningham J, et al.
Am J Public Health 1996 Oct;86(10):1406-9. Comment in: Am J Public Health 1996 Oct;86(10):1361-2.

Successful treatment of post-extubation stridor by continuous positive airway pressure. Sundaram RK, et al.
Anaesth Intensive Care 1996 Jun;24(3):392-3

Acute stridor as a presentation of bilateral abductor vocal cord paralysis. Strauss A, et al. **Anaesthesia** 1996 Nov; 51(11):1046-8

Paradoxical vocal cord motion presenting as acute stridor. Dinulos JG, et al. **Ann Emerg Med** 1997 Jun;29(6):815-7

Clinical significance of cough and wheeze in the diagnosis of asthma. Kelly YJ, et al. **Arch Dis Child** 1996 Dec; 75(6):489-93

Stability of respiratory symptoms in unlabelled wheezy illness and nocturnal cough. Powell CV, et al. **Arch Dis Child** 1996 Nov;75(5):385-91

Increased house dust mite allergen in synthetic pillows may explain increased wheezing [letter] Crane J, et al. **BMJ** 1997 Jun 14;314(7096):1763-4

Paradoxical vocal cord motion in the recovery room: a masquerader of pulmonary dysfunction [see comments] Arndt GA, et al. **Can J Anaesth** 1996 Dec;43(12):1249-51 . Comment in: Can J Anaesth 1997 Jul;44(7):785-6.

Paradoxical vocal cord motion [letter; comment] Kleiman S, et al. **Can J Anaesth** 1997 Jul;44(7):785-6. Comment on: Can J Anaesth 1996 Dec;43(12):1249-51.

Association between reduced cuff leak volume and postextubation stridor. Miller RL, et al. **Chest** 1996 Oct; 110(4):1035-40

Infantile laryngeal neurofibroma presenting as stridor and dysphagia. Boas SR, et al. **Clin Pediatr (Phila)** 1996 Mar; 35(3):151-3

Indoor risk factors for asthma and wheezing among Seattle school children. Maier WC, et al.
Environ Health Perspect 1997 Feb;105(2):208-14

Benign paradoxical vocal cord adduction presenting as acute stridor. Mullinax MC, et al. **Eur J Emerg Med** 1996 Jun; 3(2):102-5

Chronic cough and wheeze in children: do they all have asthma? Sear M, et al. **Eur Respir J** 1997 Feb;10(2):342-5

Factors relating to the severity of symptoms at 5 yrs in children with severe wheeze in the first 2 yrs of life. Wilson NM, et al. **Eur Respir J** 1997 Feb;10(2):346-53

Innominate artery compression of the trachea in infants [see comments] Mahboubi S, et al.
Int J Pediatr Otorhinolaryngol 1996 May;35(3):197-205. Comment in: Int J Pediatr Otorhinolaryngol 1997 Jan 3;38(3):281-4.

Fourth branchial pouch cyst: an unusual cause of neonatal stridor. Sharma HS, et al.
Int J Pediatr Otorhinolaryngol 1996 Dec 20;38(2):155-61

Clear plastic cups: a childhood choking hazard. Weiss RL, et al. **Int J Pediatr Otorhinolaryngol** 1996 Nov;37(3):243-51

Breaking the cycle: lidocaine therapy for habit cough. Sherman JM. **J Fla Med Assoc** 1997 Jun-Jul;84(5):308-9

Stridor in the neonate: laryngomalacia. Thurmond M, et al. **J La State Med Soc** 1996 Sep;148(9):375-8 (15 ref.)

An unusual foreign body in the larynx: a case report. Bhat NA, et al. **J Laryngol Otol** 1996 Dec;110(12):1164-5 (7 ref.)

Primary bronchomalacia in infants and children. Finder JD. **J Pediatr** 1997 Jan;130(1):59-66

Cellular immunity is activated and a TH-2 response is associated with early wheezing in infants after bronchiolitis. Renzi PM, et al. **J Pediatr** 1997 Apr;130(4):584-93

Tenuous airway in children with trisomy 21. de Jong AL, et al. **Laryngoscope** 1997 Mar;107(3):345-50

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 4-1997. A 37-year-old man with AIDS and wheezing refractory to bronchodilator medication [clinical conference] **N Engl J Med** 1997 Jan 30;336(5):357-64

Fluid retention and intravenous hydration in the dying [letter] Musgrave CF, et al. **Palliat Med** 1996 Jan;10(1):53

The potential role of gastroesophageal reflux in the pathogenesis of food-induced wheezing. Meer S, et al.
Pediatr Allergy Immunol 1996 Nov;7(4):167-70

Stridor in neonates. Mancuso RF. **Pediatr Clin North Am** 1996 Dec;43(6):1339-56 (40 ref.)

Vocal cord dysfunction presenting as acute asthma in a pediatric patient. Poirier MP, et al. **Pediatr Emerg Care** 1996 Jun;12(3):213-4 (14 ref.)

A newly recognized cause of wheezing: AIDS-related bronchial leiomyomas. de Chadarévian JP, et al.
Pediatr Pulmonol 1997 Aug;24(2):106-10

Serum eosinophil cationic protein as a predictor of wheezing after bronchiolitis. Reijonen TM, et al.
Pediatr Pulmonol 1997 Jun;23(6):397-403

Congenital stridor. Brodsky L. **Pediatr Rev** 1996 Nov; 17(11):408-11

Noisy breathing in children: history and presentation hold many clues to the cause. Pryor MP. **Postgrad Med** 1997 Feb;101(2):103-12 (17 ref.)

Bronchial hyperresponsiveness as a predictor of wheezing in a follow-up study of healthy men. Ségala C, et al.
Respiration 1996;63(6):352-7

[Diagnosis and treatment of recurrent coughing and wheezing in children younger than 4 years old] Brand PL, et al. **Ned Tijdschr Geneeskd** 1997 Mar 8;141(10):464-7 (Eng. Abstr.) **(Dut)**

[The wheezing child and pediatric respiratory infections] Grimfeld A. **Allerg Immunol (Paris)** 1997 Mar;29(3):73-4; discussion 82 (Eng. Abstr.) **(Fre)**

[Respiratory inflammation] Holgate ST.
Allerg Immunol (Paris) 1997 Mar;29(3):75-6; discussion 82 (11 ref.) (Eng. Abstr.) **(Fre)**

[An unusual cause of inspiratory and expiratory stridor] Truniger B. **Schweiz Med Wochenschr** 1997 Jun 21; 127(25):1106 **(Ger)**

[Serum eosinophil cationic protein in infants during first wheezing episode] Takahashi Y, et al. **Arerugi** 1996 Nov; 45(11):1161-5 (Eng. Abstr.) **(Jpn)**

[Intermittent functional stridor as a manifestation of hysterical neurosis] Karpova OIu. **Vestn Otorinolaringol** 1996 May-Jun;(3):51-3 (Eng. Abstr.) **(Rus)**

GENETICS

Partial deletion of 18p and partial duplication of 18q caused by a paternal pericentric inversion. Israëls T, et al.
Clin Genet 1996 Dec;50(6):520-4 (17 ref.)

IMMUNOLOGY

High levels of eosinophil cationic protein in wheezing infants predict the development of asthma. Koller DY, et al.
J Allergy Clin Immunol 1997 Jun;99(6 Pt 1):752-6

PHYSIOLOGY

Infant respiratory function after RSV-proven bronchiolitis. Dezateux C, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1349-55

Tidal volume of respiration and "sighing" as indicators of breathing irregularities in panic disorder patients. Schwartz GE, et al. **Anxiety** 1996;2(3):145-8

The relationship between peak expiratory sound intensity and peak expiratory flow rate in the thoroughbred horse during exercise. Attenburrow DP, et al. **Equine Vet J Suppl** 1990 Jun;(9):43-6

Increased spontaneous release of tumour necrosis factor-alpha by alveolar macrophages from wheezy infants. Azevedo I, et al. **Eur Respir J** 1997 Aug;10(8):1767-73

Adaptive reduction of heart sounds from lung sounds using fourth-order statistics. Hadjileontiadis LJ, et al.
IEEE Trans Biomed Eng 1997 Jul;44(7):642-8

Asymmetry of respiratory sounds and thoracic transmission. Pasterkamp H, et al. **Med Biol Eng Comput** 1997 Mar; 35(2):103-6

PHYSIOPATHOLOGY

Methacholine responsiveness using the raised volume forced expiration technique in infants. Hayden MJ, et al.
Am J Respir Crit Care Med 1997 May;155(5):1670-5

Ventilatory function in British adults after asthma or wheezing illness at ages 0-35. Strachan DP, et al.
Am J Respir Crit Care Med 1996 Dec;154(6 Pt 1):1629-35

Prevalence of asthma and wheezing in public schoolchildren: association with maternal smoking during pregnancy. Hu FB, et al. **Ann Allergy Asthma Immunol** 1997 Jul;79(1):80-4

Short-term variations in oscillatory and spirometric lung function indices among school children. Timonen KL, et al. **Eur Respir J** 1997 Jan;10(1):82-7

Short-term clinical measurement: acute severe episodes. de Blic J, et al. **Eur Respir J Suppl** 1996 Apr;21:4s-7s (32 ref.)

Asthma and wheeze in schoolchildren. Taylor MR, et al. **Ir Med J** 1996 Jan-Feb;89(1):34-5

RESPIRATORY STIMULANTS see **RESPIRATORY SYSTEM AGENTS**

RESPIRATORY SYNCYTIAL VIRUS, BOVINE

Influence of selective T-lymphocyte depletion on the lung pathology of gnotobiotic calves and the distribution of different T-lymphocyte subsets following challenge with bovine respiratory syncytial virus. Thomas LH, et al.
Res Vet Sci 1996 Jul;61(1):38-44

Pathological study of experimentally induced bovine respiratory syncytial viral infection in lambs. Masot AJ, et al. **Zentralbl Veterinarmed [B]** 1996 Jun;43(4):233-43

CLASSIFICATION

Subgrouping of bovine respiratory syncytial virus strains detected in lung tissue. Schrijver RS, et al.
Vet Microbiol 1996 Dec;53(3-4):253-60

DRUG EFFECTS

Heparin-dependent attachment of respiratory syncytial virus (RSV) to host cells. Krusat T, et al. **Arch Virol** 1997; 142(6):1247-54

GENETICS

Expression in Escherichia coli and purification of soluble forms of the F protein of bovine respiratory syncytial virus. Naval J, et al. **Protein Expr Purif** 1997 Mar;9(2):288-94

Sequence conservation in the attachment glycoprotein and antigenic diversity among bovine respiratory syncytial virus isolates. Stine LC, et al. **Vet Microbiol** 1997 Mar; 54(3-4):201-21

Sites of replication of bovine respiratory syncytial virus in naturally infected calves as determined by in situ hybridization. Viuff B, et al. **Vet Pathol** 1996 Jul; 33(4):383-90

Antigenically distinct G glycoproteins of BRSV strains share a high degree of genetic homogeneity. Furze JM, et al.
Virology 1997 Apr 28;231(1):48-58

IMMUNOLOGY

Modulation of bovine T cell responses by IL-12 and the influence of IL-4 on interferon-gamma responses to respiratory syncytial virus. Camon EB, et al.
Biochem Soc Trans 1997 May;25(2):291S

Functional analysis of antibody responses of feedlot cattle to bovine respiratory syncytial virus following vaccination with mixed vaccines. West K, et al. **Can J Vet Res** 1997 Jan;61(1):28-33

Antibody responses against the G and F proteins of bovine respiratory syncytial virus after experimental and natural infections. Schrijver RS, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):500-6

Milk production and reproductive performance in dairy cows given bovine respiratory syncytial virus vaccine prior to parturition. Ferguson JD, et al. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1779-83

Antigenic and molecular analyses of the variability of bovine respiratory syncytial virus G glycoprotein. Prozzi D, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):359-66

Serological studies of bovine respiratory syncytial virus in feedlot cattle in South Africa. Van Vuuren M.
J S Afr Vet Assoc 1990 Dec;61(4):168-9

Antigenic structure of the central conserved region of protein G of bovine respiratory syncytial virus. Langedijk JP, et al. **J Virol** 1997 May;71(5):4055-61

Immunization with a peptide derived from the G glycoprotein of bovine respiratory syncytial virus (BRSV) reduces the incidence of BRSV-associated pneumonia in the natural host. Bastien N, et al. **Vaccine** 1997 Aug-Sep; 15(12-13):1385-90

Identification of potential CTL epitopes of bovine RSV using allele-specific peptide motifs from bovine MHC class I molecules. Gaddum RM, et al.
Vet Immunol Immunopathol 1996 Nov;54(1-4):211-9 (50 ref.)

Cell-mediated immune responses of lambs to experimental infection with bovine respiratory syncytial virus. Sharma AK, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1-2):79-91

Antigens of bovine respiratory syncytial virus in peripheral blood lymphocytes of experimentally infected lambs. Sharma AK, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1-2):93-104

ISOLATION & PURIFICATION

Viral aetiology of enzootic pneumonia in Danish dairy herds: diagnostic tools and epidemiology. Uttenthal A, et al.
Vet Rec 1996 Aug 3;139(5):114-7

PHYSIOLOGY

Analysis of bovine respiratory syncytial virus envelope glycoproteins in cell fusion. Pastey MK, et al.
J Gen Virol 1997 Aug;78 (Pt 8):1885-9

Experimental reproduction of respiratory disease in calves with non-cell-culture-passaged bovine respiratory syncytial virus. van der Poel WH, et al. **Vet Q** 1996 Sep; 18(3):81-6

RESPIRATORY SYNCYTIAL VIRUS, HUMAN

Respiratory syncytial virus infection enhances the response to laryngeal chemostimulation and inhibits arousal from sleep in young lambs. Lindgren C, et al. **Acta Paediatr** 1996

Jul;85(7):789–97
Reflex apnoea response and inflammatory mediators in infants with respiratory tract infection. Lindgren C, et al. **Acta Paediatr** 1996 Jul;85(7):798–803
New guidelines proposed for use of RSV immune globulin [news] **Am J Health Syst Pharm** 1997 May 1;54(9):1025
Infant respiratory function after RSV–proven bronchiolitis. Dezateux C, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1349–55
Immunological responses to respiratory syncytial virus infection in infancy. Smyth RL, et al. **Arch Dis Child** 1997 Mar;76(3):210–4
Respiratory syncytial virus infection results in airway hyperresponsiveness and enhanced airway sensitization to allergen. Schwarze J, et al. **J Clin Invest** 1997 Jul 1; 100(1):226–33
Enhanced cytokine production by milk macrophages following infection with respiratory syncytial virus. Sone S, et al. **J Leukoc Biol** 1997 May;61(5):630–6
Effectiveness of ribavirin in otherwise well infants with respiratory syncytial virus–associated respiratory failure. Pediatric Critical Study Group. Moler FW, et al. **J Pediatr** 1996 Mar;128(3):422–8
Invasive monitoring in infants with respiratory syncytial virus infection. Willson DF, et al. **J Pediatr** 1996 Mar; 128(3):357–62
Adenovirus and respiratory syncytial virus in chronic sinusitis using polymerase chain reaction. Ramadan HH, et al. **Laryngoscope** 1997 Jul;107(7):923–5
An ultrastructural study of the interaction of human eosinophils with respiratory syncytial virus. Kimpen JL, et al. **Pediatr Allergy Immunol** 1996 Feb;7(1):48–53
Increased airway reactivity in human RSV bronchiolitis in the guinea pig is not due to increased wall thickness. Robinson PJ, et al. **Pediatr Pulmonol** 1996 Oct;22(4):248–54
Treatment of respiratory failure due to respiratory syncytial virus pneumonia with natural surfactant. Vos GD, et al. **Pediatr Pulmonol** 1996 Dec;22(6):412–5
Randomised double blind placebo controlled trial of prednisolone in children admitted to hospital with respiratory syncytial virus bronchiolitis [see comments] van Woensel JB, et al. **Thorax** 1997 Jul;52(7):634–7. Comment in: Thorax 1997 Jul;52(7):595–7.
[Respiratory syncytial virus: an important cause of influenza–like disese in the elderly] Kolmos HJ. **Ugeskr Laeger** 1996 Dec 30;159(1):59–60 **(Dan)**
[Apropos of a case of respiratory syncytial virus broncho–alveolitis] Bellagra N, et al. **Ann Biol Clin (Paris)** 1997 May–Jun;55(3):243 **(Fre)**
[Nosocomial infections due to syncytial respiratory virus: which hygienic measures] Sizun J, et al. **Arch Pediatr** 1996 Jul;3(7):723–7 (34 ref.) (Eng. Abstr.) **(Fre)**
[A potential rapid immunoperoxidase method of diagnosis in infections due to the respiratory syncytial virus, parainfluenza viruses and adenoviruses] Tecu C, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jul–Dec; 41(3–4):145–6 (Eng. Abstr.) **(Rum)**

CHEMISTRY

Conformational studies of a short linear peptide corresponding to a major conserved neutralizing epitope of human respiratory syncytial virus fusion glycoprotein. Toiron C, et al. **Biopolymers** 1996 Oct;39(4):537–48

CLASSIFICATION

Restriction pattern variability of respiratory syncytial virus during three consecutive epidemics in Denmark. Johansen J, et al. **APMIS** 1997 Apr;105(4):303–8
Relationship between clinical severity of respiratory syncytial virus infection and subtype. Kneyber MC, et al. **Arch Dis Child** 1996 Aug;75(2):137–40

DRUG EFFECTS

Heparin–dependent attachment of respiratory syncytial virus (RSV) to host cells. Krusat T, et al. **Arch Virol** 1997; 142(6):1247–54

ENZYMOLOGY

Acquisition of the ts phenotype by a chemically mutagenized cold–passaged human respiratory syncytial virus vaccine candidate results from the acquisition of a single mutation in the polymerase (L) gene. Crowe JE Jr, et al. **Virus Genes** 1996;13(3):269–73

GENETICS

Reverse transcription–polymerase chain reaction amplification of respiratory syncytial virus genome from neonatal nasal swab samples. Yoshio H, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):429–33
Analysis of the gene start and gene end signals of human respiratory syncytial virus: quasi–templated initiation at position 1 of the encoded mRNA. Kuo L, et al. **J Virol** 1997 Jul;71(7):4944–53
Detection of respiratory syncytial virus from clinical specimens: comparison between reverse transcription polymerase chain reaction and tissue culture. Tantivanich S, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec;26(4):684–8
Sequence conservation in the attachment glycoprotein and antigenic diversity among bovine respiratory syncytial virus isolates. Stine LC, et al. **Vet Microbiol** 1997 Mar; 54(3–4):201–21

IMMUNOLOGY

Correction: RSV immune globulin intravenous [letter] Wandstrat TL. **Ann Pharmacother** 1997 May;31(5):648–9
Respiratory syncytial virus immune globulin intravenous. Wandstrat TL. **Ann Pharmacother** 1997 Jan;31(1):83–8 (36 ref.)
Cross–reactive and group–specific immune responses to a neutralizing epitope of the human respiratory syncytial virus fusion protein. Corvaisier C, et al. **Arch Virol** 1997; 142(6):1073–86
Prevalence of antibodies against HEp–2 cell antigen in infants and children hospitalized with respiratory syncytial virus infection. Forster J, et al. **Infection** 1996 Nov–Dec; 24(6):407–11
Isolation of a neutralizing human RSV antibody from a dominant, non–neutralizing immune repertoire by epitope–blocked panning. Ping T, et al. **J Immunol** 1996 Jul 15;157(2):772–80
A monoclonal antibody pool for routine immunohistochemical detection of human respiratory syncytial virus antigens in formalin–fixed, paraffin–embedded tissue. Wright C, et al. **J Pathol** 1997 Jun;182(2):238–44
Generation of atypical pulmonary inflammatory responses in BALB/c mice after immunization with the native attachment (G) glycoprotein of respiratory syncytial virus. Hancock GE, et al. **J Virol** 1996 Nov;70(11):7783–91
The temperature–sensitive (ts) phenotype of a cold–passaged (cp) live attenuated respiratory syncytial virus vaccine candidate, designated cpts530, results from a single amino acid substitution in the L protein. Juhasz K, et al. **J Virol** 1997 Aug;71(8):5814–9
Prevention of respiratory syncytial virus infection in high risk infants: consensus opinion on the role of immunoprophylaxis with respiratory syncytial virus hyperimmune globulin. Meissner HC, et al. **Pediatr Infect Dis J** 1996 Dec;15(12):1059–68 (51 ref.)
Respiratory syncytial virus immune globulin intravenous: indications for use. American Academy of Pediatrics Committee on Infectious Diseases, Committee on Fetus and Newborn. **Pediatrics** 1997 Apr;99(4):645–50
Safety and immunogenicity of a respiratory syncytial virus subunit vaccine (PFP–2) in the institutionalized elderly. Falsey AR, et al. **Vaccine** 1997 Jul;15(10):1130–2
Determinants and kinetics of cytokine expression patterns in lungs of vaccinated mice challenged with respiratory syncytial virus. Tang YW, et al. **Vaccine** 1997 Apr–May; 15(6–7):597–602
Protective immune responses induced by the immunization of mice with a recombinant bacteriophage displaying an epitope of the human respiratory syncytial virus. Bastien N, et al. **Virology** 1997 Jul 21;234(1):118–22
Induction of protective immunity in rodents by vaccination with a prokaryotically expressed recombinant fusion protein containing a respiratory syncytial virus G protein fragment. Power UF, et al. **Virology** 1997 Apr 14; 230(2):155–66
[Characteristics of anti–respiratory syncytial humoral immunity during persistence of respiratory syncytial virus antigens in adult patients with chronic obstructive bronchitis] Krivitskaia VZ, et al. **Vopr Virusol** 1996 Sep–Oct;41(5):234–7 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Outbreaks of influenza and a rise in respiratory syncytial virus: winter has arrived. **Commun Dis Rep CDR Wkly** 1996 Nov 29;6(48):417
A nonradioactive method for rapid and sensitive detection of polymerase chain reaction products by use of bromo–deoxyuridine. Dakhama A, et al. **Mod Pathol** 1996 Aug;9(8):849–53

METABOLISM

Biochemical characterizations of two temperature–sensitive and attenuated strains of respiratory syncytial virus subgroup B. Broughan JH, et al. **J Virol** 1997 Jul; 71(7):4962–70

PATHOGENICITY

Immunological determinants of disease caused by respiratory syncytial virus [see comments] Graham BS. **Trends Microbiol** 1996 Jul;4(7):290–3 (39 ref.). Comment in: Trends Microbiol 1996 Aug;4(8):299–300.
Identification of mutations contributing to the reduced virulence of a modified strain of respiratory syncytial virus. Tolley KP, et al. **Vaccine** 1996 Dec;14(17–18):1637–46

PHYSIOLOGY

Transcriptional induction of multiple cytokines by human respiratory syncytial virus requires activation of NF–kappa B and is inhibited by sodium salicylate and aspirin. Bitko V, et al. **Virology** 1997 Jun 9;232(2):369–78

RESPIRATORY SYNCYTIAL VIRUS INFECTIONS

Respiratory syncytial virus bronchiolitis. Jeng MJ, et al. **Am Fam Physician** 1997 Mar;55(4):1139–46, 1149–50 (30 ref.)
RSV pneumonia, a community–acquired infection in adults. La Montagne JR. **Lancet** 1997 Jan 18;349(9046):149–50
Study of interobserver reliability in clinical assessment of RSV lower respiratory illness: a Pediatric Investigators Collaborative Network for Infections in Canada (PICNIC) study. Wang EE, et al. **Pediatr Pulmonol** 1996 Jul; 22(1):23–7
[Respiratory syncytial virus: an important cause of influenza–like disese in the elderly] Kolmos HJ. **Ugeskr Laeger** 1996 Dec 30;159(1):59–60 **(Dan)**

BLOOD

White blood cell count, C–reactive protein and erythrocyte sedimentation rate in respiratory syncytial virus infection of the lower respiratory tract. Saijo M, et al. **Acta Paediatr Jpn** 1996 Dec;38(6):596–600
Respiratory syncytial virus specific serum antibodies in infants under six months of age: limited serological response upon infection. Brandenburg AH, et al. **J Med Virol** 1997 May;52(1):97–104

COMPLICATIONS

Reflex apnoea response and inflammatory mediators in infants with respiratory tract infection. Lindgren C, et al. **Acta Paediatr** 1996 Jul;85(7):798–803
Respiratory syncytial virus infection enhances the response to laryngeal chemostimulation and inhibits arousal from sleep in young lambs. Lindgren C, et al. **Acta Paediatr** 1996 Jul;85(7):789–97
Successful treatment of severe dysrhythmias in infants with respiratory syncytial virus infections: two cases and a literature review. Thomas JA, et al. **Crit Care Med** 1997 May;25(5):880–6 (44 ref.)
A 6–week–old girl with persistent apnea and worsening pulmonary disease. Vernacchio L, et al. **Curr Opin Pediatr** 1996 Oct;8(5):459–66 (67 ref.)
Respiratory syncytial virus infection: its role in aeroallergen sensitization during the first two years of life. Forster J, et al. **Pediatr Allergy Immunol** 1996 May;7(2):55–60
Respiratory syncytial virus bronchiolitis in a girl undergoing chemotherapy for acute lymphoblastic leukemia: an immunologic study of local secretion. Tsutsumi H, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):635–6 (12 ref.)
Acute respiratory distress syndrome caused by respiratory syncytial virus. Hammer J, et al. **Pediatr Pulmonol** 1997 Mar;23(3):176–83
Heliox in respiratory failure secondary to bronchiolitis: a new therapy. Paret G, et al. **Pediatr Pulmonol** 1996 Nov; 22(5):322–3
Treatment of respiratory failure due to respiratory syncytial virus pneumonia with natural surfactant. Vos GD, et al. **Pediatr Pulmonol** 1996 Dec;22(6):412–5
Reduction of respiratory syncytial virus hospitalization among premature infants and infants with bronchopulmonary dysplasia using respiratory syncytial virus immune globulin prophylaxis. The PREVENT Study Group [see comments] **Pediatrics** 1997 Jan;99(1):93–9. Comment in: Pediatrics 1997 Aug;100(2 Pt 1):275–6.
[Clinical, therapeutic and developmental aspects of acute bronchiolitis in Tunisia] Ben Jaballah N, et al. **Cah Anesthesiol** 1996;44(5):423–8 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Respiratory syncytial virus infection in the elderly. Mlinaric–Galinovic G, et al. **Eur J Clin Microbiol Infect Dis** 1996 Oct;15(10):777–81 (71 ref.)
Respiratory syncytial virus: not just for kids. Murry AR, et al. **Hosp Pract (Off Ed)** 1997 Jul 15;32(7):87–8, 91–4, 98 passim (14 ref.)
Respiratory syncytial virus pneumonia in an AIDS patient. van der Ven AJ, et al. **Infection** 1996 Sep–Oct;24(5):375–7
Rapid diagnosis of respiratory syncytial virus infections in immunocompromised adults. Englund JA, et al. **J Clin Microbiol** 1996 Jul;34(7):1649–53
Differential diagnoses of influenza A virus, influenza B virus, and respiratory syncytial virus infections by direct immunofluorescence using mixtures of monoclonal antibodies of different isotypes. Murphy P, et al. **J Clin Microbiol** 1996 Jul;34(7):1798–800
Diagnosis of respiratory virus infections using GACELISA of urinary antibodies. Ireland DC, et al. **J Immunol Methods** 1996 Sep 9;195(1–2):73–80
A monoclonal antibody pool for routine immunohistochemical detection of human respiratory syncytial virus antigens in formalin–fixed, paraffin–embedded tissue. Wright C, et al. **J Pathol** 1997 Jun;182(2):238–44
Adenovirus and respiratory syncytial virus in chronic sinusitis using polymerase chain reaction. Ramadan HH, et al. **Laryngoscope** 1997 Jul;107(7):923–5
A nonradioactive method for rapid and sensitive detection of polymerase chain reaction products by use of bromo–deoxyuridine. Dakhama A, et al. **Mod Pathol** 1996 Aug;9(8):849–53
Frequency of respiratory syncytial virus in hospitalized infants with lower acute respiratory tract infection in Colombia. Bedoya VI, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1123–4

Bronchiolitis. Bar-on ME, et al. **Prim Care** 1996 Dec; 23(4):805-19 (64 ref.)

[Apropos of a case of respiratory syncytial virus broncho-alveolitis] Bellagra N, et al. **Ann Biol Clin (Paris)** 1997 May-Jun;55(3):243 **(Fre)**

[A potential rapid immunoperoxidase method of diagnosis in infections due to the respiratory syncytial virus, parainfluenza viruses and adenoviruses] Tecu C, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jul-Dec; 41(3-4):145-6 (Eng. Abstr.) **(Rum)**

[Clinical and epidemiological survey of RSV infection in infants] Cabrera Roca G, et al. **An Esp Pediatr** 1997 Jun; 46(6):576-80 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Respiratory syncytial virus immune globulin intravenous. Wandstrat TL. **Ann Pharmacother** 1997 Jan;31(1):83-8 (36 ref.)

Phase I study of intravenous ribavirin treatment of respiratory syncytial virus pneumonia after marrow transplantation. Lewinsohn DM, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2555-7

Recombinant superoxide dismutase (SOD) administered by aerosol inhibits respiratory syncytial virus infection in cotton rats. Wyde PR, et al. **Antiviral Res** 1996 Jul; 31(3):173-84

Ribavirin and bronchiolitis: variation in use in the UK [letter] Allport TD, et al. **Arch Dis Child** 1997 Apr;76(4):385

Ribavirin therapy in bone marrow transplant recipients with viral respiratory tract infections. Sparrelid E, et al. **Bone Marrow Transplant** 1997 May;19(9):905-8

Efficacy of metered-dose inhaler administration of albuterol in intubated infants [see comments] Torres A Jr, et al. **Chest** 1997 Aug;112(2):484-90. Comment in: Chest 1997 Aug;112(2):303-4.

Reassessment of indications for ribavirin therapy in respiratory syncytial virus infection. Steele RW. **Clin Pediatr (Phila)** 1996 Jul;35(7):377

Advances in antiviral therapy. Dwyer DE, et al. **Curr Opin Pediatr** 1997 Feb;9(1):24-30 (36 ref.)

Respiratory syncytial virus: not just for kids. Murry AR, et al. **Hosp Pract (Off Ed)** 1997 Jul 15;32(7):87-8, 91-4, 98 passim (14 ref.)

Ribavirin for RSV lower respiratory tract infection. Zamorski M. **J Fam Pract** 1996 Dec;43(6):536-7

Effectiveness of ribavirin in otherwise well infants with respiratory syncytial virus-associated respiratory failure. Pediatric Critical Study Group. Moler FW, et al. **J Pediatr** 1996 Mar;128(3):422-8

Vitamin A therapy for children with respiratory syncytial virus infection: a multicenter trial in the United States [see comments] Bresee JS, et al. **Pediatr Infect Dis J** 1996 Sep; 15(9):777-82. Comment in: Pediatr Infect Dis J 1997 Jan;16(1):84-5.

Treatment of respiratory syncytial virus infection with vitamin A: a randomized, placebo-controlled trial in Santiago, Chile [see comments] Dowell SF, et al. **Pediatr Infect Dis J** 1996 Sep;15(9):782-6. Comment in: Pediatr Infect Dis J 1997 Jan;16(1):84-5.

Treatment of respiratory syncytial virus bronchiolitis: 1995 poll of members of the European Society for Paediatric Infectious Diseases. Kimpen JL, et al. **Pediatr Infect Dis J** 1997 May;16(5):479-81

Follow-up of children with respiratory syncytial virus bronchiolitis in 1986 and 1987: potential effect of ribavirin on long term pulmonary function. The Bronchiolitis Study Group. Krilov LR, et al. **Pediatr Infect Dis J** 1997 Mar; 16(3):273-6

Vitamin A therapy for respiratory syncytial virus infection [letter; comment] Neuzil KM, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):84-5. Comment on: Pediatr Infect Dis J 1996 Sep;15(9):777-82. Comment on: Pediatr Infect Dis J 1996 Sep;15(9):782-6.

Aerosolized immunoglobulin treatment of respiratory syncytial virus infection in infants. Rimensberger PC, et al. **Pediatr Infect Dis J** 1996 Mar;15(3):209-16

Early ribavirin treatment did not prevent severe disease in high-risk bronchopulmonary dysplasia patients with respiratory syncytial virus infection [letter] De Boeck K, et al. **Pediatr Pulmonol** 1996 May;21(5):343

The ribavirin debate [letter; comment] Demers RR. **Pediatrics** 1996 Nov;98(5):1003-4. Comment on: Pediatrics 1996 Jan;97(1):137-40.

The ribavirin debate [letter; comment] Granger CD. **Pediatrics** 1996 Nov;98(5):1002-3; discussion 1004. Comment on: Pediatrics 1996 Jan;97(1):137-40.

Randomised double blind placebo controlled trial of prednisolone in children admitted to hospital with respiratory syncytial virus bronchiolitis [see comments] van Woensel JB, et al. **Thorax** 1997 Jul;52(7):634-7. Comment in: Thorax 1997 Jul;52(7):595-7.

ECONOMICS

Economic evaluation of respiratory syncytial virus infection in Canadian children: a Pediatric Investigators Collaborative Network on Infections in Canada (PICNIC) study. Langley JM, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):113-7

EPIDEMIOLOGY

Respiratory syncytial virus in Canada. **Can Commun Dis Rep** 1996 Mar 15;22(6):48

Outbreaks of influenza and a rise in respiratory syncytial virus: winter has arrived. **Commun Dis Rep CDR Wkly** 1996 Nov 29;6(48):417

Respiratory syncytial virus infection among hospitalized young children with acute lower respiratory illnesses in Al Ain, UAE. Uduman SA, et al. **J Commun Dis** 1996 Dec;28(4):245-52

Respiratory viruses in a hospitalized paediatric population in Edinburgh 1985-1994. Winter GF, et al. **J Infect** 1996 Nov;33(3):207-11

From the Centers for Disease Control and Prevention. Update: respiratory syncytial virus activity--United States, 1996-97 season. **JAMA** 1997 Jan 1;277(1):12-3

Update: respiratory syncytial virus activity--United States, 1996-97 season. **MMWR Morb Mortal Wkly Rep** 1996 Dec 6;45(48):1053-5

Frequency of respiratory syncytial virus in hospitalized infants with lower acute respiratory tract infection in Colombia. Bedoya VI, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1123-4

[Clinical and epidemiological survey of RSV infection in infants] Cabrera Roca G, et al. **An Esp Pediatr** 1997 Jun; 46(6):576-80 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Association between maternal smoking and severe respiratory syncytial virus infections and sudden infant death syndrome. Singleton R. **Alaska Med** 1996 Jan-Mar;38(1):34

Fatal respiratory syncytial virus pneumonia as the presenting feature of severe combined immunodeficiency disease. Schneider S, et al. **Clin Pediatr (Phila)** 1996 Mar; 35(3):147-9

Morphological studies of the respiratory syncytial virus induced bronchiolitis in experimentally infected calves. Philippou S, et al. **Pathol Res Pract** 1996 Oct; 192(10):1045-56

GENETICS

Mechanism of RSV-induced IL-8 gene expression in A549 cells before viral replication. Fiedler MA, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L963-71

IMMUNOLOGY

Respiratory syncytial virus infection in infants is associated with predominant Th-2-like response. Román M, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):190-5

Immunological responses to respiratory syncytial virus infection in infancy. Smyth RL, et al. **Arch Dis Child** 1997 Mar;76(3):210-4

Modulation of bovine T cell responses by IL-12 and the influence of IL-4 on interferon-gamma responses to respiratory syncytial virus. Camon EB, et al. **Biochem Soc Trans** 1997 May;25(2):291S

Antibody responses against the G and F proteins of bovine respiratory syncytial virus after experimental and natural infections. Schrijver RS, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):500-6

Induction of intercellular adhesion molecule-1 in human nasal epithelial cells during respiratory syncytial virus infection. Matsuzaki Z, et al. **Immunology** 1996 Aug; 88(4):565-8

Prevalence of antibodies against HEp-2 cell antigen in infants and children hospitalized with respiratory syncytial virus infection. Forster J, et al. **Infection** 1996 Nov-Dec; 24(6):407-11

Induction of allergen-specific IL-2 responsiveness of lymphocytes after respiratory syncytial virus infection and prediction of onset of recurrent wheezing and bronchial asthma. Noma T, et al. **J Allergy Clin Immunol** 1996 Oct; 98(4):816-26

Respiratory syncytial virus infection results in airway hyperresponsiveness and enhanced airway sensitization to allergen. Schwarze J, et al. **J Clin Invest** 1997 Jul 1; 100(1):226-33

T cell source of type 1 cytokines determines illness patterns in respiratory syncytial virus-infected mice. Tang YW, et al. **J Clin Invest** 1997 May 1;99(9):2183-91

A subtype-specific peptide-based enzyme immunoassay for detection of antibodies to the G protein of human respiratory syncytial virus is more sensitive than routine serological tests. Langedijk JP, et al. **J Clin Microbiol** 1997 Jul;35(7):1656-60

Virus-specific CD8+ T lymphocytes downregulate T helper cell type 2 cytokine secretion and pulmonary eosinophilia during experimental murine respiratory syncytial virus infection. Srikiatkhachorn A, et al. **J Exp Med** 1997 Aug 4;186(3):421-32

Th1 and Th2 cytokine induction in pulmonary T cells during infection with respiratory syncytial virus. Hussell T, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2447-55

Respiratory syncytial virus infection of human respiratory epithelial cells up-regulates class I MHC expression through the induction of IFN-beta and IL-1 alpha. Garofalo R, et al. **J Immunol** 1996 Sep 15;157(6):2506-13

IL-12 treatment attenuates T helper cell type 2 and B cell responses but does not improve vaccine-enhanced lung illness. Hussell T, et al. **J Immunol** 1997 Jul 1;159(1):328-34

Challenge of BALB/c mice with respiratory syncytial virus does not enhance the Th2 pathway induced after immunization with a recombinant G fusion protein, BBG2NA, in aluminum hydroxide. Corvaïa N, et al. **J Infect Dis** 1997 Sep;176(3):560-9

Increase in CD23+ B cells in infants with bronchiolitis is accompanied by appearance of IgE and IgG4 antibodies specific for respiratory syncytial virus. Rabatić S, et al. **J Infect Dis** 1997 Jan;175(1):32-7

ICAM-1 expression and low-molecular-weight G-protein activation of human bronchial epithelial cells (A549) infected with RSV. Arnold R, et al. **J Leukoc Biol** 1996 Dec;60(6):766-71

Respiratory syncytial virus specific serum antibodies in infants under six months of age: limited serological response upon infection. Brandenburg AH, et al. **J Med Virol** 1997 May;52(1):97-104

Analysis of linear epitopes recognised by the primary human antibody response to a variable region of the attachment (G) protein of respiratory syncytial virus. Cane PA. **J Med Virol** 1997 Apr;51(4):297-304

Virus-specific memory and effector T lymphocytes exhibit different cytokine responses to antigens during experimental murine respiratory syncytial virus infection. Srikiatkhachorn A, et al. **J Virol** 1997 Jan;71(1):678-85

Influence of selective T-lymphocyte depletion on the lung pathology of gnotobiotic calves and the distribution of different T-lymphocyte subsets following challenge with bovine respiratory syncytial virus. Thomas LH, et al. **Res Vet Sci** 1996 Jul;61(1):38-44

Immunological determinants of disease caused by respiratory syncytial virus [see comments] Graham BS. **Trends Microbiol** 1996 Jul;4(7):290-3 (39 ref.). Comment in: Trends Microbiol 1996 Aug;4(8):299-300.

Immunological determinants of disease caused by respiratory syncytial virus [letter; comment] Hussell T, et al. **Trends Microbiol** 1996 Aug;4(8):299-300. Comment on: Trends Microbiol 1996 Jul;4(7):290-3.

Subgroup specific protection of mice from respiratory syncytial virus infection with peptides encompassing the amino acid region 174-187 from the G glycoprotein: the role of cysteinyl residues in protection. Simard C, et al. **Vaccine** 1997 Mar;15(4):423-32

METABOLISM

Amiloride inhibits cytokine production in epithelium infected with respiratory syncytial virus. Mastronarde JG, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):L201-7

Surfactant abnormalities in infants with severe viral bronchiolitis [see comments] Dargaville PA, et al. **Arch Dis Child** 1996 Aug;75(2):133-6. Comment in: Arch Dis Child Fetal Neonatal Ed 1997 Jul;77(1):F78.

Respiratory syncytial virus infection of human respiratory epithelial cells up-regulates class I MHC expression through the induction of IFN-beta and IL-1 alpha. Garofalo R, et al. **J Immunol** 1996 Sep 15;157(6):2506-13

PATHOLOGY

Morphological studies of the respiratory syncytial virus induced bronchiolitis in experimentally infected calves. Philippou S, et al. **Pathol Res Pract** 1996 Oct; 192(10):1045-56

Increased airway reactivity in human RSV bronchiolitis in the guinea pig is not due to increased wall thickness. Robinson PJ, et al. **Pediatr Pulmonol** 1996 Oct;22(4):248-54

Experimental infections with some pneumotropic viruses in the mouse. Note I. Virological and pathomorphological aspects of the associated infections with influenza virus, adenovirus and respiratory syncytial virus. Petica M, et al. **Rom J Virol** 1995 Jan-Jun;46(1-2):21-32

Sites of replication of bovine respiratory syncytial virus in naturally infected calves as determined by in situ hybridization. Viuff B, et al. **Vet Pathol** 1996 Jul; 33(4):383-90

PHYSIOPATHOLOGY

RSV infection of human airway epithelial cells causes production of the beta-chemokine RANTES. Becker S, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):L512-20

Infant respiratory function after RSV-proven bronchiolitis. Dezateux C, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1349-55

Persistence of respiratory syncytial virus (RSV) infection and development of RSV-specific IgG1 response in a guinea-pig model of acute bronchiolitis. Dakhama A, et al. **Eur Respir J** 1997 Jan;10(1):20-6

Persistence of airway hyperresponsiveness and viral antigen following respiratory syncytial virus bronchiolitis in young guinea-pigs. Riedel F, et al. **Eur Respir J** 1997 Mar; 10(3):639-45

Respiratory syncytial virus induces selective production of the chemokine RANTES by upper airway epithelial cells. Saito T, et al. **J Infect Dis** 1997 Mar;175(3):497-504

Increased airway reactivity in human RSV bronchiolitis in the guinea pig is not due to increased wall thickness. Robinson PJ, et al. **Pediatr Pulmonol** 1996 Oct;22(4):248-54

Experimental infections with some pneumotropic viruses in the mouse. Note II. Virological and pathomorphological aspects of experimental associated infections with parainfluenza virus, adenovirus and respiratory syncytial virus in the mouse. Petica M, et al. **Rom J Virol** 1995 Jul-Dec;46(3-4):145-60

RESPIRATORY SYNCYTIAL VIRUS INFECTIONS

PREVENTION & CONTROL

Nosocomial respiratory syncytial virus infections: prevention and control in bone marrow transplant patients. Garcia R, et al. **Infect Control Hosp Epidemiol** 1997 Jun;18(6):412–6

The guinea pig as a model for the study of maternal immunization against respiratory syncytial virus infections in infancy. Buraphacheep W, et al. **J Infect Dis** 1997 Apr; 175(4):935–8

Immunoprophylaxis of group B respiratory syncytial virus infection in cotton rats. Faverio LA, et al. **J Infect Dis** 1997 Apr;175(4):932–4

Assault against respiratory syncytial virus: beginning of an era. Abzug MJ. **Lancet** 1997 Mar 15;349(9054):743–4

Respigam for protection against RSV. Burke SM. **MCN Am J Matern Child Nurs** 1996 Sep–Oct;21(5):258

Prophylaxis for severe respiratory syncytial virus disease [news] Kupecz D. **Nurse Pract** 1996 Sep;21(9):116–8 (8 ref.)

Prevention of respiratory syncytial virus infection in high risk infants: consensus opinion on the role of immunoprophylaxis with respiratory syncytial virus hyperimmune globulin. Meissner HC, et al. **Pediatr Infect Dis J** 1996 Dec;15(12):1059–68 (51 ref.)

Reduction of respiratory syncytial virus hospitalization among premature infants and infants with bronchopulmonary dysplasia using respiratory syncytial virus immune globulin prophylaxis. The PREVENT Study Group [see comments] **Pediatrics** 1997 Jan;99(1):93–9. Comment in: Pediatrics 1997 Aug;100(2 Pt 1):275–6.

Respiratory syncytial virus immune globulin intravenous: indications for use. American Academy of Pediatrics Committee on Infectious Diseases, Committee on Fetus and Newborn. **Pediatrics** 1997 Apr;99(4):645–50

RespiGam/PREVENT study questioned [letter; comment] Bouthillier MJ. **Pediatrics** 1997 Aug;100(2 Pt 1):275–6. Comment on: Pediatrics 1997 Jan;99(1):93–9.

Immunoprophylaxis and the control of respiratory syncytial virus disease. Meissner HC, et al. **Pediatrics** 1997 Aug;100(2 Pt 1):260–3

RSV-IGIV therapy: a cost/benefit analysis [letter] Thakur BK, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):417–8

Cost-effectiveness of RespiGam at a university teaching hospital [letter] Veerman M, et al. **Pediatrics** 1997 Jul; 100(1):160–1

Involvement of the complement system in the protection of mice from challenge with respiratory syncytial virus Long strain following passive immunization with monoclonal antibody 18A2B2. Corbeil S, et al. **Vaccine** 1996 Apr; 14(6):521–5

Safety and immunogenicity of a respiratory syncytial virus subunit vaccine (PFP-2) in the institutionalized elderly. Falsey AR, et al. **Vaccine** 1997 Jul;15(10):1130–2

Adjuvants influence the quantitative and qualitative immune response in BALB/c mice immunized with respiratory syncytial virus FG subunit vaccine. Neuzil KM, et al. **Vaccine** 1997 Apr;15(5):525–32

Subgroup specific protection of mice from respiratory syncytial virus infection with peptides encompassing the amino acid region 174–187 from the G glycoprotein: the role of cysteinyl residues in protection. Simard C, et al. **Vaccine** 1997 Mar;15(4):423–32

Induction of protective immunity in rodents by vaccination with a prokaryotically expressed recombinant fusion protein containing a respiratory syncytial virus G protein fragment. Power UF, et al. **Virology** 1997 Apr 14; 230(2):155–66

[Nosocomial infections due to syncytial respiratory virus: which hygienic measures] Sizun J, et al. **Arch Pediatr** 1996 Jul;3(7):723–7 (34 ref.) (Eng. Abstr.) **(Fre)**

THERAPY

Respiratory syncytial virus pneumonia ventilated with high-frequency oscillatory ventilation. Medbø S, et al. **Acta Paediatr** 1997 Jul;86(7):766–8

New guidelines proposed for use of RSV immune globulin [news] **Am J Health Syst Pharm** 1997 May 1;54(9):1025

Immunotherapy of respiratory syncytial virus pneumonia following bone marrow transplantation. De Vincenzo JP, et al. **Bone Marrow Transplant** 1996 Jun;17(6):1051–6

Invasive monitoring in infants with respiratory syncytial virus infection. Willson DF, et al. **J Pediatr** 1996 Mar; 128(3):357–62

Prevention of respiratory syncytial virus infection in high risk infants: consensus opinion on the role of immunoprophylaxis with respiratory syncytial virus hyperimmune globulin. Meissner HC, et al. **Pediatr Infect Dis J** 1996 Dec;15(12):1059–68 (51 ref.)

Reducing the morbidity of lower respiratory tract infections caused by respiratory syncytial virus: still no answer [see comments] Prober CG, et al. **Pediatrics** 1997 Mar; 99(3):472–5. Comment in: Pediatrics 1997 Mar;99(3):454–61.

Respiratory syncytial virus (RSV) immune globulin intravenous therapy for RSV lower respiratory tract infection in infants and young children at high risk for severe RSV infections: Respiratory Syncytial Virus Immune Globulin Study Group [see comments] Rodriguez WJ, et al. **Pediatrics** 1997 Mar;99(3):454–61. Comment in: Pediatrics 1997 Mar;99(3):472–5.

Bronchiolitis. Bar-on ME, et al. **Prim Care** 1996 Dec; 23(4):805–19 (64 ref.)

VETERINARY

Antibody responses against the G and F proteins of bovine respiratory syncytial virus after experimental and natural infections. Schrijver RS, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):500–6

Serological studies of bovine respiratory syncytial virus in feedlot cattle in South Africa. Van Vuuren M. **J S Afr Vet Assoc** 1990 Dec;61(4):168–9

Standardization of enzyme-linked immunosorbent assays (ELISAs) for quantitative estimation of antibodies specific for infectious bovine rhinotracheitis virus, respiratory syncytial virus, parainfluenza-3 virus, and bovine viral diarrhea virus. Graham DA, et al. **J Vet Diagn Invest** 1997 Jan;9(1):24–31

Immunization with a peptide derived from the G glycoprotein of bovine respiratory syncytial virus (BRSV) reduces the incidence of BRSV-associated pneumonia in the natural host. Bastien N, et al. **Vaccine** 1997 Aug–Sep; 15(12–13):1385–90

Antigens of bovine respiratory syncytial virus in peripheral blood lymphocytes of experimentally infected lambs. Sharma AK, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1–2):93–104

Cell-mediated immune responses of lambs to experimental infection with bovine respiratory syncytial virus. Sharma AK, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1–2):79–91

Subgrouping of bovine respiratory syncytial virus strains detected in lung tissue. Schrijver RS, et al. **Vet Microbiol** 1996 Dec;53(3–4):253–60

Experimental reproduction of respiratory disease in calves with non-cell-culture-passaged bovine respiratory syncytial virus. van der Poel WH, et al. **Vet Q** 1996 Sep; 18(3):81–6

Viral aetiology of enzootic pneumonia in Danish dairy herds: diagnostic tools and epidemiology. Uttenthal A, et al. **Vet Rec** 1996 Aug 3;139(5):114–7

Pathological study of experimentally induced bovine respiratory syncytial viral infection in lambs. Masot AJ, et al. **Zentralbl Veterinarmed [B]** 1996 Jun;43(4):233–43

VIROLOGY

Reverse transcription-polymerase chain reaction amplification of respiratory syncytial virus genome from neonatal nasal swab samples. Yoshio H, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):429–33

Amiloride inhibits cytokine production in epithelium infected with respiratory syncytial virus. Mastronarde JG, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):L201–7

Restriction pattern variability of respiratory syncytial virus during three consecutive epidemics in Denmark. Johansen J, et al. **APMIS** 1997 Apr;105(4):303–8

Relationship between clinical severity of respiratory syncytial virus infection and subtype. Kneyber MC, et al. **Arch Dis Child** 1996 Aug;75(2):137–40

Identification of a variant subgroup A strain of respiratory syncytial virus. Mufson MA, et al. **J Clin Microbiol** 1996 Oct;34(10):2493–6

Severity of respiratory syncytial virus infection is related to virus strain. Walsh EE, et al. **J Infect Dis** 1997 Apr; 175(4):814–20

Recovery of infectious respiratory syncytial virus expressing an additional, foreign gene. Bukreyev A, et al. **J Virol** 1996 Oct;70(10):6634–41

Detection of respiratory syncytial virus from clinical specimens: comparison between reverse transcription polymerase chain reaction and tissue culture. Tantivanich S, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec;26(4):684–8

[Characteristics of anti-respiratory syncytial humoral immunity during persistence of respiratory syncytial virus antigens in adult patients with chronic obstructive bronchitis] Krivitskaia VZ, et al. **Vopr Virusol** 1996 Sep–Oct;41(5):234–7 (Eng. Abstr.) **(Rus)**

RESPIRATORY SYNCYTIAL VIRUSES

Surfactant dysfunction develops in BALB/c mice infected with respiratory syncytial virus. Van Schaik SM, et al. **Pediatr Res** 1997 Aug;42(2):169–73

RSV-IGIV therapy: a cost/benefit anal; sis [letter] Thakur BK, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):417–8

Cost-effectiveness of RespiGam at a university teaching hospital [letter] Veerman M, et al. **Pediatrics** 1997 Jul; 100(1):160–1

Stabilization of respiratory syncytial virus (RSV) against thermal inactivation and freeze-thaw cycles for development and control of RSV vaccines and immune globulin [published erratum appears in Vaccine 1997 Feb;15(2):247] Gupta CK, et al. **Vaccine** 1996 Oct; 14(15):1417–20

Expression and characterisation of the NS1 and NS2 proteins of respiratory syncytial virus. Evans JE, et al. **Virus Res** 1996 Aug;43(2):155–61

CHEMISTRY

Phosphoprotein profile analysis of ruminant respiratory syncytial virus isolates. Shadomy SV, et al. **Am J Vet Res** 1997 May;58(5):478–81

CLASSIFICATION

Identification of a variant subgroup A strain of respiratory syncytial virus. Mufson MA, et al. **J Clin Microbiol** 1996 Oct;34(10):2493–6

Severity of respiratory syncytial virus infection is related to virus strain. Walsh EE, et al. **J Infect Dis** 1997 Apr; 175(4):814–20

DRUG EFFECTS

Effect of human milk prostaglandins and lactoferrin on respiratory syncytial virus and rotavirus. Grover M, et al. **Acta Paediatr** 1997 Mar;86(3):315–6

Potent inhibition of respiratory syncytial virus by polyoxometalates of several structural classes. Barnard DL, et al. **Antiviral Res** 1997 Mar;34(1):27–37

Inhibition of respiratory syncytial virus replication by antisense oligodeoxyribonucleotides. Jairath S, et al. **Antiviral Res** 1997 Feb;33(3):201–13

Recombinant superoxide dismutase (SOD) administered by aerosol inhibits respiratory syncytial virus infection in cotton rats. Wyde PR, et al. **Antiviral Res** 1996 Jul; 31(3):173–84

Inhibition of viral replication reverses respiratory syncytial virus-induced NF-kappaB activation and interleukin-8 gene expression in A549 cells. Fiedler MA, et al. **J Virol** 1996 Dec;70(12):9079–82

Aerosolized immunoglobulin treatment of respiratory syncytial virus infection in infants. Rimensberger PC, et al. **Pediatr Infect Dis J** 1996 Mar;15(3):209–16

Targeting RNA decay with 2',5' oligoadenylate–antisense in respiratory syncytial virus-infected cells. Cirino NM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1937–42

[Features of the antiviral effect of carbocyclic compounds depending on their concentration] Boreko EI, et al. **Vopr Virusol** 1996 May–Jun;41(3):129–33 (Eng. Abstr.) **(Rus)**

GENETICS

Recovery of infectious respiratory syncytial virus expressing an additional, foreign gene. Bukreyev A, et al. **J Virol** 1996 Oct;70(10):6634–41

Effects of mutations in the gene-start and gene-end sequence motifs on transcription of monocistronic and dicistronic minigenomes of respiratory syncytial virus. Kuo L, et al. **J Virol** 1996 Oct;70(10):6892–901

RNA replication by a respiratory syncytial virus RNA analog does not obey the rule of six and retains a nonviral trinucleotide extension at the leader end. Samal SK, et al. **J Virol** 1996 Aug;70(8):5075–82

Nucleotide sequence analysis of the respiratory syncytial virus subgroup A cold-passaged (cp) temperature sensitive (ts) cpts-248/404 live attenuated virus vaccine candidate. Firestone CY, et al. **Virology** 1996 Nov 15;225(2):419–22

Membrane permeability changes induced in Escherichia coli by the SH protein of human respiratory syncytial virus. Perez M, et al. **Virology** 1997 Sep 1;235(2):342–51

Baculovirus expression of the respiratory syncytial virus fusion protein using Trichoplusia ni insect cells. Parrington M, et al. **Virus Genes** 1997;14(1):63–72

GROWTH & DEVELOPMENT

Maturation of respiratory syncytial virus within HEp-2 cell cytoplasm. Arslanagic E, et al. **Acta Virol** 1996 Sep; 40(4):209–14

IMMUNOLOGY

The effect of respiratory virus infection on expression of cell surface antigens associated with binding of potentially pathogenic bacteria. Elahmer OR, et al. **Adv Exp Med Biol** 1996;408:169–77 (26 ref.)

Cytokine- and virus-stimulated airway smooth muscle cells produce IL-11 and other IL-6-type cytokines. Elias JA, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L648–55

Respiratory syncytial virus triggers synthesis of IL-6 in BALB/c mouse alveolar macrophages in the absence of virus replication. Stadnyk AW, et al. **Cell Immunol** 1997 Mar 15;176(2):122–6

Prevalence of neutralizing antibody to respiratory syncytial virus in sera from mothers and newborns residing in the Gambia and in The United States. Suara RO, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):477–9

Respiratory syncytial virus-induced cytokine production by neonatal macrophages. Tsutsumi H, et al. **Clin Exp Immunol** 1996 Dec;106(3):442–6

Antibodies against Chlamydia pneumoniae, cytomegalovirus, enteroviruses and respiratory syncytial virus in patients with polymyalgia rheumatica. Uddhammar A, et al. **Clin Exp Rheumatol** 1997 May–Jun;15(3):299–302

Persistence of respiratory syncytial virus (RSV) infection and development of RSV-specific IgG1 response in a guinea-pig model of acute bronchiolitis. Dakhama A, et al. **Eur Respir J** 1997 Jan;10(1):20–6

Peptide mimics of a conformationally constrained protective epitopes of respiratory syncytial virus fusion protein. Chargelegue D, et al. **Immunol Lett** 1997 Jun 1;57(1–3):15–7

Detection of antibodies to respiratory syncytial virus attachment and nucleocapsid proteins with recombinant baculovirus-expressed antigens. Buraphacheep W, et al. **J Clin Microbiol** 1997 Feb;35(2):354–7

A subtype-specific peptide-based enzyme immunoassay for

detection of antibodies to the G protein of human respiratory syncytial virus is more sensitive than routine serological tests. Langedijk JP, et al. **J Clin Microbiol** 1997 Jul;35(7):1656–60

Virus-specific CD8+ T lymphocytes downregulate T helper cell type 2 cytokine secretion and pulmonary eosinophilia during experimental murine respiratory syncytial virus infection. Srikiatkhachorn A, et al. **J Exp Med** 1997 Aug 4;186(3):421–32

Th1 and Th2 cytokine induction in pulmonary T cells during infection with respiratory syncytial virus. Hussell T, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2447–55

Respiratory syncytial virus infection of human respiratory epithelial cells up-regulates class I MHC expression through the induction of IFN-beta and IL-1 alpha. Garofalo R, et al. **J Immunol** 1996 Sep 15;157(6):2506–13

IL-12 treatment attenuates T helper cell type 2 and B cell responses but does not improve vaccine-enhanced lung illness. Hussell T, et al. **J Immunol** 1997 Jul 1;159(1):328–34

Diagnosis of respiratory virus infections using GACELISA of urinary antibodies. Ireland DC, et al. **J Immunol Methods** 1996 Sep 9;195(1-2):73–80

The guinea pig as a model for the study of maternal immunization against respiratory syncytial virus infections in infancy. Buraphacheep W, et al. **J Infect Dis** 1997 Apr; 175(4):935–8

Immunoprophylaxis of group B respiratory syncytial virus infection in cotton rats. Faverio LA, et al. **J Infect Dis** 1997 Apr;175(4):932–4

Increase in CD23+ B cells in infants with bronchiolitis is accompanied by appearance of IgE and IgG4 antibodies specific for respiratory syncytial virus. Rabatić S, et al. **J Infect Dis** 1997 Jan;175(1):32–7

ICAM-1 expression and low-molecular-weight G-protein activation of human bronchial epithelial cells (A549) infected with RSV. Arnold R, et al. **J Leukoc Biol** 1996 Dec;60(6):766–71

Respiratory syncytial virus specific serum antibodies in infants under six months of age: limited serological response upon infection. Brandenburg AH, et al. **J Med Virol** 1997 May;52(1):97–104

Analysis of linear epitopes recognised by the primary human antibody response to a variable region of the attachment (G) protein of respiratory syncytial virus. Cane PA. **J Med Virol** 1997 Apr;51(4):297–304

Different patterns of cytokine induction in cultures of respiratory syncytial (RS) virus-specific human TH cell lines following stimulation with RS virus and RS virus proteins. Jackson M, et al. **J Med Virol** 1996 Jul;49(3):161–9

Virus-specific memory and effector T lymphocytes exhibit different cytokine responses to antigens during experimental murine respiratory syncytial virus infection. Srikiatkhachorn A, et al. **J Virol** 1997 Jan;71(1):678–85

Priming with live respiratory syncytial virus (RSV) prevents the enhanced pulmonary inflammatory response seen after RSV challenge in BALB/c mice immunized with formalin-inactivated RSV. Waris ME, et al. **J Virol** 1997 Sep;71(9):6935–9

Respiratory syncytial virus immunology. Kimpen JL. **Pediatr Allergy Immunol** 1996;7(9 Suppl):86–90 (38 ref.)

Prevalence of antibodies against respiratory viruses (parainfluenza virus type 3, respiratory syncytial virus, reovirus and adenovirus) in relation to productivity in Syrian Awassi sheep. Giangaspero M, et al. **Trop Anim Health Prod** 1997 May;29(2):83–91

Involvement of the complement system in the protection of mice from challenge with respiratory syncytial virus Long strain following passive immunization with monoclonal antibody 18A2B2. Corbeil S, et al. **Vaccine** 1996 Apr; 14(6):521–5

Safety and immunogenicity of a respiratory syncytial virus subunit vaccine (PFP-2) in ambulatory adults over age 60. Falsey AR, et al. **Vaccine** 1996 Sep;14(13):1214–8

Immune responses of lambs to the fusion (F) glycoprotein of bovine respiratory syncytial virus expressed on insect cells infected with a recombinant baculovirus. Sharma AK, et al. **Vaccine** 1996 Jun;14(8):773–9

Subgroup specific protection of mice from respiratory syncytial virus infection with peptides encompassing the amino acid region 174–187 from the G glycoprotein: the role of cysteinyl residues in protection. Simard C, et al. **Vaccine** 1997 Mar;15(4):423–32

ISOLATION & PURIFICATION

Detection of respiratory syncytial virus, parainfluenzavirus 3, adenovirus and rhinovirus sequences in respiratory tract of infants by polymerase chain reaction and hybridization. Freymuth F, et al. **Clin Diagn Virol** 1997 May;8(1):31–40

Microwave-accelerated direct immunofluorescent staining for respiratory syncytial virus and influenza A virus. Hite SA, et al. **J Clin Microbiol** 1996 Jul;34(7):1819–20

Isolation of viruses from clinical specimens in microtitre plates with cells inoculated in suspension. O'Neill HJ, et al. **J Virol Methods** 1996 Dec;62(2):169–78

Rapid detection of respiratory syncytial virus by indirect immunofluorescence in infants hospitalized with acute respiratory disease. Goyenechea A, et al. **Mem Inst Oswaldo Cruz** 1996 Jul-Aug;91(4):489–90

METABOLISM

Transcriptional activation of the interleukin-8 gene by respiratory syncytial virus infection in alveolar epithelial cells: nuclear translocation of the RelA transcription factor as a mechanism producing airway mucosal inflammation. Garofalo R, et al. **J Virol** 1996 Dec;70(12):8773–81

PATHOGENICITY

RSV infection of human airway epithelial cells causes production of the beta-chemokine RANTES. Becker S, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):L512–20

Respiratory syncytial virus infection in the elderly. Mlinaric-Galinovic G, et al. **Eur J Clin Microbiol Infect Dis** 1996 Oct;15(10):777–81 (71 ref.)

Morphological studies of the respiratory syncytial virus induced bronchiolitis in experimentally infected calves. Philippou S, et al. **Pathol Res Pract** 1996 Oct; 192(10):1045–56

PHYSIOLOGY

Mechanism of RSV-induced IL-8 gene expression in A549 cells before viral replication. Fiedler MA, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L963–71

Analysis of bovine respiratory syncytial virus envelope glycoproteins in cell fusion. Pastey MK, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1885–9

Increased expression of the N protein of respiratory syncytial virus stimulates minigenome replication but does not alter the balance between the synthesis of mRNA and antigenome. Fearns R, et al. **Virology** 1997 Sep 15; 236(1):188–201

RESPIRATORY SYSTEM

Proceedings of the 5th International Inhalation Symposium. Hannover, Germany, 20–24 February 1995. **Exp Toxicol Pathol** 1996 Nov;48(6):477–550

Mucous cell metaplasia in the airways of rats exposed to machining fluids. Gordon T, et al. **Fundam Appl Toxicol** 1995 Dec;28(2):274–82

Pediatric aerodigestive foreign body injuries are complications related to timeliness of diagnosis. Reilly J, et al. **Laryngoscope** 1997 Jan;107(1):17–20

Smoke inhalation among firefighters. Bizovi KE, et al. **Occup Med** 1995 Oct-Dec;10(4):721–33 (52 ref.)

ABNORMALITIES

Congenital thoracic masses: imaging features in the adult. Raymond GS, et al. **Crit Rev Diagn Imaging** 1997; 38(2):115–205 (68 ref.)

Lung involvement in the multisystem syndrome CHARGE association. Sporik R, et al. **Eur Respir J** 1997 Jun; 10(6):1354–5

Foolers: things that look like pneumonia in children. Oermann CM, et al. **Semin Respir Infect** 1996 Sep; 11(3):204–13 (31 ref.)

ANATOMY & HISTOLOGY

The airways and anaesthesia—I. Anatomy, physiology and fluid mechanics. Burwell DR, et al. **Anaesthesia** 1996 Sep; 51(9):849–57 (40 ref.)

Histological characteristics of respiratory system in Brown Norway rat. Ohtsuka R, et al. **Exp Anim** 1997 Apr; 46(2):127–33

Superior laryngeal nerve section alters responses to upper airway distortion in sleeping dogs. Curran AK, et al. **J Appl Physiol** 1997 Sep;83(3):768–75

Estimation of thickness of airway surface liquid in ferret trachea in vitro. Duneclift S, et al. **J Appl Physiol** 1997 Sep;83(3):761–7

Effects of bronchial vascular engorgement on airway dimensions. Wagner EM, et al. **J Appl Physiol** 1996 Jul; 81(1):293–301

A general model for the origin of allometric scaling laws in biology [see comments] West GB, et al. **Science** 1997 Apr 4;276(5309):122–6. Comment in: Science 1997 Apr 4;276(5309):34.

BLOOD SUPPLY

Endothelin-A receptor antagonist BQ-610 blocks cigarette smoke-induced mitogenesis in rat airways and vessels. Dadmanesh F, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L614–8

Importance of airway blood flow on particle clearance from the lung. Wagner EM, et al. **J Appl Physiol** 1996 Nov; 81(5):1878–83

Airway blood flow responses to temperature and humidity of inhaled air. Le Merre C, et al. **Respir Physiol** 1996 Sep; 105(3):235–9

CHEMISTRY

Nitric oxide from the human respiratory tract efficiently quantified by standardized single breath measurements. Högman M, et al. **Acta Physiol Scand** 1997 Apr; 159(4):345–6

Airway neuropeptides and neutral endopeptidase in asthma [editorial] Chung KF. **Clin Exp Allergy** 1996 May; 26(5):491–3

Lipid peroxidation and ascorbic acid status in respiratory organs of male and female freshwater catfish Heteropneustes fossilis exposed to temperature increase. Parihar MS, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1995 Nov;112(3):309–13

Cellular and subcellular localization along the digestive and pulmonary tracts of a rabbit intestinal mucin differing from MUC2 and containing a 150 kDa light chain. Nicoletti C, et al. **Eur J Cell Biol** 1997 Aug;73(4):321–31

Structures of sulfated oligosaccharides isolated from the respiratory mucins of a non-secretor (O, Le(a + b -)) patient suffering from chronic bronchitis. Lo-Guidice JM, et al. **Glycoconj J** 1997 Jan;14(1):113–25

Distribution of two VIP-related peptides, helospectin and pituitary adenylate cyclase activating peptide (PACAP), in the human upper respiratory system. Hauser-Kronberger C, et al. **Regul Pept** 1996 Sep 16;65(3):203–9

[Surfactants of the airways. Critical review and personal research] Mira E, et al. **Acta Otorhinolaryngol Ital** 1997 Feb;17(1 Suppl 56):3–16 (77 ref.) (Eng. Abstr.) **(Ita)**

CYTOLOGY

Endothelin-A receptor antagonist BQ-610 blocks cigarette smoke-induced mitogenesis in rat airways and vessels. Dadmanesh F, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L614–8

Inhibition of ERK activation attenuates endothelin-stimulated airway smooth muscle cell proliferation. Whelchel A, et al. **Am J Respir Cell Mol Biol** 1997 May;16(5):589–96

Interactions of Bacteria with Airway Cells and Secretions. Proceedings of the 11th Transatlantic Airway Conference. Lucerne, Switzerland, January 11–12, 1996. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S131–206

Airway mucosa: secretory cells, mucus and mucin genes [see comments] Jeffery PK, et al. **Eur Respir J** 1997 Jul; 10(7):1655–62 (63 ref.). Comment in: Eur Respir J 1997 Jul;10(7):1438.

Establishment of in vitro systems from the respiratory tract of different species for the investigation of PAH metabolism. Emura M, et al. **Exp Toxicol Pathol** 1995 Dec; 47(6):434–9

Induction of a cAMP-stimulated chloride secretion in regenerating poorly differentiated airway epithelial cells by adenovirus-mediated CFTR gene transfer. Dupuit F, et al. **Hum Gene Ther** 1997 Aug 10;8(12):1439–50

Stem cells of the respiratory epithelium and their in vitro cultivation. Emura M. **In Vitro Cell Dev Biol Anim** 1997 Jan;33(1):3–14 (100 ref.)

DRUG EFFECTS

Lung distension and carbon dioxide affect pulmonary nitric oxide formation in the anaesthetized rabbit. Strömberg S, et al. **Acta Physiol Scand** 1997 Jan;159(1):59–67

Mechanisms of pollution-induced airway disease: in vitro studies in the upper and lower airways. Devalia JL, et al. **Allergy** 1997;52(38 Suppl):45–51; discussion 57–8 (37 ref.)

Cardiorespiratory and tissue oxygen dose response to rat endotoxemia. Rosser DM, et al. **Am J Physiol** 1996 Sep; 271(3 Pt 2):H891–5

The epithelium as a target of glucocorticoid action in the treatment of asthma. Schwiebert LM, et al. **Am J Respir Crit Care Med** 1996 Aug;154(2 Pt 2):S16–9; discussion S19–20 (35 ref.)

Halothane attenuation of calcium sensitivity in airway smooth muscle. Mechanisms of action during muscarinic receptor stimulation. Bremarich DH, et al. **Anesthesiology** 1997 Jul; 87(1):94–101

Site(s) mediating sympathetic activation with desflurane. Muzi M, et al. **Anesthesiology** 1996 Oct;85(4):737–47

The effect of isoflurane, halothane, sevoflurane, and thiopental/nitrous oxide on respiratory system resistance after tracheal intubation. Rooke GA, et al. **Anesthesiology** 1997 Jun;86(6):1294–9

An attempt to define a just detectable effect for airborne chemicals on the respiratory tract in mice. Boylstein LA, et al. **Arch Toxicol** 1996;70(9):567–78

Effect of a new dual neurokinin antagonist on airway smooth muscle in situ. Shioya T, et al. **Arzneimittelforschung** 1995 Nov;45(11):1194–7

Modification of cardiopulmonary and intestinal motility effects of xylazine with glycopyrrolate in horses. Singh S, et al. **Can J Vet Res** 1997 Apr;61(2):99–107

Toxicity of ferric oxide and benzo[a]pyrene alone or in combination in respiratory tract of Sprague Dawley rats. Gosset P, et al. **Cent Eur J Public Health** 1996;4 Suppl:56–7

Clinical studies of effects of nitrogen oxides in healthy and asthmatic subjects. Kjaergaard SK, et al. **Cent Eur J Public Health** 1996;4 Suppl:23–6 (18 ref.)

Mechanisms of action of some air pollutants on the airways. Višňovský P, et al. **Cent Eur J Public Health** 1996;4 Suppl:15–6

Cardiorespiratory and renal responses to arterial chemoreceptor stimulation by hypoxia or almitrine in men. Brauer H, et al. **Clin Exp Pharmacol Physiol** 1996 Dec; 23(12):1021–7

Pharmacokinetics and ventilatory effects of oxycodone before and after liver transplantation. Tallgren M, et al. **Clin Pharmacol Ther** 1997 Jun;61(6):655–61

Differential responses of asthmatic airways to enantiomers of albuterol. Implications for clinical treatment of asthma. Perrin-Fayolle M, et al. **Clin Rev Allergy Immunol** 1996 Spring;14(1):139–47

Tachykinins and central respiratory activity: an in vitro study on the newborn rat. Monteau R, et al. **Eur J Pharmacol** 1996 Oct 24;314(1–2):41–50

The effect of chloroform–extractable secondary metabolites of filamentous fungi on the movement of respiratory tract cilia of one–day–old chicks in vitro. Piecková E, et al. **Folia Microbiol (Praha)** 1995;40(1):123–7

Noise stress and airway toxicity: a prospect for experimental analysis. Van Raaij MT, et al. **Food Chem Toxicol** 1996 Nov–Dec;34(11–12):1159–61 (15 ref.)

Dimethyl sulfate uptake and methylation of DNA in rat respiratory tissues following acute inhalation. Mathison BH, et al. **Fundam Appl Toxicol** 1995 Dec;28(2):255–63

Toxic effects of acute inhalation exposure to 1,2,4–trimethylbenzene (pseudocumene) in experimental animals. Korsak Z, et al. **Int J Occup Med Environ Health** 1995;8(4):331–7

Effect of Diazinon PLUS on rapidly adapting receptors in the rabbit. Campbell H, et al. **J Appl Physiol** 1996 Dec; 81(6):2604–10

RTN TRH causes prolonged respiratory stimulation. Cream CL, et al. **J Appl Physiol** 1997 Sep;83(3):792–9

Lung mechanics and pulmonary but not systemic vascular responses to ET–1 are Tx and infusion rate dependent. Faltin DL, et al. **J Appl Physiol** 1996 May;80(5):1716–23

Esophageal stimulation by hydrochloric acid causes neurogenic inflammation in the airways in guinea pigs. Hamamoto J, et al. **J Appl Physiol** 1997 Mar;82(3):738–45

Mass–transport models to predict toxicity of inhaled gases in the upper respiratory tract. Hubal EA, et al. **J Appl Physiol** 1996 Apr;80(4):1415–27

Thromboxane causes airway hyperresponsiveness after cigarette smoke–induced neurogenic inflammation. Matsumoto K, et al. **J Appl Physiol** 1996 Dec;81(6):2358–64

Eicosanoids modulate hyperpnea–induced bronchoconstriction in canine peripheral airways. Omori C, et al. **J Appl Physiol** 1996 Sep;81(3):1255–63

Pulmonary clearance and lung function: influence of acute tobacco intoxication and of vitamin E. Scherrer–Crosbie M, et al. **J Appl Physiol** 1996 Sep;81(3):1071–7

Greater airway narrowing in immature than in mature rabbits during methacholine challenge. Shen X, et al. **J Appl Physiol** 1996 Dec;81(6):2637–43

Effects of exogenous surfactant on lung pressure–volume characteristics during liquid ventilation. Tarczy–Hornoch P, et al. **J Appl Physiol** 1996 May;80(5):1764–71

Effects of a synthetic lung surfactant on pharyngeal patency in awake human subjects. Van der Touw T, et al. **J Appl Physiol** 1997 Jan;82(1):78–85

Acute histamine–induced flux of airway liquid: role of neuropeptides. Yager D, et al. **J Appl Physiol** 1996 Apr; 80(4):1285–95

In vitro and in vivo assessment of the pulmonary toxicity of cellulose. Adamis Z, et al. **J Appl Toxicol** 1997 Mar–Apr; 17(2):137–41

Evaluation of the respiratory tract after acute exposure to a pyrotechnically generated aerosol fire suppressant. Smith EA, et al. **J Appl Toxicol** 1997 Mar–Apr;17(2):95–103

Toxic damage to the respiratory epithelium induces acute phase changes in vitamin A metabolism without depleting retinol stores of South African children. Willumsen JF, et al. **J Nutr** 1997 Jul;127(7):1339–43

Effects of potassium–channel opener HOE 234 in guinea–pig airways. Redemann B, et al. **J Pharm Pharmacol** 1996 Jun; 48(6):619–23

Effects of occupational dust exposure on the respiratory health of Portland cement workers. Yang CY, et al. **J Toxicol Environ Health** 1996 Dec 27;49(6):581–8

Respiratory and analgesic effects of meperidine and tramadol in patients undergoing orthopedic surgery. Tarradell R, et al. **Methods Find Exp Clin Pharmacol** 1996 Apr; 18(3):211–8

cAMP modulates an S–type K+ channel coupled to GABAB receptors in mammalian respiratory neurons. Wagner PG, et al. **Neuroreport** 1997 May 6;8(7):1667–70

The effect of human calcitonin gene–related peptide on eosinophil chemotaxis in the rat airway. Bellibaş SE. **Peptides** 1996;17(3):563–4

Effects of long–term high oxygen concentration breathing on defensive respiratory reflexes in guinea–pigs. Hanacek J, et al. **Pulm Pharmacol** 1996 Oct–Dec;9(5–6):367–8

The effects of nedocromil sodium and sodium cromoglycate on airway nerves and neurogenic responses in asthma. Norris AA. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):227–30 (31 ref.)

Drugs affecting neurotransmitter release in the airways. Spina D. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):217–25 (117 ref.)

Role of vagal lung C–fibres in the cardiorespiratory effects of capsaicin in monkeys. Ravi K, et al. **Respir Physiol** 1996 Nov;106(2):137–51

Ozone–induced toxicity in experimental animals and isolated cell systems. Gustafsson LE, et al. **Scand J Work Environ Health** 1996;22 Suppl 3:27–41 (93 ref.)

Organophosphate pesticides—neurological and respiratory toxicity [letter; comment] Maurissen JP. **Toxicol Ind Health** 1997 Jan–Feb;13(1):91–3, 95–7. Comment on: Toxicol Ind Health 1995 Jan–Feb;11(1):33–9.

Cardiopulmonary effects of combinations of medetomidine hydrochloride and atropine sulphate in dogs. Alibhai HI, et al. **Vet Rec** 1996 Jan 6;138(1):11–3

Increased airway pressure in response to xylazine is inhibited by both atipamezole and atropine in sheep. Papazoglou L, et al. **Zentralbl Veterinarmed A** 1994 Sep;41(7):568–72

[Atenolol: its cardiorespiratory effects at birth in a premature infant] Zanardo V, et al. **Pediatr Med Chir** 1997 May–Jun; 19(3):149–51 (8 ref.) **(Ita)**

[Influence of vapours of paint and toxic dusts on mucous membranes of the upper airways in paint and varnish factory workers] Pośpiech L, et al. **Med Pr** 1996; 47(5):445–53 (Eng. Abstr.) **(Pol)**

EMBRYOLOGY

Regulated Breathless receptor tyrosine kinase activity required to pattern cell migration and branching in the Drosophila tracheal system. Lee T, et al. **Genes Dev** 1996 Nov 15;10(22):2912–21

Use of the novel carbocyanine tracer fast–DiI for investigating upper respiratory tract cranial nerves in prenatal rats. Friedland DR, et al. **Lab Anim Sci** 1996 Apr; 46(2):220–5

ENZYMOLOGY

Airway neuropeptides and neutral endopeptidase in asthma [editorial] Chung KF. **Clin Exp Allergy** 1996 May; 26(5):491–3

[Fibrinogenolytic activity of a novel trypsin–like enzyme found in human airways] Tsuchihashi S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan;35(1):49–55 (Eng. Abstr.) **(Jpn)**

GROWTH & DEVELOPMENT

[Postnatal development of breathing control] Schäfer T, et al. **Pneumologie** 1997 Apr;51 Suppl 2:411–4 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Immune functions and immunopathology of the mucosa of the upper respiratory pathways. Brandtzaeg P, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):149–59 (72 ref.)

Recovery of gut–associated lymphoid tissue and upper respiratory tract immunity after parenteral nutrition. Janu P, et al. **Ann Surg** 1997 Jun;225(6):707–15; discussion 715–7

Workshop overview. Identification of respiratory allergens. Kimber I, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):1–10

Steroids inhibit uptake and/or processing but not presentation of antigen by airway dendritic cells. Holt PG, et al. **Immunology** 1997 May;91(1):145–50

The role of alveolar macrophages in Pneumocystis carinii elimination from the lower respiratory tract. Limper AH, et al. **J Eukaryot Microbiol** 1996 Sep–Oct;43(5):12S

Allergic eosinophil–rich inflammation develops in lungs and airways of B cell–deficient mice. Korsgren M, et al. **J Exp Med** 1997 Mar 3;185(5):885–92

Immunomodulation of afferent neurons in guinea–pig isolated airway. Riccio MM, et al. **J Physiol (Lond)** 1996 Mar 1; 491 (Pt 2):499–509

T–lymphocytes regulate genetically determined airway hyperresponsiveness in mice [see comments] De Sanctis GT, et al. **Nat Med** 1997 Apr;3(4):460–2. Comment in: Nat Med 1997 Apr;3(4):382–3.

T lymphocytes: setting the tone of the airways [news; comment] Gelfand EW, et al. **Nat Med** 1997 Apr;3(4):382–3 . Comment on: Nat Med 1997 Apr;3(4):460–2.

Respiratory problems in the immune–compromised host. Schauer U. **Pediatr Allergy Immunol** 1996;7(9 Suppl):82–5 (33 ref.)

Immunological findings in groups of children after compensatory measures. Richter J, et al. **Toxicol Lett** 1996 Nov;88(1–3):165–8

M cells and the pathogenesis of mucosal and systemic infections. Siebers A, et al. **Trends Microbiol** 1996 Jan; 4(1):22–9 (60 ref.)

Serology of respiratory viruses in relation to asthma and bronchial hyperresponsiveness. Björnsson E, et al. **Ups J Med Sci** 1996;101(2):159–68

Humoral and cellular immune responses in the murine respiratory tract following oral immunization with cholera toxin or Escherichia coli heat–labile enterotoxin. Ruedl C, et al. **Vaccine** 1996 Jun;14(8):792–8

The respiratory immune system of pigs. Pabst R. **Vet Immunol Immunopathol** 1996 Nov;54(1–4):191–5 (35 ref.)

Restricted B–cell responses to microbial challenge of the respiratory tract. Walker J, et al. **Vet Immunol Immunopathol** 1996 Nov;54(1–4):197–204 (28 ref.)

[The significance of muco–ciliary clearance as a defense mechanism in the respiratory tract] Pietrzyk A, et al. **Pneumonol Alergol Pol** 1996;64(11–12):821–8 (25 ref.) **(Pol)**

INJURIES

Burns and inhalation injury caused by steam. Balakrishnan C, et al. **Burns** 1996 Jun;22(4):313–5

Radiology quiz #8. Airway injury. Francis RA. **Mo Med** 1996 Oct;93(10):627–8

[Bronchoscopy in inhalation burns] Strekalovskii VP, et al. **Khirurgiia (Mosk)** 1997;(1):9–12 (Eng. Abstr.) **(Rus)**

INNERVATION

Localization of cholinergic nerves in lower airways of guinea pigs using antisera to choline acetyltransferase. Canning BJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L731–8

Replication–deficient adenoviral vector for gene transfer potentiates airway neurogenic inflammation. Piedimonte G, et al. **Am J Respir Cell Mol Biol** 1997 Mar;16(3):250–8

Site(s) mediating sympathetic activation with desflurane. Muzi M, et al. **Anesthesiology** 1996 Oct;85(4):737–47

Correlation of vasoactive intestinal peptide and nitric oxide synthase with choline acetyltransferase in the airway innervation. Fischer A, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:717–22

Inhibitions mediated by glycine and GABAA receptors shape the discharge pattern of bulbar respiratory neurons. Schmid K, et al. **Brain Res** 1996 Feb 26;710(1–2):150–60

Phosphodiesterase inhibitors and endothelin as modulators of respiratory neurotransmission. Fernandes LB. **Clin Exp Pharmacol Physiol** 1996 Oct–Nov;23(10–11):980–2 (35 ref.)

NANC neural control of airway smooth muscle tone. Lindén A. **Gen Pharmacol** 1996 Oct;27(7):1109–21 (140 ref.)

Characterization of respiratory–related neurons in the isolated brainstem of the frog. McLean HA, et al. **J Comp Physiol [A]** 1997 Aug;181(2):153–9

Membrane potentials of respiratory neurones during dizocilpine–induced apneusis in adult cats. Haji A, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):851–61

The ventral medullary respiratory network of the mature mouse studied in a working heart–brainstem preparation. Paton JF. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):819–31

Use of the novel carbocyanine tracer fast–DiI for investigating upper respiratory tract cranial nerves in prenatal rats. Friedland DR, et al. **Lab Anim Sci** 1996 Apr; 46(2):220–5

Functional relevance of anaerobic metabolism in the isolated respiratory network of newborn rats. Ballanyi K, et al. **Pflugers Arch** 1996 Aug;432(4):741–8

Mechanisms and modulation of capsaicin activity on airway afferent nerves. Fox AJ. **Pulm Pharmacol** 1995 Aug–Oct; 8(4–5):207–15 (64 ref.)

Modulation of cough and airway sensory fibres. Fox AJ. **Pulm Pharmacol** 1996 Oct–Dec;9(5–6):335–42

Plasticity of the afferent innervation of the airways. Kummer W, et al. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):169–72 (8 ref.)

The contribution of airway nerves to bronchial hyperresponsiveness: similarities with hyperalgesia [editorial] Page CP, et al. **Pulm Pharmacol** 1995 Aug–Oct; 8(4–5):149

Excitatory prejunctional beta 2–adrenoceptor distribution within equine airway cholinergic nerves. Zhang XY, et al. **Respir Physiol** 1996 Oct;106(1):81–90

METABOLISM

Comparison of the respiratory and systemic kinetics of nitrous oxide in the sheep. Reid MA, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):809–14

Endogenous nitric oxide in the upper airways of different animal species. Schedin U. **Acta Anaesthesiol Scand Suppl** 1997;110:161–2

Heavy physical exercise decreases nitric oxide levels in the nasal airways in humans. Lundberg JO, et al. **Acta Physiol Scand** 1997 Jan;159(1):51–7

Noncoordinated expression of alpha–, beta–, and gamma–subunit mRNAs of epithelial Na+ channel along rat respiratory tract. Farman N, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C131–41

Role of actin in regulation of epithelial sodium channels by CFTR. Ismailov II, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1077–86

Comparison of theoretical and experimental particle diffusion data within human airway casts. Zhang Z, et al. **Cell Biochem Biophys** 1995–96;27(2):97–108

Pulmonary clearance of [99mTc]DTPA and [99mTc]albumin in smokers. Nilsson K, et al. **Clin Physiol** 1997 Mar; 17(2):183–92

Differential responses of asthmatic airways to enantiomers of albuterol. Implications for clinical treatment of asthma. Perrin–Fayolle M, et al. **Clin Rev Allergy Immunol** 1996 Spring;14(1):139–47

Atrial natriuretic factor (ANF) and ANF receptor C gene expression and localization in the respiratory system: effects induced by hypoxia and hemodynamic overload. Di Nardo P, et al. **Endocrinology** 1996 Oct;137(10):4339–50

Inhalation of swine dust induces cytokine release in the upper and lower airways. Wang Z, et al. **Eur Respir J** 1997 Feb; 10(2):381–7

Establishment of in vitro systems from the respiratory tract of different species for the investigation of PAH metabolism. Emura M, et al. **Exp Toxicol Pathol** 1995 Dec; 47(6):434–9

Dimethyl sulfate uptake and methylation of DNA in rat respiratory tissues following acute inhalation. Mathison BH, et al. **Fundam Appl Toxicol** 1995 Dec;28(2):255–63

Regional clearance of solute from the respiratory epithelia: 18–20 h postexposure to ozone. Foster WM, et al. **J Appl Physiol** 1996 Sep;81(3):1143–9

Determination of production of nitric oxide by lower airways of humans—theory. Hyde RW, et al. **J Appl Physiol** 1997 Apr;82(4):1290–6

Analysis of perfluorochemical elimination from the respiratory system. Shaffer TH, et al. **J Appl Physiol** 1997 Sep;83(3):1033–40

Transient permeabilization of airway epithelium by mucosal water. Widdicombe JH, et al. **J Appl Physiol** 1996 Jul; 81(1):491–9

Subtype-specific expression patterns of inositol 1,4,5-trisphosphate receptors in rat airway epithelial cells. Sugiyama T, et al. **J Histochem Cytochem** 1996 Nov; 44(11):1237–42

Stereoselective synthesis and biodistribution of potent [11C]-labeled antagonists for positron emission tomography imaging of muscarinic receptors in the airways. Visser TJ, et al. **J Med Chem** 1997 Jan 3; 40(1):117–24

G alpha 9/G alpha 11: immunolocalization in the olfactory epithelium of the rat (Rattus rattus) and the channel catfish (Ictalurus punctatus). Dellacorte C, et al. **Neuroscience** 1996 Sep;74(1):261–73

Models for investigation of peptide and protein transport across cultured mammalian respiratory epithelial barriers. Kim KJ, et al. **Pharm Biotechnol** 1996;8:325–46 (155 ref.)

Drugs affecting neurotransmitter release in the airways. Spina D. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):217–25 (117 ref.)

Evidence of nitric oxide in the exhaled gas of Asian elephants (Elephas maximus). Lewandowski K, et al. **Respir Physiol** 1996 Oct;106(1):91–8

Synthetic functions of airway smooth muscle in asthma. Johnson SR, et al. **Trends Pharmacol Sci** 1997 Aug; 18(8):288–92 (60 ref.)

Pharmacokinetics of antimicrobial agents in the respiratory tract. Cruciani M, et al. **Zentralbl Bakteriol** 1996 Jun; 284(1):1–31 (154 ref.)

[Ion transports across the respiratory epithelium] Charfi MR, et al. **Rev Pneumol Clin** 1997;53(2):71–8 (83 ref.) (Eng. Abstr.) **(Fre)**

[Mucin gene—regulation of the expression of MUC2 and MUC3 mucin gene in the airway] Ohmori H, et al. **Nippon Rinsho** 1996 Feb;54(2):411–7 (24 ref.) (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Investigation of normal bacterial flora in the upper respiratory tract. Tanaka I, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:44–50

The effects of panresistant bacteria in cystic fibrosis patients on lung transplant outcome. Aris RM, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1699–704

Interplay between mycoplasma surface proteins, airway cells, and the protean manifestations of mycoplasma-mediated human infections. Baseman JB, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S137–44 (45 ref.)

Receptors in the Pseudomonas aeruginosa adherence to injured and repairing airway epithelium. de Bentzmann S, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S155–62 (54 ref.)

Molecular determinants of the interaction between Haemophilus influenzae and human cells. Geme JW 3rd. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S192–6 (54 ref.)

Aspects on the interaction of Streptococcus pneumoniae and Haemophilus influenzae with human respiratory tract mucosa. Håkansson A, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S187–91

Differential gene expression by Pseudomonas aeruginosa during interaction with respiratory mucus. Lory S, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S183–6

Intermittent enteral feeding: the influence on respiratory and digestive tract colonization in mechanically ventilated intensive-care-unit patients [letter; comment] Metersky M, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1817–8 . Comment on: Am J Respir Crit Care Med 1996 Aug;154(2 Pt 1):394–9.

Interactions between glycoconjugates from human respiratory airways and Pseudomonas aeruginosa. Scharfman A, et al. **Am J Respir Crit Care Med** 1996 Oct; 154(4 Pt 2):S163–9 (59 ref.)

Genetic regulation of airway colonization by Bordetella species. Yuk MH, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S150–4 (33 ref.)

Usefulness of Leeds Acinetobacter Medium for recovery of Acinetobacter species from respiratory specimens collected in an intensive care unit [letter] Alados JC, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):474–6

Microbiologic data overview of Italian cystic fibrosis patients. Taccetti G, et al. **Eur J Epidemiol** 1997 Apr; 13(3):323–7

Pseudomonas aeruginosa adherence to remodelling respiratory epithelium. de Bentzmann S, et al. **Eur Respir J** 1996 Oct;9(10):2145–50 (47 ref.)

Interaction of bacteria and airway epithelial cells [editorial; comment] Van Alphen L. **Eur Respir J** 1996 Jul;9(7):1342–3 . Comment on: Eur Respir J 1996 Jul;9(7):1523–30.

Invasion of respiratory epithelial cells by Burkholderia (Pseudomonas) cepacia. Burns JL, et al. **Infect Immun** 1996 Oct;64(10):4054–9

Adhesion of Pseudomonas aeruginosa to respiratory mucins and expression of mucin-binding proteins are increased by limiting iron during growth. Scharfman A, et al. **Infect Immun** 1996 Dec;64(12):5417–20

Actinobacillus minor sp. nov., Actinobacillus porcinus sp. nov., and Actinobacillus indolicus sp. nov., three new V factor-dependent species from the respiratory tract of pigs. Møller K, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):951–6

Rapid increase of pneumococcal resistance to beta-lactam and other antibiotics in isolates from the respiratory tract (Nagasaki, Japan: 1975–1994). Rikitomi N, et al. **Microbiol Immunol** 1996;40(12):899–905

Neonatal airway colonization with gram-negative bacilli: association with severity of bronchopulmonary dysplasia. Cordero L, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):18–23

Isolation of Ureaplasma urealyticum from nonneonatal respiratory tract specimens in a pediatric institution. Matlow AG, et al. **Pediatr Infect Dis J** 1996 Mar; 15(3):272–4

Restricted B-cell responses to microbial challenge of the respiratory tract. Walker J, et al. **Vet Immunol Immunopathol** 1996 Nov;54(1–4):197–204 (28 ref.)

Morphological evidence of a filamentous cilia-associated respiratory (CAR) bacillus in goats. Fernández A, et al. **Vet Pathol** 1996 Jul;33(4):445–7

Bacterial identity and characteristics in healthy and unhealthy respiratory tracts of sheep and calves. Barbour EK, et al. **Vet Res Commun** 1997 Aug;21(6):421–30

Differentiation of Pasteurella multocida subspecies multocida isolates from the respiratory system of pigs by using polymerase chain reaction fingerprinting technique. Zucker B, et al. **Zentralbl Veterinarmed [B]** 1996 Dec;43(10):585–91

[Detection of methicillin-resistant Staphylococcus aureus (MRSA)—relation between respiratory tract and gastro-intestinal tract] Ito Y, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):207–13 (Eng. Abstr.) **(Jpn)**

[Bacterial flora of the respiratory tract in artificially ventilated patients] Jarosz-Cencora B, et al. **Pol Merkuriusz Lek** 1996 Jul;1(1):15–7 (Eng. Abstr.) **(Pol)**

[Staphylococcal contamination of the upper respiratory tract mucosa in children exposed to air pollution] Bukharin OV, et al. **Gig Sanit** 1996 Nov–Dec;(6):6–8 (Eng. Abstr.) **(Rus)**

[The interrelations of mucosal epithelial cells with microbes—intracellular parasites] Domaradskiĭ IV, et al. **Med Parazitol (Mosk)** 1996 Oct–Dec;(4):3–8 (53 ref.) (Eng. Abstr.) **(Rus)**

[The contamination of the upper respiratory tract of children with representative opportunistic microflora] Nemchenko OO, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):86–9 (Eng. Abstr.) **(Ukr)**

PARASITOLOGY

A checklist of helminths from the respiratory system and gastrointestinal tracts of African Anatidae. Alexander SJ, et al. **Onderstepoort J Vet Res** 1997 Mar;64(1):5–16

[Mast cells and eosinophils of the respiratory mucosa of sheep with Oestrus ovis (Linné, 1761) infection] Nguyen VK, et al. **Parasite** 1996 Sep;3(3):217–21 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Scanning electron microscopy of the respiratory epithelium of chicks fumigated with formaldehyde vapour. Fauziah O, et al. **Br Poult Sci** 1996 Jul;37(3):563–70

Twenty-eight-day repeated-dose inhalation exposure of rats to diethylene glycol monoethyl ether. Hardy CJ, et al. **Fundam Appl Toxicol** 1997 Aug;38(2):143–7

Reflection of structural abnormality in the axoneme of respiratory cilia in the clinical features of immotile cilia syndrome. Kawakami M, et al. **Intern Med** 1996 Aug; 35(8):617–23

Quantitative magnetic resonance imaging of upper airways musculature in an animal model of sleep apnea. Schotland HM, et al. **J Appl Physiol** 1996 Sep;81(3):1339–46

Upper aerodigestive tract. Ranchod M. **Pathology (Phila)** 1996;3(2):299–304 (5 ref.)

Phenotypic abnormalities in long-term surviving cystic fibrosis mice. Kent G, et al. **Pediatr Res** 1996 Aug; 40(2):233–41

Pathogenicity of cilia-associated respiratory (CAR) bacillus isolates for F344, LEW, and SD rats. Schoeb TR, et al. **Vet Pathol** 1997 Jul;34(4):263–70

[Asthma-like inflammation—a new term is needed (editorial)] Haahtela T. **Nord Med** 1997 Apr;112(4):110–1 **(Swe)**

PHYSIOLOGY

Aging and the respiratory system. Rossi A, et al. **Aging (Milano)** 1996 Jun;8(3):143–61 (136 ref.)

Human airway epithelia express a beta-defensin. McCray PB Jr, et al. **Am J Respir Cell Mol Biol** 1997 Mar;16(3):343–9

Evaluation of association of blood and bronchoalveolar eosinophil numbers and serum total immunoglobulin E concentration with the expression of nonspecific airway reactivity in dogs. Collie DD, et al. **Am J Vet Res** 1997 Jan;58(1):34–9

The airways and anaesthesia—I. Anatomy, physiology and fluid mechanics. Burwell DR, et al. **Anaesthesia** 1996 Sep; 51(9):849–57 (40 ref.)

Effects of general anesthesia and paralysis on upper airway changes due to head position in humans. Sivarajan M, et al. **Anesthesiology** 1996 Oct;85(4):787–93

Identification of diencephalic and brainstem cardiorespiratory areas activated during exercise. Iwamoto GA, et al. **Brain Res** 1996 Jul 8;726(1–2):109–22

Cardiovascular, respiratory and metabolic responses to temperature and hypoxia of the winter frog Rana catesbeiana. Rocha PL, et al. **Braz J Med Biol Res** 1997 Jan;30(1):125–31

Respiratory tract lining fluid antioxidants: the first line of defence against gaseous pollutants. Kelly FJ, et al. **Cent Eur J Public Health** 1996;4 Suppl:11–4

Endogenous nitric oxide in exhaled human breath. A new means of monitoring airway disease activity or another no-no? [editorial; comment] Brett SJ, et al. **Chest** 1996 Oct; 110(4):873–4. Comment on: Chest 1996 Oct;110(4):930–8.

Origins of breath nitric oxide in humans [see comments] Dillon WC, et al. **Chest** 1996 Oct;110(4):930–8. Comment in: Chest 1996 Oct;110(4):873–4.

Relationship between the humidity and temperature of inspired gas and the function of the airway mucosa. Williams R, et al. **Crit Care Med** 1996 Nov;24(11):1920–9 (75 ref.)

Cardiorespiratory responses to exercise in horses with different grades of idiopathic laryngeal hemiplegia. Christley RM, et al. **Equine Vet J** 1997 Jan;29(1):6–10

Cardiorespiratory adaptations in neonatal foals. Rose RJ. **Equine Vet J Suppl** 1988 Sep;(5):11–3 (24 ref.)

Influence of age and physical training on measures of cardiorespiratory and muscle endurance. Knapik JJ, et al. **Eur J Appl Physiol** 1996;72(5–6):490–5

Effect of upper airway cooling and CO2 on diaphragm and geniohyoid muscle activity in the rat. O'Halloran KD, et al. **Eur Respir J** 1996 Nov;9(11):2323–7

Breathing volume and deposition in the respiratory tract. Legáth L, et al. **Exp Toxicol Pathol** 1997 Feb;49(1–2):71–4

NANC neural control of airway smooth muscle tone. Lindén A. **Gen Pharmacol** 1996 Oct;27(7):1109–21 (140 ref.)

Heat-moisture exchangers [letter; comment] Seakins P. **Intensive Care Med** 1996 Jul;22(7):714. Comment on: Intensive Care Med 1995 Feb;21(2):142–8.

Effect of lung inflation and airway muscle tone on airway diameter in vivo. Brown RH, et al. **J Appl Physiol** 1996 May;80(5):1581–8

Inputs from upper airway affect firing of respiratory-associated midbrain neurons. Chen Z, et al. **J Appl Physiol** 1997 Jul;83(1):196–203

Superior laryngeal nerve section alters responses to upper airway distortion in sleeping dogs. Curran AK, et al. **J Appl Physiol** 1997 Sep;83(3):768–75

Negative pressure-induced deformation of the upper airway causes central apnea in awake and sleeping dogs. Harms CA, et al. **J Appl Physiol** 1996 May;80(5):1528–39

Effects of surface tension and intraluminal fluid on mechanics of small airways. Hill MJ, et al. **J Appl Physiol** 1997 Jan; 82(1):233–9

Role of viscoelasticity in the tube model of airway reopening. II. Non-Newtonian gels and airway simulation. Hsu SH, et al. **J Appl Physiol** 1996 May;80(5):1649–59

Effects of upper airway stimulation on swallowing, gasping, and autoresuscitation in hypoxic mice. Khurana A, et al. **J Appl Physiol** 1996 Feb;80(2):472–7

Inspiratory coactivation of the genioglossus enlarges retroglossal space in laryngectomized humans. Kobayashi I, et al. **J Appl Physiol** 1996 May;80(5):1595–1604

Lung parenchymal shear modulus, airway wall remodeling, and bronchial hyperresponsiveness. Lambert RK, et al. **J Appl Physiol** 1997 Jul;83(1):140–7

How inhomogeneities and airway walls affect frequency dependence and separation of airway and tissue properties. Lutchen KR, et al. **J Appl Physiol** 1996 May;80(5):1696–707

Airway inhomogeneities contribute to apparent lung tissue mechanics during constriction. Lutchen KR, et al. **J Appl Physiol** 1996 May;80(5):1841–9

Detection of two clusters of mechanical properties of smooth muscle along the airway tree. Ma X, et al. **J Appl Physiol** 1996 Mar;80(3):857–61

Invited editorial on "Airway thermal volume in humans and its relation to body size" [editorial] McFadden ER Jr. **J Appl Physiol** 1997 Aug;83(2):331–2 (18 ref.)

Growth and neutralization of sulfate aerosols in human airways. Sarangapani R, et al. **J Appl Physiol** 1996 Jul; 81(1):480–90

Airway thermal volume in humans and its relation to body size. Serikov VB, et al. **J Appl Physiol** 1997 Aug; 83(2):668–76

Pharmacological modulation of the mechanical response of airway smooth muscle to length oscillation. Shen X, et al. **J Appl Physiol** 1997 Sep;83(3):739–45

Mechanisms for the mechanical response of airway smooth muscle to length oscillation. Shen X, et al. **J Appl Physiol** 1997 Sep;83(3):731–8

Respiratory tissue properties derived from flow transfer function in healthy humans. Tomalak W, et al. **J Appl Physiol** 1997 Apr;82(4):1098–106

Effects of a synthetic lung surfactant on pharyngeal patency in awake human subjects. Van der Touw T, et al. **J Appl Physiol** 1997 Jan;82(1):78–85

Airway and alveolar permeability and surface liquid thickness: theory. Widdicombe J. **J Appl Physiol** 1997 Jan; 82(1):3–12 (116 ref.)

Cardiorespiratory and metabolic responses during forward and backward walking. Chaloupka EC, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):302–6

Outcome of extracorporeal membrane oxygenation survivors at age two years: relationship to status at one year. Dodge

NN, et al. **J Perinatol** 1996 May–Jun;16(3 Pt 1):191–6

The ventral medullary respiratory network of the mature mouse studied in a working heart–brainstem preparation. Paton JF. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):819–31

Nuclear magnetic resonance imaging of airways in humans with use of hyperpolarized 3He. Bachert P, et al. **Magn Reson Med** 1996 Aug;36(2):192–6

Assessment of an airway–to–pulmonary circulation reflex in cats. Barthélémy P, et al. **Neurosci Lett** 1996 Jun 21; 211(2):89–92

Reflex relationships between the cervical esophagus and the respiratory system in cats. Barthélémy P, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):81–4

Dissociating the nicotine and airway sensory effects of smoking. Westman EC, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):309–15

The physiology behind exercise testing. Myers JN. **Prim Care** 1994 Sep;21(3):415–37 (96 ref.)

Working underground: respiratory adaptations in the blind mole rat. Widmer HR, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2062–7

The endothelins in the pulmonary system. Goldie RG, et al. **Pulm Pharmacol** 1996 Apr;9(2):69–93 (309 ref.)

In vivo determination of surface tension in the horse trachea and in vitro model studies. Im Hof V, et al. **Respir Physiol** 1997 Jul;109(1):81–93

Airway blood flow responses to temperature and humidity of inhaled air. Le Merre C, et al. **Respir Physiol** 1996 Sep; 105(3):235–9

Negative–impedance ventilation and pressure support ventilation: a comparative study. Poon CS, et al. **Respir Physiol** 1997 May;108(2):117–27

gamma–Aminobutyric acid contributes to modulation of cardiorespiratory control after chronic ventilatory loading. Rao RS, et al. **Respir Physiol** 1997 Apr;108(1):35–44

Effect of the route and mode of agonist delivery on functional behaviour of the airways. Salerno FG, et al. **Respir Physiol** 1996 Oct;106(1):71–80

Improved upper airway patency elicited by electrical stimulation of the hypoglossus nerves. Oliven A, et al. **Respiration** 1996;63(4):213–6

Cardio–respiratory physiological adaptation of pregnancy. O'Day MP. **Semin Perinatol** 1997 Aug;21(4):268–75 (68 ref.)

Predicted combustion product deposition in the human airway. Kaufman JW, et al. **Toxicology** 1996 Dec 31; 115(1–3):123–8

Upper respiratory causes of exercise intolerance. Beard W. **Vet Clin North Am Equine Pract** 1996 Dec;12(3):435–55 (42 ref.)

Cardio–respiratory and plasma lactate responses to exercise with low draught resistances in standardbred trotters. Gottlieb–Vedi M, et al. **Zentralbl Veterinarmed A** 1996 Dec; 43(10):635–41

[Control and development of breathing, pathophysiological aspects] Schläfke ME. **Pneumologie** 1997 Apr;51 Suppl 2:398–402 (10 ref.) (Eng. Abstr.) **(Ger)**

[The behavior of respiratory parameters in student pilots. A comparative study between 2 diverse groups examined at a 10–year interval] Ramacci CA, et al. **Riv Med Aeronaut Spaz** 1975 Oct–Dec;38(4):392–402 (Eng. Abstr.) **(Ita)**

[Intraoperative monitoring of respiratory function] Suwa K. **Masui** 1996 Dec;45 Suppl:S187–91 (2 ref.) **(Jpn)**

[Compensatory reactions of the rabbit respiratory system to hypoxic stimulation in hyperbaric conditions] Donina ZhA, et al. **Aviakosm Ekolog Med** 1996;30(4):34–8 (Eng. Abstr.) **(Rus)**

[The circadian dynamics of body temperature and of the cardiorespiratory system of the human body during non–competitive yachting] Agadzhanian NA, et al. **Fiziol Cheloveka** 1997 May–Jun;23(3):63–7 **(Rus)**

[The role of pulmonary heterogeneity caused by a change in the rigidity of intrapulmonary respiratory tracts in limitation of air flow during resting breathing] Kuznetsova VK, et al. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):74–82 **(Rus)**

[Respiratory water loss in the evaluation of the functional state of the respiratory system in sailors] Pospelov AM, et al. **Med Tr Prom Ekol** 1996;(12):37–40 **(Rus)**

[Response of the functional system of respiration to the cyclic changes of the hormonal state in women] Shakhlina LG. **Vestn Ross Akad Med Nauk** 1997;(5):23–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Acute effects of summer air pollution on respiratory health of asthmatic children. Gielen MH, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2105–8

Effects of continuous venovenous hemofiltration on cardiopulmonary function in a porcine model of endotoxin–induced shock. Murphey ED, et al. **Am J Vet Res** 1997 Apr;58(4):408–13

Advances in critical care monitoring. Barie PS. **Arch Surg** 1997 Jul;132(7):734–9 (43 ref.)

Cardiorespiratory and metabolic adaptations to hyperoxic training. Ploutz–Snyder LL, et al. **Eur J Appl Physiol** 1996; 73(1–2):38–48

The effect of chloroform–extractable secondary metabolites of filamentous fungi on the movement of respiratory tract cilia of one–day–old chicks in vitro. Piecková E, et al. **Folia Microbiol (Praha)** 1995;40(1):123–7

Tobacco smoke upper respiratory response relationships in healthy nonsmokers. Bascom R, et al. **Fundam Appl Toxicol** 1996 Jan;29(1):86–93

Cardiorespiratory and renal responses to arterial chemoreceptor stimulation in early hypertension. Ledderhos C, et al. **Int J Clin Pharmacol Ther** 1996 Nov; 34(11):470–6

Home monitoring for infants at high risk for the sudden infant death syndrome. Sivan Y, et al. **Isr J Med Sci** 1997 Jan; 33(1):45–9

Does the disease state influence the responsiveness of human airways studied in vitro? Armour CL, et al. **J Appl Physiol** 1996 Jun;80(6):2211–6

Differential recruitment of leukocyte populations and alteration of airway hyperreactivity by C–C family chemokines in allergic airway inflammation. Lukacs NW, et al. **J Immunol** 1997 May 1;158(9):4398–404

Bronchial hyperresponsiveness: what causes twitchy airways? Page C. **J Pharm Pharmacol** 1997 May;49 Suppl 3:9–11 (37 ref.)

The contribution of airway nerves to bronchial hyperresponsiveness: similarities with hyperalgesia [editorial] Page CP, et al. **Pulm Pharmacol** 1995 Aug–Oct; 8(4–5):149

[Non–nosocomial pneumonias in the elderly: clinical findings, etiology, therapeutic approach] Janssens JP, et al. **Schweiz Med Wochenschr** 1996 Sep 7;126(36):1515–23 (64 ref.) (Eng. Abstr.) **(Fre)**

[The energy characteristics of cardiorespiratory system function in patients with chronic bronchitis under graded physical loads] Mizin VI. **Lik Sprava** 1996 Jan–Feb; (1–2):129–31 (Eng. Abstr.) **(Rus)**

[The interrelation of changes in the upper and lower respiratory tracts in chronic bronchitis patients with different diseases of the nose and paranasal sinuses] Ovcharenko SI, et al. **Ter Arkh** 1996;68(4):15–8 (Eng. Abstr.) **(Rus)**

[Respiratory disorders in movement disorders] Jiménez Jiménez FJ, et al. **Med Clin (Barc)** 1996 Sep 21;107(9):342–6 (69 ref.) **(Spa)**

[Airway hyperreactivity and respiratory allergy in children] **Rev Alerg Mex** 1996;43 Spec No:22–37 (73 ref.) **(Spa)**

RADIATION EFFECTS

[A comparative evaluation of the efficacy of different methods for the decorporation of plutonium from the respiratory organs] Liubchanskiĭ ER, et al. **Radiats Biol Radioecol** 1997 Jan–Feb;37(1):105–10 (Eng. Abstr.) **(Rus)**

SECRETION

Airway mucosa: secretory cells, mucus and mucin genes [see comments] Jeffery PK, et al. **Eur Respir J** 1997 Jul; 10(7):1655–62 (63 ref.). Comment in: Eur Respir J 1997 Jul;10(7):1438.

Airway mucus [editorial; comment] Kim KC, et al. **Eur Respir J** 1997 Jul;10(7):1438. Comment on: Eur Respir J 1997 Jul;10(7):1655–62.

Identification of two glycoforms of the MUC5B mucin in human respiratory mucus. Evidence for a cysteine–rich sequence repeated within the molecule. Thornton DJ, et al. **J Biol Chem** 1997 Apr 4;272(14):9561–6

[Pharmacology of airway inflammation—special reference to hypersecretion of the mucous] Miyata K, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):144–6 (0 ref.) **(Jpn)**

SURGERY

Upper aerodigestive tract. Ranchod M. **Pathology (Phila)** 1996;3(2):299–304 (5 ref.)

[Intubation conditions and the development of neuromuscular blockade with rocuronium in endoscopic ORL surgery] Lüllwitz E, et al. **Anaesthesist** 1997 Jan;46(1):14–20 (Eng. Abstr.) **(Ger)**

VIROLOGY

Detection of respiratory syncytial virus, parainfluenzavirus 3, adenovirus and rhinovirus sequences in respiratory tract of infants by polymerase chain reaction and hybridization. Freymuth F, et al. **Clin Diagn Virol** 1997 May;8(1):31–40

Differential effects of total and upper airway influenza viral infection on sleep in mice. Fang I, et al. **Sleep** 1996 May; 19(4):337–42

Serology of respiratory viruses in relation to asthma and bronchial hyperresponsiveness. Björnsson E, et al. **Ups J Med Sci** 1996;101(2):159–68

RESPIRATORY SYSTEM AGENTS

ADMINISTRATION & DOSAGE

Nitric oxide inhalation in infants with respiratory distress syndrome. Skimming JW, et al. **J Pediatr** 1997 Feb; 130(2):225–30

Acute response to inhaled nitric oxide in newborns with respiratory failure and pulmonary hypertension. Day RW, et al. **Pediatrics** 1996 Oct;98(4 Pt 1):698–705

Four patterns of response to inhaled nitric oxide for persistent pulmonary hypertension of the newborn. Goldman AP, et al. **Pediatrics** 1996 Oct;98(4 Pt 1):706–13

Use of the respiratory stimulant doxapram in southern elephant seals (Mirounga leonina). Woods R, et al. **Vet Rec** 1996 May 25;138(21):514–7

[The new pathogenetic agent lipin for the treatment of patients with respiratory failure] Iukhimets VA. **Lik Sprava** 1995 Sep–Dec;(9–12):60–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Adverse events with continuous doxapram infusion against late postoperative hypoxaemia. Rosenberg J, et al. **Eur J Clin Pharmacol** 1996;50(3):191–4

Reversible hepatic cytolysis during almitrine bismesylate treatment for posttraumatic ARDS [letter] Sicsic JC, et al. **Intensive Care Med** 1996 Feb;22(2):173–4

PHARMACOLOGY

Metabolic, ventilatory and circulatory effects of doxapram in anaesthetized pigs during normoxia and hypoxia. Björk L, et al. **Acta Anaesthesiol Scand** 1996 Sep;40(8 Pt 1):919–26

Action potentials in right and left ventricles from chronic hypoxic rats: effect of almitrine. Kreher P, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1856–63

Effect of arterial chemoreceptor stimulation with almitrine bismesylate on plasma renin activity, aldosterone, ACTH and cortisol in anaesthetized, artificially ventilated cats. Honig A, et al. **Clin Exp Pharmacol Physiol** 1996 Feb; 23(2):106–10

Effect of almitrine on ventilation and on diaphragm and geniohyoid muscle activity in the rat. O'Halloran KD, et al. **Clin Sci (Colch)** 1996 Sep;91(3):337–45

Almitrine and doxapram decrease fatigue and increase subsequent recovery in isolated rat diaphragm. McGuire M, et al. **J Appl Physiol** 1997 Jul;83(1):52–8

An almitrine analog acts as hypoxia in isolated rat lungs. Robineau P, et al. **Respir Physiol** 1996 Sep;105(3):225–33

THERAPEUTIC USE

Effects of almitrine bismesylate in a microswine model of hypoxemic hypothermia. Gentile BJ, et al. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):824–8

Early response to inhaled nitric oxide and its relationship to outcome in children with severe hypoxemic respiratory failure. Goldman AP, et al. **Chest** 1997 Sep;112(3):752–8

Additive beneficial effects of the prone position, nitric oxide, and almitrine bismesylate on gas exchange and oxygen transport in acute respiratory distress syndrome. Jolliet P, et al. **Crit Care Med** 1997 May;25(5):786–94

Successful weaning from cardiopulmonary bypass after cardiac surgery using inhaled nitric oxide. Bichel T, et al. **Paediatr Anaesth** 1997;7(4):335–9

Pulmonary effect of inhaled furosemide in ventilated infants with severe bronchopulmonary dysplasia [letter] Prabhu VG. **Pediatrics** 1997 Sep;100(3 Pt 1):420–1

Comparison of the acute effects on gas exchange of nasal ventilation and doxapram in exacerbations of chronic obstructive pulmonary disease [published erratum appears in Thorax 1997 Feb;52(2):204] Angus RM, et al. **Thorax** 1996 Oct;51(10):1048–50

[Treatment of chronic rhinosinusitis] Galindo de Jaime G. **Rev Alerg Mex** 1996;43 Spec No:19–21 (11 ref.) (Eng. Abstr.) **(Spa)**

TOXICITY

Considerations for toxicology studies of respiratory drug products. DeGeorge JJ, et al. **Regul Toxicol Pharmacol** 1997 Apr;25(2):189–93 (16 ref.)

RESPIRATORY THERAPY

see related

BREATHING EXERCISES

Technological basis for NO application and environmental security. Krebs C, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:84–7

Present role of nitric oxide inhalation in severe lung failure. Rossaint R, et al. **Acta Anaesthesiol Scand Suppl** 1996; 109:88–92

Nitrogen dioxide production in a nitric oxide inhalation system using the Servo Ventilator 900C. Sato T, et al. **Acta Paediatr Jpn** 1997 Apr;39(2):172–5

Effect of chest wall vibration on dyspnea during hypercapnia and exercise in chronic obstructive pulmonary disease. Cristiano LM, et al. **Am J Respir Crit Care Med** 1997 May; 155(5):1552–9

When is a patient prone for prone? [editorial; comment] Pappert D, et al. **Anesth Analg** 1996 Dec;83(6):1139–40. Comment on: Anesth Analg 1996 Dec;83(6):1206–11.

Mapping the literature of respiratory therapy. Burnham JF. **Bull Med Libr Assoc** 1997 Jul;85(3):293–6

Airway and respiratory management following non–lethal hanging. Kaki A, et al. **Can J Anaesth** 1997 Apr; 44(4):445–50 (15 ref.)

Airborne contact dermatitis from metaproterenol in a respiratory therapist. Fung MA, et al. **Contact Dermatitis** 1996 Nov;35(5):317–8

Pulmonologists and respiratory intensive care [letter; comment] Dijkman JH. **Eur Respir J** 1996 Oct;9(10):2189 . Comment on: Eur Respir J 1996 Feb;9(2):183.

Clinical practice guidelines. Hess D. **Int Anesthesiol Clin** 1996

Winter;34(1):1–10

Treatment with hot, humid air reduces the nasal response to allergen challenge. Desrosiers M, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):77–86

A pulmonary monitoring and treatment plan for children with Duchenne-type muscular dystrophies. Warren RH, et al. **J Ark Med Soc** 1996 Dec;93(7):333–7

Nitric oxide inhalation therapy for an infant with persistent pulmonary hypertension caused by misalignment of pulmonary veins with alveolar capillary dysplasia. Kitayama Y, et al. **J Pediatr Surg** 1997 Jan;32(1):99–100

Prediction of morbidity during infancy after repair of congenital diaphragmatic hernia. Naik S, et al. **J Pediatr Surg** 1996 Dec;31(12):1651–4

Smoking cessation in comprehensive pulmonary rehabilitation [letter; comment] Kawane H. **Lancet** 1997 Jan 25;349(9047):285. Comment on: Lancet 1996 Oct 26;348(9035):1115–9.

Management of ALS: respiratory care. Hopkins LC, et al. **Neurology** 1996 Oct;47(4 Suppl 2):S123–5

Use of racemic epinephrine, dexamethasone, and mist in the outpatient management of croup. Kunkel NC, et al. **Pediatr Emerg Care** 1996 Jun;12(3):156–9

Home care of children dependent on respiratory technology. Toder DS, et al. **Pediatr Rev** 1997 Aug;18(8):273–80; quiz 281 (2 ref.)

Additional considerations for inhaled nitric oxide therapy in congenital diaphragmatic hernia [letter] Irish MS, et al. **Pediatr Surg Int** 1997 Jul;12(5–6):466–7

Inhaled nitric oxide and hypoxic respiratory failure in infants with congenital diaphragmatic hernia. The Neonatal Inhaled Nitric Oxide Study Group (NINOS). **Pediatrics** 1997 Jun;99(6):838–45

Insufficient control of asthma: increase the dose of inhaled steroids or add long-acting beta 2-agonists? Aubert JD, et al. **Schweiz Med Wochenschr** 1997 Feb 1;127(5):176–81 (28 ref.)

[Home respiratory care. Who cares about it? A report on the Conference of the same name in Ede, Holland, 1–2 Dec. 1995] Mihălţan F. **Pneumoftiziologia** 1996 Jul–Dec; 45(3–4):187–9 **(Rum)**

[Inhalation therapy in asthma] Gameros Gardea RA. **Rev Alerg Mex** 1996 Sep–Oct;43(5):109–15 (32 ref.) (Eng. Abstr.) **(Spa)**

[Clinical effects of inspiratory muscle training in patients with chronic airflow limitation] Lisboa C, et al. **Rev Med Chil** 1995 Sep;123(9):1108–15 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Unilateral pharmacologic mydriasis in a patient with respiratory compromise [letter] Goldstein JB, et al. **Arch Ophthalmol** 1997 Jun;115(6):806

Prosthetic joint infection due to Staphylococcus aureus after use of a steroid nasal inhaler. Hawley HB, et al. **Clin Infect Dis** 1996 Oct;23(4):837–9

Airborne allergic contact dermatitis from tea tree oil. De Groot AC. **Contact Dermatitis** 1996 Nov;35(5):304–5

ECONOMICS

Economic analysis of respiratory rehabilitation. Goldstein RS, et al. **Chest** 1997 Aug;112(2):370–9

INSTRUMENTATION

Recent progress in engineering the Pittsburgh intravenous membrane oxygenator. Federspiel WJ, et al. **ASAIO J** 1996 Sep–Oct;42(5):M435–42

Correlation between simple clinical parameters and the in vitro humidification characteristics of filter heat and moisture exchangers. Groupe de Travail sur les Respirateurs [see comments] Beydon L, et al. **Chest** 1997 Sep;112(3):739–44. Comment in: Chest 1997 Sep;112(3):581.

Is a nose just a nose? [editorial; comment] Branson RD. **Chest** 1997 Sep;112(3):581. Comment on: Chest 1997 Sep;112(3):739–44.

Ventilatory factors affecting inhaled nitric oxide concentrations during continuous-flow administration. Fernandez R, et al. **J Crit Care** 1996 Sep;11(3):138–43

A safe clinical system for nitric oxide inhalation therapy for pediatric patients. Miyasaka K, et al. **Pediatr Pulmonol** 1996 Sep;22(3):174–81

[Innovative respiratory muscle training for patients with Duchenne muscular dystrophy--a psychological evaluation] Ungar D, et al. **Wien Med Wochenschr** 1996; 146(9–10):213–6 (Eng. Abstr.) **(Ger)**

METHODS

The efficacy of pulse oxymetry in the postoperative respiratory management of cardiac patients. Tekinalp H, et al. **Adv Exp Med Biol** 1996;388:509–11

Amyotrophic lateral sclerosis. Successful treatment of mucous plugging by mechanical insufflation–exsufflation. Hanayama K, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug; 76(4):338–9

Heliox therapy for pneumothorax: new indication for an old remedy. Barr J, et al. **Ann Emerg Med** 1997 Aug; 30(2):159–62

Refractory asthma, Part 2: Airway interventions and management. Jagoda A, et al. **Ann Emerg Med** 1997 Feb; 29(2):275–81 (59 ref.)

Determination of low blood flow limits for arteriovenous carbon dioxide removal. Brunston RL Jr, et al. **ASAIO J** 1996 Sep–Oct;42(5):M845–9

Partial liquid ventilation with Perflubron in premature infants with severe respiratory distress syndrome. Spitzer AR, et al. **Clin Pediatr (Phila)** 1997 Mar;36(3):181–2

Acute respiratory distress syndrome in children. Beaufils F, et al. **Curr Opin Pediatr** 1997 Jun;9(3):207–12 (47 ref.)

Technical considerations for inhaled nitric oxide therapy: time response to nitric oxide dosing changes and formation of nitrogen dioxide. Breuer J, et al. **Eur J Pediatr** 1997 Jun;156(6):460–2

Reaction of term newborns with prolonged postnatal dyspnoea to early oxygen, mask continuous positive airway pressure, and volume expansion: a prospective, randomised, clinical trial [see comments] Hauer AC, et al. **Eur J Pediatr** 1996 Sep;155(9):805–10. Comment in: Eur J Pediatr 1997 May;156(5):419–20.

NO treatment in a patient with severe right-to-left shunt due to an intrapulmonary av-fistula [letter] Schölly DM, et al. **Intensive Care Med** 1996 Nov;22(11):1281–2

Conclusions from the Toronto and Boston series [editorial] Young DG. **J Pediatr Surg** 1997 Mar;32(3):406

Chest physiotherapy and post-extubation atelectasis in infants. Al-Alaiyan S, et al. **Pediatr Pulmonol** 1996 Apr; 21(4):227–30

Precise control of nitric oxide concentration in the inspired gas of continuous flow respiratory devices. Hudome SM, et al. **Pediatr Pulmonol** 1996 Sep;22(3):182–7

A comparison of bronchial drainage treatments in cystic fibrosis. Kluft J, et al. **Pediatr Pulmonol** 1996 Oct; 22(4):271–4

Heliox in respiratory failure secondary to bronchiolitis: a new therapy. Paret G, et al. **Pediatr Pulmonol** 1996 Nov; 22(5):322–3

Home care of children dependent on respiratory technology. Toder DS, et al. **Pediatr Rev** 1997 Aug;18(8):273–80; quiz 281 (2 ref.)

Aerosol therapy in patients with cystic fibrosis. Schöni MH, et al. **Schweiz Med Wochenschr** 1997 Feb 1;127(5):158–64 (53 ref.)

[Therapy of airway infections] Vogel F. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1195–7 **(Ger)**

[Inhalation therapy in chronic obstructive bronchial diseases (see comments)] Barandun J. **Schweiz Med Wochenschr** 1996 Oct 5;126(40):1693–703 (46 ref.) (Eng. Abstr.). Comment in: Schweiz Med Wochenschr 1997 Mar 8;127(10):411. **(Ger)**

[Methodological aspects and clinicophysiological substantiation of applying the hypoxic therapy] Novikov VS, et al. **Aviakosm Ekolog Med** 1996;30(6):42–6 (34 ref.) (Eng. Abstr.) **(Rus)**

[Patients with chronic airflow limitation: effects of the inspiratory muscle training with threshold load valve, built with appropriate technology, associated to nutritional support] Vargas M, et al. **Rev Med Chil** 1995 Oct; 123(10):1225–34 (Eng. Abstr.) **(Spa)**

STANDARDS

A randomized, controlled trial of protocol-directed versus physician-directed weaning from mechanical ventilation. Kollef MH, et al. **Crit Care Med** 1997 Apr;25(4):567–74

UTILIZATION

Questioning chest physiotherapy [letter; comment] Ntoumenopoulos G. **Chest** 1997 Jul;112(1):292–3. Comment on: Chest 1996 Aug;110(2):430–2.

RESPIRATORY THERAPY DEPARTMENT, HOSPITAL

[Respiratory interdisciplinary functional unit (letter; comment)] Escarrabill J, et al. **Med Clin (Barc)** 1996 Oct 5;107(11):438–9. Comment on: Med Clin (Barc) 1996 Mar 9;106(9):336–43. **(Spa)**

RESPIRATORY TRACT DISEASES

American Thoracic Society--European Respiratory Society Longitudinal Data Analysis Workshop. Barcelona, Spain, September 21–23, 1995. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S207–84

American Thoracic Society 1996 International Conference. New Orleans, Louisiana, May 10–15. **Am J Respir Crit Care Med** 1996 Apr;153(4 Pt 2):A1–940

Chest 1996. World Congress. San Francisco, California, October 27–31, 1996. Abstracts. **Chest** 1996 Oct;110(4 Suppl):1S–234S

Epidemiological studies of the respiratory effects of air pollution. Lebowitz MD. **Eur Respir J** 1996 May; 9(5):1029–54 (306 ref.)

European Respiratory Society (ERS) annual congress. Stockholm, Sweden, September 7–11, 1996. Abstracts. **Eur Respir J Suppl** 1996 Sep;23:1S–527S

Proceedings of the 5th International Inhalation Symposium. Hannover, Germany, 20–24 February 1995. **Exp Toxicol Pathol** 1996 Nov;48(6):477–550

Respiratory medicine. A breath of fresh air? Morrison D, et al. **Lancet** 1996 Dec 21–28;348 Suppl 2:sII23 (5 ref.)

An update on the diagnosis and management of respiratory illness. Mitchell CA, et al. **Med J Aust** 1997 May 5; 166(9):490

Air pollution and respiratory disease. Nardini S. **Monaldi Arch Chest Dis** 1996 Feb;51(1):50–1

Respiratory health hazards and lung function in wildland firefighters. Harrison R, et al. **Occup Med** 1995 Oct–Dec; 10(4):857–70 (41 ref.)

Joint meeting of the Swiss Society of Pneumology and the International Respiratory Care Club. Basel, March 28–30, 1996. Abstracts. **Schweiz Med Wochenschr Suppl** 1996; 75:3S–20S

[1st Single Congress of Pneumology of the French Languages. Paris, 5–8 February 1997. Abstracts] **Rev Mal Respir** 1997 Feb;14 Suppl 1:S1–102 **(Fre)**

[Introduction of molecular biology in respiratory medicine and its perspective] Kira S, et al. **Nippon Rinsho** 1996 Feb; 54(2):287–91 (9 ref.) (Eng. Abstr.) **(Jpn)**

[XXIX National Congress of the SEPAR (Spanish Society of Pneumology and Thoracic Surgery). Murcia, 28–31 May 1996. Abstracts] **Arch Bronconeumol** 1996 May;32 Suppl 2:1–116 **(Spa)**

BLOOD

Association of respiratory symptoms with serum protease inhibitors and albumin levels in Japanese children. Shima M, et al. **Int J Epidemiol** 1996 Dec;25(6):1213–9

[Lipid metabolism, iron metabolic indices and the rates of aging in welders with occupational diseases of the respiratory organs] Kucheruk TK, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):135–8 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Dose-response associations of silica with nonmalignant respiratory disease and lung cancer mortality in the diatomaceous earth industry. Checkoway H, et al. **Am J Epidemiol** 1997 Apr 15;145(8):680–8

Opiate-induced respiratory depression in pediatric patients. Gill AM, et al. **Ann Pharmacother** 1996 Feb;30(2):125–9

Systemic side effects of topical beta-adrenergic blockers. Stewart WC, et al. **Clin Cardiol** 1996 Sep;19(9):691–7 (82 ref.)

Exposure to gaseous formaldehyde induces IgE-mediated sensitization to formaldehyde in school-children. Wantke F, et al. **Clin Exp Allergy** 1996 Mar;26(3):276–80

Respiratory disease induced by drugs [editorial; comment] Camus P. **Eur Respir J** 1997 Feb;10(2):260–4. Comment on: Eur Respir J 1997 Feb;10(2):265–79.

Drugs that may injure the respiratory system [see comments] Foucher P, et al. **Eur Respir J** 1997 Feb;10(2):265–79. Comment in: Eur Respir J 1997 Feb;10(2):260–4.

Respiratory effects associated with indoor nitrogen dioxide exposure in children. Pilotto LS, et al. **Int J Epidemiol** 1997 Aug;26(4):788–96

Effect of occupational exposure to opiates on the respiratory system. Górski P, et al. **Int J Occup Med Environ Health** 1996;9(3):245–53 (48 ref.)

Assessment of respiratory effect of air pollution: study design on general population samples. Baldacci S, et al. **J Environ Pathol Toxicol Oncol** 1997;16(2–3):77–83

Respiratory health effects of industrial air pollution: a study in east Lancashire, UK. Ginns SE, et al. **J Epidemiol Community Health** 1996 Dec;50(6):631–5

Experimental exposure of male volunteers to N-methyl-2-pyrrolidone (NMP): acute effects and pharmacokinetics of NMP in plasma and urine. Akesson B, et al. **Occup Environ Med** 1997 Apr;54(4):236–40

Respiratory depression following oral tramadol in a patient with impaired renal function. Barnung SK, et al. **Pain** 1997 May;71(1):111–2

Chronic inhalation toxicity and carcinogenicity testing of respirable fibrous particles. Workshop report. Vu V, et al. **Regul Toxicol Pharmacol** 1996 Dec;24(3):202–12 (5 ref.)

Nitrogen dioxide and respiratory illness in children. Part IV: Effects of housing and meteorologic factors on indoor nitrogen dioxide concentrations. Spengler JD, et al. **Res Rep Health Eff Inst** 1996 Dec;(58):1–29; discussion 31–6

An evaluation of the respiratory health status of automotive spray-painters exposed to paints containing hexamethylene di-isocyanates in the greater Durban area. Randolph BW, et al. **S Afr Med J** 1997 Mar;87(3):318–23

Epidemiologic studies on ozone. Nyberg F, et al. **Scand J Work Environ Health** 1996;22 Suppl 3:72–98 (144 ref.)

Chemical mixtures in atmospheric aerosols and their correlation to lung diseases and lung cancer occurence in the general population. Spurny KR. **Toxicol Lett** 1996 Nov; 88(1–3):271–7 (34 ref.)

[Air pollution, disease and death (letter; comment)] Jensen AO. **Ugeskr Laeger** 1996 Dec 16;158(51):7429–30. Comment on: Ugeskr Laeger 1996 Oct 14;158(42):5915–9. **(Dan)**

[Side effects of drugs on the respiratory tract: experiences of the Swiss Drug Monitoring Center from 1991 to 1995] Leuppi JD, et al. **Schweiz Rundsch Med Prax** 1996 Oct 29;85(44):1394–7 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Severe form of Freeman-Sheldon syndrome associated with brain anomalies and hearing loss. Zampino G, et al. **Am J Med Genet** 1996 Mar 29;62(3):293–6

Wegener's granulomatosis overlapped with Takayasu arteritis. Yamasaki S, et al. **Clin Rheumatol** 1996 May; 15(3):303–6

Successful intracytoplasmic sperm injection with spermatozoa from a patient with dysplasia of the fibrous sheath and chronic respiratory disease. Olmedo SB, et al. **Hum Reprod** 1997 Jul;12(7):1497–9

Etiology of chronic cough in a population of children referred to a pediatric pulmonologist. Callahan CW. **J Am Board Fam Pract** 1996 Sep–Oct;9(5):324–7

Chronic respiratory illness as a predictor of survival in idiopathic dilated cardiomyopathy: the Washington, DC, Dilated Cardiomyopathy Study. Martin SA Jr, et al. **J Natl Med Assoc** 1996 Nov;88(11):734–43

Respiratory conditions associated with haematological malignancies [see comments] Wickremasinghe M. **Thorax** 1997 Apr;52(4):390–1. Comment in: Thorax 1997 Apr;52(4):392–3. Comment in: Thorax 1997 Apr;52(4):394–5.

[Gastroesophageal reflux disease and respiratory disease] Mattioli G, et al. **Ann Ital Chir** 1995 Sep–Oct;66(5):629–35 (19 ref.) (Eng. Abstr.) **(Ita)**

[Preoperative preparation for oral surgery of patients with underlying systemic diseases] Tartaro GP, et al. **Minerva Stomatol** 1997 Jun;46(6):293–5 (Eng. Abstr.) **(Ita)**

[Efficacy of sulbactam/cefoperazone in respiratory tract infections in elderly patients with underlying respiratory diseases] Yoshida T, et al. **Jpn J Antibiot** 1996 Jul; 49(7):710–4 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Congenital thoracic masses: imaging features in the adult. Raymond GS, et al. **Crit Rev Diagn Imaging** 1997; 38(2):115–205 (68 ref.)

DIAGNOSIS

Evaluation of impairment, disability and handicap caused by respiratory disease—the Thoracic Society of Australia and New Zealand. Abramson M, et al. **Aust N Z J Med** 1996 Oct;26(5):697–701 (12 ref.)

Experience with flexible fibreoptic bronchoscopy. Jayasundera C. **Ceylon Med J** 1996 Dec;41(4):131–4

Usefulness of flow volume loops in emergency center and ICU settings. Guntupalli KK, et al. **Chest** 1997 Feb; 111(2):481–8

Does an allergy skin test on school-children predict respiratory symptoms in adulthood? Kagamimori S, et al. **Clin Exp Allergy** 1996 Mar;26(3):262–9

Congenital thoracic masses: imaging features in the adult. Raymond GS, et al. **Crit Rev Diagn Imaging** 1997; 38(2):115–205 (68 ref.)

Respiratory pearls, pitfalls, and updates [corrected; erratum to be published] Fermann GJ, et al. **Emerg Med Clin North Am** 1997 May;15(2):315–26 (40 ref.)

Upper abdominal surgery: does a lung function test exist to predict early severe postoperative respiratory complications? Barisione G, et al. **Eur Respir J** 1997 Jun; 10(6):1301–8

Low diagnostic value of respiratory impedance measurements in children. Cuijpers CE, et al. **Eur Respir J** 1997 Jan;10(1):88–93

Nitric oxide in exhaled air. Lundberg JO, et al. **Eur Respir J** 1996 Dec;9(12):2671–80 (71 ref.)

Pulmonary function tests in normal Indian children and changes in respiratory disorders [letter; comment] Sarpotdar VG. **Indian Pediatr** 1996 Jan;33(1):73–4. Comment on: Indian Pediatr 1995 Jun;32(6):629–34.

Respiratory grey case. Seemungal B, et al. **Int J STD AIDS** 1996 Aug–Sep;7(5):322

Proximal oesophageal pH–metry in children with respiratory symptoms. Staiano A, et al. **Ital J Gastroenterol** 1996 Apr; 28(3):136–9

Importance of sputum differential cell counting in the diagnosis of airway diseases. Hsu JY, et al. **J Formos Med Assoc** 1997 May;96(5):330–5

Clinical spirometry. Pierce RJ, et al. **Med J Aust** 1997 Jun 16;166(12):658–63

Nitric oxide in exhaled air is a new marker of airway inflammation. Kharitonov SA, et al. **Monaldi Arch Chest Dis** 1996 Dec;51(6):533–7 (50 ref.)

Lung function and airway responsiveness in infancy. Landau LI. **Monaldi Arch Chest Dis** 1996 Aug;51(4):303–5 (23 ref.)

Respiratory symptoms. Burge S. **Occup Med (Oxf)** 1997 Jan; 47(1):55–6 (6 ref.)

Diagnostic tests of lung function. Voter KZ, et al. **Pediatr Rev** 1996 Feb;17(2):53–63

[Spiroergometry. Indications, methods, relevance] Breuer HW. **Dtsch Med Wochenschr** 1997 Apr 4;122(14):447–9 (20 ref.) **(Ger)**

[Differentiated characterization of pulmonary diffusion] Dörp E, et al. **Pneumologie** 1997 Apr;51 Suppl 2:460–2 (Eng. Abstr.) **(Ger)**

[Pediatric flexible bronchoscopy] Bibi H, et al. **Harefuah** 1997 Mar 16;132(6):399–401, 447 (Eng. Abstr.) **(Heb)**

[Indications and methods for rhino–pharyngo–laryngeal fibroscopy in children] Olina M, et al. **Minerva Pediatr** 1996 Jul–Aug;48(7–8):341–3 (Eng. Abstr.) **(Ita)**

[Preoperative evaluation of aged patients] Meguro K, et al. **Masui** 1996 Dec;45 Suppl:S143–6 (5 ref.) **(Jpn)**

[Evaluation of a respiratory care unit on a 45–bed hospital ward] Kiyama T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:141–4 (Eng. Abstr.) **(Jpn)**

[Elaboration and improvement of biochemical methods in early diagnosis and prognostication of the development of occupational diseases] Pavlovskaia NA, et al. **Med Tr Prom Ekol** 1997;(2):45–7 (Eng. Abstr.) **(Rus)**

[Respiratory symptoms, diseases and ventilatory function in shoe industry workers] Zuškin E, et al. **Arh Hig Rada Toksikol** 1996 Jun;47(2):189–97 (Eng. Abstr.) **(Scr)**

[Respiratory findings in textile workers employed in dyeing wool and cotton] Zuškin E, et al. **Arh Hig Rada Toksikol** 1996 Sep;47(3):295–306 (Eng. Abstr.) **(Scr)**

[Ventilatory function and immunologic reactions in female workers processing dried fruits and teas] Zuškin E, et al. **Lijec Vjesn** 1996 May–Jun;118(5–6):113–7 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

The role of corticosteroids in respiratory diseases of children. de Benedictis FM, et al. **Pediatr Pulmonol** 1996 Jul; 22(1):44–57 (234 ref.)

Respiratory benefits of regional anesthesia. Clergue F, et al. **Reg Anesth** 1996 Nov–Dec;21(6 Suppl):18–23 (39 ref.)

[Short–term therapy of acute respiratory and ORL infections with Clarithromycin] Knothe H. **Z Gesamte Inn Med** 1992 Sep;47(9 Suppl):1–7 **(Ger)**

[The use of mucosolvan in ENT diseases. Part I.] Szmeja Z, et al. **Otolaryngol Pol** 1996;50(2):162–8 (Eng. Abstr.) **(Pol)**

ECONOMICS

Maternal smoking and medical expenditures for childhood respiratory illness. Stoddard JJ, et al. **Am J Public Health** 1997 Feb;87(2):205–9

EPIDEMIOLOGY

Altered maternal psychological profile as health risk factor in poor urban infants. Araya M, et al. **Acta Paediatr** 1996 Oct;85(10):1213–6

Respiratory morbidity in preschool children born prematurely. Relationship to adverse neonatal events. Greenough A, et al. **Acta Paediatr** 1996 Jul;85(7):772–7 (46 ref.)

Epidemiology of pollution–induced airway disease in Scandinavia and Eastern Europe. Björkstén B. **Allergy** 1997;52(38 Suppl):23–5; discussion 35–6 (11 ref.)

Epidemiology of pollution–induced airway disease: urban/rural differences in East and West Germany. Nicolai T. **Allergy** 1997;52(38 Suppl):26–9; discussion 35–6 (18 ref.)

Prevalence of self–reported respiratory disease symptoms among veterinarians in the Southern Netherlands. Tielen MJ, et al. **Am J Ind Med** 1996 Feb;29(2):201–7

Respiratory function in vineyard and orchard workers. Zuskin E, et al. **Am J Ind Med** 1997 Feb;31(2):250–5

Respiratory function in shoe manufacturing workers. Zuskin E, et al. **Am J Ind Med** 1997 Jan;31(1):50–5

Prevalence of respiratory diseases in patients with panic and obsessive compulsive disorders. Perna G, et al. **Anxiety** 1994;1(2):100–1

Acute respiratory illness in the first year of primary school related to previous attendance at child care. McCutcheon H, et al. **Aust N Z J Public Health** 1996 Feb;20(1):49–53

Association between ambient air concentrations of nitrogen dioxide and respiratory symptoms in children in Prague, Czech Republic. Preliminary results from the Czech part of the SAVIAH Study. Small Area Variation in Air Pollution and Health. Pikhart H, et al. **Cent Eur J Public Health** 1997 Jun;5(2):82–5

Air pollution and childrens' respiratory morbidity in the Tata area, Hungary. Pintér A, et al. **Cent Eur J Public Health** 1996;4 Suppl:17–20

Association between ozone and hospitalization for respiratory diseases in 16 Canadian cities. Burnett RT, et al. **Environ Res** 1997 Jan;72(1):24–31

Replication [editorial; comment] Cohen AJ. **Epidemiology** 1997 Jul;8(4):341–3. Comment on: Epidemiology 1997 Jul;8(4):364–70. Comment on: Epidemiology 1997 Jul;8(4):371–7.

Respiratory symptoms in children of Upper Silesia, Poland cross–sectional study in two towns of different air pollution levels. Zejda JE, et al. **Eur J Epidemiol** 1996 Feb; 12(1):115–20

Respiratory morbidity in young school children born prematurely—chronic lung disease is not a risk factor? Greenough A, et al. **Eur J Pediatr** 1996 Sep;155(9):823–6

Invasive antenatal procedures and requirement for neonatal intensive care unit admission. Greenough A, et al. **Eur J Pediatr** 1997 Jul;156(7):550–2

Prevalence of respiratory symptoms, bronchial hyperresponsiveness and atopy among adults: west and east Germany. Nowak D, et al. **Eur Respir J** 1996 Dec; 9(12):2541–52

Occupational exposure and chronic respiratory symptoms—a population based study in Vietnam. Matsuda S, et al. **Ind Health** 1997 Apr;35(2):271–7

Ambient air pollution & respiratory symptoms complex in preschool children. Awasthi S, et al. **Indian J Med Res** 1996 Oct;104:257–62

Indoor air quality and health: validity and determinants of reported home dampness and moulds. Dales RE, et al. **Int J Epidemiol** 1997 Feb;26(1):120–5

Effects of an ambient air pollution intervention and environmental tobacco smoke on children's respiratory health in Hong Kong. Peters J, et al. **Int J Epidemiol** 1996 Aug;25(4):821–8

Seasonal exposure to NO2 and respiratory symptoms in preschool children. Mukala K, et al. **J Expo Anal Environ Epidemiol** 1996 Apr–Jun;6(2):197–210

Predictive pulmonary function of school children in an area of low air pollution in Taiwan. Tang FC, et al. **J Formos Med Assoc** 1997 Jun;96(6):397–404

Does smoking cause low back pain? Results from a population–based study. Leboeuf–Yde C, et al. **J Manipulative Physiol Ther** 1996 Feb;19(2):99–108

Respiratory findings in workers not exposed to air pollutants. Zuskin E, et al. **J Occup Environ Med** 1996 Sep;38(9):912–9

Nitrogen dioxide, gas heating and respiratory illness [editorial] Pilotto LS, et al. **Med J Aust** 1997 Sep 15; 167(6):295–6

Respiratory infection—Pennsylvania. 1977 [classical article] **MMWR Morb Mortal Wkly Rep** 1997 Jan 24;46(3):49–50

Occupational asthma and other nonasbestos occupational respiratory diseases notified between 1993 and 1996. Walls C, et al. **N Z Med J** 1997 Jul 11;110(1047):246–9

Self reported respiratory symptoms and diseases among hairdressers. Leino T, et al. **Occup Environ Med** 1997 Jun; 54(6):452–5

Respiratory health effects of opencast coalmining: a cross sectional study of current workers. Love RG, et al. **Occup Environ Med** 1997 Jun;54(6):416–23

A cross sectional study of the independent effect of occupation on lung function in British coal miners [letter; comment] Seaton A. **Occup Environ Med** 1996 Aug; 53(8):575–6. Comment on: Occup Environ Med 1996 Feb;53(2):125–8.

Short term variations in hospital admissions and mortality and particulate air pollution. Wordley J, et al. **Occup Environ Med** 1997 Feb;54(2):108–16

SWORD '95: surveillance of work–related and occupational respiratory disease in the UK. Keynes HL, et al. **Occup Med (Oxf)** 1996 Oct;46(5):379–81

A survey of respiratory and dermatological disease in the chrome plating industry in the West Midlands, UK. Williams N. **Occup Med (Oxf)** 1996 Dec;46(6):432–4

Acute respiratory illnesses in the first 18 months of life. López Bravo IM, et al. **Rev Panam Salud Publica** 1997 Jan; 1(1):9–17

Epidemiologic studies on ozone. Nyberg F, et al. **Scand J Work Environ Health** 1996;22 Suppl 3:72–98 (144 ref.)

Occupational respiratory diseases in Singapore. Lee HS, et al. **Singapore Med J** 1996 Apr;37(2):160–4

Illness and use of medicines in relation to caries development and to immigrant status in infants and toddlers living in Sweden. Wendt LK, et al. **Swed Dent J** 1996;20(4):151–9

[Epidemiology of health problems caused by passive smoking] Schwarz B, et al. **Wien Klin Wochenschr** 1996; 108(18):565–9 (48 ref.) (Eng. Abstr.) **(Ger)**

[The lung in AIDS] Lo Giudice V, et al. **Minerva Med** 1996 Jul–Aug;87(7–8):347–54 (40 ref.) (Eng. Abstr.) **(Ita)**

[Update on HIV infection in the province of Cosenza. HIV infections and respiratory disease] Lo Giudice V, et al. **Minerva Med** 1996 Jul–Aug;87(7–8):339–46 (Eng. Abstr.) **(Ita)**

[Respiratory symptoms in the textile industry. Their prevalence in the Vale do Ave] da Costa JT, et al. **Acta Med Port** 1997 Jan;10(1):7–14 (Eng. Abstr.) **(Por)**

[Respiratory organ morbidity in workers in the mining industry] Rubtsov RV, et al. **Lik Sprava** 1996 Jul–Sep; (7–9):182–4 (Eng. Abstr.) **(Rus)**

ETHNOLOGY

Ethnic differences in the prevalence of nonmalignant respiratory disease among uranium miners [see comments] Mapel DW, et al. **Am J Public Health** 1997 May;87(5):833–8 . Comment in: Am J Public Health 1997 May;87(5):730–2.

Hospitalization of aboriginal and non–aboriginal patients for respiratory tract diseases in Western Australia, 1988–1993. Williams P, et al. **Int J Epidemiol** 1997 Aug;26(4):797–805

ETIOLOGY

Epidemiology of pollution–induced airway disease in Scandinavia and Eastern Europe. Björkstén B. **Allergy** 1997;52(38 Suppl):23–5; discussion 35–6 (11 ref.)

Upper gastrointestinal motility disorders and respiratory symptoms. Schiller LR. **Am J Health Syst Pharm** 1996 Nov 15;53(22 Suppl 3):S13–6 (21 ref.)

What to do about softwood? A review of respiratory effects and recommendations regarding exposure limits. Demers PA, et al. **Am J Ind Med** 1997 Apr;31(4):385–98 (72 ref.)

A field investigation of the acute respiratory effects of metal working fluids. I. Effects of aerosol exposures. Kriebel D, et al. **Am J Ind Med** 1997 Jun;31(6):756–66

Respiratory symptoms and pulmonary function in mill workers exposed to wood dust. Liou SH, et al. **Am J Ind Med** 1996 Sep;30(3):293–9

The DIA illness probably was the flu! [letter; comment] Repsher L, et al. **Am J Ind Med** 1997 Mar;31(3):366–7; discussion 368–9. Comment on: Am J Ind Med 1995

Aug;28(2):193–205.

A field investigation of the acute respiratory effects of metal working fluids. II. Effects of airborne sulfur exposures. Sama SR, et al. **Am J Ind Med** 1997 Jun;31(6):767–76

Respiratory symptoms and lung function abnormalities among machine operators in automobile production. Sprince NL, et al. **Am J Ind Med** 1997 Apr;31(4):403–13

Respiratory morbidity in relationship to farm characteristics in swine confinement work: possible preventive measures. Vogelzang PF, et al. **Am J Ind Med** 1996 Aug;30(2):212–8

Longitudinal study of respiratory findings in rubber workers. Zuskin E, et al. **Am J Ind Med** 1996 Aug;30(2):171–9

Maternal smoking and medical expenditures for childhood respiratory illness. Stoddard JJ, et al. **Am J Public Health** 1997 Feb;87(2):205–9

Respiratory health and long-term exposure to air pollutants in Swiss schoolchildren. SCARPOL Team. Swiss Study on Childhood Allergy and Respiratory Symptoms with Respect to Air Pollution, Climate and Pollen. Braun-Fahrländer C, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1042–9

The kinetics of grain dust-induced inflammation of the lower respiratory tract. Deetz DC, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):254–9

Lower respiratory illness, recurrent wheezing, and day care attendance. Marbury MC, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):156–61

Air pollution and respiratory health among children with asthmatic or cough symptoms. Timonen KL, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):546–52

Respiratory symptoms and pulmonary function in a group of women weavers in South Africa. Shamssain MH, et al. **Ann Hum Biol** 1997 Jul–Aug;24(4):299–306

Respiratory symptoms and respiratory function in workers exposed to tea fluff. Hill B, et al. **Ann Occup Hyg** 1996 Oct;40(5):491–7

Airway symptoms among house painters in relation to exposure to volatile organic compounds (VOCS)—a longitudinal study. Wieslander G, et al. **Ann Occup Hyg** 1997 Apr;41(2):155–66

Associations between respiratory illness and PM10 air pollution. Choudhury AH, et al. **Arch Environ Health** 1997 Mar–Apr;52(2):113–7

Respiratory health of children at schools near a fertilizer plant. Gomzi M. **Arh Hig Rada Toksikol** 1996 Jun; 47(2):145–55

The respiratory system. Zifko U, et al. **Baillieres Clin Neurol** 1996 Oct;5(3):477–95 (69 ref.)

Epithelial shedding—restitution as a causative process in airway inflammation. Persson CG, et al. **Clin Exp Allergy** 1996 Jul;26(7):746–55 (73 ref.)

Evaluation and management of gastroesophageal reflux and pulmonary disease. del Rosario JF, et al. **Curr Opin Pediatr** 1996 Jun;8(3):209–15 (98 ref.)

Respiratory disease among Nigerians working in a sugar industry. Tanimowo MO. **East Afr Med J** 1996 Aug; 73(8):556–9

The role of particulate size and chemistry in the association between summertime ambient air pollution and hospitalization for cardiorespiratory diseases. Burnett RT, et al. **Environ Health Perspect** 1997 Jun;105(6):614–20

Health and respirable particulate (PM10) air pollution: a causal or statistical association? Gamble JF, et al. **Environ Health Perspect** 1996 Aug;104(8):838–50 (97 ref.)

Infant respiratory symptoms in relation to mite allergen exposure. van Strien RT, et al. **Eur Respir J** 1996 May; 9(5):926–31

Acute and chronic respiratory complications of toxic epidermal necrolysis. McIvor RA, et al. **J Burn Care Rehabil** 1996 May–Jun;17(3):237–40

Respiratory and digestive lesions caused by Salmonella arizonae in two snakes. Orós J, et al. **J Comp Pathol** 1996 Aug;115(2):185–9

Air pollution and respiratory health in Mexico City. Hernández-Garduño E, et al. **J Occup Environ Med** 1997 Apr;39(4):299–307

The chest wall and pleural space. Burgess KR. **Med J Aust** 1997 Jun 2;166(11):604–9

Occupational asthma and other nonasbestos occupational respiratory diseases notified between 1993 and 1996. Walls C, et al. **N Z Med J** 1997 Jul 11;110(1047):246–9

Long term morbidity in survivors of the 1984 Bhopal gas leak. Cullinan P, et al. **Natl Med J India** 1996 Jan–Feb; 9(1):5–10

Ventilatory function of factory workers exposed to tea dust. Jayawardana PL, et al. **Occup Med (Oxf)** 1997 Feb; 47(2):105–9

Respiratory symptoms and dermatoses among grinders and brazers of hard metal and stellite blades. Linnainmaa M, et al. **Occup Med (Oxf)** 1997 Jan;47(1):33–9

Mechanisms of airway inflammation in cystic fibrosis. Döring G. **Pediatr Allergy Immunol** 1996;7(9 Suppl):63–6 (31 ref.)

Wood-burning stoves and lower respiratory illnesses in Navajo children. Robin LF, et al. **Pediatr Infect Dis J** 1996 Oct;15(10):859–65

Damp housing conditions and respiratory symptoms in primary school children. Yang CY, et al. **Pediatr Pulmonol** 1997 Aug;24(2):73–7

Environmental tobacco smoke: a hazard to children. American Academy of Pediatrics Committee on Environmental Health. **Pediatrics** 1997 Apr;99(4):639–42

Late functional deterioration following paralytic poliomyelitis. Kidd D, et al. **QJM** 1997 Mar;90(3):189–96

Respiratory health effects of exposure to environmental tobacco smoke. Jinot J, et al. **Rev Environ Health** 1996 Jul–Sep;11(3):89–100 (63 ref.)

Smoky skies, mosquitoes, and disease [letter] Mims FM 3rd, et al. **Science** 1997 Jun 20;276(5320):1774–5

Respiratory manifestations of tick-borne diseases in the Southeastern United States [see comments] Byrd RP Jr, et al. **South Med J** 1997 Jan;90(1):1–4 (33 ref.). Comment in: South Med J 1997 Jun;90(6):663.

Long-term effects of air pollution. Berglund D, et al. **West J Med** 1996 Sep;165(3):140

[Urban atmospheric pollution and public health: epidemiologic data] Aubier M. **Bull Acad Natl Med** 1997 Mar 18;181(3):489–97 (21 ref.) (Eng. Abstr.) **(Fre)**

[Occupational respiratory risks in workers exposed to enzymes in detergents] Laraqui C, et al. **Rev Mal Respir** 1996 Oct;13(5):485–92 (Eng. Abstr.) **(Fre)**

[Indoor chemical pollutants and their effects on health] De Luca D'Alessandro E, et al. **Ann Ig** 1996 Sep–Oct; 8(5):593–5 (Eng. Abstr.) **(Ita)**

[The effect of wood dust on the respiratory system. Medical examination of furniture factory workers] Milanowski J, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 1:32–7 (Eng. Abstr.) **(Pol)**

[Pulmonary complications in patients on continuous ambulatory peritoneal dialysis] Jovanović D, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:156–7 (Eng. Abstr.) **(Scc)**

[Pulmonary complications after heart surgery] Simková I, et al. **Bratisl Lek Listy** 1997 May;98(5):258–68 (Eng. Abstr.) **(Slo)**

[Respiratory disorders in movement disorders] Jiménez Jiménez FJ, et al. **Med Clin (Barc)** 1996 Sep 21;107(9):342–6 (69 ref.) **(Spa)**

[Gas exchange changes in the postoperative period of heart surgery] Quadrelli SA, et al. **Medicina (B Aires)** 1995; 55(4):300–6 (Eng. Abstr.) **(Spa)**

GENETICS

[Research trends in molecular genetics of respiratory medicine] Yamaguchi E, et al. **Nippon Rinsho** 1996 Feb; 54(2):292–6 (17 ref.) (Eng. Abstr.) **(Jpn)**

HISTORY

Air pollution and other local factors in respiratory disease. 1959 [classical article] Fairbairn AS, et al. **J Epidemiol Community Health** 1997 Jun;51(3):216–22; discussion 223

The history of pulp and paper bleaching: respiratory-health effects. Torén K, et al. **Lancet** 1997 May 3;349(9061):1316–8

[Posthumous homage to Professor Héctor Orrego Puelma, MD] Oyarzún M. **Rev Med Chil** 1996 Apr;124(4):513–8 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Exposure to gaseous formaldehyde induces IgE-mediated sensitization to formaldehyde in school-children. Wantke F, et al. **Clin Exp Allergy** 1996 Mar;26(3):276–80

ALCAT Test results in the treatment of respiratory and gastrointestinal symptoms, arthritis, skin and central nervous system. Mylek D. **Rocz Akad Med Bialymst** 1995; 40(3):625–9

Eosinophil lysis and free granules: an in vivo paradigm for cell activation and drug development. Persson CG, et al. **Trends Pharmacol Sci** 1997 Apr;18(4):117–23 (70 ref.)

METABOLISM

Nasal lavage biomarkers in air pollution epidemiology. Steerenberg PA, et al. **Arch Toxicol Suppl** 1997;19:207–16 (35 ref.)

Upregulation of tachykinin receptors in chronic airway inflammation. McDonald DM. **Pulm Pharmacol** 1995 Aug–Oct;8(4–5):203–5 (15 ref.)

[Breath condensate as a method of noninvasive assessment of inflammation mediators from the lower airways] Becher G, et al. **Pneumologie** 1997 Apr;51 Suppl 2:456–9 (Eng. Abstr.) **(Ger)**

[Mucin gene—regulation of the expression of MUC2 and MUC3 mucin gene in the airway] Ohmori H, et al. **Nippon Rinsho** 1996 Feb;54(2):411–7 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Levels of endothelin-I in bronchoalveolar fluid of patients with selected respiratory tract diseases] Gawlik R, et al. **Pneumonol Alergol Pol** 1997;65(5–6):333–7 (Eng. Abstr.) **(Pol)**

MICROBIOLOGY

The changing trend in the pattern of infective etiologies in childhood acute lower respiratory tract infection. Chong CY, et al. **Acta Paediatr Jpn** 1997 Jun;39(3):317–21

Respiratory disease in thoroughbred horses in training: the relationships between disease and viruses, bacteria and environment. Burrell MH, et al. **Vet Rec** 1996 Sep 28; 139(13):308–13

MORTALITY

Dose-response associations of silica with nonmalignant respiratory disease and lung cancer mortality in the diatomaceous earth industry. Checkoway H, et al. **Am J Epidemiol** 1997 Apr 15;145(8):680–8

Mortality among Army Chemical Corps Vietnam veterans. Dalager NA, et al. **Am J Ind Med** 1997 Jun;31(6):719–26

Cold exposure and winter mortality from ischaemic heart disease, cerebrovascular disease, respiratory disease, and all causes in warm and cold regions of Europe. The Eurowinter Group [see comments] **Lancet** 1997 May 10; 349(9062):1341–6. Comment in: Lancet 1997 May 10;349(9062):1335. Comment in: Lancet 1997 May 10;349(9062):1337–8. Comment in: Lancet 1997 Aug 23;350(9077):590–1; discussion 591–2. Comment in: Lancet 1997 Aug 23;350(9077):591. Comment in: Lancet 1997 Aug 23;350(9077):591; discussion 591–2.

Mortality rates for respiratory disorders in Italy (1979–1990). Desideri M, et al. **Monaldi Arch Chest Dis** 1997 Jun; 52(3):212–6

Mortality from asthma in the state of S. Paulo, Brazil (1970–1992). Lotufo PA, et al. **Rev Saude Publica** 1995 Dec; 29(6):434–9

[Mortality in non-specific respiratory tract inflammation and bronchial obstructive diseases in relation to the environment in the Czech Republic] Vondra V, et al. **Cas Lek Cesk** 1996 Jul 31;135(15):482–6 (Eng. Abstr.) **(Cze)**

PATHOLOGY

Clinical significance of an inconclusive cytopathologic diagnosis: a five-year experience at Duke University Medical Center. II. Analysis and follow-up of specimens from the respiratory tract. Wax TD, et al. **Acta Cytol** 1997 Jul–Aug;41(4):1053–7

Respiratory and digestive lesions caused by Salmonella arizonae in two snakes. Orós J, et al. **J Comp Pathol** 1996 Aug;115(2):185–9

PHYSIOPATHOLOGY

Clinical relevance of tubulus anomalies and compound cilia. Torkkeli T, et al. **Acta Otolaryngol Suppl (Stockh)** 1997; 529:140–3

Neurogenic inflammation. A model for studying efferent actions of sensory nerves. McDonald DM, et al. **Adv Exp Med Biol** 1996;410:453–62 (68 ref.)

Treatment of mucociliary dysfunction [see comments] Salathe M, et al. **Chest** 1996 Oct;110(4):1048–57 (154 ref.) . Comment in: Chest 1996 Oct;110(4):876.

Partial relaxation of diaphragm and lung function parameters. Kostianev S, et al. **Folia Med (Plovdiv)** 1996;38(1):5–8

Proceedings of the Advanced Seminars in Respiratory Medicine. Trento, Italy, June 30–July 4, 1996. **Monaldi Arch Chest Dis** 1996 Dec;51(6):461–557

Noisy breathing in children: history and presentation hold many clues to the cause. Pryor MP. **Postgrad Med** 1997 Feb;101(2):103–12 (17 ref.)

Diaphragmatic flutter emulating recalcitrant asthma. Harrison P, et al. **South Med J** 1997 Feb;90(2):234–6

[Pharmacology of airway inflammation—special reference to hypersecretion of the mucous] Miyata K, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):144–6 (0 ref.) **(Jpn)**

[The use of mucosolvan in ENT diseases. Part I.] Szmeja Z, et al. **Otolaryngol Pol** 1996;50(2):162–8 (Eng. Abstr.) **(Pol)**

[Mechanisms in the onset of nonspecific respiratory diseases caused by air pollutants in the work environment] Zuškin E, et al. **Arh Hig Rada Toksikol** 1996 Dec;47(4):405–11 (Eng. Abstr.) **(Scr)**

PREVENTION & CONTROL

Respiratory health services reported by U.S. mining facilities in the National Occupational Health Survey of Mining (1984–1989). Linch KD, et al. **Am J Ind Med** 1996 Sep; 30(3):273–80

The role of tachykinin receptor antagonists in the prevention of bronchial hyperresponsiveness, airway inflammation and cough. Advenier C, et al. **Eur Respir J** 1997 Aug; 10(8):1892–906 (196 ref.)

Pre-operative oximetry and capnometry: potential respiratory screening tools. Block FE Jr, et al. **Int J Clin Monit Comput** 1996 Aug;13(3):153–6

[Prevention of respiratory complications after abdominal surgery] Rezaiguia S, et al. **Ann Fr Anesth Reanim** 1996; 15(5):623–46 (119 ref.) (Eng. Abstr.) **(Fre)**

[Prospects of using computer expert system in the diagnosis of diseases of the respiratory system] Akhlakov MK, et al. **Klin Med (Mosk)** 1996;74(8):48–9 (4 ref.) (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

3rd International Society for the Advancement of Respiratory Psychophysiology (ISARP) Congress. Nijmegen, The Netherlands, August 26–27, 1996. Abstracts. **Biol Psychol** 1997 Jun 20;46(1):73–97

RADIOGRAPHY

Plain radiographs and thoracic high-resolution CT in patients with ankylosing spondylitis. Fenlon HM, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1067–72

The impact of routine chest radiography on ICU

management decisions: an observational study. Marik PE, et al. **Am J Crit Care** 1997 Mar;6(2):95-8
The neonatal chest. Shaw DG. **Eur Radiol** 1997;7(3):368-81
Functional imaging of the airways. Goldin JG, et al. **J Thorac Imaging** 1997 Jan;12(1):29-37 (56 ref.)
Volumetric (helical/spiral) CT (VCT) of the airways. Naidich DP, et al. **J Thorac Imaging** 1997 Jan;12(1):11-28 (43 ref.)
Quality of care. Weiner D, et al. **Pediatr Emerg Care** 1997 Jun;13(3):232-6

REHABILITATION

[Evaluation methods for respiratory muscle function and their application in respiratory rehabilitation] Delhez L. **J Belge Med Phys Rehabil** 1980;3(1):7-32 (30 ref.) **(Fre)**
[Sequelae of total laryngectomy with special reference to rehabilitation of the voice and lower airways] Ackerstaff AH, et al. **HNO** 1997 Feb;45(2):97-104 (26 ref.) **(Ger)**
[Respiratory rehabilitation of the elderly patient: results and prospects] Di Marzo A. **Clin Ter** 1996 Nov;147(11):599-605 (15 ref.) (Eng. Abstr.) **(Ita)**

SURGERY

Surgical management and treatment of esophageal fistula. Fernando HC, et al. **Surg Clin North Am** 1996 Oct; 76(5):1123-35 (36 ref.)
[On adenoidectomy] Lacosta JL, et al. **An Otorrinolaringol Ibero Am** 1996;23(5):491-502 (Eng. Abstr.) **(Spa)**

THERAPY

Chest 1997. Moving toward the future with patient-centered care. New Orleans, Louisiana. October 26-30, 1997. Abstracts. **Chest** 1997 Sep;112(3 Suppl):1S-180S
Respiratory pearls, pitfalls, and updates [corrected; erratum to be published] Fermann GJ, et al. **Emerg Med Clin North Am** 1997 May;15(2):315-26 (40 ref.)
Survival in patients receiving long-term home oxygen therapy. **Monaldi Arch Chest Dis** 1997 Jun;52(3):304
Proceedings of the Advanced Seminars in Respiratory Medicine. Trento, Italy, June 30-July 4, 1996. **Monaldi Arch Chest Dis** 1996 Dec;51(6):461-557
[Respiratory emergencies in pediatrics: priority problems] Gehri M. **Rev Med Suisse Romande** 1996 Oct; 116(10):767-72 **(Fre)**
[Evaluation of a respiratory care unit on a 45-bed hospital ward] Kiyama T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:141-4 (Eng. Abstr.) **(Jpn)**
[Problems of gene transfer to human airway in the patients with respiratory diseases] Ohwada A. **Nippon Rinsho** 1996 Feb;54(2):329-33 (12 ref.) (Eng. Abstr.) **(Jpn)**
[Bronchoscopic cryotherapy] Kozielski J, et al. **Pneumonol Alergol Pol** 1997;65(5-6):411-6 (20 ref.) **(Pol)**

ULTRASONOGRAPHY

Thoracic sonography for diagnosis and intervention. Sistrom CL, et al. **Curr Probl Diagn Radiol** 1997 Jan-Feb;26(1):1-49 (148 ref.)

VETERINARY

Antibiotic prophylaxis of lower respiratory tract contamination in horses confined with head elevation for 24 or 48 hours. Raidal SL, et al. **Aust Vet J** 1997 Feb; 75(2):126-31
Respiratory coccidiosis (Cryptosporidium baileyi) among northern Georgia broilers in one company. Goodwin MA, et al. **Avian Dis** 1996 Jul-Sep;40(3):572-5
Inflammatory markers in bronchoalveolar lavage fluid of standardbred racehorses with inflammatory airway disease: response to interferon-alpha. Moore BR, et al. **Equine Vet J** 1997 Mar;29(2):142-7
Microbiological study of transtracheal aspirates from dogs with suspected lower respiratory tract disease: 264 cases (1989-1995). Angus JC, et al. **J Am Vet Med Assoc** 1997 Jan 1;210(1):55-8
Management variables associated with high mortality rates attributable to respiratory tract problems in female calves prior to weaning. Losinger WC, et al. **J Am Vet Med Assoc** 1996 Nov 15;209(10):1756-9
Relationships among treatment for respiratory tract disease, pulmonary lesions evident at slaughter, and rate of weight gain in feedlot cattle. Wittum TE, et al. **J Am Vet Med Assoc** 1996 Aug 15;209(4):814-8
Identification of noncytopathic equine rhinovirus 1 as a cause of acute febrile respiratory disease in horses. Li F, et al. **J Clin Microbiol** 1997 Apr;35(4):937-43
Lower respiratory tract disease. Moore BR. **Vet Clin North Am Equine Pract** 1996 Dec;12(3):457-72 (79 ref.)
Instrumentation and techniques in respiratory surgery. Stick JA. **Vet Clin North Am Equine Pract** 1996 Aug;12(2):351-72 (31 ref.)
Instrumentation and techniques in transendoscopic upper respiratory tract laser surgery. Tulleners E. **Vet Clin North Am Equine Pract** 1996 Aug;12(2):373-95 (19 ref.)
Turkey rhinotracheitis virus and Escherichia coli experimental infection in chickens: histopathological, immunocytochemical and microbiological study. Majó N, et al. **Vet Microbiol** 1997 Jun 30;57(1):29-40
Respiratory disease in thoroughbred horses in training: the relationships between disease and viruses, bacteria and environment. Burrell MH, et al. **Vet Rec** 1996 Sep 28; 139(13):308-13
Mortality in cattle up to two years old in Northern Ireland during 1992. Menzies FD, et al. **Vet Rec** 1996 Jun 22; 138(25):618-22
Descriptive epidemiology of captive cervid herds in Michigan, USA. Bruning-Fann CS, et al. **Vet Res** 1997 May-Jun;28(3):295-302
Chronic exposure of pigs to airborne dust and endotoxins in an environmental chamber: technical note. Urbain B, et al. **Vet Res** 1996;27(6):569-78

VIROLOGY

Detection of rhinovirus RNA in lower airway cells during experimentally induced infection. Gern JE, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1159-61
Rapid identification of respiratory viruses: impact on isolation practices and transmission among immunocompromised pediatric patients [published erratum appears in Infect Control Hosp Epidemiol 1996 Dec;17(12):774] Beekmann SE, et al. **Infect Control Hosp Epidemiol** 1996 Sep; 17(9):581-6
Rapid detection of respiratory syncytial virus by indirect immunofluorescence in infants hospitalized with acute respiratory disease. Goyenechea A, et al. **Mem Inst Oswaldo Cruz** 1996 Jul-Aug;91(4):489-90
Mucosal immunity: an overview and studies of enteric and respiratory coronavirus infections in a swine model of enteric disease. Saif LJ. **Vet Immunol Immunopathol** 1996 Nov;54(1-4):163-9 (50 ref.)

RESPIRATORY TRACT INFECTIONS

Changes in the amplitude of the nasal cycle associated with symptoms of acute upper respiratory tract infection. Eccles R, et al. **Acta Otolaryngol (Stockh)** 1996 Jan;116(1):77-81
HIV in illicit drug users. O'Donnell AE. **Clin Chest Med** 1996 Dec;17(4):797-807 (90 ref.)
Overview of pulmonary complications. Rosen MJ. **Clin Chest Med** 1996 Dec;17(4):621-31 (79 ref.)
Respiratory tract infections, England and Wales: laboratory reports, weeks 05-08/96. **Commun Dis Rep CDR Wkly** 1996 Mar 1;6(9):76-8
Atopic disease, rhinitis and conjunctivitis, and upper respiratory infections. Schneider LC, et al. **Curr Opin Pediatr** 1996 Oct;8(5):531-40 (95 ref.)
Infectious diseases. **Curr Opin Pulm Med** 1997 Mar; 3(2):B25-64
Pulmonary complications of HIV infection. Schneider RF, et al. **Curr Opin Pulm Med** 1997 Mar;3(2):151-8 (73 ref.)
Respiratory illness in HIV-negative immunocompromised patients. Tietjen PA, et al. **Curr Opin Pulm Med** 1997 Mar; 3(2):125-30 (28 ref.)
Acute respiratory infections [editorial] Wafula EM. **East Afr Med J** 1995 Oct;72(10):617-8
Lower respiratory tract infections in the community: towards a more rational approach [editorial; comment] Dorca J, et al. **Eur Respir J** 1996 Aug;9(8):1588-9 (17 ref.). Comment on: Eur Respir J 1996 Aug;9(8):1596-600.
Use of investigations in lower respiratory tract infection in the community: a European survey [see comments] Woodhead M, et al. **Eur Respir J** 1996 Aug;9(8):1596-600 . Comment in: Eur Respir J 1996 Aug;9(8):1588.
Management of respiratory infections in community/hospital set-up [see comments] Hegde BM. **J Indian Med Assoc** 1996 Jan;94(1):21-3. Comment in: J Indian Med Assoc 1996 Aug;94(8):312.
Laboratory diagnosis of acute lower respiratory tract viral infections in children. Hijazi Z, et al. **J Trop Pediatr** 1996 Oct;42(5):276-80
Study of interobserver reliability in clinical assessment of RSV lower respiratory illness: a Pediatric Investigators Collaborative Network for Infections in Canada (PICNIC) study. Wang EE, et al. **Pediatr Pulmonol** 1996 Jul; 22(1):23-7
[Destructive respiratory infection] Cole P. **Kansenshogaku Zasshi** 1996 Nov;70(11):1133-9 **(Jpn)**
[Infections of the lower respiratory tract in patients with human immunodeficiency virus infection] Arzuaga JA, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):91-106 (152 ref.) **(Spa)**
[Ethnography of acute respiratory infections in a rural zone of Mexican highlands] Martínez H, et al. **Salud Publica Mex** 1997 May-Jun;39(3):207-16 (Eng. Abstr.) **(Spa)**

BLOOD

Elevated plasma levels of L1L and L1H in CF patients. Clohessy PA, et al. **Biochem Soc Trans** 1996 May; 24(2):310S
Vitamin A status in early childhood diarrhoea, respiratory infection and in maternal and cord blood. Agarwal DK, et al. **J Trop Pediatr** 1996 Feb;42(1):12-4
Plasma glutamine and upper respiratory tract infection during intensified training in swimmers. Mackinnon LT, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):285-90
Serum alpha-interferon in lower respiratory tract infections of children. Moulin F, et al. **Pediatr Infect Dis J** 1996 Oct; 15(10):883-6
[The evaluation of interleukin-6 (IL-6) and tumor necrosis factor alpha (TNF-alpha) level in peripheral blood of patients with chronic lower respiratory tract infection] Tsujimoto M, et al. **Kansenshogaku Zasshi** 1997 May; 71(5):430-6 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Early acute otitis media: determined by exposure to respiratory pathogens. Kvaerner KJ, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:14-8
The risk of myocardial infarction among Finnish farmers seeking medical care for an infection. Penttinen J, et al. **Am J Public Health** 1996 Oct;86(10):1440-2
Role of nasal interleukin-8 in neutrophil recruitment and activation in children with virus-induced asthma. Teran LM, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1362-6
IL-4 differentiates naive CD8+ T cells to a "Th2-like" phenotype: a link between viral infections and bronchial asthma. Coyle AJ, et al. **Ann N Y Acad Sci** 1996 Oct 31; 796:97-103
Predictors of hypoxaemia in hospital admissions with acute lower respiratory tract infection in a developing country. Weber MW, et al. **Arch Dis Child** 1997 Apr;76(4):310-4
Acute airway obstruction following facial scalding: differential diagnosis between a thermal and infective cause. Watts AM, et al. **Burns** 1996 Nov;22(7):570-3
Socioeconomic status, number of siblings, and respiratory infections in early life as determinants of atopy in children. Forastiere F, et al. **Epidemiology** 1997 Sep;8(5):566-70
Association between Wegener's granulomatosis and Staphylococcus aureus infection? van Putten JW, et al. **Eur Respir J** 1996 Sep;9(9):1955-7
Bacterial toxins and sudden unexpected death in a young child. Bentley AJ, et al. **Forensic Sci Int** 1997 Aug 4; 88(2):141-6
Viruses in asthma. Busse WW, et al. **J Allergy Clin Immunol** 1997 Aug;100(2):147-50 (12 ref.)
Ocular flutter and truncal ataxia may be associated with enterovirus infection. Wiest G, et al. **J Neurol** 1997 May; 244(5):288-92
Inflammatory processes may predispose children to high-altitude pulmonary edema. Durmowicz AG, et al. **J Pediatr** 1997 May;130(5):838-40
Oxygen delivery: nasopharyngeal catheter or nasal prongs? [letter; comment] Shann F. **J Pediatr** 1996 Jul;129(1):185; discussion 186. Comment on: J Pediatr 1995 Sep;127(3):378-83.
Probable association between urinary tract infections (UTI) and common diseases of infancy and childhood: a hospital-based study of UTI in Durban, South Africa. Jeena PM, et al. **J Trop Pediatr** 1996 Apr;42(2):112-4
Unusual case of pulmonary rickettsiosis in non-Hodgkin's lymphoma. Pugliese C, et al. **Minerva Med** 1997 Jun; 88(6):261-4
Neisseria meningitidis: fifteen cases of bronchopulmonary infections associated with septicaemia. Angelini S, et al. **Pathol Biol (Paris)** 1997 Apr;45(4):274-80
Role of exposure to inhalant irritants and infections for the development of allergic diseases. Björkstén B. **Pediatr Allergy Immunol** 1996;7(9 Suppl):111-6 (37 ref.)
Rhinovirus infection associated with serious lower respiratory illness in patients with bronchopulmonary dysplasia. Chidekel AS, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):43-7
Measles vaccination during the respiratory virus season and risk of vaccine failure. Edmonson MB, et al. **Pediatrics** 1996 Nov;98(5):905-10
Codeine, cough and upper respiratory infection. Eccles R. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):293-7 (17 ref.)
Evaluation of antitussive agents in man. Parvez L, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):299-308
The effect of diabetes mellitus on the outcome of patients with chronic obstructive pulmonary disease exacerbated due to respiratory infections. Loukides S, et al. **Respiration** 1996;63(3):170-3
The treatment of allergic rhinitis improves the recovery from asthma and upper respiratory infections. Sarti W, et al. **Rev Paul Med** 1995 Sep-Oct;113(5):968-72
Vitamin A status, other risk factors and acute respiratory infection morbidity in children. Dudley L, et al. **S Afr Med J** 1997 Jan;87(1):65-70
Infection-associated cervical artery dissection. Three cases. Grau AJ, et al. **Stroke** 1997 Feb;28(2):453-5
Effects of upper respiratory tract infections in patients with cystic fibrosis. Collinson J, et al. **Thorax** 1996 Nov; 51(11):1115-22
[The wheezing child and pediatric respiratory infections] Grimfeld A. **Allerg Immunol (Paris)** 1997 Mar;29(3):73-4; discussion 82 (Eng. Abstr.) **(Fre)**
[Respiratory inflammation] Holgate ST. **Allerg Immunol (Paris)** 1997 Mar;29(3):75-6; discussion 82 (11 ref.) (Eng. Abstr.) **(Fre)**
[Ten-year experience with the use of ofloxacin in the treatment of wound infection] Blatun LA, et al. **Antibiot Khimioter** 1996;41(9):73-6 (Eng. Abstr.) **(Rus)**
[The clinical evaluation of rheological disorders in the complications of influenza and acute respiratory viral infections] Bogomolov BP, et al. **Klin Med (Mosk)** 1996; 74(2):10-2 **(Rus)**
[Isolation of mycobacteria in patients with cystic fibrosis:

a prospective study] Pedraza Gutiérrez F, et al. **An Esp Pediatr** 1996 Aug;45(2):157–60 (Eng. Abstr.) **(Spa)**

[Viruses precipitating asthmatic crises] López Pérez GT, et al. **Rev Alerg Mex** 1993 Sep–Oct;40(5):135–8 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Pneumococcal capsular antigen detection after enrichment culture: an alternative to culture methods in epidemiologic research. Lankinen KS, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):211–5

Methodological issues for eliciting local signs/symptoms/illness terms associated with acute respiratory illnesses. Ryan GW, et al. **Arch Med Res** 1996 Autumn;27(3):359–65

Video assessment of simple respiratory signs. English M, et al. **BMJ** 1996 Dec 14;313(7071):1527–8

Evaluation of Chlamydia immunoglobulin M (IgM), IgG, and IgA rELISAs Medac for diagnosis of Chlamydia pneumoniae infection. Kutlin A, et al. **Clin Diagn Lab Immunol** 1997 Mar;4(2):213–6

Detection of respiratory syncytial virus, parainfluenzavirus 3, adenovirus and rhinovirus sequences in respiratory tract of infants by polymerase chain reaction and hybridization. Freymuth F, et al. **Clin Diagn Virol** 1997 May;8(1):31–40

Microbiology and laboratory diagnosis of upper respiratory tract infections [see comments] Carroll K, et al. **Clin Infect Dis** 1996 Sep;23(3):442–8 (79 ref.). Comment in: Clin Infect Dis 1997 May;24(5):1027.

Relevance of nucleic acid amplification techniques for diagnosis of respiratory tract infections in the clinical laboratory. Ieven M, et al. **Clin Microbiol Rev** 1997 Apr; 10(2):242–56 (220 ref.)

Diagnosis of Legionella pneumophila, Mycoplasma pneumoniae, or Chlamydia pneumoniae lower respiratory infection using the polymerase chain reaction on a single throat swab specimen. Ramirez JA, et al. **Diagn Microbiol Infect Dis** 1996 Jan;24(1):7–14

Evaluation of a direct immunofluorescence assay, dot–blot enzyme immunoassay, and shell vial culture in the diagnosis of lower respiratory tract infections caused by influenza A virus. Reina J, et al. **Diagn Microbiol Infect Dis** 1996 Jul;25(3):143–5

Detection of serum antibodies against Chlamydia pneumoniae by ELISA. Numazaki K, et al. **FEMS Immunol Med Microbiol** 1996 Jun;14(2–3):179–83

Respiratory cryptosporidiosis: case series and review of the literature. Clavel A, et al. **Infection** 1996 Sep–Oct; 24(5):341–6 (47 ref.)

The reliability and validity of a structured interview for the assessment of infectious illness symptoms. Orts K, et al. **J Behav Med** 1995 Dec;18(6):517–29

Laboratory diagnosis of respiratory virus infections in 24 hours by utilizing shell vial cultures. Engler HD, et al. **J Clin Microbiol** 1997 Aug;35(8):2165–7

Cost–effectiveness of rapid diagnosis of viral respiratory tract infections in pediatric patients. Woo PC, et al. **J Clin Microbiol** 1997 Jun;35(6):1579–81

Rapid diagnosis of respiratory Chlamydia pneumoniae infection by nested touchdown polymerase chain reaction compared with culture and antigen detection by EIA. Boman J, et al. **J Infect Dis** 1997 Jun;175(6):1523–6

Comparison of bronchoalveolar lavage and catheter lavage to confirm ventilator–associated lower respiratory tract infection. Humphreys H, et al. **J Med Microbiol** 1996 Sep; 45(3):226–31

Laboratory diagnosis of acute lower respiratory tract viral infections in children. Hijazi Z, et al. **J Trop Pediatr** 1996 Oct;42(5):276–80

Sputum PCR for the detection of pneumococcal lower respiratory tract infection [letter] Paul ML, et al. **Pathology** 1997 Feb;29(1):104–5

Frequency of respiratory syncytial virus in hospitalized infants with lower acute respiratory tract infection in Colombia. Bedoya VI, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1123–4

Clinical signs of acute lower respiratory tract infections in malnourished infants and children. Cherian T, et al. **Pediatr Infect Dis J** 1997 May;16(5):490–4

The ten–day mark as a practical diagnostic approach for acute paranasal sinusitis in children. Ueda D, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):576–9

Applications of the polymerase chain reaction (PCR) to the diagnosis of pediatric pulmonary disease. Buck GE, et al. **Pediatr Pulmonol** 1995 Nov;20(5):309–22 (149 ref.)

Urinary cotinine and parent history (questionnaire) as indicators of passive smoking and predictors of lower respiratory illness in infants. Margolis PA, et al. **Pediatr Pulmonol** 1997 Jun;23(6):417–23

Pulmonary infections mimicking cancer: a retrospective, three–year review. Rolston KV, et al. **Support Care Cancer** 1997 Mar;5(2):90–3 (29 ref.)

[Chronic persistent cough in general practice: diagnosis and therapy in 329 patients over the course of 2 years] Kardos P, et al. **Pneumologie** 1996 Jun;50(6):437–41 (Eng. Abstr.) **(Ger)**

[Infections of the lower airways] Russi EW. **Schweiz Rundsch Med Prax** 1996 Oct 1;85(40):1258–60 (Eng. Abstr.) **(Ger)**

[Assay of specific anti–Chlamydia pneumoniae antibodies by ELISA method. 2. studies on clinical usefulness and serological diagnostic standards] Kishimoto T, et al. **Kansenshogaku Zasshi** 1996 Aug;70(8):830–9 (Eng. Abstr.) **(Jpn)**

[Advances in genetic diagnostics for respiratory tract infections] Koga H. **Nippon Rinsho** 1996 Feb;54(2):560–9 (25 ref.) (Eng. Abstr.) **(Jpn)**

[A case of congenital unilateral absence of maxillary and frontal sinuses] Rydzewski B, et al. **Otolaryngol Pol** 1996; 50(4):445–50 (Eng. Abstr.) **(Pol)**

[The role of the pulmonologist in pulmonary infection (editorial)] Dorca J. **Arch Bronconeumol** 1997 May; 33(5):210–2 (21 ref.) **(Spa)**

DIET THERAPY

Essential fatty acids: the effects of dietary supplementation among children with recurrent respiratory infections. Venuta A, et al. **J Int Med Res** 1996 Jul–Aug;24(4):325–30

DRUG THERAPY

Antihistamines and pregnancy [editorial] Schatz M, et al. **Ann Allergy Asthma Immunol** 1997 Feb;78(2):157–9

Cefpodoxime proxetil for infective exacerbations of chronic obstructive airway disease [letter] Alderman CP. **Ann Pharmacother** 1996 Feb;30(2):196

Prospective open randomized study comparing efficacies and safeties of a 3–day course of azithromycin and a 10–day course of erythromycin in children with community–acquired acute lower respiratory tract infections. Roord JJ, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2765–8

Bacterial resistance to antibiotics in acute respiratory infections (ARIs). López–Antuñano FJ, et al. **Arch Med Res** 1997 Summer;28(2):195–203 (36 ref.)

Cefodizime given in single or divided doses for the treatment of lower respiratory tract infection. Palombini BC, et al. **Arzneimittelforschung** 1997 Mar;47(3):299–302

Cefodizime once daily in the treatment of lower respiratory tract infections. Piovano CF, et al. **Arzneimittelforschung** 1997 May;47(5):674–7

Acute otitis media in children [editorial; comment] Majeed A, et al. **BMJ** 1997 Aug 9;315(7104):321–2. Comment on: BMJ 1997 Aug 9;315(7104):350–2.

Hospital antibiotic prescribing and feedback [letter; comment] Hemeryck L, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):449–50. Comment on: Br J Clin Pharmacol 1996 Mar;41(3):229–34.

Comparison of amoxycillin and clarithromycin as initial treatment of community–acquired lower respiratory tract infections. MacFarlane JT, et al. **Br J Gen Pract** 1996 Jun; 46(407):357–60

Standard management of acute respiratory infections in a children's hospital in Pakistan: impact on antibiotic use and case fatality. Qazi SA, et al. **Bull World Health Organ** 1996; 74(5):501–7

Multicenter randomized study of two once daily regimens in the initial management of community–acquired respiratory tract infections in 163 children: azithromycin versus ceftibuten. Galova K, et al. **Chemotherapy** 1996 May–Jun;42(3):231–4

Quinolones in everyday clinical practice: respiratory tract infections and nosocomial pneumonia. Marklein G. **Chemotherapy** 1996 Mar;42 Suppl 1:33–42

The effect of inhaled and intranasal sodium cromoglycate on symptoms of upper respiratory tract infections [see comments] Aberg N, et al. **Clin Exp Allergy** 1996 Sep; 26(9):1045–50. Comment in: Clin Exp Allergy 1996 Sep;26(9):989–94.

Streamlining antimicrobial therapy for lower respiratory tract infections. Hitt CM, et al. **Clin Infect Dis** 1997 Feb;24 Suppl 2:S231–7 (58 ref.)

Prolonged efficiency of secondary prophylaxis with colistin aerosols for respiratory infection due to Pseudomonas aeruginosa in patients infected with human immunodeficiency virus. Zylberberg H, et al. **Clin Infect Dis** 1996 Sep;23(3):641–3

Use of Broncho–Vaxom in private practice: phase IV trial in 587 children. Berber AC, et al. **Clin Ther** 1996 Nov–Dec; 18(6):1068–79

Cefixime in the treatment of patients with lower respiratory tract infections: results of US clinical trials. Quintiliani R. **Clin Ther** 1996 May–Jun;18(3):373–90; discussion 372 (37 ref.)

Antibiotic penetration in the respiratory tract and implications for the selection of antimicrobial therapy. Honeybourne D. **Curr Opin Pulm Med** 1997 Mar;3(2):170–4 (35 ref.)

Can antimicrobial activity be sustained? An appraisal of orally administered drugs used for respiratory tract infections. Jones RN. **Diagn Microbiol Infect Dis** 1997 Jan–Feb; 27(1–2):21–8 (20 ref.)

Role of oral antibiotics in treatment of community–acquired lower respiratory tract infections. Legnani D. **Diagn Microbiol Infect Dis** 1997 Jan–Feb;27(1–2):41–7 (33 ref.)

Azithromycin. A review of its pharmacological properties and use as 3–day therapy in respiratory tract infections. Dunn CJ, et al. **Drugs** 1996 Mar;51(3):483–505 (120 ref.)

Sparfloxacin. A review of its antibacterial activity, pharmacokinetic properties, clinical efficacy and tolerability in lower respiratory tract infections. Goa KL, et al. **Drugs** 1997 Apr;53(4):700–25 (150 ref.)

Clarithromycin. A review of its efficacy in the treatment of respiratory tract infections in immunocompetent patients. Langtry HD, et al. **Drugs** 1997 Jun;53(6):973–1004 (205 ref.)

Initial antibiotic therapy for lower respiratory tract infection in the community: a European survey. Huchon GJ, et al. **Eur Respir J** 1996 Aug;9(8):1590–5

Evidence–based management of upper respiratory infection in a family practice teaching clinic. English JA, et al. **Fam Med** 1997 Jan;29(1):38–41

What do patients expect from consultations for upper respiratory tract infections? Chan CS. **Fam Pract** 1996 Jun; 13(3):229–35

Treating respiratory infections in the elderly: current strategies and considerations. Norman DC, et al. **Geriatrics** 1997 Jan;52 Suppl 1:S1–28 (18 ref.)

Evaluation of safety and efficacy of azithromycin in lower respiratory tract infections (LRTI) [published erratum appears in Indian J Med Sci 1996 Oct;50(10):367] Adhikari P, et al. **Indian J Med Sci** 1996 Sep;50(9):313–7

Use of flurythromycin ethylsuccinate in infections of lower airways due to sensitive germs: multicenter comparative study with clarithromycin. Vagliasindi M. **Int J Clin Pharmacol Ther** 1997 Jun;35(6):245–9

Upper respiratory infections in children: response to endonasal administration of IGA. Giraudi V, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):103–10

Once–daily, 3–day azithromycin versus a three–times–daily, 10–day course of co–amoxiclav in the treatment of adults with lower respiratory tract infections: results of a randomized, double–blind comparative study. Gris P. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:93–101

The Alexander Project: using in–vitro susceptibility data for choosing empirical therapy in LRTI. Grüneberg RN. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:155–70

Efficacy, safety and tolerability of azithromycin versus roxithromycin in the treatment of acute lower respiratory tract infections. Laurent K. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:115–24

Health care resource utilization and antimicrobial use in elderly patients with community–acquired lower respiratory tract infection who develop Clostridium difficile–associated diarrhoea. MacGowan AP, et al. **J Antimicrob Chemother** 1997 Apr;39(4):537–41

An open comparative study of azithromycin and roxithromycin in the treatment of acute upper respiratory tract infections. Müller O. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:83–92

An open comparative study of azithromycin versus cefaclor in the treatment of patients with upper respiratory tract infections. O'Doherty B. **J Antimicrob Chemother** 1996 Jun; 37 Suppl C:71–81

Accelerated bacteriological evaluation in the management of lower respiratory tract infection in general practice. Shackley P, et al. **J Antimicrob Chemother** 1997 May; 39(5):663–6

A randomized, comparative study to evaluate the efficacy and tolerability of a 3–day course of azithromycin versus a 10–day course of co–amoxiclav as treatment of adult patients with lower respiratory tract infections. Zachariah J. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:103–13

Cefepime versus ceftazidime in the treatment of lower respiratory tract infections. Aufiero A, et al. **J Chemother** 1997 Jun;9(3):213–8

Relevance of pharmacokinetics and pharmacodynamics in the selection of antibiotics for respiratory tract infections. Drusano GL, et al. **J Chemother** 1997 May;9 Suppl 3:38–44 (11 ref.)

Azithromycin: 3–day versus 5–day course in the treatment of respiratory tract infections in children. Croatian Azithromycin Study Group. Ficnar B, et al. **J Chemother** 1997 Feb;9(1):38–43

Empiric therapy in lower respiratory tract infection—an ongoing challenge. Geddes AM. **J Chemother** 1997 May; 9 Suppl 3:5–9 (22 ref.)

Respiratory tract infection: epidemiology and surveillance. Jacobs MR. **J Chemother** 1997 May;9 Suppl 3:10–7 (25 ref.)

Once–a–day therapy of cefpodoxime proxetil for respiratory tract infections. Sawae Y, et al. **J Chemother** 1995 Nov; 7 Suppl 4:134–6

Evaluation and treatment of respiratory infections: does managed care make a difference? Hueston WJ, et al. **J Fam Pract** 1997 Jun;44(6):572–7

Appropriateness of antibiotics [letter; comment] Keegan JM. **J Fam Pract** 1996 Oct;43(4):330–1. Comment on: J Fam Pract 1996 Apr;42(4):357–61.

Patient knowledge of upper respiratory infections: implications for antibiotic expectations and unnecessary utilization. Mainous AG 3rd, et al. **J Fam Pract** 1997 Jul; 45(1):75–83

Patient satisfaction with antibiotic use. Rao G. **J Fam Pract** 1996 Nov;43(5):436–7

Ribavirin for RSV lower respiratory tract infection. Zamorski M. **J Fam Pract** 1996 Dec;43(6):536–7

Acute gout in a patient taking pefloxacin—a case report. Kundu AK. **J Indian Med Assoc** 1996 Nov;94(11):427

Pan–European survey of patients' attitudes to antibiotics and antibiotic use. Branthwaite A, et al. **J Int Med Res** 1996 May–Jun;24(3):229–38

Clinical and microbiological evaluation of pefloxacin in lower respiratory tract infections. Tatsis G, et al. **J Int Med Res** 1996 Nov–Dec;24(6):478–81

Pharmacologic management of common lower respiratory tract disorders in women. Mays M, et al. **J Nurse Midwifery** 1997 May–Jun;42(3):163–75 (57 ref.)

Antibiotics and respiratory infections: do antibiotic prescriptions improve outcomes? Hamm RM, et al. **J Okla State Med Assoc** 1996 Aug;89(8):267–74

A clinical study to evaluate the efficacy of the antihistamine doxylamine succinate in the relief of runny nose and sneezing associated with upper respiratory tract infection. Eccles R, et al. **J Pharm Pharmacol** 1995 Dec; 47(12A):990–3

Home intravenous antibiotic therapy: practical aspects in children. Leaver J, et al. **J R Soc Med** 1997;90 Suppl 31:26–33 (5 ref.)

Home intravenous antibiotic therapy: practical aspects in adults. Phillips AM. **J R Soc Med** 1997;90 Suppl 31:34–6 (14 ref.)

Antibiotic prescribing for adults with colds, upper respiratory tract infections, and bronchitis by ambulatory care physicians [see comments] Gonzales R, et al. **JAMA** 1997 Sep 17;278(11):901–4. Comment in: JAMA 1997 Sep 17;278(11):944–5.

Management of children with acute respiratory infections (ARI) by general practitioners in Multan – an observational study. Iqbal I, et al. **JPMA J Pak Med Assoc** 1997 Jan; 47(1):24–8

Antibiotic resistance in respiratory tract pathogens: clinical and therapeutic consequences. Proceedings of a symposium. Stockholm, Sweden, October 31–November 1, 1994. **Microb Drug Resist** 1995 Summer;1(2):101–167

Lower respiratory tract infections in the intensive care unit: consequences of antibiotic resistance for choice of antibiotic. Lode H, et al. **Microb Drug Resist** 1995 Summer; 1(2):163–7 (33 ref.)

Empirical antibiotic therapy and lower respiratory tract infections: European guidelines and current practices. Woodhead M. **Monaldi Arch Chest Dis** 1995 Dec; 50(6):472–6 (20 ref.)

Tracheobronchial aspergillosis in a patient with AIDS treated with aerosolized amphotericin B combined with itraconazole. Dal Conte I, et al. **Mycoses** 1996 Sep–Oct; 39(9–10):371–4

Patterns and determinants of use of antibiotics for acute respiratory tract infection in children in China. Hui L, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):560–4

Empiric antibiotic selection criteria for respiratory infections in pediatric practice. Pichichero ME. **Pediatr Infect Dis J** 1997 Mar;16(3 Suppl):S60–4 (38 ref.)

Properties of azithromycin that enhance the potential for compliance in children with upper respiratory tract infections. Powers JL. **Pediatr Infect Dis J** 1996 Sep;15(9 Suppl):S30–7

Contemporary use of antibiotics in 1089 adults presenting with acute lower respiratory tract illness in general practice in the U.K.: implications for developing management guidelines. Macfarlane J, et al. **Respir Med** 1997 Aug; 91(7):427–34

The assessment of the therapeutic effectiveness of IRS–19 in allergic children with recurrent or chronic respiratory infections. Maciorkowska E, et al. **Rocz Akad Med Bialymst** 1995;40(3):619–24

Economic analysis of treatment with roxithromycin in comparison with erythromycin in patients with lower respiratory tract infections. Norinder A, et al. **Scand J Infect Dis** 1997;29(1):83–6

Prescriptions of antibiotics for children. Prescribing habits of district, hospital, and private physicians. Cars H, et al. **Scand J Prim Health Care** 1997 Mar;15(1):22–5

Evaluation of the efficacy of sequential intravenous–oral administration of pefloxacin in community–acquired lower respiratory tract infections in patients with underlying conditions. Yap JC, et al. **Singapore Med J** 1995 Oct; 36(5):484–6

An open evaluation of the efficacy and safety of the new macrolide roxithromycin in the treatment of lower respiratory tract infections and pneumonia in Nigerian patients. Isah AO, et al. **West Afr J Med** 1996 Apr–Jun; 15(2):111–6

[Anti–infective treatment of acute pneumopathies in children] Le Masne A, et al. **Arch Pediatr** 1997;4(2 Suppl 2):69s–71s (33 ref.) **(Fre)**

[Management of bronchial infectious episodes in general medicine] Chauvin P, et al. **Rev Mal Respir** 1996; 13(4):397–404 (Eng. Abstr.) **(Fre)**

[Recurrent respiratory infections in patients with chronic obstructive bronchitis: medical treatment and costs (see comments)] Pechevis M, et al. **Rev Mal Respir** 1996 Oct; 13(5):507–12 (Eng. Abstr.). Comment in: Rev Mal Respir 1997 Apr;14(2):69–71. **(Fre)**

[Lower respiratory infections: predictive factors of therapeutic response] Bedos JP, et al. **Rev Pneumol Clin** 1996;52 Suppl 2:S47–50 **(Fre)**

[Infections in childhood; from respiratory infections to tropical medicine] **Fortschr Med Suppl** 1993;144:1–8 **(Ger)**

[Differentiated use of quinolones and cephalosporins] **Internist (Berl)** 1995 Nov;36(11 Suppl):1–8 **(Ger)**

[New clinical perspectives in the management of pediatric respiratory tract infections. Studies substantiate the usefulness of Josamycin] **Monatsschr Kinderheilkd** 1993 May;141(5 Suppl):1–4 **(Ger)**

[Antibiotic treatment strategies in cystic fibrosis] Smaczny C. **Pneumologie** 1996 Dec;50 Suppl 3:831–3 **(Ger)**

[When and why are antibiotics indicated in airway infections (except pneumonia)?] Brändli O, et al. **Schweiz Rundsch Med Prax** 1997 Apr 30;86(18):737–40 (14 ref.) (Eng. Abstr.) **(Ger)**

[Bacteriological, pharmacokinetic and clinical evaluation of azithromycin in the pediatric field] Akita H, et al. **Jpn J Antibiot** 1996 Oct;49(10):899–916 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of azithromycin in the treatment of pediatric infection] Furukawa S, et al. **Jpn J Antibiot** 1996 Nov;49(11):1013–23 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical evaluation of azithromycin in pediatric infections] Ishida Y, et al. **Jpn J Antibiot** 1996 Nov;49(11):1030–8 (Eng. Abstr.) **(Jpn)**

[Clinical study of a macrolide antibiotic, azithromycin, in pediatric patients] Kobayashi Y, et al. **Jpn J Antibiot** 1996 Nov;49(11):1004–12 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of sulbactam/cefoperazone for lower respiratory tract infections. Correlation between the efficacy of sulbactam/cefoperazone and beta–lactamase] Koga H, et al. **Jpn J Antibiot** 1996 Aug;49(8):800–7 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of azithromycin in pediatric infections] Nishimura T, et al. **Jpn J Antibiot** 1996 Oct;49(10):917–25 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on azithromycin in children] Ohtsuka Y, et al. **Jpn J Antibiot** 1996 Nov; 49(11):1039–48 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical evaluations of azithromycin in the pediatric field] Okada T, et al. **Jpn J Antibiot** 1996 Nov;49(11):1024–9 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical evaluation of azithromycin in pediatrics] Okumura A, et al. **Jpn J Antibiot** 1996 Nov; 49(11):994–1003 (Eng. Abstr.) **(Jpn)**

[Comparative study on the efficacy of ritipenem acoxil and cefotiam hexetil in chronic lower respiratory tract infections by the double–blind method] Saito A, et al. **Jpn J Antibiot** 1996 Mar;49(3):219–49 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical evaluation of azithromycin using fine granules or capsules in the pediatric patients] Toyonaga Y, et al. **Jpn J Antibiot** 1996 Nov;49(11):981–93 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of imipenem/cilastatin sodium for respiratory infections in patients with lung cancer] Yoshida M, et al. **Jpn J Antibiot** 1997 Jan;50(1):22–38 (Eng. Abstr.) **(Jpn)**

[Efficacy of sulbactam/cefoperazone in respiratory tract infections in elderly patients with underlying respiratory diseases] Yoshida T, et al. **Jpn J Antibiot** 1996 Jul; 49(7):710–4 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of lomefloxacin for associated infection in patients with hematological diseases] Suzuki T, et al. **Kansenshogaku Zasshi** 1997 Feb;71(2):143–52 (Eng. Abstr.) **(Jpn)**

[Efficacy of erythromycin inhalation in chronic respiratory infection caused by Pseudomonas aeruginosa] Yanagihara K, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):337–41 (Eng. Abstr.) **(Jpn)**

[An assessment of infant morbidity and antibiotic therapy according to the type and course of delivery between 1983 and 1993] Kozielec T, et al. **Pediatr Pol** 1996 Jun; 71(6):529–35 (Eng. Abstr.) **(Pol)**

[Selected immune response parameters in respiratory tract infections in mice—effect of combined treatment with tienamycin and coparvax] Korczak E, et al. **Pneumonol Alergol Pol** 1996;64(5–6):303–8 (Eng. Abstr.) **(Pol)**

[Effectiveness of ciprofloxacin in the treatment of hospital infections of the lower respiratory tract] Chuchalin AG, et al. **Antibiot Khimioter** 1997;42(6):34–8 (Eng. Abstr.) **(Rus)**

[Azithromycin (sumamed)—in the treatment of respiratory tract infections] Fomina IP, et al. **Antibiot Khimioter** 1996 Feb;41(2):52–61 (36 ref.) **(Rus)**

[The individual selection of immunomodulating and vitamin preparations for miners who are frequently ill with ARVI] Trunova OA. **Lik Sprava** 1996 Oct–Dec;(10–12):148–53 (Eng. Abstr.) **(Rus)**

[Possibilities of using bioparox in the treatment of patients with diseases of the upper airways] Ovchinnikov IuM, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):56–7 **(Rus)**

[The role of penicillins in the treatment of respiratory system infections] Lacka J, et al. **Bratisl Lek Listy** 1996 Nov; 97(11):673–4 (Eng. Abstr.) **(Slo)**

[Old and new antibiotics in pneumology (editorial)] Rodríguez de Castro F, et al. **Arch Bronconeumol** 1997 Mar; 33(3):109–12 **(Spa)**

[A patient with theophylline–quinolone interaction. Not all quinolones are equal (letter)] Cárdenas Rodríguez M, et al. **Aten Primaria** 1996 Sep 15;18(4):204–5 **(Spa)**

[In vitro comparative activity (E test) of sparfloxacin and other 8 antimicrobial agents against bacteria isolated from patients with respiratory infections acquired in the community] Prado V, et al. **Rev Med Chil** 1995 Nov; 123(11):1394–1401 (Eng. Abstr.) **(Spa)**

[Increasing antibiotic resistance of pneumococcus. Management of respiratory tract infections and meningitis (see comments)] Kalin M, et al. **Lakartidningen** 1997 Mar 19;94(12):1061–4, 1067–8 (41 ref.). Comment in: Lakartidningen 1997 May 14;94(20):1867–8. **(Swe)**

[Bacterial cultures and follow up visits instead of penicillin. Diagnostic aids and free of charge follow ups can reduce the use of antibiotics] Leonardsson–Hellgren M, et al. **Lakartidningen** 1997 Aug 6;94(32–33):2733–5 **(Swe)**

ECONOMICS

Streamlining antimicrobial therapy for lower respiratory tract infections. Hitt CM, et al. **Clin Infect Dis** 1997 Feb;24 Suppl 2:S231–7 (58 ref.)

Cost–effectiveness of rapid diagnosis of viral respiratory tract infections in pediatric patients. Woo PC, et al. **J Clin Microbiol** 1997 Jun;35(6):1579–81

Economic evaluation of respiratory syncytial virus infection in Canadian children: a Pediatric Investigators Collaborative Network on Infections in Canada (PICNIC) study. Langley JM, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):113–7

Economic analysis of treatment with roxithromycin in comparison with erythromycin in patients with lower respiratory tract infections. Norinder A, et al. **Scand J Infect Dis** 1997;29(1):83–6

[Recurrent respiratory infections in patients with chronic obstructive bronchitis: medical treatment and costs (see comments)] Pechevis M, et al. **Rev Mal Respir** 1996 Oct; 13(5):507–12 (Eng. Abstr.). Comment in: Rev Mal Respir 1997 Apr;14(2):69–71. **(Fre)**

EPIDEMIOLOGY

Prevalence of allergic diseases in schoolchildren in relation to family history, upper respiratory infections, and residential characteristics. Aberg N, et al. **Allergy** 1996 Apr; 51(4):232–7

Impact of an infection control program in a specialized preschool. Krilov LR, et al. **Am J Infect Control** 1996 Jun; 24(3):167–73

Concomitant Ornithobacterium rhinotracheale and Newcastle disease infection in broilers in South Africa. Travers AF. **Avian Dis** 1996 Apr–Jun;40(2):488–90

Acute respiratory infections in the Americas. **Epidemiol Bull** 1995 Dec;16(4):1–5

The indoor air and children's health study: methods and incidence rates. Marbury MC, et al. **Epidemiology** 1996 Mar;7(2):166–74

Absence of Burkholderia cepacia from the respiratory tract of non–cystic fibrosis patients [letter] Hyde J, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):253–4

Respiratory infections and the autumn increase in asthma morbidity. Dales RE, et al. **Eur Respir J** 1996 Jan;9(1):72–7

Breastfeeding, maternal smoking and lower respiratory tract infections. Nafstad P, et al. **Eur Respir J** 1996 Dec; 9(12):2623–9

Short–term effects of particulate air pollution on respiratory morbidity in asthmatic children. Peters A, et al. **Eur Respir J** 1997 Apr;10(4):872–9

Home dampness, moulds and their influence on respiratory infections and symptoms in adults in Finland. Pirhonen I, et al. **Eur Respir J** 1996 Dec;9(12):2618–22

Vitamin C, neutrophil function, and upper respiratory tract infection risk in distance runners: the missing link. Peters–Futre EM. **Exerc Immunol Rev** 1997;3:32–52 (99 ref.)

Undernutrition, vitamin A deficiency and ARI morbidity in underfives. Pandey A, et al. **Indian J Public Health** 1996 Jan–Mar;40(1):13–6

Respiratory tract infection: epidemiology and surveillance. Jacobs MR. **J Chemother** 1997 May;9 Suppl 3:10–7 (25 ref.)

Surveillance of community–acquired viral infections due to respiratory viruses in Rhone–Alpes (France) during winter 1994 to 1995. Lina B, et al. **J Clin Microbiol** 1996 Dec; 34(12):3007–11

Magnitude of acute respiratory infections in under five children. Singh MP, et al. **J Commun Dis** 1996 Dec; 28(4):273–8

Risk factors associated with the recall of respiratory diseases in the Ecuadorian children. Brüssow H, et al. **J Diarrhoeal Dis Res** 1995 Dec;13(4):212–8

Respiratory viruses in a hospitalized paediatric population in Edinburgh 1985–1994. Winter GF, et al. **J Infect** 1996 Nov;33(3):207–11

Acute respiratory infections in children: a community–based longitudinal study in rural Bangladesh. Zaman K, et al. **J Trop Pediatr** 1997 Jun;43(3):133–7

Acute respiratory infections in children living in two low income communities of Rio de Janeiro, Brazil. Sutmoller F, et al. **Mem Inst Oswaldo Cruz** 1995 Nov–Dec; 90(6):665–74

Follow–up on respiratory illness—Philadelphia. 1977 [classical article] **MMWR Morb Mortal Wkly Rep** 1997 Jan 24;46(3):50–6

Consequences of hypogammaglobulinemia and steroid therapy in severe bronchopulmonary dysplasia. Wheeler W, et al. **Pediatr Pulmonol** 1996 Aug;22(2):96–100

Respiratory Chlamydial infections in a Hong Kong teaching hospital and association with coronary heart disease. Thomas GN, et al. **Scand J Infect Dis Suppl** 1997;104:30–3

Seasonality of tuberculosis: the reverse of other respiratory diseases in the UK [see comments] Douglas AS, et al. **Thorax** 1996 Sep;51(9):944–6. Comment in: Thorax 1997 Apr;52(4):398.

The incidence of respiratory tract pathogens and antimicrobial susceptibilities of Streptococcus pneumoniae,

Haemophilus influenzae and Moraxella (Branhamella) catarrhalis isolated between 1990 and 1993. Nishioka K, et al. **Tohoku J Exp Med** 1996 Jun;179(2):111–21

Infectious disease complications post renal transplant in 220 patients. Marmol A, et al. **Transplant Proc** 1996 Dec; 28(6):3304

[Atopy and low birth weight as determinants of susceptibility of children to acute respiratory tract infections] Jędrychowski W, et al. **Przegl Epidemiol** 1996;50(3):315–22 (Eng. Abstr.) **(Pol)**

[The modern analysis and prediction of the spread of acute respiratory viral infections] Drynov ID, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):100–2 (Eng. Abstr.) **(Rus)**

[Acute respiratory infections (ARI) in the 0–14 years of age group during the winter period] Blázquez Hernanz MC, et al. **Aten Primaria** 1997 Mar 31;19(5):263–6 (Eng. Abstr.) **(Spa)**

[Respiratory infection caused by Pseudomonas aeruginosa in patients with HIV infection] Arrizabalaga Aguirreazaldegui J, et al. **Rev Clin Esp** 1996 Oct; 196(10):678–83 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Growth, feeding practices and infections in black infants. Delport SD, et al. **S Afr Med J** 1997 Jan;87(1):57–61

ETIOLOGY

Are respiratory infections more frequent in glucocorticoid–dependent asthmatic patients? [editorial; comment] Demoly P, et al. **Allergy** 1997 Feb;52(2):122–3 (17 ref.). Comment on: Allergy 1997 Feb;52(2):144–54.

Lower respiratory tract infections among Norwegian infants with siblings in day care. Nafstad P, et al. **Am J Public Health** 1996 Oct;86(10):1456–9

Do children who experience laryngospasm have an increased risk of upper respiratory tract infection? Schreiner MS, et al. **Anesthesiology** 1996 Sep;85(3):475–80

Identification of an unusual Fc gamma receptor IIIa (CD16) on natural killer cells in a patient with recurrent infections. de Vries E, et al. **Blood** 1996 Oct 15;88(8):3022–7

The incidence of respiratory tract infection in adults requiring hospitalization for asthma. Teichtahl H, et al. **Chest** 1997 Sep;112(3):591–6

Serological study of responses to selected pathogens causing respiratory tract infection in the institutionalized elderly. Orr PH, et al. **Clin Infect Dis** 1996 Dec;23(6):1240–5

Evaluation of recurrent respiratory tract infections in children. Hopp R. **Curr Probl Pediatr** 1996 May–Jun; 26(5):148–58 (35 ref.)

Particulate air pollution and respiratory disease in Anchorage, Alaska. Gordian ME, et al. **Environ Health Perspect** 1996 Mar;104(3):290–7

Maternal smoking during pregnancy and postnatal exposure to environmental tobacco smoke as predisposition factors to acute respiratory infections. Jedrychowski W, et al. **Environ Health Perspect** 1997 Mar;105(3):302–6

The indoor air and children's health study: methods and incidence rates. Marbury MC, et al. **Epidemiology** 1996 Mar;7(2):166–74

Respiratory tract and diarrheal infections of breast–fed infants from birth to 6 months of age in household contexts of an Egyptian village. Rahmanifar A, et al. **Eur J Clin Nutr** 1996 Oct;50(10):655–62

Cystic fibrosis, lung infections, and a human tracheal antimicrobial peptide (hTAP). Ko YH, et al. **FEBS Lett** 1997 Mar 24;405(2):200–8

Indoor air pollution and acute lower respiratory infections in young Gambian children. Campbell H. **Health Bull (Edinb)** 1997 Jan;55(1):20–31

An outbreak of Burkholderia cepacia lower respiratory tract infection associated with contaminated albuterol nebulization solution [see comments] Reboli AC, et al. **Infect Control Hosp Epidemiol** 1996 Nov;17(11):741–3. Comment in: Infect Control Hosp Epidemiol 1996 Nov;17(11):718–20.

Delayed diagnosis of acute rheumatic fever in adults: a forgotten cause of febrile polyarthritis. Chan AW, et al. **J Rheumatol** 1996 Nov;23(11):1999–2001

Gastroesophageal reflux and upper airway disease. Barbero GJ. **Otolaryngol Clin North Am** 1996 Feb;29(1):27–38

Clinical signs of acute lower respiratory tract infections in malnourished infants and children. Cherian T, et al. **Pediatr Infect Dis J** 1997 May;16(5):490–4

Urinary cotinine and parent history (questionnaire) as indicators of passive smoking and predictors of lower respiratory illness in infants. Margolis PA, et al. **Pediatr Pulmonol** 1997 Jun;23(6):417–23

Psychosocial stress and susceptibility to upper respiratory tract illness in an adult population sample. Cobb JM, et al. **Psychosom Med** 1996 Sep–Oct;58(5):404–12

Respiratory tract infection due to Chlamydia pneumoniae in military personnel. Csángó PA, et al. **Scand J Infect Dis Suppl** 1997;104:26–9

Mechanisms of virus induced exacerbations of asthma. Corne JM, et al. **Thorax** 1997 Apr;52(4):380–9 (29 ref.)

Acute respiratory infections in young children comparative findings in emergency rooms in Accra, (Ghana) and Harare (Zimbabwe). Dakubo GB, et al. **West Afr J Med** 1996 Jul–Sep;15(3):181–5

[Nocardia respiratory infection in patients with chronic obstructive lung disease] Lacassagne L, et al. **Rev Mal Respir** 1996;13(4):433–6 (Eng. Abstr.) **(Fre)**

[Pulmonary problems related to aging] Weber T, et al. **Rev Med Liege** 1997 Apr;52(4):245–50 (13 ref.) **(Fre)**

[Recurrent infections of the upper airways] Tränkle P, et al. **Schweiz Rundsch Med Prax** 1997 Feb 18;86(8):321–3 **(Ger)**

[Pollution by mites and/or mold spores in work environments and the risk of occupational respiratory pathology] Palmas F, et al. **Med Lav** 1996 Sep–Oct;87(5):411–22 (Eng. Abstr.) **(Ita)**

[Cigarette smoking of mothers in pregnancy and environmental tobacco smoke as factors of increasing susceptibility of older children to acute respiratory infections] Jędrychowski W, et al. **Przegl Epidemiol** 1996; 50(4):457–65 (Eng. Abstr.) **(Pol)**

[Etiological structure of respiratory virus diseases and modern therapeutic opportunities] Kolomiets AG, et al. **Klin Med (Mosk)** 1997;75(2):6–12 (41 ref.) **(Rus)**

[Etiological and clinical evaluation of low acute respiratory infections in children] Savy V, et al. **Medicina (B Aires)** 1996;56(3):213–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Downmodulation of IL–8 receptors, type A and type B, on human lung neutrophils in vivo. Soejima K, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L618–25

Gamma–delta T cells in BAL fluid of chronic lower respiratory tract infection. Fujii T, et al. **Chest** 1997 Jun; 111(6):1697–701

Decreased C4 complement component serum levels correlate with the degree of emphysema in patients with chronic bronchitis. Kosmas EN, et al. **Chest** 1997 Aug;112(2):341–7

Evidence for transudation of specific antibody into the middle ears of parenterally immunized chinchillas after an upper respiratory tract infection with adenovirus. Bakaletz LO, et al. **Clin Diagn Lab Immunol** 1997 Mar;4(2):223–5

Serum antibody response to outer membrane proteins of Moraxella (Branhamella) catarrhalis in patients with bronchopulmonary infection. Christensen JJ, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):717–21

Evaluation of Chlamydia immunoglobulin M (IgM), IgG, and IgA rELISAs Medac for diagnosis of Chlamydia pneumoniae infection. Kutlin A, et al. **Clin Diagn Lab Immunol** 1997 Mar;4(2):213–6

Cytokines and pulmonary host defenses. Standiford TJ. **Curr Opin Pulm Med** 1997 Mar;3(2):81–8 (56 ref.)

Immunity in athletes. Mackinnon LT. **Int J Sports Med** 1997 Mar;18 Suppl 1:S62–8 (54 ref.)

Exercise immunology: practical applications. Nieman DC. **Int J Sports Med** 1997 Mar;18 Suppl 1:S91–100 (129 ref.)

Exercise, immunology and upper respiratory tract infections. Peters EM. **Int J Sports Med** 1997 Mar;18 Suppl 1:S69–77 (101 ref.)

Dendritic cells are recruited into the airway epithelium during the inflammatory response to a broad spectrum of stimuli. McWilliam AS, et al. **J Exp Med** 1996 Dec 1; 184(6):2429–32

Increased psychosocial stress and decreased mucosal immunity in children with recurrent upper respiratory tract infections. Drummond PD, et al. **J Psychosom Res** 1997 Sep;43(3):271–8

The evaluation of delayed–type hypersensitivity responsiveness and nutritional status as predictors of gastro–intestinal and acute respiratory infection: a prospective field study among traditional nomadic Kenyan children. Shell–Duncan B, et al. **J Trop Pediatr** 1997 Feb; 43(1):25–32

Further search for small molecular inactivants capable of eliciting respiratory mucosal immunogenicity by modifying Sendai virus core RNA. Miyamae T. **Microbiol Immunol** 1996;40(10):761–6

Immunology of non–viral respiratory tract infections. Rieger CH, et al. **Pediatr Allergy Immunol** 1996;7(9 Suppl):91–4 (16 ref.)

Serologic response to measles–mumps–rubella vaccine among children with upper respiratory tract infection. Cilla G, et al. **Vaccine** 1996 Apr;14(6):492–4

Measles vaccination of Thai infants by intranasal and subcutaneous routes: possible interference from respiratory infections. Simasathien S, et al. **Vaccine** 1997 Feb; 15(3):329–34

[Hematopoietic growth factors and anti–infective respiratory defenses] Gagnadoux F, et al. **Rev Mal Respir** 1997 Apr; 14(2):93–9 (40 ref.) (Eng. Abstr.) **(Fre)**

[Immunologic findings in HIV infected children with bacterial infections] Bunikowski R, et al. **Klin Padiatr** 1996 Sep–Oct;208(5):304–9 (Eng. Abstr.) **(Ger)**

[Diseases of the lung and respiratory tract in disorders of immunodeficiency in childhood and adolescence] Roesler J, et al. **Pneumologie** 1996 Nov;50(11):745–51 (37 ref.) **(Ger)**

[Immunoglobulin A in saliva of children: age dependence and effect of respiratory tract diseases] Hofstötter H, et al. **Wien Klin Wochenschr** 1996;108(20):640–2 (Eng. Abstr.) **(Ger)**

[Why is it worth to take care of IGA?] Miszke A. **Otolaryngol Pol** 1995;49(5):418–21 (Eng. Abstr.) **(Pol)**

[Mechanisms of immune response in acute viral respiratory infections] Zheleznikova GF. **Vopr Virusol** 1997 Jul–Aug; 42(4):153–7 (60 ref.) **(Rus)**

METABOLISM

Protein metabolism in children with edematous malnutrition and acute lower respiratory infection. Manary MJ, et al. **Am J Clin Nutr** 1997 Apr;65(4):1005–10

Parainfluenza virus–induced persistence of airway inflammation, fibrosis, and dysfunction associated with TGF–beta 1 expression in brown Norway rats. Uhl EW, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1834–42

Flavin metabolism during respiratory infection in mice. Brijlal S, et al. **Br J Nutr** 1996 Sep;76(3):453–62

Influence of respiratory tract viral infection on endothelin–1–induced potentiation of cholinergic nerve–mediated contraction in mouse trachea. Carr MJ, et al. **Br J Pharmacol** 1996 Nov;119(5):891–8

Relevance of pharmacokinetics and pharmacodynamics in the selection of antibiotics for respiratory tract infections. Drusano GL, et al. **J Chemother** 1997 May;9 Suppl 3:38–44 (11 ref.)

MICROBIOLOGY

Prevalence and antibiotic sensitivity pattern variations of bacterial isolates in different settings and different periods of time. Tambić A, et al. **Acta Med Croatica** 1996;50(1):5–10

Antibiogram of bacterial isolates from cases of otitis media and lower respiratory tract infections. Ndip RN, et al. **Afr J Med Med Sci** 1995 Dec;24(4):353–7

Uveitis as the only clinical manifestation of poststreptococcal syndrome. Benjamin A, et al. **Am J Ophthalmol** 1997 Feb; 123(2):258–60

Aspects on the interaction of Streptococcus pneumoniae and Haemophilus influenzae with human respiratory tract mucosa. Håkansson A, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S187–91

How mutant CFTR may contribute to Pseudomonas aeruginosa infection in cystic fibrosis. Pier GB, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S175–82

Acute lower respiratory tract infections in children in Kuwait. Hijazi Z, et al. **Ann Trop Paediatr** 1997 Jun; 17(2):127–34

Human immunoglobulin isotype and IgG subclass response to different antigens of Moraxella catarrhalis. Rahman M, et al. **APMIS** 1997 Mar;105(3):213–20

Microbiology and laboratory diagnosis of upper respiratory tract infections [see comments] Carroll K, et al. **Clin Infect Dis** 1996 Sep;23(3):442–8 (79 ref.). Comment in: Clin Infect Dis 1997 May;24(5):1027.

Asymptomatic acute poststreptococcal glomerulonephritis following upper respiratory tract infections caused by Group A streptococci. Yoshizawa N, et al. **Clin Nephrol** 1996 Nov;46(5):296–301

Results of the Alexander Project: a continuing, multicenter study of the antimicrobial susceptibility of community–acquired lower respiratory tract bacterial pathogens. Grüneberg RN, et al. **Diagn Microbiol Infect Dis** 1996 Aug;25(4):169–81

Investigation of nosocomial respiratory infection due to Pseudomonas cepacia by arbitrarily primed polymerase chain reaction. Miyawaki H, et al. **Diagn Microbiol Infect Dis** 1995 Nov;23(3):77–83

A multicenter study of the antimicrobial susceptibility of community–acquired lower respiratory tract pathogens in the United States, 1992–1994. The Alexander Project. Washington JA. **Diagn Microbiol Infect Dis** 1996 Aug; 25(4):183–90

Colonization and infection with Moraxella catarrhalis in childhood. Berner R, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jun;15(6):506–9

In vitro activity of trovafloxacin (CP–99,219), sparfloxacin, ciprofloxacin, and fleroxacin against respiratory pathogens. Crokaert F, et al. **Eur J Clin Microbiol Infect Dis** 1996 Aug;15(8):696–8

Absence of Burkholderia cepacia from the respiratory tract of non–cystic fibrosis patients [letter] Hyde J, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):253–4

Field inversion gel electrophoresis on Pseudomonas cepacia strains isolated from cystic fibrosis patients. Amalfitano G, et al. **Eur J Epidemiol** 1996 Apr;12(2):149–53

Pseudomonas aeruginosa clinical isolates: serotypes, resistance phenotypes and plasmid profiles. Millesimo M, et al. **Eur J Epidemiol** 1996 Apr;12(2):123–9

Mycobacterium malmoense in Italy: the modern Norman invasion? Tortoli E, et al. **Eur J Epidemiol** 1997 Apr; 13(3):341–6

Interaction of bacteria and airway epithelial cells [editorial; comment] Van Alphen L. **Eur Respir J** 1996 Jul;9(7):1342–3 . Comment on: Eur Respir J 1996 Jul;9(7):1523–30.

The biology of bacterial colonization and invasion of the respiratory mucosa [see comments] Wilson R, et al. **Eur Respir J** 1996 Jul;9(7):1523–30 (90 ref.). Comment in: Eur Respir J 1996 Jul;9(7):1342–3.

Specific binding of Haemophilus influenzae to minor gangliosides of human respiratory epithelial cells. Fakih MG, et al. **Infect Immun** 1997 May;65(5):1695–700

Trends in antibiotic resistance of respiratory pathogens: an analysis and commentary on a collaborative surveillance study. Baquero F. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:117–32

Antibiotic susceptibility patterns of respiratory isolates of Klebsiella pneumoniae in Europe and the USA in 1992 and 1993. The Alexander Project Collaborative Group.

Bauernfeind A. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:107–15

Antibiotic susceptibility patterns of community-acquired respiratory isolates of Moraxella catarrhalis in western Europe and in the USA. The Alexander Project Collaborative Group. Berk SL, et al. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:85–96

Antimicrobial resistance among lower respiratory tract isolates of Haemophilus influenzae: results of a 1992–93 western Europe and USA collaborative surveillance study. The Alexander Project Collaborative Group. Doern GV. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:59–69

A multicentre collaborative study of the antimicrobial susceptibility of community-acquired, lower respiratory tract pathogens 1992–1993: the Alexander Project [see comments] Felmingham D, et al. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:1–57. Comment in: J Antimicrob Chemother 1996 Oct;38(4):747–51.

Antimicrobial susceptibility of community-acquired bacterial lower respiratory tract pathogens [letter; comment] Felmingham D, et al. **J Antimicrob Chemother** 1996 Oct; 38(4):747–51. Comment on: J Antimicrob Chemother 1996 Jul;38 Suppl A:1–57.

Antimicrobial resistance among lower respiratory tract isolates of Streptococcus pneumoniae: results of a 1992–93 western Europe and USA collaborative surveillance study. The Alexander Project Collaborative Group. Goldstein FW, et al. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:71–84

The Alexander Project: using in-vitro susceptibility data for choosing empirical therapy in LRTI. Grüneberg RN. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:155–70

Clinical features of patients with beta-lactamase producing Haemophilus influenzae isolated from sputum. Johnson SR, et al. **J Antimicrob Chemother** 1996 Nov;38(5):881–4

Susceptibility of respiratory strains of Staphylococcus aureus to fifteen antibiotics: results of a collaborative surveillance study (1992–1993). The Alexander Project Collaborative Group. Schito GC, et al. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:97–106

A multinational European survey on the in-vitro activity of rufloxacin and other comparative antibiotics on respiratory and urinary bacterial pathogens. Schito GC, et al. **J Antimicrob Chemother** 1996 Oct;38(4):627–39

Brodimoprim: effects of subminimal inhibitory concentrations on virulence traits of respiratory and urinary tract pathogens, and on plasmid transfer and stability. Marchese A, et al. **J Chemother** 1996 Jun;8(3):171–7

A comparison of in vitro activity of ten oral antimicrobial agents against respiratory tract pathogens. Platsouka E, et al. **J Chemother** 1995 Nov;7 Suppl 4:58–60

Variation in metabolic enzyme activity of persistent Haemophilus influenzae in respiratory tracts of patients with cystic fibrosis. Möller LV, et al. **J Clin Microbiol** 1996 Aug;34(8):1926–9

Detection of Mycoplasma pulmonis in cilia-associated respiratory bacillus isolates and in respiratory tracts of rats by nested PCR. Schoeb TR, et al. **J Clin Microbiol** 1997 Jul;35(7):1667–70

The relationship between intraoperative contamination of the lower respiratory tract and postoperative chest infection [letter; comment] Barnass S, et al. **J Hosp Infect** 1996 May; 33(1):77–80. Comment on: J Hosp Infect 1995 May;30(1):31–7.

Outbreak of severe Pseudomonas aeruginosa respiratory infections due to contaminated nebulizers. Cobben NA, et al. **J Hosp Infect** 1996 May;33(1):63–70

Changing patterns of susceptibilities of blood, urinary and respiratory pathogens in Hong Kong. Ho P, et al. **J Hosp Infect** 1995 Dec;31(4):305–17

Moraxella (Branhamella) catarrhalis—clinical and molecular aspects of a rediscovered pathogen. Enright MC, et al. **J Med Microbiol** 1997 May;46(5):360–71 (129 ref.)

Clinical aspects on antibiotic resistance: upper respiratory tract infections. Prellner K. **Microb Drug Resist** 1995 Summer;1(2):143–7 (34 ref.)

Beta-Lactam antibiotic resistance in gram-positive bacterial pathogens of the upper respiratory tract: a brief overview of mechanisms. Tomasz A, et al. **Microb Drug Resist** 1995 Summer;1(2):103–9 (30 ref.)

Moraxella (Branhamella) catarrhalis adherence to human bronchial and oropharyngeal cells: the role of adherence in lower respiratory tract infections. Rikitomi N, et al. **Microbiol Immunol** 1997;41(6):487–94

Rapid increase of pneumococcal resistance to beta-lactam and other antibiotics in isolates from the respiratory tract (Nagasaki, Japan: 1975–1994). Rikitomi N, et al. **Microbiol Immunol** 1996;40(12):899–905

Prevalence of Chlamydia pneumoniae in healthy children and in children with respiratory tract infections. Falck G, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):549–54

Haemophilus influenzae: it's role in pediatric infections. Introduction. Klein JO. **Pediatr Infect Dis J** 1997 Feb;16(2 Suppl):S3–4

Role of nontypeable Haemophilus influenzae in pediatric respiratory tract infections. Klein JO. **Pediatr Infect Dis J** 1997 Feb;16(2 Suppl):S5–8 (27 ref.)

Bronchoalveolar lavage or oropharyngeal cultures to identify lower respiratory pathogens in infants with cystic fibrosis [see comments] Armstrong DS, et al. **Pediatr Pulmonol** 1996 May;21(5):267–75. Comment in: Pediatr Pulmonol 1996 May;21(5):265–6.

What is the role of upper airway bacterial cultures in patients with cystic fibrosis? [editorial; comment] Ramsey BW. **Pediatr Pulmonol** 1996 May;21(5):265–6. Comment on: Pediatr Pulmonol 1996 May;21(5):267–75.

Persistent Chlamydia pneumoniae infection in a Swedish family. Falck G, et al. **Scand J Infect Dis** 1996;28(3):271–3

Use of serum bactericidal activity in assessing previous antibiotic therapy in acute lower respiratory tract infection in children. Vasudevan G, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):639–41

Sputum bacteriology and its antibiotic susceptibilities in Turkish cystic fibrosis patients. Ozçelik U, et al. **Turk J Pediatr** 1996 Jul–Sep;38(3):281–8

Models of mycoplasma respiratory and genital tract infections. Brunner H. **Wien Klin Wochenschr** 1997 Aug 8;109(14–15):569–73 (30 ref.)

[Causative role of infections with viruses or atypical pathogens in acute exacerbations of chronic bronchitis less frequent than expected (see comments)] Roessingh PH, et al. **Ned Tijdschr Geneeskd** 1996 Nov 30;140(48):2406–10 (28 ref.) (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1997 Feb 15;141(7):351. **(Dut)**

[Bacterial infectious agents implicated in lower respiratory tract infections in general practice] Vernejoux JM, et al. **Rev Pneumol Clin** 1997;53(3):138–43 (Eng. Abstr.) **(Fre)**

[Management of infection in respiratory tract diseases] **Internist (Berl)** 1995 Sep;36(9 Suppl Infektions):1–4 **(Ger)**

[Pulmonary mycobacteriosis] Greminger S. **Schweiz Rundsch Med Prax** 1997 Apr 23;86(17):714–5 **(Ger)**

[Susceptibilities of bacteria isolated from patients with respiratory infectious diseases to antibiotics (1992)] Ikemoto H, et al. **Jpn J Antibiot** 1996 Jan;49(1):34–70 (Eng. Abstr.) **(Jpn)**

[Susceptibilities of bacteria isolated from patients with respiratory infectious diseases to antibiotics (1995)] Ikemoto H, et al. **Jpn J Antibiot** 1997 May;50(5):421–59 (Eng. Abstr.) **(Jpn)**

[Clinical study on penicillin insusceptible/resistant Streptococcus pneumoniae in the elderly patients] Takahira K, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):313–7 (Eng. Abstr.) **(Jpn)**

[A clinical study of chronic lower respiratory infection with Haemophilus influenza by transtracheal aspiration] Tsujimoto M, et al. **Kansenshogaku Zasshi** 1996 Sep; 70(9):947–54 (Eng. Abstr.) **(Jpn)**

[Respiratory infections—pathogenesis of acute and chronic infections] Matsumoto K. **Kekkaku** 1996 Aug;71(8):477–94 (42 ref.) (Eng. Abstr.) **(Jpn)**

[Severe surgical infection with no information in terms of bacteria] Tanimura H, et al. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1066–71 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Relationship between virus and bacterial infections—with special reference to respiratory tract infections] Nagatake T, et al. **Nippon Naika Gakkai Zasshi** 1997 Mar 10; 86(3):491–5 (10 ref.) **(Jpn)**

[Two elderly patients with Rhabdomyolysis and respiratory infection with Streptococcus pneumoniae] Teramoto S, et al. **Nippon Ronen Igakkai Zasshi** 1997 Jan;34(1):49–53 (Eng. Abstr.) **(Jpn)**

[In vitro susceptibility to antifungal agents of Candida strains isolated from patients with various diseases of the respiratory tract] Batura-Gabryel H, et al. **Pneumonol Alergol Pol** 1997;65(5–6):355–9 (Eng. Abstr.) **(Pol)**

[In vitro activity of cefetamet compared with other antimicrobial agents against bacteria isolated from respiratory tract infections] Mendes CM. **Rev Assoc Med Bras** 1997 Jan–Mar;43(1):47–52 (Eng. Abstr.) **(Por)**

[Isolation of mycobacteria in patients with cystic fibrosis: a prospective study] Pedraza Gutiérrez F, et al. **An Esp Pediatr** 1996 Aug;45(2):157–60 (Eng. Abstr.) **(Spa)**

[Infection by Bordetella bronchiseptica in patients with AIDS (letter; comment)] Goenaga MA, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):48–9. Comment on: Enferm Infecc Microbiol Clin 1996 Aug–Sep;14(7):458–9. **(Spa)**

[Non-pneumonia lower respiratory infection by Neisseria meningitidis (letter)] Legaria MC, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):508–9 **(Spa)**

[The spectrum of bronchopulmonary infection caused by Pseudomonas aeruginosa in patients infected with the human immunodeficiency virus] Santín Cerezales M, et al. **Rev Clin Esp** 1996 Oct;196(10):692–7 (Eng. Abstr.) **(Spa)**

[The contamination of the upper respiratory tract of children with representative opportunistic microflora] Nemchenko OO, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):86–9 (Eng. Abstr.) **(Ukr)**

MORTALITY

Changes in the pattern of infant and childhood mortality in upper river division, The Gambia, from 1989 to 1993. Jaffar S, et al. **Trop Med Int Health** 1997 Jan;2(1):28–37

[Analysis of prognosis of bronchopulmonary infectious disease with lung cancer] Mori K, et al. **Kansenshogaku Zasshi** 1997 Jan;71(1):34–8 (Eng. Abstr.) **(Jpn)**

NURSING

Management of acute respiratory infections by mothers in the community. Hussain W, et al. **JPMA J Pak Med Assoc** 1997 Feb;47(2):38–41

PARASITOLOGY

Respiratory cryptosporidiosis: case series and review of the literature. Clavel A, et al. **Infection** 1996 Sep–Oct; 24(5):341–6 (47 ref.)

Identification of Enterocytozoon bieneusi spores in respiratory samples from an AIDS patient with a 2-year history of intestinal microsporidiosis. del Aguila C, et al. **J Clin Microbiol** 1997 Jul;35(7):1862–6

PATHOLOGY

Parainfluenza virus-induced persistence of airway inflammation, fibrosis, and dysfunction associated with TGF-beta 1 expression in brown Norway rats. Uhl EW, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1834–42

Tannic acid supplemented fixation improves ultrastructural evaluation of respiratory epithelium in children with recurrent respiratory tract infections. Valletta EA, et al. **Biotech Histochem** 1996 Sep;71(5):245–50

Comparison of the effects of infectious bronchitis and infectious laryngotracheitis on the chicken respiratory tract. Nakamura K, et al. **J Comp Pathol** 1996 Jan; 114(1):11–21

"Nonspecific chronic inflammation" in lung allografts: association with respiratory pathogens. Ross DJ, et al. **Transplant Proc** 1996 Oct;28(5):2983–6

Histopathological changes in the upper respiratory tract of F344 rats following infection with a rat-adapted influenza virus. Ibanes JD, et al. **Vet Pathol** 1996 Jul;33(4):412–8

[Respiratory infection in a man with systemic lupus erythematosus (clinical conference)] **Medicina (B Aires)** 1996;56(4):405–13 **(Spa)**

[Clinical features and ultrastructure of primary ciliary dyskinesia and Young syndrome] Domingo C, et al. **Rev Clin Esp** 1997 Feb;197(2):100–3 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Interactions of Bacteria with Airway Cells and Secretions. Proceedings of the 11th Transatlantic Airway Conference. Lucerne, Switzerland, January 11–12, 1996. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S131–206

The relationship of childhood respiratory infection to growth and decline in lung function. Britton J, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S240–5 (57 ref.)

Effect of upper respiratory tract infection in patients with neuromuscular disease. Poponick JM, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):659–64

Effect of an upper respiratory tract infection on upper airway reactivity. Nandwani N, et al. **Br J Anaesth** 1997 Apr; 78(4):352–5

Influence of parainfluenza-1 respiratory tract viral infection on endothelin receptor-effector systems in mouse and rat tracheal smooth muscle. Knott PG, et al. **Br J Pharmacol** 1996 Sep;119(2):291–8

Lower airway responses to rhinovirus-Hanks in healthy subjects with and without allergy. Angelini B, et al. **J Allergy Clin Immunol** 1997 May;99(5):618–9

Effects of dexamethasone on acute virus-induced airway dysfunction in adult rats. Mehta H, et al. **Pediatr Res** 1997 Jun;41(6):872–7

Psychobiologic reactivity to stress and childhood respiratory illness: results of two prospective studies [letter; comment] Ratliff-Crain J, et al. **Psychosom Med** 1996 Jul–Aug; 58(4):392–3. Comment on: Psychosom Med 1995 Sep–Oct;57(5):411–22. Comment on: Psychosom Med 1995 Sep–Oct;57(5):423–6.

Bacterial translocation and pulmonary infections in a swine model of small bowel transplantation: influence of enteral nutrition. Biffi R, et al. **Transplant Proc** 1996 Oct; 28(5):2662–3

PREVENTION & CONTROL

Intended response of caretakers of pre-school children to acute respiratory infection in a rural district in Ghana. Amofah GK, et al. **East Afr Med J** 1995 Oct;72(10):619–22

Health behaviour of rural mothers to acute respiratory infections in children in Gondar, Ethiopia. Teka T, et al. **East Afr Med J** 1995 Oct;72(10):623–5

Impact of a single megadose of vitamin A at delivery on breastmilk of mothers and morbidity of their infants. Roy SK, et al. **Eur J Clin Nutr** 1997 May;51(5):302–7

Effect of vitamin A supplementation to mother and infant on morbidity in infancy. Venkatarao T, et al. **Indian Pediatr** 1996 Apr;33(4):279–86

Upper respiratory infections in children: response to endonasal administration of IGA. Giraudi V, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):103–10

Secretory immunoglobulin A increases during relaxation in children with and without recurrent upper respiratory tract infections. Hewson-Bower B, et al. **J Dev Behav Pediatr** 1996 Oct;17(5):311–6

Breast-feeding lowers the frequency and duration of acute respiratory infection and diarrhea in infants under six months of age. López-Alarcón M, et al. **J Nutr** 1997 Mar; 127(3):436-43

Protection of mice from respiratory Sendai virus infections by recombinant vaccinia viruses. Takao SI, et al. **J Virol** 1997 Jan;71(1):832-8

Evaluation of a live attenuated bovine parainfluenza type 3 vaccine in two- to six-month-old infants. Karron RA, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):650-4

Impact of zinc supplementation on morbidity from diarrhea and respiratory infections among rural Guatemalan children. Ruel MT, et al. **Pediatrics** 1997 Jun;99(6):808-13

Impacts of training of village health volunteers in reduction of morbidity from acute respiratory infections in childhood in southern Thailand. Chongsuvivatwong V, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):333-8

Vaccinator device for delivering propellant-driven aerosols of Streptococcus suis bacterin into the respiratory tracts of swine. Brown AR, et al. **Vaccine** 1997 Aug; 15(11):1165-73

Safety and immunogenicity of a respiratory syncytial virus subunit vaccine (PFP-2) in the institutionalized elderly. Falsey AR, et al. **Vaccine** 1997 Jul;15(10):1130-2

[International study of prevention. Use of loratadine in the management of children at risk for recurrent respiratory tract infections. Proceedings of a conference. London, 26-28 October 1995] **Allerg Immunol (Paris)** 1997 Mar; 29(3):69-82 **(Fre)**

[Strategy for preventing upper respiratory tract infections. Consensus of the Consulting Committee] **Allerg Immunol (Paris)** 1997 Mar;29(3):80-2 (Eng. Abstr.) **(Fre)**

[Is early extubation after surgery for esophageal cancer possible?] Le Mée J, et al. **Cah Anesthesiol** 1996; 44(5):409-13 (Eng. Abstr.) **(Fre)**

[Control of Nosocomial infections: prevention of respiratory infections in the elderly] Nagatake T, et al. **Nippon Saikingaku Zasshi** 1996 Aug;51(3):871-6 (14 ref.) **(Jpn)**

[Arbidole--a new drug for prevention of influenza and acute viral respiratory infections in children] Beliaev AL, et al. **Vestn Ross Akad Med Nauk** 1996;(8):34-7 (Eng. Abstr.) **(Rus)**

[Experience in preventing acute respiratory viral infections among the troops of the Leningrad Military District] Nebredovskiĭ VN, et al. **Voen Med Zh** 1996 Aug; 317(8):55-6 **(Rus)**

[Airway hyperreactivity and respiratory allergy in children] **Rev Alerg Mex** 1996;43 Spec No:22-37 (73 ref.) **(Spa)**

RADIOGRAPHY

Reliability of the chest radiograph in the diagnosis of lower respiratory infections in young children [see comments] Davies HD, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):600-4 . Comment in: Pediatr Infect Dis J 1997 Jan;16(1):85-6.

Usefulness of high-resolution CT for differential diagnosis of multi-focal pulmonary consolidation. Johkoh T, et al. **Radiat Med** 1996 May-Jun;14(3):139-46

RADIONUCLIDE IMAGING

Radioiodine bronchogram in acute respiratory tract infection. Bakheet SM, et al. **Clin Nucl Med** 1997 May;22(5):308-9

Thallium-201 scintigraphy in the evaluation of graft dysfunction in lung transplantation. Newark Beth Israel Medical Center Lung Transplant Group. Karetzky MS, et al. **Eur Respir J** 1996 Dec;9(12):2553-9

Radioiodine uptake in the chest. Bakheet SM, et al. **J Nucl Med** 1997 Jun;38(6):984-6

THERAPY

Management of children with ARI and/or diarrhoea in Addis Ababa, Ethiopia. Farrow J, et al. **Ethiop Med J** 1996 Oct; 34(4):225-31

Humidification of oxygen with unheated humidifiers in tropical climates. Weber MW, et al. **Pediatr Pulmonol** 1996 Aug;22(2):125-8

Reducing the morbidity of lower respiratory tract infections caused by respiratory syncytial virus: still no answer [see comments] Prober CG, et al. **Pediatrics** 1997 Mar; 99(3):472-5. Comment in: Pediatrics 1997 Mar;99(3):454-61.

Natural propolis extract NIVCRISOL in the treatment of acute and chronic rhinopharyngitis in children. Crişan I, et al. **Rom J Virol** 1995 Jul-Dec;46(3-4):115-33

An analysis of decisions by European general practitioners to admit to hospital patients with lower respiratory tract infections. The European Study Group of Community Acquired Pneumonia (ESOCAP) of the European Respiratory Society. Schaberg T, et al. **Thorax** 1996 Oct; 51(10):1017-22

Acute respiratory infections in young children comparative findings in emergency rooms in Accra, (Ghana) and Harare (Zimbabwe). Dakubo GB, et al. **West Afr J Med** 1996 Jul-Sep;15(3):181-5

[Hematopoietic growth factors and anti-infective respiratory defenses] Gagnadoux F, et al. **Rev Mal Respir** 1997 Apr; 14(2):93-9 (40 ref.) (Eng. Abstr.) **(Fre)**

[Therapy of airway infections] Vogel F. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1195-7 **(Ger)**

[Etiological structure of respiratory virus diseases and modern therapeutic opportunities] Kolomiets AG, et al. **Klin Med (Mosk)** 1997;75(2):6-12 (41 ref.) **(Rus)**

[Nebulization with human IGA in patients with hypogammaglobulinemia and airway infections secondary to lymphoproliferative diseases (letter)] Sánchez Avalos JC, et al. **Medicina (B Aires)** 1995;55(6):727-9 **(Spa)**

[Management of acute respiratory infections in a Kaqchiquel community in Guatemala] Sáenz de Tejada S. **Rev Panam Salud Publica** 1997 Apr;1(4):259-65 (Eng. Abstr.) **(Spa)**

TRANSMISSION

Bacterial colonization as a potential source of nosocomial respiratory infections in two types of spirometer [see comments] Burgos F, et al. **Eur Respir J** 1996 Dec; 9(12):2612-7. Comment in: Eur Respir J 1997 Jul;10(7):1694-5.

Bacterial colonization as a potential source of nosocomial respiratory infections in spirometers [letter; comment] Kendrick AH, et al. **Eur Respir J** 1997 Jul;10(7):1694-5. Comment on: Eur Respir J 1996 Dec;9(12):2612-7.

A pseudo-outbreak of respiratory infection with Acinetobacter species. Sule O, et al. **Infect Control Hosp Epidemiol** 1997 Jul;18(7):510-2

Who mixes with whom? A method to determine the contact patterns of adults that may lead to the spread of airborne infections. Edmunds WJ, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22;264(1384):949-57

The role of household contacts in the transmission of group A streptococci. Falck G, et al. **Scand J Infect Dis** 1997; 29(3):239-44

VETERINARY

Respiratory tract disease and mucosal colonization by Pasteurella haemolytica in transported cattle. Frank GH, et al. **Am J Vet Res** 1996 Sep;57(9):1317-20

Pathogenesis of infection induced by an adenovirus isolated from a goat. Lehmkuhl HD, et al. **Am J Vet Res** 1997 Jun;58(6):608-11

In-vitro activity of ceftiofur against Australian isolates of the family Pasteurellaceae associated with respiratory disease in cattle and pigs. Blackall PJ, et al. **Aust Vet J** 1996 Jul;74(1):71

Experimental reproduction of Mycoplasma gallisepticum disease in chukar partridges (Alectoris graeca). McMartin DA, et al. **Avian Dis** 1996 Apr-Jun;40(2):408-16

Respiratory infections of sheep. Martin WB. **Comp Immunol Microbiol Infect Dis** 1996 Jun;19(3):171-9

Equine herpesvirus 2 and disease [editorial; comment] Studdert MJ. **Equine Vet J** 1996 Nov;28(6):426-8. Comment on: Equine Vet J 1996 Nov;28(6):432-6.

Comparison of the effects of infectious bronchitis and infectious laryngotracheitis on the chicken respiratory tract. Nakamura K, et al. **J Comp Pathol** 1996 Jan; 114(1):11-21

Suspected primary immunodeficiency syndrome in three related Irish wolfhounds. Leisewitz AL, et al. **J Small Anim Pract** 1997 May;38(5):209-12

Interpretive criteria for antimicrobial susceptibility testing of ceftiofur against bacteria associated with swine respiratory disease. Burton PJ, et al. **J Vet Diagn Invest** 1996 Oct;8(4):464-8

Infectious agents in acute respiratory disease in horses in Ontario. Carman S, et al. **J Vet Diagn Invest** 1997 Jan; 9(1):17-23

A novel protein polymorphism differentiates the California serotype of infectious bronchitis from other serotypes common to California. Case JT, et al. **J Vet Diagn Invest** 1997 Apr;9(2):149-55

Use of nonradioactive cDNA probes to differentiate porcine respiratory coronavirus and transmissible gastroenteritis virus isolates. Vaughn EM, et al. **J Vet Diagn Invest** 1996 Apr;8(2):241-4

The fractional inhibitory concentration index of antimicrobial agents for bacteria and Mycoplasma isolated from the nasal swabs of cattle with respiratory diseases. Katoh T, et al. **J Vet Med Sci** 1996 Aug;58(8):781-2

Effect of a combination of antimicrobial agents for the treatment of respiratory disease in cattle. Katoh T, et al. **J Vet Med Sci** 1996 Aug;58(8):783-5

Cleavage of influenza A virus H1 hemagglutinin by swine respiratory bacterial proteases. Callan RJ, et al. **J Virol** 1997 Oct;71(10):7579-85

Asymptomatic adenoviral respiratory tract infection in guinea pigs. Crippa L, et al. **Lab Anim Sci** 1997 Apr; 47(2):197-9

Detection of Mycoplasma gallisepticum antibodiesin the sera of village chickens by the enzyme-linked immunosorbent assay. Shah-Majid M. **Trop Anim Health Prod** 1996 May; 28(2):181-2

In vivo properties of a feline herpesvirus type 1 mutant carrying a lacZ insertion at the gI locus of the unique short segment. Willemse MJ, et al. **Vaccine** 1996 Jan;14(1):1-5

Biochemical and antigenic relationships between porcine and equine isolates of Actinobacillus suis. Bada R, et al. **Vet Microbiol** 1996 Aug;51(3-4):393-6

Detection of feline herpesvirus 1 DNA by the nested polymerase chain reaction. Hara M, et al. **Vet Microbiol** 1996 Feb;48(3-4):345-52

Dual infections of feeder pigs with porcine reproductive and respiratory syndrome virus followed by porcine respiratory coronavirus or swine influenza virus: a clinical and virological study. Van Reeth K, et al. **Vet Microbiol** 1996 Feb;48(3-4):325-35

Pathogenicity of cilia-associated respiratory (CAR) bacillus isolates for F344, LEW, and SD rats. Schoeb TR, et al. **Vet Pathol** 1997 Jul;34(4):263-70

Bacterial identity and characteristics in healthy and unhealthy respiratory tracts of sheep and calves. Barbour EK, et al. **Vet Res Commun** 1997 Aug;21(6):421-30

[Use of a Coffea arabica tosta extract for the prevention and therapy of polyfactorial infectious diseases in newborn calves] Ponepal V, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):390-4 (Eng. Abstr.) **(Ger)**

[Etiologic and pathologic study of respiratory disease in lambs from intensive breeding facilities in southern Spain] Hervàs J, et al. **Zentralbl Veterinarmed [B]** 1996 Jun; 43(4):221-31 (Eng. Abstr.) **(Spa)**

VIROLOGY

Epidemiology of influenza virus infections in children with acute respiratory infections in Zambia. Mizuta K, et al. **Ann Trop Paediatr** 1997 Jun;17(2):115-9

Influenza surveillance in community-dwelling elderly compared with children [see comments] Long CE, et al. **Arch Fam Med** 1997 Sep-Oct;6(5):459-65. Comment in: Arch Fam Med 1997 Sep-Oct;6(5):466-7.

Patterns of respiratory illness among elderly persons: the value of communitywide surveillance studies for influenza [editorial; comment] Poland GA. **Arch Fam Med** 1997 Sep-Oct;6(5):466-7. Comment on: Arch Fam Med 1997 Sep-Oct;6(5):459-65.

Respiratory Marburg virus infection in guinea pigs. Ryabchikova E, et al. **Arch Virol** 1996;141(11):2177-90

Risk factors for lower respiratory complications of rhinovirus infections in elderly people living in the community: prospective cohort study. Nicholson KG, et al. **BMJ** 1996 Nov 2;313(7065):1119-23

The role of respiratory viruses in asthma. Busse WW, et al. **Ciba Found Symp** 1997;206:208-13; discussion 213-9 (27 ref.)

Association of invasive pneumococcal disease with season, atmospheric conditions, air pollution, and the isolation of respiratory viruses. Kim PE, et al. **Clin Infect Dis** 1996 Jan;22(1):100-6

Epstein-Barr virus (herpesvirus 4) types A, B and herpesvirus-6 variants A and B in patients presenting with recurrent upper respiratory inflammation, persistent paravertebral thoraco-lumbar muscle spasm and fatigue by polymerase chain reaction (PCR). McGuire T, et al. **In Vivo** 1997 Jan-Feb;11(1):23-8

Eosinophils, respiratory viruses and allergic asthma. Handzel ZT. **Isr J Med Sci** 1997 Jan;33(1):66-70 (40 ref.)

The "common cold" in frail older persons: impact of rhinovirus and coronavirus in a senior daycare center. Falsey AR, et al. **J Am Geriatr Soc** 1997 Jun;45(6):706-11

Molecular epidemiology of adenovirus acute lower respiratory infections of children in the south cone of South America (1991-1994). Kajon AE, et al. **J Med Virol** 1996 Feb;48(2):151-6

Development of a murine hypothermia model for study of respiratory tract influenza virus infection. Wong JP, et al. **Lab Anim Sci** 1997 Apr;47(2):143-7

RSV pneumonia, a community-acquired infection in adults. La Montagne JR. **Lancet** 1997 Jan 18;349(9046):149-50

Effect of a rhinovirus-caused upper respiratory illness on pulmonary function test and exercise responses. Weidner TG, et al. **Med Sci Sports Exerc** 1997 May;29(5):604-9

Anaesthesia in children with viral respiratory tract infections (Paediatric Anaesthesia 5: 257-262) [letter] Donnelly J. **Paediatr Anaesth** 1997;7(4):353-4

Macrophages and respiratory viruses. Van Reeth K, et al. **Pathol Biol (Paris)** 1997 Feb;45(2):184-92 (74 ref.)

Prevalence of respiratory viruses and Mycoplasma pneumoniae in sputum samples from unselected adult patients. Kok T, et al. **Pathology** 1997 Aug;29(3):300-2

Common (but not always considered) viral infections of the lower respiratory tract. Fete TJ, et al. **Pediatr Ann** 1996 Oct;25(10):577-84 (12 ref.)

Parainfluenza virus type 4 infections in pediatric patients. Lindquist SW, et al. **Pediatr Infect Dis J** 1997 Jan; 16(1):34-8

Histopathological changes in the upper respiratory tract of F344 rats following infection with a rat-adapted influenza virus. Ibanes JD, et al. **Vet Pathol** 1996 Jul;33(4):412-8

[Causative role of infections with viruses or atypical pathogens in acute exacerbations of chronic bronchitis less frequent than expected (see comments)] Roessingh PH, et al. **Ned Tijdschr Geneeskd** 1996 Nov 30;140(48):2406-10 (28 ref.) (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1997 Feb 15;141(7):351. **(Dut)**

[Arbidole--a new drug for prevention of influenza and acute viral respiratory infections in children] Beliaev AL, et al. **Vestn Ross Akad Med Nauk** 1996;(8):34-7 (Eng. Abstr.) **(Rus)**

RESPIRATORY TRACT NEOPLASMS

[Association of esophageal carcinoma and previous upper airways and digestive neoplasm (letter)] de Castro Carpeño J, et al. **Med Clin (Barc)** 1997 Feb 22;108(7):277 **(Spa)**

RESPIRATORY TRACT NEOPLASMS

CHEMICALLY INDUCED

Epidemiologic evidence on the relationship between mists containing sulfuric acid and respiratory tract cancer. Sathiakumar N, et al. **Crit Rev Toxicol** 1997 May; 27(3):233–51 (36 ref.)

An updated meta-analysis of formaldehyde exposure and upper respiratory tract cancers. Collins JJ, et al. **J Occup Environ Med** 1997 Jul;39(7):639–51

COMPLICATIONS

[A device for realizing the permanent endoprosthesis of the respiratory tract in tumorous stenosis] Paĭkin AE, et al. **Klin Khir** 1995;(3):45 **(Rus)**

DIAGNOSIS

Recurrent respiratory papillomatosis. Kashima HK, et al. **Obstet Gynecol Clin North Am** 1996 Sep;23(3):699–706 (20 ref.)

[Multiple extramedullary plasmacytomas from the whole respiratory system] Kanoh T, et al. **Rinsho Ketsueki** 1997 Mar;38(3):217–21 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Anthropometric measures and risk of cancers of the upper digestive and respiratory tract. D'Avanzo B, et al. **Nutr Cancer** 1996;26(2):219–27

Upper respiratory and digestive tract malignancies after liver transplantation for alcoholic cirrhosis. Duvoux C, et al. **Transplant Proc** 1996 Oct;28(5):2883

[Assessment of cancer risk in the general population of Poland due to asbestos exposure. I. Basis of methodology] Szymczak W, et al. **Przegl Epidemiol** 1995;49(4):399–406 (Eng. Abstr.) **(Pol)**

[Hospital register for upper aerodigestive tract malignancies in health care in Zamora. A discriptive study] Pardal Refoyo JL. **An Otorrinolaringol Ibero Am** 1996;23(5):541–7 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Particles, inflammation and respiratory tract carcinogenesis. Borm PJ, et al. **Toxicol Lett** 1996 Nov;88(1–3):109–13 (16 ref.)

MORTALITY

Asbestos-related mortality among Italian migrants to Western Australia [letter] Merler E, et al. **Epidemiology** 1996 Sep;7(5):556–7

The influence of alcohol consumption on worldwide trends in mortality from upper aerodigestive tract cancers in men. Macfarlane GJ, et al. **J Epidemiol Community Health** 1996 Dec;50(6):636–9

Upper aerodigestive cancer in battery manufacturers and steel workers exposed to mineral acid mists [letter; comment] Hathaway JA. **Occup Environ Med** 1997 Feb; 54(2):141–2. Comment on: Occup Environ Med 1996 Jul;53(7):445–9.

PATHOLOGY

Clinical significance of an inconclusive cytopathologic diagnosis: a five-year experience at Duke University Medical Center. II. Analysis and follow-up of specimens from the respiratory tract. Wax TD, et al. **Acta Cytol** 1997 Jul–Aug;41(4):1053–7

Pathologic quiz case 2. Mucous membrane plasmacytosis of the upper aerodigestive tract. Imbing FD Jr, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec;122(12):1413, 1414–5

Inconsistent association of Epstein-Barr virus with CD56 (NCAM)-positive angiocentric lymphoma occuring in sites other than the upper and lower respiratory tract. Kobashi Y, et al. **Histopathology** 1996 Feb;28(2):111–20

[Cell types of respiratory epithelium: morphology, molecular biology and clinical significance] Bals R. **Pneumologie** 1997 Feb;51(2):142–9 (79 ref.) (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Surveillance and intervention studies on respiratory cancers in asbestos-exposed workers. Merler E, et al. **Scand J Work Environ Health** 1997 Apr;23(2):83–92 (86 ref.)

RADIOTHERAPY

[Accelerated radiotherapy: initial results in a series of locally very advanced carcinomas of the upper respiratory and digestive tracts] Dupuis O, et al. **Ann Otolaryngol Chir Cervicofac** 1996;113(5):251–60 (41 ref.) (Eng. Abstr.) **(Fre)**

SURGERY

Video-assisted thoracic surgery (VATS) for cancer. Risk of parietal seeding and of early local recurrence. Collard JM, et al. **Int Surg** 1996 Oct–Dec;81(4):343–6 (70 ref.)

THERAPY

Malignant esophageal obstruction and esophagorespiratory fistula: palliation with a polyethylene-covered Z-stent. Saxon RR, et al. **Radiology** 1997 Feb;202(2):349–54

[Molecular-biological aspects of juvenile respiratory papillomatosis and its combined treatment] Gerain V, et al. **Vestn Otorinolaringol** 1996 Jul–Aug;(4):3–8 (44 ref.) (Eng. Abstr.) **(Rus)**

VIROLOGY

Role of human papillomaviruses in cancer of the respiratory and upper digestive tract. Snijders PJ, et al. **Clin Dermatol** 1997 May–Jun;15(3):415–25 (112 ref.)

Inconsistent association of Epstein-Barr virus with CD56 (NCAM)-positive angiocentric lymphoma occuring in sites other than the upper and lower respiratory tract. Kobashi Y, et al. **Histopathology** 1996 Feb;28(2):111–20

RESPIRATORY TRANSPORT

The prone position in acute respiratory distress syndrome: where we are, and where do we go from here [editorial; comment] Albert RK. **Crit Care Med** 1997 Sep;25(9):1453–4 (36 ref.). Comment on: Crit Care Med 1997 Sep;25(9):1539–44.

Intraoperative end-tidal carbon dioxide levels and derived calculations correlated with outcome in trauma patients. Wilson RF, et al. **J Trauma** 1996 Oct;41(4):606–11

DRUG EFFECTS

Stimulation of airway mucociliary transport and epithelial ciliary motility by the triazolopyridazin derivative TAK-225. Tamaoki J, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1186–90

PHYSIOLOGY

Oxygen transport with oscillations of inspired oxygen concentration. Williams EM, et al. **Respir Physiol** 1997 Apr; 108(1):79–87

[Human hemoglobin structure and respiratory transport] Imamura T. **Nippon Rinsho** 1996 Sep;54(9):2320–5 (6 ref.) (Eng. Abstr.) **(Jpn)**

RESPITE CARE

Summer holiday respite provision for the families of children and young people with learning disabilities. McGill P. **Child Care Health Dev** 1996 May;22(3):203–12

Differences in social environment between inpatient and day hospital-crisis respite settings. Davidson L, et al. **Psychiatr Serv** 1996 Jul;47(7):714–20

METHODS

A week in the country: a model respite program. Miller SL, et al. **AIDS Educ Prev** 1996 Apr;8(2):176–86

ORGANIZATION & ADMINISTRATION

An audit of Mercheston Hospital respite service. Hillman AR, et al. **Health Bull (Edinb)** 1996 Jan;54(1):45–50

PSYCHOLOGY

Effects of respite care on patients with dementia and their caregivers. Flint AJ. **Int Psychogeriatr** 1995 Winter; 7(4):505–17 (31 ref.)

UTILIZATION

Findings from a statewide program of respite care: a comparison of service users, stoppers, and nonusers. Cox C. **Gerontologist** 1997 Aug;37(4):511–7

RESPONSE, ACUTE-PHASE see **ACUTE-PHASE REACTION**

RESPONSE INTERFERENCE

CLASSIFICATION

The selective breakdown of frontal functions in patients with obsessive-compulsive disorder and in patients with schizophrenia: a double dissociation experimental finding. Abbruzzese M, et al. **Neuropsychologia** 1997 Jun; 35(6):907–12

PATHOLOGY

Corpus callosum size and inter-hemispheric function in schizophrenia. Woodruff PW, et al. **Schizophr Res** 1997 Feb 28;23(3):189–96

PHYSIOPATHOLOGY

Preconscious processing bias in specific phobia. van den Hout M, et al. **Behav Res Ther** 1997 Jan;35(1):29–34

The selective breakdown of frontal functions in patients with obsessive-compulsive disorder and in patients with schizophrenia: a double dissociation experimental finding. Abbruzzese M, et al. **Neuropsychologia** 1997 Jun; 35(6):907–12

Functional disorganization of representations in schizophrenia. Plagnol A, et al. **Schizophr Bull** 1996; 22(2):383–98

PSYCHOLOGY

Blunted left cingulate activation in mood disorder subjects during a response interference task (the Stroop). George MS, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter; 9(1):55–63

RESPONSE LATENCY see **REACTION TIME**

RESPONSE TIME see **REACTION TIME**

RESPONSIBILITY, SOCIAL see **SOCIAL RESPONSIBILITY**

REST

see related
BED REST

Balancing work and rest to combat driver fatigue: an investigation of two-up driving in Australia. Feyer AM, et al. **Accid Anal Prev** 1997 Jul;29(4):541–53

Cognitive performance during long-term respirator wear while at rest. Caretti DM. **Am Ind Hyg Assoc J** 1997 Feb; 58(2):105–9

Resting echocardiographic features of latent left ventricular outflow obstruction in hypertrophic cardiomyopathy. Nakatani S, et al. **Am J Cardiol** 1996 Sep 15;78(6):662–7

Circadian rest-activity disturbances in seasonal affective disorder. Teicher MH, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):124–30

Comparative review of techniques for recording respiratory events at rest and during deglutition. Tarrant SC, et al. **Dysphagia** 1997 Winter;12(1):24–38

Frequent short rest breaks from computer work: effects on productivity and well-being at two field sites. Henning RA, et al. **Ergonomics** 1997 Jan;40(1):78–91

Effects of high altitude acclimatization on heart rate variability in resting humans. Perini R, et al. **Eur J Appl Physiol** 1996;73(6):521–8

Minimizing fatigue during repetitive jobs: optimal work-rest schedules. Wood DD, et al. **Hum Factors** 1997 Mar; 39(1):83–101

Decrease in CD4 lymphocyte counts with rest; implications for the monitoring of HIV infection. Campbell PJ, et al. **Int J STD AIDS** 1997 Jul;8(7):423–6

Respiratory responses to passive and active recovery from exercise. Takahashi T, et al. **Jpn J Physiol** 1997 Feb; 47(1):59–65

Comparison of immediate and long-term outcome of coronary angioplasty performed for unstable angina and rest pain in men and women [see comments] Keelan ET, et al. **Mayo Clin Proc** 1997 Jan;72(1):5–12. Comment in: Mayo Clin Proc 1997 Jan;72(1):89–91.

Upper limit for intestinal absorption of a dilute glucose solution in men at rest. Duchman SM, et al. **Med Sci Sports Exerc** 1997 Apr;29(4):482–8

Gut rest versus early feeding after elective abdominal surgery [editorial] Eagon JC, et al. **Nutrition** 1997 Feb;13(2):155–6

The effects of music interventions on postoperative pain and sleep in coronary artery bypass graft (CABG) patients. Zimmerman L, et al. **Sch Inq Nurs Pract** 1996 Summer; 10(2):153–700; discussion 171–4

[A case of autonomic nervous dysfunction caused by technostress who was effectively treated with psychosomatic therapy and long rest from work] Uchida E, et al. **Sangyo Eiseigaku Zasshi** 1997 Jan;39(1):46–7 **(Jpn)**

[The conceptual characteristics of developing family rest and physician activities at the sanatorium-health resort stage for the rehabilitation of different patient contingents] Vinokurov BL, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Nov–Dec;(6):33–8 **(Rus)**

[An outbreak of food poisoning at a children's rest center (epidemiological practice No. 6)] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb; (1):105–6 **(Rus)**

PHYSIOLOGY

Role of nitric oxide in skeletal muscle blood flow at rest and during dynamic exercise in humans. Hickner RC, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H405–10

Thyroid, renal, and splanchnic circulation in horses at rest and during short-term exercise. Manohar M, et al. **Am J Vet Res** 1995 Oct;56(10):1356–61

Physiological and psychological effects of head heating during rest and work. Nagai Y, et al. **Appl Human Sci** 1996 Sep;15(5):227–37

Effects of the new calcium antagonist efonidipine hydrochloride on resting and exercise hemodynamics in patients with stable effort angina. Saito T, et al. **Arzneimittelforschung** 1996 Sep;46(9):861–7

Effects of rest interval on isokinetic strength and functional performance after short-term high intensity training. Pincivero DM, et al. **Br J Sports Med** 1997 Sep; 31(3):229–34

Heart rate variability at rest and exercise: influence of age, gender, and physical training. Gregoire J, et al. **Can J Appl Physiol** 1996 Dec;21(6):455–70

Loss of cardiovascular adaptations after physical inactivity. Ehsani AA, et al. **Cardiol Clin** 1997 Aug;15(3):431–8 (54 ref.)

Quantitative evaluation of blood flow distribution to exercising and resting skeletal muscles in patients with cardiac dysfunction using whole-body thallium-201 scintigraphy. Wada O, et al. **Clin Cardiol** 1997 Sep;

20(9):785–90
Exercise thermoregulation after 6 h of chair rest, 6 degrees head-down bed-rest, and water immersion deconditioning in men. Greenleaf JE, et al. **Eur J Appl Physiol** 1996; 72(4):303–9
Thermoregulation at rest and during exercise in healthy older adults. Kenney WL. **Exerc Sport Sci Rev** 1997;25:41–76 (132 ref.)
Systolic and diastolic function in patients with chronic heart failure at rest and during exercise. Spinarova L, et al. **Int J Cardiol** 1997 May 23;59(3):251–6
Decreased resting metabolic rate among persons with Down Syndrome. Allison DB, et al. **Int J Obes Relat Metab Disord** 1995 Dec;19(12):858–61
Men at risk for hypertension show elevated vascular resistance at rest and during mental stress. Marrero AF, et al. **Int J Psychophysiol** 1997 Apr;25(3):185–92
Assessment of left ventricular dimensions and functions in athletes and sedentary subjects at rest and during exercise using echocardiography, Doppler sonography and radionuclide ventriculography. Huonker M, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S173–9 (64 ref.)
Effect of combined parasympathetic and sympathetic blockade on left ventricular relaxation at rest and during exercise in trained and untrained men. Niess A, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S180–3
Fish oil and vitamin E supplementation in oxidative stress at rest and after physical exercise. Sen CK, et al. **J Appl Physiol** 1997 Jul;83(1):189–95
Differences between estimates and measured PaCO2 during rest and exercise in older subjects. Williams JS, et al. **J Appl Physiol** 1997 Jul;83(1):312–6
Heart rates of northern elephant seals diving at sea and resting on the beach. Andrews RD, et al. **J Exp Biol** 1997 Aug; 200 (Pt 15):2083–95
Ventilatory chemoreflexes at rest following a brief period of heavy exercise in man. Clement ID, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):875–84
Myosin heavy chain isoform expression and high energy phosphate content in human muscle fibres at rest and post-exercise. Sant'Ana Pereira JA, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):583–8
Correlations between resting regional wall motion and regional myocardial blood flow (at rest and during exercise) in infarct-related myocardium--a study with [13N]ammonia positron emission tomography. Akutsu Y, et al. **Jpn Circ J** 1997 Aug;61(8):665–72
Dietary red pepper ingestion increases carbohydrate oxidation at rest and during exercise in runners. Lim K, et al. **Med Sci Sports Exerc** 1997 Mar;29(3):355–61
Extracellular adenosine levels in neostriatum and hippocampus during rest and activity periods of rats. Huston JP, et al. **Neuroscience** 1996 Jul;73(1):99–107
Resting systolic blood pressure, parental history of hypertension, and sensitivity to noxious stimuli. Stewart KM, et al. **Pain** 1996 Dec;68(2–3):369–74
The intra- and interobserver variability of impedance cardiography in patients at rest and during exercise. Woltjer HH, et al. **Physiol Meas** 1996 Aug;17(3):171–8
The role of lifestyle in health: the epidemiology and consequences of inactivity. Dietz WH. **Proc Nutr Soc** 1996 Nov;55(3):829–40 (75 ref.)
Effect of gravity on lung exhaled nitric oxide at rest and during exercise. Pogliaghi S, et al. **Respir Physiol** 1997 Feb; 107(2):157–64
[Pulmonary circulation at rest and during exercise in patients with obstructive sleep apnea before and after one year of treatment with CPAP] Hawrylkiewicz I, et al. **Pneumonol Alergol Pol** 1996;64(9–10):638–43 (Eng. Abstr.) **(Pol)**
[Is autonomic control of the heart rate at rest altered by detraining? A study of heart rate variability in professional soccer players after the pretraining period and after the preparatory period for competitions] Rebelo AN, et al. **Rev Port Cardiol** 1997 Jun;16(6):535–41, 508 (Eng. Abstr.) **(Por)**

PSYCHOLOGY

Responses to activation and rest in patients with panic disorder and major depression. Rief W, et al. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):605–16

REST VERTICAL DIMENSION see **VERTICAL DIMENSION**

RESTAURANTS

Social effects on duration in restaurants. Sommer R, et al. **Appetite** 1997 Aug;29(1):25–30
Intersalt data sodium contents of restaurant foods in United States are high [letter] Liebman BF, et al. **BMJ** 1997 Aug 23;315(7106):488
Escherichia coli O157 outbreak in Lincolnshire. **Commun Dis Rep CDR Wkly** 1997 Mar 21;7(12):101
Obstacles to nutrition labeling in restaurants. Almanza BA, et al. **J Am Diet Assoc** 1997 Feb;97(2):157–61
Lower-fat menu items in restaurants satisfy customers. Fitzpatrick MP, et al. **J Am Diet Assoc** 1997 May; 97(5):510–4
Caffeine content of fountain and private-label store brand carbonated beverages. Grand AN, et al. **J Am Diet Assoc** 1997 Feb;97(2):179–82
An outbreak of acute diarrheal diseases caused by E. coli in a tea garden of upper Assam. Nayak HK, et al. **J Commun Dis** 1996 Sep;28(3):209–11
Discrimination against same-sex couples in hotel reservation policies. Jones DA. **J Homosex** 1996;31(1–2):153–9
A large community outbreak of salmonellosis caused by intentional contamination of restaurant salad bars. Török TJ, et al. **JAMA** 1997 Aug 6;278(5):389–95
Health and social concerns of restaurant/bar workers exposed to environmental tobacco smoke. Akbar-Khanzadeh F, et al. **Med Lav** 1996 Mar-Apr;87(2):122–32
Indian restaurants in Glasgow [news] Kohli HS. **Natl Med J India** 1997 Jan-Feb;10(1):37–8
[Dietary differences between restaurants and home in a representative sample of the adult population residing in Geneva] Morabia A, et al. **Soz Praventivmed** 1996; 41(6):380–6 (Eng. Abstr.) **(Fre)**

STANDARDS

Levels of Cd, Hg, As, Cu, Mn, and Zn in Japanese restaurant and box lunches. Tsuda T, et al. **J AOAC Int** 1996 Jul-Aug; 79(4):972–5
Improving the safety of street-vended food. Moy G, et al. **World Health Stat Q** 1997;50(1–2):124–31 (8 ref.)

STATISTICS & NUMERICAL DATA

The relation between heavy alcohol use and bar patronage: a latent growth model. Curran PJ, et al. **J Stud Alcohol** 1996 Jul;57(4):410–8

RESTING PHASE see **INTERPHASE**

RESTING POTENTIALS see **MEMBRANE POTENTIALS**

RESTLESS LEGS

Restless legs syndrome. French L. **J Fam Pract** 1997 Mar; 44(3):242
Restless legs syndrome. Silber MH. **Mayo Clin Proc** 1997 Mar;72(3):261–4 (16 ref.)
Periodic limb movements and restless legs syndrome. Trenkwalder C, et al. **Neurol Clin** 1996 Aug;14(3):629–50 (138 ref.)

BLOOD

Adenosine in painful legs and moving toes syndrome. Guieu R, et al. **Clin Neuropharmacol** 1994 Oct;17(5):460–9

CHEMICALLY INDUCED

Restless legs syndrome and paroxetine. Sanz-Fuentenebro FJ, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):482–4
Familial akathisia and depression treated with nefazodone [letter] Simpson JS. **Can J Psychiatry** 1996 Oct; 41(8):539–40
Mianserin and restless legs. Markkula J, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):53–8
Hypothyroidism on Colchimax revealed by restless legs syndrome [letter] Bon E, et al. **Rev Rhum Engl Ed** 1996 Apr;63(4):304
Augmentation of the restless legs syndrome with carbidopa/levodopa. Allen RP, et al. **Sleep** 1996 Apr; 19(3):205–13

COMPLICATIONS

Sleep disorders [letter] Karitani M, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep;36(9):1161–2
L-DOPA/carbidopa for nocturnal movement disorders in uremia. Walker SL, et al. **Sleep** 1996 Apr;19(3):214–8
Periodic limb movements of sleep and the restless legs syndrome. Williams DC. **Va Med Q** 1996 Fall;123(4):260–5 (50 ref.)

DIAGNOSIS

Reflex studies and MRI in the restless legs syndrome. Bucher SF, et al. **Acta Neurol Scand** 1996 Aug;94(2):145–50
Detection of periodic leg movements with a static-charge-sensitive bed. Rauhala E, et al. **J Sleep Res** 1996 Dec;5(4):246–50
Automatic detection of periodic leg movements (PLM) [letter] Tauchmann N, et al. **J Sleep Res** 1996 Dec; 5(4):273–5
Clinical, polysomnographic, and genetic characteristics of restless legs syndrome: a study of 133 patients diagnosed with new standard criteria. Montplaisir J, et al. **Mov Disord** 1997 Jan;12(1):61–5
The syndrome of painful legs and moving toes--a case report. Tan AK, et al. **Singapore Med J** 1996 Aug;37(4):446–7
The symptomatology of periodic limb movement disorder [letter; comment] Picchietti DL, et al. **Sleep** 1996 Nov; 19(9):747–8. Comment on: Sleep 1996 Apr;19(3):219–23.
Periodic limb movements as the initial manifestation of restless legs syndrome triggered by lumbosacral radiculopathy [letter] Walters AS, et al. **Sleep** 1996 Dec; 19(10):825–6
[Pronounced hypersomnia in a 13-year-old patient with periodic leg movements] Laschewski F, et al. **Pneumologie** 1997 Aug;51 Suppl 3:725–8 (Eng. Abstr.) **(Ger)**
[Non-vascular claudication or painful leg syndrome] Cafagna D, et al. **Minerva Cardioangiol** 1996 May;44(5):229–35 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Restless legs syndrome [letter; comment] Hindmarsh JT. **Arch Intern Med** 1996 Nov 11;156(20):2390. Comment on: Arch Intern Med 1996 Feb 12;156(3):243–8.
Therapy for restless legs syndrome [letter; comment] Neustadt DH. **Arch Intern Med** 1996 Nov 11;156(20):2386; discussion 2390. Comment on: Arch Intern Med 1996 Feb 12;156(3):243–8.
Treatment of restless legs syndrome with gabapentin. Adler CH. **Clin Neuropharmacol** 1997 Apr;20(2):148–51
Fluoxetine and restless legs syndrome. Bakshi R. **J Neurol Sci** 1996 Oct;142(1–2):151–2
Pergolide and carbidopa/levodopa treatment of the restless legs syndrome and periodic leg movements in sleep in a consecutive series of patients. Earley CJ, et al. **Sleep** 1996 Dec;19(10):801–10
Comparison of cognitive-behavioral therapy and clonazepam for treating periodic limb movement disorder. Edinger JD, et al. **Sleep** 1996 Jun;19(5):442–4
Management of restless legs syndrome with gabapentin (Neurontin) [letter] Mellick GA, et al. **Sleep** 1996 Apr; 19(3):224–6
Persistence of repetitive EEG arousals (K-alpha complexes) in RLS patients treated with L-DOPA. Montplaisir J, et al. **Sleep** 1996 Apr;19(3):196–9
L-DOPA/carbidopa for nocturnal movement disorders in uremia. Walker SL, et al. **Sleep** 1996 Apr;19(3):214–8

ETIOLOGY

Restless legs syndrome: a metabolic disorder? [letter; comment] Machtey I, et al. **Arch Intern Med** 1996 Nov 11;156(20):2386; discussion 2390. Comment on: Arch Intern Med 1996 Feb 12;156(3):243–8.
A serendipitous observation regarding restless legs syndrome [letter; comment] McMahon JM. **Arch Intern Med** 1996 Nov 11;156(20):2386, 2390. Comment on: Arch Intern Med 1996 Feb 12;156(3):243–8.
Sleep-related periodic leg movements associated with spinal cord lesions. Lee MS, et al. **Mov Disord** 1996 Nov; 11(6):719–22
Cigarette smoking as a risk factor or an exacerbating factor for restless legs syndrome and sleep bruxism. Lavigne GL, et al. **Sleep** 1997 Apr;20(4):290–3
Periodic limb movements as the initial manifestation of restless legs syndrome triggered by lumbosacral radiculopathy [letter] Walters AS, et al. **Sleep** 1996 Dec; 19(10):825–6

GENETICS

Clinical symptoms and possible anticipation in a large kindred of familial restless legs syndrome. Trenkwalder C, et al. **Mov Disord** 1996 Jul;11(4):389–94
Hereditary essential tremor and restless legs syndrome [letter] Larner AJ, et al. **Postgrad Med J** 1997 Apr;73(858):254

PATHOLOGY

Cerebral generators involved in the pathogenesis of the restless legs syndrome. Bucher SF, et al. **Ann Neurol** 1997 May;41(5):639–45

PHYSIOPATHOLOGY

Periodic leg movements are part of the B-wave rhythm and the cyclic alternating pattern. Droste DW, et al. **Acta Neurol Scand** 1996 Nov;94(5):347–52
The cyclic alternating pattern plays a gate-control on periodic limb movements during non-rapid eye movement sleep. Parrino L, et al. **J Clin Neurophysiol** 1996 Jul; 13(4):314–23
Restless legs and periodic leg movements in sleep syndromes. Wetter TC, et al. **J Neurol** 1997 Apr;244(4 Suppl 1):S37–45 (104 ref.)
Blink reflex excitability is abnormal in patients with periodic leg movements in sleep. Briellmann RS, et al. **Mov Disord** 1996 Nov;11(6):710–4
Restless legs syndrome: clinicoetiologic correlates. Ondo W, et al. **Neurology** 1996 Dec;47(6):1435–41
[Restless legs syndrome--current aspects] Grandjean P. **Schweiz Rundsch Med Prax** 1997 Apr 30;86(18):732–6 (23 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Patterns of muscle activity in legs in sleep apnea patients before and during nCPAP therapy. Briellmann RS, et al. **Eur Neurol** 1997;38(2):113–8
Comparison of cognitive-behavioral therapy and clonazepam for treating periodic limb movement disorder. Edinger JD, et al. **Sleep** 1996 Jun;19(5):442–4
Incidence of periodic leg movements and of the restless legs syndrome during sleep following acute physical activity in spinal cord injury subjects. de Mello MT, et al. **Spinal Cord** 1996 May;34(5):294–6
[Restless legs syndrome and periodic leg movements during sleep in patients with sleep apnea--a therapeutic problem?] Dorow P, et al. **Pneumologie** 1997 Aug;51 Suppl 3:716–20 (Eng. Abstr.) **(Ger)**

RESTLESSNESS see **PSYCHOMOTOR AGITATION**

RESTRAINT, PHYSICAL

see related
IMMOBILIZATION
PROTECTIVE DEVICES

Apparatus for studying behavior and learning in restrained rats. Soltysik S, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(3):697–701

Patient restraints: no way out [letter] **Am J Nurs** 1997 Jan; 97(1):16

Trends in restraint prevalence in US nursing homes, 1990 through 1994 [letter] Schoeneman K, et al. **Am J Public Health** 1996 Oct;86(10):1480–1

The effects of research on clinical practice: the use of restraints. Stratmann D, et al. **Appl Nurs Res** 1997 Feb; 10(1):39–43

Polar day and polar night: month of year and time of day and the use of physical and pharmacological restraint in a north Norwegian university psychiatric hospital. Wynn R. **Arctic Med Res** 1996 Oct;55(4):174–81

Many children remain unrestrained in cars [letter; comment] Campbell H, et al. **BMJ** 1997 May 17;314(7092):1483. Comment on: BMJ 1997 Feb 8;314(7078):392.

Treating shackled patients. Patient's best interest in receiving most appropriate treatment without delay must prevail [letter; comment] Finlay IG, et al. **BMJ** 1997 Jan 25; 314(7076):306–7. Comment on: BMJ 1997 Jan 18;314(7075):164.

Treating shackled patients. Assumption that shackles will not be used should be ignored only in exceptional cases [letter; comment] Nathanson V. **BMJ** 1997 Jan 25;314(7076):307 . Comment on: BMJ 1997 Jan 18;314(7075):164.

Treating shackled patients. Superficiality of editorial gives rise to more anger than do shackles [letter; comment] Pearce SJ. **BMJ** 1997 Jan 25;314(7076):307. Comment on: BMJ 1997 Jan 18;314(7075):164.

Palestinian man shackled in Jerusalem hospital [news] Siegel-Itzkovich J. **BMJ** 1997 Sep 6;315(7108):568

Don't treat shackled patients [editorial] [see comments] Smith R. **BMJ** 1997 Jan 18;314(7075):164. Comment in: BMJ 1997 Jan 25;314(7076):306–7. Comment in: BMJ 1997 Jan 25;314(7076):307.

Shackling of prisoners denounced [news] Westall J. **BMJ** 1997 Feb 8;314(7078):393

A restraint to improve the focusing of extracorporeal shock wave lithotripsy of ureteric calculi. Ozyavuz R, et al. **Br J Urol** 1997 Jan;79(1):129

Sensitization of stress-induced feeding in rats repeatedly exposed to brief restraint: the role of corticosterone. Badiani A, et al. **Brain Res** 1996 Feb 26;710(1–2):35–44

c-jun mRNA expression in the hippocampal formation induced by restraint stress. Lino de Oliveira C, et al. **Brain Res** 1997 Apr 11;753(2):202–8

Prior exposure to a brief restraint session facilitates the occurrence of fear in response to a conflict situation: behavioral and neurochemical correlates. Martijena ID, et al. **Brain Res** 1997 Mar 28;752(1–2):136–42

Effects of acute tilt from orthostatic to head-down antiorthostatic restraint and of sustained restraint on the intra-cerebroventricular pressure in rats. Maurel D, et al. **Brain Res** 1996 Oct 14;736(1–2):165–73

Effect of chronic restraint stress on dendritic spines and excrescences of hippocampal CA3 pyramidal neurons—a quantitative study. Sunanda, et al. **Brain Res** 1995 Oct 2; 694(1–2):312–7

Safety and efficacy of physical restraints for the elderly. Review of the evidence. Frank C, et al. **Can Fam Physician** 1996 Dec;42:2402–9 (42 ref.)

Chronic cold in adrenalectomized, corticosterone (B)-treated rats: facilitated corticotropin responses to acute restraint emerge as B increases. Akana SF, et al. **Endocrinology** 1997 Aug;138(8):3249–58

Retrain, don't restrain: the educational intervention of the National Nursing Home Restraint Removal Project. Dunbar JM, et al. **Gerontologist** 1996 Aug;36(4):539–42

Natural therapeutic holding: a non-aversive alternative to the use of control and restraint in the management of violence for people with learning disabilities. Stirling C, et al. **J Adv Nurs** 1997 Aug;26(2):304–11

A clinical trial to reduce restraints in nursing homes [see comments] Evans LK, et al. **J Am Geriatr Soc** 1997 Jun; 45(6):675–81. Comment in: J Am Geriatr Soc 1997 Jun;45(6):773–5.

Physical restraints in geriatric care in Sweden: prevalence and patient characteristics. Karlsson S, et al. **J Am Geriatr Soc** 1996 Nov;44(11):1348–54

Bedrail use [letter; comment] Levine JM, et al. **J Am Geriatr Soc** 1997 Jun;45(6):780–1. Comment on: J Am Geriatr Soc 1996 Sep;44(9):1086–8.

To use physical restraints or not [letter] Werner P, et al. **J Am Geriatr Soc** 1997 Feb;45(2):253

Physical restraint: not fit for woman, man, or beast [see comments] Williams CC, et al. **J Am Geriatr Soc** 1997 Jun; 45(6):773–5. Comment in: J Am Geriatr Soc 1997 Jun;45(6):675–81.

An inventory method for assessing the degree of restraint imposed by others. Duker PC, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):113–21

Neuroendocrine regulation of cytokine production during experimental influenza viral infection: effects of restraint stress-induced elevation in endogenous corticosterone. Dobbs CM, et al. **J Immunol** 1996 Sep 1;157(5):1870–7

Exercising restraint: autonomy, welfare and elderly patients. Dodds S. **J Med Ethics** 1996 Jun;22(3):160–3 (13 ref.)

Restraint stress-induced elevation of endogenous glucocorticoid suppresses migration of granulocytes and macrophages to an inflammatory locus. Mizobe K, et al. **J Neuroimmunol** 1997 Mar;73(1–2):81–9

Taking charge. The role of nursing administrators in removing restraints. Dunbar JM, et al. **J Nurs Adm** 1997 Mar;27(3):42–8

Least restrictive alternatives: do they really work? Richmond I, et al. **J Nurs Care Qual** 1996 Oct;11(1):29–37

Striving toward a best practice model for a restraint-free environment. Visalli H, et al. **J Nurs Care Qual** 1997 Aug; 11(6):1–4

Seclusion and the lunar cycles. Mason T. **J Psychosoc Nurs Ment Health Serv** 1997 Jun;35(6):14–8

Facility and area variation affecting the use of physical restraints in nursing homes. Phillips CD, et al. **Med Care** 1996 Nov;34(11):1149–62

Restraining patients as part of hospital policy. Varon M, et al. **Med Law** 1996;15(3):571–87

Sudden unexplained death in a psychiatric patient—a case report: the role of phenothiazines and physical restraint. Kumar A. **Med Sci Law** 1997 Apr;37(2):170–5

Hormonal status and the neuroendocrine response to a novel heterotypic stressor involving subchronic noise exposure. van Raaij MT, et al. **Neuroendocrinology** 1997 Mar; 65(3):200–9

Restraining a child for a procedure. Miriam S. **Nurse Pract** 1997 Jul;22(7):160

The use of physical restraint interventions for children and adolescents in the acute care setting. American Academy of Pediatrics Committee on Pediatric Emergency Medicine. **Pediatrics** 1997 Mar;99(3):497–8

Inhibitory effect of restraint on induction of behavioral sensitization to methamphetamine and cocaine in mice. Kuribara H. **Pharmacol Biochem Behav** 1996 Jun; 54(2):327–31

An anatomically adapted, injury-free headholder for guinea pigs. Haidarliu S. **Physiol Behav** 1996 Jul;60(1):111–4

An updated national survey on seclusion and restraint. Crenshaw WB, et al. **Psychiatr Serv** 1997 Mar;48(3):395–7

The influence of physical restraint or fasting on plaque-forming cell response in mice. Komori T, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):295–8

Effects of short-term restraint stress on leukocyte counts, lymphocyte proliferation and lysis of erythrocytes in gilts. Roozen AW, et al. **Zentralbl Veterinarmed [B]** 1996 Oct; 43(8):505–11

[The use of involuntary commitment and other compulsory treatment in psychiatry. A study of registered compulsory treatment, physical restraint and the use of physical force] Poulsen HD, et al. **Ugeskr Laeger** 1996 Sep 16; 158(38):5303–7 (Eng. Abstr.) **(Dan)**

[Patients' evaluation of coercion in a psychiatric departmen. Interview studies in psychiatric departments for adult patients at the Hillerd hospital] Stender AK, et al. **Ugeskr Laeger** 1997 Jun 16;159(25):3947–50 (Eng. Abstr.) **(Dan)**

ADVERSE EFFECTS

A suppressive protein generated in peripheral lymph tissue induced by restraint stress. Fan SG, et al. **Adv Neuroimmunol** 1996;6(3):279–88 (44 ref.)

The impact of restraints on nursing home resident outcomes. Moseley CB. **Am J Med Qual** 1997 Summer;12(2):94–102

Vest restraint palsy. Bromberg MB, et al. **Arch Phys Med Rehabil** 1996 Dec;77(12):1316–9

Effect of DTC on humoral response of SRBC-immunized mice exposed to restraint stress. Comparison with calf thymus extract. Obmińska-Domoradzka B, et al. **Immunopharmacol Immunotoxicol** 1996 Aug;18(3):421–31

Effects of quercetin and/or restraint stress on formation of aberrant crypt foci induced by azoxymethane in rat colons. Matsukawa Y, et al. **Oncology** 1997 Mar-Apr;54(2):118–21

Cardiorespiratory consequences to hobble restraint. Roeggla M, et al. **Wien Klin Wochenschr** 1997 May 23; 109(10):359–61

INSTRUMENTATION

A stable positioning for patients requiring large calvarial exposure for surgical correction of cranial synostosis. Behnke J, et al. **Acta Neurochir (Wien)** 1996; 138(9):1099–101; discussion 1101–2

Nonstressful restraint device for longitudinal evaluation and photography of mouse skin lesions during tumorigenesis studies. Binder RL. **Lab Anim Sci** 1996 Jun;46(3):350–1

An anatomically adapted, injury-free headholder for guinea pigs. Haidarliu S. **Physiol Behav** 1996 Jul;60(1):111–4

[A device for the restraint of laboratory rats in research on their gastric secretion] Trefilov AB. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov;82(10–11):130–4 **(Rus)**

LEGISLATION & JURISPRUDENCE

Effects of a restraint reduction intervention and OBRA '87 regulations on psychoactive drug use in nursing homes. Siegler EL, et al. **J Am Geriatr Soc** 1997 Jul;45(7):791–6

Physical restraint of patients in a psychiatric hospital. Smith AD, et al. **Med Sci Law** 1997 Apr;37(2):145–9

PSYCHOLOGY

Self-restraint and self-injury: occurrence and motivational significance. Powell SB, et al. **Am J Ment Retard** 1996 Jul;101(1):41–8

The effects of contingent and noncontingent attention on self-injury and self-restraint [see comments] Derby KM, et al. **J Appl Behav Anal** 1996 Spring;29(1):107–10. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.

Further analysis of the relationship between self-injury and self-restraint [see comments] Fisher WW, et al. **J Appl Behav Anal** 1996 Spring;29(1):103–6. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.

Direct and collateral effects of restraints and restraint fading. Fisher WW, et al. **J Appl Behav Anal** 1997 Spring; 30(1):105–19; quiz 120

Self-restraint as positive reinforcement for self-injurious behavior [see comments] Smith RG, et al. **J Appl Behav Anal** 1996 Spring;29(1):99–102. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.

Comparing methods for maintaining the safety of a child with pica. LeBlanc LA, et al. **Res Dev Disabil** 1997 May-Jun; 18(3):215–20

RESTRICTION ENDONUCLEASES see **DNA RESTRICTION ENZYMES**

RESTRICTION ENDONUCLEASES, TYPE I see **DEOXYRIBONUCLEASES, TYPE I SITE-SPECIFIC**

RESTRICTION ENDONUCLEASES, TYPE II see **DEOXYRIBONUCLEASES, TYPE II SITE-SPECIFIC**

RESTRICTION ENDONUCLEASES, TYPE III see **DEOXYRIBONUCLEASES, TYPE III SITE-SPECIFIC**

RESTRICTION FRAGMENT LENGTH POLYMORPHISM see **POLYMORPHISM, RESTRICTION FRAGMENT LENGTH**

RESTRICTION MAPPING

Restriction mapping of genes by capillary electrophoresis with laser-induced fluorescence detection. Peck K, et al. **Anal Chem** 1997 Apr 1;69(7):1380–4

Construction of a restriction map and gene map of the lettuce chloroplast small single-copy region using Southern cross-hybridization. Mitchelson KR. **Biotechniques** 1996 Jan;20(1):130–5

Rapid mapping and subcloning of genomic clones in bacteriophage lambda by PCR. Woo HH, et al. **Biotechniques** 1997 May;22(5):822–4

Nucleotide sequence, insertional mutagenesis, and transcriptional mapping of a conserved region of the baculovirus Autographa californica nuclear polyhedrosis virus (map unit 64.8–66.9). Lu A, et al. **Can J Microbiol** 1996 Dec;42(12):1267–73

Identification of DNA methylation markers for human breast carcinomas using the methylation-sensitive restriction fingerprinting technique. Huang TH, et al. **Cancer Res** 1997 Mar 15;57(6):1030–4

Physical mapping of the murine casein locus reveals the gene order as alpha-beta-gamma-epsilon-kappa. George S, et al. **DNA Cell Biol** 1997 Apr;16(4):477–84

Isolation and analysis of a novel gene, HXC-26, adjacent to the rab GDP dissociation inhibitor gene located at human chromosome Xq28 region. Toyoda A, et al. **DNA Res** 1996 Oct 31;3(5):337–40

Physical map and cosmid contig encompassing a new interstitial deletion of the X-linked lymphoproliferative syndrome region. Lamartine J, et al. **Eur J Hum Genet** 1996;4(6):342–51

Characterization of Campylobacter upsaliensis fur and its localization in a highly conserved region of the Campylobacter genome. Bourke B, et al. **Gene** 1996 Dec 12;183(1–2):219–24

Genomic organization of the metal-mobilizing bacterium Thiobacillus cuprinus. Marín I, et al. **Gene** 1997 Mar 10; 187(1):99–105

A complete NotI restriction map covering the entire long arm of human chromosome 11. Hosoda F, et al. **Genes Cells** 1997 May;2(5):345–57

Genomic organization of TEL: the human ETS-variant gene 6. Baens M, et al. **Genome Res** 1996 May;6(5):404–13

A comparative transcription map of the murine bare patches (Bpa) and striated (Str) critical regions and human Xq28. Levin ML, et al. **Genome Res** 1996 Jun;6(6):465–77

Localization of human liver 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase (PFKFB1) within a YAC contig in Xp11.21. Batra RS, et al. **Genomics** 1997 Mar 1;40(2):358–61

Rapid restriction mapping of cosmids by sequence-specific triple-helix-mediated affinity capture. Ji H, et al. **Genomics** 1996 Jan 15;31(2):185–92

SMT3A, a human homologue of the S. cerevisiae SMT3 gene, maps to chromosome 21qter and defines a novel gene family. Lapenta V, et al. **Genomics** 1997 Mar 1;40(2):362–6

The human alpha 2(XI) collagen gene (COL11A2): completion of coding information, identification of the promoter sequence, and precise localization within the major histocompatibility complex reveal overlap with the KE5 gene. Lui VC, et al. **Genomics** 1996 Mar 15; 32(3):401–12

YAC and cosmid contigs encompassing the Fukuyama-type congenital muscular dystrophy (FCMD) candidate region on 9q31. Miyake M, et al. **Genomics** 1997 Mar 1; 40(2):284–93

Medium-range restriction maps of five chromosomes of Leishmania infantum and localization of size-variable regions. Ravel C, et al. **Genomics** 1996 Aug 1;35(3):509–16

Genomic organization of human MXI1, a putative tumor suppressor gene. Wechsler DS, et al. **Genomics** 1996 Mar 15;32(3):466–70

Genome organization of Pseudomonas stutzeri and resulting taxonomic and evolutionary considerations. Ginard M, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):132–43

High-resolution genotypic analysis of the genus Aeromonas by AFLP fingerprinting. Huys G, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):572–80

Molecular characterization of a caprine adenovirus. Williams EL, et al. **Intervirology** 1996;39(4):275–9

Characterization of strains of Leuconostoc mesenteroides by analysis of soluble whole-cell protein pattern, DNA fingerprinting and restriction of ribosomal DNA. Villani F, et al. **J Appl Microbiol** 1997 May;82(5):578–88

Construction of a chromosome map for the phage group II Staphylococcus aureus Ps55. Bannantine JP, et al. **J Bacteriol** 1996 Dec;178(23):6842–8

Genomic organization of the acidophilic chemolithoautotrophic bacterium Thiobacillus ferrooxidans ATCC 21834. Irazabal N, et al. **J Bacteriol** 1997 Mar; 179(6):1946–50

Physical and genetic chromosomal map of an M type 1 strain of Streptococcus pyogenes. Suvorov AN, et al. **J Bacteriol** 1996 Sep;178(18):5546–9

Riboprinting: a tool for the study of genetic diversity in microorganisms. Clark CG. **J Eukaryot Microbiol** 1997 Jul-Aug;44(4):277–83 (52 ref.)

Spodoptera exigua multicapsid nucleopolyhedrovirus deletion mutants generated in cell culture lack virulence in vivo. Heldens JG, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3127–34

Differentiation of Leptospira species and serovars by PCR-restriction endonuclease analysis, arbitrarily primed PCR and low-stringency PCR. Brown PD, et al. **J Med Microbiol** 1997 Feb;46(2):173–81

Detection and typing of human papillomavirus in biopsy and cytological specimens by polymerase chain reaction and restriction enzyme analysis: a method suitable for semiautomation. Adams V, et al. **J Med Virol** 1996 Feb; 48(2):161–70

A physical map of the mouse H2 Bat5/Db interval. Dagenais SL, et al. **Mamm Genome** 1997 Jan;8(1):39–41

Structure and chromosomal localization of the mouse mitochondrial transcription factor A gene (Tfam). Larsson NG, et al. **Mamm Genome** 1997 Feb;8(2):139–40

Linkage map of Syrian hamster with restriction landmark genomic scanning. Okuizumi H, et al. **Mamm Genome** 1997 Feb;8(2):121–8

MAPDRAW. Restriction mapping and analysis. Plasterer TN. **Methods Mol Biol** 1997;70:241–56

GeneJockeyII. Restriction analysis. Taylor P. **Methods Mol Biol** 1997;70:213–9

The structure of heterochromatic DNA is altered in polyploid cells of Drosophila melanogaster. Glaser RL, et al. **Mol Cell Biol** 1997 Mar;17(3):1254–63

A physical and genetic map of the Corynebacterium glutamicum ATCC 13032 chromosome. Bathe B, et al. **Mol Gen Genet** 1996 Sep 13;252(3):255–65

The physical relationship of barley chromosome 5 (1H) to the linkage groups of rice chromosomes 5 and 10. Korzun L, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):225–31

The unstable region of Streptomyces ambofaciens includes 210 kb terminal inverted repeats flanking the extremities of the linear chromosomal DNA. Leblond P, et al. **Mol Microbiol** 1996 Jan;19(2):261–71

Consistency, characters, and the likelihood of correct phylogenetic inference. Givnish TJ, et al. **Mol Phylogenet Evol** 1997 Jun;7(3):320–30

Sequencing, expression pattern and RFLP mapping of a senescence-enhanced cDNA from Zea mays with high homology to oryzain gamma and aleurain. Griffiths CM, et al. **Plant Mol Biol** 1997 Jul;34(5):815–21

Linkage map of phenotype and RFLP markers in rice. Yoshimura A, et al. **Plant Mol Biol** 1997 Sep;35(1-2):49–60 (36 ref.)

Amplification of Bcl I region of the factor VIII gene by PCR. Ishak R, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):364–6

Viral isolates derived from simian varicella epizootics are genetically related but are distinct from other primate herpesviruses. Gray WL, et al. **Virology** 1996 Oct 1; 224(1):161–6

Molecular cloning and restriction enzyme mapping of avian adenovirus type 8 DNA. Clavijo A, et al. **Virus Res** 1996 Dec;45(2):93–9

[Physical mapping of human chromosome] Kudoh J, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2414–23 (21 ref.) **(Jpn)**

[Effect of the transposon at the singed locus on recombination in Drosophila melanogaster] Iurchenko NN, et al. **Genetika** 1997 Mar;33(3):333–8 (Eng. Abstr.) **(Rus)**

[Molecular analysis of a copy of the novel mobile element Burdock and the region of its insertion into the cut locus of Drosophila melanogaster] Ponomarenko NA, et al. **Genetika** 1997 Jan;33(1):12–8 (Eng. Abstr.) **(Rus)**

[Restriction analysis of DNA from phages isolated from type strains of Bacillus thuringiensis] Azizbekian KR, et al. **Mikrobiologiia** 1997 Mar-Apr;66(2):247–53 (Eng. Abstr.) **(Rus)**

[Use of peptide-nucleic acids in the "Achilles heel" method] Krasil'nikova MM, et al. **Mol Biol (Mosk)** 1996 Mar-Apr; 30(2):470–4 **(Rus)**

METHODS

Different patterns of DNA alterations detected by restriction landmark genomic scanning in heterogeneous prostate carcinomas. Konishi N, et al. **Am J Pathol** 1997 Jan; 150(1):305–14

Restriction mapping of recombinant cosmid clones using lambda terminase and field inversion gel electrophoresis. Linder CY, et al. **Anal Biochem** 1997 Feb 1;245(1):105–7

Molecular detection of bean common mosaic and bean common mosaic necrosis potyviruses and pathogroups. Xu L, et al. **Arch Virol** 1996;141(10):1961–77

Universal primers for sequencing DNA restriction fragments. Chen YJ, et al. **Biotechniques** 1997 Jan;22(1):44–6

Method for rapid restriction analysis of YAC clones. Del-Favero J, et al. **Biotechniques** 1996 Sep;21(3):404–6

Integrated map of the Schizosaccharomyces pombe genome. Garkavtsev I, et al. **Chromosoma** 1997 Sep;106(4):254–65

Genome analysis of Bacteroides by pulsed-field gel electrophoresis: chromosome sizes and restriction patterns. Shaheduzzaman SM, et al. **DNA Res** 1997 Feb 28; 4(1):19–25

Restriction endonuclease in situ digestion (REISD): a novel quantitative sex-independent method to analyze chimerism after bone marrow transplantation. Díez-Martín JL, et al. **Exp Hematol** 1996 Sep;24(11):1333–9

Mitochondrial DNA differentiation in the Japanese brown frog Rana japonica as revealed by restriction endonuclease analysis. Sumida M. **Genes Genet Syst** 1997 Apr;72(2):79–90

Construction of high-resolution physical maps from yeast artificial chromosomes using restriction landmark genomic scanning (RLGS). Hirotsune S, et al. **Genomics** 1996 Oct 1;37(1):87–95

Inhibition of restriction endonuclease activity by DNA binding fluorochromes. Meng X, et al. **J Biomol Struct Dyn** 1996 Jun;13(6):945–51

Clear detection and typing of herpes simplex virus types 1 and 2 by an indirect ELISA assay: comparison with three different combined methods—capture ELISA, restriction enzymes, and polymerase chain reaction. Markoulatos P, et al. **J Clin Lab Anal** 1997;11(3):146–53

Genomics via optical mapping. II: Ordered restriction maps. Anantharaman TS, et al. **J Comput Biol** 1997 Summer; 4(2):91–118

Hardness of flip-cut problems from optical mapping. Dančík V, et al. **J Comput Biol** 1997 Summer;4(2):119–25

Restriction endonuclease analysis of highly repetitive DNA as a phylogenetic tool. Grechko VV, et al. **J Mol Evol** 1997 Sep;45(3):332–6

Genomic alterations in human glioma cell lines detected by restriction landmark genomic scanning. Nakamura M, et al. **J Neurooncol** 1997 Sep;34(3):203–9

Chromatin structure mapping in vivo using methyltransferases. Kladde MP, et al. **Methods Enzymol** 1996;274:214–33

Gene mapping by FISH. Espinosa R 3rd, et al. **Methods Mol Biol** 1997;68:53–76

Use of dinucleotide polymorphism analyses in physical mapping. Fairman J, et al. **Methods Mol Biol** 1997; 68:149–57

Physical mapping by pulsed-field gel electrophoresis. Maule J. **Methods Mol Biol** 1997;68:93–121

Ordered differential display: a simple method for systematic comparison of gene expression profiles. Matz M, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2541–2

COBRA: a sensitive and quantitative DNA methylation assay. Xiong Z, et al. **Nucleic Acids Res** 1997 Jun 15; 25(12):2532–4

A new method for straightening DNA molecules for optical restriction mapping. Yokota H, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1064–70

Rice molecular genetic map using RFLPs and its applications. Nagamura Y, et al. **Plant Mol Biol** 1997 Sep; 35(1-2):79–87 (98 ref.)

Multiple-complete-digest restriction fragment mapping: generating sequence-ready maps for large-scale DNA sequencing. Wong GK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5225–30

Differentiation of Salmonella typhi strains by ribosomal RNA gene restriction patterns. Chou WH, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):620–4

A contribution to the systematization of bovine herpesvirus 1 based on genomic mapping by restriction fragment pattern analysis. Christensen LS, et al. **Virus Res** 1996 Dec; 46(1-2):177–82

Coupled PCR-restriction enzyme analysis for rapid identification of structural gene relationships among strains of eastern equine encephalitis virus. Strizki JM, et al. **Virus Res** 1996 Jul;43(1):69–75

RESTRICTION-MODIFICATION SYSTEMS see **DNA RESTRICTION-MODIFICATION ENZYMES**

RESUME, JOB see **JOB APPLICATION**

RESUSCITATION

"Small volume resuscitation" as treatment of cerebral blood flow disturbances and increased ICP in trauma and ischemia. Kempski O, et al. **Acta Neurochir Suppl (Wien)** 1996;66:114–7

Adrenalectomy reduces the ability of newborn rats to gasp and survive anoxia. Yuan SZ, et al. **Acta Physiol Scand** 1997 Apr;159(4):285–92

Resuscitation after nifedipine overdose exclusively with intravenous calcium chloride. Haddad LM. **Am J Emerg Med** 1996 Oct;14(6):602–3

Resuscitation of the critically ill in the ED: responses of blood pressure, heart rate, shock index, central venous oxygen saturation, and lactate. Rady MY, et al. **Am J Emerg Med** 1996 Mar;14(2):218–25

Video assessment of trauma response: adherence to ATLS protocols. Santora TA, et al. **Am J Emerg Med** 1996 Oct; 14(6):564–9

Parental rights at the birth of a near-viable infant: conflicting perspectives. Pinkerton JV, et al. **Am J Obstet Gynecol** 1997 Aug;177(2):283–8; discussion 288–90

Role of ET and NO in resuscitative effect of diaspirin cross-linked hemoglobin after hemorrhage in rat. Gulati A, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H827–36

Upregulation of alveolar liquid clearance after fluid resuscitation for hemorrhagic shock in rats. Modelska K, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):L305–14

Fluid compartments in hemorrhaged rats after hyperosmotic crystalloid and hyperoncotic colloid resuscitation. Moon PF, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F1–8

Regulation of hepatic blood flow during resuscitation from hemorrhagic shock: role of NO and endothelins. Pannen BH, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2736–45

Survival after trauma pneumonectomy: the pathophysiologic balance of shock resuscitation with right heart failure. Baumgartner F, et al. **Am Surg** 1996 Nov;62(11):967–72

Emergency cricothyroidotomy. Isaacs JH Jr, et al. **Am Surg** 1997 Apr;63(4):346–9

Do not resuscitate orders in the perioperative period: patient perspectives. Clemency MV, et al. **Anesth Analg** 1997 Apr; 84(4):859–64

In-hospital resuscitation: executive summary. Cummins RO, et al. **Ann Emerg Med** 1997 May;29(5):647–9

Real-time ultrasound-guided femoral vein catheterization during cardiopulmonary resuscitation [see comments] Hilty WM, et al. **Ann Emerg Med** 1997 Mar;29(3):331–6; discussion 337. Comment in: ACP J Club 1997 Jul-Aug;127(1):15.

Intraosseous infusion in an emergency situation: a case report. Nafiu OO, et al. **Ann Trop Paediatr** 1997 Jun;17(2):175–7

Choreographing trauma resuscitation in the OR. Wooten CL, et al. **AORN J** 1996 Sep;64(3):415–8, 420–3

Parental resuscitation techniques after apparent life threatening events in infancy [letter] Fox D, et al. **Arch Dis Child** 1997 Mar;76(3):289–90

Granulocyte colony-stimulating factor (G-CSF) production in hemorrhagic shock requires both the ischemic and resuscitation phase. Hierholzer C, et al. **Arch Orthop Trauma Surg** 1997;116(3):173–6

Reduced resuscitation fluid volume for second-degree burns with delayed initiation of ascorbic acid therapy. Tanaka H, et al. **Arch Surg** 1997 Feb;132(2):158–61

Resuscitation witnessed by relatives. Has proved acceptable to doctors in paediatric cases [letter; comment] Goldstein A, et al. **BMJ** 1997 Jan 11;314(7074):144–5. Comment on: BMJ 1994 Jun 25;308(6945):1687–92.

Allowing relatives to witness resuscitation [letter; comment] McLauchlan CA. **BMJ** 1997 Apr 5;314(7086):1044. Comment on: BMJ 1997 Jan 11;314(7074):145.

Diagnosing death. Start resuscitation first [letter; comment] Mardel S, et al. **BMJ** 1997 Feb 8;314(7078):442; discussion 443. Comment on: BMJ 1996 Oct 19;313(7063):956–7.

Resuscitation witnessed by relatives. Might lead to a complaint for breach of confidentiality [letter] [see comments] Stewart K, et al. **BMJ** 1997 Jan 11; 314(7074):145. Comment in: BMJ 1997 Apr 5;314(7086):1044.

A survey of general anaesthesia, sedation and resuscitation in general dental practice. Macpherson LM, et al. **Br Dent J** 1996 Sep 21;181(6):199–203

Resuscitating effect of melanocortin peptides after prolonged respiratory arrest. Guarini S, et al. **Br J Pharmacol** 1997 Aug;121(7):1454–60

Do not resuscitate orders in the operating room. Craig DB. **Can J Anaesth** 1996 Aug;43(8):840–51

Ethics of resuscitation. Hook CC, et al. **Crit Care Clin** 1996 Jan;12(1):135–48 (53 ref.)

Gender differences in 24-hour outcome following resuscitation after 9 minutes of cardiac arrest in dogs. Zwemer CF, et al. **Crit Care Med** 1997 Feb;25(2):330–8

Blood-brain barrier methionine transport after resuscitation from 10-min cardiac arrest in rats. Kapuściński A, et al. **Folia Neuropathol** 1996;34(2):72–5

Lectin histochemistry in the rats brain in experimental postresuscitation syndrome. (Early and late changes). Szumańska G. **Folia Neuropathol** 1996;34(2):76–86

Intracardiac fluid resuscitation in penetrating cardiac wounds. Najm HK. **Injury** 1997 Apr;28(3):231–2

Paramedic interventions increase the rate of return of

spontaneous circulation in out of hospital cardiac arrests. Mann CJ, et al. **J Accid Emerg Med** 1997 May;14(3):149–50

Resuscitation of thermally injured patients with oxygen transport criteria as goals of therapy. Barton RG, et al. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 1):1–9

Hemorrhage and resuscitation alter the expression of ICAM–1 and P–selectin in mice. Shenkar R, et al. **J Inflamm** 1995;45(4):248–59

Reanimation: overcoming objections and obstacles to organ retrieval from non–heart–beating cadaver donors. Orr RD, et al. **J Med Ethics** 1997 Feb;23(1):7–11

Combined medical and surgical treatment after acute spinal cord injury: results of a prospective pilot study to assess the merits of aggressive medical resuscitation and blood pressure management. Vale FL, et al. **J Neurosurg** 1997 Aug;87(2):239–46

The integration of brain–specific treatments into the initial resuscitation of the severe head injury patient. Brain Trauma Foundation. **J Neurotrauma** 1996 Nov;13(11):653–9 (19 ref.)

Resuscitation of blood pressure and oxygenation. Brain Trauma Foundation. **J Neurotrauma** 1996 Nov;13(11):661–6 (15 ref.)

Efficacy of urgent thoracotomy for trauma in patients attended by a helicopter emergency medical service [letter] [see comments] Haji–Michael PG, et al. **J R Coll Surg Edinb** 1996 Feb;41(1):61. Comment in: J R Coll Surg Edinb 1996 Dec;41(6):423.

Administration of ATP–MgCl2 after trauma–hemorrhage and resuscitation restores the depressed cardiac performance. Robinson DA, et al. **J Surg Res** 1997 Apr; 69(1):159–65

Pentoxifylline restores the depressed cardiac performance after trauma–hemorrhage and resuscitation. Robinson DA, et al. **J Surg Res** 1996 Nov;66(1):51–6

The influence of resuscitation on hemodynamics and oxygen radical–induced reperfusion injury after arterialized liver transplantation in the rat. Walcher F, et al. **J Surg Res** 1996 Sep;65(1):9–14

Cardiac preload, splanchnic perfusion, and their relationship during resuscitation in trauma patients. Chang MC, et al. **J Trauma** 1997 Apr;42(4):577–82; discussion 582–4

Hypothermia and minimal fluid resuscitation increase survival after uncontrolled hemorrhagic shock in rats. Kim SH, et al. **J Trauma** 1997 Feb;42(2):213–22

Use of tissue oxygen tension measurements during resuscitation from hemorrhagic shock. Knudson MM, et al. **J Trauma** 1997 Apr;42(4):608–14; discussion 614–6

Irreversible shock revisited: mechanical support of the cardiovascular system: a case report and review. Lisagor P, et al. **J Trauma** 1997 Jun;42(6):1182–6 (28 ref.)

Neonatal resuscitation and newborn outcomes in rural Kenya. Kamenir SA. **J Trop Pediatr** 1997 Jun;43(3):170–3

A computer model of major haemorrhage and resuscitation. Simpson SH, et al. **Med Eng Phys** 1996 Jun;18(4):339–43

Out of hospital cardiac arrest [letter; comment] Ardagh M. **N Z Med J** 1996 Sep 13;109(1029):346. Comment on: N Z Med J 1996 Jun 28;109(1024):240–1.

Postresuscitation changes in brain free radical–mediated processes and nitric oxide synthase activity in rats: effects of individual behavior in "emotional resonance" test. Stepanichev MYu, et al. **Neurochem Res** 1997 Jun; 22(6):743–52

Pulmonary capillary pressure and tissue perfusion: clinical implications during resuscitation from shock. Levy MM. **New Horiz** 1996 Nov;4(4):504–18

Parental choice and neonatal resuscitation [letter; comment] Harrison H. **Paediatr Perinat Epidemiol** 1996 Jan;10(1):122 . Comment on: Paediatr Perinat Epidemiol 1995 Oct;9(4):370–9.

Adolescent female patient with shock unresponsive to usual resuscitative therapy. Ureta–Raroque SS, et al. **Pediatr Emerg Care** 1997 Aug;13(4):274–6

Guidelines for the advanced management of the airway and ventilation during resuscitation. A statement by the Airway and Ventilation Management of the Working Group of the European Resuscitation Council. **Resuscitation** 1996 Jun; 31(3):201–30

Guidelines for the basic management of the airway and ventilation during resuscitation. A statement by the Airway and Ventilation Management Working Group of the European Resuscitation Council. **Resuscitation** 1996 Jun; 31(3):187–200

Special resuscitation situations. An advisory statement on conditions which may require modifications in resuscitation procedures or techniques. Prepared by members of the International Liaison Committee on Resuscitation. **Resuscitation** 1997 Apr;34(2):129–49

Tidal volumes which are perceived to be adequate for resuscitation [see comments] Baskett P, et al. **Resuscitation** 1996 Jun;31(3):231–4. Comment in: Resuscitation 1997 Jan;33(3):281–2.

The ILCOR advisory statements. International Liaison Committee on Resuscitation [editorial] Baskett PJ, et al. **Resuscitation** 1997 Apr;34(2):97–8

Early defibrillation. An advisory statement by the Advanced Life Support Working Group of the International Liaison Committee on Resuscitation. Bossaert L, et al. **Resuscitation** 1997 Apr;34(2):113–4

Advisory statements of the International Liaison Committee on Resuscitation ('ILCOR'). Chamberlain DA, et al. **Resuscitation** 1997 Apr;34(2):99–100

Recommended guidelines for reviewing, reporting, and conducting research on in–hospital resuscitation: the in–hospital 'Utstein style'. A statement for healthcare professionals from the American Heart Association, the European Resuscitation Council, the Heart and Stroke Foundation of Canada, the Australian Resuscitation Council, and the Resuscitation Councils of Southern Africa. Cummins RO, et al. **Resuscitation** 1997 Apr; 34(2):151–83

Single rescuer adult basic life support. An advisory statement from the Basic Life Support Working Group of the International Liaison Committee on Resuscitation (ILCOR). Handley AJ, et al. **Resuscitation** 1997 Apr; 34(2):101–8

Improving outcome from cardiac arrest in the hospital with a reorganized and strengthened chain of survival: an American view [editorial] Kaye W, et al. **Resuscitation** 1996 Jun;31(3):181–6

The Universal ALS algorithm. An advisory statement by the Advanced Life Support Working Group of the International Liaison Committee on Resuscitation. Kloeck W, et al. **Resuscitation** 1997 Apr;34(2):109–11

Guidelines for the advanced management of the airway and ventilation during resuscitation. A statement by the airway and ventilation management working group of the European Resuscitation Council, 1996 (Resuscitation 1996;31:201–230) [letter] Kroesen G. **Resuscitation** 1997 Aug;35(1):89–90

Accidental hypothermia. Lloyd EL. **Resuscitation** 1996 Sep; 32(2):111–24 (81 ref.)

Paediatric life support. An advisory statement by the Paediatric Life Support Working Group of the International Liaison Committee on Resuscitation. Nadkarni V, et al. **Resuscitation** 1997 Apr;34(2):115–27 (69 ref.)

Reporting approval by research ethics committees and subjects' consent in human resuscitation research. Olson CM, et al. **Resuscitation** 1996 Jun;31(3):255–63

Resuscitation from cardiac arrest in cats: influence of epinephrine dosage on brain recovery. Schmitz B, et al. **Resuscitation** 1995 Dec;30(3):251–62

Structural basis of information capacity changes of sensory–motor cerebral cortex of rat brain during post–resuscitation period. Semchenko VV, et al. **Resuscitation** 1996 Apr;31(2):151–8

Acute administration of T3 or rT3 failed to improve outcome following resuscitation from cardiac arrest in dogs. Whitesall SE, et al. **Resuscitation** 1996 Nov;33(1):53–62

Annual congress of the Swiss Society of Anesthesiology and Resuscitation. Interlaken, 7–9 November 1996. Abstracts. **Schweiz Med Wochenschr Suppl** 1996;83:3S–14S **(Eng, Fre, Ger)**

The delivery room resuscitation of the hydropic neonate. McMahan MJ, et al. **Semin Perinatol** 1995 Dec;19(6):474–82 (33 ref.)

Resuscitation with lactated Ringer's solution after hemorrhage: lack of cardiac toxicity. Delman K, et al. **Shock** 1996 Apr;5(4):298–303

Progressive gastric intramucosal acidosis follows resuscitation from hemorrhagic shock. Oud L, et al. **Shock** 1996 Jul;6(1):61–5

Intestinal alkaline phosphatase: role in the depressed gut lipid transport after trauma–hemorrhagic shock. Wang W, et al. **Shock** 1997 Jul;8(1):40–4

Impaired enterocyte triglyceride synthesis after trauma–hemorrhage and resuscitation. Wang W, et al. **Shock** 1997 Jul;8(1):33–9

Cerebrovascular reactivity in comatose patients resuscitated from a cardiac arrest. Buunk G, et al. **Stroke** 1997 Aug; 28(8):1569–73

Effect of transfusion on physiologic changes after resuscitated trauma. Lyden SP, et al. **Surgery** 1997 Sep;122(3):534–45

Unexpected action of platelet activating factor antagonism after fluid resuscitation from traumatic shock. Schurr MJ, et al. **Surgery** 1997 May;121(5):493–500

Resuscitation and the limited utility of the present generation of blood substitutes. Hess JR, et al. **Transfus Med Rev** 1996 Oct;10(4):276–85 (68 ref.)

Does epinephrine administered in donor resuscitation influence graft renal function in the recipient? Decaux A, et al. **Transplant Proc** 1996 Oct;28(5):2889

Critical care nurses' lived experience of unsuccessful resuscitation. Isaak C, et al. **West J Nurs Res** 1996 Dec; 18(6):688–702

[The pathophysiological and intensive care–resuscitation aspects of septic shock] Vasilev D, et al. **Khirurgiia (Sofiia)** 1996;49(4):9–11 (24 ref.) (Eng. Abstr.) **(Bul)**

[Controversies in hospital guidelines for non–resuscitation decisions] Verweij MF, et al. **Ned Tijdschr Geneeskd** 1997 Mar 22;141(12):575–7 (Eng. Abstr.) **(Dut)**

[38th National Congress of Anesthesiology and Resuscitation. Paris, 26–29 September 1996. Abstracts] **Ann Fr Anesth Reanim** 1996;15(6):719–994 **(Fre)**

[Cardiopulmonary resuscitation in cancer patients: experience of an intensive care unit in a cancer center] Sculier JP, et al. **Bull Cancer** 1996 Aug;83(8):677–81 (Eng. Abstr.) **(Fre)**

[How to detect, correct and prevent tissue hypoxia in patients in intensive care units. 3rd European Consensus Conference on Resuscitation. Versailles, 7–8 December 1995] **Rev Pneumol Clin** 1996;52(4):269–72 (0 ref.) **(Fre)**

[Prehospital fluid resuscitation] Kreimeier U, et al. **Anaesthesist** 1996 Oct;45(10):884–99 (104 ref.) (Eng. Abstr.) **(Ger)**

[Myocardial infarct and rhabdomyolysis after a high–voltage accident with successful resuscitation] Franzius C, et al. **Dtsch Med Wochenschr** 1997 Mar 27;122(13):400–6 (22 ref.) (Eng. Abstr.) **(Ger)**

[Resuscitation in ventricular fibrillation as the first manifestation of Bland–White–Garland syndrome in adulthood] Weiss C, et al. **Med Klin** 1997 Jul 15; 92(7):447–51 (Eng. Abstr.) **(Ger)**

[Shock room management of polytrauma] Frank J, et al. **Zentralbl Chir** 1996;121(11):943–9 (Eng. Abstr.) **(Ger)**

[Emergency management of polytrauma patients] Ziegenfuss T. **Zentralbl Chir** 1996;121(11):924–42 (91 ref.) (Eng. Abstr.) **(Ger)**

[Guidelines for primary management of patients with craniocerebral trauma. Intensive Care Medicine and Neurotraumatology Working Group of the German Society of Neurosurgery. Scientific Neuroanesthesia Circle of the German Society of Anesthesiology and Intensive Care Medicine] **Zentralbl Neurochir** 1997;58(1):13–7 **(Ger)**

[Resuscitation in the delivery room: experience in 3 Veneto Centers] Trevisanuto D, et al. **Pediatr Med Chir** 1997 Mar–Apr;19(2):77–80 (Eng. Abstr.) **(Ita)**

[Brain resuscitation] Arai T. **Masui** 1996 Dec;45 Suppl:S168–72 (15 ref.) **(Jpn)**

[The verapamil correction of postresuscitation damages to the heart] Korpacheva OV, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):48–51 (Eng. Abstr.) **(Rus)**

[The initial experience of using Celeston in anesthesia and resuscitation practice] Malyshev VD, et al. **Anesteziol Reanimatol** 1996 May–Jun;(3):46–8 **(Rus)**

[Postresuscitation changes in the nitric–oxide synthase activity and radical formation in sections of the rat brain] Onufriev MV, et al. **Anesteziol Reanimatol** 1996 Sep–Oct; (5):58–61 **(Rus)**

[The interneuronal correlations in the cerebellar cortex in the postresuscitation period] Sergeeva ED, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):56–8 (Eng. Abstr.) **(Rus)**

[Changes in the functional status of the left–ventricular myocardium during dying and in the early postresuscitation period] Talantsev KV, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):45–8 (Eng. Abstr.) **(Rus)**

[Legal problems in the activities of the anesthesia–resuscitation specialist] Vanevskii VL. **Anesteziol Reanimatol** 1995 Nov–Dec;(6):60–3 **(Rus)**

[The simplest methods for controlling patient status in resuscitation and intensive therapy units] Zolotokrylina ES, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):81–6 (30 ref.) (Eng. Abstr.) **(Rus)**

[Use of piperacillin/tazobactam as empirical monotherapy in the treatment of bacterial infections in a resuscitation department] Iakovlev SV, et al. **Antibiot Khimioter** 1997; 42(2):33–7 (Eng. Abstr.) **(Rus)**

[Hibernating peptides, neokyotorphin and kyotorphin, have positive effect on cardio–pulmonary and cerebral resuscitation in rats after a 12–min heart arrest] Kharchenko IB, et al. **Biull Eksp Biol Med** 1997 May;123(5):517–20 **(Rus)**

[Threshold of cerebral seizure activity and indicators of higher nervous system activity in the post–resuscitation period after intracerebral allotransplantation of embryonal neocortical tissue] Semchenko VV, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):234–7 **(Rus)**

[The successful resuscitation and treatment of a female patient with a thoracicoabdominal wound and multiple injuries to the organs at a branch hospital] Abrosimov IP, et al. **Vestn Khir Im I I Grek** 1996;155(5):90 **(Rus)**

[Methods for estimating the severity of the status of resuscitated surgical patients] Bubnova NA, et al. **Vestn Khir Im I I Grek** 1996;155(6):91–3 (Eng. Abstr.) **(Rus)**

[Resuscitation of a newborn with cardiorespiratory arrest caused by severe hypothermia] Balaguer Santamaría JA, et al. **An Esp Pediatr** 1996 Dec;45(6):639–41 (Eng. Abstr.) **(Spa)**

[Resuscitation 96 (editorial)] Castaño–Santa J. **Rev Esp Anestesiol Reanim** 1996 Jun–Jul;43(6):195–6 **(Spa)**

[Infection and sepsis in resuscitation] Rodrigo–Casanova P, et al. **Rev Esp Anestesiol Reanim** 1997 Jun–Jul;44(6):230–43 (101 ref.) (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Pneumomediastinum in newborns induced by the Elder CPR/demand valve during resuscitation. Matsubara K, et al. **Acta Paediatr Jpn** 1997 Feb;39(1):88–91

Detection of traumatic complications of cardiopulmonary resuscitation by ultrasound. Corbett SW, et al. **Ann Emerg Med** 1997 Mar;29(3):317–21; discussion 322

Complications of resuscitation: mediastinal blood transfusion. Simes D. **Br J Hosp Med** 1997 Feb 19–Mar 4;57(4):169

Postresuscitation left ventricular systolic and diastolic dysfunction. Treatment with dobutamine. Kern KB, et al. **Circulation** 1997 Jun 17;95(12):2610–3

Preventing harm in resuscitation medicine. Ardagh M. **N Z Med J** 1997 Apr 11;110(1041):113–5 (28 ref.)

Astrocytic reaction in long–term resuscitation. Fassina G, et al. **Nippon Hoigaku Zasshi** 1997 Apr;51(2):77–82

[The neurochemical, molecular and ultrastructural mechanisms of the formation of latent postresuscitation encephalopathy] Kozhura VL, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):52–6 (Eng. Abstr.) **(Rus)**

[The effect of succinic acid on postresuscitation pathology of the CNS and of the body as a whole] Mutuskina EA, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):61–3 (Eng. Abstr.) **(Rus)**

[The potentials for therapy of the postresuscitation process using regulatory peptides after 10 and 15 minutes of heart arrest] Volkov AV, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):67–70 (Eng. Abstr.) **(Rus)**

EDUCATION

Effect of advanced cardiac life support training on resuscitation efforts and survival in a rural hospital. Camp BN, et al. **Ann Emerg Med** 1997 Apr;29(4):529–33

Training in first aid at the workplace. van Sprundel M. **Bull Inst Marit Trop Med Gdynia** 1996;47(1–4):45–51

Knowledge gained following Neonatal Resuscitation Program courses. Levitt C, et al. **Fam Med** 1996 Jun; 28(6):403–6

Improved trauma management with advanced trauma life support (ATLS) training. Williams MJ, et al. **J Accid Emerg Med** 1997 Mar;14(2):81–3

The ABCs of teaching advanced cardiac life support. Johantgen MA, et al. **J Cardiovasc Nurs** 1997 Jan; 11(2):68–71

Better to lay it out on the table rather than do it behind the curtain: hospitals need to obtain consent before using newly deceased patients to teach resuscitation procedures. Kerns AF. **J Contemp Health Law Policy** 1997 Spring; 13(2):581–612 (197 ref.)

Teaching resuscitation on the newly deceased: do we want to know? [editorial; comment] Ashby R. **Med J Aust** 1996 Oct 21;165(8):412–3. Comment on: Med J Aust 1996 Oct 21;165(8):445–7.

Teaching resuscitation skills using the newly deceased [see comments] Ginifer C, et al. **Med J Aust** 1996 Oct 21; 165(8):445–7. Comment in: Med J Aust 1996 Oct 21;165(8):412–2.

An intelligent learning environment for advanced cardiac life support. Eliot CR, et al. **Proc AMIA Annu Fall Symp** 1996;:7–11

Educating residents: the effects of a mock code program. Cappelle C, et al. **Resuscitation** 1996 Apr;31(2):107–11

[ATLS course in emergency medicine for physicians?] Ben–Abraham R, et al. **Harefuah** 1997 May 15; 132(10):695–7, 743 (Eng. Abstr.) **(Heb)**

HISTORY

Clearing the airway––tongue forceps. Ball C, et al. **Anaesth Intensive Care** 1997 Apr;25(2):105

[Cardiopulmonary resuscitation already in Egypt 5,000 years ago?] Ocklitz A. **Wien Klin Wochenschr** 1997 Jun 6; 109(11):406–12 (Eng. Abstr.) **(Ger)**

[Milestones in the origin and development of anesthesiology and resuscitation (on the 150th anniversary of the first use of ether anesthesia)] Prilmak VP. **Voen Med Zh** 1996 Nov; 317(11):74–6 **(Rus)**

INSTRUMENTATION

Laerdal infant resuscitators are unreliable as free–flow oxygen delivery devices. Martell RJ, et al. **Am J Perinatol** 1997 Jul;14(6):347–51

Adult face mask for neonatal anaesthesia and resuscitation [letter] Chan YW. **Anaesthesia** 1997 Aug;52(8):807

Resuscitation of passengers on two TWA flights [letter] Statman SH. **J Clin Monit** 1997 Mar;13(2):136

Failure to breathe at birth [editorial; comment] Harvey D. **Natl Med J India** 1997 Mar–Apr;10(2):51–2. Comment on: Natl Med J India 1997 Mar–Apr;10(2):54–7.

Assessment of mouth–to–mask ventilation in resuscitation of asphyxic newborn babies. A pilot study. Massawe A, et al. **Trop Med Int Health** 1996 Dec;1(6):865–73

[Intraosseous puncture as vascular access in pediatric emergency and intensive care medicine] Möller JC, et al. **Anaesthesiol Reanim** 1996;21(4):103–7 (Eng. Abstr.) **(Ger)**

METHODS

Fluid resuscitation in thermally injured pediatric patients. Marinov Z, et al. **Acta Chir Plast** 1997;39(1):28–32

Fluid resuscitation with O2 vs. non–O2 carriers after 2 h of hemorrhagic shock in conscious hamsters. Kerger H, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H525–37

Selective aortic arch perfusion during cardiac arrest: enhanced resuscitation using oxygenated perflubron emulsion, with and without aortic arch epinephrine. Manning JE, et al. **Ann Emerg Med** 1997 May;29(5):580–7

A starch–hemoglobin resuscitative compound. Cerny LC, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 Mar; 24(2):153–60

Fluid resuscitation following a burn injury: implications of a mathematical model of microvascular exchange. Bert J, et al. **Burns** 1997 Mar;23(2):93–105

Temperature profiles during resuscitation predict survival following burns complicated by smoke inhalation injury. Platt AJ, et al. **Burns** 1997 May;23(3):250–5

Emergency brain resuscitation. Alberts MJ. **Compr Ther** 1997 Jun;23(6):391–9 (48 ref.)

Resuscitation of pulmonary contusion: effects of a red cell substitute. Cohn SM, et al. **Crit Care Med** 1997 Mar; 25(3):484–91

Burn resuscitation: crystalloid versus colloid versus hypertonic saline hyperoncotic colloid in sheep. Guha SC, et al. **Crit Care Med** 1996 Nov;24(11):1849–57

Dopexamine improves liver oxygenation during crystalloid resuscitation from experimental hemorrhagic shock. Nordin A, et al. **Crit Care Med** 1997 Apr;25(4):663–8

Hypertonic saline and cerebral oxygen delivery in head–injured cats [letter; comment] Shackford SR. **Crit Care Med** 1996 Nov;24(11):1933–6. Comment on: Crit Care Med 1996 Jan;24(1):109–17.

Effect of resuscitation on bacterial translocation in haemorrhagic shocked rats [see comments] Erbil Y, et al. **East Afr Med J** 1996 Nov;73(11):699–702. Comment in: East Afr Med J 1996 Nov;73(11):697–8.

Use of albumin in neonatal resuscitation. Roberton NR. **Eur J Pediatr** 1997 Jun;156(6):428–31 (38 ref.)

Resuscitation of asphyxiated newborn [letter; comment] Mamman KC. **Indian Pediatr** 1996 Oct;33(10):870–1. Comment on: Indian Pediatr 1996 Apr;33(4):326–9.

Changing profile of birth asphyxia [see comments] Mane AV, et al. **Indian Pediatr** 1996 Apr;33(4):326–9. Comment in: Indian Pediatr 1996 Oct;33(10):870–1.

Resuscitation of infants by nasal route. Patwari AK. **Indian Pediatr** 1996 Apr;33(4):350–2

End–points of resuscitation: arterial blood pressure, oxygen delivery, blood lactate, or...? [editorial; comment] Vincent JL. **Intensive Care Med** 1996 Jan;22(1):3–5. Comment on: Intensive Care Med 1996 Jan;22(1):6–16. Comment on: Intensive Care Med 1996 Jan;22(1):17–25.

Air entry in infant resuscitation: oral or nasal routes? Wilson–Davis SL, et al. **J Appl Physiol** 1997 Jan; 82(1):152–5

Hyperdynamic resuscitation improves survival in patients with life–threatening burns. Schiller WR, et al. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 1):10–6

A comparison between the acute effects of nitric oxide synthase inhibition and fluid resuscitation on myocardial function and metabolism in entotoxemic dogs. Cohen RI, et al. **J Crit Care** 1996 Mar;11(1):27–36

Innominosacral dissociation: mechanism of injury as a predictor of resuscitation requirements, morbidity, and mortality. Whitbeck MG Jr, et al. **J Orthop Trauma** 1997 Feb–Mar;11(2):82–8

Regional blood flow during severe hypoxemia and resuscitation with 21% or 100% O2 in newborn pigs. Rootwelt T, et al. **J Perinat Med** 1996;24(3):227–36

Trauma management on the battlefield: a modern approach. Hawley A. **J R Army Med Corps** 1996 Oct;142(3):120–5 (33 ref.)

Hypertonic saline: A review of the literature and evaluation of its role in resuscitation of traumatic hypovolaemic shock. Heath KJ. **J R Army Med Corps** 1994 Feb;140(1):37–41 (29 ref.)

Intraosseous infusion performed in the prehospital setting: South Carolina's six–year experience. Seigler RS. **J S C Med Assoc** 1997 Jun;93(6):209–15

Fluid resuscitation in a model of uncontrolled hemorrhage: too much too early, or too little too late? Leppäniemi A, et al. **J Surg Res** 1996 Jul 1;63(2):413–8

14th Bodensee Symposium on Microcirculation: Small Volume Resuscitation in Head Injury. Bodensee, Germany, June 14–16, 1996. Proceedings. **J Trauma** 1997 May;42(5 Suppl):S1–75

Initial small–volume hypertonic resuscitation of shock and brain injury: short– and long–term effects. Anderson JT, et al. **J Trauma** 1997 Apr;42(4):592–600; discussion 600–1

Diaspirin cross–linked hemoglobin resuscitation improves cerebral perfusion after head injury and shock. Chappell JE, et al. **J Trauma** 1996 Nov;41(5):781–8

Hypertonic saline resuscitation decreases susceptibility to sepsis after hemorrhagic shock. Coimbra R, et al. **J Trauma** 1997 Apr;42(4):602–6; discussion 606–7

Impact of the in–house trauma surgeon on initial patient care, outcome, and cost. Luchette F, et al. **J Trauma** 1997 Mar; 42(3):490–5; discussion 495–7

Therapy of patients with head injuries: key parameters for management. Prough DS, et al. **J Trauma** 1997 May;42(5 Suppl):S10–8 (78 ref.)

Myocardial O2 balance during fluid resuscitation in uncontrolled hemorrhage: computer model. Sheffer N, et al. **J Trauma** 1997 Apr;42(4):647–51

Fluid resuscitation and systemic complications in crush syndrome: 14 Hanshin–Awaji earthquake patients. Shimazu T, et al. **J Trauma** 1997 Apr;42(4):641–6

Use of recombinant hemoglobin solution in reversing lethal hemorrhagic hypovolemic oxygen debt shock. Siegel JH, et al. **J Trauma** 1997 Feb;42(2):199–212

Cellular responses to surgical trauma, hemorrhage, and resuscitation with diaspirin cross–linked hemoglobin in rats. Xu L, et al. **J Trauma** 1997 Jan;42(1):32–41

Randomised comparison of epinephrine and vasopressin in patients with out–of–hospital ventricular fibrillation. Lindner KH, et al. **Lancet** 1997 Feb 22;349(9051):535–7

Tactical combat casualty care in special operations [see comments] Butler FK Jr, et al. **Mil Med** 1996 Aug;161 Suppl:3–16. Comment in: Mil Med 1997 Jan;162(1):vii.

Battlefield trauma life support: its use in the resuscitation department of 32 Field Hospital during the Gulf War. Riley B, et al. **Mil Med** 1996 Sep;161(9):542–6

Pharmacology of pediatric resuscitation. Ushay HM, et al. **Pediatr Clin North Am** 1997 Feb;44(1):207–33 (129 ref.)

Long–term resuscitation of hemorrhage/reperfusion injury (H/R) stimulates renal PGE2 release. Myers SI, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 May; 54(5):335–9

The cerebral 'no–reflow' phenomenon after cardiac arrest in rats––influence of low–flow reperfusion. Böttiger BW, et al. **Resuscitation** 1997 Feb;34(1):79–87

Combined epicardial–transthoracic electrode paddle placement: a method for defibrillation during open–chest cardiac resuscitation. Kerber RE, et al. **Resuscitation** 1997 Jun;34(3):243–5

Case report––the successful use of naloxone in an asystolic pre–hospital arrest. Marsden AK, et al. **Resuscitation** 1996 Sep;32(2):109–10

Magnesium sulfate solution dramatically improves immediate recovery of rats from hypoxia. Siemkowicz E. **Resuscitation** 1997 Aug;35(1):53–9

Hypotensive resuscitation [editorial] [see comments] Dries DJ. **Shock** 1996 Nov;6(5):311–6 (41 ref.). Comment in: Shock 1996 Nov;6(5):317–8.

Judgment driven resuscitation––new acquaintance or old friend? [comment] Flint L. **Shock** 1996 Nov;6(5):317–8. Comment on: Shock 1996 Nov;6(5):311–6.

The damage control sequence and underlying logic. Rotondo MF, et al. **Surg Clin North Am** 1997 Aug;77(4):761–77 (80 ref.)

Effects of resuscitation fluids on nonadaptive immune responses. Sillett HK, et al. **Transfusion** 1997 Sep; 37(9):953–9

Treatment of refractory intracranial hypertension in severe traumatic brain injury with repetitive hypertonic/hyperoncotic infusions. Härtl R, et al. **Zentralbl Chir** 1997;122(3):181–5

[Emergency medicine for the practitioner: management of patients who are victims of a smoky fire] Kirchner N, et al. **Rev Med Suisse Romande** 1997 Apr;117(4):325–9 **(Fre)**

[The practice of resuscitation or daily physiopathology] Perret C. **Rev Med Suisse Romande** 1997 May;117(5):443–8 **(Fre)**

[Successful resuscitation of a hypothermic patient with extracorporeal circulation––a case report] Köpcke J, et al. **Anaesthesiol Reanim** 1996;21(6):159–62 (Eng. Abstr.) **(Ger)**

["Water in the lungs is quickly resorbed" (letter)] Sefrin P. **Fortschr Med** 1997 Mar 10;115(7):18–9 **(Ger)**

[Resuscitation] Wietlisbach M, et al. **Schweiz Rundsch Med Prax** 1997 Feb 4;86(6):182–8 (Eng. Abstr.) **(Ger)**

[Resuscitation of neonates in the delivery room. Recommendations by the American Heart Association and American Academy of Pediatrics] Hencz P, et al. **Orv Hetil** 1996 Jun 30;137(26):1415–7 (Eng. Abstr.) **(Hun)**

[The surgical operation as a component in the resuscitation assistance in severe combined chest trauma] Shapot IuB, et al. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):26–9 (Eng. Abstr.) **(Rus)**

NURSING

How to conquer the fear of codes. Badger JM. **Am J Nurs** 1996 Oct;96(10):26–31; quiz 32 (8 ref.)

PSYCHOLOGY

How to conquer the fear of codes. Badger JM. **Am J Nurs** 1996 Oct;96(10):26–31; quiz 32 (8 ref.)

Resuscitating the elderly: what do the patients want? Bruce–Jones P, et al. **J Med Ethics** 1996 Jun;22(3):154–9

STANDARDS

Advisory statements of the International Liaison Committee on Resuscitation. Cummins RO, et al. **Circulation** 1997 Apr 15;95(8):2172–3

Single–rescuer adult basic life support: an advisory statement from the Basic Life Support Working Group of the International Liaison Committee on Resuscitation. Handley AJ, et al. **Circulation** 1997 Apr 15;95(8):2174–9

Special resuscitation situations: an advisory statement from the International Liaison Committee on Resuscitation. Kloeck W, et al. **Circulation** 1997 Apr 15;95(8):2196–210

Pediatric resuscitation: an advisory statement from the Pediatric Working Group of the International Liaison Committee on Resuscitation. Nadkarni V, et al. **Circulation** 1997 Apr 15;95(8):2185–95

Avoidance of hypotension: conditio sine qua non of successful severe head–injury management. Chesnut RM. **J Trauma** 1997 May;42(5 Suppl):S4–9 (31 ref.)

[The management of resuscitative services in a multi–specialty clinic] Kucherenko VZ, et al. **Probl Sotsialnoi Gig Istor Med** 1994 Jul–Aug;(4):25–33 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Cesarean deliveries: when is a pediatrician necessary? Jacob J, et al. **Obstet Gynecol** 1997 Feb;89(2):217–20

RESUSCITATION

TRENDS

Issues in emergency medical care and resuscitation. Jacobson S. **Mt Sinai J Med** 1997 Sep–Oct;64(4–5):239–40

Future directions for resuscitation research. V. Ultra–advanced life support. Tisherman SA, et al. **Resuscitation** 1997 Jun;34(3):281–93 (93 ref.)

[The old and eternally new problems of resuscitation] Negovskiĭ VA. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):4–9 (23 ref.) **(Rus)**

UTILIZATION

Throughput analysis of trauma resuscitations with financial impact. Imami ER, et al. **J Trauma** 1997 Feb;42(2):294–8

VETERINARY

Use of hypertonic saline–dextran solution to resuscitate hypovolemic calves with diarrhea. Constable PD, et al. **Am J Vet Res** 1996 Jan;57(1):97–104

RESUSCITATION DECISIONS see **RESUSCITATION ORDERS**

RESUSCITATION ORDERS

Do–not–resuscitate orders and withheld or withdrawn treatment. Königová R. **Acta Chir Plast** 1996;38(2):73–7

Impact of patient consciousness on the intensity of the do–not–resuscitate therapeutic plan. Campbell ML, et al. **Am J Crit Care** 1996 Sep;5(5):339–45

The impact of do–not–resuscitate orders on nursing workload in an ICU. Stillwell SB, et al. **Am J Crit Care** 1997 Sep; 6(5):400–5

Near end–of–life care preferences [letter] Pollack S. **Am J Med** 1996 Dec;101(6):663

DNR in the OR? Edwards BS. **Am J Nurs** 1997 Mar;97(3):66

Ethical concerns in anesthetic care for patients with do–not–resuscitate orders [see comments] Bastron RD. **Anesthesiology** 1996 Nov;85(5):1190–3. Comment in: Anesthesiology 1997 Jul;87(1):174; discussion 178–9. Comment in: Anesthesiology 1997 Jul;87(1):175–6; discussion 178–9. Comment in: Anesthesiology 1997 Jul;87(1):176–8; discussion 178–9.

Response to "Ethical concerns in anesthetic care for patients with do–not–resusitate orders" [letter; comment] Berry JM, et al. **Anesthesiology** 1997 Jul;87(1):174; discussion 178–9. Comment on: Anesthesiology 1996 Nov;85(5):1190–3.

Response to "Ethical concerns in anesthetic care for patients with do–not–resuscitate orders" [letter; comment] Cohen CB, et al. **Anesthesiology** 1997 Jul;87(1):175–6; discussion 178–9. Comment on: Anesthesiology 1996 Nov;85(5):1190–3.

Response to "Ethical concerns in anesthetic care for patients with do–not–resuscitate orders" [letter; comment] Jackson SH. **Anesthesiology** 1997 Jul;87(1):176–8; discussion 178–9 . Comment on: Anesthesiology 1996 Nov;85(5):1190–3.

Cardiopulmonary resuscitation and do–not–resuscitate orders in the nursing home. Zweig SC. **Arch Fam Med** 1997 Sep–Oct;6(5):424–9 (83 ref.)

Beyond do–not–resuscitate orders: a house staff mentoring and credentialing project on advance directives [letter] Harlow NC, et al. **Arch Intern Med** 1997 Jan 13;157(1):135

Must consent always be obtained for a do–not–resuscitate order? Layson RT, et al. **Arch Intern Med** 1996 Dec 9–23; 156(22):2617–20

Do–not–resuscitate orders: is there really disparity by diagnosis? [letter; comment] Romano PS. **Arch Intern Med** 1996 Nov 25;156(21):2497–8. Comment on: Arch Intern Med 1995 Oct 23;155(19):2056–62.

Do–not–resuscitate orders in the elderly: age discrimination or patient preference? [letter; comment] Rosenfeld KE, et al. **Arch Intern Med** 1997 May 12;157(9):1041, 1043. Comment on: Arch Intern Med 1996 Sep 9;156(16):1821–6.

Variation in the use of do–not–resuscitate orders in patients with stroke. Shepardson LB, et al. **Arch Intern Med** 1997 Sep 8;157(16):1841–7

Do not resuscitate orders and pediatric patients: the role of a clinical ethics committee in a developing country. Beca JP, et al. **Bull Pan Am Health Organ** 1996 Sep;30(3):189–96

Dilemmas in care of the elderly. **Can Fam Physician** 1996 Sep;42:1684

"No CPR" unique proactive approach [letter; comment] Quinlan PJ. **Can Fam Physician** 1997 Apr;43:613. Comment on: Can Fam Physician 1996 Dec;42:2320–2, 2330–2.

"No CPR" policy could be dangerous [letter; comment] Rabheru K. **Can Fam Physician** 1997 Apr;43:609, 611, 613 . Comment on: Can Fam Physician 1996 Dec;42:2320–2, 2330–2.

From CPR to DNR. The return of death with dignity [letter] Ciaglia P. **Chest** 1996 Dec;110(6):1627

Do–not–resuscitate decisions in the medical ICU: comparing physician and nurse opinions. Eliasson AH, et al. **Chest** 1997 Apr;111(4):1106–11

Variations in the use of do–not–resuscitate orders in ICUS. Findings from a national study [see comments] Jayes RL, et al. **Chest** 1996 Nov;110(5):1332–9. Comment in: Chest 1996 Nov;110(5):1141–2.

Variations in DNR rates. The onus is on physicians [editorial; comment] Prendergast TJ, et al. **Chest** 1996 Nov; 110(5):1141–2. Comment on: Chest 1996 Nov;110(5):1332–9.

A retrospective review of a large cohort of patients undergoing the process of withholding or withdrawal of life support. Keenan SP, et al. **Crit Care Med** 1997 Aug; 25(8):1324–31

Mistrust, racism, and end–of–life treatment. Krakauer EL, et al. **Hastings Cent Rep** 1997 May–Jun;27(3):23; discussion 23–5

Do–not–resuscitate practices in the chronically critically ill. Daly BJ, et al. **Heart Lung** 1996 Jul–Aug;25(4):310–7

'Do not resuscitate': How? why? and when? Skerritt U, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):667–70

Decisions to forego life–sustaining treatment and the duty of documentation [see comments] Melltorp G, et al. **Intensive Care Med** 1996 Oct;22(10):1015–9. Comment in: Intensive Care Med 1996 Oct;22(10):1003–5.

Worldwide similarities and differences in the foregoing of life–sustaining treatments [editorial; comment] Sprung CL, et al. **Intensive Care Med** 1996 Oct;22(10):1003–5 (37 ref.) . Comment on: Intensive Care Med 1996 Oct;22(10):1015–9. Comment on: Intensive Care Med 1996 Oct;22(10):1020–5.

Limitation of life support: frequency and practice in a London and a Cape Town intensive care unit [see comments] Turner JS, et al. **Intensive Care Med** 1996 Oct; 22(10):1020–5. Comment in: Intensive Care Med 1996 Oct;22(10):1003–5.

Characteristics of patients receiving or foregoing resuscitation at the time of cardiopulmonary arrest. Ghusn HF, et al. **J Am Geriatr Soc** 1997 Sep;45(9):1118–22

Continuity of do–not resuscitate orders between hospital and nursing home settings. Ghusn HF, et al. **J Am Geriatr Soc** 1997 Apr;45(4):465–9

Physician responses to a hospital policy allowing them to not offer cardiopulmonary resuscitation. Swig L, et al. **J Am Geriatr Soc** 1996 Oct;44(10):1215–9

Determining when care for burns is futile. Fratianne RB, et al. **J Burn Care Rehabil** 1997 May–Jun;18(3):262–7; discussion 260–1

An analysis of dilemmas posed by prehospital DNR orders. Hall SA. **J Emerg Med** 1997 Jan–Feb;15(1):109–11

Do–not–resuscitate orders—should the patient be informed? Löfmark R, et al. **J Intern Med** 1997 May;241(5):421–5

An analysis of CPR decision–making by elderly patients. Sayers GM, et al. **J Med Ethics** 1997 Aug;23(4):207–12

Do the ward notes reflect the quality of end–of–life care? Sulmasy DP, et al. **J Med Ethics** 1996 Dec;22(6):344–8

Darren's case: narrative ethics in Perri Klass's Other Women's Children [see comments] Jones AH. **J Med Philos** 1996 Jun;21(3):267–86. Comment in: J Med Philos 1996 Jun;21(3):321–40.

How long does it take to get a "do not resuscitate" order? Smith TJ, et al. **J Palliat Care** 1997 Spring;13(1):5–8

Decision making for the critically ill neonate near the end of life. Cook LA, et al. **J Perinatol** 1996 Mar–Apr;16(2 Pt 1):133–6

Manslaughter or a legitimate parental decision? The messenger case [see comments] Paris JJ. **J Perinatol** 1996 Jan–Feb;16(1):60–4. Comment in: J Perinatol 1996 Jul–Aug;16(4):321. Comment in: J Perinatol 1996 Jul–Aug;16(4):321–2.

Elderly patients excluded from resuscitation discussion [letter; comment] King D. **J R Coll Physicians Lond** 1996 Jul–Aug;30(4):398. Comment on: J R Coll Physicians Lond 1996 Mar–Apr;30(2):133–5.

Influence of ethnicity on advance directives and end–of–life decisions [letter] Romero LJ, et al. **JAMA** 1997 Jan 22–29; 277(4):298–9

Changes over time in the use of do not resuscitate orders and the outcomes of patients receiving them. Wenger NS, et al. **Med Care** 1997 Apr;35(4):311–9

Overriding a patient's refusal of treatment after an iatrogenic complication. Casarett D, et al. **N Engl J Med** 1997 Jun 26;336(26):1908–10

DNR orders: honoring do not resuscitate orders. South Jersey Ethics Alliance, the New Jersey Department of Health, and MICU (Mobile Intensive Care Units). **N J Med** 1996 Mar;93(3):140–44

Interview with Jean Kerwin [interview by Robin K. Levinson] Kerwin J. **N J Med** 1997 Sep;94(9):18, 20

The introduction and auditing of a formal do not resuscitate policy. Taylor EM, et al. **N Z Med J** 1996 Nov 8; 109(1033):424–8

Economic implications of the timing of do–not–resuscitate orders for ICU patients. Bock KR, et al. **New Horiz** 1997 Feb;5(1):51–5 (29 ref.)

Obtaining consent for do–not–resuscitate status: advice from experienced nurses. Jezewski MA. **Nurs Outlook** 1996 May–Jun;44(3):114–9

Highlighting the role of policy in nursing practice through a comparison of "DNR" policy influences and "no CPR" decision influences. Wilson DM. **Nurs Outlook** 1996 Nov–Dec;44(6):272–9

Discussing CPR with patients and relatives [letter; comment] King D, et al. **Postgrad Med J** 1996 May;72(847):317. Comment on: Postgrad Med J 1995 Oct;71(840):585–9.

[Controversies in hospital guidelines for non–resuscitation decisions] Verweij MF, et al. **Ned Tijdschr Geneeskd** 1997 Mar 22;141(12):575–7 (Eng. Abstr.) **(Dut)**

[Ethical conflicts during anesthesia. "Do not resuscitate" orders in the operating room] Mohr M. **Anaesthesist** 1997 Apr;46(4):267–74 (36 ref.) (Eng. Abstr.) **(Ger)**

[When should we stop cardiopulmonary resuscitation in patients brought to the emergency room in cardiac arrest without pre–hospital care?] César LA, et al. **Arq Bras Cardiol** 1996 Nov;67(5):339–42 (Eng. Abstr.) **(Por)**

[Guidelines for withdrawing or refusal to provide vital support in patients in irreversible clinical situations Ethics Committee, Community Private Hospital, Mar del Plata] **Medicina (B Aires)** 1996;56(4):429 **(Spa)**

[Survey among Argentine physicians on medical decisions concerning the end of life in patients: active and passive euthanasia, and relief of symptoms] Falcón JL, et al. **Medicina (B Aires)** 1996;56(4):369–77 (Eng. Abstr.) **(Spa)**

[Limited treatment of patients with poor prognosis. Discussion with relatives on life support care] Sundin PO, et al. **Lakartidningen** 1997 Mar 26;94(13):1180–4 **(Swe)**

LEGISLATION & JURISPRUDENCE

New York's DNR law does not require futile resuscitation [letter; comment] DeBuono BA. **Arch Intern Med** 1997 Feb 24;157(4):467–8. Comment on: Arch Intern Med 1996 Jul 8;156(13):1369–71.

In re Finn. **Issues Law Med** 1996 Spring;11(4):437–40

Legal and ethical issues. Resuscitating clients against their wishes. Cameron ME. **J Prof Nurs** 1997 Jan–Feb;13(1):6

When should patients not be resuscitated? Latimer–Sayer W. **Med Leg J** 1997;65 (Pt 1):34–6

Do not resuscitate. Jones TL. **Tex Med** 1997 Jan;93(1):33–4 (0 ref.)

PSYCHOLOGY

The psychological repercussions of New York State's do–not–resuscitate law. An American experience with mandated "truth–telling". Lederberg MS. **Ann N Y Acad Sci** 1997 Feb 20;809:223–36

RETAINERS, ORTHODONTIC see **ORTHODONTIC RETAINERS**

RETE TESTIS

Primary adenocarcinoma of the rete testis. Okada H, et al. **Br J Urol** 1997 Feb;79(2):300–2

Adenocarcinoma of the rete testis. Glazier DB, et al. **World J Urol** 1996;14(6):397–400 (25 ref.)

BLOOD SUPPLY

Comparative study of the intratesticular vascular rete in men and certain animals. Jędrzejewski KS, et al. **Folia Morphol (Warsz)** 1996;55(4):303–5

METABOLISM

Interactions between ovine cathepsin L, cystatin C and alpha 2–macroglobulin. Potential role in the genital tract. Peloille S, et al. **Eur J Biochem** 1997 Feb 15;244(1):140–6

PATHOLOGY

Cystic transformation of the rete testis. Nistal M, et al. **Am J Surg Pathol** 1996 Oct;20(10):1231–9 (27 ref.)

RETENTION (PSYCHOLOGY)

Retention of basic science information by fourth–year medical students. Swanson DB, et al. **Acad Med** 1996 Oct; 71(10 Suppl):S80–2

Tradeoff of semantic relatedness and degree of overlearning: differential effects on metamemory and on long–term retention. Carroll M, et al. **Acta Psychol (Amst)** 1997 Apr; 95(3):239–53

The interaction of knowledge, aptitude, and strategies in children's memory performance. Bjorklund DF, et al. **Adv Child Dev Behav** 1996;26:59–89 (98 ref.)

The role of schemata in children's memory. Davidson D. **Adv Child Dev Behav** 1996;26:35–58 (70 ref.)

Effects of case management on retention in prenatal substance abuse treatment. Laken MP, et al. **Am J Drug Alcohol Abuse** 1996 Aug;22(3):439–48

Predicting treatment retention of women dependent on cocaine. Roberts AC, et al. **Am J Drug Alcohol Abuse** 1996 Aug;22(3):313–33

The item–order distinction and the generation effect: the importance of order information in long–term memory. Burns DJ. **Am J Psychol** 1996 Winter;109(4):567–80

Feeling–of–knowing judgments from the subject's perspective. Widner RL Jr, et al. **Am J Psychol** 1996 Fall; 109(3):373–87

Monitoring the source of memory in detoxified alcoholics. Weingartner HJ, et al. **Biol Psychiatry** 1996 Jul 1; 40(1):43–53

Testing hypotheses about working memory capacity. Gillett R. **Br J Math Stat Psychol** 1996 Nov;49 (Pt 2):241–52

Acquisition and long–term retention of a fine motor skill in Alzheimer's disease. Dick MB, et al. **Brain Cogn** 1995 Dec; 29(3):294–306

Children's memory of an occurrence of a repeated event: effects of age, repetition, and retention interval across three question types. Powell MB, et al. **Child Dev** 1996 Oct; 67(5):1988–2004

Signal–detection, threshold, and dual–process models of recognition memory: ROCs and conscious recollection. Yonelinas AP, et al. **Conscious Cogn** 1996 Dec;5(4):418–41

Ontogenetic differences in retention of spatial learning tested with the Morris water maze. Brown RW, et al. **Dev Psychobiol** 1997 May;30(4):329–41

Infant learning and long-term memory at 6 months: a confirming analysis. Hartshorn K, et al. **Dev Psychobiol** 1997 Jan;30(1):71–85

Learning and retention of conditioned aversions by freely feeding chicks. Hayne H, et al. **Dev Psychobiol** 1996 Jul; 29(5):417–31

Effectiveness of the number-consonant mnemonic for retention of numeric material in community-dwelling older adults. Hill RD, et al. **Exp Aging Res** 1997 Jul–Sep; 23(3):275–86

Effects of retention interval length on young and elderly adults' memory for spatial information. Rutledge PC, et al. **Exp Aging Res** 1997 Apr–Jun;23(2):163–77

Implicit memory performance of patients with Alzheimer's disease: a brief review. Jelicic M, et al. **Int Psychogeriatr** 1995 Fall;7(3):385–92 (36 ref.)

Impaired precision, but normal retention, of auditory sensory ("echoic") memory information in schizophrenia. Javitt DC, et al. **J Abnorm Psychol** 1997 May;106(2):315–24

Implicit and explicit memory in obsessive-compulsive disorder. Foa EB, et al. **J Anxiety Disord** 1997 Mar–Apr; 11(2):119–29

Infants' memory for context: timing effects of postevent information. Boller K, et al. **J Exp Child Psychol** 1996 Dec; 63(3):583–602

Props and children's event reports: the impact of a 1-year delay. Salmon K, et al. **J Exp Child Psychol** 1997 Jun; 65(3):261–92

Additivity of the effects of retention interval and context change on latent inhibition: toward resolution of the context forgetting paradox. Rosas JM, et al. **J Exp Psychol Anim Behav Process** 1997 Jul;23(3):283–94

Long-term semantic priming: a computational account and empirical evidence. Becker S, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1059–82

The long and short of semantic priming effects in lexical decision. Joordens S, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1083–105

Activating representations in permanent memory: different benefits for pictures and words. Seifert LS. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1106–21

Reverse-interference effect in free recall. Thapar A. **J Exp Psychol Learn Mem Cogn** 1996 Mar;22(2):430–7

Dissociations between familiarity processes in explicit recognition and implicit perceptual memory. Wagner AD, et al. **J Exp Psychol Learn Mem Cogn** 1997 Mar; 23(2):305–23

On the generality of the revelation effect. Westerman DL, et al. **J Exp Psychol Learn Mem Cogn** 1996 Sep; 22(5):1147–53

Recognition of student names past: a longitudinal study with N = 1. Huang IN. **J Gen Psychol** 1997 Jan;124(1):35–47

Implicit memory effects when using pictures with children and adults: hypermnesia too? Landrum RE. **J Gen Psychol** 1997 Jan;124(1):5–17

Directed forgetting: further comparisons of the item and list methods. Basden BH, et al. **Memory** 1996 Nov;4(6):633–53

Contextual dependencies during perceptual-motor skill acquisition: gone but not forgotten! Wright DL, et al. **Memory** 1996 Jan;4(1):91–108

Insular cortex and amygdala lesions induced after aversive training impair retention: effects of degree of training. Bermúdez-Rattoni F, et al. **Neurobiol Learn Mem** 1997 Jan; 67(1):57–63

Anosognosia and procedural learning in Alzheimer's disease. Starkstein SE, et al. **Neuropsychiatry Neuropsychol Behav Neurol** 1997 Apr; 10(2):96–101

A comparison of implicit memory tasks in Korsakoff and alcoholic patients. Brunfaut E, et al. **Neuropsychologia** 1996 Dec;34(12):1143–50

Contextual interference effects in learning novel motor skills. Pollatou E, et al. **Percept Mot Skills** 1997 Apr;84(2):487–96

Dissociated contextual interference effects in children and adults. Pollock BJ, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):851–8

Only visual impressions are almost always present in long-term memories, and reported completeness, accuracy, and verbalizability of recollections increase with age. Westman AS, et al. **Percept Mot Skills** 1996 Oct;83(2):531–9

Effects of memory training on the subjective memory functioning and mental health of older adults: a meta-analysis. Floyd M, et al. **Psychol Aging** 1997 Mar; 12(1):150–61

Learning and retention in preclinical and early Alzheimer's disease. Grober E, et al. **Psychol Aging** 1997 Mar; 12(1):183–8

Mediators of long-term memory performance across the life span. Park DC, et al. **Psychol Aging** 1996 Dec;11(4):621–37

Processes of memory loss, recovery, and distortion. Estes WK. **Psychol Rev** 1997 Jan;104(1):148–69

The emergence and early development of autobiographical memory. Howe ML, et al. **Psychol Rev** 1997 Jul; 104(3):499–523 (290 ref.)

Dissociations in infant memory: rethinking the development of implicit and explicit memory. Rovee-Collier C. **Psychol Rev** 1997 Jul;104(3):467–98 (360 ref.)

The effects of hippocampal and area parahippocampalis lesions in pigeons: I. Delayed matching to sample. Colombo M, et al. **Q J Exp Psychol B** 1997 May;50(2):149–71

Modeled timing information during random practice eliminates the contextual interference effect. Lee TD, et al. **Res Q Exerc Sport** 1997 Mar;68(1):100–5

The effect of knowledge of results delay and the subjective estimation of movement form on the acquisition and retention of a motor skill. Liu J, et al. **Res Q Exerc Sport** 1997 Jun;68(2):145–51

Improving cardiopulmonary resuscitation skills retention: effect of two checklists designed to prompt correct performance. Ward P, et al. **Resuscitation** 1997 Jun; 34(3):221–5

Memory dysfunction in mild aphasics. Rönnberg J, et al. **Scand J Psychol** 1996 Mar;37(1):46–61

Working memory capacity predicts language comprehension in schizophrenic patients. Condray R, et al. **Schizophr Res** 1996 May;20(1–2):1–13

Memory processing of serial lists by pigeons, monkeys, and people. Wright AA, et al. **Science** 1985 Jul 19; 229(4710):287–9

DRUG EFFECTS

Fetal alcohol exposure produces delay-dependent memory deficits in juvenile and adult rats. Nagahara AH, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):710–5

Effects of selective catechol-O-methyltransferase inhibitors on single-trial passive avoidance retention in male rats. Khromova I, et al. **Behav Brain Res** 1997 Jun;86(1):49–57

Primacy and recency effects in rhesus monkeys (Macaca mulatta) using a serial probe recognition task: II. Effects of atropine sulfate. Castro CA. **Behav Neurosci** 1997 Aug; 111(4):676–82

Double dissociation of hippocampal and dorsal-striatal memory systems by posttraining intracerebral injections of 2-amino-5-phosphonopentanoic acid. Packard MG, et al. **Behav Neurosci** 1997 Jun;111(3):543–51

Long-term memory modulation by posttraining epinephrine in rats: differential effects depending on the basic learning capacity. Torras-Garcia M, et al. **Behav Neurosci** 1997 Apr; 111(2):301–8

Opposite strain-dependent effects of post-training corticosterone in a passive avoidance task in mice: role of dopamine. Cabib S, et al. **Brain Res** 1996 Aug 5; 729(1):110–8

Nerve growth factor affects passive avoidance learning and retention in developing mice. Ricceri L, et al. **Brain Res Bull** 1996;39(4):219–26

Alpha-helical CRF blocks differential influence of corticotropin releasing factor (CRF) on appetitive and aversive memory retrieval in rats. Kumar KB, et al. **J Neural Transm** 1996;103(8–9):1117–26

Memory modulation by post-training glucose or insulin remains evident at long retention intervals. Kopf SR, et al. **Neurobiol Learn Mem** 1996 Mar;65(2):189–91

The effects of intra-amygdala infusion of the AMPA receptor antagonist CNQX on retention performance following aversive training. Meches MH, et al. **Neurobiol Learn Mem** 1996 Nov;66(3):324–40

Peripheral post-training administration of 4-OH amphetamine enhances retention of a reduction in reward magnitude. Salinas JA, et al. **Neurobiol Learn Mem** 1996 Mar;65(2):192–5

Inhibition of intermediate-term memory following passive avoidance training in neonate chicks by a presynaptic cholinergic blocker. Zhao WQ, et al. **Neurobiol Learn Mem** 1997 May;67(3):207–13

Nefiracetam (DM-9384) reverses apomorphine-induced amnesia of a passive avoidance response: delayed emergence of the memory retention effects. Doyle E, et al. **Neurochem Res** 1996 Jun;21(6):649–52

Antisense oligodeoxynucleotides to c-fos are amnestic for passive avoidance in the chick. Mileusnic R, et al. **Neuroreport** 1996 May 17;7(7):1269–72

Caffeine enhances initial but not extended learning of a proprioceptive-based discrimination task in nonsmoking moderate users. Miller LS, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):891–8

Blockade of spontaneous posttraining performance improvement in mice by NMDA antagonists. Mélan C, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):589–94

Effects of beta-CCE on retention of aversively- and appetitively-motivated tasks in rats. Wichlinski LJ, et al. **Physiol Behav** 1996 Oct;60(4):1121–4

PHYSIOLOGY

Opposite effects on two different measures of retention following unilateral inactivation of the amygdala. Coleman-Mesches K, et al. **Behav Brain Res** 1997 Jun; 86(1):17–23

The primate temporal pole: its putative role in object recognition and memory. Nakamura K, et al. **Behav Brain Res** 1996 May;77(1–2):53–77 (290 ref.)

Tuberomammillary nucleus lesion facilitates two-way active avoidance retention in rats. Segura-Torres P, et al. **Behav Brain Res** 1996 Dec;82(1):113–7

Brainstem lesions and gustatory function: III. The role of the nucleus of the solitary tract and the parabrachial nucleus in retention of a conditioned taste aversion in rats. Grigson PS, et al. **Behav Neurosci** 1997 Feb;111(1):180–7

Partial hippocampal kindling affects retention but not acquisition and place but not cue tasks on the radial arm maze. Leung LS, et al. **Behav Neurosci** 1996 Oct; 110(5):1017–24

Cold shock before associative conditioning blocks memory retrieval, but cold shock after conditioning blocks memory retention in Caenorhabditis elegans. Morrison GE, et al. **Behav Neurosci** 1997 Jun;111(3):564–78

Dissociable properties of memory systems: differences in the flexibility of declarative and nondeclarative knowledge. Reber PJ, et al. **Behav Neurosci** 1996 Oct;110(5):861–71

Early acquisition, but not retention, of the classically conditioned eyeblink response is N-methyl-D-aspartate (NMDA) receptor dependent. Servatius RJ, et al. **Behav Neurosci** 1996 Oct;110(5):1040–8

Remembrance of odors past: enhancement by central facilitation of AMPA receptors. Stäubli U, et al. **Behav Neurosci** 1996 Oct;110(5):1067–73

Relative hippocampal volume in relation to food-storing behavior in four species of woodpeckers. Volman SF, et al. **Brain Behav Evol** 1997;49(2):110–20

Bilateral striatal lesions impair retention of an operant test of short-term memory. Döbrössy MD, et al. **Brain Res Bull** 1996;41(3):159–65

Genetic demonstration of a role for PKA in the late phase of LTP and in hippocampus-based long-term memory. Abel T, et al. **Cell** 1997 Mar 7;88(5):615–26

Deficits in delayed memory following cerebral malaria: a case study. Grote CL, et al. **Cortex** 1997 Jun;33(2):385–8

Activation of multi-modal cortical areas underlies short-term memory. Klingberg T, et al. **Eur J Neurosci** 1996 Sep; 8(9):1965–71

The embedment-in-the-brain-circuitry phenomenon: implications for psychoanalytic treatment. Gardner RA. **J Am Acad Psychoanal** 1997 Spring;25(1):151–76

Binary mapping of cortical spike trains in short-term memory. Bodner M, et al. **J Neurophysiol** 1997 Apr; 77(4):2219–22

Learning of sequential movements in the monkey: process of learning and retention of memory. Hikosaka O, et al. **J Neurophysiol** 1995 Oct;74(4):1652–61

Effects of inactivating individual cerebellar nuclei on the performance and retention of an operantly conditioned forelimb movement. Milak MS, et al. **J Neurophysiol** 1997 Aug;78(2):939–59

The neuroplastic phenomenon: a physiologic link between chronic pain and learning. Arnstein PM. **J Neurosci Nurs** 1997 Jun;29(3):179–86 (33 ref.)

The importance of cerebellar cortex and facial nucleus in acquisition and retention of eyeblink/NM conditioning: evidence for critical unilateral regulation of the conditioned response. Clark RE, et al. **Neurobiol Learn Mem** 1997 Mar; 67(2):96–111

Learning and forgetting processes in Parkinson's disease: a model-based approach to disentangling storage, retention and retrieval contributions. Faglioni P, et al. **Neuropsychologia** 1997 Jun;35(6):767–79

Learning and retention of words and designs following excision from medial or lateral temporal-lobe structures. Jones-Gotman M, et al. **Neuropsychologia** 1997 Jul; 35(7):963–73

Fragments of memory. Weiskrantz L. **Neuropsychologia** 1997 Jul;35(7):1051–7

Identification of a novel glial fibrillary acidic protein mRNA isotype related to memory retention in rats. Huang AM, et al. **Neuroreport** 1997 May 6;8(7):1619–24

Retention of context blocking in taste-aversion learning. Batsell WR Jr. **Physiol Behav** 1997 Mar;61(3):437–46

Unconditioned stimulus intensity and retention interval effects. Batsell WR Jr, et al. **Physiol Behav** 1996 Dec; 60(6):1463–7

Selective hippocampal lesions in rats disrupt acquisition and retention of a positive patterning discrimination. Gisquet-Verrier P, et al. **Physiol Behav** 1997 Apr; 61(4):577–89

Retention of conditioned taste aversion to NaCl after chorda tympani transection in Fischer 344 and Wistar rats. Sollars SI, et al. **Physiol Behav** 1996 Jul;60(1):65–9

[Nondeclarative memory—neuropsychological findings and neuroanatomic principles] Daum I, et al. **Fortschr Neurol Psychiatr** 1997 Mar;65(3):122–32 (115 ref.) (Eng. Abstr.) **(Ger)**

[Age-related and sex-related features of retention and memory of a visual-spatial image in children of preschool age] Anurova IA, et al. **Fiziol Cheloveka** 1996 Jan–Feb; 22(1):50–4 **(Rus)**

RETICULAR FORMATION

ANATOMY & HISTOLOGY

Reticular afferents from vestibular nuclei. Bukowska D. **Folia Morphol (Warsz)** 1996;55(4):224–6

Topographical organisation within the lateral reticular nucleus mossy fibre projection to the c1 and c2 zones in the rostral paramedian lobule of the cat cerebellum. Apps R, et al. **J Comp Neurol** 1997 May 5;381(2):175–87

CHEMISTRY

Retinal and non-retinal inputs upon retinopetal RMA neurons in the lamprey: a light and electron microscopic study combining HRP axonal tracing and GABA immunocytochemistry. Rio JP, et al. **J Chem Neuroanat** 1996 Nov;12(1):51–70

RETICULAR FORMATION

Distribution of fos-like immunoreactivity in the medullary reticular formation of the rat after gustatory elicited ingestion and rejection behaviors. DiNardo LA, et al. **J Neurosci** 1997 May 15;17(10):3826–39

CYTOLOGY

Secondary vestibular projection to the reticular formation of rabbit lower brainstem with reference to reciprocity. Bukowska D, et al. **Arch Ital Biol** 1997 Jun;135(3):205–18

Vestibulospinal, reticulospinal and descending propriospinal nerve fibres in man. Nathan PW, et al. **Brain** 1996 Dec; 119 (Pt 6):1809–33

Pontine reticular formation neurons exhibit a premature and precipitous increase in acoustic responses prior to audiogenic seizures in genetically epilepsy-prone rats. Faingold CL, et al. **Brain Res** 1995 Dec 18;704(2):218–26

Responses of medullary reticulospinal neurones to stimulation of cutaneous limb nerves during locomotion in intact cats. Drew T, et al. **Exp Brain Res** 1996 Sep;111(2):153–68

Afferent projections to the rat nuclei raphe magnus, raphe pallidus and reticularis gigantocellularis pars alpha demonstrated by iontophoretic application of choleratoxin (subunit b). Hermann DM, et al. **J Chem Neuroanat** 1997 Jun;13(1):1–21

Multi-segmental innervation of single pontine reticulospinal axons in the cervico-thoracic region of the cat: anterograde PHA-L tracing study. Matsuyama K, et al. **J Comp Neurol** 1997 Jan 13;377(2):234–50

Axonal branching and termination of cervical reticulospinal neurons in the cat brachial segments. Sasaki S. **Neurosci Lett** 1997 Jun 6;228(2):83–6

Morphology of single axons of tectospinal and reticulospinal neurons in the upper cervical spinal cord. Shinoda Y, et al. **Prog Brain Res** 1996;112:71–84

DRUG EFFECTS

The effect of muscarinic and nicotinic ACh antagonist on the facilitation of rat visual cortical responses. Lewandowski MH. **Brain Res** 1996 Jan 15;706(2):233–6

The effect on maximal electroshock seizures induced by GABA agents and antiepileptic drugs microinfused into the nucleus reticularis pontis oralis. Peterson SL. **Epilepsy Res** 1996 Nov;25(3):161–7

Necrosis of the substantia nigra, pars reticulate, in flurothyl-induced status epilepticus is ameliorated by the spin trap alpha phenyl-N-tert-butyl nitrone. He QP, et al. **Free Radic Biol Med** 1997;22(5):917–22

Presynaptic depression of excitatory synaptic inputs to rat hypoglossal motoneurons by muscarinic M2 receptors. Bellingham MC, et al. **J Neurophysiol** 1996 Dec; 76(6):3758–70

Activation of pharmacologically distinct metabotropic glutamate receptors depresses reticulospinal-evoked monosynaptic EPSPs in the lamprey spinal cord. Krieger P, et al. **J Neurophysiol** 1996 Dec;76(6):3834–41

Participation of AT1 and AT2 receptors in the differential interaction between angiotensin II or III and alpha-2 adrenoceptors in the nucleus reticularis gigantocellularis in cardiovascular regulation and antinociception in rats. Yang CH, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):795–802

Pontine reticular formation is involved in catalepsy produced by cholinergic drugs. Elazar Z, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):166–72

Injection of a GABA antagonist into the mesopontine reticular formation abolishes haloperidol-induced catalepsy in rats. Miwa H, et al. **Neuroreport** 1996 Nov 4; 7(15–17):2475–8

[A rotational syndrome induced by administration of the delta sleep-inducing peptide into the reticular portion of the rat substantia nigra] Shandra AA, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct–Nov;82(10–11):69–72 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Prenatal development of the cerebellar system in the rat. II. Cytogenesis and histogenesis of the inferior olive, pontine gray, and the precerebellar reticular nuclei. Altman J, et al. **J Comp Neurol** 1978 May 1;179(1):49–75

ENZYMOLOGY

Localization of the calcium/calmodulin-dependent protein phosphatase, calcineurin, in the hindbrain and spinal cord of the rat. Strack S, et al. **J Comp Neurol** 1996 Nov 4; 375(1):66–76

Nitric oxide synthase distribution in the goldfish Mauthner cell. Bell TD, et al. **Neurosci Lett** 1997 May 2;226(3):187–90

GROWTH & DEVELOPMENT

Evidence for growth of supraspinal axons through the lesion after transection of the thoracic spinal cord in the developing opossum Didelphis virginiana. Wang XM, et al. **J Comp Neurol** 1996 Jul 15;371(1):104–15

Postnatal development of GABA-immunoreactive terminals in the reticular and ventrobasal nuclei of the rat thalamus: a light and electron microscopic study. De Biasi S, et al. **Neuroscience** 1997 Jan;76(2):503–15

METABOLISM

Calretinin mRNA and immunoreactivity in the medullary reticular formation of the rat: colocalization with glutamate receptors. Winsky L, et al. **Brain Res** 1996 Nov 25; 741(1–2):123–33

Recovery of neurofilament expression selectively in regenerating reticulospinal neurons. Jacobs AJ, et al. **J Neurosci** 1997 Jul 1;17(13):5206–20

PATHOLOGY

Radiologic-clinical correlation. One-and-a-half syndrome associated with cheirooral syndrome. Shintani S, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1482–4

Necrosis of the substantia nigra, pars reticulate, in flurothyl-induced status epilepticus is ameliorated by the spin trap alpha phenyl-N-tert-butyl nitrone. He QP, et al. **Free Radic Biol Med** 1997;22(5):917–22

PHYSIOLOGY

Gigantocellular vasodepressor area is tonically active and distinct from caudal ventrolateral vasodepressor area. Aicher SA, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R731–42

Selective activation of vasomotor component of SAP spectrum by nucleus reticularis ventrolateralis in rats. Kuo TB, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H485–92

Processing of vestibular and other inputs by the caudal ventrolateral medullary reticular formation. Steinbacher BC Jr, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1070–7

Time course of sleep inertia after nighttime and daytime sleep episodes. Achermann P, et al. **Arch Ital Biol** 1995 Dec; 134(1):109–19

Antiepileptic treatment and oculomotor neurons. Mameli O, et al. **Boll Soc Ital Biol Sper** 1995 Sep–Oct;71(9–10):235–40

Response of medial medullary reticular neurons to otolith stimulation during bidirectional off-vertical axis rotation of the cat. Chan YS, et al. **Brain Res** 1996 Sep 2; 732(1–2):159–68

Differential distribution of three types of nociceptive neurons within the caudal bulbar reticular formation in the cat. Fujino Y, et al. **Brain Res** 1996 Apr 9;715(1–2):225–9

Effects of stimulating the reticular formation during fictive locomotion in lampreys. Guertin P, et al. **Brain Res** 1997 Apr 11;753(2):328–34

Electrophysiological properties and cholinergic responses of rat ventral oral pontine reticular neurons in vitro. Nuñez A, et al. **Brain Res** 1997 Apr 18;754(1–2):1–11

The medullary reticular formation is a site of muscle relaxant action of diazepam on deep back and neck muscles in the female rat. Schwartz-Giblin S, et al. **Brain Res** 1996 Feb 26;710(1–2):178–88

Demonstration of the corticotectobulbar pathway from the orofacial motor cortex to the parvicellular reticular formation in the rat. Tsumori T, et al. **Brain Res** 1997 Apr 25;755(1):151–5

The subnucleus reticularis dorsalis is involved in antinociception produced by a low dose of naloxone during carrageenan-induced inflammation. Tsuruoka M, et al. **Brain Res** 1997 Jul 11;762(1–2):264–8

A mesencephalic relay for visual inputs to reticulospinal neurones in lampreys. Zompa IC, et al. **Brain Res** 1996 Apr 29;718(1–2):221–7

The acoustic startle reflex: neurons and connections. Yeomans JS, et al. **Brain Res Brain Res Rev** 1995 Nov; 21(3):301–14 (79 ref.)

Correlation between concomitant theta waves in nucleus reticularis pontis oralis and in hippocampus, thalamus and neocortex during dreaming in rats. Simões CA, et al. **Braz J Med Biol Res** 1996 Dec;29(12):1645–50

Activation by cutaneous or visceral noxious stimulation of spinal neurons projecting to the medullary dorsal reticular nucleus in the rat: a c-fos study. Almeida A, et al. **Eur J Neurosci** 1997 Apr;9(4):686–95

Corticotropin-releasing factor in the caudal pontine reticular nucleus mediates the expression of fear-potentiated startle in the rat. Fendt M, et al. **Eur J Neurosci** 1997 Feb; 9(2):299–305

The projections of the lateral reticular nucleus to the deep cerebellar nuclei. An experimental analysis in the rat. Parenti R, et al. **Eur J Neurosci** 1996 Oct;8(10):2157–67

Visual potentiation of vestibular responses in lamprey reticulospinal neurons. Ullén F, et al. **Eur J Neurosci** 1996 Nov;8(11):2298–307

NMDA receptors in the pontine brainstem are necessary for fear potentiation of the startle response. Fendt M, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):1–6

Convergence of central respiratory and locomotor rhythms onto single neurons of the lateral reticular nucleus. Ezure K, et al. **Exp Brain Res** 1997 Feb;113(2):230–42

Neuronal gagging activity patterns may be generated by neurons in the reticular area dorsomedial to the retrofacial nucleus in dogs. Fukuda H, et al. **Exp Brain Res** 1997 Mar; 113(3):394–401

Arm-movement-related neurons in the primate superior colliculus and underlying reticular formation: comparison of neuronal activity with EMGs of muscles of the shoulder, arm and trunk during reaching. Werner W, et al. **Exp Brain Res** 1997 Jun;115(2):191–205

Anatomical distribution of arm-movement-related neurons in the primate superior colliculus and underlying reticular formation in comparison with visual and saccadic cells. Werner W, et al. **Exp Brain Res** 1997 Jun;115(2):206–16

Convergence of visceral and somatic afferents on single neurones in the reticular formation of the lower brain stem in dogs. Langhorst P, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):149–57

Octavolateral neurons projecting to the middle and posterior rhombencephalic reticular nuclei of larval lamprey: a retrograde horseradish peroxidase labeling study. González MJ, et al. **J Comp Neurol** 1997 Aug 4;384(3):396–408

Distribution, quantification, and morphological characteristics of serotonin-immunoreactive cells of the supralemniscal nucleus (B9) and pontomesencephalic reticular formation in the rat. Vertes RP, et al. **J Comp Neurol** 1997 Feb 17;378(3):411–24

GABAA receptor function in developing rat thalamic reticular neurons: whole cell recordings of GABA-mediated currents and modulation by clonazepam. Gibbs JW 3rd, et al. **J Neurophysiol** 1996 Oct;76(4):2568–79

Responses of medullary reticular formation neurons to input from the male genitalia. Hubscher CH, et al. **J Neurophysiol** 1996 Oct;76(4):2474–82

Dynamic interactions determine partial thalamic quiescence in a computer network model of spike-and-wave seizures. Lytton WW, et al. **J Neurophysiol** 1997 Apr;77(4):1679–96

Anatomy and physiology of saccadic long-lead burst neurons recorded in the alert squirrel monkey. II. Pontine neurons. Scudder CA, et al. **J Neurophysiol** 1996 Jul;76(1):353–70

Smooth pursuitlike eye movements evoked by microstimulation in macaque nucleus reticularis tegmenti pontis. Yamada T, et al. **J Neurophysiol** 1996 Nov; 76(5):3313–24

Parallel medullary gustatospinal pathways in a catfish: possible neural substrates for taste-mediated food search. Kanwal JS, et al. **J Neurosci** 1997 Jun 15;17(12):4873–85

Role of monkey nucleus reticularis tegmenti pontis in the stabilization of Listing's plane. Van Opstal J, et al. **J Neurosci** 1996 Nov 15;16(22):7284–96

A nigro-rubro-bulbar pathway to the parvicellular reticular formation in the rat. Yasui Y, et al. **Neuroreport** 1996 Apr 26;7(6):1157–60

Do craniocervical and jaw motor nuclei receive input from the same population of reticular premotor neurons? A double labeling tracing study in the mallard (Anas platyrhynchos). Tellegen AJ, et al. **Neurosci Lett** 1996 May 10;209(2):77–80

Hypoglossal premotor neurons in the rostral medullary parvocellular reticular formation participate in cortically-induced rhythmical tongue movements. Sahara Y, et al. **Neurosci Res** 1996 Oct;26(2):119–31

Heterogeneity of cell firing properties and opioid sensitivity in the thalamic reticular nucleus. Brunton J, et al. **Neuroscience** 1997 May;78(2):303–7

Postnatal development of GABA-immunoreactive terminals in the reticular and ventrobasal nuclei of the rat thalamus: a light and electron microscopic study. De Biasi S, et al. **Neuroscience** 1997 Jan;76(2):503–15

c-fos induction in sensory pathways of rats exploring a novel complex environment: shifts of active thalamic reticular sectors by predominant sensory cues. Montero VM. **Neuroscience** 1997 Feb;76(4):1069–81

Adenosinic modulation of 7-14 Hz spindle rhythms in interconnected thalamic relay and nucleus reticularis neurons. Wallenstein GV. **Neuroscience** 1996 Jul;73(1):93–8

The medullary subnucleus reticularis dorsalis (SRD) as a key link in both the transmission and modulation of pain signals. Villanueva L, et al. **Pain** 1996 Oct;67(2–3):231–40 (109 ref.)

Firing characteristics of neurones in the superior colliculus and the pontomedullary reticular formation during orienting in unrestrained cats. Sasaki S, et al. **Prog Brain Res** 1996;112:99–116

Inadequate frameworks for understanding bodily homeostasis. Blessing WW. **Trends Neurosci** 1997 Jun; 20(6):235–9 (44 ref.)

[Waking mechanisms: multiple networks in the mesencephalic reticular formation] Jouvet M. **Arch Physiol Biochem** 1996 Oct;104(6):762–9 (26 ref.) (Eng. Abstr.) **(Fre)**

[The synchronization of cortical electrical activity at different levels of activation of the caudal reticular formation] Vorob'ev NA. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul–Aug;46(4):804–7 **(Rus)**

PHYSIOPATHOLOGY

Paramedian reticular nucleus may be unrelated to the development of hypertension in spontaneously hypertensive rats. Lin AM, et al. **Chin J Physiol** 1997 Jun 30;40(2):91–6

ULTRASTRUCTURE

Membrane specializations in the developmentally transient perireticular nucleus of the rat. Ramcharan EJ, et al. **J Comp Neurol** 1997 Apr 21;380(4):435–48

RETICULIN

IMMUNOLOGY

Characterization by molecular cloning an antigen reactive with antireticulin antibodies. Uibo R, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:509–11

Isolation of antigens recognized by coeliac disease autoantibodies and their use in enzyme immunoassay of

endomysium and reticulin antibody-positive human sera. Börner H, et al. **Clin Exp Immunol** 1996 Nov;106(2):344–50
Factors associated with serum antibodies to reticulin, endomysium, and gliadin in an adult population. McMillan SA, et al. **Gut** 1996 Jul;39(1):43–7
Antibody pattern in childhood celiac disease. Bottaro G, et al. **J Pediatr Gastroenterol Nutr** 1997 May;24(5):559–62
Value of serologic markers for clinical diagnosis and population studies of coeliac disease. Ascher H, et al. **Scand J Gastroenterol** 1996 Jan;31(1):61–7
[Anti-endomysium and anti-reticulin antibodies in adults with celiac disease followed-up in the Paris area] Boige V, et al. **Gastroenterol Clin Biol** 1996;20(11):931–7 (Eng. Abstr.) **(Fre)**

METABOLISM

Follicular dendritic cells adhere to fibronectin and laminin fibers via their respective receptors. Ogata T, et al. **Blood** 1996 Oct 15;88(8):2995–3003

RETICULOCYTE COUNT

The complete blood count and reticulocyte count--are they necessary in the evaluation of acute vasoocclusive sickle-cell crisis? Lopez BL, et al. **Acad Emerg Med** 1996 Aug;3(8):751–7
Follow-up of leucocyte and reticulocyte counts for the prediction of early graft failure after non-HLA-identical BMT in children. Gerritsen EJ, et al. **Bone Marrow Transplant** 1996 May;17(5):781–7
The clinical usefulness of measurement of the reticulocyte count and its maturation parameters. Proceedings of a symposium. Nice, France, June 1994. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:1–59
Indicators of haematopoietic recovery after bone marrow transplantation: the role of reticulocyte measurements. d'Onofrio G, et al. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:45–53
Increased reticulated platelets in dialysis patients. Himmelfarb J, et al. **Kidney Int** 1997 Mar;51(3):834–9
Erythropoietin course in newborns with Rh hemolytic disease transfused and not transfused in utero. Dallacasa P, et al. **Pediatr Res** 1996 Aug;40(2):357–60

DRUG EFFECTS

Automated reticulocyte counting for monitoring patients on chemotherapy for acute leukaemias and malignant lymphomas. Kuse R, et al. **Clin Lab Haematol** 1996 Dec; 18 Suppl 1:39–43

INSTRUMENTATION

Reticulocyte quantification by Coulter MAXM VCS (volume, conductivity, light scatter) technology. Buttarello M, et al. **Clin Chem** 1996 Dec;42(12):1930–7

METHODS

In vitro stability of the reticulocyte count. Cavill I, et al. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:9–11
Automated reticulocyte counting: evaluation of the Coulter STKS Haematology Analyser reticulocyte counting function. Davies JI, et al. **Clin Lab Haematol** 1997 Jun; 19(2):89–92
Reticulocyte counting in thalassaemia. Paterakis GS. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:17–28 (18 ref.)
The reticulocyte count: progress towards the resurrection of a useful clinical test. Rowan RM, et al. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:3–8 (45 ref.)
Interference of blood leucocytes in the measurements of immature red cells (reticulocytes) by two different (semi-) automated flow-cytometry technologies [see comments] Villamor N, et al. **Clin Lab Haematol** 1996 Jun;18(2):89–94 . Comment in: Clin Lab Haematol 1997 Mar;19(1):83.
Encapsulation of ribonucleic acid in human red blood cells for use as a reticulocyte quality control material for flow cytometric analysis. Ebrahim A, et al. **Cytometry** 1996 Oct 1;25(2):156–63
Comparison of a semi-automated new Coulter methylene blue method with fluorescence flow cytometry in reticulocyte counting. Rudensky B. **Scand J Clin Lab Invest** 1997 Jul;57(4):291–6
[Evaluation of reticulocyte count on Cell-Dyn 3500 automate: comparison with a flow cytometry technique] Alvarez C, et al. **Ann Biol Clin (Paris)** 1997 May-Jun; 55(3):215–21 (Eng. Abstr.) **(Fre)**

RETICULOCYTES

Severe reversible reticulocytopenic anemia associated with quinupristin/dalfopristin RP59500 therapy. Launay O, et al. **Clin Infect Dis** 1997 Jul;25(1):156
Encapsulation of ribonucleic acid in human red blood cells for use as a reticulocyte quality control material for flow cytometric analysis. Ebrahim A, et al. **Cytometry** 1996 Oct 1;25(2):156–63

CHEMISTRY

Reticulocyte hemoglobin: an integrated parameter for evaluation of erythropoietic activity. Brugnara C, et al. **Am J Clin Pathol** 1997 Aug;108(2):133–42
Decrease of very late activation antigen-4 and CD36 on reticulocytes in sickle cell patients treated with hydroxyurea. Styles LA, et al. **Blood** 1997 Apr 1; 89(7):2554–9
Identification of the truncated Duffy mRNAs in erythroid cells. Omi T, et al. **Int J Hematol** 1997 Aug;66(2):153–8
Reticulocyte hemoglobin content in the evaluation of iron status of hemodialysis patients. Fishbane S, et al. **Kidney Int** 1997 Jul;52(1):217–22
Novel isolation method and structural stability of a eukaryotic chaperonin: the TCP-1 ring complex from rabbit reticulocytes. Norcum MT. **Protein Sci** 1996 Jul; 5(7):1366–75

CYTOLOGY

Clinical significance of immature reticulocyte fraction determined by automated reticulocyte counting. Chang CC, et al. **Am J Clin Pathol** 1997 Jul;108(1):69–73
Kinetics of reticulocyte maturity fractions and indices and iron status during therapy with epoetin beta (recombinant human erythropoietin) in cardiac surgery patients. Sowade O, et al. **Am J Hematol** 1997 Jun;55(2):89–96
Dehydration of transferrin receptor-positive sickle reticulocytes during continuous or cyclic deoxygenation: role of KCl cotransport and extracellular calcium. Franco RS, et al. **Blood** 1996 Dec 1;88(11):4359–65
Clinical application of reticulocyte maturity grading in paediatrics: an overview. Herkner KR. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:55–9
Reticulocyte reference values by the Bhattacharya method: results of a pilot study. Kraaijenhagen RJ. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:15–6
The reticulocyte count: progress towards the resurrection of a useful clinical test. Rowan RM, et al. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:3–8 (45 ref.)
Interference of blood leucocytes in the measurements of immature red cells by two different (semi-) automated flow-cytometry technologies [letter; comment] Rowan RM, et al. **Clin Lab Haematol** 1997 Mar;19(1):83. Comment on: Clin Lab Haematol 1996 Jun;18(2):89–94.
Reticulocytes: reference limits. Tarallo P, et al. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:13–4
Reticulocyte recovery is faster in allogeneic and autologous peripheral blood stem cell transplantation than in bone marrow transplantation [letter] Santamaria A, et al. **Eur J Haematol** 1997 May;58(5):362–4
Flow cytometric analysis of micronucleated reticulocytes in mouse bone marrow. Dertinger SD, et al. **Mutat Res** 1997 May 23;390(3):257–62
Comparison of a semi-automated new Coulter methylene blue method with fluorescence flow cytometry in reticulocyte counting. Rudensky B. **Scand J Clin Lab Invest** 1997 Jul;57(4):291–6

DRUG EFFECTS

Cisplatin inhibits protein synthesis in rabbit reticulocyte lysate by causing an arrest in elongation. Heminger KA, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):200–7
Phorbol ester stimulation increases sickle erythrocyte adherence to endothelium: a novel pathway involving alpha 4 beta 1 integrin receptors on sickle reticulocytes and fibronectin. Kumar A, et al. **Blood** 1996 Dec 1; 88(11):4348–58
Changes in reticulocyte fractions during peripheral stem cell harvesting exclusively mobilized with rhG-CSF [letter; comment] González FA, et al. **Bone Marrow Transplant** 1996 Sep;18(3):673. Comment on: Bone Marrow Transplant 1996 Feb;17(2):163–8.
The effect of GM-CSF on reticulocytes, haemoglobin and haematocrit in patients receiving chemotherapy for solid tumours. Paterakis GS, et al. **Clin Lab Haematol** 1996 Mar; 18(1):7–12
Influence of Ukrain on immunological blood parameters in vitro and in vivo. Nowicky JW, et al. **Drugs Exp Clin Res** 1996;22(3–5):163–5
Micronucleus induction in germ and somatic cells of the mouse after exposure to the butadiene metabolites diepoxybutane and epoxybutene. Russo A, et al. **Mutat Res** 1997 Apr 24;390(1–2):129–39
Radioprotection of beta-carotene evaluated on mouse somatic and germ cells. Salvadori DM, et al. **Mutat Res** 1996 Sep 23;356(2):163–70
Influence of dietary folic acid on the developmental toxicity of methanol and the frequency of chromosomal breakage in the CD-1 mouse. Fu SS, et al. **Reprod Toxicol** 1996 Nov-Dec;10(6):455–63

ENZYMOLOGY

Na,K-ATPase subunit isoforms in human reticulocytes: evidence from reverse transcription-PCR for the presence of alpha1, alpha3, beta2, beta3, and gamma. Stengelin MK, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5943–8

IMMUNOLOGY

Influence of Ukrain on immunological blood parameters in vitro and in vivo. Nowicky JW, et al. **Drugs Exp Clin Res** 1996;22(3–5):163–5

METABOLISM

Hsp-70 is closely associated with the transferrin receptor in exosomes from maturing reticulocytes. Mathew A, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):823–30
Evidence for multiple mechanisms for membrane binding and integration via carboxyl-terminal insertion sequences. Kim PK, et al. **Biochemistry** 1997 Jul 22;36(29):8873–82
The alternate iron transport pathway: mobilferrin and integrin in reticulocytes. Umbreit JN, et al. **Br J Haematol** 1997 Mar;96(3):521–9
Mapping of nuclease-sensitive sites in native reticulocyte ribosomes--an analysis of the accessibility of ribosomal RNA to enzymatic cleavage. Holmberg L, et al. **Eur J Biochem** 1997 Jul 1;247(1):160–8
The soluble interleukin-2 receptor, peripheral blood, and reticulocyte fractions in acute pancreatitis. Salomone T, et al. **Int J Pancreatol** 1996 Dec;20(3):197–203
Cellular iron processing. Morgan EH. **J Gastroenterol Hepatol** 1996 Nov;11(11):1027–30 (6 ref.)
Mechanisms of manganese transport in rabbit erythroid cells. Chua AC, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):99–112
Human immunodeficiency virus type 1 capsid formation in reticulocyte lysates. Spearman P, et al. **J Virol** 1996 Nov; 70(11):8187–94
Selective modulation of membrane sphingomyelin fatty acid turnover by nigericin. A study in the rat reticulocyte. Le Petit-Thevenin J, et al. **Life Sci** 1996;59(19):PL289–94

PARASITOLOGY

Enhanced gametocyte formation by Plasmodium chabaudi in immature erythrocytes: pattern of production, sequestration, and infectivity to mosquitoes. Gautret P, et al. **J Parasitol** 1996 Dec;82(6):900–6

PATHOLOGY

Cytometric analysis and maturation characteristics of reticulocytes from myelodysplastic patients. Bowen D, et al. **Clin Lab Haematol** 1996 Sep;18(3):155–60
Reticulocytes in haematological disorders. d'Onofrio G, et al. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:29–34
Clinical application of reticulocyte maturity grading in paediatrics: an overview. Herkner KR. **Clin Lab Haematol** 1996 Dec;18 Suppl 1:55–9
Changes in serum erythropoietin and the reticulocyte count during chemotherapy for leukemias. Sawabe Y, et al. **Eur J Haematol** 1996 Nov;57(5):384–8

PHYSIOLOGY

The effect of intravenous iron on the reticulocyte response to recombinant human erythropoietin. Major A, et al. **Br J Haematol** 1997 Aug;98(2):292–4
Aggregation reroutes molecules from a recycling to a vesicle-mediated secretion pathway during reticulocyte maturation. Vidal M, et al. **J Cell Sci** 1997 Aug;110 (Pt 16):1867–77
Surface area and volume changes during maturation of reticulocytes in the circulation of the baboon. Waugh RE, et al. **J Lab Clin Med** 1997 May;129(5):527–35

RADIATION EFFECTS

Radioprotection of beta-carotene evaluated on mouse somatic and germ cells. Salvadori DM, et al. **Mutat Res** 1996 Sep 23;356(2):163–70

TRANSPLANTATION

Reticulocytes in donor red cells [letter; comment] Branch DR. **Transfusion** 1997 Feb;37(2):246. Comment on: Transfusion 1994 Mar;34(3):233–7. Comment on: Transfusion 1996 Apr;36(4):318–21.

ULTRASTRUCTURE

Simple and reliable enumeration of micronucleated reticulocytes with a single-laser flow cytometer. Dertinger SD, et al. **Mutat Res** 1996 Dec 20;371(3–4):283–92

RETICULOCYTOSIS see **RETICULOCYTE COUNT**

RETICULOENDOTHELIAL SYSTEM

see related
HISTIOCYTES
KUPFFER CELLS
MACROPHAGES
PHAGOCYTES

DRUG EFFECTS

The role of serum complement on the organ distribution of intravenously administered poly (methyl methacrylate) nanoparticles: effects of pre-coating with plasma and with serum complement. Borchard G, et al. **Pharm Res** 1996 Jul;13(7):1055–8
[The effect of pyrimidine derivatives on the absorptive capacity of the reticuloendothelial system in different functional states] Ismagilova AF, et al. **Eksp Klin Farmakol** 1996 May-Jun;59(3):44–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

[Relationship between changes in factors of nonspecific resistance during traumatic and burn shock] Kharin GM, et al. **Biull Eksp Biol Med** 1997 May;123(5):541–4 **(Rus)**

RETICULOENDOTHELIAL SYSTEM

PATHOLOGY

Reticuloendothelial haemangioendothelioma [letter] Silverman JS, et al. **Histopathology** 1997 Apr;30(4):393–4

[New MR contrast media in liver diagnosis. Initial clinical results with hepatobiliary Eovist (gadolinium–EOB–DTPA) and RES–specific Resovist (SH U 555 A)] Reimer P, et al. **Radiologe** 1996 Feb;36(2):124–33 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Reticuloendothelial system uptake of infused 125I–trypsin in newborn and adult rats. Levine JJ, et al. **Biol Neonate** 1997; 71(2):111–8

Alteration of reticuloendothelial phagocytic function and tumor necrosis factor–alpha production after total hepatic ischemia. Suzuki S, et al. **Transplantation** 1997 Sep 27; 64(6):821–7

PHYSIOPATHOLOGY

Thrombocytopenia associated with hepatitis C viral infection [see comments] Nagamine T, et al. **J Hepatol** 1996 Feb; 24(2):135–40. Comment in: J Hepatol 1996 Dec;25(6):999.

Hepatic reticuloendothelial system dysfunction after intestinal ischemia–reperfusion. Haglind E, et al. **Shock** 1996 Jan;5(1):72–5

Reticuloendothelial function after hemorrhage and hypothermia. van Rijen EA, et al. **Shock** 1997 Apr; 7(4):300–3

[Effect of artificial blockade of the reticuloendothelial system (RES) on development of biliary pancreatitis in the opossum model] Baas JC, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:403–6 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Magnetic resonance imaging of reticulo–endothelial system in patients with idiopathic thrombocytopenic purpura. Morio S, et al. **Am J Hematol** 1997 Sep;56(1):52–8

RADIONUCLIDE IMAGING

Scintigraphic monitoring of reticuloendothelial system in patients with type 1 Gaucher disease on enzyme replacement therapy. Lorberboym M, et al. **J Nucl Med** 1997 Jun;38(6):890–5

RETICULOENDOTHELIOSIS

VIROLOGY

Epstein–Barr virus in lymphoproliferative diseases in the sino–nasal region: close association with CD56+ immunophenotype and polymorphic–reticulosis morphology. Tomita Y, et al. **Int J Cancer** 1997 Jan 6; 70(1):9–13

RETICULOENDOTHELIOSIS, LEUKEMIC see **LEUKEMIA, HAIRY CELL**

RETICULOENDOTHELIOSIS VIRUS, AVIAN

RRR–alpha–tocopheryl succinate induces apoptosis in avian retrovirus–transformed lymphoid cells. Qian M, et al. **Nutr Cancer** 1996;25(1):9–26

Avian retroviruses. Fadly AM. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):71–85 (65 ref.)

GENETICS

c–Jun involvement in vitamin E succinate induced apoptosis of reticuloendotheliosis virus transformed avian lymphoid cells. Qian M, et al. **Oncogene** 1997 Jul 10;15(2):223–30

ISOLATION & PURIFICATION

A non–radioactive method for identifying enzyme–amplified products of the reticuloendotheliosis proviral env and LTR genes using psoralen–biotin labelled probes. Davidson I, et al. **J Virol Methods** 1996 May;59(1–2):113–9

RETICULOENDOTHELIOSIS VIRUSES

GENETICS

Partial reconstitution of a replication–competent retrovirus in helper cells with partial overlaps between vector and helper cell genomes. Martinez I, et al. **Hum Gene Ther** 1996 Apr 10;7(6):705–12

Field and vaccine strains of fowlpox virus carry integrated sequences from the avian retrovirus, reticuloendotheliosis virus. Hertig C, et al. **Virology** 1997 Sep 1;235(2):367–76

IMMUNOLOGY

Detection of antibodies to avian leukosis/sarcoma viruses and reticuloendotheliosis viruses in humans by western blot assay. Johnson ES, et al. **Cancer Detect Prev** 1995; 19(6):472–86

RETICULOHISTIOCYTOMA see **HISTIOCYTOSIS, NON–LANGERHANS–CELL**

RETICULOLYMPHOSARCOMA see **LYMPHOMA**

RETICULOSIS see **RETICULOENDOTHELIOSIS**

RETICULOSIS, HISTIOCYTIC MEDULLARY see **HISTIOCYTOSIS, MALIGNANT**

RETICULUM

Traumatic reticulopericarditis caused by a non–metallic object. Katunguka–Rwakishaya E. **Trop Anim Health Prod** 1996 Nov;28(4):317

DRUG EFFECTS

Inhibitory effects of short intravascular infusions of propionate on reticulo–rumen motility in the sheep. McLeay LM, et al. **Comp Biochem Physiol A Physiol** 1996 Sep;115(1):63–71

PATHOLOGY

Possible hypoplasia of the reticulum in a cow. Alhendi AB, et al. **Can Vet J** 1996 Jul;37(7):442–3

Surgical removal of a fibropapilloma from the reticulum causing apparent vagal indigestion. Gordon PJ. **Vet Rec** 1997 Jan 18;140(3):69–70

PHYSIOLOGY

Effects of experimentally–impaired reticular contractions on digesta passage in sheep. Kaske M, et al. **Br J Nutr** 1997 Jul;78(1):97–110

Effects of vasoactive intestinal polypeptide on electromyographic activity of the reticulo–omasal orifice in sheep at two levels of intake. Okine EK, et al. **J Anim Sci** 1996 Jul;74(7):1681–8

Opioid–mediated responses of dietary protein on reticular motility and plasma insulin. Froetschel MA, et al. **J Dairy Sci** 1997 Mar;80(3):511–8

Influence of closure of the reticular groove on the bioavailability and disposition kinetics of meclofenamate in sheep. Encinas T, et al. **J Vet Pharmacol Ther** 1996 Feb; 19(1):15–21

Endotoxaemia in dairy cattle: mechanism of reticulorumen stasis. Eades SC. **Vet J** 1997 May;153(3):321–7

RETICULUM CELL–LIKE SARCOMA, YOSHIDA see **SARCOMA, YOSHIDA**

RETICULUM–CELL SARCOMA see **LYMPHOMA, LARGE–CELL**

RETINA

see related
ANGIOID STREAKS
ELECTRORETINOGRAPHY

Strategies for approaching retinoblastoma tumor suppressor gene therapy. Xu HJ. **Adv Pharmacol** 1997;40:369–97 (145 ref.)

Artificial retina design restores sight to blind. **Biomed Instrum Technol** 1997 Mar–Apr;31(2):169–70

The vitreoretinal interface: science and serendipity [editorial; comment] McLeod D. **Eye** 1996;10 (Pt 6):651–2. Comment on: Eye 1996 ;10 (Pt 6):653–63. Comment on: Eye 1996 ;10 (Pt 6):664–70. Comment on: Eye 1996 ;10 (Pt 6):671–84. Comment on: Eye 1996 ;10 (Pt 6):691–6. Comment on: Eye 1996 ;10 (Pt 6):697–700.

Lipofuscin fluorophore inhibits lysosomal protein degradation and may cause early stages of macular degeneration. Eldred GE. **Gerontology** 1995;41 Suppl 2:15–28 (72 ref.)

Remodeling processes during neural retinal regeneration in adult urodeles: an immunohistochemical survey. Mitashov VI, et al. **Int J Dev Biol** 1995 Dec;39(6):993–1003

Calculating relative retinal image sizes of eyes. Atchison DA. **Ophthalmic Physiol Opt** 1996 Nov;16(6):532–8

NADPH diaphorase activity in mammalian retinas is modulated by the state of visual adaptation. Zemel E, et al. **Vis Neurosci** 1996 Sep–Oct;13(5):863–71

The dynamics of the outer retina. Proceedings of a satellite symposium of the European Neuroscience Association meeting. Amsterdam, The Netherlands, 1–2 September 1995. **Vision Res** 1996 Dec;36(24):3857–4125

ABNORMALITIES

Peripapillary staphyloma. Gottlieb JL, et al. **Am J Ophthalmol** 1997 Aug;124(2):249–51

A novel pattern of oculocerebral malformation. Clark BJ, et al. **Br J Ophthalmol** 1997 Jun;81(6):470–5

Correction of retinal abnormalities found in albinism by introduction of a functional tyrosinase gene in transgenic mice and rabbits. Jeffery G, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):95–102

Arteriovenous communications of the retina. Meinhold JR. **J Am Optom Assoc** 1996 May;67(5):279–82

Neuro–ophthalmologic findings in the Asperger disorder. Brodsky MC, et al. **J Neuroophthalmol** 1996 Sep; 16(3):185–7

Special imaging casebook. Walker–Warburg syndrome. Herman TE, et al. **J Perinatol** 1997 May–Jun;17(3):250–1

Ocular phenotypes associated with two mutations (R121W, C126X) in the Norrie disease gene. Kellner U, et al. **Ophthalmic Genet** 1996 Jun;17(2):67–74

Systemic abnormalities associated with iris/nerve head/choroidal/retinal coloboma. Williams TD. **Optom Vis Sci** 1996 Jul;73(7):506–10

Zunich neuroectodermal syndrome: migratory ichthyosiform dermatosis, colobomas, and other abnormalities. Tinschert S, et al. **Pediatr Dermatol** 1996 Sep–Oct;13(5):363–71

Blindness, deafness, quadriparesis, and a retinal malformation: the ravages of neurofibromatosis 2. Rettele GA, et al. **Surv Ophthalmol** 1996 Sep–Oct;41(2):135–41

The albino retina: an abnormality that provides insight into normal retinal development. Jeffery G. **Trends Neurosci** 1997 Apr;20(4):165–9 (37 ref.)

[Macular combined malformation (hamartoma) of the retina and retinal pigment epithelium] Wiechens B, et al. **Ophthalmologe** 1996 Dec;93(6):724–8 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

An appraisal of the accuracy of Littmann's method of determining the real dimension of a retinal object. Barr DB. **Acta Ophthalmol Scand Suppl** 1995;(216):1–12 (38 ref.)

Blood supply to the retina in the laboratory shrew (Suncus murinus). Isomura G, et al. **Anat Anz** 1997 Jun; 179(3):237–43

Development of the neonatal rabbit retina in organ culture. 1. Comparison with histogenesis in vivo, and the effect of a gliotoxin (alpha–aminoadipic acid). Germer A, et al. **Anat Embryol (Berl)** 1997 Jul;196(1):67–79

Development of retino–tectal arborizations in the trout. Mansour–Robaey S, et al. **Anat Embryol (Berl)** 1996 Sep; 194(3):279–87

Relationship between cup–disc ratio and optic disc diameter: the Blue Mountains Eye Study. Healey PR, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S99–101

Retinal anatomy of a new species of bresiliid shrimp from a hydrothermal vent field on the Mid–Atlantic Ridge. Nuckley DJ, et al. **Biol Bull** 1996 Feb;190(1):98–110

Use of the sensitive anterograde tracer cholera toxin fragment B reveals new details of the central retinal projections in turtles. Reiner A, et al. **Brain Behav Evol** 1996;48(6):307–37

Overlapping ipsilateral and contralateral retinal projections to the lateral geniculate nucleus and superior colliculus in the cat: a retrograde triple labelling study. Tassinari G, et al. **Brain Res Bull** 1997;43(2):127–39

The equine fundus. I: Examination, embryology, structure and function. Crispin SM, et al. **Equine Vet J Suppl** 1990 Sep;(10):42–9

Anatomical evidence for rod input to the parvocellular pathway in the visual system of the primate. Grünert U. **Eur J Neurosci** 1997 Mar;9(3):617–21

Variability of contour line alignment on sequential images with the Heidelberg Retina Tomograph. Orgül S, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb;235(2):82–6

Cone photoreceptor topography in the retina of sexually mature Pacific salmonid fishes. Beaudet L, et al. **J Comp Neurol** 1997 Jun 23;383(1):49–59

Topographic organization in the retinocollicular pathway of the fetal cat demonstrated by retrograde labeling of ganglion cells. Chalupa LM, et al. **J Comp Neurol** 1996 Apr 29;368(2):295–303

Retinotopy of the human retinal nerve fibre layer and optic nerve head. Fitzgibbon T, et al. **J Comp Neurol** 1996 Nov 11;375(2):238–51

Morphology of retinal ganglion cells in a new world monkey, the marmoset Callithrix jacchus. Ghosh KK, et al. **J Comp Neurol** 1996 Feb 26;366(1):76–92

Comparison of photoreceptor spatial density and ganglion cell morphology in the retina of human, macaque monkey, cat, and the marmoset Callithrix jacchus. Goodchild AK, et al. **J Comp Neurol** 1996 Feb 26;366(1):55–75

Determination of the real size of fundus objects from fundus photographs. Coleman AL, et al. **J Glaucoma** 1996 Dec; 5(6):433–5

Improved reproducibility of measurements with the nerve fiber analyzer. Tjon–Fo–Sang MJ, et al. **J Glaucoma** 1997 Aug;6(4):203–11

Experimentally induced retinal projections to the ferret auditory thalamus: development of clustered eye–specific patterns in a novel target. Angelucci A, et al. **J Neurosci** 1997 Mar 15;17(6):2040–55

Is there a direct retina–raphe–suprachiasmatic nucleus pathway in the rat? Kawano H, et al. **Neurosci Lett** 1996 Jul 12;212(2):143–6

A zoom lens for examination of the vitreous cavity and retina. Peyman GA, et al. **Ophthalmic Surg Lasers** 1995 Sep–Oct; 26(5):487–8

A home–made model eye for teaching retinoscopy. Wessels GF, et al. **Ophthalmic Surg Lasers** 1995 Sep–Oct; 26(5):489–91

Quantitative in vivo retinal thickness measurements in healthy subjects. Landau D, et al. **Ophthalmology** 1997 Apr; 104(4):639–42

Retinal photoreceptor density decreases with age. Panda–Jonas S, et al. **Ophthalmology** 1995 Dec; 102(12):1853–9

Newborn primate infants are entrained by low intensity lighting. Rivkees SA, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):292–7

The morphology and distribution of horizontal cells in the retina of a New World monkey, the marmoset Callithrix jacchus: a comparison with macaque monkey. Chan TL, et al. **Vis Neurosci** 1997 Jan–Feb;14(1):125–40

The topographical relationship between two neuronal mosaics in the short wavelength-sensitive system of the primate retina. Kouyama N, et al. **Vis Neurosci** 1997 Jan–Feb;14(1):159–67

Tectal neurons that participate in centrifugal control of the quail retina: a morphological study by means of retrograde labeling with biocytin. Uchiyama H, et al. **Vis Neurosci** 1996 Nov–Dec;13(6):1119–27

CHEMISTRY

Retino-choroidal oxygen imaging through a fundus camera. Blumenröder S, et al. **Adv Exp Med Biol** 1996;388:35–9

Successive isolation and separation of the major lipid fractions including gangliosides from single biological samples. Dreyfus H, et al. **Anal Biochem** 1997 Jun 15; 249(1):67–78

Immunocytochemical localization of taurine in the pineal organ and retina of an anadromous fish, Plecoglossus altivelis. Omura Y, et al. **Arch Histol Cytol** 1997 Jun; 60(2):153–62

Cellular and subcellular localization of glycogenin in chicken retina. Miozzo MC, et al. **Biochem Mol Biol Int** 1996 Sep; 40(1):173–80

Detection of eicosanoids in epiretinal membranes of patients suffering from proliferative vitreoretinal diseases. Augustin AJ, et al. **Br J Ophthalmol** 1997 Jan;81(1):58–60

Connexin43 immunoreactivity in the catfish retina. Giblin LJ, et al. **Brain Res** 1997 Apr 25;755(1):146–50

Localization of the glutamate transporter protein GLAST in rat retina. Lehre KP, et al. **Brain Res** 1997 Jan 2; 744(1):129–37

Distribution of CD44 in the retina during development and the rds degeneration. Chaitin MH, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):92–8

Calbindin and parvalbumin immunoreactivity in the developing and adult human retina. Nag TC, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1–2):23–32

Somatostatin-like immunoreactive cells in the ground squirrel retina. Lugo N, et al. **Cell Biol Int** 1997 Jul; 21(7):447–53

Localization of proline-like immunoreactivity in young rat retinal neurons. Nishikawa S, et al. **Curr Eye Res** 1996 Sep; 15(9):951–7

Immunocytochemical localization of retinoid-binding protein in the dogfish retina. Sarthy V, et al. **Curr Eye Res** 1996 Aug;15(8):905–7

Group II and group III metabotropic glutamate receptors in the rat retina: distributions and developmental expression patterns. Koulen P, et al. **Eur J Neurosci** 1996 Oct; 8(10):2177–87

Different effects of visual deprivation on vasoactive intestinal polypeptide (VIP)-containing cells in the retinas of juvenile and adult rats. Herbst H, et al. **Exp Brain Res** 1996 Oct; 111(3):345–55

NMDA receptors in cultured radial glia. López T, et al. **FEBS Lett** 1997 Mar 24;405(2):245–8

Elevated levels of cyclin D1 mRNA in the undifferentiated chick retina. Godbout R, et al. **Gene** 1996 Dec 5; 182(1–2):111–5

Ontogeny of GTP-binding proteins, Gi and G(o), in rat retina. Oguni M, et al. **Histochem Cell Biol** 1996 Aug; 106(2):235–40

Immunohistochemical distribution of basic fibroblast growth factor in experimental retinal ischaemia and reperfusion in the rat. Ohira A, et al. **Histochem J** 1996 Sep;28(9):607–11

Muscarinic and purinergic Ca2+ mobilizations in the neural retina of early embryonic chick. Sakaki Y, et al. **Int J Dev Neurosci** 1996 Oct;14(6):691–9

Identification of lutein and zeaxanthin oxidation products in human and monkey retinas. Khachik F, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1802–11

Molecular characterization of abLIM, a novel actin-binding and double zinc finger protein. Roof DJ, et al. **J Cell Biol** 1997 Aug 11;138(3):575–88

Enrichment of glutamate-like immunoreactivity in the retinotectal terminals of the viper Vipera aspis: an electron microscope quantitative immunogold study. Repérant J, et al. **J Chem Neuroanat** 1997 May;12(4):267–80

Detection of clenbuterol in bovine retinal tissue by high-performance liquid chromatography with electrochemical detection. Lin LA, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):275–80

Rapid and simple determination of clenbuterol residues in retina by high-performance liquid chromatography with ultraviolet detection. González Gigosos P, et al. **J Chromatogr B Biomed Appl** 1996 Feb 23;677(1):167–71

Distributions of two homologous synaptic vesicle proteins, synaptoporin and synaptophysin, in the mammalian retina. Brandstätter JH, et al. **J Comp Neurol** 1996 Jun 17; 370(1):1–10

Immunocytochemical localization of the alpha 6 subunit of the gamma-aminobutyric acidA receptor in the rat nervous system. Gutiérrez A, et al. **J Comp Neurol** 1996 Feb 12; 365(3):504–10

Multiple gamma-Aminobutyric acid plasma membrane transporters (GAT-1, GAT-2, GAT-3) in the rat retina. Johnson J, et al. **J Comp Neurol** 1996 Nov 11;375(2):212–24

Postembedding immunocytochemistry demonstrates directly that both retinal and cortical terminals in the cat superior colliculus are glutamate immunoreactive. Mize RR, et al. **J Comp Neurol** 1996 Aug 5;371(4):633–48

Somatostatin-immunoreactive neurons in the adult rabbit retina. Rickman DW, et al. **J Comp Neurol** 1996 Feb 12; 365(3):491–503

Prenatal development of calbindin D-28K and parvalbumin immunoreactivities in the human retina. Yan XX. **J Comp Neurol** 1997 Jan 27;377(4):565–76

Analysis of localization of adult T-cell leukemia-derived factor in the transient ischemic rat retina after treatment with OP-1206 alpha-CD, a prostaglandin E1 analogue. Yamamoto M, et al. **J Histochem Cytochem** 1997 Jan; 45(1):63–70

Dopamine inhibits melatonin synthesis in photoreceptor cells through a D2-like receptor subtype in the rat retina: biochemical and histochemical evidence. Nguyen-Legros J, et al. **J Neurochem** 1996 Dec;67(6):2514–20

Expression of macrophage migration inhibitory factor in rat retina and its immunohistochemical localization. Matsuda A, et al. **J Neuroimmunol** 1997 Jul;77(1):85–90

Distribution of beta-amyloid precursor and B-cell lymphoma protooncogene proteins in the rat retina after optic nerve transection or vascular lesion. Chen ST, et al. **J Neuropathol Exp Neurol** 1996 Oct;55(10):1073–82

Amino acid signatures in the primate retina [published erratum appears in J Neurosci 1997 Jan 1;17(1):500–3] Kalloniatis M, et al. **J Neurosci** 1996 Nov 1;16(21):6807–29

Immunohistochemical localization of MUC1 glycoprotein in the retina. Uehara F, et al. **Jpn J Ophthalmol** 1997 May–Jun;41(3):200–1

Comparative and histophysiological study of oil droplets in the avian retina. Gondo M, et al. **Kobe J Med Sci** 1995 Aug;41(4):127–39

Tryptophan is present in glial cells and photoreceptors in the chicken retina. Pow DV, et al. **Neuroreport** 1997 May 6;8(7):1767–70

Long-term effects of retinal lesions on growth-associated protein 43 (GAP-43) expression in the visual system of adult cats. Baekelandt V, et al. **Neurosci Lett** 1996 Apr 19;208(2):113–6

Dual immunodetection and hybridisation in situ of opsin mRNA and rhodopsin protein in retinal sections. Foreman DM, et al. **Ophthalmic Res** 1996;28(5):296–302

Localization of guanylate cyclase-activating protein 2 in mammalian retinas. Otto-Bruc A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4727–32

Characterization and ontogeny of PGE2 and PGF2 alpha receptors on the retinal vasculature of the pig [published erratum appears in Prostaglandins 1996 Sep;52(3):247] Abran D, et al. **Prostaglandins** 1995 Nov–Dec; 50(5–6):253–67

GABAA receptors in neurons of the nerve fiber layer in rabbit retina. Ehinger B, et al. **Vis Neurosci** 1996 Sep–Oct; 13(5):991–4

Glutamate immunoreactivity in the cat retina: a quantitative study. Jojich L, et al. **Vis Neurosci** 1996 Jan–Feb; 13(1):117–33

Expression of GABA in the fetal, postnatal, and adult human retinas: an immunohistochemical study. Nag TC, et al. **Vis Neurosci** 1997 May–Jun;14(3):425–32

Immunocytochemical localization of dopamine D1 receptors in the retina of mammals. Nguyen-Legros J, et al. **Vis Neurosci** 1997 May–Jun;14(3):545–51

The DAPI-3 amacrine cells of the rabbit retina. Wright LL, et al. **Vis Neurosci** 1997 May–Jun;14(3):473–92

[Experiences with an isolation method for retinal S-antigen and interphotoreceptor retinoid-binding protein] Sych FJ, et al. **Ophthalmologe** 1996 Dec;93(6):732–8 (Eng. Abstr.) **(Ger)**

[Partial purification of endogenous growth factor(s) of retinal pigment epithelial cells from neural retina] Katoh K, et al. **Nippon Ganka Gakkai Zasshi** 1996 Feb;100(2):145–9 (Eng. Abstr.) **(Jpn)**

[Concentration of vascular endothelial growth factor within the subretinal space and vitreous fluid in rhegmatogenous retinal detachment] Moromizato Y, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun;101(6):498–502 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Manganese and copper-zinc superoxide dismutases in the developing rat retina. Ogawa T, et al. **Acta Histochem** 1997 Mar;99(1):1–12

Isolation of functionally intact pig retina mitochondria. Schild L, et al. **Acta Ophthalmol Scand** 1996 Aug; 74(4):354–7

Ultrastructural localization of taurine immunoreactivity in the pineal organ and retina of the pigeon. Lake N, et al. **Adv Exp Med Biol** 1996;403:329–31

Ethanol modulation of GABA-activated current responses in acutely dissociated retinal bipolar cells and ganglion cells. Yeh HH, et al. **Alcohol Clin Exp Res** 1997 Jun; 21(4):647–55

Retinal horizontal cells: old cells, old experiments, new results. Piccolino M, et al. **Arch Ital Biol** 1997 Mar; 135(2):111–29

Variation of nerve fibre layer thickness measurements with age and ethnicity by scanning laser polarimetry [see comments] Poinoosawmy D, et al. **Br J Ophthalmol** 1997 May;81(5):350–4. Comment in: Br J Ophthalmol 1997 May;81(5):338–9.

Both high- and low voltage-activated calcium currents contribute to the light-evoked responses of luminosity horizontal cells in the Xenopus retina. Akopian A, et al. **Brain Res** 1997 Jul 11;762(1–2):121–30

Linear and non-linear components in the centre-surround response of X- and Y-cells in the cat lateral geniculate nucleus. Funke K, et al. **Brain Res** 1996 Dec 2; 742(1–2):50–62

Anterograde tracing of retinohypothalamic afferents with Fluoro-Gold. Reuss S, et al. **Brain Res** 1997 Jan 16; 745(1–2):197–204

Fate of DNA from retinal cells dying during development: uptake by microglia and macroglia (Müller cells). Egensperger R, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):1–8

Influence of a retinal pigment epithelial cell factor(s) on rat retinal progenitor cells. Sheedlo HJ, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1–2):88–99

Effect of congenital hypothyroidism on cell density in the ganglion cell layer of the rat retina. Navegantes LC, et al. **Braz J Med Biol Res** 1996 May;29(5):665–8

Differentiation is inhibited and a senescence pathway is activated when simian virus 40 tsA 58-transformed human retinoblasts are grown at the restrictive temperature. Gallimore PH, et al. **Cell Growth Differ** 1997 Jul; 8(7):763–71

Two distinct regulatory elements control quail cdc2 transcription: possible involvement in the control of retinoblast differentiation. North S, et al. **Cell Growth Differ** 1996 Mar;7(3):339–49

Comparative investigations of the neuronal apparatus in the pineal organ and retina of the rainbow trout: immunocytochemical demonstration of neurofilament 200-kDa and neuropeptide Y, and tracing with DiI. Blank H, et al. **Cell Tissue Res** 1997 Jun;288(3):417–25

Biochemical and histological analysis of two Müller cell antibodies in developing and adult cat and rat central nervous system. Distler C, et al. **Cell Tissue Res** 1997 Sep; 289(3):411–26

Ontogenesis of the retinohypothalamic tract, vasoactive intestinal polypeptide- and peptide histidine isoleucine-containing neurons and melatonin binding in the hypothalamus of the mink. Peytevin J, et al. **Cell Tissue Res** 1997 Sep;289(3):427–37

Cell proliferation in retinal transplants. Sharma RK, et al. **Cell Transplant** 1997 Mar–Apr;6(2):141–8

Proto-oncogene expression in cAMP and TPA-mediated neuronal differentiation in a human retinal cell line KGLDMSM. Dutt K, et al. **Curr Eye Res** 1996 May; 15(5):477–85

Correlations between terminal mitosis and differentiated fate of retinal precursor cells in vivo and in vitro: analysis with the "window-labeling" technique. Belecky-Adams T, et al. **Dev Biol** 1996 Sep 15;178(2):304–15

Quantitative analysis of proliferation and cell cycle length during development of the rat retina. Alexiades MR, et al. **Dev Dyn** 1996 Mar;205(3):293–307

Late proliferation of retinal Müller cell progenitors facilitates preferential targeting with retroviral vectors in vitro. Linser PJ, et al. **Dev Genet** 1997;20(3):186–96

Atonal, rough and the resolution of proneural clusters in the developing Drosophila retina. Dokucu ME, et al. **Development** 1996 Dec;122(12):4139–47

Fibroblast growth factors are necessary for neural retina but not pigmented epithelium differentiation in chick embryos. Pittack C, et al. **Development** 1997 Feb;124(4):805–16

Transience of astrocytes in the newborn macaque monkey retina. Distler C, et al. **Eur J Neurosci** 1996 Apr;8(4):847–51

Unique distribution of somatostatin-immunoreactive cells in the retina of the tree shrew (Tupaia belangeri). Engelmann R, et al. **Eur J Neurosci** 1996 Jan;8(1):220–8

Immunohistochemistry localization of dopamine D1 receptors in rat retina. Veruki ML, et al. **Eur J Neurosci** 1996 Nov;8(11):2286–97

Fas-independent apoptosis of photoreceptor cells in C3H mice. Nambu H, et al. **Exp Anim** 1996 Oct;45(4):309–15

Mash1 promotes neuronal differentiation in the retina. Tomita K, et al. **Genes Cells** 1996 Aug;1(8):765–74

Mammalian retinal glial (Müller) cells express large-conductance Ca(2+)-activated K+ channels that are modulated by Mg2+ and pH and activated by protein kinase A. Bringmann A, et al. **Glia** 1997 Apr;19(4):311–23

Swelling of Müller cells induced by AP3 and glutamate transport substrates in rat retina. Izumi Y, et al. **Glia** 1996 Aug;17(4):285–93

Transplantation of oligodendrocyte progenitor cells into the rat retina: extensive myelination of retinal ganglion cell axons. Laeng P, et al. **Glia** 1996 Nov;18(3):200–10

Reproducibility of the data determined by scanning laser polarimetry. Junghardt A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Oct;234(10):628–32

Neurotrophic effects of transferrin on embryonic chick brain and neural retinal cell cultures. Bruinink A, et al. **Int J Dev Neurosci** 1996 Oct;14(6):785–95

Development and aging of cell topography in the human retinal pigment epithelium. Harman AM, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2016–26

Enrichment of glutamate-like immunoreactivity in the retinotectal terminals of the viper Vipera aspis: an electron microscope quantitative immunogold study. Repérant J, et al. **J Chem Neuroanat** 1997 May;12(4):267–80

Distribution of transferrin binding protein immunoreactivity

in the chicken central and peripheral nervous systems. Cho SS, et al. **J Comp Neurol** 1997 Jun 2;382(2):260–71

Retinal patterning in the zebrafish mutant cyclops. Fulwiler C, et al. **J Comp Neurol** 1997 May 19;381(4):449–60

Transneuronal retinal input to the primate Edinger–Westphal nucleus. Kourouyan HD, et al. **J Comp Neurol** 1997 Apr 28;381(1):68–80

Retinal neurons of the California ground squirrel, Spermophilus beecheyi: a Golgi study. Linberg KA, et al. **J Comp Neurol** 1996 Feb 5;365(2):173–216

A compartment-based, asymmetric representation of the retina in an induced projection to the olfactory cortex. Scalia F, et al. **J Comp Neurol** 1997 Jul 14;383(4):415–27

Changes in CD44 and ApoE immunoreactivities due to retinal pathology of man and rat. Kuhrt H, et al. **J Hirnforsch** 1997;38(2):223–9

Steroid hormone receptors activate transcription in glial cells of intact retina but not in primary cultures of retinal glial cells. Li YC, et al. **J Mol Neurosci** 1997 Apr;8(2):145–58

Capacitative Ca2+ influx in the neural retina of chick embryo. Sakaki Y, et al. **J Neurobiol** 1997 Jan;32(1):62–8

In vivo observations of timecourse and distribution of morphological dynamics in Xenopus retinotectal axon arbors. Witte S, et al. **J Neurobiol** 1996 Oct;31(2):219–34

Developmental alteration of the expression and kinase activity of cyclin-dependent kinase 5 (Cdk5)/p35nck5a in the rat retina. Hirooka K, et al. **J Neurochem** 1996 Dec; 67(6):2478–83

Enhancement of apoptosis in developing chick neural retina cells by basic fibroblast growth factor. Yokoyama Y, et al. **J Neurochem** 1997 May;68(5):2212–5

Quantitative anatomy, synaptic connectivity and physiology of amacrine cells with glucagon-like immunoreactivity in the turtle retina. Eldred WD, et al. **J Neurocytol** 1996 May; 25(5):347–64

The cone synapses of DB1 diffuse, DB6 diffuse and invaginating midget, bipolar cells of a primate retina. Hopkins JM, et al. **J Neurocytol** 1996 Jul;25(7):381–90

Photoreceptor number and outer segment disk membrane surface area in the retina of the rat: stereological data for whole organ and average photoreceptor cell. Mayhew TM, et al. **J Neurocytol** 1997 Jan;26(1):53–61

Two classes of bipolar cell in the retina of the skate Raja erinacea. Schlemermeyer E, et al. **J Neurocytol** 1996 Nov; 25(11):625–35

Glutamate immunoreactivity in the tiger salamander retina differentiates between GABA-immunoreactive and glycine-immunoreactive amacrine cells. Yang CY. **J Neurocytol** 1996 Jul;25(7):391–403

Receptive field of the retinal bipolar cell: a pharmacological study in the tiger salamander. Hare WA, et al. **J Neurophysiol** 1996 Sep;76(3):2005–19

Anion conductance behavior of the glutamate uptake carrier in salamander retinal glial cells. Billups B, et al. **J Neurosci** 1996 Nov 1;16(21):6722–31

Growth cone form is behavior-specific and, consequently, position-specific along the retinal axon pathway. Mason CA, et al. **J Neurosci** 1997 Feb 1;17(3):1086–100

A SNARE complex containing syntaxin 3 is present in ribbon synapses of the retina. Morgans CW, et al. **J Neurosci** 1996 Nov 1;16(21):6713–21

Purification of synaptic ribbons, structural components of the photoreceptor active zone complex. Schmitz F, et al. **J Neurosci** 1996 Nov 15;16(22):7109–16

A reliable method for Golgi staining of retina and brain slices. Angulo A, et al. **J Neurosci Methods** 1996 May;66(1):55–9

Use of cell ELISA for the screening of neurotrophic activities on minor cell populations in retinal monolayer cultures. Fuhrmann S, et al. **J Neurosci Methods** 1997 Aug 22; 75(2):199–205

Effects of glutamic acid and related agents on horizontal cells in a marine teleost retina. Laufer M, et al. **J Neurosci Res** 1996 Jun 15;44(6):568–76

Origins of horizontal cell spectral responses in the retina of marine teleosts (Centropomus and Mugil sp). Negishi K, et al. **J Neurosci Res** 1997 Jan 1;47(1):68–76

Heterologous retinal cultured neurons and cell adhesion molecules induce clustering of acetylcholine receptors and polynucleation in mouse muscle BC3H-1 clonal cell line. Politi LE, et al. **J Neurosci Res** 1996 Mar 15;43(6):639–51

Effects of retinal pigment epithelial cell-secreted factors on neonatal rat retinal explant progenitor cells. Sheedlo HJ, et al. **J Neurosci Res** 1996 Jun 15;44(6):519–31

Glial, vascular, and neuronal cytogenesis in whole-mounted cat retina. Chan-Ling T. **Microsc Res Tech** 1997 Jan 1; 36(1):1–16

Correlation of DNA fragmentation and chromatin condensation in apoptotic nuclei of the Ser 6 mouse retina. Chang GQ, et al. **Microsc Res Tech** 1997 Jan 15;36(2):123–9

Dopaminergic and GABAergic retinal cell populations in mammals. Nguyen-Legros J, et al. **Microsc Res Tech** 1997 Jan 1;36(1):26–42 (140 ref.)

Distribution of cone photoreceptors in the mammalian retina. Szél A, et al. **Microsc Res Tech** 1996 Dec 15;35(6):445–62 (167 ref.)

Distribution of S100 immunoreactivity in the retina and optic nerve head of the teleost Tinca tinca L. Vecino E, et al. **Microsc Res Tech** 1997 Jan 1;36(1):17–25

Agrin is synthesized by retinal cells and colocalizes with gephyrin [corrected] [published erratum appears in Mol Cell Neurosci 1996;8(4):301] Mann S, et al. **Mol Cell Neurosci** 1996;8(1):1–13

Regulation of neuronal diversity in the Xenopus retina by Delta signalling. Dorsky RI, et al. **Nature** 1997 Jan 2; 385(6611):67–70

Thyrotropin-like immunoreactivity in human retina: immunoreactive co-localization in ganglion cells and perivascular fibers. Fernández-Trujillo FJ, et al. **Neurochem Int** 1996 Apr;28(4):381–4

Continuous vesicle cycling in the synaptic terminal of retinal bipolar cells. Lagnado L, et al. **Neuron** 1996 Nov; 17(5):957–67

Thalamic relay of spontaneous retinal activity prior to vision. Mooney R, et al. **Neuron** 1996 Nov;17(5):863–74

Chemosuppression of retinal axon growth by the mouse optic chiasm. Wang LC, et al. **Neuron** 1996 Nov;17(5):849–62

Immunocytochemical demonstration of alpha 2-M-R/LRP on Müller (glial) cells isolated from rabbit and human retina. Birkenmeier G, et al. **Neuroreport** 1996 Dec 20; 8(1):149–51

Desensitizing GABAC receptors on carp retinal bipolar cells. Han MH, et al. **Neuroreport** 1997 Apr 14;8(6):1331–5

Voltage dependency of light-evoked on-off transient amacrine cell responses in carp retina. Djamgoz MB, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):127–30

Nervus terminalis projection to the retina in the 'four-eyed' fish, Anableps anableps. Meyer DL, et al. **Neurosci Lett** 1996 Aug 2;213(2):87–90

Effect of cutting the optic nerve on K+ currents in endfeet of Muller cells isolated from frog retina. Skatchkov SN, et al. **Neurosci Lett** 1996 Apr 19;208(2):81–4

Serum affects the characteristics of excitatory amino acid–binding sites on Müller cells. López-Colomé AM, et al. **Neurosci Res** 1996 May;25(1):25–32

The glutathione level of retinal Müller glial cells is dependent on the high-affinity sodium-dependent uptake of glutamate. Reichelt W, et al. **Neuroscience** 1997 Apr; 77(4):1213–24

Proliferation of chicken neuroretina cells induced by v-src, in vitro, depends on activation of the E2F transcription factor. Pasteau S, et al. **Oncogene** 1997 Jul 3;15(1):17–28

Retinal nerve fiber layer thickness in normal human eyes [published erratum appears in Ophthalmology 1997 Feb;104(2):174] Varma R, et al. **Ophthalmology** 1996 Dec; 103(12):2114–9

Microglia in human retina: a heterogeneous population with distinct ontogenies. Provis JM, et al. **Perspect Dev Neurobiol** 1996;3(3):213–22 (40 ref.)

The number of unidentified amacrine cells in the mammalian retina. Strettoi E, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14906–11

Starburst amacrine cells change from spiking to nonspiking neurons during retinal development. Zhou ZJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8057–62

Clonal architecture of the mouse retina. Goldowitz D, et al. **Prog Brain Res** 1996;108:3–15 (52 ref.)

Lamina-specific connectivity in the brain: regulation by N-cadherin, neurotrophins, and glycoconjugates. Inoue A, et al. **Science** 1997 May 30;276(5317):1428–31

Calcium waves in retinal glial cells. Newman EA, et al. **Science** 1997 Feb 7;275(5301):844–7

The Müller cell: a functional element of the retina. Newman E, et al. **Trends Neurosci** 1996 Aug;19(8):307–12 (58 ref.)

Relationships between Müller cells and neurons in a primitive tetrapod, the Australian lungfish. Robinson SR. **Vis Neurosci** 1997 Jul-Aug;14(4):795–800

A model for optokinetic eye movements in turtles that incorporates properties of retinal-slip neurons. Rosenberg AF, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):375–83

The horizontal cells of artiodactyl retinae: a comparison with Cajal's descriptions. Sandmann D, et al. **Vis Neurosci** 1996 Jul-Aug;13(4):735–46

The monoclonal antibody H386F labels microglia in the retinal nerve fiber layer of several mammals. Tumosa N, et al. **Vis Neurosci** 1997 Jul-Aug;14(4):663–9

Neurofibrillar bipolar cells in the capybara retina. Yamada ES, et al. **Vis Neurosci** 1996 Nov-Dec;13(6):1173–7

Müller cells in the retina of the cane toad, Bufo marinus, express neuropeptide Y-like immunoreactivity. Zhu BS, et al. **Vis Neurosci** 1996 May-Jun;13(3):501–8

Effects of horizontal cell network architecture on signal spread in the turtle outer retina. Experiments and simulations. Ammermüller J, et al. **Vision Res** 1996 Dec; 36(24):4089–103

Glia cells of the monkey retina--II. Müller cells. Distler C, et al. **Vision Res** 1996 Aug;36(16):2381–94

Preference of peanut agglutinin labeling for long-wavelength-sensitive cone photoreceptors in the dace retina. Ishikawa M, et al. **Vision Res** 1997 Feb;37(4):383–7

The size of the horizontal cell receptive fields adapts to the stimulus in the light adapted goldfish retina. Kamermans M, et al. **Vision Res** 1996 Dec;36(24):4105–19

Spatial and temporal properties of cat horizontal cells after prolonged dark adaptation. Lankheet MJ, et al. **Vision Res** 1996 Dec;36(24):3955–67

Horizontal cell dynamics: what are the main factors? Maximov VV, et al. **Vision Res** 1996 Dec;36(24):4077–87

Ionic current model of bipolar cells in the lower vertebrate retina. Usui S, et al. **Vision Res** 1996 Dec;36(24):4069–76

Gain control and hyperpolarization level in cat horizontal cells as a function of light and dark adaptation. van de Grind WA, et al. **Vision Res** 1996 Dec;36(24):3969–85

The AII amacrine network: coupling can increase correlated activity. Vardi N, et al. **Vision Res** 1996 Dec;36(23):3743–57

[Reconstruction of the neuroretina from embryonic chick retinal cells in floating culture and the effect of growth factors] Takabatake M. **Nippon Ganka Gakkai Zasshi** 1997 Jan;101(1):30–9 (Eng. Abstr.) **(Jpn)**

[Density distribution of dopaminergic neurons in the retina of a marine teleost, Thamnoconus (Navodon) modestus] Negishi K, et al. **Nippon Ika Daigaku Zasshi** 1996 Oct; 63(5):343–8 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Retinal toxicity associated with didanosine in HIV-infected adults [letter] Cobo J, et al. **AIDS** 1996 Sep;10(11):1297–300

An aldose reductase inhibitor and aminoguanidine prevent vascular endothelial growth factor expression in rats with long-term galactosemia. Frank RN, et al. **Arch Ophthalmol** 1997 Aug;115(8):1036–47

Causal role for jun protein in the stimulation of choline acetyltransferase by insulin in embryonic chick retina. Ren Y, et al. **Biochem Biophys Res Commun** 1997 Mar 27; 232(3):788–93

Effects of chronic lithium treatment on retinal electrophysiologic function. Lam RW, et al. **Biol Psychiatry** 1997 Mar 15;41(6):737–42

Inhibition by nociceptin of the light-evoked release of ACh from retinal cholinergic neurones. Neal MJ, et al. **Br J Pharmacol** 1997 Apr;120(8):1399–400

Heterotrimeric G protein activation rapidly inhibits outgrowth of optic axons from adult and embryonic mouse, and goldfish retinal explants. Bates CA, et al. **Brain Res** 1996 Apr 1;714(1–2):65–75

Retinal neurones containing kainate receptors are influenced by exogenous kainate and ischaemia while neurones lacking these receptors are not -- melatonin counteracts the effects of ischaemia and kainate. Cazevieille C, et al. **Brain Res** 1997 Apr 25;755(1):91–100

Effect of cadmium chloride on the distal retinal pigment cells of the fiddler crab, Uca pugilator. Reddy PS, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):504–10

Retinal toxicity of intravitreous octreotide in the rabbit. Liang C, et al. **Can J Ophthalmol** 1997 Jun;32(4):229–32

Effects of PhXA41, a prostaglandin analogue, and PGF2 alpha on the corneal and intraretinal d.c. electroretinogram (ERG) of the albino rabbit eye. Bragadóttir R, et al. **Curr Eye Res** 1995 Dec;14(12):1073–80

Cytochalasin D reversibly weakens retinal adhesiveness. Chiang RK, et al. **Curr Eye Res** 1995 Dec;14(12):1109–13

Evaluation of retinal susceptibility to light damage in pigmented rats supplemented with beta-carotene. Rapp LM, et al. **Curr Eye Res** 1996 Feb;15(2):219–23

Docosahexaenoic acid and the development and function of the infant retina. Heird WC, et al. **Curr Opin Lipidol** 1997 Feb;8(1):12–6 (31 ref.)

Postmitotic cells fated to become rod photoreceptors can be respecified by CNTF treatment of the retina. Ezzeddine ZD, et al. **Development** 1997 Mar;124(5):1055–67

Thiamine may indirectly act as an antioxidant [letter; comment] Bakker SJ, et al. **Diabetologia** 1997 Jun; 40(6):741–2. Comment on: Diabetologia 1996 Nov;39(11):1263–8.

Effects of mitomycin C on the rat retina. Kawashima S, et al. **Doc Ophthalmol** 1996–97;92(3):229–41

Electroretinographic findings in subjects after administration of fenretinide. Krzeminski R, et al. **Doc Ophthalmol** 1995–96;91(4):299–309

Long-term effects of fenretinide on retinal function. Decensi A, et al. **Eur J Cancer** 1997 Jan;33(1):80–4

Spectral plasticity of H1 horizontal cells in carp retina: independent modulation by dopamine and light-adaptation. Djamgoz MB, et al. **Eur J Neurosci** 1996 Aug;8(8):1571–9

Synergistic neurite-outgrowth promoting activity of two related axonal proteins, Bravo/Nr-CAM and G4/Ng-CAM in chicken retinal explants. Morales G, et al. **Eur J Neurosci** 1996 Jun;8(6):1098–105

Chronic NMDA receptor antagonism during retinotopic map formation depresses CaM kinase II differentiation in rat superior colliculus. Scheetz AJ, et al. **Eur J Neurosci** 1996 Jul;8(7):1322–8

Experimental vitreous replacement with perfluorophenanthrene. Ratiglia R, et al. **Eur J Ophthalmol** 1997 Jan-Mar;7(1):59–63

Effect of propionyl-L-carnitine on oscillatory potentials in electroretinogram in streptozotocin-diabetic rats. Hotta N, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):199–206

Effects of B vitamins on glutamate-induced neurotoxicity in retinal cultures. Kaneda K, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):259–64

A novel NMDA receptor antagonist protects against N-methyl-D-aspartate- and glutamate-induced neurotoxicity in the goldfish retina. Tyan SH, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):171–9

The effects of prenatal exposure to cocaine on the dopaminergic cells in the rat retina. An immunocytochemical and neurochemical study. Silva-Araújo A, et al. **Exp Eye Res** 1996 Jun;62(6):697–708

Chondroitin 4-sulfate stimulates regeneration of goldfish retinal axons. Challacombe JF, et al. **Exp Neurol** 1997 Jan; 143(1):10–7

Effect of an aldose reductase inhibitor, SNK-860, on deficits in the electroretinogram of diabetic rats. Hotta N, et al. **Exp Physiol** 1995 Nov;80(6):981–9

Retinoic aid increases arrestin mRNA levels in the mouse retina. Wagner E, et al. **FASEB J** 1997 Mar;11(4):271–5

Prevention of postasphyxia electroretinal dysfunction with a pyridoxal hydrazone. Bhattacharya M, et al. **Free Radic Biol Med** 1997;22(1-2):11-6

Site of stimulation by mannosyl-P-dolichol of GlcNAc-lipid formation by microsomes of embryonic chick retina. Kean EL. **Glycoconj J** 1996 Aug;13(4):675-80

Nerve growth factor delays retinal degeneration in C3H mice. Lambiase A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S96-100

Central serous retinopathy associated with adrenocorticotrophic hormone therapy. A case report and a hypothesis. Zamir E. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):339-44 (37 ref.)

Effects of serotonin on the release of thyrotropin-releasing hormone from the rat retina in vitro. Mitsuma T, et al. **Horm Metab Res** 1996 May;28(5):220-2

Antioxidant effect of a Ginkgo biloba extract (EGb 761) on the retina. Droy-Lefaix MT, et al. **Int J Tissue React** 1995; 17(3):93-100

Occurrence of birefringent retinal inclusions in cynomolgus monkeys after high doses of canthaxanthin. Goralczyk R, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):741-52

Protective effects of methylcobalamin, a vitamin B12 analog, against glutamate-induced neurotoxicity in retinal cell culture. Kikuchi M, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):848-54

MK-801 has neuroprotective and antiproliferative effects in retinal laser injury. Solberg Y, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1380-9

Canthaxanthine retinopathy. Bloomenstein MR, et al. **J Am Optom Assoc** 1996 Nov;67(11):690-2

The effect of neuropeptides from Limulus on its circadian rhythm in retinal sensitivity. Gaus G, et al. **J Comp Physiol [A]** 1997 Feb;180(2):137-42

Pharmacology of the skate electroretinogram indicates independent ON and OFF bipolar cell pathways. Chappell RL, et al. **J Gen Physiol** 1996 Apr;107(4):535-44

Evaluation of retinal toxicity and efficacy of anti-cytomegalovirus and anti-herpes simplex virus antiviral phosphorothioate oligonucleotides **ISIS** 2922 and ISIS 4015. Flores-Aguilar M, et al. **J Infect Dis** 1997 Jun; 175(6):1308-16

Docosahexaenoic acid is required for the survival of rat retinal photoreceptors in vitro. Rotstein NP, et al. **J Neurochem** 1996 May;66(5):1851-9

Enhancement of apoptosis in developing chick neural retina cells by basic fibroblast growth factor. Yokoyama Y, et al. **J Neurochem** 1997 May;68(5):2212-5

Protein kinase modulation of GABAA currents in rabbit retinal rod bipolar cells. Gillette MA, et al. **J Neurophysiol** 1996 Nov;76(5):3070-86

On bipolar cell responses in the teleost retina are generated by two distinct mechanisms. Grant GB, et al. **J Neurophysiol** 1996 Dec;76(6):3842-9

N-methyl-D-aspartate-mediated glutamate toxicity in the developing rabbit retina. Haberecht MF, et al. **J Neurosci Res** 1997 Feb 15;47(4):416-26

Oscillatory potentials and light microscopic changes demonstrate an interaction between zinc and taurine in the developing rat retina. Gottschall-Pass KT, et al. **J Nutr** 1997 Jun;127(6):1206-13

Retinal safety of oral and topical ofloxacin in rabbits. Cohen RG, et al. **J Ocul Pharmacol Ther** 1997 Aug;13(4):369-79

Changes in eye growth produced by drugs which affect retinal ON or OFF responses to light. Crewther DP, et al. **J Ocul Pharmacol Ther** 1996 Summer;12(2):193-208

Facilitation of retinal function recovery by coumarin derivatives. Liu SX, et al. **J Ocul Pharmacol Ther** 1997 Feb;13(1):69-79

Effects of Chinese herbal products on mammalian retinal functions. Liu SX, et al. **J Ocul Pharmacol Ther** 1996 Fall; 12(3):377-86 (52 ref.)

Protection against light-induced retinal degeneration with naftidrofuryl (Praxilene) in the rat. Safars M, et al. **J Ocul Pharmacol Ther** 1997 Feb;13(1):89-94

Inhibition of high K+ and norepinephrine-induced free intracellular calcium by tetrandrine in dissociated rabbit retina cells. Xuan B, et al. **J Ocul Pharmacol Ther** 1996 Summer;12(2):151-8

Effect of aspirin plus dipyridamole on the retinal vascular pattern in experimental diabetes mellitus. De la Cruz JP, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):454-9

Kinetics for camel (Camelus dromedarius) retina acetylcholinesterase inhibition by methotrexate in vitro. al-Jafari A, et al. **Jpn J Pharmacol** 1996 Sep;72(1):49-55

Exogenous application of gangliosides changes the state of excitability of retinal tissue as demonstrated by retinal spreading depression experiments. Fernandes de Lima VM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):507-14

Age dependent sensitivity of the rat retina to the excitotoxic action of N-methyl-D-aspartate. Izumi Y, et al. **Neurobiol Dis** 1995 Jun;2(3):139-44

DNA fragmentation characteristic of apoptosis and cell loss induced by kainic acid in rabbit retinas. Perez MT, et al. **Neurochem Int** 1997 Aug;31(2):251-60

5HT1A receptor agonist differentially increases cyclic AMP concentration in intact and lesioned goldfish retina. In vitro inhibition of outgrowth by forskolin. Urbina M, et al. **Neurochem Int** 1996 Nov;29(5):453-60

Wortmannin blocks goldfish retinal phosphatidylinositol 3-kinase and neurite outgrowth. Lavie Y, et al. **Neurochem Res** 1997 Apr;22(4):373-8

Two phenylglycine derivatives antagonize responses to L-AP4 in ON bipolar cells of the amphibian retina. Thoreson WB, et al. **Neuropharmacology** 1997 Jan; 36(1):13-20

Scrapie-induced neuron loss is reduced by treatment with basic fibroblast growth factor. Fraser JR, et al. **Neuroreport** 1997 Jul 7;8(9-10):2405-9

AII amacrine cells express functional NMDA receptors. Hartveit E, et al. **Neuroreport** 1997 Mar 24;8(5):1219-23

Unusual expression of the Hu paraneoplastic antigen in the visual system. Kostyk SK, et al. **Neuroreport** 1996 Jul 8; 7(10):1549-52

Kainic acid blocks a TTX-sensitive sodium channel in retinal horizontal cells of the turtle (Pseudemys scripta elegans). Martin DK, et al. **Neuroreport** 1996 Nov 4; 7(15-17):2429-33

An improved model for examining delayed excitotoxic neurodegeneration in isolated chick retina. Eggett CJ, et al. **Neurosci Lett** 1996 Nov 15;219(1):65-7

Ca2+ -activated K+ current at presynaptic terminals of goldfish retinal bipolar cells. Sakaba T, et al. **Neurosci Res** 1997 Mar;27(3):219-28

Retinal lesions in rat fetuses prenatally exposed to cocaine. Méndez-Armenta M, et al. **Neurotoxicol Teratol** 1997 May-Jun;19(3):199-203

Gentamicin retinal toxicity after cataract surgery in an eye that underwent vitrectomy. Rosenbaum JD, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):236-8

Experimental tolerance to perfluorodecalin used in prolonged intraocular tamponade. Devin F, et al. **Ophthalmologica** 1995;209(6):306-14

Intravitreal application of ganciclovir in rabbits: ERG and electron-microscopic findings. Moschos M, et al. **Ophthalmologica** 1996;210(4):215-22

Intravenous infusion of RMP-7 increases ocular uptake of ganciclovir. Elliot PJ, et al. **Pharm Res** 1997 Jan;14(1):80-5

What's the right patient management for early diagnosis of hydroxychloroquine retinal toxicity? [letter] Giorgi D, et al. **Recenti Prog Med** 1996 Jun;87(6):308

The effect of 3-aminobenzamide, an inhibitor of poly-ADP-ribose polymerase, on ischemia/reperfusion damage in rat retina. Lam TT. **Res Commun Mol Pathol Pharmacol** 1997 Mar;95(3):241-52

Experimental vitreous and aqueous replacement with perfluorophenanthrene. Clinical, histologic, and electrophysiologic results. Stolba U, et al. **Retina** 1997; 17(2):146-53

Formate-induced alterations in retinal function in methanol-intoxicated rats. Eells JT, et al. **Toxicol Appl Pharmacol** 1996 Sep;140(1):58-69

Folate and 10-formyltetrahydrofolate dehydrogenase in human and rat retina: relation to methanol toxicity. Martinasevic MK, et al. **Toxicol Appl Pharmacol** 1996 Dec; 141(2):373-81

The inhibitory effect of the neuromuscular blocking agent, gallamine triethiodide, on camel retina acetylcholinesterase activity. Al-Jafari AA. **Toxicol Lett** 1997 Jan 15; 90(1):45-51

The inhibitory effect of cyclophosphamide on camel retina acetylcholinesterase activity. al-Khwyter F, et al. **Toxicol Lett** 1996 Oct;87(2-3):69-76

Activation of NMDA receptor-channels in human retinal Müller glial cells inhibits inward-rectifying potassium currents. Puro DG, et al. **Vis Neurosci** 1996 Mar-Apr; 13(2):319-26

Correlation between a bicuculline-resistant response to GABA and GABAA receptor rho 1 subunit expression in single rat retinal bipolar cells. Yeh HH, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):283-92

The effects of GABA and glycine on horizontal cells of the rabbit retina. Blanco R, et al. **Vision Res** 1996 Dec; 36(24):3987-95

Quinine, intracellular pH and modulation of hemi-gap junctions in catfish horizontal cells. Dixon DB, et al. **Vision Res** 1996 Dec;36(24):3925-31

Use-dependent and use-independent blocking actions of picrotoxin and zinc at the GABAC receptor in retinal horizontal cells. Dong CJ, et al. **Vision Res** 1996 Dec; 36(24):3997-4005

The influence of MgCl2 and APB on the light-induced potassium changes and the ERG b-wave of the isolated superfused rat retina. Hanitzsch R, et al. **Vision Res** 1996 Feb;36(4):499-507

Functional recovery of retina after sodium iodate injection in mice. Mizota A, et al. **Vision Res** 1997 Jul;37(14):1859-65

Cholinergic modulation of dopamine release and horizontal cell coupling in mudpuppy retina. Myhr KL, et al. **Vision Res** 1996 Dec;36(24):3933-8

Effects of nitric oxide on the horizontal cell network and dopamine release in the carp retina. Pottek M, et al. **Vision Res** 1997 May;37(9):1091-102

[Sudan staining of impression cytology retinal specimen] Meier P, et al. **Ophthalmologe** 1996 Dec;93(6):714-8 (Eng. Abstr.) **(Ger)**

[Effects of intravitreal levofloxacin on the rabbit retina] Ohkubo S, et al. **Nippon Ganka Gakkai Zasshi** 1996 Aug; 100(8):592-8 (Eng. Abstr.) **(Jpn)**

[D1 receptor mediates dopamine-induced enhancement of electroretinographic oscillatory potentials] Tagawa S, et al. **Nippon Ganka Gakkai Zasshi** 1996 Feb;100(2):139-44 (Eng. Abstr.) **(Jpn)**

EMBRYOLOGY

Effects of ethanol on the inner layers of chick retina during development. Chmielewski CE, et al. **Alcohol** 1997 Jul-Aug;14(4):313-7

The initial stages of development of the retinocollicular projection in the wallaby (Macropus eugenii): distribution of ganglion cells in the retina and their axons in the superior colliculus. Ding Y, et al. **Anat Embryol (Berl)** 1996 Sep; 194(3):301-17

Ciliogenesis in photoreceptor cells of the tree shrew retina. Knabe W, et al. **Anat Embryol (Berl)** 1997 Aug; 196(2):123-31

Early expression of recoverin in a unique population of neurons in the human retina. Yan XX, et al. **Anat Embryol (Berl)** 1997 Jan;195(1):51-63

Changes in protein composition during chick embryo retina development. Carabillò M, et al. **Biochem Mol Biol Int** 1997 Feb;41(2):339-47

Growth cone interactions with purified cell and substrate adhesion molecules visualized by interference reflection microscopy. Drazba J, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):183-97

Neurogenesis of cholinoceptive neurons in the chick retina. Gardino PF, et al. **Brain Res Dev Brain Res** 1996 Sep 2; 95(2):205-12

Maturation of the blood-retina barrier in the developing pecten oculi of the chicken. Liebner S, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):205-19

Butyrylcholinesterase-positive cells of the developing chicken retina that are non-cholinergic and GABA-positive. Reiss Y, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):62-72

Localization and ontogeny of GLUT3 expression in the rat retina. Watanabe T, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):60-6

Cholinesterases precede "ON-OFF" channel dichotomy in the embryonic chick retina before onset of synaptogenesis. Layer PG, et al. **Cell Tissue Res** 1997 Jun;288(3):407-16

Ontogenesis of lipids in chick embryo retina. Ruíz-Gutiérrez V, et al. **Curr Eye Res** 1996 Nov;15(11):1138-43

The patterning and onset of opsin expression in vertebrate retinae. Cepko CL. **Curr Opin Neurobiol** 1996 Aug; 6(4):542-6 (32 ref.)

Delta-1 is a regulator of neurogenesis in the vertebrate retina. Ahmad I, et al. **Dev Biol** 1997 May 1;185(1):92-103

Hedgehog-dependent patterning in the Drosophila eye can occur in the absence of Dpp signaling. Burke R, et al. **Dev Biol** 1996 Nov 1;179(2):360-8

Widespread expression of beta1 integrins in the developing chick retina: evidence for a role in migration of retinal ganglion cells. Cann GM, et al. **Dev Biol** 1996 Nov 25; 180(1):82-96

The cellular patterns of BDNF and trkB expression suggest multiple roles for BDNF during Xenopus visual system development. Cohen-Cory S, et al. **Dev Biol** 1996 Oct 10; 179(1):102-15

Continuous observation of multipotential retinal progenitor cells in clonal density culture. Jensen AM, et al. **Dev Biol** 1997 Aug 15;188(2):267-79

Eph family receptors and their ligands distribute in opposing gradients in the developing mouse retina. Marcus RC, et al. **Dev Biol** 1996 Dec 15;180(2):786-9

Novel expression gradients of Eph-like receptor tyrosine kinases in the developing chick retina. Sefton M, et al. **Dev Biol** 1997 Aug 15;188(2):363-8

Perturbation of the developing Xenopus retinotectal projection following injections of antibodies against beta1 integrin receptors and N-cadherin. Stone KE, et al. **Dev Biol** 1996 Nov 25;180(1):297-310

Chicken homeobox gene Prox 1 related to Drosophila prospero is expressed in the developing lens and retina [published erratum appears in Dev Dyn 1996 Sep;207(1):120] Tomarev SI, et al. **Dev Dyn** 1996 Aug; 206(4):354-67

Retinal morphogenesis in Drosophila: hints from an eye-specific decapentaplegic allele. Chanut F, et al. **Dev Genet** 1997;20(3):197-207

Evidence that tyrosine phosphorylation regulates N-cadherin turnover during retinal development. Lee MM, et al. **Dev Genet** 1997;20(3):224-34

Subsets of retinal progenitors display temporally regulated and distinct biases in the fates of their progeny. Alexiades MR, et al. **Development** 1997 Mar;124(6):1119-31

Genetic dissection of the retinotectal projection. Baier H, et al. **Development** 1996 Dec;123:415-25

Role of decapentaplegic in initiation and progression of the morphogenetic furrow in the developing Drosophila retina. Chanut F, et al. **Development** 1997 Jan;124(2):559-67

Zebrafish mutations affecting retinotectal axon pathfinding. Karlstrom RO, et al. **Development** 1996 Dec;123:427-38

A single morphogenetic field gives rise to two retina primordia under the influence of the prechordal plate. Li H, et al. **Development** 1997 Feb;124(3):603-15

Mutations affecting development of the zebrafish retina. Malicki J, et al. **Development** 1996 Dec;123:263-73

The Drosophila TGF alpha homolog Spitz acts in photoreceptor recruitment in the developing retina. Tio M, et al. **Development** 1997 Jan;124(2):343-51

Mutations disrupting the ordering and topographic mapping

of axons in the retinotectal projection of the zebrafish, Danio rerio. Trowe T, et al. **Development** 1996 Dec; 123:439–50

Shared and distinct functions of RAGS and ELF–1 in guiding retinal axons. Monschau B, et al. **EMBO J** 1997 Mar 17; 16(6):1258–67

Developmental expression and self–regulation of Ca2+ entry via AMPA/KA receptors in the embryonic chick retina. Allcorn S, et al. **Eur J Neurosci** 1996 Dec;8(12):2499–510

Mitosis in developing rabbit retina: an immunohistochemical study. Sharma RK, et al. **Exp Eye Res** 1997 Jan; 64(1):97–106

Positional determination of the naso–temporal retinal axis coincides with asymmetric expression of proteins along the anterior–posterior axis of the eye primordium. Thanos S, et al. **Exp Eye Res** 1996 Nov;63(5):479–92

Ontogeny of GTP–binding proteins, Gi and G(o), in rat retina. Oguni M, et al. **Histochem Cell Biol** 1996 Aug; 106(2):235–40

Transplantations of the chick eye anlage reveal an early determination of nasotemporal polarity. Dütting D, et al. **Int J Dev Biol** 1995 Dec;39(6):921–31

p34(cdc2) and mitotic cyclin expression in the developing quail neuroretina. Espanel X, et al. **Int J Dev Biol** 1997 Jun;41(3):469–76

The role of EPH receptor tyrosine kinase CEK5 and its ligand Cek5–L/ELF–2/LERK2/hElk–L in the development of the chick retina. Sefton M, et al. **Int J Dev Biol** 1996;Suppl 1:143S–144S

Spatial–temporal expression of calbindin D–28K during embryonic and postnatal development of the fish retina. Vecino E, et al. **Int J Dev Biol** 1996;Suppl 1:217S–218S

Lateral and radial growth uncoupled in reaggregated retinospheroids of embryonic avian retina. Willbold E, et al. **Int J Dev Biol** 1996 Dec;40(6):1151–9

Spatial and temporal expression of cone opsins during monkey retinal development [published erratum appears in J Comp Neurol 1997 Apr 7;380(2):291] Bumsted K, et al. **J Comp Neurol** 1997 Feb 3;378(1):117–34

Maturational gradients in the retina of the ferret. Reese BE, et al. **J Comp Neurol** 1996 Nov 11;375(2):252–73

The developing avian retina expresses agrin isoforms during synaptogenesis. Kröger S, et al. **J Neurobiol** 1996 Feb; 29(2):165–82

Expression of pituitary adenylate cyclase–activating polypeptide (PACAP) receptors and PACAP in human fetal retina. Olianas MC, et al. **J Neurochem** 1997 Sep; 69(3):1213–8

Transfection of reaggregating embryonic chicken retinal cells with an antisense 5'–DNA butyrylcholinesterase expression vector inhibits proliferation and alters morphogenesis. Robitzki A, et al. **J Neurochem** 1997 Aug;69(2):823–33

Growth cone form is behavior–specific and, consequently, position–specific along the retinal axon pathway. Mason CA, et al. **J Neurosci** 1997 Feb 1;17(3):1086–100

Retinoic acid synthesis in the developing chick retina. Mey J, et al. **J Neurosci** 1997 Oct 1;17(19):7441–9

Expression of the chicken cysteine–rich fibroblast growth factor receptor (CFR) during embryogenesis and retina development. Fayein NA, et al. **J Neurosci Res** 1996 Mar 1;43(5):602–12

Identification and functional characterization of conserved promoter elements from glass: a retinal development gene of Drosophila. Liu H, et al. **Mech Dev** 1996 May; 56(1–2):73–82

Involvement of AP–2 in regulation of the R–FABP gene in the developing chick retina. Bisgrove DA, et al. **Mol Cell Biol** 1997 Oct;17(10):5935–45

Fibroblast growth factor receptor function is required for the orderly projection of ganglion cell axons in the developing mammalian retina. Brittis PA, et al. **Mol Cell Neurosci** 1996;8(2–3):120–8

Overexpression of c–src and n–src in the developing Xenopus retina differentially impairs axonogenesis. Worley TL, et al. **Mol Cell Neurosci** 1997;9(4):276–92

Nitric oxide enhances amino acid release from immature chick embryo retina. Ientile R, et al. **Neurosci Lett** 1996 Nov 22;219(2):79–82

Synaptic development in macaque monkey retina and its implications for other developmental sequences. Hendrickson AE. **Perspect Dev Neurobiol** 1996; 3(3):195–201 (58 ref.)

Spatiotemporal gradients of cell genesis in the primate retina. Rapaport DH, et al. **Perspect Dev Neurobiol** 1996; 3(3):147–59 (116 ref.)

Early divergence of magnocellular and parvocellular functional subsystems in the embryonic primate visual system. Meissirel C, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5900–5

Prenatal development of axon outgrowth and connectivity. Casagrande VA, et al. **Prog Brain Res** 1996;108:83–93 (71 ref.)

Ontogeny of the opioid growth factor, [Met5]–enkephalin, and its binding activity in the rat retina. Isayama T, et al. **Vis Neurosci** 1995 Sep–Oct;12(5):939–50

The optic tract in embryonic hamsters: fasciculation, defasciculation, and other rearrangements of retinal axons. Jhaveri S, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):359–74

[The reactions of different sections of human embryonic neuroepithelium to damage to the ventricular surface during explantation] Smirnov EB, et al. **Morfologiia** 1997; 111(1):15–8 (Eng. Abstr.) **(Rus)**

[The morphogenesis of the retinal neural layer and of the optic nerve in the normal white rat and under the action of large doses of x–ray irradiation during prenatal ontogeny] Stepanova IP. **Morfologiia** 1997;111(1):57–60 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Manganese and copper–zinc superoxide dismutases in the developing rat retina. Ogawa T, et al. **Acta Histochem** 1997 Mar;99(1):1–12

Adenylate cyclase activation by VIP and PACAP in the retina and choroid: effects of antagonists. Nilsson SF, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:749–52

The population of nitric oxide synthase–containing neurons persist in the ageing human retina. Roufail E, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):64–6

Investigation of the effect of tetrahydroaminoacridine on turnover kinetics of camel (Camelus dromedarius) retina acetylcholinesterase. al–Jafari AA, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):917–22

Effect of sevin on kinetic parameters of camel retina acetylcholinesterase. Kamal MA. **Biochem Mol Biol Int** 1997 Jun;42(2):235–46

Novel beta 3 isoform of the Na,K–ATPase beta subunit from mouse retina. Besirli CG, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):21–6

Circadian regulation of hydroxyindole–O–methyltransferase mRNA levels in rat pineal and retina. Gauer F, et al. **Brain Res** 1996 Oct 21;737(1–2):99–109

Nitric oxide synthase in developing retinas and after optic tract section. Patel JI, et al. **Brain Res** 1997 Jun 27; 761(1):156–60

Immunohistochemical localization of Ca2+/calmodulin–dependent protein kinase type IV in the mature and developing rat retina. Sakagami H, et al. **Brain Res** 1996 May 6;719(1–2):154–60

Pyroglutamyl peptidase I levels and their left–right distribution in the rat retina and hypothalamus are influenced by light–dark conditions. Sánchez B, et al. **Brain Res** 1996 Aug 26;731(1–2):254–7

Localization of nitric oxide synthase in the goldfish retina. Villani L, et al. **Brain Res** 1996 Dec 16;743(1–2):353–6

Morphologic analysis of rat retino–collicular neuron terminals containing monoamine oxidase. Nakajima J, et al. **Brain Res Bull** 1996;40(3):209–17

Neuronal isoform of nitric oxide synthase is expressed at low levels in human retina. Park CS, et al. **Cell Mol Neurobiol** 1996 Aug;16(4):499–515

Extracellular and asymmetric forms of acetylcholinesterase are expressed on cholinergic and noncholinergic terminal neuropil of the developing chick retina. Reiss Y, et al. **Cell Tissue Res** 1996 Oct;286(1):13–22

Biochemical characterization of cell specific enzymes in light–exposed rat retinas: oxidative loss of all–trans retinol dehydrogenase activity. Darrow RA, et al. **Curr Eye Res** 1997 Feb;16(2):144–51

Localization of cytosolic aldehyde dehydrogenase in the developing chick retina: in situ hybridization and immunohistochemical analyses. Godbout R, et al. **Dev Dyn** 1996 Mar;205(3):319–31

Vascular endothelial growth factor–induced retinal permeability is mediated by protein kinase C in vivo and suppressed by an orally effective beta–isoform–selective inhibitor. Aiello LP, et al. **Diabetes** 1997 Sep;46(9):1473–80

Hydroxyindole–O–methyltransferase in the chicken retina: immunocytochemical localization and daily rhythm of mRNA. Guerlotté J, et al. **Eur J Neurosci** 1996 Apr; 8(4):710–5

Inducible nitric oxide synthase in retinal ischemia–reperfusion injury. Hangai M, et al. **Exp Eye Res** 1996 Nov;63(5):501–9

Molecular cloning of a diacylglycerol kinase isozyme predominantly expressed in rat retina. Kohyama–Koganeya A, et al. **FEBS Lett** 1997 Jun 9;409(2):258–64

Strain differences in the distribution of NDP–ase labelled microglia in the normal rabbit retina. Humphrey MF, et al. **Glia** 1995 Dec;15(4):367–76

Site restricted and neuron dominant expression of alpha 2,8sialyltransferase gene in the adult mouse brain and retina. Yamamoto A, et al. **Glycoconj J** 1996 Jun;13(3):471–80

Chronic retinal effects by ultraviolet irradiation, with special reference to superoxide dismutases. Oguni M, et al. **Histol Histopathol** 1996 Jul;11(3):695–702

In vivo gene transfer into the retina mediated by a novel liposome system. Hangai M, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2678–85

Angiotensin–converting enzyme activity in retinas of streptozotocin–induced and Zucker diabetic rats. The effect of angiotensin II on Na+,K(+)–ATPase activity. Ottlecz A, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2157–64

The role of neuronal and endothelial nitric oxide synthase in retinal excitotoxicity. Vorwerk CK, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2038–44

Real time conformational changes in the retinal phosphodiesterase gamma subunit monitored by resonance energy transfer. Berger AL, et al. **J Biol Chem** 1997 Jan 31;272(5):2714–21

Identification of protein kinase C phosphorylation sites on bovine rhodopsin. Greene NM, et al. **J Biol Chem** 1997 Apr 18;272(16):10341–4

Distribution of guanylate cyclase within photoreceptor outer segments. Hallett MA, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1803–12

Thermodynamic investigation of camel retina acetylcholinesterase inhibition by cyclophosphamide. al–Jafari AA, et al. **J Enzyme Inhib** 1997 Feb;11(4):275–83

The Ca2+/calmodulin–dependent protein kinase II–associated protein complex isolated from chicken retina. Liu N, et al. **J Mol Neurosci** 1996 Spring;7(1):1–12

Developmental alteration of the expression and kinase activity of cyclin–dependent kinase 5 (Cdk5)/p35nck5a in the rat retina. Hirooka K, et al. **J Neurochem** 1996 Dec; 67(6):2478–83

Transfection of reaggregating embryonic chicken retinal cells with an antisense 5'–DNA butyrylcholinesterase expression vector inhibits proliferation and alters morphogenesis. Robitzki A, et al. **J Neurochem** 1997 Aug;69(2):823–33

UDP–sugar pyrophosphatase of rat retina: subcellular localization and topography. Martina JA, et al. **J Neurosci Res** 1996 Nov 15;46(4):485–91

The nature of the inhibition of camel retina acetylcholinesterase (EC 3.1.1.7) activity by tetrahydroaminoacridine. al–Jafari AA. **J Ocul Pharmacol Ther** 1996 Winter;12(4):503–14

Total cholinesterase activity in discrete brain regions and retina of normal horses. Plumlee KH, et al. **J Vet Diagn Invest** 1997 Jan;9(1):109–10

Membrane–bound carbonic anhydrase activity in the rat corneal endothelium and retina. Terashima H, et al. **Jpn J Ophthalmol** 1996;40(2):142–53

Retinal–specific guanylate cyclase gene mutations in Leber's congenital amaurosis. Perrault I, et al. **Nat Genet** 1996 Dec; 14(4):461–4

Histochemistry of NADPH–diaphorase—a marker for neuronal nitric oxide synthase—in the carp retina. Djamgoz MB, et al. **Neurochem Int** 1996 Mar;28(3):283–91

Retinal protein kinase C. Wood JP, et al. **Neurochem Int** 1997 Feb;30(2):119–36 (146 ref.)

The occurrence of protein kinase C theta and lambda isoforms in retina of different species. McCord R, et al. **Neurochem Res** 1996 Feb;21(2):259–66

Control of dopamine release in the retina: a transgenic approach to neural networks. Gustincich S, et al. **Neuron** 1997 May;18(5):723–36

Neuronal and macrophagic nitric oxide synthase isoforms distribution in normal rat retina. López–Costa JJ, et al. **Neurosci Lett** 1997 Sep 5;232(3):155–8

Effect of tunicamycin on histological organization and Na, K–ATPase distribution in the adult cat retina. Stubbs EB Jr, et al. **Neurosci Lett** 1997 Apr 25;226(2):139–41

Changes of catalase activity after ischemia–reperfusion in rat retina. Lewden O, et al. **Ophthalmic Res** 1996;28(6):331–5

Biochemical and immunohistochemical characterization of nitric oxide synthase in the rat retina. Sheng H, et al. **Pharmacol Res** 1996 Jan;33(1):29–34

Structure and function in rhodopsin: peptide sequences in the cytoplasmic loops of rhodopsin are intimately involved in interaction with rhodopsin kinase. Thurmond RL, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1715–20

Influence of constant light and darkness on arginyl aminopeptidase activity. Sánchez B, et al. **Rev Esp Fisiol** 1997 Jun;53(2):249–50

The inhibitory effect of the neuromuscular blocking agent, gallamine triethiodide, on camel retina acetylcholinesterase activity. Al–Jafari AA. **Toxicol Lett** 1997 Jan 15; 90(1):45–51

Immunocytochemical and histochemical localization of nitric oxide synthase in the turtle retina. Blute TA, et al. **Vis Neurosci** 1997 Jul–Aug;14(4):717–29

Displaced starburst amacrine cells of the rabbit retina contain the 67–kDa isoform, but not the 65–kDa isoform, of glutamate decarboxylase. Brandon C, et al. **Vis Neurosci** 1995 Nov–Dec;12(6):1053–61

Tyrosine hydroxylase expression in the Cebus monkey retina. Guimarães PZ, et al. **Vis Neurosci** 1997 Jul–Aug; 14(4):705–15

Characterization of aldehyde dehydrogenase–positive amacrine cells restricted in distribution to the dorsal retina. Milam AH, et al. **Vis Neurosci** 1997 May–Jun;14(3):601–8

Similarities and differences among inner retinal neurons revealed by the expression of reporter transgenes controlled by Brn–3a, Brn–3b, and Brn–3c promotor sequences. Xiang M, et al. **Vis Neurosci** 1996 Sep–Oct;13(5):955–62

NADPH diaphorase activity in mammalian retinas is modulated by the state of visual adaptation. Zemel E, et al. **Vis Neurosci** 1996 Sep–Oct;13(5):863–71

[The effect of light of various wave lengths on suppression of nocturnal serotonin N–acetyltransferase activity in chick retina] Jarmak A, et al. **Klin Oczna** 1996;98(5):347–51 (Eng. Abstr.) **(Pol)**

[Nucleoside diphosphate kinase from bovine retina is a glycoprotein] Karashchuk GN, et al. **Bioorg Khim** 1996 Jun;22(6):472–3 (Eng. Abstr.) **(Rus)**

[Low molecular weight GTPase of the rac family from the bovine retina. Structure of cDNA and its expression in a prokaryotic system] Petrov VM, et al. **Bioorg Khim** 1996 Dec;22(12):883–90 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Retinotopic order in the optic nerve and superior colliculus during development of the retinocollicular projection in the wallaby (Macropus eugenii). Ding Y, et al. **Anat Embryol (Berl)** 1997 Aug;196(2):141–58

Development of the neonatal rabbit retina in organ culture. 1. Comparison with histogenesis in vivo, and the effect

of a gliotoxin (alpha-aminoadipic acid). Germer A, et al. **Anat Embryol (Berl)** 1997 Jul;196(1):67-79

Ciliogenesis in photoreceptor cells of the tree shrew retina. Knabe W, et al. **Anat Embryol (Berl)** 1997 Aug; 196(2):123-31

Neurotrophin receptors expression in the developing mouse retina: an immunohistochemical study. Llamosas MM, et al. **Anat Embryol (Berl)** 1997 Apr;195(4):337-44

Development of retino-tectal arborizations in the trout. Mansour-Robaey S, et al. **Anat Embryol (Berl)** 1996 Sep; 194(3):279-87

Light reduction and the electroretinogram of preterm infants. Kennedy KA, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 May;76(3):F168-73

Extracellular regulators and pattern formation in the developing Drosophila retina. Tio M, et al. **Biochem Soc Symp** 1996;62:61-75 (111 ref.)

Formation and dissolution of spinules and changes in nematosome size require optic nerve integrity in black bass (Micropterus salmoides) retina. De Juan J, et al. **Brain Res** 1996 Jan 29;707(2):213-20

Differential age-dependent effects of retinal deafferentation upon calbindin- and parvalbumin-immunoreactive neurons in the superficial layers of the rat's superior colliculus. Lane RD, et al. **Brain Res** 1996 Nov 18;740(1-2):208-14

Nitric oxide synthase in developing retinas and after optic tract section. Patel JI, et al. **Brain Res** 1997 Jun 27; 761(1):156-60

Differential effects of bFGF on development of the rat retina. Zhao S, et al. **Brain Res** 1996 Jun 3;723(1-2):169-76

Distribution of CD44 in the retina during development and the rds degeneration. Chaitin MH, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):92-8

Retrograde fluorescent double-labeling study of bilaterally projecting retinal ganglion cells in albino rats at different stages of development. Dong K, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):55-62

Fate of DNA from retinal cells dying during development: uptake by microglia and macroglia (Müller cells). Egensperger R, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):1-8

GABA and GABA-A receptors are maximally expressed in association with cone synaptogenesis in neonatal rabbit retina. Mitchell CK, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):63-71

Transient expression of an atypical D1-like dopamine receptor system during avian retina differentiation. de Mello MC, et al. **Braz J Med Biol Res** 1996 Aug; 29(8):1035-44

Retinal development: communication helps you see the light. Wechsler-Reya RJ, et al. **Curr Biol** 1997 Jul 1;7(7):R433-6 (16 ref.)

The patterning and onset of opsin expression in vertebrate retinae. Cepko CL. **Curr Opin Neurobiol** 1996 Aug; 6(4):542-6 (32 ref.)

Quantitative analysis of proliferation and cell cycle length during development of the rat retina. Alexiades MR, et al. **Dev Dyn** 1996 Mar;205(3):293-307

Localization of cytosolic aldehyde dehydrogenase in the developing chick retina: in situ hybridization and immunohistochemical analyses. Godbout R, et al. **Dev Dyn** 1996 Mar;205(3):319-31

Changes in the immunoreactivity for inhibin in mouse retina during development of photoreceptor cells. Ying SY, et al. **Dev Neurosci** 1997;19(2):184-8

Subsets of retinal progenitors display temporally regulated and distinct biases in the fates of their progeny. Alexiades MR, et al. **Development** 1997 Mar;124(6):1119-31

Transience of astrocytes in the newborn macaque monkey retina. Distler C, et al. **Eur J Neurosci** 1996 Apr;8(4):847-51

Mitosis in developing rabbit retina: an immunohistochemical study. Sharma RK, et al. **Exp Eye Res** 1997 Jan; 64(1):97-106

Effect of endoscopic white light on the developing rat retina. Bonnett ML, et al. **Fetal Diagn Ther** 1997 Mar-Apr; 12(2):76-80

Effect of a water-soluble vitamin E analog, trolox C, on retinal vascular development in an animal model of retinopathy of prematurity. Penn JS, et al. **Free Radic Biol Med** 1997;22(6):977-84

Ontogeny and cellular expression of MHC and leucocyte antigens in human retina. Diaz-Araya CM, et al. **Glia** 1995 Dec;15(4):458-70

Developmentally regulated release of intraretinal neurotrophic factors in vitro. Ary-Pires R, et al. **Int J Dev Neurosci** 1997 Apr;15(2):239-55

Development of astrocytes and their relation to blood vessels in fetal monkey retina. Gariano RF, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2367-75

Tissue oxygen during a critical developmental period controls the death and survival of photoreceptors. Maslim J, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1667-77

Retinal pigment epithelium and photoreceptor maturation in a wallaby, the quokka. Fleming PA, et al. **J Comp Neurol** 1996 Jun 17;370(1):47-60

Localisation of amino acid neurotransmitters during postnatal development of the rat retina. Fletcher EL, et al. **J Comp Neurol** 1997 Apr 21;380(4):449-71

Temporal and spatial pattern of MASH-1 expression in the developing rat retina demonstrates progenitor cell heterogeneity. Jasoni CL, et al. **J Comp Neurol** 1996 May 27;369(2):319-27

Genesis of the adult retina and outer optic lobes of the moth, Manduca sexta. II. Effects of deafferentation and developmental hormone manipulation. Monsma SA, et al. **J Comp Neurol** 1996 Mar 25;367(1):21-35

Genesis of the adult retina and outer optic lobes of the moth, Manduca sexta. I. patterns of proliferation and cell death. Monsma SA, et al. **J Comp Neurol** 1996 Mar 25; 367(1):10-20

Differentiation and morphogenesis in pellet cultures of developing rat retinal cells. Watanabe T, et al. **J Comp Neurol** 1997 Jan 20;377(3):341-50

Xenopus Pax-6 and retinal development. Hirsch N, et al. **J Neurobiol** 1997 Jan;32(1):45-61

In vivo observations of timecourse and distribution of morphological dynamics in Xenopus retinotectal axon arbors. Witte S, et al. **J Neurobiol** 1996 Oct;31(2):219-34

Evidence for multiple, local functions of ciliary neurotrophic factor (CNTF) in retinal development: expression of CNTF and its receptors and in vitro effects on target cells. Kirsch M, et al. **J Neurochem** 1997 Mar;68(3):979-90

Apoptosis of retinal photoreceptors during development in vitro: protective effect of docosahexaenoic acid. Rotstein NP, et al. **J Neurochem** 1997 Aug;69(2):504-13

A role for nitric oxide in the development of the ferret retinogeniculate projection. Cramer KS, et al. **J Neurosci** 1996 Dec 15;16(24):7995-8004

Expression of the chicken cysteine-rich fibroblast growth factor receptor (CFR) during embryogenesis and retina development. Fayein NA, et al. **J Neurosci Res** 1996 Mar 1;43(5):602-12

N-methyl-D-aspartate-mediated glutamate toxicity in the developing rabbit retina. Haberecht MF, et al. **J Neurosci Res** 1997 Feb 15;47(4):416-26

Glial, vascular, and neuronal cytogenesis in whole-mounted cat retina. Chan-Ling T. **Microsc Res Tech** 1997 Jan 1; 36(1):1-16

Dynamic processes shape spatiotemporal properties of retinal waves. Feller MB, et al. **Neuron** 1997 Aug;19(2):293-306

PDGF mediates a neuron-astrocyte interaction in the developing retina. Fruttiger M, et al. **Neuron** 1996 Dec; 17(6):1117-31

Dystrophins in developing retina: Dp260 expression correlates with synaptic maturation. Rodius F, et al. **Neuroreport** 1997 Jul 7;8(9-10):2383-7

Developmental regulation of voltage-activated Na+ and Ca2+ currents in rat retinal ganglion cells. Schmid S, et al. **Neuroreport** 1996 Jan 31;7(2):677-81

Development of the retina is altered in the directly developing frog Eleutherodactylus coqui (Leptodactylidae). Schlosser G, et al. **Neurosci Lett** 1997 Mar 21;224(3):153-6

A ventrodorsal GABA gradient in the embryonic retina prior to expression of glutamate decarboxylase. Eliasson MJ, et al. **Neuroscience** 1997 Aug;79(3):863-9

Suppression of trkB expression by antisense oligonucleotides alters a neuronal phenotype in the rod pathway of the developing rat retina. Rickman DW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12564-9

The albino retina: an abnormality that provides insight into normal retinal development. Jeffery G. **Trends Neurosci** 1997 Apr;20(4):165-9 (37 ref.)

Asymmetric retinal growth: evidence for regulation by a retinotopic mechanism. Cameron DA. **Vis Neurosci** 1996 May-Jun;13(3):493-500

Analysis of the distribution of glycine and GABA in amacrine cells of the developing rabbit retina: a comparison with the ontogeny of a functional GABA transport system in retinal neurons. Crook DK, et al. **Vis Neurosci** 1997 Jul-Aug;14(4):751-63

Ontogeny of preproenkephalin mRNA expression in the rat retina. Isayama T, et al. **Vis Neurosci** 1996 Jul-Aug; 13(4):695-704

Factors controlling the dendritic arborization of retinal ganglion cells. Troilo D, et al. **Vis Neurosci** 1996 Jul-Aug; 13(4):721-33

Effects of glutamate and its analogs on intracellular calcium levels in the developing retina. Wong RO. **Vis Neurosci** 1995 Sep-Oct;12(5):907-17

IMMUNOLOGY

Tolerance and uveitis [editorial; comment] Bach JF. **Am J Ophthalmol** 1997 May;123(5):684-7 (22 ref.). Comment on: Am J Ophthalmol 1997 May;123(5):583-92.

Autoimmune retinopathy in the absence of cancer. Mizener JB, et al. **Am J Ophthalmol** 1997 May;123(5):607-18

Treatment of uveitis by oral administration of retinal antigens: results of a phase I/II randomized masked trial [see comments] Nussenblatt RB, et al. **Am J Ophthalmol** 1997 May;123(5):583-92. Comment in: Am J Ophthalmol 1997 May;123(5):684-7.

Expression of haematopoietic cell markers by retinal pigment epithelial cells and Muller cells. Russell W, et al. **Biochem Soc Trans** 1997 May;25(2):251S

Spatiotemporal expression of CD15 in the developing chick retina. Andressen C, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):263-71

Biochemical and functional characterization of basal lamina-bound agrin in the chick central nervous system. Kröger S, et al. **Eur J Neurosci** 1996 Mar;8(3):500-9

Sinclair swine with spontaneously regressing cutaneous melanomas do not have autoantibodies against retinal bipolar cells [letter] Alexander KR, et al. **Exp Eye Res** 1996 Sep;63(3):347-9

Humoral response after administration of E1-deleted adenoviruses: immune privilege of the subretinal space. Bennett J, et al. **Hum Gene Ther** 1996 Sep 10;7(14):1763-9

Establishment of an E1A-immortalized retinal cell culture [letter] Seigel GM. **In Vitro Cell Dev Biol Anim** 1996 Feb; 32(2):66-8

Expression of major histocompatibility complex molecules in rodent retina. Immunohistochemical study. Zhang J, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1848-57

Differential APC requirements of self- and nonself-reactive T cells and T cell hybridomas specific for retinal S-antigen. Prasad SA, et al. **J Autoimmun** 1997 Feb;10(1):1-9

Paraneoplastic retinopathy: a novel autoantibody reaction associated with small-cell lung carcinoma. Murphy MA, et al. **J Neuroophthalmol** 1997 Jun;17(2):77-83

Distribution of S100 immunoreactivity in the retina and optic nerve head of the teleost Tinca tinca L. Vecino E, et al. **Microsc Res Tech** 1997 Jan 1;36(1):17-25

Phenotypic analysis of retinal leukocyte infiltration during combined cyclosporin A and nasal antigen administration of retinal antigens: delay and inhibition of macrophage and granulocyte infiltration. Dick AD, et al. **Ocul Immunol Inflamm** 1997 Jun;5(2):129-40

Common antigenicity between Yersinia enterocolitica-derived heat-shock protein and the retina, and its role in uveitis. Tanaka T, et al. **Ophthalmic Res** 1996;28(5):284-8

Nonteratoid medulloepithelioma of the retina with electron microscopic and immunohistochemical characterization. Vadmal M, et al. **Pediatr Pathol Lab Med** 1996 Jul-Aug; 16(4):663-72 (17 ref.)

Investigations of antiretinal antibodies in pigmentary retinopathy and other retinal degenerations. Heckenlively JR, et al. **Trans Am Ophthalmol Soc** 1996;94:179-200; discussion 200-6

Macrophages in human epiretinal and vitreal membranes in patients with proliferative intraocular disorders. Tang S, et al. **Yen Ko Hsueh Pao** 1996 Mar;12(1):28-32

INJURIES

Leukocoria caused by occult penetrating trauma in a child. Guemes A, et al. **Am J Ophthalmol** 1997 Jul;124(1):117-9

Formation and treatment of a traumatic macular hole. Madreperla SA, et al. **Arch Ophthalmol** 1997 Sep; 115(9):1210-1

Retinal GFAP and bFGF expression after multiple argon laser photocoagulation injuries assessed by both immunoreactivity and mRNA levels. Humphrey MF, et al. **Exp Eye Res** 1997 Mar;64(3):361-9

Retinal damage and laser-induced breakdown produced by ultrashort-pulse lasers. Cain CP, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S28-37

Surgical management of traumatic retinal detachment with perfluorocarbon liquid. The Vitreon Study Group. Soheilian M, et al. **Int Ophthalmol** 1996-97;20(5):241-9

Retinal perforation in strabismus surgery. Noel LP, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar-Apr; 34(2):115-7

Clinical characteristics of traumatic macular holes. Yanagiya N, et al. **Jpn J Ophthalmol** 1996;40(4):544-7

Laser induced bubble formation in the retina. Gerstman BS, et al. **Lasers Surg Med** 1996;18(1):10-21

Effect of body temperature on retinal damage by 488 nm light in rat. Gorgels TG, et al. **Microsc Res Tech** 1997 Jan 15;36(2):89-95

Function and morphology of the retinal pigment epithelium after light-induced damage. van Best JA, et al. **Microsc Res Tech** 1997 Jan 15;36(2):77-88

A retained intraretinal foreign body. Arora R, et al. **Ophthalmic Surg Lasers** 1996 Oct;27(10):885-7

Air bag-related ocular injuries. Manche EE, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):246-50

Perforating BB gun injuries of the globe. Pulido JS, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):625-32

Vitrectomy, fluid-gas exchange and transforming growth factor—beta-2 for the treatment of traumatic macular holes. Rubin JS, et al. **Ophthalmology** 1995 Dec; 102(12):1840-5

Retinal injury by neodymium: YAG laser. Lam TT, et al. **Retina** 1996;16(1):42-6

Traumatic retinopathy in Stargardt's disease. Ober RR, et al. **Retina** 1997;17(3):251-4

Severe ocular trauma managed with primary pars plana vitrectomy and silicone oil. Spiegel D, et al. **Retina** 1997; 17(4):275-85

[The reactions of different sections of human embryonic neuroepithelium to damage to the ventricular surface during explantation] Smirnov EB, et al. **Morfologiia** 1997; 111(1):15-8 (Eng. Abstr.) **(Rus)**

[Surgical treatment of retinal detachment with multiple, giant and post-equatorial ruptures] Il'nitskiĭ VV, et al. **Vestn Oftalmol** 1997 Mar-Apr;113(2):3-5 (Eng. Abstr.) **(Rus)**

METABOLISM

A light and electron microscopic radioautographic study on RNA synthesis in the retina of chick embryo. Gunarso W, et al. **Acta Histochem** 1996 Jul;98(3):309-22

D2-dopamine receptor-mediated stimulation of inositol

trisphosphate formation in chick retina. Zawilska JB, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(4):961

Effects of constant and flickering light on retinal metabolism in rabbits. Wang L, et al. **Acta Ophthalmol Scand** 1997 Jun; 75(3):227–31

Glucose metabolism of the inner retina in pigs in darkness and light. Wang L, et al. **Acta Physiol Scand** 1997 May; 160(1):71–4

Glucose metabolism in pig outer retina in light and darkness. Wang L, et al. **Acta Physiol Scand** 1997 May;160(1):75–81

Taurine and diabetes. Humans and experimental models. Franconi F, et al. **Adv Exp Med Biol** 1996;403:579–82

Endogenous mono-ADP-ribosylation in retina and peripheral nervous system. Effects of diabetes. Gorio A, et al. **Adv Exp Med Biol** 1997;419:289–95

Effects of kinase inhibitors and taurine analogues on the phosphorylation of specific proteins in mitochondrial fractions of rat heart and retina. Lombardini JB, et al. **Adv Exp Med Biol** 1996;403:343–50

Presence of opiate alkaloid-selective mu3 receptors in cultured astrocytes and in brain and retina. Makman MH, et al. **Adv Exp Med Biol** 1996;402:23–8

Depletion of feline taurine levels by beta-alanine and dietary taurine restriction. Sturman JA, et al. **Adv Exp Med Biol** 1996;403:19–36

Retinal and brain accretion of long-chain polyunsaturated fatty acids in developing felines: the effects of corn oil-based maternal diets. Pawlosky RJ, et al. **Am J Clin Nutr** 1997 Feb;65(2):465–72

Correlation between enhanced vascular permeability, up-regulation of cellular adhesion molecules and monocyte adhesion to the endothelium in the retina during the development of fatal murine cerebral malaria. Ma N, et al. **Am J Pathol** 1996 Nov;149(5):1745–62

Transgenic mice with increased expression of vascular endothelial growth factor in the retina: a new model of intraretinal and subretinal neovascularization [see comments] Okamoto N, et al. **Am J Pathol** 1997 Jul; 151(1):281–91. Comment in: Am J Pathol 1997 Jul;151(1):13–23.

Oxygen consumption in the avascular guinea pig retina. Cringle S, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1162–5

Intraretinal oxygen distribution and choroidal regulation in the avascular retina of guinea pigs. Yu DY, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H965–73

Neurotrophin receptors expression in the developing mouse retina: an immunohistochemical study. Llamosas MM, et al. **Anat Embryol (Berl)** 1997 Apr;195(4):337–44

Early expression of recoverin in a unique population of neurons in the human retina. Yan XX, et al. **Anat Embryol (Berl)** 1997 Jan;195(1):51–63

GTP-binding proteins coupling to glutamate receptors on bovine retinal membranes. Kikkawa S, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:557–60

Protection of rat retina from ischemia-reperfusion injury by vasoactive intestinal peptide (VIP): the effect of VIP on lipid peroxidation and antioxidant enzyme activity of retina and choroid Tunçel N, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:489–98

Targeted delivery of an antisense oligonucleotide in the retina: uptake, distribution, stability, and effect. Rakoczy PE, et al. **Antisense Nucleic Acid Drug Dev** 1996 Fall; 6(3):207–13

Localization of D1 dopamine receptors in the chicken retina. Firth SI, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S64–6

The effect of form deprivation on retinal leu-enkephalin levels is mediated by a rod-driven pathway. Megaw P, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):58–60

Dopaminergic behaviour in chicken retina and the effect of form deprivation. Megaw PL, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S76–8

cDNA cloning and expression analysis of NeuroD mRNA in human retina. Acharya HR, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):459–63

Advanced glycation end products induce expression of vascular endothelial growth factor by retinal Muller cells. Hirata C, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):712–5

Causal role for jun protein in the stimulation of choline acetyltransferase by insulin in embryonic chick retina. Ren Y, et al. **Biochem Biophys Res Commun** 1997 Mar 27; 232(3):788–93

Affinity purification and characterization of protein gene product 9.5 (PGP9.5) from retina. Piccinini M, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):711–6

Monoclonal antibody, KK1, recognizes human retinal astrocytes and distinguishes a subtype of astrocytes in mouse brain. Kobayashi K, et al. **Brain Res** 1996 Nov 18; 740(1–2):57–65

Distribution of the inositol trisphosphate receptor in the catfish retina. Micci MA, et al. **Brain Res** 1996 May 13; 720(1–2):139–47

Co-localization of carnosine and glutamate in photoreceptors and bipolar cells of the frog retina. Panzanelli P, et al. **Brain Res** 1997 May 30;758(1–2):143–52

Sodium dependency of the inward potassium rectifier in horizontal cells isolated from the white bass retina. Pfeiffer-Linn CL, et al. **Brain Res** 1995 Dec 1; 701(1–2):81–8

Distribution of AMPA-selective glutamate receptor subunits in the cat retina. Qin P, et al. **Brain Res** 1996 Feb 26; 710(1–2):303–7

Immunocytochemical localization of polyamines in the tiger salamander retina. Valentino TL, et al. **Brain Res** 1996 Mar 25;713(1–2):278–85

Calretinin in neurochemically well-defined cell populations of rabbit retina. Völgyi B, et al. **Brain Res** 1997 Jul 18; 763(1):79–86

Do nitric oxide synthase, NMDA receptor subunit R1 and cytochrome oxidase co-localize in the rat central nervous system? Zhang C, et al. **Brain Res** 1996 Aug 12; 729(2):205–15

Growth cone interactions with purified cell and substrate adhesion molecules visualized by interference reflection microscopy. Drazba J, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):183–97

Postnatal development and the differential expression of presynaptic terminal-associated proteins in the developing retina of the Brazilian opossum, Monodelphis domestica. Greenlee MH, et al. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):159–72

The growth-associated protein GAP-43 is specifically expressed in tyrosine hydroxylase-positive cells of the rat retina. Kapfhammer JP, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):257–64

GABA and GABA-A receptors are maximally expressed in association with cone synaptogenesis in neonatal rabbit retina. Mitchell CK, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):63–71

Localization and ontogeny of GLUT3 expression in the rat retina. Watanabe T, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):60–6

Development of the enkephalin-, neurotensin- and somatostatin-like (ENSLI) amacrine cells in the chicken retina. Yang DS, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):57–65

Hormonal and non-hormonal regulation of glutamine synthetase in the developing neural retina. Gorovits R, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):321–9

Use of a high stringency differential display screen for identification of retinal mRNAs that are regulated by a circadian clock. Green CB, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):157–65

Localization of a 42-kDa inositol 1,3,4,5-tetrakisphosphate receptor protein in retina and change in expression after optic nerve injury. Kreutz MR, et al. **Brain Res Mol Brain Res** 1997 May;45(2):283–93

Light-induced c-fos mRNA expression in the suprachiasmatic nucleus and the retina of C3H/HeN mice. Masana MI, et al. **Brain Res Mol Brain Res** 1996 Dec; 42(2):193–201

Sequence analysis of PG10.2, a gene expressed in the pineal gland and the outer nuclear layer of the retina. Wang X, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):269–78

Diurnal expression of recoverin in the rat retina. Wiechmann AF, et al. **Brain Res Mol Brain Res** 1997 May;45(2):321–4

Immunohistochemical localization of GABA in chameleon retina (Chamaleo Chamaleo). Quesada A, et al. **Cell Biol Int** 1996 Jun;20(6):395–400

Nuclear localization signals, DNA binding, and transactivation properties of quail Pax-6 (Pax-QNR) isoforms. Carrière C, et al. **Cell Growth Differ** 1995 Dec; 6(12):1531–40

Signal transduction in the retina and inherited retinopathies. Shastry BS. **Cell Mol Life Sci** 1997 May;53(5):419–29 (160 ref.)

Ca2+ stores in the chick embryo retina cells. Cristóvão AJ, et al. **Cell Signal** 1997 Jan;9(1):97–103

Differential expression of three glutamate transporter subtypes in the rat retina. Rauen T, et al. **Cell Tissue Res** 1996 Dec;286(3):325–36

Immunolocalization of kinesin and cytoplasmic dynein in the retina of the locust Schistocerca gregaria. Stürmer K, et al. **Cell Tissue Res** 1996 Dec;286(3):547–9

Direct measurement of free radicals in ischemic/reperfused diabetic rat retina. Szabo ME, et al. **Clin Neurosci** 1997; 4(5):240–5 (40 ref.)

Retinal development: communication helps you see the light. Wechsler-Reya RJ, et al. **Curr Biol** 1997 Jul 1;7(7):R433–6 (16 ref.)

Heparan sulfate proteoglycan synthesis and its expression are decreased in the retina of diabetic rats. Bollineni JS, et al. **Curr Eye Res** 1997 Feb;16(2):127–30

Retinal vascular endothelial growth factor (VEGF) mRNA expression is altered in relation to neovascularization in oxygen induced retinopathy. Donahue ML, et al. **Curr Eye Res** 1996 Feb;15(2):175–84

Proto-oncogene expression in cAMP and TPA-mediated neuronal differentiation in a human retinal cell line KGLDMSM. Dutt K, et al. **Curr Eye Res** 1996 May; 15(5):477–85

Accumulation of gamma-aminobutyric acid in diabetic rat retinal Müller cells evidenced by electron microscopic immunocytochemistry. Ishikawa A, et al. **Curr Eye Res** 1996 Sep;15(9):958–64

Histidine-like immunoreactivity in the rat retina. Kusakari Y, et al. **Curr Eye Res** 1997 Jun;16(6):600–4

Anti-arrestin immunoreactivity in the human retina: difference between light- and dark-adaptation. Loeffler KU, et al. **Curr Eye Res** 1995 Dec;14(12):1165–8

Retinal dopamine in the recovery from experimental myopia. Pendrak K, et al. **Curr Eye Res** 1997 Feb;16(2):152–7

Immunolocalization of transforming growth factor-alpha and its receptor in the normal and hyperoxia-exposed neonatal rat retina. Powers MR, et al. **Curr Eye Res** 1997 Mar; 16(3):177–82

Ontogenesis of lipids in chick embryo retina. Ruíz-Gutiérrez V, et al. **Curr Eye Res** 1996 Nov;15(11):1138–43

Discrete expression and distribution pattern of TIMP-3 in the human retina and choroid. Vranka JA, et al. **Curr Eye Res** 1997 Feb;16(2):102–10

Reciprocal expression of the Eph receptor Cek5 and its ligand(s) in the early retina. Holash JA, et al. **Dev Biol** 1997 Feb 15;182(2):256–69

A goldfish Notch-3 homologue is expressed in neurogenic regions of embryonic, adult, and regenerating brain and retina. Sullivan SA, et al. **Dev Genet** 1997;20(3):208–23

Changes in the immunoreactivity for inhibin in mouse retina during development of photoreceptor cells. Ying SY, et al. **Dev Neurosci** 1997;19(2):184–8

Thiamine corrects delayed replication and decreases production of lactate and advanced glycation end-products in bovine retinal and human umbilical vein endothelial cells cultured under high glucose conditions [see comments] La Selva M, et al. **Diabetologia** 1996 Nov;39(11):1263–8. Comment in: Diabetologia 1997 Jun;40(6):741–2.

The relationship between accumulation of advanced glycation end products and expression of vascular endothelial growth factor in human diabetic retinas. Murata T, et al. **Diabetologia** 1997 Jul;40(7):764–9

Electrophysiological assessment of retinal dopaminergic deficiency. Bodis-Wollner I. **Electroencephalogr Clin Neurophysiol Suppl** 1996;46:35–41 (29 ref.)

The semidominant Mi(b) mutation identifies a role for the HLH domain in DNA binding in addition to its role in protein dimerization. Steingrímsson E, et al. **EMBO J** 1996 Nov 15;15(22):6280–9

The plasma membrane protein SNAP-25, but not syntaxin, is present at photoreceptor and bipolar cell synapses in the rat retina. Brandstätter JH, et al. **Eur J Neurosci** 1996 Apr;8(4):823–8

Cloning and characterization of a neural cell recognition molecule on axons of the retinotectal system and spinal cord. Brümmendorf T, et al. **Eur J Neurosci** 1997 Jun; 9(6):1105–16

Dopaminergic neurons in the rat retina express dopamine D2/3 receptors. Veruki ML. **Eur J Neurosci** 1997 May; 9(5):1096–100

Reduction of retinal exudates in diabetic retinopathy after heparin-induced extracorporal LDL-precipitation (HELP). A case report. Janknecht P, et al. **Eur J Ophthalmol** 1996 Jul-Sep;6(3):340–2

In situ hybridization analysis of substance P receptor in the rat retina. Kondoh A, et al. **Exp Brain Res** 1996 Nov; 112(2):181–6

The 5' flanking regions of IRBP and arrestin have promoter activity in primary embryonic chicken retina cell cultures. Boatright JH, et al. **Exp Eye Res** 1997 Feb;64(2):269–77

Distribution of lutein and zeaxanthin stereoisomers in the human retina. Bone RA, et al. **Exp Eye Res** 1997 Feb; 64(2):211–8

Multiple kinesin family members expressed in teleost retina and RPE include a novel C-terminal kinesin. Bost-Usinger L, et al. **Exp Eye Res** 1997 May;64(5):781–94

In vitro metabolic competence of the frog retina: effects of glucose and oxygen deprivation. Fliesler SJ, et al. **Exp Eye Res** 1997 May;64(5):683–92

Cellular retinaldehyde binding protein in developing retinal astrocytes. Johnson PT, et al. **Exp Eye Res** 1997 May; 64(5):759–66

Free radicals in rabbit retina under ocular hyperpressure and functional consequences. Muller A, et al. **Exp Eye Res** 1997 Apr;64(4):637–43

Light elicits the release of docosahexaenoic acid from membrane phospholipids in the rat retina in vitro. Reinboth JJ, et al. **Exp Eye Res** 1996 Sep;63(3):277–84

Human papillomavirus-16 E6/E7 transfected retinal cell line expresses the Müller cell phenotype. Roque RS, et al. **Exp Eye Res** 1997 Apr;64(4):519–27

The presence of sigma receptor subtypes in bovine retinal membranes [letter] Senda T, et al. **Exp Eye Res** 1997 May; 64(5):857–60

A splice variant of arrestin from human retina. Smith WC. **Exp Eye Res** 1996 Jun;62(6):585–92

Impairment of excitatory amino acid transporter activity by oxidative stress conditions in retinal cells: effect of antioxidants. Agostinho P, et al. **FASEB J** 1997 Feb; 11(2):154–63

Identification and expression of six family genes in mouse retina. Kawakami K, et al. **FEBS Lett** 1996 Sep 16; 393(2–3):259–63

Molecular cloning, functional expression and chromosomal localization of a human homolog of the cyclic nucleotide-gated ion channel of retinal cone photoreceptors. Yu WP, et al. **FEBS Lett** 1996 Sep 16; 393(2–3):211–5

Abnormalities of retinal metabolism in diabetes or experimental galactosemia. IV. Antioxidant defense system. Kowluru RA, et al. **Free Radic Biol Med** 1997;22(4):587–92

Modification of gonadotropin releasing hormone (GnRH) mRNA expression in the retinal-recipient Thalamus. Foran CM, et al. **Gen Comp Endocrinol** 1997 May;106(2):251–64

Chromosomal localization and genomic organization of genes encoding guanylyl cyclase receptors expressed in olfactory

sensory neurons and retina. Yang RB, et al. **Genomics** 1996 Feb 1;31(3):367–72

Tumor necrosis factor and nitric oxide production by retinal Müller glial cells from rats exhibiting inherited retinal dystrophy. Cotinet A, et al. **Glia** 1997 May;20(1):59–69

Ontogeny and cellular expression of MHC and leucocyte antigens in human retina. Diaz-Araya CM, et al. **Glia** 1995 Dec;15(4):458–70

Loss of inwardly rectifying potassium currents by human retinal glial cells in diseases of the eye. Francke M, et al. **Glia** 1997 Jul;20(3):210–8

Swelling of Müller cells induced by AP3 and glutamate transport substrates in rat retina. Izumi Y, et al. **Glia** 1996 Aug;17(4):285–93

An immunocytochemical study of isolated human retinal Müller cells in culture. Arroyo JG, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jul;235(7):411–4

A comparative study of the effects of argon and diode laser photocoagulation on retinal oxygenation. Funatsu H, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Mar;235(3):168–75

Immunolocalization of ubiquitin and related enzymes in human retina and retinal pigment epithelium. Loeffler KU, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Apr; 235(4):248–54

CD44 expression in the developing human retina. Nishina S, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb; 235(2):92–6

Comparison of tight junction permeability for albumin in iris pigment epithelium and retinal pigment epithelium in vitro. Rezai KA, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan;235(1):48–55

Immunolocalization of basic fibroblast growth factor during wound repair in rat retina after laser photocoagulation. Yamamoto C, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Nov;234(11):695–702

Effects of serotonin on the release of thyrotropin-releasing hormone from the rat retina in vitro. Mitsuma T, et al. **Horm Metab Res** 1996 May;28(5):220–2

Gene transfer into the mouse retina mediated by an adeno-associated viral vector. Ali RR, et al. **Hum Mol Genet** 1996 May;5(5):591–4

Expression of the ceruloplasmin gene in the human retina and brain: implications for a pathogenic model in aceruloplasminemia. Klomp LW, et al. **Hum Mol Genet** 1996 Dec;5(12):1989–96

The role of EPH receptor tyrosine kinase CEK5 and its ligand Cek5-L/ELF-2/LERK2/hElk-L in the development of the chick retina. Sefton M, et al. **Int J Dev Biol** 1996;Suppl 1:143S–144S

Phosphorylated microtubule associated protein (MAP1B-Phos) in the retina during regeneration of the fish optic nerve. Vecino E, et al. **Int J Dev Biol** 1996;Suppl 1:171S–172S

Spatial-temporal expression of calbindin D-28K during embryonic and postnatal development of the fish retina. Vecino E, et al. **Int J Dev Biol** 1996;Suppl 1:217S–218S

Developmentally regulated release of intraretinal neurotrophic factors in vitro. Ary-Pires R, et al. **Int J Dev Neurosci** 1997 Apr;15(2):239–55

Levels of dopamine and noradrenaline in the developing of retina--effect of light deprivation. Shelke RR, et al. **Int J Dev Neurosci** 1997 Feb;15(1):139–43

Alterations in rabbit retina lipid metabolism induced by detachment. Decreased incorporation of [3H]DHA into phospholipids. Santos FF, et al. **Int Ophthalmol** 1995–96; 19(3):149–59

Vascular endothelial growth factor is present in glial cells of the retina and optic nerve of human subjects with nonproliferative diabetic retinopathy. Amin RH, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):36–47

Pax-6, Prox 1, and Chx10 homeobox gene expression correlates with phenotypic fate of retinal precursor cells. Belecky-Adams T, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1293–303

Retinal tubulin binds macular carotenoids. Bernstein PS, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):167–75

Induction of basic fibroblast growth factor mRNA by basic fibroblast growth factor in Müller cells. Cao W, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1358–66

Endothelin expression in ocular tissues of diabetic and insulin-treated rats. Chakravarthy U, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2144–51

Changes in retinal dopaminergic cells and dopamine rhythmic metabolism during the development of a glaucoma-like disorder in quails. Dkhissi O, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2335–44

Herpes simplex virus type 1 alters transcript levels of tumor necrosis factor-alpha and interleukin-6 in retinal glial cells. Drescher KM, et al. **Invest Ophthalmol Vis Sci** 1996 Oct; 37(11):2302–12

Dietary modification of human macular pigment density. Hammond BR Jr, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1795–801

Kallikrein-binding protein levels are reduced in the retinas of streptozotocin-induced diabetic rats. Hatcher HC, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):658–64

Increase of protein tyrosine phosphorylation in rat retina after ischemia-reperfusion injury. Hayashi A, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2146–56

Xenopus Brn-3.0, a POU-domain gene expressed in the developing retina and tectum. Not regulated by innervation. Hirsch N, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):960–9

Nitric oxide enhancement of cholinergic amacrine activity by inhibition of glycine release. Neal M, et al. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1634–9

Modulation of major histocompatibility complex class II expression in retinas with age-related macular degeneration. Penfold PL, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2125–33

Glucose metabolism in cat outer retina. Effects of light and hyperoxia. Wang L, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):48–55

Glucose dependence of glycolysis, hexose monophosphate shunt activity, energy status, and the polyol pathway in retinas isolated from normal (nondiabetic) rats [see comments] Winkler BS, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):62–71. Comment in: Invest Ophthalmol Vis Sci 1997 Jul;38(8):1467–70.

Peroxynitrite and oxidative damage in experimental autoimmune uveitis. Wu GS, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1333–9

Comparative pharmacokinetics of [14C]metosulam (N-[2,6-dichloro-3-methylphenyl]-5,7-dimethoxy-1,2,4-triazolo[1,5a]-pyrimidine-2-sulfonamide) in rats, mice and dogs. Timchalk C, et al. **J Appl Toxicol** 1997 Jan-Feb; 17(1):9–21

Ret 4, a positive acting rhodopsin regulatory element identified using a bovine retina in vitro transcription system. Chen S, et al. **J Biol Chem** 1996 Nov 8;271(45):28549–57

A novel Go-mediated phototransduction cascade in scallop visual cells. Kojima D, et al. **J Biol Chem** 1997 Sep 12; 272(37):22979–82

Contribution of protein kinase C to the phosphorylation of rhodopsin in intact retinas. Udovichenko IP, et al. **J Biol Chem** 1997 Mar 21;272(12):7952–9

A novel form of the G protein beta subunit Gbeta5 is specifically expressed in the vertebrate retina. Watson AJ, et al. **J Biol Chem** 1996 Nov 8;271(45):28154–60

Association of thrombospondin-1 with osteogenic differentiation of retinal pericytes in vitro. Canfield AE, et al. **J Cell Sci** 1996 Feb;109 (Pt 2):343–53

Reactive oxygen intermediates increase vascular endothelial growth factor expression in vitro and in vivo. Kuroki M, et al. **J Clin Invest** 1996 Oct 1;98(7):1667–75

Localisation of amino acid neurotransmitters during postnatal development of the rat retina. Fletcher EL, et al. **J Comp Neurol** 1997 Apr 21;380(4):449–71

Expression of neurotrophins and trk receptors in the avian retina. Hallböök F, et al. **J Comp Neurol** 1996 Jan 22; 364(4):664–76

Immunocytochemical localization of the GABA(C) receptor rho subunits in the cat, goldfish, and chicken retina. Koulen P, et al. **J Comp Neurol** 1997 Apr 21;380(4):520–32

A calbindin-immunoreactive cone bipolar cell type in the rabbit retina. Massey SC, et al. **J Comp Neurol** 1996 Feb 26;366(1):15–33

Immunoglobulin molecules are present in early-generated neuronal populations in the rat cerebral cortex and retina. Upender MB, et al. **J Comp Neurol** 1997 Jul 28; 384(2):271–82

Effect of constant and fluctuating temperature on daily melatonin production by eyecups from Rana perezi. Valenciano AI, et al. **J Comp Physiol [B]** 1997 Apr; 167(3):221–8

Polyunsaturated fatty acid metabolism in retinal and cerebral microvascular endothelial cells. Delton-Vandenbrouke I, et al. **J Lipid Res** 1997 Jan;38(1):147–59

The developing avian retina expresses agrin isoforms during synaptogenesis. Kröger S, et al. **J Neurobiol** 1996 Feb; 29(2):165–82

Aberrant expression of c-Fos accompanies photoreceptor cell death in the rd mouse. Rich KA, et al. **J Neurobiol** 1997 Jun 5;32(6):593–612

Capacitative Ca2+ influx in the neural retina of chick embryo. Sakaki Y, et al. **J Neurobiol** 1997 Jan;32(1):62–8

Serum opens tight junctions and reduces ZO-1 protein in retinal epithelial cells. Chang C, et al. **J Neurochem** 1997 Aug;69(2):859–67

Evidence for multiple, local functions of ciliary neurotrophic factor (CNTF) in retinal development: expression of CNTF and its receptors and in vitro effects on target cells. Kirsch M, et al. **J Neurochem** 1997 Mar;68(3):979–90

Expression of pituitary adenylate cyclase-activating polypeptide (PACAP) receptors and PACAP in human fetal retina. Olianas MC, et al. **J Neurochem** 1997 Sep; 69(3):1213–8

Adenosine triphosphate degradation products after oxidative stress and metabolic dysfunction in cultured retinal cells. Rego AC, et al. **J Neurochem** 1997 Sep;69(3):1228–35

Preparation and characterization of monoclonal antibodies specific for lauroylated isoform of bovine transducin alpha-subunit: immunohistochemical analysis of bovine retinas. Shouno O, et al. **J Neurochem** 1996 May; 66(5):2188–96

Mosaics of islet-1-expressing amacrine cells assembled by short-range cellular interactions. Galli-Resta L, et al. **J Neurosci** 1997 Oct 15;17(20):7831–8

Expression and clustered distribution of an inwardly rectifying potassium channel, KAB-2/Kir4.1, on mammalian retinal Müller cell membrane: their regulation by insulin and laminin signals. Ishii M, et al. **J Neurosci** 1997 Oct 15;17(20):7725–35

Group I metabotropic glutamate receptors mGluR1alpha and mGluR5a: localization in both synaptic layers of the rat retina. Koulen P, et al. **J Neurosci** 1997 Mar 15; 17(6):2200–11

Retinoic acid synthesis in the developing chick retina. Mey J, et al. **J Neurosci** 1997 Oct 1;17(19):7441–9

Depletion and replenishment of vesicle pools at a ribbon-type synaptic terminal. von Gersdorff H, et al. **J Neurosci** 1997 Mar 15;17(6):1919–27

Flk-1, a receptor for vascular endothelial growth factor (VEGF), is expressed by retinal progenitor cells. Yang K, et al. **J Neurosci** 1996 Oct 1;16(19):6089–99

Measurement of purine nucleoside concentration in the intact rat retina. Roth S, et al. **J Neurosci Methods** 1996 Sep; 68(1):87–90

Glutamate release by the intact light-responsive photoreceptor layer of the Xenopus retina. Schmitz Y, et al. **J Neurosci Methods** 1996 Sep;68(1):55–60

Taurine in gerbil retina: changes during ischemia reperfusion/insult (I.R.I.) and aging. Delbarre B, et al. **J Ocul Pharmacol Ther** 1996 Spring;12(1):65–73

Inhibitory effects of tetrandrine on intracellular free Ca2+ increase induced by glutamate, serotonin and histamine in dissociated retina cells. Xuan B, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):331–6

Hypothermia and metabolic stress: narrowing the cellular site of early neuroprotection. Zeevalk GD, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):332–9

Effects of photoreceptor metabolism on interstitial and glial cell pH in bee retina: evidence of a role for NH4+. Coles JA, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):305–18

Intracellular ATP activates inwardly rectifying K+ channels in human and monkey retinal Müller (glial) cells. Kusaka S, et al. **J Physiol (Lond)** 1997 May 1;500 (Pt 3):593–604

Ca2+ responses to ATP via purinoceptors in the early embryonic chick retina. Sugioka M, et al. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):855–63

Cotransport of H+, lactate and H2O by membrane proteins in retinal pigment epithelium of bullfrog. Zeuthen T, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):3–17

Retinal melatonin is not involved in corneal mitotic rhythms in the Japanese quail: effects of formoguanamine hydrochloride and eye-lid suture. Oishi T, et al. **J Pineal Res** 1996 Oct;21(3):149–54

Lectin-histochemical study of O-linked glycoconjugates in dysplastic retina of Norrie disease. Uehara F, et al. **Jpn J Ophthalmol** 1996;40(2):251–4

Gene expressions of basic fibroblast growth factor and its receptor in healing of rat retina after laser photocoagulation. Yamamoto C, et al. **Jpn J Ophthalmol** 1996;40(4):480–90

Increasing dietary linoleic acid in young rats increases and then decreases docosahexaenoic acid in retina but not in brain. Su HM, et al. **Lipids** 1996 Dec;31(12):1289–98

Dopaminergic and GABAergic retinal cell populations in mammals. Nguyen-Legros J, et al. **Microsc Res Tech** 1997 Jan 1;36(1):26–42 (140 ref.)

Molecular and pharmacological identity of the alpha 2D-adrenergic receptor subtype in bovine retina and its photoreceptors. Venkataraman V, et al. **Mol Cell Biochem** 1996 Jun 21;159(2):129–38

Melatonin receptor antagonists that differentiate between the human Mel1a and Mel1b recombinant subtypes are used to assess the pharmacological profile of the rabbit retina ML1 presynaptic heteroreceptor. Dubocovich ML, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):365–75

Expression of beta 1-4 N-acetylgalactosaminyltransferase gene in the developing rat brain and retina: mRNA, protein immunoreactivity and enzyme activity. Daniotti JL, et al. **Neurochem Int** 1997 Jul;31(1):11–9

Two modes of stimulation by ammonia of taurine release from cultured rabbit Müller cells. Faff L, et al. **Neurochem Int** 1997 Aug;31(2):301–5

Antigens associated with specific retinal cells are affected by ischaemia caused by raised intraocular pressure: effect of glutamate antagonists. Osborne NN, et al. **Neurochem Int** 1996 Sep;29(3):263–70

Characterization of [2-3H]deoxy-D-glucose uptake in retina and retinal pigment epithelium of normal and diabetic rats. Vilchis C, et al. **Neurochem Int** 1996 Feb;28(2):213–9

High levels of extracellular glutamate are present in retina during neonatal development. Haberecht MF, et al. **Neurochem Res** 1996 Feb;21(2):285–91

Glutamate receptor agonists evoked Ca(2+)-dependent and Ca(2+)-independent release of [3H]D-aspartate from cultured chick retina cells. Santos PF, et al. **Neurochem Res** 1996 Mar;21(3):361–8

Effect of diabetes on levels and uptake of putative amino acid neurotransmitters in rat retina and retinal pigment epithelium. Vilchis C, et al. **Neurochem Res** 1996 Oct; 21(10):1167–71

Localization of laminin chains in the human retina: possible implications for congenital muscular dystrophy associated with alpha 2-chain of laminin deficiency. Toti P, et al. **Neuromuscul Disord** 1997 Jan;7(1):21–5

The alpha 4 subunit of the GABAA receptors from rat brain and retina. Khan ZU, et al. **Neuropharmacology** 1996; 35(9-10):1315–22

Immunocytochemical demonstration of alpha 2-M-R/LRP on Müller (glial) cells isolated from rabbit and human retina. Birkenmeier G, et al. **Neuroreport** 1996 Dec 20; 8(1):149–51

RETINA

Expression of beta-amyloid precursor protein immunoreactivity in the retina of the rat during normal development and after neonatal optic tract lesion. Chen ST, et al. **Neuroreport** 1997 Feb 10;8(3):713-7

Light controls scleral precursor synthesis. Devadas M, et al. **Neuroreport** 1996 Aug 12;7(12):2010-2

Expression of the P2X2 receptor subunit of the ATP-gated ion channel in the retina. Greenwood D, et al. **Neuroreport** 1997 Mar 24;8(5):1083-8

Localization of gamma-aminobutyric acid (GABA) receptor rho 3 subunit in rat retina. Ogurusu T, et al. **Neuroreport** 1997 Mar 3;8(4):925-7

GABA transamination regulates neuronal glutamate content in the retina. Pow DV, et al. **Neuroreport** 1996 Nov 4; 7(15-17):2683-6

The rho 1 GABA receptor cloned from rat retina is down-modulated by protons. Wegelius K, et al. **Neuroreport** 1996 Aug 12;7(12):2005-9

Expression of glutamate receptor subunit genes during development of the mouse retina. Zhang C, et al. **Neuroreport** 1996 Dec 20;8(1):335-40

Signal-regulated proteins and fibroblast growth factor receptors: comparative immunolocalization in rat retina. Blanquet PR, et al. **Neurosci Lett** 1996 Aug 23; 214(2-3):135-8

Fos expression in the retina of rd/rd mice during the light/dark cycle. Huerta JJ, et al. **Neurosci Lett** 1997 Sep 5;232(3):143-6

Nitric oxide enhances amino acid release from immature chick embryo retina. Ientile R, et al. **Neurosci Lett** 1996 Nov 22;219(2):79-82

Bilateral biochemical and biophysical retinal changes after unilateral ocular trauma in the mouse. Lam WL, et al. **Neurosci Lett** 1996 Oct 25;218(1):1-4

Localization of heme oxygenase in rat retina: effect of light adaptation. Nishimura RN, et al. **Neurosci Lett** 1996 Feb 16;205(1):13-6

Immunocytochemical localization of the high-affinity glutamate transporter, EAAC1, in the retina of representative vertebrate species. Schultz K, et al. **Neurosci Lett** 1996 Jun 28;211(3):191-4

Intracellular free Na+ concentration increases in cultured retinal cells under oxidative stress conditions. Agostinho P, et al. **Neurosci Res** 1996 Aug;25(4):343-51

Oxidative stress affects the selective ion permeability of voltage-sensitive Ca2+ channels in cultured retinal cells. Agostinho P, et al. **Neurosci Res** 1997 Apr;27(4):323-34

Two components of transmitter release in retinal bipolar cells: exocytosis and mobilization of synaptic vesicles. Sakaba T, et al. **Neurosci Res** 1997 Apr;27(4):357-70

En-2 regulates the expression of the ligands for Eph type tyrosine kinases in chick embryonic tectum. Shigetani Y, et al. **Neurosci Res** 1997 Mar;27(3):211-7

A ventrodorsal GABA gradient in the embryonic retina prior to expression of glutamate decarboxylase. Eliasson MJ, et al. **Neuroscience** 1997 Aug;79(3):863-9

Activity-dependent transport of GABA analogues into specific cell types demonstrated at high resolution using a novel immunocytochemical strategy. Pow DV, et al. **Neuroscience** 1996 Aug;73(4):1129-43

N-methyl-D-aspartate receptors containing the NR2D subunit in the retina are selectively expressed in rod bipolar cells. Wenzel A, et al. **Neuroscience** 1997 Jun;78(4):1105-12

Differential tumor necrosis factor and nitric oxide production in retinal Müller glial cells from C3H/HeN and C3H/HeJ mice. Cotinet A, et al. **Ocul Immunol Inflamm** 1997 Jun; 5(2):111-6

Tumor necrosis factor and nitric oxide production by resident retinal glial cells from rats presenting hereditary retinal degeneration. de Kozak Y, et al. **Ocul Immunol Inflamm** 1997 Jun;5(2):85-94

Increased cytokine gene expression in rat retina following transient ischemia. Hangai M, et al. **Ophthalmic Res** 1996; 28(4):248-54

In situ localization of basic fibroblast growth factor protein and mRNA in the retina. Ohsato M, et al. **Ophthalmic Res** 1997;29(1):24-30

Nitric oxide in retinal and choroidal blood flow autoregulation in newborn pigs: interactions with prostaglandins. Hardy P, et al. **Pediatr Res** 1996 Mar; 39(3):487-93

Presence and distribution of a new neuropeptide, secretoneurin, in human retina. Overdick B, et al. **Peptides** 1996;17(1):1-4

Excitatory amino acid transporter 5, a retinal glutamate transporter coupled to a chloride conductance. Arriza JL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4155-60

RGS-r, a retinal specific RGS protein, binds an intermediate conformation of transducin and enhances recycling. Chen CK, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12885-9

The core domain of a new retina specific RGS protein stimulates the GTPase activity of transducin in vitro. Faurobert E, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2945-50

rax, a novel paired-type homeobox gene, shows expression in the anterior neural fold and developing retina. Furukawa T, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3088-93

Stable and efficient gene transfer into the retina using an HIV-based lentiviral vector. Miyoshi H, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10319-23

Evidence for induction of interferon-alpha and interferon-beta in retinal glial cells of Müller. Drescher KM, et al. **Virology** 1997 Aug 4;234(2):309-16

Localization of the CD15 carbohydrate epitope in the vertebrate retina. Andressen C, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):253-62

Expression of opsin mRNA in normal and vitamin A deficient retinas of the sphingid moth Manduca sexta. Chase MR, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):353-8

Analysis of the distribution of glycine and GABA in amacrine cells of the developing rabbit retina: a comparison with the ontogeny of a functional GABA transport system in retinal neurons. Crook DK, et al. **Vis Neurosci** 1997 Jul-Aug;14(4):751-63

Calretinin in the cat retina: colocalizations with other calcium-binding proteins, GABA and glycine. Goebel DJ, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):311-22

GABA-induced increases in [Ca2+]i in retinal neurons of postnatal rabbits. Huang BO, et al. **Vis Neurosci** 1996 May-Jun;13(3):441-7

Ontogeny of the opioid growth factor, [Met5]-enkephalin, and its binding activity in the rat retina. Isayama T, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):939-50

Na(+)- and Cl(-)-dependent neurotransmitter transporters in bovine retina: identification and localization by in situ hybridization histochemistry. Jones EM. **Vis Neurosci** 1995 Nov-Dec;12(6):1135-42

Identification and localization of K+ channels in the mouse retina. Klumpp DJ, et al. **Vis Neurosci** 1995 Nov-Dec; 12(6):1177-90

Angiotensin II in the rabbit retina. Kohler K, et al. **Vis Neurosci** 1997 Jan-Feb;14(1):63-71

Neuropeptide Y and enkephalin immunoreactivity in retinorecipient nuclei of the hamster pretectum and thalamus. Morin LP, et al. **Vis Neurosci** 1997 Jul-Aug; 14(4):765-77

Modulation of endogenous dopamine release in the fish retina by light and prolonged darkness. Weiler R, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):351-6

Effects of glutamate and its analogs on intracellular calcium levels in the developing retina. Wong RO. **Vis Neurosci** 1995 Sep-Oct;12(5):907-17

Müller cells in the retina of the cane toad, Bufo marinus, express neuropeptide Y-like immunoreactivity. Zhu BS, et al. **Vis Neurosci** 1996 May-Jun;13(3):501-8

Possible role of the Müller cell in uptake and metabolism of glutamate in the mammalian outer retina. Derouiche A. **Vision Res** 1996 Dec;36(24):3875-8

[Ca2+]i regulation by glutamate receptor agonists in cultured chick retina cells. Duarte CB, et al. **Vision Res** 1996 Apr; 36(8):1091-102

Reduction of red-green discrimination by dopamine D1 receptor antagonists and retinal dopamine depletion. Mora-Ferrer C, et al. **Vision Res** 1996 Dec;36(24):4035-44

Protein kinase C does not mediate the dopamine-dependent modulation of glutamate receptors in retinal horizontal cells of the perch (Perca fluviatilis). Schmidt KF. **Vision Res** 1996 Dec;36(24):3939-42

Ca(2+)-dependency of spinule plasticity at dendrites of retinal horizontal cells and its possible implication for the functional role of spinules. Weiler R, et al. **Vision Res** 1996 Dec;36(24):3891-900

Characterization of glutamate transporter function in the tiger salamander retina. Yang JH, et al. **Vision Res** 1997 Apr;37(7):827-38

[A study on changes of levels of products of lipid peroxidation in retina of rat with experimental autoimmune uveoretinitis] Sun X, et al. **Chung Hua Yen Ko Tsa Chih** 1996 Mar;32(2):140-2 (Eng. Abstr.) **(Chi)**

[Effects of retinal intrinsic dopamine on the in in vivo electroretinogram of rabbits] Kobayashi A, et al. **Nippon Ganka Gakkai Zasshi** 1996 Feb;100(2):111-7 (Eng. Abstr.) **(Jpn)**

[cGMP synthesis induced by atrial natriuretic peptide, C-type natriuretic peptide, and nitric oxide in the rat retina] Moriwaki Y, et al. **Nippon Ganka Gakkai Zasshi** 1996 Mar; 100(3):187-91 (Eng. Abstr.) **(Jpn)**

[Retinal dopamine studies (editorial)] Uji Y. **Nippon Ganka Gakkai Zasshi** 1996 Feb;100(2):99-100 **(Jpn)**

[Evaluation of parameters of an enzymatic reaction and stationary distribution of oxygen in the choroid and retina] Shlygin VV, et al. **Biofizika** 1996 May-Jun;41(3):672-7 (Eng. Abstr.) **(Rus)**

[Structural and functional disorders of transcapillary metabolism if retina in patients with diabetic retinopathy] Sorokin EL, et al. **Vestn Oftalmol** 1997 Mar-Apr; 113(2):16-9 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Surgical removal of a subretinal proliferating cysticercus of taeniaeformis crassiceps. Chuck RS, et al. **Arch Ophthalmol** 1997 Apr;115(4):562-3

Subretinal migration of a nematode in a patient with diffuse unilateral subacute neuroretinitis. Gass JD. **Arch Ophthalmol** 1996 Dec;114(12):1526-7

Diffuse unilateral subacute neuroretinitis. Report of transvitreal surgical removal of a subretinal nematode. de Souza EC, et al. **Ophthalmology** 1995 Aug;102(8):1183-6

PATHOLOGY

Precise correlation of histopathological and fluorescein angiographic morphology using retinal vascular casting. Bek T, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):547-52

Retinal examination intervals in diabetic patients on diet treatment only. Hansson-Lundblad C, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):244-8

Retinal nerve fiber layer abnormalities in Alzheimer's disease. Hedges TR 3rd, et al. **Acta Ophthalmol Scand** 1996 Jun; 74(3):271-5

Subretinal aspiration biopsy of ocular lymphoma. Ciulla TA, et al. **Am J Ophthalmol** 1997 Mar;123(3):420-2

Echographic measurement of optic nerve thickness correlated with neuroretinal rim area and visual field defect in glaucoma. Dichtl A, et al. **Am J Ophthalmol** 1996 Oct; 122(4):514-9

Epiretinal membrane and traction retinal detachment complicating laser-induced chorioretinal venous anastomosis. Luttrull JK. **Am J Ophthalmol** 1997 May; 123(5):698-9

In vivo detection of perineural circular arterial anastomosis (circle of Zinn-Haller) in a patient with large peripapillary chorioretinal atrophy. Park KH, et al. **Am J Ophthalmol** 1996 Dec;122(6):905-7

Fluorescein angiography of peripheral retina and pars plana during vitrectomy for proliferative diabetic retinopathy. Terasaki H, et al. **Am J Ophthalmol** 1997 Mar;123(3):370-6

Argon laser retinal lesions evaluated in vivo by optical coherence tomography. Toth CA, et al. **Am J Ophthalmol** 1997 Feb;123(2):188-98

Three-dimensional measurements of central serous chorioretinopathy using a scanning laser tomograph. Weinberger D, et al. **Am J Ophthalmol** 1996 Dec; 122(6):864-9

Transgenic mice with increased expression of vascular endothelial growth factor in the retina: a new model of intraretinal and subretinal neovascularization [see comments] Okamoto N, et al. **Am J Pathol** 1997 Jul; 151(1):281-91. Comment in: Am J Pathol 1997 Jul;151(1):13-23.

Subretinal fibrosis in diabetic macular edema. ETDRS report 23. Early Treatment Diabetic Retinopathy Study Research Group. Fong DS, et al. **Arch Ophthalmol** 1997 Jul; 115(7):873-7

Photographic and angiographic characterization of the retina of Kenyan children with severe malaria. Hero M, et al. **Arch Ophthalmol** 1997 Aug;115(8):997-1003

Osseous metaplasia in a preretinal membrane [published erratum appears in Arch Ophthalmol1997 May;115(5):589] Loewenstein JI, et al. **Arch Ophthalmol** 1997 Jan; 115(1):117-9

Familial internal limiting membrane dystrophy. A new sheen retinal dystrophy. Polk TD, et al. **Arch Ophthalmol** 1997 Jul;115(7):878-85

Subretinal fluid associated with membranoproliferative glomerulonephritis type 2 [letter] Polk TD, et al. **Arch Ophthalmol** 1997 Jul;115(7):927-8

Preservation of the inner retina in retinitis pigmentosa. A morphometric analysis. Santos A, et al. **Arch Ophthalmol** 1997 Apr;115(4):511-5

Mobile retinal photography. A means of screening for diabetic retinopathy in aboriginal communities. Karagiannis A, et al. **Aust N Z J Ophthalmol** 1996 Nov;24(4):333-7

Delayed acute retinal necrosis after herpetic encephalitis [letter] Pavésio CE, et al. **Br J Ophthalmol** 1997 May; 81(5):415-6

Retinal findings in adult leukaemia: correlation with leukocytosis. Jackson N, et al. **Clin Lab Haematol** 1996 Jun;18(2):105-9

Age-related distribution of cones and ON-bipolar cells in the rd mouse retina. Ogilvie JM, et al. **Curr Eye Res** 1997 Mar;16(3):244-51

Canine rod transducin alpha-1: cloning of the cDNA and evaluation of the gene as a candidate for progressive retinal atrophy. Ray K, et al. **Curr Eye Res** 1997 Jan;16(1):71-7

Morphological and physiological consequences of the selective elimination of rod photoreceptors in transgenic mice. McCall MA, et al. **Exp Eye Res** 1996 Jul;63(1):35-50

Hypofluorescent spots in indocyanine green angiography of peau d'orange and fundus. Shiraki K, et al. **Int Ophthalmol** 1997;21(1):43-50

Electrophysiology and density of retinal neurons in mice with a mutation that includes the Pax2 locus. Green DG, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):919-29

Evaluation of a new self-screening chart for cytomegalovirus retinitis in patients with AIDS. Teich SA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 1;13(4):336-42

Understanding angioid streaks. Gurwood AS, et al. **J Am Optom Assoc** 1997 May;68(5):309-24 (95 ref.)

Ophthalmomyiasis interna posterior and pigmentary retinopathy of Guam. Hira NK, et al. **J Am Optom Assoc** 1997 Jul;68(7):452-8 (23 ref.)

Grading diabetic retinopathy from a computer screen. Leverton C. **J Audiov Media Med** 1996 Dec;19(4):176

Quantitative estimation of retinal nerve fiber layer height in glaucoma and the relationship with optic nerve head topography and visual field. Eid TM, et al. **J Glaucoma** 1997 Aug;6(4):221-30

Photographic documentation of the loss of medullated nerve fibers of the retina in uncontrolled primary open angle glaucoma. Katz SE, et al. **J Glaucoma** 1996 Dec;5(6):406-9

Changes in CD44 and ApoE immunoreactivities due to retinal pathology of man and rat. Kuhrt H, et al. **J Hirnforsch** 1997;38(2):223–9

Three histopathological types of retinoblastoma and their relation to heredity and age of enucleation. Moll AC, et al. **J Med Genet** 1996 Nov;33(11):923–27

Once more, with color—Saturn-like" retinopathy [letter] Miller BA. **J Pediatr Ophthalmol Strabismus** 1996 Jan–Feb; 33(1):69

Retinal examinations in infants after extracorporeal membrane oxygenation. Varn MM, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun; 34(3):182–5

Epiretinal membrane formation in Terson syndrome. Yokoi M, et al. **Jpn J Ophthalmol** 1997 May–Jun;41(3):168–73

Mapping and retinal phenotype of the hugger mutation in the mouse. Sidman RL, et al. **Mamm Genome** 1997 Jun; 8(6):399–402

The fundus in malignant hypertension. Gallasch G, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1518–9

Retinal pathology in Alzheimer's disease. II. Regional neuron loss and glial changes in GCL. Blanks JC, et al. **Neurobiol Aging** 1996 May–Jun;17(3):385–95

The Wisconsin Age-related Macular Degeneration grading system: performance in an independent centre. Sparrow JM, et al. **Ophthalmic Epidemiol** 1997 Mar;4(1):49–55

Bilateral epiretinal membranes: a new finding in Hunter syndrome. Narita AS, et al. **Ophthalmic Genet** 1996 Jun; 17(2):75–8

Epiretinal fibrosis. Ciulla TA, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):670–9 (72 ref.)

Magnetic resonance imaging in the evaluation of eyes treated with silicone oil. Kaynak S, et al. **Ophthalmic Surg Lasers** 1996 Dec;27(12):1019–23

Magnetic resonance imaging findings in a case of advanced Coats' disease. Lai WW, et al. **Ophthalmic Surg Lasers** 1996 Mar;27(3):234–8

Subretinal lesions following a scleral buckling procedure. Piguet B, et al. **Ophthalmologica** 1997;211(2):112–4

Application of rapid scanning retinal thickness analysis in retinal diseases. Asrani S, et al. **Ophthalmology** 1997 Jul; 104(7):1145–51

Retinal nerve fiber layer changes and visual field loss in idiopathic intracranial hypertension. Hedges TR 3rd, et al. **Ophthalmology** 1995 Aug;102(8):1242–7

Subretinal fibrosis in central serous chorioretinopathy. Schatz H, et al. **Ophthalmology** 1995 Jul;102(7):1077–88

Reproducibility of nerve fiber layer thickness measurements using optical coherence tomography. Schuman JS, et al. **Ophthalmology** 1996 Nov;103(11):1889–98

Correlation between scanning laser ophthalmoscope microperimetry and anatomic abnormalities in patients with subfoveal neovascularization. Tezel TH, et al. **Ophthalmology** 1996 Nov;103(11):1829–36

Three-dimensional measurements of idiopathic macular holes using a scanning laser tomograph. Weinberger D, et al. **Ophthalmology** 1995 Oct;102(10):1445–9

Early stage of human adenovirus type 12-inoculated retinal tissue of F344 newborn rat. Kato Y, et al. **Pathol Int** 1996 Aug;46(8):548–56

Pigmentary degeneration induced by N-methyl-N-nitrosourea and the fate of pigment epithelial cells in the rat retina. Nakajima M, et al. **Pathol Int** 1996 Nov;46(11):874–82

Morphologic characteristics of N-methyl-N-nitrosourea-induced retinal degeneration in C57BL mice. Nambu H, et al. **Pathol Int** 1997 Jun; 47(6):377–83

Glutamine synthetase protects against neuronal degeneration in injured retinal tissue. Gorovits R, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):7024–9

Nitric oxide synthase (NOS) inhibitors ameliorate retinal damage induced by ischemia in rats. Lam TT, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jun;92(3):329–40

The Agar sandwich technique for retinal biopsy processing. Banker AS, et al. **Retina** 1996;16(6):530–4

Circumpapillary chorioretinopathy in multiple evanescent white-dot syndrome. Barile GR, et al. **Retina** 1997; 17(1):75–7

Morphologic studies of the peripheral vitreoretinal interface in humans reveal structures implicated in the pathogenesis of retinal tears. Dunker S, et al. **Retina** 1997;17(2):124–30

White-centered retinal hemorrhages in ocular toxoplasmosis. Hayashi S, et al. **Retina** 1997;17(4):351–2

Early versus late staining of microaneurysms in fluorescein angiography. Jalli PY, et al. **Retina** 1997;17(3):211–5

Myelinated nerve fibers and retinal vascular abnormalities. Leys AM, et al. **Retina** 1996;16(2):89–96

Epiretinal membrane formation can occur in adult Coats' disease [letter] Machemer R. **Retina** 1996;16(2):168–9

Diagnostic and therapeutic challenges. Schatz H, et al. **Retina** 1997;17(3):247–50

Turned on by Ca2+! The physiology and pathology of Ca(2+)-binding proteins in the retina. Polans A, et al. **Trends Neurosci** 1996 Dec;19(12):547–54 (69 ref.)

Status spongiosis, optic neuropathy, and retinal degeneration in Helichrysum argyrosphaerum poisoning in sheep and a goat. van der Lugt JJ, et al. **Vet Pathol** 1996 Sep; 33(5):495–502

[The retinal nerve fiber network layer in glaucoma. I. Introduction and methods] Kraus H, et al. **Cesk Slov Oftalmol** 1996 Sep;52(4):207–9 (Eng. Abstr.) **(Cze)**

[Can the extent of glaucoma damage be quantified with laser polarimetry by in vivo measurement of retinal nerve fiber density? A clinical study] Sergunh S, et al. **Ophthalmologe** 1996 Oct;93(5):527–34 (Eng. Abstr.) **(Ger)**

[Value of scanning laser ophthalmoscopy and polarimetry compared with perimetry in evaluating glaucomatous changes in the optic papilla and nerve fiber layer] Stürmer J, et al. **Ophthalmologe** 1996 Oct;93(5):520–6 (Eng. Abstr.) **(Ger)**

[The fellow eye in patients with retinal detachment associated with atopic dermatitis] Arima T, et al. **Nippon Ganka Gakkai Zasshi** 1996 Mar;100(3):219–22 (Eng. Abstr.) **(Jpn)**

[Parapapillary chorioretinal atrophy and parapapillary avascular area in glaucoma] Funaki S, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jul;101(7):598–604 (Eng. Abstr.) **(Jpn)**

[Comparative study on diode laser (680 nm) and krypton laser mild photocoagulation—histological findings and therapeutic outcome for diabetic maculopathy] Okuyama M, et al. **Nippon Ganka Gakkai Zasshi** 1996 Sep; 100(9):692–7 (Eng. Abstr.) **(Jpn)**

[Comparison of retinal breaks between patients with atopic dermatitis and mentally retarded patients with self-inflicted ocular injury] Suzuki J, et al. **Nippon Ganka Gakkai Zasshi** 1997 May;101(5):446–9 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

The role of nitric oxide in hyperaemic response to flicker in the retina and optic nerve in cats. Kondo M, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):232–5

Full-field electroretinograms in a family with Mohr-Tranebjaerg syndrome. Ponjavic V, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):632–5

Tauret. A taurine-related endogenous substance in the retina and its role in vision. Petrosian AM, et al. **Adv Exp Med Biol** 1996;403:333–42

Retinal regeneration: common principles but a diversity of mechanisms. Raymond PA, et al. **Adv Neurol** 1997; 72:171–84 (110 ref.)

Pattern-reversal visual evoked potentials in patients with epiretinal membrane. Bemelmans NA, et al. **Am J Ophthalmol** 1997 Jan;123(1):97–102

A simple analog of visual field retinal projection. Eblen-Zajjur A. **Am J Physiol** 1997 Jun;272(6 Pt 3):S15–8

Dihydropyridine-sensitive calcium current mediates neurotransmitter release from retinal bipolar cells. Tachibana M, et al. **Ann N Y Acad Sci** 1993 Dec 20; 707:359–61

Effect of dietary n-3 deficiency on the electroretinogram in the guinea pig. Weisinger HS, et al. **Ann Nutr Metab** 1996;40(2):91–8

Correlations between observability of the spatial frequency doubled illusion and a multi-region pattern electroretinogram. Bedford S, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S91–3

Modelling oxygen consumption across an avascular retina. Cringle S, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):70–2

Retinal control of scleral precursor synthesis. Devadas M, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S73–5

A circadian component of the retinal dark-light switch. Firth SI, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):85–7

Temporal analysis of the VEP: evidence for separable magnocellular and parvocellular contributions. Klistorner A, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):32–4

Deprivation of form vision suppresses diurnal cycling of retinal levels of leu-enkephalin. McKenzie C, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S79–81

A multiple-frequency, multiple-region pattern electroretinogram investigation of non-linear retinal signals. Maddess T, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S94–7

A fundamental step-transition in retinal function at low light intensities. Morgan IG, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S70–2 (15 ref.)

Complexity of dopaminergic function in the retinal dark-light switch. Morgan IG, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):56–8 (13 ref.)

A light-driven rhythm in neurotensin-like immunoreactivity in the chicken retina. Yang DS, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S67–9

Visual processing during high frequency head oscillation. Flipse JP, et al. **Aviat Space Environ Med** 1996 Jul; 67(7):625–32

Correlating increased ocular and systemic blood pressures with neuroretinal function. Kergoat H, et al. **Aviat Space Environ Med** 1996 Dec;67(12):1174–8

Inhibition of lipid peroxidation by N-acetylserotonin and its role in retinal physiology. Longoni B, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):778–80

Electrophysiological characterization of ionic transport by the retinal exchanger expressed in human embryonic kidney cells. Navanglone A, et al. **Biophys J** 1997 Jul;73(1):45–51

Functional imaging of the retina using the multifocal electroretinograph: a control study. Parks S, et al. **Br J Ophthalmol** 1996 Sep;80(9):831–4

Pineal metabolic reaction to retinal photostimulation in ganglionectomized rats. Bartol I, et al. **Brain Res** 1997 Jan 2;744(1):77–82

Horizontal cell electrical coupling in the giant danio: synaptic modulation by dopamine and synaptic maintenance by calcium. McMahon DG, et al. **Brain Res** 1996 Apr 29; 718(1–2):89–96

Analysis of the retinohypothalamic tract in congenic albino and pigmented rats. Miller AM, et al. **Brain Res** 1996 Nov 25;741(1–2):348–51

Demonstration of direct input from the retina to the lateral habenular nucleus in the albino rat. Qu T, et al. **Brain Res** 1996 Feb 19;709(2):251–58

OFF pathway is preferentially suppressed by the activation of GABA(A) receptors in carp retina. Zhang DQ, et al. **Brain Res** 1997 Jun 6;759(1):160–2

Surface representation in the visual system. Komatsu H, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1–2):97–104

Stimulus-driven facilitation and inhibition of visual information processing in environmental and retinotopic representations of space. Shimojo S, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1–2):11–21 (14 ref.)

Time course of appearance of GABA and GABA receptors during retinal regeneration in the adult newt. Chiba C, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):204–10

Differential expression of the mRNAs of the axonal glycoproteins axonin-1 and NgCAM in the developing chick retina. Morino P, et al. **Brain Res Dev Brain Res** 1996 Feb 26;91(2):252–9

Retinal activity regulates developmental switches in functional properties and ifenprodil sensitivity of NMDA receptors in the lateral geniculate nucleus. Ramoa AS, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):165–75

Absence of neuroanatomical and behavioral deficits in L7/pcp-2-null mice. Vassileva G, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):333–7

Intravitreal tolerance of a new perfluorocarbon vitreous replacement, Multifluor APF-144. Peyman GA, et al. **Can J Ophthalmol** 1996 Dec;31(7):345–9

Development and organization of the retinal dopaminergic system of Ichthyophis kohtaoensis (Amphibia; Gymnophiona). Dünker N. **Cell Tissue Res** 1997 Aug; 289(2):265–74

Visual connections of the atypical diencephalic nucleus rostrolateralis in Pantodon buchholzi (Teleostei, Osteoglossomorpha). Saidel WM, et al. **Cell Tissue Res** 1997 Jan;287(1):91–9

Retinotopic organization in human visual cortex and the spatial precision of functional MRI. Engel SA, et al. **Cereb Cortex** 1997 Mar;7(2):181–92

Diurnal rhythmicity for visual sensitivity in humans? Tassi P, et al. **Chronobiol Int** 1997 Jan;14(1):35–48

Apoptosis in the retina. Rosenbaum PS, et al. **Clin Neurosci** 1997;4(5):224–32 (100 ref.)

Role of nitric oxide in retinal cell death. Roth S. **Clin Neurosci** 1997;4(5):216–23 (98 ref.)

Anterior segment prosthesis development: retinal function following anterior segment removal. Guo A, et al. **Cornea** 1997 Jan;16(1):88–93

Retinal development: on the crest of an exciting wave. Copenhagen DR. **Curr Biol** 1996 Nov 1;6(11):1368–70 (32 ref.)

No transfer of perceptual learning between similar stimuli in the same retinal position. Fahle M, et al. **Curr Biol** 1996 Mar 1;6(3):292–7

Retinal processing: visionary transgenics. Mobbs P, et al. **Curr Biol** 1997 Aug 1;7(8):R483–6

Chromophore-assisted laser inactivation of a repulsive axonal guidance molecule. Müller BK, et al. **Curr Biol** 1996 Nov 1;6(11):1497–502

Abrupt learning and retinal size specificity in illusory-contour perception. Rubin N, et al. **Curr Biol** 1997 Jul 1;7(7):461–7

Binocular rivalry: ambiguities resolved. Sengpiel F. **Curr Biol** 1997 Jul 1;7(7):R447–50 (15 ref.)

Retinal physiology: adapting to the changing scene. Shapley R. **Curr Biol** 1997 Jul 1;7(7):R421–3 (14 ref.)

Cortical development: a role for spontaneous activity? Thompson I. **Curr Biol** 1997 May 1;7(5):R324–6 (25 ref.)

The effects of insulin on the electroretinogram of bovine retina in vitro. Gosbell A, et al. **Curr Eye Res** 1996 Nov; 15(11):1132–7

The Eph family in retinal axon guidance. Drescher U, et al. **Curr Opin Neurobiol** 1997 Feb;7(1):75–80 (54 ref.)

Processing and encoding of visual information in the retina. Masland RH. **Curr Opin Neurobiol** 1996 Aug;6(4):467–74 (47 ref.)

The development of vision in the zebrafish (Danio rerio). Easter SS Jr, et al. **Dev Biol** 1996 Dec 15;180(2):646–63

Expression of Sonic hedgehog and its putative role as a precursor cell mitogen in the developing mouse retina. Jensen AM, et al. **Development** 1997 Jan;124(2):363–71

Check size tuning of the pattern electroretingoram: a reappraisal. Bach M, et al. **Doc Ophthalmol** 1996–97; 92(3):193–202

Modified ERG-jet contact lens electrodes for use in infants and toddlers. Brodie S, et al. **Doc Ophthalmol** 1995–96; 91(2):141–6

An electrode to record the mouse cornea electroretinogram. Goto Y. **Doc Ophthalmol** 1995–96;91(2):147–54

Reproducibility of electroretinograms recorded with DTL electrodes. Hébert M, et al. **Doc Ophthalmol** 1995–96; 91(4):333–42

Effects of quisqualic acid on the corneal and intraretinal direct-current electroretinogram and on the standing

potential of the rabbit eye. Kato M, et al. **Doc Ophthalmol** 1995-96;91(4):349-62

Correlation of an exercise-induced increase in systemic circulation with neural retinal function in humans. Kergoat H, et al. **Doc Ophthalmol** 1996-97;92(3):145-57

Electroretinographic findings in subjects after administration of fenretinide. Krzeminski R, et al. **Doc Ophthalmol** 1995-96;91(4):299-309

Intraretinal analysis of electroretinogram with K+ microelectrodes during acute intraocular pressure elevation. Masai H, et al. **Doc Ophthalmol** 1995-96; 91(2):129-39

Effects of hypoxemia on the electroretinogram in diabetics. Rimmer TJ, et al. **Doc Ophthalmol** 1995-96;91(4):311-21

Color-coded pattern suppresses visual evoked cortical potentials and electroretinograms. Shimada Y, et al. **Doc Ophthalmol** 1996-97;92(3):203-10

Maturation of the electroretinogram in children: stability of the amplitude ratio a/b. Flores-Guevara R, et al. **Electroencephalogr Clin Neurophysiol** 1996 Sep; 100(5):422-7

Instantaneous frequency maps, dipole models and potential distributions of pattern reversal-evoked potential fields for correct recognition of stimulated hemiretinae. Hoffmann K, et al. **Electroencephalogr Clin Neurophysiol** 1996 Nov; 100(6):569-78

Magnetically recorded oscillatory responses to luminance stimulation in man. Lopez L, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan;104(1):91-5

Electrophysiology of retina and optic nerve: effects of changes in serum glucose and of exogenous adenosine in vitro. Niemeyer G, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;46:141-6 (22 ref.)

Site-directed mutagenesis of highly conserved amino acids in the first cytoplasmic loop of Drosophila Rh1 opsin blocks rhodopsin synthesis in the nascent state. Bentrop J, et al. **EMBO J** 1997 Apr 1;16(7):1600-9

The equine fundus. I: Examination, embryology, structure and function. Crispin SM, et al. **Equine Vet J Suppl** 1990 Sep;(10):42-9

Synaptogenesis in the occipital cortex of macaque monkey devoid of retinal input from early embryonic stages. Bourgeois JP, et al. **Eur J Neurosci** 1996 May;8(5):942-50

Alpha7 and alpha8 nicotinic receptor subtypes immunopurified from chick retina have different immunological, pharmacological and functional properties. Gotti C, et al. **Eur J Neurosci** 1997 Jun;9(6):1201-11

Rab3 proteins and SNAP-25, essential components of the exocytosis machinery in conventional synapses, are absent from ribbon synapses of the mouse retina. Grabs D, et al. **Eur J Neurosci** 1996 Jan;8(1):162-8

Inability of rhesus monkey area V1 to discriminate between self-induced and externally induced retinal image slip. Ilg UJ, et al. **Eur J Neurosci** 1996 Jun;8(6):1156-66

Ca2+ influx through glutamate receptor-associated channels in retina cells correlates with neuronal cell death. Ferreira IL, et al. **Eur J Pharmacol** 1996 Apr 29;302(1-3):153-62

The relative contribution of retinal and extraretinal signals in determining the accuracy of reaching movements in normal subjects and a deafferented patient. Blouin J, et al. **Exp Brain Res** 1996 Apr;109(1):148-53

Self-induced splitting of spiral-shaped spreading depression waves in chicken retina. Dahlem MA, et al. **Exp Brain Res** 1997 Jun;115(2):319-24

Response properties of relay cells in the A-laminae of the cat's dorsal lateral geniculate nucleus after saccades. Fischer WH, et al. **Exp Brain Res** 1996 Aug;110(3):435-45

Retinal projections to the accommodation-related area in the rostral superior colliculus of the cat. Ohtsuka K, et al. **Exp Brain Res** 1997 Jan;113(1):169-73

Müller and RPE cell response to photoreceptor cell degeneration in aging Fischer rats. Fan W, et al. **Exp Eye Res** 1996 Jul;63(1):9-18

Retino-geniculate axons regenerating in adult hamsters are able to form morphologically distinct terminals. Carter DA, et al. **Exp Neurol** 1997 Aug;146(2):315-22

Complexity and frequency hierarchies in the catfish retina. Korenberg MJ, et al. **Front Med Biol Eng** 1997;8(2):87-107

Characterization of a human fovea cDNA library and regional differential gene expression in the human retina. Bernstein SL, et al. **Genomics** 1996 Mar 15;32(3):301-8

Human retina-specific amine oxidase (RAO): cDNA cloning, tissue expression, and chromosomal mapping. Imamura Y, et al. **Genomics** 1997 Mar 1;40(2):277-83

Mammalian retinal glial (Müller) cells express large-conductance Ca(2+)-activated K+ channels that are modulated by Mg2+ and pH and activated by protein kinase A. Bringmann A, et al. **Glia** 1997 Apr;19(4):311-23

Characterization of focal adhesion assembly in XR1 glial cells. Folsom TD, et al. **Glia** 1997 Aug;20(4):348-64

Asymmetric gap junctional coupling between glial cells in the rat retina. Zahs KR, et al. **Glia** 1997 May;20(1):10-22

Quadrant pattern ERG with SLO stimulation in normals and glaucoma patients. Horn F, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S174-9

Isovolemic hemodilution increases retinal tissue oxygen tension. Neely KA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Nov; 234(11):688-94

Adaptation to monocular torsion after macular translocation. Seaber JH, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb;235(2):76-81

Visual pigment gene structure and expression in human retinae. Yamaguchi T, et al. **Hum Mol Genet** 1997 Jul; 6(7):981-90

Remodeling processes during neural retinal regeneration in adult urodeles: an immunohistochemical survey. Mitashov VI, et al. **Int J Dev Biol** 1995 Dec;39(6):993-1003

Mechanisms of retina regeneration in urodeles. Mitashov VI. **Int J Dev Biol** 1996 Aug;40(4):833-44 (140 ref.)

Tyrosine phosphorylation induced by integrin-mediated adhesion of retinal neurons to laminin. Malosio ML, et al. **Int J Dev Neurosci** 1996 Jun;14(3):269-81

Effects of retinal eccentricity on the lateralized processing of categorical and coordinate spatial relations. Horner MD, et al. **Int J Neurosci** 1996 Jul;86(1-2):7-13

The contribution of glial cells to spontaneous and evoked potentials. Galambos R, et al. **Int J Psychophysiol** 1997 Jun;26(1-3):229-36

Apoptotic retinal cell death induced by antirecoverin autoantibodies of cancer-associated retinopathy. Adamus G, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):283-91

Cell attachment to, and contraction of, the retina in vitro. Allamby D, et al. **Invest Ophthalmol Vis Sci** 1997 Sep; 38(10):2064-72

Origin of tapetal-like reflexes in carriers of X-linked retinitis pigmentosa. Berendschot TT, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2716-23

Tractional force generation by porcine Müller cells. Development and differential stimulation by growth factors. Guidry C. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):456-68

Tractional force generation by porcine Müller cells: stimulation by growth factors in human vitreous. Hardwick C, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2053-63

Retinal control on the axial length mediated by transforming growth factor-beta in chick eye. Honda S, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2519-26

Recording multifocal electroretinograms with fundus monitoring. Kondo M, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):1049-52

Neurotransmitters in the vertebrate retina. Lam DM. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):553-6 (20 ref.)

Effects of insulin under normal and low glucose on retinal electrophysiology in the perfused cat eye. Lansel N, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):792-9

gRICH68 and gRICH70 are 2',3'-cyclic-nucleotide 3'-phosphodiesterases induced during goldfish optic nerve regeneration. Ballestero RP, et al. **J Biol Chem** 1997 Apr 25;272(17):11479-86

Post-Golgi vesicles cotransport docosahexaenoyl-phospholipids and rhodopsin during frog photoreceptor membrane biogenesis. Rodriguez de Turco EB, et al. **J Biol Chem** 1997 Apr 18;272(16):10491-7

Effect of myopic excimer laser photorefractive keratectomy on the electrophysiologic function of the retina and optic nerve. Spadea L, et al. **J Cataract Refract Surg** 1996 Sep; 22(7):906-9

Dopaminergic transmission in the rat retina: evidence for volume transmission. Bjelke B, et al. **J Chem Neuroanat** 1996 Nov;12(1):37-50

Cone photoreceptor topography in the retina of sexually mature Pacific salmonid fishes. Beaudet L, et al. **J Comp Neurol** 1997 Jun 23;383(1):49-59

ON-OFF amacrine cells in cat retina. Freed MA, et al. **J Comp Neurol** 1996 Jan 15;364(3):556-566

How neural interactions form neural responses in the salamander retina. Teeters J, et al. **J Comput Neurosci** 1997 Jan;4(1):5-27

Multiple visual pigments in a photoreceptor of the salamander retina. Makino CL, et al. **J Gen Physiol** 1996 Jul; 108(1):27-34

Properties of retinal glial cell potassium channels. Brand S, et al. **J Hirnforsch** 1996;37(1):73-9

Observations of non-stationarities in extracellular potassium dynamics within the gray matter neuropil during self-sustained SDs. de Lima VM, et al. **J Hirnforsch** 1996; 37(4):505-18

Migration of glial cells into retinal axon target field in Drosophila melanogaster. Perez SE, et al. **J Neurobiol** 1996 Jul;30(3):359-73

Na+ and Ca2+ channel expression in cultured newt retinal pigment epithelial cells: comparison with neuronal types of ion channels. Sakai H, et al. **J Neurobiol** 1997 Apr; 32(4):377-90

SV40 large T immortalised cell lines of the rat blood-brain and blood-retinal barriers retain their phenotypic and immunological characteristics. Greenwood J, et al. **J Neuroimmunol** 1996 Dec;71(1-2):51-63

Ionic currents of isolated retinal pacemaker neurons: projected daily phase differences and selective enhancement by a phase-shifting neurotransmitter. Barnes S, et al. **J Neurophysiol** 1997 Jun;77(6):3075-84

Effect of spike blockade on the receptive-field size of amacrine and ganglion cells in the rabbit retina. Bloomfield SA. **J Neurophysiol** 1996 May;75(5):1878-93

Electrogenic hyperpolarization-elicited chloride transporter current in blue cones of zebrafish retinal slices. Fan SF, et al. **J Neurophysiol** 1997 Mar;77(3):1447-59

Presynaptic calcium dynamics at the frog retinotectal synapse. Feller MB, et al. **J Neurophysiol** 1996 Jul; 76(1):381-400

An in vitro model of the kitten retinogeniculate pathway. Guido W, et al. **J Neurophysiol** 1997 Jan;77(1):511-6

Receptive field of the retinal bipolar cell: a pharmacological study in the tiger salamander. Hare WA, et al. **J Neurophysiol** 1996 Sep;76(3):2005-19

Nitric oxide and cGMP modulate retinal glutamate receptors. McMahon DG, et al. **J Neurophysiol** 1996 Oct; 76(4):2307-15

Responses to light of starburst amacrine cells. Peters BN, et al. **J Neurophysiol** 1996 Jan;75(1):469-80

Invariant visual responses from attentional gain fields. Salinas E, et al. **J Neurophysiol** 1997 Jun;77(6):3267-72

Preferential suppression of the ON pathway by GABAC receptors in the amphibian retina. Zhang J, et al. **J Neurophysiol** 1995 Oct;74(4):1583-92

Visual pigment assignments in regenerated retina. Cameron DA, et al. **J Neurosci** 1997 Feb 1;17(3):917-23

Retroviral misexpression of engrailed genes in the chick optic tectum perturbs the topographic targeting of retinal axons. Friedman GC, et al. **J Neurosci** 1996 Sep 1;16(17):5498-509

Ultrastructural localization suggests that retinal and cortical inputs access different metabotropic glutamate receptors in the lateral geniculate nucleus. Godwin DW, et al. **J Neurosci** 1996 Dec 15;16(24):8181-92

Synaptic inputs to ON parasol ganglion cells in the primate retina. Jacoby R, et al. **J Neurosci** 1996 Dec 15; 16(24):8041-56

Multi-channel metallic electrode for threshold stimulation of frog's retina. Kuras A, et al. **J Neurosci Methods** 1997 Jul 18;75(1):99-102

Nitric oxide donors: effects of S-nitrosoglutathione and 4-phenyl-3-furoxancarbonitrile on ocular blood flow and retinal function recovery. Liu SX, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):105-14

Effects of Chinese herbal products on mammalian retinal functions. Liu SX, et al. **J Ocul Pharmacol Ther** 1996 Fall; 12(3):377-86 (52 ref.)

Variations in photoreceptor directionally across the central retina. Burns SA, et al. **J Opt Soc Am A** 1997 Sep; 14(9):2033-40

Human contrast sensitivity in coherent Maxwellian view: effect of coherent noise and comparison with speckle. Felipe A, et al. **J Opt Soc Am A** 1997 May;14(5):972-83

Suppressive rod-cone interactions: evidence for separate retinal (temporal) and extraretinal (spatial) mechanisms in achromatic vision. Lange G, et al. **J Opt Soc Am A** 1997 Sep;14(9):2487-98

Parallel cone bipolar to on-beta ganglion cell pathways in the cat retina: spatial responses, spatial aliasing, and spatial variance. Levitan B, et al. **J Opt Soc Am A** 1996 Jun; 13(6):1152-65

Comparison of double-pass estimates of the retinal-image quality obtained with green and near-infrared light. López-Gil N, et al. **J Opt Soc Am A** 1997 May;14(5):961-71

Fourier models and the loci of adaptation. Makous WL. **J Opt Soc Am A** 1997 Sep;14(9):2323-45

Psychophysical signatures associated with magnocellular and parvocellular pathway contrast gain. Pokorny J, et al. **J Opt Soc Am A** 1997 Sep;14(9):2477-86

Mathematical analysis of motion-opponent mechanisms used in the determination of heading and depth. Royden CS. **J Opt Soc Am A** 1997 Sep;14(9):2128-43

Retroequatorial placement of horizontal recti [letter; comment] Reinecke RD. **J Pediatr Ophthalmol Strabismus** 1996 May-Jun; 33(3):201-2. Comment on: J Pediatr Ophthalmol Strabismus 1995 Nov-Dec;32(6):359-63.

Synaptic input from the retina to the suprachiasmatic nucleus changes with the light-dark cycle in the Syrian hamster. Cui LN, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):483-93

cGMP-mediated effects on the physiology of bovine and human retinal Müller (glial) cells. Kusaka S, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):813-24

Modulation of hybrid bass retinal gap junctional channel gating by nitric oxide. Lu C, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):689-99

Invariance of the pattern electroretinogram evoked by psychophysically equivalent stimuli in human ageing. Muir JA, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):825-35

Dopamine modulates unitary conductance of single PL-type calcium channels in Roccus chrysops retinal horizontal cells. Pfeiffer-Linn CL, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):607-16

Possible roles of AMPA/KA receptor in cultured Müller cells. Kawasaki I, et al. **Jpn J Ophthalmol** 1996;40(2):158-66

Comparative and histophysiological study of oil droplets in the avian retina. Gondo M, et al. **Kobe J Med Sci** 1995 Aug;41(4):127-39

Effect of decreased ocular perfusion pressure on blood flow and the flicker-induced flow response in the cat optic nerve head. Riva CE, et al. **Microvasc Res** 1996 Nov;52(3):258-69

Attenuation of excitotoxic cell swelling and GABA release by the GABA transport inhibitor SKF 89976A. Zeevalk GD, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):27-36

GABAC receptors in the vertebrate retina. Lukasiewicz PD. **Mol Neurobiol** 1996 Jun;12(3):181-94 (73 ref.)

Retinal direction selectivity after targeted laser ablation of starburst amacrine cells. He S, et al. **Nature** 1997 Sep 25; 389(6649):378-82

Adaptation of retinal processing to image contrast and spatial scale. Smirnakis SM, et al. **Nature** 1997 Mar 6;

386(6620):69–73
Possible roles of spontaneous waves and dendritic growth for retinal receptive field development. Burgi PY, et al. **Neural Comput** 1997 Apr 1;9(3):533–53
DNA fragmentation characteristic of apoptosis and cell loss induced by kainic acid in rabbit retinas. Perez MT, et al. **Neurochem Int** 1997 Aug;31(2):251–60
Protein kinases selectively modulate apoptosis in the developing retina in vitro. Varella MH, et al. **Neurochem Int** 1997 Aug;31(2):217–27
Synthesis of serotonin from 5-hydroxytryptophan in the post-crush retina: inhibition of in vitro outgrowth by the intraocular administration of the precursor. Lima L, et al. **Neurochem Res** 1996 Aug;21(8):939–46
Ultrafast exocytosis elicited by calcium current in synaptic terminals of retinal bipolar neurons. Mennerick S, et al. **Neuron** 1996 Dec;17(6):1241–9
The light response of retinal ganglion cells is truncated by a displaced amacrine circuit. Nirenberg S, et al. **Neuron** 1997 Apr;18(4):637–50
Nasotemporal overlap at the retinal vertical meridian: investigations with a callosotomy patient. Fendrich R, et al. **Neuropsychologia** 1996 Jul;34(7):637–46
GABAergic retinocollicular projection in the New World monkey Cebus apella. da Costa BL, et al. **Neuroreport** 1997 May 27;8(8):1797–802
Corticofugal feedback improves the timing of retino-geniculate signal transmission. Funke K, et al. **Neuroreport** 1996 Sep 2;7(13):2130–4
Nitric oxide produced during ischemia improves functional recovery in the rabbit retina. Maynard KI, et al. **Neuroreport** 1996 Dec 20;8(1):81–5
Voltage- and GABA-evoked currents from Müller glial cells of the baboon retina. Reichelt W, et al. **Neuroreport** 1997 Jan 20;8(2):541–4
Neuronal subpopulations in the suprachiasmatic nuclei based on their response to retinal and intergeniculate leaflet stimulation. Roig JA, et al. **Neuroreport** 1997 Mar 3; 8(4):885–9
Subretinal electrical stimulation of the rabbit retina. Chow AY, et al. **Neurosci Lett** 1997 Mar 28;225(1):13–6
Voltage dependency of light-evoked on-off transient amacrine cell responses in carp retina. Djamgoz MB, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):127–30
Expression of heat shock proteins in the developing rat retina. Kojima M, et al. **Neurosci Lett** 1996 Mar 1;205(3):215–7
GABAA receptor currents recorded from Müeller glial cells of the baboon (Papio cynocephalus) retina. Reichelt W, et al. **Neurosci Lett** 1996 Jan 26;203(3):159–62
Alteration of serotonergic innervation in the suprachiasmatic nucleus of the rat following removal of input fibers from retina and lateral geniculate nucleus. Ueda S, et al. **Neurosci Lett** 1996 Jun 21;211(2):97–100
Nitric oxide, 2-amino-4-phosphonobutyric acid and light/dark adaptation modulate short-wavelength-sensitive synaptic transmission to retinal horizontal cells. Furukawa T, et al. **Neurosci Res** 1997 Jan;27(1):65–74
Light microscopic comparison of the patterns of glutamate-like and homocysteate-like immunoreactivities in rat dorsal lateral geniculate after combined visual cortical and retinal ablations. Grandes P, et al. **Neurosci Res** 1997 Apr;27(4):377–80
Models of ganglion cell topography in the retina of macaque monkeys and their application to sensory cortical scaling. Azzopardi P, et al. **Neuroscience** 1996 Jun;72(3):617–25
The overrepresentation of the fovea and adjacent retina in the striate cortex and dorsal lateral geniculate nucleus of the macaque monkey. Azzopardi P, et al. **Neuroscience** 1996 Jun;72(3):627–39
Role of catalase in retinal antioxidant defence system: its comparative study among rabbits, guinea pigs, and rats. Ohta Y, et al. **Ophthalmic Res** 1996;28(6):336–42
Congenital nystagmus image motion: influence on visual acuity at different luminances. Chung ST, et al. **Optom Vis Sci** 1997 May;74(5):266–72
Eccentric viewing spectacles in everyday life, for the optimum use of residual functional retinal areas, in patients with age-related macular degeneration. Verezen CA, et al. **Optom Vis Sci** 1996 Jun;73(6):413–7
The role of retinal versus perceived size in the effects of pitched displays on visually perceived eye level. Post RB, et al. **Perception** 1996;25(7):853–9
A gem from the past: Pleikart Stumpf's (1911) anticipation of the aperture problem, Reichardt detectors, and perceived motion loss at equiluminance [classical article] Stumpf P. **Perception** 1996;25(10):1237–42; discussion 1235–7
Absolute and spectral sensitivities in dark- and light-adapted Pagothenia borchgrevinki, an Antarctic notothenid fish. Morita Y, et al. **Physiol Behav** 1997 Feb;61(2):159–63
Physiological properties of the normal lens. Mathias RT, et al. **Physiol Rev** 1997 Jan;77(1):21–50 (196 ref.)
The structure and precision of retinal spike trains. Berry MJ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5411–6
The extraordinarily rapid disappearance of entopic images. Coppola D, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23; 93(15):8001–4
Phospholipase C beta 4 is involved in modulating the visual response in mice. Jiang H, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14598–601
A model of multiplicative neural responses in parietal cortex. Salinas E, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11956–61
Dopamine inhibits mammalian photoreceptor Na+,K+-ATPase activity via a selective effect on the alpha3 isozyme. Shulman LM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8034–9
Starburst amacrine cells change from spiking to nonspiking neurons during retinal development. Zhou ZJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8057–62
Families of stationary patterns producing illusory movement: insights into the visual system. Fermüller C, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):795–806
Influences on the global structure of cortical maps. Goodhill GJ, et al. **Proc R Soc Lond B Biol Sci** 1997 May 22; 264(1382):649–55
Circadian rhythm generation, expression and entrainment in a molluscan model system. Block GD, et al. **Prog Brain Res** 1996;111:93–102 (37 ref.)
The role of NMDA receptors and nitric oxide in retinogeniculate development. Cramer KS, et al. **Prog Brain Res** 1996;108:235–44 (84 ref.)
Light entrainment and activation of signal transduction pathways in the SCN. Kornhauser JM, et al. **Prog Brain Res** 1996;111:133–46 (80 ref.)
Serotonin modulates retinotectal and corticotectal convergence in the superior colliculus. Mooney RD, et al. **Prog Brain Res** 1996;112:57–69
Entrainment pathways and the functional organization of the circadian system. Moore RY. **Prog Brain Res** 1996; 111:103–19 (65 ref.)
The effect of damage of the brachium of the superior colliculus in neonatal and adult hamsters and the use of peripheral nerve to restore retinocollicular projections. So KF, et al. **Prog Brain Res** 1996;112:363–72
Mr. Chips: an ideal-observer model of reading. Legge GE, et al. **Psychol Rev** 1997 Jul;104(3):524–53 (130 ref.)
Comparison of dark- and light-adapted carp retinas with NADPH diaphorase staining. Ye B, et al. **Sci China C Life Sci** 1996 Jun;39(3):251–7
Stochastic retinal mechanisms of light adaptation and gain control. Rudd ME, et al. **Spat Vis** 1996;10(2):125–48
The Müller cell: a functional element of the retina. Newman E, et al. **Trends Neurosci** 1996 Aug;19(8):307–12 (58 ref.)
Turned on by Ca2+! The physiology and pathology of Ca(2+)-binding proteins in the retina. Polans A, et al. **Trends Neurosci** 1996 Dec;19(12):547–54 (69 ref.)
Activation of metabotropic glutamate receptors decreases a high-threshold calcium current in spiking neurons of the Xenopus retina. Akopian A, et al. **Vis Neurosci** 1996 May-Jun;13(3):549–57
A comparison of receptive field and tracer coupling size of horizontal cells in the rabbit retina. Bloomfield SA, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):985–99
Asymmetric retinal growth: evidence for regulation by a retinotopic mechanism. Cameron DA. **Vis Neurosci** 1996 May-Jun;13(3):493–500
A centrifugally controlled circuit in the avian retina and its possible role in visual attention switching. Clarke PG, et al. **Vis Neurosci** 1996 Nov-Dec;13(6):1043–8
Tracer coupling among regenerated amacrine cells in the retina of the goldfish. Hitchcock PF. **Vis Neurosci** 1997 May-Jun;14(3):463–72
A comparison of the components of the multifocal and full-field ERGs. Hood DC, et al. **Vis Neurosci** 1997 May-Jun;14(3):533–44
Gap junction channel gating at bass retinal electrical synapses. Lu C, et al. **Vis Neurosci** 1996 Nov-Dec; 13(6):1049–57
Brain-stem afferents upon retinal projecting isthmo-optic and ectopic neurons of the pigeon centrifugal visual system demonstrated by retrograde transneuronal transport of rhodamine beta-isothiocyanate. Miceli D, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):213–24
A retinal dark-light switch: a review of the evidence. Morgan IG, et al. **Vis Neurosci** 1996 May-Jun;13(3):399–409 (134 ref.)
Background contrast modulates kinetics and lateral spread of responses to superimposed stimuli in outer retina. Reifsnider ES, et al. **Vis Neurosci** 1995 Nov-Dec; 12(6):1105–26
Response linearity and kinetics of the cat retina: the bipolar cell component of the dark-adapted electroretinogram. Robson JG, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):837–50
The modulatory cholinergic system in goldfish tectum may be necessary for retinotopic sharpening [published erratum appears in Vis Neurosci 1996 May-Jun;13(3):597] Schmidt JT. **Vis Neurosci** 1995 Nov-Dec;12(6):1093–1103
Centrifugal innervation of the rat retina. Schütte M. **Vis Neurosci** 1995 Nov-Dec;12(6):1083–92
Is the input to a GABAergic synapse the sole asymmetry in turtle's retinal directional selectivity? Smith RD, et al. **Vis Neurosci** 1996 May-Jun;13(3):423–39
Simulation of the AII amacrine cell of mammalian retina: functional consequences of electrical coupling and regenerative membrane properties. Smith RG, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):851–60
Physiology of the A1 amacrine: a spiking, axon-bearing interneuron of the macaque monkey retina. Stafford DK, et al. **Vis Neurosci** 1997 May-Jun;14(3):507–22
Microglia in the nerve fiber layer of the cat retina: detection of postnatal changes by a new monoclonal antibody. Tumosa N, et al. **Vis Neurosci** 1996 Jul-Aug;13(4):671–82
A topographic study of oscillatory potentials in man. Wu S, et al. **Vis Neurosci** 1995 Nov-Dec;12(6):1013–25
Volume transmission of dopamine may modulate light-adaptive plasticity of horizontal cell dendrites in the recovery phase following dopamine depletion in goldfish retina. Yazulla S, et al. **Vis Neurosci** 1995 Sep-Oct; 12(5):827–36
Serial inhibitory synapses in retina. Zhang J, et al. **Vis Neurosci** 1997 May-Jun;14(3):553–63
Synaptic circuitry of neuropeptide-containing amacrine cells in the retina of the cane toad, Bufo marinus. Zhu BS, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):919–27
The effect of background luminance on visual responses to strong flashes: perceived brightness and the early rise of photoreceptor responses. Djupsund K, et al. **Vision Res** 1996 Oct;36(20):3253–64
Nitric oxide: a review of its role in retinal function and disease. Goldstein IM, et al. **Vision Res** 1996 Sep; 36(18):2979–94 (173 ref.)
Analytic approximation of the off-axis modulation transfer function of the eye. Jennings JA, et al. **Vision Res** 1997 Mar;37(6):697–704
Retinal dopamine depletion in young quail mimics some of the effects of ageing on visual function. Lee JY, et al. **Vision Res** 1997 May;37(9):1103–13
Synaptic inputs mediating bipolar cell responses in the tiger salamander retina. Maple BR, et al. **Vision Res** 1996 Dec; 36(24):4015–23
An electrophysiological metric of activity within the ON- and OFF-pathways in humans. Roveri L, et al. **Vision Res** 1997 Mar;37(6):669–74
The distance used for scaling disparities is the same as the one used for scaling retinal size. van Damme W, et al. **Vision Res** 1997 Mar;37(6):757–64
Horizontal cells feed back to cones by shifting the cone calcium-current activation range. Verweij J, et al. **Vision Res** 1996 Dec;36(24):3943–53
Off-axis optical quality and retinal sampling in the human eye. Williams DR, et al. **Vision Res** 1996 Apr;36(8):1103–14
Dopaminergic control of light-adaptive synaptic plasticity and role in goldfish visual behavior. Yazulla S, et al. **Vision Res** 1996 Dec;36(24):4045–57
[The Goldmann Memorial Lecture. Light perception and the eye] Fankhauser F. **Klin Monatsbl Augenheilkd** 1997 May; 210(5):231–55 **(Ger)**
[Normal values of retinal response densities in multifocal electroretinogram] Kondo M, et al. **Nippon Ganka Gakkai Zasshi** 1996 Oct;100(10):810–6 (Eng. Abstr.) **(Jpn)**
[Correspondence of depth sensitivity and visually evoked potential amplitude in retinal eccentricity] Nakanishi F, et al. **Nippon Ganka Gakkai Zasshi** 1996 Nov;100(11):877–84 (Eng. Abstr.) **(Jpn)**
[Retinal calcium-binding proteins--their function and pathology] Witkowska D, et al. **Postepy Hig Med Dosw** 1997;51(1):1–22 (97 ref.) (Eng. Abstr.) **(Pol)**
[The neurophysiological characteristics of the retina and the potentials of clinical electroretinography] Shamshinova AM, et al. **Vestn Oftalmol** 1996 Apr-Jun;112(2):52–5 (50 ref.) **(Rus)**

PHYSIOPATHOLOGY

Retinal function abnormalities in membranoproliferative glomerulonephritis type II. Kim RY, et al. **Am J Ophthalmol** 1997 May;123(5):619–28
Laser treatment in subjects with high-risk clinical features of age-related macular degeneration. Posterior pole appearance and retinal function. Guymer RH, et al. **Arch Ophthalmol** 1997 May;115(5):595–603
Up-regulation of glial fibrillary acidic protein in the retina of primate eyes with experimental glaucoma. Tanihara H, et al. **Arch Ophthalmol** 1997 Jun;115(6):752–6
Perimetric and angiographic effects of retinotomy. Bourke RD, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):245–9
The spatial distribution of ERG losses across the posterior pole of glaucomatous eyes in multifocal recordings. Vaegan, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):28–31
Flicker perimetry in diabetic children without retinopathy. Lobefalo L, et al. **Can J Ophthalmol** 1997 Aug;32(5):324–8
The pattern electroretinogram (PERG) after laser treatment of the peripheral or central retina. Ciavarella P, et al. **Curr Eye Res** 1997 Feb;16(2):111–5
Influence of the sensory retina on healing of the rabbit retinal pigment epithelium. Ozaki S, et al. **Curr Eye Res** 1997 Apr; 16(4):349–58
Neuro-ophthalmology and neuro-otology. **Curr Opin Neurol** 1996 Feb;9(1):B1–8
Antioxidant treatment of experimental diabetic retinopathy in rats with nicanartine. Hammes HP, et al. **Diabetologia** 1997 Jun;40(6):629–34
Modified ERG-jet contact lens electrodes for use in infants and toddlers. Brodie S, et al. **Doc Ophthalmol** 1995–96; 91(2):141–6
Modulation and mechanisms of electroretinogram recovery after short-term retinal ischemic injury. Tarn DM, et al. **Doc Ophthalmol** 1995–96;91(2):109–16
The pattern electroretinogram in Parkinson's disease reveals lack of retinal spatial tuning. Tagliati M, et al. **Electroencephalogr Clin Neurophysiol** 1996 Jan;100(1):1–11
Sodium current amplitude increases dramatically in human retinal glial cells during diseases of the eye. Francke M, et al. **Eur J Neurosci** 1996 Dec;8(12):2662–70

Effect of an aldose reductase inhibitor, SNK-860, on deficits in the electroretinogram of diabetic rats. Hotta N, et al. **Exp Physiol** 1995 Nov;80(6):981-9

How useful is anomalous correspondence? Herzau V. **Eye** 1996;10 (Pt 2):266-9 (16 ref.)

The triple flash electroretinogram and its significance in macular diseases. B-wave recovery as a diagnostic tool. Bartz-Schmidt KU, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Oct;234(10):604-11

Retinal function with lens-induced myopia compared with form-deprivation myopia in chicks. Fujikado T, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 May;235(5):320-4

Assessing retinal/neural function in the presence of ocular media opacities. McGraw PV, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):280-3 (24 ref.)

Inward and outward permeability of the blood-retinal barrier in experimental myopia. Yoshida A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S239-42

Transiently raised intraocular pressure reveals pattern electroretinogram losses in ocular hypertension. Colotto A, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2663-70

Using two preferred retinal loci for different lighting conditions in patients with central scotomas. Lei H, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1812-8

Retinoschisislike alterations in the mouse eye caused by gene targeting of the Norrie disease gene. Ruether K, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):710-8

Quantitative analysis of retinal vascular changes in essential and renovascular hypertension. Houben AJ, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1729-33

Vascular network changes in the retina with age and hypertension. Stanton AV, et al. **J Hypertens** 1995 Dec; 13(12 Pt 2):1724-8

Congenital cerebellar ataxia, mental retardation, and atrophic retinal lesions in two brothers [letter] Ferri R, et al. **J Neurol Neurosurg Psychiatry** 1996 Oct;61(4):424-5

Differential effect of ischemia/reperfusion on pigmented and albino rabbit retina. Muller A, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):337-42

Modification of vitronectin by advanced glycation alters functional properties in vitro and in the diabetic retina. Hammes HP, et al. **Lab Invest** 1996 Sep;75(3):325-38

Joubert syndrome: are kidneys involved? Boltshauser E, et al. **Neuropediatrics** 1995 Dec;26(6):320-1

Retinal ischemia induced by the intraluminal suture method in rats. Block F, et al. **Neurosci Lett** 1997 Aug 22; 232(1):45-8

ERG campimetry using a multi-input stimulation technique for mapping of retinal function in the central visual field. Kretschmann U, et al. **Ophthalmic Res** 1996;28(5):303-11

Evaluation of visual function following argon laser photocoagulation in central serous retinopathy. Khosla PK, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):693-7

Electrical responses from locally detached retina and its recovery after reattachment. Kim SD, et al. **Ophthalmologica** 1996;210(4):195-9

Preferred retinal loci relationship to macular scotomas in a low-vision population. Fletcher DC, et al. **Ophthalmology** 1997 Apr;104(4):632-8

Pattern of retinal dysfunction in acute zonal occult outer retinopathy. Jacobson SG, et al. **Ophthalmology** 1995 Aug; 102(8):1187-98

Visual fields measured with double-arc perimetry in eyes with threshold retinopathy of prematurity from the cryotherapy for retinopathy of prematurity trial. The CRYO-Retinopathy of Prematurity Cooperative Group. Quinn GE, et al. **Ophthalmology** 1996 Sep;103(9):1432-7

The artifact of retinoscopy revisited: comparison of refractive error measured by retinoscopy and visual evoked potential in the rat. Mutti DO, et al. **Optom Vis Sci** 1997 Jul; 74(7):483-8

Intravitreal injection of ganglioside GM1 after ischemia reduces retinal damage in rats. Mohand-Said S, et al. **Stroke** 1997 Mar;28(3):617-21; discussion 622

Clinical applications of fundus reflection densitometry. Liem AT, et al. **Surv Ophthalmol** 1996 Jul-Aug;41(1):37-50 (108 ref.)

Effects of adaptation level and hypoglycemia on function of the cat retina during hypoxemia. McRipley MA, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):339-50

Perceptual filling-in at the scotoma following a monocular retinal lesion in the monkey. Murakami I, et al. **Vis Neurosci** 1997 Jan-Feb;14(1):89-101

Off-axis optical quality and retinal sampling in the human eye. Williams DR, et al. **Vision Res** 1996 Apr;36(8):1103-14

[Visual image in high ametropia. Computer-assisted simulation with optic ray calculation] Fink W, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):472-6 (Eng. Abstr.) **(Ger)**

[Objective visual function tests for retinal pathophysiology (editorial)] Miyake Y. **Nippon Ganka Gakkai Zasshi** 1997 Aug;101(8):631-2 **(Jpn)**

RADIATION EFFECTS

The effects of ultraviolet-A radiation on visual evoked potentials in the young human eye. Sanford BE, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):553-7

Effects of constant and flickering light on retinal metabolism in rabbits. Wang L, et al. **Acta Ophthalmol Scand** 1997 Jun; 75(3):227-31

Argon laser retinal lesions evaluated in vivo by optical coherence tomography. Toth CA, et al. **Am J Ophthalmol** 1997 Feb;123(2):188-98

Inhibition by nociceptin of the light-evoked release of ACh from retinal cholinergic neurones. Neal MJ, et al. **Br J Pharmacol** 1997 Apr;120(8):1399-400

Diurnal rhythmicity for visual sensitivity in humans? Tassi P, et al. **Chronobiol Int** 1997 Jan;14(1):35-48

Biochemical characterization of cell specific enzymes in light-exposed rat retinas: oxidative loss of all-trans retinol dehydrogenase activity. Darrow RA, et al. **Curr Eye Res** 1997 Feb;16(2):144-51

A comparison of continuous versus intermittent light exposure on apoptosis. Li S, et al. **Curr Eye Res** 1996 Sep; 15(9):914-22

Evaluation of retinal susceptibility to light damage in pigmented rats supplemented with beta-carotene. Rapp LM, et al. **Curr Eye Res** 1996 Feb;15(2):219-23

Light-induced apoptosis: differential timing in the retina and pigment epithelium. Hafezi F, et al. **Exp Eye Res** 1997 Jun; 64(6):963-70

Retinoic aid increases arrestin mRNA levels in the mouse retina. Wagner E, et al. **FASEB J** 1997 Mar;11(4):271-5

External radiotherapy in macular degeneration: technique and preliminary subjective response. Freire J, et al. **Front Radiat Ther Oncol** 1997;30:247-52

Chronic retinal effects by ultraviolet irradiation, with special reference to superoxide dismutases. Oguni M, et al. **Histol Histopathol** 1996 Jul;11(3):695-702

Dose-volume complication analysis for visual pathway structures of patients with advanced paranasal sinus tumors. Martel MK, et al. **Int J Radiat Oncol Biol Phys** 1997 May 1;38(2):273-84

Retinal light damage in rats with altered levels of rod outer segment docosahexaenoate. Organisciak DT, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2243-57

Retinal light damage: protective effect of alpha-tocopherol. Aonuma H, et al. **Jpn J Ophthalmol** 1997 May-Jun; 41(3):160-7

Preliminary results of primary chemotherapy in retinoblastoma. Bornfeld N, et al. **Klin Padiatr** 1997 Jul-Aug;209(4):216-21

Function and morphology of the retinal pigment epithelium after light-induced damage. van Best JA, et al. **Microsc Res Tech** 1997 Jan 15;36(2):77-88

Retinal irradiation from an operating microscope during vitrectomy: observation by endoscopy. Ogura Y. **Ophthalmic Surg Lasers** 1996 Jul;27(7):636-7

But is it really light damage? [editorial] Mainster MA, et al. **Ophthalmology** 1997 Feb;104(2):179-80

Retinal light damage and eye surgery [editorial] [see comments] Minckler D. **Ophthalmology** 1995 Dec; 102(12):1741-2. Comment in: Ophthalmology 1996 Apr;103(4):546-7. Comment in: Ophthalmology 1996 Apr;103(4):547-8.

Lack of correlation between the location of choroidal melanoma and ultraviolet-radiation dose distribution. Schwartz LH, et al. **Radiat Res** 1997 Apr;147(4):451-6

Light-induced modulation of coupling between AII amacrine cells in the rabbit retina. Bloomfield SA, et al. **Vis Neurosci** 1997 May-Jun;14(3):565-76

Expression of a mutant opsin gene increases the susceptibility of the retina to light damage. Wang M, et al. **Vis Neurosci** 1997 Jan-Feb;14(1):55-62

Adaptation-dependent changes of bipolar cell terminals in fish retina: effects on overall morphology and spinule formation in Ma and Mb cells. Behrens UD, et al. **Vision Res** 1996 Dec;36(24):3901-11

Horizontal cell spinule dynamics in fish are affected by rearing in monochromatic light. Kröger RH, et al. **Vision Res** 1996 Dec;36(24):3879-89

Modulation of horizontal cell receptive fields in the light adapted goldfish retina. Verweij J, et al. **Vision Res** 1996 Dec;36(24):3913-23

[Fundus hypothermia inhibits retinal damage induced by visible blue light] Mori K, et al. **Nippon Ganka Gakkai Zasshi** 1997 Aug;101(8):633-8 (Eng. Abstr.) **(Jpn)**

[The morphogenesis of the retinal neural layer and of the optic nerve in the normal white rat and under the action of large doses of x-ray irradiation during prenatal ontogeny] Stepanova IP. **Morfologiia** 1997;111(1):57-60 (Eng. Abstr.) **(Rus)**

SECRETION

Cannabinoid receptor-mediated inhibition of dopamine release in the retina. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):791-5

SURGERY

Experimental retinal and ciliary body photocoagulation using a new 670-nm diode laser. Immonen I, et al. **Am J Ophthalmol** 1996 Dec;122(6):870-4

Submacular surgery complicated by a choroidal neovascular membrane at the retinotomy site. McCannel CA, et al. **Am J Ophthalmol** 1996 Nov;122(5):737-9

Retinotomy and foveal translocation for surgical management of subfoveal choroidal neovascular membranes. Ninomiya Y, et al. **Am J Ophthalmol** 1996 Nov;122(5):613-21

Surgical removal of a subretinal proliferating cysticercus of taeniaeformis crassiceps. Chuck RS, et al. **Arch Ophthalmol** 1997 Apr;115(4):562-3

Broad laser indentation surface for retinal laser photocoagulation using indirect ophthalmoscopic delivery. Heyworth P, et al. **Arch Ophthalmol** 1997 Feb;115(2):280-1

Human photoreceptor transplantation in retinitis pigmentosa. A safety study. Kaplan HJ, et al. **Arch Ophthalmol** 1997 Sep;115(9):1168-72

Guarded microvitreoretinal blade. Schwartz DM. **Arch Ophthalmol** 1996 Dec;114(12):1524-5

Choroidal effusion causing transient myopia after panretinal photocoagulation [letter] Zamir E, et al. **Arch Ophthalmol** 1996 Oct;114(10):1284-5

Immunocytochemical study of retinal diode laser photocoagulation in the rat. Richardson PR, et al. **Br J Ophthalmol** 1996 Dec;80(12):1092-8

The pattern electroretinogram (PERG) after laser treatment of the peripheral or central retina. Ciavarella P, et al. **Curr Eye Res** 1997 Feb;16(2):111-5

The role of retinotomy in an experimental rabbit model of proliferative vitreoretinopathy. Goldaracena MB, et al. **Curr Eye Res** 1997 May;16(5):422-7

The effect of scatter laser photocoagulation on intravitreal levels of growth factors in the miniature pig. Xiao M, et al. **Curr Eye Res** 1996 Sep;15(9):923-31

Tolerance of human fetal retinal pigment epithelium xenografts in monkey retina. Berglin L, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb;235(2):103-10

A comparative study of the effects of argon and diode laser photocoagulation on retinal oxygenation. Funatsu H, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Mar;235(3):168-75

Evidence of chronic inflammation in retina excised after relaxing retinotomy for anterior proliferative vitreoretinopathy. Limb GA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):213-20

Foldable intraocular lenses and vitreoretinal surgery [editorial; comment] Obstbaum SA. **J Cataract Refract Surg** 1997 May;23(4):457. Comment on: J Cataract Refract Surg 1997 May;23(4):527-35. Comment on: J Cataract Refract Surg 1997 May;23(4):536-44.

Effect of vitrectomy on epiretinal membranes after endogenous fungal endophthalmitis. Naoi N, et al. **Jpn J Ophthalmol** 1996;40(3):434-8

Immunohistochemical proof of origin of macrophages in laser photocoagulation lesion in the retina. Yi X, et al. **Jpn J Ophthalmol** 1996;40(2):192-201

New semiconductor laser for vitreoretinal surgery. Azzolini C, et al. **Lasers Surg Med** 1996;19(2):177-83

Thermal modelling of micropulsed diode laser retinal photocoagulation. Berger JW. **Lasers Surg Med** 1997; 20(4):409-15

Modeling of erbium: YAG laser-mediated explosive photovaporization: implications for vitreoretinal surgery. Berger JW, et al. **Ophthalmic Surg Lasers** 1997 Feb; 28(2):133-9

The in vivo effects of a prototype diode laser coagulator/vaporizing endoprobe used to perform retinectomy and retinotomy in rabbits. Hoggatt JS, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):231-5

An applicator-shaped scleral depressor for vitreoretinal surgery. Lewis JM, et al. **Ophthalmic Surg Lasers** 1997 Jul; 28(7):603-4

Subretinal microsurgery with gradient index endoscopes. Koch FH, et al. **Ophthalmologica** 1997;211(5):283-7

A cadaveric eye model for practicing anterior and posterior segment surgeries. Borirak-chanyavat S, et al. **Ophthalmology** 1995 Dec;102(12):1932-5

Repair of rhegmatogenous retinal detachments [letter; comment] Moriche M, et al. **Ophthalmology** 1997 Jun; 104(6):897-8. Comment on: Ophthalmology 1996 Aug;103(8):1313-24.

Phacoemulsification after RD surgery [letter; comment] Thomas R, et al. **Ophthalmology** 1996 Nov;103(11):1714. Comment on: Ophthalmology 1996 Feb;103(2):216-9.

Removal of subretinal gas using perfluorocarbon liquid. Brown AD, et al. **Retina** 1997;17(1):70-1

The effect of retinal cryoapplication on the vitreous. Dunker S, et al. **Retina** 1997;17(4):338-43

The use of panoramic viewing system in relaxing retinotomy and retinectomy. Lesnoni G, et al. **Retina** 1997;17(3):186-90

Clinicopathologic correlation of argon laser photocoagulation of retinal angiomas in a patient with von Hippel-Lindau disease followed for more than 20 years. Rosa RH Jr, et al. **Retina** 1996;16(2):145-56

Combined transscleral diode laser cyclophotocoagulation and transscleral retinal photocoagulation for refractory neovascular glaucoma. Tsai JC, et al. **Retina** 1996; 16(2):164-6

[Treatment of neovascular glaucoma by anterior retinal cryotherapy and trabeculectomy] Ma L, et al. **Chung Hua Yen Ko Tsa Chih** 1996 Mar;32(2):118-22 (Eng. Abstr.) **(Chi)**

[Retinectomies in the treatment of retinal detachments with vitreoretinal proliferation] Metge F, et al. **J Fr Ophtalmol** 1997;20(5):345-9 (Eng. Abstr.) **(Fre)**

[Accidental retinectomy in block excision for cystic epithelial ingrowth] Rohrbach JM, et al. **Klin Monatsbl Augenheilkd** 1997 Apr;210(4):225-6 (Eng. Abstr.) **(Ger)**

[A case of reflex sympathetic dystrophy following a retinous surgery] Morimoto Y, et al. **Masui** 1997 Apr;46(4):549-51 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Influence of technique and transplantation site on rosette formation in rabbit retinal transplants. Sharma RK, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):3–10

Fetal retinal cells restore sight [news] Josefson D. **BMJ** 1996 Nov 30;313(7069):1353

Opsin gene expression and regulation in retinal transplants. Hoover F, et al. **Brain Res** 1996 Apr 29;718(1–2):124–8

Monoclonal antibody C38 labels surviving retinal ganglion cells after peripheral nerve graft in axotomized rat retina. Wakabayashi T, et al. **Brain Res** 1996 Jun 24;725(1):121–4

Storage of human fetal retina in optisol prior to subretinal transplantation. DiLoreto DA Jr, et al. **Cell Transplant** 1996 Sep–Oct;5(5):553–61

Cell proliferation in retinal transplants. Sharma RK, et al. **Cell Transplant** 1997 Mar–Apr;6(2):141–8

Adaptation to monocular torsion after macular translocation. Seaber JH, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb;235(2):76–81

Effect of cyclosporine on anterior chamber–associated immune deviation with retinal transplantation. Ishioka M, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2152–60

The first decade of continuous progress in retinal transplantation. del Cerro M, et al. **Microsc Res Tech** 1997 Jan 15;36(2):130–41 (135 ref.)

[Retinal and optic nerve transplantation] Adachi-Usami E. **Nippon Ganka Gakkai Zasshi** 1996 Dec;100(12):921–2 **(Jpn)**

[New techniques for retinal surgery. Cell transplantation, a future therapeutic method?] Nystrand A. **Lakartidningen** 1997 Apr 23;94(17):1617–20, 1623 (10 ref.) **(Swe)**

ULTRASONOGRAPHY

OCT images and surgery of juvenile Macular retinoschisis. Azzolini C, et al. **Eur J Ophthalmol** 1997 Apr–Jun; 7(2):196–200

ULTRASTRUCTURE

The effect of TNF-alpha and IL-6 on the permeability of the rat blood–retinal barrier in vivo. Bamforth SD, et al. **Acta Neuropathol (Berl)** 1996;91(6):624–32

Long-term effects on retina of rhesus monkeys fed taurine-free human infant formula. Imaki H, et al. **Adv Exp Med Biol** 1996;403:351–60

Clinicopathologic correlation of an untreated macular hole and a macular hole treated by vitrectomy, transforming growth factor-beta 2, and gas tamponade. Rosa RH Jr, et al. **Am J Ophthalmol** 1996 Dec;122(6):853–63

Morphology of the recovery from form deprivation myopia in the chick. Liang H, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):41–4

Analogues of diverse structure are unable to differentiate native melatonin receptors in the chicken retina, sheep pars tuberalis and Xenopus melanophores. Pickering H, et al. **Br J Pharmacol** 1996 Sep;119(2):379–87

Formation and dissolution of spinules and changes in nematosome size require optic nerve integrity in black bass (Micropterus salmoides) retina. De Juan J, et al. **Brain Res** 1996 Jan 29;707(2):213–20

A histopathological, ultrastructural and immunohistochemical study of congenital hereditary retinoschisis. Kirsch LS, et al. **Can J Ophthalmol** 1996 Oct; 31(6):301–10

Neuronal ceroid lipofuscinosis in the Polish Owczarek Nizinny (PON) dog. A retinal study. Wrigstad A, et al. **Doc Ophthalmol** 1995;91(1):33–47

High intraocular pressure–induced ischemia and reperfusion injury in the optic nerve and retina in rats. Adachi M, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul; 234(7):445–51

Electron microscopic study of retinas of macular mice. Mishima K, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S101–5

Retinal photoreceptor fine structure in the Australian galah (Eolophus roseicapillus) (Aves). Braekevelt CR, et al. **Histol Histopathol** 1996 Jul;11(3):555–64

Asynchronous changes in size, number, and shape of synapses in the developing superior colliculus. Correa-Gillieron EM, et al. **Int J Dev Neurosci** 1997 Feb;15(1):61–6

Ultrastructural analysis of interleukin-1 beta–induced leukocyte recruitment to the rat retina. Bamforth SD, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):25–35

Formation of synaptic specializations in the inner plexiform layer of the developing chick retina. Hering H, et al. **J Comp Neurol** 1996 Nov 18;375(3):393–405

Synaptogenesis in the rat retina: subcellular localization of glycine receptors, GABA(A) receptors, and the anchoring protein gephyrin. Sassoè-Pognetto M, et al. **J Comp Neurol** 1997 May 5;381(2):158–74

Differentiation and morphogenesis in pellet cultures of developing rat retinal cells. Watanabe T, et al. **J Comp Neurol** 1997 Jan 20;377(3):341–50

Autoradiographic and electron microscopic studies of retinal rosettes in genetically microphthalmic mice. Hilbig H, et al. **J Hirnforsch** 1996;37(3):301–11

Antibody that neutralizes myelin-associated inhibitors of axon growth does not interfere with recognition of target-specific guidance information by rat retinal axons. Bähr M, et al. **J Neurobiol** 1996 Jun;30(2):281–92

Immunolocalization of Drosophila eye-specific diacylgylcerol kinase, rdgA, which is essential for the maintenance of the photoreceptor. Masai I, et al. **J Neurobiol** 1997 Jun 20;32(7):695–706

The cone synapses of cone bipolar cells of primate retina. Hopkins JM, et al. **J Neurocytol** 1997 May;26(5):313–25

Ultrastructure of surgically excised subfoveal neovascular membranes. Kim KS, et al. **Korean J Ophthalmol** 1996 Dec; 10(2):76–81

Vitamin A, visual pigments, and visual receptors in Drosophila. Lee RD, et al. **Microsc Res Tech** 1996 Dec 15;35(6):418–30 (96 ref.)

Plasticity of retinal ribbon synapses. Vollrath L, et al. **Microsc Res Tech** 1996 Dec 15;35(6):472–87 (151 ref.)

Compartmental organization of the synthesis of GM3, GD3, and GM2 in golgi membranes from neural retina cells. Maxzúd MK, et al. **Neurochem Res** 1997 Apr;22(4):455–61

Direct retinal projections to GRP neurons in the suprachiasmatic nucleus of the rat. Tanaka M, et al. **Neuroreport** 1997 Jul 7;8(9–10):2187–91

Electron microscopic demonstration of tyrosine hydroxylase-immunoreactive interplexiform cells in the lamprey retina. Dalil-Thiney N, et al. **Neurosci Lett** 1996 Apr 5;207(3):159–62

Nonteratoid medulloepithelioma of the retina with electron microscopic and immunohistochemical characterization. Vadmal M, et al. **Pediatr Pathol Lab Med** 1996 Jul–Aug; 16(4):663–72 (17 ref.)

Unilateral containment of retinal axons by tectal glia: a possible role for sulfated proteoglycans. Jhaveri S, et al. **Prog Brain Res** 1996;108:135–48 (104 ref.)

Control of retinotectal axon arbor growth by postsynaptic CaMKII. Zou DJ, et al. **Prog Brain Res** 1996;108:303–12 (44 ref.)

The number and distribution of bipolar to ganglion cell synapses in the inner plexiform layer of the anuran retina. Buzás P, et al. **Vis Neurosci** 1996 Nov–Dec;13(6):1099–107

The human fetal retinal nerve fiber layer and optic nerve head: a DiI and DiA tracing study. FitzGibbon T. **Vis Neurosci** 1997 May–Jun;14(3):433–47

Synaptic organization of an organotypic slice culture of the mammalian retina. Sassoè-Pognetto M, et al. **Vis Neurosci** 1996 Jul–Aug;13(4):759–71

Quantitative analysis of triphasic (H3) horizontal cell–cone connectivity in the cyprinid fish (roach) retina. Djamgoz MB, et al. **Vision Res** 1996 Dec;36(24):4007–14

VIROLOGY

Human T-cell lymphotropic virus type 1 can infect primary rat retinal glial cells and induce gene expression of inflammatory cytokines. Sato Y, et al. **Curr Eye Res** 1997 Aug;16(8):782–91

Viral resistance and CMV retinitis: design and methods of a prospective study. CRVR Research Groups. Cytomegalovirus Retinitis Viral Resistance Research Group. Enger C, et al. **Ophthalmic Epidemiol** 1997 Mar; 4(1):41–8

Early stage of human adenovirus type 12–inoculated retinal tissue of F344 newborn rat. Kato Y, et al. **Pathol Int** 1996 Aug;46(8):548–56

Polymerase chain reaction detection of cytomegalovirus and human immunodeficiency virus-1 in the retina of patients with acquired immune deficiency syndrome with and without cotton-wool spots. González CR, et al. **Retina** 1996;16(4):305–11

Evidence for induction of interferon-alpha and interferon-beta in retinal glial cells of Müller. Drescher KM, et al. **Virology** 1997 Aug 4;234(2):309–16

Virus RNA persists within the retina in coronavirus-induced retinopathy. Komurasaki Y, et al. **Virology** 1996 Aug 15; 222(2):446–50

RETINAL see **RETINALDEHYDE**

RETINAL ANLAGE TUMOR see **NEUROECTODERMAL TUMOR, MELANOTIC**

RETINAL ARTERY

Serotonin-induced constriction of ocular arteries in atherosclerotic monkeys. Implications for ischemic disorders of the retina and optic nerve head. Hayreh SS, et al. **Arch Ophthalmol** 1997 Feb;115(2):220–8

Blood flow velocity measurements in the optic nerve of glaucomatous patients by elaboration of a constant to evaluate the evolutive risk. Giò M, et al. **J Cardiovasc Surg (Torino)** 1997 Jun;38(3):291–9

Idiopathic polypoidal choroidal vasculopathy associated with retinal arterial macroaneurysm and hypertensive retinopathy. Ross RD, et al. **Retina** 1996;16(2):105–11

ABNORMALITIES

Complete circumvention of central retinal artery and venous cilioretinal shunts in optic disc drusen [letter] Auw-Haedrich C, et al. **Arch Ophthalmol** 1996 Oct; 114(10):1285–7

Vitreous haemorrhage and other ocular complications of a persistent hyaloid artery. Gonçalves A, et al. **Doc Ophthalmol** 1996–97;92(1):55–9

Arteriovenous communications of the retina. Meinhold JR. **J Am Optom Assoc** 1996 May;67(5):279–82

Prepapillary vascular loop and a recurrent vitreous hemorrhage. Strassman IB, et al. **Retina** 1997;17(2):166–7

ANATOMY & HISTOLOGY

Blood supply to the retina in the laboratory shrew (Suncus murinus). Isomura G, et al. **Anat Anz** 1997 Jun; 179(3):237–43

DRUG EFFECTS

Asymmetrical response of the intraluminal and extraluminal surfaces of the porcine retinal artery to exogenous adenosine. Alder VA, et al. **Exp Eye Res** 1996 Nov; 63(5):557–64

Ocular hemodynamic effects of acute ethanol ingestion. Harris A, et al. **Ophthalmic Res** 1996;28(3):193–200

Canine retinal arterial and arteriolar dilatation induced by nipradilol, a possible glaucoma therapeutic. Okamura T, et al. **Pharmacology** 1996 Nov;53(5):302–10

INNERVATION

Monkey central retinal artery is innervated by nitroxidergic vasodilator nerves. Toda N, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2177–84

METABOLISM

Glycoprotein deposition in vascular walls of diabetic retinopathy. A histopathological and immunohistochemical study. Bek T, et al. **Acta Ophthalmol Scand** 1996 Aug; 74(4):385–90

Decreased nitric oxide production accounts for secondary arteriolar constriction after retinal branch vein occlusion. Donati G, et al. **Invest Ophthalmol Vis Sci** 1997 Jun; 38(7):1450–7

PATHOLOGY

Cilioretinal artery occlusion following scleral reinforcement surgery. Karabatsas CH, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):316–8

Identification of individual microaneurysms: a comparison between fluorescein angiograms and red-free and colour photographs. Hellstedt T, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S13–7

Hyperimmunoglobulinemia D in idiopathic retinal vasculitis. Kumano Y, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):372–8

Peripapillary focal retinal arteriolar narrowing in open angle glaucoma. Rankin SJ, et al. **J Glaucoma** 1996 Feb;5(1):22–8

Atheromatous and atheroma-like lesions of the central retinal artery: histopathological correlations. Eberle MM, et al. **Jpn J Ophthalmol** 1996;40(3):377–84

Intraoperative recognition of retinal vasculitis in a patient with early lens-induced uveitis. Besen G, et al. **Ophthalmic Surg Lasers** 1997 Jan;28(1):67–8

Subretinal fibrovascular proliferation in retinal arteritis with multiple aneurysmal dilatations: a case report. Salvador F, et al. **Ophthalmologica** 1996;210(2):129–31

Indocyanine green videoangiography of hemorrhagic retinal arterial macroaneurysms. Schneider U, et al. **Ophthalmologica** 1997;211(2):115–8

Idiopathic retinal vasculitis, aneurysms, and neuro-retinitis. Retinal Vasculitis Study. Chang TS, et al. **Ophthalmology** 1995 Jul;102(7):1089–97

Evidence for breaches of the retinal vasculature in acquired immune deficiency syndrome angiopathy. A fluorescent microsphere study. Glasgow BJ. **Ophthalmology** 1997 May; 104(5):753–60

Focal narrowing of retinal arterioles in optic nerve atrophy. Papastathopoulos KI, et al. **Ophthalmology** 1995 Nov; 102(11):1706–11

Bilateral frosted branch angitis in an 8-year-old Indian girl. Biswas J, et al. **Retina** 1996;16(5):444–5

PHYSIOLOGY

Effects of topical dorzolamide on retinal and retrobulbar hemodynamics. Harris A, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):569–72

Effect of different flow rates on retinal endothelial microfilaments. Yu PK, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):67–9

Color Doppler imaging in untreated high- and normal-pressure open-angle glaucoma. Butt Z, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):690–6

Mechanism of adrenomedullin-induced relaxation in isolated canine retinal arteries. Okamura T, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):56–61

Direct vasodilatory effect of insulin on isolated retinal arterioles. Su EN, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2634–44

Acetazolamide and CO2: acute effects on cerebral and retrobulbar hemodynamics. Harris A, et al. **J Glaucoma** 1996 Feb;5(1):39–45

Eicosanoids in bovine retinal microcirculation. Kulkarni P, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):139–49

Filtering properties of an adaptive trend operator and the application for determining the arterial blood velocity in retinal vessels. Barešová E, et al. **Med Prog Technol** 1995–96;21(3):123–34

Retinal artery and vein pressures in the dog and their relationship to aortic, intraocular, and cerebrospinal fluid pressures. Morgan WH, et al. **Microvasc Res** 1997 May; 53(3):211–21

RETINAL ARTERY

Retinal blood flow increases following short-term aspirin usage in type I diabetics with no or minimal retinopathy. Feke GT, et al. **Ophthalmic Res** 1996;28(2):108–16

Retinal hemodynamics in middle-aged normal subjects. Yoshida A, et al. **Ophthalmic Res** 1996;28(6):343–50

PHYSIOPATHOLOGY

Ophthalmic and central retinal artery flow velocities in patients with Behçet's disease. Seçkin D, et al. **Eur J Ophthalmol** 1996 Apr–Jun;6(2):215–6

ULTRASONOGRAPHY

Doppler ultrasonography of the central retinal artery by duplex scanning. Steigerwalt RD Jr, et al. **Retina** 1996; 16(6):513–7

ULTRASTRUCTURE

Retinopathy in diabetic (KKA gamma) mice: diabetic microvascular changes to the retina in KKA gamma mice revealed by light and electron microscopy. Sakaki Y, et al. **Jpn J Ophthalmol** 1996;40(3):317–28

RETINAL ARTERY OCCLUSION

Retinal artery obstruction in young patients [letter; comment] Sanborn GE. **Arch Ophthalmol** 1997 Jul;115(7):942. Comment on: Arch Ophthalmol 1996 Oct;114(10):1189–92.

CHEMICALLY INDUCED

Serotonin–induced constriction of ocular arteries in atherosclerotic monkeys. Implications for ischemic disorders of the retina and optic nerve head. Hayreh SS, et al. **Arch Ophthalmol** 1997 Feb;115(2):220–8

[Central retinal artery occlusion related to ingestion of tranexamic acid] Dighiero P, et al. **J Fr Ophtalmol** 1996; 19(12):785–6 (Eng. Abstr.) **(Fre)**

[Occlusion of finger arteries and thrombotic angiopathy of the retina during adjuvant tamoxifen therapy of a mammary carcinoma] Schlich B, et al. **Dtsch Med Wochenschr** 1997 Jun 13;122(24):783–6 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Urticaria in idiopathic bilateral recurrent branch retinal arterial occlusion. Barak N, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):107–8

Associated ocular findings in pericentral pigmentary retinopathy. Durlu YK, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):101–3

Transthoracic echocardiographic findings in patients with acute retinal arterial obstruction. A retrospective review. Retinal Emboli of Cardiac Origin Group [see comments] Sharma S, et al. **Arch Ophthalmol** 1996 Oct;114(10):1189–92 . Comment in: Arch Ophthalmol 1997 Jul;115(7):942.

Branch retinal artery occlusion in a child. Sebban AI, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):283–6 (18 ref.)

Transthoracic echocardiography in young patients with acute retinal arterial obstruction. RECO Study Group. Retinal Emboli of Cardiac Origin Group. Sharma S, et al. **Can J Ophthalmol** 1997 Feb;32(1):38–41

Toxoplasmic papillitis with central retinal artery occlusion. Tandon R, et al. **Can J Ophthalmol** 1995 Dec;30(7):374–6

Bilateral buried optic nerve drusen presenting with central retinal artery occlusion at high altitude [letter] Newsom RS, et al. **Eye** 1995;9 (Pt 6):806–8

Recurrent branch retinal infarcts in association with migraine. Beversdorf D, et al. **Headache** 1997 Jun;37(6):396–9

Carotid artery disease in patients with retinal artery occlusion. Kimura K, et al. **Intern Med** 1996 Dec; 35(12):937–40

Incomplete occlusion of central retinal artery in a girl with iron deficiency anemia. Matsuoka Y, et al. **Ophthalmologica** 1996;210(6):358–60

Sequential occlusion of the central retinal artery and posterior ciliary artery in a patient with diabetes mellitus. Phillips WB 2nd, et al. **Retina** 1997;17(1):67–70

[The relation of retinal vascular occlusion and carotid artery stenosis] Tamiya R, et al. **Nippon Ganka Gakkai Zasshi** 1996 Nov;100(11):863–7 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Ophthaproblem. Central retinal arterial occlusion. Sharma S. **Can Fam Physician** 1997 Sep;43:1513, 1520

Toxoplasmic papillitis with central retinal artery occlusion. Tandon R, et al. **Can J Ophthalmol** 1995 Dec;30(7):374–6

DRUG THERAPY

Treatment of branch retinal arterial occlusion with sodium ozagrel, a thromboxane A2 synthetase inhibitor. Kato H, et al. **J Int Med Res** 1997 Mar–Apr;25(2):108–11

Photothrombosis of retinal and choroidal vessels in rabbit eyes using chloroaluminum sulfonated phthalocyanine and a diode laser. Iliaki OE, et al. **Lasers Surg Med** 1996; 19(3):311–23

[In sudden blindness: nitroglycerin? Reflections on therapy of acute embolism embolism of the central retinal artery (letter)] Erdmann R. **Klin Monatsbl Augenheilkd** 1997 Jan; 210(1):68 **(Ger)**

[Intracerebral hemorrhage after systemic thrombolysis in patients with occlusion of the central retinal artery. Report of 2 cases] Barth H, et al. **Ophthalmologe** 1996 Dec; 93(6):739–44 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Cilioretinal artery occlusion following scleral reinforcement surgery. Karabatsas CH, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):316–8

Visual field loss caused by retinal vascular occlusion after vitrectomy surgery. Malinowski SM, et al. **Am J Ophthalmol** 1997 May;123(5):707–8

Sudden unilateral visual loss and brain infarction after autologous fat injection into nasolabial groove [letter] Lee DH, et al. **Br J Ophthalmol** 1996 Nov;80(11):1026–7

Retinal arterial occlusion associated with resistance to activated protein C [letter] Vignes S, et al. **Br J Ophthalmol** 1996 Dec;80(12):1111

Branch retinal artery occlusion (BRAO) combined with branch retinal vein occlusion (BRVO) and optic disc neovascularization associated with HIV and CMV retinitis. Conway MD, et al. **Int Ophthalmol** 1995–96;19(4):249–52

Bilateral central retinal artery occlusion in a neonate. Axer–Siegel R, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jul–Aug;34(4):249–51

Focal narrowing of retinal arterioles in optic nerve atrophy. Papastathopoulos KI, et al. **Ophthalmology** 1995 Nov; 102(11):1706–11

PARASITOLOGY

Retinal vascular occlusions complicating acute toxoplasmic retinochoroiditis. Gentile RC, et al. **Can J Ophthalmol** 1997 Aug;32(5):354–8

PATHOLOGY

Glial cell involvement in vascular occlusion of diabetic retinopathy. Bek T. **Acta Ophthalmol Scand** 1997 Jun; 75(3):239–43

Complement–induced retinal arteriolar occlusions in the cat. Lai JC, et al. **Retina** 1997;17(3):239–46

PHYSIOPATHOLOGY

[Remission of non–proliferative diabetic retinopathy following central retinal artery obstruction] Brahim R, et al. **J Fr Ophtalmol** 1996;19(10):610–4 (Eng. Abstr.) **(Fre)**

[The new laser Doppler velocimetry for the measurement of retinal circulation and its clinical application] Fujio N, et al. **Hokkaido Igaku Zasshi** 1996 Nov;71(6):757–69 (Eng. Abstr.) **(Jpn)**

[Visual field defect in eyes with branch retinal artery occlusion] Tsumura T, et al. **Nippon Ganka Gakkai Zasshi** 1997 Feb;101(2):163–6 (Eng. Abstr.) **(Jpn)**

THERAPY

The effect of inhalation of different mixtures of O2 and CO2 on ocular fundus pulsations. Schmetterer L, et al. **Exp Eye Res** 1996 Oct;63(4):351–5

Efficacy of anterior chamber paracentesis and Carbogen in treating acute nonarteritic central retinal artery occlusion. Atebara NH, et al. **Ophthalmology** 1995 Dec; 102(12):2029–34; discussion 2034–5

Reversal of visual loss with hyperbaric oxygen treatment in a patient with Susac syndrome. Li HK, et al. **Ophthalmology** 1996 Dec;103(12):2091–8

VIROLOGY

Multiple recurrent branch retinal artery occlusions associated with varicella zoster virus. Zamora RL, et al. **Retina** 1996; 16(5):399–404

RETINAL BREAKS see **RETINAL PERFORATIONS**

RETINAL DEGENERATION

Lineage study of degenerating photoreceptor cells in the rd mouse retina. Blanks JC, et al. **Curr Eye Res** 1997 Jul; 16(7):733–7

Up–regulation of Bax protein in degenerating retinal ganglion cells precedes apoptotic cell death after optic nerve lesion in the rat. Isenmann S, et al. **Eur J Neurosci** 1997 Aug; 9(8):1763–72

A rare case of McCune–Albright syndrome associated with glaucoma retinal degeneration and arteriovenous malformations [letter] Scuderi G, et al. **Eye** 1996;10 (Pt 6):752–5

rdgE: a novel retinal degeneration mutation in Drosophila melanogaster. Zars T, et al. **Genetics** 1996 Sep; 144(1):127–38

CHEMICALLY INDUCED

Interferon alfa–associated retinopathy. Chambers RB, et al. **J Am Osteopath Assoc** 1997 Jan;97(1):43–5 (12 ref.)

COMPLICATIONS

Ocular findings in the Laurence–Moon–Bardet–Biedl syndrome. Riise R, et al. **Acta Ophthalmol Scand** 1996 Dec; 74(6):612–7

Keratoconus and tapetoretinal degeneration. Moschos M, et al. **Cornea** 1996 Sep;15(5):473–6

Wagner vitreoretinal degeneration. Follow–up of the original pedigree. Graemiger RA, et al. **Ophthalmology** 1995 Dec; 102(12):1830–9

[Renal retinal dysplasia] Tomosugi N, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):381–4 (20 ref.) **(Jpn)**

[Clinico–immunological studies in dystrophic retinal detachment complicated by proliferative vitreoretinopathy] Balashova LM, et al. **Vestn Oftalmol** 1996 Apr–Jun; 112(2):38–41 (Eng. Abstr.) **(Rus)**

[Some aggregation parameters in the bulbar vessels used for assessing the clinical course of retinopathy in patients with essential hypertension and diabetes mellitus] Smirennaia EV, et al. **Vestn Oftalmol** 1996 Jul–Aug;112(3):28–30 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

MR changes in the calcarine area resulting from retinal degeneration. Kitajima M, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1291–5

Paraneoplastic ophthalmological syndromes. Constantinescu A. **Oftalmologia** 1996 Jul–Sep;40(3):214–8 (7 ref.)

[Carcinoma–associated retinopathy in breast carcinoma and carcinoid tumor] Holz FG, et al. **Ophthalmologe** 1997 May; 94(5):337–42 (Eng. Abstr.) **(Ger)**

[Paraneoplastic retinopathy in 2 patients with breast carcinoma] Huober J, et al. **Zentralbl Gynakol** 1997; 119(6):278–81 (Eng. Abstr.) **(Ger)**

[Electrophysiologic tests for diagnosis of congenital night blindness] Lubiński W, et al. **Klin Oczna** 1996 Jan; 98(1):9–12 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Growth factors in the treatment of degenerative retinal disorders. Reh TA, et al. **Ciba Found Symp** 1996; 196:120–31; discussion 131–4 (50 ref.)

ENZYMOLOGY

Matrix metalloproteinase–2 and tissue inhibitor of metalloproteinase–1 in the retinal pigment epithelium and interphotoreceptor matrix: vectorial secretion and regulation. Padgett LC, et al. **Exp Eye Res** 1997 Jun; 64(6):927–38

Carbonic anhydrase activity is increased in retinal pigmented epithelium and choriocapillaris of RCS rats. Eichhorn M, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr; 234(4):258–63

ETIOLOGY

A comparison of continuous versus intermittent light exposure on apoptosis. Li S, et al. **Curr Eye Res** 1996 Sep; 15(9):914–22

Retinal involvement in pigment dispersion syndrome. Scuderi G, et al. **Int Ophthalmol** 1995–96;19(6):375–8

Genistein, a protein tyrosine kinase inhibitor, ameliorates retinal degeneration after ischemia–reperfusion injury in rat. Hayashi A, et al. **Invest Ophthalmol Vis Sci** 1997 May; 38(6):1193–202

GENETICS

Linkage disequilibrium and physical mapping of X–linked juvenile retinoschisis. Huopaniemi L, et al. **Am J Hum Genet** 1997 May;60(5):1139–49

Assessment of the phenotypic range seen in Doyne honeycomb retinal dystrophy. Evans K, et al. **Arch Ophthalmol** 1997 Jul;115(7):904–10

Familial internal limiting membrane dystrophy. A new sheen retinal dystrophy. Polk TD, et al. **Arch Ophthalmol** 1997 Jul;115(7):878–85

Molecular genetics of central retinal dystrophies. Moore AT, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):189–98 (77 ref.)

Search for a gene that may result in fewer neurons in the adult mouse hippocampus. Wimer RE, et al. **Brain Res** 1995 Dec 1;701(1–2):293–6

Canine rod transducin alpha–1: cloning of the cDNA and evaluation of the gene as a candidate for progressive retinal atrophy. Ray K, et al. **Curr Eye Res** 1997 Jan;16(1):71–7

Cloning and characterization of human homologue of Drosophila retinal degeneration B: a candidate gene for degenerative retinal diseases. Guo J, et al. **Dev Genet** 1997; 20(3):235–45

An Xp22.1–p22.2 YAC contig encompassing the disease loci for RS, KFSD, CLS, HYP and RP15: refined localization of RS. Van de Vosse E, et al. **Eur J Hum Genet** 1996; 4(2):101–4

Analysis of the rhodopsin and peripherin/RDS gene in two families with pattern dystrophy of the retinal pigment epithelium. Daniele S, et al. **Eur J Ophthalmol** 1996 Apr–Jun;6(2):197–200

Fas–independent apoptosis of photoreceptor cells in C3H mice. Nambu H, et al. **Exp Anim** 1996 Oct;45(4):309–15

Preferential rod and cone photoreceptor abnormalities in heterozygotes with point mutations in the RDS gene [letter] Jacobson SG, et al. **Exp Eye Res** 1996 Nov;63(5):603–8

Doyne revisited. Jay M, et al. **Eye** 1996;10 (Pt 4):469–72

Rescue of photoreceptor function by AAV–mediated gene transfer in a mouse model of inherited retinal degeneration. Jomary C, et al. **Gene Ther** 1997 Jul;4(7):683–90

A new dominant retinal degeneration (Rd4) associated with a chromosomal inversion in the mouse. Roderick TH, et

al. **Genomics** 1997 Jun 15;42(3):393–6

X-linked juvenile retinoschisis: localization between (DXS1195, DXS418) and AFM291wf5 on a single YAC. Pawar H, et al. **Hum Hered** 1996 Nov–Dec;46(6):329–35

A novel human serine–threonine phosphatase related to the Drosophila retinal degeneration C (rdgC) gene is selectively expressed in sensory neurons of neural crest origin. Montini E, et al. **Hum Mol Genet** 1997 Jul; 6(7):1137–45

Mutations and polymorphisms in the human peripherin–RDS gene and their involvement in inherited retinal degeneration. Keen TJ, et al. **Hum Mutat** 1996;8(4):297–303

Retarding photoreceptor degeneration in Pdegtm1/Pdegtml mice by an apoptosis suppressor gene. Tsang SH, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):943–50

Improved genetic mapping of X linked retinoschisis. George ND, et al. **J Med Genet** 1996 Nov;33(11):919–22

RDS/peripherin gene mutations are frequent causes of central retinal dystrophies. Kohl S, et al. **J Med Genet** 1997 Aug;34(8):620–6

Autosomal dominant cerebellar ataxia with retinal degeneration (ADCA II): clinical and neuropathological findings in two pedigrees and genetic linkage to 3p12–p21.1. Jöbsis GJ, et al.
J Neurol Neurosurg Psychiatry 1997 Apr;62(4):367–71

Muscle morphology and mitochondrial investigations of a family with autosomal dominant cerebellar ataxia and retinal degeneration mapped to chromosome 3p12–p21.1. Forsgren L, et al. **J Neurol Sci** 1996 Dec;144(1–2):91–8

Retinal degeneration in transgenic mice with photoreceptor-specific expression of a dominant-negative fibroblast growth factor receptor. Campochiaro PA, et al. **J Neurosci** 1996 Mar 1;16(5):1679–88

Mammalian homolog of Drosophila retinal degeneration B rescues the mutant fly phenotype. Chang JT, et al.
J Neurosci 1997 Aug 1;17(15):5881–90

High-resolution mapping by YAC fragmentation of a 2.5-Mb Xp22 region containing the human RS, KFSD and CLS disease genes. Van de Vosse E, et al. **Mamm Genome** 1997 Jul;8(7):497–501

Inherited retinal degeneration: exceptional genetic and clinical heterogeneity. Sullivan LS, et al.
Mol Med Today 1996 Sep;2(9):380–6 (35 ref.)

Stargardt's ABCR is localized to the disc membrane of retinal rod outer segments [letter] Sun H, et al. **Nat Genet** 1997 Sep;17(1):15–6

Narrowing the focus on retinal degeneration [news; comment] Steele FR. **Nat Med** 1997 Mar;3(3):280. Comment on: Nat Med 1997 Mar;3(3):346–9.

Two novel mutations in the Norrie disease gene associated with the classical ocular phenotype. Caballero M, et al. **Ophthalmic Genet** 1996 Dec;17(4):187–91

Serine–27–phenylalanine mutation within the peripherin/RDS gene in a family with cone dystrophy. Fishman GA, et al. **Ophthalmology** 1997 Feb; 104(2):299–306

Autosomal dominant cone–rod dystrophy associated with a Val200Glu mutation of the peripherin/RDS gene. Nakazawa M, et al. **Retina** 1996;16(5):405–10

[Rhegmatogenous retinal detachment in atrophia gyrata: pars plana vitrectomy with silicone oil instillation] Engelmann K, et al. **Klin Monatsbl Augenheilkd** 1996 Dec;209(6):373–5 (Eng. Abstr.) **(Ger)**

[Hereditary retinal dystrophies. 2: Differential diagnosis] Kellner U. **Ophthalmologe** 1997 Jun;94(6):450–65 (35 ref.) **(Ger)**

[Phenocopies of hereditary retinal degenerations] Kellner U, et al. **Ophthalmologe** 1996 Dec;93(6):680–7 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Autoimmune retinopathy in the absence of cancer. Mizener JB, et al. **Am J Ophthalmol** 1997 May;123(5):607–18

[Clinico-immunological studies in dystrophic retinal detachment complicated by proliferative vitreoretinopathy] Balashova LM, et al. **Vestn Oftalmol** 1996 Apr–Jun; 112(2):38–41 (Eng. Abstr.) **(Rus)**

METABOLISM

Neurotrophin receptors expression in the developing mouse retina: an immunohistochemical study. Llamosas MM, et al. **Anat Embryol (Berl)** 1997 Apr;195(4):337–44

Lipids of plasma, retina, and retinal pigment epithelium in Swedish briard dogs with a slowly progressive retinal dystrophy. Anderson RE, et al. **Exp Eye Res** 1997 Feb; 64(2):181–7

Analysis of the oligosaccharide chains of rhodopsin from normal rats and those with hereditary retinal dystrophy. Endo T, et al. **Exp Eye Res** 1996 Oct;63(4):395–405

Overexpression of Bcl–2 or Bcl–XL transgenes and photoreceptor degeneration. Joseph RM, et al.
Invest Ophthalmol Vis Sci 1996 Nov;37(12):2434–46

Generation and analysis of transgenic mice expressing P216L–substituted rds/peripherin in rod photoreceptors. Kedzierski W, et al. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):498–509

Localization of tissue inhibitor of metalloproteinases–3 in neurodegenerative retinal disease. Jomary C, et al.
Neuroreport 1997 Jul 7;8(9–10):2169–72

Tumor necrosis factor and nitric oxide production by resident retinal glial cells from rats presenting hereditary retinal degeneration. de Kozak Y, et al.
Ocul Immunol Inflamm 1997 Jun;5(2):85–94

Light damage in the rat retina: glial fibrillary acidic protein accumulates in Müller cells in correlation with photoreceptor damage. de Raad S, et al.
Ophthalmic Res 1996;28(2):99–107

A 221–bp fragment of the mouse opsin promoter directs expression specifically to the rod photoreceptors of transgenic mice. Quiambao AB, et al. **Vis Neurosci** 1997 Jul–Aug;14(4):617–25

[Melatonin biosynthesis in the epiphysis during early postnatal ontogenesis in healthy persons and in patients with hereditary retinal degeneration] Pozdeev NV, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):131–4 **(Rus)**

PATHOLOGY

Reticular dystrophy of the retinal pigment epithelium and choroidal neovascularization. A fluorescein and ICGV study. Marano F, et al. **Acta Ophthalmol Scand** 1997 Feb; 75(1):22–7

Assessment of the phenotypic range seen in Doyne honeycomb retinal dystrophy. Evans K, et al.
Arch Ophthalmol 1997 Jul;115(7):904–10

Familial internal limiting membrane dystrophy. A new sheen retinal dystrophy. Polk TD, et al. **Arch Ophthalmol** 1997 Jul;115(7):878–85

Age–related distribution of cones and ON–bipolar cells in the rd mouse retina. Ogilvie JM, et al. **Curr Eye Res** 1997 Mar;16(3):244–51

Light damage in rod outer segments: the effects of fixation on ultrastructural alterations. Szczesny PJ, et al.
Curr Eye Res 1996 Aug;15(8):807–14

The retina. Burdon MA, et al. **Curr Opin Neurol** 1996 Feb; 9(1):16–20 (20 ref.)

Quantitative and morphological changes of the choroid vasculature in RCS rats and their congenic controls. May CA, et al. **Exp Eye Res** 1996 Jul;63(1):75–84

Retinal pigment epithelial cells from dystrophic rats form normal tight junctions in vitro. Chang CW, et al.
Invest Ophthalmol Vis Sci 1997 Jan;38(1):188–95

Aberrant expression of c–Fos accompanies photoreceptor cell death in the rd mouse. Rich KA, et al.
J Neurobiol 1997 Jun 5;32(6):593–612

The absence of c–fos prevents light–induced apoptotic cell death of photoreceptors in retinal degeneration in vivo [see comments] Hafezi F, et al. **Nat Med** 1997 Mar;3(3):346–9 . Comment in: Nat Med 1997 Mar;3(3):280.

Mechanism of retinal ganglion cell loss in inherited retinal dystrophy. Villegas–Pérez MP, et al. **Neuroreport** 1996 Aug 12;7(12):1995–9

Morphologic characteristics of N–methyl–N–nitrosourea–induced retinal degeneration in C57BL mice. Nambu H, et al. **Pathol Int** 1997 Jun; 47(6):377–83

Apoptosis in human retinal degenerations. Xu GZ, et al.
Trans Am Ophthalmol Soc 1996;94:411–30; discussion 430–1

PHYSIOPATHOLOGY

Full–field electroretinograms in individuals with the Laurence–Mood–Bardet–Biedl syndrome. Riise R, et al.
Acta Ophthalmol Scand 1996 Dec;74(6):618–20

Water escape performance of adult RCS dystrophic and congenic rats: a functional and histomorphometric study. DiLoreto D Jr, et al. **Brain Res** 1996 Apr 22; 717(1–2):165–72

Distribution of CD44 in the retina during development and the rds degeneration. Chaitin MH, et al.
Brain Res Dev Brain Res 1996 Jun 14;94(1):92–8

Cytokine effects on phagocytosis of rod outer segments by retinal pigment epithelial cells of normal and dystrophic rats. Hayashi A, et al. **Curr Eye Res** 1996 May;15(5):487–99

Photoreceptor repair in response to RPE transplants in RCS rats: outer segment regeneration. Lin N, et al.
Curr Eye Res 1996 Oct;15(10):1069–77

Membrane voltage and whole–cell currents in cultured pericytes of control rats and rats with retinal dystrophy. Wagner U, et al. **Curr Eye Res** 1996 Oct;15(10):1045–53

Inherited retinal degeneration: basic FGF induces phagocytic competence in cultured RPE cells from RCS rats. McLaren MJ, et al. **FEBS Lett** 1997 Jul 21;412(1):21–9

Tumor necrosis factor and nitric oxide production by retinal Müller glial cells from rats exhibiting inherited retinal dystrophy. Cotinet A, et al. **Glia** 1997 May;20(1):59–69

Rod plateaux during dark adaptation in Sorsby's fundus dystrophy and vitamin A deficiency. Cideciyan AV, et al.
Invest Ophthalmol Vis Sci 1997 Aug;38(9):1786–94

Subretinal electrical stimulation of the rabbit retina. Chow AY, et al. **Neurosci Lett** 1997 Mar 28;225(1):13–6

Functional consequences of oncogene–induced horizontal cell degeneration in the retinas of transgenic mice. Peachey NS, et al. **Vis Neurosci** 1997 Jul–Aug;14(4):627–32

The enhanced S cone syndrome: an analysis of receptoral and post–receptoral changes. Greenstein VC, et al.
Vision Res 1996 Nov;36(22):3711–22

[Changes in the electroretinogram of Campbell rats with the development of hereditary retinal degeneration] Kharauzov AK, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug–Sep; 82(8–9):73–9 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Nerve growth factor delays retinal degeneration in C3H mice. Lambiase A, et al.
Graefes Arch Clin Exp Ophthalmol 1996 Aug;234 Suppl 1:S96–100

Retarding photoreceptor degeneration in Pdegtm1/Pdegtml mice by an apoptosis suppressor gene. Tsang SH, et al.
Invest Ophthalmol Vis Sci 1997 Apr;38(5):943–50

Systemic L–kynurenine administration partially protects against NMDA, but not kainate–induced degeneration of retinal ganglion cells, and reduces visual discrimination deficits in adults rats. Vorwerk CK, et al.
Invest Ophthalmol Vis Sci 1996 Nov;37(12):2382–92

Protection against light–induced retinal degeneration with naftidrofuryl (Praxilene) in the rat. Safars M, et al.
J Ocul Pharmacol Ther 1997 Feb;13(1):89–94

PSYCHOLOGY

Spatial responses to light in mice with severe retinal degeneration. Mrosovsky N, et al. **Neurosci Lett** 1997 Feb 7;222(3):204–6

SURGERY

Clinical possibilities in retinal pigment epithelial transplantations [editorial] Algvere PV.
Acta Ophthalmol Scand 1997 Feb;75(1):1

[Transplantation of retinal cells (editorial)] Gouras P.
Klin Monatsbl Augenheilkd 1997 Jan;210(1):aA5–6 **(Ger)**

THERAPY

Basic fibroblast growth factor treatment delays age–related photoreceptor degeneration in Fischer 344 rats. Lin N, et al. **Exp Eye Res** 1997 Feb;64(2):239–48

Transplantation of retinal pigment epithelial, photoreceptor and other cells as treatment for retinal degeneration. Litchfield TM, et al. **Exp Eye Res** 1997 May;64(5):655–66 (130 ref.)

Effects of basic fibroblast growth factor on the retinal degeneration of the mi(vit)/mi(vit) (vitiligo) mouse: a morphologic and electrophysiologic study. Smith SB, et al. **Exp Eye Res** 1996 Nov;63(5):565–77

Efficacy of nonfetal human RPE for photoreceptor rescue: a study in dystrophic RCS rats. Castillo BV Jr, et al.
Exp Neurol 1997 Jul;146(1):1–9

Use of perfluorocarbon liquid in the repair of retinoschisis retinal detachments. Lomeo MD, et al.
Ophthalmic Surg Lasers 1996 Sep;27(9):778–81

VETERINARY

An improved diagnostic test for rod cone dysplasia 1 (rcd1) using allele–specific polymerase chain reaction. Ray K, et al. **Curr Eye Res** 1996 May;15(5):583–7

Isolation of canine retinal arrestin cDNA and exclusion of three candidate genes for Swedish Briard retinal dystrophy. Veske A, et al. **Curr Eye Res** 1997 Mar;16(3):270–4

Selective absence of cone outer segment beta 3–transducin immunoreactivity in hereditary cone degeneration (cd). Gropp KE, et al. **Exp Eye Res** 1996 Sep;63(3):285–96

Histopathological and immunocytochemical demonstration of retinal degeneration in the squirrel monkey. Warfvinge K, et al. **Exp Eye Res** 1996 Sep;63(3):245–53

Structure and analysis of the transducin beta3–subunit gene, a candidate for inherited cone degeneration (cd) in the dog. Akhmedov NB, et al. **Gene** 1997 Jul 18;194(1):47–56

Cloning and analysis of the cDNA encoding the rod G–protein transduction alpha, beta1 and gamma1 subunits from the canine retina. Kylmä T, et al. **Gene** 1997 Jul 1; 193(1):1–4

RETINAL DETACHMENT

see related
SCLERAL BUCKLING

CHEMICALLY INDUCED

[Central serous chorioretinopathy in systemic therapy with corticosteroids] Spraul CW, et al. **Ophthalmologe** 1997 Jun; 94(6):392–6 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Associated ocular findings in pericentral pigmentary retinopathy. Durlu YK, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):101–3

Peripapillary staphyloma. Gottlieb JL, et al.
Am J Ophthalmol 1997 Aug;124(2):249–51

Indocyanine green angiography–guided photocoagulation of choroidal neovascularization associated with retinal pigment epithelial detachment. Lim JI, et al.
Am J Ophthalmol 1997 Apr;123(4):524–32

Turner's syndrome associated with bilateral retinal detachments. Mason JO 3rd, et al. **Am J Ophthalmol** 1996 Nov;122(5):742–3

Nanophthalmos with longstanding choroidal effusion and serous retinal detachment. Han L, et al.
Aust N Z J Ophthalmol 1997 May;25(2):181–3

Intracerebral bleed, retinal detachment, cataract removal, and intraocular lenses in an Army aviator. Knapp CJ.
Aviat Space Environ Med 1996 Oct;67(10):997–1001

Schwartz–Matsuo syndrome: atypical presentation as acute open angle glaucoma [letter] Callender D, et al.
Br J Ophthalmol 1997 Jul;81(7):609–10

RETINAL DETACHMENT

Treatment of subfoveal pigment epithelial detachments with distant extrafoveal choroidal neovascular membranes [letter] Cohen SM, et al. **Br J Ophthalmol** 1996 Oct; 80(10):929-30

Ophthaproblem. Retinal detachment. Sharma S. **Can Fam Physician** 1997 Apr;43:621, 627

Scleral ectasia in rhegmatogenous retinal detachment. Lam WC, et al. **Can J Ophthalmol** 1996 Aug;31(5):241-4

Vitreous changes and retinal detachment in highly myopic eyes. Stirpe M, et al. **Eur J Ophthalmol** 1996 Jan-Mar; 6(1):50-8

Giant retinal tear and retinal detachment with underlying retinitis pigmentosa and hearing loss [see comments] Kim RY, et al. **Eye** 1996;10 (Pt 6):697-700. Comment in: Eye 1996 ;10 (Pt 6):651-2.

Preoperative vitreous hemorrhage associated with rhegmatogenous retinal detachment: a risk factor for postoperative proliferative vitreoretinopathy? Duquesne N, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Nov; 234(11):677-82

Post-traumatic macular break associated to congenital optic disc pit and pre-existing sensory macular detachment. Billi B, et al. **Int Ophthalmol** 1996-97;20(5):269-72

Radial keratotomy before and after retinal detachment surgery [letter] Davis DB 2nd. **J Cataract Refract Surg** 1997 Jan-Feb;23(1):10-1

The natural history of untreated rhegmatogenous retinal detachment. Ivanišević M. **Ophthalmologica** 1997; 211(2):90-2

Ultrasound biomicroscopic view of detachment of the ciliary epithelium in retinal detachment with atopic dermatitis. Yoshida S, et al. **Ophthalmology** 1997 Feb;104(2):283-7

Morning glory syndrome with peripheral exudative retinal detachment. Akamine T, et al. **Retina** 1997;17(1):73-4

Paraproteinemias associated with serous detachments of the retinal pigment epithelium and neurosensory retina. Cohen SM, et al. **Retina** 1996;16(6):467-73

Rhegmatogenous retinal detachment in eyes with uveal melanoma. Haimovici R, et al. **Retina** 1996;16(6):488-96

Retinal detachments with crescent-shaped retinal breaks in patients with atopic dermatitis. Kusaka S, et al. **Retina** 1996; 16(4):312-6

Ocular findings in cutis marmorata telangiectatica congenita. Bilateral exudative vitreoretinopathy. Pendergast SD, et al. **Retina** 1997;17(4):306-9

[Retinal detachment with vitreous hemorrhage] Li C. **Yen Ko Hsueh Pao** 1995 Dec;11(4):224-6 (Eng. Abstr.) **(Chi)**

-Choroidal detachment associated with rhegmatogenous retinal detachment: a risk factor for postoperative PVR?] Dumas C, et al. **J Fr Ophtalmol** 1996;19(6-7):455-63 (Eng. Abstr.) **(Fre)**

[Retinal detachment and posterior lens luxation. Value of liquid perfluorocarbons] Nacef L, et al. **J Fr Ophtalmol** 1996;19(6-7):432-4 (10 ref.) (Eng. Abstr.) **(Fre)**

[Clinico-immunological studies in dystrophic retinal detachment complicated by proliferative vitreoretinopathy] Balashova LM, et al. **Vestn Oftalmol** 1996 Apr-Jun; 112(2):38-41 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Proton MR spectroscopy in Coats disease. Eisenberg L, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):727-9

Three-dimensional measurements of central serous chorioretinopathy using a scanning laser tomograph. Weinberger D, et al. **Am J Ophthalmol** 1996 Dec; 122(6):864-9

Ophthaproblem. Retinal detachment. Sharma S. **Can Fam Physician** 1997 Apr;43:621, 627

Magnetic resonance imaging in the evaluation of eyes treated with silicone oil. Kaynak S, et al. **Ophthalmic Surg Lasers** 1996 Dec;27(12):1019-23

Indocyanine green hyperfluorescence associated with serous retinal pigment epithelial detachment in age-related macular degeneration. Baumal CR, et al. **Ophthalmology** 1997 May;104(5):761-9

Choroidal findings in the course of idiopathic serous pigment epithelium detachment detected by indocyanine green videoangiography. Giovannini A, et al. **Retina** 1997; 17(4):286-93

[Exudative parafoveal astrocytic hamartoma associated with Bourneville tuberous sclerosis: spontaneous evolution] Sahli O, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):332-3 (Eng. Abstr.) **(Fre)**

[Tyndallometry and cell count in the anterior chamber in retinal detachment] Amann T, et al. **Klin Monatsbl Augenheilkd** 1997 Jan;210(1):43-7 (Eng. Abstr.) **(Ger)**

[Idiopathic polypoid choroid vasculopathy] Spraul CW, et al. **Klin Monatsbl Augenheilkd** 1997 Jun;210(6):405-6 (Eng. Abstr.) **(Ger)**

[Unilateral parapapillary accumulation of sub- and intraretinal fluid. Double-pitted optic papilla with parapapillary choroid neovascularization] von Boehmer H, et al. **Ophthalmologe** 1997 May;94(5):364-5 **(Ger)**

ECONOMICS

Economic risks of refractive surgical procedures [letter] Vinger P. **Ophthalmology** 1997 Oct;104(10):1525

ENZYMOLOGY

Detached retina affects morphologic and biochemical changes in the retina adjacent to bullous retinal detachment in rabbits. Honda O, et al. **Curr Eye Res** 1997 Jan; 16(1):56-63

Cathepsin D and an alkaline protease activities in subretinal fluid. Wolańska M, et al. **Rocz Akad Med Bialymst** 1995; 40(2):383-9

EPIDEMIOLOGY

[Age of onset of rhegmatogenous retinal detachment analyzed by Weibull distribution function] Uemura A, et al. **Nippon Ganka Gakkai Zasshi** 1996 Aug;100(8):624-7 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Rhegmatogenous retinal detachment in patients with cytomegalovirus retinitis: the Foscarnet-Ganciclovir Cytomegalovirus Retinitis Trial. The Studies of Ocular Complications of AIDS (SOCA) Research Group in Collaboration with the AIDS Clinical Trials Group (ACTG). **Am J Ophthalmol** 1997 Jul;124(1):61-70

Leukocoria caused by occult penetrating trauma in a child. Guemes A, et al. **Am J Ophthalmol** 1997 Jul;124(1):117-9

Sustained closure of surgically repaired macular holes after retinal detachment with submacular fluid. Hainsworth DP, et al. **Am J Ophthalmol** 1997 Mar;123(3):364-9

Epiretinal membrane and traction retinal detachment complicating laser-induced chorioretinal venous anastomosis. Luttrull JK. **Am J Ophthalmol** 1997 May; 123(5):698-9

Retinal detachment associated with type III retinoblastoma regression after cryotherapy and external-beam radiotherapy. Mullaney PB, et al. **Am J Ophthalmol** 1997 Jan;123(1):140-2

Retinal detachment caused by retinal dialysis. Kennedy CJ, et al. **Aust N Z J Ophthalmol** 1997 Feb;25(1):25-30

Retinal detachment in U.S. Air Force flyers. Green RP Jr, et al. **Aviat Space Environ Med** 1996 Sep;67(9):874-9

Cataract surgery and retinal detachment: cause and effect? [editorial; comment] Desai P. **Br J Ophthalmol** 1996 Aug; 80(8):683-4. Comment on: Br J Ophthalmol 1996 Aug;80(8):689-93.

Risk of retinal detachment following cataract extraction: results from the International Cataract Surgery Outcomes Study [see comments] Norregaard JC, et al. **Br J Ophthalmol** 1996 Aug;80(8):689-93. Comment in: Br J Ophthalmol 1996 Aug;80(8):683-4.

Bilateral cytomegalovirus retinitis in a patient with systemic lupus erythematosus [letter] Schlingemann RO, et al. **Br J Ophthalmol** 1996 Dec;80(12):1109-10

Retinal detachment complicating scleral-sutured posterior chamber intraocular lens surgery. Bourke RD, et al. **Eye** 1996;10 (Pt 4):501-8

Ocular perforation during peribulbar anaesthesia [see comments] Gillow JT, et al. **Eye** 1996;10 (Pt 5):533-6. Comment in: Eye 1996;10(Pt 5):531-2.

Retinal detachment after cataract surgery. Berrod JP, et al. **Int Ophthalmol** 1996-97;20(6):301-8

Retinal detachment after laser capsulotomy [letter; comment] Rosen B. **J Cataract Refract Surg** 1997 Jan-Feb;23(1):7-8 . Comment on: J Cataract Refract Surg 1995 Mar;21(2):136-9.

The effect of chemoreduction on retinoblastoma-induced retinal detachment. Shields CL, et al. **J Pediatr Ophthalmol Strabismus** 1997 May-Jun; 34(3):165-9

Time-dependent stress and displacement of the eye wall tissue of the human eye. David T, et al. **Med Eng Phys** 1997 Mar;19(2):131-9

Retinal detachment in patients with retained lens fragments or dislocated posterior chamber intraocular lenses. Smiddy WE, et al. **Ophthalmic Surg Lasers** 1996 Oct;27(10):856-61

Rhegmatogenous retinal detachments in HIV-positive patients with ocular syphilis. Williams JK, et al. **Ophthalmic Surg Lasers** 1996 Aug;27(8):699-705

Retinal detachment after branch retinal vein occlusion: influence of the type of break on the outcome of vitreous surgery. Ikuno Y, et al. **Ophthalmology** 1997 Jan; 104(1):27-32

Distribution of iatrogenic retinal breaks in macular hole surgery. Sjaarda RN, et al. **Ophthalmology** 1995 Sep; 102(9):1387-92

Risk factors for retinal detachment after cataract surgery. A population-based case-control study. Tielsch JM, et al. **Ophthalmology** 1996 Oct;103(10):1537-45

Retinal detachment after noncontact pneumatic tonometry. Axer-Siegel R, et al. **Retina** 1996;16(1):80-1

Retinal detachment after clear lens extraction in 41 eyes with high axial myopia [letter; comment] Colin J, et al. **Retina** 1997;17(1):78-9. Comment on: Retina 1996;16(1):3-6.

Tumor detachments of the retinal pigment epithelium in ocular/ central nervous system lymphoma. Dean JM, et al. **Retina** 1996;16(1):47-56

Retinal detachment after clear lens extraction in 41 eyes with high axial myopia [see comments] Ripandelli G, et al. **Retina** 1996;16(1):3-6. Comment in: Retina 1997;17(1):78-9.

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1996;16(2):157-9

[A case of atypical exsudative retinal detachment and its treatment] Dighiero P, et al. **J Fr Ophtalmol** 1997; 20(2):160-2 (Eng. Abstr.) **(Fre)**

[Congenital pit of the optic disk in indocyanine green] Milazzo S, et al. **J Fr Ophtalmol** 1997;20(5):367-73 (Eng. Abstr.) **(Fre)**

[Serous macular detachment complicating colobomatous optic disk pit. Apropos of a case] Mohand-Said M, et al. **J Fr Ophtalmol** 1997;20(1):61-4 (Eng. Abstr.) **(Fre)**

[Retinal detachment caused by macular holes in patients with severe myopia: results of intravitreal injection of pure C3F8] Pernot A, et al. **J Fr Ophtalmol** 1996;19(8-9):491-5 (Eng. Abstr.) **(Fre)**

[Vitrectomy-laser-gas for treating optic disk pits complicated by serous macular detachment] Taiel-Sartral M, et al. **J Fr Ophtalmol** 1996;19(10):603-9 (31 ref.) (Eng. Abstr.) **(Fre)**

[Aicardi syndrome and acquired retinal detachment] Kleiner A, et al. **Klin Monatsbl Augenheilkd** 1997 Feb;210(2):116-8 (Eng. Abstr.) **(Ger)**

[Choroidal lesions and surgical treatment of bullous retinal detachment] Machida S, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun;101(6):481-6 (Eng. Abstr.) **(Jpn)**

[Incidence of lack of posterior vitreous detachment in retinal detachment caused by flap tear in the elderly] Ogino N. **Nippon Ganka Gakkai Zasshi** 1996 Nov;100(11):896-8 (Eng. Abstr.) **(Jpn)**

[A case of nonrhegmatogenous retinal detachment in Dandy-Walker Syndrome] Sakurai E, et al. **Nippon Ganka Gakkai Zasshi** 1996 Oct;100(10):832-6 (Eng. Abstr.) **(Jpn)**

GENETICS

A-2-->G transition at the 3' acceptor splice site of IVS17 characterizes the COL2A1 gene mutation in the original Stickler syndrome kindred. Williams CJ, et al. **Am J Med Genet** 1996 Jun 14;63(3):461-7

Identification of a cat eye syndrome using DNA sequence dosage analysis. Bulle F, et al. **Ann Genet** 1996;39(3):139-43

Norrie disease in a family with a manifesting female carrier. Sims KB, et al. **Arch Ophthalmol** 1997 Apr;115(4):517-9

X-linked exudative vitreoretinopathy caused by an arginine to leucine substitution (R121L) in the Norrie disease protein. Johnson K, et al. **Clin Genet** 1996 Sep;50(3):113-5

Ocular phenotypes associated with two mutations (R121W, C126X) in the Norrie disease gene. Kellner U, et al. **Ophthalmic Genet** 1996 Jun;17(2):67-74

[Rhegmatogenous retinal detachment in atrophia gyrata: pars plana vitrectomy with silicone oil instillation] Engelmann K, et al. **Klin Monatsbl Augenheilkd** 1996 Dec;209(6):373-5 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

[Clinico-immunological studies in dystrophic retinal detachment complicated by proliferative vitreoretinopathy] Balashova LM, et al. **Vestn Oftalmol** 1996 Apr-Jun; 112(2):38-41 (Eng. Abstr.) **(Rus)**

METABOLISM

Insoluble interphotoreceptor matrix in human vitreous after rhegmatogenous retinal detachment. Russell SR, et al. **Am J Ophthalmol** 1997 Mar;123(3):386-91

A new approach to the surgical management of idiopathic uveal effusion syndrome. Schneiderman TE, et al. **Am J Ophthalmol** 1997 Feb;123(2):262-3

Levels of some cytokines in subretinal fluid in proliferative vitreoretinopathy and rhegmatogenous retinal detachment. Kenarova B, et al. **Eur J Ophthalmol** 1997 Jan-Mar; 7(1):64-7

Lipid peroxidation products in human subretinal fluid. Bosch-Morell F, et al. **Free Radic Biol Med** 1996; 20(7):899-903

Alterations in rabbit retina lipid metabolism induced by detachment. Decreased incorporation of [3H]DHA into phospholipids. Santos FF, et al. **Int Ophthalmol** 1995-96; 19(3):149-59

Apolipoprotein E in the subretinal fluid of rhegmatogenous and exudative retinal detachments. Schneeberger SA, et al. **Retina** 1997;17(1):38-43

When vitreous enters the subretinal space. Implications for subretinal fluid protein. Takeuchi A, et al. **Retina** 1996; 16(5):426-30

[Concentration of vascular endothelial growth factor within the subretinal space and vitreous fluid in rhegmatogenous retinal detachment] Moromizato Y, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun;101(6):498-502 (Eng. Abstr.) **(Jpn)**

NURSING

Emergency! Retinal detachment. Kearney KM. **Am J Nurs** 1997 Aug;97(8):50

PATHOLOGY

Retinal detachment in identical twins with Stickler syndrome type 1. Watanabe Y, et al. **Br J Ophthalmol** 1996 Nov; 80(11):976-81

Clinical and pathologic studies on idiopathic uveal effusion. Weng N, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Nov; 31(6):403-11 **(Eng, Chi)**

Detached retina affects morphologic and biochemical

changes in the retina adjacent to bullous retinal detachment in rabbits. Honda O, et al. **Curr Eye Res** 1997 Jan; 16(1):56–63

Photoreceptor decay over time and apoptosis in experimental retinal detachment. Berglin L, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 May;235(5):306–12

Pattern of retinal breaks and retinal detachments in eyes with choroidal coloboma. Gopal L, et al. **Ophthalmology** 1995 Aug;102(8):1212–7

An experimental model of retinal pigment epithelial and neurosensory serous detachment. Chon CH, et al. **Retina** 1996;16(2):139–44

[Ocular pathology of child abuse] Rohrbach JM, et al. **Klin Monatsbl Augenheilkd** 1997 Mar;210(3):133–8 (Eng. Abstr.) **(Ger)**

[The fellow eye in patients with retinal detachment associated with atopic dermatitis] Arima T, et al. **Nippon Ganka Gakkai Zasshi** 1996 Mar;100(3):219–22 (Eng. Abstr.) **(Jpn)**

[Choroidal vascular lesions in serous retinal detachment viewed with indocyanine green angiography] Iida T, et al. **Nippon Ganka Gakkai Zasshi** 1996 Oct;100(10):817–24 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Diagnostic indocyanine green angiography in preeclampsia. Valluri S, et al. **Am J Ophthalmol** 1996 Nov;122(5):672–7

Visual acuity after segmental buckling and non–drainage: a 15–year follow–up. Kreissig I, et al. **Eur J Ophthalmol** 1995 Oct–Dec;5(4):240–6

Visual acuity after scleral buckling surgery. Girard P, et al. **Ophthalmologica** 1995;209(6):323–8

Electrical responses from locally detached retina and its recovery after reattachment. Kim SD, et al. **Ophthalmologica** 1996;210(4):195–9

Vitrectomy for complications of proliferative diabetic retinopathy. Functional outcomes. Smiddy WE, et al. **Ophthalmology** 1995 Nov;102(11):1688–95

[Contraction of extracellular matrix by transdifferentiated retinal pigment epithelial cells, inducers and inhibitors] Grisanti S, et al. **Ophthalmologe** 1996 Dec;93(6):709–13 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Transferrin–ricin A chain toxin limits the development of experimental proliferative vitreoretinopathy. Handa JT, et al. **Exp Eye Res** 1996 Jun;62(6):689–96

Prophylactic laser photocoagulation in Stickler syndrome. Leiba H, et al. **Eye** 1996;10 (Pt 6):701–8

Therapeutic effect of periocular corticosteroids in experimental proliferative vitreoretinopathy. Rubsamen PE, et al. **Retina** 1997;17(1):44–50

RADIOTHERAPY

Radiotherapy treatment of age–related subfoveal neovascular membranes in patients with good vision. Hollick EJ, et al. **Eye** 1996;10 (Pt 5):609–16

SURGERY

Pseudophakic retinal detachment. Salacz G, et al. **Acta Chir Hung** 1995–96;35(3–4):209–15

Posterior segment visualization problems with multifocal intraocular lenses [letter] Kumar A, et al. **Acta Ophthalmol Scand** 1996 Aug;74(4):415

Rhegmatogenous retinal detachment operation after radial keratotomy. Weinberger D, et al. **Acta Ophthalmol Scand** 1997 Apr;75(2):214–5

Neodymium:YLF picosecond laser segmentation for retinal traction associated with proliferative diabetic retinopathy. Cohen BZ, et al. **Am J Ophthalmol** 1997 Apr;123(4):515–23

Retinotomy and foveal translocation for surgical management of subfoveal choroidal neovascular membranes. Ninomiya Y, et al. **Am J Ophthalmol** 1996 Nov;122(5):613–21

A new approach to the surgical management of idiopathic uveal effusion syndrome. Schneiderman TE, et al. **Am J Ophthalmol** 1997 Feb;123(2):262–3

Vitrectomy with silicone oil or long–acting gas in eyes with severe proliferative vitreoretinopathy: results of additional and long–term follow–up. Silicone Study report 11 [see comments] Abrams GW, et al. **Arch Ophthalmol** 1997 Mar; 115(3):335–44. Comment in: Arch Ophthalmol 1997 Mar;115(3):407–8.

The Silicone Study. A small piece of the PVR puzzle is put into place [editorial; comment] Campochiaro PA. **Arch Ophthalmol** 1997 Mar;115(3):407–8 (6 ref.). Comment on: Arch Ophthalmol 1997 Mar;115(3):335–44.

Hydrogel exoplant fragmentation 10 years after scleral buckling surgery [letter] Hwang KI, et al. **Arch Ophthalmol** 1997 Sep;115(9):1205–6

Late dislocation of a corneal cap after automated lamellar keratoplasty and epithelial debridement for retinal surgery [letter] Shakin EP, et al. **Arch Ophthalmol** 1996 Nov; 114(11):1420

Perimetric and angiographic effects of retinotomy. Bourke RD, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):245–9

Early resolution of premacular haemorrhage following Nd:YAG laser photodisruption of posterior hyaloid. Isaacs TW, et al. **Aust N Z J Ophthalmol** 1996 Nov;24(4):365–7

Orbital squamous cell carcinoma following retinal detachment surgery. Lee LR, et al. **Aust N Z J Ophthalmol** 1997 Feb;25(1):75–7

Latest developments in treating retinal detachment. Aylward GW. **Br J Hosp Med** 1996 Feb 7–20;55(3):100–3 (14 ref.)

Ophthalmology: the role of the non–specialist [editorial] Davey CC. **Br J Hosp Med** 1996 Feb 7–20;55(3):84

Surgical management of HIV related retinal detachment [editorial; comment] Charteris DG. **Br J Ophthalmol** 1997 Mar;81(3):177–8. Comment on: Br J Ophthalmol 1997 Mar;81(3):180–3.

Treatment of subfoveal pigment epithelial detachments with distant extrafoveal choroidal neovascular membranes [letter] Cohen SM, et al. **Br J Ophthalmol** 1996 Oct; 80(10):929–30

Retinal detachment in AIDS: long–term results after repair with silicone oil [see comments] Irvine AR, et al. **Br J Ophthalmol** 1997 Mar;81(3):180–3. Comment in: Br J Ophthalmol 1997 Mar;81(3):177–8.

Sympathetic ophthalmia from inadvertent ocular perforation during conventional retinal detachment surgery [letter] Lyons C, et al. **Br J Ophthalmol** 1997 Jul;81(7):612

Does cryotherapy before drainage increase the risk of intraocular haemorrhage and affect outcome? A prospective, randomised, controlled study using a needle drainage technique and sustained ocular compression. Pearce IA, et al. **Br J Ophthalmol** 1997 Jul;81(7):563–7

Silicone oil for complicated retinal detachment in the pediatric population. Biedner B, et al. **Eur J Ophthalmol** 1996 Oct–Dec;6(4):451–3

Rhegmatogenous retinal detachment with posteriorly located break treated with temporary buckle. A case report. Ferrara V, et al. **Eur J Ophthalmol** 1995 Oct–Dec; 5(4):280–2

Long–term results of pars plana vitrectomy and silicone oil for giant tears. Karel I, et al. **Eur J Ophthalmol** 1996 Jul–Sep;6(3):315–21

Visual acuity after segmental buckling and non–drainage: a 15–year follow–up. Kreissig I, et al. **Eur J Ophthalmol** 1995 Oct–Dec;5(4):240–6

The importance of injection rate in achieving a single intraocular gas bubble. Aylward GW, et al. **Eye** 1996;10 (Pt 5):590–2

A migrating scleral explant presenting as a chalazion [letter] Chua CN, et al. **Eye** 1995;9 (Pt 6):803–4

Indirect argon laser drainage of subretinal fluid. Pitts JF, et al. **Eye** 1996;10 (Pt 4):465–8

Our experience in minimized surgery for retinal detachment: first results. Sivkova N, et al. **Folia Med (Plovdiv)** 1997; 39(1):44–7

Pars plana vitrectomy for retinal detachment due to internal posterior ophthalmomyiasis after cataract extraction. Billi B, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Apr; 235(4):255–8

Cryopexy in primary rhegmatogenous retinal detachment: a risk factor for postoperative proliferative vitreoretinopathy? Bonnet M, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Dec; 234(12):739–43

Primary vitrectomy without scleral buckling for rhegmatogenous retinal detachment. Heimann H, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Sep;234(9):561–8

Scleral buckling surgery in stage 4 retinopathy of prematurity. Ricci B, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S38–41

Pressure sore in a patient who underwent repair of a retinal tear with gas injection. Treister G, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Oct;234(10):657–8

Pneumatic retinopexy: principles and practice. Hilton GF, et al. **Indian J Ophthalmol** 1996 Sep;44(3):131–43 (35 ref.)

Fluid vitreous substitutes in vitreo retinal surgery. Saxena S, et al. **Indian J Ophthalmol** 1996 Dec;44(4):191–206 (142 ref.)

Vitrectomy for macular detachment associated with optic nerve pits. Bartz–Schmidt KU, et al. **Int Ophthalmol** 1995–96;19(6):323–9

Glaucoma after vitreo–retinal surgery with silicone oil injection: epidemiologic aspects. Montanari P, et al. **Int Ophthalmol** 1996–97;20(1–3):29–31

Surgical management of traumatic retinal detachment with perfluorocarbon liquid. The Vitreon Study Group. Soheilian M, et al. **Int Ophthalmol** 1996–97;20(5):241–9

Retained perfluorodecalin after retinal detachment surgery. Wong TY, et al. **Int Ophthalmol** 1996–97;20(6):293–4

Pneumatic retinopexy versus scleral buckling: a randomised controlled trial. Mulvihill A, et al. **Ir J Med Sci** 1996 Oct–Dec;165(4):274–7

Predicted and actual refraction after intraocular lens implantation in eyes with silicone oil. Grinbaum A, et al. **J Cataract Refract Surg** 1996 Jul–Aug;22(6):726–9

Effect of vitrectomy on epiretinal membranes after endogenous fungal endophthalmitis. Naoi N, et al. **Jpn J Ophthalmol** 1996;40(3):434–8

Encirclement of the globe and air in the vitreal cavity—unconsidered aspects. Chawla HB. **Klin Oczna** 1996 Jan;98(1):67–8 (3 ref.)

The in vivo effects of a prototype diode laser coagulator/vaporizing endoprobe used to perform retinectomy and retinotomy in rabbits. Hoggatt JS, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):231–5

Hypopyon uveitis following panretinal photocoagulation. Lee BL, et al. **Ophthalmic Surg Lasers** 1997 Jun;28(6):505–7

Pars plana vitrectomy in the treatment of combined rhegmatogenous retinal detachment and choroidal detachment in aphakic or pseudophakic patients. Yang CM. **Ophthalmic Surg Lasers** 1997 Apr;28(4):288–93

Late recurrence of retinal detachment. Girard P, et al. **Ophthalmologica** 1997;211(4):247–50

Visual acuity after scleral buckling surgery. Girard P, et al. **Ophthalmologica** 1995;209(6):323–8

Laser photocoagulation for persistent central serous retinopathy: results of long–term follow–up. Burumcek E, et al. **Ophthalmology** 1997 Apr;104(4):616–22

Lens clarity after lens–sparing vitrectomy in a pediatric population. Ferrone PJ, et al. **Ophthalmology** 1997 Feb; 104(2):273–8

Office repair of retinal detachment using a Lincoff Temporary balloon buckle [see comments] Green SN, et al. **Ophthalmology** 1996 Nov;103(11):1804–10. Comment in: Ophthalmology 1997 Jul;104(7):1059–61.

Extraocular repeat surgery of retinal detachment. A minimal approach. Lincoff H, et al. **Ophthalmology** 1996 Oct; 103(10):1586–92

Repair of rhegmatogenous retinal detachments [letter; comment] Moriche M, et al. **Ophthalmology** 1997 Jun; 104(6):897–8. Comment on: Ophthalmology 1996 Aug;103(8):1313–24.

Supraciliary effusions and ciliary body thickening after scleral buckling procedures. Pavlin CJ, et al. **Ophthalmology** 1997 Mar;104(3):433–8

Parabulbar anesthesia for primary vitreoretinal surgery. Sharma T, et al. **Ophthalmology** 1997 Mar;104(3):425–8

Phacoemulsification after RD surgery [letter; comment] Thomas R, et al. **Ophthalmology** 1996 Nov;103(11):1714. Comment on: Ophthalmology 1996 Feb;103(2):216–9.

Office repair of retinal detachment [letter; comment] Tornambe PE, et al. **Ophthalmology** 1997 Jul; 104(7):1059–61. Comment on: Ophthalmology 1996 Nov;103(11):1804–10.

Repair of retinal detachments due to herpes varicella–zoster virus retinitis in patients with acquired immune deficiency syndrome. Weinberg DV, et al. **Ophthalmology** 1997 Feb; 104(2):279–82

Erosion and migration of a Watzke sleeve into the anterior chamber. Ahn CS, et al. **Retina** 1997;17(1):71–3

Vitrectomy alone for the management of uncomplicated recurrent retinal detachments [letter; comment] Buettner H. **Retina** 1996;16(4):347–8. Comment on: Retina 1995;15(6):469–74.

Silicone oil removal: a simple technique. Gopal L, et al. **Retina** 1997;17(3):266–7

Ciliary detachment after retinal detachment surgery. Maruyama Y, et al. **Retina** 1997;17(1):7–11

Postoperative posterior retinal holes after pars plana vitrectomy for primary retinal detachment. Okada K, et al. **Retina** 1997;17(2):99–104

Reopening of macular holes in highly myopic eyes with retinal detachments. Seike C, et al. **Retina** 1997;17(1):2–6

[Use of perfluorodecalin in giant retinal tear retinal detachment surgery] Dai H, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Jul;31(4):259–61 (Eng. Abstr.) **(Chi)**

[A comparison of attachment rates between SF6 and silicone oil tamponades following vitrectomy for treatment of complicated retinal detachment] Li x, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Jul;31(4):250–4 (Eng. Abstr.) **(Chi)**

[Cataract after silicone oil tamponade and its surgical treatment] Zhang S, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Nov;31(6):430–2 (Eng. Abstr.) **(Chi)**

[Vitrectomy combined with scleral buckling for the treatment of complicated retinal detachment] Zang J, et al. **Yen Ko Hsueh Pao** 1995 Jun;11(2):105–7 (Eng. Abstr.) **(Chi)**

[Pars plana vitrectomy in retinal detachment with a macular hole] Kalvodová B, et al. **Cesk Slov Oftalmol** 1996 Nov; 52 Suppl:34–41 (Eng. Abstr.) **(Cze)**

[Vitreous surgery in complicated retinal detachment] Karel I. **Cesk Slov Oftalmol** 1996 Nov;52 Suppl:26–33 (Eng. Abstr.) **(Cze)**

[Surveillance of retinal detachment after cryoapplication and indentation] **J Fr Ophtalmol** 1997;20(6):487–8 **(Fre)**

[Myopia and retinal detachment] Berrod JP, et al. **J Fr Ophtalmol** 1997;20(4):327–8 **(Fre)**

[Has the incidence of postoperative PVR in rhegmatogenous retinal detachment decreased?] Bonnet M, et al. **J Fr Ophtalmol** 1996;19(11):696–704 (Eng. Abstr.) **(Fre)**

[Retinectomies in the treatment of retinal detachments with vitreoretinal proliferation] Metge F, et al. **J Fr Ophtalmol** 1997;20(5):345–9 (Eng. Abstr.) **(Fre)**

[Objective determination of refractive changes in silicon oil filled eyes—effect of head position on refraction] Dick B, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):459–66 (Eng. Abstr.) **(Ger)**

[Clinical experiences after implantation of various lens types in silicon oil tamponade] Effert R, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):467–71 (Eng. Abstr.) **(Ger)**

[Modification of axial length and astigmatism by scleral buckling surgery] Grimm G, et al. **Klin Monatsbl Augenheilkd** 1997 Mar;210(3):144–6 (16 ref.) (Eng. Abstr.) **(Ger)**

[Follow–up of vitrectomy for central retinal detachment and optic disk pit] Hoerauf H, et al.

RETINAL DETACHMENT

Klin Monatsbl Augenheilkd 1996 Oct;209(4):238–43; discussion 237 (Eng. Abstr.) **(Ger)**

[Angulated endodiathermy instrument facilitating retinotomy in the upper retinal circumference] Janknecht P, et al. **Klin Monatsbl Augenheilkd** 1996 Nov;209(5):317 (Eng. Abstr.) **(Ger)**

[Change in hole size and area of retinal detachment after pars plana vitrectomy in Gass stage III macular foramina] Effert R, et al. **Ophthalmologe** 1996 Dec;93(6):666–9 (Eng. Abstr.) **(Ger)**

[Sudan staining of impression cytology retinal specimen] Meier P, et al. **Ophthalmologe** 1996 Dec;93(6):714–8 (Eng. Abstr.) **(Ger)**

[Results of vitrectomy for macular packer after reattachment surgery for rhegmatogenous retinal detachment] Ogino N. **Nippon Ganka Gakkai Zasshi** 1997 Mar;101(3):232–6 (Eng. Abstr.) **(Jpn)**

[Retinotomy—early personal experience] Nawrocki J, et al. **Klin Oczna** 1995 Sep–Oct;97(9–10):293–5 (Eng. Abstr.) **(Pol)**

[Surgery for retinal detachment in the years 1989–1994] Palacz O, et al. **Klin Oczna** 1995 Sep–Oct;97(9–10):290–92 (Eng. Abstr.) **(Pol)**

[Conventional methods in retinal detachment surgery] Starzycka M, et al. **Klin Oczna** 1996 Mar;98(3):225–8 (Eng. Abstr.) **(Pol)**

[Surgical treatment of retinal detachment with multiple, giant and post-equatorial ruptures] Ilnitskiĭ VV, et al. **Vestn Oftalmol** 1997 Mar–Apr;113(2):3–5 (Eng. Abstr.) **(Rus)**

THERAPY

Perfluorodecalin and silicone oil used to achieve retinal tamponade left in an eye for 6 months [letter] Geh VS, et al. **Br J Ophthalmol** 1997 Mar;81(3):252–3

Management of retinal redetachment following silicone-oil removal. Bodanowitz S, et al. **Ger J Ophthalmol** 1996 Mar; 5(2):67–72

Use of perfluorocarbon liquid in the repair of retinoschisis retinal detachments. Lomeo MD, et al. **Ophthalmic Surg Lasers** 1996 Sep;27(9):778–81

The complications of perfluoropropane gas use in complex retinal detachments. Sabates NR, et al. **Retina** 1996; 16(1):7–12

ULTRASONOGRAPHY

[Incidence of posterior vitreous detachment in eyes with and without age-related macular degeneration. An ultrasonic study] Weber-Krause B, et al. **Ophthalmologe** 1996 Dec; 93(6):660–5 (Eng. Abstr.) **(Ger)**

VETERINARY

Diagnostic ophthalmology. Bilateral multifocal serous retinal detachments. Grahn BH, et al. **Can Vet J** 1997 Apr; 38(4):250–1

Diagnostic ophthalmology. Wolfer J, et al. **Can Vet J** 1996 Oct;37(10):634–5

Ocular signs in four dogs with hypertension. Sansom J, et al. **Vet Rec** 1997 Jun 7;140(23):593–8

VIROLOGY

Management of viral retinitis-associated retinal detachment in AIDS. Hannouche D, et al. **Eye** 1997;11 (Pt 1):33–6

RETINAL DIALYSES see **RETINAL PERFORATIONS**

RETINAL DISEASES

Epiretinal membranes. Jacobsen CH. **Optom Clin** 1996; 5(1):77–94 (48 ref.)

[Central serous chorioretinopathy] Kondrová J. **Cesk Slov Oftalmol** 1995 Oct;51(5):304–9 **(Cze)**

CHEMICALLY INDUCED

Photic maculopathy in a patient receiving bright light therapy [letter] Gallenga PE, et al. **Am J Psychiatry** 1997 Sep;154(9):1319

Hydroxychloroquine and visual screening in a rheumatology outpatient clinic. Grierson DJ. **Ann Rheum Dis** 1997 Mar; 56(3):188–90

Lithium decreases retinal sensitivity, but this is not cumulative with years of treatment. Wirz-Justice A, et al. **Biol Psychiatry** 1997 Mar 15;41(6):743–6

Should patients on hydroxychloroquine have their eyes examined regularly? [editorial; comment] Shipley M, et al. **Br J Rheumatol** 1997 May;36(5):514–5. Comment on: Br J Rheumatol 1997 May;36(5):599–601.

Ophthalmological monitoring for hydroxychloroquine toxicity: a scientific review of available data [see comments] Silman A, et al. **Br J Rheumatol** 1997 May;36(5):599–601 (15 ref.). Comment in: Br J Rheumatol 1997 May;36(5):514–5.

The effect of carbon dioxide on oxygen-induced retinopathy in the neonatal rat. Holmes JM, et al. **Curr Eye Res** 1997 Jul;16(7):725–32

Chloroquine: consideration of maximum daily dose (3.5 mg/kg ideal body weight) prevents retinopathy [letter; comment] Ochsendorf FR, et al. **Dermatology** 1996; 192(4):382–3. Comment on: Dermatology 1995;190(3):257–8.

A novel NMDA receptor antagonist protects against N-methyl-D-aspartate- and glutamate-induced neurotoxicity in the goldfish retina. Tyan SH, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):171–9

Central serous retinopathy associated with adrenocorticotrophic hormone therapy. A case report and a hypothesis. Zamir E. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):339–44 (37 ref.)

Quantification of oxygen-induced retinopathy in the mouse. Browning J, et al. **Invest Ophthalmol Vis Sci** 1997 May; 38(6):1168–74

Occurrence of birefringent retinal inclusions in cynomolgus monkeys after high doses of canthaxanthin. Goralczyk R, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):741–52

Canthaxanthine retinopathy. Bloomenstein MR, et al. **J Am Optom Assoc** 1996 Nov;67(11):690–2

Corticosteroid-induced central serous chorioretinopathy. Wakakura M, et al. **Jpn J Ophthalmol** 1997 May-Jun; 41(3):180–5

Ophthalmologic considerations in using antimalarials in the United States. Rynes RI. **Lupus** 1996 Jun;5 Suppl 1:S73–4 (14 ref.)

Retinopathy and antimalarial drugs—the British experience. Spalton DJ. **Lupus** 1996 Jun;5 Suppl 1:S70–2 (17 ref.)

High risk of retinal damage by desferrioxamine in dialysis patients [letter] Albalate M, et al. **Nephron** 1996;73(4):726–7

Gentamicin retinal toxicity after cataract surgery in an eye that underwent vitrectomy. Rosenbaum JD, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):236–8

Central serous chorioretinopathy associated with inhaled or intranasal corticosteroids. Haimovici R, et al. **Ophthalmology** 1997 Oct;104(10):1653–60

Chloroquine retinopathy [editorial] Felton JM. **Trop Doct** 1997 Jan;27(1):2–4

Eye damage from chloroquine as an antimalarial: misuse makes safe medicines unsafe. Waddell KM. **Trop Doct** 1997 Jan;27(1):10–2

[Chloroquine maculopathy and prevention of malaria] Balo KP, et al. **J Fr Ophtalmol** 1996;19(12):770–6 (15 ref.) (Eng. Abstr.) **(Fre)**

[Retinopathy caused by desferrioxamine (letter)] Sánchez Dalmau BF, et al. **Med Clin (Barc)** 1996 Nov 9;107(16):636 **(Spa)**

CLASSIFICATION

Hypertensive retinopathy: a review of existing classification systems and a suggestion for a simplified grading system. Dodson PM, et al. **J Hum Hypertens** 1996 Feb;10(2):93–8 (37 ref.)

COMPLICATIONS

Congenital hypertrophy of the retinal pigment epithelium (CHRPE) and familial adenomatous polyposis (FAP). Rossato M, et al. **Acta Ophthalmol Scand** 1996 Aug; 74(4):338–42

Primary hyperoxaluria in an adult with renal failure, livedo reticularis, retinopathy, and peripheral neuropathy. Farreli J, et al. **Am J Kidney Dis** 1997 Jun;29(6):947–52

Retinal capillary hemangioma in Marshall-Stickler syndrome. Shields JA, et al. **Am J Ophthalmol** 1997 Jul; 124(1):120–2

Thrombotic thrombocytopenic purpura associated with purtscher retinopathy. Power MH, et al. **Arch Ophthalmol** 1997 Jan;115(1):128–9

Congenital optic pits and central serous chorioretinopathy. Chen MS, et al. **Aust N Z J Ophthalmol** 1997 May; 25(2):165–6

Association of progressive outer retinal necrosis and varicella zoster encephalitis in a patient with AIDS. van den Horn GJ, et al. **Br J Ophthalmol** 1996 Nov;80(11):982–5

Effect of macular edema on surgical visual outcome in eyes with idiopathic epiretinal membrane. Ma SS, et al. **Can J Ophthalmol** 1996 Jun;31(4):183–6

The effect of carbon dioxide on oxygen-induced retinopathy in the neonatal rat. Holmes JM, et al. **Curr Eye Res** 1997 Jul;16(7):725–32

Gorlin's syndrome. Case report. Salati C, et al. **Eur J Ophthalmol** 1997 Jan-Mar;7(1):113–4

Hyperimmunoglobulinemia D in idiopathic retinal vasculitis. Kumano Y, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):372–8

Multiple ocular impairment in a patient affected by Waldenström's macroglobulinaemia. Leone G, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234(8):533–5

Butterfly-shaped pigment dystrophy of the fovea associated with subretinal neovascularization. Marano F, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):270–4

Flecked chorioretinopathy associated with Birt-Hogg-Dubé syndrome. Walter P, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):359–61

Familial exudative vitreoretinopathy associated with nonneovascular chronic angle-closure glaucoma. Azuara-Blanco A, et al. **J Glaucoma** 1997 Feb;6(1):47–9

Acute zonal occult outer retinopathy and central nervous system inflammation. Jacobson DM. **J Neuroophthalmol** 1996 Sep;16(3):172–7

Loss of vision alone may result in seesaw nystagmus. May EF, et al. **J Neuroophthalmol** 1997 Jun;17(2):84–5 (8 ref.)

Predictive value of temporal retinal disease in retinopathy of prematurity. Paysse EA, et al. **J Pediatr Ophthalmol Strabismus** 1997 May-Jun; 34(3):177–81

Eye involvement in dermatomyositis/polymyositis [letter; comment] Migliaresi S, et al. **J Rheumatol** 1996 Nov; 23(11):2006–7. Comment on: J Rheumatol 1995 Dec;22(12):2372–3.

Optic disk edema with a macular star. Brazis PW, et al. **Mayo Clin Proc** 1996 Dec;71(12):1162–6 (66 ref.)

Coats' disease and central nervous system venous malformation. Robitaille JM, et al. **Ophthalmic Genet** 1996 Dec;17(4):215–8

Pigmented ocular fundus lesions and APC mutations in familial adenomatous polyposis. Traboulsi EI, et al. **Ophthalmic Genet** 1996 Dec;17(4):167–74

Role of the vitreous and macular edema in branch retinal vein occlusion. Takahashi MK, et al. **Ophthalmic Surg Lasers** 1997 Apr;28(4):294–9

Cavernous hemangioma with cone dysfunction. Gündüz K, et al. **Ophthalmologica** 1996;210(6):367–71

Central serous chorioretinopathy in patients with systemic lupus erythematosus. Cunningham ET Jr, et al. **Ophthalmology** 1996 Dec;103(12):2081–90 (84 ref.)

Bilateral iridocyclitis with retinal capillaritis in juveniles. Matsuo T, et al. **Ophthalmology** 1997 Jun;104(6):939–44

Subretinal fibrosis in central serous chorioretinopathy. Schatz H, et al. **Ophthalmology** 1995 Jul;102(7):1077–88

Surgical removal of subfoveal neovascularization in idiopathic juxtafoveolar retinal telangiectasis. Berger AS, et al. **Retina** 1997;17(2):94–8

Placoid chorioretinopathy in acute leukemia. Dosso AA, et al. **Retina** 1996;16(5):455–7

Polymerase chain reaction detection of cytomegalovirus and human immunodeficiency virus-1 in the retina of patients with acquired immune deficiency syndrome with and without cotton-wool spots. González CR, et al. **Retina** 1996;16(4):305–11

Combined hamartoma of the retina and retinal pigment epithelium associated with epiretinal membrane and macular hole. Mason JO 3rd, et al. **Retina** 1997;17(2):160–2

Prepapillary vascular loop and a recurrent vitreous hemorrhage. Strassman IB, et al. **Retina** 1997;17(2):166–7

A 30-year-old white male with reduced vision in each eye. Ulrikson M. **Retina** 1996;16(1):70–2

Postsurgical hypotony: relationship to fistulization, inflammation, chorioretinal lesions, and the vitreous. Schubert HD. **Surv Ophthalmol** 1996 Sep–Oct;41(2):97–125 (331 ref.)

[A case of sarcoidosis with proliferative retinopathy] Miyao A, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun; 101(6):532–7 (Eng. Abstr.) **(Jpn)**

[Multifocal posterior pigment epitheliopathy accompanied by choroidal detachment] Uemura A, et al. **Nippon Ganka Gakkai Zasshi** 1996 Sep;100(9):710–5 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Role of ocular involvement in the prediction of visual development and clinical prognosis in Aicardi syndrome. Menezes AV, et al. **Br J Ophthalmol** 1996 Sep;80(9):805–11

A histopathological, ultrastructural and immunohistochemical study of congenital hereditary retinoschisis. Kirsch LS, et al. **Can J Ophthalmol** 1996 Oct; 31(6):301–10

Congenital hypertrophy of the retinal pigment epithelium in the macula. Nishikatsu H, et al. **Ophthalmologica** 1996; 210(2):126–8

[A case of congenital retinoschisis with unexpected appearance and spontaneous regression] Kageyama M, et al. **Nippon Ganka Gakkai Zasshi** 1997 Aug;101(8):698–702 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Proton MR spectroscopy in Coats disease. Eisenberg L, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):727–9

Subretinal aspiration biopsy of ocular lymphoma. Ciulla TA, et al. **Am J Ophthalmol** 1997 Mar;123(3):420–2

Multiple evanescent white dot syndrome—an uncommon cause for an enlarged blind spot. Fong KS, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):866–8 (13 ref.)

Osseous metaplasia in a preretinal membrane [published erratum appears in Arch Ophthalmol1997 May;115(5):589] Loewenstein JI, et al. **Arch Ophthalmol** 1997 Jan; 115(1):117–9

Towards the automatic interpretation of retinal images [editorial; comment] Undrill P. **Br J Ophthalmol** 1996 Nov; 80(11):937–8. Comment on: Br J Ophthalmol 1996 Nov;80(11):940–4.

Digital indocyanine green angiography in chorioretinal diseases. Yang CS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Dec;56(6):411–7

Stereoacuity testing in patients with retinal and optic nerve disorders. Shah MB, et al. **Doc Ophthalmol** 1995–96; 91(3):265–71

Macula halo syndrome and non-pitting lid oedema in an Italian family. Pagliarini S, et al. **Eye** 1996;10 (Pt 6):723–6

Lipaemia retinalis: a question of chylomicrons? Rayner S, et al. **Eye** 1996;10 (Pt 5):603–8

The triple flash electroretinogram and its significance in macular diseases. B-wave recovery as a diagnostic tool. Bartz-Schmidt KU, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Oct;234(10):604–11

Adenocarcinoma of the retinal pigment epithelium: a diagnostic and therapeutic challenge. Finger PT, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S22–7 (23 ref.)

Retinal vasculitis: pathogenesis and laboratory investigations. Rahi AH, et al. **Int Ophthalmol Clin** 1995 Summer; 35(3):93–105 (62 ref.)

Bilateral idiopathic macular pucker: a case report [see comments] Boulougouris V, et al. **J Am Optom Assoc** 1996 Aug;67(8):496–9. Comment in: J Am Optom Assoc 1997 Jan;68(1):10.

Role of indocyanine green fluorescence videoangiography in evaluation of subretinal disease. Lampariello DA, et al. **J Am Optom Assoc** 1997 Jun;68(6):343–52

Comparison of the effectiveness of a nondilated versus dilated fundus examination in the pediatric population. Parisi ML, et al. **J Am Optom Assoc** 1996 May;67(5):266–72

Careful considerations regarding EMMs [letter; comment] Rafieetary MR. **J Am Optom Assoc** 1997 Jan;68(1):10. Comment on: J Am Optom Assoc 1996 Aug;67(8):496–9.

Skeletal muscle of patients with gyrate atrophy of the choroid and retina and hyperornithinaemia in ultralow-field magnetic resonance imaging and computed tomography. Valtonen M, et al. **J Inherit Metab Dis** 1996;19(6):729–34

Differentiation of neovascular maculopathies by nonphotic electrooculogram responses. Shirao Y, et al. **Jpn J Ophthalmol** 1997 May–Jun;41(3):174–9

Magnetic resonance imaging findings in a case of advanced Coats' disease. Lai WW, et al. **Ophthalmic Surg Lasers** 1996 Mar;27(3):234–8

Endoscopic fluorescein angiography. Uram M. **Ophthalmic Surg Lasers** 1996 Oct;27(10):849–55

Difficulties in excluding the diagnosis of retinoblastoma in cases of advanced Coats' disease: a clinicopathologic report. Steidl SM, et al. **Ophthalmologica** 1996; 210(6):336–40

Application of rapid scanning retinal thickness analysis in retinal diseases. Asrani S, et al. **Ophthalmology** 1997 Jul; 104(7):1145–51

Identifying maculopathy after neodymium: YAG membranotomy for dense diabetic premacular hemorrhage. Ezra E, et al. **Ophthalmology** 1996 Oct;103(10):1568–74

Cotton-wool spots and the early diagnosis of giant cell arteritis. Melberg NS, et al. **Ophthalmology** 1995 Nov; 102(11):1611–4

Central serous chorioretinopathy in younger and older adults. Spaide RF, et al. **Ophthalmology** 1996 Dec;103(12):2070–9; discussion 2079–80

Taches de bougie. Vrabec TR, et al. **Ophthalmology** 1995 Nov;102(11):1712–21

Characterization of epiretinal membranes using optical coherence tomography. Wilkins JR, et al. **Ophthalmology** 1996 Dec;103(12):2142–51

Idiopathic peripheral vitreous membranes. Marren SE. **Optom Vis Sci** 1996 Aug;73(8):562–8 (53 ref.)

Bilateral frosted branch angitis in an 8-year-old Indian girl. Biswas J, et al. **Retina** 1996;16(5):444–5

Bilateral macular lesions in incontinentia pigmenti [letter; comment] Levy ML, et al. **Retina** 1996;16(4):348–52. Comment on: Retina 1996;16(1):38–41.

Ring retinal pigment epithelial window defect of the macula in central serous chorioretinopathy. Park DW, et al. **Retina** 1997;17(3):205–10

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1997;17(2):154–9

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1996;16(6):535–7

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1996;16(4):337–40

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1996;16(5):440–3

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1997;17(4):344–8

Bilateral macular lesions in incontinentia pigmenti. Bloch-Sulzberger syndrome [see comments] Soltau JB, et al. **Retina** 1996;16(1):38–41. Comment in: Retina 1996;16(4):348–52.

Scanning laser ophthalmoscopy in the early diagnosis of vitreoretinal interface syndrome. Varano M, et al. **Retina** 1997;17(4):300–5

Hypertensive retinopathy mimicking neuroretinitis in a twelve-year-old girl. Leavitt JA, et al. **Surv Ophthalmol** 1997 May–Jun;41(6):477–80

[Familiar exudative vitreoretinopathy] Peng X, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Nov;31(6):426–9 (Eng. Abstr.) **(Chi)**

[Hamartoma of the pigment epithelium and retina. Apropos of a case] Laghmari A, et al. **J Fr Ophtalmol** 1997; 20(4):297–301 (Eng. Abstr.) **(Fre)**

[Exudative parafoveal astrocytic hamartoma associated with Bourneville tuberous sclerosis: spontaneous evolution] Sahli O, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):332–3 (Eng. Abstr.) **(Fre)**

[Skin electrodes for electroretinography in unsedated children] Baier C, et al. **Ophthalmologe** 1996 Aug; 93(4):440–5 (Eng. Abstr.) **(Ger)**

[Topography of fundus autofluorescence with a new confocal scanning laser ophthalmoscope] Bellmann C, et al. **Ophthalmologe** 1997 Jun;94(6):385–91 (Eng. Abstr.) **(Ger)**

[Variability of findings in light sense and ring perimetry] Littan T, et al. **Ophthalmologe** 1996 Aug;93(4):413–9 (Eng. Abstr.) **(Ger)**

[Macular combined malformation (hamartoma) of the retina and retinal pigment epithelium] Wiechens B, et al. **Ophthalmologe** 1996 Dec;93(6):724–8 (Eng. Abstr.) **(Ger)**

DIET THERAPY

Lipemia retinalis of prematurity [letter] Ikesugi K, et al. **Arch Ophthalmol** 1996 Oct;114(10):1283–4

DRUG THERAPY

Thalidomide may impede cell migration in primates by down-regulating integrin beta-chains: potential therapeutic utility in solid malignancies, proliferative retinopathy, inflammatory disorders, neointimal hyperplasia, and osteoporosis. McCarty MF. **Med Hypotheses** 1997 Aug; 49(2):123–31 (108 ref.)

Epiretinal membrane formation [letter] Oh KT, et al. **Retina** 1996;16(4):346–7

[Use of calcium antagonists in ophthalmology (editorial)] Pillunat LE. **Klin Monatsbl Augenheilkd** 1996 Jun; 208(6):A1–2 **(Ger)**

ENZYMOLOGY

Changes of catalase activity after ischemia-reperfusion in rat retina. Lewden O, et al. **Ophthalmic Res** 1996;28(6):331–5

EPIDEMIOLOGY

Incidence of hydroxychloroquine retinopathy in 1,207 patients in a large multicenter outpatient practice. Levy GD, et al. **Arthritis Rheum** 1997 Aug;40(8):1482–6

Epidemiological studies on occupational eye pathology. Zlateva V, et al. **Eur J Ophthalmol** 1996 Oct–Dec; 6(4):440–5

Prevalence and associations of epiretinal membranes. The Blue Mountains Eye Study, Australia. Mitchell P, et al. **Ophthalmology** 1997 Jun;104(6):1033–40

Clinically significant macular edema in type I diabetes. Incidence and risk factors. Vitale S, et al. **Ophthalmology** 1995 Aug;102(8):1170–6

[Clinical electro-ophthalmology at the Max Planck Institute of the Frankfurt University Ophthalmology Clinic 1970–1991] Lorenz R, et al. **Klin Monatsbl Augenheilkd** 1996 Jul;209(1):47–50 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Cancer-associated retinopathy in a patient with endometrial cancer. Ohkawa T, et al. **Am J Ophthalmol** 1996 Nov; 122(5):740–2

Macular complications associated with posterior staphyloma. Steidl SM, et al. **Am J Ophthalmol** 1997 Feb;123(2):181–7

Bilateral optic disk edema with macular exudates as the manifesting sign of a cerebral arteriovenous malformation. Verm A, et al. **Am J Ophthalmol** 1997 Mar;123(3):422–4

Retinal complications after aqueous shunt surgical procedures for glaucoma. Law SK, et al. **Arch Ophthalmol** 1996 Dec; 114(12):1473–80

Subretinal fluid associated with membranoproliferative glomerulonephritis type 2 [letter] Polk TD, et al. **Arch Ophthalmol** 1997 Jul;115(7):927–8

Traumatic retinopathy resembling acute macular neuroretinopathy. Gillies M, et al. **Aust N Z J Ophthalmol** 1997 Aug;25(3):207–10 (11 ref.)

Solitary pulmonary cholesteroloma, multiple xanthelasmas and lipemia retinalis complicating hypercholesterolemia after bone marrow transplantation. Toren A, et al. **Bone Marrow Transplant** 1996 Aug;18(2):457–9

Cancer-induced retinal hypersensitivity. Thirkill CE. **Br J Biomed Sci** 1996 Sep;53(3):227–34 (110 ref.)

Recurrent septic retinal emboli following dental surgery [letter] Kilmartin DJ, et al. **Br J Ophthalmol** 1996 Dec; 80(12):1111–2

Retinal dystrophy in long chain 3-hydroxy-acyl-coA dehydrogenase deficiency. Schrijver-Wieling I, et al. **Br J Ophthalmol** 1997 Apr;81(4):291–4

Unilateral choroidal melanoma with bilateral retinal vasculitis [letter] Steel DH, et al. **Br J Ophthalmol** 1996 Sep; 80(9):850–1

Retinal blood flow indices in patients infected with human immunodeficiency virus. Yung CW, et al. **Br J Ophthalmol** 1996 Aug;80(8):723–7

Light-induced maculopathy. Schoolmeesters B, et al. **Bull Soc Belge Ophtalmol** 1995;259:115–22

Eales' disease: accumulation of reactive oxygen intermediates and lipid peroxides and decrease of antioxidants causing inflammation, neovascularization and retinal damage. Bhooma V, et al. **Curr Eye Res** 1997 Feb;16(2):91–5

Hemorrhagic retinopathy in newborns: frequency, form of presentation, associated factors and significance. Gonzalez Viejo I, et al. **Eur J Ophthalmol** 1995 Oct–Dec;5(4):247–50

Electroretinographic findings in Fuchs' heterochromic cyclitis. Murray DC, et al. **Eye** 1997;11 (Pt 1):102–8

Lipaemia retinalis: a question of chylomicrons? Rayner S, et al. **Eye** 1996;10 (Pt 5):603–8

Unusual retinal pigment epitheliopathy and choroidopathy in carcinomatosis: a rare case of cancer-associated retinopathy. Brink H, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan;235(1):59–61

The ophthalmological course of Usher syndrome type III. Pakarinen L, et al. **Int Ophthalmol** 1995–96;19(5):307–11

Retinal vasculitis: pathogenesis and laboratory investigations. Rahi AH, et al. **Int Ophthalmol Clin** 1995 Summer; 35(3):93–105 (62 ref.)

Lens-specific expression of PDGF-A in transgenic mice results in retinal astrocytic hamartomas. Reneker LW, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2455–66

Hypertensive retinopathy: a review of existing classification systems and a suggestion for a simplified grading system. Dodson PM, et al. **J Hum Hypertens** 1996 Feb;10(2):93–8 (37 ref.)

Fundal changes in malignant hypertension. Lip PL, et al. **J Hum Hypertens** 1997 Jun;11(6):395–6

Venous obstruction as the cause of retinal/choroidal dysfunction associated with arteriovenous shunts in the cavernous sinus. Kupersmith MJ, et al. **J Neuroophthalmol** 1996 Mar;16(1):1–6

Epiretinal membrane: an unusual complication of childhood optic neuritis. Repka MX, et al. **J Pediatr Ophthalmol Strabismus** 1996 Mar–Apr; 33(2):124–7

Retinopathy in adult dermatomyositis [letter] [see comments] Chu-Lee A, et al. **J Rheumatol** 1995 Dec;22(12):2372–3. Comment in: J Rheumatol 1996 Nov;23(11):2006–7.

Cancer-associated retinopathy syndrome: a case of small cell lung cancer expressing recoverin immunoreactivity. Matsubara S, et al. **Lung Cancer** 1996 Jun;14(2–3):265–71

Antiphospholipid antibodies and retinal vascular disease. Dunn JP, et al. **Lupus** 1996 Aug;5(4):313–22

Retinopathy after solar eclipse, 1995. Verma L, et al. **Natl Med J India** 1996 Nov–Dec;9(6):266–7

Bilateral epiretinal membranes: a new finding in Hunter syndrome. Narita AS, et al. **Ophthalmic Genet** 1996 Jun; 17(2):75–8

Treatment of hypotony maculopathy after trabeculectomy. Cohen SM, et al. **Ophthalmic Surg Lasers** 1995 Sep–Oct; 26(5):435–41

Subretinal lesions following a scleral buckling procedure. Piguet B, et al. **Ophthalmologica** 1997;211(2):112–4

Morphologic changes of the macula in a patient with Purtscher's retinopathy. Remky A, et al. **Ophthalmologica** 1997;211(4):268–9

Macular pucker after successful surgery for proliferative vitreoretinopathy. Silicone Study Report 8. Cox MS, et al. **Ophthalmology** 1995 Dec;102(12):1884–91

Association between the short-term natural history of diabetic macular edema and the vitreomacular relationship in type II diabetes mellitus. Hikichi T, et al. **Ophthalmology** 1997 Mar;104(3):473–8

Retinal light damage and eye surgery [editorial] [see comments] Minckler D. **Ophthalmology** 1995 Dec; 102(12):1741–2. Comment in: Ophthalmology 1996 Apr;103(4):546–7. Comment in: Ophthalmology 1996 Apr;103(4):547–8.

Hypotony maculopathy after filtering surgery with mitomycin C. Incidence and treatment. Suñer IJ, et al. **Ophthalmology** 1997 Feb;104(2):207–14; discussion 214–5

Retinopathy and optic neuropathy after transplantation [letter; comment] Theodosiadis P, et al. **Ophthalmology** 1997 Feb;104(2):170–1. Comment on: Ophthalmology 1996 Jan;103(1):87–95.

Intravitreous injections of vascular endothelial growth factor produce retinal ischemia and microangiopathy in an adult primate. Tolentino MJ, et al. **Ophthalmology** 1996 Nov; 103(11):1820–8

Purtscher's retinopathy. Buckley SA, et al. **Postgrad Med J** 1996 Jul;72(849):409–12 (30 ref.)

Welders maculopathy despite using protective lenses. Arend O, et al. **Retina** 1996;16(3):257–9

Systemic sarcoidosis with severe proliferative sarcoid retinopathy [letter] Ohta M, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar;13(1):81

Hypertensive retinopathy mimicking neuroretinitis in a twelve-year-old girl. Leavitt JA, et al. **Surv Ophthalmol** 1997 May–Jun;41(6):477–80

Hepatic retinopathia. Changes in retinal function. Eckstein AK, et al. **Vision Res** 1997 Jun;37(12):1699–706

[Rare ocular complications in patients with acute necrotizing pancreatitis] Hejcmanová D, et al. **Cesk Slov Oftalmol** 1997 May;53(2):71–5 (Eng. Abstr.) **(Cze)**

[Melanoma-associated retinopathy. Apropos of a case and review of the literature] Bret-Dibat C, et al. **Bull Cancer** 1996 Dec;83(12):1019–22 (Eng. Abstr.) **(Fre)**

[Hemoglobinopathies and retinopathies in Lomé UHC] Balo KP, et al. **J Fr Ophtalmol** 1996;19(8–9):497–504 (Eng. Abstr.) **(Fre)**

[Retinopathy in Zellweger's cerebrohepatorenal syndrome. The electrophysiological aspects] Stănescu-Segall B. **Oftalmologia** 1996 Oct–Dec;40(4):357–60 (Eng. Abstr.) **(Fre)**

[Minimal lesion hypertensive retinopathy and arterial pre-hypertension: evidence of arterial pressure monitoring in presumed normotensive subjects at zero risk] Cugini P, et al. **Recenti Prog Med** 1997 Jan;88(1):11–6 (Eng. Abstr.) **(Ita)**

[A case of dermatomyositis with severe retinopathy in a patient who died of acute interstitial pneumonia] Enoki T, et al. **Nippon Ganka Gakkai Zasshi** 1997 May; 101(5):441–5 (Eng. Abstr.) **(Jpn)**

[Cancer-associated retinopathy] Ohguro H, et al. **Nippon Ganka Gakkai Zasshi** 1997 Apr;101(4):283–7 (45 ref.) (Eng. Abstr.) **(Jpn)**

[A case of paraneoplastic retinopathy with serum antibody against retinal soluble 70 kDa protein] Takahashi K, et al.

Nippon Ganka Gakkai Zasshi 1997 Jan;101(1):92–6 (Eng. Abstr.) **(Jpn)**

[Renal retinopathy] Okisaka S.
Ryoikibetsu Shokogun Shirizu 1997;(16 Pt 1):24–6 (6 ref.) **(Jpn)**

[Maculopathy in hereditary metabolic diseases] Stănescu–Segall B. **Oftalmologia** 1996 Jul–Sep;40(3):261–3 (Eng. Abstr.) **(Rum)**

[Involutional ophthalmic endotoxicosis as the cause of the involutional vitroretinal syndrome] Vodovozov AM.
Vestn Oftalmol 1996 Apr–Jun;112(2):35–8 (Eng. Abstr.) **(Rus)**

[Purtscher's retinopathy and acute alcoholic pancreatitis] Suárez Crespo JF, et al. **Rev Esp Enferm Dig** 1996 Jul; 88(7):513–5 (Eng. Abstr.) **(Spa)**

GENETICS

Localization of a novel X–linked progressive cone dystrophy gene to Xq27: evidence for genetic heterogeneity. Bergen AA, et al. **Am J Hum Genet** 1997 Jun;60(6):1468–73

Meiotic drive at the myotonic dystrophy and the cone–rod dystrophy loci on chromosome 19q13.3 [letter] Inglehearn CF, et al. **Am J Hum Genet** 1997 Jun;60(6):1562–3

Macular pattern retinal dystrophy, adult–onset diabetes, and deafness: a family study of A3243G mitochondrial heteroplasmy. Harrison TJ, et al. **Am J Ophthalmol** 1997 Aug;124(2):217–21

Norrie disease in a family with a manifesting female carrier. Sims KB, et al. **Arch Ophthalmol** 1997 Apr;115(4):517–9

Exceptions to the rule: individuals with FAP specific CHRPE and mutations in exon 6 of the APC gene [letter] Pack K, et al. **Clin Genet** 1996 Aug;50(2):110–1

The retina: genetic studies of several retinopathies located on the short arm of chromosome 17. Joshi AR, et al.
Curr Opin Neurol 1997 Feb;10(1):31–5 (39 ref.)

Butterfly–shaped pigment dystrophy of the fovea associated with subretinal neovascularization. Marano F, et al.
Graefes Arch Clin Exp Ophthalmol 1996 Apr;234(4):270–4

Identification of novel missense mutations in the Norrie disease gene associated with one X–linked and four sporadic cases of familial exudative vitreoretinopathy. Shastry BS, et al. **Hum Mutat** 1997;9(5):396–401

Evaluation of the gene encoding the tissue inhibitor of metalloproteinases–3 in various maculopathies. Felbor U, et al. **Invest Ophthalmol Vis Sci** 1997 May;38(6):1054–9

Retinoschisislike alterations in the mouse eye caused by gene targeting of the Norrie disease gene. Ruether K, et al.
Invest Ophthalmol Vis Sci 1997 Mar;38(3):710–8

Linkage mapping of a large Colombian family segregating for X linked retinoschisis: refinement of the chromosomal location. Shastry BS, et al. **J Med Genet** 1997 Jun; 34(6):504–6

Familial exudative vitreoretinopathy linked to D11S533 in a large Asian family with consanguinity. Price SM, et al.
Ophthalmic Genet 1996 Jun;17(2):53–7

Histopathological and immunohistochemical findings associated with a null mutation in the Norrie disease gene. Schroeder B, et al. **Ophthalmic Genet** 1997 Jun;18(2):71–7

Peripheral retinopathy in offspring of carriers of Norrie disease gene mutations. Possible transplacental effect of abnormal Norrin. Mintz–Hittner HA, et al.
Ophthalmology 1996 Dec;103(12):2128–34

The familial incidence of symptoms of Scotopic Sensitivity/Irlen syndrome. Robinson GL, et al.
Percept Mot Skills 1996 Dec;83(3 Pt 1):1043–55

Autosomal dominant vitreoretinochoroidopathy. Roider J, et al. **Retina** 1997;17(4):294–9

Genetic screening of dogs [letter] [see comments] Skipper A. **Vet Rec** 1996 Aug 17;139(7):171. Comment in: Vet Rec 1996 Sep 7;139(10):243. Comment in: Vet Rec 1996 Oct 12;139(15):375–6.

[Hippel–Lindau syndrome. Clinical and genetic aspects of angiomatosis retinae (editorial)] Brauch H.
Klin Monatsbl Augenheilkd 1997 Mar;210(3):aA1 **(Ger)**

HISTORY

[Some aspects of research and development in diagnosis and treatment of central serous chorioretinopathy in Japan]
Nippon Ganka Gakkai Zasshi 1996 Dec;100(12 Spec No):32–41 **(Jpn)**

IMMUNOLOGY

Paraneoplastic retinopathy: a novel autoantibody reaction associated with small–cell lung carcinoma. Murphy MA, et al. **J Neuroophthalmol** 1997 Jun;17(2):77–83

Epitope recognition of recoverin in cancer associated retinopathy: evidence for calcium–dependent conformational epitopes. Adamus G, et al.
J Neurosci Res 1996 Sep 15;45(6):863–72

[A case of paraneoplastic retinopathy with serum antibody against retinal soluble 70 kDa protein] Takahashi K, et al.
Nippon Ganka Gakkai Zasshi 1997 Jan;101(1):92–6 (Eng. Abstr.) **(Jpn)**

METABOLISM

Lipidemic effect as a manifestation of chloroquine retinotoxicity. Gaafar KM, et al. **Arzneimittelforschung** 1995 Nov;45(11):1231–5

Eales' disease: accumulation of reactive oxygen intermediates and lipid peroxides and decrease of antioxidants causing inflammation, neovascularization and retinal damage. Bhooma V, et al. **Curr Eye Res** 1997 Feb;16(2):91–5

Glial fibrillary acidic protein (GFAP) is synthesized in the early stages of the photoreceptor cell degeneration of the mivit/mivit (vitiligo) mouse [letter] Smith SB, et al.
Exp Eye Res 1997 Apr;64(4):645–50

Vascularised vitreoretinopathy: the role of growth factors [see comments] Boulton ME, et al. **Eye** 1996;10 (Pt 6):691–6 (49 ref.). Comment in: Eye 1996 ;10 (Pt 6):651–2.

Upregulation of vascular endothelial growth factor in ischemic and non–ischemic human and experimental retinal disease. Vinores SA, et al. **Histol Histopathol** 1997 Jan; 12(1):99–109

Cancer–associated retinopathy syndrome: a case of small cell lung cancer expressing recoverin immunoreactivity. Matsubara S, et al. **Lung Cancer** 1996 Jun;14(2–3):265–71

MICROBIOLOGY

Leptospiral antibodies in patients with recurrent ophthalmic involvement. Rathinamsivakumar, et al.
Indian J Med Res 1996 Jan;103:66–8

PARASITOLOGY

Experimental intravitreous cysticercosis. Santos A, et al.
Graefes Arch Clin Exp Ophthalmol 1996 Aug;234(8):515–20

Retinal findings and characteristics in AIDS patients with systemic Mycobacterium avium–intracellulare complex and toxoplasmic encephalitis. Arevalo JF, et al.
Ophthalmic Surg Lasers 1997 Jan;28(1):50–4

Ophthalmomyiasis interna posterior. Report of a case with optic atrophy. Jakobs EM, et al. **Retina** 1997;17(4):310–4

[Toxocara canis infection. 2 cases of peripheral granuloma in adults] Saint–Blancat P, et al. **J Fr Ophtalmol** 1997; 20(4):252–7 (19 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Esophageal carcinoma metastatic to the retina. Diagnosis of a case by cytologic examination of intraocular vitreous washings. Cangiarella JF, et al. **Acta Cytol** 1996 Sep–Oct; 40(5):995–8

Three–dimensional measurements of central serous chorioretinopathy using a scanning laser tomograph. Weinberger D, et al. **Am J Ophthalmol** 1996 Dec; 122(6):864–9

Photographic and angiographic characterization of the retina of Kenyan children with severe malaria. Hero M, et al.
Arch Ophthalmol 1997 Aug;115(8):997–1003

Premacular fibrosis in juvenile Coats' disease with spontaneous peeling after photocoagulation of the congenital vascular anomalies. Lafaut BA, et al.
Bull Soc Belge Ophtalmol 1996;261:79–84

Cancer–associated retinopathy: a clinicopathological case report. Boucher MC, et al. **Can J Ophthalmol** 1997 Feb; 32(1):46–9

A histopathological, ultrastructural and immunohistochemical study of congenital hereditary retinoschisis. Kirsch LS, et al. **Can J Ophthalmol** 1996 Oct; 31(6):301–10

The retina. Burdon MA, et al. **Curr Opin Neurol** 1996 Feb; 9(1):16–20 (20 ref.)

Prognostic importance of retinopathy in acute leukemia. Abu el–Asrar AM, et al. **Doc Ophthalmol** 1995–96;91(3):273–81

Correlation of fundus lesions and hematologic findings in leukemic retinopathy. abu el–Asrar AM, et al.
Eur J Ophthalmol 1996 Apr–Jun;6(2):167–72

Histopathological evaluation of retinal damage during intraocular hypertension in rabbit: involvement of ganglion cells and nerve fiber layer. Manni G, et al.
Graefes Arch Clin Exp Ophthalmol 1996 Aug;234 Suppl 1:S209–13

Electrophysiology and density of retinal neurons in mice with a mutation that includes the Pax2 locus. Green DG, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):919–29

Torpedo maculopathy. Teitelbaum BA, et al.
J Am Optom Assoc 1997 Jun;68(6):373–6 (12 ref.)

Evolution of fundus changes in mucormycosis. Newman RM, et al. **J Neuroophthalmol** 1997 Mar;17(1):51–2

Atheromatous and atheroma–like lesions of the central retinal artery: histopathological correlations. Eberle MM, et al.
Jpn J Ophthalmol 1996;40(3):377–84

Assessing retinal neovascularization in an animal model of proliferative retinopathy. Penn JS, et al. **Microvasc Res** 1996 Jan;51(1):126–30

Histopathological and immunohistochemical findings associated with a null mutation in the Norrie disease gene. Schroeder B, et al. **Ophthalmic Genet** 1997 Jun;18(2):71–7

Unilateral acute posterior multifocal placoid pigment epitheliopathy. Nakajima N, et al. **Ophthalmologica** 1996; 210(2):123–5

Congenital hypertrophy of the retinal pigment epithelium in the macula. Nishikatsu H, et al. **Ophthalmologica** 1996; 210(2):126–8

Morphologic changes of the macula in a patient with Purtscher's retinopathy. Remky A, et al.
Ophthalmologica 1997;211(4):268–9

Indocyanine green angiography of acute multifocal posterior placoid pigment epitheliopathy. Park D, et al.
Ophthalmology 1995 Dec;102(12):1877–83

Pre–injection fluorescence in indocyanine green angiography. Piccolino FC, et al. **Ophthalmology** 1996 Nov; 103(11):1837–45

Clinical grand rounds. Idiopathic central serous chorioretinopathy. Mathews DE. **Optom Clin** 1996; 5(1):175–84

Brain and eye pathology in an infant with Down syndrome and tuberous sclerosis. Jay V. **Pediatr Neurol** 1996 Jul; 15(1):57–9

Circumpapillary chorioretinopathy in multiple evanescent white–dot syndrome. Barile GR, et al. **Retina** 1997; 17(1):75–7

Epiretinal macular membranes in eyes with attached posterior cortical vitreous. Heilskov TW, et al. **Retina** 1996; 16(4):279–84

Cytology of metastatic cutaneous melanoma to the vitreous and retina. Spraul CW, et al. **Retina** 1996;16(4):328–32

[Ornithine induced retinopathy in rat—2. Process of disappearance of choriocapillaris] Maeda H, et al.
Nippon Ganka Gakkai Zasshi 1997 Jun;101(6):470–80 (Eng. Abstr.) **(Jpn)**

[Histopathological study on retinochoroidal disorders (editorial)] Ohnishi Y. **Nippon Ganka Gakkai Zasshi** 1997 Feb;101(2):103–4 **(Jpn)**

[Study of choroidal vascular lesions in central serous chorioretinopathy using indocyanine green angiography] Okushiba U, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jan; 101(1):74–82 (Eng. Abstr.) **(Jpn)**

[Current aspects on intraocular proliferation (editorial)] Oshima K. **Nippon Ganka Gakkai Zasshi** 1996 Mar; 100(3):171–2 **(Jpn)**

[Visual prognosis and macular pathology in eyes with retinal macroaneurysms] Saito K, et al.
Nippon Ganka Gakkai Zasshi 1997 Feb;101(2):148–51 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

How are macular changes reflected in pattern visually evoked cortical potentials? Shimada Y, et al.
Acta Ophthalmol Scand 1997 Jun;75(3):277–80

Acute progressive multifocal Best's disease in a 61–year–old man. Ciulla TA, et al. **Am J Ophthalmol** 1997 Jan; 123(1):129–31

Retinal function abnormalities in membranoproliferative glomerulonephritis type II. Kim RY, et al.
Am J Ophthalmol 1997 May;123(5):619–28

Amyloid precursor protein, A beta and amyloid–associated proteins involved in chloroquine retinopathy in rats—immunopathological studies. Yoshida T, et al.
Brain Res 1997 Aug 1;764(1–2):283–8

Electrophysiology of the retinal pigment epithelium in central serous chorioretinopathy. Gupta LY, et al.
Doc Ophthalmol 1995–96;91(2):101–7

Cone–rod dysfunction in patients with unexplained reduction in visual acuity. Lang Y, et al. **Doc Ophthalmol** 1996–97; 92(3):173–91

Selective damage to either the "M" or "P" cell pathway in human retinal disease: implications for visual processing. Wolf JE, et al. **Eur J Ophthalmol** 1996 Apr–Jun;6(2):208–14

Fundus–controlled examination of reading in eyes with macular pathology. Rohrschneider K, et al.
Ger J Ophthalmol 1996 Sep;5(5):300–7

The triple flash electroretinogram and its significance in macular diseases. B–wave recovery as a diagnostic tool. Bartz–Schmidt KU, et al.
Graefes Arch Clin Exp Ophthalmol 1996 Oct;234(10):604–11

Prognostic value of pattern reversal visual–evoked potentials in idiopathic epiretinal membrane. Tilanus MA, et al.
Graefes Arch Clin Exp Ophthalmol 1997 Aug;235(8):474–9

Retinoschisislike alterations in the mouse eye caused by gene targeting of the Norrie disease gene. Ruether K, et al.
Invest Ophthalmol Vis Sci 1997 Mar;38(3):710–8

Foveal cone function in nonproliferative diabetic retinopathy and macular edema. Weiner A, et al.
Invest Ophthalmol Vis Sci 1997 Jun;38(7):1443–9

Resuturing the scleral flap leads to resolution of hypotony maculopathy. Schwartz GF, et al. **J Glaucoma** 1996 Aug; 5(4):246–51 (50 ref.)

Pulfrich psychophysical stereo–illusion and visual–evoked potentials in epiretinal membrane of the macula. Hofeldt AJ, et al. **J Neuroophthalmol** 1996 Mar;16(1):36–40

ERG campimetry using a multi–input stimulation technique for mapping of retinal function in the central visual field. Kretschmann U, et al. **Ophthalmic Res** 1996;28(5):303–11

Evaluation of visual function following argon laser photocoagulation in central serous retinopathy. Khosla PK, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):693–7

Pattern of retinal dysfunction in acute zonal occult outer retinopathy. Jacobson SG, et al. **Ophthalmology** 1995 Aug; 102(8):1187–98

Clinical applications of fundus reflection densitometry. Liem AT, et al. **Surv Ophthalmol** 1996 Jul–Aug;41(1):37–50 (108 ref.)

[Visual prognosis and macular pathology in eyes with retinal macroaneurysms] Saito K, et al.
Nippon Ganka Gakkai Zasshi 1997 Feb;101(2):148–51 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

The value of routine dilated pupil screening examination. Batchelder TJ, et al. **Arch Ophthalmol** 1997 Sep; 115(9):1179–84

A novel NMDA receptor antagonist protects against N–methyl–D–aspartate– and glutamate–induced

neurotoxicity in the goldfish retina. Tyan SH, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):171–9
Medical cardiovascular treatment trials: relevant to medical ophthalmology in 1997? Dodson PM, et al. **Eye** 1997;11 (Pt 1):3–11 (70 ref.)
Welders maculopathy despite using protective lenses. Arend O, et al. **Retina** 1996;16(3):257–9

RADIOGRAPHY

Indocyanine green angiographic aspects of multiple evanescent white dot syndrome. Obana A, et al. **Retina** 1996;16(2):97–104
Indocyanine green videoangiography of older patients with central serous chorioretinopathy. Spaide RF, et al. **Retina** 1996;16(3):203–13

RADIOTHERAPY

Radiation therapy for choroidal and retinal hemangiomas. Augsburger JJ, et al. **Front Radiat Ther Oncol** 1997; 30:265–80 (19 ref.)

SURGERY

Long-term results of macular pucker surgery. Crafoord S, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):85–8
Broad laser indentation surface for retinal laser photocoagulation using indirect ophthalmoscopic delivery. Heyworth P, et al. **Arch Ophthalmol** 1997 Feb;115(2):280–1
Effect of macular edema on surgical visual outcome in eyes with idiopathic epiretinal membrane. Ma SS, et al. **Can J Ophthalmol** 1996 Jun;31(4):183–6
Posterior segment eye–surgery in day care? Weijtens O, et al. **Doc Ophthalmol** 1996–97;92(1):37–40
Posterior empty spaces during vitreoretinal surgery. Azzolini C, et al. **Eur J Ophthalmol** 1996 Apr–Jun;6(2):173–8
OCT images and surgery of juvenile Macular retinoschisis. Azzolini C, et al. **Eur J Ophthalmol** 1997 Apr–Jun; 7(2):196–200
Automatic speech recognition in vitreo–retinal surgery. A project for a prototypal computer–based voice–controlled vitrectomy machine. Rossi L, et al. **Eur J Ophthalmol** 1996 Oct–Dec;6(4):454–9
'En bloc' dissection of epimacular membranes using aspiration delamination. Kanawati C, et al. **Eye** 1996;10 (Pt 1):47–52
Lasers, optical systems and safety in ophthalmology: a review. Fankhauser F, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234(8):473–87 (56 ref.)
Resuturing the scleral flap leads to resolution of hypotony maculopathy. Schwartz GF, et al. **J Glaucoma** 1996 Aug; 5(4):246–51 (50 ref.)
Risk factors for elevated intraocular pressure after the use of intraocular gases in vitreoretinal surgery. Chen PP, et al. **Ophthalmic Surg Lasers** 1997 Jan;28(1):37–42
Treatment of hypotony maculopathy after trabeculectomy. Cohen SM, et al. **Ophthalmic Surg Lasers** 1995 Sep–Oct; 26(5):435–41
Cataract extraction as a means of treating postfiltration hypotony maculopathy. Sibayan SA, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):241–3
Vitrectomy for endogenous Klebsiella pneumoniae endophthalmitis with massive subretinal abscess. Yarng SS, et al. **Ophthalmic Surg Lasers** 1997 Feb;28(2):147–50
Evaluation of grid pattern photocoagulation for macular edema in central vein occlusion. The Central Vein Occlusion Study Group M report [see comments] **Ophthalmology** 1995 Oct;102(10):1425–33. Comment in: Ophthalmology 1996 Mar;103(3):352, discussion 353–4. Comment in: Ophthalmology 1996 Mar;103(3):352–4.
The effect of patient characteristics on response to focal laser treatment for diabetic macular edema. Browning DJ, et al. **Ophthalmology** 1997 Mar;104(3):466–72
Multicenter clinical experience using an erbium:YAG laser for vitreoretinal surgery. D'Amico DJ, et al. **Ophthalmology** 1996 Oct;103(10):1575–85
Vitreoretinal surgery outcomes. Impact on bilateral visual function. Scott IU, et al. **Ophthalmology** 1997 Jun; 104(6):1041–8
Laser treatment of macular disease. Bass SJ, et al. **Optom Clin** 1996;5(1):161–73 (20 ref.)
Automatic centering of the microscope image for vitreoretinal surgery. Azzolini C, et al. **Retina** 1996; 16(4):333–6
The use of panoramic viewing system in relaxing retinotomy and retinectomy. Lesnoni G, et al. **Retina** 1997;17(3):186–90
The artificial iris diaphragm for vitreoretinal silicone oil surgery. Thumann G, et al. **Retina** 1997;17(4):330–7
Patients undergoing vitreous surgery under local anesthesia [letter] Willis AW. **Retina** 1997;17(2):169
[New techniques for retinal surgery. Cell transplantation, a future therapeutic method?] Nystrand A. **Lakartidningen** 1997 Apr 23;94(17):1617–20, 1623 (10 ref.) **(Swe)**

THERAPY

Severe visual loss after autologous blood injection for mitomycin–C–associated hypotonous maculopathy. Lu DW, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):244–5
[New therapy with blood components in vascular diseases of fundus oculi] Mykha AI. **Vestn Oftalmol** 1997 May–Jun; 113(3):17–8 (Eng. Abstr.) **(Rus)**
[Electrostimulation as a treatment method in partial atrophy of the optic nerve and retinal diseases] Rogatina EV. **Vestn Oftalmol** 1997 Jan–Feb;113(1):41–3 (51 ref.) **(Rus)**

ULTRASONOGRAPHY

OCT images and surgery of juvenile Macular retinoschisis. Azzolini C, et al. **Eur J Ophthalmol** 1997 Apr–Jun; 7(2):196–200
Clinical and ultrasound study of peripheral vitreoretinal adhesions. Pierro L, et al. **Retina** 1997;17(2):131–4

VETERINARY

Diagnostic ophthalmology. Hypertensive retinopathy. Wolfer J, et al. **Can Vet J** 1997 Aug;38(8):519–20
Neuronal ceroid lipofuscinosis in the Polish Owczarek Nizinny (PON) dog. A retinal study. Wrigstad A, et al. **Doc Ophthalmol** 1995;91(1):33–47
The equine fundus. III: Pathological variants. Matthews AG, et al. **Equine Vet J Suppl** 1990 Sep;(10):55–61
Pigmentary degeneration induced by N–methyl–N–nitrosourea and the fate of pigment epithelial cells in the rat retina. Nakajima M, et al. **Pathol Int** 1996 Nov;46(11):874–82
Genetic screening of dogs [letter; comment] Binns M, et al. **Vet Rec** 1996 Oct 12;139(15):375–6. Comment on: Vet Rec 1996 Aug 17;139(7):171.
Genetic screening of dogs [letter] [see comments] Skipper A. **Vet Rec** 1996 Aug 17;139(7):171. Comment in: Vet Rec 1996 Sep 7;139(10):243. Comment in: Vet Rec 1996 Oct 12;139(15):375–6.
Impaired retinal function in young labrador retriever dogs heterozygous for late onset rod–cone degeneration. Kommonen B, et al. **Vision Res** 1997 Feb;37(3):365–70

VIROLOGY

An in vivo model of human cytomegalovirus retinal infection. Laycock KA, et al. **Am J Ophthalmol** 1997 Aug; 124(2):181–9
Clinical characteristics of hepatitis C virus–associated retinopathy. Abe T, et al. **Jpn J Ophthalmol** 1995; 39(4):411–9
Virus RNA persists within the retina in coronavirus–induced retinopathy. Komurasaki Y, et al. **Virology** 1996 Aug 15; 222(2):446–50

RETINAL DISPARITY see **VISION DISPARITY**

RETINAL DRUSEN

COMPLICATIONS

Reticular pseudodrusen [letter] Maguire MG, et al. **Retina** 1996;16(2):167–8

DIAGNOSIS

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1997;17(1):65–6

ETIOLOGY

[Retinochoroidal involvement of type II membranoproliferative glomerulonephritis. An angiographic study with indocyanine green] Parrat E, et al. **J Fr Ophtalmol** 1997;20(6):430–8 (Eng. Abstr.) **(Fre)**

GENETICS

Ultrastructural findings in autosomal dominant drusen. Holz FG, et al. **Arch Ophthalmol** 1997 Jun;115(6):788–92 (29 ref.)

METABOLISM

Characterization of drusen–associated glycoconjugates. Mullins RF, et al. **Ophthalmology** 1997 Feb;104(2):288–94

PATHOLOGY

Ultrastructural findings in autosomal dominant drusen. Holz FG, et al. **Arch Ophthalmol** 1997 Jun;115(6):788–92 (29 ref.)
Characteristics of Drusen and Bruch's membrane in postmortem eyes with age–related macular degeneration. Spraul CW, et al. **Arch Ophthalmol** 1997 Feb;115(2):267–73

SURGERY

Laser treatment in subjects with high–risk clinical features of age–related macular degeneration. Posterior pole appearance and retinal function. Guymer RH, et al. **Arch Ophthalmol** 1997 May;115(5):595–603
A case of visual acuity loss following laser photocoagulation for macular drusen [letter] Hyver SW, et al. **Arch Ophthalmol** 1997 Apr;115(4):554–5
Laser photocoagulation of soft drusen in early age–related maculopathy (ARM). The one–year results of a prospective, randomised trial. Frennesson IC, et al. **Eur J Ophthalmol** 1996 Jul–Sep;6(3):307–14
A pilot randomized controlled study on the effect of laser photocoagulation of confluent soft macular drusen. Little HL, et al. **Ophthalmology** 1997 Apr;104(4):623–31

RETINAL DYSPLASIA

COMPLICATIONS

Chorioretinal dysplasia–microcephaly–mental retardation syndrome: another family with autosomal dominant inheritance. Hordijk R, et al. **Genet Couns** 1996;7(2):113–22

GENETICS

Chorioretinal dysplasia–microcephaly–mental retardation syndrome: another family with autosomal dominant inheritance. Hordijk R, et al. **Genet Couns** 1996;7(2):113–22
Ocular phenotypes associated with two mutations (R121W, C126X) in the Norrie disease gene. Kellner U, et al. **Ophthalmic Genet** 1996 Jun;17(2):67–74

METABOLISM

Lectin–histochemical study of O–linked glycoconjugates in dysplastic retina of Norrie disease. Uehara F, et al. **Jpn J Ophthalmol** 1996;40(2):251–4

VETERINARY

What is your diagnosis? Retinal dysplasia with concurrent developmental skeletal abnormalities in a Labrador retriever. Cook JL, et al. **J Am Vet Med Assoc** 1997 Feb 1;210(3):329–30
[Retinal and corneal dysplasias in the Yorkshire terrier and other dog breeds in Austria] Walde I. **Tierarztl Prax** 1997 Jan;25(1):62–7 (Eng. Abstr.) **(Ger)**

RETINAL GANGLION CELLS

[Anatomic delineation by myelin] Lozano–Alcázar J. **Gac Med Mex** 1996 Sep–Oct;132(5):537 **(Spa)**

CHEMISTRY

Somatostatin–like immunoreactive cells in the ground squirrel retina. Lugo N, et al. **Cell Biol Int** 1997 Jul; 21(7):447–53
Antibodies against Pax6 immunostain amacrine and ganglion cells and neuronal progenitors, but not rod precursors, in the normal and regenerating retina of the goldfish. Hitchcock PF, et al. **J Neurobiol** 1996 Mar;29(3):399–413
Glutamate immunoreactivity in the tiger salamander retina differentiates between GABA–immunoreactive and glycine–immunoreactive amacrine cells. Yang CY. **J Neurocytol** 1996 Jul;25(7):391–403

CLASSIFICATION

Classes of axons and their distribution in the optic nerve of the tree shrew (Tupaia belangeri). Drenhaus U, et al. **Anat Rec** 1997 Sep;249(1):103–16
Retinal ganglion cells in the albino rat: revised morphological classification. Huxlin KR, et al. **J Comp Neurol** 1997 Aug 25;385(2):309–23

CYTOLOGY

Development of the retinotectal system in the pigeon: a cytoarchitectonic and tracing study with cholera toxin. Manns M, et al. **Anat Embryol (Berl)** 1997 Jun; 195(6):539–55
A quantitative study of ganglion cells in the goat retina. Gonzalez–Soriano J, et al. **Anat Histol Embryol** 1997 Mar; 26(1):39–44
A retrograde double–labeling study of uni– and bilaterally projecting retinal ganglion cells that project to the superior colliculi after unilateral eye removal at birth in the albino rat. Farid Ahmed AK, et al. **Brain Res** 1995 Dec 18; 704(2):307–12
Nitric oxide synthase in developing retinas and after optic tract section. Patel JI, et al. **Brain Res** 1997 Jun 27; 761(1):156–60
Effect of congenital hypothyroidism on cell density in the ganglion cell layer of the rat retina. Navegantes LC, et al. **Braz J Med Biol Res** 1996 May;29(5):665–8
Fibroblast growth factors are necessary for neural retina but not pigmented epithelium differentiation in chick embryos. Pittack C, et al. **Development** 1997 Feb;124(4):805–16
Unique distribution of somatostatin–immunoreactive cells in the retina of the tree shrew (Tupaia belangeri). Engelmann R, et al. **Eur J Neurosci** 1996 Jan;8(1):220–8
Positional determination of the naso–temporal retinal axis coincides with asymmetric expression of proteins along the anterior–posterior axis of the eye primordium. Thanos S, et al. **Exp Eye Res** 1996 Nov;63(5):479–92
Transplantation of oligodendrocyte progenitor cells into the rat retina: extensive myelination of retinal ganglion cell axons. Laeng P, et al. **Glia** 1996 Nov;18(3):200–10
Growth stimulation and chemotropic attraction of rat retinal ganglion cell axons in vitro by co–cultured optic nerves, astrocytes and astrocyte conditioned medium. Lucius R, et al. **Int J Dev Neurosci** 1996 Jul;14(4):387–98
Topographic organization in the retinocollicular pathway of the fetal cat demonstrated by retrograde labeling of ganglion cells. Chalupa LM, et al. **J Comp Neurol** 1996 Apr 29;368(2):295–303
Increased serotonin in the developing superior colliculus does not alter the number or distribution of retinotectal ganglion cells. Crnko TA, et al. **J Comp Neurol** 1996 Jan 15; 364(3):414–24

Size and distribution of retinal ganglion cells in the St. Kitts green monkey (Cercopithecus aethiops sabeus). Herbin M, et al. **J Comp Neurol** 1997 Jul 14;383(4):459–72

Retinal ganglion cells in the albino rat: revised morphological classification. Huxlin KR, et al. **J Comp Neurol** 1997 Aug 25;385(2):309–23

Distribution of M retinal ganglion cells in diurnal and nocturnal New World monkeys. Lima SM, et al. **J Comp Neurol** 1996 May 13;368(4):538–52

Distribution and coverage of beta cells in the cat retina. Stein JJ, et al. **J Comp Neurol** 1996 Sep 2;372(4):597–617

Tracer coupling pattern of amacrine and ganglion cells in the rabbit retina. Xin D, et al. **J Comp Neurol** 1997 Jul 14;383(4):512–28

Tissue culture of adult human retinal ganglion cells. Hu DN, et al. **J Glaucoma** 1997 Feb;6(1):37–43

Myosin functions in Xenopus retinal ganglion cell growth cone motility in vivo. Ruchhoeft ML, et al. **J Neurobiol** 1997 Jun 5;32(6):567–78

Axonal transport blockade in the neonatal rat optic nerve induces limited retinal ganglion cell death. Fagiolini M, et al. **J Neurosci** 1997 Sep 15;17(18):7045–52

Genetic and environmental control of variation in retinal ganglion cell number in mice. Williams RW, et al. **J Neurosci** 1996 Nov 15;16(22):7193–205

In vivo confocal neuroimaging (ICON) of CNS neurons. Sabel BA, et al. **Nat Med** 1997 Feb;3(2):244–7

Effects of aging on the densities, numbers, and sizes of retinal ganglion cells in rhesus monkey. Kim CB, et al. **Neurobiol Aging** 1996 May–Jun;17(3):431–8

Thyrotropin–like immunoreactivity in human retina: immunoreactive co–localization in ganglion cells and perivascular fibers. Fernández–Trujillo FJ, et al. **Neurochem Int** 1996 Apr;28(4):381–4

Retinal nerve fiber layer thickness in normal human eyes [published erratum appears in Ophthalmology 1997 Feb;104(2):174] Varma R, et al. **Ophthalmology** 1996 Dec; 103(12):2114–9

Morphogenesis of retinal ganglion cells: a model of dendritic, mosaic, and foveal development. Kirby MA, et al. **Perspect Dev Neurobiol** 1996;3(3):177–94 (71 ref.)

The chronotopic reordering of optic axons. Reese BE. **Perspect Dev Neurobiol** 1996;3(3):233–42 (70 ref.)

Relationship between numbers of retinal ganglion cells and lateral geniculate neurons in the rhesus monkey. Spear PD, et al. **Vis Neurosci** 1996 Jan–Feb;13(1):199–203

Factors controlling the dendritic arborization of retinal ganglion cells. Troilo D, et al. **Vis Neurosci** 1996 Jul–Aug; 13(4):721–33

Morphology, dendritic field size, somal size, density, and coverage of M and P retinal ganglion cells of dichromatic Cebus monkeys. Yamada ES, et al. **Vis Neurosci** 1996 Nov–Dec;13(6):1011–29

Monoclonal antibody C38 recognizes retinal ganglion cells in cats and rats. Wakabayashi T, et al. **Vision Res** 1996 Apr;36(8):1081–90

[Regions of increased density of the ganglion cells, and resolution of the retina of the grey whale Eschrichtius gibbosus] Mass AM. **Dokl Akad Nauk** 1996 Sep; 350(1):139–42 **(Rus)**

DRUG EFFECTS

Ethanol modulation of GABA–activated current responses in acutely dissociated retinal bipolar cells and ganglion cells. Yeh HH, et al. **Alcohol Clin Exp Res** 1997 Jun; 21(4):647–55

In vivo and in vitro experiments show that betaxolol is a retinal neuroprotective agent. Osborne NN, et al. **Brain Res** 1997 Mar 14;751(1):113–23

The mechanism by which NBQX enhances NMDA currents in retinal ganglion cells. Yu W, et al. **Brain Res** 1996 Feb 19;709(2):184–96

Differential effects of bFGF on development of the rat retina. Zhao S, et al. **Brain Res** 1996 Jun 3;723(1–2):169–76

Blockade of afferent impulse activity disrupts on/off sublamination in the ferret lateral geniculate nucleus. Cramer KS, et al. **Brain Res Dev Brain Res** 1997 Feb 20; 98(2):287–90

Effects of neurotrophins on the survival and regrowth of injured retinal neurons. Aguayo AJ, et al. **Ciba Found Symp** 1996;196:135–44; discussion 144–8 (42 ref.)

Differential modulation of basic fibroblast and epidermal growth factor receptor activation by ganglioside GM3 in cultured retinal Müller glia. Meuillet E, et al. **Glia** 1996 Jul;17(3):206–16

Systemic L–kynurenine administration partially protects against NMDA, but not kainate–induced degeneration of retinal ganglion cells, and reduces visual discrimination deficits in adults rats. Vorwerk CK, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2382–92

Dopaminergic modulation of visual responses in toads. II. Influences of apomorphine on retinal ganglion cells and tectal cells. Glagow M, et al. **J Comp Physiol [A]** 1997 Jan;180(1):11–8

Factors affecting the survival of cat retinal ganglion cells after optic nerve injury. Russelakis–Carneiro M, et al. **J Neurocytol** 1996 Jun;25(6):393–402

Pharmacology of directionally selective ganglion cells in the rabbit retina. Kittila CA, et al. **J Neurophysiol** 1997 Feb; 77(2):675–89

Optical recordings of the effects of cholinergic ligands on neurons in the ganglion cell layer of mammalian retina. Baldridge WH. **J Neurosci** 1996 Aug 15;16(16):5060–72

Survival and differentiation of purified embryonic chick retinal ganglion cells cultured at low density in a chemically defined medium. Brocco MA, et al. **J Neurosci Methods** 1997 Jul 18;75(1):15–20

MK–801 reduces retinal ganglion cell survival but improves visual performance after controlled optic nerve crush. Schmitt U, et al. **J Neurotrauma** 1996 Dec;13(12):791–800

Mechanism of memantine block of NMDA–activated channels in rat retinal ganglion cells: uncompetitive antagonism. Chen HS, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):27–46

Omega–conotoxin–MVIID blocks an omega–conotoxin–GVIA–sensitive, high–threshold Ca2+ current in fish retinal ganglion cells. Tabata T, et al. **Neuropharmacology** 1996 May;35(5):633–6

Expression and herbimycin A–sensitive localization of pp125FAK in retinal growth cones. Worley TL, et al. **Neuroreport** 1996 Apr 26;7(6):1133–7

Angiotensin II–induced inhibition and facilitation of calcium current subtypes in rat retinal ganglion cells. Guenther E, et al. **Neurosci Lett** 1997 Aug 8;231(2):71–4

ENZYMOLOGY

Immunohistochemical localization of Ca2+/calmodulin–dependent protein kinase type IV in the mature and developing rat retina. Sakagami H, et al. **Brain Res** 1996 May 6;719(1–2):154–60

Extracellular and asymmetric forms of acetylcholinesterase are expressed on cholinergic and noncholinergic terminal neuropil of the developing chick retina. Reiss Y, et al. **Cell Tissue Res** 1996 Oct;286(1):13–22

The role of neuronal and endothelial nitric oxide synthase in retinal excitotoxicity. Vorwerk CK, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2038–44

Changes in NADPH diaphorase reactivity and neuronal nitric oxide synthase in the rat retina following constant illumination. Goldstein J, et al. **Neurosci Lett** 1997 Aug 1;231(1):45–8

METABOLISM

Two–fold effect of Angiotensin II on voltage–dependent calcium currents in rat retinal ganglion cells. Guenther E, et al. **Brain Res** 1996 Apr 29;718(1–2):112–6

Morphologic maturation of tachykinin peptide–expressing cells in the postnatal rabbit retina. Casini G, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):131–41

Growth cone interactions with purified cell and substrate adhesion molecules visualized by interference reflection microscopy. Drazba J, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):183–97

Localization of a 42–kDa inositol 1,3,4,5–tetrakisphosphate receptor protein in retina and change in expression after optic nerve injury. Kreutz MR, et al. **Brain Res Mol Brain Res** 1997 May;45(2):283–93

Characterization of an L–type calcium channel expressed by human retinal Müller (glial) cells. Puro DG, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):41–8

Changes in the expression of transcription factors ATF–2 and Fra–2 after axotomy and during regeneration in rat retinal ganglion cells. Robinson GA. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):57–64

Calretinin in the mouse superior colliculus originates from retinal ganglion cells. Gobersztejn F, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1507–11

Excitatory mechanisms in retinal ganglion cell death in primary open angle glaucoma (POAG). Dreyer EB, et al. **Clin Neurosci** 1997;4(5):270–3 (24 ref.)

Shared and distinct functions of RAGS and ELF–1 in guiding retinal axons. Monschau B, et al. **EMBO J** 1997 Mar 17; 16(6):1258–67

Expression of c–Jun protein in degenerating retinal ganglion cells after optic nerve lesion in the rat. Isenmann S, et al. **Exp Neurol** 1997 Sep;147(1):28–36

Elevated mRNA expression of brain–derived neurotrophic factor in retinal ganglion cell layer after optic nerve injury. Gao H, et al. **Invest Ophthalmol Vis Sci** 1997 Aug; 38(9):1840–7

Increased expression of specific recognition molecules by retinal ganglion cells and by optic pathway glia accompanies the successful regeneration of retinal axons in adult zebrafish. Bernhardt RR, et al. **J Comp Neurol** 1996 Dec 9;376(2):253–64

Ganglioside effects on basic fibroblast and epidermal growth factor receptors in retinal glial cells. Meuillet E, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):277–88

GT3 synthesis in the proximal Golgi occurs in a compartment different from those for GD3 and GM3 synthesis. Rosales Fritz VM, et al. **J Neurochem** 1996 Oct;67(4):1393–400

Differential regulation of fast axonally transported proteins during the early response of rat retinal ganglion cells to axotomy. Wodarczyk L, et al. **J Neurochem** 1997 Mar; 68(3):1114–23

Immediate early gene c–fos regulates the synthesis of phospholipids but not of gangliosides. Guido ME, et al. **J Neurosci Res** 1996 Jan 1;43(1):93–8

Axon–regenerating retinal ganglion cells in adult rats synthesize the cell adhesion molecule L1 but not TAG–1 or SC–1. Jung M, et al. **Mol Cell Neurosci** 1997;9(2):116–31

The metabotropic glutamate agonist 2–amino–4–phosphonobutyric acid (APB) does not activate currents in postnatal retinal ganglion cells. Liets LC, et al. **Neuroreport** 1996 Nov 25;7(18):2873–7

Localization of gamma–aminobutyric acid (GABA) receptor rho 3 subunit in rat retina. Ogurusu T, et al. **Neuroreport** 1997 Mar 3;8(4):925–7

PATHOLOGY

TUNEL–positive ganglion cells in human primary open–angle glaucoma. Kerrigan LA, et al. **Arch Ophthalmol** 1997 Aug;115(8):1031–5

The cellular mechanism underlying neuronal degeneration in glaucoma: parallels with Alzheimer's disease. Vickers JC. **Aust N Z J Ophthalmol** 1997 May;25(2):105–9 (47 ref.)

Correction of retinal abnormalities found in albinism by introduction of a functional tyrosinase gene in transgenic mice and rabbits. Jeffery G, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):95–102

Hypoxic and excitotoxic damage to cultured rat retinal ganglion cells. Kitano S, et al. **Exp Eye Res** 1996 Jul; 63(1):105–12

Histopathological evaluation of retinal damage during intraocular hypertension in rabbit: involvement of ganglion cells and nerve fiber layer. Manni G, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S209–13

Decreased retinal ganglion cell number and misdirected axon growth associated with fissure defects in Bst/+ mutant mice. Rice DS, et al. **Invest Ophthalmol Vis Sci** 1997 Sep; 38(10):2112–24

Study of central retinal ganglion cell loss in experimental glaucoma in monkey eyes. Desatnik H, et al. **J Glaucoma** 1996 Feb;5(1):46–53

Retinal ganglion cell death in glaucoma: the how, the why, and the maybe. Nickells RW. **J Glaucoma** 1996 Oct; 5(5):345–56 (83 ref.)

Retinal pathology in Alzheimer's disease. I. Ganglion cell loss in foveal/parafoveal retina. Blanks JC, et al. **Neurobiol Aging** 1996 May–Jun;17(3):377–84

Mechanism of retinal ganglion cell loss in inherited retinal dystrophy. Villegas–Pérez MP, et al. **Neuroreport** 1996 Aug 12;7(12):1995–9

Axotomy–induced retinal ganglion cell death in development: its time–course and its diminution by antioxidants. Castagné V, et al. **Proc R Soc Lond B Biol Sci** 1996 Sep 22;263(1374):1193–7

PHYSIOLOGY

Retinal ganglion cell anatomy and physiology after section of the optic nerve in mice overexpressing bcl–2. Ratto GM, et al. **Adv Neurol** 1997;72:87–94 (20 ref.)

Changes in the receptive fields of cat retinal ganglion cells affected by pressure on the optic nerve. Rose KA, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S61–3

Absence of ganglion cell subcomponents in multifocal luminance electroretinograms. Vaegan, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S87–90

Tailoring of variability in the lateral geniculate nucleus of the cat. Levine MW, et al. **Biol Cybern** 1996 Sep; 75(3):219–27

A retrograde fluorescent–labeling study of direct relationship between the limbic (anterodorsal and anteroventral thalamic nuclei) and the visual system in the albino rat. Ahmed AK, et al. **Brain Res** 1996 Aug 5;729(1):119–23

Postnatal retinal ganglion cells in vitro: protection against reactive oxygen species (ROS)–induced axonal degeneration by cocultured astrocytes. Lucius R, et al. **Brain Res** 1996 Dec 16;743(1–2):56–62

Monoclonal antibody C38 labels surviving retinal ganglion cells after peripheral nerve graft in axotomized rat retina. Wakabayashi T, et al. **Brain Res** 1996 Jun 24;725(1):121–4

The mechanism by which NBQX enhances NMDA currents in retinal ganglion cells. Yu W, et al. **Brain Res** 1996 Feb 19;709(2):184–96

Retrograde fluorescent double–labeling study of bilaterally projecting retinal ganglion cells in albino rats at different stages of development. Dong K, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):55–62

Delayed neurogenesis in the albino retina: evidence of a role for melanin in regulating the pace of cell generation. Ilia M, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):176–83

Survival of axotomized retinal ganglion cells in adult mammals. Watanabe M, et al. **Clin Neurosci** 1997;4(5):233–9 (87 ref.)

The intrinsic temporal properties of alpha and beta retinal ganglion cells are equivalent. Robinson DW, et al. **Curr Biol** 1997 Jun 1;7(6):366–74

Influence of spontaneous activity and visual experience on developing retinal receptive fields. Sernagor E, et al. **Curr Biol** 1996 Nov 1;6(11):1503–8

Widespread expression of beta1 integrins in the developing chick retina: evidence for a role in migration of retinal ganglion cells. Cann GM, et al. **Dev Biol** 1996 Nov 25; 180(1):82–96

Reggie–1 and reggie–2, two cell surface proteins expressed by retinal ganglion cells during axon regeneration. Schulte T, et al. **Development** 1997 Jan;124(2):577–87

Long–term survival of retinal ganglion cells following optic nerve section in adult bcl–2 transgenic mice. Cenni MC, et al. **Eur J Neurosci** 1996 Aug;8(8):1735–45

Up–regulation of Bax protein in degenerating retinal ganglion

cells precedes apoptotic cell death after optic nerve lesion in the rat. Isenmann S, et al. **Eur J Neurosci** 1997 Aug; 9(8):1763–72

Retinal projections to the accommodation–related area in the rostral superior colliculus of the cat. Ohtsuka K, et al. **Exp Brain Res** 1997 Jan;113(1):169–73

Regenerating ganglion cell axons in the adult rat establish retinofugal topography and restore visual function. Thanos S, et al. **Exp Brain Res** 1997 May;114(3):483–91

Proportions of ON–center versus OFF–center cells in retinal ganglion cells with regenerated axons of adult cats. Watanabe M, et al. **Exp Neurol** 1997 Jan;143(1):117–23

The neural architecture of binocular vision. Casagrande VA, et al. **Eye** 1996;10 (Pt 2):153–60 (64 ref.)

Hyperthermia and hypoxia increase tolerance of retinal ganglion cells to anoxia and excitotoxicity. Caprioli J, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2376–81

The role of Schwann cells during retinal ganglion cell regeneration induced by peripheral nerve transplantation. Dezawa M, et al. **Invest Ophthalmol Vis Sci** 1997 Jun; 38(7):1401–10

Effect of lipid peroxidation inhibition on retinal ganglion cell death. Levin LA, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2744–9

Neuronal coupling in rod–signal pathways of the retina. Vaney DI. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):267–73 (24 ref.)

Unilateral eye enucleation in adult rats causes neuronal loss in the contralateral superior colliculus. Smith SA, et al. **J Anat** 1997 May;190 (Pt 4):481–90

Conduction and synaptic transmission in the optic nerve and the superior colliculus during development of the retinocollicular projection in the wallaby (Macropus eugenii). Freeman TC, et al. **J Comp Neurol** 1997 Apr 21; 380(4):472–84

Expression of myelin proteins in the opossum optic nerve: late appearance of inhibitors implicates an earlier non–myelin factor in preventing ganglion cell regeneration. MacLaren RE. **J Comp Neurol** 1996 Aug 12;372(1):27–36

A simple model of human foveal ganglion cell responses to hyperacuity stimuli. Wachtler T, et al. **J Comput Neurosci** 1996 Mar;3(1):73–82

Two metabotropic gamma–aminobutyric acid receptors differentially modulate calcium currents in retinal ganglion cells. Zhang J, et al. **J Gen Physiol** 1997 Jul;110(1):45–58

Functional and biochemical analysis of CNS–relevant neurotrophic activity in the lesioned sciatic nerve of adult rats. Mey J, et al. **J Hirnforsch** 1996;37(1):25–50

Axon–mediated gene transfer of retinal ganglion cells in vivo. Garcia–Valenzuela E, et al. **J Neurobiol** 1997 Jan; 32(1):111–22

Myosin functions in Xenopus retinal ganglion cell growth cone motility in vivo. Ruchhoeft ML, et al. **J Neurobiol** 1997 Jun 5;32(6):567–78

Apoptotic cell death of photoreceptor cells in mice deficient for the adhesion molecule on glia (AMOG, the beta 2–subunit of the Na, K–ATPase). Molthagen M, et al. **J Neurocytol** 1996 Apr;25(4):243–55

Effect of spike blockade on the receptive–field size of amacrine and ganglion cells in the rabbit retina. Bloomfield SA. **J Neurophysiol** 1996 May;75(5):1878–93

Membrane properties and monosynaptic retinal excitation of neurons in the turtle accessory optic system. Kogo N, et al. **J Neurophysiol** 1997 Aug;78(2):614–27

AMPA–preferring receptors mediate excitatory synaptic inputs to retinal ganglion cells. Lukasiewicz PD, et al. **J Neurophysiol** 1997 Jan;77(1):57–64

Responses to light of starburst amacrine cells. Peters BN, et al. **J Neurophysiol** 1996 Jan;75(1):469–80

Response variability and timing precision of neuronal spike trains in vivo. Reich DS, et al. **J Neurophysiol** 1997 May; 77(5):2836–41

Transient and sustained depolarization of retinal ganglion cells by Ih. Tabata T, et al. **J Neurophysiol** 1996 May; 75(5):1932–43

Computer simulations of voltage clamping retinal ganglion cells through whole–cell electrodes in the soma. Velte TJ, et al. **J Neurophysiol** 1996 May;75(5):2129–43

Retinal ganglion cell axons recognize specific guidance cues present in the deafferented adult rat superior colliculus. Bähr M, et al. **J Neurosci** 1996 Aug 15;16(16):5106–16

Protection of retinal ganglion cells from natural and axotomy–induced cell death in neonatal transgenic mice overexpressing bcl–2. Bonfanti L, et al. **J Neurosci** 1996 Jul 1;16(13):4186–94

Implication of OTX2 in pigment epithelium determination and neural retina differentiation. Bovolenta P, et al. **J Neurosci** 1997 Jun 1;17(11):4243–52

Expression of specific tubulin isotypes increases during regeneration of injured CNS neurons, but not after the application of brain–derived neurotrophic factor (BDNF). Fournier AE, et al. **J Neurosci** 1997 Jun 15;17(12):4623–32

Partition of transient and sustained inhibitory glycinergic input to retinal ganglion cells. Han Y, et al. **J Neurosci** 1997 May 15;17(10):3392–400

Synaptic inputs to ON parasol ganglion cells in the primate retina. Jacoby R, et al. **J Neurosci** 1996 Dec 15; 16(24):8041–56

Presynaptic initiation by action potentials of retrograde signals in developing neurons. Primi MP, et al. **J Neurosci** 1997 Jun 1;17(11):4253–61

GABAergic and glycinergic IPSCs in ganglion cells of rat retinal slices. Protti DA, et al. **J Neurosci** 1997 Aug 15; 17(16):6075–85

An efficient method that reveals both the dendrites and the soma mosaics of retinal ganglion cells. Zhan XJ, et al. **J Neurosci Methods** 1997 Mar;72(1):109–16

Brain–derived neurotrophic factor modulates GAP–43 but not T alpha1 expression in injured retinal ganglion cells of adult rats. Fournier AE, et al. **J Neurosci Res** 1997 Mar 15;47(6):561–72

Parallel cone bipolar to on–beta ganglion cell pathways in the cat retina: spatial responses, spatial aliasing, and spatial variance. Levitan B, et al. **J Opt Soc Am A** 1996 Jun; 13(6):1152–65

Fractal character of the neural spike train in the visual system of the cat. Teich MC, et al. **J Opt Soc Am A** 1997 Mar; 14(3):529–46

Colour adaptation modifies the long–wave versus middle–wave cone weights and temporal phases in human luminance (but not red–green) mechanism. Stromeyer CF 3rd, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):227–54

Apoptosis in retinal ganglion cell decrease in human glaucomatous eyes. Okisaka S, et al. **Jpn J Ophthalmol** 1997 Mar–Apr;41(2):84–8

Bifurcating projections from the retinal ganglion cells to the primary visual targets (SC and LGN) in the cat. Dong K, et al. **Kobe J Med Sci** 1995 Dec;41(6):221–34

Fibroblast growth factor receptor function is required for the orderly projection of ganglion cell axons in the developing mammalian retina. Brittis PA, et al. **Mol Cell Neurosci** 1996;8(2–3):120–8

Axon–regenerating retinal ganglion cells in adult rats synthesize the cell adhesion molecule L1 but not TAG–1 or SC–1. Jung M, et al. **Mol Cell Neurosci** 1997;9(2):116–31

Retinal ganglion cell dendritic development and its control. Filling the gaps. Wingate RJ. **Mol Neurobiol** 1996 Apr; 12(2):133–44 (96 ref.)

Retinal direction selectivity after targeted laser ablation of starburst amacrine cells. He S, et al. **Nature** 1997 Sep 25; 389(6649):378–82

Retinal ganglion cell axons drive the proliferation of astrocytes in the developing rodent optic nerve. Burne JF, et al. **Neuron** 1997 Feb;18(2):223–30

Dynamic processes shape spatiotemporal properties of retinal waves. Feller MB, et al. **Neuron** 1997 Aug;19(2):293–306

Cadherin function is required for axon outgrowth in retinal ganglion cells in vivo. Riehl R, et al. **Neuron** 1996 Nov; 17(5):837–48

Induction of axon–like processes from axotomized retinal ganglion cells of adult hamsters after intravitreal injection of sciatic nerve exudate. Cho KS, et al. **Neuroreport** 1996 Nov 25;7(18):2879–82

Developmental regulation of voltage–activated Na+ and Ca2+ currents in rat retinal ganglion cells. Schmid S, et al. **Neuroreport** 1996 Jan 31;7(2):677–81

Angiotensin II–induced inhibition and facilitation of calcium current subtypes in rat retinal ganglion cells. Guenther E, et al. **Neurosci Lett** 1997 Aug 8;231(2):71–4

A quantitative approach to identify and isolate pure populations of fluorescently labeled adult retinal ganglion cells using a pressure–driven microaspiration technique. Hong YM, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):111–4

Differential increases in rat retinal ganglion cell size with various methods of optic nerve lesion. Moore S, et al. **Neurosci Lett** 1996 Mar 29;207(2):117–20

Optic nerve glia secrete a low–molecular–weight factor that stimulates retinal ganglion cells to regenerate axons in goldfish. Schwalb JM, et al. **Neuroscience** 1996 Jun; 72(4):901–10

Evidence that retinal ganglion cell density affects foveal development. Leventhal AG. **Perspect Dev Neurobiol** 1996; 3(3):203–11 (20 ref.)

The structure and precision of retinal spike trains. Berry MJ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5411–6

Early divergence of magnocellular and parvocellular functional subsystems in the embryonic primate visual system. Meissirel C, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5900–5

The visual response of retinal ganglion cells is not altered by optic nerve transection in transgenic mice overexpressing Bcl–2. Porciatti V, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14955–9

Starburst amacrine cells change from spiking to nonspiking neurons during retinal development. Zhou ZJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8057–62

Nitric oxide and the developmental remodeling of retinal connections in the brain. Wu HH, et al. **Prog Brain Res** 1996;108:273–86 (81 ref.)

Consequences of retinal color coding for cortical color decoding [letter; comment] Billock VA. **Science** 1996 Dec 20;274(5295):2118–9. Comment on: Science 1996 Feb 2;271(5249):616–7. Comment on: Science 1996 Feb 2;271(5249):656–9.

Synaptic efficacy enhanced by glial cells in vitro. Pfrieger FW, et al. **Science** 1997 Sep 12;277(5332):1684–7

Extra–receptive–field motion facilitation in on–off directionally selective ganglion cells of the rabbit retina. Amthor FR, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):303–9

The receptive field of the primate P retinal ganglion cell, I: Linear dynamics. Benardete EA, et al. **Vis Neurosci** 1997 Jan–Feb;14(1):169–85

The receptive field of the primate P retinal ganglion cell, II: Nonlinear dynamics. Benardete EA, et al. **Vis Neurosci** 1997 Jan–Feb;14(1):187–205

Corticofugal influences on visual responses in cat superior colliculus: the role of NMDA receptors. Binns KE, et al. **Vis Neurosci** 1996 Jul–Aug;13(4):683–94

Dendritic development of retinal ganglion cells after prenatal intracranial infusion of tetrodotoxin. Campbell G, et al. **Vis Neurosci** 1997 Jul–Aug;14(4):779–88

Morphological diversity in terminals of W–type retinal ganglion cells at projection sites in cat brain. Chen B, et al. **Vis Neurosci** 1996 May–Jun;13(3):449–60

Modelling the spatio–temporal modulation response of ganglion cells with difference–of–Gaussians receptive fields: relation to photoreceptor response kinetics. Donner K, et al. **Vis Neurosci** 1996 Jan–Feb;13(1):173–86 (67 ref.)

An in vitro study of retinotectal transmission in the chick: role of glutamate and GABA in evoked field potentials. Dye JC, et al. **Vis Neurosci** 1996 Jul–Aug;13(4):747–58

Organization of retinal ganglion cell axons in the optic fiber layer and nerve of fetal ferrets. Fitzgibbon T, et al. **Vis Neurosci** 1996 Sep–Oct;13(5):847–61

Is the input to a GABAergic or cholinergic synapse the sole asymmetry in rabbit's retinal directional selectivity? Grzymacz NM, et al. **Vis Neurosci** 1997 Jan–Feb; 14(1):39–54

Potassium–evoked directionally selective responses from rabbit retinal ganglion cells. Jensen RJ. **Vis Neurosci** 1996 Jul–Aug;13(4):705–19

Horizontal cell sensitivity in the cat retina during prolonged dark adaptation. Lankheet MJ, et al. **Vis Neurosci** 1996 Sep–Oct;13(5):885–96

An analysis of the cross–correlation between ganglion cells in the retina of goldfish. Levine MW. **Vis Neurosci** 1997 Jul–Aug;14(4):731–9

Alpha ganglion cells of the rabbit retina lose antagonistic surround responses under dark adaptation. Muller JF, et al. **Vis Neurosci** 1997 Mar–Apr;14(2):395–401

Overrepresentation of the central visual field in the superior colliculus of the pigmented and albino ferret. Quevedo C, et al. **Vis Neurosci** 1996 Jul–Aug;13(4):627–38

Response properties of long–range axon–bearing amacrine cells in the dark–adapted rabbit retina. Taylor WR. **Vis Neurosci** 1996 Jul–Aug;13(4):599–604

Passive electrical cable properties and synaptic excitation of tiger salamander retinal ganglion cells. Taylor WR, et al. **Vis Neurosci** 1996 Sep–Oct;13(5):979–90

Effects of eliminating retinal Y cell input on center–surround interactions in the dorsal lateral geniculate nucleus of the cat. Wang C, et al. **Vis Neurosci** 1996 Nov–Dec; 13(6):1089–97

Serial inhibitory synapses in retina. Zhang J, et al. **Vis Neurosci** 1997 May–Jun;14(3):553–63

Psychophysical evidence for a selective loss of M ganglion cells in glaucoma. Anderson RS, et al. **Vision Res** 1997 Apr;37(8):1079–83

The AII amacrine network: coupling can increase correlated activity. Vardi N, et al. **Vision Res** 1996 Dec;36(23):3743–57

[Reproducibility of the pattern electroretinogram] Otto T, et al. **Ophthalmologe** 1997 Mar;94(3):217–21 (Eng. Abstr.) **(Ger)**

[Axonal regeneration of retinal ganglion cells] Takano M. **Nippon Ganka Gakkai Zasshi** 1996 Dec;100(12):972–81 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

On the complex dynamics of intracellular ganglion cell light responses in the cat retina. Przybyszewski AW, et al. **Biol Cybern** 1996 Apr;74(4):299–308

Light exposure stimulates the activity of ganglioside glycosyltransferases of retina ganglion cells. Bussolino DF, et al. **Neurochem Int** 1997 Jul;31(1):105–11

The light response of retinal ganglion cells is truncated by a displaced amacrine circuit. Nirenberg S, et al. **Neuron** 1997 Apr;18(4):637–50

ULTRASTRUCTURE

Retinal ganglion cell anatomy and physiology after section of the optic nerve in mice overexpressing bcl–2. Ratto GM, et al. **Adv Neurol** 1997;72:87–94 (20 ref.)

Bifurcated projections of retinal ganglion cells bilaterally innervate the lateral geniculate nuclei in the cat. Dong K, et al. **Brain Res** 1995 Dec 12;703(1–2):231–6

Growth cone interactions with purified cell and substrate adhesion molecules visualized by interference reflection microscopy. Drazba J, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):183–97

Transient retinal ganglion cells in the developing rat are characterized by specific morphological properties. Ramoa AS, et al. **J Comp Neurol** 1996 May 13;368(4):582–96

Maturational gradients in the retina of the ferret. Reese BE, et al. **J Comp Neurol** 1996 Nov 11;375(2):252–73

Comparison of topographical patterns of ganglion and photoreceptor cell differentiation in the retina of the zebrafish, Danio rerio. Schmitt EA, et al. **J Comp Neurol** 1996 Jul 22;371(2):222–34

Retinal ganglion cell dendritic development and its control. Filling the gaps. Wingate RJ. **Mol Neurobiol** 1996 Apr; 12(2):133–44 (96 ref.)

Specificity of retinal ganglion cell projections in the embryonic rhesus monkey. Chalupa LM, et al. **Perspect Dev Neurobiol** 1996;3(3):223–31 (82 ref.)

Retinal axon divergence in the optic chiasm: growth cone

RETINAL GANGLION CELLS

behaviors and signalling cells. Mason CA, et al. **Prog Brain Res** 1996;108:95–107 (66 ref.)

The number and distribution of bipolar to ganglion cell synapses in the inner plexiform layer of the anuran retina. Buzás P, et al. **Vis Neurosci** 1996 Nov–Dec;13(6):1099–107

Morphological diversity in terminals of W-type retinal ganglion cells at projection sites in cat brain. Chen B, et al. **Vis Neurosci** 1996 May–Jun;13(3):449–60

Biplexiform ganglion cells, characterized by dendrites in both outer and inner plexiform layers, are regular, mosaic-forming elements of teleost fish retinae. Cook JE, et al. **Vis Neurosci** 1996 May–Jun;13(3):517–28

Spatial properties of retinal mosaics: an empirical evaluation of some existing measures. Cook JE. **Vis Neurosci** 1996 Jan–Feb;13(1):15–30

Soma and axon diameter distributions and central projections of ferret retinal ganglion cells. Fitzgibbon T, et al. **Vis Neurosci** 1996 Jul–Aug;13(4):773–86

Topography of ganglion cells and photoreceptors in the retina of a New World monkey: the marmoset Callithrix jacchus. Wilder HD, et al. **Vis Neurosci** 1996 Mar–Apr; 13(2):335–52

RETINAL HEMORRHAGE

BLOOD

Activated protein C resistance--low incidence in glaucomatous optic disc haemorrhage and central retinal vein occlusion. Graham SL, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):199–205

CHEMICALLY INDUCED

Bilateral anterior uveitis and retinal haemorrhages after administration of trimethoprim. Kristinsson JK, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):314–5

Retinal hemorrhages associated with in utero exposure to cocaine. Experimental and clinical findings. Silva-Araújo A, et al. **Retina** 1996;16(5):411–8

COMPLICATIONS

Retinal white-centered hemorrhages in infectious mononucleosis. Törnqvist G, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):99–100

Hemorrhagic retinopathy in newborns: frequency, form of presentation, associated factors and significance. Gonzalez Viejo I, et al. **Eur J Ophthalmol** 1995 Oct–Dec;5(4):247–50

Optic disc hemorrhages and glaucoma [letter; comment] Jack S, et al. **Ophthalmology** 1997 Apr;104(4):566–7. Comment on: Ophthalmology 1996 Jul;103(7):1014–24.

Indocyanine green angiography and choroidal neovascularization obscured by hemorrhage. Reichel E, et al. **Ophthalmology** 1995 Dec;102(12):1871–6

Optic disc hemorrhages and glaucoma [letter; comment] Savage HI. **Ophthalmology** 1997 Feb;104(2):169. Comment on: Ophthalmology 1996 Jul;103(7):1014–24.

Subretinal hemorrhages in proliferative diabetic retinopathy. Morse LS, et al. **Retina** 1997;17(2):87–93

[Massive subretinal hemorrhage in the course of age-related macular degeneration: preliminary study] Dixsaut F, et al. **Bull Soc Belge Ophtalmol** 1995;259:97–105 (Eng. Abstr.) **(Fre)**

[Acute glaucoma caused by massive subretinal hemorrhage in age-related macular degeneration and disordered thrombocyte function] Poller S, et al. **Klin Monatsbl Augenheilkd** 1997 Jun;210(6):384–7 (Eng. Abstr.) **(Ger)**

[Subarachnoid hemorrhage associated to subhyaloid hemorrhage: "Terson syndrome"] Castaño-Duque CH, et al. **Rev Neurol** 1997 Jul;25(143):1081–3 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Case in point. Salmon patch-hemorrhages (nonproliferative retinopathy associated with sickle-cell disease). Saif MW, et al. **Hosp Pract (Off Ed)** 1997 Aug 15;32(8):239

Indocyanine green videoangiography of hemorrhagic retinal arterial macroaneurysms. Schneider U, et al. **Ophthalmologica** 1997;211(2):115–8

Multiple posttraumatic choroidal ruptures obscured by hemorrhage: imaging with indocyanine green angiography. Baltatzis S, et al. **Retina** 1997;17(4):352–4

Ocular manifestations in shaken baby syndrome. Wong JS, et al. **Singapore Med J** 1995 Aug;36(4):391–2

[Vitreous and fundus changes in Terson syndrome. 3 case reports] Meier P, et al. **Klin Monatsbl Augenheilkd** 1996 Oct;209(4):244–8 (Eng. Abstr.) **(Ger)**

[Fundus oriented microperimetry with the scanning laser ophthalmoscope in age-induced macular degeneration] Schneider U, et al. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep;209(2–3):8–13 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Efficacy of tissue plasminogen activator (t-PA) in subretinal hemorrhage removal. Claes C, et al. **Bull Soc Belge Ophtalmol** 1996;261:115–8

The use of intravitreal tissue plasminogen activator in the treatment of experimental subretinal hemorrhage in the pig model. Boone DE, et al. **Retina** 1996;16(6):518–24

ETIOLOGY

Bilateral papilledema with retinal hemorrhages in association with cerebral venous sinus thrombosis and paroxysmal nocturnal hemoglobinuria. Hauser D, et al. **Am J Ophthalmol** 1996 Oct;122(4):592–3

Retinal venous beading with recurrent preretinal hemorrhage. Keyser BJ, et al. **Am J Ophthalmol** 1997 May; 123(5):696–8

Intraocular hemorrhage associated with dental implant surgery. Krepler K, et al. **Am J Ophthalmol** 1996 Nov; 122(5):745–6

High-altitude retinopathy. Lang GE, et al. **Am J Ophthalmol** 1997 Mar;123(3):418–20

Retinal haemorrhages and convulsions. Sandramouli S, et al. **Arch Dis Child** 1997 May;76(5):449–51

Ocular manifestations of disseminated intravascular coagulation in a patient with the acquired immunodeficiency syndrome [letter] Lertsumitkul S, et al. **Arch Ophthalmol** 1997 May;115(5):676–7

Macular haemorrhage in adult acute leukaemia patients at presentation and the risk of subsequent intracranial haemorrhage. Jackson N, et al. **Br J Haematol** 1997 Jul; 98(1):204–9

Ocular and cerebral trauma in non-accidental injury in infancy [letter] Talks SJ, et al. **Br J Ophthalmol** 1997 Apr; 81(4):333; discussion 333–4

Hemorrhages in the vitreo-retinal interface: premacular hemorrhages. Tassignon MJ, et al. **Bull Soc Belge Ophtalmol** 1995;258:71–81 (50 ref.)

Retinal findings in adult leukaemia: correlation with leukocytosis. Jackson N, et al. **Clin Lab Haematol** 1996 Jun;18(2):105–9

Valsalva haemorrhagic retinopathy in a pregnant woman [letter] [see comments] Callender D, et al. **Eye** 1995;9 (Pt 6):808–9. Comment in: Eye 1996;10 (Pt 5):650.

Valsalva retinopathy in pregnancy [letter] Deane JS, et al. **Eye** 1997;11 (Pt 1):137–8

Retinal haemorrhage in meningitis [letter; comment] Kennedy CJ. **Eye** 1996;10 (Pt 5):649–50. Comment on: Eye 1995;9 (Pt 5):659–60.

Morphometric analysis of retinal haemorrhages in the shaken baby syndrome [letter; comment] James DS, et al. **Forensic Sci Int** 1996 Oct 25;82(3):255. Comment on: Forensic Sci Int 1996 Mar 5;78(1):71–80.

Retinal damage and laser-induced breakdown produced by ultrashort-pulse lasers. Cain CP, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S28–37

Macular hemorrhage after excimer laser photorefractive keratectomy. Loewenstein A, et al. **J Cataract Refract Surg** 1997 Jun;23(5):808–10 (8 ref.)

The significance of optic disc hemorrhages in glaucoma. Gordon J, et al. **J Glaucoma** 1997 Feb;6(1):62–4 (15 ref.)

Unilateral retinal haemorrhages in non-accidental injury [letter] Tyagi AK, et al. **Lancet** 1997 Apr 26;349(9060):1224

Intrapapillary, peripapillary, and vitreous hemorrhage [letter; comment] Kokame GT. **Ophthalmology** 1995 Jul; 102(7):1003–4. Comment on: Ophthalmology 1995 Feb;102(2):349–54.

Intravitreous injections of vascular endothelial growth factor produce retinal ischemia and microangiopathy in an adult primate. Tolentino MJ, et al. **Ophthalmology** 1996 Nov; 103(11):1820–8

Natural history of subfoveal subretinal hemorrhage in age-related macular degeneration. Avery RL, et al. **Retina** 1996;16(3):183–9

White-centered retinal hemorrhages in ocular toxoplasmosis. Hayashi S, et al. **Retina** 1997;17(4):351–2

Subretinal bleeding without choroidal neovascularization in pathologic myopia. A sign of new lacquer crack formation. Ohno-Matsui K, et al. **Retina** 1996;16(3):196–202

[Some aggregation parameters in the bulbar vessels used for assessing the clinical course of retinopathy in patients with essential hypertension and diabetes mellitus] Smirennaia EV, et al. **Vestn Oftalmol** 1996 Jul–Aug;112(3):28–30 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Infective endocarditis--a photo essay. Varadarajan J, et al. **J Neuroophthalmol** 1996 Dec;16(4):291–4

PATHOLOGY

Morphometrical analysis of retinal hemorrhages in the shaken baby syndrome [see comments] Betz P, et al. **Forensic Sci Int** 1996 Mar 5;78(1):71–80. Comment in: Forensic Sci Int 1996 Oct 25;82(3):255.

The significance of white-centered retinal hemorrhages in the shaken baby syndrome. Kapoor S, et al. **Pediatr Emerg Care** 1997 Jun;13(3):183–5

[Ocular pathology of child abuse] Rohrbach JM, et al. **Klin Monatsbl Augenheilkd** 1997 Mar;210(3):133–8 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Variations in the clinical course of submacular hemorrhage. Berrocal MH, et al. **Am J Ophthalmol** 1996 Oct; 122(4):486–93

Focal macular electroretinogram before and after drainage of macular subretinal hemorrhage. Terasaki H, et al. **Am J Ophthalmol** 1997 Feb;123(2):207–11

SURGERY

Focal macular electroretinogram before and after drainage of macular subretinal hemorrhage. Terasaki H, et al. **Am J Ophthalmol** 1997 Feb;123(2):207–11

Early resolution of premacular haemorrhage following Nd:YAG laser photodisruption of posterior hyaloid. Isaacs TW, et al. **Aust N Z J Ophthalmol** 1996 Nov;24(4):365–7

Valsalva hemorrhagic retinopathy [letter; comment] Chopdar A. **Eye** 1996;10 (Pt 5):650. Comment on: Eye 1995;9 (Pt 6):808–9.

Adaptation to monocular torsion after macular translocation. Seaber JH, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb;235(2):76–81

Identifying maculopathy after neodymium: YAG membranotomy for dense diabetic premacular hemorrhage. Ezra E, et al. **Ophthalmology** 1996 Oct;103(10):1568–74

THERAPY

Submacular hemorrhage removal. Lim JI, et al. **Ophthalmology** 1995 Sep;102(9):1393–9

VETERINARY

Ocular signs in four dogs with hypertension. Sansom J, et al. **Vet Rec** 1997 Jun 7;140(23):593–8

VIROLOGY

[Ophthalmologic complications due to human immunodeficiency virus infection at Bamako (Mali)] Peyramaure F, et al. **Bull Soc Pathol Exot** 1996;89(5):345–7 (Eng. Abstr.) **(Fre)**

RETINAL HOLES see **RETINAL PERFORATIONS**

RETINAL NECROSIS SYNDROME, ACUTE

Acute retinal necrosis syndrome: findings, management, and differential diagnosis. Freilich JM, et al. **Int Ophthalmol Clin** 1996 Summer;36(3):141–6 (32 ref.)

COMPLICATIONS

Acute retinal necrosis in the course of AIDS: study of 26 cases [see comments] Batisse D, et al. **AIDS** 1996 Jan; 10(1):55–60. Comment in: AIDS 1996 Sep;10(11):1300–1.

Acute retinal necrosis syndrome in HIV-positive case: the first case reported from India. Jalali S, et al. **Indian J Ophthalmol** 1996 Jun;44(2):95–7

DIAGNOSIS

Bilateral blindness [letter] Kosowsky JM. **Acad Emerg Med** 1997 Aug;4(8):834–5

A comparative study of the polymerase chain reaction and local antibody production in acute retinal necrosis syndrome and cytomegalovirus retinitis. Abe T, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul;234(7):419–24

Progressive outer retinal necrosis [letter; comment] Topilow HW, et al. **Ophthalmology** 1995 Dec;102(12):1737–9. Comment on: Ophthalmology 1994 Sep;101(9):1488–502.

The Agar sandwich technique for retinal biopsy processing. Banker AS, et al. **Retina** 1996;16(6):530–4

[Acute retinal necrosis syndrome] Michalová K, et al. **Cesk Slov Oftalmol** 1996 Oct;52(5):319–24 (Eng. Abstr.) **(Cze)**

DRUG THERAPY

Famciclovir in AIDS-related acute retinal necrosis [letter; comment] Klein JL, et al. **AIDS** 1996 Sep;10(11):1300–1. Comment on: AIDS 1996 Jan;10(1):55–60.

Famciclovir for the treatment of acute retinal necrosis (ARN) syndrome. Figueroa MS, et al. **Am J Ophthalmol** 1997 Feb; 123(2):255–7

Successful treatment of progressive outer retinal necrosis syndrome. Spaide RF, et al. **Retina** 1996;16(6):479–87

ETIOLOGY

Progressive outer retinal necrosis in an immunocompetent patient. Carrillo-Pacheco S, et al. **Acta Ophthalmol Scand** 1996 Oct;74(5):506–8

Progressive outer retinal necrosis after bone marrow transplantation. Lewis JM, et al. **Am J Ophthalmol** 1996 Dec;122(6):892–5

Acute visual disturbance in a young adult. McDonnell GV, et al. **Postgrad Med J** 1997 May;73(859):307–9

[Retinal necrosis after blunt bulbus trauma] Hesse L, et al. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep;209(2–3):150–2 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

T-cell subsets and T-cell receptor V beta utilization by Igh-1-congenic mice in herpetic retinal necrosis. Berra A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S83–8

Immunological profiles in patients with acute retinal necrosis. Rochat C, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Sep;234(9):547–52

PATHOLOGY

Clinicopathologic correlations in acute retinal necrosis caused by herpes simplex virus type 2. Rahhal FM, et al. **Arch Ophthalmol** 1996 Nov;114(11):1416–9

Fluorescein angiography in the progressive outer retinal necrosis syndrome. Walton RC, et al. **Retina** 1996; 16(5):393–8

VIROLOGY

Twenty years' delay of fellow eye involvement in herpes simplex virus type 2–associated bilateral acute retinal necrosis syndrome. Schlingemann RO, et al. **Am J Ophthalmol** 1996 Dec;122(6):891–2

Cytomegalovirus–associated acute retinal necrosis syndrome. Silverstein BE, et al. **Am J Ophthalmol** 1997 Feb; 123(2):257–8

Optic neuropathy preceding acute retinal necrosis in acquired immunodeficiency syndrome. Friedlander SM, et al. **Arch Ophthalmol** 1996 Dec;114(12):1481–5

Clinicopathologic correlations in acute retinal necrosis caused by herpes simplex virus type 2. Rahhal FM, et al. **Arch Ophthalmol** 1996 Nov;114(11):1416–9

Rapidly progressive outer retinal necrosis caused by varicella zoster virus in a patient infected with human immunodeficiency virus. Galindez OA, et al. **Clin Infect Dis** 1996 Jan;22(1):149–51

RETINAL NEOVASCULARIZATION

[Advances in cell biology and research on neovascularization] Inomata H. **Nippon Ganka Gakkai Zasshi** 1996 Aug;100(8):573–4 (14 ref.) **(Jpn)**

COMPLICATIONS

Bilateral subretinal neovascular membrane in idiopathic juxtafoveolar telangiectasis. Lee BL. **Retina** 1996; 16(4):344–6

[Acute glaucoma caused by massive subretinal hemorrhage in age–related macular degeneration and disordered thrombocyte function] Poller S, et al. **Klin Monatsbl Augenheilkd** 1997 Jun;210(6):384–7 (Eng. Abstr.) **(Ger)**

CONGENITAL

Corneal coloboma, aphakia and retinal neovascularization with anterior segment dysgenesis (Peters' anomaly). Gunderson CA, et al. **Ophthalmologica** 1996;210(6):361–6

DIAGNOSIS

Detection of choroidal neovascularization in age–related macular degeneration using subtraction methods in indocyanine green angiography. Kohno T, et al. **Bull Soc Belge Ophtalmol** 1995;259:81–8

[Detection of subretinal neovessels with indocyanine green videoangiography] Atmaca L, et al. **J Fr Ophtalmol** 1997; 20(3):189–94 (Eng. Abstr.) **(Fre)**

[Fluorescence angiography in age–related macular degeneration. Study of the incidence of lesions treatable with coagulation] Pauleikhoff D, et al. **Klin Monatsbl Augenheilkd** 1996 Nov;209(5):309–14 (Eng. Abstr.) **(Ger)**

[Fundus oriented microperimetry with the scanning laser ophthalmoscope in age–induced macular degeneration] Schneider U, et al. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep;209(2–3):8–13 (Eng. Abstr.) **(Ger)**

[Idiopathic polypoid choroid vasculopathy] Spraul CW, et al. **Klin Monatsbl Augenheilkd** 1997 Jun;210(6):405–6 (Eng. Abstr.) **(Ger)**

[Observations of different presentations of choroid neovascularization in indocyanine green angiography] Schilling H, et al. **Ophthalmologe** 1996 Dec;93(6):703–8 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Inhibition of preretinal and optic nerve head neovascularization in pigs by intravitreal triamcinolone acetonide. Danis RP, et al. **Ophthalmology** 1996 Dec; 103(12):2099–104

ETIOLOGY

Preretinal neovascularisation induced by photodynamic venous thrombosis in pigmented rat. Shen W, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):50–2

Experimental preretinal neovascularization by laser–induced venous thrombosis in rats. Saito Y, et al. **Curr Eye Res** 1997 Jan;16(1):26–33

Late complications in branch retinal vein occlusion. Apostolopoulos M, et al. **Int Ophthalmol** 1995–96; 19(5):281–5

Preretinal neovascularization induced by experimental retinal vein occlusion in albino rats. Ham DI, et al. **Korean J Ophthalmol** 1997 Jun;11(1):60–4

Intravitreous injections of vascular endothelial growth factor produce retinal ischemia and microangiopathy in an adult primate. Tolentino MJ, et al. **Ophthalmology** 1996 Nov; 103(11):1820–8

Peripapillary subretinal neovascularization associated with tilted disk syndrome. Khairallah M, et al. **Retina** 1996; 16(5):449–51

Retinal vascular nonperfusion and retinal neovascularization as a consequence of cytomegalovirus retinitis and cryptococcal choroiditis. Saran BR, et al. **Retina** 1996; 16(6):510–2

Essential role of growth hormone in ischemia–induced retinal neovascularization. Smith LE, et al. **Science** 1997 Jun 13; 276(5319):1706–9

METABOLISM

Vascular endothelial growth factor and the eye. Past, present and future [editorial; comment] Aiello LP. **Arch Ophthalmol** 1996 Oct;114(10):1252–4. Comment on: Arch Ophthalmol 1996 Oct;114(10):1210–7. Comment on: Arch Ophthalmol 1996 Oct;114(10):1219–20.

Correlation of vascular permeability factor/vascular endothelial growth factor with extraretinal neovascularization in the rat [see comments] [published erratum appears in Arch Ophthalmol 1997 Feb;115(2):192] Dorey CK, et al. **Arch Ophthalmol** 1996 Oct;114(10):1210–7 . Comment in: Arch Ophthalmol 1996 Oct;114(10):1252–4.

Retinal vascular endothelial growth factor (VEGF) mRNA expression is altered in relation to neovascularization in oxygen induced retinopathy. Donahue ML, et al. **Curr Eye Res** 1996 Feb;15(2):175–84

PATHOLOGY

Ultrastructure of surgically excised subfoveal neovascular membranes. Kim KS, et al. **Korean J Ophthalmol** 1996 Dec; 10(2):76–81

Combined subretinal and sub–retinal pigment epithelium neovascular membranes in age–related macular degeneration: a clinicopathologic study of six cases. Mietz H, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):645–52

Correlation between scanning laser ophthalmoscope microperimetry and anatomic abnormalities in patients with subfoveal neovascularization. Tezel TH, et al. **Ophthalmology** 1996 Nov;103(11):1829–36

Myelinated nerve fibers and retinal vascular abnormalities. Leys AM, et al. **Retina** 1996;16(2):89–96

[Geometrical distribution of newly formed blood vessels in diabetic retinopathy] Kimura S, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun;101(6):492–7 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Spontaneous regression of neovascularization at the disk and elsewhere in diabetic retinopathy. Bandello F, et al. **Am J Ophthalmol** 1996 Oct;122(4):494–501

The effect of raised inspired carbon dioxide on normal retinal vascular development in the neonatal rat. Holmes JM, et al. **Curr Eye Res** 1997 Jan;16(1):78–81

Intravitreal sustained release of VEGF causes retinal neovascularization in rabbits and breakdown of the blood–retinal barrier in rabbits and primates. Ozaki H, et al. **Exp Eye Res** 1997 Apr;64(4):505–17

[Angiogenesis and inhibition of angiogenesis in the eye] Cursiefen C, et al. **Klin Monatsbl Augenheilkd** 1997 Jun; 210(6):341–51 (104 ref.) (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Antagonists of integrin alpha v beta 3 inhibit retinal neovascularization in a murine model. Luna J, et al. **Lab Invest** 1996 Oct;75(4):563–73

Subcutaneous injection of a cyclic peptide antagonist of vitronectin receptor–type integrins inhibits retinal neovascularization. Flynn JT, et al. **Surv Ophthalmol** 1996 Nov–Dec;41(3):271–2

RADIOTHERAPY

Radiotherapy treatment of age–related subfoveal neovascular membranes in patients with good vision. Hollick EJ, et al. **Eye** 1996;10 (Pt 5):609–16

SURGERY

Choroidal neovascularization complicating epiretinal membrane removal. Korobelnik JF, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):320–1

Surgical removal of large subretinal neovascular membranes: results and complications. Strmeň P, et al. **Int Ophthalmol** 1996–97;20(4):165–9

Subretinal microsurgery with gradient index endoscopes. Koch FH, et al. **Ophthalmologica** 1997;211(5):283–7

[Cryocoagulation in therapy of proliferative diabetic retinopathy] Pauleikhoff D, et al. **Klin Monatsbl Augenheilkd** 1997 Mar;210(3):147–52 (Eng. Abstr.) **(Ger)**

[Surgical removal of submacular neovascularization membranes] Eckardt C. **Ophthalmologe** 1996 Dec; 93(6):688–93 (Eng. Abstr.) **(Ger)**

THERAPY

Vascular endothelial growth factor. 20th–century mechanisms, 21st–century therapies. Aiello LP. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1647–52 (19 ref.)

RETINAL PERFORATIONS

Idiopathic macular hole. Mann DF. **Optom Clin** 1996; 5(1):95–110 (30 ref.)

CLASSIFICATION

Vitrectomy for the treatment of full–thickness stage 3 or 4 macular holes. Results of a multicentered randomized clinical trial. The Vitrectomy for Treatment of Macular Hole Study Group [see comments] [published erratum appears in Arch Ophthalmol 1997 May;115(5):636] Freeman WR, et al. **Arch Ophthalmol** 1997 Jan;115(1):11–21 . Comment in: Arch Ophthalmol 1997 Jan;115(1):112.

COMPLICATIONS

Associated ocular findings in pericentral pigmentary retinopathy. Durlu YK, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):101–3

Retinal detachment caused by retinal dialysis. Kennedy CJ, et al. **Aust N Z J Ophthalmol** 1997 Feb;25(1):25–30

Macular hole in a case of choroidal melanoma. Uffer S, et al. **Eur J Ophthalmol** 1997 Jan–Mar;7(1):115–8

Giant retinal tear and retinal detachment with underlying retinitis pigmentosa and hearing loss [see comments] Kim RY, et al. **Eye** 1996;10 (Pt 6):697–700. Comment in: Eye 1996 ;10 (Pt 6):651–2.

Retinal detachments with crescent–shaped retinal breaks in patients with atopic dermatitis. Kusaka S, et al. **Retina** 1996; 16(4):312–6

Combined hamartoma of the retina and retinal pigment epithelium associated with epiretinal membrane and macular hole. Mason JO 3rd, et al. **Retina** 1997;17(2):160–2

Reopening of macular holes in highly myopic eyes with retinal detachments. Seike C, et al. **Retina** 1997;17(1):2–6

[Pars plana vitrectomy in retinal detachment with a macular hole] Kalvodová B, et al. **Cesk Slov Oftalmol** 1996 Nov; 52 Suppl:34–41 (Eng. Abstr.) **(Cze)**

[Retinal detachment caused by macular holes in patients with severe myopia: results of intravitreal injection of pure C3F8] Pernot A, et al. **J Fr Ophtalmol** 1996;19(8–9):491–5 (Eng. Abstr.) **(Fre)**

[Incidence of lack of posterior vitreous detachment in retinal detachment caused by flap tear in the elderly] Ogino N. **Nippon Ganka Gakkai Zasshi** 1996 Nov;100(11):896–8 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Differentiating full thickness macular holes from impending macular holes and macular pseudoholes. Tsujikawa M, et al. **Br J Ophthalmol** 1997 Feb;81(2):117–22

[Changes in the vitreomacular border of the partner eye in macular foramina] Messmer EM, et al. **Ophthalmologe** 1996 Dec;93(6):670–4 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Closure of persistent macular holes with human recombinant transforming growth factor–beta 2 [see comments] Kozy DW, et al. **Can J Ophthalmol** 1996 Jun;31(4):179–82. Comment in: Can J Ophthalmol 1996 Jun;31(4):163.

ETIOLOGY

Giant retinal tear as a complication of attempted removal of intravitreal lens fragments during cataract surgery. Aaberg TM Jr, et al. **Am J Ophthalmol** 1997 Aug; 124(2):222–6

The role of the premacular liquefied pocket and premacular vitreous cortex in idiopathic macular hole development. Kishi S, et al. **Am J Ophthalmol** 1996 Nov;122(5):622–8

Formation and treatment of a traumatic macular hole. Madreperla SA, et al. **Arch Ophthalmol** 1997 Sep; 115(9):1210–1

Case report: retinal tear as a consequence of air bag inflation. Dubinsky I, et al. **Can Fam Physician** 1997 Sep;43:1576–7

Retina update: idiopathic macular holes [see comments] Gonder JR. **Can J Ophthalmol** 1996 Jun;31(4):165–8 (35 ref.). Comment in: Can J Ophthalmol 1996 Jun;31(4):163.

Scleral ectasia in rhegmatogenous retinal detachment. Lam WC, et al. **Can J Ophthalmol** 1996 Aug;31(5):241–4

Retinal detachment complicating scleral–sutured posterior chamber intraocular lens surgery. Bourke RD, et al. **Eye** 1996;10 (Pt 4):501–8

Vitreomacular observations. II. Data on the pathogenesis of idiopathic macular breaks. Kakehashi A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul;234(7):425–33

Post–traumatic macular break associated to congenital optic disc pit and pre–existing sensory macular detachment. Billi B, et al. **Int Ophthalmol** 1996–97;20(5):269–72

Retinal perforation in strabismus surgery. Noel LP, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar–Apr; 34(2):115–7

Idiopathic macular hole following vitrectomy: implications for pathogenesis. Lipham WJ, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):633–9

Full–thickness macular hole formation in eyes with a pre–existing complete posterior vitreous detachment [see comments] Gordon LW, et al. **Ophthalmology** 1995 Nov; 102(11):1702–5. Comment in: Ophthalmology 1996 Mar;103(3):349–50.

Baseline characteristics, natural history, and risk factors to progression in eyes with stage 2 macular holes. Results from a prospective randomized clinical trial. Vitrectomy for Macular Hole Study Group. Kim JW, et al. **Ophthalmology** 1995 Dec;102(12):1818–28; discussion

RETINAL PERFORATIONS

1828–9

Distribution of iatrogenic retinal breaks in macular hole surgery. Sjaarda RN, et al. **Ophthalmology** 1995 Sep; 102(9):1387–92

Spontaneous giant retinal pigment epithelial tear associated with panuveitis. Arroyo JG, et al. **Retina** 1997;17(3):254–6

Morphologic studies of the peripheral vitreoretinal interface in humans reveal structures implicated in the pathogenesis of retinal tears. Dunker S, et al. **Retina** 1997;17(2):124–30

Tumor-associated retinal pigment epithelial tears. Leys AM, et al. **Retina** 1997;17(3):258–60 (5 ref.)

Postoperative posterior retinal holes after pars plana vitrectomy for primary retinal detachment. Okada K, et al. **Retina** 1997;17(2):99–104

[Ocular contusions and giant retinal tears] Nacef L, et al. **J Fr Ophtalmol** 1997;20(3):170–4 (Eng. Abstr.) **(Fre)**

[Comparison of retinal breaks between patients with atopic dermatitis and mentally retarded patients with self-inflicted ocular injury] Suzuki J, et al. **Nippon Ganka Gakkai Zasshi** 1997 May;101(5):446–9 (Eng. Abstr.) **(Jpn)**

[Severe myopia and delivery] Prost M. **Klin Oczna** 1996 Feb; 98(2):129–30 (Eng. Abstr.) **(Pol)**

METABOLISM

Clinical evidence of the fluid dynamics in a giant tear of the retinal pigment epithelium. Silvestri G, et al. **Retina** 1996;16(5):452–5

MICROBIOLOGY

Bilateral macular holes resulting from septic embolization. Beatty S, et al. **Am J Ophthalmol** 1997 Apr;123(4):557–9

PATHOLOGY

Indocyanine green videoangiography after acute retinal pigment epithelial tears in age-related macular degeneration. Arroyo JG, et al. **Am J Ophthalmol** 1997 Mar;123(3):377–85

Vitreous cells as an indicator of retinal tears in asymptomatic or not recently symptomatic eyes. Boldrey EE. **Am J Ophthalmol** 1997 Feb;123(2):263–4

Ultrastructural features of tissue removed during idiopathic macular hole surgery [letter; comment] Kokame GT. **Am J Ophthalmol** 1997 Mar;123(3):425–6. Comment on: Am J Ophthalmol 1996 Jul;122(1):67–75.

Clinicopathologic correlation of an untreated macular hole and a macular hole treated by vitrectomy, transforming growth factor-beta 2, and gas tamponade. Rosa RH Jr, et al. **Am J Ophthalmol** 1996 Dec;122(6):853–63

Objective morphological assessment of macular hole surgery by scanning laser tomography. Hudson C, et al. **Br J Ophthalmol** 1997 Feb;81(2):107–16

Surgical treatment of full-thickness macular holes using autologous serum. Wells JA, et al. **Eye** 1996;10 (Pt 5):593–9

Bilaterality of idiopathic macular holes. Lewis ML, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):241–5

Clinical characteristics of traumatic macular holes. Yanagiya N, et al. **Jpn J Ophthalmol** 1996;40(4):544–7

Pattern of retinal breaks and retinal detachments in eyes with choroidal coloboma. Gopal L, et al. **Ophthalmology** 1995 Aug;102(8):1212–7

Retinal detachment after branch retinal vein occlusion: influence of the type of break on the outcome of vitreous surgery. Ikuno Y, et al. **Ophthalmology** 1997 Jan; 104(1):27–32

Three-dimensional measurements of idiopathic macular holes using a scanning laser tomograph. Weinberger D, et al. **Ophthalmology** 1995 Oct;102(10):1445–9

[Ocular pathology of child abuse] Rohrbach JM, et al. **Klin Monatsbl Augenheilkd** 1997 Mar;210(3):133–8 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Pattern reversal visual evoked potentials in eyes with macular holes and their fellow eyes. Bemelmans NA, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):54–7

Vitreous cells as an indicator of retinal tears in asymptomatic or not recently symptomatic eyes. Boldrey EE. **Am J Ophthalmol** 1997 Feb;123(2):263–4

Sustained closure of surgically repaired macular holes after retinal detachment with submacular fluid. Hainsworth DP, et al. **Am J Ophthalmol** 1997 Mar;123(3):364–9

Visual acuity and macular hole size after unsuccessful macular hole closure. Leonard RE 2nd, et al. **Am J Ophthalmol** 1997 Jan;123(1):84–9

Spontaneous resolution of a full-thickness macular hole with good visual acuity. da Cruz L, et al. **Arch Ophthalmol** 1997 Jan;115(1):130–1

Macular holes: migratory gaps and vitreous as obstacles to glial closure. Schubert HD, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Aug;235(8):523–9

Baseline characteristics, natural history, and risk factors to progression in eyes with stage 2 macular holes. Results from a prospective randomized clinical trial. Vitrectomy for Macular Hole Study Group. Kim JW, et al. **Ophthalmology** 1995 Dec;102(12):1818–28; discussion 1828–9

SURGERY

Posterior segment visualization problems with multifocal intraocular lenses [letter] Kumar A, et al. **Acta Ophthalmol Scand** 1996 Aug;74(4):415

Sustained closure of surgically repaired macular holes after retinal detachment with submacular fluid. Hainsworth DP, et al. **Am J Ophthalmol** 1997 Mar;123(3):364–9

Corneal perforation associated with argon laser photocoagulation for a retinal tear. Keithahn MA, et al. **Am J Ophthalmol** 1997 Jan;123(1):125–7

Ultrastructural features of tissue removed during idiopathic macular hole surgery [letter; comment] Kokame GT. **Am J Ophthalmol** 1997 Mar;123(3):425–6. Comment on: Am J Ophthalmol 1996 Jul;122(1):67–75.

Visual acuity and macular hole size after unsuccessful macular hole closure. Leonard RE 2nd, et al. **Am J Ophthalmol** 1997 Jan;123(1):84–9

Combined macular hole and cataract surgery. Miller JH Jr, et al. **Am J Ophthalmol** 1997 May;123(5):705–7

Visual field loss after vitrectomy for full-thickness macular holes. Paques M, et al. **Am J Ophthalmol** 1997 Jul; 124(1):88–94

Surgical treatment of a macular hole secondary to accidental laser burn [letter] Ciulla TA, et al. **Arch Ophthalmol** 1997 Jul;115(7):929–30

Vitrectomy for the treatment of full-thickness stage 3 or 4 macular holes. Results of a multicentered randomized clinical trial. The Vitrectomy for Treatment of Macular Hole Study Group [see comments] [published erratum appears in Arch Ophthalmol 1997 May;115(5):636] Freeman WR, et al. **Arch Ophthalmol** 1997 Jan;115(1):11–21 . Comment in: Arch Ophthalmol 1997 Jan;115(1):112.

Verdict on macular hole surgery. More data needed [editorial; comment] Hillis A, et al. **Arch Ophthalmol** 1997 Jan;115(1):112. Comment on: Arch Ophthalmol 1997 Jan;115(1):11–21.

Retinal pigment epithelial changes following macular hole surgery [letter] Holekamp NM. **Arch Ophthalmol** 1997 Sep; 115(9):1214–5

Macular surgery [published erratum appears in Br J Hosp Med 1996 Apr 17–30;55(8):526] Aylward GW. **Br J Hosp Med** 1996 Feb 7–20;55(3):85–8 (14 ref.)

Macular holes viewed objectively [editorial] Gregor ZJ. **Br J Ophthalmol** 1997 Feb;81(2):98–9

Objective morphological assessment of macular hole surgery by scanning laser tomography. Hudson C, et al. **Br J Ophthalmol** 1997 Feb;81(2):107–16

Eye wonder [editorial; comment] MacInnis BJ. **Can J Ophthalmol** 1996 Jun;31(4):163. Comment on: Can J Ophthalmol 1996 Jun;31(4):165–8. Comment on: Can J Ophthalmol 1996 Jun;31(4):179–82. **(Eng, Fre)**

Rhegmatogenous retinal detachment with posteriorly located break treated with temporary buckle. A case report. Ferrara V, et al. **Eur J Ophthalmol** 1995 Oct–Dec; 5(4):280–2

Long-term results of pars plana vitrectomy and silicone oil for giant tears. Karel I, et al. **Eur J Ophthalmol** 1996 Jul–Sep;6(3):315–21

Peripheral visual field loss after vitreous surgery for macular holes. Bopp S, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):362–71

Primary vitrectomy without scleral buckling for rhegmatogenous retinal detachment. Heimann H, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Sep;234(9):561–8

Pressure sore in a patient who underwent repair of a retinal tear with gas injection. Treister G, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Oct;234(10):657–8

Pneumatic retinopexy: principles and practice. Hilton GF, et al. **Indian J Ophthalmol** 1996 Sep;44(3):131–43 (35 ref.)

Management of idiopathic macular holes. Saxena S, et al. **Ophthalmic Surg Lasers** 1996 Jul;27(7):618–27 (71 ref.)

Secondary vitrectomy for the treatment of macular holes occurring after vitrectomy. Tsujikawa M, et al. **Ophthalmic Surg Lasers** 1997 Apr;28(4):336–7

Vision-threatening complications of surgery for full-thickness macular holes. Vitrectomy for Macular Hole Study Group. Banker AS, et al. **Ophthalmology** 1997 Sep; 104(9):1442–52; discussion 1452–3

Visual field defects after macular hole surgery. A new finding. Hutton WL, et al. **Ophthalmology** 1996 Dec; 103(12):2152–8; discussion 2158–9

The management of giant retinal tears using perfluoroperhydrophenanthrene. A multicenter case series. Vitreon Collaborative Study Group. Kertes PJ, et al. **Ophthalmology** 1997 Jul;104(7):1159–65

Long-term visual outcomes in patients with successful macular hole surgery. Leonard RE 2nd, et al. **Ophthalmology** 1997 Oct;104(10):1648–52

Macular hole surgery. Comparison of longstanding versus recent macular holes. Willis AW, et al. **Ophthalmology** 1996 Nov;103(11):1811–4

Use of perflubron as a new temporary vitreous substitute and manipulation agent for vitreoretinal surgery. Wills Eye Hospital Perflubron Study Group. Banker AS, et al. **Retina** 1996;16(4):285–91

Vitreous surgery for traumatic macular hole. de Bustros S. **Retina** 1996;16(5):451–2

An aspirating forceps to remove the posterior hyaloid in the surgery of full-thickness macular holes. Gaudric A, et al. **Retina** 1996;16(3):261–3

Vitrectomy for macular hole after pneumatic retinopexy. Hejny C, et al. **Retina** 1997;17(4):356–7

Photocoagulation and fluid-gas exchange for persistent macular hole. Ikuno Y, et al. **Retina** 1996;16(3):264–6

Macular hole surgery for chronic macular holes. Kokame GT. **Retina** 1996;16(1):75–8

Reoperation after failed macular hole surgery. Smiddy WE, et al. **Retina** 1996;16(1):13–8

Intraocular tamponade duration and success of macular hole surgery. Thompson JT, et al. **Retina** 1996;16(5):373–82

Macular hole surgery without face-down positioning. A pilot study. Tornambe PE, et al. **Retina** 1997;17(3):179–85

[Use of perfluorodecalin in giant retinal tear retinal detachment surgery] Dai H, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Jul;31(4):259–61 (Eng. Abstr.) **(Chi)**

[Long-term results of pars plana vitrectomy and silicone oil in large retinal tears in children] Karel I, et al. **Cesk Slov Oftalmol** 1997 Jun;53(3):147–54 (Eng. Abstr.) **(Cze)**

[Surgical treatment of post-traumatic macular holes] Barreau E, et al. **J Fr Ophtalmol** 1997;20(6):423–9 (24 ref.) (Eng. Abstr.) **(Fre)**

[Idiopathic macular hole] Chauvaud D, et al. **J Fr Ophtalmol** 1997;20(3):246–8 **(Fre)**

[Surgery of macular holes] Santiago PY, et al. **J Fr Ophtalmol** 1996;19(12):787–813 (171 ref.) **(Fre)**

[Change in hole size and area of retinal detachment after pars plana vitrectomy in Gass stage III macular foramina] Effert R, et al. **Ophthalmologe** 1996 Dec;93(6):666–9 (Eng. Abstr.) **(Ger)**

[Morphologic analysis of epiretinal membranes in surgically treated idiopathic macular foramina. Results of light and electron microscopy] Heidenkummer HP, et al. **Ophthalmologe** 1996 Dec;93(6):675–9 (Eng. Abstr.) **(Ger)**

[Surgical management of complete macular foramina] Liesenhoff O, et al. **Ophthalmologe** 1996 Dec;93(6):655–9 (Eng. Abstr.) **(Ger)**

[Treatment of full-thickness macular holes with autologous serum] Kutsuna M, et al. **Nippon Ganka Gakkai Zasshi** 1997 May;101(5):407–12 (Eng. Abstr.) **(Jpn)**

[Visual field defect following macular hole surgery] Otsuka S, et al. **Nippon Ganka Gakkai Zasshi** 1996 Nov; 100(11):911–5 (Eng. Abstr.) **(Jpn)**

[Vitreous surgery for macular hole followed membrane peeling] Tachi N, et al. **Nippon Ganka Gakkai Zasshi** 1997 Aug;101(8):692–7 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of retinal detachment with multiple, giant and post-equatorial ruptures] Il'nitskiĭ VV, et al. **Vestn Oftalmol** 1997 Mar–Apr;113(2):3–5 (Eng. Abstr.) **(Rus)**

THERAPY

Clinicopathologic correlation of an untreated macular hole and a macular hole treated by vitrectomy, transforming growth factor-beta 2, and gas tamponade. Rosa RH Jr, et al. **Am J Ophthalmol** 1996 Dec;122(6):853–63

Surgery for idiopathic full-thickness macular holes. Gregor ZJ. **Eye** 1996;10 (Pt 6):685–90 (37 ref.)

Surgical treatment of full-thickness macular holes using autologous serum. Wells JA, et al. **Eye** 1996;10 (Pt 5):593–9

Ultrasound-guided cryotherapy for retinal tears in patients with vitreous hemorrhage. Kelley LM, et al. **Ophthalmic Surg Lasers** 1997 Jul;28(7):565–9

Human autologous serum for the treatment of full-thickness macular holes. A preliminary study [see comments] Liggett PE, et al. **Ophthalmology** 1995 Jul;102(7):1071–6. Comment in: Ophthalmology 1996 Feb;103(2):200–1.

Vitrectomy, fluid-gas exchange and transforming growth factor—beta-2 for the treatment of traumatic macular holes. Rubin JS, et al. **Ophthalmology** 1995 Dec; 102(12):1840–5

Thrombin in the management of full thickness macular holes. Vine AK, et al. **Retina** 1996;16(6):474–8

ULTRASONOGRAPHY

Ultrasound-guided cryotherapy for retinal tears in patients with vitreous hemorrhage. Kelley LM, et al. **Ophthalmic Surg Lasers** 1997 Jul;28(7):565–9

RETINAL PIGMENT EPITHELIUM see **PIGMENT EPITHELIUM OF EYE**

RETINAL PIGMENTS

ANALYSIS

Scanning laser densitometry in visual acuity loss of unknown origin. DeLint PJ, et al. **Br J Ophthalmol** 1996 Dec; 80(12):1051–4

Foveal cone spacing and cone photopigment density difference: objective measurements in the same subjects. Marcos S, et al. **Vision Res** 1997 Jul;37(14):1909–15

BIOSYNTHESIS

Altered expression of a novel adaptin leads to defective pigment granule biogenesis in the Drosophila eye color mutant garnet. Ooi CE, et al. **EMBO J** 1997 Aug 1; 16(15):4508–18

CHEMISTRY

Chromophore configuration of iodopsin and its photoproducts formed at low temperatures. Imamoto Y, et al. **Biochemistry** 1996 Nov 19;35(46):14599–607

Resonance Raman examination of the wavelength regulation mechanism in human visual pigments. Kochendoerfer GG, et al. **Biochemistry** 1997 Jun 3;36(22):6577–87

Nanosecond retinal structure changes in K–590 during the room–temperature bacteriorhodopsin photocycle: picosecond time–resolved coherent anti–stokes Raman spectroscopy. Weidlich O, et al. **Biophys J** 1997 May; 72(5):2329–41

Synthesis of isotopically labelled retinal. Structural and functional studies at the atomic level of the chromophore in visual pigments. Lugtenburg J. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S17–20 (18 ref.)

Single amino acid residue as a functional determinant of rod and cone visual pigments. Imai H, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2322–6

GENETICS

Altered expression of a novel adaptin leads to defective pigment granule biogenesis in the Drosophila eye color mutant garnet. Ooi CE, et al. **EMBO J** 1997 Aug 1; 16(15):4508–18

Functional expression of human cone pigments using recombinant baculovirus: compatibility with histidine tagging and evidence for N–glycosylation. Vissers PM, et al. **FEBS Lett** 1996 Oct 28;396(1):26–30

Visual pigment gene structure and expression in human retinae. Yamaguchi T, et al. **Hum Mol Genet** 1997 Jul; 6(7):981–90

Individual variation in size of the human red and green visual pigment gene array. Macke JP, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):1040–3

Sequence and evolutionary history of the length polymorphism in intron 1 of the human red photopigment gene. Meagher MJ, et al. **J Mol Evol** 1996 Dec;43(6):622–30

Mechanisms of spectral tuning in the mouse green cone pigment. Sun H, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8860–5

Peropsin, a novel visual pigment–like protein located in the apical microvilli of the retinal pigment epithelium. Sun H, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9893–8

Visual pigment gene structure and the severity of color vision defects. Neitz J, et al. **Science** 1996 Nov 1;274(5288):801–4

Single 5'green–3'red hybrid gene in protanopia. Zhang Q, et al. **Yen Ko Hsueh Pao** 1996 Mar;12(1):5–9

METABOLISM

Effect of cadmium chloride on the distal retinal pigment cells of the fiddler crab, Uca pugilator. Reddy PS, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):504–10

Functional expression of human cone pigments using recombinant baculovirus: compatibility with histidine tagging and evidence for N–glycosylation. Vissers PM, et al. **FEBS Lett** 1996 Oct 28;396(1):26–30

Accumulation of lipofuscin within retinal pigment epithelial cells results in enhanced sensitivity to photo–oxidation. Brunk UT, et al. **Gerontology** 1995;41 Suppl 2:201–12

Dietary modification of human macular pigment density. Hammond BR Jr, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1795–801

Individual variations in the spatial profile of human macular pigment. Hammond BR Jr, et al. **J Opt Soc Am A** 1997 Jun;14(6):1187–96

Density of the human crystalline lens is related to the macular pigment carotenoids, lutein and zeaxanthin. Hammond BR Jr, et al. **Optom Vis Sci** 1997 Jul;74(7):499–504

Cigarette smoking and retinal carotenoids: implications for age–related macular degeneration. Hammond BR Jr, et al. **Vision Res** 1996 Sep;36(18):3003–9

PHYSIOLOGY

The macular pigment: a possible role in protection from age–related macular degeneration. Landrum JT, et al. **Adv Pharmacol** 1997;38:537–56

The photoreceptors and visual pigments of the garter snake (Thamnophis sirtalis): a microspectrophotometric, scanning electron microscopic and immunocytochemical study. Sillman AJ, et al. **J Comp Physiol [A]** 1997 Aug; 181(2):89–101

Clinical applications of fundus reflection densitometry. Liem AT, et al. **Surv Ophthalmol** 1996 Jul–Aug;41(1):37–50 (108 ref.)

The visual photopigments of simple deuteranomalous trichromats inferred from color matching. Shevell SK, et al. **Vision Res** 1997 May;37(9):1115–27

RETINAL S–ANTIGEN see **ARRESTIN**

RETINAL TEARS see **RETINAL PERFORATIONS**

RETINAL VEIN

Indocyanine green angiography of a laser–induced retinal–choroidal venous anastomosis. Cohen SM. **Ophthalmic Surg Lasers** 1997 Jan;28(1):65–6

ABNORMALITIES

Complete circumvention of central retinal artery and venous cilioretinal shunts in optic disc drusen [letter] Auw–Haedrich C, et al. **Arch Ophthalmol** 1996 Oct; 114(10):1285–7

Congenital retinal macrovessel. Polk TD, et al. **Arch Ophthalmol** 1997 Feb;115(2):290–1

Arteriovenous communications of the retina. Meinhold JR. **J Am Optom Assoc** 1996 May;67(5):279–82

METABOLISM

Glycoprotein deposition in vascular walls of diabetic retinopathy. A histopathological and immunohistochemical study. Bek T, et al. **Acta Ophthalmol Scand** 1996 Aug; 74(4):385–90

PATHOLOGY

Retinal perivasculitis in an immunocompetent patient with systemic herpes simplex infection. Chatzoulis DM, et al. **Am J Ophthalmol** 1997 May;123(5):699–702

Retinal venous beading with recurrent preretinal hemorrhage. Keyser BJ, et al. **Am J Ophthalmol** 1997 May; 123(5):696–8

Bilateral frosted branch angitis in an 8–year–old Indian girl. Biswas J, et al. **Retina** 1996;16(5):444–5

PHYSIOLOGY

Retinal hemodynamics in retinitis pigmentosa. Grunwald JE, et al. **Am J Ophthalmol** 1996 Oct;122(4):502–8

Control mechanisms of retinal vein pressure: evaluation in the cat using an in situ infusion micropipette. Attariwala R, et al. **Microcirculation** 1996 Sep;3(3):263–70

Retinal artery and vein pressures in the dog and their relationship to aortic, intraocular, and cerebrospinal fluid pressures. Morgan WH, et al. **Microvasc Res** 1997 May; 53(3):211–21

[Measurements of blood flow velocity in human retinal veins using laser speckle flowgraphy system] Nagahara M, et al. **Nippon Ganka Gakkai Zasshi** 1997 Feb;101(2):173–9 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Retinal hemodynamics in retinitis pigmentosa. Grunwald JE, et al. **Am J Ophthalmol** 1996 Oct;122(4):502–8

The venous closing pressure in central retinal vein obstruction. Luckie AP, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):233–8

Progression of nonischemic central retinal vein occlusion. Pollack A, et al. **Ophthalmologica** 1997;211(1):13–20

Increased vascular resistance for venous outflow in central retinal vein occlusion. Michelson G, et al. **Ophthalmology** 1997 Apr;104(4):659–63

SURGERY

Vitreous Hemorrhage complicating laser–induced chorioretinal anastomosis for central retinal vein occlusion. Browning DJ, et al. **Am J Ophthalmol** 1996 Oct; 122(4):588–9

Choroidal neovascular membrane after laser–induced chorioretinal anastomosis. Eccarius SG, et al. **Am J Ophthalmol** 1996 Oct;122(4):590–1

Epiretinal membrane and traction retinal detachment complicating laser–induced chorioretinal venous anastomosis. Luttrull JK. **Am J Ophthalmol** 1997 May; 123(5):698–9

Experimental preretinal neovascularization by laser–induced venous thrombosis in rats. Saito Y, et al. **Curr Eye Res** 1997 Jan;16(1):26–33

A randomized clinical trial of early panretinal photocoagulation for ischemic central vein occlusion. The Central Vein Occlusion Study Group N report [see comments] **Ophthalmology** 1995 Oct;102(10):1434–44. Comment in: Ophthalmology 1996 Mar;103(3):352, discussion 353–4. Comment in: Ophthalmology 1996 Mar;103(3):352–4.

ULTRASTRUCTURE

Retinopathy in diabetic (KKA gamma) mice: diabetic microvascular changes to the retina in KKA gamma mice revealed by light and electron microscopy. Sakaki Y, et al. **Jpn J Ophthalmol** 1996;40(3):317–28

RETINAL VEIN OCCLUSION

BLOOD

Activated protein C resistance—low incidence in glaucomatous optic disc haemorrhage and central retinal vein occlusion. Graham SL, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):199–205

CHEMICALLY INDUCED

Retinal vein occlusion after trabeculectomy with mitomycin C. Dev S, et al. **Am J Ophthalmol** 1996 Oct;122(4):574–5

Sex hormone preparations and retinal vein occlusion. Kirwan JF, et al. **Eye** 1997;11 (Pt 1):53–6

[Occlusion of the central retinal vein after vaccination against viral hepatitis B with recombinant vaccines. 4 cases] Granel B, et al. **Presse Med** 1997 Feb 1;26(2):62–5 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Central retinal vein occlusion in a young child with cyanotic heart disease [letter] VanderVeen DK, et al. **Arch Ophthalmol** 1997 Aug;115(8):1077

Optic disc haemorrhages and vascular abnormalities in a glaucoma population. Barry CJ, et al. **Aust N Z J Ophthalmol** 1997 May;25(2):137–44

Preretinal neovascularisation induced by photodynamic venous thrombosis in pigmented rat. Shen W, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):50–2

Ophthaproblem. Central retinal vein occlusion. Sharma S. **Can Fam Physician** 1997 Jun;43:1059, 1065

Bilateral central retinal vein thrombosis in Behçet's disease. el–Asrar AM, et al. **Clin Rheumatol** 1996 Sep;15(5):511–3

Experimental preretinal neovascularization by laser–induced venous thrombosis in rats. Saito Y, et al. **Curr Eye Res** 1997 Jan;16(1):26–33

Crohn's disease and central retinal vein occlusion. Igarashi H, et al. **Indian J Ophthalmol** 1996 Jun;44(2):97–9

Late complications in branch retinal vein occlusion. Apostolopoulos M, et al. **Int Ophthalmol** 1995–96; 19(5):281–5

Decreased nitric oxide production accounts for secondary arteriolar constriction after retinal branch vein occlusion. Donati G, et al. **Invest Ophthalmol Vis Sci** 1997 Jun; 38(7):1450–7

Preretinal neovascularization induced by experimental retinal vein occlusion in albino rats. Ham DI, et al. **Korean J Ophthalmol** 1997 Jun;11(1):60–4

Thrombosis associated with antiphospholipid antibody in juvenile chronic arthritis. Andrews A, et al. **Lupus** 1997; 6(6):556–7

Role of the vitreous and macular edema in branch retinal vein occlusion. Takahashi MK, et al. **Ophthalmic Surg Lasers** 1997 Apr;28(4):294–9

Branch retinal vein occlusion in a patient with Waardenburg syndrome. Kadoi C, et al. **Ophthalmologica** 1996; 210(6):354–7

Evaluation of grid pattern photocoagulation for macular edema in central vein occlusion. The Central Vein Occlusion Study Group M report [see comments] **Ophthalmology** 1995 Oct;102(10):1425–33. Comment in: Ophthalmology 1996 Mar;103(3):352, discussion 353–4. Comment in: Ophthalmology 1996 Mar;103(3):352–4.

Retinal detachment after branch retinal vein occlusion: influence of the type of break on the outcome of vitreous surgery. Ikuno Y, et al. **Ophthalmology** 1997 Jan; 104(1):27–32

Perifoveal capillary network in patients with acute central retinal vein occlusion. Remky A, et al. **Ophthalmology** 1997 Jan;104(1):33–7

Primary antiphospholipid syndrome with retinal vein occlusion. Treatment with acetylsalicylic acid [letter] Etaouil N, et al. **Rev Rhum Engl Ed** 1997 Feb;64(2):139–40

[The relation of retinal vascular occlusion and carotid artery stenosis] Tamiya R, et al. **Nippon Ganka Gakkai Zasshi** 1996 Nov;100(11):863–7 (Eng. Abstr.) **(Jpn)**

[Clinical course and complications of different retinal occlusion types based on personal material] Góralczyk M, et al. **Klin Oczna** 1996 Feb;98(2):113–6 (Eng. Abstr.) **(Pol)**

[The epidemiology of retinal vein thromboses in hypertensive patients] Tankovskiy VE. **Probl Sotsialnoi Gig Istor Med** 1997 Jan–Feb;(1):30–2 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Ophthaproblem. Central retinal vein occlusion. Sharma S. **Can Fam Physician** 1997 Jun;43:1059, 1065

Relative afferent pupillary defect and edge light pupil cycle time in the early differentiation of central retinal vein occlusion. Menon V, et al. **Indian J Ophthalmol** 1995 Sep; 43(3):127–30

[Retinal venous occlusion] Piguet B. **Rev Med Suisse Romande** 1996 Jan;116(1):31–5 (35 ref.) **(Fre)**

[Pseudoexfoliation syndrome in patients with retinal vein branch and central vein thrombosis] Cursiefen C, et al. **Klin Monatsbl Augenheilkd** 1997 Jul;211(1):17–21 (Eng. Abstr.) **(Ger)**

[Role of electroretinography in the prognosis of central retinal vein occlusion] Dujić M, et al. **Srp Arh Celok Lek** 1997 Jul–Aug;125(7–8):214–8 (Eng. Abstr.) **(Scc)**

DRUG THERAPY

Photothrombosis of retinal and choroidal vessels in rabbit eyes using chloroaluminum sulfonated phthalocyanine and a diode laser. Iliaki OE, et al. **Lasers Surg Med** 1996; 19(3):311–23

Thrombolytic therapy for central retinal vein occlusion: results of a pilot study. Elman MJ. **Trans Am Ophthalmol Soc** 1996;94:471–504

[Sulodexide treatment in retinal vein obstructions] Corbu C, et al. **Oftalmologia** 1996 Oct–Dec;40(4):393–7 (Eng. Abstr.) **(Rum)**

EPIDEMIOLOGY

Prevalence and associations of retinal vein occlusion in Australia. The Blue Mountains Eye Study. Mitchell P, et al. **Arch Ophthalmol** 1996 Oct;114(10):1243–7

Activated protein C resistance in central retinal vein occlusion [letter; comment] Sanborn G. **Br J Ophthalmol** 1996 Dec;80(12):1116. Comment on: Br

RETINAL VEIN OCCLUSION

J Ophthalmol 1996 Mar;80(3):194. Comment on: Br J Ophthalmol 1996 Mar;80(3):200-2. Comment on: Br J Ophthalmol 1996 Mar;80(3):203-8.

Incidence of retinal vein occlusion at the Glaucoma Clinic of Hiroshima University. Hirota A, et al. **Ophthalmologica** 1997;211(5):288-91

[The epidemiology of retinal vein thromboses in hypertensive patients] Tankovskiy VE. **Probl Sotsialnoi Gig Istor Med** 1997 Jan-Feb;(1):30-2 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Retinal vein occlusion and transient monocular visual loss associated with hyperhomocystinemia. Biousse V, et al. **Am J Ophthalmol** 1997 Aug;124(2):257-60

Branch retinal artery occlusion in a child [letter] Hertzberg R. **Aust N Z J Ophthalmol** 1997 Aug;25(3):246-7

Central retinal vein occlusion associated with cavernous sinus thrombosis. Sharma S, et al. **Can J Ophthalmol** 1996 Aug; 31(5):255-6

Retinal vascular abnormalities in aortic coarctation [letter] Tabandeh H. **Eye** 1996;10 (Pt 4):525-7

Thrombus and branch retinal vein occlusion. Baglivo E, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan;235(1):10-3

Prothrombotic states associated with retinal venous occlusion in young adults. Abu el-Asrar AM, et al. **Int Ophthalmol** 1996-97;20(4):197-204

Branch retinal artery occlusion (BRAO) combined with branch retinal vein occlusion (BRVO) and optic disc neovascularization associated with HIV and CMV retinitis. Conway MD, et al. **Int Ophthalmol** 1995-96;19(4):249-52

Noninfectious branch retinal vein occlusion in HIV-positive patients. Park KL, et al. **Retina** 1997;17(2):162-4

Branch retinal vein occlusion. Axial length and other risk factors. Simons BD, et al. **Retina** 1997;17(3):191-5

Axial length as a risk factor to branch retinal vein occlusion. Timmerman EA, et al. **Retina** 1997;17(3):196-9

[Eye symptoms and latent diabetes] Polak BC, et al. **Ned Tijdschr Geneeskd** 1997 Jan 11;141(2):73-5 (Eng. Abstr.) **(Dut)**

[Retinal vein occlusion and deep-sea diving] Merle H, et al. **J Fr Ophtalmol** 1997;20(6):456-60 (13 ref.) (Eng. Abstr.) **(Fre)**

[A case of segmentary unilateral occlusion of the central retinal vein following hepatitis B vaccination (letter)] Berkman N. **Presse Med** 1997 Apr 26;26(14):670 **(Fre)**

[Impaired glucose tolerance and branch retinal vein obstruction] Yoshimoto H, et al. **Nippon Rinsho** 1996 Oct; 54(10):2786-9 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Central retinal vein occlusion after embolization for spontaneous carotid cavernous sinus fistula] Fukami T, et al. **No Shinkei Geka** 1996 Aug;24(8):749-53 (Eng. Abstr.) **(Jpn)**

[Contemporary views on the etiopathogenesis of thrombotic changes in the retinal vein] Góralczyk M, et al. **Klin Oczna** 1996 Feb;98(2):155-8 (24 ref.) (Eng. Abstr.) **(Pol)**

GENETICS

Factor V and antithrombin gene mutations in patients with idiopathic central retinal vein occlusion. Hodgkins PR, et al. **Eye** 1995;9 (Pt 6):760-2

Prevalence of factor V Leiden in young adults with retinal vein occlusion [letter] Linna T, et al. **Thromb Haemost** 1997 Jan;77(1):214-6

IMMUNOLOGY

Thrombosis associated with antiphospholipid antibody in juvenile chronic arthritis. Andrews A, et al. **Lupus** 1997; 6(6):556-7

Antiphospholipid-protein antibodies are not an uncommon feature in retinal venous occlusions. Coniglio M, et al. **Thromb Res** 1996 Jul 15;83(2):183-8

[Risk of thrombosis with increased anticardiolipin antibodies] Winckelmann G. **Dtsch Med Wochenschr** 1997 Apr 11; 122(15):492-3 **(Ger)**

METABOLISM

Activation of protein tyrosine phosphorylation after retinal branch vein occlusion in cats. Hayashi A, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):372-80

Analysis of localization of adult T-cell leukemia-derived factor in the transient ischemic rat retina after treatment with OP-1206 alpha-CD, a prostaglandin E1 analogue. Yamamoto M, et al. **J Histochem Cytochem** 1997 Jan; 45(1):63-70

[Expression of basic fibroblast growth factor and fibroblast growth factor receptor 1 in the experimental retinal vein occlusion model] Matsushima M, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jul;101(7):564-70 (Eng. Abstr.) **(Jpn)**

[Evaluation of the general condition and selected biochemical blood parameters in various types of retinal vein occlusion] Góralczyk M, et al. **Klin Oczna** 1996 Feb;98(2):109-11 (Eng. Abstr.) **(Pol)**

PARASITOLOGY

Retinal vascular occlusions complicating acute toxoplasmic retinochoroiditis. Gentile RC, et al. **Can J Ophthalmol** 1997 Aug;32(5):354-8

PATHOLOGY

Glial cell involvement in vascular occlusion of diabetic retinopathy. Bek T. **Acta Ophthalmol Scand** 1997 Jun; 75(3):239-43

Picture resembling hemicentral retinal vein occlusion in the acquired immunodeficiency syndrome: is it related to cytomegalovirus? Mansour AM, et al. **Ophthalmologica** 1996;210(2):108-11

PHYSIOPATHOLOGY

Glaucoma and visual outcome in central retinal vein occlusion. Moisseiev J, et al. **Acta Ophthalmol Scand** 1996 Aug;74(4):368-71

Electroretinography of central retinal vein occlusion under scotopic and photopic conditions: what to measure? Williamson TH, et al. **Acta Ophthalmol Scand** 1997 Feb; 75(1):48-53

Natural history and clinical management of central retinal vein occlusion. The Central Vein Occlusion Study Group. **Arch Ophthalmol** 1997 Apr;115(4):486-91

The venous closing pressure in central retinal vein obstruction. Luckie AP, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):233-8

Pattern-reversal electroretinograms and visual evoked potentials in branch retinal vein occlusion. Gündüz K, et al. **Doc Ophthalmol** 1995-96;91(2):155-64

Haemorheology in patients with branch retinal vein occlusion with and without risk factors. Remky A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S8-12

Progression of nonischemic central retinal vein occlusion. Pollack A, et al. **Ophthalmologica** 1997;211(1):13-20

Increased vascular resistance for venous outflow in central retinal vein occlusion. Michelson G, et al. **Ophthalmology** 1997 Apr;104(4):659-63

Perifoveal capillary network in patients with acute central retinal vein occlusion. Remky A, et al. **Ophthalmology** 1997 Jan;104(1):33-7

Significance of refractive status in branch retinal vein occlusion. A case-control study. Majji AB, et al. **Retina** 1997;17(3):200-4

[Evaluation of blood flow rate in the internal carotid system in various types of retinal vein occlusion] Góralczyk M, et al. **Klin Oczna** 1996 Feb;98(2):105-8 (Eng. Abstr.) **(Pol)**

SURGERY

Vitreous Hemorrhage complicating laser-induced chorioretinal anastomosis for central retinal vein occlusion. Browning DJ, et al. **Am J Ophthalmol** 1996 Oct; 122(4):588-9

Choroidal neovascular membrane after laser-induced chorioretinal anastomosis. Eccarius SG, et al. **Am J Ophthalmol** 1996 Oct;122(4):590-1

Natural history and clinical management of central retinal vein occlusion. The Central Vein Occlusion Study Group. **Arch Ophthalmol** 1997 Apr;115(4):486-91

Treatment of central retinal vein occlusion. Baumal CR, et al. **Ophthalmic Surg Lasers** 1997 Jul;28(7):590-600 (81 ref.)

A randomized clinical trial of early panretinal photocoagulation for ischemic central vein occlusion. The Central Vein Occlusion Study Group N report [see comments] **Ophthalmology** 1995 Oct;102(10):1434-44. Comment in: Ophthalmology 1996 Mar;103(3):352, discussion 353-4. Comment in: Ophthalmology 1996 Mar;103(3):352-4.

THERAPY

A randomised prospective study of outpatient haemodilution for central retinal vein obstruction. Luckie AP, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):223-32

[Normovolemic hemodilution in central retinal vein thrombosis. Personal experience apropos of 14 cases] Locht B, et al. **Bull Soc Belge Ophtalmol** 1995;259:89-92 (Eng. Abstr.) **(Fre)**

[Digital fluorescein angiography in follow-up of the clinical course in therapy of patients with central vein occlusion and cystoid macular edema] Arend O, et al. **Klin Monatsbl Augenheilkd** 1996 Aug-Sep;209(2-3):163-70 (Eng. Abstr.) **(Ger)**

[Evaluation of the effectiveness of endovascular laser irradiation of blood in multimodal treatment of retinal vein thrombosis] Zakharova IA, et al. **Vestn Oftalmol** 1996 Sep-Oct;112(5):17-9 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

[Color-coded duplex ultrasonography of the orbit in central vein thrombosis] Tacke J, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Apr;166(4):329-34 (Eng. Abstr.) **(Ger)**

RETINAL VESSELS

see related

FLUORESCEIN ANGIOGRAPHY

Postoperative retinal ischemia with self-sealing cataract surgery incisions. Steinert RF, et al. **Am J Ophthalmol** 1997 Jan;123(1):124-5

Oxygen consumption in the avascular guinea pig retina. Cringle S, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1162-5

Protection of rat retina from ischemia-reperfusion injury by vasoactive intestinal peptide (VIP): the effect of VIP on lipid peroxidation and antioxidant enzyme activity of retina and choroid. Tunçel N, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:489-98

Retinal transient ischemic attack [letter; comment] Cornblath WT, et al. **Arch Neurol** 1996 Apr;53(4):294-5. Comment on: Arch Neurol 1995 Mar;52(3):246-9.

Glucose-mediated regulation of GLUT-1 and GLUT-3 mRNA in human retinal endothelial cells. Knott RM, et al. **Biochem Soc Trans** 1996 May;24(2):216S

Glucose mediated regulation of transforming growth factor beta in human retinal endothelial cells. Pascal MM, et al. **Biochem Soc Trans** 1996 May;24(2):228S

Retinal vasculitis in Lyme borreliosis. Leys AM, et al. **Bull Soc Belge Ophtalmol** 1995;259:205-14 (64 ref.)

Ultrastructural and biochemical studies on the neuroprotective effects of excitatory amino acid antagonists in the ischemic rat retina. Matini P, et al. **Exp Neurol** 1997 Aug;146(2):419-34

High intraocular pressure-induced ischemia and reperfusion injury in the optic nerve and retina in rats. Adachi M, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul; 234(7):445-51

Butterfly-shaped pigment dystrophy of the fovea associated with subretinal neovascularization. Marano F, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):270-4

Immunohistochemical distribution of basic fibroblast growth factor in experimental retinal ischaemia and reperfusion in the rat. Ohira A, et al. **Histochem J** 1996 Sep;28(9):607-11

Genistein, a protein tyrosine kinase inhibitor, ameliorates retinal degeneration after ischemia-reperfusion injury in rat. Hayashi A, et al. **Invest Ophthalmol Vis Sci** 1997 May; 38(6):1193-202

Taurine in gerbil retina: changes during ischemia reperfusion/insult (I.R.I.) and aging. Delbarre B, et al. **J Ocul Pharmacol Ther** 1996 Spring;12(1):65-73

Retinal large vessel oxygen saturations correlate with early blood loss and hypoxia in anesthetized swine. Denninghoff KR, et al. **J Trauma** 1997 Jul;43(1):29-34

Psoriatic arthritis or overlap syndrome. Rechichi CF, et al. **Ophthalmologica** 1997;211(4):266-7

The extraordinarily rapid disappearance of entopic images. Coppola D, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23; 93(15):8001-4

Early versus late staining of microaneurysms in fluorescein angiography. Jalli PY, et al. **Retina** 1997;17(3):211-5

Prevalence of asymptomatic retinal emboli in an Australian urban community. Mitchell P, et al. **Stroke** 1997 Jan; 28(1):63-6

[Protective effect of nitric oxide on ischemic retina] Imai N, et al. **Nippon Ganka Gakkai Zasshi** 1997 Aug; 101(8):639-43 (Eng. Abstr.) **(Jpn)**

[The effect of calcium antagonist on ischemia-reperfusion injury of the rabbit retina] Mori T, et al. **Nippon Ganka Gakkai Zasshi** 1996 Oct;100(10):773-6 (Eng. Abstr.) **(Jpn)**

[The retinochoroidal ischemia syndrome. Its classification, etiopathogenesis and clinical aspects] Munteanu G. **Oftalmologia** 1996 Jul-Sep;40(3):241-8 (24 ref.) (Eng. Abstr.) **(Rum)**

ABNORMALITIES

Premacular fibrosis in juvenile Coats' disease with spontaneous peeling after photocoagulation of the congenital vascular anomalies. Lafaut BA, et al. **Bull Soc Belge Ophtalmol** 1996;261:79-84

Congenital retinal macrovessel with bilateral pigment epithelial changes. Sharma S, et al. **Can J Ophthalmol** 1996 Dec;31(7):386-7

Coats' disease and central nervous system venous malformation. Robitaille JM, et al. **Ophthalmic Genet** 1996 Dec;17(4):215-8

Deep retinal vascular anomalous complexes in advanced age-related macular degeneration. Hartnett ME, et al. **Ophthalmology** 1996 Dec;103(12):2042-53

Retinal vascular abnormalities. A rare complication of myelinated nerve fibers? Silvestri G, et al. **Retina** 1996; 16(3):214-8

Prepapillary arterial loop associated with vitreous hemorrhage and venous retinal macrovessel. Soltau JB, et al. **Retina** 1996;16(1):74-5

Ipsilateral facial and uveal arteriovenous and capillary angioma, microphthalmos, heterochromia of the iris, and hypotony: an oculocutaneous syndrome simulating Sturge-Weber syndrome. Gass JD. **Trans Am Ophthalmol Soc** 1996;94:227-37; discussion 237-9

ANATOMY & HISTOLOGY

Blood supply to the retina in the laboratory shrew (Suncus murinus). Isomura G, et al. **Anat Anz** 1997 Jun; 179(3):237-43

Arteriolar length-diameter (L:D) ratio: a geometric parameter of the retinal vasculature diagnostic of hypertension. King LA, et al. **J Hum Hypertens** 1996 Jun; 10(6):417-8

CYTOLOGY

Primary culture and characterization of microvascular endothelial cells from Macaca monkey retina. Yan Q, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2185-94

Glaucoma, capillaries and pericytes. 2. Identification and characterization of retinal pericytes in culture. Anderson DR, et al. **Ophthalmologica** 1996;210(5):263–8

DRUG EFFECTS

Development of the eye after gestational exposure to cocaine. Vascular disruption in the retina of rats and humans. Silva-Araújo A, et al. **Ann N Y Acad Sci** 1996 Oct 31; 801:274–88

Macula toxicity after intravitreal amikacin. Seawright AA, et al. **Aust N Z J Ophthalmol** 1996 May;24(2):143–6

Retinal neurones containing kainate receptors are influenced by exogenous kainate and ischaemia while neurones lacking these receptors are not -- melatonin counteracts the effects of ischaemia and kainate. Cazevieille C, et al. **Brain Res** 1997 Apr 25;755(1):91–100

Effect of one week of levobunolol HCl 0.5% on the human retinal circulation. Bloom AH, et al. **Curr Eye Res** 1997 Mar;16(3):191–6

Effect of intraocular irrigating solutions on the viability of cultured retinal vascular endothelial cells. Mourad KM, et al. **Curr Eye Res** 1997 Mar;16(3):239–43

Toxic action of advanced glycation end products on cultured retinal capillary pericytes and endothelial cells: relevance to diabetic retinopathy. Chibber R, et al. **Diabetologia** 1997 Feb;40(2):156–64

Oxygen modulation of guanylate cyclase-mediated retinal pericyte relaxations with 3-morpholino-sydnonimine and atrial natriuretic peptide. Haefliger IO, et al. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1563–8

Differential effects of transforming growth factor-beta 1 on interleukin-1-induced cellular inflammation and vascular permeability in the rabbit retina. Cuff CA, et al. **J Neuroimmunol** 1996 Oct;70(1):21–8

Time-course of changes in nicardipine effects on microcirculation in retina and optic nerve head in living rabbit eyes. Tamaki Y, et al. **Jpn J Ophthalmol** 1996; 40(2):202–11

Insulin-like growth factor-1 retinal microangiopathy in the pig eye. Danis RP, et al. **Ophthalmology** 1997 Oct; 104(10):1661–9

[Use of calcium antagonists in ophthalmology (editorial)] Pillunat LE. **Klin Monatsbl Augenheilkd** 1996 Jun; 208(6):A1–2 **(Ger)**

[The effect of nicardipine on ischemic injury of rabbit retina] Hosobe Y. **Nippon Ganka Gakkai Zasshi** 1996 Sep; 100(9):665–71 (Eng. Abstr.) **(Jpn)**

[Effect of topically applied isopropyl unoprostone on microcirculation in the human ocular fundus evaluated with a laser speckle microcirculation analyser] Kojima S, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jul;101(7):605–10 (Eng. Abstr.) **(Jpn)**

EMBRYOLOGY

Maturation of the blood-retina barrier in the developing pecten oculi of the chicken. Liebner S, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):205–19

Development of astrocytes and their relation to blood vessels in fetal monkey retina. Gariano RF, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2367–75

GROWTH & DEVELOPMENT

Role of astrocytes in the control of developing retinal vessels. Zhang Y, et al. **Invest Ophthalmol Vis Sci** 1997 Aug; 38(9):1653–66

Ultrastructural and morphometric aspects of ageing in the retinal capillaries of rats. Schellini SA, et al. **J Submicrosc Cytol Pathol** 1997 Apr;29(2):275–80

INNERVATION

Thyrotropin-like immunoreactivity in human retina: immunoreactive co-localization in ganglion cells and perivascular fibers. Fernández-Trujillo FJ, et al. **Neurochem Int** 1996 Apr;28(4):381–4

METABOLISM

Advanced glycation end products (AGEs) co-localize with AGE receptors in the retinal vasculature of diabetic and of AGE-infused rats. Stitt AW, et al. **Am J Pathol** 1997 Feb;150(2):523–31

Advanced glycation end products induce specific glycoprotein alterations in retinal microvascular cells. Rellier N, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):281–5

Direct measurement of free radicals in ischemic/reperfused diabetic rat retina. Szabo ME, et al. **Clin Neurosci** 1997; 4(5):240–5 (40 ref.)

The release of amino acids from ischemic retina [letter] Muller A, et al. **Exp Eye Res** 1997 Feb;64(2):291–3

Upregulation of vascular endothelial growth factor in ischemic and non-ischemic human and experimental retinal disease. Vinores SA, et al. **Histol Histopathol** 1997 Jan; 12(1):99–109

Effect of high glucose on permeability of retinal capillary endothelium in vitro. Gillies MC, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):635–42

Prednisolone, platelet-activating factor receptor antagonist, or superoxide dismutase reduced leukocyte entrapment induced by interferon alpha in retinal microcirculation. Nishiwaki H, et al. **Invest Ophthalmol Vis Sci** 1997 Apr; 38(5):811–6

Adenosine mediates hypoxic induction of vascular endothelial growth factor in retinal pericytes and endothelial cells. Takagi H, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2165–76

Docosahexaenoic acid is a major n-3 polyunsaturated fatty acid in bovine retinal microvessels. Lecomte M, et al. **J Neurochem** 1996 May;66(5):2160–7

Increased cytokine gene expression in rat retina following transient ischemia. Hangai M, et al. **Ophthalmic Res** 1996; 28(4):248–54

Glaucoma, capillaries and pericytes. 3. Peptide hormone binding and influence on pericytes. Ferrari-Dileo G, et al. **Ophthalmologica** 1996;210(5):269–75

Glaucoma, capillaries and pericytes. 4. Beta-adrenergic activation of cultured retinal pericytes. Zschauer AO, et al. **Ophthalmologica** 1996;210(5):276–9

PATHOLOGY

Precise correlation of histopathological and fluorescein angiographic morphology using retinal vascular casting. Bek T, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):547–52

Intermediate uveitis and retinal vasculitis as manifestations of cat scratch disease. Soheilian M, et al. **Am J Ophthalmol** 1996 Oct;122(4):582–4

Optic disc haemorrhages and vascular abnormalities in a glaucoma population. Barry CJ, et al. **Aust N Z J Ophthalmol** 1997 May;25(2):137–44

Retinal vessel dilatation and elongation precedes diabetic macular oedema. Kristinsson JK, et al. **Br J Ophthalmol** 1997 Apr;81(4):274–8

Characterization of retinal vascular abnormalities in lean and obese spontaneously hypertensive rats. Huang SS, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S129–31

Retinal findings in adult leukaemia: correlation with leukocytosis. Jackson N, et al. **Clin Lab Haematol** 1996 Jun;18(2):105–9

An image-processing strategy for the segmentation and quantification of microaneurysms in fluorescein angiograms of the ocular fundus. Spencer T, et al. **Comput Biomed Res** 1996 Aug;29(4):284–302

The effect of raised inspired carbon dioxide on normal retinal vascular development in the neonatal rat. Holmes JM, et al. **Curr Eye Res** 1997 Jan;16(1):78–81

Angiographic abnormalities of experimental autoimmune uveoretinitis. Howe LJ, et al. **Curr Eye Res** 1996 Dec; 15(12):1149–55

Long-term retinal vascular abnormalities in an animal model of retinopathy of prematurity. Roberto KA, et al. **Curr Eye Res** 1996 Sep;15(9):932–7

Endothelin-1 and endothelin-3-like immunoreactivity in the eyes of diabetic and non-diabetic BB/W rats. Chakrabarti S, et al. **Diabetes Res Clin Pract** 1997 Aug;37(2):109–20

Familial idiopathic juxtafoveolar retinal telangiectasis [letter] Isaacs TW, et al. **Eye** 1996;10 (Pt 5):639–42

Lipaemia retinalis: a question of chylomicrons? Rayner S, et al. **Eye** 1996;10 (Pt 5):603–8

Retinal vascular abnormalities in aortic coarctation [letter] Tabandeh H. **Eye** 1996;10 (Pt 4):525–7

The ordered array of perivascular macrophages is disrupted by IL-1-induced inflammation in the rabbit retina. Cuff CA, et al. **Glia** 1996 Aug;17(4):307–16

The effect of pregnancy on mild diabetic retinopathy. Hellstedt T, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jul;235(7):437–41

Entoptic evaluation of diabetic retinopathy. Applegate RA, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):783–91

Angioscotometry with the scanning laser ophthalmoscope. Comparison of the effect of different wavelengths. Remky A, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2350–5

Altered endothelial/pericyte ratio in Goto-Kakizaki rat retina. Agardh CD, et al. **J Diabetes Complications** 1997 May-Jun;11(3):158–62

Luxury perfusion following anterior ischemic optic neuropathy. Friedland S, et al. **J Neuroophthalmol** 1996 Sep;16(3):163–71

Observer sensitivity to retinal vessel diameter and tortuosity in retinopathy of prematurity: a model system. Freedman SF, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jul-Aug; 33(4):248–54

Fundus morphology assessed by digital image analysis in children with fetal alcohol syndrome. Hellström A, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jan-Feb;34(1):17–23

Photothrombosis of retinal and choroidal vessels in rabbit eyes using chloroaluminum sulfonated phthalocyanine and a diode laser. Iliaki OE, et al. **Lasers Surg Med** 1996; 19(3):311–23

A rat model for sickle cell-mediated vaso-occlusion in retina. Lutty GA, et al. **Microvasc Res** 1996 Nov;52(3):270–80

Assessing retinal neovascularization in an animal model of proliferative retinopathy. Penn JS, et al. **Microvasc Res** 1996 Jan;51(1):126–30

Vascular changes in retinas of spontaneously hypertensive rats demonstrated by corrosion casts. Bhutto IA, et al. **Ophthalmic Res** 1997;29(1):12–23

Anticardiolipin antibodies and retinal vascular complications in Behçet's disease. Ozdemir Y, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):653–6

Endoscopic fluorescein angiography. Uram M. **Ophthalmic Surg Lasers** 1996 Oct;27(10):849–55

Choroidal ganglion cell plexus and retinal vasculature in monkeys with laser-induced glaucoma. May CA, et al. **Ophthalmologica** 1997;211(3):161–71

Cotton-wool spots and the early diagnosis of giant cell arteritis. Melberg NS, et al. **Ophthalmology** 1995 Nov; 102(11):1611–4

Risk factors for cotton-wool spots and for cytomegalovirus retinitis in patients with human immunodeficiency virus infection. Spaide RF, et al. **Ophthalmology** 1995 Dec; 102(12):1860–4

Intravitreous injections of vascular endothelial growth factor produce retinal ischemia and microangiopathy in an adult primate. Tolentino MJ, et al. **Ophthalmology** 1996 Nov; 103(11):1820–8

Clinicopathologic correlation of intraretinal microvascular abnormalities. Imesch PD, et al. **Retina** 1997;17(4):321–9

Bilateral subretinal neovascular membrane in idiopathic juxtafoveolar telangiectasis. Lee BL. **Retina** 1996; 16(4):344–6

Retinal vascular nonperfusion and retinal neovascularization as a consequence of cytomegalovirus retinitis and cryptococcal choroiditis. Saran BR, et al. **Retina** 1996; 16(6):510–2

Diagnostic and therapeutic challenges. Schatz H. **Retina** 1996;16(6):535–7

Prepapillary arterial loop associated with vitreous hemorrhage and venous retinal macrovessel. Soltau JB, et al. **Retina** 1996;16(1):74–5

Fluorescein angiography in the progressive outer retinal necrosis syndrome. Walton RC, et al. **Retina** 1996; 16(5):393–8

[The ocular fundus in ischemic cardiopathy] Borgia MC, et al. **Minerva Cardioangiol** 1997 May;45(5):229–34 (Eng. Abstr.) **(Ita)**

[Cellular and molecular biology of ischemic retina] Honda Y. **Nippon Ganka Gakkai Zasshi** 1996 Dec;100(12):937–55 (189 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Effects of dorzolamide hydrochloride 2% on the retinal circulation. Grunwald JE, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):236–8

A comparison of retinal and choroidal hemodynamics in patients with primary open-angle glaucoma and normal-pressure glaucoma. Duijm HF, et al. **Am J Ophthalmol** 1997 May;123(5):644–56

Scanning laser Doppler flowmeter study of retinal and optic disk blood flow in glaucomatous patients [published erratum appears in Am J Ophthalmol 1997 Apr;123(4):575] Nicolela MT, et al. **Am J Ophthalmol** 1996 Dec; 122(6):775–83

Effect of breathing 100% oxygen on retinal and optic nerve head capillary blood flow in smokers and non-smokers. Langhans M, et al. **Br J Ophthalmol** 1997 May;81(5):365–9

Reproducibility and sensitivity of scanning laser Doppler flowmetry during graded changes in PO2. Strenn K, et al. **Br J Ophthalmol** 1997 May;81(5):360–4

Retinal blood flow indices in patients infected with human immunodeficiency virus. Yung CW, et al. **Br J Ophthalmol** 1996 Aug;80(8):723–7

Membrane voltage and whole-cell currents in cultured pericytes of control rats and rats with retinal dystrophy. Wagner U, et al. **Curr Eye Res** 1996 Oct;15(10):1045–53

Physiological transport properties of cultured retinal microvascular endothelial cell monolayers. Yaccino JA, et al. **Curr Eye Res** 1997 Aug;16(8):761–8

Growth modulation of retinal microvascular cells by early and advanced glycation products. Ruggiero-Lopez D, et al. **Diabetes Res Clin Pract** 1997 Jan;34(3):135–42

Endothelium: the main actor in the remodelling of the retinal microvasculature in diabetes [see comments] Porta M. **Diabetologia** 1996 Jun;39(6):739–44 (65 ref.). Comment in: Diabetologia 1996 Jun;39(6):745–6.

Endothelium: the main actor or choreographer in the remodelling of the retinal microvasculature in diabetes? [comment] Tooke JE. **Diabetologia** 1996 Jun;39(6):745–6. Comment on: Diabetologia 1996 Jun;39(6):739–44.

Effect of oxygen on relaxation of retinal pericytes by sodium nitroprusside. Haefliger IO, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):388–92

Retinal blood flow during dynamic exercise. Harris A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Jul;234(7):440–4

Scanning laser ophthalmoscope imaging of fluorescein-labelled blood cells. Le Gargasson JF, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan;235(1):56–8

Visualization of retinal and choroidal blood flow with fluorescein leukocyte angiography in rabbits. Yang Y, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan; 235(1):27–31

Effect of CO2 on intracellular pH and contraction of retinal capillary pericytes. Chen Q, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):643–51

Oxygen modulation of guanylate cyclase-mediated retinal pericyte relaxations with 3-morpholino-sydnonimine and atrial natriuretic peptide. Haefliger IO, et al. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1563–8

Suppression of CO2-induced relaxation of bovine retinal pericytes by angiotensin II. Matsugi T, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):652–7

Regulation of retinal hemodynamics in diabetic rats by increased expression and action of endothelin-1. Takagi C, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2504–18

In vivo angiogenic activity and hypoxia induction of heterodimers of placenta growth factor/vascular

endothelial growth factor. Cao Y, et al. **J Clin Invest** 1996 Dec 1;98(11):2507–11

Confocal scanning laser Doppler flowmetry: experiments in a model flow system. Chauhan BC, et al. **J Glaucoma** 1997 Aug;6(4):237–45

Perfusion of the juxtapapillary retina and the neuroretinal rim area in primary open angle glaucoma. Michelson G, et al. **J Glaucoma** 1996 Apr;5(2):91–8

Principle, validity, and reliability of scanning laser Doppler flowmetry. Michelson G, et al. **J Glaucoma** 1996 Apr; 5(2):99–105

A new method for assessment of changes in retinal blood flow. Lee ET, et al. **Med Eng Phys** 1997 Mar;19(2):125–30

Autoregulation in the human retinal circulation: assessment using isometric exercise, laser Doppler velocimetry, and computer-assisted image analysis. Dumskyj MJ, et al. **Microvasc Res** 1996 May;51(3):378–92

Antigens associated with specific retinal cells are affected by ischaemia caused by raised intraocular pressure: effect of glutamate antagonists. Osborne NN, et al. **Neurochem Int** 1996 Sep;29(3):263–70

Nitric oxide produced during ischemia improves functional recovery in the rabbit retina. Maynard KI, et al. **Neuroreport** 1996 Dec 20;8(1):81–5

Glaucoma, capillaries and pericytes. 5. Preliminary evidence that carbon dioxide relaxes pericyte contractile tone. Anderson DR, et al. **Ophthalmologica** 1996;210(5):280–4

Relationship between ocular pulse pressures and retinal vessel velocities. Michelson G, et al. **Ophthalmology** 1997 Apr; 104(4):664–71

Association of retinal capillary perfusion with visual status during chronic glaucoma therapy. Sponsel WE, et al. **Ophthalmology** 1997 Jun;104(6):1026–32

Fluorescent dots in fluorescein angiography and fluorescein leukocyte angiography using a scanning laser ophthalmoscope in humans. Yang Y, et al. **Ophthalmology** 1997 Oct;104(10):1670–6

Effects of dexamethasone on retinal and choroidal blood flow during normoxia and hyperoxia in newborn piglets. Stiris TA, et al. **Pediatr Res** 1996 Oct;40(4):592–6

[Fundus-oriented perimetry. Evaluation of a new visual field examination method for detecting angioscotoma] Schiefer U, et al. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep; 209(2–3):62–71 (Eng. Abstr.) **(Ger)**

[Effects of beta-adrenergic blockers on retinal circulation] Ishikawa Y, et al. **Nippon Ganka Gakkai Zasshi** 1996 Oct; 100(10):798–802 (Eng. Abstr.) **(Jpn)**

[Measurement of retinal circulation] Konno S, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:446–9 (14 ref.) **(Jpn)**

PHYSIOPATHOLOGY

Altered retrobulbar vascular reactivity in early diabetic retinopathy. Evans DW, et al. **Br J Ophthalmol** 1997 Apr; 81(4):279–82

Choroidal and retinal blood flow changes in degenerative myopia. Akyol N, et al. **Can J Ophthalmol** 1996 Apr; 31(3):113–9

Antioxidant treatment of experimental diabetic retinopathy in rats with nicanartine. Hammes HP, et al. **Diabetologia** 1997 Jun;40(6):629–34

Modulation and mechanisms of electroretinogram recovery after short-term retinal ischemic injury. Tarn DM, et al. **Doc Ophthalmol** 1995–96;91(2):109–16

Scanning laser Doppler flowmetry in glaucoma. Holló G, et al. **Int Ophthalmol** 1996–97;20(1–3):63–70

Evaluation of the peripapillary circulation in healthy and glaucoma eyes with scanning laser Doppler flowmetry. Holló G, et al. **Int Ophthalmol** 1996–97;20(1–3):71–7

Contrast sensitivity loss is coupled with capillary dropout in patients with diabetes. Arend O, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1819–24

KATP channels mediate adenosine-induced hyperemia in retina. Gidday JM, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2624–33

Involvement of adenosine in retinal ischemia. Studies on the rat. Larsen AK, et al. **Invest Ophthalmol Vis Sci** 1996 Dec; 37(13):2603–11

In vivo quantification of leukocyte behavior in the retina during endotoxin-induced uveitis. Miyamoto K, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2708–15

Reproducibility of retinal and optic nerve head blood flow measurements with scanning laser Doppler flowmetry. Nicolela MT, et al. **J Glaucoma** 1997 Jun;6(3):157–64

Ameliorative effect of MK-801 on retinal ischemia. Lam TT, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):129–37

Effects of local hypothermia on ischemic eyes in vitrectomy. Tamai K, et al. **Jpn J Ophthalmol** 1996;40(2):220–8

Retinal capillary hemodynamics and VEP/pressure tolerance: evidence of retinal microcirculatory compromise in treated glaucomatous eyes. Sponsel WE, et al. **Ophthalmologica** 1997;211(3):172–7

Perifoveal capillary network in patients with acute central retinal vein occlusion. Remky A, et al. **Ophthalmology** 1997 Jan;104(1):33–7

[The new laser Doppler velocimetry for the measurement of retinal circulation and its clinical application] Fujio N, et al. **Hokkaido Igaku Zasshi** 1996 Nov;71(6):757–69 (Eng. Abstr.) **(Jpn)**

[Measurement of retinal blood flow by laser Doppler method] Ogasawara H, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:454–7 (15 ref.) **(Jpn)**

[Heart and eye (editorial; comment)] Andreu Andreu D. **Med Clin (Barc)** 1997 Mar 1;108(8):299–300. Comment on: Med Clin (Barc) 1997 Mar 1;108(8):281–5. **(Spa)**

[Relation between left ventricular hypertrophy and retinal vascular changes in mild hypertension (see comments)] Pose Reino A, et al. **Med Clin (Barc)** 1997 Mar 1; 108(8):281–5 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Mar 1;108(8):299–300. **(Spa)**

RADIOGRAPHY

Digital retinal angiography [editorial] Mainster MA, et al. **Retina** 1996;16(1):1–2

RADIONUCLIDE IMAGING

The microvasculature in myeloproliferative disease. A study using retinal fluorescein angiography. Dapling RB, et al. **Clin Lab Haematol** 1996 Dec;18(4):277–9

SECRETION

Cultured retinal pericytes stimulate in vitro angiogenesis of endothelial cells through secretion of a fibroblast growth factor-like molecule. Watanabe S, et al. **Atherosclerosis** 1997 Apr;130(1–2):101–7

SURGERY

[Retinal vascular closure using laser photocoagulation] Riss JM. **Chirurgie** 1996;121(4):309–16 (Eng. Abstr.) **(Fre)**

[Retinal vessels before and after photocoagulation in diabetic retinopathy. Determining the diameter using digitized color fundus slides] Remky A, et al. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep;209(2–3):79–83 (Eng. Abstr.) **(Ger)**

ULTRASONOGRAPHY

Color Doppler imaging of normal orbital vasculature [see comments] Greenfield DS, et al. **Ophthalmology** 1995 Nov; 102(11):1598–605. Comment in: Ophthalmology 1996 Sep;103(9):1333–4.

ULTRASTRUCTURE

Effect of hypoxia on the proliferation of retinal microvessel endothelial cells in culture. Lou Y, et al. **Anat Rec** 1997 Jul;248(3):366–73

Fine structure of the pecten oculi in the Australian galah (Eolophus roseicapillus) (Aves). Braekevelt CR, et al. **Histol Histopathol** 1996 Jul;11(3):565–71

Precapillary patterns and perivascular cells in the retinal microvasculature. A scanning electron microscope study. Pannarale L, et al. **J Anat** 1996 Jun;188 (Pt 3):693–703

RETINALDEHYDE

ADMINISTRATION & DOSAGE

Topical retinaldehyde increases skin content of retinoic acid and exerts biologic activity in mouse skin. Didierjean L, et al. **J Invest Dermatol** 1996 Nov;107(5):714–9

ANALOGS & DERIVATIVES

Retinal analog study of the role of steric interactions in the excited state isomerization dynamics of rhodopsin. Kochendoerfer GG, et al. **Biochemistry** 1996 Dec 17; 35(50):16230–40

Steric hindrance between chromophore substituents as the driving force of rhodopsin photoisomerization: 10-methyl-13-demethyl retinal containing rhodopsin. Koch D, et al. **Photochem Photobiol** 1997 Jan;65(1):181–6

CHEMICAL SYNTHESIS

Synthesis of isotopically labelled retinal. Structural and functional studies at the atomic level of the chromophore in visual pigments. Lugtenburg J. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S17–20 (18 ref.)

CHEMISTRY

Antioxidant reactions of all-trans retinol in phospholipid bilayers: effect of oxygen partial pressure, radical fluxes, and retinol concentration. Tesoriere L, et al. **Arch Biochem Biophys** 1997 Jul 1;343(1):13–8

Chromophore configuration of iodopsin and its photoproducts formed at low temperatures. Imamoto Y, et al. **Biochemistry** 1996 Nov 19;35(46):14599–607

Relationship of retinal configuration and internal proton transfer at the end of the bacteriorhodopsin photocycle. Richter HT, et al. **Biochemistry** 1996 Dec 3;35(48):15461–6

Analysis of conformational changes in bacteriorhodopsin upon retinal removal. Cladera J, et al. **Biophys J** 1996 Jun; 70(6):2882–7

Correlation between surfactant/micelle structure and the stability of bacteriorhodopsin in solution. Tan EH, et al. **Biophys J** 1996 May;70(5):2385–95

Retinal and non-retinal inputs upon retinopetal RMA neurons in the lamprey: a light and electron microscopic study combining HRP axonal tracing and GABA immunocytochemistry. Rio JP, et al. **J Chem Neuroanat** 1996 Nov;12(1):51–70

Analytical applications of retinoid-cyclodextrin inclusion complexes. 1. Characterization of a retinal-beta-cyclodextrin complex. Muñoz Botella S, et al. **J Pharm Biomed Anal** 1996 Jun;14(8–10):909–15

Reducing the flexibility of retinal restores a wild-type-like photocycle in bacteriorhodopsin mutants defective in protein-retinal coupling. Delaney JK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5028–33

The photoisomerization of retinal in bacteriorhodospin: experimental evidence for a three-state model. Hasson KC, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15124–9

ISOLATION & PURIFICATION

Micellar electrokinetic capillary chromatography of three natural vitamin A derivatives. Profumo A, et al. **Electrophoresis** 1996 Oct;17(10):1617–21

METABOLISM

Mechanistic enzymology of liver alcohol dehydrogenase. Kinetic and stereochemical characterization of retinal oxidation and reduction. Pocker Y, et al. **Adv Exp Med Biol** 1997;414:331–8

Purification and partial characterization of bovine kidney aldehyde dehydrogenase able to oxidize retinal to retinoic acid. Bhat PV, et al. **Biochem Cell Biol** 1996;74(5):695–700

Biotransformation of all-trans-retinal, 13-cis-retinal, and 9-cis-retinal catalyzed by conceptal cytosol and microsomes. Chen H, et al. **Biochem Pharmacol** 1997 Mar 21;53(6):877–85

Ultraviolet resonance Raman spectra of Trp-182 and Trp-189 in bacteriorhodopsin: novel information on the structure of Trp-182 and its steric interaction with retinal. Hashimoto S, et al. **Biochemistry** 1997 Sep 30; 36(39):11583–90

Retinal analog study of the role of steric interactions in the excited state isomerization dynamics of rhodopsin. Kochendoerfer GG, et al. **Biochemistry** 1996 Dec 17; 35(50):16230–40

Reconstitution of bacteriorhodopsin from the apoprotein and retinal studied by Fourier-transform infrared spectroscopy. Rüdiger M, et al. **Biochemistry** 1997 Apr 22;36(16):4867–74

Replacement effects of neutral amino acid residues of different molecular volumes in the retinal binding cavity of bacteriorhodopsin on the dynamics of its primary process. Logunov SL, et al. **Biophys J** 1996 Jun; 70(6):2875–81

Metabolism of topical retinaldehyde and retinol by mouse skin in vivo: predominant formation of retinyl esters and identification of 14-hydroxy-4, 14-retro-retinol. Sass JO, et al. **Exp Dermatol** 1996 Oct;5(5):267–71

Cellular retinaldehyde-binding protein localization in cornea [letter] Sarthy V. **Exp Eye Res** 1996 Dec;63(6):759–62

Modulation of opsin apoprotein activity by retinal. Dark activity of rhodopsin formed at low temperature. Surya A, et al. **J Biol Chem** 1997 Aug 29;272(35):21745–50

Chloride and proton transport in bacteriorhodopsin mutant D85T: different modes of ion translocation in a retinal protein. Tittor J, et al. **J Mol Biol** 1997 Aug 22; 271(3):405–16

Formation of lipofuscin-like fluorophores by reaction of retinal with photoreceptor outer segments and liposomes. Katz ML, et al. **Mech Ageing Dev** 1996 Dec 20; 92(2–3):159–74

Reducing the flexibility of retinal restores a wild-type-like photocycle in bacteriorhodopsin mutants defective in protein-retinal coupling. Delaney JK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5028–33

The lipocalin Xlcpl1 expressed in the neural plate of Xenopus laevis embryos is a secreted retinaldehyde binding protein. Lepperdinger G, et al. **Protein Sci** 1996 Jul;5(7):1250–60

PHARMACOKINETICS

Effects of ethanol on biotransformation of all-trans-retinol and all-trans-retinal to all-trans-retinoic acid in rat conceptal cytosol. Chen H, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):942–7

Plasma retinoids after topical use of retinaldehyde on human skin. Sass JO, et al. **Skin Pharmacol** 1996;9(5):322–6

PHARMACOLOGY

Retinol and retinaldehyde specifically increase alpha1-proteinase inhibitor in the human cornea. Bosković G, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):751–6

Partial agonist activity of 11-cis-retinal in rhodopsin mutants. Han M, et al. **J Biol Chem** 1997 Sep 12;272(37):23081–5

Induction of erythrophagocytic activity in cultured mouse trophoblast cells by phorbol myristate acetate and all-trans-retinal. Albieri A, et al. **Placenta** 1996 Sep; 17(7):507–12

PHYSIOLOGY

Synthesis of isotopically labelled retinal. Structural and functional studies at the atomic level of the chromophore in visual pigments. Lugtenburg J. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S17–20 (18 ref.)

Electrophysiological evidence for retinal projections to the hypothalamic supraoptic nucleus and its perinuclear zone. Cui LN, et al. **J Neuroendocrinol** 1997 May;9(5):347–53

Retinoids and the visual process. Crouch RK, et al. **Photochem Photobiol** 1996 Oct;64(4):613–21 (113 ref.)

RETINENE see **RETINALDEHYDE**

RETINITIS

CHEMICALLY INDUCED

The ordered array of perivascular macrophages is disrupted by IL-1-induced inflammation in the rabbit retina. Cuff CA, et al. **Glia** 1996 Aug;17(4):307-16

Experimental autoimmune uveoretinitis induced by the gamma-subunit of cyclic guanosine monophosphate phosphodiesterase in rats. Ren J, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2527-31

Differential effects of transforming growth factor-beta 1 on interleukin-1-induced cellular inflammation and vascular permeability in the rabbit retina. Cuff CA, et al. **J Neuroimmunol** 1996 Oct;70(1):21-8

COMPLICATIONS

A polymerase chain reaction-based assay for diagnosing varicella-zoster virus retinitis in patients with acquired immunodeficiency syndrome. Short GA, et al. **Am J Ophthalmol** 1997 Feb;123(2):157-64

Management of viral retinitis-associated retinal detachment in AIDS. Hannouche D, et al. **Eye** 1997;11 (Pt 1):33-6

Cytomegalovirus retinitis in a healthy antiretroviral naive HIV positive male with a CD4 count of 277/mm3 [letter] Fairley I, et al. **Genitourin Med** 1996 Dec;72(6):446-7

[Pathology of the retina in patients with AIDS] Adán-Civera A, et al. **Rev Neurol** 1996 Dec;24(136):1614-8 (17 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Serological and polymerase chain reaction-based analysis of aqueous humour samples in patients with AIDS and necrotizing retinitis. Verbraak FD, et al. **AIDS** 1996 Sep; 10(10):1091-9

Retinal perivasculitis in an immunocompetent patient with systemic herpes simplex infection. Chatzoulis DM, et al. **Am J Ophthalmol** 1997 May;123(5):699-702

Use of polymerase chain reaction assays of aqueous humor in the differential diagnosis of retinitis in patients infected with human immunodeficiency virus. Danise A, et al. **Clin Infect Dis** 1997 Jun;24(6):1100-6

The Agar sandwich technique for retinal biopsy processing. Banker AS, et al. **Retina** 1996;16(6):530-4

Hypertensive retinopathy mimicking neuroretinitis in a twelve-year-old girl. Leavitt JA, et al. **Surv Ophthalmol** 1997 May-Jun;41(6):477-80

[Unilateral diffuse subacute neuroretinitis] Bernasconi OR, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):327-8 (Eng. Abstr.) **(Fre)**

[Intraocular involvement of Chagas disease (American trypanosomiasis). Studies in Paraguay/South America] Fröhlich SJ, et al. **Ophthalmologe** 1997 Mar;94(3):206-10 (Eng. Abstr.) **(Ger)**

[A case of Leber's idiopathic stellate retinitis and optic neuritis] Karczewicz D. **Klin Oczna** 1996 Mar;98(3):233-5 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Management of varicella zoster virus retinitis in AIDS. Moorthy RS, et al. **Br J Ophthalmol** 1997 Mar;81(3):189-94

Successful use of cidofovir in treating AIDS-related cytomegalovirus retinitis, encephalitis, and esophagitis [letter] Blick G, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):84-5

Cytomegalovirus (CMV) culture results, drug resistance, and clinical outcome in patients with AIDS and CMV retinitis treated with foscarnet or ganciclovir. Studies of Ocular Complications of AIDS (SOCA) in collaboration with the AIDS Clinical Trial Group. **J Infect Dis** 1997 Jul; 176(1):50-8

Concurrent ganciclovir and foscarnet treatment for cytomegalovirus encephalitis and retinitis in an infant with acquired immunodeficiency syndrome: case report and review. Zaknun D, et al. **Pediatr Infect Dis J** 1997 Aug; 16(8):807-11

Evaluation of a novel lipid prodrug for intraocular drug delivery: effect of acyclovir diphosphate dimyristoylglycerol in a rabbit model with herpes simplex virus-1 retinitis. Taskintuna I, et al. **Retina** 1997;17(1):57-64

New therapies for cytomegalovirus retinitis in patients with the acquired immunodeficiency syndrome. Cunningham ET Jr. **West J Med** 1997 Feb;166(2):138-9

[The clinico-immunological validation of a differentiated approach to the use of corticosteroids in treating S-dependent uveoretinitis] Slepova OS, et al. **Vestn Oftalmol** 1996 Apr-Jun;112(2):45-7 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The occurrence of uncommon intraocular inflammatory diseases: a survey of the Macula society. Hanutsaha P, et al. **Retina** 1996;16(5):437-9

ETIOLOGY

Recombinant IL-4 aggravates experimental autoimmune uveoretinitis in rats. Ramanathan S, et al. **J Immunol** 1996 Sep 1;157(5):2209-15

GENETICS

Genetic susceptibility to experimental autoimmune uveoretinitis in the rat is associated with an elevated Th1 response. Caspi RR, et al. **J Immunol** 1996 Sep 15; 157(6):2668-75

IMMUNOLOGY

Uveitogenicity is associated with a Th1-like lymphokine profile: cytokine-dependent modulation of early and committed effector T cells in experimental autoimmune uveitis. Xu H, et al. **Cell Immunol** 1997 May 25;178(1):69-78

Resident and infiltrating immune cells in the uveal tract in the early and late stages of experimental autoimmune uveoretinitis. Butler TL, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2195-210

Genetic susceptibility to experimental autoimmune uveoretinitis in the rat is associated with an elevated Th1 response. Caspi RR, et al. **J Immunol** 1996 Sep 15; 157(6):2668-75

Recombinant IL-4 aggravates experimental autoimmune uveoretinitis in rats. Ramanathan S, et al. **J Immunol** 1996 Sep 1;157(5):2209-15

[The clinico-immunological validation of a differentiated approach to the use of corticosteroids in treating S-dependent uveoretinitis] Slepova OS, et al. **Vestn Oftalmol** 1996 Apr-Jun;112(2):45-7 (Eng. Abstr.) **(Rus)**

METABOLISM

Elevation of laser flare photometry in patients with cytomegalovirus retinitis and AIDS [see comments] Magone MT, et al. **Am J Ophthalmol** 1997 Aug; 124(2):190-8. Comment in: Am J Ophthalmol 1997 Aug;124(2):227-33.

Herpes simplex virus type 1 alters transcript levels of tumor necrosis factor-alpha and interleukin-6 in retinal glial cells. Drescher KM, et al. **Invest Ophthalmol Vis Sci** 1996 Oct; 37(11):2302-12

[A study on changes of levels of products of lipid peroxidation in retina of rat with experimental autoimmune uveoretinitis] Sun X, et al. **Chung Hua Yen Ko Tsa Chih** 1996 Mar;32(2):140-2 (Eng. Abstr.) **(Chi)**

MICROBIOLOGY

Rhegmatogenous retinal detachments in HIV-positive patients with ocular syphilis. Williams JK, et al. **Ophthalmic Surg Lasers** 1996 Aug;27(8):699-705

Long-term follow-up of chronic Lyme neuroretinitis. Karma A, et al. **Retina** 1996;16(6):505-9

PARASITOLOGY

Toxoplasmic retinochoroiditis: new insights provided by indocyanine green angiography. Auer C, et al. **Am J Ophthalmol** 1997 Jan;123(1):131-3

Subretinal migration of a nematode in a patient with diffuse unilateral subacute neuroretinitis. Gass JD. **Arch Ophthalmol** 1996 Dec;114(12):1526-7

Right active retinitis and left focal retinochoroidal scar in a girl with congenital toxoplasmosis. Kamiyama M, et al. **Ophthalmologica** 1997;211(2):95-7

PATHOLOGY

Acute multifocal retinitis. Cunningham ET Jr, et al. **Am J Ophthalmol** 1997 Mar;123(3):347-57

Acute retinal pigment epitheliitis. Luttrull JK. **Am J Ophthalmol** 1997 Jan;123(1):127-9

Antiendothelial cell antibodies (AECA) in patients with uveoretinitis. Edelsten C, et al. **Clin Rev Allergy Immunol** 1997 Spring;15(1):41-52 (40 ref.)

Angiographic abnormalities of experimental autoimmune uveoretinitis. Howe LJ, et al. **Curr Eye Res** 1996 Dec; 15(12):1149-55

The ordered array of perivascular macrophages is disrupted by IL-1-induced inflammation in the rabbit retina. Cuff CA, et al. **Glia** 1996 Aug;17(4):307-16

Evidence of chronic inflammation in retina excised after relaxing retinotomy for anterior proliferative vitreoretinopathy. Limb GA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Apr;234(4):213-20

Neuroretinitis in cat scratch disease associated with macular star. McCrary B, et al. **J Miss State Med Assoc** 1997 May; 38(5):158-9

Blood-retinal barrier (BRB) breakdown in experimental autoimmune uveoretinitis: comparison with vascular endothelial growth factor, tumor necrosis factor alpha, and interleukin-1beta-mediated breakdown. Luna JD, et al. **J Neurosci Res** 1997 Aug 1;49(3):268-80

Idiopathic retinal vasculitis, aneurysms, and neuro-retinitis. Retinal Vasculitis Study. Chang TS, et al. **Ophthalmology** 1995 Jul;102(7):1089-97

PHYSIOPATHOLOGY

Foscarnet-Ganciclovir Cytomegalovirus Retinitis Trial: 5. Clinical features of cytomegalovirus retinitis at diagnosis. Studies of ocular complications of AIDS Research Group in collaboration with the AIDS Clinical Trials Group [see comments] **Am J Ophthalmol** 1997 Aug;124(2):141-57. Comment in: Am J Ophthalmol 1997 Aug;124(2):227-33.

Progressive zonal outer retinitis. Abe T, et al. **Jpn J Ophthalmol** 1996;40(3):412-8 (4 ref.)

PREVENTION & CONTROL

Immunomodulatory effects of linomide in animals immunized with immunopathogenic retinal antigens: dissociation between different immune functions. Shirkey BL, et al. **Clin Exp Immunol** 1997 Jun;108(3):539-44

Oral tolerance in a murine model of relapsing experimental autoimmune uveoretinitis (EAU): induction of protective tolerance in primed animals. Thurau SR, et al. **Clin Exp Immunol** 1997 Aug;109(2):370-6

Prevention of experimental autoimmune uveoretinitis by monoclonal antibody to interleukin-12. Yokoi H, et al. **Eur J Immunol** 1997 Mar;27(3):641-6

Suppression of actively induced experimental autoimmune uveoretinitis by CD4+ T cells. Uchio E, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Feb;235(2):97-102

Peptide-mediated suppression of experimental autoimmune uveoretinitis in mice: development of a peptide vaccine. Kezuka T, et al. **Int Immunol** 1996 Aug;8(8):1229-35

Adoptive transfer of murine cytomegalovirus-immune lymph node cells prevents retinitis in T-cell-depleted mice. Lu Y, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):301-10

Anti-tumor necrosis factor alpha therapy suppresses the induction of experimental autoimmune uveoretinitis in mice by inhibiting antigen priming. Sartani G, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2211-8

Evaluation of retinal toxicity and efficacy of anti-cytomegalovirus and anti-herpes simplex virus antiviral phosphorothioate oligonucleotides ISIS 2922 and ISIS 4015. Flores-Aguilar M, et al. **J Infect Dis** 1997 Jun; 175(6):1308-16

Immune effector cell (IEC)-mediated protection from HSV-1 retinitis occurs in the brain. Zhao M, et al. **J Neuroimmunol** 1997 May;75(1-2):51-8

SURGERY

Diffuse unilateral subacute neuroretinitis syndrome in Canada [letter] Yuen VH, et al. **Arch Ophthalmol** 1996 Oct; 114(10):1279-82

Diffuse unilateral subacute neuroretinitis. Report of transvitreal surgical removal of a subretinal nematode. de Souza EC, et al. **Ophthalmology** 1995 Aug;102(8):1183-6

THERAPY

Systemic cytokine immunotherapy for experimental cytomegalovirus retinitis in mice with retrovirus-induced immunodeficiency. Dix RD, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1411-7

VIROLOGY

Foscarnet-Ganciclovir Cytomegalovirus Retinitis Trial: 5. Clinical features of cytomegalovirus retinitis at diagnosis. Studies of ocular complications of AIDS Research Group in collaboration with the AIDS Clinical Trials Group [see comments] **Am J Ophthalmol** 1997 Aug;124(2):141-57. Comment in: Am J Ophthalmol 1997 Aug;124(2):227-33.

Intraocular pressure and aqueous humor dynamics in patients with AIDS treated with intravitreal cidofovir (HPMPC) for cytomegalovirus retinitis [see comments] Banker AS, et al. **Am J Ophthalmol** 1997 Aug;124(2):168-80. Comment in: Am J Ophthalmol 1997 Aug;124(2):227-33.

Elevation of laser flare photometry in patients with cytomegalovirus retinitis and AIDS [see comments] Magone MT, et al. **Am J Ophthalmol** 1997 Aug; 124(2):190-8. Comment in: Am J Ophthalmol 1997 Aug;124(2):227-33.

Subacute sclerosing panencephalitis manifesting as viral retinitis: clinical and histopathologic findings. Park DW, et al. **Am J Ophthalmol** 1997 Apr;123(4):533-42

Regression of cytomegalovirus retinitis associated with protease-inhibitor treatment in patients with AIDS [see comments] Reed JB, et al. **Am J Ophthalmol** 1997 Aug; 124(2):199-205. Comment in: Am J Ophthalmol 1997 Aug;124(2):227-33.

A polymerase chain reaction-based assay for diagnosing varicella-zoster virus retinitis in patients with acquired immunodeficiency syndrome. Short GA, et al. **Am J Ophthalmol** 1997 Feb;123(2):157-64

Iritis and hypotony after treatment with intravenous cidofovir for cytomegalovirus retinitis [see comments] Davis JL, et al. **Arch Ophthalmol** 1997 Jun;115(6):733-7. Comment in: Arch Ophthalmol 1997 Jun;115(6):785-6.

Hypotony and visual loss with intravenous cidofovir treatment of cytomegalovirus retinitis [letter] [see comments] Friedberg DN. **Arch Ophthalmol** 1997 Jun; 115(6):801-2. Comment in: Arch Ophthalmol 1997 Jun;115(6):785-6.

Early reactivation of cytomegalovirus retinitis following placement of a ganciclovir implant [letter] Friedlander SM, et al. **Arch Ophthalmol** 1997 Jun;115(6):802-3

Cidofovir [editorial; comment] Jabs DA. **Arch Ophthalmol** 1997 Jun;115(6):785-6 (19 ref.). Comment on: Arch Ophthalmol 1997 Jun;115(6):733-7. Comment on: Arch Ophthalmol 1997 Jun;115(6):801-2.

The herpes simplex virus type 1 ribonucleotide reductase is required for acute retinal disease. Brandt CR, et al. **Arch Virol** 1997;142(5):883-96

Treatment of clinically resistant cytomegalovirus retinitis in

AIDS patients: combination of intravenous ganciclovir and intravitreal foscarnet. Pivetti-Pezzi P, et al. **Eur J Ophthalmol** 1995 Oct-Dec;5(4):199-203

Optic neuroretinitis, a rare manifestation of herpes zoster ophthalmicus: a case report. Dhar MY, et al. **J Commun Dis** 1997 Mar;29(1):57-61

Detection of human herpes virus 6 in AIDS-associated retinitis by means of in situ hybridization, polymerase chain reaction and immunohistochemistry. Fillet AM, et al. **J Med Virol** 1996 Aug;49(4):289-95

Immune effector cell (IEC)-mediated protection from HSV-1 retinitis occurs in the brain. Zhao M, et al. **J Neuroimmunol** 1997 May;75(1-2):51-8

Initial experience with an eight-month sustained-release intravitreal ganciclovir implant for the treatment of CMV retinitis associated with AIDS. Duker JS, et al. **Ophthalmic Surg Lasers** 1995 Sep-Oct;26(5):442-8

Repair of retinal detachments due to herpes varicella-zoster virus retinitis in patients with acquired immune deficiency syndrome. Weinberg DV, et al. **Ophthalmology** 1997 Feb; 104(2):279-82

RETINITIS, CYTOMEGALOVIRUS see **CYTOMEGALOVIRUS RETINITIS**

RETINITIS PIGMENTOSA

[Retinitis pigmentosa] Souied E, et al. **J Fr Ophtalmol** 1997; 20(6):461-86 (243 ref.) **(Fre)**

BLOOD

Non-retinal abnormalities associated with progressive retinal atrophy (PRA) in the miniature poodle. Willmott NJ, et al. **Exp Eye Res** 1996 Nov;63(5):527-33

Serum retinoids in retinitis pigmentosa patients treated with vitamin A. Fex GA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S18-21

Acanthocytosis, retinitis pigmentosa, pallidal degeneration. Report of two cases without serum lipid abnormalities. Malandrini A, et al. **J Neurol Sci** 1996 Sep 1; 140(1-2):129-31

Evaluation of fatty acids in membrane phospholipids of erythrocytes in retinitis pigmentosa patients. Simonelli F, et al. **Ophthalmic Res** 1996;28(2):93-8

COMPLICATIONS

Associated ocular findings in pericentral pigmentary retinopathy. Durlu YK, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):101-3

Retinitis pigmentosa with recurrent vitreous hemorrhage. Nao-i N, et al. **Acta Ophthalmol Scand** 1996 Oct; 74(5):509-12

Retinitis pigmentosa in a young man with Noonan syndrome: further evidence that Noonan syndrome (NS) and the cardio-facio-cutaneous syndrome (CFC) are variable manifestations of the same entity? [see comments] Lorenzetti ME, et al. **Am J Med Genet** 1996 Oct 16; 65(2):97-9 (17 ref.). Comment in: Am J Med Genet 1996 Oct 16;65(2):100.

More on the Noonan-CFC controversy [editorial; comment] Neri G, et al. **Am J Med Genet** 1996 Oct 16;65(2):100. Comment on: Am J Med Genet 1996 Oct 16;65(2):97-9.

Association of thyroid disease with retinitis pigmentosa and gyrate atrophy. Whitcup SM, et al. **Am J Ophthalmol** 1996 Dec;122(6):903-5

Usher's syndrome type IC: clinical studies and fine-mapping the disease locus. Marietta J, et al. **Ann Otol Rhinol Laryngol** 1997 Feb;106(2):123-8

Giant retinal tear and retinal detachment with underlying retinitis pigmentosa and hearing loss [see comments] Kim RY, et al. **Eye** 1996;10 (Pt 6):697-700. Comment in: Eye 1996 ;10 (Pt 6):651-2.

The ophthalmological course of Usher syndrome type III. Pakarinen L, et al. **Int Ophthalmol** 1995-96;19(5):307-11

Frequency of optic disc or parapapillary nerve fiber layer drusen in retinitis pigmentosa. Grover S, et al. **Ophthalmology** 1997 Feb;104(2):295-8

Frequency of optic disc drusen and size of the optic disc [letter] Jonas JB. **Ophthalmology** 1997 Oct;104(10):1531-2

Bilateral disc edema in retinitis pigmentosa. Villa AM, et al. **Optom Vis Sci** 1997 Mar;74(3):132-7

Frequency of photographically apparent optic disc and parapapillary nerve fiber layer drusen in Usher syndrome. Edwards A, et al. **Retina** 1996;16(5):388-92

Efficacy of dorzolamide hydrochloride in the management of chronic cystoid macular edema in patients with retinitis pigmentosa. Grover S, et al. **Retina** 1997;17(3):222-31

DIAGNOSIS

Carriers of the Usher syndrome type IB: is audiometric identification possible? Wagenaar M, et al. **Am J Otol** 1996 Nov;17(6):853-8

Bardet-Biedl syndrome: delayed diagnosis in a child with Hirschsprung disease [letter] Işlek I, et al. **Clin Dysmorphol** 1996 Jul;5(3):271-3 (7 ref.)

[Development of a standardized evaluation system for cataracta complicata in retinitis pigmentosa] Auffarth GU, et al. **Ophthalmologe** 1997 Jul;94(7):509-14 (Eng. Abstr.) **(Ger)**

[Clinical examinations in Usher's syndrome] Lubiński W, et al. **Klin Oczna** 1996 Jan;98(1):55-8 (Eng. Abstr.) **(Pol)**

[Pupillary membrane persistence, Bourneville's disease and pigmentary retinopathy] Stefăniu I, et al. **Oftalmologia** 1996 Oct-Dec;40(4):368-72 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

[Mechanism of the treatment of pigmentary degeneration of retina with traditional Chinese medicine] Wu XW, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Mar; 16(3):176-8 **(Chi)**

ENZYMOLOGY

Genomic organization of the human TIMP-1 gene. Investigation of a causative role in the pathogenesis of X-linked retinitis pigmentosa 2. Hardcastle AJ, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1893-6

Lysosomal enzyme activities in cultured retinal pigment epithelial and glial cells of RCS rat. Hu J, et al. **Yen Ko Hsueh Pao** 1996 Mar;12(1):20-7

EPIDEMIOLOGY

Usher syndrome in the city of Birmingham--prevalence and clinical classification. Hope CI, et al. **Br J Ophthalmol** 1997 Jan;81(1):46-53

The prevalence of Usher syndrome and other retinal dystrophy-hearing impairment associations. Rosenberg T, et al. **Clin Genet** 1997 May;51(5):314-21

Multicenter genetic study of retinitis pigmentosa in Japan: II. Prevalence of autosomal recessive retinitis pigmentosa. Hayakawa M, et al. **Jpn J Ophthalmol** 1997 Jan-Feb; 41(1):7-11

[Retinitis pigmentosa and color vision deficiency in Kamigoto island, Nagasaki Prefecture] Toda S. **Nippon Ganka Gakkai Zasshi** 1997 Aug;101(8):669-76 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Pseudoretinitis pigmentosa due to sub-optimal treatment of neurosyphilis [letter] Lotery AJ, et al. **Eye** 1996;10 (Pt 6):759-60

[Physiological roles of rhodopsin phosphorylation and dephosphorylation and its relationship with retinitis pigmentosa] Oguro H. **Nippon Ganka Gakkai Zasshi** 1996 Aug;100(8):575-81 (49 ref.) (Eng. Abstr.) **(Jpn)**

GENETICS

Autosomal dominant retinitis pigmentosa with a rhodopsin mutation (Arg-135-Trp). Disease phenotype in a Swedish family. Ponjavic V, et al. **Acta Ophthalmol Scand** 1997 Apr; 75(2):218-23

Analysis of the RPGR gene in 11 pedigrees with the retinitis pigmentosa type 3 genotype: paucity of mutations in the coding region but splice defects in two families. Fujita R, et al. **Am J Hum Genet** 1997 Sep;61(3):571-80

Evidence for a major retinitis pigmentosa locus on 19q13.4 (RP11) and association with a unique bimodal expressivity phenotype. Al-Maghtheh M, et al. **Am J Hum Genet** 1996 Oct;59(4):864-71

Myosin VIIA mutation screening in 189 Usher syndrome type 1 patients. Weston MD, et al. **Am J Hum Genet** 1996 Nov;59(5):1074-83

Response to Drs. Shastry and Trese: phenotype-genotype correlations in X-linked retinitis pigmentosa [letter; comment] Kaplan J, et al. **Am J Med Genet** 1996 Nov 11;65(4):367. Comment on: Am J Med Genet 1995 Nov 20;59(3):401-2.

Phenotypes in three Swedish families with X-linked retinitis pigmentosa caused by different mutations in the RPGR gene. Andréasson S, et al. **Am J Ophthalmol** 1997 Jul; 124(1):95-102

Carriers of the Usher syndrome type IB: is audiometric identification possible? Wagenaar M, et al. **Am J Otol** 1996 Nov;17(6):853-8

Friedreich-like ataxia with retinitis pigmentosa caused by the His101Gln mutation of the alpha-tocopherol transfer protein gene. Yokota T, et al. **Ann Neurol** 1997 Jun; 41(6):826-32

Identification of a polymorphic missense (G338D) and silent (106V and 121L) mutations within the coding region of the peripherin/RDS gene in a patient with retinitis punctata albescens. Shastry BS, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):103-5

Clinical and molecular genetic characterisation of a family segregating autosomal dominant retinitis pigmentosa and sensorineural deafness. Kenna P, et al. **Br J Ophthalmol** 1997 Mar;81(3):207-13

Signal transduction in the retina and inherited retinopathies. Shastry BS. **Cell Mol Life Sci** 1997 May;53(5):419-29 (160 ref.)

Myosin VIIa, the product of the Usher 1B syndrome gene, is concentrated in the connecting cilia of photoreceptor cells. Liu X, et al. **Cell Motil Cytoskeleton** 1997; 37(3):240-52

Autosomal recessive retinitis pigmentosa in Spain: evaluation of four genes and two loci involved in the disease. Bayés M, et al. **Clin Genet** 1996 Nov;50(5):380-7

ERG and EOG abnormalities in carriers of X-linked retinitis pigmentosa. Stavrou P, et al. **Eye** 1996;10 (Pt 5):581-9

Mapping the RP2 locus for X-linked retinitis pigmentosa on proximal Xp: a genetically defined 5-cM critical region and exclusion of candidate genes by physical mapping [letter] Thiselton DL, et al. **Genome Res** 1996 Nov; 6(11):1093-102

Analysis of three deletion breakpoints in Xp21.1 and the further localization of RP3. Brown J, et al. **Genomics** 1996 Oct 15;37(2):200-10

Refined mapping of the Usher syndrome type III locus on chromosome 3, exclusion of candidate genes, and identification of the putative mouse homologous region. Joensuu T, et al. **Genomics** 1996 Dec 15;38(3):255-63

A new locus for autosomal recessive retinitis pigmentosa (RP19) maps to 1p13-1p21. Martínez-Mir A, et al. **Genomics** 1997 Feb 15;40(1):142-6

Adenovirus-mediated gene transfer of ciliary neurotrophic factor can prevent photoreceptor degeneration in the retinal degeneration (rd) mouse. Cayouette M, et al. **Hum Gene Ther** 1997 Mar 1;8(4):423-30

Putative association of a mutant ROM1 allele with retinitis pigmentosa. Martínez-Mir A, et al. **Hum Genet** 1997 Jun; 99(6):827-30

Genetic mapping of RP1 on 8q11-q21 in an Australian family with autosomal dominant retinitis pigmentosa reduces the critical region to 4 cM between D8S601 and D8S285. Xu SY, et al. **Hum Genet** 1996 Dec;98(6):741-3

Human Usher 1B/mouse shaker-1: the retinal phenotype discrepancy explained by the presence/absence of myosin VIIA in the photoreceptor cells. el-Amraoui A, et al. **Hum Mol Genet** 1996 Aug;5(8):1171-8

A newly identified locus for Usher syndrome type I, USH1E, maps to chromosome 21q21. Chaïb H, et al. **Hum Mol Genet** 1997 Jan;6(1):27-31

Localisation of a gene for dominant cone-rod dystrophy (CORD6) to chromosome 17p. Kelsell RE, et al. **Hum Mol Genet** 1997 Apr;6(4):597-600

Myosin VIIA gene: heterogeneity of the mutations responsible for Usher syndrome type IB. Lévy G, et al. **Hum Mol Genet** 1997 Jan;6(1):111-6

Positional cloning of the gene for X-linked retinitis pigmentosa 3: homology with the guanine-nucleotide-exchange factor RCC1. Roepman R, et al. **Hum Mol Genet** 1996 Jul;5(7):1035-41

Identification of a gene disrupted by a microdeletion in a patient with X-linked retinitis pigmentosa (XLRP). Roepman R, et al. **Hum Mol Genet** 1996 Jun;5(6):827-33

Localization of the Usher syndrome type ID gene (Ush1D) to chromosome 10. Wayne S, et al. **Hum Mol Genet** 1996 Oct;5(10):1689-92

A ninth locus (RP18) for autosomal dominant retinitis pigmentosa maps in the pericentromeric region of chromosome 1. Xu SY, et al. **Hum Mol Genet** 1996 Aug; 5(8):1193-7

Identification of a new mutation of the myosin VII head region in Usher syndrome type 1. Liu XZ, et al. **Hum Mutat** 1997;10(2):168-70

New mutation in the 3'-acceptor splice site of intron 4 in the rhodopsin gene associated with autosomal dominant retinitis pigmentosa in a Basque family. Reig C, et al. **Hum Mutat** 1996;8(1):93-4

Identification of a novel R552O mutation in exon 13 of the beta-subunit of rod phosphodiesterase gene in a Spanish family with autosomal recessive retinitis pigmentosa. Valverde D, et al. **Hum Mutat** 1996;8(4):393-4

Retinitis pigmentosa genetics: a study in Indian population. Vinchurkar MS, et al. **Indian J Ophthalmol** 1996 Jun; 44(2):77-82

Origin of tapetal-like reflexes in carriers of X-linked retinitis pigmentosa. Berendschot TT, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2716-23

Dominant and digenic mutations in the peripherin/RDS and ROM1 genes in retinitis pigmentosa. Dryja TP, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):1972-82

Disease expression in X-linked retinitis pigmentosa caused by a putative null mutation in the RPGR gene. Jacobson SG, et al. **Invest Ophthalmol Vis Sci** 1997 Sep; 38(10):1983-97

Evaluation of the human gene encoding recoverin in patients with retinitis pigmentosa or an allied disease. Parminder AH, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):704-9

Evidence for a fourth locus in Usher syndrome type I. Gerber S, et al. **J Med Genet** 1996 Jan;33(1):77-9

Exclusion of CAG repeat expansion as the cause of disease in autosomal dominant retinitis pigmentosa families. Keen TJ, et al. **J Med Genet** 1997 Feb;34(2):130-2

Linkage of a medium sized Scottish autosomal dominant retinitis pigmentosa family to chromosome 7q. Mohamed Z, et al. **J Med Genet** 1996 Aug;33(8):714-5

Genetic heterogeneity of Usher syndrome type II in a Dutch population. Pieke-Dahl S, et al. **J Med Genet** 1996 Sep; 33(9):753-7

A new family linked to the RP13 locus for autosomal dominant retinitis pigmentosa on distal 17p. Tarttelin EE, et al. **J Med Genet** 1996 Jun;33(6):518-20

Polygenic disease and retinitis pigmentosa: albinism exacerbates photoreceptor degeneration induced by the expression of a mutant opsin in transgenic mice. Naash MI, et al. **J Neurosci** 1996 Dec 15;16(24):7853-8

Multicenter genetic study of retinitis pigmentosa in Japan: II. Prevalence of autosomal recessive retinitis pigmentosa. Hayakawa M, et al. **Jpn J Ophthalmol** 1997 Jan-Feb; 41(1):7-11

Multicenter genetic study of retinitis pigmentosa in Japan: I. Genetic heterogeneity in typical retinitis pigmentosa.

Hayakawa M, et al. **Jpn J Ophthalmol** 1997 Jan–Feb; 41(1):1–6

Usher's syndrome and cochlear implant [letter] Konrádsson KS, et al. **Laryngoscope** 1997 Mar;107(3):406–7

Retinitis pigmentosa and ataxia caused by a mutation in the gene for the alpha–tocopherol–transfer protein [letter] Yokota T, et al. **N Engl J Med** 1996 Dec 5;335(23):1770–1

Retinopathy induced in mice by targeted disruption of the rhodopsin gene [see comments] Humphries MM, et al. **Nat Genet** 1997 Feb;15(2):216–9. Comment in: Nat Genet 1997 Feb;15(2):115–7.

Familial interstitial nephritis and retinitis pigmentosa. Farrell J, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1468–70

Heterogeneous clinical presentation of the mtDNA NARP/T8993G mutation. Santorelli FM, et al. **Neurology** 1997 Jul;49(1):270–3

G106R rhodopsin mutation is also present in Spanish ADRP patients. Ayuso C, et al. **Ophthalmic Genet** 1996 Sep; 17(3):95–101

Novel rhodopsin mutation (M216R) in a Danish family with autosomal dominant retinitis pigmentosa. Haim M, et al. **Ophthalmic Genet** 1996 Dec;17(4):193–7

The ocular phenotype of the Bardet–Biedl syndrome. Comparison to non–syndromic retinitis pigmentosa. Iannaccone A, et al. **Ophthalmic Genet** 1997 Mar; 18(1):13–26

A mild phenotype of autosomal dominant retinitis pigmentosa is associated with the rhodopsin mutation Pro–267–Leu. Ponjavic V, et al. **Ophthalmic Genet** 1997 Jun;18(2):63–70

Visual acuity impairment in patients with retinitis pigmentosa. Grover S, et al. **Ophthalmology** 1996 Oct;103(10):1593–600

Autosomal–dominant retinitis pigmentosa associated with an Arg–135–Trp point mutation of the rhodopsin gene. Clinical features and longitudinal observations. Pannarale MR, et al. **Ophthalmology** 1996 Sep;103(9):1443–52

Defective subunit assembly underlies a digenic form of retinitis pigmentosa linked to mutations in peripherin/rds and rom–1. Goldberg AF, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13726–30

[Yeast artificial chromosome cloning and physical mapping of retinitis pigmentosa 3 (RP3) locus] Miao W, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Oct;76(10):747–9 (Eng. Abstr.) **(Chi)**

[Tissue expression of a gene potentially implicated in some diseases with retinal and renal involvement] Candelier JJ, et al. **C R Acad Sci III** 1997 Jul;320(7):541–9 (Eng. Abstr.) **(Fre)**

[Retinitis pigmentosa—clinical, genetic and pathophysiologic aspects] Jurklies B, et al. **Klin Monatsbl Augenheilkd** 1997 Jan;210(1):1–18 (229 ref.) (Eng. Abstr.) **(Ger)**

[Alström syndrome—a rare disease of diabetic association] Weichenhain B, et al. **Med Klin** 1997 Mar 15;92(3):175–8 (Eng. Abstr.) **(Ger)**

[Candidate gene approach] Hotta Y, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2433–40 (54 ref.) **(Jpn)**

IMMUNOLOGY

Thyroid disease and retinitis pigmentosa [letter; comment] Proto G, et al. **J Endocrinol Invest** 1996 Oct;19(9):647–8 . Comment on: J Endocrinol Invest 1996 Mar;19(3):170–4.

Investigations of antiretinal antibodies in pigmentary retinopathy and other retinal degenerations. Heckenlively JR, et al. **Trans Am Ophthalmol Soc** 1996;94:179–200; discussion 200–6

PARASITOLOGY

Ophthalmomyiasis interna posterior and pigmentary retinopathy of Guam. Hira NK, et al. **J Am Optom Assoc** 1997 Jul;68(7):452–8 (23 ref.)

PATHOLOGY

Preservation of the inner retina in retinitis pigmentosa. A morphometric analysis. Santos A, et al. **Arch Ophthalmol** 1997 Apr;115(4):511–5

Cleft lip and cone–rod dystrophy in a consanguineous sibship. Ausems MG, et al. **Clin Dysmorphol** 1996 Oct;5(4):307–11

Vitreal alterations in retinitis pigmentosa: biomicroscopic appearance and statistical evaluation. Vingolo EM, et al. **Ophthalmologica** 1996;210(2):104–7

Autosomal–dominant retinitis pigmentosa associated with an Arg–135–Trp point mutation of the rhodopsin gene. Clinical features and longitudinal observations. Pannarale MR, et al. **Ophthalmology** 1996 Sep;103(9):1443–52

Clinicopathologic correlation of intraretinal microvascular abnormalities. Imesch PD, et al. **Retina** 1997;17(4):321–9

PHYSIOPATHOLOGY

Retinal hemodynamics in retinitis pigmentosa. Grunwald JE, et al. **Am J Ophthalmol** 1996 Oct;122(4):502–8

Stable and progressive hearing loss in type 2A Usher's syndrome. van Aarem A, et al. **Ann Otol Rhinol Laryngol** 1996 Dec;105(12):962–7

Relationship between difficulty in performing daily activities and clinical measures of visual function in patients with retinitis pigmentosa. Szlyk JP, et al. **Arch Ophthalmol** 1997 Jan;115(1):53–9

Neuroradiology and clinical aspects of Usher syndrome. Tamayo ML, et al. **Clin Genet** 1996 Sep;50(3):126–32

Origin of tapetal–like reflexes in carriers of X–linked retinitis pigmentosa. Berendschot TT, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2716–23

A mild phenotype of autosomal dominant retinitis pigmentosa is associated with the rhodopsin mutation Pro–267–Leu. Ponjavic V, et al. **Ophthalmic Genet** 1997 Jun;18(2):63–70

Rate of visual field loss in retinitis pigmentosa. Grover S, et al. **Ophthalmology** 1997 Mar;104(3):460–5

Visual acuity impairment in patients with retinitis pigmentosa. Grover S, et al. **Ophthalmology** 1996 Oct;103(10):1593–600

Mobility of people with retinitis pigmentosa as a function of vision and psychological variables. Haymes S, et al. **Optom Vis Sci** 1996 Oct;73(10):621–37

Reproducibility of visual acuity measurements in patients with retinitis pigmentosa. Grover S, et al. **Retina** 1997; 17(1):33–7

Intraocular light scatter in patients with retinitis pigmentosa. Alexander KR, et al. **Vision Res** 1996 Nov;36(22):3703–9

[Improving contrast sensitivity by cut–off filters in high adaptation luminance levels in retinitis pigmentosa] Wetzel C, et al. **Ophthalmologe** 1996 Aug;93(4):456–62 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

[Psycho–affective problems associated with retinitis pigmentosa] Strougo Z, et al. **J Fr Ophtalmol** 1997; 20(2):111–6 (Eng. Abstr.) **(Fre)**

SURGERY

Restrictive strabismus after ocular surgery for retinitis pigmentosa in Cuba [letter] Bacal DA, et al. **Arch Ophthalmol** 1997 Jul;115(7):930–1

Evaluation of patients with retinitis pigmentosa receiving electric stimulation, ozonated blood, and ocular surgery in Cuba [letter; comment] Peláez O. **Arch Ophthalmol** 1997 Jan;115(1):133–4. Comment on: Arch Ophthalmol 1996 May;114(5):560–3.

Adenovirus–mediated gene transfer of ciliary neurotrophic factor can prevent photoreceptor degeneration in the retinal degeneration (rd) mouse. Cayouette M, et al. **Hum Gene Ther** 1997 Mar 1;8(4):423–30

VETERINARY

Differential expression of photoreceptor–specific proteins during disease and degeneration in the progressive rod–cone degeneration (prcd) retina. Gropp KE, et al. **Exp Eye Res** 1997 Jun;64(6):875–86

Non–retinal abnormalities associated with progressive retinal atrophy (PRA) in the miniature poodle. Willmott NJ, et al. **Exp Eye Res** 1996 Nov;63(5):527–33

Elevation of cGMP with normal expression and activity of rod cGMP–PDE in photoreceptor degenerate labrador retrievers. Kommonen B, et al. **Ophthalmic Res** 1996; 28(1):19–28

RETINOBLASTOMA

see related

GENES, RETINOBLASTOMA

Diaphyseal telangiectatic osteosarcoma as a second tumor after bilateral retinoblastomas. Brown MJ, et al. **Skeletal Radiol** 1996 Oct;25(7):685–8

[An analysis of causes of recurrence, matastasis and death of retinoblastoma] Chen Z, et al. **Yen Ko Hsueh Pao** 1995 Dec;11(4):221–3 (Eng. Abstr.) **(Chi)**

BLOOD SUPPLY

Human retinoblastoma: a morphological study of apoptotic, leukocytic, and vascular elements. Madigan MC, et al. **Ultrastruct Pathol** 1997 Mar–Apr;21(2):95–107

CHEMISTRY

Increased chromokinesin immunoreactivity in retinoblastoma cells. Yan RT, et al. **Gene** 1997 Apr 21;189(2):263–7

COMPLICATIONS

Hereditary retinoblastoma, lipoma, and second primary cancers. Li FP, et al. **J Natl Cancer Inst** 1997 Jan 1; 89(1):83–4

The effect of chemoreduction on retinoblastoma–induced retinal detachment. Shields CL, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun; 34(3):165–9

Rubeosis iridis in retinoblastoma. Histologic findings and the possible role of vascular endothelial growth factor in its induction. Pe'er J, et al. **Ophthalmology** 1997 Aug; 104(8):1251–8

[Dental changes induced by radiotherapy: a study of subjects with retinoblastoma. I] Mascagni EE, et al. **Minerva Stomatol** 1997 Apr;46(4):191–200 (66 ref.) (Eng. Abstr.) **(Ita)**

[Skeletal changes induced by radiotherapy. A study of subjects with retinoblastoma. II] Mascagni EE, et al. **Minerva Stomatol** 1997 May;46(5):233–46 (67 ref.) (Eng. Abstr.) **(Ita)**

DIAGNOSIS

MR imaging in retinoblastoma. Barkhof F, et al. **Eur Radiol** 1997;7(5):726–31

A special surface coil for high–resolution ocular MRI. Hosten N, et al. **Front Radiat Ther Oncol** 1997;30:20–5

Malignancy after retinoblastoma: secondary cancer or recurrence? Dickman PS, et al. **Hum Pathol** 1997 Feb; 28(2):200–5

The genetics of retinoblastoma and current diagnostic testing. Smith BJ, et al. **J Pediatr Ophthalmol Strabismus** 1996 Mar–Apr;33(2):120–3 (20 ref.)

Retinoblastoma: clinical and immunocytochemical observations. Karim MM, et al. **Kobe J Med Sci** 1996 Jun; 42(3):151–61

Clinical and electron microscopic features of retinoblastoma. Karim MM, et al. **Kobe J Med Sci** 1996 Jun;42(3):163–72

Gadolinium enhancement: improved MRI detection of retinoblastoma extension into the optic nerve. Ainbinder DJ, et al. **Neuroradiology** 1996 Nov;38(8):778–81

Trilateral retinoblastoma with suprasellar involvement. Skulski M, et al. **Neuroradiology** 1997 Jan;39(1):41–3

Difficulties in excluding the diagnosis of retinoblastoma in cases of advanced Coats' disease: a clinicopathologic report. Steidl SM, et al. **Ophthalmologica** 1996; 210(6):336–40

DRUG THERAPY

Successful treatment with ranimustine and carboplatin for recurrent intraocular retinoblastoma with vitreous seeding. Ishii E, et al. **Am J Clin Oncol** 1996 Dec;19(6):562–5

Chemoreduction in the initial management of intraocular retinoblastoma. Shields CL, et al. **Arch Ophthalmol** 1996 Nov;114(11):1330–8

Antineoplastic effect of 1,25–dihydroxy–16–ene–23–yne–vitamin D3 analogue in transgenic mice with retinoblastoma. Shternfeld IS, et al. **Arch Ophthalmol** 1996 Nov;114(11):1396–401

Photodynamic targeting of human retinoblastoma cells using covalent low–density lipoprotein conjugates. Schmidt–Erfurth U, et al. **Br J Cancer** 1997;75(1):54–61

Chemotherapy in the treatment of retinoblastoma. O'Brien JM, et al. **Int Ophthalmol Clin** 1996 Spring;36(2):11–24 (58 ref.)

The effect of chemoreduction on retinoblastoma–induced retinal detachment. Shields CL, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun; 34(3):165–9

Preliminary results of primary chemotherapy in retinoblastoma. Bornfeld N, et al. **Klin Padiatr** 1997 Jul–Aug:209(4):216–21

What is the best method of prevention of therapeutic failures in CNS in high risk retinoblastoma? [letter; comment] Grześkowiak–Melanowska J, et al. **Med Pediatr Oncol** 1997 Jan;28(1):79. Comment on: Med Pediatr Oncol 1994;22(2):125–8.

Treatment of intraocular retinoblastoma with carboplatin and etoposide chemotherapy. Greenwald MJ, et al. **Ophthalmology** 1996 Dec;103(12):1989–97

EPIDEMIOLOGY

Incidence and survival of retinoblastoma in The Netherlands: a register based study 1862–1995. Moll AC, et al. **Br J Ophthalmol** 1997 Jul;81(7):559–62

Second primary tumors in patients with retinoblastoma. A review of the literature. Moll AC, et al. **Ophthalmic Genet** 1997 Mar;18(1):27–34 (33 ref.)

ETHNOLOGY

Retinoblastoma in Singapore: 1976 to 1995. Tan NW, et al. **Ann Acad Med Singapore** 1997 Mar;26(2):154–60

GENETICS

Deletion of RB exons 24 and 25 causes low–penetrance retinoblastoma. Bremner R, et al. **Am J Hum Genet** 1997 Sep;61(3):556–70

Predictive testing for retinoblastoma comes of age [editorial; comment] Gallie BL. **Am J Hum Genet** 1997 Aug; 61(2):279–81. Comment on: Am J Hum Genet 1997 Aug;61(2):282–94.

Bilateral retinoblastoma in a male patient with an X; 13 translocation: evidence for silencing of the RB1 gene by the spreading of X inactivation [letter] Jones C, et al. **Am J Hum Genet** 1997 Jun;60(6):1558–62

Genomic imprinting of the human serotonin–receptor (HTR2) gene involved in development of retinoblastoma. Kato MV, et al. **Am J Hum Genet** 1996 Nov;59(5):1084–90

Constitutional RB1–gene mutations in patients with isolated unilateral retinoblastoma [see comments] Lohmann DR, et al. **Am J Hum Genet** 1997 Aug;61(2):282–94. Comment in:

Am J Hum Genet 1997 Aug;61(2):279–81.
Retinoblastoma: a bilateral familial case. Eagle RC Jr, et al. **Arch Ophthalmol** 1996 Nov;114(11):1424–5
Cloning and characterization of the rat p130, a member of the retinoblastoma gene family. Sawada Y, et al. **Biochim Biophys Acta** 1997 Jul 10;1361(1):20–7
Hypermethylation in the retinoblastoma gene is associated with unilateral, sporadic retinoblastoma. Ohtani-Fujita N, et al. **Cancer Genet Cytogenet** 1997 Oct 1;98(1):43–9
Characterization by FISH of a t(5;13) in a patient with bilateral retinoblastoma. Triviño E, et al. **Cancer Genet Cytogenet** 1997 Jul 1;96(1):23–5
Loss of heterozygosity on chromosome 17 and mutation of the p53 gene in retinoblastoma. Kato MV, et al. **Cancer Lett** 1996 Aug 23;106(1):75–82
Extensive DNA methylation spanning the Rb promoter in retinoblastoma tumors. Stirzaker C, et al. **Cancer Res** 1997 Jun 1;57(11):2229–37
Investigation of the loss of heterozygosity and familial segregation by PCR in retinoblastoma. Yazici H, et al. **Clin Biochem** 1996 Dec;29(6):595–8
Constitutional nonsense germline mutations in the RB1 gene detected in patients with early onset unilateral retinoblastoma. Cowell JK, et al. **Eur J Cancer** 1996 Sep; 32A(10):1749–52
Bilateral spontaneously regressed retinoblastoma with preservation of vision [letter] Roberts BN, et al. **Eye** 1997; 11 (Pt 1):122–4
Intron 17 of the human retinoblastoma susceptibility gene encodes an actively transcribed G protein-coupled receptor gene. Herzog H, et al. **Genome Res** 1996 Sep; 6(9):858–61
Mutational scanning of large genes by extensive PCR multiplexing and two-dimensional electrophoresis: application to the RB1 gene. Van Orsouw NJ, et al. **Hum Mol Genet** 1996 Jun;5(6):755–61
The retinoblastoma gene: its role in cell cycle and cancer. Giordano A, et al. **In Vivo** 1996 Mar–Apr;10(2):223–7 (71 ref.)
Identification of mutations in the Ki-ras gene in human retinoblastoma. Bautista D, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2313–7
Insulin-like growth factor-I regulates transcription of the elastin gene through a putative retinoblastoma control element. A role for Sp3 acting as a repressor of elastin gene transcription. Conn KJ, et al. **J Biol Chem** 1996 Nov 15;271(46):28853–60
Three histopathological types of retinoblastoma and their relation to heredity and age of enucleation. Moll AC, et al. **J Med Genet** 1996 Nov;33(11):923–27
Alfred Knudson: two hits times 25 years [news] Kuska B. **J Natl Cancer Inst** 1997 Apr 2;89(7):470–3
Hereditary retinoblastoma, lipoma, and second primary cancers. Li FP, et al. **J Natl Cancer Inst** 1997 Jan 1; 89(1):83–4
The genetics of retinoblastoma and current diagnostic testing. Smith BJ, et al. **J Pediatr Ophthalmol Strabismus** 1996 Mar–Apr;33(2):120–3 (20 ref.)
Failure to detect mutations in the retinoblastoma protein-binding domain of the transcription factor E2F-1 in human cancers. Nakamura T, et al. **Jpn J Cancer Res** 1996 Dec;87(12):1204–9
Mutation detection and genetic counseling in retinoblastoma using heteroduplex analysis. Zhang Q, et al. **Jpn J Ophthalmol** 1995;39(4):432–7
Prognostic factors associated with loss of heterozygosity at the RB1 locus in retinoblastoma. Munier FL, et al. **Ophthalmic Genet** 1997 Mar;18(1):7–12
The polymerase chain reaction (PCR) in the routine genetic characterization of retinoblastoma: a tool for the clinical laboratory. Mastrangelo D, et al. **Surv Ophthalmol** 1997 Jan–Feb;41(4):331–40 (47 ref.)
Multiple changes in oncogenes and tumor suppressor genes in human retinoblastoma. Howard RO. **Trans Am Ophthalmol Soc** 1996;94:299–312; discussion 312–4
A linkage analysis in two families with bilateral retinoblastoma. Emre S, et al. **Turk J Pediatr** 1996 Oct–Dec;38(4):413–7
[Molecular genetics and diagnosis of retinoblastoma. Significance for ophthalmologic practice] Lohmann DR, et al. **Ophthalmologe** 1997 Apr;94(4):263–7 (11 ref.) (Eng. Abstr.) **(Ger)**
[Evaluation of cancer risk through genetic analysis?] Luz A. **Strahlenther Onkol** 1997 Sep;173(9):444–56 (178 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Human retinoblastoma: in vitro differentiation and immunoglobulin superfamily antigen modulation by retinoic acid. Conway RM, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):189–96

METABOLISM

Immunohistochemical analysis of c-Fos and c-Jun in retinoblastoma. Faraldi F, et al. **Acta Genet Med Gemellol (Roma)** 1996;45(1–2):289–91
p53 regulates apoptosis in human retinoblastoma. Nork TM, et al. **Arch Ophthalmol** 1997 Feb;115(2):213–9
Detection of membrane-associated human chorionic gonadotropin and its subunits on human cultured cancer cells of the nervous system. Acevedo HF, et al. **Cancer Detect Prev** 1997;21(4):295–303
Multidrug resistance protein (MRP) expression in retinoblastoma correlates with the rare failure of chemotherapy despite cyclosporine for reversal of P-glycoprotein. Chan HS, et al. **Cancer Res** 1997 Jun 15; 57(12):2325–30
Expression of vascular endothelial growth factor (VEGF) in retinoblastoma but not in posterior uveal melanoma. Kvanta A, et al. **Exp Eye Res** 1996 Nov;63(5):511–8
Overexpression of E2F1 in astrocytes leads to neoplastic transformation and changes in expression of retinoblastoma family members. Miyajima M, et al. **J Neurosci Res** 1996 Oct 1;46(1):108–13

NURSING

The power of humor and play as nursing interventions for a child with cancer: a case report. Frankenfield PK. **J Pediatr Oncol Nurs** 1996 Jan;13(1):15–20 (21 ref.)

PATHOLOGY

Papillary adenocarcinoma of the ciliary body simulating retinoblastoma. Günalp I, et al. **Am J Ophthalmol** 1997 Feb;123(2):268–9
Immunocytochemical features of retinoblastoma in an adult. Nork TM, et al. **Arch Ophthalmol** 1996 Nov;114(11):1402–6
Retinoblastoma--a histologic and immunohistologic study. Arora R, et al. **Indian J Pathol Microbiol** 1997 Jan; 40(1):37–46
Retinoblastoma. Biltjes IG. **J Belge Radiol** 1996 Dec; 79(6):263
Three histopathological types of retinoblastoma and their relation to heredity and age of enucleation. Moll AC, et al. **J Med Genet** 1996 Nov;33(11):923–27
Unilateral retinoblastoma in an adult: report of a case and review of the literature [see comments] Mietz H, et al. **Ophthalmology** 1997 Jan;104(1):43–7 (30 ref.). Comment in: Ophthalmology 1997 Aug;104(8):1207.
Fine-needle biopsy and retinoblastoma [letter; comment] Robertson DM. **Ophthalmology** 1997 Apr;104(4):567–8. Comment on: Ophthalmology 1996 Jun;103(6):949–52.
The topography of bilateral retinoblastoma lesions. Abramson DH, et al. **Retina** 1996;16(3):232–9
Human retinoblastoma: a morphological study of apoptotic, leukocytic, and vascular elements. Madigan MC, et al. **Ultrastruct Pathol** 1997 Mar–Apr;21(2):95–107
[Prolonged remission in a child with late brain metastasis of retinoblastoma] Marec-Bérard P, et al. **Arch Pediatr** 1996 Oct;3(10):1001–5 (Eng. Abstr.) **(Fre)**
[Invasion of the optic nerve in undifferentiated retinoblastoma] Florescu M, et al. **Oftalmologia** 1996 Oct–Dec;40(4):354–6 (7 ref.) (Eng. Abstr.) **(Rum)**

PHYSIOPATHOLOGY

Unilateral retinoblastoma in adults [letter; comment] Abramson DH. **Ophthalmology** 1997 Aug;104(8):1207. Comment on: Ophthalmology 1997 Jan;104(1):43–7.

RADIOGRAPHY

Local carboplatin and radiation therapy in the treatment of murine transgenic retinoblastoma. Murray TG, et al. **Arch Ophthalmol** 1996 Nov;114(11):1385–9
Efficacy of unanesthetized spiral computed tomography scanning in initial evaluation of childhood leukocoria. O'Brien JM, et al. **Ophthalmology** 1995 Sep;102(9):1345–50

RADIOTHERAPY

External radiotherapy for circumscribed choroidal haemangiomas using a modified retinoblastoma technique. Eide N, et al. **Acta Ophthalmol Scand** 1995 Dec; 73(6):547–50
Retinal detachment associated with type III retinoblastoma regression after cryotherapy and external-beam radiotherapy. Mullaney PB, et al. **Am J Ophthalmol** 1997 Jan;123(1):140–2
Retinoblastoma after chemoreduction and irradiation: preliminary results. Freire J, et al. **Front Radiat Ther Oncol** 1997;30:88–92
Whole-eye versus lens-sparing megavoltage therapy for retinoblastoma. Hungerford JL, et al. **Front Radiat Ther Oncol** 1997;30:81–7
Radiotherapy for retinoblastoma. Treatment strategies. Sauerwein W, et al. **Front Radiat Ther Oncol** 1997;30:93–6 (6 ref.)
Precision megavoltage external beam radiation therapy for retinoblastoma. Schipper J, et al. **Front Radiat Ther Oncol** 1997;30:65–80
Radiation therapy for retinoblastoma: a retrospective review of 120 patients. Pradhan DG, et al. **Int J Radiat Oncol Biol Phys** 1997 Aug 1;39(1):3–13
Cancer incidence after retinoblastoma. Radiation dose and sarcoma risk [see comments] Wong FL, et al. **JAMA** 1997 Oct 15;278(15):1262–7. Comment in: JAMA 1997 Oct 15;278(15):1284–5.
Retinoblastoma recurrence after iodine 125 plaque application. Spraul CW, et al. **Retina** 1996;16(2):135–8
Brachytherapy in primary ocular tumors. Freire JE, et al. **Semin Surg Oncol** 1997 May–Jun;13(3):167–76 (47 ref.)

SECONDARY

Pseudonucleoli in an aspirate of metastatic retinoblastoma [letter] Mandal S, et al. **Acta Cytol** 1996 Nov–Dec; 40(6):1330–1
Workup for metastatic retinoblastoma. A review of 261 patients. Karcioglu ZA, et al. **Ophthalmology** 1997 Feb; 104(2):307–12

SURGERY

Orbital avitene granuloma formation after enucleation for intraocular retinoblastoma. Abramson DH, et al. **Am J Ophthalmol** 1997 Apr;123(4):567–9

THERAPY

Strategies for approaching retinoblastoma tumor suppressor gene therapy. Xu HJ. **Adv Pharmacol** 1997;40:369–97 (145 ref.)
Retinal detachment associated with type III retinoblastoma regression after cryotherapy and external-beam radiotherapy. Mullaney PB, et al. **Am J Ophthalmol** 1997 Jan;123(1):140–2
A new era for the treatment of retinoblastoma [editorial] Ferris FL 3rd, et al. **Arch Ophthalmol** 1996 Nov; 114(11):1412
Chemotherapy with focal therapy can cure intraocular retinoblastoma without radiotherapy. Gallie BL, et al. **Arch Ophthalmol** 1996 Nov;114(11):1321–8
Results of combined chemotherapy and radiotherapy for advanced intraocular retinoblastoma. Kingston JE, et al. **Arch Ophthalmol** 1996 Nov;114(11):1339–43
Chemotherapy plus local treatment in the management of intraocular retinoblastoma. Murphree AL, et al. **Arch Ophthalmol** 1996 Nov;114(11):1348–56
Radiation therapy and ferromagnetic hyperthermia in the treatment of murine transgenic retinoblastoma. Murray TG, et al. **Arch Ophthalmol** 1996 Nov;114(11):1376–81
Bilateral macular retinoblastoma managed by chemoreduction and chemothermotherapy. Shields JA, et al. **Arch Ophthalmol** 1996 Nov;114(11):1426–7
Nasopharyngeal osteosarcoma as second malignant neoplasm in a post-treated unilateral retinoblastoma: report of a case and review of literature. Dubey SP, et al. **Int J Pediatr Otorhinolaryngol** 1996 Feb;34(3):265–71 (14 ref.)
Orbital development in long-term survivors of retinoblastoma. Kaste SC, et al. **J Clin Oncol** 1997 Mar; 15(3):1183–9
New and recurrent tumors in germinal retinoblastoma: is there a treatment effect? Merrill PT, et al. **Ophthalmic Genet** 1996 Sep;17(3):115–8
Treatment of spontaneously arising retinoblastoma tumors in transgenic mice with an attenuated herpes simplex virus mutant. Brandt CR, et al. **Virology** 1997 Mar 3; 229(1):283–91
[A new era in treatment of retinoblastoma (letter)] Armata J. **Klin Oczna** 1996;98(6):477 **(Pol)**
[Multimodality treatment for retinoblastoma in children] Durnov LA, et al. **Vestn Ross Akad Med Nauk** 1996; (10):28–33 (Eng. Abstr.) **(Rus)**
[Successful treatment of retinoblastoma] Gerinec A. **Cesk Slov Oftalmol** 1997 Jun;53(3):168–73 (Eng. Abstr.) **(Slo)**

ULTRASTRUCTURE

Clinical and electron microscopic features of retinoblastoma. Karim MM, et al. **Kobe J Med Sci** 1996 Jun;42(3):163–72

VETERINARY

Retinoblastoma in a dog. Syed NA, et al. **Arch Ophthalmol** 1997 Jun;115(6):758–63

RETINOBLASTOMA GENES see **GENES, RETINOBLASTOMA**

RETINOBLASTOMA NUCLEAR PHOSPHOPROTEIN P105-RB see **RETINOBLASTOMA PROTEIN**

RETINOBLASTOMA PROTEIN

ANALYSIS

Localization of a retinoblastoma-like protein in Entamoeba histolytica. De Dios Bravo G, et al. **Arch Med Res** 1997; 28 Spec No:21–3
Anomalous retinoblastoma protein expression in Sternberg-Reed cells in Hodgkin's disease: a comparative study with p53 and Ki67 expression. Sánchez-Beato M, et al. **Br J Cancer** 1996 Oct;74(7):1056–62
Expression and localization of the retinoblastoma gene during radiation-induced apoptosis in neonatal rat kidney. Gobé GC, et al. **Exp Cell Res** 1997 Sep 15;235(2):354–61
Detectability of retinoblastoma (Rb) gene product and p53 antigen expression decreases in stored paraffin sections [letter] Songun I, et al. **Histopathology** 1997 Jun;30(6):604–5
Reduced expression of retinoblastoma gene product (pRB) and high expression of p53 are associated with poor prognosis in ovarian cancer. Dong Y, et al. **Int J Cancer** 1997 Aug 22;74(4):407–15
Immunohistochemical evaluation of p53 and retinoblastoma proteins in relation to hyperthermia treatment: results in

human urothelial carcinomas. Okamura T, et al. **Int J Hyperthermia** 1996 Nov-Dec;12(6):813-24

Nuclear localization of DP and E2F transcription factors by heterodimeric partners and retinoblastoma protein family members. Magae J, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1717-26

The role of prognostic markers (MiB-1, RB, and bcl-2) in the diagnosis of parathyroid tumors. Vargas MP, et al. **Mod Pathol** 1997 Jan;10(1):12-7

Combined and sequential expression of p53, Rb, Ras and Bcl-2 in bronchial preneoplastic lesions. Ferron PE, et al. **Tumori** 1997 Mar-Apr;83(2):587-93

ANTAGONISTS & INHIBITORS

Gossypol inhibition of mitosis, cyclin D1 and Rb protein in human mammary cancer cells and cyclin-D1 transfected human fibrosarcoma cells. Ligueros M, et al. **Br J Cancer** 1997;76(1):21-8

Inhibition of pRb phosphorylation and cell-cycle progression by a 20-residue peptide derived from p16CDKN2/INK4A. Fåhraeus R, et al. **Curr Biol** 1996 Jan 1;6(1):84-91

Ras signalling is required for inactivation of the tumour suppressor pRb cell-cycle control protein. Mittnacht S, et al. **Curr Biol** 1997 Mar 1;7(3):219-21

Inactivation of pRB-related proteins p130 and p107 mediated by the J domain of simian virus 40 large T antigen. Stubdal H, et al. **Mol Cell Biol** 1997 Sep;17(9):4979-90

An old acquaintance resurfaces in human mesothelioma [news; comment] Wiman KG, et al. **Nat Med** 1997 Aug; 3(8):839-40. Comment on: Nat Med 1997 Aug;3(8):908-12. Comment on: Nat Med 1997 Aug;3(8):913-6.

BIOSYNTHESIS

Expression of EVI1 and the Retinoblastoma genes in acute myelogenous leukemia with t(3;13)(q26;q13-14). Yufu Y, et al. **Am J Hematol** 1996 Sep;53(1):30-4

p53 and Rb1 protein expression: are they prognostically useful in colorectal cancer? Poller DN, et al. **Br J Cancer** 1997;75(1):87-93

The expression of retinoblastoma protein in epidermis is induced by ultraviolet B exposure. Ueda M, et al. **Br J Dermatol** 1996 Sep;135(3):406-11

Molecular cloning, expression, and developmental characterization of the murine retinoblastoma-related gene Rb2/p130. Pertile P, et al. **Cell Growth Differ** 1995 Dec; 6(12):1659-64

Murine hepatic p53, RB, and CDK inhibitory protein expression following acute 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure. Rininger JA, et al. **Chemosphere** 1997 Mar-Apr; 34(5-7):1557-68

Angiotensin II and serum differentially regulate expression of cyclins, activity of cyclin-dependent kinases, and phosphorylation of retinoblastoma gene product in neonatal cardiac myocytes. Sadoshima J, et al. **Circ Res** 1997 Feb; 80(2):228-41

Retinoblastoma protein expression in endometrial hyperplasia and carcinoma. Niemann TH, et al. **Gynecol Oncol** 1997 May;65(2):232-6

Clonal analysis of human recurrent superficial bladder cancer by immunohistochemistry of P53 and retinoblastoma proteins. Chern HD, et al. **J Urol** 1996 Nov;156(5):1846-9

Concomitant presence of p16/cyclin-dependent kinase 4 and cyclin D/cyclin-dependent kinase 4 complexes in LNCaP prostatic cancer cell line. Itoh N, et al. **Jpn J Cancer Res** 1997 Mar;88(3):229-33

The retinoblastoma gene family is differentially expressed during embryogenesis. Jiang Z, et al. **Oncogene** 1997 Apr 17;14(15):1789-97

RB1 oncosuppressor gene over-expression inhibits tumor progression and induces melanogenesis in metastatic melanoma cells. Valente P, et al. **Oncogene** 1996 Sep 19; 13(6):1169-78

Adenoviral-mediated gene transfer of a constitutively active retinoblastoma gene inhibits human pancreatic tumor cell proliferation. Simeone DM, et al. **Surgery** 1997 Aug; 122(2):428-33; discussion 433-4

CHEMISTRY

Plant cells contain a novel member of the retinoblastoma family of growth regulatory proteins. Xie Q, et al. **EMBO J** 1996 Sep 16;15(18):4900-8

RRB1 and RRB2 encode maize retinoblastoma-related proteins that interact with a plant D-type cyclin and geminivirus replication protein. Ach RA, et al. **Mol Cell Biol** 1997 Sep;17(9):5077-86

Structural similarity between the pocket region of retinoblastoma tumour suppressor and the cyclin-box. Kim HY, et al. **Nat Struct Biol** 1997 May;4(5):390-5

[The retinoblastoma gene: from its basic understanding as a signal mediator for growth and differentiation to its use in the treatment of cancer] Lee WH, et al. **Gan To Kagaku Ryoho** 1997 Sep;24(11):1368-80 (87 ref.) (Eng. Abstr.) **(Jpn)**

DEFICIENCY

Altered expression of the retinoblastoma tumor-suppressor gene in leukemic cell lines inhibits induction of differentiation but not G1-accumulation. Bergh G, et al. **Blood** 1997 Apr 15;89(8):2938-50

DNA rereplication in the presence of mitotic spindle inhibitors in human and mouse fibroblasts lacking either p53 or pRb function. Di Leonardo A, et al. **Cancer Res** 1997 Mar 15;57(6):1013-9

Skeletal muscle cells lacking the retinoblastoma protein display defects in muscle gene expression and accumulate in S and G2 phases of the cell cycle. Novitch BG, et al. **J Cell Biol** 1996 Oct;135(2):441-56

Increased histone H1 phosphorylation and relaxed chromatin structure in Rb-deficient fibroblasts. Herrera RE, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11510-5

GENETICS

Abrogation of the Rb/p16 tumor-suppressive pathway in virtually all pancreatic carcinomas. Schutte M, et al. **Cancer Res** 1997 Aug 1;57(15):3126-30

Immortalization of primary epithelial cells by E1A 12S requires late, second exon-encoded functions in addition to complex formation with pRB and p300. Gopalakrishnan S, et al. **Cell Growth Differ** 1997 May;8(5):541-51

p21ras-mediated decrease of the retinoblastoma protein in fibroblasts occurs through growth factor-dependent mechanisms. Klvinen L, et al. **Cell Growth Differ** 1996 Dec; 7(12):1705-12

Adenoviral constructs encoding phosphorylation-competent full-length and truncated forms of the human retinoblastoma protein inhibit myocyte proliferation and neointima formation [see comments] Smith RC, et al. **Circulation** 1997 Sep 16;96(6):1899-905. Comment in: Circulation 1997 Sep 16;96(6):1717-9.

Plant cells contain a novel member of the retinoblastoma family of growth regulatory proteins. Xie Q, et al. **EMBO J** 1996 Sep 16;15(18):4900-8

The Rab protein family: genetic mapping of six Rab genes in the mouse. Barbosa MD, et al. **Genomics** 1995 Dec 10; 30(3):439-44

Mutational scanning of large genes by extensive PCR multiplexing and two-dimensional electrophoresis: application to the RB1 gene. Van Orsouw NJ, et al. **Hum Mol Genet** 1996 Jun;5(6):755-61

2-Aminopurine unravels a role for pRB in the regulation of gene expression by transforming growth factor beta. Giannini G, et al. **J Biol Chem** 1997 Feb 21;272(8):5313-9

Fas stimulation induces RB dephosphorylation and proteolysis that is blocked by inhibitors of the ICE protease family. Dou QP, et al. **J Cell Biochem** 1997 Mar 15; 64(4):586-94

Linkage mapping of rat Rb1 gene on chromosome 15. Yamada S, et al. **Mamm Genome** 1997 Jun;8(6):454-5

TGF beta-induced growth inhibition in primary fibroblasts requires the retinoblastoma protein. Herrera RE, et al. **Mol Biol Cell** 1996 Sep;7(9):1335-42

The Rb family contains a conserved cyclin-dependent-kinase-regulated transcriptional repressor motif. Chow KN, et al. **Mol Cell Biol** 1996 Dec; 16(12):7173-81

Cyclin-mediated inhibition of muscle gene expression via a mechanism that is independent of pRB hyperphosphorylation. Skapek SX, et al. **Mol Cell Biol** 1996 Dec;16(12):7043-53

Human glioblastomas with no alterations of the CDKN2A (p16INK4A, MTS1) and CDK4 genes have frequent mutations of the retinoblastoma gene. Ichimura K, et al. **Oncogene** 1996 Sep 5;13(5):1065-72

Accumulation of p16INK4a in mouse fibroblasts as a function of replicative senescence and not of retinoblastoma gene status. Palmero I, et al. **Oncogene** 1997 Jul 31;15(5):495-503

Inhibition of retinoblastoma protein translation by UVB in human melanocytic cells and reduced cell cycle arrest following repeated irradiation. Pedley J, et al. **Oncogene** 1996 Sep 19;13(6):1335-42

A maize cDNA encoding a member of the retinoblastoma protein family: involvement in endoreduplication. Grafi G, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8962-7

Loss of the retinoblastoma protein-related p130 protein in small cell lung carcinoma. Helin K, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6933-8

IMMUNOLOGY

Molecular genetic and immunohistochemical analysis of the tumor suppressor genes Rb and p53 in palmar and aggressive fibromatosis. Muller E, et al. **Diagn Mol Pathol** 1996 Sep;5(3):194-200

Use of sequential immunoprecipitation to reveal discrete, separable populations of SV40 T-antigen binding to host cellular proteins. Ludlow JW. **J Virol Methods** 1996 May; 59(1-2):105-12

METABOLISM

The retinoblastoma gene product is a negative modulator of the apoptotic pathway. Fan G, et al. **Adv Enzyme Regul** 1996;36:283-303

Retinoblastoma protein expressed in human non-Hodgkin's lymphoma cells generates resistance against radiation-induced apoptosis. Ishii H, et al. **Am J Hematol** 1997 May;55(1):46-8

Differential retinoblastoma protein expression in neuroendocrine tumors of the lung. Potential diagnostic implications. Cagle PT, et al. **Am J Pathol** 1997 Feb; 150(2):393-400

Retinoblastoma (pRb) protein immunoexpression in colorectal cancer. Chetty R, et al. **Anticancer Res** 1997 Jul-Aug;17(4A):2593-7

Interference with c-myc expression and RB phosphorylation during TNF-mediated growth arrest in human endothelial cells. López-Marure R, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):819-24

Association of protein phosphatase-1delta with the retinoblastoma protein and reversible phosphatase activation in mitotic HeLa cells and in cells released from mitosis. Puntoni F, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):704-8

Transcriptional activation of the human c-myc gene by simian virus 40 large T antigen without binding to p53 and RB proteins in the transient expression system. Shimazu T, et al. **Biochem Biophys Res Commun** 1997 Jun 9; 235(1):153-7

Novel phosphorylated forms of E2F-1 transcription factor bind to the retinoblastoma protein in cells overexpressing an E2F-1 cDNA. Yang XH, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):336-9

Effects of IFN-beta and 1,25-dihydroxyvitamin D3 on cellular proliferation, induction of 2',5'-oligoadenylate (2-5A) synthetase and changes in immunoreactive pRB/p53 in human prostatic JCA-1 cells. Faiella L, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1085-92

A unique cathepsin-like protease isolated from CV-1 cells is involved in rapid degradation of retinoblastoma susceptibility gene product, RB, and transcription factor SP1. Nishinaka T, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):274-86

Adverse clinical outcome in Hodgkin's disease is associated with loss of retinoblastoma protein expression, high Ki67 proliferation index, and absence of Epstein-Barr virus-latent membrane protein 1 expression. Morente MM, et al. **Blood** 1997 Sep 15;90(6):2429-36

Control of cell cycle progression in human natural killer cells through redox regulation of expression and phosphorylation of retinoblastoma gene product protein. Yamauchi A, et al. **Blood** 1997 Jun 1;89(11):4092-9

Altered retinoblastoma protein expression in nonsmall cell lung cancer: its synergistic effects with altered ras and p53 protein status on prognosis. Dosaka-Akita H, et al. **Cancer** 1997 Apr 1;79(7):1329-37

Retinoblastoma protein expression and MIB-1 correlate with survival of patients with malignant astrocytoma. Nakamura M, et al. **Cancer** 1997 Jul 15;80(2):242-9

G1 phase accumulation induced by UCN-01 is associated with dephosphorylation of Rb and CDK2 proteins as well as induction of CDK inhibitor p21/Cip1/WAF1/Sdi1 in p53-mutated human epidermoid carcinoma A431 cells. Akiyama T, et al. **Cancer Res** 1997 Apr 15;57(8):1495-501

Defects in p21WAF1/CIP1, Rb, and c-myc signaling in phorbol ester-resistant cancer cells. Blagosklonny MV, et al. **Cancer Res** 1997 Jan 15;57(2):320-5

E7 protein of human papilloma virus-16 induces degradation of retinoblastoma protein through the ubiquitin-proteasome pathway. Boyer SN, et al. **Cancer Res** 1996 Oct 15; 56(20):4620-4

Cooperative effects of p53 and pRB alterations in primary superficial bladder tumors. Cordon-Cardo C, et al. **Cancer Res** 1997 Apr 1;57(7):1217-21

Altered p16INK4 and retinoblastoma protein status in non-small cell lung cancer: potential synergistic effect with altered p53 protein on proliferative activity. Kinoshita I, et al. **Cancer Res** 1996 Dec 15;56(24):5557-62

Increasing c-FMS (CSF-1 receptor) expression decreases retinoic acid concentration needed to cause cell differentiation and retinoblastoma protein hypophosphorylation. Yen A, et al. **Cancer Res** 1997 May 15;57(10):2020-8

Gamma-interferon induces an irreversible growth arrest in mid-G1 in mammary epithelial cells which correlates with a block in hyperphosphorylation of retinoblastoma. Harvat BL, et al. **Cell Growth Differ** 1996 Mar;7(3):289-300

Staurosporine-induced G1 arrest is associated with the induction and accumulation of cyclin-dependent kinase inhibitors. Kwon TK, et al. **Cell Growth Differ** 1996 Oct; 7(10):1305-13

Inactivation of retinoblastoma family proteins by SV40 T antigen results in creation of a hepatocyte growth factor/scatter factor autocrine loop associated with an epithelial-fibroblastoid conversion and invasiveness. Martel C, et al. **Cell Growth Differ** 1997 Feb;8(2):165-78

Cell cycle-independent regulation of p21Waf1/Cip1 and retinoblastoma protein during okadaic acid-induced apoptosis is coupled with induction of Bax protein in human breast carcinoma cells. Sheikh MS, et al. **Cell Growth Differ** 1996 Dec;7(12):1599-607

The amino terminus of the retinoblastoma (Rb) protein associates with a cyclin-dependent kinase-like kinase via Rb amino acids required for growth suppression. Sterner JM, et al. **Cell Growth Differ** 1996 Jan;7(1):53-64

Inhibition of retinoblastoma protein phosphorylation by myogenesis-induced changes in the subunit composition of the cyclin-dependent kinase 4 complex. Wang J, et al. **Cell Growth Differ** 1996 Nov;7(11):1471-8

Activity of the retinoblastoma family proteins, pRB, p107, and p130, during cellular proliferation and differentiation. Sidle A, et al. **Crit Rev Biochem Mol Biol** 1996 Jun; 31(3):237-71 (197 ref.)

Constitutively active protein phosphatase 1alpha causes Rb-dependent G1 arrest in human cancer cells. Berndt N,

et al. **Curr Biol** 1997 Jun 1;7(6):375–86

The helix–loop–helix protein Id–1 and a retinoblastoma protein binding mutant of SV40 T antigen synergize to reactivate DNA synthesis in senescent human fibroblasts. Hara E, et al. **Dev Genet** 1996;18(2):161–72

Hyperphosphorylation of retinoblastoma protein and stimulation of growth by okadaic acid in human pancreatic cancer. Hirai A, et al. **Dig Dis Sci** 1996 Oct;41(10):1975–80

Interaction of rat Cdc37–related protein with retinoblastoma gene product. Ozaki T, et al. **DNA Cell Biol** 1996 Nov; 15(11):975–9

Specific cleavage of the retinoblastoma protein by an ICE–like protease in apoptosis. Jänicke RU, et al. **EMBO J** 1996 Dec 16;15(24):6969–78

Mechanistic analysis of RNA polymerase III regulation by the retinoblastoma protein. Larminie CG, et al. **EMBO J** 1997 Apr 15;16(8):2061–71

The PTPase YopH inhibits uptake of Yersinia, tyrosine phosphorylation of p130Cas and FAK, and the associated accumulation of these proteins in peripheral focal adhesions. Persson C, et al. **EMBO J** 1997 May 1; 16(9):2307–18

Dual mechanisms of repression of E2F1 activity by the retinoblastoma gene product. Zacksenhaus E, et al. **EMBO J** 1996 Nov 1;15(21):5917–27

Formation of the early–region–2 transcription–factor–1–retinoblastoma–protein (E2F–1–RB) transrepressor and release of the retinoblastoma protein from nuclear complexes containing cyclin A is induced by interferon alpha in U937V cells but not in interferon–alpha–resistant U937VR cells. Kirch HC, et al. **Eur J Biochem** 1997 Jun 15;246(3):736–44

Absence of retinoblastoma gene product in human primary oral cavity carcinomas. Pavelic ZP, et al. **Eur J Cancer B Oral Oncol** 1996 Sep;32B(5):347–51

Concentration of RB protein in nucleus vs. cytoplasm is stable as phosphorylation of RB changes during the cell cycle and differentiation. Yen A, et al. **Eur J Cell Biol** 1997 Feb;72(2):159–65

Phosphorylation of the three Rb protein family members is a common step of the cAMP–, the growth factor, and the phorbol ester–mitogenic cascades but is not necessary for the hypertrophy induced by insulin. Coulonval K, et al. **Exp Cell Res** 1997 Jun 15;233(2):395–8

FMS (CSF–1 receptor) prolongs cell cycle and promotes retinoic acid–induced hypophosphorylation of retinoblastoma protein, G1 arrest, and cell differentiation. Yen A, et al. **Exp Cell Res** 1996 Nov 25;229(1):111–25

Failure to activate interleukin 1beta–converting enzyme–like proteases and to cleave retinoblastoma protein in drug–resistant cells. An B, et al. **FEBS Lett** 1996 Dec 9; 399(1–2):158–62

Enterocyte differentiation is compatible with SV40 large T expression and loss of p53 function in human colonic Caco–2 cells. Status of the pRb1 and pRb2 tumor suppressor gene products. Djelloul S, et al. **FEBS Lett** 1997 Apr 14;406(3):234–42

The retinoblastoma gene product protects E2F–1 from degradation by the ubiquitin–proteasome pathway. Hofmann F, et al. **Genes Dev** 1996 Dec 1;10(23):2949–59

E2F1–induced apoptosis requires DNA binding but not transactivation and is inhibited by the retinoblastoma protein through direct interaction. Hsieh JK, et al. **Genes Dev** 1997 Jul 15;11(14):1840–52

pRB and p107/p130 are required for the regulated expression of different sets of E2F responsive genes. Hurford RK Jr, et al. **Genes Dev** 1997 Jun 1;11(11):1447–63

Cyclin E–induced S phase without activation of the pRb/E2F pathway. Lukas J, et al. **Genes Dev** 1997 Jun 1;11(11):1479–92

The retinoblastoma gene family and its role in proliferation, differentiation and development. De Luca A, et al. **Histol Histopathol** 1996 Oct;11(4):1029–34 (65 ref.)

Loss of RB and MTS1/CDKN2 (p16) expression in human sarcomas. Cohen JA, et al. **Hum Pathol** 1997 Aug; 28(8):893–8

Cyclin–D1–gene amplification and expression in breast carcinoma: relation with clinicopathologic characteristics and with retinoblastoma gene product, p53 and p21WAF1 immunohistochemical expression. Barbareschi M, et al. **Int J Cancer** 1997 Apr 22;74(2):171–4

Interaction of BCR–ABL with the retinoblastoma protein in Philadelphia chromosome–positive cell lines. Miyamura T, et al. **Int J Hematol** 1997 Feb;65(2):115–21

The related adhesion focal tyrosine kinase differentially phosphorylates p130Cas and the Cas–like protein, p105HEF1. Astier A, et al. **J Biol Chem** 1997 Aug 8; 272(32):19719–24

Tyrosine phosphorylation of p130(cas) by bombesin, lysophosphatidic acid, phorbol esters, and platelet–derived growth factor. Signaling pathways and formation of a p130(cas)–Crk complex. Casamassima A, et al. **J Biol Chem** 1997 Apr 4;272(14):9363–70

RNA polymerase III transcription repressed by Rb through its interactions with TFIIIB and TFIIIC2. Chu WM, et al. **J Biol Chem** 1997 Jun 6;272(23):14755–61

Detection and functional characterization of p180, a novel cell cycle regulated yeast transcription factor that binds retinoblastoma control elements. Cuevo RS, et al. **J Biol Chem** 1997 Feb 7;272(6):3813–22

Kinetic characterization of the human retinoblastoma protein bipartite nuclear localization sequence (NLS) in vivo and in vitro. A comparison with the SV40 large T–antigen NLS. Efthymiadis A, et al. **J Biol Chem** 1997 Aug 29; 272(35):22134–9

Protein kinase C isozyme–mediated cell cycle arrest involves induction of p21(waf1/cip1) and p27(kip1) and hypophosphorylation of the retinoblastoma protein in intestinal epithelial cells. Frey MR, et al. **J Biol Chem** 1997 Apr 4;272(14):9424–35

Neuronal Cdc2–like kinase (Nclk) binds and phosphorylates the retinoblastoma protein. Lee KY, et al. **J Biol Chem** 1997 Feb 28;272(9):5622–6

The retinoblastoma interacting zinc finger gene RIZ produces a PR domain–lacking product through an internal promoter. Liu L, et al. **J Biol Chem** 1997 Jan 31; 272(5):2984–91

High molecular weight protein phosphatase type 1 dephosphorylates the retinoblastoma protein. Nelson DA, et al. **J Biol Chem** 1997 Feb 14;272(7):4528–35

Regulation and expression of retinoblastoma proteins p107 and p130 during 3T3–L1 adipocyte differentiation. Richon VM, et al. **J Biol Chem** 1997 Apr 11;272(15):10117–24

The retinoblastoma gene product (Rb) induces binding of a conformationally inactive nuclear factor–kappaB. Tamami M, et al. **J Biol Chem** 1996 Oct 4;271(40):24551–6

A novel proximal element mediates the regulation of mouse Ren–1C promoter by retinoblastoma protein in cultured cells. Tamura K, et al. **J Biol Chem** 1997 Jul 4; 272(27):16845–51

Degradation of retinoblastoma protein in tumor necrosis factor– and CD95–induced cell death. Tan X, et al. **J Biol Chem** 1997 Apr 11;272(15):9613–6

Differential phosphorylation of the retinoblastoma protein by G1/S cyclin–dependent kinases. Zarkowska T, et al. **J Biol Chem** 1997 May 9;272(19):12738–46

Inducible expression of cyclin D1 in T–47D human breast cancer cells is sufficient for Cdk2 activation and pRB hyperphosphorylation. Musgrove EA, et al. **J Cell Biochem** 1996 Mar 1;60(3):363–78

Newt myotubes reenter the cell cycle by phosphorylation of the retinoblastoma protein. Tanaka EM, et al. **J Cell Biol** 1997 Jan 13;136(1):155–65

CDC2–related kinase PITALRE phosphorylates pRb exclusively on serine and is widely expressed in human tissues. De Luca A, et al. **J Cell Physiol** 1997 Aug; 172(2):265–73

Relation between retinoblastoma and p53 proteins in human papilloma viruses 16/18 positive and negative cancers of the uterine cervix. Chetty R, et al. **J Clin Pathol** 1997 May; 50(5):413–6

Analysis of phosphorylation of pRB and its regulatory proteins in breast cancer. Wakasugi E, et al. **J Clin Pathol** 1997 May;50(5):407–12

Colonic retinoblastoma protein and proliferation in cancer and non–cancer patients. Kohn GJ, et al. **J Gastroenterol Hepatol** 1997 Mar;12(3):198–203

Characterization of the new immunosuppressive drug undecylprodigiosin in human lymphocytes: retinoblastoma protein, cyclin–dependent kinase–2, and cyclin–dependent kinase–4 as molecular targets. Songia S, et al. **J Immunol** 1997 Apr 15;158(8):3987–95

Retinoblastoma protein in human breast carcinoma: immunohistochemical study using a new monoclonal antibody effective on routinely processed tissues. Anderson JJ, et al. **J Pathol** 1996 Sep;180(1):65–70

Prognostic factors for fibromatoses: a correlation of proliferation index, estrogen receptor, p53, retinoblastoma, and src gene products and clinical features with outcome. Moffatt EJ, et al. **J Surg Oncol** 1997 Jun;65(2):117–22

p53, bcl–2 and retinoblastoma proteins as long–term prognostic markers in localized carcinoma of the prostate. Theodorescu D, et al. **J Urol** 1997 Jul;158(1):131–7

The cyclin encoded by Kaposi's sarcoma–associated herpesvirus stimulates cdk6 to phosphorylate the retinoblastoma protein and histone H1. Godden–Kent D, et al. **J Virol** 1997 Jun;71(6):4193–8

Differential interaction of temperature–sensitive simian virus 40 T antigens with tumor suppressors pRb and p53. Ray S, et al. **J Virol** 1996 Oct;70(10):7224–7

Adding an Rb–binding site to an N–terminally truncated simian virus 40 T antigen restores growth to high cell density, and the T common region in trans provides anchorage–independent growth and rapid growth in low serum concentrations. Tevethia MJ, et al. **J Virol** 1997 Mar; 71(3):1888–96

TGF–beta1–induced cell cycle arrest in renal mesangial cells involves inhibition of cyclin E–cdk 2 activation and retinoblastoma protein phosphorylation. Schoecklmann HO, et al. **Kidney Int** 1997 Apr;51(4):1228–36

p53, retinoblastoma gene product, and cyclin protein expression in human papillomavirus virus DNA–positive cervical intraepithelial neoplasia and invasive cancer. Amortegui AJ, et al. **Mod Pathol** 1995 Dec;8(9):907–12

Cyclin D1/Cdk4 regulates retinoblastoma protein–mediated cell cycle arrest by site–specific phosphorylation. Connell–Crowley L, et al. **Mol Biol Cell** 1997 Feb; 8(2):287–301

Dual mechanisms for the inhibition of E2F binding to RB by cyclin–dependent kinase–mediated RB phosphorylation. Knudsen ES, et al. **Mol Cell Biol** 1997 Oct;17(10):5771–83

Convergence of mitogenic signalling cascades from diverse classes of receptors at the cyclin D–cyclin–dependent kinase–pRb–controlled G1 checkpoint. Lukas J, et al. **Mol Cell Biol** 1996 Dec;16(12):6917–25

Tissue transglutaminase–dependent posttranslational modification of the retinoblastoma gene product in promonocytic cells undergoing apoptosis. Oliverio S, et al. **Mol Cell Biol** 1997 Oct;17(10):6040–8

A novel E1A domain mediates skeletal–muscle–specific enhancer repression independently of pRB and p300 binding. Sandmöller A, et al. **Mol Cell Biol** 1996 Oct; 16(10):5846–56

Mechanism of repression of RNA polymerase I transcription by the retinoblastoma protein. Voit R, et al. **Mol Cell Biol** 1997 Aug;17(8):4230–7

Ionizing radiation and teniposide increase p21(waf1/cip1) and promote Rb dephosphorylation but fail to suppress E2F activity in MCF–7 breast tumor cells. Orr MS, et al. **Mol Pharmacol** 1997 Sep;52(3):373–9

p53 and WAF1 are induced and Rb protein is hypophosphorylated during cell growth inhibition by the thymidylate synthase inhibitor ZD1694 (Tomudex). Yin MB, et al. **Mol Pharmacol** 1997 Apr;51(4):630–6

The retinoblastoma gene family pRb/p105, p107, pRb2/p130 and simian virus–40 large T–antigen in human mesotheliomas [see comments] De Luca A, et al. **Nat Med** 1997 Aug;3(8):913–6. Comment in: Nat Med 1997 Aug;3(8):839–40.

Ras signalling linked to the cell–cycle machinery by the retinoblastoma protein [published erratum appears in Nature 1997 Apr 3;386(6624):521] Peeper DS, et al. **Nature** 1997 Mar 13;386(6621):177–81

p120–v–Abl expression overcomes TGF–beta1 negative regulation of c–myc transcription but not cell growth. Birchenall–Roberts MC, et al. **Oncogene** 1996 Oct 3; 13(7):1499–509

Epstein–Barr virus exploits the normal cell pathway to regulate Rb activity during the immortalisation of primary B–cells. Cannell EJ, et al. **Oncogene** 1996 Oct 3; 13(7):1413–21

Apoptosis is associated with cleavage of a 5 kDa fragment from RB which mimics dephosphorylation and modulates E2F binding. Chen WD, et al. **Oncogene** 1997 Mar 13; 14(10):1243–8

The RB/p107/p130 phosphorylation pathway is not inhibited in rapamycin–induced G1–prolongation of NIH3T3 cells. Chen Y, et al. **Oncogene** 1996 Oct 17;13(8):1765–71

Regulation of tumor suppressor proteins, p53 and retinoblastoma, by estrogen and antiestrogens in breast cancer cells. Hurd C, et al. **Oncogene** 1997 Aug 18; 15(8):991–5

Expression of the retinoblastoma (RB) tumor suppressor gene inhibits tumor cell invasion in vitro. Li J, et al. **Oncogene** 1996 Dec 5;13(11):2379–86

p53–mediated accumulation of hypophosphorylated pRb after the G1 restriction point fails to halt cell cycle progression. Linke SP, et al. **Oncogene** 1997 Jul 17; 15(3):337–45

Characterization of the mitotic phase pRb–directed protein phosphatase activity. Nelson DA, et al. **Oncogene** 1997 May 22;14(20):2407–15

Deregulation of cyclin E and D1 in breast cancer is associated with inactivation of the retinoblastoma protein. Nielsen NH, et al. **Oncogene** 1997 Jan 23;14(3):295–304

Inhibition of retinoblastoma protein translation by UVB in human melanocytic cells and reduced cell cycle arrest following repeated irradiation. Pedley J, et al. **Oncogene** 1996 Sep 19;13(6):1335–42

Rb interacts with TAF(II)250/TFIID through multiple domains. Shao Z, et al. **Oncogene** 1997 Jul 24;15(4):385–92

Apoptosis induced by ectopic expression of cyclin D1 but not cyclin E. Sofer–Levi Y, et al. **Oncogene** 1996 Dec 5; 13(11):2431–7

Glucose–regulated stresses cause decreased expression of cyclin D1 and hypophosphorylation of retinoblastoma protein in human cancer cells. Tomida A, et al. **Oncogene** 1996 Dec 19;13(12):2699–705

Monoclonal antibodies specific for underphosphorylated retinoblastoma protein identify a cell cycle regulated phosphorylation site targeted by CDKs. Zarkowska T, et al. **Oncogene** 1997 Jan 16;14(2):249–54

Differing effects of staurosporine and UCN–01 on RB protein phosphorylation and expression of lung cancer cell lines. Shimizu E, et al. **Oncology** 1996 Nov–Dec;53(6):494–504

Regulation of E2F through ubiquitin–proteasome–dependent degradation: stabilization by the pRB tumor suppressor protein. Campanero MR, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2221–6

A thyroid hormone receptor coactivator negatively regulated by the retinoblastoma protein. Chang KH, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9040–5

E2F4–RB and E2F4–p107 complexes suppress gene expression by transforming growth factor beta through E2F binding sites. Li JM, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4948–53

The proliferation potential protein–related (P2P–R) gene with domains encoding heterogeneous nuclear ribonucleoprotein association and Rb1 binding shows repressed expression during terminal differentiation. Witte MM, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1212–7

RB kinases and RB–binding proteins: new points of view. Taya Y. **Trends Biochem Sci** 1997 Jan;22(1):14–7 (50 ref.)

Regulation of RNA polymerases I and III by the retinoblastoma protein: a mechanism for growth control?

White RJ. **Trends Biochem Sci** 1997 Mar;22(3):77–80 (33 ref.)

Interaction of mouse adenovirus type 1 early region 1A protein with cellular proteins pRb and p107. Smith K, et al. **Virology** 1996 Oct 1;224(1):184–97

[Preparation of a retinoblastoma gene with a mutation in the C–domain and assessment of growth–suppressing activity of its product] Popov BV, et al. **Mol Biol (Mosk)** 1997 Mar–Apr;31(2):324–31 **(Rus)**

PHARMACOLOGY

[Control of cell proliferation by the retinoblastoma gene product (editorial)] Trouche D. **Pathol Biol (Paris)** 1997 Jan;45(1):5–8 (18 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Adrenocortical neoplasms: role of prognostic markers MIB–1, P53, and RB. Vargas MP, et al. **Am J Surg Pathol** 1997 May;21(5):556–62

Recent insights into the functions of the retinoblastoma susceptibility gene product. Kaelin WG Jr. **Cancer Invest** 1997;15(3):243–54 (183 ref.)

Vitamin D3 reduces the apoptotic effect of IFN–gamma but does not facilitate HLA class II inducibility in RB–defective cells. Schmidt B, et al. **Cancer Lett** 1996 Dec 20;110(1–2):169–76

The p16–cyclin D/Cdk4–pRb pathway as a functional unit frequently altered in melanoma pathogenesis. Bartkova J, et al. **Cancer Res** 1996 Dec 1;56(23):5475–83

Rb functions to inhibit apoptosis during myocyte differentiation. Wang J, et al. **Cancer Res** 1997 Feb 1; 57(3):351–4

The retinoblastoma protein pathway and the restriction point. Bartek J, et al. **Curr Opin Cell Biol** 1996 Dec;8(6):805–14 (71 ref.)

Retinoblastoma protein in growth suppression and death protection. Wang JY. **Curr Opin Genet Dev** 1997 Feb; 7(1):39–45 (51 ref.)

The retinoblastoma protein: a master regulator of cell cycle, differentiation and apoptosis. Herwig S, et al. **Eur J Biochem** 1997 Jun 15;246(3):581–601 (396 ref.)

Retinoblastoma protein positively regulates terminal adipocyte differentiation through direct interaction with C/EBPs. Chen PL, et al. **Genes Dev** 1996 Nov 1; 10(21):2794–804

pRb controls proliferation, differentiation, and death of skeletal muscle cells and other lineages during embryogenesis. Zacksenhaus E, et al. **Genes Dev** 1996 Dec 1;10(23):3051–64

A novel link between REC2, a DNA recombinase, the retinoblastoma protein, and apoptosis. Fan G, et al. **J Biol Chem** 1997 Aug 1;272(31):19413–7

Retinoblastoma protein–dependent growth signal conflict and caspase activity are required for protein kinase C–signaled apoptosis of prostate epithelial cells. Zhao X, et al. **J Biol Chem** 1997 Sep 5;272(36):22751–7

Retinoblastoma protein family in cell cycle and cancer: a review. Paggi MG, et al. **J Cell Biochem** 1996 Sep 1; 62(3):418–30 (160 ref.)

The retinoblastoma gene product activates transcription of the hepatitis B virus pregenomic promoter through the Sp1 binding sites. Park GT, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2775–80

The retinoblastoma susceptibility gene RB–1 in multiple myeloma. Juge–Morineau N, et al. **Leuk Lymphoma** 1997 Jan;24(3–4):229–37 (71 ref.)

The human retinoblastoma gene product suppresses ceramide–induced apoptosis in human bladder tumor cells. McConkey DJ, et al. **Oncogene** 1996 Oct 17;13(8):1693–700

Differentiation induced by RB expression and apoptosis induced by p53 expression in an osteosarcoma cell line. Ookawa K, et al. **Oncogene** 1997 Mar 27;14(12):1389–96

[The retinoblastoma gene: from its basic understanding as a signal mediator for growth and differentiation to its use in the treatment of cancer] Lee WH, et al. **Gan To Kagaku Ryoho** 1997 Sep;24(11):1368–80 (87 ref.) (Eng. Abstr.) **(Jpn)**

[Study of the cell cycle–dependent phosphorylation of the RB protein to the development of a method to cure cancer] Taya Y. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1737–41 (33 ref.) **(Jpn)**

RETINOIC ACID see **TRETINOIN**

13–CIS–RETINOIC ACID see **ISOTRETINOIN**

RETINOIC ACID–BINDING PROTEINS see **RECEPTORS, RETINOIC ACID**

RETINOIC ACID RECEPTORS see **RECEPTORS, RETINOIC ACID**

RETINOIDS

Terminations of pregnancy for exposure to oral retinoids in South Australia, 1985–1993. Chan A, et al. **Aust N Z J Obstet Gynaecol** 1995 Nov;35(4):422–6

IUPAC–IUBMB Joint Commission on Biochemical Nomenclature (JCBN) and Nomenclature Committee of IUBMB (NC–IUBMB). Newsletter 1996. Liébecq C. **Eur J Biochem** 1997 Jul 15;247(2):733–9

Retinoid signalling during embryogenesis. Pijnappel WW, et al. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S29–31 (20 ref.)

Tazarotene: A New Generation of Receptor–Selective Retinoids. Proceedings of a symposium. Vancouver, British Columbia, Canada, May 28–31, 1996. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 3):S1–40

[Retinoids and glial tumors. A new therapeutic approach? (editorial)] Defer G. **Rev Neurol (Paris)** 1996 Nov; 152(11):653–7 (24 ref.) **(Fre)**

ADMINISTRATION & DOSAGE

Retinoids synergize with IL–2 to increase interferon–gamma production by peripheral blood mononuclear cells via induction of IL–12. Fox FE, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:337–40

Synergistic activation of the hydratase but not the ApoA1 gene by gemfibrozil and retinoids. Mukherjee R, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:734–5

Oral retinoids—efficacy and toxicity in psoriasis. Gollnick HP. **Br J Dermatol** 1996 Oct;135 Suppl 49:6–17 (80 ref.)

Tazarotene gel: efficacy and safety in plaque psoriasis. Weinstein GD. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 3):S33–8 (19 ref.)

ADVERSE EFFECTS

Retinoids and hyperostosis [letter; comment] Helliwell PS, et al. **Br J Dermatol** 1996 Dec;135(6):1003. Comment on: Br J Dermatol 1996 Jan;134(1):71–6.

Clinical safety of tazarotene in the treatment of plaque psoriasis. Marks R. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 3):S25–32 (50 ref.)

Vitamin A and its congeners. Monga M. **Semin Perinatol** 1997 Apr;21(2):135–42 (64 ref.)

ANALYSIS

Metabolism of topical retinaldehyde and retinol by mouse skin in vivo: predominant formation of retinyl esters and identification of 14–hydroxy–4, 14–retro–retinol. Sass JO, et al. **Exp Dermatol** 1996 Oct;5(5):267–71

ANTAGONISTS & INHIBITORS

[Retinoid antagonists] Umemiya H, et al. **Yakugaku Zasshi** 1996 Dec;116(12):928–41 (31 ref.) (Eng. Abstr.) **(Jpn)**

BLOOD

Serum retinoids in retinitis pigmentosa patients treated with vitamin A. Fex GA, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S18–21

Fully automated determination of selective retinoic acid receptor ligands in mouse plasma and tissue by reversed–phase liquid chromatography coupled on–line with solid–phase extraction. Arafa HM, et al. **J Chromatogr A** 1996 Apr 5;729(1–2):125–36

Determination of the arotinoid mofarotene in human, rat and dog plasma by high–performance liquid chromatography with automated column switching and ultraviolet detection. Wyss R, et al. **J Chromatogr A** 1996 Apr 5;729(1–2):315–22

Quantitative high–performance liquid chromatographic determination of retinoids in human serum using on–line solid–phase extraction and column switching. Determination of 9–cis–retinoic acid, 13–cis–retinoic acid, all–trans–retinoic acid, 4–oxo–all–trans–retinoicacid and 4–oxo–13–cis–retinoic acid. Gundersen TE, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):43–58

Simultaneous determination of all–trans–, 13–cis– and 9–cis–retinoic acid, their 4–oxo metabolites and all–trans–retinol in human plasma by high–performance liquid chromatography. Lanvers C, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):233–40

Plasma retinoids after topical use of retinaldehyde on human skin. Sass JO, et al. **Skin Pharmacol** 1996;9(5):322–6

CHEMISTRY

Conformational analysis of retinoids and restriction of their dynamics by retinoid–binding proteins. van Aalten DM, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):543–50

Location of two photoaffinity–labeled sites on the ligand–binding domain of retinoic acid receptor alpha. Sasaki T, et al. **Biol Pharm Bull** 1996 May;19(5):659–64

Simultaneous determination of all–trans–, 13–cis– and 9–cis–retinoic acid, their 4–oxo metabolites and all–trans–retinol in human plasma by high–performance liquid chromatography. Lanvers C, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):233–40

Conformationally defined 6–s–trans–retinoic acid analogs. 3. Structure–activity relationships for nuclear receptor binding, transcriptional activity, and cancer chemopreventive activity. Muccio DD, et al. **J Med Chem** 1996 Sep 13;39(19):3625–35

Solubilization of retinoids by bile salt/phospholipid aggregates. Li CY, et al. **Pharm Res** 1996 Jun;13(6):907–13

[Accounting for conformational flexibility of molecules in structure–property studies] Mekenian OG, et al. **Vopr Med Khim** 1997 May–Jun;43(3):127–38 (19 ref.) (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Retinoids can be classified according to their effects on vitamin A metabolism in HeLa cells. Stenström E, et al. **Skin Pharmacol** 1996;9(1):27–34

METABOLISM

Role of alcohol dehydrogenases in steroid and retinoid metabolism. Kedishvili NY, et al. **Adv Exp Med Biol** 1997; 414:321–9

Sex differences in endogenous retinoid release in the post–embryonic spinal cord of the western mosquitofish, Gambusia affinis affinis. Rosa–Molinar E, et al. **Adv Exp Med Biol** 1997;414:95–108

Measurement of retinoids and carotenoids in breast adipose tissue and a comparison of concentrations in breast cancer cases and control subjects. Zhang S, et al. **Am J Clin Nutr** 1997 Sep;66(3):626–32

Effects of all–trans–retinoyl–beta–D–glucuronide and all–trans–retinoic acid on chondrogenesis and retinoid metabolism in mouse limb bud mesenchymal cells in vitro. Sass JO, et al. **Arch Toxicol** 1997;71(3):142–50

Fatty acids and retinoids bind independently and simultaneously to beta–lactoglobulin. Narayan M, et al. **Biochemistry** 1997 Feb 18;36(7):1906–11

Retinoid metabolism and all–trans retinoic acid–induced growth inhibition in head and neck squamous cell carcinoma cell lines. Braakhuis BJ, et al. **Br J Cancer** 1997; 76(2):189–97

Aryl hydrocarbon receptor knockout mice (AHR–/–) exhibit liver retinoid accumulation and reduced retinoic acid metabolism. Andreola F, et al. **Cancer Res** 1997 Jul 15; 57(14):2835–8

Retinoid signalling and axial patterning during early vertebrate embryogenesis. Durston AJ, et al. **Cell Mol Life Sci** 1997 Apr;53(4):339–49 (136 ref.)

Regulation and regulatory role of the retinoids. Ng KW, et al. **Crit Rev Eukaryot Gene Expr** 1995;5(3–4):219–53 (373 ref.)

Life–and–death decisions influenced by retinoids. Rogers MB. **Curr Top Dev Biol** 1997;35:1–46 (274 ref.)

Initiation of retinoid signaling in primitive streak mouse embryos: spatiotemporal expression patterns of receptors and metabolic enzymes for ligand synthesis. Ang HL, et al. **Dev Dyn** 1997 Apr;208(4):536–43

Positional apoptosis during vertebrate CNS development in the absence of endogenous retinoids. Maden M, et al. **Development** 1997 Jul;124(14):2799–805

Glucuronidation of retinoids by rat recombinant UDP: glucuronosyltransferase 1.1 (bilirubin UGT). Radominska A, et al. **Drug Metab Dispos** 1997 Jul;25(7):889–92

A complex retinoic acid response element in the uncoupling protein gene defines a novel role for retinoids in thermogenesis. Rabelo R, et al. **Endocrinology** 1996 Aug; 137(8):3488–96

Retinoid (vitamin A) metabolism. Hendriks HF. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S2–6 (46 ref.)

The phantom ligand effect: allosteric control of transcription by the retinoid X receptor. Schulman IG, et al. **Genes Dev** 1997 Feb 1;11(3):299–308

Extra–and intracellular transport of retinoids: a reappraisal. Siegenthaler G. **Horm Res** 1996;45(3–5):122–7 (30 ref.)

Activity of retinoic acid receptor–gamma selectively binding retinoids alone and in combination with interferon–gamma in breast cancer cell lines. Widschwendter M, et al. **Int J Cancer** 1997 May 2;71(3):497–504

Differential role of homologous positively charged amino acid residues for ligand binding in retinoic acid receptor alpha compared with retinoic acid receptor beta. Scafonas A, et al. **J Biol Chem** 1997 Apr 25;272(17):11244–9

Lipocalin–type prostaglandin D synthase (beta–trace) is a newly recognized type of retinoid transporter. Tanaka T, et al. **J Biol Chem** 1997 Jun 20;272(25):15789–95

Binding of retinoids to beta–lactoglobulin isolated by bioselective adsorption. Wang Q, et al. **J Dairy Sci** 1997 Jun;80(6):1047–53

On the mechanism of isomerization of ocular retinoids by the crayfish Procambarus clarkii. Srivastava R, et al. **J Exp Biol** 1997 Feb;200 (Pt 3):625–31

Extraction of human epidermis treated with retinol yields retro–retinoids in addition to free retinol and retinyl esters. Duell EA, et al. **J Invest Dermatol** 1996 Aug;107(2):178–82

Hepatic stellate cells—from the viewpoint of retinoid handling and function of the extracellular matrix. Senoo H, et al. **Kaibogaku Zasshi** 1997 Apr;72(2):79–94 (51 ref.)

Characterization of the sequences of the human cytomegalovirus enhancer that mediate differential regulation by natural and synthetic retinoids. Angulo A, et al. **Mol Endocrinol** 1996 Jul;10(7):781–93

Inhibition of retinoid signaling in transgenic mice alters lipid processing and disrupts epidermal barrier function. Attar PS, et al. **Mol Endocrinol** 1997 Jun;11(6):792–800

Retinoids: from hindbrain patterning to Parkinson disease. Eichele G. **Trends Genet** 1997 Sep;13(9):343–5 (25 ref.)

PHARMACOKINETICS

Studies on the metabolism and disposition of the new retinoid 4–[(5,6,7,8–tetrahydro–5,5,8,8–tetramethyl–2–naphthyl) carbamoyl]benzoic acid. 3rd communication: placental transfer and excretion into milk in rats. Mizojiri K, et al. **Arzneimittelforschung** 1997 Feb;47(2):201–8

Studies on the metabolism and disposition of the new retinoid

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl) carbamoyl] benzoic acid. 2nd communication: absorption, distribution and excretion after single and consecutive subcutaneous administration in rats. Mizojiri K, et al. **Arzneimittelforschung** 1997 Feb;47(2):195-200

Studies on the metabolism and disposition of the new retinoid 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl) carbamoyl] benzoic acid. 4th communication: absorption, metabolism, excretion and plasma protein binding in various animals and man. Mizojiri K, et al. **Arzneimittelforschung** 1997 Mar;47(3):259-69

Studies on the metabolism and disposition of the new retinoid 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl) carbamoyl]benzoic acid. 5th communication: factors affecting percutaneous absorption in rats. Mizojiri K, et al. **Arzneimittelforschung** 1997 Mar;47(3):270-5

Pharmacokinetics of retinoids in women after meal consumption or vitamin A supplementation. Chen C, et al. **J Clin Pharmacol** 1996 Sep;36(9):799-808

PHARMACOLOGY

Quantitation of mucin RNA by PCR reveals induction of both MUC2 and MUC5AC mRNA levels by retinoids. Guzman K, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L1023-8

Retinoid-induced differentiation regulates prostaglandin H synthase and cPLA2 expression in tracheal epithelium. Hill EM, et al. **Am J Physiol** 1996 May;270(5 Pt 1):L854-62

Endogenous retinoids increase perinatal elastin gene expression in rat lung fibroblasts and fetal explants. McGowan SE, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):L410-6

Liarozole amplifies retinoid-induced apoptosis in human prostate cancer cells. Hall AK. **Anticancer Drugs** 1996 May; 7(3):312-20

Regulation of hepatic lecithin:retinol acyltransferase activity by retinoic acid receptor-selective retinoids. Shimada T, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):220-7

Retinoic acid receptors beta and gamma distinguish retinoid signals for growth inhibition and neuritogenesis in human neuroblastoma cells. Cheung B, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):349-54

Inhibition of IL-1-induced IL-6 production by synthetic retinoids. Kagechika H, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):243-8

Retinoids inhibit primary cynomolgus monkey hepatocyte lipoprotein(a) levels. Ramharack R, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):48-52

Modulation of type VII collagen (anchoring fibril) expression by retinoids in human skin cells. Chen M, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):333-40

Multiple retinoids alter liver bile salt-independent retinyl ester-hydrolase activity, serum vitamin A and serum retinol-binding protein of rats. Ritter SJ, et al. **Biochim Biophys Acta** 1996 Dec 6;1291(3):228-36

Evaluation of differentiation-inducing activity of retinoids on human leukemia cell lines HL-60 and NB4. Hashimoto Y, et al. **Biol Pharm Bull** 1996 Oct;19(10):1322-8

Retinoid induced apoptosis in leukemia cells through a retinoic acid nuclear receptor-independent pathway. Hsu CA, et al. **Blood** 1997 Jun 15;89(12):4470-9

Retinoids irreversibly inhibit in vitro growth of Epstein-Barr virus-immortalized B lymphocytes. Pomponi F, et al. **Blood** 1996 Oct 15;88(8):3147-59

Anticoagulant effects of synthetic retinoids mediated via different receptors on human leukemia and umbilical vein endothelial cells. Shibakura M, et al. **Blood** 1997 Aug 15; 90(4):1545-51

Induction of the oxidative catabolism of retinoid acid in MCF-7 cells. Krekels MD, et al. **Br J Cancer** 1997; 75(8):1098-104

All-trans-retinoic acid 4-hydroxylation in human liver microsomes: in vitro modulation by therapeutic retinoids. Nadin L, et al. **Br J Clin Pharmacol** 1996 Jun;41(6):609-12

New retinoids and arsenic compounds for the treatment of refractory acute promyelocytic leukemia: clinical and basic studies for the next generation. Kitamura K, et al. **Cancer Chemother Pharmacol** 1997;40 Suppl:S36-41

Inhibitory effects of retinoids on development of squamous metaplasia in rat mammary epithelial organoids cultured in Matrigel. Kim ND, et al. **Cancer Lett** 1996 Dec 20; 110(1-2):217-23

Retinoids suppress epidermal growth factor-induced transcription of cyclooxygenase-2 in human oral squamous carcinoma cells. Mestre JR, et al. **Cancer Res** 1997 Jul 15; 57(14):2890-5

Effects of retinoids on the production of tumour necrosis factor-alpha and nitric oxide by lipopolysaccharide-stimulated rat Kupffer cells in vitro: evidence for participation of retinoid X receptor signalling pathway. Motomura K, et al. **Cell Biochem Funct** 1997 Jun; 15(2):95-101

Differential regulation of human ectocervical epithelial cell line proliferation and differentiation by retinoid X receptor- and retinoic acid receptor-specific retinoids. Agarwal C, et al. **Cell Growth Differ** 1996 Apr;7(4):521-30

Retinoic acid receptor- and retinoid X receptor-selective retinoids activate signaling pathways that converge on AP-1 and inhibit squamous differentiation in human bronchial epithelial cells. Lee HY, et al. **Cell Growth Differ** 1996 Aug;7(8):997-1004

Evidence of a retinoid signaling alteration involving the activator protein 1 complex in tumorigenic human bronchial epithelial cells and non-small cell lung cancer cells. Lee HY, et al. **Cell Growth Differ** 1997 Mar; 8(3):283-91

Regulation of retinoid-induced differentiation in embryonal carcinoma PCC4.aza1R cells: effects of retinoid-receptor selective ligands. Mills KJ, et al. **Cell Growth Differ** 1996 Mar;7(3):327-37

Differential effects of retinoids and antiestrogens on cell cycle progression and cell cycle regulatory genes in human breast cancer cells. Wilcken NR, et al. **Cell Growth Differ** 1996 Jan;7(1):65-74

Role of thyroid hormone and retinoid receptors in the homeotic transformation of tails into limbs in frogs. Maden M, et al. **Dev Genet** 1996;19(1):85-93

Ligand-bound RXR can mediate retinoid signal transduction during embryogenesis. Lu HC, et al. **Development** 1997 Jan; 124(1):195-203

RXRalpha-null F9 embryonal carcinoma cells are resistant to the differentiation, anti-proliferative and apoptotic effects of retinoids. Clifford J, et al. **EMBO J** 1996 Aug 15;15(16):4142-55

Roles of retinoids and their nuclear receptors in the development and prevention of upper aerodigestive tract cancers. Lotan R. **Environ Health Perspect** 1997 Jun;105 Suppl 4:985-8 (52 ref.)

Nuclear retinoid receptors: mediators of retinoid effects. van der Saag PT. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S24-8 (46 ref.)

An RXR-selective analog attenuates the RAR alpha-selective analog-induced differentiation and non-G1-restricted growth arrest of NB4 cells. Brooks SC 3rd, et al. **Exp Cell Res** 1997 Aug 1;234(2):259-69

Altered sensitivity to retinoid-induced apoptosis associated with changes in the subcellular distribution of Bcl-2. Bruel A, et al. **Exp Cell Res** 1997 Jun 15;233(2):281-7

Bcl-X(L) expression and its downregulation by a novel retinoid in breast carcinoma cells. Hsu CK, et al. **Exp Cell Res** 1997 Apr 10;232(1):17-24

Retinoic acid receptors alpha and gamma mediate the induction of "tissue" transglutaminase activity and apoptosis in human neuroblastoma cells. Melino G, et al. **Exp Cell Res** 1997 Aug 25;235(1):55-61

Retinoids differentially regulate the proliferation of colon cancer cell lines. Stewart LV, et al. **Exp Cell Res** 1997 Jun 15;233(2):321-9

Effects of retinoids and role of retinoic acid receptors in human thyroid carcinomas and cell lines derived therefrom. Schmutzler C, et al. **Exp Clin Endocrinol Diabetes** 1996; 104 Suppl 4:16-9

Retinoids inhibit adhesion to laminin in human pancreatic carcinoma cells via the alpha 6 beta 1-integrin receptor. Rosewicz S, et al. **Gastroenterology** 1997 Feb;112(2):532-42

Suprabasal expression of a dominant-negative RXR alpha mutant in transgenic mouse epidermis impairs regulation of gene transcription and basal keratinocyte proliferation by RAR-selective retinoids. Feng X, et al. **Genes Dev** 1997 Jan 1;11(1):59-71

Biological assay for activity and molecular mechanism of retinoids in cervical tumor cells. Benbrook DM, et al. **Gynecol Oncol** 1997 Jul;66(1):114-21

Induction of cytochrome P450 3A by retinoids in rat hepatocyte culture. Jurima-Romet M, et al. **Hum Exp Toxicol** 1997 Apr;16(4):198-203

Links between pharmacological properties of retinoids and nuclear retinoid receptors. Bollag W, et al. **Int J Cancer** 1997 Feb 7;70(4):470-2

Interferons induce normal and aberrant retinoic-acid receptors type alpha in acute promyelocytic leukemia cells: potentiation of the induction of retinoid-dependent differentiation markers. Gianni M, et al. **Int J Cancer** 1996 Sep 27;68(1):75-83

Rapid induction of apoptosis in human C33A cervical carcinoma cells by the synthetic retinoid 6-[3-(1-adamantyl)hydroxyphenyl]-2-naphtalene carboxylic acid (CD437). Oridate N, et al. **Int J Cancer** 1997 Feb 7;70(4):484-7

Activity of retinoic acid receptor-gamma selectively binding retinoids alone and in combination with interferon-gamma in breast cancer cell lines. Widschwendter M, et al. **Int J Cancer** 1997 May 2;71(3):497-504

Treatment of axolotls with retinoids for limb regeneration studies. Scadding SR. **Int J Dev Biol** 1996 Aug;40(4):909-10

Effect of retinoids on dermal inflammation and on arachidonic acid mobilization and metabolism in murine 3T6 fibroblasts retinoids, arachidonate release and metabolism. Moreno JJ. **Int J Immunopharmacol** 1996 Aug-Sep;18(8-9):459-65

Molecular mechanisms of tazarotene action in psoriasis. Duvic M, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 3):S18-24 (33 ref.)

Identification and functional separation of retinoic acid receptor neutral antagonists and inverse agonists. Klein ES, et al. **J Biol Chem** 1996 Sep 13;271(37):22692-6

Treatment of melanoma cells with the synthetic retinoid CD437 induces apoptosis via activation of AP-1 in vitro, and causes growth inhibition in xenografts in vivo. Schadendorf D, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1889-98

Disruption of local retinoid-mediated gene expression accompanies abnormal development in the mammalian olfactory pathway [published erratum appears in J Comp Neurol 1997 Jul 28;384(2):321] Anchan RM, et al. **J Comp Neurol** 1997 Mar 10;379(2):171-84

Molecular epidemiology and retinoid chemoprevention of head and neck cancer. Khuri FR, et al. **J Natl Cancer Inst** 1997 Feb 5;89(3):199-211 (116 ref.)

Expression and retinoid modulation of N-arginine dibasic convertase and an aminopeptidase-B in human neuroblastoma cell lines. Draoui M, et al. **J Neurooncol** 1997 Jan;31(1-2):99-106

Retinoids and the control of growth/death decisions in human neuroblastoma cell lines. Melino G, et al. **J Neurooncol** 1997 Jan;31(1-2):65-83 (133 ref.)

Receptor specificity of retinoid-induced epidermal hyperplasia: effect of RXR-selective agonists and correlation with topical irritation. Thacher SM, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):528-34

Potentiation of VD-induced monocytic leukemia cell differentiation by retinoids involves both RAR and RXR signaling pathways. Defacque H, et al. **Leukemia** 1997 Feb; 11(2):221-7

AP-2.2, a novel gene related to AP-2, is expressed in the forebrain, limbs and face during mouse embryogenesis. Chazaud C, et al. **Mech Dev** 1996 Jan;54(1):83-94

Determination and regulation of nitric oxide production from macrophages by lipopolysaccharides, cytokines, and retinoids. Aggarwal BB, et al. **Methods Enzymol** 1996; 269:166-71

Inhibition of plasma membrane NADH oxidase activity and growth of HeLa cells by natural and synthetic retinoids. Dai S, et al. **Mol Cell Biochem** 1997 Jan;166(1-2):101-9

Retinoid X receptor (RXR) within the RXR-retinoic acid receptor heterodimer binds its ligand and enhances retinoid-dependent gene expression. Minucci S, et al. **Mol Cell Biol** 1997 Feb;17(2):644-55

Retinoid antagonism of NF-IL6: insight into the mechanism of antiproliferative effects of retinoids in Kaposi's sarcoma. Nagpal S, et al. **Mol Cell Biol** 1997 Jul;17(7):4159-68

The rat TSHbeta gene contains distinct response elements for regulation by retinoids and thyroid hormone. Breen JJ, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):137-46

Induction of apoptosis by retinoids and retinoic acid receptor gamma-selective compounds in mouse thymocytes through a novel apoptosis pathway. Szondy Z, et al. **Mol Pharmacol** 1997 Jun;51(6):972-82

Activation of specific RXR heterodimers by an antagonist of RXR homodimers. Lala DS, et al. **Nature** 1996 Oct 3; 383(6599):450-3

Retinoids and secosteroids induce gene expression in human colorectal carcinoma-derived cells but the macroscopic-scale effects remain unpredictable. Waliszewska MK, et al. **Pol J Pathol** 1997;48(1):15-24

Blocking activator protein-1 activity, but not activating retinoic acid response element, is required for the antitumor promotion effect of retinoic acid. Huang C, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5826-30

Terminal differentiation of human liposarcoma cells induced by ligands for peroxisome proliferator-activated receptor gamma and the retinoid X receptor. Tontonoz P, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):237-41

Activation of the orphan receptor RIP14 by retinoids. Zavacki AM, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7909-14

Effects of retinoid X receptor-selective ligands on proliferation of prostate cancer cells. de Vos S, et al. **Prostate** 1997 Jul 1;32(2):115-21

Vaginal keratinization during the estrous cycle in rats: a model for evaluating retinoid activity. Chateau D, et al. **Skin Pharmacol** 1996;9(1):9-16

Retinoids can be classified according to their effects on vitamin A metabolism in HeLa cells. Stenström E, et al. **Skin Pharmacol** 1996;9(1):27-34

THERAPEUTIC USE

New therapeutic effects of retinoid for adult T-cell leukemia [letter] Maeda Y, et al. **Blood** 1996 Dec 15;88(12):4726-7

Treatment with a new synthetic retinoid, Am80, of acute promyelocytic leukemia relapsed from complete remission induced by all-trans retinoic acid. Tobita T, et al. **Blood** 1997 Aug 1;90(3):967-73

New retinoids and arsenic compounds for the treatment of refractory acute promyelocytic leukemia: clinical and basic studies for the next generation. Kitamura K, et al. **Cancer Chemother Pharmacol** 1997;40 Suppl:S36-41

Retinoids in prevention of skin cancer. Moon TE, et al. **Cancer Lett** 1997 Mar 19;114(1-2):203-5

A novel retinoic acid receptor-selective retinoid, ALRT1550, has potent antitumor activity against human oral squamous carcinoma xenografts in nude mice. Shalinsky DR, et al. **Cancer Res** 1997 Jan 1;57(1):162-8

Retinoids in the management of non-melanoma skin cancer and melanoma. Craven NM, et al. **Cancer Surv** 1996; 26:267-88 (145 ref.)

Retinoids in clinical cancer therapy. Muindi JR. **Cancer Treat Res** 1996;87:305-42 (242 ref.)

Retinoids in aging. Torras H. **Clin Dermatol** 1996 Mar-Apr; 14(2):207-15 (53 ref.)

Oral 9-cis-retinoic acid versus 13-cis-retinoic acid in acne therapy. Ott F, et al. **Dermatology** 1996;193(2):124-6

Retinoids in lichen planus [letter; comment] Plewig G. **Dermatology** 1997;194(3):311-2. Comment on: Dermatology 1996;192(4):334-6.

Current use and future potential role of retinoids in

dermatology. Orfanos CE, et al. **Drugs** 1997 Mar; 53(3):358–88 (262 ref.)
Chemoprevention of respiratory tract cancer. Khuri FR, et al. **Hematol Oncol Clin North Am** 1997 Jun;11(3):387–408 (72 ref.)
Retinoids as cancer-preventive agents. Sankaranarayanan R, et al. **IARC Sci Publ** 1996;(139):47–59 (94 ref.)
Moving promising research findings to the clinic: methodological issues in the design and conduct of clinical trials of retinoids. Arnold A. **Int J Cancer** 1997 Feb 7; 70(4):467–9 (11 ref.)
Retinoid-interferon therapy of solid tumors. Lippman SM, et al. **Int J Cancer** 1997 Feb 7;70(4):481–3 (27 ref.)
Retinoid actions and implications for prevention and therapy of oral cancer. Girod SC, et al.
Int J Oral Maxillofac Surg 1996 Feb;25(1):69–73 (79 ref.)
Tazarotene: the first receptor-selective topical retinoid for the treatment of psoriasis. Chandraratna RA.
J Am Acad Dermatol 1997 Aug;37(2 Pt 3):S12–7 (34 ref.)
The treatment of acne with topical retinoids: one man's opinions. Kligman AM. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 2):S92–5
Carotenoids and retinoids: a review of research, clinical, and public health applications. Hinds TS, et al.
J Clin Pharmacol 1997 Jul;37(7):551–8 (54 ref.)
Current status of retinoids in chemoprevention of oral squamous cell carcinoma: an overview. Conley BA, et al. **J Craniomaxillofac Surg** 1996 Dec;24(6):339–45 (56 ref.)
Novel retinoid-related molecules as apoptosis inducers and effective inhibitors of human lung cancer cells in vivo. Lu XP, et al. **Nat Med** 1997 Jun;3(6):686–90
Topical treatments for photoaged skin. Separating the reality from the hype. Kligman AM. **Postgrad Med** 1997 Aug; 102(2):115–8, 123–6 (11 ref.)
Resurfacing with topical agents. Lewis AB, et al.
Semin Cutan Med Surg 1996 Sep;15(3):139–44 (26 ref.)
[Prevention and treatment of solid tumors with retinoids] Moriwaki H. **Gan To Kagaku Ryoho** 1996 Oct; 23(12):1625–8 (17 ref.) (Eng. Abstr.) **(Jpn)**
[Chemoprevention in cancer of the head and neck] Sánchez Hernández A, et al. **Acta Otorrinolaringol Esp** 1997 Jan-Feb;48(1):1–4 (30 ref.) (Eng. Abstr.) **(Spa)**

TOXICITY

Retinoids may increase fibrotic potential of TGF-beta: crosstalk between two multi-functional effectors [editorial; comment] Blomhoff R. **Hepatology** 1997 Oct;26(4):1067–8 . Comment on: Hepatology 1997 Oct;26(4):913–21.
Retinoids exacerbate rat liver fibrosis by inducing the activation of latent TGF-beta in liver stellate cells [see comments] Okuno M, et al. **Hepatology** 1997 Oct; 26(4):913–21. Comment in: Hepatology 1997 Oct;26(4):1067–8.
Relation of TGF-beta 2 to inhibition of limb bud chondrogenesis by retinoid in rats. Tsuiki H, et al.
Teratology 1996 Oct;54(4):191–7
RARalpha-mediated teratogenicity in mice is potentiated by an RXR agonist and reduced by an RAR antagonist: dissection of retinoid receptor-induced pathways. Elmazar MM, et al. **Toxicol Appl Pharmacol** 1997 Sep;146(1):21–8
Multiple factors contribute to the toxicity of the aromatic retinoid, TTNPB (Ro 13-7410): binding affinities and disposition. Pignatello MA, et al.
Toxicol Appl Pharmacol 1997 Feb;142(2):319–27

RETINOL see **VITAMIN A**

RETINOL-BINDING PROTEINS

ANALYSIS

Immunocytochemical localization of retinoid-binding protein in the dogfish retina. Sarthy V, et al. **Curr Eye Res** 1996 Aug;15(8):905–7
Vitamin A (retinol) status of first nation adults with non-insulin-dependent diabetes mellitus. Basualdo CG, et al. **J Am Coll Nutr** 1997 Feb;16(1):39–45
Retinol (vitamin A) and retinal-binding protein serum levels in children with cancer at onset. Fiore P, et al.
Nutrition 1997 Jan;13(1):17–20

BIOSYNTHESIS

Identification of a novel retinoic acid response element in the promoter region of the retinol-binding protein gene. Panariello L, et al. **J Biol Chem** 1996 Oct 11; 271(41):25524–32
Vitamin A metabolism and mRNA expression of retinoid-binding protein and receptor genes in human epidermal melanocytes and melanoma cells. Rosdahl I, et al. **Melanoma Res** 1997 Aug;7(4):267–74

CHEMISTRY

Structure/function of cytoplasmic vitamin A-binding proteins. Li E, et al. **Annu Rev Nutr** 1996;16:205–34 (159 ref.)
A Zn(II)-binding site engineered into retinol-binding protein exhibits metal-ion specificity and allows highly efficient affinity purification with a newly designed metal ligand. Schmidt AM, et al. **Chem Biol** 1996 Aug;3(8):645–53
Essential dynamics of the cellular retinol-binding protein—evidence for ligand-induced conformational changes. van Aalten DM, et al. **Protein Eng** 1995 Nov; 8(11):1129–35

GENETICS

Molecular phylogeny of the New World monkeys (Platyrrhini, primates) based on two unlinked nuclear genes: IRBP intron 1 and epsilon-globin sequences. Schneider H, et al. **Am J Phys Anthropol** 1996 Jun; 100(2):153–79
A SINE-associated polymorphism at the bovine retinol binding protein 3 gene. Martin-Burriel I, et al.
Anim Genet 1997 Apr;28(2):150
Variable expression of cellular retinol- and cellular retinoic acid-binding proteins in the rat uterus and ovary during the estrous cycle. Wardlaw SA, et al. **Biol Reprod** 1997 Jan;56(1):125–32
Detection of transcripts for retinoic acid receptors, retinol-binding protein, and transforming growth factors during rapid trophoblastic elongation in the porcine conceptus. Yelich JV, et al. **Biol Reprod** 1997 Aug; 57(2):286–94
Differential expression of transcripts encoding retinoid binding proteins and retinoic acid receptors during placentation of the mouse. Sapin V, et al. **Dev Dyn** 1997 Feb;208(2):199–210
The rat growth hormone and human cellular retinol binding protein 1 genes share homologous NF1-like binding sites that exert either positive or negative influences on gene expression in vitro. Leclerc S, et al. **DNA Cell Biol** 1997 Aug;16(8):951–67
Decreased cellular retinol-binding protein expression coincides with the loss of retinol responsiveness in rat cervical epithelial cells. Tannous-Khuri L, et al.
Exp Cell Res 1997 Jan 10;230(1):38–44
The 5' flanking regions of IRBP and arrestin have promoter activity in primary embryonic chicken retina cell cultures. Boatright JH, et al. **Exp Eye Res** 1997 Feb;64(2):269–77
Association of retinol binding protein in multiple-case families with insulin-dependent diabetes. Krill D, et al.
Hum Biol 1997 Feb;69(1):89–96
Retinyl ester storage is altered in liver stellate cells and in HL60 cells transfected with cellular retinol-binding protein type I. Nilsson A, et al. **Int J Biochem Cell Biol** 1997 Feb; 29(2):381–9
Identification of a novel retinoic acid response element in the promoter region of the retinol-binding protein gene. Panariello L, et al. **J Biol Chem** 1996 Oct 11; 271(41):25524–32
Mammalian evolution and the interphotoreceptor retinoid binding protein (IRBP) gene: convincing evidence for several superordinal clades. Stanhope MJ, et al.
J Mol Evol 1996 Aug;43(2):83–92
Retinyl ester storage is normal in transgenic mice with enhanced expression of cellular retinol-binding protein type I. Troen G, et al. **J Nutr** 1996 Nov;126(11):2709–19
Bacterially expressed rat retinol-binding protein is functional for retinol and transthyretin bindings. Yamamoto Y, et al.
J Nutr Sci Vitaminol (Tokyo) 1996 Aug;42(4):257–66
Phylogenetic evidence from the IRBP gene for the paraphyly of toothed whales, with mixed support for Cetacea as a suborder of Artiodactyla. Smith MR, et al.
Mol Biol Evol 1996 Sep;13(7):918–22
Engineering protein mechanics: inhibition of concerted motions of the cellular retinol binding protein by site-directed mutagenesis. van Aalten DM, et al.
Protein Eng 1997 Jan;10(1):31–7

IMMUNOLOGY

Interphotoreceptor retinoid binding protein is a potent tolerogen in Lewis rat: suppression of experimental autoimmune uveoretinitis is retinal antigen specific. Laliotou B, et al. **Br J Ophthalmol** 1997 Jan;81(1):61–7
Establishment of an E1A-immortalized retinal cell culture [letter] Seigel GM. **In Vitro Cell Dev Biol Anim** 1996 Feb; 32(2):66–8
Cellular immune response to retinal S-antigen & interphotoreceptor retinoid binding protein fragments in idiopathic human uveitis. Rajasingh J, et al.
Indian J Med Res 1996 Apr;103:222–6
Anti-tumor necrosis factor alpha therapy suppresses the induction of experimental autoimmune uveoretinitis in mice by inhibiting antigen priming. Sartani G, et al.
Invest Ophthalmol Vis Sci 1996 Oct;37(11):2211–8
Immunogenicity and immunopathogenicity of an autoimmune epitope are potentiated by increasing MHC binding through residue substitution. Kozhich AT, et al.
J Immunol 1997 May 1;158(9):4145–51
Genetic susceptibility to experimental autoimmune uveitis involves more than a predisposition to generate a T helper-1-like or a T helper-2-like response. Sun B, et al.
J Immunol 1997 Jul 15;159(2):1004–11
Generalized autoimmunity of the nervous system (GANS) induced by a recombinant protein composed of major pathogenic determinants of MBP, IRBP, and P2 protein: suppression of inflammation by a monoclonal antibody against activated rat T line cells. Schluesener H.
J Neurosci Res 1996 Aug 1;45(3):303–7

ISOLATION & PURIFICATION

Isolation and characterization of isoforms of retinol binding protein by isoelectrofocusing. Minic Z, et al.
Biochem Mol Biol Int 1997 Apr;41(5):1057–66
[Experiences with an isolation method for retinal S-antigen and interphotoreceptor retinoid-binding protein] Sych FJ, et al. **Ophthalmologe** 1996 Dec;93(6):732–8 (Eng. Abstr.) **(Ger)**

METABOLISM

Cellular retinol-binding protein-1 is expressed by distinct subsets of rat arterial smooth muscle cells in vitro and in vivo. Neuville P, et al. **Am J Pathol** 1997 Feb;150(2):509–21
Retinoid binding proteins in mouse yolk sac and chorio-allantoic placentas. Johansson S, et al.
Anat Embryol (Berl) 1997 Jun;195(6):483–90
Absorption of retinol from the retinol:retinol-binding protein complex by small intestinal gut sheets from the rat. Dew SE, et al. **Arch Biochem Biophys** 1997 Feb 15;338(2):233–6
Conformational analysis of retinoids and restriction of their dynamics by retinoid-binding proteins. van Aalten DM, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):543–50
Retinol free and retinol complexed beta-lactoglobulin binding sites in bovine germ cells. Mansouri A, et al.
Biochim Biophys Acta 1997 Jun 5;1357(1):107–14
Association between uteroferrin, retinol-binding protein, and transferrin within the uterine and conceptus compartments during pregnancy in swine. Vallet JL, et al.
Biol Reprod 1996 Nov;55(5):1172–8
Streptozotocin-induced diabetes lowers retinol-binding protein and transthyretin concentrations in rats. Tuitoek PJ, et al. **Br J Nutr** 1996 Dec;76(6):891–7
A Zn(II)-binding site engineered into retinol-binding protein exhibits metal-ion specificity and allows highly efficient affinity purification with a newly designed metal ligand. Schmidt AM, et al. **Chem Biol** 1996 Aug;3(8):645–53
Association of matrix metalloproteinases with interphotoreceptor retinoid binding protein. Plantner JJ, et al. **Curr Eye Res** 1997 Jan;16(1):51–5
Role of the C-termini of human and chicken plasma retinol-binding proteins. Natarajan V, et al.
Eur J Cell Biol 1997 Aug;73(4):316–20
Interactions of transthyretin (TTR) and retinol-binding protein (RBP) in the uptake of retinol by primary rat hepatocytes. Yamamoto Y, et al. **Exp Cell Res** 1997 Aug 1;234(2):373–8
19F-NMR studies of retinol transfer between cellular retinol binding proteins and phospholipid vesicles. Rong D, et al.
FEBS Lett 1997 Feb 3;402(2–3):116–20
Retinyl ester hydrolysis and retinol efflux from BFC-1beta adipocytes. Wei S, et al. **J Biol Chem** 1997 May 30; 272(22):14159–65
Zebrafish interphotoreceptor retinoid-binding protein: differential circadian expression among cone subtypes. Rajendran RR, et al. **J Exp Biol** 1996 Dec;199 (12):2775–87
Decreases in retinol and retinol-binding protein during total parenteral nutrition in rats are not due to a vitamin A deficiency. Lespine A, et al. **J Lipid Res** 1996 Dec; 37(12):2492–501
Effects of acute inflammation on plasma retinol, retinol-binding protein, and its mRNA in the liver and kidneys of vitamin A-sufficient rats. Rosales FJ, et al.
J Lipid Res 1996 May;37(5):962–71
Retinoic acid increases cellular retinol binding protein II mRNA and retinol uptake in the human intestinal Caco-2 cell line. Levin MS, et al. **J Nutr** 1997 Jan;127(1):13–7
Plasma levels of retinol, retinol-binding protein, all-trans beta-carotene and cryptoxanthin in low birth weight infants. Moji H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1995 Dec;41(6):595–606
Bacterially expressed rat retinol-binding protein is functional for retinol and transthyretin bindings. Yamamoto Y, et al.
J Nutr Sci Vitaminol (Tokyo) 1996 Aug;42(4):257–66

PHYSIOLOGY

Structure/function of cytoplasmic vitamin A-binding proteins. Li E, et al. **Annu Rev Nutr** 1996;16:205–34 (159 ref.)
Engineering protein mechanics: inhibition of concerted motions of the cellular retinol binding protein by site-directed mutagenesis. van Aalten DM, et al.
Protein Eng 1997 Jan;10(1):31–7

SECRETION

Secretion of N-(4-hydroxyphenyl) retinamide-retinol-binding protein from liver parenchymal cells: evidence for reduced affinity of the complex for transthyretin. Holven KB, et al. **Int J Cancer** 1997 May 16;71(4):654–9
The effect of estrone and estradiol treatment on endometrial total protein, uteroferrin, and retinol-binding protein secretion during midpregnancy or midpseudopregnancy in swine. Vallet JL, et al. **J Anim Sci** 1996 Nov;74(11):2765–72

URINE

Measurement of albumin and low molecular weight proteins in the urine of newborn infants using a cotton wool ball collection method. Feli JM, et al. **Acta Paediatr** 1997 May; 86(5):518–22
Retinol-binding protein and transferrin in urine. New markers of renal function in essential hypertension and white coat hypertension? Bang LE, et al.
Am J Hypertens 1996 Oct;9(10 Pt 1):1024–8

RETINOL-BINDING PROTEINS

Comparison of urinary albumin, retinol-binding protein and N-acetyl beta-glucosaminidase as predictors of progression of low level albuminuria in diabetes. O'Brien SF, et al. **Ann Clin Biochem** 1997 Mar;34 (Pt 2):202-4

Urinary microalbumin and retinol-binding protein assay for verifying children's nephron development and maturation. Hua MJ, et al. **Clin Chim Acta** 1997 Aug 8;264(1):127-32

Increased urinary albumin and retinol-binding protein in type I diabetes. A study of identical twins. Dubrey SW, et al. **Diabetes Care** 1997 Jan;20(1):84-9

Comparison of urinary excretion of albumin, alpha 1-microglobulin and retinol-binding protein in diabetic patients [published erratum appears in Diabetes Metab 1997 Feb;23(1):118] Galanti LM, et al. **Diabetes Metab** 1996 Oct; 22(5):324-30

RETINOPATHY OF PREMATURITY

Retinopathy of prematurity: guidelines for screening and treatment. The report of a Joint Working Party of The Royal College of Ophthalmologists and the British Association of Perinatal Medicine. **Early Hum Dev** 1996 Nov 21;46(3):239-58

Prospective study of New Zealand very low birthweight infants: outcome at 7-8 years. Darlow BA, et al. **J Paediatr Child Health** 1997 Feb;33(1):47-51

Retinopathy of prematurity [editorial] Tan KE. **Natl Med J India** 1996 Sep-Oct;9(5):204-5

Retinopathy of prematurity. Dobson V, et al. **Optom Clin** 1996;5(2):105-24 (40 ref.)

Examination and treatment of patients with pediatric retinal disease [letter] Ferrone PJ, et al. **Retina** 1997;17(2):168-9

[Prospective biochemical study of the antioxidant defense capacity in retinopathy of prematurity] Papp A, et al. **Orv Hetil** 1997 Jan 26;138(4):201-5 (47 ref.) (Eng. Abstr.) **(Hun)**

COMPLICATIONS

Cryotherapy and laser treatment for acute retinopathy of prematurity: refractive outcomes, a longitudinal study [see comments] Laws F, et al. **Br J Ophthalmol** 1997 Jan; 81(1):12-5. Comment in: Br J Ophthalmol 1997 Jan;81(1):2-3.

Longitudinal study of neuropsychological outcome in blind extremely-low-birthweight children. Gosch A, et al. **Dev Med Child Neurol** 1997 May;39(5):297-304

Esotropia and pseudoexotropia in acute ROP sequelae: clinical features and suggestions for treatment. Bianchi PE, et al. **Eur J Ophthalmol** 1996 Oct-Dec;6(4):446-50

Predictive value of temporal retinal disease in retinopathy of prematurity. Paysse EA, et al. **J Pediatr Ophthalmol Strabismus** 1997 May-Jun; 34(3):177-81

Retinopathy of prematurity [letter] Wheeler LC, et al. **Nurse Pract** 1996 Dec;21(12 Pt 1):13, 16

[Occurrence of refractive errors in relation to retinopathy of prematurity] Válková Z. **Cesk Slov Oftalmol** 1997 Feb; 53(1):27-31 (Eng. Abstr.) **(Cze)**

DIAGNOSIS

Pre-term delivery and subsequent ocular development. A 7-10 year follow-up of children screened 1982-84 for ROP. 4) Oculometric - and other metric considerations. Fledelius HC. **Acta Ophthalmol Scand** 1996 Jun;74(3):301-5

Towards a universal approach for screening of retinopathy of prematurity (ROP). Schalij-Delfos NE, et al. **Doc Ophthalmol** 1996-97;92(2):137-44

Visual acuity in extremely low birth weight infants. Courage ML, et al. **J Dev Behav Pediatr** 1997 Feb;18(1):4-12

Observer sensitivity to retinal vessel diameter and tortuosity in retinopathy of prematurity: a model system. Freedman SF, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jul-Aug; 33(4):248-54

Screening for retinopathy of prematurity [letter] Gerding H. **J Pediatr Ophthalmol Strabismus** 1996 Sep-Oct;33(5):274-5

Partial tip detachment on swab [letter] Goldblum TA. **J Pediatr Ophthalmol Strabismus** 1996 Mar-Apr;33(2):133

Screening examination of premature infants for retinopathy of prematurity. A joint statement of the American Academy of Pediatric, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology. **Ophthalmology** 1997 May;104(5):888-9

Screening examination of premature infants for retinopathy of prematurity. A joint statement of the American Academy of Pediatrics, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology. **Pediatrics** 1997 Aug;100(2 Pt 1):273

Retinopathy of prematurity requires diligent follow-up care. Demorest BH. **Surv Ophthalmol** 1996 Sep-Oct;41(2):175-8

[Retinopathy of prematurity. Experiences with a routine examination] Flage T, et al. **Tidsskr Nor Laegeforen** 1996 Sep 10;116(21):2559-61 (Eng. Abstr.) **(Nor)**

DRUG THERAPY

Less severe retinopathy of prematurity induced by surfactant replacement therapy. Termote J, et al. **Acta Paediatr** 1996 Dec;85(12):1491-6

Effect of a water-soluble vitamin E analog, trolox C, on retinal vascular development in an animal model of retinopathy of prematurity. Penn JS, et al. **Free Radic Biol Med** 1997;22(6):977-84

Retinopathy of prematurity: is suppression of neovascularization achievable? [letter; comment] Katzman GH. **J Pediatr** 1996 Oct;129(4):618-9. Comment on: J Pediatr 1995 Oct;127(4):632-9.

Control of cerebral and ocular blood flow autoregulation in neonates. Hardy P, et al. **Pediatr Clin North Am** 1997 Feb;44(1):137-52 (129 ref.)

EPIDEMIOLOGY

Retinopathy of prematurity in a Danish county. Trends over the 12-year period 1982-93. Fledelius HC. **Acta Ophthalmol Scand** 1996 Jun;74(3):285-7

Incidence of retinopathy of prematurity (ROP) in the western part of Norway. A population-based retrospective study. Haugen OH, et al. **Acta Ophthalmol Scand** 1997 Jun; 75(3):305-7

Risk factors associated with retinopathy of prematurity (ROP) in northern Jutland, Denmark 1990-1993. Nødgaard H, et al. **Acta Ophthalmol Scand** 1996 Jun;74(3):306-10

Retinopathy of prematurity: the continuing threat to vision in preterm infants. Dutch survey from 1986 to 1994. Schalij-Delfos NE, et al. **Acta Ophthalmol Scand** 1997 Feb; 75(1):72-5

Review of experience with retinopathy of prematurity from the Pavia registry (1990-1993). Bianchi PE, et al. **Eur J Ophthalmol** 1996 Apr-Jun;6(2):187-91

Retinopathy of prematurity in Denmark. Epidemiological considerations and screening limits. Fledelius HC. **Eur J Ophthalmol** 1996 Apr-Jun;6(2):183-6

Blood transfusion. Iron load and retinopathy of prematurity. Hesse L, et al. **Eur J Pediatr** 1997 Jun;156(6):465-70

The incidence of retinopathy of prematurity in a neonatal care unit. Charan R, et al. **Indian J Ophthalmol** 1995 Sep; 43(3):123-6

Retinopathy of prematurity: incidence and risk factors. Rekha S, et al. **Indian Pediatr** 1996 Dec;33(12):999-1003

Color vision measured with pseudoisochromatic plates at five-and-a-half years in eyes of children from the CRYO-ROP study. Dobson V, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2467-74

Retinopathy of prematurity and surfactant treatment. Axer-Siegel R, et al. **J Pediatr Ophthalmol Strabismus** 1996 May-Jun;33(3):171-4

Retinopathy of prematurity in multiple-gestation, very low birth weight infants. Friling R, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar-Apr; 34(2):96-100

Risk factors associated with retinopathy of prematurity: a study from Oman. Bassiouny MR. **J Trop Pediatr** 1996 Dec; 42(6):355-8

Retinopathy of prematurity in middle-income countries. Gilbert C, et al. **Lancet** 1997 Jul 5;350(9070):12-4

Incidence and risk factors of retinopathy of prematurity in a tertiary care newborn unit in New Delhi. Maheshwari R, et al. **Natl Med J India** 1996 Sep-Oct;9(5):211-4

Incidence of retinopathy of prematurity in Singapore. Leo SW, et al. **Singapore Med J** 1997 Feb;38(2):54-7

[Changes in the visual system in low birth weight children] Gralek M, et al. **Klin Oczna** 1995 Sep-Oct;97(9-10):296-8 (Eng. Abstr.) **(Pol)**

[Retinopathy of prematurity. The results after a 1-year follow-up] Párraga Quiles MJ, et al. **An Esp Pediatr** 1996 May;44(5):482-4 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Racial variation in retinopathy of prematurity. The Cryotherapy for Retinopathy of Prematurity Cooperative Group. Saunders RA, et al. **Arch Ophthalmol** 1997 May; 115(5):604-8

ETIOLOGY

Maternal risk factors for retinopathy of prematurity--a population-based study. Holmström G, et al. **Acta Obstet Gynecol Scand** 1996 Aug;75(7):628-35

Selective abortion. Fifth of babies born after assisted conception have retinopathy of prematurity [letter; comment] Choyce DP. **BMJ** 1996 Oct 19;313(7063):1005 . Comment on: BMJ 1996 Aug 17;313(7054):380.

Retinopathy of prematurity in infants of birth weight > 2000 g after haemorrhagic shock at birth. Jandeck C, et al. **Br J Ophthalmol** 1996 Aug;80(8):728-31

Duration of oxygen therapy and exchange transfusion as risk factors associated with retinopathy of prematurity in very low birthweight infants. Teoh SL, et al. **Eye** 1995;9 (Pt 6):733-7

[Calculation of the "safety index" in clinical practice] Válková Z, et al. **Cesk Slov Oftalmol** 1996 Sep;52(4):234-7 (Eng. Abstr.) **(Cze)**

GENETICS

Identification of missense mutations in the Norrie disease gene associated with advanced retinopathy of prematurity. Shastry BS, et al. **Arch Ophthalmol** 1997 May;115(5):651-5

METABOLISM

Vascular endothelial growth factor and the eye. Past, present and future [editorial; comment] Aiello LP. **Arch Ophthalmol** 1996 Oct;114(10):1252-4. Comment on: Arch Ophthalmol 1996 Oct;114(10):1210-7. Comment on: Arch Ophthalmol 1996 Oct;114(10):1219-20.

Regulation of vascular endothelial growth factor by oxygen in a model of retinopathy of prematurity [see comments] [published erratum appears in Arch Ophthalmol 1997 Mar;115(3):427] Pierce EA, et al. **Arch Ophthalmol** 1996 Oct;114(10):1219-28. Comment in: Arch Ophthalmol 1996 Oct;114(10):1252-4.

PATHOLOGY

Atrophic fundus lesions associated with untreated retinopathy of prematurity. Fishburne BC, et al. **Am J Ophthalmol** 1997 Aug;124(2):247-9

Long-term retinal vascular abnormalities in an animal model of retinopathy of prematurity. Roberto KA, et al. **Curr Eye Res** 1996 Sep;15(9):932-7

Retinopathy of prematurity: is suppression of neovascularization achievable? [letter; comment] Katzman GH. **J Pediatr** 1996 Oct;129(4):618-9. Comment on: J Pediatr 1995 Oct;127(4):632-9.

PHYSIOPATHOLOGY

Pre-term delivery and subsequent ocular development. A 7-10 year follow-up of children screened 1982-84 for ROP. 1) Visual function, slit-lamp findings, and fundus appearance. Fledelius HC. **Acta Ophthalmol Scand** 1996 Jun;74(3):288-93

Pre-term delivery and subsequent ocular development. A 7-10 year follow-up of children screened 1982-84 for ROP. 2) Binocular function. Fledelius HC. **Acta Ophthalmol Scand** 1996 Jun;74(3):294-6

Pre-term delivery and subsequent ocular development. A 7-10 year follow-up of children screened 1982-84 for ROP. 3) Refraction. Myopia of prematurity. Fledelius HC. **Acta Ophthalmol Scand** 1996 Jun;74(3):297-300

Central nervous system damage and retinopathy of prematurity--an ophthalmic follow-up of prematures born in 1982-84. Fledelius HC. **Acta Paediatr** 1996 Oct; 85(10):1186-91

Electroretinogram responses and refractive errors in patients with a history of retinopathy prematurity. Fulton AB, et al. **Doc Ophthalmol** 1995-96;91(2):87-100

Dark-adapted thresholds in children with histories of mild retinopathy of prematurity. Reisner DS, et al. **Invest Ophthalmol Vis Sci** 1997 May;38(6):1175-83

Implications of the severity of retinopathy of prematurity on childhood development [published erratum appears in Jpn J Ophthalmol 1996;40(4):554] Tamai H, et al. **Jpn J Ophthalmol** 1996;40(3):371-6

Long-term form identification vision after early, closed, lensectomy-vitrectomy for stage 5 retinopathy of prematurity. Mintz-Hittner HA, et al. **Ophthalmology** 1997 Mar;104(3):454-9

Visual fields measured with double-arc perimetry in eyes with threshold retinopathy of prematurity from the cryotherapy for retinopathy of prematurity trial. The CRYO-Retinopathy of Prematurity Cooperative Group. Quinn GE, et al. **Ophthalmology** 1996 Sep;103(9):1432-7

PREVENTION & CONTROL

Conjunctival impression cytology in the preterm infant and it's relation to outcome. Hughes AP, et al. **Eur J Pediatr** 1997 Jun;156(6):471-5

Assisted conception and retinopathy of prematurity. McKibbin M, et al. **Eye** 1996;10 (Pt 4):476-8

Screening for retinopathy of prematurity: do former guidelines still apply? Schalij-Delfos NE, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jan-Feb;33(1):35-8

Doctors and the health industry: a case study of transcutaneous oxygen monitoring in neonatal intensive care. Miké V, et al. **Soc Sci Med** 1996 May;42(9):1247-58

[Ophthalmologic management of premature infants] Merz U. **Z Geburtshilfe Neonatol** 1996 May-Jun;200(3):129 **(Ger)**

SURGERY

Cataract following diode laser photoablation for retinopathy of prematurity [letter] Christiansen SP, et al. **Arch Ophthalmol** 1997 Feb;115(2):275-6

Massive proliferation of conjunctival tissue after cryotherapy for retinopathy of prematurity [letter] Watanabe H, et al. **Arch Ophthalmol** 1997 Feb;115(2):278-9

Retinopathy of prematurity: systemic complications associated with different anaesthetic techniques at treatment. Haigh PM, et al. **Br J Ophthalmol** 1997 Apr; 81(4):283-7

Cryotherapy and laser treatment for acute retinopathy of prematurity: refractive outcomes, a longitudinal study [see comments] Laws F, et al. **Br J Ophthalmol** 1997 Jan; 81(1):12-5. Comment in: Br J Ophthalmol 1997 Jan;81(1):2-3.

Diode laser photocoagulation in retinopathy of prematurity. González I, et al. **Eur J Ophthalmol** 1997 Jan-Mar;7(1):55-8

Scleral buckling surgery in stage 4 retinopathy of prematurity. Ricci B, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S38-41

Cataracts associated with treatment for retinopathy of prematurity. Gold RS. **J Pediatr Ophthalmol Strabismus** 1997 Mar-Apr;34(2):123-4

Treatment of retinopathy of prematurity [editorial; comment]

Wagner RS, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar–Apr;34(2):75. Comment on: J Pediatr Ophthalmol Strabismus 1997 Mar–Apr;34(2):83–7; quiz 121–2.

Visual acuity of eyes after vitrectomy for ROP [letter; comment] Lambert SR, et al. **Ophthalmology** 1996 Sep; 103(9):1331–2. Comment on: Ophthalmology 1996 Apr;103(4):595–600.

[Factors affecting long–term visual outcome in retinopathy of prematurity treated with xenon photocoagulation and/or cryocautery] Noso M. **Nippon Ganka Gakkai Zasshi** 1997 Jun;101(6):503–9 (Eng. Abstr.) **(Jpn)**

[Use of cryotherapy in retinopathy of prematurity] Starzycka M, et al. **Klin Oczna** 1996 Jan;98(1):33–6 (Eng. Abstr.) **(Pol)**

THERAPY

Myopia of prematurity: nature, nurture, or disease? [editorial; comment] Fielder AR, et al. **Br J Ophthalmol** 1997 Jan; 81(1):2–3. Comment on: Br J Ophthalmol 1997 Jan;81(1):12–5.

Refractive outcome in eyes with retinopathy of prematurity treated with cryotherapy or diode laser: 3 year follow up. Knight–Nanan DM, et al. **Br J Ophthalmol** 1996 Nov; 80(11):998–1001

Comparison of cryotherapy and laser photocoagulation in stage III retinopathy of prematurity. Yang CM, et al. **J Formos Med Assoc** 1997 Sep;96(9):734–9

Randomized comparison of diode laser photocoagulation versus cryotherapy for threshold retinopathy of prematurity: 3–year outcome [see comments] White JE, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar–Apr; 34(2):83–7; quiz 121–2. Comment in: J Pediatr Ophthalmol Strabismus 1997 Mar–Apr;34(2):75.

The outcome of cryotherapy for retinopathy of prematurity (ROP) according to ROP location. Khwarg SI, et al. **Korean J Ophthalmol** 1996 Dec;10(2):92–6

Therapeutic effect of liposomal superoxide dismutase in an animal model of retinopathy of prematurity. Niesman MR, et al. **Neurochem Res** 1997 May;22(5):597–605

Retinopathy of prematurity [letter] Wheeler LC, et al. **Nurse Pract** 1996 Dec;21(12 Pt 1):13, 16

Retinopathy of prematurity requires diligent follow–up care. Demorest BH. **Surv Ophthalmol** 1996 Sep–Oct;41(2):175–8

[Follow–up and treatment of retinopathy of prematurity] Laatikainen L, et al. **Duodecim** 1995;111(11):1021–5 **(Fin)**

RETIREMENT

Succession plan: orthodontics will never again be "the way it was"! [letter] Sutton WC. **Am J Orthod Dentofacial Orthop** 1997 Apr;111(4):33A, 35A

On retirement. Moser RH. **Ann Intern Med** 1997 Jul 15; 127(2):159–61

"Dr. Taglicozzi, I presume?" [letter] Weinzweig J. **Ann Plast Surg** 1997 Jul;39(1):108–9

The retired surgeon: a potential teaching resource. Kirk RM. **Ann R Coll Surg Engl** 1997 Mar;79(2 Suppl):73–4

Retirement age and the work force in general surgery. Jonasson O, et al. **Ann Surg** 1996 Oct;224(4):574–9; discussion 579–82

Second study supports results of Whitehall study after retirement [letter; comment] Harding S, et al. **BMJ** 1997 Apr 12;314(7087):1130. Comment on: BMJ 1996 Nov 9;313(7066):1177–80.

Premature retirement [letter] Sarll DW. **Br Dent J** 1997 Sep 13;183(5):156

Touching the third rail: time to return the retirement age for early Social Security benefits to 65 [editorial] [see comments] Burkhauser RV. **Gerontologist** 1996 Dec; 36(6):726–7. Comment in: Gerontologist 1997 Apr;37(2):149.

Understanding the provision of postretirement health care and pension benefits: which firm characteristics are most explanatory? Hirshorn BA, et al. **Gerontologist** 1996 Oct; 36(5):637–48

Touching the third rail: time to return the retirement age for early Social Security benefits to 65 [letter; comment] Palmore EB. **Gerontologist** 1997 Apr;37(2):149. Comment on: Gerontologist 1996 Dec;36(6):726–7.

What's the latest? II. Cultural age deadlines for educational and work transitions. Settersten RA Jr, et al. **Gerontologist** 1996 Oct;36(5):602–13

Leadership ... chief executives nearing retirement [news] **Hosp Health Netw** 1997 Jun 20;71(12):25–6

Exploring factors of perceived social performance, health and personal control among retired seniors and seniors owning home–based businesses in non–metropolitan counties. Kean RC, et al. **Int J Aging Hum Dev** 1996; 43(4):297–315

What do dentists do when they don't do dentistry? [editorial] Meskin LH. **J Am Dent Assoc** 1997 Jun;128(6):682, 684, 686

Tray service generates more food waste in dining areas of a continuing–care retirement community. Hackes BL, et al. **J Am Diet Assoc** 1997 Aug;97(8):879–82; quiz 883–4

Changing perspective on retirement [editorial] Henretta JC. **J Gerontol B Psychol Sci Soc Sci** 1997 Jan;52(1):S1–3

Expectations of nursing home use in the Health and Retirement Study: the role of gender, health, and family characteristics. Holden K, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Sep;52(5):S240–51

Pathways to labor force exit: work transitions and work instability. Mutchler JE, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jan;52(1):S4–12

Retirement planning for doctors—the easy way. Lakhotia S. **J Indian Med Assoc** 1997 Jan;95(1):18

Growing old in poverty. Bresnahan ME. **J Med Assoc Ga** 1997 Apr;86(2):124

Retirement: slowing down or slowing up? Smisson HF Jr. **J Med Assoc Ga** 1997 Apr;86(2):130

Some reflections on approaching retirement. Payan J. **J Neurol Neurosurg Psychiatry** 1996 Dec;61(6):573–8

What to do with Stella? The case of the near–incompetent employee nearing retirement. **J Nurs Adm** 1997 Feb; 27(2):7–10

Health in the NHS [letter] Waldron HA. **J R Coll Physicians Lond** 1996 May–Jun;30(3):271–2

Lifestyle and injuries of professional ballet dancers: reflections in retirement. Lewis RL, et al. **J R Soc Health** 1997 Feb;117(1):23–31

Wanted: retired physicians to serve as medical examiners [letter; comment] Butts JD. **N C Med J** 1997 May–Jun; 58(3):165. Comment on: N C Med J 1997 Mar–Apr;58(2):148–9.

Ill health retirement—guidelines for occupational physicians. Association of Local Authority Medical Advisors (working party). Poole CJ, et al. **Occup Med (Oxf)** 1996 Dec; 46(6):402–6

Managing a successful retirement [editorial] Anast GT. **Surgery** 1997 Apr;121(4):474–6

Post–retirement health coverage. Dolan MJ. **Wis Med J** 1996 Apr;95(4):254

[Performance capacity of elderly workers—internal and external influencing factors] Dittmann–Kohli F, et al. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):323–7 (47 ref.) (Eng. Abstr.) **(Ger)**

[Consensual and conflictual early retirement—flexible transition to retirement within the context of different labor force strategies] Teipen C, et al. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):334–8 (Eng. Abstr.) **(Ger)**

[Memories of a retired physician] Fried D. **Harefuah** 1997 Apr 1;132(7):518–9 **(Heb)**

[Effect of retirement on mental health and social well–being among elderly Japanese] Sugisawa A, et al. **Nippon Koshu Eisei Zasshi** 1997 Feb;44(2):123–30 (Eng. Abstr.) **(Jpn)**

[Medical and social problems of the disabled and persons of retirement age in the Perm region] Boev VS, et al. **Probl Sotsialnoi Gig Istor Med** 1995 Mar–Apr;(2):15–9 (Eng. Abstr.) **(Rus)**

[The standards of medical–social assistance to retirees] Preobrazhenskaya VS, et al. **Probl Sotsialnoi Gig Istor Med** 1995 Sep–Oct;(5):12–5 (Eng. Abstr.) **(Rus)**

ECONOMICS

Interest in physician–buyout packages grows as more doctors contemplate retirement. Robb N. **Can Med Assoc J** 1997 Mar 15;156(6):882–5, 888

Retirement against the demographic trend: more older people living longer, working less, and saving less. Wise DA. **Demography** 1997 Feb;34(1):83–95

Gender, the state, and constructing the old as dependent: lessons from the economic transition in Poland. Calasanti TM, et al. **Gerontologist** 1997 Aug;37(4):452–61 (34 ref.)

It doesn't add up: the broken promises of lifetime health benefits, Medicare, and accounting rule FAS 106 do not equal satisfactory medical coverage for retirees. Ossi GJ. **J Contemp Health Law Policy** 1996 Fall;13(1):233–63

Research Grant Summary. **Soc Secur Bull** 1996 Winter; 59(4):71–4 (11 ref.)

The economics of retirement: a nontechnical guide. Leonesio MV. **Soc Secur Bull** 1996 Winter;59(4):29–50 (64 ref.)

Pension benefits among the aged: conflicting measures, unequal distributions. Woods JR. **Soc Secur Bull** 1996 Fall; 59(3):3–30 (30 ref.)

Retirement savings. Safe haven or open season for feeding creditors in bankruptcy? Dabney HS Jr, et al. **Va Med Q** 1996 Winter;123(1):50–1

Preretirement planning of female registered nurses. Wiggins SD, et al. **West J Nurs Res** 1996 Oct;18(5):580–94

["Retirement at age 58"—improvement or deterioration of living status?] Behrend C. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):339–42 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

Trav'lin' light: early retirees and the availability of post–retirement health benefits. Russell TE. **Am J Law Med** 1996;22(4):537–62

The limits of state action? The myths and realities of ERISA. Employee Retirement Income Security Act. Crittenden R. **J Am Board Fam Pract** 1996 May–Jun;9(3):208–11

Retirement savings. Safe haven or open season for feeding creditors in bankruptcy? Dabney HS Jr, et al. **Va Med Q** 1996 Winter;123(1):50–1

[Part time work instead of early retirement: successful breakthrough for flexible and later retirement?] Bäcker G, et al. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):348–51 (Eng. Abstr.) **(Ger)**

[Perspectives on work capacity of the elderly (editorial)] Frerichs F, et al. **Z Gerontol Geriatr** 1996 Sep–Oct; 29(5):317 **(Ger)**

[Partial pensions: futuristic social policy innovation or only an alibi?] Oswald C, et al. **Z Gerontol Geriatr** 1996 Sep–Oct; 29(5):343–7 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Anticipating retirement: the formation of narratives concerning an occupational transition. Jonsson H, et al. **Am J Occup Ther** 1997 Jan;51(1):49–56

Does retirement hurt well–being? Factors influencing self–esteem and depression among retirees and workers. Reitzes DC, et al. **Gerontologist** 1996 Oct;36(5):649–56

Assessing anxiety about retirement: the case of academicians. Hayslip B Jr, et al. **Int J Aging Hum Dev** 1997;44(1):15–36

The retirement adjustment process: changes in the well–being of male retirees across time. Gall TL, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):P110–7

Still participating after all these years: a study of life task participation in later life. Harlow RE, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1235–49

Physicians in retirement. Opportunities for continued productivity and enjoyment [see comments] Kenan PD, et al. **N C Med J** 1997 Mar–Apr;58(2):148–9. Comment in: N C Med J 1997 May–Jun;58(3):165.

The physician in retirement: transition and opportunity. Weisman AD. **Psychiatry** 1996 Fall;59(3):298–306

Efficacy of volunteerism for role–loss depression: a complement to Weinstein, et al [comment] Crist–Houran M. **Psychol Rep** 1996 Dec;79(3 Pt 1):736–8. Comment on: Psychol Rep 1995 Apr;76(2):482.

Psychometric properties of the Self–perceived Stress in Retirement Scale. Sharpley CF. **Psychol Rep** 1997 Aug; 81(1):319–22

The retirement transition and the later life family unit. Smith SD. **Public Health Nurs** 1997 Aug;14(4):207–16

Social support and depression among older adults living alone: the importance of friends within and outside of a retirement community. Potts MK. **Soc Work** 1997 Jul; 42(4):348–62

[From early retirement to retirement—change and stability of the social status of East Germany early retirees] Ernst J. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):352–5 (Eng. Abstr.) **(Ger)**

[Retirement activities: wish or reality?] Niederfranke A. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):362–6 (Eng. Abstr.) **(Ger)**

[Change in daily activities in the transition to retirement in single persons and couples] Schäuble G. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):356–61 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

Do socioeconomic differences in mortality persist after retirement? 25 year follow up of civil servants from the first Whitehall study. [see comments] Marmot MG, et al. **BMJ** 1996 Nov 9;313(7066):1177–80. Comment in: BMJ 1997 Apr 12;314(7087):1130.

Retirement on grounds of ill health: cross sectional survey in six organisations in United Kingdom. Poole CJ. **BMJ** 1997 Mar 29;314(7085):929–32

The practice of dentistry: an assessment of reasons for premature retirement. Burke FJ, et al. **Br Dent J** 1997 Apr 12;182(7):250–4

The older psychiatrist and retirement. Draper B, et al. **Int J Geriatr Psychiatry** 1997 Feb;12(2):233–9

TRENDS

Guidance on ill health retirement. Poole CJ. **Br J Rheumatol** 1997 May;36(5):573–6 (18 ref.)

Human resource policies and older workers in Japan. Clark RL, et al. **Gerontologist** 1996 Oct;36(5):627–36 (26 ref.)

[Demographic change, job market development and employment perspectives of elderly workers] Bäcker G. **Z Gerontol Geriatr** 1996 Jan–Feb;29(1):23–8 (Eng. Abstr.) **(Ger)**

[Elderly working women—late stages of employment and transition to retirement] Clemens W. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):328–33 (Eng. Abstr.) **(Ger)**

[Overcoming age barriers in occupational life—problem field regarding qualifications] Frerichs F. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):318–22 (Eng. Abstr.) **(Ger)**

RETIREMENT BENEFITS see **PENSIONS**

RETRACTED PUBLICATION [Publication Type]

Ross–Konno operation with resection of endocardial fibroelastosis for critical aortic stenosis with borderline–sized left ventricle in neonates [retracted by van Son JA. In: Ann Thorac Surg 1997 Jun;63(6):1834] van Son JA, et al. **Ann Thorac Surg** 1997 Jan;63(1):112–6

A cluster of cytoplasmic histidine residues specifies pH dependence of the AE2 plasma membrane anion exchanger [retracted by Kobayashi S, Kopito RR. In: Cell 1997 Sep 19;90(6):following 1159] Sekler I, et al. **Cell** 1996 Sep 20; 86(6):929–35

Differential expression of fibroblast growth factor–2 and receptor by glial cells in experimental autoimmune encephalomyelitis (EAE) [retracted by Gehrmann J, Lannes–Vieira J, Wekerle H. In: Glia 1997 May;20(1):86]

RETRACTED PUBLICATION [Publication Type]

Gehrmann J, et al. **Glia** 1996 Feb;16(2):93–100

A unique and sensitive ELISA technique for typing ABH antigens in bloodstains using UEA–I lectin—the removal of detergent with a Sephadex G–25 mini–column improves sensitivity [retracted by Kimura K, Matsubara K. In: J Forensic Sci 1996 Nov;41(6):1085] Matsubara K, et al. **J Forensic Sci** 1996 Jan;41(1):35–9

Endosomal targeting by the cytoplasmic tail of membrane immunoglobulin [retracted by Weiser P, Müller R, Braun U, Reth M. In: Science 1997 Jul 4;277(5322):20–1] Weiser P, et al. **Science** 1997 Apr 18;276(5311):407–9

RETRACTION OF PUBLICATION [Publication Type]

Characterization of V3 loop of HIV type 1 spreading rapidly among injection drug users of Manipur, India: a molecular epidemiological perspective [retraction of Panda S, Wang G, Sarkar S, Perez CM, Chakraborty S, Agarwal A, Dorman K, Sarkar K, Detels R, Kaplan AH. In: AIDS Res Hum Retroviruses 1996 Nov 1;12(16):1571–3] Kaplan AH. **AIDS Res Hum Retroviruses** 1997 Jun 10;13(9):811

Re: Spinal injury increases the risk of abdominal aortic aneurysm [retraction of Gordon IL, Kohl CA, Arefi M, Complin RA, Vulpe M. In: Am Surg 1996 Mar;62(3):249–52] Gordon I. **Am Surg** 1997 Jan;63(1):111

Ross–Konno operation with resection of endocardial fibroelastosis for critical aortic stenosis with borderline–sized left ventricle in neonates [retraction of van Son JA, Falk V, Mohr FW. In: Ann Thorac Surg 1997 Jan;63(1):112–6] van Son JA. **Ann Thorac Surg** 1997 Jun; 63(6):1834

A unique cellular myosin II exhibiting differential expression in the cerebral cortex [retraction of Sun WD, Chantler PD. In: Biochem Biophys Res Commun 1991 Feb 28;175(1):244–9] Chantler PD.
Biochem Biophys Res Commun 1997 Jun 9;235(1):268

Retraction of the article 'Purification and immunological characterization of DNA polymerase–alpha from human acute lymphoblastic leukemia cells' [retraction of Siddiqui FA. In: Biochem Biophys Acta 1983 Jun 15;745(2):154–61] Siddiqui FA. **Biochim Biophys Acta** 1997 Mar 7;1338(1):145

Retraction of articles [retraction of Robson M, Hamid R, McParland P, Pearce JM. In: Br J Obstet Gynaecol 1994 Jun;101(6):477–80 and Hamid R, Robson M, Pearce JM. In: Br J Obstet Gynaecol 1994 Jun;101(6):481–4 and Pearce JM, Hamid RI. In: Br J Obstet Gynaecol 1994 Aug;101(8):685–8 and Pearce JM, Manyonda IT, Chamberlain GV. In: Br J Obstet Gynaecol 1994 Aug;101(8):716–7] **Br J Obstet Gynaecol** 1995 Nov; 102(11):853

The voltage–dependent sodium channel in mammalian CNS and PNS antibody characterization and immunocytochemical localization. Brain Research 532 (1990) 222–231 [retraction of Elmer LW, Black JA, Waxman SG, Angelides KJ. In: Brain Res 1990 Nov 5;532(1–2):222–31] Elmer LW, et al. **Brain Res** 1997 Jun 27;761(1):2

Sodium channels in the cytoplasm of Schwann cells. Proc. Natl. Acad. Sci. 87 (1990) 9290–9294 [retraction of Ritchie JM, Black JA, Waxman SG, Angelides KJ. In: Proc Natl Acad Sci U S A 1990 Dec;87(23):9290–4] Ritchie JM, et al. **Brain Res** 1997 Jun 27;761(1):3

A cluster of cytoplasmic histidine residues specifies pH dependence of the AE2 plasma membrane anion exchanger [retraction of Sekler I, Kobayashi S, Kopito RR. In: Cell 1996 Sep 20:86(6):929–35] Kobayashi S, et al. **Cell** 1997 Sep 19;90(6):following 1159

Ribozyme–mediated cleavage of the MDR–1 transcript restores chemosensitivity in previously resistant cancer cells [retraction of Kiehntopf M, Brach MA, Licht T, Petschauer S, Karawajew L, Kirschning C, Herrmann F. In: EMBO J 1994 Oct 3;13(19):4645–52] **EMBO J** 1997 Jul 1;16(13):4153

Structure of the leukemia–associated human CBFB gene [retraction of Hajra A, Collins FS. In: Genomics 1995 Apr 10;26(3):571–9] Hajra A, et al. **Genomics** 1996 Nov 15; 38(1):107

Differential expression of fibroblast growth factor–2 and receptor by glial cells in experimental autoimmune encephalomelitis (EAE) [retraction of Gehrmann J, Lannes–Vieira J, Wekerle H. In: Glia 1996 Feb;16(2):93–100] Gehrmann J, et al. **Glia** 1997 May; 20(1):86

Genetic determination of the meso–diaminopimelate biosynthetic pathway of mycobacteria [retraction of Cirillo JD, Weisbrod TR, Banerjee A, Bloom BR, Jacobs WR Jr. In: J Bacteriol 1994 Jul;176(14):4424–9] Cirillo JD, et al. **J Bacteriol** 1997 Apr;179(8):2792

Functional NF–IL6/CCAAT enhancer–binding protein is required for tumor necrosis factor alpha–inducible expression of the granulocyte colony–stimulating factor (CSF), but not the granulocyte/macrophage CSF or interleukin 6 gene in human fibroblasts [retraction of Kiehntopf M, Herrmann F, Brach MA. In: J Exp Med 1995 Feb 1;181(2):793–8] Adler G. **J Exp Med** 1997 Jul 7;186(1):171

A unique and sensitive ELISA technique for typing ABH antigens in bloodstains using UEA–I lectin—the removal of detergent with a Sephadex G–25 mini–column improves sensitivity [retraction of Matsubara K, Tanabe K, Yuasa I, Nakamura H, Tanabe Y, Idzu T, Takahashi S, Kimura K. In: J Forensic Sci 1996 Jan;41(1):35–9] Kimura K, et al. **J Forensic Sci** 1996 Nov;41(6):1085

Analysis of T–cell receptor alpha beta chains of CD8+ suppressor T cells induced by tolerogenic conjugates of antigen and monomethoxypolyethylene glycol. Involvement of TCR alpha–CDR3 domain in immunosuppression [retraction of Mohapatra S, Chen Y, Takata M, Mohapatra SS, Sehon AH. In: J Immunol 1993 Jul 15;151(2):688–98] Lang GM, et al. **J Immunol** 1997 Feb 15;158(4):1984

Cloning of the cDNA encoding a neuronal myosin heavy chain from mammalian brain and its differential expression within the central nervous system [retraction of Sun W, Chantler PD. In: J Mol Biol 1992 Apr 20;224(4):1185–93] Chantler PD. **J Mol Biol** 1997 May 2;268(2):585

Re: Gehrmann, J. Colony–stimulating factors regulate programmed cell death of rat microglia/brain macrophages in vitro [retraction of Gehrmann J. In: J Neuroimmunol 1995 Dec;63(1):55–61] Gehrmann J. **J Neuroimmunol** 1997 Jan;72(1):107

Hyperventilation in patients who have sustained myocardial infarction after a work injury [retraction of Rosen SD, King JC, Nixon PG. In: J R Soc Med 1994 May;87(5):268–71] Rosen SD, et al. **J R Soc Med** 1997 Jul;90(7):416

Overexpression of core–binding factor alpha (CBF alpha) reverses cellular transformation by the CBF beta–smooth muscle myosin heavy chain chimeric oncoprotein [retraction of Hajra A, Liu PP, Speck NA, Collins FS. In: Mol Cell Biol 1995 Sep;15(9):4980–9] Hajra A, et al. **Mol Cell Biol** 1996 Dec;16(12):7185

Identification of a novel bone marrow–derived B–cell progenitor population that coexpresses B220 and Thy–1 and is highly enriched for Abelson leukemia virus targets [retraction of Tidmarsh GF, Heimfeld S, Whitlock CA, Weissman IL, Müller–Sieburg CE. In: Mol Cell Biol 1989 Jun;9(6):2665–71] Tidmarsh GF, et al. **Mol Cell Biol** 1996 Oct;16(10):5946

Suicide in 24 European countries, 1972–1984 [retraction of Diekstra RF, Kerkhof AJ. In: Ned Tijdschr Geneeskd 1988 Jan 9;132(2):67–70] **Ned Tijdschr Geneeskd** 1997 Jan 18; 141(3):161–2 **(Eng, Dut)**

Retraction of: orofacial motor control impairment in Parkinson's disease [retraction of Abbs JH, Hartman DE, Vishwanat B. In: Neurology 1987 Mar;37(3):394–8] **Neurology** 1996 Aug;47(2):340

The leukemic core binding factor beta–smooth muscle myosin heavy chain (CBF beta–SMMHC) chimeric protein requires both CBF beta and myosin heavy chain domains for transformation of NIH 3T3 cells [retraction of Hajra A, Liu PP, Wang Q, Kelley CA, Stacy T, Adelstein RS, Speck NA, Collins FS. In: Proc Natl Acad Sci U S A 1995 Mar 14;92(6):1926–30] Adelstein RS, et al.
Proc Natl Acad Sci U S A 1996 Dec 24;93(26):15523

Membrane permeabilization by Listeria monocytogenes phosphatidylinositol–specific phospholipase C is independent of phospholipid hydrolysis and cooperative with listeriolysin O [retraction of Goldfine H, Knob C, Alford D, Bentz J. In: Proc Natl Acad Sci U S A 1995 Mar 28;92(7):2979–83] Goldfine H, et al.
Proc Natl Acad Sci U S A 1997 Mar 18;94(6):2772

Recombinant human migration inhibitory factor has adjuvant activity [retraction of Weiser WY, Pozzi LM, Titus RG, David JR. In: Proc Natl Acad Sci U S A 1992 Sep 1;89(17):8049–52] Weiser WY, et al.
Proc Natl Acad Sci U S A 1997 Jan 7;94(1):351

Retraction of a thrush (Catharus guttatus) cytochrome b sequence [retraction of Edwards SV, Arctander P, Wilson AC. In: Proc R Soc Lond B Biol Sci 1991 Feb 22;243(1307):99–107] Edwards SV, et al.
Proc R Soc Lond B Biol Sci 1996 Mar 22;263(1368):323

Synergistic effect of environmental estrogens: report withdrawn [retraction of Arnold SF, Klotz DM, Collins BM, Vonier PM, Guillette LJ Jr, McLachlan JA. In: Science 1996 Jun 7;272(5267):1489–92] McLachlan JA. **Science** 1997 Jul 25;277(5325):462–3

A U3–like small nucleolar RNA in Archaea [retraction of Potter S, Durovic P, Dennis PP. In: Science 1995 May 19;268(5213):1056–60] Russell AG, et al. **Science** 1997 Aug 29;277(5330):1189

Resonance Raman results [retraction of Qiu D, Kumar M, Ragsdale SW, Spiro TG. In: Science 1994 May 6;264(5160):817–9 and Kumar M, Qiu D, Spiro TG, Ragsdale SW. In: Science 1995 Oct 27;p60(5236):628–30] Spiro TG. **Science** 1997 Oct 3;278(5335):21

Endosomal targeting and the cytoplasmic tail of membrane immunoglobulin [retraction of Weiser P, Müller R, Braun U, Reth M. In: Science 1997 Apr 18;276(5311):407–9] Weiser P, et al. **Science** 1997 Jul 4;277(5322):20–1

RETRAINING, PROFESSIONAL see **EDUCATION, PROFESSIONAL, RETRAINING**

RETREATMENT

see related
REOPERATION

RETROBULBAR HEMORRHAGE

CHEMICALLY INDUCED

Orbital hemorrhage after the administration of sub–Tenon's infusion anesthesia. Olitsky SE, et al.
Ophthalmic Surg Lasers 1997 Feb;28(2):145–6

COMPLICATIONS

Subperiosteal orbital haematoma presenting as proptosis at birth. Skull SA, et al. **J Paediatr Child Health** 1997 Jun; 33(3):256–8 (18 ref.)

Optic neuropathy following simulation of orbital hemorrhage in the nonhuman primate. Hargaden M, et al.
Ophthal Plast Reconstr Surg 1996 Dec;12(4):264–72

[Unilateral exophthalmus in the course of spontaneous retrobulbar hemorrhage in a patient with arterial hypertension] Bień E, et al. **Klin Oczna** 1996;98(6):455–8 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Spontaneous orbital hemorrhage in pregnant women treated with subcutaneous heparin. Chang WJ, et al.
Am J Ophthalmol 1996 Dec;122(6):907–8

Orbital hemorrhage during rhinoplasty. Hunts JH, et al.
Ann Plast Surg 1996 Dec;37(6):618–23

Subperiosteal orbital hemorrhage from retrobulbar injection resulting in blindness [letter; comment] Girard LJ.
Arch Ophthalmol 1997 Aug;115(8):1085–6. Comment on: Arch Ophthalmol 1997 Jan;115(1):123–4.

Subperiosteal orbital hemorrhage from retrobulbar injection resulting in blindness [see comments] Mootha VV, et al.
Arch Ophthalmol 1997 Jan;115(1):123–4. Comment in: Arch Ophthalmol 1997 Aug;115(8):1085–6.

Orbital hemorrhage following extracorporeal membrane oxygenation in a newborn. Bart DJ, et al.
J Pediatr Ophthalmol Strabismus 1997 Jan–Feb;34(1):65–7

Late migration of an orbital implant causing orbital hemorrhage with sudden proptosis and diplopia. Rosen CE.
Ophthal Plast Reconstr Surg 1996 Dec;12(4):260–2; discussion 263

PREVENTION & CONTROL

Combined peribulbar and retrobulbar block anesthesia and antibiotic–steroid injection: a simple method to prevent retrobulbar hemorrhage, globe perforation, or infection. Girard LJ, et al. **Ophthalmic Surg Lasers** 1997 Mar; 28(3):251–4

RADIOGRAPHY

Orbital venous anomalies demonstrated by spiral computed tomography. Rubin PA, et al. **Ophthalmology** 1997 Sep; 104(9):1463–70

SURGERY

[Surgical decompression of the orbit in a case of post–traumatic retrobulbar hematoma] Kmera–Muszyńska M, et al. **Klin Oczna** 1996 Mar;98(3):229–31 (Eng. Abstr.) **(Pol)**

THERAPY

Treatment of retrobulbar haemorrhage in accident and emergency departments. Hislop WS, et al.
Br J Oral Maxillofac Surg 1996 Aug;34(4):289–92

RETROGNATHISM

see related
MANDIBULAR ADVANCEMENT

COMPLICATIONS

Treatment of a patient with a Class II malocclusion and an extremely high mandibular plane angle and severe crowding. Coreil MN. **Am J Orthod Dentofacial Orthop** 1997 Jan;111(1):93–9

EMBRYOLOGY

Morphological deficiency in the prenatal anterior cranial base of midfacially retrognathic mice. Ma W, et al. **J Anat** 1996 Jun;188 (Pt 3):547–55

PHYSIOPATHOLOGY

Muscle activity during mandibular movements in normal and mandibular retrognathic subjects. Harper RP, et al.
J Oral Maxillofac Surg 1997 Mar;55(3):225–33

PREVENTION & CONTROL

Musculature of the soft palate: clinico–anatomic correlations and therapeutic implications in the treatment of cleft palates. Vacher C, et al. **Cleft Palate Craniofac J** 1997 May; 34(3):189–94

SURGERY

Positional changes in the mandibular condyle and amount of mouth opening after sagittal split ramus osteotomy with rigid or nonrigid osteosynthesis. Nishimura A, et al.
J Oral Maxillofac Surg 1997 Jul;55(7):672–6; discussion 677–8

[A modified method for the surgical treatment of patients with maxillary retro– and micrognathism] Bezrukov VM, et al. **Stomatologiia (Mosk)** 1996;75(2):49–51 (Eng. Abstr.) **(Rus)**

[A method for the surgical treatment of maxillary micro- and retrognathism] Nedel'ko NA. **Stomatologiia (Mosk)** 1995;74(6):41-3 (Eng. Abstr.) **(Rus)**

THERAPY

The mandibular central incisor, an extraction option. Klein DJ. **Am J Orthod Dentofacial Orthop** 1997 Mar; 111(3):253-9

RETROGRADE DEGENERATION

Progressive systemic sclerosis associated with multiple mononeuropathy. Nitta Y, et al. **Dermatology** 1996; 193(1):22-6 (19 ref.)

DRUG EFFECTS

BDNF prevents and reverses adult rat motor neuron degeneration and induces axonal outgrowth. Kishino A, et al. **Exp Neurol** 1997 Apr;144(2):273-86

GENETICS

Principles of neuronal regeneration. Kreutzberg GW. **Acta Neurochir Suppl (Wien)** 1996;66:103-6 (10 ref.)

Changes in the expression of transcription factors ATF-2 and Fra-2 after axotomy and during regeneration in rat retinal ganglion cells. Robinson GA. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):57-64

PHYSIOLOGY

Traumatically induced axonal damage: evidence for enduring changes in axolemmal permeability with associated cytoskeletal change. Povlishock JT, et al. **Acta Neurochir Suppl (Wien)** 1996;66:81-6

Retrograde abolition of conditional fear after excitotoxic lesions in the basolateral amygdala of rats: absence of a temporal gradient. Maren S, et al. **Behav Neurosci** 1996 Aug;110(4):718-26

Response properties of long-range axon-bearing amacrine cells in the dark-adapted rabbit retina. Taylor WR. **Vis Neurosci** 1996 Jul-Aug;13(4):599-604

RETROGRADE OBTURATION

Is there a best retrograde filling material? Jou YT, et al. **Dent Clin North Am** 1997 Jul;41(3):555-61 (24 ref.)

Clinical management of nonhealing periradicular pathosis. Surgery versus endodontic retreatment. Danin J, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Aug;82(2):213-7

[Dens in dente: apicoectomy and retrograde obturation] Sakkal S, et al. **J Can Dent Assoc** 1997 Jan;63(1):48-51 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Relationship between apical and marginal healing in periradicular surgery. Jansson L, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 May;83(5):596-601

METHODS

Surgical treatment of a lateroradicular lesion on an invaginated lateral incisor (dens in dente). Sauveur G, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jun;83(6):703-6

Transantral endodontic surgery. Wallace JA. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jul;82(1):80-3

RETROLENTAL FIBROPLASIA see **RETINOPATHY OF PREMATURITY**

RETROPERITONEAL FIBROSIS

Ormond's disease. Kovács T, et al. **Acta Chir Hung** 1995-96; 35(3-4):339-50

COMPLICATIONS

Laparoscopic ureterolysis in retroperitoneal fibrosis. Mattelaer P, et al. **Acta Urol Belg** 1996 Dec;64(4):15-8

Marfan syndrome and retroperitoneal fibrosis [letter; comment] Phillips S, et al. **AJR Am J Roentgenol** 1996 Dec;167(6):1596-7. Comment on: AJR Am J Roentgenol 1995 Dec;165(6):1481-4.

Retroperitoneal fibrosis: a report of complete colonic obstruction. Leone JP, et al. **Am Surg** 1997 Jun;63(6):475-7

Cholestatic jaundice due to Ormond's disease (primary retroperitoneal fibrosis). Pereira-Lima JC, et al. **Hepatogastroenterology** 1996 Jul-Aug;43(10):992-4

Hepatitis C related cryoglobulinemia associated with retroperitoneal fibrosis. Hofbauer LC, et al. **J Rheumatol** 1996 Mar;23(3):554-7

[Obstructive nature of the "double-J" ureteral catheter in idiopathic retroperitoneal fibrosis] Luján Galán M, et al. **Actas Urol Esp** 1996 May;20(5):465-70 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Retroperitoneal fibrosis and infection of an aortic graft prosthesis: diagnosis and therapeutic problems. Cuny C, et al. **Clin Cardiol** 1997 Sep;20(9):810-2

Ormond's disease or aortic aneurysm? Case reports. Debrand-Passard A, et al. **Int Urol Nephrol** 1996; 28(3):295-304

Laparoscopic diagnosis of malignant retroperitoneal fibrosis. Kava BR, et al. **J Endourol** 1996 Dec;10(6):535-8

Retroperitoneal fibrosis. Kottra JJ, et al. **Radiol Clin North Am** 1996 Nov;34(6):1259-75 (79 ref.)

[Clinical thinking and decision making in practice. A patient with flank pain and anuria] Gans RO, et al. **Ned Tijdschr Geneeskd** 1997 May 10;141(19):931-7 (Eng. Abstr.) **(Dut)**

[Primary retroperitoneal fibrosis with renal involvement] Stürzebecher B, et al. **Urologe A** 1997 Jul;36(4):348-50 (Eng. Abstr.) **(Ger)**

[Idiopathic retroperitoneal fibrosis localizing in pelvic cavity: a case report] Touge H, et al. **Hinyokika Kiyo** 1996 Aug; 42(8):577-81 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Ormond's disease--a form of retroperitoneal fibrosis] Madaliński M, et al. **Pol Arch Med Wewn** 1996 Nov; 96(5):490-4 (15 ref.) **(Pol)**

[Idiopathic retroperitoneal fibrosis simulating pelvic tumor with distal ureter infiltration. Report of a case] Luján Galán M, et al. **Arch Esp Urol** 1997 Apr;50(3):299-302 (10 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

New data on diagnosis and medical treatment of retroperitoneal fibrosis. Oosterlinck W, et al. **Acta Urol Belg** 1997 Jun;65(2):3-6 (25 ref.)

Treatment of idiopathic retroperitoneal fibrosis by tamoxifen. Tonietto G, et al. **Eur J Surg** 1997 Mar;163(3):231-5

[Regression of retroperitoneal fibrosis treated by tamoxifen] Devevey JM, et al. **Prog Urol** 1996 Aug-Sep;6(4):578-81 (Eng. Abstr.) **(Fre)**

[Regression of retroperitoneal fibrosis by combination therapy with tamoxifen and steroids] Allendorff J, et al. **Med Klin** 1997 Jul 15;92(7):439-43 (Eng. Abstr.) **(Ger)**

ETIOLOGY

[Edema caused by retroperitoneal and tricuspid fibrosis with sclerodermatous cutaneous involvement disclosing carcinoid tumor. Apropos of a case and review of the literature] Morand JJ, et al. **Rev Med Interne** 1997; 18(5):388-95 (61 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Idiopathic retroperitoneal fibrosis and HLA antigens [letter] Chevet D, et al. **Nephron** 1996;73(3):495

PATHOLOGY

Fine needle aspiration biopsy of idiopathic retroperitoneal fibrosis. Stein AL, et al. **Acta Cytol** 1997 Mar-Apr; 41(2):461-6

Retroperitoneal fibrosis. A true connective tissue disease. Gilkeson GS, et al. **Rheum Dis Clin North Am** 1996 Feb; 22(1):23-38 (81 ref.)

[Idiopathic retroperitoneal fibrosis localizing in pelvic cavity: a case report] Touge H, et al. **Hinyokika Kiyo** 1996 Aug; 42(8):577-81 (13 ref.) (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

[Lumbo-sacroiliac hyperostosis with retroperitoneal fibrosis in spondarthritis hyperostotical pustulo-psoriatica--with sternocostoclavicular hyperostosis and superior and inferior venous obstruction syndrome: pathogenetic hypothesis of fibro-osteopathia psoriatica] Schilling F, et al. **Z Rheumatol** 1996 Sep-Oct;55(5):331-47 (Eng. Abstr.) **(Ger)**

SURGERY

Laparoscopic post-chemotherapy retroperitoneal dissection of residual mass. Bales GT, et al. **Br J Urol** 1997 Aug; 80(2):349-50

RETROPERITONEAL NEOPLASMS

Cystic retroperitoneal lymphangiomas in adults. Hauser H, et al. **Eur J Surg Oncol** 1997 Aug;23(4):322-6

Primary retroperitoneal tumours a 25 year study. Pai MR, et al. **Indian J Med Sci** 1995 Jun;49(6):139-41

Juxta-adrenal malignant schwannoma. Fabbro MA, et al. **Pediatr Surg Int** 1997 Sep;12(7):532-4 (13 ref.)

[Retroperitoneal cystic lymphangioma in a child] Humke U, et al. **Ann Urol (Paris)** 1997;31(2):77-9 (Eng. Abstr.) **(Fre)**

[Malignant fibrous histiocytoma of the retroperitoneum] Saile N, et al. **Prog Urol** 1996 Dec;6(6):944-7 (11 ref.) (Eng. Abstr.) **(Fre)**

[Retroperitoneal sarcomas: recent advances in nosographic framework, diagnosis and integrated surgical treatment] Capaldi M, et al. **G Chir** 1997 Jan-Feb;18(1-2):55-60 (17 ref.) (Eng. Abstr.) **(Ita)**

[Extraskeletal retroperitoneal osteosarcoma. A case report and review of the literature] Vulpio C, et al. **Minerva Chir** 1996 Dec;51(12):1129-33 (Eng. Abstr.) **(Ita)**

Primary retroperitoneal tumors. Comments on 22 cases] Hita Villaplana G, et al. **Actas Urol Esp** 1996 Oct;20(9):806-11 (Eng. Abstr.) **(Spa)**

[Lymphangioleiomyoma with retroperitoneal and thoracic involvement] Barron Medrano M, et al. **An Med Interna** 1996 Feb;13(2):75-8 (38 ref.) (Eng. Abstr.) **(Spa)**

[Benign retroperitoneal schwannoma (letter)] Galofré MJ, et al. **An Med Interna** 1996 Nov;13(11):568 **(Spa)**

[Burned out testicular tumor] Donderis Guastavino C, et al. **Arch Esp Urol** 1997 Mar;50(2):196-8 (Eng. Abstr.) **(Spa)**

[Retroperitoneal ganglioneuroma. Report of a case] Hernando Almudí E, et al. **Arch Esp Urol** 1997 Mar; 50(2):202-4 (Eng. Abstr.) **(Spa)**

[Extragonadal germinal tumor] Vesga Molina F, et al. **Arch Esp Urol** 1997 May;50(4):407-9 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Antenatal exposure to atenolol and retroperitoneal fibromatosis. Satgé D, et al. **Reprod Toxicol** 1997 Jul-Aug; 11(4):539-41

COMPLICATIONS

Hypertension and unilateral renal ischemia (Page kidney) due to compression of a retroperitoneal paraganglioma. Nakano S, et al. **Am J Nephrol** 1996;16(2):91-4

Sarcoma arising from an abdominal aortic aneurysm. Compagnoni G, et al. **Ann Vasc Surg** 1997 Mar;11(2):183-5

Klinefelter syndrome and neoplasia presentation of three new cases [letter] Wysocka B, et al. **Cancer Genet Cytogenet** 1996 Nov;92(1):85-6

Carcinoid tumor presenting as acute abdomen due to hemoperitoneum. Rungta U, et al. **Indian J Gastroenterol** 1995 Oct;14(4):147-8

Excess adipose and heartburn. Clements WD, et al. **Postgrad Med J** 1997 Jun;73(860):369-71

Abdominal mass and haematuria. Hewitt PM, et al. **Postgrad Med J** 1997 Aug;73(862):517-8

[Malignant neoplasms and intestinal obstruction in children 3 to 15 years old] Trifonov G, et al. **Khirurgiia (Sofiia)** 1996;49(3):33-6 (Eng. Abstr.) **(Bul)**

[Percutaneous nephrostomy in malignant ureteral obstruction (see comments)] Demetriou D, et al. **Dtsch Med Wochenschr** 1996 Dec 6;121(49):1526-30 (Eng. Abstr.). Comment in: Dtsch Med Wochenschr 1997 Mar 21;122(12):385. **(Ger)**

[Hypertension secondary to multiple malignant paragangliomas] Mazza A, et al. **G Ital Cardiol** 1996 Aug; 26(8):891-7 (Eng. Abstr.) **(Ita)**

[Retroperitoneal mucinous cystadenocarcinoma associated with horseshoe kidney: a case report] Takayama H, et al. **Hinyokika Kiyo** 1996 Aug;42(8):573-6 (8 ref.) (Eng. Abstr.) **(Jpn)**

[A retroperitoneal lipoma of the lesser pelvis impinging on the femur via the obturator canal] Urban AS, et al. **Vestn Khir Im I I Grek** 1997;156(3):78 **(Rus)**

[Intratumor and retroperitoneal massive hemorrhage caused by retroperitoneal liposarcoma] Guzmán Martínez-Valls PL, et al. **Actas Urol Esp** 1996 Sep;20(8):754-6 (Eng. Abstr.) **(Spa)**

CONGENITAL

Case report: congenital retroperitoneal fibrosarcoma. Hamm CM, et al. **Med Pediatr Oncol** 1997 Jan;28(1):65-8

Clonal analysis of sacrococcygeal "teratomas". Sinnock KL, et al. **Pediatr Pathol Lab Med** 1996 Nov-Dec;16(6):865-75

Congenital retroperitoneal tumour: rhabdomyoma or rhabdomyosarcoma? Sharma AK, et al. **Pediatr Surg Int** 1997;12(1):69-70

DIAGNOSIS

Progressive approach to the cytologic diagnosis of retroperitoneal spindle cell tumors. Ferretti M, et al. **Acta Cytol** 1997 Mar-Apr;41(2):450-60

Granulocytic sarcoma presenting as a retroperitoneal lymph node mass. A case report with diagnosis by fine needle aspiration biopsy and flow cytometry. Mockli G. **Acta Cytol** 1997 Sep-Oct;41(5):1525-7

Malignant retroperitoneal teratoma: case report and literature review. Renato F, et al. **Acta Urol Belg** 1996 Sep; 64(3):49-54 (19 ref.)

CT-guided transvertebral core biopsy of a retrocrural mass. Aström KG, et al. **AJR Am J Roentgenol** 1997 Oct; 169(4):991-3

Prenatal diagnosis of an extensive fetal lymphangioma using ultrasonography, magnetic resonance imaging and cytology. Kaminopetros P, et al. **Br J Radiol** 1997 Jul; 70(835):750-3

Giant retroperitoneal angiomyolipoma mimicking liposarcoma. Wang LJ, et al. **Br J Urol** 1997 Jun; 79(6):1001-2

Retroperitoneal cystic lymphangioma: report of one case. Chang PF, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Jul-Aug;38(4):306-8

Primary retroperitoneal sarcomas: common symptoms, common diagnoses, uncommon disease. Ziran BH, et al. **Clin Orthop** 1996 Oct;(331):277-82

Retrorectal tumors complicating pregnancy. Report of two cases. Sobrado CW, et al. **Dis Colon Rectum** 1996 Oct; 39(10):1176-9 (13 ref.)

Absence of Epstein-Barr virus (EBV) in a gastrointestinal

stromal cell tumour (GIST) in an adult human immunodeficiency virus-seropositive patient with past EBV infection. Kubben FJ, et al. **Eur J Gastroenterol Hepatol** 1997 Jul;9(7):721–4

Retroperitoneal lymphangioma presenting as a mesenteric cyst. Meyer T, et al. **Eur J Radiol** 1995 Dec 15;21(2):143–4

Generalised lymphangioleiomyomatosis presenting as a retroperitoneal tumour. Gawad KA, et al. **Eur J Surg** 1996 Jul;162(7):583–5

Large iliac venous aneurysm simulating a retroperitoneal soft tissue tumour. Petrunić M, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):221–2

A pelvic retroperitoneal schwannoma arising in the right paracolpium. Ueda M, et al. **Gynecol Oncol** 1996 Mar; 60(3):480–3

Primary retroperitoneal teratoma in an adult: a case report. Koroku M, et al. **Int J Urol** 1997 Mar;4(2):219–21

Diagnosis and surgical treatment of retroperitoneal tumours. Testini M, et al. **Int Surg** 1996 Jan–Mar;81(1):88–93

Solitary fibrous tumour of the retroperitoneum mimicking a renal mass. Piazza R, et al. **Int Urol Nephrol** 1996; 28(6):751–4

Peripheral primitive neuroectodermal tumor involving the paravertebral and retroperitoneal regions. Fukumoto S, et al. **Intern Med** 1997 Jun;36(6):424–9

Retroperitoneal actinomycosis masquerading as inflammatory pseudotumor. Radhi J, et al. **J Pediatr Surg** 1997 Apr; 32(4):618–20

Retroperitoneal MR imaging. Engelken JD, et al. **Magn Reson Imaging Clin N Am** 1997 Feb;5(1):165–78 (51 ref.)

Retroperitoneal MR imaging in children. Meyer JS. **Magn Reson Imaging Clin N Am** 1996 Nov;4(4):657–78 (70 ref.)

Ectopic neural tissue as an unusual cause of a retroperitoneal tumor. Hahlbohm AM, et al. **Pediatr Surg Int** 1997; 12(1):66–8

Excess adipose and heartburn. Clements WD, et al. **Postgrad Med J** 1997 Jun;73(860):369–71

Adrenal and extra-adrenal retroperitoneal ganglioneuroma: imaging findings in 13 adults. Radin R, et al. **Radiology** 1997 Mar;202(3):703–7

Extrarenal retroperitoneal angiomyolipoma. Fegan JE, et al. **South Med J** 1997 Jan;90(1):59–62 (22 ref.)

Simultaneous occurrence of urothelial bladder carcinoma and primary retroperitoneal leiomyosarcoma. Herrmann U, et al. **Urol Int** 1997;58(4):252–3

[Retroperitoneal schwannoma. Diagnostic and therapeutic outcome] Krid M, et al. **Acta Urol Belg** 1997 Mar; 65(1):69–72 (18 ref.) (Eng. Abstr.) **(Fre)**

[Diagnosis of adenopathies and retroperitoneal masses by surgical endoscopy. Apropos of 93 cases] Porte H, et al. **Chirurgie** 1997 Jan;121(9–10):631–5 (Eng. Abstr.) **(Fre)**

[Magnetic resonance tomography of liposarcoma] Uhl M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Aug;165(2):144–7 (Eng. Abstr.) **(Ger)**

[Burned-out tumor and carcinoma-in-situ of the testis mimicking an extragonadal germ cell tumor: a case report] Kayada K, et al. **Hinyokika Kiyo** 1996 Aug;42(8):613–6 (Eng. Abstr.) **(Jpn)**

[Retroperitoneal ganglioneuroma: a case report] Oyama N, et al. **Hinyokika Kiyo** 1996 Sep;42(9):663–5 (Eng. Abstr.) **(Jpn)**

[Pheochromocytoma of the left retroperitoneal paraganglion associated with torsade de pointes: a case report] Kihara H, et al. **J Cardiol** 1997 Jul;30(1):37–44 (Eng. Abstr.) **(Jpn)**

[A case of mature retroperitoneal teratoma producing CEA] Iwai T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Jul; 93(7):491–5 (16 ref.) **(Jpn)**

[Four cases of retroperitoneal schwannomas] Yumoto E, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Dec; 93(12):947–52 **(Jpn)**

[Retroperitoneal tumors of nervous origin in adults] Andronescu P, et al. **Chirurgia (Bucur)** 1997 Jan–Feb; 92(1):39–45 (Eng. Abstr.) **(Rum)**

[Leiomyoma of the small intestine simulating retroperitoneal tumor] Zhuravlev VN, et al. **Khirurgiia (Mosk)** 1996;(2):120 **(Rus)**

[The diagnosis and treatment of primary nonorganic tumors of the retroperitoneal space] Gorburov GF, et al. **Klin Khir** 1996;(7):11–3 **(Rus)**

[Mesenchymoma—diagnostic dilemmas] Curčin N, et al. **Med Pregl** 1997 May–Jun;50(5–6):229–32 (Eng. Abstr.) **(Scr)**

[Retrovesical schwannosarcoma] Gonzalvo Pérez V, et al. **Actas Urol Esp** 1997 Apr;21(4):416–9 (8 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Advances in the management of metastatic non-seminomatous germ cell tumours during the cisplatin era: a single-institution experience. Gerl A, et al. **Br J Cancer** 1996 Oct;74(8):1280–5

Long-term survival of patients with recurrent or refractory germ cell tumors after high dose chemotherapy. Beyer J, et al. **Cancer** 1997 Jan 1;79(1):161–8

Early postoperative intraperitoneal Adriamycin as an adjuvant treatment for visceral and retroperitoneal sarcoma. Sugarbaker PH. **Cancer Treat Res** 1996;81:7–14 (12 ref.)

Combination chemotherapy for malignant paraganglioma. Kimura S, et al. **Intern Med** 1997 Jan;36(1):35–9 (21 ref.)

Residual masses after chemotherapy for metastatic testicular cancer: the clinical implications of the association between retroperitoneal and pulmonary histology. Re-analysis of Histology in Testicular Cancer (ReHiT) Study Group. Steyerberg EW, et al. **J Urol** 1997 Aug;158(2):474–8 (23 ref.)

Management of chemotherapy in a pregnancy complicated by a large neuroblastoma. Arango HA, et al. **Obstet Gynecol** 1994 Oct;84(4 Pt 2):665–8 (10 ref.)

ETIOLOGY

Radiation induced malignant schwannoma arising in a neurofibroma. Isler MH, et al. **Clin Orthop** 1996 Apr; (325):251–5

Radiation-induced sarcoma following curative radiotherapy for testicular seminoma: case report and brief review of the literature. Stein ME, et al. **Tumori** 1997 May–Jun; 83(3):721–3 (14 ref.)

METABOLISM

High-molecular weight IGF-2 expression in a haemangiopericytoma associated with hypoglycaemia. Höög A, et al. **APMIS** 1997 Jun;105(6):469–82 (58 ref.)

MORTALITY

Prognostic factors associated with long-term survival for retroperitoneal sarcoma: implications for management. Heslin MJ, et al. **J Clin Oncol** 1997 Aug;15(8):2832–9

PATHOLOGY

Cytology of fine needle aspirates of primary extragonadal germ cell tumors. Chao TY, et al. **Acta Cytol** 1997 Mar–Apr;41(2):497–503

Use of abdominal compression as an aid to CT-guided retroperitoneal biopsies [letter] de Kerviler E, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1346–7

Lymphocyte-rich well-differentiated liposarcoma: report of nine cases. Argani P, et al. **Am J Surg Pathol** 1997 Aug; 21(8):884–95

Dedifferentiated liposarcoma: a clinicopathological analysis of 155 cases with a proposal for an expanded definition of dedifferentiation. Henricks WH, et al. **Am J Surg Pathol** 1997 Mar;21(3):271–81

Primary retroperitoneal mucinous tumor of low malignant potential: histogenetic aspects and review of the literature. Papadogiannakis N, et al. **APMIS** 1997 Jun;105(6):483–6 (32 ref.)

Retroperitoneal melanocytic schwannoma. Hardisson D, et al. **Br J Urol** 1997 Jun;79(6):1003–4

Malignant cells revealed in fine needle punctures of lymph nodes and tumours by electronmicroscopical methods. Hulinska D, et al. **Cent Eur J Public Health** 1995 Nov; 3(4):195–8

Two cases of primary retroperitoneal mucinous cystadenocarcinoma. Lee IW, et al. **Gynecol Oncol** 1996 Oct;63(1):145–50 (13 ref.)

Dedifferentiated myxoid liposarcoma: a clinicopathological study suggesting a closer relationship between myxoid and well-differentiated liposarcoma. Mentzel T, et al. **Histopathology** 1997 May;30(5):457–63

Stage IVS neuroblastoma: a clinical, histological, and biological analysis of 45 cases. Hachitanda Y, et al. **Hum Pathol** 1996 Nov;27(11):1135–8

Retroperitoneal malignant teratoma. A case report. Tezel E, et al. **Mater Med Pol** 1995 Jul–Sep;27(3):123–5

Well-differentiated liposarcoma of the retroperitoneum: a clinicopathologic analysis of 20 cases, with particular attention to the extent of low-grade dedifferentiation. Elgar F, et al. **Mod Pathol** 1997 Feb;10(2):113–20

Extrapleural solitary fibrous tumor: a report of seven cases. Fukunaga M, et al. **Mod Pathol** 1997 May;10(5):443–50

Retroperitoneal liposarcoma in two siblings. Narita T, et al. **Pathol Res Pract** 1996 Dec;192(12):1259–63; discussion 1264–5

Retroperitoneal cystic neuroendocrine tumor. A case report. Scapinello A, et al. **Pathologica** 1995 Oct;87(5):544–47

Clonal analysis of sacrococcygeal "teratomas". Sinnock KL, et al. **Pediatr Pathol Lab Med** 1996 Nov–Dec;16(6):865–75

Inferior vena caval thrombus associated with double neoplasms of the retroperitoneum and kidney: report of a case. Furugaki K, et al. **Surg Today** 1996;26(8):658–61

An effective chemotherapy regimen for liver metastasis from retroperitoneal fibrosarcoma: report of a case. Isobe H, et al. **Surg Today** 1997;27(5):463–5

Solid and papillary tumor of the pancreas: ultrastructural observations on two contrasting cases. de la Roza G, et al. **Ultrastruct Pathol** 1997 Sep–Oct;21(5):439–47

Extrarenal Wilms' tumor: an ultrastructural and immunoelectron microscopic case report. Mount SL, et al. **Ultrastruct Pathol** 1996 Mar–Apr;20(2):155–65

Detection of vital germ cell tumor cells in short-term cell cultures of primary tumors and of retroperitoneal metastasis—clinical implications. Otto T, et al. **Urol Res** 1997;25(2):121–4

[Retroperitoneal extragonadal germ cell tumors: apropos of 4 cases. The importance of research of an occult testicular lesion] Houlgatte A, et al. **Prog Urol** 1996 Aug–Sep; 6(4):548–51 (Eng. Abstr.) **(Fre)**

[Association of bone marrow mastocytosis with extremely immature extramedullary mast cell sarcoma] Sotlar K, et al. **Pathologe** 1997 May;18(3):252–6 (Eng. Abstr.) **(Ger)**

[Retroperitoneal bifocal ganglioneuroma—a case report] Hallscheidt P, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Apr;166(4):351–4 **(Ger)**

[CT-guided core needle biopsy of abdominal, pelvic and retroperitoneal masses] Sklair-Levy M, et al. **Harefuah** 1997 Mar 2;132(5):318–23, 382 (Eng. Abstr.) **(Heb)**

[A case of giant cavernous hemangioma of the retroperitoneum] Bellini F, et al. **Minerva Chir** 1996 Oct; 51(10):867–70 (14 ref.) (Eng. Abstr.) **(Ita)**

[Characterization of spontaneous liver metastatic model of BALB/c retroperitoneal sarcoma (LMFS) injected in footpad and antitumor effects of HCFU] Fujii Y, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):343–8 (Eng. Abstr.) **(Jpn)**

[Retroperitoneal malignant Schwannoma in the pelvis: a case report] Saito R, et al. **Hinyokika Kiyo** 1997 Jan;43(1):25–8 (Eng. Abstr.) **(Jpn)**

[Retroperitoneal malignant mesothelioma. A case report] Iguchi Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Nov; 87(11):1261–5 (Eng. Abstr.) **(Jpn)**

[Autopsy findings of retroperitoneal cystic tumor and peliosis hepatis in lymphangiomyomatosis] Hamada K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Apr; 35(4):437–41 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Perirenal fat necrosis secondary to hemorrhagic pancreatitis, mimicking retroperitoneal liposarcoma: CT manifestation. Chen H, et al. **Abdom Imaging** 1996 Nov–Dec;21(6):546–8

Interfascial and perinephric pathways in the spread of retroperitoneal disease: refined concepts based on CT observations. Aizenstein RI, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):639–43

Computed tomography of retroperitoneal and mesenteric sarcomas: a pictorial essay. Munk PL, et al. **Can Assoc Radiol J** 1996 Oct;47(5):335–41

Retroperitoneal granular cell tumor. Computed tomography findings with 5-year follow-up. Varma DG, et al. **Clin Imaging** 1996 Oct–Dec;20(4):279–81

Benign schwannoma surrounding and obstructing the ureteropelvic junction. First case report. Micali S, et al. **Eur Urol** 1997;32(1):121–3

[Computed tomographic features of malignant fibrous histiocytoma] Dai J, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Mar;18(2):140–2 (Eng. Abstr.) **(Chi)**

[Retroperitoneal leiomyosarcoma: case report and literature review] Baraké H, et al. **Rev Med Brux** 1996 Dec; 17(6):384–8 (19 ref.) (Eng. Abstr.) **(Fre)**

[Computerized tomography of retroperitoneal liposarcoma] Dieckmann C, et al. **Aktuelle Radiol** 1997 Jan;7(1):23–9 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

FDG-PET evaluation of retroperitoneal metastases of testicular cancer before and after chemotherapy. Reinhardt MJ, et al. **J Nucl Med** 1997 Jan;38(1):99–101

RADIOTHERAPY

Radiotherapy for hypoglycaemia associated with large leiomyosarcomas. Kishi K, et al. **Br J Radiol** 1997 Mar; 70:306–8

Role of radiation therapy in retroperitoneal sarcomas. Clark JA, et al. **Oncology (Huntingt)** 1996 Dec;10(12):1867–72; discussion 1872–4 (27 ref.)

[Organ preservation in the treatment of malignant solid tumors in children] Saeki M, et al. **Gan To Kagaku Ryoho** 1997 Apr;24(6):666–72 (5 ref.) (Eng. Abstr.) **(Jpn)**

SECONDARY

Resection of residual retroperitoneal masses in testicular cancer: evaluation and improvement of selection criteria. The ReHiT study group. Re-analysis of histology in testicular cancer. Steyerberg EW, et al. **Br J Cancer** 1996 Nov;74(9):1492–8

Late relapse of metastatic teratoma invading a vertebral body: a combined surgical approach. Elkabir JJ, et al. **Br J Urol** 1997 Jun;79(6):999–1000

Evaluation by magnetic resonance imaging of the inferior vena cava in patients with non-seminomatous germ cell tumours of the testis metastatic to the retroperitoneum. Ng CS, et al. **Br J Urol** 1997 Jun;79(6):942–51

A metastatic and androgen-sensitive human prostate cancer model using intraprostatic inoculation of LNCaP cells in SCID mice. Sato N, et al. **Cancer Res** 1997 Apr 15; 57(8):1584–9

Indispensability of pelvic and paraaortic lymphadenectomy in endometrial cancers. Yokoyama Y, et al. **Gynecol Oncol** 1997 Mar;64(3):411–7

Laparoscopic diagnosis of malignant retroperitoneal fibrosis. Kava BR, et al. **J Endourol** 1996 Dec;10(6):535–8

FDG-PET evaluation of retroperitoneal metastases of testicular cancer before and after chemotherapy. Reinhardt MJ, et al. **J Nucl Med** 1997 Jan;38(1):99–101

Residual masses after chemotherapy for metastatic testicular

cancer: the clinical implications of the association between retroperitoneal and pulmonary histology. Re-analysis of Histology in Testicular Cancer (ReHiT) Study Group. Steyerberg EW, et al. **J Urol** 1997 Aug;158(2):474–8 (23 ref.)

A case of growing teratoma syndrome. Adsan O, et al. **Scand J Urol Nephrol** 1997 Apr;31(2):217–9

Detection of vital germ cell tumor cells in short-term cell cultures of primary tumors and of retroperitoneal metastasis—clinical implications. Otto T, et al. **Urol Res** 1997;25(2):121–4

A new strategy for management of retroperitoneal tumors with supradiaphragmatic vena caval thrombi. Zaima M, et al. **Urology** 1997 Jun;49(6):948–50

[Lymphatic cysts arising after extended surgery for cervical and endometrial tumors] Oleinik VV, et al. **Vopr Onkol** 1997;43(3):335–9 (Eng. Abstr.) **(Rus)**

[Burned-out testicular tumor] Sanz Chinesta S, et al. **Actas Urol Esp** 1996 Jun;20(6):586–90 (Eng. Abstr.) **(Spa)**

SURGERY

Conservative surgical treatment for a giant thoracoabdominal benign teratoma. Catania A, et al. **Acta Chir Belg** 1997 Jun;97(3):130–2

Malignant soft tissue tumours of the trunk and retroperitoneum. Henderson MA. **Acta Orthop Scand Suppl** 1997 Feb;273:108–11

Fibromatosis of the female pelvis. Cormio G, et al. **Ann Chir Gynaecol** 1997;86(1):84–6

Nephrectomy during operative management of retroperitoneal sarcoma. Russo P, et al. **Ann Surg Oncol** 1997 Jul-Aug;4(5):421–4

Cardiopulmonary bypass and cell-saver technique in combined oncologic and cardiovascular surgery. Akchurin RS, et al. **Artif Organs** 1997 Jul;21(7):763–5

Resection of residual retroperitoneal masses in testicular cancer: evaluation and improvement of selection criteria. The ReHiT study group. Re-analysis of histology in testicular cancer. Steyerberg EW, et al. **Br J Cancer** 1996 Nov;74(9):1492–8

Primary retroperitoneal germ cell tumours: excision via a thoracoabdominal extraperitoneal approach. Christmas TJ, et al. **Br J Surg** 1997 Jul;84(7):1022–5

Surgical management of primary retroperitoneal sarcoma. Wang TY, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep;58(3):177–82

Surgical management of retroperitoneal tumors with vena caval thrombus in the inferior cava using cardiopulmonary bypass, arrested circulation and profound hypothermia. Rodríguez-Rubio FI, et al. **Eur Urol** 1997;32(2):194–7

Indispensability of pelvic and paraaortic lymphadenectomy in endometrial cancers. Yokoyama Y, et al. **Gynecol Oncol** 1997 Mar;64(3):411–7

Diagnosis and surgical treatment of retroperitoneal tumours. Testini M, et al. **Int Surg** 1996 Jan-Mar;81(1):88–93

Laparoscopic removal of a benign pelvic retroperitoneal dermoid cyst. Sharpe LA, et al. **J Am Assoc Gynecol Laparosc** 1995 Feb;2(2):223–6

Prognostic factors associated with long-term survival for retroperitoneal sarcoma: implications for management. Heslin MJ, et al. **J Clin Oncol** 1997 Aug;15(8):2832–9

Intra-operative acute pulmonary oedema: a rare presentation of retroperitoneal paraganglioma. Haribhakti SP, et al. **J Indian Med Assoc** 1996 Feb;94(2):72–3

Renal impairment after surgical resection of neuroblastoma. Tanabe M, et al. **J Pediatr Surg** 1996 Sep;31(9):1252–5

Resection of massive retroperitoneal tumor extending into L5 vertebral body: controversies in surgical management. Epstein NE. **J Spinal Disord** 1997 Apr;10(2):176–7; discussion 177–81

Benign retroperitoneal neural sheath tumors in patients without von Recklinghausen's disease. Bastounis E, et al. **Scand J Urol Nephrol** 1997 Apr;31(2):129–36

Successful resection of a retroperitoneal malignant fibrous histiocytoma with caval tumor thrombus. Iwanami K, et al. **Surg Today** 1996;26(2):145–6

Systemic inflammatory response syndrome after human syngeneic intestinal transplantation: evidence for disruption of enterocyte barrier function. Kuo PC, et al. **Transplant Proc** 1996 Oct;28(5):2763–4

Extragonadal germ cell tumor followed by metachronous testicular tumor. A case report. Hayashi T, et al. **Urol Int** 1996;57(3):194–6

A new strategy for management of retroperitoneal tumors with supradiaphragmatic vena caval thrombi. Zaima M, et al. **Urology** 1997 Jun;49(6):948–50

[Retroperitoneal schwannoma. Diagnostic and therapeutic outcome] Krid M, et al. **Acta Urol Belg** 1997 Mar; 65(1):69–72 (18 ref.) (Eng. Abstr.) **(Fre)**

[Retroperitoneal tumors and surgery of the great vessels] Barret A, et al. **Chirurgie** 1997;122(1):25–30 (18 ref.) (Eng. Abstr.) **(Fre)**

[surgical relevance of diagnostic imaging in abdominal tumors—decision making in retroperitoneal tumors] Schildberg FW, et al. **Chirurg** 1997 Apr;68(4):346–55 (33 ref.) (Eng. Abstr.) **(Ger)**

[Results of surgical therapy of primary and recurrent retroperitoneal liposarcoma] Hiller WF, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:234–6 (Eng. Abstr.) **(Ger)**

[Laparoscopy in diagnosis and therapy of advanced abdominal malignancies] Müller G, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:568–70 (Eng. Abstr.) **(Ger)**

[Retroperitoneal schwannoma: report of a clinical case and review of the literature] Ziparo V, et al. **G Chir** 1996 Aug-Sep;17(8-9):399–404 (33 ref.) (Eng. Abstr.) **(Ita)**

[Retroperitoneal mucinous cystadenocarcinoma associated with horseshoe kidney: a case report] Takayama H, et al. **Hinyokika Kiyo** 1996 Aug;42(8):573–6 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Case of bilateral retroperitoneal ganglioneuroma and renal artery abnormality with spasmodic hypertension, excessive catecholamine secretion after the removal of the tumor near right adrenal gland] Kojima M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jun 10;85(6):922–4 **(Jpn)**

[Retroperitoneal desmoid tumor] Budzyński A, et al. **Przegl Lek** 1996;53(6):506–7 (Eng. Abstr.) **(Pol)**

THERAPY

Clinical usefulness of determining the rate of thermal clearance within heated tumors. Masunaga S, et al. **Jpn J Clin Oncol** 1996 Dec;26(6):428–37

[Results of surgical and combined treatment of retroperitoneal non-organ neoformations] Chernyí VV. **Klin Khir** 1996;(6):41–3 (38 ref.) **(Rus)**

ULTRASONOGRAPHY

Extrarenal Wilms tumor. Song JH, et al. **J Ultrasound Med** 1997 Feb;16(2):149–51

The unusual imaging appearance of primary retroperitoneal teratoma: report of a case. Goyal M, et al. **Surg Today** 1997;27(3):282–4

ULTRASTRUCTURE

Image cytometry analysis of Feulgen-stained nuclei in 72 lipomatous lesions including atypical lipomas and well-differentiated liposarcomas. Berthe JV, et al. **Am J Clin Pathol** 1996 Sep;106(3):289–97

Extrarenal Wilms' tumor: an ultrastructural and immunoelectron microscopic case report. Mount SL, et al. **Ultrastruct Pathol** 1996 Mar-Apr;20(2):155–65

VETERINARY

Identification of two homologs of the Kaposi's sarcoma-associated herpesvirus (human herpesvirus 8) in retroperitoneal fibromatosis of different macaque species. Rose TM, et al. **J Virol** 1997 May;71(5):4138–44

RETROPERITONEAL SPACE

Retroperitoneal bleeding after L4–L5 diskectomy in a patient with crossed-fused renal ectopia: treatment by selective embolization. Khan HG, et al. **Cardiovasc Intervent Radiol** 1996 Sep-Oct;19(5):348–51

Retroperitoneal endometriosis causing cyclical ureteral obstruction. Sakellariou PG, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Jul;67(1):59–62

Giant retroperitoneal cyst in an adult male. Egawa S, et al. **Int J Urol** 1996 Jul;3(4):304–6

Life-threatening retroperitoneal hematoma caused by anticoagulant therapy for myocardial infarction after SWL. Katz R, et al. **J Endourol** 1997 Feb;11(1):23–5

Retroperitoneal and intraperitoneal CO2 insufflation have markedly different cardiovascular effects. Giebler RM, et al. **J Surg Res** 1997 Mar;68(2):153–60

Intra-abdominal pulmonary sequestration: diagnostic difficulties. Morad NA, et al. **Pathology** 1997 May; 29(2):218–20

Inflammatory pseudotumor of the retroperitoneum in a child. Gignoux B, et al. **Pediatr Surg Int** 1997 Jul;12(5-6):443–5

Herniation of retroperitoneal cyst into scrotum. Garg P, et al. **Trop Doct** 1997 Apr;27(2):118–9

Posterior retroperitoneoscopy as a new minimally invasive approach for adrenalectomy: results of 30 adrenalectomies in 27 patients. Walz MK, et al. **World J Surg** 1996 Sep; 20(7):769–74

[Retroperitoneoscopy—a new era] Kala Z, et al. **Rozhl Chir** 1996 Mar;75(3):153–6 (Eng. Abstr.) **(Cze)**

[Spontaneous retroperitoneal hematoma in adrenal metastasis] Tappe U, et al. **Dtsch Med Wochenschr** 1997 Apr 11; 122(15):471–4 (Eng. Abstr.) **(Ger)**

[A case of retroperitoneal abscess and disseminated intravascular coagulation as a complication of upper ureteral rupture caused by ureteral calculus] Igawa T, et al. **Hinyokika Kiyo** 1996 Jul;42(7):525–8 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

The perirenal space: relationship of pathologic processes to normal retroperitoneal anatomy. Bechtold RE, et al. **Radiographics** 1996 Jul;16(4):841–54

BLOOD SUPPLY

Major retroperitoneal vascular injury during laparoscopic surgery. Nezhat C, et al. **Hum Reprod** 1997 Mar;12(3):480–3

INJURIES

[Advantages of laparatomy in the treatment of closed injuries of the abdomen and retroperitoneal space] Tomusiak TL. **Klin Khir** 1996;(6):11–2 **(Ukr)**

INNERVATION

Iatrogenic injury to the ilioinguinal and iliohypogastric nerves in the groin: a case report, diagnosis, and management. Choi PD, et al. **Ann Plast Surg** 1996 Jul; 37(1):60–5

PATHOLOGY

Retroperitoneal foregut cyst. Kajiya Y, et al. **Abdom Imaging** 1997 Jan-Feb;22(1):111–3

Extensive intra-abdominal-retroperitoneal fat necrosis in a patient with renal cell carcinoma. Yang MC, et al. **J Formos Med Assoc** 1996 Sep;95(9):719–21

Retroperitoneal MR imaging in children. Meyer JS. **Magn Reson Imaging Clin N Am** 1996 Nov;4(4):657–78 (70 ref.)

[Benign non-organ-related diseases of the retroperitoneal space] Szolar DH, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Aug;167(2):107–21 (101 ref.) (Eng. Abstr.) **(Ger)**

[Retroperitoneal hematoma during heparin therapy. Comments on 3 cases] Di Rosa C, et al. **Minerva Chir** 1997 Apr;52(4):493–7 (30 ref.) (Eng. Abstr.) **(Ita)**

[A case of Oberling's retroperitoneal xanthogranuloma in pilot] Kvashin IK, et al. **Aviakosm Ekolog Med** 1996; 30(6):62–3 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Interfascial and perinephric pathways in the spread of retroperitoneal disease: refined concepts based on CT observations. Aizenstein RI, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):639–43

CT of pancreatitis with renal and juxtarenal manifestations. Farman J, et al. **Clin Imaging** 1997 May-Jun;21(3):183–8 (9 ref.)

Retroperitoneal collections—aetiology and radiological implications. Paley M, et al. **Clin Radiol** 1997 Apr; 52(4):290–4

Image quality and dose in computed tomography. Jurik AG, et al. **Eur Radiol** 1997;7(1):77–81

The perirenal space: relationship of pathologic processes to normal retroperitoneal anatomy. Bechtold RE, et al. **Radiographics** 1996 Jul;16(4):841–54

[Benign non-organ-related diseases of the retroperitoneal space] Szolar DH, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Aug;167(2):107–21 (101 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Iatrogenic injury to the ilioinguinal and iliohypogastric nerves in the groin: a case report, diagnosis, and management. Choi PD, et al. **Ann Plast Surg** 1996 Jul; 37(1):60–5

New possibilities in L2–L5 lumbar arthrodesis using a lateral retroperitoneal approach assisted by laparoscopy: preliminary results. de Peretti F, et al. **Eur Spine J** 1996; 5(3):210–6

The laparoscopic sound: a simple instrument for rapid and safe secondary trocar insertion in retroperitoneal laparoscopy. Kyriakidis AA. **Eur Urol** 1996;30(4):471–4

Retroperitoneoscopic treatment of ureteropelvic junction obstruction. Puppo P, et al. **Eur Urol** 1997;31(2):204–8

Retroperitoneal laparoscopic nephrectomy in children. Preliminary report of 18 cases. Valla JS, et al. **Eur Urol** 1996;30(4):490–3

Laparoscopic retroperitoneal nephrectomy for atrophic kidney associated with ectopic ureter in a 2-year-old girl. Nishiyama T, et al. **Int J Urol** 1996 Jul;3(4):307–9

An operative technique for laparoscopic hysterectomy using a retroperitoneal approach. Kadar N. **J Am Assoc Gynecol Laparosc** 1994 Aug;1(4 Pt 1):365–77

The retroperitoneal approach for abdominal aortic aneurysms. Laohapensang K, et al. **J Med Assoc Thai** 1997 Aug;80(8):479–85

Videoendoscopic retroperitoneal cutaneous ureterostomy. Puppo P, et al. **Tech Urol** 1996 Spring;2(1):10–5

[Retroperitoneoesotomy in the surgery of pancreonecrosis] Gagushin VA, et al. **Khirurgiia (Mosk)** 1996;(6):66–8 (Eng. Abstr.) **(Rus)**

[Drainage of the retroperitoneal space in suppurative pancreatitis] Chernov VN, et al. **Vestn Khir Im I I Grek** 1996;155(2):92–4 **(Rus)**

ULTRASONOGRAPHY

[Echo-guided drainage of pararenal and pelvic fluid accumulations: technique, indications, and results] Porena M, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):19–26 (8 ref.) (Eng. Abstr.) **(Ita)**

RETROPHARYNGEAL ABSCESS

Contemporary management of deep neck space infections. Gidley PW, et al. **Otolaryngol Head Neck Surg** 1997 Jan; 116(1):16–22

Supraglottic airway infections. Millan SB, et al. **Prim Care** 1996 Dec;23(4):741–58 (106 ref.)

RETROPHARYNGEAL ABSCESS

COMPLICATIONS

Pathogenesis of non-traumatic atlanto-axial subluxation (Grisel's syndrome). Welinder NR, et al. **Eur Arch Otorhinolaryngol** 1997;254(5):251-4

Retropharyngeal abscess associated with tuberculosis of the cervical spine. Al Soub H. **Tuber Lung Dis** 1996 Dec; 77(6):563-5 (17 ref.)

DIAGNOSIS

Early retropharyngeal abscess formation after treatment of scarlet fever. Chan TC, et al. **J Emerg Med** 1996 May-Jun; 14(3):377

Acute non-tuberculous retropharyngeal abscess in an adult. A case report and review of the literature. Karkanevatos A, et al. **J Laryngol Otol** 1997 Feb;111(2):169-71 (9 ref.)

An atypical infectious complication of anterior cervical surgery. Violon P, et al. **Neuroradiology** 1997 Apr; 39(4):278-81

ETIOLOGY

Retropharyngeal and epidural abscess from a swallowed fish bone. Tsai YS, et al. **Am J Emerg Med** 1997 Jul;15(4):381-2

An unusual complication of emergency tracheal intubation. Ooi GC, et al. **Anaesthesia** 1997 Feb;52(2):154-8

Complications associated with 327 foreign bodies of the pharynx, larynx, and esophagus. Singh B, et al. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):301-4

Group A streptococcal septicemia with retropharyngeal abscess: a case report. Choong CS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jul;60(1):62-5

Retropharyngeal abscess due to Gemella morbillorum [letter; comment] Pradeep R, et al. **Clin Infect Dis** 1997 Feb; 24(2):284-5. Comment on: Clin Infect Dis 1996 Jun;22(6):1084-6.

Cervical adenitis and deep neck infection caused by Streptococcus pneumoniae. Medina M, et al. **Pediatr Infect Dis J** 1997 Aug;16(8):823-4

RADIOGRAPHY

Retropharyngeal abscess: pitfalls of plain films and computed tomography. Brechtelsbauer PB, et al. **Am J Otolaryngol** 1997 Jul-Aug;18(4):258-62

Parapharyngeal abscess in children: the role of CT for diagnosis and treatment. Sichel JY, et al. **Int J Pediatr Otorhinolaryngol** 1996 May;35(3):213-22

Retropharyngeal abscess: a clinical review. Goldenberg D, et al. **J Laryngol Otol** 1997 Jun;111(6):546-50

Neonatal radiology casebook. Retropharyngeal abscess in the neonate. Gaglani MJ, et al. **J Perinatol** 1996 May-Jun;16(3 Pt 1):231-3 (12 ref.)

Images in clinical medicine. Retropharyngeal abscess. Babl FE, et al. **N Engl J Med** 1997 Aug 14;337(7):472

VETERINARY

[Retropharyngeal abscess in cattle. A case report] Stocker S, et al. **Schweiz Arch Tierheilkd** 1997;139(7):314-8 (Eng. Abstr.) **(Ger)**

RETROPNEUMOPERITONEUM

CHEMICALLY INDUCED

Pneumatosis cystoides intestinalis with pneumoperitoneum and pneumoretroperitoneum following chemotherapy. Kopp AF, et al. **Abdom Imaging** 1997 Jul-Aug;22(4):395-7

ETIOLOGY

Pneumoretroperitoneum secondary to an open reduction and internal fixation of a femoral fracture: case report. Maldjian PD, et al. **Am Surg** 1997 Jun;63(6):504-5

Pneumoretroperitoneum in a patient with acute biliary pancreatitis. Foitzik T, et al. **Eur J Surg** 1996 Jun; 162(6):507-9

[Subcutaneous emphysema, pneumomediastinum, and pneumoretroperitoneum caused by perforation of sigmoid diverticulum. Report of a case studied with spiral computerized tomography] Mininel G, et al. **Radiol Med (Torino)** 1996 Nov;92(5):653-5 **(Ita)**

RADIOGRAPHY

Pseudo-pneumoretroperitoneum secondary to lumbar emphysema: CT demonstration in two cases. Catalano O, et al. **Eur J Radiol** 1996 Aug;23(1):88-90

[Pneumoperitoneum and pneumoretroperitoneum without perforation] Kirchner J, et al. **Zentralbl Chir** 1996; 121(10):861-5 (12 ref.) (Eng. Abstr.) **(Ger)**

RETROPOSONS see **RETROTRANSPOSONS**

RETROSPECTIVE STUDIES

Reliability of an expert rating procedure for retrospective assessment of occupational exposures in community-based case-control studies. Siemiatycki J, et al. **Am J Ind Med** 1997 Mar;31(3):280-6

Reliability of retrospective chlorophenol exposure estimates over five decades. Teschke K, et al. **Am J Ind Med** 1996 Nov;30(5):616-22

A retrospective, follow-up study of biofeedback-assisted relaxation therapy in patients with posttraumatic headache. Ham LP, et al. **Biofeedback Self Regul** 1996 Jun; 21(2):93-104

Retrospective and prospective design and data. Janson CG. **Eur Child Adolesc Psychiatry** 1996;5 Suppl 1:11-7

Methodological problems in the retrospective computation of responsiveness to change: the lesson of Cronbach. Norman GR, et al. **J Clin Epidemiol** 1997 Aug;50(8):869-79

Reliability of lifetime residential history and activity measures as elements of cumulative ambient ozone exposure assessment. Künzli N, et al. **J Expo Anal Environ Epidemiol** 1996 Jul-Sep;6(3):289-310

Health economics with retrospective data: selection bias issues [letter; comment] Puder KL, et al. **J Int Med Res** 1997 Jan-Feb;25(1):45-51. Comment on: J Int Med Res 1995 Nov-Dec;23(6):395-412.

Increasing toxoplasma seropositivity in women with bad obstetric history and in newborns. Sharma P, et al. **Natl Med J India** 1997 Mar-Apr;10(2):65-6

RETROTRANSPOSONS

The three human cytochrome P450 lanosterol 14 alpha-demethylase (CYP51) genes reside on chromosomes 3, 7, and 13: structure of the two retrotransposed pseudogenes, association with a line-1 element, and evolution of the human CYP51 family. Rozman D, et al. **Arch Biochem Biophys** 1996 Sep 15;333(2):466-74

RNA packaging of yeast retrotransposon Ty1 in the heterologous host, Escherichia coli. Luschnig C, et al. **Biol Chem** 1997 Jan;378(1):39-46

The Ty1-copia group retrotransposons of Allium cepa are distributed throughout the chromosomes but are enriched in the terminal heterochromatin. Pearce SR, et al. **Chromosome Res** 1996 Aug;4(5):357-64

Transposable elements: how non-LTR retrotransposons do it. Finnegan DJ. **Curr Biol** 1997 Apr 1;7(4):R245-8 (16 ref.)

Turned on by stress. Plant retrotransposons. Wessler SR. **Curr Biol** 1996 Aug 1;6(8):959-61 (17 ref.)

Infection of the germ line by retroviral particles produced in the follicle cells: a possible mechanism for the mobilization of the gypsy retroelement of Drosophila. Song SU, et al. **Development** 1997 Jul;124(14):2789-98

A new variant of B1 elements, vB1, identified upstream of a retroviral integration site. Gimbel W, et al. **DNA Seq** 1996;6(4):229-32

The gypsy insulator can function as a promoter-specific silencer in the Drosophila embryo. Cai HN, et al. **EMBO J** 1997 Apr 1;16(7):1732-41

Zepp, a LINE-like retrotransposon accumulated in the Chlorella telomeric region. Higashiyama T, et al. **EMBO J** 1997 Jun;16(12):3715-23

Retroviruses and retroelements in diseases and in gene therapy. Svoboda J. **Folia Biol (Praha)** 1996;42(6):283-94 (46 ref.)

Differential methylation of human LINE-1 retrotransposons in malignant cells. Alves G, et al. **Gene** 1996 Oct 17; 176(1-2):39-44

Integration of the yeast retrovirus-like element Ty3 upstream of a human tRNA gene expressed in yeast. Dildine SL, et al. **Gene** 1997 Jul 31;194(2):227-33

Discovery of a Zdel transposable element in Zea species as a consequence of a retrotransposon insertion. Vicient CM, et al. **Gene** 1997 Jan 15;184(2):257-61

Molecular structure of the transposable element ninja in Drosophila simulans. Ogura K, et al. **Genes Genet Syst** 1996 Feb;71(1):1-8

DNA regions flanking the major Arabidopsis thaliana satellite are principally enriched in Athila retroelement sequences. Pélissier T, et al. **Genetica** 1996 Mar;97(2):141-51

412-positive mesodermal cells and the gonadal mesoderm are separate from the fat-cell lineage. Tan C, et al. **Genetica** 1996 Jan;97(1):111-5

Interaction between mutations in the suppressor of Hairy wing and modifier of mdg4 genes of Drosophila melanogaster affecting the phenotype of gypsy-induced mutations. Georgiev P, et al. **Genetics** 1996 Feb; 142(2):425-36

Doing the conjugative two-step: evidence of recipient autonomy in retrotransfer. Heinemann JA, et al. **Genetics** 1996 Jul;143(3):1425-35

Transcription of gypsy elements in a Y-chromosome male fertility gene of Drosophila hydei. Hochstenbach R, et al. **Genetics** 1996 Feb;142(2):437-46

copia-, gypsy- and LINE-like retrotransposon fragments in the mitochondrial genome of Arabidopsis thaliana. Knoop V, et al. **Genetics** 1996 Feb;142(2):579-85

Details of retropositional genome dynamics that provide a rationale for a generic division: the distinct branching of all the pacific salmon and trout (Oncorhynchus) from the Atlantic salmon and trout (Salmo). Murata S, et al. **Genetics** 1996 Mar;142(3):915-26

Influences of histone stoichiometry on the target site preference of retrotransposons Ty1 and Ty2 in Saccharomyces cerevisiae. Rinckel LA, et al. **Genetics** 1996 Mar;142(3):761-76

The enigma of Y chromosome degeneration: TRAM, a novel retrotransposon is preferentially located on the Neo-Y chromosome of Drosophila miranda. Steinemann M, et al. **Genetics** 1997 Feb;145(2):261-6

Multiple non-LTR retrotransposons in the genome of Arabidopsis thaliana. Wright DA, et al. **Genetics** 1996 Feb; 142(2):569-78

Sex and the spread of retrotransposon Ty3 in experimental populations of Saccharomyces cerevisiae. Zeyl C, et al. **Genetics** 1996 Aug;143(4):1567-77

The Chironomus (Camptochironomus) tentans genome contains two non-LTR retrotransposons. Blinov AG, et al. **Genome** 1997 Feb;40(1):143-50

Chromosomal and genomic organization of Ty1-copia-like retrotransposon sequences in the genus Avena. Katsiotis A, et al. **Genome** 1996 Apr;39(2):410-7

Testis-specific expression of a functional retroposon encoding glucose-6-phosphate dehydrogenase in the mouse. Hendriksen PJ, et al. **Genomics** 1997 May 1; 41(3):350-9

The bg allele mutation is due to a LINE1 element retrotransposition. Perou CM, et al. **Genomics** 1997 Jun 1;42(2):366-8

Inactivation of the mouse HPRT locus by a 203-bp retroposon insertion and a 55-kb gene-targeted deletion: establishment of new HPRT-deficient mouse embryonic stem cell lines. Tsuda H, et al. **Genomics** 1997 Jun 15; 42(3):413-21

Chromosomal distribution of the 412 retrotransposon in natural populations of Drosophila simulans. Hoogland C, et al. **Heredity** 1997 Aug;79 (Pt 2):128-34

An unusual combined insertion/deletion polymorphism in intron 10 of the human complement C6 gene. Fernie BA, et al. **Hum Genet** 1997 Jul;100(1):104-8

Identification of a 5' truncated non-LTR-retrotransposon, YAKPs1, from the variegated cutworm, Peridroma saucia, using PCR. Ring M, et al. **Insect Biochem Mol Biol** 1996 May;26(5):511-8

Rapid cloning of insect transposon insertion junctions using 'universal' PCR. Beeman RW, et al. **Insect Mol Biol** 1997 Feb;6(1):83-8

The open reading frame 1 of the L1Tc retrotransposon of Trypanosoma cruzi codes for a protein with apurinic-apyrimidinic nuclease activity. Olivares M, et al. **J Biol Chem** 1997 Oct 3;272(40):25224-8

Asymmetric methylation in the hypermethylated CpG promoter region of the human L1 retrotransposon. Woodcock DM, et al. **J Biol Chem** 1997 Mar 21; 272(12):7810-6

Regulation of human endogenous retrovirus-K Gag expression in teratocarcinoma cell lines and human tumours. Götzinger N, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):2983-90

Ribonuclease and high salt sensitivity of the ribonucleoprotein complex formed by the human LINE-1 retrotransposon. Hohjoh H, et al. **J Mol Biol** 1997 Aug 8;271(1):7-12

Integration of retroposable elements in mammals: selection of target sites [letter] Jurka J, et al. **J Mol Evol** 1996 Dec; 43(6):685-9

Gypsy/Ty3-like elements in the genome of the terrestrial Salamander hydromantes (Amphibia, Urodela). Marracci S, et al. **J Mol Evol** 1996 Dec;43(6):584-93

Mapping the multimerization domains of the Gag protein of yeast retrotransposon Ty1. Brachmann CB, et al. **J Virol** 1997 Jan;71(1):812-7

Retrovirus-like end processing of the tobacco Tnt1 retrotransposon linear intermediates of replication. Feuerbach F, et al. **J Virol** 1997 May;71(5):4005-15

The HNF1/HNF4-dependent We2 element of woodchuck hepatitis virus controls viral replication and can activate the N-myc2 promoter. Fourel G, et al. **J Virol** 1996 Dec; 70(12):8571-83

Cryo-electron microscopy structure of yeast Ty retrotransposon virus-like particles. Palmer KJ, et al. **J Virol** 1997 Sep;71(9):6863-8

Comparison of insertion rate of L1 retroposon into intron 30 of the neurofibromatosis type 1 gene in seven Asian and Pacific populations. Shirakawa T, et al. **Jpn J Hum Genet** 1996 Mar;41(1):209-14

Heterogeneous transcripts of RIME/ingi retroposons in Trypanosoma brucei are unspliced. Vassella E, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):131-5

The ability to form intrastrand tetraplexes is an evolutionarily conserved feature of the 3' end of L1 retrotransposons. Howell R, et al. **Mol Biol Evol** 1997 Feb;14(2):144-55

Phylogenetic analysis of a retrotransposon with implications for strong evolutionary constraints on reverse transcriptase. McAllister BF, et al. **Mol Biol Evol** 1997 Jan;14(1):69-80

Transposition rate of the 412 retrotransposable element is independent of copy number in natural populations of Drosophila simulans. Vieira C, et al. **Mol Biol Evol** 1997 Feb;14(2):185-8

Stress-induced rearrangement of Fusarium retrotransposon sequences. Anaya N, et al. **Mol Gen Genet** 1996 Nov 27; 253(1-2):89-94

CgT1: a non-LTR retrotransposon with restricted distribution in the fungal phytopathogen Colletotrichum gloeosporioides. He C, et al. **Mol Gen Genet** 1996 Sep 13; 252(3):320-31

Germ line transposition of the copia retrotransposon in Drosophila melanogaster is restricted to males by tissue-specific control of copia RNA levels. Pasyukova E, et al. **Mol Gen Genet** 1997 Jun;255(1):115-24

Genetic distribution of Bare-1-like retrotransposable elements in the barley genome revealed by sequence-specific amplification polymorphisms (S-SAP). Waugh R, et al. **Mol Gen Genet** 1997 Feb 27;253(6):687-94

Repetitive sequences found in the chromosome of the myxobacterium Nannocystis exedens are similar to msDNA: a possible retrotransposition event in bacteria. Lampson BC, et al. **Mol Microbiol** 1997 Feb;23(4):813–23

Identification of proteolytic cleavage sites within the gag–analogue protein of Ty1 virus–like particles. Martin–Rendon E, et al. **Mol Microbiol** 1996 Dec; 22(5):1035–43

Capture of retrotransposon DNA at the sites of chromosomal double–strand breaks [see comments] Moore JK, et al. **Nature** 1996 Oct 17;383(6601):644–6. Comment in: Nature 1997 Mar 6;385(6620)31–2.

High intrinsic rate of DNA loss in Drosophila [see comments] Petrov DA, et al. **Nature** 1996 Nov 28;384(6607):346–9. Comment in: Nature 1996 Nov 28;384(6607):315–6.

Molecular evidence from retroposons that whales form a clade within even–toed ungulates [see comments] Shimamura M, et al. **Nature** 1997 Aug 14;388(6643):666–70 . Comment in: Nature 1997 Aug 14;388(6643):622–4.

Retrotransposon reverse–transcriptase–mediated repair of chromosomal breaks [see comments] Teng SC, et al. **Nature** 1996 Oct 17;383(6601):641–4. Comment in: Nature 1997 Mar 6;385(6620):31–2.

Ribonucleoprotein formation by the ORF1 protein of the non–LTR retrotransposon Tx1L in Xenopus oocytes. Pont–Kingdon G, et al. **Nucleic Acids Res** 1997 Aug 1; 25(15):3088–94

A new family of site–specific retrotransposons, SART1, is inserted into telomeric repeats of the silkworm, Bombyx mori. Takahashi H, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1578–84

Expression of intracisternal A–particle retrotransposons in primary tumors of oncogene–expressing transgenic mice. Dupressoir A, et al. **Oncogene** 1997 Jun 19;14(24):2951–8

Retrotransposon insertion into the maize waxy gene results in tissue–specific RNA processing. Marillonnet S, et al. **Plant Cell** 1997 Jun;9(6):967–78

A copia–like retrotransposon Tgmr closely linked to the Rps1–k allele that confers race–specific resistance of soybean to Phytophthora sojae. Bhattacharyya MK, et al. **Plant Mol Biol** 1997 May;34(2):255–64

Comparative analysis of the chromosomal and genomic organization of Ty1–copia–like retrotransposons in pteridophytes, gymnosperms and angiosperms. Brandes A, et al. **Plant Mol Biol** 1997 Jan;33(1):11–21

A transcriptional analysis of the S1Bn (Brassica napus) family of SINE retroposons. Deragon JM, et al. **Plant Mol Biol** 1996 Dec;32(5):869–78

Retrotransposons of rice: their regulation and use for genome analysis. Hirochika H. **Plant Mol Biol** 1997 Sep; 35(1–2):231–40 (74 ref.)

The promoter of the tobacco Tnt1 retrotransposon is induced by wounding and by abiotic stress. Mhiri C, et al. **Plant Mol Biol** 1997 Jan;33(2):257–66

Replication infidelity during a single cycle of Ty1 retrotransposition [see comments] Gabriel A, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7767–71. Comment in: Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7427–31.

Retrotransposons of rice involved in mutations induced by tissue culture. Hirochika H, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7783–8

In vitro properties of the first ORF protein from mouse LINE–1 support its role in ribonucleoprotein particle formation during retrotransposition. Kolosha VO, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10155–60

Error–prone retrotransposition: rime of the ancient mutators [comment] Preston BD. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7427–31 (74 ref.). Comment on: Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7767–71.

Telomerase and retrotransposons: which came first? [comment] Eickbush TH. **Science** 1997 Aug 15; 277(5328):911–2. Comment on: Science 1997 Aug 15;277(5328):955–9.

Nested retrotransposons in the intergenic regions of the maize genome [see comments] SanMiguel P, et al. **Science** 1996 Nov 1;274(5288):765–8. Comment in: Science 1996 Nov 1;274(5288):737–8.

Retroelements in genome organization [comment] Voytas DF. **Science** 1996 Nov 1;274(5288):737–8 (5 ref.). Comment on: Science 1996 Nov 1;274(5288):765–8.

The adventures of the Ty1–copia group of retrotransposons in plants. Kumar A. **Trends Genet** 1996 Feb;12(2):41–3 (26 ref.)

Induction of neutralizing antibody and T–cell responses to varicella–zoster virus (VZV) using Ty–virus–like particles carrying fragments of glycoprotein E (gE). Garcia–Valcarcel M, et al. **Vaccine** 1997 Apr–May; 15(6–7):709–19

Reverse transcriptase: mediator of genomic plasticity. Brosius J, et al. **Virus Genes** 1995;11(2–3):163–79 (259 ref.)

Retrotransposition and herpesvirus evolution. Brunovskis P, et al. **Virus Genes** 1995;11(2–3):259–70 (124 ref.)

Retroelements: propagation and adaptation. Hull R, et al. **Virus Genes** 1995;11(2–3):105–18 (91 ref.)

Structure, function, and evolution of bacterial reverse transcriptase. Inouye S, et al. **Virus Genes** 1995; 11(2–3):81–94 (47 ref.)

Evolution and biological significance of human retroelements. Leib–Mösch C, et al. **Virus Genes** 1995; 11(2–3):133–45 (153 ref.)

GCR1–dependent transcriptional activation of yeast retrotransposon Ty2–917. Türkel S, et al. **Yeast** 1997 Aug; 13(10):917–30

[Molecular analysis of a copy of the novel mobile element Burdock and the region of its insertion into the cut locus of Drosophila melanogaster] Ponomarenko NA, et al. **Genetika** 1997 Jan;33(1):12–8 (Eng. Abstr.) **(Rus)**

[Distribution of motifs of functional sites in the MDG2 DNA sequence] Ratner VA, et al. **Genetika** 1996 Jul; 32(7):896–901 (Eng. Abstr.) **(Rus)**

[Structural features of the modified BARE–retroelement in the barley (Hordeum vulgare L.) genome] Shcherban' AB, et al. **Genetika** 1997 Apr;33(4):431–6 (Eng. Abstr.) **(Rus)**

[Regulating polyadenylation of jockey mobile genetic element transcripts belonging to the LINE class, in Drosophila cell culture] Agamalian NS, et al. **Mol Biol (Mosk)** 1996 Jul–Aug;30(4):818–28 **(Rus)**

DRUG EFFECTS

Escherichia coli RNase HI inhibits murine leukaemia virus reverse transcription in vitro and yeast retrotransposon Ty1 transposition in vivo. Ma WP, et al. **Genes Cells** 1996 Jun; 1(6):581–93

GENETICS

Structure and functional properties of mouse VL30 retrotransposons. French NS, et al. **Biochim Biophys Acta** 1997 May 2;1352(1):33–47 (99 ref.)

Human L1 retrotransposon encodes a conserved endonuclease required for retrotransposition. Feng Q, et al. **Cell** 1996 Nov 29;87(5):905–16

High frequency retrotransposition in cultured mammalian cells. Moran JV, et al. **Cell** 1996 Nov 29;87(5):917–27

cDNA–mediated Ty recombination can take place in the absence of plus–strand cDNA synthesis, but not in the absence of the integrase protein. Nevo–Caspi Y, et al. **Curr Genet** 1997 Jul;32(1):32–40

Morphogenesis at the retrotransposon–retrovirus interface: gypsy and copia families in yeast and Drosophila. Sandmeyer SB, et al. **Curr Top Microbiol Immunol** 1996; 214:261–96 (136 ref.)

Molecular analysis of a putative transposable retroelement from the Zea genus with internal clusters of tandem repeats. Monfort A., et al. **DNA Res** 1995 Dec 31;2(6):255–61

RNA polymerase III interferes with Ty3 integration. Connolly CM, et al. **FEBS Lett** 1997 Apr 1;405(3):305–11

Identification of critical CpG sites for repression of L1 transcription by DNA methylation. Hata K, et al. **Gene** 1997 Apr 21;189(2):227–34

Transcriptional silencing of Ty1 elements in the RDN1 locus of yeast. Bryk M, et al. **Genes Dev** 1997 Jan 15;11(2):255–69

A complex structure in the mRNA of Tf1 is recognized and cleaved to generate the primer of reverse transcription. Lin JH, et al. **Genes Dev** 1997 Jan 15;11(2):270–85

Identification and characterization of two tandem repeat sequences (TrsB and TrsC) and a retrotransposon (RIRE1) as genome–general sequences in rice. Nakajima R, et al. **Genes Genet Syst** 1996 Dec;71(6):373–82

Insertion of the retroposable element, jockey, near the Adh gene of Drosophila melanogaster is associated with altered gene expression. White LD, et al. **Genet Res** 1996 Dec; 68(3):203–9

Increased concentration of some transcription factor binding sites in human retroposons of the Alu family. Kazakov VI, et al. **Genetica** 1996 Jan;97(1):15–22

Evidence for a regulatory protein complex on RNA polymerase III promoter of human retroposons of Alu family. Kropotov AV, et al. **Genetica** 1996–97;98(3):223–33

Recombination creates novel L1 (LINE–1) elements in Rattus norvegicus. Hayward BE, et al. **Genetics** 1997 Jun; 146(2):641–54

Increased length of long terminal repeats inhibits Ty1 transposition and leads to the formation of tandem multimers. Lauermann V, et al. **Genetics** 1997 Apr; 145(4):911–22

Isolation and characterization of a retroelement from B chromosome (PSR) in the parasitic wasp Nasonia vitripennis. McAllister BF. **Insect Mol Biol** 1995 Nov; 4(4):253–62

A major non–LTR retrotransposon of Bombyx mori, L1Bm. Ichimura S, et al. **J Mol Evol** 1997 Sep;45(3):253–64

The gag coding region of the Drosophila telomeric retrotransposon, HeT–A, has an internal frame shift and a length polymorphic region. Pardue ML, et al. **J Mol Evol** 1996 Dec;43(6):572–83

Analysis of orthologous retrovirus–like elements in the white–footed mouse, Peromyscus leucopus. Sawby R, et al. **J Mol Evol** 1997 Jan;44(1):74–80

Intragenomic distribution and stability of transposable elements in euchromatin and heterochromatin of Drosophila melanogaster: non–LTR retrotransposon. Terrinoni A, et al. **J Mol Evol** 1997 Aug;45(2):145–53

A retrotransposon of the non–long terminal repeat class from the human blood fluke Schistosoma mansoni. Similarities to the chicken–repeat–1–like elements of vertebrates. Drew AC, et al. **Mol Biol Evol** 1997 Jun;14(6):602–10

Evolution of SINE S1 retroposons in Cruciferae plant species. Lenoir A, et al. **Mol Biol Evol** 1997 Sep; 14(9):934–41

Wheat retrotransposon families identified by reverse transcriptase domain analysis. Matsuoka Y, et al. **Mol Biol Evol** 1996 Dec;13(10):1384–92

Molecular cloning and characterization of a transcription factor for the copia retrotransposon with homology to the BTB–containing lola neurogenic factor. Cavarec L, et al. **Mol Cell Biol** 1997 Jan;17(1):482–94

The decline in human Alu retroposition was accompanied by an asymmetric decrease in SRP9/14 binding to dimeric Alu RNA and increased expression of small cytoplasmic Alu RNA. Sarrowa J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1144–51

Genetic redundancy between SPT23 and MGA2: regulators of Ty–induced mutations and Ty1 transcription in Saccharomyces cerevisiae. Zhang S, et al. **Mol Cell Biol** 1997 Aug;17(8):4718–29

Evidence for the complex formation between reverse transcriptase and multicopy single–stranded DNA in retron EC83. Jeong DW, et al. **Mol Cells** 1997 Jun 30;7(3):347–51

Prt1, an unusual retrotransposon–like sequence in the fungus Phycomyces blakesleeanus. Ruiz–Pérez VL, et al. **Mol Gen Genet** 1996 Dec 13;253(3):324–33

Tad, a Neurospora LINE–like retrotransposon exhibits a complex pattern of transcription. Sewell E, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):137–45

Zebedee: a novel copia–Ty1 family of transposable elements in the genome of the medically important mosquito Aedes aegypti. Warren AM, et al. **Mol Gen Genet** 1997 May 20; 254(5):505–13

LINEs and Alus––the polyA connection [news; comment] Boeke JD. **Nat Genet** 1997 May;16(1):6–7. Comment on: Nat Genet 1997 May;16(1):37–43.

Many human L1 elements are capable of retrotransposition [see comments] Sassaman DM, et al. **Nat Genet** 1997 May; 16(1):37–43. Comment in: Nat Genet 1997 May;16(1):6–7.

Heterogeneous terminal structure of Ty1 and Ty3 reverse transcripts. Wilhelm M, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2161–6

The Saccharomyces retrotransposon Ty5 influences the organization of chromosome ends. Zou S, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4825–31

Comparative expression of the LINE–1 p40 protein in human breast carcinomas and normal breast tissues. Asch HL, et al. **Oncol Res** 1996;8(6):239–47

UVB irradiation upregulation of the Drosophila 1731 retrotransposon LTR requires the same short sequence of U3 region in a human epithelial cell line as in Drosophila cells. Faure E, et al. **Photochem Photobiol** 1996 Nov; 64(5):807–13

Copia–like retrotransposons in rice: sequence heterogeneity, species distribution and chromosomal locations. Wang S, et al. **Plant Mol Biol** 1997 Apr;33(6):1051–8

Sequence patterns indicate an enzymatic involvement in integration of mammalian retroposons. Jurka J. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1872–7

Gypsy retrotransposon as a tool for the in vivo analysis of the regulatory region of the optomotor–blind gene in Drosophila. Tsai SF, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3837–41

Silent chromatin determines target preference of the Saccharomyces retrotransposon Ty5. Zou S, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7412–6

Self–primed reverse transcription is a mechanism shared by several LTR–containing retrotransposons [letter] Lin JH, et al. **RNA** 1997 Sep;3(9):952–3

Secondary structure model of the RNA recognized by the reverse transcriptase from the R2 retrotransposable element. Mathews DH, et al. **RNA** 1997 Jan;3(1):1–16

Tying together integration and chromatin. Curcio MJ, et al. **Trends Genet** 1996 Nov;12(11):436–8 (25 ref.)

The contributions of retroelements to plant genome organization, function and evolution. Bennetzen JL. **Trends Microbiol** 1996 Sep;4(9):347–53 (70 ref.)

The Env–like open reading frame of the baculovirus–integrated retrotransposon TED encodes a retrovirus–like envelope protein. Ozers MS, et al. **Virology** 1996 Dec 15;226(2):252–9

[Study of transcription of the transposable element burdock at the different stages of Drosophila development] Ponomarenko NA, et al. **Dokl Akad Nauk** 1997 Jul; 355(2):266–8 **(Rus)**

[Analysis of motifs of functional MDG2 sites in assuring its possible molecular functions] Ratner VA, et al. **Genetika** 1996 Jul;32(7):902–13 (Eng. Abstr.) **(Rus)**

[Polymorphism of virus–like particles of retrotransposons in Drosophila and yeast cells] Zolotova LI, et al. **Genetika** 1996 Nov;32(11):1528–35 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

It's prime time for reverse transcriptase. Levin HL. **Cell** 1997 Jan 10;88(1):5–8 (20 ref.)

DNA repair. A little help for my ends [news] Boeke JD. **Nature** 1996 Oct 17;383(6601):579, 581

Do non–long terminal repeat retrotransposons have nuclease activity? [letter] Martin F, et al. **Trends Biochem Sci** 1996 Aug;21(8):283–5

RADIATION EFFECTS

X–irradiation activates the Drosophila 1731 retrotransposon LTR and stimulates secretion of an extracellular factor that induces the 1731–LTR transcription in nonirradiated cells. Faure E, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):313–9

UVB irradiation upregulation of the Drosophila 1731 retrotransposon LTR requires the same short sequence of

U3 region in a human epithelial cell line as in Drosophila cells. Faure E, et al. **Photochem Photobiol** 1996 Nov; 64(5):807–13

RETROVIRIDAE

Proceedings of the 4th International Symposium on Retrovirus in Multiple Sclerosis and Related Diseases. Copenhagen, Denmark, September 26, 1996. **Acta Neurol Scand Suppl** 1997;169:1–98

Phenotypic and genotypic analysis of rat liver epithelial cells infected with retroviral shuttle vectors. Dees C, et al. **Cancer Lett** 1996 Oct 1;107(1):19–28

Ex vivo gene transfer into myocardium using replication–defective retrovirus. Gojo S, et al. **Cell Transplant** 1996 Sep–Oct;5(5 Suppl 1):S81–4

Regulation of L–DOPA production by genetically modified primary fibroblasts transfected with retrovirus vector system. Ishida A, et al. **Cell Transplant** 1996 Sep–Oct;5(5 Suppl 1):S5–7

Late proliferation of retinal Müller cell progenitors facilitates preferential targeting with retroviral vectors in vitro. Linser PJ, et al. **Dev Genet** 1997;20(3):186–96

Control of differentiation, transformation, and apoptosis in granulosa cells by oncogenes, oncoviruses, and tumor suppressor genes. Amsterdam A, et al. **Endocr Rev** 1997 Aug;18(4):435–61 (367 ref.)

Successful retroviral mediated transduction of a reporter gene in human dendritic cells: feasibility of therapy with gene–modified antigen presenting cells. Aicher A, et al. **Exp Hematol** 1997 Jan;25(1):39–44

Retroviral mediated gene transfer of Flt3 ligand enhances proliferation and MAP kinase activity of AML5 cells. Braun SE, et al. **Exp Hematol** 1997 Jan;25(1):51–6

Retroviruses and retroelements in diseases and in gene therapy. Svoboda J. **Folia Biol (Praha)** 1996;42(6):283–94 (46 ref.)

Amphotropic and ecotropic retroviral vector viruses transduce midgestational murine fetal liver cells in a dual–chambered cocultivation system. Casal ML, et al. **Gene Ther** 1997 Jan;4(1):39–44

Inhibition of transfer of collagen–induced arthritis into SCID mice by ex vivo infection of spleen cells with retroviruses expressing soluble tumor necrosis factor receptor. Chernajovsky Y, et al. **Gene Ther** 1995 Dec;2(10):731–5

Euro targeting in Leiden: the fourth meeting of the EWGT, University of Leiden, 14–17 November 1996. Diaz RM, et al. **Gene Ther** 1997 Jun;4(6):501–3

Effect of amniotic fluid on cationic lipid mediated transfection and retroviral infection. Douar AM, et al. **Gene Ther** 1996 Sep;3(9):789–96

Novel retroviral packaging cell lines: complementary tropisms and improved vector production for efficient gene transfer. Forestell SP, et al. **Gene Ther** 1997 Jun;4(6):600–10

Retroviral end–point titer is not predictive of gene transfer efficiency: implications for vector production. Forestell SP, et al. **Gene Ther** 1995 Dec;2(10):723–30

Enhanced immune costimulatory activity of primary acute myeloid leukaemia blasts after retrovirus–mediated gene transfer of B7.1. Hirst WJ, et al. **Gene Ther** 1997 Jul; 4(7):691–9

Production of increased titer retrovirus vectors from stable producer cell lines by superinfection and concentration. Parente MK, et al. **Gene Ther** 1996 Sep;3(9):756–60

Uptake of alpha–(L)–iduronidase produced by retrovirally transduced fibroblasts into neuronal and glial cells in vitro. Stewart K, et al. **Gene Ther** 1997 Jan;4(1):63–75

beta–galactosidase transduced T lymphocytes: a comparison between stimulation by either PHA and IL–2 or a mixed lymphocyte reaction. Di Ianni M, et al. **Haematologica** 1996 Sep–Oct;81(5):410–7

Transduction of human CD34+ haemopoietic progenitors of various origin using an original retrovirus vector derived from Fr–MuLV and clinically relevant procedures. Cohen–Haguenauer O, et al. **Hematol Cell Ther** 1996 Apr; 38(2):205–6

Retroviral vectors efficiently transduce basal and secretory airway epithelial cells in vitro resulting in persistent gene expression in organotypic culture. Halbert CL, et al. **Hum Gene Ther** 1996 Oct 1;7(15):1871–81

In vivo retrovirus–mediated gene transfer into multiple hematopoietic lineages in rabbits without preconditioning. Nelson DM, et al. **Hum Gene Ther** 1997 Apr 10;8(6):747–54

A gene delivery system activatable by disease–associated matrix metalloproteinases. Peng KW, et al. **Hum Gene Ther** 1997 Apr 10;8(6):729–38

Can insights into urodele limb regeneration be achieved with cell cultures and retroviruses? Tsonis PA, et al. **Int J Dev Biol** 1996 Aug;40(4):813–6 (13 ref.)

Retroviral gene transfer is inhibited by chondroitin sulfate proteoglycans/glycosaminoglycans in malignant pleural effusions. Batra RK, et al. **J Biol Chem** 1997 May 2; 272(18):11736–43

Construction of retroviral vectors to induce strong hepatoma cell–specific expression of cytokine genes. Cao G, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1053–61

Polio vaccines and retroviral contamination [letter; comment] Stricker RB, et al. **J Infect Dis** 1997 Aug;176(2):545–6. Comment on: J Infect Dis 1996 Dec;174(6):1185–90.

Characterization of humoral and CD4+ cellular responses after genetic immunization with retroviral vectors expressing different forms of the hepatitis B virus core and e antigens. Sällberg M, et al. **J Virol** 1997 Jul; 71(7):5295–303

On viruses, sex, and motherhood. Villareal LP. **J Virol** 1997 Feb;71(2):859–65 (88 ref.)

Selective block in erythropoietin–induced differentiation of growth factor–independent retrovirally–infected TF–1 cells. Percy MJ, et al. **Leuk Res** 1997 Jul;21(7):657–66

A new retroviral AIDS–like disease and/or acute leukemia induced in mice by alloimmune stimuli. Ter–Grigorov V, et al. **Leukemia** 1997 Apr;11 Suppl 3:263–6

Possible relationships between canine hematopoietic neoplasia, other malignancies and immune mediated diseases. Theilen G. **Leukemia** 1997 Apr;11 Suppl 3:187–8

Isolation of genetic suppressor elements (GSEs) from random fragment cDNA libraries in retroviral vectors. Gudkov AV, et al. **Methods Mol Biol** 1997;69:221–40

Retroviral vectors. From laboratory tools to molecular medicine. Vile RG, et al. **Mol Biotechnol** 1996 Apr; 5(2):139–58 (115 ref.)

Decreased lysosomal storage in the adult MPS VII mouse brain in the vicinity of grafts of retroviral vector–corrected fibroblasts secreting high levels of beta–glucuronidase [see comments] Taylor RM, et al. **Nat Med** 1997 Jul;3(7):771–4 . Comment in: Nat Med 1997 Jul;3(7):719–20.

Generation of packaging cell lines for pseudotyped retroviral vectors of the G protein of vesicular stomatitis virus by using a modified tetracycline inducible system. Chen ST, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10057–62

Efficient infection of a human T–cell line and of human primary peripheral blood leukocytes with a pseudotyped retrovirus vector. Sharma S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11842–7

Strategies for targeted gene therapy. Harris JD, et al. **Trends Genet** 1996 Oct;12(10):400–5 (67 ref.)

Laboratory diagnostic tests for retroviral infections in dairy and beef cattle. Evermann JF, et al. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):87–106 (105 ref.)

[Selection of retroviral vector producing cell lines and gene transfer into hematopoietic cells] Bagnis C, et al. **Hematol Cell Ther** 1996 Apr;38(2):207–9 (Eng. Abstr.) **(Fre)**

[Study on the specificity of a monoclonal antibody against recombinant envelope proteins of a human endogenous retrovirus, ERV3] Shibata M. **Hokkaido Igaku Zasshi** 1996 Jul;71(4):463–73 (Eng. Abstr.) **(Jpn)**

[An interview with Dr. Hidesaburo Hanafusa in honor of his cultural medal [interview by Michinari Hamaguchi] Hanafusa H. **Uirusu** 1996 Dec;46(2):185–90 **(Jpn)**

CHEMISTRY

From the natural evolution to the genetic manipulation of the host–range of retroviruses. Dornburg R. **Biol Chem** 1997 Jun;378(6):457–68 (101 ref.)

Retroviral marking identifies grafted autologous keratinocytes in porcine wounds receiving cultured epithelium. Ng RL, et al. **J Invest Dermatol** 1997 Apr; 108(4):457–62

Three–dimensional structure of the HTLV–II matrix protein and comparative analysis of matrix proteins from the different classes of pathogenic human retroviruses. Christensen AM, et al. **J Mol Biol** 1996 Dec 20; 264(5):1117–31

Transactivation of the GATA–1 promoter by a myb–ets–containing mouse retrovirus is mediated by CACCC elements. Sun–Hoffman L, et al. **Oncogene** 1996 Sep 5;13(5):1037–42

CLASSIFICATION

Comparative morphology and structural classification of retroviruses. Nermut MV, et al. **Curr Top Microbiol Immunol** 1996;214:1–24 (60 ref.)

Retrovirus classification and cell interactions. Weiss RA. **J Antimicrob Chemother** 1996 May;37 Suppl B:1–11 (16 ref.)

Molecular characterization of a piscine retrovirus, walleye dermal sarcoma virus. Holzschu DL, et al. **Leukemia** 1997 Apr;11 Suppl 3:172–5

DRUG EFFECTS

Methionine enkephalin used in combination with azidothymidine in murine retrovirus infection. Specter S, et al. **Adv Exp Med Biol** 1996;402:59–62

Antiretroviral activities of acyclic nucleoside phosphonates [9–(2–phosphonylmethoxyethyl)adenine, 9–(2–phosphonylmethoxyethyl)guanine, (R)–9–(2–phosphonylmethoxypropyl)adenine, and MDL 74,968] in cell cultures and murine sarcoma virus–infected newborn NMRI mice. Balzarini J, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):611–6

Antiretroviral activity and pharmacokinetics in mice of oral bis(pivaloyloxymethyl)–9–(2–phosphonylmethoxyethyl) adenine, the bis(pivaloyloxymethyl) ester prodrug of 9–(2–phosphonylmethoxyethyl)adenine. Naesens L, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):22–8

Antiretrovirus specificity and intracellular metabolism of 2',3'–didehydro–2',3'–dideoxythymidine (stavudine) and its 5'–monophosphate triester prodrug So324. Balzarini J, et al. **Mol Pharmacol** 1996 Nov;50(5):1207–13

[Viral load and antiretroviral treatments in children infected by human immunodeficiency virus (letter)] Monpoux F, et al. **Arch Pediatr** 1996 Oct;3(10):1046–7 **(Fre)**

ENZYMOLOGY

Retroviral proteases: structure, function and inhibition from a non–anticipated viral enzyme to the target of a most promising HIV therapy. von der Helm K. **Biol Chem** 1996 Dec;377(12):765–74 (97 ref.)

Specific suppression of false–positive signals in the product–enhanced reverse transcriptase assay. Lugert R, et al. **Biotechniques** 1996 Feb;20(2):210–7

The reverse transcriptase assay: problems and practical solutions. Metz RA, et al. **Dev Biol Stand** 1996;88:167–76

Reverse transcriptase jumps and gaps. Kupiec JJ, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):1987–91 (38 ref.)

Functional identification of nucleotides conferring substrate specificity to retroviral integrase reactions. Balakrishnan M, et al. **J Virol** 1997 Feb;71(2):1025–35

Analysis of inhibition of retroviral reverse transcriptase. Balzarini J, et al. **Methods Enzymol** 1996;275:472–502 (112 ref.)

Approaches to high–volume screening assays of viral polymerases and related proteins. Cole JL. **Methods Enzymol** 1996;275:310–28

Catalytic activities associated with retroviral and viral polymerases. Gabbara S, et al. **Methods Enzymol** 1996; 275:276–310

An unusual mechanism of self–primed reverse transcription requires the RNase H domain of reverse transcriptase to cleave an RNA duplex. Levin HL. **Mol Cell Biol** 1996 Oct;16(10):5645–54

GENETICS

Characterization of retroviruses from patients with multiple sclerosis. Christensen T, et al. **Acta Neurol Scand Suppl** 1997;169:49–58

Expression of endogenous retroviruses in blood mononuclear cells and brain tissue from multiple sclerosis patients. Rasmussen HB, et al. **Acta Neurol Scand Suppl** 1997; 169:38–44

Development of a pan–retrovirus detection system for multiple sclerosis studies. Tuke PW, et al. **Acta Neurol Scand Suppl** 1997;169:16–21

Differential expression of human endogenous retroviral sequences similar to mouse mammary tumor virus in normal peripheral blood mononuclear cells. Andersson ML, et al. **AIDS Res Hum Retroviruses** 1996 Jun 10;12(9):833–40

Transcription of human endogenous retroviral sequences related to mouse mammary tumor virus in human breast and placenta: similar pattern in most malignant and nonmalignant breast tissues. Yin H, et al. **AIDS Res Hum Retroviruses** 1997 Apr 10;13(6):507–16

Retroviral vectors for production of interleukin–12 in the bone marrow to induce a graft–versus–leukemia effect. Hawley RG, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:341–5

Gene therapy--the challenge for the future. Moore MA, et al. **Ann Oncol** 1996;7 Suppl 2:53–8

Endogenous retroviral sequences in the pathogenesis of systemic autoimmune disease. Walchner M, et al. **Arch Dermatol** 1997 Jun;133(6):767–71 (69 ref.)

Direct evidence for the expression of multiple endogenous retroviruses in the synovial compartment in rheumatoid arthritis. Nakagawa K, et al. **Arthritis Rheum** 1997 Apr; 40(4):627–38

Three allelic forms of the human endogenous retrovirus, ERV3, and their frequencies in multiple sclerosis patients and healthy individuals. Rasmussen HB, et al. **Autoimmunity** 1996;23(2):111–7

Retroviral insertional mutagenesis of a herpesvirus: a Marek's disease virus mutant attenuated for oncogenicity but not for immunosuppression or in vivo replication. Witter RL, et al. **Avian Dis** 1997 Apr–Jun;41(2):407–21

Green fluorescent protein variants as markers of retroviral–mediated gene transfer in primary hematopoietic cells and cell lines. Bierhuizen MF, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):371–5

Controlled gene expression with a reverse tetracycline–regulated retroviral vector (RTRV) system. Watsuji T, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):769–73

VSV–G–pseudotyped retroviral packaging through adenovirus–mediated inducible gene expression. Yoshida Y, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):379–82

Retroviral vector–mediated transfer of the galactocerebrosidase (GALC) cDNA leads to overexpression and transfer of GALC activity to neighboring cells. Rafi MA, et al. **Biochem Mol Med** 1996 Aug;58(2):142–50

Dimerization of retroviral genomic RNAs: structural and functional implications. Paillart JC, et al. **Biochimie** 1996; 78(7):639–53 (138 ref.)

From the natural evolution to the genetic manipulation of the host–range of retroviruses. Dornburg R. **Biol Chem** 1997 Jun;378(6):457–68 (101 ref.)

Improved screening method for recombinant retrovirus producing clones. Havenga M, et al. **Biotechniques** 1996 Dec;21(6):1004–7

Tracking and quantitation of retroviral–mediated transfer using a completely humanized, red–shifted green fluorescent protein gene. Muldoon RR, et al.

Biotechniques 1997 Jan;22(1):162–7

Inhibition of human immunodeficiency virus-1 (HIV-1) replication after transduction of granulocyte colony-stimulating factor-mobilized CD34+ cells from HIV-1-infected donors using retroviral vectors containing anti-HIV-1 genes. Bauer G, et al. **Blood** 1997 Apr 1; 89(7):2259–67

Retroviral transduction of human progenitor cells: use of granulocyte colony-stimulating factor plus stem cell factor to mobilize progenitor cells in vivo and stimulation by Flt3/Flk-2 ligand in vitro. Elwood NJ, et al. **Blood** 1996 Dec 15;88(12):4452–62

Hematopoietic potential and retroviral transduction of CD34+ Thy-1+ peripheral blood stem cells from asymptomatic human immunodeficiency virus type-1-infected individuals mobilized with granulocyte colony-stimulating factor. Junker U, et al. **Blood** 1997 Jun 15;89(12):4299–306

Therapeutic levels of functional human factor X in rats after retroviral-mediated hepatic gene therapy. Le M, et al. **Blood** 1997 Feb 15;89(4):1254–9

Efficiency of retroviral transduction into hematopoietic cells by cocultivation procedure does not correlate with viral titer. Bagnis C, et al. **Cancer Gene Ther** 1997 Jan-Feb; 4(1):5–8

Retrovirally mediated gene transfer of Arg22 and Tyr22 forms of dihydrofolate reductase into the hematopoietic cell line K562: a comparison of methotrexate resistance. Braun SE, et al. **Cancer Gene Ther** 1997 Jan-Feb;4(1):26–32

Murine neuroblastoma vaccines produced by retroviral transfer of MHC class II genes. Hock RA, et al. **Cancer Gene Ther** 1996 Sep-Oct;3(5):314–20

Purified herpes simplex thymidine kinase Retrovector particles. I. In vitro characterization, in situ transduction efficiency, and histopathological analyses of gene therapy-treated brain tumors. Kruse CA, et al. **Cancer Gene Ther** 1997 Mar-Apr;4(2):118–28

Tumor inhibitory activity of anti-ras ribozymes delivered by retroviral gene transfer. Li M, et al. **Cancer Gene Ther** 1996 Jul-Aug;3(4):221–9

Transmissibility of murine stem cell virus-based retroviral vectors carrying both interleukin-12 cDNAs and a third gene: implications for immune gene therapy. Lieu FH, et al. **Cancer Gene Ther** 1997 May-Jun;4(3):167–75

Resistance to cytosine arabinoside by retrovirally mediated gene transfer of human cytidine deaminase into murine fibroblast and hematopoietic cells. Momparler RL, et al. **Cancer Gene Ther** 1996 Sep-Oct;3(5):331–8

Use of bicistronic retroviral vectors encoding the LacZ gene together with a gene of interest: a method to select producer cells and follow transduced target cells. Staal FJ, et al. **Cancer Gene Ther** 1996 Sep-Oct;3(5):345–51

Coexpression of a multidrug resistance gene (MDR1) and herpes simplex virus thymidine kinase gene in a bicistronic retroviral vector Ha-MDR-IRES-TK allows selective killing of MDR1-transduced human tumors transplanted in nude mice. Sugimoto Y, et al. **Cancer Gene Ther** 1997 Jan-Feb;4(1):51–8

Transforming function of the HOX11/TCL3 homeobox gene. Hawley RG, et al. **Cancer Res** 1997 Jan 15;57(2):337–45

Retroviral transduction of human dendritic cells with a tumor-associated antigen gene. Reeves ME, et al. **Cancer Res** 1996 Dec 15;56(24):5672–7

Promoting in tandem: the promoter for telomere transposon HeT-A and implications for the evolution of retroviral LTRs. Danilevskaya ON, et al. **Cell** 1997 Mar 7; 88(5):647–55

Ex vivo gene therapy for Alzheimer's disease and spinal cord injury. Blesch A, et al. **Clin Neurosci** 1995-96;3(5):268–74 (51 ref.)

Transposable elements: how non-LTR retrotransposons do it. Finnegan DJ. **Curr Biol** 1997 Apr 1;7(4):R245–8 (16 ref.)

Retrovirus-mediated transfer of the suicide gene into retinal pigment epithelial cells in vitro. Schubert CA, et al. **Curr Eye Res** 1997 Jul;16(7):656–62

Morphogenesis at the retrotransposon-retrovirus interface: gypsy and copia families in yeast and Drosophila. Sandmeyer SB, et al. **Curr Top Microbiol Immunol** 1996; 214:261–96 (136 ref.)

High efficiency gene transfer into the embryonic chicken CNS using B-subgroup retroviruses. Homburger SA, et al. **Dev Dyn** 1996 May;206(1):112–20

Sequencing and detection of polymorphisms in the 5' end of the human endogenous retroviral element, HRES-1. Rasmussen HB, et al. **Dis Markers** 1996 Aug;13(1):1–9

The chromosomal organization of the human endogenous retrovirus-like sequence HERV-H: clustering of the HERV-H sequences in a 300-kb region close to the GRPR locus on the X chromosome. Shiraishi M, et al. **DNA Res** 1996 Dec 31;3(6):425–9

Factors affecting the priming efficiency of short contiguous oligonucleotide strings in the primer walking strategy of DNA sequencing. Azhikina T, et al. **DNA Seq** 1996; 6(4):211–6

A new variant of B1 elements, vB1, identified upstream of a retroviral integration site. Gimbel W, et al. **DNA Seq** 1996;6(4):229–32

The mechanism of specific prolongation of class I-mismatched skin grafts induced by retroviral gene therapy. Mayfield RS, et al. **Eur J Immunol** 1997 May; 27(5):1177–81

Inhibition of human complement-dependent cell lysis by bovine aortic endothelial cells transfected with membrane-bound complement-regulatory factor (DAF and HRF20) gene using a retroviral vector. Hayashi S, et al. **Eur Surg Res** 1996;28(6):440–6

Overexpression of calcium/calmodulin-dependent protein kinase II in insulinoma cells by use of a retroviral vector. Möhlig M, et al. **Exp Clin Endocrinol Diabetes** 1995;103 Suppl 2:71–3

Adenoviral/retroviral vector chimeras: a novel strategy to achieve high-efficiency stable transduction in vivo. Bilbao G, et al. **FASEB J** 1997 Jul;11(8):624–34 (112 ref.)

Construction of adenoviral and retroviral vectors coexpressing the genes encoding the hepatitis B surface antigen and B7-1 protein. He XS, et al. **Gene** 1996 Oct 10;175(1-2):121–5

Development of a VSV-G protein pseudotyped retroviral vector system expressing dominant oncogenes from a lacO-modified inducible LTR promoter. Wang S, et al. **Gene** 1996 Dec 5;182(1-2):145–50

Analysis of the relative level of gene expression from different retroviral vectors used for gene therapy. Byun J, et al. **Gene Ther** 1996 Sep;3(9):780–8

Replication-competent retrovirus produced by a 'split-function' third generation amphotropic packaging cell line. Chong H, et al. **Gene Ther** 1996 Jul;3(7):624–9

Targeting retrovirus entry. Cosset FL, et al. **Gene Ther** 1996 Nov;3(11):946–56 (70 ref.)

Optimized conditions for the production of recombinant amphotropic retroviral vector preparations. Kaptein LC, et al. **Gene Ther** 1997 Feb;4(2):172–6

Loss of retroviral gene expression in bone marrow reconstituted mice correlates with down-regulation of gene expression in long-term culture initiating cells. Lange C, et al. **Gene Ther** 1997 Apr;4(4):303–8

Ex vivo transduction and expansion of CD4+ lymphocytes from HIV + donors: prelude to a ribozyme gene therapy trial. Leavitt MC, et al. **Gene Ther** 1996 Jul;3(7):599–606

A novel, membrane receptor-based retroviral vector for Fanconi anemia group C gene therapy. Machl AW, et al. **Gene Ther** 1997 Apr;4(4):339–45

A rapid screening procedure for the identification of high-titer retrovirus packaging clones. Murdoch B, et al. **Gene Ther** 1997 Jul;4(7):744–9

Sustained retroviral gene marking and expression in lymphoid and myeloid cells derived from transduced hematopoietic progenitor cells. Plavec I, et al. **Gene Ther** 1996 Aug; 3(8):717–24

Suicide gene expression induced in tumour cells transduced with recombinant adenoviral, retroviral and plasmid vectors containing the ERBB2 promoter. Ring CJ, et al. **Gene Ther** 1996 Dec;3(12):1094–103

High-efficiency retroviral vector mediated gene transfer into human peripheral blood CD4+ T lymphocytes. Rudoll T, et al. **Gene Ther** 1996 Aug;3(8):695–705

Retroviral targeted delivery. Schnierle BS, et al. **Gene Ther** 1996 Dec;3(12):1069–73 (29 ref.)

Identification of endogenous retroviral sequences based on modular organization: proviral structure at the SSAV1 locus. Blusch JH, et al. **Genomics** 1997 Jul 1;43(1):52–61

Fusion transcripts between the HMGIC gene and RTVL-H-related sequences in mesenchymal tumors without cytogenetic aberrations. Kazmierczak B, et al. **Genomics** 1996 Dec 1;38(2):223–6

LacZ and interleukin-3 expression in vivo after retroviral transduction of marrow-derived human osteogenic mesenchymal progenitors. Allay JA, et al. **Hum Gene Ther** 1997 Aug 10;8(12):1417–27

Preclinical studies for cell transplantation: isolation of primate fetal hepatocytes, their cryopreservation, and efficient retroviral transduction [published erratum appears in Hum Gene Ther 1997 May 20;8(8):1024] Andreoletti M, et al. **Hum Gene Ther** 1997 Feb 10;8(3):267–74

Transduction of human hematopoietic cells and cell lines using a retroviral vector containing a modified murine CD4 reporter gene. Bauer TR Jr, et al. **Hum Gene Ther** 1997 Feb 10;8(3):243–52

Modulation of erythropoietin delivery from engineered muscles in mice. Bohl D, et al. **Hum Gene Ther** 1997 Jan 20;8(2):195–204

A simple and efficient method for the concentration and purification of recombinant retrovirus for increased hepatocyte transduction in vivo. Bowles NE, et al. **Hum Gene Ther** 1996 Sep 10;7(14):1735–42

Portal branch occlusion safely facilitates in vivo retroviral vector transduction of rat liver. Bowling WM, et al. **Hum Gene Ther** 1996 Nov 10;7(17):2113–21

Comparison of retroviral and adeno-associated viral vectors designed to express human clotting factor IX. Chen L, et al. **Hum Gene Ther** 1997 Jan 20;8(2):125–35

Consistent and high rates of gene transfer can be obtained using flow-through transduction over a wide range of retroviral titers. Chuck AS, et al. **Hum Gene Ther** 1996 Apr 10;7(6):743–50

Retroviral gene transfer in autologous bone marrow transplantation for adult acute leukemia. Cornetta K, et al. **Hum Gene Ther** 1996 Jul 10;7(11):1323–9

Retroviral particles produced from a stable human-derived packaging cell line transduce target cells with very high efficiencies. Davis JL, et al. **Hum Gene Ther** 1997 Aug 10;8(12):1459–67

Use of safety-modified retroviruses to introduce chemotherapy resistance sequences into normal hematopoietic cells for chemoprotection during the therapy of breast cancer: a pilot trial. Deisseroth AB, et al. **Hum Gene Ther** 1996 Feb 10;7(3):401–16

Preclinical assessment of human hematopoietic progenitor cell transduction in long-term marrow cultures. Dubé ID, et al. **Hum Gene Ther** 1996 Nov 10;7(17):2089–100

Use of a retroviral vector to study the trafficking patterns of purified ovarian tumor infiltrating lymphocytes (TIL) used in intraperitoneal adoptive immunotherapy of ovarian cancer patients. A pilot study. Freedman RS, et al. **Hum Gene Ther** 1996 Jul 10;7(11):1351–65

Green fluorescent protein retroviral vectors: low titer and high recombination frequency suggest a selective disadvantage. Hanazono Y, et al. **Hum Gene Ther** 1997 Jul 20;8(11):1313–9

Gene therapy for the treatment of metastatic breast cancer by in vivo transduction with breast-targeted retroviral vector expressing antisense c-fos RNA. Holt JT, et al. **Hum Gene Ther** 1996 Jul 10;7(11):1367–80

Use of amphotropic retroviral vectors for gene transfer in human colon carcinoma cells. Jacomino M, et al. **Hum Gene Ther** 1997 May 1;8(7):835–41

Retrovirus-mediated suicide gene transduction in the vitreous cavity of the eye: feasibility in prevention of proliferate vitreoretinopathy. Kimura H, et al. **Hum Gene Ther** 1996 May 1;7(7):799–808

Highly efficient retrovirus-mediated gene transfer into rat hepatocytes in vivo. Kitten O, et al. **Hum Gene Ther** 1997 Aug 10;8(12):1491–4

Retrovirus-mediated gene transfer of rat glutathione S-transferase Yc confers in vitro resistance to alkylating agents in human leukemia cells and in clonogenic mouse hematopoietic progenitor cells. Letourneau S, et al. **Hum Gene Ther** 1996 May 1;7(7):831–40

Retrovirus-mediated gene expression in hematopoietic cells correlates inversely with growth factor stimulation. Lu M, et al. **Hum Gene Ther** 1996 Dec 1;7(18):2263–71

Anti-vector immunoglobulin induced by retroviral vectors. McCormack JE, et al. **Hum Gene Ther** 1997 Jul 1; 8(10):1263–73

Alveolar macrophages inhibit retrovirus-mediated gene transfer to airway epithelia. McCray PB Jr, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1087–93

Evaluation of PCR and ELISA assays for screening clinical trial subjects for replication-competent retrovirus. Martineau D, et al. **Hum Gene Ther** 1997 Jul 1; 8(10):1231–41

Molecular analysis of T lymphocyte-directed gene therapy for adenosine deaminase deficiency: long-term expression in vivo of genes introduced with a retroviral vector. Mullen CA, et al. **Hum Gene Ther** 1996 Jun 10;7(9):1123–9

A simple and reliable method for screening retroviral producer clones without selectable markers. Onodera M, et al. **Hum Gene Ther** 1997 Jul 1;8(10):1189–94

Modification of tumor suppressor gene expression in non-small cell lung cancer (NSCLC) with a retroviral vector expressing wildtype (normal) p53. Roth JA. **Hum Gene Ther** 1996 May 1;7(7):861–74

A retroviral vector that allows efficient co-expression of two genes and the versatility of alternate selection markers. Saleh M. **Hum Gene Ther** 1997 May 20;8(8):979–83

Establishment of parameters for optimal transduction efficiency and antitumor effects with purified high-titer HSV-TK retroviral vector in established solid tumors. Smiley WR, et al. **Hum Gene Ther** 1997 May 20;8(8):965–77

Construction of retroviral vectors carrying human CD3 gamma cDNA and reconstitution of CD3 gamma expression and T cell receptor surface expression and function in a CD3 gamma-deficient mutant T cell line. Sun JY, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1041–8

Use of donor T-lymphocytes expressing herpes-simplex thymidine kinase in allogeneic bone marrow transplantation: a phase I-II study. Tiberghien P, et al. **Hum Gene Ther** 1997 Mar 20;8(5):615–24

Limitations of retrovirus-mediated HSV-tk gene transfer to pulmonary adenocarcinoma cells in vitro and in vivo. Zhang L, et al. **Hum Gene Ther** 1997 Mar 20;8(5):563–74

Endogenous retroviral long terminal repeats of the HLA-DQ region are associated with susceptibility to insulin-dependent diabetes mellitus. Badenhoop K, et al. **Hum Immunol** 1996 Oct;50(2):103–10

Endogenous retroviral transcripts in myocytes from spontaneously hypertensive rats. Sirokman G, et al. **Hypertension** 1997 Jul;30(1 Pt 1):88–93

The potential roles of endogenous retroviruses in autoimmunity. Nakagawa K, et al. **Immunol Rev** 1996 Aug; 152:193–236 (219 ref.)

Rat primary T cells expressing HTLV-I tax gene transduced by a retroviral vector: in vitro and in vivo characterization. Murata K, et al. **Int J Cancer** 1996 Sep 27;68(1):102–8

Retroviral-mediated in vivo gene transfer into muscle cells and synthesis of human factor IX in mice. Baru M, et al. **Intervirology** 1995;38(6):356–60

Biological significance of human endogenous retroviral sequences. Hohenadl C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S268–73 (59 ref.)

HERV-K: the biologically most active human endogenous retrovirus family. Tönjes RR, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S261–7 (56 ref.)

An amphotropic retroviral vector expressing a mutant gsp

oncogene: effects on human thyroid cells in vitro. Ivan M, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2702–9

Retrovirally mediated gene transfer in a skin equivalent model of chronic wounds. Badiavas E, et al. **J Dermatol Sci** 1996 Oct;13(1):56–62

Regulated expression of artificial chimeric genes contained in retroviral vectors: implications for virus–directed enzyme prodrug therapy (VDEPT) and other gene therapy applications. Huber BE, et al. **J Drug Target** 1996; 3(5):349–56

Local delivery of interleukin 4 by retrovirus–transduced T lymphocytes ameliorates experimental autoimmune encephalomyelitis. Shaw MK, et al. **J Exp Med** 1997 May 5;185(9):1711–4

Correction of defective expression in MHC class II deficiency (bare lymphocyte syndrome) cells by retroviral transduction of CIITA. Bradley MB, et al. **J Immunol** 1997 Aug 1;159(3):1086–95

Retroviral transduction of murine epidermal stem cells demonstrates clonal units of epidermal structure. Mackenzie IC. **J Invest Dermatol** 1997 Sep;109(3):377–83

A novel method to develop highly specific models for regulatory units detects a new LTR in GenBank which contains a functional promoter. Frech K, et al. **J Mol Biol** 1997 Aug 1;270(5):674–87

Retroviral oligonucleotide distributions correlate with biased nucleotide compositions of retrovirus sequences, suggesting a duplicative stepwise molecular evolution. Laprevotte I, et al. **J Mol Evol** 1997 Feb;44(2):214–25

Gene therapy: from retrovirus to triplex DNA repair [editorial] Becker Y, et al. **J Mol Med** 1997 Apr;75(4):247–8

Biosynthetic retrovectoring systems for gene therapy. Hodgson CP, et al. **J Mol Med** 1997 Apr;75(4):249–58 (50 ref.)

Retroviral misexpression of engrailed genes in the chick optic tectum perturbs the topographic targeting of retinal axons. Friedman GC, et al. **J Neurosci** 1996 Sep 1;16(17):5498–509

Olfactory neuronal cell lines generated by retroviral insertion of the n–myc oncogene display different developmental phenotypes. MacDonald KP, et al. **J Neurosci Res** 1996 Aug 1;45(3):237–47

Retroviral mediated gene transduction alters integrin expression on vascular endothelial cells. Sackman JE, et al. **J Surg Res** 1997 Apr;69(1):45–50

Retroviral–mediated transduction of endothelial cells with the lac Z gene impairs cellular proliferation in vitro and graft endothelialization in vivo. Baer RP, et al. **J Vasc Surg** 1996 Nov;24(5):892–9

Improved retroviral transduction efficiency of vascular cells in vitro and in vivo during clinically relevant incubation periods using centrifugation to increase viral titers. Zelenock JA, et al. **J Vasc Surg** 1997 Jul;26(1):119–27

Cloning of a new murine endogenous retrovirus, MuERV–L, with strong similarity to the human HERV–L element and with a gag coding sequence closely related to the Fv1 restriction gene. Bénit L, et al. **J Virol** 1997 Jul;71(7):5652–7

Molecular cloning of Mus dunni endogenous virus: an unusual retrovirus in a new murine viral interference group with a wide host range. Bonham L, et al. **J Virol** 1997 Jun;71(6):4663–70

Toward highly efficient cell–type–specific gene transfer with retroviral vectors displaying single–chain antibodies. Chu TH, et al. **J Virol** 1997 Jan;71(1):720–5

Cre/loxP–mediated excision of a neomycin resistance expression unit from an integrated retroviral vector increases long terminal repeat–driven transcription in human hematopoietic cells. Fernex C, et al. **J Virol** 1997 Oct;71(10):7533–40

Retrovirus–like end processing of the tobacco Tnt1 retrotransposon linear intermediates of replication. Feuerbach F, et al. **J Virol** 1997 May;71(5):4005–15

Selection for retroviral insertions into regulated genes. Gogos JA, et al. **J Virol** 1997 Feb;71(2):1644–50

A novel exogenous retrovirus sequence identified in humans. Griffiths DJ, et al. **J Virol** 1997 Apr;71(4):2866–72

Homologous recombination occurs in a distinct retroviral subpopulation and exhibits high negative interference. Hu WS, et al. **J Virol** 1997 Aug;71(8):6028–36

Novel retroviral vector transferring a suicide gene and a selectable marker gene with enhanced gene expression by using a tetracycline–responsive expression system. Hwang JJ, et al. **J Virol** 1996 Nov;70(11):8138–41

The antiretrovirus drug 3'–azido–3'–deoxythymidine increases the retrovirus mutation rate. Julias JG, et al. **J Virol** 1997 Jun;71(6):4254–63

Gene transfer to human cells using retrovirus vectors produced by a new polytropic packaging cell line. Loiler SA, et al. **J Virol** 1997 Jun;71(6):4825–8

Human endogenous retrovirus type I–related viruses have an apparently widespread distribution within vertebrates. Martin J, et al. **J Virol** 1997 Jan;71(1):437–43

The pCL vector system: rapid production of helper–free, high–titer, recombinant retroviruses. Naviaux RK, et al. **J Virol** 1996 Aug;70(8):5701–5

Self–deleting retrovirus vectors for gene therapy. Russ AP, et al. **J Virol** 1996 Aug;70(8):4927–32

Expression of human endogenous retrovirus type K envelope glycoprotein in insect and mammalian cells. Tönjes RR, et al. **J Virol** 1997 Apr;71(4):2747–56

Characterization of CD8+ cytotoxic T–lymphocyte responses after genetic immunization with retrovirus vectors expressing different forms of the hepatitis B virus core and e antigens. Townsend K, et al. **J Virol** 1997 May; 71(5):3365–74

RNAs from genetically distinct retroviruses can copackage and exchange genetic information in vivo. Yin PD, et al. **J Virol** 1997 Aug;71(8):6237–42

Utilization of nonhomologous minus–strand DNA transfer to generate recombinant retroviruses. Yin PD, et al. **J Virol** 1997 Mar;71(3):2487–94

Single–tube heminested PCR coupled with 'touchdown' PCR for the analysis of the walleye dermal sarcoma virus env gene. Zhang Z, et al. **J Virol Methods** 1996 Jun;60(1):29–37

In vivo retrovirus–mediated herpes simplex virus thymidine kinase gene therapy approach for adult T cell leukemia in a rat model. Murata K, et al. **Jpn J Cancer Res** 1997 May;88(5):492–500

Gene transfer to the patellar tendon. Gerich TG, et al. **Knee Surg Sports Traumatol Arthrosc** 1997;5(2):118–23

New insight on the role of extrachromosomal retroviral DNA. Cara A, et al. **Leukemia** 1997 Sep;11(9):1395–9 (48 ref.)

Molecular characterization of a piscine retrovirus, walleye dermal sarcoma virus. Holzschu DL, et al. **Leukemia** 1997 Apr;11 Suppl 3:172–5

Avian leukemias and lymphomas: interplay between retroviruses and herpesviruses. Robinson D, et al. **Leukemia** 1997 Apr;11 Suppl 3:176–8

Involvement of a human endogenous retroviral sequence (THE–7) in a t(7;14)(q21;q32) chromosomal translocation associated with a B cell chronic lymphocytic leukemia. Wahbi K, et al. **Leukemia** 1997 Aug;11(8):1214–9

Differential effects of retroviral long terminal repeats on interleukin–3 gene expression and autocrine transformation. Wang XY, et al. **Leukemia** 1997 Oct;11(10):1711–25

Co–amplification to tail–to–tail copies of MuRVY and IAPE retroviral genomes on the Mus musculus Y chromosome. Fennelly J, et al. **Mamm Genome** 1996 Jan;7(1):31–6

Use of single–cycle analysis to study rates and mechanisms of retroviral mutation. Yu H, et al. **Methods** 1997 Aug; 12(4):325–36 (62 ref.)

Retroviral delivery and anti–HIV testing of hammerhead ribozymes. Cagnon L, et al. **Methods Mol Biol** 1997; 74:451–7

Retroviral techniques for studying organogenesis with a focus on heart development. Hyer J, et al. **Mol Cell Biochem** 1997 Jul;172(1–2):23–35

Proviral inactivation of the Npat gene of Mpv 20 mice results in early embryonic arrest. Di Fruscio M, et al. **Mol Cell Biol** 1997 Jul;17(7):4080–6

Versatile retrovirus vector systems for regulated gene expression in vitro and in vivo. Lindemann D, et al. **Mol Med** 1997 Jul;3(7):466–76

Retrovirus–mediated p53 gene therapy [letter] Estreicher A, et al. **Nat Med** 1996 Nov;2(11):1163

Canine fucosidosis: a model for retroviral gene transfer into haematopoietic stem cells. Ferrara ML, et al. **Neuromuscul Disord** 1997 Jul;7(5):361–6

Neural toxicity of retroviruses. Hurley MJ, et al. **Neurosci Lett** 1996 Dec 6;220(1):66–8

Co–packaging of non–vector RNAs generates replication–defective retroviral vector particles: a novel approach for blocking retrovirus replication. Joshi S, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3199–203

A retroviral element in the human CYP2D gene cluster [letter] Molven A, et al. **Pharmacogenetics** 1996 Aug; 6(4):375–7

A deleted retroviral insertion at the ev21–K complex locus in Indonesian chickens. Tixier–Boichard M, et al. **Poult Sci** 1997 May;76(5):733–42

Selection of retrovirally transduced cells to enhance the efficiency of gene therapy. Medin JA, et al. **Proc Assoc Am Physicians** 1997 Mar;109(2):111–9 (67 ref.)

Posttranscriptional modification of retroviral primers is required for late stages of DNA replication. Burnett BP, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7210–5

Host range restrictions of oncogenes: myc genes transform avian but not mammalian cells and mht/raf genes transform mammalian but not avian cells. Li R, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7522–7

The level of mRNA encoding the amphotropic retrovirus receptor in mouse and human hematopoietic stem cells is low and correlates with the efficiency of retrovirus transduction. Orlic D, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11097–102

Molecular identification of a novel retrovirus repeatedly isolated from patients with multiple sclerosis. The Collaborative Research Group on Multiple Sclerosis. Perron H, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8; 94(14):7583–8

Human trophoblast and choriocarcinoma expression of the growth factor pleiotrophin attributable to germ–line insertion of an endogenous retrovirus. Schulte AM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14759–64

Antigen presentation in retroviral vector–mediated gene transfer in vivo. Song ES, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1943–8

Effects of infection rate and selection pressure on gene expression from an internal promoter of a double gene retroviral vector. Schott B, et al. **Somat Cell Mol Genet** 1996 Jul;22(4):291–309

Retroviral stem cell gene therapy. Havenga M, et al. **Stem Cells** 1997;15(3):162–79 (144 ref.)

Eleven chromosomal integration sites of a human endogenous retrovirus (HERV 4–1) map close to known loci of thirteen hereditary malformation syndromes. Taruscio DA, et al. **Teratology** 1996 Aug;54(2):108–10 (21 ref.)

Viral vector–mediated gene therapy for hemophilia B. Eisensmith RC, et al. **Thromb Haemost** 1997 Jul;78(1):24–30 (81 ref.)

Accessory replication proteins and the accuracy of reverse transcription: implications for retroviral genetic diversity. Mansky LM. **Trends Genet** 1997 Apr;13(4):134–6 (19 ref.)

Our retroviral heritage. Patience C, et al. **Trends Genet** 1997 Mar;13(3):116–20 (62 ref.)

Endogenous retroviruses and the evolution of resistance to retroviral infection. Best S, et al. **Trends Microbiol** 1997 Aug;5(8):313–8 (33 ref.)

Pararetro– and retrovirus RNA: splicing and the control of nuclear export. Kiss–László Z, et al. **Trends Microbiol** 1996 Dec;4(12):480–5 (52 ref.)

Retrovirus variation: a finger on the pulse [comment] Meyerhans A. **Trends Microbiol** 1996 Jun;4(6):218–9 (15 ref.). Comment on: Trends Microbiol 1996 Apr;4(4):135–41.

Mechanisms of retroviral mutation. Preston BD, et al. **Trends Microbiol** 1996 Jan;4(1):16–21 (88 ref.)

BaEV is a relic from an ancient retrovirus that crossed species barriers [letter; comment] Vandamme AM. **Trends Microbiol** 1996 Dec;4(12):478. Comment on: Trends Microbiol 1996 Nov;4(11):455–9.

Baboon endogenous virus evolution and ecology [see comments] van der Kuyl AC, et al. **Trends Microbiol** 1996 Nov;4(11):455–9 (23 ref.). Comment in: Trends Microbiol 1996 Dec;4(12):478.

Endogenous retrovirus sequences and their usefulness to the host [letter] van der Kuyl AC. **Trends Microbiol** 1997 Sep; 5(9):339

PCR and RT–PCR analysis of infection and transcriptional activity of walleye dermal sarcoma virus (WDSV) in organs of adult walleyes (Stizostedion vitreum). Poulet FM, et al. **Vet Pathol** 1996 Jan;33(1):66–73

Type 1 HERV–K genome is spliced into subgenomic transcripts in the human breast tumor cell line T47D. Etkind PR, et al. **Virology** 1997 Aug 4;234(2):304–8

Human endogenous retrovirus HC2 is a new member of the S71 retroviral subgroup with a full–length pol gene. Kabát P, et al. **Virology** 1996 Dec 1;226(1):83–94

[Gene therapy of human pancreatic carcinoma by recombinant retroviral vector expressing herpes simplex virus thymidine kinase gene] Li H, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1995 Dec;24(6):345–7 (Eng. Abstr.) **(Chi)**

[Endogenous retroviral sequences as a factor in the pathogenesis of systemic lupus erythematosus] Walchner M, et al. **Hautarzt** 1996 Jul;47(7):502–9 (55 ref.) (Eng. Abstr.) **(Ger)**

[Gene therapy with wild–type p53 in lung tumors] Dunst J. **Strahlenther Onkol** 1997 Aug;173(8):431–2 **(Ger)**

[Structural characteristics of four long terminal repeats (LTR) of human endogenous retroviruses and features of their integration sites] Khil' PP, et al. **Bioorg Khim** 1997 May;23(5):434–40 (Eng. Abstr.) **(Rus)**

[Possibility of transfer of genetic information of type D retroviruses from lymphocytes of patients with B–cells lymphosarcomas into raji cells] Il'in KV, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):446–8 **(Rus)**

[Effect of specific oligonucleotide insertions on the activity of a chimeric retroviral promotor in vivo] Kraevskiĭ VA, et al. **Dokl Akad Nauk** 1996 Dec;351(5):695–8 **(Rus)**

[Retrovirus and human diseases: etiologic agents as therapeutic instruments (editorial)] García Hernández B, et al. **Med Clin (Barc)** 1996 Jul 6;107(6):215–7 **(Spa)**

[Gene therapy in neurology. State of the art and future prospects] Duarte RG. **Neurologia** 1995 Dec;10 Suppl 1:56–61 (14 ref.) (Eng. Abstr.) **(Spa)**

GROWTH & DEVELOPMENT

The expression of human endogenous retrovirus–3 in fetal cardiac tissue and antibodies in congenital heart block. Li JM, et al. **Clin Exp Immunol** 1996 Jun;104(3):388–93

A simple and rapid method for the determination of recombinant retrovirus titer by G418 selection. Byun J, et al. **Gene Ther** 1996 Nov;3(11):1018–20

Anemia and perinatal death result from loss of the murine ecotropic retrovirus receptor mCAT–1. Perkins CP, et al. **Genes Dev** 1997 Apr 1;11(7):914–25

Eosinophils inhibit retroviral transduction of human target cells by a ribonuclease–dependent mechanism. Domachowske JB, et al. **J Leukoc Biol** 1997 Sep; 62(3):363–8

IMMUNOLOGY

Comparative Approach to Retroviral Vaccines. Workshop proceedings. Les Pensières, Veyrier–du–Lac, France, June 23–24, 1995. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):355–467

Roundtable: can experience with veterinary retroviral vaccines be applied to the human situation? **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):365–73

Comparative approach to retroviral vaccines. Burny A. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):389–92 (6 ref.)

Perspectives on retroviral pathogenesis and vaccines. Weiss RA. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):465–7 (3 ref.)

Selective antibody reactivity with peptides from human endogenous retroviruses and nonviral poly(amino acids) in patients with systemic lupus erythematosus. Bengtsson A, et al. **Arthritis Rheum** 1996 Oct;39(10):1654–63

Specificity of antibodies directed against Env protein of human endogenous retroviruses in patients with germ cell tumors. Sauter M, et al. **Cancer Res** 1996 Oct 1; 56(19):4362–5

The expression of human endogenous retrovirus–3 in fetal cardiac tissue and antibodies in congenital heart block. Li JM, et al. **Clin Exp Immunol** 1996 Jun;104(3):388–93

Damselfish with neurofibromatosis exhibit cytotoxicity towards retrovirus infected cells. McKinney EC, et al. **Dev Comp Immunol** 1997 May–Jun;21(3):287–98

Retroviruses and systemic lupus erythematosus. Herrmann M, et al. **Immunol Rev** 1996 Aug;152:145–56 (54 ref.)

The potential roles of endogenous retroviruses in autoimmunity. Nakagawa K, et al. **Immunol Rev** 1996 Aug; 152:193–236 (219 ref.)

HERV–K: the biologically most active human endogenous retrovirus family. Tönjes RR, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S261–7 (56 ref.)

Retrovirus and filovirus "immunosuppressive motif" and the evolution of virus pathogenicity in HIV–1, HIV–2, and Ebola viruses. Becker Y. **Virus Genes** 1995;11(2–3):191–5 (28 ref.)

[Anti–retrovirus agents in AIDS: therapeutic strategy and prospectives for the future] **Rev Med Interne** 1997; 18(2):100–5 (37 ref.) **(Fre)**

[Endogenous retroviruses in autoimmune diseases] Katsumata K, et al. **Nippon Rinsho** 1997 Jun;55(6):1475–81 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Systemic lupus erythematosus (SLE) and retrovirus] Sekigawa I, et al. **Nippon Rinsho** 1997 Jun;55(6):1492–7 (20 ref.) (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Expression of human endogenous retrovirus K elements in germ cell and trophoblastic tumors. Herbst H, et al. **Am J Pathol** 1996 Nov;149(5):1727–35

Search for retrovirus in patients with multiple sclerosis. Hackett J Jr, et al. **Ann Neurol** 1996 Nov;40(5):805–9

Retrovirus screening of vaccine cell substrates. Khan AS. **Dev Biol Stand** 1996;88:157–62 (24 ref.)

Gliotoxicity, reverse transcriptase activity and retroviral RNA in monocyte/macrophage culture supernatants from patients with multiple sclerosis. Ménard A, et al. **FEBS Lett** 1997 Aug 25;413(3):477–85

Rapid retrovirus titration using competitive polymerase chain reaction. Tafuro S, et al. **Gene Ther** 1996 Aug;3(8):679–84

A simple and efficient method for the concentration and purification of recombinant retrovirus for increased hepatocyte transduction in vivo. Bowles NE, et al. **Hum Gene Ther** 1996 Sep 10;7(14):1735–42

Retrovirus in salivary glands from patients with Sjögren's syndrome. Yamano S, et al. **J Clin Pathol** 1997 Mar; 50(3):223–30

Degenerate and specific PCR assays for the detection of bovine leukaemia virus and primate T cell leukaemia/lymphoma virus pol DNA and RNA: phylogenetic comparisons of amplified sequences from cattle and primates from around the world. Dube S, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1389–98

Expression of the Drosophila retrovirus gypsy as ultrastructurally detectable particles in the ovaries of flies carrying a permissive flamenco allele. Lécher P, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2379–88

Viruses and oncogenes in brain tumors. Archer GE, et al. **J Neurovirol** 1997 May;3 Suppl 1:S76–7 (7 ref.)

Highly sensitive qualitative and quantitative detection of reverse transcriptase activity: optimization, validation, and comparative analysis with other detection systems. Yamamoto S, et al. **J Virol Methods** 1996 Sep; 61(1–2):135–43

Plasmacytoid leukemia of chinook salmon. Kent ML, et al. **Leukemia** 1997 Apr;11 Suppl 3:170–1

Tissue and differentiation specific expression on the endogenous retrovirus ERV3 (HERV–R) in normal human tissues and during induced monocytic differentiation in the U–937 cell line. Larsson E, et al. **Leukemia** 1997 Apr;11 Suppl 3:142–4

Human endogenous retroviruses: expression in various organs in vivo and its regulation in vitro. Sibata M, et al. **Leukemia** 1997 Apr;11 Suppl 3:145–6

Retroviruses and schizophrenia in Jamaica. Rodgers–Johnson PE, et al. **Mol Chem Neuropathol** 1996 May–Aug; 28(1–3):237–43

Molecular identification of a novel retrovirus repeatedly isolated from patients with multiple sclerosis. The Collaborative Research Group on Multiple Sclerosis. Perron H, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8; 94(14):7583–8

Molecular screening of xenodonor genomes for species–specific endogenous retroviral DNA sequences. Hoopes CW, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):897–8

Food animal and poultry retroviruses and human health. DiGiacomo RF, et al. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):177–90 (81 ref.)

PCR and RT–PCR analysis of infection and transcriptional activity of walleye dermal sarcoma virus (WDSV) in organs of adult walleyes (Stizostedion vitreum). Poulet FM, et al. **Vet Pathol** 1996 Jan;33(1):66–73

Phylogenetic and epidemiologic analysis of the walleye dermal sarcoma virus. Zhang Z, et al. **Virology** 1996 Nov 15;225(2):406–12

METABOLISM

Alveolar macrophages produce the Env protein of a human endogenous retrovirus, HERV–E 4–1, in a subgroup of interstitial lung diseases. Tamura N, et al. **Am J Respir Cell Mol Biol** 1997 Apr;16(4):429–37

Receptor co–operation in retrovirus entry: recruitment of an auxiliary entry mechanism after retargeted binding [published erratum appears in EMBO J 1997 Jul 1;16(13):4153] Valsesia–Wittmann S, et al. **EMBO J** 1997 Mar 17;16(6):1214–23

Retroviral infection is limited by Brownian motion. Chuck AS, et al. **Hum Gene Ther** 1996 Aug 20;7(13):1527–34

Two–step delivery of retroviruses to postmitotic, terminally differentiated cells. Ito M, et al. **Hum Gene Ther** 1997 Jan 1;8(1):57–63

Retrovirus–mediated gene transfer of 6–pyruvoyl–tetrahydropterin synthase corrects tetrahydrobiopterin deficiency in fibroblasts from hyperphenylalaninemic patients. Thöny B, et al. **Hum Gene Ther** 1996 Aug 20;7(13):1587–93

Late virus replication events in microglia are required for neurovirulent retrovirus–induced spongiform neurodegeneration: evidence from neural progenitor–derived chimeric mouse brains. Lynch WP, et al. **J Virol** 1996 Dec;70(12):8896–907

Murine retroviruses use at least six different receptors for entry into Mus dunni cells. Miller AD, et al. **J Virol** 1997 Jun;71(6):4531–5

Adeno–associated virus type 2–mediated transfer of ecotropic retrovirus receptor cDNA allows ecotropic retroviral transduction of established and primary human cells. Qing K, et al. **J Virol** 1997 Jul;71(7):5663–7

Plasma membrane targeting of chimeric intracisternal A–type particle polyproteins leads to particle release and specific activation of the viral proteinase. Welker R, et al. **J Virol** 1997 Jul;71(7):5209–17

Retroviral vector design for gene therapy of cancer: specific inhibition and tagging of BCR–ABLp190 cells. García–Hernández B, et al. **Mol Med** 1996 Jan;2(1):124–33

PATHOGENICITY

Perspectives on retroviral pathogenesis and vaccines. Weiss RA. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):465–7 (3 ref.)

The ABL–MYC retrovirus generates antigen–specific plasmacytomas by in vitro infection of activated B lymphocytes from spleen and other murine lymphoid organs. Largaespada DA, et al. **J Immunol Methods** 1996 Oct 16;197(1–2):85–95

Oncogenic retroviruses of cattle, chickens and turkeys: potential infectivity and oncogenicity for humans. Johnson ES, et al. **Med Hypotheses** 1996 Apr;46(4):354–6 (19 ref.)

Our retroviral heritage. Patience C, et al. **Trends Genet** 1997 Mar;13(3):116–20 (62 ref.)

Endogenous retroviruses and the evolution of resistance to retroviral infection. Best S, et al. **Trends Microbiol** 1997 Aug;5(8):313–8 (33 ref.)

Programmed endothelial cell death induced by an avian hemangioma retrovirus is density dependent. Sela–Donenfeld D, et al. **Virology** 1996 Sep 1;223(1):233–7

PHYSIOLOGY

HIV and human endogenous retroviruses: an hypothesis with therapeutic implications. McIntosh EM, et al. **Acta Biochim Pol** 1996;43(4):583–92 (42 ref.)

Retroviral insertional mutagenesis of a herpesvirus: a Marek's disease virus mutant attenuated for oncogenicity but not for immunosuppression or in vivo replication. Witter RL, et al. **Avian Dis** 1997 Apr–Jun;41(2):407–21

Retrovirus budding may constitute a port of entry for drug carriers. Ropert C, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):53–9

RNA packaging. Berkowitz R, et al. **Curr Top Microbiol Immunol** 1996;214:177–218 (218 ref.)

Use of heterologous expression systems to study retroviral morphogenesis. Boulanger P, et al. **Curr Top Microbiol Immunol** 1996;214:237–60 (112 ref.)

Role of auxiliary proteins in retroviral morphogenesis. Cohen EA, et al. **Curr Top Microbiol Immunol** 1996;214:219–35 (102 ref.)

Dynamic interactions of the Gag polyprotein. Craven RC, et al. **Curr Top Microbiol Immunol** 1996;214:65–94 (113 ref.)

Maturation and assembly of retroviral glycoproteins. Einfeld D. **Curr Top Microbiol Immunol** 1996;214:133–76 (285 ref.)

Intracellular transport of retroviral capsid components. Kräusslich HG, et al. **Curr Top Microbiol Immunol** 1996; 214:25–63 (179 ref.)

Proteolytic processing and particle maturation. Vogt VM. **Curr Top Microbiol Immunol** 1996;214:95–131 (154 ref.)

The physico–chemical factors that govern retrovirus–mediated gene transfer. Palsson B, et al. **Exp Hematol** 1997 Feb;25(2):94–102 (94 ref.)

Stromal cells maintain the radioprotective capacity of CFU–S during retroviral infection. Goncalves F, et al. **Gene Ther** 1996 Sep;3(9):761–8

Evaluation of recommendations for replication–competent retrovirus testing associated with use of retroviral vectors. Wilson CA, et al. **Hum Gene Ther** 1997 May 1;8(7):869–74

Rat islet cell lines produced by retroviral transduction of SV40 T antigen [letter] Kaung HC, et al. **In Vitro Cell Dev Biol Anim** 1996 Apr;32(4):185–8

Release of replication–deficient retroviruses from a packaging cell line: interaction with glioma tumor spheroids in vitro. Thorsen F, et al. **Int J Cancer** 1997 May 29;71(5):874–80

The interaction of a type A retroviral particle and class II human leukocyte antigen susceptibility genes in the pathogenesis of Graves' disease. Jaspan JB, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2271–9

Loss of intracisternal A–type retroviral particles in BL6 melanoma cells transfected with MHC class I genes. Li M, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2757–65

Cellular and viral protein interactions regulating I kappa B alpha activity during human retrovirus infection. Hiscott J, et al. **J Leukoc Biol** 1997 Jul;62(1):82–92 (80 ref.)

Kinetics of retrovirus mediated gene transfer: the importance of intracellular half–life of retroviruses. Andreadis ST, et al. **J Theor Biol** 1996 Sep 7;182(1):1–20

Development of high–titer retroviral producer cell lines by using Cre–mediated recombination. Vanin EF, et al. **J Virol** 1997 Oct;71(10):7820–6

Improved detection of replication–competent retrovirus. Forestell SP, et al. **J Virol Methods** 1996 Jul;60(2):171–8

Tissue and differentiation specific expression on the endogenous retrovirus ERV3 (HERV–R) in normal human tissues and during induced monocytic differentiation in the U–937 cell line. Larsson E, et al. **Leukemia** 1997 Apr;11 Suppl 3:142–4

Human endogenous retroviruses: expression in various organs in vivo and its regulation in vitro. Sibata M, et al. **Leukemia** 1997 Apr;11 Suppl 3:145–6

Autoimmune diabetes. Retrovirus as trigger, precipitator or marker? [news] Benoist C, et al. **Nature** 1997 Aug 28; 388(6645):833–4

Neural toxicity of retroviruses. Hurley MJ, et al. **Neurosci Lett** 1996 Dec 6;220(1):66–8

Cell–surface receptors for retroviruses and implications for gene transfer. Miller AD. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11407–13 (52 ref.)

A human B–lymphoblastoid cell line constitutively producing Epstein–Barr herpesvirus and JHK retrovirus. Grossberg SE, et al. **Res Virol** 1997 May–Jun;148(3):191–206

Retrovirus–associated neoplasms of the respiratory system of sheep and goats. Ovine pulmonary carcinoma and enzootic nasal tumor. DeMartini JC, et al. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):55–70 (73 ref.)

Murine AIDS, a key to understanding retrovirus–induced immunodeficiency. Liang B, et al. **Viral Immunol** 1996; 9(4):225–39 (122 ref.)

Characterization of human endogenous retrovirus type K virus–like particles generated from recombinant baculoviruses. Tönjes RR, et al. **Virology** 1997 Jul 7; 233(2):280–91

ULTRASTRUCTURE

Cryo–electron microscopy structure of yeast Ty retrotransposon virus–like particles. Palmer KJ, et al. **J Virol** 1997 Sep;71(9):6863–8

RETROVIRIDAE INFECTIONS

p53–independent tumor growth and in vitro cell survival for F–MuLV–induced erythroleukemias. Howard J, et al. **Cell Growth Differ** 1996 Dec;7(12):1651–60

Optimization of the reverse transcriptase assay for the detection of viral burden in mice infected with Rauscher murine leukemia virus. White EL, et al. **J Virol Methods** 1996 Oct;62(1):63–70

BLOOD

Effect of combination interleukin–3 (IL–3) and granulocyte–macrophage colony stimulating factor (GM–CSF) on hematopoiesis administered to retrovirus–infected immunodeficient mice receiving dose–escalation zidovudine (AZT). Gallicchio VS, et al. **Int J Immunopharmacol** 1995 Nov;17(11):865–78

Serum levels of soluble Fas/APO–1 receptor in human retroviral infection and associated diseases. Kamihira S, et al. **Intern Med** 1997 Mar;36(3):166–70

CLASSIFICATION

HERV–K: the biologically most active human endogenous retrovirus family. Tönjes RR, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S261–7 (56 ref.)

COMPLICATIONS

Amelioration of experimental systemic lupus erythematosus (SLE) by retrovirus infection. Mittleman BB, et al. **J Clin Immunol** 1996 Jul;16(4):230–6

An unlikely link? Researchers probe viral role in breast cancer [news] Ziegler J. **J Natl Cancer Inst** 1997 May 7; 89(9):608–10

RETROVIRIDAE INFECTIONS

DIAGNOSIS

Development of a pan-retrovirus detection system for multiple sclerosis studies. Tuke PW, et al. **Acta Neurol Scand Suppl** 1997;169:16–21

Use of polymerase chain reaction for diagnosis of type D simian retrovirus infection in macaque blood. Wang Y, et al. **Lab Anim Sci** 1996 Apr;46(2):187–92

DRUG THERAPY

Methionine enkephalin used in combination with azidothymidine in murine retrovirus infection. Specter S, et al. **Adv Exp Med Biol** 1996;402:59–62

Hypersensitivity reactions during antiretroviral regimens with protease inhibitors [letter] Bonfanti P, et al. **AIDS** 1997 Aug;11(10):1301–2

Effects of (R)-9-(2-phosphonylmethoxypropyl)adenine monotherapy on chronic SIV infection in macaques. Tsai CC, et al. **AIDS Res Hum Retroviruses** 1997 May 20; 13(8):707–12

Antiretroviral activities of acyclic nucleoside phosphonates [9-(2-phosphonylmethoxyethyl)adenine, 9-(2-phosphonylmethoxyethyl)guanine, (R)-9-(2-phosphonylmethoxypropyl)adenine, and MDL 74,968] in cell cultures and murine sarcoma virus-infected newborn NMRI mice. Balzarini J, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):611–6

Evidence that high-dosage zidovudine at time of retrovirus exposure reduces antiviral efficacy. Mathes LE, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2183–6

Effects of SKF 108922, an HIV-1 protease inhibitor, on retrovirus replication in mice. Black PI, et al. **Antiviral Res** 1996 Mar;29(2-3):175–86

Retrovirus budding may constitute a port of entry for drug carriers. Ropert C, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):53–9

RetroActive antivirals [editorial] MacInnis BJ. **Can J Ophthalmol** 1996 Oct;31(6):275–6 **(Eng, Fre)**

Diethylcarbamazine treatment of feline leukemia virus-infected cats [letter; comment] Kitchen LW. **Vet Immunol Immunopathol** 1996 Sep;53(1-2):191–2. Comment on: Vet Immunol Immunopathol 1995 May;46(1-2):181–94.

[Antiretroviral treatment and resistance] Gómez-Cano M, et al. **Rev Clin Esp** 1997 Aug;197(8):574–82 (74 ref.) **(Spa)**

ENZYMOLOGY

Regional changes in constitutive, but not inducible NOS expression in the brains of mice infected with the LP-BM5 leukemia virus. Li Y, et al. **Brain Res** 1997 Mar 28; 752(1-2):107–16

EPIDEMIOLOGY

No evidence of antibody to human foamy virus in widespread human populations. Ali M, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1473–83

Retroviral risk factors in patients with autoimmune disease. Drevlow BE, et al. **J Rheumatol** 1996 Mar;23(3):428–31

Baboon endogenous virus evolution and ecology [see comments] van der Kuyl AC, et al. **Trends Microbiol** 1996 Nov;4(11):455–9 (23 ref.). Comment in: Trends Microbiol 1996 Dec;4(12):478.

Food animal and poultry retroviruses and human health. DiGiacomo RF, et al. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):177–90 (81 ref.)

Phylogenetic and epidemiologic analysis of the walleye dermal sarcoma virus. Zhang Z, et al. **Virology** 1996 Nov 15;225(2):406–12

ETIOLOGY

HTLV-associated diseases: human retroviral infection and cutaneous T-cell lymphomas. Fujihara K, et al. **Immunol Invest** 1997 Jan-Feb;26(1-2):231–42

Quantative aspects of transfusion-transmitted retrovirus-induced lymphoproliferative disease in mice. Thacore HR, et al. **J Clin Lab Immunol** 1995;46(3):97–109

Immunosuppressive retroviral peptides: immunopathological implications for immunosuppressive influences of retroviral infections. Haraguchi S, et al. **J Leukoc Biol** 1997 Jun; 61(6):654–66 (161 ref.)

Oncogenic retroviruses of cattle, chickens and turkeys: potential infectivity and oncogenicity for humans. Johnson ES, et al. **Med Hypotheses** 1996 Apr;46(4):354–6 (19 ref.)

Silk purse or sow's ear [news; comment] Allan J. **Nat Med** 1997 Mar;3(3):275–6. Comment on: Nat Med 1997 Mar;3(3):282–6.

Mouse mammary tumor virus and mammary tumorigenesis in wild mice. Imai S. **Pathol Int** 1996 Dec;46(12):919–32 (136 ref.)

Leukemogenesis by Moloney murine leukemia virus: a multistep process. Fan H. **Trends Microbiol** 1997 Feb; 5(2):74–82 (48 ref.)

GENETICS

Host range conversion of murine leukemia virus resulting from recombination with endogenous virus. Kawana A, et al. **Arch Virol** 1997;142(1):139–49

Human endogenous retroviruses [letter; comment] Michalski F. **Clin Microbiol Rev** 1996 Oct;9(4):585. Comment on: Clin Microbiol Rev 1996 Jan;9(1):72–99.

Retroviral infection in peripheral mononuclear cells in patients with IgA nephropathy. Kanno Y, et al. **Clin Nephrol** 1997 Apr;47(4):211–6

Biological significance of human endogenous retroviral sequences. Hohenadl C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S268–73 (59 ref.)

Molecular biology of the human foamy virus. Saïb A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S254–60 (69 ref.)

HERV-K: the biologically most active human endogenous retrovirus family. Tönjes RR, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S261–7 (56 ref.)

Expression of the gibbon ape leukemia virus receptor-1 in rhesus macaque tissues. Wong SW, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):59–62

Stability of AML1 (core) site enhancer mutations in T lymphomas induced by attenuated SL3-3 murine leukemia virus mutants. Amtoft HW, et al. **J Virol** 1997 Jul; 71(7):5080–7

Identification of a cis-acting element in the class I major histocompatibility complex gene promoter responsive to activation by retroviral sequences. Choi SY, et al. **J Virol** 1997 Feb;71(2):965–70

Low-frequency loss of heterozygosity in Moloney murine leukemia virus-induced tumors in BRAKF1/J mice. Lander JK, et al. **J Virol** 1997 May;71(5):3940–52

Cell-free transmission of Fv-4 resistance gene product controlling Friend leukemia virus-induced leukemogenesis in mice. Kitagawa M, et al. **Leukemia** 1997 Apr;11 Suppl 3:230–2

Viral genetic variation, AIDS, and the multistep nature of carcinogenesis: the feline leukemia virus model. Rohn JL, et al. **Leukemia** 1996 Dec;10(12):1867–9 (31 ref.)

The mouse mammary tumor associated gene INT3 is a unique member of the NOTCH gene family (NOTCH4). Gallahan D, et al. **Oncogene** 1997 Apr 24;14(16):1883–90

Establishment of a therapeutic model for retroviral infection using the genetic resistance mechanism of the host. Kitagawa M, et al. **Pathol Int** 1996 Oct;46(10):719–25 (73 ref.)

Mouse mammary tumor virus/v-Ha-ras transgene-induced mammary tumors exhibit strain-specific allelic loss on mouse chromosome 4. Radany EH, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8664–9

Endogenous retroviruses and the evolution of resistance to retroviral infection. Best S, et al. **Trends Microbiol** 1997 Aug;5(8):313–8 (33 ref.)

Pararetro- and retrovirus RNA: splicing and the control of nuclear export. Kiss-László Z, et al. **Trends Microbiol** 1996 Dec;4(12):480–5 (52 ref.)

BaEV is a relic from an ancient retrovirus that crossed species barriers [letter; comment] Vandamme AM. **Trends Microbiol** 1996 Dec;4(12):478. Comment on: Trends Microbiol 1996 Nov;4(11):455–9.

[Gene therapy in neurology. State of the art and future prospects] Duarte RG. **Neurologia** 1995 Dec;10 Suppl 1:56–61 (14 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Mouse mammary tumor virus and the immune system. Ross SR. **Adv Pharmacol** 1997;39:21–46 (95 ref.)

B cell response and histology of a retroviral infection in vivo. Luther SA, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:465–6

The expression of human endogenous retrovirus-3 in fetal cardiac tissue and antibodies in congenital heart block. Li JM, et al. **Clin Exp Immunol** 1996 Jun;104(3):388–93

Inhibition of T cell activation by an autoantibody induced by murine retrovirus infection. Townsend RM, et al. **Clin Immunol Immunopathol** 1997 Mar;82(3):263–73

Distribution of Fv-4 resistant gene product in Friend leukemia virus-resistant Fv-4r mouse strain. Kitagawa M, et al. **Exp Hematol** 1996 Oct;24(12):1423–31

Induction of intestinal lesions in nu/nu mice induced by transfer of lymphocytes from syngeneic mice infected with murine retrovirus. Suzuki K, et al. **Gut** 1997 Aug; 41(2):221–8

CD4 expression is important but not essential for infection with exogenous mouse mammary tumor virus. Ando Y, et al. **Immunobiology** 1996 Aug;195(3):376–84

Retrovirus-induced lymphoproliferative disease in mice: role of humoral immunity in perinatally exposed mice. Zaleski MB, et al. **Immunobiology** 1995 Nov;194(4-5):390–402

Moloney leukemia virus-induced cell surface antigen mimicry by monoclonal antibodies. Baskin JG, et al. **Immunol Res** 1995;14(4):292–316 (96 ref.)

Follicular dendritic cells (FDC) in retroviral infection: host/pathogen perspectives. Burton GF, et al. **Immunol Rev** 1997 Apr;156:185–97 (58 ref.)

The nasal-associated lymphoid tissue of adult mice acts as an entry site for the mouse mammary tumor retrovirus. Velin D, et al. **J Exp Med** 1997 May 19;185(10):1871–6

Immunization with a mouse mammary tumour virus envelope protein epitope protects against tumour formation without inhibition of the virus infection. Astori M, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1935–9

Early neutralizing antibody response against mouse mammary tumor virus: critical role of viral infection and superantigen-reactive T cells. Luther SA, et al. **J Immunol** 1997 Sep 15;159(6):2807–14

T cell deletion induced by chronic infection with mouse mammary tumor virus spares a CD25-positive, IL-10-producing T cell population with infectious capacity. Papiernik M, et al. **J Immunol** 1997 May 15; 158(10):4642–53

T cells bearing Vbeta8 are preferentially infected with exogenous mouse mammary tumor virus. Upragarin N, et al. **J Immunol** 1997 Sep 1;159(5):2189–95

Eosinophils inhibit retroviral transduction of human target cells by a ribonuclease-dependent mechanism. Domachowske JB, et al. **J Leukoc Biol** 1997 Sep; 62(3):363–8

Immunosuppressive retroviral peptides: immunopathological implications for immunosuppressive influences of retroviral infections. Haraguchi S, et al. **J Leukoc Biol** 1997 Jun; 61(6):654–66 (161 ref.)

Retrovirus-induced target cell activation in the early phases of infection: the mouse mammary tumor virus model. Ardavin C, et al. **J Virol** 1997 Oct;71(10):7295–9

Susceptibility of nude mice carrying the Fv-4 gene to Friend murine leukemia virus infection. Higo K, et al. **J Virol** 1997 Jan;71(1):750–4

The neonatal Fc receptor is not required for mucosal infection by mouse mammary tumor virus. Velin D, et al. **J Virol** 1996 Oct;70(10):7250–4

Mouse mammary tumor virus: a virus that exploits the immune system. Bramblett D, et al. **Leukemia** 1997 Apr; 11 Suppl 3:183–6

The role of the immune response in MULV-induced lymphomagenesis. Marshall DJ, et al. **Leukemia** 1996 Dec; 10(12):1860–6 (79 ref.)

Immunity to retroviral infection: the Friend virus model. Hasenkrug KJ, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7811–6 (95 ref.)

Prevention of retrovirus-induced aberrant cytokine secretion, excessive lipid peroxidation, and tissue vitamin E deficiency by T cell receptor peptide treatments in C57BL/6 mice. Liang B, et al. **Proc Soc Exp Biol Med** 1997 Jan; 214(1):87–94

Selective lysis of activated cells in oncorna virus infection. Biasi G, et al. **Scand J Immunol** 1997 Apr;45(4):366–70

Study of the T cell receptor repertoire in viral immunodeficiency disease. Ciurli C, et al. **Springer Semin Immunopathol** 1996;17(4):319–32 (87 ref.)

Superantigens in disease. MacDonald HR. **Springer Semin Immunopathol** 1996;17(4):283–4

Endogenous retroviruses and the evolution of resistance to retroviral infection. Best S, et al. **Trends Microbiol** 1997 Aug;5(8):313–8 (33 ref.)

Deletion of CD4+ T cells by mouse mammary tumor virus (FM) superantigen with broad specificity of T cell receptor beta-chain variable region. Yoshimoto T, et al. **Virology** 1996 Sep 15;223(2):387–91

METABOLISM

Increased resistance to acetaminophen-induced hepatotoxicity in retrovirus-infected mice. Chow HH, et al. **Biopharm Drug Dispos** 1996 Nov;17(8):661–74

In vivo tissue disposition of 3'-azido-3'-deoxythymidine and its anabolites in control and retrovirus-infected mice. Chow HH, et al. **Drug Metab Dispos** 1997 Apr;25(4):412–22

Secretion of a murine retroviral Env associated with resistance to infection. Nihrane A, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):785–93

Regional disease in AMPA receptor density in mice infected with the LP-BM5 murine leukemia virus. Kustova Y, et al. **Neuroreport** 1997 Mar 24;8(5):1243–7

Nuclear export and its significance in retroviral infection. Yoneda Y. **Trends Microbiol** 1996 Jan;4(1):1–2 (15 ref.)

MICROBIOLOGY

Simian foamy virus isolated from an accidentally infected human individual. Schweizer M, et al. **J Virol** 1997 Jun; 71(6):4821–4

PATHOLOGY

Central nervous system lesions in rats infected with Friend murine leukemia virus-related PVC441: ultrastructural and immunohistochemical studies. Saida K, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):369–78

Cytopathic feline leukemia viruses cause apoptosis in hemolymphatic cells. Rojko JL, et al. **Prog Mol Subcell Biol** 1996;16:13–43 (150 ref.)

PHYSIOPATHOLOGY

Mouse model to study the replication of primate foamy viruses. Schmidt M, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1929–33

Early (preleukemic) events in Moloney murine leukemia virus leukemogenesis. Fan H, et al. **Leukemia** 1997 Apr;11 Suppl 3:149–51

Pathogenesis of Friend leukemia virus. Ikawa Y. **Leukemia** 1997 Apr;11 Suppl 3:152–4

Factors affecting induction of neurological disorder in mice by PVC viruses and the sequence of env-LTR region of PVC441. Kai K, et al. **Leukemia** 1997 Apr;11 Suppl 3:236–8

PREVENTION & CONTROL

Comparative approach to retroviral vaccines. Burny A.

AIDS Res Hum Retroviruses 1996 Mar 20;12(5):389–92 (6 ref.)

Efficacy of an inactivated feline leukemia virus vaccine. Hoover EA, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):379–83 (53 ref.)

The relevance of feline retroviruses to the development of vaccines against HIV. Jarrett O. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):385–7 (23 ref.)

Efficacy of recombinant feline leukemia virus vaccines. Jarrett O. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):435–6 (14 ref.)

Correlates of immune protection after vaccination with attenuated live murine leukemia virus. Ruprecht RM, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):375–7 (14 ref.)

Perspectives on retroviral pathogenesis and vaccines. Weiss RA. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):465–7 (3 ref.)

Prophylactic intervention in RadLV-induced lymphomagenesis with an anti-IL-4 monoclonal antibody. Epzsteyn S, et al. **J Immunother** 1997 Jul;20(4):287–91

Nucleic acid vaccines. Cernescu C. **Rom J Virol** 1995 Jan–Jun;46(1–2):69–73 (13 ref.)

Destroying retroviruses from within. Boeke JD, et al. **Trends Microbiol** 1996 Nov;4(11):421–6 (27 ref.)

THERAPY

Antiretroviral effect of a gag-RNase HI fusion gene. Schumann G, et al. **Gene Ther** 1997 Jun;4(6):593–9

Targeted vectors for gene therapy of cancer and retroviral infections. Walther W, et al. **Mol Biotechnol** 1996 Dec; 6(3):267–86 (66 ref.)

Establishment of a therapeutic model for retroviral infection using the genetic resistance mechanism of the host. Kitagawa M, et al. **Pathol Int** 1996 Oct;46(10):719–25 (73 ref.)

[Gene therapy in neurology. State of the art and future prospects] Duarte RG. **Neurologia** 1995 Dec;10 Suppl 1:56–61 (14 ref.) (Eng. Abstr.) **(Spa)**

TRANSMISSION

Infection of human cells by an endogenous retrovirus of pigs [see comments] Patience C, et al. **Nat Med** 1997 Mar; 3(3):282–6. Comment in: Nat Med 1997 Mar;3(3):275–6.

Xenotransplantation: the heart of the matter [editorial] **Nature** 1997 Jan 23;385(6614):279

Britain plays it cautious on animal–human transplants [news] **Nature** 1997 Jan 23;385(6614):285

Xenotransplantation. Proviruses pose potential problems [news] Stoye JP. **Nature** 1997 Mar 13;386(6621):126–7

BaEV is a relic from an ancient retrovirus that crossed species barriers [letter; comment] Vandamme AM. **Trends Microbiol** 1996 Dec;4(12):478. Comment on: Trends Microbiol 1996 Nov;4(11):455–9.

[Retrovirus and cancer (editorial)] Pasqualini CD. **Medicina (B Aires)** 1995;55(5 Pt 1):467–9 **(Spa)**

VETERINARY

Roundtable: can experience with veterinary retroviral vaccines be applied to the human situation? **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):365–73

Prevalences of feline leukaemia virus and feline immunodeficiency virus infections in cats in Sydney. Malik R, et al. **Aust Vet J** 1997 May;75(5):323–7

Occurrence and frequency of transmission of naturally occurring simian retroviral infections (SIV, STLV, and SRV) at the CIRMF Primate Center, Gabon. Georges-Courbot MC, et al. **J Med Primatol** 1996 Oct; 25(5):313–26

Feline leukaemia virus: a review of immunity and vaccination. Sparkes AH. **J Small Anim Pract** 1997 May; 38(5):187–94 (49 ref.)

Transduction of Notch2 in feline leukemia virus-induced thymic lymphoma. Rohn JL, et al. **J Virol** 1996 Nov; 70(11):8071–80

From the Centers for Disease Control and Prevention. Nonhuman primate spumavirus infections among persons with occupational exposure—United States, 1996. **JAMA** 1997 Mar 12;277(10):783–5

Screening for simian type-D retrovirus infection in macaques, using nested polymerase chain reaction. Lerche NW, et al. **Lab Anim Sci** 1997 Jun;47(3):263–8

Cooperating events in lymphomagenesis mediated by feline leukemia virus. Levy LS, et al. **Leukemia** 1997 Apr;11 Suppl 3:239–41 (16 ref.)

Nonhuman primate spumavirus infections among persons with occupational exposure—United States, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Feb 14;46(6):129–31

Laboratory diagnostic tests for retroviral infections in dairy and beef cattle. Evermann JF, et al. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):87–106 (105 ref.)

Avian retroviruses. Fadly AM. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):71–85 (65 ref.)

Laboratory diagnostic tests for retrovirus infections of small ruminants. Knowles DP Jr. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):1–11 (64 ref.)

Sequence analysis of the putative viral enhancer in tissues from 33 cats with various feline leukemia virus-related diseases. Jackson ML, et al. **Vet Microbiol** 1996 Dec; 53(3–4):213–25

Characterization of enzootic nasal tumor virus capsid antigen. Rosati S, et al. **Vet Microbiol** 1996 Dec;53(3–4):261–9

PCR and RT-PCR analysis of infection and transcriptional activity of walleye dermal sarcoma virus (WDSV) in organs of adult walleyes (Stizostedion vitreum). Poulet FM, et al. **Vet Pathol** 1996 Jan;33(1):66–73

FeLV testing [letter] Kerr MG, et al. **Vet Rec** 1996 Jun 8; 138(23):575–6

VIROLOGY

Characterization of retroviruses from patients with multiple sclerosis. Christensen T, et al. **Acta Neurol Scand Suppl** 1997;169:49–58

Cell cultures and associated retroviruses in multiple sclerosis. Collaborative Research Group on MS. Perron H, et al. **Acta Neurol Scand Suppl** 1997;169:22–31

Possible involvement of endogenous retroviruses in the development of autoimmune disorders, especially multiple sclerosis. Rasmussen HB, et al. **Acta Neurol Scand Suppl** 1997;169:32–7 (28 ref.)

Analysis of west African hunters for foamy virus infections. Goepfert PA, et al. **AIDS Res Hum Retroviruses** 1996 Dec 10;12(18):1725–30

Human endogenous retroviruses [letter; comment] Michalski F. **Clin Microbiol Rev** 1996 Oct;9(4):585. Comment on: Clin Microbiol Rev 1996 Jan;9(1):72–99.

Biological significance of human endogenous retroviral sequences. Hohenadl C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S268–73 (59 ref.)

Unexpected replication pathways of foamy viruses. Rethwilm A. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S248–53 (52 ref.)

Molecular biology of the human foamy virus. Saïb A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S254–60 (69 ref.)

The simian foamy virus type 1 transcriptional transactivator (Tas) binds and activates an enhancer element in the gag gene. Campbell M, et al. **J Virol** 1996 Oct;70(10):6847–55

Mutational analysis of the proposed gibbon ape leukemia virus binding site in Pit1 suggests that other regions are important for infection. Chaudry GJ, et al. **J Virol** 1997 Oct;71(10):8078–81

FAETL motif required for leukemic transformation by v-Myb. Fu SL, et al. **J Virol** 1996 Aug;70(8):5600–10

Inactivation of murine leukemia virus by compounds that react with the zinc finger in the viral nucleocapsid protein. Rein A, et al. **J Virol** 1996 Aug;70(8):4966–72

Neurologic disease induced by polytropic murine retroviruses: neurovirulence determined by efficiency of spread to microglial cells. Robertson SJ, et al. **J Virol** 1997 Jul;71(7):5287–94

Charlotte Friend Memorial Lecture: murine leukemia virus (MuLV) tumorigenesis. Hartley JW, et al. **Leukemia** 1997 Apr;11 Suppl 3:147–8

The role of the immune response in MULV-induced lymphomagenesis. Marshall DJ, et al. **Leukemia** 1996 Dec; 10(12):1860–6 (79 ref.)

Viral genetic variation, AIDS, and the multistep nature of carcinogenesis: the feline leukemia virus model. Rohn JL, et al. **Leukemia** 1996 Dec;10(12):1867–9 (31 ref.)

Mouse Moloney leukemia virus infects microglia but not neurons even though it induces motor neuron disease. Zachary JF, et al. **Mol Psychiatry** 1997 Mar;2(2):104–6 (19 ref.)

Pseudotyping of murine leukemia virus with the envelope glycoproteins of HIV generates a retroviral vector with specificity of infection for CD4-expressing cells. Schnierle BS, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8640–5

Mml1, a new common integration site in murine leukemia virus-induced promonocytic leukemias maps to mouse chromosome 10. Koller R, et al. **Virology** 1996 Oct 1; 224(1):224–34

The glycosylated gag protein of MuLV is a determinant of neuroinvasiveness: analysis of second site revertants of a mutant MuLV lacking expression of this protein. Portis JL, et al. **Virology** 1996 Dec 15;226(2):384–92

Long-term persistent infection of domestic rabbits by the human foamy virus. Saïb A, et al. **Virology** 1997 Feb 17; 228(2):263–8

Unique sequence and lesional tropism of a new variant of neuropathogenic friend murine leukemia virus. Takase-Yoden S, et al. **Virology** 1997 Jul 7;233(2):411–22

Deletion of CD4+ T cells by mouse mammary tumor virus (FM) superantigen with broad specificity of T cell receptor beta-chain variable region. Yoshimoto T, et al. **Virology** 1996 Sep 15;223(2):387–91

RETROVIRIDAE PROTEINS

ANALYSIS

Expression of human endogenous retrovirus K elements in germ cell and trophoblastic tumors. Herbst H, et al. **Am J Pathol** 1996 Nov;149(5):1727–35

BIOSYNTHESIS

Gene transfer using replication-defective human foamy virus vectors. Bieniasz PD, et al. **Virology** 1997 Aug 18; 235(1):65–72

BLOOD

Retroviral p15E-related serum factors and recurrence of head and neck cancer. Tas MP, et al. **Clin Otolaryngol** 1993 Aug;18(4):324–8

CHEMISTRY

Structural analysis of membrane-bound retrovirus capsid proteins. Barklis E, et al. **EMBO J** 1997 Mar 17; 16(6):1199–213

Determination of the secondary structure and global topology of the 44 kDa ectodomain of gp41 of the simian immunodeficiency virus by multidimensional nuclear magnetic resonance spectroscopy. Caffrey M, et al. **J Mol Biol** 1997 Sep 5;271(5):819–26

Structure of equine infectious anemia virus proteinase complexed with an inhibitor. Gustchina A, et al. **Protein Sci** 1996 Aug;5(8):1453–65

GENETICS

Characterization of retroviruses from patients with multiple sclerosis. Christensen T, et al. **Acta Neurol Scand Suppl** 1997;169:49–58

Characterization of human foamy virus proteins expressed by recombinant vaccinia viruses. Fischer N, et al. **AIDS Res Hum Retroviruses** 1997 Apr 10;13(6):517–21

A retroviral peptide encoded by mutated env p15E gene is recognized by specific CD8+ T lymphocytes on drug-treated murine mastocytoma P815. Belladonna ML, et al. **Int J Immunopharmacol** 1996 Oct;18(10):563–76

Reverse transcriptase genotype and antiretroviral susceptibility of human immunodeficiency virus isolates from patients with advanced disease treated with didanosine: correlation with virologic response and survival. Shepp DH, et al. **J Med Virol** 1996 Aug; 49(4):303–10

The simian foamy virus type 1 transcriptional transactivator (Tas) binds and activates an enhancer element in the gag gene. Campbell M, et al. **J Virol** 1996 Oct;70(10):6847–55

Highly sensitive qualitative and quantitative detection of reverse transcriptase activity: optimization, validation, and comparative analysis with other detection systems. Yamamoto S, et al. **J Virol Methods** 1996 Sep; 61(1–2):135–43

IMMUNOLOGY

Antibodies against retroviral proteins and nuclear antigens in a subset of idiopathic CD4+ T lymphocytopenia patients. Garry RF, et al. **AIDS Res Hum Retroviruses** 1996 Jul 1;12(10):931–40

Antibody reactivities to tumor-suppressor protein p53 and HTLV-I Tof, Rex and Tax in HTLV-I-infected people with differing clinical status. Chen YM, et al. **Int J Cancer** 1997 Apr 10;71(2):196–202

A retroviral peptide encoded by mutated env p15E gene is recognized by specific CD8+ T lymphocytes on drug-treated murine mastocytoma P815. Belladonna ML, et al. **Int J Immunopharmacol** 1996 Oct;18(10):563–76

Identification of type-specific cytotoxic T lymphocyte responses to homologous viral proteins in laboratory workers accidentally infected with HIV-1. Sipsas NV, et al. **J Clin Invest** 1997 Feb 15;99(4):752–62

Evolution of envelope-specific antibody responses in monkeys experimentally infected or immunized with simian immunodeficiency virus and its association with the development of protective immunity. Cole KS, et al. **J Virol** 1997 Jul;71(7):5069–79

METABOLISM

High degree of sensitivity of the simian immunodeficiency virus (SIVmac) envelope glycoprotein subunit association to amino acid changes in the glycoprotein 41 ectodomain. Marcon L, et al. **AIDS Res Hum Retroviruses** 1997 Apr 10;13(6):441–7

Infection of the germ line by retroviral particles produced in the follicle cells: a possible mechanism for the mobilization of the gypsy retroelement of Drosophila. Song SU, et al. **Development** 1997 Jul;124(14):2789–98

The human T-cell lymphotropic virus type 1 Tof protein contains a bipartite nuclear localization signal that is able to functionally replace the amino-terminal domain of Rex. D'Agostino DM, et al. **J Virol** 1997 Jan;71(1):75–83

A sorting motif localizes the foamy virus glycoprotein to the endoplasmic reticulum. Goepfert PA, et al. **J Virol** 1997 Jan;71(1):778–84

Analysis of cleavage site mutations between the NC and PR Gag domains of Rous sarcoma virus. Schatz G, et al. **J Virol** 1997 Jan;71(1):444–50

RNase H domain of Moloney murine leukemia virus reverse transcriptase retains activity but requires the polymerase domain for specificity. Schultz SJ, et al. **J Virol** 1996 Dec; 70(12):8630–8

Reverse transcriptase activity in chicken embryo fibroblast culture supernatants is associated with particles containing endogenous avian retrovirus EAV-0 RNA. Weissmahr

RETROVIRIDAE PROTEINS

RN, et al. **J Virol** 1997 Apr;71(4):3005–12

Plasma membrane targeting of chimeric intracisternal A-type particle polyproteins leads to particle release and specific activation of the viral proteinase. Welker R, et al. **J Virol** 1997 Jul;71(7):5209–17

Isolation and characterization of infectious full-length DNA clones of chimpanzee foamy viruses SFV6 and SFV7: evidence for a Taf-dependent internal promoter. Tobaly-Tapiero J, et al. **Res Virol** 1996 Jan–Feb; 147(1):17–27

Intracisternal A-type particles express their proteinase in a separate reading frame by translational frameshifting, similar to D-type retroviruses. Fehrmann F, et al. **Virology** 1997 Sep 1;235(2):352–9

RETROVIRIDAE PROTEINS, ONCOGENIC

ADVERSE EFFECTS

Recommendations of the vaccine-Associated Feline Sarcoma Task Force [letter; comment] Romatowski J. **J Am Vet Med Assoc** 1997 Apr 1;210(7):890. Comment on: J Am Vet Med Assoc 1997 Feb 1;210(3):310–1.

BIOSYNTHESIS

Transformation by Rho exchange factor oncogenes is mediated by activation of an integrin-dependent pathway. Schwartz MA, et al. **EMBO J** 1996 Dec 2;15(23):6525–30

v-Ras and v-Raf block differentiation of transformable C3H10T1/2-derived preadipocytes at lower levels than required for neoplastic transformation. Raptis L, et al. **Exp Cell Res** 1997 Aug 25;235(1):188–97

HTLV-I induced myeloneuropathy in WKAH rats: apoptosis and local activation of the HTLV-I pX and TNF-alpha genes implicated in the pathogenesis. Ohya O, et al. **Leukemia** 1997 Apr;11 Suppl 3:255–7

CHEMISTRY

Dissection of a retrovirus envelope protein reveals structural similarity to influenza hemagglutinin. Fass D, et al. **Curr Biol** 1995 Dec 1;5(12):1377–83

Regulation of osteoclastogenesis by antisense oligodeoxynucleotides specific to zinc finger nuclear transcription factors Egr-1 and WT1 in rat bone marrow culture system. Kukita T, et al. **Endocrinology** 1997 Oct; 138(10):4384–9

Oncogenic point mutations induce altered conformation, redox sensitivity, and DNA binding in the minimal DNA binding domain of avian myeloblastosis virus v-Myb. Brendeford EM, et al. **J Biol Chem** 1997 Feb 14; 272(7):4436–43

Probing the conformation of the human T-lymphotropic virus I envelope protein complex with monoclonal antibodies. Carrington CV, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2025–9

DRUG EFFECTS

Biological and biochemical inhibitors of the NF-kappa B/Rel proteins and cytokine synthesis. Beauparlant P, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):175–90 (141 ref.)

GENETICS

V-myb oncogene and c-myb proto-oncogene expression in avian cells: morphological changes of the cells and topographic localization of myb proteins. Korb J, et al. **Acta Virol** 1996 Apr;40(2):81–6

Expression of the Ets-1 proto-oncogene in human gastric carcinoma: correlation with tumor invasion. Nakayama T, et al. **Am J Pathol** 1996 Dec;149(6):1931–9

EWS/FLI-1 antagonists induce growth inhibition of Ewing tumor cells in vitro. Kovar H, et al. **Cell Growth Differ** 1996 Apr;7(4):429–37

Growth factor ligands of tyrosine kinase receptors activate the Rous sarcoma virus promoter by a Ras- and Raf-dependent mechanism. Cosgaya JM, et al. **Gene** 1997 Apr 1;188(2):291–3

A novel leaf-specific myb-related protein with a single binding repeat. Kirik V, et al. **Gene** 1996 Dec 12; 183(1–2):109–13

Mybl2 (Bmyb) maps to mouse chromosome 2 and human chromosome 20q 13.1. Noben-Trauth K, et al. **Genomics** 1996 Aug 1;35(3):610–2

A wide spectrum of collagen vascular and autoimmune diseases in transgenic rats carrying the env-pX gene of human T lymphocyte virus type I. Yamazaki H, et al. **Int Immunol** 1997 Feb;9(2):339–46

Characterization of five conserved genotypes of the mumps virus small hydrophobic (SH) protein gene. Orvell C, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):91–5

Functional dissection of the Moloney murine leukemia virus envelope protein gp70. Bae Y, et al. **J Virol** 1997 Mar; 71(3):2092–9

FAETL motif required for leukemic transformation by v-Myb. Fu SL, et al. **J Virol** 1996 Aug;70(8):5600–10

HTLV-I pX transgenic rats: development of cytokine-producing mammary carcinomas and establishment of the pX mammary carcinoma cell lines. Shikishima H, et al. **Leukemia** 1997 Apr;11 Suppl 3:70–2

HTLV-I env-pX transgenic rats: prototype animal model for collagen vascular diseases. Yamazaki H, et al. **Leukemia** 1997 Apr;11 Suppl 3:258–9

Models of HTLV-I-induced diseases. Infectious transmission of HTLV-I in inbred rats and HTVL-I env-pX transgenic rats. Yoshiki T, et al. **Leukemia** 1997 Apr;11 Suppl 3:245–6

Assignment of porcine ceruloplasmin and v-RAF1 murine viral oncogene homolog 1 to chromosome 13 by linkage analysis. Sun HS, et al. **Mamm Genome** 1997 Aug;8(8):626–7

Actin cytoskeleton polymerization in Dbl-transformed NIH3T3 fibroblasts is dependent on cell adhesion to specific extracellular matrix proteins. Defilippi P, et al. **Oncogene** 1997 Apr 24;14(16):1933–43

A novel human ERK phosphatase regulates H-ras and v-raf signal transduction. Shin DY, et al. **Oncogene** 1997 Jun 5;14(22):2633–9

Transactivation of the GATA-1 promoter by a myb-ets-containing mouse retrovirus is mediated by CACCC elements. Sun-Hoffman L, et al. **Oncogene** 1996 Sep 5;13(5):1037–42

EGF receptor binding and transformation by v-cbl is ablated by the introduction of a loss-of-function mutation from the Caenorhabditis elegans sli-1 gene. Thien CB, et al. **Oncogene** 1997 May 8;14(18):2239–49

EAT-2 is a novel SH2 domain containing protein that is up regulated by Ewing's sarcoma EWS/FLI1 fusion gene. Thompson AD, et al. **Oncogene** 1996 Dec 19; 13(12):2649–58

Bcl-2 and CrmA have different effects on transformation, apoptosis and the stability of I kappa B-alpha in chicken spleen cells transformed by temperature-sensitive v-Rel oncoproteins. White DW, et al. **Oncogene** 1996 Sep 5; 13(5):891–9

Host range restrictions of oncogenes: myc genes transform avian but not mammalian cells and mht/raf genes transform mammalian but not avian cells. Li R, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7522–7

Analysis of mutations within the cytoplasmic domain of the Moloney murine leukemia virus transmembrane protein. Thomas A, et al. **Virology** 1997 Jan 20;227(2):305–13

[Comparative analysis of the sequenced fragment of the Macaca arctoides STLV-1 env gene encoding the immunodominant region gp46 and the similar fragments in HTLV-1 (ATK) and STLV-1 from various primate species] Chikobava MG, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):92–6 **(Rus)**

IMMUNOLOGY

Efficacy of recombinant feline leukemia virus vaccines. Jarrett O. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):435–6 (14 ref.)

Immunogenicity of variable regions of the surface envelope glycoprotein of HTLV type I and identification of new major epitopes in the 239–261 region. Londos-Gagliardi D, et al. **AIDS Res Hum Retroviruses** 1996 Jul 1; 12(10):941–50

Resistance to fas-mediated apoptosis of peripheral T cells in human T lymphocyte virus type I (HTLV-I) transgenic mice with autoimmune arthropathy. Kishi S, et al. **J Exp Med** 1997 Jul 7;186(1):57–64

Neutralizing activity and antibody reactivity toward immunogenic regions of the human T cell leukemia virus type I surface glycoprotein in sera of infected patients with different clinical states. Astier-Gin T, et al. **J Infect Dis** 1997 Mar;175(3):716–9

Cervicovaginal synthesis of IgG antibodies to the immunodominant 175–199 domain of the surface glycoprotein gp46 of human T-cell leukemia virus type I. Bélec L, et al. **J Med Virol** 1996 Sep;50(1):42–9

Preferential recognition of synthetic peptides from HTLV-I gp21 envelope protein by HLA-DRB1 alleles associated with HAM/TSP (HTLV-I-associated myelopathy/tropical spastic paraparesis). Yamano Y, et al. **J Neuroimmunol** 1997 Jun;76(1–2):50–60

A source of glycosylated human T-cell lymphotropic virus type I envelope protein: expression of gp46 by the vaccinia virus/T7 polymerase system. Arp J, et al. **J Virol** 1996 Nov;70(11):7349–59

Neutralizing human monoclonal antibodies to conformational epitopes of human T-cell lymphotropic virus type 1 and 2 gp46. Hadlock KG, et al. **J Virol** 1997 Aug;71(8):5828–40

Antibodies directed against a variable and neutralizable region of the HTLV-I envelope surface glycoprotein. Londos-Gagliardi D, et al. **Leukemia** 1997 Apr;11 Suppl 3:38–41

Handling of retroviral antigens by human antigen-presenting cells. Fenoglio D, et al. **Res Virol** 1996 Mar-Jun; 147(2–3):97–101

Identification of HTLV-1-specific CTL directed against synthetic and naturally processed peptides in HLA-B*3501 transgenic mice. Schönbach C, et al. **Virology** 1996 Dec 1;226(1):102–12

METABOLISM

Membrane binding and enzymatic activation of a Dbl homology domain require the neighboring pleckstrin homology domain. Wang DS, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):183–9

Excision of Ets by an inducible site-specific recombinase causes differentiation of Myb-Ets-transformed hematopoietic progenitors. Rossi F, et al. **Curr Biol** 1996 Jul 1;6(7):866–72

Biological and biochemical inhibitors of the NF-kappa B/Rel proteins and cytokine synthesis. Beauparlant P, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):175–90 (141 ref.)

Cooperating oncogenes converge to regulate cyclin/cdk complexes. Lloyd AC, et al. **Genes Dev** 1997 Mar 1; 11(5):663–77

Direct T cell activation by chimeric single chain Fv-Syk promotes Syk-Cbl association and Cbl phosphorylation. Fitzer-Attas CJ, et al. **J Biol Chem** 1997 Mar 28; 272(13):8551–7

Serine phosphorylation of Cbl induced by phorbol ester enhances its association with 14-3-3 proteins in T cells via a novel serine-rich 14-3-3-binding motif. Liu YC, et al. **J Biol Chem** 1997 Apr 11;272(15):9979–85

v-Crk-induced cell transformation: changes in focal adhesion composition and signaling. Nievers MG, et al. **J Cell Sci** 1997 Feb;110 (Pt 3):389–99

Functional dissection of the Moloney murine leukemia virus envelope protein gp70. Bae Y, et al. **J Virol** 1997 Mar; 71(3):2092–9

The critical N-linked glycan of murine leukemia virus envelope protein promotes both folding of the C-terminal domains of the precursor polyprotein and stability of the postcleavage envelope complex. Li Z, et al. **J Virol** 1997 Sep;71(9):7012–9

Late virus replication events in microglia are required for neurovirulent retrovirus-induced spongiform neurodegeneration: evidence from neural progenitor-derived chimeric mouse brains. Lynch WP, et al. **J Virol** 1996 Dec;70(12):8896–907

Trypsin-sensitive and -resistant components in human T-cell membranes required for syncytium formation by human T-cell lymphotropic virus type 1-bearing cells. Sagara Y, et al. **J Virol** 1997 Jan;71(1):601–7

v-Rel activates the proto-oncogene c-Jun promoter: a correlation with its transforming activity. Fujii M, et al. **Leukemia** 1997 Apr;11 Suppl 3:402–4

Regulation of the interleukin-2 CD28-responsive element by NF-ATp and various NF-kappaB/Rel transcription factors. Maggirwar SB, et al. **Mol Cell Biol** 1997 May; 17(5):2605–14

High-intensity Raf signal causes cell cycle arrest mediated by p21Cip1. Sewing A, et al. **Mol Cell Biol** 1997 Sep; 17(9):5588–97

Raf-induced proliferation or cell cycle arrest is determined by the level of Raf activity with arrest mediated by p21Cip1. Woods D, et al. **Mol Cell Biol** 1997 Sep; 17(9):5598–611

T-cell lymphomas in v-Myb transgenic mice. Badiani PA, et al. **Oncogene** 1996 Nov 21;13(10):2205–12

Characterization of the kinase activity essential for tyrosine phosphorylation of p130Cas in fibroblasts. Sakai R, et al. **Oncogene** 1997 Mar 27;14(12):1419–26

Downstream of Crk adaptor signaling pathway: activation of Jun kinase by v-Crk through the guanine nucleotide exchange protein C3G. Tanaka S, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2356–61

PHARMACOLOGY

FeLV envelope protein (gp70) variable region 5 causes alterations in calcium homeostasis and toxicity of neurons. Mitchell TW, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 1;14(4):307–20

Immunosuppressive retroviral peptides: immunopathological implications for immunosuppressive influences of retroviral infections. Haraguchi S, et al. **J Leukoc Biol** 1997 Jun; 61(6):654–66 (161 ref.)

PHYSIOLOGY

The Myb oncoprotein: regulating a regulator. Ness SA. **Biochim Biophys Acta** 1996 Dec 9;1288(3):F123–39

A role for Ras in v-Crk transformation. Greulich H, et al. **Cell Growth Differ** 1996 Nov;7(11):1443–51

Emerging components of the Crk oncogene product: the first identified adaptor protein. Matsuda M, et al. **Cell Signal** 1996 Aug;8(5):335–40 (68 ref.)

v-Myb of E26 leukemia virus up-regulates bcl-2 and suppresses apoptosis in myeloid cells. Frampton J, et al. **Genes Dev** 1996 Nov 1;10(21):2720–31

IkappaBalpha overexpression delays tumor formation in v-rel transgenic mice. Carrasco D, et al. **J Exp Med** 1997 Jul 21;186(2):279–88

Cells transformed by a v-Myb-estrogen receptor fusion differentiate into multinucleated giant cells. Engelke U, et al. **J Virol** 1997 May;71(5):3760–6

Functional interactions between monomers of the retroviral envelope protein complex. Zhao Y, et al. **J Virol** 1997 Sep; 71(9):6967–72

Dissociation of NGF induced signal transduction from neurite elongation by expression of a mutant adaptor protein v-Crk in PC12 cells. Teng KK, et al. **Mol Cell Neurosci** 1996;8(2–3):157–70

A threshold nuclear level of the v-Rel oncoprotein is required for transformation of avian lymphocytes. Sachdev S, et al. **Oncogene** 1997 May 29;14(21):2585–94

The chicken adenosine receptor 2B gene is regulated by v-myb. Worpenberg S, et al. **Oncogene** 1997 Jul 10; 15(2):213–21

Identification of a core functional and structural domain of the v-Ski oncoprotein responsible for both transformation and myogenesis. Zheng G, et al. **Oncogene** 1997 Jul 24; 15(4):459–71

v-Rel prevents apoptosis in transformed lymphoid cells and blocks TNFalpha-induced cell death. Zong WX, et al. **Oncogene** 1997 Aug 18;15(8):971–80

Transcription factors, oncogenes, and apoptosis [letter; comment] White DW, et al. **Science** 1997 Apr 11; 276(5310):185. Comment on: Science 1996 Nov 1;274(5288):782–4. Comment on: Science 1996 Nov 1;274(5288):784–7. Comment on: Science 1996 Nov 1;274(5288):787–9.

RETROVIRUS D, NEW ENGLAND see **RETROVIRUSES TYPE D, SIMIAN**

RETROVIRUS INFECTIONS see **RETROVIRIDAE INFECTIONS**

RETROVIRUS PROTEINS see **RETROVIRIDAE PROTEINS**

RETROVIRUSES see **RETROVIRIDAE**

RETROVIRUSES, ALV-RELATED see **RETROVIRUSES TYPE C, AVIAN**

RETROVIRUSES, SIMIAN

Occurrence and frequency of transmission of naturally occurring simian retroviral infections (SIV, STLV, and SRV) at the CIRMF Primate Center, Gabon. Georges-Courbot MC, et al. **J Med Primatol** 1996 Oct; 25(5):313–26

GENETICS

BaEV is a relic from an ancient retrovirus that crossed species barriers [letter; comment] Vandamme AM. **Trends Microbiol** 1996 Dec;4(12):478. Comment on: Trends Microbiol 1996 Nov;4(11):455–9.

ISOLATION & PURIFICATION

Use of the polymerase chain reaction to screen cell banks for retroviruses. Deatly AM, et al. **Dev Biol Stand** 1996; 88:177–88

RETROVIRUSES TYPE C, AVIAN

CHEMISTRY

A short autocomplementary sequence plays an essential role in avian sarcoma-leukosis virus RNA dimerization. Fossé P, et al. **Biochemistry** 1996 Dec 24;35(51):16601–9

CAR1, a TNFR-related protein, is a cellular receptor for cytopathic avian leukosis-sarcoma viruses and mediates apoptosis. Brojatsch J, et al. **Cell** 1996 Nov 29;87(5):845–55

Role of basic residues in the subgroup-determining region of the subgroup A avian sarcoma and leukosis virus envelope in receptor binding and infection. Rong L, et al. **J Virol** 1997 May;71(5):3458–65

ENZYMOLOGY

Reverse transcriptase activity in vaccines derived from chick cells [letter] Robertson JS, et al. **Biologicals** 1996 Sep; 24(3):289–90

GENETICS

A short autocomplementary sequence plays an essential role in avian sarcoma-leukosis virus RNA dimerization. Fossé P, et al. **Biochemistry** 1996 Dec 24;35(51):16601–9

Reverse transcriptase activity in chicken embryo fibroblast culture supernatants is associated with particles containing endogenous avian retrovirus EAV-0 RNA. Weissmahr RN, et al. **J Virol** 1997 Apr;71(4):3005–12

ISOLATION & PURIFICATION

A PCR-based test for the presence of endogenous virus gene evA in chickens. Nave A, et al. **Anim Genet** 1997 Feb; 28(1):46–8

RETROVIRUSES TYPE C, MAMMALIAN

Infection of human cells by an endogenous retrovirus of pigs [see comments] Patience C, et al. **Nat Med** 1997 Mar; 3(3):282–6. Comment in: Nat Med 1997 Mar;3(3):275–6.

Xenotransplantation. Proviruses pose potential problems [news] Stoye JP. **Nature** 1997 Mar 13;386(6621):126–7

GENETICS

Structure and genomic organization of a novel human endogenous retrovirus family: HERV-K (HML-6). Medstrand P, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1731–44

Retroviral mutation rates and A-to-G hypermutations during different stages of retroviral replication. Kim T, et al. **J Virol** 1996 Nov;70(11):7594–602

Comparative analyses of LTRs of the ERV-H family of primate-specific retrovirus-like elements isolated from marmoset, African green monkey, and man. Anderssen S, et al. **Virology** 1997 Jul 21;234(1):14–30

GROWTH & DEVELOPMENT

Phenotypic changes and loss of melanoma-specific endogenous C-type retroviruses in BL6 melanoma cells transfected with the H-2Kb gene. Muller J, et al. **Melanoma Res** 1996 Apr;6(2):101–11

IMMUNOLOGY

Characterization of the antibody response specific for the human endogenous retrovirus HTDV/HERV-K. Boller K, et al. **J Virol** 1997 Jun;71(6):4581–8

ISOLATION & PURIFICATION

A sensitive method for the detection of murine C-type retroviruses. Heinemeyer T, et al. **J Virol Methods** 1997 Jan;63(1–2):155–65

Silk purse or sow's ear [news; comment] Allan J. **Nat Med** 1997 Mar;3(3):275–6. Comment on: Nat Med 1997 Mar;3(3):282–6.

METABOLISM

Expression of a putative immunosuppressive protein in human tumors and tissues. Turbeville MA, et al. **Pathobiology** 1996;64(5):233–8

PHYSIOLOGY

Syncytial cell formation in vivo by type C retroviral particles in the systemic lupus erythematosus (SLE) lung. Tamura N, et al. **Clin Exp Immunol** 1997 Mar;107(3):474–9

Xenotransplanters turn xenovirologists. Sikorski R, et al. **Science** 1997 Jun 20;276(5320):1893

RETROVIRUSES, TYPE D

ISOLATION & PURIFICATION

Jaagsiekte retrovirus establishes a disseminated infection of the lymphoid tissues of sheep affected by pulmonary adenomatosis. Palmarini M, et al. **J Gen Virol** 1996 Dec; 77 (Pt 12):2991–8

PCR-based detection and partial characterization of a retrovirus associated with contagious intranasal tumors of sheep and goats. Cousens C, et al. **J Virol** 1996 Nov; 70(11):7580–3

SIV hunt leads to baboon virus discovery [news] **Science** 1997 May 2;276(5313):685

Characterization of enzootic nasal tumor virus capsid antigen. Rosati S, et al. **Vet Microbiol** 1996 Dec;53(3–4):261–9

Endogenous D-type (HERV-K) related sequences are packaged into retroviral particles in the placenta and possess open reading frames for reverse transcriptase. Simpson GR, et al. **Virology** 1996 Aug 15;222(2):451–6

METABOLISM

A cellular cofactor for the constitutive transport element of type D retrovirus. Tang H, et al. **Science** 1997 May 30; 276(5317):1412–5

RETROVIRUSES TYPE D, SIMIAN

CHEMISTRY

Base-pairings within the RNA pseudoknot associated with the simian retrovirus-1 gag-pro frameshift site. Du Z, et al. **J Mol Biol** 1997 Jul 18;270(3):464–70

GENETICS

Characterization of human proteins that bind the repeated sequences in the squirrel monkey retrovirus enhancer. Ikeda S, et al. **Cell Mol Biol (Noisy-le-grand)** 1995 Dec; 41(8):1113–8

Complete nucleotide sequence of simian endogenous type D retrovirus with intact genome organization: evidence for ancestry to simian retrovirus and baboon endogenous virus. van der Kuyl AC, et al. **J Virol** 1997 May; 71(5):3666–76

Use of polymerase chain reaction for diagnosis of type D simian retrovirus infection in macaque blood. Wang Y, et al. **Lab Anim Sci** 1996 Apr;46(2):187–92

Identification and purification of cellular proteins that specifically interact with the RNA constitutive transport elements from retrovirus D. Tang H, et al. **Virology** 1997 Feb 17;228(2):333–9

IMMUNOLOGY

Simian retrovirus vaccines: simian retrovirus and simian immunodeficiency lentivirus. Gardner MB, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):399–401 (20 ref.)

ISOLATION & PURIFICATION

Simultaneous detection of simian retrovirus type D serotypes 1, 2, and 3 by polymerase chain reaction. Liška V, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):433–7

Screening for simian type-D retrovirus infection in macaques, using nested polymerase chain reaction. Lerche NW, et al. **Lab Anim Sci** 1997 Jun;47(3):263–8

RETT SYNDROME

Rett syndrome [letter; comment] Dearlove OR, et al. **Acta Paediatr** 1996 Jun;85(6):761. Comment on: Acta Paediatr 1995 Sep;84(9):971–6.

Rett syndrome. Clarke A. **J Med Genet** 1996 Aug;33(8):693–9 (105 ref.)

Review of Rett syndrome. Armstrong DD. **J Neuropathol Exp Neurol** 1997 Aug;56(8):843–9 (90 ref.)

CEREBROSPINAL FLUID

CSF beta-endorphin levels in patients with infantile autism. Nagamitsu S, et al. **J Autism Dev Disord** 1997 Apr; 27(2):155–63

Low levels of nerve growth factor in cerebrospinal fluid of children with Rett syndrome. Lappalainen R, et al. **J Child Neurol** 1996 Jul;11(4):296–300

High levels of cerebrospinal fluid glutamate in Rett syndrome. Lappalainen R, et al. **Pediatr Neurol** 1996 Oct; 15(3):213–6

COMPLICATIONS

Feeding ability in Rett syndrome. Morton RE, et al. **Dev Med Child Neurol** 1997 May;39(5):331–5

Oral manifestations in Rett syndrome: a study of 17 cases. Ribeiro RA, et al. **Pediatr Dent** 1997 Jul–Aug;19(5):349–52

DIAGNOSIS

Brain perfusion SPECT and EEG findings in Rett syndrome. Lappalainen R, et al. **Acta Neurol Scand** 1997 Jan; 95(1):44–50

Rett syndrome in Saudi Arabia: report of six patients. al-Jarallah AA, et al. **Ann Trop Paediatr** 1996 Dec; 16(4):347–52

Does transcranial magnetic stimulation allow early diagnosis of Rett syndrome? [letter] Heinen F, et al. **Neuropediatrics** 1996 Aug;27(4):223–4

EPIDEMIOLOGY

Rett syndrome: geographic variation in prevalence in Norway. Skjeldal OH, et al. **Brain Dev** 1997 Jun; 19(4):258–61

Rett syndrome in northern Tuscany (Italy): family tree studies. Pini G, et al. **Clin Genet** 1996 Dec;50(6):486–90

GENETICS

A new Rett syndrome family consistent with X-linked inheritance expands the X chromosome exclusion map. Schanen NC, et al. **Am J Hum Genet** 1997 Sep;61(3):634–41

Additional clinical and cytogenetic findings associated with Rett syndrome. Simonic I, et al. **Am J Med Genet** 1997 May 31;74(3):331–7

Earlier finishing of Xp21.2 subband replication of the inactive X chromosome in Rett syndrome girl but not in her 47,XXX mother. Panasiuk B, et al. **Clin Genet** 1997 Aug; 52(2):120–5

A comparative study of X-inactivation in Rett syndrome probands and control subjects. Webb T, et al. **Clin Genet** 1996 Apr;49(4):189–95

Rett syndrome, classical and atypical: genealogical support for common origin. Akesson HO, et al. **J Med Genet** 1996 Sep;33(9):764–6

Is Rett syndrome caused by a triplet repeat expansion? Hofferbert S, et al. **Neuropediatrics** 1997 Jun;28(3):179–83

Cytogenetic and molecular-cytogenetic investigation of Rett syndrome: analysis of 31 cases. Vorsanova SG, et al. **Neuroreport** 1996 Dec 20;8(1):187–9

[Mutation analysis of mitochondrial DNA of children with Rett syndrome] Tang J, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Sep;76(9):684–7 (Eng. Abstr.) **(Chi)**

METABOLISM

Cyclooxygenase-2 expression during rat neocortical development and in Rett syndrome. Kaufmann WE, et al. **Brain Dev** 1997 Jan;19(1):25–34

Purine and pyridine nucleotide metabolism in the erythrocytes of patients with Rett syndrome. Rocchigiani M, et al. **Neuropediatrics** 1995 Dec;26(6):288–92

Choline acetyltransferase activity and vesamicol binding in Rett syndrome and in rats with nucleus basalis lesions. Wenk GL, et al. **Neuroscience** 1996 Jul;73(1):79–84

PATHOLOGY

Morphological study of neocortical areas in Rett syndrome. Belichenko PV, et al. **Acta Neuropathol (Berl)** 1997 Jan; 93(1):50–61

Neuroanatomy in Rett syndrome: cerebral cortex and posterior fossa. Subramaniam B, et al. **Neurology** 1997 Feb; 48(2):399–407

PHYSIOPATHOLOGY

Observations on hand movements in Rett syndrome: a pilot study. Elian M, et al. **Acta Neurol Scand** 1996 Sep; 94(3):212–4

Rett syndrome: a disorder affecting early brain growth. Naidu S. **Ann Neurol** 1997 Jul;42(1):3–10 (100 ref.)

RETT SYNDROME

Rett syndrome in Saudi Arabia: report of six patients. al-Jarallah AA, et al. **Ann Trop Paediatr** 1996 Dec; 16(4):347-52

Unusual EEG theta rhythms over central region in Rett syndrome: considerations of the underlying dysfunction. Niedermeyer E, et al. **Clin Electroencephalogr** 1997 Jan; 28(1):36-43

The effect of the presentation of visual and auditory stimuli on the breathing patterns of two girls with Rett syndrome. Woodyatt GC, et al. **J Intellect Disabil Res** 1996 Jun;40 (Pt 3):252-9

Rett syndrome: evidence for normal dopaminergic function. Wenk GL. **Neuropediatrics** 1996 Oct;27(5):256-9

Brainstem frequency-following responses in Rett syndrome. Galbraith GC, et al. **Pediatr Neurol** 1996 Jul;15(1):26-31

Rett syndrome: neurobiological changes underlying specific symptoms. Wenk GL. **Prog Neurobiol** 1997 Mar; 51(4):383-91 (90 ref.)

PSYCHOLOGY

Early communication development in children with Rett syndrome. Tams-Little S, et al. **Brain Dev** 1996 Sep-Oct; 18(5):376-8

RADIONUCLIDE IMAGING

Brain perfusion SPECT and EEG findings in Rett syndrome. Lappalainen R, et al. **Acta Neurol Scand** 1997 Jan; 95(1):44-50

Brain perfusion abnormalities in Rett syndrome: a qualitative and quantitative SPET study with 99Tc(m)-ECD. Burroni L, et al. **Nucl Med Commun** 1997 Jun;18(6):527-34

REUPTAKE INHIBITORS, NEUROTRANSMITTER see **NEUROTRANSMITTER UPTAKE INHIBITORS**

REV GENE PRODUCTS see **GENE PRODUCTS, REV**

REV GENES see **GENES, REV**

REV PROTEIN see **GENE PRODUCTS, REV**

REV-RESPONSIVE ELEMENT see **GENES, ENV**

REVERSAL LEARNING

Auditory and visual recall of forward and backward digit spans. Powell DH, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1099-103

DRUG EFFECTS

Analyses of response patterns clarify lead effects in olfactory reversal and extradimensional shift tasks: assessment of inhibitory control, associative ability, and memory. Hilson JA, et al. **Behav Neurosci** 1997 Jun;111(3):532-42

Chronic administration of ORG 2766 for 6 months produces a subtle impairment in strategic learning by rats. Logan JA, et al. **Neuropeptides** 1996 Dec;30(6):541-5

Effects of postnatal exposure to a PCB mixture in monkeys on nonspatial discrimination reversal and delayed alternation performance. Rice DC, et al. **Neurotoxicology** 1997;18(2):479-94

[Differences in the effects of piracetam and fenazepam in emotional stress caused by the spatial reversal of a habit] Inozemtsev AN, et al. **Eksp Klin Farmakol** 1996 Nov-Dec; 59(6):3-5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Hippocampal activity during classical discrimination--reversal eyeblink conditioning in rabbits. Miller DP, et al. **Behav Neurosci** 1997 Feb;111(1):70-9

Effects of radiofrequency versus neurotoxic cingulate lesions on spatial reversal learning in mice. Meunier M, et al. **Hippocampus** 1997;7(4):355-60

REVERSE IMMUNOBLOTTING see **IMMUNOBLOTTING**

REVERSE TRANSCRIPTASE see **RNA-DIRECTED DNA POLYMERASE**

REVERSE TRANSCRIPTASE, HIV-1 see **HIV-1 REVERSE TRANSCRIPTASE**

REVERSE TRANSCRIPTASE INHIBITORS

FDA approvals include two new AIDS drugs, pediatric labeling for two protease inhibitors [news] **Am J Health Syst Pharm** 1997 Jun 1;54(11):1233

New drugs--reports of new drugs recently approved by the FDA. Lamivudine. Ohta Y, et al. **Bioorg Med Chem** 1997 Apr;5(4):639-40

ADMINISTRATION & DOSAGE

Pharmacokinetic study of the interaction between rifabutin and delavirdine mesylate in HIV-1 infected patients. Borin MT, et al. **Antiviral Res** 1997 Jun;35(1):53-63

Triple therapy reduces HIV virus to undetected levels [news] **Aust Fam Physician** 1996 Dec;25(12):1816

Beneficial effect of lamivudine pre- and post-liver transplantation for hepatitis B infection. Ben-Ari Z, et al. **Transplant Proc** 1997 Sep;29(6):2687-8

[Nevirapine: a new principle of action against HIV (news)] **Dtsch Med Wochenschr** 1996 Dec 6;121(49):A48-9 **(Ger)**

[Therapy of chronic hepatitis B virus infection with the nucleoside analog lamivudine] Jung MC, et al. **Z Gastroenterol** 1996 Dec;34(12):827-8 **(Ger)**

[Preventive lamivudine against reinfection by hepatitis B after liver transplantation] Niederau C. **Z Gastroenterol** 1997 May;35(5):359-61 **(Ger)**

ADVERSE EFFECTS

Acetyl-carnitine deficiency in AIDS patients with neurotoxicity on treatment with antiretroviral nucleoside analogues. Famularo G, et al. **AIDS** 1997 Feb;11(2):185-90

Lamivudine-stavudine-induced liver failure in hepatitis B cirrhosis. Schiano TD, et al. **Am J Gastroenterol** 1997 Sep; 92(9):1563-4

Minimising the dosage-limiting toxicities of foscarnet induction therapy. Jayaweera DT. **Drug Saf** 1997 Apr; 16(4):258-66 (40 ref.)

Puerperal febrile morbidity associated with the reverse transcriptase inhibitor stavudine. Wax JR, et al. **J Matern Fetal Med** 1997 Mar-Apr;6(2):118-9

Anaphylactoid reaction, angioedema, and urticaria associated with lamivudine [letter] Kainer MA, et al. **Lancet** 1996 Nov 30;348(9040):1519

ANALYSIS

Determination of the composition of delavirdine mesylate polymorph and pseudopolymorph mixtures using 13C CP/MAS NMR. Gao P. **Pharm Res** 1996 Jul; 13(7):1095-104

BLOOD

High-performance liquid chromatographic method for the determination of an HIV-1 non-nucleoside reverse transcriptase inhibitor (L-696,229) in plasma samples from animals. Lee LL, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):323-8

CEREBROSPINAL FLUID

Sensitive reversed-phase high-performance liquid chromatographic method for the determination of atevirdine and its N-desethyl metabolite in human saliva or cerebrospinal fluid using solid-phase extraction. Howard GM, et al. **J Chromatogr B Biomed Appl** 1997 Jun 6; 693(2):431-6

CHEMICAL SYNTHESIS

Pyridazines 79. Novel oxazolo[3',2':1,2]pyrrolo[3,4-d]pyridazines and imidazolo[1',2':1,2]pyrrolo[3,4-d]pyridazines: synthesis and biological evaluation. Barth B, et al. **Arch Pharm (Weinheim)** 1996 Aug-Sep;329(8-9):403-7

Pyridazines 82. Synthesis of pyridazino [3,4-b][1,5]benzodiazepin-5-ones and their biological evaluation as non-nucleoside HIV reverse transcriptase inhibitors. Heinisch G, et al. **Arch Pharm (Weinheim)** 1997 Jan-Feb;330(1-2):29-34

Synthesis and evaluation of new Reissert analogs as HIV-1 reverse transcriptase inhibitors. 1. Quinoline and quinoxaline derivatives. Font M, et al. **Drug Des Discov** 1997 Apr;14(4):305-32

Synthesis and evaluation of new Reissert analogs as HIV-1 RT inhibitors. 2. Benzo[f]quinoline and pyridine derivatives. Monge A, et al. **Drug Des Discov** 1997 Apr; 14(4):291-303

Synthesis and bioactivity of novel bis(heteroaryl)piperazine (BHAP) reverse transcriptase inhibitors: structure-activity relationships and increased metabolic stability of novel substituted pyridine analogs. Genin MJ, et al. **J Med Chem** 1996 Dec 20;39(26):5267-75

Targeting delavirdine/atevirdine resistant HIV-1: identification of (alkylamino)piperidine-containing bis(heteroaryl)piperazines as broad spectrum HIV-1 reverse transcriptase inhibitors. Romero DL, et al. **J Med Chem** 1996 Sep 13;39(19):3769-89

Development of nonnucleoside HIV reverse transcriptase inhibitors. Tucker TJ, et al. **Methods Enzymol** 1996; 275:440-72 (67 ref.)

CHEMISTRY

Models which explain the inhibition of reverse transcriptase by HIV-1-specific (thio)carboxanilide derivatives. Esnouf RM, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):458-64

Targeting HIV reverse transcriptase for anti-AIDS drug design: structural and biological considerations for chemotherapeutic strategies. Arnold E, et al. **Drug Des Discov** 1996 Apr;13(3-4):29-47 (62 ref.)

Evidence of a butterfly-like configuration of structurally diverse allosteric inhibitors of the HIV-1 reverse transcriptase. Mager PP. **Drug Des Discov** 1996 Dec; 14(3):241-57

Quantitative structure-activity relationship studies on some viral reverse transcriptase inhibitors acting as anti-HIV-1 agents. Garg R, et al. **J Enzyme Inhib** 1997 Jan;11(3):171-81

Structural analogues of the calanolide anti-HIV agents. Modification of the trans-10,11-dimethyldihydropyran-12-ol ring (ring C). Zembower DE, et al. **J Med Chem** 1997 Mar 14; 40(6):1005-17

Bent pseudoknots and novel RNA inhibitors of type 1 human immunodeficiency virus (HIV-1) reverse transcriptase. Burke DH, et al. **J Mol Biol** 1996 Dec 13;264(4):650-66

Crystal structures of 8-Cl and 9-Cl TIBO complexed with wild-type HIV-1 RT and 8-Cl TIBO complexed with the Tyr181Cys HIV-1 RT drug-resistant mutant. Das K, et al. **J Mol Biol** 1996 Dec 20;264(5):1085-100

Structure of a DNA analog of the primer for HIV-1 RT second strand synthesis. Han GW, et al. **J Mol Biol** 1997 Jun 27;269(5):811-26

Solid phases of delavirdine mesylate. Bergren MS, et al. **J Pharm Sci** 1996 Aug;85(8):834-41

A check on rational drug design: molecular simulation of the allosteric inhibition of HIV-1 reverse transcriptase. Mager PP. **Med Res Rev** 1997 May;17(3):235-76 (53 ref.)

Analysis of inhibition of retroviral reverse transcriptase. Balzarini J, et al. **Methods Enzymol** 1996;275:472-502 (112 ref.)

Novel methods of generating specific oligonucleotide inhibitors of viral polymerases. Chen H, et al. **Methods Enzymol** 1996;275:503-20

ISOLATION & PURIFICATION

Spinonin, a novel glycoside from Ononis spinosa subsp. leiosperma. Kirmizigül S, et al. **J Nat Prod** 1997 Apr; 60(4):378-81

Stellettamide B, a new indolizidine alkaloid from a sponge of the genus Stelletta. Shin J, et al. **J Nat Prod** 1997 Jun; 60(6):611-3

METABOLISM

Analysis of HIV-2 RT mutants provides evidence that resistance of HIV-1 RT and HIV-2 RT to nucleoside analogs involves a repositioning of the template-primer. Perach M, et al. **J Mol Biol** 1997 May 9;268(3):648-54

Unique features in the structure of the complex between HIV-1 reverse transcriptase and the bis(heteroaryl)piperazine (BHAP) U-90152 explain resistance mutations for this nonnucleoside inhibitor. Esnouf RM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3984-9

PHARMACOKINETICS

Efficacy, pharmacokinetics, and in vivo antiviral activity of UC781, a highly potent, orally bioavailable nonnucleoside reverse transcriptase inhibitor of HIV type 1. Buckheit RW Jr, et al. **AIDS Res Hum Retroviruses** 1997 Jun 10; 13(9):789-96

Treatment of gastrointestinal cytomegalovirus infection with twice-daily foscarnet: a pilot study of safety, efficacy, and pharmacokinetics in patients with AIDS. Dieterich DT, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1226-30

Pharmacokinetic study of the interaction between rifabutin and delavirdine mesylate in HIV-1 infected patients. Borin MT, et al. **Antiviral Res** 1997 Jun;35(1):53-63

Pharmacokinetics of zidovudine in HIV-infected patients with end-stage renal disease. Kimmel PL, et al. **Blood Purif** 1995 Nov-Dec;13(6):340-6

Pharmacokinetic study of the interaction between rifampin and delavirdine mesylate. Borin MT, et al. **Clin Pharmacol Ther** 1997 May;61(5):544-53

Steady-state pharmacokinetics of delavirdine in HIV-positive patients: effect on erythromycin breath test. Cheng CL, et al. **Clin Pharmacol Ther** 1997 May; 61(5):531-43

Identification of the metabolites of the HIV-1 reverse transcriptase inhibitor delavirdine in monkeys. Chang M, et al. **Drug Metab Dispos** 1997 Jul;25(7):814-27

Metabolism of the HIV-1 reverse transcriptase inhibitor delavirdine in mice. Chang M, et al. **Drug Metab Dispos** 1997 Jul;25(7):828-39

Metabolism of the human immunodeficiency virus type 1 reverse transcriptase inhibitor delavirdine in rats. Chang M, et al. **Drug Metab Dispos** 1997 Feb;25(2):228-42

Role of altered metabolism in dideoxynucleoside pharmacokinetics. Studies of 2'-beta-fluoro-2',3'-dideoxyinosine and 2'-beta-fluoro-2',3'-dideoxyadenosine in rats. Singhal D, et al. **Drug Metab Dispos** 1996 Oct;24(10):1155-61

Pharmacokinetics, absolute bioavailability, and absorption characteristics of lamivudine [published erratum appears in J Clin Pharmacol 1996 Apr;36(4):373] Yuen GJ, et al. **J Clin Pharmacol** 1995 Dec;35(12):1174-80

The bottleneck in AZT activation [see comments] Lavie A, et al. **Nat Med** 1997 Aug;3(8):922-4. Comment in: Nat Med 1997 Aug;3(8):836-7.

PHARMACOLOGY

Re-evaluation of time to progression of foscarnet salvage therapy for cytomegalovirus retinitis in AIDS patients clinically resistant to ganciclovir [letter] Mueller AJ, et al. **AIDS** 1997 Mar;11(3):397-9

Selection conditions affect the evolution of specific mutations in the reverse transcriptase gene associated with resistance to DMP 266. Winslow DL, et al. **AIDS** 1996 Sep; 10(11):1205-9

Stavudine selectively induces apoptosis in HIV type 1-infected cells. Hashimoto KI, et al. **AIDS Res Hum Retroviruses** 1997 Jan 20;13(2):193-9

Highly potent oxathiin carboxanilide derivatives with efficacy against nonnucleoside reverse transcriptase inhibitor-resistant human immunodeficiency virus isolates. Buckheit RW Jr, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):831-7

Novel mutation (K70E) in human immunodeficiency virus type 1 reverse transcriptase confers decreased susceptibility to 9-[2-(phosphonomethoxy)ethyl]adenine in vitro. Cherrington JM, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2212-6

Comparative kinetic analyses of interaction of inhibitors with Rauscher murine leukemia virus and human immunodeficiency virus reverse transcriptases. Cherrington JM, et al. **Antimicrob Agents Chemother** 1996 May; 40(5):1270-3

Evaluation of reverse transcriptase and protease inhibitors in two-drug combinations against human immunodeficiency virus replication. Deminie CA, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1346-51

Genotypic and phenotypic changes during culture of a multinucleoside-resistant human immunodeficiency virus type 1 strain in the presence and absence of additional reverse transcriptase inhibitors. Shafer RW, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2887-90

Human immunodeficiency virus type 1 reverse transcriptase genotype and drug susceptibility changes in infected individuals receiving dideoxyinosine monotherapy for 1 to 2 years. Winters MA, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):757-62

2',3'-dideoxy-beta-L-5-fluorocytidine inhibits duck hepatitis B virus reverse transcription and suppresses viral DNA synthesis in hepatocytes, both in vitro and in vivo. Zoulim F, et al. **Antimicrob Agents Chemother** 1996 Feb; 40(2):448-53

Inhibition of human immunodeficiency virus type 1 infection in vitro by combination of delavirdine, zidovudine and didanosine. Chong KT, et al. **Antiviral Res** 1997 Mar; 34(1):51-63

Anti-HIV-1 activity of thiadiazole derivatives: structure-activity relationship, reverse transcriptase inhibition, and lipophilicity. Ijichi K, et al. **Antiviral Res** 1996 Jun;31(1-2):87-94

Nucleotide substitution patterns can predict the requirements for drug-resistance of HIV-1 proteins. Keulen W, et al. **Antiviral Res** 1996 Jun;31(1-2):45-57

The role of genotypic heterogeneity in wild type virus populations on the selection of nonnucleoside reverse transcriptase inhibitor-resistant viruses. Kinjerski TL, et al. **Antiviral Res** 1997 Jan;33(2):109-15

Complete inhibition of viral breakthrough by combination of MKC-442 with AZT during a long-term culture of HIV-1 infected cells. Okamoto M, et al. **Antiviral Res** 1996 Jun;31(1-2):69-77

Pyridazines 82. Synthesis of pyridazino [3,4-b][1,5]benzodiazepin-5-ones and their biological evaluation as non-nucleoside HIV reverse transcriptase inhibitors. Heinisch G, et al. **Arch Pharm (Weinheim)** 1997 Jan-Feb;330(1-2):29-34

Models which explain the inhibition of reverse transcriptase by HIV-1-specific (thio)carboxanilide derivatives. Esnouf RM, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):458-64

Mode of inhibition of HIV reverse transcriptase by 2-hexaprenylhydroquinone, a novel general inhibitor of RNA- and DNA-directed DNA polymerases. Loya S, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):721-7

Mechanism of polyoxometalate-mediated inactivation of DNA polymerases: an analysis with HIV-1 reverse transcriptase indicates specificity for the DNA-binding cleft. Sarafianos SG, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):619-26

Inhibition of HIV-1 replication by uridine-3'-spiroxirane, a new type of reverse transcriptase inhibitor. Bailey JM, et al. **Biochem Soc Trans** 1996 May;24(2):245S

The thiocarboxanilide nonnucleoside UC781 is a tight-binding inhibitor of HIV-1 reverse transcriptase. Barnard J, et al. **Biochemistry** 1997 Jun 24;36(25):7786-92

Inhibition of the ribonuclease H and DNA polymerase activities of HIV-1 reverse transcriptase by N-(4-tert-butylbenzoyl)-2-hydroxy-1-naphthaldehyde hydrazone. Borkow G, et al. **Biochemistry** 1997 Mar 18; 36(11):3179-85

Single-step kinetics of HIV-1 reverse transcriptase mutants responsible for virus resistance to nucleoside inhibitors zidovudine and 3-TC. Krebs R, et al. **Biochemistry** 1997 Aug 19;36(33):10292-300

Comparative enzymatic study of HIV-1 reverse transcriptase resistant to 2',3'-dideoxynucleotide analogs using the single-nucleotide incorporation assay. Ueno T, et al. **Biochemistry** 1997 Feb 4;36(5):1092-9

5H-pyrrolo[1,2-b] [1,2,5]benzothiadiazepines (PBTDs): a novel class of non-nucleoside reverse transcriptase inhibitors. Artico M, et al. **Bioorg Med Chem** 1996 Jun; 4(6):837-50

Induction of DNA topoisomerase II-mediated DNA cleavage by beta-lapachone and related naphthoquinones. Frydman B, et al. **Cancer Res** 1997 Feb 15;57(4):620-7

New hydrolyzable tannins, shephagenins A and B, from Shepherdia argentea as HIV-1 reverse transcriptase inhibitors. Yoshida T, et al. **Chem Pharm Bull (Tokyo)** 1996 Aug;44(8):1436-9

Determination of HIV-1 susceptibility to reverse transcriptase (RT) inhibitors by a quantitative cell-free RT assay. Greene RA, et al. **Clin Diagn Virol** 1996 Nov; 7(2):111-9

AZT induces high frequency, rapid amplification of centromeric DNA. Parra I, et al. **Cytogenet Cell Genet** 1997;76(3-4):128-33

Structure-activity relationships in quinoline Reissert derivatives with HIV-1 reverse transcriptase inhibitory activity. Font M, et al. **Drug Des Discov** 1997 Apr; 14(4):259-72

(s4dU)35: a novel, highly potent oligonucleotide inhibitor of the human immunodeficiency virus type 1 reverse transcriptase. Tökés S, et al. **FEBS Lett** 1996 Oct 28; 396(1):43-6

SIV/HIV-1 hybrid virus expressing the reverse transcriptase gene of HIV-1 remains sensitive to HIV-1-specific reverse transcriptase inhibitors after passage in rhesus macaques. Balzarini J, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):1-4

Zidovudine potentiates local and systemic inflammatory responses in the rat. Raymond P, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 15;14(5):399-407

QSAR based on multiple linear regression and PLS methods for the anti-HIV activity of a large group of HEPT derivatives. Luco JM, et al. **J Chem Inf Comput Sci** 1997 Mar-Apr;37(2):392-401

Simultaneous determination of L-702,007, a HIV-1 reverse transcriptase inhibitor, and its 6-hydroxy metabolite in human plasma by column-switching high-performance liquid chromatography with fluorescence detection. Woolf EJ, et al. **J Chromatogr A** 1996 Apr 5;729(1-2):211-7

Quantitative structure-activity relationship studies on some viral reverse transcriptase inhibitors acting as anti-HIV-1 agents. Garg R, et al. **J Enzyme Inhib** 1997 Jan;11(3):171-81

Quantitative structure-activity relationship studies on some anti-human-immunodeficiency-virus-1 (anti-HIV-1) drugs: viral reverse transcriptase inhibitors. Garg R, et al. **J Enzyme Inhib** 1997 Apr;12(1):1-12

Quantitative structure-activity relationship studies on anti-HIV-1 TIBO derivatives as inhibitors of viral reverse transcriptase. Gupta SP, et al. **J Enzyme Inhib** 1996 Aug; 11(1):23-32

Multiple drug resistance to nucleoside analogues and nonnucleoside reverse transcriptase inhibitors in an efficiently replicating human immunodeficiency virus type 1 patient strain. Schmit JC, et al. **J Infect Dis** 1996 Nov; 174(5):962-8

Inhibition of replication of HIV in primary monocyte/macrophages by different antiviral drugs and comparative efficacy in lymphocytes. Aquaro S, et al. **J Leukoc Biol** 1997 Jul;62(1):138-43 (39 ref.)

Synthesis and bioactivity of novel bis(heteroaryl)piperazine (BHAP) reverse transcriptase inhibitors: structure-activity relationships and increased metabolic stability of novel substituted pyridine analogs. Genin MJ, et al. **J Med Chem** 1996 Dec 20;39(26):5267-75

Novel non-nucleoside inhibitors of human immunodeficiency virus type 1 reverse transcriptase. 6. 2-Indol-3-yl- and 2-azaindol-3-yl-dipyridodiazepinones. Kelly TA, et al. **J Med Chem** 1997 Jul 18;40(15):2430-3

Dihydro(alkylthio)(naphthylmethyl)oxopyrimidines: novel non-nucleoside reverse transcriptase inhibitors of the S-DABO series. Mai A, et al. **J Med Chem** 1997 May 9; 40(10):1447-54

A non-radioactive assay system for screening for inhibitors of RNA-dependent reverse transcriptase activity; an analysis using aurintricarboxylic acid and plant flavonoids. Spedding G. **J Mol Recognit** 1996 Sep-Dec;9(5-6):499-502

Specific inhibition of human immunodeficiency virus type 1 reverse transcriptase mediated by soulattrolide, a coumarin isolated from the latex of calophyllum teysmannii. Pengsuparp T, et al. **J Nat Prod** 1996 Sep; 59(9):839-42

Antiviral activity and mechanism of action of calanolide A against the human immunodeficiency virus type-1. Currens MJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):645-51

Kinetic analysis of inhibition of human immunodeficiency virus type-1 reverse transcriptase by calanolide A. Currens MJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):652-61

Human immunodeficiency virus fitness in vivo: calculations based on a single zidovudine resistance mutation at codon 215 of reverse transcriptase. Goudsmit J, et al. **J Virol** 1996 Aug;70(8):5662-4

Nevirapine-resistant human immunodeficiency virus: kinetics of replication and estimated prevalence in untreated patients. Havlir DV, et al. **J Virol** 1996 Nov;70(11):7894-9

An in vivo mutation from leucine to tryptophan at position 210 in human immunodeficiency virus type 1 reverse transcriptase contributes to high-level resistance to 3'-azido-3'-deoxythymidine. Hooker DJ, et al. **J Virol** 1996 Nov;70(11):8010-8

Sequence and drug susceptibility of subtype C reverse transcriptase from human immunodeficiency virus type 1 seroconverters in Zimbabwe. Shafer RW, et al. **J Virol** 1997 Jul;71(7):5441-8

Clinical data sets of human immunodeficiency virus type 1 reverse transcriptase-resistant mutants explained by a mathematical model. Stilianakis NI, et al. **J Virol** 1997 Jan; 71(1):161-8

Cross-resistance analysis and molecular modeling of nonnucleoside reverse transcriptase inhibitors targeting drug-resistance mutations in the reverse transcriptase of human immunodeficiency virus. Yang SS, et al. **Leukemia** 1997 Apr;11 Suppl 3:89-92

Anti-human immunodeficiency virus (anti-HIV) natural products with special emphasis on HIV reverse transcriptase inhibitors. Ng TB, et al. **Life Sci** 1997; 61(10):933-49 (67 ref.)

A check on rational drug design: molecular simulation of the allosteric inhibition of HIV-1 reverse transcriptase. Mager PP. **Med Res Rev** 1997 May;17(3):235-76 (53 ref.)

Analysis of inhibition of retroviral reverse transcriptase. Balzarini J, et al. **Methods Enzymol** 1996;275:472-502 (112 ref.)

Analysis of resistance mutants of viral polymerases. Oxford JS, et al. **Methods Enzymol** 1996;275:555-600 (179 ref.)

Differences in the inhibition of human immunodeficiency virus type 1 reverse transcriptase DNA polymerase activity by analogs of nevirapine and [2',5'-bis-O-(tert-butyldimethylsilyl)-3'-spiro-5"-(4"-amino-1", 2"-oxathiole-2",2"-dioxide] (TSAO). Arion D, et al. **Mol Pharmacol** 1996 Nov;50(5):1057-64

Enhancement of radiation-inducible hepatic glutathione-S-transferases Ya, Yb1, Yb2, Yc1, and Yc2 gene expression by oltipraz: possible role in radioprotection. Kim SG, et al. **Mol Pharmacol** 1997 Feb; 51(2):225-33

Failure of AZT: a molecular perspective [news; comment] Hazuda D, et al. **Nat Med** 1997 Aug;3(8):836-7. Comment on: Nat Med 1997 Aug;3(8):922-4.

Concomitant combination therapy for HIV infection preferable over sequential therapy with 3TC and non-nucleoside reverse transcriptase inhibitors. Balzarini J, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):13152-7

Reverse transcriptase fidelity and HIV-1 variation [letter; comment] Balzarini J, et al. **Science** 1997 Jan 10; 275(5297):229-30; discussion 230-1. Comment on: Science 1996 Mar 1;271(5253):1282-5.

Reverse transcriptase fidelity and HIV-1 variation [letter; comment] Keulen W, et al. **Science** 1997 Jan 10; 275(5297):229; discussion 230-1. Comment on: Science 1996 Mar 1;271(5253):1282-5.

Reverse transcriptase fidelity and HIV-1 variation [letter; comment] Preston BD. **Science** 1997 Jan 10; 275(5297):228-9; discussion 230-1. Comment on: Science 1996 Mar 1;271(5253):1282-5.

Structure of unliganded HIV-1 reverse transcriptase at 2.7 A resolution: implications of conformational changes for polymerization and inhibition mechanisms. Hsiou Y, et al. **Structure** 1996 Jul 15;4(7):853-60

In vitro selection for different mutational patterns in the HIV-1 reverse transcriptase using high and low selective pressure of the nonnucleoside reverse transcriptase inhibitor HBY 097. Kleim JP, et al. **Virology** 1997 Apr 28;231(1):112-8

Population dynamics studies of wild-type and drug-resistant mutant HIV in mixed infections. Rayner MM, et al. **Virology** 1997 Sep 15;236(1):85-94

[Nevirapine: a new principle of action against HIV (news)] **Dtsch Med Wochenschr** 1996 Dec 6;121(49):A48-9 **(Ger)**

[Effect of reverse transcriptase inhibitors on telomerase function in immortal murine fibroblasts] Egorov EE, et al. **Mol Biol (Mosk)** 1997 Jan-Feb;31(1):130-6 **(Rus)**

[Anti-retrovirals] Roca B, et al. **Med Clin (Barc)** 1997 Jun 7;109(2):62-7 **(Spa)**

THERAPEUTIC USE

Pilot study of the efficacy of atevirdine in the treatment of AIDS dementia complex. Brew BJ, et al. **AIDS** 1996 Oct; 10(12):1357-60

Combined therapy with zidovudine and L-697,661 in primary HIV infection. Perrin L, et al. **AIDS** 1996 Sep; 10(11):1233-7

Correspondence between the effect of zidovudine plus lamivudine on plasma HIV level/CD4 lymphocyte count and the incidence of clinical disease in infected individuals. North American Lamivudine HIV Working Group. Phillips AN, et al. **AIDS** 1997 Feb;11(2):169-75

Quantitative analysis of the endogenous reverse transcriptase reactions of HIV type 1 variants with decreased susceptibility to azidothymidine and nevirapine. Krogstad P, et al. **AIDS Res Hum Retroviruses** 1996 Jul 20; 12(11):977-83

Perspective: research highlights at the Albert Einstein College of Medicine Center for AIDS research. Approaches to control drug resistance in HIV: the role of increased polymerase fidelity. Prasad VR, et al. **AIDS Res Hum Retroviruses** 1996 Jul 20;12(11):959-63 (54 ref.)

Nonnucleoside reverse transcriptase inhibitor marketed for AIDS therapy [news] **Am J Health Syst Pharm** 1996 Sep 15;53(18):2132-3

Effects of lamivudine on replication of hepatitis B virus in HIV-infected men. Benhamou Y, et al. **Ann Intern Med** 1996 Nov 1;125(9):705-12

New approaches to using antiretroviral therapy for the management of HIV Infection. Doran CM. **Ann Pharmacother** 1997 Feb;31(2):228-36 (51 ref.)

Pharmacotherapy of HIV dementia. Melton ST, et al. **Ann Pharmacother** 1997 Apr;31(4):457–73 (90 ref.)

Randomized, controlled phase I/II, trial of combination therapy with delavirdine (U–90152S) and conventional nucleosides in human immunodeficiency virus type 1–infected patients. Davey RT Jr, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1657–64

Treatment of gastrointestinal cytomegalovirus infection with twice–daily foscarnet: a pilot study of safety, efficacy, and pharmacokinetics in patients with AIDS. Dieterich DT, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1226–30

Downregulation of increased CD95 (APO–1/Fas) ligand in T cells from human immunodeficiency virus–type 1–infected children after antiretroviral therapy [letter; comment] Böhler T, et al. **Blood** 1997 Jul 15;90(2):886–8 . Comment on: Blood 1997 Jan 15;89(2):550–7.

Foscarnet therapy for acyclovir–resistant herpes simplex virus 1 infection in allogeneic bone marrow transplant recipients. Naik HR, et al. **Clin Infect Dis** 1995 Dec; 21(6):1514–5

Use of viral resistance patterns to antiretroviral drugs in optimising selection of drug combinations and sequences. Moyle GJ. **Drugs** 1996 Aug;52(2):168–85

Zidovudine and thymus humoral factor gamma–2 in the treatment of HIV infection: preliminary clinical experience. Maggiolo F, et al. **Infection** 1997 Jan–Feb;25(1):35–8

CD8+ lymphocyte responses to antiretroviral therapy of HIV infection. Carr A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 1;13(4):320–6

HIV–1 drug susceptibilities and reverse transcriptase mutations in patients receiving combination therapy with didanosine and delavirdine. Demeter LM, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Feb 1;14(2):136–44

Effects of reverse transcriptase inhibitor therapy on the HIV–1 viral burden in semen. Gilliam BL, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):54–60

Delavirdine approved for use in treating HIV [news] **J Am Osteopath Assoc** 1997 May;97(5):266

Combined therapy with zidovudine, recombinant granulocyte colony stimulating factors and erythropoietin in asymptomatic HIV patients. Perrella O, et al. **J Chemother** 1996 Feb;8(1):63–6

Treatment of late–state HIV infection. Millard PS. **J Fam Pract** 1997 Feb;44(2):132–4

Lamivudine resistance in immunocompetent chronic hepatitis B. Incidence and patterns. Honkoop P, et al. **J Hepatol** 1997 Jun;26(6):1393–5

High viral load in semen of human immunodeficiency virus type 1–infected men at all stages of disease and its reduction by therapy with protease and nonnucleoside reverse transcriptase inhibitors. Gupta P, et al. **J Virol** 1997 Aug; 71(8):6271–5

Initial appearance of the 184Ile variant in lamivudine–treated patients is caused by the mutational bias of human immunodeficiency virus type 1 reverse transcriptase. Keulen W, et al. **J Virol** 1997 Apr;71(4):3346–50

The art of 'HAART': researchers probe the potential and limits of aggressive HIV treatments [news] Stephenson J. **JAMA** 1997 Feb 26;277(8):614–6

Randomised trial of addition of lamivudine or lamivudine plus loviride to zidovudine–containing regimens for patients with HIV–1 infection: the CAESAR trial [see comments] **Lancet** 1997 May 17;349(9063):1413–21. Comment in: Lancet 1997 May 17;349(9063):1408–9.

Second–generation non–nucleosidic reverse transcriptase inhibitor HBY097 and HIV–1 viral load [letter] Rübsamen–Waigmann H, et al. **Lancet** 1997 May 24; 349(9064):1517

Increased fidelity of drug–selected M184V mutated HIV–1 reverse transcriptase as the basis for the effectiveness of 3TC in HIV clinical trials. Wainberg MA. **Leukemia** 1997 Apr;11 Suppl 3:85–8

Antiretroviral therapy. Threlkeld SC, et al. **Med Clin North Am** 1996 Nov;80(6):1263–82 (107 ref.)

Thiadiazole derivatives: highly potent and selective inhibitors of human immunodeficiency virus type 1 (HIV–1) replications in vitro. Fujiwara M, et al. **Microbiol Immunol** 1997;41(4):301–8

AIDS researchers emphasize new drug combinations [news] Fox JL. **Nat Biotechnol** 1997 Mar;15(3):215

Prophylaxis against HIV–1 infection in chimpanzees by nevirapine, a nonnucleoside inhibitor of reverse transcriptase. Grob PM, et al. **Nat Med** 1997 Jun; 3(6):665–70

Assessing and enhancing compliance with antiretroviral therapy [news] Klaus BD, et al. **Nurse Pract** 1997 Apr; 22(4):211–2, 215, 219

Antiretroviral therapy during pregnancy. Beyond AZT (ZDV). Dattel BJ. **Obstet Gynecol Clin North Am** 1997 Sep;24(3):645–57 (24 ref.)

HIV/AIDS management in office practice. Antiretroviral therapy. Hartman AF. **Prim Care** 1997 Sep;24(3):531–60 (46 ref.)

Use of phosphonoformic acid to induce phosphaturia in chronic renal failure in rats. Loghman–Adham M, et al. **Ren Fail** 1996 Nov;18(6):855–66

[AIDS; new developments. IV. Changes in primary medical care due to new possibilities of treating HIV–infected patients] Wigersma L. **Ned Tijdschr Geneeskd** 1997 May 24;141(21):1051–4 (Eng. Abstr.) **(Dut)**

[Stavudine: current information] Saimot AG. **Presse Med** 1997 Apr 5;26(11):514–5 **(Fre)**

[Lamivudine resistance impedes hepatitis B therapy (news)] Eggers HJ. **Fortschr Med** 1997 Apr 30;115(12):5 **(Ger)**

[Nevirapine—the first non–nucleoside inhibitor of reverse transcriptase in the battle against AIDS] Wiese E. **Pharm Unserer Zeit** 1997 Mar;26(2):99–100 **(Ger)**

[Nucleoside analogs inhibiting reverse transcriptase: use in adult patient with HIV infection] Aguirrebengoa K, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14 Suppl 1:3–9 (99 ref.) **(Spa)**

REVERSE TRANSCRIPTION see **TRANSCRIPTION, GENETIC**

REVERSE TRIIODOTHYRONINE see **TRIIODOTHYRONINE, REVERSE**

REVIEW LITERATURE

see related
META–ANALYSIS

Beyond ACP Journal Club: how to harness MEDLINE for review articles [editorial] McKibbon KA, et al. **ACP J Club** 1996 May–Jun;124(3):A12–3

Getting the most from review articles: a guide for readers and writers [see comments] Shaughnessy AF, et al. **Am Fam Physician** 1997 May 1;55(6):2155–60 (14 ref.). Comment in: Am Fam Physician 1997 May 1;55(6):2064, 2069–70, 2072.

Reading and evaluating clinical review articles [editorial; comment] Siwek J. **Am Fam Physician** 1997 May 1; 55(6):2064, 2069–70, 2072. Comment on: Am Fam Physician 1997 May 1;55(6):2155–60.

Drug review articles and industry ties [see comments] Miller JL. **Am J Health Syst Pharm** 1997 Jan 1;54(1):30–1. Comment in: Am J Health Syst Pharm 1997 Feb 15;54(4):441–2.

Using systematic reviews in clinical education. Badgett RG, et al. **Ann Intern Med** 1997 Jun 1;126(11):886–91

How consumers and policymakers can use systematic reviews for decision making. Bero LA, et al. **Ann Intern Med** 1997 Jul 1;127(1):37–42

The relation between systematic reviews and practice guidelines. Cook DJ, et al. **Ann Intern Med** 1997 Aug 1; 127(3):210–6 (58 ref.)

Systematic reviews: synthesis of best evidence for clinical decisions [see comments] Cook DJ, et al. **Ann Intern Med** 1997 Mar 1;126(5):376–80. Comment in: Ann Intern Med 1997 Mar 1;126(5):389–91.

Locating and appraising systematic reviews. Hunt DL, et al. **Ann Intern Med** 1997 Apr 1;126(7):532–8

Using numerical results from systematic reviews in clinical practice. McQuay HJ, et al. **Ann Intern Med** 1997 May 1;126(9):712–20

Selecting and appraising studies for a systematic review. Meade MO, et al. **Ann Intern Med** 1997 Oct 1;127(7):531–7

Systematic reviews: critical links in the great chain of evidence [editorial; comment] Mulrow CD, et al. **Ann Intern Med** 1997 Mar 1;126(5):389–91. Comment on: Ann Intern Med 1997 Mar 1;126(5):376–80.

Writing a useful literature review for a quantitative research project. Martin PA. **Appl Nurs Res** 1997 Aug;10(3):159–62

Clinical curriculum reviews: a step forward in sport medicine [editorial; comment] Kohl HW 3d, et al. **Clin J Sport Med** 1996 Oct;6(4):218–9. Comment on: Clin J Sport Med 1996 Oct;6(4):245–50.

Systematic reviews [letter; comment] Lancaster T. **Fam Pract** 1997 Feb;14(1):90. Comment on: Fam Pract 1996 Aug;13(4):397–401.

The diffusion of knowledge about glycoconjugates through reviews, monographs, textbooks and symposia [letter] Cabezas JA. **Glycoconj J** 1996 Jun;13(3):iii–vi

Health economic reviews. Are they compiled systematically? Rigby K, et al. **Int J Technol Assess Health Care** 1996 Summer;12(3):450–9

References, copyright and plagiarism [editorial] Smith JP. **J Adv Nurs** 1997 Jul;26(1):1

Trashing the dental literature—misleading the general practitioners: a point of view [editorial] Stanley HR. **J Dent Res** 1996 Sep;75(9):1624–6

The effectiveness of chiropractic manipulation in the treatment of headache: an exploration in the literature. Vernon HT. **J Manipulative Physiol Ther** 1995 Nov–Dec; 18(9):611–17

Systematic reviews [letter; comment] Franklin J. **J R Soc Med** 1996 Sep;89(9):538. Comment on: J R Soc Med 1996 May;89(5):242–4.

The role of medico–legal reviews in medical research. Iffy L, et al. **Med Law** 1996;15(3):399–406

Systematic reviews and the Cochrane collaboration [editorial] Kale R, et al. **Natl Med J India** 1996 Jan–Feb; 9(1):3–4

Systematic reviews, economic evaluations, and practice guidelines: can research synthesis help us care for the critically ill? Cook DJ, et al. **New Horiz** 1996 Nov; 4(4):551–7

Rare benign neoplasms of the larynx: rhabdomyoma and lipoma [letter; comment] Friedmann I. **ORL J Otorhinolaryngol Relat Spec** 1996 May–Jun; 58(3):182. Comment on: ORL J Otorhinolaryngol Relat Spec 1995 Nov–Dec;57(6):351–5.

Systematic reviews and meta–analysis [editorial] Lewis G, et al. **Psychol Med** 1997 Jan;27(1):3–7

Systematic literature review and meta–analysis. Hughes EG. **Semin Reprod Endocrinol** 1996 May;14(2):161–9

Accuracy of current educational literature on the staging of gastric carcinoma. Fung AS. **World J Surg** 1997 Mar–Apr;21(3):237–9

[The Cochrane Collaboration. A new path to improving medical knowledge] Gladkij I. **Cas Lek Cesk** 1996 Nov 20;135(22):733–5 **(Cze)**

[Reviews in the Psychotherapie Psychosomatik Medizinische Psychologie Journal (editorial)] Heim E. **Psychother Psychosom Med Psychol** 1997 Mar–Apr; 47(3–4):75 **(Ger)**

[The Cochrane Collaboration] Bonfill Cosp X. **Gastroenterol Hepatol** 1996 Dec;19(10):524–8 **(Spa)**

[Methods of investigation in clinical cardiology. VIII. Meta–analysis and systematic reviews in cardiology] Guallar E, et al. **Rev Esp Cardiol** 1997 May;50(5):345–54 (43 ref.) (Eng. Abstr.) **(Spa)**

REVISION, JOINT see **REOPERATION**

REVISION, SURGICAL see **REOPERATION**

REWARD

The relationship between recognition, rewards and burnout in AIDS caring. Bennett L, et al. **AIDS Care** 1996 Apr; 8(2):145–53

Reward comparison in chronic decerebrate rats. Grigson PS, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R479–86

Detrimental effects of reward. Reality or myth? Eisenberger R, et al. **Am Psychol** 1996 Nov;51(11):1153–66 (110 ref.)

Addictive drugs and brain stimulation reward. Wise RA. **Annu Rev Neurosci** 1996;19:319–40 (202 ref.)

Short–term effectiveness of anticipatory guidance to reduce early childhood risks for subsequent violence [letter] Walcher JR. **Arch Pediatr Adolesc Med** 1997 Sep;151(9):964

The amygdala modulates memory for changes in reward magnitude: involvement of the amygdaloid GABAergic system. Salinas JA, et al. **Behav Brain Res** 1996 Oct; 80(1–2):87–98

Interactions between self and external reinforcement in predicting depressive symptoms. Wilkinson RB. **Behav Res Ther** 1997 Apr;35(4):281–9

Should we pay the patient? Review of financial incentives to enhance patient compliance. Giuffrida A, et al. **BMJ** 1997 Sep 20;315(7110):703–7 (64 ref.)

Effects of corticosteroid synthesis inhibitors on the sensitization of reward by food restriction. Abrahamsen GC, et al. **Brain Res** 1996 Jul 8;726(1–2):39–48

Effect of adrenalectomy on cocaine facilitation of lateral hypothalamic self–stimulation. Abrahamsen GC, et al. **Brain Res** 1997 Apr 25;755(1):156–61

Estimates of the axonal refractory period of midbrain dopamine neurons: their relevance to brain stimulation reward. Anderson RM, et al. **Brain Res** 1996 Apr 29; 718(1–2):83–8

NMDA–induced lesions of the nucleus accumbens or the ventral pallidum increase the rewarding efficacy of food to deprived rats. Johnson PI, et al. **Brain Res** 1996 May 25;722(1–2):109–17

Serotonergic modulation of 3,4–methylenedioxymethamphetamine (MDMA)–elicited reduction of response rate but not rewarding threshold in accumbal self–stimulation. Lin HQ, et al. **Brain Res** 1997 Jan 9;744(2):351–7

Ibotenic acid lesions of the amygdala basolateral complex or central nucleus differentially effect the response to reductions in reward. Salinas JA, et al. **Brain Res** 1996 Dec 2;742(1–2):283–93

Involvement of dopamine–dependent and –independent mechanisms in the rewarding effects mediated by delta opioid receptor subtypes in mice. Suzuki T, et al. **Brain Res** 1997 Jan 9;744(2):327–34

Anticipatory contrast effect in rats: a new view with lick response analysis and the effect of dopamine blocking. Chen BH, et al. **Chin J Physiol** 1996;39(4):235–43

Dopamine neurons and their role in reward mechanisms. Schultz W. **Curr Opin Neurobiol** 1997 Apr;7(2):191–7 (83 ref.)

Response rates with different distribution methods and reward, and reproducibility of a quantitative food frequency questionnaire. Johansson L, et al. **Eur J Clin Nutr** 1997 Jun;51(6):346–53

Involvement of delta– and mu–opioid receptors in the potentiation of brain–stimulation reward. Duvauchelle CL, et al. **Eur J Pharmacol** 1996 Dec 5;316(2–3):137–43

Impulsive and self–control choices in opioid–dependent patients and non–drug–using control participants: drug and monetary rewards. Madden GJ, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):256–62

Effects of unreasonable pay discrepancies for under– and overpayment on double demotivation. Carr SC, et al. **Genet Soc Gen Psychol Monogr** 1996 Nov;122(4):475–94

Reward dominance: associations with anxiety, conduct problems, and psychopathy in children. O'Brien BS, et al. **J Abnorm Child Psychol** 1996 Apr;24(2):223–40

Neural signals in the monkey ventral striatum related to motivation for juice and cocaine rewards. Bowman EM,

et al. **J Neurophysiol** 1996 Mar;75(3):1061–73
Deprivation state switches the neurobiological substrates mediating opiate reward in the ventral tegmental area. Nader K, et al. **J Neurosci** 1997 Jan 1;17(1):383–90
Adaptive increase in D3 dopamine receptors in the brain reward circuits of human cocaine fatalities. Staley JK, et al. **J Neurosci** 1996 Oct 1;16(19):6100–6
Classical conditioning of electrical self-stimulation of ventral tegmental area to brief visual stimuli in rats. Bespalov AYu, et al. **J Neurosci Methods** 1996 Dec;70(1):1–4
Can salient reward increase creative performance without reducing intrinsic creative interest? Eisenberger R, et al. **J Pers Soc Psychol** 1997 Mar;72(3):652–63
Effect of the highly selective and nonpeptide delta opioid receptor agonist TAN-67 on the morphine-induced place preference in mice. Suzuki T, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):177–85
The influences of goal-related actions and reward information on children's and adults' perceptions of effort expenditure and goal desire. Parker BL, et al. **J Psychol** 1996 Sep;130(5):571–83
Everybody has won, and all must have prizes [see comments] Patel L, et al. **Lancet** 1996 Nov 30;348(9040):1497. Comment in: Lancet 1997 Mar 22;349(9055):885.
Peripheral post-training administration of 4-OH amphetamine enhances retention of a reduction in reward magnitude. Salinas JA, et al. **Neurobiol Learn Mem** 1996 Mar;65(2):192–5
Feeding, drug abuse, and the sensitization of reward by metabolic need. Carr KD. **Neurochem Res** 1996 Nov; 21(11):1455–67 (107 ref.)
Pleasure-attenuation of startle is disrupted by lesions of the nucleus accumbens. Koch M, et al. **Neuroreport** 1996 May 31;7(8):1442–6
Activation of the human brain by monetary reward. Thut G, et al. **Neuroreport** 1997 Mar 24;8(5):1225–8
PD-135158, a CCKB receptor antagonist, microinjected into the nucleus accumbens and the expression of conditioned rewarded behavior. Josselyn SA, et al. **Neurosci Lett** 1996 May 10;209(2):85–8
Endogenous cannabinoids as an aversive or counter-rewarding system in the rat. Sañudo-Peña MC, et al. **Neurosci Lett** 1997 Feb 21;223(2):125–8
Ventral pallidum self-stimulation induces stimulus dependent increase in c-fos expression in reward-related brain regions. Panagis G, et al. **Neuroscience** 1997 Mar;77(1):175–86
Molecular mechanisms of the brain reward system. **NIDA Res Monogr** 1996;162:34–6
Effects of a personal trainer and financial incentives on exercise adherence in overweight women in a behavioral weight loss program. Wing RR, et al. **Obes Res** 1996 Sep; 4(5):457–62
A role for D2, but not D1, dopamine receptors in the response-reinstating effects of food reinforcement. Chausmer AL, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):681–5
Anabolic-androgenic steroids and brain reward. Clark AS, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):741–5
Rewarding effect of the neuroactive steroid 3 alpha-hydroxy-5 alpha-pregnan-20-one in mice. Finn DA, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):261–4
Prior exposure to palatable solutions enhances the effects of naltrexone on food intake in rats. Kanarek RB, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):377–81
Both nicotinic and muscarinic receptors in ventral tegmental area contribute to brain-stimulation reward. Yeomans J, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):915–21
Amsel's frustration effect: a pavlovian replication with control for frequency and distribution of rewards. Dudley RT, et al. **Physiol Behav** 1997 Apr;61(4):627–9
Appetitive sexual behavior in male rats: 2. sexual reward and level-changing behavior. Van Furth WR, et al. **Physiol Behav** 1996 Sep;60(3):1007–12
A flood of rewards. Volunteers set an example for all of us [editorial] Setness PA. **Postgrad Med** 1997 Jul; 102(1):13–6
Dose-dependent aversive and rewarding effects of amphetamine as revealed by a new place conditioning apparatus. Cabib S, et al. **Psychopharmacology (Berl)** 1996 May;125(1):92–6
Injection of 5-HT into the nucleus accumbens reduces the effects of d-amphetamine on responding for conditioned reward. Fletcher PJ. **Psychopharmacology (Berl)** 1996 Jul; 126(1):62–9
Amygdala and hippocampus control dissociable aspects of drug-associated conditioned rewards. Hitchcott PK, et al. **Psychopharmacology (Berl)** 1997 May;131(2):187–95
Psychophysiological response of ADHD children to reward and extinction. Iaboni F, et al. **Psychophysiology** 1997 Jan; 34(1):116–23
A neural substrate of prediction and reward. Schultz W, et al. **Science** 1997 Mar 14;275(5306):1593–9 (37 ref.)
Getting the brain's attention [news] Wickelgren I. **Science** 1997 Oct 3;278(5335):35–7
Enhanced reward-related responding following cholera toxin infusion into the nucleus accumbens. Kelley AE, et al. **Synapse** 1997 May;26(1):46–54
The neural basis of associative reward learning in honeybees. Hammer M. **Trends Neurosci** 1997 Jun;20(6):245–52 (58 ref.)
[When a sense of justice hinders social efficiency: Pareto axiom revisited] Ohtsubo Y, et al. **Shinrigaku Kenkyu** 1996 Dec;67(5):367–74 (Eng. Abstr.) **(Jpn)**

REWARMING

Transcutaneous pacing in a hypothermic-dog model. Dixon RG, et al. **Ann Emerg Med** 1997 May;29(5):602–6
Hemofiltration in very severe hypothermia with favorable outcome. Brodersen HP, et al. **Clin Nephrol** 1996 Jun; 45(6):413–5
Effects of surface-induced hypothermia and rewarming on canine cardiac contraction-relaxation cycle. Lauri T, et al. **Int J Circumpolar Health** 1997 Apr;56(1-2):40–8
Induction of hypercontractility in human cerebral arteries by rewarming following hypothermia: a possible role for tyrosine kinase. Sagher O, et al. **J Neurosurg** 1997 Sep; 87(3):431–5
Accidental hypothermia. Lloyd EL. **Resuscitation** 1996 Sep; 32(2):111–24 (81 ref.)
[Therapy for accidental hypothermia] Antretter H, et al. **Dtsch Med Wochenschr** 1997 Mar 21;122(12):373–7 (17 ref.) **(Ger)**
[Cerebral oxygen desaturation during rewarming in retrograde cerebral perfusion with total circulatory arrest] Saito S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Dec; 44(12):2138–45 (Eng. Abstr.) **(Jpn)**
[Microcirculation in the skeletal muscle of the white rat subjected to deep immersion hypothermia and restored by self-warming] Shevchenko SV, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun;82(5-6):66–71 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Reduction of rewarming injury of the hepatic graft by a heat insulator. Wakiyama S, et al. **Br J Surg** 1997 Apr; 84(4):459–63

INSTRUMENTATION

Rewarming: comparison of contemporary heat-exchangers. Ueyama K, et al. **Biomed Mater Eng** 1996;6(3):191–7
Evaluation of two warming systems after cardiopulmonary bypass. Janke EL, et al. **Br J Anaesth** 1996 Aug; 77(2):268–70

METHODS

Rewarming cardiac surgical patients: warm water vs warm air. Sanford MM. **Am J Crit Care** 1997 Jan;6(1):39–45
Comparison of three rewarming methods in a postanesthesia care unit. Hershey J, et al. **AORN J** 1997 Mar;65(3):597–601
Convective warming after CABG [letter; comment] Deakin CD. **Br J Anaesth** 1996 Aug;77(2):298–9. Comment on: Br J Anaesth 1996 Apr;76(4):511–4.
Hypothermia, slow pulse, and an unusual QRS complex. Hancock EW. **Hosp Pract (Off Ed)** 1996 Nov 15; 31(11):25–6
Back from the dead: extracorporeal rewarming of severe accidental hypothermia victims in accident and emergency. Ireland AJ, et al. **J Accid Emerg Med** 1997 Jul;14(4):255–7
The effects of forced-air warming on postbypass central and skin temperatures and shivering activity. Mort TC, et al. **J Clin Anesth** 1996 Aug;8(5):361–70
Severe accidental hypothermia: pathophysiology and therapeutic options for hospitals without cardiopulmonary bypass equipment. Schrijver G, et al. **Neth J Med** 1996 Oct;49(4):167–76 (36 ref.)
Severe accidental hypothermia: rewarming with CVVHD. van der Maten J, et al. **Neth J Med** 1996 Oct;49(4):160–3
[Successful resuscitation of a hypothermic patient with extracorporeal circulation--a case report] Köpcke J, et al. **Anaesthesiol Reanim** 1996;21(6):159–62 (Eng. Abstr.) **(Ger)**
[Severe, accidental hypothermia: active rewarming with a simple extracorporeal veno-venous warming-circuit] Heise D, et al. **Anaesthesist** 1996 Nov;45(11):1093–6 (Eng. Abstr.) **(Ger)**
[Gas exchange and gas transport in deeply cooled rats during slow and rapid warming using artificial pulmonary ventilation] Chulkin AE, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun;82(5-6):77–86 (Eng. Abstr.) **(Rus)**

VETERINARY

The effects of active peripheral skin warming on perioperative hypothermia in dogs. Cabell LW, et al. **Vet Surg** 1997 Mar-Apr;26(2):79–85

REX GENE PRODUCTS see **GENE PRODUCTS, REX**

REX GENES see **GENES, PX**

REX PROTEIN see **GENE PRODUCTS, REX**

REYE'S SYNDROME

Metabolic function and liver histopathology in Reye-like illnesses. Hou JW, et al. **Acta Paediatr** 1996 Sep; 85(9):1053–7

CHEMICALLY INDUCED

The mitochondrial permeability transition: a new pathophysiological mechanism for Reye's syndrome and toxic liver injury. Trost LC, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1000–5

COMPLICATIONS

Arrhythmias and ischemia-like ECG changes in Reye's syndrome. Sarti A, et al. **Intensive Care Med** 1996 Jan; 22(1):62–4
[A case of adult Reye's syndrome with favorable outcome despite status epilepticus] Arai M. **Rinsho Shinkeigaku** 1996 Nov;36(11):1256–8 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Single-photon emission CT and MR findings in Klüver-Bucy syndrome after Reye syndrome. Ozawa H, et al. **AJNR Am J Neuroradiol** 1997 Mar;18(3):540–2
The changing clinical pattern of Reye's syndrome 1982–90 [letter; comment] Casteels-Van Daele M, et al. **Arch Dis Child** 1997 Jan;76(1):79. Comment on: Arch Dis Child 1996 May;74(5):400–5.
Focal glycogenosis of the liver in disorders of ureagenesis: its occurrence and diagnostic significance. Badizadegan K, et al. **Hepatology** 1997 Aug;26(2):365–73
Our experience in Reye's syndrome [letter] Kutukculer N, et al. **J Pediatr Gastroenterol Nutr** 1996 Oct;23(3):338–9
Reye's syndrome. Larsen SU. **Med Sci Law** 1997 Jul; 37(3):235–41 (46 ref.)
Initial and follow-up MRI in a case of early diagnosed Reye's syndrome. Ozdoba C, et al. **Neuroradiology** 1997 Jul; 39(7):495–8

EPIDEMIOLOGY

Reye syndrome: an international perspective. Stumpf DA. **Brain Dev** 1995;17 Suppl:77–8 (15 ref.)

ETIOLOGY

Co-existence of hepatitis A and adult Reye's syndrome. Duerksen DR, et al. **Gut** 1997 Jul;41(1):121–4
[Neurological outcome associated with influenza viral infection] Kamimura N, et al. **Nippon Rinsho** 1997 Apr; 55(4):880–5 (22 ref.) (Eng. Abstr.) **(Jpn)**

GENETICS

Frequency of 985A-to-G mutation in medium-chain acyl-CoA dehydrogenase gene among patients with sudden infant death syndrome, Reye syndrome, severe motor and intellectual disabilities and healthy newborns in Japan. Nagao M. **Acta Paediatr Jpn** 1996 Aug;38(4):304–7

PATHOLOGY

[An autopsy case of the Reye's syndrome] Kubo S, et al. **Nippon Hoigaku Zasshi** 1996 Dec;50(6):416–21 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

[Reye syndrome evaluated by 99mTc-ECD SPECT: a case report] Uchino K, et al. **Kaku Igaku** 1996 Sep;33(9):1005–10 (Eng. Abstr.) **(Jpn)**

RFLP see **POLYMORPHISM, RESTRICTION FRAGMENT LENGTH**

RH FACTORS see **RH-HR BLOOD-GROUP SYSTEM**

RH-HR BLOOD-GROUP SYSTEM

see related
ERYTHROBLASTOSIS, FETAL

Molecular insights into the Rh protein family and associated antigens. Huang CH. **Curr Opin Hematol** 1997 Mar; 4(2):94–103 (94 ref.)
From butterflies to babies. Clarke CA. **J R Nav Med Serv** 1997;82(3):232–8 (8 ref.)
Differences between RhD-negative Africans and RhD-negative Europeans [letter] Daniels G, et al. **Lancet** 1997 Sep 20;350(9081):862–3
Quantitation and the Rh blood group system. Hughes-Jones NC. **Transfus Med** 1991 Jun;1(2):69–76 (43 ref.)
Clinical impact of anti-D in intravenous immunoglobulin [letter] Friedman DF, et al. **Transfusion** 1997 Apr; 37(4):450–2
Differentiation of anti-D, -C, and -G: clinical relevance in alloimmunized pregnancies. Shirey RS, et al. **Transfusion** 1997 May;37(5):493–6
The Rh antigen D: partial D antigens and associated low incidence antigens. Tippett P, et al. **Vox Sang** 1996; 70(3):123–31 (36 ref.)
[Is it always necessary to give anti-D gamma-globulins in the case of spontaneous miscarriage in Rhesus-negative patients?] Salvat J, et al. **Contracept Fertil Sex** 1997 Apr; 25(4):V-IX (27 ref.) **(Fre)**
[Prenatal determination of fetal RhD-positivity from the blood of the RhD-negative mother] Tóth T, et al. **Orv Hetil** 1997 May 11;138(19):1203–5 (Eng. Abstr.) **(Hun)**

ANALYSIS

Raising the sensitivity of fetal RhD typing and sex determination from maternal blood [letter] Hengstschläger M, et al. **J Med Genet** 1997 Apr;34(4):350–1

Comparative study of 49 anti–D antibodies in tube and gel techniques with 22 partial D red blood cells. Beolet M, et al. **Transfus Clin Biol** 1996;3(6):373–80

RHD antigen density and agglutination in RHD variant red cells. Flegel WA, et al. **Transfus Clin Biol** 1996;3(6):385–6

Weak rhesus D (RH1) grouping on the Olympus PK7100 blood grouping system [letter] Moncharmont P, et al. **Transfus Med** 1997 Mar;7(1):66–7

Efficient and safe definition of the rhesus–negative donor on the olympus PK 7200 without the indirect antiglobulin test for weak D [letter] Mertens G, et al. **Vox Sang** 1996; 70(4):237–8

BLOOD

ABO, Rh and Kell frequency distribution in a sample population of Terni province, Italy. Cassetti M, et al. **Hum Hered** 1996 Jul–Aug;46(4):205–10

Fetal RhD typing by polymerase chain reaction in pregnancies complicated by rhesus alloimmunization. Van den Veyver IB, et al. **Obstet Gynecol** 1996 Dec; 88(6):1061–7 (34 ref.)

Royal College of Physicians of Edinburgh/Royal College of Obstetricians and Gynaecologists consensus conference on anti–D prophylaxis 7 & 8 April 1997. Urbaniak SJ. **Transfus Med** 1997 Jun;7(2):143–4 (0 ref.)

[The role of genetically determined blood system markers in the development of humoral immunity disorders in those who worked in the cleanup of the aftermath of the accident at the Chernobyl Atomic Electric Power Station] Pavliuk RP, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):44–7 (Eng. Abstr.) **(Ukr)**

CHEMISTRY

Quantitation of Rh D antigen sites on weak D and D variant red cells by flow cytometry. Jones JW, et al. **Vox Sang** 1996;71(3):176–83

Inhibition of the monocyte chemiluminescent response to anti–D–sensitized red cells by Fc gamma RI–blocking antibodies which ameliorate the severity of haemolytic disease of the newborn. Shepard SL, et al. **Vox Sang** 1996; 70(3):157–63

The D antigen characteristic of RoHar is a partial D antigen. Wallace M, et al. **Vox Sang** 1996;70(3):169–72

CLASSIFICATION

[A rapid polycation method for typing rhesus–system antigens in liquid blood] Skosyrev GV, et al. **Sud Med Ekspert** 1996 Jul–Sep;39(3):30–2 (Eng. Abstr.) **(Rus)**

GENETICS

Human D(IIIa) erythrocytes: RhD protein is associated with multiple dispersed amino acid variations. Huang CH, et al. **Am J Hematol** 1997 Jul;55(3):139–45

Genetic recombination at the human RH locus: a family study of the red–cell Evans phenotype reveals a transfer of exons 2–6 from the RHD to the RHCE gene. Huang CH, et al. **Am J Hum Genet** 1996 Oct;59(4):825–33

A recombination hot spot in the Rh genes revealed by analysis of unrelated donors with the rare D–– phenotype [published erratum appears in Am J Hum Genet 1997 Mar;60(3):749] Kemp TJ, et al. **Am J Hum Genet** 1996 Nov;59(5):1066–73

Characterization of the recombination hot spot involved in the genomic rearrangement leading to the hybrid D–CE–D gene in the D(VI) phenotype. Matassi G, et al. **Am J Hum Genet** 1997 Apr;60(4):808–17

Prenatal analysis of rhesus CcDEe blood groups by heteroduplex generator. Rose NC, et al. **Am J Obstet Gynecol** 1997 May;176(5):1084–9

Polymerase chain reaction determination of RhC, Rhc, and RhE blood types: an evaluation of accuracy and clinical utility. Yankowitz J, et al. **Am J Obstet Gynecol** 1997 May; 176(5):1107–11

Molecular analysis of Rh transcripts and polypeptides from individuals expressing the DVI variant phenotype: an RHD gene deletion event does not generate All DVIccEe phenotypes. Avent ND, et al. **Blood** 1997 Mar 1; 89(5):1779–86

Evidence of genetic diversity underlying Rh D–, weak D (Du), and partial D phenotypes as determined by multiplex polymerase chain reaction analysis of the RHD gene. Avent ND, et al. **Blood** 1997 Apr 1;89(7):2568–77

RH gene structure: reassignment of two exon–exon junctions [letter; comment] Cherif–Zahar B, et al. **Blood** 1997 Jun 15;89(12):4661–2. Comment on: Blood 1996 Sep 15;88(6):2326–33.

Human DVI category erythrocytes: correlation of the phenotype with a novel hybrid RhD–CE–D gene but not an internally deleted RhD gene [letter] Huang CH. **Blood** 1997 Mar 1;89(5):1834–5

Evidence that the RHD(VI) deletion genotype does not exist [letter] Maaskant–van Wijk PA, et al. **Blood** 1997 Aug 15; 90(4):1709–11

Molecular basis of the D variant phenotypes DNU and DII allows localization of critical amino acids required for expression of Rh D epitopes epD3, 4 and 9 to the sixth external domain of the Rh D protein. Avent ND, et al. **Br J Haematol** 1997 May;97(2):366–71

Red cells with the rare Rh phenotype rG express some C antigen [letter; comment] Daniels G, et al. **Br J Haematol** 1996 Sep;94(4):768. Comment on: Br J Haematol 1996 May;93(2):472–4.

The Rhnull phenotype in an English individual: haematological, serological and immunological studies. Snowden JA, et al. **Clin Lab Haematol** 1997 Jun;19(2):143–8

Lack of association between ABO blood groups and Rh factor and the tendency to develop mycetoma [letter] Fahal AH, et al. **East Afr Med J** 1996 Nov;73(11):771

Rh D/d genotyping by quantitative polymerase chain reaction and capillary zone electrophoresis. Cossu G, et al. **Electrophoresis** 1996 Dec;17(12):1911–5

Geographic variation analysis of the ABO and RH systems in Turkey. Onde S, et al. **Gene Geogr** 1995 Dec;9(3):211–20

The distribution of the ABO and Rhesus blood groups (phenotype and allele frequencies) in the populations of Cyprus. Poumpouridou A, et al. **Gene Geogr** 1995 Dec; 9(3):197–205

Gene differentiation at the AB0, MN and Rhesus loci among Albanians and their relation with other Balkanic populations. Susanne C, et al. **Gene Geogr** 1996 Apr; 10(1):31–6

Evolution of the human RH (rhesus) blood group genes: a 50 year old prediction (partially) fulfilled. Carritt B, et al. **Hum Mol Genet** 1997 Jun;6(6):843–50

Frequencies of the blood groups ABO, Rhesus, D category VI, Kell, and of clinically relevant high–frequency antigens in south–western Germany. Wagner FF, et al. **Infusionsther Transfusionsmed** 1995 Oct;22(5):285–90

The RHD gene is highly detectable in RhD–negative Japanese donors. Okuda H, et al. **J Clin Invest** 1997 Jul 15;100(2):373–9

Prenatal detection of rhesus D genotype [letter] Hamlington J, et al. **Lancet** 1997 Feb 22;349(9051):540

Genotyping for RhC/c and RhE/e by PCR using allele–specific oligonucleotide primers. Tanaka M, et al. **Nippon Hoigaku Zasshi** 1997 Feb;51(1):32–8

Rapid molecular determination of fetal rhesus E type. Geifman–Holtzman O, et al. **Prenat Diagn** 1996 Jun; 16(6):489–93

Molecular analysis of DVI variant ISBT 35 (R2VIr). Armstrong–Fisher SS, et al. **Transfus Clin Biol** 1996; 3(6):505–6

Molecular biology of partial D phenotypes. Avent ND, et al. **Transfus Clin Biol** 1996;3(6):511–6

Rh DNA—coordinator's report. Cartron JP. **Transfus Clin Biol** 1996;3(6):491–5

Tentative model for the mapping of D epitopes on the RhD polypeptide. Cartron JP, et al. **Transfus Clin Biol** 1996; 3(6):497–503

Rh DNA analysis. Maaskant–Van Wijk PA, et al. **Transfus Clin Biol** 1996;3(6):507–10

Molecular analysis of selected Rh variants. Noizat–Pirenne F, et al. **Transfus Clin Biol** 1996;3(6):517–9

Frequency of partial D phenotypes in the south western region of France. Roubinet F, et al. **Transfus Clin Biol** 1996;3(4):247–55

A structural model for 30 Rh D epitopes based on serological and DNA sequence data from partial D phenotypes. Scott ML, et al. **Transfus Clin Biol** 1996;3(6):391–6

Lower antigen site density and weak D immunogenicity cannot be explained by structural genomic abnormalities or regulatory defects of the RHD gene. Beckers EA, et al. **Transfusion** 1997 Jun;37(6):616–23

Molecular background of VS and weak C expression in blacks. Faas BH, et al. **Transfusion** 1997 Jan;37(1):38–44

Loss of D and C expression in chronic myelomonocytic leukemia [letter] Mertens G, et al. **Transfusion** 1997 Aug; 37(8):880–1

DNA–based rhesus typing: simultaneous determination of RHC and RHD status using the polymerase chain reaction. Poulter M, et al. **Vox Sang** 1996;70(3):164–8

Rh haplotypes that make e but not hrB usually make VS. Reid ME, et al. **Vox Sang** 1997;72(1):41–4

Sensitive determination of the RhD genotype in mixed samples using fluorescence–based polymerase chain reaction. Tonn T, et al. **Vox Sang** 1997;72(3):177–81

[Distribution of Rhesus haplotype frequencies in the Cologne (North Rhine–Westphalia) administrative district] Scheil HG, et al. **Anthropol Anz** 1996 Sep;54(3):215–28 (Eng. Abstr.) **(Ger)**

[Identification of a variant D(IVa) with anti–D in serum] Serra A, et al. **Sangre (Barc)** 1996 Apr;41(2):151–3 (Eng. Abstr.) **(Spa)**

HISTORY

History of Rh [letter; comment] Reid MM. **J R Coll Physicians Lond** 1997 Jan–Feb;31(1):112–3. Comment on: J R Coll Physicians Lond 1996 Sep–Oct;30(5):457–64.

IMMUNOLOGY

Large scale cultivation of an anti–D (IgM) antibody producing human/mouse heterohybridoma. Fizil A, et al. **Acta Microbiol Immunol Hung** 1996;43(4):345–57

Delayed hemolytic transfusion reaction due to anti–Go(a), an antibody against the low–prevalence Gonzales antigen. Larson PJ, et al. **Am J Hematol** 1996 Dec;53(4):248–50

Mothers at risk of alloimmunization to the Rh (D) antigen and availability of gamma–globulin at the Mexican Institute of Social Security. Zavala C, et al. **Arch Med Res** 1996 Autumn;27(3):373–6

Restricted use of cationic germline V(H) gene segments in human Rh(D) red cell antibodies. Boucher G, et al. **Blood** 1997 May 1;89(9):3277–86

The Rhesus D–negative phenotype is an independent predictor of poor prognosis in curatively (RO) resected gastric cancer patients. Mayer B, et al. **Br J Cancer** 1997; 75(9):1291–4

A human monoclonal anti–D antibody which detects a nonconformation–dependent epitope on the RhD protein by immunoblot. Apoil PA, et al. **Br J Haematol** 1997 Aug; 98(2):365–74

Treatment of human immunodeficiency virus–related thrombocytopenia with intravenous anti–rhesus D immunoglobulin [letter] Izzi I, et al. **Clin Infect Dis** 1997 Jul;25(1):171–2

The history of rhesus prophylaxis with anti–D.[classical article] Wegmann A, et al. **Eur J Pediatr** 1996 Oct; 155(10):835–8

The role of the fetal immune system in the pathogenesis of RhD–hemolytic disease of newborns. Gurevich P, et al. **Hum Antibodies** 1997;8(2):76–89 (120 ref.)

Obtaining a functional recombinant anti–rhesus (D) antibody using the baculovirus–insect cell expression system. Edelman L, et al. **Immunology** 1997 May;91(1):13–9

Rhesus isoimmunization: increased hemolysis during early infancy. Hayde M, et al. **Pediatr Res** 1997 May;41(5):716–21

Proceedings of the 3rd International Workshop and Symposium on Monoclonal Antibodies against Red Blood Cells and Related Antigens. Nantes, 25–27 September 1996. **Transfus Clin Biol** 1996;3(6):329–541

ADCC activity of monoclonal anti–D antibodies. Armstrong–Fisher SS, et al. **Transfus Clin Biol** 1996; 3(6):475–7

Monoclonal antibodies directed against human Rh antigens in tests with red cells of non–human primates. Blancher A, et al. **Transfus Clin Biol** 1996;3(6):339–45

Polyreactivity of human monoclonal antibodies: human IgM anti–rhesus monoclonal antibodies are frequently polyreactive. Blancher A, et al. **Transfus Clin Biol** 1996; 3(6):347–53

Functional (ADCC) study of 54 IgG MAb anti–RhD. Brossard Y, et al. **Transfus Clin Biol** 1996;3(6):459–63

Functional activity of Rh monoclonal antibodies in ADCC assay. Delsalle A, et al. **Transfus Clin Biol** 1996;3(6):469–71

Serological investigation of Rh antibodies other than anti–D. Delsalle A, et al. **Transfus Clin Biol** 1996;3(6):381–4

A comparison of the functional activity of monoclonal and polyclonal Rh antibodies. Downing I, et al. **Transfus Clin Biol** 1996;3(6):479–81

RHD epitope density profiles of RHD variant red cells analyzed by flow cytometry. Flegel WA, et al. **Transfus Clin Biol** 1996;3(6):429–31

Coordinator's report on the flow cytometric analysis of the Rh antibodies. Fletcher A, et al. **Transfus Clin Biol** 1996; 3(6):407–13

Anti–Rh(D) monoclonal antibodies: study of their in vitro functional properties. Glacet A, et al. **Transfus Clin Biol** 1996;3(6):465–8

Coordinator's report: an assessment of the functional activity of human Rh monoclonal antibodies after their evaluation by nine laboratories. Kumpel BM. **Transfus Clin Biol** 1996; 3(6):439–52

Characterization and functional activity of human Rh monoclonal antibodies. Kumpel BM, et al. **Transfus Clin Biol** 1996;3(6):453–8

Flow cytometric evaluation of non anti–RH1(D) monoclonal Rh antibodies. Le Pennec PY, et al. **Transfus Clin Biol** 1996;3(6):433–5

Serological studies of monoclonal RH1(D) antibodies with RH1(D) variants. Le Pennec PY, et al. **Transfus Clin Biol** 1996;3(6):401–4

Flow cytometric analysis of 68 monoclonal anti–D reagents. Lubenko A, et al. **Transfus Clin Biol** 1996;3(6):415–7

Reactivity of 62 Rh MAbs with weak and variant antigens. Morelati F, et al. **Transfus Clin Biol** 1996;3(6):359–66

Reactions of anti–D monoclonal antibodies with rhesus D variant cells. Overbeeke MA, et al. **Transfus Clin Biol** 1996; 3(6):397–9

Results of serological testing of D variants and weak D antigens. Písačka M, et al. **Transfus Clin Biol** 1996; 3(6):369–71

IgG anti–D MAbs in tests by flow cytometry. Roubinet F, et al. **Transfus Clin Biol** 1996;3(6):419–23

Rh serology—coordinator's report. Scott M. **Transfus Clin Biol** 1996;3(6):333–7

Specificity C and e: tests using Rh variant cells. Smart EA, et al. **Transfus Clin Biol** 1996;3(6):355–7

Human Rh monoclonal antibodies: assessment of functional activity by chemiluminescence and RhD antibody quantitation. Strachan AJ, et al. **Transfus Clin Biol** 1996; 3(6):483–7

Serological analysis of monoclonal anti–E and –e with Japanese E/e variant red cells. Uchikawa M, et al. **Transfus Clin Biol** 1996;3(6):387–9

Evaluation of Rh monoclonal antibodies for flow cytometry tests. Wendel RF, et al. **Transfus Clin Biol** 1996;3(6):425–7

A pharmacokinetic/pharmacodynamic model for the action of anti–D immunoglobulin in effecting circulatory clearance of Rh D+ red cells. Chapman GE. **Transfus Med** 1996 Sep;6(3):227–33

The abundance and organization of polypeptides associated

with antigens of the Rh blood group system. Gardner B, et al. **Transfus Med** 1991 Jun;1(2):77–85

Transcytosis of IgG anti–D by human term trophoblast cells in culture. Kumpel BM, et al. **Transfus Med** 1996 Jun; 6(2):115–20

Antibodies to human major histocompatibility complex products inhibit Fc gamma receptors types I and II. Neppert J, et al. **Transfus Med** 1996 Jun;6(2):125–31

Semi–quantitative assay of D antigen site density by flow cytometric analysis. Nicholson G, et al. **Transfus Med** 1991 Jun;1(2):87–90

The treatment of autoimmune thrombocytopaenic purpura with anti–D immunoglobulin: similar platelet responses in homozygous and heterozygous Rh(D) positive patients. Smith NA, et al. **Transfus Med** 1991 Sep;1(3):183–5

More on the R0 Har antigenic complex [letter; comment] Case J. **Transfusion** 1996 Nov–Dec;36(11–12):1034–5. Comment on: Transfusion 1996 Feb;36(2):104–8.

The clinical significance of anti–G in alloimmunized pregnant women [letter] Hadley A, et al. **Transfusion** 1997 Sep; 37(9):985

Anti–D in a D–positive renal transplant patient. Saba NF, et al. **Transfusion** 1997 Mar;37(3):321–4

Severe hemolytic anemia due to anti–E after renal transplantation [letter] Larrea L, et al. **Transplantation** 1997 Aug 15;64(3):550–1

Use of the DAF assay to assess the functional properties of polyclonal and monoclonal RhD antibodies. Ducrot T, et al. **Vox Sang** 1996;71(1):30–6

Flow–cytometric quantitation of anti–D antibodies. Hildén JO, et al. **Vox Sang** 1997;72(3):172–6

Selection of monoclonal antibodies for the identification of D variants: ability to detect weak D and to split epD2, epD5 and epD6/7. Jones J, et al. **Vox Sang** 1996;70(3):173–9

The effect of cysteine modification and proteinases on the major antigens (D, C, c, E and e) of the Rh blood group system. Schmitz G, et al. **Vox Sang** 1996;70(1):34–9

[Results of postpartum Rhesus prophylaxis 1967 to 1990] Schlensker KH, et al. **Geburtshilfe Frauenheilkd** 1996 Sep; 56(9):494–500 (Eng. Abstr.) **(Ger)**

[Perioperative management of a patient with severe anemia caused by rare Jr (a–) blood] Ehata T, et al. **Masui** 1997 Apr;46(4):525–30 (Eng. Abstr.) **(Jpn)**

[Clinical manifestations and treatment of Terson's syndrome] Prost ME. **Klin Oczna** 1996;98(5):371–4 (Eng. Abstr.) **(Pol)**

[2–stage determination of rhesus classification] Zhiburt EB, et al. **Klin Lab Diagn** 1996 May–Jun;(3):29–30 (Eng. Abstr.) **(Rus)**

RH IMMUNE GLOBULIN see **RHO(D) IMMUNE GLOBULIN**

RH ISOIMMUNIZATION

see related

ERYTHROBLASTOSIS, FETAL

Antecedents to and outcomes of Rh(D) isoimmunization: Mater Mothers Hospital, Brisbane, 1988–1995. Portmann C, et al. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):12–6

Anti–TJa alloimmunization (anti–PP1Pk): two consecutive pregnancies of an anti–TJa–carrying patient. Haentjens–Verbeke K, et al. **Fetal Diagn Ther** 1996 Mar–Apr;11(2):120–5

Role of C1q in Rhesus haemolytic disease of the newborn. Poorkhorsandi ME, et al. **Indian J Med Res** 1996 Sep; 104:208–12

ACOG educational bulletin. Management of isoimmunization in pregnancy. American College of Obstetricians and Gynecologists. **Int J Gynaecol Obstet** 1996 Nov; 55(2):183–90 (35 ref.)

Increase of fetal hematocrit decreases the middle cerebral artery peak systolic velocity in pregnancies complicated by rhesus alloimmunization. Mari G, et al. **J Matern Fetal Med** 1997 Jul–Aug;6(4):206–8

High–dose gammaglobulin (IVIG) followed by intrauterine transfusions (IUTs): a new alternative for the treatment of severe fetal hemolytic disease. Voto LS, et al. **J Perinat Med** 1997;25(1):85–8

Ultrasonographic fetal cardiac measurement in isoimmunized pregnancies. Ouzounian JG, et al. **J Reprod Med** 1997 Jun; 42(6):342–6

[Rh alloimmunization (letter; comment)] Boda D, et al. **Orv Hetil** 1996 Nov 3;137(44):2485. Comment on: Orv Hetil 1996 Mar 31;137(13):675–9. **(Hun)**

BLOOD

The disappearance of fetal and donor red blood cells in alloimmunised pregnancies: a reappraisal. Egberts J, et al. **Br J Obstet Gynaecol** 1997 Jul;104(7):818–24

Fetal RhD typing by polymerase chain reaction in pregnancies complicated by rhesus alloimmunization. Van den Veyver IB, et al. **Obstet Gynecol** 1996 Dec; 88(6):1061–7 (34 ref.)

Rhesus isoimmunization: increased hemolysis during early infancy. Hayde M, et al. **Pediatr Res** 1997 May;41(5):716–21

Differentiation of anti–D, –C, and –G: clinical relevance in alloimmunized pregnancies. Shirey RS, et al. **Transfusion** 1997 May;37(5):493–6

COMPLICATIONS

Clinical biological features of Ballantyne syndrome and the role of placental hydrops. Carbillon L, et al. **Obstet Gynecol Surv** 1997 May;52(5):310–4 (27 ref.)

Rhesus haemolytic disease of the newborn, complicating a quadruplet pregnancy. Elasoud K, et al. **Ulster Med J** 1997 May;66(1):62–4

DIAGNOSIS

Specificity and sensitivity of RHD genotyping methods by PCR–based DNA amplification. Aubin JT, et al. **Br J Haematol** 1997 Aug;98(2):356–64

EPIDEMIOLOGY

Mothers at risk of alloimmunization to the Rh (D) antigen and availability of gamma–globulin at the Mexican Institute of Social Security. Zavala C, et al. **Arch Med Res** 1996 Autumn;27(3):373–6

ETHNOLOGY

Differences between RhD–negative Africans and RhD–negative Europeans [letter] Daniels G, et al. **Lancet** 1997 Sep 20;350(9081):862–3

GENETICS

Fetal Rhesus D genotyping on amniocytes in alloimmunised pregnancies using fluorescence duplex polymerase chain reaction. Crombach G, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):15–9

Management of rhesus isoimmunization by preimplantation genetic diagnosis. Avner R, et al. **Mol Hum Reprod** 1996 Jan;2(1):60–2

IMMUNOLOGY

The management of hemolytic disease in the fetus and newborn. Bowman J. **Semin Perinatol** 1997 Feb;21(1):39–44 (19 ref.)

The clinical significance of anti–G in alloimmunized pregnant women [letter] Hadley A, et al. **Transfusion** 1997 Sep; 37(9):985

PREVENTION & CONTROL

Anti–D administration in early pregnancy––time for a new protocol [letter; comment] Carmody F. **Aust N Z J Obstet Gynaecol** 1996 May;36(2):227–8. Comment on: Aust N Z J Obstet Gynaecol 1995 Nov;35(4):385–7.

Anti–D administration in early pregnancy – time for a new protocol [see comments] de Crespigny L, et al. **Aust N Z J Obstet Gynaecol** 1995 Nov;35(4):385–7. Comment in: Aust N Z J Obstet Gynaecol 1996 May;36(2):227–8.

Royal College of Physicians of Edinburgh/Royal College of Obstetricians and Gynaecologists Consensus Conference on anti–D prophylaxis, 7–8 April 1997 [letter] **Br J Haematol** 1997 Jun;97(4):927–8

The outcome of babies of mothers with severe rhesus incompatibility treated at Tygerberg Hospital, 1980–1993. Kirsten GF, et al. **S Afr Med J** 1995 Oct;85(10 Suppl):1091–6

A pharmacokinetic/pharmacodynamic model for the action of anti–D immunoglobulin in effecting circulatory clearance of Rh D+ red cells. Chapman GE. **Transfus Med** 1996 Sep;6(3):227–33

Royal College of Physicians of Edinburgh/Royal College of Obstetricians and Gynaecologists consensus conference on anti–D prophylaxis 7 & 8 April 1997. Urbaniak SJ. **Transfus Med** 1997 Jun;7(2):143–4 (0 ref.)

[Is it always necessary to give anti–D gamma–globulins in the case of spontaneous miscarriage in Rhesus–negative patients?] Salvat J, et al. **Contracept Fertil Sex** 1997 Apr; 25(4):V–IX (27 ref.) **(Fre)**

[Is Rhesus prophylaxis indicated also with positive antibodies?] Behrens O. **Z Geburtshilfe Neonatol** 1996 Nov–Dec;200(6):246 **(Ger)**

[Rhesus prophylaxis––history and current status] Behrens O, et al. **Zentralbl Gynakol** 1997;119(5):204–10 (Eng. Abstr.) **(Ger)**

THERAPY

Intravenous immune globulin in neonatal ABO isoimmunization: factors associated with clinical efficacy. Hammerman C, et al. **Biol Neonate** 1996;70(2):69–74

Preventing rhesus D haemolytic disease of the newborn by giving anti–D immunoglobulin: are the guidelines being adequately followed? [letter; comment] Harding K. **Br J Obstet Gynaecol** 1997 Jul;104(7):869–70. Comment on: Br J Obstet Gynaecol 1997 Jan;104(1):37–41.

Preventing Rhesus D haemolytic disease of the newborn by giving anti–D immunoglobulin: are the guidelines being adequately followed? [see comments] Howard HL, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):37–41. Comment in: Br J Obstet Gynaecol 1997 Jul;104(7):869–70.

Tubo–peritoneal factor infertility: a distant sequel to intrauterine transfusion for rhesus disease. Harrison RF, et al. **Hum Reprod** 1996 Oct;11(10):2134–5

Fetal outcome following intrauterine intravascular transfusion in rhesus alloimmunization. Merchant RH, et al. **Indian Pediatr** 1995 Sep;32(9):971–7

Intravenous immunoglobulin as primary therapy or adjuvant therapy to intrauterine fetal blood transfusion: a new approach in the management of severe Rh–immunization. Deka D, et al. **J Obstet Gynaecol Res** 1996 Dec;22(6):561–7

High–dose intravenous immunoglobulins [letter; comment] Rosti L. **J Perinat Med** 1996;24(5):539. Comment on: J Perinat Med 1995;23(6):443–51.

Neonatal administration of high–dose intravenous immunoglobulin in rhesus hemolytic disease [see comments] Voto LS, et al. **J Perinat Med** 1995;23(6):443–51. Comment in: J Perinat Med 1996;24(5):539.

Intravenous immune globulin in the management of severe Rh D hemolytic disease. Porter TF, et al. **Obstet Gynecol Surv** 1997 Mar;52(3):193–7 (19 ref.)

Monoclonal anti–D for prophylaxis of RhD haemolytic disease of the newborn. Kumpel BM. **Transfus Clin Biol** 1997 Jul;4(4):351–6

RHABDITIDA

Differential susceptibility of Dysmicoccus vaccinii (Homoptera: Pseudococcidae) to entomopathogenic nematodes (Rhabditida: Heterorhabditidae and Steinernematidae). Stuart RJ, et al. **J Econ Entomol** 1997 Aug;90(4):925–32

ANATOMY & HISTOLOGY

A multivariate analysis of morphometric characters of Heterorhabditis species (Nemata: Heterorhabditidae) and the role of morphometrics in the taxonomy of species of the genus. Stock SP, et al. **J Parasitol** 1996 Oct; 82(5):806–13

CLASSIFICATION

A multivariate analysis of morphometric characters of Heterorhabditis species (Nemata: Heterorhabditidae) and the role of morphometrics in the taxonomy of species of the genus. Stock SP, et al. **J Parasitol** 1996 Oct; 82(5):806–13

Use of species–specific satellite DNAs as diagnostic probes in the identification of Steinernematidae and Heterorhabditidae entomopathogenic nematodes. Grenier E, et al. **Parasitology** 1996 Nov;113 (Pt 5):483–9

DRUG EFFECTS

Glycogen: its importance in the infectivity of aged juveniles of Steinernema carpocapsae. Patel MN, et al. **Parasitology** 1997 Jun;114 (Pt 6):591–6

[An analysis of the results of histological and histochemical research on the integumental tissues and the digestive system of nematodes of the suborder Strongylata after the use of anthelmintics] Bogoiavlenskii IuK. **Med Parazitol (Mosk)** 1996 Oct–Dec;(4):54–8 (17 ref.) (Eng. Abstr.) **(Rus)**

GENETICS

The 5.8S rDNA sequences of 18 species of bursate nematodes (order Strongylida): comparison with rhabditid and tylenchid nematodes. Chilton NB, et al. **Int J Parasitol** 1997 Jan;27(1):119–24

Phylogenetic relationships of entomopathogenic nematodes (Heterorhabditidae and Steinernematidae) inferred from partial 18S rRNA gene sequences. Liu J, et al. **J Invertebr Pathol** 1997 May;69(3):246–52

Molecular characterization of two species–specific tandemly repeated DNAs from entomopathogenic nematodes Steinernema and Heterorhabditis (Nematoda:Rhabditida). Grenier E, et al. **Mol Biochem Parasitol** 1996 Dec 2; 83(1):47–56

Use of species–specific satellite DNAs as diagnostic probes in the identification of Steinernematidae and Heterorhabditidae entomopathogenic nematodes. Grenier E, et al. **Parasitology** 1996 Nov;113 (Pt 5):483–9

IMMUNOLOGY

Encapsulation of the entomopathogenic nematode Steinernema feltiae in Tipula oleracea. Peters A, et al. **J Invertebr Pathol** 1997 May;69(3):218–22

ISOLATION & PURIFICATION

Entomopathogenic nematode (Heterorhabditidae and Steinernematidae) spatial distribution in turfgrass. Campbell JF, et al. **Parasitology** 1996 Nov;113 (Pt 5):473–82

Ocular disease associated with Rhabditis orbitalis nematodes in a common dormouse (Muscardinus avellanarius). Sainsbury AW, et al. **Vet Rec** 1996 Aug 24;139(8):192–3

MICROBIOLOGY

Fast and accurate identification of Xenorhabdus and Photorhabdus species by restriction analysis of PCR–amplified 16S rRNA genes. Brunel B, et al. **Appl Environ Microbiol** 1997 Feb;63(2):574–80

PATHOGENICITY

Pathogenicity of axenic Steinernema feltiae, Xenorhabdus bovienii, and the bacto–helminthic complex to larvae of Tipula oleracea (Diptera) and Galleria mellonella (Lepidoptera). Ehlers RU, et al. **J Invertebr Pathol** 1997 May;69(3):212–7

RHABDITIDA

Effects of infected insects on secondary invasion of steinernematid entomopathogenic nematodes. Glazer I. **Parasitology** 1997 Jun;114 (Pt 6):597-604

PHYSIOLOGY

Desiccation survival and water contents of entomopathogenic nematodes, Steinernema spp. (Rhabditida:Steinernematidae). Patel MN, et al. **Int J Parasitol** 1997 Jan;27(1):61-70

Host recognition behaviour predicts host suitability in the entomopathogenic nematode Steinernema carpocapsae (Rhabditida:Steinernematidae). Lewis EE, et al. **Parasitology** 1996 Dec;113 (Pt 6):573-9

RHABDITIDA INFECTIONS

VETERINARY

What is your diagnosis? Severe granulomatous osteomyelitis associated with Micronema deletrix infection in a horse. Kreuder C, et al. **J Am Vet Med Assoc** 1996 Sep 15; 209(6):1070-1

Ocular disease associated with Rhabditis orbitalis nematodes in a common dormouse (Muscardinus avellanarius). Sainsbury AW, et al. **Vet Rec** 1996 Aug 24;139(8):192-3

RHABDITIS see **RHABDITOIDEA**

RHABDITOIDEA

GENETICS

Phylogenetic relationships of entomopathogenic nematodes (Heterorhabditidae and Steinernematidae) inferred from partial 18S rRNA gene sequences. Liu J, et al. **J Invertebr Pathol** 1997 May;69(3):246-52

Genome sizes of the entomopathogenic nematodes Steinernema carpocapsae and Heterorhabditis bacteriophora (Nematoda:Rhabditida). Grenier E, et al. **Parasitology** 1997 May;114 (Pt 5):497-501

MICROBIOLOGY

Larvicidal activity of the symbiotic bacterium Xenorhabdus japonicus from the entomopathogenic nematode Steinernema kushidai against Anomala cuprea (Coleoptera:Scarabaeidae). Tachibana M, et al. **J Invertebr Pathol** 1996 Sep;68(2):152-9

Mechanisms of specificity of association between the nematode Steinernema scapterisci and its symbiotic bacterium. Grewal PS, et al. **Parasitology** 1997 May;114 (Pt 5):483-8

PATHOGENICITY

Neutral lipids and the assessment of infectivity in entomopathogenic nematodes: observations on four Steinernema species. Patel MN, et al. **Parasitology** 1997 May;114 (Pt 5):489-96

RHABDOID TUMOR

Malignant rhabdoid tumor of the uterine corpus [letter; comment] Niemann T. **Gynecol Oncol** 1997 Jan;64(1):181-2 (5 ref.). Comment on: Gynecol Oncol 1996 Apr;61(1):142-6.

CONGENITAL

MRI of congenital rhabdoid tumor of the neck: case report. Roy SS, et al. **Neuroradiology** 1996 May;38(4):373-4

DIAGNOSIS

The role of imaging in renal and extra-renal rhabdoid tumours. Roebuck DJ. **Australas Radiol** 1996 Aug; 40(3):310-8

Malignant rhabdoid tumor presenting as a hemangioma. Albregts AE, et al. **Pediatr Dermatol** 1996 Nov-Dec; 13(6):468-71

Malignant rhabdoid tumor of the central nervous system. Ruiz ME, et al. **Wis Med J** 1996 Dec;95(12):864-6 (7 ref.)

[Rhabdoid tumor of the central nervous system. Ultrasonographic, computed tomographic and MRI aspects apropos of a case in an infant] Guessoum M, et al. **J Neuroradiol** 1997 Jun;24(1):60-4 (16 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Chromosome analyses in a rhabdoid tumor of the brain. Klopfenstein K, et al. **Cancer Genet Cytogenet** 1997 Feb; 93(2):152-6

Immunohistochemical and cytogenetic findings in malignant rhabdoid tumor. Kaiserling E, et al. **Gen Diagn Pathol** 1996 May;141(5-6):327-37

Narrowing the critical region for a rhabdoid tumor locus in 22q11. Biegel JA, et al. **Genes Chromosomes Cancer** 1996 Jun;16(2):94-105

Loss of heterozygosity at chromosome regions 22q11-12 and 11p15.5 in renal rhabdoid tumors. Schofield DE, et al. **Genes Chromosomes Cancer** 1996 Jan;15(1):10-7

IMMUNOLOGY

Immunohistochemical and cytogenetic findings in malignant rhabdoid tumor. Kaiserling E, et al. **Gen Diagn Pathol** 1996 May;141(5-6):327-37

PATHOLOGY

Malignant rhabdoid tumor of the liver diagnosed by fine needle aspiration cytology. A case report. Pogačnik A, et al. **Acta Cytol** 1997 Mar-Apr;41(2):539-43

Rhabdoid cells in peritoneal fluid. A case report. Stastny JF, et al. **Acta Cytol** 1996 Nov-Dec;40(6):1289-92

Fine needle aspiration cytology of a recurrent malignant tumor of the kidney with rhabdoid features in an adult. A case report. Yusuf Y, et al. **Acta Cytol** 1996 Nov-Dec; 40(6):1313-6

Immunohistochemistry of primary central nervous system malignant rhabdoid tumors: report of five cases and review of the literature. Behring B, et al. **Acta Neuropathol (Berl)** 1996;91(6):578-86

"Proximal-type" epithelioid sarcoma, a distinctive aggressive neoplasm showing rhabdoid features. Clinicopathologic, immunohistochemical, and ultrastructural study of a series. Guillou L, et al. **Am J Surg Pathol** 1997 Feb;21(2):130-46 (70 ref.)

Malignant rhabdoid tumor of brain: an aggressive clinical entity. Fisher BJ, et al. **Can J Neurol Sci** 1996 Nov; 23(4):257-63

Are the globular eosinophilic paranuclear inclusions seen in fine-needle aspirates pathognomonic of malignant rhabdoid tumor? [letter; comment] Pérez-Guillermo M, et al. **Diagn Cytopathol** 1996 Aug;15(2):179-81. Comment on: Diagn Cytopathol 1992;8(4):369-73.

Malignant rhabdoid tumor of the colon. Report of a case with molecular analysis. Marcus VA, et al. **Dis Colon Rectum** 1996 Nov;39(11):1322-6

Endometrial stromal sarcoma with sex cord-like areas and focal rhabdoid differentiation. McCluggage WG, et al. **Histopathology** 1996 Oct;29(4):369-74

Malignant rhabdoid tumour of stomach. Read HS, et al. **Histopathology** 1996 Nov;29(5):474-7

Rhabdoid tumour of the kidney: a clinicopathological study of 22 patients from the International Society of Paediatric Oncology (SIOP) nephroblastoma file. Vujanić GM, et al. **Histopathology** 1996 Apr;28(4):333-40 (20 ref.)

Rhabdoid phenotype in squamous carcinoma. A report of two cases. Pai SA, et al. **Indian J Cancer** 1996 Sep; 33(3):161-4

Case report: intrahepatic cholangiocarcinoma with rhabdoid transformation. Honda M, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):771-4

Cerebral rhabdomyosarcoma with rhabdoid tumor-like features. Caputo V, et al. **J Neurooncol** 1997 Mar;32(1):81-6

Localized malignant peritoneal mesothelioma containing rhabdoid cells. Matsukuma S, et al. **Pathol Int** 1996 May; 46(5):389-91

Malignant rhabdoid tumor in adults--heterogenous tumors with a unique morphological phenotype. Leong FJ, et al. **Pathol Res Pract** 1996 Aug;192(8):796-807 (34 ref.)

Primary malignant rhabdoid tumor of the central nervous system. Bhattacharjee M, et al. **Ultrastruct Pathol** 1997 Jul-Aug;21(4):361-8 (23 ref.)

Central nervous system atypical teratoid/rhabdoid tumors of infancy and childhood. Bhattacharjee M, et al. **Ultrastruct Pathol** 1997 Jul-Aug;21(4):369-78 (14 ref.)

Cytopathology and ultrastructure of primary rhabdoid tumor of lung. Rubenchik I, et al. **Ultrastruct Pathol** 1996 Jul-Aug;20(4):355-60

[A malignant rhabdoid tumor of the soft tissues] Popkhristova E. **Khirurgiia (Sofiia)** 1996;49(6):53-4 **(Bul)**

[Undifferentiated soft tissue tumor with rhabdoid phenotype (extra-renal rhabdoid tumor). Report of a congenital case associated with medulloblastoma in a brother] Costes V, et al. **Ann Pathol** 1997 Mar;17(1):41-3 (Eng. Abstr.) **(Fre)**

[Malignant rhabdoid tumor of the kidney. A poorly differentiated type with difficult diagnosis] Fabre M, et al. **Arch Anat Cytol Pathol** 1996;44(1):49-52 (Eng. Abstr.) **(Fre)**

[A malignant rhabdoid tumor appearing simultaneously in the kidney and the brain of an infant: case report] Morizane A, et al. **No Shinkei Geka** 1997 Jul;25(7):665-9 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Rhabdoid tumor of the kidney in children: a comparative study of 21 cases. Agrons GA, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):447-51

SECONDARY

Implantation metastasis of primary malignant rhabdoid tumor of the brain in an adult (one case report). Ashraf R, et al. **Med Pediatr Oncol** 1997 Mar;28(3):223-7

SURGERY

Pathological case of the month. Rhabdoid tumor of the kidney. Tarantino MD, et al. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):629-30

Surgical tactics in the treatment of malignant renal tumors in childhood. Pýcha K, et al. **Pediatr Surg Int** 1997 Feb; 12(2-3):145-7

ULTRASTRUCTURE

Appraisal of the comparative utility of immunohistochemistry and electron microscopy in the diagnosis of childhood round cell tumors. Mierau GW, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):507-17

VETERINARY

Rhabdoid tumor in the brain of a dog. Steele KE, et al. **Vet Pathol** 1997 Jul;34(4):359-63

RHABDOMYOLYSIS

[Rhabdomyolysis and acute kidney failure] Rosa EC, et al. **Rev Assoc Med Bras** 1996 Jan-Mar;42(1):39-45 (71 ref.) **(Por)**

[Diagnosis and treatment of rhabdomyolysis and myoglobinuria (letter; comment)] Pensado A, et al. **Rev Esp Anestesiol Reanim** 1996 Aug-Sep;43(7):263. Comment on: Rev Esp Anestesiol Reanim 1995 Nov;42(9):400-1. **(Spa)**

BLOOD

Serum cardiac troponin I, creatine kinase (CK), and CK-MB in early posttraumatic rhabdomyolysis [letter] Benoist JF, et al. **Clin Chem** 1997 Feb;43(2):416-7

[Plasma myoglobin and continuous hemofiltration in patients with rhabdomyolysis and acute kidney failure] Timokhov VS, et al. **Ter Arkh** 1997;69(6):40-4 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Rhabdomyolysis: a rare adverse effect of diphenhydramine overdose. Emadian SM, et al. **Am J Emerg Med** 1996 Oct; 14(6):574-6

3,4-methylenedioxymethamphetamine (MDMA, or "ecstasy") and associated hypoglycemia [letter] Montgomery H, et al. **Am J Emerg Med** 1997 Mar;15(2):218

Association of elevated umbilical cord blood creatine kinase and myoglobin levels with the presence of cocaine metabolites in maternal urine. Roby PV, et al. **Am J Perinatol** 1996 Nov;13(8):453-5

Lovastatin-induced rhabdomyolysis possibly associated with clarithromycin and azithromycin. Grunden JW, et al. **Ann Pharmacother** 1997 Jul-Aug;31(7-8):859-63

Rhabdomyolysis associated with haloperidol without evidence of NMS [letter] Marinella MA. **Ann Pharmacother** 1997 Jul-Aug;31(7-8):927-8

Rhabdomyolysis induced by epsilon-aminocaproic acid. Seymour BD, et al. **Ann Pharmacother** 1997 Jan;31(1):56-8

Rhabdomyolysis associated with azathioprine hypersensitivity syndrome [letter] Compton MR, et al. **Arch Dermatol** 1996 Oct;132(10):1254-5

Coadministration of itraconazole with hypolipidemic agents may induce rhabdomyolysis in healthy individuals [letter] Horn M. **Arch Dermatol** 1996 Oct;132(10):1254

Rhabdomyolysis after lung transplantation [letter] Malouf MA, et al. **Aust N Z J Med** 1997 Apr;27(2):186

Acute renal failure due to rhabdomyolysis in presence of concurrent ciprofibrate and ibuprofen treatment. Ramachandran S, et al. **BMJ** 1997 May 31;314(7094):1593

Rhabdomyolysis following administration of cyclophosphamide: a case report in a BMT recipient. Tabata N, et al. **Bone Marrow Transplant** 1996 Jun; 17(6):1167-9

Bone scintigraphy of drug-induced rhabdomyolysis: antihyperlipidemia agent. Takayama T, et al. **Clin Nucl Med** 1996 Dec;21(12):988-9

Mild rhabdomyolysis after high-dose trimethoprim-sulfamethoxazole in a patient with HIV infection. Anders HJ, et al. **Eur J Med Res** 1997 May 28; 2(5):198-200

Research into individual predisposition to develop acute rhabdomyolysis attributed to fenoverine. Jouglard J, et al. **Hum Exp Toxicol** 1996 Oct;15(10):815-20

MDMA induced hyperthermia: report of a fatality and review of current therapy. Dar KJ, et al. **Intensive Care Med** 1996 Sep;22(9):995-6 (13 ref.)

Rhabdomyolysis and pulmonary hypertension in a child, possibly due to long-term high-dose propofol infusion [letter] van Straaten EA, et al. **Intensive Care Med** 1996 Sep;22(9):997

Anticholinergic syndrome with severe rhabdomyolysis--an unusual feature of amantadine toxicity [letter] Yang CC, et al. **Intensive Care Med** 1997 Mar;23(3):355-6

Possible increased risk of rhabdomyolysis during concomitant use of simvastatin and gemfibrozil. van Puijenbroek EP, et al. **J Intern Med** 1996 Dec;240(6):403-4

Myositis and rhabdomyolysis associated with concurrent use of simvastatin and nefazodone [letter] Jacobson RH, et al. **JAMA** 1997 Jan 22-29;277(4):296-7

Renal lesions in rhabdomyolysis caused by Pseudechis australis snake myotoxin. Ponraj D, et al. **Kidney Int** 1997 Jun;51(6):1956-69

Rhabdomyolysis: an unusual complication of cytotoxic chemotherapy. Levy RJ, et al. **Med Oncol** 1995 Dec; 12(4):219-22

Rhabdomyolysis and acute renal failure associated with bezafibrate treatment [letter] Górriz JL, et al. **Nephrol Dial Transplant** 1995 Dec;10(12):2371-2

A chronic glue sniffer with hyperchloraemia metabolic acidosis, rhabdomyolysis, irreversible quadriplegia, central

pontine myelinolysis, and hypothyroidism. Hong JJ, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1848–9

Drug–interaction–induced rhabdomyolysis. Segaert MF, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1846–7

HMG–CoA reductase inhibitor treatment in renal insufficiency [editorial; comment] Wanner C. **Nephrol Dial Transplant** 1996 Oct;11(10):1951–2. Comment on: Nephrol Dial Transplant 1996 Oct;11(10):2059–60.

Rhabdomyolysis and acute renal failure associated with gemfibrozil therapy [letter] Górriz JL, et al. **Nephron** 1996; 74(2):437–8

Severe rhabdomyolysis induced by a retard formulation of bezafibrate in a CAPD patient [letter] Panuccio V, et al. **Nephron** 1996;73(4):736

Gluteal compartment syndrome due to rhabdomyolysis after heroin abuse. Klockgether T, et al. **Neurology** 1997 Jan; 48(1):275–6

Rhabdomyolysis and anesthesia: a report of two cases and review of the literature. Pedrozzi NE, et al. **Pediatr Neurol** 1996 Oct;15(3):254–7 (52 ref.)

Acute hepatitis, rhabdomyolisis and pancytopenia associated with perazine therapy [letter] Pantel J, et al. **Pharmacopsychiatry** 1996 Jan;29(1):43

Coma, myalagia and hypoxia. Froomes PR, et al. **Postgrad Med J** 1996 Oct;72(852):629–30

Rhabdomyolysis associated with simvastatin–gemfibrozil therapy. Tal A, et al. **South Med J** 1997 May;90(5):546–7

Inadvertent intraoperative myelography with Hypaque: case report and discussion. Killeffer JA, et al. **Surg Neurol** 1997 Jul;48(1):70–3 (23 ref.)

[Rhabdomyolysis and unexplained malaise. Role of combination of ciprofibrate and norfloxacin (letter)] Blain H, et al. **Rev Med Interne** 1996;17(10):859–60 **(Fre)**

[Thyroid myopathy disclosed by a fibrate (letter)] Schlienger JL, et al. **Rev Med Interne** 1997;18(2):169–70 **(Fre)**

[Rhabdomyolysis in antiretroviral therapy with Lamivudin] Mendila M, et al. **Dtsch Med Wochenschr** 1997 Aug 15; 122(33):1003–6 (Eng. Abstr.) **(Ger)**

[Drug–induced rhabdomyolysis and lesions of peripheral nerves. Sequelae of local ischemia within the scope of circulatory collapse?] Amoiridis G, et al. **Nervenarzt** 1996 Dec;67(12):1023–6 (Eng. Abstr.) **(Ger)**

[Acute rhabdomyolysis in status asthmaticus] Eisenhuber E, et al. **Wien Klin Wochenschr** 1996;108(16):521–4 (Eng. Abstr.) **(Ger)**

[Painful myoedema caused by rhabdomyolysis: a proposal of a new integrated therapeutic treatment] Bagnoli L, et al. **Recenti Prog Med** 1997 Feb;88(2):80–1 **(Ita)**

[Rhabdomyolysis and acute renal failure caused by haloperidol–decanoate (neuroleptic malignant syndrome)] Lazzarin M, et al. **Recenti Prog Med** 1996 Sep;87(9):422–4 (Eng. Abstr.) **(Ita)**

[Rhabdomyolysis induced by succinylcholine chloride and sevoflurane in an elderly man] Takamatsu F, et al. **Masui** 1996 Nov;45(11):1406–9 (Eng. Abstr.) **(Jpn)**

[Case of toluene poisoning associated with acute kidney failure] Kadomitsu M, et al. **Nippon Naika Gakkai Zasshi** 1994 Jan 10;83(1):120–1 **(Jpn)**

[Nontraumatic rhabdomyolysis due to oral poisoning by doxylamine succinate (letter)] Paytubí Garí C, et al. **Med Clin (Barc)** 1997 Mar 8;108(9):356 (5 ref.) **(Spa)**

COMPLICATIONS

Rhabdomyolysis and akinetic hyperthermic crisis complicating Parkinson's disease [letter] Jayaram L, et al. **Aust N Z J Med** 1997 Apr;27(2):194–5

Hyperglycemia, lumbar plexopathy and hypokalemic rhabdomyolysis complicating Conn's syndrome. Chow CP, et al. **Can J Neurol Sci** 1997 Feb;24(1):67–9

Non–traumatic rhabdomyolysis and acute renal failure. Chang CY, et al. **Chang Keng I Hsueh** 1996 Mar;19(1):10–5

Streptococcus suis infection complicated by purpura fulminans and rhabdomyolysis: case report and review. Tambyah PA, et al. **Clin Infect Dis** 1997 Apr;24(4):710–2

Cardiac arrest on the day following surgery in children with unrecognized rhabdomyolysis. Warner LO, et al. **J Clin Anesth** 1997 Sep;9(6):501–6

Acute pancreatitis with diabetic ketoacidosis associated with hypermyoglobinemia, acute renal failure, and DIC. Nakano S, et al. **J Gastroenterol** 1996 Aug;31(4):623–6

Acute renal failure, compartment syndrome, and systemic capillary leak syndrome complicating carbon monoxide poisoning. Abdul–Ghaffar NU, et al. **J Toxicol Clin Toxicol** 1996;34(6):713–9

Acute renal failure due to rhabdomyolysis in diabetic patients. Higa EM, et al. **Ren Fail** 1997 Mar;19(2):289–93

Prophylaxis of acute renal failure in patients with rhabdomyolysis. Homsi E, et al. **Ren Fail** 1997 Mar; 19(2):283–8

Acute renal failure due to traumatic rhabdomyolysis. Naqvi R, et al. **Ren Fail** 1996 Jul;18(4):677–9

Rhabdomyolysis due to hyperosmolarity leading to acute renal failure. Rosa EC, et al. **Ren Fail** 1997 Mar; 19(2):295–301

Acute renal failure caused by nontraumatic rhabdomyolysis. Tozzo C, et al. **Ren Fail** 1997 May;19(3):439–42

[Rhabdomyolysis related–acute renal failure in a patient with hyperosmolar nonketotic diabetic coma (HNKC): demonstration of myoglobin casts after normalization of renal function] Nakazawa A, et al. **Nippon Jinzo Gakkai Shi** 1996 Aug;38(8):388–92 (Eng. Abstr.) **(Jpn)**

[Two elderly patients with Rhabdomyolysis and respiratory infection with Streptococcus pneumoniae] Teramoto S, et al. **Nippon Ronen Igakkai Zasshi** 1997 Jan;34(1):49–53 (Eng. Abstr.) **(Jpn)**

[An elderly patient with Leriche syndrome complicated by congestive heart failure and rhabdomyolysis] Yabe T, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jan;33(1):38–42 (Eng. Abstr.) **(Jpn)**

[Acute renal failure in the course of rhabdomyolysis after status epilepticus] Syzdół P, et al. **Pol Merkuriusz Lek** 1996 Dec;1(6):412–3 (Eng. Abstr.) **(Pol)**

[Hepatic dysfunction in myoglobinuric acute renal failure (rhabdomyolysis)—experimental study in rats] Coelho AM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 Nov–Dec; 51(6):228–31 (Eng. Abstr.) **(Por)**

DIAGNOSIS

A 41–year–old man with thigh pain and loss of sensation in the toes. Cohen RI, et al. **Chest** 1997 Mar;111(3):810–2

Idiopathic rhabdomyolysis [see comments] Fraser J, et al. **J R Soc Med** 1996 Dec;89(12):706–7. Comment in: J R Soc Med 1997 Feb;90(2):120.

[A case of rhabdomyolysis] Carfora M, et al. **Radiol Med (Torino)** 1996 Sep;92(3):306–7 **(Ita)**

ENZYMOLOGY

Creatine phosphokinase elevation in patients presenting to the emergency department with cocaine–related complaints. Counselman FL, et al. **Am J Emerg Med** 1997 May;15(3):221–3

ETIOLOGY

Bilateral, exercise–induced thigh compartment syndrome diagnosed as exertional rhabdomyolysis. A case report and review of the literature. Wise JJ, et al. **Am J Sports Med** 1997 Jan–Feb;25(1):126–9

Exaggerated lithotomy position–related rhabdomyolysis. Biswas S, et al. **Am Surg** 1997 Apr;63(4):361–4 (23 ref.)

Lumbar muscle rhabdomyolysis after abdominal aortic surgery. Bertrand M, et al. **Anesth Analg** 1997 Jul; 85(1):11–5

Rhabdomyolysis and suicidal hydrocarbon inhalation [letter] Betrosian A, et al. **Ann Emerg Med** 1997 Feb;29(2):301–2

Canebrake rattlesnake envenomation. Carroll RR, et al. **Ann Emerg Med** 1997 Jul;30(1):45–8

Trifunctional enzyme deficiency: adult presentation of a usually fatal beta–oxidation defect. Schaefer J, et al. **Ann Neurol** 1996 Oct;40(4):597–602

Rhabdomyolysis in patients with acute lymphoblastic leukemia. Morales–Polanco M, et al. **Arch Med Res** 1997 Autumn;28(3):377–81

The causes of rhabdomyolysis [letter] Humphries D. **Aust Fam Physician** 1997 Aug;26(8):987

Rhabdomyolysis associated with septicemia after autologous bone marrow transplantation [letter] Sanfructuoso C, et al. **Bone Marrow Transplant** 1997 Jan;19(1):95

Cholera associated with acute renal failure and rhabdomyolysis: a case report. Lin MC, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):371–6

Acute renal failure from rhabdomyolysis following influenza A in a child. Goebel J, et al. **Clin Pediatr (Phila)** 1997 Aug;36(8):479–81

Rhabdomyolysis and renal function impairment after isolated limb perfusion—comparison between the effects of perfusion with rhTNF alpha and a 'triple–drug' regimen. Hohenberger P, et al. **Eur J Cancer** 1997 Apr;33(4):596–601

Severe hypokalemia causing rhabdomyolysis and quadriplegia in a patient with AIDS [letter] Joly LM, et al. **Intensive Care Med** 1997 May;23(5):596–7

Case 2—1997. Aorto–iliac occlusion and rhabdomyolysis after coronary artery revascularization [clinical conference] Menon G, et al. **J Cardiothorac Vasc Anesth** 1997 Apr; 11(2):242–5

Severe rhabdomyolysis following a viral illness: a case report and review of the literature. Pesik NT, et al. **J Emerg Med** 1996 Jul–Aug;14(4):425–8

Blood lactate threshold and type II fibre predominance in patients with exertional heatstroke. Hsu YD, et al. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):182–7

Livedo reticularis, rhabdomyolysis, massive intestinal infarction, and death after carbon dioxide arteriography. Rundback JH, et al. **J Vasc Surg** 1997 Aug;26(2):337–40 (13 ref.)

Fatal rhabdomyolysis and multiple organ failure associated with adjuvant high–dose interferon alfa in malignant melanoma [letter] Reinhold U, et al. **Lancet** 1997 Feb 22; 349(9051):540–1

Rhabdomyolysis with acute renal failure and disseminated intravascular coagulation: association with acetaminophen and ethanol. Riggs JE, et al. **Mil Med** 1996 Nov; 161(11):708–9

Myocarditis, rhabdomyolysis and myoglobinuric renal failure complicating influenza in a young adult [letter] McGregor D, et al. **N Z Med J** 1997 Jun 27;110(1046):237

Myoglobinuria, malignant hyperthermia, neuroleptic malignant syndrome and serotonin syndrome. Bertorini TE. **Neurol Clin** 1997 Aug;15(3):649–71 (193 ref.)

Severe rhabdomyolysis with good recovery in a patient with head injury: case report. Chen CM, et al. **Neurosurgery** 1997 Jul;41(1):293–6

Rhabdomyolysis and acute renal failure in a child with influenza A infection. Dell KM, et al. **Pediatr Nephrol** 1997 Jun;11(3):363–5

Rhabdomyolysis following status asthmaticus. Bando T, et al. **Respiration** 1996;63(5):309–11

An unusual cause of rhabdomyolysis [letter] Fourie A, et al. **S Afr Med J** 1996 Dec;86(12):1563–4

When exercise goes awry: exertional rhabdomyolysis. Hamer R. **South Med J** 1997 May;90(5):548–51

Rhabdomyolysis and hemolysis associated with sickle cell trait and glucose–6–phosphate dehydrogenase deficiency. Kimmick G, et al. **South Med J** 1996 Nov;89(11):1097–8

[Legionella infection with rhabdomyolysis] Lihn AM, et al. **Ugeskr Laeger** 1997 Jul 21;159(30):4654–5 (Eng. Abstr.) **(Dan)**

[Rhabdomyolysis and kidney insufficiency in van Weil syndrome] van de Wouw AJ, et al. **Ned Tijdschr Geneeskd** 1996 Sep 7;140(36):1820–2 (Eng. Abstr.) **(Dut)**

[Chlamydia pneumoniae infection: an uncommon cause of rhabdomyolysis (letter)] Chemlal K, et al. **Presse Med** 1996 Dec 21;25(40):2049 **(Fre)**

[Latrodectism: a rare cause of rhabdomyolysis (letter)] Fouché R, et al. **Presse Med** 1997 Jun 14;26(20):954 **(Fre)**

[Depressive status, rhabdomyolysis and inflammatory syndrome in a 71–year–old patient] Colin JY, et al. **Rev Med Interne** 1997;18 Suppl 3:303s–304s **(Fre)**

[Generalized gas gangrene infection with rhabdomyloysis following cholecystectomy] Haerty W, et al. **Anaesthesist** 1997 Mar;46(3):207–10 (Eng. Abstr.) **(Ger)**

[Myocardial infarct and rhabdomyolysis after a high–voltage accident with successful resuscitation] Franzius C, et al. **Dtsch Med Wochenschr** 1997 Mar 27;122(13):400–6 (22 ref.) (Eng. Abstr.) **(Ger)**

[Rhabdomyolysis as a rare complication of severe hypertonic dehydration—a case report] Klipstein P, et al. **Klin Padiatr** 1996 Mar–Apr;208(2):88–90 (Eng. Abstr.) **(Ger)**

[Traumatic rhabdomyolysis. A clinical case] Paleari L, et al. **Minerva Anestesiol** 1995 Oct;61(10):411–4 (Eng. Abstr.) **(Ita)**

[A case report of open heart surgery in an infant with MNMS caused by femoral arterial cannulation during cardiopulmonary bypass] Shirasawa B, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Oct;44(10):1902–6 (Eng. Abstr.) **(Jpn)**

[Rhabdomyolysis and lumbosacral plexopathy in intravenous drug addict: report of a case] Diaz Guzman J, et al. **An Med Interna** 1996 Feb;13(2):84–6 (Eng. Abstr.) **(Spa)**

[Massive rhabdomyolysis after the first exercise session for muscle development (letter)] Pintor Holguin E, et al. **An Med Interna** 1997 Mar;14(3):158–9 **(Spa)**

[Rhabdomyolysis associated with Legionella pneumophila pneumonia (letter)] Gutiérrez A, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):43–4 **(Spa)**

[Rhabdomyolysis and acute kidney failure in alcoholics (letter)] Alegre S, et al. **Med Clin (Barc)** 1996 Jun 22; 107(4):155 **(Spa)**

GENETICS

A novel mitochondrial tRNA phenylalanine mutation presenting with acute rhabdomyolysis. Chinnery PF, et al. **Ann Neurol** 1997 Mar;41(3):408–10

[Acute renal failure disclosing Mc Ardle disease (letter)] Hyvernat H, et al. **Presse Med** 1997 Jan 18–25;26(1):17 **(Fre)**

IMMUNOLOGY

Ehrlichia equi infection associated with rhabdomyolysis. Shea KW, et al. **Clin Infect Dis** 1996 Mar;22(3):605

METABOLISM

Rhabdomyolysis induced by epsilon–aminocaproic acid. Seymour BD, et al. **Ann Pharmacother** 1997 Jan;31(1):56–8

Inherited metabolic myopathy and hemolysis due to a mutation in aldolase A [letter; comment] Kopp A, et al. **N Engl J Med** 1996 Oct 17;335(16):1242–3. Comment on: N Engl J Med 1996 Apr 25;334(17):1100–4.

MICROBIOLOGY

Rhabdomyolysis and acute renal failure associated with meningitis and sepsis due to Haemophilus influenzae: case report [letter; comment] Benedetti P, et al. **Clin Infect Dis** 1997 Mar;24(3):533–4. Comment on: Clin Infect Dis 1996 Apr;22(4):642–9.

[Rhabdomyolysis during Shigella flexneri shigellosis (letter)] Paris JF, et al. **Med Trop (Mars)** 1996;56(4):411 **(Fre)**

MORTALITY

Glycerol–induced augmentation of sensitivity to endotoxin in rats. Zurovsky Y, et al. **Toxicon** 1994 Jan;32(1):17–26

PATHOLOGY

Exertional rhabdomyolysis and exercise intolerance revealing dystrophinopathies. Figarella–Branger D, et al. **Acta Neuropathol (Berl)** 1997 Jul;94(1):48–53

Renal lesions in rhabdomyolysis caused by Pseudechis australis snake myotoxin. Ponraj D, et al. **Kidney Int** 1997

RHABDOMYOLYSIS

Jun;51(6):1956–69

PHYSIOPATHOLOGY

Exertional rhabdomyolysis and exercise intolerance revealing dystrophinopathies. Figarella-Branger D, et al. **Acta Neuropathol (Berl)** 1997 Jul;94(1):48–53

Rhabdomyolytic acute renal failure in cardiac surgery. A clinical case. Maccario M, et al. **Minerva Anestesiol** 1995 Sep;61(9):397–400

RADIONUCLIDE IMAGING

Intense muscle uptake of Tc-99m MDP and Ga-67 citrate in massive rhabdomyolysis. Provan I, et al. **Clin Nucl Med** 1997 Jul;22(7):463–6

REHABILITATION

Rehabilitation of ten soldiers with exertional rhabdomyolysis. Randall T, et al. **Mil Med** 1996 Sep;161(9):564–6

THERAPY

Management of rhabdomyolysis [letter; comment] Ball DR. **Br J Anaesth** 1997 Mar;78(3):340–2. Comment on: Br J Anaesth 1996 Oct;77(4):546–9.

Inadvertent intraoperative myelography with Hypaque: case report and discussion. Killeffer JA, et al. **Surg Neurol** 1997 Jul;48(1):70–3 (23 ref.)

URINE

Rhabdomyolysis and myohemoglobinuric acute renal failure [editorial] Zager RA. **Kidney Int** 1996 Feb;49(2):314–26 (148 ref.)

VETERINARY

Genetic markers in standardbred trotters susceptible to the rhabdomyolysis syndrome. Collinder E, et al. **Equine Vet J** 1997 Mar;29(2):117–20

Idiopathic rhabdomyolysis [letter; comment] Walters H. **J R Soc Med** 1997 Feb;90(2):120. Comment on: J R Soc Med 1996 Dec;89(12):706–7.

Rhabdomyolysis as a complication of canine babesiosis. Jacobson LS, et al. **J Small Anim Pract** 1996 Jun; 37(6):286–91

Chronic exertional rhabdomyolysis. Beech J. **Vet Clin North Am Equine Pract** 1997 Apr;13(1):145–68 (84 ref.)

VIROLOGY

Idiopathic rhabdomyolysis [letter] Fenton TH. **J R Soc Med** 1997 May;90(5):299

RHABDOMYOMA

Cardiac rhabdomyoma of a neonate: an autopsy case report. Sadi AM, et al. **Acta Paediatr Jpn** 1996 Aug;38(4):361–4

Perianal fetal rhabdomyoma: case report. Lapner PC, et al. **Pediatr Surg Int** 1997 Sep;12(7):544–7 (26 ref.)

[Cardiac rhabdomyoma, cardiac rhabdomyosarcoma] Kondo T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(14):227–9 (21 ref.) **(Jpn)**

COMPLICATIONS

The natural history of cardiac rhabdomyoma with and without tuberous sclerosis. Bosi G, et al. **Acta Paediatr** 1996 Aug;85(8):928–31

Ventricular tachycardia caused by cardiac rhabdomyoma in a young adult with tuberous sclerosis. Enbergs A, et al. **Am Heart J** 1996 Dec;132(6):1263–5

Evolution of cardiac rhabdomyoma in tuberous sclerosis complex. DiMario FJ Jr, et al. **Clin Pediatr (Phila)** 1996 Dec;35(12):615–9

Intracardiac tumor in a neonate causing complete tricuspid valve obstruction. Shore-Lesserson L, et al. **J Cardiothorac Vasc Anesth** 1997 Jun;11(4):487–9

[Functional tricuspid atresia in a newborn infant with cardiac rhabdomyoma] Hofner G, et al. **Klin Padiatr** 1997 May-Jun;209(3):130–2 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Intraoperative fine needle aspiration diagnosis of cardiac rhabdomyoma. A case report. Owji SM, et al. **Acta Cytol** 1997 May-Jun;41(3):835–8

Rhabdomyoma of the pharyngeal musculature extending into the prestyloid parapharyngeal space. Helmberger RC, et al. **AJNR Am J Neuroradiol** 1996 Jun-Jul;17(6):1115–8

MRI in the evaluation and management of a newborn infant with cardiac rhabdomyoma. Berkenblit R, et al. **Ann Thorac Surg** 1997 May;63(5):1475–7

Two cases of benign vaginal rhabdomyoma. Case reports. Iversen UM. **APMIS** 1996 Jul-Aug;104(7–8):575–8 (18 ref.)

Evolution of cardiac rhabdomyoma in tuberous sclerosis complex. DiMario FJ Jr, et al. **Clin Pediatr (Phila)** 1996 Dec;35(12):615–9

Neonatal tuberous sclerosis with cardiac rhabdomyomas presenting as fetal supraventricular tachycardia. Wu CT, et al. **Jpn Heart J** 1997 Jan;38(1):133–7

Sternomastoid rhabdomyoma mimicking a thyroid nodule. Adickes ED, et al. **Nebr Med J** 1996 Nov;81(11):359–62

Pediatric case of the day. Cardiac rhabdomyoma. Aideyan UO, et al. **Radiographics** 1997 May-Jun;17(3):805–7

[Tardive pseudo-ischemic presentation of cardiac rhabdomyoma] Matteucci C, et al. **G Ital Cardiol** 1997 Jun; 27(6):583–7 (Eng. Abstr.) **(Ita)**

[Primary tumors of the cardiac septum] Nakamura N, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(14):260–2 (19 ref.) **(Jpn)**

EPIDEMIOLOGY

Rare benign neoplasms of the larynx: rhabdomyoma and lipoma [letter; comment] Friedmann I. **ORL J Otorhinolaryngol Relat Spec** 1996 May-Jun; 58(3):182. Comment on: ORL J Otorhinolaryngol Relat Spec 1995 Nov-Dec;57(6):351–5.

PATHOLOGY

Rhabdomyoma of the orbit in a child. Hatsukawa Y, et al. **Am J Ophthalmol** 1997 Jan;123(1):142–4

Rapid enlargement of cardiac rhabdomyoma during corticotropin therapy for infantile spasms. Hishitani T, et al. **Can J Cardiol** 1997 Jan;13(1):72–4

Multiple cardiac rhabdomyoma with exclusively histological manifestation. Grellner W, et al. **Forensic Sci Int** 1996 Mar 5;78(1):1–5

Myocardial rhabdomyoma with rhabdomyoblastic moiety. Bosman C, et al. **Gen Diagn Pathol** 1996 May; 141(5–6):393–8

Neural variant of fetal rhabdomyoma and naevoid basal cell carcinoma syndrome. Hardisson D, et al. **Histopathology** 1996 Sep;29(3):247–52

Rhabdomyoma of the tunica vaginalis of the testis: a histologic, immunohistochemical, and ultrastructural study. Tanda F, et al. **Mod Pathol** 1997 Jun;10(6):608–11

Sternomastoid rhabdomyoma mimicking a thyroid nodule. Adickes ED, et al. **Nebr Med J** 1996 Nov;81(11):359–62

Rare benign neoplasms of the larynx: rhabdomyoma and lipoma [see comments] Zbären P, et al. **ORL J Otorhinolaryngol Relat Spec** 1995 Nov-Dec; 57(6):351–5. Comment in: ORL J Otorhinolaryngol Relat Spec 1996 May-Jun;58(3):182.

Fetal rhabdomyoma: two instances of recurrence. Smith NM, et al. **Pediatr Pathol Lab Med** 1996 Jul-Aug;16(4):673–80

Congenital retroperitoneal tumour: rhabdomyoma or rhabdomyosarcoma? Sharma AK, et al. **Pediatr Surg Int** 1997;12(1):69–70

[Aniridia and Wilms tumor: 2 cases of fetal rhabdomyomatous nephroblastoma] Schneider P, et al. **Arch Pediatr** 1996 Dec; 3(12):1243–7 (Eng. Abstr.) **(Fre)**

[Recurrence in a case of rhabdomyoma of the vagina] Losi L, et al. **Pathologica** 1995 Dec;87(6):704–8 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Electrophysiologic study and radiofrequency ablation in patients with intracardiac tumors and accessory pathways: is the tumor the pathway? Van Hare GF, et al. **J Cardiovasc Electrophysiol** 1996 Dec;7(12):1204–10

Multiple intracardiac tumors: spontaneous prenatal recovery of fetal bradyarrhythmia. Chaban FK, et al. **Ultrasound Obstet Gynecol** 1996 Aug;8(2):120–2

RADIOGRAPHY

Rhabdomyoma of the orbit in a child. Hatsukawa Y, et al. **Am J Ophthalmol** 1997 Jan;123(1):142–4

ULTRASONOGRAPHY

Multiple cardiac rhabdomyomas: tuberous sclerosis or not? Uzun O, et al. **Heart** 1997 Apr;77(4):388

Prenatal diagnosis of cardiac rhabdomyoma. Suresh S, et al. **Indian Heart J** 1995 Sep-Oct;47(5):506–8

Fetal echocardiography for neonatal cardiac tumors [letter; comment] Corno A. **J Am Coll Cardiol** 1996 Oct;28(4):1080 . Comment on: J Am Coll Cardiol 1995 Aug;26(2):516–20.

RHABDOMYOSARCOMA

Rhabdomyosarcoma and other soft tissue sarcomas in children. Pappo AS. **Curr Opin Oncol** 1996 Jul;8(4):311–6 (20 ref.)

Imaging of pediatric head and neck rhabdomyosarcomas with emphasis on magnetic resonance imaging and a review of the literature. Yang WT, et al. **Pediatr Hematol Oncol** 1997 May-Jun;14(3):243–57

[Cardiac rhabdomyoma, cardiac rhabdomyosarcoma] Kondo T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(14):227–9 (21 ref.) **(Jpn)**

CEREBROSPINAL FLUID

Another cause of hypoglycorrhachia [letter] Varon J, et al. **J Emerg Med** 1996 Sep-Oct;14(5):636–7

CHEMISTRY

Rhabdomyosarcoma. Morphologic, immunohistochemical, and DNA study. Gruchala A, et al. **Gen Diagn Pathol** 1997 Feb;142(3–4):175–84

Immunohistochemical detection of vinculin in human rhabdomyosarcomas. Meyer T, et al. **Gen Diagn Pathol** 1997 Feb;142(3–4):191–8

Expression of interleukin 15 (IL-15) in human rhabdomyosarcoma, osteosarcoma and Ewing's sarcoma. Lollini PL, et al. **Int J Cancer** 1997 May 29;71(5):732–6

COMPLICATIONS

An unusual case of haemorrhagic cystitis [letter] Lucas GN, et al. **Ceylon Med J** 1996 Dec;41(4):169

[Cardiac tamponade caused by a rhabdomyosarcoma in the right atrium (letter)] Valdovinos Mahave MC, et al. **Med Clin (Barc)** 1997 Jun 7;109(2):79 **(Spa)**

CONGENITAL

Rhabdomyosarcoma of the prostate in a newborn: sonographic and CT findings. Onal B, et al. **Eur J Radiol** 1995 Dec 15;21(2):106–8

DIAGNOSIS

Fine needle aspiration of poorly differentiated rhabdomyosarcoma presenting with quadriparesis. A case report. Agarwal PK, et al. **Acta Cytol** 1996 Sep-Oct; 40(5):985–8

Rhabdomyosarcoma of the head and neck in adults: MR and CT findings. Lee JH, et al. **AJNR Am J Neuroradiol** 1996 Nov-Dec;17(10):1923–8

Fulminant disseminated intravascular coagulation revealing an advanced stage IV poorly differenciated rhabdomyosarcoma [letter] Stéphan JL, et al. **Eur J Pediatr** 1996 Jul;155(7):622–3

Focal rhabdomyosarcomatous differentiation in primary liposarcoma [see comments] Shanks JH, et al. **J Clin Pathol** 1996 Sep;49(9):770–2. Comment in: J Clin Pathol 1996 Sep;49(9):697–8.

Primary rhabdomyosarcoma of the heart presenting with increased intracranial pressure. Altunbaşak S, et al. **Pediatr Cardiol** 1996 Jul-Aug;17(4):260–4

Rhabdomyosarcoma presenting as acute hematologic malignancy: case report and review of the literature. Ambrosiani L, et al. **Tumori** 1996 Jul-Aug;82(4):408–12 (23 ref.)

[Rapidly enlarging occipital soft tissue tumor] Keiner S, et al. **HNO** 1997 May;45(5):396–7 **(Ger)**

[Clinical study of intraspinal neoplasms in children] Takahashi I, et al. **No Shinkei Geka** 1996 Jul;24(7):605–11 (Eng. Abstr.) **(Jpn)**

[Primary orbital tumors in children] Składzień J, et al. **Otolaryngol Pol** 1996;50(1):32–6 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Kinetics of primary tumor regression with chemotherapy: implications for the timing of surgery. Medary I, et al. **Ann Surg Oncol** 1996 Nov;3(6):521–5

Venoocclusive disease of the liver after chemotherapy with vincristine, actinomycin D, and cyclophosphamide for the treatment of rhabdomyosarcoma. A report of the Intergroup Rhabdomyosarcoma Study Group. Childrens Cancer Group, the Pediatric Oncology Group, and the Pediatric Intergroup Statistical Center. Ortega JA, et al. **Cancer** 1997 Jun 15;79(12):2435–9

Role of interleukin 1 and granulocyte colony-stimulating factor in photofrin-based photodynamic therapy of rat rhabdomyosarcoma tumors. de Vree WJ, et al. **Cancer Res** 1997 Jul 1;57(13):2555–8

Ukrain treatment of rhabdomyosarcoma (case report). Kotsay B, et al. **Drugs Exp Clin Res** 1996;22(3–5):239–41

Response of previously untreated metastatic rhabdomyosarcoma to combination chemotherapy with carboplatin, epirubicin and vincristine. Frascella E, et al. **Eur J Cancer** 1996 May;32A(5):821–5

Suppression of rhabdomyosarcoma growth by fumagillin analog TNP-470. Kalebic T, et al. **Int J Cancer** 1996 Nov 27;68(5):596–9

Hyperthermia-enhanced effectiveness of mitoxantrone in an experimental rat tumour. Schopman EM, et al. **Int J Hyperthermia** 1996 Mar-Apr;12(2):241–54

Protein synthesis in TE 671/RD (human rabdomiosarcoma) cells treated with thapsigargin and hyperthermia: impairment of HSP 70 induction. Delpino A, et al. **J Biol Regul Homeost Agents** 1995 Oct-Dec;9(4):132–8

A feasibility, toxicity, and early response study of etoposide, ifosfamide, and vincristine for the treatment of children with rhabdomyosarcoma: a report from the Intergroup Rhabdomyosarcoma Study (IRS) IV pilot study. Arndt C, et al. **J Pediatr Hematol Oncol** 1997 Mar-Apr;19(2):124–9

Successful treatment of orbital rhabdomyosarcoma in two infants using chemotherapy alone [letter; comment] Lackner H, et al. **Med Pediatr Oncol** 1997 Jun;28(6):463–4 . Comment on: Med Pediatr Oncol 1996 Mar;26(3):186–9.

[A case of paratesticular rhabdomyosarcoma with a paraaortic lymph node metastasis] Nakanishi H, et al. **Hinyokika Kiyo** 1997 Mar;43(3):233–6 (Eng. Abstr.) **(Jpn)**

[Progress in the treatment of 155 children with rhabdomyosarcoma obtained in one center between 1962–1990] Perek D, et al. **Pediatr Pol** 1996 Aug; 71(8):667–72 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

[Malignant neoplasms of the middle ear in Krakow Otolaryngological Clinic in the years 1962–1994] Olszewski E, et al. **Otolaryngol Pol** 1996;50(3):258–62 (Eng. Abstr.) **(Pol)**

[Primary orbital tumors in children] Składzień J, et al. **Otolaryngol Pol** 1996;50(1):32–6 (Eng. Abstr.) **(Pol)**

GENETICS

Expression of transduced carcinoembryonic antigen gene in human rhabdomyosarcoma inhibits metastasis. Landuzzi L, et al. **Cancer Res** 1996 Oct 1;56(19):4503–8

Expression of memory, differentiation, and repression of c-myc and p53 genes in human RD/TE-671 cells induced by a ureido-derivative of pyridine (UDP-4). Pappas IS, et al. **Cell Growth Differ** 1996 Jun;7(6):797–809

Translocations in solid tumours. Cooper CS. **Curr Opin Genet Dev** 1996 Feb;6(1):71–5 (27 ref.)

Subtractive cloning and characterization of DRAL, a novel LIM-domain protein down-regulated in rhabdomyosarcoma. Genini M, et al. **DNA Cell Biol** 1997 Apr;16(4):433–42

Molecular cytogenetic characterization and physical mapping of 12q13–15 amplification in human cancers. Elkahloun AG, et al. **Genes Chromosomes Cancer** 1996 Dec; 17(4):205–14

Three germline mutations in the TP53 gene. Cornelis RS, et al. **Hum Mutat** 1997;9(2):157–63

Clinical relevance of DNA ploidy and proliferative activity in childhood rhabdomyosarcoma: a retrospective analysis of patients enrolled onto the Italian Cooperative Rhabdomyosarcoma Study RMS88. De Zen L, et al. **J Clin Oncol** 1997 Mar;15(3):1198–205

Inverse expression of mdr 1 and c-myc genes in a rhabdomyosarcoma cell line resistant to actinomycin d. Prados J, et al. **J Pathol** 1996 Sep;180(1):85–9

Mutation analysis of p53 gene in childhood malignant solid tumors. Kusafuka T, et al. **J Pediatr Surg** 1997 Aug; 32(8):1175–80

Expression and parental imprinting of the H19 gene in human rhabdomyosarcoma [published erratum appears in Oncogene 1997 Aug 14;15(7):875] Casola S, et al. **Oncogene** 1997 Mar 27;14(12):1503–10

Gene alterations and apoptosis in rhabdomyosarcoma. Boman F, et al. **Pediatr Pathol Lab Med** 1997 Mar-Apr; 17(2):233–47

IMMUNOLOGY

[The membrane hetero-organic antigens of tumors of hepatocellular and myogenic origins] Teriukova NP, et al. **Tsitologiia** 1996;38(10):1092–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Tumour oxygenation: the influence of normobaric and hyperbaric oxygen. van der Kleij AJ, et al. **Adv Exp Med Biol** 1996;388:385–90

Studies on tumor oxygenation in a rat rhabdomyo-sarcoma during fractionated irradiation. Zywietz F, et al. **Adv Exp Med Biol** 1996;388:445–55

Effect of angiotensin II on immunotoxin uptake in tumor and normal tissue. Elizondo FG Jr, et al. **Cancer Chemother Pharmacol** 1996;39(1–2):113–21

Protein synthesis in TE 671/RD (human rabdomiosarcoma) cells treated with thapsigargin and hyperthermia: impairment of HSP 70 induction. Delpino A, et al. **J Biol Regul Homeost Agents** 1995 Oct-Dec;9(4):132–8

Paediatric rhabdomyosarcoma: MyoD1 demonstration in routinely processed tissue sections using wet heat pretreatment (pressure cooking) for antigen retrieval. Engel ME, et al. **J Clin Pathol** 1997 Jan;50(1):37–9

Immunohistochemical detection of p53 protein in rhabdomyosarcoma: association with clinicopathological features and outcome. Ayan I, et al. **J Pediatr Hematol Oncol** 1997 Jan-Feb;19(1):48–53

Phosphotyrosyl proteins in childhood rhabdomyosarcomas: phosphorylation of catenins and components of the insulin-like growth factor type I receptor signaling cascade. McManus MJ, et al. **J Pediatr Hematol Oncol** 1997 Jul-Aug;19(4):319–26

Expression of type I interferon receptor in solid tumors of childhood. Rosolen A, et al. **Mod Pathol** 1997 Jan; 10(1):55–61

Media from rhabdomyosarcoma and neuroblastoma cell cultures stimulate in vitro aggregation and fibrillization of amyloid beta-protein. Chauhan A, et al. **Neurochem Res** 1997 Feb;22(2):227–32

Cellular expression of adhesion factors in childhood rhabdomyosarcoma. Saxon BR, et al. **Pediatr Pathol Lab Med** 1997 Mar-Apr;17(2):259–66

Tumour hypoxia and hyperbaric oxygenation studied by quenching of Pd porphine phosphorescence. Ince C, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:4–6

MICROBIOLOGY

Two case reports and review of vascular catheter-associated bacteremia caused by nontuberculous Mycobacterium species. Rodgers GL, et al. **Pediatr Infect Dis J** 1996 Mar; 15(3):260–4 (50 ref.)

PATHOLOGY

Intraventricular rhabdomyosarcoma after resection of hyperplastic choroid plexus. Herva R, et al. **Acta Neuropathol (Berl)** 1996 Aug;92(2):213–6

Histological effect of intranodal injection of the streptococcal preparation OK-432 for cervical lymph node metastases of malignant head and neck tumors. Suzuki K, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:125–8

Hemophagocytosis by rhabdomyosarcoma cells in bone marrow [letter] Tsoi WC, et al. **Am J Hematol** 1997 Apr; 54(4):340–2

Dedifferentiated chondrosarcoma with rhabdomyosarcomatous differentiation. Reith JD, et al. **Am J Surg Pathol** 1996 Mar;20(3):293–8 (18 ref.)

Pathologic quiz case 2. Rhabdomyosarcoma (RMS), alveolar type, of the paranasal sinus. Licameli GR, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug;123(8):881, 883–4

Pretreatment TNM staging of childhood rhabdomyosarcoma: a report of the Intergroup Rhabdomyosarcoma Study Group. Children's Cancer Study Group. Pediatric Oncology Group. Lawrence W Jr, et al. **Cancer** 1997 Sep 15;80(6):1165–70

Soft tissue sarcomas in children. Pappo AS, et al. **Cancer Treat Res** 1997;91:205–22

Reduction of tumorigenicity by alpha 3 integrin in a rhabdomyosarcoma cell line. Weitzman JB, et al. **Cell Adhes Commun** 1996 Jul;4(1):41–52

Transfection of rhabdomyosarcoma cells with connexin43 induces myogenic differentiation. Proulx AA, et al. **Cell Growth Differ** 1997 May;8(5):533–40

Embryonal rhabdomyosarcoma of the uterine corpus mistaken for small cell carcinoma: a case report. Shu WH, et al. **Chang Keng I Hsueh** 1996 Jun;19(2):181–6

Biliary tree rhabdomyosarcoma: report of one case. Lee MJ, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1996 Nov-Dec;37(6):458–60

Myocardial rhabdomyoma with rhabdomyoblastic moiety. Bosman C, et al. **Gen Diagn Pathol** 1996 May; 141(5–6):393–8

Rhabdomyosarcoma. Morphologic, immunohistochemical, and DNA study. Gruchala A, et al. **Gen Diagn Pathol** 1997 Feb;142(3–4):175–84

Pure heterologous sarcoma of mixed type of the uterine corpus in a postmenopausal patient: a case report. Meinhard K, et al. **Gen Diagn Pathol** 1997 Jun;142(5–6):343–6

Rhabdomyosarcoma of the spleen. Feakins RM, et al. **Histopathology** 1996 Dec;29(6):577–9

Rhabdomyosarcoma of head and neck--an analysis of 24 cases. Mehta S, et al. **Indian J Cancer** 1996 Mar;33(1):37–42

Metastatic human rhabdomyosarcoma: molecular, cellular and cytogenetic analysis of a novel cellular model. Kalebic T, et al. **Invasion Metastasis** 1996;16(2):83–96

Actinomycin D treatment leads to differentiation and inhibits proliferation in rhabdomyosarcoma cells. Marchal JA, et al. **J Lab Clin Med** 1997 Jul;130(1):42–50

Cerebral rhabdomyosarcoma with rhabdoid tumor-like features. Caputo V, et al. **J Neurooncol** 1997 Mar;32(1):81–6

Primary and metastatic rhabdomyosarcoma in the breast: neoplasms of adolescent females, a report from the Intergroup Rhabdomyosarcoma Study. Hays DM, et al. **Med Pediatr Oncol** 1997 Sep;29(3):181–9

Orbital rhabdomyosarcomas and related tumors in childhood: relationship of morphology to prognosis--an Intergroup Rhabdomyosarcoma study. Kodet R, et al. **Med Pediatr Oncol** 1997 Jul;29(1):51–60

Pleomorphic rhabdomyosarcoma of the submandibular salivary gland. Lin J, et al. **Otolaryngol Head Neck Surg** 1997 Apr;116(4):545–7

Gastric stump carcinosarcoma with rhabdomyosarcomatous differentiation. Matsukuma S, et al. **Pathol Int** 1997 Jan; 47(1):73–7

Gene alterations and apoptosis in rhabdomyosarcoma. Boman F, et al. **Pediatr Pathol Lab Med** 1997 Mar-Apr; 17(2):233–47

Clear cell rhabdomyosarcoma. Boman F, et al. **Pediatr Pathol Lab Med** 1996 Nov-Dec;16(6):951–9

Cellular expression of adhesion factors in childhood rhabdomyosarcoma. Saxon BR, et al. **Pediatr Pathol Lab Med** 1997 Mar-Apr;17(2):259–66

Congenital retroperitoneal tumour: rhabdomyoma or rhabdomyosarcoma? Sharma AK, et al. **Pediatr Surg Int** 1997;12(1):69–70

Induction of apoptosis in rhabdomyosarcoma cells through down-regulation of PAX proteins. Bernasconi M, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13164–9

Prostate rhabdomyosarcoma in a young adult: a case study. Beyzadeoglu M, et al. **Radiat Med** 1997 May-Jun; 15(3):199–201

Factors that influence treatment decisions in childhood rhabdomyosarcoma. Intergroup Rhabdomyosarcoma Study Group of the Children's Cancer Group, the Pediatric Oncology Group, and the Intergroup Rhabdomyosarcoma Study Group Statistical Center. Donaldson SS, et al. **Radiology** 1997 Apr;203(1):17–22

Recurrent paratesticular rhabdomyosarcoma reported from Nigeria. Ofiaeli RO, et al. **Trop Doct** 1997 Jul;27(3):171–2

[Histopathologic classification of 1921 orbital tumors] Ni C, et al. **Yen Ko Hsueh Pao** 1995 Jun;11(2):101–4 (Eng. Abstr.) **(Chi)**

[Malignant neoplasms of the middle ear in Krakow Otolaryngological Clinic in the years 1962–1994] Olszewski E, et al. **Otolaryngol Pol** 1996;50(3):258–62 (Eng. Abstr.) **(Pol)**

[Bridges and multipolar mitoses in populations of rat rhabdomyosarcoma RA-23 cells] Kravtsov VIu, et al. **Biull Eksp Biol Med** 1997 May;123(5):569–72 **(Rus)**

PHYSIOPATHOLOGY

Induction of apoptosis in rhabdomyosarcoma cells through down-regulation of PAX proteins. Bernasconi M, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13164–9

PSYCHOLOGY

Observations from a survivor of childhood cancer. Dorfman E. **J Pediatr Oncol Nurs** 1996 Oct;13(4):235–6

RADIOGRAPHY

From the archives of the AFIP. Genitourinary rhabdomyosarcoma in children: radiologic-pathologic correlation. Agrons GA, et al. **Radiographics** 1997 Jul-Aug; 17(4):919–37

[Rhabdomyosarcoma of the middle ear. Report of a case] Fumagalli A. **Radiol Med (Torino)** 1997 May;93(5):629–30 **(Ita)**

RADIONUCLIDE IMAGING

Pentavalent 99mTc DMSA: uptake into a variety of human rhabdomyosarcoma xenografts. Van der Wall H, et al. **In Vivo** 1997 Jan-Feb;11(1):45–50

RADIOTHERAPY

Studies on tumor oxygenation in a rat rhabdomyo-sarcoma during fractionated irradiation. Zywietz F, et al. **Adv Exp Med Biol** 1996;388:445–55

Parameningeal rhabdomyosarcoma: results of an international workshop [see comments] Benk V, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):533–40. Comment in: Int J Radiat Oncol Biol Phys 1996 Oct 1;36(3):747–8.

A new level of international collaboration: learning from each other about rhabdomyosarcoma [editorial; comment] Donaldson SS. **Int J Radiat Oncol Biol Phys** 1996 Oct 1; 36(3):747–8. Comment on: Int J Radiat Oncol Biol Phys 1996 Oct 1;36(3):533–40.

Radiation therapy for rhabdomyosarcoma: local failure risk for Clinical Group III patients on Intergroup Rhabdomyosarcoma Study II. Wharam MD, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):797–804

Delayed-accelerated hyperfractionated radiation therapy for advanced-stage or high-risk rhabdomyosarcoma. Merchant TE. **Med Pediatr Oncol** 1997 Jul;29(1):45–50

Impact of the interfraction interval on clonogenic cell survival in split-dose irradiation of R1H rhabdomyosarcoma of the rat in vitro. Willers H, et al. **Radiother Oncol** 1997 Apr;43(1):93–6

[Progress in the treatment of 155 children with rhabdomyosarcoma obtained in one center between 1962–1990] Perek D, et al. **Pediatr Pol** 1996 Aug; 71(8):667–72 (Eng. Abstr.) **(Pol)**

SECONDARY

Response of previously untreated metastatic rhabdomyosarcoma to combination chemotherapy with carboplatin, epirubicin and vincristine. Frascella E, et al. **Eur J Cancer** 1996 May;32A(5):821–5

Another cause of hypoglycorrhachia [letter] Varon J, et al. **J Emerg Med** 1996 Sep-Oct;14(5):636–7

[A case of paratesticular rhabdomyosarcoma with a paraaortic lymph node metastasis] Nakanishi H, et al. **Hinyokika Kiyo** 1997 Mar;43(3):233–6 (Eng. Abstr.) **(Jpn)**

SURGERY

Kinetics of primary tumor regression with chemotherapy: implications for the timing of surgery. Medary I, et al. **Ann Surg Oncol** 1996 Nov;3(6):521–5

Surgical management of rhabdomyosarcoma in children. Corpron CA, et al. **Curr Opin Pediatr** 1996 Jun;8(3):283–6 (26 ref.)

Mandibular reconstruction in the pediatric patient. Hildago DA, et al. **Head Neck** 1996 Jul-Aug;18(4):359–65

Preservation of the bladder in patients with rhabdomyosarcoma. Heyn R, et al. **J Clin Oncol** 1997 Jan; 15(1):69–75

The argument for conservative, delayed surgery in the management of prostatic rhabdomyosarcoma. Lobe TE, et al. **J Pediatr Surg** 1996 Aug;31(8):1084–7

Reconstructive options in genitourinary rhabdomyosarcoma. Duel BP, et al. **J Urol** 1996 Nov;156(5):1798–804

Delayed resection in the management of non-orbital rhabdomyosarcoma of the head and neck in childhood. Blatt J, et al. **Med Pediatr Oncol** 1997 Apr;28(4):294–8

Rhabdomyosarcoma of the biliary tree. Sanz N, et al. **Pediatr Surg Int** 1997 Feb;12(2–3):200–1

Radical resection of tumors of the inferior vena cava with vascular reconstruction and kidney autotransplantation. Kraybill WG, et al. **Surgery** 1997 Jan;121(1):31–6

[Treatment of advanced malignant tumor in children: delayed primary and secondary operation] Gao J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):772–4 (Eng. Abstr.) **(Chi)**

[Paratesticular rhabdomyosarcomas. Apropos of a case] Kabiri H, et al. **J Urol (Paris)** 1996;102(4):176–9 (Eng. Abstr.) **(Fre)**

[Report on a case of adult rhabdomyosarcoma subjected to tumorectomy and lobectomy] Adachi T, et al.

RHABDOMYOSARCOMA

Nippon Kyobu Geka Gakkai Zasshi 1997 Apr;45(4):619–23 (Eng. Abstr.) **(Jpn)**

[A case of adult chest wall rhabdomyosarcoma] Shirasawa B, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Dec; 44(12):2187–90 (Eng. Abstr.) **(Jpn)**

THERAPY

Tumour oxygenation: the influence of normobaric and hyperbaric oxygen. van der Kleij AJ, et al. **Adv Exp Med Biol** 1996;388:385–90

Do patients with metastatic and recurrent rhabdomyosarcoma benefit from high-dose therapy with hematopoietic rescue? Report of the German/Austrian Pediatric Bone Marrow Transplantation Group. Koscielniak E, et al. **Bone Marrow Transplant** 1997 Feb; 19(3):227–31

IL-15 mediates anti-tumor effects after cyclophosphamide injection of tumor-bearing mice and enhances adoptive immunotherapy: the potential role of NK cell subpopulations. Evans R, et al. **Cell Immunol** 1997 Jul 10; 179(1):66–73

Rhabdomyosarcoma of head and neck--an analysis of 24 cases. Mehta S, et al. **Indian J Cancer** 1996 Mar;33(1):37–42

Organ-preserving management of rhabdomyosarcoma of the prostate and bladder in children. Silván AM, et al. **Med Pediatr Oncol** 1997 Dec;29(6):573–5

Multidisciplinary management of refractory orbital rhabdomyosarcoma. Mannor GE, et al. **Ophthalmology** 1997 Jul;104(7):1198–201

Rhabdomyosarcoma. Biology and treatment. Pappo AS, et al. **Pediatr Clin North Am** 1997 Aug;44(4):953–72 (59 ref.)

Rhabdomyosarcoma. Andrassy RJ. **Semin Pediatr Surg** 1997 Feb;6(1):17–23 (51 ref.)

Tumour hypoxia and hyperbaric oxygenation studied by quenching of Pd porphine phosphorescence. Ince C, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:4–6

ULTRASTRUCTURE

Appraisal of the comparative utility of immunohistochemistry and electron microscopy in the diagnosis of childhood round cell tumors. Mierau GW, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):507–17

[The ultrastructure of tumor cells of strain CRM-1 under different transplantation conditions] Kalashnikova MM, et al. **Arkh Anat Gistol Embriol** 1968 Nov;55(11):48–51 (Eng. Abstr.) **(Rus)**

VETERINARY

Partial cystectomy for urinary bladder neoplasia: surgical technique and outcome in 11 dogs. Stone EA, et al. **J Small Anim Pract** 1996 Oct;37(10):480–5

RHABDOMYOSARCOMA, ALVEOLAR

BLOOD

Pure alveolar rhabdomyosarcoma of the corpus uteri: description of a case with increased serum level of CA-125. Chiarle R, et al. **Gynecol Oncol** 1997 Aug;66(2):320–3 (19 ref.)

COMPLICATIONS

Bilateral bronchial balloon dilatation and Strecker stent implantation in a ventilated child with malignant carinal stenosis. Nicolai T, et al. **Intensive Care Med** 1996 May; 22(5):482–5

DIAGNOSIS

Minimal disease detection in patients with alveolar rhabdomyosarcoma using a reverse transcriptase-polymerase chain reaction method. Kelly KM, et al. **Cancer** 1996 Sep 15;78(6):1320–7

The diagnostic potential of the chromosome translocation t(2;13) in rhabdomyosarcoma: a Pcr study of fresh-frozen and paraffin-embedded tumour samples. Reichmuth C, et al. **J Pathol** 1996 Sep;180(1):50–7

Undifferentiated rhabdomyosarcoma with lymphoid phenotype expression. Pinto A, et al. **Med Pediatr Oncol** 1997 Mar;28(3):165–70

DRUG THERAPY

Long-lasting complete remission after prolonged administration of etoposide in a child with a second recurrence of alveolar rhabdomyosarcoma. Schiavetti A, et al. **Med Pediatr Oncol** 1997 Feb;28(2):144–6

Rhabdomyosarcoma treated with chemotherapy during the third trimester. Martin D, et al. **Obstet Gynecol** 1997 May; 89(5 Pt 2):828–31

GENETICS

Amplification of the t(2; 13) and t(1; 13) translocations of alveolar rhabdomyosarcoma in small formalin-fixed biopsies using a modified reverse transcriptase polymerase chain reaction. Anderson J, et al. **Am J Pathol** 1997 Feb; 150(2):477–82

Selection of probes for fluorescence in situ hybridization analysis by differential display polymerase chain reaction of mRNA from rhabdomyosarcoma. Pienkowska M, et al. **Cancer Genet Cytogenet** 1996 Nov;92(1):58–65

Fusions involving paired box and fork head family transcription factors in the pediatric cancer alveolar rhabdomyosarcoma. Barr FG. **Curr Top Microbiol Immunol** 1997;220:113–29 (68 ref.)

Detection of gene fusions in rhabdomyosarcoma by reverse transcriptase-polymerase chain reaction assay of archival samples. Edwards RH, et al. **Diagn Mol Pathol** 1997 Apr; 6(2):91–7

Detection of the t(2;13) chromosomal translocation in alveolar rhabdomyosarcoma using the reverse transcriptase-polymerase chain reaction. Arden KC, et al. **Genes Chromosomes Cancer** 1996 Aug;16(4):254–60

Novel formation and amplification of the PAX7-FKHR fusion gene in a case of alveolar rhabdomyosarcoma. Weber-Hall S, et al. **Genes Chromosomes Cancer** 1996 Sep; 17(1):7–13

Common and variant gene fusions predict distinct clinical phenotypes in rhabdomyosarcoma. Kelly KM, et al. **J Clin Oncol** 1997 May;15(5):1831–6

Translin recognition site sequences flank chromosome translocation breakpoints in alveolar rhabdomyosarcoma cell lines. Chalk JG, et al. **Oncogene** 1997 Sep 4; 15(10):1199–205

Fusion genes resulting from alternative chromosomal translocations are overexpressed by gene-specific mechanisms in alveolar rhabdomyosarcoma. Davis RJ, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8047–51

METABOLISM

Alpha 2a-interferon-induced differentiation of human alveolar rhabdomyosarcoma cells: correlation with down-regulation of the insulin-like growth factor type I receptor. Thulasi R, et al. **Cell Growth Differ** 1996 Apr; 7(4):531–41

PATHOLOGY

Pure alveolar rhabdomyosarcoma of the corpus uteri: description of a case with increased serum level of CA-125. Chiarle R, et al. **Gynecol Oncol** 1997 Aug;66(2):320–3 (19 ref.)

Alveolar rhabdomyosarcoma of the uterine cervix. Emerich J, et al. **Gynecol Oncol** 1996 Dec;63(3):398–403

SECONDARY

Rhabdomyosarcoma presumed metastatic to the orbit. Walton RC, et al. **Ophthalmology** 1996 Sep;103(9):1512–6

ULTRASONOGRAPHY

Unusual sonographic appearance with color Doppler imaging of bilateral breast metastases in a patient with alveolar rhabdomyosarcoma of an extremity. Yang WT, et al. **J Ultrasound Med** 1996 Jul;15(7):531–3

RHABDOMYOSARCOMA, EMBRYONAL

Perineal and perirectal sarcomas: report of two cases. Kessler KJ, et al. **Dis Colon Rectum** 1996 Apr;39(4):468–72 (27 ref.)

Colorectal adenocarcinoma as a second malignant neoplasm following Wilms' tumor and rhabdomyosarcoma. Densmore TL, et al. **Med Pediatr Oncol** 1996 Dec; 27(6):556–60

[Rhabdomyosarcoma of the orbit] Gerinec A, et al. **Cesk Slov Oftalmol** 1997 Feb;53(1):11–7 (Eng. Abstr.) **(Slo)**

CONGENITAL

[Sarcoma botryoides in the pediatric vagina--a soft tissue sarcoma with good prognosis] Wierrani F, et al. **Geburtshilfe Frauenheilkd** 1996 Aug;56(8):441–2 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Adult embryonal rhabdomyosarcoma metastatic to the breast and diagnosed by fine needle aspiration. A case report. Lai CR, et al. **Acta Cytol** 1997 May-Jun;41(3):845–8

The diagnostic potential of the chromosome translocation t(2;13) in rhabdomyosarcoma: a Pcr study of fresh-frozen and paraffin-embedded tumour samples. Reichmuth C, et al. **J Pathol** 1996 Sep;180(1):50–7

Embryonal rhabdomyosarcoma of foot with expansive growth between metatarsals. Suzuki Y, et al. **Skeletal Radiol** 1997 Feb;26(2):128–30

[Embryonal rhabdomyosarcoma in adults: a case report] Manfrè L, et al. **Radiol Med (Torino)** 1997 Apr;93(4):457–9 **(Ita)**

ENZYMOLOGY

Local activity of matrix metalloproteinases in a case of botryoid sarcoma. Rechberger T, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Aug;67(2):169–72

GENETICS

Selection of probes for fluorescence in situ hybridization analysis by differential display polymerase chain reaction of mRNA from rhabdomyosarcoma. Pienkowska M, et al. **Cancer Genet Cytogenet** 1996 Nov;92(1):58–65

Common and variant gene fusions predict distinct clinical phenotypes in rhabdomyosarcoma. Kelly KM, et al. **J Clin Oncol** 1997 May;15(5):1831–6

Microsatellite instability in childhood rhabdomyosarcoma is locus specific and correlates with fractional allelic loss. Visser M, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9172–6

PATHOLOGY

Botryoid embryonal rhabdomyosarcoma of Stensen's duct. Kapadia SB, et al. **Am J Otolaryngol** 1996 Mar-Apr; 17(2):127–32

Pleural effusion cytology of embryonal rhabdomyosarcoma. Thompson KS, et al. **Diagn Cytopathol** 1997 Mar; 16(3):270–3

Sarcoma botryoides of the uterine endocervix: long-term results of conservative surgery. Balat O, et al. **Eur J Gynaecol Oncol** 1996;17(5):335–7 (13 ref.)

Spindle cell variant of embryonal rhabdomyosarcoma. Don DM, et al. **Otolaryngol Head Neck Surg** 1997 Apr; 116(4):529–32

Juvenile rhabdomyosarcomas in two dogs. Kim DY, et al. **Vet Pathol** 1996 Jul;33(4):447–50

[Infantile rhabdomyofibrosarcoma. An aggressive tumor in the spectrum of spindle cell tumors in childhood] Mentzel T, et al. **Pathologe** 1996 Jul;17(4):296–300 (Eng. Abstr.) **(Ger)**

[Family behavior of the children suffering from malignant neoplasms] Kulczyński B, et al. **Otolaryngol Pol** 1996; 50(5):513–6 (Eng. Abstr.) **(Pol)**

[A rare case of rhabdomyosarcoma of the heart] Kysil'ova VF. **Lik Sprava** 1996 Jan-Feb;(1-2):161–4 (8 ref.) **(Ukr)**

RADIOTHERAPY

Adult embryonal rhabdomyosarcoma showing marked response to radiotherapy: a case report. Takahashi T, et al. **Radiat Med** 1997 May-Jun;15(3):177–80

SECONDARY

Adult embryonal rhabdomyosarcoma metastatic to the breast and diagnosed by fine needle aspiration. A case report. Lai CR, et al. **Acta Cytol** 1997 May-Jun;41(3):845–8

Rhabdomyosarcoma presumed metastatic to the orbit. Walton RC, et al. **Ophthalmology** 1996 Sep;103(9):1512–6

ULTRASONOGRAPHY

Ultrasound diagnosis of para-testicular neoplasm. Bhushan B, et al. **J Clin Ultrasound** 1996 Sep;24(7):375–7

ULTRASTRUCTURE

Low sample volume causes differentiation in human rhabdomyosarcoma cell line RD subjected to electroporation. Aránega A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1219–27

VETERINARY

Juvenile rhabdomyosarcomas in two dogs. Kim DY, et al. **Vet Pathol** 1996 Jul;33(4):447–50

RHABDOVIRIDAE

[Marine fish pathogenic ssRNA viruses] Nishizawa T. **Uirusu** 1996 Jun;46(1):67–72 (32 ref.) **(Jpn)**

CLASSIFICATION

Adelaide River virus nucleoprotein gene: analysis of phylogenetic relationships of ephemeroviruses and other rhabdoviruses. Wang Y, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):995–9

ENZYMOLOGY

Role of cellular kinases in the gene expression of nonsegmented negative strand RNA viruses. De BP, et al. **Biol Chem** 1997 Jun;378(6):489–93 (29 ref.)

Characterization of the components and activity of Sonchus yellow net rhabdovirus polymerase. Wagner JD, et al. **J Virol** 1997 Mar;71(3):2371–82

Expression, purification, and characterization of rhabdovirus polymerase. Das T, et al. **Methods Enzymol** 1996; 275:99–122

GENETICS

Role of cellular kinases in the gene expression of nonsegmented negative strand RNA viruses. De BP, et al. **Biol Chem** 1997 Jun;378(6):489–93 (29 ref.)

Harnessing viral devices as pharmaceuticals: fighting HIV-1's fire with fire [comment] Nolan GP. **Cell** 1997 Sep 5;90(5):821–4 (11 ref.). Comment on: Cell 1997 Sep 5;90(5):841–7. Comment on: Cell 1997 Sep 5;90(5):849–57.

Distribution and variation of NV genes in fish rhabdoviruses. Kurath G, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):113–7

Nucleotide sequence of the glycoprotein gene of viral haemorrhagic septicaemia (VHS) viruses from different geographical areas: a link between VHS in farmed fish species and viruses isolated from North Sea cod (Gadus morhua L.). Stone DM, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1319–26

Adelaide River virus nucleoprotein gene: analysis of phylogenetic relationships of ephemeroviruses and other

rhabdoviruses. Wang Y, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):995–9

Detection of the infectious hematopoietic necrosis virus directly from infected fish tissues by dot blot hybridization with a non–radioactive probe. González MP, et al. **J Virol Methods** 1997 May;65(2):273–9

The glycoprotein genes and gene junctions of the fish rhabdoviruses spring viremia of carp virus and hirame rhabdovirus: analysis of relationships with other rhabdoviruses. Björklund HV, et al. **Virus Res** 1996 Jun; 42(1–2):65–80

IMMUNOLOGY

Immunization with viral antigens: viral haemorrhagic septicaemia. Lorenzen N, et al. **Dev Biol Stand** 1997; 90:201–9 (37 ref.)

Immunization with viral antigens: infectious haematopoietic necrosis. Winton JR. **Dev Biol Stand** 1997;90:211–20 (35 ref.)

Mapping the neutralizing epitopes on the glycoprotein of infectious haematopoietic necrosis virus, a fish rhabdovirus. Huang C, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3033–40

Mother to fry, successful transfer of immunity against infectious haematopoietic necrosis virus infection in rainbow trout. Oshima S, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2441–5

ISOLATION & PURIFICATION

Detection of the infectious hematopoietic necrosis virus directly from infected fish tissues by dot blot hybridization with a non–radioactive probe. González MP, et al. **J Virol Methods** 1997 May;65(2):273–9

Fast neutralization/immunoperoxidase assay for viral haemorrhagic septicaemia with anti–nucleoprotein monoclonal antibody. Lorenzo G, et al. **J Virol Methods** 1996 Apr 26;58(1–2):1–6

Immunohistochemical detection of VHS virus in paraffin–embedded specimens of rainbow trout (Oncorhynchus mykiss): the influence of primary antibody, fixative, and antigen unmasking on method sensitivity. Evensen O, et al. **Vet Pathol** 1997 May;34(3):253–61

[Detection of the spring viremia of carp virus by hybridization with nonradioactive DNA probes] Oreshkova SF, et al. **Mol Gen Mikrobiol Virusol** 1996 Apr–Jun;(2):22–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Phosphatidylserine binding to solid–phase rhabdoviral peptides: a new method to study phospholipid/viral protein interactions. Estepa A, et al. **J Virol Methods** 1996 Sep; 61(1–2):37–45

PHYSIOLOGY

A CXCR4/CD4 pseudotype rhabdovirus that selectively infects HIV–1 envelope protein–expressing cells [see comments] Mebatsion T, et al. **Cell** 1997 Sep 5;90(5):841–7 . Comment in: Cell 1997 Sep 5;90(5):821–4.

Rhabdovirus–induced apoptosis in a fish cell line is inhibited by a human endogenous acid cysteine proteinase inhibitor. Björklund HV, et al. **J Virol** 1997 Jul;71(7):5658–62

RHABDOVIRIDAE INFECTIONS

DIAGNOSIS

Detection of the infectious hematopoietic necrosis virus directly from infected fish tissues by dot blot hybridization with a non–radioactive probe. González MP, et al. **J Virol Methods** 1997 May;65(2):273–9

ENZYMOLOGY

Activation of type III nitric oxide synthase in astrocytes following a neurotropic viral infection. Barna M, et al. **Virology** 1996 Sep 15;223(2):331–43

EPIDEMIOLOGY

Fatal encephalitis and meningitis at the Gold Coast Hospital, 1980 to 1996. Gerrard J. **Commun Dis Intell** 1997 Feb 6; 21(3):32–3

ETIOLOGY

Pathogenesis of murine encephalitis limited by defective interfering particles. An immunohistochemical study. Plakhov IV, et al. **J Neurovirol** 1995 Jun;1(2):207–18

GENETICS

Detection of the infectious hematopoietic necrosis virus directly from infected fish tissues by dot blot hybridization with a non–radioactive probe. González MP, et al. **J Virol Methods** 1997 May;65(2):273–9

IMMUNOLOGY

Interleukin–12 promotes enhanced recovery from viral infection of neurons in the central nervous system. Reiss CS, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:257–65

The role of somatic mutation in the generation of the protective humoral immune response against vesicular stomatitis virus. Kalinke U, et al. **Immunity** 1996 Dec; 5(6):639–52

IFN–gamma is not required in the IL–12 response to vesicular stomatitis virus infection of the olfactory bulb. Komatsu T, et al. **J Immunol** 1997 Oct 1;159(7):3444–52

Virus–specific IgD in acute viral infection of mice. Moskophidis D, et al. **J Immunol** 1997 Feb 1;158(3):1254–61

Intracellular murine IFN–gamma mediates virus resistance, expression of oligoadenylate synthetase, and activation of STAT transcription factors. Will A, et al. **J Immunol** 1996 Nov 15;157(10):4576–83

Experimental vesicular stomatitis in swine: effects of route of inoculation and steroid treatment. Howerth EW, et al. **J Vet Diagn Invest** 1997 Apr;9(2):136–42

The antigen–specific cell–mediated immune response in mice is suppressed by infection with pathogenic lyssaviruses. Perrin P, et al. **Res Virol** 1996 Sep–Oct;147(5):289–99

The role of antibody concentration and avidity in antiviral protection. Bachmann MF, et al. **Science** 1997 Jun 27; 276(5321):2024–7

Host immune response to vesicular stomatitis virus infection of the central nervous system in C57BL/6 mice. Christian AY, et al. **Viral Immunol** 1996;9(3):195–205

Interleukin–12 promotes recovery from viral encephalitis. Komatsu T, et al. **Viral Immunol** 1997;10(1):35–47

METABOLISM

A novel 90–kDa stress protein induced in fish cells by fish rhabdovirus infection. Cho WJ, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):316–9

MORTALITY

Monovalent single–chain Fv fragments and bivalent miniantibodies bound to vesicular stomatitis virus protect against lethal infection. Kalinke U, et al. **Eur J Immunol** 1996 Dec;26(12):2801–6

PHYSIOPATHOLOGY

Potentiation by thyroxine of interferon–gamma–induced antiviral state requires PKA and PKC activities. Lin HY, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1256–61

Experimental infection of swine with a sandfly (Lutzomyia shannoni) isolate of vesicular stomatitis virus, New Jersey serotype. Clarke GR, et al. **J Vet Diagn Invest** 1996 Jan; 8(1):105–8

PREVENTION & CONTROL

Monovalent single–chain Fv fragments and bivalent miniantibodies bound to vesicular stomatitis virus protect against lethal infection. Kalinke U, et al. **Eur J Immunol** 1996 Dec;26(12):2801–6

Mother to fry, successful transfer of immunity against infectious haematopoietic necrosis virus infection in rainbow trout. Oshima S, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2441–5

TRANSMISSION

Vector competence of select black fly species for vesicular stomatitis virus (New Jersey serotype). Mead DG, et al. **Am J Trop Med Hyg** 1997 Jul;57(1):42–8

Experimental vesicular stomatitis in swine: effects of route of inoculation and steroid treatment. Howerth EW, et al. **J Vet Diagn Invest** 1997 Apr;9(2):136–42

VETERINARY

Current knowledge on the Australian bat lyssavirus [see comments] **Aust Vet J** 1997 Feb;75(2):151–3. Comment in: Aust Vet J 1997 May;75(5):367.

Taskforce investigates fatal bat virus [news] **Aust Vet J** 1996 Dec;74(6):417

Australian bat lyssavirus--a newly emerged zoonosis? Gleeson LJ. **Aust Vet J** 1997 Mar;75(3):188

Australian bat lyssavirus [letter; comment] St George TD. **Aust Vet J** 1997 May;75(5):367. Comment on: Aust Vet J 1997 Feb;75(2):151–3.

Australian bat lyssavirus infection in three fruit bats from north Queensland. Speare R, et al. **Commun Dis Intell** 1997 May 1;21(9):117–20

Immunization with viral antigens: viral haemorrhagic septicaemia. Lorenzen N, et al. **Dev Biol Stand** 1997; 90:201–9 (37 ref.)

Immunization with viral antigens: infectious haematopoietic necrosis. Winton JR. **Dev Biol Stand** 1997;90:211–20 (35 ref.)

Distribution and variation of NV genes in fish rhabdoviruses. Kurath G, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):113–7

Comparative performance of four serodiagnostic procedures for detecting bovine and equine vesicular stomatitis virus antibodies. Katz JB, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):329–31

Fast neutralization/immunoperoxidase assay for viral haemorrhagic septicaemia with anti–nucleoprotein monoclonal antibody. Lorenzo G, et al. **J Virol Methods** 1996 Apr 26;58(1–2):1–6

Serological survey of small mammals in a vesicular stomatitis virus enzootic area. Jiménez AE, et al. **J Wildl Dis** 1996 Apr;32(2):274–9

Immunohistochemical detection of VHS virus in paraffin–embedded specimens of rainbow trout (Oncorhynchus mykiss): the influence of primary antibody, fixative, and antigen unmasking on method sensitivity. Evensen O, et al. **Vet Pathol** 1997 May;34(3):253–61

Zoonoses control. Lyssavirus infection in 3 fruit bats, Australia. **Wkly Epidemiol Rec** 1997 Jun 27;72(26):194–6 **(Eng, Fre)**

VIROLOGY

Encephalitis caused by a Lyssavirus in fruit bats in Australia. Fraser GC, et al. **Emerg Infect Dis** 1996 Oct–Dec; 2(4):327–31

RHAMNOSE

ANALOGS & DERIVATIVES

Selection and partial characterization of a Pseudomonas aeruginosa mono–rhamnolipid deficient mutant. Wild M, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):279–85

A kinetic comparison of [18F]2–fluoro–2–deoxyglucose and [18F]2–fluoro–2–deoxymannose using positron emission tomography. Braun AR, et al. **Nucl Med Biol** 1994 Aug; 21(6):857–63

[Synthesis and NMR spectra and conformation of branched oligosaccharides. 16. Synthesis of 3,4–di–O–glycosylated derivatives of methyl–alpha–L–rhamnopyranoside] Khatuntseva EA, et al. **Bioorg Khim** 1996 May;22(5):376–82 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and structure–activity relationships of 17beta–substituted 14beta–hydroxysteroid 3–(alpha–L–rhamnopyranoside)s: steroids that bind to the digitalis receptor. Templeton JF, et al. **J Med Chem** 1997 May 9;40(10):1439–46

CHEMISTRY

Conformational analysis and molecular dynamics simulation of alpha–(1–>2) and alpha–(1–>3) linked rhamnose oligosaccharides: reconciliation with optical rotation and NMR experiments. Hardy BJ, et al. **Biopolymers** 1997 Jan; 41(1):83–96

IMMUNOLOGY

Immunochemical characterization of O polysaccharides composing the alpha–D–rhamnose backbone of lipopolysaccharide of Pseudomonas syringae and classification of bacteria into serogroups O1 and O2 with monoclonal antibodies. Ovod V, et al. **J Bacteriol** 1996 Nov;178(22):6459–65

METABOLISM

Intestinal permeability in kwashiorkor. Brewster DR, et al. **Arch Dis Child** 1997 Mar;76(3):236–41

Polymerization of 1,2–anhydro–3,4–di–O–benzyl–beta–L–rhamnopyranose. Chen Q, et al. **Carbohydr Res** 1996 Mar 22;283:207–13

Determination of the pathway for rhamnose biosynthesis in mycobacteria: cloning, sequencing and expression of the Mycobacterium tuberculosis gene encoding alpha–D–glucose–1–phosphate thymidylyltransferase. Ma Y, et al. **Microbiology** 1997 Mar;143 (Pt 3):937–45

PHARMACOKINETICS

Increased intestinal permeability in rats with graft versus host disease. Koltun WA, et al. **Gut** 1996 Aug;39(2):291–8

PHARMACOLOGY

Suppressive effect of monosaccharides on ICAM–1/CD54 expression in human keratinocytes. Palacio S, et al. **Arch Dermatol Res** 1997 Mar;289(4):234–7

Induction of nitric oxide production by polyosides from the cell walls of Streptococcus mutans OMZ 175, a gram–positive bacterium, in the rat aorta. Martin V, et al. **Infect Immun** 1997 Jun;65(6):2074–9

RHAMNUS

Genotoxic effects of Karwinskia humboldtiana toxin T–514 in peripheral blood lymphocytes. Velazco MR, et al. **Anticancer Drugs** 1996 Aug;7(6):710–5

RHENIUM

Availability of rhenium–188 from the alumina–based tungsten–188/rhenium–188 generator for preparation of rhenium–188–labeled radiopharmaceuticals for cancer treatment. Knapp FF Jr, et al. **Anticancer Res** 1997 May–Jun;17(3B):1783–95

Purification by affinity chromatography with anti–idiotypic monoclonal antibodies of immunoreactive monoclonal antibodies following labeling with 188Re. Hamby CV, et al. **Hybridoma** 1997 Feb;16(1):27–31

ADMINISTRATION & DOSAGE

Targeting peptides for pleural cavity tumor radiotherapy: specificity and dosimetry of Re–188–RC–160. Zamora PO, et al. **Hybridoma** 1997 Feb;16(1):85–91

RHENIUM

ADVERSE EFFECTS

Transient cranial neuropathy in prostatic cancer with bone metastases after rhenium-186-HEDP treatment. de Klerk JM, et al. **J Nucl Med** 1996 Mar;37(3):465-7

CHEMISTRY

Preparation of 188Re-RC-160 somatostatin analog: a peptide for local/regional radiotherapy. Zamora PO, et al. **Appl Radiat Isot** 1997 Mar;48(3):305-9

Synthesis and characterization of rhenium-complexed alpha-melanotropin analogs. Giblin MF, et al. **Bioconjug Chem** 1997 May-Jun;8(3):347-53

Cyclic and acyclic polyamines as chelators of rhenium-186 and rhenium-188 for therapeutic use. Prakash S, et al. **Nucl Med Biol** 1996 May;23(4):543-9

Investigations of directly labeling antibodies with rhenium-188. Winnard P Jr, et al. **Q J Nucl Med** 1996 Jun;40(2):151-60

[Effect of a binuclear rhenium complex on the conductivity of lipid bilayer membranes for alkali metal ions] Bovykin BA, et al. **Ukr Biokhim Zh** 1996 May-Jun;68(3):107-11 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Preparation, characterization, and biological evaluation of technetium(V) and rhenium(V) complexes of novel heterocyclic tetradentate N3S ligands. Rajagopalan R, et al. **Bioconjug Chem** 1997 May-Jun;8(3):407-15

METABOLISM

Technetium(V) and rhenium(V) complexes for 5-HT2A serotonin receptor binding: structure-affinity considerations. Johannsen B, et al. **Nucl Med Biol** 1996 May;23(4):429-38

PHARMACOKINETICS

Gastric uptake during Re-186 HEDP bone scintigraphy. Limouris GS, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1779-81

Localization of small-cell lung cancer xenografts with iodine-125-, indium-111-, and rhenium-188-somatostatin analogs. Hosono M, et al. **Jpn J Cancer Res** 1996 Sep; 87(9):995-1000

THERAPEUTIC USE

Clinical aspects of local and regional tumor therapy with 188Re-RC-160. Bender H, et al. **Anticancer Res** 1997 May-Jun;17(3B):1705-12 (31 ref.)

Treatment of metastatic bone pain using the bone seeking radiopharmaceutical Re-186-HEDP. De Klerk JM, et al. **Anticancer Res** 1997 May-Jun;17(3B):1773-7 (21 ref.)

Rhenium-186-HEDP palliative treatment in disseminated bone metastases due to prostate cancer. Limouris G, et al. **Anticancer Res** 1997 May-Jun;17(3B):1699-704

Palliative therapy using rhenium-186-HEDP in painful breast osseous metastases. Limouris GS, et al. **Anticancer Res** 1997 May-Jun;17(3B):1767-72

Gastric uptake during Re-186 HEDP bone scintigraphy. Limouris GS, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1779-81

Pre-clinical experience with Re-188-RC-160, a radiolabeled somatostatin analog for use in peptide-targeted radiotherapy. Zamora PO, et al. **Anticancer Res** 1997 May-Jun;17(3B):1803-8 (33 ref.)

Radiolabelling of Lipiodol with generator-produced 188Re for hepatic tumor therapy. Wang SJ, et al. **Appl Radiat Isot** 1996 Mar;47(3):267-71

Rhenium-188 hydroxyethylidene diphosphonate: a new generator-produced radiotherapeutic drug of potential value for the treatment of bone metastases. Lin WY, et al. **Eur J Nucl Med** 1997 Jun;24(6):590-5

Comparison of the biodistribution and the efficacy of monoclonal antibody 323/A3 labeled with either 131I or 186Re in human ovarian cancer xenografts. Kievit E, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):813-23

Cyclic and acyclic polyamines as chelators of rhenium-186 and rhenium-188 for therapeutic use. Prakash S, et al. **Nucl Med Biol** 1996 May;23(4):543-9

Rhenium-188 labeled hydroxyapatite and rhenium-188 sulfur colloid. In vitro comparison of two agents for radiation synovectomy. Grillenberger KG, et al. **Nuklearmedizin** 1997 Mar;36(2):71-5

Palliative therapy with rhenium-186-HEDP for bone metastases of breast cancer. Guerra UP, et al. **Tumori** 1997 Mar-Apr;83(2):560-2

Rhenium-186 hydroxyethylidene diphosphonate for treatment of painful osseous metastases from mammary carcinoma. Virotta G, et al. **Tumori** 1997 Mar-Apr; 83(2):563-5

Radionuclide therapy for prostate cancer lumbar metastasis prolongs symptom-free survival in a rat model. Geldof AA, et al. **Urology** 1997 May;49(5):795-801

[Pain therapy with rhenium-186 HEDP in multiple bone metastases] Palmedo H, et al. **Nuklearmedizin** 1996 Apr; 35(2):63-7 (Eng. Abstr.) **(Ger)**

RHEOGRAPHY see **PLETHYSMOGRAPHY, IMPEDANCE**

RHEOLOGY

Uroflowmetry and pressure/flow study of voiding in women. Lose G. **Acta Obstet Gynecol Scand Suppl** 1997;166:43-7

A model of blood interaction with optical-fluid guide for laser angioplasty. Ilegbusi OJ, et al. **Ann Biomed Eng** 1997 Jul-Aug;25(4):653-64

Rheology of rat basophilic leukemia cells. Tsai MA, et al. **Ann Biomed Eng** 1997 Jan-Feb;25(1):62-8

Validity and reproducibility of transit time flowmetry. Albäck A, et al. **Ann Chir Gynaecol** 1996;85(4):325-31

Joint meeting of the 21st Congress of the Society of Biomechanics, 19th Congress of the French Society of Fundamental and Clinical Biorheology, 4th Symposium on Cell Aggregation and Adhesion. Nancy, France, 23-25 September 1996. Abstracts. **Arch Physiol Biochem** 1996 Sep;104(5):543-727 **(Eng, Fre)**

Shear-induced platelet activation and platelet microparticle formation at blood flow conditions as in arteries with a severe stenosis. Holme PA, et al. **Arterioscler Thromb Vasc Biol** 1997 Apr;17(4):646-53

2nd International Conference on Medical Biorheology (ICMB). Shanghai, China, September 13-15, 1995. Shi Y, et al. **Biorheology** 1996 Nov-Dec;33(6):505-7

Rheological properties of selected dairy products. Vélez-Ruiz JF, et al. **Crit Rev Food Sci Nutr** 1997 Jun; 37(4):311-59 (183 ref.)

The clinical value of transvaginal colour Doppler ultrasound in assisted reproductive technology procedures [see comments] Tekay A, et al. **Hum Reprod** 1996 Aug; 11(8):1589-91. Comment in: Hum Reprod 1996 Oct;11(10):2333.

A method of ultrasonic 3-D computed velocimetry. Ogura Y, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):823-30

Relation of haemostatic, fibrinolytic, and rheological variables to the angiographic extent of peripheral arterial occlusive disease. Woodburn KR, et al. **Int Angiol** 1995 Sep;14(3):219-25

Influence of pulse repetition frequency and high pass filter on color Doppler maps of converging flow in vitro. Giesler M, et al. **Int J Card Imaging** 1996 Dec;12(4):257-61

Understanding continuous-wave Doppler signal intensity as a measure of regurgitant severity. Bolger AF, et al. **J Am Soc Echocardiogr** 1997 Jul-Aug;10(6):613-22

Observations on rheological, electrical, and optical changes during rigor development in pork and beef. Swatland HJ. **J Anim Sci** 1997 Apr;75(4):975-85

LDA measurements of velocities in a simulated collapsed tube. Bertram CD, et al. **J Biomech Eng** 1997 Aug; 119(3):357-63

Pulmonary airway reopening: effects of non-Newtonian fluid viscosity. Low HT, et al. **J Biomech Eng** 1997 Aug; 119(3):298-308

Pulsatile and steady flow-induced calcium oscillations in single cultured endothelial cells. Helmlinger G, et al. **J Vasc Res** 1996 Sep-Oct;33(5):360-9

Velocity distribution of slow fluid flows in Bentheimer sandstone: an NMRI and propagator study. Waggoner RA, et al. **Magn Reson Imaging** 1996;14(9):1085-91

Direct method for linear equations in branching networks. Hydon PE. **Med Biol Eng Comput** 1996 Sep;34(5):389-93

Modelling nanoscale fluid dynamics and transport in physiological flows. Ciofalo M, et al. **Med Eng Phys** 1996 Sep;18(6):437-51 (88 ref.)

Correlations between fatty acid composition of the erythrocyte membrane and blood rheology data. Persson SU, et al. **Scand J Clin Lab Invest** 1996 Apr;56(2):183-90

An improved flow evaluation scheme in orifices of different aspect ratios. Anayiotos AS, et al. **Ultrasound Med Biol** 1997;23(2):231-44

[Changes in coagulation physiology and rheology after preoperative normovolemic hemodilution] Hensel M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):481-7 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Rheology of cystic fibrosis sputum after in vitro treatment with hypertonic saline alone and in combination with recombinant human deoxyribonuclease I. King M, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):173-7

Central inhibitory effect of adenosine deaminase on carotid blood flow increase at high pressure. Guerrero F, et al. **Physiol Behav** 1996 Feb;59(2):283-6

INSTRUMENTATION

Leaking Precision Medical Model 2MFA oxygen flowmeters. **Health Devices** 1997 Jan;26(1):29-30

Medical flow measurement with drop counters. Methods for improving accuracy. Schnell G. **IEEE Eng Med Biol Mag** 1997 Jan-Feb;16(1):72-6

MR measurement and numerical simulation of steady flow in an end-to-side anastomosis model. Steinman DA, et al. **J Biomech** 1996 Apr;29(4):537-42

Peak flow meters [letter] Komesaroff D. **N Z Med J** 1997 Feb 28;110(1038):63

Thermal diffusion flowmetry. Carter LP. **Neurosurg Clin N Am** 1996 Oct;7(4):749-54 (17 ref.)

Low flow oxygen delivery via nasal cannula to neonates. Finer NN, et al. **Pediatr Pulmonol** 1996 Jan;21(1):48-51

Blood flow measurement using a highly filled carbon polymer sandwich sensor and an elasto-pseudo compressible vascular flow. Mehdian M, et al. **Proc Inst Mech Eng [H]** 1996;210(4):289-96

Noninvasive continuous blood pressure control by pulse wave velocity. Lutter N, et al. **Z Kardiol** 1996;85 Suppl 3:124-6

METHODS

The use of light reflection rheography to rule out deep venous thrombosis in emergency patients [letter] Brottman P, et al. **Am J Emerg Med** 1997 Mar;15(2):215-6

Comparison of steady-state diffusion and transit time ultrasonic measurements of umbilical blood flow in the chronic fetal sheep preparation. Sokol GM, et al. **Am J Obstet Gynecol** 1996 May;174(5):1456-60

High-resolution fluorescent particle-tracking flow visualization within an intraventricular axial flow left ventricular assist device. Kerrigan JP, et al. **Artif Organs** 1996 Jun;20(6):534-40

Study of secondary flow in centrifugal blood pumps using a flow visualization method with a high-speed video camera. Sakuma I, et al. **Artif Organs** 1996 Jun;20(6):541-5

Echo-Doppler-flowmetric assessment of penile dorsal arteries and their role in the erectile mechanism. Barra S, et al. **Eur J Radiol** 1997 Jul;25(1):67-73

Colored microsphere technique as a new method for quantitative-multiple estimation of regional hepatic and portal blood flow. Bauer R, et al. **Exp Toxicol Pathol** 1996 Jul;48(5):415-20

A new method to measure portal venous and hepatic arterial blood flow in patients intraoperatively. Jakab F, et al. **HPB Surg** 1996;9(4):239-43

Measurement of volumetric flow with no angle correction using multiplanar pulsed Doppler ultrasound. Poulsen JK, et al. **IEEE Trans Biomed Eng** 1996 Jun;43(6):589-99

Flow characteristics of peripherally inserted central catheters. Angle JF, et al. **J Vasc Interv Radiol** 1997 Jul-Aug;8(4):569-77

Validation of a revised slow-stop flow recirculation method. Kapoian T, et al. **Kidney Int** 1997 Sep;52(3):839-42

Intraoperative laser flowmetry reflects levels of cerebral blood flow during neurosurgical procedures. Kuchiwaki H, et al. **Neurol Res** 1996 Oct;18(5):457-61

Thermal diffusion flowmetry. Carter LP. **Neurosurg Clin N Am** 1996 Oct;7(4):749-54 (17 ref.)

Scaling laws for fully developed turbulent flow in pipes: discussion of experimental data. Barenblatt GI, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):773-6

[Ultrasound Doppler blood flowmetry] Chihara K. **Nippon Rinsho** 1997 Mar;55 Suppl 1:59-64 (20 ref.) **(Jpn)**

RHESUS BLOOD-GROUP SYSTEM see **RH-HR BLOOD-GROUP SYSTEM**

RHESUS MONKEY see **MACACA MULATTA**

RHETINIC ACID see **GLYCYRRHETINIC ACID**

RHEUM see **RHUBARB**

RHEUM EMODIN see **EMODIN**

RHEUMATIC DISEASES

Liability issues in the treatment of patients with rheumatic diseases. Gibofsky A. **Am J Med** 1997 Jan 27; 102(1A):40S-42S (04 ref.)

British Society for Rheumatology XIVth annual general meeting. Harrogate, 23-25 April 1997. Abstracts. **Br J Rheumatol** 1997;36 Suppl 1:1-231

British Society for Rheumatology Heberden Round joint with the Irish Society for Rheumatology and Society for Irish and American Rheumatologists. Belfast, 11-12 September 1997. Abstracts. **Br J Rheumatol** 1997;36 Abst Suppl 2:1-45

Getting to know about Colombia [letter] Caballero-Uribe CV. **Br J Rheumatol** 1997 Feb;36(2):268-9

Legal rights of children with musculoskeletal disabilities. Cassidy JT, et al. **Bull Rheum Dis** 1996 Nov;45(7):1-5 (24 ref.)

Rheumatologic emergencies. Halla J. **Bull Rheum Dis** 1997 Feb;46(1):4-6

Time-related changes in left ventricular function after double valve replacement for combined aortic and mitral regurgitation in a young rheumatic population. Predictors of postoperative left ventricular performance and role of chordal preservation. Skudicky D, et al. **Circulation** 1997 Feb 18;95(4):899-904

Tuberculous rheumatism (Poncet's disease) in a patient infected with human immunodeficiency virus. Lesprit P, et al. **Clin Infect Dis** 1996 Nov;23(5):1179-80

The T cell receptor (TCR) in HLA-B27-restricted T cell responses--an introduction. Märker-Hermann E, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:86-90 (28 ref.)

Nonarticular rheumatism, sports-related injuries, and related conditions. **Curr Opin Rheumatol** 1997 Mar;9(2):B42-65

Patient education in rheumatology [see comments] Lorish CD, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):106-11 (21 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87-9.

Nonarticular rheumatism, sports-related injuries, and related conditions [editorial; comment] Pinals RS.

Curr Opin Rheumatol 1997 Mar;9(2):133–4. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):144–50. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):151–4. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):155–8. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):159–64. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):165–73.

Health services research [see comments] Saag KG.
Curr Opin Rheumatol 1997 Mar;9(2):118–25 (50 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87–9.

The Canadian Rheumatology Association Meeting. Mont Tremblant, Quebec, February 26–March 1, 1997. Abstracts.
J Rheumatol 1997 Jul;24(7):1423–35

4th Annual winter workshop and annual meeting of the Canadian Rheumatology Association. Lake Louise, Alberta, Canada, February 22–24, 1996. Abstracts.
J Rheumatol 1996 Aug;23(8):1457–68

Rheumatic and musculoskeletal diseases and impaired quality of life: a challenge for rheumatologists [editorial] [see comments] Morales–Torres J, et al. **J Rheumatol** 1996 Jan; 23(1):1–3 (30 ref.). Comment in: J Rheumatol 1997 Feb;24(2):411.

Obstetric complications and rheumatic disease. Johnson MJ.
Rheum Dis Clin North Am 1997 Feb;23(1):169–82 (50 ref.)

Inherited deficiencies of complement in rheumatic diseases. Ratnoff WD. **Rheum Dis Clin North Am** 1996 Feb; 22(1):75–94 (73 ref.)

Rheumatic pain in female diabetic patients [letter; comment] Schnedl WJ, et al. **Scand J Rheumatol** 1997;26(2):135–6. Comment on: Scand J Rheumatol 1995;24(4):234–7.

[Rheumatology and rheumatologists today (editorial)] Trnavský K. **Vnitr Lek** 1997 Feb;43(2):63–5 **(Cze)**

[27th Annual meeting of the German Society of Rheumatology. Bamberg, 18–21 September 1996. Abstracts] **Z Rheumatol** 1996;55 Suppl 1:1–125 **(Ger)**

[Rheumatoid aortitis] Nakamura H, et al.
Ryoikibetsu Shokogun Shirizu 1996;(14):417–20 (11 ref.) **(Jpn)**

[The 40th Congress of the Japan Rheumatism Association. Fukushima, Japan. May 23–25, 1996. Abstracts]
Ryumachi 1996 Apr;36(2):91–458 **(Jpn)**

[For whom the medical journal is (editorial)] Kashiwazaki S. **Ryumachi** 1996 Oct;36(5):733 **(Jpn)**

[Quality assurance in rheumatology. Evaluation of a team work model between general practitioners and a rheumatologist] Hartmann H. **Tidsskr Nor Laegeforen** 1997 Apr 30;117(11):1624–6 (Eng. Abstr.) **(Nor)**

[Impact of an educational manual on knowledge and attitudes of rheumatic patients and health care workers] Pacheco D, et al. **Rev Med Chil** 1996 Sep;124(9):1071–6 (Eng. Abstr.) **(Spa)**

BLOOD

Detection of clonally rearranged T-cell-receptor gamma chain genes from T-cell malignancies and acute inflammatory rheumatic disease using PCR amplification, PAGE, and automated analysis. Witzens M, et al.
Ann Hematol 1997 Mar;74(3):123–30

Antibodies against p53 in sera from patients with systemic lupus erythematosus and other rheumatic diseases. Kovacs B, et al. **Arthritis Rheum** 1997 May;40(5):980–2

Soluble Fas (APO–1, CD95) and soluble Fas ligand in rheumatic diseases. Nozawa K, et al. **Arthritis Rheum** 1997 Jun;40(6):1126–9

Clinical use of the measurement of soluble cell adhesion molecules in patients with autoimmune rheumatic diseases [see comments] Sfikakis PP, et al.
Clin Diagn Lab Immunol 1997 May;4(3):241–6 (50 ref.). Comment in: Clin Diagn Lab Immunol 1997 Jul;4(4):496–7.

Clinical significance of serum thrombomodulin levels in patients with systemic rheumatic diseases. Kotajima L, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):59–65

Priming of NADPH oxidase by tumor necrosis factor alpha in patients with inflammatory and autoimmune rheumatic diseases. Miesel R, et al. **Inflammation** 1996 Aug; 20(4):427–38

Concentrations and origins of soluble interleukin 6 receptor–alpha in serum and synovial fluid. Desgeorges A, et al. **J Rheumatol** 1997 Aug;24(8):1510–6

Reduced serum creatine kinase activity in inflammatory rheumatic diseases. Sanmartí R, et al. **J Rheumatol** 1996 Feb;23(2):310–2

Immunoglobulin A--alpha–1–antitrypsin complex in rheumatic diseases. Łącki JK, et al. **Mater Med Pol** 1996 Oct–Dec;28(4):138–40 (21 ref.)

[Calciotropic hormones in rheumatology] Cormier C, et al. **Ann Biol Clin (Paris)** 1997 Jul–Aug;55(4):311–8 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Rheumatic symptoms following adjuvant therapy for breast cancer. Warner E, et al. **Am J Clin Oncol** 1997 Jun; 20(3):322–6

Drug–induced rheumatic disorders. Bannwarth B.
Rev Rhum Engl Ed 1996 Nov;63(10):639–47 (125 ref.)

Tuberculin–induced rheumatic manifestations. A new case [letter; comment] Montané de la Roque P, et al.
Rev Rhum Engl Ed 1996 Mar;63(3):229–30. Comment on: Rev Rhum Ed Fr 1993 Dec;60(12):937–8.

[Rheumatism caused by anticonvulsants: presentation of 2 clinical cases with work reintegration] Saviola G, et al. **G Ital Med Lav Ergon** 1996 Jan–May;18(1–3):31–4 (Eng. Abstr.) **(Ita)**

CLASSIFICATION

Rule induction and instance–based learning applied in medical diagnosis. Džeroski S, et al.
Technol Health Care 1996 Aug;4(2):203–21

[Teaching evolution of the working classification and nomenclature of rheumatism] Nasonova VA.
Vestn Ross Akad Med Nauk 1996;(11):10–4 (9 ref.) **(Rus)**

[National Register of Rheumatic Diseases in Children. The Spanish group of pediatric rheumatology]
An Esp Pediatr 1996 Oct;45(4):346–50 **(Spa)**

COMPLICATIONS

Other rheumatological complications of GI disorders [letter] Mönkemüller KE, et al. **Am J Gastroenterol** 1996 Dec; 91(12):2652

Interstitial lung fibrosis and rheumatic disorders in patients with hepatitis C virus infection. Ferri C, et al.
Br J Rheumatol 1997 Mar;36(3):360–5

Rheumatic disease patients, prone to Sjögren's syndrome and/or lymphoma, mount an antibody response to BHRF1, the Epstein–Barr viral homologue of BCL–2. Newkirk MM, et al. **Br J Rheumatol** 1996 Nov;35(11):1075–81

Sleep and rheumatic disease. Hench PK. **Bull Rheum Dis** 1996 Dec;45(8):1–6

Relapsing polychondritis: a syndrome rather than a distinct clinical entity? [letter] Priori R, et al.
Clin Exp Rheumatol 1997 May–Jun;15(3):334–5

Skin disorders associated with rheumatic disease. Kaminski MJ. **Clin Podiatr Med Surg** 1996 Jan;13(1):139–53 (46 ref.)

Inflammatory rheumatism and nasal polyposis. Laroche M, et al. **Clin Rheumatol** 1997 Mar;16(2):207–11

Sparing effect of hemiparesis on palindromic rheumatism. Ouguchi Y, et al. **Clin Rheumatol** 1997 Mar;16(2):204–6

Systemic disorders with rheumatic manifestations.
Curr Opin Rheumatol 1997 Jan;9(1):B14–30

Rheumatic manifestations of infectious diseases in children. Adebajo AO. **Curr Opin Rheumatol** 1997 Jan;9(1):68–74 (36 ref.)

Rheumatic manifestations of neurologic and psychiatric diseases. Aviña–Zubieta JA, et al. **Curr Opin Rheumatol** 1997 Jan;9(1):51–5 (30 ref.)

Hyperlipidemia and the rheumatic diseases. Ilowite NT.
Curr Opin Rheumatol 1996 Sep;8(5):455–8 (24 ref.)

Rheumatologic manifestations of malignancy. Mody GM, et al. **Curr Opin Rheumatol** 1997 Jan;9(1):75–9 (28 ref.)

Rheumatic features of sarcoidosis. Pettersson T.
Curr Opin Rheumatol 1997 Jan;9(1):62–7 (42 ref.)

Rheumatic features of gastrointestinal tract, hepatic, and pancreatic diseases. Ramos–Remus C, et al.
Curr Opin Rheumatol 1997 Jan;9(1):56–61 (68 ref.)

Rheumatic manifestations of inherited diseases. Sholter D, et al. **Curr Opin Rheumatol** 1997 Jan;9(1):80–2 (14 ref.)

Airway obstruction and rheumatoid arthritis. Vergnenègre A, et al. **Eur Respir J** 1997 May;10(5):1072–8

Identifying undiagnosed rheumatic disorders among patients with TMD. Wright EF, et al. **J Am Dent Assoc** 1997 Jun; 128(6):738–44

Carpal tunnel syndrome as a herald of autoimmune rheumatic disorders [letter; comment] Dodds WN. **J R Soc Med** 1997 Jun;90(6):359–60. Comment on: J R Soc Med 1997 Apr;90(4):216–7.

Carpal tunnel syndrome as a herald of autoimmune rheumatic disorders [see comments] Pal B. **J R Soc Med** 1997 Apr; 90(4):216–7. Comment in: J R Soc Med 1997 Jun;90(6):359–60.

Enthesopathy in leprosy. Carpintero–Benítez P, et al.
J Rheumatol 1996 Jun;23(6):1020–1

WHO/ILAR Taskforce on quality of life. Strand CV, et al.
J Rheumatol 1997 Aug;24(8):1630–3 (1 ref.)

Hepatitis C virus and rheumatic disease [editorial] Wener MH, et al. **J Rheumatol** 1996 Jun;23(6):953–9 (92 ref.)

The prevalence and meaning of fatigue in rheumatic disease. Wolfe F, et al. **J Rheumatol** 1996 Aug;23(8):1407–17

Malignant lymphoma in patients with rheumatic diseases other than Sjögren's syndrome: a clinicopathologic study of five cases and a review of the Japanese literature. Kojima M, et al. **Jpn J Clin Oncol** 1997 Apr;27(2):84–90 (43 ref.)

Parvovirus B19 infection and rheumatic diseases. Caramaschi P, et al. **Rev Rhum Engl Ed** 1996 Dec;63(11):846–53 (103 ref.)

Alveolar hemorrhage in patients with rheumatic disease. Dweik RA, et al. **Rheum Dis Clin North Am** 1997 May; 23(2):395–410 (67 ref.)

Emergency and critical care issues in pediatric rheumatology. Fitch JA, et al. **Rheum Dis Clin North Am** 1997 May; 23(2):439–60 (198 ref.)

Cerebrovascular complications of rheumatic disease. Hinchey JA, et al. **Rheum Dis Clin North Am** 1997 May; 23(2):293–316 (98 ref.)

Urticaria, angioedema, and rheumatologic disease.
Kulp–Shorten CL, et al. **Rheum Dis Clin North Am** 1996 Feb;22(1):95–115 (74 ref.)

Upper airway obstruction in the rheumatic diseases. Langford CA, et al. **Rheum Dis Clin North Am** 1997 May; 23(2):345–63 (125 ref.)

Prophylactic use of antibiotics and vaccines in patients with rheumatologic disorders. Mounzer KC, et al.
Rheum Dis Clin North Am 1997 May;23(2):259–75 (83 ref.)

Esophageal manifestations of rheumatic disorders. Fitzgerald RC, et al. **Semin Arthritis Rheum** 1997 Feb;26(4):641–66 (149 ref.)

The association of malignancy with rheumatic and connective tissue diseases. Carsons S. **Semin Oncol** 1997 Jun;24(3):360–72 (102 ref.)

[Cutaneous manifestations in rheumatic diseases] Kaneko F, et al. **Ryumachi** 1996 Aug;36(4):676–87 (33 ref.) **(Jpn)**

[The ocular manifestations in rheumatic diseases in young adults] Stefăniu I, et al. **Oftalmologia** 1996 Jul–Sep; 40(3):284–7 (Eng. Abstr.) **(Rum)**

[Osteoporosis: the rheumatological perspectives (editorial)] Nasonov EL, et al. **Ter Arkh** 1997;69(5):5–9 (53 ref.) **(Rus)**

[Tramadol (Tramal) in the treatment of rheumatic diseases--comparative study] Vlak T. **Reumatizam** 1996;43(2):1–10 (Eng. Abstr.) **(Scr)**

[Infection and reactive arthritis: clinico–bacteriological correlation in seronegative arthropathies] Gutiérrez F, et al. **Rev Med Chil** 1995 Oct;123(10):1214–24 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Increased serum levels of soluble CD44–isoform v5 in rheumatic diseases are restricted to seropositive rheumatoid arthritis. Haberhauer G, et al. **Acta Med Austriaca** 1997; 24(1):23–5

Soft–tissue rheumatism: diagnosis and treatment. Reveille JD.
Am J Med 1997 Jan 27;102(1A):23S–29S (14 ref.)

Sensitivity and positive predictive value of Medicare Part B physician claims for rheumatologic diagnoses and procedures. Katz JN, et al. **Arthritis Rheum** 1997 Sep; 40(9):1594–600

Standards of care: the value and importance of standardization [editorial] Smolen JS, et al.
Arthritis Rheum 1997 Mar;40(3):410–2

You're the flight surgeon. Barnes–Rivera.
Aviat Space Environ Med 1996 Apr;67(4):381

The role of MRI in the assessment of rheumatological disease. Proceedings of an international symposium. Otocec, Slovenia, November 1995. **Br J Rheumatol** 1996 Dec;35 Suppl 3:1–47

Should patients presenting with dry eyes be screened for autoimmune rheumatic disorders? [letter] Pal B.
Br J Rheumatol 1997 Feb;36(2):301

Rheumatic disease: choosing the most useful diagnostic tests. Shmerling RH. **Geriatrics** 1996 Nov;51(11):22–6, 29–30, 32

Autoantibodies to the A/B proteins of the heterogeneous nuclear ribonucleoprotein complex: novel tools for the diagnosis of rheumatic diseases. Steiner G, et al.
Int Arch Allergy Immunol 1996 Dec;111(4):314–9 (34 ref.)

Identifying undiagnosed rheumatic disorders among patients with TMD. Wright EF, et al. **J Am Dent Assoc** 1997 Jun; 128(6):738–44

Measuring chronic rheumatic pain in Mexican Americans: cross–cultural adaptation of the McGill Pain Questionnaire. Escalante A, et al. **J Clin Epidemiol** 1996 Dec; 49(12):1389–99

Enthesopathy in leprosy. Carpintero–Benítez P, et al.
J Rheumatol 1996 Jun;23(6):1020–1

Where does it hurt? Stability of recordings of pain location using the McGill Pain Map. Escalante A, et al.
J Rheumatol 1996 Oct;23(10):1788–93

Remitting distal extremity swelling with pitting edema: a distinct syndrome or a clinical feature of different inflammatory rheumatic diseases? [editorial; comment] Olivieri I, et al. **J Rheumatol** 1997 Feb;24(2):249–52 (30 ref.). Comment on: J Rheumatol 1997 Feb;24(2):333–6.

Functional and clinical aspects of the myelomonocyte protein calprotectin. Johne B, et al. **Mol Pathol** 1997 Jun; 50(3):113–23 (142 ref.)

Non–Hodgkin's lymphoma with rheumatism–like presentation and multiple cystic and nodular lesions in the liver. Cirasino L, et al. **Recenti Prog Med** 1997 Apr; 88(4):176–8

Rule induction and instance–based learning applied in medical diagnosis. Džeroski S, et al.
Technol Health Care 1996 Aug;4(2):203–21

[Diagnostic value of the HLA phenotype in inflammatory rheumatic diseases] Saraux A, et al. **Presse Med** 1997 Jun 28;26(22):1040–4 (Eng. Abstr.) **(Fre)**

[Bone and joint manifestations in the elderly patient] André B, et al. **Rev Med Liege** 1997 Apr;52(4):270–7 (12 ref.) **(Fre)**

[Lower abdominal pain. Rheumatologic–orthopedic aspects] Stucki G. **Arch Gynecol Obstet** 1996;259 Suppl 1:S61–5 **(Ger)**

[Diagnostic strategies in rheumatology. 4: Laboratory diagnosis--autoantibodies, immunogenetics and diagnosis of inflammation] Genth E. **Fortschr Med** 1997 Apr 20; 115(11):49–51 **(Ger)**

[Diagnostic strategies in rheumatology. 1: Clinical diagnosis--steps 1 and 2] Keitel W. **Fortschr Med** 1997 Mar 20;115(8):40–2 **(Ger)**

[Needle arthroscopy in rheumatology--its role in diagnosis and therapy] Brühlmann P. **Ther Umsch** 1996 Oct; 53(10):713–5 (Eng. Abstr.) **(Ger)**

[Enthesopathies--diagnosis and therapy] Sprott H, et al.
Z Arztl Fortbild (Jena) 1997 Jan;90(8):711–8 (Eng. Abstr.) **(Ger)**

[Nosologic criteria in rheumatology] Genth E.
Z Rheumatol 1996 Sep–Oct;55(5):319–30 (78 ref.) (Eng.

Abstr.) **(Ger)**

[The clinical pictures of rheumatological involvement in neoplasms] Dipasquale G. **Riv Med Aeronaut Spaz** 1975 Oct-Dec;38(4):547-60 (27 ref.) (Eng. Abstr.) **(Ita)**

[A case of a combined course of gout and rheumatism] Chukabaev ET, et al. **Ter Arkh** 1996;68(9):86-8 (13 ref.) **(Rus)**

[Rheumatism and aspects of the chronicity of the rheumatic process] Ermolina LM. **Voen Med Zh** 1996 Jun; 317(6):69-71 **(Rus)**

DRUG THERAPY

Comparison of the accuracy of steroid placement with clinical outcome in patients with shoulder symptoms. Eustace JA, et al. **Ann Rheum Dis** 1997 Jan;56(1):59-63

Is there a future for extracorporeal photochemotherapy in the treatment of the rheumatological diseases? Holbrook MR, et al. **Ann Rheum Dis** 1997 Jun;56(6):339-40

Penetration and bactericidal activity of cefixime in synovial fluid. Somekh E, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1198-200

Preliminary experience with low-dose methotrexate in fibroblastic rheumatism. Vittecoq O, et al. **Arthritis Rheum** 1996 Dec;39(12):2070-3

Safety of meloxicam: a global analysis of clinical trials [British Journal of Rheumatology, 1996;35(suppl. 1):68-77] [letter] Fenn GC, et al. **Br J Rheumatol** 1997 Jul;36(7):817-9

Auranofin. Kean WF, et al. **Br J Rheumatol** 1997 May; 36(5):560-72 (111 ref.)

Inadvertent intra-articular injection of the wrong substance. Lanyon P, et al. **Br J Rheumatol** 1997 Jul;36(7):812-3

Antimalarial drugs in the treatment of rheumatological diseases. Rynes RI. **Br J Rheumatol** 1997 Jul;36(7):799-805 (64 ref.)

Antirheumatic drug therapy during pregnancy. Soscia PN, et al. **Bull Rheum Dis** 1997 Apr;46(2):2-4 (11 ref.)

The use of intravenous immunoglobulin in rheumatic diseases. Cruz-Esteban C, et al. **Cleve Clin J Med** 1996 Oct;63(6):340-3

Efficacy and tolerability of a topical NSAID patch (local action transcutaneous flurbiprofen) and oral diclofenac in the treatment of soft-tissue rheumatism. Martens M. **Clin Rheumatol** 1997 Jan;16(1):25-31

A clinical evaluation of flurbiprofen LAT and piroxicam gel: a multicentre study in general practice. Ritchie LD. **Clin Rheumatol** 1996 May;15(3):243-7

Clinical therapeutics. **Curr Opin Rheumatol** 1997 May; 9(3):B67-93

Biologic agents in the treatment of inflammatory rheumatic diseases. Kalden JR, et al. **Curr Opin Rheumatol** 1996 May; 8(3):195-200 (29 ref.)

Immunosuppressive drug treatment. McCune J, et al. **Curr Opin Rheumatol** 1997 May;9(3):191-9 (45 ref.)

Recent clinical trials in the rheumatic diseases [see comments] Matteson EL. **Curr Opin Rheumatol** 1997 Mar;9(2):95-101 (49 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87-9.

Corticosteroids in the treatment of rheumatologic diseases. Morand E. **Curr Opin Rheumatol** 1997 May;9(3):200-5 (46 ref.)

Clinical therapeutics [editorial] Robinson D. **Curr Opin Rheumatol** 1997 May;9(3):175-7

Corticosteroids in the treatment of rheumatologic diseases. Weisman MH. **Curr Opin Rheumatol** 1996 May;8(3):188-94 (15 ref.)

Aceclofenac. A review of its pharmacodynamic properties and therapeutic potential in the treatment of rheumatic disorders and in pain management. Brogden RN, et al. **Drugs** 1996 Jul;52(1):113-24 (52 ref.)

Drug treatment of rheumatic diseases in the 1990s. Achievements and future developments. Choy EH, et al. **Drugs** 1997 Mar;53(3):337-48 (91 ref.)

Tolerability of nabumetone: a pilot in vitro study showing absence of injury to articular cartilage. Giordano N, et al. **Int J Tissue React** 1996;18(4-6):105-8

Improving drug use in rheumatic disorders. Peterson GM, et al. **J Clin Pharm Ther** 1996 Aug;21(4):215-20

Antimalarial workshop. **J Rheumatol** 1997 Jul;24(7):1393-5 (13 ref.)

Prescribing nonsteroidal antiinflammatory drugs--what's new? [editorial] Hawker G. **J Rheumatol** 1997 Feb; 24(2):243-5 (15 ref.)

Safety of nonsteroidal antiinflammatory drugs in pregnant patients with rheumatic disease. Ostensen M, et al. **J Rheumatol** 1996 Jun;23(6):1045-9

Immunosuppressive drugs and pregnancy. Esplin MS, et al. **Obstet Gynecol Clin North Am** 1997 Sep;24(3):601-16 (94 ref.)

Hematologic complications of rheumatic disease therapies. George CS, et al. **Rheum Dis Clin North Am** 1997 May; 23(2):425-37 (82 ref.)

Immunosuppressive drug use during pregnancy. Ramsey-Goldman R, et al. **Rheum Dis Clin North Am** 1997 Feb;23(1):149-67 (133 ref.)

Infectious complications of immunosuppressive therapy in patients with rheumatic diseases. Segal BH, et al. **Rheum Dis Clin North Am** 1997 May;23(2):219-37 (93 ref.)

Considerations for nonsteroidal anti-inflammatory drug therapy: benefits. Emery P. **Scand J Rheumatol Suppl** 1996; 105:5-9; discussion 10-2 (15 ref.)

Cyclooxygenase 1 and 2 in rheumatic disease: implications for nonsteroidal anti-inflammatory drug therapy. Spangler RS. **Semin Arthritis Rheum** 1996 Aug;26(1):435-46 (79 ref.)

[Antimalarial agents in rheumatic diseases. New therapeutic aspects of an old medication] Barthel HR, et al. **Dtsch Med Wochenschr** 1996 Dec 13;121(50):1576-82 (48 ref.) **(Ger)**

[Cyclosporin A in inflammatory rheumatic diseases] Gross WL, et al. **Internist (Berl)** 1996 Jan;37(1):91-7 (61 ref.) **(Ger)**

[General principles of immunosuppressive therapy of diseases of rheumatic origin] Peter HH. **Internist (Berl)** 1997 Jun; 38(6):514-9 (20 ref.) **(Ger)**

[Ketoprofen--a first class nonsteroidal anti-arrhythmia agent] **Z Orthop Ihre Grenzgeb** 1997 Jan-Feb;135(1 Suppl):1-8 **(Ger)**

[Propolis and poplar bud extract. Some thoughts on alternative medicine (editorial; comment)] Rák K. **Orv Hetil** 1996 Jun 23;137(25):1363-4. Comment on: Orv Hetil 1996 Jun 23;137(25):1365-70. **(Hun)**

[Local treatment of rheumatic diseases with propolis compounds (see comments) Síró B, et al. **Orv Hetil** 1996 Jun 23;137(25):1365-70 (Eng. Abstr.). Comment in: Orv Hetil 1996 Jun 23;137(25):1363-4. **(Hun)**

[Cyclophosphamide pulse therapy for refractory rheumatic diseases] Tateishi M, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Jun;20(3):152-8 (Eng. Abstr.) **(Jpn)**

[Sulphasalazine: a promising drug in rheumatology] Nasonov EL. **Klin Med (Mosk)** 1997;75(6):39-44 (71 ref.) **(Rus)**

[New aspects of anti-inflammatory therapy of rheumatic diseases: preclinical validation and clinical trial of meloxicam] Nasonov EL, et al. **Klin Med (Mosk)** 1996; 74(4):4-8 (48 ref.) **(Rus)**

[The use of methotrexate in rheumatology: results and prospects] Nasonov EL. **Klin Med (Mosk)** 1996;74(5):10-5 (74 ref.) **(Rus)**

[Use of fluoroquinolones in rheumatology] Belov BS, et al. **Vestn Ross Akad Med Nauk** 1996;(12):12-5 (Eng. Abstr.) **(Rus)**

[Current problems of antibacterial therapy in rheumatology] Sidorenko SV. **Vestn Ross Akad Med Nauk** 1996;(12):10-2 (Eng. Abstr.) **(Rus)**

ECONOMICS

A summary of economic evaluations published in the field of rheumatology and related disciplines. Ferraz MB, et al. **Arthritis Rheum** 1997 Sep;40(9):1587-93

Economic impact of rheumatologic disorders [see comments] Sangha O, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):102-5 (18 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87-9.

Role of specialty care for chronic diseases: a report from an ad hoc committee of the American College of Rheumatology. Committee of the American College of Rheumatology Council on Health Care Research [published erratum appears in Mayo Clin Proc 1997 Feb;72(2):192] **Mayo Clin Proc** 1996 Dec;71(12):1179-81

ENZYMOLOGY

Metalloproteinases in the rheumatic diseases [editorial] Cawston TE, et al. **J Pathol** 1996 Oct;180(2):115-7

Cyclooxygenase 1 and 2 in rheumatic disease: implications for nonsteroidal anti-inflammatory drug therapy. Spangler RS. **Semin Arthritis Rheum** 1996 Aug;26(1):435-46 (79 ref.)

EPIDEMIOLOGY

A nationwide surveillance study of rheumatic diseases among Japanese children. Fujikawa S, et al. **Acta Paediatr Jpn** 1997 Apr;39(2):242-4

Rheumatic diseases and the development of rheumatology in Vietnam. An TN, et al. **Br J Rheumatol** 1996 Jul; 35(7):680-1

A comparison of the prevalence of rheumatoid arthritis and other rheumatic diseases amongst Pakistanis living in England and Pakistan. Hameed K, et al. **Br J Rheumatol** 1997 Jul;36(7):781-5

Rheumatology in Iceland. Jónsson H, et al. **Br J Rheumatol** 1997 May;36(5):577-9 (14 ref.)

Rheumatic disorders at a Zambian Teaching Hospital [letter] Njobvu PD, et al. **Br J Rheumatol** 1997 Mar;36(3):404-5

Letter from Lebanon. Uthman I, et al. **Br J Rheumatol** 1997 Jul;36(7):806-7

Epidemiology and health services research. **Curr Opin Rheumatol** 1997 Mar;9(2):B31-42

Threats to population-based research [editorial; comment] Gabriel SE. **Curr Opin Rheumatol** 1997 Mar;9(2):87-9. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):90-4. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):95-101. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):102-5. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):106-11. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):118-25. Comment on: Curr Opin Rheumatol 1997 Mar;9(2):126-32.

Epidemiology of rheumatic disease in children. Gäre BA. **Curr Opin Rheumatol** 1996 Sep;8(5):449-54 (52 ref.)

Update on the epidemiology of the rheumatic diseases [see comments] Hawker G. **Curr Opin Rheumatol** 1997 Mar; 9(2):90-4 (42 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87-9.

The prevalence of rheumatic diseases in a Filipino urban population: a WHO-ILAR COPCORD Study. World Health Organization. International League of Associations for Rheumatology. Community Oriented Programme for the Control of the Rheumatic Diseases. Dans LF, et al. **J Rheumatol** 1997 Sep;24(9):1814-9

Registers in the study of pediatric rheumatic diseases--limitations and potential [editorial; comment] Gäre BA. **J Rheumatol** 1996 Nov;23(11):1834-7 (32 ref.). Comment on: J Rheumatol 1996 Nov;23(11):1981-7.

The incidence of pediatric rheumatic diseases: results from the Canadian Pediatric Rheumatology Association Disease Registry [see comments] Malleson PN, et al. **J Rheumatol** 1996 Nov;23(11):1981-7. Comment in: J Rheumatol 1996 Nov;23(11):1834-7.

Prevalence of leisure-time physical activity among persons with arthritis and other rheumatic conditions--United States, 1990-1991. **MMWR Morb Mortal Wkly Rep** 1997 May 9;46(18):389-93

[Rheumatism in the Russian Federation: statistic and reality] Folomeeva OM, et al. **Vestn Ross Akad Med Nauk** 1996; (11):21-4 (0 ref.) (Eng. Abstr.) **(Rus)**

[Prospective epidemiological study of rheumatism in the Irkutsk Region] Goriaev IA, et al. **Vestn Ross Akad Med Nauk** 1996;(11):50-2 (Eng. Abstr.) **(Rus)**

ETHNOLOGY

A comparison of the prevalence of rheumatoid arthritis and other rheumatic diseases amongst Pakistanis living in England and Pakistan. Hameed K, et al. **Br J Rheumatol** 1997 Jul;36(7):781-5

[The pattern of predisposition to rheumatism] Miakotkin VA. **Vestn Ross Akad Med Nauk** 1996;(11):35-8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Connective tissue disease and other rheumatic conditions following breast implants in Denmark. Friis S, et al. **Ann Plast Surg** 1997 Jul;39(1):1-8

An outcome analysis of 100 women after explantation of silicone gel breast implants. Peters W, et al. **Ann Plast Surg** 1997 Jul;39(1):9-19

Rheumatic manifestations of the myelodysplastic syndromes: a comparative study. Chandran G, et al. **Aust N Z J Med** 1996 Oct;26(5):683-8

Occupational medicine and rheumatic diseases [editorial] Harrington JM. **Br J Rheumatol** 1997 Feb;36(2):153-4 (12 ref.)

Joint inflammation and erosion: different mechanisms? [letter; comment] Pullar T. **Br J Rheumatol** 1997 Jul;36(7):821-2 . Comment on: Br J Rheumatol 1996 Dec;35(12):1263-8.

Systemic disorders with rheumatic manifestations. **Curr Opin Rheumatol** 1996 Jan;8(1):B10-20

Rheumatic manifestations of tropical diseases. Adebajo AO. **Curr Opin Rheumatol** 1996 Jan;8(1):85-9 (30 ref.)

Rheumatic manifestations of malignancy. Aviña-Zubieta JA, et al. **Curr Opin Rheumatol** 1996 Jan;8(1):47-51 (45 ref.)

Rheumatologic manifestations of renal disease. Ferrari R. **Curr Opin Rheumatol** 1996 Jan;8(1):71-6 (13 ref.)

Immunodeficient states and associated rheumatic manifestations. Stein CM. **Curr Opin Rheumatol** 1996 Jan; 8(1):52-6 (26 ref.)

Postcardiac injury rheumatism. Mukhopadhyay P, et al. **J Assoc Physicians India** 1995 Jun;43(6):388-90

Lack of evidence of systemic inflammatory rheumatic disorders in symptomatic women with breast implants. Blackburn WD Jr, et al. **Plast Reconstr Surg** 1997 Apr; 99(4):1054-60

Silicone-associated rheumatic disease: an unsupported myth. Blackburn WD Jr, et al. **Plast Reconstr Surg** 1997 Apr; 99(5):1362-7 (45 ref.)

Uricemia in hemodialyzed patients [letter] Bertolo MB, et al. **Rev Rhum Engl Ed** 1996 Dec;63(11):869-70

Rheumatic manifestations due to human parvovirus B19. A report of four cases. Golstein MA, et al. **Rev Rhum Engl Ed** 1996 Dec;63(11):854-8 (21 ref.)

Remitting seronegative symmetrical synovitis with pitting edema: a rheumatic manifestation of myelodysplastic syndrome? [letter] Hernandez-Beriain JA, et al. **Rev Rhum Engl Ed** 1996 Oct;63(9):629-30

Rheumatic manifestations of dysproteinemias and lymphoproliferative disorders. Duna GF, et al. **Rheum Dis Clin North Am** 1996 Feb;22(1):39-51 (107 ref.)

Adult immunodeficiency and rheumatic disease. Itescu S. **Rheum Dis Clin North Am** 1996 Feb;22(1):53-73 (67 ref.)

[Lessons learned in rheumatic diseases from studies in twins (editorial)] Aho K. **Duodecim** 1995;111(11):1002-4 **(Fin)**

[The role of the killer activity of the peripheral blood lymphocytes in the pathogenesis of rheumatism] Dubkova AG, et al. **Lik Sprava** 1997 Jan-Feb;(1):39-42 (Eng. Abstr.) **(Rus)**

GENETICS

Detection of clonally rearranged T-cell-receptor gamma chain genes from T-cell malignancies and acute inflammatory rheumatic disease using PCR amplification, PAGE, and automated analysis. Witzens M, et al. **Ann Hematol** 1997 Mar;74(3):123-30

Happy families. Ollier B, et al. **Ann Rheum Dis** 1997 Mar; 56(3):149-50

Epstein-Barr virus strain type and latent membrane protein 1 gene deletions in lymphomas in patients with rheumatic diseases. Natkunam Y, et al. **Arthritis Rheum** 1997 Jun; 40(6):1152-6

Rheumatology in Iceland. Jónsson H, et al.
Br J Rheumatol 1997 May;36(5):577–9 (14 ref.)
Solitary caging protects mice from ankylosing enthesopathy. Weinreich S, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:32–3
Pediatric and heritable disorders. **Curr Opin Rheumatol** 1997 Sep;9(5):B179–91

HISTORY

The famous case of rheumatic hematuria described by Giammatteo Ferrari da Grado, professor at the University of Pavia (1432–1472). Dal Canton I, et al.
Am J Nephrol 1997;17(3–4):282–5
The Dunlop–Dottridge Memorial Lecture. Paleopathology as a clinical science with implications for patient care, education, and research. Rothschild BM. **J Rheumatol** 1996 Aug;23(8):1469–75
Digging in the desert. Browne CD, et al. **Med J Aust** 1996 Dec 2–16;165(11–12):617–20
Rheumatic diseases and the development of rheumatology in Vietnam. An TN, et al. **Rev Rhum Engl Ed** 1996 Oct; 63(9):616–7
Rheumatism as perceived by some quotations: as seen by the patient and physician. Lagier R.
Rev Rhum Engl Ed 1995 Dec;62(11):775–80

IMMUNOLOGY

Comparison of an enzyme-linked immunosorbent assay for antibodies to beta 2-glycoprotein I and a conventional anticardiolipin immunoassay [see comments] Roubey RA, et al. **Arthritis Rheum** 1996 Sep;39(9):1606–7. Comment in: Arthritis Rheum 1996 Sep;39(9):1441–3. Comment in: Arthritis Rheum 1997 Jul;40(7):1366–8.
Range of antinuclear antibodies in "healthy" individuals. Tan EM, et al. **Arthritis Rheum** 1997 Sep;40(9):1601–11
Immunoadhesins for immunomodulation of autoimmune and rheumatic disease [editorial] Isaacs JD. **Br J Rheumatol** 1997 Mar;36(3):305–7
Rheumatic disease patients, prone to Sjögren's syndrome and/or lymphoma, mount an antibody response to BHRF1, the Epstein–Barr viral homologue of BCL-2. Newkirk MM, et al. **Br J Rheumatol** 1996 Nov;35(11):1075–81
Hepatitis C virus (HCV)-induced IgG–IgM rheumatoid factor (RF) complex may be the main causal factor for cold-dependent activation of complement in patients with rheumatic disease. Wei G, et al. **Clin Exp Immunol** 1997 Jan;107(1):83–8
Antibody epitopes probed by immunoselected phage-display library peptides in members of a family with various rheumatic manifestations. Fakhfakh F, et al.
Clin Exp Rheumatol 1996 Nov–Dec;14(6):607–11
Lymphocyte adhesion molecules in autoimmune rheumatic diseases: basic issues and clinical expectations. Sfikakis PP, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):763–77 (108 ref.)
Expression of CD28, CTLA4, CD80, and CD86 molecules in patients with autoimmune rheumatic diseases: implications for immunotherapy [editorial; comment] Sfikakis PP, et al. **Clin Immunol Immunopathol** 1997 Jun; 83(3):195–8. Comment on: Clin Immunol Immunopathol 1997 Jun;83(3):199–204.
Autoantibodies to the nucleolar organizer antigen NOR-90 in children with systemic rheumatic diseases [letter] Bitter T. **J Rheumatol** 1995 Dec;22(12):2371
HLA-dependent heterogeneous T cell response to Mycoplasma arthritidis-derived superantigen (MAS). Alvarez-Ossorio L, et al.
Med Microbiol Immunol (Berl) 1997 Mar;185(4):245–51
Clinical relevance of autoantibodies in systemic rheumatic diseases. Fritzler MJ. **Mol Biol Rep** 1996;23(3–4):133–45 (204 ref.)
Molecular biology of autoantigens in rheumatic diseases. Galperin C, et al. **Rheum Dis Clin North Am** 1996 Feb; 22(1):175–210 (243 ref.)
Anti-heat-shock protein antibodies in rheumatic and autoimmune diseases. Tishler M, et al.
Semin Arthritis Rheum 1996 Oct;26(2):558–63 (25 ref.)
[Assessment of secretory and humoral immune response to group A polysaccharide in rheumatism] Miasoedova SE, et al. **Klin Lab Diagn** 1996 Jul–Aug;(4):43–5 **(Rus)**
[Antistreptococcal immunity in rheumatism and urban ecological risk factors] Amanzholova ShA. **Ter Arkh** 1996; 68(5):45–7 (Eng. Abstr.) **(Rus)**
[The characteristics of the immune response to the polysaccharide determinants of Streptococcus group A in rheumatism] Borodiiuk NA, et al.
Zh Mikrobiol Epidemiol Immunobiol 1996 May–Jun; (3):118–22 (Eng. Abstr.) **(Rus)**
[Viral infection and rheumatic diseases] Handzha IM, et al. **Lik Sprava** 1997 Jan–Feb;(1):37–9 (Eng. Abstr.) **(Ukr)**

METABOLISM

ICAM-1, E-selectin, and TNF alpha expression in labial salivary glands of patients with rheumatoid vasculitis. Flipo RM, et al. **Ann Rheum Dis** 1997 Jan;56(1):41–4
Tissue crosslinks concentrations in normal joints and chronic articular diseases [letter; comment] Sinigaglia L, et al.
Ann Rheum Dis 1997 May;56(5):337–8. Comment on: Ann Rheum Dis 1996 May;55(5):324–7.
Biological markers in inflammatory rheumatic diseases. Hilliquin P. **Cell Mol Biol (Noisy-le-grand)** 1995 Dec; 41(8):993–1006 (119 ref.)
Pharmacokinetics of hydroxychloroquine and chloroquine during treatment of rheumatic diseases. Furst DE.
Lupus 1996 Jun;5 Suppl 1:S11–5 (48 ref.)

MICROBIOLOGY

Mycoplasma fermentans, but not M penetrans, detected by PCR assays in synovium from patients with rheumatoid arthritis and other rheumatic disorders. Schaeverbeke T, et al. **J Clin Pathol** 1996 Oct;49(10):824–8
Tuberculous rheumatism. Gupta SK, et al.
J Indian Med Assoc 1996 Sep;94(9):358–9
Chronic health effects of microbial foodborne disease. Bunning VK, et al. **World Health Stat Q** 1997;50(1–2):51–6 (45 ref.)
[The phage sensitivity and lysogeny of cultures of Streptococcus pyogenes group A isolated in different streptococcal infections] Asoskova TK, et al.
Zh Mikrobiol Epidemiol Immunobiol 1996 Sep–Oct;(5):7–10 (Eng. Abstr.) **(Rus)**

MORTALITY

Short and longterm outcomes for patients with systemic rheumatic diseases admitted to intensive care units: a prognostic study of 181 patients. Godeau B, et al.
J Rheumatol 1997 Jul;24(7):1317–23

NURSING

The expanding role of the nurse in rheumatology [editorial] Hill J. **Br J Rheumatol** 1997 Apr;36(4):410–2

PATHOLOGY

Quantitative histopathologic discrimination of rheumatic disorders using nuclear measurements of synoviocytes. Artacho-Pérula E, et al. **Anal Quant Cytol Histol** 1996 Oct;18(5):420–8
Rheumatic diseases in an MRL strain of mice with a deficit in the functional Fas ligand. Ito MR, et al.
Arthritis Rheum 1997 Jun;40(6):1054–63
The arthropathy of fibroblastic rheumatism. Romas E, et al.
Arthritis Rheum 1997 Jan;40(1):183–7 (16 ref.)
Preliminary experience with low-dose methotrexate in fibroblastic rheumatism. Vittecoq O, et al.
Arthritis Rheum 1996 Dec;39(12):2070–3
Joint inflammation and erosion: different mechanisms? [letter; comment] Pullar T. **Br J Rheumatol** 1997 Jul;36(7):821–2 . Comment on: Br J Rheumatol 1996 Dec;35(12):1263–8.
[Panoramic nailfold capillary microscopy and its application in rheumatic diseases] da Silva LS, et al.
Rev Assoc Med Bras 1997 Jan–Mar;43(1):69–73 (27 ref.) **(Por)**

PHYSIOPATHOLOGY

Rheumatic diseases in an MRL strain of mice with a deficit in the functional Fas ligand. Ito MR, et al.
Arthritis Rheum 1997 Jun;40(6):1054–63
Advances in the understanding of neuroendocrine function in rheumatic disease. Morand EF, et al.
Aust N Z J Med 1996 Aug;26(4):543–51 (91 ref.)
Cytokines in rheumatic diseases. Miller LC. **Biotherapy** 1994; 8(2):99–111 (138 ref.)
Guidance on ill health retirement. Poole CJ.
Br J Rheumatol 1997 May;36(5):573–6 (18 ref.)
Nerve growth factor and autoimmune rheumatic diseases. Aloe L, et al. **Clin Exp Rheumatol** 1997 Jul–Aug; 15(4):433–8 (70 ref.)
The absence of human beta 2-microglobulin increases the occurrence of ankylosing enthesopathy in HLA-B27 transgenic mice. Chopin M, et al. **Clin Rheumatol** 1996 Jan; 15 Suppl 1:28–31
Health assessment in the rheumatic diseases of childhood. Duffy CM, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):440–7 (49 ref.)
Rheumatologic features of hematologic disorders. Mody GM, et al. **Curr Opin Rheumatol** 1996 Jan;8(1):57–61 (27 ref.)
Molecular and cellular interactions in rheumatoid synovium. Müller-Ladner U. **Curr Opin Rheumatol** 1996 May; 8(3):210–20 (105 ref.)
The clinical significance of cytoplasmic inclusions(CPI) in synovial fluid examination. Park J, et al.
J Korean Med Sci 1996 Aug;11(4):326–31
Assessing chronic musculoskeletal pain associated with rheumatic disease: further validation of the pediatric pain questionnaire. Gragg RA, et al. **J Pediatr Psychol** 1996 Apr;21(2):237–50
Reliability and validity of a submaximal treadmill test to estimate aerobic capacity in women with rheumatic disease. Minor MA, et al. **J Rheumatol** 1996 Sep;23(9):1517–23
Assessment of sexual function in patients with rheumatic disorders: a critical appraisal. Quarersma MR, et al.
J Rheumatol 1997 Sep;24(9):1673–6 (19 ref.)

PREVENTION & CONTROL

Community screening for rheumatic disorder: cross cultural adaptation and screening characteristics of the COPCORD Core Questionnaire in Brazil, Chile, and Mexico. The PANLAR-COPCORD Working Group. Pan American League of Associations for Rheumatology. Community Oriented Programme for the Control of Rheumatic Disease. Bennett K, et al. **J Rheumatol** 1997 Jan;24(1):160–8
[Drug prevention of rheumatism: a glance into past and present time] Shokh BP. **Vestn Ross Akad Med Nauk** 1996; (12):7–9 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Psychosocial measures. Brooks P, et al. **J Rheumatol** 1997 May;24(5):1008–11

RADIOGRAPHY

Imaging in clinical trials. Bird HA.
Baillieres Clin Rheumatol 1996 Nov;10(4):699–709 (61 ref.)
DXA scanning. Truscott JG, et al.
Baillieres Clin Rheumatol 1996 Nov;10(4):679–98 (50 ref.)
Clinico-radiological correlation of enthesitis in seronegative spondyloarthropathies (SNSA). Secundini R, et al.
Clin Rheumatol 1997 Mar;16(2):129–32
Patellar enthesopathy in childhood: a new clinical and radiographic observation. al-Mayouf SM, et al.
J Rheumatol 1997 Jun;24(6):1186–8

RADIONUCLIDE IMAGING

Isotope imaging. Ryan PJ, et al.
Baillieres Clin Rheumatol 1996 Nov;10(4):589–613 (54 ref.)

REHABILITATION

Rheumatologic aspects of mineral water. Fabiani D, et al.
Clin Dermatol 1996 Nov–Dec;14(6):571–5 (21 ref.)
6th International Symposium for Health Professionals in Rheumatology. Pellenberg, Belgium, 19–21 September 1996. Abstracts. **Clin Rheumatol** 1996 Nov;15(6):627–52
Ancillary services in rheumatology. Jones G, et al.
Med J Aust 1997 Apr 21;166(8):434–9 (34 ref.)
Why exercise?: a preliminary investigation of an exercise motivation index among individuals with rheumatic conditions and healthy individuals. Stenström CH, et al.
Physiother Res Int 1997;2(1):7–16
[Health care status of rheumatic patients in rheumatologic centers 1993] Zink A, et al. **Gesundheitswesen** 1996 Dec; 58(12):648–56 (Eng. Abstr.) **(Ger)**
[Memorandum on the position and development of rehabilitation for patients with rheumatic diseases] Jäckel WH, et al. **Z Rheumatol** 1996 Nov–Dec;55(6):410–22 **(Ger)**
[Rheumatism caused by anticonvulsants: presentation of 2 clinical cases with work reintegration] Saviola G, et al. **G Ital Med Lav Ergon** 1996 Jan–May;18(1–3):31–4 (Eng. Abstr.) **(Ita)**
[From spas and convalescent homes to retraining institutions] Nilsen KH. **Tidsskr Nor Laegeforen** 1996 Oct 30; 116(26):3115–7 (Eng. Abstr.) **(Nor)**
[Care in warm climate is good for patients with rheumatism. Both the functional ability and well-being is improved] Hafström I. **Lakartidningen** 1997 Mar 19;94(12):1094–6 (23 ref.) **(Swe)**

THERAPY

Soft-tissue rheumatism: diagnosis and treatment. Reveille JD.
Am J Med 1997 Jan 27;102(1A):23S–29S (14 ref.)
Costs, outcomes, and patient satisfaction by provider type for patients with rheumatic and musculoskeletal conditions: a critical review of the literature and proposed methodologic standards [see comments] Solomon DH, et al. **Ann Intern Med** 1997 Jul 1;127(1):52–60 (35 ref.). Comment in: Ann Intern Med 1997 Jul 1;127(1):72–4.
Sensitivity and positive predictive value of Medicare Part B physician claims for rheumatologic diagnoses and procedures. Katz JN, et al. **Arthritis Rheum** 1997 Sep; 40(9):1594–600
Prospects and advances in hormonal immunomodulatory therapy. Jorgensen C, et al. **Baillieres Clin Rheumatol** 1996 May;10(2):379–92 (84 ref.)
Telemedicine. Pilot study of telephone follow up in rheumatology has just been completed [letter; comment] Pal B. **BMJ** 1997 Feb 15;314(7079):520–1. Comment on: BMJ 1996 Nov 30;313(7069):1375–7. Comment on: BMJ 1996 Nov 30;313(7069):1377–80; discussion 1380–1.
Shoes and insoles for patients with rheumatoid foot disease. Grifka JK. **Clin Orthop** 1997 Jul;(340):18–25 (15 ref.)
Epidemiology and health services research.
Curr Opin Rheumatol 1997 Mar;9(2):B31–42
Behavioral and social research in rheumatology [see comments] Callahan LF, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):126–32 (40 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87–9.
Biologic agents in the treatment of inflammatory rheumatic diseases. Kalden JR, et al. **Curr Opin Rheumatol** 1997 May; 9(3):206–12 (40 ref.)
Indications, contraindications and possible side-effects of climatotherapy at the Dead-Sea. Shani J, et al.
Int J Dermatol 1997 Jul;36(7):481–92 (47 ref.)
The effects of traditional antirheumatic herbal medicines on immune response cells. Chang DM, et al. **J Rheumatol** 1997 Mar;24(3):436–41
Unmet service needs of children with rheumatic diseases and their parents in a metropolitan area. Lineker SC, et al.
J Rheumatol 1996 Jun;23(6):1054–8
Home exercise and compliance in inflammatory rheumatic diseases--a prospective clinical trial. Stenström CH, et al.
J Rheumatol 1997 Mar;24(3):470–6
Preclinical investigations that subserve efforts to employ bone

marrow transplantation for rheumatoid or autoimmune diseases. Good RA, et al. **J Rheumatol Suppl** 1997 May; 48:5–12 (73 ref.)

Stem cell transplantation for severe autoimmune disorders, with special reference to rheumatic diseases. Marmont AM. **J Rheumatol Suppl** 1997 May;48:13–8 (48 ref.)

Hematopoietic stem cell transplantation in rheumatic diseases other than systemic sclerosis and systemic lupus erythematosus. Tyndall A. **J Rheumatol Suppl** 1997 May; 48:94–7 (25 ref.)

Hematopoietic stem cell transplants for autoimmune disease: role of EULAR. European League Against Rheumatism. van de Putte LB, et al. **J Rheumatol Suppl** 1997 May; 48:98–9

Rheumatology. Panush RS, et al. **JAMA** 1997 Jun 18; 277(23):1899–900

Education for outpatients with rheumatic diseases. Evaluation of short-term and medium-term results. Giraudet-Le Quintrec JS, et al. **Rev Rhum Engl Ed** 1996 Jul–Sep;63(7–8):469–74

Unorthodox treatment practices in rheumatology [editorial] Kahn MF. **Rev Rhum Engl Ed** 1997 Feb;64(2):75–7 (73 ref.)

Intravenous immunoglobulin in rheumatic disease. Klassen LW, et al. **Rheum Dis Clin North Am** 1996 Feb;22(1):155–73 (95 ref.)

Dynamic training versus relaxation training as home exercise for patients with inflammatory rheumatic diseases. A randomized controlled study. Stenström CH, et al. **Scand J Rheumatol** 1996;25(1):28–33

Testing the power of prayer [letter; comment] Cox BM. **Science** 1997 Jun 13;276(5319):1630–1. Comment on: Science 1997 Apr 18;276(5311):357–9. Comment on: Science 1997 May 9;276(5314):881.

[Bone and joint manifestations in the elderly patient] André B, et al. **Rev Med Liege** 1997 Apr;52(4):270–7 (12 ref.) **(Fre)**

[Lecture on the therapy of rheumatism for practice physicians] Schikawa K. **Ryumachi** 1997 Apr;37(2):159–60 **(Jpn)**

[Orthotic devices for patients with rheumatism] Tajima N. **Ryumachi** 1997 Apr;37(2):165–6 **(Jpn)**

ULTRASONOGRAPHY

Musculoskeletal ultrasound. Gibbon WW. **Baillieres Clin Rheumatol** 1996 Nov;10(4):561–88 (38 ref.)

VIROLOGY

[Autoimmune rheumatic diseases associated with HIV infection and its pathogenesis] Matsumoto Y. **Nippon Rinsho** 1997 Jun;55(6):1486–91 (18 ref.) (Eng. Abstr.) **(Jpn)**

RHEUMATIC FEVER

Rheumatic fever [see comments] Stollerman GH. **Lancet** 1997 Mar 29;349(9056):935–42 (49 ref.). Comment in: Lancet 1997 Jun 7;349(9066):1700.

Acute rheumatic fever. Still a challenge. da Silva NA, et al. **Rheum Dis Clin North Am** 1997 Aug;23(3):545–68 (144 ref.)

[Rheumatic carditis] Kunitomi T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(14):219–21 (11 ref.) **(Jpn)**

[Rheumatic fever] Miyata K. **Ryoikibetsu Shokogun Shirizu** 1996;(15):195–7 (6 ref.) **(Jpn)**

[New potentialities of diagnosis and any primary prevention of rheumatic fever] Shostak NA. **Vestn Ross Akad Med Nauk** 1996;(11):38–41 (22 ref.) **(Rus)**

BLOOD

Haptoglobin in rheumatic fever. Anil K, et al. **Mater Med Pol** 1995 Jul–Sep;27(3):108–10

COMPLICATIONS

Sydenham's chorea. Kulkarni ML, et al. **Indian Pediatr** 1996 Feb;33(2):112–5

Rheumatic chorea. Sudhindra BK. **Indian Pediatr** 1996 Jan; 33(1):47–9

The co-occurrence of acute rheumatic fever and AIDS. Georgescu L, et al. **J Rheumatol** 1997 Feb;24(2):404–6

[Obsessive compulsive disorder and Tourette syndrome in patients with rheumatic fever with or without Sydenham's chorea: phenomenological and laboratorial aspects (letter)] Mercadante MT, et al. **Rev Assoc Med Bras** 1996 Jan–Mar; 42(1):61–2 **(Por)**

[Association of acute rheumatic fever and acute glomerulonephritis] Jovanović D, et al. **Vojnosanit Pregl** 1996 May–Jun;53(3):233–5 **(Scr)**

DIAGNOSIS

Antigenic epitope mapping of the M24 protein of Streptococcus pyogenes: implications for serodiagnosis of rheumatic fever. Norton RE, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3–4):267–71

Complete heart block as a first manifestation of acute rheumatic fever [letter; comment] Thakur AK. **Indian Heart J** 1996 Jul–Aug;48(4):428–9. Comment on: Indian Heart J 1996 May–Jun;48(3):303–4.

Salmonella infection mimicking acute rheumatic fever. Kamili MA, et al. **J Assoc Physicians India** 1996 Aug; 44(8):579–80

The reference value of erythrocyte sedimentation rate for differential diagnosis of rheumatic fever among Bangladeshi children. Zaman MM, et al. **J Epidemiol** 1996 Jun; 6(2):109–13

Delayed diagnosis of acute rheumatic fever in adults: a forgotten cause of febrile polyarthritis. Chan AW, et al. **J Rheumatol** 1996 Nov;23(11):1999–2001

Poststreptococcal reactive arthritis in children [letter] Mercado U. **J Rheumatol** 1996 Jun;23(6):1113–4

An emotional 13-year-old girl. Kanabar DJ, et al. **Lancet** 1996 Oct 12;348(9033):1000

Index of suspicion. Acute rheumatic fever. Ganea GR. **Pediatr Rev** 1997 Aug;18(8):283–6

[An approach to the diagnosis of recurrent attack of rheumatic fever in patients with rheumatic heart disease] Huang C. **Chung Hua Nei Ko Tsa Chih** 1995 Oct; 34(10):687–9 (Eng. Abstr.) **(Chi)**

[Adult-onset acute rheumatic fever: 4 cases in Guadeloupe] Cnudde F, et al. **Presse Med** 1996 Nov 30;25(37):1823–6 (21 ref.) (Eng. Abstr.) **(Fre)**

[Sweet's syndrome (letter)] Pollak M. **Dtsch Med Wochenschr** 1996 Oct 4;121(40):1244–5 **(Ger)**

[Diagnostic strategies in rheumatology. 3: General laboratory diagnosis--detection of pathogenic infections] Genth E. **Fortschr Med** 1997 Apr 10;115(10):42, 45 **(Ger)**

[A resurgence of rheumatic fever. New causes or old attitudes?] Brito MJ, et al. **Acta Med Port** 1996 Oct–Dec; 9(10–12):401–5 (33 ref.) (Eng. Abstr.) **(Por)**

[Additional dilemmas in the differential diagnosis of rheumatic fever and post-streptococcal reactive arthritis (letter; comment)] Sušković T. **Lijec Vjesn** 1996 Oct; 118(10):254. Comment on: Lijec Vjesn 1996 Mar–Apr;118(3–4):53–6. **(Scr)**

DRUG THERAPY

[Secondary prophylaxis in rheumatic fever. Oral antibiotic therapy versus benzathine penicillin] Herdy GV, et al. **Arq Bras Cardiol** 1996 Nov;67(5):331–3 (Eng. Abstr.) **(Por)**

EPIDEMIOLOGY

Acute rheumatic fever in an Arabian Gulf country--effect of climate, advantageous socioeconomic conditions, and access to medical care. Eltohami EA, et al. **Angiology** 1997 Jun;48(6):481–9

Socio-economic deprivation associated with acute rheumatic fever. A hospital-based case-control study in Bangladesh. Zaman MM, et al. **Paediatr Perinat Epidemiol** 1997 Jul; 11(3):322–32

[Prevalence of rheumatic fever in children from a public high school in Belo Horizonte] Alves Meira ZM, et al. **Arq Bras Cardiol** 1995 Oct;65(4):331–4 (Eng. Abstr.) **(Por)**

[Epidemiology of rheumatic fever. A local study] Gus I, et al. **Arq Bras Cardiol** 1995 Oct;65(4):321–5 (Eng. Abstr.) **(Por)**

ETHNOLOGY

Acute rheumatic fever in adults: a resurgence in the Hasidic Jewish community. Feuer J, et al. **J Rheumatol** 1997 Feb; 24(2):337–40

ETIOLOGY

Anticardiolipin antibodies in acute rheumatic fever and chronic rheumatic heart disease: is there a significant association? Narin N, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):567–9

HISTORY

The epidemiology and prevention of rheumatic fever. 1952 [classical article] Rammelkamp CH, et al. **Bull N Y Acad Med** 1997 Summer;74(1):119–33; discussion 134–6

IMMUNOLOGY

Identification of children with pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections by a marker associated with rheumatic fever. Swedo SE, et al. **Am J Psychiatry** 1997 Jan;154(1):110–2

Cytokines in acute rheumatic fever. Yeğin O, et al. **Eur J Pediatr** 1997 Jan;156(1):25–9

Antibodies in the sera of acute rheumatic fever patients bind to human cardiac tropomyosin. Khanna AK, et al. **J Autoimmun** 1997 Feb;10(1):99–106

Immunologic and clinical correlations in rheumatic fever and rheumatic heart disease. Veasy LG, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):400–7 (82 ref.)

Persistent elevation of immunoglobulin G titer against the C region of recombinant group A streptococcal M protein in patients with rheumatic fever. Mori K, et al. **Pediatr Res** 1996 Feb;39(2):336–42

[Cellular immune responses in rheumatic fever (editorial)] George J, et al. **Harefuah** 1996 Nov 1;131(9):321–2 **(Heb)**

[Activation of cellular immunity in acute rheumatic fever: clinical and pathogenetic significance] Nasonov EL, et al. **Vestn Ross Akad Med Nauk** 1996;(11):41–4 (50 ref.) **(Rus)**

MICROBIOLOGY

Type-specific antibodies to purified streptococcal M proteins from potentially rheumatogenic M-types in patients with rheumatic fever and rheumatic heart disease. Thakur A, et al. **J Med Microbiol** 1996 Dec;45(6):483–9

Immunologic and clinical correlations in rheumatic fever and rheumatic heart disease. Veasy LG, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):400–7 (82 ref.)

PHYSIOPATHOLOGY

Obsessive-compulsive disorder and rheumatic chorea: is there a connection? Abbas S, et al. **Psychopathology** 1996; 29(3):193–7

PREVENTION & CONTROL

Compliance of secondary prophylaxis for controlling rheumatic fever and rheumatic heart disease in a rural area of northern India. Kumar R, et al. **Indian Heart J** 1997 May–Jun;49(3):282–8

Changing streptococci and prospects for the global eradication of rheumatic fever. Stollerman GH. **Perspect Biol Med** 1997 Winter;40(2):165–89 (113 ref.)

[The challenge of secondary prophylaxis in rheumatic fever (editorial)] Herdy GV. **Arq Bras Cardiol** 1996 Nov; 67(5):317 **(Por)**

[Antibiotics in the prevention of rheumatic fever (lecture)] Kuznetsova SM, et al. **Antibiot Khimioter** 1996 Feb; 41(2):43–51 **(Rus)**

[Is an antistreptococcal vaccine available at last? (editorial)] Reyes López PA. **Arch Inst Cardiol Mex** 1996 Sep–Oct; 66(5):387–9 **(Spa)**

ULTRASONOGRAPHY

Echocardiographic evaluation of patients with acute rheumatic fever and rheumatic carditis. Vasan RS, et al. **Circulation** 1996 Jul 1;94(1):73–82

RHEUMATIC HEART DISEASE

Rheumatic heart disease in developing countries [letter; comment] Singh M, et al. **Lancet** 1997 Jun 7;349(9066):1700. Comment on: Lancet 1997 Mar 29;349(9056):935–42.

Rheumatic fever [see comments] Stollerman GH. **Lancet** 1997 Mar 29;349(9056):935–42 (49 ref.). Comment in: Lancet 1997 Jun 7;349(9066):1700.

[Rheumatic pericarditis] Fujikawa S. **Ryoikibetsu Shokogun Shirizu** 1996;(13):615–7 (6 ref.) **(Jpn)**

[Rheumatic valvular heart disease] Kitamura F. **Ryoikibetsu Shokogun Shirizu** 1996;(13):444–7 (4 ref.) **(Jpn)**

[Rheumatic carditis] Kunitomi T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(14):219–21 (11 ref.) **(Jpn)**

[Rheumatic endocarditis] Murata K. **Ryoikibetsu Shokogun Shirizu** 1996;(13):486–8 (12 ref.) **(Jpn)**

CLASSIFICATION

[Combined forms of rheumatism and rheumatoid arthritis--an attempt at nosological interpretation] Shostak NA. **Ter Arkh** 1997;69(5):36–40 **(Rus)**

COMPLICATIONS

Importance of left atrial appendage function as a risk factor for systemic thromboembolism in patients with rheumatic mitral valve disease. Li YH, et al. **Am J Cardiol** 1996 Oct 1;78(7):844–7

Cardiac papillary fibroelastomas: rationale for excision. Minatoya K, et al. **Ann Thorac Surg** 1996 Nov; 62(5):1519–21

Coronary fistula associated with double mitral valve disease. A case report. Ayala F, et al. **Arch Med Res** 1996 Autumn; 27(3):345–7

Percutaneous mitral valvuloplasty for rheumatic mitral stenosis associated with cor triatriatum. Alfonso F, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):291–3

Time to bid farewell to surgical mitral commissurotomy? [editorial] Tan K, et al. **Eur Heart J** 1996 Sep;17(9):1304–5

Familial Jaccoud's arthropathy. Panja M, et al. **Indian Heart J** 1996 Jul–Aug;48(4):395–7

Mitral valve prolapse secondary to rheumatic valvulitis [letter] Cheng TO. **Int J Cardiol** 1997 Jul 25;60(2):217

Re: Rheumatic mitral stenosis with Ebstein anomaly of tricuspid value [letter; comment] Kapoor A. **Int J Cardiol** 1996 Apr 19;54(1):93–4. Comment on: Int J Cardiol 1995 Mar 24;49(1):92–3.

Rheumatic mitral and tricuspid valve disease [letter] Mittal SR, et al. **Int J Cardiol** 1997 May 23;59(3):317–9

Inflammatory valvular prolapse produced by acute rheumatic carditis: echocardiographic analysis of 66 cases of acute rheumatic carditis. Zhou LY, et al. **Int J Cardiol** 1997 Jan 31;58(2):175–8

Ebstein's anomaly of tricuspid value coexisting with rheumatic mitral stenosis. Bharani A, et al. **J Assoc Physicians India** 1995 May;43(5):358–9

Surgery for rheumatic mitral regurgitation in patients below twenty years of age. An analysis of failures. Gometza B, et al. **J Heart Valve Dis** 1996 May;5(3):294–301

Autograft failure after the Ross operation in a rheumatic population: pre- and postoperative echocardiographic observations. Pieters FA, et al. **J Heart Valve Dis** 1996 Jul;5(4):404–8; discussion 408–9

Growth parameters and endocrine function in relation to echocardiographic parameters in children and adolescents with compensated rheumatic heart disease. Soliman AT, et al. **J Trop Pediatr** 1997 Feb;43(1):4–9

Fever, cardiac failure and arteritis in a child with rheumatic carditis. Burnell RH, et al. **Pediatr Infect Dis J** 1997 Apr; 16(4):408, 422–3

[An approach to the diagnosis of recurrent attack of rheumatic fever in patients with rheumatic heart disease] Huang C. **Chung Hua Nei Ko Tsa Chih** 1995 Oct; 34(10):687–9 (Eng. Abstr.) **(Chi)**

[Bacterial endocarditis in childhood] Zacherl S, et al. **Klin Padiatr** 1996 Mar–Apr;208(2):47–52 (Eng. Abstr.) **(Ger)**

[Repair in rheumatic mitral valve insufficiency] Fucci C, et al. **G Ital Cardiol** 1997 Jun;27(6):544–8 (Eng. Abstr.) **(Ita)**

[Rheumatic heart disease and infective endocarditis in a patient with acquired immunodeficiency syndrome] Mesquita ET, et al. **Arq Bras Cardiol** 1996 Oct;67(4):255–7 (Eng. Abstr.) **(Por)**

[Biventricular diverticulosis associated with rheumatic heart disease: apropos of a case] Fuertes Beneitez J, et al. **Rev Esp Cardiol** 1997 Aug;50(8):597–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

[A diagnostically difficult case of a combination of extrapulmonary tuberculosis with a rheumatic heart defect] Sarkisova ND, et al. **Ter Arkh** 1996;68(4):24–7 (9 ref.) **(Rus)**

DRUG THERAPY

Effects of high-dose intravenous methylprednisolone in children with acute rheumatic carditis. Akçoral A, et al. **Acta Paediatr Jpn** 1996 Feb;38(1):28–31

[Time organization of blood coagulation in patients with rheumatic heart disease involving circulation insufficiency] Zaslavskaia RM, et al. **Klin Med (Mosk)** 1996;74(8):25–9 (Eng. Abstr.) **(Rus)**

[The chronocorrection of disorders in the blood coagulation rhythm with kurantil in patients with decompensated rheumatic heart defects] Zaslavskaia RM, et al. **Patol Fiziol Eksp Ter** 1997 Apr–Jun;(2):23–7 (Eng. Abstr.) **(Rus)**

[The efficacy of treatment with the angiotensin-converting enzyme inhibitor ramipril in patients with congestive heart failure of rheumatic etiology] Karakin AA, et al. **Ter Arkh** 1996;68(2):43–6 **(Rus)**

[The immunomodulating effect of vilozen in the combined treatment of children with rheumatism associated with an allergy] Moshchych PS, et al. **Lik Sprava** 1997 Mar–Apr; (2):76–9 (Eng. Abstr.) **(Ukr)**

ETIOLOGY

Anticardiolipin antibodies in acute rheumatic fever and chronic rheumatic heart disease: is there a significant association? Narin N, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):567–9

Rheumatic heart disease in Gondar College of Medial Sciences Teaching Hospital: socio-demographic and clinical profile. Melka A. **Ethiop Med J** 1996 Oct; 34(4):207–16

Mitral regurgitation may be related with previous streptococcal infection. Wahid MR, et al. **Eur J Pediatr** 1996 Mar;155(3):168–72

Rheumatic fever is a major cause of acquired heart disease in children and young adults throughout the developing world [letter] Chadha S, et al. **Singapore Med J** 1997 Mar; 38(3):138

GENETICS

DNA typing of HLA class II genes in Japanese patients with rheumatic heart disease. Koyanagi T, et al. **J Mol Cell Cardiol** 1996 Jun;28(6):1349–53

IMMUNOLOGY

Study of HLA-A, B, C, DR, DQ profile of patients with established rheumatic heart disease in Kashmir. Wani BA. **Indian Heart J** 1997 Mar–Apr;49(2):152–4

HLA antigen pattern of Kashmiri patients with rheumatic heart disease. Bhat MS, et al. **Indian J Med Res** 1997 Jun; 105:271–4

Preferential recognition of human myocardial antigens by T lymphocytes from rheumatic heart disease patients. El-Demellawy M, et al. **Infect Immun** 1997 Jun; 65(6):2197–205

DNA typing of HLA class II genes in Japanese patients with rheumatic heart disease. Koyanagi T, et al. **J Mol Cell Cardiol** 1996 Jun;28(6):1349–53

Immunologic and clinical correlations in rheumatic fever and rheumatic heart disease. Veasy LG, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):400–7 (82 ref.)

[Acute rheumatic fever and rheumatic heart disease: immunological studies] Speranskii AI, et al. **Vestn Ross Akad Med Nauk** 1996;(11):44–50 (17 ref.) (Eng. Abstr.) **(Rus)**

[The structure of the determinants of streptococcal group A polysaccharide common to epidermal antigens to which antibodies are formed at different stages of the rheumatic process] Bazanova EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):16–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of different left ventricular load conditions on myocardial beta-adrenoceptor density in patients with rheumatic heart valvular disease. Dzimiri N, et al. **Gen Pharmacol** 1996 Sep;27(6):1019–23

Serum alpha-1-antitrypsin in ischemia and rheumatic heart diseases. Somayajulu GL, et al. **Indian J Pathol Microbiol** 1996 Oct;39(4):271–5

Zinc in rheumatic heart valves [letter] Bhattacharya SK, et al. **J Assoc Physicians India** 1995 Jan;43(1):72

MICROBIOLOGY

Type-specific antibodies to purified streptococcal M proteins from potentially rheumatogenic M-types in patients with rheumatic fever and rheumatic heart disease. Thakur A, et al. **J Med Microbiol** 1996 Dec;45(6):483–9

Immunologic and clinical correlations in rheumatic fever and rheumatic heart disease. Veasy LG, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):400–7 (82 ref.)

PATHOLOGY

[Clinicopathological analysis of rheumatic heart disease] Okada R. **J Cardiol** 1996;27 Suppl 2:3–11; discussion 12–3 (Eng. Abstr.) **(Jpn)**

[Variations in mesenchymal cell activity between rheumatic and non-rheumatic valve disease] Takeda A, et al. **J Cardiol** 1997;29 Suppl 2:29–35 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Role of mitral regurgitation in preventing mitral orifice occlusion in a patient with a free-floating left atrial thrombus and mitral stenosis. Carp RM, et al. **Am Heart J** 1997 Apr;133(4):479–81

Effect of left ventricular pressure and volume overload on alpha-adrenoceptor activity in patients with rheumatic heart valvular disease. Dzimiri N, et al. **Gen Pharmacol** 1996 Apr;27(3):539–43

PREVENTION & CONTROL

Compliance of secondary prophylaxis for controlling rheumatic fever and rheumatic heart disease in a rural area of northern India. Kumar R, et al. **Indian Heart J** 1997 May-Jun;49(3):282–8

Integrated community-based screening for cardiovascular diseases of childhood. Thakur JS, et al. **World Health Forum** 1997;18(1):24–7

RADIOGRAPHY

Prospective angiographic study of the abnormalities of systemic venous connections in congenital and acquired heart disease. Parikh SR, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):379–86

RADIONUCLIDE IMAGING

[Radionuclide study of capillary circulation in the lungs in rheumatism and sarcoidosis] Vyrenkova NIu. **Probl Tuberk** 1996;(3):24–5 **(Rus)**

SURGERY

Effects of aprotinin on plasma levels of neutrophil elastase and postoperative blood loss in cardiac surgery. Dernek S, et al. **Cardiovasc Surg** 1996 Aug;4(4):515–9

Spontaneous restoration of sinus rhythm after cardiac surgery [letter] Sechi LA, et al. **Eur Heart J** 1996 Dec;17(12):1914 (5 ref.)

Role of an operative score in mitral reconstruction in dominantly stenotic lesions. Ghosh PK, et al. **Eur J Cardiothorac Surg** 1997 Feb;11(2):274–9

Porcine mitral stentless valve mid-term clinical results. Vrandecic M, et al. **Eur J Cardiothorac Surg** 1997 Jul; 12(1):56–62

Surgery of the mitral valve [editorial] John S. **Indian J Chest Dis Allied Sci** 1996 Oct–Dec;38(4):223–5

Cardiac surgery and plasma digoxin levels. Anaokar SM, et al. **J Assoc Physicians India** 1996 Oct;44(10):694–7

Valve repair in rheumatic mitral valve disease: is it always worth trying? [see comments] Cotrufo M, et al. **J Heart Valve Dis** 1997 Jul;6(4):370–2. Comment in: J Heart Valve Dis 1997 Jul;6(4):373–4. Comment in: J Heart Valve Dis 1997 Jul;6(4):375–6. Comment in: J Heart Valve Dis 1997 Jul;6(4):377–9.

The appropriateness of mitral valve repair for rheumatic mitral valve disease [editorial; comment] David TE. **J Heart Valve Dis** 1997 Jul;6(4):373–4. Comment on: J Heart Valve Dis 1997 Jul;6(4):370–2.

Repair versus replacement for mitral stenosis [editorial; comment] Frater RW. **J Heart Valve Dis** 1997 Jul; 6(4):377–9. Comment on: J Heart Valve Dis 1997 Jul;6(4):370–2.

One leaflet immobilization after mitral valve replacement with a bileaflet prosthesis. Masiello P, et al. **J Heart Valve Dis** 1996 Jan;5(1):114–6

Tricuspid valve replacement in rheumatic disease: preoperative predictors of hospital mortality. Poveda JJ, et al. **J Heart Valve Dis** 1996 Jan;5(1):26–30

Tricuspid valve surgery: 15-year experience. Bleiweis MS, et al. **J Natl Med Assoc** 1996 Oct;88(10):645–8

Video-assisted minimally invasive mitral valve surgery: the "micro-mitral" operation. Chitwood WR Jr, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):413–4

[Ostium stenosis of the left coronary artery after aortic valve replacement--2 case reports] Roithinger FX, et al. **Wien Klin Wochenschr** 1996;108(17):552–4 (Eng. Abstr.) **(Ger)**

[Reconstructive surgery of rheumatic mitral valvulopathy in patients under 18 years of age] Buendía-Hernández A, et al. **Rev Invest Clin** 1996 Sep–Oct;48(5):343–9 (Eng. Abstr.) **(Spa)**

THERAPY

Biventricular assist for severe acute rheumatic pancarditis [letter; comment] Barlow JB, et al. **Ann Thorac Surg** 1997 Mar;63(3):920–1. Comment on: Ann Thorac Surg 1996 Jul;62(1):267–9.

Percutaneous mitral valvuloplasty for rheumatic mitral stenosis associated with cor triatriatum. Alfonso F, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):291–3

Unsuccessful deflation of a bifoil balloon during percutaneous mitral valvuloplasty. Patel TM, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):290–2

Rheumatic heart disease. Feldman T. **Curr Opin Cardiol** 1996 Mar;11(2):126–30 (25 ref.)

Percutaneous balloon mitral valvotomy in mitral restenosis. Gupta S, et al. **Eur Heart J** 1996 Oct;17(10):1560–4

Beneficial effect of balloon mitral valvotomy in reducing severity of associated tricuspid regurgitation. Sambasivam KA, et al. **Indian Heart J** 1997 May-Jun;49(3):271–3

The value of perioperative echocardiography in percutaneous balloon mitral valvuloplasty. Lu Q, et al. **J Tongji Med Univ** 1996;16(2):91–5

The management of patients with rheumatic valvular heart disease in rural communities. Strang JI. **S Afr Med J** 1996 Jun;86 Suppl 3:C160–4 (10 ref.)

ULTRASONOGRAPHY

Left atrial appendage flow velocity and spontaneous echo contrast in patients with rheumatic mitral stenosis: a multiplane transesophageal echocardiographic study. Ho HY, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Dec; 56(6):380–5

Aortic arch interruption in association with Ebstein's anomaly of tricuspid valve and rheumatic mitral stenosis [letter; comment] Mahorkar UK, et al. **Indian Heart J** 1996 Nov-Dec;48(6):735–6. Comment on: Indian Heart J 1996 Jul-Aug;48(4):398–400.

Reversal of atrioventricular flow during part of atrial flutter wave [letter] Mittal SR, et al. **Indian Heart J** 1997 May-Jun;49(3):337

Images in clinical medicine. Rheumatic mitral stenosis. Bach DS. **N Engl J Med** 1997 Jul 3;337(1):31

Left atrial spontaneous echo contrast as a predictor of systemic arterial embolization in rheumatic mitral valve disease: a transesophageal echocardiographic study. Drăgulescu SI, et al. **Rom J Intern Med** 1996 Jan-Jun; 34(1-2):33–41

[Isolated tricuspid valve insufficiency of rheumatic origin] Morelli S, et al. **Cardiologia** 1997 Aug;42(8):867–9 (Eng. Abstr.) **(Ita)**

[Evaluation of valvular lesions by three-dimensional echocardiography] Mikami T, et al. **J Cardiol** 1996;27 Suppl 2:39–43; discussion 44 (Eng. Abstr.) **(Jpn)**

[Clinical and echocardiographic study of mitral valve in children with severe rheumatic carditis. Aspects of prolapse or rupture] Volga Haddad Herdy G, et al. **Arq Bras Cardiol** 1996 Mar;66(3):125–8 (Eng. Abstr.) **(Por)**

[Intravascular ultrasound. Initial experience and review of the literature] Ledesma M, et al. **Arch Inst Cardiol Mex** 1996 Jul-Aug;66(4):313–21 (33 ref.) (Eng. Abstr.) **(Spa)**

RHEUMATIC NODULE

CHEMICALLY INDUCED

Accelerated nodulosis in a patient with psoriasis and arthritis during treatment with methotrexate [see comments] Berris B, et al. **J Rheumatol** 1995 Dec;22(12):2359–60. Comment in: J Rheumatol 1996 Nov;23(11):2004.

Accelerated nodulosis in a patient with psoriasis and arthritis during treatment with methotrexate [letter; comment] Smith MD. **J Rheumatol** 1996 Nov;23(11):2004. Comment on: J Rheumatol 1995 Dec;22(12):2359–60.

RHEUMATISM see **RHEUMATIC DISEASES**

RHEUMATISM, ARTICULAR, ACUTE see **RHEUMATIC FEVER**

RHEUMATISM, MUSCULAR

RHEUMATISM, MUSCULAR see **FIBROMYALGIA**

RHEUMATISM, PERI-EXTRA-ARTICULAR see **POLYMYALGIA RHEUMATICA**

RHEUMATOID FACTOR

[Up-to-date study of rheumatoid factor and the clinical significance] Hirose S. **Ryumachi** 1997 Apr;37(2):149-50 **(Jpn)**

ANALYSIS

Human decidua-associated protein (hDP) 200 identified as a monoclonal rheumatoid factor is not an acute phase reactant. Halperin R, et al. **Am J Reprod Immunol** 1997 Feb;37(2):195-8

Rheumatoid factor autoantibodies in health and disease. Mageed RA, et al. **Ann N Y Acad Sci** 1997 Apr 5; 815:296-311 (63 ref.)

HLA-B27, rheumatoid factor and spondyloarthritis [editorial] Calin A. **Clin Exp Rheumatol** 1997 May-Jun; 15(3):229-31

Comparable histological appearance of synovitis in seropositive and seronegative rheumatoid arthritis. Fujinami M, et al. **Clin Exp Rheumatol** 1997 Jan-Feb; 15(1):11-7

Rheumatoid factor in patients with systemic lupus erythematosus [letter] Zoli A, et al. **Clin Rheumatol** 1996 May;15(3):312-3

Soluble interleukin-2 receptors and serum autoantibodies in dry eye patients: correlation with lacrimal gland function. Tsubota K, et al. **Cornea** 1997 May;16(3):339-44

Rheumatoid factor isotypes in monozygotic and dizygotic twins discordant for rheumatoid arthritis. MacGregor AJ, et al. **J Rheumatol** 1995 Dec;22(12):2203-7

Concurrent bilateral posterior scleritis and Vogt-Koyanagi-Harada disease in a patient with positive rheumatoid factor. Watanabe K, et al. **Ophthalmologica** 1997;211(5):316-9

Relations between absolute number of CD4 + CD29+ memory cells and levels of interleukin-6, rheumatoid factors, and acute phase proteins in rheumatoid synovial fluid. Lacki JK, et al. **Rev Rhum Engl Ed** 1997 Mar; 64(3):160-5

Adult seronegative arthritis with antinuclear antibodies: a distinct group of patients with a different immunogenetic pattern from seropositive rheumatoid arthritis and a good outcome. Saudan-Kister A, et al. **Rev Rhum Engl Ed** 1996 May;63(5):313-20

[A case of rheumatoid factor-positive pachymeningitis] Nishikawa M, et al. **No To Shinkei** 1996 Aug;48(8):735-9 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of immuno-serological laboratory data] Kasukawa R, et al. **Rinsho Byori** 1996 Dec;44(12):1157-63 (7 ref.) (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Superantigens, VH gene polymorphism, and rheumatoid factor (RF) production. Goronzy JJ, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:357-60

Regulation of rheumatoid factor production by B cells from healthy individuals and patients with rheumatoid arthritis. Van Esch WJ, et al. **Ann N Y Acad Sci** 1997 Apr 5; 815:361-3

Correlation between HLA-DR sequence polymorphisms and rheumatoid factor production. Weyand CM, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:353-6

IgH and L chain variable region gene sequence analyses of twelve synovial tissue-derived B cell lines producing IgA, IgG, and IgM rheumatoid factors structure/function comparisons of antigenic specificity, V gene sequence, and Ig isotype. Jain RI, et al. **Autoimmunity** 1995;22(4):229-43

Effect of treatment with methotrexate, hydroxychloroquine, and prednisone on lymphocyte polyamine levels in rheumatoid arthritis: correlation with the clinical response and rheumatoid factor synthesis. Nesher G, et al. **Clin Exp Rheumatol** 1997 Jul-Aug;15(4):343-7

Unique site of IgG2a and rheumatoid factor production in MRL/lpr mice. Jacobson BA, et al. **Immunol Rev** 1997 Apr;156:103-10 (65 ref.)

When do microbes stimulate rheumatoid factor? [comment] Posnett DN, et al. **J Exp Med** 1997 May 19;185(10):1721-3 (26 ref.). Comment on: J Exp Med 1997 May 19;185(10):1785-92.

Serum rheumatoid factor induced by intraperitoneal administration of periodontopathic bacterial lipopolysaccharide in mice. Hara Y, et al. **J Periodontal Res** 1996 Oct;31(7):502-7

Suppression of in vitro IgM rheumatoid factor production by diphtheria toxin interleukin 2 recombinant fusion protein (DAB 486IL-2) in patients with refractory rheumatoid arthritis. Schrohenloher RE, et al. **J Rheumatol** 1996 Nov; 23(11):1845-8

BLOOD

Increased serum levels of soluble CD44-isoform v5 in rheumatic diseases are restricted to seropositive rheumatoid arthritis. Haberhauer G, et al. **Acta Med Austriaca** 1997; 24(1):23-5

Mannan binding protein in sera positive for rheumatoid factor. Kilpatrick DC. **Br J Rheumatol** 1997 Feb; 36(2):207-9

Misleading results from immunoassays of serum free thyroxine in the presence of rheumatoid factor. Norden AG, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):957-62

Does serum rheumatoid factor have an influence on the clinical picture of ankylosing spondylitis? Jimenez-Balderas FJ, et al. **Clin Exp Rheumatol** 1997 May-Jun;15(3):289-93

IgA isotype rheumatoid factor in rheumatoid arthritis: clinical implications. Jorgensen C, et al. **Clin Exp Rheumatol** 1996 May-Jun;14(3):301-4

Rheumatic disease: choosing the most useful diagnostic tests. Shmerling RH. **Geriatrics** 1996 Nov;51(11):22-6, 29-30, 32

The presence of rheumatoid factor in sera from anti-HCV positive blood donors interferes with the detection of HCV-specific IgM. Trent HCV Study Group. Stevenson DL, et al. **J Hepatol** 1996 Nov;25(5):621-6

Plasma levels of granulocyte elastase-alpha-proteinase inhibitor complex in patients with rheumatoid arthritis: measurements with a system free from rheumatoid factor interference [letter] Fujimori J, et al. **J Rheumatol** 1996 Mar;23(3):571

Continuous progression of radiological destruction in seropositive rheumatoid arthritis. Kaarela K, et al. **J Rheumatol** 1997 Jul;24(7):1285-7

Rheumatoid factor positive, oligoarticular onset juvenile rheumatoid arthritis. Sailer M, et al. **J Rheumatol** 1997 Mar; 24(3):586-8

Routine measurement of IgM, IgG, and IgA rheumatoid factors: high sensitivity, specificity, and predictive value for rheumatoid arthritis. Swedler W, et al. **J Rheumatol** 1997 Jun;24(6):1037-44

Relationship of soluble interleukin-2-receptor and interleukin-6 with class-specific rheumatoid factors during low-dose methotrexate treatment in rheumatoid arthritis. Spadaro A, et al. **Rev Rhum Engl Ed** 1997 Feb;64(2):89-94

[The rheumatoid patient as back pain patient. Diagnosis and differential diagnosis of seronegative spondylarthropathies] Lakomek HJ. **Versicherungsmedizin** 1997 Jun 1;49(3):78-81 (8 ref.) (Eng. Abstr.) **(Ger)**

[Monoclonal rheumatoid factor in a patient with multiple myeloma after chemotherapy] Nishinarita M, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Oct;19(5):519-23 (Eng. Abstr.) **(Jpn)**

[Standardization of quantitative measurement of rheumatoid factor] Yoshinoya S, et al. **Ryumachi** 1996 Dec;36(6):819-29 (Eng. Abstr.) **(Jpn)**

[High titers of rheumatoid factor: clinical significance] Naranjo Hernández A, et al. **Rev Clin Esp** 1997 Apr; 197(4):232-6 (Eng. Abstr.) **(Spa)**

CHEMISTRY

Rheumatoid factor in the serum of hepatitis C virus-infected patients: an increase in the titre during cold storage. Ueda K, et al. **Ann Clin Biochem** 1996 Sep;33 (Pt 5):438-42

Structure of human IgM rheumatoid factor Fab bound to its autoantigen IgG Fc reveals a novel topology of antibody-antigen interaction. Corper AL, et al. **Nat Struct Biol** 1997 May;4(5):374-81

GENETICS

Immunoglobulin variable region (IgV) gene expression in rheumatoid factors from monozygotic twins with rheumatoid arthritis. Vencovský J, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:324-6

Generation and molecular characterisation of monoclonal IgG4 rheumatoid factor from a patient with rheumatoid arthritis. Hakoda M, et al. **Ann Rheum Dis** 1997 Jan; 56(1):74-7

Analysis of the molecular basis of synovial rheumatoid factors in rheumatoid arthritis. Ermel RW, et al. **Clin Immunol Immunopathol** 1997 Sep;84(3):307-17

Differences in mutational patterns between rheumatoid factors in health and disease are related to variable heavy chain family and germ-line gene usage. Børretzen M, et al. **Eur J Immunol** 1997 Mar;27(3):735-41

High affinity rheumatoid factor transgenic B cells are eliminated in normal mice. Wang H, et al. **J Immunol** 1997 Aug 1;159(3):1125-34

IMMUNOLOGY

Sperm, nuclear, phospholipid, and red blood cell antibodies and isotype RF in infertile couples and patients with autoimmune rheumatic diseases. Fichorova R, et al. **Am J Reprod Immunol** 1996 Dec;36(6):309-16

The functional affinity of IgM rheumatoid factor is related to the disease duration in patients with rheumatoid arthritis. Saraux A, et al. **Ann Rheum Dis** 1997 Feb;56(2):126-9

Diagnostic value of anti-RA33 antibody, antikeratin antibody, antiperinuclear factor and antinuclear antibody in early rheumatoid arthritis: comparison with rheumatoid factor [see comments] Cordonnier C, et al. **Br J Rheumatol** 1996 Jul;35(7):620-4. Comment in: Br J Rheumatol 1997 Jun;36(6):710-2.

Hepatitis C virus (HCV)-induced IgG-IgM rheumatoid factor (RF) complex may be the main causal factor for cold-dependent activation of complement in patients with rheumatic disease. Wei G, et al. **Clin Exp Immunol** 1997 Jan;107(1):83-8

Comparison of rheumatoid factors of rheumatoid arthritis patients, of individuals with mycobacterial infections and of normal controls: evidence for maturation in the absence of an autoimmune response. Djavad N, et al. **Eur J Immunol** 1996 Oct;26(10):2480-6

Crystallization of a complex between the Fab fragment of a human immunoglobulin M (IgM) rheumatoid factor (RF-AN) and the Fc fragment of human IgG4. Sohi MK, et al. **Immunology** 1996 Aug;88(4):636-41

A disease-related rheumatoid factor autoantibody is not tolerized in a normal mouse: implications for the origins of autoantibodies in autoimmune disease. Hannum LG, et al. **J Exp Med** 1996 Oct 1;184(4):1269-78

A solution to the rheumatoid factor paradox: pathologic rheumatoid factors can be tolerized by competition with natural rheumatoid factors. Stewart JJ, et al. **J Immunol** 1997 Aug 15;159(4):1728-38

IgA rheumatoid factor correlates with changes in B and T lymphocyte subsets and disease manifestations in rheumatoid arthritis. Arinbjarnarson S, et al. **J Rheumatol** 1997 Feb;24(2):269-74

Peripheral deletion of rheumatoid factor B cells after abortive activation by IgG. Tighe H, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):646-51

Binding specificities of a polyreactive and a monoreactive human monoclonal IgG rheumatoid factor: role of oligosaccharides. al-Balaghi S, et al. **Scand J Immunol** 1996 Nov;44(5):470-7

[Rheumatoid factor idiotypes in patients with Sjögren's syndrome] Chen X, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Oct;19(5):468-76 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

IgG rheumatoid factors isolated by the surface-displaying phage library technique. Yang YY, et al. **Immunogenetics** 1997;45(5):301-10

METABOLISM

Increased responsiveness of rheumatoid factor-producing B cells in seronegative and seropositive rheumatoid arthritis. He X, et al. **Arthritis Rheum** 1996 Sep;39(9):1499-506

IgG glycosylation in association with tropical infections and rheumatoid arthritis in the tropics. Adebajo AO, et al. **Clin Exp Rheumatol** 1995 Nov-Dec;13(6):737-40

High affinity rheumatoid factor transgenic B cells are eliminated in normal mice. Wang H, et al. **J Immunol** 1997 Aug 1;159(3):1125-34

Role of HLA-DR-DR and DR-DQ associations in the expression of extraarticular manifestations and rheumatoid factor in rheumatoid arthritis. Perdriger A, et al. **J Rheumatol** 1997 Jul;24(7):1272-6

PHARMACOLOGY

Human monoclonal rheumatoid factors augment arthritis in mice by the activation of T cells. Ezaki I, et al. **Clin Exp Immunol** 1996 Jun;104(3):474-82

PHYSIOLOGY

Rheumatoid factors: where are we now? Soltys AI, et al. **Ann Rheum Dis** 1997 May;56(5):285-6

TOXICITY

Hepatitis C virus (HCV)-induced IgG-IgM rheumatoid factor (RF) complex may be the main causal factor for cold-dependent activation of complement in patients with rheumatic disease. Wei G, et al. **Clin Exp Immunol** 1997 Jan;107(1):83-8

RHEUMATOID NODULE

CHEMICALLY INDUCED

Methotrexate-associated appearance and rapid progression of rheumatoid nodules in systemic-onset juvenile rheumatoid arthritis. Falcini F, et al. **Arthritis Rheum** 1997 Jan;40(1):175-8 (22 ref.)

COMPLICATIONS

Thoracic myelopathy due to intraspinal rheumatoid nodules. Sasaki S, et al. **Scand J Rheumatol** 1997;26(3):227-8

DIAGNOSIS

Magnetic resonance imaging of the foot. Rheumatologic disorders mimicking osteomyelitis [published erratum appears in J Am Podiatr Med Assoc 1996 Jul;86(7):306] Jelinek J, et al. **J Am Podiatr Med Assoc** 1996 May; 86(5):228-31

Rheumatoid nodules: MR/pathological correlation. el-Noueam KI, et al. **J Comput Assist Tomogr** 1997 Sep-Oct;21(5):796-9

Clinical, laboratory, and radiographic features of rheumatoid arthritis with and without nodules. Saraux A, et al. **Rev Rhum Engl Ed** 1997 Jan;64(1):11-7

DRUG THERAPY

The management of rheumatoid nodules [letter; comment] Swezey RL. **Am J Orthop** 1997 Feb;26(2):73. Comment on: Am J Orthop 1996 Oct;25(10):706-8.

ETIOLOGY

Bilateral rheumatoid nodule development on the distal region of the soles; poor blood circulation and local pressure as possible causes [letter] Horiuchi Y, et al. **J Dermatol** 1997 Apr;24(4):273–4

Thromboangiitis obliterans with arthralgia, diarrhea and nodules as the first symptoms [letter] Zarnitsky C, et al. **Rev Rhum Engl Ed** 1997 May;64(5):353–4

IMMUNOLOGY

In situ hybridization study of vascular cell adhesion molecule-1 messenger RNA expression in rheumatoid synovium. Higashiyama H, et al. **J Autoimmun** 1995 Dec; 8(6):947–57

Dominant T cell receptor rearrangements in interleukin 2 expanded lymphocytes from rheumatoid nodules suggest antigen driven T cell activation in situ. De Keyser F, et al. **J Rheumatol** 1997 Sep;24(9):1685–9

MICROBIOLOGY

Tenosynovial nodulosis in a patient infected with human T cell lymphotropic virus I. Hasunuma T, et al. **Arthritis Rheum** 1997 Mar;40(3):578–82

PATHOLOGY

Adenosine A1 receptor promotion of multinucleated giant cell formation by human monocytes: a mechanism for methotrexate-induced nodulosis in rheumatoid arthritis. Merrill JT, et al. **Arthritis Rheum** 1997 Jul;40(7):1308–15

A rare case of embolizing cardiac tumor: rheumatoid nodule of the mitral valve. Mounet FS, et al. **J Heart Valve Dis** 1997 Jan;6(1):77–8

Rheumatoid arthritis complicated by pachy- and leptomeningeal rheumatoid nodule-like granulomas and systemic vasculitis. Kamio N, et al. **Pathol Int** 1996 Jul; 46(7):526–30

[Arthrogenic ear canal tumor] Schunk M, et al. **HNO** 1996 Nov;44(11):640–3 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Rheumatoid nodules affecting both heels with surgical debulking: a case report*. Jones RO, et al. **J Am Podiatr Med Assoc** 1996 Apr;86(4):179–82

SURGERY

The management of rheumatoid nodules [see comments] Arnold C. **Am J Orthop** 1996 Oct;25(10):706–8. Comment in: Am J Orthop 1997 Feb;26(2):73.

Rheumatoid nodules affecting both heels with surgical debulking: a case report*. Jones RO, et al. **J Am Podiatr Med Assoc** 1996 Apr;86(4):179–82

RHEUMATOID PURPURA see **PURPURA, SCHOENLEIN-HENOCH**

RHEUMATOID SPONDYLITIS see **SPONDYLITIS, ANKYLOSING**

RHEUMATOLOGY

see related
COLLAGEN DISEASES
RHEUMATIC DISEASES

Surfing for rheumatologists--a guide to rheumatology resources on the Worldwide Web. Goulding N. **Ann Rheum Dis** 1996 Oct;55(10):697–9

Recertification of rheumatologists [letter] Daggett R, et al. **Arthritis Rheum** 1996 Dec;39(12):2082–3

A uniform reference system for rheumatology journals [editorial] Doherty M, et al. **Arthritis Rheum** 1997 Feb; 40(2):199

Proposed recertification requirements for rheumatologists: comment on the letter by Daggett and Hardy [letter] Kotha AJ. **Arthritis Rheum** 1997 Sep;40(9):1733

The American College of Rheumatology statement on silicone breast implants represents a consensus [letter] Rosenbaum J. **Arthritis Rheum** 1996 Oct;39(10):1765

Day case knee arthroscopy under regional anaesthesia, performed by rheumatologists. Smith MD, et al. **Aust N Z J Med** 1996 Feb;26(1):108–9

British Society for Rheumatology Heberden Round joint with the Irish Society for Rheumatology and Society for Irish and American Rheumatologists. Belfast, 11–12 September 1997. Abstracts. **Br J Rheumatol** 1997;36 Abst Suppl 2:1–45

British Society for Rheumatology XIVth annual general meeting. Harrogate, 23–25 April 1997. Abstracts. **Br J Rheumatol** 1997;36 Suppl 1:1–231

Lyme borreliosis in rheumatological practice: identification of Lyme arthritis and diagnostic aspects in a Swedish county with high endemicity. Berglund J, et al. **Br J Rheumatol** 1996 Sep;35(9):853–60

Anti-rheumatic drug-prescribing behaviour of Australasian rheumatologists 1984–1994. Conaghan PG, et al. **Br J Rheumatol** 1997 Apr;36(4):487–90

An approach to therapeutic trials in rheumatology: the foundation for applied rheumatology research. De Vries E, et al. **Br J Rheumatol** 1996 Oct;35(10):1000–1

What do general practitioners expect from rheumatology clinics? [editorial] Dickson DJ. **Br J Rheumatol** 1996 Oct; 35(10):920

Improving rheumatology with electronic communication [editorial] Griffith SM, et al. **Br J Rheumatol** 1997 Jun; 36(6):619–21

Pinioning the American rheumatologist. Hadler NM. **Br J Rheumatol** 1997 Jun;36(6):692–5

Rheumatology and immunology in Bergen--from basic science to clinical application. Haga HJ, et al. **Br J Rheumatol** 1996 Nov;35(11):1159–60

Rheumatology out-patient workload increases inexorably. Kirwan JR. **Br J Rheumatol** 1997 Apr;36(4):481–6

Tropical rheumatology: challenge of the future [editorial] McGill P, et al. **Br J Rheumatol** 1997 Mar;36(3):307–9

Rheumatology and dermatology: sister specialities in Italy and Malta. Matucci Cerinic M, et al. **Br J Rheumatol** 1996 Dec;35(12):1312–3

Epidemiology and health services research. **Curr Opin Rheumatol** 1997 Mar;9(2):B31–42

Behavioral and social research in rheumatology [see comments] Callahan LF, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):126–32 (40 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87–9.

Referrals to a rheumatologist [letter] Sant SM, et al. **Ir Med J** 1996 Sep–Oct;89(5):162

Patient satisfaction in a nurse-led rheumatology clinic. Hill J. **J Adv Nurs** 1997 Feb;25(2):347–54

Complementary medicine [letter; comment] Pal B, et al. **J R Coll Physicians Lond** 1997 Jan–Feb;31(1):111–2. Comment on: J R Coll Physicians Lond 1996 Sep–Oct;30(5):406–9.

The Canadian Rheumatology Association Meeting. Mont Tremblant, Quebec, February 26–March 1, 1997. Abstracts. **J Rheumatol** 1997 Jul;24(7):1423–35

4th Annual winter workshop and annual meeting of the Canadian Rheumatology Association. Lake Louise, Alberta, Canada, February 22–24, 1996. Abstracts. **J Rheumatol** 1996 Aug;23(8):1457–68

Pediatric rheumatology clinic populations in the United States: results of a 3 year survey. Pediatric Rheumatology Database Research Group. Bowyer S, et al. **J Rheumatol** 1996 Nov;23(11):1968–74

The rheumatologist and chronic whiplash syndrome [editorial; comment] Gordon DA. **J Rheumatol** 1997 Apr; 24(4):617–8. Comment on: J Rheumatol 1997 Apr;24(4):618–22. Comment on: J Rheumatol 1997 Apr;24(4):623–5.

The incidence of pediatric rheumatic diseases: results from the Canadian Pediatric Rheumatology Association Disease Registry [see comments] Malleson PN, et al. **J Rheumatol** 1996 Nov;23(11):1981–7. Comment in: J Rheumatol 1996 Nov;23(11):1834–7.

Pediatric rheumatology in the United Kingdom: data from the British Pediatric Rheumatology Group National Diagnostic Register. Symmons DP, et al. **J Rheumatol** 1996 Nov;23(11):1975–80

Bone Disease for the Rheumatologist: Osteoporosis, New Management Strategies, and Beyond. Symposium proceedings. Philadelphia, Pennsylvania, September 19–21, 1996. **Rev Rhum Engl Ed** 1997 Jun 30;64(6 Suppl):1S–123S

The prevalence of Paget's disease in 1994 in a rheumatology department of a Paris hospital [letter] Chazerain P, et al. **Rev Rhum Engl Ed** 1997 Apr;64(4):280

Musculoskeletal medicine. Introduction. Lane NE, et al. **Rheum Dis Clin North Am** 1996 Aug;22(3):xi–xiii

[A rheumatologist on the Internet] Klarlund M. **Ugeskr Laeger** 1997 May 26;159(22):3374–5 **(Dan)**

[Various opinions of family physicians and rheumatologists about the management of patients with rheumatoid arthritis (see comments)] Pollemans MC, et al. **Ned Tijdschr Geneeskd** 1996 Oct 12;140(41):2040–4 (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1996 Dec 7;140(49):2478–9. **(Dut)**

[Various viewpoints of family physicians and rheumatologists on care of patients with rheumatoid arthritis (letter; comment)] van Rijthoven AW. **Ned Tijdschr Geneeskd** 1996 Dec 7;140(49):2478–9. Comment on: Ned Tijdschr Geneeskd 1996 Oct 12;140(41):2040–4. **(Dut)**

[27th Annual meeting of the German Society of Rheumatology. Bamberg, 18–21 September 1996. Abstracts] **Z Rheumatol** 1996;55 Suppl 1:1–125 **(Ger)**

[The 40th Congress of the Japan Rheumatism Association. Fukushima, Japan. May 23–25, 1996. Abstracts] **Ryumachi** 1996 Apr;36(2):91–458 **(Jpn)**

[Profession and certification (editorial)] Abe T. **Ryumachi** 1996 Aug;36(4):623–6 **(Jpn)**

[Rheumatoid patients in rheumatology (editorial)] Imura S. **Ryumachi** 1996 Dec;36(6):815–8 (5 ref.) **(Jpn)**

[Rheumatology and pediatrics] Watanabe N. **Ryumachi** 1997 Apr;37(2):152–3 **(Jpn)**

[Reumatologists were early on the Internet: a member bulletin right on the screen] Fällman H. **Lakartidningen** 1997 Mar 12;94(11):918 **(Swe)**

ECONOMICS

A summary of economic evaluations published in the field of rheumatology and related disciplines. Ferraz MB, et al. **Arthritis Rheum** 1997 Sep;40(9):1587–93

Health economics in rheumatology. McCabe CJ, et al. **Baillieres Clin Rheumatol** 1997 Feb;11(1):145–56 (23 ref.)

Role of specialty care for chronic diseases: a report from an ad hoc committee of the American College of Rheumatology. Committee of the American College of Rheumatology Council on Health Care Research [published erratum appears in Mayo Clin Proc 1997 Feb;72(2):192] **Mayo Clin Proc** 1996 Dec;71(12):1179–81

EDUCATION

Pediatric rheumatology: status of the subspecialty in United States medical schools. Cassidy JT, et al. **Arthritis Rheum** 1997 Jun;40(6):1182

Training in rheumatology [letter; comment] Blake D, et al. **Br J Rheumatol** 1996 Nov;35(11):1190. Comment on: Br J Rheumatol 1996 Jan;35(1):1–2.

Rheumatology in Singapore. Boey ML, et al. **Br J Rheumatol** 1997 Apr;36(4):479–80

The 1994–5 Michael Mason Travelling Fellowship: goodbye the Commonwealth, hello Australia!! Gough A. **Br J Rheumatol** 1996 Dec;35(12):1324–5

The consequences of the Calman Report on academic rheumatology [editorial] Isenberg DA, et al. **Br J Rheumatol** 1996 Jul;35(7):608–10

Rheumatology in Iceland. Jónsson H, et al. **Br J Rheumatol** 1997 May;36(5):577–9 (14 ref.)

Undergraduate education in rheumatology [letter; comment] Keat A, et al. **Br J Rheumatol** 1997 Feb;36(2):295. Comment on: Br J Rheumatol 1996 Feb;35(2):110–1.

Specialist training into the new millennium: the price of conformity with Europe [editorial] Swannell AJ. **Br J Rheumatol** 1996 Jul;35(7):607–8

Patient education in rheumatology [see comments] Lorish CD, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):106–11 (21 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87–9.

Awareness of diagnostic and clinical features of fibromyalgia among family physicians. Buskila D, et al. **Fam Pract** 1997 Jun;14(3):238–41

Effectiveness of computer-assisted interactive videodisc instruction in teaching rheumatology to physical and occupational therapy students. Sanford MK, et al. **J Allied Health** 1996 Spring;25(2):141–8

Paediatric teaching: core paediatric conditions [letter; comment] Southwood T. **J R Coll Physicians Lond** 1996 May–Jun;30(3):271. Comment on: J R Coll Physicians Lond 1996 Jan–Feb;30(1):58–60.

Primary care and rheumatology in musculoskeletal disorders: bridging the gap [comment] Bjelle A. **J Rheumatol** 1996 Feb;23(2):205–7. Comment on: J Rheumatol 1996 Feb;23(2):351–6.

Physicians: our greatest potential resource for continuing medical education [editorial] Davis P. **J Rheumatol** 1997 Sep;24(9):1670–2

OMERED: Outcome measures in rheumatology education. Lewtas J. **J Rheumatol** 1996 Feb;23(2):208–10

A fresh start for GP rheumatology [editorial] Hosie G. **Practitioner** 1996 Aug;240(1565):463

A survey of rheumatology training centers in France. Amor B. **Rev Rhum Engl Ed** 1996 Jul–Sep;63(7–8):493–7

HISTORY

The growth of paediatric rheumatology [editorial] Woo P. **Br J Rheumatol** 1997 Jul;36(7):721–6

The contribution of Sir James Paget (1814–1894) to the study of rheumatic disease. Buchanan W. **Clin Rheumatol** 1996 Sep;15(5):461–72 (205 ref.)

Rheumatic diseases and the development of rheumatology in Vietnam. An TN, et al. **Rev Rhum Engl Ed** 1996 Oct; 63(9):616–7

[Formation and development of rheumatology in Russia] Anokhin VN. **Vestn Ross Akad Med Nauk** 1996;(11):14–21 (Eng. Abstr.) **(Rus)**

[Nesterov's contribution to the development of Russian rheumatology] Astapenko MG. **Vestn Ross Akad Med Nauk** 1996;(11):7–10 **(Rus)**

METHODS

Accentuate the positive: we are better than guidelines. Cohen MD. **Arthritis Rheum** 1997 Jan;40(1):2–4

Physiotherapy and occupational therapy for juvenile chronic arthritis: custom and practice in five centres in the UK, USA and Canada. Hackett J, et al. **Br J Rheumatol** 1996 Jul;35(7):695–9

The Dunlop–Dottridge Lecture: prognosis in inflammatory arthritis: the value of HLA genotyping and the oncological analogy. Emery P. **J Rheumatol** 1997 Jul;24(7):1436–42

Where's the evidence? Putting clinical science into pediatric rheumatology [editorial] Feldman BM, et al. **J Rheumatol** 1996 Sep;23(9):1502–4

Methods for quantitative analysis of trabecular bone structure. Cortet B, et al. **Rev Rhum Engl Ed** 1995 Dec; 62(11):781–93 (78 ref.)

How do French rheumatologists treat early rheumatoid arthritis? de Asit N, et al. **Rev Rhum Engl Ed** 1996 Mar; 63(3):188–95

Unorthodox treatment practices in rheumatology [editorial] Kahn MF. **Rev Rhum Engl Ed** 1997 Feb;64(2):75–7 (73 ref.)

ORGANIZATION & ADMINISTRATION

Getting to know about Colombia [letter] Caballero-Uribe CV. **Br J Rheumatol** 1997 Feb;36(2):268–9

WHO/ILAR Taskforce on quality of life. Strand CV, et al. **J Rheumatol** 1997 Aug;24(8):1630–3 (1 ref.)

RHEUMATOLOGY

Rheumatology visit frequency and changes in functional disability and pain in patients with rheumatoid arthritis. Ward MM. **J Rheumatol** 1997 Jan;24(1):35–42

Ancillary services in rheumatology. Jones G, et al. **Med J Aust** 1997 Apr 21;166(8):434–9 (34 ref.)

STANDARDS

Clinical guidelines for management. Scott DL. **Baillieres Clin Rheumatol** 1997 Feb;11(1):157–79 (78 ref.)

Rheumatologists issue guidelines for preventing and treating corticosteroid–induced osteoporosis [news] Skolnick AA. **JAMA** 1997 Jan 8;277(2):98, 100

Clinical assessment of the 1987 American College of Rheumatology criteria for rheumatoid arthritis [see comments] Levin RW, et al. **Scand J Rheumatol** 1996; 25(5):277–81. Comment in: Scand J Rheumatol 1997;26(3):229.

[Validation of choice of experts for the spondylarthropathy study in Lebanon] Awada H, et al. **J Med Liban** 1996; 44(4):215–7 (Eng. Abstr.) **(Fre)**

[Quality assurance in rheumatology. Evaluation of a team work model between general practitioners and a rheumatologist] Hartmann H. **Tidsskr Nor Laegeforen** 1997 Apr 30;117(11):1624–6 (Eng. Abstr.) **(Nor)**

STATISTICS & NUMERICAL DATA

An epidemiological study of diagnostic and therapeutic strategies in office practice patients with subacute or chronic pain in the thoracic or low back. Comparison of practices in primary care and rheumatology settings. Dreiser RL, et al. **Rev Rhum Engl Ed** 1997 Jan;64(1):26–34

TRENDS

International trials in paediatric rheumatology: current status. Lovell DJ. **Ann Med** 1997 Apr;29(2):165–7

Paediatric rheumatology today. Pelkonen P. **Ann Med** 1997 Apr;29(2):143–4

Change creates challenges and opportunities for rheumatologists and the American College of Rheumatology. Weaver AL. **Arthritis Rheum** 1997 Apr; 40(4):610–4

Early rheumatoid arthritis. Future treatment. Breedveld FC. **Baillieres Clin Rheumatol** 1997 Feb;11(1):83–96 (42 ref.)

Specialist management: needs and benefits. Stucki G. **Baillieres Clin Rheumatol** 1997 Feb;11(1):97–107 (49 ref.)

Early arthritis: outstanding issues. Woolf AD, et al. **Baillieres Clin Rheumatol** 1997 Feb;11(1):181–3

Rheumatic diseases and the development of rheumatology in Vietnam. An TN, et al. **Br J Rheumatol** 1996 Jul; 35(7):680–1

Rheumatology in Lithuania. Butrimienė I, et al. **Br J Rheumatol** 1997 Jan;36(1):110–2

The Heberden Oration. Calman KC. **Br J Rheumatol** 1997 Jan;36(1):6–8

Rheumatology in Israel [letter; comment] Grahame R, et al. **Br J Rheumatol** 1997 Apr;36(4):508. Comment on: Br J Rheumatol 1996 Aug;35(8):778–80.

Newsletter from New Zealand. Highton J. **Br J Rheumatol** 1997 Mar;36(3):387–9

Swedish rheumatology in good health at 50. Wollheim FA. **Br J Rheumatol** 1997 Aug;36(8):920–1

Thrombomodulin: a new frontier in lupus research? [editorial] Cucurull E, et al. **Clin Exp Rheumatol** 1997 Jan–Feb; 15(1):1–4 (38 ref.)

The future of rheumatology: new directions [letter; comment] Brighton SW. **J Rheumatol** 1997 Jul;24(7):1443–4. Comment on: J Rheumatol 1996 Sep;23(9):1492–4.

Variation among rheumatologists in clinical outcomes and frequency of office visits for rheumatoid arthritis. Criswell LA, et al. **J Rheumatol** 1997 Jul;24(7):1266–71

The future of rheumatology: paradigm shift or turf war? [editorial] Glazier R. **J Rheumatol** 1996 Sep;23(9):1494–6

Who will care for our patients? [editorial] Panush RS, et al. **J Rheumatol** 1995 Dec;22(12):2197–9

The future of rheumatology: new directions? [editorial] [see comments] Roth SH. **J Rheumatol** 1996 Sep;23(9):1492–4 . Comment in: J Rheumatol 1997 Jul;24(7):1443–4.

Rheumatoid Arthritis: The Status and Future of Combination Therapy. Proceedings of a meeting. Chatham, Massachusetts, USA, July 13–15, 1995. **J Rheumatol Suppl** 1996 Mar;44:1–110

Rheumatology. Panush RS, et al. **JAMA** 1997 Jun 18; 277(23):1899–900

Rheumatology. Inflammation and HIV infection: a friendly connection. Gómez–Reino JJ, et al. **Lancet** 1996 Dec 21–28; 348 Suppl 2:sII24 (5 ref.)

Role and evolution of therapeutic options. Keen RW, et al. **Osteoporos Int** 1996;6 Suppl 2:16–20 (29 ref.)

What is the future of fibromyalgia? Goldenberg DL. **Rheum Dis Clin North Am** 1996 May;22(2):393–406 (48 ref.)

Recent progress in the prevention of osteoporosis. To screen or not to screen? Sørensen OH, et al. **Scand J Rheumatol Suppl** 1996;103:25–9 (38 ref.)

[Rheumatology and rheumatologists today (editorial)] Trnavský K. **Vnitr Lek** 1997 Feb;43(2):63–5 **(Cze)**

[Fourty Years' Progress in Rheumatology, and future Perspectives in Japan] Shiokawa Y. **Ryumachi** 1996 Aug; 36(4):662–9 (17 ref.) **(Jpn)**

[Clinical medicine of 21st century and rheumatology] Shiokawa Y. **Ryumachi** 1997 Apr;37(2):151 **(Jpn)**

RHINENCEPHALON see **LIMBIC SYSTEM**

RHINITIS

The diving reflex in non–eosinophilic non–allergic rhinitis. Cook JA, et al. **Clin Otolaryngol** 1996 Jun;21(3):226–7

CHEMICALLY INDUCED

Occupational rhinitis and bronchial asthma due to morphine: evidence from inhalational and nasal challenges. Uliński S, et al. **Allergy** 1996 Dec;51(12):914–8

Psyllium laxative–induced anaphylaxis, asthma, and rhinitis. Vaswani SK, et al. **Allergy** 1996 Apr;51(4):266–8

Immediate rhinoconjunctivitis induced by metamizole and metronidazole. Añibarro B, et al. **Ann Allergy Asthma Immunol** 1997 Apr;78(4):345–6

Fluticasone propionate nasal spray is more effective and has a faster onset of action than placebo in treatment of rhinitis medicamentosa. Hallén H, et al. **Clin Exp Allergy** 1997 May; 27(5):552–8

Dose–dependent protective effect of BPC 157 on capsaicin–induced rhinitis in rats. Kalogjera L, et al. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S9–11

Study of employees with anhydride–induced respiratory disease after removal from exposure. Grammer LC, et al. **J Occup Environ Med** 1996 Aug;38(8):771–4

Occupational asthma and rhinitis caused by 1,2–benzisothiazolin–3–one in a chemical worker. Moscato G, et al. **Occup Med (Oxf)** 1997 May;47(4):249–51

One–week use of oxymetazoline nasal spray in patients with rhinitis medicamentosa 1 year after treatment. Graf P, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan–Feb; 59(1):39–44

The use of nasal lavage for objective measurement of irritant–induced nasal inflammation. Peden DB. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 2):S76–8 (23 ref.)

CLASSIFICATION

[Cytologic and histopathologic examinations of polyps and mucosa in chronic allergic and nonallergic rhinitis] Tryka E, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 1:45–51 (Eng. Abstr.) **(Pol)**

COMPLICATIONS

Inflammatory cytokine expression on nasal polyps developed in allergic and infectious rhinitis. Min YG, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):302–6

Local treatment of nasal polyposis with capsaicin: preliminary findings. Filiaci F, et al. **Allergol Immunopathol (Madr)** 1996 Jan–Feb;24(1):13–8

Allergic manifestations in AIDS. Avila PC, et al. **Clin Rev Allergy Immunol** 1996–97 Winter;14(4):433–49 (83 ref.)

DIAGNOSIS

Nasal provocation test in the diagnostics of hairdressers' occupational rhinitis. Hytönen M, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:133–6

The diagnosis of maxillary sinusitis in children. van Buchem FL. **Acta Otorhinolaryngol Belg** 1997;51(1):55–7

Rhinopharyngoscopy, computed tomography and magnetic resonance imaging. Bonifazi F, et al. **Allergy** 1997;52(33 Suppl):28–31 (32 ref.)

Nasal cytology in rhinitis children: comparison between brushing and blowing the nose. Jean R, et al. **Allergy** 1996 Dec;51(12):932–4

Idiopathic rhinitis: idiopathic or not? Carney AS, et al. **Clin Otolaryngol** 1996 Jun;21(3):198–202 (47 ref.)

Endoscopic view of cocaine rhinitis. Yanagisawa E, et al. **Ear Nose Throat J** 1996 Mar;75(3):128–30

Neonatal rhinitis. Nathan CA, et al. **Int J Pediatr Otorhinolaryngol** 1997 Feb 14;39(1):59–65

Development and validation of a rhinoconjunctivitis and asthma symptom score for use as an outcome measure in clinical trials. Wasserfallen JB, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):16–22

Nasal smear eosinophilia for the diagnosis of allergic rhinitis and eosinophilic non–allergic rhinitis. Crobach M, et al. **Scand J Prim Health Care** 1996 Jun;14(2):116–21

[Diagnosis of chronic rhinosinusitis] Canseco Villarreal JI. **Rev Alerg Mex** 1996;43 Spec No:6–7 (10 ref.) (Eng. Abstr.) **(Spa)**

[Chronic rhinosinusitis: predominant symptoms in children under 14 years of age who were seen at the Regional Center for the Prevention and Treatment of Allergic Diseases] Mógica Mógica JD, et al. **Rev Alerg Mex** 1996;43 Spec No:16–8 (Eng. Abstr.) **(Spa)**

[Comparative study of prick and intradermal cutaneous tests in allergic rhinitis] Rodríguez Zuleta L, et al. **Rev Alerg Mex** 1996 Nov–Dec;43(6):143–7 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Effects of corticosteroid therapy in non–allergic rhinosinusitis. Mygind N. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):164–6 (25 ref.)

The pharmacological basis for the treatment of perennial allergic rhinitis and non–allergic rhinitis with topical corticosteroids. Meltzer EO. **Allergy** 1997;52(36 Suppl):33–40 (65 ref.)

Capsaicin's effect on rat nasal mucosa substance P release: experimental basis for vasomotor rhinitis treatment. Kuhn FA, et al. **Am J Rhinol** 1997 Jul–Aug;11(4):313–6

Adverse effects of medications for rhinitis. Milgrom H, et al. **Ann Allergy Asthma Immunol** 1997 May;78(5):439–44; quiz 445–6 (63 ref.)

Antihistamines and pregnancy [editorial] Schatz M, et al. **Ann Allergy Asthma Immunol** 1997 Feb;78(2):157–9

Intranasal capsaicin is efficacious in non–allergic, non–infectious perennial rhinitis. A placebo–controlled study. Blom HM, et al. **Clin Exp Allergy** 1997 Jul; 27(7):796–801

Fluticasone propionate nasal spray is more effective and has a faster onset of action than placebo in treatment of rhinitis medicamentosa. Hallén H, et al. **Clin Exp Allergy** 1997 May; 27(5):552–8

Challenge tests in nose and bronchi: pharmacological modulation of rhinitis and asthma. Mygind N, et al. **Clin Exp Allergy** 1996 May;26 Suppl 3:39–43 (35 ref.)

Intranasal fluticasone propionate. A reappraisal of its pharmacology and clinical efficacy in the treatment of rhinitis. Wiseman LR, et al. **Drugs** 1997 May;53(5):885–907 (114 ref.)

Nasal inflammation and chronic ear disease in Australian Aboriginal children. Gibson PG, et al. **J Paediatr Child Health** 1996 Apr;32(2):143–7

Ipratropium bromide (Atrovent) nasal spray. A new treatment for rhinorrhea [news] Pfister SM. **Nurse Pract** 1996 Jul;21(7):104, 107–8 (8 ref.)

Purulent rhinitis:antibiotic prescribing survey [letter] Murray DL. **Pediatr Infect Dis J** 1997 Aug;16(8):825–6

Antimicrobial prescribing for acute purulent rhinitis in children: a survey of pediatricians and family practitioners. Schwartz RH, et al. **Pediatr Infect Dis J** 1997 Feb; 16(2):185–90

Treating allergic rhinitis with second–generation antihistamines. Nightingale CH. **Pharmacotherapy** 1996 Sep–Oct;16(5):905–14 (95 ref.)

New thinking on the treatment of rhinitis. Mirakian R, et al. **Practitioner** 1997 May;241(1574):286–90

Comparison between the effect of ipratropium bromide as a pressurized aerosol and as an aqueous pump spray on methacholine–induced rhinorrhoea. Borum S, et al. **Rhinology** 1996 Dec;34(4):198–200

The effect of intranasal fluticasone propionate on the diving reflex in patients with non–eosinophilic non–allergic rhinitis. Cook JA, et al. **Rhinology** 1996 Sep;34(3):144–6

Cost of therapy for allergic rhinitis. Wessels F, et al. **S Afr Med J** 1997 Feb;87(2):141–5

Effect of regular inhaled salbutamol on airway responsiveness and airway inflammation in rhinitic non–asthmatic subjects. Evans DW, et al. **Thorax** 1997 Feb;52(2):136–42

Comparison of topical silver nitrate and flunisolide treatment in patients with idiopathic non–allergic rhinitis. Erhan E, et al. **Tokai J Exp Clin Med** 1996 Jun;21(2):103–11

ECONOMICS

Treating allergic rhinitis with second–generation antihistamines. Nightingale CH. **Pharmacotherapy** 1996 Sep–Oct;16(5):905–14 (95 ref.)

EPIDEMIOLOGY

Prevalence of asthma, rhinitis and eczema among schoolchildren in Kelantan, Malaysia. Quah BS, et al. **Acta Paediatr Jpn** 1997 Jun;39(3):329–35

Epidemiologic identification of allergic rhinitis. Charpin D, et al. **Allergy** 1996 May;51(5):293–8

Rhinitis in Singapore. Yeak S, et al. **Allergy** 1996 Oct; 51(10):757–8

Comparative degree and type of sensitization to common indoor and outdoor allergens in subjects with allergic rhinitis and/or asthma. Boulet LP, et al. **Clin Exp Allergy** 1997 Jan;27(1):52–9

The association between self–reported symptoms of asthma and allergic rhinitis and self–reported traffic density on street of residence in adolescents. Duhme H, et al. **Epidemiology** 1996 Nov;7(6):578–82

Prevalence and intensity of rhinoconjunctivitis in subjects with occupational asthma. Malo JL, et al. **Eur Respir J** 1997 Jul;10(7):1513–5

The effect of season–of–response to ISAAC questions about asthma, rhinitis and eczema in children. Stewart AW, et al. **Int J Epidemiol** 1997 Feb;26(1):126–36

[Prevalence of rhinosinusitis. Statistics: January–December 1993] González Escamilla JA, et al. **Rev Alerg Mex** 1996; 43 Spec No:8–11 (31 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Occupational asthma and rhinitis caused by ash (Fraxinus excelsior) wood dust. Fernández–Rivas M, et al. **Allergy** 1997 Feb;52(2):196–9

Rhinitis in Singapore. Yeak S, et al. **Allergy** 1996 Oct; 51(10):757–8

Air pollution in relation to allergic and nonallergic rhinitis. Samir M, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jul;123(7):746–8

You're the flight surgeon: nasal congestion and increasing right–sided headaches. Little JR. **Aviat Space Environ Med** 1996 Oct;67(10):1002–4

A new triad: sensitivity to aspirin, allergic rhinitis, and severe

allergic reaction to ingested aeroallergens. Sánchez-Borges M, et al. **Cutis** 1997 Jun;59(6):311–4 (11 ref.)
Subjective and objective findings in craniofacial pain and chronic rhinosinusitis [letter] Naito K, et al. **Eur Arch Otorhinolaryngol** 1997;254(1):22
The risk of occupational rhinitis. Hytönen M, et al. **Int Arch Occup Environ Health** 1997;69(6):487–90
Allergic diagnosis: skin testing and rast. Thurmond M, et al. **J La State Med Soc** 1997 May;149(5):141–3 (9 ref.)
[Respiratory inflammation] Holgate ST. **Allerg Immunol (Paris)** 1997 Mar;29(3):75–6; discussion 82 (11 ref.) (Eng. Abstr.) **(Fre)**
[Malformations of intranasal structures and rhinosinusitis in children] Garashchenko TI. **Vestn Otorinolaringol** 1996 Sep–Oct;(5):10–2 (Eng. Abstr.) **(Rus)**

GENETICS

[Clinical significant correlation between to the onset of bronchial asthma in children and family history of allergic diseases. Part 2. The onset of allergic diseases of their parents and bronchial asthma in children] Shiigai N. **Arerugi** 1995 Dec;44(12):1369–78 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Epidemiologic identification of allergic rhinitis. Charpin D, et al. **Allergy** 1996 May;51(5):293–8
Demonstration of the high-affinity IgE receptor (Fc epsilon RI) on Langerhans' cells of diseased nasal mucosa. Haas N, et al. **Allergy** 1997 Apr;52(4):436–9
Nonspecific binding of IgE to allergens. Jensen-Jarolim E, et al. **Allergy** 1997 Aug;52(8):844–52
Autonomic reflexes and non-allergic rhinitis. Jones AS. **Allergy** 1997;52(36 Suppl):14–9 (53 ref.)
Immunologic effects of intranasal corticosteroids [editorial] Levenson T, et al. **Allergy Asthma Proc** 1996 May–Jun; 17(3):157–9
Immediate rhinoconjunctivitis induced by metamizole and metronidazole. Añibarro B, et al. **Ann Allergy Asthma Immunol** 1997 Apr;78(4):345–6
House dust mite immunotherapy results in a decrease in Der p 2-specific IFN-gamma and IL-4 expression by circulating T lymphocytes. O'Brien RM, et al. **Clin Exp Allergy** 1997 Jan;27(1):46–51
Specific antibodies against methyltetrahydrophthalic anhydride and risk factors for sensitization in occupationally exposed subjects. Yokota K, et al. **Scand J Work Environ Health** 1997 Jun;23(3):214–20
[Significance of vascular endothelium for specific functional behavior of nasal mucosa] Grevers G, et al. **Laryngorhinootologie** 1997 Jul;76(7):398–404 (24 ref.) (Eng. Abstr.) **(Ger)**

METABOLISM

Effect of clarithromycin on nasal mucus properties in healthy subjects and in patients with purulent rhinitis. Rubin BK, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2018–23
[Lipid peroxidation in the blood of children with pyoinflammation of the nose and paranasal sinuses] Karabayev KhE, et al. **Vestn Otorinolaringol** 1997;(4):44–5 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Effects of viral and bacterial infection on nasal and sinus mucosa. van Cauwenberge P, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):316–21 (25 ref.)
Rhinocerebral and systemic mucormycosis. Clinical experience with 36 cases. Rangel-Guerra RA, et al. **J Neurol Sci** 1996 Nov;143(1–2):19–30
Nasal inflammation and chronic ear disease in Australian Aboriginal children. Gibson PG, et al. **J Paediatr Child Health** 1996 Apr;32(2):143–7
[Bacteriology of the nose and sinuses] Stoll D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1996;117(3):179–82 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Chronic rhinosinusitis in patients with AIDS: potential role of microsporidia [letter] Franzen C, et al. **AIDS** 1996 Jun; 10(6):687–8
Non Hodgkins lymphoma of ethmoidal sinus with rhinoorbital myiasis. David S, et al. **Indian J Cancer** 1996 Dec;33(4):171–2

PATHOLOGY

Nasal biopsy is superior to nasal smear for finding eosinophils in nonallergic rhinitis. Ingels K, et al. **Allergy** 1997 Mar; 52(3):338–41
Nasal cytology in rhinitis children: comparison between brushing and blowing the nose. Jean R, et al. **Allergy** 1996 Dec;51(12):932–4
Goblet cell density of the inferior turbinates in patients with perennial allergic and nonallergic rhinitis. Berger G, et al. **Am J Rhinol** 1997 May–Jun;11(3):233–6
The inferior turbinate mast cell population of patients with perennial allergic and nonallergic rhinitis. Berger G, et al. **Am J Rhinol** 1997 Jan–Feb;11(1):63–6
Pathology of rhinitis and bronchial asthma. Djukanović R, et al. **Clin Exp Allergy** 1996 May;26 Suppl 3:44–51 (68 ref.)
Response of nose and bronchi to exercise in asthma and rhinitis: similarities and differences. Picado C. **Clin Exp Allergy** 1996 May;26 Suppl 3:36–8 (9 ref.)
Polypoidal rhinosinusitis in cystic fibrosis: a clinical and histopathological study. Rowe-Jones JM, et al. **Clin Otolaryngol** 1997 Apr;22(2):167–71
Modified epithelial cell distribution in chronic airways inflammation. Chapelin C, et al. **Eur Respir J** 1996 Dec; 9(12):2474–8
Existence of c-kit receptor-positive, tryptase-negative, IgE-negative cells in human allergic nasal mucosa: a candidate for mast cell progenitor. Kawabori S, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):36–43
Eosinophilic angiocentric fibrosis of the nasal cavity. Altemani AM, et al. **Mod Pathol** 1997 Apr;10(4):391–3
Rhinostereometry and laser Doppler flowmetry in human nasal mucosa: changes in congestion and microcirculation during intranasal histamine challenge. Grudemo H, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan–Feb; 59(1):50–6
Evaluation of the nasal cavity by acoustic rhinometry in normal and allergic subjects. Corey JP, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):22–8

PHYSIOPATHOLOGY

Late phase response during nasal challenge: effect of astemizole on leukotriene B4 levels. Kumar NS, et al. **Allergy Asthma Proc** 1996 Mar–Apr;17(2):93–9
Pathophysiology and therapy for allergic and nonallergic rhinitis: an updated review. Levenson T, et al. **Allergy Asthma Proc** 1997 Jul–Aug;18(4):213–20 (54 ref.)
One year follow-up of patients with rhinitis medicamentosa after vasoconstrictor withdrawal. Graf PM, et al. **Am J Rhinol** 1997 Jan–Feb;11(1):67–72
Sensation of nasal airflow compared with nasal airway resistance in patients with rhinitis. Simola M, et al. **Clin Otolaryngol** 1997 Jun;22(3):260–2
Differences in nonspecific bronchial responsiveness between patients with asthma and patients with rhinitis are not explained by type and degree of inhalant allergy. Witteman AM, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):65–72
Late allergic airway response to segmental bronchopulmonary provocation in allergic subjects is related to peripheral blood basophil histamine release. Jarjour NN, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):87–93
The effect of intranasal fluticasone propionate on the diving reflex in patients with non-eosinophilic non-allergic rhinitis. Cook JA, et al. **Rhinology** 1996 Sep;34(3):144–6
[Physiopathology of chronic rhinosinusitis] González Díaz SN. **Rev Alerg Mex** 1996;43 Spec No:12–5 (46 ref.) (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Analysis of CT scanning referrals for chronic rhinosinusitis [letter; comment] **J Laryngol Otol** 1996 Dec; 110(12):1189–90. Comment on: J Laryngol Otol 1996 Jul;110(7):641–3.

RADIOTHERAPY

[Experience in the use of low-energy laser irradiation in the treatment of patients with diseases of the upper respiratory airways and ear] Ovchinnikov IuM, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):36–8 **(Rus)**

SURGERY

Contact laser turbinate surgery for the treatment of idiopathic rhinitis. Min YG, et al. **Clin Otolaryngol** 1996 Dec; 21(6):533–6

THERAPY

Local nasal immunotherapy. Proceedings of a satellite symposium to the XVI Congress of European Academy of Allergology and Clinical Immunology. Madrid, June 1995. **Allergy** 1997;52(33 Suppl):5–44
Pathophysiology and therapy for allergic and nonallergic rhinitis: an updated review. Levenson T, et al. **Allergy Asthma Proc** 1997 Jul–Aug;18(4):213–20 (54 ref.)
Fel d 1 peptides: effect on skin tests and cytokine synthesis in cat-allergic human subjects. Simons FE, et al. **Int Immunol** 1996 Dec;8(12):1937–45
Development and validation of a rhinoconjunctivitis and asthma symptom score for use as an outcome measure in clinical trials. Wasserfallen J ?, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):16–22
Natural propolis extract NIVCRISOL in the treatment of acute and chronic rhinopharyngitis in children. Crişan I, et al. **Rom J Virol** 1995 Jul–Dec;46(3–4):115–33
[Sublingual immunotherapy] Nelken D. **Harefuah** 1996 Sep; 131(5–6):164–5, 215 (Eng. Abstr.) **(Heb)**
[Treatment of chronic rhinosinusitis] Galindo de Jaime G. **Rev Alerg Mex** 1996;43 Spec No:19–21 (11 ref.) (Eng. Abstr.) **(Spa)**

VETERINARY

Sequelae of ventral rhinotomy in dogs and cats with inflammatory and neoplastic nasal pathology: a retrospective study. Holmberg DL. **Can Vet J** 1996 Aug; 37(8):483–5
Immunoglobulin concentrations in nasal lavage fluids in dogs with non-specific rhinitis. Wolschrijn CF, et al. **Vet Q** 1996 Mar;18(1):13–7
Computed tomographic assessment of noninvasive intranasal infusions in dogs with fungal rhinitis. Mathews KG, et al. **Vet Surg** 1996 Jul–Aug;25(4):309–19
[Importance of blood serological examinations in the context of rhinitis atrophicans diagnosis] Müller E, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Dec;103(12):513–6 (Eng. Abstr.) **(Ger)**

VIROLOGY

Effects of viral and bacterial infection on nasal and sinus mucosa. van Cauwenberge P, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):316–21 (25 ref.)

RHINITIS, ALLERGIC, NONSEASONAL see **RHINITIS, ALLERGIC, PERENNIAL**

RHINITIS, ALLERGIC, PERENNIAL

Cytokines and allergic rhinitis. Fireman P. **Allergy Asthma Proc** 1996 Jul–Aug;17(4):175–8 (11 ref.)
Diagnosis and management of seasonal and perennial allergic rhinitis. Tan RA, et al. **Compr Ther** 1996 Jun;22(6):363–74 (35 ref.)
Allergic rhinitis in South Africa--diagnosis and management. South African Allergic Rhinitis Working Group. **S Afr Med J** 1996 Oct;86(10 Pt 2):1315–28 (95 ref.)

BLOOD

Inhibition of the sodium, potassium adenosine triphosphatase enzyme in peripheral blood mononuclear cells of subjects with allergic rhinitis. Van Deusen MA, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):259–64
The assay of interleukin 4 in the serum of normal subjects and atopic patients using a novel immunoassay. Jones KP, et al. **Cytokine** 1997 Jul;9(7):529–34
Soluble intercellular adhesion molecule-1 level in sera is elevated in perennial allergic rhinitis. Ohashi Y, et al. **Laryngoscope** 1997 Jul;107(7):932–5

CHEMICALLY INDUCED

Rhinitis caused by ninhydrin develops into occupational asthma. Piirilä P, et al. **Eur Respir J** 1997 Aug; 10(8):1918–21
Allergic disease, immunoglobulins, exposure to mercury and dental amalgam in Swedish adolescents. Herrström P, et al. **Int Arch Occup Environ Health** 1997;69(5):339–42
Treatment of persistent otitis media [letter; comment] Parikh A, et al. **Lancet** 1996 Nov 30;348(9040):1517. Comment on: Lancet 1996 Sep 14;348(9029):713–6.

COMPLICATIONS

Inflammatory cytokine expression on nasal polyps developed in allergic and infectious rhinitis. Min YG, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):302–6
The mechanism of bronchial hyperreactivity in allergic rhinitis patients. A light microscopic study on BAL and bronchial biopsy. Bavbek S, et al. **Allergol Immunopathol (Madr)** 1996 Mar–Apr;24(2):45–53
The natural course of allergic rhinitis during 12 years of follow-up. Danielsson J, et al. **Allergy** 1997 Mar; 52(3):331–4
Allergy to the ornamental indoor green plant Tradescantia (Albifloxia). Wüthrich B, et al. **Allergy** 1997 May; 52(5):556–9
Otitis media and its relation to allergic rhinitis. Fireman P. **Allergy Asthma Proc** 1997 May–Jun;18(3):135–43 (46 ref.)
Learning impairment and allergic rhinitis. Simons FE. **Allergy Asthma Proc** 1996 Jul–Aug;17(4):185–9. (35 ref.)
Allergic rhinitis and asthma: how important is the link? Corren J. **J Allergy Clin Immunol** 1997 Feb;99(2):S781–6 (55 ref.)
Otitis media and eustachian tube dysfunction: connection to allergic rhinitis. Fireman P. **J Allergy Clin Immunol** 1997 Feb;99(2):S787–97 (95 ref.)
CO2 laser surgery of hypertrophied inferior turbinates. Lippert BM, et al. **Rhinology** 1997 Mar;35(1):33–6
[Rhinoconjunctivitis. Highly selective therapy using topical H1-blockers] **HNO** 1996 Mar;44(3 Suppl):1–4 **(Ger)**
[Allergic fungal sinusitis: is this rare disease an allergy or infection?] Berrettini S, et al. **Acta Otorhinolaryngol Ital** 1996 Oct;16(5):447–54 (Eng. Abstr.) **(Ita)**
[Nasal eosinophilia after specific provocation in patients with perennial allergic rhinitis] Gamboa Vargas YG, et al. **Rev Alerg Mex** 1996 Jul–Aug;43(4):96–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Bilateral increases in histamine after unilateral nasal allergen challenge. Wagenmann M, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):426–31
New occupational allergen in a pharmaceutical industry: serratial peptidase and lysozyme chloride. Park HS, et al. **Ann Allergy Asthma Immunol** 1997 Feb;78(2):225–9
Diagnosing nasal hyperreactivity with positional rhinomanometry. Altissimi G, et al. **Ann Otol Rhinol Laryngol** 1996 Nov;105(11):901–4
Allergen skin test and total IgE in adults with rhinitis in Singapore. John AB, et al.

Asian Pac J Allergy Immunol 1996 Jun;14(1):9–12

Diagnosis of allergic rhinitis [letter] Crobach MJ, et al. **Br J Gen Pract** 1996 Jul;46(408):437

The upper airway. Scadding GK. **Br J Hosp Med** 1996 Oct 16–Nov 5;56(8):401–5 (17 ref.)

Endoscopic scoring system in patients with allergic rhinitis. Bavbek S, et al. **J Investig Allergol Clin Immunol** 1997 May–Jun;7(3):175–8

Diagnostic value of nasal provocation testing and rhinomanometry in allergic rhinitis. Fernandes FR, et al. **J Investig Allergol Clin Immunol** 1996 May–Jun;6(3):184–8

Non-specific nasal provocation in children with chronic allergic rhinitis. Giannico R, et al. **J Investig Allergol Clin Immunol** 1996 Mar–Apr;6(2):110–6

Comparative study between skin prick tests and TOP-CAST allergen leukocyte stimulation in diagnosis of allergic status. Mędrala W, et al. **J Investig Allergol Clin Immunol** 1997 Mar–Apr;7(2):115–8

Allergic diagnosis: skin testing and rast. Thurmond M, et al. **J La State Med Soc** 1997 May;149(5):141–3 (9 ref.)

Allergic rhinitis. Recognizing signs, symptoms, and triggering allergens. Ferguson BJ. **Postgrad Med** 1997 May; 101(5):110–6 (9 ref.)

Nasal provocation test in the diagnostics of occupational allergic rhinitis. Hytönen M, et al. **Rhinology** 1996 Jun; 34(2):86–90

Comparison of SPT and NPT in the ascertainment of nasal mucosa as shock organ. Testa B, et al. **Rhinology** 1996 Sep; 34(3):160–2

Clinical presentation of chronic non-infectious rhinitis in children. Green RJ, et al. **S Afr Med J** 1997 Aug; 87(8):987–91

[Nasal hyperreactivity. Allergic rhinitis and differential diagnoses—consensus report on pathophysiology, classification, diagnosis and therapy] Bachert C, et al. **Laryngorhinootologie** 1997 Feb;76(2):65–76 (57 ref.) **(Ger)**

[Cell activation markers in rhinitis and rhinosinusitis. 1: Eosinophilic cationic protein (ECP)] Klimek L, et al. **Laryngorhinootologie** 1996 Nov;75(11):665–70 (Eng. Abstr.) **(Ger)**

[Diagnostic imaging and functional tests—allergic rhinitis] Takenaka H. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Dec; 99(12):1780–3 **(Jpn)**

DRUG THERAPY

Adjunct effect of loratadine in the treatment of acute sinusitis in patients with allergic rhinitis. Braun JJ, et al. **Allergy** 1997 Jun;52(6):650–5

Allergic rhinitis and inflammation: the effect of nasal corticosteroid therapy. Fokkens WJ, et al. **Allergy** 1997; 52(36 Suppl):29–32 (23 ref.)

The effect of cetirizine on sulfidoleukotriene production by blood leukocytes in children with allergic rhinitis. Kalayci O, et al. **Allergy** 1995 Dec;50(12):964–9

The pharmacological basis for the treatment of perennial allergic rhinitis and non-allergic rhinitis with topical corticosteroids. Meltzer EO. **Allergy** 1997;52(36 Suppl):33–40 (65 ref.)

Treatment of allergic rhinitis: effect on occupation productivity and work force costs. Fireman P. **Allergy Asthma Proc** 1997 Mar–Apr;18(2):63–7 (10 ref.)

Long-term safety and efficacy of triamcinolone acetonide aqueous nasal spray for the treatment of perennial allergic rhinitis. Koepke JW, et al. **Allergy Asthma Proc** 1997 Jan–Feb;18(1):33–7

Treatment of allergic rhinitis: effects of allergic rhinitis and antihistamines on performance. Storms WW. **Allergy Asthma Proc** 1997 Mar–Apr;18(2):59–61

Treatment strategies designed to minimize medical complications of allergic rhinitis. Fireman P. **Am J Rhinol** 1997 Mar–Apr;11(2):95–102 (42 ref.)

Onset of action and efficacy of terfenadine, astemizole, cetirizine, and loratadine for the relief of symptoms of allergic rhinitis. Day JH, et al. **Ann Allergy Asthma Immunol** 1997 Aug;79(2):163–72

Response to intranasal fluticasone propionate in perennial allergic rhinitis not associated with glucocorticoid receptor characteristics. Garrelds IM, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):319–24

Study protocol on azelastine [letter; comment] Kelso JM. **Ann Allergy Asthma Immunol** 1997 Feb;78(2):244. Comment on: Ann Allergy Asthma Immunol 1996 Feb;76(2):181–8.

Brompheniramine, terfenadine, and placebo in allergic rhinitis [see comments] Klein GL, et al. **Ann Allergy Asthma Immunol** 1996 Nov;77(5):365–70. Comment in: Ann Allergy Asthma Immunol 1996 Nov;77(5):337–40.

Comparison of once daily mometasone furoate (Nasonex) and fluticasone propionate aqueous nasal sprays for the treatment of perennial rhinitis. The 194–079 Study Group. Mandl M, et al. **Ann Allergy Asthma Immunol** 1997 Sep; 79(3):237–45

Ipratropium nasal spray in children with perennial rhinitis. Meltzer EO, et al. **Ann Allergy Asthma Immunol** 1997 May; 78(5):485–91

Changing strategies in the treatment of allergic rhinitis [editorial; comment] Nathan RA. **Ann Allergy Asthma Immunol** 1996 Oct;77(4):255–9 (55 ref.) . Comment on: Ann Allergy Asthma Immunol 1996 Oct;77(4):277–81.

Fluticasone propionate aqueous nasal spray treatment for perennial allergic rhinitis in children. Ngamphaiboon J, et al. **Ann Allergy Asthma Immunol** 1997 May;78(5):479–84

Evaluation of the drug monitoring programme of azelastine hydrochloride nasal spray in the treatment of allergic rhinitis in children under 13 years of age. Wober W, et al. **Arzneimittelforschung** 1997 Jul;47(7):841–4

Management of allergic rhinitis [letter] Dietman C. **Aust Fam Physician** 1996 Apr;25(4):601

A clinical comparison of intranasal budesonide with beclomethasone dipropionate for perennial non-allergic rhinitis: a 12 month study. Synnerstad B, et al. **Br J Clin Pract** 1996 Oct–Nov;50(7):363–6

The rationale for use of topical corticosteroids in allergic rhinitis. Mygind N, et al. **Clin Exp Allergy** 1996 May;26 Suppl 3:2–10 (42 ref.)

Allergic rhinitis in children: effects of flunisolide and disodium cromoglycate on nasal eosinophil cationic protein. Sensi LG, et al. **Clin Exp Allergy** 1997 Mar; 27(3):270–6

A time-dose study of the effect of topical ipratropium bromide on methacholine-induced rhinorrhoea in patients with perennial non-allergic rhinitis. Becker B, et al. **Clin Otolaryngol** 1997 Apr;22(2):132–4

Effect of topical beclomethasone on histamine-induced increases in nasal airflow resistance and secretion in perennial rhinitis. Studham JM, et al. **Clin Otolaryngol** 1993 Aug;18(4):285–90

The effect of the H2 antagonist cimetidine on the numbers of CD4+ and CD8+ cells in the nasal mucosa of patients with allergic rhinitis. Yang PC, et al. **Clin Otolaryngol** 1997 Apr;22(2):93–5

Once-daily mometasone furoate nasal spray: efficacy and safety of a new intranasal glucocorticoid for allergic rhinitis. Davies RJ, et al. **Clin Ther** 1997 Jan–Feb; 19(1):27–38; discussion 2–3 (24 ref.)

Sedative effects of antihistamines: safety, performance, learning, and quality of life. Nolen TM. **Clin Ther** 1997 Jan–Feb;19(1):39–55; discussion 2–3 (63 ref.)

Topical therapy of allergic rhinitis in childhood: Allergodil nasal spray—non-sedating in children. Lassig W, et al. **Curr Med Res Opin** 1996;13(7):391–5

Triamcinolone acetonide. A review of its pharmacological properties and therapeutic efficacy in the management of allergic rhinitis. Jeal W, et al. **Drugs** 1997 Feb;53(2):257–80 (73 ref.)

Acoustic evaluation of the efficacy of medical therapy for allergic nasal obstruction. Yamagiwa M. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S82–4

A randomized double-blind placebo controlled study of azelastine nasal spray in children with perennial rhinitis. Herman D, et al. **Int J Pediatr Otorhinolaryngol** 1997 Feb 14;39(1):1–8

A parallel-group comparison of astemizole and loratadine for the treatment of perennial allergic rhinitis. al-Muhaimeed H. **J Int Med Res** 1997 Jul–Aug; 25(4):175–81

Lysine-vasopressin in the evaluation of the hypothalamic-pituitary-adrenal axis in children with allergic rhinitis treated with intranasal beclomethasone dipropionate or oral prednisone. Kokron CM, et al. **J Investig Allergol Clin Immunol** 1997 Jan–Feb;7(1):51–6

Azelastine nasal spray for allergic rhinitis. **Med Lett Drugs Ther** 1997 May 9;39(1000):45–7

Fluticasone propionate aqueous nasal spray: a well-tolerated and effective treatment for children with perennial rhinitis. Richards DH, et al. **Pediatr Allergy Immunol** 1996 Feb; 7(1):35–43

The treatment of allergic rhinitis improves the recovery from asthma and upper respiratory infections. Sarti W, et al. **Rev Paul Med** 1995 Sep–Oct;113(5):968–72

Comparison of mizolastine with loratadine in the treatment of perennial allergic rhinitis. Bellioni P, et al. **Rhinology** 1996 Jun;34(2):101–4

Cetirizine and pseudoephedrine retard alone and in combination in the treatment of perennial allergic rhinitis: a double-blind multicentre study. Bertrand B, et al. **Rhinology** 1996 Jun;34(2):91–6

Are prostaglandins major mediators in perennial allergic rhinitis? Lee WC, et al. **Rhinology** 1996 Sep;34(3):130–5

Tachykinin and kinin receptor antagonists: therapeutic perspectives in allergic airway disease. Bertrand C, et al. **Trends Pharmacol Sci** 1996 Jul;17(7):255–9 (58 ref.)

[Can inhaled corticosteroid used for asthma cure allergic rhinitis? (letter)] Säynävälammi P. **Duodecim** 1995; 111(18):1805 **(Fin)**

[Ebastine : treatment of perennial rhinitis in the child] Benavente V, et al. **Allerg Immunol (Paris)** 1996 Oct; 28(8):277–81 (Eng. Abstr.) **(Fre)**

[Multicenter hospital study on the efficacy of Zyrtec (R) (cetirizine) compared to a placebo, in the treatment of perennial allergic rhinitis in 254 adolescents aged 12–15] Molkhou P, et al. **Allerg Immunol (Paris)** 1995 Oct; 27(8):300–6 (Eng. Abstr.) **(Fre)**

[Multicenter study on the efficacy of Zyrtec (Cetirizine) in the treatment of perennial allergic rhinitis in 875 adolescents] Molkhou P, et al. **Ailerg Immunol (Paris)** 1996 Jan;28(1):19–24 (Eng. Abstr.) **(Fre)**

[Efficacy of levocabastine in perennial rhinitis] Pacor ML, et al. **Clin Ter** 1996 Jun;147(6):295–8 (Eng. Abstr.) **(Ita)**

[Nedocromil sodium 1% nasal spray in the treatment of allergic rhinitis caused by Dermatophagoides pteronyssinus] Pacor ML, et al. **Recenti Prog Med** 1997 Jul–Aug;88(7–8):309–11 (Eng. Abstr.) **(Ita)**

[Fluticasone propionate—a new name common in asthma and rhinitis] Ulmeanu R, et al. **Pneumoftiziologia** 1997 Jan–Mar; 46(1):63–4 (8 ref.) **(Rum)**

[Perennial rhinitis: antihistaminic and anti-inflammatory treatment] Eseverri JL, et al. **Allergol Immunopathol (Madr)** 1997 Jan–Feb;25(1):1–9 (Eng. Abstr.) **(Spa)**

ECONOMICS

A cost of illness study of allergic rhinitis in the United States. Malone DC, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):22–7

The prevalence and medical and economic impact of allergic rhinitis in the United States. Meltzer EO. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 2):S805–28 (65 ref.)

EPIDEMIOLOGY

The behaviour of non-specific nasal provocation tests in subjects with allergic rhinitis and not, in and out of crisis. A longitudinal study. Filiaci F, et al. **Allergol Immunopathol (Madr)** 1996 Jul–Aug;24(4):158–62

One airway, one disease. Grossman J. **Chest** 1997 Feb;111(2 Suppl):11S–16S (55 ref.)

Pollen allergy in South Africa. Potter PC, et al. **Clin Exp Allergy** 1996 Dec;26(12):1347–54 (28 ref.)

Prevalence and risk factors for perennial allergic rhinitis in Korea: results of a nationwide survey. Min YG, et al. **Clin Otolaryngol** 1997 Apr;22(2):139–44

The prevalence and medical and economic impact of allergic rhinitis in the United States. Meltzer EO. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 2):S805–28 (65 ref.)

Asthma, nasal allergies, and multiple sclerosis [letter; comment] Neukirch F, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):270–1. Comment on: J Allergy Clin Immunol 1996 Jun;97(6):1402–8.

Epidemiology of allergic rhinitis. Mygind N, et al. **Pediatr Allergy Immunol** 1996;7(9 Suppl):57–62 (55 ref.)

ETIOLOGY

Changed allergy pattern in outpatients. Ciprandi G, et al. **Allergy** 1997 Mar;52(3):351–2

Birch pollinosis and atopy caused by apple, peach, and hazelnut; comparison of three extraction procedures with two apple strains. de Groot H, et al. **Allergy** 1996 Oct; 51(10):712–8

Asthma and rhinitis in wooding workers. De Zotti R, et al. **Allergy Asthma Proc** 1996 Jul–Aug;17(4):199–203

Glove-related rhinopathy among hospital personnel. Kujala VM, et al. **Am J Ind Med** 1996 Aug;30(2):164–70

Effect of dietary nucleosides and nucleotides on murine allergic rhinitis. Almansouri HM, et al. **Am J Med Sci** 1996 Nov;312(5):202–5

Occupational allergic rhinoconjunctivitis and asthma due to fennel seed. Schwartz HJ, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):37–40

Air pollution in relation to allergic and nonallergic rhinitis. Samir M, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jul;123(7):746–8

Immunotherapy for house dust allergy. Vóna I. **Clin Otolaryngol** 1997 Feb;22(1):52–6

Natural rubber latex as an aeroallergen in the general environment. Rueff F, et al. **Contact Dermatitis** 1996 Jul; 35(1):46–7

Coexistence of type I and type IV sensitization in occupational coffee allergy. Treudler R, et al. **Contact Dermatitis** 1997 Feb;36(2):109

Otitis media and eustachian tube dysfunction: connection to allergic rhinitis. Fireman P. **J Allergy Clin Immunol** 1997 Feb;99(2):S787–97 (95 ref.)

Asthma, nasal allergies, and multiple sclerosis [letter; comment] Neukirch F, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):270–1. Comment on: J Allergy Clin Immunol 1996 Jun;97(6):1402–8.

Overview of comorbid associations of allergic rhinitis. Spector SL. **J Allergy Clin Immunol** 1997 Feb; 99(2):S773–80 (95 ref.)

Storage mite allergy in perennial rhinitis patients not sensitized to house dust mites. Bernd LA, et al. **J Investig Allergol Clin Immunol** 1996 Mar–Apr;6(2):94–7

Allergic rhinosinusitis in the pediatric population. Cook PR, et al. **Otolaryngol Clin North Am** 1996 Feb;29(1):39–56 (67 ref.)

Allergic fungal sinusitis in children. Muntz HR. **Otolaryngol Clin North Am** 1996 Feb;29(1):185–22

Allergic rhinitis. Recognizing signs, symptoms, and triggering allergens. Ferguson BJ. **Postgrad Med** 1997 May; 101(5):110–6 (9 ref.)

Are prostaglandins major mediators in perennial allergic rhinitis? Lee WC, et al. **Rhinology** 1996 Sep;34(3):130–5

Consensus document — allergic rhinitis in South Africa [letter] Sellars SL. **S Afr Med J** 1997 May;87(5):624

[Asthma and rhinitis due to chloramine T-powder in instrument maintenance personnel] Keskinen H, et al. **Duodecim** 1995;111(10):921–5 **(Fin)**

[Identify the allergic rhinitis in your patient] Nuutinen J. **Duodecim** 1995;111(16):1609–15 (20 ref.) **(Fin)**

[Chronic rhinitis, or the consequences of gluttony] Nicolie

B, et al. **Allerg Immunol (Paris)** 1997 Jan;29(1):22–3 **(Fre)**

[Clinical aspects of environmental illnesses of the nose and paranasal sinuses—science and clinical practice] Bachert C. **Eur Arch Otorhinolaryngol Suppl** 1996;1:73–153 (651 ref.) **(Ger)**

[Nasal hyperreactivity. Allergic rhinitis and its differential diagnoses. Consensus report of pathophysiology, classification, diagnosis and therapy (see comments)] **HNO** 1997 Apr;45(4):189–201 (57 ref.). Comment in: HNO 1997 Apr;45(4):187–8. **(Ger)**

[Nasal hyperreactivity (comment)] Heppt W. **HNO** 1997 Apr; 45(4):187–8 (3 ref.). Comment on: HNO 1997 Apr;45(4):189–201. **(Ger)**

[Evaluation of the RAST in the diagnosis of children with food allergy] Medina RR, et al. **Rev Alerg Mex** 1996 Jan–Feb;43(1):9–12 (Eng. Abstr.) **(Spa)**

GENETICS

Increased expression of histamine H1 receptor mRNA in allergic rhinitis. Iriyoshi N, et al. **Clin Exp Allergy** 1996 Apr;26(4):379–85

Histamine H1–receptors in the nasal mucosa: a mystery solved? [editorial] Simons FE, et al. **Clin Exp Allergy** 1996 Apr;26(4):368–70

Polymorphism in transporter antigen peptides gene (TAP1) associated with atopy in Tunisians. Ismaïl A, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):216–23

IMMUNOLOGY

Humoral responses to bovine dust in dairy farmers with allergic rhinitis. Rautiainen M, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:169–72

Nasal response to allergen challenge in patients with immediate asthmatic reaction. Palczynski C, et al. **Allergol Immunopathol (Madr)** 1996 Nov–Dec;24(6):237–42

Purine derivatives in the study of allergic inflammation in respiratory diseases. Crimi N, et al. **Allergy** 1997;52(34 Suppl):48–54 (70 ref.)

Pathophysiology of perennial allergic rhinitis. Naclerio RM. **Allergy** 1997;52(36 Suppl):7–13 (23 ref.)

Local nasal immunotherapy: experimental evidences and general considerations. Passalacqua G, et al. **Allergy** 1997; 52(33 Suppl):10–6 (32 ref.)

The link between the nose and lung, perennial rhinitis and asthma—is it the same disease? Rowe-Jones JM. **Allergy** 1997;52(36 Suppl):20–8 (124 ref.)

Allergy to cockroaches in patients with asthma and rhinitis in an urban area (Madrid). Sastre J, et al. **Allergy** 1996 Aug;51(8):582–6

Nasal sensitization. Van Cauwenberge PB. **Allergy** 1997;52(33 Suppl):7–9 (13 ref.)

The perennial pattern of clinical symptoms in children monosensitized to Olea europaea pollen allergens in comparison with subjects with Parietaria and Gramineae pollinosis. Liccardi G, et al. **Allergy Asthma Proc** 1997 Mar–Apr;18(2):99–105

Alternaria as a major allergen for asthma in children raised in a desert environment. Halonen M, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1356–61

Phenotypic analysis of alveolar macrophages and monocytes in allergic airway inflammation. I. Evidence for activation of alveolar macrophages, but not peripheral blood monocytes, in subjects with allergic rhinitis and asthma. Viksman MY, et al. **Am J Respir Crit Care Med** 1997 Mar; 155(3):858–63

New occupational allergen in a pharmaceutical industry: serratial peptidase and lysozyme chloride. Park HS, et al. **Ann Allergy Asthma Immunol** 1997 Feb;78(2):225–9

Significant correlation between symptom score and IgG4 antibody titer following long-term immunotherapy for perennial allergic rhinitis. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1997 Jun;106(6):483–9

The role of leukotrienes in asthma and allergic rhinitis. Busse WW. **Clin Exp Allergy** 1996 Aug;26(8):868–79 (75 ref.)

Relationship between nasal hyperreactivity, mediators and eosinophils in patients with perennial allergic rhinitis and controls. de Graaf-in t Veld C, et al. **Clin Exp Allergy** 1996 Aug;26(8):903–8

Mite allergy is associated with a specific profile of IgG epitopes recognized on antigen p1 of Dermatophagoides pteronyssinus. Duchateau J, et al. **Clin Exp Allergy** 1997 Mar;27(3):296–305

Interleukin-8 secretion in patients with allergic rhinitis after an allergen challenge: interleukin-8 is not the main chemotactic factor present in nasal lavages. Gosset P, et al. **Clin Exp Allergy** 1997 Apr;27(4):379–88

Effects of a cysteinyl leukotriene antagonist, ONO–1078 (pranlukast), on total airway resistance after antigen challenge in sensitized guinea pigs. Narita S, et al. **Inflamm Res** 1997 Apr;46(4):143–6

In vivo effects of monoclonal antibody against ICAM–1 and LFA–1 on antigen-induced nasal symptoms and eosinophilia in sensitized rats. Asakura K, et al. **Int Arch Allergy Immunol** 1996 Oct;111(2):156–60

Role of IL–13 in CD4 T cell-dependent IgE production in atopy. Levy F, et al. **Int Arch Allergy Immunol** 1997 Jan; 112(1):49–58

Topical antigen provocation increases the number of immunoreactive IL–4–, IL–5– and IL–6–positive cells in the nasal mucosa of patients with perennial allergic rhinitis. Saito H, et al. **Int Arch Allergy Immunol** 1997 Sep; 114(1):81–5

Pathogenesis of allergic rhinitis. Baraniuk JN. **J Allergy Clin Immunol** 1997 Feb;99(2):S763–72 (69 ref.)

The relationships between nasal hyperreactivity, quality of life, and nasal symptoms in patients with perennial allergic rhinitis. de Graaf-in t Veld T, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):508–13

The role of mattress bases in the mite infestation of dwellings. Pauli G, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):261–3

Storage mite allergy in perennial rhinitis patients not sensitized to house dust mites. Bernd LA, et al. **J Investig Allergol Clin Immunol** 1996 Mar–Apr;6(2):94–7

Skin prick tests with standardized extracts of inhalant allergens in 7099 adult patients with asthma or rhinitis: cross-sensitizations and relationships to age, sex, month of birth and year of testing. Eriksson NE, et al. **J Investig Allergol Clin Immunol** 1996 Jan–Feb;6(1):36–46

Non-specific nasal provocation in children with chronic allergic rhinitis. Giannico R, et al. **J Investig Allergol Clin Immunol** 1996 Mar–Apr;6(2):110–6

Why are nasal and bronchial symptoms mostly perennial in patients with monosensitization to Olea europaea pollen allergens? Liccardi G, et al. **J Investig Allergol Clin Immunol** 1996 Nov–Dec;6(6):371–7

Comparative study between skin prick tests and TOP–CAST allergen leukocyte stimulation in diagnosis of allergic status. Medrala W, et al. **J Investig Allergol Clin Immunol** 1997 Mar–Apr;7(2):115–8

Natural course of serum-specific immunoglobulin E and immunoglobulin G4 for a span of eight years in untreated patients with perennial allergic rhinitis. Ohashi Y, et al. **Laryngoscope** 1997 Mar;107(3):382–5

Determination of sensitivity of inhalant allergens in patients with allergic rhinitis in West Athens. Kontothanasi G, et al. **Rhinology** 1995 Dec;33(4):234–5

Changes of some parameters of humoral and cellular immunity in allergy to pollen. Mitrea CM, et al. **Rom J Intern Med** 1996 Jan–Jun;34(1–2):111–5

Nasal responsiveness to allergen and histamine in patients with perennial rhinitis with and without a late phase response. de Graaf-in t Veld C, et al. **Thorax** 1997 Feb; 52(2):143–8

[Incidence of cutaneous sensitization to environmental allergens in obstructive sleep apnea syndrome] Duchna HW, et al. **Pneumologie** 1997 Aug;51 Suppl 3:763–6 (Eng. Abstr.) **(Ger)**

[Immunohistological study of infiltrating cells in nasal mucosa and nasal lavage fluid of perennial allergic rhinitis] Suzuki N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jan; 100(1):20–6 (Eng. Abstr.) **(Jpn)**

[Manifestation of nasal allergy in ovalbumin-sensitized mice—as compared with mast cell-deficient mice, determined with an immunosuppressive agent] Watanabe M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Mar; 99(3):454–63 (Eng. Abstr.) **(Jpn)**

[Clinical and laboratory features of 100 patients with perennial allergic rhinitis] Segura Méndez NH, et al. **Rev Alerg Mex** 1993 Sep–Oct;40(5):110–3 (20 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Purine derivatives in the study of allergic inflammation in respiratory diseases. Crimi N, et al. **Allergy** 1997;52(34 Suppl):48–54 (70 ref.)

RANTES in human allergen–induced rhinitis: cellular source and relation to tissue eosinophilia. Rajakulasingam K, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):696–703

Bilateral increases in histamine after unilateral nasal allergen challenge. Wagenmann M, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):426–31

Effects of anti–allergic drugs on substance P (SP) and vasoactive intestinal peptide (VIP) in nasal secretions. Shinoda M, et al. **Am J Rhinol** 1997 May–Jun;11(3):237–41

Response to intranasal fluticasone propionate in perennial allergic rhinitis not associated with glucocorticoid receptor characteristics. Garrelds IM, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):319–24

Nasal nitric oxide is increased in allergic rhinitis [see comments] Arnal JF, et al. **Clin Exp Allergy** 1997 Apr; 27(4):358–62. Comment in: Clin Exp Allergy 1997 Apr;27(4):347–50.

Defective inhibition of sodium on basophil histamine release in patients with allergic rhinitis and bronchial asthma. Tedeschi A, et al. **Eur Respir J** 1996 Oct;9(10):2070–6

Allergen binding to specific IgE in the nasal mucosa of allergic patients. KleinJan A, et al. **J Allergy Clin Immunol** 1997 Apr;99(4):515–21

Endothelial adhesion molecules for nasal–homing T cells in allergy. Karlsson MG, et al. **Virchows Arch** 1996 Sep; 429(1):49–54

PATHOLOGY

Goblet cell density of the inferior turbinates in patients with perennial allergic and nonallergic rhinitis. Berger G, et al. **Am J Rhinol** 1997 May–Jun;11(3):233–6

The inferior turbinate mast cell population of patients with perennial allergic and nonallergic rhinitis. Berger G, et al. **Am J Rhinol** 1997 Jan–Feb;11(1):63–6

Bronchial subepithelial fibrosis correlates with airway responsiveness to methacholine. Boulet LP, et al. **Chest** 1997 Jul;112(1):45–52

A comparison of morphological effects on the rabbit nasal and sinus mucosa after surgical denervation and topical capsaicin application. Norlander T, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):205–13

Light and electron microscope study in allergic rhinitis patients (ARP) with or without bronchial hyperreactivity (BHR). Bavbek S, et al. **J Investig Allergol Clin Immunol** 1996 May–Jun;6(3):172–82

Increase in epithelial mast cell numbers in the nasal mucosa of patients with perennial allergic rhinitis. Slater A, et al. **J Laryngol Otol** 1996 Oct;110(10):929–33

Lower airways remodeling in nonasthmatic subjects with allergic rhinitis. Chakir J, et al. **Lab Invest** 1996 Nov; 75(5):735–44

Distribution of eosinophil granule proteins in nasal mucosa of atopic patients with nasal polyposis. Min YG, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Mar–Apr; 58(2):82–6

Stereological estimation of blood vessel surface and volume densities in human normal and rhinitic nasal mucosa. Abrams DC, et al. **Rhinology** 1997 Mar;35(1):22–7

[Evaluation of eosinophils in nasal mucus from patients with perennial allergic rhinitis during nasal provocation tests] Arzuaga Orozco J, et al. **Rev Alerg Mex** 1993 Nov–Dec; 40(6):139–41 (Eng. Abstr.) **(Spa)**

[Nasal cytology using swabs and Conn spoons] Gálvez Gulño VJ. **Rev Alerg Mex** 1993 Nov–Dec;40(6):142–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Pathophysiology and therapy for allergic and nonallergic rhinitis: an updated review. Levenson T, et al. **Allergy Asthma Proc** 1997 Jul–Aug;18(4):213–20 (54 ref.)

Rhinovirus infection preferentially increases lower airway responsiveness in allergic subjects. Gern JE, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1872–6

The effect of regular salbutamol on lung function and bronchial hyperresponsiveness in normal subjects and nonasthmatic atopic subjects with allergic rhinitis. Boothman–Burrell D, et al. **Chest** 1997 Jul;112(1):12–8

Relationship between nasal hyperreactivity, mediators and eosinophils in patients with perennial allergic rhinitis and controls. de Graaf-in t Veld C, et al. **Clin Exp Allergy** 1996 Aug;26(8):903–8

Sensation of nasal airflow compared with nasal airway resistance in patients with rhinitis. Simola M, et al. **Clin Otolaryngol** 1997 Jun;22(3):260–2

No alteration of biophysical parameters in the skin of subjects with respiratory atopy. Conti A, et al. **Dermatology** 1996; 192(4):317–20

Comparison of early and late asthmatic responses between patients with allergic rhinitis and mild asthma. Bonavia M, et al. **Eur Respir J** 1996 May;9(5):905–9

Lower airway responses to rhinovirus 39 in healthy allergic and nonallergic subjects. Skoner DP, et al. **Eur Respir J** 1996 Jul;9(7):1402–6

Reduction by a kallikrein inhibitor of the increased nasal airway resistance of allergic patients after antigen challenge. Katori M, et al. **Immunopharmacology** 1996 Jun; 33(1–3):308–10

Pathogenesis of allergic rhinitis. Baraniuk JN. **J Allergy Clin Immunol** 1997 Feb;99(2):S763–72 (69 ref.)

The relationships between nasal hyperreactivity, quality of life, and nasal symptoms in patients with perennial allergic rhinitis. de Graaf-in t Veld T, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):508–13

Lysine–vasopressin in the evaluation of the hypothalamic–pituitary–adrenal axis in children with allergic rhinitis treated with intranasal beclomethasone dipropionate or oral prednisone. Kokron CM, et al. **J Investig Allergol Clin Immunol** 1997 Jan–Feb;7(1):51–6

Short stature in children with respiratory allergy. Sant'Anna CA, et al. **Pediatr Allergy Immunol** 1996 Nov;7(4):187–92

[Investigation of "anosmic zones" associated with nasal allergy] Higo R, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Nov;99(11):1648–52 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Indoor allergens: thrill of victory or agony of defeat? [editorial; comment] Wood RA. **J Allergy Clin Immunol** 1997 Sep;100(3):290–2. Comment on: J Allergy Clin Immunol 1997 Sep;100(3):307–12. Comment on: J Allergy Clin Immunol 1997 Sep;100(3):313–9. Comment on: J Allergy Clin Immunol 1997 Sep;100(3):428–30.

PSYCHOLOGY

Measuring health-related quality of life in rhinitis. Juniper EF. **J Allergy Clin Immunol** 1997 Feb;99(2):S742–9 (31 ref.)

SURGERY

Severe perennial allergic rhinitis treated with Nd:YAG laser. Ito H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:14–7

[Inferior turbinectomy in asthmatic children] Ducroz V, et al. **Ann Otolaryngol Chir Cervicofac** 1997;114(1–2):36–40 (14 ref.) (Eng. Abstr.) **(Fre)**

THERAPY

Modern management of allergic rhinitis. Katelaris CH. **Adv Otorhinolaryngol** 1997;51:68–71 (13 ref.)

RHINITIS, ALLERGIC, PERENNIAL

The efficacy of E.P.D., a new immunotherapy, in the treatment of allergic diseases in children. Caramia G, et al. **Allerg Immunol (Paris)** 1996 Nov;28(9):308–10

The early effect of specific immunotherapy on lymphocyte response to PHA and allergens in atopic patients with allergic rhinitis. Kinikli G, et al.
Allergol Immunopathol (Madr) 1996 Mar–Apr;24(2):65–9

A prospective safety–monitoring study of immunotherapy in mite–allergy patients with mass–units–standardized extract. González de la Cuesta C, et al. **Allergy** 1997 May; 52(5):580–3

Local nasal immunotherapy: experimental evidences and general considerations. Passalacqua G, et al. **Allergy** 1997; 52(33 Suppl):10–6 (32 ref.)

Monitoring methods for local nasal immunotherapy. Passali D, et al. **Allergy** 1997;52(33 Suppl):22–5 (13 ref.)

Specific nasal provocation test with powder allergen. Salzano FA. **Allergy** 1997;52(33 Suppl):32–5

Pathophysiology and therapy for allergic and nonallergic rhinitis: an updated review. Levenson T, et al.
Allergy Asthma Proc 1997 Jul–Aug;18(4):213–20 (54 ref.)

Evaluation of activated eosinophil infiltration for the assessment of the effect of chemosurgical treatment for allergic rhinitis using trichloroacetic acid. Yao K, et al. **Am J Rhinol** 1997 Mar–Apr;11(2):103–7

Nasal immunotherapy in weed–induced allergic rhinitis. Gaglani B, et al. **Ann Allergy Asthma Immunol** 1997 Sep; 79(3):259–65

Narrow–band red light phototherapy in perennial allergic rhinitis and nasal polyposis. Neuman I, et al.
Ann Allergy Asthma Immunol 1997 Apr;78(4):399–406

Significant correlation between symptom score and IgG4 antibody titer following long–term immunotherapy for perennial allergic rhinitis. Ohashi Y, et al.
Ann Otol Rhinol Laryngol 1997 Jun;106(6):483–9

Immunotherapy for house dust allergy. Vóna I.
Clin Otolaryngol 1997 Feb;22(1):52–6

Ephedrine–saline nasal wash in allergic rhinitis [letter] Shaikh WA. **J Assoc Physicians India** 1996 Apr;44(4):289

Allergen–specific low–dose immunotherapy in perennial allergic rhinitis: a double–blind placebo–controlled crossover study. Radcliffe MJ, et al.
J Investig Allergol Clin Immunol 1996 Jul–Aug;6(4):242–7

Double–blind placebo–controlled study of sublingual immunotherapy with house dust mite extract (D.pt.) in children. Hirsch T, et al. **Pediatr Allergy Immunol** 1997 Feb;8(1):21–7

Allergic rhinitis. Options for pharmacotherapy and immunotherapy. Ferguson BJ. **Postgrad Med** 1997 May; 101(5):117–20, 123–6, 131 (15 ref.)

[Bioresonance therapy in treatment of allergies. Every person has his own vibration pattern (interview by Beatrice Wagner)] Süss S. **Fortschr Med** 1997 Apr 20;115(11):16, 18 **(Ger)**

[Cauterization of the inferior nostrils and immunotherapy as a treatment for patients with allergic rhinitis] Tovar Soots V, et al. **Rev Alerg Mex** 1997 Mar–Apr;44(2):39–41 (Eng. Abstr.) **(Spa)**

VETERINARY

Treatment of bilateral nasal polyposis and chronic refractory inhalant allergic rhinitis in a chimpanzee (Pan troglodytes). Dumonceaux GA, et al. **J Zoo Wildl Med** 1997 Jun; 28(2):215–9

VIROLOGY

Rhinovirus infection preferentially increases lower airway responsiveness in allergic subjects. Gern JE, et al.
Am J Respir Crit Care Med 1997 Jun;155(6):1872–6

RHINITIS, ALLERGIC, SEASONAL see **HAY FEVER**

RHINITIS, ATROPHIC

DIAGNOSIS

Primary atrophic rhinitis: a summary of four cases and review of the literature. Chand MS, et al.
Otolaryngol Head Neck Surg 1997 Apr;116(4):554–8 (20 ref.)

ETIOLOGY

Atrophic rhinitis. Shehata MA. **Am J Otolaryngol** 1996 Mar–Apr;17(2):81–6 (42 ref.)

Synergistic role of gaseous ammonia in etiology of Pasteurella multocida–induced atrophic rhinitis in swine. Hamilton TD, et al. **J Clin Microbiol** 1996 Sep;34(9):2185–90

VETERINARY

Detection of toxigenic Pasteurella multocida infections in swine herds by assaying antibodies in sow colostrum. Levonen K, et al. **J Vet Diagn Invest** 1996 Oct;8(4):455–9

Effect of Bordetella bronchiseptica and serotype D Pasteurella multocida bacterin–toxoid on the occurrence of atrophic rhinitis after experimental infection with B. bronchiseptica and toxigenic type AP. multocida. Sakano T, et al. **J Vet Med Sci** 1997 Jan;59(1):55–7

RHINITIS, VASOMOTOR

DIAGNOSIS

A comparative immunological study of vasomotor rhinitis and pollinosis. Zieliński A.
J Investig Allergol Clin Immunol 1996 Jul–Aug;6(4):261–5

[Nasal hyperreactivity. Allergic rhinitis and differential diagnoses––consensus report on pathophysiology, classification, diagnosis and therapy] Bachert C, et al.
Laryngorhinootologie 1997 Feb;76(2):65–76 (57 ref.) **(Ger)**

ETIOLOGY

[Clinical aspects of environmental illnesses of the nose and paranasal sinuses––science and clinical practice] Bachert C. **Eur Arch Otorhinolaryngol Suppl** 1996;1:73–153 (651 ref.) **(Ger)**

IMMUNOLOGY

Reflexly runny noses: neurogenic inflammation in the nasal mucosa [editorial] Rogers DF. **Clin Exp Allergy** 1996 Apr; 26(4):365–7

A comparative immunological study of vasomotor rhinitis and pollinosis. Zieliński A.
J Investig Allergol Clin Immunol 1996 Jul–Aug;6(4):261–5

PHYSIOPATHOLOGY

The nasal response to axillary pressure in non–eosinophilic intrinsic rhinitis. Wilde D, et al. **Clin Otolaryngol** 1997 Jun; 22(3):219–21

THERAPY

Specific nasal provocation test with powder allergen. Salzano FA. **Allergy** 1997;52(33 Suppl):32–5

Vasomotor rhinitis and sphenopalatine ganglion block. Prasanna A, et al. **J Pain Symptom Manage** 1997 Jun; 13(6):332–8

RHINOPHARYNX see **NASOPHARYNX**

RHINOPHYMA

CLASSIFICATION

Actinic rhinophyma: an old disorder with a new name. Kligman AM. **Cutis** 1996 Jun;57(6):389–92

SURGERY

Treatment of rhinophyma with carbon dioxide laser. Simo R, et al. **J Laryngol Otol** 1996 Sep;110(9):841–6

The external shaving technique in aesthetic rhinoplasty [letter; comment] Ullmann Y, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1322. Comment on: Plast Reconstr Surg 1996 Jan;97(1):33–9.

[Surgical treatment of rhinophyma using dermo–epidermal graft. A case report] Cervelli V, et al. **Minerva Chir** 1997 Mar;52(3):301–5 (Eng. Abstr.) **(Ita)**

RHINOPLASTY

The combination of morphine with local anaesthetic in rhinoplasty––no evidence of a peripheral morphine effect. Ben–David B, et al. **Acta Anaesthesiol Scand** 1996 Sep;40(8 Pt 1):892–7

Treatment of the before and after images in aesthetic surgery. Chamosa M. **Aesthetic Plast Surg** 1997 Jan–Feb;21(1):52–4

Surgery of the naso–frontal angle. Fontana AM, et al.
Aesthetic Plast Surg 1996 Jul–Aug;20(4):319–22

Cephalometric analysis and postoperative results in aesthetic rhinoplasty. Fruscella P. **Aesthetic Plast Surg** 1997 Mar–Apr;21(2):79–85

The quantification and distribution of nasal sebaceous glands using image analysis. Michelson LN, et al.
Aesthetic Plast Surg 1996 Jul–Aug;20(4):303–9

Ethnic profile of patients undergoing aesthetic rhinoplasty in Stockholm. Niechajev I, et al. **Aesthetic Plast Surg** 1997 May–Jun;21(3):139–45

Evaluation of the median forehead flap and the nasolabial flap in nasal reconstruction. Uchinuma E, et al.
Aesthetic Plast Surg 1997 Mar–Apr;21(2):86–9

Extended open–tip rhinoplasty with three V–flaps for secondary correction of bilateral cleft lip nasal deformity. Chen TH, et al. **Ann Plast Surg** 1996 Nov;37(5):482–8; discussion 488–9

Correction of the hypoplastic nasal ala using an auricular composite graft. Kobayashi S, et al. **Ann Plast Surg** 1996 Nov;37(5):490–4

Clinical study of alar anatomy and surgery of the alar base. Becker DG, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug;123(8):789–95

Anthropometric analysis of the female Latino nose. Revised aesthetic concepts and their surgical implications. Milgrim LM, et al. **Arch Otolaryngol Head Neck Surg** 1996 Oct; 122(10):1079–86

Rhinoplasty in the cleft lip patient. Trenité GJ, et al.
Cleft Palate Craniofac J 1997 Jan;34(1):63–8

Cartilage grafts for the nasal tip. Zijlker TD, et al.
Clin Otolaryngol 1993 Dec;18(6):446–58

Do laws of biomechanics work in reconstruction of the cartilaginous nasal septum? Lopatin AS.
Eur Arch Otorhinolaryngol 1996;253(4–5):309–12

Paraffinoma revisited: a post–operative condition following rhinoplasty nasal packing. Montgomery PQ, et al.
J Laryngol Otol 1996 Aug;110(8):785–6

Current concepts in plastic surgery of the nose. Fuleihan NS. **J Med Liban** 1996;44(3):150–60 (18 ref.)

Experimental study of the safety of simultaneous nasal and Le Fort I osteotomies. Li KK. **J Oral Maxillofac Surg** 1997 Apr;55(4):371–4; discussion 374–5

Clonidine as premedication for rhinoplasty [letter] Britto JA, et al. **Plast Reconstr Surg** 1997 Aug;100(2):548–9

What Mary's mother told me [letter] Pool R.
Plast Reconstr Surg 1997 Jul;100(1):281

The lateral nasal osteotomy in rhinoplasty: an anatomic endoscopic comparison of the external versus the internal approach. Rohrich RJ, et al. **Plast Reconstr Surg** 1997 Apr; 99(5):1309–12; discussion 1313

[Advances in the research on implanted tissue of rhinoplasty materials and its tissue substitutes] Shang S, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1996 May;12(3):219–21 (29 ref.) **(Chi)**

[Functional problems before and after rhinoplasty] Riu R.
Ann Chir Plast Esthet 1996 Aug;41(4):389–99 (Eng. Abstr.) **(Fre)**

[The deviated nose. Classification and treatment. Apropos of 100 cases] Tomasi M, et al.
Ann Otolaryngol Chir Cervicofac 1997;114(1–2):41–50 (26 ref.) (Eng. Abstr.) **(Fre)**

[Repair of substance losses of the nose: apropos of 45 cases] Kadiri F, et al. **Rev Laryngol Otol Rhinol (Bord)** 1997; 118(2):99–102 (Eng. Abstr.) **(Fre)**

[Patient satisfaction as health care outcome––the example of surgical correction of the nasal septum] Dörning H, et al.
Gesundheitswesen 1996 Oct;58(10):510–8 (Eng. Abstr.) **(Ger)**

[Comment on the contribution by A. Pennekamp, P. Tschirky and R. Grossenbacher. Significance of Staphylococcus aureus in nose operations (letter; comment)] Damm M.
HNO 1996 Aug;44(8):429–30. Comment on: HNO 1995 Nov;43(11):664–8. **(Ger)**

[Hypoglossal nerve paralysis after endonasal paranasal sinus operation in intubation narcosis] Bachmann G, et al.
Laryngorhinootologie 1996 Oct;75(10):623–4 (Eng. Abstr.) **(Ger)**

[Treatment of postoperative "uncontrollable" nosebleed by embolization of the maxillary artery] Daniilidis I, et al.
Laryngorhinootologie 1996 Sep;75(9):529–32 (Eng. Abstr.) **(Ger)**

[Tooth discoloration as a rare complication of septorhinoplasty] Issing PR, et al. **Laryngorhinootologie** 1996 Jan;75(1):59–62 (Eng. Abstr.) **(Ger)**

["Functional" neurovascular decompressive surgery of cranial rhino– base in headaches with rhinogenic triggering] Bonaccorsi P. **Acta Otorhinolaryngol Ital** 1996 Jun; 16(3):254–60 (Eng. Abstr.) **(Ita)**

[Septorhinoplasty in childhood] Busca GP, et al.
Acta Otorhinolaryngol Ital 1996 Jun;16(3):235–7 (Eng. Abstr.) **(Ita)**

[8–year experience with force vector rhinoplasty by J.B. Tebbetts: comparative results] Gottarelli P, et al.
Acta Otorhinolaryngol Ital 1996 Jun;16(3):248–53 (Eng. Abstr.) **(Ita)**

[The actual problems in functional and aesthetic nasal surgery] La Rosa R, et al. **Acta Otorhinolaryngol Ital** 1996 Jun;16(3):238–44 (Eng. Abstr.) **(Ita)**

[Cartilaginous grafts in primary rhinoplasty] Leopizzi G.
Acta Otorhinolaryngol Ital 1996 Jun;16(3):245–7 (Eng. Abstr.) **(Ita)**

[The evolution of the techniques used to correct nasal septum function] Meloni F, et al. **Acta Otorhinolaryngol Ital** 1996 Jun;16(3):180–8 (Eng. Abstr.) **(Ita)**

[Modern corrective nasoseptal surgery] Palma P, et al.
Acta Otorhinolaryngol Ital 1996 Jun;16(3):211–24 (45 ref.) (Eng. Abstr.) **(Ita)**

[Presumed physiopathology of the nasal wall surgery and contemporary techniques of the inferior turbinates surgery] Passàli D, et al. **Acta Otorhinolaryngol Ital** 1996 Jun; 16(3):202–10 (61 ref.) (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Tumefactive cartilage proliferation after rhinoplasty. A newly reported complication. Reiter D, et al.
Arch Otolaryngol Head Neck Surg 1997 Jan;123(1):72–5

Lipogranulomas as complications of septorhinoplasty. Rettinger G, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug;123(8):809–14

Nasal valve obstruction complicating rhinoplasty: prevention and treatment. Part II. Broker BJ, et al.
Ear Nose Throat J 1997 Mar;76(3):130–2

Nasal valve obstruction complicating rhinoplasty: prevention and treatment. Part I. Broker BJ, et al.
Ear Nose Throat J 1997 Feb;76(2):77–8

Mucous cyst––a postrhinoplasty complication: outcome and prevention. Kotzur A, et al. **Plast Reconstr Surg** 1997 Aug; 100(2):520–4

[Secondary rhinoplasty (analysis of failures over a 5–year period)] Cvjetković N, et al. **Lijec Vjesn** 1997 Feb; 119(2):68–71 (Eng. Abstr.) **(Scr)**

HISTORY

Von Graefe's circular saw for rhinoplasty. Pirsig W. **Rhinology** 1997 Mar;35(1):46

[The history of nasal valve surgery] Croce G, et al. **Acta Otorhinolaryngol Ital** 1996 Jun;16(3):189–201 (Eng. Abstr.) **(Ita)**

[The history and evolution of the surgical techniques in rhinoplasty] Serra A, et al. **Acta Otorhinolaryngol Ital** 1996 Jun;16(3):225–34 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Alar lateral crus in nasal tip surgery. Fontana A, et al. **Aesthetic Plast Surg** 1997 Jan–Feb;21(1):43–7

Nasal speculum with positionally autoswitched and battery-operated fiber optic illumination. Kayikçioğlu A, et al. **Aesthetic Plast Surg** 1997 May–Jun;21(3):146–7

Concurrent functional endoscopic sinus surgery and rhinoplasty. Rizk SS, et al. **Ann Plast Surg** 1997 Apr; 38(4):323–9

Prosthetic management of large nasal septal defects. Zaki HS, et al. **J Prosthet Dent** 1997 Mar;77(3):335–8

METHODS

External rhinoplasty approach for septal perforation. van Kempen MJ, et al. **Acta Otorhinolaryngol Belg** 1997; 51(2):79–83

Thick skin and cosmetic surgery of the nasal tip: how to avoid the cutaneous polly beak. Botti G. **Aesthetic Plast Surg** 1996 Sep–Oct;20(5):421–7

New surgical concepts: nasal tip function. Galli JJ, et al. **Aesthetic Plast Surg** 1997 Jul–Aug;21(4):240–2

Technique for harvesting of conchal cartilage grafts. Nicolle FV, et al. **Aesthetic Plast Surg** 1997 Jul–Aug;21(4):243–4

Extracorporeal septoplasty combined with open rhinoplasty. Senyuva C, et al. **Aesthetic Plast Surg** 1997 Jul–Aug; 21(4):233–9

Early secondary corrections after septorhinoplasty. Szalay L. **Aesthetic Plast Surg** 1996 Sep–Oct;20(5):429–32

A modification of the primary nasal correction in the rotation–advancement unilateral cleft lip repair. Armstrong GT, et al. **Ann Plast Surg** 1997 Mar;38(3):236–45

Nasal dysplasia. de Blécourt RA, et al. **Ann Plast Surg** 1996 Dec;37(6):633–7

Orbital hemorrhage during rhinoplasty. Hunts JH, et al. **Ann Plast Surg** 1996 Dec;37(6):618–23

Hemangioma of the nasal bones [letter] Karacaoğlan N, et al. **Ann Plast Surg** 1997 Aug;39(2):218–9

Superficial nasalis aponeurotic system (SNAS) flap reconstruction of nasal defects. O'Hara D, et al. **Ann Plast Surg** 1997 Apr;38(4):379–84

The use of the labiocolumellar crease incision in rhinoplasty. Spiro SA, et al. **Ann Plast Surg** 1996 Dec;37(6):569–76

Subtotal midfacial/total nasal reconstruction following shotgun blast to the face employing composite microvascular serratus anterior rib, muscle, and scapular tip. Thomas WO, et al. **Ann Plast Surg** 1997 Mar; 38(3):291–5

Augmentation with cartilage grafts around the pyriform aperture to improve the midface and profile in binder's syndrome. Watanabe T, et al. **Ann Plast Surg** 1996 Feb; 36(2):206–11

Objective evaluation of the Tajima secondary cleft lip nose correction. Coghlan BA, et al. **Br J Plast Surg** 1996 Oct; 49(7):457–61

Septoplasty for obstructive sleep apnea in infants after cleft lip repair. Josephson GD, et al. **Cleft Palate Craniofac J** 1996 Nov;33(6):473–6

Frontonasal flap for reconstruction of complete alar defects. Kurata S, et al. **Dermatol Surg** 1996 Oct;22(10):850–2

Changing the nasal tip: Part III (of VI parts). Berman WE. **Ear Nose Throat J** 1996 Feb;75(2):71

Changing the nasal tip: Part IV (of VI parts). Berman WE. **Ear Nose Throat J** 1996 Mar;75(3):131

Management of the nasal tip by open rhinoplasty. Raspall G, et al. **J Craniomaxillofac Surg** 1996 Jun;24(3):145–50

Reducing the risk of cartilaginous supratip deformities. Gilbert SE. **J Okla State Med Assoc** 1996 Feb;89(2):51–7

Nasal reconstruction using a combination of alloplastic materials and autogenous tissues: a surgical alternative. Bikhazi NB, et al. **Laryngoscope** 1997 Aug;107(8):1086–93

Septal extension grafts: a method of controlling tip projection shape. Byrd HS, et al. **Plast Reconstr Surg** 1997 Sep; 100(4):999–1010

Difficult nasal deformities [letter; comment] Crysdale WS. **Plast Reconstr Surg** 1996 Oct;98(5):905–6. Comment on: Plast Reconstr Surg 1995 Apr;95(4):672–82. Comment on: Plast Reconstr Surg 1995 Nov;96(6):1486–7.

Lateral crural strut graft: technique and clinical applications in rhinoplasty. Gunter JP, et al. **Plast Reconstr Surg** 1997 Apr;99(4):943–52; discussion 953–5

The merits of the open approach in rhinoplasty. Gunter JP. **Plast Reconstr Surg** 1997 Mar;99(3):863–7

Internal stabilization of autogenous rib cartilage grafts in rhinoplasty: a barrier to cartilage warping. Gunter JP, et al. **Plast Reconstr Surg** 1997 Jul;100(1):161–9

Suture correction of nasal tip cartilage concavities. Neu BR. **Plast Reconstr Surg** 1996 Nov;98(6):971–9

External cantilever sling in septorhinoplasty: a new technique. Numanoğlu A. **Plast Reconstr Surg** 1997 Jul; 100(1):250–6

Closed versus open rhinoplasty--and the debate goes on. Sheen JH. **Plast Reconstr Surg** 1997 Mar;99(3):859–62

The external shaving technique in aesthetic rhinoplasty [letter; comment] Ullmann Y, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1322. Comment on: Plast Reconstr Surg 1996 Jan;97(1):33–9.

The retroangular flap for nasal reconstructions [letter; comment] Vandeput JJ. **Plast Reconstr Surg** 1997 Jul; 100(1):276–7. Comment on: Plast Reconstr Surg 1996 Feb;97(2):431–5.

Dental alginate for taking impressions of the nose prior to rhinoplasty [letter; comment] Wood DL. **Plast Reconstr Surg** 1997 Jan;99(1):269–70. Comment on: Plast Reconstr Surg 1996 Feb;97(2):436–44.

[Reconstruction of loss of substance on the nose by composite auricular grafts. Apropos of 30 cases] Hodin E, et al. **Ann Chir Plast Esthet** 1996 Jun;41(3):284–94 (Eng. Abstr.) **(Fre)**

[Defect coverage with a bilobed flap with reference to special aspects regarding the nose] Umbricht RE, et al. **Handchir Mikrochir Plast Chir** 1996 Jul;28(4):210–4 (Eng. Abstr.) **(Ger)**

[Tissue engineering of human cartilage tissue for reconstructive surgery using biocompatible resorbable fibrin gel and polymer carriers] Haisch A, et al. **HNO** 1996 Nov;44(11):624–9 (Eng. Abstr.) **(Ger)**

[Clinical success of surgical correction of the nasal septum] Bitzer EM, et al. **Laryngorhinootologie** 1996 Nov; 75(11):649–56; discussion 656–9 (Eng. Abstr.) **(Ger)**

[Stenoses in the area of the inner nasal cavity (nasal valve stenoses)] Kastenbauer E. **Laryngorhinootologie** 1996 Oct; 75(10):A1–4 **(Ger)**

[Stenoses of the area of the internal nasal cavity (nasal valve stenosis)] Kastenbauer E. **Laryngorhinootologie** 1996 Sep; 75(9):A1–4 **(Ger)**

[Reconstruction of the side of the nose] Kastenbauer ER. **Laryngorhinootologie** 1997 Jul;76(7):A43–51 **(Ger)**

[Reconstruction of the nasal tip] Kastenbauer ER. **Laryngorhinootologie** 1997 Jun;76(6):A35–41 **(Ger)**

[Basic principles of reconstructive surgery of the outer nose] Kastenbauer ER. **Laryngorhinootologie** 1997 Apr; 76(4):A19–26 **(Ger)**

[Reconstruction of various nasal areas, here: reconstruction of the columella] Kastenbauer ER. **Laryngorhinootologie** 1997 May;76(5):A27–34 **(Ger)**

[Proliferative potential of nasal septum chondrocytes for in vitro culture of cartilage transplants] Sittinger M, et al. **Laryngorhinootologie** 1997 Feb;76(2):96–100 (Eng. Abstr.) **(Ger)**

[The correction of a protruding tip of the nose] Ezrokhin VM. **Stomatologiia (Mosk)** 1997;76(3):44–5 (Eng. Abstr.) **(Rus)**

[Surgical treatment methods in combined nasal deformities] Ezrokhin VM. **Stomatologiia (Mosk)** 1996;75(6):33–6 (Eng. Abstr.) **(Rus)**

[Variants of plastic surgery of the external nose] Tsukerberg LI, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):45–7 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

A prospective study of the psychological effects of rhinoplasty. Sheard C, et al. **Clin Otolaryngol** 1996 Jun; 21(3):232–6

VETERINARY

Nasal septoplasty for correction of septal deviation in a foal. Yarbrough TB, et al. **Vet Surg** 1997 Jul–Aug;26(4):340–5

RHINOSCLEROMA

DIAGNOSIS

Isolated subglottic scleroma. Postma GN, et al. **Ear Nose Throat J** 1996 May;75(5):306–8

[Rhinoslceroma in an elderly Danish woman] Stougaard MJ, et al. **Ugeskr Laeger** 1996 Sep 2;158(36):5041–3 (Eng. Abstr.) **(Dan)**

PATHOLOGY

Scleroma of the larynx. Soni NK. **J Laryngol Otol** 1997 May; 111(5):438–40

Respiratory scleroma: a clinicopathologic and ultrastructural study. Sedano HO, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jun;81(6):665–71

PHYSIOPATHOLOGY

Isolated subglottic scleroma. Postma GN, et al. **Ear Nose Throat J** 1996 May;75(5):306–8

RHINOSPORIDIOSIS

Infection of the conjunctiva by Rhinosporidium seeberi. Reidy JJ, et al. **Surv Ophthalmol** 1997 Mar–Apr; 41(5):409–13 (32 ref.)

DIAGNOSIS

Rhinosporidiosis. Report of a case with an unusual presentation with bony involvement. Adiga BK, et al. **Acta Cytol** 1997 May–Jun;41(3):889–91

Conjunctival oculosporidiosis in east Africa caused by Rhinosporidium seeberi. Pe'er J, et al. **Arch Pathol Lab Med** 1996 Sep;120(9):854–8

Subcutaneous and osteolytic rhinosporidiosis. Gokhale S, et al. **Indian J Pathol Microbiol** 1997 Jan;40(1):95–8

Disseminated cutaneous rhinosporiodiosis [letter] Mathur DR, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):223

PATHOLOGY

Rhinosporodium: case report. Ashiru JO, et al. **East Afr Med J** 1996 Jun;73(6):414–5 (16 ref.)

Laryngeal rhinosporidiosis. Banerjee SB, et al. **J Indian Med Assoc** 1996 Apr;94(4):148, 150

Cutaneous rhinosporidiosis. Mitra K, et al. **J Indian Med Assoc** 1996 Feb;94(2):84

Rhinosporidiosis nasopharynx. Sharma K, et al **J Indian Med Assoc** 1996 Feb;94(2):81

PREVENTION & CONTROL

Attitude of involved epidemiologists toward the first European outbreak of rhinosporidiosis. Radovanovic Z, et al. **Eur J Epidemiol** 1997 Feb;13(2):157–60

RHINOSPORIDIUM

ISOLATION & PURIFICATION

Conjunctival oculosporidiosis in east Africa caused by Rhinosporidium seeberi. Pe'er J, et al. **Arch Pathol Lab Med** 1996 Sep;120(9):854–8

RHINOTRACHEITIS VIRUS, TURKEY see **PNEUMOVIRUS**

RHINOVIRUS

Rhinovirus infection preferentially increases lower airway responsiveness in allergic subjects. Gern JE, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1872–6

Effects of experimental rhinovirus 16 infection on airway hyperresponsiveness to bradykinin in asthmatic subjects in vivo. Grünberg K, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):833–8

Experimental rhinovirus 16 infection. Effects on cell differentials and soluble markers in sputum in asthmatic subjects. Grünberg K, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):609–16

Prevention of rhinovirus infection in chimpanzees by soluble intercellular adhesion molecule-1. Huguenel ED, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1206–10

The role of respiratory viruses in asthma. Busse WW, et al. **Ciba Found Symp** 1997;206:208–13; discussion 213–9 (27 ref.)

Effect of experimental rhinovirus 16 colds on airway hyperresponsiveness to histamine and interleukin-8 in nasal lavage in asthmatic subjects in vivo [see comments] Grünberg K, et al. **Clin Exp Allergy** 1997 Jan;27(1):36–45 . Comment in: Clin Exp Allergy 1997 Jan;27(1):7–9.

Bronchial hyperresponsiveness and cytokines in virus-induced asthma exacerbations [editorial; comment] Johnston SL. **Clin Exp Allergy** 1997 Jan;27(1):7–9. Comment on: Clin Exp Allergy 1997 Jan;27(1):36–45.

Experimental rhinovirus infection in volunteers. Bardin PG, et al. **Eur Respir J** 1996 Nov;9(11):2250–5

Lower airway responses to rhinovirus 39 in healthy allergic and nonallergic subjects. Skoner DP, et al. **Eur Respir J** 1996 Jul;9(7):1402–6

Lower airway responses to rhinovirus-Hanks in healthy subjects with and without allergy. Angelini B, et al. **J Allergy Clin Immunol** 1997 May;99(5):618–9

Rhinovirus inhibits antigen-specific T cell proliferation through an intercellular adhesion molecule-1-dependent mechanism. Gern JE, et al. **J Infect Dis** 1996 Dec; 174(6):1143–50

Effect of a rhinovirus-caused upper respiratory illness on pulmonary function test and exercise responses. Weidner TG, et al. **Med Sci Sports Exerc** 1997 May;29(5):604–9

[Respiratory inflammation] Holgate ST. **Allerg Immunol (Paris)** 1997 Mar;29(3):75–6; discussion 82 (11 ref.) (Eng. Abstr.) **(Fre)**

CHEMISTRY

Determination of the pI of human rhinovirus serotype 2 by capillary isoelectric focusing. Schnabel U, et al. **Anal Chem** 1996 Dec 1;68(23):4300–3

Human rhinovirus 3 at 3.0 A resolution. Zhao R, et al. **Structure** 1996 Oct 15;4(10):1205–20

Cations in human rhinoviruses. Zhao R, et al. **Virology** 1997 Jan 6;227(1):13–23

DRUG EFFECTS

Simple in vitro translation assay to analyze inhibitors of rhinovirus proteases. Heinz BA, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):267–70

Investigation on QSAR and binding mode of a new class of human rhinovirus-14 inhibitors by CoMFA and docking experiments. Artico M, et al. **Bioorg Med Chem** 1996 Oct; 4(10):1715–24

ENZYMOLOGY

Simple in vitro translation assay to analyze inhibitors of

RHINOVIRUS

rhinovirus proteases. Heinz BA, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):267–70

The eIF4G–eIF4E complex is the target for direct cleavage by the rhinovirus 2A proteinase. Haghighat A, et al. **J Virol** 1996 Dec;70(12):8444–50

Mutational analyses support a model for the HRV2 2A proteinase. Sommergruber W, et al. **Virology** 1997 Aug 4; 234(2):203–14

GENETICS

Detection of rhinovirus RNA in lower airway cells during experimentally induced infection. Gern JE, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1159–61

Chimeric rhinoviruses as tools for vaccine development and characterization of protein epitopes. Arnold GF, et al. **Intervirology** 1996;39(1–2):72–8 (38 ref.)

A comparison of RT–PCR, in–situ hybridisation and in–situ RT–PCR for the detection of rhinovirus infection in paraffin sections. Bates PJ, et al. **J Virol Methods** 1997 Sep;67(2):153–60

Translation and replication properties of the human rhinovirus genome in vivo and in vitro. Todd S, et al. **Virology** 1997 Mar 3;229(1):90–7

GROWTH & DEVELOPMENT

Incubation periods of experimental rhinovirus infection and illness. Harris JM 2nd, et al. **Clin Infect Dis** 1996 Dec; 23(6):1287–90

Rhinoviruses induce interleukin–8 mRNA and protein production in human monocytes. Johnston SL, et al. **J Infect Dis** 1997 Feb;175(2):323–9

IMMUNOLOGY

Chimeric rhinoviruses as tools for vaccine development and characterization of protein epitopes. Arnold GF, et al. **Intervirology** 1996;39(1–2):72–8 (38 ref.)

The development of cowpea mosaic virus as a potential source of novel vaccines. Porta C, et al. **Intervirology** 1996; 39(1–2):79–84 (24 ref.)

Rhinovirus–specific T cells recognize both shared and serotype–restricted viral epitopes. Gern JE, et al. **J Infect Dis** 1997 May;175(5):1108–14

Characterization of the T cell response to human rhinovirus in children: implications for understanding the immunopathology of the common cold. Wimalasundera SS, et al. **J Infect Dis** 1997 Sep;176(3):755–9

Hyper–antigenic variation occurs with human rhinovirus type 17 [published erratum appears in J Virol 1997 Apr;71(4):3363] Patterson LJ, et al. **J Virol** 1997 Feb; 71(2):1370–4

Prechallenge antibodies: moderators of infection rate, signs, and symptoms in adults experimentally challenged with rhinovirus type 39. Alper CM, et al. **Laryngoscope** 1996 Oct;106(10):1298–305

Virus versus antibody. Colman PM. **Structure** 1997 May 15; 5(5):591–3 (19 ref.)

Recent structural solutions for antibody neutralization of viruses. Stewart PL, et al. **Trends Microbiol** 1997 Jun; 5(6):229–33 (36 ref.)

ISOLATION & PURIFICATION

Effects of viral and bacterial infection on nasal and sinus mucosa. van Cauwenberge P, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):316–21 (25 ref.)

Detection of respiratory syncytial virus, parainfluenzavirus 3, adenovirus and rhinovirus sequences in respiratory tract of infants by polymerase chain reaction and hybridization. Freymuth F, et al. **Clin Diagn Virol** 1997 May;8(1):31–40

The "common cold" in frail older persons: impact of rhinovirus and coronavirus in a senior daycare center. Falsey AR, et al. **J Am Geriatr Soc** 1997 Jun;45(6):706–11

Identification of noncytopathic equine rhinovirus 1 as a cause of acute febrile respiratory disease in horses. Li F, et al. **J Clin Microbiol** 1997 Apr;35(4):937–43

Detection of rhinovirus in sinus brushings of patients with acute community–acquired sinusitis by reverse transcription–PCR. Pitkäranta A, et al. **J Clin Microbiol** 1997 Jul;35(7):1791–3

Comparison of PCR primer pairs in the detection of human rhinoviruses in nasopharyngeal aspirates. Santti J, et al. **J Virol Methods** 1997 Jun;66(1):139–47

Rhinovirus infection associated with serious lower respiratory illness in patients with bronchopulmonary dysplasia. Chidekel AS, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):43–7

PHYSIOLOGY

Internalization of human rhinovirus 14 into HeLa and ICAM–1–transfected BHK cells. Grunert HP, et al. **Med Microbiol Immunol (Berl)** 1997 Jun;186(1):1–9

[ICAM–1 and allergic inflammation] Canonica GW. **Allerg Immunol (Paris)** 1997 Mar;29(3):77–9; discussion 84 (17 ref.) (Eng. Abstr.) **(Fre)**

[Rhinovirus infection and expression of adhesion molecules in human tracheal epithelium] Ohrui T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec;34 Suppl:121–5 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

The pentamer channel stiffening model for drug action on human rhinovirus HRV–1A. Vaidehi N, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2466–71

The refined structure of human rhinovirus 16 at 2.15 A resolution: implications for the viral life cycle. Hadfield AT, et al. **Structure** 1997 Mar 15;5(3):427–41

RHIZOBIACEAE

CHEMISTRY

Replacement of Pro109 by His in TlpA, a thioredoxin–like protein from Bradyrhizobium japonicum, alters its redox properties but not its in vivo functions. Rossmann R, et al. **FEBS Lett** 1997 Apr 14;406(3):249–54

CLASSIFICATION

Comparative analysis of antibiotic resistance, immunofluorescent colony staining, and a transgenic marker (bioluminescence) for monitoring the environmental fate of rhizobacterium. Mahaffee WF, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1617–22

Genetic variability of the common nod gene in soybean bradyrhizobia isolated in Thailand and Japan. Yokoyama T, et al. **Can J Microbiol** 1996 Dec;42(12):1209–18

Sinorhizobium medicae sp. nov., isolated from annual Medicago spp. Rome S, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):972–80

DRUG EFFECTS

Specific flavonoids promote intercellular root colonization of Arabidopsis thaliana by Azorhizobium caulinodans ORS571. Gough C, et al. **Mol Plant Microbe Interact** 1997 Jul;10(5):560–70

ENZYMOLOGY

Heme C incorporation into the c–type cytochromes FixO and FixP is essential for assembly of the Bradyrhizobium japonicum cbb3–type oxidase. Zufferey R, et al. **FEBS Lett** 1997 Jul 21;412(1):75–8

Histidine 131, not histidine 43, of the Bradyrhizobium japonicum FixN protein is exposed towards the periplasm and essential for the function of the cbb3–type cytochrome oxidase. Zufferey R, et al. **FEBS Lett** 1996 Oct 7; 394(3):349–52

Roles of HoxX and HoxA in biosynthesis of hydrogenase in Bradyrhizobium japonicum. Durmowicz MC, et al. **J Bacteriol** 1997 Jun;179(11):3676–82

Azorhizobium caulinodans uses both cytochrome bd (quinol) and cytochrome cbb3 (cytochrome c) terminal oxidases for symbiotic N2 fixation. Kaminski PA, et al. **J Bacteriol** 1996 Oct;178(20):5989–94

The Bradyrhizobium japonicum aconitase gene (acnA) is important for free–living growth but not for an effective root nodule symbiosis [published erratum appears in J Bacteriol 1997 Mar;179(5):1836] Thöny–Meyer L, et al. **J Bacteriol** 1996 Nov;178(21):6166–72

GENETICS

The sequence of a symbiotically essential Bradyrhizobium japonicum operon consisting of trpD, trpC and a moaC–like gene. Kuykendall LD, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):277–81

Genetic diversity among bradyrhizobium isolates that effectively nodulate peanut (Arachis hypogaea). Urtz BE, et al. **Can J Microbiol** 1996 Nov;42(11):1121–30

The genetic and biochemical basis for nodulation of legumes by rhizobia. Pueppke SG. **Crit Rev Biotechnol** 1996; 16(1):1–51 (435 ref.)

The nodulation gene nolK of Azorhizobium caulinodans is involved in the formation of GDP–fucose from GDP–mannose. Mergaert P, et al. **FEBS Lett** 1997 Jun 9;409(2):312–6

The Bradyrhizobium japonicum coxWXYZ gene cluster encodes a bb3–type ubiquinol oxidase. Surpin MA, et al. **Gene** 1996 Dec 12;183(1–2):201–6

Dissection of the transcription machinery for housekeeping genes of Bradyrhizobium japonicum. Beck C, et al. **J Bacteriol** 1997 Jan;179(2):364–9

Transcriptional regulation of delta–aminolevulinic acid dehydratase synthesis by oxygen in Bradyrhizobium japonicum and evidence for developmental control of the hemB gene. Chauhan S, et al. **J Bacteriol** 1997 Jun; 179(11):3706–10

Metals control activity and expression of the heme biosynthesis enzyme delta–aminolevulinic acid dehydratase in Bradyrhizobium japonicum. Chauhan S, et al. **J Bacteriol** 1997 Sep;179(17):5516–20

Identification of the lrp gene in Bradyrhizobium japonicum and its role in regulation of delta–aminolevulinic acid uptake. King ND, et al. **J Bacteriol** 1997 Mar; 179(5):1828–31

The Bradyrhizobium japonicum fegA gene encodes an iron–regulated outer membrane protein with similarity to hydroxamate–type siderophore receptors [published erratum appears in J Bacteriol 1997 Aug;179(16):5246] LeVier K, et al. **J Bacteriol** 1996 Dec;178(24):7265–75

Characterization of Azorhizobium caulinodans glnB and glnA genes: involvement of the P(II) protein in symbiotic nitrogen fixation. Michel–Reydellet N, et al. **J Bacteriol** 1997 Jun;179(11):3580–7

The Bradyrhizobium japonicum rpoH1 gene encoding a sigma 32–like protein is part of a unique heat shock gene cluster together with groESL1 and three small heat shock genes. Narberhaus F, et al. **J Bacteriol** 1996 Sep; 178(18):5337–46

Squalene–hopene cyclase from Bradyrhizobium japonicum: cloning, expression, sequence analysis and comparison to other triterpenoid cyclases. Perzl M, et al. **Microbiology** 1997 Apr;143 (Pt 4):1235–42

The dnaKJ operon belongs to the sigma32–dependent class of heat shock genes in Bradyrhizobium japonicum. Minder AC, et al. **Mol Gen Genet** 1997 Mar 26;254(2):195–206

Two different mechanisms are involved in the heat–shock regulation of chaperonin gene expression in Bradyrhizobium japonicum. Babst M, et al. **Mol Microbiol** 1996 Feb;19(4):827–39

NodZ of Bradyrhizobium extends the nodulation host range of Rhizobium by adding a fucosyl residue to nodulation signals. López–Lara IM, et al. **Mol Microbiol** 1996 Jul; 21(2):397–408

Fucosylation and arabinosylation of Nod factors in Azorhizobium caulinodans: involvement of nolK, nodZ as well as noeC and/or downstream genes. Mergaert P, et al. **Mol Microbiol** 1996 Jul;21(2):409–19

Three disparately regulated genes for sigma 32–like transcription factors in Bradyrhizobium japonicum. Narberhaus F, et al. **Mol Microbiol** 1997 Apr;24(1):93–104

The HypB protein from Bradyrhizobium japonicum can store nickel and is required for the nickel–dependent transcriptional regulation of hydrogenase. Olson JW, et al. **Mol Microbiol** 1997 Apr;24(1):119–28

Nodule development induced by mutants of Bradyrhizobium japonicum defective in cyclic B–glucan synthesis. Dunlap J, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):546–55

Phenotypic characterization and regulation of the nolA gene of Bradyrhizobium japonicum. Garcia M, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):625–36

Environmental regulation of rhizobial symbiotic nitrogen fixation genes. Fischer HM. **Trends Microbiol** 1996 Aug; 4(8):317–20 (27 ref.)

GROWTH & DEVELOPMENT

Bradyrhizobium japonicum does not require alpha–ketoglutarate dehydrogenase for growth on succinate or malate. Green LS, et al. **J Bacteriol** 1997 Jan; 179(1):194–201

Specific flavonoids promote intercellular root colonization of Arabidopsis thaliana by Azorhizobium caulinodans ORS571. Gough C, et al. **Mol Plant Microbe Interact** 1997 Jul;10(5):560–70

METABOLISM

The genetic and biochemical basis for nodulation of legumes by rhizobia. Pueppke SG. **Crit Rev Biotechnol** 1996; 16(1):1–51 (435 ref.)

Cyclic beta–(1,2)–glucan synthesis in Rhizobiaceae: roles of the 319–kilodalton protein intermediate. Castro OA, et al. **J Bacteriol** 1996 Oct;178(20):6043–8

NodV and NodW, a second flavonoid recognition system regulating nod gene expression in Bradyrhizobium japonicum. Loh J, et al. **J Bacteriol** 1997 May; 179(9):3013–20

Sinorhizobium teranga bv. acaciae ORS1073 and Rhizobium sp. strain ORS1001, two distantly related Acacia–nodulating strains, produce similar Nod factors that are O carbamoylated, N methylated, and mainly sulfated. Lorquin J, et al. **J Bacteriol** 1997 May;179(9):3079–83

Role of nodl and nodJ in lipo–chitooligosaccharide secretion in Azorhizobium caulinodans and Escherichia coli. Fernández–López M, et al. **Mol Microbiol** 1996 Jun; 20(5):993–1000

Fucosylation and arabinosylation of Nod factors in Azorhizobium caulinodans: involvement of nolK, nodZ as well as noeC and/or downstream genes. Mergaert P, et al. **Mol Microbiol** 1996 Jul;21(2):409–19

Phenotypic characterization and regulation of the nolA gene of Bradyrhizobium japonicum. Garcia M, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):625–36

Nod factors of Azorhizobium caulinodans strain ORS571 can be glycosylated with an arabinosyl group, a fucosyl group, or both. Mergaert P, et al. **Mol Plant Microbe Interact** 1997 Jul;10(5):683–7

PHYSIOLOGY

Activity of nitrogen fixation and nitrogen assimilation enzymes in soybean plants inoculated with Bradyrhizobium japonicum strains. Milić V, et al. **Acta Microbiol Immunol Hung** 1996;43(2–3):135–41

Nodulation: finding the lost common denominator. Peters NK. **Curr Biol** 1997 Apr 1;7(4):R223–6 (22 ref.)

Cooperative action of lipo–chitin nodulation signals on the induction of the early nodulin, ENOD2, in soybean roots. Minami E, et al. **Mol Plant Microbe Interact** 1996 Sep; 9(7):574–83

RHIZOBIUM

CHEMISTRY

Cloning and sequence analysis of the Rhizobium etli ccmA and ccmB genes involved in c-type cytochrome biogenesis. Aguilar GR, et al. **Gene** 1996 Dec 5;182(1-2):129-35

Structural characterization of the K antigens from Rhizobium fredii USDA257: evidence for a common structural motif, with strain-specific variation, in the capsular polysaccharides of Rhizobium spp. Forsberg LS, et al. **J Bacteriol** 1997 Sep;179(17):5366-71

CLASSIFICATION

Rhizobium hainanense sp. nov., isolated from tropical legumes. Chen WX, et al. **Int J Syst Bacteriol** 1997 Jul; 47(3):870-3

Phylogenetic and genetic relationships of Mesorhizobium tianshanense and related rhizobia. Tan ZY, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):874-9

DRUG EFFECTS

Toxicity of 2,4-dichlorophenoxyacetic acid to Rhizobium sp in pure culture. Fabra A, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):645-52

ENZYMOLOGY

Microbial dehalogenation of halogenated alkanoic acids, alcohols and alkanes. Slater JH, et al. **Adv Microb Physiol** 1997;38:133-76 (170 ref.)

Characterization of the gene encoding nitrite reductase and the physiological consequences of its expression in the nondenitrifying Rhizobium "hedysari" strain HCNT1. Toffanin A, et al. **Appl Environ Microbiol** 1996 Nov; 62(11):4019-25

Identification of two glutaminases in Rhizobium etli. Durán S, et al. **Biochem Genet** 1996 Dec;34(11-12):453-65

Rhizobium sp. strain NGR234 NodZ protein is a fucosyltransferase. Quesada-Vincens D, et al. **J Bacteriol** 1997 Aug;179(16):5087-93

GENETICS

Nodulation genes in the Rhizobium--plant signal exchange. Lorkiewicz Z. **Acta Biochim Pol** 1997;44(1):1-12 (94 ref.)

Simultaneous detection of different Rhizobium strains marked with either the Escherichia coli gusA gene or the Pyrococcus furiosus celB gene. Sessitsch A, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4191-4

Characterization of the gene encoding nitrite reductase and the physiological consequences of its expression in the nondenitrifying Rhizobium "hedysari" strain HCNT1. Toffanin A, et al. **Appl Environ Microbiol** 1996 Nov; 62(11):4019-25

A 150-megadalton plasmid in Rhizobium etli strain TAL182 contains genes for nodulation competitiveness on Phaseolus vulgaris L. Borthakur D, et al. **Can J Microbiol** 1996 Sep; 42(9):903-10

Identification of soil bacteria expressing a symbiotic plasmid from Rhizobium leguminosarum bv. trofolii. Sivakumaran S, et al. **Can J Microbiol** 1997 Feb;43(2):164-77

Comparison of partial 23S rDNA sequences from Rhizobium species. Tesfaye M, et al. **Can J Microbiol** 1997 Jun; 43(6):526-33

Introduction and expression of an anti-dipteran toxin gene from B. thuringiensis in nodulating Rhizobia. Guerchicoff A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jul; 42(5):729-35

Molecular studies on a new genetic locus linked to the common nodulation genes in Bradyrhizobium japonicum. Luka S, et al. **FEMS Microbiol Lett** 1997 Mar 15; 148(2):145-51

Cloning and transcriptional analysis of the lipA (lipoic acid synthetase) gene from Rhizobium etli. Taté R, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):165-72

Sequencing the 500-kb GC-rich symbiotic replicon of Rhizobium sp. NGR234 using dye terminators and a thermostable "sequenase": a beginning. Freiberg C, et al. **Genome Res** 1996 Jul;6(7):590-600

Phylogenetic and genetic relationships of Mesorhizobium tianshanense and related rhizobia. Tan ZY, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):874-9

Characterization of Rhizobium 'hedysari' by RFLP analysis of PCR amplified rDNA and by genomic PCR fingerprinting. Selenska-Pobell S, et al. **J Appl Bacteriol** 1996 May;80(5):517-28

Isolation and characterization of Rhizobium etli mutants altered in degradation of asparagine. Huerta-Zepeda A, et al. **J Bacteriol** 1997 Mar;179(6):2068-72

Rhizobium nodulation protein NodC is an important determinant of chitin oligosaccharide chain length in Nod factor biosynthesis. Kamst E, et al. **J Bacteriol** 1997 Apr; 179(7):2103-8

Cloning of the rpoD analog from Rhizobium etli: sigA of R. etli is growth phase regulated. Luka S, et al. **J Bacteriol** 1996 Dec;178(24):7138-43

Characterization of the promoter of the Rhizobium etli recA gene. Tapias A, et al. **J Bacteriol** 1997 Mar;179(5):1573-9

Characterization of the Bradyrhizobium japonicum CycY protein, a membrane-anchored periplasmic thioredoxin that may play a role as a reductant in the biogenesis of c-type cytochromes. Fabianek RA, et al. **J Biol Chem** 1997 Feb 14;272(7):4467-73

The soybean cultivar specificity gene nolX is present, expressed in a nodD-dependent manner, and of symbiotic significance in cultivar-nonspecific strains of Rhizobium (Sinorhizobium) fredii. Bellato C, et al. **Microbiology** 1997 Apr;143 (Pt 4):1381-8

Sequence, localization and characteristics of the replicator region of the symbiotic plasmid of Rhizobium etli. Ramírez-Romero MA, et al. **Microbiology** 1997 Aug;143 (Pt 8):2825-31

Genetic evidence for 5-aminoimidazole-4-carboxamide ribonucleotide (AICAR) as a negative effector of cytochrome terminal oxidase cbb3 production in Rhizobium etli. Soberón M, et al. **Mol Gen Genet** 1997 May;254(6):665-73

A TnphoA insertion within the Bradyrhizobium japonicum sipS gene, homologous to prokaryotic signal peptidases, results in extensive changes in the expression of PBM-specific nodulins of infected soybean (Glycine max) cells. Müller P, et al. **Mol Microbiol** 1995 Dec;18(5):831-40

HoxA is a transcriptional regulator for expression of the hup structural genes in free-living Bradyrhizobium japonicum. Van Soom C, et al. **Mol Microbiol** 1997 Mar;23(5):967-77

A quest for symbiosis-specific genes urges itself upon Rhizobium geneticists [letter] Van Soom C, et al. **Mol Microbiol** 1997 May;24(3):669-70

rosR, a determinant of nodulation competitiveness in Rhizobium etli. Bittinger MA, et al. **Mol Plant Microbe Interact** 1997 Mar;10(2):180-6

Identification and distribution of plasmid-type A replicator region in rhizobia. Burgos PA, et al. **Mol Plant Microbe Interact** 1996 Dec;9(9):843-9

Sequence and mutational analysis of the 6.7-kb region containing nodAFEG genes of Rhizobium sp. strain N33: evidence of DNA rearrangements. Cloutier J, et al. **Mol Plant Microbe Interact** 1997 Apr;10(3):401-6

Characterization of Rhizobium tropici CIAT899 nodulation factors: the role of nodH and nodPQ genes in their sulfation. Folch-Mallol JL, et al. **Mol Plant Microbe Interact** 1996 Apr;9(3):151-63

Novel and complex chromosomal arrangement of Rhizobium loti nodulation genes. Scott DB, et al. **Mol Plant Microbe Interact** 1996 Apr;9(3):187-97

Generation of Rhizobium strains with improved symbiotic properties by random DNA amplification (RDA) [see comments] Mavingui P, et al. **Nat Biotechnol** 1997 Jun; 15(6):564-9. Comment in: Nat Biotechnol 1997 Jun;15(6):511.

Plant biology. Fixing a symbiotic circle [news; comment] [see comments] Downie A. **Nature** 1997 May 22; 387(6631):352-4. Comment on: Nature 1997 May 22;387(6631):394-401. Comment in: Nature 1997 Jun 19;387(6635):767.

How many replicons make a nodule? [letter; comment] Perret X, et al. **Nature** 1997 Jun 19;387(6635):767. Comment on: Nature 1997 May 22;387(6631):352-4.

Rhizobium symbiosis: nod factors in perspective. Long SR. **Plant Cell** 1996 Oct;8(10):1885-98 (140 ref.)

Rhizobium gone native: unexpected plasmid stability of indigenous Rhizobium leguminosarum. Wernegreen JJ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5483-8

GROWTH & DEVELOPMENT

Bacillus polymyxa stimulates increased Rhizobium etli populations and nodulation when co-resident in the rhizosphere of Phaseolus vulgaris. Petersen DJ, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2-3):271-6

Heme compounds as iron sources for nonpathogenic Rhizobium bacteria. Noya F, et al. **J Bacteriol** 1997 May; 179(9):3076-8

ISOLATION & PURIFICATION

Identification of soil bacteria expressing a symbiotic plasmid from Rhizobium leguminosarum bv. trofolii. Sivakumaran S, et al. **Can J Microbiol** 1997 Feb;43(2):164-77

Rhizobium hainanense sp. nov., isolated from tropical legumes. Chen WX, et al. **Int J Syst Bacteriol** 1997 Jul; 47(3):870-3

METABOLISM

Microbial dehalogenation of halogenated alkanoic acids, alcohols and alkanes. Slater JH, et al. **Adv Microb Physiol** 1997;38:133-76 (170 ref.)

Rhizobium lipo-chitooligosaccharide nodulation factors: signaling molecules mediating recognition and morphogenesis. Dénarié J, et al. **Annu Rev Biochem** 1996; 65:503-35 (185 ref.)

The requirement for exopolysaccharide precedes the requirement for flavolan-binding polysaccharide in nodulation of Leucaena leucocephala by Rhizobium loti. Hotter GS, et al. **Arch Microbiol** 1997 Feb-Mar; 167(2-3):182-6

Salinity and osmotic stress-regulated proteins in cowpea Rhizobium 4a (peanut isolate). Wankhade S, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):621-8

Structural determination of symbiotic nodulation factors from the broad host-range Rhizobium species NGR234. Price NP, et al. **Carbohydr Res** 1996 Aug 19;289:115-36

Characterization of the biosynthesis of beta(1-2) cyclic glucan in R. Fredii. Beta(1-2) glucan has no apparent role in nodule invasion of Mc Call and Peking soybean cultivars. Iñón de Iannino N, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jul;42(5):617-29

Rhizobium fredii synthesizes an array of lipooligosaccharides, including a novel compound with glucose inserted into the backbone of the molecule. Bec-Ferté MP, et al. **FEBS Lett** 1996 Sep 16;393(2-3):273-9

The role of the nodI and nodJ genes in the transport of Nod metabolites in Rhizobium etli. Cárdenas L, et al. **Gene** 1996 Sep 16;173(2):183-7

Acyl-acyl carrier protein is a donor of fatty acids in the NodA-dependent step in biosynthesis of lipochitin oligosaccharides by rhizobia. Ritsema T, et al. **J Bacteriol** 1997 Jun;179(12):4053-5

Rhizobium leguminosarum bv. trifolii produces lipo-chitin oligosaccharides with nodE-dependent highly unsaturated fatty acyl moieties. An electrospray ionization and collision-induced dissociation tandem mass spectrometric study. van der Drift KM, et al. **J Biol Chem** 1996 Sep 13;271(37):22563-9

Genetic evidence for 5-aminoimidazole-4-carboxamide ribonucleotide (AICAR) as a negative effector of cytochrome terminal oxidase cbb3 production in Rhizobium etli. Soberón M, et al. **Mol Gen Genet** 1997 May;254(6):665-73

The NodA proteins of Rhizobium meliloti and Rhizobium tropici specify the N-acylation of Nod factors by different fatty acids. Debellé F, et al. **Mol Microbiol** 1996 Oct; 22(2):303-14

Sulphation of Rhizobium sp. NGR234 Nod factors is dependent on noeE, a new host-specificity gene. Hanin M, et al. **Mol Microbiol** 1997 Jun;24(6):1119-29

Signal transduction in Rhizobium-induced nodule formation. Geurts R, et al. **Plant Physiol** 1996 Oct;112(2):447-53 (42 ref.)

Biological nitrogen fixation for sustainable agriculture. Brewin NJ, et al. **Trends Microbiol** 1996 Dec;4(12):476-7

PHYSIOLOGY

Modulation of carbohydrate-binding capacities and attachment ability of Bradyrhizobium sp. (lupinus) to white lupin roots. Wisniewski JP, et al. **Can J Microbiol** 1996 Mar;42(3):234-42

The role of lipochitooligosaccharides in root nodule organogenesis and plant cell growth. Schultze M, et al. **Curr Opin Genet Dev** 1996 Oct;6(5):631-8 (76 ref.)

Pyruvate carboxylase from Rhizobium etli: mutant characterization, nucleotide sequence, and physiological role. Dunn MF, et al. **J Bacteriol** 1996 Oct;178(20):5960-70

Sequential functioning of Sym-13 and Sym-31, two genes affecting symbiosome development in root nodules of pea (Pisum sativum L.). Borisov AY, et al. **Mol Gen Genet** 1997 May 20;254(5):592-8

Rhizobia modulate root-hair-specific expression of extensin genes. Arsenijević-Maksimović I, et al. **Mol Plant Microbe Interact** 1997 Jan;10(1):95-101

Characterization and mutational analysis of nodHPQ genes of Rhizobium sp. strain N33. Cloutler J, et al. **Mol Plant Microbe Interact** 1996 Nov;9(8):720-8

Induction of chalcone synthase expression by rhizobia and nod factors in root hairs and roots. Krause A, et al. **Mol Plant Microbe Interact** 1997 Apr;10(3):388-93

A quick fix using random DNA amplification [news; comment] Haselkorn R. **Nat Biotechnol** 1997 Jun;15(6):511 . Comment on: Nat Biotechnol 1997 Jun;15(6):564-9.

Generation of Rhizobium strains with improved symbiotic properties by random DNA amplification (RDA) [see comments] Mavingui P, et al. **Nat Biotechnol** 1997 Jun; 15(6):564-9. Comment in: Nat Biotechnol 1997 Jun;15(6):511.

Molecular basis of symbiosis between Rhizobium and legumes [see comments] Freiberg C, et al. **Nature** 1997 May 22;387(6631):394-401. Comment in: Nature 1997 May 22;387(6631):352-4.

Biogenesis of the peribacteroid membrane in root nodules. Verma DP, et al. **Trends Microbiol** 1996 Sep;4(9):364-8 (40 ref.)

[Inoculation of chickpeas with Rhizobium sp. native to the province of Córdoba, Argentina] Abril A, et al. **Rev Argent Microbiol** 1997 Jan-Mar;29(1):24-31 (Eng. Abstr.) **(Spa)**

RHIZOBIUM LEGUMINOSARUM

CHEMISTRY

The "missing" typical Rhizobium leguminosarum O antigen is attached to a fatty acylated glycerol in R. leguminosarum bv. trifolii 4S, a strain that also lacks the usual tetrasaccharide "core" component. Cedergren RA, et al. **J Bacteriol** 1996 Sep;178(18):5529-32

New Rhizobium leguminosarum flavonoid-induced proteins revealed by proteome analysis of differentially displayed proteins. Guerreiro N, et al. **Mol Plant Microbe Interact** 1997 May;10(4):506-16

CLASSIFICATION

Classification of bacteria nodulating Lathyrus japonicus and Lathyrus pratensis in northern Quebec as strains of Rhizobium leguminosarum biovar viciae. Drouin P, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1016-24

RHIZOBIUM LEGUMINOSARUM

ENZYMOLOGY

The general amino acid permease of Rhizobium leguminosarum strain 3841 is negatively regulated by the Ntr system. Walshaw DL, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):57–64

Genetic and chemical characterization of a mutant that disrupts synthesis of the lipopolysaccharide core tetrasaccharide in Rhizobium leguminosarum. Allaway D, et al. **J Bacteriol** 1996 Nov;178(21):6403–6

Lipopolysaccharide biosynthesis in Rhizobium leguminosarum. Novel enzymes that process precursors containing 3-deoxy-D-manno-octulosonic acid. Brozek KA, et al. **J Biol Chem** 1996 Dec 13;271(50):32112–8

The fructokinase from Rhizobium leguminosarum biovar trifolii belongs to group I fructokinase enzymes and is encoded separately from other carbohydrate metabolism enzymes. Fennington GJ Jr, et al. **Microbiology** 1996 Feb; 142 (Pt 2):321–30

The hydrogenase gene cluster of Rhizobium leguminosarum bv. viciae contains an additional gene (hypX), which encodes a protein with sequence similarity to the N10-formyltetrahydrofolate-dependent enzyme family and is required for nickel-dependent hydrogenase processing and activity. Rey L, et al. **Mol Gen Genet** 1996 Sep 13; 252(3):237–48

Hydrogenase genes from Rhizobium leguminosarum bv. viciae are controlled by the nitrogen fixation regulatory protein nifA. Brito B, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6019–24

Crystallization and preliminary diffraction studies of NodL, a rhizobial O-acetyl-transferase involved in the host-specific nodulation of legume roots. Dunn SM, et al. **Protein Sci** 1996 Mar;5(3):538–41

GENETICS

Identification of soil bacteria expressing a symbiotic plasmid from Rhizobium leguminosarum bv. trofolii. Sivakumaran S, et al. **Can J Microbiol** 1997 Feb;43(2):164–77

Deletion of Escherichia coli groEL is complemented by a Rhizobium leguminosarum groEL homologue at 37 degrees C but not at 43 degrees C. Ivic A, et al. **Gene** 1997 Jul 18;194(1):1–8

Fate of genetically modified Rhizobium leguminosarum biovar viciae during long-term storage of commercial inoculants. Corich V, et al. **J Appl Bacteriol** 1996 Sep; 81(3):319–28

FnrN controls symbiotic nitrogen fixation and hydrogenase activities in Rhizobium leguminosarum biovar viciae UPM791. Gutiérrez D, et al. **J Bacteriol** 1997 Sep; 179(17):5264–70

The fructokinase from Rhizobium leguminosarum biovar trifolii belongs to group I fructokinase enzymes and is encoded separately from other carbohydrate metabolism enzymes. Fennington GJ Jr, et al. **Microbiology** 1996 Feb; 142 (Pt 2):321–30

Identification of genes in Rhizobium leguminosarum bv. trifolii whose products are homologues to a family of ATP-binding proteins. Król J, et al. **Microbiology** 1997 Apr;143 (Pt 4):1389–94

Regulation of exopolysaccharide production in Rhizobium leguminosarum biovar viciae WSM710 involves exoR. Reeve WG, et al. **Microbiology** 1997 Jun;143 (Pt 6):1951–8

Aspartate transport by the Dct system in Rhizobium leguminosarum negatively affects nitrogen-regulated operons. Reid CJ, et al. **Microbiology** 1996 Sep;142 (Pt 9):2603–12

Analysis of a Rhizobium leguminosarum gene encoding a protein homologous to glutathione S-transferases. Tawfiq Alkafaf NK, et al. **Microbiology** 1997 Mar;143 (Pt 3):813–22

High affinity iron acquisition in Rhizobium leguminosarum requires the cycHJKL operon and the feuPQ gene products, which belong to the family of two-component transcriptional regulators. Yeoman KH, et al. **Microbiology** 1997 Jan;143 (Pt 1):127–34

Rhizobium leguminosarum bv. viciae contains a second fnr/fixK-like gene and an unusual fixL homologue. Patschkowski T, et al. **Mol Microbiol** 1996 Jul;21(2):267–80

The general L-amino acid permease of Rhizobium leguminosarum is an ABC uptake system that also influences efflux of solutes. Walshaw DL, et al. **Mol Microbiol** 1996 Sep;21(6):1239–52

Functional and regulatory analysis of the two copies of the fixNOQP operon of Rhizobium leguminosarum strain VF39. Schlüter A, et al. **Mol Plant Microbe Interact** 1997 Jul;10(5):605–16

Cloning and characterization of four genes of Rhizobium leguminosarum bv. trifolii involved in exopolysaccharide production and nodulation. van Workum WA, et al. **Mol Plant Microbe Interact** 1997 Mar;10(2):290–301

Hydrogenase genes from Rhizobium leguminosarum bv. viciae are controlled by the nitrogen fixation regulatory protein nifA. Brito B, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6019–24

Rhizobium gone native: unexpected plasmid stability of indigenous Rhizobium leguminosarum. Wernegreen JJ, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5483–8

[The Rhizobium leguminosarum bv viciae VF39 pssB gene product participates in symbiotic fixation of molecular nitrogen] Ivashina TV, et al. **Dokl Akad Nauk** 1996 Oct; 350(5):712–5 **(Rus)**

GROWTH & DEVELOPMENT

Root colonization of different plants by plant-growth-promoting Rhizobium leguminosarum bv. trifolii R39 studied with monospecific polyclonal antisera. Schloter M, et al. **Appl Environ Microbiol** 1997 May; 63(5):2038–46

IMMUNOLOGY

Root colonization of different plants by plant-growth-promoting Rhizobium leguminosarum bv. trifolii R39 studied with monospecific polyclonal antisera. Schloter M, et al. **Appl Environ Microbiol** 1997 May; 63(5):2038–46

ISOLATION & PURIFICATION

Identification of soil bacteria expressing a symbiotic plasmid from Rhizobium leguminosarum bv. trofolii. Sivakumaran S, et al. **Can J Microbiol** 1997 Feb;43(2):164–77

Purification of pea nodule symbiosomes using an aqueous polymer two-phase system. Hernández LE, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):171–81

METABOLISM

The in vitro biosynthesis of the exopolysaccharide produced by Rhizobium leguminosarum bv. trifolii, strain NA 30. Bossio JC, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jul; 42(5):737–58

Lipopolysaccharide core glycosylation in Rhizobium leguminosarum. An unusual mannosyl transferase resembling the heptosyl transferase I of Escherichia coli. Kadrmas JL, et al. **J Biol Chem** 1996 Dec 13; 271(50):32119–25

Regulation of exopolysaccharide production in Rhizobium leguminosarum biovar viciae WSM710 involves exoR. Reeve WG, et al. **Microbiology** 1997 Jun;143 (Pt 6):1951–8

Aspartate transport by the Dct system in Rhizobium leguminosarum negatively affects nitrogen-regulated operons. Reid CJ, et al. **Microbiology** 1996 Sep;142 (Pt 9):2603–12

Regulation of the TCA cycle and the general amino acid permease by overflow metabolism in Rhizobium leguminosarum. Walshaw DL, et al. **Microbiology** 1997 Jul; 143 (Pt 7):2209–21

Cloning and characterization of four genes of Rhizobium leguminosarum bv. trifolii involved in exopolysaccharide production and nodulation. van Workum WA, et al. **Mol Plant Microbe Interact** 1997 Mar;10(2):290–301

PHYSIOLOGY

Rhizobium leguminosarum as a plant growth-promoting rhizobacterium: direct growth promotion of canola and lettuce. Noel TC, et al. **Can J Microbiol** 1996 Mar; 42(3):279–83

Ethylene provides positional information on cortical cell division but is not involved in Nod factor-induced root hair tip growth in Rhizobium-legume interaction. Heidstra R, et al. **Development** 1997 May;124(9):1781–7

The cytochrome bc1 complex but not CycM is necessary for symbiotic nitrogen fixation by Rhizobium leguminosarum. Wu G, et al. **Microbiology** 1996 Dec;142 (Pt 12):3381–8

Structure and role in symbiosis of the exoB gene of Rhizobium leguminosarum bv trifolii. Sánchez-Andújar B, et al. **Mol Gen Genet** 1997 Jun;255(2):131–40

Expression of cysteine protease genes in pea nodule development and senescence. Kardailsky IV, et al. **Mol Plant Microbe Interact** 1996 Nov;9(8):689–95

Analysis of the C-terminal secretion signal of the Rhizobium leguminosarum nodulation protein NodO; a potential system for the secretion of heterologous proteins during nodule invasion. Sutton JM, et al. **Mol Plant Microbe Interact** 1996 Nov;9(8):671–80

RHIZOBIUM MELILOTI

CHEMISTRY

Characterization of ferrous FixL-nitric oxide adducts by resonance Raman spectroscopy. Lukat-Rodgers GS, et al. **Biochemistry** 1997 Apr 8;36(14):4178–87

Cyclolaminarinose. A new biologically active beta-(1-->3) cyclic glucan [published erratum appears in Carbohydr Res 1997 Mar 13;298(4):347] Pfeffer PE, et al. **Carbohydr Res** 1996 Dec 24;296:23–37

Effect of o-acyl substituents on the functional behaviour of Rhizobium meliloti succinoglycan. Ridout MJ, et al. **Int J Biol Macromol** 1997 Feb;20(1):1–7

CYTOLOGY

Generation of buds, swellings, and branches instead of filaments after blocking the cell cycle of Rhizobium meliloti. Latch JN, et al. **J Bacteriol** 1997 Apr; 179(7):2373–81

ENZYMOLOGY

Symbiotic nitrogen fixation does not require adenylylation of glutamine synthetase I in Rhizobium meliloti. Arcondéguy T, et al. **FEMS Microbiol Lett** 1996 Nov 15; 145(1):33–40

Properties of NAD(+)- and NADP(+)-dependent malic enzymes of Rhizobium (Sinorhizobium) meliloti and differential expression of their genes in nitrogen-fixing bacteroids. Driscoll BT, et al. **Microbiology** 1997 Feb;143 (Pt 2):489–98

Increased pyruvate orthophosphate dikinase activity results in an alternative gluconeogenic pathway in Rhizobium (Sinorhizobium) meliloti. Osterås M, et al. **Microbiology** 1997 May;143 (Pt 5):1639–48

The Rhizobium meliloti putA gene: its role in the establishment of the symbiotic interaction with alfalfa. Jiménez-Zurdo JI, et al. **Mol Microbiol** 1997 Jan; 23(1):85–93

GENETICS

A helicase gene (helO) in Rhizobium meliloti WSM419. Reeve WG, et al. **FEMS Microbiol Lett** 1997 Aug 1; 153(1):43–9

Identification and nucleotide sequence of Rhizobium meliloti insertion sequence ISRm6, a small transposable element that belongs to the IS3 family. Zekri S, et al. **Gene** 1996 Oct 10;175(1–2):43–8

Evaluation of the resolving power of three different DNA fingerprinting methods to discriminate among isolates of a natural Rhizobium meliloti population. Niemann S, et al. **J Appl Microbiol** 1997 Apr;82(4):477–84

Genetic analysis of the Rhizobium meliloti nifH promoter, using the P22 challenge phage system. Ashraf SI, et al. **J Bacteriol** 1997 Apr;179(7):2356–62

The 32-kilobase exp gene cluster of Rhizobium meliloti directing the biosynthesis of galactoglucan: genetic organization and properties of the encoded gene products. Becker A, et al. **J Bacteriol** 1997 Feb;179(4):1375–84

Cloning and characterization of the katA gene of Rhizobium meliloti encoding a hydrogen peroxide-inducible catalase. Hérouart D, et al. **J Bacteriol** 1996 Dec;178(23):6802–9

Genetic analysis of the Rhizobium meliloti bacA gene: functional interchangeability with the Escherichia coli sbmA gene and phenotypes of mutants. Ichige A, et al. **J Bacteriol** 1997 Jan;179(1):209–16

Rhizobium nodulation protein NodC is an important determinant of chitin oligosaccharide chain length in Nod factor biosynthesis. Kamst E, et al. **J Bacteriol** 1997 Apr; 179(7):2103–8

The rkpGHI and -J genes are involved in capsular polysaccharide production by Rhizobium meliloti. Kiss E, et al. **J Bacteriol** 1997 Apr;179(7):2132–40

Alterations within the activation domain of the sigma 54-dependent activator DctD that prevent transcriptional activation. Wang YK, et al. **J Bacteriol** 1997 Sep; 179(18):5812–9

The CcrM DNA methyltransferase is widespread in the alpha subdivision of proteobacteria, and its essential functions are conserved in Rhizobium meliloti and Caulobacter crescentus. Wright R, et al. **J Bacteriol** 1997 Sep; 179(18):5869–77

Induction of Rhizobium meliloti nodC gene by Alnus incana compounds. Małek W. **J Basic Microbiol** 1996;36(5):319–26

Cooperative binding of DctD to the dctA upstream activation sequence of Rhizobium meliloti is enhanced in a constitutively active truncated mutant. Scholl D, et al. **J Biol Chem** 1996 Oct 18;271(42):26435–42

A new nos gene downstream from nosDFY is essential for dissimilatory reduction of nitrous oxide by Rhizobium (Sinorhizobium) meliloti. Chan YK, et al. **Microbiology** 1997 Aug;143 (Pt 8):2817–24

Molecular characterization of the bet genes encoding glycine betaine synthesis in Sinorhizobium meliloti 102F34. Pocard JA, et al. **Microbiology** 1997 Apr;143 (Pt 4):1369–79

An essential role for actA in acid tolerance of Rhizobium meliloti. Tiwari RP, et al. **Microbiology** 1996 Mar;142 (Pt 3):601–10

Alteration of the symbiotic properties of Rhizobium meliloti by plasmid manipulations. Radeva G, et al. **Microbios** 1997; 89(360–361):187–96

The regulatory protein MucR binds to a short DNA region located upstream of the mucR coding region in Rhizobium meliloti. Bertram-Drogatz PA, et al. **Mol Gen Genet** 1997 May 20;254(5):529–38

Different roles of CheY1 and CheY2 in the chemotaxis of Rhizobium meliloti. Sourjik V, et al. **Mol Microbiol** 1996 Nov;22(3):427–36

Identification and characterization of a gene on Rhizobium meliloti pSyma, syrB, that negatively affects syrM expression. Barnett MJ, et al. **Mol Plant Microbe Interact** 1997 Jul;10(5):550–9

Deletion analysis of the 5' untranslated region of the Rhizobium meliloti nodF gene. Kalinowski G, et al. **Mol Plant Microbe Interact** 1996 Dec;9(9):869–73

Gene structure and differential regulation of the Rhizobium-induced peroxidase gene rip1. Peng HM, et al. **Plant Physiol** 1996 Dec;112(4):1437–46

The common nodABC genes of Rhizobium meliloti are host-range determinants. Roche P, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15305–10

GROWTH & DEVELOPMENT

Mechanism of gluconate synthesis in Rhizobium meliloti by using in vivo NMR. Portais JC, et al. **FEBS Lett** 1997 Aug 4;412(3):485–9

Heme compounds as iron sources for nonpathogenic

Rhizobium bacteria. Noya F, et al. **J Bacteriol** 1997 May; 179(9):3076–8

METABOLISM

Nonsteric factors dominate binding of nitric oxide, azide, imidazole, cyanide, and fluoride to the rhizobial heme-based oxygen sensor FixL. Winkler WC, et al. **Chem Biol** 1996 Oct;3(10):841–50

Mechanism of gluconate synthesis in Rhizobium meliloti by using in vivo NMR. Portais JC, et al. **FEBS Lett** 1997 Aug 4;412(3):485–9

Rhizobium meliloti exopolysaccharides: synthesis and symbiotic function. González JE, et al. **Gene** 1996 Nov 7;179(1):141–6 (50 ref.)

The Rhizobium meliloti PII protein, which controls bacterial nitrogen metabolism, affects alfalfa nodule development. Arcondéguy T, et al. **Genes Dev** 1997 May 1;11(9):1194–206

Use of green fluorescent protein to visualize the early events of symbiosis between Rhizobium meliloti and alfalfa (Medicago sativa). Gage DJ, et al. **J Bacteriol** 1996 Dec; 178(24):7159–66

The NodA proteins of Rhizobium meliloti and Rhizobium tropici specify the N-acylation of Nod factors by different fatty acids. Debellé F, et al. **Mol Microbiol** 1996 Oct; 22(2):303–14

PHYSIOLOGY

Different roles of CheY1 and CheY2 in the chemotaxis of Rhizobium meliloti. Sourjik V, et al. **Mol Microbiol** 1996 Nov;22(3):427–36

A carbonic anhydrase gene is induced in the nodule primordium and its cell-specific expression is controlled by the presence of Rhizobium during development. Coba de la Peña T, et al. **Plant J** 1997 Mar;11(3):407–20

RHIZOCTONIA

CLASSIFICATION

Identification at strain level of Rhizoctonia solani AG4 isolates by direct sequence of asymmetric PCR products of the ITS regions. Boysen M, et al. **Curr Genet** 1996 Jan; 29(2):174–81

GENETICS

Double-stranded RNAs in Korean isolates of Rhizoctonia solani AG4. Kim SO, et al. **FEMS Microbiol Lett** 1996 Aug 1;141(2–3):203–6

PHYSIOLOGY

Identification at strain level of Rhizoctonia solani AG4 isolates by direct sequence of asymmetric PCR products of the ITS regions. Boysen M, et al. **Curr Genet** 1996 Jan; 29(2):174–81

RHIZOMELIC CHONDRODYSPLASIA PUNCTATA see **CHONDRODYSPLASIA PUNCTATA, RHIZOMELIC**

RHIZOPUS

Pulmonary mucormycosis in diabetic renal allograft recipients. Latif S, et al. **Am J Kidney Dis** 1997 Mar; 29(3):461–4 (26 ref.)

Mucormycosis of the vulva following bone marrow transplantation. Nomura J, et al. **Bone Marrow Transplant** 1997 Apr;19(8):859–60

Fatal Rhizopus infection in a hand [letter] La Hausse-Brown TP, et al. **Br J Plast Surg** 1996 Dec;49(8):572–3

Invasive fungal infections and contaminated tongue depressors. **Commun Dis Rep CDR Wkly** 1996 Apr 26; 6(17):145, 148

CHEMISTRY

Fumaric acid, anti-thrombin substance from Rhizopus javanicus. Okamura T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1997 Apr;43(2):241–7

ENZYMOLOGY

The folding and activity of the extracellular lipase of Rhizopus oryzae are modulated by a prosequence. Beer HD, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):351–9

Enzymatic activities of several K108 mutants of ribonuclease (RNase) Rh isolated from Rhizopus niveus. Ohgi K, et al. **Biol Pharm Bull** 1996 Aug;19(8):1080–2

Safety evaluation of lipase derived from Rhizopus oryzae: summary of toxicological data. Coenen TM, et al. **Food Chem Toxicol** 1997 Mar–Apr;35(3–4):315–22 (24 ref.)

Role of histidine 46 in the hydrolysis and the reverse transphosphorylation reaction of RNase Rh from Rhizopus niveus. Irie M, et al. **J Biochem (Tokyo)** 1997 May; 121(5):849–53

The crystal structure of lipase II from Rhizopus niveus at 2.2 A resolution. Kohno M, et al. **J Biochem (Tokyo)** 1996 Sep;120(3):505–10

Enzymatic properties of mutant enzymes at Trp49 and Tyr57 of RNase Rh from Rhizopus niveus. Ohgi K, et al. **J Biochem (Tokyo)** 1996 Jan;119(1):9–15

Altered acyl chain length specificity of Rhizopus delemar lipase through mutagenesis and molecular modeling. Klein RR, et al. **Lipids** 1997 Feb;32(2):123–30

Analysis of the catalytic mechanism of a fungal lipase using computer-aided design and structural mutants. Beer HD, et al. **Protein Eng** 1996 Jun;9(6):507–17

Glucoamylase mutants in the conserved active-site segment Trp170–Tyr175 located at a distance from the site of catalysis. Stoffer BB, et al. **Protein Eng** 1997 Jan;10(1):81–7

[Comparative characteristics of microbial proteases by the level of hydrolysis of protein substrates] Rimareva LV, et al. **Prikl Biokhim Mikrobiol** 1997 Jan–Feb;33(1):43–8 (Eng. Abstr.) **(Rus)**

GENETICS

Enzymatic properties of mutant enzymes at Trp49 and Tyr57 of RNase Rh from Rhizopus niveus. Ohgi K, et al. **J Biochem (Tokyo)** 1996 Jan;119(1):9–15

IMMUNOLOGY

Granulocyte colony-stimulating factor administered in vivo augments neutrophil-mediated activity against opportunistic fungal pathogens. Liles WC, et al. **J Infect Dis** 1997 Apr;175(4):1012–5

Interstitial pneumonitis induced in guinea pigs by the antigens of Rhizopus nigricans. Alonso A, et al. **J Investig Allergol Clin Immunol** 1997 Mar–Apr;7(2):103–9

ISOLATION & PURIFICATION

Gastric mucormycosis due to Rhizopus oryzae in a renal transplant recipient. Winkler S, et al. **J Clin Microbiol** 1996 Oct;34(10):2585–7

Human infection by Rhizopus azygosporus and the occurrence of azygospores in Zygomycetes. Schipper MA, et al. **J Med Vet Mycol** 1996 Jun–Jul;34(3):199–203

Rhizopus and tongue depressors [letter; comment] Harper JJ, et al. **Lancet** 1996 Nov 2;348(9036):1250. Comment on: Lancet 1996 Aug 17;348(9025):441–3.

Atypical presentations of mucormycosis in the head and neck. Vessely MB, et al. **Otolaryngol Head Neck Surg** 1996 Dec; 115(6):573–7

Pulmonary mucormycosis diagnosed by bronchoalveolar lavage: a case report and review of the literature. al-Abbadi MA, et al. **Pediatr Pulmonol** 1997 Mar;23(3):222–5 (14 ref.)

METABOLISM

Interesterification biocatalysis of purified lipase fractions from Rhizopus niveus. Kermasha S, et al. **Ann N Y Acad Sci** 1996 Oct 12;799:268–74

Models of metabolism in Rhizopus oryzae. Wright BE, et al. **J Theor Biol** 1996 Oct 7;182(3):453–7

RHIZOTOMY

Results of DREZ coagulations for pain related to plexus lesions, spinal cord injuries and postherpetic neuralgia. Rath SA, et al. **Acta Neurochir (Wien)** 1996;138(4):364–9

Quantitative measurement of improvement in sitting balance in children with spastic cerebral palsy after selective posterior rhizotomy. Yang TF, et al. **Am J Phys Med Rehabil** 1996 Sep–Oct;75(5):348–52

Motoneuron development after deafferentation. I. dorsal rhizotomy does not alter growth in the spinal nucleus of the bulbocavernosus (SNB). Goldstein LA, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):11–9

Motoneuron development after deafferentation: II. dorsal rhizotomy does not block estrogen-supported growth in the dorsolateral nucleus (DLN). Hays TC, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):20–8

Assessment of upper-extremity function in children with spastic diplegia before and after selective dorsal rhizotomy. Buckon CE, et al. **Dev Med Child Neurol** 1996 Nov; 38(11):967–75

A randomized clinical trial to compare selective posterior rhizotomy plus physiotherapy with physiotherapy alone in children with spastic diplegic cerebral palsy. Steinbok P, et al. **Dev Med Child Neurol** 1997 Mar;39(3):178–84

Biphasic response of spinal GABAergic neurons after a lumbar rhizotomy in the adult rat. Dumoulin A, et al. **Eur J Neurosci** 1996 Dec;8(12):2553–63

Sacral rhizotomies and electrical bladder stimulation in spinal cord injury. Part I: Clinical and urodynamic analysis. Dutch Study Group on Sacral Anterior Root Stimulation. Van Kerrebroeck EV, et al. **Eur Urol** 1997;31(3):263–71

Sacral rhizotomies and electrical bladder stimulation in spinal cord injury. 2. Cost-effectiveness and quality of life analysis. Dutch Study Group on Sacral Anterior Root Stimulation. Wielink G, et al. **Eur Urol** 1997;31(4):441–6

The choice of therapy in medically intractable trigeminal neuralgia. Rappaport ZH. **Isr J Med Sci** 1996 Dec; 32(12):1232–4

Sensory rhizotomy for the treatment of childhood spasticity. Abbott R. **J Child Neurol** 1996 Nov;11 Suppl 1:S36–42 (60 ref.)

Selective dorsal rhizotomy and rates of orthopedic surgery in children with spastic cerebral palsy. Chicoine MR, et al. **J Neurosurg** 1997 Jan;86(1):34–9

Lack of specificity in electrophysiological identification of lower sacral roots during selective dorsal rhizotomy. Ojemann JG, et al. **J Neurosurg** 1997 Jan;86(1):28–33

Posterior rhizotomy [letter] Rose RD. **J Neurosurg** 1997 Aug; 87(2):334–5

Intrathecal morphine for analgesia in children undergoing selective dorsal rhizotomy. Dews TE, et al. **J Pain Symptom Manage** 1996 Mar;11(3):188–94

Dorsal rhizotomy induces transient expression of the highly sialylated isoform of the neural cell adhesion molecule in neurons and astrocytes of the adult rat spinal cord. Bonfanti L, et al. **Neuroscience** 1996 Oct;74(3):619–23

Comparison of surgical treatments for trigeminal neuralgia: reevaluation of radiofrequency rhizotomy [letter; comment] Håkanson S. **Neurosurgery** 1997 May;40(5):1106–7. Comment on: Neurosurgery 1996 May;38(5):865–71.

Preservation of pudendal afferents in sacral rhizotomies. Huang JC, et al. **Neurosurgery** 1997 Aug;41(2):411–5

Spinal stenosis after total lumbar laminectomy for selective dorsal rhizotomy. Gooch JL, et al. **Pediatr Neurosurg** 1996 Jul;25(1):28–30

ADVERSE EFFECTS

Severe lumbar lordosis after dorsal rhizotomy. Crawford K, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):336–9

Perioperative complications in children undergoing selective posterior rhizotomy: a review of 105 cases. Van de Wiele BM, et al. **Paediatr Anaesth** 1996;6(6):479–86

INSTRUMENTATION

Percutaneous radiofrequency rhizotomy of lumbar spinal facets: the results of 46 cases. Göçer AI, et al. **Neurosurg Rev** 1997;20(2):114–6

METHODS

Retrolabyrinthine selective posterior root section of the trigeminal nerve for the treatment of trigeminal neuralgia. Pulec JL. **Ear Nose Throat J** 1996 Sep;75(9):601–6

Gait changes in children with spastic diplegia after selective dorsal rhizotomy. Thomas SS, et al. **J Pediatr Orthop** 1996 Nov–Dec;16(6):747–52

Posterior sacral rhizotomy and intradural anterior sacral root stimulation for treatment of the spastic bladder in spinal cord injured patients [see comments] Schurch B, et al. **J Urol** 1997 Feb;157(2):610–4. Comment in: J Urol 1997 Feb;157(2):615–6.

Selective posterior rhizotomy and constant-voltage stimulation [letter; comment] Rose RD. **Muscle Nerve** 1997 Aug;20(8):1044–5. Comment on: Muscle Nerve 1994 May;17(5):539–49. Comment on: Muscle Nerve 1995 Jan;18(1):126–7. Comment on: Muscle Nerve 1996 Apr;19(4):415–22.

Percutaneous retrogasserian glycerol rhizotomy. Current technique and results. Jho HD, et al. **Neurosurg Clin N Am** 1997 Jan;8(1):63–74

Treatment of trigeminal neuralgia by percutaneous radiofrequency rhizotomy. Taha JM, et al. **Neurosurg Clin N Am** 1997 Jan;8(1):31–9 (30 ref.)

Comparison of surgical treatments for trigeminal neuralgia: reevaluation of radiofrequency rhizotomy [see comments] Taha JM, et al. **Neurosurgery** 1996 May;38(5):865–71. Comment in: Neurosurgery 1997 May;40(5):1106–7.

The electromyographic responses to dorsal rootlet stimulation during partial dorsal rhizotomy are inconsistent. Warf BC, et al. **Pediatr Neurosurg** 1996 Jul;25(1):13–9

[Transcutaneous radiofrequency destruction of the articular nerves in treating low back pains] Akatov OV, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr–Jun; (2):17–20 (Eng. Abstr.) **(Rus)**

[The use of selective dorsal rhizotomy for treating spasticity in patients with infantile cerebral palsy] Shevelev IN, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1996 Jul–Sep; (3):19–22 (Eng. Abstr.) **(Rus)**

STANDARDS

Developmental skills of children with spastic diplegia: functional and qualitative changes after selective dorsal rhizotomy. Buckon CE, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):946–51

Does gait continue to improve 2 years after selective dorsal rhizotomy? Thomas SS, et al. **J Pediatr Orthop** 1997 May–Jun;17(3):387–91

Selective posterior rhizotomy and constant-voltage stimulation [letter; comment] Rose RD. **Muscle Nerve** 1997 Aug;20(8):1044–5. Comment on: Muscle Nerve 1994 May;17(5):539–49. Comment on: Muscle Nerve 1995 Jan;18(1):126–7. Comment on: Muscle Nerve 1996 Apr;19(4):415–22.

RHO(D) IMMUNE GLOBULIN

ADMINISTRATION & DOSAGE

Anti-D administration in early pregnancy – time for a new protocol [see comments] de Crespigny L, et al. **Aust N Z J Obstet Gynaecol** 1995 Nov;35(4):385–7. Comment in: Aust N Z J Obstet Gynaecol 1996 May;36(2):227–8.

Positive Kleihauer result following an ectopic pregnancy [see comments] Krause HG, et al. **Aust N Z J Obstet Gynaecol** 1996 Aug;36(3):324–5. Comment in: Aust N Z J Obstet Gynaecol 1997 Feb;37(1):133–4.

Ectopic pregnancy of 5 weeks gestation [letter; comment] Rice M. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):133–4 . Comment on: Aust N Z J Obstet Gynaecol 1996

RHO(D) IMMUNE GLOBULIN

Aug;36(3):324–5.

Importance of accurate assessment of fetomaternal haemorrhage after late abortions. Bromilow I, et al. **BMJ** 1996 Nov 9;313(7066):1200–1

Idiopathic thrombocytopenic purpura following allogeneic bone marrow transplantation--treatment with anti-D immunoglobulin. Lee SJ, et al. **Bone Marrow Transplant** 1997 Jan;19(2):173–4

ADVERSE EFFECTS

Urticaria from allergy to a purified human anti-Rh antibody preparation. Sulakvelidze I, et al. **Allergy** 1995 Dec; 50(12):981–3

Hepatitis C virus liver disease in women infected with contaminated anti-D immunoglobulin. Sheehan MM, et al. **Histopathology** 1997 Jun;30(6):512–7

Viral transmission by blood products: a perspective of events covered by the recent tribunal of enquiry into the Irish Blood Transfusion Board [editorial] Yap PL. **Ir Med J** 1997 Apr–May;90(3):84, 86, 88

Delayed hypersensitivity to thimerosal in RhO(D) immunoglobulin. Luka RE, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):138–9

ANALYSIS

Flow-cytometric quantitation of anti-D antibodies. Hildén JO, et al. **Vox Sang** 1997;72(3):172–6

ECONOMICS

Cost-effectiveness of antenatal anti-D prophylaxis. Vick S, et al. **Health Econ** 1996 Jul–Aug;5(4):319–28

GENETICS

Specificity and sensitivity of RHD genotyping methods by PCR-based DNA amplification. Aubin JT, et al. **Br J Haematol** 1997 Aug;98(2):356–64

Fetal Rhesus D genotyping on amniocytes in alloimmunised pregnancies using fluorescence duplex polymerase chain reaction. Crombach G, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):15–9

IMMUNOLOGY

Interferon-associated thyroid dysfunction in anti-D-related chronic hepatitis C. Sachithanandan S, et al. **J Interferon Cytokine Res** 1997 Jul;17(7):409–11

Monoclonal anti-D is not effective in the treatment of chronic autoimmune thrombocytopenic purpura [letter; comment] Atrah HI. **Transfusion** 1997 Apr;37(4):444; discussion 445–6. Comment on: Transfusion 1996 Apr;36(4):328–30.

Treatment of chronic autoimmune thrombocytopenic purpura with monoclonal anti-D: lack of efficiency due to absence of Fc gammaR-inhibiting activity? [letter; comment] Neppert J, et al. **Transfusion** 1997 Apr; 37(4):444–5; discussion 445–6. Comment on: Transfusion 1996 Apr;36(4):328–30.

THERAPEUTIC USE

Anti-D administration in early pregnancy--time for a new protocol [letter; comment] Carmody F. **Aust N Z J Obstet Gynaecol** 1996 May;36(2):227–8. Comment on: Aust N Z J Obstet Gynaecol 1995 Nov;35(4):385–7.

Intravenous anti-D treatment of immune thrombocytopenic purpura: experience in 272 patients. Scaradavou A, et al. **Blood** 1997 Apr 15;89(8):2689–700

Royal College of Physicians of Edinburgh/Royal College of Obstetricians and Gynaecologists Consensus Conference on anti-D prophylaxis, 7–8 April 1997 [letter] **Br J Haematol** 1997 Jun;97(4):927–8

Preventing rhesus D haemolytic disease of the newborn by giving anti-D immunoglobulin: are the guidelines being adequately followed? [letter; comment] Harding K. **Br J Obstet Gynaecol** 1997 Jul;104(7):869–70. Comment on: Br J Obstet Gynaecol 1997 Jan;104(1):37–41.

The history of rhesus prophylaxis with anti-D.[classical article] Wegmann A, et al. **Eur J Pediatr** 1996 Oct; 155(10):835–8

The treatment of autoimmune thrombocytopaenic purpura with anti-D immunoglobulin: similar platelet responses in homozygous and heterozygous Rh(D) positive patients. Smith NA, et al. **Transfus Med** 1991 Sep;1(3):183–5

The clinical significance of anti-G in alloimmunized pregnant women [letter] Hadley A, et al. **Transfusion** 1997 Sep; 37(9):985

[Is it always necessary to give anti-D gamma-globulins in the case of spontaneous miscarriage in Rhesus-negative patients?] Salvat J, et al. **Contracept Fertil Sex** 1997 Apr; 25(4):V–IX (27 ref.) **(Fre)**

[Rhesus prophylaxis--history and current status] Behrens O, et al. **Zentralbl Gynakol** 1997;119(5):204–10 (Eng. Abstr.) **(Ger)**

RHO FACTOR

ANTAGONISTS & INHIBITORS

In vivo and in vitro evidence for an anti-Rho activity induced by the phage P4 polarity suppressor protein Psu. Linderoth NA, et al. **Virology** 1997 Jan 6;227(1):131–41

CHEMISTRY

1H, 15N and 13C resonance assignments and secondary structure determination of the RNA-binding domain of E.coli rho protein. Briercheck DM, et al. **J Biomol NMR** 1996 Dec;8(4):429–44

The quaternary geometry of transcription termination factor rho: assignment by chemical cross-linking. Horiguchi T, et al. **J Mol Biol** 1997 Jun 20;269(4):514–28

IMMUNOLOGY

Evaluation of monoclonal anti-D reagents using D variant cells. Condon J, et al. **Transfus Clin Biol** 1996;3(6):367–8

ISOLATION & PURIFICATION

Purification of transcription termination factor Rho from Escherichia coli and Micrococcus luteus. Nowatzke W, et al. **Methods Enzymol** 1996;274:353–63

METABOLISM

Structure-function relationships in Escherichia coli transcription termination protein Rho revealed by radiation target analysis. Stitt BL, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):268–76

Kinetics of the RNA-DNA helicase activity of Escherichia coli transcription termination factor rho. 1. Characterization and analysis of the reaction. Walstrom KM, et al. **Biochemistry** 1997 Jul 1;36(26):7980–92

Kinetics of the RNA-DNA helicase activity of Escherichia coli transcription termination factor rho. 2. Processivity, ATP consumption, and RNA binding. Walstrom KM, et al. **Biochemistry** 1997 Jul 1;36(26):7993–8004

The antibiotic bicyclomycin affects the secondary RNA binding site of Escherichia coli transcription termination factor Rho. Magyar A, et al. **J Biol Chem** 1996 Oct 11; 271(41):25369–74

Function of the novel subdomain in the RNA binding domain of transcription termination factor Rho from Micrococcus luteus. Nowatzke WL, et al. **J Biol Chem** 1997 Jan 24; 272(4):2207–11

1H, 15N and 13C resonance assignments and secondary structure determination of the RNA-binding domain of E.coli rho protein. Briercheck DM, et al. **J Biomol NMR** 1996 Dec;8(4):429–44

Effects on mRNA degradation by Escherichia coli transcription termination factor Rho and pBR322 copy number control protein Rop. Sozhamannan S, et al. **J Mol Biol** 1997 May 16;268(4):689–703

PHYSIOLOGY

Roles of the tnaC-tnaA spacer region and Rho factor in regulating expression of the tryptophanase operon of Proteus vulgaris. Kamath AV, et al. **J Bacteriol** 1997 Mar; 179(5):1780–6

Incompatibility of Escherichia coli rho mutants with plasmids is mediated by plasmid-specific transcription. Li TK, et al. **J Bacteriol** 1997 Sep;179(18):5789–94

Transcription termination factor Rho is essential for Micrococcus luteus. Nowatzke WL, et al. **J Bacteriol** 1997 Aug;179(16):5238–40

Bombesin-induced gastrin release from canine G cells is stimulated by Ca2+ but not by protein kinase C, and is enhanced by disruption of rho/cytoskeletal pathways. Seensalu R, et al. **J Clin Invest** 1997 Sep 1;100(5):1037–46

RADIATION EFFECTS

Structure-function relationships in Escherichia coli transcription termination protein Rho revealed by radiation target analysis. Stitt BL, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):268–76

RHODAMINES

Three-dimensional imaging of rhodamine 123 fluorescence distribution in human melanoma cells by means of confocal laser scanning microscopy. Porwol T, et al. **Acta Anat (Basel)** 1996;157(2):116–25

Assay of anticancer drugs in tissue culture: comparison of a tetrazolium-based assay and a protein binding dye assay in short-term cultures derived from human malignant glioma. Haselsberger K, et al. **Anticancer Drugs** 1996 May; 7(3):331–8

Fluorescence polarization of skeletal muscle fibers labeled with rhodamine isomers on the myosin heavy chain. Berger CL, et al. **Biophys J** 1996 Dec;71(6):3330–43

Fluorescence characteristics of 5-carboxytetramethylrhodamine linked covalently to the 5' end of oligonucleotides: multiple conformers of single-stranded and double-stranded dye-DNA complexes. Vámosi G, et al. **Biophys J** 1996 Aug;71(2):972–94

Flow cytometric applications of Sulforhodamine 101 as a fluorescent stain for total cellular protein. Engelhard HH. **Biotech Histochem** 1997 Jan;72(1):1–9

Flow cytometry [letter; comment] Galley HF, et al. **Br J Anaesth** 1997 Feb;78(2):227–8. Comment on: Br J Anaesth 1996 Sep;77(3):387–92.

JC-1, but not DiOC6(3) or rhodamine 123, is a reliable fluorescent probe to assess delta psi changes in intact cells: implications for studies on mitochondrial functionality during apoptosis. Salvioli S, et al. **FEBS Lett** 1997 Jul 7; 411(1):77–82

Frequency analysis of multidrug resistance-1 gene transfer into human primitive hematopoietic progenitor cells using the cobblestone area-forming cell assay and detection of vector-mediated P-glycoprotein expression by rhodamine-123. Fruehauf S, et al. **Hum Gene Ther** 1996 Jun 20;7(10):1219–31

Analysis of mitochondrial morphology and function with novel fixable fluorescent stains. Poot M, et al. **J Histochem Cytochem** 1996 Dec;44(12):1363–72

Nystatin-rhodamine B assay for estimating activity of killer toxin from Kluyveromyces lactis. Palková Z, et al. **Methods Mol Biol** 1996;53:325–9 (5 ref.)

Rhodamine B assay for estimating activity of killer toxins permeabilizing cytoplasmic membranes. Vondrejs V, et al. **Methods Mol Biol** 1996;53:319–24 (4 ref.)

Influence of fluorescent labelling of polystyrene particles on phagocytic uptake, surface hydrophobicity, and plasma protein adsorption. Müller RH, et al. **Pharm Res** 1997 Jan; 14(1):18–24

ANALYSIS

Comparison of methods to determine chromophore concentrations from fluorescence spectra of turbid samples. Durkin AJ, et al. **Lasers Surg Med** 1996;19(1):75–89

Direct measurement of single-molecule diffusion and photodecomposition in free solution. Xu XH, et al. **Science** 1997 Feb 21;275(5303):1106–9

CHEMICAL SYNTHESIS

Texas Res-X and rhodamine Red-X, new derivatives of sulforhodamine 101 and lissamine rhodamine B with improved labeling and fluorescence properties. Lefevre C, et al. **Bioconjug Chem** 1996 Jul–Aug;7(4):482–9

CHEMISTRY

Time-resolved fluorescence microscopy could correct for probe binding while estimating intracellular pH. Srivastava A, et al. **Anal Biochem** 1997 Jul 1;249(2):140–6

Texas Res-X and rhodamine Red-X, new derivatives of sulforhodamine 101 and lissamine rhodamine B with improved labeling and fluorescence properties. Lefevre C, et al. **Bioconjug Chem** 1996 Jul–Aug;7(4):482–9

Fluorescence emission and anisotropy from rhodamine dimers. Burghardt TP, et al. **Biophys Chem** 1996 Mar 7; 59(1–2):119–31

Voltage-dependent translocation of R18 and DiI across lipid bilayers leads to fluorescence changes. Melikyan GB, et al. **Biophys J** 1996 Nov;71(5):2680–91

Single-molecule microscopy on model membranes reveals anomalous diffusion. Schütz GJ, et al. **Biophys J** 1997 Aug; 73(2):1073–80

In vivo dynamics of myosin II in Dictyostelium by fluorescent analogue cytochemistry. Chu Q, et al. **Cell Motil Cytoskeleton** 1996;35(3):254–68

Site-directed mutagenesis enabled preparation of a functional fluorescent analog of profilin: biochemical characterization and localization in living cells. Tarachandani A, et al. **Cell Motil Cytoskeleton** 1996;34(4):313–23

Simultaneous measurement of Ca2+ and pH by laser cytometry using fluo-3 and SNARF-1. Atsumi T, et al. **Cytometry** 1996 Jun 1;24(2):99–105

Chloromethyl-X-Rosamine is an aldehyde-fixable potential-sensitive fluorochrome for the detection of early apoptosis. Macho A, et al. **Cytometry** 1996 Dec 1; 25(4):333–40

Detection of apoptosis by flow cytometry of cells simultaneously stained for intracellular pH (carboxy SNARF-1) and membrane permeability (Hoechst 33342). Reynolds JE, et al. **Cytometry** 1996 Dec 1;25(4):349–57

Rhodamine 800 as a probe of energization of cells and tissues in the near-infrared region: a study with isolated rat liver mitochondria and hepatocytes. Sakanoue J, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):29–37

Fusion of bovine leukemia virus with target cells monitored by R18 fluorescence and PCR assays. Zarkik S, et al. **J Virol** 1997 Jan;71(1):738–40

New energy transfer dyes for DNA sequencing. Lee LG, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2816–22

METABOLISM

Correlation between rhodamine 123 accumulation and azole sensitivity in Candida species: possible role for drug efflux in drug resistance. Clark FS, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):419–25

Binding of two fluorescent cAMP analogues to type I and II regulatory subunits of cAMP-dependent protein kinases. Mucignat-Caretta C, et al. **Biochim Biophys Acta** 1997 Jun 5;1357(1):81–90

P-glycoprotein (PGP) and lung resistance-related protein (LRP) expression and function in leukaemic blast cells. Michieli M, et al. **Br J Haematol** 1997 Feb;96(2):356–65

Heparin reverses Rhodamine 123 extrusion by multidrug resistant cells. Maia RC, et al. **Cancer Lett** 1996 Aug 23; 106(1):101–8

Distribution and orientation of rhodamine-phalloidin bound to thin filaments in skeletal and cardiac myofibrils. Zhukarev V, et al. **Cell Motil Cytoskeleton** 1997; 37(4):363–77

Intracellular degradation of sulforhodamine-GM1: use for a fluorescence-based characterization of

GM2-gangliosidosis variants in fibroblasts and white blood cells. Agmon V, et al. **Clin Chim Acta** 1996 Mar 29; 247(1-2):105-20

Mitochondrial membrane potential measurement in rat cerebellar neurons by flow cytometry. Sureda FX, et al. **Cytometry** 1997 May 1;28(1):74-80

Nuclear pH gradient in mammalian cells revealed by laser microspectrofluorimetry. Seksek O, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):257-62

Comparison of drug accumulation in P-glycoprotein-expressing and MRP-expressing human leukaemia cells. Davey MW, et al. **Leuk Res** 1996 Aug; 20(8):657-64

Flow cytometric analysis of P-glycoprotein function using rhodamine 123. Pétriz J, et al. **Leukemia** 1997 Jul; 11(7):1124-30

Use of rhodamine 123 to examine the functional activity of P-glycoprotein in primary cultured brain microvessel endothelial cell monolayers. Fontaine M, et al. **Life Sci** 1996;59(18):1521-31

Diffusion of microinjected markers across the parasitophorous vacuole membrane in cells infected with Eimeria nieschulzi (Coccidia, Apicomplexa). Werner-Meier R, et al. **Parasitol Res** 1997;83(6):611-3

Brain-stem afferents upon retinal projecting isthmo-optic and ectopic neurons of the pigeon centrifugal visual system demonstrated by retrograde transneuronal transport of rhodamine beta-isothiocyanate. Miceli D, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):213-24

PHARMACOKINETICS

MDR1/P-glycoprotein function. I. Effect of hypotonicity and inhibitors on rhodamine 123 exclusion. Weaver JL, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1447-52

Acceleration of MRP-associated efflux of rhodamine 123 by genistein and related compounds. Versantvoort CH, et al. **Br J Cancer** 1996 Dec;74(12):1949-54

Flow cytometry evaluation of the multidrug-resistant phenotype with functional tests involving uptake of daunorubicin, Hoechst 33342, or rhodamine 123: a comparative study. Lizard G, et al. **Cancer Detect Prev** 1995;19(6):527-34

Impregnation of collagen corneal shields with liposomes: uptake and release of hydrophilic and lipophilic marker substances. Grammer JB, et al. **Curr Eye Res** 1996 Aug; 15(8):815-23

Efficiency of P-glycoprotein-mediated exclusion of rhodamine dyes from multidrug-resistant cells is determined by their passive transmembrane movement rate. Eytan GD, et al. **Eur J Biochem** 1997 Aug 15;248(1):104-12

Rhodamine 123 accumulates extensively in the isolated perfused rat kidney and is secreted by the organic cation system. Masereeuw R, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):315-23

On pathways for small molecules into and out of human hair fibers. Pötsch L, et al. **J Forensic Sci** 1996 Jan;41(1):121-5

Intracellular accumulation of rhodamine 110 in single living cells. Jeannot V, et al. **J Histochem Cytochem** 1997 Mar; 45(3):403-12

PHARMACOLOGY

Influence of rhodamine 123 on the photosensitizing properties of porphyrins. Lagerberg JW, et al. **Free Radic Biol Med** 1996;21(2):181-8

Efficient fixation procedure of human leukemia cells in sulforhodamine B cytotoxicity assay. Kim HM, et al. **J Pharmacol Toxicol Methods** 1996 Nov;36(3):163-9

[Stimulation of mitochondrial respiration, induced by laser irradiation in the presence of rhodamine dyes] Krasnikov BF, et al. **Biokhimiia** 1996 Oct;61(10):1793-9 (Eng. Abstr.) **(Rus)**

RHODANATES see **THIOCYANATES**

RHODANESE see **THIOSULFATE SULFURTRANSFERASE**

RHODANINE

ANALOGS & DERIVATIVES

Improvement of corneal sensation and tear dynamics in diabetic patients by oral aldose reductase inhibitor, ONO-2235: a preliminary study. Fujishima H, et al. **Cornea** 1996 Jul;15(4):368-75

Epalrestat, an aldose reductase inhibitor, improves an impaired generation of oxygen-derived free radicals by neutrophils from poorly controlled NIDDM patients. Sato N, et al. **Diabetes Care** 1997 Jun;20(6):995-8

Effect of an aldose reductase inhibitor on glomerular basement membrane anionic sites in streptozotocin-induced diabetic rats. Isogai S, et al. **Diabetes Res Clin Pract** 1995 Nov;30(2):111-6

The absence of synergism between the effects of an aldose reductase inhibitor, epalrestat, and a vasodilator, cilostazol, on the nerve conduction slowing and the myelinated fiber atrophy in streptozotocin-induced diabetic rats. Sasaki H, et al. **Exp Neurol** 1997 Aug;146(2):466-70

Effectiveness of aldose reductase inhibitors for diabetic gastroenteropathy with constipation. Nakamura T, et al. **Intern Med** 1997 Jul;36(7):479-83

Clinical investigation of epalrestat, an aldose reductase inhibitor, on diabetic neuropathy in Japan: multicenter study. Diabetic Neuropathy Study Group in Japan. Hotta N, et al. **J Diabetes Complications** 1996 May-Jun; 10(3):168-72

Effects of ONO-2235, an aldose reductase inhibitor, on muscarinic receptors and contractile response of the urinary bladder in rats with streptozotocin-induced diabetes. Kanda M, et al. **Jpn J Pharmacol** 1997 Mar;73(3):221-8

Restoration of nitric oxide production by aldose reductase inhibitor in human endothelial cells cultured in high-glucose medium. Okuda Y, et al. **Life Sci** 1997; 60(3):PL53-6

PHARMACOLOGY

Rhodanine resistance and dependence of echovirus 12: a possible consequence of capsid flexibility. Kraus W, et al. **J Virol** 1997 Feb;71(2):1697-702

RHODIUM

Short communication: kilovoltage measurement with rhodium target and filters on mammography X-ray machines. Underwood AC, et al. **Br J Radiol** 1996 Aug; 69(824):769-73

Biodistribution of model 105Rh-labeled tetradentate thiamacrocycles in rats. Li N, et al. **Nucl Med Biol** 1997 Jan;24(1):85-92

Breast calcification and mass detection with mammographic anode-filter combinations of molybdenum, tungsten, and rhodium. Kimme-Smith CM, et al. **Radiology** 1997 Jun; 203(3):679-83

CHEMISTRY

An Rh-105 complex of tetrathiacyclohexadecane diol with potential for formulating bifunctional chelates. Venkatesh M, et al. **Nucl Med Biol** 1996 Jan;23(1):33-40

Solid-state NMR studies of interstitial phosphorus atoms in rhodium carbonyl clusters. Rocha J, et al. **Solid State Nucl Magn Reson** 1997 May;8(3):195-9

METABOLISM

The novel use of Rh(I) complexes with naphthyridine ligands and poly(oxyethylene) as antitumorals. Sartori R, et al. **Anticancer Drugs** 1996 Jan;7(1):87-92

Targeting the Tat-binding site of bovine immunodeficiency virus TAR RNA with a shape-selective rhodium complex. Lim AC, et al. **Bioorg Med Chem** 1997 Jun;5(6):1131-6

A new metal-binding site for yeast phosphoglycerate kinase as determined by the use of a metal-ATP analog. Pappu KM, et al. **Biophys J** 1997 Feb;72(2 Pt 1):928-35

Studies on the interaction between human serum albumin and [Rh2(OAc)2(bpy)2(H2O)2](OAc)2. Trynda-Lemiesz L, et al. **J Inorg Biochem** 1997 May 15;66(3):187-92

Oxidative thymine dimer repair in the DNA helix [see comments] Dandliker PJ, et al. **Science** 1997 Mar 7; 275(5305):1465-8. Comment in: Science 1997 Mar 7;275(5305):1420-1.

PHARMACOLOGY

Antimicrobial activity of carbene complexes of rhodium(I) and ruthenium(II). Cetinkaya B, et al. **Arzneimittelforschung** 1996 Aug;46(8):821-3

Water-soluble rhodium(II) carboxylate adducts: cytotoxicity of the new compounds. de Souza AR, et al. **J Inorg Biochem** 1996 Oct;64(1):1-5

TOXICITY

Cyto- and genotoxic effects of coordination complexes of platinum, palladium and rhodium in vitro. Bünger J, et al. **Int Arch Occup Environ Health** 1996;69(1):33-8

RHODNIUS

CHEMISTRY

Lipophorin density variation during oogenesis on Rhodnius prolixus. Coelho HS, et al. **Arch Insect Biochem Physiol** 1997;35(3):301-13

Role of phospholipids in the protein stability of an insect lipoprotein, lipophorin from Rhodnius prolixus. Maya-Monteiro C, et al. **Biochemistry** 1997 Sep 16; 36(37):11216-22

Purification, characterization and cDNA cloning of a novel anticoagulant of the intrinsic pathway, (prolixin-S) from salivary glands of the blood sucking bug, Rhodnius prolixus. Sun J, et al. **Thromb Haemost** 1996 Apr; 75(4):573-7

DRUG EFFECTS

Lignanes from the Brazilian Melia azedarach, and their activity in Rhodnius prolixus (Hemiptera, Reduviidae). Cabral MM, et al. **Mem Inst Oswaldo Cruz** 1995 Nov-Dec; 90(6):759-63

ENZYMOLOGY

cDNA cloning, expression and characterization of nitric-oxide synthase from the salivary glands of the blood-sucking insect Rhodnius prolixus. Yuda M, et al. **Eur J Biochem** 1996 Dec 15;242(3):807-12

Salivary thiol oxidase activity of Rhodnius prolixus. Ribeiro JM. **Insect Biochem Mol Biol** 1996 Sep-Oct; 26(8-9):899-905

METABOLISM

Isolation of a calcium-binding phosphoprotein from the oocytes and hemolymph of the blood-sucking insect Rhodnius prolixus. Silva-Neto MA, et al. **J Biol Chem** 1996 Nov 22;271(47):30227-32

PARASITOLOGY

A novel approach to preventing insect-borne diseases. Conte JE Jr. **N Engl J Med** 1997 Sep 11;337(11):785-6

Prevention of insect-borne disease: an approach using transgenic symbiotic bacteria. Durvasula RV, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3274-8

PHYSIOLOGY

Urate protects a blood-sucking insect against hemin-induced oxidative stress. Souza AV, et al. **Free Radic Biol Med** 1997;22(1-2):209-14

Circadian regulation of a daily rhythm of release of prothoracicotropic hormone from the brain retrocerebral complex of Rhodnius prolixus (hemiptera) during larval-adult development. Vafopoulou X, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):123-9

The paracellular channel for water secretion in the upper segment of the Malpighian tubule of Rhodnius prolixus. Sofia Hernández C, et al. **J Membr Biol** 1995 Dec; 148(3):233-42

Thrombin inhibitors of bloodsucking animals. Dodt J, et al. **Semin Thromb Hemost** 1996;22(2):203-8 (44 ref.)

RHODOBACTER

DRUG EFFECTS

Effect of pesticides on the diazotrophic growth and nitrogenase activity of purple nonsulfur bacteria. Chalam AV, et al. **Bull Environ Contam Toxicol** 1997 Mar; 58(3):463-8

METABOLISM

Reverse catabolite repression and the regulation of CO2 fixation in Rhodobacter and related bacteria. Inui M, et al. **Res Microbiol** 1996 Jul-Sep;147(6-7):562-6 (32 ref.)

RHODOBACTER CAPSULATUS

CHEMISTRY

Isolation and characterization of vibrational spectra of individual heme active sites in cytochrome bc1 complexes from Rhodobacter capsulatus. Gao F, et al. **Biochemistry** 1996 Oct 1;35(39):12812-9

Influence of conserved amino acids on the structure and environment of the heme of cytochrome c2. A resonance Raman study. Othman S, et al. **Biochemistry** 1997 May 6; 36(18):5499-508

Kinetic mechanism of folding and unfolding of Rhodobacter capsulatus cytochrome c2. Sauder JM, et al. **Biochemistry** 1996 Dec 24;35(51):16852-62

Cytochrome c(y) of Rhodobacter capsulatus is attached to the cytoplasmic membrane by an uncleaved signal sequence-like anchor. Myllykallio H, et al. **J Bacteriol** 1997 Apr;179(8):2623-31

Differences between porin isolated from Rhodobacter capsulatus B10 and 37b4. Trieschmann MD, et al. **Microbiol Res** 1996 Aug;151(3):319-24

X-ray crystallographic and mass spectrometric structure determination and functional characterization of succinylated porin from Rhodobacter capsulatus: implications for ion selectivity and single-channel conductance. Przybylski M, et al. **Protein Sci** 1996 Aug; 5(8):1477-89

An optimized g-tensor for Rhodobacter capsulatus cytochrome c2 in solution: a structural comparison of the reduced and oxidized states. Zhao D, et al. **Protein Sci** 1996 Sep;5(9):1816-25

ENZYMOLOGY

Cell-free activity of magnesium chelatase in Rhodobacter spheroides and Rhodobacter capsulatus. Gorchein A. **Biochem Soc Trans** 1997 Feb;25(1):82S

Substitutions at position 146 of cytochrome b affect drastically the properties of heme bL and the Qo site of Rhodobacter capsulatus cytochrome bc1 complex. Saribas AS, et al. **Biochim Biophys Acta** 1997 Mar 28; 1319(1):99-108

Isolation, cloning, sequence analysis and X-ray structure of dimethyl sulfoxide/trimethylamine N-oxide reductase from Rhodobacter capsulatus. Knäblein J, et al. **Biol Chem** 1997 Mar-Apr;378(3-4):293-302

Organization of the DMSO respiratory operon of Rhodobacter capsulatus and its consequences for homologous expression of DMSOR/TMAOR. Knäblein J, et al. **Biol Chem** 1997 Mar-Apr;378(3-4):303-8

Protein and gene structure of the NADH-binding fragment of Rhodobacter capsulatus NADH:ubiquinone

RHODOBACTER CAPSULATUS

oxidoreductase. Herter SM, et al. **Eur J Biochem** 1997 Jun 15;246(3):800–8

Comparative in-vivo and in-vitro 99Mo-time-differential-perturbed-angular-correlation studies on the nitrogenase MoFe protein and on other Mo species of different N2-fixing bacteria. Muller A, et al. **Eur J Biochem** 1997 Jun 1;246(2):311–9

Comparative biochemical characterization of the iron-only nitrogenase and the molybdenum nitrogenase from Rhodobacter capsulatus. Schneider K, et al. **Eur J Biochem** 1997 Mar 15;244(3):789–800

Characterisation of the pterin molybdenum cofactor in dimethylsulfoxide reductase of Rhodobacter capsulatus. Solomon PS, et al. **Eur J Biochem** 1997 May 15; 246(1):200–3

The assimilatory nitrate reductase from the phototrophic bacterium, Rhodobacter capsulatus E1F1, is a flavoprotein. Blasco R, et al. **FEBS Lett** 1997 Sep 1;414(1):45–9

Immuno-purification of a dimeric subcomplex of the respiratory NADH-CoQ reductase of Rhodobacter capsulatus equivalent to the FP fraction of the mitochondrial complex I. Duborjal H, et al. **FEBS Lett** 1997 Apr 1;405(3):345–50

Promoter analysis of the catalase-peroxidase gene (cpeA) from Rhodobacter capsulatus. Forkl H, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):169–74

Cloning, nucleotide sequence and characterization of the rpoD gene encoding the primary sigma factor of Rhodobacter capsulatus. Pasternak C, et al. **Gene** 1996 Oct 17;176(1–2):177–84

Purification and in vitro phosphorylation of HupT, a regulatory protein controlling hydrogenase gene expression in Rhodobacter capsulatus. Elsen S, et al. **J Bacteriol** 1997 Feb;179(3):968–71

Regulation of synthesis of pyruvate carboxylase in the photosynthetic bacterium Rhodobacter capsulatus. Yakunin AF, et al. **J Bacteriol** 1997 Mar;179(5):1460–8

Sulfide-quinone reductase from Rhodobacter capsulatus. Purification, cloning, and expression. Schütz M, et al. **J Biol Chem** 1997 Apr 11;272(15):9890–4

Crystal structure of dimethyl sulfoxide reductase from Rhodobacter capsulatus at 1.88 A resolution. Schneider F, et al. **J Mol Biol** 1996 Oct 18;263(1):53–69

Identification, sequence analysis, and expression of the lepB gene for a leader peptidase in Rhodobacter capsulatus. Klug G, et al. **Mol Gen Genet** 1997 Feb 27;253(6):666–73

The substitution of proline 35 by alanine in Rhodobacter capsulatus cytochrome c2 affects the overall protein stability but not the alkaline transition. Caffrey MS, et al. **Protein Eng** 1997 Jan;10(1):77–80

GENETICS

Polyhydroxyalkanoate production in Rhodobacter capsulatus: genes, mutants, expression, and physiology. Kranz RG, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3003–9

Membrane localization, topology, and mutual stabilization of the rnfABC gene products in Rhodobacter capsulatus and implications for a new family of energy-coupling NADH oxidoreductases. Kumagai H, et al. **Biochemistry** 1997 May 6;36(18):5509–21

In bacterial reaction centers rapid delivery of the second proton to QB can be achieved in the absence of L212Glu. Miksovska J, et al. **Biochemistry** 1997 Oct 7; 36(40):12216–26

Cloning and sequence analysis of the dimethylsulfoxide reductase structural gene from Rhodobacter capsulatus. Shaw AL, et al. **Biochim Biophys Acta** 1996 Sep 30; 1276(3):176–80

Promoter analysis of the catalase-peroxidase gene (cpeA) from Rhodobacter capsulatus. Forkl H, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):169–74

Molecular analysis of the Rhodobacter capsulatus chaperone dnaKJ operon: purification and characterization of DnaK. Nickel CM, et al. **Gene** 1997 Jun 19;192(2):251–9

Molecular characterization and organization of porin from Rhodobacter capsulatus strain 37B4. Trieschmann MD, et al. **Gene** 1996 Dec 12;183(1–2):61–8

Cloning, sequencing, and oxygen regulation of the Rhodobacter capsulatus alpha-ketoglutarate dehydrogenase operon. Dastoor FP, et al. **J Bacteriol** 1997 Jul;179(14):4559–66

TRAP transporters: a new family of periplasmic solute transport systems encoded by the dctPQM genes of Rhodobacter capsulatus and by homologs in diverse gram-negative bacteria. Forward JA, et al. **J Bacteriol** 1997 Sep;179(17):5482–93

Differential levels of specific cytochrome c biogenesis proteins in response to oxygen: analysis of the ccl operon in Rhodobacter capsulatus. Gabbert KK, et al. **J Bacteriol** 1997 Sep;179(17):5422–8

Structure of the puf operon of the obligately aerobic, bacteriochlorophyll alpha-containing bacterium Roseobacter denitrificans OCh114 and its expression in a Rhodobacter capsulatus puf puc deletion mutant. Kortlüke C, et al. **J Bacteriol** 1997 Sep;179(17):5247–58

Cloning of the sdsA gene encoding solanesyl diphosphate synthase from Rhodobacter capsulatus and its functional expression in Escherichia coli and Saccharomyces cerevisiae. Okada K, et al. **J Bacteriol** 1997 Oct; 179(19):5992–8

The bluF gene of Rhodobacter capsulatus is involved in conversion of cobinamide to cobalamin (vitamin B12). Pollich M, et al. **J Bacteriol** 1996 Dec;178(24):7308–10

Isolation, cloning, sequence analysis and localization of the operon encoding dimethyl sulfoxide/trimethylamine N-oxide reductase from Rhodobacter capsulatus. Knäblein J, et al. **J Mol Biol** 1996 Oct 18;263(1):40–52

Functional analysis of the recA promoter of Rhodobacter capsulatus. Fernández de Henestrosa AR, et al. **Mol Gen Genet** 1997 Aug;255(5):487–94

Molecular analysis of the Rhodobacter capsulatus B10 porin (porCa) gene; purification and biochemical characterisation of the porin protein. Trieschmann MD, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):253–8

Effect of the pufQ-pufB intercistronic region on puf mRNA stability in Rhodobacter capsulatus. Heck C, et al. **Mol Microbiol** 1996 Jun;20(6):1165–78

A glutamate/glutamine/aspartate/asparagine transport operon in Rhodobacter capsulatus. Zheng S, et al. **Mol Microbiol** 1996 Jun;20(5):1001–11

Sequence of a 189-kb segment of the chromosome of Rhodobacter capsulatus SB1003. Vlcek C, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9384–8

GROWTH & DEVELOPMENT

A [2Fe-2S] ferredoxin (FdVI) is essential for growth of the photosynthetic bacterium Rhodobacter capsulatus. Armengaud J, et al. **J Bacteriol** 1997 May;179(10):3304–9

METABOLISM

Polyhydroxyalkanoate production in Rhodobacter capsulatus: genes, mutants, expression, and physiology. Kranz RG, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3003–9

Positive selection systems for discovery of novel polyester biosynthesis genes based on fatty acid detoxification. Kranz RG, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3010–3

The amino-terminal portion of the Rieske iron-sulfur protein contributes to the ubihydroquinone oxidation site catalysis of the Rhodobacter capsulatus bc1 complex. Brasseur G, et al. **Biochemistry** 1997 Sep 30;36(39):11685–96

Site-directed mutations near the L-subunit D-helix of the purple bacterial reaction center: a partial model for the primary donor of photosystem II. Coleman WJ, et al. **Biochemistry** 1997 Feb 25;36(8):2178–87

pH-metric study of reaction centers from photosynthetic bacteria in micellular solutions: protonatable groups equilibrate with the aqueous bulk phase. Kálmán L, et al. **Biochemistry** 1997 Apr 15;36(15):4489–96

Antenna excited state decay kinetics establish primary electron transfer in reaction centers as heterogeneous. Laible PD, et al. **Biochemistry** 1997 Jul 22;36(29):8677–85

Conserved nonliganding residues of the Rhodobacter capsulatus Rieske iron-sulfur protein of the bc1 complex are essential for protein structure, properties of the [2Fe-2S] cluster, and communication with the quinone pool. Liebl U, et al. **Biochemistry** 1997 Sep 30; 36(39):11675–84

In bacterial reaction centers rapid delivery of the second proton to QB can be achieved in the absence of L212Glu. Miksovska J, et al. **Biochemistry** 1997 Oct 7; 36(40):12216–26

Demonstration that the BchH protein of Rhodobacter capsulatus activates S-adenosyl-L-methionine:magnesium protoporphyrin IX methyltransferase. Hinchigeri SB, et al. **FEBS Lett** 1997 May 5;407(3):337–42

A native electrostatic environment near Q(B) is not sufficient to ensure rapid proton delivery in photosynthetic reaction centers. Valerio-Lepiniec M, et al. **FEBS Lett** 1997 Apr 28;407(2):159–63

The hupTUV operon is involved in negative control of hydrogenase synthesis in Rhodobacter capsulatus. Elsen S, et al. **J Bacteriol** 1996 Sep;178(17):5174–81

Comparative characterization of SecA from the alpha-subclass purple bacterium Rhodobacter capsulatus and Escherichia coli reveals differences in membrane and precursor specificity. Helde R, et al. **J Bacteriol** 1997 Jun; 179(12):4003–12

Rhodobacter capsulatus CycH: a bipartite gene product with pleiotropic effects on the biogenesis of structurally different c-type cytochromes. Lang SE, et al. **J Bacteriol** 1996 Sep; 178(17):5279–90

HupUV proteins of Rhodobacter capsulatus can bind H2: evidence from the H-D exchange reaction. Vignais PM, et al. **J Bacteriol** 1997 Jan;179(1):290–2

DNA binding characteristics of CrtJ. A redox-responding repressor of bacteriochlorophyll, carotenoid, and light harvesting-II gene expression in Rhodobacter capsulatus. Ponnampalam SN, et al. **J Biol Chem** 1997 Jul 18; 272(29):18391–6

A thioreduction pathway tethered to the membrane for periplasmic cytochromes c biogenesis; in vitro and in vivo studies. Monika EM, et al. **J Mol Biol** 1997 Sep 5; 271(5):679–92

Purification and activities of the Rhodobacter capsulatus RpoN (sigma N) protein. Cannon W, et al. **Mol Microbiol** 1996 Jul;21(2):233–45

RHODOBACTER SPHAEROIDES

CHEMISTRY

Electrostatic influence of QA reduction on the IR vibrational mode of the 10a-ester C==O of HA demonstrated by mutations at residues Glu L104 and Trp L100 in reaction centers from Rhodobacter sphaeroides. Breton J, et al. **Biochemistry** 1997 Apr 15;36(15):4515–25

Temperature dependence of the Qy resonance Raman spectra of bacteriochlorophylls, the primary electron donor, and bacteriopheophytins in the bacterial photosynthetic reaction center. Cherepy NJ, et al. **Biochemistry** 1997 Jul 15;36(28):8559–66

Characterization of pheophytin ground states in Rhodobacter sphaeroides R26 photosynthetic reaction centers from multispin pheophytin enrichment and 2-D 13C MAS NMR dipolar correlation spectroscopy. Egorova-Zachernyuk TA, et al. **Biochemistry** 1997 Jun 17;36(24):7513–9

The role of betaArg-10 in the B800 bacteriochlorophyll and carotenoid pigment environment within the light-harvesting LH2 complex of Rhodobacter sphaeroides. Fowler GJS, et al. **Biochemistry** 1997 Sep 16; 36(37):11282–91

Influence of Asn/His L166 on the hydrogen-bonding pattern and redox potential of the primary donor of purple bacterial reaction centers. Ivancich A, et al. **Biochemistry** 1997 Mar 11;36(10):3027–36

Two distinct conformations of the primary electron donor in reaction centers from Rhodobacter sphaeroides revealed by ENDOR/TRIPLE-spectroscopy. Müh F, et al. **Biochemistry** 1997 Apr 8;36(14):4155–62

Functions of conserved tryptophan residues of the core light-harvesting complex of Rhodobacter sphaeroides. Sturgis JN, et al. **Biochemistry** 1997 Mar 11;36(10):2772–8

Probing native-like orientation of pigments in modified reaction centers from Rhodobacter sphaeroides R26 by linear dichroism. Meyer M, et al. **FEBS Lett** 1996 Sep 9; 393(1):131–4

Diphosphoryl lipid A from Rhodobacter sphaeroides inhibits complexes that form in vitro between lipopolysaccharide (LPS)-binding protein, soluble CD14, and spectrally pure LPS. Jarvis BW, et al. **Infect Immun** 1997 Aug;65(8):3011–6

Light-induced structural changes in photosynthetic reaction center: implications for mechanism of electron-proton transfer. Stowell MH, et al. **Science** 1997 May 2; 276(5313):812–6

Resonance Raman spectroscopy of 2H-labelled spheroidenes in petroleum ether and in the Rhodobacter sphaeroides reaction centre. Kok P, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Mar; 53A(3):381–92

ENZYMOLOGY

Cell-free activity of magnesium chelatase in Rhodobacter spheroides and Rhodobacter capsulatus. Gorchein A. **Biochem Soc Trans** 1997 Feb;25(1):82S

Factors determining electron-transfer rates in cytochrome c oxidase: studies of the FQ(I-391) mutant of the Rhodobacter sphaeroides enzyme. Adelroth P, et al. **Biochemistry** 1997 Sep 30;36(39):11787–96

FTIR study of conformational substates in the CO adduct of cytochrome c oxidase from Rhodobacter sphaeroides. Mitchell DM, et al. **Biochemistry** 1996 Dec 24; 35(51):16782–8

Site-directed mutagenesis of residues lining a putative proton transfer pathway in cytochrome c oxidase from Rhodobacter sphaeroides. Mitchell DM, et al. **Biochemistry** 1996 Oct 8;35(40):13089–93

Aspartate-407 in Rhodobacter sphaeroides cytochrome c oxidase is not required for proton pumping or manganese binding. Qian J, et al. **Biochemistry** 1997 Mar 4; 36(9):2539–43

Rhodobacter sphaeroides phosphoribulokinase: binary and ternary complexes with nucleotide substrate analogs and effectors. Runquist JA, et al. **Biochemistry** 1996 Nov 26; 35(47):15049–56

Nucleotide sequence of the genes, encoding the pentaheme cytochrome (dmsC) and the transmembrane protein (dmsB), involved in dimethyl sulfoxide respiration from Rhodobacter sphaeroides f. sp. denitrificans. Ujiiye T, et al. **Biochim Biophys Acta** 1996 Nov 12;1277(1–2):1–5

Fatty acids stimulate activity and restore respiratory control in a proton channel mutant of cytochrome c oxidase. Fetter J, et al. **FEBS Lett** 1996 Sep 16;393(2–3):155–60

Mutation in ntrC gene leading to the derepression of nitrogenase synthesis in Rhodobacter sphaeroides. Zinchenko V, et al. **FEMS Microbiol Lett** 1997 Feb 1; 147(1):57–61

The involvement of serine 175 and alanine 185 of cytochrome b of Rhodobacter sphaeroides cytochrome bc1 complex in interaction with iron-sulfur protein. Tian H, et al. **J Biol Chem** 1997 Sep 19;272(38):23722–8

Magnesium chelatase: association with ribosomes and mutant complementation studies identify barley subunit Xantha-G as a functional counterpart of Rhodobacter subunit BchD. Kannangara CG, et al. **Mol Gen Genet** 1997 Mar 18; 254(1):85–92

The roles of the two proton input channels in cytochrome c oxidase from Rhodobacter sphaeroides probed by the effects of site-directed mutations on time-resolved electrogenic intraprotein proton transfer. Konstantinov

AA, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19; 94(17):9085–90

GENETICS

5-Aminolevulinate production by Escherichia coli containing the Rhodobacter sphaeroides hemA gene. van der Werf MJ, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3560–6

The dmsR gene encoding a dimethyl sulfoxide-responsive regulator for expression of dmsCBA (dimethyl sulfoxide respiration genes) in Rhodobacter sphaeroides f. sp. denitrificans. Ujiiye T, et al. **Biochim Biophys Acta** 1997 Jul 17;1353(1):84–92

Mutation in ntrC gene leading to the derepression of nitrogenase synthesis in Rhodobacter sphaeroides. Zinchenko V, et al. **FEMS Microbiol Lett** 1997 Feb 1; 147(1):57–61

Characterization of the nitric oxide reductase-encoding region in Rhodobacter sphaeroides 2.4.3. Bartnikas TB, et al. **J Bacteriol** 1997 Jun;179(11):3534–40

Complex regulatory activities associated with the histidine kinase PrrB in expression of photosynthesis genes in Rhodobacter sphaeroides 2.4.1. Eraso JM, et al. **J Bacteriol** 1996 Dec;178(24):7037–46

Analysis of the cbbXYZ operon in Rhodobacter sphaeroides. Gibson JL, et al. **J Bacteriol** 1997 Feb;179(3):663–9

Molecular genetic analysis suggesting interactions between AppA and PpsR in regulation of photosynthesis gene expression in Rhodobacter sphaeroides 2.4.1. Gomelsky M, et al. **J Bacteriol** 1997 Jan;179(1):128–34

Analysis of the role of the nnrR gene product in the response of Rhodobacter sphaeroides 2.4.1 to exogenous nitric oxide. Kwiatkowski AV, et al. **J Bacteriol** 1997 Sep; 179(17):5618–20

Cloning and characterization of two groESL operons of Rhodobacter sphaeroides: transcriptional regulation of the heat-induced groESL operon. Lee WT, et al. **J Bacteriol** 1997 Jan;179(2):487–95

Evidence for the role of redox carriers in photosynthesis gene expression and carotenoid biosynthesis in Rhodobacter sphaeroides 2.4.1. O'Gara JP, et al. **J Bacteriol** 1997 Mar; 179(6):1951–61

Characterization and regulation of the gene encoding nitrite reductase in Rhodobacter sphaeroides 2.4.3. Tosques IE, et al. **J Bacteriol** 1997 Feb;179(4):1090–5

Expression of the gltP gene of Escherichia coli in a glutamate transport-deficient mutant of Rhodobacter sphaeroides restores chemotaxis to glutamate. Jacobs MH, et al. **Mol Microbiol** 1995 Nov;18(4):641–7

Nucleotide sequence and transcriptional analysis of the flanking region of the gene (spb) for the trans-acting factor that controls light-mediated expression of the puf operon in Rhodobacter sphaeroides. Mizoguchi H, et al. **Plant Cell Physiol** 1997 May;38(5):558–67

GROWTH & DEVELOPMENT

Thioredoxin is essential for Rhodobacter sphaeroides growth by aerobic and anaerobic respiration. Pasternak C, et al. **Microbiology** 1997 Jan;143 (Pt 1):83–91

METABOLISM

Accumulation of sulfoquinovosyl-1-O-dihydroxyacetone in a sulfolipid-deficient mutant of Rhodobacter sphaeroides inactivated in sqdC. Rossak M, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):219–30

Temperature-dependent behavior of bacteriochlorophyll and bacteriopheophytin in the photosynthetic reaction center from Rhodobacter sphaeroides. Ivancich A, et al. **Biochemistry** 1997 Mar 18;36(11):3242–53

pH-metric study of reaction centers from photosynthetic bacteria in micellular solutions: protonatable groups equilibrate with the aqueous bulk phase. Kálmán L, et al. **Biochemistry** 1997 Apr 15;36(15):4489–96

Excitation energy transfer between the B850 and B875 antenna complexes of Rhodobacter sphaeroides. Nagarajan V, et al. **Biochemistry** 1997 Feb 25;36(8):2300–6

Influence of iron-removal procedures on sequential electron transfer in photosynthetic bacterial reaction centers studied by transient EPR spectroscopy. Utschig LM, et al. **Biochemistry** 1997 Jul 15;36(28):8548–58

A new pathway for transmembrane electron transfer in photosynthetic reaction centers of Rhodobacter sphaeroides not involving the excited special pair. Van Brederode ME, et al. **Biochemistry** 1997 Jun 10; 36(23):6855–61

Primary electron transfer kinetics in membrane-bound Rhodobacter sphaeroides reaction centers: a global and target analysis. van Stokkum IH, et al. **Biochemistry** 1997 Sep 23;36(38):11360–8

Reactions of isocytochrome c2 in the photosynthetic electron transfer chain of Rhodobacter sphaeroides. Witthuhn VC Jr, et al. **Biochemistry** 1997 Jan 28;36(4):903–11

Polymer ultrathin films with immobilized photosynthetic reaction center proteins. Kalabina NA, et al. **Biochim Biophys Acta** 1996 Oct 23;1284(2):138–42

Kinetics of H+ ion binding by the P+QA-state of bacterial photosynthetic reaction centers: rate limitation within the protein. Maróti P, et al. **Biophys J** 1997 Jul;73(1):367–81

Coupling of cytochrome and quinone turnovers in the photocycle of reaction centers from the photosynthetic bacterium Rhodobacter sphaeroides. Osváth S, et al. **Biophys J** 1997 Aug;73(2):972–82

Solubility diagram of the Rhodobacter sphaeroides reaction center as a function of PEG concentration. Gaucher JF, et al. **FEBS Lett** 1997 Jan 20;401(2-3):113–6

Temperature dependence of the electrogenic reaction in the QB site of the Rhodobacter sphaeroides photosynthetic reaction center: the QA-QB --> QAQB- transition. Gopta OA, et al. **FEBS Lett** 1997 Aug 4;412(3):490–4

Anaerobic carotenoid biosynthesis in Rhodobacter sphaeroides 2.4.1: H2O is a source of oxygen for the 1-methoxy group of spheroidene but not for the 2-oxo group of spheroidenone. Yeliseev AA, et al. **FEBS Lett** 1997 Feb 10;403(1):10–4

Biosynthesis of diacylglyceryl-N,N,N-trimethylhomoserine in Rhodobacter sphaeroides and evidence for lipid-linked N methylation. Hofmann M, et al. **J Bacteriol** 1996 Nov; 178(21):6140–4

Sequential 1H and 15N NMR resonance assignment and secondary structure of ferrocytochrome c2 from Rhodobacter sphaeroides. Gans P, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1131–42

Requirement of nitric oxide for induction of genes whose products are involved in nitric oxide metabolism in Rhodobacter sphaeroides 2.4.3. Kwiatkowski AV, et al. **J Biol Chem** 1996 Oct 4;271(40):24382–8

Expression of the gltP gene of Escherichia coli in a glutamate transport-deficient mutant of Rhodobacter sphaeroides restores chemotaxis to glutamate. Jacobs MH, et al. **Mol Microbiol** 1995 Nov;18(4):641–7

Triplet energy transfer between the primary donor and carotenoids in Rhodobacter sphaeroides R-26.1 reaction centers incorporated with spheroidene analogs having different extents of pi-electron conjugation. Farhoosh R, et al. **Photochem Photobiol** 1997 Jul;66(1):97–104

Triplet state energy transfer between the primary donor and the carotenoid in Rhodobacter sphaeroides R-26.1 reaction centers exchanged with modified bacteriochlorophyll pigments and reconstituted with spheroidene. Frank HA, et al. **Photochem Photobiol** 1996 Nov;64(5):823–31

Glutamate transport in Rhodobacter sphaeroides is mediated by a novel binding protein-dependent secondary transport system. Jacobs MH, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12786–90

A global two component signal transduction system that integrates the control of photosynthesis, carbon dioxide assimilation, and nitrogen fixation. Joshi HM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14515–20

Ultrafast exciton relaxation in the B850 antenna complex of Rhodobacter sphaeroides. Nagarajan V, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13774–9

[Spatial structure of light-harvesting chlorophyll-protein complex B800-850 from the photosynthesizing bacterium Rhodobacter sphaeroides] Klevanik AV. **Mol Biol (Mosk)** 1996 Sep-Oct;30(5):1209–18 **(Rus)**

PHYSIOLOGY

The Rhodobacter sphaeroides flagellar motor is a variable-speed rotor. Packer HL, et al. **FEBS Lett** 1997 Jun 2;409(1):37–40

Differential carotenoid composition of the B875 and B800-850 photosynthetic antenna complexes in Rhodobacter sphaeroides 2.4.1: involvement of spheroidene and spheroidenone in adaptation to changes in light intensity and oxygen availability. Yeliseev AA, et al. **J Bacteriol** 1996 Oct;178(20):5877–83

The behavioural response of anaerobic Rhodobacter sphaeroides to temporal stimuli. Packer HL, et al. **Microbiology** 1996 Mar;142 (Pt 3):593–9

Characterization of the chemotaxis protein CheW from Rhodobacter sphaeroides and its effect on the behaviour of Escherichia coli. Hamblin PA, et al. **Mol Microbiol** 1997 Apr;24(1):41–51

Eubacterial signal transduction by ligands of the mammalian peripheral benzodiazepine receptor complex [see comments] Donohue TJ. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4821–2 (18 ref.). Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):5101–6.

A mammalian mitochondrial drug receptor functions as a bacterial "oxygen" sensor [see comments] Yeliseev AA, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5101–6 . Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):4821–2.

RADIATION EFFECTS

Photoresponses in Rhodobacter sphaeroides: role of photosynthetic electron transport. Grishanin RN, et al. **J Bacteriol** 1997 Jan;179(1):24–30

RHODOCOCCUS

Relationship between induction of macrophage chemotactic factors and formation of granulomas caused by mycoloyl glycolipids from Rhodococcus ruber (Nocardia rubra). Matsunaga I, et al. **J Biochem (Tokyo)** 1996 Sep; 120(3):663–70

[Generalized rhodococcosis of fatal outcome in a patient with AIDS (letter)] Steineur MP, et al. **Presse Med** 1996 Sep 7;25(25):1166 **(Fre)**

CLASSIFICATION

A phylogenetic analysis of aerobic polychlorinated biphenyl-degrading bacteria. Williams WA, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):207–10

Reclassification of Nocardioides simplex ATCC 13260, ATCC 19565, and ATCC 19566 as Rhodococcus erythropolis. Yoon JH, et al. **Int J Syst Bacteriol** 1997 Jul; 47(3):904–7

ENZYMOLOGY

Thiocarbamate herbicide-inducible nonheme haloperoxidase of Rhodococcus erythropolis NI86/21. De Schrijver A, et al. **Appl Environ Microbiol** 1997 May;63(5):1911–6

Purification and characterization of limonoate dehydrogenase from Rhodococcus fascians. Humanes L, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3385–9

Location, catalytic activity, and subunit composition of NAD-reducing hydrogenases of some Alcaligenes strains and Rhodococcus opacus MR22. Grzeszik C, et al. **Arch Microbiol** 1997 Feb-Mar;167(2-3):172–6

Resonance Raman evidence that photodissociation of nitric oxide from the non-heme iron center activates nitrile hydratase from Rhodococcus sp. N-771. Noguchi T, et al. **Biochemistry** 1996 Dec 24;35(51):16777–81

Subunit topology of the Rhodococcus proteasome. Zühl F, et al. **FEBS Lett** 1997 Jan 2;400(1):83–90

Classification of catechol 1,2-dioxygenase family: sequence analysis of a gene for the catechol 1,2-dioxygenase showing high specificity for methylcatechols from Gram+ aniline-assimilating Rhodococcus erythropolis AN-13. Murakami S, et al. **Gene** 1997 Jan 31;185(1):49–54

Gene overexpression, purification, and identification of a desulfurization enzyme from Rhodococcus sp. strain IGTS8 as a sulfide/sulfoxide monooxygenase. Lei B, et al. **J Bacteriol** 1996 Oct;178(19):5699–705

Molecular cloning, expression, and sequence analysis of the endoglycoceramidase II gene from Rhodococcus species strain M-777. Izu H, et al. **J Biol Chem** 1997 Aug 8; 272(32):19846–50

Studies on the isopropylbenzene 2,3-dioxygenase and the 3-isopropylcatechol 2,3-dioxygenase genes encoded by the linear plasmid of Rhodococcus erythropolis BD2. Kesseler M, et al. **Microbiology** 1996 Nov;142 (Pt 11):3241–51

Crystal structure of nitrile hydratase reveals a novel iron centre in a novel fold. Huang W, et al. **Structure** 1997 May 15;5(5):691–9

GENETICS

Conservation of plasmid-encoded dibenzothiophene desulfurization genes in several rhodococci. Denis-Larose C, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2915–9

Thiocarbamate herbicide-inducible nonheme haloperoxidase of Rhodococcus erythropolis NI86/21. De Schrijver A, et al. **Appl Environ Microbiol** 1997 May;63(5):1911–6

Three of the seven bphC genes of Rhodococcus erythropolis TA421, isolated from a termite ecosystem, are located on an indigenous plasmid associated with biphenyl degradation. Kosono S, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3282–5

Molecular analysis of the Rhodococcus sp. strain H1 her gene and characterization of its product, a heroin esterase, expressed in Escherichia coli. Rathbone DA, et al. **Appl Environ Microbiol** 1997 May;63(5):2062–6

Molecular aspects of pesticide degradation by microorganisms. Kumar S, et al. **Crit Rev Microbiol** 1996; 22(1):1–26 (129 ref.)

Further sequence analysis of the DNA regions with the Rhodococcus 20S proteasome structural genes reveals extensive homology with Mycobacterium leprae. Nagy I, et al. **DNA Seq** 1997;7(3-4):225–8

The bphDEF meta-cleavage pathway genes involved in biphenyl/polychlorinated biphenyl degradation are located on a linear plasmid and separated from the initial bphACB genes in Rhodococcus sp. strain RHA1. Masai E, et al. **Gene** 1997 Mar 10;187(1):141–9

Classification of catechol 1,2-dioxygenase family: sequence analysis of a gene for the catechol 1,2-dioxygenase showing high specificity for methylcatechols from Gram+ aniline-assimilating Rhodococcus erythropolis AN-13. Murakami S, et al. **Gene** 1997 Jan 31;185(1):49–54

Characterization of catechol catabolic genes from Rhodococcus erythropolis 1CP. Eulberg D, et al. **J Bacteriol** 1997 Jan;179(2):370–81

Characterization of the genes encoding a receptor-like histidine kinase and a cognate response regulator from a biphenyl/polychlorobiphenyl-degrading bacterium, Rhodococcus sp. strain M5. Labbé D, et al. **J Bacteriol** 1997 Apr;179(8):2772–6

Genetic analysis of the dsz promoter and associated regulatory regions of Rhodococcus erythropolis IGTS8. Li MZ, et al. **J Bacteriol** 1996 Nov;178(22):6409–18

Heterologous expression of biphenyl dioxygenase-encoding genes from a gram-positive broad-spectrum polychlorinated biphenyl degrader and characterization of chlorobiphenyl oxidation by the gene products. McKay DB, et al. **J Bacteriol** 1997 Mar;179(6):1924–30

Transposition of the IS21-related element IS1415 in Rhodococcus erythropolis. Nagy I, et al. **J Bacteriol** 1997 Jul;179(14):4635–8

Differentiation of Rhodococcus species by ribotyping. Jorks S. **J Basic Microbiol** 1996;36(6):399–406

Genes encoding the NAD-reducing hydrogenase of Rhodococcus opacus MR11. Grzeszik C, et al. **Microbiology** 1997 Apr;143 (Pt 4):1271–86

RHODOCOCCUS

Studies on the isopropylbenzene 2,3-dioxygenase and the 3-isopropylcatechol 2,3-dioxygenase genes encoded by the linear plasmid of Rhodococcus erythropolis BD2. Kesseler M, et al. **Microbiology** 1996 Nov;142 (Pt 11):3241-51

The plasmid-located haloalkane dehalogenase gene from Rhodococcus rhodochrous NCIMB 13064. Kulakova AN, et al. **Microbiology** 1997 Jan;143 (Pt 1):109-15

Prevention of insect-borne disease: an approach using transgenic symbiotic bacteria. Durvasula RV, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3274-8

A novel transporter involved in cobalt uptake. Komeda H, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):36-41

Transcriptional regulation of the Rhodococcus rhodochrous J1 nitA gene encoding a nitrilase. Komeda H, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10572-7

GROWTH & DEVELOPMENT

Growth of rhodococcus S1 on anthracene. Tongpim S, et al. **Can J Microbiol** 1996 Mar;42(3):289-94

ISOLATION & PURIFICATION

Isolation of Rhodococcus rhodochrous NCIMB13064 derivatives with new biodegradative abilities. Kulakova AN, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):227-31

Bacteremia due to Gordona sputi in an immunocompromised patient [published erratum appears in J Clin Microbiol 1996 Dec;34(12):3258] Riegel P, et al. **J Clin Microbiol** 1996 Aug;34(8):2045-7

METABOLISM

Improvement of lysine production by analog-sensitive and auxotroph mutants of the acetylene-utilizing bacterium Gordona bronchialis (Rhodococcus bronchialis). Kyriacou A, et al. **Appl Biochem Biotechnol** 1997 Jun;66(3):281-9

Conservation of plasmid-encoded dibenzothiophene desulfurization genes in several rhodococci. Denis-Larose C, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2915-9

Biosynthesis of a cyclic tautomer of (3-methylmaleyl)acetone from 4-hydroxy-3,5-dimethylbenzoate by Pseudomonas sp. HH35 but not by Rhodococcus rhodochrous N75. Cain RB, et al. **Biochem Biophys Res Commun** 1997 Sep 8; 238(1):197-201

A flavin reductase stimulates DszA and DszC proteins of Rhodococcus erythropolis IGTS8 in vitro. Xi L, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):73-5

Isolation of Rhodococcus rhodochrous NCIMB13064 derivatives with new biodegradative abilities. Kulakova AN, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):227-31

Amide metabolism: a putative ABC transporter in Rhodococcus sp. R312. Chebrou H, et al. **Gene** 1996 Dec 5;182(1-2):215-8

A 3-(3-hydroxyphenyl)propionic acid catabolic pathway in Rhodococcus globerulus PWD1: cloning and characterization of the hpp operon. Barnes MR, et al. **J Bacteriol** 1997 Oct;179(19):6145-53

A chemotaxonomic study of the lipoglycans of Rhodococcus rhodnii N445 (NCIMB 11279). Flaherty C, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):11-9

[The degradation of plasticizers by Rhodococcus erythropolis 40F] Aleshchenkova ZM, et al. **Mikrobiol Z** 1996 Jul-Aug;58(4):34-8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Bacterial degradation of emulsified crude oil and the effect of various surfactants. Bruheim P, et al. **Can J Microbiol** 1997 Jan;43(1):17-22

RHODOCOCCUS EQUI

Rhodococcus equi infections: antibiotic therapy and relapses [letter; comment] Giacometti A, et al. **AIDS** 1997 Jan; 11(1):120-1. Comment on: AIDS 1996 Apr;10(4):359-62.

Rhodococcus equi and Arcanobacterium haemolyticum: two "coryneform" bacteria increasingly recognized as agents of human infection. Linder R. **Emerg Infect Dis** 1997 Apr-Jun; 3(2):145-53 (43 ref.)

Acute mediastinitis due to Rhodococcus equi in a patient with human immunodeficiency virus infection. Casado JL, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):241-4

Serologic responses to Rhodococcus equi in individuals with and without human immunodeficiency virus infection. Vullo V, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jul; 15(7):588-94

Radiological findings in nine AIDS patients with Rhodococcus equi pneumonia. Wicky S, et al. **Eur Radiol** 1996;6(6):826-30

Chronic pneumonia caused by Rhodococcus equi in a patient without impaired immunity. Linares MJ, et al. **Eur Respir J** 1997 Jan;10(1):248-50

Rhodococcus equi causing bacteraemia and pneumonia in a pulmonary transplant patient [letter] Le Lay G, et al. **J Infect** 1996 Nov;33(3):239-40

Optimal treatment regimen for CAPD peritonitis caused by Rhodococcus species [letter; comment] Tang S, et al. **Nephrol Dial Transplant** 1997 May;12(5):1080-1. Comment on: Nephrol Dial Transplant 1996 Nov;11(11):2340-1.

Dense Rhodococcus cerebral abscesses in an HIV-positive patient. Perrymore WD, et al. **Neuroradiology** 1997 Aug; 39(8):581-2

Rhodococcus equi pneumonia in a patient with occult HIV infection: successful therapy. Volpino P, et al. **Panminerva Med** 1997 Mar;39(1):61-3

Empyema with malakoplakic-like lesions by Rhodococcus equi as a presentation of HIV infection. Calore EE, et al. **Pathologica** 1995 Oct;87(5):525-27

Rhodococcus equi pneumonia. Johnson DH, et al. **Semin Respir Infect** 1997 Mar;12(1):57-60 (23 ref.)

Spontaneous resolution of rhodococcal pulmonary infection in a liver transplant recipient. Schilz RJ, et al. **South Med J** 1997 Aug;90(8):851-4 (33 ref.)

Rhodococcus equi: an emerging opportunistic pathogen. Mosser DM, et al. **Trends Microbiol** 1996 Jan;4(1):29-33 (50 ref.)

Comparison of tracheal aspiration with other tests for diagnosis of Rhodococcus equi pneumonia in foals. Anzai T, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):335-45

Immunoprophylaxis of Rhodococcus equi pneumonia in foals. Becú T, et al. **Vet Microbiol** 1997 Jun 16; 56(3-4):193-204

Clinical manifestations, diagnosis, treatment, and prevention of Rhodococcus equi infections in foals. Giguère S, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):313-34 (97 ref.)

Immunity to Rhodococcus equi. Hines SA, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):177-85 (49 ref.)

Pathogenesis and virulence of Rhodococcus equi. Hondalus MK. **Vet Microbiol** 1997 Jun 16;56(3-4):257-68 (77 ref.)

Equine herpesvirus type 2 (EHV-2) as a predisposing factor for Rhodococcus equi pneumonia in foals: prevention of the bifactorial disease with EHV-2 immunostimulating complexes. Nordengrahn A, et al. **Vet Microbiol** 1996 Jul; 51(1-2):55-68

Serum antibody responses of foals to virulence-associated 15- to 17-kilodalton antigens of Rhodococcus equi. Takai S, et al. **Vet Microbiol** 1996 Sep;52(1-2):63-71

Epidemiology of Rhodococcus equi infections: a review. Takai S. **Vet Microbiol** 1997 Jun 16;56(3-4):167-76 (49 ref.)

Prevention of Rhodococcus equi pneumonia of foals using two different inactivated vaccines. Varga J, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):205-12

[Rhodococcus equi--a newly recognized opportunistic pathogen in man] Votava M, et al. **Epidemiol Mikrobiol Imunol** 1997 May;46(2):58-66 (58 ref.) (Eng. Abstr.) **(Cze)**

[Current concepts and implications for future research on Rhodococcus equi] Takai S. **Nippon Saikingaku Zasshi** 1996 Feb;51(2):485-96 (31 ref.) **(Jpn)**

CHEMISTRY

Macroamphiphilic cell envelope components of Rhodococcus equi and closely related bacteria. Sutcliffe IC. **Vet Microbiol** 1997 Jun 16;56(3-4):287-99 (43 ref.)

CLASSIFICATION

[Characterization of Rhodococcus equi isolates from horse and man] Fuhrmann C, et al. **Berl Munch Tierarztl Wochenschr** 1997 Feb;110(2):54-9 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Emergence of rifampin-resistant Rhodococcus equi in an infected foal. Takai S, et al. **J Clin Microbiol** 1997 Jul; 35(7):1904-8

GENETICS

Monooxygenase-like sequence of a Rhodococcus equi gene conferring increased resistance to rifampin by inactivating this antibiotic. Andersen SJ, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):218-21

Attempts to find phenotypic markers of the virulence plasmid of Rhodococcus equi. De La Peña-Moctezuma A, et al. **Can J Vet Res** 1996 Jan;60(1):29-33

Prevalence of the virulence-associated gene of Rhodococcus equi in isolates from infected foals. Haites RE, et al. **J Clin Microbiol** 1997 Jun;35(6):1642-4

Restriction enzyme analysis of the virulence plasmids of VapA-positive Rhodococcus equi strains isolated from humans and horses. Nicholson VM, et al. **J Clin Microbiol** 1997 Mar;35(3):738-40

GROWTH & DEVELOPMENT

Studies on the rod-coccus life cycle of Rhodococcus equi. Fuhrmann C, et al. **Zentralbl Veterinarmed [B]** 1997 Jul; 44(5):287-94

IMMUNOLOGY

Use of Rhodococcus equi virulence-associated protein for immunization of foals against R equi pneumonia. Prescott JF, et al. **Am J Vet Res** 1997 Apr;58(4):356-9

Failure of hyperimmune plasma to prevent pneumonia caused by Rhodococcus equi in foals. Hurley JR, et al. **Aust Vet J** 1995 Nov;72(11):418-20

Rhodococcal pneumonia: humoral versus cell-mediated immunity [editorial; comment] Hines SA, et al. **Equine Vet J** 1996 Sep;28(5):339-40. Comment on: Equine Vet J 1996 Sep;28(5):344-9.

Use of a virulence-associated protein based enzyme-linked immunosorbent assay for Rhodococcus equi serology in horses [see comments] Prescott JF, et al. **Equine Vet J** 1996 Sep;28(5):344-9. Comment in: Equine Vet J 1996 Sep;28(5):339-40.

Protective effect against Rhodococcus equi infection in mice of IgG purified from horses vaccinated with virulence associated protein (VapA)-enriched antigens. Fernandez AS, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):187-92

Antigenic analysis of Rhodococcus equi preparations using different horse sera. Fontanals AM, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):247-55

In vitro production of tumor necrosis factor-alpha, interleukin-6 and interleukin-8 from normal human peripheral blood mononuclear cells stimulated by Rhodococcus equi. Pece S, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):277-85

Assessment of the immunogenic potential of Rhodococcus equi virulence associated protein (VapA) in mice. Prescott JF, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):213-25

[Structure and antigenicity of the major glycolipid from opportunistic bacteria Rhodococcus equi] Szponar B, et al. **Postepy Hig Med Dosw** 1996;50(5):533-5 (Eng. Abstr.) **(Pol)**

ISOLATION & PURIFICATION

Long survival of a patient with AIDS in spite of previous Rhodococcus equi infection [letter; comment] Schneider E, et al. **Acta Clin Belg** 1997;52(1):50. Comment on: Acta Clin Belg 1996;51(2):101-5.

Pulmonary malacoplakia associated with Rhodococcus equi infection in an AIDS patient. Report of a case with diagnosis by fine needle aspiration. Sughayer M, et al. **Acta Cytol** 1997 Mar-Apr;41(2):507-12

Rhodococcus or mycobacterium? An example of misdiagnosis in HIV infection [letter] Macías J, et al. **AIDS** 1997 Feb;11(2):253-4

Poststenotic cavitating pneumonia due to Rhodococcus equi in HIV infection. Sutor GC, et al. **AIDS** 1996 Mar; 10(3):339-40

Role of CD4+, CD8+ and double negative T-cells in the protection of SCID/beige mice against respiratory challenge with Rhodococcus equi. Ross TL, et al. **Can J Vet Res** 1996 Jul;60(3):186-92

Extra-pulmonary Rhodococcus equi in a thoroughbred foal. Nay TS. **Can Vet J** 1996 Oct;37(10):623-4

Radiologic features of Rhodococcus equi pneumonia in AIDS. Muntaner L, et al. **Eur J Radiol** 1997 Jan; 24(1):66-70

Isolation of virulent and intermediately virulent Rhodococcus equi from soil and sand on parks and yards in Japan. Takai S, et al. **J Vet Med Sci** 1996 Jul;58(7):669-72

Rhodococcus equi in CAPD-associated peritonitis treated with azithromycin [see comments] Hoque S, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2340-1. Comment in: Nephrol Dial Transplant 1997 May;12(5):1080-1.

Rhodococcus equi infection in HIV-positive subjects: a retrospective analysis of 24 cases. Arlotti M, et al. **Scand J Infect Dis** 1996;28(5):463-7

[Review of 105 cases of isolation of Rhodococcus equi in humans] Votava M, et al. **Cas Lek Cesk** 1997 Jan 22; 136(2):51-3 (29 ref.) (Eng. Abstr.) **(Cze)**

METABOLISM

Attempts to find phenotypic markers of the virulence plasmid of Rhodococcus equi. De La Peña-Moctezuma A, et al. **Can J Vet Res** 1996 Jan;60(1):29-33

Oxidation of macrophage membrane cholesterol by intracellular Rhodococcus equi. Linder R, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):269-76

PATHOGENICITY

Cytologic features of pulmonary malakoplakia related to Rhodococcus equi in an immunocompromised host. van Hoeven KH, et al. **Diagn Cytopathol** 1996 Nov;15(4):325-8

Virulent and avirulent Rhodococcus equi infection in T-cell deficient athymic nude mice: pathologic, bacteriologic and immunologic responses. Madarame H, et al. **FEMS Immunol Med Microbiol** 1997 Apr;17(4):251-62

Prevalence of the virulence-associated gene of Rhodococcus equi in isolates from infected foals. Haites RE, et al. **J Clin Microbiol** 1997 Jun;35(6):1642-4

Restriction enzyme analysis of the virulence plasmids of VapA-positive Rhodococcus equi strains isolated from humans and horses. Nicholson VM, et al. **J Clin Microbiol** 1997 Mar;35(3):738-40

Isolation of virulent and intermediately virulent Rhodococcus equi from soil and sand on parks and yards in Japan. Takai S, et al. **J Vet Med Sci** 1996 Jul;58(7):669-72

Expression of virulence-associated antigens of Rhodococcus equi is regulated by temperature and pH. Takai S, et al. **Microbiol Immunol** 1996;40(8):591-4

Pathogenicity and virulence of Rhodococcus equi in foals following intratracheal challenge. Wada R, et al. **Vet Microbiol** 1997 Jun 16;56(3-4):301-12

Relationship between haemagglutination and HeLa-cell adherence of Rhodococcus equi. Bern D, et al. **Zentralbl Veterinarmed [B]** 1996 May;43(3):147-53

ULTRASTRUCTURE

Macroamphiphilic cell envelope components of Rhodococcus equi and closely related bacteria. Sutcliffe IC. **Vet Microbiol** 1997 Jun 16;56(3-4):287-99 (43 ref.)

RHODOPSEUDOMONAS

CHEMISTRY

An NMR study of the 7Fe-8S ferredoxin from Rhodopseudomonas palustris and reinterpretation of data on similar systems. Bertini I, et al. **Biochemistry** 1997 Mar 25;36(12):3570-9

Membrane lipids of Rhodopseudomonas viridis. Linscheid M, et al. **Biochim Biophys Acta** 1997 Aug 16; 1347(2-3):151-63

Apoprotein structure in the LH2 complex from Rhodopseudomonas acidophila strain 10050: modular assembly and protein pigment interactions. Prince SM, et al. **J Mol Biol** 1997 May 2;268(2):412-23

Pigment-pigment interactions and energy transfer in the antenna complex of the photosynthetic bacterium Rhodopseudomonas acidophila. Freer A, et al. **Structure** 1996 Apr 15;4(4):449-62

CLASSIFICATION

Transfer of the bacteriochlorophyll b-containing phototrophic bacteria Rhodopseudomonas viridis and Rhodopseudomonas sulfoviridis to the genus Blastochloris gen. nov. Hiraishi A. **Int J Syst Bacteriol** 1997 Jan; 47(1):217-9

DRUG EFFECTS

Effect of pesticides on the diazotrophic growth and nitrogenase activity of purple nonsulfur bacteria. Chalam AV, et al. **Bull Environ Contam Toxicol** 1997 Mar; 58(3):463-8

ENZYMOLOGY

Purification, molecular cloning and expression in Escherichia coli of homospermidine synthase from Rhodopseudomonas viridis. Tholl D, et al. **Eur J Biochem** 1996 Sep 1; 240(2):373-9

Structural and functional analysis of the phosphoenolpyruvate carboxylase gene from the purple nonsulfur bacterium Rhodopseudomonas palustris No. 7. Inui M, et al. **J Bacteriol** 1997 Aug;179(15):4942-5

GENETICS

Cloning of dnaK and dnaJ homologous genes from a purple non-sulfur bacterium Rhodopseudomonas species. Momma K, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):235-9

4-hydroxybenzoyl coenzyme A reductase (dehydroxylating) is required for anaerobic degradation of 4-hydroxybenzoate by Rhodopseudomonas palustris and shares features with molybdenum-containing hydroxylases. Gibson J, et al. **J Bacteriol** 1997 Feb;179(3):634-42

A cluster of bacterial genes for anaerobic benzene ring biodegradation. Egland PG, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6484-9

METABOLISM

Reductive dehalogenation of halocarboxylic acids by the phototrophic genera Rhodospirillum and Rhodopseudomonas. McGrath JE, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3333-5

Calculated coupling of electron and proton transfer in the photosynthetic reaction center of Rhodopseudomonas viridis. Lancaster CR, et al. **Biophys J** 1996 Jun; 70(6):2469-92

Very fast electron transfer from cytochrome to the bacterial photosynthetic reaction center at low temperature. Ortega JM, et al. **FEBS Lett** 1997 Jan 20;401(2-3):153-7

A cluster of bacterial genes for anaerobic benzene ring biodegradation. Egland PG, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6484-9

RHODOPSEUDOMONAS CAPSULATUS see **RHODOBACTER CAPSULATUS**

RHODOPSEUDOMONAS SPHAEROIDES see **RHODOBACTER SPHAEROIDES**

RHODOPSIN

A rhodopsin-based model for melatonin recognition at its G protein-coupled receptor. Navajas C, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):173-83

Steric hindrance between chromophore substituents as the driving force of rhodopsin photoisomerization: 10-methyl-13-demethyl retinal containing rhodopsin. Koch D, et al. **Photochem Photobiol** 1997 Jan;65(1):181-6

[Physiological roles of rhodopsin phosphorylation and dephosphorylation and its relationship with retinitis pigmentosa] Oguro H. **Nippon Ganka Gakkai Zasshi** 1996 Aug;100(8):575-81 (49 ref.) (Eng. Abstr.) **(Jpn)**

AGONISTS

Partial agonist activity of 11-cis-retinal in rhodopsin mutants. Han M, et al. **J Biol Chem** 1997 Sep 12;272(37):23081-5

ANALOGS & DERIVATIVES

Studies of Rh1 metarhodopsin stabilization in wild-type Drosophila and in mutants lacking one or both arrestins. Kiselev A, et al. **Biochemistry** 1997 Feb 25;36(8):2188-96

Modulation of the metarhodopsin I/metarhodopsin II equilibrium of bovine rhodopsin by ionic strength--evidence for a surface-charge effect. Delange F, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):174-80

Ultraviolet resonance Raman evidence for the absence of tyrosinate in octopus rhodopsin and the participation of Trp residues in the transition to acid metarhodopsin. Hashimoto S, et al. **FEBS Lett** 1996 Dec 2;398(2-3):239-42

Metarhodopsin III formation and decay kinetics: comparison of bovine and human rhodopsin. Lewis JW, et al. **Vision Res** 1997 Jan;37(1):1-8

ANALYSIS

Identification and localization of a possible rhodopsin in the echinoderms Asterias forbesi (Asteroidea) and Ophioderma brevispinum (Ophiuroidea). Johnsen S. **Biol Bull** 1997 Aug; 193(1):97-105

Vitamin A, visual pigments, and visual receptors in Drosophila. Lee RD, et al. **Microsc Res Tech** 1996 Dec 15;35(6):418-30 (96 ref.)

Dual immunodetection and hybridisation in situ of opsin mRNA and rhodopsin protein in retinal sections. Foreman DM, et al. **Ophthalmic Res** 1996;28(5):296-302

BIOSYNTHESIS

High-level inducible expression of visual pigments in transfected cells. Kazmi MA, et al. **Biotechniques** 1996 Aug; 21(2):304-11

A new rhodopsin in R8 photoreceptors of Drosophila: evidence for coordinate expression with Rh3 in R7 cells. Papatsenko D, et al. **Development** 1997 May;124(9):1665-73

Site-directed mutagenesis of highly conserved amino acids in the first cytoplasmic loop of Drosophila Rh1 opsin blocks rhodopsin synthesis in the nascent state. Bentrop J, et al. **EMBO J** 1997 Apr 1;16(7):1600-9

Structure and function in rhodopsin: expression of functional mammalian opsin in Saccharomyces cerevisiae [published erratum appears in Proc Natl Acad Sci U S A 1997 Apr 1;94(7):3481] Mollaaghababa R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11482-6

Structure and function in rhodopsin: high level expression of a synthetic bovine opsin gene and its mutants in stable mammalian cell lines. Reeves PJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11487-92

CHEMISTRY

4-Hydroxynonenal interaction with rhodopsin. van Kuijk FJ. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):275-9

Structural features and light-dependent changes in the cytoplasmic interhelical E-F loop region of rhodopsin: a site-directed spin-labeling study. Altenbach C, et al. **Biochemistry** 1996 Sep 24;35(38):12470-8

Properties of early photolysis intermediates of rhodopsin are affected by glycine 121 and phenylalanine 261. Jäger S, et al. **Biochemistry** 1997 Sep 30;36(39):11804-10

Retinal analog study of the role of steric interactions in the excited state isomerization dynamics of rhodopsin. Kochendoerfer GG, et al. **Biochemistry** 1996 Dec 17; 35(50):16230-40

Water and peptide backbone structure in the active center of bovine rhodopsin. Nagata T, et al. **Biochemistry** 1997 May 20;36(20):6164-70

Structural dynamics of water and the peptide backbone around the Schiff base associated with the light-activated process of octopus rhodopsin. Nishimura S, et al. **Biochemistry** 1997 Jan 28;36(4):864-70

Structural changes in the peptide backbone in complex formation between activated rhodopsin and transducin studied by FT1R spectroscopy. Nishimura S, et al. **Biochemistry** 1996 Oct 15;35(41):13267-71

Structure and function in rhodopsin. Single cysteine substitution mutants in the cytoplasmic interhelical E-F loop region show position-specific effects in transducin activation. Yang K, et al. **Biochemistry** 1996 Sep 24; 35(38):12464-9

Structure and function in rhodopsin. Cysteines 65 and 316 are in proximity in a rhodopsin mutant as indicated by disulfide formation and interactions between attached spin labels. Yang K, et al. **Biochemistry** 1996 Nov 12; 35(45):14040-6

Three-dimensional structure of the cytoplasmic face of the G protein receptor rhodopsin. Yeagle PL, et al. **Biochemistry** 1997 Aug 12;36(32):9649-54

The first and second cytoplasmic loops of the G-protein receptor, rhodopsin, independently form beta-turns. Yeagle PL, et al. **Biochemistry** 1997 Apr 1;36(13):3864-9

Rhodopsin-cholesterol interactions in bovine rod outer segment disk membranes. Albert AD, et al. **Biochim Biophys Acta** 1996 Nov 13;1285(1):47-55

Effect of cholesterol on rhodopsin stability in disk membranes. Albert AD, et al. **Biochim Biophys Acta** 1996 Sep 13;1297(1):77-82

A distance measurement between specific sites on the cytoplasmic surface of bovine rhodopsin in rod outer segment disk membranes. Albert AD, et al. **Biochim Biophys Acta** 1997 Aug 14;1328(1):74-82

Identification and localization of a possible rhodopsin in the echinoderms Asterias forbesi (Asteroidea) and Ophioderma brevispinum (Ophiuroidea). Johnsen S. **Biol Bull** 1997 Aug; 193(1):97-105

The transmembrane 7-alpha-bundle of rhodopsin: distance geometry calculations with hydrogen bonding constraints. Pogozheva ID, et al. **Biophys J** 1997 May;72(5):1963-85

Surface plasmon resonance spectroscopy studies of membrane proteins: transducin binding and activation by rhodopsin monitored in thin membrane films. Salamon Z, et al. **Biophys J** 1996 Jul;71(1):283-94

Volume and enthalpy changes after photoexcitation of bovine rhodopsin: laser-induced optoacoustic studies. Strassburger JM, et al. **Biophys J** 1997 May;72(5):2294-303

Deriving reaction mechanisms from kinetic spectroscopy. Application to late rhodopsin intermediates. Szundi I, et al. **Biophys J** 1997 Aug;73(2):688-702

Modelling the P2Y purinoceptor using rhodopsin as template. Van Rhee AM, et al. **Drug Des Discov** 1995 Nov; 13(2):133-54

Analysis of the oligosaccharide chains of rhodopsin from normal rats and those with hereditary retinal dystrophy. Endo T, et al. **Exp Eye Res** 1996 Oct;63(4):395-405

Ultraviolet resonance Raman evidence for the absence of tyrosinate in octopus rhodopsin and the participation of Trp residues in the transition to acid metarhodopsin. Hashimoto S, et al. **FEBS Lett** 1996 Dec 2;398(2-3):239-42

High levels of rhodopsin phosphorylation in missense mutations of C-terminal region of rhodopsin. Ohguro H. **FEBS Lett** 1997 Aug 25;413(3):433-5

Intramembrane signaling mediated by hydrogen-bonding of water and carboxyl groups in bacteriorhodopsin and rhodopsin. Maeda A, et al. **J Biochem (Tokyo)** 1997 Mar; 121(3):399-406 (62 ref.)

Transducin-alpha C-terminal peptide binding site consists of C-D and E-F loops of rhodopsin. Acharya S, et al. **J Biol Chem** 1997 Mar 7;272(10):6519-24

Modulation of GDP release from transducin by the conserved Glu134-Arg135 sequence in rhodopsin. Acharya S, et al. **J Biol Chem** 1996 Oct 11;271(41):25406-11

Identification of protein kinase C phosphorylation sites on bovine rhodopsin. Greene NM, et al. **J Biol Chem** 1997 Apr 18;272(16):10341-4

The effects of amino acid replacements of glycine 121 on transmembrane helix 3 of rhodopsin. Han M, et al. **J Biol Chem** 1996 Dec 13;271(50):32330-6

Functional interaction of transmembrane helices 3 and 6 in rhodopsin. Replacement of phenylalanine 261 by alanine causes reversion of phenotype of a glycine 121 replacement mutant. Han M, et al. **J Biol Chem** 1996 Dec 13; 271(50):32337-42

Rhodopsin phosphorylation sites and their role in arrestin binding. Zhang L, et al. **J Biol Chem** 1997 Jun 6; 272(23):14762-8

An alpha-carbon template for the transmembrane helices in the rhodopsin family of G-protein-coupled receptors. Baldwin JM, et al. **J Mol Biol** 1997 Sep 12;272(1):144-64

The steric trigger in rhodopsin activation. Shieh T, et al. **J Mol Biol** 1997 Jun 13;269(3):373-84

Arrangement of rhodopsin transmembrane alpha-helices. Unger VM, et al. **Nature** 1997 Sep 11;389(6647):203-6

Identification of two palmitoyl groups in octopus rhodopsin. Nakagawa M, et al. **Photochem Photobiol** 1997 Jan; 65(1):187-91

Expression, stability, and membrane integration of truncation mutants of bovine rhodopsin. Heymann JAW, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4966-71

Single amino acid residue as a functional determinant of rod and cone visual pigments. Imai H, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2322-6

Chromophore structural changes in rhodopsin from nanoseconds to microseconds following pigment photolysis. Jäger S, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8557-62

Structure and function in rhodopsin: expression of functional mammalian opsin in Saccharomyces cerevisiae [published erratum appears in Proc Natl Acad Sci U S A 1997 Apr 1;94(7):3481] Mollaaghababa R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11482-6

Structure and function in rhodopsin: peptide sequences in the cytoplasmic loops of rhodopsin are intimately involved in interaction with rhodopsin kinase. Thurmond RL, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1715-20

Identification of transmembrane tryptic peptides of rhodopsin using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. Barnidge DR, et al. **Protein Sci** 1997 Apr;6(4):816-24

Modeling of halorhodopsin and rhodopsin based on bacteriorhodopsin. Neumüller M, et al. **Proteins** 1996 Oct; 26(2):146-56

Requirement of rigid-body motion of transmembrane helices for light activation of rhodopsin. Farrens DL, et al. **Science** 1996 Nov 1;274(5288):768-70

[The homology of the primary structure of the third cytoplasmic domains in rhodopsin-type receptors and of the cytoplasmic tail in the beta-subunit of the insulin receptor] Shpakov AO. **Tsitologiia** 1996;38(11):1179-90 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Retinopathy induced in mice by targeted disruption of the rhodopsin gene [see comments] Humphries MM, et al. **Nat Genet** 1997 Feb;15(2):216-9. Comment in: Nat Genet 1997 Feb;15(2):115-7.

Insights from a lost visual pigment [news; comment] Travis GH. **Nat Genet** 1997 Feb;15(2):115-7. Comment on: Nat

Genet 1997 Feb;15(2):175–8. Comment on: Nat Genet 1997 Feb;15(2):216–9.

GENETICS

Autosomal dominant retinitis pigmentosa with a rhodopsin mutation (Arg–135–Trp). Disease phenotype in a Swedish family. Ponjavic V, et al. **Acta Ophthalmol Scand** 1997 Apr; 75(2):218–23

Activating mutations of rhodopsin and other G protein–coupled receptors. Rao VR, et al. **Annu Rev Biophys Biomol Struct** 1996;25:287–314 (120 ref.)

Autosomal recessive retinitis pigmentosa in Spain: evaluation of four genes and two loci involved in the disease. Bayés M, et al. **Clin Genet** 1996 Nov;50(5):380–7

Analysis of the rhodopsin and peripherin/RDS gene in two families with pattern dystrophy of the retinal pigment epithelium. Daniele S, et al. **Eur J Ophthalmol** 1996 Apr–Jun;6(2):197–200

Molecular cloning of Drosophila Rh6 rhodopsin: the visual pigment of a subset of R8 photoreceptor cells. Huber A, et al. **FEBS Lett** 1997 Apr 7;406(1–2):6–10

Cloning of the gene encoding honeybee long–wavelength rhodopsin: a new class of insect visual pigments. Chang BS, et al. **Gene** 1996 Sep 16;173(2):215–9

Molecular evolution of the rhodopsin gene of marine lamprey, Petromyzon marinus. Zhang H, et al. **Gene** 1997 May 20;191(1):1–6

Direct regulation of rhodopsin 1 by Pax–6/eyeless in Drosophila: evidence for a conserved function in photoreceptors. Sheng G, et al. **Genes Dev** 1997 May 1; 11(9):1122–31

New mutation in the 3'–acceptor splice site of intron 4 in the rhodopsin gene associated with autosomal dominant retinitis pigmentosa in a Basque family. Reig C, et al. **Hum Mutat** 1996;8(1):93–4

Ret 4, a positive acting rhodopsin regulatory element identified using a bovine retina in vitro transcription system. Chen S, et al. **J Biol Chem** 1996 Nov 8;271(45):28549–57

Partial agonist activity of 11–cis–retinal in rhodopsin mutants. Han M, et al. **J Biol Chem** 1997 Sep 12;272(37):23081–5

The bZIP transcription factor Nrl stimulates rhodopsin promoter activity in primary retinal cell cultures. Kumar R, et al. **J Biol Chem** 1996 Nov 22;271(47):29612–8

A novel AvaI polymorphism within exon 5 of the rhodopsin gene. Isashiki Y, et al. **Jpn J Hum Genet** 1996 Mar; 41(1):221–3

G106R rhodopsin mutation is also present in Spanish ADRP patients. Ayuso C, et al. **Ophthalmic Genet** 1996 Sep; 17(3):95–101

Novel rhodopsin mutation (M216R) in a Danish family with autosomal dominant retinitis pigmentosa. Haim M, et al. **Ophthalmic Genet** 1996 Dec;17(4):193–7

A mild phenotype of autosomal dominant retinitis pigmentosa is associated with the rhodopsin mutation Pro–267–Leu. Ponjavic V, et al. **Ophthalmic Genet** 1997 Jun;18(2):63–70

Autosomal–dominant retinitis pigmentosa associated with an Arg–135–Trp point mutation of the rhodopsin gene. Clinical features and longitudinal observations. Pannarale MR, et al. **Ophthalmology** 1996 Sep;103(9):1443–52

Transgenic mice carrying the dominant rhodopsin mutation P347S: evidence for defective vectorial transport of rhodopsin to the outer segments. Li T, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14176–81

METABOLISM

Recoverin inhibits the phosphorylation of dark–adapted rhodopsin more than it does that of bleached rhodopsin: a possible mechanism through which rhodopsin kinase is prevented from participation in a side reaction. Senin II, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):551–5

Structural features and light–dependent changes in the cytoplasmic interhelical E–F loop region of rhodopsin: a site–directed spin–labeling study. Altenbach C, et al. **Biochemistry** 1996 Sep 24;35(38):12470–8

Binding of transducin to light–activated rhodopsin prevents transducin interaction with the rod cGMP phosphodiesterase gamma–subunit. Artemyev NO. **Biochemistry** 1997 Apr 8;36(14):4188–93

Spectroscopic evidence for altered chromophore––protein interactions in low–temperature photoproducts of the visual pigment responsible for congenital night blindness. Fahmy K, et al. **Biochemistry** 1996 Nov 26;35(47):15065–73

Arrestin with a single amino acid substitution quenches light–activated rhodopsin in a phosphorylation–independent fashion. Gray–Keller MP, et al. **Biochemistry** 1997 Jun 10;36(23):7058–63

Time–resolved spectroscopy of the early photolysis intermediates of rhodopsin Schiff base counterion mutants. Jäger S, et al. **Biochemistry** 1997 Feb 25;36(8):1999–2009

Simple purification and functional reconstitution of octopus photoreceptor Gq, which couples rhodopsin to phospholipase C. Kikkawa S, et al. **Biochemistry** 1996 Dec 10;35(49):15857–64

Retinal analog study of the role of steric interactions in the excited state isomerization dynamics of rhodopsin. Kochendoerfer GG, et al. **Biochemistry** 1996 Dec 17; 35(50):16230–40

In vitro assay for trans–phosphorylation of rhodopsin by rhodopsin kinase. Rim J, et al. **Biochemistry** 1997 Jun 10; 36(23):7064–70

Structure and function in rhodopsin. Single cysteine substitution mutants in the cytoplasmic interhelical E–F loop region show position–specific effects in transducin activation. Yang K, et al. **Biochemistry** 1996 Sep 24; 35(38):12464–9

Deriving reaction mechanisms from kinetic spectroscopy. Application to late rhodopsin intermediates. Szundi I, et al. **Biophys J** 1997 Aug;73(2):688–702

Spin columns can be used to study G protein–coupled receptor binding. Popp MP, et al. **Biotechniques** 1996 Nov; 21(5):788, 790, 792

Zinc causes an apparent increase in rhodopsin phosphorylation. Shuster TA, et al. **Curr Eye Res** 1996 Oct;15(10):1019–24

High levels of rhodopsin phosphorylation in missense mutations of C–terminal region of rhodopsin. Ohguro H. **FEBS Lett** 1997 Aug 25;413(3):433–5

Rhodopsin phosphorylation in bovine rod outer segments is more sensitive to the inhibitory action of recoverin at the low rhodopsin bleaching than it is at the high bleaching. Senin II, et al. **FEBS Lett** 1997 May 26;408(3):251–4

Modulation of GDP release from transducin by the conserved Glu134–Arg135 sequence in rhodopsin. Acharya S, et al. **J Biol Chem** 1996 Oct 11;271(41):25406–11

Identification of protein kinase C phosphorylation sites on bovine rhodopsin. Greene NM, et al. **J Biol Chem** 1997 Apr 18;272(16):10341–4

Mechanism of quenching of phototransduction. Binding competition between arrestin and transducin for phosphorhodopsin. Krupnick JG, et al. **J Biol Chem** 1997 Jul 18;272(29):18125–31

Interaction of transducin with light–activated rhodopsin protects It from proteolytic digestion by trypsin. Mazzoni MR, et al. **J Biol Chem** 1996 Nov 22;271(47):30034–40

Post–Golgi vesicles cotransport docosahexaenoyl–phospholipids and rhodopsin during frog photoreceptor membrane biogenesis. Rodriguez de Turco EB, et al. **J Biol Chem** 1997 Apr 18;272(16):10491–7

Modulation of opsin apoprotein activity by retinal. Dark activity of rhodopsin formed at low temperature. Surya A, et al. **J Biol Chem** 1997 Aug 29;272(35):21745–50

Stimulus–dependent phosphorylation of G–protein–coupled receptors by casein kinase 1alpha. Tobin AB, et al. **J Biol Chem** 1997 Aug 15;272(33):20844–9

Contribution of protein kinase C to the phosphorylation of rhodopsin in intact retinas. Udovichenko IP, et al. **J Biol Chem** 1997 Mar 21;272(12):7952–9

Rhodopsin phosphorylation sites and their role in arrestin binding. Zhang L, et al. **J Biol Chem** 1997 Jun 6; 272(23):14762–8

The steric trigger in rhodopsin activation. Shieh T, et al. **J Mol Biol** 1997 Jun 13;269(3):373–84

Rhodopsin, Gq and phospholipase C activation in cephalopod photoreceptors. Bhatia J, et al. **J Photochem Photobiol B** 1996 Aug;35(1–2):19–23

Spin–labeling analysis of structure and dynamics in octopus rhodopsin. Steinhoff HJ, et al. **J Photochem Photobiol B** 1996 Aug;35(1–2):1–6

Interaction of guanosine 5'–triphosphate binding protein Gq from Sepia officinalis with illuminated rhodopsin bound to concanavalin A. von der Heide W, et al. **J Photochem Photobiol B** 1996 Aug;35(1–2):25–31

Assay of G protein–coupled receptor kinase activity by rhodopsin phosphorylation. Gagnon AW, et al. **Methods Mol Biol** 1997;83:235–42 (14 ref.)

Novel Gq alpha isoform is a candidate transducer of rhodopsin signaling in a Drosophila testes–autonomous pacemaker. Alvarez CE, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12278–82

Expression, stability, and membrane integration of truncation mutants of bovine rhodopsin. Heymann JAW, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4966–71

Transgenic mice carrying the dominant rhodopsin mutation P347S: evidence for defective vectorial transport of rhodopsin to the outer segments. Li T, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14176–81

Structure and function in rhodopsin: peptide sequences in the cytoplasmic loops of rhodopsin are intimately involved in interaction with rhodopsin kinase. Thurmond RL, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1715–20

Long–term rod dark adaptation in man. Threshold measurements, rhodopsin regeneration and allosteric sensitivity regulation. An evaluation. Stabell U, et al. **Scand J Psychol** 1996 Sep;37(3):259–68 (30 ref.)

Receptor and betagamma binding sites in the alpha subunit of the retinal G protein transducin [published erratum appears in Science 1997 Apr 18;276(5311):341] Onrust R, et al. **Science** 1997 Jan 17;275(5298):381–4

A G protein–coupled receptor phosphatase required for rhodopsin function. Vinós J, et al. **Science** 1997 Aug 1; 277(5326):687–90

Metarhodopsin III formation and decay kinetics: comparison of bovine and human rhodopsin. Lewis JW, et al. **Vision Res** 1997 Jan;37(1):1–8

PHYSIOLOGY

Functional differences in the interaction of arrestin and its splice variant, p44, with rhodopsin. Pulvermüller A, et al. **Biochemistry** 1997 Jul 29;36(30):9253–60

Control of phobic behavioral responses by rhodopsin–induced photocurrents in Chlamydomonas. Holland EM, et al. **Biophys J** 1997 Sep;73(3):1395–401

Rhodopsin replacement rescues photoreceptor structure during a critical developmental window. Kumar JP, et al. **Dev Biol** 1997 Aug 1;188(1):43–7

Persistent activation of transducin by bleached rhodopsin in salamander rods. Matthews HR, et al. **J Gen Physiol** 1996 Dec;108(6):557–63

Rhodopsin evolution in the dark [letter] Crandall KA, et al. **Nature** 1997 Jun 12;387(6634):667–8

G–protein deactivation is rate–limiting for shut–off of the phototransduction cascade. Sagoo MS, et al. **Nature** 1997 Sep 25;389(6649):392–5

Rhodopsin guides fungal phototaxis [letter] Saranak J, et al. **Nature** 1997 May 29;387(6632):465–6

RADIATION EFFECTS

Structural dynamics of water and the peptide backbone around the Schiff base associated with the light–activated process of octopus rhodopsin. Nishimura S, et al. **Biochemistry** 1997 Jan 28;36(4):864–70

Light–induced protein conformational changes in the photolysis of octopus rhodopsin. Nakagawa M, et al. **Biophys J** 1997 May;72(5):2320–8

ULTRASTRUCTURE

Projection structure of an invertebrate rhodopsin. Davies A, et al. **J Struct Biol** 1996 Jul–Aug;117(1):36–44

RHODOSPIRILLACEAE

CHEMISTRY

Active site mutants implicate key residues for control of color and light cycle kinetics of photoactive yellow protein. Genick UK, et al. **Biochemistry** 1997 Jan 7;36(1):8–14

GENETICS

Photooxidative stress stimulates illegitimate recombination and mutability in carotenoid–less mutants of Rubrivivax gelatinosus. Ouchane S, et al. **EMBO J** 1997 Aug 1; 16(15):4777–87

Pleiotropic effects of puf interposon mutagenesis on carotenoid biosynthesis in Rubrivivax gelatinosus. A new gene organization in purple bacteria. Ouchane S, et al. **J Biol Chem** 1997 Jan 17;272(3):1670–6

Development of gene transfer methods for Rubrivivax gelatinosus S1: construction, characterization and complementation of a puf operon deletion strain. Ouchane S, et al. **Mol Gen Genet** 1996 Sep 25;252(4):379–85

METABOLISM

Photooxidative stress stimulates illegitimate recombination and mutability in carotenoid–less mutants of Rubrivivax gelatinosus. Ouchane S, et al. **EMBO J** 1997 Aug 1; 16(15):4777–87

RHODOSPIRILLALES

CHEMISTRY

Effect of hydration on the structure, dynamics and function of photosynthetic membranes of purple bacteria. Aksyonov SI, et al. **Membr Cell Biol** 1997;11(1):1–16

ENZYMOLOGY

Characterization of the reaction center bound tetraheme cytochrome of Rhodocyclus tenuis. Menin L, et al. **Biochemistry** 1997 Oct 7;36(40):12175–82

Photoinduced cyclic electron transfer in Rhodocyclus tenuis cells: participation of HiPIP or cyt c8 depending on the ambient redox potential. Menin L, et al. **Biochemistry** 1997 Oct 7;36(40):12183–8

GENETICS

Horizontal transfer of genes coding for the photosynthetic reaction centers of purple bacteria. Nagashima KV, et al. **J Mol Evol** 1997 Aug;45(2):131–6

METABOLISM

Photoinduced cyclic electron transfer in Rhodocyclus tenuis cells: participation of HiPIP or cyt c8 depending on the ambient redox potential. Menin L, et al. **Biochemistry** 1997 Oct 7;36(40):12183–8

RHODOSPIRILLUM

CHEMISTRY

The crystal structure of the light–harvesting complex II (B800–850) from Rhodospirillum molischianum. Koepke J, et al. **Structure** 1996 May 15;4(5):581–97

GENETICS

Analysis of a chemotaxis operon from Rhodospirillum centenum. Jiang ZY, et al. **J Bacteriol** 1997 Sep; 179(18):5712–9

METABOLISM

Reductive dehalogenation of halocarboxylic acids by the phototrophic genera Rhodospirillum and Rhodopseudomonas. McGrath JE, et al.

Appl Environ Microbiol 1997 Aug;63(8):3333–5

The effect of respiration on the phototactic behavior of the purple nonsulfur bacterium Rhodospirillum centenum. Romagnoli S, et al. **Arch Microbiol** 1997 Feb–Mar; 167(2–3):99–105

PHYSIOLOGY

The effect of respiration on the phototactic behavior of the purple nonsulfur bacterium Rhodospirillum centenum. Romagnoli S, et al. **Arch Microbiol** 1997 Feb–Mar; 167(2–3):99–105

Chemosensory and photosensory perception in purple photosynthetic bacteria utilize common signal transduction components. Jiang ZY, et al. **J Bacteriol** 1997 Sep; 179(18):5720–7

RHODOSPIRILLUM RUBRUM

CHEMISTRY

Melatonin immunoreactivity in the photosynthetic prokaryote Rhodospirillum rubrum: implications for an ancient antioxidant system. Manchester LC, et al. **Cell Mol Biol Res** 1995;41(5):391–5

Two-dimensional crystallization of the light-harvesting I-reaction centre photounit from Rhodospirillum rubrum. Walz T, et al. **J Mol Biol** 1997 Jan 17;265(2):107–11

DRUG EFFECTS

A single mutation in the M-subunit of Rhodospirillum rubrum confers herbicide resistance. Sopp G, et al. **FEBS Lett** 1997 Jun 16;409(3):343–6

ENZYMOLOGY

Role of isoleucine–164 at the active site of rubisco from Rhodospirillum rubrum. Chène P, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):482–6

Mutations at tyrosine–235 in the mobile loop region of domain I protein of transhydrogenase from Rhodospirillum rubrum strongly inhibit hydride transfer. Bizouarn T, et al. **Biochim Biophys Acta** 1997 Jul 4;1320(3):265–74

High cyclic transhydrogenase activity catalyzed by expressed and reconstituted nucleotide-binding domains of Rhodospirillum rubrum transhydrogenase. Yamaguchi M, et al. **Biochim Biophys Acta** 1997 Jan 16;1318(1–2):225–34

Comparison of the hydrolysis of Zn–PPi2– and the MgPPi2– as substrates and the effect of free cations upon membrane-bound pyrophosphatase of Rhodospirillum rubrum. Romero I, et al. **Biochimie** 1995;77(12):949–52

Properties of the purified, recombinant, NADP(H)-binding domain III of the proton-translocating nicotinamide nucleotide transhydrogenase from Rhodospirillum rubrum. Diggle C, et al. **Eur J Biochem** 1996 Oct 1;241(1):162–70

Characterization of the region encoding the CO-induced hydrogenase of Rhodospirillum rubrum. Fox JD, et al. **J Bacteriol** 1996 Nov;178(21):6200–8

NAD-dependent cross-linking of dinitrogenase reductase and dinitrogenase reductase ADP-ribosyltransferase from Rhodospirillum rubrum. Grunwald SK, et al. **J Bacteriol** 1997 May;179(10):3277–83

In vivo nickel insertion into the carbon monoxide dehydrogenase of Rhodospirillum rubrum: molecular and physiological characterization of cooCTJ. Kerby RL, et al. **J Bacteriol** 1997 Apr;179(7):2259–66

Identification and sequence of a nifJ-like gene in Rhodospirillum rubrum: partial characterization of a mutant unaffected in nitrogen fixation. Lindblad A, et al. **Mol Microbiol** 1996 May;20(3):559–68

GENETICS

A 3-hydroxy-3-methylglutaryl-CoA lyase gene in the photosynthetic bacterium Rhodospirillum rubrum. Baltscheffsky M, et al. **Biochim Biophys Acta** 1997 Jan 4; 1337(1):113–22

A single mutation in the M-subunit of Rhodospirillum rubrum confers herbicide resistance. Sopp G, et al. **FEBS Lett** 1997 Jun 16;409(3):343–6

METABOLISM

A novel heme protein that acts as a carbon monoxide-dependent transcriptional activator in Rhodospirillum rubrum. Aono S, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):752–6

The role of NAD+ as a signal during nitrogenase switch-off in Rhodospirillum rubrum. Norén A, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):829–32

Energy migration in the light-harvesting antenna of the photosynthetic bacterium Rhodospirillum rubrum studied by time-resolved excitation annihilation at 77 K. Valkunas L, et al. **Biophys J** 1996 May;70(5):2373–9

Uridylylation of the P(II) protein in the photosynthetic bacterium Rhodospirillum rubrum. Johansson M, et al. **J Bacteriol** 1997 Jul;179(13):4190–4

A global two component signal transduction system that integrates the control of photosynthesis, carbon dioxide assimilation, and nitrogen fixation. Joshi HM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14515–20

RHODOTORULA

Meningitis caused by Rhodotorula rubra in an HIV-infected patient. Gyaurgieva OH, et al. **J Med Vet Mycol** 1996 Sep–Oct;34(5):357–9

[The radioprotective properties of a lipocarotenoid extract of Rhodotorula glutinis yeasts] Zalashko MV, et al. **Radiats Biol Radioecol** 1997 Jan–Feb;37(1):41–5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Tributyltin oxide affects energy production in the yeast Rhodotorula ferulica, a utilizer of phenolic compounds. Veiga A, et al. **Can J Microbiol** 1997 Jul;43(7):683–7

ENZYMOLOGY

Microbial D-amino acid oxidases (EC .4.3.3). Fischer L, et al. **Ann N Y Acad Sci** 1996 Oct 12;799:683–8

Identification of a reactive cysteine in the flavin-binding domain of Rhodotorula gracilis D-amino acid oxidase. Pollegioni L, et al. **Arch Biochem Biophys** 1997 Jul 1; 343(1):1–5

6-phosphofructo-1-kinase from the lipid accumulating, non-fermentative, red yeast Rhodotorula glutinis. Schröter A, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):247–52

Cytochrome P450rm from Rhodotorula minuta catalyzes 4-hydroxylation of benzoate. Fukuda H, et al. **J Biochem (Tokyo)** 1996 Feb;119(2):314–8

Chemical modification of histidyl residues in D-amino acid oxidase from Rhodotorula gracilis. Ramón F, et al. **J Biochem (Tokyo)** 1995 Nov;118(5):911–6

Detection of extracellular phospholipase activity in Candida albicans and Rhodotorula rubra. Mayser P, et al. **Mycopathologia** 1996;135(3):149–55

GENETICS

Spliceosomal introns in conserved sequences of U1 and U5 small nuclear RNA genes in yeast Rhodotorula hasegawae. Takahashi Y, et al. **J Biochem (Tokyo)** 1996 Sep; 120(3):677–83

GROWTH & DEVELOPMENT

[The growth of Rhodotorula rubra yeasts and their synthesis of ergosterol on media with lovastatin] Baranova NA, et al. **Antibiot Khimioter** 1996;41(11):3–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Growth of Saccharomyces cerevisiae, Rhodotorula rubra and Bullera alba in the presence of beechwood prehydrolyzate-based lignin fractions. Košíková B, et al. **Folia Microbiol (Praha)** 1996;41(5):430–2

Rhodotorula cresolica sp. nov., a cresol-assimilating yeast species isolated from soil. Middelhoven WJ, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):324–7

[Activity of glyoxylate cycle during the culture of Rhodotorula gracilis in the presence of fatty acids and detergents] Ranaldi F, et al. **C R Seances Soc Biol Fil** 1996; 190(2–3):299–309 (Eng. Abstr.) **(Fre)**

RHOMBENCEPHALIC SLEEP see **SLEEP, REM**

RHOMBENCEPHALON

MR findings in listerial rhombencephalitis. Alper G, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):593–6

ANATOMY & HISTOLOGY

Angiotensin II activates pressor and depressor sites of the pontomedulla that react to glutamate. Chai CY, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):415–23

Cytoarchitecture of the medial octavolateralis nucleus in the goldfish, Carassius auratus. New JG, et al. **J Comp Neurol** 1996 Mar 11;366(3):534–46

CYTOLOGY

Morphological and morphometric analysis of serotonin-containing neurons in primary dissociated cultures of human rhombencephalon: a study of development. Levallois C, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):243–52

Cell movements, neuronal organisation and gene expression in hindbrains lacking morphological boundaries. Nittenberg R, et al. **Development** 1997 Jun;124(12):2297–306

Embryonic precursor cells from the rhombic lip are specified to a cerebellar granule neuron identity. Alder J, et al. **Neuron** 1996 Sep;17(3):389–99

DRUG EFFECTS

Angiotensin II activates pressor and depressor sites of the pontomedulla that react to glutamate. Chai CY, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):415–23

Feeding induced by pharmacological blockade of fatty acid metabolism is selectively attenuated by hindbrain injections of the galanin receptor antagonist, M40. Koegler FH, et al. **Obes Res** 1996 Jul;4(4):329–36

EMBRYOLOGY

Expression of Fgf-3 in relation to hindbrain segmentation, otic pit position and pharyngeal arch morphology in normal and retinoic acid-exposed mouse embryos. Mahmood R, et al. **Anat Embryol (Berl)** 1996 Jul;194(1):13–22

Analysis of hindbrain neural crest migration in the long-tailed monkey (Macaca fascicularis). Peterson PE, et al. **Anat Embryol (Berl)** 1996 Sep;194(3):235–46

Phenotypic specification of hindbrain rhombomeres and the origins of rhythmic circuits in vertebrates. Bass AH, et al. **Brain Behav Evol** 1997;50 Suppl 1:3–16 (120 ref.)

Morphological and morphometric analysis of serotonin-containing neurons in primary dissociated cultures of human rhombencephalon: a study of development. Levallois C, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):243–52

The floor plate of the hindbrain is a highly specialized gland. Immunocytochemical and ultrastructural characteristics. Rodriguez EM, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):153–68

A role for midline closure in the reestablishment of dorsoventral pattern following dorsal hindbrain ablation. Buxton P, et al. **Dev Biol** 1997 Mar 15;183(2):150–65

Branchial HOX gene expression and human craniofacial development. Vieille-Grosjean I, et al. **Dev Biol** 1997 Mar 1;183(1):49–60

BMP-7 influences pattern and growth of the developing hindbrain of mouse embryos. Arkell R, et al. **Development** 1997 Jan;124(1):1–12

Mutations in zebrafish genes affecting the formation of the boundary between midbrain and hindbrain. Brand M, et al. **Development** 1996 Dec;123:179–90

Development of branchiomotor neurons in zebrafish. Chandrasekhar A, et al. **Development** 1997 Jul; 124(13):2633–44

Appropriate pattern formation following regulative regeneration in the hindbrain neural tube. Díaz C, et al. **Development** 1996 Oct;122(10):3095–105

The prechordal region lacks neural inducing ability, but can confer anterior character to more posterior neuroepithelium. Foley AC, et al. **Development** 1997 Aug; 124(15):2983–96

Hox gene induction in the neural tube depends on three parameters: competence, signal supply and paralogue group. Grapin-Botton A, et al. **Development** 1997 Feb; 124(4):849–59

Rhombencephalic neural crest segmentation is preserved throughout craniofacial ontogeny. Köntges G, et al. **Development** 1996 Oct;122(10):3229–42

The caudal limit of Otx2 gene expression as a marker of the midbrain/hindbrain boundary: a study using in situ hybridisation and chick/quail homotopic grafts. Millet S, et al. **Development** 1996 Dec;122(12):3785–97

valentino: a zebrafish gene required for normal hindbrain segmentation. Moens CB, et al. **Development** 1996 Dec; 122(12):3981–90

Cell movements, neuronal organisation and gene expression in hindbrains lacking morphological boundaries. Nittenberg R, et al. **Development** 1997 Jun;124(12):2297–306

Pax-6 is involved in the specification of hindbrain motor neuron subtype. Osumi N, et al. **Development** 1997 Aug; 124(15):2961–72

Dorsal hindbrain ablation results in rerouting of neural crest migration and changes in gene expression, but normal hyoid development. Saldivar JR, et al. **Development** 1997 Jul; 124(14):2729–39

Segmental and neuronal architecture of the hindbrain of Krox-20 mouse mutants. Schneider-Maunoury S, et al. **Development** 1997 Mar;124(6):1215–26

Specification of the anterior hindbrain and establishment of a normal mid/hindbrain organizer is dependent on Gbx2 gene function. Wassarman KM, et al. **Development** 1997 Aug;124(15):2923–34

Hoxb-2 transcriptional activation in rhombomeres 3 and 5 requires an evolutionarily conserved cis-acting element in addition to the Krox-20 binding site [published erratum appears in EMBO J 1996 Dec 16;15(24):7188] Vesque C, et al. **EMBO J** 1996 Oct 1;15(19):5383–96

Prorhombomeric subdivision of the mammalian embryonic hindbrain: is it functionally meaningful? Ruberte E, et al. **Int J Dev Biol** 1997 Apr;41(2):213–22 (40 ref.)

Rhombomere-specific origin of branchial and visceral motoneurons of the facial nerve in the rat embryo. Auclair F, et al. **J Comp Neurol** 1996 Jun 3;369(3):451–61

Krox-20 is a key regulator of rhombomere-specific gene expression in the developing hindbrain. Seitanidou T, et al. **Mech Dev** 1997 Jul;65(1–2):31–42

Segmental regulation of Hoxb-3 by kreisler. Manzanares M, et al. **Nature** 1997 May 8;387(6629):191–5

The avian inferior olive derives from the alar neuroepithelium of the rhombomeres 7 and 8: an analysis by using chick-quail chimeric embryos. Ambrosiani J, et al. **Neuroreport** 1996 May 17;7(7):1285–8

Elk-L3, a novel transmembrane ligand for the Eph family of receptor tyrosine kinases, expressed in embryonic floor plate, roof plate and hindbrain segments. Gale NW, et al. **Oncogene** 1996 Sep 19;13(6):1343–52

Specification of the zebrafish nervous system by nonaxial signals. Woo K, et al. **Science** 1997 Jul 11;277(5323):254–7

Engrailed, Wnt and Pax genes regulate midbrain–hindbrain development. Joyner AL. **Trends Genet** 1996 Jan; 12(1):15–20 (50 ref.)

RHOMBENCEPHALON

[Genetic control of rhombencephalon development by Hox genes studied in bird embryo by the quail-chick chimera method] Le Douarin NM, et al.
C R Seances Soc Biol Fil 1997;191(1):29-42 (Eng. Abstr.) **(Fre)**

[Role of the Krox-20 gene in the development of rhombencephalon] Schneider-Maunoury S, et al.
C R Seances Soc Biol Fil 1997;191(1):91-4 (15 ref.) (Eng. Abstr.) **(Fre)**

[The formation of the choroid plexus of the human hindbrain] Korzhevskii DE. **Morfologiia** 1997;111(1):31-4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Hypothyroidism alters the effect of GTP on adenylyl cyclase in forebrain and hindbrain synaptosomal membranes from 15-day-old rats. Leung FC, et al. **Int J Dev Neurosci** 1996 Oct;14(6):701-5

Localization of the calcium/calmodulin-dependent protein phosphatase, calcineurin, in the hindbrain and spinal cord of the rat. Strack S, et al. **J Comp Neurol** 1996 Nov 4; 375(1):66-76

GROWTH & DEVELOPMENT

Cell-cell interactions and segmentation in the developing vertebrate hindbrain. Irving C, et al.
Biochem Soc Symp 1996;62:85-95 (41 ref.)

Ontogeny of cholecystokinin binding sites in the hindbrain of the laboratory rat. Kuehl-Kovarik MC, et al.
Brain Behav Evol 1996;47(5):246-56

Patterning the hindbrain. Guthrie S. **Curr Opin Neurobiol** 1996 Feb;6(1):41-8 (54 ref.)

Retinoids: from hindbrain patterning to Parkinson disease. Eichele G. **Trends Genet** 1997 Sep;13(9):343-5 (25 ref.)

METABOLISM

Forebrain angiotensin type 1 receptors and parabrachial serotonin in the control of NaCl and water intake. Colombari DS, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1470-6

Caudal hindbrain neuromedin B-preferring receptors participate in the control of food intake. Ladenheim EE, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R433-7

Localization of angiotensin IV binding sites to motor and sensory neurons in the sheep spinal cord and hindbrain. Moeller I, et al. **Brain Res** 1995 Dec 1;701(1-2):301-6

A target of the HoxB5 gene from the mouse nervous system. Safaei R. **Brain Res Dev Brain Res** 1997 May 20;100(1):5-12

Timing and regulation of trkB and BDNF mRNA expression in placode-derived sensory neurons and their targets. Robinson M, et al. **Eur J Neurosci** 1996 Nov;8(11):2399-406

Synaptic interactions of retrogradely labeled hypoglossal motoneurons with substance P-like immunoreactive nerve terminals in the cat: a dual-labeling electron microscopic study. Gatti PJ, et al. **Exp Brain Res** 1996 Jul;110(2):175-82

Expression, localization, and function of transforming growth factor-beta s in embryonic chick spinal cord, hindbrain, and dorsal root ganglia. Unsicker K, et al. **J Neurobiol** 1996 Feb;29(2):262-76

Expression of the helix-loop-helix factor, Hes3, during embryo development suggests a role in early midbrain-hindbrain patterning. Lobe CG. **Mech Dev** 1997 Mar;62(2):227-37

Presence of S-100 beta in cholinergic neurones of the rat hindbrain. Yang Q, et al. **Neuroreport** 1996 Nov 25; 7(18):3093-9

Increased nerve growth factor inducible-A gene and c-fos messenger RNA levels in the rat midbrain and hindbrain associated with the cardiovascular response to electrical stimulation of the mesencephalic cuneiform nucleus. Lam W, et al. **Neuroscience** 1996 Mar;71(1):193-211

Elk-L3, a novel transmembrane ligand for the Eph family of receptor tyrosine kinases, expressed in embryonic floor plate, roof plate and hindbrain segments. Gale NW, et al. **Oncogene** 1996 Sep 19;13(6):1343-52

MICROBIOLOGY

Magnetic resonance imaging of abscesses of the brain stem and cerebellum complicating Listeria monocytogenes rhombencephalitis. Salgado MJ, et al.
Can Assoc Radiol J 1996 Dec;47(6):431-3

PATHOLOGY

MRI appearances of Listeria rhombencephalitis. Davies RS, et al. **Australas Radiol** 1996 Aug;40(3):354-6

Musical auditory hallucinosis from Listeria rhombencephalitis. Douen AG, et al. **Can J Neurol Sci** 1997 Feb;24(1):70-2

MR imaging of Wilson's disease: contrast enhancement of the cerebral cortex, and corticomedullary junction. Sener RN. **Comput Med Imaging Graph** 1997 May-Jun; 21(3):195-200

Tethered hindbrain. Case report. Kernan JC, et al.
J Neurosurg 1996 Oct;85(4):713-5

Utility of early postoperative MRI in hindbrain-related syringomyelia. A preliminary prospective study on five patients. Lunardi P, et al. **Spinal Cord** 1996 Dec; 34(12):720-4

PHYSIOLOGY

Hindbrain effects of PACAP on gastric motor function in the rat. Krowicki ZK, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1221-9

Cranial motor axons respond differently to the floor plate and sensory ganglia in collagen gel co-cultures. Tucker A, et al. **Eur J Neurosci** 1996 May;8(5):906-16

Octavolateral neurons projecting to the middle and posterior rhombencephalic reticular nuclei of larval lamprey: a retrograde horseradish peroxidase labeling study. González MJ, et al. **J Comp Neurol** 1997 Aug 4;384(3):396-408

Train signals for electric fish [news; comment] Maler L. **Nature** 1996 Dec 12;384(6609):517-8. Comment on: Nature 1996 Dec 12;384(6609):564-7.

Imaging the functional organization of zebrafish hindbrain segments during escape behaviors. O'Malley DM, et al. **Neuron** 1996 Dec;17(6):1145-55

Enhanced water intake after asymmetric hindbrain lesions. Wang T, et al. **Physiol Behav** 1996 Sep;60(3):733-9

Axon decussation and midline glia in the developing ferret auditory hindbrain. Brunso-Bechtold JK, et al.
Prog Brain Res 1996;108:165-81 (67 ref.)

PHYSIOPATHOLOGY

Somatosensory evoked potentials to median nerve stimulation in meningomyelocele: what is occurring in the hindbrain and its connections during growth? Nishimura T, et al. **Childs Nerv Syst** 1996 Jan;12(1):13-26 (35 ref.)

SURGERY

Utility of early postoperative MRI in hindbrain-related syringomyelia. A preliminary prospective study on five patients. Lunardi P, et al. **Spinal Cord** 1996 Dec; 34(12):720-4

RHONCHI see **RESPIRATORY SOUNDS**

RHUBARB

Rheum officinale: a new lead in preventing progression of chronic renal failure. Li L. **Chin Med J (Engl)** 1996 Jan; 109(1):35-7

Effect of dietary rhubarb stalk fiber on the bioavailability of calcium in rats. Goel V, et al. **Int J Food Sci Nutr** 1996 Mar;47(2):159-63

[Study on the clinical effect of rhubarb on nitrogen-metabolism abnormality due to chronic renal failure and its mechanism] Sanada H.
Nippon Jinzo Gakkai Shi 1996 Aug;38(8):379-87 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Effects of a rhubarb (Rhei rhizoma) solution and its fractions on the formation of calcium phosphate precipitates. Hidaka S, et al. **J Periodontal Res** 1996 Aug;31(6):408-13

RHUS see **TOXICODENDRON**

RHUS DERMATITIS see **DERMATITIS, TOXICODENDRON**

RHYTHM METHOD

Natural family planning and reproductive health awareness: expanding options and improving health. Symposium proceedings. Washington, D.C., April 2-5, 1997.
Adv Contracept 1997 Jun-Sep;13(2-3):vii-ix, 81-384

Alternatives to vaginal intercourse practiced during the fertile time among calendar method users in Ireland. Bonnar J, et al. **Adv Contracept** 1997 Jun-Sep;13(2-3):173-7

Simplifying NFP: preliminary report of a pilot study of the 'collar' method in Brazil. Faundes A, et al.
Adv Contracept 1997 Jun-Sep;13(2-3):167-71

Calendar rhythm efficacy: a review. Kambic RT, et al.
Adv Contracept 1996 Jun;12(2):123-8

Natural family planning effectiveness: evaluating published reports. Lamprecht V, et al. **Adv Contracept** 1997 Jun-Sep; 13(2-3):155-65 (16 ref.)

Natural family planning: suitability of the CUE method for defining the time of ovulation. Moreno JE, et al.
Contraception 1997 Apr;55(4):233-7

An overview on the effectiveness of natural family planning. Guida M, et al. **Gynecol Endocrinol** 1997 Jun;11(3):203-19 (81 ref.)

[How do self-observed cycle symptoms correlate with ovulation?] Gnoth C, et al. **Zentralbl Gynakol** 1996; 118(12):650-4 (Eng. Abstr.) **(Ger)**

RHYTHMICITY see **PERIODICITY**

RHYTIDECTOMY see **RHYTIDOPLASTY**

RHYTIDOPLASTY

Treatment of the before and after images in aesthetic surgery. Chamosa M. **Aesthetic Plast Surg** 1997 Jan-Feb;21(1):52-4

Viscoelastic properties of the superficial musculoaponeurotic system (SMAS): a microscopic and mechanical study. Har-Shai Y, et al. **Aesthetic Plast Surg** 1997 Jul-Aug; 21(4):219-24

Chemical peeling: an alternative to rhytidoplasty. Peled IJ, et al. **Aesthetic Plast Surg** 1996 Jul-Aug;20(4):333-6

Mycobacterium smegmatis infection in a healthy woman following a facelift: case report and review of the literature. Pennekamp A, et al. **Ann Plast Surg** 1997 Jul;39(1):80-3 (12 ref.)

Parotidectomy through a rhytidectomy incision. Murthy P, et al. **Clin Otolaryngol** 1997 Jun;22(3):206-8

New camouflaging technique following laser resurfacing [letter] O'Donoghue MN. **Dermatol Surg** 1997 Aug; 23(8):717-8

Interpositional dressing for reduced postoperative pain after laser skin resurfacing [letter] Ruiz-Esparza J.
Dermatol Surg 1997 May;23(5):404-5

Facial rhytidectomy approach for treatment of posterior mandibular fractures. Anastassov GE, et al.
J Craniomaxillofac Surg 1997 Feb;25(1):9-14

The nasolabial fold in facial rejuvenation [letter; comment] de la Plaza R. **Plast Reconstr Surg** 1997 Jul;100(1):278-80 . Comment on: Plast Reconstr Surg 1996 Sep;98(4):622-36.

Steroids with face lift [letter] Dostal GH.
Plast Reconstr Surg 1997 Aug;100(2):551-2

Supposed parotid fistula following rhytidectomy [letter; comment] Gleason MC. **Plast Reconstr Surg** 1996 Oct; 98(5):908. Comment on: Plast Reconstr Surg 1996 Mar;97(3):641-2.

If it's dead, does it make any difference how it got there? Miller TA, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2056-7

Aesthetic and safety considerations in composite rhytidectomy: a review of 145 patients over a 3-year period. Pina DP. **Plast Reconstr Surg** 1997 Mar;99(3):670-8; discussion 679

Histologic effects of the high-energy pulsed CO2 laser on photoaged facial skin. Stuzin JM, et al.
Plast Reconstr Surg 1997 Jun;99(7):2036-50; discussion 2051-5

The arterial supply of the face lift flap. Whetzel TP, et al. **Plast Reconstr Surg** 1997 Aug;100(2):480-6; discussion 487-8

ADVERSE EFFECTS

Chronic, burning facial pain following cosmetic facial surgery. Eisenberg E, et al. **Ann Plast Surg** 1996 Jan; 36(1):76-9

Distortion of the auriculocephalic angle following rhytidectomy. Recognition and prevention. Newman JP, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug; 123(8):818-20

The short- and long-term side effects of carbon dioxide laser resurfacing. Bernstein LJ, et al. **Dermatol Surg** 1997 Jul; 23(7):519-25

Infections complicating pulsed carbon dioxide laser resurfacing for photoaged facial skin. Sriprachya-Anunt S, et al. **Dermatol Surg** 1997 Jul;23(7):527-35; discussion 535-6

Management of parotid leakage following rhytidectomy. McKinney P, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):795-7

Salivary fistula after secondary rhytidoplasty [letter; comment] Muirragui AG. **Plast Reconstr Surg** 1997 Mar; 99(3):919. Comment on: Plast Reconstr Surg 1996 Mar;97(3):641-2.

INSTRUMENTATION

Endoscopic facelift: two years' experience. Chajchir A.
Aesthetic Plast Surg 1997 Jan-Feb;21(1):1-6

Liposculpture with the nasal Fraser suction techniques [letter] Mealer WR. **Ann Plast Surg** 1996 Dec;37(6):680

Transblepharoplasty forehead lift and upper face rejuvenation. Ramirez OM. **Ann Plast Surg** 1996 Dec; 37(6):577-84

Laser resurfacing as an adjunct to endoforehead lift, endofacelift, and biplanar facelift. Ramirez OM, et al.
Ann Plast Surg 1997 Apr;38(4):315-21; discussion 321-2

Treatment of facial rhytides with a high-energy pulsed carbon dioxide laser. Alster TS, et al.
Plast Reconstr Surg 1996 Oct;98(5):791-4

[Endoscopic forehead lift] Biemer E.
Langenbecks Arch Chir Suppl Kongressbd 1996;113:1118-22 (Eng. Abstr.) **(Ger)**

METHODS

The mini rhytidectomy. Duminy F, et al.
Aesthetic Plast Surg 1997 Jul-Aug;21(4):280-4

An outer-table suspension technique for endoscopic browlift. Gallaher T, et al. **Aesthetic Plast Surg** 1997 Jul-Aug; 21(4):262-4

Cervicofacial rhytidectomy: the superficial plane. Lassus C.
Aesthetic Plast Surg 1997 Jan-Feb;21(1):25-31

Neck rhytidectomy: aesthetic treatment variations. Michalany Filho S. **Aesthetic Plast Surg** 1997 Jan-Feb; 21(1):32-7

Arcus marginalis effacement and support of the lower lid by malar skin-fat flap blepharoplasty. Mogelvang C.
Ann Plast Surg 1996 Feb;36(2):167-70

The liposhaver in facial plastic surgery. A multi-institutional experience. Becker DG, et al.
Arch Otolaryngol Head Neck Surg 1996 Nov; 122(11):1161-7

The management of hyperfunctional facial lines with botulinum toxin. A collaborative study of 210 injection sites in 162 patients. Blitzer A, et al.

Arch Otolaryngol Head Neck Surg 1997 Apr;123(4):389–92
Combined use of superpulsed carbon dioxide laser and cryotherapy for treatment of facial rhytids [published erratum appears in Arch Otolaryngol Head Neck Surg 1997 Jan;123(1):46] Nasri S, et al.
Arch Otolaryngol Head Neck Surg 1996 Nov; 122(11):1169–73
Transcalvarial suture fixation for endoscopic brow and forehead lifts. Newman JP, et al.
Arch Otolaryngol Head Neck Surg 1997 Mar;123(3):313–7
Prevention of seromas and hematomas after face-lift surgery with the use of postoperative vacuum drains. Perkins SW, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jul; 123(7):743–5
A new procedure for improvement of the ptotic melolabial fold. Smith LF, et al.
Arch Otolaryngol Head Neck Surg 1996 Oct; 122(10):1088–93
Direct fixation of the malar pad. Barton FE Jr, et al.
Clin Plast Surg 1997 Apr;24(2):329–35
The extended browlift. Byrd HS. **Clin Plast Surg** 1997 Apr; 24(2):233–46
The endo-facelift. Basics and options. Del Campo AF, et al. **Clin Plast Surg** 1997 Apr;24(2):309–27
A 15-year follow-up study of the non-SMAS skin-tightening facelift with midface defatting. Equal or better than deeper plane procedures in result, duration, safety, and patient satisfaction. Ellenbogen R. **Clin Plast Surg** 1997 Apr; 24(2):247–67
Composite rhytidectomy. Finesse and refinements in technique. Hamra ST. **Clin Plast Surg** 1997 Apr; 24(2):337–46
Endoscopic facial rejuvenation. Isse NG. **Clin Plast Surg** 1997 Apr;24(2):213–31
Facelift. Planning and technique. Marten TJ.
Clin Plast Surg 1997 Apr;24(2):269–308
Rejuvenation of the upper face. A logical gamut of surgical options. Michelow BJ, et al. **Clin Plast Surg** 1997 Apr; 24(2):199–212 (20 ref.)
The short- and long-term side effects of carbon dioxide laser resurfacing. Bernstein LJ, et al. **Dermatol Surg** 1997 Jul; 23(7):519–25
Fast healing after laser skin resurfacing. The minimal mechanical trauma technique. David L, et al.
Dermatol Surg 1997 May;23(5):359–61
Treatment of periorbital wrinkles. A comparison of the SilkTouch carbon dioxide laser with a medium-depth chemical peel. Reed JT, et al. **Dermatol Surg** 1997 Aug; 23(8):643–8
Skin resurfacing with the erbium:YAG laser. Teikemeier G, et al. **Dermatol Surg** 1997 Aug;23(8):685–7
Cosmetic upper-facial rejuvenation with botulinum. Ellis DA, et al. **J Otolaryngol** 1997 Apr;26(2):92–6
In vitro changes in non-facial human skin following CO2 laser resurfacing: a comparison study. Gardner ES, et al. **Lasers Surg Med** 1996;19(4):379–87
Ultrapulse CO2 laser resurfacing. Treatment for wrinkled, photodamaged skin. Krunic AL, et al. **N C Med J** 1997 May-Jun;58(3):214–7
Posterior cervical rhytidectomy: a valuable adjunct in facial rejuvenation surgery. Campbell JP, et al.
Otolaryngol Head Neck Surg 1997 Jan;116(1):79–90
Ultrapulse carbon dioxide laser with CPG scanner for full-face resurfacing for rhytids, photoaging, and acne scars. Apfelberg DB. **Plast Reconstr Surg** 1997 Jun; 99(7):1817–25
Lateral SMASectomy. Baker DC. **Plast Reconstr Surg** 1997 Aug;100(2):509–13
Personal technique of face lifting. Baker TJ, et al.
Plast Reconstr Surg 1997 Aug;100(2):502–8
Excision of neck redundancy with single Z-plasty closure [letter; comment] Biggs TM. **Plast Reconstr Surg** 1996 Nov; 98(6):1113–4. Comment on: Plast Reconstr Surg 1996 Jan;97(1):219–21.
Endoscopy in facial rejuvenation [letter] Botti G.
Plast Reconstr Surg 1997 Feb;99(2):593–5
A comparison between parallel hairline incisions and perpendicular incisions when performing a face lift. Camirand A, et al. **Plast Reconstr Surg** 1997 Jan;99(1):10–5
The significance of digastric muscle contouring for rejuvenation of the submental area of the face. Connell BF, et al. **Plast Reconstr Surg** 1997 May;99(6):1586–90
Endoscopic forehead lift: an operative technique. Daniel RK, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1148–57; discussion 1158
Open approach for upper facial rejuvenation. Friedland JA. **Plast Reconstr Surg** 1997 Sep;100(4):1040–2; discussion 1043–6
Preventing hairline elevation in endoscopic browlifts. Hamas RS, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1018–22
Is there a difference? A prospective study comparing lateral and standard SMAS face lifts with extended SMAS and composite rhytidectomies. Ivy EJ, et al.
Plast Reconstr Surg 1996 Dec;98(7):1135–43; discussion 1144–7
Arcus marginalis release [letter; comment] Maillard GF.
Plast Reconstr Surg 1996 Oct;98(5):910–1. Comment on: Plast Reconstr Surg 1995 Aug;96(2):354–62.
Fibrin glue fixation in forehead endoscopy: evaluation of our experience with 206 cases. Marchac D, et al.
Plast Reconstr Surg 1997 Sep;100(3):704–12; discussion 713–4
Face lift: which technique? Miller TA.
Plast Reconstr Surg 1997 Aug;100(2):501
Face lift. Owsley JQ. **Plast Reconstr Surg** 1997 Aug; 100(2):514–9
Update: lifting the malar fat pad for correction of prominent nasolabial folds. Owsley JQ, et al. **Plast Reconstr Surg** 1997 Sep;100(3):715–22
Biodegradable positive fixation for the endoscopic brow lift. Pakkanen M, et al. **Plast Reconstr Surg** 1996 Nov; 98(6):1087–91
Intraoperatively controlled small-incision forehead and brow lift. Putterman AM. **Plast Reconstr Surg** 1997 Jul; 100(1):262–6
Cervicoplasty: nonexcisional anterior approach. Ramirez OM. **Plast Reconstr Surg** 1997 May;99(6):1576–85
Why I prefer the endoscopic forehead lift. Ramirez OM.
Plast Reconstr Surg 1997 Sep;100(4):1033–9; discussion 1043–6
Coral in malar augmentation: complications in our experience [letter] Santanchè P, et al. **Plast Reconstr Surg** 1997 Jan; 99(1):266–8
A simple method for forehead fixation following endoscopy [letter] Smith DS. **Plast Reconstr Surg** 1996 Nov;98(6):1117
The contribution of the SMAS to the blood supply in the lateral face lift flap. Whetzel TP, et al.
Plast Reconstr Surg 1997 Sep;100(4):1011–8
[Value of liposuction for the improvement of cervicofacial contour] Mole B. **Ann Chir Plast Esthet** 1996 Jun; 41(3):299–307 (Eng. Abstr.) **(Fre)**
[Frontal and subcutaneous temporal closed lifting without endoscopy: technique and indications] Delonca D.
Rev Laryngol Otol Rhinol (Bord) 1997;118(1):53–6 (Eng. Abstr.) **(Fre)**
[Video-assisted endoscopic lifting: development] Raspaldo H. **Rev Laryngol Otol Rhinol (Bord)** 1997;118(1):57–64 (Eng. Abstr.) **(Fre)**
[The face-neck lift] Feller AM.
Langenbecks Arch Chir Suppl Kongressbd 1996;113:1123–7 (Eng. Abstr.) **(Ger)**
[Current systematic definition and terminology of the face lifting technique] Mayer B. **Laryngorhinootologie** 1996 Aug; 75(8):471–5 (44 ref.) (Eng. Abstr.) **(Ger)**
[Facial wrinkles—ultrapulsed CO2 laser: alternative or supplement to surgical face lift?] Raulin C, et al.
Laryngorhinootologie 1997 Jun;76(6):351–7 (Eng. Abstr.) **(Ger)**
[Removal of the sagging of the tissues in the submental area] Ezrokhin VM. **Stomatologiia (Mosk)** 1995;74(6):44–5 (Eng. Abstr.) **(Rus)**

VETERINARY

Stellate rhytidectomy: superior entropion repair in a dog with excessive facial skin. Stuhr CM, et al.
J Am Anim Hosp Assoc 1997 Jul-Aug;33(4):342–5

RIB FRACTURES

The fractured rib in chest wall trauma. Mayberry JC, et al.
Chest Surg Clin N Am 1997 May;7(2):239–61 (75 ref.)

COMPLICATIONS

Posterior fracture of the left sixth rib causing late aortic laceration: case report. Marco JV, et al. **J Trauma** 1997 Apr;42(4):736–7
Bilateral cervical rib fracture secondary to blunt trauma. Ovadia P, et al. **J Trauma** 1997 Jul;43(1):157–8
Stress fracture of the second rib as a cause of back pain. Nikkola-Sihto A, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1997 Jul;167(1):103–5 (12 ref.)
[Heart injury following closed thoracic injury] Bourguignon N, et al. **Ann Fr Anesth Reanim** 1996;15(7):1088–9 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Stress fracture of the neck of the seventh and eighth ribs: a case report. Brukner P, et al. **Clin J Sport Med** 1996 Jul;6(3):204–6 (12 ref.)

DRUG THERAPY

Topical application of nerve growth factor improves fracture healing in rats. Grills BL, et al. **J Orthop Res** 1997 Mar; 15(2):235–42

EPIDEMIOLOGY

Serious complications from active compression-decompression cardiopulmonary resuscitation. Rabl W, et al. **Int J Legal Med** 1996; 109(2):84–9

ETIOLOGY

Radiological case of the month. Rib fractures produced by birth trauma. Hartmann RW Jr.
Arch Pediatr Adolesc Med 1997 Sep;151(9):947–8
Avulsion injury of the serratus anterior: a case history. Gaffney KM. **Clin J Sport Med** 1997 Apr;7(2):134–6
Stress changes in the ribs associated with ballet dancing. Bar-Sever Z, et al. **Clin Nucl Med** 1997 Apr;22(4):263–4
An unusual cause of rib fracture following a road traffic accident. Daniels RJ, et al. **J Accid Emerg Med** 1997 Mar; 14(2):113–4

RADIOGRAPHY

Radiological case of the month. Rib fractures produced by birth trauma. Hartmann RW Jr.
Arch Pediatr Adolesc Med 1997 Sep;151(9):947–8
Traumatic first rib fracture: is angiography necessary? A review of 730 cases. Gupta A, et al. **Cardiovasc Surg** 1997 Feb;5(1):48–53 (21 ref.)
Mechanical factors associated with posterior rib fractures: laboratory and case studies. Kleinman PK, et al.
Pediatr Radiol 1997 Jan;27(1):87–91

RADIONUCLIDE IMAGING

Stress changes in the ribs associated with ballet dancing. Bar-Sever Z, et al. **Clin Nucl Med** 1997 Apr;22(4):263–4
Golfer's rib stress fracture (Duffer's fracture). Scintigraphic appearance. Goyal M, et al. **Clin Nucl Med** 1997 Jul; 22(7):503–4

RIBAVIRIN

ADMINISTRATION & DOSAGE

A paediatric canopy system for aerosol administration and minimized environmental pollution. Wählin B, et al.
Acta Anaesthesiol Scand 1996 Sep;40(8 Pt 1):932–9
Ribavirin conjugated with lactosaminated poly-L-lysine: selective delivery to the liver and increased antiviral activity in mice with viral hepatitis. Di Stefano G, et al.
Biochem Pharmacol 1997 Aug 1;54(3):357–63
Ribavirin therapy in bone marrow transplant recipients with viral respiratory tract infections. Sparrelid E, et al.
Bone Marrow Transplant 1997 May;19(9):905–8
Oral ribavirin for prevention of severe liver disease caused by hepatitis C virus during allogeneic bone marrow transplantation. Ljungman P, et al. **Clin Infect Dis** 1996 Jul;23(1):167–9
Interferon-ribavirin combination therapy for chronic hepatitis C. Schalm SW, et al. **Dig Dis Sci** 1996 Dec;41(12 Suppl):131S–134S
Long-term efficacy of ribavirin plus interferon alfa in the treatment of chronic hepatitis C. Lai MY, et al.
Gastroenterology 1996 Nov;111(5):1307–12
Pilot study of the combination of interferon alfa and ribavirin as therapy of recurrent hepatitis C after liver transplantation [see comments] Bizollon T, et al.
Hepatology 1997 Aug;26(2):500–4. Comment in: Hepatology 1997 Aug;26(2):505–6.
Ribavirin and interferon for recurrent posttransplantation HCV infection: to treat or not to treat? [editorial; comment] McHutchison JG. **Hepatology** 1997 Aug;26(2):505–6. Comment on: Hepatology 1997 Aug;26(2):500–4.
Intravenous ribavirin therapy in a neonate with disseminated adenovirus infection undergoing extracorporeal membrane oxygenation: pharmacokinetics and clearance by hemofiltration. Aebi C, et al. **J Pediatr** 1997 Apr; 130(4):612–5
Ribavirin potentiates the efficacy and toxicity of 2',3'-dideoxyinosine in the murine acquired immunodeficiency syndrome model. Harvie P, et al.
J Pharmacol Exp Ther 1996 Nov;279(2):1009–17
Prolonged therapy of chronic hepatitis C with ribavirin. Hoofnagle JH, et al. **J Viral Hepat** 1996 Sep;3(5):247–52
Early ribavirin treatment did not prevent severe disease in high-risk bronchopulmonary dysplasia patients with respiratory syncytial virus infection [letter] De Boeck K, et al. **Pediatr Pulmonol** 1996 May;21(5):343
The ribavirin debate [letter; comment] Demers RR.
Pediatrics 1996 Nov;98(5):1003–4. Comment on: Pediatrics 1996 Jan;97(1):137–40.

ADVERSE EFFECTS

Interferon-associated thyroid dysfunction in anti-D-related chronic hepatitis C. Sachithanandan S, et al.
J Interferon Cytokine Res 1997 Jul;17(7):409–11
Health care worker exposure to aerosolized ribavirin: biological and air monitoring. Shults RA, et al.
J Occup Environ Med 1996 Mar;38(3):257–63
Effects of cirrhosis, interferon and azathioprine on adverse events in patients with chronic hepatitis C treated with ribavirin. Thevenot T, et al. **J Viral Hepat** 1997 Jul; 4(4):243–53
[Severe local cutaneous necrosis during treatment with interferon-alpha and ribavirin for chronic viral hepatitis C (letter)] de Ledinghen V, et al.
Gastroenterol Clin Biol 1997;21(6-7):523–4 **(Fre)**

ANALOGS & DERIVATIVES

Tiazofurin-induced autosecretion of IL-6 and hemoglobin production in K562 human leukemia cells. Talley CJ, et al. **Am J Hematol** 1997 Apr;54(4):301–5
Antiinvasive effects of Tiazofurin on liver-metastatic human colon carcinoma xenografts. Lapis KY, et al.
Anticancer Res 1996 Nov-Dec;16(6A):3323–31
Molecular mechanisms in the antiproliferative action of taxol and tiazofurin. Olah E, et al. **Anticancer Res** 1996 Sep-Oct; 16(5A):2469–77
Inhibition of the progression of human and rat Wilms' tumor by Tiazofurin. Rásó E, et al. **Anticancer Res** 1996 Nov-Dec;

16(6A):3333–9

The antitumor effect of Tiazofurin (TR) consists of anti–proliferative and anti–invasive elements. Tóvári J, et al. **Anticancer Res** 1996 Nov–Dec;16(6A):3307–12

Biochemically targeted therapy of refractory leukemia and myeloid blast crisis of chronic granulocytic leukemia with Tiazofurin, a selective blocker of inosine 5'–phosphate dehydrogenase activity. Tricot G, et al. **Anticancer Res** 1996 Nov–Dec;16(6A):3341–7

Tiazofurin: molecular and clinical action. Weber G, et al. **Anticancer Res** 1996 Nov–Dec;16(6A):3313–22

Tiazofurin effects on IMP–dehydrogenase activity and expression in the leukemia cells of patients with CML blast crisis. Wright DG, et al. **Anticancer Res** 1996 Nov–Dec; 16(6A):3349–51

Antiviral activities of nucleotide heterodimers against human immunodeficiency virus type 1 in vitro. Ijichi K, et al. **Antiviral Res** 1996 Jun;31(1–2):115–20

Tiazofurin enhances the anabolism and toxicity of 5–fluorouracil. Cysyk RL, et al. **Cancer Lett** 1996 Dec 3; 109(1–2):49–55

IMP dehydrogenase inhibitor, tiazofurin, induces apoptosis in K562 human erythroleukemia cells. Vitale M, et al. **Cytometry** 1997 Feb 15;30(1):61–6

Inhibition of B16 melanoma cell proliferation and alterations in p21 ras expression induced by interceptors of signal transduction pathways. Nordenberg J, et al. **Isr J Med Sci** 1996 Dec;32(12):1153–7

Kinetics and sodium independence of [3H]–tiazofurin blood to brain transport in the guinea pig. Redzic ZB, et al. **Methods Find Exp Clin Pharmacol** 1996 Jul–Aug; 18(6):413–8

PHARMACOKINETICS

Effective ribavirin concentration in hamster brains for antiviral chemotherapy for subacute sclerosing panencephalitis. Ishii T, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):241–3

Weibull function fits to pharmacokinetic data of ribavirin in man. Liu XD, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jul–Sep; 21(3):227–31

A phase–I study of the safety, pharmacokinetics, and antiviral activity of combination didanosine and ribavirin in patients with HIV–1 disease. AIDS Clinical Trials Group 231 Protocol Team. Japour AJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Nov 1;13(3):235–46

PHARMACOLOGY

Inhibition of coxsackievirus B3 carrier state infection of cultured human myocardial fibroblasts by ribavirin and human natural interferon–alpha. Heim A, et al. **Antiviral Res** 1997 May;34(3):101–11

Drug sensitivity of human immunodeficiency virus type 1 isolates after ribavirin therapy. Bernier R, et al. **J Infect Dis** 1997 Jan;175(1):176–8

The effects of ribavirin on the GTP level and the VIP receptor dynamic of human IGR39 cells. Fouchier F, et al. **J Recept Signal Transduct Res** 1996 Jan–Mar; 16(1–2):39–58

Inhibition of viral replication reverses respiratory syncytial virus–induced NF–kappaB activation and interleukin–8 gene expression in A549 cells. Fiedler MA, et al. **J Virol** 1996 Dec;70(12):9079–82

Antiviral efficacy and toxicity of ribavirin and foscarnet each given alone or in combination in the murine AIDS model. Omar RF, et al. **Toxicol Appl Pharmacol** 1997 Mar; 143(1):140–51

THERAPEUTIC USE

Phase I study of intravenous ribavirin treatment of respiratory syncytial virus pneumonia after marrow transplantation. Lewinsohn DM, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2555–7

Synergistic anti–influenza virus A (H1N1) activities of PM–523 (polyoxometalate) and ribavirin in vitro and in vivo. Shigeta S, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1423–7

Ribavirin and bronchiolitis: variation in use in the UK [letter] Allport TD, et al. **Arch Dis Child** 1997 Apr;76(4):385

Treatment of Bolivian hemorrhagic fever with intravenous ribavirin. Kilgore PE, et al. **Clin Infect Dis** 1997 Apr; 24(4):718–22

Reassessment of indications for ribavirin therapy in respiratory syncytial virus infection. Steele RW. **Clin Pediatr (Phila)** 1996 Jul;35(7):377

Tolerance and efficacy of oral ribavirin treatment of chronic hepatitis C: a multicenter trial. Bodenheimer HC Jr, et al. **Hepatology** 1997 Aug;26(2):473–7

Therapy of hepatitis C: alpha interferon and ribavirin. Reichard O, et al. **Hepatology** 1997 Sep;26(3 Suppl 1):108S–111S (29 ref.)

Pilot study of a short course of ribavirin and alpha interferon in the treatment of chronic active hepatitis C not responding to alpha–interferon alone. Scotto G, et al. **Ital J Gastroenterol** 1996 Dec;28(9):505–11

A phase–I study of the safety, pharmacokinetics, and antiviral activity of combination didanosine and ribavirin in patients with HIV–1 disease. AIDS Clinical Trials Group 231 Protocol Team. Japour AJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Nov 1;13(3):235–46

Ribavirin for RSV lower respiratory tract infection. Zamorski M. **J Fam Pract** 1996 Dec;43(6):536–7

Subfulminant syncytial giant cell hepatitis: recurrence after liver transplantation treated with ribavirin. Durand F, et al. **J Hepatol** 1997 Mar;26(3):722–6

Ribavirin treatment for patients with chronic hepatitis C: results of a placebo–controlled study. Dusheiko G, et al. **J Hepatol** 1996 Nov;25(5):591–8

Ribavirin enhances the efficacy but not the adverse effects of interferon in chronic hepatitis C. Meta–analysis of individual patient data from European centers. Schalm SW, et al. **J Hepatol** 1997 May;26(5):961–6

Effect of interferon–alpha and ribavirin therapy on serum GB virus C/hepatitis G virus (GBV–C/HGV) RNA levels in patients chronically infected with hepatitis C virus and GBV–C/HGV. Lau JY, et al. **J Infect Dis** 1997 Aug; 176(2):421–6

Effectiveness of ribavirin in otherwise well infants with respiratory syncytial virus–associated respiratory failure. Pediatric Critical Study Group. Moler FW, et al. **J Pediatr** 1996 Mar;128(3):422–8

Ribavirin and interferon–alpha combination therapy vs interferon–alpha alone in the retreatment of chronic hepatitis C: a randomized clinical trial. Bellobuono A, et al. **J Viral Hepat** 1997 May;4(3):185–91

Modulation of hepatitis C virus quasispecies heterogeneity by interferon–alpha and ribavirin therapy. González–Peralta RP, et al. **J Viral Hepat** 1997 Mar; 4(2):99–106

Prolonged therapy of chronic hepatitis C with ribavirin. Hoofnagle JH, et al. **J Viral Hepat** 1996 Sep;3(5):247–52

Treatment of chronic hepatitis C: another therapeutic option. Trepo C, et al. **Nephrol Dial Transplant** 1996;11 Suppl 4:62–4 (9 ref.)

Follow–up of children with respiratory syncytial virus bronchiolitis in 1986 and 1987: potential effect of ribavirin on long term pulmonary function. The Bronchiolitis Study Group. Krilov LR, et al. **Pediatr Infect Dis J** 1997 Mar; 16(3):273–6

Study of interobserver reliability in clinical assessment of RSV lower respiratory illness: a Pediatric Investigators Collaborative Network for Infections in Canada (PICNIC) study. Wang EE, et al. **Pediatr Pulmonol** 1996 Jul; 22(1):23–7

The ribavirin debate [letter; comment] Granger CD. **Pediatrics** 1996 Nov;98(5):1002–3; discussion 1004. Comment on: Pediatrics 1996 Jan;97(1):137–40.

Treatment of severe La Crosse encephalitis with intravenous ribavirin following diagnosis by brain biopsy. McJunkin JE, et al. **Pediatrics** 1997 Feb;99(2):261–7

Reducing the morbidity of lower respiratory tract infections caused by respiratory syncytial virus: still no answer [see comments] Prober CG, et al. **Pediatrics** 1997 Mar; 99(3):472–5. Comment in: Pediatrics 1997 Mar;99(3):454–61.

Hepatitis C: ribavirin and/or interferon? Heathcote J. **Rev Gastroenterol Mex** 1996 Oct–Dec;61(4 Suppl 2):S71–5

Clearance of hepatitis C viral RNA in cirrhotic patients with antiviral therapy. Ono SK, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 Sep–Oct; 51(5):180–3

Long–term ribavirin therapy for recurrent hepatitis C after liver transplantation. Aljumah AA, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):514

New approaches to treatment of recurrent hepatitis C virus following liver transplantation using ribavirin. Bizollon T, et al. **Transplant Proc** 1996 Oct;28(5):2842–3 (13 ref.)

Treatment of hepatitis C virus infection with ribavirin in kidney transplant patients. Garnier JL, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):783

Prophylaxis against HCV recurrence after liver transplantation: effect of interferon and ribavirin combination. Mazzaferro V, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):519–21

[The effect of interferon in combination with ribavirin on the plus and minus strands of hepatitis C virus RNA in patients with hepatitis] He Y, et al. **Chung Hua Nei Ko Tsa Chih** 1996 Jan;35(1):32–5 (Eng. Abstr.) **(Chi)**

[Ribavirin for chronic hepatitis C: many doubts and some hope (editorial; comment)] Andrade Júnior DR, et al. **Arq Gastroenterol** 1995 Jul–Sep;32(3):102–4. Comment on: Arq Gastroenterol 1996 Jul–Sep;32(3):105–9. **(Por)**

[Ribavirin in the treatment of hepatic cirrhosis due to hepatitis C virus. A non–controlled study (see comments)] Parise ER, et al. **Arq Gastroenterol** 1995 Jul–Sep; 32(3):105–9 (Eng. Abstr.). Comment in: Arq Gastroenterol 1996 Jul–Sep;32(3):102–4. **(Por)**

[Effect of the amide of 1–adamantanecarboxylic acid (AACA) and its combination with ribavirin on the course of experimental infection, caused by the sindbis virus in tissue culture and in mouse brain. Possible isolation of the virus mutant resistant to ribavirin and to a combination of the inhibitors] Andronova VL. **Antibiot Khimioter** 1997; 42(7):3–7 (Eng. Abstr.) **(Rus)**

[Experimental study of possible treatment of Marburg hemorrhagic fever with desferal, ribavirin, and homologous interferon] Ignat'ev GM, et al. **Vopr Virusol** 1996 Sep–Oct; 41(5):206–9 (Eng. Abstr.) **(Rus)**

[Bronchiolitis: revision of 153 cases and comparative study of ribavirin treatment] Colinas Herrero J, et al. **An Esp Pediatr** 1997 Feb;46(2):143–7 (Eng. Abstr.) **(Spa)**

RIBITOL

METABOLISM

Substrate recognition domains as revealed by active hybrids between the D–arabinitol and ribitol transporters from Klebsiella pneumoniae. Heuel H, et al. **J Bacteriol** 1997 Oct;179(19):6014–9

RIBOFLAVIN

Hormonal modulation of riboflavin carrier protein secretion by immature rat Sertoli cells in culture. Subramanian S, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):41–50

ADMINISTRATION & DOSAGE

Treatment of mitochondrial encephalomyopathy with a combination of cytochrome C and vitamins B1 and B2. Tanaka J, et al. **Brain Dev** 1997 Jun;19(4):262–7

Fetal growth is associated positively with maternal intake of riboflavin and negatively with maternal intake of linoleic acid. Badart–Smook A, et al. **J Am Diet Assoc** 1997 Aug; 97(8):867–70

[Study of the relationship between indicators of provision with vitamins B2 and B6 of children 7–10 years of age with mental retardation] Kodentsova VM, et al. **Klin Lab Diagn** 1997 Jan;(1):6–8 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Presence of F420–dependent glucose–6–phosphate dehydrogenase in Mycobacterium and Nocardia species, but absence from Streptomyces and Corynebacterium species and methanogenic Archaea. Purwantini E, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):129–34

Incorporation of synthetic tetramethylene diamine 8,8'–bis(riboflavin tetraacetate) in DMPC vesicles. Chauhan SM, et al. **Indian J Biochem Biophys** 1995 Oct; 32(5):286–9

The identification and kinetics of 7 alpha–hydroxyriboflavin (7–hydroxymethylriboflavin) in blood plasma from humans following oral administration of riboflavin supplements. Zempleni J, et al. **Int J Vitam Nutr Res** 1996;66(2):151–7

Chemical synthesis and properties of 7 alpha–hydroxyriboflavin. Matsui K, et al. **Methods Enzymol** 1997;280:352–9

ANALYSIS

Proximate composition and mineral content of selected Tanzanian vegetables and the effect of traditional processing on the retention of ascorbic acid, riboflavin and thiamine. Mosha TC, et al. **Plant Foods Hum Nutr** 1995 Oct;48(3):235–45

Vitamin and trace mineral withdrawal effects on broiler breast tissue riboflavin and thiamin content. Deyhim F, et al. **Poult Sci** 1996 Feb;75(2):201–2

[The criteria for the vitamin B2 and B6 allowances of children suffering from celiac disease] Kodentsova VM, et al. **Klin Lab Diagn** 1996 Nov–Dec;(6):33–6 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Physiology and metabolic fluxes of wild–type and riboflavin–producing Bacillus subtilis. Sauer U, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3687–96

Biosynthesis of riboflavin: an unusual riboflavin synthase of Methanobacterium thermoautotrophicum. Eberhardt S, et al. **J Bacteriol** 1997 May;179(9):2938–43

Biosynthesis of riboflavin: characterization of the bifunctional deaminase–reductase of Escherichia coli and Bacillus subtilis. Richter G, et al. **J Bacteriol** 1997 Mar; 179(6):2022–8

Biosynthesis of riboflavin. Lumazine synthase of Escherichia coli. Mörtl S, et al. **J Biol Chem** 1996 Dec 27; 271(52):33201–7

Biosynthesis of riboflavin: GTP cyclohydrolase II, deaminase, and reductase. Bacher A, et al. **Methods Enzymol** 1997;280:382–9

Biosynthesis of riboflavin: lumazine synthase and riboflavin synthase. Bacher A, et al. **Methods Enzymol** 1997; 280:389–99

Biosynthesis of riboflavin: 3,4–dihydroxy–2–butanone–4–phosphate synthase. Richter G, et al. **Methods Enzymol** 1997;280:374–82

Molecular cloning and characterisation of the ribC gene from Bacillus subtilis: a point mutation in ribC results in riboflavin overproduction. Coquard D, et al. **Mol Gen Genet** 1997 Mar 18;254(1):81–4

Metabolic fluxes in riboflavin–producing Bacillus subtilis. Sauer U, et al. **Nat Biotechnol** 1997 May;15(5):448–52

[Riboflavin biosynthetic genes in Bacillus amyloliquefaciens: primary structure, organization and regulation of activity] Gusarov II, et al. **Mol Biol (Mosk)** 1997 May–Jun; 31(3):446–53 **(Rus)**

BLOOD

The metabolism of riboflavin in female patients with liver

cirrhosis. Zempleni J, et al. **Int J Vitam Nutr Res** 1996; 66(3):237–43

Estimation of vitamin needs—riboflavin, vitamin B6 and ascorbic acid–according to blood parameters and functional–cognitive and emotional indices in a selected well–established group of elderly in a home for the aged in Israel. Dror Y, et al. **J Am Coll Nutr** 1996 Oct; 15(5):481–8

Effect of magnesium deficiency on vitamin B2 and B6 status in the rat. Planells E, et al. **J Am Coll Nutr** 1997 Aug; 16(4):352–6

CHEMISTRY

Degradation of hyaluronic acid by photosensitized riboflavin in vitro. Modulation of the effect by transition metals, radical quenchers, and metal chelators. Frati E, et al. **Free Radic Biol Med** 1997;22(7):1139–44

Fluorimetric studies of the formation of riboflavin–beta–cyclodextrin inclusion complex: determination of the stability constant by use of a non–linear least–squares model. Loukas YL, et al. **J Pharm Pharmacol** 1997 Feb;49(2):127–30

Effect of nicotinamide and urea on the solubility of riboflavin in various solvents. Coffman RE, et al. **J Pharm Sci** 1996 Sep;85(9):951–4

Hydrotropic solubilization—mechanistic studies. Coffman RE, et al. **Pharm Res** 1996 Oct;13(10):1460–3

Riboflavin–enhanced transport of serum albumin across the distal pulmonary epithelium. Wangensteen OD, et al. **Pharm Res** 1996 Dec;13(12):1861–4

DEFICIENCY see RIBOFLAVIN DEFICIENCY

DIAGNOSTIC USE

Assessment of medication compliance in alcoholics through UV light detection of a riboflavin tracer. Del Boca FK, et al. **Alcohol Clin Exp Res** 1996 Nov;20(8):1412–7

GENETICS

A riboflavin auxotroph of Actinobacillus pleuropneumoniae is attenuated in swine. Fuller TE, et al. **Infect Immun** 1996 Nov;64(11):4659–64

[Phenotypic expression of a 100–pair nucleotide deletion in the regulatory region of the Bacillus subtilis riboflavin operon] Kreneva RA, et al. **Genetika** 1997 May; 33(5):599–603 (Eng. Abstr.) **(Rus)**

[Genetic mapping of an additional regulatory locus of the riboflavin operon of Bacillus subtilis] Kreneva RA, et al. **Genetika** 1996 Dec;32(12):1623–8 (Eng. Abstr.) **(Rus)**

[Cloning of ribR, an additional regulatory gene of the Bacillus subtilis riboflavin operon] Solov'eva IM, et al. **Genetika** 1997 Jun;33(6):739–43 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Development of monoclonal antibodies against a riboflavin–tryptophan photoinduced adduct: reactivity to eye lens proteins. Diaz M, et al. **Photochem Photobiol** 1996 Jun;63(6):762–7

ISOLATION & PURIFICATION

Method for the extraction of riboflavin for high–performance liquid chromatography and application to casein. Hewavitharana AK. **Analyst** 1996 Nov;121(11):1671–6

METABOLISM

Flavin metabolism during respiratory infection in mice. Brijlal S, et al. **Br J Nutr** 1996 Sep;76(3):453–62

Immunohistochemical localization of riboflavin carrier protein in testicular cells of mammals. Bhat KG, et al. **Indian J Exp Biol** 1995 Jan;33(1):12–6

Plasma and urine riboflavin and pyridoxine concentrations in enterally fed very–low–birth–weight neonates. Porcelli PJ, et al. **J Pediatr Gastroenterol Nutr** 1996 Aug; 23(2):141–6

Measurements and characteristics of intestinal riboflavin transport. Rindi G, et al. **Methods Enzymol** 1997; 280:399–407

Insertional inactivation of streptolysin S expression is associated with altered riboflavin metabolism in Streptococcus pyogenes. Liu S, et al. **Microb Pathog** 1997 Apr;22(4):227–34

[Pre–cecal digestibility of natural thiamine, riboflavin and natural pantothenic acid in the swine animal model] Roth–Maier DA, et al. **Z Ernahrungswiss** 1996 Dec; 35(4):318–22 (Eng. Abstr.) **(Ger)**

[Effect of various riboflavin supplementations during lactation on riboflavin levels in milk, liver and carcass in lactating rats] Roth–Maier DA, et al. **Z Ernahrungswiss** 1997 Jun;36(2):176–81 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Bioavailability of riboflavin. Bates CJ. **Eur J Clin Nutr** 1997 Jan;51 Suppl 1:S38–42 (56 ref.)

The identification and kinetics of 7 alpha–hydroxyriboflavin (7–hydroxymethylriboflavin) in blood plasma from humans following oral administration of riboflavin supplements. Zempleni J, et al. **Int J Vitam Nutr Res** 1996;66(2):151–7

The effects of triethanolamine myristate, a fatty acid salt, on the availability of riboflavin in humans. Forusz H, et al. **Methods Find Exp Clin Pharmacol** 1997 Jan–Feb; 19(1):73–6

The effects of triethanolamine myristate, a fatty acid salt, on the bioavailability of riboflavin in dogs. Forusz H, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov; 18(9):589–91

Absorption of vitamin B12 administered to continent ileal reservoirs for urinary diversion. Riedasch G, et al. **Urol Int** 1996;56(4):224–9

PHARMACOLOGY

Riboflavin nutrition of sows. Pettigrew JE, et al. **J Anim Sci** 1996 Sep;74(9):2226–30

Needle crystals of vitamin B2 induce polyploidy in Chinese hamster lung (CHL/IU) cells. Kawaguchi Y, et al. **Mutat Res** 1997 Jan 3;373(1):1–7

[The effect of different high riboflavin supplements during pregnancy and lactation on performance and erythrocyte glutathione reductase activity of rats] Hirschvogl G, et al. **Arch Tierernahr** 1997;50(3):245–56 (Eng. Abstr.) **(Ger)**

[Effect of various riboflavin supplementations during lactation on riboflavin levels in milk, liver and carcass in lactating rats] Roth–Maier DA, et al. **Z Ernahrungswiss** 1997 Jun;36(2):176–81 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Genotoxicity of photoilluminated riboflavin in the presence of Cu(II). Jazzar MM, et al. **Free Radic Biol Med** 1996; 21(1):7–14

THERAPEUTIC USE

Mitochondrial myopathy with tRNA(Leu(UUR)) mutation and complex I deficiency responsive to riboflavin. Ogle RF, et al. **J Pediatr** 1997 Jan;130(1):138–45

TOXICITY

Genotoxicity of photoilluminated riboflavin in the presence of Cu(II). Jazzar MM, et al. **Free Radic Biol Med** 1996; 21(1):7–14

URINE

Development of a urinary riboflavin adherence marker for a wheat bran fiber community intervention trial. Switzer BR, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jun; 6(6):439–42

The metabolism of riboflavin in female patients with liver cirrhosis. Zempleni J, et al. **Int J Vitam Nutr Res** 1996; 66(3):237–43

Urinary riboflavin determination by C18 reversed–phase open–column chromatography. Huang SI, et al. **Methods Enzymol** 1997;280:343–51

RIBOFLAVIN DEFICIENCY

Glutathione reductase activity, riboflavin status, and disease activity in rheumatoid arthritis. Mulherin DM, et al. **Ann Rheum Dis** 1996 Nov;55(11):837–40

CHEMICALLY INDUCED

Methazid–induced vitamin B2 deficiency in rats and its prevention. Kodentsova VM, et al. **Ukr Biokhim Zh** 1995 Nov–Dec;67(6):86–8

COMPLICATIONS

The relationship between maternal nutritional status and spontaneous abortion. Neela J, et al. **Natl Med J India** 1997 Jan–Feb;10(1):15–6

EPIDEMIOLOGY

Vitamin B1, B2 and B6 deficiency in primary school children infected with hookworm. Nontasut P, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):47–50

METABOLISM

Changes in iron, calcium, magnesium, copper, and zinc levels in different tissues of riboflavin–deficient rats. Chen H, et al. **Biol Trace Elem Res** 1997 Mar;56(3):311–9

Decompensation of hepatic and cerebral acyl–CoA metabolism in BALB/cByJ mice by chronic riboflavin deficiency: restoration by acetyl–L–carnitine. Rao KV, et al. **Can J Physiol Pharmacol** 1997 May;75(5):423–30

An investigation into the reversibility of the morphological and cytokinetic changes seen in the small intestine of riboflavin deficient rats. Williams EA, et al. **Gut** 1996 Aug; 39(2):220–5

PREVENTION & CONTROL

Methazid–induced vitamin B2 deficiency in rats and its prevention. Kodentsova VM, et al. **Ukr Biokhim Zh** 1995 Nov–Dec;67(6):86–8

RIBOFLAVIN SYNTHASE

CHEMISTRY

Biosynthesis of riboflavin: an unusual riboflavin synthase of Methanobacterium thermoautotrophicum. Eberhardt S, et al. **J Bacteriol** 1997 May;179(9):2938–43

GENETICS

Cloning, sequencing, mapping and hyperexpression of the ribC gene coding for riboflavin synthase of Escherichia coli. Eberhardt S, et al. **Eur J Biochem** 1996 Dec 15; 242(3):712–9

METABOLISM

Biosynthesis of riboflavin: an unusual riboflavin synthase of Methanobacterium thermoautotrophicum. Eberhardt S, et al. **J Bacteriol** 1997 May;179(9):2938–43

Biosynthesis of riboflavin. Lumazine synthase of Escherichia coli. Mörtl S, et al. **J Biol Chem** 1996 Dec 27; 271(52):33201–7

Biosynthesis of riboflavin: lumazine synthase and riboflavin synthase. Bacher A, et al. **Methods Enzymol** 1997; 280:389–99

RIBONUCLEASE A see RIBONUCLEASE, PANCREATIC

RIBONUCLEASE H see RIBONUCLEASE H, CALF THYMUS

RIBONUCLEASE H, CALF THYMUS

Use of thermostable and Escherichia coli RNase H in RNA mapping studies. Porter D, et al. **Anal Biochem** 1997 May 1;247(2):279–86

The kinetic folding intermediate of ribonuclease H resembles the acid molten globule and partially unfolded molecules detected under native conditions [published erratum appears in Nat Struct Biol 1997 Jun;4(6):505] Raschke TM, et al. **Nat Struct Biol** 1997 Apr;4(4):298–304

ANALYSIS

In situ DNA polymerase and RNase H activity gel assays as applied to hepadnavirus particles. Oberhaus SM, et al. **Methods Enzymol** 1996;275:328–47

ANTAGONISTS & INHIBITORS

Inhibition of the ribonuclease H and DNA polymerase activities of HIV–1 reverse transcriptase by N–(4–tert–butylbenzoyl)–2–hydroxy–1–naphthaldehyde hydrazone. Borkow G, et al. **Biochemistry** 1997 Mar 18; 36(11):3179–85

CHEMISTRY

Structure of the acid state of Escherichia coli ribonuclease HI. Dabora JM, et al. **Biochemistry** 1996 Sep 17; 35(37):11951–8

Importance of the C–terminal helix to the stability and enzymatic activity of Escherichia coli ribonuclease H. Goedken ER, et al. **Biochemistry** 1997 Jun 10; 36(23):7256–63

Binding affinity and specificity of Escherichia coli RNase H1: impact on the kinetics of catalysis of antisense oligonucleotide–RNA hybrids. Lima WF, et al. **Biochemistry** 1997 Jan 14;36(2):390–8

Dynamics of ribonuclease H: temperature dependence of motions on multiple time scales. Mandel AM, et al. **Biochemistry** 1996 Dec 17;35(50):16009–23

Insertion of foreign random sequences of 120 amino acid residues into an active enzyme. Doi N, et al. **FEBS Lett** 1997 Feb 3;402(2–3):177–80

Thermal stability of Escherichia coli ribonuclease HI and its active site mutants in the presence and absence of the Mg2+ ion. Proposal of a novel catalytic role for Glu48. Kanaya S, et al. **J Biol Chem** 1996 Dec 20;271(51):32729–36

Expression, purification, and characterization of an active RNase H domain of the hepatitis B viral polymerase. Wei X, et al. **J Biol Chem** 1996 Dec 20;271(51):32617–22

Proposal for new catalytic roles for two invariant residues in Escherichia coli ribonuclease HI. Kashiwagi T, et al. **Protein Eng** 1996 Oct;9(10):857–67

The position of site–directed cleavage of RNA using RNase H and 2'–O–methyl oligonucleotides is dependent on the enzyme source [letter] Lapham J, et al. **RNA** 1997 Sep; 3(9):950–1

[Interaction of RNAase H from E. coli with modified duplexes. II. Duplexes, containing oligo(1–beta–D–2'–deoxy–threo–pentofuranosyl) thymidylate] Alekseev IaI, et al. **Mol Biol (Mosk)** 1996 Mar–Apr;30(2):348–52 **(Rus)**

GENETICS

Cycling probe technology with RNase H attached to an oligonucleotide. Bekkaoui F, et al. **Biotechniques** 1996 Feb; 20(2):240–8

The rnhB gene encoding RNase HII of Streptococcus pneumoniae and evidence of conserved motifs in eucaryotic genes. Zhang YB, et al. **J Bacteriol** 1997 Jun; 179(12):3828–36

Expression of a murine leukemia virus Gag–Escherichia coli RNase HI fusion polyprotein significantly inhibits virus spread. VanBrocklin M, et al. **J Virol** 1997 Apr; 71(4):3312–8

Comparative sequence analysis of ribonucleases HII, III, II PH and D. Mian IS. **Nucleic Acids Res** 1997 Aug 15; 25(16):3187–95

RIBONUCLEASE H, CALF THYMUS

ISOLATION & PURIFICATION

The isolated RNase H domain of murine leukemia virus reverse transcriptase. Retention of activity with concomitant loss of specificity. Zhan X, et al. **J Biol Chem** 1997 Aug 29;272(35):22023-9

METABOLISM

RNase H activity of human hepatitis B virus polymerase expressed in Escherichia coli. Lee YI, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):401-7

Ribonuclease H-mediated antisense effects in intact human leukaemia cells. Tidd DM. **Biochem Soc Trans** 1996 Aug; 24(3):619-23 (21 ref.)

Binding affinity and specificity of Escherichia coli RNase H1: impact on the kinetics of catalysis of antisense oligonucleotide-RNA hybrids. Lima WF, et al. **Biochemistry** 1997 Jan 14;36(2):390-8

Modulation of RNase H activity by modified DNA probes: major groove vs minor groove effects. Daniher AT, et al. **Bioorg Med Chem** 1997 Jun;5(6):1037-42

Insertion of foreign random sequences of 120 amino acid residues into an active enzyme. Doi N, et al. **FEBS Lett** 1997 Feb 3;402(2-3):177-80

Either bacteriophage T4 RNase H or Escherichia coli DNA polymerase I is essential for phage replication. Hobbs LJ, et al. **J Bacteriol** 1996 Dec;178(23):6772-7

Conformational stabilities of Escherichia coli RNase HI variants with a series of amino acid substitutions at a cavity within the hydrophobic core. Akasako A, et al. **J Biol Chem** 1997 Jul 25;272(30):18686-93

Kinetic and stoichiometric analysis for the binding of Escherichia coli ribonuclease HI to RNA-DNA hybrids using surface plasmon resonance. Haruki M, et al. **J Biol Chem** 1997 Aug 29;272(35):22015-22

The influence of antisense oligonucleotide-induced RNA structure on Escherichia coli RNase H1 activity. Lima WF, et al. **J Biol Chem** 1997 Jul 18;272(29):18191-9

Mutations within the primer grip region of HIV-1 reverse transcriptase result in loss of RNase H function. Palaniappan C, et al. **J Biol Chem** 1997 Apr 25; 272(17):11157-64

Substituting a conserved residue of the ribonuclease H domain alters substrate hydrolysis by retroviral reverse transcriptase. Rausch JW, et al. **J Biol Chem** 1997 Mar 28;272(13):8602-10

Interaction of the basic protrusion of Escherichia coli ribonuclease HI with its substrate. Iwai S, et al. **J Mol Biol** 1996 Nov 15;263(5):699-706

Subunit-specific mutagenesis of the cysteine 280 residue of the reverse transcriptase of human immunodeficiency virus type 1: effects on sensitivity to a specific inhibitor of the RNase H activity. Loya S, et al. **J Virol** 1997 Jul; 71(7):5668-72

RNase H domain of Moloney murine leukemia virus reverse transcriptase retains activity but requires the polymerase domain for specificity. Schultz SJ, et al. **J Virol** 1996 Dec; 70(12):8630-8

Catalytic activities associated with retroviral and viral polymerases. Gabbara S, et al. **Methods Enzymol** 1996; 275:276-310

An unusual mechanism of self-primed reverse transcription requires the RNase H domain of reverse transcriptase to cleave an RNA duplex. Levin HL. **Mol Cell Biol** 1996 Oct;16(10):5645-54

Mixed-backbone oligonucleotides as second generation antisense oligonucleotides: in vitro and in vivo studies. Agrawal S, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2620-5

Mutations in HIV reverse transcriptase which alter RNase H activity and decrease strand transfer efficiency are suppressed by HIV nucleocapsid protein. Cameron CE, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6700-5

The position of site-directed cleavage of RNA using RNase H and 2'-O-methyl oligonucleotides is dependent on the enzyme source [letter] Lapham J, et al. **RNA** 1997 Sep; 3(9):950-1

RNase H cleavage of tRNAPro mediated by M-MuLV and HIV-1 reverse transcriptases. Smith CM, et al. **Virology** 1997 Mar 17;229(2):437-46

PHARMACOLOGY

Escherichia coli RNase HI inhibits murine leukaemia virus reverse transcription in vitro and yeast retrotransposon Ty1 transposition in vivo. Ma WP, et al. **Genes Cells** 1996 Jun; 1(6):581-93

PHYSIOLOGY

RNase H-independent antisense activity of oligonucleotide N3 '--> P5 ' phosphoramidates. Heidenreich O, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):776-80

RIBONUCLEASE N1 see **RIBONUCLEASE T1**

RIBONUCLEASE, PANCREATIC

Is RNase-free really RNase for free? Hengen PN. **Trends Biochem Sci** 1996 Mar;21(3):112-3

ANALYSIS

[Determination of angiogenin in cow's milk based on a competitive test "pancreatic RNAase/placental inhibitor of RNAase--angiogenin"] Rogov IA, et al. **Vopr Pitan** 1997; (2):35-7 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

5'-Diphosphoadenosine 3'-phosphate is a potent inhibitor of bovine pancreatic ribonuclease A. Russo N, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):671-4

Kinetics of inactivation of bovine pancreatic ribonuclease A by bromopyruvic acid. Wang MH, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):187-92

Tissue-specific expression of pancreatic-type RNases and RNase inhibitor in humans. Futami J, et al. **DNA Cell Biol** 1997 Apr;16(4):413-9

Mechanism of ribonuclease inhibition by ribonuclease inhibitor protein based on the crystal structure of its complex with ribonuclease A. Kobe B, et al. **J Mol Biol** 1996 Dec 20;264(5):1028-43

BIOSYNTHESIS

Production of human pancreatic ribonuclease in Saccharomyces cerevisiae and Escherichia coli. Ribó M, et al. **Protein Expr Purif** 1996 May;7(3):253-61

CHEMISTRY

Differences in conformational dynamics of ribonucleases A and S as observed by infrared spectroscopy and hydrogen-deuterium exchange. Dong A, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):275-81

Kinetic and thermodynamic thermal stabilities of ribonuclease A and ribonuclease B. Arnold U, et al. **Biochemistry** 1997 Feb 25;36(8):2166-72

Ionic interactions in crystalline bovine pancreatic ribonuclease A. Fedorov AA, et al. **Biochemistry** 1996 Dec 17;35(50):15962-79

DSC study of the thermal stability of S-protein and S-peptide/S-protein. Graziano G, et al. **Biochemistry** 1996 Oct 15;35(41):13386-92

Crystal structures of ribonuclease A complexes with 5'-diphosphoadenosine 3'-phosphate and 5'-diphosphoadenosine 2'-phosphate at 1.7 A resolution. Leonidas DD, et al. **Biochemistry** 1997 May 6; 36(18):5578-88

Effect of glutaredoxin and protein disulfide isomerase on the glutathione-dependent folding of ribonuclease A. Ruoppolo M, et al. **Biochemistry** 199- Oct 7; 36(40):12259-67

Kinetic and thermodynamic studies of the folding/unfolding of a tryptophan-containing mutant of ribonuclease A. Sendak RA, et al. **Biochemistry** 1996 Oct 1;35(39):12978-92

NMR structural analysis of an analog of an intermediate formed in the rate-determining step of one pathway in the oxidative folding of bovine pancreatic ribonuclease A: automated analysis of 1H, 13C, and 15N resonance assignments for wild-type and [C65S, C72S] mutant forms. Shimotakahara S, et al. **Biochemistry** 1997 Jun 10; 36(23):6915-29

Residual structure in unfolded proteins revealed by Raman optical activity. Wilson G, et al. **Biochemistry** 1996 Sep 24;35(38):12518-25

Hydrogen-exchange kinetics in the cold denatured state of ribonuclease A. Nash D, et al. **Biochim Biophys Acta** 1996 Sep 13;1297(1):40-8

Calculations of the CD spectrum of bovine pancreatic ribonuclease. Kurapkat G, et al. **Biopolymers** 1997 Mar; 41(3):267-87

Human pancreatic ribonuclease--deletion of the carboxyl-terminal EDST extension enhances ribonuclease activity and thermostability. Bal HP, et al. **Eur J Biochem** 1997 Apr 15;245(2):465-9

Probing subtle acid-induced conformational changes of ribonuclease A by electrospray mass spectrometry. Pan XM, et al. **FEBS Lett** 1997 Jan 27;402(1):25-7

Folding studies on ribonuclease A, a model protein. Neira JL, et al. **Fold Des** 1997;2(1):R1-11 (70 ref.)

Identification of disulphide bonds in the refolding of bovine pancreatic RNase A. Ruoppolo M, et al. **Fold Des** 1996; 1(5):381-90

A two-stage mechanism for the reductive unfolding of disulfide-containing proteins. Chang JY. **J Biol Chem** 1997 Jan 3;272(1):69-75

Internal packing conditions and fluctuations of amino acid residues in globular proteins. Bhaskaran R, et al. **J Biomol Struct Dyn** 1996 Feb;13(4):627-39

Mechanism of ribonuclease inhibition by ribonuclease inhibitor protein based on the crystal structure of its complex with ribonuclease A. Kobe B, et al. **J Mol Biol** 1996 Dec 20;264(5):1028-43

Reactivity of singlet oxygen toward proteins: the effect of structure in basic pancreatic trypsin inhibitor and in ribonuclease A. Michaeli A, et al. **Photochem Photobiol** 1997 Feb;65(2):309-15

Crystal structures of the copper and nickel complexes of RNase A: metal-induced interprotein interactions and identification of a novel copper binding motif. Balakrishnan R, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9620-5

On the mechanism of action of ribonuclease A: relevance of enzymatic studies with a p-nitrophenylphosphate ester and a thiophosphate ester. Breslow R, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10018-21

Comparison of experimental and computational functional group mapping of an RNase A structure: implications for computer-aided drug design. Joseph-McCarthy D, et al. **Protein Eng** 1996 Sep;9(9):773-80

Thermodynamic analysis of the effect of selective monodeamidation at asparagine 67 in ribonuclease A. Catanzano F, et al. **Protein Sci** 1997 Aug;6(8):1682-93

The effect of denaturants on protein structure. Dunbar J, et al. **Protein Sci** 1997 Aug;6(8):1727-33

Contribution of a tyrosine side chain to ribonuclease A catalysis and stability. Eberhardt ES, et al. **Protein Sci** 1996 Aug;5(8):1697-703

Three-dimensional structure of the complexes of ribonuclease A with 2',5'-CpA and 3',5'-d(CpA) in aqueous solution, as obtained by NMR and restrained molecular dynamics. Toiron C, et al. **Protein Sci** 1996 Aug; 5(8):1633-47

Temperature dependence of the preferential interactions of ribonuclease A in aqueous co-solvent systems: thermodynamic analysis. Xie G, et al. **Protein Sci** 1997 Jan; 6(1):222-32

GENETICS

Kinetic and thermodynamic studies of the folding/unfolding of a tryptophan-containing mutant of ribonuclease A. Sendak RA, et al. **Biochemistry** 1996 Oct 1;35(39):12978-92

Ribonuclease A mutant His119 Asn: the role of histidine in catalysis. Panov KI, et al. **FEBS Lett** 1996 Nov 25; 398(1):57-60

[Discovery of genetic polymorphism of human nucleases] Kishi K. **Nippon Hoigaku Zasshi** 1996 Oct;50(5):281-91 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Cloning and cytotoxicity of a human pancreatic RNase immunofusion. Zewe M, et al. **Immunotechnology** 1997 Jun; 3(2):127-36

ISOLATION & PURIFICATION

Tissue-specific expression of pancreatic-type RNases and RNase inhibitor in humans. Futami J, et al. **DNA Cell Biol** 1997 Apr;16(4):413-9

METABOLISM

Ionic interactions in crystalline bovine pancreatic ribonuclease A. Fedorov AA, et al. **Biochemistry** 1996 Dec 17;35(50):15962-79

Tyrosyl interactions in the folding and unfolding of bovine pancreatic ribonuclease A: a study of tyrosine-to-phenylalanine mutants. Juminaga D, et al. **Biochemistry** 1997 Aug 19;36(33):10131-45

Refolding of thermally and urea-denatured ribonuclease A monitored by time-resolved FTIR spectroscopy. Reinstädler D, et al. **Biochemistry** 1996 Dec 10; 35(49):15822-30

Effect of glutaredoxin and protein disulfide isomerase on the glutathione-dependent folding of ribonuclease A. Ruoppolo M, et al. **Biochemistry** 1997 Oct 7; 36(40):12259-67

Ribonuclease A mutant His119 Asn: the role of histidine in catalysis. Panov KI, et al. **FEBS Lett** 1996 Nov 25; 398(1):57-60

Interaction of heparin with human angiogenin. Soncin F, et al. **J Biol Chem** 1997 Apr 11;272(15):9818-24

Photodynamic crosslinking of proteins. II. Photocrosslinking of a model protein-ribonuclease A. Shen HR, et al. **J Photochem Photobiol B** 1996 Sep;35(3):213-9

On the mechanism of action of ribonuclease A: relevance of enzymatic studies with a p-nitrophenylphosphate ester and a thiophosphate ester. Breslow R, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10018-21

Site-specific mutagenesis reveals differences in the structural bases for tight binding of RNase inhibitor to angiogenin and RNase A. Chen CZ, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1761-6

Dynamics of ribonuclease A and ribonuclease S: computational and experimental studies. Nadig G, et al. **Protein Sci** 1996 Oct;5(10):2104-14

Limited proteolysis of ribonuclease A with thermolysin in trifluoroethanol. Polverino de Laureto P, et al. **Protein Sci** 1997 Apr;6(4):860-72

Mechanism of the stabilization of ribonuclease A by sorbitol: preferential hydration is greater for the denatured then for the native protein. Xie G, et al. **Protein Sci** 1997 Jan; 6(1):211-21

Primary genetic characterization of HIV-1 isolates from WHO-sponsored vaccine evaluation sites by the RNase-A mismatch method. Sánchez-Palomino S, et al. **Virus Res** 1995 Dec;39(2-3):251-9

RNase A activity in Japanese quail oocytes. Stepińska U, et al. **Zygote** 1996 Aug;4(3):219-27

PHARMACOLOGY

Presence of RNase A causes aberrant DNA band shifts. Benore-Parsons M, et al. **Biotechniques** 1997 Jul; 23(1):128-31

TOXICITY

Cloning and cytotoxicity of a human pancreatic RNase immunofusion. Zewe M, et al. **Immunotechnology** 1997 Jun;

3(2):127–36

RIBONUCLEASE T1

CHEMISTRY

A novel guanyl-preferable ribonuclease of Bacillus polymyxa: isolation and characterization of the enzyme. Dementiev AA, et al. **Biochem Mol Biol Int** 1996 May; 39(1):159–70

Protein structural segments and their interconnections derived from optical spectra. Thermal unfolding of ribonuclease T1 as an example. Pancoska P, et al. **Biochemistry** 1996 Oct 8;35(40):13094–106

Glutathione-dependent pathways of refolding of RNase T1 by oxidation and disulfide isomerization: catalysis by protein disulfide isomerase. Ruoppolo M, et al. **Biochemistry** 1996 Oct 22;35(42):13636–46

Conformation of thermally denatured RNase T1 with intact disulfide bonds: a study by small-angle X-ray scattering. Damaschun H, et al. **Biochim Biophys Acta** 1997 Jul 18; 1340(2):235–44

Ribonuclease T1 is active when both catalytic histidines are replaced by aspartate. Landt O, et al. **Biol Chem** 1997 Jun; 378(6):553–8

The role of a trans-proline in the folding mechanism of ribonuclease T1. Schindler T, et al. **Eur J Biochem** 1996 Oct 15;241(2):516–24

A decade of protein engineering on ribonuclease T1—atomic dissection of the enzyme-substrate interactions. Steyaert J. **Eur J Biochem** 1997 Jul 1;247(1):1–11 (91 ref.)

Ribonuclease T1 has different dimensions in the thermally and chemically denatured states: a dynamic light scattering study. Gast K, et al. **FEBS Lett** 1997 Feb 24;403(3):245–8

The alpha-helix of ribonuclease T1 as an independent stability unit: direct comparison of peptide and protein stability. Myers JK, et al. **J Mol Biol** 1996 Nov 1; 263(3):390–5

Limits of NMR structure determination using variable target function calculations: ribonuclease T1, a case study. Pfeiffer S, et al. **J Mol Biol** 1997 Feb 21;266(2):400–23

Denaturants can accelerate folding rates in a class of globular proteins. Camacho CJ, et al. **Protein Sci** 1996 Sep; 5(9):1826–32

A catalytic function for the structurally conserved residue Phe 100 of ribonuclease T1. Doumen J, et al. **Protein Sci** 1996 Aug;5(8):1523–30

Conformational stability of ribonuclease T1 determined by hydrogen-deuterium exchange. Mullins LS, et al. **Protein Sci** 1997 Jul;6(7):1387–95

METABOLISM

Glutathione-dependent pathways of refolding of RNase T1 by oxidation and disulfide isomerization: catalysis by protein disulfide isomerase. Ruoppolo M, et al. **Biochemistry** 1996 Oct 22;35(42):13636–46

Upstream subsite interactions for oligonucleotide binding with ribonuclease T1. Walz FG Jr. **Biochim Biophys Acta** 1997 Feb 7;1350(2):183–8

Reverse action of ribonuclease T1 in frozen aqueous systems. Haensler M, et al. **Biol Chem** 1997 Feb;378(2):115–8

Catalyzed and assisted protein folding of ribonuclease T1. Schmid FX, et al. **Biol Chem** 1996 Jul-Aug;377(7–8):417–24 (65 ref.)

Capillary enzymophoresis of nucleic acid fragments using coupled capillary electrophoresis and capillary enzyme microreactors having surface-immobilized RNA-modifying enzymes. Mechref Y, et al. **Electrophoresis** 1995 Nov;16(11):2164–71

Additivity of protein-guanine interactions in ribonuclease T1. Loverix S, et al. **J Biol Chem** 1997 Apr 11;272(15):9635–9

Limits of NMR structure determination using variable target function calculations: ribonuclease T1, a case study. Pfeiffer S, et al. **J Mol Biol** 1997 Feb 21;266(2):400–23

[Inactivation mechanism of carboxymethylated RNase T1] Ishikawa K, et al. **Tanpakushitsu Kakusan Koso** 1997 May; 42(7 Suppl):971–6 (17 ref.) **(Jpn)**

RIBONUCLEASES

Nonisotopic quantitation of mRNA using a novel RNase protection assay: measurement of erbB-2 mRNA in tumor cell lines. Chan SD, et al. **Anal Biochem** 1996 Nov 15; 242(2):214–20

Use of internal controls to increase quantitative capabilities of the ribonuclease protection assay. Davis MJ, et al. **Biotechniques** 1997 Aug;23(2):280–5

A reliable external control for ribonuclease protection assays. Scott PAE, et al. **Nucleic Acids Res** 1997 Mar 15; 25(6):1305–6

AGONISTS

[Activation of endogenous nucleases as affected by sodium arsenate and cisplatin] Maksimovich MB, et al. **Antibiot Khimioter** 1996;41(7–8):18–21 (Eng. Abstr.) **(Rus)**

ANALYSIS

pH gradient electrophoresis of basic ribonucleases in sealed slab polyacrylamide gels: detection and inhibition of enzyme activity in the gel. Nadano D, et al. **Electrophoresis** 1996 Jan;17(1):104–9

Identification of stylar RNases associated with gametophytic self-incompatibility in almond (Prunus dulcis). Tao R, et al. **Plant Cell Physiol** 1997 Mar;38(3):304–11

ANTAGONISTS & INHIBITORS

Thermodynamics of the complex protein unfolding reaction of barstar. Agashe VR, et al. **Biochemistry** 1997 Oct 7; 36(40):12288–95

Circular dichroism of denatured barstar suggests residual structure,. Nölting B, et al. **Biochemistry** 1997 Aug 12; 36(32):9899–905

Transition metal saccharide chemistry and biology: synthesis, characterization, electrochemistry and EPR studies of oxovanadium (IV) complexes of saccharides and their derivatives and in vitro interaction of some of these with ribonuclease and deoxyribonuclease. Sreedhara A, et al. **Carbohydr Res** 1996 Aug 19;289:39–53

Antibodies of the anti-Yo and anti-Ri type in the absence of paraneoplastic neurological syndromes: a long-term survey of ovarian cancer patients. Drlicek M, et al. **J Neurol** 1997 Feb;244(2):85–9

[Determination of angiogenin in cow's milk based on a competitive test "pancreatic RNAase/placental inhibitor of RNAase--angiogenin"] Rogov IA, et al. **Vopr Pitan** 1997; (2):35–7 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Sequence determination and molecular characterization of gigantin, a cytotoxic protein produced by the mould Aspergillus giganteus IFO 5818. Wirth J, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):188–93

Molecular cloning and expression of a ribonuclease H from the kinetoplastid, Trypanosoma brucei. Hesslein DG, et al. **Mol Biochem Parasitol** 1997 May;86(1):121–6

Relationship between thermal stability, degradation rate and expression yield of barnase variants in the periplasm of Escherichia coli. Kwon WS, et al. **Protein Eng** 1996 Dec; 9(12):1197–202

CHEMICAL SYNTHESIS

Towards artificial ribonucleases: the sequence-specific cleavage of RNA in a duplex. Hall J, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3522–6

Pyridoxamine-amino acid chimeras in semisynthetic aminotransferase mimics. Roy RS, et al. **Protein Eng** 1997 Jun;10(6):691–8

CHEMISTRY

Differences in conformational dynamics of ribonucleases A and S as observed by infrared spectroscopy and hydrogen-deuterium exchange. Dong A, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):275–81

Sequence determination and molecular characterization of gigantin, a cytotoxic protein produced by the mould Aspergillus giganteus IFO 5818. Wirth J, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):188–93

Kinetic and thermodynamic thermal stabilities of ribonuclease A and ribonuclease B. Arnold U, et al. **Biochemistry** 1997 Feb 25;36(8):2166–72

Temperature-induced denaturation of ribonuclease S: a thermodynamic study. Catanzano F, et al. **Biochemistry** 1996 Oct 15;35(41):13378–85

The role of phenylalanine 31 in maintaining the conformational stability of ribonuclease P2 from Sulfolobus solfataricus under extreme conditions of temperature and pressure. Mombelli E, et al. **Biochemistry** 1997 Jul 22; 36(29):8733–42

Molecular dynamics simulations of the unfolding of barnase in water and 8 M aqueous urea. Tirado-Rives J, et al. **Biochemistry** 1997 Jun 17;36(24):7313–29

A multi-functional enzyme with RNA polymerase and RNase activities: molecular anatomy of influenza virus RNA polymerase. Ishihama A. **Biochimie** 1996; 78(11–12):1097–102 (46 ref.)

A molecular switch for biochemical logic gates: conformational studies. Ashkenazi G, et al. **Biosens Bioelectron** 1997;12(2):85–95

Location of cysteine and cystine residues in S-ribonucleases associated with gametophytic self-incompatibility. Ishimizu T, et al. **Eur J Biochem** 1996 Dec 15;242(3):627–35

Disulphide bonding in a stylar self-incompatibility ribonuclease of Nicotiana alata. Oxley D, et al. **Eur J Biochem** 1996 Nov 15;242(1):75–80

Determination of the nucleotide conformation in the productive enzyme-substrate complexes of RNA-depolymerases. Moiseyev GP, et al. **FEBS Lett** 1997 Mar 10;404(2–3):169–72

Primary structures of two ribonucleases from ginseng calluses. New members of the PR-10 family of intracellular pathogenesis-related plant proteins. Moiseyev GP, et al. **FEBS Lett** 1997 Apr 28;407(2):207–10

Structure-function relationships in human ribonucleases: main distinctive features of the major RNase types. Sorrentino S, et al. **FEBS Lett** 1997 Mar 3;404(1):1–5 (56 ref.)

Mechanical stability of compact modules of barnase. Takahashi K, et al. **FEBS Lett** 1997 Mar 17;405(1):47–54

An NMR study on the beta-hairpin region of barnase. Neira JL, et al. **Fold Des** 1996;1(3):231–41

Structure of N-glycans on the S3- and S6-allele stylar self-incompatibility ribonucleases of Nicotiana alata. Oxley D, et al. **Glycobiology** 1996 Sep;6(6):611–8

Identification of histidine 31 and cysteine 95 in the active site of self-incompatibility associated S6-RNase in Nicotiana alata. Ishimizu T, et al. **J Biochem (Tokyo)** 1995 Nov;118(5):1007–13

A chaperone-like function of intramolecular high-mannose chains in the oxidative refolding of bovine pancreatic RNase B. Yamaguchi H, et al. **J Biochem (Tokyo)** 1996 Sep;120(3):474–7

Crystallization and preliminary diffraction data of a major pollen allergen. Crystal growth separates a low molecular weight form with elevated biological activity. Bufe A, et al. **J Biol Chem** 1996 Nov 1;271(44):27193–6

The secondary structure of a pyrimidine-guanine sequence-specific ribonuclease possessing cytotoxic activity from the oocytes of Rana catesbeiana. Chen C, et al. **J Biomol NMR** 1996 Oct;8(3):331–44

Internal packing conditions and fluctuations of amino acid residues in globular proteins. Bhaskaran R, et al. **J Biomol Struct Dyn** 1996 Feb;13(4):627–39

Dynamic structure of proteins in solid state. 1H and 13C NMR relaxation study. Krushelnitsky AG, et al. **J Biomol Struct Dyn** 1996 Oct;14(2):211–24

Thermodynamics of the interaction of barnase and barstar: changes in free energy versus changes in enthalpy on mutation. Frisch C, et al. **J Mol Biol** 1997 Apr 4; 267(3):696–706

Thermodynamics of denaturation of mutants of barnase with disulfide crosslinks. Johnson CM, et al. **J Mol Biol** 1997 Apr 25;268(1):198–208

The role of Glu73 of barnase in catalysis and the binding of barstar. Schreiber G, et al. **J Mol Biol** 1997 Jul 4; 270(1):111–22

Molecular cloning and expression of a ribonuclease H from the kinetoplastid, Trypanosoma brucei. Hesslein DG, et al. **Mol Biochem Parasitol** 1997 May;86(1):121–6

Acetylacetonato-lanthanide complexes as eminent catalytic sites for artificial ribonucleases. Sumaoka J, et al. **Nucleic Acids Symp Ser** 1995;(34):83–4

Initiation sites of protein folding by NMR analysis. Freund SM, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10600–3

Pyridoxamine-amino acid chimeras in semisynthetic aminotransferase mimics. Roy RS, et al. **Protein Eng** 1997 Jun;10(6):691–8

Free energy calculations of the mutation of Ile96-->Ala in barnase: contributions to the difference in stability. Sun YC, et al. **Protein Eng** 1996 Mar;9(3):273–81

Effect of nucleotide substrate binding on the pKa of catalytic residues in barnase. Gordon-Beresford RM, et al. **Proteins** 1996 Jun;25(2):180–94

Properties of the protein matrix revealed by the free energy of cavity formation. Kocher JP, et al. **Structure** 1996 Dec 15;4(12):1517–29

Insights into specificity of cleavage and mechanism of cell entry from the crystal structure of the highly specific Aspergillus ribotoxin, restrictocin. Yang X, et al. **Structure** 1996 Jul 15;4(7):837–52

Methods and reagents. Is your fluorometer on the blink? Hengen PN. **Trends Biochem Sci** 1996 Aug;21(8):317–8

[Cytotoxic properties of the complex of the antineoplastic antibiotic bleomycetin and Bacillus intermedius ribonuclease] Kalacheva NV, et al. **Antibiot Khimioter** 1997;42(4):16–20 (Eng. Abstr.) **(Rus)**

[Chemical modification of RNAse from Bacillus intermedius. Effect on the cytotoxic properties of the enzyme] Kurinenko BM, et al. **Antibiot Khimioter** 1996;41(7–8):9–12 (Eng. Abstr.) **(Rus)**

[Analysis of ribonuclease and lysozyme interactions with liposomes using fluorescent probes] Gorbenko GP. **Biofizika** 1996 Sep-Oct;41(5):1038–43 (Eng. Abstr.) **(Rus)**

[The effect of ligands undergoing temperature conformational transitions on the stability of DNA double helix] Lando DIu. **Biofizika** 1997 Jan-Feb;42(1):92–8 (Eng. Abstr.) **(Rus)**

[Artificial ribonucleases I. Targeted RNA cleavage by 5'-peptidyloligodeoxyribonucleotides containing arginine and leucine residues] Pyshnyĭ DV, et al. **Bioorg Khim** 1997 Jun;23(6):497–504 (Eng. Abstr.) **(Rus)**

[Barnase, binase and a hybrid of them: differences in conformation and heat denaturation parameters] Randzhbar B, et al. **Mol Biol (Mosk)** 1997 May-Jun;31(3):492–9 **(Rus)**

[Modification of Bacillus intermedius ribonuclease by dialdehyde dextran] Kurinenko BM, et al. **Prikl Biokhim Mikrobiol** 1996 May-Jun;32(3):303–6 (Eng. Abstr.) **(Rus)**

[Study of the interaction of ribonuclease with liposomes using competitive analysis] Gorbenko GP. **Ukr Biokhim Zh** 1996 Jan-Feb;68(1):55–60 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Structure-function relationships in human ribonucleases: main distinctive features of the major RNase types. Sorrentino S, et al. **FEBS Lett** 1997 Mar 3;404(1):1–5 (56 ref.)

RIBONUCLEASES

DIAGNOSTIC USE

Skin test reactivity to recombinant Aspergillus fumigatus allergen I/a in patients with cystic fibrosis. Nikolaizik WH, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):403–8

From housekeeper to microsurgeon: the diagnostic and therapeutic potential of ribonucleases. Schein CH. **Nat Biotechnol** 1997 Jun;15(6):529–36 (115 ref.)

GENETICS

Construction, expression and characterization of chimaeric toxins containing the ribonucleolytic toxin restrictocin: intracellular mechanism of action. Rathore D, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):815–22

Identification of cDNA encoding rat eosinophil cationic protein/eosinophil-associated ribonuclease. Nittoh T, et al. **Biochim Biophys Acta** 1997 Mar 20;1351(1–2):42–6

Primary structure of base non-specific and acid ribonuclease from bullfrog (Rana catesbeiana). Inokuchi N, et al. **Biol Pharm Bull** 1997 May;20(5):471–8

Mammalian Rh/T2/S-glycoprotein ribonuclease family genes: cloning of a human member located in a region of chromosome 6 (6q27) frequently deleted in human malignancies. Trubia M, et al. **Genomics** 1997 Jun 1; 42(2):342–4

Identification and partial amino acid sequences of seven S-RNases associated with self-incompatibility of Japanese pear, Pyrus pyrifolia Nakai. Ishimizu T, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):326–34

Molecular cloning and nucleotide sequences of cDNAs encoding S-allele specific stylar RNases in a self-incompatible cultivar and its self-compatible mutant of Japanese pear, Pyrus pyrifolia Nakai. Norioka N, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):335–45

Intronic enhancer activity of the eosinophil-derived neurotoxin (RNS2) and eosinophil cationic protein (RNS3) genes is mediated by an NFAT-1 consensus binding sequence. Handen JS, et al. **J Biol Chem** 1997 Jan 17; 272(3):1665–9

Thermodynamics of denaturation of mutants of barnase with disulfide crosslinks. Johnson CM, et al. **J Mol Biol** 1997 Apr 25;268(1):198–208

The product of the UL12.5 gene of herpes simplex virus type 1 is a capsid-associated nuclease. Bronstein JC, et al. **J Virol** 1997 Apr;71(4):3039–47

Self-incompatibility (S) alleles of the Rosaceae encode members of a distinct class of the T2/S ribonuclease superfamily. Sassa H, et al. **Mol Gen Genet** 1996 Aug 27; 252(1–2):222

Exchanging sequence domains between S-RNases from Nicotiana alata disrupts pollen recognition. Zurek DM, et al. **Plant J** 1997 Apr;11(4):797–808

Two highly homologous ribonuclease genes expressed in mouse eosinophils identify a larger subgroup of the mammalian ribonuclease superfamily. Larson KA, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12370–5

Relationship between thermal stability, degradation rate and expression yield of barnase variants in the periplasm of Escherichia coli. Kwon WS, et al. **Protein Eng** 1996 Dec; 9(12):1197–202

Expression and characterization of a cytotoxic human–frog chimeric ribonuclease: potential for cancer therapy. Newton DL, et al. **Protein Eng** 1997 Apr;10(4):463–70

Characterization of a new ribotoxin gene (c-sar) from Aspergillus clavatus. Huang KC, et al. **Toxicon** 1997 Mar; 35(3):383–92

[Effect of culture medium components on the accumulation of extracellular bacillary ribonucleases in culture fluid of recombinant strains of Escherichia coli] Gabdrakhmanova LA, et al. **Mikrobiologiia** 1996 Sep–Oct;65(5):599–606 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The function of allergens may determine allergenicity. Bufe A, et al. **Adv Exp Med Biol** 1996;409:399–402 (18 ref.)

Automated specific IgE assay with recombinant allergens: evaluation of the recombinant Aspergillus fumigatus allergen I in the Pharmacia Cap System. Crameri R, et al. **Clin Exp Allergy** 1996 Dec;26(12):1411–9

Immunosuppressive activity of bovine seminal ribonuclease and its mode of action. Souček J, et al. **Immunobiology** 1996 Aug;195(3):271–85

ISOLATION & PURIFICATION

Purification and some properties of a novel dsRNA degrading nuclease bound to rye germ ribosomes. Siwecka MA. **Acta Biochim Pol** 1997;44(1):61–8

Identification and partial amino acid sequences of seven S-RNases associated with self-incompatibility of Japanese pear, Pyrus pyrifolia Nakai. Ishimizu T, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):326–34

Large-scale preparation of a ribonuclease from Rana catesbeiana (bullfrog) oocytes and characterization of its specific cytotoxic activity against tumor cells. Liao YD, et al. **Protein Expr Purif** 1996 Mar;7(2):194–202

Purification of mammalian ribonuclease using immobilized human ribonuclease inhibitor. Nadano D, et al. **Protein Expr Purif** 1996 Mar;7(2):167–72

Characterization of a new ribotoxin gene (c-sar) from Aspergillus clavatus. Huang KC, et al. **Toxicon** 1997 Mar; 35(3):383–92

METABOLISM

Purification and some properties of a novel dsRNA degrading nuclease bound to rye germ ribosomes. Siwecka MA. **Acta Biochim Pol** 1997;44(1):61–8

A general ribonuclease assay using methylene blue. Greiner-Stoeffele T, et al. **Anal Biochem** 1996 Aug 15; 240(1):24–8

A novel Mn++-dependent ribonuclease that functions in U16 SnoRNA processing in X. laevis. Caffarelli E, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):514–7

A multi-functional enzyme with RNA polymerase and RNase activities: molecular anatomy of influenza virus RNA polymerase. Ishihama A. **Biochimie** 1996; 78(11–12):1097–102 (46 ref.)

Poly(A) metabolism in Xenopus laevis embryos: substrate-specific and default poly(A) nuclease activities are mediated by two distinct complexes. Paillard L, et al. **Biochimie** 1996;78(6):399–407

Overproduction of Sac7d and Sac7e reveals only Sac7e to be a DNA-binding protein with ribonuclease activity from the extremophilic archaeon Sulfolobus acidocaldarius. Kulms D, et al. **Biol Chem** 1997 Jun;378(6):545–51

The gradual reduction of viroid levels in hop mericlones following heat therapy: a possible role for a nuclease degrading dsRNA. Matoušek J, et al. **Biol Chem Hoppe Seyler** 1995 Dec;376(12):715–21

Enzymatic activities of several K108 mutants of ribonuclease (RNase) Rh isolated from Rhizopus niveus. Ohgi K, et al. **Biol Pharm Bull** 1996 Aug;19(8):1080–2

Protein–protein diffusional encounter [comment] Briggs JM. **Biophys J** 1997 May;72(5):1915–6. Comment on: Biophys J 1997 May;72(5):1917–29.

Simulation of the diffusional association of barnase and barstar [see comments] Gabdoulline RR, et al. **Biophys J** 1997 May;72(5):1917–29. Comment in: Biophys J 1997 May;72(5):1915–6.

NIRCA: a rapid robust method for screening for unknown point mutations. Goldrick MM, et al. **Biotechniques** 1996 Jul;21(1):106–12

A new quantitative solution hybridisation–RNase protection assay for APP and APLP2 mRNA. Johnston JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):77–84

Transition metal saccharide chemistry and biology: synthesis, characterization, electrochemistry and EPR studies of oxovanadium (IV) complexes of saccharides and their derivatives and in vitro interaction of some of these with ribonuclease and deoxyribonuclease. Sreedhara A, et al. **Carbohydr Res** 1996 Aug 19;289:39–53

Conformation-independent binding of monoglucosylated ribonuclease B to calnexin. Zapun A, et al. **Cell** 1997 Jan 10;88(1):29–38

Solid-state 13C-NMR spectroscopy of adduction products of 2,5-hexanedione with ribonuclease, albumin, and rat neurofilament protein. Yan B, et al. **Chem Biol Interact** 1996 Oct 21;102(2):101–16

N-linked oligosaccharides are necessary and sufficient for association of glycosylated forms of bovine RNase with calnexin and calreticulin. Rodan AR, et al. **EMBO J** 1996 Dec 16;15(24):6921–30

Ribonucleolytic activities in the Escherichia coli in vitro translation system and in its separate components. Fuchs U, et al. **FEBS Lett** 1997 Sep 8;414(2):362–4

Colloidal gold–RNase labeling of RNA in regenerating rat liver hepatocytes. Orkisz S, et al. **Folia Histochem Cytobiol** 1995;33(4):247–53

Activation of RNase L by 2',5'-oligoadenylates. Kinetic characterization. Carroll SS, et al. **J Biol Chem** 1997 Aug 1;272(31):19193–8

Characteristics of poly(A)-degrading factor present in the avian oocytes and early embryos. Stepińska U, et al. **J Exp Zool** 1996 Sep 1;276(1):19–29

RNAse protection assays for the simultaneous and semiquantitative analysis of multiple murine matrix metalloproteinase (MMP) and MMP inhibitor mRNAs. Pagenstecher A, et al. **J Immunol Methods** 1997 Aug 7; 206(1–2):1–9

Eosinophils inhibit retroviral transduction of human target cells by a ribonuclease-dependent mechanism. Domachowske JB, et al. **J Leukoc Biol** 1997 Sep; 62(3):363–8

Ribonuclease and high salt sensitivity of the ribonucleoprotein complex formed by the human LINE-1 retrotransposon. Hohjoh H, et al. **J Mol Biol** 1997 Aug 8;271(1):7–12

Importance of electrostatic interactions in the rapid binding of polypeptides to GroEL. Perrett S, et al. **J Mol Biol** 1997 Jun 27;269(5):892–901

The role of Glu73 of barnase in catalysis and the binding of barstar. Schreiber G, et al. **J Mol Biol** 1997 Jul 4; 270(1):111–22

Demonstration of ribonuclease activity in the plant ribosome-inactivating proteins alpha- and beta-momorcharins. Mock JW, et al. **Life Sci** 1996; 59(22):1853–9

Expression of mRNAs of pancreatic and L type RNase inhibitors as a function of age in different tissues of SAMP8 and BDF1 mice. Semsei I, et al. **Mech Ageing Dev** 1997 Sep;97(3):249–61

Determination of apolipoprotein mRNA levels by ribonuclease protection assay. Mitchell A, et al. **Methods Enzymol** 1996;263:351–63

RNases in ColE1 DNA metabolism. Jung YH, et al. **Mol Biol Rep** 1995–96;22(2–3):195–200 (35 ref.)

A sensitive RNase protection assay using 33P labeled antisense riboprobes. Meisinger C, et al. **Mol Biotechnol** 1996 Jun;5(3):289–91

Glutamic acid-371 of the barnase homology domain in RNA polymerase II is not required for SII-activated RNA cleavage. Powell W, et al. **Mol Gen Genet** 1997 Jan 27; 253(4):507–11

Isolation of a nuclease-resistant decoy RNA that can protect human acetylcholine receptors from myasthenic antibodies. Lee SW, et al. **Nat Biotechnol** 1997 Jan;15(1):41–5

Polynucleotide:adenosine glycosidase activity of ribosome-inactivating proteins: effect on DNA, RNA and poly(A). Barbieri L, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):518–22

Cleavage properties of an estrogen-regulated polysomal ribonuclease involved in the destabilization of albumin mRNA. Chernokalskaya E, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):735–42

Matrix-assisted laser desorption/ionization mass spectrometry (MALDI) of endonuclease digests of RNA. Hahner S, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1957–64

A homogeneous method to quantify mRNA levels: a hybridization of RNase protection and scintillation proximity assay technologies. Kenrick MK, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2947–8

Diversity among the primate eosinophil-derived neurotoxin genes: a specific C-terminal sequence is necessary for enhanced ribonuclease activity. Rosenberg HF, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3532–6

Distribution of catalase, ribonuclease and superoxide dismutase modified by monomethoxy (polyethylene glycol) into rat central lymph and lymphatic nodes. Lamka J, et al. **Physiol Res** 1995;44(5):307–13

Trypanosome U-deletional RNA editing involves guide RNA-directed endonuclease cleavage, terminal U exonuclease, and RNA ligase activities. Cruz-Reyes J, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8901–6

A novel RNA polymerase I-dependent RNase activity that shortens nascent transcripts from the 3' end. Tschochner H. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12914–9

Dynamics of ribonuclease A and ribonuclease S: computational and experimental studies. Nadig G, et al. **Protein Sci** 1996 Oct;5(10):2104–14

Effect of nucleotide substrate binding on the pKa of catalytic residues in barnase. Gordon-Beresford RM, et al. **Proteins** 1996 Jun;25(2):180–94

[The modification of the internucleotide relations of antisignature oligodeoxyribonucleotides as a means of increasing their resistance to nuclease cleavage in mollicute cells] Egorov OV. **Mikrobiol Z** 1997 Jan–Feb;59(1):31–6 (Eng. Abstr.) **(Rus)**

[The ribonuclease activity of bacteria as a factor in the persistence of the causative agents of sapronotic infections] Boĭko AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug;(4):71–3 **(Rus)**

PHARMACOLOGY

Mapping of nuclease-sensitive sites in native reticulocyte ribosomes--an analysis of the accessibility of ribosomal RNA to enzymatic cleavage. Holmberg L, et al. **Eur J Biochem** 1997 Jul 1;247(1):160–8

Immunosuppressive activity of bovine seminal ribonuclease and its mode of action. Souček J, et al. **Immunobiology** 1996 Aug;195(3):271–85

Ribonucleases may limit recovery of ribonucleic acids from archival human temporal bones. Lee KH, et al. **Laryngoscope** 1997 Sep;107(9):1228–34

Nephrotoxic effects of bacterial ribonucleases in the isolated perfused rat kidney. Ilinskaya ON, et al. **Toxicology** 1997 Jun 6;120(1):55–63

[Change in various biological properties of Lactobacillus as affected by ribonuclease] Kolpakov AI, et al. **Antibiot Khimioter** 1996;41(10):16–8 (Eng. Abstr.) **(Rus)**

[Influence of Bacillus intermedius RNAse on growth-stimulating and antagonistic characteristics of Trichoderma harzianum] Egorov SI, et al. **Prikl Biokhim Mikrobiol** 1996 Sep–Oct;32(5):554–6 (Eng. Abstr.) **(Rus)**

[Changes in the size and morphology of cells under the influence of bacterial ribonuclease] Kurinenko BM, et al. **Tsitologiia** 1996;38(7):667–73 (Eng. Abstr.) **(Rus)**

[The stimulating action of exogenous RNase on eubiotic strains of Lactobacillus, Bifidobacterium and Escherichia coli] Kolpakov AI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):14–8 (Eng. Abstr.) **(Rus)**

[Ribonuclease improves the function of hippocampal slices in the postischemic period] Kudriashov IE, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan–Feb; 47(1):136–46 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Glycoprotein Erns of pestiviruses induces apoptosis in lymphocytes of several species. Bruschke CJ, et al. **J Virol** 1997 Sep;71(9):6692–6

RADIATION EFFECTS

[The possible role of the elements of protein secondary structure in adaptation to the action of ionizing radiation]

Kharchenko LI, et al. **Izv Akad Nauk Ser Biol** 1997 Jan-Feb;(1):5-10 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

From housekeeper to microsurgeon: the diagnostic and therapeutic potential of ribonucleases. Schein CH. **Nat Biotechnol** 1997 Jun;15(6):529-36 (115 ref.)

TOXICITY

Cytotoxic activity of ribonucleolytic toxin restrictocin-based chimeric toxins targeted to epidermal growth factor receptor. Rathore D, et al. **FEBS Lett** 1997 May 5; 407(3):275-9

Large-scale preparation of a ribonuclease from Rana catesbeiana (bullfrog) oocytes and characterization of its specific cytotoxic activity against tumor cells. Liao YD, et al. **Protein Expr Purif** 1996 Mar;7(2):194-202

RIBONUCLEIC ACID see RNA

RIBONUCLEOPROTEINS

Maternal autoimmune response to recombinant Ro/SSA and La/SSB proteins in Japanese neonatal lupus erythematosus. Miyagawa S, et al. **Autoimmunity** 1995;21(4):277-82

The immune response to 52-kDa Ro and 60-kDa Ro is linked in experimental autoimmunity. Keech CL, et al. **J Immunol** 1996 Oct 15;157(8):3694-9

ANALYSIS

Osmium ammine-B and electron spectroscopic imaging of ribonucleoproteins: correlation of stain and phosphorus. Olins AL, et al. **Biol Cell** 1996;87(3):143-7

Subcellular distribution of Xenopus XEL-1 protein, a member of the neuron-specific ELAV/Hu family, revealed by epitope tagging. Perron M, et al. **DNA Cell Biol** 1997 May;16(5):579-87

Differential distribution of calcium stores in paramecium cells. Occurrence of a subplasmalemmal store with a calsequestrin-like protein. Plattner H, et al. **Eur J Cell Biol** 1997 Apr;72(4):297-306

Nuclear colocalization of the Ro 60 kDa autoantigen and a subset of U snRNP domains. Wahren M, et al. **Eur J Cell Biol** 1996 Jul;70(3):189-97

Characterization of prosomes in human lymphocyte subpopulations and their presence as surface antigens. Bureau JP, et al. **Exp Cell Res** 1997 Feb 25;231(1):50-60

An altered intracellular distribution of the autoantigen La/SS-B when translated from a La mRNA isoform. Grölz D, et al. **Exp Cell Res** 1997 Aug 1;234(2):329-35

The I protein of the heterogeneous nuclear ribonucleoprotein complex is a novel dog nuclear autoantigen. Soulard M, et al. **J Autoimmun** 1996 Oct;9(5):599-608

hnRNP proteins and B23 are the major proteins of the internal nuclear matrix of HeLa S3 cells. Mattern KA, et al. **J Cell Biochem** 1996 Aug;62(2):275-89

Evaluation of recombinant RO/SSA, La/SSB, Sm and U1 RNP autoantigens in clinical diagnosis [letter; comment] Meheus L, et al. **J Clin Lab Anal** 1996;10(1):57-8. Comment on: J Clin Lab Anal 1995;9(1):52-8.

Identification of a 4.5S-like ribonucleoprotein in maize mitochondria. Yang AJ, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3601-6

Phosphorylated Ser/Arg-rich proteins: limiting factors in the assembly of 200S large nuclear ribonucleoprotein particles. Yitzhaki S, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8830-5

[Packing of the chromatin fibers and the distribution of RNP in BK chromosomes] Luo Y, et al. **I Chuan Hsueh Pao** 1996;23(5):351-6 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

Cardiac expression of 52beta, an alternative transcript of the congenital heart block-associated 52-kd SS-A/Ro autoantigen, is maximal during fetal development. Buyon JP, et al. **Arthritis Rheum** 1997 Apr;40(4):655-60

Stress-induced cell surface expression and antigenic alteration of the Ro/SSA autoantigen. Igarashi T, et al. **Autoimmunity** 1995;22(1):33-42

Induction of calreticulin expression in HeLa cells by depletion of the endoplasmic reticulum Ca2+ store and inhibition of N-linked glycosylation. Llewellyn DH, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):555-60

Calreticulin biosynthesis and processing in human myeloid cells: demonstration of signal peptide cleavage and N-glycosylation. Denning GM, et al. **Blood** 1997 Jul 1; 90(1):372-81

Spatial and temporal expression of 4f-rnp gene in Drosophila melanogaster. Hess KA, et al. **Differentiation** 1996 Dec; 61(2):103-11

In vivo commitment to splicing in yeast involves the nucleotide upstream from the branch site conserved sequence and the Mud2 protein. Rain JC, et al. **EMBO J** 1997 Apr 1;16(7):1759-71

Transfection analysis of expression of mRNA isoforms encoding the nuclear autoantigen La/SS-B. Grölz D, et al. **J Biol Chem** 1997 May 2;272(18):12076-82

Calreticulin expression in spinal motoneurons of the rat. Copray JC, et al. **J Chem Neuroanat** 1996 Jul;11(1):57-65

RNA transport in dendrites: a cis-acting targeting element is contained within neuronal BC1 RNA. Muslimov IA, et al. **J Neurosci** 1997 Jun 15;17(12):4722-33

Ambisense gene expression from recombinant rabies virus: random packaging of positive- and negative-strand ribonucleoprotein complexes into rabies virions. Finke S, et al. **J Virol** 1997 Oct;71(10):7281-8

Ribonucleoprotein formation by the ORF1 protein of the non-LTR retrotransposon Tx1L in Xenopus oocytes. Pont-Kingdon G, et al. **Nucleic Acids Res** 1997 Aug 1; 25(15):3088-94

BC1 RNA, the transcript from a master gene for ID element amplification, is able to prime its own reverse transcription. Shen MR, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1641-8

A topogenic role for the oncogenic N-terminus of TLS: nucleolar localization when transcription is inhibited. Zinszner H, et al. **Oncogene** 1997 Jan 30;14(4):451-61

Mutations in the small subunit of the Drosophila U2AF splicing factor cause lethality and developmental defects. Rudner DZ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10333-7

CHEMISTRY

Cation-dependent interactions of calreticulin with denatured and native proteins. Wiuff C, et al. **Acta Chem Scand** 1996 Sep;50(9):788-95

Identification of N(G)-methylarginine residues in human heterogeneous RNP protein A1: Phe/Gly-Gly-Gly-Arg-Gly-Gly-Gly/Phe is a preferred recognition motif. Kim S, et al. **Biochemistry** 1997 Apr 29;36(17):5185-92

Electron spectroscopic imaging analyses of the distribution of phosphorus in Balbiani ring granules and in the surrounding nucleoplasm. Vázquez-Nin GH, et al. **Chromosoma** 1997 Apr;105(6):360-8

Roles of the influenza virus polymerase and nucleoprotein in forming a functional RNP structure. Klumpp K, et al. **EMBO J** 1997 Mar 17;16(6):1248-57

Sequence determinants for hnRNP I protein nuclear localization. Romanelli MG, et al. **Exp Cell Res** 1997 Aug 25;235(1):300-4

Primary structure of the N-linked carbohydrate chains of Calreticulin from spinach leaves. Navazio L, et al. **Glycoconj J** 1996 Dec;13(6):977-83

Phage-displayed La/SS-B antigen as a diagnostic reagent. Poon VK, et al. **Immunotechnology** 1997 Jun;3(2):155-9

Zik1, a transcriptional repressor that interacts with the heterogeneous nuclear ribonucleoprotein particle K protein. Denisenko ON, et al. **J Biol Chem** 1996 Nov 1; 271(44):27701-6

Ribonuclease and high salt sensitivity of the ribonucleoprotein complex formed by the human LINE-1 retrotransposon. Hohjoh H, et al. **J Mol Biol** 1997 Aug 8;271(1):7-12

A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. II. The RNA-protein interaction data. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):545-65

Native gel analysis of ribonucleoprotein complexes from a Leishmania tarentolae mitochondrial extract. Peris M, et al. **Mol Biochem Parasitol** 1997 Mar;85(1):9-24

The La autoantigen contains a dimerization domain that is essential for enhancing translation. Craig AW, et al. **Mol Cell Biol** 1997 Jan;17(1):163-9

Chicken MAR-binding protein ARBP is homologous to rat methyl-CpG-binding protein MeCP2. Weitzel JM, et al. **Mol Cell Biol** 1997 Sep;17(9):5656-66

Crystal structure of the two RNA binding domains of human hnRNP A1 at 1.75 A resolution. Shamoo Y, et al. **Nat Struct Biol** 1997 Mar;4(3):215-22

Xp54, the Xenopus homologue of human RNA helicase p54, is an integral component of stored mRNP particles in oocytes. Ladomery M, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):965-73

Identification of a (CUG)n triplet repeat RNA-binding protein and its expression in myotonic dystrophy. Timchenko LT, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4407-14

Cross-validated maximum likelihood enhances crystallographic simulated annealing refinement. Adams PD, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):5018-23

RNA splicing specificity determined by the coordinated action of RNA recognition motifs in SR proteins. Chandler SD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15; 94(8):3596-601

The newt ribozyme is part of a riboprotein complex. Luzi E, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9711-6

Phosphorylated Ser/Arg-rich proteins: limiting factors in the assembly of 200S large nuclear ribonucleoprotein particles. Yitzhaki S, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8830-5

Crystal structure of human UP1, the domain of hnRNP A1 that contains two RNA-recognition motifs. Xu RM, et al. **Structure** 1997 Apr 15;5(4):559-70

DIAGNOSTIC USE

Phage-displayed La/SS-B antigen as a diagnostic reagent. Poon VK, et al. **Immunotechnology** 1997 Jun;3(2):155-9

GENETICS

Embryonic lethal abnormal visual RNA-binding proteins involved in growth, differentiation, and posttranscriptional gene expression. Antic D, et al. **Am J Hum Genet** 1997 Aug;61(2):273-8 (59 ref.)

The nuclear autoantigen La/SS-associated antigen B: one gene, three functional mRNAs. Grölz D, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):151-8

The case of chicken attachment region binding protein reinforces the importance of pre-screening of several libraries for cDNA cloning [letter] Weitzel J, et al. **Biochem J** 1997 Jan 1;321 (Pt 1):261-2

Analysis of expression of an alternative La (SS-B) cDNA and localization of the encoded N- and C-terminal peptides. Bachmann M, et al. **Biochim Biophys Acta** 1997 Mar 27;1356(1):53-63

Upregulation of the elongation factor-1alpha gene by p53 in association with death of an erythroleukemic cell line. Kato MV, et al. **Blood** 1997 Aug 15;90(4):1373-8

Multiple chromosomal mechanisms generate an EWS/FLI1 or an EWS/ERG fusion gene in Ewing tumors. Desmaze C, et al. **Cancer Genet Cytogenet** 1997 Aug;97(1):12-9

Phosphorylation of the human La antigen on serine 366 can regulate recycling of RNA polymerase III transcription complexes. Fan H, et al. **Cell** 1997 Mar 7;88(5):707-15

Calreticulin. Krause KH, et al. **Cell** 1997 Feb 21;88(4):439-43 (25 ref.)

ELAV, a Drosophila neuron-specific protein, mediates the generation of an alternatively spliced neural protein isoform. Koushika SP, et al. **Curr Biol** 1996 Dec 1; 6(12):1634-41

Biology of EWS/FLI and related fusion genes in Ewing's sarcoma and primitive neuroectodermal tumor. May WA, et al. **Curr Top Microbiol Immunol** 1997;220:143-50 (35 ref.)

Chromosome translocation-mediated conversion of a tumor suppressor gene into a dominant oncogene: fusion of EWS1 to WT1 in desmoplastic small round cell tumors. Rauscher FJ 3rd. **Curr Top Microbiol Immunol** 1997;220:151-62 (47 ref.)

A genetic pathway for regulation of tra-2 translation. Goodwin EB, et al. **Development** 1997 Feb;124(3):749-58

Spatial and temporal expression of 4f-rnp gene in Drosophila melanogaster. Hess KA, et al. **Differentiation** 1996 Dec; 61(2):103-11

Molecular cloning of htra2-beta-1 and htra2-beta-2, two human homologs of tra-2 generated by alternative splicing. Beil B, et al. **DNA Cell Biol** 1997 Jun;16(6):679-90

hPop1: an autoantigenic protein subunit shared by the human RNase P and RNase MRP ribonucleoproteins. Lygerou Z, et al. **EMBO J** 1996 Nov 1;15(21):5936-48

EWS-FLI1 fusion transcripts identified in patients with typical neuroblastoma. Burchill SA, et al. **Eur J Cancer** 1997 Feb;33(2):239-43

An altered intracellular distribution of the autoantigen La/SS-B when translated from a La mRNA isoform. Grölz D, et al. **Exp Cell Res** 1997 Aug 1;234(2):329-35

Genes for murine Y1 and Y3 Ro RNAs have class 3 RNA polymerase III promoter structures and are unlinked on mouse chromosome 6. Farris AD, et al. **Gene** 1996 Sep 26;174(1):35-42

The nuclear autoantigen La/SS-B: mapping and sequencing of the gene and the three retropseudogenes. Grölz D, et al. **Gene** 1997 May 20;191(1):23-9

Analysis of a cDNA encoding the major vault protein from the electric ray Discopyge ommata. Herrmann C, et al. **Gene** 1997 Mar 25;188(1):85-90

Fusion of an ETS-family gene, EIAF, to EWS by t(17;22)(q12;q12) chromosome translocation in an undifferentiated sarcoma of infancy. Kaneko Y, et al. **Genes Chromosomes Cancer** 1996 Feb;15(2):115-21

EWS-ERG fusion transcript produced by chromosomal insertion in a Ewing sarcoma. Kaneko Y, et al. **Genes Chromosomes Cancer** 1997 Mar;18(3):228-31

LINE-1 element insertion at the t(11;22) translocation breakpoint of a desmoplastic small round cell tumor. Liu J, et al. **Genes Chromosomes Cancer** 1997 Mar;18(3):232-9

Expression patterns of the human sarcoma-associated genes FUS and EWS and the genomic structure of FUS. Aman P, et al. **Genomics** 1996 Oct 1;37(1):1-8

The gene for human U2 snRNP auxiliary factor small 35-kDa subunit (U2AF1) maps to the progressive myoclonus epilepsy (EPM1) critical region on chromosome 21q22.3. Lalioti MD, et al. **Genomics** 1996 Apr 15;33(2):298-300

Cloning and mapping of a human RBP56 gene encoding a putative RNA binding protein similar to FUS/TLS and EWS proteins. Morohoshi F, et al. **Genomics** 1996 Nov 15;38(1):51-7

Assignment of human KH-box-containing genes by in situ hybridization: HNRNPK maps to 9q21.32-q21.33, PCBP1 to 2p12-p13, and PCBP2 to 12q13.12-q13.13, distal to FRA12A. Tommerup N, et al. **Genomics** 1996 Mar 1; 32(2):297-8

Thyroid hormone regulation of germ cell-specific EF-1 alpha expression during metamorphosis of Xenopus laevis. Abdallah B, et al. **Int J Dev Biol** 1996 Apr;40(2):507-14

A frame shift mutation in a hot spot region of the nuclear autoantigen La (SS-B). Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):747-56

Different La/SS-B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757-66

Complete nucleotide sequences of the genes encoding

translation elongation factors 1 alpha and 2 from a microsporidian parasite, Glugea plecoglossi: implications for the deepest branching of eukaryotes. Kamaishi T, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1095–103

Cloning of human 2H9 heterogeneous nuclear ribonucleoproteins. Relation with splicing and early heat shock–induced splicing arrest. Mahé D, et al. **J Biol Chem** 1997 Jan 17;272(3):1827–36

Targeting of U2AF65 to sites of active splicing in the nucleus. Gama–Carvalho M, et al. **J Cell Biol** 1997 Jun 2; 137(5):975–87

The hnRNP C proteins contain a nuclear retention sequence that can override nuclear export signals. Nakielny S, et al. **J Cell Biol** 1996 Sep;134(6):1365–73

Calreticulin modulates cell adhesiveness via regulation of vinculin expression. Opas M, et al. **J Cell Biol** 1996 Dec; 135(6 Pt 2):1913–23

Regulation of calreticulin gene expression by calcium. Waser M, et al. **J Cell Biol** 1997 Aug 11;138(3):547–57

EWS–Fli1 antisense oligodeoxynucleotide inhibits proliferation of human Ewing's sarcoma and primitive neuroectodermal tumor cells. Tanaka K, et al. **J Clin Invest** 1997 Jan 15;99(2):239–47

Molecular cloning and subcellular localisation of the snRNP–associated protein 69KD, a structural homologue of the proto–oncoproteins TLS and EWS with RNA and DNA–binding properties. Hackl W, et al. **J Mol Biol** 1996 Dec 20;264(5):843–51

Additional evidence of a variant translocation t(12;22) with EWS/CHOP fusion in myxoid liposarcoma: clinicopathological features. Dal Cin P, et al. **J Pathol** 1997 Aug;182(4):437–41

Characterization of ribonucleoprotein complexes containing an abundant polyadenylated nuclear RNA encoded by Kaposi's sarcoma–associated herpesvirus (human herpesvirus 8). Zhong W, et al. **J Virol** 1997 Feb; 71(2):1207–12

Malignant melanoma of the soft parts (clear–cell sarcoma): confirmation of EWS and ATF–1 gene fusion caused by a t(12;22) translocation. Speleman F, et al. **Mod Pathol** 1997 May;10(5):496–9

Isolation and characterization of Leishmania donovani calreticulin gene and its conservation of the RNA binding activity. Joshi M, et al. **Mol Biochem Parasitol** 1996 Oct 18;81(1):53–64

Altered levels of the Drosophila HRB87F/hrp36 hnRNP protein have limited effects on alternative splicing in vivo. Zu K, et al. **Mol Biol Cell** 1996 Jul;7(7):1059–73

Cloning and expression of mouse 60 kDa ribonucleoprotein SS–A/Ro. Wang D, et al. **Mol Biol Rep** 1996; 23(3–4):205–10

An intron element modulating 5' splice site selection in the hnRNP A1 pre–mRNA interacts with hnRNP A1. Chabot B, et al. **Mol Cell Biol** 1997 Apr;17(4):1776–86

Evolutionary conservation of regulatory strategies for the sex determination factor transformer–2. Chandler D, et al. **Mol Cell Biol** 1997 May;17(5):2908–19

Repression of gene expression by an exogenous sequence element acting in concert with a heterogeneous nuclear ribonucleoprotein–like protein, Nrd1, and the putative helicase Sen1. Steinmetz EJ, et al. **Mol Cell Biol** 1996 Dec; 16(12):6993–7003

Cloning of Caenorhabditis U2AF65: an alternatively spliced RNA containing a novel exon. Zorio DA, et al. **Mol Cell Biol** 1997 Feb;17(2):946–53

HLA–H and associated proteins in patients with hemochromatosis. Beutler E, et al. **Mol Med** 1997 Jun; 3(6):397–402

Neural BC1 RNA in mouse skeletal muscle is a denervation–induced RNA whose expression is developmentally regulated. Anzai K, et al. **Neurosci Lett** 1996 Sep 27;216(2):81–4

Zebrafish elav/HuC homologue as a very early neuronal marker. Kim CH, et al. **Neurosci Lett** 1996 Sep 27; 216(2):109–12

Overexpression in COS cells of p50, the major core protein associated with mRNA, results in translation inhibition. Davydova EK, et al. **Nucleic Acids Res** 1997 Jul 15; 25(14):2911–6

The Elav–like proteins bind to AU–rich elements and to the poly(A) tail of mRNA. Ma WJ, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3564–9

Gene encoding human Ro–associated autoantigen Y5 RNA. Maraia R, et al. **Nucleic Acids Res** 1996 Sep 15; 24(18):3552–9

A new member of the ETS family fused to EWS in Ewing tumors. Peter M, et al. **Oncogene** 1997 Mar 13; 14(10):1159–64

EAT–2 is a novel SH2 domain containing protein that is up regulated by Ewing's sarcoma EWS/FLI1 fusion gene. Thompson AD, et al. **Oncogene** 1996 Dec 19; 13(12):2649–58

Cloning and characterization of the calreticulin gene from Ricinus communis L. Coughlan SJ, et al. **Plant Mol Biol** 1997 Aug;34(6):897–911

A human homologue of the Drosophila sex determination factor transformer–2 has conserved splicing regulatory functions. Dauwalder B, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9004–9

In vitro properties of the first ORF protein from mouse LINE–1 support its role in ribonucleoprotein particle formation during retrotransposition. Kolosha VO, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10155–60

Heterogeneous nuclear ribonucleoprotein A1 binds to the transcription–regulatory region of mouse hepatitis virus RNA. Li HP, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9544–9

Mutations in the small subunit of the Drosophila U2AF splicing factor cause lethality and developmental defects. Rudner DZ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10333–7

The proliferation potential protein–related (P2P–R) gene with domains encoding heterogeneous nuclear ribonucleoprotein association and Rb1 binding shows repressed expression during terminal differentiation. Witte MM, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1212–7

Evolution, expression, and possible function of a master gene for amplification of an interspersed repeated DNA family in rodents. Deininger PL, et al. **Prog Nucleic Acid Res Mol Biol** 1996;52:67–88 (62 ref.)

A highly stable duplex structure sequesters the 5' splice site region of hnRNP A1 alternative exon 7B. Blanchette M, et al. **RNA** 1997 Apr;3(4):405–19

Identification of the universally conserved core of ribonuclease P RNA [letter] Chen JL, et al. **RNA** 1997 Jun;3(6):557–60

A novel protein shared by RNase MRP and RNase P. Chu S, et al. **RNA** 1997 Apr;3(4):382–91

The protein cofactor allows the sequence of an RNase P ribozyme to diversify by maintaining the catalytically active structure of the enzyme. Kim JJ, et al. **RNA** 1997 Jun;3(6):613–23

Mutation of PTB binding sites causes misregulation of alternative 3' splice site selection in vivo. Pérez I, et al. **RNA** 1997 Jul;3(7):764–78

Establishment of a new continuous clear cell sarcoma cell line. Morphological and cytogenetic characterization and detection of chimaeric EWS/ATF–1 transcripts. Hiraga H, et al. **Virchows Arch** 1997 Jul;431(1):45–51

IMMUNOLOGY

Anti–Ro (SSA) and anti–La (SSB) antibodies and complete congenital heart block. Finkelstein Y, et al. **Ann Med Interne (Paris)** 1997;148(3):205–8 (60 ref.)

Anti–Ro/SS–A and anti–La/SS–B antibodies associated with cardiac involvement in childhood systemic lupus erythematosus. Oshiro AC, et al. **Ann Rheum Dis** 1997 Apr; 56(4):272–4

Identification of autoantibodies to the I protein of the heterogeneous nuclear ribonucleoprotein complex in patients with systemic sclerosis. Montecucco C, et al. **Arthritis Rheum** 1996 Oct;39(10):1669–76

Association of homozygosity for glutathione–S–transferase GSTM1 null alleles with the Ro+/La– autoantibody profile in patients with systemic lupus erythematosus. Ollier W, et al. **Arthritis Rheum** 1996 Oct;39(10):1763–4

Development of the anti–Ro autoantibody response in a patient with systemic lupus erythematosus. Scofield RH, et al. **Arthritis Rheum** 1996 Oct;39(10):1664–8

The 52–kd protein as a target of intermolecular spreading of the immune response to components of the SS–A/Ro–SS–B/La complex. Tseng CE, et al. **Arthritis Rheum** 1997 May;40(5):936–44

Peripheral blood in Sjögren's syndrome does not contain increased levels of T lymphocytes reactive with the recombinant Ro/SS–A 52 kD and La/SS–B 48 kD autoantigens. Halse AK, et al. **Autoimmunity** 1996; 23(1):25–34

Restricted heterogeneity and changing spectrotypes in autoantibodies to La/SS–B. Satoh M, et al. **Autoimmunity** 1996;24(4):229–36

Characterization of T cell receptor repertoire and anti–Ro/SSA autoantibodies in relation to sialadenitis of NOD mice. Skarstein K, et al. **Autoimmunity** 1995; 22(1):9–16

Anti–RNP antibody in a child with undifferentiated carcinoma and no evidence of mixed connective tissue disease. Foster HE, et al. **Br J Rheumatol** 1997 Feb; 36(2):289–91

Arrhythmogenicity of IgG and anti–52–kD SSA/Ro affinity–purified antibodies from mothers of children with congenital heart block. Boutjdir M, et al. **Circ Res** 1997 Mar;80(3):354–62

Anti–Ro52 antibodies frequently co–occur with anti–Jo–1 antibodies in sera from patients with idiopathic inflammatory myopathy. Rutjes SA, et al. **Clin Exp Immunol** 1997 Jul;109(1):32–40

Fine specificity of autoantibodies to La/SSB: epitope mapping, and characterization. Tzioufas AG, et al. **Clin Exp Immunol** 1997 May;108(2):191–8

Antibodies to Jo–1 and Ro–52: why do they go together? [editorial] Venables PJ. **Clin Exp Immunol** 1997 Sep; 109(3):403–5

Complete congenital heart block is associated with increased autoantibody titers against calreticulin. Orth T, et al. **Eur J Clin Invest** 1996 Mar;26(3):205–15

Differential recognition of the 52–kd Ro(SS–A) antigen by sera from patients with primary biliary cirrhosis and primary Sjögren's syndrome. Dörner T, et al. **Hepatology** 1996 Dec;24(6):1404–7

Autoantibodies to the A/B proteins of the heterogeneous nuclear ribonucleoprotein complex: novel tools for the diagnosis of rheumatic diseases. Steiner G, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):314–9 (34 ref.)

Detection of human–specific anti–la(SSB) antibodies in patients with rheumatoid arthritis. Manoussakis MN, et al. **J Autoimmun** 1995 Dec;8(6):959–69

Accessibility of epitopes on the 52–kD Ro/SSA protein (Ro52) and on the RoRNP associated Ro52 protein as determined by anti–peptide antibodies. Ricchiuti V, et al. **J Autoimmun** 1997 Apr;10(2):181–91

Activation of a murine autoreactive B cell by immunization with human recombinant autoantigen La/SS–B: characterization of the autoepitope. Tröster H, et al. **J Autoimmun** 1995 Dec;8(6):825–42

Autoantibody repertoire to Ro/SSA and La/SSB antigens in patients with primary and secondary Sjögren's syndrome. Wahren M, et al. **J Autoimmun** 1996 Aug; 9(4):537–44

Human anti–Ro autoantibodies bind multiple conformational epitopes of 60–kD Ro autoantigen. Huang SC, et al. **J Clin Immunol** 1997 May;17(3):212–9

Anti–A2/RA33 autoantibodies are directed to the RNA binding region of the A2 protein of the heterogeneous nuclear ribonucleoprotein complex. Differential epitope recognition in rheumatoid arthritis, systemic lupus erythematosus, and mixed connective tissue disease. Skriner K, et al. **J Clin Invest** 1997 Jul 1;100(1):127–35

Hierarchical self–tolerance to T cell determinants within the ubiquitous nuclear self–antigen La (SS–B) permits induction of systemic autoimmunity in normal mice. Reynolds P, et al. **J Exp Med** 1996 Nov 1;184(5):1857–70

Autoantigenic epitopes on hY5 Ro RNA are distinct from regions bound by the 60–kDa Ro and La proteins. Granger D, et al. **J Immunol** 1996 Sep 1;157(5):2193–200

The recognition of human 60–kDa Ro ribonucleoprotein particles by antibodies associated with cutaneous lupus and neonatal lupus. Lee LA, et al. **J Invest Dermatol** 1996 Aug; 107(2):225–8

17–beta–estradiol increases expression of 52–kDa and 60–kDa SS–A/Ro autoantigens in human keratinocytes and breast cancer cell line MCF–7. Wang D, et al. **J Invest Dermatol** 1996 Oct;107(4):610–4

Anti–Ro (SSA) antibodies: clinical significance and biological relevance [editorial; comment] Bouffard P, et al. **J Rheumatol** 1996 Nov;23(11):1838–41. Comment on: J Rheumatol 1996 Nov;23(11):1897–903.

Autoantibodies reactive with Ro(SSA) and La(SSB) and pregnancy. Buyon JP. **J Rheumatol** 1997 Sep;24 Suppl 50:12–6 (47 ref.)

Recombinant 52 kDa Ro(SSA) ELISA detects autoantibodies in Sjögren's syndrome sera that go undetected by conventional serologic assays. McCauliffe DP, et al. **J Rheumatol** 1997 May;24(5):860–6

Fine specificity of anti–Ro(SSA) autoantibodies and clinical manifestations in patients with systemic lupus erythematosus [see comments] Zimmermann C, et al. **J Rheumatol** 1996 Nov;23(11):1897–903. Comment in: J Rheumatol 1996 Nov;23(11):1838–41.

New T–cell epitope of Ro/SS–A 52 kDa protein in labial salivary glands from patients with Sjögren's syndrome [letter] Sumida T, et al. **Lancet** 1996 Dec 14;348(9042):1667

Transient neonatal bradycardia without heart block associated with anti–Ro antibodies [letter] Cimaz R, et al. **Lupus** 1997;6(5):487–8

A subpopulation of WIL–2 cell calreticulin molecules is associated with RO/SS–A ribonucleoprotein particles. Lieu TS, et al. **Lupus** 1997;6(1):40–7

Systemic lupus erythematosus: clinical expression and anti–Ro/SS—a response in patients with and without lesions of subacute cutaneous lupus erythematosus. López–Longo FJ, et al. **Lupus** 1997;6(1):32–9

Cutaneous diseases in adults associated with anti–Ro/SS–A autoantibody production. McCauliffe DP. **Lupus** 1997; 6(2):158–66 (100 ref.)

Development of squamous cell carcinoma in chronic discoid lupus erythematosus: a report of two patients with anti–Ro/SSA antibodies [letter] Miyagawa S, et al. **Lupus** 1996 Dec;5(6):630–2

Anti–Ro(SS–A) antibody positive Sjögren's/lupus erythematosus overlap syndrome. Provost TT, et al. **Lupus** 1997;6(2):105–11

Late development of anti–La/SS–B antibodies in a patient with Sjogren's syndrome and high titer anti–Ro/SS–A antibodies. Satoh M, et al. **Lupus** 1996 Aug;5(4):337–9

Immunologically restricted and inhibitory anti–Ro/SSA in monozygotic twins. Scofield RH, et al. **Lupus** 1997; 6(4):395–8

Clinical and immunological aspects of autoantibodies to RA33/hnRNP–A/B proteins—a link between RA, SLE and MCTD. Steiner G, et al. **Mol Biol Rep** 1996; 23(3–4):167–71 (29 ref.)

Rapid and sensitive detection of anti–Ro (SS–A) antibodies by indirect immunofluorescence of 60kDa Ro HEp–2 transfectants. Keech CL, et al. **Pathology** 1996 Jan; 28(1):54–7

Neonatal lupus: bedside to bench and back [editorial] Buyon JP. **Scand J Rheumatol** 1996;25(5):271–6 (49 ref.)

[Sjögren's syndrome and anti–Ro syndrome] Tanaka M. **Ryoikibetsu Shokogun Shirizu** 1996;(15):379–82 (17 ref.) **(Jpn)**

[The DNA–binding activity of the membrane protein annexin II and its interaction with antibodies to the chromatin nuclear ribonucleoprotein (alpha–RNP)] Krutilina RI, et al. **Tsitologiia** 1996;38(10):1106–14 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Identification of human common nuclear-matrix proteins as heterogeneous nuclear ribonucleoproteins H and H' by sequencing and mass spectrometry. Holzmann K, et al. **Eur J Biochem** 1997 Mar 1;244(2):479–86

Expression, purification, and characterization of orthomyxovirus: influenza transcriptase. Tomassini JE. **Methods Enzymol** 1996;275:90–9

METABOLISM

Involvement of a 50-kDa mRNP protein from Saccharomyces cerevisiae in mRNA binding to ribosomes. Triana L, et al. **Arch Biochem Biophys** 1997 Aug 1; 344(1):1–10

Nuclear proteins bind to poliovirus 5' untranslated region [published erratum appears in Arch Med Res 1996 Winter;27(4):589] Gutiérrez-Escolano L, et al. **Arch Med Res** 1996 Autumn;27(3):413–9

Stress-induced cell surface expression and antigenic alteration of the Ro/SSA autoantigen. Igarashi T, et al. **Autoimmunity** 1995;22(1):33–42

Geranylgeraniol causes a decrease in levels of calreticulin and tyrosine phosphorylation of a 36-kDa protein prior to the appearance of apoptotic features in HL-60 cells. Nakajo S, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):741–5

The interaction between human cytomegalovirus immediate-early gene 2 (IE2) protein and heterogeneous ribonucleoprotein A1. Wang YF, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):590–4

Preribosomal RNA processing in archaea: characterization of the RNP endonuclease mediated processing of precursor 16S rRNA in the thermoacidophile Sulfolobus acidocaldarius. Potter S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):813–23 (31 ref.)

Recognition of subsets of the mammalian A/B-type core heterogeneous nuclear ribonucleoprotein polypeptides by novel autoantibodies. Dangli A, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):761–7

Release of calreticulin from neutrophils may alter C1q-mediated immune functions. Kishore U, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):543–50

The scaffold/matrix attachment region binding protein hnRNP-U (SAF-A) is directly bound to chromosomal DNA in vivo: a chemical cross-linking study. Göhring F, et al. **Biochemistry** 1997 Jul 8;36(27):8276–83

Multiple RRMs contribute to RNA binding specificity and affinity for polypyrimidine tract binding protein. Pérez I, et al. **Biochemistry** 1997 Sep 30;36(39):11881–90

The roles of heterogeneous nuclear ribonucleoproteins (hnRNP) in RNA metabolism. Weighardt F, et al. **Bioessays** 1996 Sep;18(9):747–56 (72 ref.)

The class III POU factor Brn-4 interacts with other class III POU factors and the heterogeneous nuclear ribonucleoprotein U. Malik KF, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):99–107

Phosphorylation of the human La antigen on serine 366 can regulate recycling of RNA polymerase III transcription complexes. Fan H, et al. **Cell** 1997 Mar 7;88(5):707–15

Calreticulin. Krause KH, et al. **Cell** 1997 Feb 21;88(4):439–43 (25 ref.)

mRNA silencing in erythroid differentiation: hnRNP K and hnRNP E1 regulate 15-lipoxygenase translation from the 3' end. Ostareck DH, et al. **Cell** 1997 May 16;89(4):597–606

The yeast La protein is required for the 3' endonucleolytic cleavage that matures tRNA precursors. Yoo CJ, et al. **Cell** 1997 May 2;89(3):393–402

The autoantigen La/SSB is a calmodulin-binding protein. Castro A, et al. **Cell Calcium** 1996 Dec;20(6):493–500

Association of hnRNP S1 proteins C2 and D2 with vimentin intermediate filaments. Tsugawa K, et al. **Cell Struct Funct** 1997 Apr;22(2):239–46

The covalent binding of [14C]acetaminophen to mouse hepatic microsomal proteins: the specific binding to calreticulin and the two forms of the thiol:protein disulfide oxidoreductases. Zhou L, et al. **Chem Res Toxicol** 1996 Oct-Nov;9(7):1176–82

Association of the neuron-specific RNA binding domain-containing protein ELAV with the coiled body in Drosophila neurons. Yannoni YM, et al. **Chromosoma** 1997 Apr;105(6):332–41

RNA-labelled Ro and La ribonucleoprotein complexes reassembled in vitro; characterization by gel shift analysis. Granger D, et al. **Clin Exp Immunol** 1996 Dec; 106(3):498–503

Calnexin, calreticulin, and Bip/Kar2p in protein folding. Hebert DN, et al. **Cold Spring Harb Symp Quant Biol** 1995; 60:405–15 (70 ref.)

A small nucleolar RNP protein is required for pseudouridylation of eukaryotic ribosomal RNAs. Bousquet-Antonelli C, et al. **EMBO J** 1997 Aug 1; 16(15):4770–6

Pop3p is essential for the activity of the RNase MRP and RNase P ribonucleoproteins in vivo. Dichtl B, et al. **EMBO J** 1997 Jan 15;16(2):417–29

RNA-RNA interaction is required for the formation of specific bicoid mRNA 3' UTR-STAUFEN ribonucleoprotein particles. Ferrandon D, et al. **EMBO J** 1997 Apr 1;16(7):1751–8

Heat shock disassembles the nucleolus and inhibits nuclear protein import and poly(A)+ RNA export. Liu Y, et al. **EMBO J** 1996 Dec 2;15(23):6750–7

The K nuclear shuttling domain: a novel signal for nuclear import and nuclear export in the hnRNP K protein. Michael WM, et al. **EMBO J** 1997 Jun;16(12):3587–98

N-linked oligosaccharides are necessary and sufficient for association of glycosylated forms of bovine RNase with calnexin and calreticulin. Rodan AR, et al. **EMBO J** 1996 Dec 16;15(24):6921–30

Complementary change in cis determinants and trans factors in the evolution of an mRNP stability complex. Wang X, et al. **EMBO J** 1996 Sep 16;15(18):5040–51

Still immunodetectable nuclear RNPs are extruded from the cytoplasm of spontaneously apoptotic thymocytes. Biggiogera M, et al. **Exp Cell Res** 1997 Aug 1;234(2):512–20

Sequence determinants for hnRNP I protein nuclear localization. Romanelli MG, et al. **Exp Cell Res** 1997 Aug 25;235(1):300–4

Modulation of the retinoic acid and retinoid X receptor signaling pathways in P19 embryonal carcinoma cells by calreticulin. Shago M, et al. **Exp Cell Res** 1997 Jan 10; 230(1):50–60

Diverse molecular interactions of the hnRNP K protein. Bomsztyk K, et al. **FEBS Lett** 1997 Feb 17;403(2):113–5 (28 ref.)

Evidence for the formation of an unusual ternary complex of rabbit liver EF-1alpha with GDP and deacylated tRNA. Petrushenko ZM, et al. **FEBS Lett** 1997 Apr 21;407(1):13–7

Nuclear localisation of calreticulin in vivo is enhanced by its interaction with glucocorticoid receptors. Roderick HL, et al. **FEBS Lett** 1997 Mar 24;405(2):181–5

Localisation of the C1q binding site within C1q receptor/calreticulin. Stuart GR, et al. **FEBS Lett** 1996 Nov 18;397(2–3):245–9

A protein of the SR family of splicing factors binds extensively to exonic Balbiani ring pre-mRNA and accompanies the RNA from the gene to the nuclear pore. Alzhanova-Ericsson AT, et al. **Genes Dev** 1996 Nov 15; 10(22):2881–93

U2AF65 recruits a novel human DEAD box protein required for the U2 snRNP-branchpoint interaction. Fleckner J, et al. **Genes Dev** 1997 Jul 15;11(14):1864–72

Fission yeast WD-repeat protein pop1 regulates genome ploidy through ubiquitin-proteasome-mediated degradation of the CDK inhibitor Rum1 and the S-phase initiator Cdc18. Kominami K, et al. **Genes Dev** 1997 Jun 15;11(12):1548–60

The spliceosome is a dynamic ribonucleoprotein machine. Guthrie C. **Harvey Lect** 1994–95;90:59–80 (77 ref.)

Nuclear ribonucleoprotein-containing structures undergo severe rearrangement during spontaneous thymocyte apoptosis. A morphological study by electron microscopy. Biggiogera M, et al. **Histochem Cell Biol** 1997 Apr; 107(4):331–6

Zik1, a transcriptional repressor that interacts with the heterogeneous nuclear ribonucleoprotein particle K protein. Denisenko ON, et al. **J Biol Chem** 1996 Nov 1; 271(44):27701–6

Endoplasmic reticulum chaperones GRP78 and calreticulin prevent oxidative stress, Ca2+ disturbances, and cell death in renal epithelial cells. Liu H, et al. **J Biol Chem** 1997 Aug 29;272(35):21751–9

Endoplasmic reticulum form of calreticulin modulates glucocorticoid-sensitive gene expression. Michalak M, et al. **J Biol Chem** 1996 Nov 15;271(46):29436–45

High density distribution of endoplasmic reticulum proteins and mitochondria at specialized Ca2+ release sites in oligodendrocyte processes. Simpson PB, et al. **J Biol Chem** 1997 Sep 5;272(36):22654–61

The C-group heterogeneous nuclear ribonucleoprotein proteins bind to the 5' stem-loop of the U2 small nuclear ribonucleoprotein particle. Temsamani J, et al. **J Biol Chem** 1996 Oct 4;271(40):24922–6

The related molecular chaperones calnexin and calreticulin differentially associate with nascent T cell antigen receptor proteins within the endoplasmic reticulum. Van Leeuwen JEM, et al. **J Biol Chem** 1996 Oct 11;271(41):25345–9

Heteronuclear ribonucleoproteins C1 and C2, components of the spliceosome, are specific targets of interleukin 1beta-converting enzyme-like proteases in apoptosis. Waterhouse N, et al. **J Biol Chem** 1996 Nov 15; 271(46):29335–41

Intracellular distribution of heat-induced stress glycoproteins. Jethmalani SM, et al. **J Cell Biochem** 1997 Jul 1;66(1):98–111

The dynamic nuclear redistribution of an hnRNP K-homologous protein during Drosophila embryo development and heat shock. Flexibility of transcription sites in vivo. Buchenau P, et al. **J Cell Biol** 1997 Apr 21; 137(2):291–303

Xlrbpa, a double-stranded RNA-binding protein associated with ribosomes and heterogeneous nuclear RNPs. Eckmann CR, et al. **J Cell Biol** 1997 Jul 28;138(2):239–53

Targeting of U2AF65 to sites of active splicing in the nucleus. Gama-Carvalho M, et al. **J Cell Biol** 1997 Jun 2; 137(5):975–87

Transportin-mediated nuclear import of heterogeneous nuclear RNP proteins. Siomi MC, et al. **J Cell Biol** 1997 Sep 22;138(6):1181–92

The signal recognition particle and related small cytoplasmic ribonucleoprotein particles. Bovia F, et al. **J Cell Sci** 1996 Nov;109 (Pt 11):2601–8 (64 ref.)

Nuclear import of hnRNP A1 is mediated by a novel cellular cofactor related to karyopherin-beta. Fridell RA, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1325–31

Hel-N1/Hel-N2 proteins are bound to poly(A)+ mRNA in granular RNP structures and are implicated in neuronal differentiation. Gao FB, et al. **J Cell Sci** 1996 Mar;109 (Pt 3):579–89

TLS (FUS) binds RNA in vivo and engages in nucleo-cytoplasmic shuttling. Zinszner H, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1741–50

Telomerase activity and in situ telomerase RNA expression in malignant and non-malignant lymph nodes. Yashima K, et al. **J Clin Pathol** 1997 Feb;50(2):110–7

Structure of influenza virus ribonucleoprotein particles. II. Purified RNA-free influenza virus ribonucleoprotein forms structures that are indistinguishable from the intact influenza virus ribonucleoprotein particles. Ruigrok RW, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):1009–14

Prominence of beta 2-microglobulin, class I heavy chain conformation, and tapasin in the interactions of class I heavy chain with calreticulin and the transporter associated with antigen processing. Solheim JC, et al. **J Immunol** 1997 Mar 1;158(5):2236–41

Disparate locations of the 52- and 60-kDa Ro/SS-A antigens in cultured human keratinocytes. Yell JA, et al. **J Invest Dermatol** 1996 Oct;107(4):622–6

Molecular cloning and subcellular localisation of the snRNP-associated protein 69KD, a structural homologue of the proto-oncoproteins TLS and EWS with RNA and DNA-binding properties. Hackl W, et al. **J Mol Biol** 1996 Dec 20;264(5):843–51

Alterations of expression and distribution of the Ca(2+)-storing proteins in endo/sarcoplasmic reticulum during differentiation of rat cardiomyocytes. Imanaka-Yoshida K, et al. **J Mol Cell Cardiol** 1996 Mar; 28(3):553–62

Attenuating mutations in the poliovirus 5' untranslated region alter its interaction with polypyrimidine tract-binding protein. Gutiérrez AL, et al. **J Virol** 1997 May; 71(5):3826–33

Characterization of the in vitro activity of the RNA-dependent RNA polymerase associated with the ribonucleoproteins of rice hoja blanca tenuivirus. Nguyen M, et al. **J Virol** 1997 Apr;71(4):2621–7

Processing of a cellular polypeptide by 3CD proteinase is required for poliovirus ribonucleoprotein complex formation. Roehl HH, et al. **J Virol** 1997 Jan;71(1):578–85

Distinct differences in the requirements for ribonucleoprotein complex formation on differentially regulated pre-edited mRNAs in Trypanosoma brucei. Koslowsky DJ, et al. **Mol Biochem Parasitol** 1996 Sep;80(1):1–14

Altered levels of the Drosophila HRB87F/hrp36 hnRNP protein have limited effects on alternative splicing in vivo. Zu K, et al. **Mol Biol Cell** 1996 Jul;7(7):1059–73

Structural and functional similarities between MRP and RNase P. Reddy R, et al. **Mol Biol Rep** 1995–96; 22(2–3):81–5 (68 ref.)

Guide RNA requirement for editing-site-specific endonucleolytic cleavage of preedited mRNA by mitochondrial ribonucleoprotein particles in Trypanosoma brucei. Adler BK, et al. **Mol Cell Biol** 1997 Sep; 17(9):5377–85

Human and mouse MOK2 proteins are associated with nuclear ribonucleoprotein components and bind specifically to RNA and DNA through their zinc finger domains. Arranz V, et al. **Mol Cell Biol** 1997 Apr;17(4):2116–26

The neuronal RNA binding protein Nova-1 recognizes specific RNA targets in vitro and in vivo. Buckanovich RJ, et al. **Mol Cell Biol** 1997 Jun;17(6):3194–201

The polypyrimidine tract binding protein binds upstream of neural cell-specific c-src exon N1 to repress the splicing of the intron downstream. Chan RC, et al. **Mol Cell Biol** 1997 Aug;17(8):4667–76

Interaction between the human nuclear cap-binding protein complex and hnRNP F. Gamberi C, et al. **Mol Cell Biol** 1997 May;17(5):2587–97

A carboxy-terminal basic region controls RNA polymerase III transcription factor activity of human La protein. Goodier JL, et al. **Mol Cell Biol** 1997 Oct;17(10):5823–32

Identification of AUF1 (heterogeneous nuclear ribonucleoprotein D) as a component of the alpha-globin mRNA stability complex. Kiledjian M, et al. **Mol Cell Biol** 1997 Aug;17(8):4870–6

Human La protein: a stabilizer of histone mRNA. McLaren RS, et al. **Mol Cell Biol** 1997 Jun;17(6):3028–36

Crystal structure of the two RNA binding domains of human hnRNP A1 at 1.75 A resolution. Shamoo Y, et al. **Nat Struct Biol** 1997 Mar;4(3):215–22

Transportin nuclear proteins [news] Dingwall C. **Nature** 1996 Nov 21;384(6606):210–1

A protein related to splicing factor U2AF35 that interacts with U2AF65 and SR proteins in splicing of pre-mRNA. Tronchère H, et al. **Nature** 1997 Jul 24;388(6640):397–400

Expression of dendritic BC200 RNA, component of a 11.4S ribonucleoprotein particle, is conserved in humans and simians [published erratum appears in Neurosci Lett 1997 May 30;228(1):69] Cheng JG, et al. **Neurosci Lett** 1997 Mar 21;224(3):206–10

hnRNP A1 binds promiscuously to oligoribonucleotides: utilization of random and homo-oligonucleotides to discriminate sequence from base-specific binding. Abdul-Manan N, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):4063–70

RIBONUCLEOPROTEINS

Characterization of an RNP complex that assembles on the Rous sarcoma virus negative regulator of splicing element. Cook CR, et al. **Nucleic Acids Res** 1996 Dec 15; 24(24):4962–8

Characterization of the autoantigen La (SS–B) as a dsRNA unwinding enzyme. Hühn P, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):410–6

A new member of the ETS family fused to EWS in Ewing tumors. Peter M, et al. **Oncogene** 1997 Mar 13; 14(10):1159–64

FLI1 and EWS–FLI1 function as ternary complex factors and ELK1 and SAP1a function as ternary and quaternary complex factors on the Egr1 promoter serum response elements. Watson DK, et al. **Oncogene** 1997 Jan 16; 14(2):213–21

Abundant accumulation of the calcium–binding molecular chaperone calreticulin in specific floral tissues of Arabidopsis thaliana. Nelson DE, et al. **Plant Physiol** 1997 May;114(1):29–37

The La antigen binds 5' noncoding region of the hepatitis C virus RNA in the context of the initiator AUG codon and stimulates internal ribosome entry site–mediated translation. Ali N, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2249–54

A cellular 65–kDa protein recognizes the negative regulatory element of human papillomavirus late mRNA. Dietrich–Goetz W, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):163–8

The ultrastructural localization of 60–kDa Ro protein and human cytoplasmic RNAs: association with novel electron–dense bodies. Farris AD, et al.
Proc Natl Acad Sci U S A 1997 Apr 1;94(7):3040–5

RNA–dependent phosphorylation of a nuclear RNA binding protein. Fung PA, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1064–8

In vivo analysis of the functional domains of the Drosophila splicing regulator RBP1. Heinrichs V, et al.
Proc Natl Acad Sci U S A 1997 Jan 7;94(1):115–20

Four highly stable eukaryotic mRNAs assemble 3' untranslated region RNA–protein complexes sharing cis and trans components. Holcik M, et al.
Proc Natl Acad Sci U S A 1997 Mar 18;94(6):2410–4

SC35–mediated reconstitution of splicing in U2AF–depleted nuclear extract. MacMillan AM, et al.
Proc Natl Acad Sci U S A 1997 Jan 7;94(1):133–6

Deglucosylation of N–linked glycans is an important step in the dissociation of calreticulin–class I–TAP complexes. van Leeuwen JE, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13997–4001

The proliferation potential protein–related (P2P–R) gene with domains encoding heterogeneous nuclear ribonucleoprotein association and Rb1 binding shows repressed expression during terminal differentiation. Witte MM, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18; 94(4):1212–7

A neuron–specific splicing switch mediated by an array of pre–mRNA repressor sites: evidence of a regulatory role for the polypyrimidine tract binding protein and a brain–specific PTB counterpart. Ashiya M, et al. **RNA** 1997 Sep;3(9):996–1015

RNA–dependent RNA polymerase activity associated with the yeast viral p91/20S RNA ribonucleoprotein complex. García–Cuéllar MP, et al. **RNA** 1997 Jan;3(1):27–36

A major determinant of hnRNP C protein binding to RNA is a novel bZIP–like RNA binding domain. McAfee JG, et al. **RNA** 1996 Nov;2(11):1139–52

Mutation of PTB binding sites causes misregulation of alternative 3' splice site selection in vivo. Pérez I, et al. **RNA** 1997 Jul;3(7):764–78

The SH3 domain of Bruton's tyrosine kinase interacts with Vav, Sam68 and EWS. Guinamard R, et al.
Scand J Immunol 1997 Jun;45(6):587–95

Crystal structure of human UP1, the domain of hnRNP A1 that contains two RNA–recognition motifs. Xu RM, et al. **Structure** 1997 Apr 15;5(4):559–70

Specific binding of polypyrimidine tract binding protein and hnRNP A1 to HIV–1 CRS elements. Black AC, et al.
Virus Genes 1996;12(3):275–85

[The major cytoplasmic mRNP protein, p50, is required for efficient mRNA translation in vitro] Kovrigina EA, et al. **Biokhimiia** 1996 Dec;61(12):2173–80 (Eng. Abstr.) **(Rus)**

[The association of specific RNPs with the EGF receptor in A–431 cells] Konstantinova IM, et al. **Tsitologiia** 1996; 38(10):1103–5 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The systemic lupus erythematosus (SLE) disease autoantigen–calreticulin can inhibit C1q association with immune complexes. Kishore U, et al. **Clin Exp Immunol** 1997 May;108(2):181–90

Anti–Ro/SSA associated recurrent annular erythema: autoimmune response to recombinant 60– and 52–kDa Ro/SSA proteins. Miyagawa S, et al. **J Dermatol Sci** 1996 Jun;12(2):127–31

Calreticulin inhibits glucocorticoid– but not cAMP–sensitive expression of tyrosine aminotransferase gene in cultured McA–RH7777 hepatocytes. Burns K, et al.
Mol Cell Biochem 1997 Jun;171(1–2):37–43

The La autoantigen contains a dimerization domain that is essential for enhancing translation. Craig AW, et al.
Mol Cell Biol 1997 Jan;17(1):163–9

PHYSIOLOGY

Calreticulin–integrin bidirectional signaling complex. Zhu Q, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):354–8

Calreticulin: how many functions in how many cellular compartments? Como, April 1996. Meldolesi J, et al.
Cell Calcium 1996 Jul;20(1):83–6

TLS–CHOP and the role of RNA–binding proteins in oncogenic transformation. Ron D.
Curr Top Microbiol Immunol 1997;220:131–42 (53 ref.)

Enhanced stability of urokinase–type plasminogen activator mRNA in metastatic breast cancer MDA–MB–231 cells and LLC–PK1 cells down–regulated for protein kinase C—correlation with cytoplasmic heterogeneous nuclear ribonucleoprotein C. Nanbu R, et al. **Eur J Biochem** 1997 Jul 1;247(1):169–74

Roles for calreticulin and a novel glycoprotein, tapasin, in the interaction of MHC class I molecules with TAP. Sadasivan B, et al. **Immunity** 1996 Aug;5(2):103–14

A role for the M9 transport signal of hnRNP A1 in mRNA nuclear export. Izaurralde E, et al. **J Cell Biol** 1997 Apr 7;137(1):27–35

The sequence of the 5' end of the U8 small nucleolar RNA is critical for 5.8S and 28S rRNA maturation. Peculis BA. **Mol Cell Biol** 1997 Jul;17(7):3702–13

Calreticulin is essential for integrin–mediated calcium signalling and cell adhesion. Coppolino MG, et al.
Nature 1997 Apr 24;386(6627):843–7

ULTRASTRUCTURE

Three–dimensional image reconstruction of large nuclear RNP (lnRNP) particles by automated electron tomography. Sperling R, et al. **J Mol Biol** 1997 Apr 4; 267(3):570–83

RIBONUCLEOPROTEINS, SMALL NUCLEAR

ANALYSIS

The spinal muscular atrophy disease gene product, SMN, and its associated protein SIP1 are in a complex with spliceosomal snRNP proteins. Liu Q, et al. **Cell** 1997 Sep 19;90(6):1013–21

Neuronal differentiation in the rat hippocampus involves a stage–specific reorganization of subnuclear structure both in vivo and in vitro. Santama N, et al. **Eur J Neurosci** 1996 May;8(5):892–905

BIOSYNTHESIS

The SMN–SIP1 complex has an essential role in spliceosomal snRNP biogenesis. Fischer U, et al. **Cell** 1997 Sep 19; 90(6):1023–9

CHEMISTRY

Nuclear colocalization of the Ro 60 kDa autoantigen and a subset of U snRNP domains. Wahren M, et al.
Eur J Cell Biol 1996 Jul;70(3):189–97

Human anti–nuclear ribonucleoprotein antigen autoimmune sera contain a novel subset of autoantibodies that stabilizes the molecular interaction of U1RNP–C protein with the Sm core proteins. Satoh M, et al. **J Immunol** 1997 May 15;158(10):5017–25

GENETICS

Detection of imprinting mutations in Angelman syndrome using a probe for exon alpha of SNRPN [letter] Beuten J, et al. **Am J Med Genet** 1996 May 17;63(2):414–5

The yeast SME1 gene encodes the homologue of the human E core protein. Bordonné R, et al. **Gene** 1996 Oct 17; 176(1–2):111–7

Identification of a U7snRNA homologue mapping to the human Xq27.1 region, between the DXS1232 and DXS119 loci. Mostardini M, et al. **Gene** 1997 Mar 18;187(2):221–4

Cloning and characterization of two processed pseudogenes and the cDNA for the murine U1 snRNP–specific protein C. Nelissen RL, et al. **Gene** 1997 Jan 15;184(2):273–8

Identification of a novel protein, DMAP, which interacts with the myotonic dystrophy protein kinase and shows strong homology to D1 snRNP. Fu YH. **Genetica** 1996 Jan;97(1):117–25

Identification of a novel paternally expressed transcript adjacent to snRPN in the Prader–Willi syndrome critical region. Ning Y, et al. **Genome Res** 1996 Aug;6(8):742–6

Identification of novel exons 3' to the human SNRPN gene. Buiting K, et al. **Genomics** 1997 Feb 15;40(1):132–7

Loss of H19 imprinting and up–regulation of H19 and SNRPN in a case with malignant mixed Müllerian tumor of the uterus. Hashimoto K, et al. **Hum Pathol** 1997 Jul; 28(7):862–5

A gene belonging to the Sm family of snRNP core proteins maps within the mouse MHC. Bedian V, et al.
Immunogenetics 1997;46(5):427–30

Molecular cloning and developmental expression of a small ribonuclear protein in the mouse testis. Morales CR, et al. **Mol Reprod Dev** 1997 Apr;46(4):459–70

Imprint switching on human chromosome 15 may involve alternative transcripts of the SNRPN gene [see comments] Dittrich B, et al. **Nat Genet** 1996 Oct;14(2):163–70. Comment in: Nat Genet 1996 Oct;14(2):119–21.

Length suppression in histone messenger RNA 3'–end maturation: processing defects of insertion mutant premessenger RNAs can be compensated by insertions into the U7 small nuclear RNA. Scharl LC, et al.
Proc Natl Acad Sci U S A 1996 Dec 10;93(25):14659–64

The [U4/U6.U5] tri–snRNP–specific 27K protein is a novel SR protein that can be phosphorylated by the snRNP–associated protein kinase. Fetzer S, et al. **RNA** 1997 Apr;3(4):344–55

Pre–mRNA splicing: the discovery of a new spliceosome doubles the challenge. Tarn WY, et al.
Trends Biochem Sci 1997 Apr;22(4):132–7 (40 ref.)

[A novel class of small RNP (alpha–RNP) in human cell line K–562 and coordinated control of expression of Alu–containing messenger RNA] Konstantinova IM, et al. **Dokl Akad Nauk** 1996 Sep;350(2):268–71 **(Rus)**

IMMUNOLOGY

Neutralization of HIV type 1 infectivity by serum antibodies from a subset of autoimmune patients with mixed connective tissue disease. Douvas A, et al.
AIDS Res Hum Retroviruses 1996 Nov 1;12(16):1509–17

A major, novel systemic lupus erythematosus autoantibody class recognizes the E, F, and G Sm snRNP proteins as an E–F–G complex but not in their denatured states. Brahms H, et al. **Arthritis Rheum** 1997 Apr;40(4):672–82

Analysis of human T cell and B cell responses against U small nuclear ribonucleoprotein 70–kd, B, and D polypeptides among patients with systemic lupus erythematosus and mixed connective tissue disease. Holyst MM, et al. **Arthritis Rheum** 1997 Aug;40(8):1493–503

Mapping of SLE–specific Sm B cell epitopes using murine monoclonal antibodies. Pruijn GJ, et al. **J Autoimmun** 1997 Apr;10(2):127–36

Coexistence of serum anti–DNA topoisomerase I and anti–Sm antibodies: report of 3 cases. Kameda H, et al.
J Rheumatol 1997 Feb;24(2):400–3

Clinical and immunological aspects of autoantibodies to RA33/hnRNP–A/B proteins—a link between RA, SLE and MCTD. Steiner G, et al. **Mol Biol Rep** 1996; 23(3–4):167–71 (29 ref.)

Development–dependent localization of nuclear antigens in growing mouse oocytes. Borsuk E, et al.
Mol Reprod Dev 1996 Mar;43(3):376–86

METABOLISM

Validation studies of SNRPN methylation as a diagnostic test for Prader–Willi syndrome. Kubota T, et al.
Am J Med Genet 1996 Dec 2;66(1):77–80

RNA splicing: unexpected spliceosome diversity. Kreivi JP, et al. **Curr Biol** 1996 Jul 1;6(7):802–5 (9 ref.)

Ribosomal RNA: small nucleolar RNAs make their mark. Peculis BA, et al. **Curr Biol** 1996 Nov 1;6(11):1413–5 (10 ref.)

Identification and characterization of a yeast homolog of U1 snRNP–specific protein C. Tang J, et al. **EMBO J** 1997 Jul 1;16(13):4082–91

Inhibition of protein dephosphorylation results in the accumulation of splicing snRNPs and coiled bodies within the nucleolus. Lyon CE, et al. **Exp Cell Res** 1997 Jan 10; 230(1):84–93

Identification of a novel protein, DMAP, which interacts with the myotonic dystrophy protein kinase and shows strong homology to D1 snRNP. Fu YH. **Genetica** 1996 Jan;97(1):117–25

Spliced exons of adenovirus late RNAs colocalize with snRNP in a specific nuclear domain. Bridge E, et al.
J Cell Biol 1996 Oct;135(2):303–14

Splicing factors associate with hyperphosphorylated RNA polymerase II in the absence of pre–mRNA. Kim E, et al. **J Cell Biol** 1997 Jan 13;136(1):19–28

Transcription–dependent redistribution of nuclear protein 4.1 to SC35–enriched nuclear domains. Lallena MJ, et al.
J Cell Sci 1997 Jan;110 (Pt 2):239–47

Molecular cloning and subcellular localisation of the snRNP–associated protein 69KD, a structural homologue of the proto–oncoproteins TLS and EWS with RNA and DNA–binding properties. Hackl W, et al. **J Mol Biol** 1996 Dec 20;264(5):843–51

Coiled bodies without coilin. Bauer DW, et al.
Mol Biol Cell 1997 Jan;8(1):73–82

RCC1 and nuclear organization. Huang S, et al.
Mol Biol Cell 1997 Jun;8(6):1143–57

The cdk7–cyclin H–MAT1 complex associated with TFIIH is localized in coiled bodies. Jordan P, et al.
Mol Biol Cell 1997 Jul;8(7):1207–17

Site–specific crosslinking of mammalian U11 and u6atac to the 5' splice site of an AT–AC intron. Yu YT, et al.
Proc Natl Acad Sci U S A 1997 Jun 10;94(12):6030–5

The [U4/U6.U5] tri–snRNP–specific 27K protein is a novel SR protein that can be phosphorylated by the snRNP–associated protein kinase. Fetzer S, et al. **RNA** 1997 Apr;3(4):344–55

U11 snRNA interacts in vivo with the 5' splice site of U12–dependent (AU–AC) pre–mRNA introns. Kolossova I, et al. **RNA** 1997 Mar;3(3):227–33

[A new class of small RNP (alpha–RNP) containing antisense RNA in K–562 cells. III. The DNA–binding activity of nuclear alpha–RNP. The Signal Transmission from Growth Factors Group of the Medical Faculty, F. Schiller University, Jena, Germany] Konstantinova IM, et al.

Ontogenez 1997 May-Jun;28(3):171-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Protein functions in pre-mRNA splicing. Will CL, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):320-8 (92 ref.)

Mpp10p, a U3 small nucleolar ribonucleoprotein component required for pre-18S rRNA processing in yeast. Dunbar DA, et al. **Mol Cell Biol** 1997 Oct;17(10):5803-12

ULTRASTRUCTURE

Electron microscopy of assembly intermediates of the snRNP core: morphological similarities between the RNA-free (E.F.G) protein heteromer and the intact snRNP core. Plessel G, et al. **J Mol Biol** 1997 Jan 17;265(2):87-94

RIBONUCLEOPROTEINS, SMALL, U1

ANALYSIS

Measurement of antigen by enhanced chemiluminescent western blot. Huang D, et al. **Biotechniques** 1997 Mar; 22(3):454-6, 458

Evaluation of recombinant RO/SSA, La/SSB, Sm and U1 RNP autoantigens in clinical diagnosis [letter; comment] Meheus L, et al. **J Clin Lab Anal** 1996;10(1):57-8. Comment on: J Clin Lab Anal 1995;9(1):52-8.

Comparison of two different methods using overlapping synthetic peptides for localizing linear B cell epitopes in the U1 snRNP-C autoantigen. Halimi H, et al. **J Immunol Methods** 1996 Nov 29;199(1):77-85

CHEMISTRY

Tertiary structure of RBD2 and backbone dynamics of RBD1 and RBD2 of the human U1A protein determined by NMR spectroscopy. Lu J, et al. **Biochemistry** 1997 Aug 26; 36(34):10393-405

High-energy channeling in protein folding. Silow M, et al. **Biochemistry** 1997 Jun 24;36(25):7633-7

Human anti-nuclear ribonucleoprotein antigen autoimmune sera contain a novel subset of autoantibodies that stabilizes the molecular interaction of U1RNP-C protein with the Sm core proteins. Satoh M, et al. **J Immunol** 1997 May 15;158(10):5017-25

Crystal structure of the U1A spliceosomal protein complexed with its cognate RNA hairpin. Nagai K, et al. **Nucleic Acids Symp Ser** 1995;(34):1-2

Identification of the proteins of the yeast U1 small nuclear ribonucleoprotein complex by mass spectrometry. Neubauer G, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):385-90

Transient aggregates in protein folding are easily mistaken for folding intermediates. Silow M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6084-6

Contribution of the tyrosines to the structure and function of the human U1A N-terminal RNA binding domain. Kranz JK, et al. **Protein Sci** 1996 Aug;5(8):1567-83

Two structurally different RNA molecules are bound by the spliceosomal protein U1A using the same recognition strategy. Jovine L, et al. **Structure** 1996 May 15;4(5):621-31

GENETICS

Probing the 3' UTR structure of U1A mRNA and footprinting analysis of its complex with U1A protein. Teunissen SW, et al. **Biochemistry** 1997 Feb 18;36(7):1782-9

Expression of Tetrahymena snRNA gene variants including a U1 gene with mutations in the 5' splice site recognition sequence. Eugen-Olsen J, et al. **Gene** 1997 Apr 21; 189(2):221-5

Analysis of genes for human snRNP Sm-D1 protein and identification of the promoter sequence which shows segmental homology to the promoters of Sm-E and U1 snRNA genes. Sun D, et al. **Gene** 1997 Apr 21; 189(2):245-54

Essential role of Swp73p in the function of yeast Swi/Snf complex. Cairns BR, et al. **Genes Dev** 1996 Sep 1; 10(17):2131-44

Both loss-of-function and gain-of-function mutations in snf define a role for snRNP proteins in regulating Sex-lethal pre-mRNA splicing in Drosophila development. Salz HK, et al. **Genetics** 1996 Sep;144(1):95-108

In vitro genetic analysis of RNA-binding proteins using phage display libraries. Laird-Offringa IA, et al. **Methods Enzymol** 1996;267:149-68

Structure and expression of a plant U1 snRNP 70K gene: alternative splicing of U1 snRNP 70K pre-mRNAs produces two different transcripts. Golovkin M, et al. **Plant Cell** 1996 Aug;8(8):1421-35

Identification of an inhibitory element within the human 68-kDa (U1) ribonucleoprotein antigen. Northemann W, et al. **Protein Expr Purif** 1995 Dec;6(6):748-56

IMMUNOLOGY

Isolation and characterization of single anti-U1A-specific B cells from autoimmune patients. de Wildt RM, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:440-2

B lymphocytes as autoantigen-presenting cells in the amplification of autoimmunity. Roth R, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:88-104

Follow-up of 151 patients with high-titer U1RNP antibodies. Frandsen PB, et al. **Clin Rheumatol** 1996 May;15(3):254-60

The penetration of autoantibodies into cells may induce tolerance to self by apoptosis of autoreactive lymphocytes and cause autoimmune disease by dysregulation and/or cell damage. Alarcón-Segovia D, et al. **J Autoimmun** 1996 Apr; 9(2):295-300

Human anti-RNP sera contain both human-specific and cross-reactive anti-70K autoantibodies. Henriksson EW, et al. **J Autoimmun** 1996 Aug;9(4):551-9

Comparative study of 4 diagnosis criteria sets for mixed connective tissue disease in patients with anti-RNP antibodies. Autoimmunity Group of the Hospitals of Toulouse. Amigues JM, et al. **J Rheumatol** 1996 Dec; 23(12):2055-62

Antiphospholipid antibodies among anti-U1-70 kDa autoantibody positive patients with mixed connective tissue disease. Komatireddy GR, et al. **J Rheumatol** 1997 Feb; 24(2):319-22

Identification of an inhibitory element within the human 68-kDa (U1) ribonucleoprotein antigen. Northemann W, et al. **Protein Expr Purif** 1995 Dec;6(6):748-56

Blotting patterns of IgG anti-(U1)RNP antibodies in mixed connective tissue disease. Ghirardello A, et al. **Rheumatol Int** 1996;16(4):145-50

[Mixed connective tissue disease: progress in diagnosis and treatment. II. Physiopathology and diagnosis. 1. Etiology and pathogenesis] Mimori T. **Nippon Naika Gakkai Zasshi** 1996 Aug 10;85(8):1196-202 (9 ref.) **(Jpn)**

METABOLISM

Thermal unfolding of the N-terminal RNA binding domain of the human U1A protein studied by differential scanning calorimetry. Lu J, et al. **Biophys Chem** 1997 Feb 28; 64(1-3):111-9

Anti-(U1)snRNP autoantibodies inhibit homologous pairing activity of the human recombination complex. Dowjat K. **DNA Cell Biol** 1997 Jul;16(7):819-27

Nuclear accumulation of the U1 snRNP-specific protein C is due to diffusion and retention in the nucleus. Klein Gunnewiek JM, et al. **Exp Cell Res** 1997 Aug 25; 235(1):265-73

Cloning and characterization of two processed pseudogenes and the cDNA for the murine U1 snRNP-specific protein C. Nelissen RL, et al. **Gene** 1997 Jan 15;184(2):273-8

Involvement of the carboxyl terminus of vertebrate poly(A) polymerase in U1A autoregulation and in the coupling of splicing and polyadenylation. Gunderson SI, et al. **Genes Dev** 1997 Mar 15;11(6):761-73

Dynamics of the U1 small nuclear ribonucleoprotein during yeast spliceosome assembly. Ruby SW. **J Biol Chem** 1997 Jul 11;272(28):17333-41

In vitro genetic analysis of RNA-binding proteins using phage display libraries. Laird-Offringa IA, et al. **Methods Enzymol** 1996;267:149-68

Adenovirus E1A specifically blocks SWI/SNF-dependent transcriptional activation. Miller ME, et al. **Mol Cell Biol** 1996 Oct;16(10):5737-43

In vitro reconstitution of mammalian U1 snRNPs active in splicing: the U1-C protein enhances the formation of early (E) spliceosomal complexes. Will CL, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4614-23

Transient aggregates in protein folding are easily mistaken for folding intermediates. Silow M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6084-6

Characterization of yeast U1 snRNP A protein: identification of the N-terminal RNA binding domain (RBD) binding site and evidence that the C-terminal RBD functions in splicing. Tang J, et al. **RNA** 1996 Oct;2(10):1058-70

Contribution of the C-terminal tail of U1A RBD1 to RNA recognition and protein stability. Zeng Q, et al. **RNA** 1997 Mar;3(3):303-14

Two structurally different RNA molecules are bound by the spliceosomal protein U1A using the same recognition strategy. Jovine L, et al. **Structure** 1996 May 15;4(5):621-31

PHYSIOLOGY

Involvement of U1 small nuclear ribonucleoproteins (snRNP) in 5' splice site-U1 snRNP interaction. Rossi F, et al. **J Biol Chem** 1996 Sep 27;271(39):23985-91

RIBONUCLEOPROTEINS, SMALL, U2

METABOLISM

In vitro interaction of U2 snRNA with cytoplasmic 6S protein complexes. Fury MG, et al. **FEBS Lett** 1997 Mar 3;404(1):70-4

U2AF65 recruits a novel human DEAD box protein required for the U2 snRNP-branchpoint interaction. Fleckner J, et al. **Genes Dev** 1997 Jul 15;11(14):1864-72

The gene for human U2 snRNP auxiliary factor small 35-kDa subunit (U2AF1) maps to the progressive myoclonus epilepsy (EPM1) critical region on chromosome 21q22.3. Lalioti MD, et al. **Genomics** 1996 Apr 15;33(2):298-300

The C-group heterogeneous nuclear ribonucleoprotein proteins bind to the 5' stem-loop of the U2 small nuclear ribonucleoprotein particle. Temsamani J, et al. **J Biol Chem** 1996 Oct 4;271(40):24922-6

In vitro studies of the Prp9.Prp11.Prp21 complex indicate a pathway for U2 small nuclear ribonucleoprotein activation. Wiest DK, et al. **J Biol Chem** 1996 Dec 27; 271(52):33268-76

A minimal spliceosomal complex A recognizes the branch site and polypyrimidine tract. Query CC, et al. **Mol Cell Biol** 1997 May;17(5):2944-53

RIBONUCLEOPROTEINS, SMALL, U3 see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

RIBONUCLEOPROTEINS, SMALL, U4 see **RIBONUCLEOPROTEINS, SMALL, U4-U6**

RIBONUCLEOPROTEINS, SMALL, U4-U6

CHEMISTRY

The human U4/U6 snRNP contains 60 and 90kD proteins that are structurally homologous to the yeast splicing factors Prp4p and Prp3p. Lauber J, et al. **RNA** 1997 Aug; 3(8):926-41

GENETICS

RNA polymerase III transcription from the human U6 and adenovirus type 2 VAI promoters has different requirements for human BRF, a subunit of human TFIIIB. Mital R, et al. **Mol Cell Biol** 1996 Dec;16(12):7031-42

IMMUNOLOGY

The human U4/U6 snRNP contains 60 and 90kD proteins that are structurally homologous to the yeast splicing factors Prp4p and Prp3p. Lauber J, et al. **RNA** 1997 Aug; 3(8):926-41

METABOLISM

U6 snRNA maturation and stability. Fury MG, et al. **Exp Cell Res** 1996 Oct 10;228(1):160-3

Site-specific crosslinking of mammalian U11 and u6atac to the 5' splice site of an AT-AC intron. Yu YT, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6030-5

The [U4/U6.U5] tri-snRNP-specific 27K protein is a novel SR protein that can be phosphorylated by the snRNP-associated protein kinase. Fetzer S, et al. **RNA** 1997 Apr;3(4):344-55

ULTRASTRUCTURE

Prp31p promotes the association of the U4/U6 x U5 tri-snRNP with prespliceosomes to form spliceosomes in Saccharomyces cerevisiae. Weidenhammer EM, et al. **Mol Cell Biol** 1997 Jul;17(7):3580-8

RIBONUCLEOPROTEINS, SMALL, U5

CHEMISTRY

Antisense oligonucleotide binding to U5 snRNP induces a conformational change that exposes the conserved loop of U5 snRNA. Ast G, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3508-13

GENETICS

Trans mRNA splicing in trypanosomes: cloning and analysis of a PRP8-homologous gene from Trypanosoma brucei provides evidence for a U5-analogous RNP. Lücke S, et al. **EMBO J** 1997 Jul 16;16(14):4433-40

IMMUNOLOGY

Anti-U5 small nuclear ribonucleoprotein (snRNP) antibodies: a rare anti-U snRNP specificity. Okano Y, et al. **Clin Immunol Immunopathol** 1996 Oct;81(1):41-7

METABOLISM

Evidence that U5 snRNP recognizes the 3' splice site for catalytic step II in mammals. Chiara MD, et al. **EMBO J** 1997 Aug 1;16(15):4746-59

An evolutionarily conserved U5 snRNP-specific protein is a GTP-binding factor closely related to the ribosomal translocase EF-2. Fabrizio P, et al. **EMBO J** 1997 Jul 1; 16(13):4092-106

Antisense oligonucleotide binding to U5 snRNP induces a conformational change that exposes the conserved loop of U5 snRNA. Ast G, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3508-13

Mutations in both the U5 region and the primer-binding site influence the selection of the tRNA used for the initiation of HIV-1 reverse transcription. Kang SM, et al. **Virology** 1996 Aug 15;222(2):401-14

PHYSIOLOGY

Nucleotide substitutions within U5 are critical for efficient reverse transcription of human immunodeficiency virus type 1 with a primer binding site complementary to tRNA(His). Li Y, et al. **J Virol** 1997 Sep;71(9):6315-22

ULTRASTRUCTURE

Prp31p promotes the association of the U4/U6 x U5 tri-snRNP with prespliceosomes to form spliceosomes in Saccharomyces cerevisiae. Weidenhammer EM, et al.

RIBONUCLEOPROTEINS, SMALL, U5

Mol Cell Biol 1997 Jul;17(7):3580–8

RIBONUCLEOPROTEINS, SMALL, U6 see **RIBONUCLEOPROTEINS, SMALL, U4–U6**

RIBONUCLEOPROTEINS, SMALL, U7 see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

RIBONUCLEOSIDE DIPHOSPHATE REDUCTASE

GENETICS

pH dependence of self-splicing by the group IA2 intron in a pre-mRNA derived from the nrdB gene of bacteriophage T4. Sjögren AS, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3543–9

RIBONUCLEOSIDES

The RNA modification database. Crain PF, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):126–7

ANALYSIS

Capillary electrophoresis of cytokinins and cytokinin ribosides. Pacáková V, et al. **J Chromatogr A** 1997 Mar 14;764(2):331–5

BLOOD

Simultaneous determination of purine bases, ribonucleosides and ribonucleotides by capillary electrophoresis–electrochemistry with a copper electrode. Lin H, et al. **J Chromatogr A** 1997 Jan 31;760(2):227–33

CHEMICAL SYNTHESIS

Synthesis, structure, and antiproliferative activity of selenophenfurin, an inosine 5'-monophosphate dehydrogenase inhibitor analogue of selenazofurin. Franchetti P, et al. **J Med Chem** 1997 May 23;40(11):1731–7

Synthesis and antiviral activity of certain 5'-modified analogs of 2,5,6-trichloro-1-(beta-D-ribofuranosyl)benzimidazole. Gudmundsson KS, et al. **J Med Chem** 1997 Feb 28; 40(5):785–93

Synthesis and antiproliferative and antiviral activity of carbohydrate-modified pyrrolo[2,3-d]pyridazin-7-one nucleosides. Meade EA, et al. **J Med Chem** 1997 Feb 28; 40(5):794–801

Synthesis, antiproliferative and antiviral activity of imidazo[4,5-d]isothiazole nucleosides as 5:5 fused analogs of nebularine and 6-methylpurine ribonucleoside. Swayze EE, et al. **J Med Chem** 1997 Feb 28;40(5):771–84

Design, synthesis, and antiviral evaluation of 2-substituted 4,5-dichloro- and 4,6-dichloro-1-beta-D-ribofuranosylbenzimidazoles as potential agents for human cytomegalovirus infections. Zou R, et al. **J Med Chem** 1997 Feb 28;40(5):802–10

Design, synthesis, and antiviral evaluation of 2-chloro-5,6-dihalo-1-beta-D-ribofuranosylbenzimidazoles as potential agents for human cytomegalovirus infections. Zou R, et al. **J Med Chem** 1997 Feb 28;40(5):811–8

4'-Aza-sugar nucleosides. Pickering L, et al. **Nucleic Acids Symp Ser** 1995;(34):9–10

Synthesis of [5'-11C]ribonucleoside and -2'-deoyribonucleoside derivatives from D-ribose. Sekine T, et al. **Nucleic Acids Symp Ser** 1995;(34):11–2

CHEMISTRY

Synthesis, structure, and antiproliferative activity of selenophenfurin, an inosine 5'-monophosphate dehydrogenase inhibitor analogue of selenazofurin. Franchetti P, et al. **J Med Chem** 1997 May 23;40(11):1731–7

METABOLISM

Degradation of pyrimidine ribonucleosides by Pseudomonas aeruginosa. West TP. **Antonie Van Leeuwenhoek** 1996 May; 69(4):331–5

Substrate cycling between 5-amino-4-imidazolecarboxamide riboside and its monophosphate in isolated rat hepatocytes. Vincent MF, et al. **Biochem Pharmacol** 1996 Oct 11; 52(7):999–1006

Nebularine (9-2'-deoxy-beta-D-ribofuranosylpurine) has the template characteristics of adenine in vivo and in vitro. Rahman MS, et al. **Mutat Res** 1997 Jul 3;377(2):263–8

PHARMACOKINETICS

Clinical pharmacokinetic study of mizoribine in renal transplantation patients. Sonda K, et al. **Transplant Proc** 1996 Dec;28(6):3643–8

PHARMACOLOGY

Mizoribine reduces urinary protein excretion in rats given puromycin aminonucleoside. Shibasaki T, et al. **Am J Nephrol** 1996;16(2):167–72

Effect of mizoribine on effector T cell-mediated immune responses in mice. Kamada H, et al. **Biol Pharm Bull** 1996 Sep;19(9):1136–40

Potentiation of excitatory amino acid-evoked adenosine release from rat cortex by inhibitors of adenosine kinase and adenosine deaminase and by acadesine. White TD. **Eur J Pharmacol** 1996 May 6;303(1-2):27–38

Synthesis, structure, and antiproliferative activity of selenophenfurin, an inosine 5'-monophosphate dehydrogenase inhibitor analogue of selenazofurin. Franchetti P, et al. **J Med Chem** 1997 May 23;40(11):1731–7

Synthesis and antiviral activity of certain 5'-modified analogs of 2,5,6-trichloro-1-(beta-D-ribofuranosyl)benzimidazole. Gudmundsson KS, et al. **J Med Chem** 1997 Feb 28; 40(5):785–93

Synthesis and antiproliferative and antiviral activity of carbohydrate-modified pyrrolo[2,3-d]pyridazin-7-one nucleosides. Meade EA, et al. **J Med Chem** 1997 Feb 28; 40(5):794–801

Synthesis and evaluation of 6-(dibromomethyl)-5-nitropyrimidines as potential antitumor agents. Thompson MD, et al. **J Med Chem** 1997 Feb 28;40(5):766–70

Design, synthesis, and antiviral evaluation of 2-substituted 4,5-dichloro- and 4,6-dichloro-1-beta-D-ribofuranosylbenzimidazoles as potential agents for human cytomegalovirus infections. Zou R, et al. **J Med Chem** 1997 Feb 28;40(5):802–10

Design, synthesis, and antiviral evaluation of 2-chloro-5,6-dihalo-1-beta-D-ribofuranosylbenzimidazoles as potential agents for human cytomegalovirus infections. Zou R, et al. **J Med Chem** 1997 Feb 28;40(5):811–8

Effect of mizoribine on collagen-induced arthritis in mice. Kamada H, et al. **Jpn J Pharmacol** 1996 Feb;70(2):169–75

Nebularine (9-2'-deoxy-beta-D-ribofuranosylpurine) has the template characteristics of adenine in vivo and in vitro. Rahman MS, et al. **Mutat Res** 1997 Jul 3;377(2):263–8

Effects of azathioprine and mizoribine on aggregation of normal and uremic platelets. Malyszko JS, et al. **Transplant Proc** 1996 Dec;28(6):3488–9

THERAPEUTIC USE

Effect of mizoribine on pulmonary lesions in MRL/lpr/lpr mice. Soga T, et al. **Autoimmunity** 1996;25(1):9–18

Effects of acadesine on myocardial infarction, stroke, and death following surgery. A meta-analysis of the 5 international randomized trials. The Multicenter Study of Perioperative Ischemia (McSPI) Research Group. Mangano DT. **JAMA** 1997 Jan 22–29;277(4):325–32

Mizoribine as an alternative to azathioprine in pediatric renal trar splantation [letter] Faraj G, et al. **Transplantation** 1996 Dec 15;62(11):1701–2

[A new approach to assessing rheumatoid . thritis (RA) disease activity using the American College of Rheumatology core set of disease activity measures for RA trials--a multi-center study] Okano Y, et al. **Ryumachi** 1997 Jun;37(3):467–75 (Eng. Abstr.) **(Jpn)**

TOXICITY

Clinical cases and problems of delayed (tardive) reactions to drugs--for pharmaceuticals in general. Hama R. **J Toxicol Sci** 1996 Feb;21(1):81–91 (7 ref.)

RIBONUCLEOTIDE REDUCTASES

ANALYSIS

The herpes simplex virus type 1 ribonucleotide reductase is required for acute retinal disease. Brandt CR, et al. **Arch Virol** 1997;142(5):883–96

ANTAGONISTS & INHIBITORS

Evaluation of a peptidomimetic ribonucleotide reductase inhibitor with a murine model of herpes simplex virus type 1 ocular disease. Brandt CR, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1078–84

Overexpression of the multidrug resistance genes mdr1, mdr3, and mrp in L1210 leukemia cells resistant to inhibitors of ribonucleotide reductase. Rappa G, et al. **Biochem Pharmacol** 1997 Sep 15;54(6):649–55

Suppression of malignancy by the 3' untranslated regions of ribonucleotide reductase R1 and R2 messenger RNAs. Fan H, et al. **Cancer Res** 1996 Oct 1;56(19):4366–9

Antitumor and radiosensitizing effects of (E)-2'-deoxy-2'-(fluoromethylene) cytidine, a novel inhibitor of ribonucleoside diphosphate reductase, on human colon carcinoma xenografts in nude mice. Sun LQ, et al. **Cancer Res** 1997 Sep 15;57(18):4023–8

Gemcitabine: safety profile unaffected by starting dose. Martin C, et al. **Int J Clin Pharmacol Res** 1996;16(1):9–18

Modulation of 5-FU/alpha-interferon with high-dose continuous infusion hydroxyurea. Horowitz R, et al. **J Infus Chemother** 1995 Fall;5(4):212–4 (33 ref.)

Peptidomimetic inhibitors of herpes simplex virus ribonucleotide reductase with improved in vivo antiviral activity. Moss N, et al. **J Med Chem** 1996 Oct 11; 39(21):4173–80

The new inhibitors of ribonucleotide reductase--comparison of some physico-chemical properties. Romanova D, et al. **J Pharm Biomed Anal** 1997 Apr;15(7):951–6

Characterization of mouse leukemia L1210 cells resistant to the ribonucleotide reductase inhibitor 4-methyl-5-amino-1-formylisoquinoline thiosemicarbazone. Cory AH, et al. **Oncol Res** 1996; 8(10-11):449–56

Cellular delivery of nucleoside diphosphates: a prodrug approach. Kang SH, et al. **Pharm Res** 1997 Jun; 14(6):706–12

Genotoxic properties of the newly synthesized antineoplastic agents amidox, didox and trimidox. Miadoková E, et al. **Pharmazie** 1997 Jul;52(7):540–4

Weekly gemcitabine and monthly cisplatin for advanced non-small cell lung carcinoma. Abratt RP, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-18–S8-23

The emerging role of gemcitabine in lung cancer. Bunn PA Jr. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-1

The emerging role of gemcitabine in lung cancer: part I [editorial] Bunn PA Jr. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-1

Phase II trial of gemcitabine plus cisplatin in non-small cell lung cancer: a Hoosier Oncology Group study. Einhorn LH. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-24–S8-26

Cost-effectiveness of gemcitabine in stage IV non-small cell lung cancer: an estimate using the Population Health Model lung cancer module. Evans WK. **Semin Oncol** 1997 Apr; 24(2 Suppl 7):S7-56–S7-63

Phase II studies of gemcitabine for non-small cell lung cancer in Japan. Fukuoka M, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-42–S7-46

A phase II trial of gemcitabine and ifosfamide in non-small cell lung cancer. Gatzemeier U, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-36–S8-38

Gemcitabine plus radiotherapy for non-small cell lung cancer. Gregor A. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-39–S8-41

Efficacy of single-agent gemcitabine in advanced non-small cell lung cancer: a review. Hansen HH, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-38–S7-41 (15 ref.)

In vitro interaction between gemcitabine and other anticancer drugs using a novel three-dimensional model. Kanzawa F, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-8–S7-16

Single-agent gemcitabine in non-small cell lung cancer: the French experience. Le Chevalier T, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-47–S7-49

A randomized study of gemcitabine monotherapy versus etoposide/cisplatin in the treatment of locally advanced or metastatic non-small cell lung cancer. Manegold C, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-13–S8-17

Phase II trial of gemcitabine and weekly cisplatin for advanced non-small cell lung cancer. Shepherd FA, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-27–S8-30

Gemcitabine in the treatment of elderly patients with advanced non-small cell lung cancer. Shepherd FA, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-50–S7-55

Preclinical, pharmacologic, and phase I studies of gemcitabine. Storniolo AM, et al. **Semin Oncol** 1997 Apr; 24(2 Suppl 7):S7-2–S7-7 (16 ref.)

Gemcitabine: symptomatic benefit in advanced non-small cell lung cancer. Thatcher N, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-6–S8-12 (37 ref.)

Rationale of a phase III study comparing a standard cisplatin regimen (mitomycin/ifosfamide/cisplatin) with cisplatin and gemcitabine in non-small cell lung cancer. Tonato M, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 8):S8-31–S8-35

Combination chemotherapy studies with gemcitabine. van Moorsel CJ, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 7):S7-17–S7-23 (40 ref.)

BIOSYNTHESIS

A cis-trans interaction at the 3'-untranslated region of ribonucleotide reductase mRNA is regulated by TGF-beta 1, TGF-beta 2, and TGF-beta 3. Amara FM, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):347–51

Cloning, sequencing and expression of ribonucleotide reductase R2 from Trypanosoma brucei. Dormeyer M, et al. **FEBS Lett** 1997 Sep 8;414(2):449–53

Induction of the mouse ribonucleotide reductase R1 and R2 genes in response to DNA damage by UV light. Filatov D, et al. **J Biol Chem** 1996 Sep 27;271(39):23698–704

Ribonucleotide reductase R2 component is a novel malignancy determinant that cooperates with activated oncogenes to determine transformation and malignant potential. Fan H, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14036–40

CHEMISTRY

Electron paramagnetic resonance and nuclear magnetic resonance studies of class I ribonucleotide reductase. Gräslund A, et al. **Annu Rev Biophys Biomol Struct** 1996; 25:259–86 (64 ref.)

Model complexes of di-iron sites in methane mono-oxygenase and ribonucleotide reductase: structure and reactivity. Fontecave M, et al. **Biochem Soc Trans** 1997 Feb;25(1):65–9 (36 ref.)

EPR study of the mixed-valent diiron sites in mouse and herpes simplex virus ribonucleotide reductases. Effect of the tyrosyl radical on structure and reactivity of the diferric center. Davydov RM, et al. **Biochemistry** 1997 Jul 29; 36(30):9093–100

EXAFS comparison of the dimanganese core structures of manganese catalase, arginase, and manganese-substituted ribonucleotide reductase and hemerythrin. Stemmler TL, et al. **Biochemistry** 1997 Aug 12;36(32):9847–58

Density functional calculations on model tyrosyl radicals. Himo F, et al. **Biophys J** 1997 Apr;72(4):1556–67

Di-iron-carboxylate proteins. Nordlund P, et al.

Curr Opin Struct Biol 1995 Dec;5(6):758–66 (54 ref.)

The Cys292—>Ala substitution in protein R1 of class I ribonucleotide reductase from Escherichia coli has a global effect on nucleotide binding at the specificity–determining allosteric site. Ormö M, et al. **Eur J Biochem** 1996 Oct 15;241(2):363–7

Detection of a stable free radical in the B2 subunit of the manganese ribonucleotide reductase (Mn–RRase) of Corynebacterium ammoniagenes. Griepenburg U, et al. **Free Radic Res** 1996 Jun;24(6):473–81

Kinetics of transient radicals in Escherichia coli ribonucleotide reductase. Formation of a new tyrosyl radical in mutant protein R2. Katterle B, et al. **J Biol Chem** 1997 Apr 18;272(16):10414–21

High field EPR studies of mouse ribonucleotide reductase indicate hydrogen bonding of the tyrosyl radical. Schmidt PP, et al. **J Biol Chem** 1996 Sep 27;271(39):23615–8

The ten–stranded beta/alpha barrel in ribonucleotide reductase protein R1. Uhlin U, et al. **J Mol Biol** 1996 Sep 27;262(3):358–69

Binding of allosteric effectors to ribonucleotide reductase protein R1: reduction of active–site cysteines promotes substrate binding. Eriksson M, et al. **Structure** 1997 Aug 15;5(8):1077–92

Crystal structure of reduced protein R2 of ribonucleotide reductase: the structural basis for oxygen activation at a dinuclear iron site. Logan DT, et al. **Structure** 1996 Sep 15;4(9):1053–64

The evolution of ribonucleotide reduction. Reichard P. **Trends Biochem Sci** 1997 Mar;22(3):81–5 (31 ref.)

DRUG EFFECTS

Interferon augments the cytotoxicity of hydroxyurea without enhancing its activity against the M2 subunit of ribonucleotide reductase: effects in wild–type and resistant human colon cancer cells. Wadler S, et al. **Cancer Chemother Pharmacol** 1996;38(6):522–8

Inactivation of ribonucleotide reductase in tumour cells and inhibition of tumour cell growth by p–alkoxyphenols. Wellnitz U, et al. **Melanoma Res** 1997 Aug;7(4):288–98

GENETICS

Quantitative analysis of polymerase chain reaction products by dot blot. Hill JM, et al. **Anal Biochem** 1996 Mar 1; 235(1):44–8

A method for direct DNA amplification of uncharacterized DNA viruses and for development of a viral polymerase chain reaction assay: application to the red sea bream iridovirus. Oshima S, et al. **Anal Biochem** 1996 Nov 1; 242(1):15–9

Temperature–sensitive mutants of Corynebacterium ammoniagenes ATCC 6872 with a defective large subunit of the manganese–containing ribonucleotide reductase. Luo C, et al. **Arch Microbiol** 1997 May;167(5):317–24

nrdD and nrdG genes are essential for strict anaerobic growth of Escherichia coli. Garriga X, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):189–92

Production of the R2 subunit of ribonucleotide reductase from herpes simplex virus with prokaryotic and eukaryotic expression systems: higher activity of R2 produced by eukaryotic cells related to higher iron–binding capacity. Lamarche N, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):129–35

Functional and sequence analysis of splicing defective nrdB mutants of bacteriophage T4 reveal new bases and a new sub–domain required for group I intron self–splicing. Lal SK, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):89–97

A prespore–specific gene of Dictyostelium discoideum encodes the small subunit of ribonucleotide reductase. Tsang A, et al. **Biochim Biophys Acta** 1996 Nov 11; 1309(1–2):100–8

Baculoviruses contain a gene for the large subunit of ribonucleotide reductase. van Strien EA, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2365–77

Mapping of the ribonucleotide reductase genes (Rrm1, Rrm2) in the rat. Klinga–Levan K, et al. **Mamm Genome** 1997 Jan;8(1):47–9

The Bacillus subtilis genes for ribonucleotide reductase are similar to the genes for the second class I NrdE/NrdF enzymes of Enterobacteriaceae. Scotti C, et al. **Microbiology** 1996 Nov;142 (Pt 11):2995–3004

Identification of RNR4, encoding a second essential small subunit of ribonucleotide reductase in Saccharomyces cerevisiae. Huang M, et al. **Mol Cell Biol** 1997 Oct; 17(10):6105–13

Rnr4p, a novel ribonucleotide reductase small–subunit protein. Wang PJ, et al. **Mol Cell Biol** 1997 Oct; 17(10):6114–21

Cloning and sequencing of cDNAs encoding ribonucleotide reductase from zebrafish Danio rerio. Mathews CZ, et al. **Mol Mar Biol Biotechnol** 1996 Dec;5(4):284–7

Promoter identification and expression analysis of Salmonella typhimurium and Escherichia coli nrdEF operons encoding one of two class I ribonucleotide reductases present in both bacteria. Jordan A, et al. **Mol Microbiol** 1996 Feb; 19(4):777–90

Metal ion interaction with cosubstrate in self–splicing of group I introns. Sjögren AS, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):648–53

Cloning and characterization of the R1 and R2 subunits of ribonucleotide reductase from Trypanosoma brucei. Hofer A, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):6959–64

Ribonucleotide reductase in the archaeon Pyrococcus furiosus: a critical enzyme in the evolution of DNA genomes? Riera J, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):475–8

The B12–dependent ribonucleotide reductase from the archaebacterium Thermoplasma acidophila: an evolutionary solution to the ribonucleotide reductase conundrum. Tauer A, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):53–8

AP–1 cis–response elements are involved in basal expression and Vmw110 transactivation of the large subunit of herpes simplex virus type 2 ribonucleotide reductase (ICP10). Zhu J, et al. **Virology** 1997 May 12;231(2):301–12

METABOLISM

Differences in the properties of mammalian ribonucleotide reductase toward its substrates. Cory JG, et al. **Adv Enzyme Regul** 1996;36:3–15

Ribonucleotide reductase, lipoxygenase and the intracellular low–molecular–weight iron pool. Cooper CE, et al. **Biochem Soc Trans** 1997 Feb;25(1):75–80 (25 ref.)

Model complexes of di–iron sites in methane mono–oxygenase and ribonucleotide reductase: structure and reactivity. Fontecave M, et al. **Biochem Soc Trans** 1997 Feb;25(1):65–9 (36 ref.)

A direct interaction between a DNA–tracking protein and a promoter recognition protein: implications for searching DNA sequence. Tinker–Kulberg RL, et al. **EMBO J** 1996 Sep 16;15(18):5032–9

Role of ribonucleotide reductase and deoxynucleotide pools in the oxygen–dependent control of DNA replication in Ehrlich ascites cells. Brischwein K, et al. **Eur J Biochem** 1997 Mar 1;244(2):286–93

Allosteric regulation of the third ribonucleotide reductase (NrdEF enzyme) from enterobacteriaceae. Eliasson R, et al. **J Biol Chem** 1996 Oct 25;271(43):26582–7

Regulation of T4 phage aerobic ribonucleotide reductase. Simultaneous assay of the four activities. Hendricks SP, et al. **J Biol Chem** 1997 Jan 31;272(5):2861–5

Kinetics of transient radicals in Escherichia coli ribonucleotide reductase. Formation of a new tyrosyl radical in mutant protein R2. Katterle B, et al. **J Biol Chem** 1997 Apr 18;272(16):10414–21

Activation of the anaerobic ribonucleotide reductase from Escherichia coli. The essential role of the iron–sulfur center for S–adenosylmethionine reduction. Ollagnier S, et al. **J Biol Chem** 1997 Sep 26;272(39):24216–23

Inactivation of ribonucleotide reductase in tumour cells and inhibition of tumour cell growth by p–alkoxyphenols. Wellnitz U, et al. **Melanoma Res** 1997 Aug;7(4):288–98

The evolution of ribonucleotide reduction. Reichard P. **Trends Biochem Sci** 1997 Mar;22(3):81–5 (31 ref.)

PHYSIOLOGY

The large subunit of herpes simplex virus type 2 ribonucleotide reductase (ICP10) is associated with the virion tegument and has PK activity. Smith CC, et al. **Virology** 1997 Aug 4;234(2):235–42

ULTRASTRUCTURE

The three–dimensional structure of mammalian ribonucleotide reductase protein R2 reveals a more–accessible iron–radical site than Escherichia coli R2. Kauppi B, et al. **J Mol Biol** 1996 Oct 11;262(5):706–20

RIBONUCLEOTIDES

Improved large scale culture of Methylophilus methylotrophus for 13C/15N labeling and random fractional deuteration of ribonucleotides. Batey RT, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4836–7

ANALYSIS

Facile analysis of ribonucleotides in D,L–alpha–difluoromethylornithine–treated mouse lymphoid cells by high–performance anion–exchange column chromatography. Cho SC. **J Chromatogr B Biomed Appl** 1996 Apr 12;678(2):344–8

BLOOD

Simultaneous determination of purine bases, ribonucleosides and ribonucleotides by capillary electrophoresis–electrochemistry with a copper electrode. Lin H, et al. **J Chromatogr A** 1997 Jan 31;760(2):227–33

CHEMISTRY

Effect of ribonucleotide substitution on nucleic acid bulge recognition by neocarzinostatin. Kappen LS, et al. **Bioorg Med Chem** 1997 Jun;5(6):1221–7

Substrate properties of fluorescent ribonucleotides in the terminal transferase–catalyzed labeling of DNA sequencing primers. Igloi GL. **Biotechniques** 1996 Dec;21(6):1084–92

2'–O–aminopropyl ribonucleotides: a zwitterionic modification that enhances the exonuclease resistance and biological activity of antisense oligonucleotides. Griffey RH, et al. **J Med Chem** 1996 Dec 20;39(26):5100–9

ISOLATION & PURIFICATION

Simple and rapid chromatographic method for the separation of major classes of ribosomal ribomononucleotides. Popović DA, et al. **J Chromatogr A** 1997 May 9; 769(2):225–30

METABOLISM

Reprogramming the purine nucleotide cofactor requirement of Drosophila P element transposase in vivo. Mul YM, et al. **EMBO J** 1997 Jul 16;16(14):4441–7

Stable and diffusible pools of nucleotides in pancreatic islet cells. Detimary P, et al. **Endocrinology** 1996 Nov; 137(11):4671–6

Analysis of nucleotide binding by a vacuolar proton–translocating adenosine triphosphatase. Webster LC, et al. **Eur J Biochem** 1996 Aug 15;240(1):156–64

Occurrence and biosynthesis of 5–aminoimidazole–4–carboxamide ribonucleotide and N–(beta–D–ribofuranosyl)formamide 5'–phosphate in Methanobacterium thermoautotrophicum delta(H). White RH. **J Bacteriol** 1997 Jan;179(2):563–6

Regulation of T4 phage aerobic ribonucleotide reductase. Simultaneous assay of the four activities. Hendricks SP, et al. **J Biol Chem** 1997 Jan 31;272(5):2861–5

Template recognition and ribonucleotide specificity of the DNA primase of bacteriophage T7. Kusakabe T, et al. **J Biol Chem** 1997 Feb 28;272(9):5943–51

Creation and removal of embedded ribonucleotides in chromosomal DNA during mammalian Okazaki fragment processing. Rumbaugh JA, et al. **J Biol Chem** 1997 Sep 5;272(36):22591–9

Characterization of a Goalpha mutant that binds xanthine nucleotides. Yu B, et al. **J Biol Chem** 1997 Jul 18; 272(29):18015–9

Switches, latches, and amplifiers: common themes of G proteins and molecular motors. Vale RD. **J Cell Biol** 1996 Oct;135(2):291–302 (92 ref.)

Genetic evidence for 5–aminoimidazole–4–carboxamide ribonucleotide (AICAR) as a negative effector of cytochrome terminal oxidase cbb3 production in Rhizobium etli. Soberón M, et al. **Mol Gen Genet** 1997 May;254(6):665–73

The evolution of ribonucleotide reduction. Reichard P. **Trends Biochem Sci** 1997 Mar;22(3):81–5 (31 ref.)

PHARMACOLOGY

Hypoglycaemic effect of AICAriboside in mice. Vincent MF, et al. **Diabetologia** 1996 Oct;39(10):1148–55

Synthesis and effect of nonhydrolyzable xanthosine triphosphate derivatives on prenylation of Rab5D136N. Yanachkov I, et al. **Mol Pharmacol** 1997 Jan;51(1):47–51

Effect of umami taste on pleasantness of low–salt soups during repeated testing. Roininen K, et al. **Physiol Behav** 1996 Sep;60(3):953–8

THERAPEUTIC USE

The influence of dietary nucleotides on erythrocyte membrane fatty acids and plasma lipids in preterm infants. Axelsson I, et al. **Acta Paediatr** 1997 May;86(5):539–44

RIBOSE

ADMINISTRATION & DOSAGE

Slow bolus injection of ribose in the identification of thallium–201 redistribution following combined adenosine/dynamic exercise stress. Gunning MG, et al. **Eur Heart J** 1996 Sep;17(9):1438–43

BIOSYNTHESIS

Ribose biosynthesis and evidence for an alternative first step in the common aromatic amino acid pathway in Methanococcus maripaludis. Tumbula DL, et al. **J Bacteriol** 1997 Oct;179(19):6010–3

CHEMISTRY

A comprehensive survey of the acid–stable fluorescent cross–links formed by ribose with basic amino acids, and partial characterization of a novel Maillard cross–link. Graham L. **Biochim Biophys Acta** 1996 Sep 13;1297(1):9–16

Pyranosyl–RNA: chiroselective self–assembly of base sequences by ligative oligomerization of tetranucleotide–2',3'–cyclophosphates (with a commentary concerning the origin of biomolecular homochirality). Bolli M, et al. **Chem Biol** 1997 Apr;4(4):309–20

Identification of ribose–base sequential NOEs according to base types in uniformly 13C–labeled RNAs. Ramachandran R, et al. **J Magn Reson** 1997 Jan;124(1):210–3

Plural origins of molecular homochirality in our biota Part II. The relative stabilities of homochiral and mixed oligoribotides and peptides. Soares TA, et al. **Z Naturforsch [C]** 1997 Jan–Feb;52(1–2):89–96

GENETICS

A small nucleolar RNA requirement for site–specific ribose methylation of rRNA in Xenopus. Tycowski KT, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14480–5

RIBOSE

METABOLISM

Biochemical alterations in collagen IV induced by in vitro glycation. Raabe HM, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):699–704

Cleavage of 16S rRNA within the ribosome by mRNA modified in the A–site codon with phenanthroline–Cu(II). Bucklin DJ, et al. **Biochemistry** 1997 Jul 1;36(26):7951–7

Mechanism of ribose 2'–group discrimination by an RNA polymerase. Huang Y, et al. **Biochemistry** 1997 Jul 8; 36(27):8231–42

Genetically probing the regions of ribose–binding protein involved in permease interaction. Eym Y, et al. **Mol Microbiol** 1996 Aug;21(4):695–702

Targeted ribose methylation of RNA in vivo directed by tailored antisense RNA guides [see comments] Cavaillé J, et al. **Nature** 1996 Oct 24;383(6602):732–5. Comment in: Nature 1996 Oct 24;383(6602):675–6.

Guiding ribose methylation of rRNA. Bachellerie JP, et al. **Trends Biochem Sci** 1997 Jul;22(7):257–61 (34 ref.)

PHARMACOLOGY

Concanavalin A, ribose, and adenine resuscitate preserved rat hearts. Tan ZT, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):26–32

Glycation–dependent, reactive oxygen species–mediated suppression of the insulin gene promoter activity in HIT cells. Matsuoka T, et al. **J Clin Invest** 1997 Jan 1; 99(1):144–50

RIBOSE–PHOSPHATE PYROPHOSPHOKINASE

[Mammalian phosphoribosylpyrophosphate synthetase] Tatibana M. **Nippon Rinsho** 1996 Dec;54(12):3195–201 (24 ref.) (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

The defective phosphoribosyl diphosphate synthase in a temperature–sensitive prs–2 mutant of Escherichia coli is compensated by increased enzyme synthesis. Post DA, et al. **Microbiology** 1996 Feb;142 (Pt 2):359–65

CHEMISTRY

Overexpression of Bacillus subtilis phosphoribosylpyrophosphate synthetase and crystallization and preliminary X–ray characterization of the free enzyme and its substrate–effector complexes. Bentsen AK, et al. **Proteins** 1996 Feb;24(2):238–46

[Structure of family proteins constituting mammalian phosphoribosylpyrophosphate synthetase] Ishijima S, et al. **Seikagaku** 1997 Feb;69(2):122–6 (15 ref.) **(Jpn)**

GENETICS

Bacillus caldolyticus prs gene encoding phosphoribosyl–diphosphate synthase. Krath BN, et al. **Gene** 1996 Oct 17;176(1–2):73–9

10Sa RNA complements the temperature–sensitive phenotype caused by a mutation in the phosphoribosyl pyrophosphate synthetase (prs) gene in Escherichia coli. Ando H, et al. **Genes Genet Syst** 1996 Feb;71(1):47–50

The defective phosphoribosyl diphosphate synthase in a temperature–sensitive prs–2 mutant of Escherichia coli is compensated by increased enzyme synthesis. Post DA, et al. **Microbiology** 1996 Feb;142 (Pt 2):359–65

PRS1 is a key member of the gene family encoding phosphoribosylpyrophosphate synthetase in Saccharomyces cerevisiae. Carter AT, et al. **Mol Gen Genet** 1997 Mar 26;254(2):148–56

Involvement of the ribulosephosphate epimerase gene in the dnaA and dnaR functions for initiation of chromosome replication in Escherichia coli. Sakakibara Y. **Mol Microbiol** 1997 May;24(4):793–801

[PRPP synthetase superactivity] Fujimori S. **Nippon Rinsho** 1996 Dec;54(12):3309–14 (20 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Binding of divalent magnesium by Escherichia coli phosphoribosyl diphosphate synthetase. Willemoës M, et al. **Biochemistry** 1997 Apr 22;36(16):5078–83

Carbocyclic analogues of D–ribose–5–phosphate: synthesis and behavior with 5–phosphoribosyl alpha–1–pyrophosphate synthetases. Parry RJ, et al. **Bioorg Med Chem** 1996 Jul;4(7):1077–88

The human phosphoribosylpyrophosphate synthetase–associated protein 39 gene (PRPSAP1) is located in the chromosome region 17q24–q25. Ishizuka T, et al. **Genomics** 1996 Apr 15;33(2):332–4

RIBOSEMONOPHOSPHATES

CHEMICAL SYNTHESIS

Carbocyclic analogues of D–ribose–5–phosphate: synthesis and behavior with 5–phosphoribosyl alpha–1–pyrophosphate synthetases. Parry RJ, et al. **Bioorg Med Chem** 1996 Jul;4(7):1077–88

METABOLISM

Recycling of alpha–D–ribose 1–phosphate for nucleoside interconversion. Giorgelli F, et al. **Biochim Biophys Acta** 1997 Apr 17;1335(1–2): 6–22

Occurrence and biosynthesis of 5–aminoimidazole–4–carboxamide ribonucleotide and N–(beta–D–ribofuranosyl)formamide 5'–phosphate in Methanobacterium thermoautotrophicum delta(H). White RH. **J Bacteriol** 1997 Jan;179(2):563–6

Phosphoribosyl anthranilate isomerase from Thermotoga maritima is an extremely stable and active homodimer. Sterner R, et al. **Protein Sci** 1996 Oct;5(10):2000–8

RIBOSOMAL DNA see DNA, RIBOSOMAL

RIBOSOMAL FRAMESHIFTING see FRAMESHIFTING, RIBOSOMAL

RIBOSOMAL PROTEINS

A new model for the three–dimensional folding of Escherichia coli 16 S ribosomal RNA. II. The RNA–protein interaction data. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):545–65

[Expression of monocyte chemotactic activity by cross–linked dimerization of a ribosomal protein] Yamamoto T. **Seikagaku** 1997 May;69(5):324–8 (15 ref.) **(Jpn)**

ANALYSIS

A nonradioactive assay for ribosome–inactivating proteins. Langer M, et al. **Anal Biochem** 1996 Dec 1;243(1):150–3

Very alkaline immobilized pH gradients for two–dimensional electrophoresis of ribosomal and nuclear proteins. Görg A, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):328–37

Sequence requirement for nucleolar localization of rat ribosomal protein L31. Quaye IK, et al. **Eur J Cell Biol** 1996 Feb;69(2):151–5

Identification of a Drosophila 60S ribosomal protein. Gaynor JJ, et al. **Insect Biochem Mol Biol** 1997 Mar;27(3):223–8

Predictive value of argyrophilic nucleolar–organizer–region–associated proteins in bladder cancer, using cell–imprint preparations. Masuda M, et al. **J Cancer Res Clin Oncol** 1997;123(1):1–5

Contact sites of peptide–oligoribonucleotide cross–links identified by a combination of peptide and nucleotide sequencing with MALDI MS. Urlaub H, et al. **J Protein Chem** 1997 Jul;16(5):375–83

Presence of ribosomal P protein on the surface of human umbilical vein endothelial cells [editorial] Reichlin M. **J Rheumatol** 1996 Jul;23(7):1123–5

ANTAGONISTS & INHIBITORS

Immunoconjugates made of an anti–EGF receptor monoclonal antibody and type 1 ribosome–inactivating proteins from Saponaria ocymoides or Vaccaria pyramidata. Di Massimo AM, et al. **Br J Cancer** 1997; 75(6):822–8

BIOSYNTHESIS

The effects of mutations in the rpmB,G operon of Escherichia coli on ribosome assembly and ribosomal protein synthesis. Maguire BA, et al. **Biochim Biophys Acta** 1997 Aug 7; 1353(2):137–47

Pseudoknot and translational control in the expression of the S15 ribosomal protein. Bénard L, et al. **Biochimie** 1996; 78(7):568–76

A ribosomal protein from Thermus thermophilus is homologous to a general shock protein. Gryaznova OI, et al. **Biochimie** 1996;78(11–12):915–9

S6 ribosomal protein phosphorylation and translation of stored mRNA in maize. Sánchez–de–Jiménez E, et al. **Biochimie** 1997 Apr;79(4):187–94

Persistence of ribosomal protein synthesis after infection of HeLa cells by herpes simplex virus type 1. Simonin D, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):435–43

Defective ribosomal products (DRiPs): a major source of antigenic peptides for MHC class I molecules? Yewdell JW, et al. **J Immunol** 1996 Sep 1;157(5):1823–6 (21 ref.)

Suppression of human ribosomal protein L23A expression during cell growth inhibition by interferon–beta. Jiang H, et al. **Oncogene** 1997 Jan 30;14(4):473–80

Ribosomal protein synthesis in 16 and 19 day gestation fetuses of hypothyroid mothers. Hendrich CE, et al. **Proc Soc Exp Biol Med** 1996 Dec;213(3):273–80

CHEMISTRY

The primary structures of rat ribosomal proteins S3a (the V–Fos transformation effector) and of S3b. Chan YL, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):141–7

Histidine 229 in protein L2 is apparently essential for 50S peptidyl transferase activity. Cooperman BS, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1087–94 (43 ref.)

Structures of prokaryotic ribosomal proteins: implications for RNA binding and evolution. Ramakrishnan V, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):979–86 (30 ref.)

Proteins P1, P2, and P0, components of the eukaryotic ribosome stalk. New structural and functional aspects. Remacha M, et al. **Biochem Cell Biol** 1995 Nov–Dec; 73(11–12):959–68 (49 ref.)

Structure and evolution of mammalian ribosomal proteins. Wool IG, et al. **Biochem Cell Biol** 1995 Nov–Dec; 73(11–12):933–47 (55 ref.)

The primary structure of rat ribosomal protein L6. Chan YL, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):431–8

Structure of the N–terminus of the Escherichia coli ribosomal protein L7/L12. Todorova RT. **Biochem Mol Biol Int** 1996 Jul;39(4):657–64

Primary structures and sequence analysis of human ribosomal proteins L39 and S27. Tsui SK, et al. **Biochem Mol Biol Int** 1996 Oct;40(3):611–6

Dimer/monomer equilibrium and domain separations of Escherichia coli ribosomal protein L7/L12. Hamman BD, et al. **Biochemistry** 1996 Dec 24;35(51):16680–6

Rotational and conformational dynamics of Escherichia coli ribosomal protein L7/L12. Hamman BD, et al. **Biochemistry** 1996 Dec 24;35(51):16672–9

The exchangeable yeast ribosomal acidic protein YP2beta shows characteristics of a partly folded state under physiological conditions. Zurdo J, et al. **Biochemistry** 1997 Aug 5;36(31):9625–35

Characterization of an hsp70 related clone encoding a 33 kDa protein with homology to a protein which associates with polysomes. Chen MS, et al. **Biochim Biophys Acta** 1996 Oct 17;1297(2):124–6

Specific serodiagnosis of human leishmaniasis with recombinant Leishmania P2 acidic ribosomal proteins. Soto M, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):387–91

Ribosomal proteins and elongation factors. Liljas A, et al. **Curr Opin Struct Biol** 1995 Dec;5(6):721–7 (59 ref.)

Human ribosomal protein L7 binds RNA with an alpha–helical arginine–rich and lysine–rich domain. Hemmerich P, et al. **Eur J Biochem** 1997 May 1; 245(3):549–56

S6 permutein shows that the unusual target topology is not responsible for the absence of rigid tertiary structure in de novo protein albebetin. Abdullaev ZK, et al. **FEBS Lett** 1997 Sep 8;414(2):243–6

The L7/L12 ribosomal domain of the ribosome: structural and functional studies. Gudkov AT. **FEBS Lett** 1997 May 5;407(3):253–6 (60 ref.)

A mutant form of the ribosomal protein L1 reveals conformational flexibility. Unge J, et al. **FEBS Lett** 1997 Jul 7;411(1):53–9

Solution structure of the phosphorylated sites of ribosomal protein S6 by 1H NMR spectroscopy. Katahira R, et al. **Int J Pept Protein Res** 1996 Apr;47(4):282–8

Mass spectrometric analysis of 40 S ribosomal proteins from Rat–1 fibroblasts. Louie DF, et al. **J Biol Chem** 1996 Nov 8;271(45):28189–98

Incorporation of dinitrophenyl protein L23 into totally reconstituted Escherichia coli 50 S ribosomal subunits and its localization at two sites by immune electron microscopy. Montesano–Roditis L, et al. **J Biol Chem** 1997 Mar 28; 272(13):8695–703

Identification and sequence analysis of contact sites between ribosomal proteins and rRNA in Escherichia coli 30 S subunits by a new approach using matrix–assisted laser desorption/ionization–mass spectrometry combined with N–terminal microsequencing. Urlaub H, et al. **J Biol Chem** 1997 Jun 6;272(23):14547–55

Ribosomal protein L9: a structure determination by the combined use of X–ray crystallography and NMR spectroscopy. Hoffman DW, et al. **J Mol Biol** 1996 Dec 20;264(5):1058–71

An exceptionally stable helix from the ribosomal protein L9: implications for protein folding and stability. Kuhlman B, et al. **J Mol Biol** 1997 Aug 1;270(5):640–7

The stability and dynamics of ribosomal protein L9: investigations of a molecular strut by amide proton exchange and circular dichroism. Lillemoen J, et al. **J Mol Biol** 1997 May 2;268(2):482–93

Bacterial 3alpha–hydroxysteroid dehydrogenase is homologous to a fusion of bacterial ribosomal L10 and L7/12 genes. Baker ME. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):365–6

Solution structure of the ribosomal RNA binding protein S15 from Thermus thermophilus [letter] Berglund H, et al. **Nat Struct Biol** 1997 Jan;4(1):20–3

High resolution solution structure of ribosomal protein L11–C76, a helical protein with a flexible loop that becomes structured upon binding to RNA. Markus MA, et al. **Nat Struct Biol** 1997 Jan;4(1):70–7

The RNA binding domain of ribosomal protein L11 is structurally similar to homeodomains [letter] Xing Y, et al. **Nat Struct Biol** 1997 Jan;4(1):24–7

The central pseudoknot in 16S ribosomal RNA is needed for ribosome stability but is not essential for 30S initiation complex formation. Poot RA, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3670–6

Beta–methylthio–aspartic acid: identification of a novel posttranslational modification in ribosomal protein S12 from Escherichia coli. Kowalak JA, et al. **Protein Sci** 1996 Aug;5(8):1625–32

Crystallization and preliminary crystallographic analysis of ribosomal protein S8 from Thermus thermophilus. Tishchenko SV, et al. **Proteins** 1997 Feb;27(2):309–10

Structural evidence for specific S8–RNA and S8–protein interactions within the 30S ribosomal subunit: ribosomal protein S8 from Bacillus stearothermophilus at 1.9 A resolution. Davies C, et al. **Structure** 1996 Sep 15;

4(9):1093–104

The crystal structure of ribosomal protein L14 reveals an important organizational component of the translational apparatus. Davies C, et al. **Structure** 1996 Jan 15;4(1):55–66

KOW: a novel motif linking a bacterial transcription factor with ribosomal proteins. Kyrpides NC, et al. **Trends Biochem Sci** 1996 Nov;21(11):425–6

[Topography of ribosomal proteins: reconsideration of of protein map of small ribosomal subunit] Spirin AS, et al. **Biokhimiia** 1996 Nov;61(11):1928–30 (Eng. Abstr.) **(Rus)**

[Protein environment of matrices in the decoding region of 80S ribosomes from human placenta from data of affinity modification of mRNA analogs—oligoribonucleotide derivative] Bulygin KN, et al. **Mol Biol (Mosk)** 1996 Mar–Apr;30(2):400–9 **(Rus)**

[The protein environment of a template in the decoding region from data on affinity modification of ribosomes from human placenta by an alkylating derivative of the oligoribonucleotide pGUGU3] Smolenskaia IA, et al. **Mol Biol (Mosk)** 1997 Jan–Feb;31(1):144–51 **(Rus)**

CLASSIFICATION

Phylogenetic relationship of organisms obtained by ribosomal protein comparison. Müller EC, et al. **Cell Mol Life Sci** 1997 Jan;53(1):34–50

DIAGNOSTIC USE

Specific serodiagnosis of human leishmaniasis with recombinant Leishmania P2 acidic ribosomal proteins. Soto M, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):387–91

DRUG EFFECTS

Protein phosphatase activity is required for prothoracicotropic hormone–stimulated ecdysteroidogenesis in the prothoracic glands of the tobacco hornworm, Manduca sexta. Song Q, et al. **Arch Insect Biochem Physiol** 1996;31(4):465–80

Tetracyclines induce changes in accessibility of ribosomal proteins to proteases. Kolesnikov IV, et al. **Biochimie** 1996; 78(10):868–73

GENETICS

U14 snoRNAs are encoded in introns of human ribosomal protein S13 gene. Kenmochi N, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):371–4

Structure and expression of ribosomal protein genes in Xenopus laevis. Amaldi F, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):969–77 (60 ref.)

A pseudoknot is required for efficient translational initiation and regulation of the Escherichia coli rpsO gene coding for ribosomal protein S15. Ehresmann C, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1131–40 (34 ref.)

The accuracy center of a eukaryotic ribosome. Liebman SW, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1141–9 (49 ref.)

Location and domain structure of Escherichia coli ribosomal protein L7/L12: site specific cysteine crosslinking and attachment of fluorescent probes. Traut RR, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):949–58

Regulation of the Escherichia coli S10 ribosomal protein operon by heterologous L4 ribosomal proteins. Zengel JM, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1105–12

Organization and nucleotide sequences of ten ribosomal protein genes from the region equivalent to the S10 operon in the archaebacterium, Halobacterium halobium. Miyokawa T, et al. **Biochem Mol Biol Int** 1996 Aug; 39(6):1209–20

Primary structures and sequence analysis of human ribosomal proteins L39 and S27. Tsui SK, et al. **Biochem Mol Biol Int** 1996 Oct;40(3):611–6

The large ribosomal protein gene cluster of a cryptomonad plastid: gene organization, sequence and evolutionary implications. Wang SL, et al. **Biochem Mol Biol Int** 1997 Apr;41(5):1035–44

Overexpression of the gene of ribosomal protein L30 from Thermus thermophilus and crystallization of the recombinant protein. Khairullina AR, et al. **Biochemistry (Mosc)** 1997 Feb;62(2):221–4

The cloning and sequencing of a ribosomal L18 protein from an evolutionary divergent eukaryote, Trypanosoma brucei. Coulter LJ, et al. **Biochim Biophys Acta** 1996 Nov 11; 1309(1–2):69–72

Nucleotide sequence of a gene cluster encoding NusG and the L11–L1–L10–L12 ribosomal proteins from the thermophilic archaeon Sulfolobus solfataricus. Geiger M, et al. **Biochim Biophys Acta** 1997 Jul 18;1340(2):170–7

Mutations in yeast ribosomal proteins S28 and S4 affect the accuracy of translation and alter the sensitivity of the ribosomes to paromomycin. Synetos D, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):156–66

Cloning, sequencing and expression in MEL cells of a cDNA encoding the mouse ribosomal protein S5. Vanegas N, et al. **Biochim Biophys Acta** 1997 Jun 5;1357(1):1–4

The rps4–gene is encoded upstream of the nad2–gene in Arabidopsis mitochondria. Lippok B, et al. **Biol Chem Hoppe Seyler** 1996 Apr;377(4):251–7

In vitro evolution used to define a protein recognition site within a large RNA domain. Sapag A, et al. **Bioorg Med Chem** 1997 Jun;5(6):1097–105

Study of tyrosine–containing mutants of ribosomal protein L7/L12 from Escherichia coli. Todorova RT, et al. **Biophys Chem** 1996 Nov 29;62(1–3):39–45

Analysis of expression of cMOAT (MRP2), MRP3, MRP4, and MRP5, homologues of the multidrug resistance–associated protein gene (MRP1), in human cancer cell lines. Kool M, et al. **Cancer Res** 1997 Aug 15; 57(16):3537–47

Effect of decreased fte–1 gene expression on protein synthesis, cell growth, and transformation. Kho CJ, et al. **Cell Growth Differ** 1996 Sep;7(9):1157–66

The yeast ORF YDL202w codes for the mitochondrial ribosomal protein YmL11. Bui DM, et al. **Curr Genet** 1997 May;31(5):396–400

Cloning and characterization of MRP10, a yeast gene coding for a mitochondrial ribosomal protein. Jin C, et al. **Curr Genet** 1997 Mar;31(3):228–34

Loss of RNA editing of rps1 sequences in Oenothera mitochondria. Mundel C, et al. **Curr Genet** 1996 Nov; 30(5):455–60

Organization and characterization of the two yeast ribosomal protein YL19 genes. Song JM, et al. **Curr Genet** 1996 Sep; 30(4):273–8

The wheat mitochondrial rps13 gene: RNA editing and co–transcription with the atp6 gene. Takvorian A, et al. **Curr Genet** 1997 Jun;31(6):497–502

Cloning and characterization of a Neurospora crassa ribosomal protein gene, crps–7. Vierula PJ. **Curr Genet** 1997 Feb;31(2):139–43

A pseudogene for the human ribosomal protein L5 (RPL5P1) maps within an intron of the SNRPN transcription unit on human chromosome 15. Buiting K, et al. **Cytogenet Cell Genet** 1996;75(4):224–6

Assignment of the L32 ribosomal protein gene (RPL32) to human chromosome 3q13.3––>q21 by in situ hybridization. Vorobieva NV, et al. **Cytogenet Cell Genet** 1997; 77(3–4):190–1

Characterization and mapping of the Xiphophorus maculatus (Teleostei: Poeciliidae) RPS15 gene. Walter RB, et al. **Cytogenet Cell Genet** 1996;75(2–3):140–4

Localization of ribosomal protein L5 mRNA in myoplasm during ascidian development. Swalla BJ, et al. **Dev Genet** 1996;19(3):258–67

Organization and transcription of a putative gene cluster encoding ribosomal protein S14 and an oligopeptide permease–like protein in the cyanobacterium Synechococcus sp. strain PCC 6301. Fujishiro T, et al. **DNA Res** 1996 Jun 30;3(3):165–9

A cDNA encodes the Drosophila homolog of yeast 60S ribosomal protein YL43. Fox MG, et al. **DNA Seq** 1997; 7(2):123–5

Nucleotide sequence of ribosomal protein L3 cDNA and the exon–intron structure of L3 gene in the nematode, Caenorhabditis elegans. Zhu X, et al. **DNA Seq** 1996; 6(5):299–302

Targeting presequence acquisition after mitochondrial gene transfer to the nucleus occurs by duplication of existing targeting signals. Kadowaki K, et al. **EMBO J** 1996 Dec 2;15(23):6652–61

Identification and characterization of the genes for mitochondrial ribosomal proteins of Saccharomyces cerevisiae. Kitakawa M, et al. **Eur J Biochem** 1997 Apr 15;245(2):449–56

Ribosomal protein S15 from Thermus thermophilus—cloning, sequencing, overexpression of the gene and RNA–binding properties of the protein. Serganov A, et al. **Eur J Biochem** 1997 Jun 1;246(2):291–300

Constitutive expression of human ribosomal protein L7 arrests the cell cycle in G1 and induces apoptosis in Jurkat T–lymphoma cells. Neumann F, et al. **Exp Cell Res** 1997 Feb 1;230(2):252–61

Overproduction, purification and characterization of the HPB12–L24 ribosomal protein of Bacillus subtilis. Zouine M, et al. **FEMS Microbiol Lett** 1996 Nov 15;145(1):41–8

The S3a ribosomal protein gene is identical to the Fte–1 (v–fos transformation effector) gene and the TNF–alpha–induced TU–11 gene, and its transcript level is altered in transformed and tumor cells. Lecomte F, et al. **Gene** 1997 Feb 28;186(2):271–7

Structural characterization of the mouse ribosomal protein S6–encoding gene. Pata I, et al. **Gene** 1996 Oct 10; 175(1–2):241–5

Sequence, overproduction and purification of Vibrio proteolyticus ribosomal protein L18 for in vitro and in vivo studies. Setterquist RA, et al. **Gene** 1996 Dec 12; 183(1–2):237–42

Cloning and sequencing of ribosomal protein L27a and a gene similar to human GS1 in Drosophila. Soehnge H, et al. **Gene** 1997 Feb 7;185(2):257–63

Organization of a large gene cluster encoding ribosomal proteins in the cyanobacterium Synechococcus sp. strain PCC 6301: comparison of gene clusters among cyanobacteria, eubacteria and chloroplast genomes. Sugita M, et al. **Gene** 1997 Aug 11;195(1):73–9

Sequencing and analysis of the Thermus thermophilus ribosomal protein gene cluster equivalent to the spectinomycin operon. Vysotskaya VS, et al. **Gene** 1997 Jul 1;193(1):23–30

A Leuconostoc lactis protein with homology to ribosomal protein S1 shares common epitopes and common DNA binding properties with a mammalian DNA binding nuclear factor. Yamit–Hezi A, et al. **Gene** 1997 Jan 31;185(1):99–103

A novel Drosophila Minute locus encodes ribosomal protein S13. Saebøe–Larssen S, et al. **Genetics** 1996 Jun; 143(2):877–85

Fugu intron oversize reveals the presence of U15 snoRNA coding sequences in some introns of the ribosomal protein S3 gene. Crosio C, et al. **Genome Res** 1996 Dec; 6(12):1227–31

Mapping of the human ribosomal small subunit protein gene RPS24 to the chromosome 10q22–q23 boundary. Jones AM, et al. **Genomics** 1997 Jan 1;39(1):121–2

Expression and human chromosomal localization to 17q25 of the growth–regulated gene encoding the mitochondrial ribosomal protein MRPL12. Marty L, et al. **Genomics** 1997 May 1;41(3):453–7

A novel ribosomal protein L3–like gene (RPL3L) maps to the autosomal dominant polycystic kidney disease gene region. Van Raay TJ, et al. **Genomics** 1996 Oct 15; 37(2):172–6

Changes in ribosomal protein rpL8 mRNA during the reproductive cycle of the mosquito, Aedes aegypti. Mazzacano CA, et al. **Insect Biochem Mol Biol** 1996 Jun; 26(6):563–70

Generation of chromophore Tyr–containing mutants of the ribosomal protein L7/L12 from Escherichia coli by site–directed mutagenesis and characterization. Todorova R. **Int J Biochem Cell Biol** 1997 May;29(5):841–8

A novel method for improving Streptomyces coelicolor A3(2) for production of actinorhodin by introduction of rpsL (encoding ribosomal protein S12) mutations conferring resistance to streptomycin [letter] Hesketh A, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):532–5

Use of rpsL for dominance selection and gene replacement in Streptomyces roseosporus. Hosted TJ, et al. **J Bacteriol** 1997 Jan;179(1):180–6

Mutations in the rpmBG operon of Escherichia coli that affect ribosome assembly. Maguire BA, et al. **J Bacteriol** 1997 Apr;179(8):2486–93

Induction of actinorhodin production by rpsL (encoding ribosomal protein S12) mutations that confer streptomycin resistance in Streptomyces lividans and Streptomyces coelicolor A3(2). Shima J, et al. **J Bacteriol** 1996 Dec; 178(24):7276–84

QSR1, an essential yeast gene with a genetic relationship to a subunit of the mitochondrial cytochrome bc1 complex, codes for a 60 S ribosomal subunit protein. Dick FA, et al. **J Biol Chem** 1997 May 16;272(20):13372–9

Modulation of the activity of RNase E in vitro by RNA sequences and secondary structures 5' to cleavage sites. Mackie GA, et al. **J Biol Chem** 1997 Jan 3;272(1):609–16

Molecular cloning, developmental expression, and phosphorylation of ribosomal protein S6 in the endocrine gland responsible for insect molting. Song Q, et al. **J Biol Chem** 1997 Feb 14;272(7):4429–35

Expression patterns of bone–related proteins during osteoblastic differentiation in MC3T3–E1 cells. Choi JY, et al. **J Cell Biochem** 1996 Jun 15;61(4):609–18

GA–binding protein is involved in altered expression of ribosomal protein L32 gene. Curčić D, et al. **J Cell Biochem** 1997 Jun 1;65(3):287–307

Functional analysis of human RPS14 null alleles. Martin–Nieto J, et al. **J Cell Sci** 1997 Apr;110 (Pt 8):955–63

Cellular nucleic acid binding protein binds a conserved region of the 5' UTR of Xenopus laevis ribosomal protein mRNAs. Pellizzoni L, et al. **J Mol Biol** 1997 Mar 28; 267(2):264–75

Cell cycle and apoptosis: possible roles of Gadd45 and MyD118 proteins inferred from their homology to ribosomal proteins. Koonin EV. **J Mol Med** 1997 Apr; 75(4):236–8

Mapping of the rat ribosomal protein S18 gene (Rps 18) to chromosome 20p12. Larsson M, et al. **Mamm Genome** 1996 Jan;7(1):90

Cloning of a ribosomal phosphoprotein P0 gene homologue from Plasmodium falciparum. Goswami A, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):117–20

Characterisation of genes encoding a nucleoside monophosphate kinase and a L35 ribosomal protein from Babesia bovis. Silins GU, et al. **Mol Biochem Parasitol** 1996 Feb–Mar;76(1–2):231–44

SQT1, which encodes an essential WD domain protein of Saccharomyces cerevisiae, suppresses dominant–negative mutations of the ribosomal protein gene QSR1. Eisinger DP, et al. **Mol Cell Biol** 1997 Sep;17(9):5146–55

Phenotypic analysis of mice lacking the highly abundant Purkinje cell– and bipolar neuron–specific PCP2 protein. Mohn AR, et al. **Mol Cell Neurosci** 1997 Jan;9(1):63–76

Functional promoter elements common to ribosomal protein and ribosomal RNA genes in Neurospora crassa. Cujec TP, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):205–16

Homologous and heterologous expression of a ribosomal protein gene in Podospora anserina requires an intron. Dequard–Chablat M, et al. **Mol Gen Genet** 1997 Feb 20; 253(5):546–52

Partial purification of mitochondrial ribosomes from broad bean and identification of proteins encoded by the mitochondrial genome. Maffey L, et al. **Mol Gen Genet** 1997 Apr 28;254(4):365–71

The Drosophila ribosomal protein L14–encoding gene, identified by a novel Minute mutation in a dense cluster of previously undescribed genes in cytogenetic region 66D. Saebøe–Larssen S, et al. **Mol Gen Genet** 1997 Jun; 255(2):141–51

S2F, a leaf-specific trans-acting factor, binds to a novel cis-acting element and differentially activates the RPL21 gene. Lagrange T, et al. **Plant Cell** 1997 Aug;9(8):1469–79

Disruption analysis of the gene for a cold-regulated RNA-binding protein, rbpA1, in Anabaena: cold-induced initiation of the heterocyst differentiation pathway. Sato N, et al. **Plant Cell Physiol** 1996 Dec;37(8):1150–60

Identification of members of gene families in Arabidopsis thaliana by contig construction from partial cDNA sequences: 106 genes encoding 50 cytoplasmic ribosomal proteins. Cooke R, et al. **Plant J** 1997 May;11(5):1127–40

A transposon insertion in the Arabidopsis SSR16 gene causes an embryo-defective lethal mutation. Tsugeki R, et al. **Plant J** 1996 Sep;10(3):479–89

Promoter elements controlling developmental and environmental regulation of a tobacco ribosomal protein gene L34. Dai Z, et al. **Plant Mol Biol** 1996 Dec; 32(6):1055–65

A ribosomal protein L2 gene is transcribed, spliced, and edited at one site in rice mitochondria. Kubo N, et al. **Plant Mol Biol** 1996 Jul;31(4):853–62

The rpl5–rps14–cob gene arrangement in Solanum tuberosum: rps14 is a transcribed and unedited pseudogene. Quiñones V, et al. **Plant Mol Biol** 1996 Jul;31(4):937–43

Wild-type strains of Dictyostelium discoideum can be transformed using a novel selection cassette driven by the promoter of the ribosomal V18 gene. Wetterauer B, et al. **Plasmid** 1996 Nov;36(3):169–81

TOP genes: a translationally controlled class of genes including those coding for ribosomal proteins. Amaldi F, et al. **Prog Mol Subcell Biol** 1997;18:1–17 (70 ref.)

RNA apatamers for yeast ribosomal protein L32 have a conserved purine-rich internal loop. Li H, et al. **RNA** 1997 Mar;3(3):245–54

Extraribosomal functions of ribosomal proteins. Wool IG. **Trends Biochem Sci** 1996 May;21(5):164–5

Sequence analysis of a 13.4 kbp fragment from the left arm of chromosome XV reveals a malate dehydrogenase gene, a putative Ser/Thr protein kinase, the ribosomal L25 gene and four new open reading frames. Casamayor A, et al. **Yeast** 1996 Sep;12(10B Suppl):1013–20

Ribosomal protein L9 is the product of GRC5, a homolog of the putative tumor suppressor QM in S. cerevisiae. Nika J, et al. **Yeast** 1997 Sep 30;13(12):1155–66

[Mutation ssF29 in the gene for E. coli ribosomal protein S1, suppressing a defect in transmembrane protein transport results from insertion of the IS10R element (letter)] Artamonova VS, et al. **Bioorg Khim** 1996 Dec;22(12):941–3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Anti-P antibodies and neuropsychiatric lupus erythematosus. Georgescu L, et al. **Ann N Y Acad Sci** 1997 Aug 14; 823:263–9 (28 ref.)

Role of antiribosomal P protein antibodies in the diagnosis of lupus isolated to the central nervous system. Agius MA, et al. **Arch Neurol** 1997 Jul;54(7):862–4

Ribosomal P autoantibodies in systemic lupus erythematosus. Frequencies in different ethnic groups and clinical and immunogenetic associations. Arnett FC, et al. **Arthritis Rheum** 1996 Nov;39(11):1833–9

Association of anti-ribosomal P protein antibodies with neuropsychiatric systemic lupus erythematosus [published erratum appears in Arthritis Rheum 1997 May;40(5):977] Isshi K, et al. **Arthritis Rheum** 1996 Sep;39(9):1483–90

Characteristic epitope recognition pattern of autoantibodies against eukaryotic ribosomal protein L7 in systemic autoimmune diseases. Neu E, et al. **Arthritis Rheum** 1997 Apr;40(4):661–71

Correlation of serum IgG antibodies to recombinant P0 fusion protein with IgG antibodies to carboxyl-terminal 22 synthetic peptides and carboxyl-terminal 22 amino acid-deleted recombinant P0 fusion protein in patients with systemic lupus erythematosus. Yoshio T, et al. **Arthritis Rheum** 1997 Jul;40(7):1364–5

Anti-ribosomal and 'P-peptide'-specific autoantibodies bind to T lymphocytes [see comments] Stafford HA, et al. **Clin Exp Immunol** 1997 Jul;109(1):12–9. Comment in: Clin Exp Immunol 1997 Jul;109(1):1–3.

Are anti-ribosomal P protein antibodies a type of anti-lymphocyte antibody? [editorial; comment] Winfield JB. **Clin Exp Immunol** 1997 Jul;109(1):1–3. Comment on: Clin Exp Immunol 1997 Jul;109(1):12–9.

Prevalence of anti-R-13 antibodies in human Trypanosoma cruzi infection. Aznar C, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):231–8

Immunization with recombinant Trypanosoma cruzi ribosomal P2beta protein induces changes in the electrocardiogram of immunized mice. Lopez Bergami P, et al. **FEMS Immunol Med Microbiol** 1997 May;18(1):75–85

A Leuconostoc lactis protein with homology to ribosomal protein S1 shares common epitopes and common DNA binding properties with a mammalian DNA binding nuclear factor. Yamit-Hezi A, et al. **Gene** 1997 Jan 31;185(1):99–103

Delayed-type hypersensitivity activity of the Brucella L7/L12 ribosomal protein depends on posttranslational modification. Bachrach G, et al. **Infect Immun** 1997 Jan; 65(1):267–71

Production and characterization of monoclonal antibodies directed against the laminin receptor precursor. Butò S, et al. **Int J Biol Markers** 1997 Jan–Mar;12(1):1–5

A human monoclonal IgM lambda specific for an epitope shared by the 200 kDa neurofilament protein, histones and ribosomal proteins. Brindel I, et al. **J Autoimmun** 1995 Dec; 8(6):915–29

Autoantibodies to ribosomal P proteins penetrate into live hepatocytes and cause cellular dysfunction in culture. Koscec M, et al. **J Immunol** 1997 Aug 15;159(4):2033–41

Autoantibodies to ribosomal P antigens with immune complex glomerulonephritis in SJL mice treated with pristane. Satoh M, et al. **J Immunol** 1996 Oct 1; 157(7):3200–6

Defective ribosomal products (DRiPs): a major source of antigenic peptides for MHC class I molecules? Yewdell JW, et al. **J Immunol** 1996 Sep 1;157(5):1823–6 (21 ref.)

Antiribosomal P0 protein antibodies react with the surface of human umbilical vein endothelial cells [letter] Yoshio T, et al. **J Rheumatol** 1996 Jul;23(7):1311–2

Are antibodies to ribosomal P proteins a clinically useful predictor of neuropsychiatric manifestations in patients with systemic lupus erythematosus? [letter; comment] Iverson GL. **Lupus** 1996 Dec;5(6):634–5. Comment on: Lupus 1996 Jun;5(3):178–83.

Neuropsychiatric manifestations in patients with systemic lupus erythematosus: diagnostic and predictive value of longitudinal examination of anti-ribosomal P antibody [see comments] Watanabe T, et al. **Lupus** 1996 Jun;5(3):178–83 . Comment in: Lupus 1996 Dec;5(6):634–5.

Monoclonal antibodies against Streptococcus pneumoniae detect epitopes on eubacterial ribosomal proteins L7/L12 and on streptococcal elongation factor Ts. Kolberg J, et al. **Microbiology** 1997 Jan;143 (Pt 1):55–61

The evolutionarily conserved ribosomal protein L23 and the cationic urease beta-subunit of Yersinia enterocolitica O:3 belong to the immunodominant antigens in Yersinia-triggered reactive arthritis: implications for autoimmunity. Mertz AK, et al. **Mol Med** 1994 Nov; 1(1):44–55

The ribosomal protein P0 of soybean (Glycine max L. Merr.) has antigenic cross-reactivity to soybean seed lectin. Wycoff KL, et al. **Plant Mol Biol** 1997 May;34(2):295–306

Antibodies to ribosomal P proteins of Trypanosoma cruzi in chagas disease possess functional autoreactivity with heart tissue and differ from anti-P autoantibodies in lupus. Kaplan D, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16; 94(19):10301–6

Inhibition of multiplication of Mycobacterium leprae in mouse foot pads by immunization with ribosomal fraction and culture filtrate from Mycobacterium bovis BCG. Matsuoka M, et al. **Vaccine** 1997 Aug;15(11):1214–7

Immunization of mice with recombinant L7. .12 ribosomal protein confers protection against Brucella abortus infection. Oliveira SC, et al. **Vaccine** 1996 Jul;14(10):959–62

ISOLATION & PURIFICATION

Overexpression of the gene of ribosomal protein L30 from Thermus thermophilus and crystallization of the recombinant protein. Khairullina AR, et al. **Biochemistry (Mosc)** 1997 Feb;62(2):221–4

Overproduction, purification and characterization of the HPB12–L24 ribosomal protein of Bacillus subtilis. Zouine M, et al. **FEMS Microbiol Lett** 1996 Nov 15;145(1):41–8

Sequence, overproduction and purification of Vibrio proteolyticus ribosomal protein L18 for in vitro and in vivo studies. Setterquist RA, et al. **Gene** 1996 Dec 12; 183(1–2):237–42

Copurification of ribosomal protein S2 and DNA-dependent RNA polymerase from heat-shocked cells of Bacillus subtilis. Büttner K, et al. **J Basic Microbiol** 1997;37(1):3–9

Large-scale isolation of proteins of the large subunit from Escherichia coli ribosomes. Diedrich G, et al. **Protein Expr Purif** 1997 Jun;10(1):42–50

METABOLISM

Halogenated benzimidazole inhibitors of phosphorylation, in vitro and in vivo, of the surface acidic proteins of the yeast ribosomal 60S subunit by endogenous protein kinases CK-II and PK60S. Szyszka R, et al. **Acta Biochim Pol** 1996;43(2):389–96

The highly basic ribosomal protein L41 interacts with the beta subunit of protein kinase CKII and stimulates phosphorylation of DNA topoisomerase IIalpha by CKII. Lee JH, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):462–7

Protein kinase associated with ribosomes phosphorylates ribosomal proteins of Streptomyces collinus. Mikulík K, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):370–6

Rapamycin-sensitive phosphorylation of ribosomal protein S17 by p70 S6 kinase. Patel HR, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):507–12

Wortmannin-sensitive activation of p70S6-kinase and MAP-kinase by the G protein-coupled receptor, G/CCKB. Seva C, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):202–6

p70 S6 kinase is activated by sodium arsenite in adult rat cardiomyocytes: roles for phosphatidylinositol 3-kinase and p38 MAP kinase. Wang X, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):207–12

Association of elongation factor 1 alpha and ribosomal protein L3 with the proline-rich region of yeast adenylyl cyclase-associated protein CAP. Yanagihara C, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):503–7

RNA-binding properties of an unusual ribosomal protein TL5 from Thermus thermophilus. Meshcheryakov VA, et al. **Biochemistry (Mosc)** 1997 May;62(5):537–42

Translational coupling in the Escherichia coli operon encoding translation initiation factor IF3 and ribosomal proteins L20 and L35. Chiaruttini C, et al. **Biochimie** 1996; 78(7):555–67

The hinge region of Escherichia coli ribosomal protein L7/L12 is required for factor binding and GTP hydrolysis. Dey D, et al. **Biochimie** 1995;77(12):925–30

Growth phase and growth rate dependence of ribosomal peptidyltransferase activity status in Escherichia coli. Kalpaxis DL, et al. **Biochimie** 1995;77(12):963–71

In vitro evolution used to define a protein recognition site within a large RNA domain. Sapag A, et al. **Bioorg Med Chem** 1997 Jun;5(6):1097–105

Study of tyrosine-containing mutants of ribosomal protein L7/L12 from Escherichia coli. Todorova RT, et al. **Biophys Chem** 1996 Nov 29;62(1–3):39–45

A distinct nuclear import pathway used by ribosomal proteins. Rout MP, et al. **Cell** 1997 May 30;89(5):715–25

Age-related distribution of cones and ON-bipolar cells in the rd mouse retina. Ogilvie JM, et al. **Curr Eye Res** 1997 Mar;16(3):244–51

A long-range RNA-RNA interaction forms a pseudoknot required for translational control of the IF3–L35–L20 ribosomal protein operon in Escherichia coli. Chiaruttini C, et al. **EMBO J** 1996 Aug 15;15(16):4402–13

Targeting presequence acquisition after mitochondrial gene transfer to the nucleus occurs by duplication of existing targeting signals. Kadowaki K, et al. **EMBO J** 1996 Dec 2;15(23):6652–61

The ribosomal S16 protein of Escherichia coli displaying a DNA-nicking activity binds to cruciform DNA. Bonnefoy E. **Eur J Biochem** 1997 Aug 1;247(3):852–9

Post-translational processing of rat ribosomal proteins. Ubiquitous methylation of Lys22 within the zinc-finger motif of RL40 (carboxy-terminal extension protein 52) and tissue-specific methylation of Lys4 in RL29. Williamson NA, et al. **Eur J Biochem** 1997 Jun 15;246(3):786–93

The L7/L12 ribosomal domain of the ribosome: structural and functional studies. Gudkov AT. **FEBS Lett** 1997 May 5;407(3):253–6 (60 ref.)

Acetylation of ribosomal protein S5 affected by defects in the central pseudoknot in 16S ribosomal RNA? Poot RA, et al. **FEBS Lett** 1997 Jan 20;401(2–3):175–9

5S rRNA sugar-phosphate backbone protection in complexes with specific ribosomal proteins. Shpanchenko OV, et al. **FEBS Lett** 1996 Sep 23;394(1):71–5

Phosphorylation of ribosomal proteins by ribosome-associated protein kinases of Trichosporon cutaneum. Wojda I, et al. **J Basic Microbiol** 1996; 36(5):363–9

Further study on association of 5SrRNA-L5 protein complex and methionyl-tRNA to methionyl-tRNA synthetase in the macromolecular aminoacyl-tRNA synthetase complex. Ogata K, et al. **J Biochem (Tokyo)** 1996 Nov;120(5):869–80

Ribosomal binding site of release factors RF1 and RF2. A new translational termination assay in vitro. Grentzmann G, et al. **J Biol Chem** 1997 May 9;272(19):12300–4

Reconstitution of functional eukaryotic ribosomes from Dictyostelium discoideum ribosomal proteins and RNA. Mangiarotti G, et al. **J Biol Chem** 1997 Aug 8; 272(32):19682–7

Functional analysis of ribosomal protein L2 in yeast mitochondria. Pan C, et al. **J Biol Chem** 1997 Mar 28; 272(13):8165–71

Different domains cooperate to target the human ribosomal L7a protein to the nucleus and to the nucleoli. Russo G, et al. **J Biol Chem** 1997 Feb 21;272(8):5229–35

The Drosophila ribosomal protein S3 contains a DNA deoxyribophosphodiesterase (dRpase) activity. Sandigursky M, et al. **J Biol Chem** 1997 Jul 11;272(28):17480–4

Receptor-mediated ribosome binding to liposomes depends on lipid composition. Savitz AJ, et al. **J Biol Chem** 1997 May 16;272(20):13140–5

Binding of mammalian ribosomal protein complex P0.P1.P2 and protein L12 to the GTPase-associated domain of 28 S ribosomal RNA and effect on the accessibility to anti-28 S RNA autoantibody. Uchiumi T, et al. **J Biol Chem** 1997 Feb 7;272(6):3302–8

A specific role for the phosphorylation of mammalian acidic ribosomal protein P2. Vard C, et al. **J Biol Chem** 1997 Aug 8;272(32):20259–62

Specific interactions of the autoantigen L7 with multi-zinc finger protein ZNF7 and ribosomal protein S7. Witte S, et al. **J Biol Chem** 1997 Aug 29;272(35):22243–7

Rat RL23a ribosomal protein efficiently competes with its Saccharomyces cerevisiae L25 homologue for assembly into 60 S subunits. Jeeninga RE, et al. **J Mol Biol** 1996 Nov 15;263(5):648–56

Analysis of the ribosome large subunit assembly and 23 S rRNA stability in vivo. Liiv A, et al. **J Mol Biol** 1996 Nov 1;263(3):396–410

Recognition of bacteriophage Qbeta plus strand RNA as a template by Qbeta replicase: role of RNA interactions mediated by ribosomal proteins S1 and host factor. Miranda G, et al. **J Mol Biol** 1997 Apr 18;267(5):1089–103

A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. III. The topography of the functional centre. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):566–87

Expression of S9 and actin CyIIa mRNAs reveals dorso-ventral polarity and mesodermal sublineages in the vegetal plate of the sea urchin embryo. Miller RN, et al. **Mech Dev** 1996 Nov;60(1):3-12

Evolution of the large-subunit ribosomal RNA binding site for protein L23/25. Chenuil A, et al. **Mol Biol Evol** 1997 May;14(5):578-88

Qsr1p, a 60S ribosomal subunit protein, is required for joining of 40S and 60S subunits. Eisinger DP, et al. **Mol Cell Biol** 1997 Sep;17(9):5136-45

Ribosomal protein L32 of Saccharomyces cerevisiae influences both the splicing of its own transcript and the processing of rRNA. Vilardell J, et al. **Mol Cell Biol** 1997 Apr;17(4):1959-65

The insulin-induced signalling pathway leading to S6 and initiation factor 4E binding protein 1 phosphorylation bifurcates at a rapamycin-sensitive point immediately upstream of p70s6k. von Manteuffel SR, et al. **Mol Cell Biol** 1997 Sep;17(9):5426-36

Saccharomyces cerevisiae Nip7p is required for efficient 60S ribosome subunit biogenesis. Zanchin NI, et al. **Mol Cell Biol** 1997 Sep;17(9):5001-15

New RNA recognition features revealed in ancient ribosomal proteins [news] Yonath A, et al. **Nat Struct Biol** 1997 Jan; 4(1):3-5 (23 ref.)

Drosophila ribosomal protein PO contains apurinic/apyrimidinic endonuclease activity. Yacoub A, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4298-303

Acidic phosphoprotein complex of the 60S ribosomal subunit of maize seedling roots. Components and changes in response to flooding. Bailey-Serres J, et al. **Plant Physiol** 1997 Aug;114(4):1293-305

Structural features of the binding site for ribosomal protein S8 in Escherichia coli 16S rRNA defined using NMR spectroscopy. Kalurachchi K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2139-44

The RNA binding site of S8 ribosomal protein of Escherichia coli: Selex and hydroxyl radical probing studies. Moine H, et al. **RNA** 1997 Mar;3(3):255-68

Photoaffinity labeling of 30S-subunit proteins S7 and S11 by 4-thiouridine-substituted tRNA(Phe) situated at the P site of Escherichia coli ribosomes. Rosen KV, et al. **RNA** 1997 Sep;3(9):1028-36

The 16S rRNA binding site of Thermus thermophilus ribosomal protein S15: comparison with Escherichia coli S15, minimum site and structure. Serganov AA, et al. **RNA** 1996 Nov;2(11):1124-38

[RNA-binding properties of ribosomal protein L1 from Thermus thermophilus] Elisekina IA, et al. **Biokhimiia** 1996 Nov;61(11):2040-4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A role for ribosomal protein L5 in the nuclear import of 5S rRNA in Xenopus oocytes. Murdoch KJ, et al. **Exp Cell Res** 1996 Sep 15;227(2):332-43

Characterization of P0, a ribosomal phosphoprotein of Plasmodium falciparum. Antibody against amino-terminal domain inhibits parasite growth. Goswami A, et al. **J Biol Chem** 1997 May 2;272(18):12138-43

A functional model for the ribosome. Wood PN. **J Theor Biol** 1997 Mar 7;185(1):97-118

The partial agonist activity of antagonist-occupied steroid receptors is controlled by a novel hinge domain-binding coactivator L7/SPA and the corepressors N-CoR or SMRT. Jackson TA, et al. **Mol Endocrinol** 1997 Jun; 11(6):693-705

The roles of proteins L28 and L33 in the assembly and function of Escherichia coli ribosomes in vivo. Maguire BA, et al. **Mol Microbiol** 1997 Jan;23(2):237-45

RIBOSOMAL RNA see **RNA, RIBOSOMAL**

5S RIBOSOMAL RNA see **RNA, RIBOSOMAL, 5S**

5.8S RIBOSOMAL RNA see **RNA, RIBOSOMAL, 5.8S**

16S RIBOSOMAL RNA see **RNA, RIBOSOMAL, 16S**

18S RIBOSOMAL RNA see **RNA, RIBOSOMAL, 18S**

23S RIBOSOMAL RNA see **RNA, RIBOSOMAL, 23S**

28S RIBOSOMAL RNA see **RNA, RIBOSOMAL, 28S**

RIBOSOMES

see related
DNA, RIBOSOMAL
RIBOSOMAL PROTEINS
RNA, RIBOSOMAL

Frontiers in translation. An international conference on the structure and function of the ribosome. Proceedings. Victoria, B.C., Canada, May 20-25, 1995. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):iv, 739-1227

The accuracy center of a eukaryotic ribosome. Liebman SW, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):1141-9 (49 ref.)

Cytotoxicity of two new ribosome-inactivating proteins, cinnamomin and camphorin, to carcinoma cells. Ling J, et al. **Cell Biochem Funct** 1996 Sep;14(3):157-61

Recent advances in the uses and applications of ribosome-inactivating proteins from plants. Girbés T, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jun;42(4):461-71 (122 ref.)

Polynucleotide:adenosine glycosidase activity of ribosome-inactivating proteins: effect on DNA, RNA and poly(A). Barbieri L, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):518-22

Synthesis of functional eukaryotic ribosomal RNAs in trans: development of a novel in vivo rDNA system for dissecting ribosome biogenesis. Liang WQ, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2864-8

Reflections on the days of ribosome reconstitution research. Nomura M. **Trends Biochem Sci** 1997 Jul;22(7):275-9

CHEMISTRY

A procedure for isolation of pure complexes of acylated and unacylated tRNA(Phe) with ribosomes from Escherichia coli. Chinali G. **Anal Biochem** 1996 Oct 1;241(1):30-4

Identification of ribosome-ligand interactions using cleavage reagents. Hill WE, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):1033-9 (47 ref.)

The elongating ribosome: structural and functional aspects. Nierhaus KH, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):1011-21 (24 ref.)

A milestone in ribosomal crystallography: the construction of preliminary electron density maps at intermediate resolution. Schlünzen F, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):739-49 (53 ref.)

The ribosome as affinity matrix': efficient purification scheme for translation factors. Ganoza MC, et al. **Biochimie** 1996; 78(1):51-61

The conformation of ribosomes and rRNA. Moore PB. **Curr Opin Struct Biol** 1997 Jun;7(3):343-7 (36 ref.)

Determination of relative amounts of ribosome and subunits in Escherichia coli using asymmetrical flow field-flow fractionation. Nilsson M, et al. **J Biochem Biophys Methods** 1996 Oct 15;33(1):9-23

Simple and rapid chromatographic method for the separation of major classes of ribosomal ribomononucleotides. Popović DA, et al. **J Chromatogr A** 1997 May 9; 769(2):225-30

Analysis of the ribosome large subunit assembly and 23 S rRNA stability in vivo. Liiv A, et al. **J Mol Biol** 1996 Nov 1;263(3):396-410

Three-dimensional reconstruction with contrast transfer function correction from energy-filtered cryoelectron micrographs: procedure and application to the 70S Escherichia coli ribosome. Zhu J, et al. **J Struct Biol** 1997 Apr;118(3):197-219

Conserved structural motifs located in distal loops of aphthovirus internal ribosome entry site domain 3 are required for internal initiation of translation. López de Quinto S, et al. **J Virol** 1997 May;71(5):4171-5

Partial purification of mitochondrial ribosomes from broad bean and identification of proteins encoded by the mitochondrial genome. Maffey L, et al. **Mol Gen Genet** 1997 Apr 28;254(4):365-71

Structural characterization of three RNA hexanucleotide loops from the internal ribosome entry site of polioviruses. Klinck R, et al. **Nucleic Acids Res** 1997 Jun 1; 25(11):2129-37

Large-scale isolation of proteins of the large subunit from Escherichia coli ribosomes. Diedrich G, et al. **Protein Expr Purif** 1997 Jun;10(1):42-50

In vitro complementation analysis localizes 23S rRNA posttranscriptional modifications that are required for Escherichia coli 50S ribosomal subunit assembly and function. Green R, et al. **RNA** 1996 Oct;2(10):1011-21

Exact determination of UV-induced crosslinks in 16S ribosomal RNA in 30S ribosomal subunits. Wilms C, et al. **RNA** 1997 Jun;3(6):602-12

[Topography of ribosomal proteins: reconsideration of of protein map of small ribosomal subunit] Spirin AS, et al. **Biokhimiia** 1996 Nov;61(11):1928-30 (Eng. Abstr.) **(Rus)**

[Three-dimensional structure and function of ribosomal elongation factors: new data and new questions] Chirgadze IuN. **Mol Biol (Mosk)** 1996 Jul-Aug;30(4):773-85 (24 ref.) **(Rus)**

[The physicochemical characteristics of ribosomal fractions from Pseudomonas aeruginosa obtained by precipitation with polyethylene glycol 6000] Egorova TP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jan-Feb;(1):6-9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Differential effects of chronic ethanol consumption on hepatic mitochondrial and cytoplasmic ribosomes. Cahill A, et al. **Alcohol Clin Exp Res** 1996 Nov;20(8):1362-7

50S ribosomal subunit synthesis and translation are equivalent targets for erythromycin inhibition in Staphylococcus aureus. Champney WS, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1301-3

Fungal ribotoxins: a family of naturally engineered targeted toxins? Kao R, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):1151-9 (70 ref.)

Characterization of a saporin isoform with lower ribosome-inhibiting activity. Fabbrini MS, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):719-27

Purification of a new ribosome-inactivating protein from the seeds of Cinnamomum porrectum and characterization of the RNA N-glycosidase activity of the toxic protein. Li XD, et al. **Biol Chem** 1996 Dec;377(12):825-31

Amino acid sequences and ribosome-inactivating activities of karasurin-B and karasurin-C. Kondo T, et al. **Biol Pharm Bull** 1996 Nov;19(11):1485-9

Structure/function relationship study of Tyr14 and Arg22 in trichosanthin, a ribosome-inactivating protein. Shaw PC, et al. **Eur J Biochem** 1997 Apr 15;245(2):423-7

A systemic antiviral resistance-inducing protein isolated from Clerodendrum inerme Gaertn. is a polynucleotide:adenosine glycosidase (ribosome-inactivating protein). Olivieri F, et al. **FEBS Lett** 1996 Nov 4;396(2-3):132-4

alpha-Kirilowin, a novel ribosome-inactivating protein from seeds of Trichosanthes kirilowii (family Cucurbitaceae): a comparison with beta-kirilowin and other related proteins. Wong RN, et al. **Int J Pept Protein Res** 1996 Jan-Feb; 47(1-2):103-9

Pyridine-promoted factor- and energy-free peptide synthesis systems prepared from various organisms including prokaryote, eukaryote, and mitochondria. Nojima T, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1076-9

Large-scale preparation of two new ribosome-inactivating proteins--cinnamomin and camphorin from the seeds of Cinnamomum camphora. Li XD, et al. **Protein Expr Purif** 1997 Jun;10(1):27-31

Comparison of ribosome-inactivating proteins in the induction of apoptosis. Williams JM, et al. **Toxicol Lett** 1997 Apr 28;91(2):121-7

[Effect of minimal bactericidal dose of chlorhexidine and other antiseptics on Bacillus subtilis 720 ribosomes] Lishchenko NN, et al. **Biull Eksp Biol Med** 1996 May; 121(5):551-4 **(Rus)**

ENZYMOLOGY

A monoclonal antibody specific for carboxy-terminal region of yeast translation elongation factor-3 inhibits ribosome-activated ATPase activity but not intrinsic ATPase activity. Masahiro U, et al. **Biochem Mol Biol Int** 1996 May;39(2):227-34

Conserved nucleotides of 23 S rRNA located at the ribosomal peptidyltransferase center. Spahn CMT, et al. **J Biol Chem** 1996 Dec 20;271(51):32857-62

Ribosome stalling is responsible for arginine-specific translational attenuation in Neurospora crassa. Wang Z, et al. **Mol Cell Biol** 1997 Sep;17(9):4904-13

Aminoacyl and peptidyl analogs of chloramphenicol as slow-binding inhibitors of ribosomal peptidyltransferase: a new approach for evaluating their potency. Michelinaki M, et al. **Mol Pharmacol** 1997 Jan;51(1):139-46

GENETICS

New tetracycline resistance determinants coding for ribosomal protection in streptococci and nucleotide sequence of tet(T) isolated from Streptococcus pyogenes A498. Clermont D, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):112-6

Structure and function of 5S rRNA in the ribosome. Bogdanov AA, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):869-76 (52 ref.)

An oligonucleotide analog approach to the decoding region of 16S rRNA. Stern S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):899-905 (19 ref.)

Protein environment of mRNA at the decoding site of 80S ribosomes from human placenta as revealed from affinity labeling with mRNA analogs--derivatives of oligoribonucleotides. Bulygin KN, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):325-32

The effects of mutations in the rpmB,G operon of Escherichia coli on ribosome assembly and ribosomal protein synthesis. Maguire BA, et al. **Biochim Biophys Acta** 1997 Aug 7; 1353(2):137-47

The ribosome as an exon detector. Mendoza L, et al. **Biosystems** 1996;38(1):45-9

The transcription unit of ribosomal genes is attached to the nuclear skeleton. Weipoltshammer K, et al. **Exp Cell Res** 1996 Sep 15;227(2):374-9

Ribosomal gene amplification in the oocytes of Creophilus maxillosus (Staphylinidae, Coleoptera-polyphaga)--an insect with telotrophic ovaries. Kloc M, et al. **Folia Histochem Cytobiol** 1995;33(4):267-76

Reduction of the activity of ribosomal genes with age in Down's syndrome. Borsatto B, et al. **Gerontology** 1996; 42(3):147-54

Multiparameter microscopic analysis of nucleolar structure and ribosomal gene transcription. Trendelenburg MF, et al. **Histochem Cell Biol** 1996 Aug;106(2):167-92 (156 ref.)

pPV: a novel IRES-containing vector to facilitate plasmid immunization and antibody response characterization. Clarke NJ, et al. **Immunotechnology** 1997 Jun;3(2):145-53

Enhanced ribosomal association of p27(Kip1) mRNA is a mechanism contributing to accumulation during growth arrest. Millard SS, et al. **J Biol Chem** 1997 Mar 14; 272(11):7093-8

Enhanced ribosome frameshifting in stationary phase cells. Barak Z, et al. **J Mol Biol** 1996 Oct 25;263(2):140-8

Regulation and trafficking of three distinct 18 S ribosomal RNAs during development of the malaria parasite. Li J, et al. **J Mol Biol** 1997 Jun 6;269(2):203-13

The sequence element of the internal ribosome entry site and a 25-kilodalton cellular protein contribute to efficient internal initiation of translation of hepatitis C virus RNA. Fukushi S, et al. **J Virol** 1997 Feb;71(2):1662-6

RIBOSOMES

Functional dissection of eukaryotic initiation factor 4F: the 4A subunit and the central domain of the 4G subunit are sufficient to mediate internal entry of 43S preinitiation complexes. Pestova TV, et al. **Mol Cell Biol** 1996 Dec; 16(12):6870–8

Canonical eukaryotic initiation factors determine initiation of translation by internal ribosomal entry. Pestova TV, et al. **Mol Cell Biol** 1996 Dec;16(12):6859–69

The RDP (Ribosomal Database Project). Maidak BL, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):109–11

C-terminal deletion mutant of pokeweed antiviral protein inhibits viral infection but does not depurinate host ribosomes. Tumer NE, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3866–71

Ribosome-mediated translational pause and protein domain organization. Thanaraj TA, et al. **Protein Sci** 1996 Aug; 5(8):1594–612

Translational misreading: mutations in translation elongation factor 1alpha differentially affect programmed ribosomal frameshifting and drug sensitivity. Dinman JD, et al. **RNA** 1997 Aug;3(8):870–81

Regulated poly(A) tail shortening in somatic cells mediated by cap-proximal translational repressor proteins and ribosome association. Muckenthaler M, et al. **RNA** 1997 Sep;3(9):983–95

Association of a group I intron with its splice junction in 50S ribosomes: implications for intron toxicity. Nikolcheva T, et al. **RNA** 1997 Sep;3(9):1016–27

[Regulation of translation of the distal lacZ gene in polycistronic mRNA by the ribosome stream from the proximal gene] Nikolenko GN, et al. **Bioorg Khim** 1997 Mar;23(3):200–4 (Eng. Abstr.) **(Rus)**

[Determination of the number of ribosomal genes in individual human genomes. Comparison of the results of molecular and cytogenetic analysis] Veĭko NN, et al. **Mol Biol (Mosk)** 1996 Sep–Oct;30(5):1076–85 **(Rus)**

IMMUNOLOGY

Liposomes containing Candida albicans ribosomes as a prophylactic vaccine against disseminated candidiasis in mice. Eckstein M, et al. **Vaccine** 1997 Feb;15(2):220–4

METABOLISM

Purification and some properties of a novel dsRNA degrading nuclease bound to rye germ ribosomes. Siwecka MA. **Acta Biochim Pol** 1997;44(1):61–8

Studies of the astrovirus signal that induces (–1) ribosomal frameshifting. Lewis TL, et al. **Adv Exp Med Biol** 1997; 412:323–30

rRNA transcription and growth rate-dependent regulation of ribosome synthesis in Escherichia coli. Gourse RL, et al. **Annu Rev Microbiol** 1996;50:645–77 (157 ref.)

Glycylcyclines bind to the high-affinity tetracycline ribosomal binding site and evade Tet(M)- and Tet(O)-mediated ribosomal protection. Bergeron J, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2226–8

Involvement of a 50-kDa mRNP protein from Saccharomyces cerevisiae in mRNA binding to ribosomes. Triana L, et al. **Arch Biochem Biophys** 1997 Aug 1; 344(1):1–10

Ribosomally synthesized antimicrobial peptides: their function, structure, biogenesis, and mechanism of action. Nissen-Meyer J, et al. **Arch Microbiol** 1997 Feb–Mar; 167(2–3):67–77 (90 ref.)

Protein kinase associated with ribosomes phosphorylates ribosomal proteins of Streptomyces collinus. Mikulík K, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):370–6

tRNA–ribosome interactions. Ehrenberg M, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1049–54 (35 ref.)

Global regulators of ribosome biosynthesis in yeast. Planta RJ, et al. **Biochem Cell Biol** 1995 Nov–Dec; 73(11–12):825–34 (70 ref.)

Elongation factor Tu, a GTPase triggered by codon recognition on the ribosome: mechanism and GTP consumption. Rodnina MV, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1221–7 (42 ref.)

Structural and functional implications in the eubacterial ribosome as revealed by protein–rRNA and antibiotic contact sites. Wittmann–Liebold B, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1187–97

Peptidyl transferase and beyond. Wower J, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1041–7 (45 ref.)

Influence of systematic error on the shape of the scatchard plot of tRNAPhe binding to eukaryotic ribosomes. Nekhai SA, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):401–4

Partial restoration of inactivated ribosomes: role of the aldehyde group generated by RNA N-glycosidase in the sarcin/ricin domain of 28S rRNA in ribosome. Cheng LP, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):381–90

A revised bacterial polypeptide chain elongation cycle with a stepwise increase in restriction of unwanted ternary complexes by the ribosome. Bosch L, et al. **Biochemistry** 1996 Oct 1;35(39):12647–51

Three tRNA binding sites in rabbit liver ribosomes and role of the intrinsic ATPase in 80S ribosomes from higher eukaryotes. El'skaya AV, et al. **Biochemistry** 1997 Aug 26; 36(34):10492–7

The QM protein associates with ribosomes in the rough endoplasmic reticulum. Loftus TM, et al. **Biochemistry** 1997 Jul 8;36(27):8224–30

Role of ribosomes in reinitiation of membrane insertion of internal transmembrane segments in a polytopic membrane protein. Wang C, et al. **Biochemistry** 1997 Sep 23; 36(38):11437–43

Analysis of the interaction between bovine mitochondrial 28 S ribosomal subunits and mRNA. Farwell MA, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):122–30

Dual functions of ribosome recycling factor in protein biosynthesis: disassembling the termination complex and preventing translational errors. Janosi L, et al. **Biochimie** 1996;78(11–12):959–69 (50 ref.)

Structure and function of 10Sa RNA: trans-translation system. Muto A, et al. **Biochimie** 1996;78(11–12):985–91 (41 ref.)

Topological requirements for recognition and cleavage of DNA by ribosome-inactivating proteins. Ling J, et al. **Biol Chem Hoppe Seyler** 1995 Nov;376(11):637–41

The ribosome as an exon detector. Mendoza L, et al. **Biosystems** 1996;38(1):45–9

The ribosomal 5.8S RNA as a target site for p53 protein in cell differentiation and oncogenesis. Abou Elela S, et al. **Cancer Lett** 1997 Jul 15;117(1):23–8

Both lumenal and cytosolic gating of the aqueous ER translocon pore are regulated from inside the ribosome during membrane protein integration [see comments] Liao S, et al. **Cell** 1997 Jul 11;90(1):31–41. Comment in: Cell 1997 Jul 11;90(1):5–8.

Empty site forms of the SRP54 and SR alpha GTPases mediate targeting of ribosome-nascent chain complexes to the endoplasmic reticulum [see comments] Rapiejko PJ, et al. **Cell** 1997 May 30;89(5):703–13. Comment in: Cell 1997 May 30;89(5):673–6.

Recognition of a transmembrane domain: another role for the ribosome? [comment] Siegel V. **Cell** 1997 Jul 11; 90(1):5–8 (19 ref.). Comment on: Cell 1997 Jul 11;90(1):31–41.

Nascent-polypeptide-associated complex: a bridge between ribosome and cytosol. Lauring B, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:47–56

The nascent polypeptide-associated complex modulates interactions between the signal recognition particle and the ribosome. Powers T, et al. **Curr Biol** 1996 Mar 1;6(3):331–8

Function and synthesis of small nucleolar RNAs. Tollervey D, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):337–42 (49 ref.)

The conformation of ribosomes and rRNA. Moore PB. **Curr Opin Struct Biol** 1997 Jun;7(3):343–7 (36 ref.)

Release factor RF3 in E.coli accelerates the dissociation of release factors RF1 and RF2 from the ribosome in a GTP-dependent manner. Freistroffer DV, et al. **EMBO J** 1997 Jul 1;16(13):4126–33

Fast recycling of Escherichia coli ribosomes requires both ribosome recycling factor (RRF) and release factor RF3. Pavlov MY, et al. **EMBO J** 1997 Jul 1;16(13):4134–41

The G222D mutation in elongation factor Tu inhibits the codon-induced conformational changes leading to GTPase activation on the ribosome. Vorstenbosch E, et al. **EMBO J** 1996 Dec 2;15(23):6766–74

Ribosome-initiator tRNA complex as an intermediate in translation initiation in Escherichia coli revealed by use of mutant initiator tRNAs and specialized ribosomes. Wu XQ, et al. **EMBO J** 1996 Sep 2;15(17):4734–9

Mapping of nuclease-sensitive sites in native reticulocyte ribosomes--an analysis of the accessibility of ribosomal RNA to enzymatic cleavage. Holmberg L, et al. **Eur J Biochem** 1997 Jul 1;247(1):160–8

Purification, characterization and subcellular localization of a type-1 ribosome-inactivating protein from the sarcocarp of Cucurbita pepo. Yoshinari S, et al. **Eur J Biochem** 1996 Dec 15;242(3):585–91

Trans-acting factors in ribosome synthesis. Tollervey D. **Exp Cell Res** 1996 Dec 15;229(2):226–32 (74 ref.)

Divergence towards a dead end? Cleavage of the divergent domains of ribosomal RNA in apoptosis. Houge G, et al. **Experientia** 1996 Oct 31;52(10–11):963–7 (29 ref.)

Ribosome-inactivating lectins with polynucleotide:adenosine glycosidase activity. Battelli MG, et al. **FEBS Lett** 1997 May 26;408(3):355–9

Ribonucleolytic activities in the Escherichia coli in vitro translation system and in its separate components. Fuchs U, et al. **FEBS Lett** 1997 Sep 8;414(2):362–4

Movement of the 3'-end of tRNA through the peptidyl transferase centre and its inhibition by antibiotics. Kirillov S, et al. **FEBS Lett** 1997 Apr 14;406(3):223–33 (165 ref.)

In vitro virus: bonding of mRNA bearing puromycin at the 3'-terminal end to the C-terminal end of its encoded protein on the ribosome in vitro. Nemoto N, et al. **FEBS Lett** 1997 Sep 8;414(2):405–8

Interaction of 10Sa RNA with ribosomes in Escherichia coli. Tadaki T, et al. **FEBS Lett** 1996 Dec 16;399(3):223–6

Ribosomes and ribosomal RNA as chaperones for folding of proteins. Kudlicki W, et al. **Fold Des** 1997;2(2):101–8

RIC1, a novel gene required for ribosome synthesis in Saccharomyces cerevisiae. Mizuta K, et al. **Gene** 1997 Mar 18;187(2):171–8

Complete growth inhibition of Escherichia coli by ribosome trapping with truncated cspA mRNA at low temperature. Jiang W, et al. **Genes Cells** 1996 Nov;1(11):965–76

Cytosolic ribosomal mutations that abolish accumulation of circular intron in the mitochondria without preventing senescence of Podospora anserina. Silar P, et al. **Genetics** 1997 Mar;145(3):697–705

Characterization of fibroblast growth factor-2 binding to ribosomes. Klein S, et al. **Growth Factors** 1996; 13(3–4):219–28

Dynamics of ribosome biogenesis during the pollen developmental program by in situ localization of nucleolar targets. Testillano PS, et al. **Int J Dev Biol** 1996;Suppl 1:121S–122S

A novel ribosome-associated protein is important for efficient translation in Escherichia coli. Bylund GO, et al. **J Bacteriol** 1997 Jul;179(14):4567–74

The trp RNA-binding attenuation protein regulates TrpG synthesis by binding to the trpG ribosome binding site of Bacillus subtilis. Du H, et al. **J Bacteriol** 1997 Apr; 179(8):2582–6

Mutations in the rpmBG operon of Escherichia coli that affect ribosome assembly. Maguire BA, et al. **J Bacteriol** 1997 Apr;179(8):2486–93

Investigation of ribosome binding by the Shiga toxin A1 subunit, using competition and site-directed mutagenesis. Skinner LM, et al. **J Bacteriol** 1997 Feb;179(4):1368–74

Construction, expression, and characterization of BD1-G28-5 sFv, a single-chain anti-CD40 immunotoxin containing the ribosome-inactivating protein bryodin 1. Francisco JA, et al. **J Biol Chem** 1997 Sep 26; 272(39):24165–9

Ribosomal binding site of release factors RF1 and RF2. A new translational termination assay in vitro. Grentzmann G, et al. **J Biol Chem** 1997 May 9;272(19):12300–4

Inducers of erythroleukemic differentiation cause messenger RNAs that lack poly(A)-binding protein to accumulate in translationally inactive, salt-labile 80 S ribosomal complexes. Hensold JO, et al. **J Biol Chem** 1996 Sep 20; 271(38):23246–54

The amino-terminal 118 amino acids of Escherichia coli trigger factor constitute a domain that is necessary and sufficient for binding to ribosomes. Hesterkamp T, et al. **J Biol Chem** 1997 Aug 29;272(35):21865–71

Functional subdomains of yeast elongation factor 3. Localization of ribosome-binding domain. Kambampati R, et al. **J Biol Chem** 1997 Mar 7;272(10):6377–81

Binding of an N-terminal rhodanese peptide to DnaJ and to ribosomes. Kudlicki W, et al. **J Biol Chem** 1996 Dec 6;271(49):31160–5

Disruption of ribosomal scanning on the 5'-untranslated region, and not restriction of translational initiation per se, modulates the stability of nonaberrant mRNAs in the yeast Saccharomyces cerevisiae. Linz B, et al. **J Biol Chem** 1997 Apr 4;272(14):9131–40

Reconstitution of functional eukaryotic ribosomes from Dictyostelium discoideum ribosomal proteins and RNA. Mangiarotti G, et al. **J Biol Chem** 1997 Aug 8; 272(32):19682–7

Involvement of stress-activated protein kinase and p38/RK mitogen-activated protein kinase signaling pathways in the enhanced phosphorylation of initiation factor 4E in NIH 3T3 cells. Morley SJ, et al. **J Biol Chem** 1997 Jul 11; 272(28):17887–93

Complex formation of the elongation factor Tu from Pseudomonas aeruginosa with nucleoside diphosphate kinase modulates ribosomal GTP synthesis and peptide chain elongation. Mukhopadhyay S, et al. **J Biol Chem** 1997 Jul 11;272(28):17815–20

Ribosome concentration contributes to discrimination against poly(A)- mRNA during translation initiation in Saccharomyces cerevisiae. Proweller A, et al. **J Biol Chem** 1997 Feb 28;272(9):6004–10

Receptor-mediated ribosome binding to liposomes depends on lipid composition. Savitz AJ, et al. **J Biol Chem** 1997 May 16;272(20):13140–5

Identification and sequence analysis of contact sites between ribosomal proteins and rRNA in Escherichia coli 30 S subunits by a new approach using matrix-assisted laser desorption/ionization-mass spectrometry combined with N-terminal microsequencing. Urlaub H, et al. **J Biol Chem** 1997 Jun 6;272(23):14547–55

Effect of the amino acid attached to Escherichia coli initiator tRNA on its affinity for the initiation factor IF2 and on the IF2 dependence of its binding to the ribosome. Wu XQ, et al. **J Biol Chem** 1997 Jan 17;272(3):1891–5

Ribosome targeting of PKR is mediated by two double-stranded RNA-binding domains and facilitates in vivo phosphorylation of eukaryotic initiation factor-2. Zhu S, et al. **J Biol Chem** 1997 May 30;272(22):14434–41

Xlrbpa, a double-stranded RNA-binding protein associated with ribosomes and heterogeneous nuclear RNPs. Eckmann CR, et al. **J Cell Biol** 1997 Jul 28;138(2):239–53

Identification of a novel stage of ribosome/nascent chain association with the endoplasmic reticulum membrane. Murphy EC 3rd, et al. **J Cell Biol** 1997 Mar 24; 136(6):1213–26

Mutations at nucleotides G2251 and U2585 of 23 S rRNA perturb the peptidyl transferase center of the ribosome. Green R, et al. **J Mol Biol** 1997 Feb 14;266(1):40–50

Analysis of interactions between the codon-anticodon duplexes within the ribosome: their role in translation. Lim VI. **J Mol Biol** 1997 Mar 14;266(5):877–90

Fragile X mental retardation protein: nucleocytoplasmic shuttling and association with somatodendritic ribosomes. Feng Y, et al. **J Neurosci** 1997 Mar 1;17(5):1539–47

Bovine mitochondrial initiation and elongation factors. Schwartzbach CJ, et al. **Methods Enzymol** 1996;264:248–61

Functional analysis of Rrp7p, an essential yeast protein

involved in pre-rRNA processing and ribosome assembly. Baudin-Baillieu A, et al. **Mol Cell Biol** 1997 Sep; 17(9):5023-32

Cytoplasmic p53 polypeptide is associated with ribosomes. Fontoura BM, et al. **Mol Cell Biol** 1997 Jun;17(6):3146-54

Nop2p is required for pre-rRNA processing and 60S ribosome subunit synthesis in yeast. Hong B, et al. **Mol Cell Biol** 1997 Jan;17(1):378-88

Ribotoxic stress response: activation of the stress-activated protein kinase JNK1 by inhibitors of the peptidyl transferase reaction and by sequence-specific RNA damage to the alpha-sarcin/ricin loop in the 28S rRNA. Iordanov MS, et al. **Mol Cell Biol** 1997 Jun;17(6):3373-81

Evidence that GCN1 and GCN20, translational regulators of GCN4, function on elongating ribosomes in activation of eIF2alpha kinase GCN2. Marton MJ, et al. **Mol Cell Biol** 1997 Aug;17(8):4474-89

Saccharomyces cerevisiae Nip7p is required for efficient 60S ribosome subunit biogenesis. Zanchin NI, et al. **Mol Cell Biol** 1997 Sep;17(9):5001-15

The murine Spam1 gene: RNA expression pattern and lower steady-state levels associated with the Rb(6.16) translocation. Zheng Y, et al. **Mol Reprod Dev** 1997 Mar; 46(3):252-7

Efficient hammerhead ribozyme and antisense RNA targeting in a slow ribosome Escherichia coli mutant. Chen H, et al. **Nat Biotechnol** 1997 May;15(5):432-5

A protein-making motor protein [news; comment] Cross RA. **Nature** 1997 Jan 2;385(6611):18-9. Comment on: Nature 1997 Jan 2;385(6611):37-41.

Hydrolysis of GTP by elongation factor G drives tRNA movement on the ribosome [see comments] Rodnina MV, et al. **Nature** 1997 Jan 2;385(6611):37-41. Comment in: Nature 1997 Jan 2;385(6611):18-9.

Visualization of elongation factor Tu on the Escherichia coli ribosome. Stark H, et al. **Nature** 1997 Sep 25; 389(6649):403-6

Role of the 5.8S rRNA in ribosome translocation. Abou Elela S, et al. **Nucleic Acids Res** 1997 May 1;25(9):1788-94

A new technique for the characterization of long-range tertiary contacts in large RNA molecules: insertion of a photolabel at a selected position in 16S rRNA within the Escherichia coli ribosome. Baranov PV, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2266-73

Interaction of the Escherichia coli fdhF mRNA hairpin promoting selenocysteine incorporation with the ribosome. Hüttenhofer A, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):3903-10

Transfer RNA docking pair model in the ribosomal pre- and post-translocational states. Nagano K, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1254-64

Decoding fidelity at the ribosomal A and P sites: influence of mutations in three different regions of the decoding domain in 16S rRNA. O'Connor M, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1185-93

Interaction of tetracycline with RNA: photoincorporation into ribosomal RNA of Escherichia coli. Oehler R, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1219-24

Oligomerization of the transcription termination factor TTF-I: implications for the structural organization of ribosomal transcription units. Sander EE, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1142-7

Plant ribosome shunting in vitro. Schmidt-Puchta W, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2854-60

Location of the internal ribosome entry site in the 5' non-coding region of the immunoglobulin heavy-chain binding protein (BiP) mRNA: evidence for specific RNA-protein interactions. Yang Q, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2800-7

The La antigen binds 5' noncoding region of the hepatitis C virus RNA in the context of the initiator AUG codon and stimulates internal ribosome entry site-mediated translation. Ali N, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2249-54

In vitro selection and evolution of functional proteins by using ribosome display. Hanes J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4937-42

Association of RNase mitochondrial RNA processing enzyme with ribonuclease P in higher ordered structures in the nucleolus: a possible coordinate role in ribosome biogenesis. Lee B, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11471-6

Three small nucleolar RNAs that are involved in ribosomal RNA precursor processing. Mishra RK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4972-7

Binding of SecB to ribosome-bound polypeptides has the same characteristics as binding to full-length, denatured proteins. Randall LL, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):802-7

Structural analysis of the interaction of the pyrimidine tract-binding protein with the internal ribosomal entry site of encephalomyocarditis virus and foot-and-mouth disease virus RNAs. Kolupaeva VG, et al. **RNA** 1996 Dec; 2(12):1199-212

An antisense/target RNA duplex or a strong intramolecular RNA structure 5' of a translation initiation signal blocks ribosome binding: the case of plasmid R1. Malmgren C, et al. **RNA** 1996 Oct;2(10):1022-32

Internal initiation of translation of hepatitis C virus RNA: the ribosome entry site is at the authentic initiation codon. Reynolds JE, et al. **RNA** 1996 Sep;2(9):867-78

Photoaffinity labeling of 30S-subunit proteins S7 and S11 by 4-thiouridine-substituted tRNA(Phe) situated at the P site of Escherichia coli ribosomes. Rosen KV, et al. **RNA** 1997 Sep;3(9):1028-36

The path of mRNA through the bacterial ribosome: a site-directed crosslinking study using new photoreactive derivatives of guanosine and uridine. Sergiev PV, et al. **RNA** 1997 May;3(5):464-75

Identification of 2'-hydroxyl groups required for interaction of a tRNA anticodon stem-loop region with the ribosome. von Ahsen U, et al. **RNA** 1997 Jan;3(1):49-56

Nucleotide-sugar binding to ribosomes. Comparison of affinity and capacity of gastric mucosa and liver ribosomes to sugar-nucleotides. Paszkiewicz-Gadek A, et al. **Rocz Akad Med Bialymst** 1996;41(2):305-15

eIF4G: a multipurpose ribosome adapter? [published erratum appears in Science 1997 Mar 14;275(5306):1553] Hentze MW. **Science** 1997 Jan 24;275(5299):500-1 (12 ref.)

Stimulation of yeast EF-3 factor by mammalian ribosomes. El'skaya EV, et al. **Ukr Biokhim Zh** 1995 Nov-Dec; 67(6):28-32

[Detection of a new small RNA, induced by heat shock, in wheat seed ribosomes] Zhanybekova SSh, et al. **Biokhimiia** 1996 May;61(5):862-70 (Eng. Abstr.) **(Rus)**

[Interaction of ribosomes with membranes in vitro] Borisova TA, et al. **Ukr Biokhim Zh** 1996 Sep-Oct;68(5):41-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Ribosomes and translation. Green R, et al. **Annu Rev Biochem** 1997;66:679-716 (198 ref.)

Tetracycline resistance mediated by ribosomal protection. Taylor DE, et al. **Antimicrob Agents Chemother** 1996 Jan; 40(1):1-5 (41 ref.)

Effects of magnesium and temperature on the conformation and reassociation of Escherichia coli and Sulfolobus solfataricus ribosomes. Pedone F, et al. **Biochim Biophys Acta** 1997 Jun 6;1335(3):283-9

News and views on the nucleolus in 1996. Report on the 'Colloquium on the nucleolus', a meeting at Paris-Grignon, July 18-20, 1996. Mosgoeller W, et al. **Biol Cell** 1996; 88(1-2):1-4 (12 ref.)

Transneuronal regulation of ribosomes after blockade of ionotropic excitatory amino acid receptors. Hyson RL. **Brain Res** 1997 Feb 21;749(1):61-70

Emerging understanding of translation termination. Nakamura Y, et al. **Cell** 1996 Oct 18;87(2):147-50 (20 ref.)

The position dependence of translational regulation via RNA-RNA and RNA-protein interactions in the 5'-untranslated region of eukaryotic mRNA is a function of the thermodynamic competence of 40 S ribosomes in translational initiation. Koloteva N, et al. **J Biol Chem** 1997 Jun 27;272(26):16531-9

The yeast nucleolar protein Nop4p contains four RNA recognition motifs necessary for ribosome biogenesis. Sun C, et al. **J Biol Chem** 1997 Oct 3;272(40):25345-52

A functional model for the ribosome. Wood PN. **J Theor Biol** 1997 Mar 7;185(1):97-118

The roles of proteins L28 and L33 in the assembly and function of Escherichia coli ribosomes in vivo. Maguire BA, et al. **Mol Microbiol** 1997 Jan;23(2):237-45

ULTRASTRUCTURE

The determination of the in situ structure by nuclear spin contrast variation. Stuhrmann HB, et al. **Basic Life Sci** 1996;64:397-413

Structural model of the 50S subunit of E. coli ribosomes from solution scattering. Svergun DI, et al. **Basic Life Sci** 1996; 64:149-74

Modeling the structure of the ribosome. Easterwood TR, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):751-6 (35 ref.)

A model of the translational apparatus based on a three-dimensional reconstruction of the Escherichia coli ribosome. Frank J, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):757-65 (38 ref.)

Cotranslational folding of nascent proteins on Escherichia coli ribosomes. Hardesty B, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):1199-207 (22 ref.)

Topography of ribosomes and initiation complexes from rat liver as revealed by atomic force microscopy. Wu X, et al. **Biol Chem** 1997 May;378(5):363-72

Arrangement of tRNAs in pre- and posttranslocational ribosomes revealed by electron cryomicroscopy. Stark H, et al. **Cell** 1997 Jan 10;88(1):19-28

Nucleolar organization as revealed in cell spreads. Ghosh S, et al. **Cell Biol Int** 1996 Jul;20(7):465-70

Ribosomes: protein synthesis in slow motion. Moore PB. **Curr Biol** 1997 Mar 1;7(3):R179-81 (10 ref.)

The ribosome at higher resolution--the donut takes shape. Frank J. **Curr Opin Struct Biol** 1997 Apr;7(2):266-72 (61 ref.)

Mutational analysis of two highly conserved UGG sequences of 23 S rRNA from Escherichia coli. Spahn CMT, et al. **J Biol Chem** 1996 Dec 20;271(51):32849-56

The stability and dynamics of ribosomal protein L9: investigations of a molecular strut by amide proton exchange and circular dichroism. Lillemoen J, et al. **J Mol Biol** 1997 May 2;268(2):482-93

A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. III. The topography of the functional centre. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):566-87

A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. II. The RNA-protein interaction data. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):545-65

A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. I. Fitting the RNA to a 3D electron microscopic map at 20 A. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):524-44

Solution scattering structural analysis of the 70 S Escherichia coli ribosome by contrast variation. I. Invariants and validation of electron microscopy models. Svergun DI, et al. **J Mol Biol** 1997 Aug 29;271(4):588-601

Solution scattering structural analysis of the 70 S Escherichia coli ribosome by contrast variation. II. A model of the ribosome and its RNA at 3.5 nm resolution. Svergun DI, et al. **J Mol Biol** 1997 Aug 29;271(4):602-18

Direct localization of the tRNAs within the elongating ribosome by means of neutron scattering (proton-spin contrast-variation). Wadzack J, et al. **J Mol Biol** 1997 Feb 21;266(2):343-56

Direct visualization of a transmembrane channel associated with ribosomes. Miyaguchi K, et al. **J Struct Biol** 1996 May-Jun;116(3):413-7

Three-dimensional reconstruction with contrast transfer function correction from energy-filtered cryoelectron micrographs: procedure and application to the 70S Escherichia coli ribosome. Zhu J, et al. **J Struct Biol** 1997 Apr;118(3):197-219

13Bovine mitochondrial ribosomes. O'Brien TW, et al. **Methods Enzymol** 1996;264:237-48

The "allosteric three-site model" of elongation cannot be confirmed in a well-defined ribosome system from Escherichia coli. Semenkov YP, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12183-8

A common-lines based method for determining orientations for $N > 3$ particle projections simultaneously. Penczek PA, et al. **Ultramicroscopy** 1996 Jul;63(3-4):205-18

Ultrastructural study of a perineurioma with ribosome-lamella complexes. Dhimes P, et al. **Ultrastruct Pathol** 1996 Mar-Apr;20(2):167-72

Ribosome-lamella complexes in the perineurial cells of neurofibromatosis. Hassan MO, et al. **Ultrastruct Pathol** 1996 Mar-Apr;20(2):173-78

VIROLOGY

A tobamovirus genome that contains an internal ribosome entry site functional in vitro. Ivanov PA, et al. **Virology** 1997 May 26;232(1):32-43

RIBOSYLHYPOXANTHINE MONOPHOSPHATE see **INOSINE MONOPHOSPHATE**

RIBOVIRIN see **RIBAVIRIN**

RIBOZYMES see **RNA, CATALYTIC**

RIBS

see related

TIETZE'S SYNDROME

Exostosis of a rib causing laceration of the diaphragm: diagnosis and management. Simansky DA, et al. **Ann Thorac Surg** 1997 Mar;63(3):856-7

Tuberculosis of the rib. Asnis DS, et al. **Clin Infect Dis** 1997 May;24(5):1018-9

Spontaneous haemothorax caused by costal exostosis. Uchida K, et al. **Eur Respir J** 1997 Mar;10(3):735-6

Bursal osteochondromatosis overlying an osteochondroma of a rib. A case report. Wright JM, et al. **J Bone Joint Surg Am** 1997 Jul;79(7):1085-8

The twelfth rib syndrome. Cranfield KA, et al. **J Pain Symptom Manage** 1997 Mar;13(3):172-5

Slipping rib syndrome in childhood. Mooney DP, et al. **J Pediatr Surg** 1997 Jul;32(7):1081-2

Subscapular elastofibroma: a reactive pseudotumor. Nielsen T, et al. **J Shoulder Elbow Surg** 1996 May-Jun;5(3):209-13

Dedifferentiated chondrosarcoma of the rib with a malignant mesenchymomatous component: an autopsy case report. Ishida T, et al. **Pathol Int** 1997 Jun;47(6):397-403

Chondroblastoma with multiple distant soft tissue metastases. Khalili K, et al. **Skeletal Radiol** 1997 Aug;26(8):493-6

Primary angiosarcoma of the rib. Batt H, et al. **South Med J** 1997 Apr;90(4):454-6 (8 ref.)

Transthoracic video endoscopic electrocautery of sympathetic ganglia for hyperhidrosis palmaris: special reference to localization of the first and second ribs. Wong CW. **Surg Neurol** 1997 Mar;47(3):224-9; discussion 229-30

Mesenchymal chondrosarcoma of the rib: report of a case. Aoki T, et al. **Surg Today** 1996;26(12):1020-3

Chest wall reconstruction using a titanium hollow screw reconstruction plate. Nomori H, et al. **Thorac Cardiovasc Surg** 1997 Feb;45(1):35-7

[Costal chondrosarcoma. Apropos of 4 cases] Hernández Ortiz C, et al. **Ann Chir** 1997;51(2):152-7 (Eng. Abstr.) **(Fre)**

[Costosternal swelling and diffuse bone pain in tubercular osteomyelitis] Hemmen T, et al. **Dtsch Med Wochenschr** 1997 May 9;122(19):610-4 (Eng. Abstr.) **(Ger)**

[Rare differential diagnosis of breast tumor. Giant cell tumor of the ribs] Brenner P, et al. **Langenbecks Arch Chir** 1997; 382(2):64-8 (Eng. Abstr.) **(Ger)**

[The principle of autogeneic rib perichondrial transplantation in the treatment of deep articular cartilage defects] Bruns J, et al. **Z Orthop Ihre Grenzgeb** 1997 Mar-Apr; 135(2):138-44 (Eng. Abstr.) **(Ger)**

[A case of giant cell tumor originating in the rib] Iida M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Aug; 44(8):1141-4 (Eng. Abstr.) **(Jpn)**

[A case of intrathoracic chondrosarcoma of the rib head--comparison between MRI shadow and histopathological specimen] Kita Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul;45(7):1011-4 (Eng. Abstr.) **(Jpn)**

[Costal chondritis treated by resection of the entire costal arch] Shibata K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Aug; 34(8):890-3 (Eng. Abstr.) **(Jpn)**

[Massive hemorrhage from a gastric neuroma associated with a kidney neoplasm] Lukasiewicz S, et al. **Wiad Lek** 1996; 49(7-12):124-6 (Eng. Abstr.) **(Pol)**

[A case of peripheral cancer of the lung] Shlenova LA. **Vestn Rentgenol Radiol** 1997 Mar-Apr;(2):39-40 **(Rus)**

[Primary tumors of the thoracic wall (1991-1994)] Arrabal Sánchez R, et al. **Arch Bronconeumol** 1996 Oct;32(8):384-7 (Eng. Abstr.) **(Spa)**

[A giant-cell tumor with rib location (letter)] Vázquez-Pelillo JC, et al. **Arch Bronconeumol** 1997 May; 33(5):257 **(Spa)**

ABNORMALITIES

Sutural exostoses, rib hyperostoses, craniosynostosis, mental retardation with focal fat deposition: Proteus syndrome? Christianson AL, et al. **Am J Med Genet** 1996 Dec 11; 66(2):150-3

Family with branchial arch anomalies, hearing loss, ear and commissural lip pits, and rib anomalies. A new autosomal recessive condition: branchio-oto-costal syndrome? Clementi M, et al. **Am J Med Genet** 1997 Jan 10;68(1):91-3

Multiple vertebral segmentation defects and rib anomalies [letter; comment] Martínez-Frías ML. **Am J Med Genet** 1996 Dec 2;66(1):91. Comment on: Am J Med Genet 1996 Feb 2;61(4):310-9.

Cerebro-costo-mandibular syndrome [published erratum appears in Am J Med Genet 1996 Aug 23;64(3):527] Plötz FB, et al. **Am J Med Genet** 1996 Mar 29;62(3):286-92 (20 ref.)

Complete cartilaginous duplication of the rib cage found in a cadaver: a first reported case. Abolhoda A, et al. **Am Surg** 1996 Nov;62(11):976-8

Upper extremity ischemia from subclavian artery aneurysm caused by bony abnormalities of the thoracic outlet. Nehler MR, et al. **Arch Surg** 1997 May;132(5):527-32

Slipping rib syndrome as a cause of chest pain in children. Taubman B, et al. **Clin Pediatr (Phila)** 1996 Aug;35(8):403-5

Targeted mutations in hoxa-9 and hoxb-9 reveal synergistic interactions. Chen F, et al. **Dev Biol** 1997 Jan 15; 181(2):186-96

Congenital lumbar hernia associated with the lumbocostovertebral syndrome: two cases. Somuncu S, et al. **Eur J Pediatr Surg** 1997 Apr;7(2):122-4

Slipping rib syndrome: an overlooked cause of chest and abdominal pain. Lum-Hee N, et al. **Int J Clin Pract** 1997 Jun;51(4):252-3

Supernumerary lumbar rib: manifestation of basic alteration in embryonic development of ribs. Branch S, et al. **J Appl Toxicol** 1996 Mar-Apr;16(2):115-9

Perturbation of BMP signaling in somitogenesis resulted in vertebral and rib malformations in the axial skeletal formation [see comments] Nifuji A, et al. **J Bone Miner Res** 1997 Mar;12(3):332-42. Comment in: J Bone Miner Res 1997 Mar;12(3):343-6.

Bilateral rudimentary first ribs as a cause of thoracic outlet syndrome. Nguyen T 4th, et al. **J Natl Med Assoc** 1997 Jan;89(1):69-73

Focal nodular hyperplasia of the liver with the lumbo-costovertebral syndrome. al-Salem AH, et al. **J Pediatr Surg** 1996 Sep;31(9):1282-4

Special imaging casebook. Cerebrocostomandibular syndrome with hypoxic myocardiopathy and encephalopathy. Herman TE, et al. **J Perinatol** 1996 Nov-Dec;16(6):504-6

Bilateral cervical rib fracture secondary to blunt trauma. Ovadia P, et al. **J Trauma** 1997 Jul;43(1):157-8

Anomalous articulation of the first rib mimicking supraclavicular neoplasia. Zrada SE, et al. **Otolaryngol Head Neck Surg** 1997 Mar;116(3):389-91 (14 ref.)

Scoliosis and fused ribs. A case report. Damsin JP, et al. **Spine** 1997 May 1;22(9):1030-2

An unusual case of flail chest: surgical repair using Marlex mesh. Heriot AG, et al. **Thorax** 1997 May;52(5):488-9

Management of oesophageal atresia [comment] Walker WS. **Thorax** 1997 May;52(5):486. Comment on: Thorax 1997 May;52(5):487-8.

Spondylocostal dysplasia and cardiac anomalies in one dizygotic twin. Ozkinay F, et al. **Turk J Pediatr** 1996 Jul-Sep;38(3):381-4

Early sonographic diagnosis of Jarcho-Levin syndrome: a prospective screening program in one family. Eliyahu S, et al. **Ultrasound Obstet Gynecol** 1997 May;9(5):314-8

Cerebro-costo-mandibular syndrome: early sonographic prenatal diagnosis. Ibba RM, et al. **Ultrasound Obstet Gynecol** 1997 Aug;10(2):142-4

[Thoracic outlet syndrome] Malawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1997;62(1):7-14 (Eng. Abstr.) **(Pol)**

ANATOMY & HISTOLOGY

The osteology of the African elephant (Loxodonta africana): vertebral column, ribs and sternum. Bezuidenhout AJ, et al. **Onderstepoort J Vet Res** 1996 Jun;63(2):131-47

BLOOD SUPPLY

Malposition of a dialysis catheter in the accessory hemiazygos vein. Muhm M, et al. **Anesth Analg** 1996 Oct;83(4):883-5

Impact of bone scintigraphy on the clinical management of a patient with sickle cell anemia and recent chest pain. Sisayan R, et al. **Clin Nucl Med** 1996 Jul;21(7):523-6

Intercostal artery pseudoaneurysm after a percutaneous biliary procedure: diagnosis with CT and treatment with transarterial embolization. Casas JD, et al. **J Comput Assist Tomogr** 1997 Sep-Oct;21(5):729-30

An anatomic study of the latissimus dorsi-rib flap: an extension of the subscapular combined flap. Yamamoto Y, et al. **Plast Reconstr Surg** 1996 Oct;98(5):811-6

EMBRYOLOGY

Three dimensional ultrasound: display modalities in the fetal spine and thorax. Riccabona M, et al. **Eur J Radiol** 1996 May;22(2):141-5

GROWTH & DEVELOPMENT

Factors affecting the rate and pattern of the first costal cartilage ossification. Barchilon V, et al. **Am J Forensic Med Pathol** 1996 Sep;17(3):239-47

Quantitative analysis of trabecular morphogenesis in the human costochondral junction during the postnatal period in normal subjects. Fazzalari NL, et al. **Anat Rec** 1997 May; 248(1):1-12

Chest wall deformities and thoracic scoliosis after costal cartilage graft harvesting. Ohara K, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1030-6

INJURIES

Fracture of the scapula with intrathoracic penetration. A case report. Blue JM, et al. **J Bone Joint Surg Am** 1997 Jul; 79(7):1076-8

Increased risk of stress fractures of the ribs in elite rowers. Christiansen E, et al. **Scand J Med Sci Sports** 1997 Feb; 7(1):49-52

[Effective treatment of a man with head injury and multiple rib fractures with epidural analgesia] Kariya N, et al. **Masui** 1996 Feb;45(2):223-6 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Histomorphometric study of ribs with looser zones in Itai-itai disease. Yamashita H, et al. **Calcif Tissue Int** 1996 Mar; 58(3):170-6

The costal cartilages in health and disease. Ontell FK, et al. **Radiographics** 1997 May-Jun;17(3):571-7

PHYSIOLOGY

Human rib cage distortability. Chihara K, et al. **J Appl Physiol** 1996 Jul;81(1):437-47

Rib motion modulates inspiratory intercostal activity in dogs. De Troyer A. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):265-75

Biomechanical role of the posterior elements, costovertebral joints, and rib cage in the stability of the thoracic spine. Oda I, et al. **Spine** 1996 Jun 15;21(12):1423-9

[On the costal articulations XI, XII, XIII of the domestic cat (Felis catus)] Roos H, et al. **Anat Histol Embryol** 1996 Sep;25(3):151-2 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Rib cage-spine coupling patterns involved in brace treatment of adolescent idiopathic scoliosis. Aubin CE, et al. **Spine** 1997 Mar 15;22(6):629-35

RADIOGRAPHY

Rib enlargement in patients with chronic pleural disease. Eyler WR, et al. **AJR Am J Roentgenol** 1996 Oct; 167(4):921-6

Rip hump correction and rotation of the lumbar spine after selective thoracic fusion. Hosman AJ, et al. **Eur Spine J** 1996;5(6):394-9

Rib-vertebral angle asymmetry in idiopathic, neuromuscular and experimentally induced scoliosis. Sevastik B, et al. **Eur Spine J** 1997;6(2):84-8

The segmental effect of Cotrel-Dubousset instrumentation on vertebral rotation, rib hump and the thoracic cage in idiopathic scoliosis. Willers U, et al. **Eur Spine J** 1996; 5(6):387-93

The costal cartilages in health and disease. Ontell FK, et al. **Radiographics** 1997 May-Jun;17(3):571-7

Three-dimensional effect of the Boston brace on the thoracic spine and rib cage. Labelle H, et al. **Spine** 1996 Jan 1; 21(1):59-64

Measurement of rib vertebral angle difference. Intraobserver error and interobserver variation. McAlindon RJ, et al. **Spine** 1997 Jan 15;22(2):198-9

RADIONUCLIDE IMAGING

Acquired hyperostosis syndrome--AHYS--(sternocostoclavicular hyperostosis, pustulotic arthro-osteitis, SAPHO-syndrome): bone scintigraphy of the anterior chest wall. Dihlmann W, et al. **Clin Rheumatol** 1997 Jan;16(1):13-24

SURGERY

770 consecutive supraclavicular first rib resections for thoracic outlet syndrome. Hempel GK, et al. **Ann Vasc Surg** 1996 Sep;10(5):456-63

"Above-under" exposure of the first rib: a modified approach for the treatment of thoracic outlet syndrome. Robicsek F, et al. **Ann Vasc Surg** 1997 May;11(3):304-6

Surgical treatment of thoracic outlet compression syndromes: diagnostic considerations and transaxillary first rib resection. Thompson RW, et al. **Ann Vasc Surg** 1997 May; 11(3):315-23

Chest wall resection and reconstruction. Sabanathan S, et al. **Br J Hosp Med** 1997 Mar 19-Apr 1;57(6):255-9 (21 ref.)

Non-serratus-sparing antero-axillary thoracotomy with disconnection of anterior rib cartilage. Improvement in postoperative pulmonary function and pain in comparison to posterolateral thoracotomy. Nomori H, et al. **Chest** 1997 Mar;111(3):572-6

Thoracoscapular fusion in facioscapulohumeral dystrophy: clinical review of a new surgical method. Twyman RS, et al. **J Shoulder Elbow Surg** 1996 May-Jun;5(3):201-5

Correction of experimental scoliosis by rib resection in the transverse plane. Deguchi M, et al. **J Spinal Disord** 1997 Jun;10(3):197-203

Correction of scoliosis by rib resection in pinealectomized chickens. Deguchi M, et al. **J Spinal Disord** 1996 Jun; 9(3):207-13

Scoliosis induced by rib resection in chickens [letter; comment] Robin GC. **J Spinal Disord** 1996 Aug;9(4):351 . Comment on: J Spinal Disord 1995 Jun;8(3):179-85.

Fully thoracoscopic pulmonary lobectomy and specimen extraction through rib segment resection. Preliminary report. Poulin EC, et al. **Surg Endosc** 1997 Apr;11(4):354-8

Use of a surgical sponge facilitates rib resection in flank incisions. Brown JA, et al. **Urology** 1997 Jun;49(6):946-7

[Resection of the first rib for the upper thoracic outlet syndrome-- long-term experience] Zatočil Z, et al. **Rozhl Chir** 1997 May;76(5):242-5 (Eng. Abstr.) **(Cze)**

[Comment on H. P. Richter (1996). Removal of the 1st rib in thoracic outlet syndrome. Is it helpful? Is it safe? (letter; comment)] Gruss JD. **Nervenarzt** 1996 Dec;67(12):1038-9 . Comment on: Nervenarzt 1996 Dec;67(12):1034-7. **(Ger)**

[Removal of the 1st rib in thoracic outlet syndrome. Is it helpful? Is it safe? (see comments)] Richter HP. **Nervenarzt** 1996 Dec;67(12):1034-7 (26 ref.) (Eng. Abstr.) . Comment in: Nervenarzt 1996 Dec;67(12):1038-9. **(Ger)**

[Thoracic outlet syndrome--an interdisciplinary topic. Experience with diagnosis and therapy in a 15-year patient cohort (80 trans-axillary resections of the 1st rib in 67 patients) and a literature review] Wenz W, et al. **Z Orthop Ihre Grenzgeb** 1997 Jan-Feb;135(1):84-90 (32 ref.) (Eng. Abstr.) **(Ger)**

[A device for synthesis of the costal plane after posterolateral thoracotomy using transosseous incisions to prevent compression of intercostal nerves] Nazari S, et al. **Minerva Chir** 1996 Dec;51(12):1151-4 (Eng. Abstr.) **(Ita)**

[Omentoplasty in a patient with osteomyelitis of the ribs and sternum] Shipulin PP, et al. **Klin Khir** 1994;(12):61-2 **(Rus)**

TRANSPLANTATION

The role of autogenous primary rib grafts in treating fractures of the atrophic edentulous mandible. Newman L. **Br J Oral Maxillofac Surg** 1995 Dec;33(6):381-6; discussion 386-7

Rib graft or cement to enhance screw fixation in anterior vertebral bodies. Hernigou P, et al. **J Spinal Disord** 1996 Aug;9(4):322-5

RIBULOSE BIPHOSPHATE CARBOXYLASE-OXYGENASE see **RIBULOSEBIPHOSPHATE CARBOXYLASE**

RIBULOSE DIPHOSPHATE CARBOXYLASE see **RIBULOSEBIPHOSPHATE CARBOXYLASE**

RIBULOSEBIPHOSPHATE CARBOXYLASE

ANALYSIS

Immunofluorescent quantitation of chloroplast proteins. Leech RM, et al. **Plant J** 1996 Dec;10(6):1169-75

ANTAGONISTS & INHIBITORS

A common structural basis for the inhibition of ribulose 1,5-bisphosphate carboxylase by 4-carboxyarabinitol 1,5-bisphosphate and xylulose 1,5-bisphosphate. Taylor TC, et al. **J Biol Chem** 1996 Dec 20;271(51):32894-9

BIOSYNTHESIS

Improved ballistic transient transformation conditions for tomato fruit allow identification of organ-specific contributions of I-box and G-box to the RBCS2 promoter activity. Baum K, et al. **Plant J** 1997 Aug;12(2):463-9

Fluorescent imaging of GUS activity and RT-PCR analysis of gene expression in the shoot apical meristem. Fleming AJ, et al. **Plant J** 1996 Oct;10(4):745-54

Differential regulation of chloroplast gene expression in Chlamydomonas reinhardtii during photoacclimation: light stress transiently suppresses synthesis of the Rubisco LSU protein while enhancing synthesis of the PS II D1 protein. Shapira M, et al. **Plant Mol Biol** 1997 Apr;33(6):1001-11

Identification of an Arabidopsis thaliana ribulose-1,5-bisphosphate carboxylase/oxygenase activase (RCA) minimal promoter regulated by light and the circadian clock. Liu Z, et al. **Plant Physiol** 1996 Sep; 112(1):43-51

Elimination of the Chlamydomonas gene family that encodes the small subunit of ribulose-1,5-bisphosphate carboxylase/oxygenase. Khrebtukova I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13689-93

CHEMISTRY

Facilitation of the terminal proton transfer reaction of ribulose 1,5-bisphosphate carboxylase/oxygenase by active-site Lys166. Harpel MR, et al. **Biochemistry** 1996 Nov 5;35(44):13865-70

Structure of a product complex of spinach ribulose-1,5-bisphosphate carboxylase/oxygenase. Taylor TC, et al. **Biochemistry** 1997 Apr 1;36(13):4041-6

Postimport methylation of the small subunit of ribulose-1,5-bisphosphate carboxylase in chloroplasts. Grimm R, et al. **FEBS Lett** 1997 May 26;408(3):350-4

Thermal denaturation and gelation of rubisco: effects of pH and ions. Libouga DG, et al. **Int J Biol Macromol** 1996 Dec;19(4):271-7

Crystallization and preliminary crystallographic studies of ribulose 1,5-bisphosphate carboxylase/oxygenase from a red alga, Galdieria partita, with a high specificity factor. Shibata N, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1064-6

Orderly disposition of heterogeneous small subunits in D-ribulose-1,5-bisphosphate carboxylase/oxygenase from spinach. Shibata N, et al. **J Biol Chem** 1996 Oct 25; 271(43):26449-52

The structure of the complex between rubisco and its natural substrate ribulose 1,5-bisphosphate. Taylor TC, et al. **J Mol Biol** 1997 Jan 31;265(4):432-44

GENETICS

Diversity of the ribulose bisphosphate carboxylase/oxygenase form I gene (rbcL) in natural phytoplankton communities. Pichard SL, et al. **Appl Environ Microbiol** 1997 Sep; 63(9):3600-6

Activity and carboxylation specificity factor of mutant ribulose 1,5-bisphosphate carboxylase/oxygenase from Anacystis Nidulans. Romanova AK, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):299-307

Import inhibition of poly(His) containing chloroplast precursor proteins by Ni2+ ions. Rothen R, et al. **FEBS Lett** 1997 Feb 10;403(1):15-8

Microbial ribulose 1,5-bisphosphate carboxylase/oxygenase: a molecule for phylogenetic and enzymological investigation. Watson GM, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):13-22 (39 ref.)

Maximum activity of recombinant ribulose 1,5-bisphosphate carboxylase/oxygenase of Anabaena sp. strain CA requires the product of the rbcX gene. Li LA, et al. **J Bacteriol** 1997 Jun;179(11):3793-6

Purification and some properties of ribulose 1,5-bisphosphate carboxylases/oxygenases from Acinetobacter sp. strain JC1 and Hydrogenophaga pseudoflava. Kim EY, et al. **Mol Cells** 1997 Jun 30;7(3):380-8

Improved ballistic transient transformation conditions for tomato fruit allow identification of organ-specific contributions of I-box and G-box to the RBCS2 promoter activity. Baum K, et al. **Plant J** 1997 Aug;12(2):463-9

Light-dependent developmental control of rbcS gene expression in epidermal cells of maize leaves. Bilang R, et al. **Plant Mol Biol** 1996 Jul;31(4):831-41

GSBF1, a seedling-specific bZIP DNA-binding protein with preference for a 'split' G-box-related element in Brassica napus RbcS promoters. Waldmüller S, et al. **Plant Mol Biol** 1996 Nov;32(4):631-9

Regulation, unique gene organization, and unusual primary structure of carbon fixation genes from a marine phycoerythrin-containing cyanobacterium. Watson GM, et al. **Plant Mol Biol** 1996 Dec;32(6):1103-15

Alternate paths of evolution for the photosynthetic gene rbcL in four nonphotosynthetic species of Orobanche. Wolfe AD, et al. **Plant Mol Biol** 1997 Apr;33(6):965-77

Growth and photosynthesis under high and low irradiance of Arabidopsis thaliana antisense mutants with reduced ribulose-1,5-bisphosphate carboxylase/oxygenase activase content. Eckardt NA, et al. **Plant Physiol** 1997 Feb; 113(2):575-86

Mutations in the small subunit of ribulose-1,5-bisphosphate carboxylase/ oxygenase increase the formation of the misfire product xylulose-1,5-bisphosphate. Flachmann R, et al. **Plant Physiol** 1997 May;114(1):131-6

Substitution rate comparisons between grasses and palms: synonymous rate differences at the nuclear gene Adh parallel rate differences at the plastid gene rbcL. Gaut BS, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10274-9

Elimination of the Chlamydomonas gene family that encodes the small subunit of ribulose-1,5-bisphosphate carboxylase/oxygenase. Khrebtukova I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13689-93

[Mechanisms of calcification and molecular phylogeny of Rubisco genes in coccolithophorid algae] Fujiwara S. **Seikagaku** 1996 Aug;68(8):1445-8 (8 ref.) **(Jpn)**

ISOLATION & PURIFICATION

Purification and some properties of ribulose 1,5-bisphosphate carboxylases/oxygenases from Acinetobacter sp. strain JC1 and Hydrogenophaga pseudoflava. Kim EY, et al. **Mol Cells** 1997 Jun 30;7(3):380-8

METABOLISM

Role of isoleucine-164 at the active site of rubisco from Rhodospirillum rubrum. Chène P, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):482-6

Ribulose-1,5-bisphosphate carboxylase/oxygenase from thermophilic red algae with a strong specificity for CO2 fixation. Uemura K, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):568-71

Activity and carboxylation specificity factor of mutant ribulose 1,5-bisphosphate carboxylase/oxygenase from Anacystis Nidulans. Romanova AK, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):299-307

Facilitation of the terminal proton transfer reaction of ribulose 1,5-bisphosphate carboxylase/oxygenase by active-site Lys166. Harpel MR, et al. **Biochemistry** 1996 Nov 5;35(44):13865-70

The effect of condensed tannins in Lotus pedunculatus on the solubilization and degradation of ribulose-1,5-bisphosphate carboxylase (EC 4.1.1.39; Rubisco) protein in the rumen and the sites of Rubisco digestion. McNabb WC, et al. **Br J Nutr** 1996 Oct; 76(4):535-49

Postimport methylation of the small subunit of ribulose-1,5-bisphosphate carboxylase in chloroplasts. Grimm R, et al. **FEBS Lett** 1997 May 26;408(3):350-4

Import inhibition of poly(His) containing chloroplast precursor proteins by Ni2+ ions. Rothen R, et al. **FEBS Lett** 1997 Feb 10;403(1):15-8

Import inhibition of poly(His) containing chloroplast precursor proteins by Ni2+ ions. Rothen R, et al. **FEBS Lett** 1996 Nov 4;396(2-3):135-8

Microbial ribulose 1,5-bisphosphate carboxylase/oxygenase: a molecule for phylogenetic and enzymological investigation. Watson GM, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):13-22 (39 ref.)

Complementing substitutions at the bottom of the barrel influence catalysis and stability of ribulose-bisphosphate carboxylase/oxygenase. Hong S, et al. **J Biol Chem** 1997 Apr 25;272(17):11114-7

Specificity for activase is changed by a Pro-89 to Arg substitution in the large subunit of ribulose-1,5-bisphosphate carboxylase/oxygenase. Larson EM, et al. **J Biol Chem** 1997 Jul 4;272(27):17033-7

Side reactions catalyzed by ribulose-bisphosphate carboxylase in the presence and absence of small subunits. Morell MK, et al. **J Biol Chem** 1997 Feb 28;272(9):5445-51

In vitro interaction between a chloroplast transit peptide and chloroplast outer envelope lipids is sequence-specific and lipid class-dependent. Pinnaduwage P, et al. **J Biol Chem** 1996 Dec 20;271(51):32907-15

Mutations in the small subunit of ribulose-1,5-bisphosphate carboxylase/ oxygenase increase the formation of the misfire product xylulose-1,5-bisphosphate. Flachmann R, et al. **Plant Physiol** 1997 May;114(1):131-6

RIBULOSEPHOSPHATES

CHEMISTRY

The structure of the complex between rubisco and its natural substrate ribulose 1,5-bisphosphate. Taylor TC, et al. **J Mol Biol** 1997 Jan 31;265(4):432-44

METABOLISM

Is the ribulose monophosphate pathway widely distributed in bacteria? Reizer J, et al. **Microbiology** 1997 Aug;143 (Pt 8):2519-20

RICE

Possible factors which may affect phase durations in the natural chewing rhythm. Yamada Y, et al. **Brain Res** 1996 Jan 15;706(2):237-42

Rice bran proteins: properties and food uses. Prakash J. **Crit Rev Food Sci Nutr** 1996 Jul;36(6):537-52 (113 ref.)

Motility disorders of the esophagus: diagnosis with barium-rice administration. Schwickert HC, et al. **Eur J Radiol** 1995 Dec 15;21(2):131-7

Malaria epidemic in Lamta PHC of Balaghat district--a rice cultivating ecosystem. Chand G, et al. **J Commun Dis** 1997 Jun;29(2):179-81

A controlled trial comparing the efficacy of rice-based and hypotonic glucose oral rehydration solutions in infants and young children with gastroenteritis. Wall CR, et al. **J Gastroenterol Hepatol** 1997 Jan;12(1):24-8

Cholesterol-lowering effects of soybean, potato and rice proteins depend on their low methionine contents in rats fed a cholesterol-free purified diet. Morita T, et al. **J Nutr** 1997 Mar;127(3):470-7

A rice protein isolate alters 7,12-dimethylbenz[alpha]anthracene-induced mammary tumor development in female rats. Morita T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Aug;42(4):325-37

Serum vitamin B12 levels in young vegans who eat brown rice. Suzuki H. **J Nutr Sci Vitaminol (Tokyo)** 1995 Dec; 41(6):587-94

Rehydration of two patients with secondary glucose intolerance by using rice-oral rehydration solution (R-ORS) [letter] Yurdakök K, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):509-10

Lactose intolerance in persistent diarrhoea during childhood: the role of a traditional rice-lentil (Khitchri) and yogurt diet in nutritional management. Bhutta ZA, et al. **JPMA J Pak Med Assoc** 1997 Jan;47(1):20-4

Sagodana based verses rice based oral rehydration solution in the management of acute diarrhoea in Pakistani children. Ibrahim S, et al. **JPMA J Pak Med Assoc** 1997 Jan; 47(1):16-9

FDA and Pharmanex clash over dietary supplement [news] **Nat Biotechnol** 1997 Jun;15(6):489

Superiority of rice-based oral rehydration solution [letter] Kulkarni ML, et al. **Natl Med J India** 1996 Jul-Aug; 9(4):198-9

Nutrient and nutritional evaluation of sinasin prepared in two ways. Chibuzo EC, et al. **Plant Foods Hum Nutr** 1996 Feb; 49(2):139-45

Effect of boiled barley-rice-feeding in hypercholesterolemic and normolipemic subjects. Ikegami S, et al. **Plant Foods Hum Nutr** 1996 Jun;49(4):317-28

[Possibility of rice porridge for preoperative feeding in children] Kushikata T, et al. **Masui** 1996 Aug;45(8):943-7 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Effect of rice cereal feedings on bone mineralization and calcium homeostasis in cow milk formula fed infants. Bainbridge RR, et al. **J Am Coll Nutr** 1996 Aug;15(4):383-8

CHEMISTRY

Isolation and purification of fumonisin B1 and B2 from rice culture. Meredith FI, et al. **Adv Exp Med Biol** 1996; 392:113-22

Epidermal growth factor binding proteins in rice (Oryza sativa L.) leaves. Komatsu S, et al. **Biol Pharm Bull** 1996 Jun;19(6):905-8

Determination of lead and cadmium content in the rice consumed in Maracaibo, Venezuela. Buscema I, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):94-8

Comparison of closed-vessel and focused open-vessel microwave dissolution for determination of cadmium, copper, lead, and selenium in wheat, wheat products, corn bran, and rice flour by transverse-heated graphite furnace atomic absorption spectrometry. Gawalko EJ, et al. **J AOAC Int** 1997 Mar-Apr;80(2):379-87

Monitoring of domestic and imported apples and rice by the U.S. Food and Drug Administration pesticide program. Roy RR, et al. **J AOAC Int** 1997 Jul-Aug;80(4):883-94

Potential interference by free fatty acids in determination of tricyclazole in brown rice by gas chromatography with flame thermionic detection. Tsumura Y, et al. **J AOAC Int** 1996 Nov-Dec;79(6):1471-6

Characterization of seed oil bodies and their surface oleosin isoforms from rice embryos. Chuang RL, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):74-81

Changes in activity, antigenicity, and molecular size of rice bran trypsin inhibitor by in vitro digestion. Tashiro M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Aug;42(4):367-76

Assessment of pearl millet vs rice based diets for bioavailability of four trace metals. Agte VV, et al. **Plant Foods Hum Nutr** 1995 Sep;48(2):149-58

Functional suitability of commercially milled rice bran in India for use in different food products. Sekhon KS, et al. **Plant Foods Hum Nutr** 1997;50(2):127-40

Characterization of a novel rice bZIP protein which binds to the alpha-globulin promoter. Nakase M, et al. **Plant Mol Biol** 1997 Feb;33(3):513-22

Lead content of rice collected from various areas in the world. Zhang ZW, et al. **Sci Total Environ** 1996 Nov 18; 191(1-2):169-75

CLASSIFICATION

Novel DNA probes capable of discriminating indica and japonica rice cultivars. Oba S, et al. **DNA Seq** 1996; 6(5):303-6

Phylogenetic relationships in A-genome species of rice as revealed by RAPD analysis. Ishii T, et al. **Genes Genet Syst** 1996 Aug;71(4):195-201

Two new genomes in the Oryza complex identified on the basis of molecular divergence analysis using total genomic DNA hybridization. Aggarwal RK, et al. **Mol Gen Genet** 1997 Mar 18;254(1):1-12

ENZYMOLOGY

Isolation of mammalian pol beta type DNA polymerase in

shoot tips of germinated seedlings of IR-8 rice (Oryza sativa L.). Sanathkumar M, et al. **Biochem Mol Biol Int** 1996 May;39(1):117-26

Purification and characterization of a (1-->3)-beta-D-glucan endohydrolase from rice (Oryza sativa) bran. Akiyama T, et al. **Carbohydr Res** 1997 Feb 14;297(4):365-74

Involvement of soluble proteinous factors in auxin-induced modulation of P-type ATPase in rice (Oryza sativa L.) seedlings. Kim D, et al. **FEBS Lett** 1997 Jun 9;409(2):273-6

Phytoalexin production by amino acid conjugates of jasmonic acid through induction of naringenin-7-O-methyltransferase, a key enzyme on phytoalexin biosynthesis in rice (Oryza sativa L.). Tamogami S, et al. **FEBS Lett** 1997 Jan 20;401(2-3):239-42

Phosphorylation of the C2 subunit of the proteasome in rice (Oryza sativa L.). Umeda M, et al. **FEBS Lett** 1997 Feb 24;403(3):313-7

Structure of the rice glutaredoxin (thioltransferase) gene. Sha S, et al. **Gene** 1997 Mar 25;188(1):23-8

Cloning of the Arabidopsis and rice formaldehyde dehydrogenase genes: implications for the origin of plant ADH enzymes. Dolferus R, et al. **Genetics** 1997 Jul; 146(3):1131-41

Preferential interaction of denaturants with rice bran lipase. Rajeshwara AN, et al. **Int J Biol Macromol** 1996 Jul; 19(1):1-7

Purification and characterization of glutaredoxin (thioltransferase) from rice (Oryza sativa L.). Sha S, et al. **J Biochem (Tokyo)** 1997 May;121(5):842-8

Expression, secretion, and processing of rice alpha-amylase in the yeast Yarrowia lipolytica. Park CS, et al. **J Biol Chem** 1997 Mar 14;272(11):6876-81

Carbohydrate starvation stimulates differential expression of rice alpha-amylase genes that is modulated through complicated transcriptional and posttranscriptional processes. Sheu JJ, et al. **J Biol Chem** 1996 Oct 25; 271(43):26998-7004

Molecular and biochemical characterization of a proteasome subunit from rice and carrot cells. Umeda M, et al. **Mol Gen Genet** 1997 Jun;255(1):19-27

Purification and properties of a basic endo-1,3-beta-glucanase from rice (Oryza sativa L.). Akiyama T, et al. **Plant Cell Physiol** 1996 Jul;37(5):702-5

Molecular cloning and characterization of a cDNA for plastidic copper/zinc-superoxide dismutase in rice (Oryza sativa L.). Kaminaka H, et al. **Plant Cell Physiol** 1997 Jan; 38(1):65-9

Rapid reconstitution of tonoplast H(+)-translocating pyrophosphatase from cultured rice cells into liposomes. Nakamura Y, et al. **Plant Cell Physiol** 1997 Mar;38(3):371-4

Identification and amino acid sequences of tryptic peptides of a novel ferredoxin-NADP+ oxidoreductase from rice. Swegle M, et al. **Plant Cell Physiol** 1996 Dec;37(8):1183-7

Transgenic rice (Oryza sativa) endosperm expressing daffodil (Narcissus pseudonarcissus) phytoene synthase accumulates phytoene, a key intermediate of provitamin A biosynthesis. Burkhardt PK, et al. **Plant J** 1997 May;11(5):1071-8

Expression of a betaine aldehyde dehydrogenase gene in rice, a glycinebetaine nonaccumulator, and possible localization of its protein in peroxisomes. Nakamura T, et al. **Plant J** 1997 May;11(5):1115-20

Characterization of the gene for pyruvate,orthophosphate dikinase from rice, a C3 plant, and a comparison of structure and expression between C3 and C4 genes for this protein. Imaizumi N, et al. **Plant Mol Biol** 1997 Jul; 34(5):701-16

Structure, chromosomal location and expression of a rice gene encoding the microsome omega-3 fatty acid desaturase. Kodama H, et al. **Plant Mol Biol** 1997 Feb; 33(3):493-502

Physicochemical and serological characterization of rice alpha-amylase isoforms and identification of their corresponding genes. Mitsui T, et al. **Plant Physiol** 1996 Apr;110(4):1395-404

Differential induction of pyruvate decarboxylase subunits and transcripts in anoxic rice seedlings. Rivoal J, et al. **Plant Physiol** 1997 Jul;114(3):1021-9

Purification and properties of Oryza sativa Cu-Zn superoxide dismutase. Padiglia A, et al. **Prep Biochem Biotechnol** 1996 May;26(2):135-42

GENETICS

Transient expression of multiple genes in salinity-stressed young seedlings of rice (Oryza sativa L.) cv. bura rata. Ramani S, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):663-7

Cloning of a cDNA that encodes farnesyl diphosphate synthase and the blue-light-induced expression of the corresponding gene in the leaves of rice plants. Sanmiya K, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):240-6

Cytological identification of an isotetrasomic in rice and its application to centromere mapping. Cheng ZK, et al. **Cell Res** 1997 Jun;7(1):31-8

Identification of somatic hybrids between rice cultivar and wild Oryza species by RAPD. Li W, et al. **Chin J Biotechnol** 1996;12(4):221-6

YAC cloning and identification of rice (Oriza sativa L.) genomic DNA. Wang C, et al. **Chin J Biotechnol** 1996; 12(1):9-16

Short inverted repeats function as hotspots of intermolecular recombination giving rise to oligomers of deleted plastid DNAs (ptDNAs). Kawata M, et al. **Curr Genet** 1997 Feb; 31(2):179-84

Cereal genome analysis using rice as a model. Havukkala IJ. **Curr Opin Genet Dev** 1996 Dec;6(6):711-4 (38 ref.)

Physical mapping of rice chromosomes 8 and 9 with YAC clones. Antonio BA, et al. **DNA Res** 1996 Dec 31; 3(6):393-400

Physical mapping of rice chromosomes 4 and 7 using YAC clones. Koike K, et al. **DNA Res** 1997 Feb 28;4(1):27-33

Characterization and genetic mapping of simple sequence repeats in the rice genome. Miyao A, et al. **DNA Res** 1996 Aug 31;3(4):233-8

Construction of YAC contigs on rice chromosome 5. Saji S, et al. **DNA Res** 1996 Oct 31;3(5):297-302

Assignment of YAC clones spanning rice chromosomes 10 and 12. Shimokawa T, et al. **DNA Res** 1996 Dec 31; 3(6):401-6

Characterization and mapping of cDNA encoding aspartate aminotransferase in rice, Oryza sativa L. Song J, et al. **DNA Res** 1996 Oct 31;3(5):303-10

Ordered YAC clone contigs assigned to rice chromosomes 3 and 11. Tanoue H, et al. **DNA Res** 1997 Apr 28; 4(2):133-40

Yeast artificial chromosome clones of rice chromosome 2 ordered using DNA markers. Umehara Y, et al. **DNA Res** 1997 Apr 28;4(2):127-31

Physical mapping of rice chromosome 1 with yeast artificial chromosomes (YACs). Wang ZX, et al. **DNA Res** 1996 Oct 31;3(5):291-6

Sequences of two expressed sequence tags (EST) from rice encoding different cap-binding proteins. Aliyeva E, et al. **Gene** 1996 Nov 21;180(1-2):221-3

Cloning of cDNA encoding the rice 22 kDa protein of Photosystem II (PSII-S) and analysis of light-induced expression of the gene. Iwasaki T, et al. **Gene** 1997 Feb 7;185(2):223-9

A group 3 LEA cDNA of rice, responsive to abscisic acid, but not to jasmonic acid, shows variety-specific differences in salt stress response. Moons A, et al. **Gene** 1997 Jun 3; 191(2):197-204

Phylogenetic relationships in A-genome species of rice as revealed by RAPD analysis. Ishii T, et al. **Genes Genet Syst** 1996 Aug;71(4):195-201

Identification and characterization of two tandem repeat sequences (TrsB and TrsC) and a retrotransposon (RIRE1) as genome-general sequences in rice. Nakajima R, et al. **Genes Genet Syst** 1996 Dec;71(6):373-82

Isolation and characterization of rice R genes: evidence for distinct evolutionary paths in rice and maize. Hu J, et al. **Genetics** 1996 Mar;142(3):1021-31

Epistasis for three grain yield components in rice (Oryza sativa L.). Li Z, et al. **Genetics** 1997 Feb;145(2):453-65

Genetics of hybrid sterility and hybrid breakdown in an intersubspecific rice (Oryza sativa L.) population. Li Z, et al. **Genetics** 1997 Apr;145(4):1139-48

A codominant DNA marker closely linked to the rice nuclear restorer gene, RF-1, identified with inter-SSR fingerprinting. Akagi H, et al. **Genome** 1996 Dec; 39(6):1205-9

Cloning and mapping of variety-specific rice genomic DNA sequences: amplified fragment length polymorphisms (AFLP) from silver-stained polyacrylamide gels. Cho YG, et al. **Genome** 1996 Apr;39(2):373-8

Complex arrangement of dispersed repeated DNA sequences in Oryza officinalis. Kiefer-Meyer MC, et al. **Genome** 1996 Feb;39(1):183-90

Level of polymorphism and genetic mapping of AFLP markers in rice. Mackill DJ, et al. **Genome** 1996 Oct; 39(5):969-77

Development of a sequence characterized amplified region (SCAR) based indirect selection method for a dominant blast-resistance gene in rice. Naqvi NI, et al. **Genome** 1996 Feb;39(1):26-30

Comparative evaluation of within-cultivar variation of rice (Oryza sativa L.) using microsatellite and RFLP markers. Olufowote JO, et al. **Genome** 1997 Jun;40(3):370-8

Chloroplast DNA variability in wild and cultivated rice (Oryza spp.) revealed by polymorphic chloroplast simple sequence repeats. Provan J, et al. **Genome** 1997 Feb; 40(1):104-10

The Japanese Rice Genome Research Program. Sasaki T, et al. **Genome Res** 1996 Aug;6(8):661-6 (16 ref.)

An ordered yeast artificial chromosome library covering over half of rice chromosome 6. Umehara Y, et al. **Genome Res** 1996 Oct;6(10):935-42

Screening of rice genes from the cDNA catalog using the data obtained by protein sequencing. Hirano H. **J Protein Chem** 1997 Jul;16(5):533-6

Mitochondrial plasmid-like DNAs of the B1 family in the genus Oryza: sequence heterogeneity and evolution. Miyata S, et al. **Jpn J Genet** 1995 Dec;70(6):675-85

Isolation and characterization of a rice MADS box gene belonging to the AGL2 gene family. Kang HG, et al. **Mol Cells** 1997 Feb 28;7(1):45-51

Molecular characterization of a rab-related small GTP binding protein cDNA from rice (Oryza sativa L. IR-36). Kim HY, et al. **Mol Cells** 1997 Apr 30;7(2):226-30

MADS box genes expressed in developing inflorescences of rice and sorghum. Greco R, et al. **Mol Gen Genet** 1997 Feb 20;253(5):615-23

Silencing of waxy genes in rice containing Wx transgenes. Itoh K, et al. **Mol Gen Genet** 1997 Jul;255(4):351-8

The physical relationship of barley chromosome 5 (1H) to the linkage groups of rice chromosomes 5 and 10. Korzun L, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):225-31

Construction of an 800-kb contig in the near-centromeric region of the rice blast resistance gene Pi-ta2 using a highly representative rice BAC library. Nakamura S, et al. **Mol Gen Genet** 1997 May;254(6):611-20

A chloroplast-derived sequence is utilized as a source of promoter sequences for the gene for subunit 9 of NADH dehydrogenase (nad9) in rice mitochondria. Nakazono M, et al. **Mol Gen Genet** 1996 Sep 25;252(4):371-8

Mapping QTLs for submergence tolerance in rice by AFLP analysis and selective genotyping. Nandi S, et al. **Mol Gen Genet** 1997 Jun;255(1):1-8

Development of microsatellite markers and characterization of simple sequence length polymorphism (SSLP) in rice (Oryza sativa L.). Panaud O, et al. **Mol Gen Genet** 1996 Oct 16;252(5):597-607

Chromosomal regions associated with segregation distortion of molecular markers in F2, backcross, doubled haploid, and recombinant inbred populations in rice (Oryza sativa L.). Xu Y, et al. **Mol Gen Genet** 1997 Feb 20;253(5):535-45

The cloned gene, Xa21, confers resistance to multiple Xanthomonas oryzae pv. oryzae isolates in transgenic plants. Wang GL, et al. **Mol Plant Microbe Interact** 1996 Dec;9(9):850-5

Evolution of the rice Xa21 disease resistance gene family. Song WY, et al. **Plant Cell** 1997 Aug;9(8):1279-87

Molecular cloning, expression and subcellular localization of a BiP homolog from rice endosperm tissue. Muench DG, et al. **Plant Cell Physiol** 1997 Apr;38(4):404-12

dad-1, A putative programmed cell death suppressor gene in rice. Tanaka Y, et al. **Plant Cell Physiol** 1997 Mar; 38(3):379-83

rbohA, a rice homologue of the mammalian gp91phox respiratory burst oxidase gene. Groom QJ, et al. **Plant J** 1996 Sep;10(3):515-22

Transcriptional repression by Oshox1, a novel homeodomain leucine zipper protein from rice. Meijer AH, et al. **Plant J** 1997 Feb;11(2):263-76

A rice bZIP protein, designated OSBZ8, is rapidly induced by abscisic acid. Nakagawa H, et al. **Plant J** 1996 Feb; 9(2):217-27

Differential expression of a CAK (cdc2-activating kinase)-like protein kinase, cyclins and cdc2 genes from rice during the cell cycle and in response to gibberellin. Sauter M. **Plant J** 1997 Feb;11(2):181-90

The structures of integration sites in transgenic rice. Takano M, et al. **Plant J** 1997 Mar;11(3):353-61

Cloning and characterization of the OsNramp family from Oryza sativa, a new family of membrane proteins possibly implicated in the transport of metal ions. Belouchi A, et al. **Plant Mol Biol** 1997 Apr;33(6):1085-92

Public informatics resources for rice and other grasses. Cartinhour SW. **Plant Mol Biol** 1997 Sep;35(1-2):241-51 (71 ref.)

Sequence composition and organization in the Sh2/A1-homologous region of rice [letter] Chen M, et al. **Plant Mol Biol** 1996 Dec;32(6):999-1001

Rice transformation: bombardment. Christou P. **Plant Mol Biol** 1997 Sep;35(1-2):197-203 (29 ref.)

Transformation of rice mediated by Agrobacterium tumefaciens. Hiei Y, et al. **Plant Mol Biol** 1997 Sep; 35(1-2):205-18 (119 ref.)

Retrotransposons of rice: their regulation and use for genome analysis. Hirochika H. **Plant Mol Biol** 1997 Sep; 35(1-2):231-40 (74 ref.)

A rapid and accurate strategy for rice contig map construction by combination of fingerprinting and hybridization. Hong G. **Plant Mol Biol** 1997 Sep; 35(1-2):129-33

Characterization of pyruvate decarboxylase genes from rice. Hossain MA, et al. **Plant Mol Biol** 1996 Jul;31(4):761-70

RNA expression patterns of a type 2 metallothionein-like gene from rice. Hsieh HM, et al. **Plant Mol Biol** 1996 Nov; 32(3):525-9

Characterization of the gene for delta1-pyrroline-5-carboxylate synthetase and correlation between the expression of the gene and salt tolerance in Oryza sativa L. Igarashi Y, et al. **Plant Mol Biol** 1997 Mar; 33(5):857-65

Characterization of the gene for pyruvate,orthophosphate dikinase from rice, a C3 plant, and a comparison of structure and expression between C3 and C4 genes for this protein. Imaizumi N, et al. **Plant Mol Biol** 1997 Jul; 34(5):701-16

Transposon tagging in rice. Izawa T, et al. **Plant Mol Biol** 1997 Sep;35(1-2):219-29 (42 ref.)

Conservation of rice genetic resources: the role of the International Rice Genebank at IRRI. Jackson MT. **Plant Mol Biol** 1997 Sep;35(1-2):61-7 (34 ref.)

Origin, dispersal, cultivation and variation of rice. Khush GS. **Plant Mol Biol** 1997 Sep;35(1-2):25-34

Towards map-based cloning of the barley stem rust resistance genes Rpg1 and rpg4 using rice as an intergenomic cloning vehicle. Kilian A, et al. **Plant Mol Biol** 1997 Sep; 35(1-2):187-95

Structure, chromosomal location and expression of a rice gene encoding the microsome omega-3 fatty acid desaturase. Kodama H, et al. **Plant Mol Biol** 1997 Feb; 33(3):493-502

A ribosomal protein L2 gene is transcribed, spliced, and

edited at one site in rice mitochondria. Kubo N, et al. **Plant Mol Biol** 1996 Jul;31(4):853–62

Physical mapping of the rice genome with YAC clones. Kurata N, et al. **Plant Mol Biol** 1997 Sep;35(1–2):101–13 (26 ref.)

Microsatellite marker development, mapping and applications in rice genetics and breeding. McCouch SR, et al. **Plant Mol Biol** 1997 Sep;35(1–2):89–99 (76 ref.)

Are rice chromosomes components of a holocentric chromosome ancestor? Moore G, et al. **Plant Mol Biol** 1997 Sep;35(1–2):17–23 (37 ref.)

Stringently and developmentally regulated levels of a cytoplasmic double-stranded RNA and its high-efficiency transmission via egg and pollen in rice. Moriyama H, et al. **Plant Mol Biol** 1996 Jul;31(4):713–9

Rice molecular genetic map using RFLPs and its applications. Nagamura Y, et al. **Plant Mol Biol** 1997 Sep; 35(1–2):79–87 (98 ref.)

Rice genetic resources: history, conservation, investigative characterization and use in Japan. Nakagahra M, et al. **Plant Mol Biol** 1997 Sep;35(1–2):69–77 (45 ref.)

Characterization of a novel rice bZIP protein which binds to the alpha-globulin promoter. Nakase M, et al. **Plant Mol Biol** 1997 Feb;33(3):513–22

The same nuclear proteins bind to the 5'-flanking regions of genes for the rice seed storage protein: 16 kDa albumin, 13 kDa prolamin and type II glutelin. Nakase M, et al. **Plant Mol Biol** 1996 Nov;32(4):621–30

T-DNA integration into genomic DNA of rice following Agrobacterium inoculation of isolated shoot apices. Park SH, et al. **Plant Mol Biol** 1996 Dec;32(6):1135–48

QTL analysis to study the association between leaf size and abscisic acid accumulation in droughted rice leaves and comparisons across cereals. Quarrie SA, et al. **Plant Mol Biol** 1997 Sep;35(1–2):155–65 (45 ref.)

Chalcone synthase in rice (Oryza sativa L.): detection of the CHS protein in seedlings and molecular mapping of the chs locus. Reddy AR, et al. **Plant Mol Biol** 1996 Nov; 32(4):735–43

Isolation and characterization of cDNAs encoding vacuolar H(+)-pyrophosphatase isoforms from rice (Oryza sativa L.). Sakakibara Y, et al. **Plant Mol Biol** 1996 Aug; 31(5):1029–38

Copia-like retrotransposons in rice: sequence heterogeneity, species distribution and chromosomal locations. Wang S, et al. **Plant Mol Biol** 1997 Apr;33(6):1051–8

Phytohormone-regulated beta-amylase gene expression in rice. Wang SM, et al. **Plant Mol Biol** 1996 Aug;31(5):975–82

Large-scale EST sequencing in rice. Yamamoto K, et al. **Plant Mol Biol** 1997 Sep;35(1–2):135–44 (39 ref.)

Genetic and molecular dissection of quantitative traits in rice. Yano M, et al. **Plant Mol Biol** 1997 Sep;35(1–2):145–53 (61 ref.)

Linkage map of phenotype and RFLP markers in rice. Yoshimura A, et al. **Plant Mol Biol** 1997 Sep;35(1–2):49–60 (36 ref.)

Physical mapping of the rice genome with BACs. Zhang HB, et al. **Plant Mol Biol** 1997 Sep;35(1–2):115–27 (55 ref.)

The rab16B promoter of rice contains two distinct abscisic acid-responsive elements. Ono A, et al. **Plant Physiol** 1996 Oct;112(2):483–91

The distribution of genes in the genomes of Gramineae. Barakat A, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):6857–61

Retrotransposons of rice involved in mutations induced by tissue culture. Hirochika H, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7783–8

Transgenic elite indica rice plants expressing CryIAc delta-endotoxin of Bacillus thuringiensis are resistant against yellow stem borer (Scirpophaga incertulas). Nayak P, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2111–6

Structure and expression of a rice hsp70 gene. Wang Q, et al. **Sci China C Life Sci** 1996 Jun;39(3):291–9

Rice cDNAs as a model for expressed genes of plants. Sasaki T. **Symp Soc Exp Biol** 1996;50:11–5

Evidence for genomic changes in transgenic rice (Oryza sativa L.) recovered from protoplasts. Bao PH, et al. **Transgenic Res** 1996 Mar;5(2):97–103

Tissue-specific expression in transgenic maize of four endosperm promoters from maize and rice. Russell DA, et al. **Transgenic Res** 1997 Mar;6(2):157–68

[Identification of transcription start site of waxy gene in O. sativa subsp. indica 232] Gao J, et al. **I Chuan Hsueh Pao** 1995;22(6):431–6 (Eng. Abstr.) **(Chi)**

HISTORY

Rice genetic resources: history, conservation, investigative characterization and use in Japan. Nakagahra M, et al. **Plant Mol Biol** 1997 Sep;35(1–2):69–77 (45 ref.)

METABOLISM

Biochemical characteristics of a rice (Oryza sativa L., IR36) G-protein alpha-subunit expressed in Escherichia coli. Seo HS, et al. **Biochem J** 1997 May 15;324 (Pt 1):273–81

Identification of stable plant cystatin/nematode proteinase complexes using mildly denaturing gelatin/polyacrylamide gel electrophoresis. Michaud D, et al. **Electrophoresis** 1996 Aug;17(8):1373–9

Two-dimensional electrophoresis of plant proteins and standardization of gel patterns. Tsugita A, et al. **Electrophoresis** 1996 May;17(5):855–65

The enzymology of lysine catabolism in rice seeds—isolation, characterization, and regulatory properties of a lysine 2-oxoglutarate reductase/saccharopine dehydrogenase bifunctional polypeptide. Gaziola SA, et al. **Eur J Biochem** 1997 Jul 1;247(1):364–71

Phytoalexin production elicited by exogenously applied jasmonic acid in rice leaves (Oryza sativa L.) is under the control of cytokinins and ascorbic acid. Tamogami S, et al. **FEBS Lett** 1997 Jul 21;412(1):61–4

A 45-bp proximal region containing AACA and GCN4 motif is sufficient to confer endosperm-specific expression of the rice storage protein glutelin gene, GluA-3. Yoshihara T, et al. **FEBS Lett** 1996 Apr 1;383(3):213–8

Deposition velocity of gaseous organic iodine from the atmosphere to rice plants. Muramatsu Y, et al. **Health Phys** 1996 Nov;71(5):757–62

Binding of endogenous and exogenous cadmium to glutelin in rice grains as studied by HPLC/ICP-MS with use of a stable isotope. Suzuki KT, et al. **J Trace Elem Med Biol** 1997 Jun;11(2):71–6

Cloning of a rice cDNA encoding a transcription factor homologous to barley GAMyb. Gubler F, et al. **Plant Cell Physiol** 1997 Mar;38(3):362–5

Phosphorylation of a protein (pp56) is related to the regeneration of rice cultured suspension cells. Komatsu S, et al. **Plant Cell Physiol** 1996 Sep;37(6):748–53

Rice embryo globulins: amino-terminal amino acid sequences, cDNA cloning and expression. Sun JL, et al. **Plant Cell Physiol** 1996 Jul;37(5):612–20

Characterization of the light-responsive promoter of rice chloroplast psbD-C operon and the sequence-specific DNA binding factor. To KY, et al. **Plant Cell Physiol** 1996 Jul;37(5):660–6

Glycemic index of grain amaranth, wheat and rice in NIDDM subjects. Chaturvedi A, et al. **Plant Foods Hum Nutr** 1997;50(2):171–8

Identification of a high-affinity binding protein for N-acetylchitooligosaccharide elicitor in the plasma membrane of suspension-cultured rice cells by affinity labeling. Ito Y, et al. **Plant J** 1997 Aug;12(2):347–56

Characterization and expression of a rice RAD23 gene. Schultz TF, et al. **Plant Mol Biol** 1997 Jun;34(3):557–62

Utilization of defatted rice bran by broiler chickens. Adrizal, et al. **Poult Sci** 1996 Aug;75(8):1012–7

Expression of an ortholog of replication protein A1 (RPA1) is induced by gibberellin in deepwater rice. van der Knaap E, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9979–83

Environmental contamination and seasonal variation of metals in soils, plants and waters in the paddy fields around a Pb-Zn mine in Korea. Jung MC, et al. **Sci Total Environ** 1997 May 30;198(2):105–21

MICROBIOLOGY

Breaking and entering: host penetration by the fungal rice blast pathogen Magnaporthe grisea. Howard RJ, et al. **Annu Rev Microbiol** 1996;50:491–512 (98 ref.)

Digestion of staphylococcal enterotoxin by Bacillus natto. Osawa R, et al. **Antonie Van Leeuwenhoek** 1997 May; 71(4):307–11

Organisation and molecular analysis of repeated DNA sequences in the rice blast fungus Magnaporthe grisea. Kachroo P, et al. **Curr Genet** 1997 Apr;31(4):361–9

Rearrangements at a DNA-fingerprint locus in the rice blast fungus. Shull V, et al. **Curr Genet** 1996 Aug;30(3):263–71

Analysis of host-induced response in the rice blast fungus Magnaporthe grisea using two-dimensional polyacrylamide gel electrophoresis. Kachroo P, et al. **Electrophoresis** 1997 Jan;18(1):163–9

Inheritance of dsRNAs in the rice blast fungus, Magnaporthe grisea. Chun SJ, et al. **FEMS Microbiol Lett** 1997 Mar 15;148(2):159–62

A large-insert (130 kbp) bacterial artificial chromosome library of the rice blast fungus Magnaporthe grisea: genome analysis, contig assembly, and gene cloning. Zhu H, et al. **Fungal Genet Biol** 1997 Jun;21(3):337–47

MAP kinase and cAMP signaling regulate infection structure formation and pathogenic growth in the rice blast fungus Magnaporthe grisea. Xu JR, et al. **Genes Dev** 1996 Nov 1;10(21):2696–706

Mycoflora of paddy and milled rice produced in the region of northeastern Argentina and southern Paraguay. Tonon SA, et al. **Int J Food Microbiol** 1997 Jul 22;37(2–3):231–5

Cloning and characterization of the rpfC gene of Xanthomonas oryzae pv. oryzae: involvement in exopolysaccharide production and virulence to rice. Tang JL, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):664–6

The cloned gene, Xa21, confers resistance to multiple Xanthomonas oryzae pv. oryzae isolates in transgenic plants. Wang GL, et al. **Mol Plant Microbe Interact** 1996 Dec;9(9):850–5

Alien introgression in rice. Brar DS, et al. **Plant Mol Biol** 1997 Sep;35(1–2):35–47 (45 ref.)

Transformation of rice mediated by Agrobacterium tumefaciens. Hiei Y, et al. **Plant Mol Biol** 1997 Sep; 35(1–2):205–18 (119 ref.)

PARASITOLOGY

Alien introgression in rice. Brar DS, et al. **Plant Mol Biol** 1997 Sep;35(1–2):35–47 (45 ref.)

PHYSIOLOGY

Blast disease of rice in regard to active oxygen. Averyanov AA, et al. **Biochem Soc Trans** 1996 May;24(2):205S

Oxidative stress and responses in Arabidopsis thaliana and Oryza sativa subjected to chilling and salinity stress. Burdon RH, et al. **Biochem Soc Trans** 1996 May; 24(2):469–72 (17 ref.)

Cloning of a Ca(2+)-ATPase gene and the role of cytosolic Ca2+ in the gibberellin-dependent signaling pathway in aleurone cells. Chen X, et al. **Plant J** 1997 Mar;11(3):363–71

Expression of arginine decarboxylase in seedlings of indica rice (Oryza sativa L.) cultivars as affected by salinity stress. Chattopadhyay MK, et al. **Plant Mol Biol** 1997 Jun; 34(3):477–83

Expression characteristics of OS-ACS1 and OS-ACS2, two members of the 1-aminocyclopropane-1-carboxylate synthase gene family in rice (Oryza sativa L. cv. Habiganj Aman II) during partial submergence. Zarembinski TI, et al. **Plant Mol Biol** 1997 Jan;33(1):71–7

Expansins in deepwater rice internodes. Cho HT, et al. **Plant Physiol** 1997 Apr;113(4):1137–43

Cool-temperature-induced chlorosis in rice plants. Yoshida R, et al. **Plant Physiol** 1996 Mar;110(3):997–1005

A rice homeobox gene, OSH1, is expressed before organ differentiation in a specific region during early embryogenesis. Sato Y, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8117–22

POISONING

Increased mortality from chronic liver disease and cirrhosis 13 years after the Taiwan "yucheng" ("oil disease") incident. Yu ML, et al. **Am J Ind Med** 1997 Feb;31(2):172–5

Comparison of clinical picture between Yusho/Yucheng cases and occupational PCB poisoning cases. Ikeda M. **Chemosphere** 1996 Feb;32(3):559–66 (53 ref.)

Approach to risk assessment of chlorinated dioxins from Yusho PCB poisoning. Masuda Y. **Chemosphere** 1996 Feb; 32(3):583–94

Concentrations of polychlorinated dibenzo-p-dioxins and dibenzofurans in human placental and fetal tissues from the U.S. and in placentas from Yu-Cheng exposed mothers. Schecter A, et al. **Chemosphere** 1996 Feb;32(3):551–7

Reassessment of PCDD/DFs and Co-PCBs toxicity in contaminated rice-bran oil responsible for the disease "Yu-Cheng". Soong DK, et al. **Chemosphere** 1997 Mar-Apr;34(5–7):1579–86

[Tissue distribution of methylsulfonyl metabolites derived from Kanechlor 400 in mice] Haraguchi K, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):157–61 (Eng. Abstr.) **(Jpn)**

[An epidemiologic examination on the prevalence of the periodontal diseases and oral pigmentation in Yusho patients in 1996] Hashiguchi I, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):226–30 (Eng. Abstr.) **(Jpn)**

[Symptoms and blood PCB level among chronic Yusho patients, twenty-five years after outbreak] Hirota Y, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):220–5 (Eng. Abstr.) **(Jpn)**

[Stimulation for sebum excretion of PCDDs, PCDFs and coplanar PCBs on bathing ceramic sand bath] Iida T, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):186–92 (Eng. Abstr.) **(Jpn)**

[Concentrations of PCDDs, PCDFs and coplanar PCBs in blood of 83 patients with Yusho] Iida T, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):169–76 (Eng. Abstr.) **(Jpn)**

[Levels of PCDDs, PCDFs and coplanar PCBs in sebum and blood of Yusho patients] Iida T, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):177–85 (Eng. Abstr.) **(Jpn)**

[The condition of PCBs and PCDFs in the blood of Yusho patients 20 years after the onset] Masuda Y, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):149–56 (Eng. Abstr.) **(Jpn)**

[Dermatological findings in the annual examination of the patients with Yusho in 1995-1996] Nakayama J, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):236–9 (Eng. Abstr.) **(Jpn)**

[Thyroid function in patients with Yusho: 28 year follow-up study] Tsuji H, et al. **Fukuoka Igaku Zasshi** 1997 May; 88(5):231–5 (Eng. Abstr.) **(Jpn)**

[Yearly and seasonal fluctuation of PCB concentration in skin surface lipid] Watanabe M, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):205–6 (Eng. Abstr.) **(Jpn)**

[Elevation of serum creatine kinase in the patients with Kanemi Yusho] Yoshimura T, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):216–9 (Eng. Abstr.) **(Jpn)**

STANDARDS

Rice inhibits intestinal secretions. Goldberg ED, et al. **Nutr Rev** 1996 Jan;54(1 Pt 1):36–7 (8 ref.)

VIROLOGY

The M(r) 43K major capsid protein of rice ragged stunt oryzavirus is a post-translationally processed product of a M(r) 67,348 polypeptide encoded by genome segment 8. Upadhyaya NM, et al. **Arch Virol** 1996;141(9):1689–701

The proteins encoded by rice grassy stunt virus RNA5 and

RNA6 are only distantly related to the corresponding proteins of other members of the genus Tenuivirus. Toriyama S, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2355–63

Rice ragged stunt Oryzavirus genome segment 9 encodes a 38 600 Mr structural protein. Uyeda I, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):975–8

Rice tungro bacilliform virus open reading frames II and III are translated from polycistronic pregenomic RNA by leaky scanning. Fütterer J, et al. **J Virol** 1997 Oct; 71(10):7984–9

The loss of outer capsid protein P2 results in nontransmissibility by the insect vector of rice dwarf phytoreovirus. Tomaru M, et al. **J Virol** 1997 Oct; 71(10):8019–23

Detection of rice tungro bacilliform virus in field and glasshouse samples from India using the polymerase chain reaction. Dasgupta I, et al. **J Virol Methods** 1996 Apr 26; 58(1–2):53–8

RICE TUNGRO BACILLIFORM VIRUS see **BADNAVIRUS**

RICIN

Recombinant RFB4 immunotoxins exhibit potent cytotoxic activity for CD22–bearing cells and tumors. Mansfield E, et al. **Blood** 1997 Sep 1;90(5):2020–6

Inhibition of cell proliferation on lens capsules by 4197X–ricin A immunoconjugate. Tarsio JF, et al. **J Cataract Refract Surg** 1997 Mar;23(2):260–6

ADMINISTRATION & DOSAGE

Cell–specific delivery of bacteriophage–encapsidated ricin A chain. Wu M, et al. **Bioconjug Chem** 1995 Sep–Oct; 6(5):587–95

A phase–I study of an anti–CD25 ricin A–chain immunotoxin (RFT5–SMPT–dgA) in patients with refractory Hodgkin's lymphoma. Engert A, et al. **Blood** 1997 Jan 15;89(2):403–10

ANALOGS & DERIVATIVES

Immunotoxin therapy of small–cell lung cancer: a phase I study of N901–blocked ricin. Lynch TJ Jr, et al. **J Clin Oncol** 1997 Feb;15(2):723–34

Intranasal stimulation of long–lasting immunity against aerosol ricin challenge with ricin toxoid vaccine encapsulated in polymeric microspheres. Yan C, et al. **Vaccine** 1996 Aug;14(11):1031–8

ANTAGONISTS & INHIBITORS

Fibronectin inhibits the cytotoxic effect of ricin A chain on endothelial cells. Baluna R, et al. **Int J Immunopharmacol** 1996 Jun–Jul;18(6–7):355–61

Potential chemoprotectant activity of mechanism–based glycosidase inhibitors against ricin toxicity in Chinese hamster ovary and macrophage J774A.1 cell cultures. Hassoun EA, et al. **J Appl Toxicol** 1996 Jan–Feb; 16(1):49–54

Potential chemoprotectant activity of 3'–azido–3'–deoxythymidine (AZT) and 2',3'–dideoxycytidine (DDC) against ricin toxicity in Chinese hamster ovary and macrophage J774A.1 cell cultures. Hassoun EA, et al. **J Appl Toxicol** 1996 Jan–Feb; 16(1):43–8

Structure–based identification of a ricin inhibitor. Yan X, et al. **J Mol Biol** 1997 Mar 14;266(5):1043–9

Structural analysis of ricin and implications for inhibitor design. Robertus JD, et al. **Toxicon** 1996 Nov–Dec; 34(11–12):1325–34

CHEMISTRY

Generation of a potent chimeric toxin by replacement of domain III of Pseudomonas exotoxin with ricin A chain KDEL. Pitcher C, et al. **Bioconjug Chem** 1995 Sep–Oct; 6(5):624–9

Conjugation of blocked ricin to an anti–CD19 monoclonal antibody increases antibody–induced cell calcium mobilization and CD19 internalization. Goulet AC, et al. **Blood** 1997 Sep 15;90(6):2364–75

Galactose–induced dimerization of blocked ricin at acidic pH: evidence for a third galactose–binding site in ricin B–chain. Venkatesh YP, et al. **Glycobiology** 1997 Apr; 7(3):329–35

Ricin toxin contains three lectin sites which contribute to its in vivo toxicity. Fu T, et al. **Int J Immunopharmacol** 1996 Dec;18(12):685–92

Laboratory preparation of a deglycosylated ricin toxin A chain containing immunotoxin directed against a CD7 T lineage differentiation antigen for phase I human clinical studies involving T cell malignancies. Vallera DA, et al. **J Immunol Methods** 1996 Oct 16;197(1–2):69–83

Ricin A–chain structural determinant for binding substrate analogues: a molecular dynamics simulation analysis. Olson MA. **Proteins** 1997 Jan;27(1):80–95

Structural analysis of ricin and implications for inhibitor design. Robertus JD, et al. **Toxicon** 1996 Nov–Dec; 34(11–12):1325–34

GENETICS

Cotranslational folding of nascent proteins on Escherichia coli ribosomes. Hardesty B, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1199–207 (22 ref.)

Double–lectin site ricin B chain mutants expressed in insect cells have residual galactose binding: evidence for more than two lectin sites on the ricin toxin B chain. Fu T, et al. **Bioconjug Chem** 1996 Nov–Dec;7(6):651–8

Preproricin expressed in Nicotiana tabacum cells in vitro is fully processed and biologically active. Tagge EP, et al. **Protein Expr Purif** 1996 Aug;8(1):109–18

IMMUNOLOGY

Comparison of the pulmonary distribution and efficacy of antibodies given to mice by intratracheal instillation or aerosol inhalation. Vogel P, et al. **Lab Anim Sci** 1996 Oct; 46(5):516–23

Intranasal stimulation of long–lasting immunity against aerosol ricin challenge with ricin toxoid vaccine encapsulated in polymeric microspheres. Yan C, et al. **Vaccine** 1996 Aug;14(11):1031–8

METABOLISM

Partial restoration of inactivated ribosomes: role of the aldehyde group generated by RNA N–glycosidase in the sarcin/ricin domain of 28S rRNA in ribosome. Cheng LP, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):381–90

Dependence of depurination of oligoribonucleotides by ricin A–chain on divalent cations and chelating agents. Glück A, et al. **Biochem Mol Biol Int** 1996 May;39(2):285–91

Ricin toxin contains at least three galactose–binding sites located in B chain subdomains 1 alpha, 1 beta, and 2 gamma. Frankel AE, et al. **Biochemistry** 1996 Nov 26; 35(47):14749–56

Accumulating evidence suggests that several AB–toxins subvert the endoplasmic reticulum–associated protein degradation pathway to enter target cells. Hazes B, et al. **Biochemistry** 1997 Sep 16;36(37):11051–4 (48 ref.)

Mannose receptor dependent uptake of ricin A1 and A2 chains by macrophages. Riccobono F, et al. **Carbohydr Res** 1996 Mar 18;282(2):285–92

Ricin–binding proteins along the endocytic pathway: the major endosomal ricin–binding protein is endosome–specific. Alami M, et al. **Cell Biol Int** 1997 Mar; 21(3):145–50

Effect of calmodulin antagonists on endocytosis and intracellular transport of ricin in polarized MDCK cells. Llorente A, et al. **Exp Cell Res** 1996 Sep 15;227(2):298–308

The role of structural domains in RIP II toxin model membrane binding. Agapov II, et al. **FEBS Lett** 1997 Jan 27;402(1):91–3

Restoration of lectin activity to a non–glycosylated ricin B chain mutant by the introduction of a novel N–glycosylation site. Zhan J, et al. **FEBS Lett** 1997 May 5;407(3):271–4

Galactose–induced dimerization of blocked ricin at acidic pH: evidence for a third galactose–binding site in ricin B–chain. Venkatesh YP, et al. **Glycobiology** 1997 Apr; 7(3):329–35

Ricin A chain can transport unfolded dihydrofolate reductase into the cytosol. Beaumelle B, et al. **J Biol Chem** 1997 Aug 29;272(35):22097–102

The effects of cytochalasin D and phorbol myristate acetate on the apical endocytosis of ricin in polarised Caco–2 cells. Shurety W, et al. **J Cell Sci** 1996 Dec;109 (Pt 12):2927–35

IL2 fused to lectin–deficient ricin is toxic to human leukemia cells expressing the IL2 receptor. Frankel AE, et al. **Leukemia** 1997 Jan;11(1):22–30

Ribotoxic stress response: activation of the stress–activated protein kinase JNK1 by inhibitors of the peptidyl transferase reaction and by sequence–specific RNA damage to the alpha–sarcin/ricin loop in the 28S rRNA. Iordanov MS, et al. **Mol Cell Biol** 1997 Jun;17(6):3373–81

Retrograde transport of mutant ricin to the endoplasmic reticulum with subsequent translocation to cytosol. Rapak A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3783–8

Characterization of a ricin fusion toxin targeted to the interleukin–2 receptor. Frankel AE, et al. **Protein Eng** 1996 Oct;9(10):913–9

A hypothesis to explain the substrate reactivity of ribosomal and stem–loop RNA with ricin A–chain. Link T, et al. **Toxicon** 1996 Nov–Dec;34(11–12):1317–24

PHARMACOKINETICS

Free ricin A chain reaches an early compartment of the secretory pathway before it enters the cytosol. Simpson JC, et al. **Exp Cell Res** 1996 Dec 15;229(2):447–51

The chronic lymphocytic leukemia antigen (cCLLa) as immunotherapy target: pharmacokinetics and biodistribution of two divalent, ricin–based immunotoxins in xenografted athymic mice. Faguet GB, et al. **Leuk Lymphoma** 1997 May;25(5–6):509–20

Endocytosis, intracellular transport, and cytotoxic action of Shiga toxin and ricin. Sandvig K, et al. **Physiol Rev** 1996 Oct;76(4):949–66 (235 ref.)

PHARMACOLOGY

Combination of antiviral immunotoxin and ganciclovir or cidofovir for the treatment of murine cytomegalovirus infections. Smee DF, et al. **Antiviral Res** 1996 Nov; 32(3):165–71

Characterization of lipophosphoglycan from a ricin–resistant mutant of Leishmania major. Opat A, et al. **Glycobiology** 1996 Jun;6(4):387–97

Purification of primary human hepatocytes using ricin A chain [letter] Johnston DE, et al. **In Vitro Cell Dev Biol Anim** 1996 Jul–Aug;32(7):388–90

Highly potent CD22–recombinant ricin A results in complete cure of disseminated malignant B–cell xenografts in SCID mice but fails to cure solid xenografts in nude mice. Van Horssen PJ, et al. **Int J Cancer** 1996 Nov 4;68(3):378–83

In vitro fusion of endocytic vesicles: effects of reagents that alter endosomal pH. Pless DD, et al. **J Cell Biochem** 1996 Jul;62(1):27–39

Response of glial cells and activation of complement following motorneuron degeneration induced by toxic ricin. Törnquist E, et al. **Neurosci Res** 1997 Jun; 28(2):167–75

POISONING

Ricin disturbs calcium homeostasis in the rabbit heart. Ma L, et al. **J Biochem Toxicol** 1995 Dec;10(6):323–8

[Poisoning caused by ricin seeds (letter)] Gros Bañeres B, et al. **Aten Primaria** 1996 Sep 15;18(4):203 **(Spa)**

THERAPEUTIC USE

Complete sustained response of a refractory, post–transplantation, large B–cell lymphoma to an anti–CD22 immunotoxin. Senderowicz AM, et al. **Ann Intern Med** 1997 Jun 1;126(11):882–5

Mouse multivalent IgG(2a, b) antibody––ricin A–chain immunotoxins combined with homologous or heterologous interleukin 2 in the treatment of a murine malignant lymphoproliferation (EL4). Mota G, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(2–3):131–6

Transferrin–ricin A chain toxin limits the development of experimental proliferative vitreoretinopathy. Handa JT, et al. **Exp Eye Res** 1996 Jun;62(6):689–96

Combination immunotoxin treatment and chemotherapy in SCID mice with advanced, disseminated Daudi lymphoma. Ghetie MA, et al. **Int J Cancer** 1996 Sep 27;68(1):93–6

TOXICITY

Selective cytotoxicity of ricin A chain immunotoxins towards murine cytomegalovirus–infected cells. Barnett BB, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):470–2

Toxicity and cytotoxicity of nigrin b, a two–chain ribosome–inactivating protein from Sambucus nigra: comparison with ricin. Battelli MG, et al. **Arch Toxicol** 1997;71(6):360–4

Specific cytotoxicity against cells bearing HIV1 gp120 antigen by bacteriophage–encapsidated ricin A chain: implications for cell specific drug delivery. Wu M, et al. **Biochem Soc Trans** 1997 May;25(2):158S

An in vitro model for toxin–mediated vascular leak syndrome: ricin toxin A chain increases the permeability of human endothelial cell monolayers. Lindstrom AL, et al. **Blood** 1997 Sep 15;90(6):2323–34

Lectin–deficient ricin toxin intoxicates cells bearing the D–mannose receptor. Frankel AE, et al. **Carbohydr Res** 1997 May 16;300(3):251–8

Differential sensitivity of HELA cells to the type 2 ribosome–inactivating proteins ebulin l, nigrin b and nigrin f as compared with ricin. Citores L, et al. **Cell Mol Biol (Noisy–le–grand)** 1996 Jun;42(4):473–6

Induction of the heat shock response prevents tissue injury during acute inflammation of the rat ileum. Stojadinovic A, et al. **Crit Care Med** 1997 Feb;25(2):309–17

Free ricin A chain reaches an early compartment of the secretory pathway before it enters the cytosol. Simpson JC, et al. **Exp Cell Res** 1996 Dec 15;229(2):447–51

Toxicity of ricin and volkensin, two ribosome–inactivating proteins, to microglia, astrocyte, and neuron cultures. Sparapani M, et al. **Glia** 1997 Jul;20(3):203–9

Morphology of ricin and abrin exposed endothelial cells is consistent with apoptotic cell death. Hughes JN, et al. **Hum Exp Toxicol** 1996 May;15(5):443–51

Reactive oxygen species involvement in ricin–induced thyroid toxicity in rat. Sadani GR, et al. **Hum Exp Toxicol** 1997 May;16(5):254–6

Fibronectin inhibits the cytotoxic effect of ricin A chain on endothelial cells. Baluna R, et al. **Int J Immunopharmacol** 1996 Jun–Jul;18(6–7):355–61

Ricin toxin contains three lectin sites which contribute to its in vivo toxicity. Fu T, et al. **Int J Immunopharmacol** 1996 Dec;18(12):685–92

Potential chemoprotectant activity of 3'–azido–3'–deoxythymidine (AZT) and 2',3'–dideoxycytidine (DDC) against ricin toxicity in Chinese hamster ovary and macrophage J774A.1 cell cultures. Hassoun EA, et al. **J Appl Toxicol** 1996 Jan–Feb; 16(1):43–8

Potential chemoprotectant activity of mechanism–based glycosidase inhibitors against ricin toxicity in Chinese hamster ovary and macrophage J774A.1 cell cultures. Hassoun EA, et al. **J Appl Toxicol** 1996 Jan–Feb; 16(1):49–54

The chronic lymphocytic leukemia antigen (cCLLa) as immunotherapy target: assessment of LD50 and MTD of four ricin–based anti–cCLLa immunotoxins (ITs) in Balb/c mice. Faguet GB, et al. **Leuk Lymphoma** 1997 May; 25(5–6):531–7

Ricin fusion toxin targeted to the human granulocyte–macrophage colony stimulating factor

receptor is selectively toxic to acute myeloid leukemia cells. Burbage C, et al. **Leuk Res** 1997 Jul;21(7):681–90
Endocytosis, intracellular transport, and cytotoxic action of Shiga toxin and ricin. Sandvig K, et al. **Physiol Rev** 1996 Oct;76(4):949–66 (235 ref.)
The synovial membrane, liver, and tongue: target organs for a ricin A-chain immunotoxin (ZD0490). Westwood FR, et al. **Toxicol Pathol** 1996 Jul–Aug;24(4):477–83
Aerosolized specific antibody protects mice from lung injury associated with aerosolized ricin exposure. Poli MA, et al. **Toxicon** 1996 Sep;34(9):1037–44

RICINOLEIC ACIDS

ADVERSE EFFECTS

Allergic contact dermatitis from disodium ricinoleamido MEA-sulfosuccinate in shampoo. Tan BB, et al. **Contact Dermatitis** 1996 Nov;35(5):307
Allergic contact dermatitis from oleyl alcohol in lipstick cross-reacting with ricinoleic acid in castor oil and lanolin. Tan BB, et al. **Contact Dermatitis** 1997 Jul;37(1):41–2

METABOLISM

Accumulation of ricinoleic, lesquerolic, and densipolic acids in seeds of transgenic Arabidopsis plants that express a fatty acyl hydroxylase cDNA from castor bean. Broun P, et al. **Plant Physiol** 1997 Mar;113(3):933–42

RICINUS

see related
CASTOR BEAN
CASTOR OIL
RICIN

CHEMISTRY

Amino acid sequence of a new 2S albumin from Ricinus communis which is part of a 29-kDa precursor protein. da Silva JG Jr, et al. **Arch Biochem Biophys** 1996 Dec 1; 336(1):10–8
Purification and sequencing of napin-like protein small and large chains from Momordica charantia and Ricinus communis seeds and determination of sites phosphorylated by plant Ca(2+)-dependent protein kinase. Neumann GM, et al. **Biochim Biophys Acta** 1996 Dec 5;1298(2):223–40

ENZYMOLOGY

High level expression of Ricinus communis casbene synthase in Escherichia coli and characterization of the recombinant enzyme. Hill AM, et al. **Arch Biochem Biophys** 1996 Dec 15;336(2):283–9
Purification and characterization of cytosolic pyruvate kinase from leaves of the castor oil plant. Hu Z, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):298–307
Characterization of oleoyl-12-hydroxylase in castor microsomes using the putative substrate, 1-acyl-2-oleoyl-sn-glycero-3-phosphocholine. Lin JT, et al. **Lipids** 1996 Jun;31(6):571–7

RICKETS

Nutritional rickets in a 2-year-old child: case report. McDonnell D, et al. **Pediatr Dent** 1997 Mar–Apr; 19(2):127–30
Targeted ablation of the vitamin D receptor: an animal model of vitamin D-dependent rickets type II with alopecia. Li YC, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9831–5

BLOOD

Plasma osteocalcin in healthy Nigerian children and in children with calcium-deficiency rickets. Oginni LM, et al. **Calcif Tissue Int** 1996 Dec;59(6):424–7
Osteocalcin abnormalities in Hyp mice reflect altered genetic expression and are not due to altered clearance, affinity for mineral, or ambient phosphorus levels. Carpenter TO, et al. **Endocrinology** 1996 Dec;137(12):5213–9
Radiological, biochemical, and hormonal changes in malnourished children with rachitic manifestations. Soliman AT, et al. **J Trop Pediatr** 1996 Feb;42(1):34–7

CHEMICALLY INDUCED

Rickets and soil strontium. Ozgür S, et al. **Arch Dis Child** 1996 Dec;75(6):524–6

COMPLICATIONS

Fractures in very low birth weight infants with rickets. Dabezies EJ, et al. **Clin Orthop** 1997 Feb;(335):233–9
Nutritional rickets in a child with Down syndrome. Cabana MD, et al. **Clin Pediatr (Phila)** 1997 Apr;36(4):235–7
Case-control study of the role of nutritional rickets in the risk of developing pneumonia in Ethiopian children. Muhe L, et al. **Lancet** 1997 Jun 21;349(9068):1801–4
Rickets and childhood pneumonia [letter] Smyth A, et al. **Lancet** 1997 Sep 13;350(9080):811
Hypophosphatemic vitamin-D resistant rickets associated with epidermal nevus syndrome. A case report. Tokatli A, et al. **Turk J Pediatr** 1997 Apr–Jun;39(2):247–51

CONGENITAL

Congenital rickets [letter; comment] Ozsoylu S, et al. **Eur J Pediatr** 1996 Sep;155(9):830–1. Comment on: Eur J Pediatr 1995 Nov;154(11):915–8.

DIAGNOSIS

Early detection of infants with hypophosphatemic vitamin D resistant rickets (HDRR). Minamitani K, et al. **Endocr J** 1996 Jun;43(3):339–43
Cholecalciferol-dependent rickets [letter; comment] Ozsoylu S. **Lancet** 1997 Mar 8;349(9053):728. Comment on: Lancet 1996 Dec 21–28;348(9043):1705.
Index of suspicion. Case 1. Rickets. Colson ER, et al. **Pediatr Rev** 1996 Sep;17(9):319–21

DRUG THERAPY

Vitamin-D dependent rickets type II. Mishra S, et al. **Indian Pediatr** 1996 Apr;33(4):334–6 (15 ref.)

EPIDEMIOLOGY

Prevalence and risk factors for asymmetric posture in preschool children aged 6–7 years. Juskeliene V, et al. **Int J Epidemiol** 1996 Oct;25(5):1053–9

ETIOLOGY

Rickets of premature infants induced by calcium deficiency. A case report. Tsai JR, et al. **Chang Keng I Hsueh** 1997 Jun;20(2):142–7
Autosomal dominant hypophosphatemic rickets/osteomalacia: clinical characterization of a novel renal phosphate-wasting disorder. Econs MJ, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):674–81
Rickets: the chicken or the egg! [letter; comment] Barness LA. **J Pediatr** 1996 Dec;129(6):941–2. Comment on: J Pediatr 1996 May;128(5 Pt 1):692–4.
"D or not D"—that is the question [letter; comment] Thacher T, et al. **J Pediatr** 1997 Feb;130(2):332–3. Comment on: J Pediatr 1996 May;128(5 Pt 1):692–4.
Etiology of nutritional rickets: geographic variations [letter; comment] Walker AR. **J Pediatr** 1997 Mar;130(3):501–3. Comment on: J Pediatr 1996 May;128(5 Pt 1):600–1. Comment on: J Pediatr 1996 May;128(5 Pt 1):692–4.
Rickets and protein malnutrition in northern Nigeria. Walter EA, et al. **J Trop Pediatr** 1997 Apr;43(2):98–102
Cholecalciferol-dependent rickets [letter; comment] Utian HL. **Lancet** 1997 Mar 8;349(9053):728–9. Comment on: Lancet 1996 Dec 21–28;348(9043):1705.
[Nutritional rickets—an old disease with new relevance] Brunvand L, et al. **Nord Med** 1996 Sep;111(7):219–21 (13 ref.) (Eng. Abstr.) **(Nor)**
[Insufficient AD-profylaxis may result in rachitis] Westphal O. **Lakartidningen** 1997 Jan 15;94(3):125–6 **(Swe)**

GENETICS

Genetic rickets and osteomalacia. Weisman Y, et al. **Curr Ther Endocrinol Metab** 1997;6:527–9 (6 ref.)
Osteocalcin abnormalities in Hyp mice reflect altered genetic expression and are not due to altered clearance, affinity for mineral, or ambient phosphorus levels. Carpenter TO, et al. **Endocrinology** 1996 Dec;137(12):5213–9
Vitamin-D dependent rickets type II. Mishra S, et al. **Indian Pediatr** 1996 Apr;33(4):334–6 (15 ref.)
Craniosynostosis in X-linked hypophosphataemic rickets. Willis FR, et al. **J Paediatr Child Health** 1997 Feb; 33(1):78–9 (12 ref.)
[Molecular mechanisms of familial rachitis] Glorieux FH. **Arch Pediatr** 1997;4(2 Suppl 2):102s–105s (26 ref.) **(Fre)**

HISTORY

Charles Dickens: his quaint little "person of the house," and the English disease. Gamble JG. **Pharos** 1996 Fall; 59(4):24–8
[Repeat cesarean delivery by the Zurich city wound physician Johann Jakob Locher 1817/18] Mörgeli C, et al. **Gesnerus** 1996;53(3–4):194–216 (Eng. Abstr.) **(Ger)**
[Rachitis, English disease, punishment or curse? An old disease of new interest in Sweden] Norvenius SG. **Lakartidningen** 1997 Jan 15;94(3):122–5 **(Swe)**

METABOLISM

Influence of vitamin D status on hyaluronan localization in bone. Genever PG, et al. **Bone** 1996 May;18(5):429–35
Elevated collagen turnover in Nigerian children with calcium-deficiency rickets. Sharp CA, et al. **Calcif Tissue Int** 1997 Aug;61(2):87–94
Vitamin D3 elicits calcium response and activates blood monocyte-derived macrophages from patients with vitamin D dependent rickets type II. Takeda E, et al. **FEBS Lett** 1996 Nov 4;396(2–3):157–60
Static and dynamic bone changes in hospitalized patients suffering from rickets—a histomorphometric study. Raubenheimer EJ, et al. **Histopathology** 1997 Jul;31(1):12–7
[Molecular mechanisms of familial rachitis] Glorieux FH. **Arch Pediatr** 1997;4(2 Suppl 2):102s–105s (26 ref.) **(Fre)**

PATHOLOGY

Static and dynamic bone changes in hospitalized patients suffering from rickets—a histomorphometric study. Raubenheimer EJ, et al. **Histopathology** 1997 Jul;31(1):12–7

PHYSIOPATHOLOGY

Selective modulation by vitamin D of renal response to parathyroid hormone: a study in calcitriol-resistant rickets. Even L, et al. **J Clin Endocrinol Metab** 1996 Aug; 81(8):2836–40
Radiological, biochemical, and hormonal changes in malnourished children with rachitic manifestations. Soliman AT, et al. **J Trop Pediatr** 1996 Feb;42(1):34–7

PREVENTION & CONTROL

Persistence of Vitamin D-deficiency rickets in Toronto in the 1990s [see comments] Binet A, et al. **Can J Public Health** 1996 Jul–Aug;87(4):227–30. Comment in: Can J Public Health 1996 Nov–Dec;87(6):375. Comment in: Can J Public Health 1996 Nov–Dec;87(6):375–6. Comment in: Can J Public Health 1997 Jan–Feb;88(1):10.
Rickets prevention [letter; comment] Davey M. **Can J Public Health** 1996 Nov–Dec;87(6):375–6. Comment on: Can J Public Health 1996 Jul–Aug;87(4):227–30.
Rickets prevention [letter; comment] Smith PJ. **Can J Public Health** 1996 Nov–Dec;87(6):375. Comment on: Can J Public Health 1996 Jul–Aug;87(4):227–30.
Rickets prevention [letter; comment] Smith PJ. **Can J Public Health** 1997 Jan–Feb;88(1):10. Comment on: Can J Public Health 1996 Jul–Aug;87(4):227–30.
Minnesota rickets. Need for a policy change to support vitamin D supplementation. Eugster EA, et al. **Minn Med** 1996 Aug;79(8):29–32
[Vitamin deficiency is very rare in Sweden. Vitamin D supplementation to children for prevention of rickets] Becker W. **Lakartidningen** 1997 Aug 27;94(35):2936, 2939–40 **(Swe)**

THERAPY

Genetic rickets and osteomalacia. Weisman Y, et al. **Curr Ther Endocrinol Metab** 1997;6:527–9 (6 ref.)

VETERINARY

Rickets in a litter of racing greyhounds. Malik R, et al. **J Small Anim Pract** 1997 Mar;38(3):109–14
A clumsy 3-year-old who liked junk food [see comments] von Mühlendahl KE, et al. **Lancet** 1996 Dec 21–28; 348(9043):1705. Comment in: Lancet 1997 Mar 8;349(9053):728. Comment in: Lancet 1997 Mar 8;349(9053):728–9.
Effect of 1,25-dihydroxycholecalciferol, cholecalciferol, and fluorescent lights on the development of tibial dyschondroplasia and rickets in broiler chickens. Elliot MA, et al. **Poult Sci** 1997 Apr;76(4):570–80
Rickets in a 6-month-old monkey. Liu SK. **Skeletal Radiol** 1996 Jan;25(1):70–2 (13 ref.)
Hypophosphataemic rickets and nephrocalcinosis in ostrich chicks brooded and reared on limestone sand. Morrow CJ, et al. **Vet Rec** 1997 May 17;140(20):531–2

RICKETS, HYPOPHOSPHATEMIC see **HYPOPHOSPHATEMIA, FAMILIAL**

RICKETS, RENAL see **RENAL OSTEODYSTROPHY**

RICKETS, VITAMIN D-RESISTANT see **HYPOPHOSPHATEMIA, FAMILIAL**

RICKETS, X-LINKED HYPOPHOSPHATEMIC see **HYPOPHOSPHATEMIA, FAMILIAL**

RICKETTSIA

The biology of rickettsiae. Hackstadt T. **Infect Agents Dis** 1996 Jun;5(3):127–43 (154 ref.)
Role of T lymphocyte subsets in immunity to spotted fever group Rickettsiae. Feng H, et al. **J Immunol** 1997 Jun 1; 158(11):5314–20
Tick bite fever in black South Africans—a rare disease? Cohen GL, et al. **J Infect** 1996 May;32(3):235–7
Pyrenean bears [letter; comment] Guiserix J. **Lancet** 1997 Aug 23;350(9077):596. Comment on: Lancet 1997 Jul 12;350(9071):112–3.

CLASSIFICATION

African tick-bite fever. An imported spotless rickettsiosis. Brouqui P, et al. **Arch Intern Med** 1997 Jan 13; 157(1):119–24 (40 ref.)
Rickettsia aeschlimannii sp. nov., a new spotted fever group rickettsia associated with Hyalomma marginatum ticks. Beati L, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):548–54
Rickettsia africae sp. nov., the etiological agent of African tick bite fever. Kelly PJ, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):611–4
Rickettsia peacockii sp. nov., a new species infecting wood ticks, Dermacentor andersoni, in western Montana. Niebylski ML, et al. **Int J Syst Bacteriol** 1997 Apr; 47(2):446–52
Characterization of a spotted fever group Rickettsia from Ixodes ricinus ticks in Sweden. Nilsson K, et al. **J Clin Microbiol** 1997 Jan;35(1):243–7
Protein characterization of Australian spotted fever group rickettsiae and monoclonal antibody typing of Rickettsia

honei. Stenos J, et al. **J Clin Microbiol** 1997 Jan;35(1):261–3
A new tick-transmitted disease due to Rickettsia slovaca [letter] [see comments] Raoult D, et al. **Lancet** 1997 Jul 12;350(9071):112–3. Comment in: Lancet 1997 Aug 23;350(9077):596.
Molecular evidence for single Wolbachia infections among geographic strains of the flour beetle Tribolium confusum. Fialho RF, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22;264(1384):1065–8

DRUG EFFECTS

In vitro susceptibilities of Bartonella henselae, B. quintana, B. elizabethae, Rickettsia rickettsii, R. conorii, R. akari, and R. prowazekii to macrolide antibiotics as determined by immunofluorescent-antibody analysis of infected Vero cell monolayers. Ives TJ, et al.
Antimicrob Agents Chemother 1997 Mar;41(3):578–82
The in-vitro anti-rickettsial activity of macrolides. Keysary A, et al. **J Antimicrob Chemother** 1996 Oct;38(4):727–31
Bacteriostatic and bactericidal activity of levofloxacin against Rickettsia rickettsii, Rickettsia conorii, 'Israeli spotted fever group rickettsia' and Coxiella burnetii. Maurin M, et al. **J Antimicrob Chemother** 1997 Jun;39(6):725–30

ENZYMOLOGY

Citrate synthase gene comparison, a new tool for phylogenetic analysis, and its application for the rickettsiae. Roux V, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):252–61

GENETICS

Sequence analysis and comparison of 190 K surface antigen gene fragment of a new species of spotted fever group rickettsiae. Zhang JZ, et al. **Acta Virol** 1997 Feb;41(1):41–5
Genotypic identification of three new strains of spotted fever group rickettsiae isolated in China. Zhang JZ, et al.
Acta Virol 1996 Sep;40(4):215–9
Biological and genetic characterization of Rickettsia sibirica strains isolated in the endemic area of the north Asian tick typhus. Balayeva NM, et al. **Am J Trop Med Hyg** 1996 Dec;55(6):685–92
Single and double infections with Wolbachia in the parasitic wasp Nasonia vitripennis: effects on compatibility. Perrot-Minnot MJ, et al. **Genetics** 1996 Jun;143(2):961–72
PCR-based detection of Wolbachia, cytoplasmic incompatibility microorganisms, infected in natural populations of Laodelphax striatellus (Homoptera: Delphacidae) in central Japan: has the distribution of Wolbachia spread recently? Hoshizaki S, et al.
Insect Mol Biol 1995 Nov;4(4):237–43
Rickettsia peacockii sp. nov., a new species infecting wood ticks, Dermacentor andersoni, in western Montana. Niebylski ML, et al. **Int J Syst Bacteriol** 1997 Apr; 47(2):446–52
Citrate synthase gene comparison, a new tool for phylogenetic analysis, and its application for the rickettsiae. Roux V, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):252–61
Genetic variation in Australian spotted fever group rickettsiae. Baird RW, et al. **J Clin Microbiol** 1996 Jun; 34(6):1526–30
Phenotypic and genotypic characterization of spotted fever group Rickettsiae isolated from Catalan Rhipicephalus sanguineus ticks. Beati L, et al. **J Clin Microbiol** 1996 Nov; 34(11):2688–94
Differentiation of spotted fever group rickettsiae by sequencing and analysis of restriction fragment length polymorphism of PCR-amplified DNA of the gene encoding the protein rOmpA. Roux V, et al.
J Clin Microbiol 1996 Sep;34(9):2058–65

IMMUNOLOGY

Sequence analysis and comparison of 190 K surface antigen gene fragment of a new species of spotted fever group rickettsiae. Zhang JZ, et al. **Acta Virol** 1997 Feb;41(1):41–5
Comparison of serological reactions of Rickettsiae-infected patients and rabbit anti-Proteus OX antibodies with Proteus OX2, OX19 and OXK lipopolysaccharides. Amano K, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(4):235–40
Serosurvey for Cowdria ruminantium, Coxiella burnetii, and Spotted fever group rickettsiae in ostriches (Struthio camelus) from Zimbabwe. Kelly PJ, et al. **Avian Dis** 1996 Apr-Jun;40(2):448–52
Serological examination of human and animal sera from six countries of three continents for the presence of rickettsial antibodies. Kováčová E, et al. **Eur J Epidemiol** 1996 Feb; 12(1):85–9
Prevalence of antibodies to rickettsiae in the north-western part of Bosnia and Herzegovina. Punda-Polic V, et al.
Eur J Epidemiol 1995 Dec;11(6):697–9
Production of monoclonal antibodies against Rickettsia massiliae and their use in antigenic and epidemiological studies. Xu W, et al. **J Clin Microbiol** 1997 Jul; 35(7):1715–21
Characterization of and application of monoclonal antibodies against Rickettsia africae, a newly recognized species of spotted fever group rickettsia. Xu W, et al.
J Clin Microbiol 1997 Jan;35(1):64–70
Epidemiological survey of small rodents for spotted fever rickettsial antibody in Hokkaido, Japan. Okabayashi T, et al. **Jpn J Med Sci Biol** 1996 Apr;49(2):63–8
Serological survey of spotted fever group rickettsia in wild rats in Thailand in the 1970s. Okabayashi T, et al.
Microbiol Immunol 1996;40(12):895–8
Demonstration of a heat-stable 120-kilodalton protein of Rickettsia japonica as a spotted fever group-common antigen. Uchiyama T, et al. **Microbiol Immunol** 1996; 40(2):133–9

ISOLATION & PURIFICATION

Isolation of Rickettsia akari from a patient in a region where Mediterranean spotted fever is endemic. Radulovic S, et al. **Clin Infect Dis** 1996 Feb;22(2):216–20
An outbreak of spotted fever rickettsiosis in U.S. Army troops deployed to Botswana. Smoak BL, et al.
Emerg Infect Dis 1996 Jul-Sep;2(3):217–21
Ulceroglandular lymphadenopathy due to Rickettsia conorii in Italy [letter] Castagnola E, et al.
Eur J Clin Microbiol Infect Dis 1996 Sep;15(9):766–7 (5 ref.)
Tick zoonoses in the southern part of Switzerland (Canton Ticino): occurrence of Borrelia burgdorferi sensu lato and Rickettsia sp. Bernasconi MV, et al. **Eur J Epidemiol** 1997 Feb;13(2):209–15
Domestic cats as indicators of the presence of spotted fever and typhus group rickettsiae. Matthewman L, et al.
Eur J Epidemiol 1997 Jan;13(1):109–11
Mediterranean spotted fever: a preliminary tick field study. Oteo JA, et al. **Eur J Epidemiol** 1996 Oct;12(5):475–8
Wolbachia infection and cytoplasmic incompatibility in Drosophila species. Bourtzis K, et al. **Genetics** 1996 Nov; 144(3):1063–73
Rickettsia aeschlimannii sp. nov., a new spotted fever group rickettsia associated with Hyalomma marginatum ticks. Beati L, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):548–54
Phenotypic and genotypic characterization of spotted fever group Rickettsiae isolated from Catalan Rhipicephalus sanguineus ticks. Beati L, et al. **J Clin Microbiol** 1996 Nov; 34(11):2688–94
Rickettsia felis: a new species of pathogenic rickettsia isolated from cat fleas. Higgins JA, et al. **J Clin Microbiol** 1996 Mar;34(3):671–4
Use of enzyme-linked immunosorbent assay techniques with cross-reacting human sera in diagnosis of murine typhus and spotted fever. Keysary A, et al. **J Clin Microbiol** 1997 Apr;35(4):1034–5
Diagnosis of Mediterranean spotted fever by cultivation of Rickettsia conorii from blood and skin samples using the centrifugation-shell vial technique and by detection of R. conorii in circulating endothelial cells: a 6-year follow-up. La Scola B, et al. **J Clin Microbiol** 1996 Nov;34(11):2722–7
Prevalence of spotted fever group rickettsiae in ticks from southern Israel. Guberman D, et al. **J Med Entomol** 1996 Nov;33(6):979–82
Molecular evidence for single Wolbachia infections among geographic strains of the flour beetle Tribolium confusum. Fialho RF, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22;264(1384):1065–8
Use of hemolymph test for detection of rickettsiae in Malaysian ticks. Tay ST, et al.
Southeast Asian J Trop Med Public Health 1996 Sep; 27(3):642–4

PATHOGENICITY

[Astrakhan fever--a rickettsiosis of the tick-borne spotted fevers caused by a new pathovar of rickettsiae, Rickettsia conorii] Lukin EP, et al.
Zh Mikrobiol Epidemiol Immunobiol 1996 Sep-Oct;(5):96–9 (37 ref.) **(Rus)**

PHYSIOLOGY

Wolbachia-induced delay of paternal chromatin condensation does not prevent maternal chromosomes from entering anaphase in incompatible crosses of Drosophila simulans. Callaini G, et al. **J Cell Sci** 1997 Jan;110 (Pt 2):271–80
Rickettsia conorii infection enhances vascular cell adhesion molecule-1- and intercellular adhesion molecule-1-dependent mononuclear cell adherence to endothelial cells. Dignat-George F, et al. **J Infect Dis** 1997 May;175(5):1142–52
Cytokine-induced, nitric oxide-dependent, intracellular antirickettsial activity of mouse endothelial cells. Walker DH, et al. **Lab Invest** 1997 Jan;76(1):129–38

RICKETTSIA INFECTIONS

[Rickettsial myocarditis] Uemura A, et al.
Ryoikibetsu Shokogun Shirizu 1996;(14):222–4 (10 ref.) **(Jpn)**

DIAGNOSIS

African tick-bite fever. An imported spotless rickettsiosis. Brouqui P, et al. **Arch Intern Med** 1997 Jan 13; 157(1):119–24 (40 ref.)
A new tick-transmitted disease due to Rickettsia slovaca [letter] [see comments] Raoult D, et al. **Lancet** 1997 Jul 12;350(9071):112–3. Comment in: Lancet 1997 Aug 23;350(9077):596.
[First case of Japanese spotted fever in Wakayama prefecture in Japan] Yanagawa T, et al.
Nippon Naika Gakkai Zasshi 1996 May 10;85(5):761–2 **(Jpn)**

DRUG THERAPY

Ciprofloxacin treatment for Australian spotted fever [letter] Hudson BJ, et al. **Med J Aust** 1996 Nov 18;165(10):588

EPIDEMIOLOGY

Flea-borne rickettsioses: ecologic considerations. Azad AF, et al. **Emerg Infect Dis** 1997 Jul-Sep;3(3):319–27 (27 ref.)
Japanese spotted fever: report of 31 cases and review of the literature. Mahara F. **Emerg Infect Dis** 1997 Apr-Jun; 3(2):105–11 (42 ref.)
Tick zoonoses in the southern part of Switzerland (Canton Ticino): occurrence of Borrelia burgdorferi sensu lato and Rickettsia sp. Bernasconi MV, et al. **Eur J Epidemiol** 1997 Feb;13(2):209–15
Seroepidemiology of rickettsial infections in Morocco. Meskini M, et al. **Eur J Epidemiol** 1995 Dec;11(6):655–60
[Serological study of rickettsia infections in Niamey, Niger] Julvez J, et al. **Med Trop (Mars)** 1997;57(2):153–6 (Eng. Abstr.) **(Fre)**
[Spotted fever in the municipality of Pedreira, PS, Brazil. Serologic survey] Del Guercio VM, et al.
Rev Soc Bras Med Trop 1996 Jan-Feb;30(1):47–52 (Eng. Abstr.) **(Por)**

GENETICS

Reduced variation in Drosophila simulans mitochondrial DNA. Ballard JW, et al. **Genetics** 1996 Dec;144(4):1519–28
Single and double infections with Wolbachia in the parasitic wasp Nasonia vitripennis: effects on compatibility. Perrot-Minnot MJ, et al. **Genetics** 1996 Jun;143(2):961–72

IMMUNOLOGY

Comparison of serological reactions of Rickettsiae-infected patients and rabbit anti-Proteus OX antibodies with Proteus OX2, OX19 and OXK lipopolysaccharides. Amano K, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(4):235–40
Role of T lymphocyte subsets in immunity to spotted fever group Rickettsiae. Feng H, et al. **J Immunol** 1997 Jun 1; 158(11):5314–20

MICROBIOLOGY

Biological and genetic characterization of Rickettsia sibirica strains isolated in the endemic area of the north Asian tick typhus. Balayeva NM, et al. **Am J Trop Med Hyg** 1996 Dec;55(6):685–92
Rickettsia africae sp. nov., the etiological agent of African tick bite fever. Kelly PJ, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):611–4
Genetic variation in Australian spotted fever group rickettsiae. Baird RW, et al. **J Clin Microbiol** 1996 Jun; 34(6):1526–30
Characterization of and application of monoclonal antibodies against Rickettsia africae, a newly recognized species of spotted fever group rickettsia. Xu W, et al.
J Clin Microbiol 1997 Jan;35(1):64–70
Production of monoclonal antibodies against Rickettsia massiliae and their use in antigenic and epidemiological studies. Xu W, et al. **J Clin Microbiol** 1997 Jul; 35(7):1715–21

PARASITOLOGY

The biology of rickettsiae. Hackstadt T.
Infect Agents Dis 1996 Jun;5(3):127–43 (154 ref.)

PATHOLOGY

Viruses and rickettsiae. Esiri MM. **Brain Pathol** 1997 Jan; 7(1):695–709 (107 ref.)

TRANSMISSION

Flea-borne rickettsioses: ecologic considerations. Azad AF, et al. **Emerg Infect Dis** 1997 Jul-Sep;3(3):319–27 (27 ref.)
A lump on the head from Mongolia [letter] Lankester T, et al. **Lancet** 1997 Mar 1;349(9052):656

VETERINARY

The rickettsia: an emerging group of pathogens in fish. Fryer JL, et al. **Emerg Infect Dis** 1997 Apr-Jun;3(2):137–44 (34 ref.)
Serological survey of spotted fever group rickettsia in wild rats in Thailand in the 1970s. Okabayashi T, et al.
Microbiol Immunol 1996;40(12):895–8

RICKETTSIA PROWAZEKII

DRUG EFFECTS

[The use of a method of estimating the count of viable Rickettsia prowazekii for the screening of efficacious antibiotics] Predtechenskii AB, et al.
Zh Mikrobiol Epidemiol Immunobiol 1997 Mar-Apr;(2):3–5 (Eng. Abstr.) **(Rus)**

GENETICS

Transcriptional regulation in the obligate intracytoplasmic bacterium Rickettsia prowazekii. Cai J, et al.
J Bacteriol 1996 Sep;178(18):5543–5
A chimeric disposition of the elongation factor genes in Rickettsia prowazekii. Syvänen AC, et al. **J Bacteriol** 1996

Nov;178(21):6192–9
Genomic rearrangements during evolution of the obligate intracellular parasite Rickettsia prowazekii as inferred from an analysis of 52015 bp nucleotide sequence. Andersson JO, et al. **Microbiology** 1997 Aug;143 (Pt 8):2783–95
Rickettsia prowazekii sigma factor sigma 73 can be overexpressed in Escherichia coli and promotes RNA polymerase binding and transcription. Aniskovitch LP, et al. **Microbiology** 1996 Apr;142 (Pt 4):901–6

GROWTH & DEVELOPMENT

Interaction of Rickettsia prowazekii strains of different virulence with white rat macrophages. Penkina GA, et al. **Acta Virol** 1995 Sep;39(4):205–209
Improved plaque assays for Rickettsia prowazekii in Vero 76 cells. Policastro PF, et al. **J Clin Microbiol** 1996 Aug; 34(8):1944–8
[The use of a method of estimating the count of viable Rickettsia prowazekii for the screening of efficacious antibiotics] Predtechenskii AB, et al.
Zh Mikrobiol Epidemiol Immunobiol 1997 Mar–Apr;(2):3–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Rickettsia prowazekii sigma factor sigma 73 can be overexpressed in Escherichia coli and promotes RNA polymerase binding and transcription. Aniskovitch LP, et al. **Microbiology** 1996 Apr;142 (Pt 4):901–6

PATHOGENICITY

[Probable nature of Rickettsia prowazekii virulence] Emel'ianov VV, et al. **Mol Gen Mikrobiol Virusol** 1996 Apr–Jun;(2):39–40 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[The ecology of Rickettsia prowazekii] Lukin EP.
Zh Mikrobiol Epidemiol Immunobiol 1996 Jan–Feb; (1):88–91 (50 ref.) **(Rus)**

RICKETTSIA QUINTANA see **BARTONELLA QUINTANA**

RICKETTSIA RICKETTSII

[Spotted fever in the municipality of Pedreira, PS, Brazil. Serologic survey] Del Guercio VM, et al.
Rev Soc Bras Med Trop 1996 Jan–Feb;30(1):47–52 (Eng. Abstr.) **(Por)**

ISOLATION & PURIFICATION

Prednisolone at anti-inflammatory or immunosuppressive dosages in conjunction with doxycycline does not potentiate the severity of Rickettsia rickettsii infection in dogs. Breitschwerdt EB, et al.
Antimicrob Agents Chemother 1997 Jan;41(1):141–7
Immunoperoxidase and immunofluorescent staining of Rickettsia rickettsii in skin biopsies. A comparative study. Procop GW, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):894–9
Primary isolation of spotted fever group rickettsiae from Amblyomma cooperi collected from Hydrochaeris hydrochaeris in Brazil. de Lemos ER, et al.
Mem Inst Oswaldo Cruz 1996 May–Jun;91(3):273–5

PHYSIOLOGY

Rickettsia rickettsii infection of cultured human endothelial cells induces NF-kappaB activation. Sporn LA, et al.
Infect Immun 1997 Jul;65(7):2786–91

RICKETTSIA TSUTSUGAMUSHI

Laboratory tests of arthropod repellents against Leptotrombidium deliense--noninfected and infected with Rickettsia tsutsugamushi--and noninfected L. fletcheri (Acari: Trombiculidae). Frances SP, et al.
J Med Entomol 1996 Mar;33(2):232–5

CLASSIFICATION

Prevalence of genotypes of Orientia tsutsugamushi in patients with scrub typhus in Miyazaki Prefecture. Horinouchi H, et al. **Microbiol Immunol** 1997;41(6):503–7
Isolation of a new Orientia tsutsugamushi serotype. Seong SY, et al. **Microbiol Immunol** 1997;41(6):437–43
[Analysis of clinical severity of tsutsugamushi disease according to the serotype of pathogenic rickettsia] Shiga K, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):299–306 (Eng. Abstr.) **(Jpn)**

GENETICS

Prevalence of genotypes of Orientia tsutsugamushi in patients with scrub typhus in Miyazaki Prefecture. Horinouchi H, et al. **Microbiol Immunol** 1997;41(6):503–7
Demonstration of antigenic and genotypic variation in Orientia tsutsugamushi which were isolated in Japan, and their classification into type and subtype. Ohashi N, et al. **Microbiol Immunol** 1996;40(9):627–38
Isolation of a new Orientia tsutsugamushi serotype. Seong SY, et al. **Microbiol Immunol** 1997;41(6):437–43
ELISA-based colorimetric detection of Rickettsia tsutsugamushi DNA from patient sera by nested polymerase chain reaction. Shieh GJ, et al.
Southeast Asian J Trop Med Public Health 1996 Mar; 27(1):139–44

GROWTH & DEVELOPMENT

High concentration of recombinant murine interferon-beta enhances the growth of Orientia (formerly Rickettsia) tsutsugamushi Gilliam in mouse L929 cells. Tasneen R, et al. **Acta Virol** 1997 Apr;41(2):77–82

IMMUNOLOGY

Antibodies to Orientia tsutsugamushi in Thai soldiers. Eamsila C, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):556–9
Seroepidemiologic evidence for murine and scrub typhus in Malang, Indonesia. Richards AL, et al.
Am J Trop Med Hyg 1997 Jul;57(1):91–5
Evaluation of an enzyme-linked immunosorbent assay in Thai scrub typhus patients. Suwanabun N, et al.
Am J Trop Med Hyg 1997 Jan;56(1):38–43
Induction of homologous immune response to Rickettsia tsutsugamushi Boryong with a partial 56-kilodalton recombinant antigen fused with the maltose-binding protein MBP-Bor56. Seong SY, et al. **Infect Immun** 1997 Apr;65(4):1541–5
Demonstration of antigenic and genotypic variation in Orientia tsutsugamushi which were isolated in Japan, and their classification into type and subtype. Ohashi N, et al. **Microbiol Immunol** 1996;40(9):627–38

ISOLATION & PURIFICATION

Infection with human immunodeficiency virus does not influence the clinical severity of scrub typhus. Kantipong P, et al. **Clin Infect Dis** 1996 Nov;23(5):1168–70
Central nervous system involvement in patients with scrub typhus. Pai H, et al. **Clin Infect Dis** 1997 Mar;24(3):436–40
Occurrence of high ratio of males after introduction of minocycline in a colony of Leptotrombidium fletcheri infected with Orientia tsutsugamushi. Takahashi M, et al. **Eur J Epidemiol** 1997 Jan;13(1):79–86
Characterization of Orientia tsutsugamushi isolated in Taiwan by immunofluorescence and restriction fragment length polymorphism analyses. Tamura A, et al.
FEMS Microbiol Lett 1997 May 15;150(2):225–31
Diagnosis of scrub typhus in Malaysian aborigines using nested polymerase chain reaction. Tay ST, et al.
Southeast Asian J Trop Med Public Health 1996 Sep; 27(3):580–3

PATHOGENICITY

Virulence in mice of Orientia tsutsugamushi isolated from patients in a new endemic area in Japan. Nagano I, et al. **Microbiol Immunol** 1996;40(10):743–7
[Symbiotic relationship between Orientia tsutsugamushi and vector mites] Urakami H, et al.
Nippon Saikingaku Zasshi 1996 Feb;51(2):497–511 (78 ref.) **(Jpn)**

RICKETTSIA TYPHI

CHEMISTRY

Expression and purification of the crystalline surface layer protein of Rickettsia typhi. Hahn MJ, et al.
Microbiol Immunol 1996;40(3):233–6

DRUG EFFECTS

The in-vitro anti-rickettsial activity of macrolides. Keysary A, et al. **J Antimicrob Chemother** 1996 Oct;38(4):727–31

IMMUNOLOGY

Seroepidemiologic evidence for murine and scrub typhus in Malang, Indonesia. Richards AL, et al.
Am J Trop Med Hyg 1997 Jul;57(1):91–5

RICKETTSIACEAE

GENETICS

Molecular identification of a Wolbachia endosymbiont in a Tetranychus urticae strain (Acari: Tetranychidae). Tsagkarakou A, et al. **Insect Mol Biol** 1996 Aug;5(3):217–21

GROWTH & DEVELOPMENT

In vitro cultivation of Wolbachia pipientis in an Aedes albopictus cell line. O'Neill SL, et al. **Insect Mol Biol** 1997 Feb;6(1):33–9

ISOLATION & PURIFICATION

Wolbachia: intracellular manipulators of mite reproduction. Breeuwer JA, et al. **Exp Appl Acarol** 1996 Aug;20(8):421–34

PATHOGENICITY

Virulence in mice of Orientia tsutsugamushi isolated from patients in a new endemic area in Japan. Nagano I, et al. **Microbiol Immunol** 1996;40(10):743–7

PHYSIOLOGY

In vitro infection of a cell line from Ictalurus nebulosus with Piscirickettsia salmonis. Almendras FE, et al.
Can J Vet Res 1997 Jan;61(1):66–8
Thanks to a parasite, asexual reproduction catches on [news] [published erratum appears in Science 1997 May 9;276(5314):885] Enserink M. **Science** 1997 Mar 21; 275(5307):1743

RICKETTSIACEAE INFECTIONS

DIAGNOSIS

Rickettsialpox. Boyd AS. **Dermatol Clin** 1997 Apr; 15(2):313–8 (26 ref.)
Rickettsialpox-like illness in a traveler. Angeloni VL, et al. **Mil Med** 1997 Sep;162(9):636–9
[Microbiological diagnosis of rickettsial infections] Cardeñosa N, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):32–7 (56 ref.) **(Spa)**

MICROBIOLOGY

Isolation of Rickettsia akari from a patient in a region where Mediterranean spotted fever is endemic. Radulovic S, et al. **Clin Infect Dis** 1996 Feb;22(2):216–20

VETERINARY

Improved method for preparation of samples for the polymerase chain reaction for detection of Coxiella burnetii in milk using immunomagnetic separation. Muramatsu Y, et al. **Vet Microbiol** 1996 Jul;51(1–2):179–85

RICKETTSIAL PNEUMONIA see **PNEUMONIA, RICKETTSIAL**

RICKETTSIAL VACCINES

IMMUNOLOGY

[An experimental study of the immunogenic and protective properties of Coxiella burnetii strain M-44 and a live enteral vaccine against Q fever] Mikhailov VV, et al.
Zh Mikrobiol Epidemiol Immunobiol 1996 Jan–Feb; (1):38–42 (Eng. Abstr.) **(Rus)**

RICKETTSIALES

GENETICS

Horizontal transmission of parthenogenesis-inducing microbes in Trichogramma wasps. Schilthuizen M, et al. **Proc R Soc Lond B Biol Sci** 1997 Mar 22;264(1380):361–6

IMMUNOLOGY

Immunization with bacterial antigens: piscirickettsiosis. Smith PA, et al. **Dev Biol Stand** 1997;90:161–6 (12 ref.)
Antigenic characterization of the salmonid pathogen Piscirickettsia salmonis. Kuzyk MA, et al. **Infect Immun** 1996 Dec;64(12):5205–10

PHYSIOLOGY

Horizontal transmission of parthenogenesis-inducing microbes in Trichogramma wasps. Schilthuizen M, et al. **Proc R Soc Lond B Biol Sci** 1997 Mar 22;264(1380):361–6

RICKETTSIALES INFECTIONS

VETERINARY

Immunization with bacterial antigens: piscirickettsiosis. Smith PA, et al. **Dev Biol Stand** 1997;90:161–6 (12 ref.)
Epitheliocystis infection in cultured white sturgeon (Acipenser transmontanus): antigenic and ultrastructural similarities of the causative agent to the chlamydiae. Groff JM, et al. **J Vet Diagn Invest** 1996 Apr;8(2):172–80

RICKETTSIALPOX see **RICKETTSIACEAE INFECTIONS**

RIDA see **SCRAPIE**

RIFABUTIN

[Rifabutin] **Enferm Infecc Microbiol Clin** 1996 May; 14(5):329–30 **(Spa)**

ADMINISTRATION & DOSAGE

Pharmacokinetic study of the interaction between rifabutin and delavirdine mesylate in HIV-1 infected patients. Borin MT, et al. **Antiviral Res** 1997 Jun;35(1):53–63
Treatment of nontuberculous mycobacterial lymphadenitis with clarithromycin plus rifabutin. Berger C, et al.
J Pediatr 1996 Mar;128(3):383–6

ADVERSE EFFECTS

Inflammatory opacities of the vitreous in rifabutin-associated uveitis. Chaknis MJ, et al. **Am J Ophthalmol** 1996 Oct; 122(4):580–2
Uveitis associated with rifabutin prophylaxis and itraconazole therapy [letter] Lefort A, et al. **Ann Intern Med** 1996 Dec 1;125(11):939–40

RIFABUTIN

Unusual pigmentation in patients with AIDS who are receiving rifabutin for bacteremia due to Mycobacterium avium/Mycobacterium intracellulare complex. Smith JF, et al. **Clin Infect Dis** 1995 Dec;21(6):1515–6

Uveitis associated with rifabutin and macrolide therapy for Mycobacterium avium intracellulare infection in AIDS patients. Kelleher P, et al. **Genitourin Med** 1996 Dec; 72(6):419–21

Rifabutin–associated anterior uveitis in patients infected with human immunodeficiency virus. Schimkat M, et al. **Ger J Ophthalmol** 1996 Jul;5(4):195–201

Uveitis associated with rifabutin therapy: a clinical alert. Petrowski JT 3rd. **J Am Optom Assoc** 1996 Nov; 67(11):693–6 (17 ref.)

Severe neutropenia and prophylactic doses of rifabutin [letter; comment] Tansey MJ, et al. **Lancet** 1996 Dec 7; 348(9041):1592–3. Comment on: Lancet 1996 Sep 7;348(9028):685.

New ophthalmic manifestations of presumed rifabutin–related uveitis. Arevalo JF, et al. **Ophthalmic Surg Lasers** 1997 Apr;28(4):321–4

Rifabutin ocular toxicity mimicking endophthalmitis. Le Saux N, et al. **Pediatr Infect Dis J** 1997 Jul;16(7):716–8

Recurrent bilateral anterior uveitis with hypopyon and rifabutin therapy. Zenone T, et al. **Scand J Infect Dis** 1996; 28(3):325–6

[Rifabutin–induced hypopyon iritis in HIV infection] Diemer PR, et al. **Klin Monatsbl Augenheilkd** 1996 Jul;209(1):40–2 (Eng. Abstr.) **(Ger)**

[Rifabutin as a cause of curable visual alterations in patients with human immunodeficiency virus infection (letter)] Fernández Peña CM, et al. **Med Clin (Barc)** 1997 Jul 5; 109(6):239 **(Spa)**

[Pseudojaundice caused by rifabutine (letter)] Martínez Rivera C, et al. **Med Clin (Barc)** 1997 May 31;109(1):38 **(Spa)**

ANALOGS & DERIVATIVES

Metabolism of rifabutin and its 25–desacetyl metabolite, LM565, by human liver microsomes and recombinant human cytochrome P–450 3A4: relevance to clinical interaction with fluconazole. Trapnell CB, et al. **Antimicrob Agents Chemother** 1997 May;41(5):924–6

BLOOD

Determination of rifabutin by high–performance liquid chromatography using on–line concentration and column switching. Bartels H, et al. **J Chromatogr B Biomed Appl** 1996 Nov 15;686(2):235–40

Determination of rifabutin in human plasma by high–performance liquid chromatography with ultraviolet detection. Lau YY, et al. **J Chromatogr B Biomed Appl** 1996 Feb 9;676(1):125–30

METABOLISM

Metabolism of rifabutin and its 25–desacetyl metabolite, LM565, by human liver microsomes and recombinant human cytochrome P–450 3A4: relevance to clinical interaction with fluconazole. Trapnell CB, et al. **Antimicrob Agents Chemother** 1997 May;41(5):924–6

A comparative study of the redox–cycling of a quinone (rifamycin S) and a quinonimine (rifabutin) antibiotic by rat liver microsomes. Rao DN, et al. **Free Radic Biol Med** 1997;22(3):439–46

PHARMACOKINETICS

Rifabutin absorption in the gut unaltered by concomitant administration of didanosine in AIDS patients. Li RC, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1566–70

Lack of effect of concomitant zidovudine on rifabutin kinetics in patients with AIDS–related complex. Li RC, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1397–402

Pharmacokinetic study of the interaction between rifabutin and delavirdine mesylate in HIV–1 infected patients. Borin MT, et al. **Antiviral Res** 1997 Jun;35(1):53–63

A model based assessment of redistribution dependent elimination and bioavailability of rifabutin. Li RC, et al. **Biopharm Drug Dispos** 1996 Apr;17(3):223–36

Metabolism of rifabutin in human enterocyte and liver microsomes: kinetic parameters, identification of enzyme systems, and drug interactions with macrolides and antifungal agents. Iatsimirskaia E, et al. **Clin Pharmacol Ther** 1997 May;61(5):554–62

Lack of a pharmacologic interaction between rifabutin and methadone in HIV–infected former injecting drug users. Brown LS, et al. **Drug Alcohol Depend** 1996 Dec 2; 43(1–2):71–7

In vivo disposition and metabolism by liver and enterocyte microsomes of the antitubercular drug rifabutin in rats. Koudriakova T, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1300–9

Inducing properties of rifabutin, and effects on the pharmacokinetics and metabolism of concomitant drugs. Benedetti MS. **Pharmacol Res** 1995 Oct;32(4):177–87 (48 ref.)

PHARMACOLOGY

Induction of theophylline clearance by rifampin and rifabutin in healthy male volunteers. Gillum JG, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1866–9

In vitro and in vivo effects of rifabutin alone or combined with atovaquone against Toxoplasma gondii. Romand S, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2015–20

Inducing properties of rifampicin and rifabutin for selected enzyme activities of the cytochrome P–450 and UDP–glucuronosyltransferase superfamilies in female rat liver. Oesch F, et al. **J Antimicrob Chemother** 1996 Jun; 37(6):1111–9

Activity of rifabutin, clarithromycin, ethambutol, sparfloxacin and amikacin, alone and in combination, against Mycobacterium avium complex in human macrophages. Pellegrin I, et al. **J Antimicrob Chemother** 1996 Mar;37(3):501–10

Antimycobacterial synergism of clarithromycin and rifabutin. Ghebremichael S, et al. **Scand J Infect Dis** 1996; 28(4):387–90

THERAPEUTIC USE

Three new studies expand understanding of MAC therapy [news] **Am J Health Syst Pharm** 1996 Oct 15;53(20):2376, 2380

Criteria for use of rifabutin in adult patients with human immunodeficiency virus (HIV)–associated disease. Fish N, et al. **Am J Health Syst Pharm** 1996 Jul 1;53(13):1598–9

Efficacy and safety of rifabutin in the treatment of patients with newly diagnosed pulmonary tuberculosis. McGregor MM, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1462–7

Early bactericidal activity of rifabutin versus that of placebo in treatment of disseminated Mycobacterium avium complex bacteremia in AIDS patients. Dautzenberg B, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1722–5

Rifabutin for experimental pneumococcal meningitis. Schmidt H, et al. **Chemotherapy** 1997 Jul–Aug;43(4):264–71

Varying dosages of rifabutin affect white blood cell and platelet counts in human immunodeficiency virus––negative patients who are receiving multidrug regimens for pulmonary Mycobacterium avium complex disease. Griffith DE, et al. **Clin Infect Dis** 1996 Dec; 23(6):1321–2

Clinical and bacteriologic impact of rifabutin prophylaxis for Mycobacterium avium complex infection in patients with human immunodeficiency virus infection. Maslo C, et al. **Clin Infect Dis** 1997 Mar;24(3):344–9

Rifampin–resistant Mycobacterium kansasii infection in a pa ient with AIDS who was receiving rifabutin. Meynard JL, et al. **Clin Infect Dis** 1997 Jun;24(6):1262–3

Rifabutin prevents campylobacter infection i patients with AIDS [letter; comment] Pulik M, et al. **Clin Infect Dis** 1996 Nov;23(5):1197–8. Comment on: Clin Infect Dis 1996 Apr;22 Suppl 1:S61–6; discussion S66–9.

Use of rifabutin in combination with atovaquone, clindamycin, pyrimethamine, or sulfadiazine for treatment of toxoplasmic encephalitis in mice. Araujo FG, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):394–7

Against the proposition: all patients with advanced HIV disease should be offered rifabutin prophylaxis. Pozniak A, et al. **Genitourin Med** 1996 Aug;72(4):269–71 (14 ref.)

Is rifabutin prophylaxis against Mycobacterium avium complex infection in HIV infection worthwhile? The net impact on patients suggests not. Stephenson JM, et al. **Genitourin Med** 1996 Aug;72(4):272–6 (10 ref.)

Anterior uveitis associated with rifabutin medication in AIDS patients. Becker K, et al. **Infection** 1996 Jan–Feb;24(1):34–6

The use of rifabutin in Europe for the treatment of mycobacterial infection in AIDS patients. Dautzenberg B. **Infection** 1997 Jan–Feb;25(1):63–6 (16 ref.)

Impact of Mycobacterium avium complex prophylaxis on the incidence of mycobacterial infections and transfusion–requiring anemia in an HIV–positive population. Kravcik S, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Sep; 13(1):27–32

Two–year–outcomes analysis of Crohn's disease treated with rifabutin and macrolide antibiotics. Gui GP, et al. **J Antimicrob Chemother** 1997 Mar;39(3):393–400

Evaluation of the activities of rifabutin combined with atovaquone or low–dose of cotrimoxazole for prevention of pneumocystosis and toxoplasmosis in a dual infection rat model. Brun–Pascaud M, et al. **J Eukaryot Microbiol** 1996 Sep–Oct;43(5):14S–15S

Clinical experience with rifabutin in the treatment of mycobacterial infections. De Cian W, et al. **Scand J Infect Dis Suppl** 1995;98:22–6 (28 ref.)

Treatment of mycobacterial infections in HIV–negative immunocompromised patients. Heurlin N. **Scand J Infect Dis Suppl** 1995;98:21

[Rifabutin––a new antituberculous antibiotic] **Antibiot Khimioter** 1997;42(5):47–8 (13 ref.) **(Rus)**

URINE

Isolation and identification of major urinary metabolites of rifabutin in rats and humans. Utkin I, et al. **Drug Metab Dispos** 1997 Aug;25(8):963–9

RIFAMPICIN see **RIFAMPIN**

RIFAMPIN

Rifampin. Glatman–Freedman A. **Pediatr Rev** 1996 Aug; 17(8):294–5

[Stability of rifampicin in eyedrops] Izer K, et al. **Acta Pharm Hung** 1996 Jul;66(4):157–63 (Eng. Abstr.) **(Hun)**

ADMINISTRATION & DOSAGE

Rifampin preventive therapy for tuberculosis infection: experience with 157 adolescents. Villarino ME, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1735–8

Therapeutic efficacies of isoniazid and rifampin encapsulated in lung–specific stealth liposomes against Mycobacterium tuberculosis infection induced in mice. Deol P, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1211–4

Rifampicin carrying poly (D,L–lactide)/poly(ethylene glycol) microspheres: loading and release. Celikkaya E, et al. **Artif Organs** 1996 Jul;20(7):743–51

Physico–chemical properties of a rifampicin–releasing polydimethylsiloxane shunt. Schierholz JM. **Biomaterials** 1997 Apr;18(8):635–41

Prophylaxis of graft infection with rifampicin–bonded Gelseal graft: 2–year follow–up of a prospective clinical trial. Italian Investigators Group. D'Addato M, et al. **Cardiovasc Surg** 1996 Apr;4(2):200–4

Prophylaxis against Staphylococcus epidermidis vascular graft infection with rifampicin–soaked, gelatin–sealed Dacron. Sardelic F, et al. **Cardiovasc Surg** 1996 Jun; 4(3):389–92

Osteomyelitis due to Mycobacterium haemophilum in a cardiac transplant patient: case report and analysis of interactions among clarithromycin, rifampin, and cyclosporine. Plemmons RM, et al. **Clin Infect Dis** 1997 May;24(5):995–7

Delayed resolution versus treatment failure in paucibacillary leprosy patients under six months fixed duration multidrug therapy. Job CK, et al. **Indian J Lepr** 1997 Apr–Jun; 69(2):131–42

Oral treatment of Staphylococcus spp. infected orthopaedic implants with fusidic acid or ofloxacin in combination with rifampicin. Drancourt M, et al. **J Antimicrob Chemother** 1997 Feb;39(2):235–40

Targeting of multiple emulsions to the lungs. Khopade AJ, et al. **Pharmazie** 1996 Aug;51(8):558–62

Multiple emulsion based systems for prolonged delivery of rifampicin: in vitro and in vivo characterization. Nakhare S, et al. **Pharmazie** 1997 Mar;52(3):224–6

A controlled trial of a 4–weekly supplement of rifampicin, pyrazinamide and streptomycin in the continuation phase of a 7–month daily chemotherapy regimen for pulmonary tuberculosis. Tanzania/British Medical Research Council Collaborative Investigation. **S Afr Med J** 1996 Aug; 86(8):960–5

[Oral desensitization to antitubercular agents] Drira I, et al. **Rev Pneumol Clin** 1997;53(2):104–6 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Methemoglobinemia after rifampin therapy [letter] Luzio JL, et al. **Ann Pharmacother** 1996 Nov;30(11):1339–40

Risk factors for side–effects of isoniazid, rifampin and pyrazinamide in patients hospitalized for pulmonary tuberculosis. Schaberg T, et al. **Eur Respir J** 1996 Oct; 9(10):2026–30

Thrombocytopenic purpura with blood blisters on once a month rifampicin. Selwyn GJ, et al. **Indian J Lepr** 1996 Oct–Dec;68(4):371–2

Paradoxical worsening in tuberculosis during therapy in an HIV–infected patient [letter] Mofredj A, et al. **Infection** 1996 Sep–Oct;24(5):390–1

Osteomalacia during rifampicin and isoniazid therapy is rare in Hong Kong. Chan TY. **Int J Clin Pharmacol Ther** 1996 Dec;34(12):533–4

Rifampin–induced deterioration in steroid–dependent asthma. Lin FL. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 1):1125

Thrombocytopenia––a rare but serious side effect of rifampicin [letter] Shah NM, et al. **J Assoc Physicians India** 1996 May;44(5):359–60

Development of life–threatening thrombocytopaenia in a patient on MDT and prednisolone [letter] [published erratum appears in Lepr Rev 1996 Dec;67(4):356] Croft R, et al. **Lepr Rev** 1996 Sep;67(3):229

An unusual reaction to rifampicin in a once monthly dose [letter] Sule RR. **Lepr Rev** 1996 Sep;67(3):227–8

Leucocytopenia after rifampicin and ofloxacin therapy in leprosy. Vijayakumaran P, et al. **Lepr Rev** 1997 Mar; 68(1):10–5

Periodontal indices of patients taking isoniazid and rifampin: a pilot study. Zuehlke RK, et al. **Mil Med** 1997 Jan; 162(1):59–61

Adverse drug reaction to rifampin: a case with long lasting antiplatelet antibodies. Tricerri A, et al. **Panminerva Med** 1997 Mar;39(1):64–6

Delayed onset of pseudomembranous colitis after rifampin therapy. Byrd RP Jr, et al. **South Med J** 1997 Jun; 90(6):644–6 (18 ref.)

Rifampicin–induced immune thrombocytopenia. Mehta YS, et al. **Tuber Lung Dis** 1996 Dec;77(6):558–62

[Adverse effects related to the use of antitubercular drugs in psychiatric centers: retrospective study at the Philippe Pinel CH in Amiens 1994] Decocq G, et al. **Therapie** 1996 Sep–Oct;51(5):543–9 (Eng. Abstr.) **(Fre)**

[Fulminant hepatitis during the therapy for tuberculous meningitis] Garavelli PL. **Recenti Prog Med** 1996 Dec; 87(12):597 (8 ref.) **(Ita)**

[Desensitization to rifampicin (letter; comment)] Portu Zapirain J, et al. **Med Clin (Barc)** 1997 Jan 11;108(1):35. Comment on: Med Clin (Barc) 1996 Mar 2;106(8):319. **(Spa)**

ANALOGS & DERIVATIVES

Rifapentine is active in vitro and in vivo against Toxoplasma gondii. Araujo FG, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1335–7

Comparative antimycobacterial activities of rifampin, rifapentine, and KRM-1648 against a collection of rifampin-resistant Mycobacterium tuberculosis isolates with known rpoB mutations. Moghazeh SL, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2655–7

Comparison of biological and chemical assays for the quantitation of rifapentine in human plasma. Kenny MT, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):107–11

A mechanism of rifamycin inhibition and resistance in Pseudomonas aeruginosa. Yee YC, et al. **J Antimicrob Chemother** 1996 Jul;38(1):133–7

High-performance liquid chromatography assay of rifapentine in human serum. He X, et al. **J Chromatogr B Biomed Appl** 1996 Jun 7;681(2):412–5

[Correlation between pharmacokinetic parameters of rifampicin and its biologically active metabolite as related to estimation of the relative bioavailability of the antibiotic] Firsov AA, et al. **Antibiot Khimioter** 1996 Apr;41(4):36–43 (Eng. Abstr.) **(Rus)**

ANALYSIS

Simultaneous determination of rifampicin, isoniazid and pyrazinamid by high performance thin layer chromatography. Argekar AP, et al. **J Pharm Biomed Anal** 1996 Aug;14(11):1645–50

Discrepancy among dissolution rates of commercial tablets as a function of dissolution method. part 6: rifampicin. Ammar HO, et al. **Pharmazie** 1996 Mar;51(3):165–8

BLOOD

Determination of rifampin in human plasma by high-performance liquid chromatography with ultraviolet detection. Lau YY, et al. **J Chromatogr B Biomed Appl** 1996 Feb 9;676(1):147–52

Plasma and saliva concentrations of rifampicin in man after oral administration. Orisakwe OE, et al. **Tokai J Exp Clin Med** 1996 Feb;21(1):45–9

ISOLATION & PURIFICATION

The elution and binding characteristics of rifampicin for three commercially available protein-sealed vascular grafts. Lovering AM, et al. **J Antimicrob Chemother** 1996 Oct; 38(4):599–604

PHARMACOKINETICS

Pharmacokinetic interaction between itraconazole and rifampin in Yucatan miniature pigs. Kaltenbach G, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2043–6

Relative bioavailability of rifampicin, isoniazid and ethambutol from a combination tablet vs. concomitant administration of a capsule containing rifampicin and a tablet containing isoniazid and ethambutol. Schall R, et al. **Arzneimittelforschung** 1995 Nov;45(11):1236–9

Pharmacokinetics of antimycobacterial drugs in patients with tuberculosis, AIDS, and diarrhea. Choudhri SH, et al. **Clin Infect Dis** 1997 Jul;25(1):104–11

Pharmacokinetic study of the interaction between rifampin and delavirdine mesylate. Borin MT, et al. **Clin Pharmacol Ther** 1997 May;61(5):544–53

Bioequivalence study of two pharmaceutical forms of rifampicin capsules in man. Chouchane N, et al. **Eur J Drug Metab Pharmacokinet** 1995 Oct–Dec; 20(4):315–20

Disposition of rifampicin following intranasal and oral administration. Mamidi NV, et al. **Indian J Lepr** 1996 Apr–Jun;68(2):149–53

Lack of effect of fluconazole on the pharmacokinetics of rifampicin in AIDS patients. Jaruratanasirikul S, et al. **J Antimicrob Chemother** 1996 Nov;38(5):877–80

Rifampicin loading of vascular grafts. Malassiney P, et al. **J Antimicrob Chemother** 1996 Jun;37(6):1121–9

Targeting of multiple emulsions to the lungs. Khopade AJ, et al. **Pharmazie** 1996 Aug;51(8):558–62

Plasma and saliva concentrations of rifampicin in man after oral administration. Orisakwe OE, et al. **Tokai J Exp Clin Med** 1996 Feb;21(1):45–9

Effect of activated charcoal on rifampicin absorption in man. Orisakwe OE, et al. **Tokai J Exp Clin Med** 1996 Feb; 21(1):51–4

[Correlation between pharmacokinetic parameters of rifampicin and its biologically active metabolite as related to estimation of the relative bioavailability of the antibiotic] Firsov AA, et al. **Antibiot Khimioter** 1996 Apr;41(4):36–43 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Laboratory diagnosis of antibiotic resistant Mycobacterium bovis within 48 h: a qualitative change in the approach to mycobacterial diseases in AIDS patients [letter] Espinosa de los Monteros LE, et al. **AIDS** 1997 May;11(6):827–8

Rapid prediction of rifampin susceptibility of Mycobacterium tuberculosis. Ohno H, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2057–63

Use of salivary caffeine tests to assess the inducer effect of a drug on hepatic metabolism. Soto J, et al. **Ann Pharmacother** 1996 Jul–Aug;30(7–8):736–9

Rifampin resistance in Neisseria meningitidis due to alterations in membrane permeability. Abadi FJ, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):646–51

Monooxygenase-like sequence of a Rhodococcus equi gene conferring increased resistance to rifampin by inactivating this antibiotic. Andersen SJ, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):218–21

In vitro activities of ciprofloxacin and rifampin alone and in combination against growing and nongrowing strains of methicillin-susceptible and methicillin-resistant Staphylococcus aureus. Bahl D, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1293–7

Detection of rifampin- and ciprofloxacin-resistant Mycobacterium tuberculosis by using species-specific assays for precursor rRNA. Cangelosi GA, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1790–5

Induction of theophylline clearance by rifampin and rifabutin in healthy male volunteers. Gillum JG, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1866–9

Comparative antimycobacterial activities of rifampin, rifapentine, and KRM-1648 against a collection of rifampin-resistant Mycobacterium tuberculosis isolates with known rpoB mutations. Moghazeh SL, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2655–7

Insufficient evidence of synergistic effect of levofloxacin and rifampin against Legionella pneumophila [letter; comment] van Ogtrop ML. **Antimicrob Agents Chemother** 1996 Feb; 40(2):524–5. Comment on: Antimicrob Agents Chemother 1995 Aug;39(8):1661–6.

In vitro and in vivo effects of rifampin on Staphylococcus epidermidis graft infections. Garrison JR Jr, et al. **ASAIO J** 1997 Jan–Feb;43(1):8–12

Rifampicin inhibits the toxicity of pre-aggregated amyloid peptides by binding to peptide fibrils and preventing amyloid-cell interaction. Tomiyama T, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):859–65

Concentrations and effects of zopiclone are greatly reduced by rifampicin. Villikka K, et al. **Br J Clin Pharmacol** 1997 May;43(5):471–4

Rifampin-resistant Mycobacterium kansasii infection in a patient with AIDS who was receiving rifabutin. Meynard JL, et al. **Clin Infect Dis** 1997 Jun;24(6):1262–3

Detection of resistance to isoniazid, rifampin, and streptomycin in clinical isolates of Mycobacterium tuberculosis by molecular methods. Nachamkin I, et al. **Clin Infect Dis** 1997 May;24(5):894–900

Triazolam is ineffective in patients taking rifampin. Villikka K, et al. **Clin Pharmacol Ther** 1997 Jan;61(1):8–14

Mycobacterial growth indicator tube for susceptibility testing of Mycobacterium tuberculosis to isoniazid and rifampin. Bergmann JS, et al. **Diagn Microbiol Infect Dis** 1997 Jul; 28(3):153–6

The nifedipine-rifampin interaction. Evidence for induction of gut wall metabolism. Holtbecker N, et al. **Drug Metab Dispos** 1996 Oct;24(10):1121–3

Rifampicin: an inhibitor of Xp12-specific protein phosphorylation in Xanthomonas oryzae pv. oryzae. Cheng CM, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):141–9

Rifampicin resistance and mutation of the rpoB gene in Mycobacterium tuberculosis. Taniguchi H, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):103–8

Differential induction of prehepatic and hepatic metabolism of verapamil by rifampin. Fromm MF, et al. **Hepatology** 1996 Oct;24(4):796–801

Rifampicin and isoniazid increase acetaminophen and isoniazid cytotoxicity in human HepG2 hepatoma cells. Nicod L, et al. **Hum Exp Toxicol** 1997 Jan;16(1):28–34

The effects of therapy with rifampicin and isoniazid on basic investigations for Cushing's syndrome. Zawawi TH, et al. **Ir J Med Sci** 1996 Oct–Dec;165(4):300–2

Effect of combination therapy of rifampicin and azithromycin on TNF levels during a rat model of chronic osteomyelitis. Littlewood-Evans AJ, et al. **J Antimicrob Chemother** 1997 Apr;39(4):493–8

Determination of the in vivo post-antibiotic effects of ciprofloxacin and rifampicin. Meng X, et al. **J Antimicrob Chemother** 1995 Dec;36(6):987–96

Rifampicin resistance in Neisseria meningitidis: evidence from a study of sibling strains, description of new mutations and notes on population genetics. Nolte O. **J Antimicrob Chemother** 1997 Jun;39(6):747–55

Inducing properties of rifampicin and rifabutin for selected enzyme activities of the cytochrome P-450 and UDP-glucuronosyltransferase superfamilies in female rat liver. Oesch F, et al. **J Antimicrob Chemother** 1996 Jun; 37(6):1111–9

Lack of resistance to erythromycin, rifampicin and ciprofloxacin in 98 clinical isolates of Legionella pneumophila. Onody C, et al. **J Antimicrob Chemother** 1997 Jun;39(6):815–6

In-vitro activity of a new oral streptogramin, RPR 106972, alone and in combination with rifampicin or ciprofloxacin against Legionella spp. Pendland SL, et al. **J Antimicrob Chemother** 1997 May;39(5):651–3

The absence of genetic markers for streptomycin and rifampicin resistance in Mycobacterium avium complex strains. Portillo-Gomez L, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1049–53

Factors affecting development of rifampicin resistance in biofilm-producing Staphylococcus epidermidis. Svensson E, et al. **J Antimicrob Chemother** 1997 Jun;39(6):817–20

The effect of rifampicin on adaptive resistance of Pseudomonas aeruginosa to aminoglycosides. Xiong YQ, et al. **J Antimicrob Chemother** 1996 May;37(5):993–8

Evaluation of a line probe assay kit for characterization of rpoB mutations in rifampin-resistant Mycobacterium tuberculosis isolates from New York City. Cooksey RC, et al. **J Clin Microbiol** 1997 May;35(5):1281–3

Mutations in the rpoB gene of Mycobacterium tuberculosis that interfere with PCR-single-strand conformation polymorphism analysis for rifampin susceptibility testing. Kim BJ, et al. **J Clin Microbiol** 1997 Feb;35(2):492–4

Emergence of rifampin-resistant Rhodococcus equi in an infected foal. Takai S, et al. **J Clin Microbiol** 1997 Jul; 35(7):1904–8

Genotypic assessment of isoniazid and rifampin resistance in Mycobacterium tuberculosis: a blind study at reference laboratory level. Telenti A, et al. **J Clin Microbiol** 1997 Mar;35(3):719–23

Testing of susceptibility of Mycobacterium tuberculosis to isoniazid and rifampin by mycobacterium growth indicator tube method. Walters SB, et al. **J Clin Microbiol** 1996 Jun; 34(6):1565–7

Effect of rifampin on the plasma concentration and the clinical effect of haloperidol concomitantly administered to schizophrenic patients. Kim YH, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):247–52

Stimulation of bile acid 6 alpha-hydroxylation by rifampin. Wietholtz H, et al. **J Hepatol** 1996 Jun;24(6):713–8

Detection of rifampin resistance in Mycobacterium tuberculosis by use of a rapid, simple, and specific RNA/RNA mismatch assay. Nash KA, et al. **J Infect Dis** 1997 Aug;176(2):533–6

The effect of single does of rifampicin on the pharmacokinetics of oral nifedipine. Ndanusa BU, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1571–5

Pharmacogenetic determinants of codeine induction by rifampin: the impact on codeine's respiratory, psychomotor and miotic effects. Caraco Y, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):330–6

Multidrug-resistance to dapsone, rifampicin, and ofloxacin in Mycobacterium leprae. Cambau E, et al. **Lancet** 1997 Jan 11;349(9045):103–4

Detection of rifampin resistance among isolates of Mycobacterium tuberculosis from Mozambique. Caugant DA, et al. **Microb Drug Resist** 1995 Winter;1(4):321–6

Disequilibria in the distribution of rpoB alleles in rifampicin-resistant M. tuberculosis isolates from Germany and Sierra Leone. Rinder H, et al. **Microb Drug Resist** 1997 Summer;3(2):195–7

Different rifampicin inactivation mechanisms in Nocardia and related taxa. Tanaka Y, et al. **Microbiol Immunol** 1996; 40(1):1–4

Drug interaction: rifampicin and glibenclamide. Surekha V, et al. **Natl Med J India** 1997 Jan–Feb;10(1):11–2

Evaluation of the in vitro activity of seven selected antimicrobial agents to be used for the isolation of human intestinal spirochaetes. Calderaro A, et al. **New Microbiol** 1997 Jan;20(1):35–45

Metabolism of tacrolimus (FK 506) in rat liver microsomes. Effect of rifampin and dexamethasone. Prasad, et al. **Res Commun Mol Pathol Pharmacol** 1997 Apr;96(1):107–10

Inability to attain oral anticoagulation: warfarin-rifampin interaction revisited. Casner PR. **South Med J** 1996 Dec; 89(12):1200–3 (21 ref.)

In vitro reconstitution of an intermediate assembly stage of vaccinia virus. Ericsson M, et al. **Virology** 1997 Sep 1; 235(2):218–27

Drug delivery concepts for the efficacious prevention of foreign-body infections. Schierholz JM, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):390–401

[Genetic evaluation for rifampicin-susceptibility of Mycobacterium tuberculosis] Ohno H, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):323–8 (Eng. Abstr.) **(Jpn)**

[Detection of rifampicin-resistant strains of Mycobacterium tuberculosis by a non-radioactive PCR-SSCP method] Yamazaki T, et al. **Kekkaku** 1996 Aug;71(8):465–71 (Eng. Abstr.) **(Jpn)**

[Influence of rifampicin on antihypertensive effects of dihydropiridine calcium-channel blockers in four elderly patients] Yoshimoto H, et al. **Nippon Ronen Igakkai Zasshi** 1996 Sep;33(9):692–6 (Eng. Abstr.) **(Jpn)**

[Regulatory properties of RNA polymerase from rifampicin-resistant E. coli strain rpoB403] Kamzolova SG. **Biokhimiia** 1996 Aug;61(8):1483–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Rifampicin and isoniazid in the treatment of leprous nerve abscesses. Husain S, et al. **Acta Leprol** 1997;10(3):147–50

Rifampicin and the relief of pruritus of hepatic cholestatic origin [letter] Airede AK, et al. **Acta Paediatr** 1996 Jul; 85(7):887–8

CDC lists options for managing rifampin, protease inhibitor therapy [news] **Am J Health Syst Pharm** 1996 Dec 15; 53(24):2940; 2943

Mycobacterium szulgai infection of the lung: case report and

review of an unusual pathogen. Benator DA, et al. **Am J Med Sci** 1997 Jun;313(6):346–51 (25 ref.)

Efficacy and safety of rifabutin in the treatment of patients with newly diagnosed pulmonary tuberculosis. McGregor MM, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1462–7

Selective malabsorption and the origin of mono–rifampin–resistant Mycobacterium tuberculosis [letter; comment] Perlman DC, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1213. Comment on: Am J Respir Crit Care Med 1996 Feb;153(2):837–40.

Rifampin preventive therapy for tuberculosis in Boston's homeless. Polesky A, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1473–7

Central venous catheters coated with minocycline and rifampin for the prevention of catheter–related colonization and bloodstream infections. A randomized, double–blind trial. The Texas Medical Center Catheter Study Group [see comments] Raad I, et al. **Ann Intern Med** 1997 Aug 15;127(4):267–74. Comment in: Ann Intern Med 1997 Aug 15;127(4):304–6.

Efficacies of ofloxacin, rifampin, and clindamycin in treatment of Staphylococcus aureus abscesses and correlation with results of an in vitro assay of intracellular bacterial killing. Bamberger DM, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1178–81

Lack of ability of ciprofloxacin–rifampin prophylaxis to decrease infection–related morbidity in neutropenic patients given cytotoxic therapy and peripheral blood stem cell transplants. Hidalgo M, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1175–7

Bactericidal activities of combinations of new drugs against Mycobacterium leprae in nude mice. Ji B, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):393–9

Grand rounds—Hammersmith Hospital. Persistent fever in pulmonary tuberculosis [clinical conference] Barakat MT, et al. **BMJ** 1996 Dec 14;313(7071):1543–5

Methadone maintenance and tuberculosis treatment [see comments] Raistrick D, et al. **BMJ** 1996 Oct 12; 313(7062):925–6. Comment in: BMJ 1997 Jan 25;314(7076):303.

Cotrifazid—an agent against malaria. Freerksen E, et al. **Chemotherapy** 1996 Nov–Dec;42(6):391–401

The challenge of penicillin–resistant Streptococcus pneumoniae meningitis: current antibiotic therapy in the 1990s. Bradley JS, et al. **Clin Infect Dis** 1997 Feb;24 Suppl 2:S213–21 (58 ref.)

Concurrent mucosal leishmaniasis and pulmonary tuberculosis. Escobar MA, et al. **Clin Infect Dis** 1996 Oct; 23(4):836–7

Disseminated infection due to multidrug–resistant Mycobacterium bovis in a patient who was seropositive for human immunodeficiency virus. Schultsz C, et al. **Clin Infect Dis** 1996 Oct;23(4):841–3

Efficacy of antibiotics alone for orthopaedic device related infections. Isiklar ZU, et al. **Clin Orthop** 1996 Nov; (332):184–9

Benign recurrent intrahepatic cholestasis: improvement of pruritus and shortening of the symptomatic phase with rifampin therapy: a case report. Balsells F, et al. **Clin Pediatr (Phila)** 1997 Aug;36(8):483–5

Epidemiology, control and treatment of multidrug–resistant tuberculosis. Chaulet P, et al. **Drugs** 1996;52 Suppl 2:103–7; discussion 107–8 (17 ref.)

Efficacy of single dose multidrug therapy for the treatment of single–lesion paucibacillary leprosy. Single–lesion Multicentre Trial Group. **Indian J Lepr** 1997 Apr–Jun; 69(2):121–9

Two multidrug fixed–dosage treatment regimens with multibacillary leprosy patients. Gallo ME, et al. **Indian J Lepr** 1996 Jul–Sep;68(3):235–45

Paradoxical worsening in tuberculosis during therapy in an HIV–infected patient [letter] Mofredj A, et al. **Infection** 1996 Sep–Oct;24(5):390–1

Drug interaction between cyclosporine and two antimicrobial agents, josamycin and rifampicin, in organ–transplanted patients. Capone D, et al. **Int J Clin Pharmacol Res** 1996; 16(2–3):73–6

Daily multidrug therapy for leprosy; results of a fourteen–year experience. de Carsalade GY, et al. **Int J Lepr Other Mycobact Dis** 1997 Mar;65(1):37–44

Rate of decline in bacterial index in leprosy; observations after three different chemotherapeutic interventions [letter] Ganapati R, et al. **Int J Lepr Other Mycobact Dis** 1997 Jun;65(2):264–6

Field trial on efficacy of supervised monthly dose of 600 mg rifampin, 400 mg ofloxacin and 100 mg minocycline for the treatment of leprosy; first results. Mane I, et al. **Int J Lepr Other Mycobact Dis** 1997 Jun;65(2):224–9

Effect of rhuIFN–gamma treatment in multibacillary leprosy patients. Sampaio EP, et al. **Int J Lepr Other Mycobact Dis** 1996 Sep;64(3):268–73

Tuberculous meningitis [letter; comment] Pozniak A. **Int J STD AIDS** 1997 Feb;8(2):139–40. Comment on: Int J STD AIDS 1996 Jul;7(4):244–9; quiz 249–51.

Human immunodeficiency virus infection in children with tuberculosis in Santo Domingo, Dominican Republic: prevalence, clinical findings, and response to antituberculosis treatment. Espinal MA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Oct 1;13(2):155–9

Multiple drug resistant tuberculosis [editorial] Drobniewski FA, et al. **J Clin Pathol** 1997 Feb;50(2):89–90

Correlation between steady–state plasma concentration of antituberculous drugs and age, inclusion of rifampicin in the treatment regimen, adverse drug reactions and other clinical parameters. Woo J, et al. **J Med** 1995; 26(5–6):279–94

Duration of protective activity of cerebrospinal fluid shunt catheters impregnated with antimicrobial agents to prevent bacterial catheter–related infection. Bayston R, et al. **J Neurosurg** 1997 Aug;87(2):247–51

From the Centers for Disease Control and Prevention. Clinical update: impact of HIV protease inhibitors on the treatment of HIV–infected tuberculosis patients with rifampin. **JAMA** 1996 Nov 20;276(19):1546

Primary resistance to single and multiple drugs in leprosy—a mouse footpad study. Shetty VP, et al. **Lepr Rev** 1996 Dec; 67(4):280–6

Relapse in a borderline–tuberculoid case of leprosy 5 years after the release from rifampicin monotherapy. Shetty VP, et al. **Lepr Rev** 1997 Jun;68(2):162–6

Clinical update: impact of HIV protease inhibitors on the treatment of HIV–infected tuberculosis patients with rifampin. **MMWR Morb Mortal Wkly Rep** 1996 Oct 25; 45(42):921–5

Prospective randomized study of thrice weekly six–month and nine–month chemotherapy for cervical tuberculous lymphadenopathy. Yuen AP, et al. **Otolaryngol Head Neck Surg** 1997 Feb;116(2):189–92

Loss of analgesic effect of morphine due to coadministration of rifampin. Fromm MF, et al. **Pain** 1997 Aug;72(1–2):261–7

Evaluation of the use of mass chemoprophylaxis during a school outbreak of enzyme type 5 serogroup B meningococcal disease. Jackson LA, et al. **Pediatr Infect Dis J** 1996 Nov;15(11):992–8

Rifampicin for ulcerative colitis [letter; comment] Borok G. **S Afr Med J** 1996 Aug;86(8):986. Comment on: S Afr Med J 1996 Jan;86(1):97–8.

Prophylactic antibiotics eliminate bacteremia and allow safe outpatient management following high–dose chemotherapy and autologous stem cell rescue. Meisenberg B, et al. **Support Care Cancer** 1996 Sep;4(5):364–9

Experience of tacrolimus–based immunosuppression in living–related liver transplantation complicated with graft tuberculosis: interaction with rifampicin and side effects. Kiuchi T, et al. **Transplant Proc** 1996 Dec;28(6):3171–2

[Compliance, efficacy and tolerability of the therapeutic regimen recommended by National Consensus on Tuberculosis] Colmenero JD, et al. **Enferm Infecc Microbiol Clin** 1997 Mar;15(3):129–33 (Eng. Abstr.) **(Spa)**

[Cotrimoxazole plus rifampicin in the treatment of staphylococcal osteoarticular infection] Sánchez C, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):10–3 (Eng. Abstr.) **(Spa)**

TOXICITY

Study of oxidative–stress in rifampicin–induced hepatic injury in growing rats with and without protein–energy malnutrition. Sodhi CP, et al. **Hum Exp Toxicol** 1997 Jun; 16(6):315–21

RIFAMYCINS

ADMINISTRATION & DOSAGE

Activity of KRM–1648 in combination with isoniazid against Mycobacterium tuberculosis in a murine model. Klemens SP, et al. **Antimicrob Agents Chemother** 1996 Feb; 40(2):298–301

Bacterial translocation in the course of acute pancreatitis: beneficial role of nonabsorbable antibiotics and lactitol enemas. Marotta F, et al. **Digestion** 1996 Nov–Dec; 57(6):446–52

[Anti–Mycobacterium avium complex activities of KRM–1648, clarithromycin and levofloxacin in 7HSF medium at peak or average blood concentrations after their oral administration of clinical dosages] Sato K, et al. **Kekkaku** 1997 Jul;72(7):449–53 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Rifamycin–induced lupus syndrome [letter] Berning SE, et al. **Lancet** 1997 May 24;349(9064):1521–2

[Anaphylactic shock after tourniquet removal in orthopedic surgery] Laxenaire MC, et al. **Ann Fr Anesth Reanim** 1996; 15(2):179–84 (Eng. Abstr.) **(Fre)**

BLOOD

Effect of Mycobacterium avium infection on the influx, accumulation, and efflux of KRM–1648 by human macrophages. Bermudez LE, et al. **Microb Drug Resist** 1997 Fall;3(3):277–82

CHEMISTRY

Cytotrienin A, a novel apoptosis inducer in human leukemia HL–60 cells [letter] Kakeya H, et al. **J Antibiot (Tokyo)** 1997 Apr;50(4):370–2

METABOLISM

A comparative study of the redox–cycling of a quinone (rifamycin S) and a quinonimine (rifabutin) antibiotic by rat liver microsomes. Rao DN, et al. **Free Radic Biol Med** 1997;22(3):439–46

In vitro metabolism of a rifamycin derivative by animal and human liver microsomes, whole blood and expressed human CYP3A isoform. Mae T, et al. **Xenobiotica** 1996 Aug;26(8):793–802

PHARMACOKINETICS

Pharmacokinetics of KRM–1648, a new benzoxazinorifamycin, in rats and dogs. Hosoe K, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2749–55

In vitro metabolism of a rifamycin derivative by animal and human liver microsomes, whole blood and expressed human CYP3A isoform. Mae T, et al. **Xenobiotica** 1996 Aug;26(8):793–802

PHARMACOLOGY

Antibiotic susceptibility of the newly cultivated agent of human granulocytic ehrlichiosis: promising activity of quinolones and rifamycins. Klein MB, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):76–9

Comparative antimycobacterial activities of rifampin, rifapentine, and KRM–1648 against a collection of rifampin–resistant Mycobacterium tuberculosis isolates with known rpoB mutations. Moghazeh SL, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2655–7

Bacteriostatic and bactericidal activities of benzoxazinorifamycin KRM–1648 against Mycobacterium tuberculosis and Mycobacterium avium in human macrophages. Mor N, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1482–5

Effects of benzoxazinorifamycin KRM–1648 on cytokine production at sites of Mycobacterium avium complex infection induced in mice. Tomioka H, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):357–62

In vitro bactericidal and in vivo therapeutic activities of a new rifamycin derivative, KRM–1648, against Mycobacterium tuberculosis. Yamamoto T, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):426–8

In vitro activity of a new rifamycin derivative against Mycobacterium leprae. Dhople AM, et al. **Arzneimittelforschung** 1996 Feb;46(2):210–2

In vivo activities of novel benzoxazinorifamycins against Mycobacterium leprae. Dhople AM, et al. **Indian J Lepr** 1995 Oct–Dec;67(4):375–82

Rifamycins inhibit human neutrophil functions: new derivatives with potential antiinflammatory activity. Spisani S, et al. **Inflammation** 1997 Aug;21(4):391–400

A mechanism of rifamycin inhibition and resistance in Pseudomonas aeruginosa. Yee YC, et al. **J Antimicrob Chemother** 1996 Jul;38(1):133–7

[In vitro activities of benzoxazinorifamycin KRM–1648 against Mycobacterium tuberculosis] Sato K, et al. **Kekkaku** 1996 Aug;71(8):459–64 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Advice on treatment of Mycobacterium avium complex infection [letter; comment] Peloquin CA, et al. **Am J Health Syst Pharm** 1997 May 15;54(10):1208–9. Comment on: Am J Health Syst Pharm 1996 Nov 1;53(21):2585–90.

How effective is KRM–1648 in treatment of disseminated Mycobacterium avium complex infections in beige mice? Ji B, et al. **Antimicrob Agents Chemother** 1996 Feb; 40(2):437–42

In vitro bactericidal and in vivo therapeutic activities of a new rifamycin derivative, KRM–1648, against Mycobacterium tuberculosis. Yamamoto T, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):426–8

Activity of KRM–1648 alone or in combination with both ethambutol and kanamycin or clarithromycin against Mycobacterium intracellulare infections in beige mice. Yamamoto T, et al. **Antimicrob Agents Chemother** 1996 Feb; 40(2):429–32

Cytotrienin A, a novel apoptosis inducer in human leukemia HL–60 cells [letter] Kakeya H, et al. **J Antibiot (Tokyo)** 1997 Apr;50(4):370–2

RIFLES see **FIREARMS**

RIFOMYCINS see **RIFAMYCINS**

RIFT VALLEY FEVER

BLOOD

Experimental infection of three Nigerian breeds of sheep with the Zinga strain of the Rift Valley Fever virus. Olaleye OD, et al. **Rev Elev Med Vet Pays Trop** 1996;49(1):6–16

EPIDEMIOLOGY

Enzootic activity of Rift Valley fever virus in Senegal. Zeller HG, et al. **Am J Trop Med Hyg** 1997 Mar;56(3):265–72

MICROBIOLOGY

Distribution of viral antigen in tissues of new–born lambs infected with Rift Valley fever virus. Van der Lugt JJ, et al. **Onderstepoort J Vet Res** 1996 Dec;63(4):341–7

TRANSMISSION

Facilitation of Rift Valley fever virus transmission by Plasmodium berghei sporozoites in Anopheles stephensi mosquitoes. Vaughan JA, et al. **Am J Trop Med Hyg** 1996 Oct;55(4):407–9

RIFT VALLEY FEVER VIRUS

GENETICS

Analysis of the 3' terminal sequence recognized by the Rift Valley fever virus transcription complex in its ambisense S segment. Prehaud C, et al. **Virology** 1997 Jan 6; 227(1):189–97

ISOLATION & PURIFICATION

Detection of Rift Valley fever virus in mosquitoes by RT–PCR. Ibrahim MS, et al. **Mol Cell Probes** 1997 Feb; 11(1):49–53

Distribution of viral antigen in tissues of new-born lambs infected with Rift Valley fever virus. Van der Lugt JJ, et al. **Onderstepoort J Vet Res** 1996 Dec;63(4):341–7

PHYSIOLOGY

Facilitation of Rift Valley fever virus transmission by Plasmodium berghei sporozoites in Anopheles stephensi mosquitoes. Vaughan JA, et al. **Am J Trop Med Hyg** 1996 Oct;55(4):407–9

Persistent infection of mammalian cells by Rift Valley fever virus. Billecocq A, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3053–62

RIGHT ATRIAL FUNCTION see **ATRIAL FUNCTION, RIGHT**

RIGHT HEART BYPASS see **HEART BYPASS, RIGHT**

RIGHT TO DIE

see related
SUICIDE, ASSISTED

Dying with dignity [letter] Prendes C. **Am Fam Physician** 1997 Jul;56(1):55–6

Constitutional right to pharmaceutically assisted death. Brushwood DB, et al. **Am J Health Syst Pharm** 1996 Aug 1;53(15):1797–9

Constitutional aspects of physician-assisted suicide after Lee v. Oregon. Canick SM. **Am J Law Med** 1997;23(1):69–96 (251 ref.)

Whose death is it, anyway? [letter; comment] Bohlmann BJ. **Ann Intern Med** 1997 Apr 1;126(7):586; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Glick S. **Ann Intern Med** 1997 Apr 1;126(7):586–7; discussion 588 . Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Griffin EA. **Ann Intern Med** 1997 Apr 1;126(7):587; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Harris RH Jr. **Ann Intern Med** 1997 Apr 1;126(7):586; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Lena PJ. **Ann Intern Med** 1997 Apr 1;126(7):584–5; discussion 588 . Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Portnoi VA. **Ann Intern Med** 1997 Apr 1;126(7):587–8. Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41.

Whose death is it, anyway? [letter; comment] Reich JS. **Ann Intern Med** 1997 Apr 1;126(7):587; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Ringel E. **Ann Intern Med** 1997 Apr 1;126(7):585; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Rousseau P. **Ann Intern Med** 1997 Apr 1;126(7):585–6; discussion 588 . Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Routh CR. **Ann Intern Med** 1997 Apr 1;126(7):586; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

Whose death is it, anyway? [letter; comment] Salon JE. **Ann Intern Med** 1997 Apr 1;126(7):585; discussion 588. Comment on: Ann Intern Med 1996 Jul 15;125(2):137–41. Comment on: Ann Intern Med 1996 Jul 15;125(2):149–51.

The right to die [letter] Hartwig AW. **Aust Fam Physician** 1997 Mar;26(3):333

Doctors and patients support right to die [news] Dyer C. **BMJ** 1996 Nov 30;313(7069):1354

Legalizing physician-aided death. Capron AM. **Camb Q Healthc Ethics** 1996 Winter;5(1):10–23

Learning from Amy. A remarkable patient provokes anguished debate about rationality, autonomy and the right to die [see comments] Cameron S. **Can Med Assoc J** 1997 Jan 15;156(2):229–31. Comment in: Can Med Assoc J 1997 Apr 15;156(8):1116. Comment in: Can Med Assoc J 1997 Apr 15;156(8):1116, 1118. Comment in: CMAJ 1997 Jul 1;157(1):12; discussion 14. Comment in: CMAJ 1997 Jul 1;157(1):13–4.

The right to die. Herath P. **Ceylon Med J** 1996 Dec; 41(4):155–6

Lessons from Amy [letter; comment] Gervais L. **CMAJ** 1997 Jul 1;157(1):13–4. Comment on: Can Med Assoc J 1997 Jan 15;156(2):229–31.

Thoughts on SUPPORT [letter] Lobel C. **Hastings Cent Rep** 1996 Sep–Oct;26(5):2

Choosing to die [see comments] Botticelli MG. **Hawaii Med J** 1996 Dec;55(12):257. Comment in: Hawaii Med J 1996 Dec;55(12):255–6.

Rxemedy survey of 30,000 Americans age 55 and over indicates strong support for the right to die. Cataldi S, et al. **Hawaii Med J** 1997 Mar;56(3):74

Models of physician-assisted dying. Girsh F. **Hawaii Med J** 1996 Dec;55(12):284–5

Death with dignity: the case of physician-assisted suicide [comment] Goldstein N. **Hawaii Med J** 1996 Dec; 55(12):255–6. Comment on: Hawaii Med J 1996 Dec;55(12):257.

D.A.D.D.-Doctor Assisted Death with Dignity [editorial] Goldstein N. **Hawaii Med J** 1997 Mar;56(3):52–3

An emergency physician's perspective on death with dignity. Holschuh FC. **Hawaii Med J** 1996 Dec;55(12):252–4

Death with dignity: there's plenty more that we can do. Johnson RG. **Hawaii Med J** 1996 Dec;55(12):291–2

To die or not to die—is that the question? Educating physicians about end-of-life care. MacDonald R. **Hawaii Med J** 1996 Dec;55(12):294–5

Euthanasia: murder or mercy? Phifer KW. **Hawaii Med J** 1996 Dec;55(12):270–2, 292

Assisted suicide is gaining public support. Smyser AA. **Hawaii Med J** 1996 Aug;55(8):134

The right to bow out: yet another dilemma. Laster L. **Hosp Pract (Off Ed)** 1997 Apr 15;32(4):193–4

Death with Kantian dignity. Nelson HL. **J Clin Ethics** 1996 Fall;7(3):215–21

Utility and the principle of medical futility: safeguarding autonomy and the prohibition against cruel and unusual punishment [published erratum appears in J Contemp Health Law Policy 1996 Spring;12(2):following table of contents] Smith GP 2nd. **J Contemp Health Law Policy** 1995 Fall;12(1):1–39 (178 ref.)

Is the patient's right to die evolving into a duty to die?: Medical decision making and ethical evaluations in health care. Sprung CL, et al. **J Eval Clin Pract** 1997 Feb; 3(1):69–75

Death with dignity. End-of-life issues for the HIV/AIDS patient. Evangelisto M. **J Psychosoc Nurs Ment Health Serv** 1996 Jun;34(6):45–7 (4 ref.)

Forgoing life-sustaining treatments [letter; comment] Daniels JD. **Mayo Clin Proc** 1996 Dec;71(12):1212–3. Comment on: Mayo Clin Proc 1996 May;71(5):512–6.

Physician-assisted suicide. Lessons learned from the Kevorkian trials. Carroll BJ. **N C Med J** 1997 Jan–Feb; 58(1):25–9

Sometimes assisted suicide is best [letter] Ehrich R. **Nurse Pract** 1997 Apr;22(4):253

Patients deserve a graceful exit [letter; comment] Silverman JS. **Pa Med** 1997 Apr;100(4):4. Comment on: Pa Med 1996 Dec;99(12):34–7.

Die hard: end-of-life care in America [see comments] Snyder L, et al. **Pa Med** 1996 Jul;99(7):10–1. Comment in: Pa Med 1996 Jul;99(7):6.

Patient autonomy is the bottom line [letter; comment] Weiss W. **Pa Med** 1996 Sep;99(9):6. Comment on: Pa Med 1996 Jun;99(6):10.

Dignified death: a German perspective. Mundt C. **Psychiatry Clin Neurosci** 1995 May;49 Suppl 1:S149–54 (30 ref.)

Death with dignity in the Japanese culture. Nakagawa Y. **Psychiatry Clin Neurosci** 1995 May;49 Suppl 1:S161–3 (2 ref.)

Ethical orientations and dignified death. Ohi G. **Psychiatry Clin Neurosci** 1995 May;49 Suppl 1:S155–9 (16 ref.)

Life and death from a psychiatric perspective. Introduction. Takahashi Y. **Psychiatry Clin Neurosci** 1995 May;49 Suppl 1:S53–4

Relationship of psychosocial and background variables to older adults' end-of-life decisions. Cicirelli VG. **Psychol Aging** 1997 Mar;12(1):72–83

Medical decisions at the end of life [editorial; comment] [published erratum appears in Public Health 1997 Jan;111(1):60] Horner JS. **Public Health** 1996 Sep; 110(5):269. Comment on: Public Health 1996 Sep;110(5):271–5.

Right to die [news] Horgan J. **Sci Am** 1996 May;274(5):12, 14

Death with dignity: what is the role of the physician? Egbert LD. **Tex Med** 1997 Feb;93(2):57–9

An ethical analysis of end-of-life decision-making: can the pediatrician's approach to the never-capacitated and the internist's approach to the formerly-capacitated be mutually enhancing? Fleischman AR. **Trans Am Clin Climatol Assoc** 1996;108:222–31; discussion 231–2 (29 ref.)

A guide of the perplexed—assisted suicide [editorial] Jonsen AR. **West J Med** 1996 Oct;165(4):250–1

When patients ask about assisted suicide. A viewpoint from Oregon. Lee MA, et al. **West J Med** 1996 Oct;165(4):205–8 (23 ref.)

Death with dignity. Burke JD. **Wis Med J** 1997 Feb; 96(2):23–6

Right-to-die [editorial] Risser F. **Wis Med J** 1997 Feb; 96(2):6–7

The caring imperative [editorial] Scheckler WE. **Wis Med J** 1997 Feb;96(2):10–1

[To want and to say that one wants (letter)] Häyry H, et al. **Duodecim** 1995;111(16):1578–80 **(Fin)**

[Life is teaching, but do we learn? (letter)] Linkola A. **Duodecim** 1995;111(16):1579–80 **(Fin)**

[Commentary on the editorial by J. Touzet: "Will to die, palliative care and medical responsibility" (letter; comment)] Dunet E. **Nephrologie** 1996;17(8):455–6. Comment on: Nephrologie 1996;17(4):221–3. **(Fre)**

[Terminal care. I. Topics. 2. Death with dignity and euthanasia] Hoshino K. **Nippon Naika Gakkai Zasshi** 1996 Dec 10;85(12):1983–7 **(Jpn)**

[The National Society Mitt Livstestament (My Living Will)—promotes active euthanasia (letter)] Borg E. **Tidsskr Nor Laegeforen** 1997 Apr 30;117(11):1646 **(Nor)**

[The good death?] Jodalen H. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1065 **(Nor)**

[Create "freedom" for the debate on death, not clinics! (letter; comment)] Bengtsson M. **Lakartidningen** 1997 Feb 12; 94(7):500. Comment on: Lakartidningen 1997 Jan 8;94(1):13–4. **(Swe)**

[The right to death with dignity. No care standards are perfect] Hagberg G. **Lakartidningen** 1997 Feb 5;94(6):398, 403–4 **(Swe)**

[A reply to Göran Isacsson: investigate how people in our own country die! (see comments)] Tännsjö T. **Lakartidningen** 1997 Jan 8;94(1–2):13–4. Comment in: Lakartidningen 1997 Feb 12;94(7):500. **(Swe)**

HISTORY

Historical evolution and modern implications of concepts of consent to, and refusal of, medical treatment in the law of trespass. Mendelson D. **J Leg Med** 1996 Mar;17(1):1–71

[Death with dignity and medical decision. 1979 (classical article)] Chávez I. **Arch Inst Cardiol Mex** 1996 Jul–Aug; 66(4):356–9 **(Spa)**

LEGISLATION & JURISPRUDENCE

What degree of medical treatment do nursing home residents want in case of life-threatening disease? Moe C, et al. **Age Ageing** 1997 Mar;26(2):133–7

Oregon's physician-assisted suicide law. An alternative positive viewpoint [see comments] Goodwin P. **Arch Intern Med** 1997 Aug 11–25;157(15):1642–4. Comment in: Arch Intern Med 1997 Aug 11–25;157(15):1638–40.

Physician-assisted suicide. Compassionate care or brave New World? [editorial; comment] Sobel RM, et al. **Arch Intern Med** 1997 Aug 11–25;157(15):1638–40. Comment on: Arch Intern Med 1997 Aug 11–25;157(15):1642–4.

Assisted suicide and euthanasia: what about the clinical issues? [see comments] Kelly BJ, et al. **Aust N Z J Psychiatry** 1996 Feb;30(1):3–8 (34 ref.). Comment in: Aust N Z J Psychiatry 1996 Aug;30(4):557–8.

Velcro on the slippery slope: the role of psychiatry in active voluntary euthanasia. Ryan CJ. **Aust N Z J Psychiatry** 1995 Dec;29(4):580–5

Living versus dying "with dignity": a new perspective on the euthanasia debate. Koch T. **Camb Q Healthc Ethics** 1996 Winter;5(1):50–61

Rights of the Terminally Ill Act of the Australian Northern Territory [see comments] Schwartz RL. **Camb Q Healthc Ethics** 1996 Winter;5(1):157–66. Comment in: Camb Q Healthc Ethics 1996 Spring;5(2):278–80.

Legalized MD-assisted suicide needed to improve care, physician tells right-to-die group. Elash A. **CMAJ** 1997 Sep 15;157(6):763–4

Death in a Halifax hospital: a murder case highlights a profession's divisions. Robb N. **CMAJ** 1997 Sep 15; 157(6):757–62

The question of assisted suicide: why now? Blansfield HN. **Conn Med** 1997 May;61(5):293–4

Hemlock Society medical director defends 'physician aid-in dying' [letter; comment] MacDonald R. **Geriatrics** 1996 Oct;51(10):12–3. Comment on: Geriatrics 1996 Jun;51(6):32–5, 39–40, 42. Comment on: Geriatrics 1996 Jul;51(7):14–5.

The personal as political [letter; comment] Preston TA. **Hastings Cent Rep** 1996 Sep–Oct;26(5):2–3. Comment on: Hastings Cent Rep 1995 Nov–Dec;25(6):23–4.

Physician-assisted dying: the coming debate [letter] Kipnis K. **Hawaii Med J** 1997 May;56(5):108, 110–1

Lives in the balance '96. A letter to members of Hemlock-Hawaii. Lawson M. **Hawaii Med J** 1996 Dec; 55(12):299–300

Hawaii needs a policy on assisted suicide. Smyser AA. **Hawaii Med J** 1996 Nov;55(11):230

Dollars & death. Money changes everything. Now it's entering the debate over the right to die—with explosive results. Bilchik GS. **Hosp Health Netw** 1996 Dec 20; 70(24):18–22

The Glucksberg & Quill amicus curiae briefs: verbatim arguments opposing assisted suicide. Coleson RE. **Issues Law Med** 1997 Summer;13(1):3–102

RIGHT TO DIE

Lee v. State of Oregon. Devlin MM. **Issues Law Med** 1996 Spring;11(4):433–5
The reasons so many people support physician–assisted suicide—and why these reasons are not convincing. Kamisar Y. **Issues Law Med** 1996 Fall;12(2):113–31
Encyclical, Evangelium Vitae. Paul PJ 2d. **Issues Law Med** 1996 Spring;11(4):443–53
It's my body and I'll die if I want to: a property–based argument in support of assisted suicide. Friedman RF. **J Contemp Health Law Policy** 1995 Fall;12(1):183–213 (210 ref.)
A right to suicide does not entail a right to assisted death. Gunderson M. **J Med Ethics** 1997 Feb;23(1):51–4
The legislation of active voluntary euthanasia in Australia: will the slippery slope prove fatal? Kerridge IH, et al. **J Med Ethics** 1996 Oct;22(5):273–8
The right to refuse treatment is not a right to be killed [see comments] Lowe SL. **J Med Ethics** 1997 Jun;23(3):154–8; discussion 161–3. Comment in: J Med Ethics 1997 Jun;23(3):159. Comment in: J Med Ethics 1997 Jun;23(3):160.
Privacy and autonomy: from Warren and Brandeis to Roe and Cruzan. Halper T. **J Med Philos** 1996 Apr;21(2):121–35
Does it make clinical sense to equate terminally ill patients who require life–sustaining interventions with those who do not? Alpers A, et al. **JAMA** 1997 Jun 4;277(21):1705–8
Assisted suicide or the right to die, Part II. Rhodes AM. **MCN Am J Matern Child Nurs** 1997 Mar–Apr;22(2):114
Assisted suicide or the right to die, Part I. Rhodes AM. **MCN Am J Matern Child Nurs** 1997 Jan–Feb;22(1):31
Death and dying in Australia—some medico–legal problems for legislators. MacFarlane PJ. **Med Law** 1997;16(1):179–86
Death. Nieuw AD. **Med Law** 1996;15(2):319–23
Supreme Court finds no 'right to die' [news] **Minn Med** 1997 Aug;80(8):39
The promised end—constitutional aspects of physician–assisted suicide. Annas GJ. **N Engl J Med** 1996 Aug 29;335(9):683–7
Dying in dignity: the pros and cons of assisted suicide. Diekstra RF. **Psychiatry Clin Neurosci** 1995 May;49 Suppl 1:S139–48
The Oregon Death With Dignity Act: implementation issues. Lee MA. **West J Med** 1997 Jun;166(6):398–401

RIGHT TO TREATMENT see **PATIENT ADVOCACY**

RIGHT VENTRICULAR DYSFUNCTION see **VENTRICULAR DYSFUNCTION, RIGHT**

RIGHT VENTRICULAR FUNCTION see **VENTRICULAR FUNCTION, RIGHT**

RIGHT VENTRICULAR HYPERTROPHY see **HYPERTROPHY, RIGHT VENTRICULAR**

RIGIDITY, DECEREBRATE see **DECEREBRATE STATE**

RIGOR MORTIS

Absence of rigor mortis in Indian childhood cirrhosis [see comments] Patel BD, et al. **Lancet** 1997 Jan 11; 349(9045):100–1. Comment in: Lancet 1997 Mar 15;349(9054):810.
Absence of rigor mortis [letter; comment] Schäfer AT. **Lancet** 1997 Mar 15;349(9054):810. Comment on: Lancet 1997 Jan 11;349(9045):100–1.

METABOLISM

Reconsideration of the sequence of rigor mortis through postmortem changes in adenosine nucleotides and lactic acid in different rat muscles. Kobayashi M, et al. **Forensic Sci Int** 1996 Oct 25;82(3):243–53

VETERINARY

Meat toughening does not occur when rigor shortening is prevented. Koohmaraie M, et al. **J Anim Sci** 1996 Dec; 74(12):2935–42
Observations on rheological, electrical, and optical changes during rigor development in pork and beef. Swatland HJ. **J Anim Sci** 1997 Apr;75(4):975–85

RILEY–DAY SYNDROME see **DYSAUTONOMIA, FAMILIAL**

RILEY VIRUS see **LACTATE DEHYDROGENASE VIRUS**

RIMANTADINE

PHARMACOLOGY

Combined protective effect of an immunostimulatory bacterial preparation and rimantadine in experimental influenza A virus infection. Serkedjieva J, et al. **Acta Virol** 1997 Apr;41(2):65–70
[Comparative study of the mechanism of inhibition of Sindbis virus reproduction by adamantane derivatives: remantadine and amide of 1–adamantane carboxylic acid] Andronova VL. **Antibiot Khimioter** 1996;41(7–8):26–30 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Use of antivirals in influenza in the elderly: prophylaxis and therapy. Nicholson KG. **Gerontology** 1996;42(5):280–9 (55 ref.)
Influenza, influenza vaccine, and amantadine/rimantadine. Zimmerman RK, et al. **J Fam Pract** 1997 Aug;45(2):107–22; quiz 123–4 (44 ref.)
Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). **MMWR Morb Mortal Wkly Rep** 1997 Apr 25; 46(RR–9):1–25

RINDERPEST

EPIDEMIOLOGY

Occurrence of rinderpest in European pigs in India. Govindarajan R, et al. **Vet Rec** 1996 Nov 9;139(19):473
[Epidemiology of rinderpest and cattle plague in Mali: serological surveys] Tounkara K, et al. **Rev Elev Med Vet Pays Trop** 1996;49(4):273–7 (Eng. Abstr.) **(Fre)**

HISTORY

The cattle plague of 1865 and the reception of "the germ theory" in mid–Victorian Britain [see comments] Romano TM. **J Hist Med Allied Sci** 1997 Jan;52(1):51–80. Comment in: J Hist Med Allied Sci 1997 Jan;52(1):7–16.
Rinderpest in South Africa—100 years ago. Vogel SW, et al. **J S Afr Vet Assoc** 1996 Dec;67(4):164–70
The immunization of cattle against rinderpest in eighteenth–century Europe. Huygelen C. **Med Hist** 1997 Apr;41(2):182–96

IMMUNOLOGY

The nucleotide sequence of the hemagglutinin gene of the LA strain of rinderpest virus, a seed virus strain used for vaccine production in Japan. Sugiyama M, et al. **J Vet Med Sci** 1996 Aug;58(8):769–71
Use of dot–immunobinding assay for visual detection of rinderpest antibodies in vaccinated cattle. Singh G, et al. **Trop Anim Health Prod** 1997 May;29(2):73–6
Long–term immunity in cattle vaccinated with a recombinant rinderpest vaccine. Inui K, et al. **Vet Rec** 1995 Dec 23–30; 137(26):669–70

PREVENTION & CONTROL

Trial of a capripoxvirus–rinderpest recombinant vaccine in African cattle. Ngichabe CK, et al. **Epidemiol Infect** 1997 Feb;118(1):63–70
Rinderpest: at war with the disease of war. Crowther JR. **Sci Prog** 1997;80 (Pt 1):21–43
Long–term immunity in cattle vaccinated with a recombinant rinderpest vaccine. Inui K, et al. **Vet Rec** 1995 Dec 23–30; 137(26):669–70
[Evaluation of vaccinal protection against rinderpest in Cameroon. III. General evaluation] Ngangnou A, et al. **Rev Elev Med Vet Pays Trop** 1996;49(1):18–22 (Eng. Abstr.) **(Fre)**

VIROLOGY

Adaptation of caprinised rinderpest virus to grow in Vero cells in vitro. Parida MM, et al. **Acta Virol** 1996 Feb; 40(1):45–8

RINDERPEST VIRUS

DRUG EFFECTS

Inhibition of replication of rinderpest virus by 5–fluorouracil. Ghosh A, et al. **Antiviral Res** 1996 Jun;31(1–2):35–44

GENETICS

Protective vaccination of ferrets against canine distemper with recombinant pox virus vaccines expressing the H or F genes of rinderpest virus. Jones L, et al. **Am J Vet Res** 1997 Jun;58(6):590–3
The genome sequence of the virulent Kabete 'O' strain of rinderpest virus: comparison with the derived vaccine. Baron MD, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3041–6
The nucleotide sequence of the hemagglutinin gene of the LA strain of rinderpest virus, a seed virus strain used for vaccine production in Japan. Sugiyama M, et al. **J Vet Med Sci** 1996 Aug;58(8):769–71
Rescue of rinderpest virus from cloned cDNA. Baron MD, et al. **J Virol** 1997 Feb;71(2):1265–71
Characterization of membrane–bound and membrane anchor–less forms of hemagglutinin glycoprotein of Rinderpest virus expressed by baculovirus recombinants. Naik S, et al. **Virus Genes** 1997;14(2):95–104
Evaluation of polymerase chain reaction for the detection and characterisation of rinderpest and peste des petits ruminants viruses for epidemiological studies. Forsyth MA, et al. **Virus Res** 1995 Dec;39(2–3):151–63

GROWTH & DEVELOPMENT

Adaptation of caprinised rinderpest virus to grow in Vero cells in vitro. Parida MM, et al. **Acta Virol** 1996 Feb; 40(1):45–8

IMMUNOLOGY

Stabilization of rinderpest vaccine by modification of the lyophilization process. House JA, et al. **Dev Biol Stand** 1996;87:235–44 (23 ref.)
Trial of a capripoxvirus–rinderpest recombinant vaccine in African cattle. Ngichabe CK, et al. **Epidemiol Infect** 1997 Feb;118(1):63–70
The nucleotide sequence of the hemagglutinin gene of the LA strain of rinderpest virus, a seed virus strain used for vaccine production in Japan. Sugiyama M, et al. **J Vet Med Sci** 1996 Aug;58(8):769–71
Epidemiologic association between antibody titres against bovine virus diarrhoea virus, rinderpest disease virus and infectious bovine rhinotracheitis virus in a buffalo herd. Akhtar S, et al. **Trop Anim Health Prod** 1996 Aug; 28(3):207–12
Use of dot–immunobinding assay for visual detection of rinderpest antibodies in vaccinated cattle. Singh G, et al. **Trop Anim Health Prod** 1997 May;29(2):73–6
Immunogenic and protective properties of haemagglutinin protein (H) of rinderpest virus expressed by a recombinant baculovirus. Naik S, et al. **Vaccine** 1997 Apr–May; 15(6–7):603–7
Potency testing of tissue culture rinderpest vaccine in rabbits. Patil PK, et al. **Vaccine** 1997 Apr–May;15(6–7):608–11
Long–term immunity in cattle vaccinated with a recombinant rinderpest vaccine. Inui K, et al. **Vet Rec** 1995 Dec 23–30; 137(26):669–70

PATHOGENICITY

Rinderpest virus isolates of different virulence vary in their capacity to infect bovine monocytes and macrophages. Rey Nores JE, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1875–84

PHYSIOLOGY

Rinderpest virus isolates of different virulence vary in their capacity to infect bovine monocytes and macrophages. Rey Nores JE, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1875–84

RING CHROMOSOMES

Boy with a ring 7 chromosome: a case report with special reference to dermatological findings. Wahlström J, et al. **Acta Paediatr** 1996 Oct;85(10):1256–60
Growth hormone neurosecretory dysfunction associated with ring chromosome 18. Aritaki S, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):544–8
Supernumerary ring chromosome 17 identified by fluorescent in situ hybridization. Fagan K, et al. **Am J Med Genet** 1997 Apr 14;69(4):352–5
Familial ring (19) chromosome mosaicism: case report and review. Flejter WL, et al. **Am J Med Genet** 1996 Dec 18; 66(3):276–80 (11 ref.)
Prune–belly syndrome and other anomalies in a stillborn fetus with a ring X chromosome lacking XIST. Guillén DR, et al. **Am J Med Genet** 1997 May 2;70(1):32–6
Leiomyoma of uterus in a patient with ring chromosome 12: case presentation and literature review. Hajianpour MJ, et al. **Am J Med Genet** 1996 May 17;63(2):335–9 (12 ref.)
A case with mosaic di–, tetra–, and octacentric ring Y chromosomes. Henegariu O, et al. **Am J Med Genet** 1997 Sep 5;71(4):426–9
PCR and FISH analysis of a ring Y chromosome. Henegariu O, et al. **Am J Med Genet** 1997 Mar 17;69(2):171–6
Ring chromosome 18 in a fetus with only facial anomalies. Los FJ, et al. **Am J Med Genet** 1996 Dec 11;66(2):216–20
Ring chromosome X in a child with manifestations of Kabuki syndrome. McGinniss MJ, et al. **Am J Med Genet** 1997 May 2;70(1):37–42 (34 ref.)
Sub–band deletion of 7q36.3 in a patient with ring chromosome 7: association with holoprosencephaly. Sawyer JR, et al. **Am J Med Genet** 1996 Oct 16;65(2):113–6
Interstitial deletion 5p accompanied by dicentric ring formation of the deleted segment resulting in trisomy 5p13–cen. Schuffenhauer S, et al. **Am J Med Genet** 1996 Oct 2;65(1):56–9
Ring chromosome 20 and nonconvulsive status epilepticus. A new epileptic syndrome. Inoue Y, et al. **Brain** 1997 Jun; 120 (Pt 6):939–53 (38 ref.)
Ring chromosome 9: an atypical case. Lanzi G, et al. **Brain Dev** 1996 May–Jun;18(3):216–9
March 1997—4 year old girl with ring chromosome 22 and brain tumor. Rubio A. **Brain Pathol** 1997 Jul;7(3):1027–8
Two newborns with chromosome 4 imbalances: deletion 4q33—>q35 and ring r(4)(pterq35.2–qter). Calabrese G, et al. **Clin Genet** 1997 Apr;51(4):264–7
Delineation of a ring chromosome 16 by the FISH–technique: a case report with review. Conte RA, et al. **Clin Genet** 1997 Mar;51(3):196–9
Prenatal diagnosis of ring chromosome 14 after intracytoplasmic sperm injection. Jean M, et al. **Fertil Steril** 1997 Jan;67(1):164–5
A Turner syndrome woman with a ring X chromosome [45,X/46,X,r(X)(p22.3q27)] whose child also had a ring X chromosome. Uehara S, et al. **Fertil Steril** 1997 Mar; 67(3):576–9
Ring chromosomes in parosteal osteosarcoma contain sequences from 12q13–15: a combined cytogenetic and comparative genomic hybridization study. Szymanska J, et al. **Genes Chromosomes Cancer** 1996 May;16(1):31–4
Mutational analysis and expression studies of the

neurofibromatosis type 2 (NF2) gene in a patient with a ring chromosome 22 and NF2. Kehrer-Sawatzki H, et al. **Hum Genet** 1997 Jul;100(1):67–74

Ring chromosome 15 syndrome in an adult female. Matsuishi T, et al. **J Intellect Disabil Res** 1996 Oct;40 (Pt 5):478–80

Ring chromosome 22 and mood disorders. Sovner R, et al. **J Intellect Disabil Res** 1996 Feb;40 (Pt 1):82–6 (8 ref.)

Prenatal diagnosis of ring chromosome 6 in a fetus with hydrocephalus. Walker ME, et al. **Prenat Diagn** 1996 Sep; 16(9):857–61 (26 ref.)

RING CONSTRICTIONS, INTRAUTERINE see **AMNIOTIC BAND SYNDROME**

RINGWORM see **TINEA**

RIOTS

see related
VIOLENCE

Atherosclerotic cardiovascular mortality during the 1992 riots in Los Angeles. Birnbaum Y, et al. **Am J Cardiol** 1997 Apr 15;79(8):1155–8

The violence of despair: consultation to a HeadStart program following the Los Angeles uprising of 1992. Stuber ML, et al. **Community Ment Health J** 1997 Jun;33(3):235–41

PSYCHOLOGY

Psychological perspective for a theory of behavior during riots. Lachman SJ. **Psychol Rep** 1996 Dec;79(3 Pt 1):739–44

RISK

Quantifying the expected vs potential impact of a risk-factor intervention program [letter; comment] Bulterys M, et al. **Am J Public Health** 1997 May;87(5):867–8. Comment on: Am J Public Health 1995 Sep;85(9):1202–4.

The effect of nonresponse on estimation of relative risk in a case–control study. Kreiger N, et al. **Ann Epidemiol** 1997 Apr;7(3):194–9

The relation of chronic diseases to all–cause mortality risk--the Seven Countries Study. Menotti A, et al. **Ann Med** 1997 Apr;29(2):135–41

Truth–telling, risk, and hope. Surbone A. **Ann N Y Acad Sci** 1997 Feb 20;809:72–9

Cardiothoracic databases: where are we headed? [editorial; comment] Grover FL. **Ann Thorac Surg** 1997 Jun; 63(6):1531–2. Comment on: Ann Thorac Surg 1997 Jun;63(6):1635–43.

Coming to terms with the terms of risk. Kraemer HC, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):337–43

Estimation of excess risk from case–control data using Aalen's linear regression model. Borgan O, et al. **Biometrics** 1997 Jun;53(2):690–7

A competing risks analysis of presenting AIDS diagnoses trends. Fusaro RE, et al. **Biometrics** 1996 Mar;52(1):211–25

Estimation of absolute risk from nested case–control data. Langholz B, et al. **Biometrics** 1997 Jun;53(2):767–74

Performance of the Pediatric Risk of Mortality Score [letter; comment] Martinot A, et al. **Crit Care Med** 1997 Apr; 25(4):716–7. Comment on: Crit Care Med 1996 Sep;24(9):1507–13.

Relative and attributable risk and its relevance to the prevention of contact dermatitis. Williams HC. **Curr Probl Dermatol** 1996;25:10–7

Risk communication; the patient's view. Thornton JG, et al. **Early Hum Dev** 1996 Dec 30;47 Suppl:S13–7 (17 ref.)

Problems in the average–risk interpretation of categorical dose–response analyses [letter; comment] Fleisher JM. **Epidemiology** 1996 Mar;7(2):211–12. Comment on: Epidemiology 1995 Sep;6(5):563–5.

Fundamentals for establishing a risk communication program. Ng KL, et al. **Health Phys** 1997 Sep;73(3):473–82

Physician payment and the game of risk. Grumbach K. **J Am Board Fam Pract** 1996 Sep–Oct;9(5):360–5

Should the definition for the negative likelihood ratio be changed? Delgado–Rodríguez M, et al. **J Clin Epidemiol** 1997 Jun;50(6):639–40

Should the definition for the negative likelihood ratio be changed? Delgado–Rodríguez M, et al. **J Clin Epidemiol** 1997 Jun;50(6):641–2; discussion 643–4

Clinical prediction rules [letter; comment] Tu JV, et al. **J Clin Epidemiol** 1997 Jun;50(6):743–4. Comment on: J Clin Epidemiol 1996 Jul;49(7):819.

Induced abortion, bias, and breast cancer: why epidemiology hasn't reached its limit [editorial; comment] [see comments] Weed DL, et al. **J Natl Cancer Inst** 1996 Dec 4; 88(23):1698–700. Comment on: J Natl Cancer Inst 1996 Dec 4;88(23):1759–64. Comment in: J Natl Cancer Inst 1997 Apr 16;89(8):588–90.

Women's health as a paradigm for understanding factors that mediate disease. Ness RB, et al. **J Womens Health** 1997 Jun;6(3):329–36

Risk and the inadequacy of science [editorial] **Nature** 1997 Jan 2;385(6611):1

How to better communicate cancer risk to patients [news] **Oncology (Huntingt)** 1996 Sep;10(9):1413

Risk perception, federal spending, and the Savannah River Site: attitudes of hunters and fishermen. Burger J, et al. **Risk Anal** 1997 Jun;17(3):313–20

Risk–based environmental remediation: Bayesian Monte Carlo analysis and the expected value of sample information. Dakins ME, et al. **Risk Anal** 1996 Feb; 16(1):67–79

Major chemical accidents in industrializing countries: the socio–political amplification of risk. de Souza Porto MF, et al. **Risk Anal** 1996 Feb;16(1):19–29

Perception of ecological risk to water environments. McDaniels TL, et al. **Risk Anal** 1997 Jun;17(3):341–52

Exploring the "psychometric paradigm": comparisons between aggregate and individual analyses. Marris C, et al. **Risk Anal** 1997 Jun;17(3):303–12

Industry response to SARA Title III: pollution prevention, risk reduction, and risk communication. Santos SL, et al. **Risk Anal** 1996 Feb;16(1):57–66

Compliance versus risk in assessing occupational exposures. Tornero–Velez R, et al. **Risk Anal** 1997 Jun;17(3):279–92

Probability of developing or dying of cancer United States, 1991. Garfinkel L. **Stat Bull Metrop Insur Co** 1995 Oct–Dec;76(4):31–7

Non–parametric Bayesian approach to hazard regression: a case study with a large number of missing covariate values. Arjas E, et al. **Stat Med** 1996 Aug 30;15(16):1757–70

Regression models for interval censored survival data: application to HIV infection in Danish homosexual men. Carstensen B. **Stat Med** 1996 Oct 30;15(20):2177–89

The effects of misclassification of the actual cause of death in competing risks analysis. Ebrahimi N. **Stat Med** 1996 Jul 30;15(14):1557–66

Simple robust procedures for combining risk differences in sets of 2 x 2 tables. Emerson JD, et al. **Stat Med** 1996 Jul 30;15(14):1465–88

A simulation study of cross–validation for selecting an optimal cutpoint in univariate survival analysis. Faraggi D, et al. **Stat Med** 1996 Oct 30;15(20):2203–13

Simultaneously modelling censored survival data and repeatedly measured covariates: a Gibbs sampling approach. Faucett CL, et al. **Stat Med** 1996 Aug 15; 15(15):1663–85

Assessment of postpartum time–dependent disease risk in case–control studies: an application for examining age–specific effect estimates. Hsieh CC, et al. **Stat Med** 1996 Jul 30;15(14):1545–56

Characterizing exposure–disease association in human populations using the Lorenz curve and Gini index. Lee WC. **Stat Med** 1997 Apr 15;16(7):729–39

Non–parametric inference for cumulative incidence functions in competing risks studies. Lin DY. **Stat Med** 1997 Apr 30;16(8):901–10

The population risk as an explanatory variable in research synthesis of clinical trials. McIntosh MW. **Stat Med** 1996 Aug 30;15(16):1713–28

Sample size requirements for stratified prospective studies with null hypothesis of non–unity relative risk using the score test. Nam JM. **Stat Med** 1994 Jan 15;13(1):79–86

Conceptual aspects of attributable risk with recurrent disease events. Pichlmeier U, et al. **Stat Med** 1997 May 30; 16(10):1107–20

Design considerations for estimation of exposure effects on disease risk, using aggregate data studies. Sheppard L, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1849–58

Confidence intervals for the excess risk in case–control studies. Siskind V. **Stat Med** 1996 Jul 30;15(14):1535–44

Designing and analysing case–control studies to exploit independence of genotype and exposure. Umbach DM, et al. **Stat Med** 1997 Aug 15;16(15):1731–43

[Empirical Bayes estimates of relative risk: principles and examples] Colonna M. **Rev Epidemiol Sante Publique** 1997 Apr;45(2):142–9 (Eng. Abstr.) **(Fre)**

[Relative risk and odds ratio] Steurer J. **Schweiz Rundsch Med Prax** 1997 Jul 2;86(27–28):1122–3 **(Ger)**

[Risk as a concept and a challenge in health care] Graff–Iversen S. **Tidsskr Nor Laegeforen** 1996 Sep 20; 116(22):2669–72 (32 ref.) (Eng. Abstr.) **(Nor)**

[Risk--coincidence or destiny? (letter)] Iversen JG. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):411 **(Nor)**

[Risk as a concept and challenge in health care] Skolbekken JA. **Tidsskr Nor Laegeforen** 1996 Sep 20;116(22):2673–6 (30 ref.) (Eng. Abstr.) **(Nor)**

[How do we perceive the risk?] Thelle DS. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3590–1 **(Nor)**

[Models of causal inference: critical analysis of the use of statistics in epidemiology] Czeresnia D, et al. **Rev Saude Publica** 1995 Oct;29(5):415–23 (Eng. Abstr.) **(Por)**

RISK ASSESSMENT

Influence of HIV–infection risk on resident physicians. Ritota PC, et al. **Acad Med** 1996 Jun;71(6):684–6

Predicting postoperative adverse events. Clinical efficiency of four general classification systems. The project perioperative risk. Arvidsson S, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):783–91

Preoperative risk stratification in vascular surgical patients. Coriat P, et al. **Acta Anaesthesiol Scand Suppl** 1996; 109:127–30

Improved perioperative management: the preoperative contribution. Fleisher LA. **Acta Anaesthesiol Scand Suppl** 1996;109:130–3

Human GSH–transferase in risk assessment. Bolt HM. **Adv Exp Med Biol** 1996;387:405–9 (28 ref.)

The use of data on biologically reactive intermediates in risk assessment. Buchanan JR, et al. **Adv Exp Med Biol** 1996; 387:429–37 (19 ref.)

Role of molecular biology in risk assessment. Puga A, et al. **Adv Exp Med Biol** 1996;387:395–404 (46 ref.)

Industrial hygiene risk assessment: industrial hygiene technology transition [letter] Butler AH. **Am Ind Hyg Assoc J** 1997 Jan;58(1):66

Construction of composite scales for risk assessment in epidemiology: an application to ectopic pregnancy. Coste J, et al. **Am J Epidemiol** 1997 Feb 1;145(3):278–89

Suicides, homicides, and accidental death: a comparative risk assessment of police officers and municipal workers. Violanti JM, et al. **Am J Ind Med** 1996 Jul;30(1):99–104

Obstacles encountered in application of the Centers for Disease Control and Prevention guidelines for control of tuberculosis in a large dental center. Murphy DC, et al. **Am J Infect Control** 1997 Jun;25(3):275–82

Carbon monoxide poisoning from gasoline–powered engines: risk perception among Midwest flood victims [letter] Greife AL, et al. **Am J Public Health** 1997 Mar;87(3):466–7

The value of the population attributable risk percentage [letter; comment] Hill GB. **Am J Public Health** 1996 Oct; 86(10):1483. Comment on: Am J Public Health 1995 Sep;85(9):1202–4.

Neighborhood risk factors for low birthweight in Baltimore: a multilevel analysis. O'Campo P, et al. **Am J Public Health** 1997 Jul;87(7):1113–8

An overview of the risk assessment of hazardous materials and the role of toxicology. Mattie DR. **Ann Clin Lab Sci** 1997 May–Jun;27(3):173–8 (3 ref.)

Risk stratification of patients with syncope [comment] Martin TP, et al. **Ann Emerg Med** 1997 Apr;29(4):459–66. Comment on: Ann Emerg Med 1997 Apr;29(4):540–2.

The correction of risk estimates for measurement error. Bashir SA, et al. **Ann Epidemiol** 1997 Feb;7(2):154–64 (34 ref.)

Ecotoxicology for risk assessment in arid zones: some key issues. Everts JW. **Arch Environ Contam Toxicol** 1997 Jan; 32(1):1–10 (123 ref.)

The environmental experience: ecosystem protection. Bro–Rasmussen F. **Arch Toxicol Suppl** 1997;19:155–66 (17 ref.)

The identification of thresholds of acceptability and danger: the biological route. Tarazona JV. **Arch Toxicol Suppl** 1997; 19:137–46 (17 ref.)

Epidemiological studies of pig diseases: 1. Use of French protocols for risk factor assessment to predict the health status of Australian herds. Buddle JR, et al. **Aust Vet J** 1997 Apr;75(4):274–81

Communicating risk. Use of standard terms is unlikely to result in standard communication [letter; comment] Edwards A, et al. **BMJ** 1996 Dec 7;313(7070):1483. Comment on: BMJ 1996 Sep 28;313(7060):799–802.

Communicating risk. Risks can also be categorised as normal or abnormal [letter; comment] Madeley D. **BMJ** 1996 Dec 7;313(7070):1483. Comment on: BMJ 1996 Sep 28;313(7060):799–802.

Limited education as a risk factor in cervical cancer. Corral F, et al. **Bull Pan Am Health Organ** 1996 Dec;30(4):322–9

Myocardial infarction: predischarge risk stratification [editorial] Conti CR. **Clin Cardiol** 1996 Dec;19(12):923–4

The application of quantitative risk assessment to microbial food safety risks. Jaykus LA. **Crit Rev Microbiol** 1996; 22(4):279–93 (48 ref.)

Risk assessment and exposure control in an occupational setting. Packham CL. **Curr Probl Dermatol** 1996;25:133–44 (0 ref.)

Predictive testing of metalworking fluids and development of contact dermatitis in metalworkers. Wigger–Alberti W, et al. **Curr Probl Dermatol** 1996;25:106–15 (35 ref.)

Visceral fat and race–dependent health risks in obese nondiabetic premenopausal women. Albu JB, et al. **Diabetes** 1997 Mar;46(3):456–62

A two–step strategy for identification of high–risk subjects for a clinical trial of prevention of NIDDM. Narayan KM, et al. **Diabetes Care** 1996 Sep;19(9):972–8

Switching between cyclosporin formulations. What are the risks? Olyaei AJ, et al. **Drug Saf** 1997 Jun;16(6):366–73 (44 ref.)

Evaluation of the hazard quotient method for risk assessment of selenium. Lemly AD. **Ecotoxicol Environ Saf** 1996 Nov; 35(2):156–62

Added risk approach to derive maximum permissible concentrations for heavy metals: how to take natural background levels into account. Struijs J, et al. **Ecotoxicol Environ Saf** 1997 Jul;37(2):112–8

Risky business. Baram M. **Environ Health Perspect** 1996 Oct; 104(10):1040–5

Research needs for the risk assessment of health and environmental effects of endocrine disruptors: a report of the U.S. EPA–sponsored workshop. Kavlock RJ, et al. **Environ Health Perspect** 1996 Aug;104 Suppl 4:715–40 (193 ref.)

Acetylation as an indicator of risk. Lang NP. **Environ Health Perspect** 1997 Jun;105 Suppl 4:763–6 (44 ref.)

Reactivity parameters in structure–activity relationship–based risk assessment of chemicals. McKinney JD. **Environ Health Perspect** 1996 Aug;104(8):810–6 (44 ref.)

Practicing safe modeling: GLP for biologically based

mechanistic models [editorial] Portier CJ, et al. **Environ Health Perspect** 1996 Aug;104(8):806

Use of genetic toxicology data in U.S. EPA risk assessment: the mercury study report as an example. Schoeny R. **Environ Health Perspect** 1996 May;104 Suppl 3:663–73

Measures of effect based on the sufficient causes model. 3. Multivariate analysis. Allard R, et al. **Epidemiology** 1997 Jan;8(1):93–8

The case–control study as data missing by design: estimating risk differences [see comments] Wacholder S. **Epidemiology** 1996 Mar;7(2):144–50. Comment in: Epidemiology 1997 Jan;8(1):111–2.

Risk stratification after acute myocardial infarction in the thrombolytic era [editorial; comment] Beller GA. **Eur Heart J** 1997 Jun;18(6):886–8. Comment on: Eur Heart J 1997 Jun;18(6):925–30.

Supraventricular tachycardia. Occasional nuisance or frequent threat? Campbell RW. **Eur Heart J** 1996 Jul;17 Suppl C:21–5 (33 ref.)

Combination toxicology. Proceedings of a European conference. Veldhoven, The Netherlands, 11–13 October 1995. **Food Chem Toxicol** 1996 Nov–Dec; 34(11–12):1025–185

Risk assessment of mixtures and standard setting: working towards practical compromises. Bolt HM, et al. **Food Chem Toxicol** 1996 Nov–Dec;34(11–12):1179–81 (16 ref.)

Experimental designs and risk assessment in combination toxicology: panel discussion. Henschler D, et al. **Food Chem Toxicol** 1996 Nov–Dec;34(11–12):1183–5

Workshop overview. National Toxicology Program Studies: principles of dose selection and applications to mechanistic based risk assessment. Bucher JR, et al. **Fundam Appl Toxicol** 1996 May;31(1):1–8

Re: The use of uncertainty factors in estimating health risks [letter; comment] Crofton KM, et al. **Fundam Appl Toxicol** 1996 Jul;32(1):126–7. Comment on: Fundam Appl Toxicol 1996 Jan;29(1):18–30.

Surgical risk assessment and management in patients with HIV disease. Harris HW, et al. **Gastroenterol Clin North Am** 1997 Jun;26(2):377–91 (38 ref.)

Risk analysis in the valuation of medical practices. Nanda S, et al. **Health Care Manage Rev** 1996 Fall;21(4):26–32

Where to be born? A normative approach of life duration inequalities in the world. Attias E, et al. **Health Econ** 1996 Nov–Dec;5(6):559–72

Risk ranking by perception. Osei EK, et al. **Health Phys** 1997 Feb;72(2):195–203

Striking the balance between the role of animal model and human data in hazard assessment [comment] Calabrese EJ. **Hum Exp Toxicol** 1997 Apr;16(4):186–7. Comment on: Hum Exp Toxicol 1996 Sep;15(9):702–35.

Commentary: the use of maximum tolerated dose in rodent carcinogenicity bioassays and its relevance to human risk assessment. Savolainen K. **Hum Exp Toxicol** 1997 Apr; 16(4):190–2

Evaluating chemical risks: results of a survey of the British Toxicology Society. Slovic P, et al. **Hum Exp Toxicol** 1997 Jun;16(6):289–304

IARC Working Group on the Evaluation of Carcinogenic Risks to Humans: Silica, Some Silicates, Coal Dust and Para–Aramid Fibrils. Lyon, 15–22 October 1996. **IARC Monogr Eval Carcinog Risks Hum** 1997;68:1–475

Risk and cause in medical science. Kumar R, et al. **Indian Pediatr** 1995 Sep;32(9):1031–5 (5 ref.)

Biological monitoring and risk assessment in occupational settings. Zober A, et al. **Int Arch Occup Environ Health** 1996;68(6):389–93

Driving predictive modelling on a risk assessment path for enhanced food safety. Foegeding PM. **Int J Food Microbiol** 1997 May 20;36(2–3):87–95

A regulatory perspective on the potential uses of microbial risk assessment in international trade. Hathaway SC, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):127–33

Use of predictive microbiology in microbial food safety risk assessment. Walls I, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):97–102

Development of a quantitative risk assessment model for Salmonella enteritidis in pasteurized liquid eggs. Whiting RC, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):111–25

Environmental assessments in veterinary parasitology: a balanced perspective. Forbes AB. **Int J Parasitol** 1996 May; 26(5):567–9

Assessing risk [letter] Bradigan TW. **J Am Dent Assoc** 1997 May;128(5):542, 544, 546

Developments in microbiological risk assessment models for drinking water—a short review. Gale P. **J Appl Bacteriol** 1996 Oct;81(4):403–10 (27 ref.)

Risk assessment in dentistry: health risks of dental amalgam revisited. Choi BC. **J Can Dent Assoc** 1996 Apr; 62(4):328–32 (28 ref.)

Anesthesia information–management systems: their role in risk–versus cost assessment and outcomes research. Gibby GL. **J Cardiothorac Vasc Anesth** 1997 Apr;11(2 Suppl 1):2–5; discussion 24–5 (22 ref.)

Risk–benefit ratio or risk–benefit nonsense? Ernst E, et al. **J Clin Epidemiol** 1996 Oct;49(10):1203–4

Air Quality '95—Interdisciplinary Opportunities in the Environmental Evaluation International Conference. Pisa, Italy, October 19–21, 1995. **J Environ Pathol Toxicol Oncol** 1997;16(2–3):73–257

Preoperative risk assessment for carotid occlusion by transcranial Doppler ultrasound. Schneweis S, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):485–9

Risk assessment in patients with stable coronary artery disease: incremental value of nuclear imaging. Berman DS, et al. **J Nucl Cardiol** 1996 Nov–Dec;3(6 Pt 2):S41–9 (11 ref.)

Risk assessment after myocardial infarction: have the rules changed with thrombolytic therapy?. Verani MS. **J Nucl Cardiol** 1996 Nov–Dec;3(6 Pt 2):S50–9 (20 ref.)

Hemodynamic ischemic stroke during carotid endarterectomy: an appraisal of risk and cerebral protection. Frawley JE, et al. **J Vasc Surg** 1997 Apr; 25(4):611–9

And now all this [editorial] **Lancet** 1997 Jan 4;349(9044):1

Physicians' judgments of the risks of cardiac procedures. Differences between cardiologists and other internists. Poses RM, et al. **Med Care** 1997 Jun;35(6):603–17

Radiation risk estimation in human populations: lessons from the radiological accident in Brazil. da Cruz AD, et al. **Mutat Res** 1997 Feb 3;373(2):207–14

Future approaches to genetic toxicology risk assessment. Elespuru RK. **Mutat Res** 1996 Sep;365(1–3):191–204 (100 ref.)

UK policy learns about risk the hard way [news] Dickson D. **Nature** 1997 Jan 2;385(6611):8–9

Consensus grows on risk assessment [news] Ochert A. **Nature** 1997 Mar 27;386(6623):310

An approach to risk assessment. Simonsen L, et al. **Neurotoxicology** 1996 Fall–Winter;17(3–4):815–24

Basic occupational epidemiologic measures. Marsh GM. **Occup Med** 1996 Jul–Sep;11(3):421–31 (34 ref.)

Ethical and metaethical criteria for an emerging technology: risk assessment. Samuels SW. **Occup Med (Oxf)** 1997 May; 47(4):241–6

Stepwise strategy of using short– and long–term heart rate variability for risk stratification after myocardial infarction. Faber TS, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1845–51

Clinical significance of increased QT dispersion in the 12–lead standard ECG for arrhythmia risk prediction in dilated cardiomyopathy. Grimm W, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1886–9

Value of time– and frequency–domain analysis of signal–averaged electrocardiography for arrhythmia risk prediction in idiopathic dilated cardiomyopathy. Grimm W, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1923–7

EUROTOX '97. Diversification in Toxicology: man and environment. Aarhus, Denmark, June 25–28, 1997. Abstracts. **Pharmacol Toxicol** 1997;80 Suppl 3:1–192

Immediate and long–term effects of novel odors on risk assessment in mice. Kemble ED, et al. **Physiol Behav** 1997 Apr;61(4):543–9

Validation issues for the use of transgenic mouse mutation assays in risk assessment. Gorelick NJ. **Prog Clin Biol Res** 1996;395:81–108 (85 ref.)

Genetic variation in susceptibility as a key parameter in risk assessment and risk communication: policy aspects. Omenn GS. **Prog Clin Biol Res** 1996;395:235–47 (37 ref.)

Risk appraisal and management of violent behavior. Harris GT, et al. **Psychiatr Serv** 1997 Sep;48(9):1168–76 (132 ref.)

Use of the NOSIE to predict assaults among acute psychiatric patients. Nurses' Observational Scale for Inpatient Evaluation. Swett C, et al. **Psychiatr Serv** 1997 Sep; 48(9):1177–80

Perception of risk by home health care administrators and field workers. Kendra MA. **Public Health Nurs** 1996 Dec; 13(6):386–93

Reducing prenatal risk and improving birth outcomes: the public health nursing role. Schmitz K, et al. **Public Health Nurs** 1994 Jun;11(3):174–80

Toxicological considerations in environmental audit studies. Jaffery FN, et al. **Qual Assur** 1997 Jan–Mar;5(1):19–26 (7 ref.)

A new approach to risk assessment integrating scientific evaluation and economic assessment of costs and benefits. Barnard RC. **Regul Toxicol Pharmacol** 1996 Oct;24(2 Pt 1):121–5 (7 ref.)

What is going on in risk assessment? Remarks by the recipient upon his acceptance of the ISRTP 1995 International Achievement Award. Barnard RC. **Regul Toxicol Pharmacol** 1995 Dec;22(3):295–9

Dose–response assessment strategies for endocrine–active compounds. Barton HA, et al. **Regul Toxicol Pharmacol** 1997 Jun;25(3):292–305

Cancer risk assessment at the crossroads: the need to turn to a biological approach. Clayson DB, et al. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 1):45–59 (112 ref.)

Characterization of risks associated with the use of molinate. Cochran RC, et al. **Regul Toxicol Pharmacol** 1997 Apr; 25(2):146–57

Uncertainty factors in noncancer risk assessment [editorial; comment] Dourson M. **Regul Toxicol Pharmacol** 1996 Oct; 24(2 Pt 1):107. Comment on: Regul Toxicol Pharmacol 1996 Oct;24(2 Pt 1):108–20.

Evolution of science–based uncertainty factors in noncancer risk assessment [see comments] Dourson ML, et al. **Regul Toxicol Pharmacol** 1996 Oct;24(2 Pt 1):108–20 (62 ref.). Comment in: Regul Toxicol Pharmacol 1996 Oct;24(2 Pt 1):107.

Categorical regression of toxicity data: a case study using aldicarb. Dourson ML, et al. **Regul Toxicol Pharmacol** 1997 Apr;25(2):121–9

Quantitative risk assessment for a glass fiber insulation product. Fayerweather WE, et al. **Regul Toxicol Pharmacol** 1997 Apr;25(2):103–20

Hexavalent chromium–contaminated soils: options for risk assessment and risk management. Felter SP, et al. **Regul Toxicol Pharmacol** 1997 Feb;25(1):43–59 (65 ref.)

Quantalization of continuous data for benchmark dose estimation. Gaylor DW. **Regul Toxicol Pharmacol** 1996 Dec;24(3):246–50

Science, imaginable risks, and public policy: anatomy of a mirage. Gori GB. **Regul Toxicol Pharmacol** 1996 Jun; 23(3):304–11 (41 ref.)

Environmental risk harmonization: federal/state approaches to risk assessment and management. Kamrin MA. **Regul Toxicol Pharmacol** 1997 Apr;25(2):158–65 (16 ref.)

A systematic approach for evaluating the quality of experimental toxicological and ecotoxicological data. Klimisch HJ, et al. **Regul Toxicol Pharmacol** 1997 Feb; 25(1):1–5

Mortality from tobacco in developed countries: are indirect estimates reliable? Lee PN. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 1):60–8 (25 ref.)

The predictive value of animal data in human cancer risk assessment. Meijers JM, et al. **Regul Toxicol Pharmacol** 1997 Apr;25(2):94–102

On the use of scaling factors to improve interspecies extrapolation of acute toxicity in birds. Mineau P, et al. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 1):24–9

Science advice and the regulation of chemicals [editorial] Stöhrer G, et al. **Regul Toxicol Pharmacol** 1997 Apr; 25(2):89–90

Analysis of diesel–exhaust unit–risk estimates derived from animal bioassays. Valberg PA, et al. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 1):30–44 (58 ref.)

The utility of two rodent species in carcinogenic risk assessment of pharmaceuticals in Europe. Van Oosterhout JP, et al. **Regul Toxicol Pharmacol** 1997 Feb;25(1):6–17

A mechanistic interpretation of the oncogenicity of chlorothalonil in rodents and an assessment of human relevance. Wilkinson CF, et al. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 1):69–84 (94 ref.)

New Approaches for Assessing the Etiology and Risks of Developmental Abnormalities from Chemical Exposure. Symposium proceedings. December 11–12, 1995. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):261–463

Advances in understanding mechanisms of toxicity and implications for risk assessment. Daston GP. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):389–96 (48 ref.)

Recent advances in mathematical modeling of developmental abnormalities using mechanistic information. Kavlock RJ. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):423–34 (86 ref.)

Weighing the risks and the benefits: a call for the empirical assessment of perceived teratogenic risk. Polifka JE, et al. **Reprod Toxicol** 1997 Jul–Aug;11(4):633–40

A conceptual framework to assess the risks of human disease following exposure to pathogens. ILSI Risk Science Institute Pathogen Risk Assessment Working Group. **Risk Anal** 1996 Dec;16(6):841–8

A semiparametric approach to risk assessment for quantitative outcomes. Bosch RJ, et al. **Risk Anal** 1996 Oct;16(5):657–65

Quantifying water pathogen risk in an epidemiological framework. Eisenberg JN, et al. **Risk Anal** 1996 Aug; 16(4):549–63

What determines trust in information about food–related risks? Underlying psychological constructs. Frewer LJ, et al. **Risk Anal** 1996 Aug;16(4):473–86

On the effect of probability distributions of input variables in public health risk assessment. Hamed MM, et al. **Risk Anal** 1997 Feb;17(1):97–105

A perspective on the risk assessment process for endocrine–disruptive effects on wildlife and human health. Kavlock RJ, et al. **Risk Anal** 1996 Dec;16(6):731–9 (65 ref.)

The role of heavy drinking in the risk of traffic fatalities. Kennedy BP, et al. **Risk Anal** 1996 Aug;16(4):565–9

An overview of a multimedia benchmarking analysis for three risk assessment models: RESRAD, MMSOILS, and MEPAS. Laniak GF, et al. **Risk Anal** 1997 Apr; 17(2):203–14

Application of a biologically–based RFD estimation method to tetrachlorodibenzo–p–dioxin (TCDD) mediated immune suppression and enzyme induction. McGrath LF, et al. **Risk Anal** 1996 Aug;16(4):539–48

Risk perception and symptom reporting. MacGregor DG, et al. **Risk Anal** 1996 Dec;16(6):773–83

Estimating health risks from natural hazards using risk assessment and epidemiology. Malilay J, et al. **Risk Anal** 1997 Jun;17(3):353–8

Multimedia benchmarking analysis for three risk assessment models: RESRAD, MMSOILS, and MEPAS. Mills WB, et al. **Risk Anal** 1997 Apr;17(2):187–201

The SAM framework: modeling the effects of management factors on human behavior in risk analysis. Murphy DM, et al. **Risk Anal** 1996 Aug;16(4):501–15

An analytical framework for relating dose, risk, and incidence: an application to occupational tuberculosis infection. Nicas M. **Risk Anal** 1996 Aug;16(4):527–38

The determinants of trust and credibility in environmental risk communication: an empirical study. Peters RG, et al.

Risk Anal 1997 Feb;17(1):43–54

Exposure assessment—a challenge for occupational epidemiology [editorial; comment] Kauppinen T. **Scand J Work Environ Health** 1996 Dec;22(6):401–3. Comment on: Scand J Work Environ Health 1996 Dec;22(6):405–14.

Quantification of historical exposures in occupational cohort studies [see comments] Stewart PA, et al. **Scand J Work Environ Health** 1996 Dec;22(6):405–14 (42 ref.). Comment in: Scand J Work Environ Health 1996 Dec;22(6):401–3.

Methods of risk assessment. Ahlborg UG. **Sci Total Environ** 1996 Sep;188 Suppl 1:S75–7

Combining expert opinions [letter] Arkes HR, et al. **Science** 1997 Jan 24;275(5299):463

Selected issues in quality improvement and risk management. Chapman AH, et al. **Semin Oncol Nurs** 1996 Aug; 12(3):231–7 (20 ref.)

Network analytic methods for epidemiological risk assessment. Altmann M, et al. **Stat Med** 1994 Jan 15; 13(1):53–60

Differential recall bias and spurious associations in case/control studies. Barry D. **Stat Med** 1996 Dec 15; 15(23):2603–16

Optimal sample allocation in clinical trials designed to investigate relative risks. Eastwood BJ. **Stat Med** 1996 Dec 15;15(23):2523–38

Sources of uncertainty in estimating HIV infection rates by back-calculation: an application to Italian data. Mariotti S, et al. **Stat Med** 1996 Dec 30;15(24):2669–87

Caries risk assessment in adolescents. Bjarnason S, et al. **Swed Dent J** 1997;21(1–2):41–8

Letter from the editor [comment] Sadler TW. **Teratology** 1995 Oct;52(4):185. Comment on: Teratology 1995 Oct;52(4):186–9.

Competition in a spatially heterogeneous environment: modelling the risk of spread of a genetically engineered population. Cruywagen GC, et al. **Theor Popul Biol** 1996 Feb;49(1):1–38

The use of mechanistically defined chemical mixtures (MDCM) to assess mixture component effects on the percutaneous absorption and cutaneous disposition of topically exposed chemicals. II. Development of a general dermatopharmacokinetic model for use in risk assessment. Williams PL, et al. **Toxicol Appl Pharmacol** 1996 Dec; 141(2):487–96

Combining qualitative and quantitative approaches to assessing impacts of environments on human health and well-being in local community studies. Cole DC, et al. **Toxicol Ind Health** 1997 Mar–Jun;13(2–3):259–65 (25 ref.)

Using measured contaminant concentrations versus modeling for CERCLA-related air pathway risk assessments. Smith SA, et al. **Toxicol Ind Health** 1997 Mar–Jun;13(2–3):231–45

Reply to Professors Purchase and Gelbke [letter] Hansson SO. **Toxicol Lett** 1997 Apr 28;91(2):163–5

Risk assessment of butadiene for the Existing Substances Regulation (ESR) in the European Union. Brooke IM. **Toxicology** 1996 Oct 28;113(1–3):226–30

Review of risk assessments on 1,3-butadiene (1985–1991). Cagen SZ, et al. **Toxicology** 1996 Oct 28;113(1–3):215–20 (17 ref.)

Improvement in human health risk assessment utilizing site- and chemical-specific information: a case study. Del Pup J, et al. **Toxicology** 1996 Oct 28;113(1–3):346–50

Risk assessment of butadiene in ambient air; the approach used in the UK. Fielder RJ. **Toxicology** 1996 Oct 28; 113(1–3):221–5

A database designed to support dose–response analysis and risk assessment. Guth DJ, et al. **Toxicology** 1996 Nov 15; 114(1):81–90 (26 ref.)

Future research needs for non-cancer and cancer effects among populations exposed to 1,3-butadiene. Koppikar AM. **Toxicology** 1996 Oct 28;113(1–3):203–9 (43 ref.)

Risk assessment for butadiene: introductory and summary comments. Omenn GS. **Toxicology** 1996 Oct 28; 113(1–3):5–11

Using PBPK modeling and comprehensive realism methodology for the quantitative cancer risk assessment of butadiene. Sielken RL Jr, et al. **Toxicology** 1996 Oct 28;113(1–3):231–7

Cloning: realising the benefits while minimising the risks [news] **Vet Rec** 1997 Mar 29;140(13):323–4

Risk formulas in calcium oxalate urolithiasis. Tiselius HG. **World J Urol** 1997;15(3):176–85 (50 ref.)

[Risk assessment and responsibility selection] Pelkonen R, et al. **Duodecim** 1995;111(17):1711–5 **(Fin)**

[Expert systems in risk assessment. Risk or opportunity?] Lohn H. **Versicherungsmedizin** 1997 Jun 1;49(3):94–6, 98, 100 (Eng. Abstr.) **(Ger)**

[Apropos of risk evaluation (letter)] Colombi A. **Med Lav** 1996 Mar–Apr;87(2):171–3 **(Ita)**

[Risk assessment: an ambiguous boundary between technology and the culture of prevention (letter; comment)] Mutti A. **Med Lav** 1996 Mar–Apr;87(2):173–5. Comment on: Med Lav 1996 Jan–Feb;87(1):76–7. **(Ita)**

[The concept of risk and its estimation] Zocchetti C, et al. **Med Lav** 1996 Jul–Aug;87(4):330–47 (Eng. Abstr.) **(Ita)**

[Computer analysis of life style. A tool for reduction of cardiovascular diseases] Bye A. **Tidsskr Nor Laegeforen** 1997 Aug 10;117(18):2630–3 (Eng. Abstr.) **(Nor)**

[Risk factors analysis of cardiovascular diseases. Is the Life Style Assessment useful?] Bye A. **Tidsskr Nor Laegeforen** 1997 Aug 10;117(18):2634–6 (Eng. Abstr.) **(Nor)**

[Risk as a concept and a challenge in health care] Graff-Iversen S. **Tidsskr Nor Laegeforen** 1996 Sep 20; 116(22):2669–72 (32 ref.) (Eng. Abstr.) **(Nor)**

[Risk as a concept and challenge in health care] Skolbekken JA. **Tidsskr Nor Laegeforen** 1996 Sep 20;116(22):2673–6 (30 ref.) (Eng. Abstr.) **(Nor)**

[Methods of extrapolating risk from from high to low doses and their effect on determining MAC values] Szymczak W. **Med Pr** 1996;47(5):501–9 (Eng. Abstr.) **(Pol)**

[Problems associated with setting maximum allowable concentrations (MAC) of harmful substances present in the work environment] Więcek E. **Med Pr** 1997;48(1):75–83 (Eng. Abstr.) **(Pol)**

[The risk of surgical treatment in elderly patients] Swiątkowski J. **Wiad Lek** 1994 Nov–Dec;47(21–24):836–9 (Eng. Abstr.) **(Pol)**

[Careless risk estimation in an advertisement on osteoporosis (letter)] Englund L. **Lakartidningen** 1997 Mar 19; 94(12):1049, 1051 **(Swe)**

RISK BEHAVIOR see **RISK-TAKING**

RISK FACTORS

Re: "Time-to-event analysis of longitudinal follow-up of a survey: choice of the time-scale" [letter; comment] Ingram DD, et al. **Am J Epidemiol** 1997 Sep 15;146(6):528–9. Comment on: Am J Epidemiol 1997 Jan 1;145(1):72–80.

Prediction of fracture risk. II: Other risk factors. Ross PD. **Am J Med Sci** 1996 Dec;312(6):260–9 (172 ref.)

Annotation: preventive screening for health risks among adolescents [comment] Barnett HL. **Am J Public Health** 1996 Dec;86(12):1701. Comment on: Am J Public Health 1996 Dec;86(12):1767–72.

Quantifying the expected vs potential impact of a risk-factor intervention program [letter; comment] Bulterys M, et al. **Am J Public Health** 1997 May;87(5):867–8. Comment on: Am J Public Health 1995 Sep;85(9):1202–4.

Coming to terms with the terms of risk. Kraemer HC, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):337–43

[Fetal megalosomia: clinical and prognostic value of main risk factors] Rech F, et al. **Minerva Ginecol** 1995 Nov; 47(11):487–98 (44 ref.) (Eng. Abstr.) **(Ita)**

[Prevention of risks (letter)] Falch JA. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1809–10 **(Nor)**

RISK MANAGEMENT

PCA: for patients only. Pasero CL. **Am J Nurs** 1996 Sep; 96(9):22–3

The clinical risk management of stalking: "someone is watching over me...." Meloy JR. **Am J Psychother** 1997 Spring;51(2):174–84

The role of incident reporting in continuous quality improvement in the intensive care setting [editorial; comment] Beckmann U, et al. **Anaesth Intensive Care** 1996 Jun;24(3):311–3. Comment on: Anaesth Intensive Care 1996 Jun;24(3):314–9. Comment on: Anaesth Intensive Care 1996 Jun;24(3):320–9.

Tooth mobility—a risk management tool [letter] Gaitini L, et al. **Anaesthesia** 1997 Apr;52(4):393–4

Quality medical care, physicians, and risk managers [letter] Long KJ. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):635

Risk, safety, and the dark side of quality [editorial] Vincent C. **BMJ** 1997 Jun 21;314(7097):1775–6

Cardiovascular risk management among 1806 low risk patients in a primary care setting. Clinical Quality Improvement Network (CQIN) Investigators. **Can J Cardiol** 1996 Sep;12(9):797–801

Pap smear risk management by process control. Gill GW. **Cancer** 1997 Aug 25;81(4):198–211 (52 ref.)

Risky business. Baram M. **Environ Health Perspect** 1996 Oct; 104(10):1040–5

Uncalculated risks. Why risk managers won't benchmark. Serb C. **Hosp Health Netw** 1997 Jul 5;71(13):28–30

Rules outside the rules for administration of medication: a study in New South Wales, Australia. Baker HM. **Image J Nurs Sch** 1997;29(2):155–8

A prospective analysis of critical incidents attributable to anaesthesia. Spittal MJ, et al. **Int J Qual Health Care** 1995 Dec;7(4):363–71

Men with repeated episodes of gonorrhoea 1990–1992. Sherrard J, et al. **Int J STD AIDS** 1996 Jul;7(4):281–3

Patient risks: an underdeveloped area. Zelders T. **J Clin Monit** 1996 May;12(3):237–41

Implementing a quality assurance program using a risk assessment tool on dairy operations. Sischo WM, et al. **J Dairy Sci** 1997 Apr;80(4):777–87

Adverse events in primary care identified from a risk-management database [see comments] Fischer G, et al. **J Fam Pract** 1997 Jul;45(1):40–6. Comment in: J Fam Pract 1997 Jul;45(1):38–9.

Deaf services. The ADA and risk management. **J Fla Med Assoc** 1996 Oct;83(8):573–6

Reducing vulnerability to ethics code violations: an At-Risk Test for marriage and family therapists. Brock GW. **J Marital Fam Ther** 1997 Jan;23(1):87–9

Partnering for action oriented risk/quality management. Hardy VS, et al. **J Nurs Care Qual** 1996 Oct;11(1):1, 3

Surviving in a risky business [editorial] Laskin DM. **J Oral Maxillofac Surg** 1996 Oct;54(10):1149

Hospital communication threats and intervention. Burgess AW, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Aug; 35(8):9–16

Management of technological risks in Nigeria. Ezenwa AO. **J R Soc Health** 1997 Feb;117(1):13–6

Is downsizing affecting incident reports? Jones L, et al. **Jt Comm J Qual Improv** 1996 Aug;22(8):592–4

Reporting of adverse events in hospitals in Victoria 1994–1995 [letter] Collopy BT. **Med J Aust** 1997 Sep 15; 167(6):342–3

To report or not? [letter] Frier M, et al. **Nucl Med Commun** 1997 Jun;18(6):589

Nevada's elderly: nutrition screening, risk, and interventions. Wilson D, et al. **Nutr Rev** 1996 Jan;54(1 Pt 2):S45–7 (12 ref.)

Risk arrangements differ in style, purpose. Lance MP, et al. **Pa Med** 1996 Oct;99(10):26–7

The SAM framework: modeling the effects of management factors on human behavior in risk analysis. Murphy DM, et al. **Risk Anal** 1996 Aug;16(4):501–15

The decision to terminate services: minimizing liability in the process. Midwest Medical Insurance Company Risk Management Committee. **S D J Med** 1996 Aug;49(8):261

Risk management in transfusion medicine. Isbister JP. **Transfus Med Rev** 1996 Jul;10(3):183–202 (42 ref.)

Meat inspection: an overview of present practices and future trends. Edwards DS, et al. **Vet J** 1997 Sep;154(2):135–47 (78 ref.)

[Has laparoscopic surgery reached its limits? (editorial)] Champault G. **J Chir (Paris)** 1996;133(8):356–7 **(Fre)**

ECONOMICS

Who carries the risk? Networks, antitrust, and carve-outs. Mason C. **Acad Radiol** 1996 Apr;3 Suppl 1:S150–3

Risk adjustment: the missing piece of market competition. Shewry S, et al. **Health Aff (Millwood)** 1996 Spring; 15(1):171–81

HISTORY

What are occupational diseases? Risk and risk management in industrial medicine in Germany, c. 1880–1920. Milles D. **Clio Med** 1997;41:179–95

LEGISLATION & JURISPRUDENCE

Strategic partnering: clinical and risk management concerns. Blouin AS, et al. **J Nurs Adm** 1997 Jun;27(6):10–3

Hazard communication: challenges in the pharmaceutical industry. Hayes EP. **Occup Med** 1997 Jan–Mar; 12(1):95–105 (7 ref.)

Malpractice claim losses: beyond money damages. **S D J Med** 1996 May;49(5):159–60

Risk management issues in the new managed care environment. Bettman JW, et al. **Surv Ophthalmol** 1996 Nov–Dec;41(3):268–70 (6 ref.)

Medical device reporting regulations. Gill PG. **Va Med Q** 1997 Winter;124(1):8–12

[Liability prevention by risk management] Ulsenheimer K. **Chirurg** 1997 May;68(5):Suppl 125–31 **(Ger)**

METHODS

The Australian Incident Monitoring Study in Intensive Care: AIMS-ICU. The development and evaluation of an incident reporting system in intensive care [see comments] Beckmann U, et al. **Anaesth Intensive Care** 1996 Jun; 24(3):314–9. Comment in: Anaesth Intensive Care 1996 Jun;24(3):311–3.

The Australian Incident Monitoring Study in Intensive Care: AIMS-ICU. An analysis of the first year of reporting [see comments] Beckmann U, et al. **Anaesth Intensive Care** 1996 Jun;24(3):320–9. Comment in: Anaesth Intensive Care 1996 Jun;24(3):311–3.

Critical incident reporting in the intensive care unit. Buckley TA, et al. **Anaesthesia** 1997 May;52(5):403–9

The expanding role of simulators in risk management [editorial; comment] Spence AA. **Br J Anaesth** 1997 Jun; 78(6):633–4. Comment on: Br J Anaesth 1997 Jun;78(6):637–41.

Response: Lessons from two linked clusters of acute hepatitis B in cardiothoracic surgery patients [letter; comment] Drabu YJ, et al. **Commun Dis Rep CDR Rev** 1996 Nov 8;6(12):R178. Comment on: Commun Dis Rep CDR Rev 1996 Aug 16;6(9):R119–25.

Risk management issues in long-term care. Weinberg AD. **Compr Ther** 1996 May;22(5):311–7 (17 ref.)

A comparison of risk assessment of single and combination manual handling tasks: 1. maximum acceptable weight measures [published erratum appears in Ergonomics 1997 Jun;40(6):656] Straker LM, et al. **Ergonomics** 1996 Jan; 39(1):128–40

Collecting data on potentially harmful events: a method for monitoring incidents in general practice. Britt H, et al. **Fam Pract** 1997 Apr;14(2):101–6

The chlorine controversy. Cap AP. **Int Arch Occup Environ Health** 1996;68(6):455–8 (19 ref.)

Conceptualising and communicating a reconfigured occupational health service. Jackson JR, et al. **Int Arch Occup Environ Health** 1996;68(6):472–7

A study of the factors determining perceptions of trust and

credibility in environmental risk communication: the importance of overcoming negative stereotypes. Peters RG. **Int Arch Occup Environ Health** 1996;68(6):442–7
Occupational health data as a basis for process engineering changes: development of a safe work environment in the sodium azide industry. Rippen HE, et al. **Int Arch Occup Environ Health** 1996;68(6):459–68
Notification of adverse health effects due to chemicals: two different ways in Germany. Thuerauf JR. **Int Arch Occup Environ Health** 1996;68(6):436–41
Risk management in allergen immunotherapy. Greineder DK. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 3):S330–4 (24 ref.)
Early diagnosis of colorectal conditions: a risk management and quality of care approach. Harmon WA, et al. **J Fla Med Assoc** 1997 Jun–Jul;84(5):298–301
Suicide risk factors among veterans: risk management in the changing culture of the Department of Veterans Affairs. Lambert MT, et al. **J Ment Health Adm** 1997 Summer; 24(3):350–8 (50 ref.)
A prospective study for upper-extremity cumulative trauma disorders of workers in aircraft manufacturing. Melhorn JM. **J Occup Environ Med** 1996 Dec;38(12):1264–71
Workplace violence: preventive and interventive strategies. Warshaw LJ, et al. **J Occup Environ Med** 1996 Oct; 38(10):993–1006 (53 ref.)
Major learning experiences revisited. Kowalski K, et al. **MCN Am J Matern Child Nurs** 1996 Mar–Apr;21(2):76–9
De-escalating verbal aggression in primary care settings. Anderson LN, et al. **Nurse Pract** 1996 Oct;21(10):95, 98, 101–2, passim (30 ref.)
Study provides new evidence of back belts' effectiveness. McIntyre DR, et al. **Occup Health Saf** 1996 Dec; 65(12):39–41
Occupational toxicology: test methods and approaches for the pharmaceutical industry. Sprague G, et al. **Occup Med** 1997 Jan–Mar;12(1):119–29 (13 ref.)
Understanding the etiology of serious medical events involving children: implications for pediatricians and their risk managers. Pichert JW, et al. **Pediatr Ann** 1997 Mar; 26(3):160–4, 167–8, 170–2
Designing an emergency medicine physician workstation to support risk management in decision making. Rucker DW, et al. **Proc AMIA Annu Fall Symp** 1996;:787–91
The practical aspects of quality assurance in Good Laboratory Practice studies in an emergency situation. Nomura A, et al. **Qual Assur** 1995 Dec;4(4):366–73
The need for policy and risk analysis—the Department of Energy experience. Henry CJ, et al. **Toxicol Pathol** 1997 Jan–Feb;25(1):27–31 (11 ref.)
Sustainable improvement of animal health care by systematic quality risk management according to the HACCP concept. Noordhuizen JP, et al. **Vet Q** 1996 Dec;18(4):121–6 (32 ref.)

ORGANIZATION & ADMINISTRATION

Care and safety of pacemaker electrodes in intensive care and telemetry nursing units. Baas LS, et al. **Am J Crit Care** 1997 Jul;6(4):302–11
Anaesthetic disasters: handling the aftermath. Aitkenhead AR. **Anaesthesia** 1997 May;52(5):477–82
SHOT surveillance programme. Lumley J. **Ann R Coll Surg Engl** 1997 Mar;79(2 Suppl):72, 74
Importance of reporting adverse incidents relating to in vitro diagnostic medical devices [letter] Glasspool M. **Cytopathology** 1997 Jun;8(3):218
Protecting tourists from death and injury in coastal storms. Burby RJ, et al. **Disasters** 1996 Mar;20(1):49–60
Is clinical practice improved by risk management? Bowden D. **J Eval Clin Pract** 1995 Sep;1(1):77–9 (3 ref.)
The physician's office is his castle: risk management for self preservation and reducing medical errors. Ashkar FS. **J Fla Med Assoc** 1997 Feb;84(2):87–8
Errors in medicine. Brown RW. **J Qual Clin Pract** 1997 Mar; 17(1):21–5
Putting environmental risks in a public health context. Omenn GS. **Public Health Rep** 1996 Nov–Dec;111(6):514–6

STANDARDS

Reporting requirements under the Safe Medical Devices Act. Harris AV, et al. **AORN J** 1996 Sep;64(3):460–2
Inaccurate reporting of simulated critical anaesthetic incidents [see comments] Byrne AJ, et al. **Br J Anaesth** 1997 Jun;78(6):637–41. Comment in: Br J Anaesth 1997 Jun;78(6):633–4.
Risk management and food safety. Report of a Joint FAO/WHO Consultation, Rome, Italy, 27 to 31 January 1997.United Nations. **FAO Food Nutr Pap** 1997;65:1–27
Elderly patients' satisfaction with the outcome of their health care complaints. Dolinsky AL. **Health Care Manage Rev** 1997 Spring;22(2):33–40
Accident scenes. Blecher MB. **Hosp Health Netw** 1997 May 20;71(10):46–8
Management of healthcare workers infected with hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or other bloodborne pathogens. AIDS/TB Committee of the Society for Healthcare Epidemiology of America. **Infect Control Hosp Epidemiol** 1997 May;18(5):349–63
Raising food hygiene standards—could customer power and the new laws hold the key? Leach JC. **J R Soc Health** 1996 Dec;116(6):351–5 (36 ref.)
Ethical and metaethical criteria for an emerging technology: risk assessment. Samuels SW. **Occup Med (Oxf)** 1997 May; 47(4):241–6

STATISTICS & NUMERICAL DATA

Respiratory health services reported by U.S. mining facilities in the National Occupational Health Survey of Mining (1984–1989). Linch KD, et al. **Am J Ind Med** 1996 Sep; 30(3):273–80
Choking incidents among psychiatric patients: retrospective analysis of thirty-one cases from the west Bologna psychiatric wards. Fioritti A, et al. **Can J Psychiatry** 1997 Jun;42(5):515–20
An evaluation of risk factors for in-patient falls in acute and rehabilitation elderly care wards. Gluck T, et al. **Gerontology** 1996;42(2):104–7
Report form for aggressive episodes: preliminary report. Bjørkly S. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1139–52
Patterns of violent incidents by patients in a general hospital psychiatric facility. Tam E, et al. **Psychiatr Serv** 1996 Jan; 47(1):86–8

TRENDS

Hospital downsizing and patients' assaults on staff. Flannery RB Jr, et al. **Psychiatr Q** 1997 Spring;68(1):67–76

RISK RATIO see **ODDS RATIO**

RISK-TAKING

Reckless driving in adolescence: 'state' and 'trait' factors. Arnett JJ, et al. **Accid Anal Prev** 1997 Jan;29(1):57–63
Methodological issues in testing the hypothesis of risk compensation. Dulisse B. **Accid Anal Prev** 1997 May; 29(3):285–92
Behavioural feedback to risk variation ensues from unsatisfied appetency. Dussault C. **Accid Anal Prev** 1996 Jul; 28(4):477–86 (20 ref.)
Risk perception following exposure to a job-related electrocution accident: the mediating role of perceived control. Greening L. **Acta Psychol (Amst)** 1997 Apr; 95(3):267–77
The acquisition of life skills through adventure-based activities and programs: a review of the literature. Moote GT Jr. et al. **Adolescence** 1997 Spring;32(125):143–67 (102 ref.)
The long-term impact of AIDS-preventive interventions for delinquent and abused adolescents. Slonim-Nevo V, et al. **Adolescence** 1996 Summer;31(122):409–21
Behavioral effects of receiving HIV test results among injecting drug users in Puerto Rico. Colón HM, et al. **AIDS** 1996 Sep;10(10):1163–8
Role of HIV counseling and testing in changing risk behavior in developing countries. De Zoysa I, et al. **AIDS** 1995;9 Suppl A:S95–101 (47 ref.)
Social and behavioral issues in phase III HIV preventive vaccine trials. Grinstead OA. **AIDS** 1995;9 Suppl A:S245–50 (32 ref.)
No aggregate change in homosexual HIV risk behaviour among gay men attending the Gay Pride festivals, United Kingdom, 1993–1995. Hickson FC, et al. **AIDS** 1996 Jun; 10(7):771–4
Changes in HIV risk behavior among injecting drug users: the impact of 21 versus 90 days of methadone detoxification. Iguchi MY, et al. **AIDS** 1996 Dec; 10(14):1719–28
Gender differences in HIV risk behaviour of injecting drug users in Edinburgh. Davies AG, et al. **AIDS Care** 1996 Oct;8(5):517–27
A community support group for HIV-seropositive drug users: is attendance associated with reductions in risk behaviour? [published erratum appears in AIDS Care 1996 Dec;8(6):716] Greenberg JB, et al. **AIDS Care** 1996 Oct; 8(5):529–40
Reasons for having sex and sexual risk-taking: a study of heterosexual male STD clinic patients. Hoffman V, et al. **AIDS Care** 1997 Jun;9(3):285–96
Sexual debut and predictors of condom use among secondary school students in Arusha, Tanzania. Lugoe WL, et al. **AIDS Care** 1996 Aug;8(4):443–52
Sexual risk and HIV-testing behaviour by gay and bisexual men in Canada. Myers T, et al. **AIDS Care** 1996 Jun; 8(3):297–309
Patrons of the sex industry: perceptions of risk. Plumridge EW, et al. **AIDS Care** 1996 Aug;8(4):405–16
College students' perceptions of the prevalence of risky sexual behaviour. Seal DW, et al. **AIDS Care** 1996 Aug; 8(4):453–66
Sources of HIV information among injecting drug users: association with gender, ethnicity, and risk behaviour. AIDS Community Demonstration Projects. Wolitski RJ, et al. **AIDS Care** 1996 Oct;8(5):541–55
HIV risk behavior, street outreach, and condom use in eight high-risk populations. Anderson JE, et al. **AIDS Educ Prev** 1996 Jun;8(3):191–204
HIV risk behaviors among Dominican brothel and street prostitutes in New York City. Deren S, et al. **AIDS Educ Prev** 1996 Oct;8(5):444–56
HIV risk among Latino gay men in the Southwestern United States. Diaz RM, et al. **AIDS Educ Prev** 1996 Oct; 8(5):415–29
Evaluation of the HIV risk reduction intervention for women entering inpatient substance abuse treatment. Eldridge GD, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):62–76
Prevalence of anal sex among heterosexuals in California and its relationship to other AIDS risk behaviors. Erickson PI, et al. **AIDS Educ Prev** 1995 Dec;7(6):477–93
Risk contexts and risk behaviors in the Euregion Maas-Rhein: the Boule de Neige intervention for AIDS prevention among drug users. Franken IH, et al. **AIDS Educ Prev** 1997 Apr;9(2):161–80
HIV counseling for behavior change. Grinstead OA. **AIDS Educ Prev** 1997 Apr;9(2):125–32
Self-reported risk factors for AIDS among homeless youth. Johnson TP, et al. **AIDS Educ Prev** 1996 Aug;8(4):308–22
Behavioral risks for HIV infection associated with HIV-testing decisions. Miller KS, et al. **AIDS Educ Prev** 1996 Oct;8(5):394–402
Activity and similarity on safe sex workshops led by peer educators. Reeder GD, et al. **AIDS Educ Prev** 1997 Feb; 9(1 Suppl):77–89
Predictors of African American adolescents' condom use and HIV risk behavior. Reitman D, et al. **AIDS Educ Prev** 1996 Dec;8(6):499–515
AIDS-relevant condom use by gay and bisexual men: the role of person variables and the interpersonal situation. Sacco WP, et al. **AIDS Educ Prev** 1996 Oct;8(5):430–43
HIV risk behaviors: a comparison of U.S. Hispanic and Dominican Republic youth. Westhoff WW, et al. **AIDS Educ Prev** 1996 Apr;8(2):106–14
Characteristics of risk-taking behaviors, HIV and AIDS knowledge, and risk perception among young males in southwest China. Wu Z, et al. **AIDS Educ Prev** 1997 Apr; 9(2):147–60
Gun safety education [letter; comment] Bryant-Bruce C. **Am Fam Physician** 1997 Mar;55(4):1078. Comment on: Am Fam Physician 1996 Sep 1;54(3):971–5, 977–8.
NIH develops consensus statement on interventions to prevent HIV risk behaviors. Rose VL. **Am Fam Physician** 1997 Aug;56(2):623–4
Sexual risk behavior and risk factors for HIV-1 seroconversion in homosexual men participating in the Tricontinental Seroconverter Study, 1982–1994. Page-Shafer K, et al. **Am J Epidemiol** 1997 Oct 1; 146(7):531–42
Sexual abuse history and associated multiple risk behavior in adolescent runaways. Rotheram-Borus MJ, et al. **Am J Orthopsychiatry** 1996 Jul;66(3):390–400
Gender differences in HIV-related self-reported knowledge, attitudes, and behaviors among college students. Dekin B. **Am J Prev Med** 1996 Jul–Aug;12(4 Suppl):61–6
Prevalence of high-risk sex among HIV-positive gay and bisexual men: a longitudinal analysis. Posner SF, et al. **Am J Prev Med** 1996 Nov–Dec;12(6):472–7
HIV risk behaviors and obstacles to condom use among Puerto Rican men in New York City who have sex with men. Carballo-Diéguez A, et al. **Am J Public Health** 1996 Nov;86(11):1619–22
The protective effect of AIDS-related behavioral change among injection drug users: a cross-national study. WHO Multi-Centre Study of AIDS and Injecting Drug Use. Des Jarlais DC, et al. **Am J Public Health** 1996 Dec; 86(12):1780–5
Our view of adolescent sexuality—a focus on risk behavior without the developmental context [editorial; comment] [see comments] Ehrhardt AA. **Am J Public Health** 1996 Nov;86(11):1523–5. Comment on: Am J Public Health 1996 Nov;86(11):1570–6. Comment in: Am J Public Health 1997 Aug;87(8):1380–1.
Health risk behaviors of Hispanics in the United States: findings from HHANES, 1982–84. Marks G, et al. **Am J Public Health** 1990 Dec;80 Suppl:20–6
Patterns of health-compromising behaviors among Minnesota adolescents: sociodemographic variations. Neamark-Sztainer D, et al. **Am J Public Health** 1996 Nov; 86(11):1599–606
Drug use and behavior change [editorial] Osborn JE. **Am J Public Health** 1996 Dec;86(12):1698–9
Using social gatherings to encourage HIV risk reduction among drug users. Wood M, et al. **Am J Public Health** 1996 Dec;86(12):1815–6
Safer sex behavior and alcohol consumption. Research Group of the Swiss HIV Prevention Study. Läuchli S, et al. **Ann Epidemiol** 1996 Jul;6(4):357–64
Changes in HIV risk behavior following alternative residential programs of drug abuse treatment and AIDS education. McCusker J, et al. **Ann Epidemiol** 1996 Mar; 6(2):119–25
Racial differences in bulimic behaviors among high school females. Field AE, et al. **Ann N Y Acad Sci** 1997 May 28;817:359–60
Risk-taking behavior in adolescents: the paradigm. Irwin CE Jr, et al. **Ann N Y Acad Sci** 1997 May 28;817:1–35 (139 ref.)
Unhealthy eating and other risk-taking behavior: are they related? Lytle LA, et al. **Ann N Y Acad Sci** 1997 May 28;817:49–65 (31 ref.)
Lack of relations of hostility, negative affect, and high-risk behavior with low plasma lipid levels in the Coronary Artery Risk Development in Young Adults Study. Markovitz JH, et al. **Arch Intern Med** 1997 Sep 22; 157(17):1953–9
Shelter-based homeless youth. Health and access to care.

Ensign J, et al. **Arch Pediatr Adolesc Med** 1997 Aug; 151(8):817–23

Relationship between cigarette smoking and health risk and problem behaviors among US adolescents. Escobedo LG, et al. **Arch Pediatr Adolesc Med** 1997 Jan;151(1):66–71

Evolution of risk behaviors over 2 years among a cohort of urban African American adolescents. Stanton B, et al. **Arch Pediatr Adolesc Med** 1997 Apr;151(4):398–406

Sensation seeking as an explanation for the association between substance use and HIV-related risky sexual behavior. Kalichman SC, et al. **Arch Sex Behav** 1996 Apr; 25(2):141–54

Sexual risk behaviour in women carriers of Mycoplasma hominis. Elshibly S, et al. **Br J Obstet Gynaecol** 1996 Nov; 103(11):1124–8

The limitations of trust in intimate relationships: constructions of trust and sexual risk taking. Willig C. **Br J Soc Psychol** 1997 Jun;36 (Pt 2):211–21

The risk society in an age of anxiety: situating fear of crime. Hollway W, et al. **Br J Sociol** 1997 Jun;48(2):255–66 (15 ref.)

Similarity of risk and protective behaviors among African-American pre- and early adolescent members of naturally occurring friendship groups. Fang X, et al. **Bull N Y Acad Med** 1996 Winter;73(2):285–300

Adolescent alcohol use: social determinants and the case for early family-centered prevention. Family-focused prevention of adolescent drinking. Schor EL. **Bull N Y Acad Med** 1996 Winter;73(2):335–56 (86 ref.)

School attendance, health-risk behaviors, and self-esteem in adolescents applying for working papers. Suss AL, et al. **Bull N Y Acad Med** 1996 Winter;73(2):255–66

Re: AIDS knowledge and sexual behaviour in patients with schizophrenia [letter; comment] Buckley PF, et al. **Can J Psychiatry** 1996 Nov;41(9):603. Comment on: Can J Psychiatry 1996 Jun;41(5):269–72.

AIDS knowledge and high-risk behaviour in the chronic mentally ill [see comments] Chuang HT, et al. **Can J Psychiatry** 1996 Jun;41(5):269–72. Comment in: Can J Psychiatry 1996 Nov;41(9):603.

Re: Personality disorders and depression in the young and old [letter; comment] Fishbain DA. **Can J Psychiatry** 1996 Nov;41(9):602. Comment on: Can J Psychiatry 1996 May;41(4):223–6.

Variation in sexual orientations among men who have sex with men, and their current sexual practices. Myers T, et al. **Can J Public Health** 1995 Nov–Dec;86(6):384–8

Characteristics of pregnant women who engage in binge alcohol consumption [see comments] Gladstone J, et al. **Can Med Assoc J** 1997 Mar 15;156(6):789–94. Comment in: Can Med Assoc J 1997 Mar 15;156(6):807–8.

The effect of a patient's risk-taking attitude on the cost effectiveness of testing strategies in the evaluation of pulmonary lesions. Raab SS, et al. **Chest** 1997 Jun; 111(6):1583–90

The relationship of sexual abuse and HIV risk behaviors among heterosexual adult female STD patients. Thompson NJ, et al. **Child Abuse Negl** 1997 Feb;21(2):149–56

Substance use and other health risk behaviors in collegiate athletes. Kokotailo PK, et al. **Clin J Sport Med** 1996 Jul; 6(3):183–9

You won't know unless you ask: the biopsychosocial interview for adolescents. Perkins K, et al. **Clin Pediatr (Phila)** 1997 Feb;36(2):79–86; discussion 87–8

Characteristics of injection drug users derived from a large family study of alcoholism. Dinwiddie SH. **Compr Psychiatry** 1997 Jul–Aug;38(4):218–29

Taking chances. James AA. **Curr Biol** 1996 Jul 1;6(7):761

The preparticipation athletic examination of adolescents: a missed opportunity? Cavanaugh RM Jr, et al. **Curr Probl Pediatr** 1997 Mar;27(3):109–20

Prevention of hand eczema in the metal-working industry: risk awareness and behaviour of metal worker apprentices. Itschner L, et al. **Dermatology** 1996;193(3):226–9

HIV-1 infection in relation to educational status, use of hypodermic injections and other risk behaviours in Ethiopian sailors. Demissie K, et al. **East Afr Med J** 1996 Dec;73(12):819–22

Determinants of current HIV risk behaviour among injecting drug users in Warsaw, Poland. Stark K, et al. **Eur J Epidemiol** 1996 Jun;12(3):315–7

Effects of alcohol intoxication on the perceived consequences of risk taking. Fromme K, et al. **Exp Clin Psychopharmacol** 1997 Feb;5(1):14–23

The association between substance use, condom use and sexual risk among low-income women. Sly DF, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):132–6

Rethinking perceived risk and health behavior: a critical review of HIV prevention research. Kowalewski MR, et al. **Health Educ Behav** 1997 Jun;24(3):313–25 (101 ref.)

Relationship of sexual mixing across age and ethnic groups to herpes simplex virus-2 among unmarried heterosexual adults with multiple sexual partners. Catania JA, et al. **Health Psychol** 1996 Sep;15(5):362–70

Evaluation of the validity of the condom use self-efficacy scale (CUSES) in young men using two behavioral simulations. Forsyth AD, et al. **Health Psychol** 1997 Mar; 16(2):175–8

A longitudinal study of the reciprocal nature of risk behaviors and cognitions in adolescents: what you do shapes what you think, and vice versa. Gerrard M, et al. **Health Psychol** 1996 Sep;15(5):344–54

Self-esteem and the relation between risk behavior and perceptions of vulnerability to unplanned pregnancy in college women. Smith GE, et al. **Health Psychol** 1997 Mar; 16(2):137–46

Testing for HIV and other sexually transmitted diseases: implications for risk behavior in women. Wilson TE, et al. **Health Psychol** 1996 Jul;15(4):252–60

Sibling power: influence of older siblings' persuasive appeals on younger siblings' judgements about risk taking behaviours. Morrongiello BA, et al. **Inj Prev** 1997 Mar; 3(1):23–8

Psychodynamic group therapy with adolescents: exploration of HIV-related risk taking. Henry RM. **Int J Group Psychother** 1996 Apr;46(2):229–53

HIV Behavioural Interventions. Proceedings of a conference. 21–23 June 1995. **Int J STD AIDS** 1996;7 Suppl 2:1–90

STD/AIDS knowledge and risk behaviour among masseuses and bar hostesses in Singapore. Chan R, et al. **Int J STD AIDS** 1997 Jun;8(6):373–7

HIV epidemiology and interventions among injecting drug users. Des Jarlais DC, et al. **Int J STD AIDS** 1996;7 Suppl 2:57–61 (35 ref.)

Determinants of high-risk sexual behaviour and condom use among adults in the Arusha region, Tanzania. Mnyika KS, et al. **Int J STD AIDS** 1997 Mar;8(3):176–83

Young women's sexual risk taking behaviour: re-visiting the influences of sexual self-efficacy and sexual self-esteem. Seal A, et al. **Int J STD AIDS** 1997 Mar;8(3):159–65

Interventions for homeless men and women with mental illness: reducing sexual risk behaviours for HIV. Susser E, et al. **Int J STD AIDS** 1996;7 Suppl 2:66–70 (28 ref.)

Reward dominance: associations with anxiety, conduct problems, and psychopathy in children. O'Brien BS, et al. **J Abnorm Child Psychol** 1996 Apr;24(2):223–40

Noncoital sexual interactions and problem behaviour among young adolescents: the Norwegian Longitudinal Health Behaviour Study. Jakobsen R, et al. **J Adolesc** 1997 Feb; 20(1):71–83

Psychosocial resources, adolescent risk behaviour and young adult adjustment: is risk taking more dangerous for some than others? Maggs JL, et al. **J Adolesc** 1997 Feb; 20(1):103–19

An examination of adolescent risk-taking using a story completion task. Moore SM, et al. **J Adolesc** 1997 Aug; 20(4):369–79

Late adolescent risk-taking: effects of perceived benefits and perceived risks on behavioral intentions and behavioral change. Parsons JT, et al. **J Adolesc** 1997 Aug;20(4):381–92

Personality and risk-taking: a brief report on adolescent male drivers. Vavrik J. **J Adolesc** 1997 Aug;20(4):461–5

A risk profile of street youth in northern California: implications for gender-specific human immunodeficiency virus prevention. Clements K, et al. **J Adolesc Health** 1997 May;20(5):343–53

A longitudinal study of the role of sociodemographic factors and childhood aggression on adolescent injury and "close calls". Cobb BK, et al. **J Adolesc Health** 1995 Dec; 17(6):381–8

Adolescents' perceptions of relative weight and self-reported weight-loss activities: analysis of 1990 YRBS (Youth Risk behavior Survey) national data. Felts WM, et al. **J Adolesc Health** 1996 Jan;18(1):20–6

Risky behavior and risk in adolescents with IDDM. Frey MA, et al. **J Adolesc Health** 1997 Jan;20(1):38–45

Relationship of alcohol use and risky sexual behavior: a review and analysis of findings. Halpern-Felsher BL, et al. **J Adolesc Health** 1996 Nov;19(5):331–6 (42 ref.)

HIV risk behaviors among adolescents at a sexually transmitted disease clinic in New York City. Heffernan R, et al. **J Adolesc Health** 1996 Jun;18(6):429–34

Human immunodeficiency virus risk behavior among white and Asian/Pacific Islander high school students in the United States: does culture make a difference? Hou SI, et al. **J Adolesc Health** 1997 Jan;20(1):68–74

Do school-based health centers improve adolescents' access to health care, health status, and risk-taking behavior? Kisker EE, et al. **J Adolesc Health** 1996 May;18(5):335–43

"Safe sun": preventing adult disease in adolescence [editorial; comment] Litt IF. **J Adolesc Health** 1996 Dec;19(6):377. Comment on: J Adolesc Health 1996 Dec;19(6):409–15.

Immigrant status and risk behaviors [letter; comment] Michaud PA, et al. **J Adolesc Health** 1996 Dec;19(6):378–80 . Comment on: J Adolesc Health 1995 Aug;17(2):99–105.

Health risk behavioral survey from 39 juvenile correctional facilities in the United States. Morris RE, et al. **J Adolesc Health** 1995 Dec;17(6):334–44

Patterns of health risk behaviors for chronic disease: a comparison between adolescent and adult American Indians living on or near reservations in Montana. Nelson DE, et al. **J Adolesc Health** 1997 Jul;21(1):25–32

A study of HIV seroprevalence in a group of homeless youth in Hollywood, California. Pfeifer RW, et al. **J Adolesc Health** 1997 May;20(5):339–42

Predictors of sun exposure in adolescents in a southeastern U.S. population [see comments] Reynolds KD, et al. **J Adolesc Health** 1996 Dec;19(6):409–15. Comment in: J Adolesc Health 1996 Dec;19(6):377.

Adolescent dimenhydrinate abuse: resurgence of an old problem. Rowe C, et al. **J Adolesc Health** 1997 Jul; 21(1):47–9

The association of sexual risk behaviors and problem drug behaviors in high school students. Shrier LA, et al. **J Adolesc Health** 1997 May;20(5):377–83

Problems in conceptualizing adolescent risk behaviors: international comparisons. Tursz A. **J Adolesc Health** 1997 Aug;21(2):116–27

Changing concepts of allergic disease: the attempt to keep up with real changes in lifestyles. Platts-Mills TA, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 3):S297–306 (75 ref.)

Influence of sexual abuse on HIV-related attitudes and behaviors in adolescent psychiatric inpatients. Brown LK, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Mar; 36(3):316–22

Experience with risk-taking adolescents [letter; comment] Kay P. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1423–4. Comment on: J Am Acad Child Adolesc Psychiatry 1995 Dec;34(12):1682–3.

Gender differences in adolescent psychiatric outpatient substance use: associated behaviors and feelings. Martin CA, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Apr; 36(4):486–94

Inattentive and hyperactive behaviors and driving offenses in adolescence. Nada-Raja S, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Apr;36(4):515–22

Results from the 1995 National College Health Risk Behavior Survey. Douglas KA, et al. **J Am Coll Health** 1997 Sep; 46(2):55–66

New Jersey college students' high-risk behavior: will we meet the health objectives for the year 2000? Lewis DF, et al. **J Am Coll Health** 1996 Nov;45(3):119–26

Health risk behaviors among California college students. Patrick K, et al. **J Am Coll Health** 1997 May;45(6):265–72

Knowledge and risk behaviors of people seeking HIV antibody testing at a community site. Sowell RL, et al. **J Assoc Nurses AIDS Care** 1996 May–Jun;7(3):33–41

Does sexual coercion play a role in the high-risk sexual behavior of adolescent and young adult women? Biglan A, et al. **J Behav Med** 1995 Dec;18(6):549–68

HIV risk reduction for the seriously mentally ill: pilot investigation and call for research. Weinhardt LS, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):87–95

Is it worth the risk? [editorial] Crawford PR. **J Can Dent Assoc** 1996 Jul;62(7):545

Heroes, martyrs, and other choices [comment] Fletcher JC, et al. **J Clin Ethics** 1996 Winter;7(4):301–5. Comment on: J Clin Ethics 1996 Winter;7(4):297–9.

Perhaps we all be heroes [comment] Reitemeier PJ. **J Clin Ethics** 1996 Winter;7(4):307–9. Comment on: J Clin Ethics 1996 Winter;7(4):297–9.

The relative contributions of psychiatric symptoms and AIDS knowledge to HIV risk behaviors among people with severe mental illness. McKinnon K, et al. **J Clin Psychiatry** 1996 Nov;57(11):506–13

Acquired immunodeficiency syndrome and suburban adolescents: knowledge, attitudes, behaviors and risks. Imperato AM. **J Community Health** 1996 Oct;21(5):329–47

Structure of health risk behavior among high school students. Basen-Engquist K, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):764–75

Enhancing motivation to reduce the risk of HIV infection for economically disadvantaged urban women. Carey MP, et al. **J Consult Clin Psychol** 1997 Aug;65(4):531–41

Fatalism, current life satisfaction, and risk for HIV infection among gay and bisexual men. Kalichman SC, et al. **J Consult Clin Psychol** 1997 Aug;65(4):542–6

Drugs and the college athlete: an analysis of the attitudes of student athletes at risk. Tricker R, et al. **J Drug Educ** 1997;27(2):105–19

Does child abuse influence subsequent sexual behaviour and risk of AIDS? [letter] Meledandri G, et al. **J Epidemiol Community Health** 1997 Feb;51(1):103

Methadone maintenance treatment and HIV risk-taking behaviour among injecting drug users in Berlin. Stark K, et al. **J Epidemiol Community Health** 1996 Oct;50(5):534–7

Behavioral factors affecting exposure potential for household cleaning products. Kovacs DC, et al. **J Expo Anal Environ Epidemiol** 1997 Oct–Dec;7(4):505–20

Fighting among America's youth: a risk and protective factors approach. Fitzpatrick KM. **J Health Soc Behav** 1997 Jun;38(2):131–48

Two views of risky sexual practices among northern Thai males: the Health Belief Model and the Theory of Reasoned Action. VanLandingham MJ, et al. **J Health Soc Behav** 1995 Jun;36(2):195–212

Personal risk taking and the spread of disease: beyond core groups. Rothenberg RB, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S144–9 (36 ref.)

Choice-sensitive health costs. Jindal B. **J La State Med Soc** 1997 Feb;149(2):62–71

Preferred sources of AIDS information, risk perceptions, and risk behaviors among inner-city community college students. Rich JA, et al. **J Natl Med Assoc** 1996 Feb; 88(2):87–93

A comparison of AIDS-related sexual risk behaviors among African-American college students. Taylor SE, et al. **J Natl Med Assoc** 1997 Jun;89(6):397–403

Understanding personal risk taking among staff nurses: critical information for nurse executives. Dobos C. **J Nurs Adm** 1997 Jan;27(1):12–3

Why do bad moods increase self-defeating behavior? Emotion, risk taking, and self-regulation. Leith KP, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1250–67

Attitudes toward health risks and sunbathing behavior. Beech

JR, et al. **J Psychol** 1996 Nov;130(6):669-77
Risk behaviors, self-efficacy, and AIDS prevention among adolescents. Goh DS, et al. **J Psychol** 1996 Sep; 130(5):537-46
Youth risk behavior surveillance--United States, 1995. Kann L, et al. **J Sch Health** 1996 Dec;66(10):365-77
Perceived risk of fighting and actual fighting behavior among middle school students. St. George DM, et al. **J Sch Health** 1997 May;67(5):178-81
Coping with controversy: the professional epidemic of the nineties. Spalt SW. **J Sch Health** 1996 Nov;66(9):339-40
Bridging student health risks and academic achievement through comprehensive school health programs. Symons CW, et al. **J Sch Health** 1997 Aug;67(6):220-7 (73 ref.)
Sexual risk-taking by Muscovite youth attending school. Westhoff WW, et al. **J Sch Health** 1996 Mar;66(3):102-5
Using the Youth Risk Behavior Survey to compare risk behaviors of Texas High School and college students. Wiley DC, et al. **J Sch Health** 1997 Feb;67(2):45-9
College students' high-risk sexual behavior following alcohol consumption. Anderson PB, et al. **J Sex Marital Ther** 1996 Winter;22(4):259-64
Predictors of HIV-related risk behaviors among heterosexuals in alcoholism treatment. Woods WJ, et al. **J Stud Alcohol** 1996 Sep;57(5):486-93
"Shotgunning" as an illicit drug smoking practice. Perlman DC, et al. **J Subst Abuse Treat** 1997 Jan-Feb;14(1):3-9
Risk-taking behaviors among adolescent trauma patients. Spain DA, et al. **J Trauma** 1997 Sep;43(3):423-6
The association between illusions of invulnerability and exposure to trauma. Roe-Berning S, et al. **J Trauma Stress** 1997 Apr;10(2):319-27
Psychological and social factors associated with histories of risk for human immunodeficiency virus infection among African-American inner-city women. Kalichman SC, et al. **J Womens Health** 1997 Apr;6(2):209-17
The National Longitudinal Study on Adolescent Health. Preliminary results: great expectations [editorial; comment] Klein JD. **JAMA** 1997 Sep 10;278(10):864-5. Comment on: JAMA 1997 Sep 10;278(10):823-32.
Criteria for screening blood donors: science or politics? [letter; comment] Murphy JL. **JAMA** 1997 Jul 23-30; 278(4):289. Comment on: JAMA 1997 Mar 25;277(12):967-72.
Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health [see comments] Resnick MD, et al. **JAMA** 1997 Sep 10; 278(10):823-32. Comment in: JAMA 1997 Sep 10;278(10):864-5.
Changing the risky behaviour of politicians. Rowe PM. **Lancet** 1997 Feb 22;349(9051):520
Interactive multimedia sexual risk assessment: using a video doctor to screen patients. Gerbert B, et al. **MD Comput** 1996 Sep-Oct;13(5):416-22
Risk attitude and time discounting [editorial; comment] Chapman G. **Med Decis Making** 1997 Jul-Sep;17(3):355-6 . Comment on: Med Decis Making 1997 Jul-Sep;17(3):340-50.
Incorporating risk attitude into Markov-process decision models: importance for individual decision making [see comments] Cher DJ, et al. **Med Decis Making** 1997 Jul-Sep; 17(3):340-50. Comment in: Med Decis Making 1997 Jul-Sep;17(3):355-6.
Incidence of bloodborne virus infection and risk behaviours in a cohort of injecting drug users in Victoria, 1990-1995. Crofts N, et al. **Med J Aust** 1997 Jul 7;167(1):17-20
Sexually transmitted diseases and unwanted pregnancies in chronically ill psychiatric patients [letter; comment] Dignam PT. **Med J Aust** 1997 Jun 16;166(12):666-7. Comment on: Med J Aust 1997 Mar 3;166(5):231-2.
HIV prevalence and risk behaviour in needle exchange attenders: a national study. The Collaboration of Australian Needle Exchanges. MacDonald M, et al. **Med J Aust** 1997 Mar 3;166(5):237-40
Sexually transmitted diseases and unwanted pregnancies in chronically ill psychiatric patients [letter; comment] Thompson SC, et al. **Med J Aust** 1997 Jun 16;166(12):666 . Comment on: Med J Aust 1997 Mar 3;166(5):231-2.
State- and sex-specific prevalence of selected characteristics--Behavioral Risk Factor Surveillance System, 1992 and 1993. Frazier EL, et al. **MMWR CDC Surveill Summ** 1996 Dec 27;45(6):1-36
State-and sex-specific prevalence of selected characteristics--behavioral risk factor surveillance system, 1994 and 1995. Powell-Griner E, et al. **MMWR CDC Surveill Summ** 1997 Aug 1;46(3):1-31
Are advances in treatment changing views about high-risk sex? [letter] Dilley JW, et al. **N Engl J Med** 1997 Aug 14;337(7):501-2
Recent developments in an animal model of visual evoked potential augmenting/reducing and sensation seeking behavior. Siegel J, et al. **Neuropsychobiology** 1996; 34(3):130-5 (38 ref.)
Psychiatric symptoms, risky behavior, and HIV infection. Woody GE, et al. **NIDA Res Monogr** 1997;172:156-70
HIV-risk behaviors and mental health characteristics among homeless or drug-recovering women and their closest sources of social support. Nyamathi A, et al. **Nurs Res** 1997 May-Jun;46(3):133-7
Psychosocial concerns and health-compromising behaviors among overweight and nonoverweight adolescents. Neumark-Sztainer D, et al. **Obes Res** 1997 May;5(3):237-49
The associations of suicide attempts in adolescents. Woods ER, et al. **Pediatrics** 1997 Jun;99(6):791-6
Effect of numerical representations of risk on perception. Mehta MD, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):714
Risk assessment behaviour: evaluation of utility in the study of 5-HT-related drugs in the rat elevated plus-maze test. Griebel G, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):817-27
Blockade of effect of stress on risk assessment behavior in mice by a beta-1 adrenoceptor antagonist. Stone EA, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):215-7
AIDS-related attitudes and risk behaviors: a survey of a random sample of California heterosexuals. Bastani R, et al. **Prev Med** 1996 Mar-Apr;25(2):105-17
Diving the wreck: risk and injury in sport scuba diving. Hunt JC. **Psychoanal Q** 1996 Jul;65(3):591-622
Locus of control, sensation seeking, and stress. De Brabander B, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1307-12
Risk-taking behavior: a cognitive approach. Kohler MP. **Psychol Rep** 1996 Apr;78(2):489-90
Self-reported depression and risk-taking behaviors among Hispanic adolescents. Pesa JA, et al. **Psychol Rep** 1997 Aug; 81(1):235-43
Gender and marital differences for risk taking among undergraduates. West GB, et al. **Psychol Rep** 1996 Feb; 78(1):315-20
Acquisition of high-risk behavior by African-American, Latino, and Caucasian middle-school students. Westhoff WW, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):787-95
Field-workers' sense of coherence and perception of risk when making home visits. George VD. **Public Health Nurs** 1996 Aug;13(4):244-52
An empirical analysis of rock climbers' response to hazard warnings. Jakus PM, et al. **Risk Anal** 1996 Aug;16(4):581-6
Fishing in a polluted estuary: fishing behavior, fish consumption, and potential risk. May H, et al. **Risk Anal** 1996 Aug;16(4):459-71
The SAM framework: modeling the effects of management factors on human behavior in risk analysis. Murphy DM, et al. **Risk Anal** 1996 Aug;16(4):501-15
Risk perception: an empirical study of the relationship between worldview and the risk construct. Palmer CG. **Risk Anal** 1996 Oct;16(5):717-23
Risk-taking behaviour of Cape Peninsula high-school students. Part X. Multivariate relationships among behaviours. Flisher AJ, et al. **S Afr Med J** 1996 Sep; 86(9):1094-8
Sexual adventurism, high-risk behavior, and human immunodeficiency virus-1 seroconversion among the Chicago MACS-CCS cohort, 1984 to 1992. A case-control study. Difranceisco W, et al. **Sex Transm Dis** 1996 Nov-Dec;23(6):453-60
Changes at a human immunodeficiency virus testing clinic in the prevalence of unsafe sexual behavior among men who have sex with men. Goldbaum GM, et al. **Sex Transm Dis** 1996 Mar-Apr;23(2):109-14
Human immunodeficiency virus seroprevalence and risk assessment of a homeless population in Denver. Shlay JC, et al. **Sex Transm Dis** 1996 Jul-Aug;23(4):304-11
Working women's sexual risk taking in Jamaica. Le Franc E, et al. **Soc Sci Med** 1996 May;42(10):1411-7
The risky and protective motorcycling opinions and behaviours of young on-road motorcyclists in New Zealand. Reeder AI, et al. **Soc Sci Med** 1996 May; 42(9):1297-311
Health behaviour and risk behaviour: socioeconomic differences in an Austrian rural county. Stronegger WJ, et al. **Soc Sci Med** 1997 Feb;44(3):423-6
HIV testing history among gay/bisexual men recruited in Barcelona: evidence of high levels of risk behavior among self-reported HIV + men. Wang J, et al. **Soc Sci Med** 1997 Feb;44(4):469-77
High risk behavior related to HIV transmission among recently diagnosed TB patients in Jakarta. Sudaryo MD, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):443-8
A five-factor model of personality and addiction, psychiatric, and AIDS risk severity in pregnant and postpartum cocaine misusers. Ball SA, et al. **Subst Use Misuse** 1997 Jan; 32(1):25-41
The Life Attitudes Schedule Short Form: an abbreviated measure of life-enhancing and life-threatening behaviors in adolescents. Rohde P, et al. **Suicide Life Threat Behav** 1996 Fall;26(3):272-81
HIV risk behaviors become survival techniques for aboriginal women. Mill JE. **West J Nurs Res** 1997 Aug;19(4):466-89
[Little HIV risk behavior in drug users during detention in Dutch penitentiaries] van Haastrecht HJ, et al. **Ned Tijdschr Geneeskd** 1997 Mar 1;141(9):429-33 (Eng. Abstr.) **(Dut)**
[Does methadone lessen HIV risk behavior?] Mader U. **Dtsch Med Wochenschr** 1997 Feb 21;122(8):A7-8 **(Ger)**
[Health locus of control and health related risk behavior--an analysis of locus of control patterns] Barth J, et al. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):247-53 (Eng. Abstr.) **(Ger)**
[Scenc and extreme sports varieties: the injury spectrum is changing (interview)] Jerosch J. **Sportverletz Sportschaden** 1996 Sep;10(3):VII-VIII **(Ger)**
[Risk behaviors for HIV transmission among the recent clients of a syringe-exchange program in Madrid, 1993] Bravo Portela MJ, et al. **Gac Sanit** 1996 Nov-Dec; 10(57):261-73 (Eng. Abstr.) **(Spa)**

RISPERIDONE

ADMINISTRATION & DOSAGE

Risperidone: once-daily dosage [letter] Gupta S, et al. **Ann Clin Psychiatry** 1996 Dec;8(4):221
Acute treatment of bipolar disorder with adjunctive risperidone in outpatients. Ghaemi SN, et al. **Can J Psychiatry** 1997 Mar;42(2):196-9
Case study: risperidone treatment of children and adolescents with developmental disorders. Hardan A, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1551-6
Use of novel antipsychotic drugs. Raleigh F. **Pharmacotherapy** 1996 Nov-Dec;16(6 Pt 2):160S-165S; discussion 166S-168S (20 ref.)
Effects of switching inpatients with treatment-resistant schizophrenia from clozapine to risperidone. Still DJ, et al. **Psychiatr Serv** 1996 Dec;47(12):1382-4
Risperidone: a novel antipsychotic with many "atypical" properties? Stathis P, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):181-6
Risperidone-reserpine combination in refractory psychosis [letter] Solon EN. **Schizophr Res** 1996 Dec 15;22(3):265-6
[Efficacy and tolerance of risperidone in various doses (report of a study)] Cešková E, et al. **Ceska Slov Psychiatr** 1996 Feb;92(1):50-6 (Eng. Abstr.) **(Cze)**
[Risperidone after clozapine in therapy refractory schizoaffective psychosis--a case report] Konrad C, et al. **Psychiatr Prax** 1997 Mar;24(2):88-9 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Pancreatitis associated with risperidone treatment? [letter] Berent I, et al. **Am J Psychiatry** 1997 Jan;154(1):130-1
Treatment of risperidone-induced obsessive-compulsive symptoms with sertraline [letter] Dodt JE, et al. **Am J Psychiatry** 1997 Apr;154(4):582
Atypical neuroleptic malignant syndrome associated with risperidone treatment [letter] Newman M, et al. **Am J Psychiatry** 1997 Oct;154(10):1475
Protracted akathisia after risperidone withdrawal [letter] Rosebush PI, et al. **Am J Psychiatry** 1997 Mar;154(3):437-8
Withdrawal-emergent dyskinesia in a patient on risperidone undergoing dosage reduction. Anand VS, et al. **Ann Clin Psychiatry** 1996 Sep;8(3):179-82
Delayed risperidone-induced neuroleptic malignant syndrome [letter] Kern JL, et al. **Ann Pharmacother** 1996 Mar;30(3):300
Fatal cardiac event following initiation of risperidone therapy. Ravin DS, et al. **Ann Pharmacother** 1997 Jul-Aug; 31(7-8):867-70
Risperidone-induced neuroleptic malignant syndrome. Sharma R, et al. **Ann Pharmacother** 1996 Jul-Aug; 30(7-8):775-8
Comment: delayed risperidone-induced neuroleptic malignant syndrome [letter] Sitarz WE. **Ann Pharmacother** 1996 Nov;30(11):1342-3
Neuroleptic malignant syndrome and risperidone: a case report. Bonwick RJ, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):419-21
Re: Acute dystonic reaction with risperidone [letter] Anand HS. **Can J Psychiatry** 1996 Aug;41(6):412
Severe depression with risperidone-induced EPS in an elderly schizoaffective patient [letter] Benazzi F. **Can J Psychiatry** 1996 Apr;41(3):196-7
Extrapyramidal side effects with low-dose risperidone [letter] Brown ES. **Can J Psychiatry** 1997 Apr;42(3):325-6
Hoarding and clozapine-risperidone combination [letter] Chong SA, et al. **Can J Psychiatry** 1996 Jun;41(5):315-6
Risperidone, weight gain, and bulimia nervosa [letter] Crockford DN, et al. **Can J Psychiatry** 1997 Apr; 42(3):326-7
Switching between clozapine and risperidone treatment [letter] Gardner DM, et al. **Can J Psychiatry** 1997 May; 42(4):430-1
Risperidone-induced neuroleptic malignant syndrome: a case report and review. Meterissian GB. **Can J Psychiatry** 1996 Feb;41(1):52-4 (9 ref.)
Acute dystonic reaction with risperidone [letter] Takhar J, et al. **Can J Psychiatry** 1996 Feb;41(1):61-2
Risperidone and reversible neutropenia: a negative rechallenge. Bondolfi G, et al. **Eur Neuropsychopharmacol** 1996 Aug;6(3):257
TD from risperidone? [letter; comment] Edleman RJ. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):867. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Nov;35(11):1421-2.
Risperidone and tardive dyskinesia [letter] [see comments] Feeney DJ, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov;35(11):1421-2. Comment in: J Am Acad Child Adolesc Psychiatry 1997 Jul;36(7):867.
Case study: risperidone-induced hepatotoxicity in pediatric patients. Kumra S, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):701-5
Tics with risperidone withdrawal [letter] Rowan AB, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):162-3
Side effect profiles of new antipsychotic agents. Casey DE. **J Clin Psychiatry** 1996;57 Suppl 11:40-5; discussion 46-52 (30 ref.)

Severe extrapyramidal reaction due to risperidone in a case of neurofibromatosis [letter] De León OA, et al. **J Clin Psychiatry** 1997 Jul;58(7):323

Risperidone-induced ejaculatory and urinary dysfunction [letter] Madhusoodanan S, et al. **J Clin Psychiatry** 1996 Nov;57(11):549–50

LSD-like panic from risperidone in post-LSD visual disorder [see comments] Abraham HD, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):238–41. Comment in: J Clin Psychopharmacol 1997 Aug;17(4):327–8.

A case report of risperidone-induced obsessive-compulsive symptoms [letter] Alzaid K, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):58–9

Induction of mania by risperidone resistant to mood stabilizers [letter] Barkin JS, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):57–8

Acute dystonia induced by rapid increase in risperidone dosage [letter] Brody AL. **J Clin Psychopharmacol** 1996 Dec;16(6):461–2

Risperidone-associated hepatotoxicity [letter] Fuller MA, et al. **J Clin Psychopharmacol** 1996 Feb;16(1):84–5

Risperidone-associated burning paraesthesia. Heimberg C, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):446–8

Comments to "the evolution of the serotonin-dopamine antagonist concept" [letter] Howsepian AA. **J Clin Psychopharmacol** 1996 Feb;16(1):99

Risperidone and obsessive-compulsive symptoms [letter] Iruela LM. **J Clin Psychopharmacol** 1996 Feb;16(1):85–6

Exacerbation of hallucinogen-persisting perception disorder with risperidone [letter; comment] Morehead DB. **J Clin Psychopharmacol** 1997 Aug;17(4):327–8. Comment on: J Clin Psychopharmacol 1996 Jun;16(3):238–41.

Weight gain associated with risperidone [letter] Penn JV, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):259–60

Dystonia while changing from clozapine to risperidone [letter; comment] Simpson GM, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):260–1. Comment on: J Clin Psychopharmacol 1995 Jun;15(3):225–6.

Extrapyramidal symptoms in patients treated with risperidone. Simpson GM, et al. **J Clin Psychopharmacol** 1997 Jun;17(3):194–201

Risperidone-induced tardive dyskinesia and parkinsonism. Gwinn KA, et al. **Mov Disord** 1997 Jan;12(1):119–21

Adverse effects of risperidone on eye movement activity: a comparison of risperidone and haloperidol in antipsychotic-naive schizophrenic patients. Sweeney JA, et al. **Neuropsychopharmacology** 1997 Mar;16(3):217–28

Lymphocytopenia and thrombocytopenia during treatment with risperidone or clozapine. Assion HJ, et al. **Pharmacopsychiatry** 1996 Nov;29(6):227–8

Neuroleptic malignant syndrome with risperidone. Gleason PP, et al. **Pharmacotherapy** 1997 May-Jun;17(3):617–21

Therapeutic effect and safety of adjunctive risperidone in refractory obsessive-compulsive disorder (OCD). Ravizza L, et al. **Psychopharmacol Bull** 1996;32(4):677–82

Development and implementation of drug use evaluation (DUE) criteria for risperidone in an outpatient psychiatric setting. Shepski JC, et al. **Psychopharmacol Bull** 1996; 32(4):705–19 (45 ref.)

Risperidone-induced galactorrhea [letter] Schreiber S, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):300–1

[Urinary retention with risperidone] Siepmann M, et al. **Psychiatr Prax** 1997 Jul;24(4):209 **(Ger)**

[Risperidone-induced priapism] Maizel S, et al. **Harefuah** 1996 Jun 2;130(11):744–5, 799 (Eng. Abstr.) **(Heb)**

BLOOD

Therapeutic drug monitoring of risperidone and 9-hydroxyrisperidone in serum with solid-phase extraction and high-performance liquid chromatography. Price MC, et al. **Ther Drug Monit** 1997 Jun;19(3):333–7

ECONOMICS

Cost-effectiveness and quality of life in psychosis: the pharmacoeconomics of risperidone. Aronson SM. **Clin Ther** 1997 Jan-Feb;19(1):139–47; discussion 126–7

Impact of newer antipsychotics on outcomes in schizophrenia. Keks NA. **Clin Ther** 1997 Jan-Feb; 19(1):148–58; discussion 126–7

Economic and health state utility determinations for schizophrenic patients treated with risperidone or haloperidol. Chouinard G, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):298–307

Assessing a drug's cost-benefits [letter; comment] Raleigh F. **Psychiatr Serv** 1996 Aug;47(8):877–8. Comment on: Psychiatr Serv 1996 Mar;47(3):309–10.

Risperidone use in a teaching hospital during its first year after market approval: economic and clinical implications. Carter CS, et al. **Psychopharmacol Bull** 1995;31(4):719–25

Clinical and economic aspects of risperidone treatment in adults with mental retardation and behavioral disturbance. Lott RS, et al. **Psychopharmacol Bull** 1996;32(4):721–9

METABOLISM

Risperidone compared with new and reference antipsychotic drugs: in vitro and in vivo receptor binding. Schotte A, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):57–73

PHARMACOKINETICS

Lack of effect of amitriptyline on risperidone pharmacokinetics in schizophrenic patients. Sommers DK, et al. **Int Clin Psychopharmacol** 1997 May;12(3):141–5

Serum and urine risperidone concentrations in an acute overdose [letter] Lee HS, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):325–6

Risperidone: effects of formulations on oral bioavailability. Gutierrez R, et al. **Pharmacotherapy** 1997 May-Jun; 17(3):599–605

PHARMACOLOGY

Does risperidone improve verbal working memory in treatment-resistant schizophrenia? Green MF, et al. **Am J Psychiatry** 1997 Jun;154(6):799–804

Effects of risperidone, clozapine and haloperidol on extracellular recordings of substantia nigra reticulata neurons of the rat brain. Bruggeman R, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):49–56

In functional experiments, risperidone is selective, not for the B, but for the A subtype of alpha 1-adrenoceptors. Eltze M. **Eur J Pharmacol** 1996 Jan 4;295(1):69–73

Risperidone dose-dependently increases extracellular concentrations of serotonin in the rat frontal cortex: role of alpha 2-adrenoceptor antagonism. Hertel P, et al. **Neuropsychopharmacology** 1997 Jul;17(1):44–55

Augmentation of opioid induced antinociception by the atypical antipsychotic drug risperidone in mice. Schreiber S, et al. **Neurosci Lett** 1997 May 30;228(1):25–8

Effects of acute or chronic administration of risperidone on motor and sexual behavior of male rats. Drago F, et al. **Pharmacol Res** 1997 Jan;35(1):17–25

Serotonin-mediated increase in cytosolic [Ca++] in platelets of risperidone-treated schizophrenia patients. Ereshefsky L, et al. **Psychopharmacol Bull** 1996;32(1):101–6

Risperidone: regional effects in vivo on release and metabolism of dopamine and serotonin in the rat brain. Hertel P, et al. **Psychopharmacology (Berl)** 1996 Mar; 124(1-2):74–86

Effects of clozapine, thioridazine, risperidone and haloperidol on behavioral tests related to extrapyramidal motor function. Trevitt JT, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):74–81

Risperidone--a new antipsychotic agent. Simpson GM. **West J Med** 1996 Mar;164(3):257

POISONING

Risperidone overdose [letter] Moore NC, et al. **Am J Psychiatry** 1997 Feb;154(2):289–90

Acute risperidone overdose. Catalano G, et al. **Clin Neuropharmacol** 1997 Feb;20(1):82–5

Serum and urine risperidone concentrations in an acute overdose [letter] Lee HS, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):325–6

[Acute poisoning by risperidone and ionic and electrocardiographic changes (letter)] Laroussinie G, et al. **Therapie** 1997 Mar-Apr;52(2):155–6 **(Fre)**

THERAPEUTIC USE

Observations on switching patients with schizophrenia to risperidone treatment. Risperidone Switching Study Group. Kirov GK, et al. **Acta Psychiatr Scand** 1997 May; 95(5):439–43

Risperidone, negative symptoms and cognitive deficit in schizophrenia: an open study. Rossi A, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):40–3

Does risperidone improve verbal working memory in treatment-resistant schizophrenia? Green MF, et al. **Am J Psychiatry** 1997 Jun;154(6):799–804

Risperidone treatment of methamphetamine psychosis [letter] Misra L, et al. **Am J Psychiatry** 1997 Aug;154(8):1170

Chronic schizophrenia: response to clozapine, risperidone, and paroxetine [clinical conference] Patel JK, et al. **Am J Psychiatry** 1997 Apr;154(4):543–6

Risperidone for treatment of childhood schizophrenia [letter] Sourander A. **Am J Psychiatry** 1997 Oct;154(10):1476

Improvement of debilitating tardive dyskinesia with risperidone. Rangwani SR, et al. **Ann Clin Psychiatry** 1996 Mar;8(1):27–9

Use of risperidone in delirium: case reports. Sipahimalani A, et al. **Ann Clin Psychiatry** 1997 Jun;9(2):105–7

Neurological soft signs and response to risperidone in chronic schizophrenia. Smith RC, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1056–9

Treatment of schizophrenia: advances during the decade of the brain. Buckley PF. **Br J Hosp Med** 1996 Dec 11-1997 Jan 14;56(11):574–80 (31 ref.)

Conventional versus atypical neuroleptics: subjective quality of life in schizophrenic patients. Franz M, et al. **Br J Psychiatry** 1997 May;170:422–5

Schizophrenia, violence, clozapine and risperidone: a review. The Special Hospitals Treatment Resistant Schizophrenia Research Group. **Br J Psychiatry Suppl** 1996 Dec; (31):21–30 (60 ref.)

Risperidone treatment of bipolar disorder [letter] McIntyre R, et al. **Can J Psychiatry** 1997 Feb;42(1):88–90

Self-induced water intoxication treated with risperidone. Millson RC, et al. **Can J Psychiatry** 1996 Dec;41(10):648–50

Risperidone and neuropsychological test performance in cocaine-withdrawn patients [letter] Smelson DA, et al. **Can J Psychiatry** 1997 May;42(4):431

The effect of risperidone on cognition in patients with schizophrenia. Stip E, et al. **Can J Psychiatry** 1996 Oct; 41(8 Suppl 2):S35–40

Cost-effectiveness and quality of life in psychosis: the pharmacoeconomics of risperidone. Aronson SM. **Clin Ther** 1997 Jan-Feb;19(1):139–47; discussion 126–7

Changing antipsychotic medication: guidelines on the transition to treatment with risperidone. The Consensus Study Group on Risperidone Dosing. Borison RL. **Clin Ther** 1996 Jul-Aug;18(4):592–607; discussion 591 (42 ref.)

Impact of newer antipsychotics on outcomes in schizophrenia. Keks NA. **Clin Ther** 1997 Jan-Feb; 19(1):148–58; discussion 126–7

Risperidone and ECT combination therapy: a case series. Farah A, et al. **Convuls Ther** 1995 Dec;11(4):280–2

Treatment-resistant schizophrenia: clinical experience with new antipsychotics. Bondolfi G, et al. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S21–5

Risperidone and reversible neutropenia: a negative rechallenge. Bondolfi G, et al. **Eur Neuropsychopharmacol** 1996 Aug;6(3):257

Cognitive dysfunction in schizophrenia: comparison of treatment with atypical antipsychotic agents and conventional neuroleptic drugs. Gallhofer B, et al. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S13–20

Managing the first episode of schizophrenia: the role of new therapies. McCreadie RG. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S3–5

Psychosis in medical conditions: response to risperidone. Furmaga KM, et al. **Gen Hosp Psychiatry** 1997 May; 19(3):223–8

The use of risperidone in severely demented patients with persistent vocalizations. Kopala LC, et al. **Int J Geriatr Psychiatry** 1997 Jan;12(1):73–7

Risperidone in the treatment of psychosis and concomitant buccolinguomasticatory dyskinesia in the elderly [letter] Koponen HJ. **Int J Geriatr Psychiatry** 1997 Mar; 12(3):412–3

Outcome of risperidone therapy in elderly patients with chronic psychosis. Sajatovic M, et al. **Int J Psychiatry Med** 1996;26(3):309–17

Nursing home research from industry's perspective. Brecher M. **Int Psychogeriatr** 1996;8 Suppl 3:367–70

Risperidone for dementia-related disturbed behavior in nursing home residents: a clinical experience. Goldberg RJ, et al. **Int Psychogeriatr** 1997 Mar;9(1):65–8

Risperidone in adolescents with schizophrenia: an open pilot study. Armenteros JL, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):694–700

Drug therapy in autism [letter] Frischauf E. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):577

Risperidone in children with schizophrenia -letter- Lykes WC, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Apr; 35(4):405–6

Risperidone treatment of children and adolescents with pervasive developmental disorders: a prospective open-label study. McDougle CJ, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):685–93

Aggression and schizophrenia: efficacy of risperidone. Buckley PF, et al. **J Am Acad Psychiatry Law** 1997; 25(2):173–81

Risperidone and explosive aggressive autism. Horrigan JP, et al. **J Autism Dev Disord** 1997 Jun;27(3):313–23

Brief report: risperidone for severely disturbed behavior and tardive dyskinesia in developmentally disabled adults. Khan BU. **J Autism Dev Disord** 1997 Aug;27(4):479–89

Risperidone in young children with pervasive developmental disorders and other developmental disabilities [letter] Demb HB. **J Child Adolesc Psychopharmacol** 1996 Spring; 6(1):79–80

Differential response of psychotic and obsessive symptoms to risperidone in an adolescent. Dryden-Edwards RC, et al. **J Child Adolesc Psychopharmacol** 1996 Summer; 6(2):139–45

Erythromycin interaction with risperidone or clomipramine in an adolescent. Fisman S, et al. **J Child Adolesc Psychopharmacol** 1996 Summer;6(2):133–8

Use of risperidone in pervasive developmental disorders: a case series. Fisman S, et al. **J Child Adolesc Psychopharmacol** 1996 Fall;6(3):177–90

Risperidone in the treatment of children and adolescents with schizophrenia: a retrospective study. Grcevich SJ, et al. **J Child Adolesc Psychopharmacol** 1996 Winter;6(4):251–7

Use of risperidone in psychotic disorder following ischemic brain damage. Zimnitzky BM, et al. **J Child Adolesc Psychopharmacol** 1996 Spring;6(1):75–8

Risperidone versus haloperidol in the treatment of schizophrenia: a meta-analysis comparing their efficacy and safety. de Oliveira IR, et al. **J Clin Pharm Ther** 1996 Oct; 21(5):349–58

Response to risperidone addition in fluvoxamine-refractory obsessive-compulsive disorder: three cases [letter; comment] Berigan TR, et al. **J Clin Psychiatry** 1996 Dec; 57(12):594–5. Comment on: J Clin Psychiatry 1995 Nov;56(11):526–8.

Efficacy of risperidone in reducing positive and negative symptoms in medication-refractory schizophrenia: an open prospective study. Smith RC, et al. **J Clin Psychiatry** 1996 Oct;57(10):460–6

Risperidone augmentation of serotonin reuptake inhibitors in obsessive-compulsive and related disorders. Stein DJ,

RISPERIDONE

et al. **J Clin Psychiatry** 1997 Mar;58(3):119–22

Risperidone in the elderly: a pharmacoepidemiologic study. Zarate CA Jr, et al. **J Clin Psychiatry** 1997 Jul;58(7):311–7

Risperidone and fluoxetine in the treatment of pedophilia with comorbid dysthymia [letter] Bourgeois JA, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):257–8

Economic and health state utility determinations for schizophrenic patients treated with risperidone or haloperidol. Chouinard G, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):298–307

Extrapyramidal signs and clinical symptoms in first-episode schizophrenia: response to low-dose risperidone. Kopala LC, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):308–13

Comments on "Clozapine treatment after agranulocytosis induced by classic neuroleptics" [letter; comment] Mahmood T, et al. **J Clin Psychopharmacol** 1996 Jun; 16(3):262–3. Comment on: J Clin Psychopharmacol 1994 Feb;14(1):71–3.

Risperidone in comorbid borderline personality disorder and dysthymia [letter] Szigethy EM, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):326–7

Risperidone plus a monoamine oxidase inhibitor for agitated depression crisis [letter] Welner M. **J Clin Psychopharmacol** 1996 Dec;16(6):460–1

Efficacy and safety of risperidone in psychotic patients: an open study. Daradkeh TK, et al. **J Int Med Res** 1996 May-Jun;24(3):291–5

Remission of self-mutilation in a patient with borderline personality during risperidone therapy. Khouzam HR, et al. **J Nerv Ment Dis** 1997 May;185(5):348–9

Risperidone in the treatment of schizophrenia: a meta-analysis of randomized controlled trials. Song F. **J Psychopharmacol (Oxf)** 1997;11(1):65–71

Treatment of HIV-related psychotic disorders with risperidone: a series of 21 cases. Singh AN, et al. **J Psychosom Res** 1997 May;42(5):489–93

Substituting traditional antipsychotics with risperidone for individuals with mental retardation. Simon EW, et al. **Ment Retard** 1996 Dec;34(6):359–66

Risperidone in levodopa-induced psychosis in advanced Parkinson's disease: an open-label, long-term study. Meco G, et al. **Mov Disord** 1997 Jul;12(4):610–2

Risperidone in treatment-refractory chronic alcohol hallucinosis [letter] Soyka M, et al. **Pharmacopsychiatry** 1997 Jul;30(4):135–6

Reemergence of positive symptoms after initial response to risperidone. Cung DD, et al. **Pharmacotherapy** 1997 Mar-Apr;17(2):383–6

New antipsychotic medications: what advantages do they offer? Citrome L. **Postgrad Med** 1997 Feb;101(2):207–10, 213–4 (19 ref.)

Risperidone antagonism of self-mutilation in a Lesch-Nyhan patient. Allen SM, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jul; 20(5):793–800

Cost-benefits of risperidone [letter] [see comments] Bilsker D. **Psychiatr Serv** 1996 Mar;47(3):309–10. Comment in: Psychiatr Serv 1996 Aug;47(8):877–8.

A naturalistic outcome study of risperidone treatment among hospital patients. Negrón AE, et al. **Psychiatr Serv** 1996 Oct;47(10):1118–20

Impact of risperidone on the use of mental health care resources. Viale G, et al. **Psychiatr Serv** 1997 Sep; 48(9):1153–9

Striatal dopamine-2 receptor occupancy in psychotic patients treated with risperidone. Küfferle B, et al. **Psychiatry Res** 1996 Nov 25;68(1):23–30

Regional cerebral blood flow changes associated with risperidone treatment in elderly schizophrenia patients: a pilot study. Berman I, et al. **Psychopharmacol Bull** 1996; 32(1):95–100

Risperidone use in a teaching hospital during its first year after market approval: economic and clinical implications. Carter CS, et al. **Psychopharmacol Bull** 1995;31(4):719–25

Serotonin-mediated increase in cytosolic [Ca+ +] in platelets of risperidone-treated schizophrenia patients. Ereshefsky L, et al. **Psychopharmacol Bull** 1996;32(1):101–6

An open clinical trial of risperidone monotherapy in young children with autistic disorder. Findling RL, et al. **Psychopharmacol Bull** 1997;33(1):155–9

Clinical and economic aspects of risperidone treatment in adults with mental retardation and behavioral disturbance. Lott RS, et al. **Psychopharmacol Bull** 1996;32(4):721–9

Therapeutic effect and safety of adjunctive risperidone in refractory obsessive-compulsive disorder (OCD). Ravizza L, et al. **Psychopharmacol Bull** 1996;32(4):677–82

Risperidone therapy in treatment refractory acute bipolar and schizoaffective mania. Sajatovic M, et al. **Psychopharmacol Bull** 1996;32(1):55–61

Development and implementation of drug use evaluation (DUE) criteria for risperidone in an outpatient psychiatric setting. Shepski JC, et al. **Psychopharmacol Bull** 1996; 32(4):705–19 (45 ref.)

A clinical evaluation of risperidone in the treatment of schizophrenia: a 10-week, open-label, multicenter trial. ARCS Study Group. Assessment of Risperdal in a Clinical Setting. Jeste DV, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):239–47

Risperidone: how good is the evidence for efficacy? Mattes JA. **Schizophr Bull** 1997;23(1):155–61 (36 ref.)

[Pharma-clinics. Drug of the month. Risperidone (Risperdal)] Ansseau M. **Rev Med Liege** 1996 Oct;51(10):665–7 **(Fre)**

[Remission of schizophrenic psychosis with negative symptoms with risperidone] Lübbe R. **Fortschr Med** 1996 Feb 28;114(6):35–6 (Eng. Abstr.) **(Ger)**

[Risperidon--contribution to an integrated therapy of schizophrenia. Yearly session of the German Society for Psychiatry, Psychotherapy and Neurology. Düsseldorf, 17 September 1996] **Fortschr Neurol Psychiatr** 1996 Dec;64(12 Suppl):1–4 **(Ger)**

[Risperidon: an advance for schizophrenic patients. Why new neuroleptics?] **Nervenarzt** 1994 May;65(5 Suppl [risperid]):1–4 **(Ger)**

[Risperidone in the treatment of chronic schizophrenia: multicenter study comparative to haloperidol] López Ibor JJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jul-Aug;24(4):165–72 (Eng. Abstr.) **(Spa)**

RISTOCETIN

ANALYSIS

Plasma derived von Willebrand factor preparations: collagen binding and ristocetin cofactor activities. Chang P, et al. **Thromb Haemost** 1997 Aug;78(2):930–3

CHEMISTRY

Cooperativity and anti-cooperativity between ligand binding and the dimerization of ristocetin A: asymmetry of a homodimer complex and implications for signal transduction. Cho YR, et al. **Chem Biol** 1996 Mar; 3(3):207–15

PHARMACOLOGY

Inhibition assay for the binding of biotinylated von Willebrand factor to platelet-bound microtiter wells in the presence of ristocetin or botrocetin. Miura S, et al. **Anal Biochem** 1996 May 1;236(2):215–20

Inverse relationships between haemoglobin and ristocetin-induced platelet aggregation in haemodialysis patients under erythropoietin therapy. Borawski J, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2444–8

Aggregated-disaggregated, refractory platelets retain sensitivity to ristocetin. White JG, et al. **Thromb Res** 1996 Nov 15;84(4):253–66

[A conjugate of ristomycin A ristosaminylaglycon-polymyxin B: the spectrum of its antimicrobial action and its membranolytic activity] Polin AN, et al. **Antibiot Khimioter** 1997;42(5):24–8 (Eng. Abstr.) **(Rus)**

RISTOMYCIN see **RISTOCETIN**

RITANSERIN

ADVERSE EFFECTS

Ritanserin facilitates anxiety in a simulated public-speaking paradigm. Guimarães FS, et al. **J Psychopharmacol (Oxf)** 1997;11(3):225–31

CHEMISTRY

Molecular modeling of serotonin, ketanserin, ritanserin and their 5-HT2C receptor interactions. Kristiansen K, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):195–210

PHARMACOLOGY

Ritanserin-induced changes in sleep-waking phases in rats. Kirov R, et al. **Acta Physiol Pharmacol Bulg** 1995; 21(4):87–92

Ritanserin and alcohol abuse and dependence. Meert TF. **Alcohol Alcohol Suppl** 1994;2:523–30 (33 ref.)

5-HT2 receptor regulation of acetylcholine release induced by dopaminergic stimulation in rat striatal slices. Ramírez MJ, et al. **Brain Res** 1997 May 16;757(1):17–23

Enhancement of antipsychotic-like properties of the dopamine D2 receptor antagonist, raclopride, by the additional treatment with the 5-HT2 receptor blocking agent, ritanserin, in the rat. Wadenberg ML, et al. **Eur Neuropsychopharmacol** 1996 Nov;6(4):305–10

Serotonin--one possible link between oxygen metabolism and the regulation of blood flow in the brain? Gustafsson U, et al. **Int J Microcirc Clin Exp** 1996 May-Jun;16(3):143–6

Ritanserin attenuates the in vitro effects of the 5-HT2 receptor agonist DOI on skeletal muscles from malignant hyperthermia-susceptible patients. Wappler F, et al. **J Clin Anesth** 1997 Jun;9(4):306–11

Effects of the 5-HT2 receptor antagonist ritanserin on halothane-induced increase of inositol phosphates in porcine malignant hyperthermia. Richter A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):593–7

Effects of ritanserin on haloperidol-induced dopamine (D2) receptor up-regulation in the rat. Szczepanik AM, et al. **Neurosci Lett** 1997 Aug 8;231(2):91–4

Ritanserin blocks DOI-altered embryonic motility and posthatch learning in the developing chicken. Bollweg G, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):397–403

Serotonergic serotonin 2 receptor modulation on DOPAC and 5-HIAA levels in rat striatum and nucleus accumbens: microdialysis studies of freely moving rats. Liu Y, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Feb; 20(2):307–22

Ritanserin administration potentiates amphetamine-stimulated dopamine release in the rat prefrontal cortex. Pehek EA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 May; 21(4):671–82

8-OH-DPAT, a 5-HT1A agonist and ritanserin, a 5-HT2A/C antagonist, reverse haloperidol-induced catalepsy in rats independently of striatal dopamine release. Lucas G, et al. **Psychopharmacology (Berl)** 1997 May; 131(1):57–63

Potentiation of the effects of raclopride on sucrose consumption by the 5-HT2 antagonist ritanserin. Montgomery AM, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):98–102

Effects of dopamine antagonists in a two-way active avoidance procedure in rats: interactions with 8-OH-DPAT, ritanserin, and prazosin. Prinssen EP, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):191–7

A quantitative evaluation of the relationships between growth hormone secretion and delta wave electroencephalographic activity during normal sleep and after enrichment in delta waves. Gronfier C, et al. **Sleep** 1996 Dec;19(10):817–24

Local infusion of the serotonin antagonists ritanserin or ICS 205,930 increases in vivo dopamine release in the rat medial prefrontal cortex. Pehek EA. **Synapse** 1996 Sep;24(1):12–8

[Ritanserin prolongs the analgesic effect of morphine and slows the development of tolerance] Verbitskaia EV, et al. **Eksp Klin Farmakol** 1997 Mar-Apr;60(2):10–3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Failure of ritanserin to block cocaine cue reactivity in humans. Ehrman RN, et al. **Drug Alcohol Depend** 1996 Nov;42(3):167–74

Ritanserin as adjunct to fluoxetine treatment of OCD patients with psychotic features [letter] Bach M, et al. **Pharmacopsychiatry** 1997 Jan;30(1):28–9

Ritanserin in the treatment of alcohol dependence--a multi-center clinical trial. Ritanserin Study Group. Johnson BA, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(2):206–15

Possible mechanism of action for the attenuation of ethanol intake induced by ritanserin in rats. Panocka I, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):181–90

[Risperdal: a new hope for schizophrenic patients?] **Fortschr Neurol Psychiatr** 1994 May;62(5 Suppl):1–4 **(Ger)**

[The effect of ritanserin on the formation and expression of an opiate abstinence syndrome] Verbitskaia EV, et al. **Eksp Klin Farmakol** 1997 Jan-Feb;60(1):19–21 (Eng. Abstr.) **(Rus)**

RITODRINE

ADMINISTRATION & DOSAGE

Hyperamylasemia in response to ritodrine or ephedrine administered to pregnant women. Takahashi T, et al. **J Am Coll Surg** 1997 Jan;184(1):31–6

Prenatal ritodrine administration and the incidence of respiratory distress syndrome in premature infants. Kerem E, et al. **J Perinatol** 1997 Mar-Apr;17(2):101–6

ADVERSE EFFECTS

Ritodrine-induced leukopenia: a case report and literature review. Wu CD, et al. **Chang Keng I Hsueh** 1996 Dec; 19(4):388–91 (7 ref.)

Ritodrine- and terbutaline-induced hypokalemia in preterm labor: mechanisms and consequences. Braden GL, et al. **Kidney Int** 1997 Jun;51(6):1867–75

[Maternal complications from tocolytic treatment with beta-mimetics. Three cases of pulmonary edema] Hourdequin P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(5):528–32 (21 ref.) (Eng. Abstr.) **(Fre)**

[Effect of prolonged intravenous ritodrine tocolysis on diurnal glucose profiles in pregnant women with normal carbohydrate tolerance] Hirai M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Jul;48(7):488–94 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Progesterone levels in preterm labor are not affected by ritodrin treatment. Odeh M, et al. **Gynecol Obstet Invest** 1997;43(1):34–6

THERAPEUTIC USE

Does the use of a tocolytic agent affect the success rate of external cephalic version? Marquette GP, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):859–61

Urinary trypsin inhibitor: a new drug to treat preterm labor: a comparative study with ritodrine. Kanayama N, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Aug;67(2):133–8

Prolongation of pregnancy in multiple pregnancy. al-Najashi SS, et al. **Int J Gynaecol Obstet** 1996 Aug;54(2):131–5

Fetal ventricular rate in case of congenital complete heart block is increased by ritodrine. Case report. Koike T, et al. **J Perinat Med** 1997;25(2):216–8

Long-term intravenous tocolytic therapy. Bruner JP, et al.

Mil Med 1997 Aug;162(8):555–9
Nifedipine and nitrodrine in the management of preterm labor: a randomized multicenter trial. Papatsonis DN, et al. **Obstet Gynecol** 1997 Aug;90(2):230–4

RITONAVIR

ADMINISTRATION & DOSAGE

Saquinavir pharmacokinetics alone and in combination with ritonavir in HIV-infected patients. Merry C, et al. **AIDS** 1997 Mar 15;11(4):F29–33
Ergotism related to concurrent administration of ergotamine tartrate and ritonavir in an AIDS patient [letter] Caballero-Granado FJ, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1207

ADVERSE EFFECTS

Hypersensitivity reactions during antiretroviral regimens with protease inhibitors [letter] Bonfanti P, et al. **AIDS** 1997 Aug;11(10):1301–2
Unusual occurrence of spontaneous haematomas in three asymptomatic HIV-infected haemophilia patients a few days after the onset of ritonavir treatment [letter] Ginsburg C, et al. **AIDS** 1997 Mar;11(3):388–9
Gout secondary to ritonavir and didanosine [letter] Mehlhaff DL, et al. **AIDS** 1996 Dec;10(14):1744
Marked hyperlipidaemia on ritonavir therapy [letter] Sullivan AK, et al. **AIDS** 1997 Jun;11(7):938–9
Side-effects of ritonavir and its combination with saquinavir with special regard to renal function [letter] Witzke O, et al. **AIDS** 1997 May;11(6):836–8
New safety information emerges from postmarketing use of ritonavir [news] **Am J Health Syst Pharm** 1997 Jan 15; 54(2):126
Improved tolerability of ritonavir derived from pharmacokinetic principles [letter] Merry C, et al. **Br J Clin Pharmacol** 1996 Dec;42(6):787
Ritonavir and renal failure [letter] Chugh S, et al. **N Engl J Med** 1997 Jan 9;336(2):138

PHARMACOKINETICS

Multiple-dose pharmacokinetics of ritonavir in human immunodeficiency virus-infected subjects. Hsu A, et al. **Antimicrob Agents Chemother** 1997 May;41(5):898–905
Improved tolerability of ritonavir derived from pharmacokinetic principles [letter] Merry C, et al. **Br J Clin Pharmacol** 1996 Dec;42(6):787
Metabolism and disposition of the HIV-1 protease inhibitor ritonavir (ABT-538) in rats, dogs, and humans. Denissen JF, et al. **Drug Metab Dispos** 1997 Apr;25(4):489–501

PHARMACOLOGY

HIV protease inhibitors. Carr A, et al. **AIDS** 1996;10 Suppl A:S151–7 (51 ref.)
Resistance-related mutations in the HIV-1 protease gene of patients treated for 1 year with the protease inhibitor ritonavir (ABT-538). Schmit JC, et al. **AIDS** 1996 Aug; 10(9):995–9
Pharmacokinetic enhancement of inhibitors of the human immunodeficiency virus protease by coadministration with ritonavir. Kempf DJ, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):654–60
Differential inhibition of cytochrome P450 isoforms by the protease inhibitors, ritonavir, saquinavir and indinavir. Eagling VA, et al. **Br J Clin Pharmacol** 1997 Aug; 44(2):190–4
Hepatic drug-metabolizing activities in rats after 14 days of oral administration of the human immunodeficiency virus-type 1 protease inhibitor ritonavir (ABT-538). Kumar GN, et al. **Drug Metab Dispos** 1996 May;24(5):615–7
Ritonavir. Lea AP, et al. **Drugs** 1996 Oct;52(4):541–6; discussion 547–8 (37 ref.)
Drug interactions of protease inhibitors [letter] Simmonds M. **Genitourin Med** 1997 Jun;73(3):227–8

THERAPEUTIC USE

Reduction of Kaposi's sarcoma lesions following treatment of AIDS with ritonovir [letter] Conant MA, et al. **AIDS** 1997 Aug;11(10):1300–1
Dramatic cutaneous psoriasis improvement in a patient with the human immunodeficiency virus treated with 2',3'-dideoxycytidine and ritonavir [letter] Berthelot P, et al. **Arch Dermatol** 1997 Apr;133(4):531
New drugs—reports of new drugs recently approved by the FDA. Ritonavir. **Bioorg Med Chem** 1997 Mar;5(3):461–2
Resolution of intractable molluscum contagiosum in a human immunodeficiency virus-infected patient after institution of antiretroviral therapy with ritonavir. Hicks CB, et al. **Clin Infect Dis** 1997 May;24(5):1023–5
Hundreds enrolled in canadian HIV trials [news] **CMAJ** 1997 Jun 15;156(12):1691
Restoration of immunity to chronic hepatitis B infection in HIV-infected patient on protease inhibitor [letter] Carr A, et al. **Lancet** 1997 Apr 5;349(9057):995–6
FDA rapidly approves HIV protease inhibitors for children [news] Fox JL. **Nat Biotechnol** 1997 May;15(5):404

RITTER DISEASE see **STAPHYLOCOCCAL SCALDED SKIN SYNDROME**

RIVER BLINDNESS see **ONCHOCERCIASIS, OCULAR**

RNA

see related
NISSL BODIES
REPETITIVE SEQUENCES, NUCLEIC ACID

Alternative tRNA primers for HIV [letter] Lauermann V, et al. **AIDS** 1996 Dec;10(14):1738–40
Construction of cDNA libraries from small amounts of total RNA using the suppression PCR effect. Lukyanov K, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):285–8
Chromatin structure and function: the heretical path to an RNA transcription factor. Krause MO. **Biochem Cell Biol** 1996;74(5):623–32 (91 ref.)
In vitro amplification of human basic fibroblast growth factor mRNA by RNA-specific exon-junction primers. Sheu HM, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):907–14
Posttranscriptional Control of Gene Expression: The Regulatory Role of RNA. Proceedings of a meeting. Hakone, Japan, November 10–14, 1996. **Biochimie** 1996; 78(11–12):901–1122
Use of the direct RNA amplification technique NASBA to detect factor V Leiden, a point mutation associated with APC resistance. Reitsma PH, et al. **Blood Coagul Fibrinolysis** 1996 Sep;7(6):659–63
Some biochemical thoughts on the RNA world. Bloch K. **Chem Biol** 1996 May;3(5):405–7
Encapsulation of ribonucleic acid in human red blood cells for use as a reticulocyte quality control material for flow cytometric analysis. Ebrahim A, et al. **Cytometry** 1996 Oct 1;25(2):156–63
Activin-like signal activates dorsal-specific maternal RNA between 8- and 16-cell stages of Xenopus. Hainski AM, et al. **Dev Genet** 1996;19(3):210–21
The rate of compensatory evolution. Stephan W. **Genetics** 1996 Sep;144(1):419–26
RNA-primed PCR. Shibata H, et al. **Genome Res** 1995 Nov; 5(4):400–3
Mapping of the gene for the mouse telomerase RNA component, Terc, to chromosome 3 by fluorescence in situ hybridization and mouse chromosome painting. Soder AI, et al. **Genomics** 1997 Apr 15;41(2):293–4
Increased proportion of exon 9 alternatively spliced CFTR transcripts in vas deferens compared with nasal epithelial cells. Teng H, et al. **Hum Mol Genet** 1997 Jan;6(1):85–90
Genetic divergence at the mitochondrial small subunit ribosomal RNA gene among isolates of Pneumocystis carinii from five mammalian host species. Hunter JA, et al. **J Eukaryot Microbiol** 1996 Sep–Oct;43(5):24S–25S
Processing of human mitochondrial tRNA(Ser(AGY))GCU: a novel pathway in tRNA biosynthesis. Rossmanith W. **J Mol Biol** 1997 Jan 31;265(4):365–71 (26 ref.)
Approximate scaling properties of RNA free energy landscapes. Baskaran S, et al. **J Theor Biol** 1996 Aug 21; 181(4):299–310
On the appearance of function and organisation in the origin of life. Blomberg C. **J Theor Biol** 1997 Aug 21; 187(4):541–54
Chemical evolution and the primitive soup: did Oparin get it all right? [letter] Lazcano A. **J Theor Biol** 1997 Jan 21; 184(2):219–23
Primer tRNA3Lys on the viral genome exists in unextended and two-base extended forms within mature human immunodeficiency virus type 1. Huang Y, et al. **J Virol** 1997 Jan;71(1):726–8
Identification of a sequence within U5 required for human immunodeficiency virus type 1 to stably maintain a primer binding site complementary to tRNA(Met). Kang SM, et al. **J Virol** 1997 Jan;71(1):207–17
Identification of an RNA sequence within an intracisternal-A particle element able to replace Rev-mediated posttranscriptional regulation of human immunodeficiency virus type 1. Tabernero C, et al. **J Virol** 1997 Jan; 71(1):95–101
Functional importance of RNA interactions in selection of translation initiation codons. Sprengart ML, et al. **Mol Microbiol** 1997 Apr;24(1):19–28 (57 ref.)
Influence of recipient cytoplasm cell stage on transcription in bovine nucleus transfer embryos. Smith SD, et al. **Mol Reprod Dev** 1996 Dec;45(4):444–50
A simple method for 3'-labeling of RNA. Huang Z, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4360–1
Mitochondrial tRNAs in the lower fungus Spizellomyces punctatus: tRNA editing and UAG 'stop' codons recognized as leucine. Laforest MJ, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):626–32
Sequence-independent inhibition of RNA transcription by DNA dumbbells and other decoys. Lim CS, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):575–81
Views of RNA on the World Wide Web. Sühnel J. **Trends Genet** 1997 May;13(5):206–7

ANALYSIS

RNA and DNA sequence analysis of the nef gene of HIV type 1 strains from the first HIV type 1-infected long-term nonprogressing mother-child pair. Saksena NK, et al. **AIDS Res Hum Retroviruses** 1997 May 20;13(8):729–32
Interleukin-6 and interleukin-8 protein and gene expression in human arterial atherosclerotic wall. Rus HG, et al. **Atherosclerosis** 1996 Dec 20;127(2):263–71
Growth hormone restores hepatic lipase mRNA levels but the translation is impaired in hepatocytes of hypothyroid rats. Neve BP, et al. **Biochim Biophys Acta** 1997 Apr 1; 1345(2):172–9
Northern blotting of RNA denatured in glyoxal without buffer recirculation. Burnett WV. **Biotechniques** 1997 Apr; 22(4):668–71
Quantitative densitometric analysis using a commercially available handheld CCD digital camera. Malek AM, et al. **Biotechniques** 1997 Jun;22(6):1150–3
Use of UV methods for measurement of protein and nucleic acid concentrations. Manchester KL. **Biotechniques** 1996 Jun;20(6):968–70
Measurement of nucleic acid concentrations using the DyNA Quant and the GeneQuant. Teare JM, et al. **Biotechniques** 1997 Jun;22(6):1170–4
Technical aspects of quantitative competitive PCR. Zimmermann K, et al. **Biotechniques** 1996 Aug; 21(2):268–72, 274–9 (110 ref.)
COBAS AMPLICOR: fully automated RNA and DNA amplification and detection system for routine diagnostic PCR. DiDomenico N, et al. **Clin Chem** 1996 Dec; 42(12):1915–23
Hartman interferometer: versatile integrated optic sensor for label-free, real-time quantification of nucleic acids, proteins, and pathogens. Schneider BH, et al. **Clin Chem** 1997 Sep;43(9):1757–63
Quantification of nucleic acids. Killeen AA. **Clin Lab Med** 1997 Mar;17(1):1–19 (109 ref.)
Microwave treatment enhances detection of RNA and DNA by in situ hybridization. Sperry A, et al. **Diagn Mol Pathol** 1996 Dec;5(4):291–6
Analysis of RNA by capillary electrophoresis. Skeidsvoll J, et al. **Electrophoresis** 1996 Sep;17(9):1512–7
Localization by ultrastructural in situ hybridization of mitochondrial transcripts in epithelial cells of a Drosophila subobscura deletion mutant. Lécher P, et al. **Eur J Cell Biol** 1996 Dec;71(4):423–7
The cystic fibrosis transmembrane regulator gene is expressed in the human endocervix throughout the menstrual cycle. Hayslip CC, et al. **Fertil Steril** 1997 Apr;67(4):636–40
Quantitation of liver RNA [letter] Barnard GF, et al. **Hepatology** 1997 Sep;26(3):803
RNA molecules lighting up under the microscope. Dirks RW. **Histochem Cell Biol** 1996 Aug;106(2):151–66 (104 ref.)
Cytochemical detection systems for in situ hybridization, and the combination with immunocytochemistry, 'who is still afraid of red, green and blue?' Speel EJ, et al. **Histochem J** 1995 Nov;27(11):833–58 (212 ref.)
Rapid detection of chemical carcinogens by measuring RNA released from microsomes in post-mitochondrial supernatant. Dhanda JS, et al. **Indian J Exp Biol** 1996 Jun; 34(6):597–9
Tumour necrosis factor is expressed in cardiac tissues of patients with heart failure. Doyama K, et al. **Int J Cardiol** 1996 Jun;54(3):217–25
Multifunctional compartments in the nucleus: insights from DNA and RNA localization. Clemson CM, et al. **J Cell Biochem** 1996 Aug;62(2):181–90 (68 ref.)
Signal amplification in the detection of single-copy DNA and RNA by enzyme-catalyzed deposition (CARD) of the novel fluorescent reporter substrate Cy3.29-tyramide. Schmidt BF, et al. **J Histochem Cytochem** 1997 Mar; 45(3):365–73
Isolation and characterization of 2'-fluoro-, 2'-amino-, and 2'-fluoro-/amino-modified RNA ligands to human IFN-gamma that inhibit receptor binding. Kubik MF, et al. **J Immunol** 1997 Jul 1;159(1):259–67
Cloning, expression, and chromosomal localization of mouse liver bile acid CoA:amino acid N-acyltransferase. Falany CN, et al. **J Lipid Res** 1997 Jun;38(6):1139–48
Detection and analysis of mitochondrial DNA and RNA in muscle by in situ hybridization and single-fiber PCR. Moraes CT, et al. **Methods Enzymol** 1996;264:522–40
Single molecule detection of RNA reporter probes by amplification with Q beta replicase. Burg JL, et al. **Mol Cell Probes** 1996 Aug;10(4):257–71
Transcriptional activity in in vitro produced bovine two- and four-cell embryos. Viuff D, et al. **Mol Reprod Dev** 1996 Feb;43(2):171–9
Microwave pretreatment improves RNA-ISH in various formalin-fixed tissues using a uniform protocol. Wilkens L, et al. **Pathol Res Pract** 1996 Jun;192(6):588–94
Nucleotides in human milk: sources and metabolism by the newborn infant. Thorell L, et al. **Pediatr Res** 1996 Dec; 40(6):845–52
In vitro selection of a 7-methyl-guanosine binding RNA that inhibits translation of capped mRNA molecules. Haller AA, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8521–6
Expression of the epidermal growth factor receptor gene in human intestinal metaplasia: a preliminary report. Granelli P, et al. **Scand J Gastroenterol** 1997 May;32(5):485–9

ANTAGONISTS & INHIBITORS

Discovery of selective, small-molecule inhibitors of RNA complexes—II. Self-splicing group I intron ribozyme. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1185–95

BIOSYNTHESIS

A light and electron microscopic radioautographic study on RNA synthesis in the retina of chick embryo. Gunarso W,

et al. **Acta Histochem** 1996 Jul;98(3):309–22
Tissue inhibitor of metalloproteinase–1 and –2 RNA expression in rat and human liver fibrosis. Herbst H, et al. **Am J Pathol** 1997 May;150(5):1647–59
Effects and fate of human IGF–binding protein–5 in rat osteoblast cultures. Schmid C, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):E1029–35
adapt33, a novel oxidant–inducible RNA from hamster HA–1 cells. Wang Y, et al. **Arch Biochem Biophys** 1996 Aug 15; 332(2):255–60
The antiproliferative effect of 8–chloro–adenosine, an active metabolite of 8–chloro–cyclic adenosine monophosphate, and disturbances in nucleic acid synthesis and cell cycle kinetics. Langeveld CH, et al. **Biochem Pharmacol** 1997 Jan 24;53(2):141–8
Kinetic mechanism of transcription initiation by bacteriophage T7 RNA polymerase. Jia Y, et al. **Biochemistry** 1997 Apr 8;36(14):4223–32
Template strand gap bypass is a general property of prokaryotic RNA polymerases: implications for elongation mechanisms. Liu J, et al. **Biochemistry** 1996 Nov 26; 35(47):14999–5008
Activation functions of transcription factor Sp1 at U2 snRNA and TATA box promoters. Forsberg M, et al. **Biol Chem Hoppe Seyler** 1995 Nov;376(11):661–9
Nucleologenesis and ribonucleic acid synthesis in preimplantation equine embryos. Grøndahl C, et al. **Biol Reprod** 1996 Oct;55(4):769–74
Effect of aflatoxin B1–8,9–epoxide–DNA adducts on transcription of a supF gene fragment. Yu FL, et al. **Cancer Lett** 1996 Dec 3;109(1–2):77–83
Activation of 17beta–estradiol and estrone by dimethyldioxirane and inhibition of rat liver nuclear and nucleolar RNA synthesis in vitro. Yu FL, et al. **Carcinogenesis** 1996 Sep;17(9):1957–61
Age–related changes of RNA synthesis in the lungs of aging mice by light and electron microscopic radioautography. Sun L. **Cell Mol Biol (Noisy–le–grand)** 1995 Dec; 41(8):1061–72
Pyranosyl–RNA: chiroselective self–assembly of base sequences by ligative oligomerization of tetranucleotide–2',3'–cyclophosphates (with a commentary concerning the origin of biomolecular homochirality). Bolli M, et al. **Chem Biol** 1997 Apr;4(4):309–20
Killing two birds with one stone: a chemically plausible scheme for linked nucleic acid replication and coded peptide synthesis. Sutherland JD, et al. **Chem Biol** 1997 Jul;4(7):481–8 (17 ref.)
Nuclear domains involved in RNA synthesis, RNA processing, and replication. de Jong L, et al. **Crit Rev Eukaryot Gene Expr** 1996;6(2–3):215–46 (208 ref.)
Influence of the Gloeophyllum metabolite oosponol and some synthetic analogues on protein and RNA synthesis in target cells. Sonnenbichler J, et al. **Eur J Biochem** 1997 May 15; 246(1):45–9
Redox control of RNA synthesis in potato mitochondria. Wilson SB, et al. **Eur J Biochem** 1996 Nov 15;242(1):81–5
RNA and protein synthesis in the primate lens [letter] Russell P, et al. **Exp Eye Res** 1996 Jul;63(1):121–4
Heat shock protein 27 stimulates recovery of RNA and protein synthesis following a heat shock. Carper SW, et al. **J Cell Biochem** 1997 Aug 1;66(2):153–64
Regulation of telomerase RNA template expression in human T lymphocyte development and activation. Weng N, et al. **J Immunol** 1997 Apr 1;158(7):3215–20
The angiotensin type 2 receptor mediates RNA synthesis in A10 vascular smooth muscle cells. Saward L, et al. **J Mol Cell Cardiol** 1996 Mar;28(3):499–506
Gender–specific induction of pituitary RNA by estrogen and its modification by thyroid hormone. Zhu YS, et al. **J Neuroendocrinol** 1997 May;9(5):395–403
Inhibitory effects of interleukin–1 blockers on corneal fibroblast proliferation. Chen Z, et al. **J Ocul Pharmacol Ther** 1996 Summer;12(2):169–82
Effect of UVA on RNA synthesis in isolated chicken liver nuclei. Arai S, et al. **J Radiat Res (Tokyo)** 1997 Mar; 38(1):5–14
Analysis of the 2–kilobase latency–associated transcript expressed in PC12 cells productively infected with herpes simplex virus type 1: evidence for a stable, nonlinear structure. Rødahl E, et al. **J Virol** 1997 Feb;71(2):1703–7
Cold stress related alteration of RNA biosynthesis in brain cortex of mother–deprived newborn rats. Ibarra GR, et al. **Life Sci** 1997;60(24):2165–71
In organello RNA synthesis system from mammalian liver and brain. Enríquez JA, et al. **Methods Enzymol** 1996; 264:50–7
In organello RNA synthesis system from HeLa cells. Gaines GL 3rd. **Methods Enzymol** 1996;264:43–9
Transcription in vitro with Saccharomyces cerevisiae mitochondrial RNA–polymerase. Mangus DA, et al. **Methods Enzymol** 1996;264:57–66
In organello mitochondrial protein and RNA synthesis systems from Saccharomyces cerevisiae. Poyton RO, et al. **Methods Enzymol** 1996;264:36–42
Mapping promoters in displacement–loop region of vertebrate mitochondrial DNA. Shadel GS, et al. **Methods Enzymol** 1996;264:139–48
RNA editing in trypanosomatid mitochondria. Simpson L, et al. **Methods Enzymol** 1996;264:99–121
Chemical and enzymatic approaches to construct modified RNAs. Gaur RK, et al. **Methods Mol Biol** 1997;74:99–110
Nucleus structure and transcriptional activity in relation to oocyte diameter in cattle. Fair T, et al. **Mol Reprod Dev** 1996 Apr;43(4):503–12
Protein and RNA synthesis–dependent and –independent LTPs in developing rat visual cortex. Kurotani T, et al. **Neuroreport** 1996 Dec 20;8(1):35–9
Comprehensive, rapid and sensitive detection of sequence variants of human mitochondrial tRNA genes. Michikawa Y, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2455–63
The sensitivity of human fibroblasts to N–acetoxy–2–acetylaminofluorene is determined by the extent of transcription–coupled repair, and/or their capability to counteract RNA synthesis inhibition. van Oosterwijk MF, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4653–9
Calcium influx signals normal flagellar RNA induction following acid shock of Chlamydomonas reinhardtii. Evans JH, et al. **Plant Mol Biol** 1997 Feb;33(3):467–81
RNA replication by Q beta replicase: a working model. Brown D, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11558–62
Initiation of (–)–strand RNA synthesis catalyzed by the BMV RNA–dependent RNA polymerase: synthesis of oligonucleotides. Sun JH, et al. **Virology** 1996 Dec 1; 226(1):1–12
[Regulatory properties of RNA polymerase from rifampicin–resistant E. coli strain rpoB403] Kamzolova SG. **Biokhimiia** 1996 Aug;61(8):1483–8 (Eng. Abstr.) **(Rus)**
[Transcription in nerve cells and hepatocytes of WAG and F344 rats of different ages] Iarygin VN, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):427–31 **(Rus)**
[Protein and RNA synthesis in larvae of the yellow mealworm beetle (Tenebrio molitor) during cooling and cold acclimatization] Gulevskiĭ AK, et al. **Ukr Biokhim Zh** 1996 Jan–Feb;68(1):88–91 (Eng. Abstr.) **(Rus)**
[Protein and RNA biosynthesis in the nuclei of the thymus cells of piglets with antenatal hypotrophy] Babak SV, et al. **Ukr Biokhim Zh** 1996 Mar–Apr;68(2):103–5 (Eng. Abstr.) **(Ukr)**

BLOOD

Isolation of cytoplasmic RNA from small samples of whole blood. Michel U, et al. **Anal Biochem** 1997 Jul 1; 249(2):246–7
[The role of nucleic homeostasis in different pathological states of the human body] Andriiuk LV. **Lik Sprava** 1996 Mar–Apr;(3–4):3–6 (28 ref.) **(Ukr)**

CHEMICAL SYNTHESIS

Application of a 5'–bridging phosphorothioate to probe divalent metal and hammerhead ribozyme mediated RNA cleavage. Kuimelis RG, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1051–61
Chemical and enzymatic approaches to construct modified RNAs. Gaur RK, et al. **Methods Mol Biol** 1997;74:99–110
Crystallographic analyses of chemically synthesized modified hammerhead RNA sequences as a general approach toward understanding ribozyme structure and function. Scott WG. **Methods Mol Biol** 1997;74:387–91
A practical method for the production of RNA and ribozymes. Wincott FE, et al. **Methods Mol Biol** 1997; 74:59–68
Primer design for a prokaryotic differential display RT–PCR. Fislage R, et al. **Nucleic Acids Res** 1997 May 1;25(9):1830–5
Efficient introduction of phosphorothioates into RNA oligonucleotides by 3–ethoxy–1,2,4–dithiazoline–5–one (EDITH). Xu Q, et al. **Nucleic Acids Res** 1996 Sep 15; 24(18):3643–4
A new method for removal of the 2'–TBDMS group under acidic conditions in chemical synthesis of RNA. Kawahara S, et al. **Nucleic Acids Symp Ser** 1995;(34):29–30
Oligomerization of uridine phosphorimidazolides on montmorillonite: a model for the prebiotic synthesis of RNA on minerals. Ding PZ, et al. **Orig Life Evol Biosph** 1996 Apr;26(2):151–71
Primordial soup researchers gather at watering hole [news] Lewis R. **Science** 1997 Aug 22;277(5329):1034–5

CHEMISTRY

Construction of cDNA library from liver RNA of heat shocked rats and DNA sequence analysis of the clone containing the 3'–end untranslated region (3'UTR) of the heat inducible gene hsp70.2. Lisowska K, et al. **Acta Biochim Pol** 1996;43(2):313–7
Detecting immobilized protein kinase C isozymes with RNA aptamers. Conrad R, et al. **Anal Biochem** 1996 Nov 15; 242(2):261–5
Hierarchy and dynamics of RNA folding. Brion P, et al. **Annu Rev Biophys Biomol Struct** 1997;26:113–37 (118 ref.)
Flexibility of RNA. Hagerman PJ. **Annu Rev Biophys Biomol Struct** 1997;26:139–56 (64 ref.)
Identification and characterization of an RNA specific primer for human tumor necrosis factor receptor I (TNFR–I). Kuo KW, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):119–25
Facilitators of RNA–RNA annealing: implications for the catalytic cycle of hammerhead ribozymes. Nedbal W, et al. **Biochem Soc Trans** 1996 Aug;24(3):615–8 (17 ref.)
Molecular palaeontology: understanding catalytic mechanisms in the RNA world by excavating clues from a ribozyme three–dimensional structure. Scott WG. **Biochem Soc Trans** 1996 Aug;24(3):604–8 (14 ref.)
Solution structure of an RNA x DNA hybrid duplex containing a 3'–thioformacetal linker and an RNA A–tract. Cross CW, et al. **Biochemistry** 1997 Apr 8;36(14):4096–107
Comparison of the thermodynamic stabilities and solution conformations of DNA.RNA hybrids containing purine–rich and pyrimidine–rich strands with DNA and RNA duplexes. Gyi JI, et al. **Biochemistry** 1996 Sep 24; 35(38):12538–48
Creating RNA bulges: cleavage of RNA in RNA/DNA duplexes by metal ion catalysis. Hüsken D, et al. **Biochemistry** 1996 Dec 24;35(51):16591–600
RNA folding topology and intermolecular contacts in the AMP–RNA aptamer complex. Jiang F, et al. **Biochemistry** 1996 Oct 8;35(40):13250–66
A new type of hairpin ribozyme consisting of three domains. Komatsu Y, et al. **Biochemistry** 1997 Aug 12;36(32):9935–40
Binding affinity and specificity of Escherichia coli RNase H1: impact on the kinetics of catalysis of antisense oligonucleotide–RNA hybrids. Lima WF, et al. **Biochemistry** 1997 Jan 14;36(2):390–8
Investigation of the structural basis for thermodynamic stabilities of tandem GU wobble pairs: NMR structures of (rGGAGUUCC)2 and (rGGAUGUCC)2. McDowell JA, et al. **Biochemistry** 1997 Jul 1;36(26):8030–8
Solution structure of an RNA.2'–O–methylated RNA hybrid duplex containing an RNA.DNA hybrid segment at the center. Nishizaki T, et al. **Biochemistry** 1997 Mar 4; 36(9):2577–85
DNA and RNA oligomer sequences from the 3' noncoding region of the chicken glutamine synthetase gene from intramolecular hairpins. Riccelli PV, et al. **Biochemistry** 1996 Dec 3;35(48):15364–72
Conformation of formacetal and 3'–thioformacetal nucleotide linkers and stability of their antisense RNA.DNA hybrid duplexes. Rice JS, et al. **Biochemistry** 1997 Jan 14; 36(2):399–411
Thermally induced DNA.RNA hybrid to G–quadruplex transitions: possible implications for telomere synthesis by telomerase. Salazar M, et al. **Biochemistry** 1996 Dec 17; 35(50):16110–5
G.A and U.U mismatches can stabilize RNA internal loops of three nucleotides. Schroeder S, et al. **Biochemistry** 1996 Dec 17;35(50):16105–9
Improved parameters for the prediction of RNA hairpin stability. Serra MJ, et al. **Biochemistry** 1997 Apr 22; 36(16):4844–51
Thermodynamic comparison of the salt dependence of natural RNA hairpins and RNA hairpins with non–nucleotide spacers. Williams DJ, et al. **Biochemistry** 1996 Nov 19;35(46):14665–70
Solution structure of (rGGCAGGCC)2 by two–dimensional NMR and the iterative relaxation matrix approach. Wu M, et al. **Biochemistry** 1997 Apr 15;36(15):4449–60
2–Aminopurine labelled RNA bulge loops. Synthesis and thermodynamics. Zagórowska I, et al. **Biochimie** 1996; 78(2):123–30
Context dependent RNA–RNA recognition in a three–dimensional model of the 16S rRNA core. Masquida B, et al. **Bioorg Med Chem** 1997 Jun;5(6):1021–35
Recognition of RNA by triplex formation: divergent effects of pyrimidine C–5 methylation. Wang S, et al. **Bioorg Med Chem** 1997 Jun;5(6):1043–50
Modulation of nucleic acid structure by ligand binding: induction of a DNA.RNA.DNA hybrid triplex by DAPI intercalation. Xu Z, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1137–47
A graph–topological approach to recognition of pattern and similarity in RNA secondary structures. Benedetti G, et al. **Biophys Chem** 1996 Mar 7;59(1–2):179–84
Sequentially folded SV–11 RNA: metastability is relevant to biological function. Fernández A, et al. **Biophys Chem** 1996 Oct 30;61(2–3):101–5
Comparison of the electrophoretic and hydrodynamic properties of DNA and RNA oligonucleotide duplexes. Bonifacio GF, et al. **Biophys J** 1997 Sep;73(3):1532–8
New evidence that the hydrophobic effect and dispersion are not major driving forces for nucleotide base stacking [letter; comment] Gellman SH, et al. **Biophys J** 1996 Dec; 71(6):3523–6. Comment on: Biophys J 1995 Oct;69(4):1528–35.
A computational approach to modeling nucleic acid hairpin structures. Tung CS. **Biophys J** 1997 Feb;72(2 Pt 1):876–85
Analysis of birefringence decay profiles for nucleic acid helices possessing bends: the tau–ratio approach. Vacano E, et al. **Biophys J** 1997 Jul;73(1):306–17
Influence of static and dynamic bends on the birefringence decay profile of RNA helices: Brownian dynamics simulations. Zacharias M, et al. **Biophys J** 1997 Jul; 73(1):318–32
RNA crystallography. Holbrook SR, et al. **Biopolymers** 1997; 44(1):3–21 (100 ref.)
Ordered aggregation of ribonucleic acids by the human immunodeficiency virus type 1 nucleocapsid protein. Stoylov SP, et al. **Biopolymers** 1997 Mar;41(3):301–12
Matching among multiple random sequences. Naus JI, et al. **Bull Math Biol** 1997 May;59(3):483–96
Generic properties of combinatory maps: neutral networks of RNA secondary structures. Reidys C, et al. **Bull Math Biol** 1997 Mar;59(2):339–97
RNA structure comes of age. Uhlenbeck OC, et al. **Cell** 1997 Sep 5;90(5):833–40 (46 ref.)

Pyranosyl-RNA: chiroselective self-assembly of base sequences by ligative oligomerization of tetranucleotide-2',3'-cyclophosphates (with a commentary concerning the origin of biomolecular homochirality). Bolli M, et al. **Chem Biol** 1997 Apr;4(4):309-20

Aptamer structures from A to zeta. Feigon J, et al. **Chem Biol** 1996 Aug;3(8):611-7 (36 ref.)

Saccharide-RNA recognition in an aminoglycoside antibiotic-RNA aptamer complex. Jiang L, et al. **Chem Biol** 1997 Jan;4(1):35-50

RNA surfaces as functional mimetics of proteins. Keene JD. **Chem Biol** 1996 Jul;3(7):505-13 (39 ref.)

Crystal structures of an A-form duplex with single-adenosine bulges and a conformational basis for site-specific RNA self-cleavage. Portmann S, et al. **Chem Biol** 1996 Mar; 3(3):173-84

In vitro selection of a viomycin-binding RNA pseudoknot. Wallis MG, et al. **Chem Biol** 1997 May;4(5):357-66

Alignment of possible secondary structures in multiple RNA sequences using simulated annealing. Kim J, et al. **Comput Appl Biosci** 1996 Aug;12(4):259-67

RNAdraw: an integrated program for RNA secondary structure calculation and analysis under 32-bit Microsoft Windows. Matzura O, et al. **Comput Appl Biosci** 1996 Jun; 12(3):247-9

Visualization of RNA secondary structures using highly parallel computers. Nakaya A, et al. **Comput Appl Biosci** 1996 Jun;12(3):205-11

RNA secondary structure prediction using highly parallel computers. Nakaya A, et al. **Comput Appl Biosci** 1995 Dec; 11(6):685-92

An annealing mutation operator in the genetic algorithms for RNA folding. Shapiro BA, et al. **Comput Appl Biosci** 1996 Jun;12(3):171-80

Predicting RNA H-type pseudoknots with the massively parallel genetic algorithm. Shapiro BA, et al. **Comput Appl Biosci** 1997 Aug;13(4):459-71

Prebiotic evolution: selecting for homochirality before RNA. Schwartz AW. **Curr Biol** 1997 Aug 1;7(8):R477-9

Evolutionary analysis of sea urchin mitochondrial tRNAs: folding of the molecules as suggested by the non-random occurrence of nucleotides. Giorgi CD, et al. **Curr Genet** 1996 Aug;30(3):191-9

Quantitative nucleic acids footprinting: thermodynamic and kinetic approaches. Petri V, et al. **Curr Opin Biotechnol** 1997 Feb;8(1):36-44 (79 ref.)

Nucleic acids. **Curr Opin Struct Biol** 1997 Jun;7(3):429-38

RNA structure: crystal clear? Doudna JA, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):310-6 (62 ref.)

Hammering away at RNA global structure. Hagerman PJ, et al. **Curr Opin Struct Biol** 1996 Jun;6(3):317-21 (21 ref.)

Fluorescence studies of DNA and RNA structure and dynamics. Millar DP. **Curr Opin Struct Biol** 1996 Jun; 6(3):322-6 (38 ref.)

Recent solution structures of RNA and its complexes with drugs, peptides and proteins. Ramos A, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):317-23 (59 ref.)

Protein-facilitated RNA folding. Weeks KM. **Curr Opin Struct Biol** 1997 Jun;7(3):336-42 (58 ref.)

Nucleic acids. From self-assembly to induced-fit recognition [editorial] Westhof E, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):305-9 (19 ref.)

Viroid processing: switch from cleavage to ligation is driven by a change from a tetraloop to a loop E conformation. Baumstark T, et al. **EMBO J** 1997 Feb 3;16(3):599-610

Mutagenesis of a stacking contact in the MS2 coat protein-RNA complex. LeCuyer KA, et al. **EMBO J** 1996 Dec 16;15(24):6847-53

Human ribosomal protein L7 binds RNA with an alpha-helical arginine-rich and lysine-rich domain. Hemmerich P, et al. **Eur J Biochem** 1997 May 1; 245(3):549-56

Geometrical factor and physical reasons for its influence on the kinetic and thermodynamic properties of RNA-like heteropolymers. Galzitskaya OV. **Fold Des** 1997; 2(3):193-201

RNA tectonics: towards RNA design. Westhof E, et al. **Fold Des** 1996;1(4):R78-88 (97 ref.)

Comparative analysis of tertiary structure elements in signal recognition particle RNA. Zwieb C, et al. **Fold Des** 1996; 1(4):315-24

RNA secondary structure as a reusable interface to biological information resources. Felciano RM, et al. **Gene** 1997 May 6;190(2):GC59-70

Automated chemical synthesis of biologically active tRNA having a sequence corresponding to Ascaris suum mitochondrial tRNA(Met) toward NMR measurements. Ohtsuki T, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1070-3

Single-stranded RNA recognition by the bacteriophage T4 translational repressor, regA. Brown D, et al. **J Biol Chem** 1997 Jun 6;272(23):14969-74

Assignment methodology for larger RNA oligonucleotides: application to an ATP-binding RNA aptamer. Dieckmann T, et al. **J Biomol NMR** 1997 Apr;9(3):259-72

Specific labeling approaches to guanine and adenine imino and amino proton assignments in the AMP-RNA aptamer complex. Jiang F, et al. **J Biomol NMR** 1997 Jan;9(1):55-62

Prediction of sequentially optimal RNA secondary structures. Breton N, et al. **J Biomol Struct Dyn** 1997 Jun;14(6):727-40

Three-dimensional model for slipped loop RNA. Farutin VA, et al. **J Biomol Struct Dyn** 1997 Aug;15(1):45-52

Single-stranded DNA and RNA targeted triplex-formation: UV, CD and molecular modeling studies of foldback triplexes containing different RNA, 2'-OMe-RNA and DNA strand combinations. Kandimalla ER, et al. **J Biomol Struct Dyn** 1997 Jun;14(6):715-26

Comparative studies of duplex and triplex formation of 2'-5' and 3'-5' linked oligoribonucleotides. Sawai H, et al. **J Biomol Struct Dyn** 1996 Jun;13(6):1043-51

Segmented structure of separate and transposable DNA and RNA elements as suggested by their size distributions. Trifonov EN. **J Biomol Struct Dyn** 1997 Feb;14(4):449-57

Identification and molecular properties of a 306 nucleotide viroid associated with apple dimple fruit disease. Di Serio F, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2833-7

Identification of ribose-base sequential NOEs according to base types in uniformly 13C-labeled RNAs. Ramachandran R, et al. **J Magn Reson** 1997 Jan;124(1):210-3

Distinguishing inter- and intrastrand NOEs involving exchangeable protons in RNA duplexes. Sich C, et al. **J Magn Reson B** 1996 Sep;112(3):275-81

Remarkable morphological variability of a common RNA folding motif: the GNRA tetraloop-receptor interaction. Abramovitz DL, et al. **J Mol Biol** 1997 Feb 28; 266(3):493-506

How accurately and precisely can RNA structure be determined by NMR? Allain FH, et al. **J Mol Biol** 1997 Mar 28;267(2):338-51

Classification of nucleic acid junctions. Altona C. **J Mol Biol** 1996 Nov 8;263(4):568-81

Bent pseudoknots and novel RNA inhibitors of type 1 human immunodeficiency virus (HIV-1) reverse transcriptase. Burke DH, et al. **J Mol Biol** 1996 Dec 13;264(4):650-66

Solution structure of r(gaggacug):d(CAGTCCTC) hybrid: implications for the initiation of HIV-1 (+)-strand synthesis. Fedoroff OY, et al. **J Mol Biol** 1997 Jun 6; 269(2):225-39

The detailed structure of tandem G.A mismatched base-pair motifs in RNA duplexes is context dependent. Heus HA, et al. **J Mol Biol** 1997 Aug 8;271(1):147-58

The structure of an RNA/DNA hybrid: a substrate of the ribonuclease activity of HIV-1 reverse transcriptase. Horton NC, et al. **J Mol Biol** 1996 Dec 6;264(3):521-33

A network of heterogeneous hydrogen bonds in GNRA tetraloops. Jucker FM, et al. **J Mol Biol** 1996 Dec 20; 264(5):968-80

Theoretical studies of an exceptionally stable RNA tetraloop: observation of convergence from an incorrect NMR structure to the correct one using unrestrained molecular dynamics. Miller JL, et al. **J Mol Biol** 1997 Jul 18; 270(3):436-50

Mechanistic insights into p53-promoted RNA-RNA annealing. Nedbal W, et al. **J Mol Biol** 1997 Mar 7; 266(4):677-87

Time-resolved synchrotron X-ray "footprinting", a new approach to the study of nucleic acid structure and function: application to protein-DNA interactions and RNA folding. Sclavi B, et al. **J Mol Biol** 1997 Feb 14; 266(1):144-59

The three-dimensional structures of two complexes between recombinant MS2 capsids and RNA operator fragments reveal sequence-specific protein-RNA interactions. Valegård K, et al. **J Mol Biol** 1997 Aug 1;270(5):724-38

Exploring phenotype space through neutral evolution. Huynen MA. **J Mol Evol** 1996 Sep;43(3):165-9

An approach to prebiotic synthesis of alpha-oligoribonucleotides and description of their properties: selective advantage of beta-RNA over alpha-RNA. Sawai H, et al. **J Mol Evol** 1997 Sep; 45(3):209-15

Secondary structure and patterns of evolution among mammalian mitochondrial 12S rRNA molecules. Springer MS, et al. **J Mol Evol** 1996 Oct;43(4):357-73

STRUCTURELAB: a heterogeneous bioinformatics system for RNA structure analysis. Shapiro BA, et al. **J Mol Graph** 1996 Aug;14(4):194-205, 222-4

Speculation on the RNA precursor problem. Schwartz AW. **J Theor Biol** 1997 Aug 21;187(4):523-7

Identifying consensus patterns and secondary structure in SELEX sequence sets. Davis JP, et al. **Methods Enzymol** 1996;267:302-14

A SELEX primer. Fitzwater T, et al. **Methods Enzymol** 1996; 267:275-301

Crystallographic analyses of chemically synthesized modified hammerhead RNA sequences as a general approach toward understanding ribozyme structure and function. Scott WG. **Methods Mol Biol** 1997;74:387-91

Computer-aided calculation of the local folding potential of target RNA and its use for ribozyme design. Sczakiel G, et al. **Methods Mol Biol** 1997;74:11-5

Using the SELEX combinatorial chemistry process to find high affinity nucleic acid ligands to target molecules. Tuerk C. **Methods Mol Biol** 1997;67:219-30

The evolution of strand-specific compositional bias. A case study in the Hymenopteran mitochondrial 16S rRNA gene [letter] Dowton M, et al. **Mol Biol Evol** 1997 Jan; 14(1):109-12

Replication slippage may cause parallel evolution in the secondary structures of mitochondrial transfer RNAs. Macey JR, et al. **Mol Biol Evol** 1997 Jan;14(1):30-9

In vitro selection methodologies to probe RNA function and structure. Conrad RC, et al. **Mol Divers** 1995 Sep; 1(1):69-78 (50 ref.)

Construction of a mouse blastocyst cDNA library by PCR amplification from total RNA. Corrick CM, et al. **Mol Reprod Dev** 1996 Jan;43(1):7-16

Through a magnet, clearly [editorial; comment] **Nat Struct Biol** 1997 Mar;4(3):159-60 (12 ref.). Comment on: Nat Struct Biol 1997 Mar;4(3):167-9.

An RNA groove [news] Ellington AD, et al. **Nat Struct Biol** 1996 Dec;3(12):981-4

RNA aptamers [news; comment] Heus HA. **Nat Struct Biol** 1997 Aug;4(8):597-600. Comment on: Nat Struct Biol 1997 Aug;4(8):644-9.

Peptide nucleic acids and prebiotic chemistry [news] [see comments] Miller SL. **Nat Struct Biol** 1997 Mar;4(3):167-9 . Comment in: Nat Struct Biol 1997 Mar;4(3):159-60.

The ion core in RNA folding [news; comment] Tinoco I Jr, et al. **Nat Struct Biol** 1997 Jul;4(7):509-12. Comment on: Nat Struct Biol 1997 Jul;4(7):553-8.

Interlocking structural motifs mediate molecular discrimination by a theophyiline-binding RNA [see comments] Zimmermann GR, et al. **Nat Struct Biol** 1997 Aug;4(8):644-9. Comment in: Nat Struct Biol 1997 Aug;4(8):597-600.

RNA structure. A molecular contortionist [news] Doudna JA. **Nature** 1997 Aug 28;388(6645):830-1

Structure of HIV-1 TAR RNA in the absence of ligands reveals a novel conformation of the trinucleotide bulge. Aboul-ela F, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):3974-81

Mechanistic analyses of site-specific degradation in DNA-RNA hybrids by prototypic DNA cleavers. Bansal M, et al. **Nucleic Acids Res** 1997 May 1;25(9):1836-45

Effects of hypoxanthine substitution on bleomycin-mediated DNA strand degradation in DNA-RNA hybrids. Bansal M, et al. **Nucleic Acids Res** 1997 May 1;25(9):1846-53

Hydration effects on the duplex stability of phosphoramidate DNA-RNA oligomers. Barsky D, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):830-5

RNA aptamers to the adenosine moiety of S-adenosyl methionine: structural inferences from variations on a theme and the reproducibility of SELEX. Burke DH, et al. **Nucleic Acids Res** 1997 May 15;25(10):2020-4

ESSA: an integrated and interactive computer tool for analysing RNA secondary structure. Chetouani F, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3514-22

Hydration of the RNA duplex r(CGCAAAUUUGCG)2 determined by NMR. Conte MR, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3693-9

Conformational properties and thermodynamics of the RNA duplex r(CGCAAAUUUGCG)2: comparison with the DNA analogue d(CGCAAATTTGCG)2. Conte MR, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2627-34

Inferring the conformation of RNA base pairs and triples from patterns of sequence variation. Gautheret D, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1559-64

Determinants of a protein-induced RNA switch in the large domain of signal recognition particle identified by systematic-site directed mutagenesis. Gowda K, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2835-40

Matrix-assisted laser desorption/ionization mass spectrometry (MALDI) of endonuclease digests of RNA. Hahner S, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1957-64

Expression of bovine mitochondrial tRNASer GCU derivatives in Escherichia coli. Hayashi I, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3503-7

DNA polymerization catalysed by a group II intron RNA in vitro. Hetzer M, et al. **Nucleic Acids Res** 1997 May 1; 25(9):1825-9

NMR analysis of the hydrogen bonding interactions of the RNA-binding domains of the Drosophila sex-lethal protein with target RNA fragments with site-specific [3-15N]uridine substitutions. Kim I, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1565-9

Fluorescence-, isotope- or biotin-labeling of the 5 '-end of single-stranded DNA/RNA using T4 RNA ligase. Kinoshita Y, et al. **Nucleic Acids Res** 1997 Sep 15; 25(18):3747-8

Synthesis and studies on the effect of 2-thiouridine and 4-thiouridine on sugar conformation and RNA duplex stability. Kumar RK, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1272-80

Characterization and mapping of the double-stranded regions involved in activation of PKR within a cellular RNA from 3T3-F442A cells. Petryshyn RA, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2672-8

Chemical methods of DNA and RNA fluorescent labeling. Proudnikov D, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4535-42

Fluorophores for labeling of DNA/RNA fragments. Dubey KK, et al. **Nucleic Acids Symp Ser** 1995;(34):177-8

Dinuclear metal complexes for the efficient RNA hydrolysis. Ishikubo A, et al. **Nucleic Acids Symp Ser** 1995;(34):85-6

Solution structure of the duplexes between phosphorothioate DNA and target DNA/RNA. Kanehara H, et al. **Nucleic Acids Symp Ser** 1995;(34):53-4

Comparative CD and thermodynamic studies between sheared A:G and Watson-Crick A:U(T) base pairs in RNA and DNA. Katahira M, et al. **Nucleic Acids Symp Ser** 1995; (34):59-60

RNA quadruplex containing G and A. Katahira M, et al. **Nucleic Acids Symp Ser** 1995;(34):197-8

Selective deuteration of RNA for NMR signal assignment. Kim I, et al. **Nucleic Acids Symp Ser** 1995;(34):123-4

Crystal structure of the U1A spliceosomal protein complexed with its cognate RNA hairpin. Nagai K, et al. **Nucleic Acids Symp Ser** 1995;(34):1–2

Properties of nicked and circular dumbbell RNA–DNA chimeric oligonucleotides. Yamakawa H, et al. **Nucleic Acids Symp Ser** 1995;(34):133–4

Mirror symmetry breaking at the molecular level. Avetisov V, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11435–42 (59 ref.)

A curved RNA helix incorporating an internal loop with G.A and A.A non–Watson–Crick base pairing. Baeyens KJ, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12851–5

From oligonucleotide shapes to genomic SELEX: novel biological regulatory loops. Gold L, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):59–64 (42 ref.)

Characterization of individual polynucleotide molecules using a membrane channel. Kasianowicz JJ, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13770–3

Mismatch base pairs in RNA. Limmer S. **Prog Nucleic Acid Res Mol Biol** 1997;57:1–39 (129 ref.)

A multicopy modeling of the water distribution in macromolecular crystals. Podjarny AD, et al. **Proteins** 1997 Jul;28(3):303–12

Optical evanescent wave methods for the study of biomolecular interactions. Garland PB. **Q Rev Biophys** 1996 Feb;29(1):91–117 (80 ref.)

Base dynamics in a UUCG tetraloop RNA hairpin characterized by 15N spin relaxation: correlations with structure and stability. Akke M, et al. **RNA** 1997 Jul; 3(7):702–9

Structural and functional conservation of the Drosophila doublesex splicing enhancer repeat elements. Hertel KJ, et al. **RNA** 1996 Oct;2(10):969–81

Secondary structure model of the RNA recognized by the reverse transcriptase from the R2 retrotransposable element. Mathews DH, et al. **RNA** 1997 Jan;3(1):1–16

A major leap toward the tertiary structure of large RNAs. Moras D. **RNA** 1997 Feb;3(2):111–3

Dynamics of RNA–protein interactions in the HIV–1 Rev–RRE complex visualized by 6–thioguanosine–mediated photocrosslinking. Ping YH, et al. **RNA** 1997 Aug;3(8):850–60

NMR studies of the most conserved RNA domain of the mammalian signal recognition particle (SRP). Schmitz U, et al. **RNA** 1996 Dec;2(12):1213–27

Global similarities in nucleotide base composition among disparate functional classes of single–stranded RNA imply adaptive evolutionary convergence. Schultes E, et al. **RNA** 1997 Jul;3(7):792–806

A new strategy for introducing photoactivatable 4–thiouridine ((4S)U) into specific positions in a long RNA molecule. Yu YT, et al. **RNA** 1997 Jul;3(7):807–10

Solution structure of the donor site of a trans–splicing RNA. Greenbaum NL, et al. **Structure** 1996 Jun 15;4(6):725–33

Proteins, RNAs and chaperones in enzyme evolution: a folding perspective. Csermely P. **Trends Biochem Sci** 1997 May;22(5):147–9

Ribozymes: structure and mechanism in RNA catalysis. Scott WG, et al. **Trends Biochem Sci** 1996 Jun;21(6):220–4 (31 ref.)

RNA seeing double: close–packing of helices in RNA tertiary structure. Strobel SA, et al. **Trends Biochem Sci** 1997 Jul; 22(7):262–6 (49 ref.)

[Artificial ribonucleases I. Targeted RNA cleavage by 5'–peptidyloligodeoxyribonucleotides containing arginine and leucine residues] Pyshnyĭ DV, et al. **Bioorg Khim** 1997 Jun;23(6):497–504 (Eng. Abstr.) **(Rus)**

[A theoretical study of the dependence of rate of winding of RNA–like heteropolymers on the length of the chain] Galzitskaia OV, et al. **Mol Biol (Mosk)** 1997 May–Jun; 31(3):478–87 **(Rus)**

[Effect of the energy of distant contacts on the time of finding the native structure for RNA–like heteropolymers] Galzitskaia OV. **Mol Biol (Mosk)** 1997 May–Jun; 31(3):488–91 **(Rus)**

CLASSIFICATION

Global similarities in nucleotide base composition among disparate functional classes of single–stranded RNA imply adaptive evolutionary convergence. Schultes E, et al. **RNA** 1997 Jul;3(7):792–806

DRUG EFFECTS

Psoralen photosensitization: damages to nucleic acid and membrane lipid components. Caffieri S, et al. **Acta Biochim Pol** 1996;43(1):241–6 (31 ref.)

On the chemistry of RNA degradation by Fe.bleomycin. Holmes CE, et al. **Bioorg Med Chem** 1997 Jun;5(6):1235–48

Effect of ribonucleotide substitution on nucleic acid bulge recognition by neocarzinostatin. Kappen LS, et al. **Bioorg Med Chem** 1997 Jun;5(6):1221–7

Design and analysis of molecular motifs for specific recognition of RNA. Li K, et al. **Bioorg Med Chem** 1997 Jun;5(6):1157–72

Inhibition of Rev.RRE complexation by triplex tethered oligonucleotide probes. Moses AC, et al. **Bioorg Med Chem** 1997 Jun;5(6):1123–9

Modulation of nucleic acid structure by ligand binding: induction of a DNA.RNA.DNA hybrid triplex by DAPI intercalation. Xu Z, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1137–47

RNA as a drug target. Pearson ND, et al. **Chem Biol** 1997 Jun;4(6):409–14

[The effect of ovariectomy and estradiol on DNA, RNA and protein metabolism in the adrenal cortex of rats] Kovzun OI. **Fiziol Zh** 1996;42(1–2):53–8 (Eng. Abstr.) **(Ukr)**

GENETICS

Anti–oncogene ribozymes for cancer gene therapy. Irie A, et al. **Adv Pharmacol** 1997;40:207–57 (350 ref.)

RNA–based mutation screening in hereditary nonpolyposis colorectal cancer. Kohonen–Corish M, et al. **Am J Hum Genet** 1996 Oct;59(4):818–24

Mutations in mitochondrial transfer ribonucleic acid genes in preeclampsia. Folgerø T, et al. **Am J Obstet Gynecol** 1996 May;174(5):1626–30

adapt33, a novel oxidant–inducible RNA from hamster HA–1 cells. Wang Y, et al. **Arch Biochem Biophys** 1996 Aug 15; 332(2):255–60

Differential splicing of the GTP cyclohydrolase I RNA in dopa–responsive dystonia. Hirano M, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):316–9

Molecular cloning and RNA expression of two new human chemokine receptor–like genes [published erratum appears in Biochem Biophys Res Commun 1997 Feb 13;231(2):519–20] Zaballos A, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):846–53

Co–operation of the 5' and 3' untranslated regions of ornithine decarboxylase mRNA and inhibitory role of its 3' untranslated region in regulating the translational efficiency of hybrid RNA species via cellular factor. Lorenzini EC, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):361–7

Characterization and sequence of an additional 15–lipoxygenase transcript and of the human gene. Kritzik MR, et al. **Biochim Biophys Acta** 1997 Jun 26; 1352(3):267–81

Subunits I and II of Dictyostelium cytochrome c oxidase are specified by a single open reading frame transcribed into a large polycistronic RNA. Pellizzari R, et al. **Biochim Biophys Acta** 1997 May 16;1320(1):1–7

Primary sequence of mitochondrial tRNA(Arg) of a nematode Ascaris suum: occurrence of unmodified adenosine at the first position of the anticodon. Watanabe Y, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):119–22

RNA from air–dried frozen sections for RT–PCR and differential display. Castles CG, et al. **Biotechniques** 1996 Sep;21(3):425–8

PCR synthesis of cDNA from total RNA. Shepard SB, et al. **Biotechniques** 1997 Aug;23(2):202–4

RNA–RNA interaction and gene splicing. Verma M, et al. **Cancer Biochem Biophys** 1997 Jun;15(4):211–20 (65 ref.)

Decoupling of DNA excision repair and RNA transcription in translocation breaksite regions of plasmacytoma–susceptible BALB/cAnPt mice. Beecham EJ, et al. **Carcinogenesis** 1997 Apr;18(4):687–94

Nonhomologous RNA recombination in a cell–free system: evidence for a transesterification mechanism guided by secondary structure. Chetverin AB, et al. **Cell** 1997 Feb 21;88(4):503–13

Frpo: a novel single–stranded DNA promoter for transcription and for primer RNA synthesis of DNA replication. Masai H, et al. **Cell** 1997 Jun 13;89(6):897–907

Alignment of possible secondary structures in multiple RNA sequences using simulated annealing. Kim J, et al. **Comput Appl Biosci** 1996 Aug;12(4):259–67

An annealing mutation operator in the genetic algorithms for RNA folding. Shapiro BA, et al. **Comput Appl Biosci** 1996 Jun;12(3):171–80

Predicting RNA H–type pseudoknots with the massively parallel genetic algorithm. Shapiro BA, et al. **Comput Appl Biosci** 1997 Aug;13(4):459–71

Beta–cell loss and glucose induced signalling defects in diabetes mellitus caused by mitochondrial tRNALeu(UUR) gene mutation. Oka Y, et al. **Diabet Med** 1996 Sep;13(9 Suppl 6):S98–102

Clinical picture of a case of diabetes with mitochondrial tRNA mutation at position 3271 [letter] [published erratum appears in Diabetes Care 1996 Dec;19(12):1458] Suzuki Y, et al. **Diabetes Care** 1996 Nov;19(11):1304–5

Mitochondrial aldehyde dehydrogenase in diabetes associated with mitochondrial tRNA(Leu(UUR)) mutation at position 3243. Suzuki Y, et al. **Diabetes Care** 1996 Dec;19(12):1423–5

Proteome research: complementarity and limitations with respect to the RNA and DNA worlds. Humphery–Smith I, et al. **Electrophoresis** 1997 Aug;18(8):1217–42 (321 ref.)

Reconstitution of human telomerase activity and identification of a minimal functional region of the human telomerase RNA. Autexier C, et al. **EMBO J** 1996 Nov 1;15(21):5928–35

3'–Inverted repeats in plant mitochondrial mRNAs are processing signals rather than transcription terminators. Dombrowski S, et al. **EMBO J** 1997 Aug 15;16(16):5069–76

In–frame exon 2 deletion in insulin receptor RNA in a family with extreme insulin resistance in association with defective insulin binding: a case report. Moritz W, et al. **Eur J Endocrinol** 1996 Sep;135(3):357–63

Islet cell antibodies in diabetes mellitus associated with a mitochondrial tRNA(Leu(UUR)) gene mutation. Oexle K, et al. **Exp Clin Endocrinol Diabetes** 1996;104(3):212–7

Point mutations in a transcription terminator, lambda tI, that affect both transcription termination and RNA stability. Cisneros B, et al. **Gene** 1996 Nov 28;181(1–2):127–33

Genes for murine Y1 and Y3 Ro RNAs have class 3 RNA polymerase III promoter structures and are unlinked on mouse chromosome 6. Farris AD, et al. **Gene** 1996 Sep 26;174(1):35–42

In vitro display of DNA elements that modulate the RNA transcription in cis or in trans directions. Reifenrath–Biesel B, et al. **Gene** 1996 Nov 28;181(1–2):135–7

RNase mitochondrial RNA processing correctly cleaves a novel R loop at the mitochondrial DNA leading–strand origin of replication. Lee DY, et al. **Genes Dev** 1997 Mar 1;11(5):582–92

Enrichment of middle repetitive element Bm–1 transcripts in translationally active RNA fractions of the silkmoth, Bombyx mori. Gao GP, et al. **Genetica** 1996 Mar; 97(2):173–82

The alcohol dehydrogenase gene is nested in the outspread locus of Drosophila melanogaster. McNabb S, et al. **Genetics** 1996 Jun;143(2):897–911

Assessing dissimilarity of genes by comparing their RNAse A mismatch cleavage patterns. Rzhetsky A, et al. **Genetics** 1996 Dec;144(4):1975–83

Regionalized expression of Nkx5–1, Nkx5–2, Pax2 and sek genes during mouse inner ear development. Rinkwitz–Brandt S, et al. **Hear Res** 1996 Sep 15; 99(1–2):129–38

Scanning the first part of the neurofibromatosis type 1 gene by RNA–SSCP: identification of three novel mutations and of two new polymorphisms. Gasparini P, et al. **Hum Genet** 1996 Apr;97(4):492–5

Biochemical evidence for nuclear gene involvement in phenotype of non–syndromic deafness associated with mitochondrial 12S rRNA mutation. Guan MX, et al. **Hum Mol Genet** 1996 Jul;5(7):963–71

Alanine–scanning mutations in the "primer grip" of p66 HIV–1 reverse transcriptase result in selective loss of RNA priming activity. Powell MD, et al. **J Biol Chem** 1997 May 16;272(20):13262–9

C–myc deregulation during transformation induction: involvement of 7SK RNA. Luo Y, et al. **J Cell Biochem** 1997 Feb;64(2):313–27

Rapid identification of differentially expressed RNA transcripts in apoptotic T lymphocytes. Zhang J, et al. **J Immunol Methods** 1996 Sep 9;195(1–2):113–23

Cloning and characterization of partial cDNAs for woodchuck cytokines and CD3epsilon with applications for the detection of RNA expression in tissues by RT–PCR assay. Nakamura I, et al. **J Med Virol** 1997 Sep;53(1):85–95

Effects of neutral salts on RNA chain elongation and pausing by Escherichia coli RNA polymerase. Chan CL, et al. **J Mol Biol** 1997 Apr 25;268(1):37–53

Polyadenylation creates the discriminator nucleotide of chicken mitochondrial tRNA(Tyr). Yokobori S, et al. **J Mol Biol** 1997 Jan 17;265(2):95–9

Interferon–gamma induced increases in intracellular cathepsin B activity in THP–1 cells are dependent on RNA transcription. Li Q, et al. **J Neuroimmunol** 1997 Apr; 74(1–2):77–84

Muscle histopathology in diabetes mellitus associated with mitochondrial tRNA(Leu(UUR)) mutation at position 3243. Suzuki Y, et al. **J Neurol Sci** 1997 Jan;145(1):49–53

Myoclonic epilepsy and ragged red fibers (MERRF) syndrome: selective vulnerability of CNS neurons does not correlate with the level of mitochondrial tRNAlys mutation in individual neuronal isolates. Zhou L, et al. **J Neurosci** 1997 Oct 15;17(20):7746–53

Analysis of a theoretical model based on similarity for studying RNA base pairings. Di Gennaro P, et al. **J Theor Biol** 1996 Aug 21;181(4):359–71

Classification of RNA secondary structures using the techniques of cluster analysis. Nakaya A, et al. **J Theor Biol** 1996 Nov 7;183(1):105–17

Genetic and clinical features of sensorineural hearing loss associated with the 1555 mitochondrial mutation. Usami S, et al. **Laryngoscope** 1997 Apr;107(4):483–90

Novel analysis of minimal residual disease in leukemia with TCR beta rearrangement—detection of monoclonality by single strand conformation polymorphism and PCR using a clonotype primer of leukemic T cell receptor beta–chain RNA. Hanawa H, et al. **Leuk Res** 1997 Mar;21(3):201–10

Selection of accessible sites for ribozymes on large RNA transcripts. Frank BL, et al. **Methods Mol Biol** 1997; 74:37–43

RAP–PCR using RNA from tissue microdissection. Jensen RA, et al. **Methods Mol Biol** 1997;85:277–83

Selection of efficient ribozyme cleavage sites in target RNAs. Lieber A, et al. **Methods Mol Biol** 1997;74:45–50

T7 transcript length determination using enzymatic RNA sequencing. Siwkowski A. **Methods Mol Biol** 1997;74:91–7

The evolution of strand–specific compositional bias. A case study in the Hymenopteran mitochondrial 16S rRNA gene [letter] Dowton M, et al. **Mol Biol Evol** 1997 Jan; 14(1):109–12

Replication slippage may cause parallel evolution in the secondary structures of mitochondrial transfer RNAs. Macey JR, et al. **Mol Biol Evol** 1997 Jan;14(1):30–9

Cleavage of RNA hairpins mediated by a developmentally regulated CCCH zinc finger protein. Bai C, et al. **Mol Cell Biol** 1996 Dec;16(12):6661–7

The decline in human Alu retroposition was accompanied by an asymmetric decrease in SRP9/14 binding to dimeric Alu RNA and increased expression of small cytoplasmic

Alu RNA. Sarrowa J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1144–51

An alternative splicing event in the Pax–3 paired domain identifies the linker region as a key determinant of paired domain DNA–binding activity. Vogan KJ, et al. **Mol Cell Biol** 1996 Dec;16(12):6677–86

Germ line transposition of the copia retrotransposon in Drosophila melanogaster is restricted to males by tissue–specific control of copia RNA levels. Pasyukova E, et al. **Mol Gen Genet** 1997 Jun;255(1):115–24

RNA in spermatozoa: implications for the alternative haploid genome. Kramer JA, et al. **Mol Hum Reprod** 1997 Jun; 3(6):473–8 (58 ref.)

The phylogeny of the Caelifera (Insecta, Orthoptera) as deduced from mtrRNA gene sequences. Flook PK, et al. **Mol Phylogenet Evol** 1997 Aug;8(1):89–103

The effectiveness of mitochondrial rRNA gene sequences for the reconstruction of the phylogeny of an insect order (Orthoptera). Flook PK, et al. **Mol Phylogenet Evol** 1997 Oct;8(2):177–92

Interordinal mammalian relationships: evidence for paenungulate monophyly is provided by complete mitochondrial 12S rRNA sequences. Lavergne A, et al. **Mol Phylogenet Evol** 1996 Oct;6(2):245–58

Phylogenetic relationships of chelid turtles (Pleurodira: Chelidae) based on mitochondrial 12S rRNA gene sequence variation. Seddon JM, et al. **Mol Phylogenet Evol** 1997 Feb; 7(1):55–61

Treasures amongst the trash: functional RNAs within introns [news] Scharl EC. **Mol Psychiatry** 1996 May;1(2):87–8

'Distorted' RNA helix recognition [letter] Schimmel P, et al. **Nature** 1996 Dec 5;384(6608):422

Modulation of a novel RNA in brain neurons by glucocorticoid and mineralocorticoid receptors. Masters JN, et al. **Neuroendocrinology** 1996 Jan;63(1):28–38

The RNA modification database. Crain PF, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):126–7

Inferring the conformation of RNA base pairs and triples from patterns of sequence variation. Gautheret D, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1559–64

Finding the most significant common sequence and structure motifs in a set of RNA sequences. Gorodkin J, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3724–32

Binding site of the M–domain of human protein SRP54 determined by systematic site–directed mutagenesis of signal recognition particle RNA. Gowda K, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):388–94

Expression of bovine mitochondrial tRNASer GCU derivatives in Escherichia coli. Hayashi I, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3503–7

Gene encoding human Ro–associated autoantigen Y5 RNA. Maraia R, et al. **Nucleic Acids Res** 1996 Sep 15; 24(18):3552–9

Inhibition of self–splicing group I intron RNA: high–throughput screening assays. Mei HY, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):5051–3

Screening differentially expressed cDNA clones obtained by differential display using amplified RNA. Poirier GM, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):913–4

RNA editing in the acceptor stem of squid mitochondrial tRNA(Tyr). Tomita K, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4987–91

Optic neuropathy associated with mitochondrial tRNA[Leu(UUR)] A3243G mutation. Hwang JM, et al. **Ophthalmic Genet** 1997 Jun;18(2):101–5

RNA fingerprinting by arbitrarily primed PCR. McClelland M, et al. **PCR Methods Appl** 1994 Aug;4(1):S66–81 (33 ref.)

Transcription initiation sites for sorghum mitochondrial atp9 are positioned immediately 3' to trnfM. Yan B, et al. **Plant Mol Biol** 1997 Jul;34(5):823–9

Posttranscriptional modification of retroviral primers is required for late stages of DNA replication. Burnett BP, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7210–5

Evolution of trans–splicing plant mitochondrial introns in pre–Permian times. Malek O, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):553–8

ETS target genes: identification of egr1 as a target by RNA differential display and whole genome PCR techniques. Robinson L, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7170–5

Preferential interaction of the his pause RNA hairpin with RNA polymerase beta subunit residues 904–950 correlates with strong transcriptional pausing. Wang D, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8433–8

A group I plant intron accumulates as circular RNA forms with extensive 5' deletions in vivo. Darós JA, et al. **RNA** 1996 Sep;2(9):928–36

A new method to screen clones from differential display experiments prior to RNA studies. Consalez GG, et al. **Trends Genet** 1996 Nov;12(11):455–6

Cytokine RNA expression in an equine CD4+ subset differentiated by expression of a novel 46–kDa surface protein. Byrne KM, et al. **Vet Immunol Immunopathol** 1997 May;56(3–4):191–204

Sequence analysis of a 37.6 kbp cosmid clone from the right arm of Saccharomyces cerevisiae chromosome XII, carrying YAP3, HOG1, SNR6, tRNA–Arg3 and 23 new open reading frames, among which several homologies to proteins involved in cell division control and to mammalian growth factors and other animal proteins are found. Verhasselt P, et al. **Yeast** 1997 Mar 15;13(3):241–50

[Contextual signals and antisignals of the intron td–homing site] Ponomarenko MP, et al. **Dokl Akad Nauk** 1996 May; 348(3):424–7 **(Rus)**

HISTORY

Biochemistry or molecular biology? the discovery of 'soluble RNA'. Hoagland M. **Trends Biochem Sci** 1996 Feb; 21(2):77–80

IMMUNOLOGY

A new monoclonal antibody for specific immunocytochemical staining of nucleoli. Vissers CJ, et al. **Acta Histochem** 1996 Apr;98(2):113–21

Autoantigenic epitopes on hY5 Ro RNA are distinct from regions bound by the 60–kDa Ro and La proteins. Granger D, et al. **J Immunol** 1996 Sep 1;157(5):2193–200

In vitro transfer of cellular immunity to synthetic peptides of HIV–1 to human lymphocytes with exogenous RNA. Sales VS, et al. **Mem Inst Oswaldo Cruz** 1996 May–Jun; 91(3):349–50

RNA recognition by autoantigens and autoantibodies. Keene JD. **Mol Biol Rep** 1996;23(3–4):173–81 (63 ref.)

ISOLATION & PURIFICATION

One–tube extraction of DNA or RNA from agarose gel. Matitashvili E, et al. **Anal Biochem** 1997 Mar 15; 246(2):260–2

Utilization of the freeze–drying method in the preparation of biologically active, intact RNA from hard frozen tissues of human prostate. Tsuka H, et al. **Anal Biochem** 1997 May 1;247(2):458–61

Improved purification and yields of RNA by RNeasy. Bonham MJ, et al. **Biotechniques** 1996 Jul;21(1):57–60

Method for simultaneous RNA and DNA isolation from biopsy material, culture cells, plants and bacteria. Döbbeling U, et al. **Biotechniques** 1997 Jan;22(1):88–90

Removal of RT–PCR inhibitors from RNA extracts of tissues. Mathy NL, et al. **Biotechniques** 1996 Nov;21(5):770, 772, 774

Improved nucleic acid organic extraction through use of a unique gel barrier material. Murphy NR, et al. **Biotechniques** 1996 Nov;21(5):934–6, 938–9

Rapid isolation of total RNA from small samples of hypocellular, dense connective tissues. Reno C, et al. **Biotechniques** 1997 Jun;22(6):1082–6

Tissue homogenization as a key step in extracting RNA from human and rat pancreatic tissue. Sparmann G, et al. **Biotechniques** 1997 Mar;22(3):408–10, 412

Simultaneous preparation of RNA and nuclei for northern blot and flow cytometric analysis. Tesfaigzi J, et al. **Biotechniques** 1996 Nov;21(5):800, 802, 804

Modification of the acid guanidinium thiocyanate–phenol–chloroform method for nuclear RNA isolation. Vareli K, et al. **Biotechniques** 1996 Aug; 21(2):236–7

Effect of pH and ionic strength on the spectrophotometric assessment of nucleic acid purity. Wilfinger WW, et al. **Biotechniques** 1997 Mar;22(3):474–6, 478–81

Milligram quantity preparation of RNA from a marine invertebrate with a high fluid content. Witchel HJ, et al. **Biotechniques** 1996 Dec;21(6):1024–6

Capillary enzymophoresis of nucleic acid fragments using coupled capillary electrophoresis and capillary enzyme microreactors having surface–immobilized RNA–modifying enzymes. Mechref Y, et al. **Electrophoresis** 1995 Nov;16(11):2164–71

Eosinophilic lung inflammation in particulate–induced lung injury: technical consideration in isolating RNA for gene expression studies. Kodavanti UP, et al. **Exp Lung Res** 1996 Sep–Oct;22(5):541–54

A comparison of three methods for isolating RNA from mosquitoes. Noriega FG, et al. **Insect Mol Biol** 1993; 2(1):21–4

Hybrid selection with cDNA–silica. Jarrett HW. **J Chromatogr A** 1996 Aug 23;742(1–2):87–94

Isolating RNA from clinical samples with Catrimox–14 and lithium chloride. Macfarlane DE, et al. **J Clin Lab Anal** 1997;11(3):132–9

Cloning and characterization of partial cDNAs for woodchuck cytokines and CD3epsilon with applications for the detection of RNA expression in tissues by RT–PCR assay. Nakamura I, et al. **J Med Virol** 1997 Sep;53(1):85–95

Analysis of aminoacylation of human mitochondrial tRNAs. Enríquez JA, et al. **Methods Enzymol** 1996;264:183–96

Isolation of mitochondrial tRNAs from human cells. King MP. **Methods Enzymol** 1996;264:173–82

A sparse matrix approach to crystallizing ribozymes and RNA motifs. Cate JH, et al. **Methods Mol Biol** 1997; 74:379–86

Establishing suitability of RNA preparations for crystallization. Determination of polydispersity. Ferré–d'Amaré AR, et al. **Methods Mol Biol** 1997;74:371–7

Ensuring recovery of intact RNA from rat pancreas. Gill SS, et al. **Mol Biotechnol** 1996 Dec;6(3):359–62

Preparative–scale purification of RNA using an efficient method which combines gel electrophoresis and column chromatography. Cunningham L, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3647–8

Rapid RNA isolation without the use of commercial kits: application to small tissue samples. Gauthier ER, et al. **Pflugers Arch** 1997 Mar;433(5):664–8

[Use of aerosol A–300 amd GF/F (GF/C) filters for purifying fragments of DNA, plasmid DNA, and RNA] Gribanov PG, et al. **Biokhimiia** 1996 Jun;61(6):1064–70 (Eng. Abstr.) **(Rus)**

METABOLISM

Inhibition of human immunodeficiency virus replication in differentiating monocytes by interleukin 10 occurs in parallel with inhibition of cellular RNA expression. Naif HM, et al. **AIDS Res Hum Retroviruses** 1996 Sep 1; 12(13):1237–45

Detecting immobilized protein kinase C isozymes with RNA aptamers. Conrad R, et al. **Anal Biochem** 1996 Nov 15; 242(2):261–5

Identification of two nuclear proteins which bind to RNA CUG repeats: significance for myotonic dystrophy. Bhagwati S, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):55–62

"BEP" RNAs and proteins are situated in the animal side of sea urchin unfertilized egg, which can be recognized by female pronuclear localization. Di Carlo M, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):511–7

Differential splicing of the GTP cyclohydrolase I RNA in dopa–responsive dystonia. Hirano M, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):316–9

Polynucleotide: adenosine glycosidase activity of saporin–L1: effect on DNA, RNA and poly(A). Barbieri L, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):507–13

Characterization of a novel nucleolytic activity of acylphosphatases. Chiarugi P, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):73–81

Facilitators of RNA–RNA annealing: implications for the catalytic cycle of hammerhead ribozymes. Nedbal W, et al. **Biochem Soc Trans** 1996 Aug;24(3):615–8 (17 ref.)

Molecular palaeontology: understanding catalytic mechanisms in the RNA world by excavating clues from a ribozyme three–dimensional structure. Scott WG. **Biochem Soc Trans** 1996 Aug;24(3):604–8 (14 ref.)

Identification of determinants for inhibitor binding within the RNA active site of human telomerase using PNA scanning. Hamilton SE, et al. **Biochemistry** 1997 Sep 30; 36(39):11873–80

Kinetics for hybridization of peptide nucleic acids (PNA) with DNA and RNA studied with the BIAcore technique. Jensen KK, et al. **Biochemistry** 1997 Apr 22;36(16):5072–7

Hoogsteen DNA duplexes of 3'–3'– and 5'–5'–linked oligonucleotides and trip formation with RNA and DNA pyrimidine single strands: experimental and molecular modeling studies. Kandimalla ER, et al. **Biochemistry** 1996 Dec 3;35(48):15332–9

Binding affinity and specificity of Escherichia coli RNase H1: impact on the kinetics of catalysis of antisense oligonucleotide–RNA hybrids. Lima WF, et al. **Biochemistry** 1997 Jan 14;36(2):390–8

In vitro selection of dopamine RNA ligands. Mannironi C, et al. **Biochemistry** 1997 Aug 12;36(32):9726–34

Thermodynamics of oligoarginines binding to RNA and DNA. Mascotti DP, et al. **Biochemistry** 1997 Jun 10; 36(23):7272–9

Role of Nd3+ and Pb2+ on the RNA cleavage reaction by a small ribozyme. Ohmichi T, et al. **Biochemistry** 1997 Mar 25;36(12):3514–21

Measurement of the frequency of histone displacement during the in vitro transcription of nucleosomes: RNA is a competitor for these histones. Peng HF, et al. **Biochemistry** 1997 Oct 7;36(40):12371–82

Multiple RRMs contribute to RNA binding specificity and affinity for polypyrimidine tract binding protein. Pérez I, et al. **Biochemistry** 1997 Sep 30;36(39):11881–90

Ligation of RNA–containing duplexes by vaccinia DNA ligase. Sekiguchi J, et al. **Biochemistry** 1997 Jul 22; 36(29):9073–9

Analysis of hairpin ribozyme base mutations in loops 2 and 4 and their effects on cis–cleavage in vitro. Siwkowski A, et al. **Biochemistry** 1997 Apr 1;36(13):3930–40

Complexes of N antitermination protein of phage lambda with specific and nonspecific RNA target sites on the nascent transcript. Van Gilst MR, et al. **Biochemistry** 1997 Feb 11;36(6):1514–24

RNA molecules that specifically and stoichiometrically bind aminoglycoside antibiotics with high affinities. Wang Y, et al. **Biochemistry** 1996 Sep 24;35(38):12338–46

Analysis of the interaction between bovine mitochondrial 28 S ribosomal subunits and mRNA. Farwell MA, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):122–30

Role of RNA primers in initiation of minus–strand and plus–strand DNA synthesis of the yeast retrotransposon Ty1. Friant S, et al. **Biochimie** 1996;78(7):674–80

RNAs mediating cotranslational insertion of selenocysteine in eukaryotic selenoproteins. Hubert N, et al. **Biochimie** 1996;78(7):590–6 (40 ref.)

Targeting RNA structures by antisense oligonucleotides. Toulmé JJ, et al. **Biochimie** 1996;78(7):663–73 (85 ref.)

Incorporation of two anthraquinonylmethyl groups into the 2'–O–positions of oligonucleotides: increased affinity and sequence specificity of anthraquinone–modified oligonucleotides in hybrid formation with DNA and RNA. Yamana K, et al. **Bioconjug Chem** 1996 Nov–Dec; 7(6):715–20

DNA and RNA strand scission by copper, zinc and manganese superoxide dismutases. Dowjat WK, et al. **Biometals** 1996 Oct;9(4):327–35

Interacting RNA species identified by combinatorial

selection. Cho B, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1107–13

RNA aptamers that specifically bind to a K Ras-derived farnesylated peptide. Gilbert BA, et al. **Bioorg Med Chem** 1997 Jun;5(6):1115–22

RNA–RNA interactions between oligonucleotide substrates for aminoacylation. Henderson BS, et al. **Bioorg Med Chem** 1997 Jun;5(6):1071–9

On the chemistry of RNA degradation by Fe.bleomycin. Holmes CE, et al. **Bioorg Med Chem** 1997 Jun;5(6):1235–48

Effect of ribonucleotide substitution on nucleic acid bulge recognition by neocarzinostatin. Kappen LS, et al. **Bioorg Med Chem** 1997 Jun;5(6):1221–7

Application of a 5'-bridging phosphorothioate to probe divalent metal and hammerhead ribozyme mediated RNA cleavage. Kuimelis RG, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1051–61

Design and analysis of molecular motifs for specific recognition of RNA. Li K, et al. **Bioorg Med Chem** 1997 Jun;5(6):1157–72

Context dependent RNA–RNA recognition in a three-dimensional model of the 16S rRNA core. Masquida B, et al. **Bioorg Med Chem** 1997 Jun;5(6):1021–35

Discovery of selective, small-molecule inhibitors of RNA complexes—II. Self-splicing group I intron ribozyme. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1185–95

Inhibition of Rev.RRE complexation by triplex tethered oligonucleotide probes. Moses AC, et al. **Bioorg Med Chem** 1997 Jun;5(6):1123–9

Using guanidinium groups for the recognition of RNA and as catalysts for the hydrolysis of RNA. Perreault DM, et al. **Bioorg Med Chem** 1997 Jun;5(6):1209–20

Selectivity of F8-actinomycin D for RNA:DNA hybrids and its anti-leukemia activity. Takusagawa F, et al. **Bioorg Med Chem** 1997 Jun;5(6):1197–207

Recognition of RNA by triplex formation: divergent effects of pyrimidine C-5 methylation. Wang S, et al. **Bioorg Med Chem** 1997 Jun;5(6):1043–50

RNA–RNA interaction and gene splicing. Verma M, et al. **Cancer Biochem Biophys** 1997 Jun;15(4):211–20 (65 ref.)

The solution structure of the S1 RNA binding domain: a member of an ancient nucleic acid-binding fold. Bycroft M, et al. **Cell** 1997 Jan 24;88(2):235–42

Phospholipids and nuclear RNA. Albi E, et al. **Cell Biol Int** 1996 Jun;20(6):407–12

Steady-state levels of mitochondrial messenger RNA species characterize a predominant pathway culminating in apoptosis and shedding of HT29 human colonic carcinoma cells. Heerdt BG, et al. **Cell Growth Differ** 1996 Jan; 7(1):101–06

Isolation of novel ribozymes that ligate AMP-activated RNA substrates. Hager AJ, et al. **Chem Biol** 1997 Aug;4(8):607–17

A unique mechanism for RNA catalysis: the role of metal cofactors in hairpin ribozyme cleavage. Hampel A, et al. **Chem Biol** 1997 Jul;4(7):513–7

In vitro selection of a viomycin-binding RNA pseudoknot. Wallis MG, et al. **Chem Biol** 1997 May;4(5):357–66

Application of proton NMR spectroscopy to measurement of whole-body RNA degradation rates: effects of surgical stress in human patients. Marway JS, et al. **Clin Chim Acta** 1996 Aug 30;252(2):123–35

Nuclear domains involved in RNA synthesis, RNA processing, and replication. de Jong L, et al. **Crit Rev Eukaryot Gene Expr** 1996;6(2–3):215–46 (208 ref.)

RNA turnover: the helicase story unwinds. Anderson JS, et al. **Curr Biol** 1996 Jul 1;6(7):780–2 (16 ref.)

Macromolecular complexes: how RNA and protein get together. Woodson SA. **Curr Biol** 1996 Jan 1;6(1):23–5 (9 ref.)

Nuclear export of proteins and RNAs. Nakielny S, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):420–9 (81 ref.)

RNA localization and the development of asymmetry during Drosophila oogenesis. Grünert S, et al. **Curr Opin Genet Dev** 1996 Aug;6(4):395–402 (59 ref.)

RNA movement between the nucleus and the cytoplasm. Lee MS, et al. **Curr Opin Genet Dev** 1997 Apr;7(2):212–9

Nucleic acids. **Curr Opin Struct Biol** 1997 Jun;7(3):429–38

Recent solution structures of RNA and its complexes with drugs, peptides and proteins. Ramos A, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):317–23 (59 ref.)

Protein-facilitated RNA folding. Weeks KM. **Curr Opin Struct Biol** 1997 Jun;7(3):336–42 (58 ref.)

Nucleic acids. From self-assembly to induced-fit recognition [editorial] Westhof E, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):305–9 (19 ref.)

Nucleic acid specificity of an acridine derivative permits its use for flow cytometric analysis of the cell cycle. Jayat-Vignoles C, et al. **Cytometry** 1997 Feb 1;27(2):153–60

Elaboration of the messenger transport organizer pathway for localization of RNA to the vegetal cortex of Xenopus oocytes. Kloc M, et al. **Dev Biol** 1996 Nov 25;180(1):119–30

Identification of new localized RNAs in the Xenopus oocyte by differential display PCR. Hudson JW, et al. **Dev Genet** 1996;19(3):190–8

Molecular basis for cytoplasmic localization. King ML. **Dev Genet** 1996;19(3):183–9 (85 ref.)

Xenopus poly (A) binding protein maternal RNA is localized during oogenesis and associated with large complexes in blastula. Schroeder KE, et al. **Dev Genet** 1996;19(3):268–76

Reconstitution of human telomerase activity and identification of a minimal functional region of the human telomerase RNA. Autexier C, et al. **EMBO J** 1996 Nov 1;15(21):5928–35

RNA editing changes the identity of a mitochondrial tRNA in marsupials. Börner GV, et al. **EMBO J** 1996 Nov 1; 15(21):5949–57

Guide RNA-directed uridine insertion RNA editing in vitro. Byrne EM, et al. **EMBO J** 1996 Dec 2;15(23):6758–65

Interplay of two uridylate-specific RNA binding sites in the translocation of poly(A) polymerase from vaccinia virus. Deng L, et al. **EMBO J** 1997 Mar 3;16(5):1103–13

The human RNA 3'-terminal phosphate cyclase is a member of a new family of proteins conserved in Eucarya, Bacteria and Archaea. Genschik P, et al. **EMBO J** 1997 May 15; 16(10):2955–67

Intrinsic termination of T7 RNA polymerase mediated by either RNA or DNA. Hartvig L, et al. **EMBO J** 1996 Sep 2;15(17):4767–74

Identification of an RNA-binding-loop in the N-terminal region of signal-recognition-particle protein SRP19. Black SD, et al. **Eur J Biochem** 1997 May 1;245(3):564–72

The N-terminal Arg-rich region of human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus Nef is involved in RNA binding. Echarri A, et al. **Eur J Biochem** 1997 May 15;246(1):38–44

Interaction of human immunodeficiency virus type 1 reverse transcriptase with primer tRNALys3 and affinity modification of the enzyme by tRNALys3 derivatives. Nevinsky GA, et al. **Eur J Biochem** 1996 Sep 15; 240(3):774–80

The localization of sites containing nascent RNA and splicing factors. Pombo A, et al. **Exp Cell Res** 1996 Dec 15; 229(2):201–3 (14 ref.)

Expression and biochemical analyses of the recombinant potato virus X 25K movement protein. Kalinina NO, et al. **FEBS Lett** 1996 Nov 11;397(1):75–8

RNA stimulates aggregation of microtubule-associated protein tau into Alzheimer-like paired helical filaments. Kampers T, et al. **FEBS Lett** 1996 Dec 16;399(3):344–9

A nuclear RNA-binding cyclophilin in human T cells. Mi H, et al. **FEBS Lett** 1996 Dec 2;398(2–3):201–5

16S mitochondrial ribosomal RNA degradation is associated with apoptosis. Crawford DR, et al. **Free Radic Biol Med** 1997;22(7):1295–300

Down-regulation of mammalian mitochondrial RNAs during oxidative stress. Crawford DR, et al. **Free Radic Biol Med** 1997;22(3):551–9

Dichloromethane metabolism to formaldehyde and reaction of formaldehyde with nucleic acids in hepatocytes of rodents and humans with and without glutathione S-transferase T1 and M1 genes. Casanova M, et al. **Fundam Appl Toxicol** 1997 Jun;37(2):168–80

RNase mitochondrial RNA processing correctly cleaves a novel R loop at the mitochondrial DNA leading-strand origin of replication. Lee DY, et al. **Genes Dev** 1997 Mar 1;11(5):582–92

Phosphorylation of the ASF/SF2 RS domain affects both protein–protein and protein–RNA interactions and is necessary for splicing. Xiao SH, et al. **Genes Dev** 1997 Feb 1;11(3):334–44

Identification of two novel isoforms of the ZNF162 gene: a growing family of signal transduction and activator of RNA proteins. Caslini C, et al. **Genomics** 1997 Jun 1; 42(2):268–77

Distribution and configuration of c-myc RNA during transcriptional attenuation in differentiating cells in-situ. Bains MA, et al. **Histochem Cell Biol** 1997 Mar; 107(3):259–63

Missense mutation clustering in the survival motor neuron gene: a role for a conserved tyrosine and glycine rich region of the protein in RNA metabolism? Talbot K, et al. **Hum Mol Genet** 1997 Mar;6(3):497–500

Protein–RNA and protein–protein interactions of the Drosophila sex-lethal mediated by its RNA-binding domains. Sakashita E, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):1028–33

Dinuclear lanthanum(III) complex for efficient hydrolysis of RNA. Yashiro M, et al. **J Biochem (Tokyo)** 1996 Dec; 120(6):1067–9

Single-stranded RNA recognition by the bacteriophage T4 translational repressor, regA. Brown D, et al. **J Biol Chem** 1997 Jun 6;272(23):14969–74

Formation of 2',3'-cyclic phosphates at the 3' end of human U6 small nuclear RNA in vitro. Identification of 2',3'-cyclic phosphates at the 3' ends of human signal recognition particle and mitochondrial RNA processing RNAs. Gu J, et al. **J Biol Chem** 1997 Aug 29; 272(35):21989–93

Kinetic and stoichiometric analysis for the binding of Escherichia coli ribonuclease HI to RNA–DNA hybrids using surface plasmon resonance. Haruki M, et al. **J Biol Chem** 1997 Aug 29;272(35):22015–22

NIPP-1, a nuclear inhibitory subunit of protein phosphatase-1, has RNA-binding properties. Jagiello I, et al. **J Biol Chem** 1997 Aug 29;272(35):22067–71

Properties of a primer RNA–DNA hybrid at the mouse mitochondrial DNA leading-strand origin of replication. Lee DY, et al. **J Biol Chem** 1996 Sep 27;271(39):24262–9

The RNA molecule CsrB binds to the global regulatory protein CsrA and antagonizes its activity in Escherichia coli. Liu MY, et al. **J Biol Chem** 1997 Jul 11; 272(28):17502–10

The antibiotic bicyclomycin affects the secondary RNA binding site of Escherichia coli transcription termination factor Rho. Magyar A, et al. **J Biol Chem** 1996 Oct 11; 271(41):25369–74

RNA–diethylstilbestrol interaction studied by Fourier transform infrared difference spectroscopy. Neault JF, et al. **J Biol Chem** 1997 Apr 4;272(14):8901–4

Function of the novel subdomain in the RNA binding domain of transcription termination factor Rho from Micrococcus luteus. Nowatzke WL, et al. **J Biol Chem** 1997 Jan 24; 272(4):2207–11

Elongation factor SII contacts the 3'-end of RNA in the RNA polymerase II elongation complex. Powell W, et al. **J Biol Chem** 1996 Sep 13;271(37):22301–4

Kinetic analysis of DNA and RNA strand transfer reactions catalyzed by vaccinia topoisomerase. Sekiguchi J, et al. **J Biol Chem** 1997 Jun 20;272(25):15721–8

Evolution of RNA-binding specificity in T4 DNA polymerase. Wang CC, et al. **J Biol Chem** 1997 Jul 11; 272(28):17703–10

Sex-lethal interactions with protein and RNA. Roles of glycine-rich and RNA binding domains. Wang J, et al. **J Biol Chem** 1997 Aug 29;272(35):22227–35

The affinity of an oligodeoxynucleotide–peptide conjugate for an RNA hairpin loop depends on stereochemistry at the DNA–peptide junction. Sahasrabudhe PV, et al. **J Biomol Struct Dyn** 1996 Feb;13(4):585–91

Plasminogen activator system in osteoclasts. Yang JN, et al. **J Bone Miner Res** 1997 May;12(5):761–8

The vertebrate GLFG nucleoporin, Nup98, is an essential component of multiple RNA export pathways. Powers MA, et al. **J Cell Biol** 1997 Jan 27;136(2):241–50

TLS (FUS) binds RNA in vivo and engages in nucleo-cytoplasmic shuttling. Zinszner H, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1741–50

RNA metabolism in myotonic dystrophy: patient muscle shows decreased insulin receptor RNA and protein consistent with abnormal insulin resistance. Morrone A, et al. **J Clin Invest** 1997 Apr 1;99(7):1691–8

Telomerase activity and in situ telomerase RNA expression in malignant and non-malignant lymph nodes. Yashima K, et al. **J Clin Pathol** 1997 Feb;50(2):110–7

Binding of the influenza virus NS1 protein to model genome RNAs. Hatada E, et al. **J Gen Virol** 1997 May;78 (Pt 5):1059–63

Differential effects of aromatic and charged residue substitutions in the RNA binding domains of the yeast poly(A)-binding protein. Deardorff JA, et al. **J Mol Biol** 1997 May 30;269(1):67–81

A Xenopus zinc finger protein that specifically binds dsRNA and RNA–DNA hybrids. Finerty PJ Jr, et al. **J Mol Biol** 1997 Aug 15;271(2):195–208

A mutant T7 RNA polymerase that is defective in RNA binding and blocked in the early stages of transcription. He B, et al. **J Mol Biol** 1997 Jan 24;265(3):275–88

Alanine-scanning mutagenesis of Bacillus subtilis trp RNA-binding attenuation protein (TRAP) reveals residues involved in tryptophan binding and RNA binding. Yang M, et al. **J Mol Biol** 1997 Aug 1;270(5):696–710

Developmental changes in rat cardiac DNA, RNA and protein tissue base: implications for the interpretation of changes in gene expression. van den Hoff MJ, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):629–39

Three-dimensional model of a selective theophylline-binding RNA molecule. Tung CS, et al. **J Mol Recognit** 1996 Jul-Aug;9(4):275–86

Translocation of RNA granules in living neurons. Knowles RB, et al. **J Neurosci** 1996 Dec 15;16(24):7812–20

RNA transport in dendrites: a cis-acting targeting element is contained within neuronal BC1 RNA. Muslimov IA, et al. **J Neurosci** 1997 Jun 15;17(12):4722–33

A hierarchy of Hu RNA binding proteins in developing and adult neurons. Okano HJ, et al. **J Neurosci** 1997 May 1; 17(9):3024–37

Murine coronavirus packaging signal confers packaging to nonviral RNA. Woo K, et al. **J Virol** 1997 Jan;71(1):824–7

Cell-killing efficiency and number of platinum atoms binding to DNA, RNA and protein molecules of HeLa cells treated with combinations of trans-diaminedichloroplatinum(II) and hyperthermia. Akaboshi M, et al. **Jpn J Cancer Res** 1997 May;88(5):506–11

Expression of human telomerase RNA is an early event of stomach carcinogenesis. Kuniyasu H, et al. **Jpn J Cancer Res** 1997 Feb;88(2):103–7

In vivo footprinting of the interaction of proteins with DNA and RNA. Grange T, et al. **Methods** 1997 Feb;11(2):151–63

Identifying consensus patterns and secondary structure in SELEX sequence sets. Davis JP, et al. **Methods Enzymol** 1996;267:302–14

Analysis of aminoacylation of human mitochondrial tRNAs. Enríquez JA, et al. **Methods Enzymol** 1996;264:183–96

Genetic strategies for identification of mitochondrial translation factors in Saccharomyces cerevisiae. Fox TD. **Methods Enzymol** 1996;264:228–37

Genetic and biochemical approaches for analysis of mitochondrial RNase P from Saccharomyces cerevisiae. Groom KR, et al. **Methods Enzymol** 1996;264:86–99

Randomization and selection of RNA to identify targets for RRM RNA-binding proteins and antibodies. Keene JD. **Methods Enzymol** 1996;267:367–83

Ligation of RNA molecules by the hairpin ribozyme. Berzal-Herranz A, et al. **Methods Mol Biol** 1997;74:349–55

Selection of accessible sites for ribozymes on large RNA transcripts. Frank BL, et al. **Methods Mol Biol** 1997;

74:37–43
Applications of modified transcripts. Gaur RK, et al. **Methods Mol Biol** 1997;74:111–20
Design of the hairpin ribozyme for targeting specific RNA sequences. Hampel A, et al. **Methods Mol Biol** 1997; 74:171–7
Selection of efficient ribozyme cleavage sites in target RNAs. Lieber A, et al. **Methods Mol Biol** 1997;74:45–50
Computer-aided calculation of the local folding potential of target RNA and its use for ribozyme design. Sczakiel G, et al. **Methods Mol Biol** 1997;74:11–5
T7 transcript length determination using enzymatic RNA sequencing. Siwkowski A. **Methods Mol Biol** 1997;74:91–7
Nucleocytoplasmic transport of macromolecules. Corbett AH, et al. **Microbiol Mol Biol Rev** 1997 Jun;61(2):193–211 (282 ref.)
Human and mouse MOK2 proteins are associated with nuclear ribonucleoprotein components and bind specifically to RNA and DNA through their zinc finger domains. Arranz V, et al. **Mol Cell Biol** 1997 Apr;17(4):2116–26
The neuronal RNA binding protein Nova-1 recognizes specific RNA targets in vitro and in vivo. Buckanovich RJ, et al. **Mol Cell Biol** 1997 Jun;17(6):3194–201
A carboxy-terminal basic region controls RNA polymerase III transcription factor activity of human La protein. Goodier JL, et al. **Mol Cell Biol** 1997 Oct;17(10):5823–32
Involvement of a tissue-specific RNA recognition motif protein in Drosophila spermatogenesis. Haynes SR, et al. **Mol Cell Biol** 1997 May;17(5):2708–15
Editing of glutamate receptor B subunit ion channel RNAs by four alternatively spliced DRADA2 double-stranded RNA adenosine deaminases. Lai F, et al. **Mol Cell Biol** 1997 May;17(5):2413–24
The Drosophila suppressor of sable protein binds to RNA and associates with a subset of polytene chromosome bands. Murray MV, et al. **Mol Cell Biol** 1997 Apr;17(4):2291–300
RNA recognition by the human polyadenylation factor CstF. Takagaki Y, et al. **Mol Cell Biol** 1997 Jul;17(7):3907–14
Pet127p, a membrane-associated protein involved in stability and processing of Saccharomyces cerevisiae mitochondrial RNAs. Wiesenberger G, et al. **Mol Cell Biol** 1997 May; 17(5):2816–24
Exon skipping and circular RNA formation in transcripts of the human cytochrome P-450 2C18 gene in epidermis and of the rat androgen binding protein gene in testis. Zaphiropoulos PG. **Mol Cell Biol** 1997 Jun;17(6):2985–93
In vitro selection methodologies to probe RNA function and structure. Conrad RC, et al. **Mol Divers** 1995 Sep; 1(1):69–78 (50 ref.)
A RNA/RNA heteroduplex cleavage analysis to detect rare mutations in populations. Lenk P, et al. **Mol Ecol** 1997 Jul;6(7):687–90
Striking differences in mitochondrial tRNA import between different plant species. Kumar R, et al. **Mol Gen Genet** 1996 Sep 25;252(4):404–11
RNA in spermatozoa: implications for the alternative haploid genome. Kramer JA, et al. **Mol Hum Reprod** 1997 Jun; 3(6):473–8 (58 ref.)
The MDM2 oncoprotein binds specifically to RNA through its RING finger domain. Elenbaas B, et al. **Mol Med** 1996 Jul;2(4):439–51
The murine Spam1 gene: RNA expression pattern and lower steady-state levels associated with the Rb(6.16) translocation. Zheng Y, et al. **Mol Reprod Dev** 1997 Mar; 46(3):252–7
Isolation of a nuclease-resistant decoy RNA that can protect human acetylcholine receptors from myasthenic antibodies. Lee SW, et al. **Nat Biotechnol** 1997 Jan;15(1):41–5
Potent 2'-amino-, and 2'-fluoro-2'-deoxyribonucleotide RNA inhibitors of keratinocyte growth factor. Pagratis NC, et al. **Nat Biotechnol** 1997 Jan;15(1):68–73
Inhibition of cell proliferation by an RNA ligand that selectively blocks E2F function. Ishizaki J, et al. **Nat Med** 1996 Dec;2(12):1386–9
High resolution solution structure of ribosomal protein L11-C76, a helical protein with a flexible loop that becomes structured upon binding to RNA. Markus MA, et al. **Nat Struct Biol** 1997 Jan;4(1):70–7
The ion core in RNA folding [news; comment] Tinoco I Jr, et al. **Nat Struct Biol** 1997 Jul;4(7):509–12. Comment on: Nat Struct Biol 1997 Jul;4(7):553–8.
Sequence-specific RNA binding by bicoid [letter] Chan SK, et al. **Nature** 1997 Aug 14;388(6643):634
Age-related changes in the DNA and RNA content of the brain in spontaneously hypertensive rats. Nakane H, et al. **Neurochem Res** 1997 Mar;22(3):253–6
Polynucleotide:adenosine glycosidase activity of ribosome-inactivating proteins: effect on DNA, RNA and poly(A). Barbieri L, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):518–22
The SRP9/14 subunit of the human signal recognition particle binds to a variety of Alu-like RNAs and with higher affinity than its mouse homolog. Bovia F, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):318–26
RNase YI* and RNA structure studies. Cannistraro VJ, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1405–12
Demethylation of DNA by purified chick embryo 5-methylcytosine-DNA glycosylase requires both protein and RNA. Frémont M, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2375–80
Cleavage of collagen RNA transcripts by hammerhead ribozymes in vitro is mutation-specific and shows competitive binding effects. Grassi G, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3451–8
Towards artificial ribonucleases: the sequence-specific cleavage of RNA in a duplex. Hall J, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3522–6
Peptide nucleic acid (PNA) is capable of enhancing hammerhead ribozyme activity with long but not with short RNA substrates. Jankowsky E, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2690–3
High-affinity and specific recognition of human thyroid stimulating hormone (hTSH) by in vitro-selected 2'-amino-modified RNA. Lin Y, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3407–14
In vitro selection of RNAs that bind to the human immunodeficiency virus type-1 gag polyprotein. Lochrie MA, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2902–10
RNA base-amino acid interaction strengths derived from structures and sequences. Lustig B, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2562–5
A tri-hybrid system for the analysis and detection of RNA—protein interactions. Putz U, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4838–40
Effects of variations in length of hammerhead ribozyme antisense arms upon the cleavage of longer RNA substrates. Sioud M. **Nucleic Acids Res** 1997 Jan 15;25(2):333–8
Plant pathogenic RNAs and RNA catalysis. Symons RH. **Nucleic Acids Res** 1997 Jul 15;25(14):2683–9 (71 ref.)
Nucleic acid concentrations and ornithine decarboxylase activity in tissues from three lines of turkeys. Emmerson DA, et al. **Poult Sci** 1997 Feb;76(2):217–26
RNA binding by the Wilms tumor suppressor zinc finger proteins. Caricasole A, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7562–6
The ultrastructural localization of 60-kDa Ro protein and human cytoplasmic RNAs: association with novel electron-dense bodies. Farris AD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3040–5
Selection and nuclear immobilization of exportable RNAs. Grimm C, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16; 94(19):10122–7
Use of intrinsic binding energy for catalysis by an RNA enzyme. Hertel KJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8497–502
Versatile 5'phosphoryl coupling of small and large molecules to an RNA. Huang F, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):8965–9
Inhibition by uridine but not thymidine of p53-dependent intestinal apoptosis initiated by 5-fluorouracil: evidence for the involvement of RNA perturbation. Pritchard DM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1795–9
Insertional editing of nascent mitochondrial RNAs in Physarum. Visomirski-Robic LM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4324–9
RNase L: effector nuclease of an activatable RNA degradation system in mammals. Bisbal C. **Prog Mol Subcell Biol** 1997;18:19–34 (87 ref.)
Interaction between iron-regulatory proteins and their RNA target sequences, iron-responsive elements. Henderson BR, et al. **Prog Mol Subcell Biol** 1997;18:117–39 (115 ref.)
RNA cleavage without hydrolysis. Splitting the catalytic activities of binase with Asn101 and Thr101 mutations. Okorokov AL, et al. **Protein Eng** 1997 Mar;10(3):273–8
Expression, purification, and characterization of the two human primase subunits and truncated complexes from Escherichia coli. Copeland WC. **Protein Expr Purif** 1997 Feb;9(1):1–9
A standardized nomenclature for adenosine deaminases that act on RNA [letter] Bass BL, et al. **RNA** 1997 Sep; 3(9):947–9
Mutational analysis of the protein subunits of the signal recognition particle Alu-domain. Bui N, et al. **RNA** 1997 Jul;3(7):748–63
The position of site-directed cleavage of RNA using RNase H and 2'-O-methyl oligonucleotides is dependent on the enzyme source [letter] Lapham J, et al. **RNA** 1997 Sep; 3(9):950–1
A major determinant of hnRNP C protein binding to RNA is a novel bZIP-like RNA binding domain. McAfee JG, et al. **RNA** 1996 Nov;2(11):1139–52
Resolution of the RNA editing gRNA-directed endonuclease from two other endonucleases of Trypanosoma brucei mitochondria. Piller KJ, et al. **RNA** 1997 Mar;3(3):279–90
Dynamics of RNA-protein interactions in the HIV-1 Rev-RRE complex visualized by 6-thioguanosine-mediated photocrosslinking. Ping YH, et al. **RNA** 1997 Aug;3(8):850–60
In vitro selection of a novel catalytic RNA: characterization of a sulfur alkylation reaction and interaction with a small peptide. Wecker M, et al. **RNA** 1996 Oct;2(10):982–94
Contribution of the C-terminal tail of U1A RBD1 to RNA recognition and protein stability. Zeng Q, et al. **RNA** 1997 Mar;3(3):303–14
A mammalian telomerase-associated protein [see comments] Harrington L, et al. **Science** 1997 Feb 14;275(5302):973–7 . Comment in: Science 1997 Feb 14;275(5302):928.
Inhibition of Ran guanosine triphosphatase-dependent nuclear transport by the matrix protein of vesicular stomatitis virus [see comments] Her LS, et al. **Science** 1997 Jun 20;276(5320):1845–8. Comment in: Science 1997 Jun 20;276(5320):1814–6.
Telomerase activity of reverse transcriptase [letter; comment] Ricchetti M, et al. **Science** 1997 Aug 15;277(5328):887. Comment on: Science 1997 Apr 25;276(5312):561–7.
How Tat targets TAR: structure of the BIV peptide-RNA complex. Greenbaum NL. **Structure** 1996 Jan 15;4(1):5–9 (18 ref.)
Two structurally different RNA molecules are bound by the spliceosomal protein U1A using the same recognition strategy. Jovine L, et al. **Structure** 1996 May 15;4(5):621–31
A biopolymer by any other name would bind as well: a comparison of the ligand-binding pockets of nucleic acids and proteins. Marshall KA, et al. **Structure** 1997 Jun 15; 5(6):729–34 (29 ref.)
Crystal structure of human UP1, the domain of hnRNP A1 that contains two RNA-recognition motifs. Xu RM, et al. **Structure** 1997 Apr 15;5(4):559–70
Does HIV tat protein also regulate genes of other viruses present in HIV infection? [letter] Ferbeyre G, et al. **Trends Biochem Sci** 1997 Apr;22(4):115–6
RNA turnover and the control of mitochondrial gene expression. Margossian SP, et al. **Trends Biochem Sci** 1996 Oct;21(10):392–6 (36 ref.)
RNA editing in kinetoplastid parasites: what to do with U. Sloof P, et al. **Trends Microbiol** 1997 May;5(5):189–95 (54 ref.)
A specific RNA structural motif mediates high affinity binding by the HIV-1 nucleocapsid protein (NCp7). Allen P, et al. **Virology** 1996 Nov 15;225(2):306–15
Computational characterisation of potential RNA-binding sites in arenavirus nucleocapsid proteins. Parisi G, et al. **Virus Genes** 1996;13(3):247–54
[Phosphate sites of RNA-ligands interacting with ribosome at different stages of translation. Thiophosphate method of analysis] Dabrowski M, et al. **Biokhimiia** 1996 Nov; 61(11):1971–83 (38 ref.) (Eng. Abstr.) **(Rus)**
[Detection of a new small RNA, induced by heat shock, in wheat seed ribosomes] Zhanybekova SSh, et al. **Biokhimiia** 1996 May;61(5):862–70 (Eng. Abstr.) **(Rus)**
[RNA hydrolysis catalyzed by imidazole as a reaction for studying the secondary structure of RNA and complexes of RNA with oligonucleotides] Vlasov AV, et al. **Dokl Akad Nauk** 1996 Jul;349(3):411–3 **(Rus)**

PHARMACOLOGY

Membrane currents elicited by the organic calcium channel blocker verapamil in native and rat brain RNA-injected oocytes of Xenopus laevis. Hübschle T, et al. **Arzneimittelforschung** 1997 Jan;47(1):1–5
A specific synthetic RNA promotes cardiac myofibrillogenesis in the Mexican axolotl. Lemanski LF, et al. **Biochem Biophys Res Commun** 1996 Dec 24; 229(3):974–81
Intraoviductal administration of ribonucleic acid from estrogen-treated rats mimics the effect of estrogen on ovum transport. Ríos M, et al. **Biol Reprod** 1997 Jan;56(1):279–83
SUG1, a component of the 26 S proteasome, is an ATPase stimulated by specific RNAs. Makino Y, et al. **J Biol Chem** 1997 Sep 12;272(37):23201–5
Potent 2'-amino-, and 2'-fluoro-2'-deoxyribonucleotide RNA inhibitors of keratinocyte growth factor. Pagratis NC, et al. **Nat Biotechnol** 1997 Jan;15(1):68–73

PHYSIOLOGY

RNA in polysomes is an inhibitor of manganese superoxide dismutase RNA-binding protein activity. Chung DJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L714–9
RNA structure comes of age. Uhlenbeck OC, et al. **Cell** 1997 Sep 5;90(5):833–40 (46 ref.)
Function and synthesis of small nucleolar RNAs. Tollervey D, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):337–42 (49 ref.)
Biological properties of pseudorecombinant and recombinant strains created with cucumber mosaic virus and tomato aspermy virus. Salánki K, et al. **J Virol** 1997 May; 71(5):3597–602
Ribosomal RNA: a vehicle for small functional RNAs [news] Sweeney R. **Mol Psychiatry** 1997 Jan;2(1):12–4
Remodelling chromatin with RNA [news; comment] Willard HF, et al. **Nature** 1997 Mar 20;386(6622):228–9. Comment on: Nature 1997 Mar 20;386(6622):272–5. Comment on: Nature 1997 Mar 20;386(6622):275–9.
A small circular TAR RNA decoy specifically inhibits Tat-activated HIV-1 transcription. Bohjanen PR, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3733–8
Requirement for a noncoding RNA in Drosophila polar granules for germ cell establishment. Nakamura A, et al. **Science** 1996 Dec 20;274(5295):2075–9
[Visualized biomolecules as tools to explore cell function] Yuba S, et al. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):915–9 (10 ref.) **(Jpn)**

RADIATION EFFECTS

RNA fingerprinting displays UVB-specific disruption of transcriptional control in human melanocytes. Vogt TM, et al. **Cancer Res** 1997 Aug 15;57(16):3554–61
In vitro photooxidation of nucleic acids by ultraviolet A radiation. Wamer WG, et al. **Photochem Photobiol** 1997 Mar;65(3):560–3
[Changes in the content of ribonucleic acid in the blood cells and plasma compared to the hematological indicators of a radiation-induced lesion in rats] Mišúrová E, et al. **Radiats Biol Radioecol** 1997 Mar-Apr;37(2):148–53 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Suppression of malignancy by the 3' untranslated regions of ribonucleotide reductase R1 and R2 messenger RNAs. Fan H, et al. **Cancer Res** 1996 Oct 1;56(19):4366–9

ULTRASTRUCTURE

RNA structures and folding: from conventional to new issues in structure predictions. Schuster P, et al. **Curr Opin Struct Biol** 1997 Apr;7(2):229–35 (73 ref.)

Double hairpin complexes allow accommodation of all four base pairs in triple helices containing both DNA and RNA strands. Pascolo E, et al. **J Biol Chem** 1996 Sep 27; 271(39):24187–92

Probing single biomolecules with atomic force microscopy. Fritz J, et al. **J Struct Biol** 1997 Jul;119(2):165–71

RNA, ANTISENSE

Transfection of Entamoeba dispar: inhibition of expression of the lysine-rich 30 kDa surface antigen by the transcription of its antisense RNA. Alon RN, et al. **Arch Med Res** 1997;28 Spec No:52–5

Antisense estrogen receptor RNA expression increases epidermal growth factor receptor gene expression in breast cancer cells. deFazio A, et al. **Cell Growth Differ** 1997 Aug; 8(8):903–11

Antisense and sense poly(A)-RNAs from the Xenopus laevis pyruvate dehydrogenase gene loci are regulated with message production during embryogenesis. Islam N, et al. **Gene** 1996 Oct 17;176(1–2):9–16

Gene therapy for the treatment of metastatic breast cancer by in vivo transduction with breast-targeted retroviral vector expressing antisense c-fos RNA. Holt JT, et al. **Hum Gene Ther** 1996 Jul 10;7(11):1367–80

Autonomous differentiation in the mouse myogenic cell line, C2, involves a mutual positive control between insulin-like growth factor II and MyoD, operating as early as at the myoblast stage. Montarras D, et al. **J Cell Sci** 1996 Mar; 109 (Pt 3):551–60

Antisense RNA inhibition of the putative vacuolar H(+)-ATPase proteolipid of Dictyostelium reduces intracellular Ca2+ transport and cell viability. Xie Y, et al. **J Cell Sci** 1996 Feb;109 (Pt 2):489–97

The inhibitory effects of antisense RNA on hepatitis B virus surface antigen synthesis. Wu J, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):641–7

Identification and location of human papillomavirus type 16 antisense early promoter and characterisation of antisense RNA. Belaguli NS, et al. **J Med Virol** 1997 Apr; 51(4):344–54

Abrogation of cisplatin-induced programmed cell death in human breast cancer cells by epidermal growth factor antisense RNA [see comments] Dixit M, et al. **J Natl Cancer Inst** 1997 Mar 5;89(5):365–73. Comment in: J Natl Cancer Inst 1997 Mar 5;89(5):341–3.

Characterization of the products of the U(L)43 gene of herpes simplex virus 1: potential implications for regulation of gene expression by antisense transcription. Carter KL, et al. **J Virol** 1996 Nov;70(11):7663–8

In vitro and in vivo action of antisense RNA. Nellen W, et al. **Mol Biotechnol** 1996 Aug;6(1):7–15 (48 ref.)

Expression of the rat BFGF antisense RNA transcript is tissue-specific and developmentally regulated. Li AW, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):113–23

Replication control of plasmid pLS1: the antisense RNA II and the compact rnaII region are involved in translational regulation of the initiator RepB synthesis. del Solar G, et al. **Mol Microbiol** 1997 Jan;23(1):95–108

A two unit antisense RNA cassette test system for silencing of target genes. Engdahl HM, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3218–27

A reliable external control for ribonuclease protection assays. Scott PAE, et al. **Nucleic Acids Res** 1997 Mar 15; 25(6):1305–6

Adenovirus-mediated gene transfer of antisense ribozyme for alpha (1,3)galactosyltransferase gene and alpha (1,2)fucosyltransferase gene in xenotransplantation. Hayashi S, et al. **Transplant Proc** 1997 Jun;29(4):2213

[Reversion of malignant phenotypes of human lung squamous carcinoma cells by ornithine decarboxylase antisense RNA] Guan J, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Mar; 18(2):81–3 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

Application of a dicistronic mRNA expression vector to antisense RNA expression in mammalian cells. Yamauchi Y, et al. **Antisense Nucleic Acid Drug Dev** 1996 Winter; 6(4):305–9

Suppression of basement membrane type IV collagen degradation and cell invasion in human melanoma cells expressing an antisense RNA for MMP-1. Durko M, et al. **Biochim Biophys Acta** 1997 May 27;1356(3):271–80

Expression of an antisense hla fragment in Staphylococcus aureus reduces alpha-toxin production in vitro and attenuates lethal activity in a murine model. Kernodle DS, et al. **Infect Immun** 1997 Jan;65(1):179–84

Induction of Galphaq-specific antisense RNA in vivo causes increased body mass and hyperadiposity. Galvin-Parton PA, et al. **J Biol Chem** 1997 Feb 14;272(7):4335–41

The expression of antisense and ribozyme genes targeting citrus exocortis viroid in transgenic plants. Atkins D, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1781–90

Use of the bovine leukaemia virus LTR U3 promoter for expressing antisense antiviral RNAs and competitive inhibition of viral infection in cell culture. Shayakhmetov D, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1941–8

Expression of sense and naturally occurring antisense mRNA of myosin heavy chain in rat heart tissue and cultivated cardiomyocytes. Luther HP, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):27–35

PCR-based construction of long hammerhead ribozymes. Zillmann M, et al. **Methods Mol Biol** 1997;74:131–9

Chinese hamster cells expressing antisense to metallothionein become spontaneous mutators. Rossman TG, et al. **Mutat Res** 1997 Jan 3;373(1):75–85

Adenovirus-mediated NMDA receptor knockouts in the rat hippocampal CA1 region. Kammesheidt A, et al. **Neuroreport** 1997 Feb 10;8(3):635–8

Reduced level of calmodulin in PC12 cells induced by stable expression of calmodulin antisense RNA inhibits cell proliferation and induces neurite outgrowth. Davidkova G, et al. **Neuroscience** 1996 Dec;75(4):1003–19

Engineering resistance against tomato yellow leaf curl virus (TYLCV) using antisense RNA. Bendahmane M, et al. **Plant Mol Biol** 1997 Jan;33(2):351–7

Sense and antisense transcripts of the maize MuDR regulatory transposon localized by in situ hybridization. Joanin P, et al. **Plant Mol Biol** 1997 Jan;33(1):23–36

Characterization and tissue-specific expression of the rat basic fibroblast growth factor antisense mRNA and protein. Knee R, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):4943–7

[Expression of c-myc gene and biosynthesis of biological macromolecules in antisense transfectant HLR60-9] Li Y, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan;18(1):16–9 (Eng. Abstr.) **(Chi)**

CHEMISTRY

Antisense sequence-directed cross-linking of RNA oligonucleotides by mitomycin. Maruenda H, et al. **Anticancer Drug Des** 1997 Sep;12(6):473–9

High-resolution NMR of an antisense DNA x RNA hybrid containing alternating chirally pure Rp methylphosphonates in the DNA backbone. Mujeeb A, et al. **Biochemistry** 1997 Mar 4;36(9):2371–9

Characterization of the structure and melting behavior of the loop I fragment of ColE1 RNA I. Lin TH, et al. **J Biomol Struct Dyn** 1996 Feb;13(4):677–85

Natural antisense RNA/target RNA interactions: possible models for antisense oligonucleotide drug design. Delihas N, et al. **Nat Biotechnol** 1997 Aug;15(8):751–3 (55 ref.)

DRUG EFFECTS

The antisense bcl-2-IgH transcript is an optimal target for synthetic oligonucleotides. Morelli S, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8150–5

GENETICS

rTS gene expression is associated with altered cell sensitivity to thymidylate synthase inhibitors. Dolnick BJ, et al. **Adv Enzyme Regul** 1996;36:165–80

Enhancement or inhibition of HIV-1 replication by intracellular expression of sense or antisense RNA targeted at different intermediates of reverse transcription. Peng H, et al. **AIDS** 1997 Apr;11(5):587–95

A helix 1-extended hairpin ribozyme exhibits altered cleavage behavior in vitro. Moosbauer J, et al. **Antisense Nucleic Acid Drug Dev** 1997 Apr;7(2):79–87

Demonstration of alkaline phosphatase participation in the mineralization of osteoblasts by antisense RNA approach. Torii Y, et al. **Cell Biol Int** 1996 Jul;20(7):459–64

PCNA mRNA has a 3'UTR antisense to yellow crescent RNA and is localized in ascidian eggs and embryos. Swalla BJ, et al. **Dev Biol** 1996 Aug 25;178(1):23–34

Sense and antisense RNA for the membrane associated 40 kDa subunit M40 of the insect V-ATPase. Merzendorfer H, et al. **FEBS Lett** 1997 Jul 14;411(2–3):239–44

Antisense transcription of a murine FGFR-3 psuedogene during fetal developement. Weil D, et al. **Gene** 1997 Mar 10;187(1):115–22

Adenovirus-mediated transfer of HPV 16 E6/E7 antisense RNA to human cervical cancer cells. Hamada K, et al. **Gynecol Oncol** 1996 Nov;63(2):219–27

Inhibition of fibrillin 1 expression using U1 snRNA as a vehicle for the presentation of antisense targeting sequence. Montgomery RA, et al. **Hum Mol Genet** 1997 Apr; 6(4):519–25

Importance of structural differences between complementary RNA molecules to control of replication of an IncB plasmid. Wilson IW, et al. **J Bacteriol** 1997 Feb; 179(3):742–53

Antisense RNA inactivation of gene expression of a cell-cell adhesion protein (gp64) in the cellular slime mold Polysphondylium pallidum. Funamoto S, et al. **J Cell Sci** 1996 May;109 (Pt 5):1009–16

Models for pairing of IS10 encoded antisense RNAs in vivo. Jain C. **J Theor Biol** 1997 Jun 21;186(4):431–9

Marek's disease virus latency-associated transcripts belong to a family of spliced RNAs that are antisense to the ICP4 homolog gene. Cantello JL, et al. **J Virol** 1997 Feb; 71(2):1353–61

Delivery of recombinant HIV-1-directed antisense and ribozyme genes. Sczakiel G, et al. **Methods Mol Biol** 1997; 63:389–400

Cloning strategies for catalytic antisense RNAs. Tabler M, et al. **Methods Mol Biol** 1997;74:121–9

PCR-based construction of long hammerhead ribozymes. Zillmann M, et al. **Methods Mol Biol** 1997;74:131–9

Processing of pro-opiomelanocortin in GH3 cells: inhibition by prohormone convertase 2 (PC2) antisense mRNA. Friedman TC, et al. **Mol Cell Endocrinol** 1996 Jan 15; 116(1):89–96

Natural antisense transcripts of the S locus receptor kinase gene and related sequences in Brassica oleracea. Cock JM, et al. **Mol Gen Genet** 1997 Aug;255(5):514–24

The FinOP repressor system of plasmid R1: analysis of the antisense RNA control of traJ expression and conjugative DNA transfer. Koraimann G, et al. **Mol Microbiol** 1996 Aug;21(4):811–21

Transcriptional control of the agr-dependent virulence gene regulator, RNAIII, in Staphylococcus aureus. Morfeldt E, et al. **Mol Microbiol** 1996 Sep;21(6):1227–37

Chinese hamster cells expressing antisense to metallothionein become spontaneous mutators. Rossman TG, et al. **Mutat Res** 1997 Jan 3;373(1):75–85

Effects of variations in length of hammerhead ribozyme antisense arms upon the cleavage of longer RNA substrates. Sioud M. **Nucleic Acids Res** 1997 Jan 15;25(2):333–8

Nuclear antisense RNA induces extensive adenosine modifications and nuclear retention of target transcripts. Kumar M, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15; 94(8):3542–7

Enhanced selection for homologous-recombinant embryonic stem cell clones with a neomycin phosphotransferase gene in antisense orientation. Skryabin BV, et al. **Transgenic Res** 1997 Jan;6(1):27–35

METABOLISM

Expression of hammerhead ribozymes by retroviral vectors to inhibit HIV-1 replication: comparison of RNA levels and viral inhibition. Zhou C, et al. **Antisense Nucleic Acid Drug Dev** 1996 Spring;6(1):17–24

Sense and antisense transcripts of the developmentally regulated murine hsp70.2 gene are expressed in distinct and only partially overlapping areas in the adult brain. Murashov AK, et al. **Brain Res Mol Brain Res** 1996 Apr; 37(1–2):85–95

Antisense RNA control of plasmid R1 replication. The dominant product of the antisense rna-mrna binding is not a full RNA duplex. Malmgren C, et al. **J Biol Chem** 1997 May 9;272(19):12508–12

Expression of epidermal growth factor receptor and human papillomavirus E6/E7 proteins in cervical carcinoma cells [see comments] Hu G, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1271–6. Comment in: J Natl Cancer Inst 1997 Sep 3;89(17):1243–6.

Antisense human papillomavirus (HPV) E6/E7 expression, reduced stability of epidermal growth factor, and diminished growth of HPV-positive tumor cells [editorial; comment] Rorke EA. **J Natl Cancer Inst** 1997 Sep 3; 89(17):1243–6. Comment on: J Natl Cancer Inst 1997 Sep 3;89(17):1271–6.

Antisense src expression inhibits tyrosine phosphorylation of Shc and its association with Grb2 and Sos which leads to MAP kinase activation in U937 human leukemia cells. Yamaguchi M, et al. **Leukemia** 1997 Apr;11(4):497–503

Efficient hammerhead ribozyme and antisense RNA targeting in a slow ribosome Escherichia coli mutant. Chen H, et al. **Nat Biotechnol** 1997 May;15(5):432–5

Targeted ribose methylation of RNA in vivo directed by tailored antisense RNA guides [see comments] Cavaillé J, et al. **Nature** 1996 Oct 24;383(6602):732–5. Comment in: Nature 1996 Oct 24;383(6602):675–6.

Antisense GADD45 expression results in decreased DNA repair and sensitizes cells to u.v.-irradiation or cisplatin. Smith ML, et al. **Oncogene** 1996 Nov 21;13(10):2255–63

Expression of antisense RNA to S100A4 gene encoding an S100-related calcium-binding protein suppresses metastatic potential of high-metastatic Lewis lung carcinoma cells. Takenaga K, et al. **Oncogene** 1997 Jan 23;14(3):331–7

An antisense/target RNA duplex or a strong intramolecular RNA structure 5' of a translation initiation signal blocks ribosome binding: the case of plasmid R1. Malmgren C, et al. **RNA** 1996 Oct;2(10):1022–32

Antisense RNA control of gene expression in bacteriophage P22. I. Structures of sar RNA and its target, ant mRNA. Schaefer KL, et al. **RNA** 1997 Feb;3(2):141–56

Antisense RNA control of gene expression in bacteriophage P22. II. Kinetic mechanism and cation specificity of the pairing reaction. Schaefer KL, et al. **RNA** 1997 Feb; 3(2):157–74

[A new class of small RNP (alpha-RNP) containing antisense RNA in K-562 cells. III. The DNA-binding activity of nuclear alpha-RNP. The Signal Transmission from Growth Factors Group of the Medical Faculty, F. Schiller University, Jena, Germany] Konstantinova IM, et al. **Ontogenez** 1997 May-Jun;28(3):171–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Comparison of the antiviral efficacy of ribozymes and antisense RNA directed against bovine leukemia virus rex/tax. Cantor GH, et al.

Antisense Nucleic Acid Drug Dev 1996 Winter;6(4):301–4

A specificity comparison of four antisense types: morpholino, 2'–O–methyl RNA, DNA, and phosphorothioate DNA. Stein D, et al. **Antisense Nucleic Acid Drug Dev** 1997 Jun; 7(3):151–7

The ade6 gene of the fission yeast as a target for antisense and ribozyme RNA–mediated suppression. Atkins D, et al. **Antisense Res Dev** 1995 Winter;5(4):295–305

Antisense RNA–mediated inhibition of mouse hepatitis virus replication in L2 cells. Thieringer HA, et al. **Antisense Res Dev** 1995 Winter;5(4):289–94

Ribozyme and antisense RNAs inhibit coupled transcription translation by binding to rabbit polyribosomes. Denman RB. **Biochem Biophys Res Commun** 1997 Jan 3; 230(1):226–31

The effect of pretreatment with a delta 2–opioid receptor antisense oligodeoxynucleotide on the recovery from acute antinociceptive tolerance to delta 2–opioid receptor agonist in the mouse spinal cord. Narita M, et al. **Br J Pharmacol** 1997 Feb;120(4):587–92

Characterization of platelet–derived growth factor (PDGF) action on a mouse neuroblastoma cell line, NB41, by introduction of an antisense PDGF beta–receptor RNA. Funa K, et al. **Cell Growth Differ** 1997 Aug;8(8):861–9

EWS/FLI–1 antagonists induce growth inhibition of Ewing tumor cells in vitro. Kovar H, et al. **Cell Growth Differ** 1996 Apr;7(4):429–37

Onset of C. elegans gastrulation is blocked by inhibition of embryonic transcription with an RNA polymerase antisense RNA. Powell–Coffman JA, et al. **Dev Biol** 1996 Sep 15; 178(2):472–83

Inhibition of eFGF expression in Xenopus embryos by antisense mRNA. Lombardo A, et al. **Dev Dyn** 1997 Feb; 208(2):162–9

Inhibition of vesicular stomatitis virus in cells constitutively expressing an antisense RNA targeted against the virus RNA polymerase gene. Takacs AM, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):125–9

Inhibition of hepatitis B virus by retroviral vectors expressing antisense RNA. Ji W, et al. **J Viral Hepat** 1997 May; 4(3):167–73

Intracellular expression of RNA transcripts complementary to the human immunodeficiency virus type 1 gag gene inhibits viral replication in human CD4+ lymphocytes. Veres G, et al. **J Virol** 1996 Dec;70(12):8792–800

Regulation of gene expression by natural antisense RNA transcripts. Knee R, et al. **Neurochem Int** 1997 Sep; 31(3):379–92 (122 ref.)

Cholecystokinin antisense RNA increases the analgesic effect induced by electroacupuncture or low dose morphine: conversion of low responder rats into high responders. Tang NM, et al. **Pain** 1997 May;71(1):71–80

Blockade of plasma membrane calcium pumping ATPase isoform I impairs nerve growth factor–induced neurite extension in pheochromocytoma cells. Brandt PC, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13843–8

Targeting RNA decay with 2',5' oligoadenylate–antisense in respiratory syncytial virus–infected cells. Cirino NM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1937–42

Effect of antisense ribozyme to alpha (1,3)galactosyl transferase gene on the expression of Gal alpha (1,3)Gal epitope. Hayashi S, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):893

[The reversing effect of HPV–16 E6E7 gene antisense plasmid on the HPV–16 positive human cervical carcinoma cells] Zeng P, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1995 Dec;24(6):348–51 (Eng. Abstr.) **(Chi)**

[Studies on inhibition of activated oncogene expression by antisense RNA] Yang Q, et al. **I Chuan Hsueh Pao** 1996; 23(3):243–8 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Antisense–mediated regulation of Annexin VII gene expression during the transition from growth to differentiation in Dictyostelium discoideum. Okafuji T, et al. **Gene** 1997 Apr 11;189(1):49–56

Antisense–mediated resistance to measles virus infection in HeLa cells. Bell AF, et al. **J Infect Dis** 1997 Jul; 176(1):258–61

Stable human immunodeficiency virus type 1 (HIV–1) resistance in transformed CD4+ monocytic cells treated with multitargeting HIV–1 antisense sequences incorporated into U1 snRNA. Liu D, et al. **J Virol** 1997 May;71(5):4079–85

Ribosomal RNA: a vehicle for small functional RNAs [news] Sweeney R. **Mol Psychiatry** 1997 Jan;2(1):12–4

THERAPEUTIC USE

Growth inhibition of human papillomavirus 16 DNA–positive mouse tumor by antisense RNA transcribed from U6 promoter. He Y, et al. **Cancer Res** 1997 Sep 15; 57(18):3993–9

Oligonucleotide therapeutics––novel cardiovascular targets [news; comment] Isner JM. **Nat Med** 1997 Aug;3(8):834–5 . Comment on: Nat Med 1997 Aug;3(8):894–9. Comment on: Nat Med 1997 Aug;3(8):900–3.

Curing rat glioblastoma: immunotherapy or graft rejection? [letter; comment] Beutler AS, et al. **Science** 1997 Apr 4; 276(5309):20–1. Comment on: Science 1993 Jan 1;259(5091):94–7.

RNA, BACTERIAL

10Sa RNA complements the temperature–sensitive phenotype caused by a mutation in the phosphoribosyl pyrophosphate synthetase (prs) gene in Escherichia coli. Ando H, et al. **Genes Genet Syst** 1996 Feb;71(1):47–50

Comparison of the small 16S to 23S intergenic spacer region (ISR) of the rRNA operons of some Escherichia coli strains of the ECOR collection and E. coli K–12. García–Martínez J, et al. **J Bacteriol** 1996 Nov;178(21):6374–7

Identification and characterization of transcripts from the biotin biosynthetic operon of Bacillus subtilis. Perkins JB, et al. **J Bacteriol** 1996 Nov;178(21):6361–5

Heat induction of hsp18 gene expression in Streptomyces albus G: transcriptional and posttranscriptional regulation. Servant P, et al. **J Bacteriol** 1996 Dec;178(24):7031–6

Promoters and transcripts associated with the aroP gene of Escherichia coli. Wang P, et al. **J Bacteriol** 1997 Jul; 179(13):4206–12

Role of the spacer boxA of Escherichia coli ribosomal RNA operons in efficient 23 S rRNA synthesis in vivo. Pfeiffer T, et al. **J Mol Biol** 1997 Jan 31;265(4):385–93

Relationships between genomic G+C content, RNA secondary structures, and optimal growth temperature in prokaryotes. Galtier N, et al. **J Mol Evol** 1997 Jun; 44(6):632–6

STAB–SD: a Shine–Dalgarno sequence in the 5'untranslated region is a determinant of mRNA stability. Agaisse H, et al. **Mol Microbiol** 1996 May;20(3):633–43

Replication control of plasmid pLS1: the antisense RNA II and the compact rnaII region are involved in translational regulation of the initiator RepB synthesis. del Solar G, et al. **Mol Microbiol** 1997 Jan;23(1):95–108

Effect of the pufQ–pufB intercistronic region on puf mRNA stability in Rhodobacter capsulatus. Heck C, et al. **Mol Microbiol** 1996 Jun;20(6):1165–78

Introducing mutations into a chromosomal rRNA gene using a genetically modified eubacterial host with a single rRNA operon. Sander P, et al. **Mol Microbiol** 1996 Dec; 22(5):841–8

Bacterial reverse transcriptase and msDNA. Rice SA, et al. **Virus Genes** 1995;11(2–3):95–104 (54 ref.)

[Identification of eubacterial SRP RNA as a multifunctional molecule] Nakamura K, et al. **Seikagaku** 1997 Mar; 69(3):192–6 (15 ref.) **(Jpn)**

ANALYSIS

Seasonal distributions of dominant 16S rRNA–defined populations in a hot spring microbial mat examined by denaturing gradient gel electrophoresis. Ferris MJ, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1375–81

Group–specific 16S rRNA hybridization probes for determinative and community structure studies of Butyrivibrio fibrisolvens in the rumen. Forster RJ, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1256–60

Identification and quantification of Bifidobacterium species isolated from food with genus–specific 16S rRNA–targeted probes by colony hybridization and PCR. Kaufmann P, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1268–73

In situ analysis of nucleic acids in cold–induced nonculturable Vibrio vulnificus. Weichart D, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2754–8

Highly selective acridine and ethidium staining of bacterial DNA and RNA. Bruno JG, et al. **Biotech Histochem** 1996 May;71(3):130–6

Comparison of the nucleic acids of helical and coccoid forms of Helicobacter pylori. Narikawa S, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):285–90

Characterization of Burkholderia pseudomallei and Burkholderia pseudomallei–like strains. Brett PJ, et al. **Epidemiol Infect** 1997 Apr;118(2):137–48

Characterization of the Lancefield group C streptococcus 16S–23S RNA gene intergenic spacer and its potential for identification and sub–specific typing. Chanter N, et al. **Epidemiol Infect** 1997 Apr;118(2):125–35

Neisseria gonorrhoeae RNA/DNA hybridization and culture for screening of gonococcal infections in a low–prevalence population. Sednaoui P, et al. **Eur J Epidemiol** 1996 Dec; 12(6):651–4

Whipple's disease: comparison of histology with diagnosis based on polymerase chain reaction in four consecutive cases. Müller C, et al. **Gut** 1997 Mar;40(3):425–7

Characterization of Rhizobium 'hedysari' by RFLP analysis of PCR amplified rDNA and by genomic PCR fingerprinting. Selenska–Pobell S, et al. **J Appl Bacteriol** 1996 May;80(5):517–28

Quantification of total RNA by ethidium bromide fluorescence may not accurately reflect the RNA mass. Kerkhof L. **J Biochem Biophys Methods** 1997 Mar 27; 34(2):147–54

Heterogeneity and clonality among isolates of Mycobacterium kansasii: implications for epidemiological and pathogenicity studies. Alcaide F, et al. **J Clin Microbiol** 1997 Aug;35(8):1959–64

Molecular diagnosis of cat scratch disease: a two–step approach. Avidor B, et al. **J Clin Microbiol** 1997 Aug; 35(8):1924–30

Identification of Aeromonas clinical isolates by restriction fragment length polymorphism of PCR–amplified 16S rRNA genes. Borrell N, et al. **J Clin Microbiol** 1997 Jul; 35(7):1671–4

Detection of Treponema pallidum by a sensitive reverse transcriptase PCR. Centurion–Lara A, et al. **J Clin Microbiol** 1997 Jun;35(6):1348–52

Alkaline decontamination of sputum specimens adversely affects stability of mycobacterial mRNA. Desjardin LE, et al. **J Clin Microbiol** 1996 Oct;34(10):2435–9

Acinetobacter species identification by using tRNA spacer fingerprinting. Ehrenstein B, et al. **J Clin Microbiol** 1996 Oct;34(10):2414–20

A 16S rRNA–based PCR assay for detection and identification of granulocytic Ehrlichia species in dogs, horses, and cattle. Engvall EO, et al. **J Clin Microbiol** 1996 Sep;34(9):2170–4

Corynebacterium imitans sp. nov. isolated from patients with suspected diphtheria. Funke G, et al. **J Clin Microbiol** 1997 Aug;35(8):1978–83

Direct detection of Mycobacterium tuberculosis complex in nonrespiratory specimens by Gen–Probe Amplified Mycobacterium Tuberculosis Direct Test. Gamboa F, et al. **J Clin Microbiol** 1997 Jan;35(1):307–10

PCR ribotyping for characterizing Salmonella isolates of different serotypes. Lagatolla C, et al. **J Clin Microbiol** 1996 Oct;34(10):2440–3

Application of a nested, multiplex PCR to psittacosis outbreaks. Messmer TO, et al. **J Clin Microbiol** 1997 Aug; 35(8):2043–6

Application of 16S rRNA gene PCR to study bowel flora of preterm infants with and without necrotizing enterocolitis. Millar MR, et al. **J Clin Microbiol** 1996 Oct; 34(10):2506–10

Comparative evaluation of two commercial amplification assays for direct detection of Mycobacterium tuberculosis complex in respiratory specimens. Piersimoni C, et al. **J Clin Microbiol** 1997 Jan;35(1):193–6

Fluorescently–labeled oligonucleotide probes can be used to identify protistan food vacuole contents. Gunderson JH, et al. **J Eukaryot Microbiol** 1997 Jul–Aug;44(4):300–4

Detection of rifampin resistance in *Mycobacterium tuberculosis by use of a rapid, simple, and specific RNA/RNA mismatch assay. Nash KA, et al. **J Infect Dis** 1997 Aug;176(2):533–6

Contact sites of peptide–oligoribonucleotide cross–links identified by a combination of peptide and nucleotide sequencing with MALDI MS. Urlaub H, et al. **J Protein Chem** 1997 Jul;16(5):375–83

Nucleic acid amplification tests for tuberculosis. **MMWR Morb Mortal Wkly Rep** 1996 Nov 1;45(43):950–2

Detection of viable Vibrio cholerae by reverse–transcriptase polymerase chain reaction (RT–PCR). Bej AK, et al. **Mol Biotechnol** 1996 Feb;5(1):1–10

Decontamination of polymerase chain reaction reagents for detection of low concentrations of 16S rRNA genes. Hilali F, et al. **Mol Biotechnol** 1997 Jun;7(3):207–16

RNA amplification for direct detection of mycobacterium tuberculosis in respiratory samples. Hoffner SE, et al. **Scand J Infect Dis** 1996;28(1):59–61

Differentiation of Salmonella typhi strains by ribosomal RNA gene restriction patterns. Chou WH, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):620–4

[Evaluation of a new detection method of Mycobacterium tuberculosis in clinical specimens by amplification of ribosomal RNA and its clinical application] Osumi M, et al. **Kekkaku** 1996 Oct;71(10):573–85 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Mechanisms of primer RNA synthesis and D–loop/R–loop–dependent DNA replication in Escherichia coli. Masai H, et al. **Biochimie** 1996; 78(11–12):1109–17 (55 ref.)

Mutation in resting cells: the role of endogenous DNA damage. Bridges BA. **Cancer Surv** 1996;28:155–67 (47 ref.)

A small, stable RNA induced by oxidative stress: role as a pleiotropic regulator and antimutator. Altuvia S, et al. **Cell** 1997 Jul 11;90(1):43–53

Expression of an antisense hla fragment in Staphylococcus aureus reduces alpha–toxin production in vitro and attenuates lethal activity in a murine model. Kernodle DS, et al. **Infect Immun** 1997 Jan;65(1):179–84

Functional features of an ssi signal of plasmid pGKV21 in Escherichia coli. Jeong JY, et al. **J Bacteriol** 1997 Sep; 179(18):5795–801

Sensitive detection of bacterial transcription initiation sites and differentiation from RNA processing sites in the pheromone–induced plasmid transfer system of Enterococcus faecalis. Bensing BA, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7794–9

Direct physical interaction between DnaG primase and DnaB helicase of Escherichia coli is necessary for optimal synthesis of primer RNA. Lu YB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12902–7

MutT prevents leakiness [comment] Bridges BA. **Science** 1997 Oct 3;278(5335):78–9. Comment on: Science 1997 Oct 3;278(5335):128–30.

CHEMISTRY

Modeling the structure of the ribosome. Easterwood TR, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):751–6 (35 ref.)

Azospirillum lipoferum tRNAs: fractionation and identification of tRNA species and the nucleotide sequence of tRNA(Asn) (QUU). Sivakamasundari R, et al.

Biochem Mol Biol Int 1996 Dec;40(6):1221–6
An RNA structural determinant for tRNA recognition. Hamann CS, et al. **Biochemistry** 1997 Jul 1;36(26):7967–72
Structural organization of Escherichia coli tmRNA. Felden B, et al. **Biochimie** 1996;78(11–12):979–83
Structure and function of 10Sa RNA: trans-translation system. Muto A, et al. **Biochimie** 1996;78(11–12):985–91 (41 ref.)
Identity elements of Thermus thermophilus tRNA(Thr). Nameki N, et al. **FEBS Lett** 1996 Nov 4;396(2–3):201–7
Posttranscriptional modification of tRNA in psychrophilic bacteria. Dalluge JJ, et al. **J Bacteriol** 1997 Mar; 179(6):1918–23
The influence of antisense oligonucleotide-induced RNA structure on Escherichia coli RNase H1 activity. Lima WF, et al. **J Biol Chem** 1997 Jul 18;272(29):18191–9
A geometrical approach in folding a pseudoknot motif within the E. coli 16S-RNA. Tung CS. **J Biomol Struct Dyn** 1996 Oct;14(2):153–61
Multiple interactions stabilize a single paused transcription intermediate in which hairpin to 3' end spacing distinguishes pause and termination pathways. Chan CL, et al. **J Mol Biol** 1997 Apr 25;268(1):54–68
Effects of Mg2+, K+, and H+ on an equilibrium between alternative conformations of an RNA pseudoknot. Gluick TC, et al. **J Mol Biol** 1997 Jul 18;270(3):451–63
RNA sequence determinants for aminoglycoside binding to an A-site rRNA model oligonucleotide. Recht MI, et al. **J Mol Biol** 1996 Oct 4;262(4):421–36
Recent approaches to probe functional groups in ribonuclease P RNA by modification interference. Hardt WD, et al. **Mol Biol Rep** 1995–96;22(2–3):161–9 (63 ref.)
Analysis of the tertiary structure of bacterial RNase P RNA. Harris ME, et al. **Mol Biol Rep** 1995–96;22(2–3):115–23 (50 ref.)
Early studies of native ribonuclease P, including discovery of its essential RNA component. Stark BC. **Mol Biol Rep** 1995–96;22(2–3):95–7 (14 ref.)
RNase P RNA of Mycoplasma capricolum. Ushida C, et al. **Mol Biol Rep** 1995–96;22(2–3):125–9 (28 ref.)
Sequence interruptions in enterobacterial repeated elements retain their ability to encode well-folded RNA secondary structures [letter] Cromie G, et al. **Mol Microbiol** 1997 Jun; 24(6):1311–4
Structure and evolution of ribonuclease P RNA in Gram-positive bacteria. Haas ES, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4775–82
Preparation and characterization of a uniformly 2 H/ 15 N-labeled RNA oligonucleotide for NMR studies. Nikonowicz EP, et al. **Nucleic Acids Res** 1997 Apr 1; 25(7):1390–6
Interaction of tetracycline with RNA: photoincorporation into ribosomal RNA of Escherichia coli. Oehler R, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1219–24
The RNase P RNA from cyanobacteria: short tandemly repeated repetitive (STRR) sequences are present within the RNase P RNA gene in heterocyst-forming cyanobacteria. Vioque A. **Nucleic Acids Res** 1997 Sep 1; 25(17):3471–7
Ribonuclease P RNA: models of the 15/16 bulge from Escherichia coli and the P15 stem loop of Bacillus subtilis. Easterwood TR, et al. **RNA** 1997 Jun;3(6):577–85
Probing the structure of the Escherichia coli 10Sa RNA (tmRNA). Felden B, et al. **RNA** 1997 Jan;3(1):89–103
Analysis of the tertiary structure of the ribonuclease P ribozyme-substrate complex by site-specific photoaffinity crosslinking. Harris ME, et al. **RNA** 1997 Jun;3(6):561–76
Phylogenetic evidence for a new tertiary interaction in bacterial RNase P RNAs [letter] Massire C, et al. **RNA** 1997 Jun;3(6):553–6
Phylogenetic analysis of tmRNA secondary structure. Williams KP, et al. **RNA** 1996 Dec;2(12):1306–10
Exact determination of UV-induced crosslinks in 16S ribosomal RNA in 30S ribosomal subunits. Wilms C, et al. **RNA** 1997 Jun;3(6):602–12
Structure of the A site of Escherichia coli 16S ribosomal RNA complexed with an aminoglycoside antibiotic. Fourmy D, et al. **Science** 1996 Nov 22;274(5291):1367–71
A conformational switch in Escherichia coli 16S ribosomal RNA during decoding of messenger RNA. Lodmell JS, et al. **Science** 1997 Aug 29;277(5330):1262–7

DRUG EFFECTS

Antibiotics and RNA [editorial; comment] **Nat Struct Biol** 1997 Jun;4(6):421–2. Comment on: Nat Struct Biol 1997 Jun;4(6):483–9.

GENETICS

Clinical resistance to erythromycin and clindamycin in cutaneous propionibacteria isolated from acne patients is associated with mutations in 23S rRNA. Ross JI, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1162–5
Evolution of bacterial genomes. Trevors JT. **Antonie Van Leeuwenhoek** 1997 Mar;71(3):265–70 (28 ref.)
Rapid and sensitive method for the detection of Mycobacterium chlorophenolicum PCP-1 in soil based on 16S rRNA gene-targeted PCR. Briglia M, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1478–80
A computer analysis of primer and probe hybridization potential with bacterial small-subunit rRNA sequences. Brunk CF, et al. **Appl Environ Microbiol** 1996 Mar; 62(3):872–9
A new computational method for detection of chimeric 16S rRNA artifacts generated by PCR amplification from mixed bacterial populations. Komatsoulis GA, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2338–46
Phylogenetic diversity of bacterial symbionts of Solemya hosts based on comparative sequence analysis of 16S rRNA genes. Krueger DM, et al. **Appl Environ Microbiol** 1997 Jan;63(1):91–8
Distribution of bacterioplankton in meromictic Lake Saelenvannet, as determined by denaturing gradient gel electrophoresis of PCR-amplified gene fragments coding for 16S rRNA. Ovreås L, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3367–73
Molecular diversity of soil and marine 16S rRNA gene sequences related to beta-subgroup ammonia-oxidizing bacteria. Stephen JR, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4147–54
The ldh phylogeny for environmental isolates of Lactococcus lactis is consistent with rRNA genotypes but not with phenotypes. Urbach E, et al. **Appl Environ Microbiol** 1997 Feb;63(2):694–702
Differentiation of Shewanella putrefaciens and Shewanella alga on the basis of whole-cell protein profiles, ribotyping, phenotypic characterization, and 16S rRNA gene sequence analysis. Vogel BF, et al. **Appl Environ Microbiol** 1997 Jun; 63(6):2189–99
A novel delta-subdivision proteobacterial lineage from the lower ocean surface layer. Wright TD, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1441–8
Pleiotropic effects of mutations at positions 13 and 914 in Escherichia coli 16S ribosomal RNA. Brakier-Gingras L, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):907–13 (52 ref.)
A proposal for the conformation of loop E in Escherichia coli 5S rRNA. Dallas A, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):887–97
Escherichia coli initiator tRNA: structure-function relationships and interactions with the translational machinery. Mangroo D, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1023–31 (51 ref.)
Variety of nonsense suppressor phenotypes associated with mutational changes at conserved sites in Escherichia coli ribosomal RNA. Murgola EJ, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):925–31
Preribosomal RNA processing in archaea: characterization of the RNP endonuclease mediated processing of precursor 16S rRNA in the thermoacidophile Sulfolobus acidocaldarius. Potter S, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):813–23 (31 ref.)
Comparison of functional peptide encoded in the Escherichia coli 23S rRNA with other peptides involved in cis-regulation of translation. Tenson T, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1061–70 (40 ref.)
In vitro evolution used to define a protein recognition site within a large RNA domain. Sapag A, et al. **Bioorg Med Chem** 1997 Jun;5(6):1097–105
Simultaneous detection of microorganisms in soil suspension based on PCR amplification of bacterial 16S rRNA fragments. McGregor DP, et al. **Biotechniques** 1996 Sep; 21(3):463–6, 468, 470–1
Comparison of partial 23S rDNA sequences from Rhizobium species. Tesfaye M, et al. **Can J Microbiol** 1997 Jun; 43(6):526–33
Phylogenetic perspective on microbial life in hydrothermal ecosystems, past and present. Barns SM, et al. **Ciba Found Symp** 1996;202:24–32; discussion 32–9
Genetic diversity among Yersinia enterocolitica strains as revealed by sequence analysis of the 16S rRNA gene. Ibrahim A. **Contrib Microbiol Immunol** 1995;13:277–80
Novel small stable RNAs of Mycoplasma capricolum. Ushida C, et al. **DNA Res** 1995 Oct 31;2(5):229–30
The use of a nonradioactively labelled probe system in an electrophoretic ribotyping method for the differentiation of strains of coagulase-negative staphylococci. Hawcroft DM, et al. **Electrophoresis** 1996 Jan;17(1):55–7
Gene expression evidence indicates that nucleotides 507–513 and 1434–1440 in 16S rRNA are organized in close proximity on the Escherichia coli 30S ribosomal subunit. Kaloyanova D, et al. **Eur J Biochem** 1997 Aug 15; 248(1):10–4
Expression of small RNAs by Bacillus sp. strain PS3 and B. subtilis cells during sporulation. Fink PS, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):387–92
A cluster of atypical Yersinia strains with a distinctive 16S rRNA signature. Ibrahim A, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):73–8
Discrimination between Bacillus cereus and Bacillus thuringiensis using specific DNA probes based on variable regions of 16S rRNA. te Giffel MC, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):47–51
Cloning and sequencing of a gene encoding 16S ribosomal RNA from a novel hyperthermophilic archaebacterium NC12. Aoshima M, et al. **Gene** 1996 Nov 21;180(1–2):183–7
Use of polymerase chain reaction to identify a leucyl tRNA in Streptomyces coelicolor. Trepanier NK, et al. **Gene** 1997 Jul 1;193(1):59–63
Influence of cloned tRNA genes from a uropathogenic Escherichia coli strain on adherence to primary human renal tubular epithelial cells and nephropathogenicity in rats. Susa M, et al. **Infect Immun** 1996 Dec;64(12):5390–4
Use of 16S rRNA analysis to investigate phylogeny of methylotrophic bacteria. Bratina BJ, et al. **Int J Syst Bacteriol** 1992 Oct;42(4):645–8
The ribosomal intergenic spacer and domain I of the 23S rRNA gene are phylogenetic markers for Chlamydia spp. Everett KD, et al. **Int J Syst Bacteriol** 1997 Apr; 47(2):461–73
Phylogenetic analysis of the genus Chlamydia based on 16S rRNA gene sequences. Pudjiatmoko, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):425–31
Phylogenetic position of Riemerella anatipestifer based on 16S rRNA gene sequences. Subramaniam S, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):562–5
Role of mRNA termination in regulation of ermK. Choi SS, et al. **J Bacteriol** 1997 Mar;179(6):2065–7
Sequence and transcript analysis of a novel Methanosarcina barkeri methyltransferase II homolog and its associated corrinoid protein homologous to methionine synthase. Paul L, et al. **J Bacteriol** 1996 Nov;178(22):6599–607
Importance of structural differences between complementary RNA molecules to control of replication of an IncB plasmid. Wilson IW, et al. **J Bacteriol** 1997 Feb; 179(3):742–53
Phylogenetic placement and characterization of a new alpha-2 proteobacterium isolated from a patient with sepsis. Blomqvist G, et al. **J Clin Microbiol** 1997 Aug; 35(8):1988–95
Differentiation of bacterial 16S rRNA genes and intergenic regions and Mycobacterium tuberculosis katG genes by structure-specific endonuclease cleavage. Brow MA, et al. **J Clin Microbiol** 1996 Dec;34(12):3129–37
Evaluation of 16S rRNA gene PCR with primers Hp1 and Hp2 for detection of Helicobacter pylori. Chong SK, et al. **J Clin Microbiol** 1996 Nov;34(11):2728–30
Isolation of Arthrobacter spp. from clinical specimens and description of Arthrobacter cumminsii sp. nov. and Arthrobacter woluwensis sp. nov. Funke G, et al. **J Clin Microbiol** 1996 Oct;34(10):2356–63
Differentiation of Chlamydia spp. by sequence determination and restriction endonuclease cleavage of RNase P RNA genes. Herrmann B, et al. **J Clin Microbiol** 1996 Aug; 34(8):1897–902
Amplification and restriction endonuclease digestion of a large fragment of genes coding for rRNA as a rapid method for discrimination of closely related pathogenic bacteria [see comments] Ibrahim A, et al. **J Clin Microbiol** 1996 Dec;34(12):2894–6. Comment in: J Clin Microbiol 1997 Jun;35(6):1646–7.
Rapid species identification of "Streptococcus milleri" strains by line blot hybridization: identification of a distinct 16S rRNA population closely related to Streptococcus constellatus. Jacobs JA, et al. **J Clin Microbiol** 1996 Jul; 34(7):1717–21
Amplification of rRNA for assessment of treatment response of pulmonary tuberculosis patients during antimicrobial therapy. Moore DF, et al. **J Clin Microbiol** 1996 Jul; 34(7):1745–9
RNA amplification by nucleic acid sequence-based amplification with an internal standard enables reliable detection of Chlamydia trachomatis in cervical scrapings and urine samples. Morré SA, et al. **J Clin Microbiol** 1996 Dec;34(12):3108–14
Two different 16S rRNA genes in a mycobacterial strain. Ninet B, et al. **J Clin Microbiol** 1996 Oct;34(10):2531–6
Western immunoblot analysis of Haemobartonella muris and comparison of 16S rRNA gene sequences of H. muris, H. felis, and Eperythrozoon suis. Rikihisa Y, et al. **J Clin Microbiol** 1997 Apr;35(4):823–9
Case of fatal systemic infection with an Aureobacterium sp.: identification of isolate by 16S rRNA gene analysis. Saweljew P, et al. **J Clin Microbiol** 1996 Jun;34(6):1540–1
Isolation of an unusual mycobacterium from an AIDS patient. Tortoli E, et al. **J Clin Microbiol** 1996 Sep;34(9):2316–9
Multiplex PCR using conserved and species-specific 16S rRNA gene primers for simultaneous detection of Actinobacillus actinomycetemcomitans and Porphyromonas gingivalis. Tran SD, et al. **J Clin Microbiol** 1996 Nov;34(11):2674–8
Molecular characterization of Salmonella enterica subsp. enterica serovar choleraesuis field isolates and differentiation from homologous live vaccine strains suisaloral and SC-54. Weide-Botjes M, et al. **J Clin Microbiol** 1996 Oct;34(10):2460–3
Multiple interactions stabilize a single paused transcription intermediate in which hairpin to 3' end spacing distinguishes pause and termination pathways. Chan CL, et al. **J Mol Biol** 1997 Apr 25;268(1):54–68
Dual regulation of Escherichia coli secA translation by distinct upstream elements. McNicholas P, et al. **J Mol Biol** 1997 Jan 17;265(2):128–41
Phylogenetic relationships of nonaxenic filamentous cyanobacterial strains based on 16S rRNA sequence analysis. Nelissen B, et al. **J Mol Evol** 1996 Feb; 42(2):194–200
The rRNA operons of Mycobacterium smegmatis and Mycobacterium tuberculosis: comparison of promoter elements and of neighbouring upstream genes. Gonzalez-y-Merchand JA, et al. **Microbiology** 1996 Mar; 142 (Pt 3):667–74
Organization of ribosomal RNA genes from the footrot pathogen Dichelobacter nodosus. La Fontaine S, et al. **Microbiology** 1996 Apr;142 (Pt 4):889–99

Primary and secondary structures of rRNA spacer regions in enterococci. Naïmi A, et al. **Microbiology** 1997 Mar;143 (Pt 3):823–34

Transfer RNA gene organization and RNase P. Green CJ. **Mol Biol Rep** 1995–96;22(2–3):181–5 (67 ref.)

Evidence for the complex formation between reverse transcriptase and multicopy single-stranded DNA in retron EC83. Jeong DW, et al. **Mol Cells** 1997 Jun 30;7(3):347–51

A dual role for the Bacillus subtilis glpD leader and the GlpP protein in the regulated expression of glpD: antitermination and control of mRNA stability. Glatz E, et al. **Mol Microbiol** 1996 Jan;19(2):319–28

Differential mRNA stability of the cspA gene in the cold-shock response of Escherichia coli. Goldenberg D, et al. **Mol Microbiol** 1996 Jan;19(2):241–8

The LysR-like regulator LeuO in Escherichia coli is involved in the translational regulation of rpoS by affecting the expression of the small regulatory DsrA-RNA. Klauck E, et al. **Mol Microbiol** 1997 Aug;25(3):559–69

Repetitive sequences found in the chromosome of the myxobacterium Nannocystis exedens are similar to msDNA: a possible retrotransposition event in bacteria. Lampson BC, et al. **Mol Microbiol** 1997 Feb;23(4):813–23

Transcriptional control of the agr-dependent virulence gene regulator, RNAIII, in Staphylococcus aureus. Morfeldt E, et al. **Mol Microbiol** 1996 Sep;21(6):1227–37

Functional analysis of the Enterococcus faecalis plasmid pAD1-encoded stability determinant par. Weaver KE, et al. **Mol Microbiol** 1996 Apr;20(1):53–63

A genomic study of the leproma-derived and cultivable Mycobacterium HI-75. The direct DNA sequencing of PCR product of 16S ribosomal RNA. Sakai T, et al. **Nihon Hansenbyo Gakkai Zasshi** 1996 Nov;65(3):180–5

Selective amplification of RNA utilizing the nucleotide analog dITP and Thermus thermophilus DNA polymerase. Auer T, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):5021–5

Primer design for a prokaryotic differential display RT-PCR. Fislage R, et al. **Nucleic Acids Res** 1997 May 1;25(9):1830–5

A quantitative map of nucleotide substitution rates in bacterial rRNA. Van de Peer Y, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3381–91

Function of RNA secondary structures in transcriptional attenuation of the Bacillus subtilis pyr operon. Lu Y, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14462–7

Ribosome-mediated translational pause and protein domain organization. Thanaraj TA, et al. **Protein Sci** 1996 Aug; 5(8):1594–612

The protein cofactor allows the sequence of an RNase P ribozyme to diversify by maintaining the catalytically active structure of the enzyme. Kim JJ, et al. **RNA** 1997 Jun;3(6):613–23

Oligonucleotide probes for Bordetella bronchiseptica based on 16S ribosomal RNA sequences. Taneda A, et al. **Vet Microbiol** 1994 Dec;42(4):297–305

[The 16S–23s rRNA intergenic spacer regions of mycoplasmas] Harasawa R. **Nippon Saikingaku Zasshi** 1996 Feb;51(2):583–8 (15 ref.) **(Jpn)**

[Determination of the taxonomic position of bacteria from Lake Baikal using sequence analysis of 16S rRNA fragments] Belikov SI, et al. **Mikrobiologiia** 1996 Nov–Dec; 65(6):855–64 (Eng. Abstr.) **(Rus)**

[A new description of the type strain of Halobacterium distributum] Zviagintseva IS, et al. **Mikrobiologiia** 1996 May–Jun;65(3):399–402 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

A procedure for isolation of pure compiexes of acylated and unacylated tRNA(Phe) with ribosomes from Escherichia coli. Chinali G. **Anal Biochem** 1996 Oct 1;241(1):30–4

Direct ribosome isolation from soil to extract bacterial rRNA for community analysis. Felske A, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4162–7

Denaturing gradient gel electrophoresis used to monitor the enrichment culture of aerobic chemoorganotrophic bacteria from a hot spring cyanobacterial mat. Santegoeds CM, et al. **Appl Environ Microbiol** 1996 Nov;62(11):3922–8

Method for preparation of RNA from Ruminococcus albus. Nagamine T, et al. **Biotechniques** 1997 Mar;22(3):406–8

Use of a dental amalgamator to extract RNA from the gram-positive bacterium Streptococcus agalactiae. Yim HH, et al. **Biotechniques** 1997 Aug;23(2):229–31

RNA amplification by nucleic acid sequence-based amplification with an internal standard enables reliable detection of Chlamydia trachomatis in cervical scrapings and urine samples. Morré SA, et al. **J Clin Microbiol** 1996 Dec;34(12):3108–14

An effective method of RNA extraction from bacteria refractory to disruption, including mycobacteria. Mangan JA, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):675–6

METABOLISM

Evolution of bacterial genomes. Trevors JT. **Antonie Van Leeuwenhoek** 1997 Mar;71(3):265–70 (28 ref.)

A selection system to study protein-RNA interactions: functional display of HIV-1 Tat protein on filamentous bacteriophage M13. Hoffmann S, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):806–11

Recognition determinants for proteins and antibiotics within 23S rRNA. Douthwalte S, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1179–85 (56 ref.)

tRNA-ribosome interactions. Ehrenberg M, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1049–54 (35 ref.)

Structural and functional implications in the eubacterial ribosome as revealed by protein-rRNA and antibiotic contact sites. Wittmann-Liebold B, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1187–97

Peptidyl transferase and beyond. Wower J, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1041–7 (45 ref.)

An RNA structural determinant for tRNA recognition. Hamann CS, et al. **Biochemistry** 1997 Jul 1;36(26):7967–72

Kinetics of the RNA-DNA helicase activity of Escherichia coli transcription termination factor rho. 2. Processivity, ATP consumption, and RNA binding. Walstrom KM, et al. **Biochemistry** 1997 Jul 1;36(26):7993–8004

Role of RNA primers in initiation of minus-strand and plus-strand DNA synthesis of the yeast retrotransposon Ty1. Friant S, et al. **Biochimie** 1996;78(7):674–80

Structure and function of 10Sa RNA: trans-translation system. Muto A, et al. **Biochimie** 1996;78(11–12):985–91 (41 ref.)

In vitro evolution used to define a protein recognition site within a large RNA domain. Sapag A, et al. **Bioorg Med Chem** 1997 Jun;5(6):1097–105

A long-range RNA-RNA interaction forms a pseudoknot required for translational control of the IF3-L35-L20 ribosomal protein operon in Escherichia coli. Chiaruttini C, et al. **EMBO J** 1996 Aug 15;15(16):4402–13

Pop3p is essential for the activity of the RNase MRP and RNase P ribonucleoproteins in vivo. Dichtl B, et al. **EMBO J** 1997 Jan 15;16(2):417–29

Crystal structure of a new RNA-binding domain from the antiterminator protein SacY of Bacillus subtilis. van Tilbeurgh H, et al. **EMBO J** 1997 Aug 15;16(16):5030–6

Transfer RNA(Phe) isoacceptors possess non-identical set of identity elements at high and low Mg2+ concentration. Kholod NS, et al. **FEBS Lett** 1997 Jul 7;411(1):123–7

Movement of the 3'-end of tRNA through the peptidyl transferase centre and its inhibition by antibiotics. Kirillov S, et al. **FEBS Lett** 1997 Apr 14;406(3):223–33 (165 ref.)

Interaction of 10Sa RNA with ribosomes in Escherichia coli. Tadaki T, et al. **FEBS Lett** 1996 Dec 16;399(3):223–6

Interaction of the trp RNA-Binding attenuation protein (TRAP) of Bacillus subtilis with RNA: effects of the number of GAG repeats, the nucleotides separating adjacent repeats, and RNA secondary structure. Babitzke P, et al. **J Bacteriol** 1996 Sep;178(17):5159–63

Depletion of pre-16S rRNA in starved Escherichia coli cells. Cangelosi GA, et al. **J Bacteriol** 1997 Jul;179(14):4457–63

Biochemical and serological evidence for an RNase E-like activity in halophilic Archaea. Franzetti B, et al. **J Bacteriol** 1997 Feb;179(4):1180–5

Evidence that the Bacillus subtilis pyrimidine regulatory protein PyrR acts by binding to pyr mRNA at three sites in vivo. Lu Y, et al. **J Bacteriol** 1996 Oct;178(19):5806–9

Splicing of intron-containing tRNATrp by the archaeon Haloferax volcanii occurs independent of mature tRNA structure. Armbruster DW, et al. **J Biol Chem** 1997 Aug 8;272(32):19758–62

Lysine 207 as the site of cross-linking between the 3'-end of Escherichia coli initiator tRNA and methionyl-tRNA formyltransferase. Gite S, et al. **J Biol Chem** 1997 Feb 21; 272(8):5305–12

The influence of antisense oligonucleotide-induced RNA structure on Escherichia coli RNase H1 activity. Lima WF, et al. **J Biol Chem** 1997 Jul 18;272(29):18191–9

Incorporation of dinitrophenyl protein L23 into totally reconstituted Escherichia coli 50 S ribosomal subunits and its localization at two sites by immune electron microscopy. Montesano-Roditis L, et al. **J Biol Chem** 1997 Mar 28; 272(13):8695–703

1H, 15N and 13C resonance assignments and secondary structure determination of the RNA-binding domain of E.coli rho protein. Briercheck DM, et al. **J Biomol NMR** 1996 Dec;8(4):429–44

Analysis of the in vivo decay of the Escherichia coli dicistronic pyrF-orfF transcript: evidence for multiple degradation pathways. Arraiano CM, et al. **J Mol Biol** 1997 May 2;268(2):261–72

Processing of the Bacillus subtilis thrS leader mRNA is RNase E-dependent in Escherichia coli. Condon C, et al. **J Mol Biol** 1997 May 2;268(2):235–42

In vitro trans translation mediated by alanine-charged 10Sa RNA. Himeno H, et al. **J Mol Biol** 1997 May 23; 268(5):803–8

Residues in Escherichia coli RNase P RNA important for cleavage site selection and divalent metal ion binding. Kufel J, et al. **J Mol Biol** 1996 Nov 15;263(5):685–98

Structural requirements for the formation of 1-methylguanosine in vivo in tRNA(Pro)GGG of Salmonella typhimurium. Qian Q, et al. **J Mol Biol** 1997 Feb 21;266(2):283–96

Identification of elements on GeneX-secA RNA of Escherichia coli required for SecA binding and secA auto-regulation. Salavati R, et al. **J Mol Biol** 1997 Jan 17; 265(2):142–52

Effects on mRNA degradation by Escherichia coli transcription termination factor Rho and pBR322 copy number control protein Rop. Sozhamannan S, et al. **J Mol Biol** 1997 May 16;268(4):689–703

Polyadenylation of mRNA in bacteria. Sarkar N. **Microbiology** 1996 Nov;142 (Pt 11):3125–33 (80 ref.)

RNases in ColE1 DNA metabolism. Jung YH, et al. **Mol Biol Rep** 1995–96;22(2–3):195–200 (35 ref.)

RNase P RNA of Mycoplasma capricolum. Ushida C, et al. **Mol Biol Rep** 1995–96;22(2–3):125–9 (28 ref.)

Evidence for the complex formation between reverse transcriptase and multicopy single-stranded DNA in retron EC83. Jeong DW, et al. **Mol Cells** 1997 Jun 30;7(3):347–51

Programmed cell death in bacteria: translational repression by mRNA end-pairing. Franch T, et al. **Mol Microbiol** 1996 Sep;21(5):1049–60

mRNA stability is regulated by a coding-region element and the unique 5' untranslated leader sequences of the three Synechococcus psbA transcripts. Kulkarni RD, et al. **Mol Microbiol** 1997 Jun;24(6):1131–42

In vitro processing activity of Bacillus subtilis polynucleotide phosphorylase. Mitra S, et al. **Mol Microbiol** 1996 Jan; 19(2):329–42

In vitro analysis of mRNA processing by RNase E in the pap operon of Escherichia coli. Naureckiene S, et al. **Mol Microbiol** 1996 Jul;21(1):55–68

Role of stoichiometry between mRNA, translation factor SelB and selenocysteyl-tRNA in selenoprotein synthesis. Tormay P, et al. **Mol Microbiol** 1996 Sep;21(6):1253–9

Antibiotics and RNA [editorial; comment] **Nat Struct Biol** 1997 Jun;4(6):421–2. Comment on: Nat Struct Biol 1997 Jun;4(6):483–9.

Identification of new RNA modifying enzymes by iterative genome search using known modifying enzymes as probes. Gustafsson C, et al. **Nucleic Acids Res** 1996 Oct 1; 24(19):3756–62

An antibiotic-binding motif of an RNA fragment derived from the A-site-related region of Escherichia coli 16S rRNA. Miyaguchi H, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3700–6

Interaction of tetracycline with RNA: photoincorporation into ribosomal RNA of Escherichia coli. Oehler R, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1219–24

Ribonuclease P (RNase P) RNA is converted to a Cd(2+)-ribozyme by a single Rp-phosphorothioate modification in the precursor tRNA at the RNase P cleavage site. Warnecke JM, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8924–8

The decay of bacterial messenger RNA. Nierlich DP, et al. **Prog Nucleic Acid Res Mol Biol** 1996;52:153–216 (298 ref.)

RNase III autoregulation: structure and function of rncO, the posttranscriptional "operator". Matsunaga J, et al. **RNA** 1996 Dec;2(12):1228–40

The RNA binding site of S8 ribosomal protein of Escherichia coli: Selex and hydroxyl radical probing studies. Moine H, et al. **RNA** 1997 Mar;3(3):255–68

The 16S rRNA binding site of Thermus thermophilus ribosomal protein S15: comparison with Escherichia coli S15, minimum site and structure. Serganov AA, et al. **RNA** 1996 Nov;2(11):1124–38

The path of mRNA through the bacterial ribosome: a site-directed crosslinking study using new photoreactive derivatives of guanosine and uridine. Sergiev PV, et al. **RNA** 1997 May;3(5):464–75

Identification of 2'-hydroxyl groups required for interaction of a tRNA anticodon stem-loop region with the ribosome. von Ahsen U, et al. **RNA** 1997 Jan;3(1):49–56

[RNA-binding properties of ribosomal protein L1 from Thermus thermophilus] Elisekina IA, et al. **Biokhimiia** 1996 Nov;61(11):2040–4 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Getting closer to an understanding of the three-dimensional structure of ribosomal RNA. Mueller F, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):767–73 (40 ref.)

URINE

Detection of Chlamydia trachomatis in male and female urine specimens by using the amplified Chlamydia trachomatis test. Mouton JW, et al. **J Clin Microbiol** 1997 Jun; 35(6):1369–72

RNA-BINDING PROTEINS

Iron regulatory proteins 1 and 2. Henderson BR. **Bioessays** 1996 Sep;18(9):739–46 (57 ref.)

ANALYSIS

Immunocytochemical localization of vigilin, a tRNA-binding protein, after cell fractionation and within the exocrine pancreatic cell of the rat. Klinger MH, et al. **Anat Anz** 1996 Aug;178(4):331–5

Iron in synovial fluid: removal by lactoferrin, and relationship to iron regulatory protein (IRP) activity. Guillen C, et al. **Biochem Soc Trans** 1997 May;25(2):315S

Determination of molecular weights of nucleic acid-binding proteins by UV photo-crosslinking and SDS-PAGE. Bourbonnière M, et al. **Biotechniques** 1997 Jul;23(1):60–2

Measurement of antigen by enhanced chemiluminescent western blot. Huang D, et al. **Biotechniques** 1997 Mar; 22(3):454–6, 458

Inappropriately high iron regulatory protein activity in monocytes of patients with genetic hemochromatosis. Cairo G, et al. **Blood** 1997 Apr 1;89(7):2546–53

Association of RB97D, an RRM protein required for male fertility, with a Y chromosome lampbrush loop in Drosophila spermatocytes. Heatwole VM, et al. **Chromosoma** 1996 Dec;105(5):285–92

A 54-kDa protein specifically associates the 3' untranslated region of three maternal mRNAs with the cytoskeleton of the animal part of the Paracentrotus lividus egg. Montana G, et al. **Eur J Biochem** 1997 Jul 1;247(1):183-9

Identification of a new coiled body component [published erratum appears in Exp Cell Res 1996 Dec 15;229(2):452-3] Alliegro MC, et al. **Exp Cell Res** 1996 Sep 15;227(2):386-90

Identification of a new coiled body component. Alliegro MC, et al. **Exp Cell Res** 1997 Mar 15;231(2):386-90

Differential expression of the neuroendocrine genes Hel-N1 and HuD in small-cell lung carcinoma: evidence for down-regulation of HuD in the variant phenotype. King PH. **Int J Cancer** 1997 Aug 22;74(4):378-82

Xlrbpa, a double-stranded RNA-binding protein associated with ribosomes and heterogeneous nuclear RNPs. Eckmann CR, et al. **J Cell Biol** 1997 Jul 28;138(2):239-53

Mechanisms of lysis by activated cytotoxic cells expressing perforin and granzyme-B genes and the protein TIA-1 in muscle biopsies of myositis. Cherin P, et al. **J Rheumatol** 1996 Jul;23(7):1135-42

The tobacco mosaic virus RNA polymerase complex contains a plant protein related to the RNA-binding subunit of yeast eIF-3. Osman TA, et al. **J Virol** 1997 Aug;71(8):6075-82

Cytotoxicity and apoptosis in human renal allografts: identification, distribution, and quantitation of cells with a cytotoxic granule protein GMP-17 (TIA-1) and cells with fragmented nuclear DNA. Meehan SM, et al. **Lab Invest** 1997 May;76(5):639-49

Cell surface expression of paraneoplastic encephalomyelitis/sensory neuronopathy-associated Hu antigens in small-cell lung cancers and neuroblastomas. Torà M, et al. **Neurology** 1997 Mar;48(3):735-41

Phosphorylated Ser/Arg-rich proteins: limiting factors in the assembly of 20OS large nuclear ribonucleoprotein particles. Yitzhaki S, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8830-5

ANTAGONISTS & INHIBITORS

RNA in polysomes is an inhibitor of manganese superoxide dismutase RNA-binding protein activity. Chung DJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L714-9

Superoxide and hydrogen peroxide-dependent inhibition of iron regulatory protein activity: a protective stratagem against oxidative injury [see comments] Cairo G, et al. **FASEB J** 1996 Sep;10(11):1326-35. Comment in: FASEB J 1997 Apr;11(5):374-5.

BIOSYNTHESIS

Expression of DAZ, an azoospermia factor candidate, in human spermatogonia [letter] Menke DB, et al. **Am J Hum Genet** 1997 Jan;60(1):237-41

A ribosomal protein from Thermus thermophilus is homologous to a general shock protein. Gryaznova OI, et al. **Biochimie** 1996;78(11-12):915-9

Inscuteable and Staufen mediate asymmetric localization and segregation of prospero RNA during Drosophila neuroblast cell divisions. Li P, et al. **Cell** 1997 Aug 8;90(3):437-47

Differential expression of fructosyllysine-specific receptors on monocytes and macrophages and possible pathophysiological significance. Brandt R, et al. **Diabetologia** 1996 Oct;39(10):1140-7

Spatial and temporal expression of 4f-rnp gene in Drosophila melanogaster. Hess KA, et al. **Differentiation** 1996 Dec; 61(2):103-11

RNA-RNA interaction is required for the formation of specific bicoid mRNA 3' UTR-STAUFEN ribonucleoprotein particles. Ferrandon D, et al. **EMBO J** 1997 Apr 1;16(7):1751-8

Differential thermoregulation of two highly homologous cold-shock genes, cspA and cspB, of Escherichia coli. Etchegaray JP, et al. **Genes Cells** 1996 Feb;1(2):171-8

Enhanced angiotensin receptor type 1 mRNA degradation and induction of polyribosomal mRNA binding proteins by angiotensin II in vascular smooth muscle cells. Nickenig G, et al. **Mol Pharmacol** 1996 Oct;50(4):743-51

Structure and subcellular localization of a small RNA-binding protein from tobacco. Moriguchi K, et al. **Plant J** 1997 Jul;12(1):215-21

BLOOD

Identification and structure of activated-platelet protein-1, a protein with RNA-binding domain motifs that is expressed by activated platelets. Houng AK, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):209-18

CHEMISTRY

Phosphorylation can modulate the association of different sets of RNA binding proteins with the Vg1 localization signal RNA. Chen SM, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):419-23

Structures of prokaryotic ribosomal proteins: implications for RNA binding and evolution. Ramakrishnan V, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):979-86 (30 ref.)

De novo design of native proteins: characterization of proteins intended to fold into antiparallel, rop-like, four-helix bundles. Betz SF, et al. **Biochemistry** 1997 Mar 4;36(9):2450-8

Tertiary structure of RBD2 and backbone dynamics of RBD1 and RBD2 of the human U1A protein determined by NMR spectroscopy. Lu J, et al. **Biochemistry** 1997 Aug 26; 36(34):10393-405

The solution structure of the S1 RNA binding domain: a member of an ancient nucleic acid-binding fold. Bycroft M, et al. **Cell** 1997 Jan 24;88(2):235-42

The Xenopus laevis homologue of the 64-kDa subunit of cleavage stimulation factor. Barbaux S, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Jul; 114(3):313-5

Getting into the major groove. Protein-RNA interactions. Moras D, et al. **Curr Biol** 1996 May 1;6(5):530-2 (15 ref.)

Structure and expression of the tobacco nuclear gene encoding RNA-binding protein RZ-1: the existence of an intron in the 3'-untranslated region. Hanano S, et al. **DNA Res** 1996 Apr 30;3(2):65-71

A plant viral coat protein RNA binding consensus sequence contains a crucial arginine [published erratum appears in EMBO J 1996 Dec 16;15(24):7188-9] Ansel-McKinney P, et al. **EMBO J** 1996 Sep 16;15(18):5077-84

The crystal structure of the signal recognition particle Alu RNA binding heterodimer, SRP9/14. Birse DE, et al. **EMBO J** 1997 Jul 1;16(13):3757-66

Mutagenesis of a stacking contact in the MS2 coat protein-RNA complex. LeCuyer KA, et al. **EMBO J** 1996 Dec 16;15(24):6847-53

From genetic to structural characterization of a new class of RNA-binding domain within the SacY/BglG family of antiterminator proteins. Manival X, et al. **EMBO J** 1997 Aug 15;16(16):5019-29

Two functionally distinct domains generated by in vivo cleavage of Nup145p: a novel biogenesis pathway for nucleoporins. Teixeira MT, et al. **EMBO J** 1997 Aug 15; 16(16):5086-97

Crystal structure of a new RNA-binding domain from the antiterminator protein SacY of Bacillus subtilis. van Tilbeurgh H, et al. **EMBO J** 1997 Aug 15;16(16):5030-6

Characterisation of the nucleic-acid-binding activity of KH domains. Different properties of different domains. Dejgaard K, et al. **Eur J Biochem** 1996 Oct 15; 241(2):425-31

The N-terminal Arg-rich region of human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus Nef is involved in RNA binding. Echarri A, et al. **Eur J Biochem** 1997 May 15;246(1):38-44

A 20-amino-acid autonomous RNA-binding domain contained in an enoyl-CoA hydratase. Nakagawa J, et al. **Eur J Biochem** 1997 Mar 15;244(3):890-9

Characterization of two nuclear proteins that interact with cytochrome P-450 1A2 mRNA. Regulation of RNA binding and possible role in the expression of the Cyp1a2 gene. Raffalli-Mathieu F, et al. **Eur J Biochem** 1997 Apr 1;245(1):17-24

Sequence determinants for hnRNP I protein nuclear localization. Romanelli MG, et al. **Exp Cell Res** 1997 Aug 25;235(1):300-4

A nuclear RNA-binding cyclophilin in human T cells. Mi H, et al. **FEBS Lett** 1996 Dec 2;398(2-3):201-5

Structural properties and RNA-binding activities of two RNA recognition motifs of a mouse neural RNA-binding protein, mouse-Musashi-1. Kurihara Y, et al. **Gene** 1997 Feb 20;186(1):21-7

Phylogenetic distribution of the global regulatory gene csrA among eubacteria. White D, et al. **Gene** 1996 Dec 5; 182(1-2):221-3

The lac operon of Lactobacillus casei contains lacT, a gene coding for a protein of the Bg1G family of transcriptional antiterminators. Alpert CA, et al. **J Bacteriol** 1997 Mar; 179(5):1555-62

A role for Sam68 in cell cycle progression antagonized by a spliced variant within the KH domain. Barlat I, et al. **J Biol Chem** 1997 Feb 7;272(6):3129-32

Trypanosoma brucei gBP21. An arginine-rich mitochondrial protein that binds to guide RNA with high affinity. Köller J, et al. **J Biol Chem** 1997 Feb 7;272(6):3749-57

Schizosaccharomyces pombe has a novel eukaryotic initiation factor 4F complex containing a cap-binding protein with the human eIF4E C-terminal motif KSGST. Ptushkina M, et al. **J Biol Chem** 1996 Dec 20;271(51):32818-24

Two RNA-binding domains determine the RNA-binding specificity of nucleolin. Serin G, et al. **J Biol Chem** 1997 May 16;272(20):13109-16

Cleavage factor II of Saccharomyces cerevisiae contains homologues to subunits of the mammalian Cleavage/ polyadenylation specificity factor and exhibits sequence-specific, ATP-dependent interaction with precursor RNA. Zhao J, et al. **J Biol Chem** 1997 Apr 18; 272(16):10831-8

Defining the essential functional regions of the nucleoporin Nup145p. Emtage JL, et al. **J Cell Sci** 1997 Apr;110 (Pt 7):911-25

Mapping of the RNA-binding domain of the cucumber mosaic virus movement protein. Vaquero C, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):2095-9

The structure of an RNA "kissing" hairpin complex of the HIV TAR hairpin loop and its complement. Chang KY, et al. **J Mol Biol** 1997 May 30;269(1):52-66

Human immunodeficiency virus (HIV) Nef is an RNA binding protein in cell-free systems. Echarri A, et al. **J Mol Biol** 1996 Oct 11;262(5):640-51

A Xenopus zinc finger protein that specifically binds dsRNA and RNA-DNA hybrids. Finerty PJ Jr, et al. **J Mol Biol** 1997 Aug 15;271(2):195-208

Analysis of phage MS2 coat protein mutants expressed from a reconstituted phagemid reveals that proline 78 is essential for viral infectivity. Hill HR, et al. **J Mol Biol** 1997 Feb 14;266(1):1-7

A characteristic arrangement of aromatic amino acid residues in the solution structure of the amino-terminal RNA-binding domain of Drosophila sex-lethal. Inoue M, et al. **J Mol Biol** 1997 Sep 12;272(1):82-94

The three-dimensional structures of two complexes between recombinant MS2 capsids and RNA operator fragments reveal sequence-specific protein-RNA interactions. Valegård K, et al. **J Mol Biol** 1997 Aug 1;270(5):724-38

Chicken MAR-binding protein ARBP is homologous to rat methyl-CpG-binding protein MeCP2. Weitzel JM, et al. **Mol Cell Biol** 1997 Sep;17(9):5656-66

Protein alchemy: changing beta-sheet into alpha-helix [see comments] Dalal S, et al. **Nat Struct Biol** 1997 Jul; 4(7):548-52. Comment in: Nat Struct Biol 1997 Jul;4(7):512-4.

The solution structure of the first KH domain of FMR1, the protein responsible for the fragile X syndrome [letter] Musco G, et al. **Nat Struct Biol** 1997 Sep;4(9):712-6

Protein folding and the Paracelsus challenge [news; comment] Rose GD. **Nat Struct Biol** 1997 Jul;4(7):512-4 . Comment on: Nat Struct Biol 1997 Jul;4(7):548-52.

Structure of a bifunctional membrane-RNA binding protein, influenza virus matrix protein M1. Sha B, et al. **Nat Struct Biol** 1997 Mar;4(3):239-44

The RNA binding domain of ribosomal protein L11 is structurally similar to homeodomains [letter] Xing Y, et al. **Nat Struct Biol** 1997 Jan;4(1):24-7

Protein engineering. Reading, writing and redesigning [news] Gross M, et al. **Nature** 1997 Jul 31;388(6641):419-20

NMR analysis of the hydrogen bonding interactions of the RNA-binding domains of the Drosophila sex-lethal protein with target RNA fragments with site-specific [3-15N]uridine substitutions. Kim I, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1565-9

Identification of a (CUG)n triplet repeat RNA-binding protein and its expression in myotonic dystrophy. Timchenko LT, et al. **Nucleic Acids Res** 1996 Nov 15; 24(22):4407-14

Characterization of a novel arginine/serine-rich splicing factor in Arabidopsis. Lopato S, et al. **Plant Cell** 1996 Dec; 8(12):2255-64

Structure and subcellular localization of a small RNA-binding protein from tobacco. Moriguchi K, et al. **Plant J** 1997 Jul;12(1):215-21

Cross-validated maximum likelihood enhances crystallographic simulated annealing refinement. Adams PD, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):5018-23

RNA splicing specificity determined by the coordinated action of RNA recognition motifs in SR proteins. Chandler SD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15; 94(8):3596-601

Three-dimensional model of the potyviral genome-linked protein. Plochocka D, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12150-4

Grafting of discontinuous sites: a protein modeling strategy. Hornischer K, et al. **Protein Eng** 1996 Nov;9(11):931-9

Contribution of the tyrosines to the structure and function of the human U1A N-terminal RNA binding domain. Kranz JK, et al. **Protein Sci** 1996 Aug;5(8):1567-83

What makes a protein a protein? Hydrophobic core designs that specify stability and structural properties. Munson M, et al. **Protein Sci** 1996 Aug;5(8):1584-93

Crystallization of the RNA-binding domain of the transcriptional antiterminator protein SacY from Bacillus subtilis. Manival X, et al. **Proteins** 1997 Aug;28(4):590-4

Essential yeast protein with unexpected similarity to subunits of mammalian cleavage and polyadenylation specificity factor (CPSF) [see comments] Chanfreau G, et al. **Science** 1996 Nov 29;274(5292):1511-4. Comment in: Science 1996 Nov 29;274(5292):1481-2.

High anxiety [comment] Goldman D. **Science** 1996 Nov 29; 274(5292):1483. Comment on: Science 1996 Nov 29;274(5292):1527-31.

Sequence similarity between the 73-kilodalton protein of mammalian CPSF and a subunit of yeast polyadenylation factor I [see comments] Jenny A, et al. **Science** 1996 Nov 29;274(5292):1514-7. Comment in: Science 1996 Nov 29;274(5292):1481-2.

The end of the message--another link between yeast and mammals [comment] Manley JL, et al. **Science** 1996 Nov 29;274(5292):1481-2. Comment on: Science 1996 Nov 29;274(5292):1511-9. Comment on: Science 1996 Nov 29;274(5292):1514-7. Comment on: Science 1996 Nov 29;274(5292):1517-20.

Amino acid alchemy transmutes sheets to coils [news] Service RF. **Science** 1997 Jul 11;277(5323):179

Dependence of yeast pre-mRNA 3'-end processing on CFT1: a sequence homolog of the mammalian AAUAAA binding factor [see comments] Stumpf G, et al. **Science** 1996 Nov 29;274(5292):1517-20. Comment in: Science 1996 Nov 29;274(5292):1481-2.

Structural evidence for specific S8-RNA and S8-protein interactions within the 30S ribosomal subunit: ribosomal protein S8 from Bacillus stearothermophilus at 1.9 A resolution. Davies C, et al. **Structure** 1996 Sep 15; 4(9):1093-104

Crystal structure of human UP1, the domain of hnRNP A1 that contains two RNA-recognition motifs. Xu RM, et al.

Structure 1997 Apr 15;5(4):559–70
[X-ray structural analysis of RNA–protein complexes] Kopylov AM. **Biokhimiia** 1996 Oct;61(10):1911–6 **(Rus)**

GENETICS

Fragile X syndrome in humans and mice. Oostra BA. **Acta Genet Med Gemellol (Roma)** 1996;45(1–2):93–108 (79 ref.)

Embryonic lethal abnormal visual RNA–binding proteins involved in growth, differentiation, and posttranscriptional gene expression. Antic D, et al. **Am J Hum Genet** 1997 Aug;61(2):273–8 (59 ref.)

Expansion and methylation status at FRAXE can be detected on EcoRI blots used for FRAXA diagnosis: analysis of four FRAXE families with mild mental retardation in males. Biancalana V, et al. **Am J Hum Genet** 1996 Oct; 59(4):847–54

Dinucleotide–binding site of bovine liver catalase mimics a catalase mRNA–binding protein domain. Clerch LB, et al. **Am J Physiol** 1996 May;270(5 Pt 1):L790–4

Increased transcript level of RBM3, a member of the glycine–rich RNA–binding protein family, in human cells in response to cold stress. Danno S, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):804–7

Probing the 3' UTR structure of U1A mRNA and footprinting analysis of its complex with U1A protein. Teunissen SW, et al. **Biochemistry** 1997 Feb 18;36(7):1782–9

A case of convergent evolution of nucleic acid binding modules. Graumann P, et al. **Bioessays** 1996 Apr; 18(4):309–15 (46 ref.)

Cloning the 5' flanking region of neuron–specific Hel–N1: evidence for positive regulatory elements governing cell–specific transcription. King PH. **Brain Res** 1996 Jun 3;723(1–2):141–7

The splicing factor BBP interacts specifically with the pre–mRNA branchpoint sequence UACUAAC. Berglund JA, et al. **Cell** 1997 May 30;89(5):781–7

MEX–3 is a KH domain protein that regulates blastomere identity in early C. elegans embryos. Draper BW, et al. **Cell** 1996 Oct 18;87(2):205–16

FCA, a gene controlling flowering time in Arabidopsis, encodes a protein containing RNA–binding domains. Macknight R, et al. **Cell** 1997 May 30;89(5):737–45

The polyadenylation factor CstF–64 regulates alternative processing of IgM heavy chain pre–mRNA during B cell differentiation. Takagaki Y, et al. **Cell** 1996 Nov 29; 87(5):941–52

Herpes simplex virus Us11 protein enhances recovery of protein synthesis and survival in heat shock treated HeLa cells. Diaz–Latoud C, et al. **Cell Stress Chaperones** 1997 Jun;2(2):119–31

Signal sequences that target nuclear import and nuclear export of pre–mRNA–binding proteins. Michael WM, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:663–8

The Xenopus laevis homologue of the 64–kDa subunit of cleavage stimulation factor. Barbaux S, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Jul; 114(3):313–5

ELAV, a Drosophila neuron–specific protein, mediates the generation of an alternatively spliced neural protein isoform. Koushika SP, et al. **Curr Biol** 1996 Dec 1; 6(12):1634–41

RNA–binding proteins as regulators of gene expression. Siomi H, et al. **Curr Opin Genet Dev** 1997 Jun;7(3):345–53 (70 ref.)

Developmental expression of the murine spliceosome–associated protein mSAP49. Ruiz–Lozano P, et al. **Dev Dyn** 1997 Apr;208(4):482–90

Xenopus poly (A) binding protein maternal RNA is localized during oogenesis and associated with large complexes in blastula. Schroeder KE, et al. **Dev Genet** 1996;19(3):268–76

who encodes a KH RNA binding protein that functions in muscle development. Baehrecke EH. **Development** 1997 Apr;124(7):1323–32

The held out wings (how) Drosophila gene encodes a putative RNA–binding protein involved in the control of muscular and cardiac activity. Zaffran S, et al. **Development** 1997 May;124(10):2087–98

Spatial and temporal expression of 4f–rnp gene in Drosophila melanogaster. Hess KA, et al. **Differentiation** 1996 Dec; 61(2):103–11

Structure and expression of the tobacco nuclear gene encoding RNA–binding protein RZ–1: the existence of an intron in the 3'–untranslated region. Hanano S, et al. **DNA Res** 1996 Apr 30;3(2):65–71

A LINE–like transposable element in Drosophila, the I factor, encodes a protein with properties similar to those of retroviral nucleocapsids. Dawson A, et al. **EMBO J** 1997 Jul 16;16(14):4448–55

Cloning and characterization of SNAP50, a subunit of the snRNA–activating protein complex SNAPc. Henry RW, et al. **EMBO J** 1996 Dec 16;15(24):7129–36

The gene for histone RNA hairpin binding protein is located on human chromosome 4 and encodes a novel type of RNA binding protein. Martin F, et al. **EMBO J** 1997 Feb 17; 16(4):769–78

Smooth muscle alternative splicing induced in fibroblasts by heterologous expression of a regulatory gene. Roberts GC, et al. **EMBO J** 1996 Nov 15;15(22):6301–10

The wheat poly(A)–binding protein functionally complements pab1 in yeast. Le H, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):350–7

A 20–amino–acid autonomous RNA–binding domain contained in an enoyl–CoA hydratase. Nakagawa J, et al. **Eur J Biochem** 1997 Mar 15;244(3):890–9

Ribosomal protein S15 from Thermus thermophilus—cloning, sequencing, overexpression of the gene and RNA–binding properties of the protein. Serganov A, et al. **Eur J Biochem** 1997 Jun 1;246(2):291–300

Screening for deletions of the Y chromosome involving the DAZ (Deleted in AZoospermia) gene in azoospermia and severe oligozoospermia. Simoni M, et al. **Fertil Steril** 1997 Mar;67(3):542–7

Sequences of two expressed sequence tags (EST) from rice encoding different cap–binding proteins. Aliyeva E, et al. **Gene** 1996 Nov 21;180(1–2):221–3

Remarkable sequence conservation of transcripts encoding amphibian and mammalian homologues of quaking, a KH domain RNA–binding protein. Zorn AM, et al. **Gene** 1997 Apr 1;188(2):199–206

Identification of a SPH element in the distal region of a human U6 small nuclear RNA gene promoter and characterization of the SPH binding factor in HeLa cell extracts. Kunkel GR, et al. **Gene Expr** 1996;6(2):59–72

EWS–ERG fusion transcript produced by chromosomal insertion in a Ewing sarcoma. Kaneko Y, et al. **Genes Chromosomes Cancer** 1997 Mar;18(3):228–31

A new regulatory protein, KSRP, mediates exon inclusion through an intronic splicing enhancer. Min H, et al. **Genes Dev** 1997 Apr 15;11(8):1023–36

smaug protein represses translation of unlocalized nanos mRNA in the Drosophila embryo. Smibert CA, et al. **Genes Dev** 1996 Oct 15;10(20):2600–9

The protein that binds the 3' end of histone mRNA: a novel RNA–binding protein required for histone pre–mRNA processing. Wang ZF, et al. **Genes Dev** 1996 Dec 1; 10(23):3028–40

Isolation of genes encoding tRNA binding proteins by probing an expression library with unmodified tRNA. Gustafsson C. **Genet Anal** 1996 Jul;13(2):45–7

Aspergillus fabM encodes an essential product that is related to poly(A)–binding proteins and activates development when overexpressed. Marhoul JF, et al. **Genetics** 1996 Dec; 144(4):1463–70

Regulation of the gene Sex–lethal: a comparative analysis of Drosophila melanogaster and Drosophila subobscura. Penalva LO, et al. **Genetics** 1996 Dec;144(4):1653–64

Both loss–of–function and gain–of–function mutations in snf define a role for snRNP proteins in regulating Sex–lethal pre–mRNA splicing in Drosophila development. Salz HK, et al. **Genetics** 1996 Sep;144(1):95–108

Nuclear cap binding protein maps close to the xeroderma pigmentosum complementation group A (XPA) locus in human and mouse. Chadwick BP, et al. **Genomics** 1996 Aug 1;35(3):632–3

Localization of a human double–stranded RNA–binding protein gene (STAU) to band 20q13.1 by fluorescence in situ hybridization. DesGroseillers L, et al. **Genomics** 1996 Sep 15;36(3):527–9

Localization of human elav–like neuronal protein 1 (Hel–N1) on chromosome 9p21 by chromosome microdissection polymerase chain reaction and fluorescence in situ hybridization. Han J, et al. **Genomics** 1996 Aug 15; 36(1):189–91

A novel zinc finger–containing RNA–binding protein conserved from fruitflies to humans. Jackson FR, et al. **Genomics** 1997 May 1;41(3):444–52

Cloning and mapping of a human RBP56 gene encoding a putative RNA binding protein similar to FUS/TLS and EWS proteins. Morohoshi F, et al. **Genomics** 1996 Nov 15;38(1):51–7

Expression analysis and chromosomal assignment of the human SFRS5/SRp40 gene. Snow BE, et al. **Genomics** 1997 Jul 15;43(2):165–70

Localization and physical mapping of genes encoding the A+U–rich element RNA–binding protein AUF1 to human chromosomes 4 and X. Wagner BJ, et al. **Genomics** 1996 Jun 1;34(2):219–22

The identification of a (CGG)6AGG insertion within the CGG repeat of the FMR1 gene in Asians. Chen SH, et al. **Hum Genet** 1997 Jun;99(6):793–5

Localization of the human HuR gene to chromosome 19p13.2. Ma WJ, et al. **Hum Genet** 1997 Jan;99(1):32–3

An RBM homologue maps to the mouse Y chromosome and is expressed in germ cells. Elliott DJ, et al. **Hum Mol Genet** 1996 Jul;5(7):869–74

A SPGY copy homologous to the mouse gene Dazla and the Drosophila gene boule is autosomal and expressed only in the human male gonad. Shan Z, et al. **Hum Mol Genet** 1996 Dec;5(12):2005–11

Azoospermic men with deletion of the DAZ gene cluster are capable of completing spermatogenesis: fertilization, normal embryonic development and pregnancy occur when retrieved testicular spermatozoa are used for intracytoplasmic sperm injection. Mulhall JP, et al. **Hum Reprod** 1997 Mar;12(3):503–8

Isolation and analysis of the Xanthomonas alkyl hydroperoxide reductase gene and the peroxide sensor regulator genes ahpC and ahpF–oxyR–orfX. Loprasert S, et al. **J Bacteriol** 1997 Jun;179(12):3944–9

Characterization of transcription organization and analysis of unique expression patterns of an alkyl hydroperoxide reductase C gene (ahpC) and the peroxide regulator operon ahpF–oxyR–orfX from Xanthomonas campestris pv. phaseoli. Mongkolsuk S, et al. **J Bacteriol** 1997 Jun; 179(12):3950–5

Polycistronic expression and RNA–binding specificity of the C. elegans homologue of the spliceosome–associated protein SAP49. Tanaka Y, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):739–45

Rapid protein sequencing by tandem mass spectrometry and cDNA cloning of p20–CGGBP. A novel protein that binds to the unstable triplet repeat 5'–d(CGG)n–3' in the human FMR1 gene. Deissler H, et al. **J Biol Chem** 1997 Jul 4; 272(27):16761–8

Comparative mutational analysis of the double–stranded RNA binding domains of Xenopus laevis RNA–binding protein A. Krovat BC, et al. **J Biol Chem** 1996 Nov 8; 271(45):28112–9

The RNA molecule CsrB binds to the global regulatory protein CsrA and antagonizes its activity in Escherichia coli. Liu MY, et al. **J Biol Chem** 1997 Jul 11; 272(28):17502–10

A glycine–rich RNA–binding protein mediating cold–inducible suppression of mammalian cell growth. Nishiyama H, et al. **J Cell Biol** 1997 May 19;137(4):899–908

Defining the essential functional regions of the nucleoporin Nup145p. Emtage JL, et al. **J Cell Sci** 1997 Apr;110 (Pt 7):911–25

Genomic structure of a Y–specific ribonucleic acid binding motif–containing gene: a putative candidate for a subset of male infertility. Najmabadi H, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2159–64

Expression of HuD (a paraneoplastic encephalomyelitis antigen) mRNA in lung cancer. Cho JH, et al. **J Korean Med Sci** 1997 Aug;12(4):305–10

The effect of FMR1 CGG repeat interruptions on mutation frequency as measured by sperm typing. Kunst CB, et al. **J Med Genet** 1997 Aug;34(8):627–31

Differential effects of aromatic and charged residue substitutions in the RNA binding domains of the yeast poly(A)–binding protein. Deardorff JA, et al. **J Mol Biol** 1997 May 30;269(1):67–81

Molecular cloning and subcellular localisation of the snRNP–associated protein 69KD, a structural homologue of the proto–oncoproteins TLS and EWS with RNA and DNA–binding properties. Hackl W, et al. **J Mol Biol** 1996 Dec 20;264(5):843–51

The barley stripe mosaic virus 58–kilodalton beta(b) protein is a multifunctional RNA binding protein. Donald RG, et al. **J Virol** 1997 Feb;71(2):1538–46

Association of herpes simplex virus regulatory protein ICP22 with transcriptional complexes containing EAP, ICP4, RNA polymerase II, and viral DNA requires posttranslational modification by the U(L)13 proteinkinase. Leopardi R, et al. **J Virol** 1997 Feb;71(2):1133–9

Characterization of an ATPase activity in reovirus cores and its genetic association with core–shell protein lambda1. Noble S, et al. **J Virol** 1997 Mar;71(3):2182–91

Degeneracy in human multicopy RBM (YRRM), a candidate spermatogenesis gene. Prosser J, et al. **Mamm Genome** 1996 Nov;7(11):835–42

In vitro genetic analysis of RNA–binding proteins using phage display libraries. Laird–Offringa IA, et al. **Methods Enzymol** 1996;267:149–68

The trp RNA–binding attenuation protein (TRAP) regulates the steady–state levels of transcripts of the Bacillus subtilis folate operon. de Saizieu A, et al. **Microbiology** 1997 Mar; 143 (Pt 3):979–89

Isolation and characterization of Leishmania donovani calreticulin gene and its conservation of the RNA binding activity. Joshi M, et al. **Mol Biochem Parasitol** 1996 Oct 18;81(1):53–64

Purification, cloning, and expression of two closely related Trypanosoma brucei nucleic acid binding proteins. Zhang J, et al. **Mol Biochem Parasitol** 1997 Aug;87(2):145–58

The intracisternal A–particle proximal enhancer–binding protein activates transcription and is identical to the RNA– and DNA–binding protein p54nrb/NonO. Basu A, et al. **Mol Cell Biol** 1997 Feb;17(2):677–86

Regulated expression and RNA processing of transcripts from the Srp20 splicing factor gene during the cell cycle. Jumaa H, et al. **Mol Cell Biol** 1997 Jun;17(6):3116–24

The Sex–lethal early splicing pattern uses a default mechanism dependent on the alternative 5' splice sites. Zhu C, et al. **Mol Cell Biol** 1997 Mar;17(3):1674–81

The gene fl(2)d is needed for the sex–specific splicing of transformer pre–mRNA but not for double–sex pre–mRNA in Drosophila melanogaster. Granadino B, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):26–31

cynDAZLA: a cynomolgus monkey homologue of the human autosomal DAZ gene. Carani C, et al. **Mol Hum Reprod** 1997 Jun;3(6):479–83

Absence of DAZ gene mutations in cases of non–obstructed azoospermia. Vereb M, et al. **Mol Hum Reprod** 1997 Jan; 3(1):55–9

Surface proteins and a novel transcription factor regulate the expression of the S–layer gene in Thermus thermophilus HB8. Fernández–Herrero LA, et al. **Mol Microbiol** 1997 Apr;24(1):61–72

An RNA polymerase alpha subunit mutant impairs N–dependent transcriptional antitermination in Escherichia coli. Obuchowski M, et al. **Mol Microbiol** 1997 Jan; 23(2):211–22

DnaA protein stimulates polA gene expression in Escherichia coli. Quiñones A, et al. **Mol Microbiol** 1997 Mar;

23(6):1193–202

Antitermination of transcription of catabolic operons. Rutberg B. **Mol Microbiol** 1997 Feb;23(3):413–21 (71 ref.)

A human candidate spermatogenesis gene, RBM1, is conserved and amplified on the marsupial Y chromosome [published erratum appears in Nat Genet 1997 Apr;15(4):411] Delbridge ML, et al. **Nat Genet** 1997 Feb; 15(2):131–6

The DAZ gene cluster on the human Y chromosome arose from an autosomal gene that was transposed, repeatedly amplified and pruned. Saxena R, et al. **Nat Genet** 1996 Nov; 14(3):292–9

Protein alchemy: changing beta-sheet into alpha-helix [see comments] Dalal S, et al. **Nat Struct Biol** 1997 Jul; 4(7):548–52. Comment in: Nat Struct Biol 1997 Jul;4(7):512–4.

p72: a human nuclear DEAD box protein highly related to p68. Lamm GM, et al. **Nucleic Acids Res** 1996 Oct 1; 24(19):3739–47

The Elav-like proteins bind to AU-rich elements and to the poly(A) tail of mRNA. Ma WJ, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3564–9

Comparative sequence analysis of ribonucleases HII, III, II PH and D. Mian IS. **Nucleic Acids Res** 1997 Aug 15; 25(16):3187–95

Sce3, a suppressor of the Schizosaccharomyces pombe septation mutant cdc11, encodes a putative RNA-binding protein. Schmidt S, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3433–9

Optimal Tat-mediated activation of the HIV-1 LTR promoter requires a full-length TAR RNA hairpin. Verhoef K, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):496–502

Direct genetic selection of two classes of R17/MS2 coat proteins with altered capsid assembly properties and expanded RNA-binding activities. Wang S, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1649–57

Developmental regulation of CRD-BP, an RNA-binding protein that stabilizes c-myc mRNA in vitro. Leeds P, et al. **Oncogene** 1997 Mar 20;14(11):1279–86

Cloning of a gene highly overexpressed in cancer coding for a novel KH-domain containing protein. Müeller-Pillasch F, et al. **Oncogene** 1997 Jun 5; 14(22):2729–33

CSP41, a sequence-specific chloroplast mRNA binding protein, is an endoribonuclease. Yang J, et al. **Plant Cell** 1996 Aug;8(8):1409–20

Disruption analysis of the gene for a cold-regulated RNA-binding protein, rbpA1, in Anabaena: cold-induced initiation of the heterocyst differentiation pathway. Sato N, et al. **Plant Cell Physiol** 1996 Dec;37(8):1150–60

Differential regulation by low temperature of the gene for an RNA-binding protein, rbpA3, in the cyanobacterium Anabaena variabilis strain M3. Sato N, et al. **Plant Cell Physiol** 1997 Jan;38(1):81–6

A new Arabidopsis nucleic-acid-binding protein gene is highly expressed in dividing cells during development. Hecht V, et al. **Plant Mol Biol** 1997 May;34(1):119–24

Differential expression of pathogen-responsive genes encoding two types of glycine-rich proteins in barley. Molina A, et al. **Plant Mol Biol** 1997 Mar;33(5):803–10

Expression of RBM in the nuclei of human germ cells is dependent on a critical region of the Y chromosome long arm. Elliott DJ, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3848–53

Mouse cytoplasmic polyadenylylation element binding protein: an evolutionarily conserved protein that interacts with the cytoplasmic polyadenylylation elements of c-mos mRNA. Gebauer F, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14602–7

Distinct mechanisms of splicing regulation in vivo by the Drosophila protein Sex-lethal. Granadino B, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7343–8

A unique human gene that spans over 230 kb in the human chromosome 8p11–12 and codes multiple family proteins sharing RNA-binding motifs. Shimamoto A, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10913–7

Mutation of PTB binding sites causes misregulation of alternative 3' splice site selection in vivo. Pérez I, et al. **RNA** 1997 Jul;3(7):764–78

Tudor domains in proteins that interact with RNA. Ponting CP. **Trends Biochem Sci** 1997 Feb;22(2):51–2 (17 ref.)

The SR protein family: pleiotropic functions in pre-mRNA splicing. Valcárcel J, et al. **Trends Biochem Sci** 1996 Aug; 21(8):296–301 (49 ref.)

Decennial tails. Artzt K, et al. **Trends Genet** 1997 Jan; 13(1):10–1

RNA-binding proteins and human male infertility. Cooke HJ, et al. **Trends Genet** 1997 Mar;13(3):87–9 (30 ref.)

Emptying Pandora's box: cytosolic export and MHC degradation. Koszinowski UH. **Trends Microbiol** 1996 Sep; 4(9):338–9

A specific host cellular protein binding element near the 3' end of mouse hepatitis virus genomic RNA. Liu Q, et al. **Virology** 1997 May 26;232(1):74–85

Complementation of deletion of the vaccinia virus E3L gene by the Escherichia coli RNase III gene. Shors T, et al. **Virology** 1997 Jan 6;227(1):77–87

Host-range restriction of vaccinia virus E3L-specific deletion mutants. Beattie E, et al. **Virus Genes** 1996; 12(1):89–94

IMMUNOLOGY

Identification of autoantibodies to the I protein of the heterogeneous nuclear ribonucleoprotein complex in patients with systemic sclerosis. Montecucco C, et al. **Arthritis Rheum** 1996 Oct;39(10):1669–76

Changes in anti-HuD antibody titers in the long-term course in paraneoplastic sensory neuropathy. Yagi Y, et al. **Eur Neurol** 1997;37(2):122–3

Autoantibodies to the A/B proteins of the heterogeneous nuclear ribonucleoprotein complex: novel tools for the diagnosis of rheumatic diseases. Steiner G, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):314–9 (34 ref.)

Anti-Hu antibodies in patients with small-cell lung cancer: association with complete response to therapy and improved survival. Graus F, et al. **J Clin Oncol** 1997 Aug; 15(8):2866–72

The HuD paraneoplastic protein shares immunogenic regions between PEM/PSN patients and several strains and species of experimental animals. Sillevis Smitt P, et al. **J Neuroimmunol** 1996 Dec;71(1–2):199–206

Spontaneous neurological improvement in anti-Hu associated encephalomyelitis. Byrne T, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):276–8

Paraneoplastic encephalomyelitis: an update of the effects of the anti-Hu immune response on the nervous system and tumour [editorial] Voltz RD, et al. **J Neurol Neurosurg Psychiatry** 1997 Aug;63(2):133–6 (49 ref.)

Reversal of fortune for nascent proteins [news; comment] Bonifacino JS. **Nature** 1996 Dec 5;384(6608):405–6. Comment on: Nature 1996 Dec 5;384(6608):432–8.

Internalization of anti-Hu IgG is not Fc gamma receptor mediated. Hormigo A, et al. **Neurology** 1996 Aug; 47(2):607–9

Neuroblastoma-associated paraneoplastic syndrome with anti-Hu antineuronal antibodies presenting at the time of recurrence. Mpofu C, et al. **Pediatr Hematol Oncol** 1996 Jul-Aug;13(4):369–73

ISOLATION & PURIFICATION

Isolation, characterization, and functional studies of rat liver iron regulatory protein 1. Eisenstein RS, et al. **Arch Biochem Biophys** 1997 Jul 1;343(1):81–91

Identification and structure of activated-platelet protein-1, a protein with RNA-binding domain motifs that is expressed by activated platelets. Houng AK, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):209–18

Purification and characterisation of cathepsin B mRNA 3'-untranslated-region-binding protein (CBBP), a protein that represses cathepsin B mRNA translation. Yano T, et al. **Eur J Biochem** 1997 Apr 15;245(2):260–5

A transforming growth factor-beta regulable RNA-binding protein interacts specifically with germline Ig alpha transcripts. Edmiston JS, et al. **Int Immunol** 1997 Mar; 9(3):427–33

Purification of a RNA-binding protein from rat liver. Identification as ferritin L chain and determination of the RNA/protein binding characteristics. Heise T, et al. **J Biol Chem** 1997 Aug 8;272(32):20222–9

Purification of the Saccharomyces cerevisiae cleavage/polyadenylation factor I. Separation into two components that are required for both cleavage and polyadenylation of mRNA 3' ends. Kessler MM, et al. **J Biol Chem** 1996 Oct 25;271(43):27167–75

Purification of human double-stranded RNA-specific editase 1 (hRED1) involved in editing of brain glutamate receptor B pre-mRNA. O'Connell MA, et al. **J Biol Chem** 1997 Jan 3;272(1):473–8

Purification, cloning, and expression of two closely related Trypanosoma brucei nucleic acid binding proteins. Zhang J, et al. **Mol Biochem Parasitol** 1997 Aug;87(2):145–58

Conserved circadian elements in phylogenetically diverse algae. Mittag M. **Proc Natl Acad Sci U S A** 1996 Dec 10; 93(25):14401–4

METABOLISM

TIA-1 expression in lymphoid neoplasms. Identification of subsets with cytotoxic T lymphocyte or natural killer cell differentiation. Felgar RE, et al. **Am J Pathol** 1997 Jun; 150(6):1893–900

Intracellular iron regulates iron absorption and IRP activity in intestinal epithelial (Caco-2) cells. Arredondo M, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G275–80

Analysis of the binding of ligands to large numbers of sites: the binding of tryptophan to the 11 sites of the trp RNA-binding attenuation protein. Saroff HA, et al. **Anal Biochem** 1997 Apr 5;247(1):138–42

Involvement of a 50-kDa mRNP protein from Saccharomyces cerevisiae in mRNA binding to ribosomes. Triana L, et al. **Arch Biochem Biophys** 1997 Aug 1; 344(1):1–10

Nuclear proteins bind to poliovirus 5' untranslated region [published erratum appears in Arch Med Res 1996 Winter;27(4):589] Gutiérrez-Escolano L, et al. **Arch Med Res** 1996 Autumn;27(3):413–9

Structure and function of rotavirus NSP1. Taniguchi K, et al. **Arch Virol Suppl** 1996;12:53–8 (22 ref.)

Identification of two nuclear proteins which bind to RNA CUG repeats: significance for myotonic dystrophy. Bhagwati S, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):55–62

Phosphorylation can modulate the association of different sets of RNA binding proteins with the Vg1 localization signal RNA. Chen SM, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):419–23

The eukaryotic translation initiation factor 5, eIF-5, a protein from Zea mays, containing a zinc-finger structure, binds nucleic acids in a zinc-dependent manner. López Ribera I, et al. **Biochem Biophys Res Commun** 1997 Jul 18; 236(2):510–6

Recognition determinants for proteins and antibiotics within 23S rRNA. Douthwalte S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):1179–85 (56 ref.)

Structural and functional implications in the eubacterial ribosome as revealed by protein-rRNA and antibiotic contact sites. Wittmann-Liebold B, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):1187–97

Evidence for a novel cytoplasmic tRNA-protein complex containing the KH-multidomain protein vigilin. Kruse C, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):247–52

Divergent effects of alpha 1-antitrypsin on the regulation of iron metabolism in human erythroleukaemic (K562) and myelomonocytic (THP-1) cells. Weiss G, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):897–902

Binding properties of human immunodeficiency virus type-2 (HIV-2) RNA corresponding to the packaging signal to its nucleocapsid protein. Tsukahara T, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):33–42

Modulation of the hepatic expression of the estrogen-regulated mRNA stabilizing factor by estrogenic and antiestrogenic nonsteroidal xenobiotics. Ratnasabapathy R, et al. **Biochem Pharmacol** 1997 May 15; 53(10):1425–34

Modulation of transferrin receptor expression by dexrazoxane (ICRF-187) via activation of iron regulatory protein. Weiss G, et al. **Biochem Pharmacol** 1997 May 15;53(10):1419–24

Modulation of iron-regulatory protein (IRP) activity in monocytes by nitric oxide, phorbol ester and gamma-interferon. Brock JH, et al. **Biochem Soc Trans** 1997 May;25(2):193S

A model of the iron responsive element RNA hairpin loop structure determined from NMR and thermodynamic data. Laing LG, et al. **Biochemistry** 1996 Oct 22;35(42):13586–96

A single amino acid change in protein synthesis initiation factor 4G renders cap-dependent translation resistant to picornaviral 2A proteases. Lamphear BJ, et al. **Biochemistry** 1996 Dec 10;35(49):15726–33

Multiple RRMs contribute to RNA binding specificity and affinity for polypyrimidine tract binding protein. Pérez I, et al. **Biochemistry** 1997 Sep 30;36(39):11881–90

Expression and biochemical characterization of iron regulatory proteins 1 and 2 in Saccharomyces cerevisiae. Phillips JD, et al. **Biochemistry** 1996 Dec 10; 35(49):15704–14

The iron-sulfur cluster of iron regulatory protein 1 modulates the accessibility of RNA binding and phosphorylation sites. Schalinske KL, et al. **Biochemistry** 1997 Apr 1; 36(13):3950–8

RNA-binding properties of an unusual ribosomal protein TL5 from Thermus thermophilus. Meshcheryakov VA, et al. **Biochemistry (Mosc)** 1997 May;62(5):537–42

Sequence specific binding of cytosolic proteins to a 12 nucleotide sequence in the 5'untranslated region of FMR1 mRNA. Iber H. **Biochim Biophys Acta** 1996 Dec 11; 1309(3):167–73

The role of thymidylate synthase as an RNA binding protein. Chu E, et al. **Bioessays** 1996 Mar;18(3):191–8 (66 ref.)

Thermal unfolding of the N-terminal RNA binding domain of the human U1A protein studied by differential scanning calorimetry. Lu J, et al. **Biophys Chem** 1997 Feb 28; 64(1–3):111–9

Increased granulocyte-macrophage colony-stimulating factor mRNA instability in cord versus adult mononuclear cells is translation-dependent and associated with increased levels of A + U-rich element binding factor. Buzby JS, et al. **Blood** 1996 Oct 15;88(8):2889–97

Regulation of cellular iron metabolism by erythropoietin: activation of iron-regulatory protein and upregulation of transferrin receptor expression in erythroid cells. Weiss G, et al. **Blood** 1997 Jan 15;89(2):680–7

A structural model for the HIV-1 Rev-RRE complex deduced from altered-specificity rev variants isolated by a rapid genetic strategy. Jain C, et al. **Cell** 1996 Oct 4; 87(1):115–25

Radicicol inhibits tyrosine phosphorylation of the mitotic Src substrate Sam68 and retards subsequent exit from mitosis of Src-transformed cells. Pillay I, et al. **Cell Growth Differ** 1996 Nov;7(11):1487–99

New features in RNA recognition: a Tat-TAR complex. Wemmer DE. **Chem Biol** 1996 Jan;3(1):17–9 (12 ref.)

Nuclear localization of a cap-binding protein complex. Izaurralde E, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:669–75

Signal sequences that target nuclear import and nuclear export of pre-mRNA-binding proteins. Michael WM, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:663–8

HIV Rev uses a conserved cellular protein export pathway for the nucleocytoplasmic transport of viral RNAs. Fritz CC, et al. **Curr Biol** 1996 Jul 1;6(7):848–54

Macromolecular complexes: how RNA and protein get together. Woodson SA. **Curr Biol** 1996 Jan 1;6(1):23–5 (9 ref.)

Drosophila development: homeodomains and translational

control. Zamore PD, et al. **Curr Biol** 1996 Jul 1;6(7):773-5 (17 ref.)

The C. elegans MEX-1 protein is present in germline blastomeres and is a P granule component. Guedes S, et al. **Development** 1997 Feb;124(3):731-9

Localization of Xcat-2 RNA, a putative germ plasm component, to the mitochondrial cloud in Xenopus stage I oocytes. Zhou Y, et al. **Development** 1996 Sep; 122(9):2947-53

Oncogenic potential of TAR RNA binding protein TRBP and its regulatory interaction with RNA-dependent protein kinase PKR. Benkirane M, et al. **EMBO J** 1997 Feb 3; 16(3):611-24

A CCHC metal-binding domain in Nanos is essential for translational regulation. Curtis D, et al. **EMBO J** 1997 Feb 17;16(4):834-43

Ligand interactions with eukaryotic translation initiation factor 2: role of the gamma-subunit. Erickson FL, et al. **EMBO J** 1996 Nov 15;15(22):6311-20

RNA-RNA interaction is required for the formation of specific bicoid mRNA 3' UTR-STAUFEN ribonucleoprotein particles. Ferrandon D, et al. **EMBO J** 1997 Apr 1;16(7):1751-8

The splicing factor SRp20 modifies splicing of its own mRNA and ASF/SF2 antagonizes this regulation. Jumaa H, et al. **EMBO J** 1997 Aug 15;16(16):5077-85

Identification of HuR as a protein implicated in AUUUA-mediated mRNA decay. Myer VE, et al. **EMBO J** 1997 Apr 15;16(8):2130-9

Mex67p, a novel factor for nuclear mRNA export, binds to both poly(A)+ RNA and nuclear pores. Segref A, et al. **EMBO J** 1997 Jun 2;16(11):3256-71

The yeast protein Arc1p binds to tRNA and functions as a cofactor for the methionyl- and glutamyl-tRNA synthetases. Simos G, et al. **EMBO J** 1996 Oct 1; 15(19):5437-48

General RNA binding proteins render translation cap dependent [published erratum appears in EMBO J 1997 Feb 17;16(4):896] Svitkin YV, et al. **EMBO J** 1996 Dec 16;15(24):7147-55

Association of the yeast poly(A) tail binding protein with translation initiation factor eIF-4G. Tarun SZ Jr, et al. **EMBO J** 1996 Dec 16;15(24):7168-77

Two functionally distinct domains generated by in vivo cleavage of Nup145p: a novel biogenesis pathway for nucleoporins. Teixeira MT, et al. **EMBO J** 1997 Aug 15; 16(16):5086-97

Sequence determinants for hnRNP I protein nuclear localization. Romanelli MG, et al. **Exp Cell Res** 1997 Aug 25;235(1):300-4

mRNP3 and mRNP4 are phosphorylatable by casein kinase II in Xenopus oocytes, but phosphorylation does not modify RNA-binding affinity. Deschamps S, et al. **FEBS Lett** 1997 Aug 4;412(3):495-500

Enhancement of nucleocytoplasmic export of HTLV-1 Rex mRNA through cis and trans interactions of the mRNA with the complex of Rex protein and Rex-responsive element. Fu L, et al. **FEBS Lett** 1996 Oct 28;396(1):47-52

Expression and biochemical analyses of the recombinant potato virus X 25K movement protein. Kalinina NO, et al. **FEBS Lett** 1996 Nov 11;397(1):75-8

Ras GTPase-activating protein-associated p62 is a major v-Src-SH3-binding protein. Williger BT, et al. **FEBS Lett** 1997 Feb 10;403(1):35-9

Nitric oxide donors modulate ferritin and protect endothelium from oxidative injury. Juckett MB, et al. **Free Radic Biol Med** 1996;20(1):63-73

Structural properties and RNA-binding activities of two RNA recognition motifs of a mouse neural RNA-binding protein, mouse-Musashi-1. Kurihara Y, et al. **Gene** 1997 Feb 20;186(1):21-7

RNA binding analysis of yeast REF2 and its two-hybrid interaction with a new gene product, FIR1. Russnak R, et al. **Gene Expr** 1996;6(4):241-58

A one-hybrid system for detecting RNA-protein interactions. Wilhelm JE, et al. **Genes Cells** 1996 Mar; 1(3):317-23

The alternative splicing factor PSI regulates P-element third intron splicing in vivo. Adams MD, et al. **Genes Dev** 1997 Jan 1;11(1):129-38

A protein of the SR family of splicing factors binds extensively to exonic Balbiani ring pre-mRNA and accompanies the RNA from the gene to the nuclear pore. Alzhanova-Ericsson AT, et al. **Genes Dev** 1996 Nov 15; 10(22):2881-93

The 30-kD subunit of mammalian cleavage and polyadenylation specificity factor and its yeast homolog are RNA-binding zinc finger proteins. Barabino SM, et al. **Genes Dev** 1997 Jul 1;11(13):1703-16

Involvement of the carboxyl terminus of vertebrate poly(A) polymerase in U1A autoregulation and in the coupling of splicing and polyadenylation. Gunderson SI, et al. **Genes Dev** 1997 Mar 15;11(6):761-73

The fragile X mental retardation protein is a ribonucleoprotein containing both nuclear localization and nuclear export signals. Eberhart DE, et al. **Hum Mol Genet** 1996 Aug;5(8):1083-91

FMRP is associated to the ribosomes via RNA. Tamanini F, et al. **Hum Mol Genet** 1996 Jun;5(6):809-13

BglG, the response regulator of the Escherichia coli bgl operon, is phosphorylated on a histidine residue. Amster-Choder O, et al. **J Bacteriol** 1997 Sep; 179(17):5621-4

Interaction of the trp RNA-Binding attenuation protein (TRAP) of Bacillus subtilis with RNA: effects of the number of GAG repeats, the nucleotides separating adjacent repeats, and RNA secondary structure. Babitzke P, et al. **J Bacteriol** 1996 Sep;178(17):5159-63

The trp RNA-binding attenuation protein regulates TrpG synthesis by binding to the trpG ribosome binding site of Bacillus subtilis. Du H, et al. **J Bacteriol** 1997 Apr; 179(8):2582-6

The chlamydial EUO gene encodes a histone H1-specific protease. Kaul R, et al. **J Bacteriol** 1997 Sep; 179(18):5928-34

A temperature-sensitive trpS mutation interferes with trp RNA-binding attenuation protein (TRAP) regulation of trp gene expression in Bacillus subtilis. Lee AI, et al. **J Bacteriol** 1996 Nov;178(22):6518-24

The global regulator CsrA of Escherichia coli is a specific mRNA-binding protein. Liu MY, et al. **J Bacteriol** 1997 Jul;179(14):4639-42

Protein-RNA and protein-protein interactions of the Drosophila sex-lethal mediated by its RNA-binding domains. Sakashita E, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):1028-33

Polycistronic expression and RNA-binding specificity of the C. elegans homologue of the spliceosome-associated protein SAP49. Tanaka Y, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):739-45

Role of an RNA-binding protein in import of tRNA into Leishmania mitochondria. Adhya S, et al. **J Biol Chem** 1997 Aug 22;272(34):21396-402

Preferential binding of poly(A)-binding protein 1 to an inhibitory RNA element in the human immunodeficiency virus type 1 gag mRNA. Afonina E, et al. **J Biol Chem** 1997 Jan 24;272(4):2307-11

The trp RNA-binding attenuation protein (TRAP) from Bacillus subtilis binds to unstacked trp leader RNA. Baumann C, et al. **J Biol Chem** 1997 Aug 8;272(32):19863-9

Characterization of the nucleoside triphosphate phosphohydrolase and helicase activities of the reovirus lambda1 protein. Bisaillon M, et al. **J Biol Chem** 1997 Jul 18;272(29):18298-303

Redox modulation of iron regulatory proteins by peroxynitrite. Bouton C, et al. **J Biol Chem** 1997 Aug 8; 272(32):19969-75

Binding of a 40-kDa protein to the N-myc 3'-untranslated region correlates with enhanced N-myc expression in human neuroblastoma. Chagnovich D, et al. **J Biol Chem** 1996 Dec 27;271(52):33580-6

Differential activity of ELAV-like RNA-binding proteins in human neuroblastoma. Chagnovich D, et al. **J Biol Chem** 1996 Dec 27;271(52):33587-91

The localization of the phosphorylation site of BglG, the response regulator of the Escherichia coli bgl sensory system. Chen Q, et al. **J Biol Chem** 1997 Jul 11; 272(28):17263-8

Resistance to the antitumor agent gallium nitrate in human leukemic cells is associated with decreased gallium/iron uptake, increased activity of iron regulatory protein-1, and decreased ferritin production. Chitambar CR, et al. **J Biol Chem** 1997 May 2;272(18):12151-7

The Elav-like proteins bind to a conserved regulatory element in the 3'-untranslated region of GAP-43 mRNA. Chung S, et al. **J Biol Chem** 1997 Mar 7;272(10):6593-8

Specific interaction in vitro and in vivo of glyceraldehyde-3-phosphate dehydrogenase and LA protein with cis-acting RNAs of human parainfluenza virus type 3. De BP, et al. **J Biol Chem** 1996 Oct 4; 271(40):24728-35

Vigilin, a ubiquitous protein with 14 K homology domains, is the estrogen-inducible vitellogenin mRNA 3'-untranslated region-binding protein. Dodson RE, et al. **J Biol Chem** 1997 May 9;272(19):12249-52

Phage display of RNA binding zinc fingers from transcription factor IIIA. Friesen WJ, et al. **J Biol Chem** 1997 Apr 25; 272(17):10994-7

Inducers of erythroleukemic differentiation cause messenger RNAs that lack poly(A)-binding protein to accumulate in translationally inactive, salt-labile 80 S ribosomal complexes. Hensold JO, et al. **J Biol Chem** 1996 Sep 20; 271(38):23246-54

NIPP-1, a nuclear inhibitory subunit of protein phosphatase-1, has RNA-binding properties. Jagiello I, et al. **J Biol Chem** 1997 Aug 29;272(35):22067-71

Poly(A) tail shortening by a mammalian poly(A)-specific 3'-exoribonuclease. Körner CG, et al. **J Biol Chem** 1997 Apr 18;272(16):10448-56

Identification of an mRNA-binding protein and the specific elements that may mediate the pH-responsive induction of renal glutaminase mRNA. Laterza OF, et al. **J Biol Chem** 1997 Sep 5;272(36):22481-8

Translation initiation factors eIF-iso4G and eIF-4B interact with the poly(A)-binding protein and increase its RNA binding activity. Le H, et al. **J Biol Chem** 1997 Jun 27; 272(26):16247-55

Hypoxia-inducible protein binding to vascular endothelial growth factor mRNA and its modulation by the von Hippel-Lindau protein. Levy AP, et al. **J Biol Chem** 1996 Oct 11;271(41):25492-7

The RNA molecule CsrB binds to the global regulatory protein CsrA and antagonizes its activity in Escherichia coli. Liu MY, et al. **J Biol Chem** 1997 Jul 11; 272(28):17502-10

Functionally distinct double-stranded RNA-binding domains associated with alternative splice site variants of the interferon-inducible double-stranded RNA-specific adenosine deaminase. Liu Y, et al. **J Biol Chem** 1997 Feb 14;272(7):4419-28

Translational repression dependent on the interaction of the Xenopus Y-box protein FRGY2 with mRNA. Role of the cold shock domain, tail domain, and selective RNA sequence recognition. Matsumoto K, et al. **J Biol Chem** 1996 Sep 13;271(37):22706-12

KIS is a protein kinase with an RNA recognition motif. Maucuer A, et al. **J Biol Chem** 1997 Sep 12;272(37):23151-6

Differences in the regulation of iron regulatory protein-1 (IRP-1) by extra- and intracellular oxidative stress. Pantopoulos K, et al. **J Biol Chem** 1997 Apr 11; 272(15):9802-8

Characterization of the calf thymus hairpin-binding factor involved in histone pre-mRNA 3' end processing. Schaller A, et al. **J Biol Chem** 1997 Apr 18;272(16):10435-41

Evidence that a specific interaction between an 18-base cis-element in the 5'-untranslated region of human folate receptor-alpha mRNA and a 46-kDa cytosolic trans-factor is critical for translation. Sun XL, et al. **J Biol Chem** 1996 Oct 11;271(41):25539-47

Evolution of RNA-binding specificity in T4 DNA polymerase. Wang CC, et al. **J Biol Chem** 1997 Jul 11; 272(28):17703-10

Sex-lethal interactions with protein and RNA. Roles of glycine-rich and RNA binding domains. Wang J, et al. **J Biol Chem** 1997 Aug 29;272(35):22227-35

A translation regulatory particle containing the Xenopus oocyte Y box protein mRNP3+4. Yurkova MS, et al. **J Biol Chem** 1997 Apr 18;272(16):10870-6

Cleavage factor II of Saccharomyces cerevisiae contains homologues to subunits of the mammalian Cleavage/polyadenylation specificity factor and exhibits sequence-specific, ATP-dependent interaction with precursor RNA. Zhao J, et al. **J Biol Chem** 1997 Apr 18; 272(16):10831-8

Heat shock inhibits pre-rRNA processing at the primary site in vitro and alters the activity of some rRNA binding proteins. Ghoshal K, et al. **J Cell Biochem** 1996 Sep 15; 62(4):506-15

Splicing factors associate with hyperphosphorylated RNA polymerase II in the absence of pre-mRNA. Kim E, et al. **J Cell Biol** 1997 Jan 13;136(1):19-28

Interaction of AU-rich sequence binding proteins with actin: possible involvement of the actin cytoskeleton in lymphokine mRNA turnover. Henics T, et al. **J Cell Physiol** 1997 Oct;173(1):19-27

TLS (FUS) binds RNA in vivo and engages in nucleo-cytoplasmic shuttling. Zinszner H, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1741-50

The HCMV gene products US11 and US2 differ in their ability to attack allelic forms of murine major histocompatibility complex (MHC) class I heavy chains. Machold RP, et al. **J Exp Med** 1997 Jan 20;185(2):363-6

Differential effects of B cell receptor and B cell receptor-FcgammaRIIB1 engagement on docking of Csk to GTPase-activating protein (GAP)-associated p62. Vuica M, et al. **J Exp Med** 1997 Jul 21;186(2):259-67

Mapping of the RNA-binding domain of the cucumber mosaic virus movement protein. Vaquero C, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):2095-9

The structure of an RNA "kissing" hairpin complex of the HIV TAR hairpin loop and its complement. Chang KY, et al. **J Mol Biol** 1997 May 30;269(1):52-66

Differential effects of aromatic and charged residue substitutions in the RNA binding domains of the yeast poly(A)-binding protein. Deardorff JA, et al. **J Mol Biol** 1997 May 30;269(1):67-81

A Xenopus zinc finger protein that specifically binds dsRNA and RNA-DNA hybrids. Finerty PJ Jr, et al. **J Mol Biol** 1997 Aug 15;271(2):195-208

Molecular cloning and subcellular localisation of the snRNP-associated protein 69KD, a structural homologue of the proto-oncoproteins TLS and EWS with RNA and DNA-binding properties. Hackl W, et al. **J Mol Biol** 1996 Dec 20;264(5):843-51

Alanine-scanning mutagenesis of Bacillus subtilis trp RNA-binding attenuation protein (TRAP) reveals residues involved in tryptophan binding and RNA binding. Yang M, et al. **J Mol Biol** 1997 Aug 1;270(5):696-710

Neural cell type-specific expression of QKI proteins is altered in quakingviable mutant mice. Hardy RJ, et al. **J Neurosci** 1996 Dec 15;16(24):7941-9

Dietary iron intake modulates the activity of iron regulatory proteins and the abundance of ferritin and mitochondrial aconitase in rat liver. Chen OS, et al. **J Nutr** 1997 Feb; 127(2):238-48

Visualization of poly(A)-binding protein complex formation with poly(A) RNA using atomic force microscopy. Smith BL, et al. **J Struct Biol** 1997 Jul;119(2):109-17

Characterization of an abundant, unique 1.7-kilobase bovine herpesvirus 4 (BHV-4) late RNA and mapping of a BHV-4 IE2 transactivator-binding site in its promoter-regulatory region. Bermudez-Cruz R, et al. **J Virol** 1997 Jan; 71(1):527-38

Translation elongation factor-1 alpha interacts with the 3' stem-loop region of West Nile virus genomic RNA. Blackwell JL, et al. **J Virol** 1997 Sep;71(9):6433-44

Specific repression of Tax trans-activation by TAR RNA-binding protein TRBP. Donzeau M, et al. **J Virol** 1997 Apr;71(4):2628-35

Attenuating mutations in the poliovirus 5' untranslated region alter its interaction with polypyrimidine tract-binding protein. Gutiérrez AL, et al. **J Virol** 1997 May; 71(5):3826-33

ATPase, GTPase, and RNA binding activities associated with the 206-kilodalton protein of turnip yellow mosaic virus. Kadaré G, et al. **J Virol** 1996 Nov;70(11):8169-74

Double-stranded RNA is a trigger for apoptosis in vaccinia virus-infected cells. Kibler KV, et al. **J Virol** 1997 Mar; 71(3):1992-2003

The RGG box motif of the herpes simplex virus ICP27 protein mediates an RNA-binding activity and determines in vivo methylation. Mears WE, et al. **J Virol** 1996 Nov; 70(11):7445-53

Rotavirus VP1 alone specifically binds to the 3' end of viral mRNA, but the interaction is not sufficient to initiate minus-strand synthesis. Patton JT. **J Virol** 1996 Nov; 70(11):7940-7

Specific interaction of polypyrimidine tract-binding protein with the extreme 3'-terminal structure of the hepatitis C virus genome, the 3'X. Tsuchihara K, et al. **J Virol** 1997 Sep;71(9):6720-6

The carboxyl terminus of the human foamy virus Gag protein contains separable nucleic acid binding and nuclear transport domains. Yu SF, et al. **J Virol** 1996 Dec; 70(12):8255-62

Interaction of erythropoietin RNA binding protein with erythropoietin RNA requires an association with heat shock protein 70. Scandurro AB, et al. **Kidney Int** 1997 Feb;51(2):579-84

Dosage compensation in Drosophila: the X chromosome binding of MSL-1 and MSL-2 in female embryos is prevented by the early expression of the Sxl gene. McDowell KA, et al. **Mech Dev** 1996 Jun;57(1):113-9

Interplay between NO and [Fe-S] clusters: relevance to biological systems. Drapier JC. **Methods** 1997 Mar; 11(3):319-29

In vivo footprinting of the interaction of proteins with DNA and RNA. Grange T, et al. **Methods** 1997 Feb;11(2):151-63

Randomization and selection of RNA to identify targets for RRM RNA-binding proteins and antibodies. Keene JD. **Methods Enzymol** 1996;267:367-83

Enhancement of ribozyme function by RNA binding proteins. Lee NS, et al. **Methods Mol Biol** 1997;74:275-9

RNA-protein interactions in regulation of picornavirus RNA translation. Belsham GJ, et al. **Microbiol Rev** 1996 Sep; 60(3):499-511 (159 ref.)

Endothelial cytosolic proteins bind to the 3' untranslated region of endothelial nitric oxide synthase mRNA: regulation by tumor necrosis factor alpha. Alonso J, et al. **Mol Cell Biol** 1997 Oct;17(10):5719-26

Mitochondrial glutamate dehydrogenase from Leishmania tarentolae is a guide RNA-binding protein. Bringaud F, et al. **Mol Cell Biol** 1997 Jul;17(7):3915-23

PAN3 encodes a subunit of the Pab1p-dependent poly(A) nuclease in Saccharomyces cerevisiae. Brown CE, et al. **Mol Cell Biol** 1996 Oct;16(10):5744-53

The neuronal RNA binding protein Nova-1 recognizes specific RNA targets in vitro and in vivo. Buckanovich RJ, et al. **Mol Cell Biol** 1997 Jun;17(6):3194-201

The polypyrimidine tract binding protein binds upstream of neural cell-specific c-src exon N1 to repress the splicing of the intron downstream. Chan RC, et al. **Mol Cell Biol** 1997 Aug;17(8):4667-76

Self-association of the single-KH-domain family members Sam68, GRP33, GLD-1, and Qk1: role of the KH domain. Chen T, et al. **Mol Cell Biol** 1997 Oct;17(10):5707-18

C-terminal truncations of the yeast nucleoporin Nup145p produce a rapid temperature-conditional mRNA export defect and alterations to nuclear structure [published erratum appears in Mol Cell Biol 1997 Apr;17(4):2347-50] Dockendorff TC, et al. **Mol Cell Biol** 1997 Feb;17(2):906-20

Interaction between the human nuclear cap-binding protein complex and hnRNP F. Gamberi C, et al. **Mol Cell Biol** 1997 May;17(5):2587-97

Involvement of a tissue-specific RNA recognition motif protein in Drosophila spermatogenesis. Haynes SR, et al. **Mol Cell Biol** 1997 May;17(5):2708-15

Identification of AUF1 (heterogeneous nuclear ribonucleoprotein D) as a component of the alpha-globin mRNA stability complex. Kiledjian M, et al. **Mol Cell Biol** 1997 Aug;17(8):4870-6

An RNA-binding protein recognizes a mammalian selenocysteine insertion sequence element required for cotranslational incorporation of selenocysteine. Lesoon A, et al. **Mol Cell Biol** 1997 Apr;17(4):1977-85

Characterization of a beta-actin mRNA zipcode-binding protein. Ross AF, et al. **Mol Cell Biol** 1997 Apr; 17(4):2158-65

The decline in human Alu retroposition was accompanied by an asymmetric decrease in SRP9/14 binding to dimeric Alu RNA and increased expression of small cytoplasmic Alu RNA. Sarrowa J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1144-51

Posttranscriptional regulation of urokinase receptor mRNA: identification of a novel urokinase receptor mRNA binding protein in human mesothelioma cells. Shetty S, et al. **Mol Cell Biol** 1997 Mar;17(3):1075-83

A specific RNA hairpin loop structure binds the RNA recognition motifs of the Drosophila SR protein B52. Shi H, et al. **Mol Cell Biol** 1997 May;17(5):2649-57

Adhesion-dependent regulation of an A+U-rich element-binding activity associated with AUF1. Sirenko OI, et al. **Mol Cell Biol** 1997 Jul;17(7):3898-906

RNA recognition by the human polyadenylation factor CstF. Takagaki Y, et al. **Mol Cell Biol** 1997 Jul;17(7):3907-14

Role of the coat protein-RNA interaction in the life cycle of bacteriophage MS2. Peabody DS. **Mol Gen Genet** 1997 Apr 28;254(4):358-64

RbfA, a 30S ribosomal binding factor, is a cold-shock protein whose absence triggers the cold-shock response. Jones PG, et al. **Mol Microbiol** 1996 Apr;20(2):295-311

Purification of recombinant Chlamydia trachomatis histone H1-like protein Hc2, and comparative functional analysis of Hc2 and Hc1. Pedersen LB, et al. **Mol Microbiol** 1996 Apr;20(2):295-311

Ribosomal S6 kinase p90rsk and mRNA cap-binding protein eIF4E phosphorylations correlate with MAP kinase activation during meiotic reinitiation of mouse oocytes. Gavin AC, et al. **Mol Reprod Dev** 1997 Mar;46(3):383-91

Germ cell-specific DNA and RNA binding proteins p48/52 are expressed at specific stages of male germ cell development and are present in the chromatoid body. Oko R, et al. **Mol Reprod Dev** 1996 May;44(1):1-13

Inhibition of cell proliferation by an RNA ligand that selectively blocks E2F function. Ishizaki J, et al. **Nat Med** 1996 Dec;2(12):1386-9

New RNA recognition features revealed in ancient ribosomal proteins [news] Yonath A, et al. **Nat Struct Biol** 1997 Jan; 4(1):3-5 (23 ref.)

Sequence-specific RNA binding by bicoid [letter] Chan SK, et al. **Nature** 1997 Aug 14;388(6643):634

Transcription factor TFIID recruits factor CPSF for formation of 3' end of mRNA. Dantonel JC, et al. **Nature** 1997 Sep 25;389(6649):399-402

Sex lethal controls dosage compensation in Drosophila by a non-splicing mechanism. Kelley RL, et al. **Nature** 1997 May 8;387(6629):195-9

Two different RNA binding activities for the AU-rich element and the poly(A) sequence of the mouse neuronal protein mHuC. Abe R, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4895-901

Structure, tissue distribution and genomic organization of the murine RRM-type RNA binding proteins TIA-1 and TIAR. Beck AR, et al. **Nucleic Acids Res** 1996 Oct 1; 24(19):3829-35

A sensitive procedure for mapping the boundaries of RNA elements binding in vitro translated proteins defines a minimal hepatitis B virus encapsidation signal. Beck J, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4364-6

Identification of proteins binding specifically to the 3'-untranslated region of granulocyte/macrophage-colony stimulating factor mRNA. Bichsel VE, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2417-23

Characterization of DbpA, an Escherichia coli DEAD box protein with ATP independent RNA unwinding activity. Böddeker N, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):537-45

The SRP9/14 subunit of the human signal recognition particle binds to a variety of Alu-like RNAs and with higher affinity than its mouse homolog. Bovia F, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):318-26

The mouse poly(C)-binding protein exists in multiple isoforms and interacts with several RNA-binding proteins. Funke B, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3821-8

Identification of two proteins that bind to a pyrimidine-rich sequence in the 3'-untranslated region of GAP-43 mRNA. Irwin N, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1281-8

A yeast cap binding protein complex (yCBC) acts at an early step in pre-mRNA splicing. Lewis JD, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3332-6

Chloroplast endoribonuclease p54 involved in RNA 3'-end processing is regulated by phosphorylation and redox state. Liere K, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2403-8

Bacteriophage T4 regA protein binds RNA as a monomer, overcoming dimer interactions. Phillips CA, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4319-26

Synthesis of a fluorescent 7-methylguanosine analog and a fluorescence spectroscopic study of its reaction with wheatgerm cap binding proteins. Ren J, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3629-34

MS2 coat protein mutants which bind Qbeta RNA. Spingola M, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2808-15

Location of the internal ribosome entry site in the 5' non-coding region of the immunoglobulin heavy-chain binding protein (BiP) mRNA: evidence for specific RNA-protein interactions. Yang Q, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2800-7

RNA-protein interactions within the 3 ' untranslated region of vimentin mRNA. Zehner ZE, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3362-70

The Nck SH2/SH3 adaptor protein is present in the nucleus and associates with the nuclear protein SAM68. Lawe DC, et al. **Oncogene** 1997 Jan 16;14(2):223-31

The eIF4E-binding proteins 1 and 2 are negative regulators of cell growth. Rousseau D, et al. **Oncogene** 1996 Dec 5; 13(11):2415-20

A pollen-, ovule-, and early embryo-specific poly(A) binding protein from Arabidopsis complements essential functions in yeast. Belostotsky DA, et al. **Plant Cell** 1996 Aug;8(8):1261-75

Characterization of a novel arginine/serine-rich splicing factor in Arabidopsis. Lopato S, et al. **Plant Cell** 1996 Dec; 8(12):2255-64

CSP41, a sequence-specific chloroplast mRNA binding protein, is an endoribonuclease. Yang J, et al. **Plant Cell** 1996 Aug;8(8):1409-20

Poly(rC) binding protein 2 binds to stem-loop IV of the poliovirus RNA 5' noncoding region: identification by automated liquid chromatography-tandem mass spectrometry. Blyn LB, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11115-20

Karyopherin beta2 mediates nuclear import of a mRNA binding protein. Bonifaci N, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5055-60

The p20 and Ded1 proteins have antagonistic roles in eIF4E-dependent translation in Saccharomyces cerevisiae. de la Cruz J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5201-6

RNA-dependent phosphorylation of a nuclear RNA binding protein. Fung PA, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1064-8

In vivo analysis of the functional domains of the Drosophila splicing regulator RBP1. Heinrichs V, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):115-20

mRNA binding protein mrnp 41 localizes to both nucleus and cytoplasm. Kraemer D, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9119-24

SC35-mediated reconstitution of splicing in U2AF-depleted nuclear extract. MacMillan AM, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):133-6

The major yeast poly(A)-binding protein is associated with cleavage factor IA and functions in premessenger RNA 3'-end formation. Minvielle-Sebastia L, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7897-902

Complex formation between stage-specific oocyte factors and a Xenopus mRNA localization element. Mowry KL. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14608-13

The essential yeast RNA binding protein Np13p is methylated. Siebel CW, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13641-6

Sequence-specific RNA binding by an SR protein requires RS domain phosphorylation: creation of an SRp40-specific splicing enhancer. Tacke R, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1148-53

The RNA-binding protein, TB-RBP, is the mouse homologue of translin, a recombination protein associated with chromosomal translocations. Wu XQ, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5640-5

Interaction between iron-regulatory proteins and their RNA target sequences, iron-responsive elements. Henderson BR, et al. **Prog Mol Subcell Biol** 1997;18:117-39 (115 ref.)

Cytoplasmic fate of eukaryotic mRNA: identification and characterization of AU-binding proteins. Jarzembowski JA, et al. **Prog Mol Subcell Biol** 1997;18:141-72 (123 ref.)

Regulation of eukaryotic messenger RNA turnover. Rajagopalan LE, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:257-86 (128 ref.)

Expression of functional eIF-4Ehuman: purification, detailed characterization, and its use in isolating eIF-4E binding proteins. Hagedorn CH, et al. **Protein Expr Purif** 1997 Feb; 9(1):53-60

Purification and biochemical characterization of the 19-kDa signal recognition particle RNA-binding protein expressed as a hexahistidine-tagged polypeptide in Escherichia coli. Henry KA, et al. **Protein Expr Purif** 1997 Feb;9(1):15-26

A neuron-specific splicing switch mediated by an array of pre-mRNA repressor sites: evidence of a regulatory role for the polypyrimidine tract binding protein and a brain-specific PTB counterpart. Ashiya M, et al. **RNA** 1997 Sep;3(9):996-1015

Surprising specificity of PKR binding to delta agent genomic RNA. Circle DA, et al. **RNA** 1997 Apr;3(4):438-48

Two functional complexes formed by KH domain containing proteins with the 5' noncoding region of poliovirus RNA. Gamarnik AV, et al. **RNA** 1997 Aug;3(8):882-92

Structural analysis of the interaction of the pyrimidine tract-binding protein with the internal ribosomal entry site of encephalomyocarditis virus and foot-and-mouth disease virus RNAs. Kolupaeva VG, et al. **RNA** 1996 Dec; 2(12):1199-212

Mutation of PTB binding sites causes misregulation of alternative 3' splice site selection in vivo. Pérez I, et al. **RNA** 1997 Jul;3(7):764-78

Characterization of yeast U1 snRNP A protein: identification of the N-terminal RNA binding domain (RBD) binding site and evidence that the C-terminal RBD functions in splicing. Tang J, et al. **RNA** 1996 Oct;2(10):1058-70

In vitro selection of a novel catalytic RNA: characterization of a sulfur alkylation reaction and interaction with a small peptide. Wecker M, et al. **RNA** 1996 Oct;2(10):982-94

Contribution of the C-terminal tail of U1A RBD1 to RNA recognition and protein stability. Zeng Q, et al. **RNA** 1997 Mar;3(3):303-14

The SH3 domain of Bruton's tyrosine kinase interacts with Vav, Sam68 and EWS. Guinamard R, et al. **Scand J Immunol** 1997 Jun;45(6):587-95

Kap104p: a karyopherin involved in the nuclear transport of messenger RNA binding proteins. Aitchison JD, et al. **Science** 1996 Oct 25;274(5287):624-7

Evidence that heteronuclear proteins interact with XIST RNA in vitro. Brown CJ, et al. **Somat Cell Mol Genet** 1996 Sep;22(5):403-17

A hypothesis to explain the substrate reactivity of ribosomal and stem-loop RNA with ricin A-chain. Link T, et al. **Toxicon** 1996 Nov-Dec;34(11-12):1317-24

Iron-sulfur clusters and oxidant stress responses [letter; comment] Hentze MW. **Trends Biochem Sci** 1996 Aug; 21(8):282-3. Comment on: Trends Biochem Sci 1996 May;21(5):174-7.

Cellular proteins bind to multiple sites of the leader region of cauliflower mosaic virus 35S RNA. Dominguez DI, et al. **Virology** 1996 Dec 15;226(2):374-83

The open reading frame 2 product of cacao swollen shoot badnavirus is a nucleic acid-binding protein. Jacquot E, et al. **Virology** 1996 Nov 1;225(1):191-5

Stable protein-RNA interaction involves the terminal domains of bluetongue virus mRNA, but not the terminally conserved sequences. Theron J, et al. **Virology** 1997 Mar 3;229(1):134-42

The RNA-binding and effector domains of the viral NS1 protein are conserved to different extents among influenza A and B viruses. Wang W, et al. **Virology** 1996 Sep 1; 223(1):41-50

Distinct transcriptional pathways of TAR-dependent and TAR-independent human immunodeficiency virus type-1 transactivation by Tat. Yang L, et al. **Virology** 1997 Aug 18;235(1):48-64

Specific binding of polypyrimidine tract binding protein and hnRNP A1 to HIV-1 CRS elements. Black AC, et al. **Virus Genes** 1996;12(3):275-85

Computational characterisation of potential RNA-binding sites in arenavirus nucleocapsid proteins. Parisi G, et al. **Virus Genes** 1996;13(3):247-54

Site-directed mutagenesis of the double-stranded RNA binding domain of bacterially-expressed sigma 3 reovirus protein. Wang Q, et al. **Virus Res** 1996 Apr;41(2):141-51

[RNA-binding properties of ribosomal protein L1 from Thermus thermophilus] Elisekina IA, et al. **Biokhimiia** 1996 Nov;61(11):2040-4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The ER-luminal domain of the HCMV glycoprotein US6 inhibits peptide translocation by TAP. Ahn K, et al. **Immunity** 1997 May;6(5):613-21

Post-transcriptional regulation of erythropoietin mRNA stability by erythropoietin mRNA-binding protein. McGary EC, et al. **J Biol Chem** 1997 Mar 28; 272(13):8628-34

Unusual expression of the Hu paraneoplastic antigen in the visual system. Kostyk SK, et al. **Neuroreport** 1996 Jul 8; 7(10):1549-52

PHYSIOLOGY

Specific binding of a 47-kilodalton protein to the 3' untranslated region of rat transition protein 2 messenger ribonucleic acid. Schlicker M, et al. **Biol Reprod** 1997 Mar; 56(3):697-706

TLS-CHOP and the role of RNA-binding proteins in oncogenic transformation. Ron D. **Curr Top Microbiol Immunol** 1997;220:131-42 (53 ref.)

A nuclear role for the Fragile X mental retardation protein. Fridell RA, et al. **EMBO J** 1996 Oct 1;15(19):5408-14

The KH domain protein encoded by quaking functions as a dimer and is essential for notochord development in Xenopus embryos. Zorn AM, et al. **Genes Dev** 1997 Sep 1;11(17):2176-90

The RNA-binding protein HF-I plays a global regulatory role which is largely, but not exclusively, due to its role in expression of the sigmaS subunit of RNA polymerase in Escherichia coli. Muffler A, et al. **J Bacteriol** 1997 Jan; 179(1):297-300

Interaction between Sam68 and Src family tyrosine kinases, Fyn and Lck, in T cell receptor signaling. Fusaki N, et al. **J Biol Chem** 1997 Mar 7;272(10):6214-9

CspA, the major cold-shock protein of Escherichia coli, is an RNA chaperone. Jiang W, et al. **J Biol Chem** 1997 Jan 3;272(1):196-202

Regulation of a specific circadian clock output pathway by lark, a putative RNA-binding protein with repressor activity. Newby LM, et al. **J Neurobiol** 1996 Sep; 31(1):117-28

Requirement of poly(rC) binding protein 2 for translation of poliovirus RNA. Blyn LB, et al. **J Virol** 1997 Aug; 71(8):6243-6

Yeast Pab1 interacts with Rna15 and participates in the control of the poly(A) tail length in vitro. Amrani N, et al. **Mol Cell Biol** 1997 Jul;17(7):3694-701

Ectopic expression of Hel-N1, an RNA-binding protein, increases glucose transporter (GLUT1) expression in 3T3-L1 adipocytes. Jain RG, et al. **Mol Cell Biol** 1997 Feb;17(2):954-62

Phosphorylation of RNA-binding protein controls cell cycle switch from mitotic to meiotic in fission yeast. Watanabe Y, et al. **Nature** 1997 Mar 13;386(6621):187-90

AtGRP7, a nuclear RNA-binding protein as a component of a circadian-regulated negative feedback loop in Arabidopsis thaliana. Heintzen C, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8515-20

[Effect of intracellular iron homeostasis on formation of hydroxyl radicals and nitric oxide and their effects on cellular damage] Jung M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:619-22 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Structure of ribgrass mosaic virus at 2.9 A resolution: evolution and taxonomy of tobamoviruses. Wang H, et al. **J Mol Biol** 1997 Jun 27;269(5):769-79

RNA CAP ANALOGS

CHEMISTRY

Structure of translation factor eIF4E bound to m7GDP and interaction with 4E-binding protein. Matsuo H, et al. **Nat Struct Biol** 1997 Sep;4(9):717-24

METABOLISM

Dinucleoside 5', 5"'-P1, P3-triphosphate hydrolase from yellow lupin (Lupinus luteus) seeds: purification to homogeneity and hydrolysis of mRNA 5'-cap analogs. Guranowski A, et al. **Protein Expr Purif** 1996 Dec; 8(4):416-22

PHARMACOLOGY

Specific inhibition of hepatitis b virus gene expression by an antisense oligonucleotide in vitro. Yao ZQ, et al. **Acta Virol** 1995 Sep;39(4):227-230

RNA CAPS

A viral sequence in the 3'-untranslated region mimics a 5' cap in facilitating translation of uncapped mRNA. Wang S, et al. **EMBO J** 1997 Jul 1;16(13):4107-16

SV40 T1-mRNA trans-splicing and translation requires that the in vitro synthesized cRNA is capped before microinjection. Graessmann M, et al. **FEBS Lett** 1996 Sep 30;394(2):233-6

Sequences of two expressed sequence tags (EST) from rice encoding different cap-binding proteins. Aliyeva E, et al. **Gene** 1996 Nov 21;180(1-2):221-3

Translation of an uncapped mRNA involves scanning. Gunnery S, et al. **J Biol Chem** 1997 Aug 22;272(34):21642-6

Critical residues of Semliki Forest virus RNA capping enzyme involved in methyltransferase and guanylyltransferase-like activities. Ahola T, et al. **J Virol** 1997 Jan;71(1):392-7

Nucleoprotein viral RNA and mRNA of Thogoto virus: a novel "cap-stealing" mechanism in tick-borne orthomyxoviruses? Weber F, et al. **J Virol** 1996 Dec; 70(12):8361-7

Synthesis of a fluorescent 7-methylguanosine analog and a fluorescence spectroscopic study of its reaction with wheatgerm cap binding proteins. Ren J, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3629-34

Surprising function of the three influenza viral polymerase proteins: selective protection of viral mRNAs against the cap-snatching reaction catalyzed by the same polymerase proteins. Shih SR, et al. **Virology** 1996 Dec 15;226(2):430-5

A proposed mechanism of mRNA synthesis and capping by vesicular stomatitis virus. Shuman S. **Virology** 1997 Jan 6;227(1):1-6 (41 ref.)

ANALOGS & DERIVATIVES see RNA CAP ANALOGS

ANALYSIS

Analysis of yeast trimethylguanosine-capped RNAs by midwestern blotting. Rasmussen TP, et al. **Gene** 1996 Dec 5;182(1-2):89-96

BIOSYNTHESIS

Viral and cellular enzymes involved in synthesis of mRNA cap structure. Bisaillon M, et al. **Virology** 1997 Sep 15; 236(1):1-7 (65 ref.)

CHEMISTRY

High efficiency selection of full-length cDNA by improved biotinylated cap trapper. Carninci P, et al. **DNA Res** 1997 Feb 28;4(1):61-6

The role of the cap structure in RNA processing and nuclear export. Lewis JD, et al. **Eur J Biochem** 1997 Jul 15; 247(2):461-9 (70 ref.)

High-efficiency full-length cDNA cloning by biotinylated CAP trapper. Carninci P, et al. **Genomics** 1996 Nov 1; 37(3):327-36

GENETICS

Cap-independent translation initiation in Xenopus oocytes. Keiper BD, et al. **Nucleic Acids Res** 1997 Jan 15; 25(2):395-402

METABOLISM

5'-RNA self-capping from guanosine diphosphate. Huang F, et al. **Biochemistry** 1997 Jun 3;36(22):6557-63

mRNA decapping activities and their biological roles. LaGrandeur TE, et al. **Biochimie** 1996;78(11-12):1049-55 (45 ref.)

Nuclear localization of a cap-binding protein complex. Izaurralde E, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:669-75

Spliced leader RNA of trypanosomes: in vivo mutational analysis reveals extensive and distinct requirements for trans splicing and cap4 formation. Lücke S, et al. **EMBO J** 1996 Aug 15;15(16):4380-91

Nuclear cap binding protein maps close to the xeroderma pigmentosum complementation group A (XPA) locus in human and mouse. Chadwick BP, et al. **Genomics** 1996 Aug 1;35(3):632-3

eIF4G dramatically enhances the binding of eIF4E to the mRNA 5'-cap structure. Haghighat A, et al. **J Biol Chem** 1997 Aug 29;272(35):21677-80

Cap-binding protein (eukaryotic initiation factor 4E) and 4E-inactivating protein BP-1 independently regulate cap-dependent translation. Feigenblum D, et al. **Mol Cell Biol** 1996 Oct;16(10):5450-7

Interaction between the human nuclear cap-binding protein complex and hnRNP F. Gamberi C, et al. **Mol Cell Biol** 1997 May;17(5):2587-97

Ribosomal S6 kinase p90rsk and mRNA cap-binding protein eIF4E phosphorylations correlate with MAP kinase activation during meiotic reinitiation of mouse oocytes. Gavin AC, et al. **Mol Reprod Dev** 1997 Mar;46(3):383-91

Messenger RNA deadenylylation precedes decapping in mammalian cells. Couttet P, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5628-33

Expression of functional eIF-4Ehuman: purification, detailed characterization, and its use in isolating eIF-4E binding proteins. Hagedorn CH, et al. **Protein Expr Purif** 1997 Feb; 9(1):53-60

Recombinant-baculovirus-expressed PB2 subunit of the influenza A virus RNA polymerase binds cap groups as an isolated subunit. Shi L, et al. **Virus Res** 1996 Jun; 42(1-2):1-9

RNA, CATALYTIC

Ribozymes. James HA, et al. **Essays Biochem** 1995;29:175-92 (52 ref.)

In vitro selection of hairpin ribozymes [letter; comment] Berzal-Herranz A. **J Hepatol** 1996 Dec;25(6):1002-3. Comment on: J Hepatol 1995;22(1 Suppl):57-64.

Ribozymes. James HA, et al. **Methods Mol Biol** 1997;74:1-9 (36 ref.)

Ribozymes. Their functions and strategies for their use. Gibson SA, et al. **Mol Biotechnol** 1997 Apr;7(2):125-37 (57 ref.)

Anti-HIV ribozymes. Sun LQ, et al. **Mol Biotechnol** 1997 Jun;7(3):241-51 (76 ref.)

Clearing the way for ribozymes [news] Burke JM. **Nat Biotechnol** 1997 May;15(5):414-5

Translating genomics information into therapeutics: a key role for oligonucleotides. Christoffersen RE. **Nat Biotechnol** 1997 Jun;15(6):483-4

Ribozymes in wonderland [comment] Ellington AD, et al. **Science** 1997 Apr 25;276(5312):546-7. Comment on: Science 1997 Apr 25;276(5312):614-7.

Continuous in vitro evolution of catalytic function [see comments] Wright MC, et al. **Science** 1997 Apr 25; 276(5312):614-7. Comment in: Science 1997 Apr 25;276(5312):546-7.

ADMINISTRATION & DOSAGE

Optimization of lipid-mediated ribozyme delivery to cells in culture. Brown SA, et al. **Methods Mol Biol** 1997; 74:441-9

Retroviral delivery and anti-HIV testing of hammerhead ribozymes. Cagnon L, et al. **Methods Mol Biol** 1997; 74:451-7

Exogenous cellular delivery of ribozymes and ribozyme encoding DNAs. Castanotto D, et al. **Methods Mol Biol** 1997;74:429-39

ANALYSIS

A rapid and efficient system for screening HIV-1 Pol mRNA-specific ribozymes. Ramezani A, et al. **Can J Microbiol** 1997 Jan;43(1):92-6

ANTAGONISTS & INHIBITORS

Discovery of selective, small-molecule inhibitors of RNA complexes—II. Self-splicing group I intron ribozyme. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1185-95

BIOSYNTHESIS

Use of a nonviral vector to express a chimeric tRNA-ribozyme against lymphocytic choriomeningitis virus: cytoplasmic accumulation of a catalytically competent transcript but minimal antiviral effect. Gebhard JR, et al. **Antisense Nucleic Acid Drug Dev** 1997 Feb; 7(1):3-11

Expression of hammerhead ribozymes by retroviral vectors to inhibit HIV-1 replication: comparison of RNA levels and viral inhibition. Zhou C, et al. **Antisense Nucleic Acid Drug Dev** 1996 Spring;6(1):17-24

Design and preparation of sequence-specific RNase P ribozymes. Drainas D, et al. **Methods Mol Biol** 1997; 74:179-85

Preparation of templates for production of ribozymes and substrates. Gaur RK, et al. **Methods Mol Biol** 1997;74:69-78

Enzymatic synthesis and characterization of unmodified ribozymes and substrates. Krupp G. **Methods Mol Biol** 1997;74:79-89

Design and production of asymmetric hammerhead

ribozymes. Tabler M, et al. **Methods Mol Biol** 1997; 74:141–9

PCR–based construction of long hammerhead ribozymes. Zillmann M, et al. **Methods Mol Biol** 1997;74:131–9

Development of a hammerhead ribozyme against bcl–2. I. Preliminary evaluation of a potential gene therapeutic agent for hormone–refractory human prostate cancer. Dorai T, et al. **Prostate** 1997 Sep 1;32(4):246–58

In vitro characterization of hammerhead ribozymes against perforin and fas–ligand RNA. Du Z, et al. **Transplant Proc** 1997 Jun;29(4):2224–5

CHEMICAL SYNTHESIS

Design of hammerhead ribozymes to distinguish single base changes in substrate RNA. Singh KK, et al. **Antisense Nucleic Acid Drug Dev** 1996 Fall;6(3):165–8

A new type of hairpin ribozyme consisting of three domains. Komatsu Y, et al. **Biochemistry** 1997 Aug 12;36(32):9935–40

Post–synthetically ligated ribozymes: an alternative approach to iterative solid–phase synthesis. Bellon L, et al. **Bioconjug Chem** 1997 Mar–Apr;8(2):204–12

Construction of hairpin ribozymes with a three–way junction. Komatsu Y, et al. **Bioorg Med Chem** 1997 Jun;5(6):1063–9

Design and preparation of sequence–specific RNase P ribozymes. Drainas D, et al. **Methods Mol Biol** 1997; 74:179–85

Crystallographic analyses of chemically synthesized modified hammerhead RNA sequences as a general approach toward understanding ribozyme structure and function. Scott WG. **Methods Mol Biol** 1997;74:387–91

Chemical synthesis, analysis, and purification of ribozymes. Vinayak R. **Methods Mol Biol** 1997;74:51–8

A practical method for the production of RNA and ribozymes. Wincott FE, et al. **Methods Mol Biol** 1997; 74:59–68

CHEMISTRY

The secondary structure of a fourteen–nucleotide fragment of the hairpin ribozyme. Brinegar JD, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):444–8

Hairpin ribozyme: current status and future prospects. Burke JM. **Biochem Soc Trans** 1996 Aug;24(3):608–15 (36 ref.)

The hammerhead ribozyme. Eckstein F. **Biochem Soc Trans** 1996 Aug;24(3):601–4 (39 ref.)

Molecular palaeontology: understanding catalytic mechanisms in the RNA world by excavating clues from a ribozyme three–dimensional structure. Scott WG. **Biochem Soc Trans** 1996 Aug;24(3):604–8 (14 ref.)

A kinetic and thermodynamic analysis of cleavage site mutations in the hammerhead ribozyme. Baidya N, et al. **Biochemistry** 1997 Feb 4;36(5):1108–14

Chemically modified hammerhead ribozymes with improved catalytic rates. Burgin AB Jr, et al. **Biochemistry** 1996 Nov 12;35(45):14090–7

Effect of structural modifications on the activity of the leadzyme. Chartrand P, et al. **Biochemistry** 1997 Mar 18; 36(11):3145–50

Ribonuclease P catalysis requires Mg2+ coordinated to the pro–RP oxygen of the scissile bond. Chen Y, et al. **Biochemistry** 1997 Mar 4;36(9):2425–38

Hammerhead ribozymes with a faster cleavage rate. Clouet–d'Orval B, et al. **Biochemistry** 1997 Jul 29; 36(30):9087–92

The P4–P6 domain directs higher order folding of the Tetrahymena ribozyme core. Doherty EA, et al. **Biochemistry** 1997 Mar 18;36(11):3159–69

Efficient improvement of hammerhead ribozyme mediated cleavage of long substrates by oligonucleotide facilitators. Jankowsky E, et al. **Biochemistry** 1996 Dec 3; 35(48):15313–21

The importance of the helix 2 region for the cis–cleaving and trans–cleaving activities of hepatitis delta virus ribozymes. Lee CB, et al. **Biochemistry** 1996 Sep 24; 35(38):12303–12

Mg(2+)–dependent conformational changes in the hammerhead ribozyme. Menger M, et al. **Biochemistry** 1996 Nov 26;35(47):14710–6

Quantitating tertiary binding energies of 2' OH groups on the P1 duplex of the Tetrahymena ribozyme: intrinsic binding energy in an RNA enzyme. Narlikar GJ, et al. **Biochemistry** 1997 Mar 4;36(9):2465–77

Fluorescence resonance energy transfer analysis of ribozyme kinetics reveals the mode of action of a facilitator oligonucleotide. Perkins TA, et al. **Biochemistry** 1996 Dec 17;35(50):16370–7

Stopped–flow fluorescence spectroscopy of a group II intron ribozyme reveals that domain 1 is an independent folding unit with a requirement for specific Mg2+ ions in the tertiary structure. Qin PZ, et al. **Biochemistry** 1997 Apr 22;36(16):4718–30

A conformational change in the catalytic core of the hammerhead ribozyme upon cleavage of an RNA substrate. Simorre JP, et al. **Biochemistry** 1997 Jan 21;36(3):518–25

Analysis of hairpin ribozyme base mutations in loops 2 and 4 and their effects on cis–cleavage in vitro. Siwkowski A, et al. **Biochemistry** 1997 Apr 1;36(13):3930–40

Group II introns: elaborate ribozymes. Jacquier A. **Biochimie** 1996;78(6):474–87 (77 ref.)

Post–synthetically ligated ribozymes: an alternative approach to iterative solid–phase synthesis. Bellon L, et al. **Bioconjug Chem** 1997 Mar–Apr;8(2):204–12

In vitro RNA folding: the principle of sequential minimization of entropy loss at work. Fernandez A, et al. **Biophys Chem** 1996 Feb 8;58(3):335–9

Magnesium–aided folding of group I ribozymes with a minimal loss of entropy. Fernández A, et al. **Biophys Chem** 1996 Aug 30;61(1):51–8

Design and preparation of a multimeric self–cleaving hammerhead ribozyme. Ruiz J, et al. **Biotechniques** 1997 Feb;22(2):338–45

In vitro selection of self–cleaving DNAs. Carmi N, et al. **Chem Biol** 1996 Dec;3(12):1039–46

New loop–loop tertiary interactions in self–splicing introns of subgroup IC and ID: a complete 3D model of the Tetrahymena thermophila ribozyme. Lehnert V, et al. **Chem Biol** 1996 Dec;3(12):993–1009

RNA enzymes: putting together a large ribozyme. Tinoco I Jr. **Curr Biol** 1996 Nov 1;6(11):1374–6 (12 ref.)

RNA structure: crystal clear? Doudna JA, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):310–6 (62 ref.)

The New World of ribozymes. Jaeger L. **Curr Opin Struct Biol** 1997 Jun;7(3):324–35 (79 ref.)

The structure of the isolated, central hairpin of the HDV antigenomic ribozyme: novel structural features and similarity of the loop in the ribozyme and free in solution. Kolk MH, et al. **EMBO J** 1997 Jun;16(12):3685–92

The structure, function and application of the hammerhead ribozyme. Birikh KR, et al. **Eur J Biochem** 1997 Apr 1; 245(1):1–16 (184 ref.)

Cloning, purification and characterization of the protein subunit of ribonuclease P from the cyanobacterium Synechocystis sp. PCC 6803. Pascual A, et al. **Eur J Biochem** 1996 Oct 1;241(1):17–24

An AU at the first base pair of helix 3 elevates the catalytic activity of hepatitis delta virus ribozymes. Huang ZS, et al. **FEBS Lett** 1997 Aug 18;413(2):299–303

Characterization of the newly constructed domains that replace P5abc within the Tetrahymena ribozyme. Ikawa Y, et al. **FEBS Lett** 1996 Sep 23;394(1):5–8

Hammerhead ribozyme structure probed by cell extracts. Wang JY, et al. **Gene** 1996 Nov 28;181(1–2):117–20

Kinetic mechanism of the hairpin ribozyme. Identification and characterization of two nonexchangeable conformations. Esteban JA, et al. **J Biol Chem** 1997 May 23;272(21):13629–39

Modeling of a possible conformational change associated with the catalytic mechanism in the hammerhead ribozyme. Setlik RF, et al. **J Biomol Struct Dyn** 1995 Dec;13(3):515–22

Identification of functional domains in the self–cleaving Neurospora VS ribozyme using damage selection. Beattie TL, et al. **J Mol Biol** 1997 Apr 11;267(4):830–40

Crystals by design: a strategy for crystallization of a ribozyme derived from the Tetrahymena group I intron. Golden BL, et al. **J Mol Biol** 1997 Aug 1;270(5):711–23

Fluorescence properties of a tryptophan residue in an aromatic core of the protein subunit of ribonuclease P from Escherichia coli. Gopalan V, et al. **J Mol Biol** 1997 Apr 11;267(4):765–9

Branch–site selection in a group II intron mediated by active recognition of the adenine amino group and steric exclusion of non–adenine functionalities. Liu Q, et al. **J Mol Biol** 1997 Mar 21;267(1):163–71

Time–resolved synchrotron X–ray "footprinting", a new approach to the study of nucleic acid structure and function: application to protein–DNA interactions and RNA folding. Sclavi B, et al. **J Mol Biol** 1997 Feb 14; 266(1):144–59

A 451–nucleotide circular RNA from cherry with hammerhead ribozymes in its strands of both polarities. Di Serio F, et al. **J Virol** 1997 Sep;71(9):6603–10

Design and preparation of sequence–specific RNase P ribozymes. Drainas D, et al. **Methods Mol Biol** 1997; 74:179–85

Optimization of hammerhead flanking sequences using oligonucleotide facilitators. Goodchild J. **Methods Mol Biol** 1997;74:265–73

Design of the hairpin ribozyme for targeting specific RNA sequences. Hampel A, et al. **Methods Mol Biol** 1997; 74:171–7

Design of hybridizing arms in hammerhead ribozymes. Hendry P, et al. **Methods Mol Biol** 1997;74:253–64

Minimized hammerhead ribozymes. McCall MJ, et al. **Methods Mol Biol** 1997;74:151–9

In vitro selection of hairpin ribozymes. Sargueil B, et al. **Methods Mol Biol** 1997;74:289–300

Crystallographic analyses of chemically synthesized modified hammerhead RNA sequences as a general approach toward understanding ribozyme structure and function. Scott WG. **Methods Mol Biol** 1997;74:387–91

Computer–aided calculation of the local folding potential of target RNA and its use for ribozyme design. Sczakiel G, et al. **Methods Mol Biol** 1997;74:11–5

Mutagenesis and modeling of the hairpin ribozyme family. Siwkowski A, et al. **Methods Mol Biol** 1997;74:357–63

Design and production of asymmetric hammerhead ribozymes. Tabler M, et al. **Methods Mol Biol** 1997; 74:141–9

Design of hairpin ribozymes for in vitro and cellular applications. Yu Q, et al. **Methods Mol Biol** 1997;74:161–9

Ribonuclease P structure and function in Archaea. Brown JW, et al. **Mol Biol Rep** 1995–96;22(2–3):131–4 (16 ref.)

The RNase P of Dictyostelium discoideum. Drainas D. **Mol Biol Rep** 1995–96;22(2–3):135–8 (42 ref.)

Structure–function analysis in nuclear RNase P RNA. Engelke DR, et al. **Mol Biol Rep** 1995–96;22(2–3):157–60 (22 ref.)

Recent approaches to probe functional groups in ribonuclease P RNA by modification interference. Hardt WD, et al. **Mol Biol Rep** 1995–96;22(2–3):161–9 (63 ref.)

Analysis of the tertiary structure of bacterial RNase P RNA. Harris ME, et al. **Mol Biol Rep** 1995–96;22(2–3):115–23 (50 ref.)

RNase P as hyperprocessing enzyme: a model for formation of a biologically functional tRNA fragment. Kikuchi Y. **Mol Biol Rep** 1995–96;22(2–3):171–5 (17 ref.)

RNase P from bacteria. Substrate recognition and function of the protein subunit. Kirsebom LA, et al. **Mol Biol Rep** 1995–96;22(2–3):99–109 (97 ref.)

Enzymatic RNA synthesis and RNase P. Evolutionary aspects. Krupp G. **Mol Biol Rep** 1995–96;22(2–3):177–80 (29 ref.)

Structural and functional similarities between MRP and RNase P. Reddy R, et al. **Mol Biol Rep** 1995–96; 22(2–3):81–5 (68 ref.)

The yeast, Saccharomyces cerevisiae, RNase P/MRP ribonucleoprotein endoribonuclease family. Reilly TH, et al. **Mol Biol Rep** 1995–96;22(2–3):87–93 (63 ref.)

Ribonuclease P from plant nuclei and photosynthetic organelles. Schön A. **Mol Biol Rep** 1995–96;22(2–3):139–45 (41 ref.)

Early studies of native ribonuclease P, including discovery of its essential RNA component. Stark BC. **Mol Biol Rep** 1995–96;22(2–3):95–7 (14 ref.)

RNase P RNA of Mycoplasma capricolum. Ushida C, et al. **Mol Biol Rep** 1995–96;22(2–3):125–9 (28 ref.)

A magnesium ion core at the heart of a ribozyme domain [see comments] Cate JH, et al. **Nat Struct Biol** 1997 Jul; 4(7):553–8. Comment in: Nat Struct Biol 1997 Jul;4(7):509–12.

RNA–catalysed carbon–carbon bond formation. Tarasow TM, et al. **Nature** 1997 Sep 4;389(6646):54–7

The ribonuclease P database. Brown JW. **Nucleic Acids Res** 1997 Jan 1;25(1):263–4

Evidence for a hydroxide ion bridging two magnesium ions at the active site of the hammerhead ribozyme. Hermann T, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3421–7

Long–range interaction between the P2.1 and P9.1 peripheral domains of the Tetrahymena ribozyme. Ikawa Y, et al. **Nucleic Acids Res** 1997 May 1;25(9):1761–5

Detailed analysis of base preferences at the cleavage site of a trans–acting HDV ribozyme: a mutation that changes cleavage site specificity. Nishikawa F, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1605–10

In vitro selection of hammerhead ribozymes containing a bulged nucleotide in stem II. Thomson JB, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4401–6

Three–dimensional model of a hairpin ribozyme. Amano M, et al. **Nucleic Acids Symp Ser** 1995;(34):225–6

Construction of new hairpin ribozymes with replaced domains. Komatsu Y, et al. **Nucleic Acids Symp Ser** 1995; (34):223–4

In vitro selection analysis of trans–acting HDV ribozyme. Nishikawa F, et al. **Nucleic Acids Symp Ser** 1995;(34):115–6

Magnesium is essential for formation of an active complex of a hammerhead ribozyme with its substrate: an investigation by NMR spectroscopy. Orita M, et al. **Nucleic Acids Symp Ser** 1995;(34):219–20

Characterization of an HDV ribozyme which consists of three RNA oligomer strands. Sakamoto T, et al. **Nucleic Acids Symp Ser** 1995;(34):131–2

The crystal structure of an all–RNA hammerhead ribozyme. Scott WG, et al. **Nucleic Acids Symp Ser** 1995;(34):214–6

Characterization of two scleroderma autoimmune antigens that copurify with human ribonuclease P. Eder PS, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1101–6

Discrimination of a single base change in a ribozyme using the gene for dihydrofolate reductase as a selective marker in Escherichia coli. Fujita S, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):391–6

Use of intrinsic binding energy for catalysis by an RNA enzyme. Hertel KJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8497–502

Association of RNase mitochondrial RNA processing enzyme with ribonuclease P in higher ordered structures in the nucleolus: a possible coordinate role in ribosome biogenesis. Lee B, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11471–6

The newt ribozyme is part of a riboprotein complex. Luzi E, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9711–6

Rescue of abasic hammerhead ribozymes by exogenous addition of specific bases. Peracchi A, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11522–7

Observations on catalysis by hammerhead ribozymes are consistent with a two–divalent–metal–ion mechanism. Pontius BW, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2290–4

The hairpin ribozyme: discovery, two–dimensional model, and development for gene therapy. Hampel A. **Prog Nucleic Acid Res Mol Biol** 1998;58:1–39 (44 ref.)

Relating conformation, Mg2+ binding, and functional group modification in the hammerhead ribozyme [letter] Chartrand P, et al. **RNA** 1997 Jul;3(7):692–6

Kinetics of hairpin ribozyme cleavage in yeast. Donahue CP, et al. **RNA** 1997 Sep;3(9):961–73

Ribonuclease P RNA: models of the 15/16 bulge from

Escherichia coli and the P15 stem loop of Bacillus subtilis. Easterwood TR, et al. **RNA** 1997 Jun;3(6):577–85
Naegleria nucleolar introns contain two group I ribozymes with different functions in RNA splicing and processing. Einvik C, et al. **RNA** 1997 Jul;3(7):710–20
X-ray crystallography of large RNAs: heavy-atom derivatives by RNA engineering. Golden BL, et al. **RNA** 1996 Dec;2(12):1295–305
Analysis of the tertiary structure of the ribonuclease P ribozyme-substrate complex by site-specific photoaffinity crosslinking. Harris ME, et al. **RNA** 1997 Jun;3(6):561–76
Phylogenetic evidence for a new tertiary interaction in bacterial RNase P RNAs [letter] Massire C, et al. **RNA** 1997 Jun;3(6):553–6
An RNA internal loop acts as a hinge to facilitate ribozyme folding and catalysis. Szewczak AA, et al. **RNA** 1997 Aug; 3(8):838–49
Examination of the catalytic fitness of the hammerhead ribozyme by in vitro selection. Tang J, et al. **RNA** 1997 Aug;3(8):914–25
Mutagenesis and comparative sequence analysis of a base triple joining the two domains of group I ribozymes. Tanner MA, et al. **RNA** 1997 Sep;3(9):1037–51
In vitro optimization of truncated stem-loop II variants of the hammerhead ribozyme for cleavage in low concentrations of magnesium under non-turnover conditions. Zillmann M, et al. **RNA** 1997 Jul;3(7):734–47
Capturing the structure of a catalytic RNA intermediate: the hammerhead ribozyme. Scott WG, et al. **Science** 1996 Dec 20;274(5295):2065–9
Joining the two domains of a group I ribozyme to form the catalytic core. Tanner MA, et al. **Science** 1997 Feb 7; 275(5301):847–9
Metal-binding sites in the major groove of a large ribozyme domain. Cate JH, et al. **Structure** 1996 Oct 15;4(10):1221–9
Solution structure of a metal-binding site in the major groove of RNA complexed with cobalt (III) hexammine. Kieft JS, et al. **Structure** 1997 May 15;5(5):713–21
Ribozymes: structure and mechanism in RNA catalysis. Scott WG, et al. **Trends Biochem Sci** 1996 Jun;21(6):220–4 (31 ref.)

GENETICS

Anti-oncogene ribozymes for cancer gene therapy. Irie A, et al. **Adv Pharmacol** 1997;40:207–57 (350 ref.)
Development of ribozyme gene therapy for HIV infection. Wong-Staal F. **Antibiot Chemother** 1996;48:226–32
A helix 1-extended hairpin ribozyme exhibits altered cleavage behavior in vitro. Moosbauer J, et al. **Antisense Nucleic Acid Drug Dev** 1997 Apr;7(2):79–87
The ade6 gene of the fission yeast as a target for antisense and ribozyme RNA-mediated suppression. Atkins D, et al. **Antisense Res Dev** 1995 Winter;5(4):295–305
Unusual usage of noncomplementary dinucleotide primers by the yeast mitochondrial RNA polymerase. Biswas TK. **Arch Biochem Biophys** 1997 Apr 15;340(2):250–6
Escherichia coli rnpB promoter mutants altered in stringent response. Jung YH, et al. **Biochem Biophys Res Commun** 1997 Jan 23;230(3):582–6
Factors altering ribozyme-mediated cleavage of tumor necrosis factor-alpha mRNA in vitro. Kisich KO, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):205–11
Specificity of ribozymes against the bcr-abl mRNAs in vitro. James HA, et al. **Biochem Soc Trans** 1996 Aug;24(3):409S
Isolation of hammerhead ribozymes with altered core sequences by in vitro selection. Vaish NK, et al. **Biochemistry** 1997 May 27;36(21):6495–501
Stable expression of anti-HPV 16 E7-ribozyme in CV-1 cell lines. Huang Y, et al. **Chin J Biotechnol** 1996;12(4):215–20
Ribozymes: red in tooth and claw. Robertson MP, et al. **Curr Biol** 1997 Jun 1;7(6):R376–9 (9 ref.)
Ribonuclease-P RNA gene of the plastid chromosome from Cyanophora paradoxa. Shevelev EL, et al. **DNA Res** 1995 Oct 31;2(5):231–4
Identification of structural elements critical for inter-domain interactions in a group II self-splicing intron. Jestin JL, et al. **EMBO J** 1997 May 15;16(10):2945–54
hPop1: an autoantigenic protein subunit shared by the human RNase P and RNase MRP ribonucleoproteins. Lygerou Z, et al. **EMBO J** 1996 Nov 1;15(21):5936–48
Constructing an efficient trans-acting genomic HDV ribozyme. Kawakami J, et al. **FEBS Lett** 1996 Sep 30; 394(2):132–6
Ex vivo transduction and expansion of CD4+ lymphocytes from HIV + donors: prelude to a ribozyme gene therapy trial. Leavitt MC, et al. **Gene Ther** 1996 Jul;3(7):599–606
A potential therapeutic application of hairpin ribozymes: in vitro and in vivo studies of gene therapy for hepatitis C virus infection. Welch PJ, et al. **Gene Ther** 1996 Nov; 3(11):994–1001
Intracellular application of hairpin ribozyme genes against hepatitis B virus. Welch PJ, et al. **Gene Ther** 1997 Jul; 4(7):736–43
Rpp1, an essential protein subunit of nuclear RNase P required for processing of precursor tRNA and 35S precursor rRNA in Saccharomyces cerevisiae. Stolc V, et al. **Genes Dev** 1997 Sep 15;11(18):2414–25
Detection of hammerhead ribozyme-mediated cleavage and reduced expression of LacZ' mRNA in E. coli. Junn E, et al. **Genet Anal** 1996 May;13(1):1–7
Delivery of a hammerhead ribozyme specifically down-regulates the production of fibrillin-1 by cultured dermal fibroblasts. Kilpatrick MW, et al. **Hum Mol Genet** 1996 Dec;5(12):1939–44
Properties of a hammerhead ribozyme with deletion of stem II. Sakamoto T, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):288–94
Specific hammerhead ribozyme-mediated cleavage of mutant N-ras mRNA in vitro and ex vivo. Oligoribonucleotides as therapeutic agents. Scherr M, et al. **J Biol Chem** 1997 May 30;272(22):14304–13
Differentiation of Chlamydia spp. by sequence determination and restriction endonuclease cleavage of RNase P RNA genes. Herrmann B, et al. **J Clin Microbiol** 1996 Aug; 34(8):1897–902
The expression of antisense and ribozyme genes targeting citrus exocortis viroid in transgenic plants. Atkins D, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1781–90
Cleavage of viral RNA and inhibition of viral translation by hepatitis C virus RNA-specific hammerhead ribozyme in vitro. Ohkawa K, et al. **J Hepatol** 1997 Jul;27(1):78–84
Residues in Escherichia coli RNase P RNA important for cleavage site selection and divalent metal ion binding. Kufel J, et al. **J Mol Biol** 1996 Nov 15;263(5):685–98
In vitro evolution of randomized ribozymes. Tsang J, et al. **Methods Enzymol** 1996;267:410–26
Detection of ribozyme cleavage products using reverse ligation-mediated PCR (RL-PCR). Bertrand E, et al. **Methods Mol Biol** 1997;74:311–23
Exogenous cellular delivery of ribozymes and ribozyme encoding DNAs. Castanotto D, et al. **Methods Mol Biol** 1997;74:429–39
Expressing ribozymes in plants. de Feyter R, et al. **Methods Mol Biol** 1997;74:403–15
Hairpin ribozyme gene therapy for AIDS. Duarte EA, et al. **Methods Mol Biol** 1997;74:459–68
Preparation of templates for production of ribozymes and substrates. Gaur RK, et al. **Methods Mol Biol** 1997;74:69–78
The detection of hammerhead ribozyme cleavage by RT-PCR methods. Perriman R. **Methods Mol Biol** 1997; 74:301–9
In vitro selection of hairpin ribozymes. Sargueil B, et al. **Methods Mol Biol** 1997;74:289–300
Delivery of recombinant HIV-1-directed antisense and ribozyme genes. Sczakiel G, et al. **Methods Mol Biol** 1997; 63:389–400
Mutagenesis and modeling of the hairpin ribozyme family. Siwkowski A, et al. **Methods Mol Biol** 1997;74:357–63
T7 transcript length determination using enzymatic RNA sequencing. Siwkowski A. **Methods Mol Biol** 1997;74:91–7
Cloning strategies for catalytic antisense RNAs. Tabler M, et al. **Methods Mol Biol** 1997;74:121–9
Using microinjection of Xenopus oocytes to express and optimize ribozymes in vivo. Turner PC. **Methods Mol Biol** 1997;74:417–28
PCR-based construction of long hammerhead ribozymes. Zillmann M, et al. **Methods Mol Biol** 1997;74:131–9
Genetic analysis of the structure and function of RNase P from E. coli. Shiraishi H, et al. **Mol Biol Rep** 1995–96; 22(2–3):111–4 (35 ref.)
Ribozyme mediated targeting of cucumber mosaic virus RNA 1 and 2 in transgenic tobacco plants. Kwon CS, et al. **Mol Cells** 1997 Jun 30;7(3):326–34
The Brevibacterium albidum gene encoding the arginine tRNACCG complements the growth defect of an Escherichia coli strain carrying a thermosensitive mutation in the rnpA gene at the nonpermissive temperature. Kim MS, et al. **Mol Gen Genet** 1997 Apr 28;254(4):464–8
Generation of catalytic RNAs by rolling transcription of synthetic DNA nanocircles. Daubendiek SL, et al. **Nat Biotechnol** 1997 Mar;15(3):273–7
Structure and evolution of ribonuclease P RNA in Gram-positive bacteria. Haas ES, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4775–82
The RNase P RNA from cyanobacteria: short tandemly repeated repetitive (STRR) sequences are present within the RNase P RNA gene in heterocyst-forming cyanobacteria. Vioque A. **Nucleic Acids Res** 1997 Sep 1; 25(17):3471–7
In vitro selection analysis of trans-acting HDV ribozyme. Nishikawa F, et al. **Nucleic Acids Symp Ser** 1995;(34):115–6
Horizontal transmission of group-I ribozymes: viruses as a carrier of the introns. Yamada T, et al. **Nucleic Acids Symp Ser** 1995;(34):119–20
Phenotypic conversion of drug-resistant bacteria to drug sensitivity. Guerrier-Takada C, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8468–72
Expression and distribution of glucose-6-phosphatase catalytic subunit messenger RNA and its changes in the diabetic state. Shingu R, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jul;93(1):13–24
Identification of the universally conserved core of ribonuclease P RNA [letter] Chen JL, et al. **RNA** 1997 Jun;3(6):557–60
A novel protein shared by RNase MRP and RNase P. Chu S, et al. **RNA** 1997 Apr;3(4):382–91
The protein cofactor allows the sequence of an RNase P ribozyme to diversify by maintaining the catalytically active structure of the enzyme. Kim JJ, et al. **RNA** 1997 Jun;3(6):613–23
A conserved RNA motif involved in divalent cation utilization by nuclear RNase P. Pagán-Ramos E, et al. **RNA** 1996 Nov;2(11):1100–9
Use of adenoviral VAI small RNA as a carrier for cytoplasmic delivery of ribozymes. Prislei S, et al. **RNA** 1997 Jun;3(6):677–87
Enhanced selection for homologous-recombinant embryonic stem cell clones with a neomycin phosphotransferase gene in antisense orientation. Skryabin BV, et al. **Transgenic Res** 1997 Jan;6(1):27–35
Antisense and ribozyme constructs in transgenic animals. Sokol DL, et al. **Transgenic Res** 1996 Nov;5(6):363–71 (89 ref.)
Adenovirus-mediated gene transfer of antisense ribozyme for alpha (1,3)galactosyltransferase gene and alpha (1,2)fucosyltransferase gene in xenotransplantation. Hayashi S, et al. **Transplant Proc** 1997 Jun;29(4):2213
[Ribozyme targeted the point-mutation of activated oncogene inhibits its expression in vivo] Liu G, et al. **I Chuan Hsueh Pao** 1996;23(6):477–85 (Eng. Abstr.) **(Chi)**
[Expression of the ribozyme gene in the recombinant defective adenovirus genome] Zakharchuk AN, et al. **Mol Biol (Mosk)** 1997 Jan-Feb;31(1):81–5 **(Rus)**
[Polyribozymes] Zhenodarova SM. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1237–41 (24 ref.) **(Rus)**

ISOLATION & PURIFICATION

Isolation of hammerhead ribozymes with altered core sequences by in vitro selection. Vaish NK, et al. **Biochemistry** 1997 May 27;36(21):6495–501
Isolation of novel ribozymes that ligate AMP-activated RNA substrates. Hager AJ, et al. **Chem Biol** 1997 Aug;4(8):607–17
Partial purification and characterization of nuclear ribonuclease P from wheat. Arends S, et al. **Eur J Biochem** 1997 Mar 1;244(2):635–45
A sparse matrix approach to crystallizing ribozymes and RNA motifs. Cate JH, et al. **Methods Mol Biol** 1997; 74:379–86
Preparation of homogeneous ribozyme RNA for crystallization. Doudna JA. **Methods Mol Biol** 1997; 74:365–70
Establishing suitability of RNA preparations for crystallization. Determination of polydispersity. Ferré-d'Amaré AR, et al. **Methods Mol Biol** 1997;74:371–7

METABOLISM

Mechanistic aspects of enzymatic catalysis: lessons from comparison of RNA and protein enzymes. Narlikar GJ, et al. **Annu Rev Biochem** 1997;66:19–59 (240 ref.)
Correlation of activity with stability of chemically modified ribozymes in nuclei suspension. Heidenreich O, et al. **Antisense Nucleic Acid Drug Dev** 1996 Summer;6(2):111–8
A hammerhead ribozyme cleaves its target RNA during RNA preparation. Heidenreich O, et al. **Antisense Nucleic Acid Drug Dev** 1996 Summer;6(2):141–4
Comparative analysis of five highly conserved target sites within the HIV-1 RNA for their susceptibility to hammerhead ribozyme-mediated cleavage in vitro and in vivo. Ramezani A, et al. **Antisense Nucleic Acid Drug Dev** 1996 Fall;6(3):229–35
Ribozyme and antisense RNAs inhibit coupled transcription translation by binding to rabbit polyribosomes. Denman RB. **Biochem Biophys Res Commun** 1997 Jan 3; 230(1):226–31
A hammerhead ribozyme that cleaves perforin and fas-ligand RNAs in vitro. Du Z, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):595–600
A minimised hammerhead ribozyme with activity against interleukin-2 in human cells. Sioud M, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):397–402
Phosphorothiolate ribozyme against the conserved sequence in V3 loop of HIV-1. Zhang X, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):466–71
Application of hammerhead ribozymes for structural studies of ribosomal 5S RNAs. Szymański M, et al. **Biochem Mol Biol Int** 1997 Mar;41(3):439–47
Toxicity of cationic lipid-ribozyme complexes in human prostate tumor cells can mimic ribozyme activity. Freedland SJ, et al. **Biochem Mol Med** 1996 Dec; 59(2):144–53
The hammerhead ribozyme. Eckstein F. **Biochem Soc Trans** 1996 Aug;24(3):601–4 (39 ref.)
Specificity of ribozymes against the bcr-abl mRNAs in vitro. James HA, et al. **Biochem Soc Trans** 1996 Aug;24(3):409S
Facilitators of RNA-RNA annealing: implications for the catalytic cycle of hammerhead ribozymes. Nedbal W, et al. **Biochem Soc Trans** 1996 Aug;24(3):615–8 (17 ref.)
Molecular palaeontology: understanding catalytic mechanisms in the RNA world by excavating clues from a ribozyme three-dimensional structure. Scott WG. **Biochem Soc Trans** 1996 Aug;24(3):604–8 (14 ref.)
A kinetic and thermodynamic analysis of cleavage site mutations in the hammerhead ribozyme. Baidya N, et al. **Biochemistry** 1997 Feb 4;36(5):1108–14
Effect of structural modifications on the activity of the leadzyme. Chartrand P, et al. **Biochemistry** 1997 Mar 18; 36(11):3145–50
Hammerhead ribozymes with a faster cleavage rate. Clouet-d'Orval B, et al. **Biochemistry** 1997 Jul 29; 36(30):9087–92
A new type of hairpin ribozyme consisting of three domains. Komatsu Y, et al. **Biochemistry** 1997 Aug 12;36(32):9935–40
The importance of the helix 2 region for the cis-cleaving and trans-cleaving activities of hepatitis delta virus

ribozymes. Lee CB, et al. **Biochemistry** 1996 Sep 24; 35(38):12303–12

Effects of Mg2+ and the 2' OH of guanosine on steps required for substrate binding and reactivity with the Tetrahymena ribozyme reveal several local folding transitions. Li Y, et al. **Biochemistry** 1997 Sep 16; 36(37):11131–9

Recognition of the T stem–loop of a pre-tRNA substrate by the ribozyme from Bacillus subtilis ribonuclease P. Loria A, et al. **Biochemistry** 1997 May 27;36(21):6317–25

Effects of divalent metal ions on individual steps of the Tetrahymena ribozyme reaction. McConnell TS, et al. **Biochemistry** 1997 Jul 8;36(27):8293–303

Role of Nd3+ and Pb2+ on the RNA cleavage reaction by a small ribozyme. Ohmichi T, et al. **Biochemistry** 1997 Mar 25;36(12):3514–21

Fluorescence resonance energy transfer analysis of ribozyme kinetics reveals the mode of action of a facilitator oligonucleotide. Perkins TA, et al. **Biochemistry** 1996 Dec 17;35(50):16370–7

Transcripts containing a small anti-HIV hammerhead ribozyme that are active in the cell cytoplasm but inactive in vitro as free RNAs. Domi A, et al. **Biochimie** 1996; 78(7):654–62

In vitro catalytic activities of DNA/RNA chimeric hammerhead ribozymes against AML1-MTG8 mRNA, a fused gene transcript in acute myeloid leukemia with t(8;21). Kozu T, et al. **Biochimie** 1996;78(11–12):1067–73

Application of a 5'-bridging phosphorothioate to probe divalent metal and hammerhead ribozyme mediated RNA cleavage. Kuimelis RG, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1051–61

Discovery of selective, small-molecule inhibitors of RNA complexes--II. Self-splicing group I intron ribozyme. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1185–95

Use of 33P for ribozyme assays: the safe way. Wolff PR, et al. **Biotechniques** 1996 Sep;21(3):422–4

Ribozyme-mediated suppression of v-myc expression abrogates apoptosis in transformed monocytes. Dolnikov A, et al. **Cancer Gene Ther** 1996 Sep–Oct;3(5):289–95

Ribozymes: aiming at RNA replication and protein synthesis. Hager AJ, et al. **Chem Biol** 1996 Sep;3(9):717–25 (51 ref.)

Isolation of novel ribozymes that ligate AMP-activated RNA substrates. Hager AJ, et al. **Chem Biol** 1997 Aug;4(8):607–17

A unique mechanism for RNA catalysis: the role of metal cofactors in hairpin ribozyme cleavage. Hampel A, et al. **Chem Biol** 1997 Jul;4(7):513–7

An unusual pH-independent and metal-ion-independent mechanism for hairpin ribozyme catalysis. Nesbitt S, et al. **Chem Biol** 1997 Aug;4(8):619–30

Rational design of allosteric ribozymes. Tang J, et al. **Chem Biol** 1997 Jun;4(6):453–9

Building the RNA world. Ribozymes. Joyce GF. **Curr Biol** 1996 Aug 1;6(8):965–7 (7 ref.)

The New World of ribozymes. Jaeger L. **Curr Opin Struct Biol** 1997 Jun;7(3):324–35 (79 ref.)

Rules for RNA recognition of GNRA tetraloops deduced by in vitro selection: comparison with in vivo evolution. Costa M, et al. **EMBO J** 1997 Jun 2;16(11):3289–302

Pop3p is essential for the activity of the RNase MRP and RNase P ribonucleoproteins in vivo. Dichtl B, et al. **EMBO J** 1997 Jan 15;16(2):417–29

Self-cleaving ribozymes of hepatitis delta virus RNA. Been MD, et al. **Eur J Biochem** 1997 Aug 1;247(3):741–53 (87 ref.)

Intermolecular cleavage by the newt ribozyme. Marusic L, et al. **Eur J Biochem** 1997 Jul 1;247(1):396–401

An AU at the first base pair of helix 3 elevates the catalytic activity of hepatitis delta virus ribozymes. Huang ZS, et al. **FEBS Lett** 1997 Aug 18;413(2):299–303

Constructing an efficient trans-acting genomic HDV ribozyme. Kawakami J, et al. **FEBS Lett** 1996 Sep 30; 394(2):132–6

Influence of substrate structure on cleavage by hammerhead ribozyme. Scarabino D, et al. **FEBS Lett** 1996 Apr 1; 383(3):185–90

Site-specific cleavage reaction catalyzed by leadzyme is enhanced by combined effect of lead and rare earth ions. Sugimoto N, et al. **FEBS Lett** 1996 Sep 9;393(1):97–100

Defective HIV-1 provirus encoding a multitarget-ribozyme inhibits accumulation of spliced and unspliced HIV-1 mRNAs, reduces infectivity of viral progeny, and protects the cells from pathogenesis. Paik SY, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1115–24

Reversal of cisplatin resistance in vivo by an anti-fos ribozyme. Funato T, et al. **In Vivo** 1997 May–Jun; 11(3):217–20

Inhibition of Plasmodium falciparum proliferation in vitro by ribozymes. Flores MV, et al. **J Biol Chem** 1997 Jul 4; 272(27):16940–5

Efficient hammerhead ribozymes targeted to the polycistronic Sendai virus P/C mRNA. Structure–function relationships. Gavin DK, et al. **J Biol Chem** 1997 Jan 17; 272(3):1461–72

Optimizing the cell efficacy of synthetic ribozymes. Site selection and chemical modifications of ribozymes targeting the proto-oncogene c-myb. Jarvis TC, et al. **J Biol Chem** 1996 Nov 15;271(46):29107–12

Circular ribozymes generated in Escherichia coli using group I self-splicing permuted intron–exon sequences. Puttaraju M, et al. **J Biol Chem** 1996 Oct 18;271(42):26081–7

Nuclear domains of the RNA subunit of RNase P. Jacobson MR, et al. **J Cell Sci** 1997 Apr;110 (Pt 7):829–37

Intracellular cleavage of hepatitis C virus RNA and inhibition of viral protein translation by hammerhead ribozymes. Sakamoto N, et al. **J Clin Invest** 1996 Dec 15;98(12):2720–8

Analysis of the functional role of conserved residues in the protein subunit of ribonuclease P from Escherichia coli. Gopalan V, et al. **J Mol Biol** 1997 Apr 11;267(4):818–29

Small-molecule-substrate interactions with a self-aminoacylating ribozyme. Illangasekare M, et al. **J Mol Biol** 1997 May 9;268(3):631–9

Elimination of hepatitis C virus RNA in infected human hepatocytes by adenovirus-mediated expression of ribozymes. Lieber A, et al. **J Virol** 1996 Dec;70(12):8782–91

Genetic and biochemical approaches for analysis of mitochondrial RNase P from Saccharomyces cerevisiae. Groom KR, et al. **Methods Enzymol** 1996;264:86–99

Quantitation of ribozyme target abundance by QCPCR. Beaudry AA, et al. **Methods Mol Biol** 1997;74:325–39

Detection of ribozyme cleavage products using reverse ligation-mediated PCR (RL-PCR). Bertrand E, et al. **Methods Mol Biol** 1997;74:311–23

Ligation of RNA molecules by the hairpin ribozyme. Berzal-Herranz A, et al. **Methods Mol Biol** 1997;74:349–55

Computer analysis of the conservation and uniqueness of ribozyme-targeted HIV sequences. DeYoung MB, et al. **Methods Mol Biol** 1997;74:27–36

Determination of catalytic parameters for hairpin ribozymes. DeYoung MB, et al. **Methods Mol Biol** 1997;74:209–20

Selection of accessible sites for ribozymes on large RNA transcripts. Frank BL, et al. **Methods Mol Biol** 1997; 74:37–43

Applications of modified transcripts. Gaur RK, et al. **Methods Mol Biol** 1997;74:111–20

Design of the hairpin ribozyme for targeting specific RNA sequences. Hampel A, et al. **Methods Mol Biol** 1997; 74:171–7

Characterizing ribozyme cleavage reactions. Hendry P, et al. **Methods Mol Biol** 1997;74:221–9

Defining optimum reaction conditions for hammerhead ribozymes. Hendry P, et al. **Methods Mol Biol** 1997; 74:231–9

Computational approaches to the identification of ribozyme target sites. James W, et al. **Methods Mol Biol** 1997; 74:17–26

Trans-s›licing reactions by ribozymes. Jones JT, et al. **Methods Mol Biol** 1997;74:341–8

Enhancement of ribozyme function by RNA binding proteins. Lee NS, et al. **Methods Mol Biol** 1997;74:275–9

Selection of efficient ribozyme cleavage sites in target RNAs. Lieber A, et al. **Methods Mol Biol** 1997;74:45–50

Theoretical considerations in measuring reaction parameters. McConnell TS. **Methods Mol Biol** 1997;74:187–98

Experimental approaches for measuring reaction parameters. McConnell TS. **Methods Mol Biol** 1997;74:199–208

Using fluorescence resonance energy transfer to investigate hammerhead ribozyme kinetics. Perkins TA, et al. **Methods Mol Biol** 1997;74:241–51

The detection of hammerhead ribozyme cleavage by RT-PCR methods. Perriman R. **Methods Mol Biol** 1997; 74:301–9

tRNA delivery systems for ribozymes. Perriman R, et al. **Methods Mol Biol** 1997;74:393–402

Computer-aided calculation of the local folding potential of target RNA and its use for ribozyme design. Sczakiel G, et al. **Methods Mol Biol** 1997;74:11–5

Using microinjection of Xenopus oocytes to express and optimize ribozymes in vivo. Turner PC. **Methods Mol Biol** 1997;74:417–28

Ribonuclease P structure and function in Archaea. Brown JW, et al. **Mol Biol Rep** 1995–96;22(2–3):131–4 (16 ref.)

The RNase P of Dictyostelium discoideum. Drainas D. **Mol Biol Rep** 1995–96;22(2–3):135–8 (42 ref.)

Structure-function analysis in nuclear RNase P RNA. Engelke DR, et al. **Mol Biol Rep** 1995–96;22(2–3):157–60 (22 ref.)

Structure, mechanism and evolution of chloroplast transfer RNA processing systems. Gegenheimer P. **Mol Biol Rep** 1995–96;22(2–3):147–50 (27 ref.)

Transfer RNA gene organization and RNase P. Green CJ. **Mol Biol Rep** 1995–96;22(2–3):181–5 (67 ref.)

Recent approaches to probe functional groups in ribonuclease P RNA by modification interference. Hardt WD, et al. **Mol Biol Rep** 1995–96;22(2–3):161–9 (63 ref.)

RNase P as hyperprocessing enzyme: a model for formation of a biologically functional tRNA fragment. Kikuchi Y. **Mol Biol Rep** 1995–96;22(2–3):171–5 (17 ref.)

RNase P from bacteria. Substrate recognition and function of the protein subunit. Kirsebom LA, et al. **Mol Biol Rep** 1995–96;22(2–3):99–109 (97 ref.)

Enzymatic RNA synthesis and RNase P. Evolutionary aspects. Krupp G. **Mol Biol Rep** 1995–96;22(2–3):177–80 (29 ref.)

Plant mitochondrial RNase P. Marchfelder A. **Mol Biol Rep** 1995–96;22(2–3):151–6 (29 ref.)

tRNA processing in human mitochondrial disorders. Masucci JP, et al. **Mol Biol Rep** 1995–96;22(2–3):187–93 (78 ref.)

Structural and functional similarities between MRP and RNase P. Reddy R, et al. **Mol Biol Rep** 1995–96; 22(2–3):81–5 (68 ref.)

The yeast, Saccharomyces cerevisiae, RNase P/MRP ribonucleoprotein endoribonuclease family. Reilly TH, et al. **Mol Biol Rep** 1995–96;22(2–3):87–93 (63 ref.)

Ribonuclease P from plant nuclei and photosynthetic organelles. Schön A. **Mol Biol Rep** 1995–96;22(2–3):139–45 (41 ref.)

Genetic analysis of the structure and function of RNase P from E. coli. Shiraishi H, et al. **Mol Biol Rep** 1995–96; 22(2–3):111–4 (35 ref.)

Early studies of native ribonuclease P, including discovery of its essential RNA component. Stark BC. **Mol Biol Rep** 1995–96;22(2–3):95–7 (14 ref.)

RNase P RNA of Mycoplasma capricolum. Ushida C, et al. **Mol Biol Rep** 1995–96;22(2–3):125–9 (28 ref.)

Efficient hammerhead ribozyme and antisense RNA targeting in a slow ribosome Escherichia coli mutant. Chen H, et al. **Nat Biotechnol** 1997 May;15(5):432–5

A magnesium ion core at the heart of a ribozyme domain [see comments] Cate JH, et al. **Nat Struct Biol** 1997 Jul; 4(7):553–8. Comment in: Nat Struct Biol 1997 Jul;4(7):509–12.

A second catalytic metal ion in group I ribozyme. Weinstein LB, et al. **Nature** 1997 Aug 21;388(6644):805–8

Secondary structure content of the HDV ribozyme in 95% formamide. Duhamel J, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):3911–7

Analysis of the cleavage reaction of a trans-acting human hepatitis delta virus ribozyme. Fauzi H, et al. **Nucleic Acids Res** 1997 Aug 1;25(15):3124–30

Cleavage of collagen RNA transcripts by hammerhead ribozymes in vitro is mutation-specific and shows competitive binding effects. Grassi G, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3451–8

The subcellular localization and length of hammerhead ribozymes determine efficacy in human cells. Hormes R, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):769–75

Peptide nucleic acid (PNA) is capable of enhancing hammerhead ribozyme activity with long but not with short RNA substrates. Jankowsky E, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2690–3

Interaction of retroviral nucleocapsid proteins with transfer RNAPhe: a lead ribozyme and 1H NMR study. Khan R, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3568–75

Conserved thermochemistry of guanosine nucleophile binding for structurally distinct group I ribozymes. Kuo LY, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3722–7

Comparison of the specificities and catalytic activities of hammerhead ribozymes and DNA enzymes with respect to the cleavage of BCR-ABL chimeric L6 (b2a2) mRNA. Kuwabara T, et al. **Nucleic Acids Res** 1997 Aug 1; 25(15):3074–81

Differences in the phosphate oxygen requirements for self-cleavage by the extended and prototypical hammerhead forms. Mitrasinovic O, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2189–96

Detailed analysis of base preferences at the cleavage site of a trans-acting HDV ribozyme: a mutation that changes cleavage site specificity. Nishikawa F, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1605–10

Effects of variations in length of hammerhead ribozyme antisense arms upon the cleavage of longer RNA substrates. Sioud M. **Nucleic Acids Res** 1997 Jan 15;25(2):333–8

Plant pathogenic RNAs and RNA catalysis. Symons RH. **Nucleic Acids Res** 1997 Jul 15;25(14):2683–9 (71 ref.)

The mechanism of the hammerhead ribozyme. Hendry P, et al. **Nucleic Acids Symp Ser** 1995;(34):217–8

A novel screening system for construction and selection of active ribozymes using DHFR (dihydrofolate reductase) gene as selection marker. Koguma T, et al. **Nucleic Acids Symp Ser** 1995;(34):221–2

Regulation of leadzyme (lead-dependent ribozyme) reaction by amino acids and rare earth ions. Ohmichi T, et al. **Nucleic Acids Symp Ser** 1995;(34):227–8

Cis and trans reactions of hairpin ribozymes derived from the negative strand of arabis mosaic virus satellite RNA. Tomita R, et al. **Nucleic Acids Symp Ser** 1995;(34):117–8

Association of RNase mitochondrial RNA processing enzyme with ribonuclease P in higher ordered structures in the nucleolus: a possible coordinate role in ribosome biogenesis. Lee B, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11471–6

Use of engineered ribozymes to catalyze chimeric gene assembly. Mikheeva S, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7486–90

Rescue of abasic hammerhead ribozymes by exogenous addition of specific bases. Peracchi A, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11522–7

Observations on catalysis by hammerhead ribozymes are consistent with a two-divalent-metal-ion mechanism. Pontius BW, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2290–4

Ribonuclease P (RNase P) RNA is converted to a Cd(2+)-ribozyme by a single Rp-phosphorothioate modification in the precursor tRNA at the RNase P cleavage site. Warnecke JM, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8924–8

The expression cassette determines the functional activity of ribozymes in mammalian cells by controlling their intracellular localization. Bertrand E, et al. **RNA** 1997 Jan; 3(1):75–88

Probing accessible sites for ribozymes on human acetylcholinesterase RNA. Birikh KR, et al. **RNA** 1997 Apr;3(4):429–37

Relating conformation, Mg2+ binding, and functional group modification in the hammerhead ribozyme [letter]

Chartrand P, et al. **RNA** 1997 Jul;3(7):692-6
Kinetics of hairpin ribozyme cleavage in yeast. Donahue CP, et al. **RNA** 1997 Sep;3(9):961-73
In vitro selection of RNase P RNA reveals optimized catalytic activity in a highly conserved structural domain. Frank DN, et al. **RNA** 1996 Dec;2(12):1179-88
Rp-deoxy-phosphorothioate modification interference experiments identify 2'-OH groups in RNase P RNA that are crucial to tRNA binding. Hardt WD, et al. **RNA** 1996 Dec;2(12):1189-98
Complete identification of nonbridging phosphate oxygens involved in hammerhead cleavage. Knöll R, et al. **RNA** 1997 Feb;3(2):132-40
Nuclear pre-tRNA terminal structure and RNase P recognition. Lee Y, et al. **RNA** 1997 Feb;3(2):175-85
A conserved RNA motif involved in divalent cation utilization by nuclear RNase P. Pagán-Ramos E, et al. **RNA** 1996 Nov;2(11):1100-9
An RNA internal loop acts as a hinge to facilitate ribozyme folding and catalysis. Szewczak AA, et al. **RNA** 1997 Aug; 3(8):838-49
Examination of the catalytic fitness of the hammerhead ribozyme by in vitro selection. Tang J, et al. **RNA** 1997 Aug;3(8):914-25
Mutagenesis and comparative sequence analysis of a base triple joining the two domains of group I ribozymes. Tanner MA, et al. **RNA** 1997 Sep;3(9):1037-51
Real-time monitoring of hairpin ribozyme kinetics through base-specific quenching of fluorescein-labeled substrates. Walter NG, et al. **RNA** 1997 Apr;3(4):392-404
In vitro selection of a novel catalytic RNA: characterization of a sulfur alkylation reaction and interaction with a small peptide. Wecker M, et al. **RNA** 1996 Oct;2(10):982-94
In vitro optimization of truncated stem-loop II variants of the hammerhead ribozyme for cleavage in low concentrations of magnesium under non-turnover conditions. Zillmann M, et al. **RNA** 1997 Jul;3(7):734-47
Efficient in vitro cleavage of mouse acute phase serum amyloid A mRNA mediated by a synthetic hammerhead ribozyme. Gaughan DJ, et al. **Scand J Immunol** 1997 Jul; 46(1):51-8
Ribozymes: structure and mechanism in RNA catalysis. Scott WG, et al. **Trends Biochem Sci** 1996 Jun;21(6):220-4 (31 ref.)
"Hairpin" and "hammerhead" ribozymes directed towards the mumps virus nucleocapsid RNA: specific cleavage of a small synthetic RNA substrate and full-length mRNA. Albuquerque-Silva J, et al. **Virus Genes** 1996;13(3):211-9
[Reversal of drug resistance in human cancer cells by anti-oncogenes] Funato T. **Gan To Kagaku Ryoho** 1997 Feb;24(4):395-400 (6 ref.) (Eng. Abstr.) **(Jpn)**
[Ribozyme cleaving the mRNA for influenza virus type A polymerase gene] Zakharchuk AN, et al. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1420-5 **(Rus)**

PHARMACOKINETICS

Pharmacokinetics of a synthetic, chemically modified hammerhead ribozyme against the rat cytochrome P-450 3A2 mRNA after single intravenous injections. Desjardins JP, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1419-27

PHARMACOLOGY

Comparison of the antiviral efficacy of ribozymes and antisense RNA directed against bovine leukemia virus rex/tax. Cantor GH, et al. **Antisense Nucleic Acid Drug Dev** 1996 Winter;6(4):301-4
Inhibition of human immunodeficiency virus-1 (HIV-1) replication after transduction of granulocyte colony-stimulating factor-mobilized CD34+ cells from HIV-1-infected donors using retroviral vectors containing anti-HIV-1 genes. Bauer G, et al. **Blood** 1997 Apr 1; 89(7):2259-67
Inhibition of matrix metalloproteinase 9 expression by a ribozyme blocks metastasis in a rat sarcoma model system. Hua J, et al. **Cancer Res** 1996 Nov 15;56(22):5279-84
Reversal of the in vivo metastatic phenotype of human tumor cells by an anti-CAPL (mts1) ribozyme. Maelandsmo GM, et al. **Cancer Res** 1996 Dec 1;56(23):5490-8
A ribozyme specifically suppresses transformation and tumorigenicity of Ha-ras-oncogene-transformed NIH/3T3 cell lines. Chang MY, et al. **J Cancer Res Clin Oncol** 1997; 123(2):91-9
Intracellular cleavage of hepatitis C virus RNA and inhibition of viral protein translation by hammerhead ribozymes. Sakamoto N, et al. **J Clin Invest** 1996 Dec 15;98(12):2720-8
Retroviral delivery and anti-HIV testing of hammerhead ribozymes. Cagnon L, et al. **Methods Mol Biol** 1997; 74:451-7
Use of a hammerhead ribozyme with cationic liposomes to reduce leukocyte type 12-lipoxygenase expression in vascular smooth muscle. Gu JL, et al. **Mol Cell Biochem** 1997 Jul;172(1-2):47-57
Design and anti-HIV-1 activity of ribozymes that cleave HIV-1 LTR. Koizumi M, et al. **Nucleic Acids Symp Ser** 1995;(34):125-6
Growth arrest of Epstein-Barr virus immortalized B lymphocytes by adenovirus-delivered ribozymes. Huang S, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22; 94(15):8156-61
Effect of antisense ribozyme to alpha (1,3)galactosyl transferase gene on the expression of Gal alpha (1,3)Gal epitope. Hayashi S, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):893
Anti-gene therapy: the use of ribozymes to inhibit gene function. Couture LA, et al. **Trends Genet** 1996 Dec; 12(12):510-5 (55 ref.)
[Ribozyme targeting reduces erb-B2 expression of SKOV3 carcinoma cells and inhibits tumor growth in vivo] Juhl H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:41-5 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Ribozymes: structure, function, and potential therapy for dominant genetic disorders. Grassi G, et al. **Ann Med** 1996 Dec;28(6):499-510 (117 ref.)
Tumor inhibitory activity of anti-ras ribozymes delivered by retroviral gene transfer. Li M, et al. **Cancer Gene Ther** 1996 Jul-Aug;3(4):221-9
Ribozyme-mediated high resistance against potato spindle tuber viroid in transgenic potatoes. Yang X, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4861-5

THERAPEUTIC USE

Ribozymes: structure, function, and potential therapy for dominant genetic disorders. Grassi G, et al. **Ann Med** 1996 Dec;28(6):499-510 (117 ref.)
Gene therapy for chronic viral hepatitis: ribozymes, antisense oligonucleotides, and dominant negative mutants. von Weizsäcker F, et al. **Hepatology** 1997 Aug;26(2):251-5 (72 ref.)
Ribozyme-mediated cancer gene therapy. Irie A, et al. **Int J Urol** 1997 Jul;4(4):329-37 (90 ref.)
Anti-HIV therapy with antisense oligonucleotides and ribozymes: realistic approaches or expensive myths? Akhtar S, et al. **J Antimicrob Chemother** 1996 Aug;38(2):159-65 (64 ref.)
Ribozymes enter clinical trials for HIV-1 treatment [news] Rowe PM. **Lancet** 1996 Nov 9;348(9037):1302
Multi-unit anti-BCR-ABL ribozyme therapy in chronic myelogenous leukemia. Leopold LH, et al. **Leuk Lymphoma** 1996 Aug;22(5-6):365-73 (56 ref.)
Hairpin ribozyme gene therapy for AIDS. Duarte EA, et al. **Methods Mol Biol** 1997;74:459-68
Clinical aspects of ribozymes as therapeutics in gene therapy. Looney D, et al. **Methods Mol Biol** 1997;74:469-86 (71 ref.)
[Circumventing multidrug resistance in human cancer by anti-ribozyme] Funato T. **Nippon Rinsho** 1997 May; 55(5):1116-21 (14 ref.) (Eng. Abstr.) **(Jpn)**
[Specific inhibition of anti-DNA antibody production by an anti-DH ribozyme] Suzuki Y, et al. **Nippon Rinsho** 1997 Jun;55(6):1557-61 (18 ref.) (Eng. Abstr.) **(Jpn)**

RNA, CHROMOSOMAL see **RNA, NUCLEAR**

RNA, COMPLEMENTARY

ANALYSIS

Human intestinal folate transport: cloning, expression, and distribution of complementary RNA. Nguyen TT, et al. **Gastroenterology** 1997 Mar;112(3):783-91
Modulation of globin gene expression in cultured erythroid precursors derived from normal individuals: transcriptional and posttranscriptional regulation by hemin. Kollia P, et al. **Proc Assoc Am Physicians** 1997 Jul;109(4):420-8

CHEMISTRY

Recognition of RNA by triplex formation: divergent effects of pyrimidine C-5 methylation. Wang S, et al. **Bioorg Med Chem** 1997 Jun;5(6):1043-50

GENETICS

Multiple components of arginine and phenylalanine transport induced in neutral and basic amino acid transporter-cRNA-injected Xenopus oocytes. Peter GJ, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):915-22
Characterization of the chicken follicle-stimulating hormone receptor (cFSH-R) complementary deoxyribonucleic acid, and expression of cFSH-R messenger ribonucleic acid in the ovary. You S, et al. **Biol Reprod** 1996 Nov; 55(5):1055-62
Amplifiable hybridization probes containing a molecular switch. Blok HJ, et al. **Mol Cell Probes** 1997 Jun; 11(3):187-94

METABOLISM

Modulation of RNase H activity by modified DNA probes: major groove vs minor groove effects. Daniher AT, et al. **Bioorg Med Chem** 1997 Jun;5(6):1037-42
Recognition of RNA by triplex formation: divergent effects of pyrimidine C-5 methylation. Wang S, et al. **Bioorg Med Chem** 1997 Jun;5(6):1043-50
In vitro synthesized SV40 cRNA is trans-spliced after microinjection into the nuclei of mammalian cells. Eul J, et al. **FEBS Lett** 1996 Sep 30;394(2):227-32
Selection of fast-hybridizing complementary RNA species in vitro. Kronenwett R, et al. **Methods Mol Biol** 1997; 74:281-8

THERAPEUTIC USE

Application of antisense ribonucleic acid complementary to O6-methylguanine-deoxyribonucleic acid methyltransferase messenger ribonucleic acid for therapy of malignant gliomas. Nagane M, et al. **Neurosurgery** 1997 Aug;41(2):434-40; discussion 440-1

RNA-DEPENDENT DNA POLYMERASE see **RNA-DIRECTED DNA POLYMERASE**

RNA-DEPENDENT RNA POLYMERASE see **RNA REPLICASE**

RNA-DIRECTED DNA POLYMERASE

mRNA expression, measured by quantitative reverse transcriptase polymerase chain reaction, of five putative drug resistance parameters, in normal and leukaemic peripheral blood and bone marrow. Lohri A, et al. **Acta Haematol** 1997;98(1):1-7
Automated cycle sequencing with Taquenase: protocols for internal labeling, dye primer and "doublex" simultaneous sequencing. Voss H, et al. **Biotechniques** 1997 Aug; 23(2):312-8
Quantitative RT-PCR combined with time-resolved fluorometry for determination of BCR-ABL mRNA. Bortolin S, et al. **Clin Chem** 1996 Dec;42(12):1924-9
Competitive RT-PCR to quantify CFTR mRNA in human endometrium. Mularoni A, et al. **Clin Chem** 1996 Nov; 42(11):1765-9
Recollections of Howard Temin (1934-1994). Drake JW, et al. **Genetics** 1996 Sep;144(1):1-6
Use of reverse transcription-polymerase chain reaction to detect embryonic interleukin-1 system messenger RNA in individual preimplantation mouse embryos co-cultured with Vero cells. Huang HY, et al. **Hum Reprod** 1997 Jul; 12(7):1537-44
Detection of Treponema pallidum by a sensitive reverse transcriptase PCR. Centurion-Lara A, et al. **J Clin Microbiol** 1997 Jun;35(6):1348-52
Reverse transcriptase jumps and gaps. Kupiec JJ, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):1987-91 (38 ref.)
A simple reverse transcriptase PCR assay to distinguish EBNA1 gene transcripts associated with type I and II latency from those arising during induction of the viral lytic cycle. Schaefer BC, et al. **J Virol** 1996 Nov; 70(11):8204-8
Elimination of background signals in a modified polymerase chain reaction-based reverse transcriptase assay. Maudru T, et al. **J Virol Methods** 1997 Jul;66(2):247-61
Wheat retrotransposon families identified by reverse transcriptase domain analysis. Matsuoka Y, et al. **Mol Biol Evol** 1996 Dec;13(10):1384-92
Rapid determination of the complexity of cDNA bands extracted from DDRT-PCR polyacrylamide gels. Smith NR, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3552-4

ANALYSIS

Reverse transcriptase and corresponding activity-blocking antibody for monitoring SIVsm infection in macaques. Ekstrand DH, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):601-10
Reverse transcriptase activity in vaccines derived from chick cells [letter] Robertson JS, et al. **Biologicals** 1996 Sep; 24(3):289-90
The reverse transcriptase assay: problems and practical solutions. Metz RA, et al. **Dev Biol Stand** 1996;88:167-76
Measurement of reverse transcriptase of feline immunodeficiency virus by poly A-linked colorimetric assay. Saito T, et al. **J Vet Med Sci** 1997 Jun;59(6):425-9
Optimization of the reverse transcriptase assay for the detection of viral burden in mice infected with Rauscher murine leukemia virus. White EL, et al. **J Virol Methods** 1996 Oct;62(1):63-70
Nonisotopic assays of viral polymerases and related proteins. Eberle J, et al. **Methods Enzymol** 1996;275:257-76
In situ DNA polymerase and RNase H activity gel assays as applied to hepadnavirus particles. Oberhaus SM, et al. **Methods Enzymol** 1996;275:328-47

ANTAGONISTS & INHIBITORS see **REVERSE TRANSCRIPTASE INHIBITORS**

BIOSYNTHESIS

Expression and characterization of hepadnavirus reverse transcriptases. Hu J, et al. **Methods Enzymol** 1996; 275:195-208
Expression, purification, and characterization of orthomyxovirus: influenza transcriptase. Tomassini JE. **Methods Enzymol** 1996;275:90-9
Production of infectious recombinant Moloney murine leukemia virus particles in BHK cells using Semliki Forest virus-derived RNA expression vectors. Li KJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11658-63

BLOOD

Earlier diagnosis of HIV-1 infection by simultaneous detection of p24 antigen and antibody IgGs to p17 and reverse transcriptase in serum with enzyme immunoassay. Hashida S, et al. **J Clin Lab Anal** 1996;10(4):213-9

RNA-DIRECTED DNA POLYMERASE

CHEMISTRY

An unusual bacterial reverse transcriptase having LVDD in the YXDD box from Escherichia coli. Mao JR, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):489–93

Elucidation of the role of Arg 110 of murine leukemia virus reverse transcriptase in the catalytic mechanism: biochemical characterization of its mutant enzymes. Chowdhury K, et al. **Biochemistry** 1996 Dec 24; 35(51):16610–20

Modulation of non-templated nucleotide addition by Taq DNA polymerase: primer modifications that facilitate genotyping. Brownstein MJ, et al. **Biotechniques** 1996 Jun; 20(6):1004–6, 1008–10

Expression, purification, and characterization of an active RNase H domain of the hepatitis B viral polymerase. Wei X, et al. **J Biol Chem** 1996 Dec 20;271(51):32617–22

The isolated RNase H domain of murine leukemia virus reverse transcriptase. Retention of activity with concomitant loss of specificity. Zhan X, et al. **J Biol Chem** 1997 Aug 29;272(35):22023–9

Hybrid selection with cDNA–silica. Jarrett HW. **J Chromatogr A** 1996 Aug 23;742(1–2):87–94

Adaptive amino acid replacements accompanied by domain fusion in reverse transcriptase. Shirai T, et al. **J Mol Evol** 1997;44 Suppl 1:S155–62

Different properties of wild type and drug–resistant mutants of human immunodeficiency virus type 1 reverse transcriptase in vitro. Ijichi K, et al. **Microbiol Immunol** 1996;40(5):353–8

A minor groove binding track in reverse transcriptase [letter] Bebenek K, et al. **Nat Struct Biol** 1997 Mar;4(3):194–7

Conferring RNA polymerase activity to a DNA polymerase: a single residue in reverse transcriptase controls substrate selection. Gao G, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):407–11

The telomerase picture fills in [news; comment] Barinaga M. **Science** 1997 Apr 25;276(5312):528–9. Comment on: Science 1997 Apr 25;276(5312):561–7.

Reverse transcriptase motifs in the catalytic subunit of telomerase [see comments] Lingner J, et al. **Science** 1997 Apr 25;276(5312):561–7. Comment in: Science 1997 Apr 25;276(5312):528–9. Comment in: Science 1997 Aug 15;277(5328):887.

[Photoaffinity modification of human immunodeficiency virus reverse transcriptase with an analog of deoxyuridine-5'-triphosphate, containing an arylazide group] Shcherbik NV, et al. **Mol Biol (Mosk)** 1997 Mar–Apr;31(2):344–52 **(Rus)**

DIAGNOSTIC USE

Limitations of reverse-transcriptase polymerase chain reaction analyses for detection of micrometastatic epithelial cancer cells in bone marrow. Zippelius A, et al. **J Clin Oncol** 1997 Jul;15(7):2701–8

DRUG EFFECTS

Impact of the stereochemistry of benzo[a]pyrene 7,8–dihydrodiol 9,10–epoxide–deoxyadenosine adducts on resistance to digestion by phosphodiesterases I and II and translesion synthesis with HIV–1 reverse transcriptase. Chary P, et al. **Chem Res Toxicol** 1996 Mar;9(2):409–17

GENETICS

Evidence of HIV–2 infection in Equatorial Guinea (central Africa): partial genetic analysis of a B subtype virus. Heredia A, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):439–40

The use of the reverse transcription–competitive polymerase chain reaction to investigate the in vivo regulation of gene expression in small tissue samples. Auboeuf D, et al. **Anal Biochem** 1997 Feb 15;245(2):141–8

Generation of duck hepatitis B virus polymerase mutants through site–directed mutagenesis which demonstrate resistance to lamivudine [(—)–beta–L–2', 3'–dideoxy–3'–thiacytidine] in vitro. Fischer KP, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1957–60

A zidovudine–resistant simian immunodeficiency virus mutant with a Q151M mutation in reverse transcriptase causes AIDS in newborn macaques. Van Rompay KK, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):278–83

Linear mitochondrial plasmids of Fusarium oxysporum contain genes with sequence similarity to genes encoding a reverse transcriptase from Neurospora spp. Kistler HC, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3311–3

Elucidation of the role of Arg 110 of murine leukemia virus reverse transcriptase in the catalytic mechanism: biochemical characterization of its mutant enzymes. Chowdhury K, et al. **Biochemistry** 1996 Dec 24; 35(51):16610–20

Specific inhibition of in vitro reverse transcription using antisense oligonucleotides targeted to the TAR regions of HIV–1 and HIV–2. Boulme F, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):249–55

Purine ribonucleotide content in infected HIV–RT+ and HIV–RT– lymphoblastoid cell lines. Carlucci F, et al. **Biomed Pharmacother** 1996;50(3–4):158–62

Evolution of mutations conferring multidrug resistance during prophylaxis and therapy for cytomegalovirus disease. Chou S, et al. **J Infect Dis** 1997 Sep;176(3):786–9

Reverse transcriptase genotype and antiretroviral susceptibility of human immunodeficiency virus isolates from patients with advanced disease treated with didanosine: correlation with virologic response and survival. Shepp DH, et al. **J Med Virol** 1996 Aug; 49(4):303–10

A novel Met–to–Thr mutation in the YMDD motif of reverse transcriptase from feline immunodeficiency virus confers resistance to oxathiolane nucleosides. Smith RA, et al. **J Virol** 1997 Mar;71(3):2357–62

Promoters for synthesis of the pre–C and pregenomic mRNAs of human hepatitis B virus are genetically distinct and differentially regulated. Yu X, et al. **J Virol** 1996 Dec; 70(12):8719–26

Highly sensitive qualitative and quantitative detection of reverse transcriptase activity: optimization, validation, and comparative analysis with other detection systems. Yamamoto S, et al. **J Virol Methods** 1996 Sep; 61(1–2):135–43

Genetic selection in Escherichia coli for active human immunodeficiency virus reverse transcriptase mutants. Kim B. **Methods** 1997 Aug;12(4):318–24

Different properties of wild type and drug–resistant mutants of human immunodeficiency virus type 1 reverse transcriptase in vitro. Ijichi K, et al. **Microbiol Immunol** 1996;40(5):353–8

Phylogenetic analysis of a retrotransposon with implications for strong evolutionary constraints on reverse transcriptase. McAllister BF, et al. **Mol Biol Evol** 1997 Jan;14(1):69–80

Evidence for the complex formation between reverse transcriptase and multicopy single–stranded DNA in retron EC83. Jeong DW, et al. **Mol Cells** 1997 Jun 30;7(3):347–51

Comparative analysis of the chromosomal and genomic organization of Ty1–copia–like retrotransposons in pteridophytes, gymnosperms and angiosperms. Brandes A, et al. **Plant Mol Biol** 1997 Jan;33(1):11–21

Reverse piedpiperase: is the knockout mouse leading neuroscientists to a watery end? [letter; comment] Routtenberg A. **Trends Neurosci** 1996 Nov;19(11):471–2. Comment on: Trends Neurosci 1996 May;19(5):177–81.

Expression of human foamy virus reverse transcriptase involves a spliced pol mRNA. Jordan I, et al. **Virology** 1996 Oct 1;224(1):314–9

Petunia vein–clearing virus: a plant pararetrovirus with the core sequences for an integrase function. Richert–Pöggeler KR, et al. **Virology** 1997 Sep 15;236(1):137–46

Mutagenesis of a hepatitis B virus reverse transcriptase yields temperature–sensitive virus. Seeger C, et al. **Virology** 1996 Aug 15;222(2):430–9

Endogenous D–type (HERV–K) related sequences are packaged into retroviral particles in the placenta and possess open reading frames for reverse transcriptase. Simpson GR, et al. **Virology** 1996 Aug 15;222(2):451–6

Structure, function, and evolution of bacterial reverse transcriptase. Inouye S, et al. **Virus Genes** 1995; 11(2–3):81–94 (47 ref.)

Bacterial reverse transcriptase and msDNA. Rice SA, et al. **Virus Genes** 1995;11(2–3):95–104 (54 ref.)

IMMUNOLOGY

Reverse transcriptase and corresponding activity–blocking antibody for monitoring SIVsm infection in macaques. Ekstrand DH, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):601–10

Human recombinant antibody fragments neutralizing human immunodeficiency virus type 1 reverse transcriptase provide an experimental basis for the structural classification of the DNA polymerase family. Gargano N, et al. **J Virol** 1996 Nov;70(11):7706–12

ISOLATION & PURIFICATION

Characterization of the RNA dependent DNA polymerase of bovine leukemia virus. Demirhan I, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2501–5

Gliotoxicity, reverse transcriptase activity and retroviral RNA in monocyte/macrophage culture supernatants from patients with multiple sclerosis. Ménard A, et al. **FEBS Lett** 1997 Aug 25;413(3):477–85

Purification of viral polymerases: general considerations. Sardana V, et al. **Methods Enzymol** 1996;275:3–16 (47 ref.)

Expression, purification, and characterization of orthomyxovirus: influenza transcriptase. Tomassini JE. **Methods Enzymol** 1996;275:90–9

METABOLISM

Miscoding properties of isoguanine (2–oxoadenine) studied in an AMV reverse transcriptase in vitro system. Bukowska AM, et al. **Acta Biochim Pol** 1996;43(1):247–54

Reverse transcriptase–like activity in Trypanosoma cruzi. González CI, et al. **Acta Trop** 1997 Feb;63(2–3):117–26

Human immunodeficiency virus type 1 reverse transcriptase and early events in reverse transcription. Arts EJ, et al. **Adv Virus Res** 1996;46:97–163 (333 ref.)

Biochemical characterization of the reverse transcriptase of a human intracisternal A–type particle (HIAP). Hart DJ, et al. **AIDS Res Hum Retroviruses** 1996 Sep 20; 12(14):1367–72

Quantitative analysis of the endogenous reverse transcriptase reactions of HIV type 1 variants with decreased susceptibility to azidothymidine and nevirapine. Krogstad P, et al. **AIDS Res Hum Retroviruses** 1996 Jul 20; 12(11):977–83

Perspective: research highlights at the Albert Einstein College of Medicine Center for AIDS research. Approaches to control drug resistance in HIV: the role of increased polymerase fidelity. Prasad VR, et al. **AIDS Res Hum Retroviruses** 1996 Jul 20;12(11):959–63 (54 ref.)

Taq–amplified fragments appear as doublets in denaturing gradient gels. Zhu D, et al. **Anal Biochem** 1997 Jan 15; 244(2):404–6

Mutations in the SIV env and the M13 lacZa gene generated in vitro by reverse transcriptases and DNA polymerases. Stuke AW, et al. **Arch Virol** 1997;142(6):1139–54

Competitive reverse–transcriptase PCR: a useful alternative to northern blotting for quantitative estimation of relative abundances of specific mRNAs in precious samples [letter] Gattei V, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):565–7

Linked lexitropsins and the in vitro inhibition of HIV–1 reverse transcriptase RNA–directed DNA polymerization: a novel induced–fit of 3,5 m–pyridyl bisdistamycin to enzyme–associated template–primer. Filipowsky ME, et al. **Biochemistry** 1996 Dec 3;35(48):15397–410

Specific suppression of false–positive signals in the product–enhanced reverse transcriptase assay. Lugert R, et al. **Biotechniques** 1996 Feb;20(2):210–7

Semiquantitative RT–PCR: enhancement of assay accuracy and reproducibility. Sarić T, et al. **Biotechniques** 1997 Apr; 22(4):630–4, 636

Fluorometric assay for DNA polymerases and reverse transcriptase. Seville M, et al. **Biotechniques** 1996 Oct; 21(4):664, 666, 668, 670, 672

It's prime time for reverse transcriptase. Levin HL. **Cell** 1997 Jan 10;88(1):5–8 (20 ref.)

The type of reverse transcriptase affects the sensitivity of some reverse transcription PCR methods. Barragán–González E, et al. **Clin Chim Acta** 1997 Apr 4; 260(1):73–83

Hepadnavirus assembly and reverse transcription require a multi–component chaperone complex which is incorporated into nucleocapsids. Hu J, et al. **EMBO J** 1997 Jan 2;16(1):59–68

Determination of the site of first strand transfer during Moloney murine leukemia virus reverse transcription and identification of strand transfer–associated reverse transcriptase errors. Kulpa D, et al. **EMBO J** 1997 Feb 17;16(4):856–65

Transdominant inhibition of Moloney murine leukemia virus proliferation by defective mutants of reverse transcriptase. Shirasawa Y, et al. **J Biochem (Tokyo)** 1996 Jun; 119(6):1070–5

Incorporation of the guanosine triphosphate analogs 8–oxo–dGTP and 8–NH2–dGTP by reverse transcriptases and mammalian DNA polymerases. Kamath–Loeb AS, et al. **J Biol Chem** 1997 Feb 28;272(9):5892–8

De novo and DNA primer–mediated initiation of cDNA synthesis by the mauriceville retroplasmid reverse transcriptase involve recognition of a 3' CCA sequence. Chen B, et al. **J Mol Biol** 1997 Aug 22;271(3):311–32

Analysis of HIV–2 RT mutants provides evidence that resistance of HIV–1 RT and HIV–2 RT to nucleoside analogs involves a repositioning of the template–primer. Perach M, et al. **J Mol Biol** 1997 May 9;268(3):648–54

A non–radioactive assay system for screening for inhibitors of RNA–dependent reverse transcriptase activity; an analysis using aurintricarboxylic acid and plant flavonoids. Spedding G. **J Mol Recognit** 1996 Sep–Dec;9(5–6):499–502

Transcomplementation of nucleotide priming and reverse transcription between independently expressed TP and RT domains of the hepatitis B virus reverse transcriptase. Lanford RE, et al. **J Virol** 1997 Apr;71(4):2996–3004

Human foamy virus reverse transcription that occurs late in the viral replication cycle. Moebes A, et al. **J Virol** 1997 Oct;71(10):7305–11

RNase H domain of Moloney murine leukemia virus reverse transcriptase retains activity but requires the polymerase domain for specificity. Schultz SJ, et al. **J Virol** 1996 Dec; 70(12):8630–8

A novel Met–to–Thr mutation in the YMDD motif of reverse transcriptase from feline immunodeficiency virus confers resistance to oxathiolane nucleosides. Smith RA, et al. **J Virol** 1997 Mar;71(3):2357–62

Reverse transcriptase activity in chicken embryo fibroblast culture supernatants is associated with particles containing endogenous avian retrovirus EAV–0 RNA. Weissmahr RN, et al. **J Virol** 1997 Apr;71(4):3005–12

Direct in situ transcriptase polymerase chain reaction for the detection of Enterovirus genome in liver tissues. Berger MM, et al. **J Virol Methods** 1997 Apr;65(1):55–66

Development of an improved product enhanced reverse transcriptase assay. Chang A, et al. **J Virol Methods** 1997 Apr;65(1):45–54

Analyzing the fidelity of reverse transcription and transcription. Boyer JC, et al. **Methods Enzymol** 1996; 275:523–37

Site–directed mutagenic analysis of viral polymerases and related proteins. Boyer PL, et al. **Methods Enzymol** 1996; 275:538–55

Novel methods of generating specific oligonucleotide inhibitors of viral polymerases. Chen H, et al. **Methods Enzymol** 1996;275:503–20

Catalytic activities associated with retroviral and viral polymerases. Gabbara S, et al. **Methods Enzymol** 1996; 275:276–310

Analysis of resistance mutants of viral polymerases. Oxford JS, et al. **Methods Enzymol** 1996;275:555–600 (179 ref.)
The Mauriceville retroplasmid reverse transcriptase initiates cDNA synthesis de novo at the 3' end of tRNAs. Chiang CC, et al. **Mol Cell Biol** 1997 Aug;17(8):4526–35
An unusual mechanism of self-primed reverse transcription requires the RNase H domain of reverse transcriptase to cleave an RNA duplex. Levin HL. **Mol Cell Biol** 1996 Oct;16(10):5645–54
Evidence for the complex formation between reverse transcriptase and multicopy single-stranded DNA in retron EC83. Jeong DW, et al. **Mol Cells** 1997 Jun 30;7(3):347–51
Neisseria gonorrhoeae reverse transcriptase activity does not mediate pilin gene conversion [letter] Barten R, et al. **Mol Microbiol** 1997 May;24(3):667–9
Moloney murine leukemia reverse transcriptase suspect in the production of multiple misincorporations during hprt cDNA synthesis. Curry J, et al. **Mutat Res** 1997 Mar 4; 374(1):145–8
Retrotransposon reverse-transcriptase-mediated repair of chromosomal breaks [see comments] Teng SC, et al. **Nature** 1996 Oct 17;383(6601):641–4. Comment in: Nature 1997 Mar 6;385(6620):31–2.
Two step synthesis of (–) strong-stop DNA by avian and murine reverse transcriptases in vitro. Isel C, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):545–52
A new family of site-specific retrotransposons, SART1, is inserted into telomeric repeats of the silkworm, Bombyx mori. Takahashi H, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1578–84
Reverse transcriptase can inhibit PCR and stimulate primer-dimer formation. Chumakov KM. **PCR Methods Appl** 1994 Aug;4(1):62–4
Initiation of (–) strand DNA synthesis from tRNA(3Lys) on lentiviral RNAs: implications of specific HIV-1 RNA-tRNA(3Lys) interactions inhibiting primer utilization by retroviral reverse transcriptases. Arts EJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10063–8
Secondary structure model of the RNA recognized by the reverse transcriptase from the R2 retrotransposable element. Mathews DH, et al. **RNA** 1997 Jan;3(1):1–16
RNase H cleavage of tRNAPro mediated by M-MuLV and HIV-1 reverse transcriptases. Smith CM, et al. **Virology** 1997 Mar 17;229(2):437–46
Reverse transcriptase: mediator of genomic plasticity. Brosius J, et al. **Virus Genes** 1995;11(2–3):163–79 (259 ref.)
[Recombinant Thermus thermophilus His6-DNA polymerase with reverse transcriptase activity] Smirnov IuV, et al. **Bioorg Khim** 1997 Apr;23(4):257–61 (Eng. Abstr.) **(Rus)**
[Interaction of human immunodeficiency virus reverse transcriptase with oligonucleotide derivatives containing polycyclic aromatic groups at the 5'-terminus] Zakharova OD, et al. **Mol Biol (Mosk)** 1997 Mar–Apr;31(2):373–9 **(Rus)**

PHYSIOLOGY

Impact of the stereochemistry of benzo[a]pyrene 7,8-dihydrodiol 9,10-epoxide-deoxyadenosine adducts on resistance to digestion by phosphodiesterases I and II and translesion synthesis with HIV-1 reverse transcriptase. Chary P, et al. **Chem Res Toxicol** 1996 Mar;9(2):409–17
DNA repair. A little help for my ends [news] Boeke JD. **Nature** 1996 Oct 17;383(6601):579, 581
Genetic loose change: how retroelements and reverse transcriptase heal broken chromosomes. Garfinkel DJ. **Trends Microbiol** 1997 May;5(5):173–5

RNA, DOUBLE-STRANDED

Involvement of dsRNA virus in the protein composition and growth kinetics of host Trichomonas vaginalis. Provenzano D, et al. **Arch Virol** 1997;142(5):939–52
Factors affecting the spread of double-stranded RNA viruses in Aspergillus nidulans. Coenen A, et al. **Genet Res** 1997 Feb;69(1):1–10
Analysis of interactions between the codon-anticodon duplexes within the ribosome: their role in translation. Lim VI. **J Mol Biol** 1997 Mar 14;266(5):877–90
Possible involvement of double-stranded RNA-activated protein kinase in cell death by influenza virus infection. Takizawa T, et al. **J Virol** 1996 Nov;70(11):8128–32
In vitro selection of packaging sites in a double-stranded RNA virus. Yao W, et al. **J Virol** 1997 Mar;71(3):2157–62
dsRNA associated with virus-like particles in Eimeria spp. of the domestic fowl. Lee S, et al. **Parasitol Res** 1996; 82(6):518–23
Structure, reactivity, and biology of double-stranded RNA. Nicholson AW. **Prog Nucleic Acid Res Mol Biol** 1996; 52:1–65 (275 ref.)

ANALYSIS

RT-PCR detection of dsRNAs associated with La France disease of the cultivated mushroom Agaricus bisporus (Lange) Imbach. Revill PA, et al. **J Virol Methods** 1997 Jan;63(1–2):17–26
Stringently and developmentally regulated levels of a cytoplasmic double-stranded RNA and its high-efficiency transmission via egg and pollen in rice. Moriyama H, et al. **Plant Mol Biol** 1996 Jul;31(4):713–9

BIOSYNTHESIS

Structure of L-A virus: a specialized compartment for the transcription and replication of double-stranded RNA. Castón JR, et al. **J Cell Biol** 1997 Sep 8;138(5):975–85
Yeast L double-stranded ribonucleic acid is synthesized during the G1 phase but not the S phase of the cell cycle. Zakian VA, et al. **Mol Cell Biol** 1981 Aug;1(8):673–9
HIV-1 nucleocapsid protein induces "maturation" of dimeric retroviral RNA in vitro. Feng YX, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7577–81

CHEMICAL SYNTHESIS

[Synthesis and properties of mixed ribodeoxyribooligonucleotide duplexes containing an internucleotide trisubstituted pyrophosphate bond] Naryshkin NA, et al. **Bioorg Khim** 1996 Sep;22(9):691–8 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Structure-based discovery of ligands targeted to the RNA double helix. Chen Q, et al. **Biochemistry** 1997 Sep 23; 36(38):11402–7
Detection of inosine in messenger RNA by inosine-specific cleavage. Morse DP, et al. **Biochemistry** 1997 Jul 15; 36(28):8429–34
Solution structures of 5-fluorouracil-substituted DNA and RNA decamer duplexes. Sahasrabudhe PV, et al. **Biochemistry** 1996 Oct 22;35(42):13597–608
Solution structures of 5-fluorouracil-substituted RNA duplexes containing G-U wobble base pairs. Sahasrabudhe PV, et al. **Biochemistry** 1997 May 20;36(20):5981–91
G.A and U.U mismatches can stabilize RNA internal loops of three nucleotides. Schroeder S, et al. **Biochemistry** 1996 Dec 17;35(50):16105–9
Polarized Raman spectroscopy of double-stranded RNA from bacteriophage phi6: local Raman tensors of base and backbone vibrations. Benevides JM, et al. **Biophys J** 1997 Jun;72(6):2748–62
Double-stranded RNAs in Korean isolates of Rhizoctonia solani AG4. Kim SO, et al. **FEMS Microbiol Lett** 1996 Aug 1;141(2–3):203–6
The formation of parallel RNA-RNA duplexes in vitro. Tchurikov NA, et al. **J Biomol Struct Dyn** 1995 Dec; 13(3):507–13
Crystal structure of r(GUGUGUA)dC with tandem G x U/U x G wobble pairs with strand slippage. Biswas R, et al. **J Mol Biol** 1997 Jul 18;270(3):511–9
Crystal structure of an alternating octamer r(GUAUGUA)dC with adjacent G x U wobble pairs. Biswas R, et al. **J Mol Biol** 1997 Apr 18;267(5):1149–56
Characterization of the autoantigen La (SS-B) as a dsRNA unwinding enzyme. Hühn P, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):410–6
Organization and expression of the double-stranded RNA genome of Helminthosporium victoriae 190S virus, a totivirus infecting a plant pathogenic filamentous fungus. Huang S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12541–6

GENETICS

Variability and inheritance of double-stranded RNA viruses in Phaffia rhodozyma. Pfeiffer I, et al. **Curr Genet** 1996 Sep;30(4):294–7
Inheritance of dsRNAs in the rice blast fungus, Magnaporthe grisea. Chun SJ, et al. **FEMS Microbiol Lett** 1997 Mar 15;148(2):159–62
Characterization of the double-stranded RNA genome segment S3 of avian reovirus. Yin HS, et al. **J Virol Methods** 1997 Aug;67(1):93–101
Double-stranded RNA viruses of Saccharomyces cerevisiae. Wickner RB. **Microbiol Rev** 1996 Mar;60(1):250–65 (172 ref.)

ISOLATION & PURIFICATION

Absence of double-stranded replicative forms of HCV RNA in liver tissue from chronically infected patients. Blight K, et al. **J Viral Hepat** 1996 Jan;3(1):29–36
Rapid isolation of double-stranded RNAs from entomopathogenic species of the fungus Paecilomyces using a commercial minicolumn system. Inglis PW, et al. **J Virol Methods** 1997 Aug;67(1):113–6
Serine palmitoyltransferase (scs1/lcb2) mutants have elevated copy number of the L-A dsRNA virus. Garnepudi VR, et al. **Yeast** 1997 Mar 30;13(4):299–304

METABOLISM

Purification and some properties of a novel dsRNA degrading nuclease bound to rye germ ribosomes. Siwecka MA. **Acta Biochim Pol** 1997;44(1):61–8
The regulation of the protein kinase PKR by RNA. Robertson HD, et al. **Biochimie** 1996;78(11–12):909–14 (27 ref.)
The gradual reduction of viroid levels in hop mericlones following heat therapy: a possible role for a nuclease degrading dsRNA. Matoušek J, et al. **Biol Chem Hoppe Seyler** 1995 Dec;376(12):715–21
Physical association between STAT1 and the interferon-inducible protein kinase PKR and implications for interferon and double-stranded RNA signaling pathways. Wong AH, et al. **EMBO J** 1997 Mar 17; 16(6):1291–304
Characterization of the solution complex between the interferon-induced, double-stranded RNA-activated protein kinase and HIV-I trans-activating region RNA. Carpick BW, et al. **J Biol Chem** 1997 Apr 4;272(14):9510–6
Comparative mutational analysis of the double-stranded RNA binding domains of Xenopus laevis RNA-binding protein A. Krovat BC, et al. **J Biol Chem** 1996 Nov 8; 271(45):28112–9
Specific mutations near the amino terminus of double-stranded RNA-dependent protein kinase (PKR) differentially affect its double-stranded RNA binding and dimerization properties. Patel RC, et al. **J Biol Chem** 1996 Oct 11;271(41):25657–63
A model for the double-stranded RNA (dsRNA)-dependent dimerization and activation of the dsRNA-activated protein kinase PKR. Wu S, et al. **J Biol Chem** 1997 Jan 10;272(2):1291–6
A Xenopus zinc finger protein that specifically binds dsRNA and RNA-DNA hybrids. Finerty PJ Jr, et al. **J Mol Biol** 1997 Aug 15;271(2):195–208
Measles virus-specific dsRNAs are targets for unwinding/modifying activity in neural cells in vitro. Ecker A, et al. **J Neurovirol** 1995 Mar;1(1):92–100
Double-stranded RNA is a trigger for apoptosis in vaccinia virus-infected cells. Kibler KV, et al. **J Virol** 1997 Mar; 71(3):1992–2003
Bluetongue virus VP6 protein binds ATP and exhibits an RNA-dependent ATPase function and a helicase activity that catalyze the unwinding of double-stranded RNA substrates. Stäuber N, et al. **J Virol** 1997 Oct;71(10):7220–6
Dissociation of long-chain duplex RNA can occur via strand displacement in vitro: biological implications. Homann M, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4395–400
Characterization of the autoantigen La (SS-B) as a dsRNA unwinding enzyme. Hühn P, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):410–6
A Z-DNA binding domain present in the human editing enzyme, double-stranded RNA adenosine deaminase. Herbert A, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8421–6
Two forms of human double-stranded RNA-specific editase 1 (hRED1) generated by the insertion of an Alu cassette. Gerber A, et al. **RNA** 1997 May;3(5):453–63
Peptides derived from the interferon-induced PKR prevent activation by HIV-1 TAR RNA. Nekhai S, et al. **Virology** 1996 Aug 1;222(1):193–200
Double-stranded RNA-dependent protein kinase (PKR) is regulated by reovirus structural proteins. Yue Z, et al. **Virology** 1997 Aug 4;234(2):364–71
Site-directed mutagenesis of the double-stranded RNA binding domain of bacterially-expressed sigma 3 reovirus protein. Wang Q, et al. **Virus Res** 1996 Apr;41(2):141–51

PHARMACOLOGY

Ridostin inhibits transfer of HIV-1 from abortively infected human umbilical vein endothelial cells to T lymphoblastoid cells. Scheglovitova O, et al. **Acta Virol** 1995 Sep; 39(4):189–92
Ridostin inhibits HIV-1 replication in the T lymphoblastoid cell line C8166. Possible role of altered cytokine production. Scheglovitova O, et al. **Acta Virol** 1995 Sep; 39(4):185–8
[Effect of imidazen in combination with RNA on the structure of DNA from sarcoma 45] Babaian IuS, et al. **Biofizika** 1997 Jan–Feb;42(1):125–8 (Eng. Abstr.) **(Rus)**
[Features of formation of antiviral resistance upon local application of the interferon inducer ridostin] Masycheva VI, et al. **Vopr Virusol** 1997 May–Jun;42(3):126–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Ultrastructure of Kunjin virus-infected cells: colocalization of NS1 and NS3 with double-stranded RNA, and of NS2B with NS3, in virus-induced membrane structures. Westaway EG, et al. **J Virol** 1997 Sep;71(9):6650–61

THERAPEUTIC USE

[Effectiveness of the interferon inducers ridostin and camedon in prevention and treatment of experimental alpha- and flavivirus infections] Barinskii IF, et al. **Vopr Virusol** 1996 May–Jun;41(3):133–5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Three-dimensional structural analysis of recombinant rotavirus-like particles with intact and amino-terminal-deleted VP2: implications for the architecture of the VP2 capsid layer. Lawton JA, et al. **J Virol** 1997 Oct;71(10):7353–60

RNA EDITING

Gene regulation by mRNA editing [editorial; comment] Ashkenas J. **Am J Hum Genet** 1997 Feb;60(2):278–83 (43 ref.). Comment on: Am J Hum Genet 1997 Feb;60(2):305–12.
A potential role for NF1 mRNA editing in the pathogenesis of NF1 tumors [see comments] Cappione AJ, et al.

Am J Hum Genet 1997 Feb;60(2):305–12. Comment in: Am J Hum Genet 1997 Feb;60(2):278–83.

Copper deficiency increases hepatic apolipoprotein B secretion and mRNA editing in rats. Reaves SK, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C595–604

RNA editing. Simpson L, et al. **Annu Rev Neurosci** 1996; 19:27–52 (177 ref.)

Effects of apo E deficiency on plasma lipid levels in mice lacking APOBEC-1. Osuga J, et al. **Biochem Biophys Res Commun** 1997 Jul 18;236(2):375–8

Apobec-1 and apolipoprotein B mRNA editing. Chan L, et al. **Biochim Biophys Acta** 1997 Mar 10;1345(1):11–26 (90 ref.)

Two nucleotides 5'-adjacent to the anticodon of rat cytoplasmic tRNA(Asp) are not edited. Tomita K, et al. **Biochimie** 1996;78(11–12):1001–6

Developmental changes of RNA editing of glutamate receptor subunits GluR5 and GluR6: in vivo versus in vitro. Paschen W, et al. **Brain Res Dev Brain Res** 1997 Feb 20; 98(2):271–80

Regional analysis of developmental changes in the extent of GluR6 mRNA editing in rat brain. Schmitt J, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):153–7

RNA editing: rewriting receptors. O'Connell MA. **Curr Biol** 1997 Jul 1;7(7):R437–9 (28 ref.)

The chlB gene encoding a subunit of light-independent protochlorophyllide reductase is edited in chloroplasts of conifers. Karpinska B, et al. **Curr Genet** 1997 Apr; 31(4):343–7

The wheat mitochondrial rps13 gene: RNA editing and co-transcription with the atp6 gene. Takvorian A, et al. **Curr Genet** 1997 Jun;31(6):497–502

Preferential RNA editing at specific sites within transcripts of two plant mitochondrial genes does not depend on transcriptional context or nuclear genotype. Wilson RK, et al. **Curr Genet** 1996 Dec;30(6):502–8

Mammalian RNA-dependent deaminases and edited mRNAs. Maas S, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):343–9 (49 ref.)

No editing of mitochondrial plasmid transcripts in mitochondria of Physarum that have an RNA-editing system. Takano H, et al. **DNA Res** 1997 Feb 28;4(1):67–71

Extraplastidic site-specific factors mediate RNA editing in chloroplasts. Bock R, et al. **EMBO J** 1997 Jun 2; 16(11):3282–8

In vivo dissection of cis-acting determinants for plastid RNA editing. Bock R, et al. **EMBO J** 1996 Sep 16;15(18):5052–9

RNA editing changes the identity of a mitochondrial tRNA in marsupials. Börner GV, et al. **EMBO J** 1996 Nov 1; 15(21):5949–57

Guide RNA-directed uridine insertion RNA editing in vitro. Byrne EM, et al. **EMBO J** 1996 Dec 2;15(23):6758–65

Sequences directing C to U editing of the plastid psbL mRNA are located within a 22 nucleotide segment spanning the editing site. Chaudhuri S, et al. **EMBO J** 1996 Nov 1;15(21):5958–64

Purification of a functional enzymatic editing complex from Trypanosoma brucei mitochondria. Rusché LN, et al. **EMBO J** 1997 Jul 1;16(13):4069–81

Insulin modulation of newly synthesized apolipoproteins B-100 and B-48 in human fetal intestine: gene expression and mRNA editing are not involved. Levy E, et al. **FEBS Lett** 1996 Sep 16;393(2-3):253–8

A novel translational repressor mRNA is edited extensively in livers containing tumors caused by the transgene expression of the apoB mRNA-editing enzyme. Yamanaka S, et al. **Genes Dev** 1997 Feb 1;11(3):321–33

Cloning of a human RNA editing deaminase (ADARB1) of glutamate receptors that maps to chromosome 21q22.3. Mittaz L, et al. **Genomics** 1997 Apr 15;41(2):210–7

Localization of a novel human RNA-editing deaminase (hRED2 or ADARB2) to chromosome 10p15. Mittaz L, et al. **Hum Genet** 1997 Sep;100(3–4):398–400

Purification of human double-stranded RNA-specific editase 1 (hRED1) involved in editing of brain glutamate receptor B pre-mRNA. O'Connell MA, et al. **J Biol Chem** 1997 Jan 3;272(1):473–8

RNA editing of glutamate receptor subunits GluR2, GluR5 and GluR6 in transient cerebral ischemia in the rat. Paschen W, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):548–56

Editing of GluR2 RNA in the gerbil hippocampus after global cerebral ischemia. Rump A, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1362–5

Hepatic gene transfer of the catalytic subunit of the apolipoprotein B mRNA editing enzyme results in a reduction of plasma LDL levels in normal and watanabe heritable hyperlipidemic rabbits. Greeve J, et al. **J Lipid Res** 1996 Sep;37(9):2001–17

Splicing and intron-internal RNA editing of trnK-matK transcripts in barley plastids: support for MatK as an essential splice factor. Vogel J, et al. **J Mol Biol** 1997 Jul 11;270(2):179–87

Polyadenylation creates the discriminator nucleotide of chicken mitochondrial tRNA(Tyr). Yokobori S, et al. **J Mol Biol** 1997 Jan 17;265(2):95–9

Evolution of the nad3-rps12 gene cluster in angiosperm mitochondria: comparison of edited and unedited sequences. Pesole G, et al. **J Mol Evol** 1996 Nov; 43(5):447–52

Single-channel properties of recombinant AMPA receptors depend on RNA editing, splice variation, and subunit composition. Swanson GT, et al. **J Neurosci** 1997 Jan 1; 17(1):58–69

Effect of RNA editing and subunit co-assembly single-channel properties of recombinant kainate receptors. Swanson GT, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):129–42

Control of apolipoprotein B mRNA editing: implication of mRNA dynamics at various maturation stages. Chen L, et al. **J Theor Biol** 1996 Dec 21;183(4):391–407

Increased hepatic synthesis and accumulation of plasma apolipoprotein B100 in copper-deficient rats does not result from modification in apolipoprotein B mRNA editing. Nassir F, et al. **Lipids** 1996 Apr;31(4):433–6

Normal intestinal dietary fat and cholesterol absorption, intestinal apolipoprotein B (ApoB) mRNA levels, and ApoB-48 synthesis in a hypobetalipoproteinemic kindred without any ApoB truncation. Pulai JI, et al. **Metabolism** 1997 Sep;46(9):1095–100

RNA editing in trypanosomatid mitochondria. Simpson L, et al. **Methods Enzymol** 1996;264:99–121

RNA editing in kinetoplastid protozoa. Stuart K, et al. **Microbiol Mol Biol Rev** 1997 Mar;61(1):105–20 (114 ref.)

Distinct differences in the requirements for ribonucleoprotein complex formation on differentially regulated pre-edited mRNAs in Trypanosoma brucei. Koslowsky DJ, et al. **Mol Biochem Parasitol** 1996 Sep;80(1):1–14

Effects of RNA editing and gene processing on phylogenetic reconstruction. Bowe LM, et al. **Mol Biol Evol** 1996 Nov; 13(9):1159–66

Guide RNA requirement for editing-site-specific endonucleolytic cleavage of preedited mRNA by mitochondrial ribonucleoprotein particles in Trypanosoma brucei. Adler BK, et al. **Mol Cell Biol** 1997 Sep; 17(9):5377–85

Editing of glutamate receptor B subunit ion channel RNAs by four alternatively spliced DRADA2 double-stranded RNA adenosine deaminases. Lai F, et al. **Mol Cell Biol** 1997 May;17(5):2413–24

Regulation of serotonin-2C receptor G-protein coupling by RNA editing [see comments] Burns CM, et al. **Nature** 1997 May 15;387(6630):303–8. Comment in: Nature 1997 May 15;387(6630):242–3.

RNA editing. Message change for a fat controller [news; comment] Scott J. **Nature** 1997 May 15;387(6630):242–3. Comment on: Nature 1997 May 15;387(6630):303–8.

Mitochondrial tRNAs in the lower fungus Spizellomyces punctatus: tRNA editing and UAG 'stop' codons recognized as leucine. Laforest MJ, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):626–32

RNA editing in the acceptor stem of squid mitochondrial tRNA(Tyr). Tomita K, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4987–91

Analysis of the heterogeneous transcripts of the highly edited orf206 in tomato mitochondria. Shikanai T, et al. **Plant Cell Physiol** 1996 Jul;37(5):692–6

RNA editing in plant mitochondria and chloroplasts. Maier RM, et al. **Plant Mol Biol** 1996 Oct;32(1-2):343–65 (113 ref.)

Mutations of cytochrome b6 in Chlamydomonas reinhardtii disclose the functional significance for a proline to leucine conversion by petB editing in maize and tobacco. Zito F, et al. **Plant Mol Biol** 1997 Jan;33(1):79–86

Trypanosome U-deletional RNA editing involves guide RNA-directed endonuclease cleavage, terminal U exonuclease, and RNA ligase activities. Cruz-Reyes J, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8901–6

Occurrence of plastid RNA editing in all major lineages of land plants. Freyer R, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6285–90

Insertional editing of nascent mitochondrial RNAs in Physarum. Visomirski-Robic LM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4324–9

Purification and characterization of a human RNA adenosine deaminase for glutamate receptor B pre-mRNA editing. Yang JH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4354–9

Transgenic male-sterile plant induced by an unedited atp9 gene is restored to fertility by inhibiting its expression with antisense RNA. Zabaleta E, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11259–63

Two forms of human double-stranded RNA-specific editase 1 (hRED1) generated by the insertion of an Alu cassette. Gerber A, et al. **RNA** 1997 May;3(5):453–63

RNA editing missing in mitochondria [letter] Orr AT, et al. **RNA** 1997 Apr;3(4):335–6

Insertional editing in isolated Physarum mitochondria is linked to RNA synthesis. Visomirski-Robic LM, et al. **RNA** 1997 Aug;3(8):821–37

Discrete determinants in transfer RNA for editing and aminoacylation. Hale SP, et al. **Science** 1997 May 23; 276(5316):1250–2

Pharmacia Biotech & Science Prize. 1996 grand prize winner. RNA editing hints of a remarkable diversity in gene expression pathways. Seiwert SD. **Science** 1996 Dec 6; 274(5293):1636–7

RNA editing and hypermutation by adenosine deamination [published erratum appears in Trends Biochem Sci 1997 Jul;22(7):278] Bass BL. **Trends Biochem Sci** 1997 May; 22(5):157–62 (54 ref.)

RNA editing: getting U into RNA. Kable ML, et al. **Trends Biochem Sci** 1997 May;22(5):162–6 (27 ref.)

Cell and genome coevolution: facultative anaerobiosis, glycosomes and kinetoplastan RNA editing. Cavalier-Smith T. **Trends Genet** 1997 Jan;13(1):6–9 (30 ref.)

RNA editing, introns and evolution. Herbert A. **Trends Genet** 1996 Jan;12(1):6–9 (23 ref.)

Base-modification mRNA editing through deamination--the good, the bad and the unregulated. Smith HC, et al. **Trends Genet** 1996 Oct;12(10):418–24 (69 ref.)

Recombinant measles viruses defective for RNA editing and V protein synthesis are viable in cultured cells. Schneider H, et al. **Virology** 1997 Jan 20;227(2):314–22

[RNA editing] Yamanaka S, et al. **Tanpakushitsu Kakusan Koso** 1997 May;42(6):803–11 (48 ref.) **(Jpn)**

GENETICS

Control of gene expression by base deamination: the case of RNA editing in wheat mitochondria. Blanc V, et al. **Biochimie** 1996;78(6):511–7 (50 ref.)

Editing and import: strategies for providing plant mitochondria with a complete set of functional transfer RNAs. Dietrich A, et al. **Biochimie** 1996;78(6):518–29

Tissue-specific and differential editing of the two ycf3 editing sites in maize plastids. Ruf S, et al. **Curr Genet** 1997 Jul; 32(1):19–23

Gene transfer of cytidine deaminase apoBEC-1 lowers lipoprotein(a) in transgenic mice and induces apolipoprotein B editing in rabbits. Hughes SD, et al. **Hum Gene Ther** 1996 Jan;7(1):39–49

Cloning of an Apobec-1-binding protein that also interacts with apolipoprotein B mRNA and evidence for its involvement in RNA editing. Lau PP, et al. **J Biol Chem** 1997 Jan 17;272(3):1452–5

Tissue-specific inhibition of apolipoprotein B mRNA editing in the liver by adenovirus-mediated transfer of a dominant negative mutant APOBEC-1 leads to increased low density lipoprotein in mice. Oka K, et al. **J Biol Chem** 1997 Jan 17;272(3):1456–60

Accelerated evolution of sites undergoing mRNA editing in plant mitochondria and chloroplasts. Shields DC, et al. **Mol Biol Evol** 1997 Mar;14(3):344–9

Disruption of a gene encoding a novel mitochondrial DEAD-box protein in Trypanosoma brucei affects edited mRNAs. Missel A, et al. **Mol Cell Biol** 1997 Sep; 17(9):4895–903

RNA editing status of nad7 intron domains in wheat mitochondria. Carrillo C, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):403–9

Paramyxovirus RNA editing and the requirement for hexamer genome length. Hausmann S, et al. **RNA** 1996 Oct;2(10):1033–45

PHYSIOLOGY

RNA editing in metazoan mitochondria: staying fit without sex. Börner GV, et al. **FEBS Lett** 1997 Jun 16;409(3):320–4 (34 ref.)

Dramatic increase of the RNA editing for glutamate receptor subunits during terminal differentiation of clonal human neurons. Lai F, et al. **J Neurochem** 1997 Jul;69(1):43–52

Isolation and characterization of intranuclear ribonucleoprotein complexes associated with double-stranded RNA adenosine deaminase from brain cells: implications for RNA-editing and hypermutation of viral RNA in the CNS. Chen Z, et al. **J Neurovirol** 1995 Sep;1(3-4):295–306

A ribosomal protein L2 gene is transcribed, spliced, and edited at one site in rice mitochondria. Kubo N, et al. **Plant Mol Biol** 1996 Jul;31(4):853–62

RNA, FUNGAL

Aspergillus fabM encodes an essential product that is related to poly(A)-binding proteins and activates development when overexpressed. Marhoul JF, et al. **Genetics** 1996 Dec; 144(4):1463–70

Mitochondrial tRNAs in the lower fungus Spizellomyces punctatus: tRNA editing and UAG 'stop' codons recognized as leucine. Laforest MJ, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):626–32

ANALYSIS

Ribosomal DNA internal transcribed spacers to estimate the proportion of Pisolithus tinctorius and Eucalyptus RNAs in ectomycorrhiza. Diaz EC, et al. **Appl Environ Microbiol** 1997 Mar;63(3):840–3

Specific detection of Candida albicans and Candida tropicalis by fluorescent in situ hybridization with an 18S rRNA-targeted oligonucleotide probe. Lischewski A, et al. **Microbiology** 1996 Oct;142 (Pt 10):2731–40

In vitro selection of a 7-methyl-guanosine binding RNA that inhibits translation of capped mRNA molecules. Haller AA, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8521–6

BIOSYNTHESIS

A multisubunit 3'end processing factor from yeast containing poly(A) polymerase and homologues of the subunits of mammalian cleavage and polyadenylation specificity factor. Preker PJ, et al. **EMBO J** 1997 Aug 1;16(15):4727–37

RRP5 is required for formation of both 18S and 5.8S rRNA in yeast. Venema J, et al. **EMBO J** 1996 Oct 15; 15(20):5701–14

Mechanism, specificity and general properties of the yeast enzyme catalysing the formation of inosine 34 in the anticodon of transfer RNA. Auxilien S, et al. **J Mol Biol** 1996 Oct 4;262(4):437–58

Transcription in vitro with Saccharomyces cerevisiae mitochondrial RNA–polymerase. Mangus DA, et al. **Methods Enzymol** 1996;264:57–66

Length changes in the joining segment between domains 5 and 6 of a group II intron inhibit self–splicing and alter 3' splice site selection. Boulanger SC, et al. **Mol Cell Biol** 1996 Oct;16(10):5896–904

The yeast nucleolar protein Cbf5p is involved in rRNA biosynthesis and interacts genetically with the RNA polymerase I transcription factor RRN3. Cadwell C, et al. **Mol Cell Biol** 1997 Oct;17(10):6175–83

restless, an active Ac–like transposon from the fungus Tolypocladium inflatum: structure, expression, and alternative RNA splicing. Kempken F, et al. **Mol Cell Biol** 1996 Nov;16(11):6563–72

Yeast L double–stranded ribonucleic acid is synthesized during the G1 phase but not the S phase of the cell cycle. Zakian VA, et al. **Mol Cell Biol** 1981 Aug;1(8):673–9

Purines are required at the 5' ends of newly initiated RNAs for optimal RNA polymerase III gene expression. Zecherle GN, et al. **Mol Cell Biol** 1996 Oct;16(10):5801–10

Activated levels of rRNA synthesis in fission yeast are driven by an intergenic rDNA region positioned over 2500 nucleotides upstream of the initiation site. Liu Z, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):659–67

Synthesis of functional eukaryotic ribosomal RNAs in trans: development of a novel in vivo rDNA system for dissecting ribosome biogenesis. Liang WQ, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2864–8

CHEMISTRY

Arginine aminoacylation identity is context–dependent and ensured by alternate recognition sets in the anticodon loop of accepting tRNA transcripts. Sissler M, et al. **EMBO J** 1996 Sep 16;15(18):5069–76

Modification of 18 S rRNA in the 40 S ribosomal subunit of yeast with dimethyl sulfate. Mankin AS, et al. **FEBS Lett** 1981 Nov 2;134(1):11–4

RNA partitioning accompanied by adsorption: high–molecular–mass RNA adsorbed at the interface like a particle. Kimura K, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):213–9

Identification of functional domains in the self–cleaving Neurospora VS ribozyme using damage selection. Beattie TL, et al. **J Mol Biol** 1997 Apr 11;267(4):830–40

Sequence/structure selective thermal and photochemical cleavage of yeast–tRNA(Phe) by UO(2)2+. Nielsen PE, et al. **J Mol Recognit** 1996 May–Jun;9(3):228–32

Matrix–assisted laser desorption/ionisation mass spectrometry of transfer ribonucleic acids isolated from yeast. Gruic–Sovulj I, et al. **Nucleic Acids Res** 1997 May 1;25(9):1859–61

Fe.bleomycin as a probe of RNA conformation. Holmes CE, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3399–406

Visualization of RNA crystal growth by atomic force microscopy. Ng JD, et al. **Nucleic Acids Res** 1997 Jul 1; 25(13):2582–8

Site–specific hydrolysis of yeast tRNAPhe by anthraquinone–glycine and anthraquinone–iminodiacetate conjugates. Endo M, et al. **Nucleic Acids Symp Ser** 1995; (34):109–10

Nuclear pre–tRNA terminal structure and RNase P recognition. Lee Y, et al. **RNA** 1997 Feb;3(2):175–85

RNA apatamers for yeast ribosomal protein L32 have a conserved purine–rich internal loop. Li H, et al. **RNA** 1997 Mar;3(3):245–54

Secondary structure of the yeast Saccharomyces cerevisiae pre–U3A snoRNA and its implication for splicing efficiency. Mougin A, et al. **RNA** 1996 Nov;2(11):1079–93

DRUG EFFECTS

Sequence–specific cleavage of yeast tRNA(Phe) with oligonucleotides conjugated to a diimidazole construct. Vlassov V, et al. **Antisense Nucleic Acid Drug Dev** 1997 Feb;7(1):39–42

GENETICS

Trans–acting factors in yeast pre–rRNA and pre–snoRNA processing. Lafontaine D, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):803–12 (71 ref.)

The accuracy center of a eukaryotic ribosome. Liebman SW, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1141–9 (49 ref.)

Mixed mechanisms in yeast pre–mRNA splicing? [comment] Rosbash M. **Cell** 1996 Nov 1;87(3):357–9 (15 ref.). Comment on: Cell 1996 Nov 1;87(3):391–404. Comment on: Cell 1996 Nov 1;87(3):405–13.

RNA–mediated transformation in Aspergillus nidulans recovers gene functions lost by deletion or by point mutations. Zucchi TM. **Cell Mol Biol (Noisy–le–grand)** 1996 Sep;42(6):889–904

ORF7 of yeast plasmid pGKL2: analysis of gene expression in vivo. Schaffrath R, et al. **Curr Genet** 1997 Feb; 31(2):190–2

The role of branchpoint–3' splice site spacing and interaction between intron terminal nucleotides in 3' splice site selection in Saccharomyces cerevisiae. Luukkonen BG, et al. **EMBO J** 1997 Feb 17;16(4):779–92

A functional dominant mutation in Schizosaccharomyces pombe RNase MRP RNA affects nuclear RNA processing and requires the mitochondrial–associated nuclear mutation ptp1–1 for viability. Paluh JL, et al. **EMBO J** 1996 Sep 2;15(17):4723–33

The transcriptional apparatus required for mRNA encoding genes in the yeast Saccharomyces cerevisiae emerges from a jigsaw puzzle of transcription factors. Künzler M, et al. **FEMS Microbiol Rev** 1996 Dec;19(2):117–36 (167 ref.)

A complex structure in the mRNA of Tf1 is recognized and cleaved to generate the primer of reverse transcription. Lin JH, et al. **Genes Dev** 1997 Jan 15;11(2):270–85

Telomerase RNA mutations in Saccharomyces cerevisiae alter telomerase action and reveal nonprocessivity in vivo and in vitro. Prescott J, et al. **Genes Dev** 1997 Feb 15; 11(4):528–40

Rpp1, an essential protein subunit of nuclear RNase P required for processing of precursor tRNA and 35S precursor rRNA in Saccharomyces cerevisiae. Stolc V, et al. **Genes Dev** 1997 Sep 15;11(18):2414–25

Genesis and variability of [PSI] prion factors in Saccharomyces cerevisiae. Derkatch IL, et al. **Genetics** 1996 Dec;144(4):1375–86

Los1p, involved in yeast pre–tRNA splicing, positively regulates members of the SOL gene family. Shen WC, et al. **Genetics** 1996 Jun;143(2):699–712

Mutagenesis of the yeast gene PRP8 reveals domains governing the specificity and fidelity of 3' splice site selection. Umen JG, et al. **Genetics** 1996 Jun;143(2):723–39

A phylogenetic analysis of the genus Saccharomyces based on 18S rRNA gene sequences: description of Saccharomyces kunashirensis sp. nov. and Saccharomyces martiniae sp. nov. James SA, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):453–60

A 2'–phosphotransferase implicated in tRNA splicing is essential in Saccharomyces cerevisiae. Culver GM, et al. **J Biol Chem** 1997 May 16;272(20):13203–10

Only one nucleotide insertion to the long variable arm confers an efficient serine acceptor activity upon Saccharomyces cerevisiae tRNA(Leu) in vitro. Himeno H, et al. **J Mol Biol** 1997 May 16;268(4):704–11

Very fast identification of RNA motifs in genomic DNA. Application to tRNA search in the yeast genome. el–Mabrouk N, et al. **J Mol Biol** 1996 Nov 22;264(1):46–55

Complete transcriptional map of yeast chromosome XI in different life conditions. Richard GF, et al. **J Mol Biol** 1997 May 2;268(2):303–21

Origin and inheritance of group I introns in 26S rRNA genes of Gaeumannomyces graminis. Tan MK. **J Mol Evol** 1997 Jun;44(6):637–45

Spliceosome activation by PRP2 ATPase prior to the first transesterification reaction of pre–mRNA splicing. Kim SH, et al. **Mol Cell Biol** 1996 Dec;16(12):6810–9

Direct isolation of human transcribed sequences from yeast artificial chromosomes through the application of RNA fingerprinting. Still IH, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10373–8

A conserved RNA motif involved in divalent cation utilization by nuclear RNase P. Pagán–Ramos E, et al. **RNA** 1996 Nov;2(11):1100–9

Requirement of the DEAD–Box protein ded1p for messenger RNA translation. Chuang RY, et al. **Science** 1997 Mar 7; 275(5305):1468–71

3'–end–forming signals of yeast mRNA. Guo Z, et al. **Trends Biochem Sci** 1996 Dec;21(12):477–81 (41 ref.)

Mutational analysis of the gene for Schizosaccharomyces pombe RNase MRP RNA, mrp1, using plasmid shuffle by counterselection on canavanine. Paluh JL, et al. **Yeast** 1996 Nov;12(14):1393–405

ISOLATION & PURIFICATION

Rapid isolation of double–stranded RNAs from entomopathogenic species of the fungus Paecilomyces using a commercial minicolumn system. Inglis PW, et al. **J Virol Methods** 1997 Aug;67(1):113–6

In situ hybridization for Aspergillus and Penicillium in allergic fungal sinusitis: a rapid means of speciating fungal pathogens in tissues. Perez–Jaffe LA, et al. **Laryngoscope** 1997 Feb;107(2):233–40

Preparation of total RNA. Brown AJ. **Methods Mol Biol** 1996;53:269–76 (9 ref.)

A simple and inexpensive method for RNA extraction from yeasts. Manna F, et al. **Trends Genet** 1996 Sep;12(9):337–8

METABOLISM

RNA packaging of yeast retrotransposon Ty1 in the heterologous host, Escherichia coli. Luschnig C, et al. **Biol Chem** 1997 Jan;378(1):39–46

Strategy for RNA recognition by yeast histidyl–tRNA synthetase. Rudinger J, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1001–9 (56 ref.)

A novel mechanism for regulating activity of a transcription factor that controls the unfolded protein response [see comments] Cox JS, et al. **Cell** 1996 Nov 1;87(3):391–404. Comment in: Cell 1996 Nov 1;87(3):357–9.

tRNA ligase is required for regulated mRNA splicing in the unfolded protein response [see comments] Sidrauski C, et al. **Cell** 1996 Nov 1;87(3):405–13. Comment in: Cell 1996 Nov 1;87(3):357–9.

STP1, a gene involved in pre–tRNA processing in yeast, is important for amino–acid uptake and transcription of the permease gene BAP2. Jorgensen MU, et al. **Curr Genet** 1997 Mar;31(3):241–7

In vivo commitment to splicing in yeast involves the nucleotide upstream from the branch site conserved sequence and the Mud2 protein. Rain JC, et al. **EMBO J** 1997 Apr 1;16(7):1759–71

Transfer RNA structural change is a key element in the reassignment of the CUG codon in Candida albicans. Santos MA, et al. **EMBO J** 1996 Sep 16;15(18):5060–8

The ribosomal–RNA–processing pathway in Schizosaccharomyces pombe. Good L, et al. **Eur J Biochem** 1997 Jul 1;247(1):314–21

Yeast pre–mRNA is composed of two populations with distinct kinetic properties. Elliott DJ, et al. **Exp Cell Res** 1996 Dec 15;229(2):181–8

Localization of the newly initiated and processed ribosomal primary transcripts during the mitotic cycle in Physarum polycephalum. Pierron G, et al. **Exp Cell Res** 1996 Dec 15;229(2):407–20

RNA binding analysis of yeast REF2 and its two–hybrid interaction with a new gene product, FIR1. Russnak R, et al. **Gene Expr** 1996;6(4):241–58

Fatty acid–responsive control of mRNA stability. Unsaturated fatty acid–induced degradation of the Saccharomyces OLE1 transcript. Gonzalez CI, et al. **J Biol Chem** 1996 Oct 18;271(42):25801–9

Translational regulation of yeast GCN4. A window on factors that control initiator–trna binding to the ribosome. Hinnebusch AG. **J Biol Chem** 1997 Aug 29;272(35):21661–4 (61 ref.)

Disruption of ribosomal scanning on the 5'–untranslated region, and not restriction of translational initiation per se, modulates the stability of nonaberrant mRNAs in the yeast Saccharomyces cerevisiae. Linz B, et al. **J Biol Chem** 1997 Apr 4;272(14):9131–40

Reconstitution of functional eukaryotic ribosomes from Dictyostelium discoideum ribosomal proteins and RNA. Mangiarotti G, et al. **J Biol Chem** 1997 Aug 8; 272(32):19682–7

The yeast nucleolar protein Nop4p contains four RNA recognition motifs necessary for ribosome biogenesis. Sun C, et al. **J Biol Chem** 1997 Oct 3;272(40):25345–52

Ssd1p of Saccharomyces cerevisiae associates with RNA. Uesono Y, et al. **J Biol Chem** 1997 Jun 27;272(26):16103–9

Only one nucleotide insertion to the long variable arm confers an efficient serine acceptor activity upon Saccharomyces cerevisiae tRNA(Leu) in vitro. Himeno H, et al. **J Mol Biol** 1997 May 16;268(4):704–11

mRNA abundance and half–life measurements. Brown AJ, et al. **Methods Mol Biol** 1996;53:277–95 (10 ref.)

Mechanisms and control of mRNA turnover in Saccharomyces cerevisiae. Caponigro G, et al. **Microbiol Rev** 1996 Mar;60(1):233–49 (126 ref.)

A Candida albicans gene expressed in Saccharomyces cerevisiae results in a distinct pattern of mRNA processing. Iborra A, et al. **Microbiologia** 1996 Sep;12(3):443–8

Isolation and molecular characterization of mRNA transport mutants in Schizosaccharomyces pombe. Azad AK, et al. **Mol Biol Cell** 1997 May;8(5):825–41

The product of the Saccharomyces cerevisiae RSS1 gene, identified as a high–copy suppressor of the rat7–1 temperature–sensitive allele of the RAT7/NUP159 nucleoporin, is required for efficient mRNA export. Del Priore V, et al. **Mol Biol Cell** 1996 Oct;7(10):1601–21

A connection between pre–mRNA splicing and the cell cycle in fission yeast: cdc28+ is allelic with prp8+ and encodes an RNA–dependent ATPase/helicase. Lundgren K, et al. **Mol Biol Cell** 1996 Jul;7(7):1083–94

PCF11 encodes a third protein component of yeast cleavage and polyadenylation factor I. Amrani N, et al. **Mol Cell Biol** 1997 Mar;17(3):1102–9

Functional analysis of Rrp7p, an essential yeast protein involved in pre–rRNA processing and ribosome assembly. Baudin–Baillieu A, et al. **Mol Cell Biol** 1997 Sep; 17(9):5023–32

Upf1p, Nmd2p, and Upf3p are interacting components of the yeast nonsense–mediated mRNA decay pathway. He F, et al. **Mol Cell Biol** 1997 Mar;17(3):1580–94

Premature 3'–end formation of CBP1 mRNA results in the downregulation of cytochrome b mRNA during the induction of respiration in Saccharomyces cerevisiae. Sparks KA, et al. **Mol Cell Biol** 1997 Aug;17(8):4199–207

Ribosomal protein L32 of Saccharomyces cerevisiae influences both the splicing of its own transcript and the processing of rRNA. Vilardell J, et al. **Mol Cell Biol** 1997 Apr;17(4):1959–65

Glutamic acid–371 of the barnase homology domain in RNA polymerase II is not required for SII–activated RNA cleavage. Powell W, et al. **Mol Gen Genet** 1997 Jan 27; 253(4):507–11

Isolation of novel pre–mRNA splicing mutants of Schizosaccharomyces pombe. Urushiyama S, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):118–27

Actin–dependent localization of an RNA encoding a cell–fate determinant in yeast. Takizawa PA, et al. **Nature** 1997 Sep 4;389(6646):90–3

mRNA turnover in yeast promoted by the MATalpha1 instability element. Caponigro G, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4304–12

Pleiotropic effects of intron removal on base modification pattern of yeast tRNAPhe: an in vitro study. Jiang HQ,

et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2694–701

A yeast cap binding protein complex (yCBC) acts at an early step in pre-mRNA splicing. Lewis JD, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3332–6

Site-specific hydrolysis of yeast tRNAPhe by anthraquinone-glycine and anthraquinone-iminodiacetate conjugates. Endo M, et al. **Nucleic Acids Symp Ser** 1995; (34):109–10

Importin/karyopherin protein family members required for mRNA export from the nucleus. Seedorf M, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8590–5

Degradation of CYC1 mRNA in the yeast Saccharomyces cerevisiae does not require translation. Yun DF, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8895–900

RNA-dependent RNA polymerase activity associated with the yeast viral p91/20S RNA ribonucleoprotein complex. García-Cuéllar MP, et al. **RNA** 1997 Jan;3(1):27–36

Interactions of the yeast U6 RNA with the pre-mRNA branch site. McPheeters DS. **RNA** 1996 Nov;2(11):1110–23

Characterization of yeast U1 snRNP A protein: identification of the N-terminal RNA binding domain (RBD) binding site and evidence that the C-terminal RBD functions in splicing. Tang J, et al. **RNA** 1996 Oct;2(10):1058–70

Polysome-associated mRNAs are substrates for the nonsense-mediated mRNA decay pathway in Saccharomyces cerevisiae. Zhang S, et al. **RNA** 1997 Mar; 3(3):234–44

RNA-dependent RNA polymerase activity related to the 20S RNA replicon of Saccharomyces cerevisiae. Ribas JC, et al. **Yeast** 1996 Sep 30;12(12):1219–28

PHARMACOLOGY

Ridostin inhibits HIV-1 replication in the T lymphoblastoid cell line C8166. Possible role of altered cytokine production. Scheglovitova O, et al. **Acta Virol** 1995 Sep; 39(4):185–8

Ridostin inhibits transfer of HIV-1 from abortively infected human umbilical vein endothelial cells to T lymphoblastoid cells. Scheglovitova O, et al. **Acta Virol** 1995 Sep; 39(4):189–92

[Effect of imidazen in combination with RNA on the structure of DNA from sarcoma 45] Babaian IuS, et al. **Biofizika** 1997 Jan-Feb;42(1):125–8 (Eng. Abstr.) **(Rus)**

[Study of anti-HIV activity of the yeast RNA-tilorone molecular complex] Karpov AV, et al. **Vopr Virusol** 1997 Jan-Feb;42(1):17–9 (Eng. Abstr.) **(Rus)**

[Features of formation of antiviral resistance upon local application of the interferon inducer ridostin] Masycheva VI, et al. **Vopr Virusol** 1997 May-Jun;42(3):126–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[Effectiveness of the interferon inducers ridostin and camedon in prevention and treatment of experimental alpha- and flavivirus infections] Barinskiĭ IF, et al. **Vopr Virusol** 1996 May-Jun;41(3):133–5 (Eng. Abstr.) **(Rus)**

RNA, GUIDE

see related
RNA EDITING

CHEMISTRY

Experimental verification of the secondary structures of guide RNA-pre-mRNA chimaeric molecules in Trypanosoma brucei. Schmid B, et al. **Eur J Biochem** 1996 Sep 15;240(3):721–31

A three-dimensional working model for a guide RNA from Trypanosoma brucei. Hermann T, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2311–8

GENETICS

The genomic organization of guide RNA genes in kinetoplastid protozoa: several conundrums and their solutions. Simpson L. **Mol Biochem Parasitol** 1997 Jun; 86(2):133–41 (39 ref.)

Analysis of the 3' uridylylation sites of guide RNAs from Leishmania tarentolae. Thiemann OH, et al. **Mol Biochem Parasitol** 1996 Aug;79(2):229–34

The guide RNA database. Souza AE, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):104–6

Guide RNAs and guide RNA genes in the cryptobiid kinetoplastid protozoan, Trypanoplasma borreli. Yasuhira S, et al. **RNA** 1996 Nov;2(11):1153–60

METABOLISM

Guide RNA-directed uridine insertion RNA editing in vitro. Byrne EM, et al. **EMBO J** 1996 Dec 2;15(23):6758–65

Guide RNA-independent and guide RNA-dependent uridine insertion into cytochrome b mRNA in a mitochondrial lysate from Leishmania tarentolae. Role of RNA secondary structure. Connell GJ, et al. **J Biol Chem** 1997 Feb 14; 272(7):4212–8

Trypanosoma brucei gBP21. An arginine-rich mitochondrial protein that binds to guide RNA with high affinity. Köller J, et al. **J Biol Chem** 1997 Feb 7;272(6):3749–57

RNA editing in kinetoplastid protozoa. Stuart K, et al. **Microbiol Mol Biol Rev** 1997 Mar;61(1):105–20 (114 ref.)

Guide RNA requirement for editing-site-specific endonucleolytic cleavage of preedited mRNA by mitochondrial ribonucleoprotein particles in Trypanosoma brucei. Adler BK, et al. **Mol Cell Biol** 1997 Sep; 17(9):5377–85

Mitochondrial glutamate dehydrogenase from Leishmania tarentolae is a guide RNA-binding protein. Bringaud F, et al. **Mol Cell Biol** 1997 Jul;17(7):3915–23

Trypanosome U-deletional RNA editing involves guide RNA-directed endonuclease cleavage, terminal U exonuclease, and RNA ligase activities. Cruz-Reyes J, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8901–6

Resolution of the RNA editing gRNA-directed endonuclease from two other endonucleases of Trypanosoma brucei mitochondria. Piller KJ, et al. **RNA** 1997 Mar;3(3):279–90

Defining the editing 'reaction'. Hajduk SL. **Trends Microbiol** 1997 Jan;5(1):1–2

RNA, HELMINTH

The schistosome genome project: RNA arbitrarily primed PCR allows the accelerated generation of expressed sequence tags. Dias Neto E, et al. **Mem Inst Oswaldo Cruz** 1996 Sep-Oct;91(5):655–7

BIOSYNTHESIS

Regulated use of an alternative spliced leader exon in the plant parasitic nematode Meloidogyne javanica. Koltai H, et al. **Mol Biochem Parasitol** 1997 May;86(1):107–10

CHEMISTRY

The nucleotide sequence of 5S ribosomal RNA from the parasitic nematode Ascaris suum. Evolutionary relationships in nematodes. Szymański M, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):251–5

GENETICS

Primary sequence of mitochondrial tRNA(Arg) of a nematode Ascaris suum: occurrence of unmodified adenosine at the first position of the anticodon. Watanabe Y, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):119–22

The nucleotide sequence and predicted secondary structure of small subunit (18S) ribosomal RNA from Spirometra erinaceieuropaei. Liu DW, et al. **Gene** 1997 Jan 15; 184(2):221–7

Genetic diversity among a complex of cereal cyst nematodes inferred from RFLP analysis of the ribosomal internal transcribed spacer region. Bekal S, et al. **Genome** 1997 Aug; 40(4):479–86

PCR-based amplification of total cDNA with high fidelity and high yield from minute amounts of parasite RNA. Lattemann CT, et al. **Int J Parasitol** 1997 Aug;27(8):955–8

Use of molecular data to discriminate pseudocerotid turbellarians. Goggin CL, et al. **J Helminthol** 1996 Jun; 70(2):123–6

Species variation within the internal transcribed spacer (ITS) region of Gyrodactylus (Monogenea:Gyrodactylidae) ribosomal RNA genes. Cunningham CO. **J Parasitol** 1997 Apr;83(2):215–9

Surprising diversity and distribution of spliced leader RNAs in flatworms. Davis RE. **Mol Biochem Parasitol** 1997 Jul; 87(1):29–48

Differentially expressed, abundant trans-spliced cDNAs from larval Brugia malayi. Gregory WF, et al. **Mol Biochem Parasitol** 1997 Jul;87(1):85–95

Repetitive sequences within the first internal transcribed spacer of ribosomal DNA in schistosomes contain a Chi-like site. Kane RA, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):265–9

The 5S ribosomal RNA intergenic region of parasitic nematodes: variation in size and presence of SL1 RNA. Liu LX, et al. **Mol Biochem Parasitol** 1996 Dec 20; 83(2):235–9

Polymerase chain reaction-based construction of cDNA libraries from minute amounts of third-stage and fourth- and fifth-stage larvae of Dictyocaulus viviparus. von Samson-Himmelstjerna G, et al. **Parasitol Res** 1997; 83(1):20–3

[Molecular phylogeny of planarians (Turbellaria, Tricladida, Paludicola) from the lake Baikal. Use of comparative analysis for determination of nucleotide sequence of 18S ribosomal RNA] Kuznedelov KD, et al. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1316–25 **(Rus)**

METABOLISM

A bulged lin-4/lin-14 RNA duplex is sufficient for Caenorhabditis elegans lin-14 temporal gradient formation. Ha I, et al. **Genes Dev** 1996 Dec 1;10(23):3041–50

Expression patterns and transcript processing of ftt-1 and ftt-2, two C. elegans 14-3-3 homologues. Wang W, et al. **J Mol Biol** 1997 May 9;268(3):619–30

RNA, HETEROGENEOUS NUCLEAR

ANALYSIS

Emergence of an isolated arginine vasopressin (AVP) response to stress after repeated restraint: a study of both AVP and corticotropin-releasing hormone messenger ribonucleic acid (RNA) and heteronuclear RNA. Ma XM, et al. **Endocrinology** 1997 Oct;138(10):4351–7

CHEMISTRY

Identification of N(G)-methylarginine residues in human heterogeneous RNP protein A1: Phe/Gly-Gly-Gly-Arg-Gly-Gly-Gly/Phe is a preferred recognition motif. Kim S, et al. **Biochemistry** 1997 Apr 29;36(17):5185–92

Chicken MAR-binding protein ARBP is homologous to rat methyl-CpG-binding protein MeCP2. Weitzel JM, et al. **Mol Cell Biol** 1997 Sep;17(9):5656–66

IMMUNOLOGY

Autoantibodies to the A/B proteins of the heterogeneous nuclear ribonucleoprotein complex: novel tools for the diagnosis of rheumatic diseases. Steiner G, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):314–9 (34 ref.)

METABOLISM

The roles of heterogeneous nuclear ribonucleoproteins (hnRNP) in RNA metabolism. Weighardt F, et al. **Bioessays** 1996 Sep;18(9):747–56 (72 ref.)

Nuclear import of hnRNP A1 is mediated by a novel cellular cofactor related to karyopherin-beta. Fridell RA, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1325–31

Rapid changes in heteronuclear RNA for corticotrophin-releasing hormone and arginine vasopressin in response to acute stress. Ma XM, et al. **J Endocrinol** 1997 Jan;152(1):81–9

Interaction between the human nuclear cap-binding protein complex and hnRNP F. Gamberi C, et al. **Mol Cell Biol** 1997 May;17(5):2587–97

Evidence that heteronuclear proteins interact with XIST RNA in vitro. Brown CJ, et al. **Somat Cell Mol Genet** 1996 Sep;22(5):403–17

Specific binding of polypyrimidine tract binding protein and hnRNP A1 to HIV-1 CRS elements. Black AC, et al. **Virus Genes** 1996;12(3):275–85

RNA LIGASE see **POLYRIBONUCLEOTIDE SYNTHETASE**

RNA, MESSENGER

Distribution of AVT gene expressing neurons in the prosencephalon of japanese quail and chicken. Aste N, et al. **Cell Tissue Res** 1996 Dec;286(3):365–73

Time course and cellular localization of lipopolysaccharide-induced inducible nitric oxide synthase messenger RNA expression in the rat in vivo. Liu SF, et al. **Crit Care Med** 1997 Mar;25(3):512–8

Translational regulation of maternal mRNAs. Macdonald PM, et al. **Curr Opin Genet Dev** 1996 Aug;6(4):403–7 (46 ref.)

Life and death in the cytoplasm: messages from the 3' end. Wickens M, et al. **Curr Opin Genet Dev** 1997 Apr; 7(2):220–32 (105 ref.)

In vivo dissection of cis-acting determinants for plastid RNA editing. Bock R, et al. **EMBO J** 1996 Sep 16;15(18):5052–9

Experimental tissue expansion induces changes in expression of procollagen I and III messenger RNA. Löffler JA, et al. **Eur Arch Otorhinolaryngol** 1995;252(8):475–7

Distribution of HLA-G alternative mRNAs including soluble forms in normal lymphocytes and in lymphoid cell-derived leukemia. Amiot L, et al. **Eur J Immunogenet** 1996 Aug; 23(4):311–20

Expression of alternatively spliced PCTAIRE-1 mRNA in PC12 cells and neonatal rat brain. Gao CY, et al. **Gene** 1996 Oct 17;176(1-2):243–7

Translational inhibition by 5'-polycytidine tracts in Xenopus embryos and in vitro. Kuo JS, et al. **Gene** 1996 Oct 17; 176(1-2):17–21

The Nanos gradient in Drosophila embryos is generated by translational regulation. Dahanukar A, et al. **Genes Dev** 1996 Oct 15;10(20):2610–20

Complete nucleotide sequence of the vitellogenin mRNA from the gypsy moth: novel arrangement of the subunit encoding regions. Hiremath S, et al. **Insect Biochem Mol Biol** 1997 Jan;27(1):27–35

The compartmentalization of protein synthesis: importance of cytoskeleton and role in mRNA targeting. Hovland R, et al. **Int J Biochem Cell Biol** 1996 Oct;28(10):1089–105 (161 ref.)

Macrophage colony-stimulating factor (M-CSF) inhibits the decrease in the amount of rRNA and IA beta mRNA in cultured epidermal Langerhans cells of the mouse. Koyama Y, et al. **J Dermatol** 1996 Feb;23(2):73–82

Translational properties of the untranslated regions of the p10 messenger RNA of Autographa californica multicapsid nucleopolyhedrovirus. Scheper GC, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):687–96

A subgenomic mRNA transcript of the coronavirus mouse hepatitis virus strain A59 defective interfering (DI) RNA is packaged when it contains the DI packaging signal. Bos EC, et al. **J Virol** 1997 Jul;71(7):5684–7

Efficient transcription from the rice tungro bacilliform virus promoter requires elements downstream of the transcription start site. Chen G, et al. **J Virol** 1996 Dec; 70(12):8411–21

Analysis of the gene start and gene end signals of human respiratory syncytial virus: quasi-templated initiation at position 1 of the encoded mRNA. Kuo L, et al. **J Virol** 1997 Jul;71(7):4944–53

Exon 1 leader sequences downstream of U5 are important for efficient human immunodeficiency virus type 1 gene expression. Lenz C, et al. **J Virol** 1997 Apr;71(4):2757–64

Intermediate class of mRNAs in African swine fever virus. Rodríguez JM, et al. **J Virol** 1996 Dec;70(12):8584–9

Nucleoprotein viral RNA and mRNA of Thogoto virus: a novel "cap-stealing" mechanism in tick-borne orthomyxoviruses? Weber F, et al. **J Virol** 1996 Dec; 70(12):8361–7

Vitamin B12 repression of the btuB gene in Salmonella typhimurium is mediated via a translational control which requires leader and coding sequences. Ravnum S, et al. **Mol Microbiol** 1997 Jan;23(1):35–42

In postmeiotic male germ cells poly (A) shortening accompanies translation of mRNA encoding gamma enteric actin but not cytoplasmic beta and gamma actin mRNAs. Gu W, et al. **Mol Reprod Dev** 1996 Jun;44(2):141–5

Overexpression in COS cells of p50, the major core protein associated with mRNA, results in translation inhibition. Davydova EK, et al. **Nucleic Acids Res** 1997 Jul 15; 25(14):2911–6

The conserved 5'-untranslated leader of Spi-1 (PU.1) mRNA is highly structured and potently inhibits translation in vitro but not in vivo. Hensold JO, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2869–76

Control of messenger RNA stability in higher eukaryotes. Ross J. **Trends Genet** 1996 May;12(5):171–5 (39 ref.)

[Vg1, a possible natural mesoderm inducer derived from the study of the localized maternal mRNA in the Xenopus egg cytoplasm] Shiokawa K, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(11):1594–9 (18 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

An immunocytochemical technique for analysis of regulation of genes encoding early differentiation marker antigens in an oocyte translation system. Nishizawa K, et al. **Biotech Histochem** 1996 Mar;71(2):73–8

Inhibitory effect of new quinolones on GABA(A) receptor-mediated response and its potentiation with felbinac in Xenopus oocytes injected with mouse-brain mRNA: correlation with convulsive potency in vivo. Kawakami J, et al. **Toxicol Appl Pharmacol** 1997 Aug; 145(2):246–54

ANALYSIS

Effect of biotin on glucokinase activity, mRNA expression and insulin release in cultured beta-cells. Borboni P, et al. **Acta Diabetol** 1996 Jul;33(2):154–8

Expression of HIV regulatory and structural mRNA in the central nervous system [see comments] Wiley CA, et al. **AIDS** 1996 Jul;10(8):843–7. Comment in: AIDS 1997 Jan;11(1):133–5. Comment in: AIDS 1997 Feb;11(2):251–2. Comment in: AIDS 1997 Apr;11(5):698–9.

Parental somatic and germ-line mosaicism for a FBN2 mutation and analysis of FBN2 transcript levels in dermal fibroblasts. Putnam EA, et al. **Am J Hum Genet** 1997 Apr; 60(4):818–27

Analysis of estrogen receptor messenger RNA in breast carcinomas from archival specimens is predictive of tumor biology. Carmeci C, et al. **Am J Pathol** 1997 May; 150(5):1563–70

Multiparametric in situ mRNA hybridization analysis to predict disease recurrence in patients with colon carcinoma. Kitadai Y, et al. **Am J Pathol** 1996 Nov;149(5):1541–51

Detection of rare RNA sequences by single-enzyme in situ reverse transcription-polymerase chain reaction. High-resolution analyses of interleukin-6 mRNA in paraffin sections of lymph nodes. Peters J, et al. **Am J Pathol** 1997 Feb;150(2):469–76

Intestinal distribution of human Na+/H+ exchanger isoforms NHE-1, NHE-2, and NHE-3 mRNA. Dudeja PK, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):G483–93

Quantitation of mucin RNA by PCR reveals induction of both MUC2 and MUC5AC mRNA levels by retinoids. Guzman K, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L1023–8

Effects of hypoxia on expression of superoxide dismutases in cultured ATII cells and lung fibroblasts. Jackson RM, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L955–62

Human airway epithelia express a beta-defensin. McCray PB Jr, et al. **Am J Respir Cell Mol Biol** 1997 Mar;16(3):343–9

Expression of RANTES mRNA and protein in airways of patients with mild asthma. Berkman N, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1804–11

Expression of IL-12 and IL-13 mRNA in asthma and their modulation in response to steroid therapy. Naseer T, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):845–51

Reverse transcriptase-polymerase chain reaction amplification and partial sequence of T helper 1- and T helper 2-type lymphokine genes from the owl monkey (Aotus trivirgatus). Bost KL, et al. **Am J Trop Med Hyg** 1997 Mar;56(3):351–8

Nonisotopic quantitation of mRNA using a novel RNase protection assay: measurement of erbB-2 mRNA in tumor cell lines. Chan SD, et al. **Anal Biochem** 1996 Nov 15; 242(2):214–20

Quantitation of estrogen receptor mRNA and its alternatively spliced mRNAs in breast tumor cells and tissues. Fasco MJ. **Anal Biochem** 1997 Feb 15;245(2):167–78

Polymerase chain reaction (PCR)-based construction of a competitor target for quantitative reverse transcriptase PCR measurement of cytochrome P450 1A1 mRNA. Frötschl R, et al. **Anal Biochem** 1996 Nov 15;242(2):280–2

Development of a high-volume in situ mRNA hybridization assay for the quantification of gene expression utilizing scintillating microplates. Harris DW, et al. **Anal Biochem** 1996 Dec 15;243(2):249–56

Identification of zinc finger mRNAs using domain-specific differential display. Johnson SW, et al. **Anal Biochem** 1996 May 1;236(2):348–52

Quantitation of mouse and rat beta-actin mRNA by competitive polymerase chain reaction using capillary electrophoresis. Murata T, et al. **Anal Biochem** 1997 Jan 1;244(1):172–4

An alternative quantitative polymerase chain reaction method [published erratum appears in Anal Biochem 1996 Nov 1;242(1):164] Nicoletti A, et al. **Anal Biochem** 1996 May 1;236(2):229–41

Pitfalls in the use of several "housekeeping" genes as standards for quantitation of mRNA: the example of thyroid cells. Savonet V, et al. **Anal Biochem** 1997 Apr 5;247(1):165–7

Bioluminescence hybridization assays using recombinant aequorin. Application to the detection of prostate-specific antigen mRNA. Galvan B, et al. **Anal Chem** 1996 Oct 15; 68(20):3545–50

Hunting for differentially expressed mRNA species in preconditioned myocardium. Maulik N, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:240–58

Reverse transcriptase-polymerase chain reaction for expression of tyrosinase to identify malignant melanoma cells in peripheral blood. Pittman K, et al. **Ann Oncol** 1996 Mar;7(3):297–301

Expression of immediate early genes after cardioplegic arrest and reperfusion. Aebert H, et al. **Ann Thorac Surg** 1997 Jun;63(6):1669–75

Ribosomal DNA internal transcribed spacers to estimate the proportion of Pisolithus tinctorius and Eucalyptus RNAs in ectomycorrhiza. Diaz EC, et al. **Appl Environ Microbiol** 1997 Mar;63(3):840–3

Localization of annexin I (lipocortin I, p35) mRNA in normal and diseased human skin by in situ hybridization. Sato-Matsumura KC, et al. **Arch Dermatol Res** 1996 Sep; 288(10):565–9

Cellular distribution of the P2X4 ATP receptor mRNA in the brain and non-neuronal organs of rats. Tanaka J, et al. **Arch Histol Cytol** 1996 Dec;59(5):485–90

Semi-quantitative PCR: a tool to study low abundance messages in the kidney. Bobadilla NA, et al. **Arch Med Res** 1997 Spring;28(1):55–60

Differential display of mRNAs from Entamoeba histolytica during electron dense granules secretion. Salazar I, et al. **Arch Med Res** 1997;28 Spec No:190–2

The identification of proteoglycan-associated mRNAs in human dental pulp cells. Harlamb SC, et al. **Arch Oral Biol** 1996 Nov;41(11):1097–100

Spatial and temporal distribution of Indian hedgehog mRNA in the embryonic mouse mandible. Kronmiller JE, et al. **Arch Oral Biol** 1996 Jun;41(6):577–83

Use of myeloperoxidase mRNA as a marker for myeloid lineage in acute leukemias. Crisan D, et al. **Arch Pathol Lab Med** 1996 Sep;120(9):828–34

Quantitation of platelet glycoprotein mRNA using the polymerase chain reaction. Seidl C, et al. **Beitr Infusionsther Transfusionsmed** 1996;33:55–60

Loss of hIRH mRNA expression from premalignant adenomas and malignant cell lines. Begum NA, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):864–8

Spatial distribution of collagen type I mRNA in Paracentrotus lividus eggs and embryos. Gambino R, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):334–7

Quantification of estrogen receptor messenger RNA by quantitative polymerase chain reaction using internal standard fragment. Kagami I, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):358–64

An improved, rapid Northern protocol. Kevil CG, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):277–9

Detection and quantification of the leptin receptor splice variants Ob-Ra, b, and, e in different mouse tissues. Löllmann B, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):648–52

Regulation of midkine messenger ribonucleic acid levels in cultured rat granulosa cells. Minegishi T, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):799–805

An optimized protocol for mRNA quantification using nested competitive RT-PCR. Watzka M, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):813–7

Down-regulation of the defective transcripts of the Werner's syndrome gene in the cells of patients. Yamabe Y, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):151–4

Competitive reverse-transcriptase PCR: a useful alternative to northern blotting for quantitative estimation of relative abundances of specific mRNAs in precious samples [letter] Gattei V, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):565–7

Molecular cloning of a novel mRNA (harderin) specifically and highly expressed in the Harderian gland of the frog, Rana esculenta. Aniello F, et al. **Biochem Mol Biol Int** 1996 Feb;38(2):401–8

2'3'-CNPase and actin distribution in oligodendrocytes, relative to their mRNAs. McEwan NR. **Biochem Mol Biol Int** 1996 Nov;40(5):975–9

Increases in the mRNA levels of gamma-glutamyltransferase and heme oxygenase-1 in the rat lung after ozone exposure. Takahashi Y, et al. **Biochem Pharmacol** 1997 Apr 4; 53(7):1061–4

A competitive prehybridisation assay for validating the specificity of oligonucleotide probes: application for analysis of rat metallothionein -1 and -2 mRNA. Vasconcelos MH, et al. **Biochem Soc Trans** 1996 May; 24(2):225S

Accelerated development of liver fibrosis in CCl4-treated rats by the weekly induction of acute phase response episodes: upregulation of alpha1(I) procollagen and tissue inhibitor of metalloproteinase-1 mRNAs. Greenwel P, et al. **Biochim Biophys Acta** 1997 Aug 22;1361(2):177–84

Induction of the stress protein Grp75 by amino acid deprivation in CHO cells does not involve an increase in Grp75 mRNA levels. Heal RD, et al. **Biochim Biophys Acta** 1997 Jun 5;1357(1):31–40

Preferential expression of alternatively spliced transcript of type II procollagen in the rabbit notochordal remnant and developing fibrocartilages. Takaishi H, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):253–8

Up-regulation of nuclear genes in response to inhibition of mitochondrial DNA expression in chicken cells. Wang H, et al. **Biochim Biophys Acta** 1997 Jun 26;1352(3):325–34

Ethanol represses thymidylate synthase and thymidine kinase at mRNA level in regenerating rat liver after partial hepatectomy. Yoshida Y, et al. **Biochim Biophys Acta** 1997 Aug 29;1336(2):180–6

Activity of lactate dehydrogenase but not its concentration of messenger RNA increases with body size in barred sand bass, Paralabrax nebulifer (Teleostei). Yang TH, et al. **Biol Bull** 1996 Oct;191(2):155–8

Relaxin-like factor gene is highly expressed in the bovine ovary of the cycle and pregnancy: sequence and messenger ribonucleic acid analysis [published erratum appears in Biol Reprod 1997 Mar;56(3):788] Bathgate R, et al. **Biol Reprod** 1996 Dec;55(6):1452–7

Zonal distribution of 11 beta-hydroxysteroid dehydrogenase types 1 and 2 messenger ribonucleic acid expression in the rat placenta and decidua during late pregnancy. Burton PJ, et al. **Biol Reprod** 1996 Nov;55(5):1023–8

Regional distribution and hormonal control of estrogen-dependent oviduct-specific glycoprotein messenger ribonucleic acid in the baboon (Papio anubis). Jaffe RC, et al. **Biol Reprod** 1996 Aug;55(2):421–6

In situ localization of messenger ribonucleic acid for an oviduct-specific glycoprotein during various hormonal conditions in the golden hamster. Komiya H, et al. **Biol Reprod** 1996 Nov;55(5):1107–18

Steroidogenic acute regulatory protein in bovine corpora lutea. Pescador N, et al. **Biol Reprod** 1996 Aug;55(2):485–91

Expression of triosephosphate isomerase transcripts in rat testis: evidence for retinol regulation and a novel germ cell transcript. Russell DL, et al. **Biol Reprod** 1996 Jul; 55(1):11–8

Relationship between gonadotropin subunit messenger ribonucleic acid levels and plasma gonadotropin concentrations in intact and orchidectomized adult rats. Winters SJ. **Biol Reprod** 1996 Oct;55(4):828–32

Detection of transcripts for retinoic acid receptors, retinol-binding protein, and transforming growth factors during rapid trophoblastic elongation in the porcine conceptus. Yelich JV, et al. **Biol Reprod** 1997 Aug; 57(2):286–94

Detection of lamprin mRNA in the anadromous sea lamprey using in situ hybridization. McBurney KM, et al. **Biotech Histochem** 1996 Jan;71(1):44–53

Improved ligation-anchored PCR strategy for identification of 5' ends of transcripts. Ali Ansari-Lari M, et al. **Biotechniques** 1996 Jul;21(1):34–6, 38

Use of manganese in RT-PCR eliminates PCR artifacts resulting from DNase I digestion. Bauer P, et al. **Biotechniques** 1997 Jun;22(6):1128–32

Highly sensitive method to detect mRNAs in individual cells by direct RT-PCR using Tth DNA polymerase. Chiocchia G, et al. **Biotechniques** 1997 Feb;22(2):312–4, 316, 318

Quantitation of T-cell receptor transcripts using a wet agarose gel method. Daniel ES, et al. **Biotechniques** 1996 Sep;21(3):374–6, 378

Use of internal controls to increase quantitative capabilities of the ribonuclease protection assay. Davis MJ, et al. **Biotechniques** 1997 Aug;23(2):280–5

Labeling of RNA transcripts of eukaryotic cells in culture with BrUTP using a liposome transfection reagent (DOTAP). Haukenes G, et al. **Biotechniques** 1997 Feb; 22(2):308–12

Microdissection RT-PCR analysis of gene expression in pathologically defined frozen tissue sections. Hiller T, et al. **Biotechniques** 1996 Jul;21(1):38–40, 42, 44

Generation of multiple mRNA fingerprints using fluorescence-based differential display and an automated DNA sequencer. Jones SW, et al. **Biotechniques** 1997 Mar; 22(3):536–40, 542–3

Semi-multiplex PCR technique for screening of abundant transcripts during systematic sequencing of cDNA libraries. Pacchioni B, et al. **Biotechniques** 1996 Oct;21(4):644–6, 648–9

Construction of an internal control to quantitate multiple porcine cytokine mRNAs by RT-PCR. Reddy NR, et al. **Biotechniques** 1996 Nov;21(5):868–70, 872, 875

New approach to mRNA quantification: additive RT-PCR. Reyes-Engel A, et al. **Biotechniques** 1996 Aug;21(2):202, 204

mRNA differential display in agarose gels. Rompf R, et al. **Biotechniques** 1997 Jul;23(1):28, 30, 32
Solid-phase method for differential display of genes expressed in hematopoietic stem cells. Røsok O, et al. **Biotechniques** 1996 Jul;21(1):114–21
Quantitative RT-PCR: limits and accuracy. Souazé F, et al. **Biotechniques** 1996 Aug;21(2):280–5
High-throughput RT-PCR analysis of multiple transcripts using a microplate RNA isolation procedure. Su S, et al. **Biotechniques** 1997 Jun;22(6):1107–13
Quantification of mRNA using competitive RT-PCR with standard-curve methodology. Tsai SJ, et al. **Biotechniques** 1996 Nov;21(5):862–6
Sensitive nonradioactive dot blot/ribonuclease protection assay for quantitative determination of mRNA. Zhan J, et al. **Biotechniques** 1997 Mar;22(3):500–5
Semi-automated PCR method for quantitating MDR1 expression. Zhao S, et al. **Biotechniques** 1996 Oct; 21(4):726–31
High levels of Wilms' tumor gene (wt1) mRNA in acute myeloid leukemias are associated with a worse long-term outcome. Bergmann L, et al. **Blood** 1997 Aug 1; 90(3):1217–25
Selection of myeloid progenitors lacking BCR/ABL mRNA in chronic myelogenous leukemia patients after in vitro treatment with the tyrosine kinase inhibitor genistein. Carlo-Stella C, et al. **Blood** 1996 Oct 15;88(8):3091–100
Surface and mRNA expression of the CD52 antigen by human eosinophils but not by neutrophils. Elsner J, et al. **Blood** 1996 Dec 15;88(12):4684–93
Association of PML-RAR alpha fusion mRNA type with pretreatment hematologic characteristics but not treatment outcome in acute promyelocytic leukemia: an intergroup molecular study. Gallagher RE, et al. **Blood** 1997 Aug 15; 90(4):1656–63
Consistent detection of TLS/FUS-ERG chimeric transcripts in acute myeloid leukemia with t(16;21)(p11;q22) and identification of a novel transcript. Kong XT, et al. **Blood** 1997 Aug 1;90(3):1192–9
Monitoring of minimal residual disease by quantitative reverse transcriptase-polymerase chain reaction for AML1-MTG8 transcripts in AML-M2 with t(8; 21). Tobal K, et al. **Blood** 1996 Nov 15;88(10):3704–9
Demonstration of estrogen receptor mRNA in bone using in situ reverse-transcriptase polymerase chain reaction. Hoyland JA, et al. **Bone** 1997 Feb;20(2):87–92
Expression of transforming growth factors beta-1, beta 2 and beta 3 in human bladder carcinomas. Eder IE, et al. **Br J Cancer** 1997;75(12):1753–60
Analysis of somatostatin receptor subtype mRNA expression in human breast cancer. Evans AA, et al. **Br J Cancer** 1997; 75(6):798–803
Quantitative analysis of multidrug resistance gene expression in human osteosarcomas. Lee PD, et al. **Br J Cancer** 1996 Oct;74(7):1046–50
Clinical significance of tissue inhibitor of metalloproteinase expression in gastric carcinoma. Mimori K, et al. **Br J Cancer** 1997;76(4):531–6
TIMP-3 mRNA expression is regionally increased in moderately and poorly differentiated colorectal adenocarcinoma. Powe DG, et al. **Br J Cancer** 1997; 75(11):1678–83
Keratin 19 mRNA measurement to detect micrometastases in lymph nodes in breast cancer patients. Schoenfeld A, et al. **Br J Cancer** 1996 Nov;74(10):1639–42
High incidence of interleukin 10 mRNA but not interleukin 2 mRNA detected in human breast tumours. Venetsanakos E, et al. **Br J Cancer** 1997;75(12):1826–30
Expression of CYP3A4, CYP3A5 and CYP3A7 in human duodenal tissue. Kivistö KT, et al. **Br J Clin Pharmacol** 1996 Sep;42(3):387–9
Efficient RT-PCR on platelet mRNA after long-term storage. Peyruchaud O, et al. **Br J Haematol** 1997 Jan; 96(1):183–5
Expression of beta 3-adrenoceptor mRNA in rat tissues. Evans BA, et al. **Br J Pharmacol** 1996 Jan;117(1):210–6
The relaxant effect of adrenomedullin on particular smooth muscles despite a general expression of its mRNA in smooth muscle, endothelial and epithelial cells. Nishimura J, et al. **Br J Pharmacol** 1997 Jan;120(2):193–200
Detection of protein and mRNA of various components of the NADPH oxidase complex in an immortalized human chondrocyte line. Moulton PJ, et al. **Br J Rheumatol** 1997 May;36(5):522–9
Identification of a long huntingtin mRNA transcript in mouse brain. Casanova E, et al. **Brain Res** 1996 Dec 16; 743(1-2):320–3
Distributional characteristics of the mRNA for retinoid Z receptor beta (RZR beta), a putative nuclear melatonin receptor, in the rat brain and spinal cord. Park HT, et al. **Brain Res** 1997 Feb 7;747(2):332–7
Localization of mRNA for Ca2+/calmodulin-dependent protein kinase I in the brain of developing and mature rats. Sawamura Y, et al. **Brain Res** 1996 Jan 15;706(2):259–66
Distribution of the mRNA for protein phosphatase T in rat brain. Becker W, et al. **Brain Res Mol Brain Res** 1996 Feb; 36(1):23–8
Localization of mRNAs for Rlim-1, the rat Xlim-1 homolog, in the developing rat brain. Furuyama T, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):152–6
Creatine kinase-B mRNA levels in brain regions from male and female rats. Ilyin SE, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):50–6
Localization of mRNA for phosphatidylinositol 3-kinase in brain of developing and mature rats. Ito Y, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):149–53
Differential distribution of mRNA encoding cAMP-specific phosphodiesterase isoforms in the rat brain. Iwahashi Y, et al. **Brain Res Mol Brain Res** 1996 May;38(1):14–24
Molecular characterization of dendritically localized transcripts encoding MAP2. Kindler S, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):63–9
Discrete brain areas express the insulin-responsive glucose transporter GLUT4. Leloup C, et al. **Brain Res Mol Brain Res** 1996 May;38(1):45–53
Comparative expression of vasopressin and angiotensin type-1 receptor mRNA in rat hypothalamic nuclei: a double in situ hybridization study. Lenkei Z, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):135–42
The differential osmoregulation and localization of taurine transporter mRNA and Na+/myo-inositol cotransporter mRNA in rat eyes. Morimura H, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):245–52
Molecular cloning of mouse Doc2alpha and distribution of its mRNA in adult mouse brain. Naito A, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):198–204
Messenger RNAs encoding steroidogenic enzymes are expressed in rodent brain. Strömstedt M, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):75–88
Application of quantitative RT-PCR to the analysis of dopamine receptor mRNA levels in rat striatum. Vrana SL, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):127–34
Regional distribution of GABA transporter 1 (GAT1) mRNA in the rat brain: comparison with glutamic acid decarboxylase67 (GAD67) mRNA localization. Yasumi M, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):205–18
Neuronal coexistence of trkB and glutamic acid decarboxylase67 mRNAs in rat hippocampus. Zachrisson O, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):169–73
Presence and localization of neurotrophin receptor tyrosine kinase (TrkA, TrkB, TrkC) mRNAs in visceral afferent neurons of the nodose and petrosal ganglia. Zhuo H, et al. **Brain Res Mol Brain Res** 1996 May;38(1):63–70
Expression of the estrogen receptor gene in developing and adult human breast. Boyd M, et al. **Breast Cancer Res Treat** 1996;37(3):243–51
Expression of the prolactin gene in normal and neoplastic human breast tissues and human mammary cell lines: promoter usage and alternative mRNA splicing. Shaw-Bruha CM, et al. **Breast Cancer Res Treat** 1997 Jul; 44(3):243–53
Analysis of gene expression during experimental uveitis in the rabbit. Rocha G, et al. **Can J Ophthalmol** 1996 Aug; 31(5):228–33
Decreased levels of CD44 protein and mRNA in prostate carcinoma. Correlation with tumor grade and ploidy. Kallakury BV, et al. **Cancer** 1996 Oct 1;78(7):1461–9
Glutathione content but not gamma glutamyl cysteine synthetase mRNA expression predicts cisplatin resistance in head and neck cancer cell lines. Newkirk K, et al. **Cancer Chemother Pharmacol** 1997;40(1):75–80
Selection of probes for fluorescence in situ hybridization analysis by differential display polymerase chain reaction of mRNA from rhabdomyosarcoma. Pienkowska M, et al. **Cancer Genet Cytogenet** 1996 Nov;92(1):58–65
Will molecular biology provide oncologists with information useful for risk assessment, prognosis, or therapeutic decisions in cancer patients? [editorial; comment] Head JF. **Cancer Invest** 1996;14(6):635–6. Comment on: Cancer Invest 1996;14(6):518–26.
Elevated expression of ferritin H-chain mRNA in metastatic ovarian tumor [see comments] Tripathi PK, et al. **Cancer Invest** 1996;14(6):518–26. Comment in: Cancer Invest 1996;14(6):635–6.
Insulin-like growth factor I receptor messenger RNA in the colon is unchanged during neoplasia. Zenilman ME, et al. **Cancer Invest** 1997;15(1):1–7
Low frequency of c-kit expression and detection of an aberrant Kit message among Hong Kong Chinese myelogenous leukaemia patients. Chui CH, et al. **Cancer Lett** 1997 Jun 24;116(2):253–8
Rapid cytocidal and cytostatic chemosensitivity test by measuring total amount of mRNA. Miura Y, et al. **Cancer Lett** 1997 Jun 24;116(2):139–44
Evaluation of cholecystokinin, gastrin, CCK-A receptor, and CCK-B/gastrin receptor gene expressions in gastric cancer. Okada N, et al. **Cancer Lett** 1996 Sep 10; 106(2):257–62
Expression of structure-specific recognition protein mRNA in fetal kidney and Fe-nitrilotriacetate-induced renal carcinoma in the rat. Xiang YY, et al. **Cancer Lett** 1996 Sep 10;106(2):271–8
Thrombospondin-1 and -2 messenger RNA expression in normal, benign, and neoplastic human breast tissues: correlation with prognostic factors, tumor angiogenesis, and fibroblastic desmoplasia. Bertin N, et al. **Cancer Res** 1997 Feb 1;57(3):396–9
Identification of genes differentially expressed in association with metastatic potential of K-1735 murine melanoma by messenger RNA differential display. Hashimoto Y, et al. **Cancer Res** 1996 Nov 15;56(22):5266–71
Identification of a breast cancer-specific gene, BCSG1, by direct differential cDNA sequencing. Ji H, et al. **Cancer Res** 1997 Feb 15;57(4):759–64
Prevalence of estrogen receptor variant messenger RNAs in human breast cancer. Leygue E, et al. **Cancer Res** 1996 Oct 1;56(19):4324–7
Characterization of functional messenger RNA splice variants of BRCA1 expressed in nonmalignant and tumor-derived breast cells. Lu M, et al. **Cancer Res** 1996 Oct 15;56(20):4578–81
Melanoma-associated antigens as messenger RNA detection markers for melanoma. Sarantou T, et al. **Cancer Res** 1997 Apr 1;57(7):1371–6
Simultaneous detection of all four alkaline phosphatase isoenzymes in human germ cell tumors using reverse transcription-PCR. Schär BK, et al. **Cancer Res** 1997 Sep 1;57(17):3841–6
Tamoxifen down-regulates CD36 messenger RNA levels in normal and neoplastic human breast tissues. Silva ID, et al. **Cancer Res** 1997 Feb 1;57(3):378–81
Rapid detection of specific messenger RNAs in thyroid carcinomas by reverse transcription-PCR with degenerate primers: specific expression of oncofetal fibronectin messenger RNA in papillary carcinoma. Takano T, et al. **Cancer Res** 1997 Sep 1;57(17):3792–7
Temporal expression of c-fos mRNA following balloon injury in the rat common carotid artery. Mills CJ, et al. **Cardiovasc Res** 1996 Nov;32(5):954–61
Angiotensin receptor type 1 mRNA in human right ventricular endomyocardial biopsies: downregulation in heart failure. Regitz-Zagrosek V, et al. **Cardiovasc Res** 1997 Jul;35(1):99–105
Developmental changes of connexin40 and connexin43 mRNA distribution patterns in the rat heart. Van Kempen MJ, et al. **Cardiovasc Res** 1996 Nov;32(5):886–900
Correlation of expression of connexin mRNA isoforms with degree of cellular differentiation. Rosenberg E, et al. **Cell Adhes Commun** 1996 Nov;4(4–5):223–35
Differential mRNA regulation of integrin subunits alpha V, beta 1, beta 3, and beta 5 during mouse embryonic organogenesis. Yamada S, et al. **Cell Adhes Commun** 1995 Nov;3(4):311–25
Molecular cloning of two rat Na+/Pi cotransporters: evidence for differential tissue expression of transcripts. Li H, et al. **Cell Mol Biol Res** 1995;41(5):451–60
Variation in expression of genes used for normalization of Northern blots after induction of cell proliferation. Goldsworthy SM, et al. **Cell Prolif** 1993 Nov;26(6):511–8
Differential expression of a cDNA clone in human liver versus hepatic cancer--highly homologous to aryl-dialkyl-phosphatase. Wang KK, et al. **Cell Res** 1997 Jun;7(1):79–90
Localization and diurnal expression of mRNA encoding the beta1-adrenoceptor in the rat pineal gland: an in situ hybridization study. Moller M, et al. **Cell Tissue Res** 1997 May;288(2):279–84
Localization of ACTH receptor mRNA by in situ hybridization in mouse adrenal gland. Xia Y, et al. **Cell Tissue Res** 1996 Oct;286(1):63–8
Tissue and species distribution of mRNA for the IKr-like K+ channel, erg. Wymore RS, et al. **Circ Res** 1997 Feb; 80(2):261–8
Quantitative reverse transcriptase-polymerase chain reaction for prostate-specific antigen mRNA. Galvan B, et al. **Clin Biochem** 1997 Jul;30(5):391–7
Quantitative RT-PCR combined with time-resolved fluorometry for determination of BCR-ABL mRNA. Bortolin S, et al. **Clin Chem** 1996 Dec;42(12):1924–9
Fluorometric determination of total mRNA with oligo(dT) immobilized on microtiter plates. Miura Y, et al. **Clin Chem** 1996 Nov;42(11):1758–64
Avoidance of false positives in PCR-based mRNA differential display during investigation of nonstandardized tissues or cells. Mohr S, et al. **Clin Chem** 1997 Jan; 43(1):182–4
Competitive RT-PCR to quantify CFTR mRNA in human endometrium. Mularoni A, et al. **Clin Chem** 1996 Nov; 42(11):1765–9
Colorimetric ELISA measurement of specific mRNA on immobilized-oligonucleotide-coated microtiter plates by reverse transcription with biotinylated mononucleotides. Tominaga K, et al. **Clin Chem** 1996 Nov;42(11):1750–7
Expression of adrenocorticotrophic hormone receptor mRNA in human adrenocortical neoplasms: correlation with P450scc expression. Reincke M, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):619–26
Pit-1 gene expression in human pituitary adenomas using the reverse transcription polymerase chain reaction method. Yamada S, et al. **Clin Endocrinol (Oxf)** 1996 Sep; 45(3):263–72
Adrenomedullin: changes in circulating and cardiac tissue concentration in Dahl salt-sensitive rats on a high-salt diet. Shimokubo T, et al. **Clin Exp Hypertens** 1996 Oct; 18(7):949–61
Gold and D-penicillamine induce vasculitis and up-regulate mRNA for IL-4 in the Brown Norway rat: support for a role for Th2 cell activity. Qasim FJ, et al. **Clin Exp Immunol** 1997 Jun;108(3):438–45
Cellular mRNA expression of interferon-gamma (IFN-gamma), IL-4 and IL-10 relates to resistance to experimental autoimmune myasthenia gravis (EAMG) in young Lewis rats. Shi FD, et al. **Clin Exp Immunol** 1997 Jun;108(3):523–8
Effect of genotype on the angiotensin-converting enzyme mRNA level in human atria. Tamaki S, et al.

Clin Exp Pharmacol Physiol 1997 May;24(5):305–8

Presence of gonadotropin–releasing hormone (GnRH) receptor mRNA in rat myenteric plexus cells. Ho JS, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Apr; 113(4):817–21

A competitive RT–PCR method for the quantitative analysis of cytokine mRNAs in mouse tissues. Zhou NM, et al. **Cytokine** 1997 Mar;9(3):212–8

Primary neuroendocrine carcinoma of the skin expresses tyrosinase mRNA: detection by a specific nested PCR technique. Alegre M, et al. **Dermatology** 1997;194(4):334–7

Developmental testis–specific regulation of mRNA levels and mRNA translational efficiencies for TATA–binding protein mRNA isoforms. Schmidt EE, et al. **Dev Biol** 1997 Apr 1;184(1):138–49

Zebrafish vasa homologue RNA is localized to the cleavage planes of 2– and 4–cell–stage embryos and is expressed in the primordial germ cells. Yoon C, et al. **Development** 1997 Aug;124(16):3157–65

Tissue distribution and quantification of the expression of mRNAs of peroxisome proliferator–activated receptors and liver X receptor–alpha in humans: no alteration in adipose tissue of obese and NIDDM patients. Auboeuf D, et al. **Diabetes** 1997 Aug;48(8):1319–27

PPAR–gamma gene expression is elevated in skeletal muscle of obese and type II diabetic subjects. Park KS, et al. **Diabetes** 1997 Jul;46(7):1230–4

Voluntary wheel running decreases adipose tissue mass and expression of leptin mRNA in Osborne–Mendel rats. Zachwieja JJ, et al. **Diabetes** 1997 Jul;46(7):1159–66

Long–term and rapid regulation of ob mRNA levels in adipose tissue from normal (Sprague Dawley rats) and obese (db/db mice, fa/fa rats) rodents. Igel M, et al. **Diabetologia** 1996 Jul;39(7):758–65

Renal antioxidant enzyme mRNA levels are increased in rats with experimental diabetes mellitus. Sechi LA, et al. **Diabetologia** 1997 Jan;40(1):23–9

Identification of genes regulated by glucose in a pancreatic beta–cell line by a new method for subtraction of mRNA. Yamato E, et al. **Diabetologia** 1996 Nov;39(11):1293–8

Internal marker for quantitative analysis of mRNA by reverse transcriptase–polymerase chain reaction in pancreatic beta cells [letter] Yamato E, et al. **Diabetologia** 1996 Jun; 39(6):747–8

Myeloperoxidase mRNA analysis in acute lymphoblastic leukemia. Crisan D, et al. **Diagn Mol Pathol** 1996 Dec; 5(4):236–48

Demonstration of cytoplasmic tyrosinase mRNA in tissue–cultured cells by reverse transcription (RT) in situ polymerase chain reaction (PCR) and RT PCR in situ hybridization. Li PX, et al. **Diagn Mol Pathol** 1997 Feb; 6(1):26–33

Myeloperoxidase mRNA analysis in acute lymphoblastic leukemia [letter] Serrano J, et al. **Diagn Mol Pathol** 1997 Jun;6(3):175–6

Stromelysin–3 (ST–3) mRNA expression in colorectal carcinomas. Localization and clinicopathologic correlations. Thewes M, et al. **Diagn Mol Pathol** 1996 Dec; 5(4):284–90

Analysis of ornithine decarboxylase messenger ribonucleic acid expression in colorectal carcinoma. Mimori K, et al. **Dis Colon Rectum** 1997 Sep;40(9):1095–100

Method for quantitation of low–abundance nerve growth factor mRNA expression in human nervous tissue using competitive reverse transcription polymerase chain reaction. St Amand D, et al. **DNA Cell Biol** 1996 May; 15(5):415–22

Guinea pig preprodynorphin mRNA: primary structure and regional quantitation in the brain. Yuferov VP, et al. **DNA Cell Biol** 1996 Dec;15(12):1105–12

A comparison of selected mRNA and protein abundances in human liver. Anderson L, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):533–7

Different electrophoretic techniques produce conflicting data in the analysis of myocardial samples from dilated cardiomyopathy patients: protein levels do not necessarily reflect mRNA levels. dos Remedios CG, et al. **Electrophoresis** 1996 Jan;17(1):235–8

Multiplex reverse transcription polymerase chain reaction combined with temperature gradient gel electrophoresis as a tool for the normalized quantitation of intrinsic factor mRNA. Solch JP, et al. **Electrophoresis** 1996 Jan;17(1):30–9

Use of internally controlled reverse transcriptase–polymerase chain reaction for absolute quantitation of individual multidrug resistant gene transcripts in tissue samples. Zhang F, et al. **Electrophoresis** 1996 Jan;17(1):255–60

Insulin stimulates protein synthesis of glycogen synthase in rat hepatoma H4 cells associated with acceleration of translation rate. Fujita N, et al. **Endocr J** 1996 Jun; 43(3):313–20

Expression of prolactin gene in mouse placenta during late pregnancy: detection of mRNA and its translation product. Harigaya T, et al. **Endocr J** 1997 Feb;44(1):155–61

Acute expression of the PRL receptor gene after ovariectomy in midpregnant mouse mammary gland. Mizoguchi Y, et al. **Endocr J** 1996 Oct;43(5):537–44

Quantitative RT–PCR for inhibin/activin subunits: measurements of rat hypothalamic and ovarian inhibin/activin subunit mRNAs during the estrous cycle. Murata T, et al. **Endocr J** 1997 Feb;44(1):35–42

Expression of LH–alpha and –beta subunit mRNAs in the rat placenta. Shinozaki M, et al. **Endocr J** 1997 Feb; 44(1):79–87

Inhibin alpha and beta A subunit messenger ribonucleic acids expression in human pituitary adenomas: studies by quantitative reverse transcription–polymerase chain reaction. Suzuki T, et al. **Endocr J** 1996 Jun;43(3):353–6

Quantitative analysis of rat thyroglobulin messenger RNA in FRTL–5 cells by competitive polymerase chain reaction with human thyroglobulin messenger RNA. Takano T, et al. **Endocr Res** 1997 Feb–May;23(1–2):119–30

Estrogen regulation of placental P–450 cholesterol side–chain cleavage enzyme messenger ribonucleic acid levels and activity during baboon pregnancy. Babischkin JS, et al. **Endocrinology** 1997 Jan;138(1):452–9

A novel estrogen–enhanced transcript identified in the rat uterus by differential display. Everett LM, et al. **Endocrinology** 1997 Sep;138(9):3836–41

'Distinct cellular localization' of the messenger ribonucleic acid for prostaglandin E receptor subtypes in the mouse uterus during pseudopregnancy. Katsuyama M, et al. **Endocrinology** 1997 Jan;138(1):344–50

The rat ovarian phospholipase A2 system: gene expression, cellular localization, activity characterization, and interleukin–1 dependence. Kol S, et al. **Endocrinology** 1997 Jan;138(1):322–31

Emergence of an isolated arginine vasopressin (AVP) response to stress after repeated restraint: a study of both AVP and corticotropin–releasing hormone messenger ribonucleic acid (RNA) and heteronuclear RNA. Ma XM, et al. **Endocrinology** 1997 Oct;138(10):4351–7

Estrogens potentiate the stimulatory effects of follicle–stimulating hormone on N–cadherin messenger ribonucleic acid levels in cultured mouse Sertoli cells. MacCalman CD, et al. **Endocrinology** 1997 Jan;138(1):41–8

Transforming growth factor–betas inhibit somatostatin messenger ribonucleic acid levels and somatostatin secretion in hypothalamic cells in culture. Quintela M, et al. **Endocrinology** 1997 Oct;138(10):4401–9

Androgens modulate nitric oxide synthase messenger ribonucleic acid expression in neurons of the major pelvic ganglion in the rat. Schirar A, et al. **Endocrinology** 1997 Aug;138(8):3093–102

Hormonal regulation of monocyte chemoattractant protein–1 messenger ribonucleic acid expression in corpora lutea. Tsai SJ, et al. **Endocrinology** 1997 Oct;138(10):4517–20

Regional distribution of type 2 thyroxine deiodinase messenger ribonucleic acid in rat hypothalamus and pituitary and its regulation by thyroid hormone. Tu HM, et al. **Endocrinology** 1997 Aug;138(8):3359–68

Evidence that pituitary adenylate cyclase activating polypeptide suppresses follicle–stimulating hormone–beta messenger ribonucleic acid levels by stimulating follistatin gene transcription. Winters SJ, et al. **Endocrinology** 1997 Oct;138(10):4324–9

Rapid and transient increases in cellular immediate early gene and neuropeptide mRNAs in cortical and limbic areas after amygdaloid kindling seizures in the rat. Burazin TC, et al. **Epilepsy Res** 1996 Dec;26(1):281–93

A multispecific internal (pRat6) for the analysis of rat cytokine mRNA levels by quantitative RT–PCR. Pitossi FJ, et al. **Eur Cytokine Netw** 1996 Sep;7(3):377–9

Quantification of MyoD, myogenin, MRF4 and Id–1 by reverse–transcriptase polymerase chain reaction in rat muscles—effects of hypothyroidism and chronic low–frequency stimulation. Kraus B, et al. **Eur J Biochem** 1997 Jul 1;247(1):98–106

Quantitative analyses of myosin heavy–chain mRNA and protein isoforms in single fibers reveal a pronounced fiber heterogeneity in normal rabbit muscles. Peuker H, et al. **Eur J Biochem** 1997 Jul 1;247(1):30–6

Induction of early immediate genes and programmed cell death following cardioplegic arrest in human hearts. Aebert H, et al. **Eur J Cardiothorac Surg** 1997 Aug;12(2):261–7

Localization by ultrastructural in situ hybridization of mitochondrial transcripts in epithelial cells of a Drosophila subobscura deletion mutant. Lécher P, et al. **Eur J Cell Biol** 1996 Dec;71(4):423–7

Non–isotopic competitive reverse transcription polymerase chain reaction coupled with high performance liquid chromatography to measure beta 2–receptor messenger RNA in the human heart. Höhnel K, et al. **Eur J Clin Chem Clin Biochem** 1996 May;34(5):411–7

A chronic GM2 gangliosidosis variant with a HEXA splicing defect: quantitation of HEXA mRNAs in normal and mutant fibroblasts. Fernandes MJ, et al. **Eur J Hum Genet** 1997 May–Jun;5(3):129–36

Clonal analysis of immunoglobulin mRNA in rheumatoid arthritis synovium: characterization of expanded IgG3 populations. Williams DG, et al. **Eur J Immunol** 1997 Feb; 27(2):476–85

Expression of E–cadherin, alpha– and beta–catenin mRNAs in ovarian endometriosis. Fujimoto J, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Aug;67(2):179–83

Cell type–specific regulation of beta2–adrenoceptor mRNA by agonists. Danner S, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):73–8

Chronic zolpidem treatment alters GABA(A) receptor mRNA levels in the rat cortex. Holt RA, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):129–32

Dopamine D3 receptors are not involved in the induction of c–fos mRNA by neuroleptic drugs: comparison of the dopamine D3 receptor antagonist GR103691 with typical and atypical neuroleptics. Hurley MJ, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):283–93

Contrasting effects of SM–9018, a potential atypical antipsychotic, and haloperidol on c–fos mRNA expression in the rat striatum. Ishibashi T, et al. **Eur J Pharmacol** 1996 May 15;303(3):247–51

Expression of a brain–type cannabinoid receptor (CB1) in alveolar Type II cells in the lung: regulation by hydrocortisone. Rice W, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):227–32

Detection of cytokine mRNA in unfractionated peripheral blood by reverse transcriptase polymerase chain reaction. Shimizu S, et al. **Eur J Surg** 1997 Jul;163(7):487–92

Quantitative digital analysis of diffuse and concentrated nuclear distributions of nascent transcripts, SC35 and poly(A). Fay FS, et al. **Exp Cell Res** 1997 Feb 25; 231(1):27–37

CAG repeat mutation in the mouse IL–2 gene enables concurrent assessment of T– and B–cell–specific gene expression by northern analysis. Szebeni J, et al. **Exp Clin Immunogenet** 1996;13(2):117–9

In vivo cytokine and receptor gene expression during the rat hair growth cycle. Analysis by semi–quantitative RT–PCR. Little JC, et al. **Exp Dermatol** 1996 Aug; 5(4):202–12

Characterization and developmental regulation of avian corneal beta–1,4–galactosyltransferase mRNA. Cai CX, et al. **Exp Eye Res** 1996 Aug;63(2):193–200

Quantitation of vascular endothelial growth factor mRNA levels in human breast tumors and metastatic lymph nodes. Wright PS, et al. **Exp Mol Pathol** 1997 Feb;64(1):41–51

Hepatic microsomal triglyceride transfer protein messenger RNA concentrations are increased by dietary cholesterol in hamsters. Bennett AJ, et al. **FEBS Lett** 1996 Oct 7; 394(3):247–50

Quantification of presenilin–1 mRNA in Alzheimer's disease brains. Johnston JA, et al. **FEBS Lett** 1996 Oct 7; 394(3):279–84

Presence of 17 beta–hydroxysteroid dehydrogenase type 3 messenger ribonucleic acid transcript in an ovarian Sertoli–Leydig cell tumor. Barbieri RL, et al. **Fertil Steril** 1997 Sep;68(3):534–7

Demonstration of calcitonin mRNA in rat thyroid C–cells and endocrine cells of the lung: comparison of immunocytochemical and hybridocytochemical results. Kasprzak A, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:9–10

Localization of calcitonin mRNA using in situ labeling with reverse transcriptase and PCR. Zabel M, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:7–8

Analysis of human 65 kD heat shock protein mRNA using polymerase chain reaction in synovia of rheumatoid arthritis patients. Kodama E, et al. **Fukushima J Med Sci** 1995 Dec;41(2):95–102

Inducibility of metallothionein mRNA expression and cadmium tolerance in larvae of a marine teleost, the turbot (Scophthalmus maximus). George SG, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):91–9

Human intestinal folate transport: cloning, expression, and distribution of complementary RNA. Nguyen TT, et al. **Gastroenterology** 1997 Mar;112(3):783–91

Molecular cloning and mRNA tissue distribution of a novel matrix metalloproteinase isolated from porcine enamel organ. Bartlett JD, et al. **Gene** 1996 Dec 12;183(1–2):123–8

Quantification of cytokine mRNA expression by RT–PCR and electrochemiluminescence. Vandevyver C, et al. **Genome Res** 1995 Sep;5(2):195–201

cDNA cloning of the murine Pex gene implicated in X–linked hypophosphatemia and evidence for expression in bone. Du L, et al. **Genomics** 1996 Aug 15;36(1):22–8

Ontogeny of IGFs and IGFBPs mRNA levels and tissue concentrations in liver, kidney and skeletal muscle of pig. Peng M, et al. **Growth Dev Aging** 1996 Autumn–Winter; 60(3–4):171–87

Vascular endothelial growth factor messenger ribonucleic acid expression in human ovarian and endometrial cancer. Doldi N, et al. **Gynecol Endocrinol** 1996 Dec;10(6):375–82

Localization of sex hormone–binding globulin mRNA expression in human uterine endometrium. Misao R, et al. **Gynecol Endocrinol** 1997 Feb;11(1):1–4

In situ hybridization study of messenger RNA for estrogen receptor and immunohistochemical detection of estrogen and progesterone receptors in the human ovary. Revelli A, et al. **Gynecol Endocrinol** 1996 Jun;10(3):177–86

Identification of differentially expressed mRNAs in normal and neoplastic (adenocarcinoma) human endometrium. Crescenzi E, et al. **Gynecol Oncol** 1996 Nov;63(2):228–33

Differences in sarcoplasmic reticulum gene expression in myocardium from patients undergoing cardiac surgery. Quantification of steady–state levels of messenger RNA using the reverse transcription–polymerase chain reaction. Ohkusa T, et al. **Heart Vessels** 1997;12(1):1–9

Expression of vascular endothelial growth factor in human myocardial infarction. Shinohara K, et al. **Heart Vessels** 1996;11(3):113–22

The importance of the 3' untranslated region for the expression of the alpha–globin genes. Molchanova TP, et al. **Hemoglobin** 1996 Feb;20(1):41–54

Hematogenous spreading of hepatocellular carcinoma cells: possible participation in recurrence in the liver. Funaki NO, et al. **Hepatology** 1997 Mar;25(3):564–8

kan–1 (bile acid CoA:amino acid N–acyltransferase) messenger RNA as a novel predictive indicator for

prognosis of hepatocellular carcinoma patients after partial hepatectomy. Furutani M, et al. **Hepatology** 1996 Dec; 24(6):1441–5

In situ nucleic acid hybridization of pyruvate dehydrogenase complex–E2 in primary biliary cirrhosis: pyruvate dehydrogenase complex–E2 messenger RNA is expressed in hepatocytes but not in biliary epithelium. Harada K, et al. **Hepatology** 1997 Jan;25(1):27–32

Reduced p21(WAF1/CIP1) expression and p53 mutation in hepatocellular carcinomas. Hui AM, et al. **Hepatology** 1997 Mar;25(3):575–9

Quantitative graphical description of portocentral gradients in hepatic gene expression by image analysis. Lamers WH, et al. **Hepatology** 1997 Aug;26(2):398–406

Hepatic expression of inducible nitric oxide synthase transcripts in chronic hepatitis C virus infection: relation to hepatic viral load and liver injury. Mihm S, et al. **Hepatology** 1997 Aug;26(2):451–8

Induction of hepatocyte growth factor activator messenger RNA in the liver following tissue injury and acute inflammation. Okajima A, et al. **Hepatology** 1997 Jan; 25(1):97–102

Difference in gene expression for matrix metalloproteinase–1 between early and advanced hepatocellular carcinomas. Okazaki I, et al. **Hepatology** 1997 Mar;25(3):580–4

RNA molecules lighting up under the microscope. Dirks RW. **Histochem Cell Biol** 1996 Aug;106(2):151–66 (104 ref.)

Cellular expression of MAP 2 kinase in rat brain. Jacobowitz DM, et al. **Histochem Cell Biol** 1996 Sep;106(3):303–10

Localization of the mRNA encoding the zona protein ZP3 alpha in the porcine ovary, oocyte and embryo by non–radioactive in situ hybridization. Kölle S, et al. **Histochem J** 1996 Jun;28(6):441–7

Effect of different serum concentrations of growth hormone–binding protein (GHBP) on the regulation of GH receptor/GHBP gene transcription in a human hepatoma cell line. Mullis PE, et al. **Horm Res** 1997;47(2):73–80

A possibility of all mRNA expression in a human single lymphocyte. Kimoto Y. **Hum Cell** 1996 Dec;9(4):367–70

Methylmercury modulation of monocyte chemotactic protein–1 mRNA expression in human peripheral blood mononuclear cells. Kishimoto T, et al. **Hum Cell** 1996 Dec; 9(4):371–4

Establishment and application of a novel T cell clonality analysis using single–strand conformation polymorphism of T cell receptor messenger signals. Yamamoto K, et al. **Hum Immunol** 1996 Jun–Jul;48(1–2):23–31

Cloning, mapping and RNA analysis of the human methionine synthase gene. Li YN, et al. **Hum Mol Genet** 1996 Dec;5(12):1851–8

Use of reverse transcription–polymerase chain reaction to detect embryonic interleukin–1 system messenger RNA in individual preimplantation mouse embryos co–cultured with Vero cells. Huang HY, et al. **Hum Reprod** 1997 Jul; 12(7):1537–44

Distribution of the A and B forms of the progesterone receptor messenger ribonucleic acid and protein in uterine leiomyomata and adjacent myometrium. Viville B, et al. **Hum Reprod** 1997 Apr;12(4):815–22

Morphological and molecular characteristics of living human fetuses between Carnegie stages 7 and 23: localization of inhibin mRNA alpha and beta a subunits by in–situ hybridization. Harkness LM, et al. **Hum Reprod Update** 1997 Jan–Feb;3(1):59–92

Differential regulation of angiotensinogen transcripts after renin infusion. Milsted A, et al. **Hypertension** 1996 Oct; 28(4):678–81

Insulin–like growth factor–1 messenger RNA isoforms in rat prostate and prostate tumors [letter] Wang F, et al. **In Vitro Cell Dev Biol Anim** 1996 May;32(5):265–8

Absence of tumor necrosis factor alpha, interleukin–6 (IL–6), and granulocyte–macrophage colony–stimulating factor expression but presence of IL–1beta, IL–8, and IL–10 expression in human monocytes exposed to viable or killed Ehrlichia chaffeensis. Lee EH, et al. **Infect Immun** 1996 Oct;64(10):4211–9

Anti–Ehrlichia chaffeensis antibody complexed with E. chaffeensis induces potent proinflammatory cytokine mRNA expression in human monocytes through sustained reduction of IkappaB–alpha and activation of NF–kappaB. Lee EH, et al. **Infect Immun** 1997 Jul;65(7):2890–7

Induction of interleukin (IL)–1beta and IL–8 mRNA expression in porcine macrophages by lipopolysaccharide from Serpulina hyodysenteriae. Sacco RE, et al. **Infect Immun** 1996 Oct;64(10):4369–72

Characterization of polydnavirus–encoded mRNA in parasitized armyworm larvae. Yamanaka A, et al. **Insect Biochem Mol Biol** 1996 Jun;26(6):529–36

Retinoic acid–induced modulation of IL–2 mRNA production and IL–2 receptor expression on T cells. Ballow M, et al. **Int Arch Allergy Immunol** 1997 May–Jul; 113(1–3):167–9

Modulatory effects of epinastine hydrochloride on IL–4 mRNA expression by peripheral blood mononuclear cells. Nakagawa T, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):321–2

Cell mobilisation and cytokine gene expression in a rat model of non–antigen–induced lung inflammation. Williams CM, et al. **Int Arch Allergy Immunol** 1997 May–Jul; 113(1–3):316–7

Increased analytical sensitivity of RT–PCR of PSA mRNA decreases diagnostic specificity of detection of prostatic cells in blood. Henke W, et al. **Int J Cancer** 1997 Jan 6; 70(1):52–6

On the distribution of insulin–like growth factors in breast tissues [letter] Spanakis E, et al. **Int J Cancer** 1996 Nov 15;68(4):555–6

Analysis of human papillomavirus type 16 E5 oncogene expression in vitro and from bicistronic messenger RNAs. Johnsen CK, et al. **Intervirology** 1995;38(6):339–45

Analysis of PrPc mRNA by in situ hybridization in brain, placenta, uterus and testis of rats. Tanji K, et al. **Intervirology** 1995;38(6):309–15

Increased expression of interleukin–2 receptor alpha on peripheral blood mononuclear cells in HTLV–I tax/rex mRNA–positive asymptomatic carriers. Okayama A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):70–5

Levels of tryptase, chymase, and Fc epsilon RI alpha messenger RNA in human skin are unchanged after IgE–dependent stimulation of cutaneous mast cells in vivo. Xia HZ, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):224–6

Sepsis increases skeletal muscle sodium, potassium–adenosinetriphosphatase activity without affecting messenger RNA or protein levels. O'Brien WJ, et al. **J Am Coll Surg** 1996 Nov;183(5):471–9

Natriuretic peptide B receptor and C–type natriuretic peptide in the rat kidney. Lohe A, et al. **J Am Soc Nephrol** 1995 Dec;6(6):1552–8

Intraglomerular C3 synthesis in human kidney detected by in situ hybridization [see comments] Miyazaki M, et al. **J Am Soc Nephrol** 1996 Nov;7(11):2428–33. Comment in: J Am Soc Nephrol 1996 Nov;7(11):2314–9.

Presence and regulation of Raf–1–K (Kinase), MAPK–K, MAP–K, and S6–K in rat nephron segments. Terada Y, et al. **J Am Soc Nephrol** 1995 Dec;6(6):1565–77

Demonstration and characterization of dipeptide transport system activity in sheep omasal epithelium by expression of mRNA in Xenopus laevis oocytes. Matthews JC, et al. **J Anim Sci** 1996 Jul;74(7):1720–7

Concentration of gonadotropin–releasing hormone receptor messenger ribonucleic acid in pituitary tissue of orchidectomized sheep: effect of passive immunization against gonadotropin–releasing hormone. Sakurai H, et al. **J Anim Sci** 1997 Jan;75(1):189–94

mRNA levels of the calpain system in longissimus muscle of young pigs during prolonged feeding of a protein–free diet. van den Hemel–Grooten HN, et al. **J Anim Sci** 1997 Apr;75(4):968–74

Interleukin 12 mRNA expression in islets correlates with beta–cell destruction in NOD mice. Rabinovitch A, et al. **J Autoimmun** 1996 Oct;9(5):645–51

The rat pyruvate carboxylase gene structure. Alternate promoters generate multiple transcripts with the 5'–end heterogeneity. Jitrapakdee S, et al. **J Biol Chem** 1997 Aug 15;272(33):20522–30

Localization of group IIc low molecular weight phospholipase A2 mRNA to meiotic cells in the mouse. Chen J, et al. **J Cell Biochem** 1997 Mar 1;64(3):369–75

Detection of a proliferation specific gene during development of the osteoblast phenotype by mRNA differential display. Ryoo HM, et al. **J Cell Biochem** 1997 Jan;64(1):106–16

beta–Actin messenger RNA localization and protein synthesis augment cell motility. Kislauskis EH, et al. **J Cell Biol** 1997 Mar 24;136(6):1263–70

Na+/H+ exchanger (NHE) in the basolateral membrane is encoded by NHE–1 mRNA in LLC–PK1 clone 4 cells. Hanai JI, et al. **J Cell Physiol** 1997 Jun;171(3):318–24

Differential gene expression in SV40–mediated immortalization of human fibroblasts. Pardinas J, et al. **J Cell Physiol** 1997 Jun;171(3):325–35

Editing of GluR2 RNA in the gerbil hippocampus after global cerebral ischemia. Rump A, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1362–5

Distribution of alpha 1a–, alpha 1b– and alpha 1d–adrenergic receptor mRNA in the rat brain and spinal cord. Day HE, et al. **J Chem Neuroanat** 1997 Jul;13(2):115–39

Alternatively spliced transcripts of the aromatase cytochrome P450 (CYP19) gene in adipose tissue of women. Agarwal VR, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):70–4

Comparative messenger ribonucleic acid analysis of immediate early genes and sex steroid receptors in human leiomyoma and healthy myometrium. Lessl M, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2596–600

Growth hormone receptor messenger ribonucleic acid in normal and pathologic human adrenocortical tissues--an analysis by quantitative polymerase chain reaction technique. Lin CJ, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2671–6

Ribonucleic acid expression of the CLA–1 gene, a human homolog to mouse high density lipoprotein receptor SR–BI, in human adrenal tumors and cultured adrenal cells. Liu J, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2522–7

Insulin–like growth factor–binding proteins (IGFBP)–4, –5, and –6 in the benign and malignant human prostate: IGFBP–5 messenger ribonucleic acid localization differs from IGFBP–5 protein localization. Tennant MK, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3783–92

Tissue–specific expression of alpha and beta messenger ribonucleic acid isoforms of the human mineralocorticoid receptor in normal and pathological states. Zennaro MC, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1345–52

Alkaline decontamination of sputum specimens adversely affects stability of mycobacterial mRNA. Desjardin LE, et al. **J Clin Microbiol** 1996 Oct;34(10):2435–9

Neuropeptides and neurotrophin receptor mRNAs in primary sensory neurons of aged rats. Bergman E, et al. **J Comp Neurol** 1996 Nov 11;375(2):303–19

Spatial distribution of kainate receptor subunit mRNA in the mouse basal ganglia and ventral mesencephalon. Bischoff S, et al. **J Comp Neurol** 1997 Mar 24;379(4):541–62

Distribution of the mRNA for a pituitary adenylate cyclase–activating polypeptide receptor in the rat brain: an in situ hybridization study. Hashimoto H, et al. **J Comp Neurol** 1996 Aug 5;371(4):567–77

Retrograde transport of brain–derived neurotrophic factor (BDNF) following infusion in neo– and limbic cortex in rat: relationship to BDNF mRNA expressing neurons. Sobreviela T, et al. **J Comp Neurol** 1996 Nov 18; 375(3):417–44

Cellular localization of Pan–trk immunoreactivity and trkC mRNA in the enteric nervous system. Sternini C, et al. **J Comp Neurol** 1996 May 13;368(4):597–607

Neurokinin receptor mRNA localization in human midbrain dopamine neurons. Whitty CJ, et al. **J Comp Neurol** 1997 Jun 9;382(3):394–400

Human granulation–tissue fibroblasts show enhanced proteoglycan gene expression and altered response to TGF–beta 1. Häkkinen L, et al. **J Dent Res** 1996 Oct; 75(10):1767–78

Localization of prostaglandin H synthase type 2 protein and mRNA in term human fetal membranes and decidua. Gibb W, et al. **J Endocrinol** 1996 Sep;150(3):497–503

Localisation of mRNA for interleukin–1 receptor and interleukin–1 receptor antagonist in the rat ovary. Wang LJ, et al. **J Endocrinol** 1997 Jan;152(1):11–7

Expression of interleukin–1 in human pheochromocytoma. Bornstein SR, et al. **J Endocrinol Invest** 1996 Nov; 19(10):693–8

Heparin–binding epidermal growth factor–like growth factor and transforming growth factor–alpha in human non–small cell lung cancers. Chong IW, et al. **J Formos Med Assoc** 1997 Aug;96(8):579–85

The intragraft cytokine mRNA pattern reflects the efficacy of steroid antirejection therapy. Baan CC, et al. **J Heart Lung Transplant** 1996 Dec;15(12):1184–93

Experimental and clinical allogeneic heart transplant rejection: correlations between histology and immune reactivity detected by cytokine messenger RNA. Normann SJ, et al. **J Heart Lung Transplant** 1996 Aug;15(8):778–89

Ontogenic expression of the Na(+)–independent organic anion transporting polypeptide (oatp) in rat liver and kidney. Dubuisson C, et al. **J Hepatol** 1996 Dec; 25(6):932–40

Semiquantitation of intrahepatic MDR3 mRNA levels by reverse transcription/competitive polymerase chain reaction. Dumoulin FL, et al. **J Hepatol** 1997 Apr; 26(4):852–6

Effectiveness of interferon–alpha therapy in chronic hepatitis C is associated with the amount of interferon–alpha receptor mRNA in the liver. Fukuda R, et al. **J Hepatol** 1997 Mar;26(3):455–61

Initial expression of phosphoenolpyruvate carboxykinase gene in fetal hepatocytes: role of transcription factors. Molero C, et al. **J Hepatol** 1996 Oct;25(4):510–7

Expression of messenger RNA for liver functions following 70% and 90% hepatectomy. Tygstrup N, et al. **J Hepatol** 1996 Jul;25(1):72–8

Amplification of human beta–actin gene by the reverse transcriptase–polymerase chain reaction: implications for assessment of RNA from formalin–fixed, paraffin–embedded material. Dakhama A, et al. **J Histochem Cytochem** 1996 Oct;44(10):1205–7

Localization of basic fibroblast growth factor mRNA (FGF–2 mRNA) in the uterus of mated and unmated gilts. Katsahambas S, et al. **J Histochem Cytochem** 1996 Nov; 44(11):1289–301

Effect of angiotensinogen on blood pressure regulation in normotensive rats: application of a loss of function approach. Tomita N, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1767–74

TCR expression in human fetal intestine and identification of an early T cell receptor beta–chain transcript. Koningsberger JC, et al. **J Immunol** 1997 Aug 15; 159(4):1775–82

A simple nested RT–PCR method for quantitation of the relative amounts of multiple cytokine mRNAs in small tissue samples. Kotake S, et al. **J Immunol Methods** 1996 Dec 15;199(2):193–203

Measurement of relative quantities of different HLA–A and –B mRNAs in cells by reverse transcription–polymerase chain reaction and denaturing gradient gel electrophoresis. Liu K, et al. **J Immunol Methods** 1997 Apr 11;203(1):67–75

RNAse protection assays for the simultaneous and semiquantitative analysis of multiple murine matrix metalloproteinase (MMP) and MMP inhibitor mRNAs. Pagenstecher A, et al. **J Immunol Methods** 1997 Aug 7; 206(1–2):1–9

A simplified, competitive RT–PCR method for measuring rat IFN–gamma mRNA expression. Sun B, et al. **J Immunol Methods** 1996 Sep 9;195(1–2):139–48

Quantitation of RT–PCR amplified cytokine mRNA by aequorin–based bioluminescence immunoassay. Xiao L, et al. **J Immunol Methods** 1996 Dec 15;199(2):139–47

Chemotherapeutic purine analogs alter the level of interferon–beta mRNA induced by poly I–poly C in

cultured osteosarcoma cells. Slomiany DJ, et al. **J Interferon Cytokine Res** 1997 May;17(5):245–54

Differential expression of GRO–alpha and IL–8 mRNA in psoriasis: a model for neutrophil migration and accumulation in vivo. Gillitzer R, et al. **J Invest Dermatol** 1996 Nov;107(5):778–82

T helper 1 cytokine mRNA is increased in spontaneously regressing primary melanomas. Lowes MA, et al. **J Invest Dermatol** 1997 Jun;108(6):914–9

Regulation of tyrosinase mRNA in mouse melanoma cells by alpha–melanocyte–stimulating hormone. Rungta D, et al. **J Invest Dermatol** 1996 Nov;107(5):689–93

Quantification of Pro alpha 1(I) collagen mRNA in skin biopsy specimens: levels of transcription in normal skin and in granuloma annulare. Tasanen K, et al. **J Invest Dermatol** 1996 Sep;107(3):314–7

Expression of apolipoprotein[a] and plasminogen mRNAs in cynomolgus monkey liver and extrahepatic tissues. Ramharack R, et al. **J Lipid Res** 1996 Sep;37(9):2029–40

Sterol 27–hydroxylase: expression in human arterial endothelium. Reiss AB, et al. **J Lipid Res** 1997 Jun; 38(6):1254–60

A nimA–like protein kinase transcript is highly expressed in meristems of Antirrhinum majus. Zhang H, et al. **J Microsc** 1996 Feb;181 (Pt 2):186–94

Variations in the relative mRNA levels of actins and myosin heavy chains do not produce corresponding differences in their proteins in the adult human heart. Coumans JV, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):895–905

Regional and age–related differences in mRNA composition of intracellular Ca(2+)–release channels of rat cardiac myocytes. Gorza L, et al. **J Mol Cell Cardiol** 1997 Mar; 29(3):1023–36

Sarcoplasmic reticulum Ca2+ATPase and phospholamban mRNA and protein levels in end–stage heart failure due to ischemic or dilated cardiomyopathy. Flesch M, et al. **J Mol Med** 1996 Jun;74(6):321–32

Messenger RNA expression for a TSH receptor variant in the thymus of a two–year–old child. Paschke R, et al. **J Mol Med** 1995 Nov;73(11):577–80

Localization of pleiotrophin and its mRNA in subpopulations of neurons and their corresponding axonal tracts suggests important roles in neural–glial interactions during development and in maturity. Silos–Santiago I, et al. **J Neurobiol** 1996 Nov;31(3):283–96

Localization of mRNA coding for the three subtypes of atrial natriuretic factor (ANF) receptors in rat anterior pituitary gland cells. Grandclément B, et al. **J Neuroendocrinol** 1995 Dec;7(12):939–48

Expression of somatostatin receptor (SSTR) subtypes in pituitary adenomas: quantitative analysis of SSTR2 mRNA by reverse transcription–polymerase chain reaction. Murabe H, et al. **J Neuroendocrinol** 1996 Aug;8(8):605–10

Co–localization of alpha1D adrenergic receptor mRNA with mineralocorticoid and glucocorticoid receptor mRNA in rat hippocampus. Williams AM, et al. **J Neuroendocrinol** 1997 Feb;9(2):113–9

Central nervous system cytokine mRNA expression following Theiler's murine encephalomyelitis virus infection. Sato S, et al. **J Neuroimmunol** 1997 Jun; 76(1–2):213–23

Localization of mRNA for leukemia inhibitory factor receptor in the adult rat brain. Yamakuni H, et al. **J Neuroimmunol** 1996 Oct;70(1):45–53

Interleukin (IL)–1 beta and IL–1 beta mRNA expression in normal and diseased skeletal muscle assessed by immunocytochemistry, immunoblotting and reverse transcriptase–nested polymerase chain reaction. Bélec L, et al. **J Neuropathol Exp Neurol** 1997 Jun;56(6):651–63

Preferential subsarcolemmal localization of dystrophin and beta–dystroglycan mRNA in human skeletal muscles. Mitsui T, et al. **J Neuropathol Exp Neurol** 1997 Jan; 56(1):94–101

Dendritic and postsynaptic localizations of glycine receptor alpha subunit mRNAs. Racca C, et al. **J Neurosci** 1997 Mar 1;17(5):1691–700

A novel in situ double–labeling method for simultaneous detection of mRNA and expressed protein or two different mRNAs. Chiu KP, et al. **J Neurosci Methods** 1996 Jun; 66(2):69–79

Identification of transcriptionally regulated mRNAs from mouse Schwann cell precursors using modified RNA fingerprinting methods. Zoidl G, et al. **J Neurosci Res** 1997 Jul 1;49(1):32–42

Competitive reverse transcriptase–polymerase chain reaction shows that dietary zinc supplementation in humans increases monocyte metallothionein mRNA levels. Sullivan VK, et al. **J Nutr** 1997 May;127(5):694–8

The selenium requirement for glutathione peroxidase mRNA level is half of the selenium requirement for glutathione peroxidase activity in female rats. Weiss SL, et al. **J Nutr** 1996 Sep;126(9):2260–7

Expression of human intestinal trefoil factor in malignant cells and its regulation by oestrogen in breast cancer cells. May FE, et al. **J Pathol** 1997 Aug;182(4):404–13

In situ hybridization study on tissue inhibitors of metalloproteinases (TIMPs) mRNA–expressing cells in human inflamed gingival tissue. Kubota T, et al. **J Periodontal Res** 1997 Jul;32(5):467–72

Kappa light chain mRNA bearing plasma cells are predominant in periodontitis lesions. Takahashi K, et al. **J Periodontal Res** 1996 May;31(4):256–9

Molecular biological analysis of the effects of ginsenoside–Rb2 on albumin mRNA in streptozotocin–induced diabetic rats. Yokozawa T, et al. **J Pharm Pharmacol** 1996 Jul;48(7):763–7

Phencyclidine continuous dosing produces a treatment time–dependent regulation of rat CYP2C11 function, protein expression and mRNA levels. Shelnutt SR, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):574–81

Corticotropin–releasing factor and type 1 corticotropin–releasing factor receptor messenger RNAs in rat brain and pituitary during "binge"–pattern cocaine administration and chronic withdrawal. Zhou Y, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):351–8

The expression and localization of zona pellucida glycoproteins and mRNA in cynomolgus monkeys (Macaca fascicularis). Martinez ML, et al. **J Reprod Fertil Suppl** 1996;50:35–41

Early elevation of transforming growth factor–beta, decorin, and biglycan mRNA levels during cartilage matrix restoration after mild proteoglycan depletion. van der Kraan PM, et al. **J Rheumatol** 1997 Mar;24(3):543–9

Inflammatory cytokine mRNA in human gestational tissues: implications for term and preterm labor. Dudley DJ, et al. **J Soc Gynecol Investig** 1996 Nov–Dec;3(6):328–35

Quantification of androgen receptor mRNA in tissues by competitive co–amplification of a template in reverse transcription–polymerase chain reaction. Malucelli A, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):563–8

Influence of blockers for the estrogen receptor (ER) and type 1 IGF–receptor on the levels of ER, ER mRNA and IGF–I mRNA in the rat uterus. Sahlin L, et al. **J Steroid Biochem Mol Biol** 1996 Jul;58(4):359–65

Effect of thyroid hormone (T3)–responsive changes in surfactant apoproteins on surfactant function during sepsis. Raafat AM, et al. **J Trauma** 1997 May;42(5):803–8; discussion 808–9

Localization of mRNA and receptor binding sites for the alpha 1a–adrenoceptor subtype in the rat, monkey and human urinary bladder and prostate. Walden PD, et al. **J Urol** 1997 Mar;157(3):1032–8

Partial cloning of prohibitin cDNA from canine, feline, bovine, equine, and rabbit liver mRNA by RT–PCR. Matsuyama S, et al. **J Vet Med Sci** 1997 Mar;59(3):201–3

Detection of latency–associated transcripts of equid herpesvirus 1 in equine leukocytes but not in trigeminal ganglia. Chesters PM, et al. **J Virol** 1997 May;71(5):3437–43

Inflammatory cytokine expression is correlated with the level of human immunodeficiency virus (HIV) transcripts in HIV–infected placental trophoblastic cells. Lee BN, et al. **J Virol** 1997 May;71(5):3628–35

Tiny T antigen: an autonomous polyomavirus T antigen amino–terminal domain. Riley MI, et al. **J Virol** 1997 Aug; 71(8):6068–74

Analysis of upregulated cellular genes in pseudorabies virus infection: use of mRNA differential display. Hsiang CY, et al. **J Virol Methods** 1996 Oct;62(1):11–9

Procedures for reproducible detection of rabies virus antigen mRNA and genome in situ in formalin–fixed tissues. Warner CK, et al. **J Virol Methods** 1997 Aug;67(1):5–12

Analysis of dissociated single neurons by simple and semi–quantitative RT–PCR (reverse transcription and polymerase chain reaction). Andoh T, et al. **Jpn J Pharmacol** 1997 May;74(1):121–3

Assessment of protein kinase C mRNA levels in Alzheimer's disease brains. Chachin M, et al. **Jpn J Pharmacol** 1996 Jun;71(2):175–7

Dissociation of beta–adrenoceptor numbers from mRNA levels during acute ischemia in rat myocardium. Nakamura K, et al. **Jpn J Pharmacol** 1997 Jan;73(1):23–8

High phosphorus diet increases preproPTH mRNA independent of calcium and calcitriol in normal rats. Hernández A, et al. **Kidney Int** 1996 Dec;50(6):1872–8

Differential expression of transforming growth factor–beta isoforms and receptors in experimental membranous nephropathy. Shankland SJ, et al. **Kidney Int** 1996 Jul; 50(1):116–24

Distribution of alpha 1B–adrenergic receptor mRNA expression along rat nephron segments. Umemura S, et al. **Kidney Int** 1997 May;51(5):1548–52

Molecular analysis of human glomerular disease. Esposito C, et al. **Kidney Int Suppl** 1996 Jan;53:S21–5 (31 ref.)

Ribonucleases may limit recovery of ribonucleic acids from archival human temporal bones. Lee KH, et al. **Laryngoscope** 1997 Sep;107(9):1228–34

Expression of thrombopoietin and thrombopoietin receptor MPL in human leukemia–lymphoma and solid tumor cell lines. Graf G, et al. **Leuk Res** 1996 Oct;20(10):831–8

Actin mRNA is not lowered in chronic myeloid leukemic granulocytes. Kant AM, et al. **Leuk Res** 1996 Sep; 20(9):739–41

Loss of the DEK–CAN fusion transcript in a child with t(6;9) acute myeloid leukemia following chemotherapy and allogeneic bone marrow transplantation. Boer J, et al. **Leukemia** 1997 Feb;11(2):299–300

Good correlation between RT–PCR analysis and relapse in Philadelphia (Ph1)–positive acute lymphoblastic leukemia (ALL). Preudhomme C, et al. **Leukemia** 1997 Feb; 11(2):294–8

A competitive quantitative polymerase chain reaction assay for bovine transforming growth factor–B1 mRNA. Lanzillo JJ, et al. **Life Sci** 1996;59(25–26):2157–65

Effects of pulsatile pituitary adenylate cyclase activating polypeptide (PACAP) on gonadotropin secretion and subunit mRNA levels in perifused rat pituitary cells. Tsujii T, et al. **Life Sci** 1995 Feb 17;56(13):1103–11

Quantification of mRNAs for three alpha 1–adrenoceptor subtypes in rat aorta by solution hybridization. Xu K, et al. **Life Sci** 1996;59(21):PL343–7

Extensive alternate exon usage at the 5' end of the sheep tropoelastin gene. Mauch JC, et al. **Matrix Biol** 1995 Oct; 14(8):635–41

Analysis of proteoglycan messages in human articular cartilage by a competitive PCR technique. Melching LI, et al. **Matrix Biol** 1997 Apr;16(1):1–11

Quantitative analysis of alpha 1 (I) procollagen transcripts in vivo by competitive polymerase chain reaction. Thur J, et al. **Matrix Biol** 1996 Apr;15(1):49–52

Detection of chimeric mRNAs by reverse transcriptase–polymerase chain reaction for diagnosis and monitoring of acute leukemias with 11q23 abnormalities. Ida K, et al. **Med Pediatr Oncol** 1997 May;28(5):325–32

Cytochrome P450 mRNA induction: quantitation by RNA–polymerase chain reaction using capillary electrophoresis. Fasco MJ, et al. **Methods Enzymol** 1996; 272:401–12

Determination of apolipoprotein mRNA levels by ribonuclease protection assay. Mitchell A, et al. **Methods Enzymol** 1996;263:351–63

In situ PCR amplification of intracellular mRNA. Chen RH, et al. **Methods Mol Biol** 1997;71:123–32 (20 ref.)

Reverse transcriptase PCR in situ on cryopreserved tissue sections. Hendler FJ, et al. **Methods Mol Biol** 1997; 71:99–111 (9 ref.)

mRNA in situ hybridization to in vitro cultured cells. Raap AK, et al. **Methods Mol Biol** 1997;75:367–75 (32 ref.)

In situ hybridization to determine the expression of peptide neurotransmitters. Santama N. **Methods Mol Biol** 1997; 72:159–70

2D–PAGE examination of mRNA populations from Penicillium freii mutants deficient in xanthomegnin biosynthesis. Nicolaisen M, et al. **Microbiol Res** 1996 Aug; 151(3):285–90

Renal mRNA of PTH–PTHrP receptor, [Ca2+]i and phosphaturic response to PTH in phosphate depletion. Marcinkowski W, et al. **Miner Electrolyte Metab** 1997; 23(1):48–57

Hybridization of biotinylated oligo(dT) for eukaryotic mRNA quantitation. Stolz LE, et al. **Mol Biotechnol** 1996 Dec;6(3):225–30

The quantitative analysis of multiple mRNA species using oligonucleotide probes in an S1 nuclease protection assay. Tanay VA, et al. **Mol Biotechnol** 1997 Jun;7(3):217–29

Differential responses of post–natal rat ovarian cells to FSH and activin. Drummond AE, et al. **Mol Cell Endocrinol** 1996 Aug 30;122(1):21–32

Characterization of the insulin–like growth factor type 1 receptor messenger in two teleost species. Elies G, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):131–40

Growth hormone stimulates transcription of the gene encoding the acid–labile subunit (ALS) of the circulating insulin–like growth factor–binding protein complex and ALS promoter activity in rat liver. Ooi GT, et al. **Mol Endocrinol** 1997 Jun;11(7):997–1007

Expression of heparin–binding epidermal growth factor messenger RNA in the human endometrium. Birdsall MA, et al. **Mol Hum Reprod** 1996 Jan;2(1):31–4

GnRH receptor mRNA expression by in–situ hybridization in the primate pituitary and ovary. Fraser HM, et al. **Mol Hum Reprod** 1996 Feb;2(2):117–21

Quantification of hexokinase mRNA in mouse blastocysts by competitive reverse transcriptase polymerase chain reaction. Johnson MD, et al. **Mol Hum Reprod** 1997 Apr; 3(4):359–65

Detection of mRNA transcripts of beta 1 integrins in ejaculated human spermatozoa by nested reverse transcription–polymerase chain reaction. Rohwedder A, et al. **Mol Hum Reprod** 1996 Jul;2(7):499–505

Localization of bradykinin type II receptor mRNA in human endometrium. Shams M, et al. **Mol Hum Reprod** 1996 Jan; 2(1):35–9

Haploid transcripts persist in mature human spermatozoa. Wykes SM, et al. **Mol Hum Reprod** 1997 Jan;3(1):15–9

Expression of multiple thyroid hormone receptor mRNAs in human oocytes, cumulus cells, and granulosa cells. Zhang SS, et al. **Mol Hum Reprod** 1997 Jul;3(7):555–62

Novel method for detection of small amounts of RNA based on the semi–nested polymerase chain reaction. Sanders S, et al. **Mol Pathol** 1997 Apr;50(2):105–7

Expression of a novel mRNA in human head and neck squamous cell carcinoma cells. Werner JA, et al. **Mol Pathol** 1997 Apr;50(2):82–6

Down–regulation of P2U–purinergic nucleotide receptor messenger RNA expression during in vitro differentiation of human myeloid leukocytes by phorbol esters or inflammatory activators. Martin KA, et al. **Mol Pharmacol** 1997 Jan;51(1):97–108

Distribution of 5–HT4 receptor mRNA in the rat brain. Ullmer C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):210–2

Upregulation of NMDAR1 mRNA induced by MK–801 is associated with massive death of axotomized motor neurones in adult rats. Sanner C, et al. **Neurobiol Dis** 1994 Dec;1(3):121–9

Quantification of dopamine D1 and D2 receptor mRNA

levels associated with the development of behavioral sensitization in amphetamine treated rats. Richtand NM, et al. **Neurochem Int** 1997 Jul;31(1):131–7

Expression of carbonic anhydrase II mRNA and protein in oligodendrocytes during toxic demyelination in the young adult mouse. Tansey FA, et al. **Neurochem Res** 1996 Apr; 21(4):411–6

Expression of mRNA for a sodium channel in subfamily 2 in spinal sensory neurons. Waxman SG, et al. **Neurochem Res** 1996 Apr;21(4):395–401

Pituitary growth hormone–releasing factor receptor expression in normal and dwarf rats. Carmignac DF, et al. **Neuroendocrinology** 1996 Sep;64(3):177–85

Identification of mRNAs regulated by interferon–gamma in cultured rat astrocytes by PCR differential display. Kuchinke W, et al. **Neuroimmunomodulation** 1995 Nov–Dec;2(6):347–55

mRNA localization in neurons: a multipurpose mechanism? Steward O. **Neuron** 1997 Jan;18(1):9–12 (19 ref.)

Transient upregulation of the AT2 receptor mRNA level after global ischemia in the rat brain. Makino I, et al. **Neuropeptides** 1996 Dec;30(6):596–601

Identification of thyrotropin–releasing hormone receptor mRNA in the Leydig cells of the mouse testis by in situ hybridization. Zhang SH, et al. **Neuropeptides** 1995 Dec; 29(6):309–13

Expression of serotonin transporter mRNA in human brainstem raphe nuclei. McLaughlin DP, et al. **Neuropsychopharmacology** 1996 Nov;15(5):523–9

Chronic fluoxetine reduces serotonin transporter mRNA and 5–HT1B mRNA in a sequential manner in the rat dorsal raphe nucleus. Neumaier JF, et al. **Neuropsychopharmacology** 1996 Nov;15(5):515–22

Distribution of a rat galanin receptor mRNA in rat brain. Gustafson EL, et al. **Neuroreport** 1996 Mar 22;7(4):953–7

GDNF mRNA in Schwann cells and DRG satellite cells after chronic sciatic nerve injury. Hammarberg H, et al. **Neuroreport** 1996 Mar 22;7(4):857–60

Cellular localization of Na+/MYO–inositol co–transporter mRNA in the rat brain. Inoue K, et al. **Neuroreport** 1996 Apr 26;7(6):1195–8

Expression of the neuropeptide Y Y1 receptor mRNA in the human brain: an in situ hybridization study. Jacques D, et al. **Neuroreport** 1996 Apr 10;7(5):1053–6

Quantitative comparison of mu opioid receptor mRNA in selected CNS regions of alcohol naive rats selectively bred for high and low alcohol drinking. Gong J, et al. **Neurosci Lett** 1997 May 9;227(1):9–12

Localization of interleukin–1 beta mRNA in the cerebral ganglion of the protochordate, Styela plicata. Pestarino M, et al. **Neurosci Lett** 1997 Feb 7;222(3):151–4

The messenger RNAs for the N–methyl–D–aspartate receptor subunits show region–specific expression of different subunit composition in the human brain. Rigby M, et al. **Neuroscience** 1996 Jul;73(2):429–47

Distribution of messenger RNAs for the orphan nuclear receptors Nurr1 and Nur77 (NGFI–B) in adult rat brain using in situ hybridization. Xiao Q, et al. **Neuroscience** 1996 Nov;75(1):221–30

GAP–43 mRNA expression in the developing rat brain: alterations following lead–acetate exposure. Schmitt TJ, et al. **Neurotoxicology** 1996 Summer;17(2):407–14

Human opioid receptors: chromosomal mapping and mRNA localization. Miotto K, et al. **NIDA Res Monogr** 1996; 161:72–82 (34 ref.)

A homogeneous method to quantify mRNA levels: a hybridization of RNase protection and scintillation proximity assay technologies. Kenrick MK, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2947–8

A quantitative and specific method for measuring transcript levels of highly homologous genes. Lombardo AJ, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4812–6

Field cancerisation and polyclonal p53 mutation in the upper aero–digestive tract. Waridel F, et al. **Oncogene** 1997 Jan 16;14(2):163–9

Expression of the p16INK4a tumor suppressor versus other INK4 family members during mouse development and aging. Zindy F, et al. **Oncogene** 1997 Jul 10;15(2):203–11

Dual immunodetection and hybridisation in situ of opsin mRNA and rhodopsin protein in retinal sections. Foreman DM, et al. **Ophthalmic Res** 1996;28(5):296–302

RT–PCR investigation of fibronectin mRNA isoforms in malignant, normal and reactive oral mucosa. Mighell AJ, et al. **Oral Oncol** 1997 May;33(3):155–62

Inflammatory cytokine mRNAs in surgical specimens of necrotizing enterocolitis and normal newborn intestine. Viscardi RM, et al. **Pediatr Pathol Lab Med** 1997 Jul–Aug; 17(4):547–59

Angiotensinogen and natriuretic peptide mRNAs in rat brain: localization and differential regulation by adrenal steroids in hypothalamus. Ryan MC, et al. **Peptides** 1997; 18(4):495–504

Analysis of NPY receptor subtypes in the human frontal cortex reveals abundant Y1 mRNA and binding sites. Statnick MA, et al. **Peptides** 1997;18(1):137–43

Localization of type II phospholipase A2 messenger RNA and immunoactivity in human placenta and fetal membranes. Aitken MA, et al. **Placenta** 1996 Sep; 17(7):423–9

Characterization of glutamine synthetase transcript, protein, and enzyme activity in the human placenta. DeMarco V, et al. **Placenta** 1997 Sep;18(7):541–5

Prostaglandin H synthase–2 in human gestational tissues: regulation in amnion. Trautman MS, et al. **Placenta** 1996 May;17(4):239–45

Cellular localization and developmental regulation of 11 beta–hydroxysteroid dehydrogenase type 1 (11 beta–HSD1) gene expression in the ovine placenta. Yang K, et al. **Placenta** 1997 Sep;18(7):503–9

Isolation of molecular markers from the barley endosperm coenocyte and the surrounding nucellus cell layers. Doan DN, et al. **Plant Mol Biol** 1996 Jul;31(4):877–86

Localization of tobacco cytosolic glutamine synthetase enzymes and the corresponding transcripts shows organ– and cell–specific patterns of protein synthesis and gene expression. Dubois F, et al. **Plant Mol Biol** 1996 Jul; 31(4):803–17

Transcripts of a gene encoding a putative cell wall–plasma membrane linker protein are specifically cold–induced in Brassica napus. Goodwin W, et al. **Plant Mol Biol** 1996 Jul;31(4):771–81

RNA expression patterns of a type 2 metallothionein–like gene from rice. Hsieh HM, et al. **Plant Mol Biol** 1996 Nov; 32(3):525–9

Ehlers–Danlos syndrome type VI results from a nonsense mutation and a splice site–mediated exon–skipping mutation in the lysyl hydroxylase gene. Yeowell HN, et al. **Proc Assoc Am Physicians** 1997 Jul;109(4):383–96

Selective amplification via biotin– and restriction–mediated enrichment (SABRE), a novel selective amplification procedure for detection of differentially expressed mRNAs. Lavery DJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6831–6

Occurrence of a growth hormone–releasing hormone–like messenger ribonucleic acid and immunoreactive peptide in the sheep placenta. Lacroix MC, et al. **Reprod Fertil Dev** 1996;8(3):449–56

Clonal analysis suggests provirus expression in a subpopulation of human malignant trophoblast cells harbouring the human T cell lymphotropic virus type–I genome. Liu X, et al. **Res Virol** 1996 Jan–Feb;147(1):45–51

Hepatocyte growth factor mRNA in human liver cirrhosis as evidenced by in situ hybridization. Yamaguchi K, et al. **Scand J Gastroenterol** 1996 Sep;31(9):921–7

Cytokine mRNA profile of peripheral blood mononuclear cells isolated from individuals with Trypanosoma cruzi chronic infection. Dutra WO, et al. **Scand J Immunol** 1997 Jan;45(1):74–80

Transforming growth factor–beta mRNA expression in CD4+ T cells from patients with primary glomerulonephritides. Lai KN, et al. **Scand J Urol Nephrol** 1996 Jun;30(3):223–6

Messenger RNA expression of steroidogenesis enzyme subtypes in the human pilosebaceous unit. Courchay G, et al. **Skin Pharmacol** 1996;9(3):169–76

Simple hemorrhage induces tissue factor mRNA in the liver. Yamashita M, et al. **Surg Today** 1997;27(2):145–8

Characterization of Fc gamma receptors on human megakaryocytes. Wu Z, et al. **Thromb Haemost** 1996 Apr; 75(4):661–7

Co–localization of tissue factor protein and its mRNA in human blood monocytes. Stephens AC, et al. **Thromb Res** 1996 Mar 1;81(5):545–54

Enhanced levels of wild–type versus mutant thyroid hormone receptor beta 1 messenger RNA in fibroblasts from heterozygotes of kindred S with thyroid hormone resistance. Bercu BB, et al. **Thyroid** 1996 Jun;6(3):189–94

Localization and clinical significance of thyrotropin receptor mRNA expression in orbital fat and eye muscle tissues from patients with thyroid–associated ophthalmopathy. Hiromatsu Y, et al. **Thyroid** 1996 Dec;6(6):553–62

Differential expression of thyrotropin receptor mRNA in the porcine heart. Sellitti DF, et al. **Thyroid** 1997 Aug; 7(4):641–6

Patterns in donor–specific mRNA and protein production of Th1 and Th2 cytokines by graft–infiltrating lymphocytes and PBMC after heart transplantation. Baan CC, et al. **Transpl Int** 1996;9 Suppl 1:S237–40

Expression of cytokine messenger RNA after heart transplantation: relationship with rejection and serum cytokines. Grant SC, et al. **Transplantation** 1996 Oct 15; 62(7):910–6

Methods and reagents. Expression profiling using messenger RNA assays. Hengen PN. **Trends Biochem Sci** 1996 Dec; 21(12):492–3

Of messages and meaning. Gardiner K, et al. **Trends Genet** 1997 Mar;13(3):92–3

Expression of sex hormone–binding globulin mRNA in uterine cervical cancers. Misao R, et al. **Tumour Biol** 1997; 18(1):6–12

Detection of circulating prostate cells by reverse transcriptase–polymerase chain reaction of human glandular kallikrein (hK2) and prostate–specific antigen (PSA) messages. Corey E, et al. **Urology** 1997 Aug; 50(2):184–8

Localization of AMPA–selective glutamate receptor subunits in the adult cat visual cortex. Gutiérrez–Igarza K, et al. **Vis Neurosci** 1996 Jan–Feb;13(1):61–72

Agrin mRNA expression in the developing chick Edinger–Westphal nucleus. McAvoy M, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):293–301

Smooth–muscle myosin heavy–chain isoform expression in bladder–outlet obstruction. Cher ML, et al. **World J Urol** 1996;14(5):295–300

Increased levels of nm23 H1/nucleoside diphosphate kinase A mRNA associated with adenocarcinoma of the prostate. Jensen SL, et al. **World J Urol** 1996;14 Suppl 1:S21–5

Metabolism of MPTP by cytochrome P4502D6 and the demonstration of 2D6 mRNA in human foetal and adult brain by in situ hybridization. Gilham DE, et al. **Xenobiotica** 1997 Jan;27(1):111–25

PCR–generated cDNA libraries from reduced numbers of mouse oocytes. Revel F, et al. **Zygote** 1995 Aug;3(3):241–50

[Expression of mRNA, interleukin–1 beta, interleukin 6 and tumor necrosis factor–alpha during regeneration of the sciatic nerve in rats after tissue loss] Bizette C, et al. **Chirurgie** 1996;121(6):474–81 (Eng. Abstr.) **(Fre)**

[Higher expression levels of alternatively spliced pX mRNA in human T lymphotropic virus type I (HTLV–I) asymptomatic carriers positive for antibodies to p40tax protein] Hirata M. **Fukuoka Igaku Zasshi** 1996 Jan; 87(1):23–34 (Eng. Abstr.) **(Jpn)**

[Expression of neurotrophin and IL–1 beta mRNAs following spinal cord injury and the effects of methylprednisolone treatment] Hayashi M, et al. **Kaibogaku Zasshi** 1997 Jun; 72(3):209–13 (Eng. Abstr.) **(Jpn)**

[Expression of Mn–SOD mRNA in streptozotocin–induced diabetic rat cornea by in situ hybridization] Beppu H, et al. **Nippon Ganka Gakkai Zasshi** 1996 Aug;100(8):599–604 (Eng. Abstr.) **(Jpn)**

[Analysis of multiple cytokine mRNA at a single cell level] Toda M. **Nippon Rinsho** 1996 Feb;54(2):304–8 (Eng. Abstr.) **(Jpn)**

[Up–regulation of NGF, trkA, Fas, down–regulation of bcl–2, and induction of apoptosis by propentofylline in human glioma cell lines] Kamada H, et al. **No To Shinkei** 1996 Nov;48(11):1022–8 (Eng. Abstr.) **(Jpn)**

[Chronic myelogenous leukemia expressing two bcr–abl chimeric mRNA; a case report] Hashimoto S, et al. **Rinsho Ketsueki** 1997 Jan;38(1):72–4 (Eng. Abstr.) **(Jpn)**

[Detection of PEBP2 beta/MYH11 fusion mRNA in acute myelomonocytic leukemia without marrow eosinophilia] Morinaga S, et al. **Rinsho Ketsueki** 1996 Jul;37(7):618–23 (Eng. Abstr.) **(Jpn)**

[The detection of minimal residual disease by DEK/CAN chimeric m–RNA in a case of AML M2 with translocation t(6;9) (p23;q34) after chemotherapy and peripheral blood stem cell transplantation] Toyosawa M, et al. **Rinsho Ketsueki** 1997 Jan;38(1):33–40 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Tumor necrosis factor–alpha decreases surfactant protein B mRNA in murine lung. Pryhuber GS, et al. **Am J Physiol** 1996 May;270(5 Pt 1):L714–21

Reversible inhibition of IL–8 receptor B mRNA expression and proliferation in non–small cell lung cancer by antisense oligonucleotides. Olbina G, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3525–30

Antisense–protein kinase A: a single–gene–based therapeutic approach. Cho–Chung YS, et al. **Antisense Nucleic Acid Drug Dev** 1997 Jun;7(3):217–23 (20 ref.)

A specificity comparison of four antisense types: morpholino, 2'–O–methyl RNA, DNA, and phosphorothioate DNA. Stein D, et al. **Antisense Nucleic Acid Drug Dev** 1997 Jun; 7(3):151–7

Reversal of the in vivo metastatic phenotype of human tumor cells by an anti–CAPL (mts1) ribozyme. Maelandsmo GM, et al. **Cancer Res** 1996 Dec 1;56(23):5490–8

Inhibition by interleukin–1 beta and tumor necrosis factor–alpha of the insulin–like growth factor I messenger ribonucleic acid response to growth hormone in rat hepatocyte primary culture. Thissen JP, et al. **Endocrinology** 1997 Mar;138(3):1078–84

Inhibition by dexamethasone of the lipopolysaccharide–induced increase in IL–6 mRNA abundance and IL–6 production in human polymorphonuclear leukocytes. Mianji S, et al. **Int J Immunopharmacol** 1996 May;18(5):339–46

TGF–beta suppresses IFN–gamma induction of class II MHC gene expression by inhibiting class II transactivator messenger RNA expression. Lee YJ, et al. **J Immunol** 1997 Mar 1;158(5):2065–75

Interleukin–1 beta and phenytoin reduce alpha 1 (I) procollagen mRNA expression in human gingival fibroblasts. Modéer T, et al. **J Periodontal Res** 1996 Nov; 31(8):563–9

Increased interferon–gamma mRNA expression following alloincompatible myoblast transplantation is inhibited by FK506. Guérette B, et al. **Muscle Nerve** 1996 Jul; 19(7):829–35

In vitro selection of a 7–methyl–guanosine binding RNA that inhibits translation of capped mRNA molecules. Haller AA, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8521–6

Inhibition of increases of transcription factor mRNAs during differentiation of primary rat adipocytes by in vivo 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD) treatment. Brodie AE, et al. **Toxicol Lett** 1997 Feb 7;90(2–3):91–5

BIOSYNTHESIS

In situ hybridization analysis of Pit–1 mRNA and hormonal production in human pituitary adenomas. Sanno N, et al.

Acta Neuropathol (Berl) 1996;91(3):263–8
Induction of cytokines, chemokines and adhesion molecule mRNA in a rat forebrain reperfusion model. Yoshimoto T, et al. **Acta Neuropathol (Berl)** 1997 Feb;93(2):154–8
Dopamine D2 receptor mRNA isoforms expression in the carotid body and petrosal ganglion of developing rabbits. Bairam A, et al. **Adv Exp Med Biol** 1996;410:285–9
Evaluation of gene expression in the rat carotid body using the differential display technique. Chen J, et al. **Adv Exp Med Biol** 1996;410:119–25
Aryl hydrocarbon receptor mRNA levels in different tissues of 2,3,7,8–Tetrachlorodibenzo–p–dioxin–responsive and nonresponsive mice. Döhr O, et al. **Adv Exp Med Biol** 1996; 387:447–59
Up–regulation of the intracellular Ca2+ signaling and mRNA expression of platelet–activating factor receptor by estradiol in human uterine endometrial cells. Sato S, et al. **Adv Exp Med Biol** 1996;416:95–100
Frequency of expression of prostate–specific antigen mRNA in lung tumors. Zarghami N, et al. **Am J Clin Pathol** 1997 Aug;108(2):184–90
Expression of estrogen receptor variant messenger RNAs and determination of estrogen receptor status in human breast cancer. Huang A, et al. **Am J Pathol** 1997 May; 150(5):1827–33
Expression of very low density lipoprotein receptor mRNA in rabbit atherosclerotic lesions. Nakazato K, et al. **Am J Pathol** 1996 Dec;149(6):1831–8
Analysis of anomalous CD44 gene expression in human breast, bladder, and colon cancer and correlation of observed mRNA and protein isoforms. Woodman AC, et al. **Am J Pathol** 1996 Nov;149(5):1519–30
Mismatch between myosin heavy chain mRNA and protein distribution in human skeletal muscle fibers. Andersen JL, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1881–9
Dexamethasone upregulates ANP C–receptor protein in human mesangial cells without affecting mRNA. Ardaillou N, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F440–6
Increased transforming growth factor–beta 1 expression in regenerating rat renal tubules following ischemic injury. Basile DP, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F500–9
Altered expression of myosin mRNA and protein in rat soleus and tibialis anterior following reinnervation. Huey KA, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C2016–26
Cholate inhibits high–fat diet–induced hyperglycemia and obesity with acyl–CoA synthetase mRNA decrease. Ikemoto S, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E37–45
Euglycemic hyperinsulinemia and hyperaminoacidemia decrease skeletal muscle ubiquitin mRNA in goats. Larbaud D, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E505–12
IL–13 mRNA and immunoreactivity in allergen–induced rhinitis: comparison with IL–4 expression and modulation by topical glucocorticoid therapy. Ghaffar O, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):17–24
Human lung mast cell activation leads to IL–13 mRNA expression and protein release. Jaffe JS, et al. **Am J Respir Cell Mol Biol** 1996 Oct;15(4):473–81
Inducible nitric oxide synthase mRNA and immunoreactivity in the lungs of rats eight hours after antigen challenge. Renzi PM, et al. **Am J Respir Cell Mol Biol** 1997 Jul; 17(1):36–40
Expression pattern of type II collagen mRNA during early vertebral development in the human embryo. Krengel S, et al. **Anat Embryol (Berl)** 1996 Jan;193(1):43–51
Spatial and temporal distribution of lamprin mRNA during chondrogenesis of trabecular cartilage in the sea lamprey. McBurney KM, et al. **Anat Embryol (Berl)** 1996 May; 193(5):419–26
Intracellular distribution of type II collagen mRNA and prolyl 4–hydroxylase in embryonic avian corneal epithelia. Hirsch MS, et al. **Anat Rec** 1996 Jan;244(1):1–14
Changes in atrial natriuretic factor (ANF) and Ca+2 ATPase mRNA transcriptional activity are markers of myocardial integrity during continuous warm blood cardioplegia (CWBCP) in rats. Remsey ES, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:419–22
Identification of novel growth–related genes linked to the mitogenic effect of PACAP on the rat pancreatic acinar cell line, AR4–2J. Schäfer H, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:760–7
Tumor necrosis factor–alpha–induced cytoprotective mechanisms in cardiomyocytes. Analysis by mRNA phenotyping. Sharma HS, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:267–81
Deoxycytidine kinase mRNA expression in childhood acute lymphoblastic leukemia. Stammler G, et al. **Anticancer Drugs** 1997 Jun;8(5):517–21
Herpes simplex virus–mediated activation of human immunodeficiency virus is inhibited by oligonucleoside methylphosphonates that target immediate–early mRNAs 1 and 3. Feng CP, et al. **Antisense Nucleic Acid Drug Dev** 1996 Spring;6(1):25–35
Kinetics of mRNA and protein synthesis of genes controlled by the 1,4–beta–endoxylanase A promoter in controlled fermentations of Aspergillus awamori. Gouka RJ, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3646–9
Hamster adapt78 mRNA is a Down syndrome critical region homologue that is inducible by oxidative stress. Crawford DR, et al. **Arch Biochem Biophys** 1997 Jun 1;342(1):6–12
Differential expression of CRABP II, psoriasin and cytokeratin 1 mRNA in human skin diseases. Algermissen B, et al. **Arch Dermatol Res** 1996 Jul;288(8):426–30
Expression of cutaneous fatty acid–binding protein and its mRNA in rat skin [published erratum appears in Arch Dermatol Res 1997 Feb;289(3):184] Watanabe R, et al. **Arch Dermatol Res** 1996 Jul;288(8):481–3
Neurotensin–containing endocrine cells and neurotensin receptor mRNA–expressing epithelial cells in the chicken thymus. Atoji Y, et al. **Arch Histol Cytol** 1996 May; 59(2):197–203
Secreted Entamoeba histolytica proteins stimulate interleukin–8 mRNA expression and protein production in human colonic epithelial cells. Yu Y, et al. **Arch Med Res** 1997;28 Spec No:223–4
Elevated cytokine messenger RNA levels in the peripheral blood of patients with rheumatoid arthritis suggest different degrees of myeloid cell activation. Schulze–Koops H, et al. **Arthritis Rheum** 1997 Apr;40(4):639–47
Both TH1 and TH2 cytokine mRNAs are expressed in the NOD mouse pancreas in vivo. Faulkner–Jones BE, et al. **Autoimmunity** 1996;23(2):99–110
T cells from BB–DP rats show a unique cytokine mRNA profile associated with the IDDM1 susceptibility gene, Lyp. Gold DP, et al. **Autoimmunity** 1995;22(3):149–61
The cellular basis of angiotensin converting enzyme mRNA expression in rat heart. Paul M, et al. **Basic Res Cardiol** 1996;91 Suppl 2:57–63
Hippocampal 5–HT1A receptor binding site densities, 5–HT1A receptor messenger ribonucleic acid abundance and serotonin levels parallel the activity of the hypothalamo–pituitary–adrenal axis in rats. Burnet PW, et al. **Behav Brain Res** 1996;73(1–2):365–68
Regulation of 5–HT2A receptor mRNA in P11 cells. Ferry RC, et al. **Behav Brain Res** 1996;73(1–2):187–91 (26 ref.)
Increase in Ref–1 mRNA and protein by thyrotropin in rat thyroid FRTL–5 cells. Asai T, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):71–4
Distribution of thromboxane A2 receptor mRNA along the mouse nephron segments. Asano K, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):613–7
2,3,7,8–Tetrachlorodibenzo–p–dioxin increases mRNA levels for interleukin–1beta, urokinase plasminogen activator, and tumor necrosis factor–alpha in human uterine endometrial adenocarcinoma RL95–2 cells. Charles GD, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):338–42
Increased transcript level of RBM3, a member of the glycine–rich RNA–binding protein family, in human cells in response to cold stress. Danno S, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):804–7
Expression and regulation of transforming growth factor beta1 mRNA and protein in rat fetal testis in vitro. Gautier C, et al. **Biochem Biophys Res Commun** 1997 Jul 9; 236(1):135–9
Induction of insulin–like growth factor receptor (IGF IR) mRNA levels by low density lipoproteins. Polanco JI, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):917–22
Structural modifications of RNA influence the 5' exoribonucleolytic hydrolysis by XRN1 and HKE1 of Saccharomyces cerevisiae. Poole TL, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):799–805
Induction of uncoupling protein–2 mRNA by troglitazone in the pancreatic islets of Zucker diabetic fatty rats. Shimabukuro M, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):359–61
Helicobacter pylori induces gene expression in human gastric cells identified by mRNA differential display. Wong L, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):484–8
Differential expression of ryanodine receptor RyR2 mRNA in the non–pregnant and pregnant human myometrium. Awad SS, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):777–83
Protein–tyrosine–kinase–dependent expression of cyclo–oxygenase–1 and –2 mRNAs in human endothelial cells. Hirai K, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):373–7
Induction of mRNAs for ICAM–1, VCAM–1, and ELAM–1 in cultured rat cardiac myocytes and myocardium in vivo. Hattori Y, et al. **Biochem Mol Biol Int** 1997 Apr; 41(5):979–86
Induction of a variant acetyl–CoA carboxylase mRNA in ovine mammary gland during lactation. Barber MC, et al. **Biochem Soc Trans** 1996 Aug;24(3):360S
Cytokine mRNA profiles of normal and asthmatic peripheral blood cells and endobronchial biopsies. Gelder CM, et al. **Biochem Soc Trans** 1996 May;24(2):315S
Enrichment of specific mRNAs in cytoskeletal–bound and membrane–bound polysomes in Chinese hamster ovary cells. Hesketh J, et al. **Biochem Soc Trans** 1996 May; 24(2):187S
Glucose–mediated regulation of GLUT–1 and GLUT–3 mRNA in human retinal endothelial cells. Knott RM, et al. **Biochem Soc Trans** 1996 May;24(2):216S
The effect of starvation and ethanol on c–myc messenger RNA expression in the heart. Paice AG, et al. **Biochem Soc Trans** 1996 May;24(2):212S
GTP cyclohydrolase I mRNA induction and tetrahydrobiopterin synthesis in human endothelial cells. Hattori Y, et al. **Biochim Biophys Acta** 1997 Aug 21; 1358(1):61–6
Regulation of heparin–binding EGF–like growth factor expression by phorbol ester in a human hepatoma–derived cell line. Ito N, et al. **Biochim Biophys Acta** 1997 Jan 10; 1310(1):163–7
Expression of the F–type 6–phosphofructo–2–kinase/fructose–2,6–bisphosphatase mRNA during liver regeneration. Joaquin M, et al. **Biochim Biophys Acta** 1997 Mar 15;1334(2–3):256–60
Ethylbenzene modulates the expression of different cytochrome P–450 isozymes by discrete multistep processes. Yuan W, et al. **Biochim Biophys Acta** 1997 Mar 15;1334(2–3):361–72
Astrocytes cultured in vitro produce estradiol–17beta and express aromatase cytochrome P–450 (P–450 AROM) mRNA. Zwain IH, et al. **Biochim Biophys Acta** 1997 Mar 15;1334(2–3):338–48
Differential contributions of two elements of rho–independent terminator to transcription termination and mRNA stabilization. Abe H, et al. **Biochimie** 1996; 78(11–12):1035–42
Polyadenylated mRNA in Escherichia coli: modulation of poly(A) RNA levels by polynucleotide phosphorylase and ribonuclease II. Cao GJ, et al. **Biochimie** 1997 Apr; 79(4):211–20
Site–specific substitution of inosine at the terminal positions of a pre–mRNA intron: implications for the configuration of the terminal base interaction. Tarn WY. **Biochimie** 1996; 78(11–12):1057–65
Downregulation of c–myc expression after heat shock in human B–cell lines is independent of 5' mRNA sequences. Wennborg A, et al. **Biol Chem Hoppe Seyler** 1995 Nov; 376(11):671–80
Lead inhibits nitric oxide production transiently by mRNA level in murine macrophage cell lines. Kanematsu M, et al. **Biol Pharm Bull** 1996 Jul;19(7):949–51
Serotonin transporter binding sites and mRNA levels in depressed persons committing suicide. Little KY, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1156–64
Learned helplessness increases 5–hydroxytryptamine1B receptor mRNA levels in the rat dorsal raphe nucleus. Neumaier JF, et al. **Biol Psychiatry** 1997 Mar 15; 41(6):668–74
Rat luteinizing hormone receptor messenger ribonucleic acid expression and luteolysis: inhibition by prostaglandin F2 alpha. Bjurulf E, et al. **Biol Reprod** 1996 Jun;54(6):1350–5
Progesterone receptor messenger ribonucleic acid and protein in luteinized granulosa cells of rhesus monkeys are regulated in vitro by gonadotropins and steroids. Duffy DM, et al. **Biol Reprod** 1996 Apr;54(4):888–95
Effect of testosterone on maturational gonadotropin subunit messenger ribonucleic acid levels in the goldfish pituitary. Huggard D, et al. **Biol Reprod** 1996 Jun;54(6):1184–91
Expression of avian urokinase and tissue–type plasminogen activator messenger ribonucleic acid during follicle development and atresia. Johnson AL, et al. **Biol Reprod** 1997 Mar;56(3):581–8
Regulation of protein kinase A subunits by cyclic adenosine 3',5'–monophosphate in a mouse Sertoli cell line (MSC–1): induction of RII beta messenger ribonucleic acid is independent of continuous protein synthesis. Knutsen HK, et al. **Biol Reprod** 1996 Jul;55(1):5–10
Synthesis and messenger ribonucleic acid expression of apolipoproteins E and A–I by the bovine corpus luteum during the estrous cycle and pregnancy. Ndikum–Moffor FM, et al. **Biol Reprod** 1997 Mar;56(3):745–56
Presence of urokinase plasminogen activator and plasminogen activator inhibitor–1 messenger ribonucleic acids in rat endometrium during decidualization in vivo. Wang S, et al. **Biol Reprod** 1996 Sep;55(3):493–7
Use of flow cytometry and RT–PCR for detecting gene expression by single cells. Gaynor EM, et al. **Biotechniques** 1996 Aug;21(2):286–91
Improved dicistronic mRNA expression vectors for efficient selection of transfectants highly expressing foreign genes. Kobayashi M, et al. **Biotechniques** 1996 Sep;21(3):398–402
Selective expression of mRNA coding for the truncated form of erythropoietin receptor in hematopoietic cells and its decrease in patients with polycythemia vera. Chiba S, et al. **Blood** 1997 Jul 1;90(1):97–104
TRA1, a novel mRNA highly expressed in leukemogenic mouse monocytic sublines but not in nonleukemogenic sublines. Kasukabe T, et al. **Blood** 1997 Apr 15; 89(8):2975–85
RAR alpha1/RAR alpha2–PML mRNA expression in acute promyelocytic leukemia cells: a molecular and laboratory–clinical correlative study. Li YP, et al. **Blood** 1997 Jul 1;90(1):306–12
Human eosinophils express functional CD30 ligand and stimulate proliferation of a Hodgkin's disease cell line. Pinto A, et al. **Blood** 1996 Nov 1;88(9):3299–305
Localization and regulation of thrombopoietin mRNa expression in human kidney, liver, bone marrow, and spleen using in situ hybridization. Sungaran R, et al. **Blood** 1997 Jan 1;89(1):101–7
Expression of insulin–like growth factor I (IGF–I) mRNA variants in rat bone. West CA, et al. **Bone** 1996 Jul; 19(1):41–6
Induction of cyclo–oxygenase–2 mRNA by prostaglandin E2 in human prostatic carcinoma cells. Tjandrawinata RR, et al. **Br J Cancer** 1997;75(8):1111–8
The effect of GABA stimulation on GABAA receptor subunit protein and mRNA expression in rat cultured cerebellar granule cells. Platt KP, et al. **Br J Pharmacol** 1996 Dec;119(7):1393–400
Symmetrical synovial fluid cell cytokine messenger RNA expression in rheumatoid arthritis: analysis by reverse transcription/polymerase chain reaction. Hoy MD, et al.

Br J Rheumatol 1997 Feb;36(2):170–3
Central nervous system chemokine mRNA accumulation follows initial leukocyte entry at the onset of acute murine experimental autoimmune encephalomyelitis. Glabinski AR, et al. **Brain Behav Immun** 1995 Dec;9(4):315–30
Ventromedial hypothalamic lesions produced by gold thioglucose do not impair induction of NPY mRNA in the arcuate nucleus by fasting. Bergen HT, et al. **Brain Res** 1996 Jan 29;707(2):266–71
Transiently catecholaminergic cells in the fetal rat express mRNA for the glutamate NMDAR1 receptor. Burns GA, et al. **Brain Res** 1996 Apr 29;718(1–2):117–23
Expression of mRNAs for preprotachykinin and nerve growth factor receptors in the dorsal root–ganglion following peripheral inflammation. Cho HJ, et al. **Brain Res** 1996 Apr 15;716(1–2):197–201
V+ fibronectin mRNA is increased in the brains of aged rats: effect of food restriction. Dorner H, et al. **Brain Res** 1996 Jul 8;726(1–2):198–206
Increased feeding and neuropeptide Y (NPY) but not NPY mRNA levels in the hypothalamus of the rat following central administration of the serotonin synthesis inhibitor p–chlorophenylalanine. Dryden S, et al. **Brain Res** 1996 Jun 17;724(2):232–7
Expression of mRNA coding for the serotonin transporter in aged vs. young rat brain: differential effects of glucocorticoids. Fumagalli F, et al. **Brain Res** 1996 May 6;719(1–2):225–8
Physical exercise induces FGF–2 and its mRNA in the hippocampus. Gómez–Pinilla F, et al. **Brain Res** 1997 Aug 1;764(1–2):1–8
Expression of fosB mRNA in the hamster suprachiasmatic nucleus is induced at only selected circadian phases. Guido ME, et al. **Brain Res** 1996 Nov 11;739(1–2):132–8
Thyrotropin–releasing hormone gene expression in the human hypothalamus. Guldenaar SE, et al. **Brain Res** 1996 Dec 16;743(1–2):93–101
Sociosexual stimuli affect ER– and PR–mRNA abundance in the hypothalamus of all–female whiptail lizards. Hartman V, et al. **Brain Res** 1996 Nov 25;741(1–2):344–7
Somatostatin and brain–derived neurotrophic factor mRNA expression in the primate brain: decreased levels of mRNAs during aging. Hayashi M, et al. **Brain Res** 1997 Feb 28; 749(2):283–9
Expression of nicotinic acetylcholine receptor mRNA in the adult rat peripheral vestibular system. Hiel H, et al. **Brain Res** 1996 Nov 4;738(2):347–52
Immobilization–induced stress activates neuronal nitric oxide synthase (nNOS) mRNA and protein in hypothalamic–pituitary–adrenal axis in rats. Kishimoto J, et al. **Brain Res** 1996 May 13;720(1–2):159–71
Expression pattern of messenger RNAs for prostanoid receptors in glial cell cultures. Kitanaka J, et al. **Brain Res** 1996 Jan 29;707(2):282–7
Is the lack of protein F1/GAP–43 mRNA in granule cells target–dependent? Meberg PJ, et al. **Brain Res** 1996 Jan 15;706(2):217–26
SC1, a SPARC–related glycoprotein, exhibits features of an ECM component in the developing and adult brain. Mendis DB, et al. **Brain Res** 1996 Mar 25;713(1–2):53–63
Effects of phorbol ester on expression of CNTF–mRNA in cultured astrocytes from rat olfactory bulb. Nagao H, et al. **Brain Res** 1996 May 6;719(1–2):23–8
Physical activity increases mRNA for brain–derived neurotrophic factor and nerve growth factor in rat brain. Neeper SA, et al. **Brain Res** 1996 Jul 8;726(1–2):49–56
Kindling induces neuropsin mRNA in the mouse brain. Okabe A, et al. **Brain Res** 1996 Jul 22;728(1):116–20
Galanin gene expression declines with adulthood in the cholinergic fields of the horizontal diagonal band of male rats. Planas B, et al. **Brain Res** 1996 Jul 22;728(1):57–64
GABAA alpha 2 mRNA levels are decreased following induction of spontaneous epileptiform discharges in hippocampal–entorhinal cortical slices. Vick RS, et al. **Brain Res** 1996 May 20;721(1–2):111–9
Intracerebroventricular administration of beta–endorphin increases the expression of c–fos and of corticotropin–releasing factor messenger ribonucleic acid in the paraventricular nucleus of the rat. Wang XQ, et al. **Brain Res** 1996 Jan 29;707(2):189–95
Palatability–induced hyperphagia increases hypothalamic Dynorphin peptide and mRNA levels. Welch CC, et al. **Brain Res** 1996 May 20;721(1–2):126–31
Calretinin mRNA and immunoreactivity in the medullary reticular formation of the rat: colocalization with glutamate receptors. Winsky L, et al. **Brain Res** 1996 Nov 25; 741(1–2):123–33
Estrogen alters proenkephalin RNAs in the paraventricular nucleus of the hypothalamus following stress. Yukhananov RY, et al. **Brain Res** 1997 Aug 1;764(1–2):109–16
Downregulation of corticotropin–releasing factor mRNA, but not vasopressin mRNA, in the paraventricular hypothalamic nucleus of rats following nutritional stress. Hwang BH, et al. **Brain Res Bull** 1997;43(5):509–14
Acute methamphetamine–induced zif/268, preprodynorphin, and preproenkephalin mRNA expression in rat striatum depends on activation of NMDA and kainate/AMPA receptors. Wang JQ, et al. **Brain Res Bull** 1996;39(6):349–57
Distribution of GAP–43 mRNA in the immature and adult cerebellum: a role for GAP–43 in cerebellar development and neuroplasticity. Console–Bram LM, et al. **Brain Res Dev Brain Res** 1996 Aug 20;95(1):97–106
Developmental profile and regulation of estrogen receptor (ER) mRNA expression in the preoptic area of prenatal rats. DonCarlos LL. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):224–33
Developmental switch in phenotypic expression of preproenkephalin mRNA and 45Ca2+ accumulation following kainate–induced status epilepticus. Friedman LK. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):287–93
Sexually dimorphic effects of maternal adrenalectomy on hypothalamic corticotrophin–releasing factor, glucocorticoid receptor and anterior pituitary POMC mRNA levels in rat neonates. Halasz I, et al. **Brain Res Dev Brain Res** 1997 Jun 18;100(2):198–204
Development of striatal dopaminergic function. I. Pre– and postnatal development of mRNAs and binding sites for striatal D1 (D1a) and D2 (D2a) receptors. Jung AB, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):109–20
GABAA receptor subunit expression and assembly in cultured rat cerebellar granule neurons. Nadler LS, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):216–25
Induction of apolipoprotein E mRNA in the hippocampus of the gerbil after transient global ischemia. Ali SM, et al. **Brain Res Mol Brain Res** 1996 May;38(1):37–44
Cellular localization of 5–HT1B receptor mRNA in the rat olfactory tubercle: do GABAergic neurons express the 5–HT1B gene? Cloëz–Tayarani I, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):337–42
Differential effects of clozapine and haloperidol on dopamine receptor mRNA expression in rat striatum and cortex. Damask SP, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1–2):241–9
Activation of NMDA and muscarinic receptors induces nur–77 mRNA in hippocampal neurons. Dragunow M, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):349–56
Regulation of androgen receptor mRNA expression in hamster facial motoneurons: differential effects of non–aromatizable and aromatizable androgens. Drengler SM, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):8–15
Expression of c–fos, jun D and pp60c–src+ mRNAs in the developing and grafted rat striatum. Haque NS, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):90–6
Sexually dimorphic expression of calcitonin gene–related peptide (CGRP) mRNA in rat medial preoptic nucleus. Herbison AE, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):143–8
Effects of L–DOPA–therapy on dopamine D2 receptor mRNA expression in the striatum of MPTP–intoxicated parkinsonian monkeys. Herrero MT, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):149–55
Corticotropin–releasing factor up–regulates its own receptor mRNA in the paraventricular nucleus of the hypothalamus. Imaki T, et al. **Brain Res Mol Brain Res** 1996 May; 38(1):166–70
Expression of c–fos mRNA after audiogenic seizure in adult rats with neonatal hypothyroidism. Kato N, et al. **Brain Res Mol Brain Res** 1996 May;38(1):85–90
Induction of brain derived neurotrophic factor mRNA by seizures in neonatal and juvenile rat brain. Kornblum HI, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):219–28
Detection of MAO–A and MAO–B mRNAs in monkey brainstem by cross–hybridization with human oligonucleotide probes. Luque JM, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):357–60
DRPLA gene (atrophin–1) sequence and mRNA expression in human brain. Margolis RL, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):219–26
Localization of Fas antigen mRNA induced in postischemic murine forebrain by in situ hybridization. Matsuyama T, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):166–72
Induction of sulfated glycoprotein–2 (clusterin) and glial fibrillary acidic protein (GFAP) RNA expression following transient global ischemia is differentially attenuated by LY231617. May PC, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):145–8
Expression of three glutamate transporter subtype mRNAs in human brain regions and peripheral tissues. Nakayama T, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):189–92
Neuronal nitric oxide synthase (nNOS) mRNA expression and NADPH–diaphorase staining in the frontal cortex, visual cortex and hippocampus of control and Alzheimer's disease brains. Norris PJ, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):36–49
Increased expression of the mRNA for brain– and skin–type but not heart–type fatty acid binding proteins following kainic acid systemic administration in the hippocampal glia of adult rats. Owada Y, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):156–60
Effect of serotonin on cytokine mRNA expression in rat hippocampal astrocytes. Pousset F, et al. **Brain Res Mol Brain Res** 1996 May;38(1):54–62
Developmental regulation of alpha–tubulin mRNAs during the differentiation of cultured cerebellar granule cells. Przyborski SA, et al. **Brain Res Mol Brain Res** 1996 Feb; 36(1):179–83
Changes in hippocampal gene expression associated with the induction of long–term potentiation. Roberts LA, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):123–7
Effects of dexfenfluramine or 5,7–dihydroxytryptamine on tryptophan hydroxylase and serotonin transporter mRNAS in rat dorsal raphe. Semple–Rowland SL, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):121–7
Expression of NMDAR2D glutamate receptor subunit mRNA in neurochemically identified interneurons in the rat neostriatum, neocortex and hippocampus. Standaert DG, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):89–102
Changes in glutamate/aspartate transporter (GLAST/GluT–1) mRNA expression following facial nerve transection. Yamashita T, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):294–9
Down–regulation of the GABA receptor subunits mRNA levels in mammalian cultured cortical neurons following chronic neurosteroid treatment. Yu R, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):163–8
Temporal dissociation of neurotensin/neuromedin N mRNA expression in topographically separate subsets of rat striatal neurons following administration of haloperidol. Zahm DS, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):71–8
Osteogenic protein–1 stimulates mRNA levels of BMP–6 and decreases mRNA levels of BMP–2 and –4 in human osteosarcoma cells. Honda Y, et al. **Calcif Tissue Int** 1997 Mar;60(3):297–301
Regulation of murine osteoblast macrophage colony–stimulating factor production by 1,25(OH)2D3. Rubin J, et al. **Calcif Tissue Int** 1996 Oct;59(4):291–6
Expression of T–cell receptor V beta 2 and type 1 helper T–cell–related cytokine mRNA in streptococcal pyrogenic exotoxin–C–activated human peripheral blood mononuclear cells. Ohara–Nemoto Y, et al. **Can J Microbiol** 1996 Nov;42(11):1104–11
Effect of exogenous gamma–aminobutyric acid (GABA) on hepatic insulin–like growth factor I (IGF–I) and IGF–I binding protein (IGFBP–I) mRNA abundance following partial hepatectomy in rats. Minuk GY, et al. **Can J Physiol Pharmacol** 1995 Nov;73(11):1546–51
Cell cycle–dependent expression of TAP1, TAP2, and HLA–B27 messenger RNAs in a human breast cancer cell line. Alpan RS, et al. **Cancer Res** 1996 Oct 1;56(19):4358–61
Cancer chemopreventive potential of sulforamate, a novel analogue of sulforaphane that induces phase 2 drug–metabolizing enzymes. Gerhäuser C, et al. **Cancer Res** 1997 Jan 15;57(2):272–8
Reduction of glutathione S–transferase P–form mRNA expression in remodeling nodules in rat liver revealed by in situ hybridization. Imai T, et al. **Carcinogenesis** 1997 Mar; 18(3):545–51
Synthesis of TNF alpha and TGF beta mRNA in the different micro–environments within atheromatous plaques. Rayment NB, et al. **Cardiovasc Res** 1996 Dec;32(6):1123–30
A distinct mRNA encoding a soluble form of ICAM–1 molecule expressed in human tissues. Wakatsuki T, et al. **Cell Adhes Commun** 1995 Nov;3(4):283–92
Rapid induction of Fas antigen mRNA expression in vivo by cycloheximide. Kimura K, et al. **Cell Biochem Funct** 1997 Jun;15(2):81–6
Increase of cytochrome P–450 1A and glutathione transferase transcripts in cultured hepatocytes from dogs, monkeys, and humans after cryopreservation. de Sousa G, et al. **Cell Biol Toxicol** 1996 Dec;12(4–6):351–8
Cell cycle regulation of BRCA1 messenger RNA in human breast epithelial cells. Gudas JM, et al. **Cell Growth Differ** 1996 Jun;7(6):717–23
Circulating CD8 T cells show increased interferon–gamma mRNA expression in HIV infection. Breen EC, et al. **Cell Immunol** 1997 May 25;178(1):91–8
Identification by differential display of a mRNA specifically induced by 12–O–tetradecanoylphorbol–13–acetate (TPA) in T84 human colon carcinoma cells. Cafferata EG, et al. **Cell Mol Biol (Noisy–le–grand)** 1996 Jul;42(5):797–804
Effect of gonadotropin–releasing hormone on estrogen receptor messenger ribonucleic acid level in perifused pituitary cells. Demay F, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):397–402
Effects of alveolar macrophage conditioned media from interstitial lung disease patients on the procollagen mRNA expression in human lung fibroblasts. Guo Z, et al. **Chin Med Sci J** 1996 Mar;11(1):25–7
Effect of emodin on c–myc proto–oncongen expression in cultured rat mesangial cells. Liu ZH, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan;17(1):61–3
Sustained increase in aortic endothelial nitric oxide synthase expression in vivo in a model of chronic high blood flow. Nadaud S, et al. **Circ Res** 1996 Oct;79(4):857–63
Characterization of proliferative responses and cytokine mRNA profiles induced by Vespula venom in patients with severe reactions to wasp stings. Bonay M, et al. **Clin Exp Immunol** 1997 Aug;109(2):342–50
Spontaneous CD30 mRNA expression in peripheral blood mononuclear cells from atopic patients with high IgE serum levels. Esnault S, et al. **Clin Exp Immunol** 1996 Oct; 106(1):67–72
In contrast to their murine counterparts, normal human keratinocytes and human epidermoid cell lines A431 and HaCaT fail to express IL–10 mRNA and protein. Teunissen MB, et al. **Clin Exp Immunol** 1997 Jan;107(1):213–23
Relevance of local Th2–type cytokine mRNA expression in immunocompetent infiltrates in inflamed gingival tissue to periodontal diseases. Tokoro Y, et al. **Clin Exp Immunol** 1997 Jan;107(1):166–74
No difference in the proportion of insulin receptor exon 11 +/– isoform mRNA in the liver of rats after development of hypertension. Lou Y, et al. **Clin Exp Pharmacol Physiol** 1996 Jun–Jul;23(6–7):602–4
Effects of endurance training on superoxide dismutase activity, content and mRNA expression in rat muscle.

Oh-ishi S, et al. **Clin Exp Pharmacol Physiol** 1997 May; 24(5):326-32

Decreased expression of the very low density lipoprotein receptor mRNA in the cardiac ventricle of spontaneously hypertensive rats. Jingami H, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S246-8

Vascular endothelial growth factor: tissue distribution and size of multiple mRNA splice forms in SHR and WKY. Lan L, et al. **Clin Exp Pharmacol Physiol Suppl** 1995; 1:S167-8

Expression of sarcoplasmic reticulum Ca2+ -ATPase mRNA in the hypertrophied heart of young spontaneously hypertensive rats. Ohta K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S228-9

Inherited complement C3 deficiency: reduced C3 mRNA and protein levels in a Laotian kindred. Singer L, et al. **Clin Immunol Immunopathol** 1996 Dec;81(3):244-52

Cytokine dichotomy in peripheral nervous system influences the outcome of experimental allergic neuritis: dynamics of mRNA expression for IL-1 beta, IL-6, IL-10, IL-12, TNF-alpha, TNF-beta, and cytolysin. Zhu J, et al. **Clin Immunol Immunopathol** 1997 Jul;84(1):85-94

IL-1 upregulates keratinocyte growth factor and hepatocyte growth factor mRNA and protein production by cultured stromal fibroblast cells: interleukin-1 beta expression in the cornea. Weng J, et al. **Cornea** 1997 Jul;16(4):465-71

Expression of transforming growth factor-beta mRNA in experimental choroidal neovascularization. Ogata N, et al. **Curr Eye Res** 1997 Jan;16(1):9-18

Expression of basic fibroblast growth factor mRNA in developing choroidal neovascularization. Ogata N, et al. **Curr Eye Res** 1996 Oct;15(10):1008-18

A cytokine profile of normal and malignant ovary. Burke F, et al. **Cytokine** 1996 Jul;8(7):578-85

Modulation of levels of a negative transcription factor for IL-2 by 12-O-tetradecanoyl phorbol-13-acetate and okadaic acid. Grove DS, et al. **Cytokine** 1996 Nov; 8(11):809-16

C-reactive protein and serum amyloid A mRNA stability following induction by cytokines. Lozanski G, et al. **Cytokine** 1996 Jul;8(7):534-40

Inflammatory cytokines induce intercellular adhesion molecule-1 (ICAM-1) mRNA synthesis and protein secretion by human retinal pigment epithelial cell cultures. Nagineni CN, et al. **Cytokine** 1996 Aug;8(8):622-30

Alternative splicing of the Endo16 transcript produces differentially expressed mRNAs during sea urchin gastrulation. Godin RE, et al. **Dev Biol** 1996 Oct 10; 179(1):148-59

Elaboration of the messenger transport organizer pathway for localization of RNA to the vegetal cortex of Xenopus oocytes. Kloc M, et al. **Dev Biol** 1996 Nov 25;180(1):119-30

The developmental expression in the rat CNS and peripheral tissues of proteases PC5 and PACE4 mRNAs: comparison with other proprotein processing enzymes. Zheng M, et al. **Dev Biol** 1997 Jan 15;181(2):268-83

Identification and characterization of up-regulated genes during chondrocyte hypertrophy. Nurminskaya M, et al. **Dev Dyn** 1996 Jul;206(3):260-71

Neuronal regulation of myelin basic protein mRNA translocation in oligodendrocytes is mediated by platelet-derived growth factor. Amur-Umarjee S, et al. **Dev Neurosci** 1997;19(2):143-51

Regulation of neuronal nitric oxide synthase through alternative transcripts. Brenman JE, et al. **Dev Neurosci** 1997;19(3):224-31 (39 ref.)

Alterations in the postnatal development of striatal preprotachykinin but not preproenkephalin mRNA expression in the serotonin-depleted rat. Walker PD, et al. **Dev Neurosci** 1997;19(2):135-42

Expression of alternate growth hormone receptor messenger RNA in ovary and uterus of cattle. Heap D, et al. **Domest Anim Endocrinol** 1996 Sep;13(5):421-30

RNA-RNA interaction is required for the formation of specific bicoid mRNA 3' UTR-STAUFEN ribonucleoprotein particles. Ferrandon D, et al. **EMBO J** 1997 Apr 1;16(7):1751-8

A multisubunit 3'end processing factor from yeast containing poly(A) polymerase and homologues of the subunits of mammalian cleavage and polyadenylation specificity factor. Preker PJ, et al. **EMBO J** 1997 Aug 1;16(15):4727-37

In vivo commitment to splicing in yeast involves the nucleotide upstream from the branch site conserved sequence and the Mud2 protein. Rain JC, et al. **EMBO J** 1997 Apr 1;16(7):1759-71

Tissue-specific expression and regulation by 1,25(OH)2D3 of chick protein kinase inhibitor (PKI) mRNA. Marchetto GS, et al. **Endocrine** 1997 Feb;6(1):5-10

Modulation of preoptic regulatory factor-2 (porf-2) mRNAs by castration and hypophysectomy [published erratum appears in Endocrine 1997 Apr;6(2):213] Nowak FV. **Endocrine** 1997 Feb;6(1):57-63

Chronic administration of growth hormone (GH) to adult chickens exerts marked effects on circulating concentrations of insulin-like growth factor-I (IGF-I), IGF binding proteins, hepatic GH regulated gene I, and hepatic GH receptor mRNA. Radecki SV, et al. **Endocrine** 1997 Apr;6(2):117-24

Tissue-specific expression of inhibin/activin subunit and follistatin mRNAs in mid- to late-gestational age human fetal testis and epididymis. Roberts VJ. **Endocrine** 1997 Feb; 6(1):85-90

Induction of c-fos messenger ribonucleic acid in neuropeptide Y and growth hormone (GH)-releasing factor neurons in the rat arcuate nucleus following systemic injection of the GH secretagogue, GH-releasing peptide-6. Dickson SL, et al. **Endocrinology** 1997 Feb;138(2):771-7

Bovine activin receptor type IIB messenger ribonucleic acid displays alternative splicing involving a sequence homologous to Src-homology 3 domain binding sites. Ethier JF, et al. **Endocrinology** 1997 Jun;138(6):2425-34

Two types of polyadenated mRNAs are synthesized from Drosophila replication-dependent histone genes. Akhmanova A, et al. **Eur J Biochem** 1997 Mar 1; 244(2):294-300

Evolution of the aminoacyl-tRNA synthetase family and the organization of the Drosophila glutamyl-prolyl-tRNA synthetase gene. Intron/exon structure of the gene, control of expression of the two mRNAs, selective advantage of the multienzyme complex. Cerini C, et al. **Eur J Biochem** 1997 Feb 15;244(1):176-85

Cloning, bacterial expression and biological characterization of recombinant human granulocyte chemotactic protein-2 and differential expression of granulocyte chemotactic protein-2 and epithelial cell-derived neutrophil activating peptide-78 mRNAs. Froyen G, et al. **Eur J Biochem** 1997 Feb 1;243(3):762-9

Identification of hypoxically inducible mRNAs in HeLa cells using differential-display PCR. Role of hypoxia-inducible factor-1. O'Rourke JF, et al. **Eur J Biochem** 1996 Oct 15; 241(2):403-10

A novel 4-kb interleukin-13 receptor alpha mRNA expressed in human B, T, and endothelial cells encoding an alternate type-II interleukin-4/interleukin-13 receptor. Gauchat JF, et al. **Eur J Immunol** 1997 Apr;27(4):971-8

Expression of two interleukin-15 mRNA isoforms in human tumors does not correlate with secretion: role of different signal peptides. Meazza R, et al. **Eur J Immunol** 1997 May; 27(5):1049-54

Inducible nuclear factors binding the IgM heavy chain pre-mRNA secretory poly(A) site. Phillips C, et al. **Eur J Immunol** 1996 Dec;26(12):3144-52

Localization of neuropeptide Y Y1 mRNA in the human brain: abundant expression in cerebral cortex and striatum. Caberlotto L, et al. **Eur J Neurosci** 1997 Jun;9(6):1212-25

Neurotrophins and their receptors in the adult hypo- and hyperthyroid rat after kainic acid injection: an in situ hybridization study. Calzà L, et al. **Eur J Neurosci** 1996 Sep;8(9):1873-81

Potassium channel mRNA expression in prevertebral and paravertebral sympathetic neurons. Dixon JE, et al. **Eur J Neurosci** 1996 Jan;8(1):183-91

Chronic loss of glucocorticoids following adrenalectomy down-regulates the expression of glucocorticoid receptor mRNA in the rat forebrain. Hu Z, et al. **Eur J Neurosci** 1997 Aug;9(8):1778-83

Decreased expression of TrkB and TrkC mRNAs in spinal motoneurons of aged rats. Johnson H, et al. **Eur J Neurosci** 1996 Mar;8(3):494-9

Increased expression of BDNF and trkB mRNA in rat facial motoneurons after axotomy. Kobayashi NR, et al. **Eur J Neurosci** 1996 May;8(5):1018-29

Localization of CAM II kinase-alpha, GAD, GluR2 and GABA(A) receptor subunit mRNAs in the human entorhinal cortex. Longson D, et al. **Eur J Neurosci** 1997 Apr;9(4):662-75

Regional variation in expression of calbindin and inositol 1,4,5-trisphosphate receptor type 1 mRNAs in the cerebellum of the staggerer mutant mouse. Nakagawa S, et al. **Eur J Neurosci** 1996 Jul;8(7):1401-7

Kindled seizure-induced c-fos and prodynorphin mRNA expressions are unrelated in the rat brain. Simonato M, et al. **Eur J Neurosci** 1996 Oct;8(10):2064-7

Release of preprotachykinin-A mRNA from rabbit iris upon C-fibre stimulation. Wang ZY, et al. **Eur J Pharmacol** 1996 Feb 15;297(1-2):157-63

Decreased levels of preprotachykinin-A and tachykinin NK1 receptor mRNA in specific region of the rat striatum after electroconvulsive stimuli. Zachrisson O, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):191-5

Adaptive changes in the proenkephalin and D2 dopamine receptor mRNA expression after chronic cocaine in the nucleus accumbens and striatum of the rat. Przewłocka B, et al. **Eur Neuropsychopharmacol** 1995 Dec;5(4):465-9

Cellular and developmental patterns of expression of Ret and glial cell line-derived neurotrophic factor receptor alpha mRNAs. Nosrat CA, et al. **Exp Brain Res** 1997 Jul; 115(3):410-22

Cellular hybridization for BDNF, trkB, and NGF mRNAs and BDNF-immunoreactivity in rat forebrain after pilocarpine-induced status epilepticus. Schmidt-Kastner R, et al. **Exp Brain Res** 1996;107(3):331-47

Expression of mRNA for ovarian steroid-stimulating factor (apolipoprotein A-I and apolipoprotein A-I-like protein) in human granulosa cells. Pascher E, et al. **Exp Clin Endocrinol Diabetes** 1997;105(2):122-4

In situ changes in the relative abundance of human epidermal cytokine messenger RNA levels following exposure to the poison ivy/oak contact allergen urushiol. Boehm KD, et al. **Exp Dermatol** 1996 Jun;5(3):150-60

Profile of cytokine mRNA expression in spontaneous and UV-induced skin lesions from actinic prurigo patients. Santos-Martínez L, et al. **Exp Dermatol** 1997 Apr;6(2):91-7

Expression of the Mel1a-melatonin receptor mRNA in T and B subsets of lymphocytes from rat thymus and spleen. Pozo D, et al. **FASEB J** 1997 May;11(6):466-73

Vibrational force alters mRNA expression in osteoblasts. Tjandrawinata RR, et al. **FASEB J** 1997 May;11(6):493-7

Differential expression of mRNAs for endopeptidases in phenotypically modulated ('dedifferentiated') human articular chondrocytes. Kostoulas G, et al. **FEBS Lett** 1997 Aug 4;412(3):453-5

Stimulatory effects of parathyroid hormone and 1,25-dihydroxyvitamin D3 on insulin-like growth factor-binding protein-5 mRNA expression in osteoblastic UMR-106 cells: the difference between transient and continuous treatments. Nasu M, et al. **FEBS Lett** 1997 Jun 2;409(1):63-6

Expression and regulation of mRNA for inhibin/activin alpha- and betaA-subunits in the granulosa layer of the two largest preovulatory follicles during the hen ovulatory cycle. Chen CC, et al. **Gen Comp Endocrinol** 1997 Sep; 107(3):386-93

c-fos- and c-jun-like mRNA expression in frog (Rana esculenta) testis during the annual reproductive cycle. Cobellis G, et al. **Gen Comp Endocrinol** 1997 Apr; 106(1):23-9

Modification of gonadotropin releasing hormone (GnRH) mRNA expression in the retinal-recipient Thalamus. Foran CM, et al. **Gen Comp Endocrinol** 1997 May;106(2):251-64

Localization of IGF-I and IGF-I receptor mRNA in Sparus aurata larvae. Funkenstein B, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):291-303

Antiestrogenic compounds inhibit estrogen-induced expressions of basic fibroblast growth factor and its mRNA in well-differentiated endometrial cancer cells. Fujimoto J, et al. **Gen Pharmacol** 1997 Feb;28(2):215-9

Use of alternative polyadenylation sites in the synthesis of mRNAs encoding the interferon-induced tryptophanyl tRNA synthetase. Shen T, et al. **Gene** 1996 Nov 14; 179(2):225-9

Activation of acidic sphingomyelinase and protein kinase C zeta is required for IL-1 induction of LIF mRNA in a Schwann cell line. Carlson CD, et al. **Glia** 1996 Sep; 18(1):49-58

Interleukin-1 beta increases leukemia inhibitory factor mRNA levels through transient stimulation of transcription rate. Carlson CD, et al. **Glia** 1996 Oct;18(2):141-51

Streptozotocin induction of diabetes in rats leads to increased insulin-like growth factor-II/mannose-6-phosphate receptor mRNA expression in kidney but not in lung or heart. Kiess W, et al. **Growth Regul** 1996 Jun;6(2):66-72

Differential and tissue-specific regulation of (pro)insulin and insulin-like growth factor-I mRNAs and levels of thyroid hormones in growth-retarded embryos. Serna J, et al. **Growth Regul** 1996 Jun;6(2):73-82

Colonic muscle enhances the production of interleukin-1 beta messenger RNA in experimental colitis. Khan I, et al. **Gut** 1997 Mar;40(3):307-12

Regulation of cyclin-dependent kinase inhibitor p21(WAF1/Cip1/Sdi1) gene expression in hepatic regeneration. Albrecht JH, et al. **Hepatology** 1997 Mar; 25(3):557-63

The expression of pepsinogen c mRNA in normal gastroduodenal mucosa and the gastric ulcer margin of the rat. Helander HF, et al. **Histochem Cell Biol** 1996 Feb; 105(2):163-9

Expression of connexin43 mRNA in adult rodent brain. Simbürger E, et al. **Histochem Cell Biol** 1997 Feb; 107(2):127-37

Glial fibrillary acidic protein and RNA expression in adult rat hippocampus following low-level lead exposure during development. Stoltenburg-Didinger G, et al. **Histochem Cell Biol** 1996 Jun;105(6):431-42

Combination of Hodgkin's disease and diffuse large cell lymphoma: an in situ hybridization study for immunoglobulin light chain messenger RNA. Hell K, et al. **Histopathology** 1995 Dec;27(6):491-9

Induction of cardiac angiotensinogen mRNA and angiotensin converting enzyme (ACE) activity in isoproterenol-induced heart injury. Ogiku N, et al. **Hypertens Res** 1996 Sep;19(3):179-87

Adrenomedullin stimulates renin release and renin mRNA in mouse juxtaglomerular granular cells. Jensen BL, et al. **Hypertension** 1997 May;29(5):1148-55

Mouse CD6: sequence of cDNA and expression of mRNA. Pal A, et al. **Immunol Lett** 1996 Jan;49(1-2):133-7

Cyclosporine A decreases kallikrein and BK2 mRNA expression in the rat renal cortex. Bompart G, et al. **Immunopharmacology** 1996 May;32(1-3):99-101

Suppression of in vivo IgE and tissue IL-4 mRNA induction by SDZ 280.636, a synthetic muramyl dipeptide derivative. Kricek F, et al. **Immunopharmacology** 1997 Apr;36(1):27-39

Expression of decorin mRNA in the skin of patients with ossification of the posterior longitudinal ligament. Ishidou Y, et al. **In Vivo** 1995 Sep-Oct;9(5):469-74

Transcriptional expression of gastrin mRNA in Helicobacter pylori infected patients. Gupta A, et al. **Indian J Med Res** 1997 Mar;105:136-40

Stabilized expression of mRNA is associated with mycobacterial resistance controlled by Nramp1. Brown DH, et al. **Infect Immun** 1997 Feb;65(2):597-603

Expression of cytokines and inducible nitric oxide synthase mRNA in the lungs of mice infected with Cryptococcus neoformans: effects of interleukin-12. Kawakami K, et al. **Infect Immun** 1997 Apr;65(4):1307-12

Pattern of proinflammatory cytokine mRNA expression during Trichinella spiralis infection of the rat. Stadnyk AW, et al. **Infect Immun** 1996 Dec;64(12):5138–43

An investigation of the temporal induction of cytokine mRNAs in LPS–challenged thioglycollate–elicited murine peritoneal macrophages using the reverse transcription polymerase chain reaction. Simpson AE, et al. **Inflamm Res** 1997 Feb;46(2):65–71

Upregulation of lymphoid and renal interferon–gamma mRNA in autoimmune MRL–Fas(lpr) mice with lupus nephritis. Fan X, et al. **Inflammation** 1997 Feb;21(1):105–12

Changes in ribosomal protein rpL8 mRNA during the reproductive cycle of the mosquito, Aedes aegypti. Mazzacano CA, et al. **Insect Biochem Mol Biol** 1996 Jun; 26(6):563–70

Expression of the IL–2 receptor gamma subunit in resting human CD4 · T lymphocytes: mRNA is constitutively transcribed and the protein stored as an intracellular component. Bani L, et al. **Int Immunol** 1997 Apr; 9(4):573–80

Identification and characterization of antioxidant enzyme mRNAs in the rat epididymis. Zini A, et al. **Int J Androl** 1997 Apr;20(2):86–91

Translational and pretranslational regulation of protein synthesis by amino acid availability in primary cultures of rat hepatocytes. Kimball SR, et al. **Int J Biochem Cell Biol** 1996 Mar;28(3):285–94

Translation initiation factor eIF–4A1 mRNA is consistently overexpressed in human melanoma cells in vitro. Eberle J, et al. **Int J Cancer** 1997 May 2;71(3):396–401

Down–regulation of protein and mRNA expression for transforming growth factor–beta (TGF–beta1) type I and type II receptors in human prostate cancer. Guo Y, et al. **Int J Cancer** 1997 May 16;71(4):573–9

Human brain tumor O(6)–methylguanine–DNA methyltransferase mRNA and its significance as an indicator of selective chloroethylnitrosourea chemotherapy. Mineura K, et al. **Int J Cancer** 1996 Oct 21;69(5):420–5

mdm 2 mRNA expression is associated with survival in ovarian cancer. Tanner B, et al. **Int J Cancer** 1997 Aug 22;74(4):438–42

Mosaicicm in bcr–abl protein expression in B cells in chronic myelogenous leukemia. Weissinger EM, et al. **Int J Cancer** 1996 Nov 27;68(5):577–82

Expression of amyloid precursor protein mRNA isoforms in rat brain is differentially regulated during postnatal maturation and by cholinergic activity. Apelt J, et al. **Int J Dev Neurosci** 1997 Feb;15(1):95–112

Novel genes expressed in the chick otocyst during development: identification using differential display of RNA. Gong TW, et al. **Int J Dev Neurosci** 1997 Jul; 15(4–5):585–94

Regulation of c–Fos mRNA and fos protein expression in olfactory bulbs from unilaterally odor–deprived adult mice. Jin BK, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):971–82

Inhibition by dexamethasone of the lipopolysaccharide–induced increase in IL–6 mRNA abundance and IL–6 production in human polymorphonuclear leukocytes. Mianji S, et al. **Int J Immunopharmacol** 1996 May;18(5):339–46

Beta–thalassemia (beta 90 GAG––>TAG): genetic diagnosis by allele–specific polymerase chain reaction and estimation of mutant mRNA expression by reverse transcription polymerase chain reaction. Ekawa K, et al. **Intern Med** 1996 Jun;35(6):463–7

Induction of basic fibroblast growth factor mRNA by basic fibroblast growth factor in Müller cells. Cao W, et al. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1358–66

Elevated mRNA expression of brain–derived neurotrophic factor in retinal ganglion cell layer after optic nerve injury. Gao H, et al. **Invest Ophthalmol Vis Sci** 1997 Aug; 38(9):1840–7

Transforming growth factor–beta 1 and –beta 2 positively regulate TGF–beta 1 mRNA expression in trabecular cells. Li J, et al. **Invest Ophthalmol Vis Sci** 1996 Dec; 37(13):2778–82

Differential expression of alpha A– and alpha B–crystallin during murine ocular development. Robinson ML, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2276–84

Localization of type II collagen mRNA isoforms in the developing eyes of normal and transgenic mice with a mutation in type II collagen gene. Savontaus M, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):930–42

Increases in IL–12 messenger RNA+ cells accompany inhibition of allergen–induced late skin responses after successful grass pollen immunotherapy [see comments] Hamid QA, et al. **J Allergy Clin Immunol** 1997 Feb; 99(2):254–60. Comment in: J Allergy Clin Immunol 1997 Feb;99(2):161–4.

Elevated expression of messenger ribonucleic acid encoding IL–13 in the bronchial mucosa of atopic and nonatopic subjects with asthma. Humbert M, et al. **J Allergy Clin Immunol** 1997 May;99(5):657–65

Levels of tryptase, chymase, and Fc epsilon RI alpha messenger RNA in human skin are unchanged after IgE–dependent stimulation of cutaneous mast cells in vivo. Xia HZ, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):224–6

Changes in eosinophil and leukocyte infiltration and expression of IL–6 and IL–7 messenger RNA in mite allergen patch test reactions in atopic dermatitis. Yamada N, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S201–6

Sertoli cells in culture and mRNA differential display provide a sensitive early warning assay system to detect changes induced by xenobiotics. Syed V, et al. **J Androl** 1997 May–Jun;18(3):264–73

High lung inflation increases mRNA levels of ECM components and growth factors in lung parenchyma. Berg JT, et al. **J Appl Physiol** 1997 Jul;83(1):120–8

Cytochrome c mRNA in skeletal muscles of immobilized limbs. Booth FW, et al. **J Appl Physiol** 1996 Nov; 81(5):1941–5

Angiogenic growth factor mRNA responses in muscle to a single bout of exercise. Breen EC, et al. **J Appl Physiol** 1996 Jul;81(1):355–61

Hypoxia in vivo inhibits aldosterone synthesis and aldosterone synthase mRNA in rats. Raff H, et al. **J Appl Physiol** 1996 Aug;81(2):604–10

Exercise increases the plasma membrane content of the Na+ –K+ pump and its mRNA in rat skeletal muscles. Tsakiridis T, et al. **J Appl Physiol** 1996 Feb;80(2):699–705

Steroid hormones differentially induce transcription of the chicken ovalbumin gene, but stabilize the mRNA with the same half–life. Arao Y, et al. **J Biochem (Tokyo)** 1996 Oct; 120(4):710–5

Recovery of mRNA expression of tryptophan 2,3–dioxygenase and serine dehydratase in long–term cultures of primary rat hepatocytes. Mizuguchi T, et al. **J Biochem (Tokyo)** 1996 Sep;120(3):511–7

Expression of hepatic pyruvate carboxylase mRNA in C57BL/6J Ah(b/b) and congenic Ah((d/d)) mice exposed to 2,3,7,8–tetrachlorodibenzo–p–dioxin. Ilian MA, et al. **J Biochem Toxicol** 1996;11(1):51–6

2'–O–(2–Methoxy)ethyl–modified anti–intercellular adhesion molecule 1 (ICAM–1) oligonucleotides selectively increase the ICAM–1 mRNA level and inhibit formation of the ICAM–1 translation initiation complex in human umbilical vein endothelial cells. Baker BF, et al. **J Biol Chem** 1997 May 2;272(18):11994–2000

Transfection analysis of expression of mRNA isoforms encoding the nuclear autoantigen La/SS–B. Grölz D, et al. **J Biol Chem** 1997 May 2;272(18):12076–82

Regulated unmasking of in vivo synthesized maternal mRNA at oocyte maturation. A role for the chaperone nucleoplasmin. Meric F, et al. **J Biol Chem** 1997 May 9; 272(19):12840–6

Translocation and transcriptional arrest during transcript elongatio·. by RNA polymerase II. Samkurashvili I, et al. **J Biol Chem** 1996 Sep 20;271(38):23495–505

NusA is required for ribosomal antitermination and for modulation of the transcription elongation rate of both antiterminated RNA and mRNA. Vogel U, et al. **J Biol Chem** 1997 May 9;272(19):12265–71

Glutamic acid decarboxylase message isoforms in human suprachiasmatic nucleus. Gao B, et al. **J Biol Rhythms** 1996 Jun;11(2):172–9

mRNA expression of matrix metalloproteinases and tissue inhibitors of metalloproteinase in interface tissue around implants in loosening total hip arthroplasty. Ishiguro N, et al. **J Biomed Mater Res** 1996 Dec;32(4):611–7

A novel technique for quantitative detection of mRNA expression in human bone derived cells cultured on biomaterials. Zreiqat H, et al. **J Biomed Mater Res** 1996 Winter;33(4):217–23

Relationships between translation of pro alpha1(I) and pro alpha2(I) mRNAs during synthesis of the type I procollagen heterotrimer. Hu G, et al. **J Cell Biochem** 1995 Oct;59(2):214–34

IL–3, GM–CSF and CSF–1 modulate c–fms mRNA more rapidly in humar early monocytic progenitors than in mature or transformed monocytic cells. Panterne B, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1795–801

Cyclo–oxygenase–2 messenger RNA induction in focal cerebral ischemia. Collaço–Moraes Y, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1366–72

Induction of Na+/myo–inositol cotransporter mRNA after focal cerebral ischemia: evidence for extensive osmotic stress in remote areas. Yamashita T, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1203–10

Estrogen regulation of preproenkephalin messenger RNA in the forebrain of female mice. Quiñones–Jenab V, et al. **J Chem Neuroanat** 1996 Nov;12(1):29–36

In situ hybridization analysis of vasopressin mRNA expression in the mouse hypothalamus: diurnal variation in the suprachiasmatic nucleus. Smith M, et al. **J Chem Neuroanat** 1996 Dec;12(2):105–12

Alternative expression of platelet glycoprotein Ib(beta) mRNA from an adjacent 5' gene with an imperfect polyadenylation signal sequence. Zieger B, et al. **J Clin Invest** 1997 Feb 1;99(3):520–5

Expression of IL–8, TNF–alpha and IFN–gamma m–RNA in ulcerative colitis, particularly in patients with inactive phase. Masuda H, et al. **J Clin Lab Immunol** 1995; 46(3):111–23

Atlas of the neurons that express mRNA for the long form of the prolactin receptor in the forebrain of the female rat. Bakowska JC, et al. **J Comp Neurol** 1997 Sep 22; 386(2):161–77

Comparison of the expression of a T alpha 1:nlacZ transgene and T alpha 1 alpha–tubulin mRNA in the mature central nervous system. Bamji SX, et al. **J Comp Neurol** 1996 Oct 7;374(1):52–69

Pattern of expression of the serotonin2C receptor messenger RNA in the basal ganglia of adult rats. Eberle–Wang K, et al. **J Comp Neurol** 1997 Jul 28;384(2):233–47

Developmental and mature expression of full–length and truncated TrkB receptors in the rat forebrain. Fryer RH, et al. **J Comp Neurol** 1996 Oct 7;374(1):21–40

Anatomy of rat semaphorin III/collapsin–1 mRNA expression and relationship to developing nerve tracts during neuroembryogenesis. Giger RJ, et al. **J Comp Neurol** 1996 Nov 18;375(3):378–92

Developmental increases in expression of neurofilament mRNA selectively in projection neurons of the lamprey CNS. Jacobs AJ, et al. **J Comp Neurol** 1996 Jan 15; 364(3):383–401

Epidermal growth factor receptor mRNA and protein are expressed in progenitor cells of the olfactory epithelium. Krishna NS, et al. **J Comp Neurol** 1996 Sep 16; 373(2):297–307

Distribution of angiotensin II type–2 receptor (AT2) mRNA expression in the adult rat brain. Lenkei Z, et al. **J Comp Neurol** 1996 Sep 23;373(3):322–39

In situ hybridization histochemical localization of prodynorphin messenger RNA in the central nervous system of the rat. Merchenthaler I, et al. **J Comp Neurol** 1997 Jul 28;384(2):211–32

Distribution and steroid hormone regulation of aromatase mRNA expression in the forebrain of adult male and female rats: a cellular–level analysis using in situ hybridization. Wagner CK, et al. **J Comp Neurol** 1996 Jun 17;370(1):71–84

Expression of interferon–alpha receptor mRNA in the liver in chronic liver diseases associated with hepatitis C virus: relation to effectiveness of interferon therapy. Fukuda R, et al. **J Gastroenterol** 1996 Dec;31(6):806–11

Two mRNAs are transcribed from banana bunchy top virus DNA–1. Beetham PR, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):229–36

In vivo expression of an overlapping gene encoded by the cucumoviruses. Shi BJ, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):237–41

Neuronal expression of STM2 mRNA in human brain is reduced in Alzheimer's disease. McMillan PJ, et al. **J Histochem Cytochem** 1996 Nov;44(11):1215–22

Expression of MUC2 and MUC3 mRNA in human normal, malignant, and inflammatory intestinal tissues. Weiss AA, et al. **J Histochem Cytochem** 1996 Oct;44(10):1161–6

Eosinophils transcribe and translate messenger RNA for inducible nitric oxide synthase. del Pozo V, et al. **J Immunol** 1997 Jan 15;158(2):859–64

Human mast cells activate fibroblasts: tryptase is a fibrogenic factor stimulating collagen messenger ribonucleic acid synthesis and fibroblast chemotaxis. Gruber BL, et al. **J Immunol** 1997 Mar 1;158(5):2310–7

Induction of IL–15 messenger RNA and protein in human blood–derived dendritic cells: a role for IL–15 in attraction of T cells. Jonuleit H, et al. **J Immunol** 1997 Mar 15; 158(6):2610–5

IL–12 p40 messenger RNA expression in target organs during acute graft–versus–host disease. McMillan PJ, et al. **J Immunol** 1996 Oct 1; 157(7):2851–6

Regulation of inducible nitric oxide synthase messenger RNA expression and nitric oxide production by lipopolysaccharide in vivo: the roles of macrophages, endogenous IFN–gamma, and TNF receptor–1–mediated signaling. Salkowski CA, et al. **J Immunol** 1997 Jan 15; 158(2):905–12

Cognate T cell help for CD40–deficient B cells induces c–myc RNA expression, but DNA synthesis requires an additional signal through surface Ig. Schrader CE, et al. **J Immunol** 1997 Jan 1;158(1):153–62

Production of IL–18 (IFN–gamma–inducing factor) messenger RNA and functional protein by murine keratinocytes. Stoll S, et al. **J Immunol** 1997 Jul 1; 159(1):298–302

Lipoteichoic acid from viridans streptococci induces the production of tumor necrosis factor and nitric oxide by murine macrophages. English BK, et al. **J Infect Dis** 1996 Dec;174(6):1348–51

Modulation of human papillomavirus type 16 mRNA in cervical invasive carcinoma patients by interferon–alpha therapy. García–Milián R, et al. **J Interferon Cytokine Res** 1996 Sep;16(9):739–43

Early induction of proinflammatory cytokine and type I interferon mRNAs following Newcastle disease virus, poly [rI:rC], or low–dose LPS challenge of the mouse. Guha–Thakurta N, et al. **J Interferon Cytokine Res** 1997 Apr;17(4):197–204

Potentiation of interferon–induced indoleamine 2,3–dioxygenase mRNA in human mononuclear phagocytes by lipopolysaccharide and interleukin–1. Hissong BD, et al. **J Interferon Cytokine Res** 1997 Jul; 17(7):387–93

Role of glucocorticoid in the upregulation of type I interleukin–1 receptor mRNA expression in hepatocytes of endotoxin–administrated mice. Ito A, et al. **J Interferon Cytokine Res** 1997 Jul;17(7):413–7

Endotoxin–induced upregulation of type I interleukin–1 receptor mRNA expression in hepatocytes of mice: role of cytokines. Ito A, et al. **J Interferon Cytokine Res** 1997 Jan;17(1):55–61

Type I and type II interferons upregulate functional type I interleukin–1 receptor in a human fibroblast cell line TIG–1. Takii T, et al. **J Interferon Cytokine Res** 1995 Dec; 15(12):1065–73

Expression of HuD (a paraneoplastic encephalomyelitis antigen) mRNA in lung cancer. Cho JH, et al. **J Korean Med Sci** 1997 Aug;12(4):305–10

Preactivation exposure of RAW 264.7 cells to taurine chloramine attenuates subsequent production of nitric oxide and expression of iNOS mRNA. Park E, et al. **J Leukoc Biol** 1997 Feb;61(2):161–6

Primary structure of rat CD14 and characteristics of rat CD14, cytokine, and NO synthase mRNA expression in mononuclear phagocyte system cells in response to LPS. Takai N, et al. **J Leukoc Biol** 1997 Jun;61(6):736–44

Lipoprotein lipase in highly vascularized structures of the eye. Casaroli-Marano RP, et al. **J Lipid Res** 1996 May; 37(5):1037–44

Tissue and cellular specific expression of murine lysosomal acid lipase mRNA and protein. Du H, et al. **J Lipid Res** 1996 May;37(5):937–49

Transforming growth factor-betas block cytokine induction of catalase and xanthine oxidase mRNA levels in cultured rat cardiac cells. Flanders KC, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):273–80

Cardiac Na+-H+ exchanger during postnatal development in the rat: changes in mRNA expression and sarcolemmal activity. Haworth RS, et al. **J Mol Cell Cardiol** 1997 Jan; 29(1):321–32

Altered mRNA abundance of calcium transport genes in cardiac myocytes induced by angiotensin II. Ju H, et al. **J Mol Cell Cardiol** 1996 May;28(5):1119–28

Expression of sense and naturally occurring antisense mRNA of myosin heavy chain in rat heart tissue and cultivated cardiomyocytes. Luther HP, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):27–35

Differential accumulation of mRNA for immediate early genes and heat shock genes in heart after ischaemic injury. Plumier JC, et al. **J Mol Cell Cardiol** 1996 Jun; 28(6):1251–60

Anterior pituitary vasoactive intestinal peptide mRNA is colocalised with prolactin mRNA in hyperoestrogenised rats. Chew LJ, et al. **J Mol Endocrinol** 1996 Jun; 16(3):211–20

Evidence of alternative promoters directing isoform-specific expression of human endothelin-converting enzyme-1 mRNA in cultured endothelial cells. Orzechowski HD, et al. **J Mol Med** 1997 Jul;75(7):512–21

Regulation of brain interleukin-1 beta (IL-1 beta) system mRNAs in response to pathophysiological concentrations of IL-1 beta in the cerebrospinal fluid. Ilyin SE, et al. **J Mol Neurosci** 1996 Fall;7(3):169–81

Effect of repeated administration of dopamine agonists on striatal neuropeptide mRNA expression in rats with a unilateral nigral 6-hydroxydopamine lesion. Granata R, et al. **J Neural Transm** 1996;103(3):249–60

Age-related decrease in responsiveness to L-DOPA is not due to changes in dopamine receptor mRNAs or G protein mRNAs. Murata M, et al. **J Neural Transm** 1996; 103(3):343–8

Ontogeny of pituitary transcription factor-1 (Pit-1), growth hormone (GH) and prolactin (PRL) mRNA levels in male and female rats and the differential expression of Pit-1 in lactotrophs and somatotrophs. González-Parra S, et al. **J Neuroendocrinol** 1996 Mar;8(3):211–25

Influence of testosterone on LHRH release, LHRH mRNA and proopiomelanocortin mRNA in male sheep. Hileman SM, et al. **J Neuroendocrinol** 1996 Feb;8(2):113–21

Neural regulation of corticotropin releasing hormone (CRH) and CRH receptor mRNA in the hypothalamic paraventricular nucleus in the rat. Kiss A, et al. **J Neuroendocrinol** 1996 Feb;8(2):103–12

Inhibition of steroid-induced galanin mRNA expression in GnRH neurons by specific NMDA-receptor blockade. Rossmanith WG, et al. **J Neuroendocrinol** 1996 Mar; 8(3):179–84

Induction of galanin mRNA in GnRH neurons by estradiol and its facilitation by progesterone. Rossmanith WG, et al. **J Neuroendocrinol** 1996 Mar;8(3):185–91

Sequential exposure to estrogen and testosterone (T) and subsequent withdrawal of T increases the level of arginine vasopressin messenger ribonucleic acid in the hypothalamic paraventricular nucleus of the female rat. Thomas A, et al. **J Neuroendocrinol** 1996 Oct;8(10):793–800

Expression of tumor necrosis factor-alpha and transforming growth factor-beta 1 in cerebrospinal fluid cells in meningitis. Ossege LM, et al. **J Neurol Sci** 1996 Dec; 144(1-2):1–13

Developmental regulation of presenilin mRNA expression parallels notch expression. Berezovska O, et al. **J Neuropathol Exp Neurol** 1997 Jan;56(1):40–4

TTX-sensitive and -resistant Na+ currents, and mRNA for the TTX-resistant rH1 channel, are expressed in B104 neuroblastoma cells. Gu XQ, et al. **J Neurophysiol** 1997 Jan;77(1):236–46

Maternal cocaine treatment alters dynorphin and enkephalin mRNA expression in brains of fetal rhesus macaques. Chai L, et al. **J Neurosci** 1997 Feb 1;17(3):1112–21

NMDA-NR1 receptor subunit mRNA expression in rat brain after 6-OH-dopamine induced lesions: a non-isotopic in situ hybridization study. Andrés ME, et al. **J Neurosci Res** 1996 Nov 1;46(3):375–84

Evidence for neuronal regulation of oligodendrocyte development: cellular localization of platelet-derived growth factor alpha receptor and A-chain mRNA during cerebral cortex development in the rat. Ellison JA, et al. **J Neurosci Res** 1996 Jul 1;45(1):28–39

Antisense oligodeoxynucleotides to bax mRNA promote survival of rat sympathetic neurons in culture. Gillardon F, et al. **J Neurosci Res** 1996 Mar 15;43(6):726–34

Association of c-fos mRNA expression and excitotoxicity in primary cultures of mouse neocortical and cerebellar neurons. Griffiths R, et al. **J Neurosci Res** 1997 Jun 15; 48(6):533–42

Differential expression of interleukin-10 mRNA in Wallerian degeneration and immune-mediated inflammation of the rat peripheral nervous system. Jander S, et al. **J Neurosci Res** 1996 Jan 15;43(2):254–9

Reciprocal regulation of the content of aromatic L-amino acid decarboxylase and tyrosine hydroxylase mRNA by NGF in PC12 cells. Li XM, et al. **J Neurosci Res** 1997 Feb 15;47(4):449–54

Rat oligodendrocytes and astrocytes preferentially express fibroblast growth factor receptor-2 and -3 mRNAs. Miyake A, et al. **J Neurosci Res** 1996 Sep 1;45(5):534–41

Neuronal expression of hippocampal cholinergic neurostimulating peptide (HCNP)-precursor mRNA in rat brain. Taiji M, et al. **J Neurosci Res** 1996 Aug 1; 45(3):202–15

Genomic and template RNA transcription in a model of persistent enteroviral infection. Gow JW, et al. **J Neurovirol** 1997 Feb;3(1):76–82

Hydroxyindole-O-methyltransferase mRNA expression in a subpopulation of photoreceptors in the chicken retina. Wiechmann AF. **J Pineal Res** 1996 May;20(4):217–25

The expression of interleukin-1 alpha, interleukin-1 beta, and interleukin-1 receptor type I mRNA during preimplantation mouse development. Takacs P, et al. **J Reprod Immunol** 1996 Nov;32(1):27–35

TNF alpha concentrations and mRNA expression are increased in preeclamptic placentas. Wang Y, et al. **J Reprod Immunol** 1996 Dec;32(2):157–69

Quercetin, a bioflavonoid, inhibits the induction of interleukin 8 and monocyte chemoattractant protein-1 expression by tumor necrosis factor-alpha in cultured human synovial cells. Sato M, et al. **J Rheumatol** 1997 Sep;24(9):1680–4

Rat ovarian insulin-like growth factor binding protein-4: a hormone-dependent granulosa cell-derived antigonadotropin. Putowski L, et al. **J Soc Gynecol Investig** 1997 May-Jun;4(3):144–51

Sex steroids regulate the expression of plasminogen activator inhibitor-1 (PAI-1) and its mRNA in uterine endometrial cancer cell line Ishikawa. Fujimoto J, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):1–8

Autoregulation of androgen receptor protein and messenger RNA in rat ventral prostate is protein synthesis dependent. Mora GR, et al. **J Steroid Biochem Mol Biol** 1996 Aug; 58(5-6):539–49

Presence of different collagens and collagen mRNAs during embryogenesis and in adult tissues of the sea urchin Paracentrotus lividus. Gambino R, et al. **J Submicrosc Cytol Pathol** 1996 Jan;28(1):41–7

Fluid resuscitation attenuates early cytokine mRNA expression after peritonitis. Wilson MA, et al. **J Trauma** 1996 Oct;41(4):622–7

Type III collagen messenger RNA is modulated in non-compliant human bladder tissue. Kaplan EP, et al. **J Urol** 1997 Jun;157(6):2366–9

Cu/Zn superoxide dismutase, catalase and glutathione peroxidase mRNA expression in the rat testis after surgical cryptorchidism and efferent duct ligation. Zini A, et al. **J Urol** 1997 Aug;158(2):659–63

alpha-Thrombin induces transforming growth factor-beta1 mRNA and protein in cultured vascular smooth muscle cells via a proteolytically activated receptor. Bachhuber BG, et al. **J Vasc Res** 1997 Jan-Feb;34(1):41–8

Serotype-dependent induction of pulmonary neutrophilia and inflammatory cytokine gene expression by reovirus. Farone AL, et al. **J Virol** 1996 Oct;70(10):7079–84

Duck hepatitis B virus polymerase acts as a suppressor of core protein translation. Howe AY, et al. **J Virol** 1996 Aug; 70(8):5035–42

Human immunodeficiency virus type 1 Rev function requires continued synthesis of its target mRNA. Iacampo S, et al. **J Virol** 1996 Dec;70(12):8332–9

Increased interleukin-10 mRNA expression in tumor-bearing or persistently lymphocytotic animals infected with bovine leukemia virus. Pyeon D, et al. **J Virol** 1996 Aug; 70(8):5706–10

P53 and p21 (Waf1/Cip1) mRNA expression associated with DNA damage and repair in acute immune complex alveolitis in mice. Kuwano K, et al. **Lab Invest** 1997 Feb; 76(2):161–9

Differential expression of glomerular extracellular matrix and growth factor mRNA in rapid and slowly progressive glomerulosclerosis: studies in mice transgenic for native or mutated growth hormone. Yang CW, et al. **Lab Invest** 1997 Apr;76(4):467–76

Expression of BCR-ABL, E2A-PBX1, and MLL-AF4 fusion transcripts in newly diagnosed children with acute lymphoblastic leukemia: a Children's Cancer Group initiative. Gaynon PS, et al. **Leuk Lymphoma** 1997 Jun; 26(1-2):57–65

Differential expression of alternatively spliced pX mRNAs in HTLV-I-infected cell lines. Cereseto A, et al. **Leukemia** 1997 Jun;11(6):866–70

Intrahepatic expression of pro-inflammatory cytokine mRNAs and interferon efficacy in chronic hepatitis C. Fukuda R, et al. **Liver** 1996 Dec;16(6):390–9

Expression of mRNA encoding intestinal type alkaline phosphatase in rat liver and its increase by fat-feeding. Goseki-Sone M, et al. **Liver** 1996 Dec;16(6):358–64

Expression of cytokine mRNA in bronchoalveolar lavage cells from atopic asthmatics before late antigen-induced reaction. Miadonna A, et al. **Lung** 1997;175(3):195–209

Alpha-adrenergic, neurokinin and muscarinic receptors in rat mesenteric artery; an mRNA study during postnatal development. Phillips JK, et al. **Mech Ageing Dev** 1996 Dec 20;92(2-3):235–46

Characterization of IGFBP-3, PAI-1 and SPARC mRNA expression in senescent fibroblasts. Wang S, et al. **Mech Ageing Dev** 1996 Dec 20;92(2-3):121–32

High inflammatory activity is associated with an increased amount of IFN-gamma transcripts in peripheral blood cells of patients with chronic hepatitis C virus infection. Mihm S, et al. **Med Microbiol Immunol (Berl)** 1996 Sep; 185(2):95–102

RNA editing in trypanosomatid mitochondria. Simpson L, et al. **Methods Enzymol** 1996;264:99–121

Induction of TNF-alpha mRNA in murine macrophages by virulent and avirulent strains of Salmonella choleraesuis serovar typhimurium and serovar Choleraesuis. Mitsui-Yamaguchi T, et al. **Microb Pathog** 1997 Jan; 22(1):59–66

Expression of surfactant protein B precursor and surfactant protein B mRNA in adenocarcinoma of the lung. Khoor A, et al. **Mod Pathol** 1997 Jan;10(1):62–7

Tissue and cell-type specific expression of the tuberous sclerosis gene, TSC2, in human tissues. Menchine M, et al. **Mod Pathol** 1996 Nov;9(11):1071–80

Expression of Pit-1 and estrogen receptor messenger RNA in prolactin-producing pituitary adenomas. Sanno N, et al. **Mod Pathol** 1996 May;9(5):526–33

Regulated use of an alternative spliced leader exon in the plant parasitic nematode Meloidogyne javanica. Koltai H, et al. **Mol Biochem Parasitol** 1997 May;86(1):107–10

Expression of calcium-binding protein regucalcin mRNA in hepatoma cells. Makino R, et al. **Mol Cell Biochem** 1996 Feb 9;155(1):85–90

Stimulation of GLUT1 glucose transporter expression in response to inhibition of oxidative phosphorylation: role of reduced sulfhydryl groups. Becker M, et al. **Mol Cell Endocrinol** 1996 Aug 9;121(2):165–70

Calcitonin mRNA is produced in liver by two different splicing pathways. Bracq S, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1-2):111–5

ACTH and AII differentially stimulate steroid hormone orphan receptor mRNAs in adrenal cortical cells. Enyeart JJ, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):97–110

A sensitive reverse transcriptase polymerase chain reaction assay for measuring the effects of dehydration and gestation on rat amounts of vasopressin and ocytocin mRNAs. LeMoullec JM, et al. **Mol Cell Endocrinol** 1997 Apr 4; 128(1-2):151–9

Characterization and regulation of a mRNA encoding the prostaglandin F2alpha receptor in the rat ovary. Olofsson JI, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):45–52

Activation of amylin gene transcription by LIM domain homeobox gene isl-1. Wang M, et al. **Mol Endocrinol** 1996 Mar;10(3):243–51

Expression of steroidogenic factor-1 (SF-1) mRNA and protein in the human placenta. Bamberger AM, et al. **Mol Hum Reprod** 1996 Jun;2(6):457–61

Placental mRNA expression of alpha and beta human chorionic gonadotrophin in early trisomy 18 pregnancies. Brizot ML, et al. **Mol Hum Reprod** 1996 Jun;2(6):463–5

Prostaglandin E2 induces inhibin alpha- and beta A-subunit mRNA and secretion of dimeric inhibin A in cultured human granulosa-luteal cells. Erämaa M, et al. **Mol Hum Reprod** 1996 Nov;2(11):815–22

Hormonal regulation of expression of messenger RNA encoding insulin-like growth factor binding proteins in human endometrial stromal cells cultured in vitro. Liu HC, et al. **Mol Hum Reprod** 1997 Jan;3(1):21–6

Defense response in slash pine: chitosan treatment alters the abundance of specific mRNAs. Mason ME, et al. **Mol Plant Microbe Interact** 1997 Jan;10(1):135–7

Effect of glucose and heparin on mesangial alpha 1(IV)COLL and MMP-2/TIMP-2 mRNA expression. Caenazzo C, et al. **Nephrol Dial Transplant** 1997 Mar; 12(3):443–8

Prostaglandin G/H synthase-2 (cyclooxygenase-2) mRNA expression is decreased in Alzheimer's disease. Chang JW, et al. **Neurobiol Aging** 1996 Sep-Oct;17(5):801–8

Age-related changes in c-fos mRNA induction after open-field exposure in the rat brain. Nagahara AH, et al. **Neurobiol Aging** 1997 Jan-Feb;18(1):45–55

The effect of aging on rat striatal D1 receptor mRNA-containing neurons. Zhang L, et al. **Neurobiol Aging** 1997 Mar-Apr;18(2):251–5

Expression of beta 1-4 N-acetylgalactosaminyltransferase gene in the developing rat brain and retina: mRNA, protein immunoreactivity and enzyme activity. Daniotti JL, et al. **Neurochem Int** 1997 Jul;31(1):11–9

Tetrahydrobiopterin biosynthesis in the rat brain: heterogeneity of GTP cyclohydrolase I mRNA expression in monoamine-containing neurons [published erratum appears in Neurochem Int 1996 Oct;29(4):I-II] Lentz SI, et al. **Neurochem Int** 1996 May-Jun;28(5-6):569–82

NMDAR1 mRNA expression and glutamate receptor

stimulated increase in cytosolic calcium concentration in rat and mouse cerebellar granule cells. Mogensen HS, et al. **Neurochem Int** 1996 Nov;29(5):497–506

NMDA receptor antagonist MK–801 down–regulates rat striatal proenkephalin and protachykinin mRNAs. Zhang F, et al. **Neurochem Int** 1996 Feb;28(2):189–92

Age does not alter Protein kinase C isozymes mRNA expression in rat brain. Narang N, et al. **Neurochem Res** 1995 Oct;20(10):1119–26

BDNF and trkB mRNA expression in neurons of the neonatal mouse barrel field cortex: normal development and plasticity after cauterizing facial vibrissae. Singh TD, et al. **Neurochem Res** 1997 Jul;22(7):791–7

Expression of glutamate receptor subunit mRNAs in gonadotropin–releasing hormone neurons during the sexual maturation of the female rat. Eyigor O, et al. **Neuroendocrinology** 1997 Aug;66(2):122–9

Sex–related alterations in hypothalamic growth hormone–releasing hormone mRNA–but not somatostatin mRNA–expressing cells in genetically obese Zucker rats. Tannenbaum GS, et al. **Neuroendocrinology** 1996 Sep; 64(3):186–93

Preprotachykinin A and cholecystokinin mRNAs in tenascin–gene knockout mouse brain. Fukamauchi F, et al. **Neuropeptides** 1997 Apr;31(2):199–201

The reduction of preprotachykinin mRNA in the methamphetamine–induced behavioral sensitization. Fukamauchi F. **Neuropeptides** 1996 Feb;30(1):43–6

Preprothyrotropin–releasing hormone mRNA in the rat central gray is strongly and persistently induced during morphine withdrawal. Gahn LG, et al. **Neuropeptides** 1996 Jun;30(3):207–12

Prodynorphin mRNA expression in the rat dentate gyrus after cerebral ischemia. Héron A, et al. **Neuropeptides** 1996 Aug;30(4):355–8

Chronic treatment with diazepam or abecarnil differently affects the expression of GABAA receptor subunit mRNAs in the rat cortex. Holt RA, et al. **Neuropharmacology** 1996; 35(9–10):1457–63

Reversible modification of GABAA receptor subunit mRNA expression during tolerance to diazepam–induced cognition dysfunction. Longone P, et al. **Neuropharmacology** 1996; 35(9–10):1465–73

Chronic administration of antipanic drugs alters rat brainstem GABAA receptor subunit mRNA levels. Tanay VA, et al. **Neuropharmacology** 1996;35(9–10):1475–82

Basal and stimulated C–fos mRNA expression in the rat brain: effect of chronic dietary lithium. Miller JC, et al. **Neuropsychopharmacology** 1997 Jun;16(6):408–18

Plant–derived amino acids increase hippocampal BDNF, NGF, c–fos and hsp70 mRNAs. Andersson H, et al. **Neuroreport** 1997 May 27;8(8):1813–7

c–fos antisense oligonucleotide prevents delayed induction of hsp70 mRNA after soman–induced seizures. Baille V, et al. **Neuroreport** 1997 May 27;8(8):1819–22

Bilateral ischemic tolerance of rat hippocampus induced by prior unilateral transient focal ischemia: relationship to c–fos mRNA expression. Belayev L, et al. **Neuroreport** 1996 Dec 20;8(1):55–9

Expression of TGF–beta type II receptor mRNA in the CNS. Böttner M, et al. **Neuroreport** 1996 Nov 25;7(18):2903–7

Mu and delta opioid receptor gene expression after chronic treatment with opioid agonist. Buzas B, et al. **Neuroreport** 1996 Jun 17;7(9):1505–8

Regulation of neuronal nitric oxide synthase mRNA levels in rat brain by seizure activity. Elmér E, et al. **Neuroreport** 1996 May 17;7(7):1335–9

Glutamatergic deafferentation of olfactory bulb modulates the expression of mGluR1a mRNA. Ferraris N, et al. **Neuroreport** 1997 May 27;8(8):1949–53

Effects of NSAIDs on IL–1 beta–induced IL–6 mRNA and protein synthesis in human astrocytoma cells. Fiebich BL, et al. **Neuroreport** 1996 Apr 26;7(6):1209–13

Long–term alterations in growth factor mRNA expression following seizures. Garcia ML, et al. **Neuroreport** 1997 Apr 14;8(6):1445–9

Alpha–brain spectrin mRNA belongs to the population of intradendritically transported mRNAs. Gelot A, et al. **Neuroreport** 1996 Dec 20;8(1):113–6

Scavenger receptor mRNAs in rat brain microglia are induced by kainic acid lesioning and by cytokines. Grewal RP, et al. **Neuroreport** 1997 Mar 24;8(5):1077–81

Expression of leptin receptor mRNA in the hypothalamic arcuate nucleus--relationship with NPY neurones. Håkansson ML, et al. **Neuroreport** 1996 Nov 25; 7(18):3087–92

Cloning/brain localization of mouse glutamylcysteine synthetase heavy chain mRNA. Kang Y, et al. **Neuroreport** 1997 May 27;8(8):2053–60

Striatal NMDAR2B mRNA expression after bilateral cortical and unilateral nigral deafferentation. Kayadjanian N, et al. **Neuroreport** 1996 Feb 29;7(3):713–6

Focal brain injury increases activin betaA mRNA expression in hippocampal neurons. Lai M, et al. **Neuroreport** 1997 Aug 18;8(12):2691–4

5–HT2B receptor mRNA in guinea pig superior cervical ganglion. Newberry NR, et al. **Neuroreport** 1996 Nov 25; 7(18):2909–11

Regulation of beta– and gamma–actin mRNA by thyroid hormone in the developing rat brain. Sarkar S, et al. **Neuroreport** 1997 Mar 24;8(5):1267–71

Dynamic changes in expression of glutamate transporter mRNAs in developing brain. Shibata T, et al. **Neuroreport** 1996 Feb 29;7(3):705–9

Reduction of vesicular acetylcholine transporter mRNA in the rat septum following lead exposure. Sun X, et al. **Neuroreport** 1997 Mar 3;8(4):891–4

Metabotropic glutamate receptor mRNA expression in rat spinal cord. Valerio A, et al. **Neuroreport** 1997 Aug 18; 8(12):2695–9

Developmental expression of 5–HT7 receptor mRNA in rat brain visual structures after neonatal enucleation. Venero JL, et al. **Neuroreport** 1997 Apr 14;8(6):1531–5

Induction of cytolysin mRNA in glial cells by IFN–gamma: a possible cytotoxic pathway in the CNS. Xiao BG, et al. **Neuroreport** 1996 Dec 20;8(1):329–33

Induction of TrkA receptor by retinoic acid in leukaemia cell lines. Xie P, et al. **Neuroreport** 1997 Mar 24; 8(5):1067–70

Induction of brain–derived neurotrophic factor (BDNF) and the receptor trk B mRNA following middle cerebral artery occlusion in rat. Arai S, et al. **Neurosci Lett** 1996 Jun 14; 211(1):57–60

D2 dopamine receptor antisense increases the activity and mRNA of tyrosine hydroxylase and aromatic L–amino acid decarboxylase in mouse brain. Hadjiconstantinou M, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):105–8

The relative importance of premortem acidosis and postmortem interval for human brain gene expression studies: selective mRNA vulnerability and comparison with their encoded proteins. Harrison PJ, et al. **Neurosci Lett** 1995 Nov 24;200(3):151–4

ONO–1603, a potential antidementia drug, shows neuroprotective effects and increases m3–muscarinic receptor mRNA levels in differentiating rat cerebellar granule neurons. Katsube N, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):151–4

Changes in vasoactive intestinal peptide mRNA levels in the rat suprachiasmatic nucleus following p–chlorophenylalanine (PCPA) treatment under light/dark conditions. Kawakami F, et al. **Neurosci Lett** 1995 Nov 24;200(3):171–4

Leukemia inhibitory factor (LIF) mRNA–expressing neuronal subpopulations in adult rat basal forebrain. Lemke R, et al. **Neurosci Lett** 1997 Jun 20;229(1):69–71

Up–regulation of nitric oxide synthase and its mRNA in vagal motor nuclei following axotomy in rat. Lin LH, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):97–100

Rat fibroblast growth factor receptor–4 mRNA in the brain is preferentially expressed in cholinergic neurons in the medial habenular nucleus. Miyake A, et al. **Neurosci Lett** 1996 Jan 19;203(2):101–4

Expression and nocturnal increase of type II iodothyronine deiodinase mRNA in rat pineal gland. Murakami M, et al. **Neurosci Lett** 1997 May 9;227(1):65–7

Expression of apolipoprotein E mRNA in rat microglia. Nakai M, et al. **Neurosci Lett** 1996 Jun 14;211(1):41–4

Decrease in neuron–restrictive silencer factor (NRSF) mRNA levels during differentiation of cultured neuroblastoma cells. Nishimura E, et al. **Neurosci Lett** 1996 Jun 21;211(2):101–4

Developmental expression of 'RZR beta, a putative nuclear–melatonin receptor' mRNA in the suprachiasmatic nucleus of the rat. Park HT, et al. **Neurosci Lett** 1996 Oct 11;217(1):17–20

Intracerebroventricular administration of missense oligodeoxynucleotide induces interleukin–6 mRNA expression in brain and spleen of rats. Pezeshki G, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):97–100

Induction of cyclooxygenase–2 mRNA and protein following transient focal ischemia in the rat brain. Planas AM, et al. **Neurosci Lett** 1995 Nov 24;200(3):187–90

Streptozotocin–induced diabetes produces a decrease in pituitary substance P content and preprotachykinin mRNA. Rittenhouse PA, et al. **Neurosci Lett** 1996 Jun 21; 211(2):77–80

Dissociation of HSP72 and HSC73 heat shock mRNA inductions after spinal cord ischemia in rabbit. Sakurai M, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):113–6

Estrogen increases hypothalamic neuropeptide Y (NPY) mRNA expression in ovariectomized obese rat. Shimizu H, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):81–4

Expression of 5–HT7 receptor mRNA in rat brain during postnatal development. Vizuete ML, et al. **Neurosci Lett** 1997 May 9;227(1):53–6

Expression of glial cell line–derived growth factor mRNA in the spinal cord and muscle in amyotrophic lateral sclerosis. Yamamoto M, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):117–20

Transient decrease of HPC–1/syntaxin–1A mRNA in the rat hippocampus by kainic acid. Fujino I, et al. **Neurosci Res** 1997 Jul;28(3):243–7

Localization of dopamine receptors and associated mRNA in transplants of human fetal striatal tissue in rodents with experimental Huntington's disease. Pundt LL, et al. **Neurosci Res** 1997 Apr;27(4):305–15

Imipramine–induced increase in 5–HT2C receptor mRNA level in the rat brain. Tohda M, et al. **Neurosci Res** 1996 Jan;24(2):189–93

Phenotypic characterization of neurotensin messenger RNA–expressing cells in the neuroleptic–treated rat striatum: a detailed cellular co–expression study. Augood SJ, et al. **Neuroscience** 1997 Feb;76(3):763–74

Anabolic–androgenic steroid induced alterations in choline acetyltransferase messenger RNA levels of spinal cord motoneurons in the male rat. Blanco CE, et al. **Neuroscience** 1997 Jun;78(3):873–82

Transient expression of acetylcholinesterase messenger RNA and enzyme activity in developing rat thalamus studied by quantitative histochemistry and in situ hybridization. Brimijoin S, et al. **Neuroscience** 1996 Mar;71(2):555–65

The effects of clozapine and haloperidol on serotonin–1A, –2A and –2C receptor gene expression and serotonin metabolism in the rat forebrain. Burnet PW, et al. **Neuroscience** 1996 Jul;73(2):531–40

Na,K–ATPase: increases in alpha1–messenger RNA and decreases in alpha3–messenger RNA levels in aging rat cerebral cortex. Chauhan N, et al. **Neuroscience** 1997 May; 78(1):7–11

Unilateral nigrostriatal lesions induce a bilateral increase in glutamate decarboxylase messenger RNA in the reticular thalamic nucleus. Delfs JM, et al. **Neuroscience** 1996 Mar; 71(2):383–95

Opiate receptors modulate estrogen–induced cholecystokinin and tachykinin but not enkephalin messenger RNA levels in the limbic system and hypothalamus. Eckersell CB, et al. **Neuroscience** 1997 Sep;80(2):473–85

Effects of cholinergic denervation on seizure development and neurotrophin messenger RNA regulation in rapid hippocampal kindling. Ferencz I, et al. **Neuroscience** 1997 Sep;80(2):389–99

Excitotoxic lesion of rat brain with quinolinic acid induces expression of p53 messenger RNA and protein and p53–inducible genes Bax and Gadd–45 in brain areas showing DNA fragmentation. Hughes PE, et al. **Neuroscience** 1996 Oct;74(4):1143–60

Ligand–induced down–regulation of Trk messenger RNA, protein and tyrosine phosphorylation in rat cortical neurons. Knusel B, et al. **Neuroscience** 1997 Jun; 78(3):851–62

Seizure–induced differential expression of messenger RNAs for neurotrophins and their receptors in genetically fast and slow kindling rats. Kokaia Z, et al. **Neuroscience** 1996 Nov;75(1):197–207

Increased nerve growth factor inducible–A gene and c–fos messenger RNA levels in the rat midbrain and hindbrain associated with the cardiovascular response to electrical stimulation of the mesencephalic cuneiform nucleus. Lam W, et al. **Neuroscience** 1996 Mar;71(1):193–211

Pilocarpine–induced seizures are accompanied by a transient elevation in the messenger RNA expression of the prohormone convertase PC1 in rat hippocampus: comparison with nerve growth factor and brain–derived neurotrophic factor expression. Marcinkiewicz M, et al. **Neuroscience** 1997 Jan;76(2):425–39

Glutamate decarboxylase–67 messenger RNA expression in normal human basal ganglia and in Parkinson's disease. Nisbet AP, et al. **Neuroscience** 1996 Nov;75(2):389–406

Differential effects of acute and chronic electroconvulsive shock on the abundance of messenger RNAs for voltage–dependent potassium channel subunits in the rat brain. Pei Q, et al. **Neuroscience** 1997 May;78(2):343–50

Comparative study of the pattern of expression of calmodulin messenger RNAs in the mouse brain. Solà C, et al. **Neuroscience** 1996 Nov;75(1):245–56

Oxytocin and vasopressin mRNA expression in rat hypothalamus following kainic acid–induced seizures. Sun Q, et al. **Neuroscience** 1996 Mar;71(2):543–54

Antisense oligodeoxynucleotide to a delta–opioid receptor messenger RNA selectively blocks the antinociception induced by intracerebroventricularly administered delta–, but not mu–, epsilon– or kappa–opioid receptor agonists in the mouse. Wang HQ, et al. **Neuroscience** 1996 Nov; 75(2):445–52

Chronic corticosterone treatment induces parallel changes in N–methyl–D–aspartate receptor subunit messenger RNA levels and antagonist binding sites in the hippocampus. Weiland NG, et al. **Neuroscience** 1997 Jun;78(3):653–62

Differential distribution of glutamic acid decarboxylase–65 and glutamic acid decarboxylase–67 messenger RNAs in the entopeduncular nucleus of the rat. Yuan PQ, et al. **Neuroscience** 1997 May;78(1):87–97

Trimethyltin exposure in the rat induces delayed changes in brain–derived neurotrophic factor, fos and heat shock protein 70. Andersson H, et al. **Neurotoxicology** 1997; 18(1):147–59

Monomeric scAlu and nascent dimeric Alu RNAs induced by adenovirus are assembled into SRP9/14–containing RNPs in HeLa cells. Chang DY, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4165–70

A short CIC–2 mRNA transcript is produced by exon skipping. Chu S, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3453–7

Induction of gamma–glutamyl transpeptidase mRNA by platinum complexes in a human ovarian carcinoma cell line. el–akawi Z, et al. **Oncol Res** 1996;8(10–11):415–23

Angiotensinogen mRNA is synthesized locally in rat ocular tissues. Murata M, et al. **Ophthalmologica** 1997;211(5):301–4

Quantitative reverse transcription polymerase chain reaction shows that ethanol enhances interleukin–6 mRNA expression in cultured mesangial cells. Meleg–Smith S, et al. **Pathobiology** 1995;63(5):265–9

Three variants of parathyroid hormone–related protein messenger RNA are expressed in human mammary gland. Andersson Y, et al. **Pediatr Res** 1997 Mar;41(3):380–3

Antilipolytic effect of insulin and insulin receptor messenger

RNA expression in adipocytes of infants, children, and adults. Kamel A, et al. **Pediatr Res** 1997 Apr;41(4 Pt 1):563–7

Evidence for expression of vasopressin V2 receptor mRNA in human lung. Fay MJ, et al. **Peptides** 1996;17(3):477–81

Streptozotocin–induced diabetes is associated with altered expression of peptide–encoding mRNAs in rat sensory neurons. Rittenhouse PA, et al. **Peptides** 1996;17(6):1017–22

Application of the nonradioactive in situ hybridization for the localization of acetylcholinesterase mRNA in the central nervous system of the rat; comparison to the radioactive technique. Kreft S, et al. **Pflugers Arch** 1996; 431(6 Suppl 2):R309–10

Role of calcium in stretch–induced release and mRNA synthesis of natriuretic peptides in isolated rat atrium. Laine M, et al. **Pflugers Arch** 1996 Oct;432(6):953–60

Increased expression of cholecystokinin–A receptor mRNA in pancreas and cholecystokinin–B receptor mRNA in oxyntic mucosa after porta–caval shunting in rats. Nylander AG, et al. **Pharmacol Toxicol** 1997 Mar;80(3):147–51

Human placental norepinephrine transporter mRNA: expression and correlation with fetal condition at birth. Bzoskie L, et al. **Placenta** 1997 Mar–Apr;18(2–3):205–10

Genetic regulation of placental function: a quantitative in situ hybridization study of calcium binding protein (calbindin–D9k) and calcium ATPase mRNAs in sheep placenta. Morgan G, et al. **Placenta** 1997 Mar–Apr; 18(2–3):211–8

Eucalypt alpha–tubulin: cDNA cloning and increased level of transcripts in ectomycorrhizal root system. Diaz EC, et al. **Plant Mol Biol** 1996 Jul;31(4):905–10

Molecular analysis of glomerular diseases in renal biopsies: initial results of a collaborative international study. The International Study Group for Molecular Study of Kidney Biopsies. Esposito C, et al. **Proc Assoc Am Physicians** 1996 May;108(3):209–17

Chick pineal clock regulates serotonin N–acetyltransferase mRNA rhythm in culture. Bernard M, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):304–9

Characterization and tissue–specific expression of the rat basic fibroblast growth factor antisense mRNA and protein. Knee R, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):4943–7

Use of engineered ribozymes to catalyze chimeric gene assembly. Mikheeva S, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7486–90

In situ hybridization analysis of presenilin 1 mRNA in Alzheimer disease and in lesioned rat brain. Page K, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14020–4

Identification of an alternative form of human lactoferrin mRNA that is expressed differentially in normal tissues and tumor–derived cell lines. Siebert PD, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2198–203

Evolutionary conservation of sequence elements controlling cytoplasmic polyadenylylation. Verrotti AC, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9027–32

Marked increases in neuronal nitric oxide synthase (nNOS) mRNA and NADPH–diaphorase histostaining in adrenal cortex after immobilization stress in rats. Tsuchiya T, et al. **Psychoneuroendocrinology** 1996 Apr;21(3):287–93

Differential induction of mRNA expression of cytochromes P450 (CYP2B1 and CYP1A1/2) by metyrapone in primary rat hepatocyte cultures. Aubrecht J, et al. **Res Commun Mol Pathol Pharmacol** 1996 Oct;94(1):47–61

CYP2D6 mRNA expression in circulating peripheral blood mononuclear cells correlates with in vivo debrisoquine hydroxylase activity in extensive metabolizers. Carcillo JA, et al. **Res Commun Mol Pathol Pharmacol** 1996 Feb; 91(2):149–159

Rapid induction of hepatocyte growth factor mRNA after administration of gomisin A, a lignan component of shizandra fruits. Shiota G, et al. **Res Commun Mol Pathol Pharmacol** 1996 Nov;94(2):141–6

The pattern of production of cytokine mRNAs is markedly altered at the onset of multiple sclerosis. Musette P, et al. **Res Immunol** 1996 Sep;147(7):435–41

Increased expression of tumor necrosis factor–alpha, interleukin–6, platelet–derived growth factor–B and granulocyte–macrophage colony–stimulating factor mRNA in cells of bronchoalveolar lavage fluids from patients with sarcoidosis. Ishioka S, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep;13(2):139–45

Reduced expression of the interferon–gamma messenger RNA in IgG2 deficiency. Kondo N, et al. **Scand J Immunol** 1997 Feb;45(2):227–30

Expression and regulation of constitutive and acute phase serum amyloid A mRNAs in hepatic and non–hepatic cell lines. Steel DM, et al. **Scand J Immunol** 1996 Nov; 44(5):493–500

Altered IL–1 beta and IL–2 mRNA expression in murine splenic cells after concomitant stimulation by Semliki Forest virus and lipopolysaccharide. Yang J, et al. **Scand J Immunol** 1997 Apr;45(4):349–53

MutT prevents leakiness [comment] Bridges BA. **Science** 1997 Oct 3;278(5335):78–9. Comment on: Science 1997 Oct 3;278(5335):128–30.

How the nucleus gets it together [news] Pennisi E. **Science** 1997 Jun 6;276(5318):1495–7

Counteraction by MutT protein of transcriptional errors caused by oxidative damage [see comments] Taddei F, et al. **Science** 1997 Oct 3;278(5335):128–30. Comment in: Science 1997 Oct 3;278(5335):78–9.

Distribution of hippocampal mineralocorticoid and glucocorticoid receptor mRNA in a glucocorticoid resistant nonhuman primate. Johnson EO, et al. **Steroids** 1996 Feb;61(2):69–73

Regulation of brain capillary endothelial thrombomodulin mRNA expression. Tran ND, et al. **Stroke** 1996 Dec; 27(12):2304–10; discussion 2310–1

Modulation of a cardiogenic shock inducible RNA by chemical stress: adapt73/PigHep3. Crawford DR, et al. **Surgery** 1997 May;121(5):581–7

Amphetamine–induced c–fos mRNA expression is altered in rats with neonatal ventral hippocampal damage. Lillrank SM, et al. **Synapse** 1996 Aug;23(4):292–301

Repeated amphetamine administration alters the expression of mRNA for AMPA receptor subunits in rat nucleus accumbens and prefrontal cortex. Lu W, et al. **Synapse** 1997 Jul;26(3):269–80

Up–regulation of D3 dopamine receptor mRNA by neuroleptics. Wang W, et al. **Synapse** 1996 Jul;23(3):232–5

Contrasting effects of repeated treatment vs. withdrawal of methamphetamine on tyrosine hydroxylase messenger RNA levels in the ventral tegmental area and substantia nigra zona compacta of the rat brain. Zhang Y, et al. **Synapse** 1996 Nov;24(3):218–23

Decreased expression of PAI–2 mRNA and protein in pregnancies complicated with intrauterine fetal growth retardation. Grancha S, et al. **Thromb Haemost** 1996 Nov; 76(5):761–7

Differential cytokine mRNA expression in mice after oral exposure to the trichothecene vomitoxin (deoxynivalenol): dose response and time course. Zhou HR, et al. **Toxicol Appl Pharmacol** 1997 Jun;144(2):294–305

Inhibition of increases of transcription factor mRNAs during differentiation of primary rat adipocytes by in vivo 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD) treatment. Brodie AE, et al. **Toxicol Lett** 1997 Feb 7;90(2–3):91–5

Expression of MT–3 mRNA in human kidney, proximal tubule cell cultures, and renal cell carcinoma. Hoey JG, et al. **Toxicol Lett** 1997 Jul 21;92(2):149–60

Lack of correlation between the inducibility of metallothionein mRNA and metallothionein protein in cadmium–exposed rodents. Misra RR, et al. **Toxicology** 1997 Feb 28;117(2–3):99–109

Intragraft cytokine and growth factor mRNA expression in relation to graft vascular disease after heart transplantation. Baan CC, et al. **Transplant Proc** 1997 Sep;29(6):2535–6

Steroid resistance in clinical heart transplantation: the role of simultaneous IL–2 and IL–4 mRNA expression. Baan CC, et al. **Transplant Proc** 1996 Dec;28(6):3239–40

Expression of E–cadherin and alpha– and beta–catenin mRNAs in uterine cervical cancers. Fujimoto J, et al. **Tumour Biol** 1997;18(4):206–12

Ccmparative study on expression of plasminogen activator inhibitor 1 and its mRNA in endometrial cancers and normal endometria. Fujimoto J, et al. **Tumour Biol** 1997; 18(1):13–21

Differential gene expression of transforming growth factors alpha and beta, epidermal growth factor, keratinocyte growth factor, and their receptors in fetal and adult human prostatic tissues and cancer cell lines. Dahiya R, et al. **Urology** 1996 Dec;48(6):963–70

Progelatinase A mRNA expression in cell lines derived from tumors in patients with metastatic renal cell carcinoma correlates inversely with survival. Walther MM, et al. **Urology** 1997 Aug;50(2):295–301

Interferon activity of mitogen–induced chicken splenic lymphocytes which do not express interferon mRNA. Agarwal SK, et al. **Vet Immunol Immunopathol** 1996 Oct; 53(3–4):269–75

Molecular cloning and mRNA expression of porcine interleukin–12. Foss DL, et al. **Vet Immunol Immunopathol** 1997 Jun;57(1–2):121–34

Aberrant expression of immunoglobulin mRNA in bovine leukemia virus–infected cattle. Teutsch MR, et al. **Vet Immunol Immunopathol** 1996 Sep;53(1–2):87–94

Characterization of host range factor 1 (hrf–1) expression in Lymantria dispar M nucleopolyhedrovirus– and recombinant Autographa californica M nucleopolyhedrovirus–infected IPLB–Ld652Y cells. Du X, et al. **Virology** 1997 Jan 20;227(2):420–30

Sin Nombre virus mRNA synthesis. Hutchinson KL, et al. **Virology** 1996 Oct 1;224(1):139–49

Early region 4 modulates adenovirus DNA replication by two genetically separable mechanisms. Medghalchi S, et al. **Virology** 1997 Sep 15;236(1):8–17

Kinetics of cytokine mRNA expression in the central nervous system following lethal and nonlethal coronavirus–induced acute encephalomyelitis. Parra B, et al. **Virology** 1997 Jul 7;233(2):260–70

A proposed mechanism of mRNA synthesis and capping by vesicular stomatitis virus. Shuman S. **Virology** 1997 Jan 6;227(1):1–6 (41 ref.)

Human immunodeficiency virus type–1 mRNA splicing pattern in infected persons is determined by the proportion of newly infected cells. Vesanen M, et al. **Virology** 1997 Sep 15;236(1):104–9

Expression of opsin mRNA in normal and vitamin A deficient retinas of the sphingid moth Manduca sexta. Chase MR, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):353–8

Ontogeny of preproenkephalin mRNA expression in the rat retina. Isayama T, et al. **Vis Neurosci** 1996 Jul–Aug; 13(4):695–704

[The radiobiologic characteristics of DNA polymerase beta in hepatomas] Cai J, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan;18(1):20–2 (Eng. Abstr.) **(Chi)**

[Expression of c–myc gene and biosynthesis of biological macromolecules in antisense transfectant HLR60–9] Li Y, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan;18(1):16–9 (Eng. Abstr.) **(Chi)**

[Expression of IL–8 mRNA in glomerular endothelial cells] Chen X, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jun; 76(6):420–2 (Eng. Abstr.) **(Chi)**

[Expression of insulin–like growth factor–I gene in normal and diabetic rat eye] Liu S, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Jul;31(4):291–5 (Eng. Abstr.) **(Chi)**

[Messenger RNA expression of alternatively spliced CS–1 fibronectin isoforms in Rheumatoid arthritis (RA) synovium] Müller–Ladner U, et al. **Verh Dtsch Ges Pathol** 1996;80:329 **(Ger)**

[Unique mechanism of coronavirus mRNA transcription] Tsukamoto K. **Uirusu** 1996 Dec;46(2):99–107 (41 ref.) **(Jpn)**

BLOOD

mRNA expression, measured by quantitative reverse transcriptase polymerase chain reaction, of five putative drug resistance parameters, in normal and leukaemic peripheral blood and bone marrow. Lohri A, et al. **Acta Haematol** 1997;98(1):1–7

Relative levels of alpha–, beta–, and gamma–mRNA from patients with severe and intermediate beta–thalassemia major. Smetanina NS, et al. **Acta Haematol** 1997; 97(4):205–10

T–lymphocyte cytokine mRNA expression in cystic echinococcosis. Fauser S, et al. **Acta Trop** 1997 Apr 1; 64(1–2):35–51

Semiquantification of circulating hepatocellular carcinoma cells by reverse transcriptase polymerase chain reaction. Wong IH, et al. **Br J Cancer** 1997;76(5):628–33

Ascorbic acid augments the adenylyl cyclase–cAMP system mediated POMC mRNA expression and beta–endorphin secretion from hypothalamic neurons in culture. Yang Z, et al. **Brain Res** 1996 Jan 15;706(2):243–8

Polymerase chain reaction analysis of TNF–alpha and IL–6 mRNA levels in whole blood from cattle naturally or experimentally infected with Mycobacterium paratuberculosis. Adams JL, et al. **Can J Vet Res** 1996 Oct; 60(4):257–62

Quantitative analysis of cytokine mRNA expression in peripheral blood mononuclear cells following treatment with interleukin–2. Adachi M, et al. **Cancer Immunol Immunother** 1997 Aug;44(6):329–34

Improved reverse transcriptase–polymerase chain reaction protocol with exogenous internal competitive control for prostate–specific antigen mRNA in blood and bone marrow. Corey E, et al. **Clin Chem** 1997 Mar;43(3):443–52

Increased levels of IL–13 mRNA, but not IL–4 mRNA, are found in vivo in peripheral blood mononuclear cells (PBMC) of patients with atopic dermatitis (AD). Katagiri K, et al. **Clin Exp Immunol** 1997 May;108(2):289–94

A semi–quantitative reverse transcriptase polymerase chain reaction method for measurement of MRNA for TNF–alpha and IL–1 beta in whole blood cultures: its application in typhoid fever and exentric exercise. Netea MG, et al. **Cytokine** 1996 Sep;8(9):739–44

Quantification of IL–2 and IL–2 receptor mRNA in peripheral blood mononuclear cells by the RT–PCR based SHARP Signal system. Lee BN, et al. **Cytokines Cell Mol Ther** 1997 Mar;3(1):33–40

Alpha–, beta–, and gamma–mRNA levels in beta–thalassemia; transcriptional and translational differences in heterozygotes, homozygotes, and compound heterozygotes. Smetanina NS, et al. **Hemoglobin** 1997 Jan; 21(1):27–39

Lack of specificity of albumin–mRNA–positive cells as a marker of circulating hepatoma cells. Müller C, et al. **Hepatology** 1997 Apr;25(4):896–9

Detection of pancreatic and gastric cancer cells in peripheral and portal blood by amplification of keratin 19 mRNA with reverse transcriptase–polymerase chain reaction. Aihara T, et al. **Int J Cancer** 1997 Jul 29;72(3):408–11

Identification of the truncated Duffy mRNAs in erythroid cells. Omi T, et al. **Int J Hematol** 1997 Aug;66(2):153–8

Abnormal expression of epidermal growth factor and sulfated glycoprotein SGP–2 messenger RNA in a rat model of autosomal dominant polycystic kidney disease. Cowley BD Jr, et al. **J Am Soc Nephrol** 1995 Dec;6(6):1679–81

Quantification of vitamin D receptor mRNA by competitive polymerase chain reaction in PBMC: lack of correspondence with common allelic variants. Mocharla H, et al. **J Bone Miner Res** 1997 May;12(5):726–33

Detection of circulating melanoma cells by specific amplification of tyrosinase complementary DNA is not a reliable tumor marker in melanoma patients: a clinical two–center study. Gläser R, et al. **J Clin Oncol** 1997 Aug; 15(8):2818–25

Evaluation of tyrosinase mRNA as a tumor marker in the blood of melanoma patients. Jung FA, et al. **J Clin Oncol** 1997 Aug;15(8):2826–31

Detection of human papillomavirus mRNA and cervical cancer cells in peripheral blood of cervical cancer patients with metastasis. Pao CC, et al. **J Clin Oncol** 1997 Mar;

15(3):1008–12
Quantitative analysis of ferrochelatase mRNA in blood cells of erythropoietic protoporphyria patients. Takamiyagi A, et al. **J Dermatol Sci** 1996 Feb;11(2):154–60
Induction of IL-15 messenger RNA and protein in human blood-derived dendritic cells: a role for IL-15 in attraction of T cells. Jonuleit H, et al. **J Immunol** 1997 Mar 15; 158(6):2610–5
Identification of serotonin transporter mRNA in rat platelets. Hranilović D, et al. **J Neural Transm** 1996;103(8–9):957–65
Detection of circulating albumin-mRNA by RT-PCR does not indicate metastasizing hepatocellular carcinoma. Leonhardt U, et al. **Langenbecks Arch Chir** 1997; 382(2):83–6
Evidence for tryptophan hydroxylase and hydroxy-indol-O-methyl-transferase mRNAs in human blood platelets. Champier J, et al. **Life Sci** 1997; 60(24):2191–7
Detection of colorectal carcinoma cells in circulating peripheral blood by reverse transcription-polymerase chain reaction targeting cytokeratin-20 mRNA. Funaki NO, et al. **Life Sci** 1997;60(9):643–52
Identification of carcinoembryonic antigen mRNA in circulating peripheral blood of pancreatic carcinoma and gastric carcinoma patients. Funaki NO, et al. **Life Sci** 1996; 59(25–26):2187–99

CHEMISTRY

Reduced formamide content and hybridization temperature results in increased non-radioactive mRNA in situ hybridization signals [published erratum appears in Acta Histochem 1996 Apr;98(2):156] Berndt A, et al. **Acta Histochem** 1996 Jan;98(1):79–87
Analysis of human immunodeficiency virus type 1 mRNA splicing patterns during disease progression in peripheral blood mononuclear cells from infected individuals. Saltarelli MJ, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1443–56
Glucocorticoids increase fatty-acid synthase mRNA stability in fetal rat lung. Xu ZX, et al. **Am J Physiol** 1997 May; 272(5 Pt 1):L860–4
Quantitative reverse transcriptase polymerase chain reaction for measuring the N-methylpurine-DNA glycosylase mRNA level in rodent cells. Roy G, et al. **Anal Biochem** 1997 Mar 1;246(1):45–51
Bias in nucleotide composition of antisense oligonucleotides. Smetsers TF, et al. **Antisense Nucleic Acid Drug Dev** 1996 Spring;6(1):63–7
An in vitro messenger RNA binding assay as a tool for identifying hybridization-competent antisense oligonucleotides. Stull RA, et al. **Antisense Nucleic Acid Drug Dev** 1996 Fall;6(3):221–8
Novel heterogeneity exists in the 5'-untranslated region of the beta-galactoside alpha 2,6-sialytransferase mRNAs in the human B-lymphoblastoid cell line, louckes. Lo NW, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):380–5
Structure and function of the iron-responsive element from human ferritin L chain mRNA. Mikulits W, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):212–6
Two forms of avian(chicken) TATA-binding protein mRNA generated by alternative polyadenylation. Yamauchi J, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):406–11
Modeling the structure of the ribosome. Easterwood TR, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):751–6 (35 ref.)
An oligonucleotide analog approach to the decoding region of 16S rRNA. Stern S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):899–905 (19 ref.)
Effect of genotype on the levels of surfactant protein A mRNA and on the SP-A2 splice variants in adult humans. Karinch AM, et al. **Biochem J** 1997 Jan 1;321 (Pt 1):39–47
Comparison of the mRNA sequences for Pi class glutathione transferases in different hamster species and the corresponding enzyme activities with anti-benzo[a]pyrene-7,8-dihydrodiol 9,10-epoxide. Swedmark S, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):533–8
Control of complexity constraints on combinatorial screening for preferred oligonucleotide hybridization sites on structured RNA. Bruice TW, et al. **Biochemistry** 1997 Apr 22;36(16):5004–19
The divergent 5' termini of the alpha human folate receptor (hFR) mRNAs originate from two tissue-specific promoters and alternative splicing: characterization of the alpha hFR gene structure. Elwood PC, et al. **Biochemistry** 1997 Feb 11;36(6):1467–78
A model of the iron responsive element RNA hairpin loop structure determined from NMR and thermodynamic data. Laing LG, et al. **Biochemistry** 1996 Oct 22;35(42):13586–96
Detection of inosine in messenger RNA by inosine-specific cleavage. Morse DP, et al. **Biochemistry** 1997 Jul 15; 36(28):8429–34
Probing the 3' UTR structure of U1A mRNA and footprinting analysis of its complex with U1A protein. Teunissen SW, et al. **Biochemistry** 1997 Feb 18;36(7):1782–9
Protein environment of mRNA at the decoding site of 80S ribosomes from human placenta as revealed from affinity labeling with mRNA analogs--derivatives of oligoribonucleotides. Bulygin KN, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):325–32
Sequence specific binding of cytosolic proteins to a 12 nucleotide sequence in the 5' untranslated region of FMR1 mRNA. Iber H. **Biochim Biophys Acta** 1996 Dec 11; 1309(3):167–73
Immunoglobin variable-region mRNA direct sequencing: a method to bypass aberrant myeloma light-chain transcripts. Jovelin F, et al. **Biotechniques** 1996 Oct;21(4):576, 578, 580
Shortening of poly (A) tail of glucose transporter--one mRNA in experimental diabetes mellitus. Shah GN, et al. **Brain Res** 1997 Apr 18;754(1–2):213–20
Translational recoding induced by G-rich mRNA sequences that form unusual structures. Horsburgh BC, et al. **Cell** 1996 Sep 20;86(6):949–59
Cyclin A message stability varies with the cell cycle. Maity A, et al. **Cell Growth Differ** 1997 Mar;8(3):311–8
Organization of protein and mRNA for titin and other myofibril components during myofibrillogenesis in cultured chicken skeletal muscle. Fulton AB, et al. **Cell Struct Funct** 1997 Feb;22(1):51–8
Databases of mRNA untranslated regions for metazoa. Pesole G, et al. **Comput Chem** 1996 Mar;20(1):141–4
RNA-RNA interaction is required for the formation of specific bicoid mRNA 3' UTR-STAUFEN ribonucleoprotein particles. Ferrandon D, et al. **EMBO J** 1997 Apr 1;16(7):1751–8
Identification of structural elements critical for inter-domain interactions in a group II self-splicing intron. Jestin JL, et al. **EMBO J** 1997 May 15;16(10):2945–54
Localization of ribosomal RNA and Pbs21-mRNA in the sexual stages of Plasmodium berghei using electron microscope in situ hybridization. Shaw MK, et al. **Eur J Cell Biol** 1996 Nov;71(3):270–6
In vitro virus: bonding of mRNA bearing puromycin at the 3'-terminal end to the C-terminal end of its encoded protein on the ribosome in vitro. Nemoto N, et al. **FEBS Lett** 1997 Sep 8;414(2):405–8
Minilibraries constructed from cDNA generated by arbitrarily primed RT-PCR: an alternative to normalized libraries for the generation of ESTs from nanogram quantities of mRNA. Neto ED, et al. **Gene** 1997 Feb 20; 186(1):135–42
Recharacterization of the start sites for the major human transforming growth factor-beta 1 mRNA. Romeo D, et al. **Gene** 1997 Apr 21;189(2):289–95
Characterization of mouse fibronectin alternative mRNAs reveals an unusual isoform present transiently during liver developn.ent. Górski GK, et al. **Gene Expr** 1996; 6(3):139–49
Simultaneous ultrastructural identification of growth hormone and its messenger ribonucleic acid using combined immunohistochemistry and non-radioisotopic in situ hybridization: a technical note. Matsuno A, et al. **Histochem J** 1996 Oct;28(10):703–7
A different transformation. Hinton R. **Hum Exp Toxicol** 1996 Jun;15(6):541–3
Polymorphism in the 5' terminal region of the mRNA of HLA-DQA1 gene: identification of four groups of transcripts and their association with polymorphism in the alpha 1 domain. Maffei A, et al. **Hum Immunol** 1997 Apr 1;53(2):167–73
Nematode spliced leaders--ubiquity, evolution and utility. Blaxter M, et al. **Int J Parasitol** 1996 Oct;26(10):1025–33 (51 ref.)
Transcription termination by vaccinia RNA polymerase entails recognition of specific phosphates in the nascent RNA. Deng L, et al. **J Biol Chem** 1997 Jan 3;272(1):695–8
The position dependence of translational regulation via RNA-RNA and RNA-protein interactions in the 5'-untranslated region of eukaryotic mRNA is a function of the thermodynamic competence of 40 S ribosomes in translational initiation. Koloteva N, et al. **J Biol Chem** 1997 Jun 27;272(26):16531–9
Ribosome concentration contributes to discrimination against poly(A)- mRNA during translation initiation in Saccharomyces cerevisiae. Proweller A, et al. **J Biol Chem** 1997 Feb 28;272(9):6004–10
Evidence that a specific interaction between an 18-base cis-element in the 5'-untranslated region of human folate receptor-alpha mRNA and a 46-kDa cytosolic trans-factor is critical for translation. Sun XL, et al. **J Biol Chem** 1996 Oct 11;271(41):25539–47
Alternative splicing in COL1A1 mRNA leads to a partial null allele and two In-frame forms with structural defects in non-lethal osteogenesis imperfecta. Wang Q, et al. **J Biol Chem** 1996 Nov 8;271(45):28617–23
Cloning and sequencing of complete thyrotropin receptor transcripts in pretibial fibroblast culture cells. Wu SL, et al. **J Endocrinol Invest** 1996 Jun;19(6):365–70
Mutation screening of MSH2 and MLH1 mRNA in hereditary non-polyposis colon cancer syndrome. Froggatt NJ, et al. **J Med Genet** 1996 Sep;33(9):726–30
Multiple tertiary interactions involving domain II of group II self-splicing introns. Costa M, et al. **J Mol Biol** 1997 Apr 4;267(3):520–36
Effects of Mg2+, K+, and H+ on an equilibrium between alternative conformations of an RNA pseudoknot. Gluick TC, et al. **J Mol Biol** 1997 Jul 18;270(3):451–63
Structural probing and mutagenic analysis of the stem-loop required for Escherichia coli dnaX ribosomal frameshifting: programmed efficiency of 50%. Larsen B, et al. **J Mol Biol** 1997 Aug 8;271(1):47–60
Filamentous phage IKe mRNAs conserve form and function despite divergence in regulatory elements. Stump MD, et al. **J Mol Biol** 1997 Feb 14;266(1):51–65
Selection of a nonconsensus branch point is influenced by an RNA stem-loop structure and is important to confer stability to the herpes simplex virus 2-kilobase latency-associated transcript. Krummenacher C, et al. **J Virol** 1997 Aug;71(8):5849–60
Multiple forms of messenger ribonucleic acid encoding glycodelin in male genital tract. Koistinen H, et al. **Lab Invest** 1997 May;76(5):683–90
Trypanosoma cruzi strains partition into two groups based on the structure and function of the spliced leader RNA and rRNA gene promoters. Nunes LR, et al. **Mol Biochem Parasitol** 1997 Jun;86(2):211–24
Two distinct regions in the 3' untranslated region of tumor necrosis factor alpha mRNA form complexes with macrophage proteins. Hel Z, et al. **Mol Cell Biol** 1996 Oct; 16(10):5579–90
Identification of mRNAs differentially expressed in quiescence or in late G1 phase of the cell cycle in human breast cancer cells by using the differential display method. Alpan RS, et al. **Mol Med** 1996 Jul;2(4):469–78
Antitermination of transcription of catabolic operons. Rutberg B. **Mol Microbiol** 1997 Feb;23(3):413–21 (71 ref.)
Three-dimensional visualization of mRNA release from actively transcribing rotavirus particles [letter] Lawton JA, et al. **Nat Struct Biol** 1997 Feb;4(2):118–21
Identification of proteins binding specifically to the 3'-untranslated region of granulocyte/macrophage-colony stimulating factor mRNA. Bichsel VE, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2417–23
An NMR and mutational study of the pseudoknot within the gene 32 mRNA of bacteriophage T2: insights into a family of structurally related RNA pseudoknots. Du Z, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1130–5
Identification of two proteins that bind to a pyrimidine-rich sequence in the 3'-untranslated region of GAP-43 mRNA. Irwin N, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1281–8
Logitlinear models for the prediction of splice sites in plant pre-mRNA sequences. Kleffe J, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4709–18
A common RNA structural motif involved in the internal initiation of translation of cellular mRNAs. Le SY, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):362–69
Structure of translation initiation region of c-myc mRNA and thermostability of the c-myc mRNA/antisense ODN complex. Tanaka T, et al. **Nucleic Acids Symp Ser** 1995; (34):135–6
Discontinuous translation and mRNA secondary structure. Zama M. **Nucleic Acids Symp Ser** 1995;(34):97–8
A cytokine mRNA-destabilizing element that is structurally and functionally distinct from A+U-rich elements. Brown CY, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13721–5
The role of mRNA stability in the control of globin gene expression. Russell JE, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:249–87 (99 ref.)
Probing the structure of the Escherichia coli 10Sa RNA (tmRNA). Felden B, et al. **RNA** 1997 Jan;3(1):89–103
Kissing loops hide premature termination codons in pre-mRNA of selenoprotein genes and in genes containing programmed ribosomal frameshifts [letter] Knudsen S, et al. **RNA** 1997 Jul;3(7):697–701
Phylogenetic analysis of tmRNA secondary structure. Williams KP, et al. **RNA** 1996 Dec;2(12):1306–10
Role of extracellular matrix in experimental vasospasm. Inhibitory effect of antisense oligonucleotide on collagen induction. Onoda K, et al. **Stroke** 1996 Nov;27(11):2102–8; discussion 2108–9
mRNA encoding human thyroglobulin's C-terminus is heterogeneous. Mason ME, et al. **Thyroid** 1996 Dec; 6(6):633–7
Termini of all mRNA species of Marburg virus: sequence and secondary structure. Mühlberger E, et al. **Virology** 1996 Sep 15;223(2):376–80
[Protein environment of matrices in the decoding region of 80S ribosomes from human placenta from data of affinity modification of mRNA analogs--oligoribonucleotide derivative] Bulygin KN, et al. **Mol Biol (Mosk)** 1996 Mar-Apr;30(2):400–9 **(Rus)**

DRUG EFFECTS

Expression of mRNA for gastrin-releasing peptide receptor by human bronchial epithelial cells. Association with prolonged tobacco exposure and responsiveness to bombesin-like peptides. Siegfried JM, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):358–66
Oligonucleotide analogs might be designed to bind to m-RNA. Crooke ST. **Anticancer Drug Des** 1997 Jul; 12(5):311–3 (13 ref.)
Sequence specific antisense oligonucleotide analog interference with spermidine/spermine N1-acetyltransferase gene expression. Fogel-Petrovic M, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2517–23
Effects of verapamil and S9788 on MDR-1 mRNA expression studied by in situ hybridization. Joly P, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3609–14
Effects of liposomal antisense oligonucleotides on mRNA and protein levels of the HPV 16 E7 oncogene. Lappalainen K, et al. **Anticancer Res** 1996 Sep-Oct; 16(5A):2485–92
Specific suppression of human tumor necrosis factor-alpha synthesis by antisense oligodeoxynucleotides. Hartmann G,

et al. **Antisense Nucleic Acid Drug Dev** 1996 Winter; 6(4):291–9

Inhibition of rheumatoid synovial fibroblast proliferation by antisense oligonucleotides targeting proliferating cell nuclear antigen messenger RNA. Morita Y, et al. **Arthritis Rheum** 1997 Jul;40(7):1292–7

Leptin inhibits insulin secretion and reduces insulin mRNA levels in rat isolated pancreatic islets. Pallett AL, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):267–70

Cleavage of 16S rRNA within the ribosome by mRNA modified in the A-site codon with phenanthroline–Cu(II). Bucklin DJ, et al. **Biochemistry** 1997 Jul 1;36(26):7951–7

A hypothesis to explain why translation inhibitors stabilize mRNAs in mammalian cells: mRNA stability and mitosis. Ross J. **Bioessays** 1997 Jun;19(6):527–9 (18 ref.)

Effect of pentylenetetrazol on the expression of tyrosine hydroxylase mRNA and norepinephrine and dopamine transporter mRNA. Szot P, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):46–54

Rapid induction of Fas antigen mRNA expression in vivo by cycloheximide. Kimura K, et al. **Cell Biochem Funct** 1997 Jun;15(2):81–6

Infusions of tyrosine hydroxylase antisense oligodeoxynucleotide into substantia nigra of the rat: effects on tyrosine hydroxylase mRNA and protein content, striatal dopamine release and behaviour. Skutella T, et al. **Eur J Neurosci** 1997 Feb;9(2):210–20

Monooxygenation, cytochrome P4501A1 and P4501A1–mRNA in rat liver slices exposed to beta-naphthoflavone and dexamethasone in vitro. Müller D, et al. **Exp Toxicol Pathol** 1996 Jul;48(5):433–8

Herbimycin A down-regulates messages of cyclin D1 and c-myc during erythroid differentiation of K562 cells. Yamada H, et al. **Int J Hematol** 1996 Dec;65(1):31–40

Oral administration of muramyl dipeptide into mice modulates cell proliferation, immunoglobulin synthesis and cytokine mRNA levels in gut associated lymphoid tissues. Zunić M, et al. **Int J Immunopharmacol** 1996 Feb; 18(2):155–62

Regulation of ICAM-1 mRNA stability by cycloheximide: role of serine/threonine phosphorylation and protein synthesis. Ohh M, et al. **J Cell Biochem** 1995 Oct; 59(2):202–13

Effects of GH and IGF-I administration on GHRH and somatostatin mRNA levels: I. A study on ad libitum fed and starved adult male rats. Ghigo MC, et al. **J Endocrinol Invest** 1997 Mar;20(3):144–50

Effects of GH and IGF-I administration on GHRH and somatostatin mRNA levels: II. A study in the infant rat. Grilli R, et al. **J Endocrinol Invest** 1997 Mar;20(3):151–4

Angiotensinogen messenger RNA stabilization by angiotensin II. Klett CP, et al. **J Hypertens Suppl** 1996 Dec; 14(5):S25–36

The effect of sodium lauryl sulphate on the expression of cytokeratin mRNA in hamster cheek pouch epithelium. Baert JH, et al. **J Oral Pathol Med** 1996 Oct;25(9):497–501

Differences that show up in translation [news] O'Brien C. **Mol Med Today** 1996 Feb;2(2):49

Multiple signalling pathways trigger the exquisite sensitivity of yeast gluconeogenic mRNAs to glucose. Yin Z, et al. **Mol Microbiol** 1996 May;20(4):751–64

Dexamethasone up-regulates mRNA for Na+,K(+)-ATPase in some spinal cord neurones after cord transection. Gonzalez S, et al. **Neuroreport** 1996 Apr 10;7(5):1041–4

The antisense bcl-2-IgH transcript is an optimal target for synthetic oligonucleotides. Morelli S, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8150–5

[Ribozyme targeting reduces erb-B2 expression of SKOV3 carcinoma cells and inhibits tumor growth in vivo] Juhl H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:41–5 (Eng. Abstr.) **(Ger)**

GENETICS

Local expression of migration inhibitory factor and Th1 type cytokine mRNA in sporotrichosis lesions [letter] Fujimura T, et al. **Acta Derm Venereol** 1996 Jul;76(4):321–2

Positive identification in situ of mRNA expression of IL-6, and IL-12, and the chemotactic cytokine RANTES in patients with chronic sinusitis and polypoid disease. Clinical relevance and relation to allergy. Davidsson A, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):604–10

Macrophage inflammatory protein-1 alpha mRNA expression in mononuclear cells from different tissues during acute simian immunodeficiency virus strain mac251 infection of macaques [letter] Chéret A, et al. **AIDS** 1997 Feb;11(2):257–8

Expression of gamma-glutamyl transpeptidase mRNA after depletion of glutathione in rat liver. Moriya S, et al. **Alcohol Alcohol** 1994;29 Suppl 1:107–11

GABAA and NMDA receptor subunit mRNA expression in ethanol dependent rats. Morrow AL, et al. **Alcohol Alcohol Suppl** 1994;2:89–95

Chronic ethanol downregulates Gal-beta-1,4GlcNAc alpha 2,6-sialyltransferase and Gal-beta-1,3GlcNAc alpha 2,3-sialyltransferase mRNAs in rat liver. Rao MN, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):348–51

Time course of inhibition of hypertension by antisense oligonucleotides targeted to AT1 angiotensin receptor mRNA in spontaneously hypertensive rats. Gyurko R, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):56S–62S

Correlation of metastasis-related gene expression with metastatic potential in human prostate carcinoma cells implanted in nude mice using an in situ messenger RNA hybridization technique. Greene GF, et al. **Am J Pathol** 1997 May;150(5):1571–82

Expression of fibronectin mRNA splice variants by rabbit lung in vivo and by alveolar type II cells in vitro. Maniscalco WM, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L972–80

Insulin receptor mRNA splicing and altered metabolic control in aged and mildly insulin-deficient rats. Wiersma MM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E607–15

Extracellular superoxide dismutase mRNA expressions in the human lung by in situ hybridization. Su WY, et al. **Am J Respir Cell Mol Biol** 1997 Feb;16(2):162–70

Detection of albumin messenger RNA in hepatic and extrahepatic neoplasms. A marker of hepatocellular differentiation. Krishna M, et al. **Am J Surg Pathol** 1997 Feb;21(2):147–52

Nonisotopic quantitation of mRNA using a novel RNase protection assay: measurement of erbB-2 mRNA in tumor cell lines. Chan SD, et al. **Anal Biochem** 1996 Nov 15; 242(2):214–20

Polymerase chain reaction (PCR)-based construction of a competitor target for quantitative reverse transcriptase PCR measurement of cytochrome P450 1A1 mRNA. Frötschl R, et al. **Anal Biochem** 1996 Nov 15;242(2):280–2

Development of a high-volume in situ mRNA hybridization assay for the quantification of gene expression utilizing scintillating microplates. Harris DW, et al. **Anal Biochem** 1996 Dec 15;243(2):249–56

Use of thermostable and Escherichia coli RNase H in RNA mapping studies. Porter D, et al. **Anal Biochem** 1997 May 1;247(2):279–86

Pitfalls in the use of several "housekeeping" genes as standards for quantitation of mRNA: the example of thyroid cells. Savonet V, et al. **Anal Biochem** 1997 Apr 5;247(1):165–7

Alteration of G protein subclass mRNAs in methamphetamine-induced behavioral sensitization. Iwasa H, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:110–5

Salt-loading induces decreased POMC mRNA levels, increased alpha-MSH immunoreactivity, and sustained elevated fos expression in rat pituitary intermediate lobe melanotropes. Sharma P, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:295–9

Recoding: dynamic reprogramming of translation. Gesteland RF, et al. **Annu Rev Biochem** 1996;65:741–68 (181 ref.)

Inhibition of human collagenase activity by antisense oligonucleoside methylphosphonates. Delong RK, et al. **Antisense Nucleic Acid Drug Dev** 1996 Winter;6(4):273–80

Increased mRNA for corticotrophin releasing hormone in the amygdala of fawn-hooded rats: a potential animal model of anxiety. Altemus M, et al. **Anxiety** 1994–95; 1(6):251–7

Detection of viable Giardia cysts by amplification of heat shock-induced mRNA. Abbaszadegan M, et al. **Appl Environ Microbiol** 1997 Jan;63(1):324–8

Tissue-specific stability of nuclear- and mitochondrially encoded mRNAs. Connor MK, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):103–8

Hamster adapt78 mRNA is a Down syndrome critical region homologue that is inducible by oxidative stress. Crawford DR, et al. **Arch Biochem Biophys** 1997 Jun 1;342(1):6–12

Alternative splicing of CYP2D mRNA in human breast tissue. Huang Z, et al. **Arch Biochem Biophys** 1997 Jul 1; 343(1):101–8

IL-7 mRNA is not overexpressed in mycosis fungoides and pleomorphic T-cell lymphoma and is likely to be an autocrine growth factor in vivo. Asadullah K, et al. **Arch Dermatol Res** 1996 Dec;289(1):9–13

Cytokine mRNA expression in cutaneous warts: induction of interleukin-1 alpha. Jackson M, et al. **Arch Dermatol Res** 1996 Dec;289(1):28–34

Increased release of the tumour necrosis factor receptor p75 by immortalized human keratinocytes results from an activated shedding mechanism and is not related to augmented steady-state levels of p75 mRNA. Neuner P, et al. **Arch Dermatol Res** 1996 Oct;288(11):691–6

GM-CSF mRNA and protein in human skin-derived lymph. Yawalkar N, et al. **Arch Dermatol Res** 1996 Oct; 288(11):637–40

Topical all-trans retinoic acid (RA) induces an early, coordinated increase in RA-inducible skin-specific gene/psoriasin and cellular RA-binding protein II mRNA levels which precedes skin erythema. Zouboulis CC, et al. **Arch Dermatol Res** 1996 Oct;288(11):664–9

cAMP levels and up-regulation of actin mRNA in Entamoeba histolytica. Manning-Cela R, et al. **Arch Med Res** 1997;28 Spec No:134–5

Expression of vasoactive intestinal polypeptide receptor mRNA and secretory regulation by vasoactive intestinal polypeptide in rat submandibular and sublingual salivary glands. Takai N, et al. **Arch Oral Biol** 1997 Mar; 42(3):197–204

Detection and characterization of a novel splice mutation in the LDL receptor intron 12 resulting in two different mutant mRNA variants. Nissen H, et al. **Atherosclerosis** 1997 Jan 3;128(1):75–83

Phosphorylation can modulate the association of different sets of RNA binding proteins with the Vg1 localization signal RNA. Chen SM, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):419–23

Nitric oxide synthase mRNA expression in human fetal membranes: a possible role in parturition. Dennes WJ, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):276–8

Tyrosine hydroxylase activity and its mRNA level in dopaminergic neurons of tenascin gene knockout mouse. Fukamauchi F, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):356–9

An in vivo cytokine and endotoxin-independent pathway for induction of nitric oxide synthase II mRNA, enzyme, and nitrate/nitrite in alveolar macrophages. Greenberg SS, et al. **Biochem Biophys Res Commun** 1996 Oct 3; 227(1):160–7

Amplified restriction fragment length polymorphism-based mRNA fingerprinting using a single restriction enzyme that recognizes a 4-bp sequence. Habu Y, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):516–21

Identification of glucose-regulated genes in human mesangial cells by mRNA differential display. Holmes DI, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):179–84

In vivo regulation of the IL-1 beta system (ligand, receptors I and II, receptor accessory protein, and receptor antagonist) and TNF-alpha mRNAs in specific brain regions. Ilyin SE, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):861–7

HIV-1 gp120 modulates hypothalamic cytokine mRNAs in vivo: implications to cytokine feedback systems. Ilyin SE, et al. **Biochem Biophys Res Commun** 1997 Feb 13; 231(2):514–8

Human chorionic gonadotropin induces nitric oxide synthase mRNA in mouse peritoneal macrophages. Kim HM, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):548–52

Factors altering ribozyme-mediated cleavage of tumor necrosis factor-alpha mRNA in vitro. Kisich KO, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):205–11

Identification of novel exon-deleted progesterone receptor variant mRNAs in human breast tissue. Leygue E, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):63–8

Antisense oligonucleotides to differentiation-specific element binding protein (DSEB) mRNA inhibit adipocyte differentiation. Lyle RE, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):709–15

Structure and function of the iron-responsive element from human ferritin L chain mRNA. Mikulits W, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):212–6

Expression in hematopoietic cells of GATA-1 transcripts from the alternative "testis" promoter during development and cell differentiation. Moroni E, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):299–304

Identification of arginine vasopressin mRNA in rat aortic smooth muscle cells. Nagano K, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):831–4

Expression of rho A and rho kinase mRNAs in porcine vascular smooth muscle. Nishimura J, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):750–4

Luteinizing hormone increases the abundance of various transcripts, independently of the androgens, in the rat prostate. Reiter E, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):108–12

A mammalian bicistronic transcript encoding two dentin-specific proteins. Ritchie H, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):425–8

Treatment of fibroblast-like synoviocytes with IFN-gamma results in the down-regulation of autotaxin mRNA. Santos AN, et al. **Biochem Biophys Res Commun** 1996 Dec 13; 229(2):419–24

Organization of the 5'-End of the porcine gamma-glutamyl transpeptidase gene and identification of three different mRNAs in the kidney. Schudy A, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):693–700

Expression of glutathione and gamma-glutamylcysteine synthetase mRNA is Jun dependent. Sekhar KR, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):588–93

Suppression of L-histidine decarboxylase mRNA expression by methyleugenol. Shin BK, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):188–91

Identification of two lymphotoxin beta isoforms expressed in human lymphoid cell lines and non-Hodgkin's lymphomas. Warzocha K, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):273–6

Two forms of avian(chicken) TATA-binding protein mRNA generated by alternative polyadenylation. Yamauchi J, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):406–11

Regulation of expression of leptin mRNA and secretion of leptin by thyroid hormone in 3T3-L1 adipocytes. Yoshida T, et al. **Biochem Biophys Res Commun** 1997 Mar 27; 232(3):822–6

Electrical stimulation induces the level of TGF-beta1 mRNA in osteoblastic cells by a mechanism involving calcium/calmodulin pathway. Zhuang H, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):225–9

Mechanical strain-induced proliferation of osteoblastic cells parallels increased TGF-beta 1 mRNA. Zhuang H, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):449–53

Upstream stimulators for recoding. Larsen B, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):1123–9 (45 ref.)

Structure and evolution of mammalian ribosomal proteins. Wool IG, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):933–47 (55 ref.)

Structural and functional analysis of a promoter of the human granulin/epithelin gene. Bhandari V, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):441–7

Quantification of aggrecan and link-protein mRNA in human

articular cartilage of different ages by competitive reverse transcriptase-PCR. Bolton MC, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):489–98

Subcellular structure containing mRNA for beta subunit of mitochondrial H+–ATP synthase in rat hepatocytes is translationally active. Ricart J, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):635–43

Tissue-specific promoters of the alpha human folate receptor gene yield transcripts with divergent 5' leader sequences and different translational efficiencies. Roberts SJ, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):439–47

Encystment-specific mRNA is accumulated in the resting cysts of the ciliate Colpoda inflata. Benitez L, et al. **Biochem Mol Biol Int** 1997 May;41(6):1137–41

Detection of polymorphic FGF receptor 1 mRNA in bovine lens epithelium by PCR. Marunouchi T, et al. **Biochem Mol Biol Int** 1997 May;41(6):1171–8

In vitro amplification of human basic fibroblast growth factor mRNA by RNA-specific exon-junction primers. Sheu HM, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):907–14

Steady-state mRNA levels of G protein subunits in developing rabbit myocardium. Fattal O, et al. **Biochem Mol Med** 1995 Dec;56(2):108–14

Isolation and nucleotide sequence of canine glucose-6-phosphatase mRNA: identification of mutation in puppies with glycogen storage disease type Ia. Kishnani PS, et al. **Biochem Mol Med** 1997 Aug;61(2):168–77

Murine and pediatric myocardial growth factor mRNA expression using reverse transcription-polymerase chain reaction. Shaddy RE, et al. **Biochem Mol Med** 1996 Feb; 57(1):10–3

Identification of a splice site mutation in the cystathionine beta-synthase gene resulting in variable and novel splicing defects of pre-mRNA. Tsai MY, et al. **Biochem Mol Med** 1997 Jun;61(1):9–15

Interference of corticosteroids with prostaglandin E2 synthesis at the level of cyclooxygenase-2 mRNA expression in kidney cells. Schaefers HJ, et al. **Biochem Pharmacol** 1996 Nov 8;52(9):1415–21

Induction of a variant acetyl-CoA carboxylase mRNA in ovine mammary gland during lactation. Barber MC, et al. **Biochem Soc Trans** 1996 Aug;24(3):360S

Induction of the stress protein Grp75 by amino acid deprivation in CHO cells does not involve an increase in Grp75 mRNA levels. Heal RD, et al. **Biochem Soc Trans** 1996 Aug;24(3):479S

Specificity of ribozymes against the bcr-abl mRNAs in vitro. James HA, et al. **Biochem Soc Trans** 1996 Aug;24(3):409S

S100A3 mRNA expression displays an inverse correlation to breast cancer progression. Lloyd BH, et al. **Biochem Soc Trans** 1996 Aug;24(3):340S

Aluminium-induced changes in amyloid precursor protein mRNA expression. Sinclair MA, et al. **Biochem Soc Trans** 1996 Aug;24(3):500S

Uptake and effects of antisense oligodeoxynucleotides specific for rat metallothionein -1 and -2 mRNA in H4 rat hepatoma cells in culture. Vasconcelos MH, et al. **Biochem Soc Trans** 1996 Aug;24(3):408S

Cleavage of p220 by purified poliovirus 2A(pro) in cell-free systems: effects on translation of capped and uncapped mRNAs. Novoa I, et al. **Biochemistry** 1997 Jun 24; 36(25):7802–9

Apobec-1 and apolipoprotein B mRNA editing. Chan L, et al. **Biochim Biophys Acta** 1997 Mar 10;1345(1):11–26 (90 ref.)

An3 protein encoded by a localized maternal mRNA in Xenopus laevis is an ATPase with substrate-specific RNA helicase activity. Gururajan R, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):169–82

Decreased transcript expression coincident with impaired glycosylation in the beta2-adrenergic receptor gene does not result from differences in the primary sequence. Hughes RJ, et al. **Biochim Biophys Acta** 1997 May 27; 1356(3):281–91

Mode of transfection influences the stability of ectopically expressed mRNA. Nanbu R, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):221–8

Histone H4 mRNA from the nematode Ascaris lumbricoides is cis-spliced and polyadenylated. Wyler-Duda P, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):259–61

S6 ribosomal protein phosphorylation and translation of stored mRNA in maize. Sánchez-de-Jiménez E, et al. **Biochimie** 1997 Apr;79(4):187–94

mRNA expression and cDNA sequences of beta- and gamma-sarcoglycans are normal in cardiomyopathic hamster heart. Hanada H, et al. **Biol Pharm Bull** 1997 Feb; 20(2):134–7

Antipsychotic regulation of hippocampal dopamine receptor messenger RNA expression. Ritter LM, et al. **Biol Psychiatry** 1997 Aug 1;42(3):155–64

Identification of differentially expressed RNA transcripts in neuropsychiatric disorders [editorial] Yee F, et al. **Biol Psychiatry** 1997 Apr 1;41(7):759–61

Expression of messenger ribonucleic acid (mRNA) encoding 3beta-hydroxysteroid dehydrogenase delta4,delta5 isomerase (3beta-HSD) during recruitment and selection of bovine ovarian follicles: identification of dominant follicles by expression of 3beta-HSD mRNA within the granulosa cell layer. Bao B, et al. **Biol Reprod** 1997 Jun; 56(6):1466–73

Changes in messenger ribonucleic acid encoding luteinizing hormone receptor, cytochrome P450-side chain cleavage, and aromatase are associated with recruitment and selection of bovine ovarian follicles. Bao B, et al. **Biol Reprod** 1997 May;56(5):1158–68

Expression of tissue inhibitor of metalloproteinase-1 protein and messenger ribonucleic acid by the oviduct of cyclic, early-pregnant, and ovariectomized steroid-treated gilts. Buhi WC, et al. **Biol Reprod** 1997 Jul;57(1):7–15

Expression of vascular endothelial growth factor (VEGF) and VEGF-receptor messenger ribonucleic acids in the peri-implantation rabbit uterus. Das SK, et al. **Biol Reprod** 1997 Jun;56(6):1390–9

The estradiol-induced luteinizing hormone surge in the ewe is not associated with increased gonadotropin-releasing hormone messenger ribonucleic acid levels. Dhillon H, et al. **Biol Reprod** 1997 Jul;57(1):107–11

Molecular cloning of sheep and goat ferredoxin reductase messenger ribonucleic acids, and identification of an alternatively spliced form of sheep ferredoxin reductase. Furukawa A, et al. **Biol Reprod** 1997 May;56(5):1336–42

Expression of aromatase cytochrome P450 protein and messenger ribonucleic acid in human endometriotic and adenomyotic tissues but not in normal endometrium. Kitawaki J, et al. **Biol Reprod** 1997 Sep;57(3):514–9

Identification, expression, and regulation of the transcriptional factor polyomavirus enhancer activator 3, and its putative role in regulating the expression of gamma-glutamyl transpeptidase mRNA-IV in the rat epididymis. Lan ZJ, et al. **Biol Reprod** 1997 Jul;57(1):186–93

Up-regulation of urokinase plasminogen activator messenger ribonucleic acid and protein in hen granulosa cells by transforming growth factor alpha in vitro during follicular development. Li J, et al. **Biol Reprod** 1997 May; 56(5):1317–22

Follicle-stimulating hormone (FSH) regulates the expression of FSH receptor messenger ribonucleic acid in cultured Sertoli cells and in hypophysectomized rat testis. Maguire SM, et al. **Biol Reprod** 1997 May;56(5):1106–11

Expression of cdc25 phosphatases in the germ cells of the rat testis. Mizoguchi S, et al. **Biol Reprod** 1997 Jun; 56(6):1474–81

Regulation of luteinizing hormone-receptor and follicle-stimulating hormone-receptor messenger ribonucleic acid levels during development in the neonatal mouse ovary. O'Shaughnessy PJ, et al. **Biol Reprod** 1997 Sep;57(3):602–8

Follicle-stimulating hormone and intracellular second messengers regulate steroidogenic acute regulatory protein messenger ribonucleic acid in luteinized porcine granulosa cells. Pescador N, et al. **Biol Reprod** 1997 Sep;57(3):660–8

Effects of bovine follicular fluid and passive immunization against gonadotropin-releasing hormone (GnRH) on messenger ribonucleic acid for GnRH receptor and gonadotropin subunits in ovariectomized ewes. Turzillo AM, et al. **Biol Reprod** 1997 Jun;56(6):1537–43

Characterization of the chicken follicle-stimulating hormone receptor (cFSH-R) complementary deoxyribonucleic acid, and expression of cFSH-R messenger ribonucleic acid in the ovary. You S, et al. **Biol Reprod** 1996 Nov; 55(5):1055–62

Evaluation of biological responses to polymeric biomaterials by RT-PCR analysis. I. Study of IL-1 beta mRNA expression. Kishida A, et al. **Biomaterials** 1996 Jul; 17(13):1301–5

Refinements in re-amplification and cloning of DDRT-PCR products. Bhattacharjee A, et al. **Biotechniques** 1997 Jun; 22(6):1048–51

Analysis of the size distribution of first-strand cDNA molecules. Bodescot M, et al. **Biotechniques** 1997 Jun; 22(6):1119–22, 1124–6

Full-length cDNA cloning and determination of mRNA 5' and 3' ends by amplification of adaptor-ligated cDNA. Chenchik A, et al. **Biotechniques** 1996 Sep;21(3):526–34

Differential display without radioactivity--a modified procedure. Doss RP. **Biotechniques** 1996 Sep;21(3):408–10, 412

Purification and cloning of differential display products. Gery S, et al. **Biotechniques** 1997 Aug;23(2):198–200, 202

Further characterization of factor VIII-deficient mice created by gene targeting: RNA and protein studies. Bi L, et al. **Blood** 1996 Nov 1;88(9):3446–50

Hereditary hyperferritinemia-cataract syndrome: relationship between phenotypes and specific mutations in the iron-responsive element of ferritin light-chain mRNA. Cazzola M, et al. **Blood** 1997 Jul 15;90(2):814–21

Biochemical and genetic characterization of multiple splice variants of the Flt3 ligand. McClanahan T, et al. **Blood** 1996 Nov 1;88(9):3371–82

Different CD44 splicing patterns define prognostic subgroups in multiple myeloma. Stauder R, et al. **Blood** 1996 Oct 15; 88(8):3101–8

Blood on filter paper as a readily available source of bcr-abl rearranged mRNA [letter] Suttorp M, et al. **Blood** 1997 Aug 15;90(4):1713–5

Very low level of major BCR-ABL expression in blood of some healthy individuals. Biernaux C, et al. **Bone Marrow Transplant** 1996 May;17 Suppl 3:S45–7

Heterogenous expression of bcr-abl fusion mRNA in a patient with Philadelphia-chromosome-positive acute lymphoblastic leukaemia. Inokuchi K, et al. **Br J Haematol** 1997 Jun;97(4):837–40

A common frameshift mutation in von Willebrand factor does not alter mRNA stability but interferes with normal propeptide processing. Mohlke KL, et al. **Br J Haematol** 1996 Oct;95(1):184–91

Expression of CD44 splice variants in colorectal cancer. Wong LS, et al. **Br J Surg** 1997 Mar;84(3):363–7

A novel hamster prion protein mRNA contains an extra exon: increased expression in scrapie. Li G, et al. **Brain Res** 1997 Mar 21;751(2):265–74

Contrasting effects of electroconvulsive shock on mRNAs encoding the high affinity kainate receptor subunits (KA1 and KA2) and cyclophilin in the rat. Porter RH, et al. **Brain Res** 1996 Feb 26;710(1-2):97–102

Expression of mRNAs coding for the transforming growth factor-beta receptors in brain regions of euthyroid and hypothyroid neonatal rats and in adult brain. Slotkin TA, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):61–5

Isolation of cDNA clones of the rat mRNAs expressed preferentially in the prenatal stages of brain development. Usui H, et al. **Brain Res Dev Brain Res** 1996 Dec 23; 97(2):185–93

Increase in mRNAs encoding neonatal II and III sodium channel alpha-isoforms during kainate-induced seizures in adult rat hippocampus. Gastaldi M, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):179–90

Human choline acetyltransferase mRNAs with different 5'-region produce a 69-kDa major translation product. Misawa H, et al. **Brain Res Mol Brain Res** 1997 Mar; 44(2):323–33

Hippocampal glucocorticoid receptor mRNA is up-regulated by acute and down-regulated by chronic amphetamine treatment. Shilling PD, et al. **Brain Res Mol Brain Res** 1996 May;38(1):156–60

alpha 2-Adrenergic receptors in human spinal cord: specific localized expression of mRNA encoding alpha 2-adrenergic receptor subtypes at four distinct levels. Smith MS, et al. **Brain Res Mol Brain Res** 1995 Dec 1; 34(1):109–17

Cloning and expression of the proteolipid protein DM20 cDNA from the brain of the rainbow trout, Oncorhynchus mykiss. Tang S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):134–9

A point mutation in the human estrogen receptor gene is associated with the expression of an abnormal estrogen receptor mRNA containing a 69 novel nucleotide insertion. Wang M, et al. **Breast Cancer Res Treat** 1997 Jun; 44(2):145–51

S phase determination in intact colonic crypts by histone H3 messenger RNA in situ hybridization and confocal microscopy. Konishi H, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):531–6

Two promoters in expression of estrogen receptor messenger RNA in human breast cancer. Hayashi S, et al. **Carcinogenesis** 1997 Mar;18(3):459–64

Translational recoding induced by G-rich mRNA sequences that form unusual structures. Horsburgh BC, et al. **Cell** 1996 Sep 20;86(6):949–59

Ending the message is not so simple. Proudfoot N. **Cell** 1996 Nov 29;87(5):779–81 (15 ref.)

Characterization of the yeast transcriptome. Velculescu VE, et al. **Cell** 1997 Jan 24;88(2):243–51

Evidence for a localization signal in the 3'untranslated region of myosin heavy chain messenger RNA. Wiseman JW, et al. **Cell Biol Int** 1997 Apr;21(4):243–8

Injection of rat hepatocyte poly(A)+ RNA to Xenopus laevis oocytes leads to expression of a constitutively-active divalent cation channel distinguishable from endogenous receptor-activated channels. Auld AM, et al. **Cell Calcium** 1996 May;19(5):439–52

Molecular cloning and characterization of human FGF8 alternative messenger RNA forms. Ghosh AK, et al. **Cell Growth Differ** 1996 Oct;7(10):1425–34

Elements in the murine c-mos messenger RNA 5'-untranslated region repress translation of downstream coding sequences. Steel LF, et al. **Cell Growth Differ** 1996 Oct;7(10):1415–24

An analysis of alternatively spliced CD45 mRNA transcripts during T cell maturation in humans. Ratech H, et al. **Cell Immunol** 1997 May 1;177(2):109–18

Identification by differential display of a mRNA specifically induced by 12-O-tetradecanoylphorbol-13-acetate (TPA) in T84 human colon carcinoma cells. Cafferata EG, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jul;42(5):797–804

The 5' part of the human H19 RNA contains cis-acting elements hampering its translatability. Joubel A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1159–72

Distribution of fiber types determined by in situ hybridization of myosin heavy chain mRNA and enzyme histochemistry in rat skeletal muscles. Kanbara K, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 May;43(3):319–27

Rat hypothalamus neuron-like cells in primary culture accumulate and translate mRNA coding for the amphibian P-domain peptide xP1. Probst JC, et al. **Cell Mol Neurobiol** 1997 Jun;17(3):333–40

Early stages of pre-rRNA formation within the nucleolar ultrastructure of mouse cells studied by in situ hybridization with a 5'ETS leader probe. Puvion-Dutilleul F, et al. **Chromosoma** 1997 Jun;105(7-8):496–505

Constitutive mRNA and immunoreactivity for IL-2 in human nasal mucosa. Moss RB, et al. **Clin Exp Allergy** 1997 Apr; 27(4):406–12

Cellular mRNA expression of interferon-gamma (IFN-gamma), IL-4 and transforming growth factor-beta (TGF-beta) in rats nasally tolerized against experimental

autoimmune myasthenia gravis (EAMG). Ma CG, et al. **Clin Exp Immunol** 1996 Jun;104(3):509–16

Mdr1 mRNA expression differs between grade III astrocytomas and glioblastomas. Kirches E, et al. **Clin Neuropathol** 1997 Jan–Feb;16(1):34–6

Intragraft IL–4 mRNA expression is associated with down–regulation of liver graft rejection. Baan CC, et al. **Clin Transplant** 1996 Dec;10(6 Pt 1):542–9

A method for identifying splice sites and translational start sites in eukaryotic mRNA. Salzberg SL. **Comput Appl Biosci** 1997 Aug;13(4):365–76

Translational control during early development. Stebbins–Boaz B, et al. **Crit Rev Eukaryot Gene Expr** 1997; 7(1–2):73–94 (159 ref.)

A comparison of mammalian and yeast pre–mRNA 3'–end processing. Keller W, et al. **Curr Opin Cell Biol** 1997 Jun; 9(3):329–36 (52 ref.)

A soluble interleukin 6 receptor isolated from conditioned medium of human breast cancer cells is encoded by a differentially spliced mRNA. Oh JW, et al. **Cytokine** 1996 May;8(5):401–9

Cytokine mRNA expression in human platelets and a megakaryocytic cell line and cytokine modulation of platelet function. Soslau G, et al. **Cytokine** 1997 Jun; 9(6):405–11

Quantification of IL–2 and IL–2 receptor mRNA in peripheral blood mononuclear cells by the RT–PCR based SHARP Signal system. Lee BN, et al. **Cytokines Cell Mol Ther** 1997 Mar;3(1):33–40

Cytokine mRNA changes during the treatment of hypertrophic scars with silicone and nonsilicone gel dressings. Ricketts CH, et al. **Dermatol Surg** 1996 Nov; 22(11):955–9

PCNA mRNA has a 3'UTR antisense to yellow crescent RNA and is localized in ascidian eggs and embryos. Swalla BJ, et al. **Dev Biol** 1996 Aug 25;178(1):23–34

Comparison of mRNA expression of two regulators of G–protein signaling, RGS1/BL34/1R20 and RGS2/G0S8, in cultured human blood mononuclear cells. Heximer SP, et al. **DNA Cell Biol** 1997 May;16(5):589–98

Cloning of a human epididymis–specific mRNA, HE6, encoding a novel member of the seven transmembrane–domain receptor superfamily. Osterhoff C, et al. **DNA Cell Biol** 1997 Apr;16(4):379–89

Alternative splicing of mouse alpha1(XIII) collagen RNAs results in at least 17 different transcripts, predicting alpha1(XIII) collagen chains with length varying between 651 and 710 amino acid residues. Peltonen S, et al. **DNA Cell Biol** 1997 Feb;16(2):227–34

Cloning of multiple chicken FGF1 mRNAs and their differential expression during development of whole embryo and of the lens. Philippe JM, et al. **DNA Cell Biol** 1996 Sep;15(9):703–15

Identification of the promoters for the human and murine protective protein/cathepsin A genes. Rottier RJ, et al. **DNA Cell Biol** 1997 May;16(5):599–610

Guinea pig preprodynorphin mRNA: primary structure and regional quantitation in the brain. Yuferov VP, et al. **DNA Cell Biol** 1996 Dec;15(12):1105–12

Isolation of human purH gene expressed in the rodent transformant cells by subtractive enrichment of 3'–untranslated region of human transcript. Yamauchi M, et al. **DNA Res** 1995 Dec 31;2(6):269–75

The catalytic subunit of protein phosphatase 2A associates with the translation termination factor eRF1. Andjelković N, et al. **EMBO J** 1996 Dec 16;15(24):7156–67

The Adh–related gene of Drosophila melanogaster is expressed as a functional dicistronic messenger RNA: multigenic transcription in higher organisms. Brogna S, et al. **EMBO J** 1997 Apr 15;16(8):2023–31

3'–Inverted repeats in plant mitochondrial mRNAs are processing signals rather than transcription terminators. Dombrowski S, et al. **EMBO J** 1997 Aug 15;16(16):5069–76

Rapamycin suppresses 5'TOP mRNA translation through inhibition of p70s6k. Jefferies HB, et al. **EMBO J** 1997 Jun;16(12):3693–704

Spliced leader RNA of trypanosomes: in vivo mutational analysis reveals extensive and distinct requirements for trans splicing and cap4 formation. Lücke S, et al. **EMBO J** 1996 Aug 15;15(16):4380–91

Downstream box–anti–downstream box interactions are dispensable for translation initiation of leaderless mRNAs. Resch A, et al. **EMBO J** 1996 Sep 2;15(17):4740–8

General RNA binding proteins render translation cap dependent [published erratum appears in EMBO J 1997 Feb 17;16(4):896] Svitkin YV, et al. **EMBO J** 1996 Dec 16;15(24):7147–55

Mammary gland type I iodothyronine deiodinase is encoded by a short messenger ribonucleic acid. Navarro L, et al. **Endocrinology** 1997 Oct;138(10):4248–54

Overexpression of glutathione S–transferase pi messenger RNA and its relationship to gene amplification in head and neck squamous cell carcinoma. Pavelic ZP, et al. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S144–6

Two types of polyadenated mRNAs are synthesized from Drosophila replication–dependent histone genes. Akhmanova A, et al. **Eur J Biochem** 1997 Mar 1; 244(2):294–300

Widespread tissue expression of gastrin–binding–protein mRNA. Monstein HJ, et al. **Eur J Biochem** 1997 Jun 1; 246(2):502–7

Identification of hypoxically inducible mRNAs in HeLa cells using differential–display PCR. Role of hypoxia–inducible factor–1. O'Rourke JF, et al. **Eur J Biochem** 1996 Oct 15; 241(2):403–10

Cloning and expression of the mRNA of human galectin–4, an S–type lectin down–regulated in colorectal cancer. Rechreche H, et al. **Eur J Biochem** 1997 Aug 15; 248(1):225–30

Regulation of the wound–induced myrosinase–associated protein transcript in Brassica napus plants. Taipalensuu J, et al. **Eur J Biochem** 1997 Aug 1;247(3):963–71

Alternative processing of the tryptophanyl–tRNA synthetase mRNA from interferon–treated human cells. Turpaev KT, et al. **Eur J Biochem** 1996 Sep 15;240(3):732–7

Non–isotopic competitive reverse transcription polymerase chain reaction coupled with high performance liquid chromatography to measure beta 2–receptor messenger RNA in the human heart. Höhnel K, et al. **Eur J Clin Chem Clin Biochem** 1996 May;34(5):411–7

Positive and negative thymic selection in T cell receptor–transgenic mice correlate with Nur77 mRNA expression. Xue Y, et al. **Eur J Immunol** 1997 Aug; 27(8):2048–56

Regulation of glutamic acid decarboxylase mRNA expression in rat brain after sertraline treatment. Giardino L, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):183–7

The anxiolytics CI–988 and chlordiazepoxide fail to reduce immediate early gene mRNA stimulation following exposure to the rat elevated X–maze. Hinks GL, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):153–61

Gravitational loading of a simulated launch alters mRNA expression in osteoblasts. Fitzgerald J, et al. **Exp Cell Res** 1996 Oct 10;228(1):168–71

Expression of H and L ferritin mRNAs in mouse small intestine. Gérard B, et al. **Exp Cell Res** 1996 Oct 10; 228(1):8–13

An altered intracellular distribution of the autoantigen La/SS–B when translated from a La mRNA isoform. Grölz D, et al. **Exp Cell Res** 1997 Aug 1;234(2):329–35

Positive regulation of corneal type V collagen mRNA: analysis by chicken–human heterokaryon formation. Linsenmayer TF, et al. **Exp Cell Res** 1996 Oct 10; 228(1):36–43

NF1 mRNA isoform expression in PC12 cells: modulation by extrinsic factors. Metheny LJ, et al. **Exp Cell Res** 1996 Oct 10;228(1):44–9

TNF–alpha downregulates the peroxisome proliferator activated receptor–alpha and the mRNAs encoding peroxisomal proteins in rat liver. Beier K, et al. **FEBS Lett** 1997 Jul 28;412(2):385–7

Cloning and expression of an alternatively spliced mRNA encoding a soluble form of the human interleukin–6 signal transducer gp130. Diamant M, et al. **FEBS Lett** 1997 Jul 28;412(2):379–84

Cca3, the mRNA level of which transiently decreases before initiation of DNA synthesis in regenerating rat liver cells. Hayashi Y, et al. **FEBS Lett** 1997 Apr 7;406(1–2):147–50

The untranslated first exon 'exon 0S' of the rat estrogen receptor (ER) gene. Hirata S, et al. **FEBS Lett** 1996 Oct 7;394(3):371–3

A single nucleotide is a sufficient 5' untranslated region for translation in an eukaryotic in vitro system. Hughes MJ, et al. **FEBS Lett** 1997 Sep 1;414(1):19–22

Isolation of mRNAs induced by a hazardous chemical in white–rot fungus, Coriolus versicolor, by differential display. Iimura Y, et al. **FEBS Lett** 1997 Jul 28;412(2):370–4

Cloning and expression of a novel type (III) of human gamma–glutamyltransferase truncated mRNA. Leh H, et al. **FEBS Lett** 1996 Oct 7;394(3):258–62

Sense and antisense RNA for the membrane associated 40 kDa subunit M40 of the insect V–ATPase. Merzendorfer H, et al. **FEBS Lett** 1997 Jul 14;411(2–3):239–44

Differential translational initiation of lbp mRNA is caused by a 5' upstream open reading frame. Mittag M, et al. **FEBS Lett** 1997 Jul 14;411(2–3):245–50

Tissue distribution and levels of gelsolin mRNA in normal individuals and patients with gelsolin–related amyloidosis. Paunio T, et al. **FEBS Lett** 1997 Apr 7;406(1–2):49–55

The transcriptional apparatus required for mRNA encoding genes in the yeast Saccharomyces cerevisiae emerges from a jigsaw puzzle of transcription factors. Künzler M, et al. **FEMS Microbiol Rev** 1996 Dec;19(2):117–36 (167 ref.)

Pulmonary ferritin: differential effects of hyperoxic lung injury on subunit mRNA levels. Ryan TP, et al. **Free Radic Biol Med** 1997;22(5):901–8

Changes in poly(A) tail length of arginine vasotocin messenger ribonucleic acid in the hypothalamus of water–deprived chickens. Chaturvedi CM, et al. **Gen Comp Endocrinol** 1996 Sep;103(3):316–22

Characterization of two new preproGnRH mRNAs in the tree shrew: first direct evidence for mesencephalic GnRH gene expression in a placental mammal. Kasten TL, et al. **Gen Comp Endocrinol** 1996 Oct;104(1):7–19

Characterization of new human c–myc mRNA species produced by alternative splicing. Bodescot M, et al. **Gene** 1996 Sep 26;174(1):115–20

Alternate splice–site utilization in the gene for the catalytic subunit of the DNA–activated protein kinase, DNA–PKcs. Connelly MA, et al. **Gene** 1996 Oct 10;175(1–2):271–3

Cloning and sequencing of a new 15–hydroxyprostaglandin dehydrogenase related mRNA. Delage–Mourroux R, et al. **Gene** 1997 Mar 25;188(1):143–8

Onchocerca volvulus: identification of cDNAs encoding a putative phosphatidyl–ethanolamine–binding protein and a putative partially processed mRNA precursor. Erttmann KD, et al. **Gene** 1996 Oct 3;174(2):203–7

Alternative forms of the human thioredoxin mRNA: identification and characterization. Hariharan J, et al. **Gene** 1996 Sep 16;173(2):265–70

Characterisation of 3' end formation of the yeast HIS3 mRNA. Mahadevan S, et al. **Gene** 1997 Apr 29; 190(1):69–76

Rat and chicken s–rex/NSP mRNA: nucleotide sequence of main transcripts and expression of splice variants in rat tissues. Ninkina NN, et al. **Gene** 1997 Jan 15;184(2):205–10

Cloning and sequencing of a developmentally regulated avian mRNA containing the LEA motif found in plant seed proteins. Niu S, et al. **Gene** 1996 Oct 10;175(1–2):187–91

Cosmid–derived transcripts and sequence tags mapped to three subregions of human chromosome 22. Pusch C, et al. **Gene** 1996 Dec 12;183(1–2):29–33

Novel alternative splicing predicts a secreted extracellular isoform of the human receptor–like protein tyrosine phosphatase LAR. Tabiti K, et al. **Gene** 1996 Oct 10; 175(1–2):7–13

Epithelial membrane protein–2 and epithelial membrane protein–3: two novel members of the peripheral myelin protein 22 gene family. Taylor V, et al. **Gene** 1996 Oct 10;175(1–2):115–20

Nucleotide sequence of ovine adenovirus tripartite leader sequence and homologues of the IVa2, DNA polymerase and terminal proteins. Vrati S, et al. **Gene** 1996 Oct 24; 177(1–2):35–41

In vivo footprints are found in the Xenopus 63 kDa keratin gene promoter prior to the appearance of mRNA. Warshawsky D, et al. **Gene** 1997 Apr 21;189(2):209–12

The human aldehyde dehydrogenase 3 gene (ALDH3): identification of a new exon and diverse mRNA isoforms, and functional analysis of the promoter. Hsu LC, et al. **Gene Expr** 1996;6(2):87–99

A novel transcriptional initiator activity of the GABP factor binding ets sequence repeat from the murine cytochrome c oxidase Vb gene. Sucharov C, et al. **Gene Expr** 1995; 5(2):93–111

Incorporation of beta–globin untranslated regions into a Sindbis virus vector for augmentation of heterologous mRNA expression. Strong TV, et al. **Gene Ther** 1997 Jun; 4(6):624–7

U2AF65 recruits a novel human DEAD box protein required for the U2 snRNP–branchpoint interaction. Fleckner J, et al. **Genes Dev** 1997 Jul 15;11(14):1864–72

A complex structure in the mRNA of Tf1 is recognized and cleaved to generate the primer of reverse transcription. Lin JH, et al. **Genes Dev** 1997 Jan 15;11(2):270–85

Detection of hammerhead ribozyme–mediated cleavage and reduced expression of LacZ' mRNA in E. coli. Junn E, et al. **Genet Anal** 1996 May;13(1):1–7

Mutational analysis of the rolA gene of Agrobacterium rhizogenes in tobacco: function of the rolA pre–mRNA intron and rolA proteins defective in their biological activity. Spena A, et al. **Genet Res** 1997 Feb;69(1):11–5

Aspergillus fabM encodes an essential product that is related to poly(A)–binding proteins and activates development when overexpressed. Marhoul JF, et al. **Genetics** 1996 Dec; 144(4):1463–70

Comparative analysis of 1196 orthologous mouse and human full–length mRNA and protein sequences. Makałowski W, et al. **Genome Res** 1996 Sep;6(9):846–57

Organization of the human protein 4.1 genomic locus: new insights into the tissue–specific alternative splicing of the pre–mRNA. Baklouti F, et al. **Genomics** 1997 Feb 1; 39(3):289–302

High–efficiency full–length cDNA cloning by biotinylated CAP trapper. Carninci P, et al. **Genomics** 1996 Nov 1; 37(3):327–36

Molecular cloning of tissue–specific transcripts of a transketolase–related gene: implications for the evolution of new vertebrate genes. Coy JF, et al. **Genomics** 1996 Mar 15;32(3):309–16

Chromosomal localization of the mouse and rat DNA double–strand break repair genes Ku p70 and Ku p80/XRCC5 and their mRNA expression in various mouse tissues. Koike M, et al. **Genomics** 1996 Nov 15;38(1):38–44

A novel transcript encoded within the 10–kb first intron of the human p53 tumor suppressor gene (D17S2179E) is induced during differentiation of myeloid leukemia cells. Reisman D, et al. **Genomics** 1996 Dec 15;38(3):364–70

Alternatively spliced exons encode the tissue–specific 5' termini of leukocyte pp52 and stromal cell S37 mRNA isoforms. Thompson AA, et al. **Genomics** 1996 Mar 15; 32(3):352–7

Estrogen receptor mRNA splice variants in pre– and postmenopausal human endometrium and endometrial carcinoma. Rice LW, et al. **Gynecol Oncol** 1997 Apr; 65(1):149–57

An RT–PCR analysis of mRNA for growth factor receptors in damaged and control sensory epithelia of rat utricles. Saffer LD, et al. **Hear Res** 1996 May;94(1–2):14–23

The relative levels of different types of beta–mRNA and beta–globin in BFU–E derived colonies from patients with beta chain variants; further evidence for somatic mosaicism in the Hb Costa Rica carrier [beta 77(EF1)His—>Arg] Smetanina NS, et al. **Hemoglobin** 1996 Aug;20(3):199–212

Promoter–independent loss of mRNA and protein of the Rb gene in a human hepatocellular carcinoma. Hada H, et al.

Hepatogastroenterology 1996 Sep–Oct;43(11):1185–9
Lack of specificity of albumin–mRNA–positive cells as a marker of circulating hepatoma cells. Müller C, et al. **Hepatology** 1997 Apr;25(4):896–9
Kupffer cell depletion abolishes induction of interleukin–10 and permits sustained overexpression of tumor necrosis factor alpha messenger RNA in the regenerating rat liver. Rai RM, et al. **Hepatology** 1997 Apr;25(4):889–95
In situ assessment of mRNA accessibility in heterogeneous tissue samples using elongation factor–1 alpha (EF–1 alpha). Gruber AD, et al. **Histochem Cell Biol** 1997 May; 107(5):411–6
Progesterone inhibits female–typical receptive behavior and decreases hypothalamic estrogen and progesterone receptor messenger ribonucleic acid levels in whiptail lizards (genus Cnemidophorus). Godwin J, et al. **Horm Behav** 1996 Jun; 30(2):138–44
Delivery of a hammerhead ribozyme specifically down–regulates the production of fibrillin–1 by cultured dermal fibroblasts. Kilpatrick MW, et al. **Hum Mol Genet** 1996 Dec;5(12):1939–44
A model of mRNA splicing in adult lysosomal storage disease (glycogenosis type II). Raben N, et al. **Hum Mol Genet** 1996 Jul;5(7):995–1000
Genetic variation at a splicing branch point in intron 9 of the low density lipoprotein (LDL)–receptor gene: a rare mutation that disrupts mRNA splicing in a patient with familial hypercholesterolaemia and a common polymorphism. Webb JC, et al. **Hum Mol Genet** 1996 Sep; 5(9):1325–31
Complex cystic fibrosis allele R334W–R1158X results in reduced levels of correctly processed mRNA in a pancreatic sufficient patient. Duarte A, et al. **Hum Mutat** 1996;8(2):134–9
Identification of a splice site mutation (2789 +5 G > A) associated with small amounts of normal CFTR mRNA and mild cystic fibrosis. Highsmith WE Jr, et al. **Hum Mutat** 1997;9(4):332–8
Allele–specific measurement of low–density lipoprotein receptor transcript levels. Jensen LG, et al. **Hum Mutat** 1996;8(2):126–33
Prolonged reduction of high blood pressure with an in vivo, nonpathogenic, adeno–associated viral vector delivery of AT1–R mRNA antisense. Phillips MI, et al. **Hypertension** 1997 Jan;29(1 Pt 2):374–80
DRB4 promoter polymorphism in DR7 individuals: correlation with DRB4 pre–mRNA and mRNA levels. Leën MP, et al. **Immunogenetics** 1997;45(6):371–8
Modulation of mRNA levels in the presence of thymocytes and genome mapping for a set of genes expressed in mouse thymic epithelial cells. Rocha D, et al. **Immunogenetics** 1997;46(2):142–51
RT–PCR microlocalization of bradykinin B2 receptor mRNA in microdissected rat nephron segments. Marin Castaño ME, et al. **Immunopharmacology** 1996 Jun; 33(1–3):171–3
Cellular localization of bradykinin B1 receptor mRNA in the human kidney. Wang DZ, et al. **Immunopharmacology** 1996 Jun;33(1–3):151–6
RNA polymerase II dependent genes that do not code for protein. Lakhotia SC. **Indian J Biochem Biophys** 1996 Apr; 33(2):93–102 (132 ref.)
Developmental analysis of a female–specific 16S rRNA gene from mycetome–associated endosymbionts of a mealybug, Planococcus lilacinus. Kantheti P, et al. **Insect Biochem Mol Biol** 1996 Dec;26(10):997–1009
Expression of connective tissue growth factor mRNA in the fibrous stroma of mammary tumors. Frazier KS, et al. **Int J Biochem Cell Biol** 1997 Jan;29(1):153–61
Internal 6–methyladenine residues increase the in vitro translation efficiency of dihydrofolate reductase messenger RNA. Heilman KL, et al. **Int J Biochem Cell Biol** 1996 Jul;28(7):823–9
Alternative splicing of DNA polymerase beta mRNA is not tumor–specific. Nowak R, et al. **Int J Cancer** 1996 Oct 9;68(2):199–202
In situ detection of PCR–amplified metalloproteinase cDNAs, their inhibitors and human papillomavirus transcripts in cervical carcinoma cell lines. Nuovo GJ. **Int J Cancer** 1997 Jun 11;71(6):1056–60
Identification of an exon 3 deletion splice variant androgen receptor mRNA in human breast cancer. Zhu X, et al. **Int J Cancer** 1997 Aug 7;72(4):574–80
Stage–specific gene expression during rat spermatogenesis: application of the mRNA differential display method. Geisinger A, et al. **Int J Dev Biol** 1996 Feb;40(1):385–8
An mRNA differential display strategy for cloning genes expressed during mouse gonad development. Nordqvist K, et al. **Int J Dev Biol** 1997 Aug;41(4):627–38
Analysis for heterozygosity of protein S mRNA: application to genetic screening and family studies in hereditary protein S deficiency. Yamazaki T, et al. **Int J Hematol** 1996 Aug; 64(2):119–25
Calcium–regulated protein tyrosine phosphorylation is required for endothelin–1 to induce prostaglandin endoperoxide synthase–2 mRNA expression and protein synthesis in mesangial cells. Coroneos EJ, et al. **J Am Soc Nephrol** 1997 Jul;8(7):1080–90
Molecular cloning and mRNA expression of the bovine insulin–responsive glucose transporter (GLUT4). Abe H, et al. **J Anim Sci** 1997 Jan;75(1):182–8
Different La/SS–B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757–66
Role of mRNA termination in regulation of ermK. Choi SS, et al. **J Bacteriol** 1997 Mar;179(6):2065–7
Translation of the mRNA for the sporulation gene spoIIID of Bacillus subtilis is dependent upon translation of a small upstream open reading frame. Decatur A, et al. **J Bacteriol** 1997 Feb;179(4):1324–8
Specificity of tRNA–mRNA interactions in Bacillus subtilis tyrS antitermination. Grundy FJ, et al. **J Bacteriol** 1997 Apr;179(8):2587–94
Sequence and transcript analysis of a novel Methanosarcina barkeri methyltransferase II homolog and its associated corrinoid protein homologous to methionine synthase. Paul L, et al. **J Bacteriol** 1996 Nov;178(22):6599–607
A method for screening antisense oligodeoxyribonucleotides effective for mRNA translation–arrest. Chen TZ, et al. **J Biochem (Tokyo)** 1996 Feb;119(2):252–5
PDGF2/c–sis mRNA leader contains a differentiation–linked internal ribosomal entry site (D–IRES). Bernstein J, et al. **J Biol Chem** 1997 Apr 4;272(14):9356–62
Tissue–specific expression of unique mRNAs that encode proglucagon–derived peptides or exendin 4 in the lizard. Chen YE, et al. **J Biol Chem** 1997 Feb 14;272(7):4108–15
The Arabidopsis thaliana FPS1 gene generates a novel mRNA that encodes a mitochondrial farnesyl–diphosphate synthase isoform. Cunillera N, et al. **J Biol Chem** 1997 Jun 13;272(24):15381–8
Alternative splicing of human inducible nitric–oxide synthase mRNA. tissue–specific regulation and induction by cytokines. Eissa NT, et al. **J Biol Chem** 1996 Oct 25; 271(43):27184–7
Production of SVP–1/–3/–4 in guinea pig testis. Characterization of novel transcripts containing long 5'–untranslated regions and multiple upstream AUG codons. Fautsch MP, et al. **J Biol Chem** 1997 Sep 26; 272(39):24691–5
Translation of an uncapped mRNA involves scanning. Gunnery S, et al. **J Biol Chem** 1997 Aug 22;272(34):21642–6
A novel cardiac–restricted target for doxorubicin. CARP, a nuclear modulator of gene expression in cardiac progenitor cells and cardiomyocytes. Jeyaseelan R, et al. **J Biol Chem** 1997 Sep 5;272(36):22800–8
The polymyositis–scleroderma autoantigen interacts with the helix–loop–helix proteins E12 and E47. Kho CJ, et al. **J Biol Cher** 1997 May 16;272(20):13426–31
Structure and expression of H–type GDP–L–fucose:beta–D–galactoside 2–alpha–L–fucosyltransferase gene (FUT1). Two transcription start sites and alternative splicing generate several forms of FUT1 mRNA. Koda Y, et al. **J Biol Chem** 1997 Mar 14;272(11):7501–5
Enhanced ribosomal association of p27(Kip1) mRNA is a mechanism contributing to accumulation during growth arrest. Millard SS, et al. **J Biol Chem** 1997 Mar 14; 272(11):7093–8
Destabilization of human alpha–globin mRNA by translation anti–termination is controlled during erythroid differentiation and is paralleled by phased shortening of the poly(A) tail. Morales J, et al. **J Biol Chem** 1997 Mar 7;272(10):6607–13
Isolation of cDNA encoding guinea pig neutrophil cationic antibacterial polypeptide of 11 kDa (CAP11) and evaluation of CAP11 mRNA expression during neutrophil maturation. Nagaoka I, et al. **J Biol Chem** 1997 Sep 5; 272(36):22742–50
Tissue–specific inhibition of apolipoprotein B mRNA editing in the liver by adenovirus–mediated transfer of a dominant negative mutant APOBEC–1 leads to increased low density lipoprotein in mice. Oka K, et al. **J Biol Chem** 1997 Jan 17;272(3):1456–60
The upstream open reading frame of the mRNA encoding S–adenosylmethionine decarboxylase is a polyamine–responsive translational control element. Ruan H, et al. **J Biol Chem** 1996 Nov 22;271(47):29576–82
Regulation of stearoyl–CoA desaturase 1 mRNA stability by polyunsaturated fatty acids in 3T3–L1 adipocytes. Sessler AM, et al. **J Biol Chem** 1996 Nov 22; 271(47):29854–8
A novel, testis–specific mRNA transcript encoding an NH2–terminal truncated nitric–oxide synthase. Wang Y, et al. **J Biol Chem** 1997 Apr 25;272(17):11392–401
The 3'–untranslated region of the alpha2C–adrenergic receptor mRNA impedes translation of the receptor message. Yang Q, et al. **J Biol Chem** 1997 Jun 13; 272(24):15466–73
Constitutive in vivo mRNA expression by osteocytes of beta–actin, osteocalcin, connexin–43, IGF–I, c–fos and c–jun, but not TNF–alpha nor tartrate–resistant acid phosphatase. Mason DJ, et al. **J Bone Miner Res** 1996 Mar; 11(3):350–7
Expression of amelogenin mRNA sequences during development of rat molars. Wurtz T, et al. **J Bone Miner Res** 1996 Jan;11(1):125–31
Nitric oxide releasing reagent, S–nitroso–N–acetylpenicillamine, enhances the expression of manganese superoxide dismutase mRNA in rat vascular smooth muscle cells. Sano H, et al. **J Cell Biochem** 1996 Jul;62(1):50–5
A localisation signal in the 3' untranslated region of c–myc mRNA targets c–myc mRNA and beta–globin reporter sequences to the perinuclear cytoplasm and cytoskeletal–bound polysomes. Veyrune JL, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1185–94
Identification of pro–EPIL and EPIL peptides translated from insulin–like 4 (INSL4) mRNA in human placenta. Bellet D, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):3169–72
Tumor–specific expression of alternatively spliced estrogen receptor messenger ribonucleic acid variants in human pituitary adenomas. Chaidarun SS, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1058–65
Human myometrial G alpha s–small (with serine) and Gs–large (with serine) messenger ribonucleic acid splice variants promote the increased expression of 46– and 54–kilodalton G alpha s protein isoforms in pregnancy and their down–regulation during labor. Europe–Finner GN, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1069–75
Identification of ovarian granulosa cells as a novel site of expression for bone morphogenetic protein–3 (BMP–3/osteogenin) and regulation of BMP–3 messenger ribonucleic acids by chorionic gonadotropin in cultured human granulosa–luteal cells. Jaatinen R, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3877–82
Nitric oxide decreases stability of mRNAs encoding soluble guanylate cyclase subunits in rat pulmonary artery smooth muscle cells. Filippov G, et al. **J Clin Invest** 1997 Aug 15;100(4):942–8
Differential expression of exons 1a and 1c in mRNAs for sterol regulatory element binding protein–1 in human and mouse organs and cultured cells. Shimomura I, et al. **J Clin Invest** 1997 Mar 1;99(5):838–45
Expression of the mRNAs encoding the limbic system–associated membrane protein (LAMP): II. Fetal rat brain. Pimenta AF, et al. **J Comp Neurol** 1996 Nov 11; 375(2):289–302
Expression of the mRNAs encoding the limbic system–associated membrane protein (LAMP): I. Adult rat brain. Reinoso BS, et al. **J Comp Neurol** 1996 Nov 11; 375(2):274–88
Cloning, characterization, and heterologous expression of exon–4–containing amelogenin mRNAs. Hu CC, et al. **J Dent Res** 1997 Feb;76(2):641–7
Cloning, DNA sequence, and alternative splicing of opossum amelogenin mRNAs. Hu CC, et al. **J Dent Res** 1996 Oct; 75(10):1728–34
Cloning, cDNA sequence, and alternative splicing of porcine amelogenin mRNAs. Hu CC, et al. **J Dent Res** 1996 Oct; 75(10):1735–41
Application of non–radiolabeled in situ hybridization system for the detection of polyadenylated RNA to normal and psoriatic human skin. Masunaga T, et al. **J Dermatol Sci** 1996 Sep;12(3):227–31
Local expression of IFN–gamma mRNA in skin lesions of patients with dermatophytosis. Miyata T, et al. **J Dermatol Sci** 1996 Nov;13(2):167–71
Investigation of the effects of antisense oligodeoxynucleotides to islet amyloid polypeptide mRNA on insulin release, content and expression. Kulkarni RN, et al. **J Endocrinol** 1996 Dec;151(3):341–8
Cytokine messenger RNA expression by donor–specific cytotoxic T–cell clones after allogeneic heart transplantation. Van Hoffen E, et al. **J Heart Lung Transplant** 1997 Feb;16(2):216–21
mRNA expressions of TIMP–1, –2, and –3 and 92–KD type IV collagenase in early human placenta and decidual membrane as studied by in situ hybridization. Hurskainen T, et al. **J Histochem Cytochem** 1996 Dec;44(12):1379–88
Simultaneous in situ detection of mRNA and apoptotic cells by combined hybridization and TUNEL. Sträter J, et al. **J Histochem Cytochem** 1996 Dec;44(12):1497–9
Inhibition of nitric oxide in rats. Regulation of cardiovascular structure and expression of insulin–like growth factor I and its receptor messenger RNA. Wickman A, et al. **J Hypertens** 1997 Jul;15(7):751–9
Deficient expression of p56(lck) in Th2 cells leads to partial TCR signaling and a dysregulation in lymphokine mRNA levels. al–Ramadi BK, et al. **J Immunol** 1996 Dec 1; 157(11):4751–61
Use of messenger RNA differential display to identify interleukin–11–responsive genes in human umbilical cord blood mononuclear cells: IL–11 upregulates the expression of the hMAL gene. Ireland RC, et al. **J Interferon Cytokine Res** 1996 Oct;16(10):829–34
Characterization of the human apobec–1 gene: expression in gastrointestinal tissues determined by alternative splicing with production of a novel truncated peptide. Hirano K, et al. **J Lipid Res** 1997 May;38(5):847–59
Expression of the dystrophin–related protein 2 (Drp2) transcript in the mouse. Dixon AK, et al. **J Mol Biol** 1997 Jul 25;270(4):551–8
Dual regulation of Escherichia coli secA translation by distinct upstream elements. McNicholas P, et al. **J Mol Biol** 1997 Jan 17;265(2):128–41
Complete transcriptional map of yeast chromosome XI in different life conditions. Richard GF, et al. **J Mol Biol** 1997 May 2;268(2):303–21
Suppressors of cis–acting splicing–deficient mutations that affect the ribozyme core of a group II intron. Robineau S, et al. **J Mol Biol** 1997 Apr 4;267(3):537–47
Selenoprotein synthesis in archaea: identification of an mRNA element of Methanococcus jannaschii probably directing selenocysteine insertion. Wilting R, et al. **J Mol Biol** 1997 Mar 7;266(4):637–41

Downregulation of IGF-I mRNA expression during postnatal pancreatic development and overexpression after subtotal pancreatectomy and acute pancreatitis in the rat pancreas. Calvo EL, et al. **J Mol Endocrinol** 1997 Jun; 18(3):233–42

Isolation and characterization of the cDNA encoding the tilapia (Oreochromis niloticus) cytochrome P450 aromatase (P450arom): changes in P450arom mRNA, protein and enzyme activity in ovarian follicles during oogenesis. Chang XT, et al. **J Mol Endocrinol** 1997 Feb;18(1):57–66

The growth hormone–dependent decrease in hepatic fatty acid synthase mRNA is the result of a decrease in gene transcription. Donkin SS, et al. **J Mol Endocrinol** 1996 Apr; 16(2):151–8

Developmental and tissue–regulated expression of IGF–I and IGF–II mRNAs in Sparus aurata. Duguay SJ, et al. **J Mol Endocrinol** 1996 Apr;16(2):123–32

Expression of human myometrial G alpha s messenger ribonucleic acid transcript during pregnancy and labour: involvement of alternative splicing pathways. Europe–Finner GN, et al. **J Mol Endocrinol** 1997 Feb; 18(1):15–25

Identification of G alpha s messenger ribonucleic acid splice variants in human granulosa cells. Europe–Finner GN, et al. **J Mol Endocrinol** 1997 Feb;18(1):27–35

Development of cytochrome P450 17 alpha–hydroxylase (P450c17) mRNA and enzyme activity in neonatal ovaries of normal and hypogonadal (hpg) mice. Gray SA, et al. **J Mol Endocrinol** 1996 Aug;17(1):55–60

An alternative splice variant of the mouse TRH receptor mRNA is the major form expressed in the mouse pituitary gland. Jones KE, et al. **J Mol Endocrinol** 1996 Apr; 16(2):197–204

Expression of activin beta C subunit mRNA in reproductive tissues. Loveland KL, et al. **J Mol Endocrinol** 1996 Aug; 17(1):61–5

Investigation of the potential role of the germ cell complement in control of the expression of transferrin mRNA in the prepubertal and adult rat testis. Maguire SM, et al. **J Mol Endocrinol** 1997 Aug;19(1):67–77

Nutritional regulation of insulin–like growth factor–I mRNA expression in barramundi, Lates calcarifer. Matthews SJ, et al. **J Mol Endocrinol** 1997 Jun;18(3):273–6

Molecular cloning of the cDNAs encoding pituitary glycoprotein hormone alpha– and gonadotropin II beta–subunits of the Japanese eel, Anguilla japonica, and increase in their mRNAs during ovarian development induced by injection of chum salmon pituitary homogenate. Nagae M, et al. **J Mol Endocrinol** 1996 Apr;16(2):171–81

Glucocorticoids enhance corticotropin receptor mRNA levels in ovine adrenocortical cells. Picard–Hagen N, et al. **J Mol Endocrinol** 1997 Aug;19(1):29–36

Cell–specific regulation of mRNAs for IGF–I and IGF–binding proteins–4 and –5 in streptozotocin–diabetic rat kidney. Price GJ, et al. **J Mol Endocrinol** 1997 Feb; 18(1):5–14

Expression of IGF–II and H19 mRNA in the neonatal rat during normal maturation and after dexamethasone administration. Senior PV, et al. **J Mol Endocrinol** 1996 Dec;17(3):217–23

Ontogeny of FSH receptor messenger ribonucleic acid transcripts in relation to FSH secretion and testicular function in sheep. Yarney TA, et al. **J Mol Endocrinol** 1997 Apr;18(2):113–25

Deletion of the mouse GH–binding protein (mGHBP) mRNA polyadenylation and splicing sites does not abolish production of mGHBP. Zhou Y, et al. **J Mol Endocrinol** 1997 Aug;19(1):1–13

Evidence of alternative promoters directing isoform–specific expression of human endothelin–converting enzyme–1 mRNA in cultured endothelial cells. Orzechowski HD, et al. **J Mol Med** 1997 Jul;75(7):512–21

Nerve growth factor (NGF) regulation of estrogen receptors in explant cultures of the developing forebrain. Miranda R, et al. **J Neurobiol** 1996 Sep;31(1):77–87

A novel rat tyrosine hydroxylase mRNA species generated by alternative splicing. Laniéce P, et al. **J Neurochem** 1996 May;66(5):1819–25

Isolation and characterization of ovine tyrosine hydroxylase mRNA. Tillet Y, et al. **J Neurochem** 1997 May;68(5):2161–9

Quantification of interleukin–6 mRNA in wallerian degeneration by competitive reverse transcription polymerase chain reaction. Bourde O, et al. **J Neuroimmunol** 1996 Sep;69(1–2):135–40

Vascular cell adhesion molecule–1 mRNA is expressed in immune–mediated and ischemic injury of the rat nervous system. Jander S, et al. **J Neuroimmunol** 1996 Oct; 70(1):75–80

An antisense oligodeoxynucleotide complementary to corticotropin–releasing hormone mRNA inhibits rat splenocyte proliferation in vitro. Jessop DS, et al. **J Neuroimmunol** 1997 May;75(1–2):135–40

C–fos mRNA pattern and corticotropin–releasing factor neuronal activity throughout the brain of rats injected centrally with a prostaglandin of E2 type. Lacroix S, et al. **J Neuroimmunol** 1996 Nov;70(2):163–79

Enhanced cleavage of an atypical intron of dopamine D3–receptor pre–mRNA in chronic schizophrenia. Schmauss C. **J Neurosci** 1996 Dec 15;16(24):7902–9

The effect of a high–protein diet on cystathionine beta–synthase activity and its transcript levels in rat liver. Yamamoto N, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Dec;42(6):589–93

IL–1 beta mRNA as the predominant inflammatory cytokine transcript: correlation with inflammatory cell infiltration into human gingiva. Tokoro Y, et al. **J Oral Pathol Med** 1996 May;25(5):225–31

Altered RET gene mRNA expression in Hirschsprung's disease. Kusafuka T, et al. **J Pediatr Surg** 1997 Apr; 32(4):600–4

Drug–induced changes of carcinoembryonic antigen expression in human cancer cells: effect of 5–fluorouracil. Prete SP, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1574–81

The full D1 dopamine receptor agonist SKF–82958 induces neuropeptide mRNA in the normosensitive striatum of rats: regulation of D1/D2 interactions by muscarinic receptors. Wang JQ, et al. **J Pharmacol Exp Ther** 1997 May; 281(2):972–82

Abnormal cholecystokinin mRNA levels in entorhinal cortex of schizophrenics. Bachus SE, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):233–56 (170 ref.)

Sex hormone binding globulin mRNA in human breast cancer: detection in cell lines and tumor samples. Moore KH, et al. **J Steroid Biochem Mol Biol** 1996 Nov; 59(3–4):297–304

mRNA differential display of colonic mucosa cells in ulcerative colitis. Zuo L, et al. **J Surg Res** 1997 Apr; 69(1):119–27

Partial cloning of prohibitin cDNA from canine, feline, bovine, equine, and rabbit liver mRNA by RT–PCR. Matsuyama S, et al. **J Vet Med Sci** 1997 Mar;59(3):201–3

Human T–cell leukemia virus type 2 Rex inhibits pre–mRNA splicing in vitro at an early stage of spliceosome formation. Bakker A, et al. **J Virol** 1996 Aug;70(8):5511–8

Cosmids and transcribed sequences from chromosome 11q23. Katoh M, et al. **Jpn J Hum Genet** 1995 Dec;40(4):307–17

Bone resorption and mRNA expression of IL–6 and IL–6 receptor in patients with renal osteodystrophy. Langub MC Jr, et al. **Kidney Int** 1996 Aug;50(2):515–20

Changing patterns of gene expression in developing mouse kidney, as probed by differential mRNA display combined with cDNA library screening. Rosenblum ND, et al. **Kidney Int** 1997 Mar;51(3):920–5

Interaction of erythropoietin RNA binding protein with erythropoietin RNA requires an association with heat shock protein 70. Scandurro AB, et al. **Kidney Int** 1997 Feb;51(2):579–84

Increased atrial natriuretic peptide mRNA expression in the kidney of diabetic rats. Shin SJ, et al. **Kidney Int** 1997 Apr; 51(4):1100–5

Hypoxia–inducible factor–1 alpha is regulated at the post–mRNA level. Wenger RH, et al. **Kidney Int** 1997 Feb; 51(2):560–3

Characterization of mRNAs 4 and 5 of enterotropic mouse hepatitis virus. Homberger FR, et al. **Lab Anim Sci** 1997 Feb;47(1):86–90

Basic fibroblast growth factor stimulates the release of preformed transforming growth factor beta 1 from human proximal tubular cells in the absence of de novo gene transcription or mRNA translation. Phillips AO, et al. **Lab Invest** 1997 Apr;76(4):591–600

Frequent expression of interleukin–9 mRNA and infrequent involvement of interleukin–9 in proliferation of primary adult T–cell leukemia cells and HTLV–I infected T–cell lines. Matsushita K, et al. **Leuk Res** 1997 Mar;21(3):211–6

Inhibition of syncytium formation by antisense oligonucleotide phosphorothioates complementary to tax mRNA of human T–cell leukemia virus type 1 (HTLV–1). Maeda N, et al. **Leukemia** 1997 Apr;11 Suppl 3:42–4

Detection of colorectal carcinoma cells in circulating peripheral blood by reverse transcription–polymerase chain reaction targeting cytokeratin–20 mRNA. Funaki NO, et al. **Life Sci** 1997;60(9):643–52

Different experimental conditions which regulate type II 5'–deiodinase mRNA in rat Harderian gland. Garcia–Macias JF, et al. **Life Sci** 1997;61(2):181–92

The influence of restraint stress on the expression of mRNAs for IL–6 and the IL–6 receptor in the hypothalamus and midbrain of the rat. Shizuya K, et al. **Life Sci** 1997; 61(10):PL 135–40

Induction of mRNAs for the growth hormone receptor gene during mouse 3T3–L1 preadipocyte differentiation. Zou L, et al. **Metabolism** 1997 Jan;46(1):114–8

Translation–competent extracts from Saccharomyces cerevisiae: effects of L–A RNA, 5' cap, and 3' poly(A) tail on translational efficiency of mRNAs. Iizuka N, et al. **Methods** 1997 Apr;11(4):353–60

Research on mRNA translation into protein [editorial] Sonenberg N. **Methods** 1997 Apr;11(4):331

Cytochrome P450 mRNA induction: quantitation by RNA–polymerase chain reaction using capillary electrophoresis. Fasco MJ, et al. **Methods Enzymol** 1996; 272:401–12

Gene linkage and steady state RNAs suggest trans–splicing may be associated with a polycistronic transcript in Schistosoma mansoni. Davis RE, et al. **Mol Biochem Parasitol** 1997 Oct;89(1):25–39

Surprising diversity and distribution of spliced leader RNAs in flatworms. Davis RE. **Mol Biochem Parasitol** 1997 Jul; 87(1):29–48

A fluorescence in situ hybridisation study of the regulation of histone mRNA levels during the cell cycle of Trypanosoma brucei. Ersfeld K, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):201–9

Differentially expressed, abundant trans–spliced cDNAs from larval Brugia malayi. Gregory WF, et al. **Mol Biochem Parasitol** 1997 Jul;87(1):85–95

Transcription of the Trypanosoma brucei spliced leader RNA gene is dependent only on the presence of upstream regulatory elements. Günzl A, et al. **Mol Biochem Parasitol** 1997 Mar;85(1):67–76

The 5S ribosomal RNA intergenic region of parasitic nematodes: variation in size and presence of SL1 RNA. Liu LX, et al. **Mol Biochem Parasitol** 1996 Dec 20; 83(2):235–9

Developmentally regulated transcripts and evidence of differential mRNA processing in Giardia lamblia. Que X, et al. **Mol Biochem Parasitol** 1996 Oct 18;81(1):101–10

The SLA RNA gene of Trypanosoma brucei is organized in a tandem array which encodes several small RNAs. Roberts TG, et al. **Mol Biochem Parasitol** 1996 Dec 20; 83(2):163–74

Heterogeneous transcripts of RIME/ingi retroposons in Trypanosoma brucei are unspliced. Vassella E, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):131–5

Accelerated evolution of sites undergoing mRNA editing in plant mitochondria and chloroplasts. Shields DC, et al. **Mol Biol Evol** 1997 Mar;14(3):344–9

Microinjection of in vitro transcribed RNA and antisense oligonucleotides in mouse oocytes and early embryos to study the gain– and loss–of–function of genes. Kola I, et al. **Mol Biotechnol** 1996 Oct;6(2):191–9

An effective elimination of false positives isolated from differential display of mRNAs. Wadhwa R, et al. **Mol Biotechnol** 1996 Oct;6(2):213–7

Uncoordinated regulation of mRNA expression of the three isoforms of transforming growth factor–beta in the mouse skin carcinogenesis model. Rundhaug JE, et al. **Mol Carcinog** 1997 Feb;18(2):115–26

Postfertilization deadenylation of mRNAs in Xenopus laevis embryos is sufficient to cause their degradation at the blastula stage. Audic Y, et al. **Mol Cell Biol** 1997 Jan; 17(1):209–18

HRS/SRp40–mediated inclusion of the fibronectin EIIIB exon, a possible cause of increased EIIIB expression in proliferating liver. Du K, et al. **Mol Cell Biol** 1997 Jul; 17(7):4096–104

Elements in the 3' untranslated region of procyclin mRNA regulate expression in insect forms of Trypanosoma brucei by modulating RNA stability and translation. Furger A, et al. **Mol Cell Biol** 1997 Aug;17(8):4372–80

Identification of a competitive translation determinant in the 3' untranslated region of alfalfa mosaic virus coat protein mRNA. Hann LE, et al. **Mol Cell Biol** 1997 Apr; 17(4):2005–13

G triplets located throughout a class of small vertebrate introns enforce intron borders and regulate splice site selection. McCullough AJ, et al. **Mol Cell Biol** 1997 Aug; 17(8):4562–71

Sequences within the 5' untranslated region regulate the levels of a kinetoplast DNA topoisomerase mRNA during the cell cycle. Pasion SG, et al. **Mol Cell Biol** 1996 Dec; 16(12):6724–35

Canonical eukaryotic initiation factors determine initiation of translation by internal ribosomal entry. Pestova TV, et al. **Mol Cell Biol** 1996 Dec;16(12):6859–69

Functional dissection of eukaryotic initiation factor 4F: the 4A subunit and the central domain of the 4G subunit are sufficient to mediate internal entry of 43S preinitiation complexes. Pestova TV, et al. **Mol Cell Biol** 1996 Dec; 16(12):6870–8

Characterization of a beta–actin mRNA zipcode–binding protein. Ross AF, et al. **Mol Cell Biol** 1997 Apr; 17(4):2158–65

In vivo antisense oligodeoxynucleotide mapping reveals masked regulatory elements in an mRNA dormant in mouse oocytes. Stutz A, et al. **Mol Cell Biol** 1997 Apr; 17(4):1759–67

Modulation of the fate of cytoplasmic mRNA by AU–rich elements: key sequence features controlling mRNA deadenylation and decay. Xu N, et al. **Mol Cell Biol** 1997 Aug;17(8):4611–21

Basic fibroblast growth factor messenger ribonucleic acid levels in eutopic and ectopic human endometrial stromal cells as assessed by competitive polymerase chain reaction amplification. Di Blasio AM, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):169–75

Processing of pro–opiomelanocortin in GH3 cells: inhibition by prohormone convertase 2 (PC2) antisense mRNA. Friedman TC, et al. **Mol Cell Endocrinol** 1996 Jan 15; 116(1):89–96

Osmotic and non–osmotic regulation of arginine vasopressin (AVP) release, mRNA, and promoter activity in small cell lung carcinoma (SCLC) cells. Kim JK, et al. **Mol Cell Endocrinol** 1996 Oct 30;123(2):179–86

Expression of c–erbA alpha, c–erbA beta and Rev–erbA alpha mRNA during the conversion of brown adipose tissue into white adipose tissue. Reyne Y, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):59–65

Structure and expression of Leydig insulin–like peptide mRNA in the sheep. Roche PJ, et al. **Mol Cell Endocrinol** 1996 Aug 9;121(2):171–7

Partial sequencing of the rat steroidogenic acute regulatory protein message from immortalized granulosa cells: regulation by gonadotropins and isoproterenol. Selvaraj N,

et al. **Mol Cell Endocrinol** 1996 Oct 30;123(2):171–7
Expression of mRNA for vasoactive intestinal peptide in rat small intestine. Stadelmann AM, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):31–7
Spatial segregation of G alpha s mRNA and vasopressin mRNA to distinct domains of the rough endoplasmic reticulum within secretory neurons of the rat hypothalamus. Trembleau A, et al. **Mol Cell Neurosci** 1996 Jan;7(1):17–28
The presence of a pseudogene may affect the use of HPRT as an endogenous mRNA control in RT-PCR. Sellner LN, et al. **Mol Cell Probes** 1996 Dec;10(6):481–3
Endogenous glutamate levels regulate nerve growth factor mRNA expression in the rat dentate gyrus. Gwag BJ, et al. **Mol Cells** 1997 Jun 30;7(3):425–30
Expression of brain-derived neurotrophic factor mRNA stimulated by basic fibroblast growth factor and platelet-derived growth factor in rat hippocampal cell line. Kwon YK. **Mol Cells** 1997 Jun 30;7(3):320–5
cAMP and protein kinase C elevate LH beta mRNA levels by activating transcription rather than stabilizing mRNA in rat pituitary cells. Park D, et al. **Mol Cells** 1997 Feb 28;7(1):98–103
Tad, a Neurospora LINE-like retrotransposon exhibits a complex pattern of transcription. Sewell E, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):137–45
Inhibition of transforming growth factor-beta 1 alters the growth, anchor-dependent cell aggregation and integrin mRNA expression in human promonocytes: implications for endometriosis and peritoneal adhesion formation. Dou Q, et al. **Mol Hum Reprod** 1997 May;3(5):383–91
Prostaglandin E2 induces inhibin alpha- and beta A-subunit mRNA and secretion of dimeric inhibin A in cultured human granulosa-luteal cells. Erämaa M, et al. **Mol Hum Reprod** 1996 Nov;2(11):815–22
Differential expression of type II, IV and cytosolic PLA2 messenger RNA in human intrauterine tissues at term. Freed KA, et al. **Mol Hum Reprod** 1997 Jun;3(6):493–9
Granulocyte-macrophage colony-stimulating factor: presence in human follicular fluid, protein secretion and mRNA expression by ovarian cells. Jasper MJ, et al. **Mol Hum Reprod** 1996 Aug;2(8):555–62
Quantification of hexokinase mRNA in mouse blastocysts by competitive reverse transcriptase polymerase chain reaction. Johnson MD, et al. **Mol Hum Reprod** 1997 Apr; 3(4):359–65
Expression of luteinizing hormone/human chorionic gonadotrophin (LH/HCG) receptor mRNA in the human ovary. Minegishi T, et al. **Mol Hum Reprod** 1997 Feb; 3(2):101–7
The pattern of cytokine mRNA expression in ovarian endometriomata. Odukoya OA, et al. **Mol Hum Reprod** 1997 May;3(5):393–7
The expression of transforming growth factor-beta s and TGF-beta receptor mRNA and protein and the effect of TGF-beta s on human myometrial smooth muscle cells in vitro. Tang XM, et al. **Mol Hum Reprod** 1997 Mar; 3(3):233–40
Zebrafish translation elongation factor EF1 alpha mRNA: sequence and secondary structures. Gao D, et al. **Mol Mar Biol Biotechnol** 1996 Dec;5(4):288–94
Promoter-independent cold-shock induction of cspA and its derepression at 37 degrees C by mRNA stabilization. Fang L, et al. **Mol Microbiol** 1997 Jan;23(2):355–64
A dual role for the Bacillus subtilis glpD leader and the GlpP protein in the regulated expression of glpD: antitermination and control of mRNA stability. Glatz E, et al. **Mol Microbiol** 1996 Jan;19(2):319–28
Differential mRNA stability of the cspA gene in the cold-shock response of Escherichia coli. Goldenberg D, et al. **Mol Microbiol** 1996 Jan;19(2):241–8
Translation of vph mRNA in Streptomyces lividans and Escherichia coli after removal of the 5'untranslated leader. Wu CJ, et al. **Mol Microbiol** 1996 Oct;22(2):339–55
Sequence of interleukin-2 isolated from human placental poly A+ RNA: possible role in maintenance of fetal allograft. Chernicky CL, et al. **Mol Reprod Dev** 1996 Feb;43(2):180–6
Oocyte selection of mutations affecting cytoplasmic polyadenylation of maternal mRNAs. Verrotti AC, et al. **Mol Reprod Dev** 1997 Apr;46(4):482–8
Selective downregulation of ETA receptor mRNA in renal transplant recipients on cyclosporin A revealed by quantitative RT-PCR. Karet FE, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):1976–82
PTH/PTHrP receptor mRNA is down-regulated in epiphyseal cartilage growth plate of uraemic rats. Ureña P, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):2008–16
Regulation of gene expression by natural antisense RNA transcripts. Knee R, et al. **Neurochem Int** 1997 Sep; 31(3):379–92 (122 ref.)
Intrastriatal administration of an oligodeoxynucleotide antisense to the D2 dopamine receptor mRNA inhibits D2 dopamine receptor-mediated behavior and D2 dopamine receptors in normal mice and in mice lesioned with 6-hydroxydopamine. Zhou LW, et al. **Neurochem Int** 1996 Dec;29(6):583–95
Molecular cloning of the rat NADH:ubiquinone oxidoreductase subunit and its up-regulation in the facial muscle after denervation: detected by means of differential display. Kitahara T, et al. **Neurol Res** 1996 Aug; 18(4):329–36
Underexpression of messenger RNA for peripheral myelin protein 22 in hereditary neuropathy with liability to pressure palsies. Schenone A, et al. **Neurology** 1997 Feb; 48(2):445–9
Expression and alternative splicing of Pit-1 messenger ribonucleic acid in pituitary adenomas. Hamada K, et al. **Neurosurgery** 1996 Feb;38(2):362–6
Changes in endothelial nitric oxide synthase mRNA during vasospasm after subarachnoid hemorrhage in monkeys. Hino A, et al. **Neurosurgery** 1996 Sep;39(3):562–7; discussion 567–8
Application of antisense ribonucleic acid complementary to O6-methylguanine-deoxyribonucleic acid methyltransferase messenger ribonucleic acid for therapy of malignant gliomas. Nagane M, et al. **Neurosurgery** 1997 Aug;41(2):434–40; discussion 440–1
Prognostic factors and variant estrogen receptor RNAs in clinical breast cancer. Auchus RJ, et al. **Nucl Med Biol** 1994 Apr;21(3):449–54 (15 ref.)
The 5' terminal oligopyrimidine tract confers translational control on TOP mRNAs in a cell type- and sequence context-dependent manner. Avni D, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):995–1001
A short CIC-2 mRNA transcript is produced by exon skipping. Chu S, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3453–7
Functional analysis of the polypyrimidine tract in pre-mRNA splicing. Coolidge CJ, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):888–96
Sequence requirements of the bidirectional yeast TRP4 mRNA 3'-end formation signal. Egli CM, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):417–22
Strength of translation initiation signal sequence of mRNA as studied by quantification method: effect of nucleotide substitutions upon translation efficiency in rat preproinsulin mRNA. Iida Y, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3313–6
Differential expression of the human ST5 gene in HeLa-fibroblast hybrid cell lines mediated by YY1: evidence that YY1 plays a part in tumor suppression. Lichy JH, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4700–8
Making (anti)sense of non-coding sequence conservation. Lipman DJ. **Nucleic Acids Res** 1997 Sep 15;25(18):3580–3 (54 ref.)
The Elav-like proteins bind to AU-rich elements and to the poly(A) tail of mRNA. Ma WJ, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3564–9
Recent evolutionary acquisition of alternative pre-mRNA splicing and 3' processing regulations induced by intronic B2 SINE insertion. Michel D, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3228–34
Quantification analysis of translation initiation signal sequences in vertebrate mRNAs. Lida Y, et al. **Nucleic Acids Symp Ser** 1995;(34):103–4
Structure of translation initiation region of c-myc mRNA and thermostability of the c-myc mRNA/antisense ODN complex. Tanaka T, et al. **Nucleic Acids Symp Ser** 1995; (34):135–6
Discontinuous translation and mRNA secondary structure. Zama M. **Nucleic Acids Symp Ser** 1995;(34):97–8
Increased transcription of the E mu-myc transgene and mRNA stabilisation produce only a modest elevation in Myc protein. Colley SM, et al. **Oncogene** 1997 Jun 5; 14(22):2735–9
BRCA1 and BRCA2 mRNA levels are coordinately elevated in human breast cancer cells in response to estrogen. Spillman MA, et al. **Oncogene** 1996 Oct 17;13(8):1639–45
Reciprocal cellular distribution of glucagon-like peptide-1 (GLP-1) immunoreactivity and GLP-1 receptor mRNA in pancreatic islets of rat. Hörsch D, et al. **Pancreas** 1997 Apr;14(3):290–4
Insulin release and insulin mRNA levels in rat islets of Langerhans cultured on extracellular matrix. Perfetti R, et al. **Pancreas** 1996 Jul;13(1):47–54
Excretory/secretory products from plerocercoids of Spirometra erinacei reduce iNOS and chemokine mRNA levels in peritoneal macrophages stimulated with cytokines and/or LPS. Fukumoto S, et al. **Parasite Immunol** 1997 Jul;19(7):325–32
Localization of thyrotropin-releasing hormone mRNA expression in the rat heart by in situ hybridization histochemistry. Shi ZX, et al. **Pathobiology** 1996; 64(6):314–9
Differential modulation of prohormone convertase mRNA by second messenger activators in two cholecystokinin-producing cell lines. Mania-Farnell BL, et al. **Peptides** 1996;17(1):47–54
Renal expression of Na+-phosphate cotransporter mRNA and protein: effect of the Gy mutation and low phosphate diet. Beck L, et al. **Pflugers Arch** 1996 Apr;431(6):936–41
Alterations in the mRNA levels of two metabolic enzymes in rat skeletal muscle during stretch-induced hypertrophy and disuse atrophy. Brownson C, et al. **Pflugers Arch** 1996 Apr;431(6):990–2
Characterization of early aldosterone-induced RNAs identified in A6 kidney epithelia. Spindler B, et al. **Pflugers Arch** 1997 Jul;434(3):323–31
ICAM-1 mRNA levels and relative transcription rates are decreased by UV irradiation of monocytes. De Luca DJ, et al. **Photochem Photobiol** 1997 Apr;65(4):609–15
The level of mRNA transcribed from psaL, which encodes a subunit of photosystem I, is increased by cytokinin in darkness in etiolated cotyledons of cucumber. Toyama T, et al. **Plant Cell Physiol** 1996 Oct;37(7):1038–41
Maturation-specific translational enhancement mediated by the 5'-UTR of a late pollen transcript. Bate N, et al. **Plant J** 1996 Oct;10(4):613–23
An S-locus-related gene in Arabidopsis encodes a functional kinase and produces two classes of transcripts. Tobias CM, et al. **Plant J** 1996 Sep;10(3):523–31
Control of mRNA stability in higher plants. Abler ML, et al. **Plant Mol Biol** 1996 Oct;32(1–2):63–78 (99 ref.)
Translational control of cellular and viral mRNAs. Gallie DR. **Plant Mol Biol** 1996 Oct;32(1–2):145–58 (109 ref.)
Characterization of a lily tapetal transcript that shares sequence similarity with a class of intracellular pathogenesis-related (IPR) proteins. Huang JC, et al. **Plant Mol Biol** 1997 Jul;34(4):681–6
Cloning and characterization of tomato leaf senescence-related cDNAs. John I, et al. **Plant Mol Biol** 1997 Mar;33(4):641–51
Plant mRNA 3'-end formation. Rothnie HM. **Plant Mol Biol** 1996 Oct;32(1–2):43–61 (133 ref.)
Splicing of precursors to mRNA in higher plants: mechanism, regulation and sub-nuclear organisation of the spliceosomal machinery. Simpson GG, et al. **Plant Mol Biol** 1996 Oct; 32(1–2):1–41 (307 ref.)
Both 5' and 3' sequences of maize adh1 mRNA are required for enhanced translation under low-oxygen conditions. Bailey-Serres J, et al. **Plant Physiol** 1996 Oct;112(2):685–95
Differential expression of two hemA mRNAs encoding glutamyl-tRNA reductase proteins in greening cucumber seedlings. Tanaka R, et al. **Plant Physiol** 1996 Apr; 110(4):1223–30
Mouse cytoplasmic polyadenylylation element binding protein: an evolutionarily conserved protein that interacts with the cytoplasmic polyadenylylation elements of c-mos mRNA. Gebauer F, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14602–7
Characterization of serum amyloid A protein mRNA expression and secondary amyloidosis in the domestic duck. Guo JT, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10; 93(25):14548–53
In vitro and in vivo characterization of novel mRNA motifs that bind special elongation factor SelB. Klug SJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6676–81
Up-regulation of specific tyrosinase mRNAs in mouse melanomas with the c2j gene substituted for the wild-type tyrosinase allele: utilization in design of syngeneic immunotherapy models. Le Fur N, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7561–5
rRNA-like sequences occur in diverse primary transcripts: implications for the control of gene expression. Mauro VP, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):422–7
smg mutants affect the expression of alternatively spliced SR protein mRNAs in Caenorhabditis elegans. Morrison M, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9782–5
Complex formation between stage-specific oocyte factors and a Xenopus mRNA localization element. Mowry KL. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14608–13
Site-directed mutations reveal long-range compensatory interactions in the Adh gene of Drosophila melanogaster. Parsch J, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4; 94(3):928–33
Length suppression in histone messenger RNA 3'-end maturation: processing defects of insertion mutant premessenger RNAs can be compensated by insertions into the U7 small nuclear RNA. Scharl LC, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14659–64
Repair of thalassemic human beta-globin mRNA in mammalian cells by antisense oligonucleotides. Sierakowska H, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12840–4
Translation initiation factor eIF4G mediates in vitro poly(A) tail-dependent translation. Tarun SZ Jr, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9046–51
TOP genes: a translationally controlled class of genes including those coding for ribosomal proteins. Amaldi F, et al. **Prog Mol Subcell Biol** 1997;18:1–17 (70 ref.)
Mechanisms for posttranscriptional regulation by iron-responsive elements and iron regulatory proteins. Muckenthaler M, et al. **Prog Mol Subcell Biol** 1997; 18:93–115 (100 ref.)
3' untranslated regions of c-myc and c-fos mRNAs: multifunctional elements regulating mRNA translation, degradation and subcellular localization. Veyrune JL, et al. **Prog Mol Subcell Biol** 1997;18:35–63 (160 ref.)
Structure and function of the human immunodeficiency virus leader RNA. Berkhout B. **Prog Nucleic Acid Res Mol Biol** 1996;54:1–34 (182 ref.)
Ribosome-mediated translational pause and protein domain organization. Thanaraj TA, et al. **Protein Sci** 1996 Aug; 5(8):1594–612
Protein secondary structural types are differentially coded on messenger RNA. Thanaraj TA, et al. **Protein Sci** 1996 Oct;5(10):1973–83
Protein structure and the sequential structure of mRNA: alpha-helix and beta-sheet signals at the nucleotide level. Brunak S, et al. **Proteins** 1996 Jun;25(2):237–52
Lack of ovarian steroid hormone regulation of norepinephrine transporter mRNA expression in the non-human primate locus coeruleus. Schutzer WE, et al. **Psychoneuroendocrinology** 1997 Jul;22(5):325–36
Tissue distribution and subcellular localization of Na+ channel mRNA in the nervous system of the squid, Loligo

opalescens. Liu TI, et al. **Receptors Channels** 1995; 3(4):243–54

Expression and distribution of glucose–6–phosphatase catalytic subunit messenger RNA and its changes in the diabetic state. Shingu R, et al.
Res Commun Mol Pathol Pharmacol 1996 Jul;93(1):13–24

Effects of swimming training on brown–adipose–tissue activity in obese ob/ob mice: GDP binding and UCP m–RNA expression. Ueno N, et al.
Res Commun Mol Pathol Pharmacol 1997 Jan;95(1):92–104

A highly stable duplex structure sequesters the 5' splice site region of hnRNP A1 alternative exon 7B. Blanchette M, et al. **RNA** 1997 Apr;3(4):405–19

Functional group substitutions of the branchpoint adenosine in a nuclear pre–mRNA and a group II intron. Gaur RK, et al. **RNA** 1997 Aug;3(8):861–9

The relative abundance of dopamine D4 receptor mRNA in post mortem brains of schizophrenics and controls. Roberts DA, et al. **Schizophr Res** 1996 May;20(1–2):171–4

Glutamate dehydrogenase mRNA is immediately induced after phencyclidine treatment in the rat brain. Shimizu E, et al. **Schizophr Res** 1997 Jun 20;25(3):251–8

Requirement of the DEAD–Box protein ded1p for messenger RNA translation. Chuang RY, et al. **Science** 1997 Mar 7; 275(5305):1468–71

Transmission of hepatitis C by intrahepatic inoculation with transcribed RNA. Kolykhalov AA, et al. **Science** 1997 Jul 25;277(5325):570–4

A conformational switch in Escherichia coli 16S ribosomal RNA during decoding of messenger RNA. Lodmell JS, et al. **Science** 1997 Aug 29;277(5330):1262–7

Developmental expression and CORT–regulation of TGF–beta and EGF receptor mRNA during mouse palatal morphogenesis: correlation between CORT–induced cleft palate and TGF–beta 2 mRNA expression. Jaskoll T, et al. **Teratology** 1996 Jul;54(1):34–44

Ectopic transcript analysis indicates that allelic exclusion is an important cause of type I protein C deficiency in patients with nonsense and frameshift mutations in the PROC gene. Soria JM, et al. **Thromb Haemost** 1996 Jun;75(6):870–6

Sequencing–based typing of HLA–A locus using mRNA and a single locus–specific PCR followed by cycle–sequencing with AmpliTaq DNA polymerase, FS. Norgaard L, et al. **Tissue Antigens** 1997 May;49(5):455–65

Induction of liver–associated transforming growth factor beta 1 (TGF–beta 1) mRNA expression by carbon tetrachloride leads to the inhibition of T helper 2 cell–associated lymphokines. Jeon YJ, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):27–35

Localization of gamma–glutamylcysteine synthetase mRNA expression in mouse brain following methylmercury treatment using reverse transcription in situ PCR amplification. Li S, et al. **Toxicol Appl Pharmacol** 1996 Sep; 140(1):180–7

A molecular strategy designed for the rapid screening of gene traps based on sequence identity and gene expression pattern in adult mice. Holzschu D, et al.
Transgenic Res 1997 Jan;6(1):97–106

3'–end–forming signals of yeast mRNA. Guo Z, et al.
Trends Biochem Sci 1996 Dec;21(12):477–81 (41 ref.)

PHAS/4E–BPs as regulators of mRNA translation and cell proliferation. Lawrence JC Jr, et al.
Trends Biochem Sci 1997 Sep;22(9):345–9 (46 ref.)

Pre–mRNA splicing: the discovery of a new spliceosome doubles the challenge. Tarn WY, et al.
Trends Biochem Sci 1997 Apr;22(4):132–7 (40 ref.)

The SR protein family: pleiotropic functions in pre–mRNA splicing. Valcárcel J, et al. **Trends Biochem Sci** 1996 Aug; 21(8):296–301 (49 ref.)

Differential mRNA display using anchored oligo–dT and long sequence–specific primers as arbitrary primers. Jurecic R, et al. **Trends Genet** 1996 Dec;12(12):502–4

Base–modification mRNA editing through deamination—the good, the bad and the unregulated. Smith HC, et al.
Trends Genet 1996 Oct;12(10):418–24 (69 ref.)

mRNA differential display: application in the discovery of novel pharmacological targets. Wang X, et al.
Trends Pharmacol Sci 1996 Aug;17(8):276–9 (21 ref.)

Preferential translation of reovirus mRNA by a sigma3–dependent mechanism. Schmechel S, et al.
Virology 1997 May 26;232(1):62–73

Stable protein–RNA interaction involves the terminal domains of bluetongue virus mRNA, but not the terminally conserved sequences. Theron J, et al. **Virology** 1997 Mar 3;229(1):134–42

Enhanced expression of manganese superoxide dismutase mRNA and increased TNFalpha mRNA expression by gastric mucosa in gastric cancer. Izutani R, et al.
World J Surg 1996 Feb;20(2):228–33

[New strategy for RNA vectorization in mammalian cells. Use of a peptide vector] Vidal P, et al.
C R Acad Sci III 1997 Apr;320(4):279–87 (Eng. Abstr.) **(Fre)**

[Reproducibility of nonradioactive DDRT–PCR method for detection of gene expression in squamous epithelial carcinoma cells of the upper aerodigestive tract] Görögh T, et al. **Laryngorhinootologie** 1997 Jan;76(1):42–5 (Eng. Abstr.) **(Ger)**

[Cytokines in mixed lymphocyte culture as a prospective parameter for transplantation] Danzer SG, et al.
Med Klin 1996 Aug 15;91(8):494–500 (Eng. Abstr.) **(Ger)**

[Decubitus ulcer as the site of reactive soft tissue ossification—molecular biology aspects] Wulf M, et al.
Zentralbl Chir 1996;121 Suppl:33–4 **(Ger)**

[Unique mechanism of coronavirus mRNA transcription] Tsukamoto K. **Uirusu** 1996 Dec;46(2):99–107 (41 ref.) **(Jpn)**

[Regulation of translation of the distal lacZ gene in polycistronic mRNA by the ribosome stream from the proximal gene] Nikolenko GN, et al. **Bioorg Khim** 1997 Mar;23(3):200–4 (Eng. Abstr.) **(Rus)**

[Correlation between the molecular heterogeneity of ceruloplasmin mRNA and multiple molecular forms of ceruloplasmin synthesized in the rat liver] Tsymbalenko NV, et al. **Biull Eksp Biol Med** 1997 Jan;123(1):79–82 **(Rus)**

[A novel class of small RNP (alpha–RNP) in human cell line K–562 and coordinated control of expression of Alu–containing messenger RNA] Konstantinova IM, et al. **Dokl Akad Nauk** 1996 Sep;350(2):268–71 **(Rus)**

[Short 5'–terminal sequence of pre–mRNA tryptophanyl–tRNA–synthetase inhibits splicing of alternative exons] Turpaev KT, et al. **Dokl Akad Nauk** 1996 Aug;349(5):698–700 **(Rus)**

[Study of transcript translation of a DNA–copy of the translated region of the foot–and–mouth disease A22 virus genome] Aminev AG, et al. **Mol Biol (Mosk)** 1997 May–Jun;31(3):398–402 **(Rus)**

[Effect of the structure of the prepromotor region on transcription using phage T7 RNA polymerase] Baklanov MM, et al. **Mol Biol (Mosk)** 1996 Mar–Apr;30(2):449–53 **(Rus)**

[Transcripts of integrated simian adenovirus SA7 oncogenes in SH2 rat fibroblasts, transformed by adenovirus SA7 DNA] Kurabekova RM, et al. **Mol Biol (Mosk)** 1996 Jul–Aug;30(4):808–17 **(Rus)**

[Heterogeneity of the 5'–untranslated area of prolactin receptor mRNA in rat liver] Rubtsov PM, et al.
Mol Biol (Mosk) 1996 Mar–Apr;30(2):330–8 **(Rus)**

[The characteristics of different types of mRNA expressed in the human brain] Dmitrenko VV, et al. **Tsitol Genet** 1996 Sep–Oct;30(5):41–7 (Eng. Abstr.) **(Rus)**

HISTORY

Contributions of the 'Rouge–Cloître group' to the notion of 'messenger RNA'. Thieffry D.
Pubbl Stn Zool Napoli II 1997;19(1):89–111

IMMUNOLOGY

Expression of cytokine mRNA in gastric mucosa with Helicobacter pylori infection [see comments] Yamaoka Y, et al. **Scand J Gastroenterol** 1995 Dec;30(12):1153–9. Comment in: Scand J Gastroenterol 1997 Feb;32(2);191–2.

ISOLATION & PURIFICATION

Comparison of four methods for isolating large mRNA: apolipoprotein B mRNA in bovine and rat livers. Gruffat D, et al. **Anal Biochem** 1996 Nov 1;242(1):77–83

Use of thermostable and Escherichia coli RNase H in RNA mapping studies. Porter D, et al. **Anal Biochem** 1997 May 1;247(2):279–86

Presence of mRNAs encoding the soluble D–factor/LIF receptor in human choriocarcinoma cells and production of the soluble receptor. Tomida M.
Biochem Biophys Res Commun 1997 Mar 17;232(2):427–31

mRNA encoding the beta–subunit of the mitochondrial F1–ATPase complex is a localized mRNA in rat hepatocytes. Egea G, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):557–65

Use of internal controls to increase quantitative capabilities of the ribonuclease protection assay. Davis MJ, et al.
Biotechniques 1997 Aug;23(2):280–5

Purification and cloning of differential display products. Gery S, et al. **Biotechniques** 1997 Aug;23(2):198–200, 202

Differential display protocol with selected primers that preferentially isolates mRNAs of moderate– to low–abundance in a microscopic system. Ikonomov OC, et al. **Biotechniques** 1996 Jun;20(6):1030–4, 1036–8, 1040–2

RT–PCR without RNA isolation. Klebe RJ, et al.
Biotechniques 1996 Dec;21(6):1094–100

Preparation of magnetic oligo (dT) particles. Kolarova H, et al. **Biotechniques** 1996 Feb;20(2):196–8

Isolation of multiple mRNAs from a few eukaryotic cells: a fast method to obtain templates for RT–PCR. Noppen C, et al. **Biotechniques** 1996 Sep;21(3):394–6

Detection of melanoma cells in peripheral blood using reverse transcription polymerase chain reaction assay for tyrosinase mRNA. Jung FA, et al. **Cancer Surv** 1996;26:251–65 (38 ref.)

Increased expression of histamine H1 receptor mRNA in allergic rhinitis. Iriyoshi N, et al. **Clin Exp Allergy** 1996 Apr;26(4):379–85

Acidic calponin cloned from neural cells is differentially expressed during rat brain development. Ferhat L, et al. **Eur J Neurosci** 1996 Jul;8(7):1501–9

Human metallothionein gene MT1L mRNA is present in several human tissues but is unlikely to produce a metallothionein protein. Holloway AF, et al. **FEBS Lett** 1997 Mar 3;404(1):41–4

mRNA distribution and membrane localization of the OAT–K1 organic anion transporter in rat renal tubules. Masuda S, et al. **FEBS Lett** 1997 Apr 28;407(2):127–31

Detection of measles virus nucleocapsid transcripts in circulating blood cells from patients with Paget disease [see comments] Reddy SV, et al. **J Bone Miner Res** 1996 Nov; 11(11):1602–7. Comment in: J Bone Miner Res 1996 Nov;11(11):1599–601. Comment in: J Bone Miner Res 1997 May;12(5):863–5.

Absence of paramyxo virus transcripts in juvenile Paget bone disease [letter; comment] Whyte MP, et al.
J Bone Miner Res 1996 Jul;11(7):1041. Comment on: J Bone Miner Res 1996 Jan;11(1):132–42.

Optimization of the isolation and effective use of mRNA from rat mast cells. Gilchrist M, et al.
J Immunol Methods 1997 Feb 28;201(2):207–14

Isolation and characterization of ovine tyrosine hydroxylase mRNA. Tillet Y, et al. **J Neurochem** 1997 May;68(5):2161–9

Molecular cloning and characterization of a novel mRNA present in the squid giant axon. Chun JT, et al.
J Neurosci Res 1997 Jul 15;49(2):144–53

Amplification of specific mRNA from a single human renal glomerulus, with an approach to the separation of epithelial cell mRNA. Bicknell GR, et al. **J Pathol** 1996 Oct; 180(2):188–93

Localization of inducible heat shock protein mRNA in the guinea pig cochlea with a nonradioactive in situ hybridization technique. Gower VC, et al. **Laryngoscope** 1997 Feb;107(2):228–32

Subtractive hybridization for the isolation of differentially expressed genes using magnetic beads. Aasheim HC, et al.
Methods Mol Biol 1997;69:115–28

Isolation of messenger RNA from plant tissues. Dunn A.
Methods Mol Biol 1997;69:33–8

Temporal expression pattern of insulin–like growth factor mRNA during embryonic development in a teleost, rainbow trout (Onchorynchus mykiss). Greene MW, et al.
Mol Mar Biol Biotechnol 1997 Jun;6(2):144–51

Changes in the ultrastructural localization of mRNA for a circadian regulated protein. Techel D, et al.
Mol Mar Biol Biotechnol 1996 Dec;5(4):241–8

Specific polyadenylation and purification of total messenger RNA from Escherichia coli. Amara RR, et al.
Nucleic Acids Res 1997 Sep 1;25(17):3465–70

Isolation of rare transcripts by representational difference analysis. O'Neill MJ, et al. **Nucleic Acids Res** 1997 Jul 1; 25(13):2681–2

Induction of metallothionein mRNA and protein in primary murine neuron cultures. Kramer KK, et al.
Toxicol Appl Pharmacol 1996 Nov;141(1):1–7

METABOLISM

mRNA expression, measured by quantitative reverse transcriptase polymerase chain reaction, of five putative drug resistance parameters, in normal and leukaemic peripheral blood and bone marrow. Lohri A, et al.
Acta Haematol 1997;98(1):1–7

Regulation of interleukin–2 receptor gamma chain mRNA expression in human monocytic cell line THP–1. Yanai H, et al. **Acta Med Okayama** 1996 Jun;50(3):145–50

Regulation of tyrosine hydroxylase mRNA stability by oxygen in PC12 cells. Czyzyk–Krzeska MF, et al.
Adv Exp Med Biol 1996;410:143–50 (20 ref.)

GABAA and NMDA receptor subunit mRNA expression in ethanol dependent rats. Morrow AL, et al.
Alcohol Alcohol Suppl 1994;2:89–95

Prenatal ethanol exposure alters the expression of intestinal hydrolase mRNAs in newborn rats. Estrada G, et al.
Alcohol Clin Exp Res 1996 Dec;20(9):1662–8

Unusual expression of mRNA typical of Philadelphia positive acute lymphoblastic leukemia detected in chronic myeloid leukemia. Kirk JA, et al. **Am J Hematol** 1996 Jul; 52(3):129–34

Decreased very–low–density lipoprotein and low–density lipoprotein receptor messenger ribonucleic acid expression in placentas from preeclamptic pregnancies. Murata M, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1551–6

Beta–adrenergic receptor subtype gene expression in timed–pregnant rat myometrium. Principe D, et al.
Am J Obstet Gynecol 1997 Feb;176(2):349–57

Expression and distribution of amyloid precursor protein–like protein–2 in Alzheimer's disease and in normal brain. Crain BJ, et al. **Am J Pathol** 1996 Oct;149(4):1087–95

De Novo renal expression of macrophage migration inhibitory factor during the development of rat crescentic glomerulonephritis. Lan HY, et al. **Am J Pathol** 1996 Oct; 149(4):1119–27

In situ hybridization analysis of glial fibrillary acidic protein mRNA reveals evidence of biphasic astrocyte activation during acute experimental autoimmune encephalomyelitis. Tani M, et al. **Am J Pathol** 1996 Mar;148(3):889–96

Differential expression of cytokeratin mRNA and protein in normal prostate, prostatic intraepithelial neoplasia, and invasive carcinoma. Yang Y, et al. **Am J Pathol** 1997 Feb; 150(2):693–704

Ozone inactivates cyclooxygenase in human tracheal epithelial cells without altering PGHS–2 mRNA or protein. Alpert SE, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L879–87

Dissociation of hypothalamic NPY from BAT uncoupling protein mRNA in rats exposed to 24 h thermoneutrality. Bing C, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R111–7

Upregulation of rat intestinal uroguanylin mRNA by dietary zinc restriction. Blanchard RK, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G972–8

Water deprivation and rat adrenal mRNAs for tyrosine hydroxylase and the norepinephrine transporter. Brooks VL, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1897–903

Involvement of cyclooxygenase-2 in LPS-induced fever and regulation of its mRNA by LPS in the rat brain. Cao C, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1712–25

Aldosterone regulation of sodium channel gamma-subunit mRNA in cortical collecting duct cells. Denault DL, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C423–8

Parathyroid hormone mRNA levels are increased by progestins and vary during rat estrous cycle. Epstein E, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):E158–63

Corticosteroid receptor mRNA expression is unaffected by corticosteroids in rat kidney, heart, and colon. Escoubet B, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1343–53

Noncoordinate regulation of epithelial Na channel and Na pump subunit mRNAs in kidney and colon by aldosterone. Escoubet B, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1482–91

Induction of heme oxygenase-1 (HSP32) mRNA in skeletal muscle following contractions. Essig DA, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C59–67

Regulation of insulin-like growth factor (IGF)-I mRNA and peptide and IGF-binding proteins by interleukin-1. Fan J, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R621–9

Noncoordinated expression of alpha-, beta-, and gamma-subunit mRNAs of epithelial Na+ channel along rat respiratory tract. Farman N, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C131–41

Betaine transporter cDNA cloning and effect of osmolytes on its mRNA induction. Ferraris JD, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C650–4

Beating affects the posttranscriptional regulation of alpha-myosin mRNA in cardiac cultures. Goldspink PH, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2584–90

Increased cardiac ppENK mRNA in cardiac hypertrophy and effects on blood pressure of its peptide products. Hao JM, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2885–94

HSP induction inhibits iNOS mRNA expression and attenuates hypotension in endotoxin-challenged rats. Hauser GJ, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2529–35

Promoter elements that mediate the pH response of PCK mRNA in LLC-PK1-F+ cells. Holcomb T, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F340–6

Oxidative stress increases glyceraldehyde-3-phosphate dehydrogenase mRNA levels in isolated rabbit aorta. Ito Y, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H81–7

Prostaglandins stimulate renin secretion and renin mRNA in mouse renal juxtaglomerular cells. Jensen BL, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F659–69

Expression of AT1A and AT1B angiotensin II receptor messenger RNA in forebrain of 2-wk-old rats. Jöhren O, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E104–12

Adipose tissue stearoyl-CoA desaturase mRNA is increased by obesity and decreased by polyunsaturated fatty acids. Jones BH, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E44–9

Chronic food restriction and acute food deprivation decrease mRNA levels of opioid peptides in arcuate nucleus. Kim EM, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1019–24

Intravenous infusion of insulin-like growth factor I in fetal sheep reduces hepatic IGF-I and IGF-II mRNAs. Kind KL, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1632–7

Mechanisms of CCK regulation of monitor peptide mRNA expression in pancreatic acinar AR42J cells. Kinouchi T, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G794–801

Vasopressin V2 receptor mRNA expression and cAMP accumulation in aging rat kidney. Klingler C, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1775–82

Alterations in mRNA stability during rat liver regeneration. Kren BT, et al. **Am J Physiol** 1996 May;270(5 Pt 1):G763–77

Eccentric contractions decrease glucose transporter transcription rate, mRNA, and protein in skeletal muscle. Kristiansen S, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1734–8

ACE inhibitors and cardiac ACE mRNA in volume overload-induced cardiac hypertrophy. Lear W, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H641–6

Localization of parathyroid hormone/parathyroid hormone-related peptide receptor mRNA in kidney. Lee K, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F186–91

RT-PCR microlocalization of mRNAs for calbindin D28k and vitamin D receptor in the murine nephron. Liu L, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):F677–81

Regulation of renal oatp mRNA expression by testosterone. Lu R, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):F332–7

EGF receptor mRNA and protein in rat lacrimal acinar cells: evidence of its EGF-dependent phosphotyrosilation. Marechal H, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1164–74

Localization of epithelial sodium channel subunit mRNAs in adult rat lung by in situ hybridization. Matsushita K, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):L332–9

Short-day weight loss and effect of food deprivation on hypothalamic NPY and CRF mRNA in Djungarian hamsters. Mercer JG, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R768–76

Induction of GLUT-1 mRNA in response to inhibition of oxidative phosphorylation: role of increased [Ca2+]i. Mitani Y, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C235–42

Downregulation of renal atrial natriuretic factor receptors and receptor mRNAs during rat pregnancy. Omer S, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F87–93

Human immunodeficiency virus envelope glycoprotein 120 alters sleep and induces cytokine mRNA expression in rats [published errata appear in Am J Physiol 1996 Aug;271(2 Pt 2):section R following table of contents and 1996 Dec;271(6 Pt 3):section R following table of contents] Opp MR, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R963–70

Gastrointestinal tract protein synthesis and mRNA levels for proteolytic systems in adult fasted rats. Samuels SE, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E232–8

CD9 antigen mRNA is induced by hypertonicity in two renal epithelial cell lines. Sheikh-Hamad D, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C253–8

cAMP regulation of vasopressin mRNA content in hypothalamo-neurohypophysial explants. Sladek CD, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R554–60

Differential regulation of rat glomerular and proximal tubular renin mRNA following uninephrectomy [published errata appear in Am J Physiol 1996 Jul;271(1 Pt 2):section F following table of contents and 1996 Dec;271(6 Pt 3):section F following table of contents] Tank JE, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F776–83

Regulation of type II adenylyl cyclase mRNA in rabbit skeletal muscle by chronic motor nerve pacing. Torgan CE, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E253–60

Expression of the ornithine decarboxylase gene in response to asparagine in intestinal epithelial cells. Wang JY, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G164–71

Contractile activity and passive stretch regulate tubulin mRNA and protein content in cardiac myocytes. Watson PA, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C684–9

Atrial and pulmonary endothelin mRNA is increased in a canine model of chronic low cardiac output. Wei CM, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R838–44

Polyadenylated RNA, actin mRNA, and myosin heavy chain mRNA in young and old human skeletal muscle. Welle S, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E224–9

Osmotic regulation of Na-myo-inositol cotransporter mRNA level and activity in endothelial and neural cells [published errata appear in Am J Physiol 1996 Sep;271(3 Pt 1):section C following table of contents and 1996 Dec;271(6 Pt 3):section C following table of contents] Wiese TJ, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C990–7

Expression of PTHrP, PTH/PTHrP receptor, and Ca(2+)-sensing receptor mRNAs along the rat nephron. Yang T, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):F751–8

Stabilization of elastin mRNA by TGF-beta: initial characterization of signaling pathway [see comments] Kucich U, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):10–6. Comment in: Am J Respir Cell Mol Biol 1997 Jul;17(1):1–2.

Posttranscriptional regulation of lung elastin production [comment] Parks WC. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):1–2 (13 ref.). Comment on: Am J Respir Cell Mol Biol 1997 Jul;17(1):10–6.

IL-4 and IL-5 mRNA and protein in bronchial biopsies from patients with atopic and nonatopic asthma: evidence against "intrinsic" asthma being a distinct immunopathologic entity. Humbert M, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1497–504

Mucin mRNA expression in normal and vasomotor inferior turbinates. Aust MR, et al. **Am J Rhinol** 1997 Jul–Aug; 11(4):293–302

Sex steroids regulate the expression of plasminogen activator inhibitor-1 and its mRNA in fibroblasts derived from uterine endometrium. Fujimoto J, et al. **Ann Clin Biochem** 1996 Nov;33 (Pt 6):545–50

Hormonal regulation of N-cadherin mRNA levels in rat granulosa cells. Farookhi R, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:165–72

Salt-loading induces decreased POMC mRNA levels, increased alpha-MSH immunoreactivity, and sustained elevated fos expression in rat pituitary intermediate lobe melanotropes. Sharma P, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:295–9

Apolipoprotein E and apolipoprotein E messenger RNA in muscle of inclusion body myositis and myopathies. Mirabella M, et al. **Ann Neurol** 1996 Dec;40(6):864–72

Altered expression of bcl-2 and bax mRNA in amyotrophic lateral sclerosis spinal cord motor neurons. Mu X, et al. **Ann Neurol** 1996 Sep;40(3):379–86

Interrelationships of the pathways of mRNA decay and translation in eukaryotic cells. Jacobson A, et al. **Annu Rev Biochem** 1996;65:693–739 (400 ref.)

The structure and function of proteins involved in mammalian pre-mRNA splicing. Krämer A. **Annu Rev Biochem** 1996;65:367–409 (329 ref.)

Polyadenylation of mRNA in prokaryotes. Sarkar N. **Annu Rev Biochem** 1997;66:173–97 (117 ref.)

Basic mechanisms of transcript elongation and its regulation. Uptain SM, et al. **Annu Rev Biochem** 1997;66:117–72 (422 ref.)

RNA transport. Nakielny S, et al. **Annu Rev Neurosci** 1997; 20:269–301 (211 ref.)

Oligonucleotide analogs might be designed to bind to m-RNA. Crooke ST. **Anticancer Drug Des** 1997 Jul; 12(5):311–3 (13 ref.)

Thioredoxin and thioredoxin reductase gene expression in human tumors and cell lines, and the effects of serum stimulation and hypoxia. Berggren M, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3459–66

Lack of rearranged Tpr-met mRNA expression in human gastric cancer cell lines and gastric mucosa and carcinoma. Osaki M, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2881–4

Assessment of drug-induced dysregulations among seven resistance-associated genes in human tumour cell lines. Van Hille B, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3531–6

An extracellular factor regulating expression of the chromosomal aminoglycoside 2'-N-acetyltransferase of Providencia stuartii. Rather PN, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1749–54

Increased mRNA levels of ERG16, CDR, and MDR1 correlate with increases in azole resistance in Candida albicans isolates from a patient infected with human immunodeficiency virus. White TC. **Antimicrob Agents Chemother** 1997 Jul;41(7):1482–7

Tissue-specific stability of nuclear- and mitochondrially encoded mRNAs. Connor MK, et al. **Arch Biochem Biophys** 1996 Sep 1;333(1):103–8

Involvement of a 50-kDa mRNP protein from Saccharomyces cerevisiae in mRNA binding to ribosomes. Triana L, et al. **Arch Biochem Biophys** 1997 Aug 1; 344(1):1–10

IL-7 mRNA is not overexpressed in mycosis fungoides and pleomorphic T-cell lymphoma and is likely to be an autocrine growth factor in vivo. Asadullah K, et al. **Arch Dermatol Res** 1996 Dec;289(1):9–13

Cytokine mRNA expression in cutaneous warts: induction of interleukin-1 alpha. Jackson M, et al. **Arch Dermatol Res** 1996 Dec;289(1):28–34

Increased release of the tumour necrosis factor receptor p75 by immortalized human keratinocytes results from an activated shedding mechanism and is not related to augmented steady-state levels of p75 mRNA. Neuner P, et al. **Arch Dermatol Res** 1996 Oct;288(11):691–6

The effects of interleukin-1 and prostaglandin E2 on accumulation of collagen and steady-state levels of pro alpha 1(I) collagen messenger RNA in experimental granulation tissue in rats. Rapala K, et al. **Arch Dermatol Res** 1997 Mar;289(4):219–23

GM-CSF mRNA and protein in human skin-derived lymph. Yawalkar N, et al. **Arch Dermatol Res** 1996 Oct; 288(11):637–40

Topical all-trans retinoic acid (RA) induces an early, coordinated increase in RA-inducible skin-specific gene/psoriasin and cellular RA-binding protein II mRNA levels which precedes skin erythema. Zouboulis CC, et al. **Arch Dermatol Res** 1996 Oct;288(11):664–9

Induction of nitric oxide synthase by endotoxin in rat isolated aorta but not in rat aortic smooth muscle cells grown in culture from explant. McKendrick JD, et al. **Arch Int Pharmacodyn Ther** 1995 Sep–Oct;330(2):206–24

Nuclear proteins bind to poliovirus 5' untranslated region [published erratum appears in Arch Med Res 1996 Winter;27(4):589] Gutiérrez-Escolano L, et al. **Arch Med Res** 1996 Autumn;27(3):413–9

Changes in protein and mRNA levels of growth factor/growth factor receptors in rat livers after administration of phenobarbitone or methylclofenapate. Garcia-Allan C, et al. **Arch Toxicol** 1997;71(7):409–15

Changes in messenger RNA and protein levels of proteoglycans and link protein in human osteoarthritic cartilage samples. Cs-Szabó G, et al. **Arthritis Rheum** 1997 Jun;40(6):1037–45

Major role of collagen IIB in the elevation of total type II procollagen messenger RNA in the hypertrophic phase of experimental osteoarthritis. Matyas JR, et al. **Arthritis Rheum** 1997 Jun;40(6):1046–9

1 alpha,25-dihydroxyvitamin D3 induces very low density lipoprotein receptor mRNA expression in HL-60 cells in association with monocytic differentiation. Kohno M, et al. **Atherosclerosis** 1997 Aug;133(1):45–9

Effects of gemfibrozil administration on very low density lipoprotein receptor mRNA levels in rabbits. Matsuoka N, et al. **Atherosclerosis** 1996 Oct 25;126(2):221–6

Mechanisms of beta-adrenergic receptor desensitization: from molecular biology to heart failure. Lohse MJ, et al. **Basic Res Cardiol** 1996;91 Suppl 2:29–34 (62 ref.)

Na, K-ATPase isoform gene expression in normal and hypertrophied dog heart. Zahler R, et al. **Basic Res Cardiol** 1996 May–Jun;91(3):256–66

cDNA cloning and expression analysis of NeuroD mRNA in human retina. Acharya HR, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):459–63

A cis-trans interaction at the 3'-untranslated region of ribonucleotide reductase mRNA is regulated by TGF-beta 1, TGF-beta 2, and TGF-beta 3. Amara FM, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):347–51

Placenta growth factor: identification and characterization of a novel isoform generated by RNA alternative splicing. Cao Y, et al. **Biochem Biophys Res Commun** 1997 Jun 27; 235(3):493–8

Phosphorylation can modulate the association of different sets of RNA binding proteins with the Vg1 localization signal RNA. Chen SM, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):419–23

Increase in serum leptin and uterine leptin receptor messenger RNA levels during pregnancy in rats. Chien EK, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):476–80

"BEP" RNAs and proteins are situated in the animal side of sea urchin unfertilized egg, which can be recognized by female pronuclear localization. Di Carlo M, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):511–7

Expression of sodium-dependent purine nucleoside carrier (SPNT) mRNA correlates with nucleoside transport activity in rat liver. Felipe A, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):572–5

Molecular cloning of a bovine renal G-protein coupled receptor gene (bRGR): regulation of bRGR mRNA levels by amino acid availability. Ferrer-Martínez A, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):107–12

Translational control during recovery from heat shock in the absence of heat shock proteins. Gallie DR, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):462–7

Chromosomal localization of the human arginase II gene and tissue distribution of its mRNA. Gotoh T, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):487–91

Localization of leptin receptor mRNA splice variants in murine peripheral tissues by RT-PCR and in situ hybridization. Hoggard N, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):383–7

Role of posttranscriptional processes in the regulation of glutathione S-transferase P1 gene expression in human breast cancer cells. Jhaveri MS, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):729–34

Expression of PrP mRNA is regulated by a fragment of MRP8 in human fibroblasts. Kniazeva M, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):59–63

Binding constants in the formation of mammalian protein synthesis initiation complexes and the role of mRNA. Manchester KL. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):27–9

Expression of the proliferation-related Ki-67 mRNA in the early development of murine embryo. Mitsuyoshi S, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):191–6

Elevated plasma membrane and sarcoplasmic reticulum Ca2+ pump mRNA levels in cultured aortic smooth muscle cells from spontaneously hypertensive rats. Monteith GR, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):344–6

Alternate COX-2 transcripts are differentially regulated: implications for post-transcriptional control. Newton R, et al. **Biochem Biophys Res Commun** 1997 May 8; 234(1):85–9

Osteogenic protein-1 mRNA in the uterine endometrium. Ozkaynak E, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):242–6

Chronic stimulation differentially modulates expression of mRNA for dihydropyridine receptor isoforms in rat fast twitch skeletal muscle. Péréon Y, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):217–22

Mutation of the cysteine residues in human initiation factor 4E: effects on mRNA cap binding ability. Teraoka Y, et al. **Biochem Biophys Res Commun** 1996 Nov 21; 228(3):704–8

Regulation of p56(lck) messenger turnover upon T cell activation: involvement of the 3' untranslated region in stability as determined in cell-free extracts. Vanhée-Brossollet C, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):419–24

Vitamin D receptor: no evidence for allele-specific mRNA stability in cells which are heterozygous for the Taq I restriction enzyme polymorphism. Verbeek W, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):77–80

Regulation of expression of leptin mRNA and secretion of leptin by thyroid hormone in 3T3-L1 adipocytes. Yoshida T, et al. **Biochem Biophys Res Commun** 1997 Mar 27; 232(3):822–6

Genetic regulation of gene-specific mRNA by ethanol in vivo and its possible role in ethanol preference in a cross with RI lines in mice. Tagliabracci CE, et al. **Biochem Genet** 1996 Jun;34(5–6):219–38

Polynucleotide: adenosine glycosidase activity of saporin-L1: effect on DNA, RNA and poly(A). Barbieri L, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):507–13

Nitric oxide inhibits the synthesis of type-II collagen without altering Col2A1 mRNA abundance: prolyl hydroxylase as a possible target. Cao M, et al. **Biochem J** 1997 May 15; 324 (Pt 1):305–10

A novel trans-spliced mRNA from Onchocerca volvulus encodes a functional S-adenosylmethionine decarboxylase. Da'Dara AA, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):519–30

The nuclear autoantigen La/SS-associated antigen B: one gene, three functional mRNAs. Grölz D, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):151–8

Difference in hepatic metallothionein content in Antarctic red-blooded and haemoglobinless fish: undetectable metallothionein levels in haemoglobinless fish is accompanied by accumulation of untranslated metallothionein mRNA. Scudiero R, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):207–11

Insulin-like growth factor I stimulates degradation of an mRNA transcript encoding the 14 kDa ubiquitin-conjugating enzyme. Wing SS, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):455–61

Changes in mRNA levels of the sarcoplasmic/endoplasmic-reticulum Ca(2+)-ATPase isoforms in the rat soleus muscle regenerating from notexin-induced necrosis. Zádor E, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):107–13

Variable requirement for splicing signals for nucleocytoplasmic export of mRNAs. Fu L, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):329–37

Half-life of Escherichia coli polyadenylated lipoprotein mRNA. Taljanidisz J, et al. **Biochem Mol Biol Int** 1997 Jun;42(1):211–5

Measurement of GLUT mRNA in liver of fetal and neonatal rats using a novel method of quantitative polymerase chain reaction. Lane RH, et al. **Biochem Mol Med** 1996 Dec; 59(2):192–9

Modulation of the hepatic expression of the estrogen-regulated mRNA stabilizing factor by estrogenic and antiestrogenic nonsteroidal xenobiotics. Ratnasabapathy R, et al. **Biochem Pharmacol** 1997 May 15; 53(10):1425–34

Interference of corticosteroids with prostaglandin E2 synthesis at the level of cyclooxygenase-2 mRNA expression in kidney cells. Schaefers HJ, et al. **Biochem Pharmacol** 1996 Nov 8;52(9):1415–21

Distribution of glutathione peroxidase mRNAs between free and cytoskeletal-bound polysomes in H4 hepatoma cells. Campbell GP, et al. **Biochem Soc Trans** 1996 May; 24(2):189S

Induction of the stress protein Grp75 by amino acid deprivation in CHO cells does not involve an increase in Grp75 mRNA levels. Heal RD, et al. **Biochem Soc Trans** 1996 Aug;24(3):479S

mRNA targeting: signals in the 3'-untranslated sequences for sorting of some mRNAs. Hesketh JE. **Biochem Soc Trans** 1996 May;24(2):521–7 (55 ref.)

Targeting proteins to mitochondria: is there a role for mRNA localization? Lightowlers RN, et al. **Biochem Soc Trans** 1996 May;24(2):527–31 (41 ref.)

S100A3 mRNA expression displays an inverse correlation to breast cancer progression. Lloyd BH, et al. **Biochem Soc Trans** 1996 Aug;24(3):340S

Autonomic denervations affect rates of protein synthesis through changes in the intracellular proline imino-pool and mRNA in the fasting rat submandibular gland. Shori DK, et al. **Biochem Soc Trans** 1997 Feb;25(1):29S

Aluminium-induced changes in amyloid precursor protein mRNA expression. Sinclair MA, et al. **Biochem Soc Trans** 1996 Aug;24(3):500S

Transplatin-modified oligo(2'-O-methyl ribonucleotide)s: a new tool for selective modulation of gene expression. Boudvillain M, et al. **Biochemistry** 1997 Mar 11; 36(10):2925–31

Cleavage of 16S rRNA within the ribosome by mRNA modified in the A-site codon with phenanthroline-Cu(II). Bucklin DJ, et al. **Biochemistry** 1997 Jul 1;36(26):7951–7

Dihydrofolate reductase protein inhibits its own translation by binding to dihydrofolate reductase mRNA sequences within the coding region. Ercikan-Abali EA, et al. **Biochemistry** 1997 Oct 7;36(40):12317–22

3' untranslated region-mediated regulation of luteinizing hormone/human chorionic gonadotropin receptor expression. Lu DL, et al. **Biochemistry** 1996 Sep 24; 35(38):12347–53

The iron-sulfur cluster of iron regulatory protein 1 modulates the accessibility of RNA binding and phosphorylation sites. Schalinske KL, et al. **Biochemistry** 1997 Apr 1; 36(13):3950–8

Analysis of the interaction between bovine mitochondrial 28 S ribosomal subunits and mRNA. Farwell MA, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):122–30

The human diploid fibroblast senescence pathway is independent of interleukin-1 alpha mRNA levels and tyrosine phosphorylation of FGFR-1 substrates. Garfinkel S, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):109–19

Molecular cloning of a peroxidase mRNA specifically expressed in the ink gland of Sepia officinalis. Gesualdo I, et al. **Biochim Biophys Acta** 1997 Aug 7;1353(2):111–7

An3 protein encoded by a localized maternal mRNA in Xenopus laevis is an ATPase with substrate-specific RNA helicase activity. Gururajan R, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):169–82

Translational regulation of maternal mRNA. Hake LE, et al. **Biochim Biophys Acta** 1997 Feb 22;1332(1):M31–8 (45 ref.)

Tissue distribution of three members of the murine protein disulfide isomerase (PDI) family. Marcus N, et al. **Biochim Biophys Acta** 1996 Dec 11;1309(3):253–60

Mode of transfection influences the stability of ectopically expressed mRNA. Nanbu R, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):221–8

RNase E can inhibit the decay of some degradation intermediates: degradation of Desulfovibrio vulgaris cytochrome c3 mRNA in E coli. Cruz AA, et al. **Biochimie** 1996;78(4):227–35

Multiple degradation pathways of the rpsO mRNA of Escherichia coli. RNase E interacts with the 5' and 3' extremities of the primary transcript. Hajnsdorf E, et al. **Biochimie** 1996;78(6):416–24

A role for Rev in the association of HIV-1 gag mRNA with cytoskeletal beta-actin and viral protein expression. Kimura T, et al. **Biochimie** 1996;78(11–12):1075–80 (48 ref.)

In vitro catalytic activities of DNA/RNA chimeric hammerhead ribozymes against AML1-MTG8 mRNA, a fused gene transcript in acute myeloid leukemia with t(8;21). Kozu T, et al. **Biochimie** 1996;78(11–12):1067–73

Messenger RNA translation in prokaryotes: GTPase centers associated with translational factors. Laalami S, et al. **Biochimie** 1996;78(7):577–89 (192 ref.)

mRNA decapping activities and their biological roles. LaGrandeur TE, et al. **Biochimie** 1996;78(11–12):1049–55 (45 ref.)

The lacZ mRNA can be stabilised by the T7 late mRNA leader in E coli. Lopez PJ, et al. **Biochimie** 1996; 78(6):408–15

Cytoplasmic mRNA for human triosephosphate isomerase is immune to nonsense-mediated decay despite forming polysomes. Stephenson LS, et al. **Biochimie** 1996; 78(11–12):1043–7

Increased stability of phage T7g10 mRNA is mediated by either a 5'- or a 3'-terminal stem-loop structure. Mertens N, et al. **Biol Chem** 1996 Dec;377(12):811–7

Changes in myocardial A1 adenosine receptor and message levels during fetal development and postnatal maturation. Matherne GP, et al. **Biol Neonate** 1996;70(4):199–205

Translational augmentation of pro-matrix metalloproteinase 3 (prostromelysin 1) and a tissue inhibitor of metalloproteinases (TIMP)-1 mRNAs by epidermal growth factor and transforming growth factor alpha, but not by interleukin 1 alpha or 12-O-tetradecanoylphorbol 13-acetate in human uterine cervical fibroblasts: the possible involvement of an atypical protein kinase C. Hosono T, et al. **Biol Pharm Bull** 1996 Oct;19(10):1285–90

Increase of cytochrome b mRNA by bis(2-hydroxyethyl) trisulfide in J774A.1 cells. Kohama Y, et al. **Biol Pharm Bull** 1996 Jun;19(6):876–8

Direct actions of the luteinizing hormone-releasing hormone agonist, deslorelin, on anterior pituitary contents of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), LH and FSH subunit messenger ribonucleic acid, and plasma concentrations of LH and FSH in castrated male cattle. Aspden WJ, et al. **Biol Reprod** 1996 Aug; 55(2):386–92

Changes in messenger ribonucleic acid encoding luteinizing hormone receptor, cytochrome P450-side chain cleavage, and aromatase are associated with recruitment and selection of bovine ovarian follicles. Bao B, et al. **Biol Reprod** 1997 May;56(5):1158–68

Expression of messenger ribonucleic acid (mRNA) encoding 3beta-hydroxysteroid dehydrogenase delta4,delta5 isomerase (3beta-HSD) during recruitment and selection of bovine ovarian follicles: identification of dominant follicles by expression of 3beta-HSD mRNA within the granulosa cell layer. Bao B, et al. **Biol Reprod** 1997 Jun; 56(6):1466–73

Expression of messenger ribonucleic acids of insulin-like growth factor binding protein-2, -4, and -5 in the ovine ovary: localization and changes during growth and atresia of antral follicles. Besnard N, et al. **Biol Reprod** 1996 Dec; 55(6):1356–67

Expression of tissue inhibitor of metalloproteinase-1 protein and messenger ribonucleic acid by the oviduct of cyclic, early-pregnant, and ovariectomized steroid-treated gilts. Buhi WC, et al. **Biol Reprod** 1997 Jul;57(1):7–15

Regulation by gonadotropins of the messenger ribonucleic acid for P450 side-chain cleavage, P450(17) alpha-hydroxylase/C17,20-lyase, and 3 beta-hydroxysteroid dehydrogenase in cultured pig Leydig cells. Clark AM, et al. **Biol Reprod** 1996 Aug;55(2):347–54

Expression of vascular endothelial growth factor (VEGF) and VEGF-receptor messenger ribonucleic acids in the peri-implantation rabbit uterus. Das SK, et al. **Biol Reprod** 1997 Jun;56(6):1390–9

The estradiol-induced luteinizing hormone surge in the ewe is not associated with increased gonadotropin-releasing hormone messenger ribonucleic acid levels. Dhillon H, et al. **Biol Reprod** 1997 Jul;57(1):107–11

Molecular cloning of sheep and goat ferredoxin reductase messenger ribonucleic acids, and identification of an alternatively spliced form of sheep ferredoxin reductase. Furukawa A, et al. **Biol Reprod** 1997 May;56(5):1336–42

Localization and developmental changes in prostaglandin H synthase (PGHS) and PGHS messenger ribonucleic acid in ovine placenta throughout gestation. Gibb W, et al. **Biol Reprod** 1996 Mar;54(3):654–9

Regional distribution and hormonal control of estrogen-dependent oviduct-specific glycoprotein messenger ribonucleic acid in the baboon (Papio anubis). Jaffe RC, et al. **Biol Reprod** 1996 Aug;55(2):421–6

Characterization of a chicken luteinizing hormone receptor (cLH-R) complementary deoxyribonucleic acid, and expression of cLH-R messenger ribonucleic acid in the ovary. Johnson AL, et al. **Biol Reprod** 1996 Aug; 55(2):304–9

Expression of aromatase cytochrome P450 protein and messenger ribonucleic acid in human endometriotic and adenomyotic tissues but not in normal endometrium. Kitawaki J, et al. **Biol Reprod** 1997 Sep;57(3):514–9

Identification, expression, and regulation of the transcriptional factor polyomavirus enhancer activator 3, and its putative role in regulating the expression of gamma-glutamyl transpeptidase mRNA-IV in the rat epididymis. Lan ZJ, et al. **Biol Reprod** 1997 Jul;57(1):186–93

Up-regulation of urokinase plasminogen activator messenger ribonucleic acid and protein in hen granulosa cells by transforming growth factor alpha in vitro during follicular development. Li J, et al. **Biol Reprod** 1997 May; 56(5):1317–22

Follicle-stimulating hormone (FSH) regulates the expression of FSH receptor messenger ribonucleic acid in cultured Sertoli cells and in hypophysectomized rat testis. Maguire SM, et al. **Biol Reprod** 1997 May;56(5):1106–11

Expression of cdc25 phosphatases in the germ cells of the rat testis. Mizoguchi S, et al. **Biol Reprod** 1997 Jun;

56(6):1474–81

Collagenase, gelatinase, and proteoglycanase messenger ribonucleic acid expression and activity during luteal development, maintenance, and regression in the pseudopregnant rat ovary. Nothnick WB, et al. **Biol Reprod** 1996 Mar;54(3):616–24

Regulation of luteinizing hormone–receptor and follicle–stimulating hormone–receptor messenger ribonucleic acid levels during development in the neonatal mouse ovary. O'Shaughnessy PJ, et al. **Biol Reprod** 1997 Sep;57(3):602–8

Follicle–stimulating hormone and intracellular second messengers regulate steroidogenic acute regulatory protein messenger ribonucleic acid in luteinized porcine granulosa cells. Pescador N, et al. **Biol Reprod** 1997 Sep;57(3):660–8

Increased bax and interleukin–1beta–converting enzyme messenger ribonucleic acid levels coincide with apoptosis in the bovine corpus luteum during structural regression. Rueda BR, et al. **Biol Reprod** 1997 Jan;56(1):186–93

Specific binding of a 47–kilodalton protein to the 3' untranslated region of rat transition protein 2 messenger ribonucleic acid. Schlicker M, et al. **Biol Reprod** 1997 Mar; 56(3):697–706

Ontogeny and regulation of luteinizing hormone receptor messenger ribonucleic acid within the ovine corpus luteum. Smith GW, et al. **Biol Reprod** 1996 Jan;54(1):76–83

Follicular 3 beta–hydroxysteroid dehydrogenase and cytochromes P450 17 alpha–hydroxylase and aromatase messenger ribonucleic acids in cattle undergoing superovulation. Soumano K, et al. **Biol Reprod** 1996 Dec; 55(6):1419–26

Ovarian follicular steroidogenic acute regulatory protein, low–density lipoprotein receptor, and cytochrome P450 side–chain cleavage messenger ribonucleic acids in cattle undergoing superovulation. Soumano K, et al. **Biol Reprod** 1997 Feb;56(2):516–22

Granulosa layer: primary site of regulation of plasminogen activator messenger ribonucleic acid by luteinizing hormone in the avian ovary. Tischkau SA, et al. **Biol Reprod** 1996 Jul;55(1):75–9

Effects of bovine follicular fluid and passive immunization against gonadotropin–releasing hormone (GnRH) on messenger ribonucleic acid for GnRH receptor and gonadotropin subunits in ovariectomized ewes. Turzillo AM, et al. **Biol Reprod** 1997 Jun;56(6):1537–43

Variation in expression of hsp27 messenger ribonucleic acid during the cycle of the seminiferous epithelium and co–localization of hsp27 and microfilaments in Sertoli cells of the rat. Welsh MJ, et al. **Biol Reprod** 1996 Jul; 55(1):141–51

Effects of glucocorticoids on estrogen receptor messenger ribonucleic acid in the pregnant ovine myometrium in vivo and in vitro. Wu WX, et al. **Biol Reprod** 1996 Jan; 54(1):230–41

Messenger ribonucleic acid for insulin–like growth factors–I and –II, insulin–like growth factor–binding protein–2, gonadotropin receptors, and steroidogenic enzymes in porcine follicles. Yuan W, et al. **Biol Reprod** 1996 Nov; 55(5):1045–54

Pituitary relationship of gonadotropins and messenger ribonucleic acid for gonadotropin subunits in white composite and Meishan boars. Zanella EL, et al. **Biol Reprod** 1996 Jan;54(1):154–9

Evaluation of biological responses to polymeric biomaterials by RT–PCR analysis. I. Study of IL–1 beta mRNA expression. Kishida A, et al. **Biomaterials** 1996 Jul; 17(13):1301–5

An immunocytochemical technique for analysis of regulation of genes encoding early differentiation marker antigens in an oocyte translation system. Nishizawa K, et al. **Biotech Histochem** 1996 Mar;71(2):73–8

Increased granulocyte–macrophage colony–stimulating factor mRNA instability in cord versus adult mononuclear cells is translation–dependent and associated with increased levels of A + U–rich element binding factor. Buzby JS, et al. **Blood** 1996 Oct 15;88(8):2889–97

Molecular mechanism of a mild phenotype in coagulation factor XIII (FXIII) deficiency: a splicing mutation permitting partial correct splicing of FXIII A–subunit mRNA. Mikkola H, et al. **Blood** 1997 Feb 15;89(4):1279–87

Variability of nm23–H1/NDPK–A expression in human lymphomas and its relation to tumour aggressiveness. Aryee DN, et al. **Br J Cancer** 1996 Dec;74(11):1693–8

Changes in expression of transforming growth factor beta mRNA isoforms in patients undergoing tamoxifen therapy [letter; comment] Benson JR, et al. **Br J Cancer** 1997; 75(5):776–8. Comment on: Br J Cancer 1996 Aug;74(3):474–8.

Overexpression of p53 mRNA in colorectal cancer and its relationship to p53 gene mutation. el–Mahdani N, et al. **Br J Cancer** 1997;75(4):528–36

Colocalisation of matrix metalloproteinase–9–mRNA and protein in human colorectal cancer stromal cells. Zeng ZS, et al. **Br J Cancer** 1996 Oct;74(8):1161–7

Wells' syndrome: a pathogenic role for circulating CD4+CD7– T cells expressing interleukin–5 mRNA. Yagi H, et al. **Br J Dermatol** 1997 Jun;136(6):918–23

Defective response to thrombopoietin and impaired expression of c–mpl mRNA of bone marrow cells in congenital amegakaryocytic thrombocytopenia. Muraoka K, et al. **Br J Haematol** 1997 Feb;96(2):287–92

VEGF mRNA levels in placentae from pregnancies complicated by pre–eclampsia [see comments] Cooper JC, et al. **Br J Obstet Gynaecol** 1996 Dec;103(12):1191–6. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):972.

Pituitary adenylate cyclase activating polypeptide and nitric oxide synthase are expressed in the rat ciliary ganglion. Elsäs T, et al. **Br J Ophthalmol** 1997 Mar;81(3):223–7

Respective degree of expression of beta 1–, beta 2– and beta 3–adrenoceptors in human brown and white adipose tissues. Deng C, et al. **Br J Pharmacol** 1996 Jun;118(4):929–34

Tissue distribution of adenosine receptor mRNAs in the rat. Dixon AK, et al. **Br J Pharmacol** 1996 Jul;118(6):1461–8

Renal adenosine A1 receptor binding characteristics and mRNA levels during the development of acute renal failure in the rat. Gould J, et al. **Br J Pharmacol** 1997 Mar; 120(5):947–53

Changes in superoxide dismutase mRNA expression by streptozotocin–induced diabetes. Kamata K, et al. **Br J Pharmacol** 1996 Oct;119(3):583–9

Quantification and distribution of alpha 1–adrenoceptor subtype mRNAs in human prostate: comparison of benign hypertrophied tissue and non–hypertrophied tissue. Nasu K, et al. **Br J Pharmacol** 1996 Nov;119(5):797–803

mRNA and protein expression of nitric oxide synthase and adrenoceptor alpha 1 in young and old rat penile tissues. Dahiya R, et al. **Br J Urol** 1997 Aug;80(2):300–6

Effect of low and high doses of nitrous oxide on preproenkephalin mRNA and its peptide methionine enkephalin levels in the hypothalamus. Agarwal RK, et al. **Brain Res** 1996 Aug 19;730(1–2):47–51

Expression of inducible cyclooxygenase mRNA in the mouse brain after systemic administration of bacterial lipopolysaccharide. Breder CD, et al. **Brain Res** 1996 Mar 25;713(1–2):64–9

Increased expression of the peripheral–type benzodiazepine receptor–isoquinoline carboxamide binding protein mRNA in brain following portacaval anastomosis. Desjardins P, et al. **Brain Res** 1997 May 30;758(1–2):255–8

Nicotine administration reduces neuropeptide Y and neuropeptide Y mRNA concentrations in the rat hypothalamus: NPY may mediate nicotine's effects on energy balance. Frankish HM, et al. **Brain Res** 1995 Oct 2;694(1–2):139–46

Increased expression of M2 muscarinic receptor mRNA and binding sites in the rostral ventrolateral medulla of spontaneously hypertensive rats. Gattu M, et al. **Brain Res** 1997 May 9;756(1–2):125–32

Tryptophan hydroxylase mRNA levels are regulated by the circadian clock, temperature, and cAMP in chick pineal cells. Green CB, et al. **Brain Res** 1996 Oct 28;738(1):1–7

Expression of m1 and m4 muscarinic receptor mRNA in the striatum following a selective lesion of striatonigral neurons. Harrison MB, et al. **Brain Res** 1996 Sep 23; 734(1–2):323–6

Neuronatin mRNA in PC12 cells: downregulation by nerve growth factor. Joseph R, et al. **Brain Res** 1996 Oct 28; 738(1):32–8

A novel hamster prion protein mRNA contains an extra exon: increased expression in scrapie. Li G, et al. **Brain Res** 1997 Mar 21;751(2):265–74

c–jun mRNA expression in the hippocampal formation induced by restraint stress. Lino de Oliveira C, et al. **Brain Res** 1997 Apr 11;753(2):202–8

Corticosterone promotes increased heme oxygenase–2 protein and transcript expression in the newborn rat brain. Maines MD, et al. **Brain Res** 1996 May 25;722(1–2):83–94

Serotonergic lesioning differentially affects presynaptic and postsynaptic 5–HT1B receptor mRNA levels in rat brain. Neumaier JF, et al. **Brain Res** 1996 May 25;722(1–2):50–8

Distribution of kainate receptor subunit mRNAs in human hippocampus, neocortex and cerebellum, and bilateral reduction of hippocampal GluR6 and KA2 transcripts in schizophrenia. Porter RH, et al. **Brain Res** 1997 Mar 21; 751(2):217–31

Expression of presenilin–1 and –2 mRNAs in rat and Alzheimer's disease brains. Takami K, et al. **Brain Res** 1997 Feb 14;748(1–2):122–30

Differential regulation of oxytocin and vasopressin messenger ribonucleic acid levels by gonadal steroids in postpartum rats. Thomas A, et al. **Brain Res** 1996 Oct 28;738(1):48–52

Intrastriatal injection of a muscarinic receptor agonist and antagonist regulates striatal neuropeptide mRNA expression in normal and amphetamine–treated rats. Wang JQ, et al. **Brain Res** 1997 Feb 14;748(1–2):62–70

alpha2,3–sialyltransferase mRNA and alpha2,3–linked glycoprotein sialylation are increased in malignant gliomas. Yamamoto H, et al. **Brain Res** 1997 Apr 25;755(1):175–9

Monitoring the temporal and spatial activation pattern of astrocytes in focal cerebral ischemia using in situ hybridization to GFAP mRNA: comparison with sgp–2 and hsp70 mRNA and the effect of glutamate receptor antagonists. Yamashita K, et al. **Brain Res** 1996 Oct 7; 735(2):285–97

Protein synthesis–dependent and –independent mechanisms for the regulation of GnRH RNA transcript levels in GT1 cells. Yeo TT, et al. **Brain Res** 1997 Mar 28; 752(1–2):294–300

Retinoic acid–induced increase in delta–opioid receptor and N–methyl–D–aspartate receptor mRNA levels in neuroblastoma x glioma (NG108–15) cells. Beczkowska IW, et al. **Brain Res Bull** 1996;39(3):193–9

GAP–43 mRNA and calcitonin gene–related peptide mRNA expression in sensory neurons are increased following sympathectomy. Bolden DA, et al. **Brain Res Bull** 1997; 42(1):39–50

Alterations in the spontaneous release of dopamine and the density of the DA D2 receptor mRNA after chronic postnatal exposure to cocaine. Howard SG, et al. **Brain Res Bull** 1997;43(1):101–6

Development of striatal dopaminergic function. III: Pre– and postnatal development of striatal and cortical mRNAs for the neurotrophin receptors trkBTK+ and trkC and their regulation by synaptic dopamine. Jung AB, et al. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):133–43

mRNA levels for central nervous system myelin proteins in myelin deficiency of caprine beta–mannosidosis. Sasaki M, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):131–5

Regional analysis of developmental changes in the extent of GluR6 mRNA editing in rat brain. Schmitt J, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):153–7

Spinal sensory neurons express multiple sodium channel alpha–subunit mRNAs. Black JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):117–31

alpha–CGRP mRNA levels in motoneurons innervating specific rat muscles. Blanco CE, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):253–61

Chronic morphine and naltrexone fail to modify mu–opioid receptor mRNA levels in the rat brain. Castelli MP, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):149–53

Gap–43 message levels in anterior cerebellum in Alzheimer's disease. Cheetham JE, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):145–51

Nerve growth factor mRNA and protein levels measured in the same tissue from normal and Alzheimer's disease parietal cortex. Fahnestock M, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):175–8

Experimental brain injury induces differential expression of tumor necrosis factor–alpha mRNA in the CNS. Fan L, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):287–91

Molecular cloning of chick pineal tryptophan hydroxylase and circadian oscillation of its mRNA levels. Florez JC, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):25–30

Increase of preproenkephalin mRNA in the caudal part of periaqueductal gray by morphine withdrawal in rats: a quantitative in situ hybridization study. Fukunaga Y, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):128–30

Repeated injections of dizocilpine maleate (MK–801) do not suppress the effects of nigrostriatal dopamine deafferentation on glutamate decarboxylase (GAD67) mRNA expression in the adult rat striatum. Hajji MD, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):219–24

Olfactory bulbectomy increases prepro–galanin mRNA levels in the rat locus coeruleus. Holmes PV, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):184–8

Chronic ethanol treatment produces a selective upregulation of the NMDA receptor subunit gene expression in mammalian cultured cortical neurons. Hu XJ, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):211–8

Differential distribution of mRNAs encoding phosphatidylinositol transfer proteins alpha and beta in the central nervous system of the rat. Imai H, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):256–64

Differential subcellular localization of SNAP–25a and SNAP–25b RNA transcripts in spinal motoneurons and plasticity in expression after nerve injury. Jacobsson G, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):49–62

Corticosteroid actions on the expression of kainate receptor subunit mRNAs in rat hippocampus. Joëls M, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):15–20

A new quantitative solution hybridisation–RNase protection assay for APP and APLP2 mRNA. Johnston JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):77–84

Quantification of APP and APLP2 mRNA in APOE genotyped Alzheimer's disease brains. Johnston JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):85–95

Brain specific proteins binding to the 3' UTR of the 5–HT2C receptor mRNA. Kao HT, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):174–84

Role of highly conserved pyrimidine–rich sequences in the 3' untranslated region of the GAP–43 mRNA in mRNA stability and RNA–protein interactions. Kohn DT, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):240–50

Regional brain–derived neurotrophic factor mRNA and protein levels following transient forebrain ischemia in the rat. Kokaia Z, et al. **Brain Res Mol Brain Res** 1996 May; 38(1):139–44

Regulation of alternative splicing of NMDAR1 in the kindling model. Kraus JE, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):97–104

Elevated tyrosine hydroxylase mRNA levels in medulla oblongata of spontaneously hypertensive rats. Kumai T, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):197–9

S103L reactive chondroitin sulfate proteoglycan (aggrecan) mRNA expressed in developing chick brain and cartilage is encoded by a single gene. Li H, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):309–21

Accumulation of S100 beta mRNA and protein in cerebellum during infancy in Down syndrome and control subjects. Marks A, et al. **Brain Res Mol Brain Res** 1996 Mar; 36(2):343–8

mRNAS for one, two or three members of trk receptor family are expressed in single rat trigeminal ganglion neurons. Moshnyakov M, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):141–8

Chronic exposure to stress levels of corticosterone alters

GABAA receptor subunit mRNA levels in rat hippocampus. Orchinik M, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):29–37

Characterization of an L-type calcium channel expressed by human retinal Müller (glial) cells. Puro DG, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):41–8

Estrogen regulation of gonadotropin-releasing hormone receptor messenger RNA in female rat pituitary tissue. Quiñones-Jenab V, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):233–42

Time-course of recovery of 5-HT1A receptors and changes in 5-HT1A receptor mRNA after irreversible inactivation with EEDQ. Raghupathi RK, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):233–42

Chronic triazolam and its withdrawal alters GABAA receptor subunit mRNA levels: an in situ hybridization study. Ramsey-Williams VA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):132–40

Increase of insulin-like growth factor (IGF)-1, IGF binding protein-2 and -4 mRNAs following cerebral contusion. Sandberg Nordqvist AC, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):285–93

Gonadal regulation of somatostatin receptor 1, 2 and 3 mRNA levels in the rat anterior pituitary. Señaris RM, et al. **Brain Res Mol Brain Res** 1996 May;38(1):171–5

Regulation of kappa opioid receptor mRNA in the rat brain by "binge' pattern cocaine administration and correlation with preprodynorphin mRNA. Spangler R, et al. **Brain Res Mol Brain Res** 1996 May;38(1):71–6

Prodynorphin, proenkephalin and kappa opioid receptor mRNA responses to acute "binge" cocaine. Spangler R, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):139–42

Alterations in mRNA expression of systems that regulate neurotransmitter synaptic content in seizure-naive genetically epilepsy-prone rat (GEPR): transporter proteins and rate-limiting synthesizing enzymes for norepinephrine, dopamine and serotonin. Szot P, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):233–45

Localization of 5-HT4 receptor mRNA in rat brain by in situ hybridization histochemistry. Vilaró MT, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):356–60

Stimulatory G-protein alpha-subunit mRNA levels are not increased in autopsied cerebral cortex from patients with bipolar disorder. Young LT, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):45–50

Spermidine/spermine N1-acetyltransferase mRNA levels show marked and region-specific changes in the early phase after transient forebrain ischemia. Zoli M, et al. **Brain Res Mol Brain Res** 1996 May;38(1):122–34

TGF-beta 1 mRNA expression in clinical breast cancer and its relationship to ER mRNA expression. Amoils KD, et al. **Breast Cancer Res Treat** 1997 Jan;42(2):95–101

Distribution of stromelysin-3 mRNA transcripts and microvessels in human breast carcinomas. Linder C, et al. **Breast Cancer Res Treat** 1997 Feb;42(3):207–13

Low-density lipoprotein receptor mRNA in human breast cancer cells: influence by PKC modulators. Stranzl A, et al. **Breast Cancer Res Treat** 1997 Feb;42(3):195–205

Area and lamina-specific expression of GABAA receptor subunit mRNAs in monkey cerebral cortex. Jones EG. **Can J Physiol Pharmacol** 1997 May;75(5):452–69

Variable expression of tumor necrosis factor alpha in human malignant melanoma localized by in situ hybridization for mRNA. Bergenwald C, et al. **Cancer Immunol Immunother** 1997 Aug;44(6):335–40

Expression of E-cadherin and alpha- and beta-catenin mRNAs in ovarian cancers. Fujimoto J, et al. **Cancer Lett** 1997 May 19;115(2):207–12

Decreased expression and rare somatic mutation of the CIP1/WAF1 gene in human hepatocellular carcinoma. Furutani M, et al. **Cancer Lett** 1997 Jan 1;111(1–2):191–7

Enhanced XPA mRNA levels in cisplatin-resistant human ovarian cancer are not associated with XPA mutations or gene amplification. States JC, et al. **Cancer Lett** 1996 Nov 29;108(2):233–7

Increased gadd153 messenger RNA level is associated with apoptosis in human leukemic cells treated with etoposide. Eymin B, et al. **Cancer Res** 1997 Feb 15;57(4):686–95

Expression and mutational analysis of the DCC, DPC4, and MADR2/JV18-1 genes in neuroblastoma. Kong XT, et al. **Cancer Res** 1997 Sep 1;57(17):3772–8

Up-regulation of flk-1/vascular endothelial growth factor receptor 2 by its ligand in a cerebral slice culture system. Kremer C, et al. **Cancer Res** 1997 Sep 1;57(17):3852–9

Translational enhancement of mdm2 oncogene expression in human tumor cells containing a stabilized wild-type p53 protein. Landers JE, et al. **Cancer Res** 1997 Aug 15; 57(16):3562–8

Human malignant thyroid tumors displayed reduced levels of transforming growth factor beta receptor type II messenger RNA and protein. Lazzereschi D, et al. **Cancer Res** 1997 May 15;57(10):2071–6

Differential expression of psoriasin messenger RNA between in situ and invasive human breast carcinoma [published erratum appears in Cancer Res 1997 Feb 15;57(4):793] Leygue E, et al. **Cancer Res** 1996 Oct 15;56(20):4606–9

Estrogen receptor messenger RNA splice variants are not involved in antiestrogen resistance in sublines of MCF-7 human breast cancer cells. Madsen MW, et al. **Cancer Res** 1997 Feb 15;57(4):585–9

Cell cycle regulation of the human DNA mismatch repair genes hMSH2, hMLH1, and hPMS2. Meyers M, et al. **Cancer Res** 1997 Jan 15;57(2):206–8

Two mechanisms of basic fibroblast growth factor-induced angiogenesis in bladder cancer. O'Brien T, et al. **Cancer Res** 1997 Jan 1;57(1):136–40

Neurofilament heavy chain-like messenger RNA and protein are present in benign prostate and down-regulated in prostatic carcinoma. Schleicher RL, et al. **Cancer Res** 1997 Aug 15;57(16):3532–6

Differential messenger RNA and protein expression of the receptor for advanced glycosylated end products in normal lung and non-small cell lung carcinoma. Schraml P, et al. **Cancer Res** 1997 Sep 1;57(17):3669–71

Coexpression of Grb7 with epidermal growth factor receptor or Her2/erbB2 in human advanced esophageal carcinoma. Tanaka S, et al. **Cancer Res** 1997 Jan 1;57(1):28–31

Anti-cancer effects of morphine through inhibition of tumour necrosis factor-alpha release and mRNA expression. Sueoka N, et al. **Carcinogenesis** 1996 Nov;17(11):2337–41

Rat ferritin-H: cDNA cloning, differential expression and localization during hepatocarcinogenesis. Wu CG, et al. **Carcinogenesis** 1997 Jan;18(1):47–52

Increased cardiac expression of endothelin-1 mRNA in ischemic heart failure in rats. Tønnessen T, et al. **Cardiovasc Res** 1997 Mar;33(3):601–10

A novel mechanism for regulating activity of a transcription factor that controls the unfolded protein response [see comments] Cox JS, et al. **Cell** 1996 Nov 1;87(3):391–404 . Comment in: Cell 1996 Nov 1;87(3):357–9.

Cocrystal structure of the messenger RNA 5' cap-binding protein (eIF4E) bound to 7-methyl-GDP. Marcotrigiano J, et al. **Cell** 1997 Jun 13;89(6):951–61

mRNA silencing in erythroid differentiation: hnRNP K and hnRNP E1 regulate 15-lipoxygenase translation from the 3' end. Ostareck DH, et al. **Cell** 1997 May 16;89(4):597–606

X chromosome inactivation is mediated by Xist RNA stabilization. Panning B, et al. **Cell** 1997 Sep 5;90(5):907–16

The transmembrane kinase Ire1p is a site-specific endonuclease that initiates mRNA splicing in the unfolded protein response. Sidrauski C, et al. **Cell** 1997 Sep 19; 90(6):1031–9

Focal altered compartmentation of repetitive B2 (Alu-like) sequences in rat liver following hepatocarcinogen exposure. Clawson GA, et al. **Cell Growth Differ** 1996 May; 7(5):635–46

Distribution of fiber types determined by in situ hybridization of myosin heavy chain mRNA and enzyme histochemistry in rat skeletal muscles. Kanbara K, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 May;43(3):319–27

Immunochemical localization of the phylogenetically oldest receptor tyrosine kinase: existence in the marine sponge Geodia cydonium. Skorokhod A, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jun;43(4):509–19

VEGF and bFGF mRNA are expressed in ethylnitrosourea-induced experimental rat gliomas. Okimoto T, et al. **Cell Mol Neurobiol** 1997 Feb;17(1):141–50

Effects of shaker-1 mutations on myosin-VIIa protein and mRNA expression. Hasson T, et al. **Cell Motil Cytoskeleton** 1997;37(2):127–38

Leptomycin B is an inhibitor of nuclear export: inhibition of nucleo-cytoplasmic translocation of the human immunodeficiency virus type 1 (HIV-1) Rev protein and Rev-dependent mRNA. Wolff B, et al. **Chem Biol** 1997 Feb;4(2):139–47

Expression of TGF-beta 1, PDGF and IGF-1 mRNA in lung of bleomycin-A5-induced pulmonary fibrosis in rats. Li H, et al. **Chin Med J (Engl)** 1996 Jul;109(7):533–6

Effect of probucol on mRNA expression of glomerular antioxidant enzymes in rat with subtotal nephrectomy. Tang Z, et al. **Chin Med J (Engl)** 1996 Oct;109(10):780–6

p22phox mRNA expression and NADPH oxidase activity are increased in aortas from hypertensive rats. Fukui T, et al. **Circ Res** 1997 Jan;80(1):45–51

Expression of mRNAs for neurotrophins and their receptors in developing rat heart. Hiltunen JO, et al. **Circ Res** 1996 Nov;79(5):930–9

Distribution of cAMP-activated chloride current and CFTR mRNA in the guinea pig heart. James AF, et al. **Circ Res** 1996 Aug;79(2):201–7

Constitutive mRNA and immunoreactivity for IL-2 in human nasal mucosa. Moss RB, et al. **Clin Exp Allergy** 1997 Apr; 27(4):406–12

Haemophilus influenzae and Streptococcus pneumoniae induce different intracerebral mRNA cytokine patterns during the course of experimental bacterial meningitis. Diab A, et al. **Clin Exp Immunol** 1997 Aug;109(2):233–41

Cellular mRNA expression of interferon-gamma (IFN-gamma), IL-4 and transforming growth factor-beta (TGF-beta) in rats nasally tolerized against experimental autoimmune myasthenia gravis (EAMG). Ma CG, et al. **Clin Exp Immunol** 1996 Jun;104(3):509–16

Persistent reduction in IL-6 mRNA in peripheral blood mononuclear cells of patients with rheumatoid arthritis after treatment with a monoclonal antibody to CD54 (ICAM-1). Schulze-Koops H, et al. **Clin Exp Immunol** 1996 Nov;106(2):190–6

Alterations of mRNA levels of alpha 1-adrenoceptor subtypes with maturation and ageing in different rat blood vessels. Xu KM, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):415–7

Changes in renal renin gene expression in fetal sheep. Zhang DY, et al. **Clin Exp Pharmacol Physiol** 1996 Aug; 23(8):682–4

Chick kidney ferredoxin: complementary DNA cloning and vitamin D effects on mRNA levels. Blanchard RD, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Aug; 114(4):337–44

Recognition of 3'-processing sites of human mRNA precursors. Salamov AA, et al. **Comput Appl Biosci** 1997 Feb;13(1):23–8

A method for identifying splice sites and translational start sites in eukaryotic mRNA. Salzberg SL. **Comput Appl Biosci** 1997 Aug;13(4):365–76

Growth factor and neurotrophic factor mRNA in human lacrimal gland. Nguyen DH, et al. **Cornea** 1997 Mar; 16(2):192–9

Time-dependent increases in syndecan-1 and fibroglycan messenger RNA expression in the infarct zone after experimentally induced myocardial infarction in rats. Endo C, et al. **Coron Artery Dis** 1997 Mar-Apr;8(3–4):155–61

Upregulation of IGF-I and collagen I mRNA in human atherosclerotic tissue is not accompanied by changes in type 1 IGF receptor or collagen III mRNA: an in situ hybridization study. Wilson VJ, et al. **Coron Artery Dis** 1996 Aug;7(8):569–72

Diminished heme oxygenase-1 mRNA expression in RPE cells from diabetic donors as quantitated by competitive RT/PCR. da Silva JL, et al. **Curr Eye Res** 1997 Apr; 16(4):380–6

Retinal vascular endothelial growth factor (VEGF) mRNA expression is altered in relation to neovascularization in oxygen induced retinopathy. Donahue ML, et al. **Curr Eye Res** 1996 Feb;15(2):175–84

Quantification and regulation of mRNAs encoding beaded filament proteins in the chick lens. Ireland ME, et al. **Curr Eye Res** 1997 Aug;16(8):838–46

Expression of FGF-1 and FGF-2 mRNA during lens morphogenesis, differentiation and growth. Lovicu FJ, et al. **Curr Eye Res** 1997 Mar;16(3):222–30

Messenger RNA expression of heat shock proteins (HSPs) during ocular development. Tanaka Y, et al. **Curr Eye Res** 1995 Dec;14(12):1125–33

Lens epithelial cell mRNA. III. Elevated expression of macrophage migration inhibitory factor mRNA in galactose cataracts. Wen Y, et al. **Curr Eye Res** 1996 Feb; 15(2):125–30

mRNA and cytoskeletal filaments. Bassell G, et al. **Curr Opin Cell Biol** 1997 Feb;9(1):109–15 (58 ref.)

Common themes in the function of transcription and splicing enhancers. Hertel KJ, et al. **Curr Opin Cell Biol** 1997 Jun; 9(3):350–7 (68 ref.)

The cytoskeleton in mRNA localization and cell differentiation. Nasmyth K, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):396–400

Effects of interleukins on Crouzon fibroblast phenotype in vitro. Release of cytokines and IL-6 mRNA expression. Bodo M, et al. **Cytokine** 1996 Oct;8(10):772–83

Induction of rapid IL-1 beta mRNA degradation in THP-1 cells mediated through the AU-rich region in the 3'UTR by a radicicol analogue. Kastelic T, et al. **Cytokine** 1996 Oct;8(10):751–61

Cytokine mRNA expression in human platelets and a megakaryocytic cell line and cytokine modulation of platelet function. Soslau G, et al. **Cytokine** 1997 Jun; 9(6):405–11

Analysis of amyloid precursor protein mRNAs in skin fibroblasts in Down's syndrome. Urakami K, et al. **Dementia** 1996 Mar-Apr;7(2):82–5

Cytoplasmic polyadenylation of activin receptor mRNA and the control of pattern formation in Xenopus development. Simon R, et al. **Dev Biol** 1996 Oct 10;179(1):239–50

Temporal expression of types XII and XIV collagen mRNA and protein during avian corneal development. Gordon MK, et al. **Dev Dyn** 1996 May;206(1):49–58

Analysis of MyoD, myogenin, and muscle-specific gene mRNAs in regenerating Xenopus skeletal muscle. Nicolas N, et al. **Dev Dyn** 1996 Sep;207(1):60–8

Comparative analysis of the kinetics and dynamics of K10, bicoid, and oskar mRNA localization in the Drosophila oocyte. Karlin-Mcginness M, et al. **Dev Genet** 1996; 19(3):238–48

Localization of ribosomal protein L5 mRNA in myoplasm during ascidian development. Swalla BJ, et al. **Dev Genet** 1996;19(3):258–67

Role of Adducin-like (hu-li tai shao) mRNA and protein localization in regulating cytoskeletal structure and function during Drosophila Oogenesis and early embryogenesis. Zaccai M, et al. **Dev Genet** 1996; 19(3):249–57

Tubulin tyrosine ligase: protein and mRNA expression in developing rat skeletal muscle. Arregui CO, et al. **Dev Growth Differ** 1997 Apr;39(2):167–78

Localization of mRNA for UDP-galactose: ceramide galactosyltransferase in the brain during mouse development. Kagawa T, et al. **Dev Neurosci** 1996; 18(4):309–18

Nanos and pumilio establish embryonic polarity in Drosophila by promoting posterior deadenylation of hunchback mRNA. Wreden C, et al. **Development** 1997 Aug;124(15):3015–23

Localization of Xcat-2 RNA, a putative germ plasm component, to the mitochondrial cloud in Xenopus stage I oocytes. Zhou Y, et al. **Development** 1996 Sep; 122(9):2947–53

Disordered expression of glycolytic and gluconeogenic liver

enzymes of juvenile visceral steatosis mice with systemic carnitine deficiency. Hotta K, et al. **Diabetes Res Clin Pract** 1996 May;32(3):117–23

Insulin regulated PKC isoform mRNA in rat adipocytes. Ishizuka T, et al. **Diabetes Res Clin Pract** 1996 Aug; 33(3):159–67

Effect of endotoxin on interleukin–6 secretion and messenger ribonucleic acid in porcine anterior pituitary cells. Abraham EJ, et al. **Domest Anim Endocrinol** 1996 Nov; 13(6):491–501

The steady–state level of mRNA from the Ogura cytoplasmic male sterility locus in Brassica cybrids is determined post–transcriptionally by its 3' region. Bellaoui M, et al. **EMBO J** 1997 Aug 15;16(16):5057–68

Sequences directing C to U editing of the plastid psbL mRNA are located within a 22 nucleotide segment spanning the editing site. Chaudhuri S, et al. **EMBO J** 1996 Nov 1;15(21):5958–64

Mof4–1 is an allele of the UPF1/IFS2 gene which affects both mRNA turnover and –1 ribosomal frameshifting efficiency. Cui Y, et al. **EMBO J** 1996 Oct 15; 15(20):5726–36

In vivo selection of RNAs that localize in the nucleus. Grimm C, et al. **EMBO J** 1997 Feb 17;16(4):793–806

The splicing factor SRp20 modifies splicing of its own mRNA and ASF/SF2 antagonizes this regulation. Jumaa H, et al. **EMBO J** 1997 Aug 15;16(16):5077–85

Polyadenylation accelerates degradation of chloroplast mRNA. Kudla J, et al. **EMBO J** 1996 Dec 16; 15(24):7137–46

Heat shock disassembles the nucleolus and inhibits nuclear protein import and poly(A)+ RNA export. Liu Y, et al. **EMBO J** 1996 Dec 2;15(23):6750–7

Trans mRNA splicing in trypanosomes: cloning and analysis of a PRP8–homologous gene from Trypanosoma brucei provides evidence for a U5–analogous RNP. Lücke S, et al. **EMBO J** 1997 Jul 16;16(14):4433–40

Identification of a transcript release activity acting on ternary transcription complexes containing murine RNA polymerase I. Mason SW, et al. **EMBO J** 1997 Jan 2; 16(1):163–72

Identification of HuR as a protein implicated in AUUUA–mediated mRNA decay. Myer VE, et al. **EMBO J** 1997 Apr 15;16(8):2130–9

A ribonuclease specific for inosine–containing RNA: a potential role in antiviral defence? Scadden AD, et al. **EMBO J** 1997 Apr 15;16(8):2140–9

Mex67p, a novel factor for nuclear mRNA export, binds to both poly(A)+ RNA and nuclear pores. Segref A, et al. **EMBO J** 1997 Jun 2;16(11):3256–71

A viral sequence in the 3'–untranslated region mimics a 5' cap in facilitating translation of uncapped mRNA. Wang S, et al. **EMBO J** 1997 Jul 1;16(13):4107–16

Evidence that translation reinitiation abrogates nonsense–mediated mRNA decay in mammalian cells. Zhang J, et al. **EMBO J** 1997 Feb 17;16(4):826–33

Inhibin alpha, beta A and beta B subunit messenger ribonucleic acid levels in cultured rat pituitary: studies by a quantitative RT–PCR. Demura R, et al. **Endocr J** 1996 Aug;43(4):403–10

Dynamic alterations in growth hormone receptor mRNA levels in rat brain during stress tolerance. Fujikawa T, et al. **Endocr J** 1996 Oct;43 Suppl:S119–22

Expression of messenger RNA of insulin–like growth factors (IGFs) and IGF binding proteins (IGFBP1–6) in placenta of normal and diabetic pregnancy. Liu YJ, et al. **Endocr J** 1996 Oct;43 Suppl:S89–91

Ovariectomy–evoked increase in gonadotropin releasing hormone receptor parallels its messenger RNA level, but does not correlate with stimulated gonadotropin release. Saito S, et al. **Endocr J** 1996 Apr;43(2):139–43

Continuous stimulation of gonadotropin–releasing hormone (GnRH) receptors by GnRH agonist decreases pituitary GnRH receptor messenger ribonucleic acid concentration in immature female rats. Sakakibara H, et al. **Endocr J** 1996 Feb;43(1):115–8

The stability of truncated epidermal growth factor receptor mRNA is higher than that of the full–length receptor mRNA in rat hepatoma cells. Satoh Y, et al. **Endocr J** 1997 Jun;44(3):403–8

Changes in ovarian expression of tissue–type plasminogen activator and plasminogen activator inhibitor type–1 messenger ribonucleic acids during ovulation in rat. Shen X, et al. **Endocr J** 1997 Jun;44(3):341–8

Multiple signal transduction systems regulate angiotensin II type 1 (AT1) receptor mRNA expression in bovine adrenocortical cells. Dell GC, et al. **Endocr Res** 1996 Nov; 22(4):363–8

Adrenocorticotropin regulates the level of the steroidogenic acute regulatory (StAR) protein mRNA in hamster adrenals. Fleury A, et al. **Endocr Res** 1996 Nov; 22(4):515–20

Heat shock protein 60 mRNA is not increased in Graves' disease thyroid tissue. Trieb K, et al. **Endocr Res** 1996 May; 22(2):185–93

Localization of dopamine D1A receptor protein and messenger ribonucleic acid in rat adrenal cortex. Aherne AM, et al. **Endocrinology** 1997 Mar;138(3):1282–8

Homologous down–regulation of growth hormone–releasing hormone receptor messenger ribonucleic acid levels. Aleppo G, et al. **Endocrinology** 1997 Mar;138(3):1058–65

Estrogen induces early and timed activation of cyclin–dependent kinases 4, 5, and 6 and increases cyclin messenger ribonucleic acid expression in rat uterus. Altucci L, et al. **Endocrinology** 1997 Mar;138(3):978–84

Endotoxin decreases corticotropin–releasing factor receptor 1 messenger ribonucleic acid levels in the rat pituitary. Aubry JM, et al. **Endocrinology** 1997 Apr;138(4):1621–6

Deletion of the thyroid hormone beta1 receptor increases basal and triiodothyronine–induced growth hormone messenger ribonucleic acid in GH3 cells. Ball SG, et al. **Endocrinology** 1997 Aug;138(8):3125–32

Fetal sheep pituitary proopiomelanocortin in late gestation: effect of bilateral lesions of the paraventricular nucleus on regional and cellular messenger ribonucleic acid levels. Bell ME, et al. **Endocrinology** 1997 Sep;138(9):3873–80

Steroid regulation of estrogen and progestin receptor messenger ribonucleic acid in monkey hypothalamus and pituitary. Bethea CL, et al. **Endocrinology** 1996 Oct; 137(10):4372–83

Pituitary follistatin and inhibin subunit messenger ribonucleic acid levels are differentially regulated by local and hormonal factors. Bilezikjian LM, et al. **Endocrinology** 1996 Oct;137(10):4277–84

Induction of myometrial 11beta–hydroxysteroid dehydrogenase type 1 messenger ribonucleic acid and protein expression late in rat pregnancy. Burton PJ, et al. **Endocrinology** 1996 Dec;137(12):5700–6

The effects of orbital spaceflight on bone histomorphometry and messenger ribonucleic acid levels for bone matrix proteins and skeletal signaling peptides in ovariectomized growing rats. Cavolina JM, et al. **Endocrinology** 1997 Apr; 138(4):1567–76

Changes in facilitative glucose transporter messenger ribonucleic acid levels in the diabetic rat kidney. Chin E, et al. **Endocrinology** 1997 Mar;138(3):1267–75

Effects of beta–adrenoceptor subtype stimulation on obese gene messenger ribonucleic acid and on leptin secretion in mouse brown adipocytes differentiated in culture. Deng C, et al. **Endocrinology** 1997 Feb;138(2):548–52

Isoform–specific 3,5,3'–triiodothyronine receptor binding capacity and messenger ribonucleic acid content in rat adenohypophysis: effect of thyroidal state and comparison with extrapituitary tissues. Ercan–Fang S, et al. **Endocrinology** 1996 Aug;137(8):3228–33

Selection of the dominant follicle in cattle occurs in the absence of differences in the expression of messenger ribonucleic acid for gonadotropin receptors. Evans AC, et al. **Endocrinology** 1997 Jul;138(7):2963–71

Homologous regulation of the rat C1a calcitonin receptor (CTR) in nonosteoclastic cells is independent of CTR messenger ribonucleic acid changes and cyclic adenosine 3',5'–monophosphate–dependent protein kinase activation. Findlay DM, et al. **Endocrinology** 1996 Nov; 137(11):4576–85

Effect of retinoid status on the messenger ribonucleic acid expression of nuclear retinoid receptors alpha, beta, and gamma, and retinoid X receptors alpha, beta, and gamma in the mouse testis. Gaemers IC, et al. **Endocrinology** 1997 Apr;138(4):1544–51

Molecular cloning of spermidine/spermine N1–acetyltransferase from the periimplantation porcine uterus by messenger ribonucleic acid differential display: temporal and conceptus–modulated gene expression. Green ML, et al. **Endocrinology** 1996 Dec;137(12):5447–55

Insulin–like growth factor I receptor messenger expression during oogenesis in Xenopus laevis. Groigno L, et al. **Endocrinology** 1996 Sep;137(9):3856–63

The effect of hypophysectomy and growth hormone replacement on sst1 and sst2 somatostatin receptor subtype messenger ribonucleic acids in the arcuate nucleus. Guo F, et al. **Endocrinology** 1996 Sep;137(9):3928–35

Androgen modulation of the messenger ribonucleic acid of retinoic acid receptors in the prostate, seminal vesicles, and kidney in the rat. Huang HF, et al. **Endocrinology** 1997 Feb;138(2):553–9

Protein malnutrition increases plasma adrenocorticotropin and anterior pituitary proopiomelanocortin messenger ribonucleic acid in the rat. Jacobson L, et al. **Endocrinology** 1997 Mar;138(3):1048–57

Differential effects of gonadotropin–releasing hormone (GnRH) pulse frequency on gonadotropin subunit and GnRH receptor messenger ribonucleic acid levels in vitro. Kaiser UB, et al. **Endocrinology** 1997 Mar;138(3):1224–31

Corticosterone selectively increases follicle–stimulating hormone beta–subunit messenger ribonucleic acid in primary anterior pituitary cell culture without affecting its half–life. Kilen SM, et al. **Endocrinology** 1996 Sep; 137(9):3802–7

Sexual dimorphism of steroid hormone receptor messenger ribonucleic acid expression and hormonal regulation in rat vascular tissue. Knauthe R, et al. **Endocrinology** 1996 Aug; 137(8):3220–7

Expression of thyrotropin–releasing hormone (TRH) receptor mRNA in somatotrophs in the rat anterior pituitary. Konaka S, et al. **Endocrinology** 1997 Feb; 138(2):827–30

Comparison of the ligand binding specificity and transcript tissue distribution of estrogen receptors alpha and beta. Kuiper GG, et al. **Endocrinology** 1997 Mar;138(3):863–70

Inhibition of fetal adrenal adrenocorticotropin receptor messenger ribonucleic acid expression by betamethasone administration to the baboon fetus in late gestation. Leavitt MG, et al. **Endocrinology** 1997 Jul;138(7):2705–12

Basal and growth hormone–induced hepatic messenger ribonucleic acid expression of insulin–like growth factor–I (IGF–I) and IGF–binding protein–3 is independent of hyperinsulinemia and increased energy status in the genetically obese Zucker rat. Melián E, et al. **Endocrinology** 1997 Mar;138(3):1066–71

Developmental increase in expression of the messenger ribonucleic acid and protein levels of 11beta–hydroxysteroid dehydrogenase types 1 and 2 in the baboon placenta. Pepe GJ, et al. **Endocrinology** 1996 Dec; 137(12):5678–84

Body temperature (37 C) specifically down–regulates the messenger ribonucleic acid for the major sperm surface antigen CD52 in epididymal cell culture. Pera I, et al. **Endocrinology** 1996 Oct;137(10):4451–9

Overexpression and activation of the insulin receptor enhances expression of ERCC–1 messenger ribonucleic acid in cultured cells. Perfetti R, et al. **Endocrinology** 1997 May;138(5):1829–35

Chronic administration of the luteinizing hormone–releasing hormone (LHRH) antagonist cetrorelix decreases gonadotrope responsiveness and pituitary LHRH receptor messenger ribonucleic acid levels in rats. Pinski J, et al. **Endocrinology** 1996 Aug;137(8):3430–6

Regulation of messenger ribonucleic acid for corticotropin releasing hormone receptor in the pituitary during stress. Rabadan–Diehl C, et al. **Endocrinology** 1996 Sep; 137(9):3808–14

Dietary fiber modulates intestinal proglucagon messenger ribonucleic acid and postprandial secretion of glucagon–like peptide–1 and insulin in rats. Reimer RA, et al. **Endocrinology** 1996 Sep;137(9):3948–56

Regulation of insulin–like growth factor I biosynthesis in porcine granulosa cells. Samaras SE, et al. **Endocrinology** 1996 Nov;137(11):4657–64

Dual label in situ hybridization studies provide evidence that luteinizing hormone–releasing hormone neurons do not synthesize messenger ribonucleic acid for mu, kappa, or delta opiate receptors. Sannella MI, et al. **Endocrinology** 1997 Apr;138(4):1667–72

Fasting prevents experimental murine colitis produced by dextran sulfate sodium and decreases interleukin–1 beta and insulin–like growth factor I messenger ribonucleic acid. Sävendahl L, et al. **Endocrinology** 1997 Feb;138(2):734–40

Regulation of hypothalamic somatostatin, growth hormone–releasing hormone, and growth hormone receptor messenger ribonucleic acid by glucocorticoids. Señarís RM, et al. **Endocrinology** 1996 Dec;137(12):5236–41

The cytosolic 47–kilodalton protein that binds to the 3' untranslated region of epidermal growth factor transcripts responds to orchiectomy in a tissue–specific fashion. Sheflin LG, et al. **Endocrinology** 1996 Dec;137(12):5616–23

Glucagon–like peptide–1 receptor (GLP1–R) mRNA in the rat hypothalamus. Shughrue PJ, et al. **Endocrinology** 1996 Nov;137(11):5159–62

Distinct mechanisms regulate induction of messenger ribonucleic acid for prostaglandin (PG) G/H synthase–2, PGE (EP3) receptor, and PGF2 alpha receptor in bovine preovulatory follicles. Tsai SJ, et al. **Endocrinology** 1996 Aug;137(8):3348–55

Effect of carboxypeptidase E deficiency on progastrin processing and gastrin messenger ribonucleic acid expression in mice with the fat mutation. Udupi V, et al. **Endocrinology** 1997 May;138(5):1959–63

Distribution of parathyroid hormone–2 receptor messenger ribonucleic acid in rat. Usdin TB, et al. **Endocrinology** 1996 Oct;137(10):4285–97

11beta–Hydroxysteroid dehydrogenase type 2 in the rat corpus luteum: induction of messenger ribonucleic acid expression and bioactivity coincident with luteal regression. Waddell BJ, et al. **Endocrinology** 1996 Dec;137(12):5386–91

Messenger ribonucleic acid levels of collagenase (MMP–13) and matrilysin (MMP–7) in virgin, pregnant, and postpartum uterus and cervix of rat. Wolf K, et al. **Endocrinology** 1996 Dec;137(12):5429–34

Changes in heat shock protein–90 and –70 messenger ribonucleic acid in uterine tissues of the ewe in relation to parturition and regulation by estradiol and progesterone. Wu WX, et al. **Endocrinology** 1996 Dec;137(12):5685–93

Estrogen regulates somatostatin receptor subtype 2 messenger ribonucleic acid expression in human breast cancer cells. Xu Y, et al. **Endocrinology** 1996 Dec; 137(12):5634–40

Effect of fasting on insulin–like growth factor (IGF)–IA and IGF–IB messenger ribonucleic acids and prehormones in rat liver. Zhang J, et al. **Endocrinology** 1997 Aug; 138(8):3112–8

In situ hybridization for c–fos mRNA reveals the involvement of the superior colliculus in the propagation of seizure activity in genetically epilepsy–prone rats. Ribak CE, et al. **Epilepsy Res** 1997 Mar;26(3):397–406

Elevated Th1 cytokine mRNA in skin biopsies and peripheral circulation in patients with erythema nodosum. Llorente L, et al. **Eur Cytokine Netw** 1997 Mar;8(1):67–71

Hepatic 5–aminolevulinic acid synthase mRNA stability is modulated by inhibitors of heme biosynthesis and by metalloporphyrins. Cable EE, et al. **Eur J Biochem** 1996 Aug 15;240(1):112–7

A 54–kDa protein specifically associates the 3' untranslated region of three maternal mRNAs with the cytoskeleton of the animal part of the Paracertrotus lividus egg. Montana G, et al. **Eur J Biochem** 1997 Jul 1;247(1):183–9

Enhanced stability of urokinase-type plasminogen activator mRNA in metastatic breast cancer MDA-MB-231 cells and LLC-PK1 cells down-regulated for protein kinase C--correlation with cytoplasmic heterogeneous nuclear ribonucleoprotein C. Nanbu R, et al. **Eur J Biochem** 1997 Jul 1;247(1):169-74

Inhibition of zinc-induced metallothionein mRNA accumulation by gonadotropin-releasing hormone in human hepatocarcinoma cell line HepG2. Pati D, et al. **Eur J Biochem** 1996 Nov 15;242(1):36-40

Characterization of two nuclear proteins that interact with cytochrome P-450 1A2 mRNA. Regulation of RNA binding and possible role in the expression of the Cyp1a2 gene. Raffalli-Mathieu F, et al. **Eur J Biochem** 1997 Apr 1;245(1):17-24

Cloning and expression of the mRNA of human galectin-4, an S-type lectin down-regulated in colorectal cancer. Rechreche H, et al. **Eur J Biochem** 1997 Aug 15; 248(1):225-30

Alternative processing of the tryptophanyl-tRNA synthetase mRNA from interferon-treated human cells. Turpaev KT, et al. **Eur J Biochem** 1996 Sep 15;240(3):732-7

Purification and characterisation of cathepsin B mRNA 3'-untranslated-region-binding protein (CBBP), a protein that represses cathepsin B mRNA translation. Yano T, et al. **Eur J Biochem** 1997 Apr 15;245(2):260-5

EGF-receptor RNA metabolism in the nucleus of A431 cells. Sibon OC, et al. **Eur J Cell Biol** 1996 Sep;71(1):45-52

The regional distribution and cellular localization of mRNA encoding rat prostacyclin synthase. Tone Y, et al. **Eur J Cell Biol** 1997 Mar;72(3):268-77

Altered parathyroid hormone-related protein secretion and mRNA expression in squamous carcinoma cells in vitro. Gröne A, et al. **Eur J Endocrinol** 1996 Oct;135(4):498-505

Coordinate expression of insulin-like growth factor II (IGF-II) and IGF-II/mannose-6-phosphate receptor mRNA and stable expression of IGF-I receptor mRNA during differentiation of human colon carcinoma cells (Caco-2). Hoeflich A, et al. **Eur J Endocrinol** 1996 Jul; 135(1):49-59

Cyclic AMP regulates expression of activin and inhibin subunit mRNAs in the mouse placenta and decidua: a short communication. Yamaguchi M, et al. **Eur J Endocrinol** 1996 Sep;135(3):379-81

Regulation of obese mRNA expression by hormonal factors in primary cultures of rat adipocytes. Yoshida T, et al. **Eur J Endocrinol** 1996 Nov;135(5):619-25

Analysis of alternative splicing patterns in the cystic fibrosis transmembrane conductance regulator gene using mRNA derived from lymphoblastoid cells of cystic fibrosis patients. Bienvenu T, et al. **Eur J Hum Genet** 1996; 4(3):127-34

Positive and negative thymic selection in T cell receptor-transgenic mice correlate with Nur77 mRNA expression. Xue Y, et al. **Eur J Immunol** 1997 Aug; 27(8):2048-56

Expression of pro-inflammatory cytokine and chemokine mRNA upon experimental spinal cord injury in mouse: an in situ hybridization study. Bartholdi D, et al. **Eur J Neurosci** 1997 Jul;9(7):1422-38

Correlations between water maze performance and cortical somatostatin mRNA and high-affinity binding sites during ageing in rats. Dournaud P, et al. **Eur J Neurosci** 1996 Mar;8(3):476-85

BDNF down-regulates neurotrophin responsiveness, TrkB protein and TrkB mRNA levels in cultured rat hippocampal neurons. Frank L, et al. **Eur J Neurosci** 1996 Jun;8(6):1220-30

Hydroxyindole-O-methyltransferase in the chicken retina: immunocytochemical localization and daily rhythm of mRNA. Guerlotté J, et al. **Eur J Neurosci** 1996 Apr; 8(4):710-5

Differential regulation of mRNAs for GDNF and its receptors Ret and GDNFR alpha after sciatic nerve lesion in the mouse. Naveilhan P, et al. **Eur J Neurosci** 1997 Jul; 9(7):1450-60

Chromogranin mRNA levels in the brain as a marker for acute and chronic changes in neuronal activity: effect of treatments including seizures, osmotic stimulation and axotomy in the rat. Shen PJ, et al. **Eur J Neurosci** 1996 May;8(5):988-1000

Localization of glial cell line-derived neurotrophic factor (GDNF) mRNA in embryonic rat by in situ hybridization. Suvanto P, et al. **Eur J Neurosci** 1996 Apr;8(4):816-22

Ciliary neurotrophic factor receptor alpha mRNA in NB41A3 neuroblastoma cells: regulation by cAMP. MacLennan AJ, et al. **Eur J Pharmacol** 1996 Jan 4; 295(1):103-8

Localisation and expression of beta-adrenoceptor subtype mRNAs in human lung. Mak JC, et al. **Eur J Pharmacol** 1996 Apr 29;302(1-3):215-21

Glucoprivation by insulin leads to trans-synaptic increase in rat adrenal tyrosine hydroxylase mRNA levels. Vietor I, et al. **Eur J Pharmacol** 1996 Oct 10;313(1-2):119-27

Gravitational loading of a simulated launch alters mRNA expression in osteoblasts. Fitzgerald J, et al. **Exp Cell Res** 1996 Oct 10;228(1):168-71

Expression of H and L ferritin mRNAs in mouse small intestine. Gérard B, et al. **Exp Cell Res** 1996 Oct 10; 228(1):8-13

The enzymatic activity of Cu/Zn superoxide dismutase does not fluctuate in mouse spermatogenic cells despite mRNA changes. Gu W, et al. **Exp Cell Res** 1997 May 1; 232(2):371-5

Positive regulation of corneal type V collagen mRNA: analysis by chicken-human heterokaryon formation. Linsenmayer TF, et al. **Exp Cell Res** 1996 Oct 10; 228(1):36-43

NF1 mRNA isoform expression in PC12 cells: modulation by extrinsic factors. Metheny LJ, et al. **Exp Cell Res** 1996 Oct 10;228(1):44-9

Changes in calpain II mRNA in young rat lens during maturation and cataract formation. Ma H, et al. **Exp Eye Res** 1997 Mar;64(3):437-45

Effect of chronic daily ozone exposure on Clara cell secretory protein mRNA expression in the adult rat lung. Royce FH, et al. **Exp Lung Res** 1997 Jan-Feb;23(1):51-64

Effects of axotomy and testosterone on androgen receptor mRNA expression in hamster facial motoneurons. Drengler SM, et al. **Exp Neurol** 1997 Aug;146(2):374-9

Brain-derived neurotrophic factor mRNA levels are up-regulated in hindlimb skeletal muscle of diabetic rats: effect of denervation. Fernyhough P, et al. **Exp Neurol** 1996 Oct;141(2):297-303

Astrocytes and microglia respond to estrogen with increased apoE mRNA in vivo and in vitro. Stone DJ, et al. **Exp Neurol** 1997 Feb;143(2):313-8

Post-transcriptional regulation of inducible nitric oxide synthase mRNA in murine macrophages by doxycycline and chemically modified tetracyclines. Amin AR, et al. **FEBS Lett** 1997 Jun 30;410(2-3):259-64

Thymosin beta10 mRNA expression during early postimplantation mouse development. Carpintero P, et al. **FEBS Lett** 1996 Sep 23;394(1):103-6

Centrifugation does not alter spatial distribution of 'BEP4' mRNA in paracentrotus lividus EGG. Costa C, et al. **FEBS Lett** 1997 Jun 30;410(2-3):499-501

Aging decreases the abundance of retinoic acid (RAR) and triiodothyronine (TR) nuclear receptor mRNA in rat brain: effect of the administration of retinoids. Enderlin V, et al. **FEBS Lett** 1997 Aug 4;412(3):629-32

Ribonucleolytic activities in the Escherichia coli in vitro translation system and in its separate components. Fuchs U, et al. **FEBS Lett** 1997 Sep 8;414(2):362-4

In vitro virus: bonding of mRNA bearing puromycin at the 3'-terminal end to the C-terminal end of its encoded protein on the ribosome in vitro. Nemoto N, et al. **FEBS Lett** 1997 Sep 8;414(2):405-8

The effect of the length of the 3'-untranslated region on expression in plants. Tanguay RL, et al. **FEBS Lett** 1996 Oct 7;394(3):285-8

RNA polymerase I from S. cerevisiae depends on an additional factor to release terminated transcripts from the template. Tschochne H, et al. **FEBS Lett** 1997 Jun 30; 410(2-3):461-6

A new role for RNase II in mRNA decay: striking differences between RNase II mutants and similarities with a strain deficient in RNase E. Cruz AA, et al. **FEMS Microbiol Lett** 1996 Dec 15;145(3):315-24

Human endometrial interleukin-6 (IL-6): in vivo messenger ribonucleic acid expression, in vitro protein production, and stimulation thereof by IL-1 beta. Vandermolen DT, et al. **Fertil Steril** 1996 Nov;66(5):741-7

Hydrogen peroxide (H2O2) increases the steady-state mRNA levels of collagenase/MMP-1 in human dermal fibroblasts. Brenneisen P, et al. **Free Radic Biol Med** 1997;22(3):515-24

Effect of reactive oxygen species on the elastin mRNA expression in cultured human dermal fibroblasts. Kawaguchi Y, et al. **Free Radic Biol Med** 1997;23(1):162-5

Pulmonary ferritin: differential effects of hyperoxic lung injury on subunit mRNA levels. Ryan TP, et al. **Free Radic Biol Med** 1997;22(5):901-8

Control of preprogastrin messenger RNA translation by gastric acid in the rat. Bate GW, et al. **Gastroenterology** 1996 Nov;111(5):1224-9

Uroguanylin and guanylin: distinct but overlapping patterns of messenger RNA expression in mouse intestine [see comments] Whitaker TL, et al. **Gastroenterology** 1997 Sep; 113(3):1000-6. Comment in: Gastroenterology 1997 Sep;113(3):1036-8.

Rat intestinal alkaline phosphatase II messenger RNA is present in duodenal crypt and villus cells. Xie QM, et al. **Gastroenterology** 1997 Feb;112(2):376-86

Helicobacter pylori cagA gene and expression of cytokine messenger RNA in gastric mucosa. Yamaoka Y, et al. **Gastroenterology** 1996 Jun;110(6):1744-52

Activation of salmon GnRH mRNA expression prior to differentiation of precocious males in Masu salmon. Amano M, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):365-71

Action of different ecdysteroids on the regulation of mRNAs for the ecdysone receptor, MHR3, dopa decarboxylase, and a larval cuticle protein in the larval epidermis of the tobacco hornworm, Manduca sexta. Hiruma K, et al. **Gen Comp Endocrinol** 1997 Jul;107(1):84-97

Quantification of salmon alpha- and thyrotropin (TSH) beta-subunit messenger RNA by an RNase protection assay: regulation by thyroid hormones. Larsen DA, et al. **Gen Comp Endocrinol** 1997 Jul;107(1):98-108

Cloning and expression pattern of a second [His5Trp7Tyr8]gonadotropin-releasing hormone (chicken GnRH-II) mRNA in goldfish: evidence for two distinct genes. Lin XW, et al. **Gen Comp Endocrinol** 1997 Aug; 107(2):262-72

Preliminary evidence suggesting variations of GtH 1 and GtH2 mRNA levels at different stages of gonadal development in rainbow trout, Oncorhynchus mykiss. Weil C, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):327-33

Expression of messenger ribonucleic acids of luteinizing hormone and follicle-stimulating hormone receptors in granulosa and theca layers of chicken preovulatory follicles. Zhang C, et al. **Gen Comp Endocrinol** 1997 Mar; 105(3):402-9

Degradation products of the cytochrome c3 mRNA are similar in Desulfovibrio vulgaris Hildenborough and Escherichia coli. Cruz AA, et al. **Gene** 1996 Oct 24; 177(1-2):223-8

Elevated levels of cyclin D1 mRNA in the undifferentiated chick retina. Godbout R, et al. **Gene** 1996 Dec 5; 182(1-2):111-5

Ubiquitous expression and testis-specific alternative polyadenylation of mRNA for the human Ran GTPase activator RanGAP1. Krebber H, et al. **Gene** 1996 Nov 21; 180(1-2):7-11

Isolation of a mRNA instability sequence that is cis-dominant to the ompA stability determinant in Escherichia coli. Meyer BJ, et al. **Gene** 1996 Nov 14;179(2):263-70

Tissue-specific processing of the Surf-5 and Surf-4 mRNAs. Garson K, et al. **Gene Expr** 1996;6(4):209-18

Complete growth inhibition of Escherichia coli by ribosome trapping with truncated cspA mRNA at low temperature. Jiang W, et al. **Genes Cells** 1996 Nov;1(11):965-76

A one-hybrid system for detecting RNA-protein interactions. Wilhelm JE, et al. **Genes Cells** 1996 Mar; 1(3):317-23

A protein of the SR family of splicing factors binds extensively to exonic Balbiani ring pre-mRNA and accompanies the RNA from the gene to the nuclear pore. Alzhanova-Ericsson AT, et al. **Genes Dev** 1996 Nov 15; 10(22):2881-93

Wild-type p53 negatively regulates the expression of a microtubule-associated protein. Murphy M, et al. **Genes Dev** 1996 Dec 1;10(23):2971-80

The protein that binds the 3' end of histone mRNA: a novel RNA-binding protein required for histone pre-mRNA processing. Wang ZF, et al. **Genes Dev** 1996 Dec 1; 10(23):3028-40

A novel translational repressor mRNA is edited extensively in livers containing tumors caused by the transgene expression of the apoB mRNA-editing enzyme. Yamanaka S, et al. **Genes Dev** 1997 Feb 1;11(3):321-33

An accurate method for comparing transcript levels of two alleles or highly homologous genes: application to fibrillin transcripts in Marfan patients' fibroblasts. Karttunen L, et al. **Genome Res** 1996 May;6(5):392-403

Localization and physical mapping of genes encoding the A+U-rich element RNA-binding protein AUF1 to human chromosomes 4 and X. Wagner BJ, et al. **Genomics** 1996 Jun 1;34(2):219-22

Cloning and expression of a Xenopus laevis oocyte lectin and characterization of its mRNA levels during early development. Lee JK, et al. **Glycobiology** 1997 Apr; 7(3):367-72

Impaired interleukin-3 mRNA decay in autocrine mast cell tumors after transient calcium ionophore stimulation. Hirsch HH, et al. **Growth Factors** 1996;13(1-2):99-110

Localisation of hepatocyte growth factor and its receptor (c-met) protein and mRNA in human term placenta. Kilby MD, et al. **Growth Factors** 1996;13(1-2):133-9

VEGF mRNA is stabilized by ras and tyrosine kinase oncogenes, as well as by UV radiation--evidence for divergent stabilization pathways. White FC, et al. **Growth Factors** 1997;14(2-3):199-212

VEGF mRNA is reversibly stabilized by hypoxia and persistently stabilized in VEGF-overexpressing human tumor cell lines. White FC, et al. **Growth Factors** 1995; 12(4):289-301

Alteration of E-cadherin, alpha- and beta-catenin mRNA expression in human uterine endometrium during the menstrual cycle. Fujimoto J, et al. **Gynecol Endocrinol** 1996 Jun;10(3):187-91

Expression of basic fibroblast growth factor and its mRNA in uterine endometrium during the menstrual cycle. Fujimoto J, et al. **Gynecol Endocrinol** 1996 Jun;10(3):193-7

Expression of estrogen receptor wild type and exon 5 splicing variant mRNAs in normal and endometriotic endometria during the menstrual cycle. Fujimoto J, et al. **Gynecol Endocrinol** 1997 Feb;11(1):11-6

Expression of estrogen and progesterone receptors and their mRNAs in ovarian endometriosis. Misao R, et al. **Gynecol Endocrinol** 1996 Oct;10(5):303-10

Identification of genes expressed after noise exposure in the chick basilar papilla. Gong TW, et al. **Hear Res** 1996 Jul; 96(1-2):20-32

Distribution of beta-tectorin mRNA in the early posthatch and developing avian inner ear. Goodyear R, et al. **Hear Res** 1996 Jul;96(1-2):167-78

Potential role of bFGF and retinoic acid in the regeneration of chicken cochlear hair cells. Lee KH, et al. **Hear Res** 1996 May;94(1-2):1-13

Localization of bone morphogenetic protein-4 messenger RNA in developing mouse cochlea. Takemura T, et al. **Hear Res** 1996 May;95(1-2):26-32

Kupffer cell depletion abolishes induction of interleukin-10 and permits sustained overexpression of tumor necrosis factor alpha messenger RNA in the regenerating rat liver. Rai RM, et al. **Hepatology** 1997 Apr;25(4):889-95

Differential display of messenger RNA expressed in bronchoalveolar lavage cells in pulmonary sarcoidosis patients. Wiwien HW, et al. **Hiroshima J Med Sci** 1996 Mar;45(1):1-10

In situ assessment of mRNA accessibility in heterogeneous tissue samples using elongation factor-1 alpha (EF-1 alpha). Gruber AD, et al. **Histochem Cell Biol** 1997 May; 107(5):411-6

Changes in osteopontin mRNA expression during phenotypic transition of rabbit arterial smooth muscle cells. Yamamoto M, et al. **Histochem Cell Biol** 1997 Apr;107(4):279-87

Difference in leptin mRNA levels between omental and subcutaneous abdominal adipose tissue from obese humans. Hube F, et al. **Horm Metab Res** 1996 Dec;28(12):690-3

Expression of insulin-like growth factor-II and IGF-binding protein-1 mRNAs in term rhesus monkey placenta: comparison with human placenta. Coulter CL, et al. **Horm Res** 1996;45(3-5):167-71

IGF-binding protein mRNAs in the human fetus: tissue and cellular distribution of developmental expression. Han VK, et al. **Horm Res** 1996;45(3-5):160-6

Detection of transforming growth factor-alpha protein and messenger RNA in hepatobiliary diseases by immunohistochemical and in situ hybridization techniques. Harada K, et al. **Hum Pathol** 1996 Aug;27(8):787-92

Expression of cytokeratin messenger RNA versus protein in the normal mammary gland and in breast cancer. Su L, et al. **Hum Pathol** 1996 Aug;27(8):800-6

Expression of progesterone receptor mRNA in the endometrium during the normal menstrual cycle and in Norplant users. Lau TM, et al. **Hum Reprod** 1996 Dec; 11(12):2629-34

Tissue-specific regulation of type 1 angiotensin II receptor mRNA levels in the rat. Sechi LA, et al. **Hypertension** 1996 Sep;28(3):403-8

Opposite regulation of Gax homeobox expression by angiotensin II and C-type natriuretic peptide. Yamashita J, et al. **Hypertension** 1997 Jan;29(1 Pt 2):381-7

The regulation mechanism of HLA class II gene expression at the level of mRNA stability. Del Pozzo G, et al. **Immunogenetics** 1996;44(6):453-8

Quantitative reverse transcriptase-PCR amplification of cytokine mRNA in liver biopsy specimens using a non-competitive method. Bishop GA, et al. **Immunol Cell Biol** 1997 Apr;75(2):142-7

RT-PCR microlocalization of bradykinin B2 receptor mRNA in microdissected rat nephron segments. Marin Castaño ME, et al. **Immunopharmacology** 1996 Jun; 33(1-3):171-3

Vancomycin down-regulates lipopolysaccharide-induced tumour necrosis factor alpha (TNF alpha) production and TNF alpha-mRNA accumulation in human blood monocytes. Siedlar M, et al. **Immunopharmacology** 1997 Jan;35(3):265-71

Cellular localization of bradykinin B1 receptor mRNA in the human kidney. Wang DZ, et al. **Immunopharmacology** 1996 Jun;33(1-3):151-6

Effect of atrophy and contractions on myogenin mRNA concentration in chick and rat myoblast omega muscle cells. Krebs JM, et al. **In Vitro Cell Dev Biol Anim** 1997 Mar;33(3):187-94

alpha-Fluoromethylhistidine elevates histidine decarboxylase mRNA and chromogranin A mRNA levels in rat oxyntic mucosa. Lindström E, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S107-8

TCR analysis reveals significant repertoire selection during in vitro lymphocyte culture. Dietrich PY, et al. **Int Immunol** 1997 Aug;9(8):1073-83

A transforming growth factor-beta regulable RNA-binding protein interacts specifically with germline Ig alpha transcripts. Edmiston JS, et al. **Int Immunol** 1997 Mar; 9(3):427-33

Expression of connective tissue growth factor mRNA in the fibrous stroma of mammary tumors. Frazier KS, et al. **Int J Biochem Cell Biol** 1997 Jan;29(1):153-61

Insulin-sensitive glucose transporter transcript levels in calf muscles assessed with a bovine GLUT4 cDNA fragment. Hocquette JF, et al. **Int J Biochem Cell Biol** 1996 Jul; 28(7):795-806

Differential effects of streptozotocin-induced diabetes on phenylalanine hydroxylase protein and mRNA abundance in isolated rat liver cells. McDowall IL, et al. **Int J Biochem Cell Biol** 1996 Jul;28(7):761-70

Alteration of p16 and p15 genes in common epithelial ovarian tumors. Fujita M, et al. **Int J Cancer** 1997 Apr 22; 74(2):148-55

mRNA expression of ligands of the epidermal-growth-factor-receptor in the uterus. Pfeiffer D, et al. **Int J Cancer** 1997 Aug 7;72(4):581-6

Association of reduced cell adhesion regulator messenger RNA expression with tumor progression in human hepatocellular carcinoma. Yamamoto H, et al. **Int J Cancer** 1997 Jun 20;74(3):251-4

Catalytic and non-catalytic forms of the neurotrophin receptor xTrkB mRNA are expressed in a pseudo-segmental manner within the early Xenopus central nervous system. Islam N, et al. **Int J Dev Biol** 1996 Oct; 40(5):973-83

Induction of IFN-gamma and IL-1 alpha production in macrophages stimulated with phosphopolysaccharide produced by Lactococcus lactis ssp. cremoris. Kitazawa H, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):99-106

The effect of aflatoxin B1 on cytokine mRNA and corresponding protein levels in peritoneal macrophages and splenic lymphocytes. Dugyala RR, et al. **Int J Immunopharmacol** 1996 Oct;18(10):599-608

(+/-)-3-[4-(2-dimethylamino-1-methylethoxy)-phenyl]-1H-pyrazolo[3,4- B]pyridine-1-acetic acid (Y-25510) stimulates production of IL-1 beta and IL-6 at the level of messenger RNA expression in cultured human monocytes. Kusuhara H, et al. **Int J Immunopharmacol** 1996 Dec;18(12):719-28

Identification of a down-regulated mRNA transcript in corpus cavernosum from diabetic patients with erectile dysfunction. Autieri MV, et al. **Int J Impot Res** 1996 Jun; 8(2):69-73

Aromatase mRNA levels in benign prostatic hyperplasia and prostate cancer. Tsugaya M, et al. **Int J Urol** 1996 Jul; 3(4):292-6

Basic fibroblast growth factor mRNA, bFGF peptide and FGF receptor in epiretinal membranes of intraocular proliferative disorders (PVR and PDR). Hueber A, et al. **Int Ophthalmol** 1996-97;20(6):345-50

Lamina propria mononuclear cells express and respond to interleukin-2 differently in Crohn's disease and ulcerative colitis. Shinoda M, et al. **Intern Med** 1996 Sep;35(9):679-85

Localization of tumor necrosis factor receptor messenger RNA in normal and herpes simplex virus-infected mouse eyes. Cunningham ET Jr, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):9-15

Characterization of cytokine mRNA transcripts in conjunctival cells in patients with allergic conjunctivitis. Fujishima H, et al. **Invest Ophthalmol Vis Sci** 1997 Jun; 38(7):1350-7

Detection and modulation of interleukin-1 receptor antagonist messenger ribonucleic acid and immunoreactivity in Graves' orbital fibroblasts. Mühlberg T, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):1018-28

Beta-ig. Molecular cloning and in situ hybridization in corneal tissues. Rawe IM, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):893-900

Cathepsin G, acid phosphatase, and alpha 1-proteinase inhibitor messenger RNA levels in keratoconus corneas. Whitelock RB, et al. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):529-34

Postnatal maturation of the Kallikrein-kinin system in the rat kidney: from enzyme activity to receptor gene expression. Bascands JL, et al. **J Am Soc Nephrol** 1996 Jan;7(1):81-9

Calcium-regulated protein tyrosine phosphorylation is required for endothelin-1 to induce prostaglandin endoperoxide synthase-2 mRNA expression and protein synthesis in mesangial cells. Coroneos EJ, et al. **J Am Soc Nephrol** 1997 Jul;8(7):1080-90

Involvement of IL-4 in human glomerulonephritis: an in situ hybridization study of IL-4 mRNA and IL-4 receptor mRNA. Furusu A, et al. **J Am Soc Nephrol** 1997 May; 8(5):730-41

Prostaglandin E1 reduces the glomerular mRNA expression of monocyte-chemoattractant protein 1 in anti-thymocyte antibody-induced glomerular injury. Jocks T, et al. **J Am Soc Nephrol** 1996 Jun;7(6):897-905

Thrombin increases clusterin mRNA in glomerular epithelial and mesangial cells. Laping NJ, et al. **J Am Soc Nephrol** 1997 Jun;8(6):906-14

Expression of type IV collagen alpha 3 and alpha 4 chain mRNA in X-linked Alport syndrome. Nakanishi K, et al. **J Am Soc Nephrol** 1996 Jun;7(6):938-45

Glomerular expression of tissue inhibitor of metalloproteinase (TIMP-1) in normal and diabetic rats. Shankland SJ, et al. **J Am Soc Nephrol** 1996 Jan;7(1):97-104

Expression of PDGF and PDGF receptor mRNA in glomeruli in IgA nephropathy. Terada Y, et al. **J Am Soc Nephrol** 1997 May;8(5):817-9

The effects of spinal cord injury on the status of messenger ribonucleic acid for TRPM 2 and androgen receptor in the prostate of the rat. Huang HF, et al. **J Androl** 1997 May-Jun;18(3):250-6

Effects of growth hormone administration and dietary protein intake on insulin-like growth factor I and growth hormone receptor mRNA Expression in porcine liver, skeletal muscle, and adipose tissue. Brameld JM, et al. **J Anim Sci** 1996 Aug;74(8):1832-41

Effect of glucose administration during the estrous cycle on serum hormone profiles, mRNA for steroidogenic enzymes, and breeding performance of ewes. Rubio JM, et al. **J Anim Sci** 1997 Mar;75(3):775-80

Influence of mechanical loading on myosin heavy-chain protein and mRNA isoform expression. Caiozzo VJ, et al. **J Appl Physiol** 1996 May;80(5):1503-12

Exercise-induced changes in beta-adrenergic-receptor mRNA level measured by competitive RT-PCR. Fujii N, et al. **J Appl Physiol** 1997 Jun;82(6):1926-31

Different La/SS-B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757-66

In situ hybridization study of vascular cell adhesion molecule-1 messenger RNA expression in rheumatoid synovium. Higashiyama H, et al. **J Autoimmun** 1995 Dec; 8(6):947-57

Biochemical and serological evidence for an RNase E-like activity in halophilic Archaea. Franzetti B, et al. **J Bacteriol** 1997 Feb;179(4):1180-5

The global regulator CsrA of Escherichia coli is a specific mRNA-binding protein. Liu MY, et al. **J Bacteriol** 1997 Jul;179(14):4639-42

Evidence that the Bacillus subtilis pyrimidine regulatory protein PyrR acts by binding to pyr mRNA at three sites in vivo. Lu Y, et al. **J Bacteriol** 1996 Oct;178(19):5806-9

Differential tissue-specific expression of neurofibromin isoform mRNAs in rat. Suzuki H, et al. **J Biochem (Tokyo)** 1996 Nov;120(5):1048-54

HIV-1 Tat induces the expression of the interleukin-6 (IL6) gene by binding to the IL6 leader RNA and by interacting with CAAT enhancer-binding protein beta (NF-IL6) transcription factors. Ambrosino C, et al. **J Biol Chem** 1997 Jun 6;272(23):14883-92

Relationship between yeast polyribosomes and Upf proteins required for nonsense mRNA decay. Atkin AL, et al. **J Biol Chem** 1997 Aug 29;272(35):22163-72

Glycoprotein 46 mRNA abundance is post-transcriptionally regulated during development of Leishmania chagasi promastigotes to an infectious form. Beetham JK, et al. **J Biol Chem** 1997 Jul 11;272(28):17360-6

Redox modulation of iron regulatory proteins by peroxynitrite. Bouton C, et al. **J Biol Chem** 1997 Aug 8; 272(32):19969-75

Guide RNA-independent and guide RNA-dependent uridine insertion into cytochrome b mRNA in a mitochondrial lysate from Leishmania tarentolae. Role of RNA secondary structure. Connell GJ, et al. **J Biol Chem** 1997 Feb 14; 272(7):4212-8

Vigilin, a ubiquitous protein with 14 K homology domains, is the estrogen-inducible vitellogenin mRNA 3'-untranslated region-binding protein. Dodson RE, et al. **J Biol Chem** 1997 May 9;272(19):12249-52

Promoter escape by RNA polymerase II. A role for an ATP cofactor in suppression of arrest by polymerase at promoter-proximal sites. Dvir A, et al. **J Biol Chem** 1996 Sep 20;271(38):23352-6

Regulation of nerve growth factor mRNA by interleukin-1 in rat hippocampal astrocytes is mediated by NFkappaB. Friedman WJ, et al. **J Biol Chem** 1996 Dec 6; 271(49):31115-20

Efficient hammerhead ribozymes targeted to the polycistronic Sendai virus P/C mRNA. Structure-function relationships. Gavin DK, et al. **J Biol Chem** 1997 Jan 17; 272(3):1461-72

Fatty acid-responsive control of mRNA stability. Unsaturated fatty acid-induced degradation of the Saccharomyces OLE1 transcript. Gonzalez CI, et al. **J Biol Chem** 1996 Oct 18;271(42):25801-9

eIF4G dramatically enhances the binding of eIF4E to the mRNA 5'-cap structure. Haghighat A, et al. **J Biol Chem** 1997 Aug 29;272(35):21677-80

Inducers of erythroleukemic differentiation cause messenger RNAs that lack poly(A)-binding protein to accumulate in translationally inactive, salt-labile 80 S ribosomal complexes. Hensold JO, et al. **J Biol Chem** 1996 Sep 20; 271(38):23246-54

Ovarian- and somatic-specific transcripts of the mosquito clathrin heavy chain gene generated by alternative 5'-exon splicing and polyadenylation. Kokoza VA, et al. **J Biol Chem** 1997 Jan 10;272(2):1164-70

RNA polymerase switches between inactivated and activated states By translocating back and forth along the DNA and the RNA. Komissarova N, et al. **J Biol Chem** 1997 Jun 13;272(24):15329-38

Poly(A) tail shortening by a mammalian poly(A)-specific 3'-exoribonuclease. Körner CG, et al. **J Biol Chem** 1997 Apr 18;272(16):10448-56

Regulation of type I collagen mRNA by amino acid deprivation in human lung fibroblasts. Krupsky M, et al. **J Biol Chem** 1997 May 23;272(21):13864-8

Identification of an mRNA-binding protein and the specific elements that may mediate the pH-responsive induction of renal glutaminase mRNA. Laterza OF, et al. **J Biol Chem** 1997 Sep 5;272(36):22481-8

Cloning of an Apobec-1-binding protein that also interacts with apolipoprotein B mRNA and evidence for its involvement in RNA editing. Lau PP, et al. **J Biol Chem** 1997 Jan 17;272(3):1452-5

Translation initiation factors eIF-iso4G and eIF-4B interact with the poly(A)-binding protein and increase its RNA binding activity. Le H, et al. **J Biol Chem** 1997 Jun 27; 272(26):16247-55

Hypoxia-inducible protein binding to vascular endothelial growth factor mRNA and its modulation by the von Hippel-Lindau protein. Levy AP, et al. **J Biol Chem** 1996 Oct 11;271(41):25492-7

Disruption of ribosomal scanning on the 5'-untranslated region, and not restriction of translational initiation per se, modulates the stability of nonaberrant mRNAs in the yeast Saccharomyces cerevisiae. Linz B, et al. **J Biol Chem** 1997 Apr 4;272(14):9131-40

The mechanism of preferential degradation of polyadenylated RNA in the chloroplast. The exoribonuclease 100RNP/polynucleotide phosphorylase displays high binding affinity for poly(A) sequence. Lisitsky I, et al. **J Biol Chem** 1997 Jul 11;272(28):17648-53

Interleukin-1 reduces the glycolytic utilization of glucose by pancreatic islets and reduces glucokinase mRNA content and protein synthesis by a nitric oxide-dependent mechanism. Ma Z, et al. **J Biol Chem** 1997 Jul 11; 272(28):17827-35

Post-transcriptional regulation of erythropoietin mRNA

stability by erythropoietin mRNA-binding protein. McGary EC, et al. **J Biol Chem** 1997 Mar 28; 272(13):8628-34

Tumor necrosis factor-alpha regulation of glucose transporter (GLUT1) mRNA turnover. Contribution of the 3'-untranslated region of the GLUT1 message. McGowan KM, et al. **J Biol Chem** 1997 Jan 10;272(2):1331-7

Modulation of the activity of RNase E in vitro by RNA sequences and secondary structures 5' to cleavage sites. Mackie GA, et al. **J Biol Chem** 1997 Jan 3;272(1):609-16

Characterization of translation initiation factor 5 (eIF5) from Saccharomyces cerevisiae. Functional homology with mammalian eIF5 and the effect of depletion of eIF5 on protein synthesis in vivo and in vitro. Maiti T, et al. **J Biol Chem** 1997 Jul 18;272(29):18333-40

Antisense RNA control of plasmid R1 replication. The dominant product of the antisense rna-mrna binding is not a full RNA duplex. Malmgren C, et al. **J Biol Chem** 1997 May 9;272(19):12508-12

Translational repression dependent on the interaction of the Xenopus Y-box protein FRGY2 with mRNA. Role of the cold shock domain, tail domain, and selective RNA sequence recognition. Matsumoto K, et al. **J Biol Chem** 1996 Sep 13;271(37):22706-12

Apobec-1 interacts with a 65-kDa complementing protein to edit apolipoprotein-B mRNA in vitro. Mehta A, et al. **J Biol Chem** 1996 Nov 8;271(45):28294-9

Masking and unmasking maternal mRNA. The role of polyadenylation, transcription, splicing, and nuclear history. Meric F, et al. **J Biol Chem** 1996 Nov 29; 271(48):30804-10

Complete phenotypic characterization of apobec-1 knockout mice with a wild-type genetic background and a human apolipoprotein B transgenic background, and restoration of apolipoprotein B mRNA editing by somatic gene transfer of Apobec-1. Nakamuta M, et al. **J Biol Chem** 1996 Oct 18;271(42):25981-8

Differences in the regulation of iron regulatory protein-1 (IRP-1) by extra- and intracellular oxidative stress. Pantopoulos K, et al. **J Biol Chem** 1997 Apr 11; 272(15):9802-8

The mammalian homolog of suppressor-of-white-apricot regulates alternative mRNA splicing of CD45 exon 4 and fibronectin IIICS. Sarkissian M, et al. **J Biol Chem** 1996 Dec 6;271(49):31106-14

Selective regulation of agrin mRNA induction and alternative splicing in PC12 cells by Ras-dependent actions of nerve growth factor. Smith MA, et al. **J Biol Chem** 1997 Jun 20;272(25):15675-81

Cytoplasmic protein mRNA interaction mediates cGMP-modulated translational control of the asialoglycoprotein receptor. Stockert RJ, et al. **J Biol Chem** 1997 Apr 4;272(14):9161-5

Evidence that a specific interaction between an 18-base cis-element in the 5'-untranslated region of human folate receptor-alpha mRNA and a 46-kDa cytosolic trans-factor is critical for translation. Sun XL, et al. **J Biol Chem** 1996 Oct 11;271(41):25539-47

A 20-nucleotide (A + U)-rich element of beta2-adrenergic receptor (beta2AR) mRNA mediates binding to beta2AR-binding protein and is obligate for agonist-induced destabilization of receptor mRNA. Tholanikunnel BG, et al. **J Biol Chem** 1997 Apr 25; 272(17):11471-8

Processing of the rne transcript by an RNase E-independent amino acid-dependent mechanism. Woo WM, et al. **J Biol Chem** 1997 Jun 13;272(24):15516-20

The spinach chloroplast endoribonuclease CSP41 cleaves the 3'-untranslated region of petD mRNA primarily within its terminal stem-loop structure. Yang J, et al. **J Biol Chem** 1997 May 9;272(19):12874-80

Increase of vascular endothelial growth factor mRNA expression by 1,25-dihydroxyvitamin D3 in human osteoblast-like cells. Wang DS, et al. **J Bone Miner Res** 1996 Apr;11(4):472-9

Expression of amelogenin mRNA sequences during development of rat molars. Wurtz T, et al. **J Bone Miner Res** 1996 Jan;11(1):125-31

Expression of adenylyl cyclase and G-protein beta subunit in end-stage human heart failure. Holmer SR, et al. **J Card Fail** 1996 Dec;2(4):279-83

Regulation of rat interstitial collagenase gene expression in growth cartilage and chondrocytes by vitamin D3, interleukin-1 beta, and okadaic acid. Grumbles RM, et al. **J Cell Biochem** 1996 Dec 15;63(4):395-409

Influence of mechanical activity, adrenergic stimulation, and calcium on the expression of myosin heavy chains in cultivated neonatal cardiomyocytes. Luther HP, et al. **J Cell Biochem** 1997 Mar 1;64(3):458-65

Transport and localization elements in myelin basic protein mRNA. Ainger K, et al. **J Cell Biol** 1997 Sep 8; 138(5):1077-87

mRNAs for microtubule proteins are specifically colocalized during the sequential formation of basal body, flagella, and cytoskeletal microtubules in the differentiation of Naegleria gruberi. Han JW, et al. **J Cell Biol** 1997 May 19; 137(4):871-9

Interaction of AU-rich sequence binding proteins with actin: possible involvement of the actin cytoskeleton in lymphokine mRNA turnover. Henics T, et al. **J Cell Physiol** 1997 Oct;173(1):19-27

Induction of interleukin-1 and interleukin-8 mRNAs and proteins by TGF beta 1 in rat lung alveolar epithelial cells. Kumar NM, et al. **J Cell Physiol** 1996 Oct;169(1):186-99

Coexpression of the mRNAs encoding retinol dehydrogenase isozymes and cellular retinol-binding protein. Zhai Y, et al. **J Cell Physiol** 1997 Oct;173(1):36-43

Hel-N1/Hel-N2 proteins are bound to poly(A)+ mRNA in granular RNP structures and are implicated in neuronal differentiation. Gao FB, et al. **J Cell Sci** 1996 Mar;109 (Pt 3):579-89

NNF1 is an essential yeast gene required for proper spindle orientation, nucleolar and nuclear envelope structure and mRNA export. Shan X, et al. **J Cell Sci** 1997 Jul;110 (Pt 14):1615-24

A localisation signal in the 3' untranslated region of c-myc mRNA targets c-myc mRNA and beta-globin reporter sequences to the perinuclear cytoplasm and cytoskeletal-bound polysomes. Veyrune JL, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1185-94

Message of nexin 1, a serine protease inhibitor, is accumulated in the follicular papilla during anagen of the hair cycle. Yu DW, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3867-74

Increased expression of endothelin B receptor mRNA following subarachnoid hemorrhage in monkeys. Hino A, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):688-97

NGFI-B, c-fos, and c-jun mRNA expression in mouse brain after acute carbon monoxide intoxication. Tang YP, et al. **J Cereb Blood Flow Metab** 1997 Jul;17(7):771-80

Expression of growth inhibitory factor mRNA after focal ischemia in rat brain. Yuguchi T, et al. **J Cereb Blood Flow Metab** 1997 Jul;17(7):745-52

Expression of serotonin transporter mRNA in rat brain: presence in neuronal and non-neuronal cells and effect of paroxetine. Swan MC, et al. **J Chem Neuroanat** 1997 Jul; 13(2):71-6

Detection of IL-12, IL-13, and IL-15 messenger ribonucleic acid in the thyroid of patients with autoimmune thyroid disease. Ajjan RA, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):666-9

Modulation of the levels of interleukin-8 messenger ribonucleic acid and interleukin-8 protein synthesis in human endometrial stromal cells by transforming growth factor-beta 1. Arici A, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3004-9

Presence of neuropeptide Y and its messenger ribonucleic acid in human islets: evidence for a possible paracrine role. Bennet WM, et al. **J Clin Endocrinol Metab** 1996 Jun; 81(6):2117-20

Distribution of aromatase P450 transcripts and adipose fibroblasts in the human breast. Bulun SE, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1273-7

Lysyl oxidase (ras recision gene) expression in human amnion: ontogeny and cellular localization. Casey ML, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):167-72

Thyrotropin receptor transcripts in human adipose tissue. Crisp MS, et al. **J Clin Endocrinol Metab** 1997 Jun; 82(6):2003-5

Levels of hepatocyte growth factor and its messenger ribonucleic acid in uncomplicated pregnancies and those complicated by preeclampsia. Furugori K, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2726-30

Measurement of human growth hormone receptor messenger ribonucleic acid by a quantitative polymerase chain reaction-based assay: demonstration of reduced expression after elective surgery. Hermansson M, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):421-8

Identification of ovarian granulosa cells as a novel site of expression for bone morphogenetic protein-3 (BMP-3/osteogenin) and regulation of BMP-3 messenger ribonucleic acids by chorionic gonadotropin in cultured human granulosa-luteal cells. Jaatinen R, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3877-82

Prolactin receptor messenger ribonucleic acid in normal and neoplastic human pituitary tissues. Jin L, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):963-8

Messenger ribonucleic acid expression of heat shock proteins HSP70 and HSP90 in human endometrium and myometrium during the menstrual cycle. Komatsu T, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1385-9

Human placenta and fetal membranes express human urocortin mRNA and peptide. Petraglia F, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3807-10

Steroidogenic factor 1 messenger ribonucleic acid expression in steroidogenic and nonsteroidogenic human tissues: Northern blot and in situ hybridization studies. Ramayya MS, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1799-806

Gonadotropin-releasing hormone and gonadotropin-releasing hormone receptor messenger ribonucleic acids expression in nontumorous and neoplastic pituitaries. Sanno N, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1974-82

Pit-1/growth hormone factor 1 splice variant expression in the rhesus monkey pituitary gland and the rhesus and human placenta. Schanke JT, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):800-7

Protein and messenger ribonucleic acid (mRNA) for the type 1 insulin-like growth factor (IGF) receptor is decreased and IGF-II mRNA is increased in human prostate carcinoma compared to benign prostate epithelium. Tennant MK, et al. **J Clin Endocrinol Metab** 1996 Oct; 81(10):3774-82

Differential expression of messenger ribonucleic acids encoding 11beta-hydroxysteroid dehydrogenase types 1 and 2 in human granulosa cells. Tetsuka M, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):2006-9

Expression of insulin-like growth factor (IGF), IGF-binding protein, and IGF receptor messenger ribonucleic acids in normal and polycystic ovaries. Voutilainen R, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1003-8

Localization of growth hormone messenger ribonucleic acid in the human immune system--a Clinical Research Center study. Wu H, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1278-82

IL-10 suppresses cell surface CD23/Fc epsilon RII expression, not by enhancing soluble CD23 release, but by reducing CD23 mRNA expression in human monocytes. Morinobu A, et al. **J Clin Immunol** 1996 Nov;16(6):326-33

Dynamics of HIV-1 mRNA expression in patients with long-term nonprogressive HIV-1 infection. Comar M, et al. **J Clin Invest** 1997 Aug 15;100(4):893-903

Temporal pattern of Borrelia burgdorferi p21 expression in ticks and the mammalian host. Das S, et al. **J Clin Invest** 1997 Mar 1;99(5):987-95

Effects of tacrolimus (FK506) on human insulin gene expression, insulin mRNA levels, and insulin secretion in HIT-T15 cells. Redmon JB, et al. **J Clin Invest** 1996 Dec 15;98(12):2786-93

Differential expression of exons 1a and 1c in mRNAs for sterol regulatory element binding protein-1 in human and mouse organs and cultured cells. Shimomura I, et al. **J Clin Invest** 1997 Mar 1;99(5):838-45

Multiplex reverse transcription-PCR for surveillance of influenza A and B viruses in England and Wales in 1995 and 1996. Ellis JS, et al. **J Clin Microbiol** 1997 Aug; 35(8):2076-82

Selective upregulation of T alpha 1 alpha-tubulin and neuropeptide Y mRNAs after intermittent excitatory stimulation in adult rat hippocampus in vivo. Causing CG, et al. **J Comp Neurol** 1996 Mar 25;367(1):132-46

Chondroitin sulfate proteoglycans in the developing central nervous system. I. cellular sites of synthesis of neurocan and phosphacan. Engel M, et al. **J Comp Neurol** 1996 Feb 26;366(1):34-43

Localization of natriuretic peptide-activated guanylate cyclase mRNAs in the rat brain. Herman JP, et al. **J Comp Neurol** 1996 May 27;369(2):165-87

Hybridization histochemical and immunohistochemical localization of inhibin/activin subunits and messenger ribonucleic acids in the rat brain. Roberts VJ, et al. **J Comp Neurol** 1996 Jan 15;364(3):473-493

Identification of mRNA-rich keratinocytes in the basal/suprabasal layers of psoriatic skin. Yokota K, et al. **J Dermatol** 1996 Dec;23(12):858-62

Application of non-radiolabeled in situ hybridization system for the detection of polyadenylated RNA to normal and psoriatic human skin. Masunaga T, et al. **J Dermatol Sci** 1996 Sep;12(3):227-31

Local expression of IFN-gamma mRNA in skin lesions of patients with dermatophytosis. Miyata T, et al. **J Dermatol Sci** 1996 Nov;13(2):167-71

Ca2+ receptor mRNA and protein increase in the rat parathyroid gland with advancing age. Autry CP, et al. **J Endocrinol** 1997 Jun;153(3):437-44

A type I collagen substrate increases PTH/PTHrP receptor mRNA expression and suppresses PTHrP mRNA expression in UMR106-06 osteoblast-like cells. Celic S, et al. **J Endocrinol** 1996 Aug;150(2):299-308

The expression of parathyroid hormone-related protein mRNA and immunoreactive protein in human amnion and choriodecidua is increased at term compared with preterm gestation. Curtis NE, et al. **J Endocrinol** 1997 Jul; 154(1):103-12

Effect of pregnancy on rat myometrial beta 2-adrenoceptor mRNA and isoproterenol-induced relaxation of isolated uterine strips. Engstrøm T, et al. **J Endocrinol** 1997 Jun; 153(3):393-9

Differential regulation of tissue insulin-like growth factor-binding protein (IGFBP)-3, IGF-I and IGF type 1 receptor mRNA levels, and serum IGF-I and IGFBP concentrations by growth hormone and IGF-I. Lemmey AB, et al. **J Endocrinol** 1997 Aug;154(2):319-28

Changes in oxytocin receptor mRNA in the rat uterus measured by competitive reverse transcription-polymerase chain reaction. Liu CX, et al. **J Endocrinol** 1996 Sep; 150(3):479-86

Continuous intracerebroventricular administration of a corticotropin releasing hormone antagonist amplifies spontaneous growth hormone pulses in the rat. Mounier F, et al. **J Endocrinol** 1997 Mar;152(3):431-6

Expression of mRNAs for insulin-like growth factor binding proteins-2, -3 and -4 in the ovine ovary throughout the oestrous cycle. Perks CM, et al. **J Endocrinol** 1996 Nov; 151(2):241-9

The desensitization of oxytocin receptors in human myometrial cells is accompanied by down-regulation of oxytocin receptor messenger RNA. Phaneuf S, et al. **J Endocrinol** 1997 Jul;154(1):7-18

Maternal diabetes induces upregulation of hepatic insulin-like growth factor binding protein-1 MRNA expression, growth retardation and developmental delay at the same stage of rat fetal development. Rajaratnam VS, et al. **J Endocrinol** 1997 Jan;152(1):R1-6

Oestrogen and progesterone control basic fibroblast growth factor mRNA in the rat uterus. Rider V, et al. **J Endocrinol** 1997 Jul;154(1):75-84

Concentration of GnRH receptor and GnRH receptor mRNA in pituitary tissue of orchidectomized sheep: effect of oestradiol, progesterone, and progesterone withdrawal. Sakurai H, et al. **J Endocrinol** 1997 Jan;152(1):91–8

Effects of vasopressin and elimination of corticotropin-releasing hormone-target cells on pro-opiomelanocortin mRNA levels and adrenocorticotropin secretion in ovine anterior pituitary cells. van de Pavert SA, et al. **J Endocrinol** 1997 Jul; 154(1):139–47

Additive effects of lactation and food restriction to increase hypothalamic neuropeptide Y mRNA in rats. Wilding JP, et al. **J Endocrinol** 1997 Mar;152(3):365–9

Effect of dexamethasone on insulin receptor mRNA levels, RNA stability and isotype RNA pattern in U-937 human promonocytic cells. Leal MA, et al. **J Endocrinol Invest** 1996 Sep;19(8):530–4

Distributions of fibroblast growth factor and the mRNA for its receptor, MFR1, in the developing testis of the medaka, Oryzias latipes. Watanabe A, et al. **J Exp Zool** 1997 Oct 1;279(2):177–84

Relationship between the intrahepatic expression of interferon-alpha receptor mRNA and the histological progress of hepatitis C virus-associated chronic liver diseases. Ishimura N, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):712–7

Reduction of intestinal apo A-IV mRNA levels in the cirrhotic rat. Seishima M, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):746–51

Differential expression of Na+,H(+)-antiporter mRNA in biliary epithelial cells and in hepatocytes. Marti U, et al. **J Hepatol** 1996 Apr;24(4):498–502

Ontogeny of Clara cell-specific protein and its mRNA: their association with neuroepithelial bodies in human fetal lung and in bronchopulmonary dysplasia. Khoor A, et al. **J Histochem Cytochem** 1996 Dec;44(12):1429–38

Inhibition of nitric oxide in rats. Regulation of cardiovascular structure and expression of insulin-like growth factor I and its receptor messenger RNA. Wickman A, et al. **J Hypertens** 1997 Jul;15(7):751–9

Deficient expression of p56(lck) in Th2 cells leads to partial TCR signaling and a dysregulation in lymphokine mRNA levels. al-Ramadi BK, et al. **J Immunol** 1996 Dec 1; 157(11):4751–61

Rhinoviruses induce interleukin-8 mRNA and protein production in human monocytes. Johnston SL, et al. **J Infect Dis** 1997 Feb;175(2):323–9

Progression of mycosis fungoides is associated with increasing cutaneous expression of interleukin-10 mRNA. Asadullah K, et al. **J Invest Dermatol** 1996 Dec; 107(6):833–7

Epidermal keratinocyte production of interferon-gamma immunoreactive protein and mRNA is an early event in allergic contact dermatitis. Howie SE, et al. **J Invest Dermatol** 1996 Jun;106(6):1218–23

Stromelysin-3 mRNA associated with myofibroblasts is overexpressed in aggressive basal cell carcinoma and in dermatofibroma but not in dermatofibrosarcoma. Undén AB, et al. **J Invest Dermatol** 1996 Aug;107(2):147–53

Oxidized low-density lipoprotein stimulates endothelin-1 release and mRNA expression from rat mesangial cells. Tan MS, et al. **J Lab Clin Med** 1997 Feb;129(2):224–30

Expression of the human NRAMP1 gene in professional primary phagocytes: studies in blood cells and in HL-60 promyelocytic leukemia. Cellier M, et al. **J Leukoc Biol** 1997 Jan;61(1):96–105

Aberrantly spliced mRNAs of the 3-hydroxy-3-methylglutaryl coenzyme A lyase (HL) gene with a donor splice-site point mutation produce hereditary HL deficiency. Buesa C, et al. **J Lipid Res** 1996 Nov; 37(11):2420–32

Endotoxin, TNF, and IL-1 decrease cholesterol 7 alpha-hydroxylase mRNA levels and activity. Feingold KR, et al. **J Lipid Res** 1996 Feb;37(2):223–8

Cloning of rabbit LCAT cDNA: increase in LCAT mRNA abundance in the liver of cholesterol-fed rabbits. Murata Y, et al. **J Lipid Res** 1996 Jul;37(7):1616–22

Dietary linoleic acid increases and palmitic acid decreases hepatic LDL receptor protein and mRNA abundance in young pigs. Mustad VA, et al. **J Lipid Res** 1996 Nov; 37(11):2310–23

Modulation of LDL receptor mRNA stability by phorbol esters in human liver cell culture models. Wilson GM, et al. **J Lipid Res** 1997 Mar;38(3):437–46

Analysis of the in vivo decay of the Escherichia coli dicistronic pyrF-orfF transcript: evidence for multiple degradation pathways. Arraiano CM, et al. **J Mol Biol** 1997 May 2;268(2):261–72

Processing of the Bacillus subtilis thrS leader mRNA is RNase E-dependent in Escherichia coli. Condon C, et al. **J Mol Biol** 1997 May 2;268(2):235–42

Structural probing and mutagenic analysis of the stem-loop required for Escherichia coli dnaX ribosomal frameshifting: programmed efficiency of 50%. Larsen B, et al. **J Mol Biol** 1997 Aug 8;271(1):47–60

A new model for the three-dimensional folding of Escherichia coli 16 S ribosomal RNA. III. The topography of the functional centre. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):566–87

Cellular nucleic acid binding protein binds a conserved region of the 5' UTR of Xenopus laevis ribosomal protein mRNAs. Pellizzoni L, et al. **J Mol Biol** 1997 Mar 28; 267(2):264–75

Identification of elements on GeneX-secA RNA of Escherichia coli required for SecA binding and secA auto-regulation. Salavati R, et al. **J Mol Biol** 1997 Jan 17; 265(2):142–52

Effects on mRNA degradation by Escherichia coli transcription termination factor Rho and pBR322 copy number control protein Rop. Sozhamannan S, et al. **J Mol Biol** 1997 May 16;268(4):689–703

Filamentous phage IKe mRNAs conserve form and function despite divergence in regulatory elements. Stump MD, et al. **J Mol Biol** 1997 Feb 14;266(1):51–65

Upregulation of alpha1A- and alpha1B-adrenergic receptor mRNAs in the heart of cardiomyopathic hamsters. Beaulieu M, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):111–9

Downregulation of IGF-I mRNA expression during postnatal pancreatic development and overexpression after subtotal pancreatectomy and acute pancreatitis in the rat pancreas. Calvo EL, et al. **J Mol Endocrinol** 1997 Jun; 18(3):233–42

The growth hormone-dependent decrease in hepatic fatty acid synthase mRNA is the result of a decrease in gene transcription. Donkin SS, et al. **J Mol Endocrinol** 1996 Apr; 16(2):151–8

Developmental and tissue-regulated expression of IGF-I and IGF-II mRNAs in Sparus aurata. Duguay SJ, et al. **J Mol Endocrinol** 1996 Apr;16(2):123–32

An alternative splice variant of the mouse TRH receptor mRNA is the major form expressed in the mouse pituitary gland. Jones KE, et al. **J Mol Endocrinol** 1996 Apr; 16(2):197–204

Nutritional regulation of insulin-like growth factor-I mRNA expression in barramundi, Lates calcarifer. Matthews SJ, et al. **J Mol Endocrinol** 1997 Jun;18(3):273–6

Molecular cloning of the cDNAs encoding pituitary glycoprotein hormone alpha- and gonadotropin II beta-subunits of the Japanese eel, Anguilla japonica, and increase in their mRNAs during ovarian development induced by injection of chum salmon pituitary homogenate. Nagae M, et al. **J Mol Endocrinol** 1996 Apr;16(2):171–81

Analysis of the rat clusterin gene promoter and cyclic AMP-regulated mRNA stability in testicular cells. Rosemblit N, et al. **J Mol Endocrinol** 1996 Jun;16(3):287–96

Reduced atrial angiotensin receptor type 1 mRNA content in end-stage human heart failure: assessment by a novel quantitative PCR-ELISA technique. Bauer P, et al. **J Mol Med** 1996 Aug;74(8):447–54

Changes in some troponin and insulin-like growth factor messenger ribonucleic acids in regenerating and denervated skeletal muscles. Krishan K, et al. **J Muscle Res Cell Motil** 1996 Oct;17(5):513–21

Chemical sympathectomy and postganglionic nerve transection produce similar increases in galanin and VIP mRNA but differ in their effects on peptide content. Hyatt-Sachs H, et al. **J Neurobiol** 1996 Aug;30(4):543–55

Induction of CCK mRNA levels in the limbic-hypothalamic circuit: time course and site-specific effects of estrogen. Micevych P, et al. **J Neurobiol** 1996 Aug;30(4):465–79

Androgen receptor mRNA expression in Xenopus laevis CNS: sexual dimorphism and regulation in laryngeal motor nucleus. Pérez J, et al. **J Neurobiol** 1996 Aug;30(4):556–68

Differential regulation by methylenedioxymethamphetamine of 5-hydroxytryptamine1A receptor density and mRNA expression in rat hippocampus, frontal cortex, and brainstem: the role of corticosteroids. Aguirre N, et al. **J Neurochem** 1997 Mar;68(3):1099–105

Avian melatonin synthesis: photic and circadian regulation of serotonin N-acetyltransferase mRNA in the chicken pineal gland and retina. Bernard M, et al. **J Neurochem** 1997 Jan;68(1):213–24

Evidence for translational control elements within the 5'-untranslated region of GLUT1 glucose transporter mRNA. Boado RJ, et al. **J Neurochem** 1996 Oct; 67(4):1335–43

Differential compartmentalization of mRNAs in squid giant axon. Chun JT, et al. **J Neurochem** 1996 Nov;67(5):1806–12

Muscarinic acetylcholine receptor-mediated induction of zif268 mRNA in PC12D cells requires protein kinase C and the influx of extracellular calcium. Ebihara T, et al. **J Neurochem** 1997 Mar;68(3):1001–10

Expression of microtubule-associated protein-2a and other novel microtubule-associated protein-2 transcripts in human fetal spinal cord. Kalcheva N, et al. **J Neurochem** 1997 Jan;68(1):383–91

Polysialic acid synthase (ST8Sia II/STX) mRNA expression in the developing mouse central nervous system. Kurosawa N, et al. **J Neurochem** 1997 Aug;69(2):494–503

Low levels of mRNA for dopamine D4 receptor in human cerebral cortex and striatum. Matsumoto M, et al. **J Neurochem** 1996 Mar;66(3):915–9

Differential regulation of fibroblast growth factor (FGF)-2 and FGF receptor 1 mRNAs and FGF-2 isoforms in spinal ganglia and sciatic nerve after peripheral nerve lesion. Meisinger C, et al. **J Neurochem** 1997 Mar;68(3):1150–8

Changes of neuropeptide Y messenger RNA and peptide by drugs influencing endogenous norepinephrine content in cerebrocortex of the rat. Niu CS, et al. **J Neurochem** 1996 May;66(5):2100–4

Regulation of alpha 2A-adrenergic receptor mRNA in rat astroglial cultures: role of cyclic AMP and protein kinase C. Reutter MA, et al. **J Neurochem** 1997 Jan;68(1):47–57

Identification of an endogenous 5-hydroxytryptamine2A receptor in NIH-3T3 cells: agonist-induced down-regulation involves decreases in receptor RNA and number. Saucier C, et al. **J Neurochem** 1997 May; 68(5):1998–2011

Changes in the activity and mRNA levels of phospholipase D during ceramide-induced apoptosis in rat C6 glial cells. Yoshimura S, et al. **J Neurochem** 1997 Aug;69(2):713–20

Distribution of three nicotinic receptor alpha 4 mRNA transcripts in rat brain: selective regulation by nicotine administration. Yu ZJ, et al. **J Neurochem** 1996 Mar; 66(3):1326–9

Calcitonin gene-related peptide and alpha-CGRP mRNA expression in cranial motoneurons after hypoglossal nerve injury during postnatal development. Blake-Bruzzini KM, et al. **J Neurocytol** 1997 Mar;26(3):163–79

Alteration of G alpha subunits mRNA levels in bromocriptine resistant prolactinomas. Caccavelli L, et al. **J Neuroendocrinol** 1996 Oct;8(10):737–46

Vasoactive intestinal polypeptide mRNA and peptide levels are decreased in the anterior pituitary of the human growth hormone-releasing hormone transgenic mouse. Hyde JF, et al. **J Neuroendocrinol** 1996 Jan;8(1):9–15

Dynamic changes in gonadotropin releasing hormone receptor mRNA content in the mediobasal hypothalamus during the rat estrous cycle. Jennes L, et al. **J Neuroendocrinol** 1996 Apr;8(4):275–81

Estradiol regulation of alpha 1b-adrenoceptor mRNA in female rat hypothalamus-preoptic area. Karkanias GB, et al. **J Neuroendocrinol** 1996 Jun;8(6):449–55

Androgens modulate glucocorticoid receptor mRNA, but not mineralocorticoid receptor mRNA levels, in the rat hippocampus. Kerr JE, et al. **J Neuroendocrinol** 1996 Jun; 8(6):439–47

Unchanged amounts of vasopressin mRNA in the supraoptic and paraventricular nucleus during aging and in Alzheimer's disease. Lucassen PJ, et al. **J Neuroendocrinol** 1997 Apr;9(4):297–305

Coexpression of leptin receptor and preproneuropeptide Y mRNA in arcuate nucleus of mouse hypothalamus. Mercer JG, et al. **J Neuroendocrinol** 1996 Oct;8(10):733–5

Brainstem hemisection decreases corticotropin-releasing hormone mRNA in the paraventricular nucleus but not in the central amygdaloid nucleus. Pacak K, et al. **J Neuroendocrinol** 1996 Jul;8(7):543–51

Ovarian steroid regulation of estrogen and progesterone receptor messenger ribonucleic acid in the anteroventral periventricular nucleus of the rat. Simerly RB, et al. **J Neuroendocrinol** 1996 Jan;8(1):45–56

Decline in basic fibroblast growth factor (FGF-2) mRNA expression in female rat hypothalamus at puberty. Smyth CE, et al. **J Neuroendocrinol** 1997 Feb;9(2):151–9

Dexamethasone increases growth hormone (GH)-releasing hormone (GRH) receptor mRNA levels in cultured rat anterior pituitary cells. Tamaki M, et al. **J Neuroendocrinol** 1996 Jun;8(6):475–80

Interleukin-1 receptors type I and type II in the mouse brain: kinetics of mRNA expressions after peripheral administration of bacterial lipopolysaccharide. Gabellec MM, et al. **J Neuroimmunol** 1996 May;66(1-2):65–70

Differential and time-dependent expression of monocyte chemoattractant protein-1 mRNA by astrocytes and macrophages in rat brain: effects of ischemia and peripheral lipopolysaccharide administration. Gourmala NG, et al. **J Neuroimmunol** 1997 Apr;74(1-2):35–44

Detection of basal levels and induction of delta opioid receptor mRNA in murine splenocytes. Sharp BM, et al. **J Neuroimmunol** 1997 Sep;78(1-2):198–202

Diurnal variations of interleukin-1 beta mRNA and beta-actin mRNA in rat brain. Taishi P, et al. **J Neuroimmunol** 1997 May;75(1-2):69–74

Competitive PCR quantification of pro- and anti-inflammatory cytokine mRNA in the central nervous system during autoimmune encephalomyelitis. Tanuma N, et al. **J Neuroimmunol** 1997 Mar;73(1-2):197–206

Cellular localization of tumor necrosis factor mRNA in neurological tissue from HIV-infected patients by combined reverse transcriptase/polymerase chain reaction in situ hybridization and immunohistochemistry. Wesselingh SL, et al. **J Neuroimmunol** 1997 Apr; 74(1-2):1–8

Experimental allergic neuritis: cytolysin mRNA expression is upregulated in lymph node cells during convalescence. Zhu J, et al. **J Neuroimmunol** 1997 Sep;78(1-2):108–16

The reduction of androgen receptor mRNA in motoneurons of X-linked spinal and bulbar muscular atrophy. Nakamura M, et al. **J Neurol Sci** 1997 Sep 10;150(2):161–5

Changes of NMDA receptor subunit (NR1, NR2B) and glutamate transporter (GLT1) mRNA expression in Huntington's disease--an in situ hybridization study. Arzberger T, et al. **J Neuropathol Exp Neurol** 1997 Apr; 56(4):440–54

Developmental regulation of synaptotagmin I, II, III, and IV mRNAs in the rat CNS. Berton F, et al. **J Neurosci** 1997 Feb 15;17(4):1206–16

NAC-1, a rat brain mRNA, is increased in the nucleus accumbens three weeks after chronic cocaine self-administration. Cha XY, et al. **J Neurosci** 1997 Sep 15;17(18):6864–71

Adrenergic agents inhibit rapid increases in cerebellar Purkinje cell glutamic acid decarboxylase (GAD67) mRNA levels after climbing fiber lesions or reserpine treatment. Drengler SM, et al. **J Neurosci** 1996 Mar 1;

16(5):1844–51
Plasticity in GABAA receptor subunit mRNA expression by hypothalamic magnocellular neurons in the adult rat. Fénelon VS, et al. **J Neurosci** 1996 Aug 15;16(16):4872–80
Differential effects of protein synthesis inhibition on the activity-dependent expression of BDNF transcripts: evidence for immediate-early gene responses from specific promoters. Lauterborn JC, et al. **J Neurosci** 1996 Dec 1; 16(23):7428–36
Prostaglandin F2alpha is required for NMDA receptor-mediated induction of c-fos mRNA in dentate gyrus neurons. Lerea LS, et al. **J Neurosci** 1997 Jan 1; 17(1):117–24
The effects of ovariectomy and estrogen replacement on trkA and choline acetyltransferase mRNA expression in the basal forebrain of the adult female Sprague-Dawley rat. McMillan PJ, et al. **J Neurosci** 1996 Mar 1;16(5):1860–5
Chronic alcohol consumption and withdrawal do not induce cell death in the suprachiasmatic nucleus, but lead to irreversible depression of peptide immunoreactivity and mRNA levels. Madeira MD, et al. **J Neurosci** 1997 Feb 15;17(4):1302–19
Ultrastructural localization of dendritic messenger RNA in adult rat hippocampus. Martone ME, et al. **J Neurosci** 1996 Dec 1;16(23):7437–46
Neuronal dopamine subpopulations maintained in hypothalamic slice explant cultures exhibit distinct tyrosine hydroxylase mRNA turnover rates. Maurer JA, et al. **J Neurosci** 1997 Jun 15;17(12):4552–61
Dynamic changes in striatal dopamine D2 and D3 receptor protein and mRNA in response to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) denervation in baboons. Todd RD, et al. **J Neurosci** 1996 Dec 1;16(23):7776–82
Post-transcriptional regulation of the GAP-43 gene by specific sequences in the 3' untranslated region of the mRNA. Tsai KC, et al. **J Neurosci** 1997 Mar 15; 17(6):1950–8
In situ hybridization for vasopressin mRNA in the human supraoptic and paraventricular nucleus; quantitative aspects of formalin-fixed paraffin-embedded tissue sections as compared to cryostat sections. Lucassen PJ, et al. **J Neurosci Methods** 1996 Jan;64(1):133
CaM I mRNA is localized to apical dendrites during postnatal development of neurons in the rat brain. Berry FB, et al. **J Neurosci Res** 1996 Mar 1;43(5):565–75
Differential and cell development-dependent localization of myelin mRNAs in oligodendrocytes. de Vries H, et al. **J Neurosci Res** 1997 Mar 1;47(5):479–88
Attenuation and recovery of nerve growth factor receptor mRNA in dorsal root ganglion neurons following axotomy. Krekoski CA, et al. **J Neurosci Res** 1996 Jan 1;43(1):1–11
Ethanol alters the concentration of Met-enkephalin in brain by affecting peptide transport system-1 independent of preproenkephalin mRNA. Plotkin SR, et al. **J Neurosci Res** 1997 May 1;48(3):273–80
Changes in dynamin and actin mRNA expression in the dorsal column-medial lemniscal system following dorsal column lesion. Riley LA, et al. **J Neurosci Res** 1996 Apr 1;44(1):47–51
Treatment of oligodendrocytes with antisense deoxyoligonucleotide directed against CREB mRNA: effect on the cyclic AMP-dependent induction of myelin basic protein expression. Sato-Bigbee C, et al. **J Neurosci Res** 1996 Oct 1;46(1):98–107
Brain-derived neurotrophic factor spares choline acetyltransferase mRNA following axotomy of motor neurons in vivo. Wang W, et al. **J Neurosci Res** 1997 Jan 15;47(2):134–43
Correlation of vascular endothelial growth factor messenger RNA expression with peritumoral vasogenic cerebral edema in meningiomas. Kalkanis SN, et al. **J Neurosurg** 1996 Dec;85(6):1095–101
Ascorbic acid deficiency reduces hepatic apolipoprotein A-I mRNA in scurvy-prone ODS rats. Ikeda S, et al. **J Nutr** 1996 Oct;126(10):2505–11
Temporal-regulation of serum lipids and stearoyl CoA desaturase and lipoprotein lipase mRNA in BALB/cHnn mice. Paisley EA, et al. **J Nutr** 1996 Nov;126(11):2730–7
Zinc deficiency in adult rats reduces the relative abundance of testis-specific angiotensin-converting enzyme mRNA. Stallard L, et al. **J Nutr** 1997 Jan;127(1):25–9
Altered mRNA expression of the neuronal nitric oxide synthase gene in Hirschsprung's disease. Kusafuka T, et al. **J Pediatr Surg** 1997 Jul;32(7):1054–8
Interaction of ethanol with inducible nitric oxide synthase messenger RNA and protein: direct effects on autacoids and endotoxin in vivo. Greenberg SS, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):1044–54
Changes in content of mRNA encoding oxytocin in the pig uterus during the oestrous cycle, pregnancy, at parturition and in lactational anoestrus. Boulton MI, et al. **J Reprod Fertil** 1996 Nov;108(2):219–27
Expression of mRNA encoding decidualization-associated protein, a variant of acute-phase alpha 2 macroglobulin, by rat uterine tissues during pregnancy and pseudopregnancy. da Silva GC, et al. **J Reprod Fertil** 1996 Nov;108(2):289–98
Maternal pituitary gonadotroph function in relation to GnRH receptor and LH beta mRNA content during pregnancy in ewes. Fowler PA, et al. **J Reprod Fertil** 1997 Jul; 110(2):267–78
Association of expression of mRNA encoding the PGF2 alpha receptor with luteal cell apoptosis in ovaries of pseudopregnant mice. Hasumoto K, et al. **J Reprod Fertil** 1997 Jan;109(1):45–51
Effects of luteotrophic and luteolytic hormones on expression of mRNA encoding insulin-like growth factor I and growth hormone receptor in the ovine corpus luteum. Juengel JL, et al. **J Reprod Fertil** 1997 Jul;110(2):291–8
Transient polyadenylation of a maternal mRNA following fertilization of mouse eggs. Temeles GL, et al. **J Reprod Fertil** 1997 Mar;109(2):223–8
Visualization of poly(A)-binding protein complex formation with poly(A) RNA using atomic force microscopy. Smith BL, et al. **J Struct Biol** 1997 Jul;119(2):109–17
Immunosuppressive cytokines (IL-10, TGF-beta) genes expression in human gastric carcinoma tissues. Morisaki T, et al. **J Surg Oncol** 1996 Dec;63(4):234–9
Monocyte chemoattractant protein-1 mRNA expression in the human burn wound. Gibran NS, et al. **J Surg Res** 1997 Jun;70(1):1–6
Monocyte chemoattractant protein-1 mRNA expression in hemangiomas and vascular malformations. Isik FF, et al. **J Surg Res** 1996 Feb 15;61(1):71–6
Expression of 32-kDa laminin-binding protein mRNA in colon cancer tissues. Pei DP, et al. **J Surg Res** 1996 Feb 15;61(1):120–6
Oxidative defense enzyme activity and mRNA levels in lenses of diabetic rats. Khanna P, et al. **J Toxicol Environ Health** 1997 Aug 29;51(6):541–55
Transforming growth factor-beta 1 increases lysyl oxidase enzyme activity and mRNA in rat aortic smooth muscle cells. Shanley CJ, et al. **J Vasc Surg** 1997 Mar;25(3):446–52
Distribution of choline acetyltransferase mRNA in the efferent vestibular neurons of the chinchilla. Bridgeman D, et al. **J Vestib Res** 1996 May-Jun;6(3):203–12
A viral function represses accumulation of transcripts from productive-cycle genes in mouse ganglia latently infected with herpes simplex virus. Chen SH, et al. **J Virol** 1997 Aug;71(8):5878–84
A splicing enhancer in the 3'-terminal c-H-ras exon influences mRNA abundance and transforming activity. Hwang DY, et al. **J Virol** 1997 Sep;71(9):6416–26
Laminin alpha 1, alpha 2, alpha 4 and beta 1 chain mRNA expression in mouse embryonic, neonatal, and adult hearts. Hirohata S, et al. **Jpn Heart J** 1997 Mar;38(2):281–9
Differential distribution of ecNOS and iNOS mRNA in rat heart after endotoxin administration. Ishiwata T, et al. **Jpn Heart J** 1997 May;38(3):445–55
Quantitative analysis of cyclin D1 messenger RNA expression in head and neck squamous cell carcinomas. Monden N, et al. **Jpn J Cancer Res** 1997 Jul;88(7):660–8
Effect of reactive oxygen species on endothelin-1 production by human mesangial cells. Hughes AK, et al. **Kidney Int** 1996 Jan;49(1):181–9
Anti-inflammatory lymphokine mRNA expression in antibody-induced glomerulonephritis. Lakkis FG, et al. **Kidney Int** 1996 Jan;49(1):117–26
Bone resorption and mRNA expression of IL-6 and IL-6 receptor in patients with renal osteodystrophy. Langub MC Jr, et al. **Kidney Int** 1996 Aug;50(2):515–20
Distribution of heparin-binding EGF-like growth factor protein and mRNA in the normal rat kidneys. Nakagawa T, et al. **Kidney Int** 1997 Jun;51(6):1774–9
Changing patterns of gene expression in developing mouse kidney, as probed by differential mRNA display combined with cDNA library screening. Rosenblum ND, et al. **Kidney Int** 1997 Mar;51(3):920–5
Interaction of erythropoietin RNA binding protein with erythropoietin RNA requires an association with heat shock protein 70. Scandurro AB, et al. **Kidney Int** 1997 Feb;51(2):579–84
Tubular gelatinase A (MMP-2) and its tissue inhibitors in polycystic kidney disease in the Han:SPRD rat. Schaefer L, et al. **Kidney Int** 1996 Jan;49(1):75–81
Increased atrial natriuretic peptide mRNA expression in the kidney of diabetic rats. Shin SJ, et al. **Kidney Int** 1997 Apr; 51(4):1100–5
Detection of cytokeratin-19 transcripts by reverse transcriptase-polymerase chain reaction in lung cancer cell lines and blood of lung cancer patients [see comments] Dingemans AM, et al. **Lab Invest** 1997 Sep;77(3):213–20. Comment in: Lab Invest 1997 Sep;77(3):211–2.
Multiple forms of messenger ribonucleic acid encoding glycodelin in male genital tract. Koistinen H, et al. **Lab Invest** 1997 May;76(5):683–90
Cyclic AMP negatively controls c-myc transcription and G1 cell cycle progression in p210 BCR-ABL transformed cells: inhibitory activity exerted through cyclin D1 and cdk4. Williamson EA, et al. **Leukemia** 1997 Jan;11(1):73–85
mRNAs encoding CCKB but not CCKA receptors are expressed in human T lymphocytes and Jurkat lymphoblastoid cells. Cuq P, et al. **Life Sci** 1997; 61(5):543–55
Cardiac nuclear hormone receptor mRNA in heart failure in man. Sylvén C, et al. **Life Sci** 1996;59(22):1917–22
Relationship between hepatic angiotensinogen mRNA expression and plasma angiotensinogen in patients with chronic hepatitis. Takahashi D, et al. **Life Sci** 1997; 60(18):1623–33
Increased expression of prolactin receptor mRNA in adenomyotic uterus in mice. Yamashita M, et al. **Life Sci** 1997;60(17):1437–46
Increased hepatic synthesis and accumulation of plasma apolipoprotein B100 in copper-deficient rats does not result from modification in apolipoprotein B mRNA editing. Nassir F, et al. **Lipids** 1996 Apr;31(4):433–6
Alteration of 6-phosphofructo-1-kinase subunit protein, synthesis rates, and mRNA during rat neonatal development. Mhaskar Y, et al. **Mech Ageing Dev** 1996 Mar 29;86(3):161–72
The mRNA encoding a beta subunit of heterotrimeric GTP-binding proteins is localized to the animal pole of Xenopus laevis oocyte and embryos. Devic E, et al. **Mech Dev** 1996 Oct;59(2):141–51
Complementary tissue-specific expression of LIF and LIF-receptor mRNAs in early mouse embryogenesis. Nichols J, et al. **Mech Dev** 1996 Jul;57(2):123–31
Regulation of interleukin-8 mRNA expression and protein secretion in a melanoma cell line by tumour necrosis factor-alpha and interferon-gamma. Möhler T, et al. **Melanoma Res** 1996 Aug;6(4):307–11
Vitamin A metabolism and mRNA expression of retinoid-binding protein and receptor genes in human epidermal melanocytes and melanoma cells. Rosdahl I, et al. **Melanoma Res** 1997 Aug;7(4):267–74
Determinants of plasma concentrations of insulin-like growth factor-I and albumin and their hepatic mRNAs: the role of dietary protein content and tumor necrosis factor in malnourished rats. Qu Z, et al. **Metabolism** 1996 Oct; 45(10):1273–8
Assays for eukaryotic translation factors that bind mRNA. Merrick WC, et al. **Methods** 1997 Apr;11(4):333–42
Genetic strategies for identification of mitochondrial translation factors in Saccharomyces cerevisiae. Fox TD. **Methods Enzymol** 1996;264:228–37
Transcription of dopamine D1A receptor mRNAs in rat heart. Zhang H, et al. **Methods Find Exp Clin Pharmacol** 1996 Apr;18(3):183–7
mRNA abundance and half-life measurements. Brown AJ, et al. **Methods Mol Biol** 1996;53:277–95 (10 ref.)
Anchoring a defined sequence to the 5' ends of mRNAs. The bolt to clone rare full-length mRNAs. Dumas Milne Edwards JB, et al. **Methods Mol Biol** 1997;67:261–78
CDNA library construction from small amounts of RNA using paramagnetic beads and PCR. Lambert KN, et al. **Methods Mol Biol** 1997;69:1–12
Identification and cloning of differentially expressed genes by DDRT-PCR. Rohde M, et al. **Methods Mol Biol** 1997; 67:419–30
Increasing the average abundance of low-abundance cDNAs by ordered subdivision of cDNA populations. Sibson DR, et al. **Methods Mol Biol** 1997;69:13–32
Mechanisms and control of mRNA turnover in Saccharomyces cerevisiae. Caponigro G, et al. **Microbiol Rev** 1996 Mar;60(1):233–49 (126 ref.)
A Candida albicans gene expressed in Saccharomyces cerevisiae results in a distinct pattern of mRNA processing. Iborra A, et al. **Microbiologia** 1996 Sep;12(3):443–8
Polyadenylation of mRNA in bacteria. Sarkar N. **Microbiology** 1996 Nov;142 (Pt 11):3125–33 (80 ref.)
Defect in export and synthesis of the periplasmic galactose receptor MglB in dnaK mutants of Escherichia coli, and decreased stability of the mglB mRNA. el Yaagoubi A, et al. **Microbiology** 1996 Sep;142 (Pt 9):2595–602
Occurrence of androgen and estrogen receptor mRNAs in the harderian gland: a comparative survey. Varriale B. **Microsc Res Tech** 1996 Jun 1;34(2):97–103 (33 ref.)
A fluorescence in situ hybridisation study of the regulation of histone mRNA levels during the cell cycle of Trypanosoma brucei. Ersfeld K, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):201–9
Polysomal, procyclin mRNAs accumulate in bloodstream forms of monomorphic and pleomorphic trypanosomes treated with protein synthesis inhibitors. Graham SV, et al. **Mol Biochem Parasitol** 1996 Oct 1;80(2):179–91
Post-transcriptional control of hsp70 mRNA in Trypanosoma brucei. Häusler T, et al. **Mol Biochem Parasitol** 1996 Feb-Mar;76(1-2):57–71
Role of 3'-untranslated regions in the regulation of hexose transporter mRNAs in Trypanosoma brucei. Hotz HR, et al. **Mol Biochem Parasitol** 1995 Dec;75(1):1–14
Developmentally regulated transcripts and evidence of differential mRNA processing in Giardia lamblia. Que X, et al. **Mol Biochem Parasitol** 1996 Oct 18;81(1):101–10
Isolation and molecular characterization of mRNA transport mutants in Schizosaccharomyces pombe. Azad AK, et al. **Mol Biol Cell** 1997 May;8(5):825–41
The product of the Saccharomyces cerevisiae RSS1 gene, identified as a high-copy suppressor of the rat7-1 temperature-sensitive allele of the RAT7/NUP159 nucleoporin, is required for efficient mRNA export. Del Priore V, et al. **Mol Biol Cell** 1996 Oct;7(10):1601–21
RCC1 and nuclear organization. Huang S, et al. **Mol Biol Cell** 1997 Jun;8(6):1143–57
Effect of 12-O-tetradecanoylphorbol-13-acetate on inhibition of expression of keratin 1 mRNA in mouse keratinocytes mimicked by 12(S)-hydroxyeicosatetraenoic acid. Hagerman RA, et al. **Mol Carcinog** 1997 Jul; 19(3):157–64
Increased manganese superoxide dismutase activity, protein, and mRNA levels and concurrent induction of tumor necrosis factor alpha in radiation-initiated Syrian hamster cells. Otero G, et al. **Mol Carcinog** 1996 Dec;17(4):175–80
Profiles of nuclear and mitochondrial encoded mRNAs in

developing and quiescent embryos of Artemia franciscana. Hardewig I, et al. **Mol Cell Biochem** 1996 May 24; 158(2):139–47

Androgen deprivation causes up-regulation of androgen receptor transcript in the rat prostate. Kumar VL, et al. **Mol Cell Biochem** 1997 Jun;171(1–2):133–8

Differential time course of liver and kidney glucose-6 phosphatase activity during long-term fasting in rat correlates with differential time course of messenger RNA level. Minassian C, et al. **Mol Cell Biochem** 1996 Feb 9; 155(1):37–41

Calcium-binding protein regucalcin mRNA expression in the kidney cortex is suppressed by saline ingestion in rats. Shinya N, et al. **Mol Cell Biochem** 1996 Sep 20; 162(2):139–44

Guide RNA requirement for editing-site-specific endonucleolytic cleavage of preedited mRNA by mitochondrial ribonucleoprotein particles in Trypanosoma brucei. Adler BK, et al. **Mol Cell Biol** 1997 Sep; 17(9):5377–85

Endothelial cytosolic proteins bind to the 3' untranslated region of endothelial nitric oxide synthase mRNA: regulation by tumor necrosis factor alpha. Alonso J, et al. **Mol Cell Biol** 1997 Oct;17(10):5719–26

PCF11 encodes a third protein component of yeast cleavage and polyadenylation factor I. Amrani N, et al. **Mol Cell Biol** 1997 Mar;17(3):1102–9

Yeast Pab1 interacts with Rna15 and participates in the control of the poly(A) tail length in vitro. Amrani N, et al. **Mol Cell Biol** 1997 Jul;17(7):3694–701

Postfertilization deadenylation of mRNAs in Xenopus laevis embryos is sufficient to cause their degradation at the blastula stage. Audic Y, et al. **Mol Cell Biol** 1997 Jan; 17(1):209–18

Rapamycin destabilizes interleukin-3 mRNA in autocrine tumor cells by a mechanism requiring an intact 3' untranslated region. Banholzer R, et al. **Mol Cell Biol** 1997 Jun;17(6):3254–60

C-terminal truncations of the yeast nucleoporin Nup145p produce a rapid temperature-conditional mRNA export defect and alterations to nuclear structure [published erratum appears in Mol Cell Biol 1997 Apr;17(4):2347–50] Dockendorff TC, et al. **Mol Cell Biol** 1997 Feb;17(2):906–20

The poly(A) tail inhibits the assembly of a 3'-to-5' exonuclease in an in vitro RNA stability system. Ford LP, et al. **Mol Cell Biol** 1997 Jan;17(1):398–406

A circadian enhancer mediates PER-dependent mRNA cycling in Drosophila melanogaster. Hao H, et al. **Mol Cell Biol** 1997 Jul;17(7):3687–93

Mutations in trans-acting factors affecting mRNA decapping in Saccharomyces cerevisiae. Hatfield L, et al. **Mol Cell Biol** 1996 Oct;16(10):5830–8

Upf1p, Nmd2p, and Upf3p are interacting components of the yeast nonsense-mediated mRNA decay pathway. He F, et al. **Mol Cell Biol** 1997 Mar;17(3):1580–94

Two distinct regions in the 3' untranslated region of tumor necrosis factor alpha mRNA form complexes with macrophage proteins. Hel Z, et al. **Mol Cell Biol** 1996 Oct; 16(10):5579–90

A suboptimal 5' splice site is a cis-acting determinant of nuclear export of polyomavirus late mRNAs. Huang Y, et al. **Mol Cell Biol** 1996 Nov;16(11):6046–54

Control of the translational efficiency of beta-F1-ATPase mRNA depends on the regulation of a protein that binds the 3' untranslated region of the mRNA. Izquierdo JM, et al. **Mol Cell Biol** 1997 Sep;17(9):5255–68

Regulated expression and RNA processing of transcripts from the Srp20 splicing factor gene during the cell cycle. Jumaa H, et al. **Mol Cell Biol** 1997 Jun;17(6):3116–24

Identification of AUF1 (heterogeneous nuclear ribonucleoprotein D) as a component of the alpha-globin mRNA stability complex. Kiledjian M, et al. **Mol Cell Biol** 1997 Aug;17(8):4870–6

Human La protein: a stabilizer of histone mRNA. McLaren RS, et al. **Mol Cell Biol** 1997 Jun;17(6):3028–36

Disruption of a gene encoding a novel mitochondrial DEAD-box protein in Trypanosoma brucei affects edited mRNAs. Missel A, et al. **Mol Cell Biol** 1997 Sep; 17(9):4895–903

The branchpoint residue is recognized during commitment complex formation before being bulged out of the U2 snRNA-pre-mRNA duplex. Pascolo E, et al. **Mol Cell Biol** 1997 Jul;17(7):3469–76

Sequence-mediated regulation of adenovirus gene expression by repression of mRNA accumulation. Prescott JC, et al. **Mol Cell Biol** 1997 Apr;17(4):2207–16

Genetic regulation of the qa gene cluster of Neurospora crassa: induction of qa messenger ribonucleic acid and dependency on qa-1 function. Reinert WR, et al. **Mol Cell Biol** 1981 Sep;1(9):829–35

Characterization of a beta-actin mRNA zipcode-binding protein. Ross AF, et al. **Mol Cell Biol** 1997 Apr; 17(4):2158–65

Promoter-proximal poly(A) sites are processed efficiently, but the RNA products are unstable in the nucleus. Scott JM, et al. **Mol Cell Biol** 1997 Apr;17(4):2127–35

Posttranscriptional regulation of urokinase receptor mRNA: identification of a novel urokinase receptor mRNA binding protein in human mesothelioma cells. Shetty S, et al. **Mol Cell Biol** 1997 Mar;17(3):1075–83

Adhesion-dependent regulation of an A+U-rich element-binding activity associated with AUF1. Sirenko OI, et al. **Mol Cell Biol** 1997 Jul;17(7):3898–906

Premature 3'-end formation of CBP1 mRNA results in the downregulation of cytochrome b mRNA during the induction of respiration in Saccharomyces cerevisiae. Sparks KA, et al. **Mol Cell Biol** 1997 Aug;17(8):4199–207

Posttranscriptional regulation of collagen alpha1(I) mRNA in hepatic stellate cells. Stefanovic B, et al. **Mol Cell Biol** 1997 Sep;17(9):5201–9

RNA recognition by the human polyadenylation factor CstF. Takagaki Y, et al. **Mol Cell Biol** 1997 Jul;17(7):3907–14

Identification and characterization of mutations in the UPF1 gene that affect nonsense suppression and the formation of the Upf protein complex but not mRNA turnover. Weng Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5491–506

Modulation of the fate of cytoplasmic mRNA by AU-rich elements: key sequence features controlling mRNA deadenylation and decay. Xu N, et al. **Mol Cell Biol** 1997 Aug;17(8):4611–21

Coding elements in exons 2 and 3 target c-myc mRNA downregulation during myogenic differentiation. Yeilding NM, et al. **Mol Cell Biol** 1997 May;17(5):2698–707

Translation of the chloroplast psbC mRNA is controlled by interactions between its 5'leader and the nuclear loci TBC1 and TBC3 in Chlamydomonas reinhardtii. Zerges W, et al. **Mol Cell Biol** 1997 Jun;17(6):3440–8

Transcriptional regulation of the human 'leukemia inhibitory factor' gene: modulation by glucocorticoids and estradiol. Bamberger AM, et al. **Mol Cell Endocrinol** 1997 Mar 14; 127(1):71–9

The rat TSHbeta gene contains distinct response elements for regulation by retinoids and thyroid hormone. Breen JJ, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):137–46

The noncalcemic vitamin D analogues EB1089 and 22-oxacalcitriol interact with the vitamin D receptor and suppress parathyroid hormone-related peptide gene expression. Falzon M. **Mol Cell Endocrinol** 1997 Mar 14; 127(1):99–108

Transcriptional and post-transcriptional regulation of rainbow trout estrogen receptor and vitellogenin gene expression. Flouriot G, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):173–83

Prolactin regulation of mitochondrial aspartate aminotransferase and protein kinase C in human prostate cancer cells. Franklin RB, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):19–25

Specific modulation of estrogen receptor mRNA isoforms in rat pituitary throughout the estrous cycle and in response to steroid hormones. Friend KE, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):147–55

Endotoxin regulates corticotropin-releasing hormone receptor 2 in heart and skeletal muscle. Heldwein KA, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):167–72

Androgens stimulate gonadotropin-II beta-subunit in eel pituitary cells in vitro. Huang YS, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):157–66

Quo vadis: extrasomatic targeting of neuronal mRNAs in mammals. Kindler S, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):7–10 (22 ref.)

Differential expression of the growth hormone receptor and its transcript in bovine uterus and placenta. Kölle S, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):127–36

Hormonal regulation of PKC-delta protein and mRNA levels in the rabbit corpus luteum. Maizels ET, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):213–21

Growth hormone down-regulates growth hormone receptor mRNA in chickens but developmental increases in growth hormone receptor mRNA occur independently of growth hormone action. Mao JN, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):135–43

Regulation of rat liver type 1 iodothyronine deiodinase mRNA levels by testosterone. Miyashita K, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):161–7

Retinoid X receptor and peroxisome proliferator-activated receptor activate an estrogen responsive gene independent of the estrogen receptor. Nuñez SB, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):27–40

Expression of c-erbA alpha, c-erbA beta and Rev-erbA alpha mRNA during the conversion of brown adipose tissue into white adipose tissue. Reyne Y, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):59–65

Expression of mRNA for vasoactive intestinal peptide in rat small intestine. Stadelmann AM, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):31–7

Moderate doses of iodide in vivo inhibit cell proliferation and the expression of thyroperoxidase and Na+/I-symporter mRNAs in dog thyroid. Uyttersprot N, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):195–203

PDGF-alpha receptor and myelin basic protein mRNAs are not coexpressed by oligodendrocytes in vivo: a double in situ hybridization study in the anterior medullary velum of the neonatal rat. Butt AM, et al. **Mol Cell Neurosci** 1997; 8(5):311–22

Prominent dendritic localization in forebrain neurons of a novel mRNA and its product, dendrin. Herb A, et al. **Mol Cell Neurosci** 1997;8(5):367–74

Endogenous glutamate levels regulate nerve growth factor mRNA expression in the rat dentate gyrus. Gwag BJ, et al. **Mol Cells** 1997 Jun 30;7(3):425–30

Expression of brain-derived neurotrophic factor mRNA stimulated by basic fibroblast growth factor and platelet-derived growth factor in rat hippocampal cell line. Kwon YK. **Mol Cells** 1997 Jun 30;7(3):320–5

cAMP and protein kinase C elevate LH beta mRNA levels by activating transcription rather than stabilizing mRNA in rat pituitary cells. Park D, et al. **Mol Cells** 1997 Feb 28;7(1):98–103

Granule cell mRNA levels for BDNF, NGF, and NT-3 correlate with neuron losses or supragranular mossy fiber sprouting in the chronically damaged and epileptic human hippocampus. Mathern GW, et al. **Mol Chem Neuropathol** 1997 Jan-Feb;30(1–2):53–76

Inhibition of transforming growth factor-beta 1 alters the growth, anchor-dependent cell aggregation and integrin mRNA expression in human promonocytes: implications for endometriosis and peritoneal adhesion formation. Dou Q, et al. **Mol Hum Reprod** 1997 May;3(5):383–91

Differential expression of type II, IV and cytosolic PLA2 messenger RNA in human intrauterine tissues at term. Freed KA, et al. **Mol Hum Reprod** 1997 Jun;3(6):493–9

Granulocyte-macrophage colony-stimulating factor: presence in human follicular fluid, protein secretion and mRNA expression by ovarian cells. Jasper MJ, et al. **Mol Hum Reprod** 1996 Aug;2(8):555–62

Expression of luteinizing hormone/human chorionic gonadotrophin (LH/HCG) receptor mRNA in the human ovary. Minegishi T, et al. **Mol Hum Reprod** 1997 Feb; 3(2):101–7

The pattern of cytokine mRNA expression in ovarian endometriomata. Odukoya OA, et al. **Mol Hum Reprod** 1997 May;3(5):393–7

The expression of transforming growth factor-beta s and TGF-beta receptor mRNA and protein and the effect of TGF-beta s on human myometrial smooth muscle cells in vitro. Tang XM, et al. **Mol Hum Reprod** 1997 Mar; 3(3):233–40

Engagement of tumor necrosis factor mRNA by an endotoxin-inducible cytoplasmic protein [published erratum appears in Mol Med 1996 Nov;2(6):786] Gueydan C, et al. **Mol Med** 1996 Jul;2(4):479–88

mRNA turnover and DNA synthesis: a lesson from bacterial genome comparisons [letter] Danchin A. **Mol Microbiol** 1996 May;20(4):895–7

Programmed cell death in bacteria: translational repression by mRNA end-pairing. Franch T, et al. **Mol Microbiol** 1996 Sep;21(5):1049–60

mRNA stability is regulated by a coding-region element and the unique 5' untranslated leader sequences of the three Synechococcus psbA transcripts. Kulkarni RD, et al. **Mol Microbiol** 1997 Jun;24(6):1131–42

In vitro analysis of mRNA processing by RNase E in the pap operon of Escherichia coli. Naureckiene S, et al. **Mol Microbiol** 1996 Jul;21(1):55–68

Role of stoichiometry between mRNA, translation factor SelB and selenocysteyl-tRNA in selenoprotein synthesis. Tormay P, et al. **Mol Microbiol** 1996 Sep;21(6):1253–9

Regulation of pineal alpha1B-adrenergic receptor mRNA: day/night rhythm and beta-adrenergic receptor/cyclic AMP control. Coon SL, et al. **Mol Pharmacol** 1997 Apr; 51(4):551–7

Selective up-regulation of alpha1a-adrenergic receptor protein and mRNA in brown adipose tissue by neural and beta3-adrenergic stimulation. Granneman JG, et al. **Mol Pharmacol** 1997 Apr;51(4):644–50

Changes of D1 and D2 dopamine receptor mRNA in the brains of monkeys lesioned with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine: correction with chronic administration of L-3,4-dihydroxyphenylalanine. Morissette M, et al. **Mol Pharmacol** 1996 Nov;50(5):1073–9

Enhanced angiotensin receptor type 1 mRNA degradation and induction of polyribosomal mRNA binding proteins by angiotensin II in vascular smooth muscle cells. Nickenig G, et al. **Mol Pharmacol** 1996 Oct;50(4):743–51

Changes in the relative abundance of various housekeeping gene transcripts in in vitro-produced early bovine embryos. Bilodeau-Goeseels S, et al. **Mol Reprod Dev** 1997 Aug; 47(4):413–20

Analysis of glutaminase activity and RNA expression in preimplantation mouse embryos. Chatot CL, et al. **Mol Reprod Dev** 1997 Jul;47(3):248–54

Identification of maternal transcripts that progressively disappear during the cleavage period of rabbit embryos. Henrion G, et al. **Mol Reprod Dev** 1997 Aug;47(4):353–62

Equine inhibin/activin beta A-subunit mRNA is expressed in the endometrial gland, but not in the trophoblast, during pregnancy. Yamanouchi K, et al. **Mol Reprod Dev** 1997 Aug;47(4):363–9

Rapid identification of RT-PCR clones containing translation-terminating mutations. Binnie CG, et al. **Mutat Res** 1997 Jan 15;388(1):21–6

Selecting effective antisense reagents on combinatorial oligonucleotide arrays [see comments] Milner N, et al. **Nat Biotechnol** 1997 Jun;15(6):537–41. Comment in: Nat Biotechnol 1997 Jun;15(6):509.

Three-dimensional visualization of mRNA release from actively transcribing rotavirus particles [letter] Lawton JA, et al. **Nat Struct Biol** 1997 Feb;4(2):118–21

Transcription factor TFIID recruits factor CPSF for formation of 3' end of mRNA. Dantonel JC, et al. **Nature** 1997 Sep 25;389(6649):399–402

The C-terminal domain of RNA polymerase II couples mRNA processing to transcription. McCracken S, et al. **Nature** 1997 Jan 23;385(6614):357–61

Actin-dependent localization of an RNA encoding a cell-fate

determinant in yeast. Takizawa PA, et al. **Nature** 1997 Sep 4;389(6646):90–3
Expression of five somatostatin receptor mRNAs in the human brain and pituitary. Thoss VS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):411–9
The role of iron supply in the regulation of 5-aminolevulinate synthase mRNA levels in murine erythroleukemia cells. Fuchs O, et al. **Neoplasma** 1996;43(1):31–6
In-vivo induction of monocyte chemotactic and activating factor in patients with chronic renal failure. Akahoshi T, et al. **Nephrol Dial Transplant** 1995 Dec;10(12):2244–9
Selective downregulation of ETA receptor mRNA in renal transplant recipients on cyclosporin A revealed by quantitative RT-PCR. Karet FE, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):1976–82
PTH/PTHrP receptor mRNA is down-regulated in epiphyseal cartilage growth plate of uraemic rats. Ureña P, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):2008–16
Altered expression of amyloid protein precursor mRNA in the rat hippocampus following trimethyltin intoxication: an in situ hybridization study. O'Connell AW, et al. **Neurochem Int** 1997 Mar;30(3):313–20
Differential expression of c-fos mRNA in rat prefrontal cortex, striatum, N. accumbens and lateral septum after typical and atypical antipsychotics: an in situ hybridization study. Semba J, et al. **Neurochem Int** 1996 Oct;29(4):435–42
Down-regulation of S-adenosylhomocysteine hydrolase in the active methyl transfer system in the brain of genetically epileptic El mice. Ohmori O, et al. **Neurochem Res** 1996 Oct;21(10):1173–80
Alteration in brain presenilin 1 mRNA expression in early onset familial Alzheimer's disease. Barton AJ, et al. **Neurodegeneration** 1996 Sep;5(3):213–8
Amyloid precursor protein mRNAs in Alzheimer's disease. Harrison PJ, et al. **Neurodegeneration** 1996 Dec;5(4):409–15 (51 ref.)
In vitro increase of aromatase mRNA in diencephalic neurons. Abe-Dohmae S, et al. **Neuroendocrinology** 1996 Jan;63(1):46–52
Estradiol regulation of nitric oxide synthase mRNAs in rat hypothalamus. Ceccatelli S, et al. **Neuroendocrinology** 1996 Nov;64(5):357–63
Connexin 32 mRNA levels in the rat supraoptic nucleus: up-regulation prior to parturition and during lactation. Micevych PE, et al. **Neuroendocrinology** 1996 Jan; 63(1):39–45
Effects of estrogen on oxytocin receptor messenger ribonucleic acid expression in the uterus, pituitary, and forebrain of the female rat. Quiñones-Jenab V, et al. **Neuroendocrinology** 1997 Jan;65(1):9–17
Hexarelin stimulation of growth hormone release and mRNA levels in an infant and adult rat model of impaired GHRH function. Torsello A, et al. **Neuroendocrinology** 1997 Feb; 65(2):91–7
Age-related and regional differences in dopamine transporter mRNA expression in human midbrain. Bannon MJ, et al. **Neurology** 1997 Apr;48(4):969–77
Decreased expression of full-length mRNA for cBCD541 does not correlate with spinal muscular atrophy phenotype severity. Nishio H, et al. **Neurology** 1997 May;48(5):1266–70
Molecular characterization of the dendritic growth cone: regulated mRNA transport and local protein synthesis. Crino PB, et al. **Neuron** 1996 Dec;17(6):1173–87
mRNA for NGF and p75 in the central nervous system of rats affected by experimental allergic encephalomyelitis. De Simone R, et al. **Neuropathol Appl Neurobiol** 1996 Feb; 22(1):54–9
Lack of effect of chronic antidepressant treatment on Gs and Gi alpha-subunit protein and mRNA levels in the rat cerebral cortex. Emamghoreishi M, et al. **Neuropsychopharmacology** 1996 Sep;15(3):281–7
Dendritic compartmentation of NMDA receptor mRNA in cultured hippocampal neurons. Benson DL. **Neuroreport** 1997 Mar 3;8(4):823–8
Stimulation by nerve growth factor of neuropeptide synthesis in the adult rat in vivo: bilateral response to unilateral intraplantar injections. Amann R, et al. **Neurosci Lett** 1996 Jan 26;203(3):171–4
Brain-derived peptides increase the expression of a blood-brain barrier GLUT1 glucose transporter reporter gene. Boado RJ. **Neurosci Lett** 1996 Dec 6;220(1):53–6
Human hair follicles as a peripheral source of tyrosine hydroxylase and aromatic L-amino acid decarboxylase mRNA. Chang YT, et al. **Neurosci Lett** 1997 Feb 7; 222(3):210–2
Accumulation of tyrosine hydroxylase messenger RNA molecules in the rat mesencephalon by chronic caffeine treatment. Datta U, et al. **Neurosci Lett** 1996 Dec 13; 220(2):77–80
Serum growth factor regulation of the paired-box transcription factor Pax-3 in neuronal cells. Evans J, et al. **Neurosci Lett** 1996 Dec 13;220(2):125–8
Persistent elevation of corticotrophin releasing factor and vasopressin but not oxytocin mRNA in the rat after kindled seizures. Greenwood RS, et al. **Neurosci Lett** 1997 Mar 7;224(1):66–70
Complement gene expression in mouse microglia and astrocytes in culture: comparisons with mouse peritoneal macrophages. Haga S, et al. **Neurosci Lett** 1996 Oct 4; 216(3):191–4
Nicotine regulates mRNA level of tyrosine hydroxylase gene but not that of nicotinic acetylcholine receptor genes in PC12 cells. Ishiguro H, et al. **Neurosci Lett** 1997 May 30; 228(1):37–40
Low stringency hybridization study of the dopamine D4 receptor revealed D4-like mRNA distribution of the orphan seven-transmembrane receptor, APJ, in human brain. Matsumoto M, et al. **Neurosci Lett** 1996 Nov 22; 219(2):119–22
Mitral and tufted cells of the mouse olfactory bulb possess gap junctions and express connexin43 mRNA. Miragall F, et al. **Neurosci Lett** 1996 Oct 4;216(3):199–202
Changes in endoplasmic reticulum Ca(2-)-ATPase mRNA levels in transient cerebral ischemia of rat: a quantitative polymerase chain reaction study. Paschen W, et al. **Neurosci Lett** 1996 Oct 11;217(1):41–4
Electroconvulsive treatment evokes release of preprotachykinin-A mRNA into the cerebrospinal fluid and ocular aqueous humor of rabbits. Wang ZY, et al. **Neurosci Lett** 1997 May 2;226(3):151–4
Induction of interleukin-1 beta mRNA in the hypothalamus following subcutaneous injections of formalin into the rat hind paws. Yabuuchi K, et al. **Neurosci Lett** 1996 Mar 29; 207(2):109–12
Changes in the expression of novel Cdk5 activator messenger RNA (p39nck5ai mRNA) during rat brain development. Cai XH, et al. **Neurosci Res** 1997 Aug;28(4):355–60
Expression of messenger RNA coding for the nerve growth factor receptor trkA in the hippocampus of the adult rat. Cellerino A. **Neuroscience** 1996 Feb;70(3):613–16
Thalamic-projecting preprocholecystokinin messenger RNA-expressing neurons in the dorsal column nuclei of the rat. Farnebo S, et al. **Neuroscience** 1997 Jun; 78(4):1051–7
In vivo regulation of specific GABAA receptor subunit messenger RNAs by increased GABA concentrations in rat brain. Fénelon VS, et al. **Neuroscience** 1996 Apr; 71(3):661–70
Expression of fibroblast growth factor-2 and fibroblast growth factor receptor 1 messenger RNAs in spinal ganglia and sciatic nerve: regulation after peripheral nerve lesion. Grothe C, et al. **Neuroscience** 1997 Jan;76(1):123–35
Differential messenger RNA expression of prodynorphin and proenkephalin in the human brain. Hurd YL. **Neuroscience** 1996 Jun;72(3):767–83
Increases in thyrotropin-releasing hormone messenger RNA expression induced by a model of human temporal lobe epilepsy: effect of partial and complete kindling. Knoblach SM, et al. **Neuroscience** 1997 Jan;76(1):85–95
A metabotropic glutamate receptor agonist regulates neurotrophin messenger RNA in rat forebrain. Murray KD, et al. **Neuroscience** 1996 Feb;70(3):617–30
Localization of preprogalanin messenger RNA in rat brain: identification of transcripts in a subpopulation of cerebellar Purkinje cells. Ryan MC, et al. **Neuroscience** 1996 Feb; 70(3):709–28
Galanin messenger RNA during postnatal development of the rat brain: expression patterns in Purkinje cells differentiate anterior and posterior lobes of cerebellum. Ryan MC, et al. **Neuroscience** 1997 Jun;78(4):1113–27
Expression of alpha 2 adrenoceptors during rat brain development--I. Alpha 2A messenger RNA expression. Winzer-Serhan UH, et al. **Neuroscience** 1997 Jan; 76(1):241–60
Expression of alpha 2 adrenoceptors during rat brain development--II. Alpha 2C messenger RNA expression and [3H]rauwolscine binding. Winzer-Serhan UH, et al. **Neuroscience** 1997 Jan;76(1):261–72
Dopamine D1, dopamine D2, and prolactin receptor messenger ribonucleic acid expression by the polymerase chain reaction in human meningiomas. Carroll RS, et al. **Neurosurgery** 1996 Feb;38(2):367–75
Reduction of choline acetyltransferase mRNA in the septum of developing rat exposed to inorganic lead. Sun X, et al. **Neurotoxicology** 1997;18(1):201–7
Specific polyadenylation and purification of total messenger RNA from Escherichia coli. Amara RR, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3465–70
Cloning and characterization of HUPF1, a human homolog of the Saccharomyces cerevisiae nonsense mRNA-reducing UPF1 protein. Applequist SE, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):814–21
Identification of proteins binding specifically to the 3'-untranslated region of granulocyte/macrophage-colony stimulating factor mRNA. Bichsel VE, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2417–23
mRNA turnover in yeast promoted by the MATalpha1 instability element. Caponigro G, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4304–12
Cleavage properties of an estrogen-regulated polysomal ribonuclease involved in the destabilization of albumin mRNA. Chernokalskaya E, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):735–42
Eukaryotic release factor 1 (eRF1) abolishes readthrough and competes with suppressor tRNAs at all three termination codons in messenger RNA. Drugeon G, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2254–8
Alternative poly(A) site selection in complex transcription units: means to an end? Edwalds-Gilbert G, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2547–61 (287 ref.)
Allelism of PSO4 and PRP19 links pre-mRNA processing with recombination and error-prone DNA repair in Saccharomyces cerevisiae. Grey M, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4009–14
3' Processing and termination of mouse histone transcripts synthesized in vitro by RNA polymerase II. Gu X, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3797–805
Interaction of the Escherichia coli fdhF mRNA hairpin promoting selenocysteine incorporation with the ribosome. Hüttenhofer A, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):3903–10
In vivo generation of 3' and 5' truncated species in the process of c-myc mRNA decay. Ioannidis P, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4969–77
Identification of two proteins that bind to a pyrimidine-rich sequence in the 3'-untranslated region of GAP-43 mRNA. Irwin N, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1281–8
Comparison of the specificities and catalytic activities of hammerhead ribozymes and DNA enzymes with respect to the cleavage of BCR-ABL chimeric L6 (b2a2) mRNA. Kuwabara T, et al. **Nucleic Acids Res** 1997 Aug 1; 25(15):3074–81
Enhanced RACE method using specific enrichment by biotinylated oligonucleotides bound to streptavidin coated magnetic particles. Lankiewicz S, et al. **Nucleic Acids Res** 1997 May 15;25(10):2037–8
DNA binding specificity of proteins derived from alternatively spliced mouse p53 mRNAs. Miner Z, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1319–26
Bacteriophage T4 regA protein binds RNA as a monomer, overcoming dimer interactions. Phillips CA, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4319–26
TFIIH-mediated nucleotide excision repair and initiation of mRNA transcription in an optimized cell-free DNA repair and RNA transcription assay. Satoh MS, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3576–82
pH dependence of self-splicing by the group IA2 intron in a pre-mRNA derived from the nrdB gene of bacteriophage T4. Sjögren AS, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3543–9
Location of the internal ribosome entry site in the 5' non-coding region of the immunoglobulin heavy-chain binding protein (BiP) mRNA: evidence for specific RNA-protein interactions. Yang Q, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2800–7
RNA-protein interactions within the 3 ' untranslated region of vimentin mRNA. Zehner ZE, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3362–70
Differences in binding of hepatic nuclear proteins from lean and obese rats to the 5'-upstream region of tyrosine aminotransferase. Dong H, et al. **Obes Res** 1997 May; 5(3):208–17
PKC epsilon functions as an oncogene by enhancing activation of the Raf kinase. Cacace AM, et al. **Oncogene** 1996 Dec 19;13(12):2517–26
High level expression of the HMGI (Y) gene during embryonic development. Chiappetta G, et al. **Oncogene** 1996 Dec 5;13(11):2439–46
Comparison of VEGF, VEGF-B, VEGF-C and Ang-1 mRNA regulation by serum, growth factors, oncoproteins and hypoxia. Enholm B, et al. **Oncogene** 1997 May 22; 14(20):2475–83
Developmental regulation of CRD-BP, an RNA-binding protein that stabilizes c-myc mRNA in vitro. Leeds P, et al. **Oncogene** 1997 Mar 20;14(11):1279–86
The eIF4E-binding proteins 1 and 2 are negative regulators of cell growth. Rousseau D, et al. **Oncogene** 1996 Dec 5; 13(11):2415–20
Activation of JNK/SAPK pathway is not directly inhibitory for cell cycle progression in NIH3T3 cells. Shu J, et al. **Oncogene** 1996 Dec 5;13(11):2421–30
The apoptosis-associated gamma-ray response of BCL-X(L) depends on normal p53 function. Zhan Q, et al. **Oncogene** 1996 Nov 21;13(10):2287–93
Transgenic mice carrying the human KRAS oncogene under the control of a thyroglobulin promoter: KRAS expression in thyroids analyzed by in situ hybridization. Chiappetta G, et al. **Oncol Res** 1996;8(2):85–93
mRNA levels and enzyme activities of protein phosphatases in drug-resistant rat ascites hepatomas. Saadat M, et al. **Oncol Res** 1995;7(10–11):505–10
In situ localization of basic fibroblast growth factor protein and mRNA in the retina. Ohsato M, et al. **Ophthalmic Res** 1997;29(1):24–30
Vitamin A stimulation of insulin secretion: effects on transglutaminase mRNA and activity using rat islets and insulin-secreting cells. Driscoll HK, et al. **Pancreas** 1997 Jul;15(1):69–77
Reciprocal cellular distribution of glucagon-like peptide-1 (GLP-1) immunoreactivity and GLP-1 receptor mRNA in pancreatic islets of rat. Hörsch D, et al. **Pancreas** 1997 Apr;14(3):290–4
Insulin release and insulin mRNA levels in rat islets of Langerhans cultured on extracellular matrix. Perfetti R, et al. **Pancreas** 1996 Jul;13(1):47–54
Excretory/secretory products from plerocercoids of Spirometra erinacei reduce iNOS and chemokine mRNA levels in peritoneal macrophages stimulated with cytokines and/or LPS. Fukumoto S, et al. **Parasite Immunol** 1997 Jul;19(7):325–32
Localization of thyrotropin-releasing hormone mRNA expression in the rat heart by in situ hybridization histochemistry. Shi ZX, et al. **Pathobiology** 1996; 64(6):314–9
Differential cytokine mRNA expression by neonatal

pulmonary cells. LoMonaco MB, et al. **Pediatr Res** 1996 Feb;39(2):248–52

Effect of glucocorticoids on neonatal rabbit renal cortical sodium–inorganic phosphate messenger RNA and protein abundance. Prabhu S, et al. **Pediatr Res** 1997 Jan;41(1):20–4

Differential modulation of prohormone convertase mRNA by second messenger activators in two cholecystokinin–producing cell lines. Mania–Farnell BL, et al. **Peptides** 1996;17(1):47–54

Renal expression of Na+–phosphate cotransporter mRNA and protein: effect of the Gy mutation and low phosphate diet. Beck L, et al. **Pflugers Arch** 1996 Apr;431(6):936–41

Alterations in the mRNA levels of two metabolic enzymes in rat skeletal muscle during stretch–induced hypertrophy and disuse atrophy. Brownson C, et al. **Pflugers Arch** 1996 Apr;431(6):990–2

Characterization of early aldosterone–induced RNAs identified in A6 kidney epithelia. Spindler B, et al. **Pflugers Arch** 1997 Jul;434(3):323–31

Analysis of UVB–modulated gene expression in human keratinocytes by mRNA differential display polymerase chain reaction. Abts HF, et al. **Photochem Photobiol** 1997 Sep;66(3):363–7

The pattern of expression of insulin–like growth factor (IGF). IGF–I receptor and IGF binding protein (IGFBP) mRNAs in the rhesus monkey placenta suggests a paracrine mode of IGF–IGFBP interaction in placental development. Coulter CL, et al. **Placenta** 1996 Sep;17(7):451–60

Eyes off transcription! The wonderful world of post–transcriptional regulation. Gallie DR, et al. **Plant Cell** 1997 May;9(5):667–73

A nuclear–encoded function essential for translation of the chloroplast psaB mRNA in chlamydomonas. Stampacchia O, et al. **Plant Cell** 1997 May;9(5):773–82

CSP41, a sequence–specific chloroplast mRNA binding protein, is an endoribonuclease. Yang J, et al. **Plant Cell** 1996 Aug;8(8):1409–20

Changes in levels of mRNAs for cell wall–related enzymes in growing cotton fiber cells. Shimizu Y, et al. **Plant Cell Physiol** 1997 Mar;38(3):375–8

Premature nonsense codons decrease the stability of phytohemagglutinin mRNA in a position–dependent manner. van Hoof A, et al. **Plant J** 1996 Sep;10(3):415–24

Generative cells of Lilium longiflorum possess translatable mRNA and functional protein synthesis machinery. Blomstedt CK, et al. **Plant Mol Biol** 1996 Aug;31(5):1083–6

Light induces accumulation of isocitrate lyase mRNA in a carotenoid–deficient mutant of Chlamydomonas reinhardtii. Petridou S, et al. **Plant Mol Biol** 1997 Feb; 33(3):381–92

mRNA stability and localisation of the low–temperature–responsive barley gene family blt14. Phillips JR, et al. **Plant Mol Biol** 1997 Apr;33(6):1013–23

Karyopherin beta2 mediates nuclear import of a mRNA binding protein. Bonifaci N, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5055–60

A cytokine mRNA–destabilizing element that is structurally and functionally distinct from A+U–rich elements. Brown CY, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13721–5

Open reading frame P—a herpes simplex virus gene repressed during productive infection encodes a protein that binds a splicing factor and reduces synthesis of viral proteins made from spliced mRNA. Bruni R, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10423–7

Alternatively spliced mRNAs predicted to yield frame–shift proteins and stable intron 1 RNAs of the herpes simplex virus 1 regulatory gene alpha 0 accumulate in the cytoplasm of infected cells. Carter KL, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12535–40

Targeting RNA decay with 2',5' oligoadenylate–antisense in respiratory syncytial virus–infected cells. Cirino NM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1937–42

Messenger RNA deadenylylation precedes decapping in mammalian cells. Couttet P, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5628–33

A cellular 65–kDa protein recognizes the negative regulatory element of human papillomavirus late mRNA. Dietrich–Goetz W, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):163–8

Caveolin mRNA levels are up–regulated by free cholesterol and down–regulated by oxysterols in fibroblast monolayers. Fielding CJ, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3753–8

In vitro selection and evolution of functional proteins by using ribosome display. Hanes J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4937–42

Four highly stable eukaryotic mRNAs assemble 3' untranslated region RNA–protein complexes sharing cis and trans components. Holcik M, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2410–4

The mouse histone H2a gene contains a small element that facilitates cytoplasmic accumulation of intronless gene transcripts and of unspliced HIV–1–related mRNAs. Huang Y, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16; 94(19):10104–9

Development of an in vitro mRNA decay system for Escherichia coli: poly(A) polymerase I is necessary to trigger degradation. Ingle CA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12926–31

mRNA binding protein mrnp 41 localizes to both nucleus and cytoplasm. Kraemer D, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9119–24

Addition of destabilizing poly (A)–rich sequences to endonuclease cleavage sites during the degradation of chloroplast mRNA. Lisitsky I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13398–403

The 3'–untranslated region of CaMKII alpha is a cis–acting signal for the localization and translation of mRNA in dendrites. Mayford M, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13250–5

The major yeast poly(A)–binding protein is associated with cleavage factor IA and functions in premessenger RNA 3'–end formation. Minvielle–Sebastia L, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7897–902

Association of the mammalian helicase MAH with the pre–mRNA splicing complex. Molnar GM, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7831–6

Mammalian orthologues of a yeast regulator of nonsense transcript stability. Perlick HA, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10928–32

A general purpose RNA–cleaving DNA enzyme. Santoro SW, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4262–6

Importin/karyopherin protein family members required for mRNA export from the nucleus. Seedorf M, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8590–5

Occurrence of two somatostatin variants in the frog brain: characterization of the cDNAs, distribution of the mRNAs, and receptor–binding affinities of the peptides. Tostivint H, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12605–10

Phylogeny of mRNA capping enzymes. Wang SP, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9573–8

Purification and characterization of a human RNA adenosine deaminase for glutamate receptor B pre–mRNA editing. Yang JH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4354–9

Degradation of CYC1 mRNA in the yeast Saccharomyces cerevisiae does not require translation. Yun DF, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8895–900

Prolactin's effects on lipoprotein lipase (LPL) activity and on LPL mRNA levels in cultured mouse mammary gland explants. Hang J, et al. **Proc Soc Exp Biol Med** 1997 Feb; 214(2):161–6

Cell–free systems for analysis of cytoplasmic mRNA turnover. DeMaria CT, et al. **Prog Mol Subcell Biol** 1997; 18:65–111 (67 ref.)

Cytoplasmic fate of eukaryotic mRNA: identification and characterization of AU–binding proteins. Jarzembowski JA, et al. **Prog Mol Subcell Biol** 1997;18:141–72 (123 ref.)

Cytoplasmic fate of messenger RNA. Introduction. Jeanteur P. **Prog Mol Subcell Biol** 1997;18:V–VIII (0 ref.)

Function and characterization of poly(A)–specific 3' exoribonucleases. Virtanen A, et al. **Prog Mol Subcell Biol** 1997;18:199–220 (120 ref.)

The decay of bacterial messenger RNA. Nierlich DP, et al. **Prog Nucleic Acid Res Mol Biol** 1996;52:153–216 (298 ref.)

Regulation of eukaryotic messenger RNA turnover. Rajagopalan LE, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:257–86 (128 ref.)

The role of mRNA stability in the control of globin gene expression. Russell JE, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:249–87 (99 ref.)

The mechanism of 3' cleavage and polyadenylation of eukaryotic pre–mRNA. Wahle E, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:41–71 (227 ref.)

Dinucleoside 5', 5"'–P1, P3–triphosphate hydrolase from yellow lupin (Lupinus luteus) seeds: purification to homogeneity and hydrolysis of mRNA 5'–cap analogs. Guranowski A, et al. **Protein Expr Purif** 1996 Dec; 8(4):416–22

Identification of the cap binding domain of human recombinant eukaryotic protein synthesis initiation factor 4E using a photoaffinity analogue. Friedland DE, et al. **Protein Sci** 1997 Jan;6(1):125–31

Effect of chronic ipsapirone treatment on the density of 5–HT1A receptors and 5–HT1A receptor mRNA in discrete regions of the rat brain. Shiro Y, et al. **Psychiatry Clin Neurosci** 1996 Jun;50(3):141–6

Elevated levels of natriuretic peptides in lungs of hamsters with genetic cardiomyopathy. Cárnio EC, et al. **Regul Pept** 1997 May 14;70(1):67–73

Ontogeny of pituitary adenylate cyclase activating polypeptide and its receptor mRNA in the mouse brain. Shuto Y, et al. **Regul Pept** 1996 Dec 3;67(2):79–83

Regulation of mRNA encoding low density lipoprotein receptor and high density lipoprotein–binding protein in ovine corpora lutea. Tandeski TR, et al. **Reprod Fertil Dev** 1996;8(7):1107–14

Cytokine mRNA repertoire of articular chondrocytes from arthritic patients, infants, and neonatal mice. Tanabe BK, et al. **Rheumatol Int** 1996;16(2):67–76

Quantification of mRNA levels in joint capsule and articular cartilage of the murine knee joint by RT–PCR: kinetics of stromelysin and IL–1 mRNA levels during arthritis. Van Meurs JB, et al. **Rheumatol Int** 1997;16(5):197–205

A novel U1/U5 interaction indicates proximity between U1 and U5 snRNAs during an early step of mRNA splicing. Ast G, et al. **RNA** 1997 Apr;3(4):371–81

Probing accessible sites for ribozymes on human acetylcholinesterase RNA. Birikh KR, et al. **RNA** 1997 Apr;3(4):429–37

eIF4G and its proteolytic cleavage products: effect on initiation of protein synthesis from capped, uncapped, and IRES–containing mRNAs. Borman AM, et al. **RNA** 1997 Feb;3(2):186–96

Genetic analysis of the Shine–Dalgarno interaction: selection of alternative functional mRNA–rRNA combinations. Lee K, et al. **RNA** 1996 Dec;2(12):1270–85

An antisense/target RNA duplex or a strong intramolecular RNA structure 5' of a translation initiation signal blocks ribosome binding: the case of plasmid R1. Malmgren C, et al. **RNA** 1996 Oct;2(10):1022–32

RNase III autoregulation: structure and function of rncO, the posttranscriptional "operator". Matsunaga J, et al. **RNA** 1996 Dec;2(12):1228–40

Visualizing nuclear export of different classes of RNA by electron microscopy. Panté N, et al. **RNA** 1997 May; 3(5):498–513

YRA1, an essential Saccharomyces cerevisiae gene, encodes a novel nuclear protein with RNA annealing activity. Portman DS, et al. **RNA** 1997 May;3(5):527–37

The path of mRNA through the bacterial ribosome: a site–directed crosslinking study using new photoreactive derivatives of guanosine and uridine. Sergiev PV, et al. **RNA** 1997 May;3(5):464–75

Splicing of a divergent subclass of AT–AC introns requires the major spliceosomal snRNAs. Wu Q, et al. **RNA** 1997 Jun;3(6):586–601

Polysome–associated mRNAs are substrates for the nonsense–mediated mRNA decay pathway in Saccharomyces cerevisiae. Zhang S, et al. **RNA** 1997 Mar; 3(3):234–44

Depletion of enterochromaffin–like cell histamine increases histidine decarboxylase and chromogranin A mRNA levels in rat stomach by a gastrin–independent mechanism. Andersson K, et al. **Scand J Gastroenterol** 1996 Oct; 31(10):959–65

Expression of mRNA for interferon–gamma, interleukin–10, and interleukin–12 (p40) in normal gastric mucosa and in mucosa infected with Helicobacter pylori. Karttunen RA, et al. **Scand J Gastroenterol** 1997 Jan;32(1):22–7

Efficient in vitro cleavage of mouse acute phase serum amyloid A mRNA mediated by a synthetic hammerhead ribozyme. Gaughan DJ, et al. **Scand J Immunol** 1997 Jul; 46(1):51–8

Localization of Xenopus Vg1 mRNA by Vera protein and the endoplasmic reticulum [see comments] Deshler JO, et al. **Science** 1997 May 16;276(5315):1128–31. Comment in: Science 1997 May 16;276(5315):1092–3.

A new face for the endoplasmic reticulum: RNA localization [comment] Etkin LD. **Science** 1997 May 16; 276(5315):1092–3. Comment on: Science 1997 May 16;276(5315):1128–31.

eIF4G: a multipurpose ribosome adapter? [published erratum appears in Science 1997 Mar 14;275(5306):1553] Hentze MW. **Science** 1997 Jan 24;275(5299):500–1 (12 ref.)

The end of the message--another link between yeast and mammals [comment] Manley JL, et al. **Science** 1996 Nov 29;274(5292):1481–2. Comment on: Science 1996 Nov 29;274(5292):1511–9. Comment on: Science 1996 Nov 29;274(5292):1514–7. Comment on: Science 1996 Nov 29;274(5292):1517–20.

Increase of calcitonin gene–related peptide (CGRP) release and mRNA levels in endotoxic rats. Tang Y, et al. **Shock** 1997 Mar;7(3):225–9

Cytokine mRNA expression after transient and prolonged hypotension. Yamashita M, et al. **Surg Today** 1997; 27(2):159–62

N–methyl–D–aspartate acutely increases proenkephalin mRNA in the rat striatum. Beckstead RM. **Synapse** 1995 Dec;21(4):342–7

Quantitative RT–PCR distribution of serotonin 5–HT6 receptor mRNA in the central nervous system of control or 5,7–dihydroxytryptamine–treated rats. Gérard C, et al. **Synapse** 1996 Jul;23(3):164–73

Distribution of preproenkephalin, preprotachykinin A, and preprodynorphin mRNAs in the rat nucleus accumbens: effect of repeated administration of nicotine. Mathieu AM, et al. **Synapse** 1996 Jun;23(2):94–106

Detection of CYP1A1 mRNA levels and CYP1A1 Msp polymorphisms as possible biomarkers of exposure and susceptibility in smokers and non–smokers. Rumsby PC, et al. **Teratog Carcinog Mutagen** 1996;16(1):65–74

Fibrinogen mRNA and antigen co–present in human trophoblasts in situ: possible implications. Galanakis D, et al. **Thromb Res** 1996 Jan 15;81(2):263–9

The effects of cyclosporin A, dexamethasone and other immunomodulatory drugs on induced expression of IL–3, IL–4 and IL–8 mRNA in a human mast cell line. Warbrick EV, et al. **Toxicology** 1997 Jan 15;116(1–3):211–8

Highways for protein delivery to the mitochondria [see comments] Lithgow T, et al. **Trends Biochem Sci** 1997 Apr; 22(4):110–3 (30 ref.). Comment in: Trends Biochem Sci 1997 Aug;22(8):290.

Glutamate dehydrogenase: an organelle–specific mRNA–binding protein [letter; comment] Preiss T, et al. **Trends Biochem Sci** 1997 Aug;22(8):290. Comment on: Trends Biochem Sci 1997 Apr;22(4):110–3.

Making sense of nonsense in yeast. Ruiz–Echevarria MJ, et al. **Trends Biochem Sci** 1996 Nov;21(11):433–8 (31 ref.)

Defining the editing 'reaction'. Hajduk SL. **Trends Microbiol** 1997 Jan;5(1):1–2

Identifying changes in gene expression in the nervous system: mRNA differential display. Livesey FJ, et al.

Trends Neurosci 1996 Mar;19(3):84–8 (20 ref.)

mRNA differential display: application in the discovery of novel pharmacological targets. Wang X, et al. **Trends Pharmacol Sci** 1996 Aug;17(8):276–9 (21 ref.)

Expression of HGF mRNA in human rejecting kidney as evidenced by in situ hybridization. Yamaguchi K, et al. **Urol Res** 1996;24(6):349–54

Differential levels of mRNAs for cytokines, the interleukin-2 receptor and class II DR/DQ genes in ovine interstitial pneumonia induced by maedi visna virus infection. Woodall CJ, et al. **Vet Pathol** 1997 May;34(3):204–11

Bcl-2 immunoreactivity in salivary gland neoplasms is unrelated to the expression of mRNA for natural killer cell stimulatory cytokines interleukin (IL)-2 and IL-12. Hellquist HB, et al. **Virchows Arch** 1996 Oct; 429(2-3):149–58

Posttranscriptional regulation by Rev protein of human immunodeficiency virus type 1 results in nonrandom nuclear localization of gag mRNA. Romanov VI, et al. **Virology** 1997 Feb 17;228(2):360–70

Expression of mesenger RNA for transforming growth factor-beta 1 in bovine trabecular meshwork. Yuan L, et al. **Yen Ko Hsueh Pao** 1996 Mar;12(1):1–4

[A study of the expression and localization of tumor necrosis factor mRNA in small intestine of rats after severe burn] Yuan J, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):163–6 (Eng. Abstr.) **(Chi)**

[Two kinds of cytokine gene expression in umbilical cord blood of premature and mature neonates] Tang J, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Aug;31(8):471–3 (Eng. Abstr.) **(Chi)**

[IL-2, IL-2R mRNA gene expression and protein production] Li Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jul;76(7):505–8 (Eng. Abstr.) **(Chi)**

[Detection of stromelysin mRNA expression in human hepatocellular carcinoma by in situ hybridization] Fang S, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1996 Apr; 25(2):73–5 (Eng. Abstr.) **(Chi)**

[An experimental study of the expression and localization of tumor necrosis factor mRNA in liver of rats with severe burn] Yuan J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Oct;33(10):636–8 (Eng. Abstr.) **(Chi)**

[Effect of tetramethylpyrazine on expression of collagen genes in primary cultured smooth muscle cells in rats] Tang LL, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Nov;15(11):666–8 (Eng. Abstr.) **(Chi)**

[The postnatal changes of follicle-stimulating hormone receptor mRNA level in rat testis] Ding Y, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):99–103 (Eng. Abstr.) **(Chi)**

[The effect of ligustrazine and 764-3 on type I and type III collagen mRNA expression in fibroblasts] Yan Y, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):126–8 (Eng. Abstr.) **(Chi)**

[The mRNA expression of CD2, CD4 and CD8 in peripheral blood lymphocytes from the patients with acute lymphoblastic leukemia and non-Hodgkin's lymphoma] Zhang Z, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1995 Dec; 17(6):403–6 (Eng. Abstr.) **(Chi)**

[Alteration of mRNA transcripts of rat Sertoli cell secreted proteins and Leydig cell LH/CG-R protein following glycosides of Tripterigium Wilfordii Hook administration] Zheng W, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):104–10 (Eng. Abstr.) **(Chi)**

[Ribozyme targeted the point-mutation of activated oncogene inhibits its expression in vivo] Liu G, et al. **I Chuan Hsueh Pao** 1996;23(6):477–85 (Eng. Abstr.) **(Chi)**

[The significance of p21 expression in gastric cancer] Aoyagi K, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:285–91 (Eng. Abstr.) **(Jpn)**

[Significance in gene expression of matrix metalloproteinase-9, urokinase-type plasminogen activator and tissue inhibitor of metalloproteinase for metastases of gastric and/or colo-rectal cancer] Koumura H, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:324–31 (Eng. Abstr.) **(Jpn)**

[gamma-Glutamylcysteine synthetase and chemosensitivity] Nishio K, et al. **Gan To Kagaku Ryoho** 1997 Feb; 24(4):418–23 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Expression of prolactin receptor gene in human decidua of early pregnancy] Tanaka S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Dec; 48(12):1141–7 (Eng. Abstr.) **(Jpn)**

[Specific regulation of gene expression in brain by antisense oligodeoxynucleotides] Yoshikawa M, et al. **Nippon Yakurigaku Zasshi** 1997 Apr;109(4):187–91 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Expression of interferon-alpha mRNA in human brain tissues] Kawaguchi N, et al. **No To Shinkei** 1997 Jan; 49(1):69–73 (Eng. Abstr.) **(Jpn)**

[Expression of HGF and c-met/HGF receptor mRNA in brains of normal rats and in phaeochromocytoma cells PC-12 of rats treated with NGF] Ukita H, et al. **No To Shinkei** 1997 Mar;49(3):252–9 (Eng. Abstr.) **(Jpn)**

[Expression of brain prolactin receptor mRNA and induction of maternal behavior] Sakaguchi K, et al. **Seikagaku** 1997 Apr;69(4):247–50 (15 ref.) **(Jpn)**

[A mechanism of mRNA transport in fission yeast: nucleolar involvement and heat shock inhibition in mRNA transport] Tani T. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):1193–200 (23 ref.) **(Jpn)**

[The major cytoplasmic mRNP protein, p50, is required for efficient mRNA translation in vitro] Kovrigina EA, et al. **Biokhimiia** 1996 Dec;61(12):2173–80 (Eng. Abstr.) **(Rus)**

[mRNA for tissue-type plasminogen activator in various human tissues and organs] Sarafanov AG, et al. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1326–33 **(Rus)**

[Ribozyme cleaving the mRNA for influenza virus type A polymerase gene] Zakharchuk AN, et al. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1420–5 **(Rus)**

PHARMACOLOGY

Increased vasopressin secretion from hypothalamic cultures following administration of exogenous vasopressin mRNA. Mathiasen JR, et al. **Exp Neurol** 1996 Oct;141(2):165–72

Central administration of a growth hormone (GH) receptor mRNA antisense increases GH pulsatility and decreases hypothalamic somatostatin expression in rats. Pellegrini E, et al. **J Neurosci** 1996 Dec 15;16(24):8140–8

PHYSIOLOGY

Hepatic messenger RNA contents of cytochrome P4502E1 in patients with different P4502E1 genotypes. Tsutsumi M, et al. **Alcohol Alcohol** 1994;29 Suppl 1:29–32

Co-operation of the 5' and 3' untranslated regions of ornithine decarboxylase mRNA and inhibitory role of its 3' untranslated region in regulating the translational efficiency of hybrid RNA species via cellular factor. Lorenzini EC, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):361–7

Starting at the beginning, middle, and end: translation initiation in eukaryotes. Sachs AB, et al. **Cell** 1997 Jun 13; 89(6):831–8 (61 ref.)

RNA transport to the vegetal cortex of Xenopus oocytes. Zhou Y, et al. **Dev Biol** 1996 Oct 10;179(1):173–83

Inhibition of translation by mRNA encoding NIPP-1, a nuclear inhibitor of protein phosphatase-1. Wera S, et al. **Eur J Biochem** 1997 Jul 1;247(1):411–5

A LAT-associated function reduces productive-cycle gene expression during acute infection of murine sensory neurons with herpes simplex virus type 1. Garber DA, et al. **J Virol** 1997 Aug;71(8):5885–93

Trypanosoma cruzi strains partition into two groups based on the structure and function of the spliced leader RNA and rRNA gene promoters. Nunes LR, et al. **Mol Biochem Parasitol** 1997 Jun;86(2):211–24

Downregulation of Na+ channel mRNA in olfactory bulb tufted cells following deafferentation. Sashihara S, et al. **Neuroreport** 1997 Mar 24;8(5):1289–93

Messengers from the synapses to the nucleus (MSNs) that establish late phase of long-term potentiation (LTP) and long-term memory. Suzuki T. **Neurosci Res** 1996 May; 25(1):1–6 (75 ref.)

Translational control by polyadenylation during early development. Osborne HB, et al. **Prog Mol Subcell Biol** 1997;18:173–98 (100 ref.)

RADIATION EFFECTS

Aspects of the adaptive response to very low doses of radiation and other agents. Wolff S. **Mutat Res** 1996 Nov 4;358(2):135–42

THERAPEUTIC USE

Suppression of malignancy by the 3' untranslated regions of ribonucleotide reductase R1 and R2 messenger RNAs. Fan H, et al. **Cancer Res** 1996 Oct 1;56(19):4366–9

RNA, MESSENGER, EDITING see **RNA EDITING**

RNA, MESSENGER, POLYADENYLATED see **RNA, MESSENGER**

RNA, MESSENGER, PRECURSORS see **RNA PRECURSORS**

RNA, MESSENGER, SPLICING see **RNA SPLICING**

RNA METHYLASES see **RNA, TRANSFER, METHYLTRANSFERASES**

RNA, NEOPLASM

Expression of the RET proto-oncogene in normal human tissues, pheochromocytomas, and other tumors of neural crest origin. Takaya K, et al. **J Mol Med** 1996 Oct; 74(10):617–21

ANALYSIS

Molecular analysis of the fusion of EWS to an orphan nuclear receptor gene in extraskeletal myxoid chondrosarcoma. Brody RI, et al. **Am J Pathol** 1997 Mar;150(3):1049–58

Multiparametric in situ mRNA hybridization analysis to predict disease recurrence in patients with colon carcinoma. Kitadai Y, et al. **Am J Pathol** 1996 Nov;149(5):1541–51

Early events of metastasis in the microcirculation involve changes in gene expression of cancer cells. Tracking mRNA levels of metastasizing cancer cells in the chick embryo chorioallantoic membrane. Shioda T, et al. **Am J Pathol** 1997 Jun;150(6):2099–112

Identification of differentially expressed genes using minute amounts of RNA. Leygue ER, et al. **Biotechniques** 1996 Dec;21(6):1008–10, 1012

High levels of Wilms' tumor gene (wt1) mRNA in acute myeloid leukemias are associated with a worse long-term outcome. Bergmann L, et al. **Blood** 1997 Aug 1; 90(3):1217–25

Selection of myeloid progenitors lacking BCR/ABL mRNA in chronic myelogenous leukemia patients after in vitro treatment with the tyrosine kinase inhibitor genistein. Carlo-Stella C, et al. **Blood** 1996 Oct 15;88(8):3091–100

Consistent detection of TLS/FUS-ERG chimeric transcripts in acute myeloid leukemia with t(16;21)(p11;q22) and identification of a novel transcript. Kong XT, et al. **Blood** 1997 Aug 1;90(3):1192–9

Monitoring of minimal residual disease by quantitative reverse transcriptase-polymerase chain reaction for AML1-MTG8 transcripts in AML-M2 with t(8; 21). Tobal K, et al. **Blood** 1996 Nov 15;88(10):3704–9

High incidence of interleukin 10 mRNA but not interleukin 2 mRNA detected in human breast tumours. Venetsanakos E, et al. **Br J Cancer** 1997;75(12):1826–30

Selection of probes for fluorescence in situ hybridization analysis by differential display polymerase chain reaction of mRNA from rhabdomyosarcoma. Pienkowska M, et al. **Cancer Genet Cytogenet** 1996 Nov;92(1):58–65

Identification of genes differentially expressed in association with metastatic potential of K-1735 murine melanoma by messenger RNA differential display. Hashimoto Y, et al. **Cancer Res** 1996 Nov 15;56(22):5266–71

Prevalence of estrogen receptor variant messenger RNAs in human breast cancer. Leygue E, et al. **Cancer Res** 1996 Oct 1;56(19):4324–7

Rapid detection of specific messenger RNAs in thyroid carcinomas by reverse transcription-PCR with degenerate primers: specific expression of oncofetal fibronectin messenger RNA in papillary carcinoma. Takano T, et al. **Cancer Res** 1997 Sep 1;57(17):3792–7

Analysis of ornithine decarboxylase messenger ribonucleic acid expression in colorectal carcinoma. Mimori K, et al. **Dis Colon Rectum** 1997 Sep;40(9):1095–100

Identification of differentially expressed mRNAs in normal and neoplastic (adenocarcinoma) human endometrium. Crescenzi E, et al. **Gynecol Oncol** 1996 Nov;63(2):228–33

Distribution of the A and B forms of the progesterone receptor messenger ribonucleic acid and protein in uterine leiomyomata and adjacent myometrium. Viville B, et al. **Hum Reprod** 1997 Apr;12(4):815–22

PCR- and RT-PCR-based methods of tumor detection: potential applications and clinical implications. Seiden M, et al. **Important Adv Oncol** 1996;:191–204 (59 ref.)

Capillary electrophoresis methodology for identification of cancer related gene expression patterns of fluorescent differential display polymerase chain reaction. George KS, et al. **J Chromatogr B Biomed Appl** 1997 Jul 18; 695(1):93–102

Amplification of human beta-actin gene by the reverse transcriptase-polymerase chain reaction: implications for assessment of RNA from formalin-fixed, paraffin-embedded material. Dakhama A, et al. **J Histochem Cytochem** 1996 Oct;44(10):1205–7

p53 abnormalities in primary prostate cancer: single-strand conformation polymorphism analysis of complementary DNA in comparison with genomic DNA. The Cooperative Prostate Network. Gumerlock PH, et al. **J Natl Cancer Inst** 1997 Jan 1;89(1):66–71

Expression of thrombopoietin and thrombopoietin receptor MPL in human leukemia-lymphoma and solid tumor cell lines. Graf G, et al. **Leuk Res** 1996 Oct;20(10):831–8

Loss of the DEK-CAN fusion transcript in a child with t(6;9) acute myeloid leukemia following chemotherapy and allogeneic bone marrow transplantation. Boer J, et al. **Leukemia** 1997 Feb;11(2):299–300

Good correlation between RT-PCR analysis and relapse in Philadelphia (Ph1)-positive acute lymphoblastic leukemia (ALL). Preudhomme C, et al. **Leukemia** 1997 Feb; 11(2):294–8

Clinical correlates of bombesin-like peptide receptor subtype expression in human lung cancer cells. Toi-Scott M, et al. **Lung Cancer** 1996 Nov;15(3):341–54

Detection of chimeric mRNAs by reverse transcriptase-polymerase chain reaction for diagnosis and monitoring of acute leukemias with 11q23 abnormalities. Ida K, et al. **Med Pediatr Oncol** 1997 May;28(5):325–32

Analysis of tumor spillage during radical prostatectomy using RT-PCR of prostate specific antigen. Moreno JG, et al. **Tech Urol** 1996 Spring;2(1):54–7

[Detection of PEBP2 beta/MYH11 fusion mRNA in acute myelomonocytic leukemia without marrow eosinophilia] Morinaga S, et al. **Rinsho Ketsueki** 1996 Jul;37(7):618–23 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Reversal of the in vivo metastatic phenotype of human tumor cells by an anti-CAPL (mts1) ribozyme. Maelandsmo GM, et al. **Cancer Res** 1996 Dec 1;56(23):5490–8

BIOSYNTHESIS

Increased expression of telomerase RNA component is associated with increased cell proliferation in human astrocytomas. Sallinen P, et al. **Am J Pathol** 1997 Apr;

150(4):1159–64

NPM/ALK fusion mRNA expression in Hodgkin and Reed–Sternberg cells is rare but does occur: results from single–cell cDNA analysis. Trümper L, et al. **Ann Oncol** 1997;8 Suppl 2:83–7

TRA1, a novel mRNA highly expressed in leukemogenic mouse monocytic sublines but not in nonleukemogenic sublines. Kasukabe T, et al. **Blood** 1997 Apr 15; 89(8):2975–85

Cell cycle–dependent expression of TAP1, TAP2, and HLA–B27 messenger RNAs in a human breast cancer cell line. Alpan RS, et al. **Cancer Res** 1996 Oct 1;56(19):4358–61

Influence of Ukrain on DNA, RNA and protein synthesis in malignant cells. Nowicky JW, et al. **Drugs Exp Clin Res** 1996;22(3–5):81–91

Frequent detection of aberrant RNA transcripts of the CDKN2 gene in human gastric adenocarcinoma. Chen YJ, et al. **Int J Cancer** 1997 May 2;71(3):350–4

Sex steroids regulate the expression of plasminogen activator inhibitor–1 (PAI–1) and its mRNA in uterine endometrial cancer cell line Ishikawa. Fujimoto J, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):1–8

The effect of dacarbazine and vincristine sulfate on human melanoma cell lines. In vitro analysis of interaction on DNA synthesis, RNA synthesis and protein synthesis. Tachihara R. **Nippon Ika Daigaku Zasshi** 1997 Jun; 64(3):238–48

BLOOD

Lack of specificity of albumin–mRNA–positive cells as a marker of circulating hepatoma cells. Müller C, et al. **Hepatology** 1997 Apr;25(4):896–9

Detection of colorectal carcinoma cells in circulating peripheral blood by reverse transcription–polymerase chain reaction targeting cytokeratin–20 mRNA. Funaki NO, et al. **Life Sci** 1997;60(9):643–52

CHEMISTRY

Molecular detection of circulating solid carcinoma cells in the peripheral blood: the concept of early systemic disease. Mori M, et al. **Int J Cancer** 1996 Dec 11;68(6):739–43

DRUG EFFECTS

Indirect inhibitory effect of a neurotensin receptor antagonist on human colon cancer (LoVo) growth. Iwase K, et al. **Surg Oncol** 1996 Oct–Dec;5(5–6):245–51

GENETICS

Single cell PCR for the analysis of Hodgkin's disease: four years later. Küpper M, et al. **Ann Oncol** 1996;7 Suppl 4:35–9 (24 ref.)

Specificity of ribozymes against the bcr–abl mRNAs in vitro. James HA, et al. **Biochem Soc Trans** 1996 Aug;24(3):409S

S100A3 mRNA expression displays an inverse correlation to breast cancer progression. Lloyd BH, et al. **Biochem Soc Trans** 1996 Aug;24(3):340S

Uptake and effects of antisense oligodeoxynucleotides specific for rat metallothionein –1 and –2 mRNA in H4 rat hepatoma cells in culture. Vasconcelos MH, et al. **Biochem Soc Trans** 1996 Aug;24(3):408S

Different CD44 splicing patterns define prognostic subgroups in multiple myeloma. Stauder R, et al. **Blood** 1996 Oct 15; 88(8):3101–8

Heterogenous expression of bcr–abl fusion mRNA in a patient with Philadelphia–chromosome–positive acute lymphoblastic leukaemia. Inokuchi K, et al. **Br J Haematol** 1997 Jun;97(4):837–40

Two promoters in expression of estrogen receptor messenger RNA in human breast cancer. Hayashi S, et al. **Carcinogenesis** 1997 Mar;18(3):459–64

Expression of an abnormal sized c–kit transcript in Hong Kong Chinese acute lymphoblastic leukaemia patients. Chui CH, et al. **Clin Lab Haematol** 1996 Dec;18(4):261–3

Cloning and expression of the mRNA of human galectin–4, an S–type lectin down–regulated in colorectal cancer. Rechreche H, et al. **Eur J Biochem** 1997 Aug 15; 248(1):225–30

Expression of neural BC1 RNA: induction in murine tumours. Chen W, et al. **Eur J Cancer** 1997 Feb;33(2):288–92

A novel transcript encoded within the 10–kb first intron of the human p53 tumor suppressor gene (D17S2179E) is induced during differentiation of myeloid leukemia cells. Reisman D, et al. **Genomics** 1996 Dec 15;38(3):364–70

Lack of specificity of albumin–mRNA–positive cells as a marker of circulating hepatoma cells. Müller C, et al. **Hepatology** 1997 Apr;25(4):896–9

Expression of connective tissue growth factor mRNA in the fibrous stroma of mammary tumors. Frazier KS, et al. **Int J Biochem Cell Biol** 1997 Jan;29(1):153–61

Sex hormone binding globulin mRNA in human breast cancer: detection in cell lines and tumor samples. Moore KH, et al. **J Steroid Biochem Mol Biol** 1996 Nov; 59(3–4):297–304

Multiple splicing variants of the estrogen receptor are present in individual human breast tumors. Zhang QX, et al. **J Steroid Biochem Mol Biol** 1996 Nov;59(3–4):251–60

Detection of colorectal carcinoma cells in circulating peripheral blood by reverse transcription–polymerase chain reaction targeting cytokeratin–20 mRNA. Funaki NO, et al. **Life Sci** 1997;60(9):643–52

bic, a novel gene activated by proviral insertions in avian leukosis virus–induced lymphomas, is likely to function through its noncoding RNA. Tam W, et al. **Mol Cell Biol** 1997 Mar;17(3):1490–502

Analysis of possible WT1 RNA processing in primary Wilms tumors. Gunning KB, et al. **Oncogene** 1996 Sep 19; 13(6):1179–85

Expression genetics in cancer: shifting the focus from DNA to RNA. Sager R. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):952–5 (56 ref.)

[Molecular genetics of human tumors] Imianitov EN, et al. **Vopr Onkol** 1997;43(1):95–101 (46 ref.) (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Immunotherapy of metastases with lymphocytes treated with exogenous RNA in mice bearing B16 melanoma. Watanabe MA, et al. **Cell Mol Biol (Noisy–le–grand)** 1997 May; 43(3):393–8

ISOLATION & PURIFICATION

Sonification as a means of enhancing the detection of gene expression levels from formalin–fixed, paraffin–embedded biopsies. Houze TA, et al. **Biotechniques** 1996 Dec; 21(6):1074–8, 1080, 1082

Increased sensitivity of in situ hybridization: implications for in situ amplification [letter] Pilling A, et al. **Diagn Mol Pathol** 1997 Jun;6(3):174

METABOLISM

Overexpression of EGF receptor is associated with spontaneous metastases of a human melanoma cell line in nude mice. Huang TS, et al. **Anticancer Res** 1996 Nov–Dec; 16(6B):3557–63

Lack of rearranged Tpr–met mRNA expression in human gastric cancer cell lines and gastric mucosa and carcinoma. Osaki M, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2881–4

S100A3 mRNA expression displays an inverse correlation to breast cancer progression. Lloyd BH, et al. **Biochem Soc Trans** 1996 Aug;24(3):340S

Cellular localisation by in situ hybridisation of cathepsin D, stromelysin 3, and urokinase plasminogen activator RNAs in breast cancer. Escot C, et al. **Breast Cancer Res Treat** 1996;38(2):217–26

Estrogen receptor messenger RNA splice variants are not involved in antiestrogen resistance in sublines of MCF–7 human breast cancer cells. Madsen MW, et al. **Cancer Res** 1997 Feb 15;57(4):585–9

Neurofilament heavy chain–like messenger RNA and protein are present in benign prostate and down–regulated in prostatic carcinoma. Schleicher RL, et al. **Cancer Res** 1997 Aug 15;57(16):3532–6

Cloning and expression of the mRNA of human galectin–4, an S–type lectin down–regulated in colorectal cancer. Rechreche H, et al. **Eur J Biochem** 1997 Aug 15; 248(1):225–30

Expression of connective tissue growth factor mRNA in the fibrous stroma of mammary tumors. Frazier KS, et al. **Int J Biochem Cell Biol** 1997 Jan;29(1):153–61

Inducers of erythroleukemic differentiation cause messenger RNAs that lack poly(A)–binding protein to accumulate in translationally inactive, salt–labile 80 S ribosomal complexes. Hensold JO, et al. **J Biol Chem** 1996 Sep 20; 271(38):23246–54

Ribonucleic acid expression of the clustered imprinted genes, p57KIP2, insulin–like growth factor II, and H19, in adrenal tumors and cultured adrenal cells. Liu J, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1766–71

Prediction of colorectal cancer relapse and survival via tissue RNA levels of matrix metalloproteinase–9. Zeng ZS, et al. **J Clin Oncol** 1996 Dec;14(12):3133–40

Incorporation of 5–fluorouracil into hepatoma and normal tissue RNA at protein depletion in the rat. Roos G, et al. **J Surg Oncol** 1997 Jul;65(3):155–8

The product of the imprinted H19 gene is an oncofetal RNA. Ariel I, et al. **Mol Pathol** 1997 Feb;50(1):34–44

Analysis of possible WT1 RNA processing in primary Wilms tumors. Gunning KB, et al. **Oncogene** 1996 Sep 19; 13(6):1179–85

The transcription factor E2F–1 modulates TGF–beta1 RNA expression in glial cells. Thatikunta P, et al. **Oncogene** 1997 Jun 19;14(24):2959–69

RNA, NON–POLYADENYLATED see **RNA**

RNA, NUCLEAR

GENETICS

Identification of a SPH element in the distal region of a human U6 small nuclear RNA gene promoter and characterization of the SPH binding factor in HeLa cell extracts. Kunkel GR, et al. **Gene Expr** 1996;6(2):59–72

The human NTT gene: identification of a novel 17–kb noncoding nuclear RNA expressed in activated CD4+ T cells. Liu AY, et al. **Genomics** 1997 Jan 15;39(2):171–84

METABOLISM

Nuclear (DNA, RNA, histone and non–histone protein) and nucleolar changes during growth and senescence of may apple leaves. Bhattacharya PK, et al. **Mech Ageing Dev** 1996 Dec 20;92(2–3):83–99

RNA–dependent phosphorylation of a nuclear RNA binding protein. Fung PA, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1064–8

RNA NUCLEOTIDYLTRANSFERASES

ANTAGONISTS & INHIBITORS

Inhibition of DNA primase by sphingosine and its analogues parallels with their growth suppression of cultured human leukemic cells. Tamiya–Koizumi K, et al. **Biochem Mol Biol Int** 1997 May;41(6):1179–89

Benzo[a]pyrene–DNA adducts inhibit the DNA helicase activity of the bacteriophage T7 gene 4 protein. Yong Y, et al. **Chem Res Toxicol** 1996 Jan–Feb;9(1):179–87

3'–Deoxyribonucleotides inhibit eukaryotic DNA primase. Izuta S, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1038–44

BIOSYNTHESIS

Multiple potential germ–line helicases are components of the germ–line–specific P granules of Caenorhabditis elegans. Gruidl ME, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13837–42

CHEMISTRY

The embryonic RNA helicase gene (ERH): a new member of the DEAD box family of RNA helicases. Sowden J, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):839–46

The helicase domain of phage P4 alpha protein overlaps the specific DNA binding domain. Ziegelin G, et al. **J Bacteriol** 1997 Jul;179(13):4087–95

Replication protein–A mediates the association of calf thymus DNA polymerase alpha–DNA primase complex with guanine–rich DNA sequence. Suzuki M, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):766–72

Domain structure of human nuclear DNA helicase II (RNA helicase A). Zhang S, et al. **J Biol Chem** 1997 Apr 25; 272(17):11487–94

A point mutation abolishes the helicase but not the nucleoside triphosphatase activity of hepatitis C virus NS3 protein. Heilek GM, et al. **J Virol** 1997 Aug;71(8):6264–6

A DNA polymerase alpha accessory protein exhibits structural and functional similarities to SV40 large tumor antigen. Crouch E, et al. **Mutat Res** 1997 Mar 4; 374(1):109–23

Cloning and characterization of HUPF1, a human homolog of the Saccharomyces cerevisiae nonsense mRNA–reducing UPF1 protein. Applequist SE, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):814—21

Characterization and crystallization of the helicase domain of bacteriophage T7 gene 4 protein. Bird LE, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2620–6

Xp54, the Xenopus homologue of human RNA helicase p54, is an integral component of stored mRNP particles in oocytes. Ladomery M, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):965–73

Molecular cloning of a Plasmodium falciparum gene interrupted by 15 introns encoding a functional primase 53 kDa subunit as demonstrated by expression in a baculovirus system. Prasartkaew S, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):3934–41

Homomorphous hexameric helicases: tales from the ring cycle. Egelman EH. **Structure** 1996 Jul 15;4(7):759–62 (35 ref.)

The putative LEF–1 proteins from two distinct Choristoneura fumiferana multiple nucleopolyhedroviruses share domain homology to eukaryotic primases. Barrett JW, et al. **Virus Genes** 1996;13(3):229–37

DRUG EFFECTS

Inhibition of DNA primase by sphingosine and its analogues parallels with their growth suppression of cultured human leukemic cells. Tamiya–Koizumi K, et al. **Biochem Mol Biol Int** 1997 May;41(6):1179–89

GENETICS

An3 protein encoded by a localized maternal mRNA in Xenopus laevis is an ATPase with substrate–specific RNA helicase activity. Gururajan R, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):169–82

Cloning and analysis of the dnaG gene encoding Pseudomonas putida DNA primase. Szafranski P, et al. **Biochim Biophys Acta** 1997 Jun 26;1352(3):243–8

The inv(11)(p15q22) chromosome translocation of de novo and therapy–related myeloid malignancies results in fusion of the nucleoporin gene, NUP98, with the putative RNA helicase gene, DDX10. Arai Y, et al. **Blood** 1997 Jun 1; 89(11):3936–44

Identification and chromosome mapping of the mouse homologue of the human gene (DDX6) that encodes a putative RNA helicase of the DEAD box protein family. Akao Y, et al. **Cytogenet Cell Genet** 1996;75(1):38–44

Zebrafish vasa homologue RNA is localized to the cleavage planes of 2– and 4–cell–stage embryos and is expressed in the primordial germ cells. Yoon C, et al. **Development** 1997 Aug;124(16):3157–65

The DDX1 gene maps within 400 kbp 5' to MYCN and is frequently coamplified in human neuroblastoma. Amler

LC, et al. **Genes Chromosomes Cancer** 1996 Feb;15(2):134–7
Amplification of a DEAD box gene (DDX1) with the MYCN gene in neuroblastomas as a result of cosegregation of sequences flanking the MYCN locus. Noguchi T, et al. **Genes Chromosomes Cancer** 1996 Feb;15(2):129–33
Isolation and characterization of suppressors of [illegible] Escherichia coli dnaG mutations, dnaG2903 and parB. Britton RA, et al. **Genetics** 1997 Apr;145(4):867–75
A new enhancer of position–effect variegation in Drosophila melanogaster encodes a putative RNA helicase that binds chromosomes and is regulated by the cell cycle. Eberl DF, et al. **Genetics** 1997 Jul;146(3):951–63
A human gene (DDX10) encoding a putative DEAD–box RNA helicase at 11q22–q23. Savitsky K, et al. **Genomics** 1996 Apr 15;33(2):199–206
Characterization of mutations affecting the Escherichia coli essential GTPase era that suppress two temperature–sensitive dnaG alleles. Britton RA, et al. **J Bacteriol** 1997 Jul;179(14):4575–82
Selection, identification, and genetic analysis of random mutants in the cloned primase/helicase gene of bacteriophage T7. Rosenberg AH, et al. **J Biol Chem** 1996 Oct 25;271(43):26819–24
The immunodominant antigen of an ultraviolet–induced regressor tumor is generated by a somatic point mutation in the DEAD box helicase p68. Dubey P, et al. **J Exp Med** 1997 Feb 17;185(4):695–705
Unidentified open reading frames in the genome of Methanococcus jannaschii are similar in sequence to an archaebacterial gene for tRNA nucleotidyltransferase. Thurlow DL, et al. **J Mol Evol** 1997 Jun;44(6):686–9
Support of a cucumber mosaic virus satellite RNA maps to a single amino acid proximal to the helicase domain of the helper virus. Roossinck MJ, et al. **J Virol** 1997 Jan; 71(1):608–12
A DEAD–family protein gene, Ddx4, encoding a murine homolog of Drosophila vasa maps to the distal end of mouse chromosome 13. Abe K, et al. **Mamm Genome** 1997 Aug;8(8):622–3
Missense mutations in the 3'end of the Escherichia coli dnaG gene do not abolish primase activity but do confer the chromosome–segregation–defective (par) phenotype. Versalovic J, et al. **Microbiology** 1997 Feb;143 (Pt 2):585–94
A putative RNA helicase of the DEAD box family from Trypanosoma brucei. Missel A, et al. **Mol Biochem Parasitol** 1995 Dec;75(1):123–6
The rRNA–processing function of the yeast U14 small nucleolar RNA can be rescued by a conserved RNA helicase–like protein. Liang WQ, et al. **Mol Cell Biol** 1997 Jul;17(7):4124–32
Severe growth defect in a Schizosaccharomyces pombe mutant defective in intron lariat degradation. Nam K, et al. **Mol Cell Biol** 1997 Feb;17(2):809–18
Dbp3p, a putative RNA helicase in Saccharomyces cerevisiae, is required for efficient pre–rRNA processing predominantly at site A3. Weaver PL, et al. **Mol Cell Biol** 1997 Mar;17(3):1354–65
Genetic interaction of DED1 encoding a putative ATP–dependent RNA helicase with SRM1 encoding a mammalian RCC1 homolog in Saccharomyces cerevisiae. Hayashi N, et al. **Mol Gen Genet** 1996 Nov 27; 253(1–2):149–56
Cloning and characterization of HUPF1, a human homolog of the Saccharomyces cerevisiae nonsense mRNA–reducing UPF1 protein. Applequist SE, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):814–21
Physical mapping of the DDX1 gene to 340 kb 5' of MYCN. Kuroda H, et al. **Oncogene** 1996 Oct 3;13(7):1561–5
Expression, purification, and characterization of the two human primase subunits and truncated complexes from Escherichia coli. Copeland WC. **Protein Expr Purif** 1997 Feb;9(1):1–9
CCA–adding enzymes and poly(A) polymerases are all members of the same nucleotidyltransferase superfamily: characterization of the CCA–adding enzyme from the archaeal hyperthermophile Sulfolobus shibatae. Yue D, et al. **RNA** 1996 Sep;2(9):895–908
A putative helicase, the SUA5, PMR1, tRNALys1 genes and four open reading frames have been detected in the DNA sequence of an 8.8 kb fragment of the left arm of chromosome VII of Saccharomyces cerevisiae. Klima R, et al. **Yeast** 1996 Sep;12(10B Suppl):1033–40
Identification of gene encoding a putative RNA–helicase, homologous to SKI2, in chromosome VII of Saccharomyces cerevisiae. Martegani E, et al. **Yeast** 1997 Mar 30;13(4):391–7

ISOLATION & PURIFICATION

Citric acid extracts a specific set of proteins from isolated cell nuclei. Rosenberger U, et al. **J Cell Biochem** 1995 Oct; 59(2):177–85
Expression, purification, and characterization of DNA polymerases involved in papovavirus replication. Malkas LH, et al. **Methods Enzymol** 1996;275:133–67
Comparison among DNA polymerases 1, 2 and 3 from maize embryo axes. A DNA primase activity copurifies with DNA polymerase 2. García E, et al. **Plant Mol Biol** 1997 Feb;33(3):445–55

METABOLISM

RNA helicase activity of Escherichia coli SecA protein. Park SK, et al. **Biochem Biophys Res Commun** 1997 Jun 27; 235(3):593–7
Cloning and characterization of Gu/RH–II binding protein. Valdez BC, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):335–40
The tyrosine photophysics of a primase–derived peptide are sensitive to the peptide's zinc–bound state: proof that the bacterial primase hypothetical zinc finger sequence binds zinc. Griep MA, et al. **Biochemistry** 1997 Jan 21; 36(3):544–53
Eucaryotic DNA primase does not prefer to synthesize primers at pyrimidine rich DNA sequences when nucleoside triphosphates are present at concentrations found in whole cells. Kirk BW, et al. **Biochemistry** 1997 Jun 3;36(22):6725–31
Kinetics of the RNA–DNA helicase activity of Escherichia coli transcription termination factor rho. 1. Characterization and analysis of the reaction. Walstrom KM, et al. **Biochemistry** 1997 Jul 1;36(26):7980–92
Kinetics of the RNA–DNA helicase activity of Escherichia coli transcription termination factor rho. 2. Processivity, ATP consumption, and RNA binding. Walstrom KM, et al. **Biochemistry** 1997 Jul 1;36(26):7993–8004
An3 protein encoded by a localized maternal mRNA in Xenopus laevis is an ATPase with substrate–specific RNA helicase activity. Gururajan R, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):169–82
RNA helicase A mediates association of CBP with RNA polymerase II. Nakajima T, et al. **Cell** 1997 Sep 19; 90(6):1107–12
RNA turnover: the helicase story unwinds. Anderson JS, et al. **Curr Biol** 1996 Jul 1;6(7):780–2 (16 ref.)
Myc–Max heterodimers activate a DEAD box gene and interact with multiple E box–related sites in vivo. Grandori C, et al. **EMBO J** 1996 Aug 15;15(16):4344–57
The NTPase/helicase activities of Drosophila maleless, an essential factor in dosage compensation. Lee CG, et al. **EMBO J** 1997 May 15;16(10):2671–81
A role for DNA primase in coupling DNA replication to DNA damage response. Marini F, et al. **EMBO J** 1997 Feb 3;16(3):639–50
Effects of cytotoxic drugs on translocation of nucleolar RNA helicase RH–II/Gu. Perlaky L, et al. **Exp Cell Res** 1997 Sep 15;235(2):413–20
RNA–dependent association of the Drosophila maleless protein with the male X chromosome. Richter L, et al. **Genes Cells** 1996 Mar;1(3):325–36
Oskar protein interaction with Vasa represents an essential step in polar granule assembly. Breitwieser W, et al. **Genes Dev** 1996 Sep 1;10(17):2179–88
The primase of broad–host–range plasmid R1162 is active in conjugal transfer. Henderson D, et al. **J Bacteriol** 1996 Dec;178(23):6888–94
Interaction of Escherichia coli primase with a phage G4ori(c)–E. coli SSB complex. Sun W, et al. **J Bacteriol** 1996 Dec;178(23):6701–5
Role of the bacteriophage T7 and T4 single–stranded DNA–binding proteins in the formation of joint molecules and DNA helicase–catalyzed polar branch migration. Kong D, et al. **J Biol Chem** 1997 Mar 28;272(13):8380–7
Template recognition and ribonucleotide specificity of the DNA primase of bacteriophage T7. Kusakabe T, et al. **J Biol Chem** 1997 Feb 28;272(9):5943–51
Gene 4 DNA primase of bacteriophage T7 mediates the annealing and extension of ribo–oligonucleotides at primase recognition sites. Kusakabe T, et al. **J Biol Chem** 1997 May 9;272(19):12446–53
A mitochondrial DNA primase from the trypanosomatid Crithidia fasciculata. Li C, et al. **J Biol Chem** 1997 Aug 15;272(33):20787–92
The acidic carboxyl terminus of the bacteriophage T7 gene 4 helicase/primase interacts with T7 DNA polymerase. Notarnicola SM, et al. **J Biol Chem** 1997 Jul 18; 272(29):18425–33
A steady–state and pre–steady–state kinetic analysis of the NTPase activity associated with the hepatitis C virus NS3 helicase domain. Preugschat F, et al. **J Biol Chem** 1996 Oct 4;271(40):24449–57
Biochemical analysis of mutant T7 primase/helicase proteins defective in DNA binding, nucleotide hydrolysis, and the coupling of hydrolysis with DNA unwinding. Washington MT, et al. **J Biol Chem** 1996 Oct 25;271(43):26825–34
Identification of the nuclear localization signal of mouse DNA primase: nuclear transport of p46 subunit is facilitated by interaction with p54 subunit. Mizuno T, et al. **J Cell Sci** 1996 Nov;109 (Pt 11):2627–36
Vaccinia virions lacking the RNA helicase nucleoside triphosphate phosphohydrolase II are defective in early transcription. Gross CH, et al. **J Virol** 1996 Dec; 70(12):8549–57
Virus–encoded RNA helicases. Kadaré G, et al. **J Virol** 1997 Apr;71(4):2583–90 (65 ref.)
Brome mosaic virus helicase– and polymerase–like proteins colocalize on the endoplasmic reticulum at sites of viral RNA synthesis. Restrepo–Hartwig MA, et al. **J Virol** 1996 Dec;70(12):8908–16
The helicase activity associated with hepatitis C virus nonstructural protein 3 (NS3). Tai CL, et al. **J Virol** 1996 Dec;70(12):8477–84
PRH75, a new nucleus–localized member of the DEAD–box protein family from higher plants. Lorković ZJ, et al. **Mol Cell Biol** 1997 Apr;17(4):2257–65
Rok1p is a putative RNA helicase required for rRNA processing. Venema J, et al. **Mol Cell Biol** 1997 Jun; 17(6):3398–407
Changes in nuclear localization of An3, a RNA helicase, during oogenesis and embryogenesis in Xenopus laevis. Longo FJ, et al. **Mol Reprod Dev** 1996 Dec;45(4):491–502
An accessory protein of DNA polymerase alpha declines in function with increasing age. Miller SD, et al. **Mutat Res** 1997 Mar 4;374(1):125–38
Structure of the hepatitis C virus RNA helicase domain. Yao N, et al. **Nat Struct Biol** 1997 Jun;4(6):463–7
Characterization of DbpA, an Escherichia coli DEAD box protein with ATP independent RNA unwinding activity. Böddeker N, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):537–45
Characterization of the autoantigen La (SS–B) as a dsRNA unwinding enzyme. Hühn P, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):410–6
Phosphorylation of DNA polymerase alpha–primase by cyclin A–dependent kinases regulates initiation of DNA replication in vitro. Voitenleitner C, et al. **Oncogene** 1997 Apr 3;14(13):1611–5
The p20 and Ded1 proteins have antagonistic roles in eIF4E–dependent translation in Saccharomyces cerevisiae. de la Cruz J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5201–6
Gene 4 helicase of bacteriophage T7 mediates strand transfer through pyrimidine dimers, mismatches, and nonhomologous regions. Kong D, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2987–92
Direct physical interaction between DnaG primase and DnaB helicase of Escherichia coli is necessary for optimal synthesis of primer RNA. Lu YB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12902–7
Expression, purification, and characterization of the two human primase subunits and truncated complexes from Escherichia coli. Copeland WC. **Protein Expr Purif** 1997 Feb;9(1):1–9
CCA–adding enzymes and poly(A) polymerases are all members of the same nucleotidyltransferase superfamily: characterization of the CCA–adding enzyme from the archaeal hyperthermophile Sulfolobus shibatae. Yue D, et al. **RNA** 1996 Sep;2(9):895–908
Requirement of the DEAD–Box protein ded1p for messenger RNA translation. Chuang RY, et al. **Science** 1997 Mar 7; 275(5305):1468–71
A cellular cofactor for the constitutive transport element of type D retrovirus. Tang H, et al. **Science** 1997 May 30; 276(5317):1412–5
Towards defining a minimal functional domain for NTPase and RNA helicase activities of the hepatitis C virus NS3 protein. Kim DW, et al. **Virus Res** 1997 May;49(1):17–25

RNA PHAGES

CHEMISTRY

The crystal structure of bacteriophage GA and a comparison of bacteriophages belonging to the major groups of Escherichia coli leviviruses. Tars K, et al. **J Mol Biol** 1997 Sep 5;271(5):759–73

GENETICS

RNA phage Q beta coat protein as a carrier for foreign epitopes. Kozlovska TM, et al. **Intervirology** 1996; 39(1–2):9–15 (19 ref.)
Altered 3'–terminal RNA structure in phage Qbeta adapted to host factor–less Escherichia coli. Schuppli D, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10239–42

IMMUNOLOGY

Short synthetic CDR–peptides forming the antibody combining site of the monoclonal antibody against RNA bacteriophage fr neutralize the phage activity. Steinbergs J, et al. **Hum Antibodies Hybridomas** 1996;7(3):106–12

PHYSIOLOGY

Strongly reduced phage Qbeta replication, but normal phage MS2 replication in an Escherichia coli K12 mutant with inactivated Qbeta host factor (hfq) gene. Su Q, et al. **Virology** 1997 Jan 6;227(1):211–4

RNA, PLANT

Intronic and exonic sequences modulate 5'splice site selection in plant nuclei. McCullough AJ, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1071–7
Analysis of the heterogeneous transcripts of the highly edited orf206 in tomato mitochondria. Shikanai T, et al. **Plant Cell Physiol** 1996 Jul;37(5):692–6

ANALYSIS

Ribosomal DNA internal transcribed spacers to estimate the proportion of Pisolithus tinctorius and Eucalyptus RNAs in ectomycorrhiza. Diaz EC, et al. **Appl Environ Microbiol** 1997 Mar;63(3):840–3
RNA/DNA mini–prep from a single sample of orchid tissue. Knapp JE, et al. **Biotechniques** 1996 Jul;21(1):54–6
Northern blot analysis of simple repetitive sequence

transcription in plants. Gortner G, et al. **Electrophoresis** 1996 Jul;17(7):1183–9
A nimA–like protein kinase transcript is highly expressed in meristems of Antirrhinum majus. Zhang H, et al. **J Microsc** 1996 Feb;181 (Pt 2):186–94
Identification of a 4.5S–like ribonucleoprotein in maize mitochondria. Yang AJ, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3601–6
Isolation of molecular markers from the barley endosperm coenocyte and the surrounding nucellus cell layers. Doan DN, et al. **Plant Mol Biol** 1996 Jul;31(4):877–86
Localization of tobacco cytosolic glutamine synthetase enzymes and the corresponding transcripts shows organ– and cell–specific patterns of protein synthesis and gene expression. Dubois F, et al. **Plant Mol Biol** 1996 Jul; 31(4):803–17
Transcripts of a gene encoding a putative cell wall–plasma membrane linker protein are specifically cold–induced in Brassica napus. Goodwin W, et al. **Plant Mol Biol** 1996 Jul;31(4):771–81
Stringently and developmentally regulated levels of a cytoplasmic double–stranded RNA and its high–efficiency transmission via egg and pollen in rice. Moriyama H, et al. **Plant Mol Biol** 1996 Jul;31(4):713–9

BIOSYNTHESIS

Redox regulation of RNA synthesis in plant mitochondria. Wilson SB, et al. **Biochem Soc Trans** 1996 May;24(2):296S
Ultrastructural nonisotopic mapping of nucleolar transcription sites in onion protoplasts. Melcák I, et al. **J Struct Biol** 1996 Mar–Apr;116(2):253–63
Defense response in slash pine: chitosan treatment alters the abundance of specific mRNAs. Mason ME, et al. **Mol Plant Microbe Interact** 1997 Jan;10(1):135–7
Effect of pollination on accumulation of ACC synthase and ACC oxidase transcripts, ethylene production and flower petal abscission in geranium (Pelargonium x hortorum L.H. Bailey). Clark DG, et al. **Plant Mol Biol** 1997 Aug; 34(6):855–65
Sense and antisense transcripts of the maize MuDR regulatory transposon localized by in situ hybridization. Joanin P, et al. **Plant Mol Biol** 1997 Jan;33(1):23–36

CHEMISTRY

The nucleotide sequence of ribosomal 5s RNA from sorrel. Opiola T, et al. **Biochimie** 1996;78(2):108–10
Mg2+ dependence of the structure and thermodynamics of wheat germ and lupin seeds 5S rRNA. Kuliński T, et al. **J Biomol Struct Dyn** 1997 Feb;14(4):495–507
Logitlinear models for the prediction of splice sites in plant pre–mRNA sequences. Kleffe J, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4709–18
Discontinuous translation and mRNA secondary structure. Zama M. **Nucleic Acids Symp Ser** 1995;(34):97–8
Interaction of rice and human SRP19 polypeptides with signal recognition particle RNA. Chittenden K, et al. **Plant Mol Biol** 1997 Jun;34(3):507–15
RNA structure and the regulation of gene expression. Klaff P, et al. **Plant Mol Biol** 1996 Oct;32(1–2):89–106 (147 ref.)
Structural analyses of plastid–derived 16S rRNAs in holoparasitic angiosperms. Nickrent DL, et al. **Plant Mol Biol** 1997 Jul;34(5):731–43

GENETICS

Amplified restriction fragment length polymorphism–based mRNA fingerprinting using a single restriction enzyme that recognizes a 4–bp sequence. Habu Y, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):516–21
RNA–mediated RNA degradation and chalcone synthase A silencing in petunia. Metzlaff M, et al. **Cell** 1997 Mar 21; 88(6):845–54
Reduced requirement for RNA editing in the mitochondrial cox3 transcript of Olea europaea L. Perrotta G, et al. **Curr Genet** 1997 Feb;31(2):185–9
Ribonuclease–P RNA gene of the plastid chromosome from Cyanophora paradoxa. Shevelev EL, et al. **DNA Res** 1995 Oct 31;2(5):231–4
3'–Inverted repeats in plant mitochondrial mRNAs are processing signals rather than transcription terminators. Dombrowski S, et al. **EMBO J** 1997 Aug 15;16(16):5069–76
The molecular diversity of the 5S rRNA gene in Kengyilia alatavica (Drobov) J.L. Yang, Yen & Baum (Poaceae:Triticeae): potential genomic assignment of different rDNA units. Baum BR, et al. **Genome** 1997 Apr; 40(2):215–28
Evolution of the ITS sequences of ribosomal DNA in Enteromorpha (Chlorophyceae). Leskinen E, et al. **Hereditas** 1997;126(1):17–23
Molecular phylogeny of extant gymnosperms and seed plant evolution: analysis of nuclear 18S rRNA sequences. Chaw SM, et al. **Mol Biol Evol** 1997 Jan;14(1):56–68
Accelerated evolution of sites undergoing mRNA editing in plant mitochondria and chloroplasts. Shields DC, et al. **Mol Biol Evol** 1997 Mar;14(3):344–9
Natural antisense transcripts of the S locus receptor kinase gene and related sequences in Brassica oleracea. Cock JM, et al. **Mol Gen Genet** 1997 Aug;255(5):514–24
Species–specificity of rRNA gene transcription in plants manifested as a switch in RNA polymerase specificity. Doelling JH, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4725–32
Splice site prediction in Arabidopsis thaliana pre–mRNA by combining local and global sequence information. Hebsgaard SM, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3439–52
Discontinuous translation and mRNA secondary structure. Zama M. **Nucleic Acids Symp Ser** 1995;(34):97–8
Structure and expression of a plant U1 snRNP 70K gene: alternative splicing of U1 snRNP 70K pre–mRNAs produces two different transcripts. Golovkin M, et al. **Plant Cell** 1996 Aug;8(8):1421–35
Maturation–specific translational enhancement mediated by the 5'–UTR of a late pollen transcript. Bate N, et al. **Plant J** 1996 Oct;10(4):613–23
H–protein of the glycine cleavage system in Flaveria: alternative splicing of the pre–mRNA occurs exclusively in advanced C4 species of the genus. Kopriva S, et al. **Plant J** 1996 Aug;10(2):369–73
Mapping of branchpoint nucleotides in mutant pre–mRNAs expressed in plant cells. Liu HX, et al. **Plant J** 1996 Mar; 9(3):381–9
Control of mRNA stability in higher plants. Abler ML, et al. **Plant Mol Biol** 1996 Oct;32(1–2):63–78 (99 ref.)
RNA as a target and an initiator of post–transcriptional gene silencing in transgenic plants. Baulcombe DC. **Plant Mol Biol** 1996 Oct;32(1–2):79–88 (56 ref.)
Translational control of cellular and viral mRNAs. Gallie DR. **Plant Mol Biol** 1996 Oct;32(1–2):145–58 (109 ref.)
Characterization of a lily tapetal transcript that shares sequence similarity with a class of intracellular pathogenesis–related (IPR) proteins. Huang JC, et al. **Plant Mol Biol** 1997 Jul;34(4):681–6
Cloning and characterization of tomato leaf senescence–related cDNAs. John I, et al. **Plant Mol Biol** 1997 Mar;33(4):641–51
RNA structure and the regulation of gene expression. Klaff P, et al. **Plant Mol Biol** 1996 Oct;32(1–2):89–106 (147 ref.)
Plant mRNA 3'–end formation. Rothnie HM. **Plant Mol Biol** 1996 Oct;32(1–2):43–61 (133 ref.)
Splicing of precursors to mRNA in higher plants: mechanism, regulation and sub–nuclear organisation of the spliceosomal machinery. Simpson GG, et al. **Plant Mol Biol** 1996 Oct; 32(1–2):1–41 (307 ref.)
Noncoding RNA for CR20, a cytokinin–repressed gene of cucumber. Teramoto H, et al. **Plant Mol Biol** 1996 Dec; 32(5) 797–808
Evolution of trans–splicing plant mitochondrial introns in pre–Permian times. Malek O, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):553–8
C–terminal deletion mutant of pokeweed antiviral protein inhibits viral infection but does not depurinate host ribosomes. Tumer NE, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3866–71
A group I plant intron accumulates as circular RNA forms with extensive 5' deletions in vivo. Darós JA, et al. **RNA** 1996 Sep;2(9):928–36

ISOLATION & PURIFICATION

Isolation of messenger RNA from plant tissues. Dunn A. **Methods Mol Biol** 1997;69:33–8
Isolation of RNA from blackcurrant (Ribes nigrum L.) fruit. Woodhead M, et al. **Mol Biotechnol** 1997 Feb;7(1):1–4

METABOLISM

Structural analysis of two plant 5S rRNA species and fragments thereof by lead–induced hydrolysis. Ciesiolka J, et al. **Biochem Mol Biol Int** 1996 May;39(2):319–28
RNA–mediated RNA degradation and chalcone synthase A silencing in petunia. Metzlaff M, et al. **Cell** 1997 Mar 21; 88(6):845–54
Preferential RNA editing at specific sites within transcripts of two plant mitochondrial genes does not depend on transcriptional context or nuclear genotype. Wilson RK, et al. **Curr Genet** 1996 Dec;30(6):502–8
Sequences directing C to U editing of the plastid psbL mRNA are located within a 22 nucleotide segment spanning the editing site. Chaudhuri S, et al. **EMBO J** 1996 Nov 1;15(21):5958–64
The organization of ribosomal RNA processing correlates with the distribution of nucleolar snRNAs. Beven AF, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1241–51
Nuclear (DNA, RNA, histone and non–histone protein) and nucleolar changes during growth and senescence of may apple leaves. Bhattacharya PK, et al. **Mech Ageing Dev** 1996 Dec 20;92(2–3):83–99
Structure, mechanism and evolution of chloroplast transfer RNA processing systems. Gegenheimer P. **Mol Biol Rep** 1995–96;22(2–3):147–50 (27 ref.)
Striking differences in mitochondrial tRNA import between different plant species. Kumar R, et al. **Mol Gen Genet** 1996 Sep 25;252(4):404–11
Chloroplast endoribonuclease p54 involved in RNA 3'–end processing is regulated by phosphorylation and redox state. Liere K, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2403–8
Structure and expression of a plant U1 snRNP 70K gene: alternative splicing of U1 snRNP 70K pre–mRNAs produces two different transcripts. Golovkin M, et al. **Plant Cell** 1996 Aug;8(8):1421–35
Retrotransposon insertion into the maize waxy gene results in tissue–specific RNA processing. Marillonnet S, et al. **Plant Cell** 1997 Jun;9(6):967–78
CSP41, a sequence–specific chloroplast mRNA binding protein, is an endoribonuclease. Yang J, et al. **Plant Cell** 1996 Aug;8(8):1409–20
Identification and characterization of an mRNA encoding a proline–rich protein that rapidly declines in abundance in the tips of harvested asparagus spears. King GA, et al. **Plant Cell Physiol** 1996 Jul;37(5):706–10
A single base change prevents import of cytosolic tRNA(Ala) into mitochondria in transgenic plants. Dietrich A, et al. **Plant J** 1996 Nov;10(5):913–8
Inefficient and incorrect processing of the Ac transposase transcript in iae1 and wild–type Arabidopsis thaliana. Jarvis P, et al. **Plant J** 1997 May;11(5):921–31
H–protein of the glycine cleavage system in Flaveria: alternative splicing of the pre–mRNA occurs exclusively in advanced C4 species of the genus. Kopriva S, et al. **Plant J** 1996 Aug;10(2):369–73
Generative cells of Lilium longiflorum possess translatable mRNA and functional protein synthesis machinery. Blomstedt CK, et al. **Plant Mol Biol** 1996 Aug;31(5):1083–6
Interaction of rice and human SRP19 polypeptides with signal recognition particle RNA. Chittenden K, et al. **Plant Mol Biol** 1997 Jun;34(3):507–15
mRNA stability and localisation of the low–temperature–responsive barley gene family blt14. Phillips JR, et al. **Plant Mol Biol** 1997 Apr;33(6):1013–23
Occurrence of plastid RNA editing in all major lineages of land plants. Freyer R, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6285–90
Evidence for light/redox–regulated splicing of psbA pre–RNAs in Chlamydomonas chloroplasts. Deshpande NN, et al. **RNA** 1997 Jan;3(1):37–48

PHYSIOLOGY

Nontarget DNA sequences reduce the transgene length necessary for RNA–mediated tospovirus resistance in transgenic plants. Pang SZ, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8261–6

RNA, POLYADENYLATED see **RNA, MESSENGER**

RNA POLYMERASE I

BIOSYNTHESIS

DNA length is a critical parameter for eukaryotic transcription in vivo. Krebs JE, et al. **Mol Cell Biol** 1996 Oct;16(10):5821–9
Rpo26p, a subunit common to yeast RNA polymerases, is essential for the assembly of RNA polymerases I and II and for the stability of the largest subunits of these enzymes. Nouraini S, et al. **Mol Cell Biol** 1996 Nov;16(11):5985–96

CHEMISTRY

A shared subunit belongs to the eukaryotic core RNA polymerase. Lanzendörfer M, et al. **Genes Dev** 1997 Apr 15;11(8):1037–47
A34.5, a nonessential component of yeast RNA polymerase I, cooperates with subunit A14 and DNA topoisomerase I to produce a functional rRNA synthesis machine. Gadal O, et al. **Mol Cell Biol** 1997 Apr;17(4):1787–95

GENETICS

Relative distribution of rDNA and proteins of the RNA polymerase I transcription machinery at chromosomal NORs. Suja JA, et al. **Chromosoma** 1997 Jun; 105(7–8):459–69
The Xenopus RNA polymerase I transcription factor, UBF, has a role in transcriptional enhancement distinct from that at the promoter. McStay B, et al. **EMBO J** 1997 Jan 15; 16(2):396–405
Epigenetic silencing of RNA polymerase I transcription: a role for DNA methylation and histone modification in nucleolar dominance. Chen ZJ, et al. **Genes Dev** 1997 Aug 15;11(16):2124–36
Molecular cloning of RPA2, the gene encoding the second largest subunit of mouse RNA polymerase I. Seither P, et al. **Genomics** 1996 Oct 1;37(1):135–9
Identification of previously unrecognized common elements in eukaryotic promoters. A ribosomal RNA gene initiator element for RNA polymerase I. Radebaugh CA, et al. **J Biol Chem** 1997 Feb 7;272(6):3141–4
Mouse RNA polymerase I 16–kDa subunit able to associate with 40–kDa subunit is a homolog of yeast AC19 subunit of RNA polymerases I and III. Yao Y, et al. **J Biol Chem** 1996 Dec 20;271(51):32881–5
A murine RNA polymerase I promoter inserted into the herpes simplex virus type 1 genome is functional during lytic, but not latent, infection. Lachmann RH, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2575–82
Identification of the gene coding for the largest subunit of RNA polymerase I (A) of Drosophila melanogaster. Knackmuss S, et al. **Mol Gen Genet** 1997 Feb 20; 253(5):529–34
TFIIS binds to mouse RNA polymerase I and stimulates transcript elongation and hydrolytic cleavage of nascent rRNA. Schnapp G, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):412–9
Molecular cloning and characterization of the cDNA encoding the largest subunit of mouse RNA polymerase I. Seither P, et al. **Mol Gen Genet** 1997 Jun;255(2):180–6
Regulation of RNA polymerases I and III by the

retinoblastoma protein: a mechanism for growth control? White RJ. **Trends Biochem Sci** 1997 Mar;22(3):77–80 (33 ref.)

IMMUNOLOGY

Molecular cloning and characterization of the cDNA encoding the largest subunit of mouse RNA polymerase I. Seither P, et al. **Mol Gen Genet** 1997 Jun;255(2):180–6

ISOLATION & PURIFICATION

Purification, assay, and properties of RNA polymerase I and class I-specific transcription factors in mouse. Schnapp A, et al. **Methods Enzymol** 1996;273:233–48 (16 ref.)

METABOLISM

Constitutive and strong association of PAF53 with RNA polymerase I. Seither P, et al. **Chromosoma** 1997 Sep; 106(4):216–25

Localization of yeast RNA polymerase I core subunits by immunoelectron microscopy. Klinger C, et al. **EMBO J** 1996 Sep 2;15(17):4643–53

RNA polymerase I transcription on nucleosomal templates: the transcription termination factor TTF-I induces chromatin remodeling and relieves transcriptional repression. Längst G, et al. **EMBO J** 1997 Feb 17; 16(4):760–8

Identification of a transcript release activity acting on ternary transcription complexes containing murine RNA polymerase I. Mason SW, et al. **EMBO J** 1997 Jan 2; 16(1):163–72

Staf, a promiscuous activator for enhanced transcription by RNA polymerases II and III. Schaub M, et al. **EMBO J** 1997 Jan 2;16(1):173–81

RNA polymerase I from S. cerevisiae depends on an additional factor to release terminated transcripts from the template. Tschochne H, et al. **FEBS Lett** 1997 Jun 30; 410(2–3):461–6

A shared subunit belongs to the eukaryotic core RNA polymerase. Lanzendörfer M, et al. **Genes Dev** 1997 Apr 15;11(8):1037–47

The role of TBP in rDNA transcription by RNA polymerase I in Saccharomyces cerevisiae: TBP is required for upstream activation factor-dependent recruitment of core factor. Steffan JS, et al. **Genes Dev** 1996 Oct 15; 10(20):2551–63

SV40 large T antigen binds to the TBP-TAF(I) complex SL1 and coactivates ribosomal RNA transcription. Zhai W, et al. **Genes Dev** 1997 Jun 15;11(12):1605–17

Cytokinin induction of RNA polymerase I transcription in Arabidopsis thaliana. Gaudino RJ, et al. **J Biol Chem** 1997 Mar 7;272(10):6799–804

Transcript cleavage in an RNA polymerase I elongation complex. Evidence for a dissociable activity similar to but distinct from TFIIS. Labhart P. **J Biol Chem** 1997 Apr 4;272(14):9055–61

RNA polymerase I transcription termination: similar mechanisms are employed by yeast and mammals. Mason SW, et al. **J Mol Biol** 1997 May 2;268(2):229–34

Cloning and characterization of the beta subunit of human proximal sequence element-binding transcription factor and its involvement in transcription of small nuclear RNA genes by RNA polymerases II and III. Bai L, et al. **Mol Cell Biol** 1996 Oct;16(10):5419–26

Upstream binding factor stabilizes Rib 1, the TATA-binding-protein-containing Xenopus laevis RNA polymerase I transcription factor, by multiple protein interactions in a DNA-independent manner. Bodeker M, et al. **Mol Cell Biol** 1996 Oct;16(10):5572–8

A34.5, a nonessential component of yeast RNA polymerase I, cooperates with subunit A14 and DNA topoisomerase I to produce a functional rRNA synthesis machine. Gadal O, et al. **Mol Cell Biol** 1997 Apr;17(4):1787–95

A novel 66-kilodalton protein complexes with Rrn6, Rrn7, and TATA-binding protein to promote polymerase I transcription initiation in Saccharomyces cerevisiae. Lin CW, et al. **Mol Cell Biol** 1996 Nov;16(11):6436–43

Mechanism of repression of RNA polymerase I transcription by the retinoblastoma protein. Voit R, et al. **Mol Cell Biol** 1997 Aug;17(8):4230–7

Estrogen-induced changes in rRNA accumulation and RNA polymerase I activity in the rat pituitary: correlation with pituitary tumor susceptibility. Ying C, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):207–13

TFIIS binds to mouse RNA polymerase I and stimulates transcript elongation and hydrolytic cleavage of nascent rRNA. Schnapp G, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):412–9

Species-specificity of rRNA gene transcription in plants manifested as a switch in RNA polymerase specificity. Doelling JH, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4725–32

Ribosomal transcription units integrated via T-DNA transformation associate with the nucleolus and do not require upstream repeat sequences for activity in Arabidopsis thaliana. Wanzenböck EM, et al. **Plant J** 1997 May;11(5):1007–16

Cloning of murine RNA polymerase I-specific TAF factors: conserved interactions between the subunits of the species-specific transcription initiation factor TIF-IB/SL1. Heix J, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4; 94(5):1733–8

A novel RNA polymerase I-dependent RNase activity that shortens nascent transcripts from the 3' end. Tschochner H. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12914–9

Regulation of RNA polymerases I and III by the retinoblastoma protein: a mechanism for growth control? White RJ. **Trends Biochem Sci** 1997 Mar;22(3):77–80 (33 ref.)

RNA POLYMERASE II

ANALYSIS

Detection of RNA polymerase II promoters and polyadenylation sites in human DNA sequence. Matis S, et al. **Comput Chem** 1996 Mar;20(1):135–40

Analysis of transcription by RNA polymerase II in vitro [editorial] Prywes R. **Methods** 1997 Jul;12(3):189–91

ANTAGONISTS & INHIBITORS

The H3/H4 tetramer blocks transcript elongation by RNA polymerase II in vitro. Chang CH, et al. **J Biol Chem** 1997 Sep 12;272(37):23427–34

In vitro transcription of human T-cell leukemia virus type 1 is RNA polymerase II dependent. Lenzmeier BA, et al. **J Virol** 1997 Mar;71(3):2577–80

BIOSYNTHESIS

DNA length is a critical parameter for eukaryotic transcription in vivo. Krebs JE, et al. **Mol Cell Biol** 1996 Oct;16(10):5821–9

Rpo26p, a subunit common to yeast RNA polymerases, is essential for the assembly of RNA polymerases I and II and for the stability of the largest subunits of these enzymes. Nouraini S, et al. **Mol Cell Biol** 1996 Nov;16(11):5985–96

CHEMISTRY

Subunit composition of RNA polymerase II from the fission yeast Schizosaccharomyces pombe. Sakurai H, et al. **Gene** 1996 Nov 21;180(1–2):63–7

Molecular assembly of RNA polymerase II from the fission yeast Schizosaccharomyces pombe: subunit-subunit contact network involving Rpb5. Miyao T, et al. **Genes Cells** 1996 Sep;1(9):843–54

Structural redesign and stabilization of the overlapping tandem beta-turns of RNA polymerase II. Dobbins JR, et al. **Int J Pept Protein Res** 1996 Apr;47(4):260–8

Interactions between the human RNA polymerase II subunits. Acker J, et al. **J Biol Chem** 1997 Jul 4; 272(27):16815–21

Identification of Rox3 as a component of mediator and RNA polymerase II holoenzyme. Gustafsson CM, et al. **J Biol Chem** 1997 Jan 3;272(1):48–50

Phosphorylation of the carboxy-terminal repeat domain in RNA polymerase II by cyclin-dependent kinases is sufficient to inhibit transcription. Gebara MM, et al. **J Cell Biochem** 1997 Mar 1;64(3):390–402

Assaying CTD kinases in vitro and phosphorylation-modulated properties of RNA polymerase II in vivo. Morris DP, et al. **Methods** 1997 Jul;12(3):264–75 (41 ref.)

Yeast RNA polymerase II holoenzyme. Li Y, et al. **Methods Enzymol** 1996;273:172–5 (11 ref.)

Heat-shock inactivation of the TFIIH-associated kinase and change in the phosphorylation sites on the C-terminal domain of RNA polymerase II. Dubois MF, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):694–700

The nuclear matrix protein p255 is a highly phosphorylated form of RNA polymerase II largest subunit which associates with spliceosomes. Vincent M, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4649–52

BRCA1 is a component of the RNA polymerase II holoenzyme. Scully R, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5605–10

Pieces of the puzzle: assembling the preinitiation complex of Pol II. Ghosh G, et al. **Structure** 1996 Aug 15;4(8):891–5 (19 ref.)

GENETICS

Requirement for phosphorylation of RNA polymerase II C-terminal domain in transcription is both transcript length and promoter dependent. Song CZ. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):810–6

Transcriptional competition and homeosis in Drosophila. Burke LP, et al. **Biochem Genet** 1996 Feb;34(1–2):45–59

Human gene for the RNA polymerase II seventh subunit (hsRPB7): structure, expression and chromosomal localization. Schoen TJ, et al. **Biochim Biophys Acta** 1997 Jul 17;1353(1):39–49

Transcription of DmRP140, the gene coding for the second-largest subunit of RNA polymerase II. Wiedemann M, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):282–6

PromFD 1.0: a computer program that predicts eukaryotic pol II promoters using strings and IMD matrices. Chen QK, et al. **Comput Appl Biosci** 1997 Feb;13(1):29–35

Transcription: building an initiation machine. Travers A. **Curr Biol** 1996 Apr 1;6(4):401–3 (22 ref.)

Repression of RNA polymerase II and III transcription during M phase of the cell cycle. Leresche A, et al. **Exp Cell Res** 1996 Dec 15;229(2):282–8

Protein interaction cloning in yeast of the mouse third largest RNA polymerase II subunit, mRPB31. Korobko IV, et al. **Gene** 1997 Jan 31;185(1):1–4

Isolation and characterization of cDNA encoding mouse RNA polymerase II subunit RPB14. Nishi Y, et al. **Gene** 1997 Mar 18;187(2):165–70

Cloning and sequencing for the largest subunit of Chinese hamster RNA polymerase II gene: identification of a mutation related to abnormal induction of sister chromatid exchanges. Sugaya K, et al. **Gene** 1997 Jul 31;194(2):267–72

GAL4-VP16 stimulates two RNA polymerase II promoters primarily at the preinitiation complex assembly step. Jacob GA, et al. **Gene Expr** 1996;5(3):193–203

Distribution of pre-mRNA splicing factors at sites of RNA polymerase II transcription. Neugebauer KM, et al. **Genes Dev** 1997 May 1;11(9):1148–59

Underproduction of the largest subunit of RNA polymerase II causes temperature sensitivity, slow growth, and inositol auxotrophy in Saccharomyces cerevisiae. Archambault J, et al. **Genetics** 1996 Mar;142(3):737–47

Mutations in the RNA polymerase II transcription machinery suppress the hyperrecombination mutant hpr1 delta of Saccharomyces cerevisiae. Fan HY, et al. **Genetics** 1996 Mar;142(3):749–59

Suppression analysis reveals a functional difference between the serines in positions two and five in the consensus sequence of the C-terminal domain of yeast RNA polymerase II. Yuryev A, et al. **Genetics** 1996 Jun; 143(2):661–71

RNA polymerase II dependent genes that do not code for protein. Lakhotia SC. **Indian J Biochem Biophys** 1996 Apr; 33(2):93–102 (132 ref.)

Transcription in the early diverging eukaryote Trichomonas vaginalis: an unusual RNA polymerase II and alpha-amanitin-resistant transcription of protein-coding genes. Quon DVK, et al. **J Mol Evol** 1996 Sep;43(3):253–62

Association of herpes simplex virus regulatory protein ICP22 with transcriptional complexes containing EAP, ICP4, RNA polymerase II, and viral DNA requires posttranslational modification by the U(L)13 proteinkinase. Leopardi R, et al. **J Virol** 1997 Feb;71(2):1133–9

Repression of host RNA polymerase II transcription by herpes simplex virus type 1. Spencer CA, et al. **J Virol** 1997 Mar;71(3):2031–40

Analysis of open complex formation during RNA polymerase II transcription initiation using heteroduplex templates and potassium permanganate probing. Holstege FC, et al. **Methods** 1997 Jul;12(3):203–11 (46 ref.)

Yeast RNA polymerase II transcription reconstituted with purified proteins. Myers LC, et al. **Methods** 1997 Jul; 12(3):212–6

Assays for investigating transcription by RNA polymerase II in vitro. Reines D, et al. **Methods** 1997 Jul;12(3):192–202 (75 ref.)

Phylogenetic relationships between Leishmania, Viannia and Sauroleishmania inferred from comparison of a variable domain within the RNA polymerase II largest subunit gene. Croan D, et al. **Mol Biochem Parasitol** 1996 Jul; 79(1):97–102

A yeast TATA-binding protein mutant that selectively enhances gene expression from weak RNA polymerase II promoters. Blair WS, et al. **Mol Cell Biol** 1997 May; 17(5):2888–96

Dual requirement for the yeast MMS19 gene in DNA repair and RNA polymerase II transcription. Lauder S, et al. **Mol Cell Biol** 1996 Dec;16(12):6783–93

Cross-competition for TATA-binding protein between TATA boxes of the selenocysteine tRNA[Ser]Sec promoter and RNA polymerase II promoters. Park JM, et al. **Mol Cells** 1997 Feb 28;7(1):72–7

Mechanisms of transcriptional regulation and neural gene expression. Tamura T, et al. **Neurochem Int** 1996 Dec; 29(6):573–81 (61 ref.)

Reduced RNA polymerase II transcription in extracts of cockayne syndrome and xeroderma pigmentosum/Cockayne syndrome cells. Dianov GL, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3636–42

Similar upstream regulatory elements of genes that encode the two largest subunits of RNA polymerase II in Saccharomyces cerevisiae. Jansma DB, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4543–51

RNA polymerase II stalled at a thymine dimer: footprint and effect on excision repair. Selby CP, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):787–93

UV-induced ubiquitination of RNA polymerase II: a novel modification deficient in Cockayne syndrome cells. Bregman DB, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11586–90

A role for TFIIH in controlling the activity of early RNA polymerase II elongation complexes. Dvir A, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9006–10

RAP74 induces promoter contacts by RNA polymerase II upstream and downstream of a DNA bend centered on the TATA box. Forget D, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7150–5

Activation of RNA polymerase II by topologically linked DNA-tracking proteins. Ouhammouch M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6718–23

The origin of red algae: implications for plastid evolution. Stiller JW, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4520–5

DNA damage-dependent transcriptional arrest and termination of RNA polymerase II elongation complexes

in DNA template containing HIV-1 promoter. Wang Z, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6688–93

In vitro characterization of mutant yeast RNA polymerase II with reduced binding for elongation factor TFIIS. Wu J, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11552–7

Mediator of transcriptional regulation [see comments] Björklund S, et al. **Trends Biochem Sci** 1996 Sep;21(9):335–7 (25 ref.). Comment in: Trends Biochem Sci 1996 Sep;21(9):325–6.

The role of general initiation factors in transcription by RNA polymerase II. Roeder RG. **Trends Biochem Sci** 1996 Sep; 21(9):327–35 (65 ref.)

IMMUNOLOGY

Autoimmunity to RNA polymerase II is focused at the carboxyl terminal domain of the large subunit. Hirakata M, et al. **Arthritis Rheum** 1996 Nov;39(11):1886–91

Anti-RNA polymerase antibodies in systemic sclerosis (SSc): association with anti-topoisomerase I antibodies and identification of autoreactive subunits of RNA polymerase II. Harvey GR, et al. **Clin Exp Immunol** 1996 Sep; 105(3):468–74

ISOLATION & PURIFICATION

Purification and characterization of an RNA polymerase II phosphatase from yeast. Chambers RS, et al. **J Biol Chem** 1996 Oct 4;271(40):24498–504

Affinity purification of a human RNA polymerase II complex using monoclonal antibodies against transcription factor IIF. Cho H, et al. **J Biol Chem** 1997 Apr 25; 272(17):11495–502

Phosphorylation of the carboxy-terminal repeat domain in RNA polymerase II by cyclin-dependent kinases is sufficient to inhibit transcription. Gebara MM, et al. **J Cell Biochem** 1997 Mar 1;64(3):390–402

Activator-dependent transcription by mammalian RNA polymerase II: in vitro reconstitution with general transcription factors and cofactors. Ge H, et al. **Methods Enzymol** 1996;274:57–71

Purification of yeast RNA polymerase II holoenzymes. Koleske AJ, et al. **Methods Enzymol** 1996;273:176–84 (12 ref.)

Purification of human RNA polymerase II and general transcription factors. Maldonado E, et al. **Methods Enzymol** 1996;274:72–100

Purification and analysis of functional preinitiation complexes. Roberts SG, et al. **Methods Enzymol** 1996; 273:110–8 (10 ref.)

Immunoaffinity purification of RNA polymerase II and transcription factors using polyol-responsive monoclonal antibodies. Thompson NE, et al. **Methods Enzymol** 1996; 274:513–26

METABOLISM

Ongoing activity of RNA polymerase II precludes chromatin collapse and DNA fragmentation in Chinese hamster ovary cells. Damgaard J, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):677–83

A novel SR-related protein specifically interacts with the carboxy-terminal domain (CTD) of RNA polymerase II through a conserved interaction domain. Tanner S, et al. **Biol Chem** 1997 Jun;378(6):565–71

DNA-binding studies of XSPTSPSZ, derivatives of the intercalating heptad repeat of RNA polymerase II. Harding MM, et al. **Biopolymers** 1997 Oct 5;42(4):387–98

RNA polymerase II holoenzyme recruitment is sufficient to remodel chromatin at the yeast PHO5 promoter. Gaudreau L, et al. **Cell** 1997 Apr 4;89(1):55–62

RNA helicase A mediates association of CBP with RNA polymerase II. Nakajima T, et al. **Cell** 1997 Sep 19; 90(6):1107–12

Promoter proximal sequences modulate RNA polymerase II elongation by a novel mechanism. Reeder TC, et al. **Cell** 1996 Nov 15;87(4):767–77

Pre-mRNA processing and the CTD of RNA polymerase II: the tail that wags the dog? Steinmetz EJ. **Cell** 1997 May 16;89(4):491–4 (21 ref.)

Transcriptional promiscuity in testes [letter] Schmidt EE. **Curr Biol** 1996 Jul 1;6(7):768–9

Mechanism and regulation of transcriptional elongation and termination by RNA polymerase II. Shilatifard A, et al. **Curr Opin Genet Dev** 1997 Apr;7(2):199–204

Quantification of actively transcribing RNA polymerase B molecules in human sperm chromatin and the effect of prostaglandin E1. Pironcheva GL, et al. **Cytobios** 1996; 88(352):7–10

Transcriptionally repressed germ cells lack a subpopulation of phosphorylated RNA polymerase II in early embryos of Caenorhabditis elegans and Drosophila melanogaster. Seydoux G, et al. **Development** 1997 Jun;124(11):2191–201

Distinct activated and non-activated RNA polymerase II complexes in yeast. Akhtar A, et al. **EMBO J** 1996 Sep 2;15(17):4654–64

Transcriptional termination signals for RNA polymerase II in fission yeast. Birse CE, et al. **EMBO J** 1997 Jun; 16(12):3633–43

Purification of a Tat-associated kinase reveals a TFIIH complex that modulates HIV-1 transcription. García-Martínez LF, et al. **EMBO J** 1997 May 15; 16(10):2836–50

Staf, a promiscuous activator for enhanced transcription by RNA polymerases II and III. Schaub M, et al. **EMBO J** 1997 Jan 2;16(1):173–81

Phosphorylation of human general transcription factors TATA-binding protein and transcription factor IIB by DNA-dependent protein kinase—synergistic stimulation of RNA polymerase II basal transcription in vitro. Chibazakura T, et al. **Eur J Biochem** 1997 Aug 1; 247(3):1166–73

The presence of two tightly bound Zn2+ ions is essential for the structural and functional integrity of yeast RNA polymerase II. Mayalagu S, et al. **Gene** 1997 Apr 29; 190(1):77–85

Specific binding sites for a pol III transcriptional repressor and pol II transcription factor YY1 within the internucleosomal spacer region in primate Alu repetitive elements. Humphrey GW, et al. **Gene Expr** 1996; 6(3):151–68

Gene activation by recruitment of the RNA polymerase II holoenzyme. Farrell S, et al. **Genes Dev** 1996 Sep 15; 10(18):2359–67

The general transcription factors of RNA polymerase II. Orphanides G, et al. **Genes Dev** 1996 Nov 1;10(21):2657–83 (281 ref.)

Transcription elongation through DNA arrest sites. A multistep process involving both RNA polymerase II subunit RPB9 and TFIIS. Awrey DE, et al. **J Biol Chem** 1997 Jun 6;272(23):14747–54

Tyrosine phosphorylation of RNA polymerase II carboxyl-terminal domain by the Abl-related gene product. Baskaran R, et al. **J Biol Chem** 1997 Jul 25; 272(30):18905–9

Requirements for RNA polymerase II carboxyl-terminal domain for activated transcription of human retroviruses human T-cell lymphotropic virus I and HIV-1. Chun RF, et al. **J Biol Chem** 1996 Nov 1;271(44):27888–94

Promoter escape by RNA polymerase II. A role for an ATP cofactor in suppression of arrest by polymerase at promoter-proximal sites. Dvir A, et al. **J Biol Chem** 1996 Sep 20;271(38):23352–6

Interaction of WW domains with hematopoietic transcription factor p45/NF-E2 and RNA polymerase II. Gavva NR, et al. **J Biol Chem** 1997 Sep 26;272(39):24105–8

Reconstitution of yeast and Arabidopsis RNA polymerase alpha-like subunit heterodimers. Larkin RM, et al. **J Biol Chem** 1997 May 9;272(19):12824–30

Modulation of RNA polymerase II elongation efficiency by C-terminal heptapeptide repeat domain kinase I. Lee JM, et al. **J Biol Chem** 1997 Apr 25;272(17):10990–3

Hepatitis B virus X protein is a transcriptional modulator that communicates with transcription factor IIB and the RNA polymerase II subunit 5. Lin Y, et al. **J Biol Chem** 1997 Mar 14;272(11):7132–9

Control of RNA polymerase II elongation potential by a novel carboxyl-terminal domain kinase. Marshall NF, et al. **J Biol Chem** 1996 Oct 25;271(43):27176–83

Interaction of elongation factors TFIIS and elongin A with a human RNA polymerase II holoenzyme capable of promoter-specific initiation and responsive to transcriptional activators. Pan G, et al. **J Biol Chem** 1997 Sep 26;272(39):24563–71

Elongation factor SII contacts the 3'-end of RNA in the RNA polymerase II elongation complex. Powell W, et al. **J Biol Chem** 1996 Sep 13;271(37):22301–4

Translocation and transcriptional arrest during transcript elongation by RNA polymerase II. Samkurashvili I, et al. **J Biol Chem** 1996 Sep 20;271(38):23495–505

Structure and function of RNA polymerase II elongation factor ELL. Identification of two overlapping ELL functional domains that govern its interaction with polymerase and the ternary elongation complex. Shilatifard A, et al. **J Biol Chem** 1997 Aug 29;272(35):22355–63

A functional interaction between the carboxy-terminal domain of RNA polymerase II and pre-mRNA splicing. Du L, et al. **J Cell Biol** 1997 Jan 13;136(1):5–18

Splicing factors associate with hyperphosphorylated RNA polymerase II in the absence of pre-mRNA. Kim E, et al. **J Cell Biol** 1997 Jan 13;136(1):19–28

Nuclear distribution of transcription factors in relation to sites of transcription and RNA polymerase II. Grande MA, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1781–91

A RNA polymerase III-based two-hybrid system to study RNA polymerase II transcriptional regulators. Marsolier MC, et al. **J Mol Biol** 1997 May 2;268(2):243–9

Replication of flock house virus RNAs from primary transcripts made in cells by RNA polymerase II. Johnson KL, et al. **J Virol** 1997 Apr;71(4):3323–7

A human primary T-lymphocyte-derived human immunodeficiency virus type 1 Tat-associated kinase phosphorylates the C-terminal domain of RNA polymerase II and induces CAK activity. Nekhai S, et al. **J Virol** 1997 Oct;71(10):7436–41

Poliovirus-encoded protease 2APro cleaves the TATA-binding protein but does not inhibit host cell RNA polymerase II transcription in vitro. Yalamanchili P, et al. **J Virol** 1997 Sep;71(9):6881–6

Assaying CTD kinases in vitro and phosphorylation-modulated properties of RNA polymerase II in vivo. Morris DP, et al. **Methods** 1997 Jul;12(3):264–75 (41 ref.)

Purification of RNA polymerase II general transcription factors from rat liver. Conaway RC, et al. **Methods Enzymol** 1996;273:194–207 (18 ref.)

Phosphorylation of mammalian RNA polymerase II. Dahmus ME. **Methods Enzymol** 1996;273:185–93 (19 ref.)

Basal and activated in vitro transcription in plants by RNA polymerase II and III. Fan H, et al. **Methods Enzymol** 1996; 273:268–77 (12 ref.)

Activator-dependent transcription by mammalian RNA polymerase II: in vitro reconstitution with general transcription factors and cofactors. Ge H, et al. **Methods Enzymol** 1996;274:57–71

Global steps during initiation by RNA polymerase II. Gralla JD. **Methods Enzymol** 1996;273:99–110 (30 ref.)

Interaction of von Hippel-Lindau tumor suppressor gene product with elongin. Pause A, et al. **Methods Enzymol** 1996;274:436–41

Rigorous and quantitative assay of transcription in vitro. Zhang H, et al. **Methods Enzymol** 1996;273:86–99 (39 ref.)

Nucleosomal structures of c-myc promoters with transcriptionally engaged RNA polymerase II. Albert T, et al. **Mol Cell Biol** 1997 Aug;17(8):4363–71

Cloning and characterization of the beta subunit of human proximal sequence element-binding transcription factor and its involvement in transcription of small nuclear RNA genes by RNA polymerases II and III. Bai L, et al. **Mol Cell Biol** 1996 Oct;16(10):5419–26

Phosphorylation of the RNA polymerase II largest subunit during Xenopus laevis oocyte maturation. Bellier S, et al. **Mol Cell Biol** 1997 Mar;17(3):1434–40

The human immunodeficiency virus transactivator Tat interacts with the RNA polymerase II holoenzyme. Cujec TP, et al. **Mol Cell Biol** 1997 Apr;17(4):1817–23

A transcriptional mediator protein that is required for activation of many RNA polymerase II promoters and is conserved from yeast to humans. Lee YC, et al. **Mol Cell Biol** 1997 Aug;17(8):4622–32

Analyses of promoter-proximal pausing by RNA polymerase II on the hsp70 heat shock gene promoter in a Drosophila nuclear extract. Li B, et al. **Mol Cell Biol** 1996 Oct; 16(10):5433–43

Mitotic repression of RNA polymerase II transcription is accompanied by release of transcription elongation complexes. Parsons GG, et al. **Mol Cell Biol** 1997 Oct; 17(10):5791–802

Cdc73p and Paf1p are found in a novel RNA polymerase II-containing complex distinct from the Srbp-containing holoenzyme. Shi X, et al. **Mol Cell Biol** 1997 Mar; 17(3):1160–9

CA150, a nuclear protein associated with the RNA polymerase II holoenzyme, is involved in Tat-activated human immunodeficiency virus type 1 transcription. Suñé C, et al. **Mol Cell Biol** 1997 Oct;17(10):6029–39

Accurate positioning of RNA polymerase II on a natural TATA-less promoter is independent of TATA-binding-protein-associated factors and initiator-binding proteins. Weis L, et al. **Mol Cell Biol** 1997 Jun;17(6):2973–84

Glutamic acid-371 of the barnase homology domain in RNA polymerase II is not required for SII-activated RNA cleavage. Powell W, et al. **Mol Gen Genet** 1997 Jan 27; 253(4):507–11

A yeast whole cell extract supports nucleotide excision repair and RNA polymerase II transcription in vitro. Wang Z, et al. **Mutat Res** 1996 Sep 2;364(1):33–41

The C-terminal domain of RNA polymerase II couples mRNA processing to transcription. McCracken S, et al. **Nature** 1997 Jan 23;385(6614):357–61

Enhanced processivity of RNA polymerase II triggered by Tat-induced phosphorylation of its carboxy-terminal domain. Parada CA, et al. **Nature** 1996 Nov 28; 384(6607):375–8

A serine/arginine-rich nuclear matrix cyclophilin interacts with the C-terminal domain of RNA polymerase II. Bourquin JP, et al. **Nucleic Acids Res** 1997 Jun 1; 25(11):2055–61

Species-specificity of rRNA gene transcription in plants manifested as a switch in RNA polymerase specificity. Doelling JH, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4725–32

Heat-shock inactivation of the TFIIH-associated kinase and change in the phosphorylation sites on the C-terminal domain of RNA polymerase II. Dubois MF, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):694–700

3' Processing and termination of mouse histone transcripts synthesized in vitro by RNA polymerase II. Gu X, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3797–805

The nuclear matrix protein p255 is a highly phosphorylated form of RNA polymerase II largest subunit which associates with spliceosomes. Vincent M, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4649–52

Reduced RNA polymerase II transcription in intact and permeabilized Cockayne syndrome group B cells. Balajee AS, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4306–11

UV-induced ubiquitination of RNA polymerase II: a novel modification deficient in Cockayne syndrome cells. Bregman DB, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11586–90

Functional antagonism between RNA polymerase II holoenzyme and global negative regulator NC2 in vivo. Gadbois EL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3145–50

The large subunit of RNA polymerase II is a substrate of

the Rsp5 ubiquitin-protein ligase. Huibregtse JM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3656-61
Fidelity of RNA polymerase II transcription controlled by elongation factor TFIIS. Jeon C, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13677-82
RNA polymerase II transcription initiation: a structural view. Nikolov DB, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):15-22
Evidence for a mediator cycle at the initiation of transcription. Svejstrup JQ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6075-8
Transitions in the coupling of transcription and nucleotide excision repair within RNA polymerase II-transcribed genes of Saccharomyces cerevisiae. Tijsterman M, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8027-32
In vitro characterization of mutant yeast RNA polymerase II with reduced binding for elongation factor TFIIS. Wu J, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11552-7
General transcription factors for RNA polymerase II. Conaway RC, et al. **Prog Nucleic Acid Res Mol Biol** 1997; 56:327-46 (170 ref.)
A novel collection of accessory factors associated with yeast RNA polymerase II. Wade PA, et al. **Protein Expr Purif** 1996 Aug;8(1):85-90
Secondary structure of the nascent 7S L RNA mediates efficient transcription by RNA polymerase III. Emde G, et al. **RNA** 1997 May;3(5):538-49
Mediator of transcriptional regulation [see comments] Björklund S, et al. **Trends Biochem Sci** 1996 Sep;21(9):335-7 (25 ref.). Comment in: Trends Biochem Sci 1996 Sep;21(9):325-6.
The RNA polymerase II general elongation factors. Reines D, et al. **Trends Biochem Sci** 1996 Sep;21(9):351-5 (37 ref.)
The role of general initiation factors in transcription by RNA polymerase II. Roeder RG. **Trends Biochem Sci** 1996 Sep; 21(9):327-35 (65 ref.)
Gene expression: increasing evidence for a transcriptosome. Halle JP, et al. **Trends Genet** 1996 May;12(5):161-3 (22 ref.)
Surprising function of the three influenza viral polymerase proteins: selective protection of viral mRNAs against the cap-snatching reaction catalyzed by the same polymerase proteins. Shih SR, et al. **Virology** 1996 Dec 15;226(2):430-5

PHYSIOLOGY

RNA polymerase II holoenzyme and transcriptional regulation. Greenblatt J. **Curr Opin Cell Biol** 1997 Jun; 9(3):310-9 (78 ref.)

RNA POLYMERASE III

RNA polymerase III and class III transcription factors from Saccharomyces cerevisiae. Huet J, et al. **Methods Enzymol** 1996;273:249-67 (70 ref.)

BIOSYNTHESIS

Purines are required at the 5' ends of newly initiated RNAs for optimal RNA polymerase III gene expression. Zecherle GN, et al. **Mol Cell Biol** 1996 Oct;16(10):5801-10

CHEMISTRY

Mapping the contacts of yeast TFIIIB and RNA polymerase III at various distances from the major groove of DNA by DNA photoaffinity labeling. Persinger J, et al. **J Biol Chem** 1996 Dec 20;271(51):33039-46

GENETICS

Phosphorylation of the human La antigen on serine 366 can regulate recycling of RNA polymerase III transcription complexes. Fan H, et al. **Cell** 1997 Mar 7;88(5):707-15
Expression of neural BC1 RNA: induction in murine tumours. Chen W, et al. **Eur J Cancer** 1997 Feb;33(2):288-92
Repression of RNA polymerase II and III transcription during M phase of the cell cycle. Leresche A, et al. **Exp Cell Res** 1996 Dec 15;229(2):282-8
Genes for murine Y1 and Y3 Ro RNAs have class 3 RNA polymerase III promoter structures and are unlinked on mouse chromosome 6. Farris AD, et al. **Gene** 1996 Sep 26;174(1):35-42
Identification of an autonomously initiating RNA polymerase III holoenzyme containing a novel factor that is selectively inactivated during protein synthesis inhibition. Wang Z, et al. **Genes Dev** 1997 Sep 15;11(18):2371-82
Evidence for a regulatory protein complex on RNA polymerase III promoter of human retroposons of Alu family. Kropotov AV, et al. **Genetica** 1996-97;98(3):223-33
RNA polymerase III defects suppress a conditional-lethal poly(A) polymerase mutation in Saccharomyces cerevisiae. Briggs MW, et al. **Genetics** 1996 Jul;143(3):1149-61
An RNA polymerase III-defective mutation in TATA-binding protein disrupts its interaction with a transcription factor IIIB subunit in drosophila cells. Vilalta A, et al. **J Biol Chem** 1997 Jul 18;272(29):18087-92
Mouse RNA polymerase I 16-kDa subunit able to associate with 40-kDa subunit is a homolog of yeast AC19 subunit of RNA polymerases I and III. Yao Y, et al. **J Biol Chem** 1996 Dec 20;271(51):32881-5
p53 inhibits RNA polymerase III-directed transcription in a promoter-dependent manner. Chesnokov I, et al. **Mol Cell Biol** 1996 Dec;16(12):7084-8
RNA polymerase III transcription from the human U6 and adenovirus type 2 VA1 promoters has different requirements for human BRF, a subunit of human TFIIIB. Mital R, et al. **Mol Cell Biol** 1996 Dec;16(12):7031-42
TATA-binding protein is limiting for both TATA-containing and TATA-lacking RNA polymerase III promoters in Drosophila cells. Trivedi A, et al. **Mol Cell Biol** 1996 Dec;16(12):6909-16
TFIIIC1 acts through a downstream region to stabilize TFIIIC2 binding to RNA polymerase III promoters. Wang Z, et al. **Mol Cell Biol** 1996 Dec;16(12):6841-50
Phylogenetic analysis of apiaceae subfamily apioideae using nucleotide sequences from the chloroplast rpoC1 intron. Downie SR, et al. **Mol Phylogenet Evol** 1996 Aug;6(1):1-18

METABOLISM

Phosphorylation of the human La antigen on serine 366 can regulate recycling of RNA polymerase III transcription complexes. Fan H, et al. **Cell** 1997 Mar 7;88(5):707-15
Mechanistic analysis of RNA polymerase III regulation by the retinoblastoma protein. Larminie CG, et al. **EMBO J** 1997 Apr 15;16(8):2061-71
RNA polymerase III interferes with Ty3 integration. Connolly CM, et al. **FEBS Lett** 1997 Apr 1;405(3):305-11
Specific binding sites for a pol III transcriptional repressor and pol II transcription factor YY1 within the internucleosomal spacer region in primate Alu repetitive elements. Humphrey GW, et al. **Gene Expr** 1996; 6(3):151-68
Three human RNA polymerase III-specific subunits form a subcomplex with a selective function in specific transcription initiation. Wang Z, et al. **Genes Dev** 1997 May 15;11(10):1315-26
Substrate specificity of the RNase activity of yeast RNA polymerase III. Bobkova EV, et al. **J Biol Chem** 1997 Sep 5;272(36):22832-9
RNA polymerase III transcription repressed by Rb through its interactions with TFIIIB and TFIIIC2. Chu WM, et al. **J Biol Chem** 1997 Jun 6;272(23):14755-61
Expression and purification of the RNA polymerase III transcription specificity factor IIIB70 from Saccharomyces cerevisiae and its cooperative binding with TATA-binding protein. Librizzi MD, et al. **J Biol Chem** 1996 Dec 20; 271(51):32695-701
A RNA polymerase III-based two-hybrid system to study RNA polymerase II transcriptional regulators. Marsolier MC, et al. **J Mol Biol** 1997 May 2;268(2):243-9
cDNAs derived from primary and small cytoplasmic Alu (scAlu) transcripts. Shaikh TH, et al. **J Mol Biol** 1997 Aug 15;271(2):222-34
Basal and activated in vitro transcription in plants by RNA polymerase II and III. Fan H, et al. **Methods Enzymol** 1996; 273:268-77 (12 ref.)
Lack of gene- and strand-specific DNA repair in RNA polymerase III-transcribed human tRNA genes. Dammann R, et al. **Mol Cell Biol** 1997 Jan;17(1):219-29
A carboxy-terminal basic region controls RNA polymerase III transcription factor activity of human La protein. Goodier JL, et al. **Mol Cell Biol** 1997 Oct;17(10):5823-32
Domains of the Brf component of RNA polymerase III transcription factor IIIB (TFIIIB): functions in assembly of TFIIIB-DNA complexes and recruitment of RNA polymerase to the promoter. Kassavetis GA, et al. **Mol Cell Biol** 1997 Sep;17(9):5299-306
Functional dissection of the B" component of RNA polymerase III transcription factor IIIB: a scaffolding protein with multiple roles in assembly and initiation of transcription. Kumar A, et al. **Mol Cell Biol** 1997 Apr; 17(4):1868-80
In vitro analysis of elongation and termination by mutant RNA polymerases with altered termination behavior. Shaaban SA, et al. **Mol Cell Biol** 1996 Nov;16(11):6468-76
Palindromic sequences preceding the terminator increase polymerase III template activity. Chu WM, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2077-82
Regulation of RNA polymerases I and III by the retinoblastoma protein: a mechanism for growth control? White RJ. **Trends Biochem Sci** 1997 Mar;22(3):77-80 (33 ref.)

RNA POLYMERASES

Molecular systematic studies of eubacteria, using sigma70-type sigma factors of group 1 and group 2. Gruber TM, et al. **J Bacteriol** 1997 Mar;179(5):1734-47
[Molecular evolution of human immunodeficiency virus type 1 and the reverse transcriptase from the virus] Doi H. **Uirusu** 1996 Jun;46(1):7-12 (11 ref.) **(Jpn)**
[Molecular dissection of the influenza virus RNA polymerase] Toyoda T. **Uirusu** 1996 Dec;46(2):131-43 (67 ref.) **(Jpn)**

ANALYSIS

The tobacco mosaic virus RNA polymerase complex contains a plant protein related to the RNA-binding subunit of yeast eIF-3. Osman TA, et al. **J Virol** 1997 Aug;71(8):6075-82

ANTAGONISTS & INHIBITORS

An automated high throughput filtration assay: application to polymerase inhibitor identification. Wu P, et al. **Anal Biochem** 1997 Feb 15;245(2):226-30
A novel antiviral agent which inhibits the endonuclease of influenza viruses. Tomassini JE, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1189-93
Specific inhibition of influenza virus RNA polymerase and nucleoprotein genes expression by liposomally endocapsulated antisense phosphorothioate oligonucleotides: penetration and localization of oligonucleotides in clone 76 cells. Hatta T, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):545-9
Inhibition of bacteriophage T7 RNA polymerase in vitro transcription by DNA-binding pyrrolo[2,1-c][1,4]benzodiazepines. Puvvada MS, et al. **Biochemistry** 1997 Mar 4;36(9):2478-84
Physical and biological characteristics of the antitumor drug actinomycin D analogues derivatized at N-methyl-L-valine residues. Takusagawa F, et al. **Biochemistry** 1996 Oct 8;35(40):13240-9
Onset of C. elegans gastrulation is blocked by inhibition of embryonic transcription with an RNA polymerase antisense RNA. Powell-Coffman JA, et al. **Dev Biol** 1996 Sep 15; 178(2):472-83
Stabilising oral poliovaccine at high ambient temperatures. Newman JF, et al. **Dev Biol Stand** 1996;87:103-11 (15 ref.)
Inhibition of influenza viral polymerases by minimal viral RNA decoys. Luo G, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2329-33

BIOSYNTHESIS

Regulation of RNA polymerase sigma subunit synthesis in Escherichia coli: intracellular levels of four species of sigma subunit under various growth conditions. Jishage M, et al. **J Bacteriol** 1996 Sep;178(18):5447-51
RNA polymerase beta mutations have reduced sigma70 synthesis leading to a hyper-temperature-sensitive phenotype of a sigma70 mutant. Zhou YN, et al. **J Bacteriol** 1997 Jul;179(13):4292-8
Cloning and characterization of a cDNA encoding a bacteriophage-type RNA polymerase from the higher plant Chenopodium album. Weihe A, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2319-25

CHEMISTRY

Epitope mapping using histidine-tagged protein fragments: application to Escherichia coli RNA polymerase sigma 70. Rao L, et al. **Anal Biochem** 1996 Oct 15;241(2):173-9
Identification of the template-binding cleft of T7 RNA polymerase as the site for promoter binding by photochemical cross-linking with psoralen. Sastry SS. **Biochemistry** 1996 Oct 22;35(42):13519-30
A multi-functional enzyme with RNA polymerase and RNase activities: molecular anatomy of influenza virus RNA polymerase. Ishihama A. **Biochimie** 1996; 78(11-12):1097-102 (46 ref.)
RNA polymerase slides home: pause and termination site recognition. Landick R. **Cell** 1997 Mar 21;88(6):741-4 (20 ref.)
Crystal structure of a sigma 70 subunit fragment from E. coli RNA polymerase. Malhotra A, et al. **Cell** 1996 Oct 4;87(1):127-36
Identification of a prime suspect. Buc H. **Curr Biol** 1997 Feb 1;7(2):R97-9 (13 ref.)
Roles of the influenza virus polymerase and nucleoprotein in forming a functional RNP structure. Klumpp K, et al. **EMBO J** 1997 Mar 17;16(6):1248-57
Mutations in the 1.1 subdomain of Escherichia coli sigma factor sigma70 and disruption of its overall structure. Gopal V, et al. **Eur J Biochem** 1997 Mar 1;244(2):613-8
Subunit assembly in vivo of Escherichia coli RNA polymerase: role of the amino-terminal assembly domain of alpha subunit. Kimura M, et al. **Genes Cells** 1996 Jun; 1(6):517-28
Molecular anatomy of the beta' subunit of the E. coli RNA polymerase: identification of regions involved in polymerase assembly. Luo J, et al. **Genes Cells** 1996 Sep; 1(9):819-27
Identification of the epitope for a highly cross-reactive monoclonal antibody on the major sigma factor of bacterial RNA polymerase. Breyer MJ, et al. **J Bacteriol** 1997 Feb; 179(4):1404-8
DNA-binding determinants of sigma 54 as deduced from libraries of mutations. Guo Y, et al. **J Bacteriol** 1997 Feb; 179(4):1239-45
Amino acid residues in the alpha-subunit C-terminal domain of Escherichia coli RNA polymerase involved in activation of transcription from the mtr promoter. Yang J, et al. **J Bacteriol** 1997 Oct;179(19):6187-91
Structural modules of the large subunits of RNA polymerase. Introducing archaebacterial and chloroplast split sites in the beta and beta' subunits of Escherichia coli RNA polymerase. Severinov K, et al. **J Biol Chem** 1996 Nov 1;271(44):27969-74
Flexible linker in the RNA polymerase alpha subunit facilitates the independent motion of the C-terminal activator contact domain. Jeon YH, et al. **J Mol Biol** 1997 Apr 11;267(4):953-62
Domain organization of the Escherichia coli RNA polymerase sigma 70 subunit. Severinova E, et al. **J Mol Biol** 1996 Nov 15;263(5):637-47
Purification of overproduced Escherichia coli RNA polymerase sigma factors by solubilizing inclusion bodies

and refolding from Sarkosyl. Burgess RR. **Methods Enzymol** 1996;273:145–9 (7 ref.)

Fluorescence spectroscopy analysis of active and regulatory sites of RNA polymerase. Chatterji D, et al. **Methods Enzymol** 1996;274:456–78

Sigma factors: purification and DNA binding. Dombroski AJ. **Methods Enzymol** 1996;273:134–44 (25 ref.)

Reconstitution of RNA polymerase. Fujita N, et al. **Methods Enzymol** 1996;273:121–30 (21 ref.)

Epitope mapping of monoclonal antibodies directed against subunits of RNA polymerase of Escherichia coli. Sharif KA, et al. **Methods Enzymol** 1996;274:503–13

Escherichia coli RNA polymerase holoenzyme: rapid reconstitution from recombinant alpha, beta, beta', and sigma subunits. Tang H, et al. **Methods Enzymol** 1996; 273:130–4 (19 ref.)

RNA polymerase sigma factors of Bacillus subtilis: purification and characterization. Tatti KM, et al. **Methods Enzymol** 1996;273:149–62 (20 ref.)

Analysis of the architecture of the transcription factor sigma N (sigma 54) and its domains by circular dichroism. Missailidis S, et al. **Mol Microbiol** 1997 May;24(3):653–64

Escherichia coli positive regulator OmpR has a large loop structure at the putative RNA polymerase interaction site [letter] Kondo H, et al. **Nat Struct Biol** 1997 Jan;4(1):28–31

Molecular analysis of RNA polymerase alpha subunit gene from Streptomyces coelicolor A3(2). Cho EJ, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4565–71

Identification of two separate domains in the influenza virus PB1 protein involved in the interaction with the PB2 and PA subunits: a model for the viral RNA polymerase structure. González S, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4456–63

sigma factor mutations affecting the sequence-selective interaction of RNA polymerase with –10 region single-stranded DNA. Huang X, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2603–9

Physical interference between escherichia coli RNA polymerase molecules transcribing in tandem enhances abortive synthesis and misincorporation. Kubori T, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2640–7

Cloning and characterization of a cDNA encoding a bacteriophage-type RNA polymerase from the higher plant Chenopodium album. Weihe A, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2319–25

A structure/function analysis of Escherichia coli RNA polymerase. Gross CA, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 Apr 29; 351(1339):475–82 (60 ref.)

Isolation and partial characterization of a novel psoralen–tyrosine photoconjugate from a photoreaction of psoralen with a natural protein. Sastry SS. **Photochem Photobiol** 1997 Jun;65(6):937–44

Two domains within sigmaN (sigma54) cooperate for DNA binding. Cannon WV, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5006–11

Conferring RNA polymerase activity to a DNA polymerase: a single residue in reverse transcriptase controls substrate selection. Gao G, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):407–11

Determinants of RNA polymerase alpha subunit for interaction with beta, beta', and sigma subunits: hydroxyl-radical protein footprinting. Heyduk T, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10162–6

The two alpha subunits of Escherichia coli RNA polymerase are asymmetrically arranged and contact different halves of the DNA upstream element. Murakami K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1709–14

Modular organization of the catalytic center of RNA polymerase. Mustaev A, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6641–5

Sigma domain structure: one down, one to go. Chan CL, et al. **Structure** 1996 Nov 15;4(11):1235–8 (34 ref.)

Structural and mechanistic relationships between nucleic acid polymerases. Sousa R. **Trends Biochem Sci** 1996 May; 21(5):186–90 (51 ref.)

DRUG EFFECTS

Potassium permanganate susceptibility of sigma E-RNA polymerase–promoter complexes. Seyler RW Jr, et al. **Gene** 1996 Oct 24;177(1–2):129–32

GENETICS

Transcription factors: regulators of gene expression in normal and pathological states [editorial] Wilson DB. **Ann Med** 1996 Feb;28(1):1–3 (15 ref.)

An RNA-dependent-RNA-polymerase activity associated with grapevine chrome mosaic nepovirus infection. Le Gall O, et al. **Arch Virol** 1997;142(1):151–6

Cloning, sequencing, and expression of the rpoD gene encoding the primary sigma factor of Xanthomonas campestris. Tseng YS, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):712–8

Expression, purification, and partial characterization of HCV RNA polymerase. Yuan ZH, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):231–5

Comparative analysis of the interactions of Escherichia coli sigma S and sigma 70 RNA polymerase holoenzyme with the stationary-phase-specific bolAp1 promoter. Nguyen LH, et al. **Biochemistry** 1997 Feb 18;36(7):1748–54

Torsional constraints on the formation of open promoter complexes on DNA minicircles carrying sigma 54-dependent promoters. Qureshi M, et al. **Biochemistry** 1997 Oct 7;36(40):12303–16

A novel genetic organization: the leuA-rpoD1 locus in the cyanobacterium Microcystis aeruginosa K-81. Asayama M, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):15–20

A new sigma factor homolog in a cyanobacterium: cloning, sequencing, and light-responsive transcripts of rpoD2 from Microcystis aeruginosa K-81. Asayama M, et al. **Biochim Biophys Acta** 1997 Mar 20;1351(1–2):31–6

The molecular anatomy of influenza virus RNA polymerase. Honda A, et al. **Biol Chem** 1997 Jun;378(6):483–8 (54 ref.)

A new point mutation in the nuclear gene of yeast mitochondrial RNA polymerase, RPO41, identifies a functionally important amino-acid residue in a protein region conserved among mitochondrial core enzymes. Lisowsky T, et al. **Curr Genet** 1996 Nov;30(5):389–95

ORF7 of yeast plasmid pGKL2: analysis of gene expression in vivo. Schaffrath R, et al. **Curr Genet** 1997 Feb; 31(2):190–2

Transcriptionally active chromosomes (TACs) of barley chloroplasts contain the alpha-subunit of plastome-encoded RNA polymerase. Suck R, et al. **Curr Genet** 1996 Dec;30(6):515–21

The two RNA polymerases encoded by the nuclear and the plastid compartments transcribe distinct groups of genes in tobacco plastids. Hajdukiewicz PT, et al. **EMBO J** 1997 Jul 1;16(13):4041–8

Intrinsic termination of T7 RNA polymerase mediated by either RNA or DNA. Hartvig L, et al. **EMBO J** 1996 Sep 2;15(17):4767–74

Mutations in the 1.1 subdomain of Escherichia coli sigma factor sigma70 and disruption of its overall structure. Gopal V, et al. **Eur J Biochem** 1997 Mar 1;244(2):613–8

Transcriptional analysis of the sigA and sigB genes of Brevibacterium lactofermentum. Oguiza JA, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):111–7

Sequence diversity of a gene encoding a putative primary sigma factor among Borrelia burgdorferi sensu lato strains. Pan MJ, et al. **FEMS Microbiol Lett** 1997 Mar 15; 148(2):153–8

Rifampicin resistance and mutation of the rpoB gene in Mycobacterium tuberculosis. Taniguchi H, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):103–8

Molecular cloning and characterization of Borrelia burgdorferi rpoB. Alekshun M, et al. **Gene** 1997 Feb 28; 186(2):227–35

Escherichia coli strain for thermoinducible T7 RNA polymerase-driven expression. Fedorova ND, et al. **Gene** 1996 Oct 24;177(1–2):267–8

A multifunctional vector system for heterologous expression of proteins in Escherichia coli. Expression of native and hexahistidyl fusion proteins, rapid purification of the fusion proteins, and removal of fusion peptide by Kex2 protease. Ghosh S, et al. **Gene** 1996 Oct 17;176(1–2):249–55

Cloning, nucleotide sequence and characterization of the rpoD gene encoding the primary sigma factor of Rhodobacter capsulatus. Pasternak C, et al. **Gene** 1996 Oct 17;176(1–2):177–84

Development and characterization of a binary gene expression system based on bacteriophage T7 components in adenovirus vectors. Tomanin R, et al. **Gene** 1997 Jul 9;193(2):129–40

A nested set of C-terminal deletions of the alpha subunit of Escherichia coli RNA polymerase define regions concerned with assembly, proteolysis, stabilization and transcriptional activation in vivo [published erratum appears in Genes Cells 1997 Apr;2(4):289] Zou C, et al. **Genes Cells** 1997 Jan;2(1):81–94

RNA polymerase sigma factors and cell-specific gene transcription in a simple developing organism. Losick R. **Harvey Lect** 1994–95;90:1–17 (44 ref.)

Identification of the gene encoding the human mitochondrial RNA polymerase (h-mtRPOL) by cyberscreening of the Expressed Sequence Tags database. Tiranti V, et al. **Hum Mol Genet** 1997 Apr;6(4):615–25

Analysis of the beta' subunit of DNA-dependent RNA polymerase does not support the hypothesis inferred from 16S rRNA analysis that Oenococcus oeni (formerly Leuconostoc oenos) is a tachytelic (fast-evolving) bacterium. Morse R, et al. **Int J Syst Bacteriol** 1996 Oct; 46(4):1004–9

Rifampicin resistance in Neisseria meningitidis: evidence from a study of sibling strains, description of new mutations and notes on population genetics. Nolte O. **J Antimicrob Chemother** 1997 Jun;39(6):747–55

Dissection of the transcription machinery for housekeeping genes of Bradyrhizobium japonicum. Beck C, et al. **J Bacteriol** 1997 Jan;179(2):364–9

An Escherichia coli host strain useful for efficient overproduction of cloned gene products with NaCl as the inducer. Bhandari P, et al. **J Bacteriol** 1997 Jul; 179(13):4403–6

The Streptomyces galP1 promoter has a novel RNA polymerase recognition sequence and is transcribed by a new form of RNA polymerase in vitro. Brawner ME, et al. **J Bacteriol** 1997 May;179(10):3222–31

Mutations in the alpha and sigma-70 subunits of RNA polymerase affect expression of the mer operon. Caslake LF, et al. **J Bacteriol** 1997 Mar;179(5):1787–95

Escherichia coli rpoC397 encodes a temperature-sensitive C-terminal frameshift in the beta' subunit of RNA polymerase that blocks growth of bacteriophage P2. Christie GE, et al. **J Bacteriol** 1996 Dec;178(23):6991–3

Transcriptional and mutational analyses of the rpoN operon in Caulobacter crescentus. Janakiraman RS, et al. **J Bacteriol** 1997 Aug;179(16):5138–47

Variation in RNA polymerase sigma subunit composition within different stocks of Escherichia coli W3110. Jishage M, et al. **J Bacteriol** 1997 Feb;179(3):959–63

Promoter selectivity of Escherichia coli RNA polymerase sigmaF holoenzyme involved in transcription of flagellar and chemotaxis genes. Kundu TK, et al. **J Bacteriol** 1997 Jul;179(13):4264–9

Cloning of the rpoD analog from Rhizobium etli: sigA of R. etli is growth phase regulated. Luka S, et al. **J Bacteriol** 1996 Dec;178(24):7138–43

A gene coding for a putative sigma 54 activator is developmentally regulated in Caulobacter crescentus. Marques MV, et al. **J Bacteriol** 1997 Sep;179(17):5502–10

The major sigma factor (RpoD) from Helicobacter pylori and other gram-negative bacteria shows an enhanced rate of divergence. Solnick JV, et al. **J Bacteriol** 1997 Oct; 179(19):6196–200

Isolation, purification, and in vitro characterization of recessive-lethal-mutant RNA polymerases from Escherichia coli. Tavormina PL, et al. **J Bacteriol** 1996 Sep;178(17):5263–71

Function of the C-terminal domain of the alpha subunit of Escherichia coli RNA polymerase in basal expression and integration host factor-mediated activation of the early promoter of bacteriophage Mu. van Ulsen P, et al. **J Bacteriol** 1997 Jan;179(2):530–7

RNA polymerase beta mutations have reduced sigma70 synthesis leading to a hyper-temperature-sensitive phenotype of a sigma70 mutant. Zhou YN, et al. **J Bacteriol** 1997 Jul;179(13):4292–8

Molecular analysis of the rpoD gene of Enterococcus faecalis. Frère J, et al. **J Basic Microbiol** 1996;36(5):305–10

The rpoD1 gene product is a principal sigma factor of RNA polymerase in Microcystis aeruginosa K-81. Asayama M, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):752–8

Recognition of the –10 promoter sequence by a partial polypeptide of sigma70 in vitro. Dombroski AJ. **J Biol Chem** 1997 Feb 7;272(6):3487–94

A one-tube method of reverse transcription-PCR to efficiently amplify a 3-kilobase region from the RNA polymerase gene to the poly(A) tail of small round-structured viruses (Norwalk-like viruses). Ando T, et al. **J Clin Microbiol** 1997 Mar;35(3):570–7

Evaluation of a line probe assay kit for characterization of rpoB mutations in rifampin-resistant Mycobacterium tuberculosis isolates from New York City. Cooksey RC, et al. **J Clin Microbiol** 1997 May;35(5):1281–3

Mutations in the rpoB gene of Mycobacterium tuberculosis that interfere with PCR-single-strand conformation polymorphism analysis for rifampin susceptibility testing. Kim BJ, et al. **J Clin Microbiol** 1997 Feb;35(2):492–4

Similarity in genome organization between Molluscum contagiosum virus (MCV) and vaccinia virus (VV): identification of MCV homologues of the VV genes for protein kinase 2, structural protein VP8, RNA polymerase 35 kDa subunit and 3beta-hydroxysteroid dehydrogenase. Douglass NJ, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3113–20

Effects of neutral salts on RNA chain elongation and pausing by Escherichia coli RNA polymerase. Chan CL, et al. **J Mol Biol** 1997 Apr 25;268(1):37–53

A mutant T7 RNA polymerase that is defective in RNA binding and blocked in the early stages of transcription. He B, et al. **J Mol Biol** 1997 Jan 24;265(3):275–88

The low processivity of T7 RNA polymerase over the initially transcribed sequence can limit productive initiation in vivo. Lopez PJ, et al. **J Mol Biol** 1997 May 30; 269(1):41–51

Mutant bacteriophage T7 RNA polymerases with altered termination properties. Lyakhov DL, et al. **J Mol Biol** 1997 May 30;269(1):28–40

Transcriptional activation via DNA-looping: visualization of intermediates in the activation pathway of E. coli RNA polymerase x sigma 54 holoenzyme by scanning force microscopy. Rippe K, et al. **J Mol Biol** 1997 Jul 11; 270(2):125–38

Mechanism of inhibition of bacteriophage T7 RNA polymerase by T7 lysozyme. Zhang X, et al. **J Mol Biol** 1997 May 30;269(1):10–27

A source of glycosylated human T-cell lymphotropic virus type 1 envelope protein: expression of gp46 by the vaccinia virus/T7 polymerase system. Arp J, et al. **J Virol** 1996 Nov;70(11):7349–59

Segment-specific noncoding sequences of the influenza virus genome RNA are involved in the specific competition between defective interfering RNA and its progenitor RNA segment at the virion assembly step. Odagiri T, et al. **J Virol** 1997 Mar;71(3):2138–45

Genetic map of the calicivirus rabbit hemorrhagic disease virus as deduced from in vitro translation studies. Wirblich C, et al. **J Virol** 1996 Nov;70(11):7974–83

The sigA gene encoding the major sigma factor of RNA polymerase from the marine cyanobacterium Synechococcus sp. strain PCC 7002: cloning and characterization. Caslake LF, et al. **Microbiology** 1996 Feb; 142 (Pt 2):347–57

The temperature sensitivity of Bacillus subtilis DB1005 is

due to insufficient activity, rather than insufficient concentration, of the mutant delta A factor. Chang BY, et al. **Microbiology** 1997 Apr;143 (Pt 4):1299–308

The flgK motility operon of Borrelia burgdorferi is initiated by a sigma 70–like promoter. Ge Y, et al. **Microbiology** 1997 May;143 (Pt 5):1681–90

A missense mutation in rpoD results in an A–signalling defect in Myxococcus xanthus. Davis JM, et al. **Mol Microbiol** 1995 Dec;18(5):943–52

Differential regulation of multiple overlapping promoters in flagellar class II operons in Escherichia coli. Liu X, et al. **Mol Microbiol** 1996 Aug;21(3):613–20

An RNA polymerase alpha subunit mutant impairs N–dependent transcriptional antitermination in Escherichia coli. Obuchowski M, et al. **Mol Microbiol** 1997 Jan; 23(2):211–22

The alpha subunit of RNA polymerase and transcription antitermination. Schauer AT, et al. **Mol Microbiol** 1996 Aug;21(4):839–51

The Bordetella pertussis sigma subunit of RNA polymerase confers enhanced expression of fha in Escherichia coli. Steffen P, et al. **Mol Microbiol** 1997 Mar;23(5):945–54

Isolation and properties of enhancer–bypass mutants of sigma 54. Syed A, et al. **Mol Microbiol** 1997 Mar;23(5):987–95

The rpoN gene of Xanthomonas campestris pv. vesicatoria is not required for pathogenicity. Horns T, et al. **Mol Plant Microbe Interact** 1996 Dec;9(9):856–9

Genetic evidence for selective degradation of RNA polymerase subunits by the 20S proteasome in Saccharomyces cerevisiae. Nouraini S, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3570–9

Inhibition of influenza virus RNA polymerase and nucleoprotein of gene expression by antisense oligonucleotides. Hatta T, et al. **Nucleic Acids Symp Ser** 1995;(34):129–30

DNA bending and the initiation of transcription at sigma54–dependent bacterial promoters. Carmona M, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9568–72

Supercoil–induced extrusion of a regulatory DNA hairpin. Dai X, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18; 94(6):2174–9

A mutation in the putative RNA polymerase gene inhibits nonhomologous, but not homologous, genetic recombination in an RNA virus. Figlerowicz M, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2073–8

Preferential interaction of the his pause RNA hairpin with RNA polymerase beta subunit residues 904–950 correlates with strong transcriptional pausing. Wang D, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8433–8

Multiple pathways to bypass the enhancer requirement of sigma 54 RNA polymerase: roles for DNA and protein determinants. Wang JT, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9538–43

Rapid mutagenesis and purification of phage RNA polymerases. He B, et al. **Protein Expr Purif** 1997 Feb; 9(1):142–51

Mitochondrial and chloroplast phage–type RNA polymerases in Arabidopsis. Hedtke B, et al. **Science** 1997 Aug 8; 277(5327):809–11

RNA polymerase II transcription control [editorial; comment] Kornberg RD. **Trends Biochem Sci** 1996 Sep; 21(9):325–6. Comment on: Trends Biochem Sci 1996 Sep;21(9):335–7. Comment on: Trends Biochem Sci 1996 Sep;21(9):338–42. Comment on: Trends Biochem Sci 1996 Sep;21(9):342–5.

The three subunits of the polymerase and the nucleoprotein of influenza B virus are the minimum set of viral proteins required for expression of a model RNA template. Jambrina E, et al. **Virology** 1997 Sep 1;235(2):209–17

Acquisition of the ts phenotype by a chemically mutagenized cold–passaged human respiratory syncytial virus vaccine candidate results from the acquisition of a single mutation in the polymerase (L) gene. Crowe JE Jr, et al. **Virus Genes** 1996;13(3):269–73

Evolution of viral DNA–dependent RNA polymerases. Sonntag KC, et al. **Virus Genes** 1995;11(2–3):271–84 (81 ref.)

Mutations in an Abf1p binding site in the promoter of yeast RPO26 shift the transcription start sites and reduce the level of RPO26 mRNA. Nouraini S, et al. **Yeast** 1996 Oct; 12(13):1339–50

[Regulatory properties of RNA polymerase from rifampicin–resistant E. coli strain rpoB403] Kamzolova SG. **Biokhimiia** 1996 Aug;61(8):1483–8 (Eng. Abstr.) **(Rus)**

[Cloning of cDNA for RNA polymerase subunit from the fission yeast Schizosaccharomyces pombe by heterospecific complementation in Saccharomyces cerevisiae] Shpakovskiĭ GV, et al. **Bioorg Khim** 1997 Feb;23(2):110–7 (Eng. Abstr.) **(Rus)**

[Molecular cloning and characterization of cDNA of the rpc10+ gene encoding the smallest subunit of nuclear RNA polymerases of Schizosaccharomyces pombe] Shpakovskiĭ GV, et al. **Bioorg Khim** 1997 May;23(5):441–8 (Eng. Abstr.) **(Rus)**

[Three regions of Rpb10 mini–subunit of nuclear RNA polymerases are strictly conserved in all eukaryotes (letter)] Shpakovskiĭ GV, et al. **Bioorg Khim** 1996 Dec; 22(12):938–40 (Eng. Abstr.) **(Rus)**

[Use of protease 3c and foot–and–mouth disease virus RNA polymerase hybrid proteins, synthesized in Escherichia coli, for diagnosis] Aminev AG, et al. **Mol Biol (Mosk)** 1997 May–Jun;31(3):568–72 **(Rus)**

[Ribozyme cleaving the mRNA for influenza virus type A polymerase gene] Zakharchuk AN, et al. **Mol Biol (Mosk)** 1996 Nov–Dec;30(6):1420–5 **(Rus)**

IMMUNOLOGY

Epitope mapping of monoclonal antibodies raised to recombinant Mengo 3D polymerase. Duque H, et al. **Virus Genes** 1996;13(2):159–68

ISOLATION & PURIFICATION

Copurification of ribosomal protein S2 and DNA–dependent RNA polymerase from heat–shocked cells of Bacillus subtilis. Büttner K, et al. **J Basic Microbiol** 1997;37(1):3–9

Purification, characterization, and reconstitution of DNA–dependent RNA polymerases from Caulobacter crescentus. Wu J, et al. **J Biol Chem** 1997 Aug 22; 272(34):21558–64

Assays for poliovirus polymerase, 3D(Pol), and authentic RNA replication in HeLa S10 extracts. Barton DJ, et al. **Methods Enzymol** 1996;275:35–57

Expression, purification, and characterization of rhabdovirus polymerase. Das T, et al. **Methods Enzymol** 1996; 275:99–122

Expression, purification, and characterization of vaccinia virus–encoded RNA and poly(A) polymerases. Gershon P, et al. **Methods Enzymol** 1996;275:208–27

Characterization of coronavirus RNA polymerase gene products. Herold J, et al. **Methods Enzymol** 1996;275:68–89

Histidine–tagged RNA polymerase of Escherichia coli and transcription in solid phase. Kashlev M, et al. **Methods Enzymol** 1996;274:326–34

Single–stranded DNA–binding proteins as transcriptional activators. Miller A, et al. **Methods Enzymol** 1996;274:9–20

Chromatographic separation of DNA dependent RNA polymerases and molecular properties of RNA polymerase II from a Leishmania Spp. Sadhukhan PK, et al. **Mol Cell Biochem** 1997 Jun;171(1–2):105–14

Purification and activities of the Rhodobacter capsulatus RpoN (sigma N) protein. Cannon W, et al. **Mol Microbiol** 1996 Jul;21(2):233–45

Rapid mutagenesis and purification of phage RNA polymerases. He B, et al. **Protein Expr Purif** 1997 Feb; 9(1):142–51

METABOLISM

An automated high throughput filtration assay: application to polymerase inhibitor identification. Wu P, et al. **Anal Biochem** 1997 Feb 15;245(2):226–30

Unusual usage of noncomplementary dinucleotide primers by the yeast mitochondrial RNA polymerase. Biswas TK. **Arch Biochem Biophys** 1997 Apr 15;340(2):250–6

Initiation, elongation, and processivity of carboxyl–terminal mutants of T7 RNA polymerase. Gardner LP, et al. **Biochemistry** 1997 Mar 11;36(10):2908–18

Mechanism of ribose 2'–group discrimination by an RNA polymerase. Huang Y, et al. **Biochemistry** 1997 Jul 8; 36(27):8231–42

Kinetic mechanism of transcription initiation by bacteriophage T7 RNA polymerase. Jia Y, et al. **Biochemistry** 1997 Apr 8;36(14):4223–32

Escherichia coli RNA polymerase activity observed using atomic force microscopy. Kasas S, et al. **Biochemistry** 1997 Jan 21;36(3):461–8

Template strand gap bypass is a general property of prokaryotic RNA polymerases: implications for elongation mechanisms. Liu J, et al. **Biochemistry** 1996 Nov 26; 35(47):14999–5008

Probing the mechanisms of T7 RNA polymerase transcription initiation using photochemical conjugation of psoralen to a promoter. Sastry SS, et al. **Biochemistry** 1997 Mar 18;36(11):3133–44

A direct real–time spectroscopic investigation of the mechanism of open complex formation by T7 RNA polymerase. Sastry SS, et al. **Biochemistry** 1996 Dec 10; 35(49):15715–25

Spectroscopic determination of open complex formation at promoters for Escherichia coli RNA polymerase. Sullivan JJ, et al. **Biochemistry** 1997 Jul 1;36(26):8005–12

Thermodynamic and kinetic measurements of promoter binding by T7 RNA polymerase. Ujvári A, et al. **Biochemistry** 1996 Nov 19;35(46):14574–82

A multi–functional enzyme with RNA polymerase and RNase activities: molecular anatomy of influenza virus RNA polymerase. Ishihama A. **Biochimie** 1996; 78(11–12):1097–102 (46 ref.)

Identification of host factors that regulate the influenza virus RNA polymerase activity. Momose F, et al. **Biochimie** 1996;78(11–12):1103–8

Cooperative relaxation of supercoils and periodic transcriptional initiation within polymerase batteries. Guptasarma P. **Bioessays** 1996 Apr;18(4):325–32

Transcripts that increase the processivity and elongation rate of RNA polymerase. King RA, et al. **Cell** 1996 Nov 29; 87(5):893–903

Transcription activation at class II CAP–dependent promoters: two interactions between CAP and RNA polymerase. Niu W, et al. **Cell** 1996 Dec 13;87(6):1123–34

The RNA–DNA hybrid maintains the register of transcription by preventing backtracking of RNA polymerase. Nudler E, et al. **Cell** 1997 Apr 4;89(1):33–41

Identification of a prime suspect. Buc H. **Curr Biol** 1997 Feb 1;7(2):R97–9 (13 ref.)

Molecular motors: single–molecule mechanics. Simmons R. **Curr Biol** 1996 Apr 1;6(4):392–4 (17 ref.)

Region 2.5 of the Escherichia coli RNA polymerase sigma70 subunit is responsible for the recognition of the 'extended–10' motif at promoters. Barne KA, et al. **EMBO J** 1997 Jul 1;16(13):4034–40

Molecular anatomy of a transcription activation patch: FIS–RNA polymerase interactions at the Escherichia coli rrnB P1 promoter. Bokal AJ, et al. **EMBO J** 1997 Jan 2;16(1):154–62

High resolution mapping of E.coli transcription elongation complex in situ reveals protein interactions with the non–transcribed strand. Guérin M, et al. **EMBO J** 1996 Oct 1;15(19):5397–407

Transcription factor recognition surface on the RNA polymerase alpha subunit is involved in contact with the DNA enhancer element. Murakami K, et al. **EMBO J** 1996 Aug 15;15(16):4358–67

FIS activates sequential steps during transcription initiation at a stable RNA promoter. Muskhelishvili G, et al. **EMBO J** 1997 Jun;16(12):3655–65

Factor requirements for transcription in the Archaeon Sulfolobus shibatae. Qureshi SA, et al. **EMBO J** 1997 May 15;16(10):2927–36

Guanosine 3',5'–bis(diphosphate) (ppGpp)–dependent inhibition of transcription from stringently controlled Escherichia coli promoters can be explained by an altered initiation pathway that traps RNA polymerase. Heinemann M, et al. **Eur J Biochem** 1997 Aug 1;247(3):990–9

Studies on the omega subunit of Escherichia coli RNA polymerase—its role in the recovery of denatured enzyme activity. Mukherjee K, et al. **Eur J Biochem** 1997 Aug 1; 247(3):884–9

The topology of transcription by immobilized polymerases. Iborra FJ, et al. **Exp Cell Res** 1996 Dec 15;229(2):167–73 (27 ref.)

Interaction of bacteriophage T4 AsiA protein with Escherichia coli sigma70 and its variant. Pahari S, et al. **FEBS Lett** 1997 Jul 7;411(1):60–2

Substrate properties of C'–methyl UTP derivatives in T7 RNA polymerase reactions. Evidence for N–type NTP conformation. Tunitskaya VL, et al. **FEBS Lett** 1997 Jan 6;400(3):263–6

Effect of heat shock on DNA–dependent RNA polymerase from the cyanobacterium Synechococcus sp. Hammouda O. **Folia Microbiol (Praha)** 1996;41(4):357–62

Recognition mechanisms of the minus–strand origin of phage f1 by Escherichia coli RNA polymerase. Higashitani N, et al. **Genes Cells** 1996 Sep;1(9):829–41

A nested set of C–terminal deletions of the alpha subunit of Escherichia coli RNA polymerase define regions concerned with assembly, proteolysis, stabilization and transcriptional activation in vivo [published erratum appears in Genes Cells 1997 Apr;2(4):289] Zou C, et al. **Genes Cells** 1997 Jan;2(1):81–94

Nature of DNA binding and RNA polymerase interaction of the Bordetella pertussis BvgA transcriptional activator at the fha promoter. Boucher PE, et al. **J Bacteriol** 1997 Mar;179(5):1755–63

Activation of the catBCA promoter: probing the interaction of CatR and RNA polymerase through in vitro transcription. Chugani SA, et al. **J Bacteriol** 1997 Apr; 179(7):2221–7

FlgM is a primary regulator of sigmaD activity, and its absence restores motility to a sinR mutant. Fredrick K, et al. **J Bacteriol** 1996 Dec;178(23):7010–3

The glutamic acid residue at amino acid 261 of the alpha subunit is a determinant of the intrinsic efficiency of RNA polymerase at the metE core promoter in Escherichia coli. Jafri S, et al. **J Bacteriol** 1996 Dec;178(23):6810–6

Stimulatory effect of trehalose on formation and activity of Escherichia coli RNA polymerase E sigma38 holoenzyme. Kusano S, et al. **J Bacteriol** 1997 Jun;179(11):3649–54

flaD (sinR) mutations affect SigD–dependent functions at multiple points in Bacillus subtilis. Rashid MH, et al. **J Bacteriol** 1996 Nov;178(22):6640–3

Activation of the Bacillus subtilis spoIIG promoter requires interaction of Spo0A and the sigma subunit of RNA polymerase. Schyns G, et al. **J Bacteriol** 1997 Sep; 179(17):5605–8

Transcription activation by the bacteriophage Mu Mor protein requires the C–terminal regions of both alpha and sigma70 subunits of Escherichia coli RNA polymerase. Artsimovitch I, et al. **J Biol Chem** 1996 Dec 13; 271(50):32343–8

Transcription termination by vaccinia RNA polymerase entails recognition of specific phosphates in the nascent RNA. Deng L, et al. **J Biol Chem** 1997 Jan 3;272(1):695–8

An ATPase component of the transcription elongation complex is required for factor–dependent transcription termination by vaccinia RNA polymerase. Deng L, et al. **J Biol Chem** 1996 Nov 15;271(46):29386–92

Two transcription factors related with the eucaryal transcription factors TATA–binding protein and transcription factor IIB direct promoter recognition by an archaeal RNA polymerase. Hausner W, et al. **J Biol Chem** 1996 Nov 22;271(47):30144–8

Phosphorylation of Sendai virus phosphoprotein by cellular protein kinase C zeta. Huntley CC, et al. **J Biol Chem** 1997 Jun 27;272(26):16578–84

Equilibrium and stopped–flow kinetic studies of interaction

between T7 RNA polymerase and its promoters measured by protein and 2-aminopurine fluorescence changes. Jia Y, et al. **J Biol Chem** 1996 Nov 29;271(48):30451-8

RNA polymerase switches between inactivated and activated states By translocating back and forth along the DNA and the RNA. Komissarova N, et al. **J Biol Chem** 1997 Jun 13;272(24):15329-38

Transcriptional pausing of RNA polymerase in the presence of guanosine tetraphosphate depends on the promoter and gene sequence. Krohn M, et al. **J Biol Chem** 1996 Sep 27; 271(39):23884-94

The RNA polymerase alpha subunit carboxyl-terminal domain is required for both basal and activated transcription from the alkA promoter. Landini P, et al. **J Biol Chem** 1997 Jun 20;272(25):15914-9

Nuclease activity of T7 RNA polymerase and the heterogeneity of transcription elongation complexes. Sastry SS, et al. **J Biol Chem** 1997 Mar 28;272(13):8644-52

Tethering of the large subunits of Escherichia coli RNA polymerase. Severinov K, et al. **J Biol Chem** 1997 Sep 26; 272(39):24137-40

Recognition of promoter DNA by subdomain 4.2 of Escherichia coli sigma 70: a knowledge based model of -35 hexamer interaction with 4.2 helix-turn-helix motif. Reddy BV, et al. **J Biomol Struct Dyn** 1997 Feb; 14(4):407-19

Active RNA polymerases are localized within discrete transcription 'factories' in human nuclei. Iborra FJ, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1427-36

The highly inducible member of the 70 kDa family of heat shock proteins increases canine distemper virus polymerase activity. Oglesbee MJ, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2125-35

Molecular assembly of the influenza virus RNA polymerase: determination of the subunit-subunit contact sites. Toyoda T, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2149-57

Incorrect base insertion and prematurely terminated transcripts during T7 RNA polymerase transcription elongation past benzo[a]pyrenediol epoxide-modified DNA. Choi DJ, et al. **J Mol Biol** 1996 Nov 29;264(2):213-9

A model for the mechanism of polymerase translocation. Guajardo R, et al. **J Mol Biol** 1997 Jan 10;265(1):8-19

A mutant T7 RNA polymerase that is defective in RNA binding and blocked in the early stages of transcription. He B, et al. **J Mol Biol** 1997 Jan 24;265(3):275-88

Protein P7 of phage phi6 RNA polymerase complex, acquiring of RNA packaging activity by in vitro assembly of the purified protein onto deficient particles. Juuti JT, et al. **J Mol Biol** 1997 Mar 14;266(5):891-900

Design of CytR regulated, cAMP-CRP dependent class II promoters in Escherichia coli: RNA polymerase-promoter interactions modulate the efficiency of CytR repression. Kristensen HH, et al. **J Mol Biol** 1997 Mar 14;266(5):866-76

The low processivity of T7 RNA polymerase over the initially transcribed sequence can limit productive initiation in vivo. Lopez PJ, et al. **J Mol Biol** 1997 May 30; 269(1):41-51

Mutant bacteriophage T7 RNA polymerases with altered termination properties. Lyakhov DL, et al. **J Mol Biol** 1997 May 30;269(1):28-40

Determinants for Escherichia coli RNA polymerase assembly within the beta subunit. Wang Y, et al. **J Mol Biol** 1997 Aug 1;270(5):648-62

Positioning of the start site in the initiation of transcription by bacteriophage T7 RNA polymerase. Weston BF, et al. **J Mol Biol** 1997 Sep 12;272(1):21-30

Region 1 of sigma70 is required for efficient isomerization and initiation of transcription by Escherichia coli RNA polymerase. Wilson C, et al. **J Mol Biol** 1997 Mar 21; 267(1):60-74

Mechanism of inhibition of bacteriophage T7 RNA polymerase by T7 lysozyme. Zhang X, et al. **J Mol Biol** 1997 May 30;269(1):10-27

Role of the intergenic dinucleotide in vesicular stomatitis virus RNA transcription. Barr JN, et al. **J Virol** 1997 Mar; 71(3):1794-801

RNA-RNA recombination in Sindbis virus: roles of the 3' conserved motif, poly(A) tail, and nonviral sequences of template RNAs in polymerase recognition and template switching. Hill KR, et al. **J Virol** 1997 Apr;71(4):2693-704

Duck hepatitis B virus polymerase acts as a suppressor of core protein translation. Howe AY, et al. **J Virol** 1996 Aug; 70(8):5035-42

Initiation of minus-strand RNA synthesis by the brome mosaicvirus RNA-dependent RNA polymerase: use of oligoribonucleotide primers. Kao CC, et al. **J Virol** 1996 Oct;70(10):6826-30

Brome mosaic virus helicase- and polymerase-like proteins colocalize on the endoplasmic reticulum at sites of viral RNA synthesis. Restrepo-Hartwig MA, et al. **J Virol** 1996 Dec;70(12):8908-16

Virus-specific cytotoxic T-lymphocyte activity elicited by coimmunization with human immunodeficiency virus type 1 genes regulated by the bacteriophage T7 promoter and T7 RNA polymerase protein. Selby MJ, et al. **J Virol** 1997 Oct;71(10):7827-31

Characterization of the components and activity of Sonchus yellow net rhabdovirus polymerase. Wagner JD, et al. **J Virol** 1997 Mar;71(3):2371-82

Site-directed mutagenic analysis of viral polymerases and related proteins. Boyer PL, et al. **Methods Enzymol** 1996; 275:538-55

Preparation and use of synthetic oligoribonucleotides as tools for study of viral polymerases. Carroll SS, et al. **Methods Enzymol** 1996;275:365-82

Immunoprinting: a technique used to study dynamic protein-nucleic acid interactions within transcription elongation complex. Das A, et al. **Methods Enzymol** 1996; 274:363-74

Components of multiprotein-RNA complex that controls transcription elongation in Escherichia coli phage lambda. Das A, et al. **Methods Enzymol** 1996;274:374-402

Identifying regulators of transcript elongation in eukaryotes. Edwards AM, et al. **Methods Enzymol** 1996;274:419-36

Expression, purification, and characterization of vaccinia virus-encoded RNA and poly(A) polymerases. Gershon P, et al. **Methods Enzymol** 1996;275:208-27

Transcription activation by histone-like protein integration host factor. Goosen N, et al. **Methods Enzymol** 1996; 274:32-43

Use of bacteriophage RNA polymerase in RNA synthesis. Gurevich VV. **Methods Enzymol** 1996;275:382-97

Kinetic analysis of RNA polymerase-promoter interactions. Gussin GN. **Methods Enzymol** 1996;273:45-59 (44 ref.)

Photochemical cross-linking analysis of protein-nucleic acid interactions in Escherichia coli transcription complexes from lambda PR' promoter. Hanna MM. **Methods Enzymol** 1996;274:403-18

Characterization of coronavirus RNA polymerase gene products. Herold J, et al. **Methods Enzymol** 1996;275:68-89

Fluorescence anisotropy: rapid, quantitative assay for protein-DNA and protein-protein interaction. Heyduk T, et al. **Methods Enzymol** 1996;274:492-503

Bacteriophage T4 middle transcription system: T4-modified RNA polymerase; AsiA, a sigma 70 binding protein; and transcriptional activator MotA. Hinton DM, et al. **Methods Enzymol** 1996;274:43-57

Quantitative parameters for promoter clearance. Hsu LM. **Methods Enzymol** 1996;273:59-71 (30 ref.)

Histidine-tagged RNA polymerase of Escherichia coli and transcription in solid phase. Kashlev M, et al. **Methods Enzymol** 1996;274:326-34

Quantitative analysis of transcriptional pausing by Escherichia coli RNA polymerase: his leader pause site as paradigm. Landick R, et al. **Methods Enzymol** 1996; 274:334-53

Transcription in vitro with Saccharomyces cerevisiae mitochondrial RNA-polymerase. Mangus DA, et al. **Methods Enzymol** 1996;264:57-66

Single-stranded DNA-binding proteins as transcriptional activators. Miller A, et al. **Methods Enzymol** 1996;274:9-20

In vitro assay for reiterative transcription during transcriptional initiation by Escherichia coli RNA polymerase. Qi F, et al. **Methods Enzymol** 1996;273:71-85 (18 ref.)

Nuclear RNA polymerases: role of general initiation factors and cofactors in eukaryotic transcription. Roeder RG. **Methods Enzymol** 1996;273:165-71 (30 ref.)

T7 transcript length determination using enzymatic RNA sequencing. Siwkowski A. **Methods Mol Biol** 1997;74:91-7

Rickettsia prowazekii sigma factor sigma 73 can be overexpressed in Escherichia coli and promotes RNA polymerase binding and transcription. Aniskovitch LP, et al. **Microbiology** 1996 Apr;142 (Pt 4):901-6

In vitro transcription of Myxococcus xanthus genes with RNA polymerase containing sigmaA, the major sigma factor in growing cells. Biran D, et al. **Mol Microbiol** 1997 Aug;25(3):463-72

Altering the level and regulation of the major sigma subunit of RNA polymerase affects gene expression and development in Bacillus subtilis. Hicks KA, et al. **Mol Microbiol** 1996 Apr;20(1):201-12

Ambidextrous transcriptional activation by SoxS: requirement for the C-terminal domain of the RNA polymerase alpha subunit in a subset of Escherichia coli superoxide-inducible genes. Jair KW, et al. **Mol Microbiol** 1996 Jan;19(2):307-17

Transcriptional activator of phage phi 29 late promoter: mapping of residues involved in interaction with RNA polymerase and in DNA bending. Mencía M, et al. **Mol Microbiol** 1996 Apr;20(2):273-82

The RpoN-box motif of the RNA polymerase sigma factor sigma N plays a role in promoter recognition. Taylor M, et al. **Mol Microbiol** 1996 Dec;22(5):1345-54

Differential binding of BvgA to two classes of virulence genes of Bordetella pertussis directs promoter selectivity by RNA polymerase. Zu T, et al. **Mol Microbiol** 1996 Aug; 21(3):557-65

Activation of prokaryotic transcription through arbitrary protein-protein contacts. Dove SL, et al. **Nature** 1997 Apr 10;386(6625):627-30

Effect on DNA transcription of nucleotide sequences upstream to T7 promoter. Baklanov MM, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3659-60

Species-specificity of rRNA gene transcription in plants manifested as a switch in RNA polymerase specificity. Doelling JH, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4725-32

sigma factor mutations affecting the sequence-selective interaction of RNA polymerase with -10 region single-stranded DNA. Huang X, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2603-9

Identification of sigma factors for growth phase-related promoter selectivity of RNA polymerases from Streptomyces coelicolor A3(2). Kang JG, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2566-73

Physical interference between escherichia coli RNA polymerase molecules transcribing in tandem enhances abortive synthesis and misincorporation. Kubori T, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2640-7

The binding of two dimers of IciA protein to the dnaA promoter 1P element enhances the binding of RNA polymerase to the dnaA promoter 1P. Lee Y, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3486-9

T7 RNA polymerase cannot transcribe through a highly knotted DNA template. Portugal J, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4890-4

The antiglucocorticoid action of mifepristone. Agarwai MK. **Pharmacol Ther** 1996;70(3):183-213 (552 ref.)

A structure/function analysis of Escherichia coli RNA polymerase. Gross CA, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 Apr 29; 351(1339):475-82 (60 ref.)

Two domains within sigmaN (sigma54) cooperate for DNA binding. Cannon WV, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5006-11

The sigma subunit of Escherichia coli RNA polymerase senses promoter spacing. Dombroski AJ, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8858-62

RNA polymerase sigma factor determines start-site selection but is not required for upstream promoter element activation on heteroduplex (bubble) templates. Fredrick K, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4982-7

Determinants of RNA polymerase alpha subunit for interaction with beta, beta', and sigma subunits: hydroxyl-radical protein footprinting. Heyduk T, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10162-6

Minus-strand origin of filamentous phage versus transcriptional promoters in recognition of RNA polymerase. Higashitani A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2909-14

A sigma32 mutant with a single amino acid change in the highly conserved region 2.2 exhibits reduced core RNA polymerase affinity. Joo DM, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4907-12

Choosing the right sugar: how polymerases select a nucleotide substrate. Joyce CM. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1619-22

Transcriptional arrest: Escherichia coli RNA polymerase translocates backward, leaving the 3'end of the RNA intact and extruded. Komissarova N, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1755-60

Protein p4 represses phage phi 29 A2c promoter by interacting with the alpha subunit of Bacillus subtilis RNA polymerase. Monsalve M, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8913-8

The two alpha subunits of Escherichia coli RNA polymerase are asymmetrically arranged and contact different halves of the DNA upstream element. Murakami K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1709-14

Dual regulation of open-complex formation and promoter clearance by Arc explains a novel repressor to activator switch. Smith TL, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8868-72

Paths to activation of transcription [comment] Geiduschek EP. **Science** 1997 Mar 14;275(5306):1614-6. Comment on: Science 1997 Mar 14;275(5306):1655-7. Comment on: Science 1997 Mar 14;275(5306):1658-61.

Promoter recognition as measured by binding of polymerase to nontemplate strand oligonucleotide. Marr MT, et al. **Science** 1997 May 23;276(5316):1258-60

RNA polymerase beta' subunit: a target of DNA binding-independent activation [see comments] Miller A, et al. **Science** 1997 Mar 14;275(5306):1655-7. Comment in: Science 1997 Mar 14;275(5306):1614-6.

DNA on the big screen [news] Stokstad E. **Science** 1997 Mar 28;275(5308):1882

Unusual oligomerization required for activity of NtrC, a bacterial enhancer-binding protein [see comments] Wyman C, et al. **Science** 1997 Mar 14;275(5306):1658-61. Comment in: Science 1997 Mar 14;275(5306):1614-6.

RNA polymerase II transcription control [editorial; comment] Kornberg RD. **Trends Biochem Sci** 1996 Sep; 21(9):325-6. Comment on: Trends Biochem Sci 1996 Sep;21(9):335-7. Comment on: Trends Biochem Sci 1996 Sep;21(9):338-42. Comment on: Trends Biochem Sci 1996 Sep;21(9):342-5.

The Sendai virus C protein binds the L polymerase protein to inhibit viral RNA synthesis. Horikami SM, et al. **Virology** 1997 Sep 1;235(2):261-70

[Effect of the structure of the prepromotor region on transcription using phage T7 RNA polymerase] Baklanov MM, et al. **Mol Biol (Mosk)** 1996 Mar-Apr;30(2):449-53 **(Rus)**

[A model prokaryotic promoter. V. Footprinting E. coli RNA polymerase complex with constructs containing Pribnow sequence repeats] Koroleva ON, et al. **Mol Biol (Mosk)** 1997 Jan-Feb;31(1):49-58 **(Rus)**

[Regularities in utilization of deoxyribonucleoside triphosphates by mutant forms of bacteriophage T7 RNA polymerase] Tunitskaia VL, et al. **Mol Biol (Mosk)** 1997 Mar-Apr;31(2):353-8 **(Rus)**

PHYSIOLOGY

RNA polymerase slides home: pause and termination site recognition. Landick R. **Cell** 1997 Mar 21;88(6):741-4 (20

ref.)
The flgE gene of Campylobacter coli is under the control of the alternative sigma factor sigma54. Kinsella N, et al. **J Bacteriol** 1997 Aug;179(15):4647–53
The transcription initiation pathway of sigma 54 mutants that bypass the enhancer protein requirement. Implications for the mechanism of activation. Wang JT, et al. **J Biol Chem** 1996 Dec 20;271(51):32707–13
Mutational analysis of structure–function relationship of RNA polymerase in Escherichia coli. Jin DJ, et al. **Methods Enzymol** 1996;273:300–19 (71 ref.)
Transcription factor phosphorylation by a protein kinase associated with chloroplast RNA polymerase from mustard (Sinapis alba). Baginsky S, et al. **Plant Mol Biol** 1997 May; 34(2):181–9
sigma54, a vital protein for Myxococcus xanthus. Keseler IM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4; 94(5):1979–84
[Functions of influenza virus RNA polymerase subunits] Nakada S. **Uirusu** 1995 Dec;45(2):125–43 (58 ref.) **(Jpn)**

RNA PRECURSORS

RNA splicing: unexpected spliceosome diversity. Kreivi JP, et al. **Curr Biol** 1996 Jul 1;6(7):802–5 (9 ref.)
RNA editing: rewriting receptors. O'Connell MA. **Curr Biol** 1997 Jul 1;7(7):R437–9 (28 ref.)
Regulation of pre-mRNA splicing in metazoa. Wang J, et al. **Curr Opin Genet Dev** 1997 Apr;7(2):205–11 (53 ref.)
Both loss-of-function and gain-of-function mutations in snf define a role for snRNP proteins in regulating Sex-lethal pre-mRNA splicing in Drosophila development. Salz HK, et al. **Genetics** 1996 Sep;144(1):95–108
A novel mechanism of aberrant pre-mRNA splicing in humans. Cogan JD, et al. **Hum Mol Genet** 1997 Jun; 6(6):909–12
Insertions within epsilon affect synthesis of minus-strand DNA before the template switch for duck hepatitis B virus. Jiang H, et al. **J Virol** 1997 Jul;71(7):5345–54
Promoters for synthesis of the pre-C and pregenomic mRNAs of human hepatitis B virus are genetically distinct and differentially regulated. Yu X, et al. **J Virol** 1996 Dec; 70(12):8719–26
Rok1p is a putative RNA helicase required for rRNA processing. Venema J, et al. **Mol Cell Biol** 1997 Jun; 17(6):3398–407
Comparable processing of beta-lactoglobulin pre-mRNA in cell culture and transgenic mouse models. Donofrio G, et al. **Mol Gen Genet** 1996 Sep 25;252(4):465–9
Metal ion interaction with cosubstrate in self-splicing of group I introns. Sjögren AS, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):648–53

BIOSYNTHESIS

Inducible nuclear factors binding the IgM heavy chain pre-mRNA secretory poly(A) site. Phillips C, et al. **Eur J Immunol** 1996 Dec;26(12):3144–52

BLOOD

Role of tissue specific alternative pre-mRNA splicing in the differentiation of the erythrocyte membrane. Benz EJ Jr, et al. **Trans Am Clin Climatol Assoc** 1996;108:78–95 (43 ref.)

CHEMISTRY

Analysis of rate-determining conformational changes during self-splicing of the Tetrahymena intron. Emerick VL, et al. **Biochemistry** 1996 Oct 15;35(41):13469–77
The eucaryal tRNA splicing endonuclease recognizes a tripartite set of RNA elements. Di Nicola Negri E, et al. **Cell** 1997 Jun 13;89(6):859–66
Biochemistry and regulation of pre-mRNA splicing. Adams MD, et al. **Curr Opin Cell Biol** 1996 Jun;8(3):331–9 (86 ref.)
Experimental verification of the secondary structures of guide RNA-pre-mRNA chimaeric molecules in Trypanosoma brucei. Schmid B, et al. **Eur J Biochem** 1996 Sep 15;240(3):721–31
Influence of substrate structure on cleavage by hammerhead ribozyme. Scarabino D, et al. **FEBS Lett** 1996 Apr 1; 383(3):185–90
Structural organization of the pre-mRNA splicing commitment: a hypothesis. Melčák I, et al. **J Struct Biol** 1996 Nov-Dec;117(3):189–94 (64 ref.)
Logitlinear models for the prediction of splice sites in plant pre-mRNA sequences. Kleffe J, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4709–18
Distribution of both lengths and 5' terminal nucleotides of mammalian pre-tRNA 3' trailers reflects properties of 3' processing endoribonuclease. Nashimoto M. **Nucleic Acids Res** 1997 Mar 15;25(6):1148–54
Regulated nuclear polyadenylation of Xenopus albumin pre-mRNA. Rao MN, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4078–83
Analysis of the tertiary structure of the ribonuclease P ribozyme-substrate complex by site-specific photoaffinity crosslinking. Harris ME, et al. **RNA** 1997 Jun;3(6):561–76
Site-specific crosslinks of yeast U6 snRNA to the pre-mRNA near the 5' splice site. Kim CH, et al. **RNA** 1996 Oct; 2(10):995–1010
Kissing loops hide premature termination codons in pre-mRNA of selenoprotein genes and in genes containing programmed ribosomal frameshifts [letter] Knudsen S, et al. **RNA** 1997 Jul;3(7):697–701
Nuclear pre-tRNA terminal structure and RNase P recognition. Lee Y, et al. **RNA** 1997 Feb;3(2):175–85
Secondary structure of the yeast Saccharomyces cerevisiae pre-U3A snoRNA and its implication for splicing efficiency. Mougin A, et al. **RNA** 1996 Nov;2(11):1079–93
Secrets of RNA folding revealed. Price S, et al. **Structure** 1996 Oct 15;4(10):1129–32 (30 ref.)

DRUG EFFECTS

Detection of rifampin- and ciprofloxacin-resistant Mycobacterium tuberculosis by using species-specific assays for precursor rRNA. Cangelosi GA, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1790–5
Delocalization of some small nucleolar RNPs after actinomycin D treatment to deplete early pre-rRNAs. Rivera-León R, et al. **Chromosoma** 1997 Jun; 105(7–8):506–14

GENETICS

Trans-acting factors in yeast pre-rRNA and pre-snoRNA processing. Lafontaine D, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):803–12 (71 ref.)
Preribosomal RNA processing in archaea: characterization of the RNP endonuclease mediated processing of precursor 16S rRNA in the thermoacidophile Sulfolobus acidocaldarius. Potter S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):813–23 (31 ref.)
Processing of eukaryotic pre-rRNA: the role of the transcribed spacers. van Nues RW, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):789–801 (65 ref.)
Identification of a splice site mutation in the cystathionine beta-synthase gene resulting in variable and novel splicing defects of pre-mRNA. Tsai MY, et al. **Biochem Mol Med** 1997 Jun;61(1):9–15
The splicing factor BBP interacts specifically with the pre-mRNA branchpoint sequence UACUAAC. Berglund JA, et al. **Cell** 1997 May 30;89(5):781–7
Site-specific pseudouridine formation in preribosomal RNA is guided by small nucleolar RNAs [see comments] Ganot P, et al. **Cell** 1997 May 30;89(5):799–809. Comment in: Cell 1997 May 30;89(5):669–72.
U3 snoRNA may recycle through different compartments of the nucleolus. Gerbi SA, et al. **Chromosoma** 1997 Jun; 105(7–8):401–6 (70 ref.)
Biochemistry and regulation of pre-mRNA splicing. Adams MD, et al. **Curr Opin Cell Biol** 1996 Jun;8(3):331–9 (86 ref.)
The role of branchpoint-3'splice site spacing and interaction between intron terminal nucleotides in 3' splice site selection in Saccharomyces cerevisiae. Luukkonen BG, et al. **EMBO J** 1997 Feb 17;16(4):779–92
Organization of the human protein 4.1 genomic locus: new insights into the tissue-specific alternative splicing of the pre-mRNA. Baklouti F, et al. **Genomics** 1997 Feb 1; 39(3):289–302
DRB4 promoter polymorphism in DR7 individuals: correlation with DRB4 pre-mRNA and mRNA levels. Leën MP, et al. **Immunogenetics** 1997;45(6):371–8
Factors involved in the activation of pre-mRNA splicing from downstream splicing enhancers. Achsel T, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):53–60
Alternative splicing of the rabbit beta-globin pre-mRNA in vivo after transient transfection of myoblast and myotube cells. Pironcheva GL, et al. **Microbios** 1997;89(358):31–8
An intron element modulating 5' splice site selection in the hnRNP A1 pre-mRNA interacts with hnRNP A1. Chabot B, et al. **Mol Cell Biol** 1997 Apr;17(4):1776–86
Spliceosome activation by PRP2 ATPase prior to the first transesterification reaction of pre-mRNA splicing. Kim SH, et al. **Mol Cell Biol** 1996 Dec;16(12):6810–9
Evidence for a role for galectin-1 in pre-mRNA splicing. Vyakarnam A, et al. **Mol Cell Biol** 1997 Aug;17(8):4730–7
Functional analysis of the polypyrimidine tract in pre-mRNA splicing. Coolidge CJ, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):888–96
Splice site prediction in Arabidopsis thaliana pre-mRNA by combining local and global sequence information. Hebsgaard SM, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3439–52
Structure and expression of a plant U1 snRNP 70K gene: alternative splicing of U1 snRNP 70K pre-mRNAs produces two different transcripts. Golovkin M, et al. **Plant Cell** 1996 Aug;8(8):1421–35
H-protein of the glycine cleavage system in Flaveria: alternative splicing of the pre-mRNA occurs exclusively in advanced C4 species of the genus. Kopriva S, et al. **Plant J** 1996 Aug;10(2):369–73
Mapping of branchpoint nucleotides in mutant pre-mRNAs expressed in plant cells. Liu HX, et al. **Plant J** 1996 Mar; 9(3):381–9
Splicing of precursors to mRNA in higher plants: mechanism, regulation and sub-nuclear organisation of the spliceosomal machinery. Simpson GG, et al. **Plant Mol Biol** 1996 Oct; 32(1–2):1–41 (307 ref.)
A highly stable duplex structure sequesters the 5' splice site region of hnRNP A1 alternative exon 7B. Blanchette M, et al. **RNA** 1997 Apr;3(4):405–19
Formation of the 5' end pseudoknot in small subunit ribosomal RNA: involvement of U3-like sequences [letter] Dennis PP, et al. **RNA** 1997 Apr;3(4):337–43
Functional group substitutions of the branchpoint adenosine in a nuclear pre-mRNA and a group II intron. Gaur RK, et al. **RNA** 1997 Aug;3(8):861–9
U11 snRNA interacts in vivo with the 5' splice site of U12-dependent (AU-AC) pre-mRNA introns. Kolossova I, et al. **RNA** 1997 Mar;3(3):227–33
Effect of nucleotides 37 and 38 on cleavage of tRNAPhe precursors. Liu J, et al. **Sci China C Life Sci** 1996 Jun; 39(3):243–50
Role of tissue specific alternative pre-mRNA splicing in the differentiation of the erythrocyte membrane. Benz EJ Jr, et al. **Trans Am Clin Climatol Assoc** 1996;108:78–95 (43 ref.)
The SR protein family: pleiotropic functions in pre-mRNA splicing. Valcárcel J, et al. **Trends Biochem Sci** 1996 Aug; 21(8):296–301 (49 ref.)
[Short 5'-terminal sequence of pre-mRNA tryptophanyl-tRNA-synthetase inhibits splicing of alternative exons] Turpaev KT, et al. **Dokl Akad Nauk** 1996 Aug;349(5):698–700 **(Rus)**
[Effect of the structure of the prepromotor region on transcription using phage T7 RNA polymerase] Baklanov MM, et al. **Mol Biol (Mosk)** 1996 Mar-Apr;30(2):449–53 **(Rus)**

METABOLISM

Effects of exon sequences on splicing of model pre-mRNA substrates in vitro. Dominski Z, et al. **Acta Biochim Pol** 1996;43(1):161–73
The structure and function of proteins involved in mammalian pre-mRNA splicing. Krämer A. **Annu Rev Biochem** 1996;65:367–409 (329 ref.)
Antisense 2'-O-methyloligoribonucleotides hybridized to RNA block a nuclear, ATP-dependent 3'-5' exonuclease. Dominski Z, et al. **Antisense Nucleic Acid Drug Dev** 1996 Spring;6(1):37–45
Purification and characterization of the precursor tRNA 3'-end processing nuclease from Aspergillus nidulans. Han SJ, et al. **Biochem Biophys Res Commun** 1997 Apr 17; 233(2):354–8
Structural modifications of RNA influence the 5' exoribonucleolytic hydrolysis by XRN1 and HKE1 of Saccharomyces cerevisiae. Poole TL, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):799–805
Modulation of pre-mRNA splicing in the Duchenne muscular dystrophy gene. Dunckley MG, et al. **Biochem Soc Trans** 1996 May;24(2):276S
Analysis of rate-determining conformational changes during self-splicing of the Tetrahymena intron. Emerick VL, et al. **Biochemistry** 1996 Oct 15;35(41):13469–77
Recognition of the T stem-loop of a pre-tRNA substrate by the ribozyme from Bacillus subtilis ribonuclease P. Loria A, et al. **Biochemistry** 1997 May 27;36(21):6317–25
Processing of fibrillarin-associated snoRNAs from pre-mRNA introns: an exonucleolytic process exclusively directed by the common stem-box terminal structure. Cavaillé J, et al. **Biochimie** 1996;78(6):443–56
Structural features of U6 snRNA and dynamic interactions with other spliceosomal components leading to pre-mRNA splicing. Forné T, et al. **Biochimie** 1996;78(6):436–42 (71 ref.)
Tissue-specific splicing of two mutually exclusive exons of the chicken beta-tropomyosin pre-mRNA: positive and negative regulations. Gallego ME, et al. **Biochimie** 1996; 78(6):457–65 (68 ref.)
Localization of nucleolin binding sites on human and mouse pre-ribosomal RNA. Serin G, et al. **Biochimie** 1996; 78(6):530–8
Site-specific substitution of inosine at the terminal positions of a pre-mRNA intron: implications for the configuration of the terminal base interaction. Tarn WY. **Biochimie** 1996; 78(11–12):1057–65
A look at messenger RNP moving through the nuclear pore. Daneholt B. **Cell** 1997 Mar 7;88(5):585–8 (20 ref.)
The eucaryal tRNA splicing endonuclease recognizes a tripartite set of RNA elements. Di Nicola Negri E, et al. **Cell** 1997 Jun 13;89(6):859–66
Mixed mechanisms in yeast pre-mRNA splicing? [comment] Rosbash M. **Cell** 1996 Nov 1;87(3):357–9 (15 ref.). Comment on: Cell 1996 Nov 1;87(3):391–404. Comment on: Cell 1996 Nov 1;87(3):405–13.
tRNA ligase is required for regulated mRNA splicing in the unfolded protein response [see comments] Sidrauski C, et al. **Cell** 1996 Nov 1;87(3):405–13. Comment in: Cell 1996 Nov 1;87(3):357–9.
Pre-mRNA processing and the CTD of RNA polymerase II: the tail that wags the dog? Steinmetz EJ. **Cell** 1997 May 16;89(4):491–4 (21 ref.)
The yeast La protein is required for the 3' endonucleolytic cleavage that matures tRNA precursors. Yoo CJ, et al. **Cell** 1997 May 2;89(3):393–402
Analysis of nucleolar transcription and processing domains and pre-rRNA movements by in situ hybridization. Lazdins IB, et al. **Chromosoma** 1997 Jun;105(7–8):481–95
U14 small nucleolar RNA makes multiple contacts with the pre-ribosomal RNA. Morrissey JP, et al. **Chromosoma** 1997 Jun;105(7–8):515–22
Early stages of pre-rRNA formation within the nucleolar ultrastructure of mouse cells studied by in situ hybridization

RNA PRECURSORS

with a 5'ETS leader probe. Puvion-Dutilleul F, et al. **Chromosoma** 1997 Jun;105(7-8):496-505

Signal sequences that target nuclear import and nuclear export of pre-mRNA-binding proteins. Michael WM, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:663-8

Recognition of 3'-processing sites of human mRNA precursors. Salamov AA, et al. **Comput Appl Biosci** 1997 Feb;13(1):23-8

STP1, a gene involved in pre-tRNA processing in yeast, is important for amino-acid uptake and transcription of the permease gene BAP2. Jorgensen MU, et al. **Curr Genet** 1997 Mar;31(3):241-7

Site-specific deoxynucleotide substitutions in yeast U6 snRNA block splicing of pre-mRNA in vitro. Kim CH, et al. **EMBO J** 1997 Apr 15;16(8):2119-29

In vivo commitment to splicing in yeast involves the nucleotide upstream from the branch site conserved sequence and the Mud2 protein. Rain JC, et al. **EMBO J** 1997 Apr 1;16(7):1759-71

Identification of a human protein that recognizes the 3' splice site during the second step of pre-mRNA splicing. Wu S, et al. **EMBO J** 1997 Jul 16;16(14):4421-32

Two ribosomal DNA-binding factors interact with a cluster of motifs on the 5' external transcribed spacer, upstream from the primary pre-rRNA processing site in a higher plant. Caparros-Ruiz D, et al. **Eur J Biochem** 1997 Aug 1;247(3):981-9

Processing of mammalian rRNA precursors at the 3' end of 18S rRNA. Identification of cis-acting signals suggests the involvement of U13 small nucleolar RNA. Cavaillé J, et al. **Eur J Biochem** 1996 Dec 1;242(2):206-13

Yeast pre-mRNA is composed of two populations with distinct kinetic properties. Elliott DJ, et al. **Exp Cell Res** 1996 Dec 15;229(2):181-8

Processing of pre-mRNA in polytene nuclei of Chironomus tentans salivary gland cells. Wieslander L, et al. **Exp Cell Res** 1996 Dec 15;229(2):240-6 (54 ref.)

SV40 T1-mRNA trans-splicing and translation requires that the in vitro synthesized cRNA is capped before microinjection. Graessmann M, et al. **FEBS Lett** 1996 Sep 30;394(2):233-6

Influence of substrate structure on cleavage by hammerhead ribozyme. Scarabino D, et al. **FEBS Lett** 1996 Apr 1; 383(3):185-90

A protein of the SR family of splicing factors binds extensively to exonic Balbiani ring pre-mRNA and accompanies the RNA from the gene to the nuclear pore. Alzhanova-Ericsson AT, et al. **Genes Dev** 1996 Nov 15; 10(22):2881-93

A human protein required for the second step of pre-mRNA splicing is functionally related to a yeast splicing factor. Horowitz DS, et al. **Genes Dev** 1997 Jan 1;11(1):139-51

Distribution of pre-mRNA splicing factors at sites of RNA polymerase II transcription. Neugebauer KM, et al. **Genes Dev** 1997 May 1;11(9):1148-59

Isolation of a heat-labile protein factor involved in the 3'-processing of H4 pre-mRNA. Pironcheva G, et al. **Int J Biochem Cell Biol** 1996 Aug;28(8):943-7

Depletion of pre-16S rRNA in starved Escherichia coli cells. Cangelosi GA, et al. **J Bacteriol** 1997 Jul;179(14):4457-63

Structure and organization of the human ankyrin-1 gene. Basis for complexity of pre-mRNA processing. Gallagher PG, et al. **J Biol Chem** 1997 Aug 1;272(31):19220-8

Characterization of the calf thymus hairpin-binding factor involved in histone pre-mRNA 3' end processing. Schaller A, et al. **J Biol Chem** 1997 Apr 18;272(16):10435-41

Cell shape-dependent regulation of protein 4.1 alternative pre-mRNA splicing in mammary epithelial cells. Schischmanoff PO, et al. **J Biol Chem** 1997 Apr 11; 272(15):10254-9

Cleavage factor II of Saccharomyces cerevisiae contains homologues to subunits of the mammalian Cleavage/polyadenylation specificity factor and exhibits sequence-specific, ATP-dependent interaction with precursor RNA. Zhao J, et al. **J Biol Chem** 1997 Apr 18; 272(16):10831-8

Heat shock inhibits pre-rRNA processing at the primary site in vitro and alters the activity of some rRNA binding proteins. Ghoshal K, et al. **J Cell Biochem** 1996 Sep 15; 62(4):506-15

Dynamic organization of pre-mRNA splicing factors. Huang S, et al. **J Cell Biochem** 1996 Aug;62(2):191-7 (53 ref.)

A functional interaction between the carboxy-terminal domain of RNA polymerase II and pre-mRNA splicing. Du L, et al. **J Cell Biol** 1997 Jan 13;136(1):5-18

The organization of ribosomal RNA processing correlates with the distribution of nucleolar snRNAs. Beven AF, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1241-51

Structural organization of the pre-mRNA splicing commitment: a hypothesis. Melčák I, et al. **J Struct Biol** 1996 Nov-Dec;117(3):189-94 (64 ref.)

Reactions catalyzed by group II introns in vitro. Perlman PS, et al. **Methods Enzymol** 1996;264:66-86

Distinct differences in the requirements for ribonucleoprotein complex formation on differentially regulated pre-edited mRNAs in Trypanosoma brucei. Koslowsky DJ, et al. **Mol Biochem Parasitol** 1996 Sep;80(1):1-14

A connection between pre-mRNA splicing and the cell cycle in fission yeast: cdc28+ is allelic with prp8+ and encodes an RNA-dependent ATPase/helicase. Lundgren K, et al. **Mol Biol Cell** 1996 Jul;7(7):1083-94

Serine/threonine phosphatase 1 modulates the subnuclear distribution of pre-mRNA splicing factors. Misteli T, et al. **Mol Biol Cell** 1996 Oct;7(10):1559-72

The RNase P of Dictyostelium discoideum. Drainas D. **Mol Biol Rep** 1995-96;22(2-3):135-8 (42 ref.)

Structure, mechanism and evolution of chloroplast transfer RNA processing systems. Gegenheimer P. **Mol Biol Rep** 1995-96;22(2-3):147-50 (27 ref.)

Transfer RNA gene organization and RNase P. Green CJ. **Mol Biol Rep** 1995-96;22(2-3):181-5 (67 ref.)

Enzymatic RNA synthesis and RNase P. Evolutionary aspects. Krupp G. **Mol Biol Rep** 1995-96;22(2-3):177-80 (29 ref.)

RNase MRP and rRNA processing. Lindahl L, et al. **Mol Biol Rep** 1995-96;22(2-3):69-73 (47 ref.)

Functional analysis of Rrp7p, an essential yeast protein involved in pre-rRNA processing and ribosome assembly. Baudin-Baillieu A, et al. **Mol Cell Biol** 1997 Sep; 17(9):5023-32

An intron element modulating 5' splice site selection in the hnRNP A1 pre-mRNA interacts with hnRNP A1. Chabot B, et al. **Mol Cell Biol** 1997 Apr;17(4):1776-86

Mpp10p, a U3 small nucleolar ribonucleoprotein component required for pre-18S rRNA processing in yeast. Dunbar DA, et al. **Mol Cell Biol** 1997 Oct;17(10):5803-12

Nop2p is required for pre-rRNA processing and 60S ribosome subunit synthesis in yeast. Hong B, et al. **Mol Cell Biol** 1997 Jan;17(1):378-88

A minimal spliceosomal complex A recognizes the branch site and polypyrimidine tract. Query CC, et al. **Mol Cell Biol** 1997 May;17(5):2944-53

Dbp3p, a putative RNA helicase in Saccharomyces cerevisiae, is required for efficient pre-rRNA processing predominantly at site A3. Weaver PL, et al. **Mol Cell Biol** 1997 Mar;17(3):1354-65

Isolation of novel pre-mRNA splicing mutants of Schizosaccharomyces pombe. Urushiyama S, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):118-27

The dynamics of a pre-mRNA splicing factor in living cells. Misteli T, et al. **Nature** 1997 May 29;387(6632):523-7

Metal ion catalysis during splicing of premessenger RNA. Sontheimer EJ, et al. **Nature** 1997 Aug 21;388(6644):801-5

A protein related to splicing factor U2AF35 that interacts with U2AF65 and SR proteins in splicing of pre-mRNA. Tronchère H, et al. **Nature** 1997 Jul 24;388(6640):397-400

Inverse splicing of a discontinuous pre-mRNA intron generates a circular exon in a HeLa cell nuclear extract. Braun S, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4152-7

Functional analysis of the fission yeast Prp4 protein kinase involved in pre-mRNA splicing and isolation of a putative mammalian homologue. Gross T, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1028-35

A yeast cap binding protein complex (yCBC) acts at an early step in pre-mRNA splicing. Lewis JD, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3332-6

Distribution of both lengths and 5' terminal nucleotides of mammalian pre-tRNA 3' trailers reflects properties of 3' processing endoribonuclease. Nashimoto M. **Nucleic Acids Res** 1997 Mar 15;25(6):1148-54

The Cbp2 protein stimulates the splicing of the omega intron of yeast mitochondria. Shaw LC, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1597-604

pH dependence of self-splicing by the group IA2 intron in a pre-mRNA derived from the nrdB gene of bacteriophage T4. Sjögren AS, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3543-9

Metabolism of pre-messenger RNA splicing cofactors: modification of U6 RNA is dependent on its interaction with U4 RNA. Zerby DB, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3583-9

Functional and physical interaction between the yeast splicing factors Slu7 and Prp18. Zhang X, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2146-52

Structure and expression of a plant U1 snRNP 70K gene: alternative splicing of U1 snRNP 70K pre-mRNAs produces two different transcripts. Golovkin M, et al. **Plant Cell** 1996 Aug;8(8):1421-35

Arabidopsis intron mutations and pre-mRNA splicing. Brown JW. **Plant J** 1996 Nov;10(5):771-80 (73 ref.)

Inefficient and incorrect processing of the Ac transposase transcript in iae1 and wild-type Arabidopsis thaliana. Jarvis P, et al. **Plant J** 1997 May;11(5):921-31

H-protein of the glycine cleavage system in Flaveria: alternative splicing of the pre-mRNA occurs exclusively in advanced C4 species of the genus. Kopriva S, et al. **Plant J** 1996 Aug;10(2):369-73

Three small nucleolar RNAs that are involved in ribosomal RNA precursor processing. Mishra RK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4972-7

Association of the mammalian helicase MAH with the pre-mRNA splicing complex. Molnar GM, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7831-6

Mutations in the small subunit of the Drosophila U2AF splicing factor cause lethality and developmental defects. Rudner DZ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10333-7

Repair of thalassemic human beta-globin mRNA in mammalian cells by antisense oligonucleotides. Sierakowska H, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12840-4

Insertional editing of nascent mitochondrial RNAs in Physarum. Visomirski-Robic LM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4324-9

Regulation of insulin preRNA splicing by glucose. Wang J, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4360-5

Ribonuclease P (RNase P) RNA is converted to a Cd(2+)-ribozyme by a single Rp-phosphorothioate modification in the precursor tRNA at the RNase P cleavage site. Warnecke JM, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8924-8

Purification and characterization of a human RNA adenosine deaminase for glutamate receptor B pre-mRNA editing. Yang JH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4354-9

A complex of nuclear proteins mediates SR protein binding to a purine-rich splicing enhancer. Yeakley JM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7582-7

The mechanism of 3' cleavage and polyadenylation of eukaryotic pre-mRNA. Wahle E, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:41-71 (227 ref.)

A neuron-specific splicing switch mediated by an array of pre-mRNA repressor sites: evidence of a regulatory role for the polypyrimidine tract binding protein and a brain-specific PTB counterpart. Ashiya M, et al. **RNA** 1997 Sep;3(9):996-1015

A novel U1/U5 interaction indicates proximity between U1 and U5 snRNAs during an early step of mRNA splicing. Ast G, et al. **RNA** 1997 Apr;3(4):371-81

Probing accessible sites for ribozymes on human acetylcholinesterase RNA. Birikh KR, et al. **RNA** 1997 Apr;3(4):429-37

Evidence for light/redox-regulated splicing of psbA pre-RNAs in Chlamydomonas chloroplasts. Deshpande NN, et al. **RNA** 1997 Jan;3(1):37-48

Relationship between 3' end formation and SL2-specific trans-splicing in polycistronic Caenorhabditis elegans pre-mRNA processing. Kuersten S, et al. **RNA** 1997 Mar; 3(3):269-78

Interactions of the yeast U6 RNA with the pre-mRNA branch site. McPheeters DS. **RNA** 1996 Nov;2(11):1110-23

Splicing of a divergent subclass of AT-AC introns requires the major spliceosomal snRNAs. Wu Q, et al. **RNA** 1997 Jun;3(6):586-601

Bimolecular exon ligation by the human spliceosome. Anderson K, et al. **Science** 1997 Jun 13;276(5319):1712-6

MutT prevents leakiness [comment] Bridges BA. **Science** 1997 Oct 3;278(5335):78-9. Comment on: Science 1997 Oct 3;278(5335):128-30.

The end of the message--another link between yeast and mammals [comment] Manley JL, et al. **Science** 1996 Nov 29;274(5292):1481-2. Comment on: Science 1996 Nov 29;274(5292):1511-9. Comment on: Science 1996 Nov 29;274(5292):1514-7. Comment on: Science 1996 Nov 29;274(5292):1517-20.

Dependence of yeast pre-mRNA 3'-end processing on CFT1: a sequence homolog of the mammalian AAUAAA binding factor [see comments] Stumpf G, et al. **Science** 1996 Nov 29;274(5292):1517-20. Comment in: Science 1996 Nov 29;274(5292):1481-2.

Solution structure of the donor site of a trans-splicing RNA. Greenbaum NL, et al. **Structure** 1996 Jun 15;4(6):725-33

RNA PROBES

Nonisotopic quantitation of mRNA using a novel RNase protection assay: measurement of erbB-2 mRNA in tumor cell lines. Chan SD, et al. **Anal Biochem** 1996 Nov 15; 242(2):214-20

Low background and short exposure times in mapping of DNaseI-hypersensitive sites using digoxigenin-labeled probes. Grünweller A, et al. **Anal Biochem** 1997 Apr 5; 247(1):172-5

Probes in DNA/RNA hybridization. Longiaru M. **Biologicals** 1996 Sep;24(3):187-8

Melanoma-associated antigens as messenger RNA detection markers for melanoma. Sarantou T, et al. **Cancer Res** 1997 Apr 1;57(7):1371-6

Application of the Gen-Probe amplified MTD test (Mycobacterium tuberculosis Direct Test) in the diagnostics of tuberculosis. Putová I, et al. **Cent Eur J Public Health** 1996 May;4(2):91-5

Expression of type I and IV collagen mRNAs in healing gastric ulcers--a comparative analysis using isotopic and non-radioactive in situ hybridization. Pohle T, et al. **Histochem Cell Biol** 1996 Oct;106(4):413-8

Microtitre plate riboprobe system for detection of ultrasonicated Campylobacter jejuni genomic DNA. Lamoureux M, et al. **J Appl Bacteriol** 1996 Dec; 81(6):626-34

Improved in situ hybridization to HIV with RNA probes derived from PCR products. Cone RW, et al. **J Histochem Cytochem** 1997 May;45(5):721-7

The use of RNA probes for the analysis of gene expression. Belin D. **Mol Biotechnol** 1997 Apr;7(2):153-63

Hybridization and detection of digoxigenin probes on RNA blots. Davies E, et al. **Mol Biotechnol** 1996 Aug;6(1):75-7

A sensitive RNase protection assay using 33P labeled antisense riboprobes. Meisinger C, et al. **Mol Biotechnol** 1996 Jun;5(3):289-91

Single molecule detection of RNA reporter probes by amplification with Q beta replicase. Burg JL, et al. **Mol Cell Probes** 1996 Aug;10(4):257-71

A reliable external control for ribonuclease protection assays. Scott PAE, et al. **Nucleic Acids Res** 1997 Mar 15; 25(6):1305-6

CHEMISTRY

Quantitative flow cytometric detection of specific microorganisms in soil samples using rRNA targeted fluorescent probes and ethidium bromide. Thomas JC, et al. **Cytometry** 1997 Mar 1;27(3):224–32

Whole-mount in situ hybridization for developing chick embryos using digoxygenin-labeled RNA probes. Hsu CW, et al. **Methods Mol Biol** 1997;63:263–70

GENETICS

Amplifiable hybridization probes containing a molecular switch. Blok HJ, et al. **Mol Cell Probes** 1997 Jun; 11(3):187–94

RNA PROCESSING, POST-TRANSCRIPTIONAL

Embryonic lethal abnormal visual RNA-binding proteins involved in growth, differentiation, and posttranscriptional gene expression. Antic D, et al. **Am J Hum Genet** 1997 Aug;61(2):273–8 (59 ref.)

Transcriptional and post-transcriptional regulation of interleukin-8. Villarete LH, et al. **Am J Pathol** 1996 Nov; 149(5):1685–93

Upstream regions of rp L21 genes play a role in regulation of expression at the post-transcriptional level in E. histolytica and E. dispar. Moshitch-Moshkovitch S, et al. **Arch Med Res** 1997;28 Spec No:36–8

Transcription and processing of the gene for spinach chloroplast threonine tRNA in a homologous in vitro system. Cheng YS, et al.
Biochem Biophys Res Commun 1997 Apr 17;233(2):380–5

A hammerhead ribozyme that cleaves perforin and fas-ligand RNAs in vitro. Du Z, et al.
Biochem Biophys Res Commun 1996 Sep 24;226(3):595–600

Purification and characterization of the precursor tRNA 3'-end processing nuclease from Aspergillus nidulans. Han SJ, et al. **Biochem Biophys Res Commun** 1997 Apr 17; 233(2):354–8

Role of posttranscriptional processes in the regulation of glutathione S-transferase P1 gene expression in human breast cancer cells. Jhaveri MS, et al.
Biochem Biophys Res Commun 1997 Aug 28;237(3):729–34

p38 mitogen activated protein kinase regulates endothelial VCAM-1 expression at the post-transcriptional level. Pietersma A, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):44–8

Structural modifications of RNA influence the 5' exoribonucleolytic hydrolysis by XRN1 and HKE1 of Saccharomyces cerevisiae. Poole TL, et al.
Biochem Biophys Res Commun 1997 Jun 27;235(3):799–805

Preribosomal RNA processing in archaea: characterization of the RNP endonuclease mediated processing of precursor 16S rRNA in the thermoacidophile Sulfolobus acidocaldarius. Potter S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):813–23 (31 ref.)

Processing of eukaryotic pre-rRNA: the role of the transcribed spacers. van Nues RW, et al.
Biochem Cell Biol 1995 Nov-Dec;73(11–12):789–801 (65 ref.)

Transcriptional and post-transcriptional mechanisms can regulate cell-specific expression of the human Pi-class glutathione S-transferase gene. Moffat GJ, et al.
Biochem J 1997 May 15;324 (Pt 1):91–5

Cell cycle and post-transcriptional regulation of annexin expression in IMR-90 human fibroblasts. Raynal P, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):365–71

mRNA targeting: signals in the 3'-untranslated sequences for sorting of some mRNAs. Hesketh JE.
Biochem Soc Trans 1996 May;24(2):521–7 (55 ref.)

Intron-dependent enzymatic formation of modified nucleosides in eukaryotic tRNAs: a review. Grosjean H, et al. **Biochimie** 1997 May;79(5):293–302 (74 ref.)

CDNA cloning of chick brain alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors reveals conservation of structure, function and post-transcriptional processes with mammalian receptors. Paperna T, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):101–13

Transcriptional and posttranscriptional regulation of erythroid gene expression in anthracycline-induced differentiation of human erythroleukemic cells. Morceau F, et al. **Cell Growth Differ** 1996 Aug;7(8):1023–9

Transcriptional and post-transcriptional regulation of pr22 (Op18) with proliferation control. Hosoya H, et al.
Cell Struct Funct 1996 Aug;21(4):237–43

Recognition of 3'-processing sites of human mRNA precursors. Salamov AA, et al. **Comput Appl Biosci** 1997 Feb;13(1):23–8

RNA processing: pocket guides to ribosomal RNA. Peculis B. **Curr Biol** 1997 Aug 1;7(8):R480–2

Reduced requirement for RNA editing in the mitochondrial cox3 transcript of Olea europaea L. Perrotta G, et al.
Curr Genet 1997 Feb;31(2):185–9

Post-transcriptional gene silencing in plants. Depicker A, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):373–82 (57 ref.)

A comparison of mammalian and yeast pre-mRNA 3'-end processing. Keller W, et al. **Curr Opin Cell Biol** 1997 Jun; 9(3):329–36 (52 ref.)

Function and synthesis of small nucleolar RNAs. Tollervey D, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):337–42 (49 ref.)

A functional dominant mutation in Schizosaccharomyces pombe RNase MRP RNA affects nuclear RNA processing and requires the mitochondrial-associated nuclear mutation ptp1-1 for viability. Paluh JL, et al. **EMBO J** 1996 Sep 2;15(17):4723–33

Processing of mammalian rRNA precursors at the 3' end of 18S rRNA. Identification of cis-acting signals suggests the involvement of U13 small nucleolar RNA. Cavaillé J, et al. **Eur J Biochem** 1996 Dec 1;242(2):206–13

The role of the cap structure in RNA processing and nuclear export. Lewis JD, et al. **Eur J Biochem** 1997 Jul 15; 247(2):461–9 (70 ref.)

Pre-tRNA 3'-processing in Saccharomyces cerevisiae. Purification and characterization of exo- and endoribonucleases. Papadimitriou A, et al.
Eur J Biochem 1996 Dec 15;242(3):747–59

Regulation of gonadotropin-releasing hormone gene expression in vivo and in vitro. Gore AC, et al.
Front Neuroendocrinol 1997 Apr;18(2):209–45 (192 ref.)

A DP1 pseudogene derived from an aberrantly processed RNA. Gopalkrishnan RV, et al. **Gene** 1997 Apr 11; 189(1):113–7

Tissue-specific processing of the Surf-5 and Surf-4 mRNAs. Garson K, et al. **Gene Expr** 1996;6(4):209–18

The family of box ACA small nucleolar RNAs is defined by an evolutionarily conserved secondary structure and ubiquitous sequence elements essential for RNA accumulation. Ganot P, et al. **Genes Dev** 1997 Apr 1; 11(7):941–56

The novel variants of mb-1 and B29 transcripts generated by alternative mRNA splicing. Koyama M, et al.
Immunol Lett 1995 Sep;47(3):151–6

The multifaceted roles of the RNA processing enzyme ribonuclease III. Srivastava RA, et al.
Indian J Biochem Biophys 1996 Aug;33(4):253–60 (47 ref.)

Posttranscriptional modification of tRNA in psychrophilic bacteria. Dalluge JJ, et al. **J Bacteriol** 1997 Mar; 179(6):1918–23

Heat induction of hsp18 gene expression in Streptomyces albus G: transcriptional and posttranscriptional regulation. Servant P, et al. **J Bacteriol** 1996 Dec;178(24):7031–6

Glycoprotein 46 mRNA abundance is post-transcriptionally regulated during development of Leishmania chagasi promastigotes to an infectious form. Beetham JK, et al. **J Biol Chem** 1997 Jul 11;272(28):17360–6

Ribosomal 5 S rRNA maturation in Saccharomyces cerevisiae. Lee Y, et al. **J Biol Chem** 1997 Jun 13; 272(24):15206–12

Disruption of ribosomal scanning on the 5'-untranslated region, and not restriction of translational initiation per se, modulates the stability of nonaberrant mRNAs in the yeast Saccharomyces cerevisiae. Linz B, et al. **J Biol Chem** 1997 Apr 4;272(14):9131–40

Apobec-1 interacts with a 65-kDa complementing protein to edit apolipoprotein-B mRNA in vitro. Mehta A, et al. **J Biol Chem** 1996 Nov 8;271(45):28294–9

Complete phenotypic characterization of apobec-1 knockout mice with a wild-type genetic background and a human apolipoprotein B transgenic background, and restoration of apolipoprotein B mRNA editing by somatic gene transfer of Apobec-1. Nakamuta M, et al. **J Biol Chem** 1996 Oct 18;271(42):25981–8

Post-transcriptional control regulates transforming growth factor alpha in the human carcinoma KB cell line. Nicolini G, et al. **J Biol Chem** 1996 Nov 22;271(47):30290–6

The chick alpha2(I) collagen gene contains two functional promoters, and its expression in chondrocytes is regulated at both transcriptional and post-transcriptional levels. Pallante KM, et al. **J Biol Chem** 1996 Oct 11; 271(41):25233–9

Analysis of post-transcriptional regulation operating on transcription products of the tandemly linked Leishmania infantum hsp70 genes. Quijada L, et al. **J Biol Chem** 1997 Feb 14;272(7):4493–9

Characterization of the calf thymus hairpin-binding factor involved in histone pre-mRNA 3'end processing. Schaller A, et al. **J Biol Chem** 1997 Apr 18;272(16):10435–41

Carbohydrate starvation stimulates differential expression of rice alpha-amylase genes that is modulated through complicated transcriptional and posttranscriptional processes. Sheu JJ, et al. **J Biol Chem** 1996 Oct 25; 271(43):26998–7004

Processing of the rne transcript by an RNase E-independent amino acid-dependent mechanism. Woo WM, et al.
J Biol Chem 1997 Jun 13;272(24):15516–20

Mutations in the nuclear export signal of human ran-binding protein RanBP1 block the Rev-mediated posttranscriptional regulation of human immunodeficiency virus type 1. Zolotukhin AS, et al. **J Biol Chem** 1997 Apr 25;272(17):11356–60

Post-transcriptional stimulation of transforming growth factor beta 1 mRNA by TGF-beta 1 treatment of transformed human osteoblasts. Liu C, et al.
J Bone Miner Res 1996 Feb;11(2):211–17

Posttranscriptional aspects of the biosynthesis of type 1 collagen pro-alpha chains: the effects of posttranslational modifications on synthesis pauses during elongation of the pro alpha 1 (I) chain. Gura T, et al. **J Cell Biochem** 1996 May;61(2):194–215

Spliced exons of adenovirus late RNAs colocalize with snRNP in a specific nuclear domain. Bridge E, et al.
J Cell Biol 1996 Oct;135(2):303–14

Chromatin modifications during oogenesis in the mouse: removal of somatic subtypes of histone H1 from oocyte chromatin occurs post-natally through a post-transcriptional mechanism. Clarke HJ, et al.
J Cell Sci 1997 Feb;110 (Pt 4):477–87

Transcriptional and post-transcriptional regulation of LDL receptor gene expression in PMA-treated THP-1 cells by LDL-containing immune complexes. Huang Y, et al.
J Lipid Res 1997 Jan;38(1):110–20

Processing of human mitochondrial tRNA(Ser(AGY))GCU: a novel pathway in tRNA biosynthesis. Rossmanith W. **J Mol Biol** 1997 Jan 31;265(4):365–71 (26 ref.)

Posttranscriptional regulation of hepatitis B virus replication by the precore protein. Scaglioni PP, et al. **J Virol** 1997 Jan;71(1):345–53

Identification of an RNA sequence within an intracisternal-A particle element able to replace Rev-mediated posttranscriptional regulation of human immunodeficiency virus type 1. Tabernero C, et al. **J Virol** 1997 Jan; 71(1):95–101

A Candida albicans gene expressed in Saccharomyces cerevisiae results in a distinct pattern of mRNA processing. Iborra A, et al. **Microbiologia** 1996 Sep;12(3):443–8

Post-transcriptional control of PARP gene expression. Clayton C, et al. **Mol Biochem Parasitol** 1996 Apr;77(1):1–6 (40 ref.)

Post-transcriptional control of hsp70 mRNA in Trypanosoma brucei. Häusler T, et al.
Mol Biochem Parasitol 1996 Feb-Mar;76(1–2):57–71

Structure, mechanism and evolution of chloroplast transfer RNA processing systems. Gegenheimer P.
Mol Biol Rep 1995–96;22(2–3):147–50 (27 ref.)

RNase P as hyperprocessing enzyme: a model for formation of a biologically functional tRNA fragment. Kikuchi Y. **Mol Biol Rep** 1995–96;22(2–3):171–5 (17 ref.)

RNase MRP and rRNA processing. Lindahl L, et al.
Mol Biol Rep 1995–96;22(2–3):69–73 (47 ref.)

Plant mitochondrial RNase P. Marchfelder A.
Mol Biol Rep 1995–96;22(2–3):151–6 (29 ref.)

Regulated expression and RNA processing of transcripts from the Srp20 splicing factor gene during the cell cycle. Jumaa H, et al. **Mol Cell Biol** 1997 Jun;17(6):3116–24

Control of adenovirus early gene expression: posttranscriptional control mediated by both viral and cellular gene products. Katze MG, et al. **Mol Cell Biol** 1981 Sep;1(9):807–13

The rRNA-processing function of the yeast U14 small nucleolar RNA can be rescued by a conserved RNA helicase-like protein. Liang WQ, et al. **Mol Cell Biol** 1997 Jul;17(7):4124–32

The sequence of the 5' end of the U8 small nucleolar RNA is critical for 5.8S and 28S rRNA maturation. Peculis BA. **Mol Cell Biol** 1997 Jul;17(7):3702–13

Mutations in STS1 suppress the defect in 3' mRNA processing caused by the rna15-2 mutation in Saccharomyces cerevisiae. Amrani N, et al.
Mol Gen Genet 1996 Oct 16;252(5):552–62

Ribosomal RNA. Click here for methylation [news; comment] Maden T. **Nature** 1996 Oct 24;383(6602):675–6 . Comment on: Nature 1996 Oct 24;383(6602):732–5.

The RNA modification database. Crain PF, et al.
Nucleic Acids Res 1997 Jan 1;25(1):126–7

3' Processing and termination of mouse histone transcripts synthesized in vitro by RNA polymerase II. Gu X, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3797–805

Chloroplast endoribonuclease p54 involved in RNA 3'-end processing is regulated by phosphorylation and redox state. Liere K, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2403–8

Distribution of both lengths and 5' terminal nucleotides of mammalian pre-tRNA 3' trailers reflects properties of 3' processing endoribonuclease. Nashimoto M.
Nucleic Acids Res 1997 Mar 15;25(6):1148–54

Genes encoding isoforms of transcription elongation factor TFIIS in Xenopus and the use of multiple unusual RNA processing signals. Plant KE, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3514–21

Ataxia-telangiectasia: structural diversity of untranslated sequences suggests complex post-transcriptional regulation of ATM gene expression. Savitsky K, et al.
Nucleic Acids Res 1997 May 1;25(9):1678–84

Eyes off transcription! The wonderful world of post-transcriptional regulation. Gallie DR, et al.
Plant Cell 1997 May;9(5):667–73

Alternative processing of the maize Ac transcript in Arabidopsis. Martin DJ, et al. **Plant J** 1997 May; 11(5):933–43

RNA as a target and an initiator of post-transcriptional gene silencing in transgenic plants. Baulcombe DC.
Plant Mol Biol 1996 Oct;32(1–2):79–88 (56 ref.)

RNA processing alters open reading frame stoichiometry from the large ATP synthase gene cluster of spinach chloroplasts. Hotchkiss T, et al. **Plant Mol Biol** 1997 Mar; 33(4):635–40

Optimizing expression of transgenes with an emphasis on post-transcriptional events. Koziel MG, et al.
Plant Mol Biol 1996 Oct;32(1–2):393–405 (80 ref.)

Post-transcriptional regulation of chloroplast gene expression in Chlamydomonas reinhardtii. Rochaix JD.
Plant Mol Biol 1996 Oct;32(1–2):327–41 (94 ref.)

Posttranscriptional modification of retroviral primers is required for late stages of DNA replication. Burnett BP, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7210–5

Isolation of quelling-defective (qde) mutants impaired in posttranscriptional transgene-induced gene silencing in Neurospora crassa. Cogoni C, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10233-8

Versatile 5'phosphoryl coupling of small and large molecules to an RNA. Huang F, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):8965-9

Addition of destabilizing poly (A)-rich sequences to endonuclease cleavage sites during the degradation of chloroplast mRNA. Lisitsky I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13398-403

The major yeast poly(A)-binding protein is associated with cleavage factor IA and functions in premessenger RNA 3'-end formation. Minvielle-Sebastia L, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7897-902

Three small nucleolar RNAs that are involved in ribosomal RNA precursor processing. Mishra RK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4972-7

Evolutionary conservation of sequence elements controlling cytoplasmic polyadenylylation. Verrotti AC, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9027-32

Mechanisms for posttranscriptional regulation by iron-responsive elements and iron regulatory proteins. Muckenthaler M, et al. **Prog Mol Subcell Biol** 1997; 18:93-115 (100 ref.)

Regulation of eukaryotic messenger RNA turnover. Rajagopalan LE, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:257-86 (128 ref.)

A novel protein shared by RNase MRP and RNase P. Chu S, et al. **RNA** 1997 Apr;3(4):382-91

Naegleria nucleolar introns contain two group I ribozymes with different functions in RNA splicing and processing. Einvik C, et al. **RNA** 1997 Jul;3(7):710-20

5'ETS rRNA processing facilitated by four small RNAs: U14, E3, U17, and U3 [published erratum appears in RNA 1996 Dec;2(12):1318] Enright CA, et al. **RNA** 1996 Nov; 2(11):1094-9

In vitro complementation analysis localizes 23S rRNA posttranscriptional modifications that are required for Escherichia coli 50S ribosomal subunit assembly and function. Green R, et al. **RNA** 1996 Oct;2(10):1011-21

Regulation of tRNA suppressor activity by an intron-encoded polyadenylation signal. Liang S, et al. **RNA** 1997 Jun;3(6):648-59

Functional analysis of filamentous phage f1 mRNA processing sites. Stump MD, et al. **RNA** 1996 Dec; 2(12):1286-94

Identification of specific nucleotide sequences and structural elements required for intronic U14 snoRNA processing. Xia L, et al. **RNA** 1997 Jan;3(1):17-26

Essential yeast protein with unexpected similarity to subunits of mammalian cleavage and polyadenylation specificity factor (CPSF) [see comments] Chanfreau G, et al. **Science** 1996 Nov 29;274(5292):1511-4. Comment in: Science 1996 Nov 29;274(5292):1481-2.

The end of the message--another link between yeast and mammals [comment] Manley JL, et al. **Science** 1996 Nov 29;274(5292):1481-2. Comment on: Science 1996 Nov 29;274(5292):1511-9. Comment on: Science 1996 Nov 29;274(5292):1514-7. Comment on: Science 1996 Nov 29;274(5292):1517-20.

Dependence of yeast pre-mRNA 3'-end processing on CFT1: a sequence homolog of the mammalian AAUAAA binding factor [see comments] Stumpf G, et al. **Science** 1996 Nov 29;274(5292):1517-20. Comment in: Science 1996 Nov 29;274(5292):1481-2.

Defining the editing 'reaction'. Hajduk SL. **Trends Microbiol** 1997 Jan;5(1):1-2

RNA editing in kinetoplastid parasites: what to do with U. Sloof P, et al. **Trends Microbiol** 1997 May;5(5):189-95 (54 ref.)

Reciprocal effects of splicing and polyadenylation on human immunodeficiency virus type 1 pre-mRNA processing. Scott JM, et al. **Virology** 1996 Oct 15;224(2):498-509

A noncanonical poly(A) signal, UAUAAA, and flanking elements in Epstein-Barr virus DNA polymerase mRNA function in cleavage and polyadenylation assays. Silver Key SC, et al. **Virology** 1997 Jul 21;234(1):147-59

DRUG EFFECTS

c-fms mRNA is regulated posttranscriptionally by 1,25(OH)2D3 in HL-60 cells. Biskobing DM, et al. **Calcif Tissue Int** 1997 Sep;61(3):205-9

Post-transcriptional regulation of inducible nitric oxide synthase mRNA in murine macrophages by doxycycline and chemically modified tetracyclines. Amin AR, et al. **FEBS Lett** 1997 Jun 30;410(2-3):259-64

Sodium butyrate inhibits the expression of the human lecithin: cholesterol acyltransferase gene in HepG2 cells by a post-transcriptional mechanism. Skretting G, et al. **FEBS Lett** 1997 Mar 3;404(1):105-10

Post-transcriptional regulation of erythropoietin mRNA stability by erythropoietin mRNA-binding protein. McGary EC, et al. **J Biol Chem** 1997 Mar 28; 272(13):8628-34

Effect of anthracycline antitumor antibiotics (adriamycin and nogalamycin) and cycloheximide on the biosynthesis and processing of major UsnRNAs. Ray R, et al. **Mol Cell Biochem** 1996 Sep 6;162(1):75-82

Brain-derived neurotrophic factor suppresses programmed death of cerebellar granule cells through a posttranslational mechanism. Suzuki K, et al. **Mol Chem Neuropathol** 1997 Jan-Feb;30(1-2):101-24

GENETICS

Alternate COX-2 transcripts are differentially regulated: implications for post-transcriptional control. Newton R, et al. **Biochem Biophys Res Commun** 1997 May 8; 234(1):85-9

The steady-state level of mRNA from the Ogura cytoplasmic male sterility locus in Brassica cybrids is determined post-transcriptionally by its 3' region. Bellaoui M, et al. **EMBO J** 1997 Aug 15;16(16):5057-68

Ferritin mRNAs in Schistosoma mansoni do not have iron-responsive elements for post-transcriptional regulation. Schüssler P, et al. **Eur J Biochem** 1996 Oct 1; 241(1):64-9

Function of the repeated sequence in the 3' flanking region of the Escherichia coli rnpB gene on transcription termination and RNA processing. Kim S, et al. **FEBS Lett** 1997 May 5;407(3):353-6

Cloning and characterization of the rat apobec-1 gene: a comparative analysis of gene structure and promoter usage in rat and mouse. Hirano K, et al. **J Lipid Res** 1997 Jun; 38(6):1103-19

PCF11 encodes a third protein component of yeast cleavage and polyadenylation factor I. Amrani N, et al. **Mol Cell Biol** 1997 Mar;17(3):1102-9

Premature 3'-end formation of CBP1 mRNA results in the downregulation of cytochrome b mRNA during the induction of respiration in Saccharomyces cerevisiae. Sparks KA, et al. **Mol Cell Biol** 1997 Aug;17(8):4199-207

Allelism of PSO4 and PRP19 links pre-mRNA processing with recombination and error-prone DNA repair in Saccharomyces cerevisiae. Grey M, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4009-14

PHYSIOLOGY

Expression patterns and transcript processing of ftt-1 and ftt-2, two C. elegans 14-3-3 homologues. Wang W, et al. **J Mol Biol** 1997 May 9;268(3):619-30

Mpp10p, a U3 small nucleolar ribonucleoprotein component required for pre-18S rRNA processing in yeast. Dunbar DA, et al. **Mol Cell Biol** 1997 Oct;17(10):5803-12

Dbp3p, a putative RNA helicase in Saccharomyces cerevisiae, is required for efficient pre-rRNA processing predominantly at site A3. Weaver PL, et al. **Mol Cell Biol** 1997 Mar;17(3):1354-65

Transcriptional and post-transcriptional regulation of rainbow trout estrogen receptor and vitellogenin gene expression. Flouriot G, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):173-83

RADIATION EFFECTS

Altered processing of precursor transcripts and increased levels of the subunit I of mitochondrial cytochrome c oxidase in Syrian hamster fetal cells initiated with ionizing radiation. Otero G, et al. **Carcinogenesis** 1997 Aug; 18(8):1569-75

RNA, PROTOZOAN

Leishmania mexicana amazonensis: differential display analysis and cloning of mRNAs from attenuated and infective forms. Heard PL, et al. **J Eukaryot Microbiol** 1996 Sep-Oct;43(5):409-15

The lobster parasite Anophryoides haemophila (Scuticociliatida: Orchitophryidae): nuclear 18S rDNA sequence, phylogeny and detection using oligonucleotide primers. Ragan MA, et al. **J Eukaryot Microbiol** 1996 Jul-Aug;43(4):341-6

Phylogeny of the rumen ciliates Entodinium, Epidinium and Polyplastron (Litostomatea:Entodiniomorphida) inferred from small subunit ribosomal RNA sequences. Wright AD, et al. **J Eukaryot Microbiol** 1997 Jan-Feb;44(1):61-7

Maxicircle genomic organization and editing of an ATPase subunit 6 RNA in Trypanosoma cruzi. Ochs DE, et al. **Mol Biochem Parasitol** 1996 Feb-Mar;76(1-2):267-78

Structural and functional characterization of the Leishmania amazonensis ribosomal RNA promoter. Uliana SR, et al. **Mol Biochem Parasitol** 1996 Feb-Mar;76(1-2):245-55

Toxoplasma gondii strain-specific transcript levels of SAG1 and their association with virulence. Windeck T, et al. **Parasitol Res** 1996;82(8):715-9

ANALYSIS

Differential display of mRNAs from Entamoeba histolytica during electron dense granules secretion. Salazar I, et al. **Arch Med Res** 1997;28 Spec No:190-2

Prevalence of microsporidiosis due to Enterocytozoon bieneusi and Encephalitozoon (Septata) intestinalis among patients with AIDS-related diarrhea: determination by polymerase chain reaction to the microsporidian small-subunit rRNA gene. Coyle CM, et al. **Clin Infect Dis** 1996 Nov;23(5):1002-6

Immunologic and molecular characteristics of Encephalitozoon-like microsporidia isolated from humans and rabbits indicate that Encephalitozoon cuniculi is a zoonotic parasite. Deplazes P, et al. **Clin Infect Dis** 1996 Mar;22(3):557-9

Morphological and molecular characterization of Giardia isolated from the straw-necked ibis (Threskiornis spinicollis) in Western Australia. McRoberts KM, et al. **J Parasitol** 1996 Oct;82(5):711-8

BIOSYNTHESIS

RNA editing in trypanosomatid mitochondria. Simpson L, et al. **Methods Enzymol** 1996;264:99-121

Insertional editing in isolated Physarum mitochondria is linked to RNA synthesis. Visomirski-Robic LM, et al. **RNA** 1997 Aug;3(8):821-37

CHEMISTRY

Analysis of rate-determining conformational changes during self-splicing of the Tetrahymena intron. Emerick VL, et al. **Biochemistry** 1996 Oct 15;35(41):13469-77

Solution conformation of a five-nucleotide RNA bulge loop from a group I intron. Luebke KJ, et al. **Biochemistry** 1997 Aug 19;36(33):10246-55

Experimental verification of the secondary structures of guide RNA-pre-mRNA chimaeric molecules in Trypanosoma brucei. Schmid B, et al. **Eur J Biochem** 1996 Sep 15;240(3):721-31

Secondary structures and features of the 18S, 5.8S and 26S ribosomal RNAs from the Apicomplexan parasite Toxoplasma gondii. Gagnon S, et al. **Gene** 1996 Sep 16; 173(2):129-35

A three-dimensional working model for a guide RNA from Trypanosoma brucei. Hermann T, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2311-8

Interaction of thiostrepton with an RNA fragment derived from the plastid-encoded ribosomal RNA of the malaria parasite. Rogers MJ, et al. **RNA** 1997 Aug;3(8):815-20

Metal-binding sites in the major groove of a large ribozyme domain. Cate JH, et al. **Structure** 1996 Oct 15;4(10):1221-9

DRUG EFFECTS

Interaction of thiostrepton with an RNA fragment derived from the plastid-encoded ribosomal RNA of the malaria parasite. Rogers MJ, et al. **RNA** 1997 Aug;3(8):815-20

GENETICS

Detection of viable Giardia cysts by amplification of heat shock-induced mRNA. Abbaszadegan M, et al. **Appl Environ Microbiol** 1997 Jan;63(1):324-8

Sequence data for two large-subunit rRNA genes from an Asian strain of Alexandrium catenella. Yeung PK, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4199-201

Molecular phylogeny of the genus Entamoeba as revealed by riboprinting. Clark CG, et al. **Arch Med Res** 1997;28 Spec No:69-70

cAMP levels and up-regulation of actin mRNA in Entamoeba histolytica. Manning-Cela R, et al. **Arch Med Res** 1997;28 Spec No:134-5

Spliced leader RNA of trypanosomes: in vivo mutational analysis reveals extensive and distinct requirements for trans splicing and cap4 formation. Lücke S, et al. **EMBO J** 1996 Aug 15;15(16):4380-91

Trypanosoma cruzi: can activity of the rRNA gene promoter be used as a marker for speciation? Floeter-Winter LM, et al. **Exp Parasitol** 1997 Jul;86(3):232-4

Stable transfection in the monogenetic trypanosomatid Leptomonas collosoma--transcription barrier of heterologous trypanosomatid SL RNA genes and expression of a chimeric SL RNA molecule. Goldring A, et al. **Exp Parasitol** 1996 Oct;84(1):28-41

Identification and analysis of the u6 small nuclear RNA gene from Entamoeba histolytica. Miranda R, et al. **Gene** 1996 Nov 21;180(1-2):37-42

Sequence variation in the 18S rRNA gene, a target for PCR-based malaria diagnosis, in Plasmodium ovale from southern Vietnam. Kawamoto F, et al. **J Clin Microbiol** 1996 Sep;34(9):2287-9

Phylogenetic position of Psalteriomonas lanterna deduced from the SSU rDNA sequence. Weekers PH, et al. **J Eukaryot Microbiol** 1997 Sep-Oct;44(5):467-70

Fluorescent oligonucleotide rDNA probes that specifically bind to a common nanoflagellate, Paraphysomonas vestita. Rice J, et al. **Microbiology** 1997 May;143 (Pt 5):1717-27

A fluorescence in situ hybridisation study of the regulation of histone mRNA levels during the cell cycle of Trypanosoma brucei. Ersfeld K, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):201-9

The promoter for the ribosomal RNA genes of Leishmania chagasi. Gay LS, et al. **Mol Biochem Parasitol** 1996 May; 77(2):193-200

Transcription of the Trypanosoma brucei spliced leader RNA gene is dependent only on the presence of upstream regulatory elements. Günzl A, et al. **Mol Biochem Parasitol** 1997 Mar;85(1):67-76

The Plasmodium falciparum 6 kb element is polycistronically transcribed. Ji YE, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):211-23

Phylogeny of trypanosomes as inferred from the small and large subunit rRNAs: implications for the evolution of parasitism in the trypanosomatid protozoa. Maslov DA, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):197-205

Structure of the Trypanosoma brucei U6 snRNA gene promoter. Nakaar V, et al. **Mol Biochem Parasitol** 1997 Sep;88(1-2):13-23

Developmentally regulated transcripts and evidence of differential mRNA processing in Giardia lamblia. Que X,

et al. **Mol Biochem Parasitol** 1996 Oct 18;81(1):101–10
The SLA RNA gene of Trypanosoma brucei is organized in a tandem array which encodes several small RNAs. Roberts TG, et al. **Mol Biochem Parasitol** 1996 Dec 20; 83(2):163–74
The genomic organization of guide RNA genes in kinetoplastid protozoa: several conundrums and their solutions. Simpson L. **Mol Biochem Parasitol** 1997 Jun; 86(2):133–41 (39 ref.)
Analysis of the 3' uridylylation sites of guide RNAs from Leishmania tarentolae. Thiemann OH, et al. **Mol Biochem Parasitol** 1996 Aug;79(2):229–34
Heterogeneous transcripts of RIME/ingi retroposons in Trypanosoma brucei are unspliced. Vassella E, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):131–5
Elements in the 3' untranslated region of procyclin mRNA regulate expression in insect forms of Trypanosoma brucei by modulating RNA stability and translation. Furger A, et al. **Mol Cell Biol** 1997 Aug;17(8):4372–80
The guide RNA database. Souza AE, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):104–6
A functional telomerase RNA swap in vivo reveals the importance of nontemplate RNA domains. Bhattacharyya A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2823–7
The U5 RNA of trypanosomes deviates from the canonical U5 RNA: the Leptomonas collosoma U5 RNA and its coding gene. Xu Yx, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8473–8
Guide RNAs and guide RNA genes in the cryptobiid kinetoplastid protozoan, Trypanoplasma borreli. Yasuhira S, et al. **RNA** 1996 Nov;2(11):1153–60
Nested polymerase chain reaction for detection of Plasmodium falciparum infection in Malaysia. Khoo A, et al. **Trans R Soc Trop Med Hyg** 1996 Jan–Feb;90(1):40–1

ISOLATION & PURIFICATION

Changes in the ultrastructural localization of mRNA for a circadian regulated protein. Techel D, et al. **Mol Mar Biol Biotechnol** 1996 Dec;5(4):241–8

METABOLISM

Analysis of rate-determining conformational changes during self-splicing of the Tetrahymena intron. Emerick VL, et al. **Biochemistry** 1996 Oct 15;35(41):13469–77
Purification of a functional enzymatic editing complex from Trypanosoma brucei mitochondria. Rusché LN, et al. **EMBO J** 1997 Jul 1;16(13):4069–81
Localization of the newly initiated and processed ribosomal primary transcripts during the mitotic cycle in Physarum polycephalum. Pierron G, et al. **Exp Cell Res** 1996 Dec 15;229(2):407–20
Role of an RNA-binding protein in import of tRNA into Leishmania mitochondria. Adhya S, et al. **J Biol Chem** 1997 Aug 22;272(34):21396–402
Reconstitution of functional eukaryotic ribosomes from Dictyostelium discoideum ribosomal proteins and RNA. Mangiarotti G, et al. **J Biol Chem** 1997 Aug 8; 272(32):19682–7
Up-regulation of action mRNA and reorganization of the cytoskeleton in Entamoeba histolytica trophozoites. Manning-Cela R, et al. **J Eukaryot Microbiol** 1997 Jan–Feb;44(1):18–24
RNA editing in kinetoplastid protozoa. Stuart K, et al. **Microbiol Mol Biol Rev** 1997 Mar;61(1):105–20 (114 ref.)
A fluorescence in situ hybridisation study of the regulation of histone mRNA levels during the cell cycle of Trypanosoma brucei. Ersfeld K, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):201–9
Polysomal, procyclin mRNAs accumulate in bloodstream forms of monomorphic and pleomorphic trypanosomes treated with protein synthesis inhibitors. Graham SV, et al. **Mol Biochem Parasitol** 1996 Oct 1;80(2):179–91
Post-transcriptional control of hsp70 mRNA in Trypanosoma brucei. Häusler T, et al. **Mol Biochem Parasitol** 1996 Feb–Mar;76(1–2):57–71
Distinct differences in the requirements for ribonucleoprotein complex formation on differentially regulated pre-edited mRNAs in Trypanosoma brucei. Koslowsky DJ, et al. **Mol Biochem Parasitol** 1996 Sep;80(1):1–14
Human and fungal 3' splice sites are used by Trypanosoma brucei for trans splicing. Metzenberg S, et al. **Mol Biochem Parasitol** 1996 Dec 2;83(1):11–23
Developmentally regulated transcripts and evidence of differential mRNA processing in Giardia lamblia. Que X, et al. **Mol Biochem Parasitol** 1996 Oct 18;81(1):101–10
Evidence for light/redox-regulated splicing of psbA pre-RNAs in Chlamydomonas chloroplasts. Deshpande NN, et al. **RNA** 1997 Jan;3(1):37–48
Resolution of the RNA editing gRNA-directed endonuclease from two other endonucleases of Trypanosoma brucei mitochondria. Piller KJ, et al. **RNA** 1997 Mar;3(3):279–90
Defining the editing 'reaction'. Hajduk SL. **Trends Microbiol** 1997 Jan;5(1):1–2

RNA REPLICASE

BIOSYNTHESIS

Hepatitis C virus NS5B protein is a membrane-associated phosphoprotein with a predominantly perinuclear localization. Hwang SB, et al. **Virology** 1997 Jan 20; 227(2):439–46

CHEMISTRY

Structure of the RNA-dependent RNA polymerase of poliovirus. Hansen JL, et al. **Structure** 1997 Aug 15; 5(8):1109–22
The fourth genus in the Orthomyxoviridae: sequence analyses of two Thogoto virus polymerase proteins and comparison with influenza viruses. Leahy MB, et al. **Virus Res** 1997 Aug;50(2):215–24

GENETICS

Identification of the minimal replicase and the minimal promoter of (-)-strand synthesis, functional in rotavirus RNA replication in vitro. Wentz MJ, et al. **Arch Virol Suppl** 1996;12:59–67
The molecular anatomy of influenza virus RNA polymerase. Honda A, et al. **Biol Chem** 1997 Jun;378(6):483–8 (54 ref.)
Amino acid changes in the putative replicase of tomato mosaic tobamovirus that overcome resistance in Tm-1 tomato. Hamamoto H, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):461–4
The complete Mokola virus genome sequence: structure of the RNA-dependent RNA polymerase. Le Mercier P, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1571–6
Inhibition of vesicular stomatitis virus in cells constitutively expressing an antisense RNA targeted against the virus RNA polymerase gene. Takacs AM, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):125–9
Sensitive detection of human Caliciviridae by RT-PCR. Stene-Johansen K, et al. **J Med Virol** 1996 Nov; 50(3):207–13
Variations of hepatitis C virus NS5B sequence (nucleotides 8261–8566) do not correlate with response to interferon-alpha therapy. Nelson DR, et al. **J Viral Hepat** 1995;2(6):285–92
An infectious arterivirus cDNA clone: identification of a replicase point mutation that abolishes discontinuous mRNA transcription. van Dinten LC, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):991–6
The fourth genus in the Orthomyxoviridae: sequence analyses of two Thogoto virus polymerase proteins and comparison with influenza viruses. Leahy MB, et al. **Virus Res** 1997 Aug;50(2):215–24

ISOLATION & PURIFICATION

Assays for poliovirus polymerase, 3D(Pol), and authentic RNA replication in HeLa S10 extracts. Barton DJ, et al. **Methods Enzymol** 1996;275:35–57
RNA-dependent RNA polymerase of hepatitis C virus. De Francesco R, et al. **Methods Enzymol** 1996;275:58–67

METABOLISM

One of two NTP binding sites in poliovirus RNA polymerase required for RNA replication. Richards OC, et al. **J Biol Chem** 1997 Sep 12;272(37):23261–4
Characterization of an RNA-dependent RNA polymerase activity associated with La France isometric virus. Goodin MM, et al. **J Virol** 1997 Mar;71(3):2264–9
Characterization of the in vitro activity of the RNA-dependent RNA polymerase associated with the ribonucleoproteins of rice hoja blanca tenuivirus. Nguyen M, et al. **J Virol** 1997 Apr;71(4):2621–7
Mutation of lysine residues in the nucleotide binding segments of the poliovirus RNA-dependent RNA polymerase. Richards OC, et al. **J Virol** 1996 Dec;70(12):8564–70
Efficient transcription of the tRNA-like structure of turnip yellow mosaic virus by a template-dependent and specific viral RNA polymerase obtained by a new procedure [corrected] [published erratum appears in J Virol Methods 1997 Jun;66(1):165–6] Deiman BA, et al. **J Virol Methods** 1997 Mar;64(2):181–95
RNA-dependent RNA polymerase of hepatitis C virus. De Francesco R, et al. **Methods Enzymol** 1996;275:58–67
Viral RNA trafficking is inhibited in replicase-mediated resistant transgenic tobacco plants. Nguyen L, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12643–7
Minimal templates directing accurate initiation of subgenomic RNA synthesis in vitro by the brome mosaic virus RNA-dependent RNA polymerase. Adkins S, et al. **RNA** 1997 Jun;3(6):634–47
RNA-dependent RNA polymerase activity associated with the yeast viral p91/20S RNA ribonucleoprotein complex. García-Cuéllar MP, et al. **RNA** 1997 Jan;3(1):27–36
RNA polymerase activity catalyzed by a potyvirus-encoded RNA-dependent RNA polymerase. Hong Y, et al. **Virology** 1996 Dec 1;226(1):146–51
New insights into the mechanisms of RNA recombination. Nagy PD, et al. **Virology** 1997 Aug 18;235(1):1–9 (80 ref.)
Turnip yellow mosaic virus RNA-dependent RNA polymerase: initiation of minus strand synthesis in vitro. Singh RN, et al. **Virology** 1997 Jul 7;233(2):430–9
RNA synthesis by the brome mosaic virus RNA-dependent RNA polymerase: transition from initiation to elongation. Sun JH, et al. **Virology** 1997 Jun 23;233(1):63–73
Initiation of (-)-strand RNA synthesis catalyzed by the BMV RNA-dependent RNA polymerase: synthesis of oligonucleotides. Sun JH, et al. **Virology** 1996 Dec 1; 226(1):1–12
Identification of the polymerase polyprotein products p72 and p65 of the murine coronavirus MHV-JHM. Gao HQ, et al. **Virus Res** 1996 Dec;45(2):101–9
Influenza A virus RNA-dependent RNA polymerase cleaves influenza mRNA in vitro. Peng Q, et al. **Virus Res** 1996 Jun;42(1–2):149–58
RNA-dependent RNA polymerase activity related to the 20S RNA replicon of Saccharomyces cerevisiae. Ribas JC, et al. **Yeast** 1996 Sep 30;12(12):1219–28

PHARMACOLOGY

Viral RNA trafficking is inhibited in replicase-mediated resistant transgenic tobacco plants. Nguyen L, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12643–7

PHYSIOLOGY

Replicase-mediated resistance to plant virus disease. Palukaitis P, et al. **Adv Virus Res** 1997;48:349–77 (93 ref.)
Mutation of the GKS motif of the RNA-dependent RNA polymerase from potato virus X disables or eliminates virus replication. Davenport GF, et al. **J Gen Virol** 1997 Jun; 78 (Pt 6):1247–51
The role of the pseudoknot at the 3' end of turnip yellow mosaic virus RNA in minus-strand synthesis by the viral RNA-dependent RNA polymerase. Deiman BA, et al. **J Virol** 1997 Aug;71(8):5990–6

RNA, RIBOSOMAL

Incognito rRNA and rDNA in databases and libraries [letter] Gonzalez IL, et al. **Genome Res** 1997 Jan;7(1):65–70
Macrophage colony-stimulating factor (M-CSF) inhibits the decrease in the amount of rRNA and IA beta mRNA in cultured epidermal Langerhans cells of the mouse. Koyama Y, et al. **J Dermatol** 1996 Feb;23(2):73–82
Genetic divergence at the mitochondrial small subunit ribosomal RNA gene among isolates of Pneumocystis carinii from five mammalian host species. Hunter JA, et al. **J Eukaryot Microbiol** 1996 Sep-Oct;43(5):24S–25S
Phylogeny of the rumen ciliates Entodinium, Epidinium and Polyplastron (Litostomatea:Entodiniomorphida) inferred from small subunit ribosomal RNA sequences. Wright AD, et al. **J Eukaryot Microbiol** 1997 Jan–Feb;44(1):61–7
Structural and functional characterization of the Leishmania amazonensis ribosomal RNA promoter. Uliana SR, et al. **Mol Biochem Parasitol** 1996 Feb–Mar;76(1–2):245–55
Introducing mutations into a chromosomal rRNA gene using a genetically modified eubacterial host with a single rRNA operon. Sander P, et al. **Mol Microbiol** 1996 Dec; 22(5):841–8
[Sequences, homologous to binding sites for eukaryotic topoisomerase I, in mycoplasma genomes] Chernov VM, et al. **Mol Biol (Mosk)** 1996 Mar–Apr;30(2):286–92 **(Rus)**

ANALYSIS

Diagnosis of Enterocytozoon bieneusi (microsporidia) infections by polymerase chain reaction in stool samples using primers based on the region coding for small-subunit ribosomal RNA. da Silva AJ, et al. **Arch Pathol Lab Med** 1997 Aug;121(8):874–9
Evaluation of commercially available tests for Chlamydia nucleic acid detection in synovial fluid of patients. Bas S, et al. **Br J Rheumatol** 1997 Feb;36(2):198–202
Prevalence of microsporidiosis due to Enterocytozoon bieneusi and Encephalitozoon (Septata) intestinalis among patients with AIDS-related diarrhea: determination by polymerase chain reaction to the microsporidian small-subunit rRNA gene. Coyle CM, et al. **Clin Infect Dis** 1996 Nov;23(5):1002–6
Identification of a new ribosomal RNA in Drosophila melanogaster. Fox MG. **Gene** 1997 Jul 31;194(2):291–5
PCR ribotyping for characterizing Salmonella isolates of different serotypes. Lagatolla C, et al. **J Clin Microbiol** 1996 Oct;34(10):2440–3
Ribosomal RNA analysis indicates a benthic pennate diatom ancestry for the endosymbionts of the dinoflagellates Peridinium foliaceum and Peridinium balticum (Pyrrhophyta). Chesnick JM, et al. **J Eukaryot Microbiol** 1997 Jul–Aug;44(4):314–20
Morphological and molecular characterization of Giardia isolated from the straw-necked ibis (Threskiornis spinicollis) in Western Australia. McRoberts KM, et al. **J Parasitol** 1996 Oct;82(5):711–8
Contact sites of peptide-oligoribonucleotide cross-links identified by a combination of peptide and nucleotide sequencing with MALDI MS. Urlaub H, et al. **J Protein Chem** 1997 Jul;16(5):375–83
Nucleic acid amplification tests for tuberculosis. **MMWR Morb Mortal Wkly Rep** 1996 Nov 1;45(43):950–2
Detection of rRNA from four respiratory pathogens using an automated Q beta replicase assay. Stone BB, et al. **Mol Cell Probes** 1996 Oct;10(5):359–70
Epidemiological analysis of Malassezia pachydermatis isolates by partial sequencing of the large subunit ribosomal RNA. Guillot J, et al. **Res Vet Sci** 1997 Jan–Feb;62(1):22–5
Differentiation of Salmonella typhi strains by ribosomal RNA gene restriction patterns. Chou WH, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):620–4
[Evaluation of a new detection method of Mycobacterium tuberculosis in clinical specimens by amplification of

ribosomal RNA and its clinical application] Osumi M, et al. **Kekkaku** 1996 Oct;71(10):573–85 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

rRNA transcription and growth rate–dependent regulation of ribosome synthesis in Escherichia coli. Gourse RL, et al. **Annu Rev Microbiol** 1996;50:645–77 (157 ref.)

Okadaic acid induces cellular hypertrophy in AKR–2B fibroblasts: involvement of the p70S6 kinase in the onset of protein and rRNA synthesis. Leicht M, et al. **Cell Growth Differ** 1996 Sep;7(9):1199–209

Regulation of ribosomal RNA gene transcription during retinoic acid–induced differentiation of mouse teratocarcinoma cells. Datta PK, et al. **Exp Cell Res** 1997 Feb 25;231(1):198–205

Ribosomal RNA synthesis in Streptomyces lividans under heat shock conditions. de León P, et al. **Gene** 1997 Jul 18;194(1):125–32

SV40 large T antigen binds to the TBP–TAF(I) complex SL1 and coactivates ribosomal RNA transcription. Zhai W, et al. **Genes Dev** 1997 Jun 15;11(12):1605–17

Cytokinin induction of RNA polymerase I transcription in Arabidopsis thaliana. Gaudino RJ, et al. **J Biol Chem** 1997 Mar 7;272(10):6799–804

NusA is required for ribosomal antitermination and for modulation of the transcription elongation rate of both antiterminated RNA and mRNA. Vogel U, et al. **J Biol Chem** 1997 May 9;272(19):12265–71

Androgen regulation of ribosomal RNA synthesis in LNCaP cells and rat prostate. Kabler RL, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):431–9

Ultrastructural nonisotopic mapping of nucleolar transcription sites in onion protoplasts. Melcák I, et al. **J Struct Biol** 1996 Mar–Apr;116(2):253–63

RNase MRP and rRNA processing. Lindahl L, et al. **Mol Biol Rep** 1995–96;22(2–3):69–73 (47 ref.)

The yeast nucleolar protein Cbf5p is involved in rRNA biosynthesis and interacts genetically with the RNA polymerase I transcription factor RRN3. Cadwell C, et al. **Mol Cell Biol** 1997 Oct;17(10):6175–83

The rRNA–processing function of the yeast U14 small nucleolar RNA can be rescued by a conserved RNA helicase–like protein. Liang WQ, et al. **Mol Cell Biol** 1997 Jul;17(7):4124–32

Activated levels of rRNA synthesis in fission yeast are driven by an intergenic rDNA region positioned over 2500 nucleotides upstream of the initiation site. Liu Z, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):659–67

The Cbp2 protein stimulates the splicing of the omega intron of yeast mitochondria. Shaw LC, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1597–604

Synthesis of functional eukaryotic ribosomal RNAs in trans: development of a novel in vivo rDNA system for dissecting ribosome biogenesis. Liang WQ, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2864–8

Three small nucleolar RNAs that are involved in ribosomal RNA precursor processing. Mishra RK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4972–7

Variable regions V13 and V3 of Saccharomyces cerevisiae contain structural features essential for normal biogenesis and stability of 5.8S and 25S rRNA. Jeeninga RE, et al. **RNA** 1997 May;3(5):476–88

CHEMISTRY

Identification of ribosome–ligand interactions using cleavage reagents. Hill WE, et al. **Biochem Cell Biol** 1995 Nov–Dec; 73(11–12):1033–9 (47 ref.)

Fragmentation of the ribosome to investigate RNA–ligand interactions. Howard BA, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1161–6 (31 ref.)

Structure and function of ribosomal RNA. Noller HF, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):997–1009 (35 ref.)

The pseudouridine residues of ribosomal RNA. Ofengand J, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):915–24 (39 ref.)

The conformation of ribosomes and rRNA. Moore PB. **Curr Opin Struct Biol** 1997 Jun;7(3):343–7 (36 ref.)

Quantitative flow cytometric detection of specific microorganisms in soil samples using rRNA targeted fluorescent probes and ethidium bromide. Thomas JC, et al. **Cytometry** 1997 Mar 1;27(3):224–32

Localization of ribosomal RNA and Pbs21–mRNA in the sexual stages of Plasmodium berghei using electron microscope in situ hybridization. Shaw MK, et al. **Eur J Cell Biol** 1996 Nov;71(3):270–6

An analysis of large rRNA sequences folded by a thermodynamic method. Fields DS, et al. **Fold Des** 1996; 1(6):419–30

Secondary structures and features of the 18S, 5.8S and 26S ribosomal RNAs from the Apicomplexan parasite Toxoplasma gondii. Gagnon S, et al. **Gene** 1996 Sep 16; 173(2):129–35

DNA sequence and secondary structure of the mitochondrial small subunit ribosomal RNA coding region including a group–IC2 intron from the cultivated basidiomycete Agrocybe aegerita. Gonzalez P, et al. **Gene** 1997 Jan 3; 184(1):55–63

Simple and rapid chromatographic method for the separation of major classes of ribosomal ribomononucleotides. Popović DA, et al. **J Chromatogr A** 1997 May 9; 769(2):225–30

Nosema trichoplusiae is a synonym of Nosema bombycis based on the sequence of the small subunit ribosomal RNA coding region. Pieniazek NJ, et al. **J Invertebr Pathol** 1996 May;67(3):316–7

Mapping to nucleotide resolution of pseudouridine residues in large subunit ribosomal RNAs from representative eukaryotes, prokaryotes, archaebacteria, mitochondria and chloroplasts. Ofengand J, et al. **J Mol Biol** 1997 Feb 21; 266(2):246–68

Secondary structure and patterns of evolution among mammalian mitochondrial 12S rRNA molecules. Springer MS, et al. **J Mol Evol** 1996 Oct;43(4):357–73

Ribosomal RNA sequencing reveals differences between the genotypes of Giardia isolates recovered from humans and dogs living in the same locality. Hopkins RM, et al. **J Parasitol** 1997 Feb;83(1):44–51

Trypanosoma cruzi strains partition into two groups based on the structure and function of the spliced leader RNA and rRNA gene promoters. Nunes LR, et al. **Mol Biochem Parasitol** 1997 Jun;86(2):211–24

Evolution of the large–subunit ribosomal RNA binding site for protein L23/25. Chenuil A, et al. **Mol Biol Evol** 1997 May;14(5):578–88

A phylogeny for the African treefrog family Hyperoliidae based on mitochondrial rDNA. Richards CM, et al. **Mol Phylogenet Evol** 1996 Jun;5(3):522–32

Eukaryotic ribosomal RNA. Guides to 95 new angles [news] Maden BE. **Nature** 1997 Sep 11;389(6647):129–31

Identification of additional rRNA fragments encoded by the Plasmodium falciparum 6 kb element. Feagin JE, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):438–46

Interaction of tetracycline with RNA: photoincorporation into ribosomal RNA of Escherichia coli. Oehler R, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1219–24

Substitution rate calibration of small subunit ribosomal RNA identifies chlorarachniophyte endosymbionts as remnants of green algae. Van de Peer Y, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7732–6

Structural evidence for specific S8–RNA and S8–protein interactions within the 30S ribosomal subunit: ribosomal protein S8 from Bacillus stearothermophilus at 1.9 A resolution. Davies C, et al. **Structure** 1996 Sep 15; 4(9):1093–104

Secrets of RNA folding revealed. Price S, et al. **Structure** 1996 Oct 15;4(10):1129–32 (30 ref.)

DRUG EFFECTS

Topical gentamicin–induced hearing loss: a mitochondrial ribosomal RNA study of genetic susceptibility. Chen JM, et al. **Am J Otol** 1996 Nov;17(6):850–2

Apoptosis induced by methylazoxymethanol in developing rat cerebellum: organization of the cell nucleus and its relationship to DNA and rRNA degradation. Lafarga M, et al. **Cell Tissue Res** 1997 Jul;289(1):25–38

Delocalization of some small nucleolar RNPs after actinomycin D treatment to deplete early pre–rRNAs. Rivera–León R, et al. **Chromosoma** 1997 Jun; 105(7–8):506–14

GENETICS

Trypanosoma cruzi rRNA genes: a repeated element from the non–transcribed spacer is locus specific. Pulido M, et al. **Acta Trop** 1996 Dec 16;62(3):163–70

Topical gentamicin–induced hearing loss: a mitochondrial ribosomal RNA study of genetic susceptibility. Chen JM, et al. **Am J Otol** 1996 Nov;17(6):850–2

Molecular microbial diversity in soils from eastern Amazonia: evidence for unusual microorganisms and microbial population shifts associated with deforestation. Borneman J, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2647–53

A computer analysis of primer and probe hybridization potential with bacterial small–subunit rRNA sequences. Brunk CF, et al. **Appl Environ Microbiol** 1996 Mar; 62(3):872–9

Group–specific small–subunit rRNA hybridization probes to characterize filamentous foaming in activated sludge systems. de los Reyes FL, et al. **Appl Environ Microbiol** 1997 Mar;63(3):1107–17

Molecular microbial diversity of an anaerobic digestor as determined by small–subunit rDNA sequence analysis. Godon JJ, et al. **Appl Environ Microbiol** 1997 Jul; 63(7):2802–13

Sequence data for two large–subunit rRNA genes from an Asian strain of Alexandrium catenella. Yeung PK, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4199–201

Characterization of universal small–subunit rRNA hybridization probes for quantitative molecular microbial ecology studies. Zheng D, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4504–13

Molecular phylogeny of the genus Entamoeba as revealed by riboprinting. Clark CG, et al. **Arch Med Res** 1997;28 Spec No:69–70

Novel intron–encoded small nucleolar RNAs with long sequence complementarities to mature rRNAs involved in ribosome biogenesis. Bachellerie JP, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):835–43 (30 ref.)

Trans–acting factors in yeast pre–rRNA and pre–snoRNA processing. Lafontaine D, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):803–12 (71 ref.)

Upstream stimulators for recoding. Larsen B, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1123–9 (45 ref.)

The accuracy center of a eukaryotic ribosome. Liebman SW, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1141–9 (49 ref.)

Variety of nonsense suppressor phenotypes associated with mutational changes at conserved sites in Escherichia coli ribosomal RNA. Murgola EJ, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):925–31

Genetic probes of ribosomal RNA function. O'Connor M, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):859–68 (45 ref.)

Processing of eukaryotic pre–rRNA: the role of the transcribed spacers. van Nues RW, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):789–801 (65 ref.)

Identification of a cAMP–dependent protein–DNA interaction at a sequence near the yeast mitochondrial rRNA genes. Rahman MU, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1115–23

News and views on the nucleolus in 1996. Report on the 'Colloquium on the nucleolus', a meeting at Paris–Grignon, July 18–20, 1996. Mosgoeller W, et al. **Biol Cell** 1996; 88(1–2):1–4 (12 ref.)

Restriction fragment length polymorphisms of rDNA and variation of essential oil composition in Atractylodes plants. Mizukami H, et al. **Biol Pharm Bull** 1996 Apr;19(4):577–80

In vitro evolution used to define a protein recognition site within a large RNA domain. Sapag A, et al. **Bioorg Med Chem** 1997 Jun;5(6):1097–105

Taxonomic status of car bacillus based on the small subunit ribosomal RNA sequences. Wei Q, et al. **Chin Med Sci J** 1995 Dec;10(4):195–8

U3 snoRNA may recycle through different compartments of the nucleolus. Gerbi SA, et al. **Chromosoma** 1997 Jun; 105(7–8):401–6 (70 ref.)

Eukaryotic ribosomal RNA: the recent excitement in the nucleotide modification problem. Maden BEH, et al. **Chromosoma** 1997 Jun;105(7–8):391–400 (69 ref.)

Early stages of pre–rRNA formation within the nucleolar ultrastructure of mouse cells studied by in situ hybridization with a 5'ETS leader probe. Puvion–Dutilleul F, et al. **Chromosoma** 1997 Jun;105(7–8):496–505

Heterochromatin and ribosomal genes in Asellus aquaticus (Crust. Isop.). Barzotti R, et al. **Chromosome Res** 1996 Apr; 4(3):177–81

Phylogenetic perspective on microbial life in hydrothermal ecosystems, past and present. Barns SM, et al. **Ciba Found Symp** 1996;202:24–32; discussion 32–9

Organization of chloroplast ribosomal RNA genes and in vitro self–splicing activity of the large subunit rRNA intron from the green alga Chlorella vulgaris C–27. Kapoor M, et al. **Curr Genet** 1997 Jun;31(6):503–10

Close linkage between RNR and GPD genes on the tammar wallaby (Macropus eugenii) X chromosome. McKenzie LM, et al. **Cytogenet Cell Genet** 1996;72(2–3):197–9

Analysis of replication timing of ribosomal RNA genes by fluorescence in situ hybridization. Haaf T. **DNA Cell Biol** 1997 Mar;16(3):341–5

The use of a nonradioactively labelled probe system in an electrophoretic ribotyping method for the differentiation of strains of coagulase–negative staphylococci. Hawcroft DM, et al. **Electrophoresis** 1996 Jan;17(1):55–7

Discriminatory power and application of ribotyping of Yersinia enterocolitica O:3 in an epidemiological study. Mendoza MC, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar;15(3):220–6

Trypanosoma cruzi: can activity of the rRNA gene promoter be used as a marker for speciation? Floeter–Winter LM, et al. **Exp Parasitol** 1997 Jul;86(3):232–4

Toxoplasma gondii: structure and characterization of the 26S ribosomal RNA and peptidyl transferase domain. Gagnon S, et al. **Exp Parasitol** 1996 Aug;83(3):346–51

Variable numbers of rRNA gene operons in Bacillus cereus strains. Johansen T, et al. **FEMS Microbiol Lett** 1996 Mar 1;136(3):325–8

A ribosomal RNA operon from Pseudomonas stutzeri Zobell. Kerkhof L. **Gene** 1997 Jun 19;192(2):241–3

Rpp1, an essential protein subunit of nuclear RNase P required for processing of precursor tRNA and 35S precursor rRNA in Saccharomyces cerevisiae. Stolc V, et al. **Genes Dev** 1997 Sep 15;11(18):2414–25

Genetic diversity among a complex of cereal cyst nematodes inferred from RFLP analysis of the ribosomal internal transcribed spacer region. Bekal S, et al. **Genome** 1997 Aug; 40(4):479–86

Helicobacter pylori infection in spouses of patients with duodenal ulcers and comparison of ribosomal RNA gene patterns. Georgopoulos SD, et al. **Gut** 1996 Nov; 39(5):634–8

Multiparameter microscopic analysis of nucleolar structure and ribosomal gene transcription. Trendelenburg MF, et al. **Histochem Cell Biol** 1996 Aug;106(2):167–92 (156 ref.)

Mosaic methylation of the repeat unit of the human ribosomal RNA genes. Brock GJ, et al. **Hum Mol Genet** 1997 Mar; 6(3):451–6

Biochemical evidence for nuclear gene involvement in phenotype of non–syndromic deafness associated with mitochondrial 12S rRNA mutation. Guan MX, et al. **Hum Mol Genet** 1996 Jul;5(7):963–71

Variation in the ribosomal RNA cistron among host–adapted races of an aphid (Schizaphis graminum). Black WC 4th. **Insect Mol Biol** 1993;2(2):59–69

Drosophila melanogaster mitochondrial DNA: completion of the nucleotide sequence and evolutionary comparisons. Lewis DL, et al. **Insect Mol Biol** 1995 Nov;4(4):263–78

rRNA gene restriction patterns as a characterization tool for Lactobacillus sake strains producing ropy slime. Björkroth J, et al. **Int J Food Microbiol** 1996 Jul;30(3):293–302

Structure of the rRNA genes in the hamster sperm nucleus. Nadel B, et al. **J Androl** 1995 Nov–Dec;16(6):517–22

Upstream interactions at the lambda pRM promoter are sequence nonspecific and activate the promoter to a lesser extent than an introduced UP element of an rRNA promoter. Tang Y, et al. **J Bacteriol** 1996 Dec; 178(23):6945–51

Identification of previously unrecognized common elements in eukaryotic promoters. A ribosomal RNA gene initiator element for RNA polymerase I. Radebaugh CA, et al. **J Biol Chem** 1997 Feb 7;272(6):3141–4

Species-specific regulation and switching of transcription between stage-specific ribosomal RNA genes in Plasmodium berghei. Waters AP, et al. **J Biol Chem** 1997 Feb 7;272(6):3583–9

Amplification and restriction endonuclease digestion of a large fragment of genes coding for rRNA as a rapid method for discrimination of closely related pathogenic bacteria [see comments] Ibrahim A, et al. **J Clin Microbiol** 1996 Dec;34(12):2894–6. Comment in: J Clin Microbiol 1997 Jun;35(6):1646–7.

Amplification of rRNA for assessment of treatment response of pulmonary tuberculosis patients during antimicrobial therapy. Moore DF, et al. **J Clin Microbiol** 1996 Jul; 34(7):1745–9

Riboprinting: a tool for the study of genetic diversity in microorganisms. Clark CG. **J Eukaryot Microbiol** 1997 Jul–Aug;44(4):277–83 (52 ref.)

Phylogenetic position of Psalteriomonas lanterna deduced from the SSU rDNA sequence. Weekers PH, et al. **J Eukaryot Microbiol** 1997 Sep–Oct;44(5):467–70

Use of molecular data to discriminate pseudocerotid turbellarians. Goggin CL, et al. **J Helminthol** 1996 Jun; 70(2):123–6

Population genetics of Ixodes scapularis (Acari: Ixodidae) based on mitochondrial 16S and 12S genes. Norris DE, et al. **J Med Entomol** 1996 Jan;33(1):78–89

Mutation in the mitochondrial 12S rRNA gene in two families from Mongolia with matrilineal aminoglycoside ototoxicity. Pandya A, et al. **J Med Genet** 1997 Feb; 34(2):169–72

Molecular epidemiology of Vibrio cholerae O1 isolates from Colombia. Tamayo M, et al. **J Med Microbiol** 1997 Jul; 46(7):611–6

Ribotype differences between clinical and environmental isolates of Burkholderia pseudomallei. Trakulsomboon S, et al. **J Med Microbiol** 1997 Jul;46(7):565–70

Molecular phylogeny of the free-living archezoan Trepomonas agilis and the nature of the first eukaryote. Cavalier-Smith T, et al. **J Mol Evol** 1996 Dec;43(6):551–62

Evolutionary relationships of eukaryotic kingdoms. Kumar S, et al. **J Mol Evol** 1996 Feb;42(2):183–93

Phylogenetic relationships within caniform carnivores based on analyses of the mitochondrial 12S rRNA gene. Ledje C, et al. **J Mol Evol** 1996 Dec;43(6):641–9

Analysis of ribosomal RNA genes suggests that trypanosomes are monophyletic. Lukes J, et al. **J Mol Evol** 1997 May; 44(5):521–7

Patterns of nucleotide change in mitochondrial ribosomal RNA genes and the phylogeny of piranhas. Ortí G, et al. **J Mol Evol** 1996 Feb;42(2):169–82

Origin and inheritance of group I introns in 26S rRNA genes of Gaeumannomyces graminis. Tan MK. **J Mol Evol** 1997 Jun;44(6):637–45

The evolution of stramenopiles and alveolates as derived by "substitution rate calibration" of small ribosomal subunit RNA. Van de Peer Y, et al. **J Mol Evol** 1996 Feb; 42(2):201–10

Large-subunit rRNA sequence of the chytridiomycete Blastocladiella emersonii, and implications for the evolution of zoosporic fungi. Van der Auwera G, et al. **J Mol Evol** 1996 Nov;43(5):476–83

Species variation within the internal transcribed spacer (ITS) region of Gyrodactylus (Monogenea:Gyrodactylidae) ribosomal RNA genes. Cunningham CO. **J Parasitol** 1997 Apr;83(2):215–9

Ribosomal and kDNA markers distinguish two subgroups of Herpetomonas among old species and new trypanosomatids isolated from flies. Teixeira MM, et al. **J Parasitol** 1997 Feb;83(1):58–65

A longitudinal study of human age-related ribosomal RNA gene activity as detected by silver-stained NORs. Thomas S, et al. **Mech Ageing Dev** 1996 Dec 20;92(2–3):101–9

Nucleotide sequence of the SrRNA gene and phylogenetic analysis of Trichomonas tenax. Fukura K, et al. **Microbiol Immunol** 1996;40(3):183–8

The rRNA operons of Mycobacterium smegmatis and Mycobacterium tuberculosis: comparison of promoter elements and of neighbouring upstream genes. Gonzalez-y-Merchand JA, et al. **Microbiology** 1996 Mar; 142 (Pt 3):667–74

Organization of ribosomal RNA genes from the footrot pathogen Dichelobacter nodosus. La Fontaine S, et al. **Microbiology** 1996 Apr;142 (Pt 4):889–99

Primary and secondary structures of rRNA spacer regions in enterococci. Naïmi A, et al. **Microbiology** 1997 Mar;143 (Pt 3):823–34

Fluorescent oligonucleotide rDNA probes that specifically bind to a common nanoflagellate, Paraphysomonas vestita. Rice J, et al. **Microbiology** 1997 May;143 (Pt 5):1717–27

Phylogeny of trypanosomes as inferred from the small and large subunit rRNAs: implications for the evolution of parasitism in the trypanosomatid protozoa. Maslov DA, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):197–205

Trypanosoma cruzi strains partition into two groups based on the structure and function of the spliced leader RNA and rRNA gene promoters. Nunes LR, et al. **Mol Biochem Parasitol** 1997 Jun;86(2):211–24

A region containing repeated elements is associated with transcriptional termination of Leishmania infantum ribosomal RNA genes. Requena JM, et al. **Mol Biochem Parasitol** 1997 Jan;84(1):101–10

Involvement of in situ conformation of ribosomal genes and selective distribution of upstream binding factor in rRNA transcription. Junéra HR, et al. **Mol Biol Cell** 1997 Jan; 8(1):145–56

Evolution of the large-subunit ribosomal RNA binding site for protein L23/25. Chenuil A, et al. **Mol Biol Evol** 1997 May;14(5):578–88

Phylogenetic relationships of artiodactyls and cetaceans as deduced from the comparison of cytochrome b and 12S rRNA mitochondrial sequences. Montgelard C, et al. **Mol Biol Evol** 1997 May;14(5):550–9

Fragmented and scrambled mitochondrial ribosomal RNA coding regions among green algae: a model for their origin and evolution. Nedelcu AM. **Mol Biol Evol** 1997 May; 14(5):506–17

Large differences in substitutional pattern and evolutionary rate of 12S ribosomal RNA genes. Simon C, et al. **Mol Biol Evol** 1996 Sep;13(7):923–32

Evolutionary distances between nucleotide sequences based on the distribution of substitution rates among sites as estimated by parsimony. Tourasse NJ, et al. **Mol Biol Evol** 1997 Mar;14(3):287–98

Phylogenetic analysis of slippage-like sequence variation in the V4 rRNA expansion segment in tiger beetles (Cicindelidae). Vogler AP, et al. **Mol Biol Evol** 1997 Jan; 14(1):6–19

The repeat organizer, a specialized insulator element within the intergenic spacer of the Xenopus rRNA genes. Robinett CC, et al. **Mol Cell Biol** 1997 May;17(5):2866–75

Functional promoter elements common to ribosomal protein and ribosomal RNA genes in Neurospora crassa. Cujec TP, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):205–16

Pheromone-inducible expression of an aggregation protein in Enterococcus faecalis requires interaction of a plasmid-encoded RNA with components of the ribosome. Bensing BA, et al. **Mol Microbiol** 1997 Apr;24(2):295–308

The phylogeny of the Caelifera (Insecta, Orthoptera) as deduced from mtrRNA gene sequences. Flook PK, et al. **Mol Phylogenet Evol** 1997 Aug;8(1):89–103

The effectiveness of mitochondrial rRNA gene sequences for the reconstruction of the phylogeny of an insect order (Orthoptera). Flook PK, et al. **Mol Phylogenet Evol** 1997 Oct;8(2):177–92

Phylogenetic relationships of cottontails (Sylvilagus, Lagomorpha): congruence of 12S rDNA and cytogenetic data. Halanych KM, et al. **Mol Phylogenet Evol** 1997 Jun; 7(3):294–302

Interordinal mammalian relationships: evidence for paenungulate monophyly is provided by complete mitochondrial 12S rRNA sequences. Lavergne A, et al. **Mol Phylogenet Evol** 1996 Oct;6(2):245–58

Molecular phylogeny of mitochondrial cytochrome b and 12S rRNA sequences in the Felidae: ocelot and domestic cat lineages. Masuda R, et al. **Mol Phylogenet Evol** 1996 Dec;6(3):351–65

Phylogenetic relationship among the malaria parasites based on small subunit rRNA gene sequences: monophyletic nature of the human malaria parasite, Plasmodium falciparum. Qari SH, et al. **Mol Phylogenet Evol** 1996 Aug; 6(1):157–65

Phylogenetic relationships among bufonoid frogs (Anura:Neobatrachia) inferred from mitochondrial DNA sequences. Ruvinsky I, et al. **Mol Phylogenet Evol** 1996 Jun;5(3):533–47

Phylogenetic relationships of chelid turtles (Pleurodira: Chelidae) based on mitochondrial 12S rRNA gene sequence variation. Seddon JM, et al. **Mol Phylogenet Evol** 1997 Feb; 7(1):55–61

Phylogenetics and evolution of the Daphnia longispina group (Crustacea) based on 12S rDNA sequence and allozyme variation. Taylor DJ, et al. **Mol Phylogenet Evol** 1996 Jun; 5(3):495–510

Two large Spanish pedigrees with nonsyndromic sensorineural deafness and the mtDNA mutation at nt 1555 in the 12s rRNA gene: evidence of heteroplasmy. el-Schahawi M, et al. **Neurology** 1997 Feb;48(2):453–6

An immunoaffinity purified Schizosaccharomyces pombe TBP-containing complex directs correct initiation of the S.pombe rRNA gene promoter. Chen L, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1633–40

Database on the structure of large ribosomal subunit RNA. De Rijk P, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):117–22

Species-specificity of rRNA gene transcription in plants manifested as a switch in RNA polymerase specificity. Doelling JH, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4725–32

The RDP (Ribosomal Database Project). Maidak BL, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):109–11

Chromatin structure and methylation of rat rRNA genes studied by formaldehyde fixation and psoralen cross-linking. Stancheva I, et al. **Nucleic Acids Res** 1997 May 1;25(9):1727–35

Database on the structure of small ribosomal subunit RNA. Van de Peer Y, et al. **Nucleic Acids Res** 1997 Jan 1; 25(1):111–6

A quantitative map of nucleotide substitution rates in bacterial rRNA. Van de Peer Y, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3381–91

Analysis of the ribosomal RNA gene repeat from the moss Funaria hygrometrica. Capesius I. **Plant Mol Biol** 1997 Feb; 33(3):559–64

Perspectives on archaeal diversity, thermophily and monophyly from environmental rRNA sequences [see comments] Barns SM, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9188–93. Comment in: Proc Natl Acad Sci U S A 1996 Aug 20;93(17):8797–9.

Transcriptional analysis of nucleolar dominance in polyploid plants: biased expression/silencing of progenitor rRNA genes is developmentally regulated in Brassica. Chen ZJ, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3442–7

rRNA-like sequences occur in diverse primary transcripts: implications for the control of gene expression. Mauro VP, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):422–7

Cleavage patterns and the topology of the metazoan tree of life. Valentine JW. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8001–5

Kissing loops hide premature termination codons in pre-mRNA of selenoprotein genes and in genes containing programmed ribosomal frameshifts [letter] Knudsen S, et al. **RNA** 1997 Jul;3(7):697–701

DNA fingerprinting of Campylobacter fetus using cloned constructs of ribosomal RNA and surface array protein genes. Denes AS, et al. **Vet Microbiol** 1997 Feb; 54(2):185–93

Different organisms associated with heartwater as shown by analysis of 16S ribosomal RNA gene sequences. Allsopp M, et al. **Vet Parasitol** 1997 Aug;71(4):283–300

IMMUNOLOGY

Inhibition of multiplication of Mycobacterium leprae in mouse foot pads by immunization with ribosomal fraction and culture filtrate from Mycobacterium bovis BCG. Matsuoka M, et al. **Vaccine** 1997 Aug;15(11):1214–7

ISOLATION & PURIFICATION

Direct ribosome isolation from soil to extract bacterial rRNA for community analysis. Felske A, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4162–7

Analysis of the ribosomal RNA gene repeat from the moss Funaria hygrometrica. Capesius I. **Plant Mol Biol** 1997 Feb; 33(3):559–64

METABOLISM

Structural and functional implications in the eubacterial ribosome as revealed by protein-rRNA and antibiotic contact sites. Wittmann-Liebold B, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1187–97

Dependence of depurination of oligoribonucleotides by ricin A-chain on divalent cations and chelating agents. Glück A, et al. **Biochem Mol Biol Int** 1996 May;39(2):285–91

Specific binding of aminoglycosides to a human rRNA construct based on a DNA polymorphism which causes aminoglycoside-induced deafness. Hamasaki K, et al. **Biochemistry** 1997 Oct 7;36(40):12323–8

Changes in ribosomal ribonucleic acid content within in vitro-produced bovine embryos. Bilodeau-Goeseels S, et al. **Biol Reprod** 1997 May;56(5):1323–9

In vitro evolution used to define a protein recognition site within a large RNA domain. Sapag A, et al. **Bioorg Med Chem** 1997 Jun;5(6):1097–105

Small nucleolar RNAs direct site-specific synthesis of pseudouridine in ribosomal RNA. Ni J, et al. **Cell** 1997 May 16;89(4):565–73

Analysis of nucleolar transcription and processing domains and pre-rRNA movements by in situ hybridization. Lazdins IB, et al. **Chromosoma** 1997 Jun;105(7–8):481–95

Eukaryotic ribosomal RNA: the recent excitement in the nucleotide modification problem. Maden BEH, et al. **Chromosoma** 1997 Jun;105(7–8):391–400 (69 ref.)

U14 small nucleolar RNA makes multiple contacts with the pre-ribosomal RNA. Morrissey JP, et al. **Chromosoma** 1997 Jun;105(7–8):515–22

Variable region V1 of Saccharomyces cerevisiae 18S rRNA participates in biogenesis and function of the small ribosomal subunit. van Nues RW, et al. **Chromosoma** 1997 Jun;105(7–8):523–31

RNA processing: pocket guides to ribosomal RNA. Peculis B. **Curr Biol** 1997 Aug 1;7(8):R480–2

Ribosomal RNA: small nucleolar RNAs make their mark. Peculis BA, et al. **Curr Biol** 1996 Nov 1;6(11):1413–5 (10 ref.)

Function and synthesis of small nucleolar RNAs. Tollervey D, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):337–42 (49 ref.)

The conformation of ribosomes and rRNA. Moore PB. **Curr Opin Struct Biol** 1997 Jun;7(3):343–7 (36 ref.)

A small nucleolar RNP protein is required for pseudouridylation of eukaryotic ribosomal RNAs.

Bousquet-Antonelli C, et al. **EMBO J** 1997 Aug 1; 16(15):4770-6

Two ribosomal DNA-binding factors interact with a cluster of motifs on the 5' external transcribed spacer, upstream from the primary pre-rRNA processing site in a higher plant. Caparros-Ruiz D, et al. **Eur J Biochem** 1997 Aug 1;247(3):981-9

The ribosomal-RNA-processing pathway in Schizosaccharomyces pombe. Good L, et al. **Eur J Biochem** 1997 Jul 1;247(1):314-21

Export of ribosomal subunits from resealed rat liver nuclear envelopes. Hassel I, et al. **Eur J Biochem** 1996 Oct 1; 241(1):32-7

Mapping of nuclease-sensitive sites in native reticulocyte ribosomes--an analysis of the accessibility of ribosomal RNA to enzymatic cleavage. Holmberg L, et al. **Eur J Biochem** 1997 Jul 1;247(1):160-8

Localization of the newly initiated and processed ribosomal primary transcripts during the mitotic cycle in Physarum polycephalum. Pierron G, et al. **Exp Cell Res** 1996 Dec 15;229(2):407-20

Ribosomes and ribosomal RNA as chaperones for folding of proteins. Kudlicki W, et al. **Fold Des** 1997;2(2):101-8

Incorporation of dinitrophenyl protein L23 into totally reconstituted Escherichia coli 50 S ribosomal subunits and its localization at two sites by immune electron microscopy. Montesano-Roditis L, et al. **J Biol Chem** 1997 Mar 28; 272(13):8695-703

Intranuclear retention of ribosomal RNAs in response to herpes simplex virus type 1 infection. Besse S, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):119-29

RNA sequence determinants for aminoglycoside binding to an A-site rRNA model oligonucleotide. Recht MI, et al. **J Mol Biol** 1996 Oct 4;262(4):421-36

Nop2p is required for pre-rRNA processing and 60S ribosome subunit synthesis in yeast. Hong B, et al. **Mol Cell Biol** 1997 Jan;17(1):378-88

Ribosomal protein L32 of Saccharomyces cerevisiae influences both the splicing of its own transcript and the processing of rRNA. Vilardell J, et al. **Mol Cell Biol** 1997 Apr;17(4):1959-65

Dbp3p, a putative RNA helicase in Saccharomyces cerevisiae, is required for efficient pre-rRNA processing predominantly at site A3. Weaver PL, et al. **Mol Cell Biol** 1997 Mar;17(3):1354-65

Estrogen-induced changes in rRNA accumulation and RNA polymerase I activity in the rat pituitary: correlation with pituitary tumor susceptibility. Ying C, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1-2):207-13

Screening chemical libraries for nucleic-acid-binding drugs by in vitro selection: a test case with lividomycin. Lato SM, et al. **Mol Divers** 1996 Oct;2(1-2):103-10

TFIIS binds to mouse RNA polymerase I and stimulates transcript elongation and hydrolytic cleavage of nascent rRNA. Schnapp G, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):412-9

Pheromone-inducible expression of an aggregation protein in Enterococcus faecalis requires interaction of a plasmid-encoded RNA with components of the ribosome. Bensing BA, et al. **Mol Microbiol** 1997 Apr;24(2):295-308

Enhanced angiotensin receptor type 1 mRNA degradation and induction of polyribosomal mRNA binding proteins by angiotensin II in vascular smooth muscle cells. Nickenig G, et al. **Mol Pharmacol** 1996 Oct;50(4):743-51

Solution structure of the ribosomal RNA binding protein S15 from Thermus thermophilus [letter] Berglund H, et al. **Nat Struct Biol** 1997 Jan;4(1):20-3

Targeted ribose methylation of RNA in vivo directed by tailored antisense RNA guides [see comments] Cavaillé J, et al. **Nature** 1996 Oct 24;383(6602):732-5. Comment in: Nature 1996 Oct 24;383(6602):675-6.

Ribosomal RNA. Click here for methylation [news; comment] Maden T. **Nature** 1996 Oct 24;383(6602):675-6 . Comment on: Nature 1996 Oct 24;383(6602):732-5.

Leader peptides of inducible chloramphenicol resistance genes from gram-positive and gram-negative bacteria bind to yeast and Archaea large subunit rRNA. Harrod R, et al. **Nucleic Acids Res** 1997 May 1;25(9):1720-6

Interaction of tetracycline with RNA: photoincorporation into ribosomal RNA of Escherichia coli. Oehler R, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1219-24

5'ETS rRNA processing facilitated by four small RNAs: U14, E3, U17, and U3 [published erratum appears in RNA 1996 Dec;2(12):1318] Enright CA, et al. **RNA** 1996 Nov; 2(11):1094-9

A hypothesis to explain the substrate reactivity of ribosomal and stem-loop RNA with ricin A-chain. Link T, et al. **Toxicon** 1996 Nov-Dec;34(11-12):1317-24

Guiding ribose methylation of rRNA. Bachellerie JP, et al. **Trends Biochem Sci** 1997 Jul;22(7):257-61 (34 ref.)

PHYSIOLOGY

Ribosomal RNA: a vehicle for small functional RNAs [news] Sweeney R. **Mol Psychiatry** 1997 Jan;2(1):12-4

RADIATION EFFECTS

Recovery from ultraviolet tight-induced depression of ribosomal RNA synthesis in normal human, xeroderma pigmentosum and Cockayne syndrome cells. Ayaki H, et al. **J Radiat Res (Tokyo)** 1996 Jun;37(2):107-16

ULTRASTRUCTURE

Getting closer to an understanding of the three-dimensional structure of ribosomal RNA. Mueller F, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):767-73 (40 ref.)

Nucleolar organization as revealed in cell spreads. Ghosh S, et al. **Cell Biol Int** 1996 Jul;20(7):465-70

Evaluation of pepsin treatment for electron microscopic RNA in situ hybridization on ultra-thin cryosections of cultured cells. Macville MV, et al. **Histochem Cell Biol** 1996 Feb;105(2):139-45

Solution scattering structural analysis of the 70 S Escherichia coli ribosome by contrast variation. II. A model of the ribosome and its RNA at 3.5 nm resolution. Svergun DI, et al. **J Mol Biol** 1997 Aug 29;271(4):602-18

RNA, RIBOSOMAL, PRECURSORS see **RNA PRECURSORS**

RNA, RIBOSOMAL, SELF-SPLICING see **RNA, CATALYTIC**

RNA, RIBOSOMAL, 5S

5S rRNA sugar-phosphate backbone protection in complexes with specific ribosomal proteins. Shpanchenko OV, et al. **FEBS Lett** 1996 Sep 23;394(1):71-5

The AT-rich flanks of the oocyte-type 5S RNA gene of Xenopus laevis act as a strong local signal for histone H1-mediated chromatin reorganization in vitro. Tomaszewski R, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):458-66

ANALYSIS

Simple detection of the 5S ribosomal RNA of Pneumocystis carinii using in situ hybridisation. Kobayashi M, et al. **J Clin Pathol** 1996 Sep;49(9):712-6

CHEMISTRY

Novel SnoRNAs from Naja naja atra (Taiwan cobra) and Bungarus multicinctus (Taiwan banded krait), form extended sequence complementarity to 5S rRNA. Chang L, et al. **Biochem Biophys Res Commun** 1997 Jul 30; 236(3):782-4

Application of hammerhead ribozymes for structural studies of ribosomal 5S RNAs. Szymański M, et al. **Biochem Mol Biol Int** 1997 Mar;41(3):439-47

The nucleotide sequence of 5S ribosomal RNA from the parasitic nematode Ascaris suum. Evolutionary relationships in nematodes. Szymański M, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):251-5

Compilation of ribosomal 5S ribonucleic acid nucleotide sequences: eukaryotic 5S rRNAs. Szymański M, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):75-9

The nucleotide sequence of ribosomal 5s RNA from sorrel. Opiola T, et al. **Biochimie** 1996;78(2):108-10

Mg2+ dependence of the structure and thermodynamics of wheat germ and lupin seeds 5S rRNA. Kuliński T, et al. **J Biomol Struct Dyn** 1997 Feb;14(4):495-507

CLASSIFICATION

Taxonomy of 5 S ribosomal RNA by the linguistic technique: probing with mitochondrial and mammalian sequences. Guimarães RC, et al. **J Mol Evol** 1997 Sep;45(3):271-7

GENETICS

Structure and function of 5S rRNA in the ribosome. Bogdanov AA, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):869-76 (52 ref.)

A proposal for the conformation of loop E in Escherichia coli 5S rRNA. Dallas A, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):887-97

Specific guanylation of Lupinus luteus 5S rRNA at its 3' end in HeLa cell extract. Wyszko E, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1221-7

Visualizing human 5S rDNA. Pelliccia F, et al. **Chromosome Res** 1997 May;5(3):205-7

The rat 5S rRNA bona fide gene repeat maps to chromosome 19q12-->qter and the pseudogene repeat maps to 12q12. Frederiksen S, et al. **Cytogenet Cell Genet** 1997; 76(1-2):101-6

Sex chromosome linkage of 5S rDNA in rainbow trout (Oncorhynchus mykiss). Moran P, et al. **Cytogenet Cell Genet** 1996;75(2-3):145-50

A novel algorithm for the search of 5S rRNA genes in DNA databases: comparison with other methods and identification of new potential 5S rRNA genes. Pavesi A, et al. **DNA Seq** 1997;7(3-4):165-77

A tandem array of 5S ribosomal RNA genes in Pythium irregulare. Belkhiri A, et al. **Gene** 1997 Feb 28;186(2):155-9

The 5S rRNA gene units in ancestral two-rowed barley (Hordeum spontaneum C. Koch) and bulbous barley (H. bulbosum L.): sequence analysis and phylogenetic relationships with the 5S rDNA units of cultivated barley (H. vulgare L.). Baum BR, et al. **Genome** 1996 Feb; 39(1):140-9

The molecular diversity of the 5S rRNA gene in Kengyilia alatavica (Drobov) J.L. Yang, Yen & Baum (Poaceae:Triticeae): potential genomic assignment of different rDNA units. Baum BR, et al. **Genome** 1997 Apr; 40(2):215-28

Energetically unfavorable interactions among the zinc fingers of transcription factor IIIA when bound to the 5 S rRNA gene. Kehres DG, et al. **J Biol Chem** 1997 Aug 8; 272(32):20152-61

Ribosomal 5 S rRNA maturation in Saccharomyces cerevisiae. Lee Y, et al. **J Biol Chem** 1997 Jun 13; 272(24):15206-12

Use of heteroduplex analysis to classify legionellae on the basis of 5S rRNA gene sequences. Pinar A, et al. **J Clin Microbiol** 1997 Jun;35(6):1609-11

Protein and DNA requirements for the transcription factor IIIA-induced distortion of the 5 S rRNA gene promoter. Brown ML, et al. **J Mol Biol** 1996 Oct 11;262(5):600-14

A 5 S rRNA gene is present in the mitochondrial genome of the protist Reclinomonas americana but is absent from red algal mitochondrial DNA. Lang BF, et al. **J Mol Biol** 1996 Sep 6;261(5):407-13

In vivo analyses of upstream promoter sequence elements in the 5 S rRNA gene from Saccharomyces cerevisiae. Lee Y, et al. **J Mol Biol** 1997 Jun 27;269(5):676-83

Equally parsimonious pathways through an RNA sequence space are not equally likely. Lee YH, et al. **J Mol Evol** 1997 Sep;45(3):278-84

A theoretical study on the nucleotide changes under a definite functional constraint of forming stable base-pairs in the stem regions of ribosomal RNAs; its application to the phylogeny of eukaryotes. Otsuka J, et al. **J Theor Biol** 1997 Jan 21;184(2):171-86

5S rRNA genes in Macaca fascicularis map to chromosome 1p in three loci. Lomholt B, et al. **Mamm Genome** 1996 Jun;7(6):451-3

The 5S ribosomal RNA intergenic region of parasitic nematodes: variation in size and presence of SL1 RNA. Liu LX, et al. **Mol Biochem Parasitol** 1996 Dec 20; 83(2):235-9

The primary structure of Harpalus rufipes 5S ribosomal RNA: a contribution for understanding insect evolution. Barciszewska MZ, et al. **Mol Biol Rep** 1995;21(3):165-7

Compilation of 5S rRNA and 5S rRNA gene sequences. Specht T, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):96-7

Molecular phylogenetic studies on filarial parasites based on 5S ribosomal spacer sequences. Xie H, et al. **Parasite** 1994 Jun;1(2):141-51

Physical mapping of the 5S ribosomal RNA genes in Arabidopsis thaliana by multi-color fluorescence in situ hybridization with cosmid clones. Murata M, et al. **Plant J** 1997 Jul;12(1):31-7

[A new description of the type strain of Halobacterium distributum] Zviagintseva IS, et al. **Mikrobiologiia** 1996 May-Jun;65(3):399-402 (Eng. Abstr.) **(Rus)**

METABOLISM

Structural analysis of two plant 5S rRNA species and fragments thereof by lead-induced hydrolysis. Ciesiolka J, et al. **Biochem Mol Biol Int** 1996 May;39(2):319-28

A role for ribosomal protein L5 in the nuclear import of 5S rRNA in Xenopus oocytes. Murdoch KJ, et al. **Exp Cell Res** 1996 Sep 15;227(2):332-43

5S rRNA sugar-phosphate backbone protection in complexes with specific ribosomal proteins. Shpanchenko OV, et al. **FEBS Lett** 1996 Sep 23;394(1):71-5

Further study on association of 5SrRNA-L5 protein complex and methionyl-tRNA to methionyl-tRNA synthetase in the macromolecular aminoacyl-tRNA synthetase complex. Ogata K, et al. **J Biochem (Tokyo)** 1996 Nov;120(5):869-80

Functional interactions between the zinc fingers of Xenopus transcription factor IIIA during 5S rRNA binding. Setzer DR, et al. **RNA** 1996 Dec;2(12):1254-69

RNA, RIBOSOMAL, 5.8S

Sequence and secondary structure of the rDNA second internal transcribed spacer in the sibling species Culex pipiens L. and Cx. quinquefasciatus Say (Diptera: Culicidae). Severini C, et al. **Insect Mol Biol** 1996 Aug; 5(3):181-6

Comparison of the internal transcribed spacer, ITS 1, from Toxoplasma gondii isolates and Neospora caninum. Homan WL, et al. **Parasitol Res** 1997;83(3):285-9

BIOSYNTHESIS

RRP5 is required for formation of both 18S and 5.8S rRNA in yeast. Venema J, et al. **EMBO J** 1996 Oct 15; 15(20):5701-14

Variable regions V13 and V3 of Saccharomyces cerevisiae contain structural features essential for normal biogenesis and stability of 5.8S and 25S rRNA. Jeeninga RE, et al. **RNA** 1997 May;3(5):476-88

CHEMISTRY

Secondary structures and features of the 18S, 5.8S and 26S ribosomal RNAs from the Apicomplexan parasite Toxoplasma gondii. Gagnon S, et al. **Gene** 1996 Sep 16; 173(2):129-35

GENETICS

The ribosomal 5.8S RNA as a target site for p53 protein in cell differentiation and oncogenesis. Abou Elela S, et al. **Cancer Lett** 1997 Jul 15;117(1):23-8

Evolution of the ITS sequences of ribosomal DNA in

Enteromorpha (Chlorophyceae). Leskinen E, et al. **Hereditas** 1997;126(1):17–23

Phylogenetic relationships of the Culicomorpha inferred from 18S and 5.8S ribosomal DNA sequences. (Diptera:Nematocera). Miller BR, et al. **Insect Mol Biol** 1997 May;6(2):105–14

Large-subunit rRNA sequence of the chytridiomycete Blastocladiella emersonii, and implications for the evolution of zoosporic fungi. Van der Auwera G, et al. **J Mol Evol** 1996 Nov;43(5):476–83

Complete large subunit ribosomal RNA sequences from the heterokont algae Ochromonas danica, Nannochloropsis salina, and Tribonema aequale, and phylogenetic analysis. Van der Auwera G, et al. **J Mol Evol** 1997 Jul;45(1):84–90

METABOLISM

Cytoplasmic p53 polypeptide is associated with ribosomes. Fontoura BM, et al. **Mol Cell Biol** 1997 Jun;17(6):3146–54

The sequence of the 5' end of the U8 small nucleolar RNA is critical for 5.8S and 28S rRNA maturation. Peculis BA. **Mol Cell Biol** 1997 Jul;17(7):3702–13

Role of the 5.8S rRNA in ribosome translocation. Abou Elela S, et al. **Nucleic Acids Res** 1997 May 1;25(9):1788–94

RNA, RIBOSOMAL, 16S

An rRNA approach for assessing the role of obligate amino acid-fermenting bacteria in ruminal amino acid deamination. Krause DO, et al. **Appl Environ Microbiol** 1996 Mar;62(3):815–21

Phylogenetic relationship among termite families based on DNA sequence of mitochondrial 16S ribosomal RNA gene. Kambhampati S, et al. **Insect Mol Biol** 1996 Nov; 5(4):229–38

Molecular identification of a Wolbachia endosymbiont in a Tetranychus urticae strain (Acari: Tetranychidae). Tsagkarakou A, et al. **Insect Mol Biol** 1996 Aug;5(3):217–21

Evolutionary relationships among members of the genus Chlamydia based on 16S ribosomal DNA analysis. Pettersson B, et al. **J Bacteriol** 1997 Jul;179(13):4195–205

Intracellular endosymbiotic bacteria of Camponotus species (carpenter ants): systematics, evolution and ultrastructural characterization. Schröder D, et al. **Mol Microbiol** 1996 Aug;21(3):479–89

Evaluation of experimental therapeutics in a new mouse model of Helicobacter felis utilizing 16S rRNA polymerase chain reaction for detection. Smith JG, et al. **Scand J Gastroenterol** 1997 Apr;32(4):297–302

16S ribosomal RNA-targeted oligonucleotide probes for monitoring of intestinal tract bacteria. Welling GW, et al. **Scand J Gastroenterol Suppl** 1997;222:17–9

ANALYSIS

Characterization of microbial communities in anaerobic bioreactors using molecular probes. Raskin L, et al. **Antonie Van Leeuwenhoek** 1995 Nov;68(4):297–308

Seasonal distributions of dominant 16S rRNA-defined populations in a hot spring microbial mat examined by denaturing gradient gel electrophoresis. Ferris MJ, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1375–81

Group-specific 16S rRNA hybridization probes for determinative and community structure studies of Butyrivibrio fibrisolvens in the rumen. Forster RJ, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1256–60

Identification and quantification of Bifidobacterium species isolated from food with genus-specific 16S rRNA-targeted probes by colony hybridization and PCR. Kaufmann P, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1268–73

Prosthetic joint infection caused by Tropheryma whippelii (Whipple's bacillus). Frésard A, et al. **Clin Infect Dis** 1996 Mar;22(3):575–6

Characterization of Burkholderia pseudomallei and Burkholderia pseudomallei-like strains. Brett PJ, et al. **Epidemiol Infect** 1997 Apr;118(2):137–48

Characterization of the Lancefield group C streptococcus 16S–23S RNA gene intergenic spacer and its potential for identification and sub-specific typing. Chanter N, et al. **Epidemiol Infect** 1997 Apr;118(2):125–35

Analysis of partial 16S rRNA nucleotide sequences of Chlamydia pecorum and C. psittaci. Sheehy N, et al. **FEMS Immunol Med Microbiol** 1997 Apr;17(4):201–5

Whipple's disease: comparison of histology with diagnosis based on polymerase chain reaction in four consecutive cases. Müller C, et al. **Gut** 1997 Mar;40(3):425–7

Infection of the upper extremity by Mycobacterium marinum in a 3-year-old boy—diagnosis by 16S-rDNA analysis. Feddersen A, et al. **Infection** 1996 Jan–Feb;24(1):47–8

Use of NASBA RNA amplification for detection of Mycobacterium leprae in skin biopsies from untreated and treated leprosy patients. van der Vliet GM, et al. **Int J Lepr Other Mycobact Dis** 1996 Dec;64(4):396–403

Reclassification of the crenarchael orders and families in accordance with 16S rRNA sequence data. Burggraf S, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):657–60

Inter- and intraspecies comparison of the 16S–23S rRNA operon intergenic spacer regions of six Listeria spp. Graham TA, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):863–9

16S rRNA gene sequence of Rubrobacter radiotolerans and its phylogenetic alignment with members of the genus Arthrobacter, gram-positive bacteria, and members of the family Deinococcaceae. Kausar J, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):684–6

Analysis of the beta' subunit of DNA-dependent RNA polymerase does not support the hypothesis inferred from 16S rRNA analysis that Oenococcus oeni (formerly Leuconostoc oenos) is a tachytelic (fast-evolving) bacterium. Morse R, et al. **Int J Syst Bacteriol** 1996 Oct; 46(4):1004–9

rRNA sequences and evolutionary relationships among toxic and nontoxic cyanobacteria of the genus Microcystis. Neilan BA, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):693–7

Characterization of strains of Leuconostoc mesenteroides by analysis of soluble whole-cell protein pattern, DNA fingerprinting and restriction of ribosomal DNA. Villani F, et al. **J Appl Microbiol** 1997 May;82(5):578–88

Heterogeneity and clonality among isolates of Mycobacterium kansasii: implications for epidemiological and pathogenicity studies. Alcaide F, et al. **J Clin Microbiol** 1997 Aug;35(8):1959–64

Molecular diagnosis of cat scratch disease: a two-step approach. Avidor B, et al. **J Clin Microbiol** 1997 Aug; 35(8):1924–30

A 16S rRNA-based PCR assay for detection and identification of granulocytic Ehrlichia species in dogs, horses, and cattle. Engvall EO, et al. **J Clin Microbiol** 1996 Sep;34(9):2170–4

Corynebacterium imitans sp. nov. isolated from patients with suspected diphtheria. Funke G, et al. **J Clin Microbiol** 1997 Aug;35(8):1978–83

Application of a nested, multiplex PCR to psittacosis outbreaks. Messmer TO, et al. **J Clin Microbiol** 1997 Aug; 35(8):2043–6

Application of 16S rRNA gene PCR to study bowel flora of preterm infants with and without necrotizing enterocolitis. Millar MR, et al. **J Clin Microbiol** 1996 Oct; 34(10):2506–10

Fluorescently-labeled oligonucleotide probes can be used to identify protistan food vacuole contents. Gunderson JH, et al. **J Eukaryot Microbiol** 1997 Jul–Aug;44(4):300–4

Decontamination of polymerase chain reaction reagents for detection of low concentrations of 16S rRNA genes. Hilali F, et al. **Mol Biotechnol** 1997 Jun;7(3):207–16

BIOSYNTHESIS

The path of mRNA through the bacterial ribosome: a site-directed crosslinking study using new photoreactive derivatives of guanosine and uridine. Sergiev PV, et al. **RNA** 1997 May;3(5):464–75

CHEMISTRY

An oligonucleotide analog approach to the decoding region of 16S rRNA. Stern S, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):899–905 (19 ref.)

Context dependent RNA–RNA recognition in a three-dimensional model of the 16S rRNA core. Masquida B, et al. **Bioorg Med Chem** 1997 Jun;5(6):1021–35

Differential sensitivity of 16S rRNA targeted oligonucleotide probes used for fluorescence in situ hybridization is a result of ribosomal higher order structure. Frischer ME, et al. **Can J Microbiol** 1996 Oct;42(10):1061–71

Reassessment of the phylogenetic position of the bacterium associated with Whipple's disease and determination of the 16S–23S ribosomal intergenic spacer sequence. Maiwald M, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1078–82

Phylogeny of some mycoplasmas from ruminants based on 16S rRNA sequences and definition of a new cluster within the hominis group. Pettersson B, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1093–8

Identification and sequence analysis of contact sites between ribosomal proteins and rRNA in Escherichia coli 30 S subunits by a new approach using matrix-assisted laser desorption/ionization-mass spectrometry combined with N-terminal microsequencing. Urlaub H, et al. **J Biol Chem** 1997 Jun 6;272(23):14547–55

A geometrical approach in folding a pseudoknot motif within the E. coli 16S-RNA. Tung CS. **J Biomol Struct Dyn** 1996 Oct;14(2):153–61

Assessing the reliability of RNA folding using statistical mechanics. Huynen M, et al. **J Mol Biol** 1997 Apr 18; 267(5):1104–12

The phylogenetic position and ultrastructure of the uncultured bacterium Achromatium oxaliferum. Head IM, et al. **Microbiology** 1996 Sep;142 (Pt 9):2341–54

The evolution of strand-specific compositional bias. A case study in the Hymenopteran mitochondrial 16S rRNA gene [letter] Dowton M, et al. **Mol Biol Evol** 1997 Jan; 14(1):109–12

A new technique for the characterization of long-range tertiary contacts in large RNA molecules: insertion of a photolabel at a selected position in 16S rRNA within the Escherichia coli ribosome. Baranov PV, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2266–73

Decoding fidelity at the ribosomal A and P sites: influence of mutations in three different regions of the decoding domain in 16S rRNA. O'Connor M, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1185–93

The central pseudoknot in 16S ribosomal RNA is needed for ribosome stability but is not essential for 30S initiation complex formation. Poot RA, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3670–6

Structural analyses of plastid-derived 16S rRNAs in holoparasitic angiosperms. Nickrent DL, et al. **Plant Mol Biol** 1997 Jul;34(5):731–43

Computational methods for defining the allowed conformational space of 16S rRNA based on chemical footprinting data. Fink DL, et al. **RNA** 1996 Sep; 2(9):851–66

Exact determination of UV-induced crosslinks in 16S ribosomal RNA in 30S ribosomal subunits. Wilms C, et al. **RNA** 1997 Jun;3(6):602–12

Structure of the A site of Escherichia coli 16S ribosomal RNA complexed with an aminoglycoside antibiotic. Fourmy D, et al. **Science** 1996 Nov 22;274(5291):1367–71

A conformational switch in Escherichia coli 16S ribosomal RNA during decoding of messenger RNA. Lodmell JS, et al. **Science** 1997 Aug 29;277(5330):1262–7

GENETICS

Detection and identification of bacteria using in-house broad range 16S rDNA PCR amplification and genus-specific DNA hybridization probes, located within variable regions of 16S rRNA genes. Monstein HJ, et al. **APMIS** 1996 Jun; 104(6):451–8

Phylogenetic analyses of some extremely halophilic archaea isolated from Dead Sea water, determined on the basis of their 16S rRNA sequences. Arahal DR, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3779–86

Diversity and association of psychrophilic bacteria in Antarctic sea ice. Bowman JP, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3068–78

Rapid and sensitive method for the detection of Mycobacterium chlorophenolicum PCP-1 in soil based on 16S rRNA gene-targeted PCR. Briglia M, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1478–80

Fast and accurate identification of Xenorhabdus and Photorhabdus species by restriction analysis of PCR-amplified 16S rRNA genes. Brunel B, et al. **Appl Environ Microbiol** 1997 Feb;63(2):574–80

Subcuticular bacteria from the brittle star Ophiactis balli (Echinodermata: Ophiuroidea) represent a new lineage of extracellular marine symbionts in the alpha subdivision of the class Proteobacteria. Burnett WJ, et al. **Appl Environ Microbiol** 1997 May;63(5):1721–4

PCR-mediated detection of acidophilic, bioleaching-associated bacteria. De Wulf-Durand P, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2944–8

Clostridium thermocellum JW20 (ATCC 31549) is a coculture with Thermoanaerobacter ethanolicus. Erbeznik M, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2949–51

Analysis of actinomycete communities by specific amplification of genes encoding 16S rRNA and gel-electrophoretic separation in denaturing gradients. Heuer H, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3233–41

Bacterial diversity in Adirondack mountain lakes as revealed by 16S rRNA gene sequences. Hiorns WD, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2957–60

Comparison of ribotyping and randomly amplified polymorphic DNA PCR for characterization of Vibrio vulnificus. Høi L, et al. **Appl Environ Microbiol** 1997 May; 63(5):1674–8

Novel group within the kingdom Crenarchaeota from boreal forest soil. Jurgens G, et al. **Appl Environ Microbiol** 1997 Feb;63(2):803–5

A new computational method for detection of chimeric 16S rRNA artifacts generated by PCR amplification from mixed bacterial populations. Komatsoulis GA, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2338–46

Phylogenetic diversity of bacterial symbionts of Solemya hosts based on comparative sequence analysis of 16S rRNA genes. Krueger DM, et al. **Appl Environ Microbiol** 1997 Jan;63(1):91–8

Nested PCR for ultrasensitive detection of the potato ring rot bacterium, Clavibacter michiganensis subsp. sepedonicus. Lee IM, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2625–30

Phylogeny and classification of bacteria in the genera Clavibacter and Rathayibacter on the basis of 16s rRNA gene sequence analyses. Lee IM, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2631–6

Development of a new seminested PCR method for detection of Legionella species and its application to surveillance of legionellae in hospital cooling tower water. Miyamoto H, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2489–94

PCR primers to amplify 16S rRNA genes from cyanobacteria. Nübel U, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3327–32

Distribution of bacterioplankton in meromictic Lake Saelenvannet, as determined by denaturing gradient gel electrophoresis of PCR-amplified gene fragments coding for 16S rRNA. Ovreås L, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3367–73

A simple method for quantification of uncultured microorganisms in the environment based on in vitro transcription of 16S rRNA. Polz MF, et al. **Appl Environ Microbiol** 1997 Mar;63(3):1028–33

Strain characterization and classification of oxyphotobacteria in clone cultures on the basis of 16S rRNA sequences from the variable regions V6, V7, and V8. Rudi K, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2593–9

Development and application of 16S rRNA-targeted probes for detection of iron- and manganese-oxidizing sheathed bacteria in environmental samples. Siering PL, et al. **Appl Environ Microbiol** 1997 Feb;63(2):644–51

Phylogenetic analysis and in situ identification of bacteria in activated sludge. Snaidr J, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2884–96

Whole–cell hybridization of Methanosarcina cells with two new oligonucleotide probes. Sørensen AH, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3043–50

Molecular diversity of soil and marine 16S rRNA gene sequences related to beta–subgroup ammonia–oxidizing bacteria. Stephen JR, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4147–54

The ldh phylogeny for environmental isolates of Lactococcus lactis is consistent with rRNA genotypes but not with phenotypes. Urbach E, et al. **Appl Environ Microbiol** 1997 Feb;63(2):694–702

Differentiation of Shewanella putrefaciens and Shewanella alga on the basis of whole–cell protein profiles, ribotyping, phenotypic characterization, and 16S rRNA gene sequence analysis. Vogel BF, et al. **Appl Environ Microbiol** 1997 Jun; 63(6):2189–99

Diversity of uncultured microorganisms associated with the seagrass Halophila stipulacea estimated by restriction fragment length polymorphism analysis of PCR–amplified 16S rRNA genes. Weidner S, et al. **Appl Environ Microbiol** 1996 Mar;62(3):766–71

Taxonomic relationships of Thiobacillus halophilus, T. aquaesulis, and other species of Thiobacillus, as determined using 16S rDNA sequencing. McDonald IR, et al. **Arch Microbiol** 1996 Dec;166(6):394–8

Comparative genomic analysis of isolates belonging to the six species of the genus Thermus using pulsed–field gel electrophoresis and ribotyping. Moreira LM, et al. **Arch Microbiol** 1997 Aug;168(2):92–101

Sequence and copy number of the Xanthomonas campestris pv. campestris gene encoding 16S rRNA. Lin NT, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):276–80

Pleiotropic effects of mutations at positions 13 and 914 in Escherichia coli 16S ribosomal RNA. Brakier–Gingras L, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):907–13 (52 ref.)

Preribosomal RNA processing in archaea: characterization of the RNP endonuclease mediated processing of precursor 16S rRNA in the thermoacidophile Sulfolobus acidocaldarius. Potter S, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):813–23 (31 ref.)

A phylogenetic study of Rubrobacter radiotolerans by sequence analysis of the 16S ribosomal RNA gene. Kausar J, et al. **Biochem Mol Biol Int** 1996 Jul;39(4):697–702

Specificity of aminoglycoside binding to RNA constructs derived from the 16S rRNA decoding region and the HIV–RRE activator region. Wang Y, et al. **Biochemistry** 1997 Jan 28;36(4):768–79

Quantitative analysis of 16S rDNA using competitive PCR and the QPCR System 5000. Blok HJ, et al. **Biotechniques** 1997 Apr;22(4):700–4

Simultaneous detection of microorganisms in soil suspension based on PCR amplification of bacterial 16S rRNA fragments. McGregor DP, et al. **Biotechniques** 1996 Sep; 21(3):463–6, 468, 470–1

Genus– and species–specific detection of Listeria monocytogenes using polymerase chain reaction assays targeting the 16S/23S intergenic spacer region of the rRNA operon. Graham T, et al. **Can J Microbiol** 1996 Nov; 42(11):1155–62

A specific oligonucleotide primer for the rapid detection of Lactobacillus lindneri by polymerase chain reaction. Yasui T, et al. **Can J Microbiol** 1997 Feb;43(2):157–63

Broad–spectrum bacterial rDNA polymerase chain reaction assay for detecting amniotic fluid infection among women in premature labor. Hitti J, et al. **Clin Infect Dis** 1997 Jun; 24(6):1228–32

Use of amplification and sequencing of the 16S rRNA gene to diagnose Mycoplasma pneumoniae osteomyelitis in a patient with hypogammaglobulinemia. La Scola B, et al. **Clin Infect Dis** 1997 Jun;24(6):1161–3

Genetic diversity among Yersinia enterocolitica strains as revealed by sequence analysis of the 16S rRNA gene. Ibrahim A. **Contrib Microbiol Immunol** 1995;13:277–80

Gene expression evidence indicates that nucleotides 507–513 and 1434–1440 in 16S rRNA are organized in close proximity on the Escherichia coli 30S ribosomal subunit. Kaloyanova D, et al. **Eur J Biochem** 1997 Aug 15; 248(1):10–4

Study of the 16S–23S ribosomal DNA internal spacer of Coxiella burnetii. Stein A, et al. **Eur J Epidemiol** 1997 Jun; 13(4):471–5

Restriction fragment length polymorphisms of 16S rDNA and of whole rRNA genes (ribotyping) of Streptococcus iniae strains from the United States and Israel. Eldar A, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):155–62

Phylogeny of the genus Chlorobium based on 16S rDNA sequence. Figueras JB, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):31–6

A cluster of atypical Yersinia strains with a distinctive 16S rRNA signature. Ibrahim A, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):73–8

Application of the variable region in 16S rDNA to create an index for rapid species identification in the genus Streptomyces. Kataoka M, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):249–55

Detection and in situ identification of representatives of a widely distributed new bacterial phylum. Ludwig W, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):181–90

16S rRNA gene sequence analyses and inter– and intrageneric relationships of Xanthomonas species and Stenotrophomonas maltophilia. Moore ER, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):145–53

Identification of Pediococcus acidilactici and Pediococcus pentosaceus based on 16S rRNA and ldhD gene–targeted multiplex PCR analysis. Mora D, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):231–6

PCR–mediated detection of the chemolithotrophic bacterium Thiobacillus cuprinus using 23S rDNA– and 16S/23S intergenic spacer region–targeted oligonucleotide primers. Moreira D, et al. **FEMS Microbiol Lett** 1996 Sep 1; 142(2–3):289–93

Differentiation of intestinal spirochaetes by multilocus enzyme electrophoresis analysis and 16S rRNA sequence comparisons. Stanton TB, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):181–6

Discrimination between Bacillus cereus and Bacillus thuringiensis using specific DNA probes based on variable regions of 16S rRNA. te Giffel MC, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):47–51

16S rDNA genotyping using PCR/RFLP (restriction fragment length polymorphism) analysis among the family Vibrionaceae. Urakawa H, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):125–32

Phylogenetic characterization of bacteria in the subsurface microbial culture collection. Balkwill DL, et al. **FEMS Microbiol Rev** 1997 Jul;20(3–4):201–16 (68 ref.)

Cloning and sequencing of a gene encoding 16S ribosomal RNA from a novel hyperthermophilic archaebacterium NC12. Aoshima M, et al. **Gene** 1996 Nov 21;180(1–2):183–7

An improved amplification and sequencing strategy for phylogenetic studies using the mitochondrial large subunit rRNA gene. Parker A, et al. **Genome** 1996 Aug;39(4):793–7

Developmental analysis of a female–specific 16S rRNA gene from mycetome–associated endosymbionts of a mealybug, Planococcus lilacinus. Kantheti P, et al. **Insect Biochem Mol Biol** 1996 Dec;26(10):997–1009

Development of oligonucleotide primers from the 16S–23S rRNA intergenic sequences for identifying different dairy and probiotic lactic acid bacteria by PCR. Tilsala–Timisjärvi A, et al. **Int J Food Microbiol** 1997 Mar 18;35(1):49–56

Evaluation of the NASBA nucleic acid amplification system for assessment of the viability of Campylobacter jejuni. Uyttendaele M, et al. **Int J Food Microbiol** 1997 Jun 17; 37(1):13–20

Use of 16S rRNA analysis to investigate phylogeny of methylotrophic bacteria. Bratina BJ, et al. **Int J Syst Bacteriol** 1992 Oct;42(4):645–8

Vibrio scophthalmi sp. nov., a new species from turbot (Scophthalmus maximus). Cerdà–Cuéllar M, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):58–61

Phylogeny of oral asaccharolytic Eubacterium species determined by 16S ribosomal DNA sequence comparison and proposal of Eubacterium infirmum sp. nov. and Eubacterium tardum sp. nov. Cheeseman SL, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):957–9

Spirochetes from digital dermatitis lesions in cattle are closely related to treponemes associated with human periodontitis. Choi BK, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):175–81

A proposal to reclassify Nocardia pinensis Blackall et al. as Skermania piniformis gen. nov., comb. nov. Chun J, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):127–31

Discrimination of Streptomyces albidoflavus strains based on the size and number of 16S–23S ribosomal DNA intergenic spacers. Hain T, et al. **Int J Syst Bacteriol** 1997 Jan; 47(1):202–6

Haloarcula argentinensis sp. nov. and Haloarcula mukohataei sp. nov., two new extremely halophilic archaea collected in Argentina. Ihara K, et al. **Int J Syst Bacteriol** 1997 Jan; 47(1):73–7

Comparison of the 16S/23S ribosomal intergenic regions of "Candidatus Liberobacter asiaticum" and "Candidatus Liberobacter africanum," the two species associated with citrus huanglongbing (greening) disease. Jagoueix S, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):224–7

Phylogenetic positions of Clostridium chauvoei and Clostridium septicum based on 16S rRNA gene sequences. Kuhnert P, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1174–6

Comparative sequence analyses of the genes coding for 16S rRNA of Lactobacillus casei–related taxa. Mori K, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):54–7

Phylogenetic analysis of the genus Chlamydia based on 16S rRNA gene sequences. Pudjiatmoko, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):425–31

Phylogenetic analysis of the genus Actinomyces based on 16S rRNA gene sequences: description of Arcanobacterium phocae sp. nov., Arcanobacterium bernardiae comb. nov., and Arcanobacterium pyogenes comb. nov. Ramos CP, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):46–53

Phylogenetic position of Riemerella anatipestifer based on 16S rRNA gene sequences. Subramaniam S, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):562–5

Phylogenetic analysis of Streptomyces spp. causing potato scab based on 16S rRNA sequences. Takeuchi T, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):476–9

Comparison of the small 16S to 23S intergenic spacer region (ISR) of the rRNA operons of some Escherichia coli strains of the ECOR collection and E. coli K–12. García–Martínez J, et al. **J Bacteriol** 1996 Nov;178(21):6374–7

Sequence heterogeneities of genes encoding 16S rRNAs in Paenibacillus polymyxa detected by temperature gradient gel electrophoresis. Nübel U, et al. **J Bacteriol** 1996 Oct; 178(19):5636–43

The actinomycete Thermobispora bispora contains two distinct types of transcriptionally active 16S rRNA genes. Wang Y, et al. **J Bacteriol** 1997 May;179(10):3270–6

Differentiation of Rhodococcus species by ribotyping. Jorks S. **J Basic Microbiol** 1996;36(6):399–406

Diversity within bacterial isolates hybridizing with Comamonas probe ppT. Koivula TT, et al. **J Basic Microbiol** 1997;37(2):129–37

Phylogenetic placement and characterization of a new alpha–2 proteobacterium isolated from a patient with sepsis. Blomqvist G, et al. **J Clin Microbiol** 1997 Aug; 35(8):1988–95

Differentiation of bacterial 16S rRNA genes and intergenic regions and Mycobacterium tuberculosis katG genes by structure–specific endonuclease cleavage. Brow MA, et al. **J Clin Microbiol** 1996 Dec;34(12):3129–37

Evaluation of 16S rRNA gene PCR with primers Hp1 and Hp2 for detection of Helicobacter pylori. Chong SK, et al. **J Clin Microbiol** 1996 Nov;34(11):2728–30

Rapid species identification of "Streptococcus milleri" strains by line blot hybridization: identification of a distinct 16S rRNA population closely related to Streptococcus constellatus. Jacobs JA, et al. **J Clin Microbiol** 1996 Jul; 34(7):1717–21

Two different 16S rRNA genes in a mycobacterial strain. Ninet B, et al. **J Clin Microbiol** 1996 Oct;34(10):2531–6

Western immunoblot analysis of Haemobartonella muris and comparison of 16S rRNA gene sequences of H. muris, H. felis, and Eperythrozoon suis. Rikihisa Y, et al. **J Clin Microbiol** 1997 Apr;35(4):823–9

Case of fatal systemic infection with an Aureobacterium sp.: identification of isolate by 16S rRNA gene analysis. Saweljew P, et al. **J Clin Microbiol** 1996 Jun;34(6):1540–1

Isolation of an unusual mycobacterium from an AIDS patient. Tortoli E, et al. **J Clin Microbiol** 1996 Sep;34(9):2316–9

Multiplex PCR using conserved and species–specific 16S rRNA gene primers for simultaneous detection of Actinobacillus actinomycetemcomitans and Porphyromonas gingivalis. Tran SD, et al. **J Clin Microbiol** 1996 Nov;34(11):2674–8

A 16S rRNA gene oligonucleotide probe for identification of Bacillus thuringiensis isolates from sheep fleece. Akhurst RJ, et al. **J Invertebr Pathol** 1997 Jan;69(1):24–30

Population genetics of Ixodes scapularis (Acari: Ixodidae) based on mitochondrial 16S and 12S genes. Norris DE, et al. **J Med Entomol** 1996 Jan;33(1):78–89

Strategy for detection and identification of bacteria based on 16S rRNA genes in suspected cases of Whipple's disease. Dauga C, et al. **J Med Microbiol** 1997 Apr;46(4):340–7

Phenotypic heterogeneity of mutational changes at a conserved nucleotide in 16 S ribosomal RNA. Pagel FT, et al. **J Mol Biol** 1997 Apr 18;267(5):1113–23

Phylogenetic reconstruction of the Felidae using 16S rRNA and NADH–5 mitochondrial genes. Johnson WE, et al. **J Mol Evol** 1997;44 Suppl 1:S98–116

Phylogenetic relationships of nonaxenic filamentous cyanobacterial strains based on 16S rRNA sequence analysis. Nelissen B, et al. **J Mol Evol** 1996 Feb; 42(2):194–200

Patterns of nucleotide change in mitochondrial ribosomal RNA genes and the phylogeny of piranhas. Ortí G, et al. **J Mol Evol** 1996 Feb;42(2):169–82

Studies on the distribution of high–level gentamicin–resistant Enterococcus faecalis using ribotyping and restriction analysis of the 16S–23S rRNA intergenic spacer sequences. Ingianni A, et al. **Microb Drug Resist** 1997 Fall;3(3):271–5

Borrelia tanukii sp. nov. and Borrelia turdae sp. nov. found from ixodid ticks in Japan: rapid species identification by 16S rRNA gene–targeted PCR analysis. Fukunaga M, et al. **Microbiol Immunol** 1996;40(11):877–81

Genetic analysis of Borrelia burgdorferi sensu lato in Korea using genomic hybridization and 16S rRNA gene sequence determination. Kee SH, et al. **Microbiol Immunol** 1996; 40(9):599–605

Unification of the genera Serpulina and Brachyspira, and proposals of Brachyspira hyodysenteriae Comb. Nov., Brachyspira innocens Comb. Nov. and Brachyspira pilosicoli Comb. Nov. Ochiai S, et al. **Microbiol Immunol** 1997;41(6):445–52

Phylogenetic diversity of intra–amoebal legionellae as revealed by 16S rRNA gene sequence comparison. Birtles RJ, et al. **Microbiology** 1996 Dec;142 (Pt 12):3525–30

The evolution of strand–specific compositional bias. A case study in the Hymenopteran mitochondrial 16S rRNA gene [letter] Dowton M, et al. **Mol Biol Evol** 1997 Jan; 14(1):109–12

DNA sequence variation of mitochondrial large–subunit rRNA provides support for a two–subclass organization of the Anthozoa (Cnidaria). France SC, et al. **Mol Mar Biol Biotechnol** 1996 Mar;5(1):15–28

Ribosomal RNA gene dosage in marine bacteria. Kerkhof L, et al. **Mol Mar Biol Biotechnol** 1997 Sep;6(3):260–7

A molecular phylogeny of Mobile River drainage basin pleurocerid snails (Caenogastropoda: Cerithioidea). Lydeard C, et al. **Mol Phylogenet Evol** 1997 Feb; 7(1):117–28

Phylogenetic relationships among bufonoid frogs (Anura:Neobatrachia) inferred from mitochondrial DNA sequences. Ruvinsky I, et al. **Mol Phylogenet Evol** 1996

Jun;5(3):533–47
A genomic study of the leproma–derived and cultivable Mycobacterium HI–75. The direct DNA sequencing of PCR product of 16S ribosomal RNA. Sakai T, et al. **Nihon Hansenbyo Gakkai Zasshi** 1996 Nov;65(3):180–5
Expansion of the 16S and 23S ribosomal RNA mutation databases (16SMDB and 23SMDB). Triman KL, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):188–91
Molecular systematics and evolution of reproductive traits of North American freshwater unionacean mussels (Mollusca: Bivalvia) as inferred from 16S rRNA gene sequences. Lydeard C, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 Nov 29; 351(1347):1593–603
Structural analyses of plastid–derived 16S rRNAs in holoparasitic angiosperms. Nickrent DL, et al. **Plant Mol Biol** 1997 Jul;34(5):731–43
16S rRNA genes reveal stratified open ocean bacterioplankton populations related to the Green Non–Sulfur bacteria. Giovannoni SJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7979–84
Species attribution and strain typing of Oenococcus oeni (formerly Leuconostoc oenos) with restriction endonuclease fingerprints. Viti C, et al. **Res Microbiol** 1996 Oct;147(8):651–60
Formation of the 5' end pseudoknot in small subunit ribosomal RNA: involvement of U3–like sequences [letter] Dennis PP, et al. **RNA** 1997 Apr;3(4):337–43
Five subgroups of Blastocystis hominis from symptomatic and asymptomatic patients revealed by restriction site analysis of PCR–amplified 16S–like rDNA. Böhm–Gloning B, et al. **Trop Med Int Health** 1997 Aug;2(8):771–8
Oligonucleotide probes for Bordetella bronchiseptica based on 16S ribosomal RNA sequences. Taneda A, et al. **Vet Microbiol** 1994 Dec;42(4):297–305
Partial identification of spirochaetes from two dairy cows with digital dermatitis by polymerase chain reaction analysis of the 16S ribosomal RNA gene. Rijpkema SG, et al. **Vet Rec** 1997 Mar 8;140(10):257–9
[16S rRNA gene PCR–SSCP analysis of the reference strains from 15 serovars (14 serogroups) of pathogenic leptospires in China] Wu W, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar;27(1):17–20 (Eng. Abstr.) **(Chi)**
[The 16S–23s rRNA intergenic spacer regions of mycoplasmas] Harasawa R. **Nippon Saikingaku Zasshi** 1996 Feb;51(2):583–8 (15 ref.) **(Jpn)**
[Species diversity of deep water microorganisms in Lake Baikal, detected by 16S rRNA sequences] Bel'kova NL, et al. **Dokl Akad Nauk** 1996 Jun;348(5):692–5 **(Rus)**
[Determination of the taxonomic position of bacteria from Lake Baikal using sequence analysis of 16S rRNA fragments] Belikov SI, et al. **Mikrobiologiia** 1996 Nov–Dec; 65(6):855–64 (Eng. Abstr.) **(Rus)**
[A new description of the type strain of Halobacterium distributum] Zviagintseva IS, et al. **Mikrobiologiia** 1996 May–Jun;65(3):399–402 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Denaturing gradient gel electrophoresis used to monitor the enrichment culture of aerobic chemoorganotrophic bacteria from a hot spring cyanobacterial mat. Santegoeds CM, et al. **Appl Environ Microbiol** 1996 Nov;62(11):3922–8
Identification of Bartonella henselae and B. quintana 16s rDNA sequences by branch–, genus– and species–specific amplification. Dauga C, et al. **J Med Microbiol** 1996 Sep; 45(3):192–9

METABOLISM

Cleavage of 16S rRNA within the ribosome by mRNA modified in the A–site codon with phenanthroline–Cu(II). Bucklin DJ, et al. **Biochemistry** 1997 Jul 1;36(26):7951–7
Specificity of aminoglycoside binding to RNA constructs derived from the 16S rRNA decoding region and the HIV–RRE activator region. Wang Y, et al. **Biochemistry** 1997 Jan 28;36(4):768–79
Context dependent RNA–RNA recognition in a three–dimensional model of the 16S rRNA core. Masquida B, et al. **Bioorg Med Chem** 1997 Jun;5(6):1021–35
The selection in vivo and characterization of an RNA recognition motif for spectinomycin. Thom G, et al. **Bioorg Med Chem** 1997 Jun;5(6):1081–6
Acetylation of ribosomal protein S5 affected by defects in the central pseudoknot in 16S ribosomal RNA? Poot RA, et al. **FEBS Lett** 1997 Jan 20;401(2–3):175–9
Role of ribosome degradation in the death of heat–stressed Salmonella typhimurium. Tolker–Nielsen T, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):155–60
16S mitochondrial ribosomal RNA degradation is associated with apoptosis. Crawford DR, et al. **Free Radic Biol Med** 1997;22(7):1295–300
Depletion of pre–16S rRNA in starved Escherichia coli cells. Cangelosi GA, et al. **J Bacteriol** 1997 Jul;179(14):4457–63
In vivo determination of RNA structure–function relationships: analysis of the 790 loop in ribosomal RNA. Lee K, et al. **J Mol Biol** 1997 Jun 27;269(5):732–43
A new technique for the characterization of long–range tertiary contacts in large RNA molecules: insertion of a photolabel at a selected position in 16S rRNA within the Escherichia coli ribosome. Baranov PV, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2266–73
An antibiotic–binding motif of an RNA fragment derived from the A–site–related region of Escherichia coli 16S rRNA. Miyaguchi H, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3700–6
Decoding fidelity at the ribosomal A and P sites: influence of mutations in three different regions of the decoding domain in 16S rRNA. O'Connor M, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1185–93
Lead–catalysed specific cleavage of ribosomal RNAs. Winter D, et al. **Nucleic Acids Res** 1997 May 1;25(9):1817–24
Structural features of the binding site for ribosomal protein S8 in Escherichia coli 16S rRNA defined using NMR spectroscopy. Kalurachchi K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2139–44
Genetic analysis of the Shine–Dalgarno interaction: selection of alternative functional mRNA–rRNA combinations. Lee K, et al. **RNA** 1996 Dec;2(12):1270–85
The 16S rRNA binding site of Thermus thermophilus ribosomal protein S15: comparison with Escherichia coli S15, minimum site and structure. Serganov AA, et al. **RNA** 1996 Nov;2(11):1124–38

ULTRASTRUCTURE

Differential sensitivity of 16S rRNA targeted oligonucleotide probes used for fluorescence in situ hybridization is a result of ribosomal higher order structure. Frischer ME, et al. **Can J Microbiol** 1996 Oct;42(10):1061–71
Solution structure of the conserved 16 S–like ribosomal RNA UGAA tetraloop. Butcher SE, et al. **J Mol Biol** 1997 May 2;268(2):348–58
A new model for the three–dimensional folding of Escherichia coli 16 S ribosomal RNA. III. The topography of the functional centre. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):566–87
A new model for the three–dimensional folding of Escherichia coli 16 S ribosomal RNA. II. The RNA–protein interaction data. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):545–65
A new model for the three–dimensional folding of Escherichia coli 16 S ribosomal RNA. I. Fitting the RNA to a 3D electron microscopic map at 20 A. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):524–44

RNA, RIBOSOMAL, 18S

The lobster parasite Anophryoides haemophila (Scuticociliatida: Orchitophryidae): nuclear 18S rDNA sequence, phylogeny and detection using oligonucleotide primers. Ragan MA, et al. **J Eukaryot Microbiol** 1996 Jul–Aug;43(4):341–6
Genetic mapping of 18S ribosomal RNA–related loci to mouse chromosomes 5, 6, 9, 12, 17, 18, 19, and X. Rowe LB, et al. **Mamm Genome** 1996 Dec;7(12):886–9
Origin of the Mesozoa inferred from 18S rRNA gene sequences. Pawlowski J, et al. **Mol Biol Evol** 1996 Oct; 13(8):1128–32

ANALYSIS

Subgenus systematics of Acanthamoeba: four nuclear 18S rDNA sequence types. Gast RJ, et al. **J Eukaryot Microbiol** 1996 Nov–Dec;43(6):498–504
Specific detection of Candida albicans and Candida tropicalis by fluorescent in situ hybridization with an 18S rRNA–targeted oligonucleotide probe. Lischewski A, et al. **Microbiology** 1996 Oct;142 (Pt 10):2731–40

BIOSYNTHESIS

RRP5 is required for formation of both 18S and 5.8S rRNA in yeast. Venema J, et al. **EMBO J** 1996 Oct 15; 15(20):5701–14

CHEMISTRY

Processing of mammalian rRNA precursors at the 3' end of 18S rRNA. Identification of cis–acting signals suggests the involvement of U13 small nucleolar RNA. Cavaillé J, et al. **Eur J Biochem** 1996 Dec 1;242(2):206–13
Modification of 18 S rRNA in the 40 S ribosomal subunit of yeast with dimethyl sulfate. Mankin AS, et al. **FEBS Lett** 1981 Nov 2;134(1):11–4
Secondary structures and features of the 18S, 5.8S and 26S ribosomal RNAs from the Apicomplexan parasite Toxoplasma gondii. Gagnon S, et al. **Gene** 1996 Sep 16; 173(2):129–35
Structure of 18 S ribosomal RNA in native 40 S ribosomal subunits. Melander Y, et al. **J Biol Chem** 1997 Feb 7; 272(6):3254–8
A new method for detecting sites of 2'–O–methylation in RNA molecules. Yu YT, et al. **RNA** 1997 Mar;3(3):324–31
[Nucleotide residues of 18S rRNA, located near the decoding segment on human ribosomes, from data on affinity modification of 5'–derivatized oligoribonucleotides, containing codon AUG] Matasova NB, et al. **Mol Biol (Mosk)** 1997 Jan–Feb;31(1):152–8 **(Rus)**

DRUG EFFECTS

Autoantibodies to double–stranded (ds)DNA immunoprecipitate 18S ribosomal RNA by virtue of their interaction with ribosomal protein S1 and suppress in vitro protein synthesis. Tsuzaka K, et al. **Clin Exp Immunol** 1996 Dec;106(3):504–8

GENETICS

A one–step lysis procedure for 18S ribosomal RNA–based diagnosis of infection by Plasmodium species. Das A, et al. **Anal Biochem** 1996 Oct 15;241(2):262–4
Quantitative fluorescence in situ hybridization of Aureobasidium pullulans on microscope slides and leaf surfaces. Li S, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3261–7
Studying functional significance of the sequence 980–1061 in the central domain of human 18S rRNA using complementary DNA probes. Graifer DM, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):335–44
Application of PCR–RFLP and MASA analyses on 18S ribosomal RNA gene sequence for the identification of three Ginseng drugs. Fushimi H, et al. **Biol Pharm Bull** 1997 Jul;20(7):765–9
18S ribosomal RNA gene sequences of three Panax species and the corresponding ginseng drugs. Fushimi H, et al. **Biol Pharm Bull** 1996 Nov;19(11):1530–2
The early emergence of platyhelminths is contradicted by the agreement between 18S rRNA and Hox genes data. Balavoine G. **C R Acad Sci III** 1997 Jan;320(1):83–94
CMA3–banding pattern and fluorescence in situ hybridization with 18S rRNA genes in zebrafish chromosomes. Gornung E, et al. **Chromosome Res** 1997 Feb;5(1):40–6
The nucleotide sequence and predicted secondary structure of small subunit (18S) ribosomal RNA from Spirometra erinaceieuropaei. Liu DW, et al. **Gene** 1997 Jan 15; 184(2):221–7
Evolution of the ITS sequences of ribosomal DNA in Enteromorpha (Chlorophyceae). Leskinen E, et al. **Hereditas** 1997;126(1):17–23
Phylogenetic relationships of the Culicomorpha inferred from 18S and 5.8S ribosomal DNA sequences. (Diptera:Nematocera). Miller BR, et al. **Insect Mol Biol** 1997 May;6(2):105–14
Phylogenetic relationships among members of the ascomycetous yeast genera Brettanomyces, Debaryomyces, Dekkera, and Kluyveromyces deduced by small–subunit rRNA gene sequences. Cai J, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):542–9
A phylogenetic analysis of the genus Saccharomyces based on 18S rRNA gene sequences: description of Saccharomyces kunashirensis sp. nov. and Saccharomyces martiniae sp. nov. James SA, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):453–60
Analysis of genes coding for small–subunit rRNA sequences in studying phylogenetics of dematiaceous fungal pathogens [letter; comment] Haase G. **J Clin Microbiol** 1996 Aug;34(8):2049–50. Comment on: J Clin Microbiol 1995 May;33(5):1322–6.
Sequence variation in the 18S rRNA gene, a target for PCR–based malaria diagnosis, in Plasmodium ovale from southern Vietnam. Kawamoto F, et al. **J Clin Microbiol** 1996 Sep;34(9):2287–9
Small subunit ribosomal RNA sequences unite alternate actinosporean and myxosporean stages of Myxobolus cerebralis the causative agent of whirling disease in salmonid fish. Andree KB, et al. **J Eukaryot Microbiol** 1997 May–Jun;44(3):208–15
Phylogenetic position of Amblyospora Hazard & Oldacre (Microspora:Amblyosporidae) based on small subunit rRNA data and its implication for the evolution of the microsporidia. Baker MD, et al. **J Eukaryot Microbiol** 1997 May–Jun;44(3):220–5
Identification of synapomorphic characters in the genus Sarcocystis based on 18S rDNA sequence comparison. Jeffries AC, et al. **J Eukaryot Microbiol** 1997 Sep–Oct; 44(5):388–92
Phylogenetic relationships of entomopathogenic nematodes (Heterorhabditidae and Steinernematidae) inferred from partial 18S rRNA gene sequences. Liu J, et al. **J Invertebr Pathol** 1997 May;69(3):246–52
No AluI site at position 940–943 of cryptococcal 18S rDNA [letter] Kappe R, et al. **J Med Vet Mycol** 1996 Sep–Oct; 34(5):367
Regulation and trafficking of three distinct 18 S ribosomal RNAs during development of the malaria parasite. Li J, et al. **J Mol Biol** 1997 Jun 6;269(2):203–13
Segmented gene conversion as a mechanism of correction of 18S rRNA pseudogene located outside of rDNA cluster in D. melanogaster. Benevolenskaya EV, et al. **J Mol Evol** 1997 Jun;44(6):646–51
Molecular evidence for Acanthocephala as a subtaxon of Rotifera. Garey JR, et al. **J Mol Evol** 1996 Sep;43(3):287–92
Phylogenetic relationships of annelids, molluscs, and arthropods evidenced from molecules and morphology. Kim CB, et al. **J Mol Evol** 1996 Sep;43(3):207–15
Phylogenetic relationships among eight Eimeria species infecting domestic fowl inferred using complete small subunit ribosomal DNA sequences. Barta JR, et al. **J Parasitol** 1997 Apr;83(2):262–71
Detection of Schistosoma mansoni in Biomphalaria using nested PCR. Hanelt B, et al. **J Parasitol** 1997 Jun; 83(3):387–94
The promoter for the ribosomal RNA genes of Leishmania chagasi. Gay LS, et al. **Mol Biochem Parasitol** 1996 May; 77(2):193–200
Molecular phylogeny of extant gymnosperms and seed plant evolution: analysis of nuclear 18S rRNA sequences. Chaw SM, et al. **Mol Biol Evol** 1997 Jan;14(1):56–68
Effects of nucleotide sequence alignment on phylogeny

estimation: a case study of 18S rDNAs of apicomplexa. Morrison DA, et al. **Mol Biol Evol** 1997 Apr;14(4):428–41
Higher ribosomal RNA substitution rates in Bacillariophyceae and Dasycladales than in Mollusca, Echinodermata, and Actinistia–Tetrapoda. Sorhannus U. **Mol Biol Evol** 1996 Sep;13(7):1032–8
Investigation of molluscan phylogeny on the basis of 18S rRNA sequences. Winnepenninckx B, et al. **Mol Biol Evol** 1996 Dec;13(10):1306–17
Correlation of nonanucleotide motifs with transcript initiation of 18S rRNA genes in mitochondria of pea, potato and Arabidopsis. Giese A, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):429–36
Phylogeny and relationships of pleurotomariid gastropods (Mollusca: Gastropoda): an assessment based on partial 18S rDNA and cytochrome c oxidase I sequences. Harasewych MG, et al. **Mol Mar Biol Biotechnol** 1997 Mar;6(1):1–20
Phylogenetic relationships among tick subfamilies (Ixodida: Ixodidae: Argasidae) based on the 18S nuclear rDNA gene. Black WC 4th, et al. **Mol Phylogenet Evol** 1997 Feb; 7(1):129–44
Nested polymerase chain reaction for detection of Plasmodium falciparum infection in Malaysia. Khoo A, et al. **Trans R Soc Trop Med Hyg** 1996 Jan–Feb;90(1):40–1
Genetic divergence of Asiatic Bdellocephala (Turbellaria, Tricladida, Paludicola) as revealed by partial 18S rRNA gene sequence comparisons. Kuznedelov KD, et al. **Zh Obshch Biol** 1997 May–Jun;58(3):85–93
[Phylogenetic analysis of representatives of the order Lecithoepitheliata (Platyhelminthes, Turbellaria) from Lake Baikal by comparing partial sequences of 18S ribosomal RNA genes] Kuznedelov KD, et al. **Mol Biol (Mosk)** 1997 May–Jun;31(3):542–8 **(Rus)**
[Molecular phylogeny of planarians (Turbellaria, Tricladida, Paludicola) from the lake Baikal. Use of comparative analysis for determination of nucleotide sequence of 18S ribosomal RNA] Kuznedelov KD, et al. **Mol Biol (Mosk)** 1996 Nov–Dec;30(6):1316–25 **(Rus)**

ISOLATION & PURIFICATION

Distribution of ribosomal genes in nucleoli of herpes simplex virus type 1 infected cells. Besse S, et al. **Eur J Cell Biol** 1996 Sep;71(1):33–44

METABOLISM

Variable region V1 of Saccharomyces cerevisiae 18S rRNA participates in biogenesis and function of the small ribosomal subunit. van Nues RW, et al. **Chromosoma** 1997 Jun;105(7–8):523–31
Autoantibodies to double-stranded (ds)DNA immunoprecipitate 18S ribosomal RNA by virtue of their interaction with ribosomal protein S1 and suppress in vitro protein synthesis. Tsuzaka K, et al. **Clin Exp Immunol** 1996 Dec;106(3):504–8
Processing of mammalian rRNA precursors at the 3' end of 18S rRNA. Identification of cis-acting signals suggests the involvement of U13 small nucleolar RNA. Cavaillé J, et al. **Eur J Biochem** 1996 Dec 1;242(2):206–13
rRNA distribution during microspore development in anthers of Beta vulgaris L. quantitative in situ hybridization analysis. Majewska-Sawka A, et al. **J Cell Sci** 1996 Apr; 109 (Pt 4):859–66
Mpp10p, a U3 small nucleolar ribonucleoprotein component required for pre-18S rRNA processing in yeast. Dunbar DA, et al. **Mol Cell Biol** 1997 Oct;17(10):5803–12
Rok1p is a putative RNA helicase required for rRNA processing. Venema J, et al. **Mol Cell Biol** 1997 Jun; 17(6):3398–407

RNA, RIBOSOMAL, 23S

ANALYSIS

Characterization of the Lancefield group C streptococcus 16S–23S RNA gene intergenic spacer and its potential for identification and sub-specific typing. Chanter N, et al. **Epidemiol Infect** 1997 Apr;118(2):125–35
Inter- and intraspecies comparison of the 16S–23S rRNA operon intergenic spacer regions of six Listeria spp. Graham TA, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):863–9
Characterization of Rhizobium 'hedysari' by RFLP analysis of PCR amplified rDNA and by genomic PCR fingerprinting. Selenska-Pobell S, et al. **J Appl Bacteriol** 1996 May;80(5):517–28
Characterization of strains of Leuconostoc mesenteroides by analysis of soluble whole-cell protein pattern, DNA fingerprinting and restriction of ribosomal DNA. Villani F, et al. **J Appl Microbiol** 1997 May;82(5):578–88

BIOSYNTHESIS

Role of the spacer boxA of Escherichia coli ribosomal RNA operons in efficient 23 S rRNA synthesis in vivo. Pfeiffer T, et al. **J Mol Biol** 1997 Jan 31;265(4):385–93

CHEMISTRY

23S rRNA similarity from selection for peptidyl transferase mimicry. Welch M, et al. **Biochemistry** 1997 Jun 3; 36(22):6614–23
Organization and nucleotide sequence analysis of the ribosomal gene set (rrnB) from Streptomyces lividans. Zarko-Postawka M, et al. **Gene** 1997 Feb 7;185(2):231–7
Reassessment of the phylogenetic position of the bacterium associated with Whipple's disease and determination of the 16S–23S ribosomal intergenic spacer sequence. Maiwald M, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1078–82
Mutations at nucleotides G2251 and U2585 of 23 S rRNA perturb the peptidyl transferase center of the ribosome. Green R, et al. **J Mol Biol** 1997 Feb 14;266(1):40–50
Assessing the reliability of RNA folding using statistical mechanics. Huynen M, et al. **J Mol Biol** 1997 Apr 18; 267(5):1104–12
The stability and dynamics of ribosomal protein L9: investigations of a molecular strut by amide proton exchange and circular dichroism. Lillemoen J, et al. **J Mol Biol** 1997 May 2;268(2):482–93
Transfer RNA docking pair model in the ribosomal pre- and post-translocational states. Nagano K, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1254–64

DRUG EFFECTS

Mutations in 23S rRNA are associated with clarithromycin resistance in Helicobacter pylori. Versalovic J, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):477–80

GENETICS

Clinical resistance to erythromycin and clindamycin in cutaneous propionibacteria isolated from acne patients is associated with mutations in 23S rRNA. Ross JI, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1162–5
A PCR–oligonucleotide ligation assay to determine the prevalence of 23S rRNA gene mutations in clarithromycin-resistant Helicobacter pylori. Stone GG, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):712–4
Mutations in 23S rRNA are associated with clarithromycin resistance in Helicobacter pylori. Versalovic J, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):477–80
Comparison of ribotyping and randomly amplified polymorphic DNA PCR for characterization of Vibrio vulnificus. Høi L, et al. **Appl Environ Microbiol** 1997 May; 63(5):1674–8
Comparison of functional peptide encoded in the Escherichia coli 23S rRNA with other peptides involved in cis-regulation of translation. Tenson T, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1061–70 (40 ref.)
Direct sequencing of PCR-amplified 23S rDNA. Ibrahim A, et al. **Biotechniques** 1997 Aug;23(2):216–8, 220
Genus- and species-specific detection of Listeria monocytogenes using polymerase chain reaction assays targeting the 16S/23S intergenic spacer region of the rRNA operon. Graham T, et al. **Can J Microbiol** 1996 Nov; 42(11):1155–62
Comparison of partial 23S rDNA sequences from Rhizobium species. Tesfaye M, et al. **Can J Microbiol** 1997 Jun; 43(6):526–33
Evaluation of rapid molecular methods for detection of clarithromycin resistance in Helicobacter pylori. Szczebara F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Feb; 16(2):162–4
Study of the 16S–23S ribosomal DNA internal spacer of Coxiella burnetii. Stein A, et al. **Eur J Epidemiol** 1997 Jun; 13(4):471–5
PCR-mediated detection of the chemolithotrophic bacterium Thiobacillus cuprinus using 23S rDNA- and 16S/23S intergenic spacer region-targeted oligonucleotide primers. Moreira D, et al. **FEMS Microbiol Lett** 1996 Sep 1; 142(2–3):289–93
Expanded genomic map of Campylobacter jejuni UA580 and localization of 23S ribosomal rRNA genes by I-CeuI restriction endonuclease digestion. Newnham E, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):223–9
Rapid distinction between Leptospira interrogans and Leptospira biflexa by PCR amplification of 23S ribosomal DNA. Woo TH, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):9–18
Sequence similarities between large subunit ribosomal RNA gene intervening sequences from different Helicobacter species. Hurtado A, et al. **Gene** 1997 Jul 18;194(1):69–75
Development of oligonucleotide primers from the 16S–23S rRNA intergenic sequences for identifying different dairy and probiotic lactic acid bacteria by PCR. Tilsala-Timisjärvi A, et al. **Int J Food Microbiol** 1997 Mar 18;35(1):49–56
The ribosomal intergenic spacer and domain I of the 23S rRNA gene are phylogenetic markers for Chlamydia spp. Everett KD, et al. **Int J Syst Bacteriol** 1997 Apr; 47(2):461–73
Discrimination of Streptomyces albidoflavus strains based on the size and number of 16S–23S ribosomal DNA intergenic spacers. Hain T, et al. **Int J Syst Bacteriol** 1997 Jan; 47(1):202–6
Comparison of the 16S/23S ribosomal intergenic regions of "Candidatus Liberobacter asiaticum" and "Candidatus Liberobacter africanum," the two species associated with citrus huanglongbing (greening) disease. Jagoueix S, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):224–7
Comparison of the small 16S to 23S intergenic spacer region (ISR) of the rRNA operons of some Escherichia coli strains of the ECOR collection and E. coli K-12. García-Martínez J, et al. **J Bacteriol** 1996 Nov;178(21):6374–7
Salmonella typhi contains identical intervening sequences in all seven rrl genes. Mattatall NR, et al. **J Bacteriol** 1996 Sep;178(17):5323–6
Differentiation of Rhodococcus species by ribotyping. Jorks S. **J Basic Microbiol** 1996;36(6):399–406
Mutational analysis of two highly conserved UGG sequences of 23 S rRNA from Escherichia coli. Spahn CMT, et al. **J Biol Chem** 1996 Dec 20;271(51):32849–56
Conserved nucleotides of 23 S rRNA located at the ribosomal peptidyltransferase center. Spahn CMT, et al. **J Biol Chem** 1996 Dec 20;271(51):32857–62
A molecular scheme based on 23S rRNA gene polymorphisms for rapid identification of Campylobacter and Arcobacter species. Hurtado A, et al. **J Clin Microbiol** 1997 Sep;35(9):2401–4
Analysis of the tobacco chloroplast DNA replication origin (oriB) downstream of the 23 S rRNA gene. Kunnimalaiyaan M, et al. **J Mol Biol** 1997 May 2; 268(2):273–83
Functional effects of mutating the closing GxA base-pair of a conserved hairpin loop in 23 S ribosomal RNA. Xu W, et al. **J Mol Biol** 1996 Dec 6;264(3):407–11
Studies on the distribution of high-level gentamicin-resistant Enterococcus faecalis using ribotyping and restriction analysis of the 16S–23S rRNA intergenic spacer sequences. Ingianni A, et al. **Microb Drug Resist** 1997 Fall;3(3):271–5
System to study horizontal gene exchange among microorganisms without cultivation of recipients. Strätz M, et al. **Mol Microbiol** 1996 Oct;22(2):207–15
Functional Escherichia coli 23S rRNAs containing processed and unprocessed intervening sequences from Salmonella typhimurium. Gregory ST, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4918–23
Expansion of the 16S and 23S ribosomal RNA mutation databases (16SMDB and 23SMDB). Triman KL, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):188–91
A quantitative map of nucleotide substitution rates in bacterial rRNA. Van de Peer Y, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3381–91
Characterization of replication origins flanking the 23S rRNA gene in tobacco chloroplast DNA. Lu Z, et al. **Plant Mol Biol** 1996 Nov;32(4):693–706
Species attribution and strain typing of Oenococcus oeni (formerly Leuconostoc oenos) with restriction endonuclease fingerprints. Viti C, et al. **Res Microbiol** 1996 Oct;147(8):651–60
[The 16S–23s rRNA intergenic spacer regions of mycoplasmas] Harasawa R. **Nippon Saikingaku Zasshi** 1996 Feb;51(2):583–8 (15 ref.) **(Jpn)**

METABOLISM

Recognition determinants for proteins and antibiotics within 23S rRNA. Douthwalte S, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1179–85 (56 ref.)
Peptidyl transferase and beyond. Wower J, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1041–7 (45 ref.)
23S rRNA similarity from selection for peptidyl transferase mimicry. Welch M, et al. **Biochemistry** 1997 Jun 3; 36(22):6614–23
Thiostrepton binds to malarial plastid rRNA. Clough B, et al. **FEBS Lett** 1997 Apr 7;406(1–2):123–5
Role of ribosome degradation in the death of heat-stressed Salmonella typhimurium. Tolker-Nielsen T, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):155–60
Mutations at nucleotides G2251 and U2585 of 23 S rRNA perturb the peptidyl transferase center of the ribosome. Green R, et al. **J Mol Biol** 1997 Feb 14;266(1):40–50
Analysis of the ribosome large subunit assembly and 23 S rRNA stability in vivo. Liiv A, et al. **J Mol Biol** 1996 Nov 1;263(3):396–410
The donor substrate site within the peptidyl transferase loop of 23 S rRNA and its putative interactions with the CCA-end of N-blocked aminoacyl-tRNA(Phe). Porse BT, et al. **J Mol Biol** 1996 Dec 6;264(3):472–83
Effects of antisense DNA against the alpha-sarcin stem-loop structure of the ribosomal 23S rRNA. Meyer HA, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):3996–4002
Lead-catalysed specific cleavage of ribosomal RNAs. Winter D, et al. **Nucleic Acids Res** 1997 May 1;25(9):1817–24
In vitro complementation analysis localizes 23S rRNA posttranscriptional modifications that are required for Escherichia coli 50S ribosomal subunit assembly and function. Green R, et al. **RNA** 1996 Oct;2(10):1011–21

RNA, RIBOSOMAL, 28S

Analysis of the 5' junctions of R2 insertions with the 28S gene: implications for non-LTR retrotransposition. George JA, et al. **Genetics** 1996 Mar;142(3):853–63
Phylogeny of the Nasonia species complex (Hymenoptera: Pteromalidae) inferred from an internal transcribed spacer (ITS2) and 28S rDNA sequences. Campbell BC, et al. **Insect Mol Biol** 1993;2(4):225–37
Sequence and secondary structure of the rDNA second internal transcribed spacer in the sibling species Culex pipiens L. and Cx. quinquefasciatus Say (Diptera: Culicidae). Severini C, et al. **Insect Mol Biol** 1996 Aug; 5(3):181–6

ANALYSIS

Specific detection of RNA molecules by fluorescent in situ hybridization in living cells. Paillasson S, et al.

Cell Biol Toxicol 1996 Dec;12(4–6):359–61

In situ hybridization in living cells: detection of RNA molecules. Paillasson S, et al. **Exp Cell Res** 1997 Feb 25; 231(1):226–33

CHEMISTRY

Nucleotide sequence and presumed secondary structure of the 28S rRNA of pea aphid: implication for diversification of insect rRNA. Amako D, et al. **J Mol Evol** 1996 Nov; 43(5):469–75

A molecular phylogeny of the Aphidiinae (Hymenoptera: Braconidae). Belshaw R, et al. **Mol Phylogenet Evol** 1997 Jun;7(3):281–93

A new method for detecting sites of 2'-O-methylation in RNA molecules. Yu YT, et al. **RNA** 1997 Mar;3(3):324–31

GENETICS

Clustering of trichothecene-producing Fusarium strains determined from 28S ribosomal DNA sequences. Mulè G, et al. **Appl Environ Microbiol** 1997 May;63(5):1843–6

Ribosomal RNA location in the Antarctic fish Champsocephalus gunnari (Notothenioidei, Channichthyidae) using banding and fluorescence in situ hybridization [published erratum appears in Chromosome Res 1997 Apr;5(2):152] Ozouf-Costaz C, et al. **Chromosome Res** 1996 Dec;4(8):557–61

Evolution of the ITS sequences of ribosomal DNA in Enteromorpha (Chlorophyceae). Leskinen E, et al. **Hereditas** 1997;126(1):17–23

Nucleotide sequence and presumed secondary structure of the 28S rRNA of pea aphid: implication for diversification of insect rRNA. Amako D, et al. **J Mol Evol** 1996 Nov; 43(5):469–75

Simplicity-correlated size growth of the nuclear 28S ribosomal RNA D3 expansion segment in the crustacean order Isopoda. Nunn GB, et al. **J Mol Evol** 1996 Feb; 42(2):211–23

Evolution of 28S ribosomal DNA in chaetognaths: duplicate genes and molecular phylogeny. Telford MJ, et al. **J Mol Evol** 1997 Feb;44(2):135–44

Complete large subunit ribosomal RNA sequences from the heterokont algae Ochromonas danica, Nannochloropsis salina, and Tribonema aequale, and phylogenetic analysis. Van der Auwera G, et al. **J Mol Evol** 1997 Jul;45(1):84–90

Phylogeny of nearctic members of the Anopheles maculipennis species group derived from the D2 variable region of 28S ribosomal RNA. Porter CH, et al. **Mol Phylogenet Evol** 1996 Oct;6(2):178–88

Human ribosomal RNA variants from a single individual and their expression in different tissues. Kuo BA, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4817–24

A small nucleolar RNA requirement for site-specific ribose methylation of rRNA in Xenopus. Tycowski KT, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14480–5

METABOLISM

Characterization of the enzymatic mechanism of gamma-momorcharin, a novel ribosome-inactivating protein with lower molecular weight of 11,500 purified from the seeds of bitter gourd (Momordica charantia). Pu Z, et al. **Biochem Biophys Res Commun** 1996 Dec 4; 229(1):287–94

Partial restoration of inactivated ribosomes: role of the aldehyde group generated by RNA N-glycosidase in the sarcin/ricin domain of 28S rRNA in ribosome. Cheng LP, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):381–90

Divergence towards a dead end? Cleavage of the divergent domains of ribosomal RNA in apoptosis. Houge G, et al. **Experientia** 1996 Oct 31;52(10–11):963–7 (29 ref.)

Investigation of ribosome binding by the Shiga toxin A1 subunit, using competition and site-directed mutagenesis. Skinner LM, et al. **J Bacteriol** 1997 Feb;179(4):1368–74

Binding of mammalian ribosomal protein complex P0.P1.P2 and protein L12 to the GTPase-associated domain of 28 S ribosomal RNA and effect on the accessibility to anti-28 S RNA autoantibody. Uchiumi T, et al. **J Biol Chem** 1997 Feb 7;272(6):3302–8

Ribotoxic stress response: activation of the stress-activated protein kinase JNK1 by inhibitors of the peptidyl transferase reaction and by sequence-specific RNA damage to the alpha-sarcin/ricin loop in the 28S rRNA. Iordanov MS, et al. **Mol Cell Biol** 1997 Jun;17(6):3373–81

The sequence of the 5'end of the U8 small nucleolar RNA is critical for 5.8S and 28S rRNA maturation. Peculis BA. **Mol Cell Biol** 1997 Jul;17(7):3702–13

RADIATION EFFECTS

[Changes induced by low doses of ionizing radiation in the accessibility to DNA restriction enzymes of the ribosomal gene system of human lymphocytes] Veĭko NN, et al. **Radiats Biol Radioecol** 1996 Nov-Dec;36(6):865–73 (Eng. Abstr.) **(Rus)**

RNA RODENT VIRUSES see **RNA VIRUSES**

RNA, SATELLITE

see related
HELPER VIRUSES
SATELLITE VIRUSES

Support of a cucumber mosaic virus satellite RNA maps to a single amino acid proximal to the helicase domain of the helper virus. Roossinck MJ, et al. **J Virol** 1997 Jan; 71(1):608–12

Changes in locations of crossover sites over time in de novo generated RNA recombinants. Carpenter CD, et al. **Virology** 1996 Sep 1;223(1):165–73

In vivo repair of 3'-end deletions in a TCV satellite RNA may involve two abortive synthesis and priming events. Carpenter CD, et al. **Virology** 1996 Dec 15;226(2):153–60

Origin and evolution of viroids and viroid-like satellite RNAs. Diener TO. **Virus Genes** 1995;11(2–3):119–31 (61 ref.)

CHEMISTRY

The satellite RNAs associated with the groundnut rosette disease complex and pea enation mosaic virus: sequence similarities and ability of each other's helper virus to support their replication. Demler SA, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2847–55

Understanding replication mechanisms in viroids and viroidlike RNAs. Diener TO. **Trends Microbiol** 1996 Mar; 4(3):85–7

GENETICS

Viroids proper can be distinguished from hammerhead viroids and satellite RNAs through their dinucleotide composition. Gast FU, et al. **Arch Virol** 1996; 141(9):1775–83

Molecular evolution and phylogeny of satellite RNA associated with bamboo mosaic potexvirus. Liu JS, et al. **J Mol Evol** 1997 Feb;44(2):207–13

Evolutionary dynamics of cucumber mosaic virus satellite RNA during natural epidemics in Italy. Grieco F, et al. **Virology** 1997 Mar 3;229(1):166–74

The satellite RNA of barley yellow dwarf virus-RPV is supported by beet western yellows virus in dicotyledonous protoplasts and plants. Rasochová L, et al. **Virology** 1997 May 12;231(2):182–91

METABOLISM

Cis and trans reactions of hairpin ribozymes derived from the negative strand of arabis mosaic virus satellite RNA. Tomita R, et al. **Nucleic Acids Symp Ser** 1995;(34):117–8

A novel 3'-end repair mechanism in an RNA virus [published erratum appears in Proc Natl Acad Sci U S A 1997 May 27;94(11):5980–2] Nagy PD, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1113–8

PHYSIOLOGY

Trans-acting untranslated elements of groundnut rosette virus satellite RNA are involved in symptom production. Taliansky ME, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1277–85

Down-regulation of groundnut rosette virus replication by a variant satellite RNA. Taliansky ME, et al. **Virology** 1997 Apr 14;230(2):228–35

RNA SEQUENCE see **BASE SEQUENCE**

RNA SEQUENCE ANALYSIS see **SEQUENCE ANALYSIS, RNA**

RNA, SMALL NUCLEAR

Sno storm in the nucleolus: new roles for myriad small RNPs [comment] Smith CM, et al. **Cell** 1997 May 30;89(5):669–72 (17 ref.). Comment on: Cell 1997 May 30;89(5):799–809.

Fugu intron oversize reveals the presence of U15 snoRNA coding sequences in some introns of the ribosomal protein S3 gene. Crosio C, et al. **Genome Res** 1996 Dec; 6(12):1227–31

A spontaneous duplication in U6 spliceosomal RNA uncouples the early and late functions of the ACAGA element in vivo. Li Z, et al. **RNA** 1996 Sep;2(9):879–94

BIOSYNTHESIS

U14 snoRNAs are encoded in introns of human ribosomal protein S13 gene. Kenmochi N, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):371–4

Intracellular localization and unique conserved sequences of three small nucleolar RNAs. Selvamurugan N, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1591–6

The miniaturized nuclear genome of eukaryotic endosymbiont contains genes that overlap, genes that are cotranscribed, and the smallest known spliceosomal introns. Gilson PR, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23; 93(15):7737–42

CHEMISTRY

Novel SnoRNAs from Naja naja atra (Taiwan cobra) and Bungarus multicinctus (Taiwan banded krait), form extended sequence complementarity to 5S rRNA. Chang L, et al. **Biochem Biophys Res Commun** 1997 Jul 30; 236(3):782–4

Solution structures of 5-fluorouracil-substituted RNA duplexes containing G-U wobble base pairs. Sahasrabudhe PV, et al. **Biochemistry** 1997 May 20;36(20):5981–91

Structural features of U6 snRNA and dynamic interactions with other spliceosomal components leading to pre-mRNA splicing. Forné T, et al. **Biochimie** 1996;78(6):436–42 (71 ref.)

A unique U5—>A substitution in the Physarum polycephalum U1 snRNA: evidence at the RNA and gene levels. Szkukalek A, et al. **Biochimie** 1996;78(6):425–35

Molecular characterization of U3 small nucleolar RNA from the early diverging protist, Euglena gracilis. Greenwood SJ, et al. **Curr Genet** 1996 Sep;30(4):338–46

Site-specific deoxynucleotide substitutions in yeast U6 snRNA block splicing of pre-mRNA in vitro. Kim CH, et al. **EMBO J** 1997 Apr 15;16(8):2119–29

Spliceosomal introns in conserved sequences of U1 and U5 small nuclear RNA genes in yeast Rhodotorula hasegawae. Takahashi Y, et al. **J Biochem (Tokyo)** 1996 Sep; 120(3):677–83

The 5' stem-loop from human U4 snRNA adopts a novel conformation stabilized by G-C and G-U base pairs. Sahasrabudhe PV, et al. **J Biomol Struct Dyn** 1997 Apr; 14(5):567–77

Crystal structure of the two RNA binding domains of human hnRNP A1 at 1.75 A resolution. Shamoo Y, et al. **Nat Struct Biol** 1997 Mar;4(3):215–22

Intracellular localization and unique conserved sequences of three small nucleolar RNAs. Selvamurugan N, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1591–6

Secondary structure of the nascent 7S L RNA mediates efficient transcription by RNA polymerase III. Emde G, et al. **RNA** 1997 May;3(5):538–49

Site-specific crosslinks of yeast U6 snRNA to the pre-mRNA near the 5' splice site. Kim CH, et al. **RNA** 1996 Oct; 2(10):995–1010

Secondary and tertiary structure in the central domain of adenovirus type 2 VA RNA I. Ma Y, et al. **RNA** 1996 Sep;2(9):937–51

Secondary structure of the yeast Saccharomyces cerevisiae pre-U3A snoRNA and its implication for splicing efficiency. Mougin A, et al. **RNA** 1996 Nov;2(11):1079–93

The human U6 snRNA intramolecular helix: structural constraints and lack of sequence specificity. Sun JS, et al. **RNA** 1997 May;3(5):514–26

Identification of specific nucleotide sequences and structural elements required for intronic U14 snoRNA processing. Xia L, et al. **RNA** 1997 Jan;3(1):17–26

GENETICS

Novel intron-encoded small nucleolar RNAs with long sequence complementarities to mature rRNAs involved in ribosome biogenesis. Bachellerie JP, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):835–43 (30 ref.)

Small nucleolar RNA. Gerbi SA. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):845–58 (140 ref.)

Trans-acting factors in yeast pre-rRNA and pre-snoRNA processing. Lafontaine D, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11–12):803–12 (71 ref.)

Site-specific pseudouridine formation in preribosomal RNA is guided by small nucleolar RNAs [see comments] Ganot P, et al. **Cell** 1997 May 30;89(5):799–809. Comment in: Cell 1997 May 30;89(5):669–72.

Amplification and altered expression of the hsc70/U14 snoRNA gene in a heat resistant Chinese hamster cell line. Chen MS, et al. **Cell Stress Chaperones** 1996 Apr;1(1):47–61

Molecular characterization of U3 small nucleolar RNA from the early diverging protist, Euglena gracilis. Greenwood SJ, et al. **Curr Genet** 1996 Sep;30(4):338–46

Identification of developmentally regulated sea urchin U5 snRNA genes. Morales J, et al. **DNA Seq** 1997;7(5):243–59

Concerted evolution of the tandemly repeated genes encoding human U2 snRNA (the RNU2 locus) involves rapid intrachromosomal homogenization and rare interchromosomal gene conversion. Liao D, et al. **EMBO J** 1997 Feb 3;16(3):588–98

Staf, a promiscuous activator for enhanced transcription by RNA polymerases II and III. Schaub M, et al. **EMBO J** 1997 Jan 2;16(1):173–81

Characterization of a Drosophila proximal-sequence-element-binding protein involved in transcription of small nuclear RNA genes. Su Y, et al. **Eur J Biochem** 1997 Aug 15;248(1):231–7

Expression of Tetrahymena snRNA gene variants including a U1 gene with mutations in the 5' splice site recognition sequence. Eugen-Olsen J, et al. **Gene** 1997 Apr 21; 189(2):221–5

Identification and analysis of the u6 small nuclear RNA gene from Entamoeba histolytica. Miranda R, et al. **Gene** 1996 Nov 21;180(1–2):37–42

Analysis of genes for human snRNP Sm-D1 protein and identification of the promoter sequence which shows segmental homology to the promoters of Sm-E and U1 snRNA genes. Sun D, et al. **Gene** 1997 Apr 21; 189(2):245–54

Expression of small, therapeutic RNAs in human cell nuclei. Good PD, et al. **Gene Ther** 1997 Jan;4(1):45–54

The family of box ACA small nucleolar RNAs is defined by an evolutionarily conserved secondary structure and ubiquitous sequence elements essential for RNA accumulation. Ganot P, et al. **Genes Dev** 1997 Apr 1; 11(7):941–56

Concerted evolution of the tandemly repeated genes encoding primate U2 small nuclear RNA (the RNU2 locus) does not prevent rapid diversification of the (CT)n.(GA)n microsatellite embedded within the U2 repeat unit. Liao D, et al. **Genomics** 1995 Dec 10;30(3):583–93

The bona fide mouse U7 snRNA gene maps to a different chromosome than two U7 pseudogenes. Turner PC, et al. **Genomics** 1996 Jan 15;31(2):250–2
Inhibition of fibrillin 1 expression using U1 snRNA as a vehicle for the presentation of antisense targeting sequence. Montgomery RA, et al. **Hum Mol Genet** 1997 Apr; 6(4):519–25
Spliceosomal introns in conserved sequences of U1 and U5 small nuclear RNA genes in yeast Rhodotorula hasegawae. Takahashi Y, et al. **J Biochem (Tokyo)** 1996 Sep; 120(3):677–83
Structure of the Trypanosoma brucei U6 snRNA gene promoter. Nakaar V, et al. **Mol Biochem Parasitol** 1997 Sep;88(1–2):13–23
Cloning and characterization of the beta subunit of human proximal sequence element–binding transcription factor and its involvement in transcription of small nuclear RNA genes by RNA polymerases II and III. Bai L, et al. **Mol Cell Biol** 1996 Oct;16(10):5419–26
The sequence of the 5' end of the U8 small nucleolar RNA is critical for 5.8S and 28S rRNA maturation. Peculis BA. **Mol Cell Biol** 1997 Jul;17(7):3702–13
A nucleosome positioned in the distal promoter region activates transcription of the human U6 gene. Stünkel W, et al. **Mol Cell Biol** 1997 Aug;17(8):4397–405
Control of mouse U1 snRNA gene expression during in vitro differentiation of mouse embryonic stem cells. Cheng Y, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2197–204
Small RNA database. Gu J, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):98–102
Differential in vivo activation of the class II and class III snRNA genes by the POU–specific domain of Oct–1. Murphy S. **Nucleic Acids Res** 1997 Jun 1;25(11):2068–76
Increasing the distance between the snRNA promoter and the 3' box decreases the efficiency of snRNA 3'-end formation. Ramamurthy L, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4525–34
The uRNA database. Zwieb C. **Nucleic Acids Res** 1997 Jan 1;25(1):102–3
Efficient expression of protein coding genes from the murine U1 small nuclear RNA promoters. Bartlett JS, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8852–7
Length suppression in histone messenger RNA 3'-end maturation: processing defects of insertion mutant premessenger RNAs can be compensated by insertions into the U7 small nuclear RNA. Scharl LC, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14659–64
A small nucleolar RNA requirement for site–specific ribose methylation of rRNA in Xenopus. Tycowski KT, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14480–5
The U5 RNA of trypanosomes deviates from the canonical U5 RNA: the Leptomonas collosoma U5 RNA and its coding gene. Xu Yx, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8473–8
Formation of the 5' end pseudoknot in small subunit ribosomal RNA: involvement of U3–like sequences [letter] Dennis PP, et al. **RNA** 1997 Apr;3(4):337–43
Localization of modified nucleotides in Schizosaccharomyces pombe spliceosomal small nuclear RNAs: modified nucleotides are clustered in functionally important regions [published erratum appears in RNA 1996 Oct;2(10):1077] Gu J, et al. **RNA** 1996 Sep;2(9):909–18
Role for the amino–terminal region of human TBP in U6 snRNA transcription. Mittal V, et al. **Science** 1997 Feb 21;275(5303):1136–40

METABOLISM

A novel Mn++–dependent ribonuclease that functions in U16 SnoRNA processing in X. laevis. Caffarelli E, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):514–7
Processing of fibrillarin–associated snoRNAs from pre–mRNA introns: an exonucleolytic process exclusively directed by the common stem–box terminal structure. Cavaillé J, et al. **Biochimie** 1996;78(6):443–56
Structural features of U6 snRNA and dynamic interactions with other spliceosomal components leading to pre–mRNA splicing. Forné T, et al. **Biochimie** 1996;78(6):436–42 (71 ref.)
Importin provides a link between nuclear protein import and U snRNA export. Görlich D, et al. **Cell** 1996 Oct 4; 87(1):21–32
Small nucleolar RNAs direct site–specific synthesis of pseudouridine in ribosomal RNA. Ni J, et al. **Cell** 1997 May 16;89(4):565–73
Small nucleolar RNAs and nucleolar proteins in Xenopus anucleolate embryos. Crosio C, et al. **Chromosoma** 1997 Jun;105(7–8):452–8
U3 snoRNA may recycle through different compartments of the nucleolus. Gerbi SA, et al. **Chromosoma** 1997 Jun; 105(7–8):401–6 (70 ref.)
U14 small nucleolar RNA makes multiple contacts with the pre–ribosomal RNA. Morrissey JP, et al. **Chromosoma** 1997 Jun;105(7–8):515–22
Delocalization of some small nucleolar RNPs after actinomycin D treatment to deplete early pre–rRNAs. Rivera–León R, et al. **Chromosoma** 1997 Jun; 105(7–8):506–14
Processing of mammalian rRNA precursors at the 3' end of 18S rRNA. Identification of cis–acting signals suggests the involvement of U13 small nucleolar RNA. Cavaillé J, et al. **Eur J Biochem** 1996 Dec 1;242(2):206–13
U6 snRNA maturation and stability. Fury MG, et al. **Exp Cell Res** 1996 Oct 10;228(1):160–3
More Sm snRNAs from vertebrate cells. Yu YT, et al. **Exp Cell Res** 1996 Dec 15;229(2):276–81
In vitro interaction of U2 snRNA with cytoplasmic 6S protein complexes. Fury MG, et al. **FEBS Lett** 1997 Mar 3;404(1):70–4
Analysis of small nuclear RNAs in a precatalytic spliceosome. Yean SL, et al. **Gene Expr** 1996;5(6):301–13
Identification and characterization of a nuclease specific for the 3' end of the U6 small nuclear RNA. Booth BL Jr, et al. **J Biol Chem** 1997 Jan 10;272(2):984–91
Formation of 2',3'–cyclic phosphates at the 3' end of human U6 small nuclear RNA in vitro. Identification of 2',3'–cyclic phosphates at the 3' ends of human signal recognition particle and mitochondrial RNA processing RNAs. Gu J, et al. **J Biol Chem** 1997 Aug 29; 272(35):21989–93
The Saccharomyces cerevisiae Prp5 protein has RNA–dependent ATPase activity with specificity for U2 small nuclear RNA. O'Day CL, et al. **J Biol Chem** 1996 Dec 27;271(52):33261–7
Prenucleolar bodies contain coilin and are assembled in Xenopus egg extract depleted of specific nucleolar proteins and U3 RNA. Bell P, et al. **J Cell Sci** 1997 Jan;110 (Pt 1):43–54
The organization of ribosomal RNA processing correlates with the distribution of nucleolar snRNAs. Beven AF, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1241–51
In vitro genetic analysis of RNA–binding proteins using phage display libraries. Laird–Offringa IA, et al. **Methods Enzymol** 1996;267:149–68
Effect of anthracycline antitumor antibiotics (adriamycin and nogalamycin) and cycloheximide on the biosynthesis and processing of major UsnRNAs. Ray R, et al. **Mol Cell Biochem** 1996 Sep 6;162(1):75–82
The rRNA–processing function of the yeast U14 small nucleolar RNA can be rescued by a conserved RNA helicase–like protein. Liang WQ, et al. **Mol Cell Biol** 1997 Jul;17(7):4124–32
The branchpoint residue is recognized during commitment complex formation before being bulged out of the U2 snRNA–pre–mRNA duplex. Pascolo E, et al. **Mol Cell Biol** 1997 Jul;17(7):3469–76
Crystal structure of the two RNA binding domains of human hnRNP A1 at 1.75 A resolution. Shamoo Y, et al. **Nat Struct Biol** 1997 Mar;4(3):215–22
Targeted ribose methylation of RNA in vivo directed by tailored antisense RNA guides [see comments] Cavaillé J, et al. **Nature** 1996 Oct 24;383(6602):732–5. Comment in: Nature 1996 Oct 24;383(6602):675–6.
Trans–activation of group II intron splicing by nuclear U5 snRNA. Hetzer M, et al. **Nature** 1997 Mar 27; 386(6623):417–20
Expression of dendritic BC200 RNA, component of a 11.4S ribonucleoprotein particle, is conserved in humans and simians [published erratum appears in Neurosci Lett 1997 May 30;228(1):69] Cheng JG, et al. **Neurosci Lett** 1997 Mar 21;224(3):206–10
Association of U2 snRNP with the spliceosomal complex E. Hong W, et al. **Nucleic Acids Res** 1997 Jan 15; 25(2):354–61
Metabolism of pre–messenger RNA splicing cofactors: modification of U6 RNA is dependent on its interaction with U4 RNA. Zerby DB, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3583–9
Three small nucleolar RNAs that are involved in ribosomal RNA precursor processing. Mishra RK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4972–7
A novel U1/U5 interaction indicates proximity between U1 and U5 snRNAs during an early step of mRNA splicing. Ast G, et al. **RNA** 1997 Apr;3(4):371–81
Secondary structure of the nascent 7S L RNA mediates efficient transcription by RNA polymerase III. Emde G, et al. **RNA** 1997 May;3(5):538–49
5'ETS rRNA processing facilitated by four small RNAs: U14, E3, U17, and U3 [published erratum appears in RNA 1996 Dec;2(12):1318] Enright CA, et al. **RNA** 1996 Nov; 2(11):1094–9
Localization of modified nucleotides in Schizosaccharomyces pombe spliceosomal small nuclear RNAs: modified nucleotides are clustered in functionally important regions [published erratum appears in RNA 1996 Oct;2(10):1077] Gu J, et al. **RNA** 1996 Sep;2(9):909–18
Secondary and tertiary structure in the central domain of adenovirus type 2 VA RNA I. Ma Y, et al. **RNA** 1996 Sep;2(9):937–51
Interactions of the yeast U6 RNA with the pre–mRNA branch site. McPheeters DS. **RNA** 1996 Nov;2(11):1110–23
Visualizing nuclear export of different classes of RNA by electron microscopy. Panté N, et al. **RNA** 1997 May; 3(5):498–513
Splicing of a divergent subclass of AT–AC introns requires the major spliceosomal snRNAs. Wu Q, et al. **RNA** 1997 Jun;3(6):586–601
U1–mediated exon definition interactions between AT–AC and GT–AG introns. Wu Q, et al. **Science** 1996 Nov 8; 274(5289):1005–8

PHYSIOLOGY

Function and synthesis of small nucleolar RNAs. Tollervey D, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):337–42 (49 ref.)
Involvement of U1 small nuclear ribonucleoproteins (snRNP) in 5' splice site–U1 snRNP interaction. Rossi F, et al. **J Biol Chem** 1996 Sep 27;271(39):23985–91
Stable human immunodeficiency virus type 1 (HIV–1) resistance in transformed CD4+ monocytic cells treated with multitargeting HIV–1 antisense sequences incorporated into U1 snRNA. Liu D, et al. **J Virol** 1997 May;71(5):4079–85

ULTRASTRUCTURE

Electron microscopy of assembly intermediates of the snRNP core: morphological similarities between the RNA–free (E.F.G) protein heteromer and the intact snRNP core. Plessel G, et al. **J Mol Biol** 1997 Jan 17;265(2):87–94

RNA, SMALL NUCLEAR, PRECURSORS see **RNA PRECURSORS**

RNA SPLICING

see related
RNA PRECURSORS
SPLICEOSOMES

Effects of exon sequences on splicing of model pre–mRNA substrates in vitro. Dominski Z, et al. **Acta Biochim Pol** 1996;43(1):161–73
Analysis of human immunodeficiency virus type 1 mRNA splicing patterns during disease progression in peripheral blood mononuclear cells from infected individuals. Saltarelli MJ, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1443–56
Unusual patterns of exon skipping in Bruton tyrosine kinase are associated with mutations involving the intron 17 3' splice site. Haire RN, et al. **Am J Hum Genet** 1997 Apr; 60(4):798–807
A–2–>G transition at the 3' acceptor splice site of IVS17 characterizes the COL2A1 gene mutation in the original Stickler syndrome kindred. Williams CJ, et al. **Am J Med Genet** 1996 Jun 14;63(3):461–7
Physiologically regulated alternative splicing patterns of fast troponin T RNA are conserved in mammals. Briggs MM, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C298–305
The structure and function of proteins involved in mammalian pre–mRNA splicing. Krämer A. **Annu Rev Biochem** 1996;65:367–409 (329 ref.)
The D1–A2 and D2–A2 pairs of splice sites from human immunodeficiency virus type 1 are highly efficient in vitro, in spite of an unusual branch site. Damier L, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):182–7
A splicing variant of Steroid Receptor Coactivator–1 (SRC–1E): the major isoform of SRC–1 to mediate thyroid hormone action. Hayashi Y, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):83–7
Localization of leptin receptor mRNA splice variants in murine peripheral tissues by RT–PCR and in situ hybridization. Hoggard N, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):383–7
The full length and splice variant thyrotropin receptor is expressed exclusively in skeletal muscle of extraocular origin: a link to the pathogenesis of Graves' ophthalmopathy. Major BJ, et al. **Biochem Biophys Res Commun** 1997 Jan 23;230(3):493–6
Autosomal recessive liver phosphorylase kinase deficiency caused by a novel splice–site mutation in the gene encoding the liver gamma subunit (PHKG2). van Beurden EA, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):544–8
Analysis of mitogen–activated protein kinase activation by naturally occurring splice variants of TrkC, the receptor for neurotrophin–3. Gunn–Moore FJ, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):193–8
Effect of genotype on the levels of surfactant protein A mRNA and on the SP–A2 splice variants in adult humans. Karinch AM, et al. **Biochem J** 1997 Jan 1;321 (Pt 1):39–47
Intracellular localization of the PDE4A cAMP–specific phosphodiesterase splice variant RD1 (RNPDE4A1A) in stably transfected human thyroid carcinoma FTC cell lines. Pooley L, et al. **Biochem J** 1997 Jan 1;321 (Pt 1):177–85
Variable requirement for splicing signals for nucleocytoplasmic export of mRNAs. Fu L, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):329–37
Modulation of pre–mRNA splicing in the Duchenne muscular dystrophy gene. Dunckley MG, et al. **Biochem Soc Trans** 1996 May;24(2):276S
Analysis of rate–determining conformational changes during self–splicing of the Tetrahymena intron. Emerick VL, et al. **Biochemistry** 1996 Oct 15;35(41):13469–77
HIV–1 genome dimerization: kissing–loop hairpin dictates whether nucleotides downstream of the 5' splice junction contribute to loose and tight dimerization of human immunodeficiency virus RNA. Laughrea M, et al. **Biochemistry** 1997 Aug 5;36(31):9501–8
Functional differences in the interaction of arrestin and its splice variant, p44, with rhodopsin. Pulvermüller A, et al. **Biochemistry** 1997 Jul 29;36(30):9253–60
Detection of a novel splice–site mutation that results in skipping exon 3 of the WASP gene in a patient with Wiskott–Aldrich syndrome. Ariga T, et al. **Biochim Biophys Acta** 1996 Dec 16;1317(3):158–60
Functional and sequence analysis of splicing defective nrdB mutants of bacteriophage T4 reveal new bases and a new sub–domain required for group I intron self–splicing. Lal SK, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):89–97
Site–specific substitution of inosine at the terminal positions

of a pre-mRNA intron: implications for the configuration of the terminal base interaction. Tarn WY. **Biochimie** 1996; 78(11-12):1057-65

Exon prediction in eucaryotic genomes. Vignal L, et al. **Biochimie** 1996;78(5):327-34

PCR-based method for isolation of full-length clones and splice variants from cDNA libraries. Alphey L. **Biotechniques** 1997 Mar;22(3):481-4, 486

Spectrin St Claude, a splicing mutation of the human alpha-spectrin gene associated with severe poikilocytic anemia. Fournier CM, et al. **Blood** 1997 Jun 15; 89(12):4584-90

Biochemical and genetic characterization of multiple splice variants of the Flt3 ligand. McClanahan T, et al. **Blood** 1996 Nov 1;88(9):3371-82

Molecular mechanism of a mild phenotype in coagulation factor XIII (FXIII) deficiency: a splicing mutation permitting partial correct splicing of FXIII A-subunit mRNA. Mikkola H, et al. **Blood** 1997 Feb 15;89(4):1279-87

Different CD44 splicing patterns define prognostic subgroups in multiple myeloma. Stauder R, et al. **Blood** 1996 Oct 15; 88(8):3101-8

Aberrant RNA splicing of the protein C and protein S genes in healthy individuals. Berg LP, et al. **Blood Coagul Fibrinolysis** 1996 Sep;7(6):625-31

A frequent mutation in the protein S gene results in cryptic splicing. Mustafa S, et al. **Br J Haematol** 1997 Jun; 97(3):555-7

Expression of CD44 splice variants in colorectal cancer. Wong LS, et al. **Br J Surg** 1997 Mar;84(3):363-7

Expression and mRNA splicing of glycine receptor subunits and gephyrin during neuronal differentiation of P19 cells in vitro, studied by RT-PCR and immunocytochemistry. Heck S, et al. **Brain Res Dev Brain Res** 1997 Feb 20; 98(2):211-20

Regulation of alternative splicing of NMDAR1 in the kindling model. Kraus JE, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):97-104

Extensive splice variation and localization of the EHK-1 receptor tyrosine kinase in adult human brain and glial tumors. Miescher GC, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):17-24

Localization of novel receptor tyrosine kinase genes of the eph family, MDK1 and its splicing variant, in the developing mouse nervous system. Mori T, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):154-60

A point mutation in the human estrogen receptor gene is associated with the expression of an abnormal estrogen receptor mRNA containing a 69 novel nucleotide insertion. Wang M, et al. **Breast Cancer Res Treat** 1997 Jun; 44(2):145-51

RNA-RNA interaction and gene splicing. Verma M, et al. **Cancer Biochem Biophys** 1997 Jun;15(4):211-20 (65 ref.)

Rapid analysis of distinctive CD44 RNA splicing preferences that characterize colonic tumors. Goodison S, et al. **Cancer Res** 1997 Aug 1;57(15):3140-4

Aberrant splicing but not mutations of TSG101 in human breast cancer. Lee MP, et al. **Cancer Res** 1997 Aug 1; 57(15):3131-4

A novel mechanism for regulating activity of a transcription factor that controls the unfolded protein response [see comments] Cox JS, et al. **Cell** 1996 Nov 1;87(3):391-404 . Comment in: Cell 1996 Nov 1;87(3):357-9.

Mixed mechanisms in yeast pre-mRNA splicing? [comment] Rosbash M. **Cell** 1996 Nov 1;87(3):357-9 (15 ref.). Comment on: Cell 1996 Nov 1;87(3):391-404. Comment on: Cell 1996 Nov 1;87(3):405-13.

Genomic organization of the mouse beta 1 gene: conservation of the beta 1D but not of the beta 1B and beta 1C integrin splice variants. Baudoin C, et al. **Cell Adhes Commun** 1996 Jul;4(1):1-11

Fibronectin isoform distribution in the mouse. I. The alternatively spliced EIIIB, EIIIA, and V segments show widespread codistribution in the developing mouse embryo. Peters JH, et al. **Cell Adhes Commun** 1996 Aug;4(2):103-25

Fibronectin isoform distribution in the mouse. II. Differential distribution of the alternatively spliced EIIIB, EIIIA, and V segments in the adult mouse. Peters JH, et al. **Cell Adhes Commun** 1996 Aug;4(2):127-48

An analysis of alternatively spliced CD45 mRNA transcripts during T cell maturation in humans. Ratech H, et al. **Cell Immunol** 1997 May 1;177(2):109-18

Alternative splicing of natriuretic peptide A and B receptor transcripts in the rat brain. Francoeur F, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S172-4

A G-1-to-A acceptor splice site LDLR mutant allele leads to reduced relative transcript levels in patients with heterozygous familial hypercholesterolemia. Jensen HK, et al. **Clin Genet** 1996 Apr;49(4):175-9

A method for identifying splice sites and translational start sites in eukaryotic mRNA. Salzberg SL. **Comput Appl Biosci** 1997 Aug;13(4):365-76

Transposition: mobile introns get into line. Grivell LA. **Curr Biol** 1996 Jan 1;6(1):48-51 (20 ref.)

RNA splicing: unexpected spliceosome diversity. Kreivi JP, et al. **Curr Biol** 1996 Jul 1;6(7):802-5 (9 ref.)

RNA splicing: out of the loop. Newman A. **Curr Biol** 1997 Jul 1;7(7):R418-20 (15 ref.)

Splicing together the unfolded-protein response. Shamu CE. **Curr Biol** 1997 Feb 1;7(2):R67-70 (15 ref.)

Organization of chloroplast ribosomal RNA genes and in vitro self-splicing activity of the large subunit rRNA intron from the green alga Chlorella vulgaris C-27. Kapoor M, et al. **Curr Genet** 1997 Jun;31(6):503-10

Common themes in the function of transcription and splicing enhancers. Hertel KJ, et al. **Curr Opin Cell Biol** 1997 Jun; 9(3):350-7 (68 ref.)

Protein functions in pre-mRNA splicing. Will CL, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):320-8 (92 ref.)

Regulation of pre-mRNA splicing in metazoa. Wang J, et al. **Curr Opin Genet Dev** 1997 Apr;7(2):205-11 (53 ref.)

Regulation of neuronal nitric oxide synthase through alternative transcripts. Brenman JE, et al. **Dev Neurosci** 1997;19(3):224-31 (39 ref.)

A splicing-dependent regulatory mechanism that detects translation signals. Carter MS, et al. **EMBO J** 1996 Nov 1;15(21):5965-75

Evidence that U5 snRNP recognizes the 3' splice site for catalytic step II in mammals. Chiara MD, et al. **EMBO J** 1997 Aug 1;16(15):4746-59

The SR splicing factors ASF/SF2 and SC35 have antagonistic effects on intronic enhancer-dependent splicing of the beta-tropomyosin alternative exon 6A. Gallego ME, et al. **EMBO J** 1997 Apr 1;16(7):1772-84

A temperature-sensitive splicing mutation in the bimG gene of Aspergillus produces an N-terminal fragment which interferes with type 1 protein phosphatase function. Hughes M, et al. **EMBO J** 1996 Sep 2;15(17):4574-83

Identification of structural elements critical for inter-domain interactions in a group II self-splicing intron. Jestin JL, et al. **EMBO J** 1997 May 15;16(10):2945-54

Trans mRNA splicing in trypanosomes: cloning and analysis of a PRP8-homologous gene from Trypanosoma brucei provides evidence for a U5-analogous RNP. Lücke S, et al. **EMBO J** 1997 Jul 16;16(14):4433-40

In vivo commitment to splicing in yeast involves the nucleotide upstream from the branch site conserved sequence and the Mud2 protein. Rain JC, et al. **EMBO J** 1997 Apr 1;16(7):1759-71

Identification of a human protein that recognizes the 3' splice site during the second step of pre-mRNA splicing. Wu S, et al. **EMBO J** 1997 Jul 16;16(14):4421-32

Dynamic relocation of transcription and splicing factors dependent upon transcriptional activity. Zeng C, et al. **EMBO J** 1997 Mar 17;16(6):1401-12

Nuclear organization in plants. Shaw PJ. **Essays Biochem** 1996;31:77-89 (31 ref.)

HmGlu1d, a novel splice variant of the human type I metabotropic glutamate receptor. Laurie DJ, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):R1-R3

Quantitative digital analysis of diffuse and concentrated nuclear distributions of nascent transcripts, SC35 and poly(A). Fay FS, et al. **Exp Cell Res** 1997 Feb 25; 231(1):27-37

The localization of sites containing nascent RNA and splicing factors. Pombo A, et al. **Exp Cell Res** 1996 Dec 15; 229(2):201-3 (14 ref.)

Ultrastructure of the nucleus in relation to transcription and splicing: roles of perichromatin fibrils and interchromatin granules. Puvion E, et al. **Exp Cell Res** 1996 Dec 15; 229(2):217-25 (54 ref.)

Splice variants of arrestins [letter] Palczewski K, et al. **Exp Eye Res** 1996 Nov;63(5):599-602

Stable transfection in the monogenetic trypanosomatid Leptomonas collosoma--transcription barrier of heterologous trypanosomatid SL RNA genes and expression of a chimeric SL RNA molecule. Goldring A, et al. **Exp Parasitol** 1996 Oct;84(1):28-41

In vitro synthesized SV40 cRNA is trans-spliced after microinjection into the nuclei of mammalian cells. Eul J, et al. **FEBS Lett** 1996 Sep 30;394(2):227-32

SV40 T1-mRNA trans-splicing and translation requires that the in vitro synthesized cRNA is capped before microinjection. Graessmann M, et al. **FEBS Lett** 1996 Sep 30;394(2):233-6

Expression of recombinant human ceruloplasmin--an absolute requirement for splicing signals in the expression cassette. Rafiq M, et al. **FEBS Lett** 1997 Apr 28; 407(2):132-6

Expression of Tetrahymena snRNA gene variants including a U1 gene with mutations in the 5' splice site recognition sequence. Eugen-Olsen J, et al. **Gene** 1997 Apr 21; 189(2):221-5

Human CD46 aberrant splicing in transgenic mice. Mulder LC, et al. **Gene** 1997 Feb 20;186(1):83-6

A processed homeobox gene expressed in a stage-, tissue- and region-specific manner in epididymis. Nhim RP, et al. **Gene** 1997 Feb 7;185(2):271-6

The transcription promoter of the spliced leader gene from Trypanosoma cruzi. Nunes LR, et al. **Gene** 1997 Apr 1; 188(2):157-68

Splicing by overlap extension by PCR using asymmetric amplification: an improved technique for the generation of hybrid proteins of immunological interest. Warrens AN, et al. **Gene** 1997 Feb 20;186(1):29-35

Increased levels of spliced RNA account for augmented expression from the MFG retroviral vector in hematopoietic cells. Krall WJ, et al. **Gene Ther** 1996 Jan; 3(1):37-48

Involvement of the MRE2 gene of yeast in formation of meiosis-specific double-strand breaks and crossover recombination through RNA splicing. Nakagawa T, et al. **Genes Cells** 1997 Jan;2(1):65-79

A protein of the SR family of splicing factors binds extensively to exonic Balbiani ring pre-mRNA and accompanies the RNA from the gene to the nuclear pore. Alzhanova-Ericsson AT, et al. **Genes Dev** 1996 Nov 15; 10(22):2881-93

U2AF65 recruits a novel human DEAD box protein required for the U2 snRNP-branchpoint interaction. Fleckner J, et al. **Genes Dev** 1997 Jul 15;11(14):1864-72

Distribution of pre-mRNA splicing factors at sites of RNA polymerase II transcription. Neugebauer KM, et al. **Genes Dev** 1997 May 1;11(9):1148-59

Targeted disruption of an essential vertebrate gene: ASF/SF2 is required for cell viability. Wang J, et al. **Genes Dev** 1996 Oct 15;10(20):2588-99

Phosphorylation of the ASF/SF2 RS domain affects both protein-protein and protein-RNA interactions and is necessary for splicing. Xiao SH, et al. **Genes Dev** 1997 Feb 1;11(3):334-44

Both loss-of-function and gain-of-function mutations in snf define a role for snRNP proteins in regulating Sex-lethal pre-mRNA splicing in Drosophila development. Salz HK, et al. **Genetics** 1996 Sep;144(1):95-108

Expression of estrogen receptor wild type and exon 5 splicing variant mRNAs in normal and endometriotic endometria during the menstrual cycle. Fujimoto J, et al. **Gynecol Endocrinol** 1997 Feb;11(1):11-6

Estrogen receptor mRNA splice variants in pre- and postmenopausal human endometrium and endometrial carcinoma. Rice LW, et al. **Gynecol Oncol** 1997 Apr; 65(1):149-57

Defective HIV-1 provirus encoding a multitarget-ribozyme inhibits accumulation of spliced and unspliced HIV-1 mRNAs, reduces infectivity of viral progeny, and protects the cells from pathogenesis. Paik SY, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1115-24

A splicing mutation in intron 16 of the cystic fibrosis transmembrane conductance regulator gene, associated with severe disease, is common on Reunion Island. Bienvenu T, et al. **Hum Hered** 1996 May-Jun;46(3):168-71

A novel mechanism of aberrant pre-mRNA splicing in humans. Cogan JD, et al. **Hum Mol Genet** 1997 Jun; 6(6):909-12

Profound biotinidase deficiency caused by a point mutation that creates a downstream cryptic 3' splice acceptor site within an exon of the human biotinidase gene. Pomponio RJ, et al. **Hum Mol Genet** 1997 May;6(5):739-45

A model of mRNA splicing in adult lysosomal storage disease (glycogenosis type II). Raben N, et al. **Hum Mol Genet** 1996 Jul;5(7):995-1000

Genetic variation at a splicing branch point in intron 9 of the low density lipoprotein (LDL)-receptor gene: a rare mutation that disrupts mRNA splicing in a patient with familial hypercholesterolaemia and a common polymorphism. Webb JC, et al. **Hum Mol Genet** 1996 Sep; 5(9):1325-31

Glycogenosis type II: a juvenile-specific mutation with an unusual splicing pattern and a shared mutation in African Americans. Adams EM, et al. **Hum Mutat** 1997; 10(2):128-34

Phenylketonuria splice mutation (EXON6nt-96A-->g) masquerading as missense mutation (Y204C). Ellingsen S, et al. **Hum Mutat** 1997;9(1):88-90

A novel splice site mutation (156 + 1G-->A) in the TSC2 gene. Kumar A, et al. **Hum Mutat** 1997;9(1):64-5

New mutation in the 3'-acceptor splice site of intron 4 in the rhodopsin gene associated with autosomal dominant retinitis pigmentosa in a Basque family. Reig C, et al. **Hum Mutat** 1996;8(1):93-4

New splicing mutation in exon 5-6 of the p53-tumor suppressor gene in a malignant schwannoma. Schneider-Stock R, et al. **Hum Mutat** 1997;9(1):91-4

Identification of an exon 3 deletion splice variant androgen receptor mRNA in human breast cancer. Zhu X, et al. **Int J Cancer** 1997 Aug 7;72(4):574-80

Nematode spliced leaders--ubiquity, evolution and utility. Blaxter M, et al. **Int J Parasitol** 1996 Oct;26(10):1025-33 (51 ref.)

Splicing of intron-containing tRNATrp by the archaeon Haloferax volcanii occurs independent of mature tRNA structure. Armbruster DW, et al. **J Biol Chem** 1997 Aug 8;272(32):19758-62

Sequence requirements for regulated RNA splicing of the human fibroblast growth factor receptor-1 alpha exon. Cote GJ, et al. **J Biol Chem** 1997 Jan 10;272(2):1054-60

Cloning of human 2H9 heterogeneous nuclear ribonucleoproteins. Relation with splicing and early heat shock-induced splicing arrest. Mahé D, et al. **J Biol Chem** 1997 Jan 17;272(3):1827-36

p32 protein, a splicing factor 2-associated protein, is localized in mitochondrial matrix and is functionally important in maintaining oxidative phosphorylation. Muta T, et al. **J Biol Chem** 1997 Sep 26;272(39):24363-70

The Saccharomyces cerevisiae Prp5 protein has RNA-dependent ATPase activity with specificity for U2 small nuclear RNA. O'Day CL, et al. **J Biol Chem** 1996 Dec 27;271(52):33261-7

Involvement of U1 small nuclear ribonucleoproteins (snRNP) in 5' splice site-U1 snRNP interaction. Rossi F, et al. **J Biol Chem** 1996 Sep 27;271(39):23985-91

In vitro studies of the Prp9.Prp11.Prp21 complex indicate a pathway for U2 small nuclear ribonucleoprotein activation. Wiest DK, et al. **J Biol Chem** 1996 Dec 27; 271(52):33268-76

Spliced exons of adenovirus late RNAs colocalize with snRNP in a specific nuclear domain. Bridge E, et al. **J Cell Biol** 1996 Oct;135(2):303–14

Splicing factors associate with nuclear HCMV–IE transcripts after transcriptional activation of the gene, but dissociate upon transcription inhibition: evidence for a dynamic organization of splicing factors. Dirks RW, et al. **J Cell Sci** 1997 Feb;110 (Pt 4):515–22

Human myometrial G alpha s–small (with serine) and Gs–large (with serine) messenger ribonucleic acid splice variants promote the increased expression of 46– and 54–kilodalton G alpha s protein isoforms in pregnancy and their down–regulation during labor. Europe–Finner GN, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1069–75

Pit–1/growth hormone factor 1 splice variant expression in the rhesus monkey pituitary gland and the rhesus and human placenta. Schanke JT, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):800–7

Glanzmann thrombasthenia. Cooperation between sequence variants in cis during splice site selection. Jin Y, et al. **J Clin Invest** 1996 Oct 15;98(8):1745–54

Improved splice site detection in Genie. Reese MG, et al. **J Comput Biol** 1997 Fall;4(3):311–23

Las Vegas algorithms for gene recognition: suboptimal and error–tolerant spliced alignment. Sze SH, et al. **J Comput Biol** 1997 Fall;4(3):297–309

Influenza virus NS1 protein alters the subnuclear localization of cellular splicing components. Fortes P, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):1001–7

A covalent fluorescent–gold immunoprobe: simultaneous detection of a pre–mRNA splicing factor by light and electron microscopy. Powell RD, et al. **J Histochem Cytochem** 1997 Jul;45(7):947–56

Aberrantly spliced mRNAs of the 3–hydroxy–3–methylglutaryl coenzyme A lyase (HL) gene with a donor splice–site point mutation produce hereditary HL deficiency. Buesa C, et al. **J Lipid Res** 1996 Nov; 37(11):2420–32

Cerebrotendinous xanthomatosis caused by two new mutations of the sterol–27–hydroxylase gene that disrupt mRNA splicing. Garuti R, et al. **J Lipid Res** 1996 Jul; 37(7):1459–67

Exon 10 skipping caused by intron 10 splice donor site mutation in cholesteryl ester transfer protein gene results in abnormal downstream splice site selection. Sakai N, et al. **J Lipid Res** 1996 Oct;37(10):2065–73

Splicing and intron–internal RNA editing of trnK–matK transcripts in barley plastids: support for MatK as an essential splice factor. Vogel J, et al. **J Mol Biol** 1997 Jul 11;270(2):179–87

Identification of G alpha s messenger ribonucleic acid splice variants in human granulosa cells. Europe–Finner GN, et al. **J Mol Endocrinol** 1997 Feb;18(1):27–35

Deletion of the mouse GH–binding protein (mGHBP) mRNA polyadenylation and splicing sites does not abolish production of mGHBP. Zhou Y, et al. **J Mol Endocrinol** 1997 Aug;19(1):1–13

Analysis of donor splice sites in different eukaryotic organisms. Rogozin IB, et al. **J Mol Evol** 1997 Jul; 45(1):50–9

Enhanced cleavage of an atypical intron of dopamine D3–receptor pre–mRNA in chronic schizophrenia. Schmauss C. **J Neurosci** 1996 Dec 15;16(24):7902–9

Single–channel properties of recombinant AMPA receptors depend on RNA editing, splice variation, and subunit composition. Swanson GT, et al. **J Neurosci** 1997 Jan 1; 17(1):58–69

Neuronally restricted RNA splicing regulates the expression of a novel GABAA receptor subunit conferring atypical functional properties [corrected; erratum to be published] Whiting PJ, et al. **J Neurosci** 1997 Jul 1;17(13):5027–37

Expression of estrogen receptor exon 5 splicing variant (ER E5SV) mRNA in gynaecological cancers. Fujimoto J, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):25–30

Structural organization of the pre–mRNA splicing commitment: a hypothesis. Melčák I, et al. **J Struct Biol** 1996 Nov–Dec;117(3):189–94 (64 ref.)

Dynamics and modulation of human immunodeficiency virus type 1 transcripts in vitro and in vivo. Bagnarelli P, et al. **J Virol** 1996 Nov;70(11):7603–13

Characterization of the spliced pol transcript of feline foamy virus: the splice acceptor site of the pol transcript is located in gag of foamy viruses. Bodem J, et al. **J Virol** 1996 Dec; 70(12):9024–7

A splicing enhancer in the 3'–terminal c–H–ras exon influences mRNA abundance and transforming activity. Hwang DY, et al. **J Virol** 1997 Sep;71(9):6416–26

The herpes simplex virus type 1 2.0–kilobase latency–associated transcript is a stable intron which branches at a guanosine. Zabolotny JM, et al. **J Virol** 1997 Jun;71(6):4199–208

A polymerase chain reaction to detect a spliced late transcript of human cytomegalovirus in the blood of bone marrow transplant recipients. Nelson PN, et al. **J Virol Methods** 1996 Feb;56(2):139–48

Expression and differential splicing of the mouse TSC2 homolog. Olsson PG, et al. **Mamm Genome** 1996 Mar; 7(3):212–5

Organization and expression of bovine TSPY. Vogel T, et al. **Mamm Genome** 1997 Jul;8(7):491–6

Reactions catalyzed by group II introns in vitro. Perlman PS, et al. **Methods Enzymol** 1996;264:66–86

Trans–splicing reactions by ribozymes. Jones JT, et al. **Methods Mol Biol** 1997;74:341–8

Splicing glue: a role for SR proteins in trans splicing? Bruzik JP. **Microb Pathog** 1996 Sep;21(3):149–55 (65 ref.)

Surprising diversity and distribution of spliced leader RNAs in flatworms. Davis RE. **Mol Biochem Parasitol** 1997 Jul; 87(1):29–48

Gene linkage and steady state RNAs suggest trans–splicing may be associated with a polycistronic transcript in Schistosoma mansoni. Davis RE, et al. **Mol Biochem Parasitol** 1997 Oct;89(1):25–39

Human and fungal 3' splice sites are used by Trypanosoma brucei for trans splicing. Metzenberg S, et al. **Mol Biochem Parasitol** 1996 Dec 2;83(1):11–23

5' sequences essential for trans–splicing of msp (gp63) RNAs in Leishmania chagasi. Ramamoorthy R, et al. **Mol Biochem Parasitol** 1996 Apr;77(1):65–76

Heterogeneous transcripts of RIME/ingi retroposons in Trypanosoma brucei are unspliced. Vassella E, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):131–5

RCC1 and nuclear organization. Huang S, et al. **Mol Biol Cell** 1997 Jun;8(6):1143–57

A connection between pre–mRNA splicing and the cell cycle in fission yeast: cdc28+ is allelic with prp8+ and encodes an RNA–dependent ATPase/helicase. Lundgren K, et al. **Mol Biol Cell** 1996 Jul;7(7):1083–94

Serine/threonine phosphatase 1 modulates the subnuclear distribution of pre–mRNA splicing factors. Misteli T, et al. **Mol Biol Cell** 1996 Oct;7(10):1559–72

Introns and reading frames: correlation between splicing sites and their codon positions. Tomita M, et al. **Mol Biol Evol** 1996 Nov;13(9):1219–23

Structure and analysis of the mouse Na+/H+ exchanger (NHE1) gene: homology and conservation of splice sites. Wang H, et al. **Mol Cell Biochem** 1996 Dec 20;165(2):155–9

Length changes in the joining segment between domains 5 and 6 of a group II intron inhibit self–splicing and alter 3' splice site selection. Boulanger SC, et al. **Mol Cell Biol** 1996 Oct;16(10):5896–904

A suboptimal 5' splice site is a cis–acting determinant of nuclear export of polyomavirus late mRNAs. Huang Y, et al. **Mol Cell Biol** 1996 Nov;16(11):6046–54

Pyrimidine tracts between the 5' splice site and branch point facilitate splicing and recognition of a small Drosophila intron. Kennedy CF, et al. **Mol Cell Biol** 1997 May; 17(5):2774–80

Spliceosome activation by PRP2 ATPase prior to the first transesterification reaction of pre–mRNA splicing. Kim SH, et al. **Mol Cell Biol** 1996 Dec;16(12):6810–9

The branchpoint residue is recognized during commitment complex formation before being bulged out of the U2 snRNA–pre–mRNA duplex. Pascolo E, et al. **Mol Cell Biol** 1997 Jul;17(7):3469–76

A specific RNA hairpin loop structure binds the RNA recognition motifs of the Drosophila SR protein B52. Shi H, et al. **Mol Cell Biol** 1997 May;17(5):2649–57

Ribosomal protein L32 of Saccharomyces cerevisiae influences both the splicing of its own transcript and the processing of rRNA. Vilardell J, et al. **Mol Cell Biol** 1997 Apr;17(4):1959–65

Prp31p promotes the association of the U4/U6 x U5 tri–snRNP with prespliceosomes to form spliceosomes in Saccharomyces cerevisiae. Weidenhammer EM, et al. **Mol Cell Biol** 1997 Jul;17(7):3580–8

A novel splice site mutation in the androgen receptor gene results in exon skipping and a non–functional truncated protein. Lim J, et al. **Mol Cell Endocrinol** 1997 Aug 8; 131(2):205–10

Comparable processing of beta–lactoglobulin pre–mRNA in cell culture and transgenic mouse models. Donofrio G, et al. **Mol Gen Genet** 1996 Sep 25;252(4):465–9

The gene fl(2)d is needed for the sex–specific splicing of transformer pre–mRNA but not for double–sex pre–mRNA in Drosophila melanogaster. Granadino B, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):26–31

In vitro mutagenesis of the mitochondrial leucyl tRNA synthetase of Saccharomyces cerevisiae shows that the suppressor activity of the mutant proteins is related to the splicing function of the wild–type protein. Li GY, et al. **Mol Gen Genet** 1996 Oct 28;252(6):667–75

Isolation of novel pre–mRNA splicing mutants of Schizosaccharomyces pombe. Urushiyama S, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):118–27

Trans–activation of group II intron splicing by nuclear U5 snRNA. Hetzer M, et al. **Nature** 1997 Mar 27; 386(6623):417–20

The dynamics of a pre–mRNA splicing factor in living cells. Misteli T, et al. **Nature** 1997 May 29;387(6632):523–7

Metal ion catalysis during splicing of premessenger RNA. Sontheimer EJ, et al. **Nature** 1997 Aug 21;388(6644):801–5

A protein related to splicing factor U2AF35 that interacts with U2AF65 and SR proteins in splicing of pre–mRNA. Tronchère H, et al. **Nature** 1997 Jul 24;388(6640):397–400

Aberrant splicing of a mouse disabled homolog, mdab1, in the scrambler mouse. Ware ML, et al. **Neuron** 1997 Aug; 19(2):239–49

Inverse splicing of a discontinuous pre–mRNA intron generates a circular exon in a HeLa cell nuclear extract. Braun S, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4152–7

Functional analysis of the polypyrimidine tract in pre–mRNA splicing. Coolidge CJ, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):888–96

E2F–dependent mitogenic stimulation of the splicing of transcripts from an S phase–regulated gene. Darville MI, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2759–65

Functional analysis of the fission yeast Prp4 protein kinase involved in pre–mRNA splicing and isolation of a putative mammalian homologue. Gross T, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1028–35

Logitlinear models for the prediction of splice sites in plant pre–mRNA sequences. Kleffe J, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4709–18

A yeast cap binding protein complex (yCBC) acts at an early step in pre–mRNA splicing. Lewis JD, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3332–6

Intronic and exonic sequences modulate 5'splice site selection in plant nuclei. McCullough AJ, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1071–7

Inhibition of self–splicing group I intron RNA: high–throughput screening assays. Mei HY, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):5051–3

The Cbp2 protein stimulates the splicing of the omega intron of yeast mitochondria. Shaw LC, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1597–604

Splicing efficiency of human immunodeficiency virus type 1 tat RNA is determined by both a suboptimal 3' splice site and a 10 nucleotide exon splicing silencer element located within tat exon 2. Si Z, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):861–7

Metal ion interaction with cosubstrate in self–splicing of group I introns. Sjögren AS, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):648–53

pH dependence of self–splicing by the group IA2 intron in a pre–mRNA derived from the nrdB gene of bacteriophage T4. Sjögren AS, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3543–9

Precise branch point mapping and quantification of splicing intermediates. Vogel J, et al. **Nucleic Acids Res** 1997 May 15;25(10):2030–1

In vitro reconstitution of mammalian U1 snRNPs active in splicing: the U1–C protein enhances the formation of early (E) spliceosomal complexes. Will CL, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4614–23

Metabolism of pre–messenger RNA splicing cofactors: modification of U6 RNA is dependent on its interaction with U4 RNA. Zerby DB, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3583–9

Functional and physical interaction between the yeast splicing factors Slu7 and Prp18. Zhang X, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2146–52

Murine myeloid leukemic cells with disrupted myb loci show splicing anomalies that account for heterogeneous sizes in myb proteins. Tantravahi R, et al. **Oncogene** 1996 Sep 19; 13(6):1187–96

Interactions across exons can influence splice site recognition in plant nuclei. McCullough AJ, et al. **Plant Cell** 1996 Dec; 8(12):2295–307

U–rich tracts enhance 3' splice site recognition in plant nuclei. Baynton CE, et al. **Plant J** 1996 Oct;10(4):703–11

Arabidopsis intron mutations and pre–mRNA splicing. Brown JW. **Plant J** 1996 Nov;10(5):771–80 (73 ref.)

A combinatorial role for exon, intron and splice site sequences in splicing in maize. Carle–Urioste JC, et al. **Plant J** 1997 Jun;11(6):1253–63

Inefficient and incorrect processing of the Ac transposase transcript in iae1 and wild–type Arabidopsis thaliana. Jarvis P, et al. **Plant J** 1997 May;11(5):921–31

Mutation of putative branchpoint consensus sequences in plant introns reduces splicing efficiency. Simpson CG, et al. **Plant J** 1996 Mar;9(3):369–80

Splicing of precursors to mRNA in higher plants: mechanism, regulation and sub–nuclear organisation of the spliceosomal machinery. Simpson GG, et al. **Plant Mol Biol** 1996 Oct; 32(1–2):1–41 (307 ref.)

Frequency of the IVS12 + 5G––>A splice mutation of the fumarylacetoacetate hydrolase gene in carriers of hereditary tyrosinaemia in the French Canadian population of Saguenay–Lac–St–Jean. Poudrier J, et al. **Prenat Diagn** 1996 Jan;16(1):59–64

A case of Becker muscular dystrophy resulting from the skipping of four contiguous exons (71–74) of the dystrophin gene during mRNA maturation. Patria SY, et al. **Proc Assoc Am Physicians** 1996 Jul;108(4):308–14

Open reading frame P–a herpes simplex virus gene repressed during productive infection encodes a protein that binds a splicing factor and reduces synthesis of viral proteins made from spliced mRNA. Bruni R, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10423–7

RNA splicing specificity determined by the coordinated action of RNA recognition motifs in SR proteins. Chandler SD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15; 94(8):3596–601

A human homologue of the Drosophila sex determination factor transformer–2 has conserved splicing regulatory functions. Dauwalder B, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9004–9

Operons and SL2 trans–splicing exist in nematodes outside the genus Caenorhabditis. Evans D, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9751–6

Gene recognition via spliced sequence alignment. Gelfand MS, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9061–6

Distinct mechanisms of splicing regulation in vivo by the Drosophila protein Sex–lethal. Granadino B, et al.

Proc Natl Acad Sci U S A 1997 Jul 8;94(14):7343-8
A protein encoded by a group I intron in Aspergillus nidulans directly assists RNA splicing and is a DNA endonuclease. Ho Y, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19; 94(17):8994-9
SC35-mediated reconstitution of splicing in U2AF-depleted nuclear extract. MacMillan AM, et al.
Proc Natl Acad Sci U S A 1997 Jan 7;94(1):133-6
Evolution of trans-splicing plant mitochondrial introns in pre-Permian times. Malek O, et al.
Proc Natl Acad Sci U S A 1997 Jan 21;94(2):553-8
Association of the mammalian helicase MAH with the pre-mRNA splicing complex. Molnar GM, et al.
Proc Natl Acad Sci U S A 1997 Jul 22;94(15):7831-6
Mutations in the small subunit of the Drosophila U2AF splicing factor cause lethality and developmental defects. Rudner DZ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10333-7
Sequence-specific RNA binding by an SR protein requires RS domain phosphorylation: creation of an SRp40-specific splicing enhancer. Tacke R, et al.
Proc Natl Acad Sci U S A 1997 Feb 18;94(4):1148-53
Regulation of insulin preRNA splicing by glucose. Wang J, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4360-5
A complex of nuclear proteins mediates SR protein binding to a purine-rich splicing enhancer. Yeakley JM, et al.
Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7582-7
Phosphorylated Ser/Arg-rich proteins: limiting factors in the assembly of 200S large nuclear ribonucleoprotein particles. Yitzhaki S, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8830-5
Site-specific crosslinking of mammalian U11 and u6atac to the 5' splice site of an AT-AC intron. Yu YT, et al.
Proc Natl Acad Sci U S A 1997 Jun 10;94(12):6030-5
Recombinant expression and secretion of a natural splicing variant containing the ectodomain of porcine LH receptor in HC11 mammary epithelial cells. Pajot-Augy E, et al. **Protein Expr Purif** 1997 Jun;10(1):107-14
A neuron-specific splicing switch mediated by an array of pre-mRNA repressor sites: evidence of a regulatory role for the polypyrimidine tract binding protein and a brain-specific PTB counterpart. Ashiya M, et al. **RNA** 1997 Sep;3(9):996-1015
A novel U1/U5 interaction indicates proximity between U1 and U5 snRNAs during an early step of mRNA splicing. Ast G, et al. **RNA** 1997 Apr;3(4):371-81
Evidence for light/redox-regulated splicing of psbA pre-RNAs in Chlamydomonas chloroplasts. Deshpande NN, et al. **RNA** 1997 Jan;3(1):37-48
Naegleria nucleolar introns contain two group I ribozymes with different functions in RNA splicing and processing. Einvik C, et al. **RNA** 1997 Jul;3(7):710-20
Functional group substitutions of the branchpoint adenosine in a nuclear pre-mRNA and a group II intron. Gaur RK, et al. **RNA** 1997 Aug;3(8):861-9
Site-specific crosslinks of yeast U6 snRNA to the pre-mRNA near the 5' splice site. Kim CH, et al. **RNA** 1996 Oct; 2(10):995-1010
Relationship between 3' end formation and SL2-specific trans-splicing in polycistronic Caenorhabditis elegans pre-mRNA processing. Kuersten S, et al. **RNA** 1997 Mar; 3(3):269-78
Association of a group I intron with its splice junction in 50S ribosomes: implications for intron toxicity. Nikolcheva T, et al. **RNA** 1997 Sep;3(9):1016-27
Cell- and stage-specific splicing events resolved in specialized neurons of the rat cerebellum. Wang Z, et al. **RNA** 1996 Dec;2(12):1241-53
Splicing of a divergent subclass of AT-AC introns requires the major spliceosomal snRNAs. Wu Q, et al. **RNA** 1997 Jun;3(6):586-601
Effect of nucleotides 37 and 38 on cleavage of tRNAPhe precursors. Liu J, et al. **Sci China C Life Sci** 1996 Jun; 39(3):243-50
Bimolecular exon ligation by the human spliceosome. Anderson K, et al. **Science** 1997 Jun 13;276(5319):1712-6
U1-mediated exon definition interactions between AT-AC and GT-AG introns. Wu Q, et al. **Science** 1996 Nov 8; 274(5289):1005-8
Pre-mRNA splicing: the discovery of a new spliceosome doubles the challenge. Tarn WY, et al.
Trends Biochem Sci 1997 Apr;22(4):132-7 (40 ref.)
The SR protein family: pleiotropic functions in pre-mRNA splicing. Valcárcel J, et al. **Trends Biochem Sci** 1996 Aug; 21(8):296-301 (49 ref.)
Involvement of human immunodeficiency virus type-1 splice sites in the cytoplasmic accumulation of viral RNA. Borg KT, et al. **Virology** 1997 Sep 15;236(1):95-103
Type 1 HERV-K genome is spliced into subgenomic transcripts in the human breast tumor cell line T47D. Etkind PR, et al. **Virology** 1997 Aug 4;234(2):304-8
Expression of human foamy virus reverse transcriptase involves a spliced pol mRNA. Jordan I, et al. **Virology** 1996 Oct 1;224(1):314-9
RNA splice site utilization by simian immunodeficiency viruses derived from sooty mangabey monkeys. Reinhart TA, et al. **Virology** 1996 Oct 1;224(1):338-44
Reciprocal effects of splicing and polyadenylation on human immunodeficiency virus type 1 pre-mRNA processing. Scott JM, et al. **Virology** 1996 Oct 15;224(2):498-509
Human immunodeficiency virus type-1 mRNA splicing pattern in infected persons is determined by the proportion of newly infected cells. Vesanen M, et al. **Virology** 1997 Sep 15;236(1):104-9
Strain-specific expression of spliced MMTV RNAs containing the superantigen gene. Xu L, et al. **Virology** 1997 Sep 15;236(1):54-65
[Statistical characteristics of splicing sites in vertebrates and invertebrates] Shchepetkova IL, et al. **Biofizika** 1997 Jan-Feb;42(1):82-91 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Discovery of selective, small-molecule inhibitors of RNA complexes--II. Self-splicing group I intron ribozyme. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1185-95
Human T-cell leukemia virus type 2 Rex inhibits pre-mRNA splicing in vitro at an early stage of spliceosome formation. Bakker A, et al. **J Virol** 1996 Aug;70(8):5511-8
Repair of thalassemic human beta-globin mRNA in mammalian cells by antisense oligonucleotides.
Sierakowska H, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12840-4

GENETICS

Nonsense mutations and altered splice-site selection [letter; comment] Dietz HC. **Am J Hum Genet** 1997 Mar; 60(3):729-30. Comment on: Am J Hum Genet 1996 Aug;59(2):279-86.
Analysis of the RPGR gene in 11 pedigrees with the retinitis pigmentosa type 3 genotype: paucity of mutations in the coding region but splice defects in two families. Fujita R, et al. **Am J Hum Genet** 1997 Sep;61(3):571-80
The molecular basis of partial penetrance of splicing mutations in cystic fibrosis. Rave-Harel N, et al.
Am J Hum Genet 1997 Jan;60(1):87-94
Detection and characterization of a novel splice mutation in the LDL receptor intron 12 resulting in two different mutant mRNA variants. Nissen H, et al. **Atherosclerosis** 1997 Jan 3;128(1):75-83
Structural features of U6 snRNA and dynamic interactions with other spliceosomal components leading to pre-mRNA splicing. Forné T, et al. **Biochimie** 1996;78(6):436-42 (71 ref.)
Tissue-specific splicing of two mutually exclusive exons of the chicken beta-tropomyosin pre-mRNA: positive and negative regulations. Gallego ME, et al. **Biochimie** 1996; 78(6):457-65 (68 ref.)
Estrogen receptor messenger RNA splice variants are not involved in antiestrogen resistance in sublines of MCF-7 human breast cancer cells. Madsen MW, et al.
Cancer Res 1997 Feb 15;57(4):585-9
The splicing factor BBP interacts specifically with the pre-mRNA branchpoint sequence UACUAAC. Berglund JA, et al. **Cell** 1997 May 30;89(5):781-7
New loop-loop tertiary interactions in self-splicing introns of subgroup IC and ID: a complete 3D model of the Tetrahymena thermophila ribozyme. Lehnert V, et al.
Chem Biol 1996 Dec;3(12):993-1009
A study of learning splice sites of DNA sequence by neural networks. Ogura H, et al. **Comput Biol Med** 1997 Jan; 27(1):67-75
Biochemistry and regulation of pre-mRNA splicing. Adams MD, et al. **Curr Opin Cell Biol** 1996 Jun;8(3):331-9 (86 ref.)
Construction of portable intron cassettes for the delivery and expression of foreign genes. Reilly JD, et al.
DNA Cell Biol 1996 Dec;15(12):1113-20
The role of branchpoint-3'splice site spacing and interaction between intron terminal nucleotides in 3' splice site selection in Saccharomyces cerevisiae. Luukkonen BG, et al. **EMBO J** 1997 Feb 17;16(4):779-92
A chronic GM2 gangliosidosis variant with a HEXA splicing defect: quantitation of HEXA mRNAs in normal and mutant fibroblasts. Fernandes MJ, et al.
Eur J Hum Genet 1997 May-Jun;5(3):129-36
A human protein required for the second step of pre-mRNA splicing is functionally related to a yeast splicing factor. Horowitz DS, et al. **Genes Dev** 1997 Jan 1;11(1):139-51
Los1p, involved in yeast pre-tRNA splicing, positively regulates members of the SOL gene family. Shen WC, et al. **Genetics** 1996 Jun;143(2):699-712
Mutagenesis of the yeast gene PRP8 reveals domains governing the specificity and fidelity of 3' splice site selection. Umen JG, et al. **Genetics** 1996 Jun;143(2):723-39
Exon skipping in the sterol 27-hydroxylase gene leads to cerebrotendinous xanthomatosis. Verrips A, et al.
Hum Genet 1997 Aug;100(2):284-6
A splice-junction mutation in the region of COL5A1 that codes for the carboxyl propeptide of pro alpha 1(V) chains results in the gravis form of the Ehlers-Danlos syndrome (type I). Wenstrup RJ, et al. **Hum Mol Genet** 1996 Nov; 5(11):1733-6
Identification of a splice site mutation (2789 +5 G > A) associated with small amounts of normal CFTR mRNA and mild cystic fibrosis. Highsmith WE Jr, et al.
Hum Mutat 1997;9(4):332-8
A 14-bp deletion (codon 554 del AAGgtaacagagtg) at exon 14/intron N junction of the coagulation factor XI gene disrupts splicing and causes severe factor XI deficiency. Peretz H, et al. **Hum Mutat** 1996;8(1):77-8
Transposon-induced splicing defect in the rat nude gene. Huth M, et al. **Immunogenetics** 1997;45(4):282-3
Factors involved in the activation of pre-mRNA splicing from downstream splicing enhancers. Achsel T, et al.
J Biochem (Tokyo) 1996 Jul;120(1):53-60
A 2'-phosphotransferase implicated in tRNA splicing is essential in Saccharomyces cerevisiae. Culver GM, et al. **J Biol Chem** 1997 May 16;272(20):13203-10
Role of the modular domains of SR proteins in subnuclear localization and alternative splicing specificity. Cáceres JF, et al. **J Cell Biol** 1997 Jul 28;138(2):225-38
Phenotypic heterogeneity associated with the splicing mutation in congenital adrenal hyperplasia due to 21-hydroxylase deficiency [see comments] Witchel SF, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4081-8. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):1304.
Novel splice donor site mutation in the cardiac myosin-binding protein-C gene in familial hypertrophic cardiomyopathy. Characterization Of cardiac transcript and protein. Rottbauer W, et al. **J Clin Invest** 1997 Jul 15;100(2):475-82
Multiple tertiary interactions involving domain II of group II self-splicing introns. Costa M, et al. **J Mol Biol** 1997 Apr 4;267(3):520-36
Suppressors of cis-acting splicing-deficient mutations that affect the ribozyme core of a group II intron. Robineau S, et al. **J Mol Biol** 1997 Apr 4;267(3):537-47
Genomic organization of the integrin beta 4 gene (ITGB4): a homozygous splice-site mutation in a patient with junctional epidermolysis bullosa associated with pyloric atresia. Pulkkinen L, et al. **Lab Invest** 1997 Jun;76(6):823-33
Compound heterozygosity for a nonsense mutation and a splice site mutation in the type VII collagen gene (COL7A1) in recessive dystrophic epidermolysis bullosa. Tamai K, et al. **Lab Invest** 1997 Feb;76(2):209-17
The SLA RNA gene of Trypanosoma brucei is organized in a tandem array which encodes several small RNAs. Roberts TG, et al. **Mol Biochem Parasitol** 1996 Dec 20; 83(2):163-74
An intron element modulating 5' splice site selection in the hnRNP A1 pre-mRNA interacts with hnRNP A1. Chabot B, et al. **Mol Cell Biol** 1997 Apr;17(4):1776-86
The polypyrimidine tract binding protein binds upstream of neural cell-specific c-src exon N1 to repress the splicing of the intron downstream. Chan RC, et al.
Mol Cell Biol 1997 Aug;17(8):4667-76
Identification of a new class of exonic splicing enhancers by in vivo selection [published erratum appears in Mol Cell Biol 1997 Jun;17(6):3468] Coulter LR, et al.
Mol Cell Biol 1997 Apr;17(4):2143-50
G triplets located throughout a class of small vertebrate introns enforce intron borders and regulate splice site selection. McCullough AJ, et al. **Mol Cell Biol** 1997 Aug; 17(8):4562-71
The Sex-lethal early splicing pattern uses a default mechanism dependent on the alternative 5'splice sites. Zhu C, et al. **Mol Cell Biol** 1997 Mar;17(3):1674-81
Modulation of expression at the level of splicing of cut-1 RNA in the infective second-stage juvenile of the plant parasitic nematode Meloidogyne artiellia. De Giorgi C, et al. **Mol Gen Genet** 1997 Feb 20;253(5):589-98
Developmental regulation and cell-specific expression of N-methyl-D-aspartate receptor splice variants in rat hippocampus. Paupard MC, et al. **Neuroscience** 1997 Jul; 79(2):399-409
Characterization of an RNP complex that assembles on the Rous sarcoma virus negative regulator of splicing element. Cook CR, et al. **Nucleic Acids Res** 1996 Dec 15; 24(24):4962-8
Inappropriate splicing of a chimeric gene containing a large internal exon results in exon skipping in transgenic mice. Davisson RL, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):4023-8
Splice site prediction in Arabidopsis thaliana pre-mRNA by combining local and global sequence information. Hebsgaard SM, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3439-52
The Cbp2 protein suppresses splice site mutations in a group I intron. Shaw LC, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3415-23
Nuclear mutations that block group II RNA splicing in maize chloroplasts reveal several intron classes with distinct requirements for splicing factors. Jenkins BD, et al.
Plant Cell 1997 Mar;9(3):283-96
Mutations of the two-nucleotide bulge of D5 of a group II intron block splicing in vitro and in vivo: phenotypes and suppressor mutations. Schmidt U, et al. **RNA** 1996 Nov; 2(11):1161-72
Solution structure of the donor site of a trans-splicing RNA. Greenbaum NL, et al. **Structure** 1996 Jun 15;4(6):725-33

PHYSIOLOGY

Histone H4 mRNA from the nematode Ascaris lumbricoides is cis-spliced and polyadenylated. Wyler-Duda P, et al. **Biochim Biophys Acta** 1997 Feb 28;1350(3):259-61
Genetic depletion reveals an essential role for an SR protein splicing factor in vertebrate cells. Mount SM. **Bioessays** 1997 Mar;19(3):189-92 (30 ref.)
Another bridge between kingdoms: tRNA splicing in archaea and eukaryotes. Belfort M, et al. **Cell** 1997 Jun 27; 89(7):1003-6 (17 ref.)
tRNA ligase is required for regulated mRNA splicing in the unfolded protein response [see comments] Sidrauski C, et al. **Cell** 1996 Nov 1;87(3):405-13. Comment in: Cell 1996 Nov 1;87(3):357-9.

RNA SPLICING

The transmembrane kinase Ire1p is a site-specific endonuclease that initiates mRNA splicing in the unfolded protein response. Sidrauski C, et al. **Cell** 1997 Sep 19; 90(6):1031–9

Differential expression of the regularly spliced wild-type p53 and its COOH-terminal alternatively spliced form during epidermal differentiation. Rehberger PA, et al. **Cell Growth Differ** 1997 Aug;8(8):851–60

Site-specific deoxynucleotide substitutions in yeast U6 snRNA block splicing of pre-mRNA in vitro. Kim CH, et al. **EMBO J** 1997 Apr 15;16(8):2119–29

A new regulatory protein, KSRP, mediates exon inclusion through an intronic splicing enhancer. Min H, et al. **Genes Dev** 1997 Apr 15;11(8):1023–36

Dynamic organization of pre-mRNA splicing factors. Huang S, et al. **J Cell Biochem** 1996 Aug;62(2):191–7 (53 ref.)

A functional interaction between the carboxy-terminal domain of RNA polymerase II and pre-mRNA splicing. Du L, et al. **J Cell Biol** 1997 Jan 13;136(1):5–18

Targeting of U2AF65 to sites of active splicing in the nucleus. Gama-Carvalho M, et al. **J Cell Biol** 1997 Jun 2; 137(5):975–87

Splicing factors associate with hyperphosphorylated RNA polymerase II in the absence of pre-mRNA. Kim E, et al. **J Cell Biol** 1997 Jan 13;136(1):19–28

Severe growth defect in a Schizosaccharomyces pombe mutant defective in intron lariat degradation. Nam K, et al. **Mol Cell Biol** 1997 Feb;17(2):809–18

Evidence for a role for galectin-1 in pre-mRNA splicing. Vyakarnam A, et al. **Mol Cell Biol** 1997 Aug;17(8):4730–7

A ribosomal protein L2 gene is transcribed, spliced, and edited at one site in rice mitochondria. Kubo N, et al. **Plant Mol Biol** 1996 Jul;31(4):853–62

HIV Rev-dependent binding of SF2/ASF to the Rev response element: possible role in Rev-mediated inhibition of HIV RNA splicing. Powell DM, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):973–8

Characterization of yeast U1 snRNP A protein: identification of the N-terminal RNA binding domain (RBD) binding site and evidence that the C-terminal RBD functions in splicing. Tang J, et al. **RNA** 1996 Oct;2(10):1058–70

Pararetro- and retrovirus RNA: splicing and the control of nuclear export. Kiss-László Z, et al. **Trends Microbiol** 1996 Dec;4(12):480–5 (52 ref.)

RNA SPLICING, ALTERNATIVE see **ALTERNATIVE SPLICING**

RNA SYNTHESIS INHIBITORS see **NUCLEIC ACID SYNTHESIS INHIBITORS**

RNA, TRANSFER

Depressive disorder due to mitochondrial transfer RNALeu(UUR) mutation. Onishi H, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1137–9

Mutation in a new gene MAF1 affects tRNA suppressor efficiency in Saccharomyces cerevisiae. Boguta M, et al. **Gene** 1997 Feb 7;185(2):291–6

Murine gammaherpesvirus 68 encodes tRNA-like sequences which are expressed during latency. Bowden RJ, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1675–87

HIV-1 reverse transcriptase discriminates against non-self tRNA primers. Oude Essink BB, et al. **J Mol Biol** 1996 Nov 29;264(2):243–54

Placement of tRNA primer on the primer-binding site requires pol gene expression in avian but not murine retroviruses. Fu W, et al. **J Virol** 1997 Sep;71(9):6940–6

Efficient transcription of the tRNA-like structure of turnip yellow mosaic virus by a template-dependent and specific viral RNA polymerase obtained by a new procedure [corrected] [published erratum appears in J Virol Methods 1997 Jun;66(1):165–6] Deiman BA, et al. **J Virol Methods** 1997 Mar;64(2):181–95

Gene rearrangements in snake mitochondrial genomes: highly concerted evolution of control-region-like sequences duplicated and inserted into a tRNA gene cluster. Kumazawa Y, et al. **Mol Biol Evol** 1996 Nov;13(9):1242–54

Mitochondrial tRNAs in the lower fungus Spizellomyces punctatus: tRNA editing and UAG 'stop' codons recognized as leucine. Laforest MJ, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):626–32

[Translational control through nonsense suppression] Muramatsu T, et al. **Seikagaku** 1997 Jan;69(1):36–9 (8 ref.) **(Jpn)**

ANALYSIS

Acinetobacter species identification by using tRNA spacer fingerprinting. Ehrenstein B, et al. **J Clin Microbiol** 1996 Oct;34(10):2414–20

Direct localization of the tRNAs within the elongating ribosome by means of neutron scattering (proton-spin contrast-variation). Wadzack J, et al. **J Mol Biol** 1997 Feb 21;266(2):343–56

BIOSYNTHESIS

Mechanism, specificity and general properties of the yeast enzyme catalysing the formation of inosine 34 in the anticodon of transfer RNA. Auxilien S, et al. **J Mol Biol** 1996 Oct 4;262(4):437–58

Structure, mechanism and evolution of chloroplast transfer RNA processing systems. Gegenheimer P. **Mol Biol Rep** 1995-96;22(2-3):147–50 (27 ref.)

Enzymatic RNA synthesis and RNase P. Evolutionary aspects. Krupp G. **Mol Biol Rep** 1995-96;22(2-3):177–80 (29 ref.)

tRNA processing in human mitochondrial disorders. Masucci JP, et al. **Mol Biol Rep** 1995-96;22(2-3):187–93 (78 ref.)

Purines are required at the 5' ends of newly initiated RNAs for optimal RNA polymerase III gene expression. Zecherle GN, et al. **Mol Cell Biol** 1996 Oct;16(10):5801–10

CHEMISTRY

The elongating ribosome: structural and functional aspects. Nierhaus KH, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11-12):1011–21 (24 ref.)

An oligonucleotide analog approach to the decoding region of 16S rRNA. Stern S, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):899–905 (19 ref.)

Azospirillum lipoferum tRNAs: fractionation and identification of tRNA species and the nucleotide sequence of tRNA(Asn) (QUU). Sivakamasundari R, et al. **Biochem Mol Biol Int** 1996 Dec;40(6):1221–6

Discriminating among the discriminator bases of tRNAs. Hou YM. **Chem Biol** 1997 Feb;4(2):93–6 (22 ref.)

Hydration of C-H groups in tRNA. Auffinger P, et al. **Faraday Discuss** 1996;(103):151–73

Isolation of genes encoding tRNA binding proteins by probing an expression library with unmodified tRNA. Gustafsson C. **Genet Anal** 1996 Jul;13(2):45–7

Posttranscriptional modification of tRNA in psychrophilic bacteria. Dalluge JJ, et al. **J Bacteriol** 1997 Mar; 179(6):1918–23

The dynamic NMR structure of the T psi C-loop: implications for the specificity of tRNA methylation. Yao LJ, et al. **J Biomol NMR** 1997 Apr;9(3):229–44

Structural rules and conformational compensations in the tRNA L-form. Steinberg S, et al. **J Mol Biol** 1997 Feb 21;266(2):269–82

Direct localization of the tRNAs within the elongating ribosome by means of neutron scattering (proton-spin contrast-variation). Wadzack J, et al. **J Mol Biol** 1997 Feb 21;266(2):343–56

RNase P as hyperprocessing enzyme: a model for formation of a biologically functional tRNA fragment. Kikuchi Y. **Mol Biol Rep** 1995-96;22(2-3):171–5 (17 ref.)

Matrix-assisted laser desorption/ionisation mass spectrometry of transfer ribonucleic acids isolated from yeast. Gruic-Sovulj I, et al. **Nucleic Acids Res** 1997 May 1;25(9):1859–61

Fe.bleomycin as a probe of RNA conformation. Holmes CE, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3399–406

Transfer RNA docking pair model in the ribosomal pre- and post-translocational states. Nagano K, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1254–64

Structural studies of tRNAs by capillary high performance liquid chromatography/electrospray mass spectrometry. Hayashi N, et al. **Nucleic Acids Symp Ser** 1995;(34):153–4

Codon recognition by tRNA molecules with a modified or unmodified uridine at the first position of the anticodon. Okumura S, et al. **Nucleic Acids Symp Ser** 1995;(34):203–4

When protein engineering confronts the tRNA world. Schimmel P, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10007–9 (24 ref.)

Structure and aminoacylation capacities of tRNA transcripts containing deoxyribonucleotides. Aphasizhev R, et al. **RNA** 1997 Aug;3(8):893–904

Probing the structure of the Escherichia coli 10Sa RNA (tmRNA). Felden B, et al. **RNA** 1997 Jan;3(1):89–103

Analysis of the tertiary structure of the ribonuclease P ribozyme-substrate complex by site-specific photoaffinity crosslinking. Harris ME, et al. **RNA** 1997 Jun;3(6):561–76

Nuclear pre-tRNA terminal structure and RNase P recognition. Lee Y, et al. **RNA** 1997 Feb;3(2):175–85

Phylogenetic analysis of tmRNA secondary structure. Williams KP, et al. **RNA** 1996 Dec;2(12):1306–10

DRUG EFFECTS

Antibiotic inhibition of the movement of tRNA substrates through a peptidyl transferase cavity. Porse BT, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):877–85 (47 ref.)

Purpuromycin: an antibiotic inhibiting tRNA aminoacylation. Kirillov S, et al. **RNA** 1997 Aug;3(8):905–13

GENETICS

Mutations in mitochondrial transfer ribonucleic acid genes in preeclampsia. Folgerø T, et al. **Am J Obstet Gynecol** 1996 May;174(5):1626–30

Sequence comparison of mitochondrial tRNA genes and origin of light strand replication in Bos taurus and Nellore (Bos indicus) breeds. Pegoraro L, et al. **Anim Genet** 1996 Apr;27(2):91–4

MELAS associated with a mutation in the valine transfer RNA gene of mitochondrial DNA. Taylor RW, et al. **Ann Neurol** 1996 Sep;40(3):459–62

Escherichia coli initiator tRNA: structure-function relationships and interactions with the translational machinery. Mangroo D, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):1023–31 (51 ref.)

Structural analysis of a bovine arginine tRNA(CCG) gene. Eubanks AC, et al. **Biochim Biophys Acta** 1997 May 30; 1352(2):138–44

Another bridge between kingdoms: tRNA splicing in archaea and eukaryotes. Belfort M, et al. **Cell** 1997 Jun 27; 89(7):1003–6 (17 ref.)

Rpp1, an essential protein subunit of nuclear RNase P required for processing of precursor tRNA and 35S precursor rRNA in Saccharomyces cerevisiae. Stolc V, et al. **Genes Dev** 1997 Sep 15;11(18):2414–25

Evolution of pulmonate gastropod mitochondrial genomes: comparisons of gene organizations of Euhadra, Cepaea and Albinaria and implications of unusual tRNA secondary structures. Yamazaki N, et al. **Genetics** 1997 Mar; 145(3):749–58

A novel RNA species from the turtle mitochondrial genome: induction and regulation of transcription and processing under anoxic and freezing stresses. Cai Q, et al. **Genome** 1997 Aug;40(4):534–43

Influence of cloned tRNA genes from a uropathogenic Escherichia coli strain on adherence to primary human renal tubular epithelial cells and nephropathogenicity in rats. Susa M, et al. **Infect Immun** 1996 Dec;64(12):5390–4

Drosophila melanogaster mitochondrial DNA: completion of the nucleotide sequence and evolutionary comparisons. Lewis DL, et al. **Insect Mol Biol** 1995 Nov;4(4):263–78

Specificity of tRNA-mRNA interactions in Bacillus subtilis tyrS antitermination. Grundy FJ, et al. **J Bacteriol** 1997 Apr;179(8):2587–94

A 2'-phosphotransferase implicated in tRNA splicing is essential in Saccharomyces cerevisiae. Culver GM, et al. **J Biol Chem** 1997 May 16;272(20):13203–10

Mitochondrial gene transfer ribonucleic acid (tRNA)Leu(UUR) 3243 and tRNA(Lys) 8344 mutations and diabetes mellitus in Korea. Lee HC, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):372–4

Induction and repair of cyclobutane pyrimidine dimers in the Escherichia coli tRNA gene tyrT: Fis protein affects dimer induction in the control region and suppresses preferential repair in the coding region of the transcribed strand, except in a short region near the transcription start site. Li S, et al. **J Mol Biol** 1997 Aug 8;271(1):31–46

Very fast identification of RNA motifs in genomic DNA. Application to tRNA search in the yeast genome. el-Mabrouk N, et al. **J Mol Biol** 1996 Nov 22;264(1):46–55

A RNA polymerase III-based two-hybrid system to study RNA polymerase II transcriptional regulators. Marsolier MC, et al. **J Mol Biol** 1997 May 2;268(2):243–9

Transfer RNA gene redundancy and translational selection in Saccharomyces cerevisiae. Percudani R, et al. **J Mol Biol** 1997 May 2;268(2):322–30

The 3' ends of tRNA-derived SINEs originated from the 3' ends of LINEs: a new example from the bovine genome. Okada N, et al. **J Mol Evol** 1997;44 Suppl 1:S52–6

The T-C(8356) mitochondrial DNA mutation in a Japanese family. Sano M, et al. **J Neurol** 1996 Jun;243(6):441–4

Myoclonic epilepsy and ragged red fibers (MERRF) syndrome: selective vulnerability of CNS neurons does not correlate with the level of mitochondrial tRNAlys mutation in individual neuronal isolates. Zhou L, et al. **J Neurosci** 1997 Oct 15;17(20):7746–53

Complementation of a primer binding site-impaired murine leukemia virus-derived retroviral vector by a genetically engineered tRNA-like primer. Lund AH, et al. **J Virol** 1997 Feb;71(2):1191–5

Mutation accumulation in nuclear, organelle, and prokaryotic transfer RNA genes. Lynch M. **Mol Biol Evol** 1997 Sep; 14(9):914–25

Transfer RNA gene organization and RNase P. Green CJ. **Mol Biol Rep** 1995-96;22(2-3):181–5 (67 ref.)

tRNA processing in human mitochondrial disorders. Masucci JP, et al. **Mol Biol Rep** 1995-96;22(2-3):187–93 (78 ref.)

Inhibition of nascent-peptide release at translation termination. Cao J, et al. **Mol Cell Biol** 1996 Dec; 16(12):7109–14

tRNAscan-SE: a program for improved detection of transfer RNA genes in genomic sequence. Lowe TM, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):955–64

Similarities and differences in tRNA identity between Escherichia coli and Saccharomyces cerevisiae: evolutionary conservation and divergence. Nameki N, et al. **Nucleic Acids Symp Ser** 1995;(34):205–6

High-resolution functional mapping of a cloned gene by genetic footprinting. Singh IR, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1304–9

IMMUNOLOGY

Systemic lupus erythmatosus associated with autoimmune hepatitis two cases with novel autoantibodies to transfer RNA-related antigens. Satoh T, et al. **Clin Rheumatol** 1997 May;16(3):305–9

ISOLATION & PURIFICATION

Isolation of mitochondrial tRNAs from human cells. King MP. **Methods Enzymol** 1996;264:173–82

METABOLISM

tRNA-ribosome interactions. Ehrenberg M, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):1049–54 (35 ref.)

Peptidyl transferase and beyond. Wower J, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):1041–7 (45 ref.)

Evidence for a novel cytoplasmic tRNA-protein complex containing the KH-multidomain protein vigilin. Kruse C,

et al. **Biochem J** 1996 Nov 15;320 (Pt 1):247–52

Three tRNA binding sites in rabbit liver ribosomes and role of the intrinsic ATPase in 80S ribosomes from higher eukaryotes. El'skaya AV, et al. **Biochemistry** 1997 Aug 26; 36(34):10492–7

Interaction of tRNA with tRNA (guanosine–1)methyltransferase: binding specificity determinants involve the dinucleotide G36pG37 and tertiary structure. Redlak M, et al. **Biochemistry** 1997 Jul 22;36(29):8699–709

Editing and import: strategies for providing plant mitochondria with a complete set of functional transfer RNAs. Dietrich A, et al. **Biochimie** 1996;78(6):518–29

Enzymatic conversion of adenosine to inosine and to N1–methylinosine in transfer RNAs: a review. Grosjean H, et al. **Biochimie** 1996;78(6):488–501 (98 ref.)

Intron–dependent enzymatic formation of modified nucleosides in eukaryotic tRNAs: a review. Grosjean H, et al. **Biochimie** 1997 May;79(5):293–302 (74 ref.)

Nonsense suppression in mammalian cells. Kuchino Y, et al. **Biochimie** 1996;78(11–12):1007–15 (32 ref.)

Functional specificity of amino acid at position 246 in the tRNA mimicry domain of bacterial release factor 2. Uno M, et al. **Biochimie** 1996;78(11–12):935–43

Development of improved tRNAs for in vitro biosynthesis of proteins containing unnatural amino acids. Cload ST, et al. **Chem Biol** 1996 Dec;3(12):1033–8

Hsp47 and other ER–resident molecular chaperones form heterocomplexes with each other and with collagen type IV chains. Ferreira LR, et al. **Connect Tissue Res** 1996; 33(4):265–73

Transfer RNA structural change is a key element in the reassignment of the CUG codon in Candida albicans. Santos MA, et al. **EMBO J** 1996 Sep 16;15(18):5060–8

The yeast protein Arc1p binds to tRNA and functions as a cofactor for the methionyl– and glutamyl–tRNA synthetases. Simos G, et al. **EMBO J** 1996 Oct 1; 15(19):5437–48

Ribosome–initiator tRNA complex as an intermediate in translation initiation in Escherichia coli revealed by use of mutant initiator tRNAs and specialized ribosomes. Wu XQ, et al. **EMBO J** 1996 Sep 2;15(17):4734–9

Pre–tRNA 3'–processing in Saccharomyces cerevisiae. Purification and characterization of exo– and endoribonucleases. Papadimitriou A, et al. **Eur J Biochem** 1996 Dec 15;242(3):747–59

Movement of the 3'–end of tRNA through the peptidyl transferase centre and its inhibition by antibiotics. Kirillov S, et al. **FEBS Lett** 1997 Apr 14;406(3):223–33 (165 ref.)

Evidence for the formation of an unusual ternary complex of rabbit liver EF–1alpha with GDP and deacylated tRNA. Petrushenko ZM, et al. **FEBS Lett** 1997 Apr 21;407(1):13–7

Isolation of genes encoding tRNA binding proteins by probing an expression library with unmodified tRNA. Gustafsson C. **Genet Anal** 1996 Jul;13(2):45–7

Translational regulation of yeast GCN4. A window on factors that control initiator–trna binding to the ribosome. Hinnebusch AG. **J Biol Chem** 1997 Aug 29;272(35):21661–4 (61 ref.)

Biosynthesis of archaeosine, a novel derivative of 7–deazaguanosine specific to archaeal tRNA, proceeds via a pathway involving base replacement on the tRNA polynucleotide chain. Watanabe M, et al. **J Biol Chem** 1997 Aug 8;272(32):20146–51

Effect of the amino acid attached to Escherichia coli initiator tRNA on its affinity for the initiation factor IF2 and on the IF2 dependence of its binding to the ribosome. Wu XQ, et al. **J Biol Chem** 1997 Jan 17;272(3):1891–5

The dynamic NMR structure of the T psi C-loop: implications for the specificity of tRNA methylation. Yao LJ, et al. **J Biomol NMR** 1997 Apr;9(3):229–44

Growth rate–optimised tRNA abundance and codon usage. Berg OG, et al. **J Mol Biol** 1997 Jul 25;270(4):544–50

A new model for the three–dimensional folding of Escherichia coli 16 S ribosomal RNA. III. The topography of the functional centre. Mueller F, et al. **J Mol Biol** 1997 Aug 29;271(4):566–87

Species–specific tRNA recognition in relation to tRNA synthetase contact residues. Nair S, et al. **J Mol Biol** 1997 May 30;269(1):1–9

tRNA delivery systems for ribozymes. Perriman R, et al. **Methods Mol Biol** 1997;74:393–402

RNase P as hyperprocessing enzyme: a model for formation of a biologically functional tRNA fragment. Kikuchi Y. **Mol Biol Rep** 1995–96;22(2–3):171–5 (17 ref.)

Striking differences in mitochondrial tRNA import between different plant species. Kumar R, et al. **Mol Gen Genet** 1996 Sep 25;252(4):404–11

Role of stoichiometry between mRNA, translation factor SelB and selenocysteyl–tRNA in selenoprotein synthesis. Tormay P, et al. **Mol Microbiol** 1996 Sep;21(6):1253–9

Hydrolysis of GTP by elongation factor G drives tRNA movement on the ribosome [see comments] Rodnina MV, et al. **Nature** 1997 Jan 2;385(6611):37–41. Comment in: Nature 1997 Jan 2;385(6611):18–9.

Eukaryotic release factor 1 (eRF1) abolishes readthrough and competes with suppressor tRNAs at all three termination codons in messenger RNA. Drugeon G, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2254–8

Structure and aminoacylation capacities of tRNA transcripts containing deoxyribonucleotides. Aphasizhev R, et al. **RNA** 1997 Aug;3(8):893–904

Rp–deoxy–phosphorothioate modification interference experiments identify 2'–OH groups in RNase P RNA that are crucial to tRNA binding. Hardt WD, et al. **RNA** 1996 Dec;2(12):1189–98

Purpuromycin: an antibiotic inhibiting tRNA aminoacylation. Kirillov S, et al. **RNA** 1997 Aug;3(8):905–13

Transfer RNA recognition by the Escherichia coli delta2–isopentenyl–pyrophosphate:tRNA delta2–isopentenyl transferase: dependence on the anticodon arm structure. Motorin Y, et al. **RNA** 1997 Jul; 3(7):721–33

Visualizing nuclear export of different classes of RNA by electron microscopy. Panté N, et al. **RNA** 1997 May; 3(5):498–513

Discrete determinants in transfer RNA for editing and aminoacylation. Hale SP, et al. **Science** 1997 May 23; 276(5316):1250–2

Mutations in both the U5 region and the primer–binding site influence the selection of the tRNA used for the initiation of HIV–1 reverse transcription. Kang SM, et al. **Virology** 1996 Aug 15;222(2):401–14

[RNA import into mitochondria] Kazakova EA, et al. **Mol Biol (Mosk)** 1996 Jul–Aug;30(4):748–58 (48 ref.) **(Rus)**

PHARMACOLOGY

Ochre suppressor transfer RNA restored dystrophin expression in mdx mice. Li K, et al. **Life Sci** 1997;61(15):PL 205–9

PHYSIOLOGY

The modified nucleoside 2–methylthio–N6–isopentenyladenosine in tRNA of Shigella flexneri is required for expression of virulence genes. Durand JM, et al. **J Bacteriol** 1997 Sep; 179(18):5777–82

ULTRASTRUCTURE

The genetic code and cyclic codes. Demongeot J, et al. **C R Acad Sci III** 1996 Jun;319(6):443–51

Arrangement of tRNAs in pre– and posttranslocational ribosomes revealed by electron cryomicroscopy. Stark H, et al. **Cell** 1997 Jan 10;88(1):19–28

RNA, TRANSFER, ALA

CHEMISTRY

A single base change prevents import of cytosolic tRNA(Ala) into mitochondria in transgenic plants. Dietrich A, et al. **Plant J** 1996 Nov;10(5):913–8

METABOLISM

A biologically active 53 kDa fragment of overproduced alanyl–tRNA synthetase from Thermus thermophilus HB8 specifically interacts with tRNA Ala acceptor helix. Lechler A, et al. **Nucleic Acids Res** 1997 Jul 15; 25(14):2737–44

Structure of the acceptor stem of Escherichia coli tRNA Ala: role of the G3.U70 base pair in synthetase recognition. Ramos A, et al. **Nucleic Acids Res** 1997 Jun 1; 25(11):2083–90

Specific atomic groups and RNA helix geometry in acceptor stem recognition by a tRNA synthetase. Beuning PJ, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10150–4

RNA, TRANSFER, AMINO ACID–SPECIFIC

BIOSYNTHESIS

Changes of tRNA population during compensatory cell proliferation: differential expression of methionine–tRNA species. Kanduc D. **Arch Biochem Biophys** 1997 Jun 1; 342(1):1–5

CHEMISTRY

Evolutionary analysis of sea urchin mitochondrial tRNAs: folding of the molecules as suggested by the non–random occurrence of nucleotides. Giorgi CD, et al. **Curr Genet** 1996 Aug;30(3):191–9

GENETICS

A novel mitochondrial tRNA phenylalanine mutation presenting with acute rhabdomyolysis. Chinnery PF, et al. **Ann Neurol** 1997 Mar;41(3):408–10

Re: Homology in phylogenetic analysis: alignment of transfer RNA genes and the phylogenetic position of snakes [letter] Macey JR, et al. **Mol Phylogenet Evol** 1997 Apr;7(2):272–9

Comprehensive, rapid and sensitive detection of sequence variants of human mitochondrial tRNA genes. Michikawa Y, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2455–63

METABOLISM

Elongation factor Tu, a GTPase triggered by codon recognition on the ribosome: mechanism and GTP consumption. Rodnina MV, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1221–7 (42 ref.)

RNA, TRANSFER, AMINO ACYL

Relationship of genotype to phenotype in fibroblast–derived transmitochondrial cell lines carrying the 3243 mutation associated with the MELAS encephalomyopathy: shift towards mutant genotype and role of mtDNA copy number. Bentlage HA, et al. **Hum Mol Genet** 1996 Feb; 5(2):197–205

Primer tRNA3Lys on the viral genome exists in unextended and two–base extended forms within mature human immunodeficiency virus type 1. Huang Y, et al. **J Virol** 1997 Jan;71(1):726–8

ANALYSIS

Lovastatin effects on human breast carcinoma cells. differential toxicity of an adriamycin–resistant derivative and influence on selenocysteine tRNAS. Diamond AM, et al. **Biochem Mol Biol Int** 1996 Feb;38(2):345–55

ANTAGONISTS & INHIBITORS

Inhibition of tRNA aminoacylation by 2'–O–methyl oligonucleotides. Hou YM, et al. **Biochemistry** 1996 Dec 3;35(48):15340–8

BIOSYNTHESIS

Chemical modification and site–directed mutagenesis of the single cysteine in motif 3 of class II Escherichia coli prolyl–tRNA synthetase. Stehlin C, et al. **Biochemistry** 1997 Mar 11;36(10):2932–8

Structural and functional evidence that initiation and elongation of HIV–1 reverse transcription are distinct processes. Lanchy JM, et al. **Biochimie** 1996; 78(11–12):1087–96 (56 ref.)

Role of TATATAA element in the regulation of tRNA1Gly gene expression in Bombyx mori is position dependent. Sharma S, et al. **J Mol Biol** 1996 Oct 4;262(4):396–406

Analysis of aminoacylation of human mitochondrial tRNAs. Enriquez JA, et al. **Methods Enzymol** 1996;264:183–96

Aminoacyl–tRNA synthesis: divergent routes to a common goal. Ibba M, et al. **Trends Biochem Sci** 1997 Feb; 22(2):39–42 (37 ref.)

CHEMISTRY

Multiple forms of tRNA(Lys3) in HIV–1. Li Z, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):530–40

Structural and functional evidence that initiation and elongation of HIV–1 reverse transcription are distinct processes. Lanchy JM, et al. **Biochimie** 1996; 78(11–12):1087–96 (56 ref.)

Effect of modified nucleotides on structure of yeast tRNA(Phe). Comparative studies by metal ion–induced hydrolysis and nuclease mapping. Michałowski D, et al. **Biochimie** 1996;78(2):131–8

Isolation, crystallization and X–ray analysis of the quaternary complex of Phe–tRNA(Phe), EF–Tu, a GTP analog and kirromycin. Kristensen O, et al. **FEBS Lett** 1996 Dec 9; 399(1–2):59–62

Identity elements of Thermus thermophilus tRNA(Thr). Nameki N, et al. **FEBS Lett** 1996 Nov 4;396(2–3):201–7

Analysis of factor XIII substrate specificity using recombinant human factor XIII and tissue transglutaminase chimeras. Hettasch JM, et al. **J Biol Chem** 1997 Oct 3; 272(40):25149–56

Selenocysteine synthesis in mammalia: an identity switch from tRNA(Ser) to tRNA(Sec). Amberg R, et al. **J Mol Biol** 1996 Oct 18;263(1):8–19

Three modified nucleosides present in the anticodon stem and loop influence the in vivo aa–tRNA selection in a tRNA–dependent manner. Li J, et al. **J Mol Biol** 1997 Aug 15;271(2):209–21

The structure of 3'–O–anthraniloyladenosine, an analogue of the 3'–end of aminoacyl–tRNA. Nawrot B, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):948–54

Aminoacylation identity switch of turnip yellow mosaic virus RNA from valine to methionine results in an infectious virus [see comments] Dreher TW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12212–6. Comment in: Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12078–81.

GENETICS

A new mtDNA mutation showing accumulation with time and restriction to skeletal muscle. Weber K, et al. **Am J Hum Genet** 1997 Feb;60(2):373–80

Transcription and processing of the gene for spinach chloroplast threonine tRNA in a homologous in vitro system. Cheng YS, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):380–5

Integration of the yeast retrovirus–like element Ty3 upstream of a human tRNA gene expressed in yeast. Dildine SL, et al. **Gene** 1997 Jul 31;194(2):227–33

Expression of individual members of a tRNA(Gly)1 multigene family in vivo follows the same pattern as in vitro. Sharma S, et al. **Gene** 1997 Jul 31;194(2):257–66

Human tyrosyl–tRNA synthetase shares amino acid sequence homology with a putative cytokine. Kleeman TA, et al. **J Biol Chem** 1997 May 30;272(22):14420–5

Polyadenylation creates the discriminator nucleotide of chicken mitochondrial tRNA(Tyr). Yokobori S, et al. **J Mol Biol** 1997 Jan 17;265(2):95–9

Lack of gene- and strand-specific DNA repair in RNA polymerase III-transcribed human tRNA genes. Dammann R, et al. **Mol Cell Biol** 1997 Jan;17(1):219-29

Cross-competition for TATA-binding protein between TATA boxes of the selenocysteine tRNA[Ser]Sec promoter and RNA polymerase II promoters. Park JM, et al. **Mol Cells** 1997 Feb 28;7(1):72-7

Photoreversal of UV-potentiated glutamine tRNA suppressor mutations in excision proficient Escherichia coli. Bockrath R, et al. **Mutat Res** 1997 May 1;383(3):231-42

Early embryonic lethality caused by targeted disruption of the mouse selenocysteine tRNA gene (Trsp). Bösl MR, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5531-4

ISOLATION & PURIFICATION

Isolation of tRNA isoacceptors by affinity chromatography with immobilized elongation factor Tu from Escherichia coli. Chinali G. **J Biochem Biophys Methods** 1997 Feb 1; 34(1):1-10

Rapid selection of aminoacyl-tRNAs based on biotinylation of alpha-NH2 group of charged amino acids. Pütz J, et al. **Nucleic Acids Res** 1997 May 1;25(9):1862-3

METABOLISM

tRNA(Trp) as cofactor of gelonin, a ribosome-inactivating protein with RNA-N-glycosidase activity. Features required for the cofactor activity. Brigotti M, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):181-8

Functional replacement of hamster lysyl-tRNA synthetase by the yeast enzyme requires cognate amino acid sequences for proper tRNA recognition. Agou F, et al. **Biochemistry** 1996 Dec 3;35(48):15322-31

Selenocysteine tRNA[Ser]Sec levels and selenium-dependent glutathione peroxidase activity in mouse embryonic stem cells heterozygous for a targeted mutation in the tRNA[Ser]Sec gene. Chittum HS, et al. **Biochemistry** 1997 Jul 15;36(28):8634-9

Zinc-dependent tRNA binding by a peptide element within a tRNA synthetase. Glasfeld E, et al. **Biochemistry** 1997 Jun 3;36(22):6739-44

Recognition of the T stem-loop of a pre-tRNA substrate by the ribozyme from Bacillus subtilis ribonuclease P. Loria A, et al. **Biochemistry** 1997 May 27;36(21):6317-25

The 'polysemous' codon--a codon with multiple amino acid assignment caused by dual specificity of tRNA identity. Suzuki T, et al. **EMBO J** 1997 Mar 3;16(5):1122-34

Detection of the peptidyltransferase activity of a dipeptide, alanylhistidine, in the absence of ribosomes. Shimizu M. **J Biochem (Tokyo)** 1996 May;119(5):832-4

Aminoacyl-tRNA recognition by the leucyl/phenylalanyl-tRNA-protein transferase. Abramochkin G, et al. **J Biol Chem** 1996 Sep 13; 271(37):22901-7

Interactions of the amino-terminal noncollagenous (NC1) domain of type VII collagen with extracellular matrix components. A potential role in epidermal-dermal adherence in human skin. Chen M, et al. **J Biol Chem** 1997 Jun 6;272(23):14516-22

Analysis of factor XIII substrate specificity using recombinant human factor XIII and tissue transglutaminase chimeras. Hettasch JM, et al. **J Biol Chem** 1997 Oct 3; 272(40):25149-56

F-actin sequesters elongation factor 1alpha from interaction with aminoacyl-tRNA in a pH-dependent reaction. Liu G, et al. **J Cell Biol** 1996 Nov;135(4):953-63

Three modified nucleosides present in the anticodon stem and loop influence the in vivo aa-tRNA selection in a tRNA-dependent manner. Li J, et al. **J Mol Biol** 1997 Aug 15;271(2):209-21

The donor substrate site within the peptidyl transferase loop of 23 S rRNA and its putative interactions with the CCA-end of N-blocked aminoacyl-tRNA(Phe). Porse BT, et al. **J Mol Biol** 1996 Dec 6;264(3):472-83

Selection of aminoacylated tRNAs from RNA libraries having randomized acceptor stem sequences: using old dogs to perform new tricks. Sampson JR, et al. **Methods Enzymol** 1996;267:384-410

Aminoacylation error correction [letter] Lin L, et al. **Nature** 1996 Nov 7;384(6604):33-4

Interaction of retroviral nucleocapsid proteins with transfer RNAPhe: a lead ribozyme and 1H NMR study. Khan R, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3568-75

Initiation of (-) strand DNA synthesis from tRNA(3Lys) on lentiviral RNAs: implications of specific HIV-1 RNA-tRNA(3Lys) interactions inhibiting primer utilization by retroviral reverse transcriptases. Arts EJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10063-8

Knowing when not to stop: selenocysteine incorporation in eukaryotes. Low SC, et al. **Trends Biochem Sci** 1996 Jun; 21(6):203-8

PHYSIOLOGY

Effects of mutations in Pr160gag-pol upon tRNA(Lys3) and Pr160gag-plo incorporation into HIV-1. Mak J, et al. **J Mol Biol** 1997 Jan 31;265(4):419-31

Interplay of tRNA-like structures from plant viral RNAs with partners of the translation and replication machineries [comment] Giegé R. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12078-81 (43 ref.). Comment on: Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12212-6.

RNA, TRANSFER, ARG

CHEMISTRY

Arginine aminoacylation identity is context-dependent and ensured by alternate recognition sets in the anticodon loop of accepting tRNA transcripts. Sissler M, et al. **EMBO J** 1996 Sep 16;15(18):5069-76

Distribution of both lengths and 5' terminal nucleotides of mammalian pre-tRNA 3' trailers reflects properties of 3' processing endoribonuclease. Nashimoto M. **Nucleic Acids Res** 1997 Mar 15;25(6):1148-54

GENETICS

Primary sequence of mitochondrial tRNA(Arg) of a nematode Ascaris suum: occurrence of unmodified adenosine at the first position of the anticodon. Watanabe Y, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):119-22

The Brevibacterium albidum gene encoding the arginine tRNACCG complements the growth defect of an Escherichia coli strain carrying a thermosensitive mutation in the rnpA gene at the nonpermissive temperature. Kim MS, et al. **Mol Gen Genet** 1997 Apr 28;254(4):464-8

Modulation of lambda integrase synthesis by rare arginine tRNA. Zahn K, et al. **Mol Microbiol** 1996 Jul;21(1):69-76

Analyses of frameshifting at UUU-pyrimidine sites. Schwartz R, et al. **Nucleic Acids Res** 1997 May 15;25(10):2005-11

Sequence analysis of a 37.6 kbp cosmid clone from the right arm of Saccharomyces cerevisiae chromosome XII, carrying YAP3, HOG1, SNR6, tRNA-Arg3 and 23 new open reading frames, among which several homologies to proteins involved in cell division control and to mammalian growth factors and other animal proteins are found. Verhasselt P, et al. **Yeast** 1997 Mar 15;13(3):241-50

METABOLISM

Distribution of both lengths and 5' terminal nucleotides of mammalian pre-tRNA 3' trailers reflects properties of 3' processing endoribonuclease. Nashimoto M. **Nucleic Acids Res** 1997 Mar 15;25(6):1148-54

RNA, TRANSFER, ASP

CHEMISTRY

Aspartate identity of transfer RNAs. Giegé R, et al. **Biochimie** 1996;78(7):605-23 (108 ref.)

Conformational flexibility of tRNA: structural changes in yeast tRNA(Asp) upon binding to aspartyl-tRNA synthetase. Rees B, et al. **Biochimie** 1996;78(7):624-31 (31 ref.)

Two nucleotides 5'-adjacent to the anticodon of rat cytoplasmic tRNA(Asp) are not edited. Tomita K, et al. **Biochimie** 1996;78(11-12):1001-6

H-bond stability in the tRNA(Asp) anticodon hairpin: 3 ns of multiple molecular dynamics simulations. Auffinger P, et al. **Biophys J** 1996 Aug;71(2):940-54

RNA hydration: three nanoseconds of multiple molecular dynamics simulations of the solvated tRNA(Asp) anticodon hairpin. Auffinger P, et al. **J Mol Biol** 1997 Jun 13; 269(3):326-41

GENETICS

Additional copies of the mitochondrial Ef-Tu and aspartyl-tRNA synthetase genes can compensate for a mutation affecting the maturation of the mitochondrial tRNAAsp. Rinaldi T, et al. **Curr Genet** 1997 Jun; 31(6):494-6

Selection of tRNA(Asp) amber suppressor mutants having alanine, arginine, glutamine, and lysine identity. Martin F, et al. **RNA** 1996 Sep;2(9):919-27

METABOLISM

Purification and characterization of the precursor tRNA 3'-end processing nuclease from Aspergillus nidulans. Han SJ, et al. **Biochem Biophys Res Commun** 1997 Apr 17; 233(2):354-8

Two nucleotides 5'-adjacent to the anticodon of rat cytoplasmic tRNA(Asp) are not edited. Tomita K, et al. **Biochimie** 1996;78(11-12):1001-6

RNA editing changes the identity of a mitochondrial tRNA in marsupials. Börner GV, et al. **EMBO J** 1996 Nov 1; 15(21):5949-57

Unusual enzyme characteristics of aspartyl-tRNA synthetase from hyperthermophilic archaeon Pyrococcus sp. KOD1. Fujiwara S, et al. **FEBS Lett** 1996 Sep 23;394(1):66-70

RNA, TRANSFER, CYS

CHEMISTRY

An RNA structural determinant for tRNA recognition. Hamann CS, et al. **Biochemistry** 1997 Jul 1;36(26):7967-72

Replication slippage may cause parallel evolution in the secondary structures of mitochondrial transfer RNAs. Macey JR, et al. **Mol Biol Evol** 1997 Jan;14(1):30-9

GENETICS

Replication slippage may cause parallel evolution in the secondary structures of mitochondrial transfer RNAs. Macey JR, et al. **Mol Biol Evol** 1997 Jan;14(1):30-9

Mitochondrial tRNA(Cys) gene mutation (A5814G): a second family with mitochondrial encephalopathy. Santorelli FM, et al. **Neuromuscul Disord** 1997 May; 7(3):156-9

RNA editing in the acceptor stem of squid mitochondrial tRNA(Tyr). Tomita K, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4987-91

Nucleotide sequences of nuclear tRNA(Cys) genes from Nicotiana and Arabidopsis and expression in HeLa cell extract. Urban C, et al. **Plant Mol Biol** 1996 Nov; 32(3):549-52

METABOLISM

An RNA structural determinant for tRNA recognition. Hamann CS, et al. **Biochemistry** 1997 Jul 1;36(26):7967-72

A strategy of tRNA recognition that includes determinants of RNA structure. Hamann CS, et al. **Bioorg Med Chem** 1997 Jun;5(6):1011-9

RNA, TRANSFER, GLN

CHEMISTRY

Crystal structures of three misacylating mutants of Escherichia coli glutaminyl-tRNA synthetase complexed with tRNA(Gln) and ATP. Arnez JG, et al. **Biochemistry** 1996 Nov 26;35(47):14725-33

Nonsense suppression in mammalian cells. Kuchino Y, et al. **Biochimie** 1996;78(11-12):1007-15 (32 ref.)

GENETICS

Mitochondrial tRNA(Gln) and tRNA(Thr) gene variants in Parkinson's disease. Mayr-Wohlfart U, et al. **Eur J Med Res** 1997 Mar 24;2(3):111-3

An engineered Tetrahymena tRNAGln for in vivo incorporation of unnatural amino acids into proteins by nonsense suppression. Saks ME, et al. **J Biol Chem** 1996 Sep 20;271(38):23169-75

The tRNA(Gln) 4336 mitochondrial DNA variant is not a high penetrance mutation which predisposes to dementia before the age of 75 years. Tysoe C, et al. **J Med Genet** 1996 Dec;33(12):1002-6

METABOLISM

Nonsense suppression in mammalian cells. Kuchino Y, et al. **Biochimie** 1996;78(11-12):1007-15 (32 ref.)

Rescuing an essential enzyme-RNA complex with a non-essential appended domain. Whelihan EF, et al. **EMBO J** 1997 May 15;16(10):2968-74

The anticodon is the signal sequence for mitochondrial import of glutamine tRNA in Tetrahymena. Rusconi CP, et al. **Genes Dev** 1996 Nov 15;10(22):2870-80

RNA, TRANSFER, GLU

GENETICS

Unconventional structure of tRNA(Lys)SUU anticodon explains tRNA's role in bacterial and mammalian ribosomal frameshifting and primer selection by HIV-1. Agris PF, et al. **RNA** 1997 Apr;3(4):420-8

METABOLISM

Role of zinc in tRNA-acceptor stem binding by glutamyl-tRNA synthetase from E.coli: a molecular modeling study. Bothra AK, et al. **J Biomol Struct Dyn** 1997 Aug;15(1):19-25

RNA, TRANSFER, GLY

BIOSYNTHESIS

Role of TATATAA element in the regulation of tRNA1Gly gene expression in Bombyx mori is position dependent. Sharma S, et al. **J Mol Biol** 1996 Oct 4;262(4):396-406

CHEMISTRY

Recognition of tRNA(Gly) by three widely diverged glycyl-tRNA synthetases. Nameki N, et al. **J Mol Biol** 1997 May 9;268(3):640-7

GENETICS

Intracellular mitochondrial triplasmy in a patient with two heteroplasmic base changes. Bidooki SK, et al. **Am J Hum Genet** 1997 Jun;60(6):1430-8

Novel mutation in the mitochondrial DNA tRNA glycine gene associated with sudden unexpected death. Santorelli FM, et al. **Pediatr Neurol** 1996 Sep;15(2):145-9

The nucleotide sequence of a 39 kb segment of yeast chromosome IV: 12 new open reading frames, nine known genes and one genes for Gly-tRNA. Bahr A, et al. **Yeast** 1997 Feb;13(2):163-9

METABOLISM

A strategy of tRNA recognition that includes determinants of RNA structure. Hamann CS, et al. **Bioorg Med Chem** 1997 Jun;5(6):1011-9

Transcriptional silencing of a tRNA1Gly copy from within

a multigene family is modulated by distal cis elements. Sharma S, et al. **J Biol Chem** 1996 Nov 8;271(45):28146–53
Ribonuclease P (RNase P) RNA is converted to a Cd(2+)-ribozyme by a single Rp-phosphorothioate modification in the precursor tRNA at the RNase P cleavage site. Warnecke JM, et al.
Proc Natl Acad Sci U S A 1996 Aug 20;93(17):8924–8

RNA, TRANSFER, HIS

GENETICS

A chloroplast derived trnH gene is expressed in the mitochondrial genome of gramineous plants. Kanno A, et al. **Plant Mol Biol** 1997 May;34(2):353–6

METABOLISM

Single nucleotide modulation of uridine to pseudouridine rearrangement in transfer RNA catalyzed by pseudouridine synthase I. Chihade JW, et al. **J Mol Recognit** 1996 Sep–Dec;9(5–6):524–7
Nucleotide substitutions within U5 are critical for efficient reverse transcription of human immunodeficiency virus type 1 with a primer binding site complementary to tRNA(His). Li Y, et al. **J Virol** 1997 Sep;71(9):6315–22
Nucleotide sequences within the U5 region of the viral RNA genome are the major determinants for an human immunodeficiency virus type 1 to maintain a primer binding site complementary to tRNA(His). Zhang Z, et al.
Virology 1996 Dec 15;226(2):306–17

RNA, TRANSFER, ILE

CHEMISTRY

The modified wobble base inosine in yeast tRNAIle is a positive determinant for aminoacylation by isoleucyl-tRNA synthetase. Senger B, et al.
Biochemistry 1997 Jul 8;36(27):8269–75

GENETICS

An ileX tRNA gene is located close to the Shiga toxin II operon in enterohemorrhagic Escherichia coli O157 and non-O157 strains. Schmidt H, et al.
FEMS Microbiol Lett 1997 Apr 1;149(1):39–44
Analysis of a hotspot for deletion formation within the intron of the chloroplast trnI gene. Johnson DA, et al.
Genome 1996 Oct;39(5):999–1005
An additional mitochondrial tRNA(Ile) point mutation (A-to-G at nucleotide 4295) causing hypertrophic cardiomyopathy. Merante F, et al. **Hum Mutat** 1996; 8(3):216–22
Molecular phylogenetics of honey bee subspecies (Apis mellifera L.) inferred from mitochondrial DNA sequence. Arias MC, et al. **Mol Phylogenet Evol** 1996 Jun;5(3):557–66

RNA, TRANSFER, LEU

BIOSYNTHESIS

Characterization of an Escherichia coli mutant, feeA, displaying resistance to the calmodulin inhibitor 48/80 and reduced expression of the rare tRNA3Leu. Bouquin N, et al. **Mol Microbiol** 1996 May;20(4):853–65

CHEMISTRY

Influence of substrate structure on cleavage by hammerhead ribozyme. Scarabino D, et al. **FEBS Lett** 1996 Apr 1; 383(3):185–90
The anticodon loop is a major identity determinant of Saccharomyces cerevisiae tRNA(Leu). Soma A, et al.
J Mol Biol 1996 Nov 15;263(5):707–14
Molecular phylogeny for marine turtles based on sequences of the ND4-leucine tRNA and control regions of mitochondrial DNA. Dutton PH, et al.
Mol Phylogenet Evol 1996 Jun;5(3):511–21

GENETICS

Mitochondrial encephalomyopathy associated with a novel mutation in the mitochondrial tRNA(leu)(UUR) gene (A3243T). Shaag A, et al.
Biochem Biophys Res Commun 1997 Apr 28;233(3):637–9
Mental disorders in diabetic patients with mitochondrial transfer RNA(Leu) (UUR) mutation at position 3243. Miyaoka H, et al. **Biol Psychiatry** 1997 Sep 15;42(6):524–6
Beta-cell loss and glucose induced signalling defects in diabetes mellitus caused by mitochondrial tRNALeu(UUR) gene mutation. Oka Y, et al. **Diabet Med** 1996 Sep;13(9 Suppl 6):S98–102
UKPDS 21: low prevalence of the mitochondrial transfer RNA gene (tRNA(Leu(UUR))) mutation at position 3243bp in UK Caucasian type 2 diabetic patients. Saker PJ, et al. **Diabet Med** 1997 Jan;14(1):42–5
Mitochondrial DNA [tRNA(Leu)(UUR)] mutation in a southern Italian diabetic population [letter] Rigoli L, et al. **Diabetes Care** 1997 Apr;20(4):674–5
Diabetes with the 3243 mitochondrial tRNALeu(UUR) mutation. Characteristic neuroimaging findings. Suzuki Y, et al. **Diabetes Care** 1996 Jul;19(7):739–43
Mitochondrial aldehyde dehydrogenase in diabetes associated with mitochondrial tRNA(Leu(UUR)) mutation at position 3243. Suzuki Y, et al. **Diabetes Care** 1996 Dec;19(12):1423–5
Clinical picture of a case of diabetes with mitochondrial tRNA mutation at position 3271 [letter] [published erratum appears in Diabetes Care 1996 Dec;19(12):1458] Suzuki Y, et al. **Diabetes Care** 1996 Nov;19(11):1304–5
Islet cell antibody in mitochondrial diabetes [letter] Suzuki Y, et al. **Diabetes Res Clin Pract** 1997 Mar;35(2–3):163–5
Subclinical cardiac abnormality in mitochondrial diabetes mellitus, detected by 123I-BMIPP scintigraphy [letter] Momiyama Y, et al. **Diabetologia** 1996 Nov;39(11):1412–3
Acute pancreatitis in an infant with lactic acidosis and a mutation at nucleotide 3243 in the mitochondrial DNA tRNALeu(UUR) gene. Kishnani PS, et al.
Eur J Pediatr 1996 Oct;155(10):898–903
Islet cell antibodies in diabetes mellitus associated with a mitochondrial tRNA(Leu(UUR)) gene mutation. Oexle K, et al. **Exp Clin Endocrinol Diabetes** 1996;104(3):212–7
Use of polymerase chain reaction to identify a leucyl tRNA in Streptomyces coelicolor. Trepanier NK, et al. **Gene** 1997 Jul 1;193(1):59–63
Genetic and molecular analysis of a tRNA(Leu) missense suppressor of nudC3, a mutation that blocks nuclear migration in Aspergillus nidulans. Chiu YH, et al.
Genetics 1997 Mar;145(3):707–14
A novel heteroplasmic tRNAleu(CUN) mtDNA point mutation in a sporadic patient with mitochondrial encephalomyopathy segregates rapidly in skeletal muscle and suggests an approach to therapy. Fu K, et al.
Hum Mol Genet 1996 Nov;5(11):1835–40
Cucumber chloroplast trnL(CAA) gene: nucleotide sequence and in vivo expression analysis in etiolated cucumber seedlings treated with benzyladenine and light. Hande S, et al. **Indian J Biochem Biophys** 1996 Dec;33(6):448–54
Mutation in mitochondrial tRNA(Leu(UUR)) gene associated with progressive kidney disease. Jansen JJ, et al. **J Am Soc Nephrol** 1997 Jul;8(7):1118–24
Multiple loci of Pseudomonas syringae pv. syringae are involved in pathogenicity on bean: restoration of one lesion-deficient mutant requires two tRNA genes. Rich JJ, et al. **J Bacteriol** 1997 Apr;179(7):2247–58
bldA dependence of undecylprodigiosin production in Streptomyces coelicolor A3(2) involves a pathway-specific regulatory cascade. White J, et al. **J Bacteriol** 1997 Feb; 179(3):627–33
Nephropathy and growth hormone deficiency in a patient with mitochondrial tRNA(Leu(UUR)) mutation. Yorifuji T, et al. **J Med Genet** 1996 Jul;33(7):621–2
Only one nucleotide insertion to the long variable arm confers an efficient serine acceptor activity upon Saccharomyces cerevisiae tRNA(Leu) in vitro. Himeno H, et al. **J Mol Biol** 1997 May 16;268(4):704–11
Muscle histopathology in diabetes mellitus associated with mitochondrial tRNA(Leu(UUR)) mutation at position 3243. Suzuki Y, et al. **J Neurol Sci** 1997 Jan;145(1):49–53
Diabetes mellitus associated with the 3243 mitochondrial tRNA(Leu)(UUR) mutation: insulin secretion and sensitivity. Suzuki Y, et al. **Metabolism** 1997 Sep; 46(9):1019–23
A new mitochondrial DNA mutation associated with mitochondrial myopathy: tRNA(Leu)(UUR) 3254C-to-G. Kawarai T, et al. **Neurology** 1997 Aug;49(2):598–600
Optic neuropathy associated with mitochondrial tRNA[Leu(UUR)] A3243G mutation. Hwang JM, et al. **Ophthalmic Genet** 1997 Jun;18(2):101–5
Transfer RNA-mediated suppression of amber stop codons in transgenic Arabidopsis thaliana. Betzner AS, et al.
Plant J 1997 Mar;11(3):587–95
Transactivation of a target gene using a suppressor tRNA in transgenic tobacco plants. Choisne N, et al. **Plant J** 1997 Mar;11(3):597–604
Sequence analysis of a 14.2 kb fragment of Saccharomyces cerevisiae chromosome XIV that includes the ypt53, tRNALeu and gsr m2 genes and four new open reading frames. Garcia-Cantalejo JM, et al. **Yeast** 1996 May; 12(6):599–608

METABOLISM

Functional heterogeneity of leucine pools in human skeletal muscle. Ljungqvist OH, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):E564–70
Influence of substrate structure on cleavage by hammerhead ribozyme. Scarabino D, et al. **FEBS Lett** 1996 Apr 1; 383(3):185–90
Mechanism of inhibition of protein synthesis by macrolide and lincosamide antibiotics. Menninger JR.
J Basic Clin Physiol Pharmacol 1995;6(3–4):229–50
Only one nucleotide insertion to the long variable arm confers an efficient serine acceptor activity upon Saccharomyces cerevisiae tRNA(Leu) in vitro. Himeno H, et al. **J Mol Biol** 1997 May 16;268(4):704–11

RNA, TRANSFER, LYS

CHEMISTRY

Multiple forms of tRNA(Lys3) in HIV-1. Li Z, et al.
Biochem Biophys Res Commun 1996 Oct 14;227(2):530–40
The crystal structures of T. thermophilus lysyl-tRNA synthetase complexed with E. coli tRNA(Lys) and a T. thermophilus tRNA(Lys) transcript: anticodon recognition and conformational changes upon binding of a lysyl-adenylate analogue. Cusack S, et al. **EMBO J** 1996 Nov 15;15(22):6321–34
Synthesis and studies on the effect of 2-thiouridine and 4-thiouridine on sugar conformation and RNA duplex stability. Kumar RK, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1272–80

GENETICS

Characterization of a tRNA(Lys)(CUU) gene located in the opposite orientation upstream of a ZmFer2 ferritin gene in the maize nuclear genome. Fobis-Loisy I, et al.
Gene 1996 Dec 5;182(1–2):195–201
Sequence variation of the human immunodeficiency virus primer-binding site suggests the use of an alternative tRNA(Lys) molecule in reverse transcription. Das AT, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):837–40
Human immunodeficiency virus Type 1 nucleocapsid protein (NCp7) directs specific initiation of minus-strand DNA synthesis primed by human tRNA(Lys3) in vitro: studies of viral RNA molecules mutated in regions that flank the primer binding site. Li X, et al. **J Virol** 1996 Aug; 70(8):4996–5004
Detection and quantification of point mutations in mitochondrial DNA by PCR. Yoneda M, et al.
Methods Enzymol 1996;264:432–41
Precise branch point mapping and quantification of splicing intermediates. Vogel J, et al. **Nucleic Acids Res** 1997 May 15;25(10):2030–1
Unconventional structure of tRNA(Lys)SUU anticodon explains tRNA's role in bacterial and mammalian ribosomal frameshifting and primer selection by HIV-1. Agris PF, et al. **RNA** 1997 Apr;3(4):420–8
A putative helicase, the SUA5, PMR1, tRNALys1 genes and four open reading frames have been detected in the DNA sequence of an 8.8 kb fragment of the left arm of chromosome VII of Saccharomyces cerevisiae. Klima R, et al. **Yeast** 1996 Sep;12(10B Suppl):1033–40
The sequence of a 54.7 kb fragment of yeast chromosome XV reveals the presence of two tRNAs and 24 new open reading frames. Valens M, et al. **Yeast** 1997 Mar 30; 13(4):379–90

METABOLISM

RNA-hydrolyzing antibodies from peripheral blood of patients with lupus erythematosus. Vlassov AV, et al.
Biochemistry (Mosc) 1997 May;62(5):474–9
Mechanisms of tRNA import into yeast mitochondria: an overview. Tarassov IA, et al. **Biochimie** 1996;78(6):502–10 (55 ref.)
Interaction of human immunodeficiency virus type 1 reverse transcriptase with primer tRNALys3 and affinity modification of the enzyme by tRNALys3 derivatives. Nevinsky GA, et al. **Eur J Biochem** 1996 Sep 15; 240(3):774–80
A base substitution in the amino acid acceptor stem of tRNA(Lys) causes both misacylation and altered decoding. Pagel FT, et al. **Gene Expr** 1996;6(2):101–12
Effect of mutations in the nucleocapsid protein (NCp7) upon Pr160(gag-pol) and tRNA(Lys) incorporation into human immunodeficiency virus type 1. Huang Y, et al. **J Virol** 1997 Jun;71(6):4378–84

RNA, TRANSFER, MET

Identification of a sequence within U5 required for human immunodeficiency virus type 1 to stably maintain a primer binding site complementary to tRNA(Met). Kang SM, et al. **J Virol** 1997 Jan;71(1):207–17

BIOSYNTHESIS

Use of a nonviral vector to express a chimeric tRNA-ribozyme against lymphocytic choriomeningitis virus: cytoplasmic accumulation of a catalytically competent transcript but minimal antiviral effect. Gebhard JR, et al. **Antisense Nucleic Acid Drug Dev** 1997 Feb; 7(1):3–11
Importance of structural features for tRNA(Met) identity. Aphasizhev R, et al. **RNA** 1997 May;3(5):489–97

CHEMISTRY

The determination of the in situ structure by nuclear spin contrast variation. Stuhrmann HB, et al. **Basic Life Sci** 1996;64:397–413
Automated chemical synthesis of biologically active tRNA having a sequence corresponding to Ascaris suum mitochondrial tRNA(Met) toward NMR measurements. Ohtsuki T, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1070–3
On the conformation of the anticodon loops of initiator and elongator methionine tRNAs. Schweisguth DC, et al.
J Mol Biol 1997 Apr 4;267(3):505–19
Importance of structural features for tRNA(Met) identity. Aphasizhev R, et al. **RNA** 1997 May;3(5):489–97
Sequence comparison of the Ty1 and Ty2 elements of the yeast genome supports the structural model of the tRNAiMet-Ty1 RNA reverse transcription initiation complex. Friant S, et al. **Yeast** 1997 Jun 15;13(7):639–45

GENETICS

Structural feature of the initiator tRNA gene from Pyrodictium occultum and the thermal stability of its gene product, tRNA(imet). Ushida C, et al. **Biochimie** 1996;

RNA, TRANSFER, MET

78(10):847–55

Multiple loci of Pseudomonas syringae pv. syringae are involved in pathogenicity on bean: restoration of one lesion-deficient mutant requires two tRNA genes. Rich JJ, et al. **J Bacteriol** 1997 Apr;179(7):2247–58

Plant nuclear tRNA(Met) genes are ubiquitously interrupted by introns. Akama K, et al. **Plant Mol Biol** 1996 Nov; 32(3):427–34

Transcription initiation sites for sorghum mitochondrial atp9 are positioned immediately 3' to trnfM. Yan B, et al. **Plant Mol Biol** 1997 Jul;34(5):823–9

Sequence comparison of the Ty1 and Ty2 elements of the yeast genome supports the structural model of the tRNAiMet–Ty1 RNA reverse transcription initiation complex. Friant S, et al. **Yeast** 1997 Jun 15;13(7):639–45

METABOLISM

RNA splicing ligase activity in the archaeon Haloferax volcanii. Gomes I, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):588–94

Binding constants in the formation of mammalian protein synthesis initiation complexes and the role of mRNA. Manchester KL. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):27–9

Yeast tRNA(Met) recognition by methionyl-tRNA synthetase requires determinants from the primary, secondary and tertiary structure: a review. Senger B, et al. **Biochimie** 1996;78(7):597–604 (58 ref.)

Structural feature of the initiator tRNA gene from Pyrodictium occultum and the thermal stability of its gene product, tRNA(imet). Ushida C, et al. **Biochimie** 1996; 78(10):847–55

Further study on association of 5SrRNA-L5 protein complex and methionyl-tRNA to methionyl-tRNA synthetase in the macromolecular aminoacyl-tRNA synthetase complex. Ogata K, et al. **J Biochem (Tokyo)** 1996 Nov;120(5):869–80

Lysine 207 as the site of cross-linking between the 3'-end of Escherichia coli initiator tRNA and methionyl-tRNA formyltransferase. Gite S, et al. **J Biol Chem** 1997 Feb 21; 272(8):5305–12

Interplay of methionine tRNAs with translation elongation factor Tu and translation initiation factor 2 in Escherichia coli. Guillon JM, et al. **J Biol Chem** 1996 Sep 13; 271(37):22321–5

RNA, TRANSFER, METHYLTRANSFERASES

METABOLISM

Interaction of tRNA with tRNA (guanosine-1)methyltransferase: binding specificity determinants involve the dinucleotide G36pG37 and tertiary structure. Redlak M, et al. **Biochemistry** 1997 Jul 22;36(29):8699–709

Intron-dependent enzymatic formation of modified nucleosides in eukaryotic tRNAs: a review. Grosjean H, et al. **Biochimie** 1997 May;79(5):293–302 (74 ref.)

The dynamic NMR structure of the T psi C-loop: implications for the specificity of tRNA methylation. Yao LJ, et al. **J Biomol NMR** 1997 Apr;9(3):229–44

RNA, TRANSFER, PHE

CHEMISTRY

Synthetic and biological applications of tricyclic analogues of guanosine. Golankiewicz B. **Acta Biochim Pol** 1996; 43(1):53–64 (47 ref.)

The determination of the in situ structure by nuclear spin contrast variation. Stuhrmann HB, et al. **Basic Life Sci** 1996;64:397–413

Pattern recognition approach to nucleic acid sequences. Seetharaman J, et al. **Biochem Mol Biol Int** 1996 Dec; 40(6):1105–10

Efficient modification of RNA by porphyrin cation photochemistry: monitoring the folding of coaxially stacked RNA helices in tRNA(Phe) and the human immunodeficiency virus type 1 rev response element RNA. Celander DW, et al. **Biochemistry** 1996 Sep 17; 35(37):12061–9

The angle between the anticodon and aminoacyl acceptor stems of yeast tRNA(Phe) is strongly modulated by magnesium ions. Friederich MW, et al. **Biochemistry** 1997 May 20;36(20):6090–9

The ternary complex of aminoacylated tRNA and EF-Tu-GTP. Recognition of a bond and a fold. Nissen P, et al. **Biochimie** 1996;78(11–12):921–33 (62 ref.)

The dynamic NMR structure of the T psi C-loop: implications for the specificity of tRNA methylation. Yao LJ, et al. **J Biomol NMR** 1997 Apr;9(3):229–44

Exploring phenotype space through neutral evolution. Huynen MA. **J Mol Evol** 1996 Sep;43(3):165–9

Sequence/structure selective thermal and photochemical cleavage of yeast-tRNA(Phe) by UO(2)2+. Nielsen PE, et al. **J Mol Recognit** 1996 May–Jun;9(3):228–32

A new method to monitor the rate of conformational transitions in RNA. Maglott EJ, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3297–301

Visualization of RNA crystal growth by atomic force microscopy. Ng JD, et al. **Nucleic Acids Res** 1997 Jul 1; 25(13):2582–8

Steric factors influencing hybridisation of nucleic acids to oligonucleotide arrays. Shchepinov MS, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1155–61

Site-specific hydrolysis of yeast tRNAPhe by anthraquinone-glycine and anthraquinone-iminodiacetate conjugates. Endo M, et al. **Nucleic Acids Symp Ser** 1995; (34):109–10

The crystal structure of phenylalanyl-tRNA synthetase from thermus thermophilus complexed with cognate tRNAPhe. Goldgur Y, et al. **Structure** 1997 Jan 15;5(1):59–68

Structure of the ternary complex of EF-Tu: macromolecular mimicry in translation. Nyborg J, et al. **Trends Biochem Sci** 1996 Mar;21(3):81–2

DRUG EFFECTS

Sequence-specific cleavage of yeast tRNA(Phe) with oligonucleotides conjugated to a diimidazole construct. Vlassov V, et al. **Antisense Nucleic Acid Drug Dev** 1997 Feb;7(1):39–42

Selective cleavages of tRNAPhe with secondary and tertiary structures by enediyne antitumor antibiotics. Sugiura Y, et al. **Bioorg Med Chem** 1997 Jun;5(6):1229–34

GENETICS

Evolution of a mitochondrial tRNA PHE gene in A. thaliana: import of cytosolic tRNA PHE into mitochondria. Chen HC, et al. **Biochem Biophys Res Commun** 1997 Aug 18; 237(2):432–7

Analyses of frameshifting at UUU-pyrimidine sites. Schwartz R, et al. **Nucleic Acids Res** 1997 May 15;25(10):2005–11

Effect of nucleotides 37 and 38 on cleavage of tRNAPhe precursors. Liu J, et al. **Sci China C Life Sci** 1996 Jun; 39(3):243–50

[The effect of Mg2+ and Ca2+ ions on the aminoacylation of of transcripts of bacteriophage T5 and Escherichia coli tRNA(Phe) genes] Kholod NS, et al. **Mol Biol (Mosk)** 1996 Sep-Oct;30(5):1066–75 **(Rus)**

ISOLATION & PURIFICATION

A procedure for isolation of pure complexes of acylated and unacylated tRNA(Phe) with ribosomes from Escherichia coli. Chinali G. **Anal Biochem** 1996 Oct 1;241(1):30–4

METABOLISM

Sequence-specific cleavage of yeast tRNA(Phe) with oligonucleotides conjugated to a diimidazole construct. Vlassov V, et al. **Antisense Nucleic Acid Drug Dev** 1997 Feb;7(1):39–42

Influence of systematic error on the shape of the scatchard plot of tRNAPhe binding to eukaryotic ribosomes. Nekhai SA, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):401–4

Selective cleavages of tRNAPhe with secondary and tertiary structures by enediyne antitumor antibiotics. Sugiura Y, et al. **Bioorg Med Chem** 1997 Jun;5(6):1229–34

Transfer RNA(Phe) isoacceptors possess non-identical set of identity elements at high and low Mg2+ concentration. Kholod NS, et al. **FEBS Lett** 1997 Jul 7;411(1):123–7

Pleiotropic effects of intron removal on base modification pattern of yeast tRNAPhe: an in vitro study. Jiang HQ, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2694–701

Site-specific hydrolysis of yeast tRNAPhe by anthraquinone-glycine and anthraquinone-iminodiacetate conjugates. Endo M, et al. **Nucleic Acids Symp Ser** 1995; (34):109–10

Nonexponential kinetics of a single tRNAPhe molecule under physiological conditions. Jia Y, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7932–6

Photoaffinity labeling of 30S-subunit proteins S7 and S11 by 4-thiouridine-substituted tRNA(Phe) situated at the P site of Escherichia coli ribosomes. Rosen KV, et al. **RNA** 1997 Sep;3(9):1028–36

Identification of 2'-hydroxyl groups required for interaction of a tRNA anticodon stem-loop region with the ribosome. von Ahsen U, et al. **RNA** 1997 Jan;3(1):49–56

RNA, TRANSFER, PRECURSORS see **RNA PRECURSORS**

RNA, TRANSFER, PRO

CHEMISTRY

Structural requirements for the formation of 1-methylguanosine in vivo in tRNA(Pro)GGG of Salmonella typhimurium. Qian Q, et al. **J Mol Biol** 1997 Feb 21;266(2):283–96

GENETICS

Structural requirements for the formation of 1-methylguanosine in vivo in tRNA(Pro)GGG of Salmonella typhimurium. Qian Q, et al. **J Mol Biol** 1997 Feb 21;266(2):283–96

A phylogeny of the bears (Ursidae) inferred from complete sequences of three mitochondrial genes. Talbot SL, et al. **Mol Phylogenet Evol** 1996 Jun;5(3):567–75

The sequence of a 54.7 kb fragment of yeast chromosome XV reveals the presence of two tRNAs and 24 new open reading frames. Valens M, et al. **Yeast** 1997 Mar 30; 13(4):379–90

METABOLISM

RNase H cleavage of tRNAPro mediated by M-MuLV and HIV-1 reverse transcriptases. Smith CM, et al. **Virology** 1997 Mar 17;229(2):437–46

RNA, TRANSFER, SER

BIOSYNTHESIS

Transfer RNA structural change is a key element in the reassignment of the CUG codon in Candida albicans. Santos MA, et al. **EMBO J** 1996 Sep 16;15(18):5060–8

Processing of human mitochondrial tRNA(Ser(AGY))GCU: a novel pathway in tRNA biosynthesis. Rossmanith W. **J Mol Biol** 1997 Jan 31;265(4):365–71 (26 ref.)

CHEMISTRY

Pattern recognition approach to nucleic acid sequences. Seetharaman J, et al. **Biochem Mol Biol Int** 1996 Dec; 40(6):1105–10

Protein dissection of the antiparallel coiled coil from Escherichia coli seryl tRNA synthetase. Oakley MG, et al. **Biochemistry** 1997 Mar 4;36(9):2544–9

Selenocysteine synthesis in mammalia: an identity switch from tRNA(Ser) to tRNA(Sec). Amberg R, et al. **J Mol Biol** 1996 Oct 18;263(1):8–19

Expression of bovine mitochondrial tRNASer GCU derivatives in Escherichia coli. Hayashi I, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3503–7

GENETICS

The effect on mitochondrial function of the tRNA Ser(UCN)/COI A7445G mtDNA point mutation associated with maternally-inherited sensorineural deafness. Hyslop SJ, et al. **Biochem Mol Biol Int** 1997 Jul; 42(3):567–75

Codon reassignment in Candida species: an evolutionary conundrum. Tuite MF, et al. **Biochimie** 1996; 78(11–12):993–9 (35 ref.)

Expression of bovine mitochondrial tRNASer GCU derivatives in Escherichia coli. Hayashi I, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3503–7

METABOLISM

The yeast La protein is required for the 3' endonucleolytic cleavage that matures tRNA precursors. Yoo CJ, et al. **Cell** 1997 May 2;89(3):393–402

Selection of aminoacylated tRNAs from RNA libraries having randomized acceptor stem sequences: using old dogs to perform new tricks. Sampson JR, et al. **Methods Enzymol** 1996;267:384–410

RNA, TRANSFER, THR

ANALYSIS

Accumulation of nuclear-encoded tRNA(Thr) (AGU) in mitochondria of the liverwort Marchantia polymorpha. Akashi K, et al. **Biochim Biophys Acta** 1997 Feb 28; 1350(3):262–6

GENETICS

Mitochondrial tRNA(Gln) and tRNA(Thr) gene variants in Parkinson's disease. Mayr-Wohlfart U, et al. **Eur J Med Res** 1997 Mar 24;2(3):111–3

A phylogeny of the bears (Ursidae) inferred from complete sequences of three mitochondrial genes. Talbot SL, et al. **Mol Phylogenet Evol** 1996 Jun;5(3):567–75

Sequence analysis of a 10.5 kb DNA fragment from the yeast chromosome VII reveals the presence of three new open reading frames and of a tRNAThr gene. Mazzoni C, et al. **Yeast** 1997 Mar 30;13(4):369–72

RNA, TRANSFER, TRP

GENETICS

Maternally inherited encephalopathy associated with a single-base insertion in the mitochondrial tRNATrp gene. Santorelli FM, et al. **Ann Neurol** 1997 Aug;42(2):256–60

UGA suppression by tRNACmCATrp occurs in diverse virus RNAs due to a limited influence of the codon context. Urban C, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3424–30

METABOLISM

Splicing of intron-containing tRNATrp by the archaeon Haloferax volcanii occurs independent of mature tRNA structure. Armbruster DW, et al. **J Biol Chem** 1997 Aug 8;272(32):19758–62

RNA, TRANSFER, TYR

GENETICS

FIS activates sequential steps during transcription initiation at a stable RNA promoter. Muskhelishvili G, et al. **EMBO J** 1997 Jun;16(12):3655–65

In vitro analysis of elongation and termination by mutant RNA polymerases with altered termination behavior. Shaaban SA, et al. **Mol Cell Biol** 1996 Nov;16(11):6468–76

RNA editing in the acceptor stem of squid mitochondrial tRNA(Tyr). Tomita K, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4987–91
Regulation of tRNA suppressor activity by an intron–encoded polyadenylation signal. Liang S, et al. **RNA** 1997 Jun;3(6):648–59

METABOLISM

Role of an RNA–binding protein in import of tRNA into Leishmania mitochondria. Adhya S, et al. **J Biol Chem** 1997 Aug 22;272(34):21396–402
The Mauriceville retroplasmid reverse transcriptase initiates cDNA synthesis de novo at the 3' end of tRNAs. Chiang CC, et al. **Mol Cell Biol** 1997 Aug;17(8):4526–35

RNA, TRANSFER, VAL

GENETICS

Lack of gene– and strand–specific DNA repair in RNA polymerase III–transcribed human tRNA genes. Dammann R, et al. **Mol Cell Biol** 1997 Jan;17(1):219–29
A mitochondrial DNA tRNA(Val) point mutation associated with adult–onset Leigh syndrome. Chalmers RM, et al. **Neurology** 1997 Aug;49(2):589–92

METABOLISM

Single nucleotide modulation of uridine to pseudouridine rearrangement in transfer RNA catalyzed by pseudouridine synthase I. Chihade JW, et al. **J Mol Recognit** 1996 Sep–Dec;9(5–6):524–7

RNA TUMOR VIRUSES see RETROVIRIDAE

RNA, VIRAL

Absence of entero– and cardioviral RNA in multiple sclerosis brain tissue. Dessau RB, et al. **Acta Neurol Scand** 1997 May; 95(5):284–6
Classification of turnip mosaic virus isolates according to the 3'–untranslated region. Petrzik K, et al. **Acta Virol** 1996 Jun;40(3):151–5
Quantitative dynamics of HIV type 1 expression. Comar M, et al. **AIDS Res Hum Retroviruses** 1996 Jan 20; 12(2):117–126
RNAs 4A and 5 are present in tomato aspermy virus and both subgroups of cucumber mosaic virus. Blanchard CL, et al. **Arch Virol** 1997;142(6):1273–83
The complete sequence of the genomic RNAs of spinach latent virus. Ge X, et al. **Arch Virol** 1997;142(6):1213–26
A viroid from Brunfelsia undulata closely related to the Columnea latent viroid. Spieker RL. **Arch Virol** 1996; 141(10):1823–32
In vitro translation of the full–length RNA transcript of figwort mosaic virus (Caulimovirus). Ranu RS, et al. **Gene Expr** 1996;5(3):143–53
E1A RNA transcripts amplify adenovirus–mediated tumor reduction. Dion LD, et al. **Gene Ther** 1996 Nov; 3(11):1021–5
Intracellular application of hairpin ribozyme genes against hepatitis B virus. Welch PJ, et al. **Gene Ther** 1997 Jul; 4(7):736–43
In vitro sensitization of the B16 murine melanoma cells to ganciclovir by different RNA and plasmid DNA constructions encoding HSVtk. Yarovoi SV, et al. **Gene Ther** 1996 Oct;3(10):913–8
Destabilization of bacteriophage T4 mRNAs by a mutation of gene 61.5. Kai T, et al. **Genetics** 1996 Sep;144(1):7–14
Isolation of Japanese encephalitis virus from Culex sitiens mosquitoes in Selangor, Malaysia. Vythilingam I, et al. **J Am Mosq Control Assoc** 1994 Jun;10(2 Pt 1):228–9
Murine gammaherpesvirus 68 encodes tRNA–like sequences which are expressed during latency. Bowden RJ, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1675–87
The nucleotide sequence of RNA1 and RNA2 of olive latent virus 2 and its relationships in the family Bromoviridae. Grieco F, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2637–44
The nucleotide sequence of RNA3 and RNA4 of olive latent virus 2. Grieco F, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):929–37
Sequence of RNA2 of the Helicoverpa armigera stunt virus (Tetraviridae) and bacterial expression of its genes. Hanzlik TN, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):799–811
Identification of a protein linked to the genomic and subgenomic mRNAs of feline calicivirus and its role in translation. Herbert TP, et al. **J Gen Virol** 1997 May;78 (Pt 5):1033–40
Genome segment 5 of rice ragged stunt virus encodes a virion protein. Li Z, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3155–60
The 119 kDa and 124 kDa polyproteins of arabis mosaic nepovirus (isolate S) are encoded by two distinct RNA2 species. Loudes AM, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):899–906
Structure of influenza virus ribonucleoprotein particles. II. Purified RNA–free influenza virus ribonucleoprotein forms structures that are indistinguishable from the intact influenza virus ribonucleoprotein particles. Ruigrok RW, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):1009–14
The nucleotide sequence and genomic organization of grapevine virus B. Saldarelli P, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2645–52
The complete nucleotide sequence and genome organization of the M RNA segment of peanut bud necrosis tospovirus and comparison with other tospoviruses. Satyanarayana T, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2347–52
Translational properties of the untranslated regions of the p10 messenger RNA of Autographa californica multicapsid nucleopolyhedrovirus. Scheper GC, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):687–96
The complete nucleotide sequence of RNA 3 of citrus leaf rugose and citrus variegation ilarviruses. Scott SW, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):957–63
The molecular structure of Iresine viroid, a new viroid species from Iresine herbstii (beefsteak plant). Spieker RL. **J Gen Virol** 1996 Oct;77 (Pt 10):2631–5
Sequence polymorphism in the 5'NTR and in the P1 coding region of potato virus Y genomic RNA. Tordo VM, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):939–49
Human immunodeficiency virus type 1 RNA populations in faeces with higher homology to intestinal populations than to blood populations. van der Hoek L, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2415–25
Addition of nucleotides similar to deleted CAA repeats in the 5' non–coding region of tomato mosaic virus RNA following propagation. Watanabe Y, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2353–7
Complete nucleotide sequences of hepatitis B virus genomes associated with epidemic fulminant hepatitis. Asahina Y, et al. **J Med Virol** 1996 Feb;48(2):171–8
Positive and negative strand of hepatitis C virus RNA sequences in peripheral blood mononuclear cells in patients with chronic hepatitis C: no correlation with viral genotypes 1b, 2a, and 2b. Kao JH, et al. **J Med Virol** 1997 Jul;52(3):270–4
Amplification of GB virus–C/hepatitis G virus RNA with primers from different regions of the viral genome. Kao JH, et al. **J Med Virol** 1997 Apr;51(4):284–9
Experimental infection of the laboratory rat with the hepatitis E virus. Maneerat Y, et al. **J Med Virol** 1996 Feb; 48(2):121–8
Persistence of hepatitis C virus RNA in established human hepatocellular carcinoma cell lines. Tsuboi S, et al. **J Med Virol** 1996 Feb;48(2):133–40
Rapid evolution of translational control mechanisms in RNA genomes. Klovins J, et al. **J Mol Biol** 1997 Jan 31; 265(4):372–84
HIV–1 reverse transcriptase discriminates against non–self tRNA primers. Oude Essink BB, et al. **J Mol Biol** 1996 Nov 29;264(2):243–54
Correlation of ribonucleic acid polymerase chain reaction, acid dissociated p24 antigen, and neopterin with progression of disease. A retrospective, longitudinal study of vertically acquired human immunodeficiency virus type 1 infection in children. Zaknun D, et al. **J Pediatr** 1997 Jun;130(6):898–905
Critical residues of Semliki Forest virus RNA capping enzyme involved in methyltransferase and guanylyltransferase–like activities. Ahola T, et al. **J Virol** 1997 Jan;71(1):392–7
The 5' ends of Thogoto virus (Orthomyxoviridae) mRNAs are homogeneous in both length and sequence. Albo C, et al. **J Virol** 1996 Dec;70(12):9013–7
Dynamics and modulation of human immunodeficiency virus type 1 transcripts in vitro and in vivo. Bagnarelli P, et al. **J Virol** 1996 Nov;70(11):7603–13
Role of the intergenic dinucleotide in vesicular stomatitis virus RNA transcription. Barr JN, et al. **J Virol** 1997 Mar; 71(3):1794–801
Characterization of an abundant, unique 1.7–kilobase bovine herpesvirus 4 (BHV–4) late RNA and mapping of a BHV–4 IE2 transactivator–binding site in its promoter–regulatory region. Bermudez–Cruz R, et al. **J Virol** 1997 Jan; 71(1):527–38
Characterization of the spliced pol transcript of feline foamy virus: the splice acceptor site of the pol transcript is located in gag of foamy viruses. Bodem J, et al. **J Virol** 1996 Dec; 70(12):9024–7
A subgenomic mRNA transcript of the coronavirus mouse hepatitis virus strain A59 defective interfering (DI) RNA is packaged when it contains the DI packaging signal. Bos EC, et al. **J Virol** 1997 Jul;71(7):5684–7
A conserved hairpin motif in the R–U5 region of the human immunodeficiency virus type 1 RNA genome is essential for replication. Das AT, et al. **J Virol** 1997 Mar; 71(3):2346–56
Multiple widely spaced elements determine the efficiency with which a distal cistron is expressed from the polycistronic pregenomic RNA of figwort mosaic caulimovirus. Edskes HK, et al. **J Virol** 1997 Feb; 71(2):1567–75
Packaging signals in alphaviruses. Frolova E, et al. **J Virol** 1997 Jan;71(1):248–58
Placement of tRNA primer on the primer–binding site requires pol gene expression in avian but not murine retroviruses. Fu W, et al. **J Virol** 1997 Sep;71(9):6940–6
Induction of an exceptionally high–level, nontranslated, Epstein–Barr virus–encoded polyadenylated transcript in the Burkitt's lymphoma line Daudi. Gao Y, et al. **J Virol** 1997 Jan;71(1):84–94
Identification of a sequence within U5 required for human immunodeficiency virus type 1 to stably maintain a primer binding site complementary to tRNA(Met). Kang SM, et al. **J Virol** 1997 Jan;71(1):207–17
Subgenomic replicons of the flavivirus Kunjin: construction and applications. Khromykh AA, et al. **J Virol** 1997 Feb; 71(2):1497–505
Analysis of the gene start and gene end signals of human respiratory syncytial virus: quasi–templated initiation at position 1 of the encoded mRNA. Kuo L, et al. **J Virol** 1997 Jul;71(7):4944–53
Position dependence of functional hairpins important for human immunodeficiency virus type 1 RNA encapsidation in vivo. McBride MS, et al. **J Virol** 1997 Mar;71(3):2050–8
Segment–specific noncoding sequences of the influenza virus genome RNA are involved in the specific competition between defective interfering RNA and its progenitor RNA segment at the virion assembly step. Odagiri T, et al. **J Virol** 1997 Mar;71(3):2138–45
Characterization of late gene transcripts expressed during vegetative replication of human papillomavirus type 31b. Ozbun MA, et al. **J Virol** 1997 Jul;71(7):5161–72
A dual role of the putative RNA dimerization initiation site of human immunodeficiency virus type 1 in genomic RNA packaging and proviral DNA synthesis. Paillart JC, et al. **J Virol** 1996 Dec;70(12):8348–54
Replication and packaging of coronavirus infectious bronchitis virus defective RNAs lacking a long open reading frame. Pénzes Z, et al. **J Virol** 1996 Dec; 70(12):8660–8
Infectious RNA transcripts from full–length dengue virus type 2 cDNA clones made in yeast. Polo S, et al. **J Virol** 1997 Jul;71(7):5366–74
Improvement of the specific infectivity of the rubella virus (RUB) infectious clone: determinants of cytopathogenicity induced by RUB map to the nonstructural proteins. Pugachev KV, et al. **J Virol** 1997 Jan;71(1):562–8
Internal entry of ribosomes is directed by the 5' noncoding region of classical swine fever virus and is dependent on the presence of an RNA pseudoknot upstream of the initiation codon. Rijnbrand R, et al. **J Virol** 1997 Jan; 71(1):451–7
Intermediate class of mRNAs in African swine fever virus. Rodríguez JM, et al. **J Virol** 1996 Dec;70(12):8584–9
Support of a cucumber mosaic virus satellite RNA maps to a single amino acid proximal to the helicase domain of the helper virus. Roossinck MJ, et al. **J Virol** 1997 Jan; 71(1):608–12
Inactivation of the human immunodeficiency virus type 1 inhibitory elements allows Rev–independent expression of Gag and Gag/protease and particle formation. Schneider R, et al. **J Virol** 1997 Jul;71(7):4892–903
Host range phenotype induced by mutations in the internal ribosomal entry site of poliovirus RNA. Shiroki K, et al. **J Virol** 1997 Jan;71(1):1–8
Two Microplitis demolitor polydnavirus mRNAs expressed in hemocytes of Pseudoplusia includens contain a common cysteine–rich domain. Strand MR, et al. **J Virol** 1997 Mar; 71(3):2146–56
Approaches to determine stoichiometry of viral assembly components. Trottier M, et al. **J Virol** 1997 Jan; 71(1):487–94
Authentic and chimeric full–length genomic cDNA clones of bovine viral diarrhea virus that yield infectious transcripts. Vassilev VB, et al. **J Virol** 1997 Jan;71(1):471–8
Intracellular expression of RNA transcripts complementary to the human immunodeficiency virus type 1 gag gene inhibits viral replication in human CD4+ lymphocytes. Veres G, et al. **J Virol** 1996 Dec;70(12):8792–800
Nucleoprotein viral RNA and mRNA of Thogoto virus: a novel "cap–stealing" mechanism in tick–borne orthomyxoviruses? Weber F, et al. **J Virol** 1996 Dec; 70(12):8361–7
Reverse transcriptase activity in chicken embryo fibroblast culture supernatants is associated with particles containing endogenous avian retrovirus EAV–0 RNA. Weissmahr RN, et al. **J Virol** 1997 Apr;71(4):3005–12
In vitro selection of packaging sites in a double–stranded RNA virus. Yao W, et al. **J Virol** 1997 Mar;71(3):2157–62
Promoters for synthesis of the pre–C and pregenomic mRNAs of human hepatitis B virus are genetically distinct and differentially regulated. Yu X, et al. **J Virol** 1996 Dec; 70(12):8719–26
Forced evolution of a regulatory RNA helix in the HIV–1 genome. Berkhout B, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):940–7
Metal ion interaction with cosubstrate in self–splicing group I introns. Sjögren AS, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):648–53
dsRNA associated with virus–like particles in Eimeria spp. of the domestic fowl. Lee S, et al. **Parasitol Res** 1996; 82(6):518–23
Stoichiometric packaging of the three genomic segments of double–stranded RNA bacteriophage phi6. Qiao X, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4074–9
Changes in locations of crossover sites over time in de novo generated RNA recombinants. Carpenter CD, et al. **Virology** 1996 Sep 1;223(1):165–73
Genetic analysis of internal ribosomal entry site on hepatitis C virus RNA: implication for involvement of the highly ordered structure and cell type–specific transacting factors. Kamoshita N, et al. **Virology** 1997 Jun 23;233(1):9–18
Virus RNA persists within the retina in coronavirus–induced retinopathy. Komurasaki Y, et al. **Virology** 1996 Aug 15; 222(2):446–50

RNA splice site utilization by simian immunodeficiency viruses derived from sooty mangabey monkeys. Reinhart TA, et al. **Virology** 1996 Oct 1;224(1):338–44

Role of Mason–Pfizer monkey virus (MPMV) constitutive transport element (CTE) in the propagation of MPMV vectors by genetic complementation using homologous/heterologous env genes. Rizvi TA, et al. **Virology** 1996 Oct 15;224(2):517–32

Genomic organization and sequence conservation in type I Trichomonas vaginalis viruses. Su HM, et al. **Virology** 1996 Aug 15;222(2):470–3

In vitro mutational and inhibitory analysis of the cis-acting translational elements within the 5' untranslated region of coxsackievirus B3: potential targets for antiviral action of antisense oligomers. Yang D, et al. **Virology** 1997 Feb 3; 228(1):63–73

Recombinant genomic RNA of coronavirus MHV–A59 after coreplication with a DI RNA containing the MHV–RI spike gene. Zhang L, et al. **Virology** 1997 Mar 31; 230(1):93–102

Expression of interferon–gamma by a coronavirus defective-interfering RNA vector and its effect on viral replication, spread, and pathogenicity. Zhang X, et al. **Virology** 1997 Jul 7;233(2):327–38

Clustering of Argentinean tospoviruses with existing species in the genus by sequence analysis of a 450–nucleotide RNA region of the N gene. Ricardo D, et al. **Virus Genes** 1996; 13(3):255–62

The HA1 of cold-adapted influenza B vaccine is not altered during replication in human vaccinees. Abbasi S, et al. **Virus Res** 1995 Dec;39(2–3):377–83

Mutations in the nonconserved noncoding sequences of the influenza A virus segments affect viral vRNA formation. Bergmann M, et al. **Virus Res** 1996 Sep;44(1):23–31

The nucleotide sequence of hydrangea mosaic virus RNA 3 exhibits similarity with the RNA 3 of tobacco streak virus. Ge X, et al. **Virus Res** 1996 Jan;40(1):57–63

Nucleotide sequence of the coat protein genes of citrus mosaic virus. Iwanami T, et al. **Virus Res** 1996 Jun; 42(1–2):181–6

Anti–interferon activity of adenovirus–2–encoded VAI and VAII RNAs in translation in cultured human cells. Mori K, et al. **Virus Res** 1996 Jun;42(1–2):53–63

Analysis of sequence and pathogenic properties of two variants of encephalomyocarditis virus differing in a single amino acid in VP1. Nelsen–Salz B, et al. **Virus Res** 1996 Apr;41(2):109–22

A large duplication in the 3'-untranslated region of a subpopulation of RNA2 of the UK–M isolate of barley mild mosaic bymovirus. Peerenboom E, et al. **Virus Res** 1997 Jan;47(1):1–6

Genetic variation in Tula hantaviruses: sequence analysis of the S and M segments of strains from Central Europe. Plyusnin A, et al. **Virus Res** 1995 Dec;39(2–3):237–50

Phylogenetic comparison of the serotype-specific VP2 protein of bluetongue and related orbiviruses. Pritchard LI, et al. **Virus Res** 1995 Dec;39(2–3):207–20

Complete nucleotide sequence and biological properties of an infectious clone of prototype echovirus 9. Zimmermann H, et al. **Virus Res** 1995 Dec;39(2–3):311–9

ANALYSIS

Relationship between response to interferon therapy and detection of hepatitis C virus RNA by differential flotation centrifugation. Wato M, et al. **Acta Med Okayama** 1996 Jun;50(3):139–44

Type 2 poliovirus recombinants isolated from vaccine–associated cases and from healthy contacts in Brazil. Friedrich F, et al. **Acta Virol** 1996 Feb;40(1):27–33

Phylogenetic analysis of pestivirus based on the 5'-untranslated region. Harasawa R. **Acta Virol** 1996 Feb; 40(1):49–54

Screening of apple mosaic virus in hop cultivars in the Czech Republic by reverse transcription–polymerase chain reaction. Petrzik K, et al. **Acta Virol** 1997 Apr;41(2):101–3

Partial genomic sequence determination of yellow fever virus strain associated with a recent epidemic in Gabon. Pisano MR, et al. **Acta Virol** 1996 Apr;40(2):103–5

Stability of foot–and–mouth disease virus, its genome and proteins at 37 degrees C. Razdan R, et al. **Acta Virol** 1996 Feb;40(1):9–14

HIV–1 RNA quantification by one–tube quantitative NASBA in HIV–infected patients [letter] Bettini P, et al. **AIDS** 1996 Dec;10(14):1735–7

Alternative tRNA primers for HIV [letter] Lauermann V, et al. **AIDS** 1996 Dec;10(14):1738–40

Early and late HIV–1 RNA level and its association with other markers and disease progression in long–term AIDS–free homosexual men. Spijkerman IJ, et al. **AIDS** 1997 Sep;11(11):1383–8

Expression of HIV regulatory and structural mRNA in the central nervous system [see comments] Wiley CA, et al. **AIDS** 1996 Jul;10(8):843–7. Comment in: AIDS 1997 Jan;11(1):133–5. Comment in: AIDS 1997 Feb;11(2):251–2. Comment in: AIDS 1997 Apr;11(5):698–9.

Comparison of quantitative HCV RNA assays in chronic hepatitis C. Jacob S, et al. **Am J Clin Pathol** 1997 Mar; 107(3):362–7

Hepatic iron stainings in chronic hepatitis C patients with low HCV RNA levels: a predictive marker for IFN therapy. Akiyoshi F, et al. **Am J Gastroenterol** 1997 Sep; 92(9):1463–6

Measuring human immunodeficiency virus type 1 RNA viral load. Killian AD. **Am J Health Syst Pharm** 1997 Jul 15; 54(14):1646–51

Aggressive natural killer cell lymphoproliferative disorder associated with Epstein–Barr viral RNA. Hirose Y, et al. **Am J Hematol** 1997 Apr;54(4):314–20

Detection of hepatitis C virus RNA using ligation–dependent polymerase chain reaction in formalin–fixed, paraffin–embedded liver tissues. Park YN, et al. **Am J Pathol** 1996 Nov;149(5):1485–91

Intracellular viral localization in murine coxsackievirus–B3 myocarditis. Ultrastructural study by electron microscopic in situ hybridization. Ukimura A, et al. **Am J Pathol** 1997 Jun;150(6):2061–74

Aedes albopictus (Diptera:Culicidae) is incompetent as a vector of hepatitis C virus. Bellini R, et al. **APMIS** 1997 Apr;105(4):299–302

Detection of human enteric viruses in oysters by in vivo and in vitro amplification of nucleic acids. Chung H, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3772–8

Molecular epidemiological survey of rotaviruses in sewage by reverse transcriptase seminested PCR and restriction fragment length polymorphism assay. Dubois E, et al. **Appl Environ Microbiol** 1997 May;63(5):1794–800

Viral RNA in duodenal bile of cirrhotic patients with chronic hepatitis C. Kuan SF, et al. **Arch Pathol Lab Med** 1997 Aug;121(8):847–52

Detection of hepatitis C virus RNA sequences in hepatocellular carcinoma and its precursors by microdissection polymerase chain reaction. Saito K, et al. **Arch Pathol Lab Med** 1997 Apr;121(4):400–3

Molecular characterization of feline immunodeficiency virus genome obtained directly from organs of a naturally infected cat with marked neurological symptoms and encephalitis. Nishimura Y, et al. **Arch Virol** 1996; 141(10):1933–48

The complete nucleotide sequence of turnip mosaic virus RNA Japanese strain. Ohshima K, et al. **Arch Virol** 1996; 141(10):1991–7

Detection and tissue distribution of potato spindle tuber viroid in infected tomato plants by tissue print hybridization. Stark–Lorenzen P, et al. **Arch Virol** 1997; 142(7):1289–96

Conserved vRNA end sequences of Thogoto–orthomyxovirus suggest a new panhandle structure. Weber F, et al. **Arch Virol** 1997;142(5):1029–33

Genome rearrangements of rotaviruses. Desselberger U. **Arch Virol Suppl** 1996;12:37–51 (50 ref.)

Development of rotavirus molecular epidemiology: electropherotyping. Holmes IH. **Arch Virol Suppl** 1996; 12:87–91 (29 ref.)

Molecular epidemiology of human rotaviruses: genogrouping by RNA–RNA hybridization. Nakagomi O, et al. **Arch Virol Suppl** 1996;12:93–8 (18 ref.)

Quantitative detection of hepatitis C virus RNA in patients undergoing hemodialysis. de Medina M, et al. **ASAIO J** 1997 Jan–Feb;43(1):19–22

Infectious bursal disease viral RNA amplification using RT/PCR from bursa tissue following phenol: chloroform inactivation of the virus. Jackwood DJ, et al. **Avian Dis** 1996 Apr–Jun;40(2):457–60

Application of PCR for detection of mycoplasma DNA and pestivirus RNA in human live viral vaccines. Sasaki T, et al. **Biologicals** 1996 Dec;24(4):371–5

Quantitative RT–PCR using a PCR–generated competitive internal standard. Fille M, et al. **Biotechniques** 1997 Jul; 23(1):34, 36

Transmission of hepatitis C virus in allografted patients: use of viral genotyping as an epidemiological marker. Gangneux JP, et al. **Bone Marrow Transplant** 1996 Dec; 18(6):1131–3

Chronic variant of myocarditis associated with hepatitis C virus infection. Okabe M, et al. **Circulation** 1997 Jul 1; 96(1):22–4

Effective detection of active HCV infection: HCV RNA carrier state in a context free of hepatitis symptoms. Arapinis C, et al. **Clin Chim Acta** 1997 Feb 3;258(1):91–104

Identification of differentially expressed mRNA species during HIV infection by RNA arbitrarily primed PCR. Boyer V, et al. **Clin Diagn Virol** 1996 Oct;7(1):43–53

Higher order structures of coxsackievirus B 5' nontranslated region RNA. Currey KM, et al. **Curr Top Microbiol Immunol** 1997;223:169–90 (70 ref.)

Serum HCV–RNA and liver histologic findings in patients with long–term normal transaminases. Montalto G, et al. **Dig Dis Sci** 1997 Aug;42(8):1703–7

Viral load in relation to clinical outcome in HIV–infected children [letter] Bravo R, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):900

Relationship between viral genotype and viral load in patients with chronic hepatitis C. Garcia F, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):884–7

Prevalence of hepatitis C virus genotypes in southern Italy. Cicciarello S, et al. **Eur J Epidemiol** 1997 Jan;13(1):49–54

HCV–RNA levels play an important role independently of genotype in predicting response to interferon therapy. Picciotto A, et al. **Eur J Gastroenterol Hepatol** 1997 Jan; 9(1):67–9

Detection of proviruses and viral RNA in the early stages of feline immunodeficiency virus infection in cats: a possible model of the early stage of HIV infection. Ohkura T, et al. **Exp Anim** 1997 Jan;46(1):31–9

Detection of viral RNA by electron microscopic in situ hybridization (ISH–EM) in the germinal epithelium of mice infected with encephalomyocarditis (EMC) virus. Ueno A, et al. **Exp Anim** 1997 Jan;46(1):79–81

GB virus C RNA in serum, liver, and peripheral blood mononuclear cells from patients with chronic hepatitis B, C, and D. Madejón A, et al. **Gastroenterology** 1997 Aug; 113(2):573–8

A rapid screening procedure for the identification of high–titer retrovirus packaging clones. Murdoch B, et al. **Gene Ther** 1997 Jul;4(7):744–9

A method for accurate determination of terminal sequences of viral genomic RNA. Weng Z, et al. **Genome Res** 1995 Sep;5(2):202–7

Detection of human T lymphotrophic virus type I (HTLV–I) DNA and mRNA in individual cells by polymerase chain reaction (PCR) in situ hybridization (ISH) and reverse transcription (RT)–PCR ISH. Ohshima K, et al. **Hematol Oncol** 1996 Jun;14(2):91–100

Detection of hepatitis C virus RNA in circulating immune complexes by RT–PCR. Morita T, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):582–5

Hepatic expression of inducible nitric oxide synthase transcripts in chronic hepatitis C virus infection: relation to hepatic viral load and liver injury. Mihm S, et al. **Hepatology** 1997 Aug;26(2):451–8

The clinical significance of changes in genetic heterogeneity of the hypervariable region 1 in chronic hepatitis C with interferon therapy. Shindo M, et al. **Hepatology** 1996 Nov; 24(5):1018–23

Absence of EBV genome in lymphoepithelioma–like carcinomas of the larynx. Tardio JC, et al. **Histopathology** 1997 Feb;30(2):126–8

A simple and reliable method for screening retroviral producer clones without selectable markers. Onodera M, et al. **Hum Gene Ther** 1997 Jul 1;8(10):1189–94

Hepatitis C virus is not recoverable from liver tissue in cryptogenic cirrhosis: failure to identify hepatitis C virus–RNA using reverse transcription–mediated polymerase chain reaction. Geller SA, et al. **Hum Pathol** 1996 Nov;27(11):1161–5

NASBA technology: isothermal RNA amplification in qualitative and quantitative diagnostics. Romano JW, et al. **Immunol Invest** 1997 Jan–Feb;26(1–2):15–28

Quantitation of HCV viraemia by branched DNA signal amplification in patients treated with alpha–interferon––a longitudinal study. Iuliano R, et al. **Infection** 1996 Jul–Aug; 24(4):292–6

HIV–1 replication in the plasma and cerebrospinal fluid. Lafeuillade A, et al. **Infection** 1996 Sep–Oct;24(5):367–71

Tick–borne encephalitis: possibly a fatal disease in its acute stage. PCR amplification of TBE RNA from postmortem brain tissue. Tomažič J, et al. **Infection** 1997 Jan–Feb; 25(1):41–3

Characterization of polydnavirus–encoded mRNA in parasitized armyworm larvae. Yamanaka A, et al. **Insect Biochem Mol Biol** 1996 Jun;26(6):529–36

Detection of Epstein–Barr virus–encoded small RNA 1 and latent membrane protein 1 in synovial lining cells from rheumatoid arthritis patients. Takei M, et al. **Int Immunol** 1997 May;9(5):739–43

Detection of Epstein–Barr virus small RNAs EBER1 and EBER2 in lymphomas of SIV–infected rhesus monkeys by in situ hybridization. Pingel S, et al. **Int J Cancer** 1997 Jul 3;72(1):160–5

Alcohol intake increases hepatitis C virus–induced hepatocellular injury. Katakami Y, et al. **Intern Med** 1995 Dec;34(12):1153–7

Variations in the hypervariable region 1 of the envelope region E2 of hepatitis C virus RNA appear associated with virus persistence independently of liver disease. Brunetto MR, et al. **Ital J Gastroenterol** 1996 Dec;28(9):499–504

A study of HIV RNA viral load in AIDS patients with bacterial pneumonia. Bush CE, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Sep; 13(1):23–6

Genetic variability and molecular epidemiology of human and simian T cell leukemia/lymphoma virus type I. Gessain A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S132–45 (106 ref.)

Quantification of HIV–1 RNA in plasma: comparable results with the NASBA HIV–1 RNA QT and the AMPLICOR HIV monitor test. Vandamme AM, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Oct 1;13(2):127–39

Localization of HIV–1 RNA in mammalian nuclei. Zhang G, et al. **J Cell Biol** 1996 Oct;135(1):9–18

Detection of human immunodeficiency virus type 1 (HIV–1) DNA and RNA sequences in HIV–1 antibody–positive blood donors in Uganda by the Roche AMPLICOR assay. Jackson JB, et al. **J Clin Microbiol** 1997 Apr;35(4):873–6

Use of heat release and an internal RNA standard control in reverse transcription–PCR detection of Norwalk virus from stool samples. Schwab KJ, et al. **J Clin Microbiol** 1997 Feb;35(2):511–4

In vivo detection of porcine reproductive and respiratory syndrome virus RNA by in situ hybridization at different times postinfection. Sur JH, et al. **J Clin Microbiol** 1996 Sep;34(9):2280–6

Detection of hepatitis E virus RNA in stools and serum by reverse transcription–PCR. Turkoglu S, et al. **J Clin Microbiol** 1996 Jun;34(6):1568–71

RNA profile and structural protein analysis of rotaviruses isolated from diarrhoeal calves in India. Gulati BR, et al. **J Diarrhoeal Dis Res** 1997 Mar;15(1):12–6

Real–time monitoring of HCV–RNA by single tube assay kit and potential importance for predicting virological sustained response in patients with chronic hepatitis C. Shiratori Y, et al. **J Gastroenterol Hepatol** 1996 Aug; 11(8):705–11

Host haemocyte inactivation by an insect parasitoid: transient expression of a polydnavirus gene. Asgari S, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2653–62

Direct demonstration of persistent Epstein–Barr virus gene expression in peripheral blood of infected common marmosets and analysis of virus–infected tissues in vivo. Farrell PJ, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1417–24

Distribution and genetic heterogeneity of Puumala virus in Sweden. Hörling J, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2555–62

Mutational analysis of influenza virus promoter elements in vivo. Neumann G, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1709–17

Two novel subgenomic RNAs derived from RNA 3 of tomato aspermy cucumovirus. Shi B, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):505–10

Identification of a new genogroup of aquareovirus by RNA–RNA hybridization. Subramanian K, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1385–8

Isolation and characterization of Tula virus, a distinct serotype in the genus Hantavirus, family Bunyaviridae. Vapalahti O, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3063–7

Sequential changes in full–length genomes of hepatitis B virus accompanying acute exacerbation of chronic hepatitis B. Asahina Y, et al. **J Hepatol** 1996 Dec;25(6):787–94

Distribution of hepatitis C virus genotypes in German patients with chronic hepatitis C: correlation with clinical and virological parameters. Berg T, et al. **J Hepatol** 1997 Mar;26(3):484–91

Hepatitis C virus antibody, viral RNA and genotypes in leprous patients in Japan. Egawa K, et al. **J Hepatol** 1996 Apr;24(4):397–402

Hepatitis C virus genotypes and subtypes in patients with hepatitis C, with and without cryoglobulinemia. Frangeul L, et al. **J Hepatol** 1996 Oct;25(4):427–32

Low hepatitis C viremia levels in patients with anti–liver/kidney microsomal antibody type 1 positive chronic hepatitis. Giostra F, et al. **J Hepatol** 1996 Oct; 25(4):433–8

Clinical presentation of GB–C virus infection in drug abusers with chronic hepatitis C. Goeser T, et al. **J Hepatol** 1997 Mar;26(3):498–502

GBV–C/HGV is not the major cause of autoimmune hepatitis. Heringlake S, et al. **J Hepatol** 1996 Dec; 25(6):980–4

Persistent expression of hepatitis C virus genome in primary tumor and adrenal metastasis of a hepatocellular carcinoma developed in a non–cirrhotic liver [letter] Herr W, et al. **J Hepatol** 1996 Jul;25(1):122

Usefulness of HCV–RNA assays in efficacy evaluation of interferon treatment for chronic hepatitis C: Amplicor HCV assay and branched DNA probe assay. Nomura H, et al. **J Infect** 1997 May;34(3):249–55

High prevalence of GB virus C/hepatitis G virus in healthy persons in Ho Chi Minh City, Vietnam. Brown KE, et al. **J Infect Dis** 1997 Feb;175(2):450–3

The effect on human immunodeficiency virus type 1 RNA levels in cerebrospinal fluid after initiation of zidovudine or didanosine. Gisslén M, et al. **J Infect Dis** 1997 Feb; 175(2):434–7

Detection of enterovirus by polymerase chain reaction and culture in cerebrospinal fluid of children with transient neurologic complications associated with acute febrile illness. Hosoya M, et al. **J Infect Dis** 1997 Mar;175(3):700–3

Molecular investigation of GB virus C infection in hemophiliacs in Japan. Kinoshita T, et al. **J Infect Dis** 1997 Feb;175(2):454–7

Evaluation of human immunodeficiency virus (HIV) type 1 RNA levels in cerebrospinal fluid and viral resistance to zidovudine in children with HIV encephalopathy. Sei S, et al. **J Infect Dis** 1996 Dec;174(6):1200–6

Distribution of infecting hepatitis C virus genotypes in end–stage liver disease patients at a large American transplantation center. Vargas HE, et al. **J Infect Dis** 1997 Feb;175(2):448–50

Clinical significance of hepatitis C viral RNA status and its correlation to antibodies to structural HCV antigens in anti–HCV reactive patients with normal liver tests. Fong TL, et al. **J Med Virol** 1996 Jul;49(3):253–8

Hantavirus S RNA sequence from a fatal case of HPS in New York. Huang C, et al. **J Med Virol** 1996 Sep;50(1):5–8

Detection and genotyping of the hepatitis C RNA in tear fluid from patients with chronic hepatitis C. Mendel I, et al. **J Med Virol** 1997 Mar;51(3):231–3

Changes in hepatitis C virus quasispecies and density populations in patients before and after interferon therapy. Nagasaka A, et al. **J Med Virol** 1996 Nov;50(3):214–20

Detection and clinical features of hepatitis C virus type 6 infections in blood donors from Hong Kong. Prescott LE, et al. **J Med Virol** 1996 Oct;50(2):168–75

Identification of GBV–C hepatitis G RNA in chronic hepatitis C patients. Schleicher S, et al. **J Med Virol** 1996 Sep;50(1):71–4

Hepatitis C virus: quantitation and distribution in liver. Terrault NA, et al. **J Med Virol** 1997 Mar;51(3):217–24

Genetic lesions associated with Muller's ratchet in an RNA virus. Escarmís C, et al. **J Mol Biol** 1996 Nov 29; 264(2):255–67

Human immunodeficiency virus type 1 DNA and RNA load in brains of demented and nondemented patients with acquired immunodeficiency syndrome. Lazarini F, et al. **J Neurovirol** 1997 Aug;3(4):299–303

Relationship between human immunodeficiency virus–1 RNA identification in placenta and perinatal transmission. Katz JM, et al. **J Perinatol** 1997 Mar–Apr;17(2):119–24

Detection of eastern equine encephalomyelitis virus RNA in formalin–fixed, paraffin–embedded tissues using DNA in situ hybridization. Gregory CR, et al. **J Vet Diagn Invest** 1996 Apr;8(2):151–5

Hepatitis C virus genotypes in chronic hepatitis C of children. Bortolotti F, et al. **J Viral Hepat** 1996 Nov;3(6):323–7

Detection of HEV RNA in faeces, by RT–PCR during the epidemics of hepatitis E in India (1976–1995). Chobe LP, et al. **J Viral Hepat** 1997 Mar;4(2):129–33

Hepatitis C virus RNA quantification in right and left lobes of the liver in patients with chronic hepatitis C. Idrovo V, et al. **J Viral Hepat** 1996 Sep;3(5):239–46

Hepatitis C, virus infection and mixed cryoglobulinaemia: assessment of HCV RNA copy numbers in supernatant, cryoprecipitate and non–liver cells. Manzin A, et al. **J Viral Hepat** 1996 Nov;3(6):285–92

Lack of evidence for hepatitis G virus replication in the livers of patients coinfected with hepatitis C and G viruses. Laskus T, et al. **J Virol** 1997 Oct;71(10):7804–6

Inflammatory cytokine expression is correlated with the level of human immunodeficiency virus (HIV) transcripts in HIV–infected placental trophoblastic cells. Lee BN, et al. **J Virol** 1997 May;71(5):3628–35

Cytotoxic T–cell–resistant variants arise at early times after infection in C57BL/6 but not in SCID mice infected with a neurotropic coronavirus. Pewe L, et al. **J Virol** 1997 Oct; 71(10):7640–7

Quasispecies in wild–type tula hantavirus populations. Plyusnin A, et al. **J Virol** 1996 Dec;70(12):9060–3

Detection of Borna disease virus (BDV) antibodies and BDV RNA in psychiatric patients: evidence for high sequence conservation of human blood–derived BDV RNA. Sauder C, et al. **J Virol** 1996 Nov;70(11):7713–24

Kaposi's sarcoma–associated herpesvirus gene expression in endothelial (spindle) tumor cells. Staskus KA, et al. **J Virol** 1997 Jan;71(1):715–9

Rapid detection of enterovirus in clinical specimens using PCR and microwell capture hybridization assay. Andréoletti L, et al. **J Virol Methods** 1996 Oct;62(1):1–10

Differentiation of the seven serotypes of foot–and–mouth disease virus by reverse transcriptase polymerase chain reaction. Callens M, et al. **J Virol Methods** 1997 Aug; 67(1):35–44

Improved detection of barley yellow dwarf virus in single aphids using RT–PCR. Canning ES, et al. **J Virol Methods** 1996 Feb;56(2):191–7

Detection of enteroviral RNA and specific DNA of herpesviruses by multiplex genome amplification. Casas I, et al. **J Virol Methods** 1997 Jun;66(1):39–50

International collaborative study on the second EUROHEP HCV–RNA reference panel. Damen M, et al. **J Virol Methods** 1996 Apr 26;58(1–2):175–85

Extraction and aphid transmission of beet western yellows luteovirus from air dried leaf tissue. de Miranda JR, et al. **J Virol Methods** 1996 Apr 26;58(1–2):205–7

Reactivity and amplification efficiency of the NASBA HIV–1 RNA amplification system with regard to different HIV–1 subtypes. Gobbers E, et al. **J Virol Methods** 1997 Jul;66(2):293–301

Use of non–radioactive probes for VP4 typing of human rotaviruses. Gorrell RJ, et al. **J Virol Methods** 1996 Sep; 61(1–2):59–64

Quantification of HIV–1 viral RNA and proviral DNA by isotopic competitive PCR. Gratzl S, et al. **J Virol Methods** 1997 Jul;66(2):269–82

A new RNA–friendly fixative for the preservation of penaeid shrimp samples for virological detection using cDNA genomic probes. Hasson KW, et al. **J Virol Methods** 1997 Jul;66(2):227–36

Capture and RT–PCR of hepatitis C virus RNA with safety primers. Heermann KH, et al. **J Virol Methods** 1996 May; 59(1–2):33–43

Direct detection of potato leafroll virus in potato tubers by immunocapture and the isothermal nucleic acid amplification method NASBA. Leone G, et al. **J Virol Methods** 1997 Jun;66(1):19–27

Elimination of background signals in a modified polymerase chain reaction–based reverse transcriptase assay. Maudru T, et al. **J Virol Methods** 1997 Jul;66(2):247–61

Identification of conserved nucleotide sequences within the GB virus C 5'–untranslated region: design of PCR primers for detection of viral RNA. Muerhoff AS, et al. **J Virol Methods** 1996 Oct;62(1):55–62

An improved method for the detection of Tospoviruses using the polymerase chain reaction. Mumford RA, et al. **J Virol Methods** 1996 Mar;57(1):109–15

Comparison of competitive and non–competitive reverse transcription–polymerase chain reaction (RT–PCR) for the quantification of hepatitis C virus (HCV) RNA. Ravaggi A, et al. **J Virol Methods** 1997 Apr;65(1):123–9

RT–PCR detection of dsRNAs associated with La France disease of the cultivated mushroom Agaricus bisporus (Lange) Imbach. Revill PA, et al. **J Virol Methods** 1997 Jan;63(1–2):17–26

Gene analysis of reassortant influenza virus by RT–PCR followed by restriction enzyme digestion. Sakamoto S, et al. **J Virol Methods** 1996 Feb;56(2):161–71

In situ hybridization technique for the detection of swine enteric and respiratory coronaviruses, transmissible gastroenteritis virus (TGEV) and porcine respiratory coronavirus (PRCV), in formalin–fixed paraffin–embedded tissues. Sirinarumitr T, et al. **J Virol Methods** 1996 Feb; 56(2):149–60

Procedures for reproducible detection of rabies virus antigen mRNA and genome in situ in formalin–fixed tissues. Warner CK, et al. **J Virol Methods** 1997 Aug;67(1):5–12

A single tube two compartment reverse transcription polymerase chain reaction system for ultrasensitive quantitative detection of hepatitis C virus RNA. Whitby K, et al. **J Virol Methods** 1997 Jun;66(1):15–8

Quantitative competitive polymerase chain reaction for detection and quantification of infectious bursal disease virus cDNA and RNA. Wu CC, et al. **J Virol Methods** 1997 Jun;66(1):29–38

Highly sensitive qualitative and quantitative detection of reverse transcriptase activity: optimization, validation, and comparative analysis with other detection systems. Yamamoto S, et al. **J Virol Methods** 1996 Sep; 61(1–2):135–43

Dose of non–heat–treated factor VIII concentrate and HIV–1 RNA levels [letter; comment] Montoro JB, et al. **JAMA** 1997 Jan 1;277(1):20–1. Comment on: JAMA 1996 Jul 10;276(2):105–10.

Undiagnosed hepatitis C virus infection in hemodialysis patients: value of HCV RNA and liver enzyme levels. Caramelo C, et al. **Kidney Int** 1996 Dec;50(6):2027–31

Detection of hepatitis B virus DNA and RNA in kidneys of HBV related glomerulonephritis. Lai KN, et al. **Kidney Int** 1996 Dec;50(6):1965–77

Hepatitis C virus genotypes in Korea and their relationship to clinical outcome in type C chronic liver diseases. Han CJ, et al. **Korean J Intern Med** 1997 Jan;12(1):21–7

Viral loads and E2/NS1 region sequences of hepatitis C virus in hepatocellular carcinoma and surrounding liver. Park CK, et al. **Korean J Intern Med** 1997 Jan;12(1):28–33

Distribution of hepatitis C virus RNA in the liver and its relation to histopathological changes. Kojima S, et al. **Liver** 1996 Feb;16(1):55–60

Virological characterization and liver histology in HCV positive subjects with normal and elevated ALT levels. Rossini A, et al. **Liver** 1997 Jun;17(3):133–8

Demonstration of Borna disease virus (BDV) in specific regions of the brain from horses positive for serum antibodies to BDV but negative for BDV RNA in the blood and internal organs. Hagiwara K, et al. **Med Microbiol Immunol (Berl)** 1997 Jun;186(1):19–24

Viremia induced by influenza virus. Mori I, et al. **Microb Pathog** 1995 Oct;19(4):237–44

Sinonasal T–cell lymphoma in the differential diagnosis of lethal midline granuloma using in situ hybridization for Epstein–Barr virus RNA. Dictor M, et al. **Mod Pathol** 1996 Jan;9(1):7–14

A rapid method for the detection of hepatitis C virus RNA by in situ hybridization. Felgar RE, et al. **Mod Pathol** 1996 Jun;9(6):696–702

Genotype distribution and transmission of hepatitis C virus (HCV) in French haemodialysed patients. Bouchardeau F, et al. **Nephrol Dial Transplant** 1995 Dec;10(12):2250–2

Hepatitis C after renal transplantation: histopathological correlations. Hestin D, et al. **Nephrol Dial Transplant** 1996; 11 Suppl 4:52–3

Is hepatitis C virus RNA detectable in dialysis ultrafiltrate? [letter] Manzini P, et al. **Nephron** 1996;72(1):102–3

Human coronavirus polyadenylated RNA sequences in cerebrospinal fluid from multiple sclerosis patients. Cristallo A, et al. **New Microbiol** 1997 Apr;20(2):105–14

Use of reverse–transcription polymerase chain reaction for detection of rubella virus RNA in cell cultures inoculated with clinical samples. Revello MG, et al. **New Microbiol** 1997 Jul;20(3):197–206

Detection of RNA sequences in cultures of a stealth virus isolated from the cerebrospinal fluid of a health care worker with chronic fatigue syndrome. Case report. Martin WJ. **Pathobiology** 1997;65(1):57–60

Demonstration and distribution of HCV RNA sequences by in situ hybridization and HCV–related proteins by immunohistochemistry in the liver tissue of patients with chronic HCV infection. Sansonno D, et al. **Pathobiology** 1995;63(5):239–48

Age– and time–related changes in extracellular viral load in children vertically infected by human immunodeficiency virus. McIntosh K, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1087–91

Quantification of hepatitis C virus RNA in peripheral blood mononuclear cells: a comparison between patients chronically infected by HCV and patients coinfected by HIV. Cribier B, et al. **Res Virol** 1996 Nov–Dec; 147(6):325–32

Quantitation of hepatitis C virus RNA production in two human bone marrow–derived B–cell lines infected in vitro. Iacovacci S, et al. **Res Virol** 1997 Mar–Apr;148(2):147–51

Clonal analysis suggests provirus expression in a subpopulation of human malignant trophoblast cells

harbouring the human T cell lymphotropic virus type-I genome. Liu X, et al. **Res Virol** 1996 Jan-Feb;147(1):45-51

Detection of enteroviral RNA by a new single-step PCR. Quirós E, et al. **Scand J Clin Lab Invest** 1997 Aug; 57(5):415-9

Treatment with recombinant interferon-alpha 2a for patients with chronic hepatitis C: predictive factors for biochemical and virologic response. Osaka Liver Disease Study Group. Hagiwara H, et al. **Scand J Gastroenterol** 1996 Oct; 31(10):1021-6

Assessments of plasma HIV RNA and CD4 cell counts after combined Pneumovax and tetanus toxoid vaccination: no detectable increase in HIV replication 6 weeks after immunization. Katzenstein TL, et al. **Scand J Infect Dis** 1996;28(3):239-41

Detection of respiratory syncytial virus from clinical specimens: comparison between reverse transcription polymerase chain reaction and tissue culture. Tantivanich S, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec;26(4):684-8

The use of polymerase chain reaction (PCR) as a diagnostic tool for dengue virus. Thayan R, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):669-72

Viral RNA in the resolution of human immunodeficiency virus type 1 diagnostic serology. Brown AE, et al. **Transfusion** 1997 Sep;37(9):926-9

Hepatitis C virus RNA in tetanus intramuscular immune globulin [letter] Pisani G, et al. **Transfusion** 1997 Sep; 37(9):986-7

Quantification of the reservoir of HIV-1. Blacklaws BA. **Trends Microbiol** 1997 Jun;5(6):215-6 (11 ref.)

Application of molecular biological techniques for detection of epizootic hemorrhagic disease virus (EHDV-318) recovered from a sentinel calf in central Sudan. Mohammed ME, et al. **Vet Microbiol** 1996 Oct;52(3-4):201-8

Colorimetric detection of lagomorphs' calicivirus genomic sequences by polymerase chain reaction incorporating digoxigenin dUTP. Pšikal I, et al. **Vet Microbiol** 1997 Jun 30;57(1):55-67

Detection of caprine arthritis—encephalitis virus RNA in macrophages by in situ hybridization using fluorescein-labelled single-stranded RNA probes. Storset AK, et al. **Vet Microbiol** 1996 Sep;52(1-2):25-35

Interpretation of test results for feline infectious peritonitis [letter; comment] [see comments] Jagger T. **Vet Rec** 1997 Mar 22;140(12):320. Comment on: Vet Rec 1997 Mar 15;140(11):291. Comment in: Vet Rec 1997 Apr 5;140(14):379-80.

Rapid vertical agarose: silver stain detection of rotavirus. Giordano MO, et al. **Viral Immunol** 1997;10(1):59-64

Human T-lymphotropic virus type I (HTLV-I)-specific antibodies and cell-free RNA in crevicular fluid-rich saliva from patients with tropical spastic paraparesis/HTLV-I-associated myelopathy. Soto-Ramirez LE, et al. **Viral Immunol** 1995;8(3):141-50

Detection and typing of hepatitis C RNA in liver biopsies and its relation to histopathology. Cathomas G, et al. **Virchows Arch** 1996 Dec;429(6):353-8

Proviral organization and sequence analysis of feline immunodeficiency virus isolated from a Pallas' cat. Barr MC, et al. **Virology** 1997 Feb 3;228(1):84-91

Sequence of Echinochloa hoja blanca tenuivirus RNA-3. de Miranda JR, et al. **Virus Genes** 1996;13(1):65-8

Sequence of Echinochloa hoja blanca tenuivirus RNA-4. de Miranda JR, et al. **Virus Genes** 1996;13(1):61-4

Sequence of echinochloa hoja blanca tenuivirus RNA-5. de Miranda JR, et al. **Virus Genes** 1996;12(2):131-4

A common structural core in the internal ribosome entry sites of picornavirus, hepatitis C virus, and pestivirus. Le SY, et al. **Virus Genes** 1996;12(2):135-47

Completion of the nucleotide sequence of sunn-hemp mosaic virus: a tobamovirus pathogenic to legumes. Silver S, et al. **Virus Genes** 1996;13(1):83-5

Molecular studies of the acute infection, latency and reactivation of equine herpesvirus-1 (EHV-1) in the mouse model. Baxi MK, et al. **Virus Res** 1996 Jan;40(1):33-45

Detection of related positive-strand RNA virus genomes by reverse transcription/polymerase chain reaction using degenerate primers for common replicase sequences. Chen Z, et al. **Virus Res** 1995 Dec;39(2-3):365-75

Characterisation of Wongorr virus, an Australian orbivirus. Parkes H, et al. **Virus Res** 1996 Oct;44(2):111-22

Typing of hepatitis C virus antibody with specific peptides in seropositive blood donors and comparison with genotyping of viral RNA. León P, et al. **Vox Sang** 1997; 72(2):71-5

[Establishment of labeled primer reverse transcription in situ polymerase chain reaction and detection of hepatitis C virus in liver tissues] Liu Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jun;76(6):431-4 (Eng. Abstr.) **(Chi)**

[Detection of poliovirus in fecal specimens by polymerase chain reaction] Liu MT, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1996 Jun; 17(3):166-8 (Eng. Abstr.) **(Chi)**

[Detection of hepatitis B virus DNA and hepatitis C virus RNA in human hepatocellular carcinoma by polymerase chain reaction] Zhang H, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1996 Apr;25(2):70-2 (Eng. Abstr.) **(Chi)**

[Detection of HCV RNA in anti-HCV positive patients with chronic hepatic porphyria] Malina L, et al. **Cas Lek Cesk** 1996 Jul 26;135(13):427-9 (Eng. Abstr.) **(Cze)**

[Detecting hepatitis C virus RNA by in situ hybridization: a critical analysis] Negro F, et al. **Gastroenterol Clin Biol** 1997;21(2):93-7 (58 ref.) **(Fre)**

[Clinical significance of detection and quantification of hepatitis C virus RNA in hemodialysis: proposal for a rational diagnostic strategy] Halfon P, et al. **Nephrologie** 1997;18(2):53-8 (Eng. Abstr.) **(Fre)**

[Detection of HGBV-C genome in patients with fulminant hepatitis in Japan--using stored serum of 44 cases for last 25 years] Tameda Y, et al. **Nippon Rinsho** 1997 Mar; 55(3):569-76 **(Jpn)**

[Monitoring of inhibitors of the polymerase chain reaction for the detection of hepatitis C virus using the positive internal control] Masukawa A, et al. **Rinsho Byori** 1997 Jul;45(7):673-8 (Eng. Abstr.) **(Jpn)**

[In situ detection of Epstein-Barr virus in the non-neoplastic gastric glands and infiltrated lymphocytes] Sasaki Y, et al. **Rinsho Byori** 1996 Dec;44(12):1196-200 (Eng. Abstr.) **(Jpn)**

[Comparison of three methods for quantitative measurement of hepatitis C virus] Yukimasa N, et al. **Rinshp Byori** 1997 Mar;45(3):260-4 (Eng. Abstr.) **(Jpn)**

[Measurement of HIV-RNA in blood is of great predictive value (letter)] Sönnerborg A. **Lakartidningen** 1997 Apr 23; 94(17):1589-90 **(Swe)**

ANTAGONISTS & INHIBITORS

Discovery of selective, small-molecule inhibitors of RNA complexes--I. The Tat protein/TAR RNA complexes required for HIV-1 transcription. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1173-84

Mechanisms of inhibition of in vitro dimerization of HIV type I RNA by sense and antisense oligonucleotides. Skripkin E, et al. **J Biol Chem** 1996 Nov 15;271(46):28812-7

BIOSYNTHESIS

Comparison of the replication of positive-stranded RNA viruses of plants and animals. Buck KW. **Adv Virus Res** 1996;47:159-251 (543 ref.)

Inhibition of human cytomegalovirus immediate-early gene expression by an antisense oligonucleotide complementary to immediate-early RNA. Anderson KP, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2004-11

Identification of the minimal replicase and the minimal promoter of (-)-strand synthesis, functional in rotavirus RNA replication in vitro. Wentz MJ, et al. **Arch Virol Suppl** 1996;12:59-67

The D1-A2 and D2-A2 pairs of splice sites from human immunodeficiency virus type 1 are highly efficient in vitro, in spite of an unusual branch site. Damier L, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):182-7

Interleukin-8 selectively enhances cytopathic effect (CPE) induced by positive-strand RNA viruses in the human WISH cell line. Khabar KS, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):774-8

Replication of M13 single-stranded viral DNA bearing single site-specific adducts by escherichia coli cell extracts: differential efficiency of translesion DNA synthesis for SOS-dependent and SOS-independent lesions. Wang G, et al. **Biochemistry** 1997 Aug 5;36(31):9486-92

RNA-protein interactions in the regulation of coronavirus RNA replication and transcription. Lai MM. **Biol Chem** 1997 Jun;378(6):477-81 (32 ref.)

Consistent gene silencing in transgenic plants expressing a replicating potato virus X RNA. Angell SM, et al. **EMBO J** 1997 Jun;16(12):3675-84

Nuclear organization of adenovirus RNA biogenesis. Bridge E, et al. **Exp Cell Res** 1996 Dec 15;229(2):233-9 (36 ref.)

The Rex phenotype of altruistic cell death following infection of a lambda lysogen by T4rII mutants is suppressed by plasmids expressing OOP RNA. Hayes S, et al. **Gene** 1997 Apr 11;189(1):35-42

Differential expression of EBER1 in nontumor nasopharyngeal biopsies and nontumor component of nasopharyngeal carcinoma. Chen CL, et al. **Intervirology** 1996;39(4):230-5

Immunologic and virologic characterization of the primary infiltrating cells in the aqueous humor of human T-cell leukemia virus type-1 uveitis. Accumulation of the human T-cell leukemia virus type-1-infected cells and constitutive expression of viral and interleukin-6 messenger ribonucleic acids. Ono A, et al. **Invest Ophthalmol Vis Sci** 1997 Mar; 38(3):676-89

One of two NTP binding sites in poliovirus RNA polymerase required for RNA replication. Richards OC, et al. **J Biol Chem** 1997 Sep 12;272(37):23261-4

Structure of L-A virus: a specialized compartment for the transcription and replication of double-stranded RNA. Castón JR, et al. **J Cell Biol** 1997 Sep 8;138(5):975-85

Kinetics of viral RNA synthesis following cell-to-cell transmission of human immunodeficiency virus type 1. Davis AJ, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1897-906

Characterization of RNA synthesis during a one-step growth curve and of the replication mechanism of bovine viral diarrhoea virus. Gong Y, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2729-36

Use of the bovine leukaemia virus LTR U3 promoter for expressing antisense antiviral RNAs and competitive inhibition of viral infection in cell culture. Shayakhmetov D, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1941-8

In vitro-generated 'inverse' chimeric Coleus blumei viroids evolve in vivo into infectious RNA replicons. Spieker RL. **J Gen Virol** 1996 Nov;77 (Pt 11):2839-46

Molecular characterization of virus-specific RNA produced in the brains of flavivirus-susceptible and -resistant mice after challenge with Murray Valley encephalitis virus. Urosevic N, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):23-9

Chimeric coxsackie B3 virus genomes that express hybrid coxsackievirus-poliovirus 2B proteins: functional dissection of structural domains involved in RNA replication. van Kuppeveld FJ, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1833-40

Expression of the gibbon ape leukemia virus receptor-1 in rhesus macaque tissues. Wong SW, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):59-62

Genomic and template RNA transcription in a model of persistent enteroviral infection. Gow JW, et al. **J Neurovirol** 1997 Feb;3(1):76-82

Analysis of La Crosse virus S-segment RNA and its positive-sense transcripts in persistently infected mosquito tissues. Chandler LJ, et al. **J Virol** 1996 Dec;70(12):8972-6

Immunologic correlates of protection against rotavirus challenge after intramuscular immunization of mice. Coffin SE, et al. **J Virol** 1997 Oct;71(10):7851-6

The role of the pseudoknot at the 3' end of turnip yellow mosaic virus RNA in minus-strand synthesis by the viral RNA-dependent RNA polymerase. Deiman BA, et al. **J Virol** 1997 Aug;71(8):5990-6

Reversible dissociation of the poliovirus replication complex: functions and interactions of its components in viral RNA synthesis. Egger D, et al. **J Virol** 1996 Dec;70(12):8675-83

Ambisense gene expression from recombinant rabies virus: random packaging of positive- and negative-strand ribonucleoprotein complexes into rabies virions. Finke S, et al. **J Virol** 1997 Oct;71(10):7281-8

RNA-RNA recombination in Sindbis virus: roles of the 3' conserved motif, poly(A) tail, and nonviral sequences of template RNAs in polymerase recognition and template switching. Hill KR, et al. **J Virol** 1997 Apr;71(4):2693-704

Replication of flock house virus RNAs from primary transcripts made in cells by RNA polymerase II. Johnson KL, et al. **J Virol** 1997 Apr;71(4):3323-7

Activation of gene expression by herpes simplex virus type 1 ICP0 occurs at the level of mRNA synthesis. Jordan R, et al. **J Virol** 1997 Sep;71(9):6850-62

Initiation of minus-strand RNA synthesis by the brome mosaicvirus RNA-dependent RNA polymerase: use of oligoribonucleotide primers. Kao CC, et al. **J Virol** 1996 Oct;70(10):6826-30

In vitro transcription of human T-cell leukemia virus type 1 is RNA polymerase II dependent. Lenzmeier BA, et al. **J Virol** 1997 Mar;71(3):2577-80

Tandem mengovirus 5' pseudoknots are linked to viral RNA synthesis, not poly(C)-mediated virulence. Martin LR, et al. **J Virol** 1996 Nov;70(11):8182-6

Genetic analysis of the yellow fever virus NS1 protein: identification of a temperature-sensitive mutation which blocks RNA accumulation. Muylaert IR, et al. **J Virol** 1997 Jan;71(1):291-8

Characterization of the in vitro activity of the RNA-dependent RNA polymerase associated with the ribonucleoproteins of rice hoja blanca tenuivirus. Nguyen M, et al. **J Virol** 1997 Apr;71(4):2621-7

Analysis of the interaction of viral RNA replication proteins by using the yeast two-hybrid assay. O'Reilly EK, et al. **J Virol** 1997 Oct;71(10):7526-32

Brome mosaic virus helicase- and polymerase-like proteins colocalize on the endoplasmic reticulum at sites of viral RNA synthesis. Restrepo-Hartwig MA, et al. **J Virol** 1996 Dec;70(12):8908-16

Coronavirus genomic and subgenomic minus-strand RNAs copartition in membrane-protected replication complexes. Sethna PB, et al. **J Virol** 1997 Oct;71(10):7744-9

Reovirus-induced acute myocarditis in mice correlates with viral RNA synthesis rather than generation of infectious virus in cardiac myocytes. Sherry B, et al. **J Virol** 1996 Oct;70(10):6709-15

Mutagenesis of the coxsackie B3 virus 2B/2C cleavage site: determinants of processing efficiency and effects on viral replication. van Kuppeveld FJ, et al. **J Virol** 1996 Nov; 70(11):7632-40

The 3'-terminal consensus sequence of rotavirus mRNA is the minimal promoter of negative-strand RNA synthesis. Wentz MJ, et al. **J Virol** 1996 Nov;70(11):7833-41

Effects of nucleotide changes on the ability of hepatitis delta virus to transcribe, process, and accumulate unit-length, circular RNA. Wu TT, et al. **J Virol** 1997 Jul;71(7):5408-14

Differential expression of alternatively spliced pX mRNAs in HTLV-I-infected cell lines. Cereseto A, et al. **Leukemia** 1997 Jun;11(6):866-70

The role of topoisomerase I in HIV-1 replication. Takahashi H, et al. **Leukemia** 1997 Apr;11 Suppl 3:26-8

Assays for poliovirus polymerase, 3D(Pol), and authentic RNA replication in HeLa S10 extracts. Barton DJ, et al. **Methods Enzymol** 1996;275:35-57

Immunoprinting: a technique used to study dynamic protein-nucleic acid interactions within transcription elongation complex. Das A, et al. **Methods Enzymol** 1996; 274:363-74

Components of multiprotein-RNA complex that controls

transcription elongation in Escherichia coli phage lambda. Das A, et al. **Methods Enzymol** 1996;274:374–402

Use of bacteriophage RNA polymerase in RNA synthesis. Gurevich VV. **Methods Enzymol** 1996;275:382–97

Characterization of RNA–mediated resistance to tomato spotted wilt virus in transgenic tobacco plants expressing NS(M) gene sequences. Prins M, et al. **Plant Mol Biol** 1997 Jan;33(2):235–43

HIV–1 nucleocapsid protein induces "maturation" of dimeric retroviral RNA in vitro. Feng YX, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7577–81

Intrinsic responses to Borna disease virus infection of the central nervous system. Morimoto K, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13345–50

Polyadenylylated nuclear RNA encoded by Kaposi sarcoma–associated herpesvirus. Sun R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11883–8

Minimal templates directing accurate initiation of subgenomic RNA synthesis in vitro by the brome mosaic virus RNA–dependent RNA polymerase. Adkins S, et al. **RNA** 1997 Jun;3(6):634–47

Involvement of human immunodeficiency virus type–1 splice sites in the cytoplasmic accumulation of viral RNA. Borg KT, et al. **Virology** 1997 Sep 15;236(1):95–103

Minimum protein requirements for transcription and RNA replication of a minigenome of human parainfluenza virus type 3 and evaluation of the rule of six. Durbin AP, et al. **Virology** 1997 Jul 21;234(1):74–83

Increased expression of the N protein of respiratory syncytial virus stimulates minigenome replication but does not alter the balance between the synthesis of mRNA and antigenome. Fearns R, et al. **Virology** 1997 Sep 15; 236(1):188–201

The Sendai virus V protein interacts with the NP protein to regulate viral genome RNA replication. Horikami SM, et al. **Virology** 1996 Aug 15;222(2):383–90

Sin Nombre virus mRNA synthesis. Hutchinson KL, et al. **Virology** 1996 Oct 1;224(1):139–49

Replication signals in the genome of vesicular stomatitis virus and its defective interfering particles: identification of a sequence element that enhances DI RNA replication. Li T, et al. **Virology** 1997 Jun 9;232(2):248–59

Kinetics of accumulation of citrus tristeza virus RNAs. Navas–Castillo J, et al. **Virology** 1997 Feb 3;228(1):92–7

A proposed mechanism of mRNA synthesis and capping by vesicular stomatitis virus. Shuman S. **Virology** 1997 Jan 6;227(1):1–6 (41 ref.)

Turnip yellow mosaic virus RNA–dependent RNA polymerase: initiation of minus strand synthesis in vitro. Singh RN, et al. **Virology** 1997 Jul 7;233(2):430–9

RNA synthesis by the brome mosaic virus RNA–dependent RNA polymerase: transition from initiation to elongation. Sun JH, et al. **Virology** 1997 Jun 23;233(1):63–73

Comparison of the role of 5' terminal sequences of alfalfa mosaic virus RNAs 1, 2, and 3 in viral RNA replication. Van Rossum CM, et al. **Virology** 1997 Sep 1;235(2):333–41

Human immunodeficiency virus type–1 mRNA splicing pattern in infected persons is determined by the proportion of newly infected cells. Vesanen M, et al. **Virology** 1997 Sep 15;236(1):104–9

The Rep68 protein of adeno–associated virus type 2 increases RNA levels from the human cytomegalovirus major immediate early promoter. Wonderling RS, et al. **Virology** 1997 Sep 15;236(1):167–76

Strain–specific expression of spliced MMTV RNAs containing the superantigen gene. Xu L, et al. **Virology** 1997 Sep 15;236(1):54–65

Molecular dissection of influenza virus RNA polymerase: PB1 subunit alone is able to catalyze RNA synthesis. Toyoda T, et al. **Virus Genes** 1996;12(2):155–63

[Unique mechanism of coronavirus mRNA transcription] Tsukamoto K. **Uirusu** 1996 Dec;46(2):99–107 (41 ref.) **(Jpn)**

BLOOD

Subtype–specific problems with quantification of plasma HIV–1 RNA. Alaeus A, et al. **AIDS** 1997 Jun;11(7):859–65

In vitro activation of HIV RNA expression in peripheral blood lymphocytes as a marker to predict the stability of non–progressive status in long–term survivors. Garbuglia AR, et al. **AIDS** 1996 Jan;10(1):17–21

Quantitative relationship between platelet count and plasma virion HIV RNA [letter] Holodniy M, et al. **AIDS** 1996 Feb;10(2):232–3

Predictive value of viral load measurements in asymptomatic untreated HIV–1 infection: a mathematical model. Ioannidis JP, et al. **AIDS** 1996 Mar;10(3):255–62

Longitudinal serum HIV RNA quantification: correlation to viral phenotype at seroconversion and clinical outcome. Katzenstein TL, et al. **AIDS** 1996 Feb;10(2):167–73

Focusing on the second phase of plasma HIV–1 RNA clearance [letter] Lafeuillade A, et al. **AIDS** 1997 Feb; 11(2):264–6

HIV–1 RNA levels and the development of clinical disease. North American Lamivudine HIV Working Group. Phillips AN, et al. **AIDS** 1996 Jul;10(8):859–65

Plasma levels of soluble CD30, tumour necrosis factor (TNF)–alpha and TNF receptors during primary HIV–1 infection: correlation with HIV–1 RNA and the clinical outcome. Rizzardi GP, et al. **AIDS** 1996 Nov;10(13):F45–50

Quantitative HIV–1 RNA as a marker of clinical stability and survival in a cohort of 302 patients with a mean CD4 cell count of 300 x 10(6)/l. Ruiz L, et al. **AIDS** 1996 Sep; 10(11):F39–44

Heat–mediated immune complex dissociation and enzyme–linked immunosorbent assay signal amplification render p24 antigen detection in plasma as sensitive as HIV–1 RNA detection by polymerase chain reaction. Schüpbach J, et al. **AIDS** 1996 Sep;10(10):1085–90

Hepatitis C viraemia in HIV–infected patients. Hepatitis–HIV Spanish Study Group [letter; comment] Soriano V, et al. **AIDS** 1996 Jul;10(8):922–3. Comment on: AIDS 1995 Oct;9(10):1131–6.

Asymptomatic HIV infection is characterized by rapid turnover of HIV RNA in plasma and lymph nodes but not of latently infected lymph–node CD4+ T cells. Stellbrink HJ, et al. **AIDS** 1997 Jul 15;11(9):1103–10

Correlation of CD8 lymphocyte activation with cellular viremia and plasma HIV RNA levels in asymptomatic patients infected by human immunodeficiency virus type 1. Bouscarat F, et al. **AIDS Res Hum Retroviruses** 1996 Jan 1;12(1):17–24

Genetic variation in human immunodeficiency virus type 2: identification of a unique variant from human plasma. Brennan CA, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):401–4

Comparison of HIV type 1 RNA plasma viremia, p24 antigenemia, and unintegrated DNA as viral load markers in pediatric patients. Bush CE, et al. **AIDS Res Hum Retroviruses** 1996 Jan 1;12(1):11–5

Gross defects in the vpr and vpu genes of HIV type 1 cannot explain the differences in RNA copy number between long–term asymptomatics and progressors. Cornelissen M, et al. **AIDS Res Hum Retroviruses** 1997 Feb 10;13(3):247–52

Increased plasma HIV type 1 RNA levels are associated with low levels of non–MHC class I–restricted cytotoxicity [letter] Ullum H, et al. **AIDS Res Hum Retroviruses** 1997 Feb 10;13(3):217–8

Early loss of serum hepatitis C virus RNA can predict a sustained response to interferon therapy in patients with chronic hepatitis C. Karino Y, et al. **Am J Gastroenterol** 1997 Jan;92(1):61–5

GB virus infection in acute and chronic cryptogenic liver disease [letter] Sata M, et al. **Am J Gastroenterol** 1997 Aug; 92(8):1404–5

Patterns of hepatitis C viremia in patients receiving hemodialysis. Umlauft F, et al. **Am J Gastroenterol** 1997 Jan;92(1):73–8

Human immunodeficiency virus–1 shedding in the genital tract of a female long–term nonprogressor without detectable plasma human immunodeficiency virus ribonucleic acid [letter] Uvin SC, et al. **Am J Obstet Gynecol** 1997 Aug;177(2):490–1

Rapid diagnosis of dengue viremia by reverse transcriptase–polymerase chain reaction using 3'–noncoding region universal primers. Sudiro TM, et al. **Am J Trop Med Hyg** 1997 Apr;56(4):424–9

Monitoring plasma HIV–1 RNA levels in addition to CD4+ lymphocyte count improves assessment of antiretroviral therapeutic response. ACTG 241 Protocol Virology Substudy Team [see comments] Hughes MD, et al. **Ann Intern Med** 1997 Jun 15;126(12):929–38. Comment in: Ann Intern Med 1997 Jun 15;126(12):983–5.

Changes in plasma HIV RNA levels and CD4+ lymphocyte counts predict both response to antiretroviral therapy and therapeutic failure. VA Cooperative Study Group on AIDS [see comments] O'Brien WA, et al. **Ann Intern Med** 1997 Jun 15;126(12):939–45. Comment in: Ann Intern Med 1997 Jun 15;126(12):983–5.

Use of HIV viral load in clinical practice: back to the future [editorial; comment] Saag MS. **Ann Intern Med** 1997 Jun 15;126(12):983–5. Comment on: Ann Intern Med 1997 Jun 15;126(12):929–38. Comment on: Ann Intern Med 1997 Jun 15;126(12):939–45. Comment on: Ann Intern Med 1997 Jun 15;126(12):946–54.

Hepatitis C virus genotype, hepatitis C virus RNA titers, and response to interferon [letter; comment] Taliani G, et al. **Ann Intern Med** 1997 Jul 1;127(1):89. Comment on: Ann Intern Med 1996 Oct 15;125(8):634–9.

Detection of persistent bovine viral diarrhea virus infections by DNA hybridization and polymerase chain reaction assay. Brock KV. **Arch Virol Suppl** 1991;3:199–208

HCV transmission through blood transfusion: are HCV–RNA titer in donor serum and genotype major determinants of infection outcome? Cardoso MS, et al. **Beitr Infusionsther Transfusionsmed** 1996;33:225–30

EPFA–NIBSC workshop on 'nucleic acid amplification assays and plasma products' 23 November, 1994, Helsinki, Finland. Zeijlemaker WP, et al. **Biologicals** 1995 Dec; 23(4):317–26

Direct amplification and cloning of up to 5–kb lentivirus genomes from serum. Holterman L, et al. **Biotechniques** 1996 Aug;21(2):312–9

Advances in HIV markers [news] Elliott EB. **Can Fam Physician** 1996 Nov;42:2301–2

Polymerase chain reaction analysis for viral nucleic acids in acute sporadic hepatitis patients negative for serum hepatitis B surface antigen and antibodies to hepatitis C virus. Huo TI, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Dec; 58(6):379–84

Quantitative detection of hepatitis C virus RNA in the serum of patients with chronic hepatitis C treated with interferon: a pilot study. Flichman D, et al. **Clin Diagn Virol** 1997 May;8(1):63–70

Performance of the automated COBAS AMPLICOR system for the detection of hepatitis C virus RNA. Kessler HH, et al. **Clin Diagn Virol** 1997 Feb;7(3):139–45

Stability of HIV–1 RNA in blood samples from patients with HIV–1 infection as determined by a quantitative polymerase chain reaction–based assay [letter] Shirasaka T, et al. **Clin Diagn Virol** 1996 Nov;7(2):121–4

Relationship of plasma HIV–RNA levels and levels of TNF–alpha and immune activation products in HIV infection. Salazar–Gonzalez JF, et al. **Clin Immunol Immunopathol** 1997 Jul;84(1):36–45

Human immunodeficiency virus (HIV) RNA in plasma as the preferred target for therapy in patients with HIV infection: a critique. Fessel WJ. **Clin Infect Dis** 1997 Feb; 24(2):116–22 (34 ref.)

Is hepatitis C virus–RNA detection by nested polymerase chain reaction clinically relevant in hemodialysis patients? Dussol B, et al. **Clin Nephrol** 1996 Apr;45(4):257–60

Correlation between serum HCV RNA and aminotransferase levels in patients with chronic HCV infection. Ghany MG, et al. **Dig Dis Sci** 1996 Nov;41(11):2213–8

No significant changes in levels of hepatitis C virus (HCV) RNA by competitive polymerase chain reaction in blood samples from patients with chronic HCV infection. Yoshimura E, et al. **Dig Dis Sci** 1997 Apr;42(4):772–7

Quantitative analysis of HCV RNA and genotype in patients with chronic hepatitis C accompanied by oral lichen planus. Nagao Y, et al. **Eur J Clin Invest** 1996 Jun;26(6):495–8

Detection of hepatitis C virus RNA in serum and peripheral blood mononuclear cells in patients with chronic hepatitis C treated with interferon alpha. Basaras M, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):887–90

Predictive value of HIV–1 RNA detection in plasma by branched DNA assay during long–term zidovudine therapy. Cotte L, et al. **Eur J Clin Microbiol Infect Dis** 1996 Aug;15(8):639–45

Early negative tests for serum HCV RNA as a predictor of sustained response to interferon therapy in patients with chronic hepatitis C [comment] Marcellin P, et al. **Eur J Gastroenterol Hepatol** 1997 Mar;9(3):237–8. Comment on: Eur J Gastroenterol Hepatol 1997 Mar;9(3):245–9.

Significance of early measurement of serum hepatitis C virus RNA in predicting response to interferon therapy in patients with chronic hepatitis C [see comments] Toyoda H, et al. **Eur J Gastroenterol Hepatol** 1997 Mar;9(3):245–9 . Comment in: Eur J Gastroenterol Hepatol 1997 Mar;9(3):237–8.

Quantification of serum hepatitis C virus core protein level in patients chronically infected with different hepatitis C virus genotypes. Orito E, et al. **Gut** 1996 Dec;39(96):876–80

Predictive factors for efficacy of interferon therapy in chronic hepatitis type C. Ishibashi K, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):535–41

Hepatitis C viral quasispecies and liver damage in patients with chronic hepatitis C virus infection. Hayashi J, et al. **Hepatology** 1997 Mar;25(3):697–701

Detection of hepatitis GB virus type C RNA in serum and liver from children with chronic viral hepatitis B and C. López–Alcorocho JM, et al. **Hepatology** 1997 May; 25(5):1258–60

Serum HIV–1 RNA load to predict CD4+ T–cell depletion in asymptomatic patients. Lafeuillade A, et al. **Infection** 1996 May–Jun;24(3):245–7

Quantitative molecular monitoring of HIV–1 RNA during antiretroviral therapy. Lafeuillade A, et al. **Infection** 1996 Nov–Dec;24(6):412–8

Effect of HIV–1 genetic diversity on HIV–1 RNA quantification in plasma: comparative evaluation of three commercial assays [letter] Coste J, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jun 1;15(2):174–5

HIV–1 RNA detection in plasma for the diagnosis of infection in neonates. The French Pediatric HIV Infection Study Group. Delamare C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jun 1;15(2):121–5

Correlation between plasma HIV–1 RNA levels and the rate of immunologic decline. Iuliano R, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 15;14(5):408–14

Effect of therapeutic immunization with recombinant gp160 HIV–1 vaccine on HIV–1 proviral DNA and plasma RNA: relationship to cellular immune responses. Kundu SK, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Aug 1;15(4):269–74

Dynamics of cell–free viral burden in HIV–1–infected patients. Michael NL, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Mar 1;14(3):237–42

Comparison of serum and plasma viral RNA measurements in primary and chronic human immunodeficiency virus type 1 infection. Rodriguez RJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):49–53

Detection of low HIV–1 RNA levels in plasma. Schockmel GA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Feb 1;14(2):179–83

Changes in HIV–1 RNA plasma level in patients treated with foscarnet [letter] Segondy M, et al.

J Acquir Immune Defic Syndr Hum Retrovirol 1997 Jan 1;14(1):79–80

Effect of antiretroviral therapy on plasma HIV RNA. Saag MS. **J Biol Regul Homeost Agents** 1995 Jul–Sep;9(3):105–6 (23 ref.)

Serum hepatitis C virus titers in the progression of type C chronic liver disease. With special emphasis on patients with type 1b infection. Kao JH, et al. **J Clin Gastroenterol** 1996 Dec;23(4):280–3

Validation of a quantitative RNA PCR assay for HIV-1 in human plasma. Wathen LK, et al. **J Clin Lab Anal** 1996; 10(5):262–8

Enhanced amplification of hepatitis C virus (HCV) cDNA by PCR: detection of HCV RNA in archival sera. Beardsley AM, et al. **J Clin Microbiol** 1996 Jun; 34(6):1581–2

Single-step PCR in molecular diagnosis of hepatitis C virus infection. Farma E, et al. **J Clin Microbiol** 1996 Dec; 34(12):3171–4

Human immunodeficiency virus (HIV) RNA quantitation using the Amplicor HIV-1 Monitor test: not all yellow-top tubes are suitable for blood collection [letter] Griffith BP, et al. **J Clin Microbiol** 1997 Apr;35(4):1040

An enhanced-sensitivity branched-DNA assay for quantification of human immunodeficiency virus type 1 RNA in plasma. Kern D, et al. **J Clin Microbiol** 1996 Dec; 34(12):3196–202

Detection of equine infectious anemia viral RNA in plasma samples from recently infected and long-term inapparent carrier animals by PCR. Langemeier JL, et al. **J Clin Microbiol** 1996 Jun;34(6):1481–7

Comparison of a competitive combined reverse transcription-PCR assay with a branched-DNA assay for hepatitis C virus RNA quantitation. Mayerat C, et al. **J Clin Microbiol** 1996 Nov;34(11):2702–6

Rapid reverse transcription-PCR detection of hepatitis C virus RNA in serum by using the TaqMan fluorogenic detection system. Morris T, et al. **J Clin Microbiol** 1996 Dec;34(12):2933–6

Multicenter comparison of three commercial methods for quantification of human immunodeficiency virus type 1 RNA in plasma. Schuurman R, et al. **J Clin Microbiol** 1996 Dec;34(12):3016–22

Comparison of QIAamp HCV kit spin columns, silica beads, and phenol-chloroform for recovering human immunodeficiency virus type 1 RNA from plasma. Shafer RW, et al. **J Clin Microbiol** 1997 Feb;35(2):520–2

Evaluation of a quality assurance program for quantitation of human immunodeficiency virus type 1 RNA in plasma by the AIDS Clinical Trials Group virology laboratories. Yen-Lieberman B, et al. **J Clin Microbiol** 1996 Nov; 34(11):2695–701

Cyclosporine therapy affects aminotransferase activity but not hepatitis C virus RNA levels in chronic hepatitis C. Kakumu S, et al. **J Gastroenterol Hepatol** 1997 Jan; 12(1):62–6

Earlier loss of hepatitis C virus RNA in interferon therapy can predict a long-term response in chronic hepatitis C [see comments] Kakumu S, et al. **J Gastroenterol Hepatol** 1997 Jun;12(6):468–72. Comment in: J Gastroenterol Hepatol 1997 Jun;12(6):450–2.

Quantitative analysis of interferon alpha/beta receptor mRNA in the liver of patients with chronic hepatitis C: correlation with serum hepatitis C virus-RNA levels and response to treatment with interferon. Yatsuhashi H, et al. **J Gastroenterol Hepatol** 1997 Jun;12(6):460–7

Permanent response to alpha-interferon therapy in chronic hepatitis C is preceded by rapid clearance of HCV-RNA from serum. Ampurdanés S, et al. **J Hepatol** 1996 Dec; 25(6):827–32

Chronic hepatitis C: effect of alcohol on hepatitic activity and viral titre. Cromie SL, et al. **J Hepatol** 1996 Dec; 25(6):821–6

Clinical evaluation of a single reaction, diagnostic polymerase chain reaction assay for the detection of hepatitis C virus RNA. Gerken G, et al. **J Hepatol** 1996 Jan;24(1):33–7

Impact of various handling and storage conditions on quantitative detection of hepatitis C virus RNA. Halfon P, et al. **J Hepatol** 1996 Sep;25(3):307–11

Serum HCV RNA levels assessed by quantitative NASBA: stability of viral load over time, and lack of correlation with liver disease. The Trent HCV Study Group. Hollingsworth RC, et al. **J Hepatol** 1996 Sep;25(3):301–6

Quantitative assessment of hepatitis C virus RNA and IgM antibodies to hepatitis C core in chronic hepatitis C. Martinelli AL, et al. **J Hepatol** 1996 Jan;24(1):21–6

Infection with GB virus C (GBV-C) in patients with fulminant hepatitis. Tameda Y, et al. **J Hepatol** 1996 Dec; 25(6):842–7

Hepatitis C virus infection detected by viral RNA analysis in porphyria cutanea tarda. Carpintero P, et al. **J Infect** 1997 Jan;34(1):61–4

Dynamic features of human immunodeficiency virus type 1 (HIV-1) viremia: kinetics of cell-free HIV-1 RNA after therapeutic plasma exchange. Bagnarelli P, et al. **J Infect Dis** 1997 Sep;176(3):801–4

Association of plasma human immunodeficiency virus type 1 RNA level with risk of clinical progression in patients with advanced infection. AIDS Clinical Trials Group (ACTG) 116B/117 Study Team. ACTG Virology Committee Resistance and HIV-1 RNA Working Groups. Coombs RW, et al. **J Infect Dis** 1996 Oct;174(4):704–12

Serum levels of human immunodeficiency virus type 1 (HIV-1) RNA after seroconversion: a predictor of long-term mortality in HIV infection. Craib KJ, et al. **J Infect Dis** 1997 Sep;176(3):798–800

Variance of plasma human immunodeficiency virus type 1 RNA levels measured by branched DNA within and between days. Deeks SG, et al. **J Infect Dis** 1997 Aug; 176(2):514–7

The relationship between serum human immunodeficiency virus type 1 (HIV-1) RNA level, CD4 lymphocyte percent, and long-term mortality risk in HIV-1-infected children. National Institute of Child Health and Human Development Intravenous Immunoglobulin Clinical Trial Study Group. Mofenson LM, et al. **J Infect Dis** 1997 May; 175(5):1029–38

Issues in the design of trials of therapies for subjects with human immunodeficiency virus infection that use plasma RNA level as an outcome. Raboud JM, et al. **J Infect Dis** 1997 Mar;175(3):576–82

Surreptitious hepatitis C virus (HCV) infection detected in the majority of patients with cryptogenic chronic hepatitis and negative HCV antibody tests. Schmidt WN, et al. **J Infect Dis** 1997 Jul;176(1):27–33

Distribution of hepatitis C virus (HCV) RNA in whole blood and blood cell fractions: plasma HCV RNA analysis underestimates circulating virus load. Schmidt WN, et al. **J Infect Dis** 1997 Jul;176(1):20–6

Prognostic value of plasma human immunodeficiency virus type 1 (HIV-1) RNA levels in patients with advanced HIV-1 disease and with little or no prior zidovudine therapy. AIDS Clinical Trials Group Protocol 116A/116B/117 Team. Welles SL, et al. **J Infect Dis** 1996 Oct;174(4):696–703

Detection of hepatitis G virus (HGV) RNA: clinical characteristics of acute HGV infection. Yashina TL, et al. **J Infect Dis** 1997 Jun;175(6):1302–7

Detection of GB virus-C/hepatitis G virus RNA in serum by reverse transcription polymerase chain reaction. Bhardwaj B, et al. **J Med Virol** 1997 May;52(1):92–6

Significance of placental damage in vertical transmission of human immunodeficiency virus. Burton GJ, et al. **J Med Virol** 1996 Nov;50(3):237–43

Comparative evaluation of three assays for the quantitation of human immunodeficiency virus type 1 RNA in plasma. Coste J, et al. **J Med Virol** 1996 Dec;50(4):293–302

Prevalence studies of GB virus-C infection using reverse transcriptase-polymerase chain reaction. Dawson GJ, et al. **J Med Virol** 1996 Sep;50(1):97–103

Clinical implications of viral quasispecies heterogeneity in chronic hepatitis C. González-Peralta RP, et al. **J Med Virol** 1996 Jul;49(3):242–7

Analysis of mother-to-infant transmission of hepatitis C virus: quasispecies nature and buoyant densities of maternal virus populations. Kudo T, et al. **J Med Virol** 1997 Mar; 51(3):225–30

Comparison of HCV RNA assays for the detection and quantification of hepatitis C virus RNA levels in serum of patients with chronic hepatitis C treated with interferon. Trabaud MA, et al. **J Med Virol** 1997 May;52(1):105–12

Infection with GB virus C (GBV-C) in patients with chronic liver disease or on maintenance hemodialysis in Indonesia. Tsuda F, et al. **J Med Virol** 1996 Jul;49(3):248–52

Detection of hepatitis G virus RNA in patients with hepatitis B, hepatitis C, and non-A-E hepatitis by RT-PCR using multiple primer sets. Zhang XH, et al. **J Med Virol** 1997 Aug;52(4):385–90

Effect of antiretroviral combination therapy (zidovudine/didanosine or zidovudine/lamivudine) on quantitative plasma human immunodeficiency virus-ribonucleic acid in children and adolescents infected with human immunodeficiency virus. Sölder B, et al. **J Pediatr** 1997 Feb;130(2):293–9

Hepatitis G virus RNA in the serum of patients with elevated gamma glutamyl transpeptidase and alkaline phosphatase: a specific liver disease? [corrected] [published erratum appears in J Viral Hepat 1997 Mar;4(2):143] Colombatto P, et al. **J Viral Hepat** 1996 Nov;3(6):301–6

Development of a quantitative PCR assay for monitoring HCV viraemia levels in patients with chronic hepatitis C. Colucci G, et al. **J Viral Hepat** 1997;4 Suppl 1:75–8

Genotypes and multiple infections with hepatitis C virus in patients with haemophilia A in Japan. Fujimura Y, et al. **J Viral Hepat** 1996 Mar;3(2):79–84

The clinical significance of the detection of hepatitis GBV-C RNA in the serum of patients with fulminant, presumed viral, hepatitis. Haydon GH, et al. **J Viral Hepat** 1997 Jan; 4(1):45–9

Prevalence and disease association of hepatitis G virus infection in Japan. Nakatsuji Y, et al. **J Viral Hepat** 1996 Nov;3(6):307–16

Fluctuations in viral load (HCV RNA) are relatively insignificant in untreated patients with chronic HCV infection. Nguyen TT, et al. **J Viral Hepat** 1996 Mar; 3(2):75–8

Viral dynamics of primary viremia and antiretroviral therapy in simian immunodeficiency virus infection. Nowak MA, et al. **J Virol** 1997 Oct;71(10):7518–25

Stability of HIV-1 RNA in blood during specimen handling and storage prior to amplification by NASBA-QT. Bruisten SM, et al. **J Virol Methods** 1997 Sep;67(2):199–207

Assessment of a standardized reverse-transcriptase PCR assay for quantifying HIV-1 RNA in plasma and serum. Izopet J, et al. **J Virol Methods** 1996 Jul;60(2):119–29

A polymerase chain reaction to detect a spliced late transcript of human cytomegalovirus in the blood of bone marrow transplant recipients. Nelson PN, et al. **J Virol Methods** 1996 Feb;56(2):139–48

Isolation of HIV-1 RNA from plasma: evaluation of eight different extraction methods. Verhofstede C, et al. **J Virol Methods** 1996 Jul;60(2):155–9

Patient compliance and drug failure in protease inhibitor monotherapy [letter] Vanhove GF, et al. **JAMA** 1996 Dec 25;276(24):1955–6

Disappearance of serum hepatitis C virus RNA within two days after one dose interferon administration is predictive for response to high-dose interferon-alpha 2b treatment for chronic hepatitis C. Keio Interferon-alpha 2b Study Group. Saito H, et al. **Keio J Med** 1997 Jun;46(2):74–80

Infection with hepatitis G virus in immunoglobulin recipients [letter; comment] Vento S, et al. **Lancet** 1997 Jan 18; 349(9046):206–7. Comment on: Lancet 1996 Nov 16;348(9038):1352–5.

Borna disease virus RNA in peripheral blood mononuclear cells obtained from healthy dairy cattle. Hagiwara K, et al. **Med Microbiol Immunol (Berl)** 1996 Nov;185(3):145–51

Quantitative competitive RNA PCR for quantitation of virion-associated HIV-1 RNA. Brichacek B, et al. **Methods** 1997 Aug;12(4):294–9

Hepatitis C virus infection-associated markers in sera from blood donors in Surabaya, Indonesia. Darmadi S, et al. **Microbiol Immunol** 1996;40(5):401–5

A simplified semiquantitative determination of hepatitis C virus genome molecules by the end-point dilution method. Bathelier C, et al. **Mol Cell Probes** 1996 Dec;10(6):477–80

Comparative analysis of three nucleic acid-based detection systems for hepatitis C virus RNA in plasma from liver transplant recipients. Chen Y, et al. **Mol Cell Probes** 1996 Oct;10(5):331–6

Hepatitis GB virus C [letter] Sampietro M, et al. **N Engl J Med** 1996 Oct 31;335(18):1392; discussion 1394

Kinetics of HIV-1 RNA concentration changes in pediatric patients. Zeichner SL, et al. **Pathobiology** 1996;64(6):289–94

Relationship of virologic, immunologic, and clinical parameters in infants with vertically acquired human immunodeficiency virus type 1 infection. Muñoz-Fernández MA, et al. **Pediatr Res** 1996 Oct; 40(4):597–602

Detection of HIV-1 RNA by nucleic acid sequence-based amplification combined with fluorescence correlation spectroscopy. Oehlenschläger F, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12811–6

High malignancy of hepatocellular carcinoma in alcoholic patients with hepatitis C virus. Kubo S, et al. **Surgery** 1997 Apr;121(4):425–9

Anti-HCV antibody is sensitive but not sufficient to detect HCV active infection in renal transplanted patients: the role of PCR for HCV-RNA. David-Neto E, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):781–2

Efficacy of quantitative analysis of Epstein-Barr virus-infected peripheral blood lymphocytes by in situ hybridization of EBER1 after living-related liver transplantation: a case report. Nakazawa Y, et al. **Transplantation** 1997 May 15;63(9):1363–6

Infection of circulating and liver infiltrating T cells by hepatitis C virus of different subtypes. Artini M, et al. **Viral Immunol** 1995;8(2):63–73

Simultaneous detection of hepatitis C virus and human immunodeficiency virus RNA in serum using amplicor PCR tests. Woźny W, et al. **Viral Immunol** 1997;10(2):73–82

Report of EPFA/NIBSC workshop 'nucleic acid amplification tests (NAT) for the detection of blood-borne viruses' held on 31 October 1996 in Amsterdam, The Netherlands. Rogers PM, et al. **Vox Sang** 1997; 72(4):199–206

Incidence of hepatitis C virus RNA in anti-HCV-negative plasma pools and blood products. Saldanha J, et al. **Vox Sang** 1996;70(4):232–4

Collaborative study to assess the suitability of an HCV RNA reference sample for detection of an HCV RNA in plasma pools by PCR. Saldanha J, et al. **Vox Sang** 1996; 70(3):148–51

Determining the number of copies of HIV-1 RNA in plasma: applying this new test to management of patients. de La Maza LM. **West J Med** 1997 Jul;167(1):35

[A three-year follow-up study of hepatitis C virus infected individuals from Beixie village, Gu-an county, Hebel province, China] Tang SX, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1996 Jun; 17(3):145–7 (Eng. Abstr.) **(Chi)**

[The effect of interferon in combination with ribavirin on the plus and minus strands of hepatitis C virus RNA in patients with hepatitis] He Y, et al. **Chung Hua Nei Ko Tsa Chih** 1996 Jan;35(1):32–5 (Eng. Abstr.) **(Chi)**

[AIDS; new developments. III. Predictive value of the quantity of HIV-RNA for the course of the HIV infection and the effect of the treatment] de Wolf F, et al. **Ned Tijdschr Geneeskd** 1997 May 24;141(21):1043–50 (Eng. Abstr.) **(Dut)**

[Viral load] Sicard D. **Presse Med** 1997 Apr 12;26(12):560–2 **(Fre)**

[Quantification of feline immunodeficiency virus (FIV) RNA in the plasma of infected cats] Vahlenkamp TW, et al. **Berl Munch Tierarztl Wochenschr** 1996 Aug;109(8):265–9

(Eng. Abstr.) **(Ger)**
[Causal relationship between GBV-C and fulminant hepatitis] Inoue K, et al. **Nippon Rinsho** 1997 Mar;55(3):578-82 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Detection of GBV-C RNA among non B non C hepatocellular carcinoma patients] Kitamoto M, et al. **Nippon Rinsho** 1997 Mar;55(3):583-6 (6 ref.) (Eng. Abstr.) **(Jpn)**
[Outcome of the cases of chronic liver disease type C who exhibited long term response to interferon therapy; comparison of the cases with or without serum HCV-RNA] Tohyama H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Nov;93(11):813-20 (Eng. Abstr.) **(Jpn)**
[Intercalation monitoring PCR(IM-PCR), its principle and application: quantitative monitoring of HCV RNA in the course of IFN therapy] Ishiguro T, et al. **Rinsho Byori** 1997 Mar;45(3):213-7 (Eng. Abstr.) **(Jpn)**
[Clinical evaluation of hepatitis C virus RNA quantification by competitive reverse-transcription PCR] Kobayashi H, et al. **Rinsho Byori** 1996 Jun;44(6):569-73 (Eng. Abstr.) **(Jpn)**
[Detection of HIV-1 in plasma samples using microplate hybridization after RT-PCR] Suzuki H, et al. **Rinsho Byori** 1996 Dec;44(12):1169-74 (Eng. Abstr.) **(Jpn)**
[Prevalence of serological markers for viral hepatitis B and C in patients and medical personnel in the hematologic ward of Novosibirsk city hospital No. 2] Netesova IG, et al. **Vopr Virusol** 1997 Jan-Feb;42(1):27-30 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

In vivo evidence of HIV-1 productive infection in cerebrospinal fluid of patients with HIV-1 encephalitis [letter; comment] Di Stefano M, et al. **AIDS** 1997 Jan; 11(1):133-5. Comment on: AIDS 1996 Jul;10(8):843-7.
HIV-1 RNA is not detectable in the cerebrospinal fluid during antiretroviral combination therapy [letter] Gisslén M, et al. **AIDS** 1997 Jul 15;11(9):1194
Evidence of presence of poliovirus genomic sequences in cerebrospinal fluid from patients with postpolio syndrome [see comments] Leparc-Goffart I, et al. **J Clin Microbiol** 1996 Aug;34(8):2023-6. Comment in: J Clin Microbiol 1997 Jan;35(1):334-5.
Levels of human immunodeficiency virus type 1 RNA in cerebrospinal fluid correlate with AIDS dementia stage. Brew BJ, et al. **J Infect Dis** 1997 Apr;175(4):963-6
Detection of rotavirus RNA in cerebrospinal fluid in a case of rotavirus gastroenteritis with febrile seizures. Pang XL, et al. **Pediatr Infect Dis J** 1996 Jun;15(6):543-5

CHEMICAL SYNTHESIS

Synthesis and purification of single-stranded RNA for use in experiments with PKR and in cell-free translation systems. Pe'ery T, et al. **Methods** 1997 Apr;11(4):371-81
Preparation and use of synthetic oligoribonucleotides as tools for study of viral polymerases. Carroll SS, et al. **Methods Enzymol** 1996;275:365-82

CHEMISTRY

Analysis of human immunodeficiency virus type 1 mRNA splicing patterns during disease progression in peripheral blood mononuclear cells from infected individuals. Saltarelli MJ, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1443-56
Inhibition of HIV type 1 RNA dimerization by antisense DNA corresponding to the 17-nucleotide sequence downstream from the splice donor site of HIV type 1 RNA. Zhang S, et al. **AIDS Res Hum Retroviruses** 1997 Jul 1; 13(10):865-73
The glycoprotein precursor gene of the attenuated Junin virus vaccine strain (Candid #1). Ghiringhelli PD, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):216-25
Multiple forms of tRNA(Lys3) in HIV-1. Li Z, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):530-40
Efficient modification of RNA by porphyrin cation photochemistry: monitoring the folding of coaxially stacked RNA helices in tRNA(Phe) and the human immunodeficiency virus type 1 rev response element RNA. Celander DW, et al. **Biochemistry** 1996 Sep 17; 35(37):12061-9
A short autocomplementary sequence plays an essential role in avian sarcoma-leukosis virus RNA dimerization. Fossé P, et al. **Biochemistry** 1996 Dec 24;35(51):16601-9
HIV-1 genome dimerization: kissing-loop hairpin dictates whether nucleotides downstream of the 5' splice junction contribute to loose and tight dimerization of human immunodeficiency virus RNA. Laughrea M, et al. **Biochemistry** 1997 Aug 5;36(31):9501-8
Dissection of the proposed base triple in human immunodeficiency virus TAR RNA indicates the importance of the Hoogsteen interaction. Tao J, et al. **Biochemistry** 1997 Mar 25;36(12):3491-5
Functional and sequence analysis of splicing defective nrdB mutants of bacteriophage T4 reveal new bases and a new sub-domain required for group I intron self-splicing. Lal SK, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):89-97
Dimerization of retroviral genomic RNAs: structural and functional implications. Paillart JC, et al. **Biochimie** 1996; 78(7):639-53 (138 ref.)
Polarized Raman spectroscopy of double-stranded RNA from bacteriophage phi6: local Raman tensors of base and backbone vibrations. Benevides JM, et al. **Biophys J** 1997 Jun;72(6):2748-62
Molecular modeling of the RNA binding N-terminal part of cowpea chlorotic mottle virus coat protein in solution with phosphate ions. van der Spoel D, et al. **Biophys J** 1996 Dec;71(6):2920-32
Magnetic bead technology aids sequence determinations for the 3' and 5' ends of viral RNAs. Koenig R. **Biotechniques** 1997 Jul;23(1):102-4
Secondary structure computer prediction of the poliovirus 5' non-coding region is improved by a genetic algorithm. Currey KM, et al. **Comput Appl Biosci** 1997 Feb;13(1):1-12
Getting into the major groove. Protein-RNA interactions. Moras D, et al. **Curr Biol** 1996 May 1;6(5):530-2 (15 ref.)
The structure of the isolated, central hairpin of the HDV antigenomic ribozyme: novel structural features and similarity of the loop in the ribozyme and free in solution. Kolk MH, et al. **EMBO J** 1997 Jun;16(12):3685-92
Cis-element, oriR, involved in the initiation of (-) strand poliovirus RNA: a quasi-globular multi-domain RNA structure maintained by tertiary ('kissing') interactions. Pilipenko EV, et al. **EMBO J** 1996 Oct 1;15(19):5428-36
An AU at the first base pair of helix 3 elevates the catalytic activity of hepatitis delta virus ribozymes. Huang ZS, et al. **FEBS Lett** 1997 Aug 18;413(2):299-303
Predicting RNA structures: the model of the RNA element binding Rev meets the NMR structure. Leclerc F, et al. **Fold Des** 1997;2(2):141-7
Sequence of the 3' end of the simian hemorrhagic fever virus genome. Smith SL, et al. **Gene** 1997 Jun 3;191(2):205-10
Two secondary structures for the RRE of HIV-1? Zhang MJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 15;13(5):403-7
Base pairing probabilities in a complete HIV-1 RNA. Huynen MA, et al. **J Comput Biol** 1996 Summer;3(2):253-74
3'-Terminal sequences of the RNA genomes of narcissus latent and Maclura mosaic viruses suggest that they represent a new genus of the Potyviridae. Badge J, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):253-7
The satellite RNAs associated with the groundnut rosette disease complex and pea enation mosaic virus: sequence similarities and ability of each other's helper virus to support their replication. Demler SA, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2847-55
Identification and molecular properties of a 306 nucleotide viroid associated with apple dimple fruit disease. Di Serio F, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2833-7
Secondary structure-dependent evolution of Cymbidium ringspot virus defective interfering RNA. Havelda Z, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1227-34
The cowpea mosaic virus RNA 1-encoded 112 kDa protein may function as a VPg precursor in vivo. Peters SA, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1807-13
Secondary structure of the 3'-untranslated region of yellow fever virus: implications for virulence, attenuation and vaccine development. Proutski V, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1543-9
Solution structure of the HIV-2 TAR-argininamide complex. Brodsky AS, et al. **J Mol Biol** 1997 Apr 4;267(3):624-39
The structure of an RNA "kissing" hairpin complex of the HIV TAR hairpin loop and its complement. Chang KY, et al. **J Mol Biol** 1997 May 30;269(1):52-66
Base-pairings within the RNA pseudoknot associated with the simian retrovirus-1 gag-pro frameshift site. Du Z, et al. **J Mol Biol** 1997 Jul 18;270(3):464-70
Human immunodeficiency virus (HIV) Nef is an RNA binding protein in cell-free systems. Echarri A, et al. **J Mol Biol** 1996 Oct 11;262(5):640-51
A tyrosyl-tRNA synthetase suppresses structural defects in the two major helical domains of the group I intron catalytic core. Myers CA, et al. **J Mol Biol** 1996 Sep 20; 262(2):87-104
Non-canonical interactions in a kissing loop complex: the dimerization initiation site of HIV-1 genomic RNA. Paillart JC, et al. **J Mol Biol** 1997 Jul 4;270(1):36-49
Predicted secondary structure of the hepatitis G virus and GB virus-A 5'untranslated regions consistent with an internal ribosome entry site. Pickering JM, et al. **J Viral Hepat** 1997 May;4(3):175-84
Secondary structure determination of the conserved 98-base sequence at the 3' terminus of hepatitis C virus genome RNA. Blight KJ, et al. **J Virol** 1997 Oct;71(10):7345-52
The sequence and structure of the 3' arm of the first stem-loop of the human immunodeficiency virus type 2 trans-activation responsive region mediate Tat-2 transactivation. Browning C, et al. **J Virol** 1997 Oct; 71(10):8048-55
Mutant human immunodeficiency virus type 1 genomes with defects in RNA dimerization or encapsidation. Clever JL, et al. **J Virol** 1997 May;71(5):3407-14
A 451-nucleotide circular RNA from cherry with hammerhead ribozymes in its strands of both polarities. Di Serio F, et al. **J Virol** 1997 Sep;71(9):6603-10
A bulged stem-loop structure in the 3' untranslated region of the genome of the coronavirus mouse hepatitis virus is essential for replication. Hsue B, et al. **J Virol** 1997 Oct; 71(10):7567-78
Selection of a nonconsensus branch point is influenced by an RNA stem-loop structure and is important to confer stability to the herpes simplex virus 2-kilobase latency-associated transcript. Krummenacher C, et al. **J Virol** 1997 Aug;71(8):5849-60
Mutations in the kissing-loop hairpin of human immunodeficiency virus type 1 reduce viral infectivity as well as genomic RNA packaging and dimerization. Laughrea M, et al. **J Virol** 1997 May;71(5):3397-406
Identification of sequences downstream of the primer binding site that are important for efficient replication of human immunodeficiency virus type 1. Li X, et al. **J Virol** 1997 Aug;71(8):6003-10
Location of cis-acting signals important for RNA encapsidation in the leader sequence of human immunodeficiency virus type 2. McCann EM, et al. **J Virol** 1997 May;71(5):4133-7
Multiple biological roles associated with the Rous sarcoma virus 5' untranslated RNA U5-IR stem and loop. Miller JT, et al. **J Virol** 1997 Oct;71(10):7648-56
An RNA tertiary structure in the 3' untranslated region of enteroviruses is necessary for efficient replication. Mirmomeni MH, et al. **J Virol** 1997 Mar;71(3):2363-70
A role for two hairpin structures as a core RNA encapsidation signal in murine leukemia virus virions. Mougel M, et al. **J Virol** 1997 Oct;71(10):8061-5
Sequence analysis of the hepatitis C virus genome recovered from serum, liver, and peripheral blood mononuclear cells of infected chimpanzees. Shimizu YK, et al. **J Virol** 1997 Aug;71(8):5769-73
Quantitative assessment of hepatitis C virus RNA by polymerase chain reaction and a digoxigenin detection system: comparison with branched DNA assay. Yeh CT, et al. **J Virol Methods** 1997 May;65(2):219-26
Striking similarities are exhibited by two small Epstein-Barr virus-encoded ribonucleic acids and the adenovirus-associated ribonucleic acids VAI and VAII. Rosa MD, et al. **Mol Cell Biol** 1981 Sep;1(9):785-96
Characterization of Natronobacterium magadii phage phi Ch1, a unique archaeal phage containing DNA and RNA. Witte A, et al. **Mol Microbiol** 1997 Feb;23(3):603-16
Deep penetration of an alpha-helix into a widened RNA major groove in the HIV-1 rev peptide-RNA aptamer complex. Ye X, et al. **Nat Struct Biol** 1996 Dec; 3(12):1026-33
Secondary structure of the panhandle RNA of influenza virus A studied by NMR spectroscopy. Cheong HK, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4197-201
Protonatable hairpins are conserved in the 5'-untranslated region of tymovirus RNAs. Hellendoorn K, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4910-7
A mutant RNA pseudoknot that promotes ribosomal frameshifting in mouse mammary tumor virus. Kang H, et al. **Nucleic Acids Res** 1997 May 15;25(10):1943-9
A revised secondary structure model for the 3'-end of hepatitis B virus pregenomic RNA. Kidd AH, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3295-301
Structural characterization of three RNA hexanucleotide loops from the internal ribosome entry site of polioviruses. Klinck R, et al. **Nucleic Acids Res** 1997 Jun 1; 25(11):2129-37
Detection of all single-base mismatches in solution by chemiluminescence. Nelson NC, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4998-5003
Secondary structure of the 3' untranslated region of flaviviruses: similarities and differences. Proutski V, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1194-202
In vitro selection analysis of trans-acting HDV ribozyme. Nishikawa F, et al. **Nucleic Acids Symp Ser** 1995;(34):115-6
Characterization of an HDV ribozyme which consists of three RNA oligomer strands. Sakamoto T, et al. **Nucleic Acids Symp Ser** 1995;(34):131-2
The La antigen binds 5' noncoding region of the hepatitis C virus RNA in the context of the initiator AUG codon and stimulates internal ribosome entry site-mediated translation. Ali N, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2249-54
Aminoacylation identity switch of turnip yellow mosaic virus RNA from valine to methionine results in an infectious virus [see comments] Dreher TW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12212-6. Comment in: Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12078-81.
RNA folding kinetics regulates translation of phage MS2 maturation gene. Poot RA, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10110-5
Altered 3'-terminal RNA structure in phage Qbeta adapted to host factor-less Escherichia coli. Schuppli D, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10239-42
Anti-peptide aptamers recognize amino acid sequence and bind a protein epitope. Xu W, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7475-80
Localization of the C terminus of the assembly domain of hepatitis B virus capsid protein: implications for morphogenesis and organization of encapsidated RNA. Zlotnick A, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9556-61
Analysis of the in vitro secondary structure of cucumber mosaic virus satellite RNA. Bernal JJ, et al. **RNA** 1997 Sep;3(9):1052-67
Secondary structure and mutational analysis of the Mason-Pfizer monkey virus RNA constitutive transport element. Ernst RK, et al. **RNA** 1997 Feb;3(2):210-22
Promoter elements in the influenza vRNA terminal structure.

Flick R, et al. **RNA** 1996 Oct;2(10):1046–57

Two functional complexes formed by KH domain containing proteins with the 5' noncoding region of poliovirus RNA. Gamarnik AV, et al. **RNA** 1997 Aug;3(8):882–92

Stability of a stem–loop involving the initiator AUG controls the efficiency of internal initiation of translation on hepatitis C virus RNA. Honda M, et al. **RNA** 1996 Oct;2(10):955–68

Secondary structure of the 3'-noncoding region of flavivirus genomes: comparative analysis of base pairing probabilities. Rauscher S, et al. **RNA** 1997 Jul;3(7):779–91

Use of circular permutation to assess six bulges and four loops of DNA-packaging pRNA of bacteriophage phi29. Zhang C, et al. **RNA** 1997 Mar;3(3):315–23

Difference imaging reveals ordered regions of RNA in turnip yellow mosaic virus. Böttcher B, et al. **Structure** 1996 Apr 15;4(4):387–94

Human rhinovirus 3 at 3.0 A resolution. Zhao R, et al. **Structure** 1996 Oct 15;4(10):1205–20

Understanding replication mechanisms in viroids and viroidlike RNAs. Diener TO. **Trends Microbiol** 1996 Mar; 4(3):85–7

Experimental confirmation of a hepatitis B virus (HBV) epsilon–like bulge–and–loop structure in avian HBV RNA encapsidation signals. Beck J, et al. **Virology** 1997 Jan 20; 227(2):500–4

Secondary structure model of the coat protein gene of turnip yellow mosaic virus RNA: long, C-rich, single-stranded regions. Hellendoorn K, et al. **Virology** 1996 Oct 1; 224(1):43–54

Nucleotide sequence of the Barmah Forest virus genome. Lee E, et al. **Virology** 1997 Jan 20;227(2):509–14

RNA structural features responsible for potato spindle tuber viroid pathogenicity. Owens RA, et al. **Virology** 1996 Aug 1;222(1):144–58

Sequence of rice hoja blanca tenuivirus RNA–2. De Miranda JR, et al. **Virus Genes** 1996;12(3):231–7

Complete sequence of two tick–borne flaviviruses isolated from Siberia and the UK: analysis and significance of the 5' and 3'-UTRs. Gritsun TS, et al. **Virus Res** 1997 May; 49(1):27–39

Complete RNA1 sequences of two UK isolates of barley mild mosaic virus: a wild–type fungus–transmissible isolate and a non–fungus–transmissible derivative. Peerenboom E, et al. **Virus Res** 1997 Aug;50(2):175–83

Distribution of Mayaro virus RNA in polysomes during heat shock. Rosas SL, et al. **Virus Res** 1997 May;48(2):133–41

CLASSIFICATION

Detection and typing of hepatitis C RNA in liver biopsies and its relation to histopathology. Cathomas G, et al. **Virchows Arch** 1996 Dec;429(6):353–8

DRUG EFFECTS

Effects of liposomal antisense oligonucleotides on mRNA and protein levels of the HPV 16 E7 oncogene. Lappalainen K, et al. **Anticancer Res** 1996 Sep–Oct; 16(5A):2485–92

Modulation of the Rev–RRE interaction by aromatic heterocyclic compounds. Zapp ML, et al. **Bioorg Med Chem** 1997 Jun;5(6):1149–55

Magnesium–induced conformational change of packaging RNA for procapsid recognition and binding during phage phi29 DNA encapsidation. Chen C, et al. **J Virol** 1997 Jan; 71(1):495–500

Nevirapine–resistant human immunodeficiency virus: kinetics of replication and estimated prevalence in untreated patients. Havlir DV, et al. **J Virol** 1996 Nov;70(11):7894–9

Further search for small molecular inactivants capable of eliciting respiratory mucosal immunogenicity by modifying Sendai virus core RNA. Miyamae T. **Microbiol Immunol** 1996;40(10):761–6

GENETICS

Studies on the translation mechanism of subgenomic RNA of potato leafroll virus. Juszczuk M, et al. **Acta Biochim Pol** 1997;44(1):69–77

Genomic characterization of M and S RNA segments of hantaviruses isolated from bats. Jung YT, et al. **Acta Virol** 1995 Sep;39(4):231–233

Characterization of human rotaviruses isolated from symptomatic and asymptomatic infections. Tietzová J, et al. **Acta Virol** 1995 Sep;39(4):211–214

Comparison of the genome ds RNA of human rotavirus strains shed in parts of Ibadan, Nigeria. Ojeh CK, et al. **Afr J Med Med Sci** 1995 Dec;24(4):359–63

Differential expression of human endogenous retroviral sequences similar to mouse mammary tumor virus in normal peripheral blood mononuclear cells. Andersson ML, et al. **AIDS Res Hum Retroviruses** 1996 Jun 10;12(9):833–40

Inhibition of HIV type 1 RNA dimerization by antisense DNA corresponding to the 17–nucleotide sequence downstream from the splice donor site of HIV type 1 RNA. Zhang S, et al. **AIDS Res Hum Retroviruses** 1997 Jul 1; 13(10):865–73

Genotypes of Japanese encephalitis virus isolated in three states in Malaysia. Tsuchie H, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):153–8

Inhibition of rabies virus infection by an oligodeoxynucleotide complementary to rabies virus genomic RNA. Fu ZF, et al. **Antisense Nucleic Acid Drug Dev** 1996 Summer;6(2):87–93

Transient protection of human T–cells from human immunodeficiency virus type 1 infection by transduction with adeno–associated viral vectors which express RNA decoys. Smith C, et al. **Antiviral Res** 1996 Oct;32(2):99–115

Detection of hepatitis A virus RNA in oyster meat. Cromeans TL, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2460–3

A CaMV 35S promoter driven cDNA clone of tobacco mosaic virus can infect host plant tissue despite being uninfectious when manually inoculated onto leaves. Dagless EM, et al. **Arch Virol** 1997;142(1):183–91

Evidence for in vitro and in vivo autocatalytic processing of the primary translation product of beet necrotic yellow vein virus RNA 1 by a papain–like proteinase. Hehn A, et al. **Arch Virol** 1997;142(5):1051–8

An RNA–dependent–RNA–polymerase activity associated with grapevine chrome mosaic nepovirus infection. Le Gall O, et al. **Arch Virol** 1997;142(1):151–6

Sequence comparison of the 3'-terminal parts of the RNA of four German isolates of sugarcane mosaic potyvirus (SCMV). Oertel U, et al. **Arch Virol** 1997;142(4):675–87

Evolutionary relationships in the ilarviruses: nucleotide sequence of prunus necrotic ringspot virus RNA 3. Sánchez–Navarro JA, et al. **Arch Virol** 1997;142(4):749–63

Divergence and conservation of the genomic RNAs of Taiwan and Hawaii strains of papaya ringspot potyvirus. Wang CH, et al. **Arch Virol** 1997;142(2):271–85

Cymbidium mosaic potexvirus RNA: complete nucleotide sequence and phylogenetic analysis. Wong SM, et al. **Arch Virol** 1997;142(2):383–91

The hepatitis B virus posttranscriptional regulatory element contains a highly stable RNA secondary structure. Patzel V, et al. **Biochem Biophys Res Commun** 1997 Feb 24; 231(3):864–7

A short autocomplementary sequence plays an essential role in avian sarcoma–leukosis virus RNA dimerization. Fossé P, et al. **Biochemistry** 1996 Dec 24;35(51):16601–9

Specificity of aminoglycoside binding to RNA constructs derived from the 16S rRNA decoding region and the HIV–RRE activator region. Wang Y, et al. **Biochemistry** 1997 Jan 28;36(4):768–79

Sequence analysis of the 5' untranslated region of pestivirus RNA demonstrated in interferons for human use. Harasawa R, et al. **Biologicals** 1995 Dec;23(4):263–9

Transcripts that increase the processivity and elongation rate of RNA polymerase. King RA, et al. **Cell** 1996 Nov 29; 87(5):893–903

Secondary structure computer prediction of the poliovirus 5' non–coding region is improved by a genetic algorithm. Currey KM, et al. **Comput Appl Biosci** 1997 Feb;13(1):1–12

Determination of the site of first strand transfer during Moloney murine leukemia virus reverse transcription and identification of strand transfer–associated reverse transcriptase errors. Kulpa D, et al. **EMBO J** 1997 Feb 17;16(4):856–65

Novel exploitation of a nuclear function by influenza virus: the cellular SF2/ASF splicing factor controls the amount of the essential viral M2 ion channel protein in infected cells. Shih SR, et al. **EMBO J** 1996 Oct 1;15(19):5415–27

Selection of RNA aptamers that bind specifically to the NS3 protease of hepatitis C virus. Urvil PT, et al. **Eur J Biochem** 1997 Aug 15;248(1):130–8

In vivo translational efficiency of different hepatitis C virus 5'-UTRs. Buratti E, et al. **FEBS Lett** 1997 Jul 14; 411(2–3):275–80

Three different GB virus C/hepatitis G virus genotypes. Phylogenetic analysis and a genotyping assay based on restriction fragment length polymorphism. Mukaide M, et al. **FEBS Lett** 1997 Apr 21;407(1):51–8

Nucleotide sequence of ovine adenovirus tripartite leader sequence and homologues of the IVa2, DNA polymerase and terminal proteins. Vrati S, et al. **Gene** 1996 Oct 24; 177(1–2):35–41

Initiation of Sendai virus multiplication from transfected cDNA or RNA with negative or positive sense. Kato A, et al. **Genes Cells** 1996 Jun;1(6):569–79

An RNA enhancer in a phage transcriptional antitermination complex functions as a structural switch. Su L, et al. **Genes Dev** 1997 Sep 1;11(17):2214–26

Mutation in HBV RNA–dependent DNA polymerase confers resistance to lamivudine in vivo. Tipples GA, et al. **Hepatology** 1996 Sep;24(3):714–7

Blackgram mottle virus RNA and its in vitro translation. Balasubrahmanyam A, et al. **Indian J Exp Biol** 1997 Jan; 35(1):37–41

Translation of an uncapped mRNA involves scanning. Gunnery S, et al. **J Biol Chem** 1997 Aug 22;272(34):21642–6

Alanine–scanning mutations in the "primer grip" of p66 HIV–1 reverse transcriptase result in selective loss of RNA priming activity. Powell MD, et al. **J Biol Chem** 1997 May 16;272(20):13262–9

Enhanced amplification of hepatitis C virus (HCV) cDNA by PCR: detection of HCV RNA in archival sera. Beardsley AM, et al. **J Clin Microbiol** 1996 Jun; 34(6):1581–2

Single–step PCR in molecular diagnosis of hepatitis C virus infection. Farma E, et al. **J Clin Microbiol** 1996 Dec; 34(12):3171–4

Detection of equine infectious anemia viral RNA in plasma samples from recently infected and long–term inapparent carrier animals by PCR. Langemeier JL, et al. **J Clin Microbiol** 1996 Jun;34(6):1481–7

Comparison of a competitive combined reverse transcription–PCR assay with a branched–DNA assay for hepatitis C virus RNA quantitation. Mayerat C, et al. **J Clin Microbiol** 1996 Nov;34(11):2702–6

Rapid reverse transcription–PCR detection of hepatitis C virus RNA in serum by using the TaqMan fluorogenic detection system. Morris T, et al. **J Clin Microbiol** 1996 Dec;34(12):2933–6

Prenatal diagnosis of rubella virus infection by direct detection and semiquantitation of viral RNA in clinical samples by reverse transcription–PCR. Revello MG, et al. **J Clin Microbiol** 1997 Mar;35(3):708–13

Detection of hepatitis E virus RNA in stools and serum by reverse transcription–PCR. Turkoglu S, et al. **J Clin Microbiol** 1996 Jun;34(6):1568–71

Quantitative detection of human immunodeficiency virus (HIV) antigen by the Enzymun–Test: comparison with alternative assays and nucleic acid sequence–based amplification of HIV type 1 RNA. Weber B, et al. **J Clin Microbiol** 1996 Jun;34(6):1440–7

Base pairing probabilities in a complete HIV–1 RNA. Huynen MA, et al. **J Comput Biol** 1996 Summer;3(2):253–74

Evidence for the occurrence of two distinct subgroups of peanut stunt cucumovirus strains: molecular characterization of RNA3. Hu CC, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):929–39

Mutational analysis of the RNA–fork model of the influenza A virus vRNA promoter in vivo. Kim HJ, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):353–7

Beet soil–borne virus RNA 2: similarities and dissimilarities to the coat protein gene–carrying RNAs of other furoviruses. Koenig R, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):469–77

Complete nucleotide sequence of tobacco necrosis virus strain DH and genes required for RNA replication and virus movement. Molnár A, et al. **J Gen Virol** 1997 Jun; 78 (Pt 6):1235–9

The complete nucleotide sequence of the RNA 3 of lilac ring mottle ilarvirus. Scott SW, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1801–6

Evolution of human immunodeficiency virus subtype A in women seroconverting post partum and in their offspring post–natally infected by ingestion of breast milk. Simonon A, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2225–33

The proteins encoded by rice grassy stunt virus RNA5 and RNA6 are only distantly related to the corresponding proteins of other members of the genus Tenuivirus. Toriyama S, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2355–63

Molecular investigation of GB virus C infection in hemophiliacs in Japan. Kinoshita T, et al. **J Infect Dis** 1997 Feb;175(2):454–7

Immune and hematopoietic parameters in HIV–1–infected chimpanzees during clinical progression toward AIDS. Villinger F, et al. **J Med Primatol** 1997 Feb–Apr; 26(1–2):11–8

Detection of enteroviral RNA by polymerase chain reaction in endomyocardial tissue of patients with chronic cardiac diseases. Andreoletti L, et al. **J Med Virol** 1996 Jan; 48(1):53–9

Detection of hepatitis G virus RNA in patients with hepatitis B, hepatitis C, and non–A–E hepatitis by RT–PCR using multiple primer sets. Zhang XH, et al. **J Med Virol** 1997 Aug;52(4):385–90

Alternative structures of the cauliflower mosaic virus 35 S RNA leader: implications for viral expression and replication. Hemmings–Mieszczak M, et al. **J Mol Biol** 1997 Apr 18;267(5):1075–88

Effect of the position of TAR on transcriptional activation by HIV–1 Tat in vivo. Wright S, et al. **J Mol Biol** 1996 Oct 18;263(1):1–7

Isolation and characterization of intranuclear ribonucleoprotein complexes associated with double–stranded RNA adenosine deaminase from brain cells: implications for RNA–editing and hypermutation of viral RNA in the CNS. Chen Z, et al. **J Neurovirol** 1995 Sep;1(3–4):295–306

Identification of three new JC virus proteins generated by alternative splicing of the early viral mRNA. Trowbridge PW, et al. **J Neurovirol** 1995 Jun;1(2):195–206

Identification and characterization of a hepatitis delta virus RNA transcriptional promoter. Beard MR, et al. **J Virol** 1996 Aug;70(8):4986–95

Role of the DIS hairpin in replication of human immunodeficiency virus type 1. Berkhout B, et al. **J Virol** 1996 Oct;70(10):6723–32

Marek's disease virus latency–associated transcripts belong to a family of spliced RNAs that are antisense to the ICP4 homolog gene. Cantello JL, et al. **J Virol** 1997 Feb; 71(2):1353–61

Initiation of vesicular stomatitis virus mutant polR1 transcription internally at the N gene in vitro. Chuang JL, et al. **J Virol** 1997 Feb;71(2):1466–75

PCR engineering of viral quasispecies: a new method to preserve and manipulate genetic diversity of RNA virus populations. Chumakov KM. **J Virol** 1996 Oct; 70(10):7331–4

Analysis of LaCrosse virus S mRNA 5' termini in infected mosquito cells and Aedes triseriatus mosquitoes. Dobie DK, et al. **J Virol** 1997 Jun;71(6):4395–9

Genetic exchange by recombination or reassortment is infrequent in natural populations of a tripartite RNA plant virus. Fraile A, et al. **J Virol** 1997 Feb;71(2):934–40

The sequence element of the internal ribosome entry site and

a 25-kilodalton cellular protein contribute to efficient internal initiation of translation of hepatitis C virus RNA. Fukushi S, et al. **J Virol** 1997 Feb;71(2):1662-6

Construction of a genome-length cDNA clone for human astrovirus serotype 1 and synthesis of infectious RNA transcripts. Geigenmüller U, et al. **J Virol** 1997 Feb; 71(2):1713-7

Mutational analysis of the encephalomyocarditis virus primary cleavage. Hahn H, et al. **J Virol** 1996 Oct; 70(10):6870-5

Nonhomologous RNA-RNA recombination events at the 3' nontranslated region of the Sindbis virus genome: hot spots and utilization of nonviral sequences. Hajjou M, et al. **J Virol** 1996 Aug;70(8):5153-64

Serial passage of tobacco rattle virus under different selection conditions results in deletion of structural and nonstructural genes in RNA 2. Hernandez C, et al. **J Virol** 1996 Aug; 70(8):4933-40

Transcriptional strategy of closteroviruses: mapping the 5' termini of the citrus tristeza virus subgenomic RNAs. Karasev AV, et al. **J Virol** 1997 Aug;71(8):6233-6

The 5' nontranslated region of potato virus X RNA affects both genomic and subgenomic RNA synthesis. Kim KH, et al. **J Virol** 1996 Aug;70(8):5533-40

Human immunodeficiency virus Type 1 nucleocapsid protein (NCp7) directs specific initiation of minus-strand DNA synthesis primed by human tRNA(Lys3) in vitro: studies of viral RNA molecules mutated in regions that flank the primer binding site. Li X, et al. **J Virol** 1996 Aug; 70(8):4996-5004

The 3' untranslated region of coronavirus RNA is required for subgenomic mRNA transcription from a defective interfering RNA. Lin YJ, et al. **J Virol** 1996 Oct; 70(10):7236-40

Characterization of two temperature-sensitive mutants of coronavirus mouse hepatitis virus strain A59 with maturation defects in the spike protein. Luytjes W, et al. **J Virol** 1997 Feb;71(2):949-55

Structure, function, and evolution of adenovirus-associated RNA: a phylogenetic approach. Ma Y, et al. **J Virol** 1996 Aug;70(8):5083-99 (78 ref.)

Rescue of a synthetic chloramphenicol acetyltransferase RNA into influenza virus-like particles obtained from recombinant plasmids. Mena I, et al. **J Virol** 1996 Aug; 70(8):5016-24

cis-active structural motifs involved in specific encapsidation of Moloney murine leukemia virus RNA. Mougel M, et al. **J Virol** 1996 Aug;70(8):5043-50

An amino-terminal domain of the Sendai virus nucleocapsid protein is required for template function in viral RNA synthesis. Myers TM, et al. **J Virol** 1997 Feb;71(2):918-24

Nonrandom segregation of parental alleles in reovirus reassortants. Nibert ML, et al. **J Virol** 1996 Oct; 70(10):7295-300

Mutations in the carboxy-terminal domain of TBP affect the synthesis of human immunodeficiency virus type 1 full-length and short transcripts similarly. Pendergrast PS, et al. **J Virol** 1996 Aug;70(8):5025-34

RNA-targeted activators, but not DNA-targeted activators, repress the synthesis of short transcripts at the human immunodeficiency virus type 1 long terminal repeat. Pendergrast PS, et al. **J Virol** 1997 Feb;71(2):910-7

The influenza A virus PB2 polymerase subunit is required for the replication of viral RNA. Perales B, et al. **J Virol** 1997 Feb;71(2):1381-5

Nuclear sites of herpes simplex virus type 1 DNA replication and transcription colocalize at early times postinfection and are largely distinct from RNA processing factors. Phelan A, et al. **J Virol** 1997 Feb;71(2):1124-32

Charged amino acid residues of human immunodeficiency virus type 1 nucleocapsid p7 protein involved in RNA packaging and infectivity. Poon DT, et al. **J Virol** 1996 Oct;70(10):6607-16

Encapsidation of turnip crinkle virus is defined by a specific packaging signal and RNA size. Qu F, et al. **J Virol** 1997 Feb;71(2):1428-35

RNA replication by a respiratory syncytial virus RNA analog does not obey the rule of six and retains a nonviral trinucleotide extension at the leader end. Samal SK, et al. **J Virol** 1996 Aug;70(8):5075-82

CREB and CREB-binding proteins play an important role in the IE2 86-kilodalton protein-mediated transactivation of the human cytomegalovirus 2.2-kilobase RNA promoter. Schwartz R, et al. **J Virol** 1996 Oct; 70(10):6955-66

Autogenous regulation of RNA translation and packaging by Rous sarcoma virus Pr76gag. Sonstegard TS, et al. **J Virol** 1996 Oct;70(10):6542-52

An eight-nucleotide sequence in the potato virus X 3' untranslated region is required for both host protein binding and viral multiplication. Sriskanda VS, et al. **J Virol** 1996 Aug;70(8):5266-71

Roles of the 35S promoter and multiple overlapping domains in the pathogenicity of the pararetrovirus cauliflower mosaic virus. Turner DS, et al. **J Virol** 1996 Aug; 70(8):4514-21

Accumulation of alfalfa mosaic virus RNAs 1 and 2 requires the encoded proteins in cis. van Rossum CM, et al. **J Virol** 1996 Aug;70(8):5100-5

The herpes simplex virus type 1 2.0-kilobase latency-associated transcript is a stable intron which branches at a guanosine. Zabolotny JM, et al. **J Virol** 1997 Jun;71(6):4199-208

Characterization of ribonucleoprotein complexes containing an abundant polyadenylated nuclear RNA encoded by Kaposi's sarcoma-associated herpesvirus (human herpesvirus 8). Zhong W, et al. **J Virol** 1997 Feb; 71(2):1207-12

Differentiation between vaccine-related and wild-type polioviruses using a heteroduplex mobility assay. Chezzi C, et al. **J Virol Methods** 1996 Dec;62(2):93-102

Characterization of the double-stranded RNA genome segment S3 of avian reovirus. Yin HS, et al. **J Virol Methods** 1997 Aug;67(1):93-101

Infection of an HIV-1/SIVmac chimeric virus having HIV-1 env to macaque monkeys via the vaginal cavity. Ido E, et al. **Microbiol Immunol** 1997;41(3):277-80

Amplification of a full-length Borna disease virus (BDV) cDNA from total RNA of cells persistently infected with BDV. Shoya Y, et al. **Microbiol Immunol** 1997;41(6):481-6

Double-stranded RNA viruses of Saccharomyces cerevisiae. Wickner RB. **Microbiol Rev** 1996 Mar;60(1):250-65 (172 ref.)

Inhibition of nascent-peptide release at translation termination. Cao J, et al. **Mol Cell Biol** 1996 Dec; 16(12):7109-14

A structured retroviral RNA element that mediates nucleocytoplasmic export of intron-containing RNA. Ernst RK, et al. **Mol Cell Biol** 1997 Jan;17(1):135-44

Identification of a competitive translation determinant in the 3' untranslated region of alfalfa mosaic virus coat protein mRNA. Hann LE, et al. **Mol Cell Biol** 1997 Apr; 17(4):2005-13

RNA polymerase III transcription from the human U6 and adenovirus type 2 VAI promoters has different requirements for human BRF, a subunit of human TFIIIB. Mital R, et al. **Mol Cell Biol** 1996 Dec;16(12):7031-42

Functional dissection of eukaryotic initiation factor 4F: the 4A subunit and the central domain of the 4G subunit are sufficient to mediate internal entry of 43S preinitiation complexes. Pestova TV, et al. **Mol Cell Biol** 1996 Dec; 16(12):6870-8

Canonical eukaryotic initiation factors determine initiation of translation by internal ribosomal entry. Pestova TV, et al. **Mol Cell Biol** 1996 Dec;16(12):6859-69

Striking similarities are exhibited by two small Epstein-Barr virus-encoded ribonucleic acids and the adenovirus-associated ribonucleic acids VAI and VAII. Rosa MD, et al. **Mol Cell Biol** 1981 Sep;1(9):785-96

Amplifiable hybridization probes containing a molecular switch. Blok HJ, et al. **Mol Cell Probes** 1997 Jun; 11(3):187-94

Ribozyme mediated targeting of cucumber mosaic virus RNA 1 and 2 in transgenic tobacco plants. Kwon CS, et al. **Mol Cells** 1997 Jun 30;7(3):326-34

Comparison of picornaviral IRES-driven internal initiation of translation in cultured cells of different origins. Borman AM, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):925-32

Co-packaging of non-vector RNAs generates replication-defective retroviral vector particles: a novel approach for blocking retrovirus replication. Joshi S, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3199-203

A mutant RNA pseudoknot that promotes ribosomal frameshifting in mouse mammary tumor virus. Kang H, et al. **Nucleic Acids Res** 1997 May 15;25(10):1943-9

Update of the viroid and viroid-like sequence database: addition of a hepatitis delta virus RNA section. Lafontaine D, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):123-5

Splicing efficiency of human immunodeficiency virus type 1 tat RNA is determined by both a suboptimal 3' splice site and a 10 nucleotide exon splicing silencer element located within tat exon 2. Si Z, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):861-7

UGA suppression by tRNACmCATrp occurs in diverse virus RNAs due to a limited influence of the codon context. Urban C, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3424-30

In vitro selection analysis of trans-acting HDV ribozyme. Nishikawa F, et al. **Nucleic Acids Symp Ser** 1995;(34):115-6

Translational control of cellular and viral mRNAs. Gallie DR. **Plant Mol Biol** 1996 Oct;32(1-2):145-58 (109 ref.)

Gene expression from viral RNA genomes. Maia IG, et al. **Plant Mol Biol** 1996 Oct;32(1-2):367-91 (203 ref.)

Posttranscriptional modification of retroviral primers is required for late stages of DNA replication. Burnett BP, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7210-5

An interspecies hybrid RNA virus is significantly more virulent than either parental virus. Ding SW, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7470-4

An inhibitor of the Tat/TAR RNA interaction that effectively suppresses HIV-1 replication. Hamy F, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3548-53

Cloning and characterization of the extreme 5'-terminal sequences of the RNA genomes of GB virus C/hepatitis G virus. Hsieh SY, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3206-10

Nuclear antisense RNA induces extensive adenosine modifications and nuclear retention of target transcripts. Kumar M, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15; 94(8):3542-7

Accurate reconstruction of a known HIV-1 transmission history by phylogenetic tree analysis. Leitner T, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10864-9

Heterogeneous nuclear ribonucleoprotein A1 binds to the transcription-regulatory region of mouse hepatitis virus RNA. Li HP, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9544-9

Molecular identification of a novel retrovirus repeatedly isolated from patients with multiple sclerosis. The Collaborative Research Group on Multiple Sclerosis. Perron H, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8; 94(14):7583-8

Construction and characterization of a reovirus double temperature-sensitive mutant. Roner MR, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6826-30

Transcripts from a single full-length cDNA clone of hepatitis C virus are infectious when directly transfected into the liver of a chimpanzee. Yanagi M, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8738-43

Structure and function of the human immunodeficiency virus leader RNA. Berkhout B. **Prog Nucleic Acid Res Mol Biol** 1996;54:1-34 (182 ref.)

Detection of circulating human immunodeficiency virus type 2 in plasma by reverse transcription polymerase chain reaction. Loussert-Ajaka I, et al. **Res Virol** 1995 Nov-Dec; 146(6):409-414

Cucumber mosaic virus from Ixora: infectious RNA transcripts confirm deficiency in satellite support and unusual symptomatology. Tousignant ME, et al. **Res Virol** 1996 Nov-Dec;147(6):363-73

The genetic stability of potato spindle tuber viroid (PSTVd) molecular variants. Góra-Sochacka A, et al. **RNA** 1997 Jan;3(1):68-74

Use of adenoviral VAI small RNA as a carrier for cytoplasmic delivery of ribozymes. Prislei S, et al. **RNA** 1997 Jun;3(6):677-87

Internal initiation of translation of hepatitis C virus RNA: the ribosome entry site is at the authentic initiation codon. Reynolds JE, et al. **RNA** 1996 Sep;2(9):867-78

Poliovirus RNA recombination in cell-free extracts. Tang RS, et al. **RNA** 1997 Jun;3(6):624-33

Transmission of hepatitis C by intrahepatic inoculation with transcribed RNA. Kolykhalov AA, et al. **Science** 1997 Jul 25;277(5325):570-4

First genes isolated from the deadly 1918 flu virus [news; comment] Pannisi E. **Science** 1997 Mar 21;275(5307):1739 . Comment on: Science 1997 Mar 21;275(5307):1793-6.

Initial genetic characterization of the 1918 "Spanish" influenza virus [see comments] Taubenberger JK, et al. **Science** 1997 Mar 21;275(5307):1793-6. Comment in: Science 1997 Mar 21;275(5307):1739.

Primary sequence of the envelope glycoprotein of a dengue type 2 virus isolated from patient with dengue hemorrhagic fever and encephalopathy. Sistayanarain A, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):221-7

Improved amplification system for detection of hepatitis C virus genome that simultaneously differentiates viral genotypes. Songsivilai S, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):237-43

Rapid detection and identification of dengue viruses by polymerase chain reaction (PCR). Yenchitsomanus PT, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):228-36

Viral nucleic acid sequence transfer between fungi and plants [letter] Marienfeld JR, et al. **Trends Genet** 1997 Jul; 13(7):260-1

Pararetro- and retrovirus RNA: splicing and the control of nuclear export. Kiss-László Z, et al. **Trends Microbiol** 1996 Dec;4(12):480-5 (52 ref.)

Secondary structure of the 5'-noncoding region of border disease virus genome RNAs. Vilček S. **Vet Med (Praha)** 1997 May;42(5):125-8

Genetic stability of a porcine rotavirus RNA segment during repeated plaque isolation. Blackhall J, et al. **Virology** 1996 Nov 1;225(1):181-90

A Rho-dependent transcription termination site regulated by bacteriophage P4 RNA immunity factor. Briani F, et al. **Virology** 1996 Sep 1;223(1):57-67

Long-term, large-population passage of aphthovirus can generate and amplify defective noninterfering particles deleted in the leader protease gene. Charpentier N, et al. **Virology** 1996 Sep 1;223(1):10-8

Completion of the Lassa fever virus sequence and identification of a RING finger open reading frame at the L RNA 5' End. Djavani M, et al. **Virology** 1997 Sep 1; 235(2):414-8

Nucleotide sequence analysis of the respiratory syncytial virus subgroup A cold-passaged (cp) temperature sensitive (ts) cpts-248/404 live attenuated virus vaccine candidate. Firestone CY, et al. **Virology** 1996 Nov 15;225(2):419-22

Deletions in the 3' untranslated region of cowpea chlorotic mottle virus transgene reduce recovery of recombinant viruses in transgenic plants. Greene AE, et al. **Virology** 1996 Nov 1;225(1):231-4

Evolutionary dynamics of cucumber mosaic virus satellite RNA during natural epidemics in Italy. Grieco F, et al. **Virology** 1997 Mar 3;229(1):166-74

Mapping and expression of southern bean mosaic virus genomic and subgenomic RNAs. Hacker DL, et al. **Virology** 1997 Aug 4;234(2):317-27

Mutations that alter a conserved element upstream of the potato virus X triple block and coat protein genes affect subgenomic RNA accumulation. Kim KH, et al. **Virology** 1997 May 26;232(1):187-97

Sequence analysis of normal and rearranged NSP5 genes

from human rotavirus strains isolated in nature: implications for the occurrence of the rearrangement at the step of plus strand synthesis. Kojima K, et al. **Virology** 1996 Oct 15; 224(2):446–52

Gradual shutdown of virus production resulting in latency is the norm during the chronic phase of human immunodeficiency virus replication and differential rates and mechanisms of shutdown are determined by viral sequences. Li XD, et al. **Virology** 1996 Nov 1; 225(1):196–212

Genome nucleotide lengths that are divisible by six are not essential but enhance replication of defective interfering RNAs of the paramyxovirus simian virus 5. Murphy SK, et al. **Virology** 1997 May 26;232(1):145–57

New insights into the mechanisms of RNA recombination. Nagy PD, et al. **Virology** 1997 Aug 18;235(1):1–9 (80 ref.)

Analysis of the 3' terminal sequence recognized by the Rift Valley fever virus transcription complex in its ambisense S segment. Prehaud C, et al. **Virology** 1997 Jan 6; 227(1):189–97

An in vitro system for the investigation of heterologous RNA recombination. Qiao X, et al. **Virology** 1997 Jan 6; 227(1):103–10

Complementation of defective picornavirus internal ribosome entry site (IRES) elements by the coexpression of fragments of the IRES. Roberts LO, et al. **Virology** 1997 Jan 6; 227(1):53–62

The efficiency of Sendai virus genome replication: the importance of the RNA primary sequence independent of terminal complementarity. Tapparel C, et al. **Virology** 1996 Nov 1;225(1):163–71

Stable protein–RNA interaction involves the terminal domains of bluetongue virus mRNA, but not the terminally conserved sequences. Theron J, et al. **Virology** 1997 Mar 3;229(1):134–42

Analysis of the two subgenomic RNA promoters for turnip crinkle virus in vivo and in vitro. Wang J, et al. **Virology** 1997 May 26;232(1):174–86

Sequences of terminal non-coding regions from four dengue-2 viruses isolated from patients exhibiting different disease severities. Mangada MN, et al. **Virus Genes** 1997; 14(1):5–12

Complete RNA1 sequences of two UK isolates of barley mild mosaic virus: a wild-type fungus-transmissible isolate and a non-fungus-transmissible derivative. Peerenboom E, et al. **Virus Res** 1997 Aug;50(2):175–83

[Flavivirus RNA replication and involvement of host factors] Takegami T. **Uirusu** 1996 Dec;46(2):91–7 (35 ref.) **(Jpn)**

[Unique mechanism of coronavirus mRNA transcription] Tsukamoto K. **Uirusu** 1996 Dec;46(2):99–107 (41 ref.) **(Jpn)**

[Carrier proteins encoded by tobamoviruses suppress translation of genomic viral RNA in vitro] Dorokhov IuL, et al. **Dokl Akad Nauk** 1996 Jul;349(2):259–61 **(Rus)**

[Cell-free system for RNA replication, expression and cloning] Chetverin AB. **Mol Biol (Mosk)** 1995 Sep–Oct; 30(5):981–90 (41 ref.) **(Rus)**

[Recombination of alpha-viruses during mixed infection in cultured cells. Formation of hybrid forms of RNA of Venezuelan equine encephalomyelitis virus and Karelian fever virus in the region of genes for nucleocapsid and envelope proteins] Sokolova TM, et al. **Vopr Virusol** 1996 Nov-Dec;41(6):245–52 (Eng. Abstr.) **(Rus)**

[Use of DNA sequence hybridization with specific oligonucleotide probes to identify hepatitis C virus genotypes] Domingo MJ, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):433–5 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Detection of HIV-1 RNA in vaginal secretions of HIV-1-seropositive women who have undergone hysterectomy [letter] Farrar DJ, et al. **AIDS** 1997 Aug; 11(10):1296–7

Localization of simian immunodeficiency virus nucleic acid and antigen in brains of fetal macaques inoculated in utero. Lane JH, et al. **Am J Pathol** 1996 Oct;149(4):1097–104

Detection of rhinovirus RNA in lower airway cells during experimentally induced infection. Gern JE, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1159–61

Detection of hepatitis A virus RNA in oyster meat. Cromeans TL, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2460–3

Characterization of rotaviral RNA isolated from children with gastroenteritis in Poland. Szczepaniak Z, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(5–6):303–8

Detection and characterization of a distinct type of beet necrotic yellow vein virus RNA 5 in a sugarbeet growing area in Europe. Koenig R, et al. **Arch Virol** 1997; 142(7):1499–504

Systematic review of role of polymerase chain reaction in defining infectiousness among people infected with hepatitis C virus. Dore GJ, et al. **BMJ** 1997 Aug 9; 315(7104):333–7

NASBA: a novel, isothermal detection technology for qualitative and quantitative HIV-1 RNA measurements. Romano JW, et al. **Clin Lab Med** 1996 Mar;16(1):89–103 (25 ref.)

Gliotoxicity, reverse transcriptase activity and retroviral RNA in monocyte/macrophage culture supernatants from patients with multiple sclerosis. Ménard A, et al. **FEBS Lett** 1997 Aug 25;413(3):477–85

Evaluation of the Amplicor HCV test: experiences after 1 year of routine use in a diagnostic laboratory. Seme K, et al. **Infection** 1996 Mar–Apr;24(2):140–3

Detection of the tick-borne encephalitis virus (TBEV) in ticks in several federal "Länder" of Germany by means of the polymerase chain reaction (PCR)—characterization of the virus. Süss J, et al. **Infection** 1996 Sep–Oct;24(5):403–4

Infection with GB virus C in female prisoners who were drug abusers in Japan [letter] Yui K, et al. **Infection** 1996 Sep–Oct;24(5):392

Expression of HHV-8 latency-associated T0.7 RNA in spindle cells and endothelial cells of AIDS-associated, classical and African Kaposi's sarcoma. Stürzl M, et al. **Int J Cancer** 1997 Jul 3;72(1):68–71

Absence of paramyxo virus transcripts in juvenile Paget bone disease [letter; comment] Whyte MP, et al. **J Bone Miner Res** 1996 Jul;11(7):1041. Comment on: J Bone Miner Res 1996 Jan;11(1):132–42.

A rapid and simple method for extracting human immunodeficiency virus type 1 RNA from plasma: enhanced sensitivity. Mulder J, et al. **J Clin Microbiol** 1997 May;35(5):1278–80

Prenatal diagnosis of rubella virus infection by direct detection and semiquantitation of viral RNA in clinical samples by reverse transcription-PCR. Revello MG, et al. **J Clin Microbiol** 1997 Mar;35(3):708–13

The complete nucleotide sequence of the RNA 3 of lilac ring mottle ilarvirus. Scott SW, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1801–6

Hepatitis C virus density heterogeneity and viral titre in acute and chronic infection: a comparison of immunodeficient and immunocompetent patients. Watson JP, et al. **J Hepatol** 1996 Nov;25(5):599–607

High prevalence of GB virus C/hepatitis G virus in healthy persons in Ho Chi Minh City, Vietnam. Brown KE, et al. **J Infect Dis** 1997 Feb;175(2):450–3

Improved methods for quantification of human immunodeficiency virus type 1 RNA and hepatitis C virus RNA in blood using spin column technology and chemiluminescent assays of PCR products. Lin HJ, et al. **J Med Virol** 1997 Jan;51(1):56–63

Absence of double-stranded replicative forms of HCV RNA in liver tissue from chronically infected patients. Blight K, et al. **J Viral Hepat** 1996 Jan;3(1):29–36

Stability of hepatitis C virus RNA in serum from samples collected in a closed-tube system for serum separation and transport, as measured by a quantitative competitive PCR assay. Trabaud MA, et al. **J Viral Hepat** 1996 Jul;3(4):207–9

Genomic characterization of the virus causing infectious salmon anemia in Atlantic salmon (Salmo salar L.): an orthomyxo-like virus in a teleost. Mjaaland S, et al. **J Virol** 1997 Oct;71(10):7681–6

Differentiation between vaccine-related and wild-type polioviruses using a heteroduplex mobility assay. Chezzi C, et al. **J Virol Methods** 1996 Dec;62(2):93–102

Quantitation of human immunodeficiency virus type 1 RNA in cell free seminal plasma: comparison of NASBA with Amplicor reverse transcription-PCR amplification and correlation with quantitative culture. Dyer JR, et al. **J Virol Methods** 1996 Jul;60(2):161–70

Isolation of HIV-1 RNA from plasma: evaluation of eight different extraction methods. Verhofstede C, et al. **J Virol Methods** 1996 Jul;60(2):155–9

Longitudinal monitoring of latent and active human cytomegalovirus infections in peripheral blood of heart transplant recipients by single-tube nested RT-PCR. Wolff D, et al. **Microbiol Res** 1996 Dec;151(4):343–9

Detection of Rift Valley fever virus in mosquitoes by RT-PCR. Ibrahim MS, et al. **Mol Cell Probes** 1997 Feb; 11(1):49–53

Use of magnetic beads versus guanidium thiocyanate-phenol-chloroform RNA extraction followed by polymerase chain reaction for the rapid, sensitive detection of enterovirus RNA. Beaulieux F, et al. **Res Virol** 1997 Jan-Feb;148(1):11–5

Serine palmitoyltransferase (scs1/lcb2) mutants have elevated copy number of the L-A dsRNA virus. Garnepudi VR, et al. **Yeast** 1997 Mar 30;13(4):299–304

In vivo and in vitro detection of canine distemper virus nucleoprotein gene with digoxigenin-labelled RNA, double-stranded DNA probes and oligonucleotides by in situ hybridization. Gaedke K, et al. **Zentralbl Veterinarmed [B]** 1997 Aug;44(6):329–40

METABOLISM

Asymptomatic HIV infection is characterized by rapid turnover of HIV RNA in plasma and lymph nodes but not of latently infected lymph-node CD4+ T cells. Stellbrink HJ, et al. **AIDS** 1997 Jul 15;11(9):1103–10

Mutational analysis of two zinc finger motifs in HIV type 1 nucleocapsid proteins: effects on proteolytic processing of Gag precursors and particle formation. Mizuno A, et al. **AIDS Res Hum Retroviruses** 1996 Jun 10;12(9):793–800

HIV type 1 RNA expression in bone marrows of patients with a spectrum of disease. Weiser B, et al. **AIDS Res Hum Retroviruses** 1996 Nov 1;12(16):1551–8

A hammerhead ribozyme cleaves its target RNA during RNA preparation. Heidenreich O, et al. **Antisense Nucleic Acid Drug Dev** 1996 Summer;6(2):141–4

Correlation of activity with stability of chemically modified ribozymes in nuclei suspension. Heidenreich O, et al. **Antisense Nucleic Acid Drug Dev** 1996 Summer;6(2):111–8

A helix 1-extended hairpin ribozyme exhibits altered cleavage behavior in vitro. Moosbauer J, et al. **Antisense Nucleic Acid Drug Dev** 1997 Apr;7(2):79–87

Comparative analysis of five highly conserved target sites within the HIV-1 RNA for their susceptibility to hammerhead ribozyme-mediated cleavage in vitro and in vivo. Ramezani A, et al. **Antisense Nucleic Acid Drug Dev** 1996 Fall;6(3):229–35

Nuclear proteins bind to poliovirus 5' untranslated region [published erratum appears in Arch Med Res 1996 Winter;27(4):589] Gutiérrez-Escolano L, et al. **Arch Med Res** 1996 Autumn;27(3):413–9

In vitro translation of apple chlorotic leaf spot virus (ACLSV) RNA. Candresse T, et al. **Arch Virol** 1996; 141(11):2031–43

Evidence that virion-associated VP1 of avibirnaviruses contains viral RNA sequences. Kibenge FS, et al. **Arch Virol** 1997;142(6):1227–36

Structure and function of rotavirus nonstructural protein NSP3. Poncet D, et al. **Arch Virol Suppl** 1996;12:29–35

Plus- and minus-stranded hepatitis G virus RNA in liver tissue and in peripheral blood mononuclear cells. Saito S, et al. **Biochem Biophys Res Commun** 1997 Aug 18; 237(2):288–91

Binding properties of human immunodeficiency virus type-2 (HIV-2) RNA corresponding to the packaging signal to its nucleocapsid protein. Tsukahara T, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):33–42

Molecular interactions in the RNA bacteriophage MS2. Stonehouse NJ, et al. **Biochem Soc Trans** 1996 Aug; 24(3):412S

Chemical cross-linking of the human immunodeficiency virus type 1 Tat protein to synthetic models of the RNA recognition sequence TAR containing site-specific trisubstituted pyrophosphate analogues. Naryshkin NA, et al. **Biochemistry** 1997 Mar 25;36(12):3496–505

Inhibition of HIV-1 Rev-RRE interaction by diphenylfuran derivatives. Ratmeyer L, et al. **Biochemistry** 1996 Oct 22; 35(42):13689–96

Specificity of aminoglycoside binding to RNA constructs derived from the 16S rRNA decoding region and the HIV-RRE activator region. Wang Y, et al. **Biochemistry** 1997 Jan 28;36(4):768–79

Transcripts containing a small anti-HIV hammerhead ribozyme that are active in the cell cytoplasm but inactive in vitro as free RNAs. Domi A, et al. **Biochimie** 1996; 78(7):654–62

RNA-protein interactions in the regulation of coronavirus RNA replication and transcription. Lai MM. **Biol Chem** 1997 Jun;378(6):477–81 (32 ref.)

Increased stability of phage T7g10 mRNA is mediated by either a 5'- or a 3'-terminal stem-loop structure. Mertens N, et al. **Biol Chem** 1996 Dec;377(12):811–7

Theoretical and experimental selection parameters for HBV-directed antisense RNA are related to increased RNA-RNA annealing. Patzel V, et al. **Biol Chem** 1997 Jun;378(6):539–43

Targeting the Tat-binding site of bovine immunodeficiency virus TAR RNA with a shape-selective rhodium complex. Lim AC, et al. **Bioorg Med Chem** 1997 Jun;5(6):1131–6

Discovery of selective, small-molecule inhibitors of RNA complexes--I. The Tat protein/TAR RNA complexes required for HIV-1 transcription. Mei HY, et al. **Bioorg Med Chem** 1997 Jun;5(6):1173–84

Modulation of the Rev-RRE interaction by aromatic heterocyclic compounds. Zapp ML, et al. **Bioorg Med Chem** 1997 Jun;5(6):1149–55

Molecular modeling of the RNA binding N-terminal part of cowpea chlorotic mottle virus coat protein in solution with phosphate ions. van der Spoel D, et al. **Biophys J** 1996 Dec;71(6):2920–32

Enhanced cytochemical detection of viral proteins and RNAs using double-sided labeling and light microscopy [published erratum appears in Biotechdniques 1996 Jun;20(6):1028] Ding XS, et al. **Biotechniques** 1996 Jan; 20(1):111–5

A structural model for the HIV-1 Rev-RRE complex deduced from altered-specificity rev variants isolated by a rapid genetic strategy. Jain C, et al. **Cell** 1996 Oct 4; 87(1):115–25

Viral RNA export. Hope TJ. **Chem Biol** 1997 May; 4(5):335–44 (82 ref.)

New features in RNA recognition: a Tat-TAR complex. Wemmer DE. **Chem Biol** 1996 Jan;3(1):17–9 (12 ref.)

HIV Rev uses a conserved cellular protein export pathway for the nucleocytoplasmic transport of viral RNAs. Fritz CC, et al. **Curr Biol** 1996 Jul 1;6(7):848–54

Intermediates in the assembly pathway of the double-stranded RNA virus phi6. Butcher SJ, et al. **EMBO J** 1997 Jul 16;16(14):4477–87

A viral sequence in the 3'-untranslated region mimics a 5' cap in facilitating translation of uncapped mRNA. Wang S, et al. **EMBO J** 1997 Jul 1;16(13):4107–16

Self-cleaving ribozymes of hepatitis delta virus RNA. Been MD, et al. **Eur J Biochem** 1997 Aug 1;247(3):741–53 (87 ref.)

Selection of RNA aptamers that bind specifically to the NS3 protease of hepatitis C virus. Urvil PT, et al. **Eur J Biochem** 1997 Aug 15;248(1):130–8

In vitro synthesized SV40 cRNA is trans-spliced after microinjection into the nuclei of mammalian cells. Eul J, et al. **FEBS Lett** 1996 Sep 30;394(2):227–32

Enhancement of nucleocytoplasmic export of HTLV-1 Rex

mRNA through cis and trans interactions of the mRNA with the complex of Rex protein and Rex-responsive element. Fu L, et al. **FEBS Lett** 1996 Oct 28;396(1):47–52

SV40 T1-mRNA trans-splicing and translation requires that the in vitro synthesized cRNA is capped before microinjection. Graessmann M, et al. **FEBS Lett** 1996 Sep 30;394(2):233–6

Formation of bacteriophage MS2 infectious units in a cell-free translation system. Katanaev VL, et al. **FEBS Lett** 1996 Nov 18;397(2–3):143–8

Constructing an efficient trans-acting genomic HDV ribozyme. Kawakami J, et al. **FEBS Lett** 1996 Sep 30; 394(2):132–6

Transfer RNA(Phe) isoacceptors possess non-identical set of identity elements at high and low Mg2+ concentration. Kholod NS, et al. **FEBS Lett** 1997 Jul 7;411(1):123–7

Anchorage of adenoviral RNAs to clusters of interchromatin granules. Besse S, et al. **Gene Expr** 1995;5(2):79–92

A potential therapeutic application of hairpin ribozymes: in vitro and in vivo studies of gene therapy for hepatitis C virus infection. Welch PJ, et al. **Gene Ther** 1996 Nov; 3(11):994–1001

An RNA enhancer in a phage transcriptional antitermination complex functions as a structural switch. Su L, et al. **Genes Dev** 1997 Sep 1;11(17):2214–26

Fluctuations in steady state level of genomic HIV-1 RNA and replication intermediates related to disease progression rate. Jurriaans S, et al. **Immunol Lett** 1996 Jun; 51(1–2):15–22

Cleavage site mapping and substrate-specificity of Leishmaniavirus 2-1 capsid endoribonuclease activity. MacBeth KJ, et al. **J Biochem (Tokyo)** 1997 Jul; 122(1):193–200

Preferential binding of poly(A)-binding protein 1 to an inhibitory RNA element in the human immunodeficiency virus type 1 gag mRNA. Afonina E, et al. **J Biol Chem** 1997 Jan 24;272(4):2307–11

Characterization of the solution complex between the interferon-induced, double-stranded RNA-activated protein kinase and HIV-I trans-activating region RNA. Carpick BW, et al. **J Biol Chem** 1997 Apr 4;272(14):9510–6

Specific interaction in vitro and in vivo of glyceraldehyde-3-phosphate dehydrogenase and LA protein with cis-acting RNAs of human parainfluenza virus type 3. De BP, et al. **J Biol Chem** 1996 Oct 4; 271(40):24728–35

Efficient hammerhead ribozymes targeted to the polycistronic Sendai virus P/C mRNA. Structure-function relationships. Gavin DK, et al. **J Biol Chem** 1997 Jan 17; 272(3):1461–72

The effects of palmitoylation on membrane association of Semliki forest virus RNA capping enzyme. Laakkonen P, et al. **J Biol Chem** 1996 Nov 8;271(45):28567–71

The RNA-binding site of bacteriophage Qbeta coat protein. Lim F, et al. **J Biol Chem** 1996 Dec 13;271(50):31839–45

Calf RTH-1 nuclease can remove the initiator RNAs of Okazaki fragments by endonuclease activity. Murante RS, et al. **J Biol Chem** 1996 Oct 18;271(42):25888–97

NCp7 activates HIV-1Lai RNA dimerization by converting a transient loop-loop complex into a stable dimer. Muriaux D, et al. **J Biol Chem** 1996 Dec 27;271(52):33686–92

Mutations within the primer grip region of HIV-1 reverse transcriptase result in loss of RNase H function. Palaniappan C, et al. **J Biol Chem** 1997 Apr 25; 272(17):11157–64

Spliced exons of adenovirus late RNAs colocalize with snRNP in a specific nuclear domain. Bridge E, et al. **J Cell Biol** 1996 Oct;135(2):303–14

Dynamics of HIV-1 mRNA expression in patients with long-term nonprogressive HIV-1 infection. Comar M, et al. **J Clin Invest** 1997 Aug 15;100(4):893–903

Intracellular cleavage of hepatitis C virus RNA and inhibition of viral protein translation by hammerhead ribozymes. Sakamoto N, et al. **J Clin Invest** 1996 Dec 15;98(12):2720–8

Abundant expression of viral nucleoprotein mRNA and restricted translation of the corresponding viral protein in inclusion body polioencephalitis of canine distemper. Nesseler A, et al. **J Comp Pathol** 1997 Apr;116(3):291–301

Failure to detect paramyxovirus RNA in the skin of connective tissue disease. Fujiwara H, et al. **J Dermatol Sci** 1996 Jan;11(1):70–5

Influenza virus M1 protein binds to RNA through its nuclear localization signal. Eister C, et al. **J Gen Virol** 1997 Jul; 78 (Pt 7):1589–96

In vivo expression of an overlapping gene encoded by the cucumoviruses. Shi BJ, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):237–41

Cleavage of viral RNA and inhibition of viral translation by hepatitis C virus RNA-specific hammerhead ribozyme in vitro. Ohkawa K, et al. **J Hepatol** 1997 Jul;27(1):78–84

RNA-DNA hybrid formation at a bacteriophage T4 replication origin. Carles-Kinch K, et al. **J Mol Biol** 1997 Mar 14;266(5):915–26

The structure of an RNA "kissing" hairpin complex of the HIV TAR hairpin loop and its complement. Chang KY, et al. **J Mol Biol** 1997 May 30;269(1):52–66

A dynamic in vivo view of the HIV-I Rev-RRE interaction. Charpentier B, et al. **J Mol Biol** 1997 Mar 14;266(5):950–62

Protein P7 of phage phi6 RNA polymerase complex, acquiring of RNA packaging activity by in vitro assembly of the purified protein onto deficient particles. Juuti JT, et al. **J Mol Biol** 1997 Mar 14;266(5):891–900

Recognition of bacteriophage Qbeta plus strand RNA as a template by Qbeta replicase: role of RNA interactions mediated by ribosomal proteins S1 and host factor. Miranda G, et al. **J Mol Biol** 1997 Apr 18;267(5):1089–103

Non-canonical interactions in a kissing loop complex: the dimerization initiation site of HIV-1 genomic RNA. Paillart JC, et al. **J Mol Biol** 1997 Jul 4;270(1):36–49

Structural change in Rev responsive element RNA of HIV-1 on binding Rev peptide. Peterson RD, et al. **J Mol Biol** 1996 Dec 20;264(5):863–77

Measles virus-specific dsRNAs are targets for unwinding/modifying activity in neural cells in vitro. Ecker A, et al. **J Neurovirol** 1995 Mar;1(1):92–100

Modulation of mouse hepatitis virus infection by defective-interfering RNA-mediated expression of viral proteins and cytokines. Lai MM, et al. **J Neurovirol** 1997 May;3 Suppl 1:S33–4

Sequence- and structure-specific determinants in the interaction between the RNA encapsidation signal and reverse transcriptase of avian hepatitis B viruses. Beck J, et al. **J Virol** 1997 Jul;71(7):4971–80

Translation elongation factor-1 alpha interacts with the 3' stem-loop region of West Nile virus genomic RNA. Blackwell JL, et al. **J Virol** 1997 Sep;71(9):6433–44

Requirement of poly(rC) binding protein 2 for translation of poliovirus RNA. Blyn LB, et al. **J Virol** 1997 Aug; 71(8):6243–6

RNA-protein interactions: involvement of NS3, NS5, and 3' noncoding regions of Japanese encephalitis virus genomic RNA. Chen CJ, et al. **J Virol** 1997 May; 71(5):3466–73

Structure-based rationale for the rescue of systemic movement of brome mosaic virus by spontaneous second-site mutations in the coat protein gene. Flasinski S, et al. **J Virol** 1997 Mar;71(3):2500–4

Rice tungro bacilliform virus open reading frames II and III are translated from polycistronic pregenomic RNA by leaky scanning. Fütterer J, et al. **J Virol** 1997 Oct; 71(10):7984–9

The abundant latency-associated transcripts of herpes simplex virus type 1 are bound to polyribosomes in cultured neuronal cells and during latent infection in mouse trigeminal ganglia. Goldenberg D, et al. **J Virol** 1997 Apr; 71(4):2897–904

Attenuating mutations in the poliovirus 5'untranslated region alter its interaction with polypyrimidine tract-binding protein. Gutiérrez AL, et al. **J Virol** 1997 May; 71(5):3826–33

Cotranslational disassembly of flock house virus in a cell-free system. Hiscox JA, et al. **J Virol** 1997 Oct;71(10):7974–7

Expression and characterization of an RNA capping enzyme encoded by Chlorella virus PBCV-1. Ho CK, et al. **J Virol** 1996 Oct;70(10):6658–64

In vitro genetic selection analysis of alfalfa mosaic virus coat protein binding to 3'-terminal AUGC repeats in the viral RNAs. Houser-Scott F, et al. **J Virol** 1997 Mar; 71(3):2310–9

In vivo DNA expression of functional brome mosaic virus RNA replicons in Saccharomyces cerevisiae. Ishikawa M, et al. **J Virol** 1997 Oct;71(10):7781–90

Elimination of hepatitis C virus RNA in infected human hepatocytes by adenovirus-mediated expression of ribozymes. Lieber A, et al. **J Virol** 1996 Dec;70(12):8782–91

Efficient encapsidation of human immunodeficiency virus type 1 vectors and further characterization of cis elements required for encapsidation. McBride MS, et al. **J Virol** 1997 Jun;71(6):4544–54

Kissing of the two predominant hairpin loops in the coxsackie B virus 3' untranslated region is the essential structural feature of the origin of replication required for negative-strand RNA synthesis. Melchers WJ, et al. **J Virol** 1997 Jan;71(1):686–96

Multiple biological roles associated with the Rous sarcoma virus 5' untranslated RNA U5-IR stem and loop. Miller JT, et al. **J Virol** 1997 Oct;71(10):7648–56

Rotavirus VP1 alone specifically binds to the 3' end of viral mRNA, but the interaction is not sufficient to initiate minus-strand synthesis. Patton JT. **J Virol** 1996 Nov; 70(11):7940–7

A host factor that binds near the termini of hepatitis B virus pregenomic RNA. Perri S, et al. **J Virol** 1996 Oct; 70(10):6803–9

Paradoxical interactions between human delta hepatitis agent RNA and the cellular protein kinase PKR. Robertson HD, et al. **J Virol** 1996 Aug;70(8):5611–7

Posttranscriptional regulation of hepatitis B virus replication by the precore protein. Scaglioni PP, et al. **J Virol** 1997 Jan;71(1):345–53

Analysis of conserved domains of UL41 of herpes simplex virus type 1 in virion host shutoff and pathogenesis. Strelow LI, et al. **J Virol** 1996 Aug;70(8):5665–7

Specific interaction of polypyrimidine tract-binding protein with the extreme 3'-terminal structure of the hepatitis C virus genome, the 3'X. Tsuchihara K, et al. **J Virol** 1997 Sep;71(9):6720–6

Stability in controlling viral replication identifies long-term nonprogressors as a distinct subgroup among human immunodeficiency virus type 1-infected persons. Vesanen M, et al. **J Virol** 1996 Dec;70(12):9035–40

Effects of nucleocapsid mutations on human immunodeficiency virus assembly and RNA encapsidation. Zhang Y, et al. **J Virol** 1997 Sep;71(9):6765–76

Production of non-infectious human immunodeficiency virus-like particles which package specifically viral RNA. Haddrick M, et al. **J Virol Methods** 1996 Sep;61(1–2):89–93

Detection of swine vesicular disease virus RNA by reverse transcription-polymerase chain reaction. Lin F, et al. **J Virol Methods** 1997 Apr;65(1):111–21

Comparison of competitive and non-competitive reverse transcription-polymerase chain reaction (RT-PCR) for the quantification of hepatitis C virus (HCV) RNA. Ravaggi A, et al. **J Virol Methods** 1997 Apr;65(1):123–9

Circulating HCV-RNA, HCV genotype, and liver histology in asymptomatic individuals reactive for anti-HCV antibody and their follow-up study. Okanoue T, et al. **Liver** 1996 Aug;16(4):241–7

Photochemical cross-linking analysis of protein-nucleic acid interactions in Escherichia coli transcription complexes from lambda PR' promoter. Hanna MM. **Methods Enzymol** 1996;274:403–18

RNA-protein interactions in regulation of picornavirus RNA translation. Belsham GJ, et al. **Microbiol Rev** 1996 Sep; 60(3):499–511 (159 ref.)

A structured retroviral RNA element that mediates nucleocytoplasmic export of intron-containing RNA. Ernst RK, et al. **Mol Cell Biol** 1997 Jan;17(1):135–44

A suboptimal 5' splice site is a cis-acting determinant of nuclear export of polyomavirus late mRNAs. Huang Y, et al. **Mol Cell Biol** 1996 Nov;16(11):6046–54

Control of adenovirus early gene expression: posttranscriptional control mediated by both viral and cellular gene products. Katze MG, et al. **Mol Cell Biol** 1981 Sep;1(9):807–13

Sequence-mediated regulation of adenovirus gene expression by repression of mRNA accumulation. Prescott JC, et al. **Mol Cell Biol** 1997 Apr;17(4):2207–16

Promoter-proximal poly(A) sites are processed efficiently, but the RNA products are unstable in the nucleus. Scott JM, et al. **Mol Cell Biol** 1997 Apr;17(4):2127–35

A role for nucleoporin FG repeat domains in export of human immunodeficiency virus type 1 Rev protein and RNA from the nucleus. Stutz F, et al. **Mol Cell Biol** 1996 Dec; 16(12):7144–50

Role of the coat protein-RNA interaction in the life cycle of bacteriophage MS2. Peabody DS. **Mol Gen Genet** 1997 Apr 28;254(4):358–64

Dramatic decay of phage transcripts in lactococcal cells carrying the abortive infection determinant AbiB. Parreira R, et al. **Mol Microbiol** 1996 Jan;19(2):221–30

A sensitive procedure for mapping the boundaries of RNA elements binding in vitro translated proteins defines a minimal hepatitis B virus encapsidation signal. Beck J, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4364–6

A high affinity binding site for the HIV-1 nucleocapsid protein. Berglund JA, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1042–9

Regulation of the double-stranded RNA-dependent protein kinase PKR by RNAs encoded by a repeated sequence in the Epstein-Barr virus genome. Elia A, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4471–8

Bacteriophage T4 regA protein binds RNA as a monomer, overcoming dimer interactions. Phillips CA, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4319–26

MS2 coat protein mutants which bind Qbeta RNA. Spingola M, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2808–15

Plant pathogenic RNAs and RNA catalysis. Symons RH. **Nucleic Acids Res** 1997 Jul 15;25(14):2683–9 (71 ref.)

In vitro selection of RNA aptamers that can bind specifically to Tat protein of HIV-1. Yamamoto R, et al. **Nucleic Acids Symp Ser** 1995;(34):145–6

Mechanism of translation initiation on hepatitis C virus RNA. Nomoto A, et al. **Princess Takamatsu Symp** 1995;25:111–9 (30 ref.)

The La antigen binds 5' noncoding region of the hepatitis C virus RNA in the context of the initiator AUG codon and stimulates internal ribosome entry site-mediated translation. Ali N, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2249–54

Initiation of (-) strand DNA synthesis from tRNA(3Lys) on lentiviral RNAs: implications of specific HIV-1 RNA-tRNA(3Lys) interactions inhibiting primer utilization by retroviral reverse transcriptases. Arts EJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10063–8

Poly(rC) binding protein 2 binds to stem-loop IV of the poliovirus RNA 5' noncoding region: identification by automated liquid chromatography-tandem mass spectrometry. Blyn LB, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11115–20

Rescue of a segmented negative-strand RNA virus entirely from cloned complementary DNAs. Bridgen A, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15400–4

Alternatively spliced mRNAs predicted to yield frame-shift proteins and stable intron 1 RNAs of the herpes simplex virus 1 regulatory gene alpha 0 accumulate in the cytoplasm of infected cells. Carter KL, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12535–40

Targeting RNA decay with 2',5' oligoadenylate-antisense in respiratory syncytial virus-infected cells. Cirino NM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1937–42

A cellular 65-kDa protein recognizes the negative regulatory element of human papillomavirus late mRNA. Dietrich-Goetz W, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):163–8

The mouse histone H2a gene contains a small element that

facilitates cytoplasmic accumulation of intronless gene transcripts and of unspliced HIV-1-related mRNAs. Huang Y, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16; 94(19):10104-9

A novel 3'-end repair mechanism in an RNA virus [published erratum appears in Proc Natl Acad Sci U S A 1997 May 27;94(11):5980-2] Nagy PD, et al.
Proc Natl Acad Sci U S A 1997 Feb 18;94(4):1113-8

Viral RNA trafficking is inhibited in replicase-mediated resistant transgenic tobacco plants. Nguyen L, et al.
Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12643-7

HIV Rev-dependent binding of SF2/ASF to the Rev response element: possible role in Rev-mediated inhibition of HIV RNA splicing. Powell DM, et al.
Proc Natl Acad Sci U S A 1997 Feb 4;94(3):973-8

A general purpose RNA-cleaving DNA enzyme. Santoro SW, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4262-6

Anti-peptide aptamers recognize amino acid sequence and bind a protein epitope. Xu W, et al.
Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7475-80

Analysis of bacteriophage N protein and peptide binding to boxB RNA using polyacrylamide gel coelectrophoresis (PACE). Cilley CD, et al. **RNA** 1997 Jan;3(1):57-67

Surprising specificity of PKR binding to delta agent genomic RNA. Circle DA, et al. **RNA** 1997 Apr;3(4):438-48

Two functional complexes formed by KH domain containing proteins with the 5' noncoding region of poliovirus RNA. Gamarnik AV, et al. **RNA** 1997 Aug;3(8):882-92

Boundary of pRNA functional domains and minimum pRNA sequence requirement for specific connector binding and DNA packaging of phage phi29. Garver K, et al. **RNA** 1997 Sep;3(9):1068-79

Paramyxovirus RNA editing and the requirement for hexamer genome length. Hausmann S, et al. **RNA** 1996 Oct;2(10):1033-45

Structural analysis of the interaction of the pyrimidine tract-binding protein with the internal ribosomal entry site of encephalomyocarditis virus and foot-and-mouth disease virus RNAs. Kolupaeva VG, et al. **RNA** 1996 Dec; 2(12):1199-212

In vitro RNA binding of the hepatitis A virus proteinase 3C (HAV 3Cpro) to secondary structure elements within the 5' terminus of the HAV genome. Kusov YY, et al. **RNA** 1997 Mar;3(3):291-302

Functional analysis of filamentous phage f1 mRNA processing sites. Stump MD, et al. **RNA** 1996 Dec; 2(12):1286-94

A cellular cofactor for the constitutive transport element of type D retrovirus. Tang H, et al. **Science** 1997 May 30; 276(5317):1412-5

Pararetro- and retrovirus RNA: splicing and the control of nuclear export. Kiss-László Z, et al. **Trends Microbiol** 1996 Dec;4(12):480-5 (52 ref.)

Experimental confirmation of a hepatitis B virus (HBV) epsilon-like bulge-and-loop structure in avian HBV RNA encapsidation signals. Beck J, et al. **Virology** 1997 Jan 20; 227(2):500-4

Identification and deletion of sequences required for feline leukemia virus RNA packaging and construction of a high-titer feline leukemia virus packaging cell line. Burns CC, et al. **Virology** 1996 Aug 1;222(1):14-20

Cellular proteins bind to multiple sites of the leader region of cauliflower mosaic virus 35S RNA. Dominguez DI, et al. **Virology** 1996 Dec 15;226(2):374-83

Efficient translation of distal cistrons of a polycistronic mRNA of a plant pararetrovirus requires a compatible interaction between the mRNA 3' end and the proteinaceous trans-activator. Edskes HK, et al.
Virology 1996 Oct 15;224(2):564-7

Identification of sites that act together to direct dimerization of human foamy virus RNA in vitro. Erlwein O, et al. **Virology** 1997 Mar 3;229(1):251-8

Differences in the UV-crosslinking patterns of the poliovirus 5'-untranslated region with cell proteins from poliovirus-susceptible and -resistant tissues.
Gutiérrez-Escolano AL, et al. **Virology** 1997 Jan 20; 227(2):505-8

Mutations in both the U5 region and the primer-binding site influence the selection of the tRNA used for the initiation of HIV-1 reverse transcription. Kang SM, et al.
Virology 1996 Aug 15;222(2):401-14

Nontranslatability and dissimilar behavior in plants and protoplasts of viral RNA and movement protein complexes formed in vitro. Karpova OV, et al. **Virology** 1997 Mar 31;230(1):11-21

A specific host cellular protein binding element near the 3' end of mouse hepatitis virus genomic RNA. Liu Q, et al. **Virology** 1997 May 26;232(1):74-85

Peptides derived from the interferon-induced PKR prevent activation by HIV-1 TAR RNA. Nekhai S, et al.
Virology 1996 Aug 1;222(1):193-200

Effect of 5' and 3' terminal sequences, overall length, and coding capacity on the accumulation of defective RNAs associated with broad bean mottle bromovirus in planta. Pogany J, et al. **Virology** 1997 Feb 17;228(2):236-43

Mason-Pfizer monkey virus (MPMV) constitutive transport element (CTE) functions in a position-dependent manner. Rizvi TA, et al. **Virology** 1997 Sep 15;236(1):118-29

Definition of the RRE binding and activation domains of the caprine arthritis encephalitis virus Rev protein. Schoborg RV, et al. **Virology** 1996 Dec 1;226(1):113-21

Surprising function of the three influenza viral polymerase proteins: selective protection of viral mRNAs against the cap-snatching reaction catalyzed by the same polymerase proteins. Shih SR, et al. **Virology** 1996 Dec 15;226(2):430-5

A noncanonical poly(A) signal, UAUAAA, and flanking elements in Epstein-Barr virus DNA polymerase mRNA function in cleavage and polyadenylation assays. Silver Key SC, et al. **Virology** 1997 Jul 21;234(1):147-59

Identification and purification of cellular proteins that specifically interact with the RNA constitutive transport elements from retrovirus D. Tang H, et al. **Virology** 1997 Feb 17;228(2):333-9

The RNA-binding and effector domains of the viral NS1 protein are conserved to different extents among influenza A and B viruses. Wang W, et al. **Virology** 1996 Sep 1; 223(1):41-50

Distinct transcriptional pathways of TAR-dependent and TAR-independent human immunodeficiency virus type-1 transactivation by Tat. Yang L, et al. **Virology** 1997 Aug 18;235(1):48-64

Double-stranded RNA-dependent protein kinase (PKR) is regulated by reovirus structural proteins. Yue Z, et al.
Virology 1997 Aug 4;234(2):364-71

Nucleotide sequences within the U5 region of the viral RNA genome are the major determinants for an human immunodeficiency virus type 1 to maintain a primer binding site complementary to tRNA(His). Zhang Z, et al.
Virology 1996 Dec 15;226(2):306-17

"Hairpin" and "hammerhead" ribozymes directed towards the mumps virus nucleocapsid RNA: specific cleavage of a small synthetic RNA substrate and full-length mRNA. Albuquerque-Silva J, et al. **Virus Genes** 1996;13(3):211-9

Specific binding of polypyrimidine tract binding protein and hnRNP A1 to HIV-1 CRS elements. Black AC, et al.
Virus Genes 1996;12(3):275-85

Influenza A virus RNA-dependent RNA polymerase cleaves influenza mRNA in vitro. Peng Q, et al. **Virus Res** 1996 Jun;42(1-2):149-58

[Natural substrates of
uridylylpolynucleotide-(5'P---->O)-tyrosine
phosphodiesterase--an enzyme, hydrolyzing the covalent bond between RNA and picornaviral VPg and a synthetic model of them] Shabanov AA, et al. **Biokhimiia** 1996 Jun; 61(6):1106-18 (Eng. Abstr.) **(Rus)**

[Ribozyme cleaving the mRNA for influenza virus type A polymerase gene] Zakharchuk AN, et al.
Mol Biol (Mosk) 1996 Nov-Dec;30(6):1420-5 **(Rus)**

PHARMACOLOGY

Inhibition of influenza viral polymerases by minimal viral RNA decoys. Luo G, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2329-33

Differential effect of modified capped RNA substrates on influenza virus transcription. Cianci C, et al. **Virus Res** 1997 Jul;50(1):65-75

PHYSIOLOGY

Poliovirus assembly and encapsidation of genomic RNA. Ansardi DC, et al. **Adv Virus Res** 1996;46:1-68 (232 ref.)

Hepadnaviruses: current models of RNA encapsidation and reverse transcription. Fallows DA, et al. **Adv Virus Res** 1996;46:165-94 (138 ref.)

RNA packaging. Berkowitz R, et al.
Curr Top Microbiol Immunol 1996;214:177-218 (218 ref.)

Trans-acting untranslated elements of groundnut rosette virus satellite RNA are involved in symptom production. Taliansky ME, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1277-85

A cDNA clone from a defective RNA of citrus tristeza virus is infective in the presence of the helper virus. Yang G, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1765-9

Sequential action of six virus-encoded DNA-packaging RNAs during phage phi29 genomic DNA translocation. Chen C, et al. **J Virol** 1997 May;71(5):3864-71

Human immunodeficiency virus type 1 RNA outside the primary encapsidation and dimer linkage region affects RNA dimer stability in vivo. Sakuragi JI, et al. **J Virol** 1997 Apr;71(4):3250-4

Determinants of the human immunodeficiency virus type 1 p15NC-RNA interaction that affect enhanced cleavage by the viral protease. Sheng N, et al. **J Virol** 1997 Aug; 71(8):5723-32

Functional equivalence of common and unique sequences in the 3' untranslated regions of alfalfa mosaic virus RNAs 1, 2, and 3. van Rossum CM, et al. **J Virol** 1997 May; 71(5):3811-6

Inhibition of transcription by the TAR RNA of HIV-1 in a nuclear extract of HeLa cells. Yamamoto R, et al.
Nucleic Acids Res 1997 Sep 1;25(17):3445-50

A single codon change in a conserved motif of a bromovirus movement protein gene confers compatibility with a new host. Fujita Y, et al. **Virology** 1996 Sep 15;223(2):283-91

Structural requirements for initiation of translation by internal ribosome entry within genome-length hepatitis C virus RNA. Honda M, et al. **Virology** 1996 Aug 1; 222(1):31-42

In vitro transcripts from cloned cDNAs of the lettuce infectious yellows closterovirus bipartite genomic RNAs are competent for replication in Nicotiana benthamiana protoplasts. Klaassen VA, et al. **Virology** 1996 Aug 1; 222(1):169-75

STANDARDS

Evaluation of a quality assurance program for quantitation of human immunodeficiency virus type 1 RNA in plasma by the AIDS Clinical Trials Group virology laboratories. Yen-Lieberman B, et al. **J Clin Microbiol** 1996 Nov; 34(11):2695-701

ULTRASTRUCTURE

Electron microscopic study of human immunodeficiency virus type 1 (HIV-1) core structure: two RNA strands in the core of mature and budding particles. Takasaki T, et al. **Arch Virol** 1997;142(2):375-82

Secondary structure probing of potato spindle tuber viroid (PSTVd) and sequence comparison with other small pathogenic RNA replicons provides evidence for central non-canonical base-pairs, large A-rich loops, and a terminal branch. Gast FU, et al. **J Mol Biol** 1996 Oct 11; 262(5):652-70

Foot-and-mouth disease virus and poliovirus particles contain proteins of the replication complex. Newman JF, et al. **J Virol** 1997 Oct;71(10):7657-62

Ultrastructure of HIV-1 genomic RNA. Höglund S, et al. **Virology** 1997 Jul 7;233(2):271-9

RNA VIRUSES

A new small RNA virus persistently infecting an established cell line of Galleria mellonella, induced by a heterologous infection. Lery X, et al. **J Invertebr Pathol** 1997 Jan; 69(1):7-13

[Viral myocarditis] Inoue K, et al.
Ryoikibetsu Shokogun Shirizu 1996;(14):29-35 (20 ref.) **(Jpn)**

[Virus-induced apoptosis as a host defence mechanism] Koyama AH. **Tanpakushitsu Kakusan Koso** 1996 Jul; 41(9):1363-71; discussion 1396-7 (36 ref.) **(Jpn)**

[Fish viruses] Yoshimizu M. **Uirusu** 1996 Jun;46(1):49-52 (10 ref.) **(Jpn)**

CHEMISTRY

Detection of potato mop-top virus capsid readthrough protein in virus particles. Cowan GH, et al.
J Gen Virol 1997 Jul;78 (Pt 7):1779-83

CLASSIFICATION

Proposed re-classification of furoviruses. Torrance L, et al. **Arch Virol** 1997;142(2):435-9

[Viruses of whales and dolphins] Birkun AA Jr.
Mikrobiol Z 1996 Sep-Oct;58(5):100-6 (52 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Antiviral properties of extract of Opuntia streptacantha. Ahmad A, et al. **Antiviral Res** 1996 May;30(2-3):75-85

Virucidal activity of pure singlet oxygen generated by thermolysis of a water-soluble naphthalene endoperoxide. Dewilde A, et al. **J Photochem Photobiol B** 1996 Oct; 36(1):23-9

ENZYMOLOGY

Characterization of an RNA-dependent RNA polymerase activity associated with La France isometric virus. Goodin MM, et al. **J Virol** 1997 Mar;71(3):2264-9

Virus-encoded RNA helicases. Kadaré G, et al. **J Virol** 1997 Apr;71(4):2583-90 (65 ref.)

Characterization of the in vitro activity of the RNA-dependent RNA polymerase associated with the ribonucleoproteins of rice hoja blanca tenuivirus. Nguyen M, et al. **J Virol** 1997 Apr;71(4):2621-7

GENETICS

Comparison of the replication of positive-stranded RNA viruses of plants and animals. Buck KW.
Adv Virus Res 1996;47:159-251 (543 ref.)

Role of host proteins in gene expression of nonsegmented negative strand RNA viruses. De BP, et al.
Adv Virus Res 1997;48:169-204 (141 ref.)

Genomic classification of fish nodaviruses by molecular phylogenetic analysis of the coat protein gene. Nishizawa T, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1633-6

Detection and characterization of a distinct type of beet necrotic yellow vein virus RNA 5 in a sugarbeet growing area in Europe. Koenig R, et al. **Arch Virol** 1997; 142(7):1499-504

Complete nucleotide sequence of the Japanese isolate S of beet necrotic yellow vein virus RNA and comparison with European isolates. Saito M, et al. **Arch Virol** 1996; 141(11):2163-75

RNA virus evolution, population dynamics, and nutritional status. Domingo E. **Biol Trace Elem Res** 1997 Jan; 56(1):23-30 (31 ref.)

Factors affecting the spread of double-stranded RNA viruses in Aspergillus nidulans. Coenen A, et al. **Genet Res** 1997 Feb;69(1):1-10

Is group selection a factor modulating the virulence of RNA viruses? Miralles R, et al. **Genet Res** 1997 Jun;69(3):165-72

A method for accurate determination of terminal sequences of viral genomic RNA. Weng Z, et al. **Genome Res** 1995 Sep;5(2):202-7

Blackgram mottle virus RNA and its in vitro translation. Balasubrahmanyam A, et al. **Indian J Exp Biol** 1997 Jan; 35(1):37–41

Identification of a ribosomal frameshift in Leishmania RNA virus 1–4. Lee SE, et al. **J Biochem (Tokyo)** 1996 Jul; 120(1):22–5

The nucleotide sequence of RNA3 and RNA4 of olive latent virus 2. Grieco F, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):929–37

The nucleotide sequence of RNA1 and RNA2 of olive latent virus 2 and its relationships in the family Bromoviridae. Grieco F, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2637–44

Sequence of RNA2 of the Helicoverpa armigera stunt virus (Tetraviridae) and bacterial expression of its genes. Hanzlik TN, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):799–811

Beet soil-borne virus RNA 2: similarities and dissimilarities to the coat protein gene-carrying RNAs of other furoviruses. Koenig R, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):469–77

Comparison of the coat protein genes of five fish nodaviruses, the causative agents of viral nervous necrosis in marine fish. Nishizawa T, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1563–9

Nucleotide sequence and taxonomy of maize chlorotic dwarf virus within the family Sequiviridae. Reddick BB, et al. **J Gen Virol** 1997 May;78 (Pt 5):1165–74

The nucleotide sequence and genomic organization of grapevine virus B. Saldarelli P, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2645–52

Complete nucleotide sequence and organization of the RNA genome of groundnut rosette umbravirus. Taliansky ME, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2335–45

The proteins encoded by rice grassy stunt virus RNA5 and RNA6 are only distantly related to the corresponding proteins of other members of the genus Tenuivirus. Toriyama S, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2355–63

Completion of the impatiens necrotic spot virus genome sequence and genetic comparison of the L proteins within the family Bunyaviridae. van Poelwijk F, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):543–6

Rapid evolution of viral RNA genomes. Domingo E. **J Nutr** 1997 May;127(5 Suppl):958S–961S (30 ref.)

Replication of flock house virus RNAs from primary transcripts made in cells by RNA polymerase II. Johnson KL, et al. **J Virol** 1997 Apr;71(4):3323–7

In vitro selection of packaging sites in a double-stranded RNA virus. Yao W, et al. **J Virol** 1997 Mar;71(3):2157–62

V3 loop core region serotyping of HIV-1 infected patients using the FHV epitope presenting system. Schiappacassi M, et al. **J Virol Methods** 1997 Jan;63(1–2):121–7

The Ustilago maydis virally encoded KP1 killer toxin. Park CM, et al. **Mol Microbiol** 1996 Jun;20(5):957–63

dsRNA associated with virus-like particles in Eimeria spp. of the domestic fowl. Lee S, et al. **Parasitol Res** 1996; 82(6):518–23

Rescue of a segmented negative-strand RNA virus entirely from cloned complementary DNAs. Bridgen A, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15400–4

Peptidyl-transferase inhibitors have antiviral properties by altering programmed -1 ribosomal frameshifting efficiencies: development of model systems. Dinman JD, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6606–11

Negative-strand RNA viruses: genetic engineering and applications. Palese P, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11354–8 (46 ref.)

Positive strands to the rescue again: a segmented negative-strand RNA virus derived from cloned cDNAs. Rose JK. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):14998–5000 (31 ref.)

Genetic engineering of animal RNA viruses. Conzelmann KK, et al. **Trends Microbiol** 1996 Oct;4(10):386–93 (73 ref.)

Oat blue dwarf marafivirus resembles the tymoviruses in sequence, genome organization, and expression strategy. Edwards MC, et al. **Virology** 1997 May 26;232(1):217–29

The genome organization and affinities of an Australian isolate of carrot mottle umbravirus. Gibbs MJ, et al. **Virology** 1996 Oct 1;224(1):310–3

New insights into the mechanisms of RNA recombination. Nagy PD, et al. **Virology** 1997 Aug 18;235(1):1–9 (80 ref.)

Genomic organization and sequence conservation in type I Trichomonas vaginalis viruses. Su HM, et al. **Virology** 1996 Aug 15;222(2):470–3

Sequence of Echinochloa hoja blanca tenuivirus RNA-4. de Miranda JR, et al. **Virus Genes** 1996;13(1):61–4

Sequence of Echinochloa hoja blanca tenuivirus RNA-3. de Miranda JR, et al. **Virus Genes** 1996;13(1):65–8

Sequence of rice hoja blanca tenuivirus RNA-2. De Miranda JR, et al. **Virus Genes** 1996;12(3):231–7

Sequence of echinochloa hoja blanca tenuivirus RNA-5. de Miranda JR, et al. **Virus Genes** 1996;12(2):131–4

Sequence analysis of wheat and oat furovirus capsid protein genes suggests that oat golden stripe virus is a strain of soil-borne wheat mosaic virus. Chen J, et al. **Virus Res** 1996 Apr;41(2):179–83

Cloning, sequencing and expression of a full-length cDNA copy of the M1 double-stranded RNA virus from the yeast, Saccharomyces cerevisiae. Russell PJ, et al. **Yeast** 1997 Jul;13(9):829–36

[Reverse genetics of negative-strand RNA viruses] Enami M. **Uirusu** 1995 Dec;45(2):145–57 (56 ref.) **(Jpn)**

GROWTH & DEVELOPMENT

The production of cricket paralysis virus in suspension cultures of insect cell lines. Scotti PD, et al. **J Invertebr Pathol** 1996 Sep;68(2):109–12

IMMUNOLOGY

Expression of single-chain antibody fragments (scFv) specific for beet necrotic yellow vein virus coat protein or 25 kDa protein in Escherichia coli and Nicotiana benthamiana. Fecker LF, et al. **Plant Mol Biol** 1996 Dec;32(5):979–86

ISOLATION & PURIFICATION

Immunodetection of beet necrotic yellow vein virus RNA3-encoded protein in different host plants and tissues. Li Y, et al. **Acta Virol** 1996 Apr;40(2):67–72

Characterization of rice yellow mottle virus isolates in Sudano-Sahelian areas. Konate G, et al. **Arch Virol** 1997; 142(6):1117–24

Cell culture isolation of piscine neuropathy nodavirus from juvenile sea bass, Dicentrarchus labrax. Frerichs GN, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2067–71

Viruses and oncogenes in brain tumors. Archer GE, et al. **J Neurovirol** 1997 May;3 Suppl 1:S76–7 (7 ref.)

RT-PCR detection of dsRNAs associated with La France disease of the cultivated mushroom Agaricus bisporus (Lange) Imbach. Revill PA, et al. **J Virol Methods** 1997 Jan;63(1–2):17–26

Infection and replication of a planthopper transmitted virus-rice stripe virus in rice protoplasts. Yang W, et al. **J Virol Methods** 1996 May;59(1–2):57–60

Serine palmitoyltransferase (scs1/lcb2) mutants have elevated copy number of the L-A dsRNA virus. Garnepudi VR, et al. **Yeast** 1997 Mar 30;13(4):299–304

METABOLISM

Viral infection. Santoro MG. **EXS** 1996;77:337–57 (103 ref.)

Maize stripe tenuivirus RNA2 transcripts in plant and insect hosts and analysis of pvc2, a protein similar to the Phlebovirus virion membrane glycoproteins. Estabrook EM, et al. **Virus Genes** 1996;12(3):239–47

PATHOGENICITY

Is group selection a factor modulating the virulence of RNA viruses? Miralles R, et al. **Genet Res** 1997 Jun;69(3):165–72

Viral determinants of pea early browning virus seed transmission in pea. Wang D, et al. **Virology** 1997 Jul 21; 234(1):112–7

A single nucleotide substitution converts potato spindle tuber viroid (PSTVd) from a noninfectious to an infectious RNA for nicotiana tabacum. Wassenegger M, et al. **Virology** 1996 Dec 15;226(2):191–7

PHYSIOLOGY

Prions and RNA viruses of Saccharomyces cerevisiae. Wickner RB. **Annu Rev Genet** 1996;30:109–39 (141 ref.)

Amyotrophic lateral sclerosis and viruses. Salazar-Grueso EF, et al. **Clin Neurosci** 1995–96;3(6):360–7 (90 ref.)

Structure of L-A virus: a specialized compartment for the transcription and replication of double-stranded RNA. Castón JR, et al. **J Cell Biol** 1997 Sep 8;138(5):975–85

Transmission of tobacco rattle virus isolate PpK20 by its nematode vector requires one of the two non-structural genes in the viral RNA 2. Hernández C, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):465–7

Fish nodavirus lytic cycle and semipermissive expression in mammalian and fish cell cultures. Delsert C, et al. **J Virol** 1997 Jul;71(7):5673–7

Cotranslational disassembly of flock house virus in a cell-free system. Hiscox JA, et al. **J Virol** 1997 Oct;71(10):7974–7

Double-stranded RNA viruses of Saccharomyces cerevisiae. Wickner RB. **Microbiol Rev** 1996 Mar;60(1):250–65 (172 ref.)

RNA viruses. Life on the edge of catastrophe [news] Nichol S. **Nature** 1996 Nov 21;384(6606):218–9

Extensive alteration of fungal gene transcript accumulation and elevation of G-protein-regulated cAMP levels by a virulence-attenuating hypovirus. Chen B, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7996–8000

Down-regulation of groundnut rosette virus replication by a variant satellite RNA. Taliansky ME, et al. **Virology** 1997 Apr 14;230(2):228–35

ULTRASTRUCTURE

Structure of L-A virus: a specialized compartment for the transcription and replication of double-stranded RNA. Castón JR, et al. **J Cell Biol** 1997 Sep 8;138(5):975–85

7S RNA see **RNA, SMALL NUCLEAR**

RNASE see **RIBONUCLEASES**

RNASE A see **RIBONUCLEASE, PANCREATIC**

RNASE H see **RIBONUCLEASE H, CALF THYMUS**

RNASE T1 see **RIBONUCLEASE T1**

RO 4-4602 see **BENSERAZIDE**

RO 7-0207 see **ORNIDAZOLE**

RO 7-0582 see **MISONIDAZOLE**

RO 10-9359 see **ETRETINATE**

RO 15-1788 see **FLUMAZENIL**

RO 20-1724

PHARMACOLOGY

Chronic exposure to Ro20-1724 protects dopaminergic neurons in vitro against the neurotoxic action of N-methyl-D-aspartate and 1-methyl-4-phenylpyridinium. Dickie BG, et al. **Brain Res** 1997 Apr 11;753(2):335–9

Activation of phosphodiesterase IV during desensitization of the A2A adenosine receptor-mediated cyclic AMP response in rat pheochromocytoma (PC12) cells. Chang YH, et al. **J Neurochem** 1997 Sep;69(3):1300–9

Treatment with the type IV phosphodiesterase inhibitor Ro 20-1724 protects renal and mesenteric blood flow in endotoxemic rats treated with norepinephrine. Carcillo JA, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1197–204

ROBENIDINE

ANALOGS & DERIVATIVES

In vivo trypanocidal activities of new S-adenosylmethionine decarboxylase inhibitors. Bacchi CJ, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1448–53

Antileishmanial effect of a potent S-adenosylmethionine decarboxylase inhibitor: CGP 40215A. Mukhopadhyay R, et al. **Pharmacol Res** 1996 Jan;33(1):67–70

ROBENZIDENE see **ROBENIDINE**

ROBENZIDINE see **ROBENIDINE**

ROBOTICS

Assessment of posterior cruciate ligament graft performance using robotic technology. Stone JD, et al. **Am J Sports Med** 1996 Nov-Dec;24(6):824–8

Fully robotic method for characterization of toxic residues. Velasco-Arjona A, et al. **Analyst** 1997 Feb;122(2):123–8

The effect of robot-assisted therapy and rehabilitative training on motor recovery following stroke. Aisen ML, et al. **Arch Neurol** 1997 Apr;54(4):443–6

The effect of anterior cruciate ligament graft fixation site at the tibia on knee stability: evaluation using a robotic testing system. Ishibashi Y, et al. **Arthroscopy** 1997 Apr; 13(2):177–82

Evolving mobile robots in simulated and real environments. Miglino O, et al. **Artif Life** 1995 Summer;2(4):417–34

Mechanism and computer simulation of a new robot hand for potential use as an artificial hand. Lin LR, et al. **Artif Organs** 1997 Jan;21(1):59–69

Visual computation of egomotion using an image interpolation technique. Chahl JS, et al. **Biol Cybern** 1996 May;74(5):405–11

Study of human forearm posture maintenance with a physiologically based robotic arm and spinal level neural controller. Chou PC, et al. **Biol Cybern** 1997 Apr; 76(4):285–98

NASA technology finds earthly use: robot will probe brain for tumors. **Biomed Instrum Technol** 1997 Mar-Apr; 31(2):170

Microrobotics in surgical practice. Goh PM, et al. **Br J Surg** 1997 Jan;84(1):2–4

Autonomy in robots and other agents. Smithers T. **Brain Cogn** 1997 Jun;34(1):88–106

Robotics and the changing face of the clinical laboratory [see comments] Boyd JC, et al. **Clin Chem** 1996 Dec; 42(12):1901–10 (30 ref.). Comment in: Clin Chem 1996 Dec;42(12):1899–900.

Excerpts from the final report for the Second International Workshop on Robotics and Computer Assisted Medical Interventions, June 23–26, 1996, Bristol, England. **Comput Aided Surg** 1997;2(2):69–101

Robotic radiosurgery with noncylindrical collimators. Schweikard A, et al. **Comput Aided Surg** 1997;2(2):124–34

Technology. Need a hand? Ask Aesop. Montague J. **Hosp Health Netw** 1996 Oct 20;70(20):54

Dynamic-robotic telepathology: Department of Veterans Affairs feasibility study. Dunn BE, et al. **Hum Pathol** 1997 Jan;28(1):8–12

Sequencing support system: a robotic system for processing DNA samples. Brignac S. **IEEE Eng Med Biol Mag** 1997 Mar-Apr;16(2):92–3

Real-time visual servoing for laparoscopic surgery. Controlling robot motion with color image segmentation. Wei GQ, et al. **IEEE Eng Med Biol Mag** 1997 Jan-Feb; 16(1):40–5

Technical aids for the physically handicapped: a psychological study of the master robot. Morvan JS, et al. **Int J Rehabil Res** 1997 Jun;20(2):193–7

Robotic automated analysis of foods for aflatoxin. Carman AS Jr, et al. **J AOAC Int** 1996 Mar-Apr;79(2):456–64

Design and development of an electromechanical ultrasound probe holder for urodynamics testing. Miller EM, et al.

ROBOTICS

J Biomech 1996 Oct;29(10):1361–4
A combined robotic/universal force sensor approach to determine in situ forces of knee ligaments. Rudy TW, et al. **J Biomech** 1996 Oct;29(10):1357–60
Sample preparation with an automated robotic workstation for organic acid analysis by gas chromatography–mass spectrometry. Bengtsson IM, et al.
J Chromatogr B Biomed Appl 1996 Oct 11;685(1):1–7
Sensitive high–performance liquid chromatographic determination of nifedipine in dog plasma using an automated sample preparation system with laboratory robot. Horváth V, et al. **J Chromatogr B Biomed Appl** 1996 Nov 15;686(2):211–9
Frameless patient registration using ultrasonic imaging: a preliminary study. Ault T, et al. **J Image Guid Surg** 1995; 1(2):94–102
Robot–assisted microscope for neurosurgery. Giorgi C, et al. **J Image Guid Surg** 1995;1(3):158–63
Neurosurgical robot Minerva: first results and current developments. Glauser D, et al. **J Image Guid Surg** 1995; 1(5):266–72
Registration and immobilization in robot–assisted surgery. Lea JT, et al. **J Image Guid Surg** 1995;1(2):80–7
Development of an MRI–compatible needle insertion manipulator for stereotactic neurosurgery. Masamune K, et al. **J Image Guid Surg** 1995;1(4):242–8
Execution of robot–assisted biopsies within the clinical context. Rovetta A, et al. **J Image Guid Surg** 1995; 1(5):280–7
Automated instrument tracking in robotically assisted laparoscopic surgery. Uecker DR, et al.
J Image Guid Surg 1995;1(6):308–25
Automated protein preparation techniques using a digest robot. Houthaeve T, et al. **J Protein Chem** 1997 Jul; 16(5):343–8
A robotic system for percutaneous renal access. Cadeddu JA, et al. **J Urol** 1997 Oct;158(4):1589–93
Healing of laser incisions in rat dermis: comparisons of the carbon dioxide laser under manual and computer control and the scalpel. Howard J, et al. **Lasers Surg Med** 1997; 20(1):90–6
Electromagnetic compatibility aspects of active robotic systems for surgery: the robotic prostatectomy experience. Arámbula Cosío F, et al. **Med Biol Eng Comput** 1997 Jul; 35(4):436–40
MARS—multiple automated robotic synthesizer for continuous flow of peptides. Krchňák V, et al.
Pept Res 1996 Jan–Feb;9(1):45–9
Bone registration method for robot assisted surgery: pedicle screw insertion. Abdel–Malek K, et al.
Proc Inst Mech Eng [H] 1997;211(3):221–33
Why can't a computer be more like a brain? [news] Watson A. **Science** 1997 Sep 26;277(5334):1934–6
The micro–laserbot: an alternative method for frameless stereotactic localization. Hardy TL, et al.
Stereotact Funct Neurosurg 1996;66(1–3):75–80
Determination of the learning curve of the AESOP robot. Jacobs LK, et al. **Surg Endosc** 1997 Jan;11(1):54–5
Robotics in urologic surgery. Cadeddu JA, et al. **Urology** 1997 Apr;49(4):501–7
[Transcranial Doppler ultrasound—robotics–controlled transducers for quantifying the effect of acupuncture] Litscher G, et al. **Biomed Tech (Berl)** 1997 May; 42(5):116–22 (Eng. Abstr.) **(Ger)**
[Computer–assisted orthopedic surgery. From pedicle screw insertion to further applications] Berlemann U, et al.
Orthopade 1997 May;26(5):463–9 (34 ref.) (Eng. Abstr.) **(Ger)**
[Computer–guided robot–assisted hip endoprosthesis] Börner M, et al. **Orthopade** 1997 Mar;26(3):251–7 (Eng. Abstr.) **(Ger)**
[Robot–assisted knee endoprosthesis] Gossé F, et al.
Orthopade 1997 Mar;26(3):258–66 (Eng. Abstr.) **(Ger)**

HISTORY

Canadian neurosurgeon helps prove that robots, surgery "are made to be partners". Mason RB. **Can Med Assoc J** 1996 Sep 15;155(6):780–1

INSTRUMENTATION

Automatic head positioning system using PSD–equipped camera–based photostereometry and a 5–degree–of–freedom robotized chair: calibration and accuracy verification. Nakamura Y, et al.
Front Med Biol Eng 1997;8(1):47–63
Manipulator adaptive control by neural networks in an orange picking robot. Cavalieri S, et al.
Int J Neural Syst 1996 Dec;7(6):735–55
The micro–robotic laboratory: optical trapping and scissing for the biologist. Conia J, et al. **J Clin Lab Anal** 1997; 11(1):28–38
Automating combinatorial chemistry: a primer on benchtop robotic systems. Hardin JH, et al. **Mol Divers** 1996 Aug; 1(4):270–4
[Technical requirements and possibilities of teleconsultation in laparoscopic interventions] Ungeheuer A, et al.
Langenbecks Arch Chir Suppl Kongressbd 1996;113:628–30 (Eng. Abstr.) **(Ger)**

METHODS

Automatic head positioning system using PSD–equipped camera–based photostereometry and a 5–degree–of–freedom robotized chair: calibration and accuracy verification. Nakamura Y, et al.
Front Med Biol Eng 1997;8(1):47–63
The micro–robotic laboratory: optical trapping and scissing for the biologist. Conia J, et al. **J Clin Lab Anal** 1997; 11(1):28–38
An automatic technique for micro–drilling a stapedotomy in the flexible stapes footplate. Brett PN, et al.
Proc Inst Mech Eng [H] 1995;209(4):255–62

TRENDS

Home care. This nurse is wired. Douglass K.
Hosp Health Netw 1997 Sep 5;71(17):78
Robot surgeons: never mind the cost, feel the quality [news] Jack DB. **Lancet** 1996 Oct 26;348(9035):1160

ROC ANALYSIS see **ROC CURVE**

ROC CURVE

Statistical methodology: III. Receiver operating characteristic (ROC) curves. Grzybowski M, et al.
Acad Emerg Med 1997 Aug;4(8):818–26
Using receiver operating characteristic (ROC) analysis to establish the previous experience threshold for critical–procedure competency. Chapman DM, et al.
Acad Med 1996 Oct;71(10 Suppl):S7–9
Proper receiver operating characteristic analysis: the bigamma model. Dorfman DD, et al. **Acad Radiol** 1997 Feb;4(2):138–49
Extension of receiver operating characteristic analysis to data concerning multiple signal detection tasks. Hajian–Tilaki KO, et al. **Acad Radiol** 1997 Mar;4(3):222–9
Comparison of receiver operating characteristic curves on the basis of optimal operating points. Halpern EJ, et al.
Acad Radiol 1996 Mar;3(3):245–53
Sampling variability of nonparametric estimates of the areas under receiver operating characteristic curves: an update. Hanley JA, et al. **Acad Radiol** 1997 Jan;4(1):49–58
The "proper" binormal model: parametric receiver operating characteristic curve estimation with degenerate data. Pan X, et al. **Acad Radiol** 1997 May;4(5):380–9
Dorfman–Berbaum–Metz method for statistical analysis of multireader, multimodality receiver operating characteristic data: validation with computer simulation. Roe CA, et al. **Acad Radiol** 1997 Apr;4(4):298–303
Variance–component modeling in the analysis of receiver operating characteristic index estimates. Roe CA, et al.
Acad Radiol 1997 Aug;4(8):587–600
On gradient–echo terminology and receiver operating characteristic methodology [letter; comment] Yao L.
AJR Am J Roentgenol 1997 Jun;168(6):1617–8. Comment on: AJR Am J Roentgenol 1996 Jun;166(6):1475–81.
Appropriate use of receiver operating characteristic curves [letter; comment] McAfee AT. **Ann Emerg Med** 1997 Apr; 29(4):556. Comment on: Ann Emerg Med 1996 Sep;28(3):313–7.
Analysis of ROC curves applied to the diagnosis of Lyme disease [letter; comment] Solomon HM.
Arch Intern Med 1997 Jun 9;157(11):1266–7. Comment on: Arch Intern Med 1996 Oct 14;156(18):2105–9.
Receiver operating characteristic curves for analysis of the results of cervicovaginal smears. A useful quality improvement tool. Renshaw AA, et al.
Arch Pathol Lab Med 1997 Sep;121(9):968–75
Nonparametric analysis of clustered ROC curve data. Obuchowski NA. **Biometrics** 1997 Jun;53(2):567–78
Confidence intervals for the generalized ROC criterion. Reiser B, et al. **Biometrics** 1997 Jun;53(2):644–52
Analysis of correlated ROC areas in diagnostic testing. Song HH. **Biometrics** 1997 Mar;53(1):370–82
A nonparametric maximum likelihood estimator for the receiver operating characteristic curve area in the presence of verification bias. Zhou XH. **Biometrics** 1996 Mar; 52(1):299–305
Accuracy and observer variation [letter; comment] Robinson P, et al. **Clin Radiol** 1997 Aug;52(8):636. Comment on: Clin Radiol 1997 Mar;52(3):235–8.
Heart rate variability in patients with daytime sleepiness suspected of having sleep apnoea syndrome: a receiver–operating characteristic analysis. Keyl C, et al.
Clin Sci (Colch) 1997 Apr;92(4):335–43
Signal–detection, threshold, and dual–process models of recognition memory: ROCs and conscious recollection. Yonelinas AP, et al. **Conscious Cogn** 1996 Dec;5(4):418–41
Alternative summary indices for the receiver operating characteristic curve. Lee WC, et al. **Epidemiology** 1996 Nov;7(6):605–11
Quantitative evaluation of histological features in "time–zero" liver allograft biopsies as predictors of rejection or graft failure: receiver–operating characteristic analysis application. Abraham S, et al. **Hum Pathol** 1996 Oct; 27(10):1077–84
Generating ROC curves for artificial neural networks. Woods K, et al. **IEEE Trans Med Imaging** 1997 Jun;16(3):329–37
Receiver operating characteristic (ROC) curve analysis of the tumor markers CEA, CA 19–9 and CA 72–4 in gastric cancer. Fernández–Fernández L, et al. **Int Surg** 1996 Oct–Dec;81(4):400–2
Is there a gain from "chance–corrected" measures of diagnostic validity? Holle R, et al. **J Clin Epidemiol** 1997 Jan;50(1):117–20
Performance of Gd–EOB–DTPA and superparamagnetic iron oxide particles in the detection of primary liver cancer: a comparative study by alternative free–response receiver operating characteristic analysis. Tanimoto A, et al.
J Magn Reson Imaging 1997 Jan–Feb;7(1):120–4
ROC methods for evaluation of fMRI techniques. Sorenson JA, et al. **Magn Reson Med** 1996 Nov;36(5):737–44
A comparison of parametric and nonparametric approaches to ROC analysis of quantitative diagnostic tests. Hajian–Tilaki KO, et al. **Med Decis Making** 1997 Jan–Mar; 17(1):94–102
Bayesian analysis of ROC curves using Markov–chain Monte Carlo methods. Peng F, et al. **Med Decis Making** 1996 Oct–Dec;16(4):404–11
On ROC analysis [letter; comment] Philosophov LV.
Med Decis Making 1996 Jul–Sep;16(3):302–3. Comment on: Med Decis Making 1995 Jul–Sep;15(3):276–82.
Waist circumference as a screening tool for cardiovascular risk factors: evaluation of receiver operating characteristics (ROC). Han TS, et al. **Obes Res** 1996 Nov;4(6):533–47
Computation modes of multivariate positive predictive characteristics. Malik M, et al.
Pacing Clin Electrophysiol 1997 Jun;20(6):1708–13
Use of receiver–operator characteristic (ROC) curve analysis to evaluate predictors of response to clomipramine therapy. Ackerman DL, et al. **Psychopharmacol Bull** 1996; 32(1):157–65
In pursuit of a piece of the ROC [editorial; comment] Dwyer AJ. **Radiology** 1996 Dec;201(3):621–5. Comment on: Radiology 1996 Dec;201(3):745–50.
A receiver operating characteristic partial area index for highly sensitive diagnostic tests [see comments] Jiang Y, et al. **Radiology** 1996 Dec;201(3):745–50. Comment in: Radiology 1996 Dec;201(3):621–5.
The use of the 'binormal' model for parametric ROC analysis of quantitative diagnostic tests. Hanley JA. **Stat Med** 1996 Jul 30;15(14):1575–85
Sample size determination for diagnostic accuracy studies involving binormal ROC curve indices. Obuchowski NA, et al. **Stat Med** 1997 Jul 15;16(13):1529–42
A measure of association for assessing prediction accuracy that is a generalization of non–parametric ROC area. Smith WD, et al. **Stat Med** 1996 Jun 15;15(11):1199–215
Ordinal regression methodology for ROC curves derived from correlated data. Toledano AY, et al. **Stat Med** 1996 Aug 30;15(16):1807–26
Limitations to the robustness of binormal ROC curves: effects of model misspecification and location of decision thresholds on bias, precision, size and power. Walsh SJ. **Stat Med** 1997 Mar 30;16(6):669–79
A simple method for comparing correlated ROC curves using incomplete data. Zhou XH, et al. **Stat Med** 1996 Aug 15; 15(15):1687–93
ROC analysis of noninvasive tests for peripheral arterial disease. Lijmer JG, et al. **Ultrasound Med Biol** 1996; 22(4):391–8
[Analysis of the diagnostic value of endovascular ultrasound with roc curves. Practical implications] Finet G, et al.
Arch Mal Coeur Vaiss 1997 Jan;90(1):59–66 (Eng. Abstr.) **(Fre)**
[Performance study of teleradiology network systems with CRT monitors: ROC analysis of an observation study of simulated lung nodules] Takizawa M, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1996 Dec; 56(14):1061–5 (Eng. Abstr.) **(Jpn)**
[Roc curves in the evaluation of diagnostic tests (letter; comment)] Díez Herranz A, et al. **Med Clin (Barc)** 1997 Jan 11;108(1):34–5. Comment on: Med Clin (Barc) 1995 May 6;104(17):661–70. **(Spa)**

ROCHALIMAEA see **BARTONELLA**

ROCHALIMAEA HENSELAE see **BARTONELLA HENSELAE**

ROCHALIMAEA INFECTIONS see **BARTONELLA INFECTIONS**

ROCHALIMAEA QUINTANA see **BARTONELLA QUINTANA**

ROCKY MOUNTAIN SPOTTED FEVER

COMPLICATIONS

Predictors of prognosis and risk of acute renal failure in patients with Rocky Mountain spotted fever. Conlon PJ, et al. **Am J Med** 1996 Dec;101(6):621–6
Guillain–Barré syndrome associated with Rocky Mountain spotted fever: case report and review. Toerner JG, et al.
Clin Infect Dis 1996 Jun;22(6):1090–1

DIAGNOSIS

Comparison of CT and MR features with clinical outcome in patients with Rocky Mountain spotted fever. Bonawitz C, et al. **AJNR Am J Neuroradiol** 1997 Mar;18(3):459–64
Immunoperoxidase and immunofluorescent staining of Rickettsia rickettsii in skin biopsies. A comparative study. Procop GW, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):894–9
Reliving a nightmare: a hard (and tragic) lesson in humility.

DiNubile MJ. **Clin Infect Dis** 1996 Jul;23(1):160-5
Remember Rocky Mountain spotted fever—a lesson in ethical principles [editorial] Woodward TE. **Clin Infect Dis** 1996 Jul;23(1):165-6
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 32-1997. A 43-year-old woman with rapidly changing pulmonary infiltrates and markedly increased intracranial pressure [clinical conference] **N Engl J Med** 1997 Oct 16;337(16):1149-56
The great imitator: Rocky Mountain spotted fever occurring after hospitalization for unrelated illnesses. Eloubeidi MA, et al. **South Med J** 1997 Sep;90(9):943-5

DRUG THERAPY

Treatment of Rocky Mountain spotted fever in children. Cale DF, et al. **Ann Pharmacother** 1997 Apr;31(4):492-4 (23 ref.)
Prednisolone at anti-inflammatory or immunosuppressive dosages in conjunction with doxycycline does not potentiate the severity of Rickettsia rickettsii infection in dogs. Breitschwerdt EB, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):141-7

EPIDEMIOLOGY

An outbreak of spotted fever rickettsiosis in U.S. Army troops deployed to Botswana. Smoak BL, et al. **Emerg Infect Dis** 1996 Jul-Sep;2(3):217-21
An outbreak of tick-bite-associated illness among military personnel subsequent to a field training exercise. Warner RD, et al. **J Am Vet Med Assoc** 1996 Jul 1;209(1):78-81

METABOLISM

Increased expression of plasminogen activator inhibitor-1 in R. rickettsii-infected endothelial cells. Shi RJ, et al. **Thromb Haemost** 1996 Apr;75(4):600-6

MICROBIOLOGY

Primary isolation of spotted fever group rickettsiae from Amblyomma cooperi collected from Hydrochaeris hydrochaeris in Brazil. de Lemos ER, et al. **Mem Inst Oswaldo Cruz** 1996 May-Jun;91(3):273-5

TRANSMISSION

Interspecific differences between small mammals as hosts of immature Dermacentor variabilis (Acari: Ixodidae) and a model for detection of high risk areas of Rocky Mountain spotted fever. Kollars TM Jr. **J Parasitol** 1996 Oct; 82(5):707-10
Epidemiological aspects of the Brazilian spotted fever: seasonal activity of ticks collected in an endemic area in São Paulo, Brazil. de Lemos ER, et al. **Rev Soc Bras Med Trop** 1997 May-Jun;30(3):181-5

VETERINARY

Thoracic radiographic findings in dogs infected with Rickettsia rickettsii. Drost WT, et al. **Vet Radiol Ultrasound** 1997 Jul-Aug;38(4):260-6

ROD-CONE DYSTROPHY see **RETINITIS PIGMENTOSA**

ROD MYOPATHY see **NEMALINE MYOPATHY**

ROD OUTER SEGMENTS

CHEMISTRY

Structural and functional characterization of a second subfamily member of the calcium-modulated bovine rod outer segment membrane guanylate cyclase, ROS-GC2. Goraczniak R, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):666-70
A distance measurement between specific sites on the cytoplasmic surface of bovine rhodopsin in rod outer segment disk membranes. Albert AD, et al. **Biochim Biophys Acta** 1997 Aug 14;1328(1):74-82
Rhodopsin-cholesterol interactions in bovine rod outer segment disk membranes. Albert AD, et al. **Biochim Biophys Acta** 1996 Nov 13;1285(1):47-55
Effect of cholesterol on rhodopsin stability in disk membranes. Albert AD, et al. **Biochim Biophys Acta** 1996 Sep 13;1297(1):77-82
The photoreceptor rim protein is an ABC transporter encoded by the gene for recessive Stargardt's disease (ABCR). Azarian SM, et al. **FEBS Lett** 1997 Jun 9; 409(2):247-52
Putative association of a mutant ROM1 allele with retinitis pigmentosa. Martínez-Mir A, et al. **Hum Genet** 1997 Jun; 99(6):827-30
Localization of kinesin superfamily proteins to the connecting cilium of fish photoreceptors. Beech PL, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):889-97
Comparative study of the fluidity of plasma and disc membranes of bovine rod outer segments by electron-spin resonance. Vezin H, et al. **Mol Membr Biol** 1997 Jan-Mar; 14(1):31-3
Stargardt's ABCR is localized to the disc membrane of retinal rod outer segments [letter] Sun H, et al. **Nat Genet** 1997 Sep;17(1):15-6

CYTOLOGY

Photoreceptor number and outer segment disk membrane surface area in the retina of the rat: stereological data for whole organ and average photoreceptor cell. Mayhew TM, et al. **J Neurocytol** 1997 Jan;26(1):53-61

DRUG EFFECTS

betagamma-Transducin stimulates hydrolysis and synthesis of phosphatidylinositol 4,5-bisphosphate in bovine rod outer segment membranes. Grigorjev IV, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):131-6
Cytokine effects on phagocytosis of rod outer segments by retinal pigment epithelial cells of normal and dystrophic rats. Hayashi A, et al. **Curr Eye Res** 1996 May;15(5):487-99
A model membrane system to investigate antioxidants in bovine rod outer segments. Keys SA, et al. **Exp Eye Res** 1997 Mar;64(3):313-21
A model of rod outer segment derived lipofuscin. Hiramitsu T, et al. **Gerontology** 1995;41 Suppl 2:121-30
Preventive effect of natural and synthetic antioxidants on lipid peroxidation in the mammalian eye. Ueda T, et al. **Ophthalmic Res** 1996;28(3):184-92

ENZYMOLOGY

Acyl-CoA:lysophosphatidylcholine acyltransferase activity in bovine retina rod outer segments. Castagnet PI, et al. **Arch Biochem Biophys** 1997 Apr 1;340(1):124-34
Binding of transducin to light-activated rhodopsin prevents transducin interaction with the rod cGMP phosphodiesterase gamma-subunit. Artemyev NO. **Biochemistry** 1997 Apr 8;36(14):4188-93
Phosphatidylinositol 3-kinase in bovine photoreceptor rod outer segments. Guo X, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1873-82
Subunit structure of rod cGMP-phosphodiesterase. Artemyev NO, et al. **J Biol Chem** 1996 Oct 11; 271(41):25382-8
Solubilization of membrane-bound rod phosphodiesterase by the rod phosphodiesterase recombinant delta subunit. Florio SK, et al. **J Biol Chem** 1996 Sep 27;271(39):24036-47
The gamma subunit of rod cGMP-phosphodiesterase blocks the enzyme catalytic site. Granovsky AE, et al. **J Biol Chem** 1997 May 2;272(18):11686-9
Dopamine inhibits mammalian photoreceptor Na+,K+-ATPase activity via a selective effect on the alpha3 isozyme. Shulman LM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8034-9

GROWTH & DEVELOPMENT

The actin network in the ciliary stalk of photoreceptors functions in the generation of new outer segment discs. Hale IL, et al. **J Comp Neurol** 1996 Dec 2;376(1):128-42

IMMUNOLOGY

CD36 participates in the phagocytosis of rod outer segments by retinal pigment epithelium. Ryeom SW, et al. **J Cell Sci** 1996 Feb;109 (Pt 2):387-95

METABOLISM

GTP-binding proteins coupling to glutamate receptors on bovine retinal membranes. Kikkawa S, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:557-60
Structural and functional characterization of a second subfamily member of the calcium-modulated bovine rod outer segment membrane guanylate cyclase, ROS-GC2. Goraczniak R, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):666-70
Calcium-dependent binding of recoverin to membranes monitored by surface plasmon resonance spectroscopy in real time. Lange C, et al. **Biochemistry** 1997 Oct 7; 36(40):12019-26
Differential membrane protein phosphorylation in bovine retinal rod outer segment disk membranes as a function of disk age. Boesze-Battaglia K, et al. **Biosci Rep** 1996 Aug; 16(4):289-97
Squalene is localized to the plasma membrane in bovine retinal rod outer segments [letter] Fliesler SJ, et al. **Exp Eye Res** 1997 Feb;64(2):279-82
Splice variants of arrestins [letter] Palczewski K, et al. **Exp Eye Res** 1996 Nov;63(5):599-602
Correlation between autofluorescent debris accumulation and the presence of partially processed forms of cathepsin D in cultured retinal pigment epithelial cells challenged with rod outer segments. Rakoczy PE, et al. **Exp Eye Res** 1996 Aug;63(2):159-67
Rhodopsin phosphorylation in bovine rod outer segments is more sensitive to the inhibitory action of recoverin at the low rhodopsin bleaching than it is at the high bleaching. Senin II, et al. **FEBS Lett** 1997 May 26;408(3):251-4
Fusion of intracellular rod outer segment disk membranes with the surrounding plasma membrane. Boesze-Battaglia K. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):487-97
Retinal light damage in rats with altered levels of rod outer segment docosahexaenoate. Organisciak DT, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2243-57
Primary structure and expression of the human beta-subunit and related proteins of the rod photoreceptor cGMP-gated channel. Colville CA, et al. **J Biol Chem** 1996 Dec 20; 271(51):32968-74
Mechanism of quenching of phototransduction. Binding competition between arrestin and transducin for phosphorhodopsin. Krupnick JG, et al. **J Biol Chem** 1997 Jul 18;272(29):18125-31
The action of cytoplasmic calcium on the cGMP-activated channel in salamander rod photoreceptors. Sagoo MS, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):309-19
Formation of lipofuscin-like fluorophores by reaction of retinal with photoreceptor outer segments and liposomes. Katz ML, et al. **Mech Ageing Dev** 1996 Dec 20; 92(2-3):159-74
Modeling and analysis of spatio-temporal change in [Ca2+]i in a retinal rod outer segment. Ichikawa K. **Neurosci Res** 1996 Jun;25(2):137-44
Identification of components of a phosphoinositide signaling pathway in retinal rod outer segments. Peng YW, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1995-2000
[Phosphorylation of proteins and phosphoinositides in the axoneme of the bovine rod outer segments. The effect of structural factor] Baranova LA, et al. **Biofizika** 1996 Nov-Dec;41(6):1258-63 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Modulation of the cGMP-activated conductance of the plasma membrane of photoreceptor cells by calmodulin. Kosolapov AV, et al. **Biochem Mol Biol Int** 1996 Apr; 38(5):871-7
Interaction of recombinant rat nucleoside diphosphate kinase alpha with bleached bovine retinal rod outer segment membranes: a possible mode of pH and salt effects. Orlov NYa, et al. **Biochem Mol Biol Int** 1997 Jan;41(1):189-98
Molecular origin of continuous dark noise in rod photoreceptors. Rieke F, et al. **Biophys J** 1996 Nov; 71(5):2553-72
Effects of light and temperature on the response gradient of retinal rod outer segments. Leibovic KN, et al. **Brain Res** 1997 Mar 7;750(1-2):321-4
Cytokine effects on phagocytosis of rod outer segments by retinal pigment epithelial cells of normal and dystrophic rats. Hayashi A, et al. **Curr Eye Res** 1996 May;15(5):487-99
A simple flow cytometric technique to quantify rod outer segment phagocytosis in cultured retinal pigment epithelial cells. Kennedy CJ, et al. **Curr Eye Res** 1996 Sep; 15(9):998-1003
Photoreceptor repair in response to RPE transplants in RCS rats: outer segment regeneration. Lin N, et al. **Curr Eye Res** 1996 Oct;15(10):1069-77
Zinc causes an apparent increase in rhodopsin phosphorylation. Shuster TA, et al. **Curr Eye Res** 1996 Oct;15(10):1019-24
Vitronectin is responsible for serum-stimulated uptake of rod outer segments by cultured retinal pigment epithelial cells. Miceli MV, et al. **Invest Ophthalmol Vis Sci** 1997 Jul; 38(8):1588-97
Post-Golgi vesicles cotransport docosahexaenoyl-phospholipids and rhodopsin during frog photoreceptor membrane biogenesis. Rodriguez de Turco EB, et al. **J Biol Chem** 1997 Apr 18;272(16):10491-7
Effects of animal age on the responses along the outer segment of retinal rod photoreceptors. Bandarchi J, et al. **Neuroreport** 1997 Feb 10;8(3):581-5
Phototransduction and calcium exchange along the length of the retinal rod outer segment. Leibovic KN, et al. **Neuroreport** 1997 Mar 24;8(5):1295-300
Transgenic mice carrying the dominant rhodopsin mutation P347S: evidence for defective vectorial transport of rhodopsin to the outer segments. Li T, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14176-81

RADIATION EFFECTS

Biochemical characterization of cell specific enzymes in light-exposed rat retinas: oxidative loss of all-trans retinol dehydrogenase activity. Darrow RA, et al. **Curr Eye Res** 1997 Feb;16(2):144-51
Light damage in rod outer segments: the effects of fixation on ultrastructural alterations. Szczesny PJ, et al. **Curr Eye Res** 1996 Aug;15(8):807-14
Solar pruning of retinal rods in albino rainbow trout. Allen DM, et al. **Vis Neurosci** 1997 May-Jun;14(3):589-600

ULTRASTRUCTURE

Light damage in rod outer segments: the effects of fixation on ultrastructural alterations. Szczesny PJ, et al. **Curr Eye Res** 1996 Aug;15(8):807-14
Rod outer segment renewal in the retinae of deep-sea fish. Fröhlich E, et al. **Vision Res** 1996 Oct;36(19):3183-94

ROD PHOTORECEPTORS see **RODS (RETINA)**

RODENT CONTROL

see related
RODENTICIDES

METHODS

Experimental evaluation of rodent exclusion methods to reduce hantavirus transmission to humans in rural housing. Glass GE, et al. **Am J Trop Med Hyg** 1997 Apr; 56(4):359-64

RODENT DISEASES

Streptobacillus moniliformis infection in Swiss white mice. Glastonbury JR, et al. **J Vet Diagn Invest** 1996 Apr; 8(2):202–9

Polymerase chain reaction for detection of guinea pig adenovirus. Pring-Akerblom P, et al. **J Vet Diagn Invest** 1997 Jul;9(3):232–6

Establishment and characterization of cell lines, MeMS and MeFS, derived from spontaneous rat mesotheliomas. Shibuya K, et al. **J Vet Med Sci** 1996 Jul;58(7):693–7

Rodent models of experimental allergic encephalomyelitis applied to the study of multiple sclerosis. Goverman J, et al. **Lab Anim Sci** 1996 Oct;46(5):482–92 (167 ref.)

Birth of normal young by microinsemination with frozen-thawed round spermatids collected from aged azoospermic mice. Tanemura K, et al. **Lab Anim Sci** 1997 Apr;47(2):203–4

Fat rats and carcinogenesis screening. Festing MF. **Nature** 1997 Jul 24;388(6640):321–2

Litomosoides chagasfilhoi sp. nov. (Nematoda:Filarioidea) parasitizing the abdominal cavity of Akodon cursor (Winge, 1887) (Rodentia:Muridae) from Brazil. de Moraes Neto AH, et al. **Parasitol Res** 1997;83(2):137–43

Host-habitat relations as an important determinant of spatial distribution of flea assemblages (Siphonaptera) on rodents in the Negev Desert. Krasnov BR, et al. **Parasitology** 1997 Feb;114 (Pt 2):159–73

Immunisation of dogs and guinea pigs against Rhipicephalus sanguineus ticks using gut extract. Szabó MP, et al. **Vet Parasitol** 1997 Feb;68(3):283–94

[Adenovirus-induced pneumonia in two guinea pigs] Breuer W, et al. **Berl Munch Tierarztl Wochenschr** 1997 Feb; 110(2):51–3 (Eng. Abstr.) **(Ger)**

[Acute glycoside intoxication from the intake of oleander (Nerium oleander) leaves in a guinea pig] Kirsch M. **Tierarztl Prax** 1997 Jul;25(4):398–400 (Eng. Abstr.) **(Ger)**

BLOOD

Autoregulation of renal blood flow and pressure-dependent renin release in autosomal dominant polycystic kidney disease of rats. Braun C, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:52–7

CHEMICALLY INDUCED

Fatal perforating intestinal ulceration attributable to flunixin meglumine overdose in rats. King CS, et al. **Lab Anim Sci** 1997 Apr;47(2):205–8

DIAGNOSIS

Discovery of mammalian hosts to Gnathostoma nipponicum larvae and prevalence of the larvae in rodents and insectivores. Oyamada T, et al. **J Vet Med Sci** 1996 Sep; 58(9):839–43

Detection of Clostridium piliforme by enzymatic assay of amplified cDNA segment in microtitration plates. Goto K, et al. **Lab Anim Sci** 1996 Oct;46(5):493–6

[Comparison of 4 microscopy techniques for the diagnosis of leptospirosis in wild rodents in a rural area of Valdivia, Chile] Zamora J, et al. **Rev Latinoam Microbiol** 1995 Jul-Sep;37(3):267–72 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Bacterial killing by use of once daily gentamicin dosage in guinea pigs with Escherichia coli infection. Campbell BG, et al. **Am J Vet Res** 1996 Nov;57(11):1627–30

Evaluation of various oral antimicrobial formulations for eradication of Helicobacter hepaticus. Foltz CJ, et al. **Lab Anim Sci** 1996 Apr;46(2):193–7

Efficacy of various therapeutic regimens in eliminating Pasteurella pneumotropica from the mouse. Goelz MF, et al. **Lab Anim Sci** 1996 Jun;46(3):280–5

An oral ivermectin regimen that eradicates pinworms (Syphacia spp.) in laboratory rats and mice. Klement P, et al. **Lab Anim Sci** 1996 Jun;46(3):286–90

Activity of albendazole-ivermectin combination and other filaricidal drugs against infective larvae, preadult, microfilariae and adult worms of Molinema dessetae in the rodent Proechimys oris. Duarte Z, et al. **Parasite** 1994 Mar; 1(1):57–64

EPIDEMIOLOGY

Patterns of association with host and habitat: antibody reactive with Sin Nombre virus in small mammals in the major biotic communities of the southwestern United States. Mills JN, et al. **Am J Trop Med Hyg** 1997 Mar; 56(3):273–84

CD3-SmIg-lymphoblastic leukaemia in an outbred domestic guinea pig. Day MJ, et al. **Aust Vet J** 1997 Mar;75(3):217–8

Seroepidemiologic studies of hantavirus infection among wild rodents in California. Jay M, et al. **Emerg Infect Dis** 1997 Apr-Jun;3(2):183–90 (36 ref.)

Botfly (Diptera:Oestridae) parasitism of Ord's kangaroo rats (Dipodomys ordii) at Suffield National Wildlife Area, Alberta, Canada. Gummer DL, et al. **J Parasitol** 1997 Aug; 83(4):601–4

Interspecific differences between small mammals as hosts of immature Dermacentor variabilis (Acari: Ixodidae) and a model for detection of high risk areas of Rocky Mountain spotted fever. Kollars TM Jr. **J Parasitol** 1996 Oct; 82(5):707–10

Eimeria spp. (Apicomplexa: Eimeriidae) from black- and white-tailed prairie dogs (Cynomys ludovicianus and Cynomys leucurus) in central and southeast Wyoming. Seville RS. **J Parasitol** 1997 Feb;83(1):166–8

Survey for antibodies to selected viruses in laboratory mice in South Africa. Van Vuuren M, et al. **J S Afr Vet Assoc** 1990 Dec;61(4):174–5

Community structure and prevalence of hantavirus infection in rodents: a geographic division of the enzootic area in far eastern Russia. Kosoy MY, et al. **J Vector Ecol** 1997 Jun;22(1):52–63

Discovery of mammalian hosts to Gnathostoma nipponicum larvae and prevalence of the larvae in rodents and insectivores. Oyamada T, et al. **J Vet Med Sci** 1996 Sep; 58(9):839–43

Epidemiological characterization of newly recognized rat parvovirus, "rat orphan parvovirus". Ueno Y, et al. **J Vet Med Sci** 1997 Apr;59(4):265–9

Hantavirus in Montana deer mouse populations: preliminary results. Douglass RJ, et al. **J Wildl Dis** 1996 Jul; 32(3):527–30

Serological survey of small mammals in a vesicular stomatitis virus enzootic area. Jiménez AE, et al. **J Wildl Dis** 1996 Apr;32(2):274–9

Protozoan parasites and pathological findings in Hydromys chrysogaster (Muridae: Hydromyinae) from Queensland. Smales LR, et al. **J Wildl Dis** 1996 Apr;32(2):344–7

Serological evidence for zoonotic hantaviruses in North Carolina rodents. Weigler BJ, et al. **J Wildl Dis** 1996 Apr; 32(2):354–7

Outbreaks of hyperkeratotic dermatitis of athymic nude mice in northern Italy. Scanziani E, et al. **Lab Anim** 1997 Jul; 31(3):206–11

Serological survey of spotted fever group rickettsia in wild rats in Thailand in the 1970s. Okabayashi T, et al. **Microbiol Immunol** 1996;40(12):895–8

The prevalence of Cryptosporidium parvum and C. muris in Mus domesticus, Apodemus sylvaticus and Clethrionomys glareolus in an agricultural system. Chalmers RM, et al. **Parasitol Res** 1997;83(5):478–82

Dental disease in chinchillas [letter] Crossley DA. **Vet Rec** 1997 May 10;140(19):512

No rabies detected in voles and field mice in a rabies-endemic area. Kulonen K, et al. **Zentralbl Veterinarmed [B]** 1996 Sep;43(7):445–7

[The ecological aspects of the epidemiology of hemorrhagic fever with renal syndrome in the south of the Far East in Russia] Slonova RA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 May-Jun; (3):19–23 (Eng. Abstr.) **(Rus)**

[Prevalence of protozoa infections in synanthropic rodents in Valdivia City, Chile] Franjola R, et al. **Bol Chil Parasitol** 1995 Jul-Dec;50(3–4):66–72 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Diet-induced nephrocalcinosis in female rats [letter] L'Abbé MR, et al. **J Nutr** 1996 Nov;126(11):2940–2

Perivascular external granule cells in hereditary cerebellar vermis defect rat: pathogenesis of cerebellar cortical dysplasia. Kuwamura M, et al. **J Vet Med Sci** 1996 Sep; 58(9):875–9

GENETICS

Heritable nephroblastoma (Wilms' tumor) in the Upjohn Sprague Dawley rat. Mesfin GM, et al. **Lab Anim Sci** 1996 Jun;46(3):321–6

Dystrophic cardiac calcinosis in C3H/HeN mice. Vargas KJ, et al. **Lab Anim Sci** 1996 Oct;46(5):572–5

Fat (and thin) rats distort results [letter] Turturro A, et al. **Nature** 1997 Sep 25;389(6649):326

Murine models of polycystic kidney disease. Schieren G, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:38–45 (77 ref.)

IMMUNOLOGY

CD3-SmIg-lymphoblastic leukaemia in an outbred domestic guinea pig. Day MJ, et al. **Aust Vet J** 1997 Mar;75(3):217–8

Vitamin E-deficient diets enriched with fish oil suppress lethal Plasmodium yoelii infections in athymic and scid/bg mice. Taylor DW, et al. **Infect Immun** 1997 Jan; 65(1):197–202

Antibody responses against Echinococcus multilocularis antigens in naturally infected Rattus norvegicus. Ito A, et al. **J Helminthol** 1996 Dec;70(4):355–7

Reduction of challenge parasite population in gerbils, Meriones unguiculatus, chronically infected with Schistosoma mansoni. Ozaki T, et al. **J Parasitol** 1997 Apr; 83(2):328–9

Susceptibility of selected rodent species from Colorado to Borrelia burgdorferi. Ubico SR, et al. **J Wildl Dis** 1996 Apr;32(2):293–9

METABOLISM

Rat models of autosomal dominant polycystic kidney disease. Gretz N, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:46–51 (33 ref.)

Evidence that lysosomal storage of proteolipids is a cell autonomous process in the motor neuron degeneration (mnd) mouse, a model of neuronal ceroid lipofuscinosis. Lipman RD, et al. **Neurosci Lett** 1996 Nov 22;219(2):111–4

MICROBIOLOGY

Competence of urban rats as reservoir hosts for Lyme disease spirochetes. Matuschka FR, et al. **J Med Entomol** 1997 Jul;34(4):489–93

Ability of the Lyme disease spirochete Borrelia burgdorferi to infect rodents and three species of human-biting ticks (blacklegged tick, American dog tick, lone star tick) (Acari:Ixodidae). Piesman J, et al. **J Med Entomol** 1997 Jul;34(4):451–6

Isolation of Enterococcus durans and Pseudomonas aeruginosa in a scid mouse colony. Dietrich HM, et al. **Lab Anim** 1996 Apr;30(2):102–7

Model of Streptococcus pneumoniae meningitis in adult rats. Strake JG, et al. **Lab Anim Sci** 1996 Oct;46(5):524–9

Chronic ulcerative typhlocolitis in CBH-rnu/rnu (athymic nude) rats. Thomas DS, et al. **Lab Anim Sci** 1997 Aug; 47(4):423–7

Randomly amplified polymorphic DNA polymerase chain reaction assay for molecular epidemiologic investigation of Pasteurella pneumotropica in laboratory rodent colonies. Weigler BJ, et al. **Lab Anim Sci** 1996 Aug;46(4):386–92

Distribution of Corynebacterium renale among apparently healthy rats. Osanai T, et al. **Vet Microbiol** 1996 Oct; 52(3–4):313–5

Pathogenicity of cilia-associated respiratory (CAR) bacillus isolates for F344, LEW, and SD rats. Schoeb TR, et al. **Vet Pathol** 1997 Jul;34(4):263–70

[Spontaneous mixed infection in rodents with Borrelia and Leptospira] Gorelova NB, et al. **Med Parazitol (Mosk)** 1996 Oct-Dec;(4):53 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Echinococcus multilocularis coproantigen detection in golden hamster, an alternative definitive host. Sakai H, et al. **Exp Anim** 1996 Jul;45(3):275–8

Variability of sex ratio, mating probability and egg production in an intestinal nematode in its fluctuating host population [published erratum appears in Int J Parasitol 1996 Oct;26(10):1137–8] Haukisalmi V, et al. **Int J Parasitol** 1996 Jul;26(7):755–63

Ultrastructural observations of the tegument of Postorchigenes gymnesicus (Digenea: Lecithodendriidae). Ferrer JR, et al. **J Helminthol** 1996 Mar;70(1):13–9

Ultrastructure of the alimentary tract of third-stage larvae of Litomosoides carinii. Ogbogu VC, et al. **J Helminthol** 1996 Sep;70(3):223–9

Two new species of Litomosoides (Nemata:Onchocercidae) from Ctenomys opimus (Rodentia:Ctenomyidae) on the altiplano of Bolivia. Brant SV, et al. **J Parasitol** 1997 Aug; 83(4):700–5

A new coccidian from Acomys cahirinus Desmarest, 1819, from Evolution Canyon, Lower Nahal Oren, Mount Carmel, Israel. Couch L, et al. **J Parasitol** 1997 Apr; 83(2):276–9

Emended description of Litomosoides silvai (Nematoda:Filarioidea) of Akodon cursor (Rodentia:Muridae). de Moraes Neto AH, et al. **J Parasitol** 1996 Dec;82(6):988–91

Gongylonema madeleinensis N. sp. (Nematoda:Spiruroidea), from Mastomys erythroleucus (Rodentia) from a Senegalese island. Diouf M, et al. **J Parasitol** 1997 Aug; 83(4):706–8

Ectoparasite fauna of the eastern woodrat, Neotoma floridana: composition, origin, and comparison with ectoparasite faunas of western woodrat species. Durden LA, et al. **J Parasitol** 1997 Jun;83(3):374–81

Eimeria (Protozoa: Eimeriidae) from North American sciurids, Glaucomys sabrinus and Tamias townsendii: with a description of a new species. Fuller CA, et al. **J Parasitol** 1997 Jun;83(3):467–70

Besnoitia sp. (Protozoa:Toxoplasmatinae) from Akodon montensis (Rodentia:Cricetidae) in Santa Catarina State, Brazil. Grisard EC, et al. **J Parasitol** 1997 Apr;83(2):314–6

Two new nematode species of Bunomystrongylus n. gen. (Trichostrongylina:Heligmonellidae) collected from Bunomys spp. (Rodentia:Muridae) of Sulawesi, Indonesia. Hasegawa H, et al. **J Parasitol** 1996 Dec;82(6):998–1004

Spatial distribution of larval Ixodes scapularis (Acari:Ixodidae) on Peromyscus leucopus and Microtus pennsylvanicus at two island sites. Markowski D, et al. **J Parasitol** 1997 Apr;83(2):207–11

Ixodid ticks infesting rodents and sheep in diverse biotopes of southern India. Saxena VK. **J Parasitol** 1997 Aug; 83(4):766–7

A comparison of parasitic helminths and arthropods from two subspecies of fox squirrels (Sciurus niger) in Florida. Coyner DF, et al. **J Wildl Dis** 1996 Jul;32(3):492–7

A survey of Blastocystis sp. in rodents. Chen XQ, et al. **Lab Anim Sci** 1997 Feb;47(1):91–4 (18 ref.)

Cryptosporidiosis in mice in Argentina. Fernández PE, et al. **Lab Anim Sci** 1996 Dec;46(6):685–6 (22 ref.)

Rodent malaria parasites: molecular karyotypes characterize species, subspecies and lines. Ahamada Said, et al. **Parasite** 1994 Mar;1(1):31–8

Susceptibility of rodents to infection with Schistosoma mansoni in Richard-Toll (Senegal). Sène M, et al. **Parasite** 1996 Dec;3(4):321–6

Distribution of schistosome genetic diversity within naturally

infected Rattus rattus detected by RAPD markers. Barral V, et al. **Parasitology** 1996 Dec;113 (Pt 6):511–7

Activities of glycogen phosphorylase, alanine aminotransferase and aspartate aminotransferase in adult worms of Litomosoides carinii recovered from pyridoxine deficient cotton rats (Sigmodon hispidus). Beg MA, et al. **Parasitology** 1996 Feb;112 (Pt 2):227–32

A comparison of phase contrast microscopy and an immunofluorescence test for the detection of Giardia spp. in faecal specimens from cattle and wild rodents. Karanis P, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun; 90(3):250–1

Fasciola infection in guinea-pigs in the Peruvian highlands. Gamarra RG. **Trop Anim Health Prod** 1996 May; 28(2):143–4

[Contribution to the study of Microphallidae travassos, 1920 (Trematoda). XLVI. Description of Floridatrema heardi n. gen., n. sp., parasite of Oryzomys palustris (Mammalia) of the United States] Kinsella JM, et al. **Parasite** 1994 Mar; 1(1):45–50 (Eng. Abstr.) **(Fre)**

[The ectoparasite fauna of the root vole (Microtus oeconomus Pall.) on the territory of the Priluki Preserve in Byelarus] Kononova IM. **Parazitologiia** 1996 Jan–Feb;30(1):27–31 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Neoplastic and non-neoplastic lesions in the mammary gland, endocrine and genital organs in aging male and female Sprague-Dawley rats. Attia MA. **Arch Toxicol** 1996; 70(8):461–73

Variation in serum creatine phosphokinase activity as indicated in two-phase EMC-D virus-induced myocarditis. Mizutani M, et al. **Exp Anim** 1996 Oct; 45(4):333–8

Lens luxation in a CD-1 mouse. Takizawa Y, et al. **Exp Anim** 1996 Jul;45(3):271–3

Intracranial tumours in Syrian golden hamsters. Kamino K, et al. **Exp Toxicol Pathol** 1996 Jan;48(1):29–32

Perivascular external granule cells in hereditary cerebellar vermis defect rat: pathogenesis of cerebellar cortical dysplasia. Kuwamura M, et al. **J Vet Med Sci** 1996 Sep; 58(9):875–9

Evaluation of hyperplastic goiter in a colony of Syrian hamsters (Mesocricetus auratus). Livingston RS, et al. **Lab Anim Sci** 1997 Aug;47(4):346–50

Spontaneous Leydig cell tumors in inbred laboratory mice. Mähler M, et al. **Lab Anim Sci** 1997 Apr;47(2):148–52

Vertebral disk changes in B6C3F1 mice. Yamasaki K. **Lab Anim Sci** 1996 Oct;46(5):576–8

Rat models of autosomal dominant polycystic kidney disease. Gretz N, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:46–51 (33 ref.)

A spontaneous testicular teratoma in an ICR mouse. Tani Y, et al. **Toxicol Pathol** 1997 May–Jun;25(3):317–20

Oral squamous cell carcinoma in ad libitum-fed and food-restricted Brown-Norway rats. Thurman JD, et al. **Toxicol Pathol** 1997 Mar–Apr;25(2):217–24

Poorly differentiated carcinoma of the parotid gland in a six-week-old Sprague-Dawley rat. Tsunenari I, et al. **Toxicol Pathol** 1997 Mar–Apr;25(2):225–8

Morphological and ultrastructural study of the histogenesis of meningeal granular cell tumors in rats. Yoshida T, et al. **Toxicol Pathol** 1997 Mar–Apr;25(2):211–6

Spontaneous malignant craniopharyngioma in an albino rat. Pace V, et al. **Vet Pathol** 1997 Mar;34(2):146–9

Immunohistochemical and morphological characterization of spontaneously occurring pheochromocytomas in the aging mouse. Tischler AS, et al. **Vet Pathol** 1996 Sep;33(5):512–20

PHYSIOPATHOLOGY

Analysis of pathogenesis of autoimmune insulitis in NOD mice: adoptive transfer experiments of insulitis in ILI and NOD nude mice. Nakamura M, et al. **Exp Anim** 1996 Jul; 45(3):233–8

Inhibitory neurotransmission in lethal spotted mutant mice: a model for Hirschsprung's disease. Chakder S, et al. **Gastroenterology** 1997 May;112(5):1575–85

Initial characterization of hamsters with spontaneous hypertension. Thomas CL, et al. **Hypertension** 1997 Aug; 30(2 Pt 1):301–4

Autoregulation of renal blood flow and pressure-dependent renin release in autosomal dominant polycystic kidney disease of rats. Braun C, et al. **Nephrol Dial Transplant** 1996;11 Suppl 6:52–7

PREVENTION & CONTROL

Protective effect of recombinant interferon (IFN)-alpha/beta on MHV-2cc-induced chronic hepatitis in athymic nude mice. Uetsuka K, et al. **Exp Anim** 1996 Jul;45(3):293–7

Nonstressful restraint device for longitudinal evaluation and photography of mouse skin lesions during tumorigenesis studies. Binder RL. **Lab Anim Sci** 1996 Jun;46(3):350–1

A 41-kDa antigen of the rodent filaria Acanthocheilonema viteae with homologies to tropomyosin induces host-protective immune responses. Hartmann S, et al. **Parasitol Res** 1997;83(4):390–3

Acanthocheilonema viteae: vaccination with irradiated L3 induces resistance in three species of rodents (Meriones unguiculatus, Mastomys coucha, Mesocricetus auratus). Schrempf-Eppstein B, et al. **Trop Med Int Health** 1997 Jan;2(1):104–10

THERAPY

Animal models for nervous system disease in systemic lupus erythematosus. Brey RL, et al. **Ann N Y Acad Sci** 1997 Aug 14;823:97–106 (55 ref.)

Gene therapy for murine mucopolysaccharidosis type VII. Sands MS, et al. **Neuromuscul Disord** 1997 Jul;7(5):352–60 (69 ref.)

TRANSMISSION

Detection and in vivo transmission of rat orphan parvovirus (ROPV). Ueno Y, et al. **Lab Anim** 1996 Apr;30(2):114–9

VIROLOGY

Vertical transmission to embryo and fetus in maternal infection with rat virus (RV). Kajiwara N, et al. **Exp Anim** 1996 Jul;45(3):239–44

A serological indication of the existence of a guineapig poliovirus. Hansen AK, et al. **Lab Anim** 1997 Jul; 31(3):212–8

Asymptomatic adenoviral respiratory tract infection in guinea pigs. Crippa L, et al. **Lab Anim Sci** 1997 Apr; 47(2):197–9

Virus infection in rat and mouse colonies reared in Brazilian animal facilities. Gilioli R, et al. **Lab Anim Sci** 1996 Oct; 46(5):582–4

Rodent parvovirus infections. Jacoby RO, et al. **Lab Anim Sci** 1996 Aug;46(4):370–80 (89 ref.)

Pathogenesis of Sendai virus infection in the Syrian hamster. Percy DH, et al. **Lab Anim Sci** 1997 Apr;47(2):132–7

RODENTIA

The validity of rodent brain-ischemia models is self-evident [see comments] Ginsberg MD. **Arch Neurol** 1996 Oct; 53(10):1065–7; discussion 1070 (52 ref.). Comment in: Arch Neurol 1997 Apr;54(4):350–1.

Microheterogeneity of odorant-binding proteins in the porcupine revealed by N-terminal sequencing and mass spectrometry. Ganni M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):287–91

Catecholaminergic innervation of interscapular brown adipose tissue in the naked mole-rat (Heterocephalus glaber). Daly TJ, et al. **J Anat** 1997 Apr;190 (Pt 3):321–6

Monitoring weight drop velocity and foam stiffness as an aid to quality control of a rodent model of impact acceleration neurotrauma. Piper IR, et al. **J Neurosci Methods** 1996 Nov;69(2):171–4

Some considerations for the development of diets for mature rodents used in long-term investigations. McDonald RB. **J Nutr** 1997 May;127(5 Suppl):847S–850S (33 ref.)

New nonpurified diet (NTP-2000) for rodents in the National Toxicology Program's toxicology and carcinogenesis studies. Rao GN. **J Nutr** 1997 May;127(5 Suppl):842S–846S (22 ref.)

Neurofibrillar bipolar cells in the capybara retina. Yamada ES, et al. **Vis Neurosci** 1996 Nov–Dec;13(6):1173–7

ANATOMY & HISTOLOGY

Scanning electron microscopy study of the interface epithelium-connective tissue surface of the lingual mucosa in Calomys callosus. Watanabe I, et al. **Anat Anz** 1997 Feb; 179(1):45–8

Quantitative microscopic changes in the mole rat's accessory sex organs during an annual cycle. Gottreich A, et al. **Anat Rec** 1996 Oct;246(2):231–7

Morphology and topography of dormouse (Muscardinus avellanarius L.) and gopher (Spermophilus suslicus Güld.) olivary nucleus. The comparative studies. Skrzypiec Z, et al. **Folia Morphol (Warsz)** 1996;55(4):447–9

Cerebellar granule cell differentiation in mutant and X-irradiated rodents revealed by the neural adhesion molecule TAG-1. Bailly Y, et al. **J Comp Neurol** 1996 May 20;369(1):150–61

Brain structure volumes in the mole rat, Spalax ehrenbergi (Spalacidae, Rodentia) in comparison to the rat and subterrestrial insectivores. Frahm HD, et al. **J Hirnforsch** 1997;38(2):209–22

Size of somatosensory cortex and of somatosensory thalamic nuclei of the naturally blind mole rat, Spalax ehrenbergi. Mann MD, et al. **J Hirnforsch** 1997;38(1):47–59

Small mammals from Sima de los Huesos. Cuenca-Bescós G, et al. **J Hum Evol** 1997 Aug–Sep;33(2–3):175–90

Adaptive differentiations of the skin of the head in a subterranean rodent, Spalax ehrenbergi. Klauer G, et al. **J Morphol** 1997 Jul;233(1):53–66

Size-dependent morphology of the conductive bronchial tree in four species of myomorph rodents. Valerius KP. **J Morphol** 1996 Dec;230(3):291–7

The ultrastructure of the trophoblastic layer of the degu (Octodon degus) placenta: a re-evaluation of the 'channel problem'. Kertschanska S, et al. **Placenta** 1997 Mar–Apr; 18(2–3):219–25

[Morphology of stomach endocrine glands of the porcupine] Vinogradova MS, et al. **Biull Eksp Biol Med** 1997 Feb; 123(2):228–32 **(Rus)**

[Morphological characteristics of jerboa (Dipodidae) skin cover] Sokolov VE, et al. **Dokl Akad Nauk** 1997 Feb; 352(5):715–8 **(Rus)**

GENETICS

Cytogenetic and molecular analysis of the satellite DNA of the genus Ctenomys (Rodentia Octodontidae) from Uruguay. Novello A, et al. **Chromosome Res** 1996 Aug; 4(5):335–9

Issues in the choice of genetic configuration for animal aging models. Austad SN. **Exp Gerontol** 1997 Jan–Apr; 32(1–2):55–63 (25 ref.)

Identification of new medium reiteration frequency repeats in the genomes of Primates, Rodentia and Lagomorpha. Jurka J, et al. **Genetica** 1996–97;98(3):235–47

Evolution of B2 repeats: the muroid explosion. Kass DH, et al. **Genetica** 1997;99(1):1–13

Substitution rate variation in closely related rodent species. Fieldhouse D, et al. **Heredity** 1997 Jan;78 (Pt 1):21–31

Mapping interleukin enhancer binding factor 2 gene (ILF2) to human chromosome 1 (1q11–qter and 1p11–p12) by polymerase chain reaction amplification of human–rodent somatic cell hybrid DNA templates. Marcoulatos P, et al. **J Interferon Cytokine Res** 1996 Dec;16(12):1035–8

Comparative evolutionary rates of introns and exons in murine rodents. Hughes AL, et al. **J Mol Evol** 1997 Aug; 45(2):125–30

Evolution of isochores in rodents. Robinson M, et al. **Mol Biol Evol** 1997 Aug;14(8):823–8

Micro- and macrogeographical genetic structure of colonies of naked mole-rats Heterocephalus glaber. Faulkes CG, et al. **Mol Ecol** 1997 Jul;6(7):615–28

Phylogenetic evidence of mitochondrial DNA introgression among pocket gophers in New Mexico (family Geomyidae). Ruedi M, et al. **Mol Ecol** 1997 May; 6(5):453–62

Evolution, expression, and possible function of a master gene for amplification of an interspersed repeated DNA family in rodents. Deininger PL, et al. **Prog Nucleic Acid Res Mol Biol** 1996;52:67–88 (62 ref.)

[Cytogenetic study of corneal cells from some rodent species from South Vietnam] Evgen'eva TP, et al. **Dokl Akad Nauk** 1997 Apr;353(6):837–40 **(Rus)**

[Genetic differentiation and phylogenetic relationships among Palearctic mice (Rodentia, Muridae)] Mezhzherin SV. **Genetika** 1997 Jan;33(1):78–86 (Eng. Abstr.) **(Rus)**

[Chromosomal polymorphism in mole rat Spalax microphthalmus (Rodentia, Spalacidae) from results of differential staining] Puzachenko AIu, et al. **Genetika** 1997 Jun;33(6):817–21 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Genetic approaches to the function of insulin-like growth factor-binding proteins during rodent development. Pintar JE, et al. **Horm Res** 1996;45(3–5):172–7 (60 ref.)

Postnatal development of body architecture and gait in several rodent species. Eilam D. **J Exp Biol** 1997 May;200 (Pt 9):1339–50

IMMUNOLOGY

Cell and extracellular matrix rejection in arterial concordant and discordant xenografts in the rat. Allaire E, et al. **Transplantation** 1996 Sep 27;62(6):794–803

METABOLISM

Fatty acids in extremity tissues of Finnish beavers (Castor canadensis and Castor fiber) and muskrats (Ondatra zibethicus). Käkelä R, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Jan; 113(1):113–24

Putative melatonin receptors in the blind mole rat harderian gland. Gilad E, et al. **J Exp Zool** 1997 Apr 15;277(6):435–41

The potential of organ specific toxicity for predicting rodent carcinogenicity. Lee Y, et al. **Mutat Res** 1996 Oct 28; 358(1):37–62

Energy requirements of beavers (Castor canadensis) swimming underwater. Allers D, et al. **Physiol Zool** 1997 Jul–Aug;70(4):456–63

MICROBIOLOGY

Prevalence of Lyme disease spirochetes in Ixodes persulcatus and wild rodents in far eastern Russia. Sato Y, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3887–9

Characterization of Orientia tsutsugamushi isolated in Taiwan by immunofluorescence and restriction fragment length polymorphism analyses. Tamura A, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):225–31

Genetic heterogeneity of Borrelia burgdorferi in the United States. Mathiesen DA, et al. **J Infect Dis** 1997 Jan; 175(1):98–107

Randomly amplified polymorphic DNA polymerase chain reaction assay for molecular epidemiologic investigation of Pasteurella pneumotropica in laboratory rodent colonies. Weigler BJ, et al. **Lab Anim Sci** 1996 Aug;46(4):386–92

PARASITOLOGY

Epidemiological study of reservoir hosts in an endemic area of zoonotic cutaneous leishmaniasis in Iran. Yaghoobi-Ershadi MR, et al. **Bull World Health Organ** 1996;74(6):587–90

Seasonal incidence of Ixodes ricinus ticks (Acari:ixodidae) on rodents in western France. L'Hostis M, et al. **Exp Appl Acarol** 1996 Jul;20(7):359–68

RODENTIA

Discovery of mammalian hosts to Gnathostoma nipponicum larvae and prevalence of the larvae in rodents and insectivores. Oyamada T, et al. **J Vet Med Sci** 1996 Sep; 58(9):839–43

Seasonal variation of Leishmania major infection rates in sandflies from rodent burrows in Isfahan province, Iran. Yaghoobi-Ershadi MR, et al. **Med Vet Entomol** 1996 Apr; 10(2):181–4

Host–habitat relations as an important determinant of spatial distribution of flea assemblages (Siphonaptera) on rodents in the Negev Desert. Krasnov BR, et al. **Parasitology** 1997 Feb;114 (Pt 2):159–73

On Physaloptera sibirica Petrow et Gorbunow, 1931 (Nematoda: Physalopteridae) parasitizing Iberian mammals. Miquel J, et al. **Wiad Parazytol** 1996;42(4):435–42

[Population density of chigger mites, the vector of tsutsugamushi disease in Chollanam-do, Korea] Song HJ, et al. **Korean J Parasitol** 1996 Mar;34(1):27–33 (Eng. Abstr.) **(Kor)**

[The host–loyalty index of fleas, its analysis and importance in plague epizootiology] Kuznetsov AA. **Parazitologiia** 1997 May–Jun;31(3):193–200 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Social cues modulate free–running circadian activity rhythms in the diurnal rodent, Octodon degus. Goel N, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R797–804

Individual variation in reentrainment after phase shifts of light–dark cycle in a diurnal rodent Octodon degus. Labyak SE, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R739–46

Rhythm chronotypes in a diurnal rodent, Octodon degus. Labyak SE, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1058–66

Free–running rhythms and light– and dark–pulse phase response curves for diurnal Octodon degus (Rodentia). Lee TM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R278–86

Daily changes in sympathetic activity. The thermoregulatory effects of the beta blocker propranolol. Haim A, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:73–7

Thermoregulatory responses of the North American porcupine (Erethizon dorsatum bruneri) to decreasing ambient temperature and increasing wind speed. DeMatteo KE, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Mar;116(3):339–46

Naked mole–rats on the move. Behavioural ecology. Bromham L, et al. **Curr Biol** 1996 Sep 1;6(9):1082–3 (10 ref.)

Is the rodent hippocampus just for 'place'? Eichenbaum H. **Curr Opin Neurobiol** 1996 Apr;6(2):187–95 (69 ref.)

Properties of peroxisomes from jerboa (Jaculus orientalis). el Kebbaj MS, et al. **Eur J Cell Biol** 1996 Jun;70(2):150–6

Dense granular bodies: a novel nucleoplasmic structure in hibernating dormice. Tamburini M, et al. **Histochem Cell Biol** 1996 Dec;106(6):581–6

Effects of both a melatonin agonist and antagonist on seasonal changes in body mass and energy intake in the garden dormouse. Le Gouic S, et al. **Int J Obes Relat Metab Disord** 1996 Jul;20(7):661–7

Acoustic communication underground: vocalization characteristics in subterranean social mole–rats (Cryptomys sp., Bathyergidae). Credner S, et al. **J Comp Physiol [A]** 1997 Mar;180(3):245–55

Summer torpor in African woodland dormice Graphiurus murinus (Myoxidae:Graphiurinae). Webb PI, et al. **J Comp Physiol [B]** 1996;166(5):325–30

A tendon–locking mechanism in two climbing rodents, Muscardinus avellanarius and Micromys minutus (Mammalia, Rodentia). Haffner M. **J Morphol** 1996 Aug; 229(2):219–27

Influence of breeding season and reproductive status on male reproductive characteristics in the common mole–rat, Cryptomys hottentotus hottentotus. Spinks AC, et al. **J Reprod Fertil** 1997 Jan;109(1):79–86

Species–specificity of pyrimethamine in the rodent bone marrow micronucleus test. Ono T, et al. **Mutat Res** 1997 Apr 24;390(1–2):167–70

Competition for brain space [news] Diamond JM. **Nature** 1996 Aug 29;382(6594):756–7

Influence of various types of species–specific acoustic signals on the heart rate of mammals. Movchan VN. **Neurosci Behav Physiol** 1996 Jul–Aug;26(4):295–300

Species differences in the localization of neuropeptide FF receptors in rodent and lagomorph brain and spinal cord. Dupouy V, et al. **Peptides** 1996;17(3):399–405

Grooming secretions and seasonal adaptations in the blind mole rat (Spalax ehrenbergi). Shanas U, et al. **Physiol Behav** 1996 Aug;60(2):653–6

The effects of plant and tooth structure on intake and digestibility in two small mammalian herbivores. Bezzobs T, et al. **Physiol Zool** 1997 May–Jun;70(3):338–51

LH responses to single doses of exogenous GnRH by social Mashona mole–rats: a continuum of socially induced infertility in the family Bathyergidae. Bennett NC, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22;264(1384):1001–6

Reproductive suppression in subordinate, non–breeding female Damaraland mole–rats: two components to a lifetime of socially induced infertility. Bennett NC, et al. **Proc R Soc Lond B Biol Sci** 1996 Nov 22; 263(1376):1599–603

[Postnatal development of renal concentrating ability in a desert rodent, Jaculus orientalis] Aldaker AB, et al. **Reprod Nutr Dev** 1997;37(2):207–11 (Eng. Abstr.) **(Fre)**

[Vegetation as a factor in species diversity in communities of desert rodents] Rogovin KA. **Izv Akad Nauk Ser Biol** 1996 Nov–Dec;(6):743–8 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Early auditory filial learning in degus (Octodon degus): behavioral and autoradiographic studies. Poeggel G, et al. **Brain Res** 1996 Dec 16;743(1–2):162–70

Dominance and queen succession in captive colonies of the eusocial naked mole–rat, Heterocephalus glaber. Clarke FM, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22; 264(1384):993–1000

SURGERY

Humane dentistry [letter] Gorrel C. **J Small Anim Pract** 1997 Jan;38(1):31

Teeth trimming in rabbits and rodents [letter] [see comments] Divers SJ. **Vet Rec** 1996 Dec 14;139(24):603. Comment in: Vet Rec 1996 Dec 21–28;139(25):631–2.

Teeth trimming in rabbits and rodents [letter] [see comments] Graham–Jones O. **Vet Rec** 1996 Dec 14;139(24):603. Comment in: Vet Rec 1996 Dec 21–28;139(25):631–2.

Teeth trimming in rabbits and rodents [letter; comment] Johnston NW. **Vet Rec** 1997 Jan 11;140(2):52. Comment on: Vet Rec 1996 Nov 23;139(21):528. Comment on: Vet Rec 1996 Dec 7;139(23):567–71.

Teeth trimming in rabbits and rodents [letter] [see comments] Malley D. **Vet Rec** 1996 Dec 14;139(24):603. Comment in: Vet Rec 1996 Dec 21–28;139(25):631–2.

Teeth trimming in rabbits and rodents [letter; comment] Newcombe JR. **Vet Rec** 1997 Jan 11;140(2):52. Comment on: Vet Rec 1996 Nov 23;139(21):528. Comment on: Vet Rec 1996 Dec 7;139(23):567–71. Comment on: Vet Rec 1996 Dec 7;139(23):575. Comment on: Vet Rec 1996 Dec 21–28;139(25):631–2.

Teeth trimming in rabbits and rodents [letter; comment] [see comments] Östle G, et al. **Vet Rec** 1996 Dec 21–28; 139(25):631–2. Comment on: Vet Rec 1996 Dec 14;139(24):603. Comment in: Vet Rec 1997 Jan 11;140(2):52.

VIROLOGY

An outbreak of hantavirus pulmonary syndrome in western Paraguay. Williams RJ, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):274–82

Rodents, human remains, and North American hantaviruses: risk factors and prevention measures for forensic science personnel––a review. Fink TM. **J Forensic Sci** 1996 Nov; 41(6):1052–6 (42 ref.)

Genetic content and preliminary transcriptional analysis of a representative region of murine gammaherpesvirus 68. Mackett M, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1425–33

[Further study of hantavirus circulation in the Russian Federation] Butenko AM, et al. **Vopr Virusol** 1997 Mar–Apr;42(2):74–6 (Eng. Abstr.) **(Rus)**

RODENTICIDES

ADMINISTRATION & DOSAGE

Brodifacoum rodenticide ingestion in a patient with shigellosis. Stanziale SF, et al. **South Med J** 1997 Aug; 90(8):833–5

BLOOD

A screening procedure for the determination of 13 oral anticoagulants and rodenticides. Lotfi H, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):93–100

METABOLISM

HPLC determination of anticoagulant rodenticide residues in animal livers. Jones A. **Bull Environ Contam Toxicol** 1996 Jan;56(1):8–15

POISONING

Spontaneous hemoperitoneum from brodifacoum overdose. Morgan BW, et al. **Am J Emerg Med** 1996 Nov;14(7):656–9

Brodifacoum intoxication with marijuana smoking. La Rosa FG, et al. **Arch Pathol Lab Med** 1997 Jan;121(1):67–9

Rodenticide poisoning among children. Parsons BJ, et al. **Aust N Z J Public Health** 1996 Oct;20(5):488–92

Inhibition of mitochondrial complex I may account for IDDM induced by intoxication with the rodenticide Vacor. Esposti MD, et al. **Diabetes** 1996 Nov;45(11):1531–4

Neuropsychiatric syndromes and occupational exposure to zinc phosphide in Egypt. Amr MM, et al. **Environ Res** 1997;73(1–2):200–6

'Superwarfarin' poisoning leading to prolonged coagulopathy. Hui CH, et al. **Forensic Sci Int** 1996 Mar 5;78(1):13–8

Covert poisoning with difenacoum: clinical and toxicological observations. McCarthy PT, et al. **Hum Exp Toxicol** 1997 Mar;16(3):166–70

Successful treatment of brodifacoum poisoning in a pregnant bitch [letter] Hornfeldt CS, et al. **J Am Vet Med Assoc** 1996 Nov 15;209(10):1690–1

Yellow phosphorus poisoning – an unusual presentation. Elizabeth J, et al. **J Assoc Physicians India** 1995 May; 43(5):371–2

Clinical presentation and prognostic factors in sodium monofluoroacetate intoxication. Chi CH, et al. **J Toxicol Clin Toxicol** 1996;34(6):707–12

Cytogenetic observations following thallium poisoning. Hantson P, et al. **J Toxicol Environ Health** 1997 Feb 7; 50(2):97–100

Index of suspicion Case #2 presentation. Neal MJ, et al. **Pediatr Rev** 1996 Feb;17(2):65–7

TOXICITY

Basic toxicology of pesticides. Costa LG. **Occup Med** 1997 Apr–Jun;12(2):251–68 (50 ref.)

RODS (RETINA)

Characterization and chromosomal localization of the gene for human rhodopsin kinase. Khani SC, et al. **Genomics** 1996 Aug 1;35(3):571–6

ANATOMY & HISTOLOGY

Anatomical evidence for rod input to the parvocellular pathway in the visual system of the primate. Grünert U. **Eur J Neurosci** 1997 Mar;9(3):617–21

CHEMISTRY

Canine rod transducin alpha–1: cloning of the cDNA and evaluation of the gene as a candidate for progressive retinal atrophy. Ray K, et al. **Curr Eye Res** 1997 Jan;16(1):71–7

Myosin V in the retina: localization in the rod photoreceptor synapse. Schlamp CL, et al. **Exp Eye Res** 1996 Dec; 63(6):613–9

Covalent activation of retinal rod cGMP–gated channels reveals a functional heterogeneity in the ligand binding sites [see comments] Karpen JW, et al. **J Gen Physiol** 1996 Feb; 107(2):169–81. Comment in: J Gen Physiol 1996 Feb;107(2):165–7.

Isolation and characterization of the alpha–subunit of the rat rod photoreceptor cGMP–gated cation channel. Barnstable CJ, et al. **J Mol Neurosci** 1995;6(4):289–302

CYTOLOGY

Postmitotic cells fated to become rod photoreceptors can be respecified by CNTF treatment of the retina. Ezzeddine ZD, et al. **Development** 1997 Mar;124(5):1055–67

Müller–cell–derived leukaemia inhibitory factor arrests rod photoreceptor differentiation at a postmitotic pre–rod stage of development. Neophytou C, et al. **Development** 1997 Jun;124(12):2345–54

Spatiotemporal coordination of rod and cone photoreceptor differentiation in goldfish retina. Stenkamp DL, et al. **J Comp Neurol** 1997 Jun 2;382(2):272–84

Injury–induced remodelling and regeneration of the ribbon presynaptic terminal in vitro. Nachman–Clewner M, et al. **J Neurocytol** 1996 Oct;25(10):597–613

Sonic hedgehog promotes rod photoreceptor differentiation in mammalian retinal cells in vitro. Levine EM, et al. **J Neurosci** 1997 Aug 15;17(16):6277–88

Asynchronous transmitter release: control of exocytosis and endocytosis at the salamander rod synapse. Rieke F, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):1–8

Regional topography of rod and immunocytochemically characterized "blue" and "green" cone photoreceptors in rabbit retina. Famiglietti EV, et al. **Vis Neurosci** 1995 Nov–Dec;12(6):1151–75

[Dopamine slows phagocytosis of rods from bovine pigment epithelium in vitro trough D1 receptor] Masri H, et al. **C R Acad Sci III** 1996 Aug;319(8):687–91 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Membrane currents evoked by ionotropic glutamate receptor agonists in rod bipolar cells in the rat retinal slice preparation. Hartveit E. **J Neurophysiol** 1996 Jul; 76(1):401–22

Cyclic GMP–gated channels of bovine rod photoreceptors: affinity, density and stoichiometry of Ca(2+)–calmodulin binding sites. Bauer PJ. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):675–85

Antagonists of the cGMP–gated conductance of vertebrate rods block the photocurrent in scallop ciliary photoreceptors. Gomez MP, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):367–78

A glutamate–elicited chloride current with transporter–like properties in rod photoreceptors of the tiger salamander. Grant GB, et al. **Vis Neurosci** 1996 Jan–Feb;13(1):135–44

EMBRYOLOGY

Müller–cell–derived leukaemia inhibitory factor arrests rod photoreceptor differentiation at a postmitotic pre–rod stage of development. Neophytou C, et al. **Development** 1997 Jun;124(12):2345–54

Development of photoreceptor mosaics in the primate retina. Wikler KC, et al. **Perspect Dev Neurobiol** 1996;3(3):161–75 (80 ref.)

ENZYMOLOGY

Functional reconstitution of photoreceptor guanylate cyclase with native and mutant forms of guanylate cyclase–activating protein 1. Otto–Bruc A, et al. **Biochemistry** 1997 Apr 8;36(14):4295–302

Cloning and characterization of the cDNA and gene encoding the gamma-subunit of cGMP-phosphodiesterase in canine retinal rod photoreceptor cells. Wang W, et al. **Gene** 1996 Nov 28;181(1-2):1-5

Cytochemical localization of guanylate cyclase in photoreceptor cells of the mouse. Schraermeyer U, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Mar;235(3):176-9

Identification of a novel R552O mutation in exon 13 of the beta-subunit of rod phosphodiesterase gene in a Spanish family with autosomal recessive retinitis pigmentosa. Valverde D, et al. **Hum Mutat** 1996;8(4):393-4

The regulation of the cGMP-binding cGMP phosphodiesterase by proteins that are immunologically related to gamma subunit of the photoreceptor cGMP phosphodiesterase. Lochhead A, et al. **J Biol Chem** 1997 Jul 18;272(29):18397-403

Protein kinase C localization in the synaptic terminal of rod bipolar cells. Vaquero CF, et al. **Neuroreport** 1996 Sep 2; 7(13):2176-80

Elevation of cGMP with normal expression and activity of rod cGMP-PDE in photoreceptor degenerate labrador retrievers. Kommonen B, et al. **Ophthalmic Res** 1996; 28(1):19-28

Dopamine inhibits mammalian photoreceptor Na+,K+-ATPase activity via a selective effect on the alpha3 isozyme. Shulman LM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8034-9

Developmental expression of protein kinase C immunoreactivity in rod bipolar cells of the rabbit retina. Casini G, et al. **Vis Neurosci** 1996 Sep-Oct;13(5):817-31

GROWTH & DEVELOPMENT

Developmental expression of protein kinase C immunoreactivity in rod bipolar cells of the rabbit retina. Casini G, et al. **Vis Neurosci** 1996 Sep-Oct;13(5):817-31

INJURIES

Synaptic growth in the rod terminals of mice after partial photoreceptor cell loss: a three-dimensional ultrastructural study. Jansen HG, et al. **Microsc Res Tech** 1997 Jan 15; 36(2):96-105

METABOLISM

The energetic cost of photoreception in retinal rods of mammals. Demontis GC, et al. **Arch Ital Biol** 1997 Mar; 135(2):95-109

A second type of rod opsin cDNA from the common carp (Cyprinus carpio). Lim J, et al. **Biochim Biophys Acta** 1997 May 2;1352(1):8-12

Structure and analysis of the transducin beta3-subunit gene, a candidate for inherited cone degeneration (cd) in the dog. Akhmedov NB, et al. **Gene** 1997 Jul 18;194(1):47-56

Molecular cloning of a rod opsin cDNA from the skate retina. O'Brien J, et al. **Gene** 1997 Jul 9;193(2):141-50

Generation and analysis of transgenic mice expressing P216L-substituted rds/peripherin in rod photoreceptors. Kedzierski W, et al. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):498-509

Modulation by internal protons of native cyclic nucleotide-gated channels from retinal rods. Picco C, et al. **J Gen Physiol** 1996 Oct;108(4):265-76

Kinetics of oxygen consumption and light-induced changes of nucleotides in solitary rod photoreceptors. Poitry S, et al. **J Gen Physiol** 1996 Aug;108(2):75-87

N-methyl-D-aspartate receptors containing the NR2D subunit in the retina are selectively expressed in rod bipolar cells. Wenzel A, et al. **Neuroscience** 1997 Jun;78(4):1105-12

Modulation of rod, but not cone, cGMP-gated photoreceptor channels by calcium-calmodulin. Haynes LW, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):233-9

Are there ionotropic glutamate receptors on the rod bipolar cell of the mouse retina? Hughes TE. **Vis Neurosci** 1997 Jan-Feb;14(1):103-9

A gradient of basic fibroblast growth factor in rod photoreceptors in the normal human retina. Li ZY, et al. **Vis Neurosci** 1997 Jul-Aug;14(4):671-9

A 221-bp fragment of the mouse opsin promoter directs expression specifically to the rod photoreceptors of transgenic mice. Quiambao AB, et al. **Vis Neurosci** 1997 Jul-Aug;14(4):617-25

3H-adenosine uptake selectively labels rod horizontal cells in goldfish retina. Studholme KM, et al. **Vis Neurosci** 1997 Mar-Apr;14(2):207-12

pH changes in frog rods upon manipulation of putative pH-regulating transport mechanisms. Kalamkarov G, et al. **Vision Res** 1996 Oct;36(19):3029-36

PHYSIOLOGY

Regulation of M-like K+ current, IKx, by Ca(2+)-dependent phosphorylation in rod photoreceptors. Kurennyi DE, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1844-53

Abnormal development of cone cells in transgenic mice ablated of rod photoreceptor cells. Usukura J, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:550-3

The effect of form deprivation on retinal leu-enkephalin levels is mediated by a rod-driven pathway. Megaw P, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):58-60

Stochastic simulation of the transducin GTPase cycle. Felber S, et al. **Biophys J** 1996 Dec;71(6):3051-63

Block of the cGMP-gated cation channel of catfish rod and cone photoreceptors by organic cations. Stotz SC, et al. **Biophys J** 1996 Dec;71(6):3136-47

Ion selectivity predictions from a two-site permeation model for the cyclic nucleotide-gated channel of retinal rod cells. Wells GB, et al. **Biophys J** 1997 Jan;72(1):127-40

Control of rod retinomotor movements in teleost retinae: the role of dopamine in mediating light-dependent and circadian signals. Kolbinger W, et al. **Cell Tissue Res** 1996 Sep;285(3):445-51

Interaction between the short-wavelength cone and rod systems in the electroretinogram of the cynomolgus monkey. Kasuga T, et al. **Doc Ophthalmol** 1995-96; 91(2):117-27

Cloning and analysis of the cDNA encoding the rod G-protein transduction alpha, beta1 and gamma1 subunits from the canine retina. Kylmä T, et al. **Gene** 1997 Jul 1; 193(1):1-4

Factors that influence the increase in the electroretinogram 30-Hz flicker amplitude during light adaptation. Raether K, et al. **Ger J Ophthalmol** 1996 Sep;5(5):285-8

Neuronal coupling in rod-signal pathways of the retina. Vaney DI. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):267-73 (24 ref.)

Equivalence of background and bleaching desensitization in isolated rod photoreceptors of the larval tiger salamander. Jones GJ, et al. **J Gen Physiol** 1996 Oct;108(4):333-40

Persistent activation of transducin by bleached rhodopsin in salamander rods. Matthews HR, et al. **J Gen Physiol** 1996 Dec;108(6):557-63

Ret 1, a cis-acting element of the rat opsin promoter, can direct gene expression in rod photoreceptors. Yu X, et al. **J Neurochem** 1996 Dec;67(6):2494-504

D2 dopamine receptor-mediated inhibition of a hyperpolarization-activated current in rod photoreceptors. Akopian A, et al. **J Neurophysiol** 1996 Sep;76(3):1828-35

Dynamic, spatially nonuniform calcium regulation in frog rods exposed to light. McCarthy ST, et al. **J Neurophysiol** 1996 Sep;76(3):1991-2004

Light-dependent control of calcium in intact rods of the bullfrog Rana catesbeiana. Younger JP, et al. **J Neurophysiol** 1996 Jan;75(1):354-66

Gain of rod to horizontal cell synaptic transfer: relation to glutamate release and a dihydropyridine-sensitive calcium current. Witkovsky P, et al. **J Neurosci** 1997 Oct 1; 17(19):7297-306

Cone-rod receptor spaces with illustrations that use CRT phosphor and light-emitting-diode spectra. Shapiro AG, et al. **J Opt Soc Am A** 1996 Dec;13(12):2319-28

Effect of hydroxylamine on photon-like events during dark adaptation in toad rod photoreceptors. Leibrock CS, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):97-109

Kinetics of desensitization induced by saturating flashes in toad and salamander rods. Murnick JG, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):1-13

Regulation of intracellular pH in salamander retinal rods. Saarikoski J, et al. **J Physiol (Lond)** 1997 Jan 1;498 (Pt 1):61-72

Vision in dim light [letter] Hubel DH. **Nature** 1997 Jul 3; 388(6637):32-3

G-protein deactivation is rate-limiting for shut-off of the phototransduction cascade. Sagoo MS, et al. **Nature** 1997 Sep 25;389(6649):392-5

Prolonged photoresponses in transgenic mouse rods lacking arrestin. Xu J, et al. **Nature** 1997 Oct 2;389(6650):505-9

Density ratio of dopaminergic versus serotonergic cells correlates with cone-to-rod ratio in teleost retinas. Negishi K, et al. **Neurosci Lett** 1997 Mar 28;225(1):37-40

Human oscillatory potentials: components of rod origin. Janáky M, et al. **Ophthalmologica** 1996;210(6):315-8

Single amino acid residue as a functional determinant of rod and cone visual pigments. Imai H, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2322-6

Long-term rod dark adaptation in man. Threshold measurements, rhodopsin regeneration and allosteric sensitivity regulation. An evaluation. Stabell U, et al. **Scand J Psychol** 1996 Sep;37(3):259-68 (30 ref.)

Regulation of sensitivity in vertebrate rod photoreceptors by calcium. Koutalos Y, et al. **Trends Neurosci** 1996 Feb; 19(2):73-81 (80 ref.)

Glycine receptors in the rod pathway of the macaque monkey retina. Grünert U, et al. **Vis Neurosci** 1996 Jan-Feb; 13(1):101-15

Horizontal cell sensitivity in the cat retina during prolonged dark adaptation. Lankheet MJ, et al. **Vis Neurosci** 1996 Sep-Oct;13(5):885-96

Photoresponses of human rods in vivo derived from paired-flash electroretinograms. Pepperberg DR, et al. **Vis Neurosci** 1997 Jan-Feb;14(1):73-82

Two signals in the human rod visual system: a model based on electrophysiological data. Stockman A, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):951-70

Influence of rod signals on hue perception: evidence from successive scotopic contrast. Buck SL. **Vision Res** 1997 May;37(10):1295-301

An alternative phototransduction model for human rod and cone ERG a-waves: normal parameters and variation with age. Cideciyan AV, et al. **Vision Res** 1996 Aug; 36(16):2609-21

Rod temporal channels. Hess RF, et al. **Vision Res** 1996 Feb; 36(4):613-9

Bradykinin receptor inhibition affects the rod b-wave in the cat electroretinogram. Jacobi PC, et al. **Vision Res** 1996 Dec;36(23):3843-9

Summation of rod and S cone signals at threshold in human observers. Naarendorp F, et al. **Vision Res** 1996 Sep; 36(17):2681-8

Peripheral colour vision: effects of rod intrusion at different eccentricities. Stabell B, et al. **Vision Res** 1996 Nov; 36(21):3407-14

Psychophysical evidence for losses in rod sensitivity in the aging visual system. Sturr JF, et al. **Vision Res** 1997 Feb; 37(4):475-81

PHYSIOPATHOLOGY

Electroretinogram responses and refractive errors in patients with a history of retinopathy prematurity. Fulton AB, et al. **Doc Ophthalmol** 1995-96;91(2):87-100

Rod plateaux during dark adaptation in Sorsby's fundus dystrophy and vitamin A deficiency. Cideciyan AV, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1786-94

RADIATION EFFECTS

Equivalence of background and bleaching desensitization in isolated rod photoreceptors of the larval tiger salamander. Jones GJ, et al. **J Gen Physiol** 1996 Oct;108(4):333-40

RODS AND CONES see **PHOTORECEPTORS**

ROENTGEN RAYS see **X-RAYS**

ROENTGENKYMOGRAPHY see **ELECTROKYMOGRAPHY**

ROENTGENOGRAPHY see **RADIOGRAPHY**

ROENTGENOTHERAPY see **X-RAY THERAPY**

ROGERIAN THERAPY see **NONDIRECTIVE THERAPY**

ROHYPNOL see **FLUNITRAZEPAM**

ROLANDS EPILEPSY see **EPILEPSY, ROLANDIC**

ROLE

Role perceptions of mothers with young children: the impact of a child's disability. Crowe TK, et al. **Am J Occup Ther** 1997 Sep;51(8):651-61

Etiology of the masochistic and narcissistic personality. Glickauf-Hughes C. **Am J Psychoanal** 1997 Jun;57(2):141-8

The father's role during infancy. Factors that influence maternal expectations. Grant CC, et al. **Arch Pediatr Adolesc Med** 1997 Jul;151(7):705-11

Health consequences of social-role careers for women: a life-course perspective. Shadbolt B. **Aust N Z J Public Health** 1996 Apr;20(2):172-80

My role in the assessment program of the Office of Strategic Services. Miller JG. **Behav Sci** 1996 Oct;41(4):245-61

Supporting special needs in the mainstream classroom: children's perceptions of the adult role. Bowers T. **Child Care Health Dev** 1997 May;23(3):217-32

Models of traumatic experiences and children's psychological adjustment: the roles of perceived parenting and the children's own resources and activity. Punamäki RL, et al. **Child Dev** 1997 Aug;68(4):718-28

Ideal role behaviours as seen by dentists and patients themselves and by their role partners: do they differ? Lahti S, et al. **Community Dent Oral Epidemiol** 1996 Aug; 24(4):245-8

The three Rs: roles, relationships, and rules. Backlar P. **Community Ment Health J** 1996 Oct;32(5):505-9

The transitions of caregiving: subjective and objective definitions. Seltzer MM, et al. **Gerontologist** 1996 Oct; 36(5):614-26

When resources are scarce: the impact of three organizational practices on clinician-managers. Lemieux-Charles L, et al. **Health Care Manage Rev** 1997 Winter;22(1):58-69

Custodial grandparenting: new roles for middle-aged and older adults. Emick MA, et al. **Int J Aging Hum Dev** 1996; 43(2):135-54 (92 ref.)

Impact of roles of women on health in India. Buckshee K. **Int J Gynaecol Obstet** 1997 Jul;58(1):35-42

The effect of women's role on health: the paradox. Kabira WM, et al. **Int J Gynaecol Obstet** 1997 Jul;58(1):23-34

Daughter-mother folie à deux: immigration as a trigger for role reversal and the development of folie à deux. Lerner V, et al. **Isr J Psychiatry Relat Sci** 1996;33(4):260-4

Negotiating the role of the practice nurse in general practice. Atkin K, et al. **J Adv Nurs** 1996 Sep;24(3):498-505

Role: a concept explored in nursing education. Clifford C. **J Adv Nurs** 1996 Jun;23(6):1135-41 (33 ref.)

Nurse researcher: a study of a contradiction in terms? Hicks C. **J Adv Nurs** 1996 Aug;24(2):357-63

From nurse to teacher: recognizing a status passage. MacNeil M. **J Adv Nurs** 1997 Mar;25(3):634-42

Exploring the nursing role in pain management from a post-structuralist perspective. Price K, et al. **J Adv Nurs** 1996 Nov;24(5):899-904 (35 ref.)

The role of clinical dietitians as perceived by dietitians and physicians. Boyhtari ME, et al. **J Am Diet Assoc** 1997 Aug; 97(8):851-5

Role conflict and conflict of interest: a professional practice

dilemma [see comments] Pullman D.
J Am Optom Assoc 1996 Feb;67(2):98–108. Comment in: J Am Optom Assoc 1996 May;67(5):254–5.
The important role of the follower. Palazzolo C, et al.
J Am Vet Med Assoc 1996 Jul 1;209(1):69–72
The roles of personal investment and reasoning competence in career–relevant everyday problem solving. Klaczynski PA. **J Exp Child Psychol** 1997 Aug;66(2):193–210
Physician role conflict and resulting career changes. Gender and generational differences. Warde C, et al.
J Gen Intern Med 1996 Dec;11(12):729–35
The psychological consequences of multiple roles: the nonnormative case. Hong J, et al. **J Health Soc Behav** 1995 Dec;36(4):386–98
Parental influence on gender and marital role attitudes: implications for intervention. Snyder DK, et al.
J Marital Fam Ther 1997 Apr;23(2):191–201
Epigenesis of the nurse practitioner role revisited. Roberts SJ, et al. **J Nurs Educ** 1997 Feb;36(2):67–73
Student to nurse–midwife role transition process. Smoothing the way. Hunter LP, et al. **J Nurse Midwifery** 1996 Jul–Aug;41(4):328–33
Care of the child with a solid organ transplant: what is the role of the generalist? [editorial; comment] Welch TR, et al. **J Pediatr** 1997 Jun;130(6):850–1. Comment on: J Pediatr 1997 Jun;130(6):987–9.
A content analysis of safety behaviors of television characters: implications for children's safety and injury. Potts R, et al. **J Pediatr Psychol** 1996 Aug;21(4):517–28
The gender gap in occupational role attainment: a social dominance approach. Pratto F, et al.
J Pers Soc Psychol 1997 Jan;72(1):37–53
Mental illness—treatable illness [letter; comment]
J Psychosoc Nurs Ment Health Serv 1997 May;35(5):9–10 . Comment on: J Psychosoc Nurs Ment Health Serv 1997 Feb;35(2):3–4.
Social roles, social norms, and self–presentation in the quiz effect of Ross, Amabile, and Steinmetz. Gibbins K, et al.
J Soc Psychol 1996 Oct;136(5):625–34
The role of art within the medical setting. Corbat C.
Med Health R I 1997 Apr;80(4):112–4
The family caregiver's role in Alzheimer's disease. Haley WE. **Neurology** 1997 May;48(5 Suppl 6):S25–9 (63 ref.)
Otolaryngologist's role in transtracheal oxygen therapy: the minitrach procedure. Lipkin AF, et al.
Otolaryngol Head Neck Surg 1996 Nov;115(5):447–53
Situational feature recognition in schizophrenic outpatients. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 1;62(3):251–7
Where two roles intersect: spillover between parent care and employment. Stephens MA, et al. **Psychol Aging** 1997 Mar; 12(1):30–7
Relation among measures of burnout, job satisfaction, and role dynamics for a sample of South African child–care social workers. Bhana A, et al. **Psychol Rep** 1996 Oct; 79(2):431–4
Efficacy of volunteerism for role–loss depression: a complement to Weinstein, et al [comment] Crist–Houran M. **Psychol Rep** 1996 Dec;79(3 Pt 1):736–8. Comment on: Psychol Rep 1995 Apr;76(2):482.
Asian–American men's acculturation and gender–role conflict. Kim EJ, et al. **Psychol Rep** 1996 Aug;79(1):95–104
Clinical ethics. An important role for the consultation–liaison psychiatrist. Kornfeld DS. **Psychosomatics** 1997 Jul–Aug; 38(4):307–8
Role concepts and expectations of physicians and nurses in hospitals. Verschuren PJ, et al. **Soc Sci Med** 1997 Oct; 45(7):1135–8
Domestic violence and role–taking: collegial inaccuracies. Forte JA, et al. **Soc Work** 1997 Jan;42(1):116–8
Taking exception to "Asymmetrical role–taking: comparing battered and nonbattered women" [comment] Starsoneck L, et al. **Soc Work** 1997 Jan;42(1):113–5. Comment on: Soc Work 1996 Jan;41(1):59–73.
Role strain and psychological well–being in women with systemic lupus erythematosus. Karasz A, et al.
Women Health 1995;23(3):41–57
Why can't a woman be more like a man? A renaissance perspective on the biological basis for female inferiority. Walton MT, et al. **Women Health** 1996;24(4):87–95
[Retirement activities: wish or reality?] Niederfranke A.
Z Gerontol Geriatr 1996 Sep–Oct;29(5):362–6 (Eng. Abstr.) **(Ger)**
[The role of pharmacists in hospitals (letter)] Heltberg B.
Tidsskr Nor Laegeforen 1997 Apr 10;117(9):1337–8 **(Nor)**
[Sun and skin cancer. Role of the pediatrician] Albisu Andrade Y. **An Esp Pediatr** 1997 Feb;46(2):111–3 **(Spa)**

ROLE CONCEPT see **ROLE**

ROLE PLAYING

A comparison of two methods to teach smoking–cessation techniques to medical students. Papadakis MA, et al.
Acad Med 1997 Aug;72(8):725–7
Using live theatre combined with role playing and discussion to examine what at–risk adolescents think about substance abuse, its consequences, and prevention. Harding CG, et al. **Adolescence** 1996 Winter;31(124):783–96
Moderating binge drinking: it is possible to change behaviour if you plan it in advance. Murgraff V, et al.
Alcohol Alcohol 1996 Nov;31(6):577–82
The use of role plays in teaching drug and alcohol management. Frith J. **Aust Fam Physician** 1996 Apr; 25(4):532–3
Using standardized patients to teach breast evaluation to sophomore medical students. Heard JK, et al.
J Cancer Educ 1995 Winter;10(4):191–4
Teaching medical students by role playing: a model for integrating psychosocial issues with disease management. Mann BD, et al. **J Cancer Educ** 1996 Summer;11(2):65–72
Effectiveness of an Indonesian model for rapid training of Guatemalan health workers in diarrhea case management. Bailey JE, et al. **J Community Health** 1996 Aug; 21(4):269–76
Make–believe hospital—a pediatric clinical experience. Warren IB. **J Nurs Educ** 1997 May;36(5):234–5
Development of the role–play inventory of situations and coping strategies for parents of children with cystic fibrosis. Quittner AL, et al. **J Pediatr Psychol** 1996 Apr;21(2):209–35
'Never again'. Model mugging: a therapeutic resource for the psychiatric nurse. Ellensweig D.
J Psychosoc Nurs Ment Health Serv 1997 Jun;35(6):41–4
Objective detection of faking on role–play tests of assertion: gender differences [see comments] Kern JM.
Psychol Rep 1996 Apr;78(2):355–61. Comment in: Psychol Rep 1994 Apr;74(2):367–70.
What influences social skills in patients with schizophrenia? Preliminary study using the role play test, WAIS–R and event–related potential. Ikebuchi E, et al. **Schizophr Res** 1996 Nov 15;22(2):143–50
The use of simulations to assess the impact of an adolescent suicide response curriculum. Kalafat J, et al.
Suicide Life Threat Behav 1996 Winter;26(4):359–64
[A challenge for medical students in Umeå: role playing for training of meeting the patient] Fällman H, et al.
Lakartidningen 1997 Aug 27;94(35):2894–7 **(Swe)**
[Does role playing trigger violence? The impact of "party games" should be scientifically scrutinized (see comments)] Lindqvist P. **Lakartidningen** 1996 Sep 25;93(39):3353–5. Comment in: Lakartidningen 1996 Oct 30;93(44):3883–4. **(Swe)**
[A survey of role playing based on correct methodology is welcome (letter)] von Knorring B. **Lakartidningen** 1996 Dec 11;93(50):4611 **(Swe)**
[Role games are to be scrutinized—without prejudice (letter; comment)] Wallström P. **Lakartidningen** 1996 Oct 30; 93(44):3883–4. Comment on: Lakartidningen 1996 Sep 25;93(39):3353–5. **(Swe)**

ROLITETRACYCLINE

DIAGNOSTIC USE

[The intraoperative visualization of the bile ducts by the use of fluorescent substances. A feasibility study] Oddi A, et al. **G Chir** 1996 Nov–Dec;17(11–12):620–3 (Eng. Abstr.) **(Ita)**

ROMAN EMPIRE see **ROMAN WORLD**

ROMAN WORLD

Health care in ancient Rome. Lessons for doctors today. Callahan RD. **N C Med J** 1997 May–Jun;58(3):202–4

ROMANO–WARD SYNDROME see **LONG QT SYNDROME**

ROMANOMERMIS see **MERMITHOIDEA**

ROMBERG'S DISEASE see **FACIAL HEMIATROPHY**

ROOMING–IN CARE

Rooming–in for elderly surgical patients. Wells N, et al.
Appl Nurs Res 1997 May;10(2):72–9
[Rooming–in in psychiatry—treatment indications and implementation] Freyberger HJ, et al.
Fortschr Neurol Psychiatr 1996 Aug;64(8):312–9 (Eng. Abstr.) **(Ger)**
[Mother–infant rooming–in and exclusive breast feeding] Flores–Huerta S, et al. **Salud Publica Mex** 1997 Mar–Apr; 39(2):110–6 (Eng. Abstr.) **(Spa)**

ROOMS, PATIENT see **PATIENTS' ROOMS**

ROOT CANAL see **DENTAL PULP CAVITY**

ROOT CANAL FILLING MATERIALS

Is there a best retrograde filling material? Jou YT, et al.
Dent Clin North Am 1997 Jul;41(3):555–61 (24 ref.)
[Endomethasone without formaldehyde (letter)] Wagner M.
Schweiz Monatsschr Zahnmed 1996;106(1):72 **(Ger)**
[Clinical cases of teeth previously treated by endodontic restoration using intra–canal pins of gold–coated brass] Lagorio L, et al. **Minerva Stomatol** 1997 Jun;46(6):337–42 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Bilateral mandibular nerve damage following root canal therapy [see comments] Kothari P, et al. **Br Dent J** 1996 Mar 9;180(5):189–90. Comment in: Br Dent J 1996 Jul 6;181(1):8.

PHARMACOLOGY

Inhibition of pure cultures of oral bacteria by root canal filling materials. Tchaou WS, et al. **Pediatr Dent** 1996 Nov–Dec;18(7):444–9

THERAPEUTIC USE

Repair of furcal perforations with mineral trioxide aggregate: two case reports. Arens DE, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Jul;82(1):84–8
Re: A comparison of pulpal response to freeze–dried bone, calcium–hydroxide, and zinc oxide–eugenol in primary teeth in two cynomolgus monkeys. S Fadavi, AW Anderson. Pediatr Dent 18:52–56, 1996 [letter; comment] Langeland K. **Pediatr Dent** 1996 May–Jun;18(3):190–3. Comment on: Pediatr Dent 1996 Jan–Feb;18(1):52–6.
[The use of a Hydroxyapol–containing zinc–eugenol paste for the filling of dental canals in treating periodontitis] Barer GM, et al. **Stomatologiia (Mosk)** 1996;75(5):26–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Comparison of the intraosseous biocompatibility of Vitremer and super EBA by implantation into the mandible of rabbits. Tassery H, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 May;83(5):602–8

ROOT CANAL IRRIGANTS

[Endomethasone without formaldehyde (letter)] Wagner M.
Schweiz Monatsschr Zahnmed 1996;106(1):72 **(Ger)**
[Analytic evaluation of Clorox household bleach from the viewpoint of its value in the use in endodontics] Veszprémi E, et al. **Fogorv Sz** 1997 Jan;90(1):13–8 (Eng. Abstr.) **(Hun)**

ROOT CANAL MEDICAMENTS see **ROOT CANAL IRRIGANTS**

ROOT CANAL OBTURATION

Clinical management of nonhealing periradicular pathosis. Surgery versus endodontic retreatment. Danin J, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Aug;82(2):213–7

INSTRUMENTATION

[Clinical cases of teeth previously treated by endodontic restoration using intra–canal pins of gold–coated brass] Lagorio L, et al. **Minerva Stomatol** 1997 Jun;46(6):337–42 (Eng. Abstr.) **(Ita)**

METHODS

Cracked–tooth syndrome [letter] B'rells GK.
J Am Dent Assoc 1997 Jun;128(6):688, 690
Endodontic treatment of maxillary canine with dens invaginatus and immature root. Holtzman L, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Oct;82(4):452–5

ROOT CANAL PREPARATION

Ultrasonic root end preparation. Carr GB.
Dent Clin North Am 1997 Jul;41(3):541–54
Scanning electron microscopic evaluation of the cleanliness of a new ultrasonic root end preparation. Chou HG, et al. **J Formos Med Assoc** 1997 Sep;96(9):727–33

ADVERSE EFFECTS

Repair of furcal perforations with mineral trioxide aggregate: two case reports. Arens DE, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Jul;82(1):84–8
Incidence of root face alteration after ultrasonic retrograde cavity preparation. Waplington M, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 Mar;83(3):387–92

INSTRUMENTATION

Electronic apex locator: a useful tool for root canal treatment in the primary dentition. Katz A, et al.
ASDC J Dent Child 1996 Nov–Dec;63(6):414–7
[Mechanical instrumentation of the root canals. A study using SEM and computerized image analysis] Ferrer Luque CM, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1996 Jun–Sep;39(3–4):111–7 (Eng. Abstr.) **(Fre)**

METHODS

Preventing after–hours endodontic emergencies.
Oppenheimer RE. **J Am Dent Assoc** 1997 Mar;128(3):350
Demineralization of resected root–ends with methylene blue dye. Morgan LA, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 Jul;84(1):74–8
Effect of dentin treatment on in vitro root tubule bacterial invasion. Perez F, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Oct;82(4):446–51

Effect of smear layer on coronal microleakage. Vassiliadis L, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Sep;82(3):315–20

[The area of dentinal diffusion at the time of the manual preparation of root canals] Ferrer Luque CM, et al.
Bull Group Int Rech Sci Stomatol Odontol 1996 Jun–Sep; 39(3–4):103–9 (Eng. Abstr.) **(Fre)**

ROOT CANAL SEALANTS see **ROOT CANAL FILLING MATERIALS**

ROOT CANAL THERAPY

Case report CT: a multidisciplinary approach to treatment, including orthognathic surgery, endodontics, periodontics, and implants for anchorage and restoration. Harnick DJ. **Angle Orthod** 1996;66(5):327–30

Orthodontic management of root–filled teeth. Drysdale C, et al. **Br J Orthod** 1996 Aug;23(3):255–60 (28 ref.)

Principles of endodontic microsurgery. Kim S.
Dent Clin North Am 1997 Jul;41(3):481–97

Intentional replantation. Kratchman S.
Dent Clin North Am 1997 Jul;41(3):603–17

Soft tissue management in endodontic surgery. Peters LB, et al. **Dent Clin North Am** 1997 Jul;41(3):513–28 (24 ref.)

Conventional endodontics and the operating microscope. Saunders WP, et al. **Dent Clin North Am** 1997 Jul; 41(3):415–28

Complications of sinus perforations and their management in endodontics. Watzek G, et al. **Dent Clin North Am** 1997 Jul;41(3):563–83

Endodontic failures—changing the approach. Cheung GS. **Int Dent J** 1996 Jun;46(3):131–8 (30 ref.)

Endodontic therapy [letter] Cammarato VT.
J Am Dent Assoc 1997 Aug;128(8):1064, 1066

Healing of intrabony defects and its relationship to root canal therapy. A histologic and histometric study in dogs. Lima LA, et al. **J Periodontol** 1997 Mar;68(3):240–8

Influence of different metal restorations bonded with resin on fracture resistance of endodontically treated maxillary premolars. Costa LC, et al. **J Prosthet Dent** 1997 Apr; 77(4):365–9

Radiographic and histologic periapical findings of root canal treated teeth in cadaver. Green TL, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 Jun;83(6):707–11

[Pulp ramifications. A report on the 7th Biennial Congress of the Société Européenne d'Endodontie (E.S.E.) of 7, 8, 9 and 10 November 1995 at Tel Aviv] Jacoby T.
Schweiz Monatsschr Zahnmed 1996;106(3):303–5 **(Fre)**

[The role of the traditional radiological methods in conservative therapy and endodontics] Bianchi SD, et al. **Minerva Stomatol** 1996 Dec;45(12):575–87 (27 ref.) (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Late infection of hand implant after a dental procedure: a case report. Skoff HD. **Am J Orthop** 1997 Feb;26(2):145–6

Bilateral mandibular nerve damage following root canal therapy [see comments] Kothari P, et al. **Br Dent J** 1996 Mar 9;180(5):189–90. Comment in: Br Dent J 1996 Jul 6;181(1):8.

Microscopic management of procedural errors. Wong R, et al. **Dent Clin North Am** 1997 Jul;41(3):455–79

When to remove a tooth [letter; comment] Cohen HV.
J Am Dent Assoc 1997 Jul;128(7):806, 808. Comment on: J Am Dent Assoc 1997 May;128(5):635–6.

Treatment outcome of surgical and non–surgical management of endodontic failures. Hepworth MJ, et al.
J Can Dent Assoc 1997 May;63(5):364–71 (30 ref.)

INSTRUMENTATION

The microscope. Its effect on your practice. Koch K.
Dent Clin North Am 1997 Jul;41(3):619–26

The anatomy of the surgical operating microscope and operating positions. Rubinstein R. **Dent Clin North Am** 1997 Jul;41(3):391–413

METHODS

Evidence–based dentistry: endodontic failure—how should it be managed? Briggs PF, et al. **Br Dent J** 1997 Sep 13; 183(5):159–64 (24 ref.)

Hemostasis in endodontic microsurgery. Kim S, et al.
Dent Clin North Am 1997 Jul;41(3):499–511

Barrier membrane techniques in endodontic microsurgery. Pecora G, et al. **Dent Clin North Am** 1997 Jul;41(3):585–602 (32 ref.)

Micro–endodontic nonsurgical retreatment. Ruddle CJ.
Dent Clin North Am 1997 Jul;41(3):429–54

Treatment outcome of surgical and non–surgical management of endodontic failures. Hepworth MJ, et al.
J Can Dent Assoc 1997 May;63(5):364–71 (30 ref.)

Provisional full coverage for draining tooth. An endodontic/esthetic problem. Gallin DM.
N Y State Dent J 1996 Aug–Sep;62(7):48–9

[CO2 laser sterilization in periradicular surgery: a clinical follow–up study] Van Doorne L, et al.
Rev Belge Med Dent 1996;51(1):73–82 (Eng. Abstr.) **(Fre)**

[Therapeutic options in endodontics: technics for the clinician. A report on the endodontics continuing education course organized as part of the continuing education program of the School of Dentistry of Geneva 17 November 1995 (news)] Roh S.
Schweiz Monatsschr Zahnmed 1996;106(4):398–9 **(Fre)**

[An experimental study of the use of Yag: Nd and YAG: Cr, Tm, Ho lasers in endodontics] Moroz BT, et al.
Stomatologiia (Mosk) 1996;Spec No:67–8 **(Rus)**

STANDARDS

Technical standard of root canal treatment in an adult Scottish sub–population. Saunders WP, et al. **Br Dent J** 1997 May 24;182(10):382–6

STATISTICS & NUMERICAL DATA

Factors related to loss of root canal filled teeth. Caplan DJ, et al. **J Public Health Dent** 1997 Winter;57(1):31–9

TRENDS

Current trends in endodontic treatment: report of a national survey. Whitten BH, et al. **J Am Dent Assoc** 1996 Sep; 127(9):1333–41

ROOT CARIES

DIAGNOSIS

Reproducibility of clinical caries diagnoses on coronal and root surfaces. Rosén B, et al. **Caries Res** 1996;30(1):1–7

A fiber–optic setup for quantification of root surface demineralization. van der Veen MH, et al.
Eur J Oral Sci 1996 Apr;104(2 (Pt 1)):118–22

[Root caries. Its diagnosis and therapeutic principles] Hotz PR, et al. **Schweiz Monatsschr Zahnmed** 1996;106(3):248–57 (26 ref.) **(Ger, Fre)**

ENZYMOLOGY

Effects of collagenase on root demineralization. Kawasaki K, et al. **J Dent Res** 1997 Jan;76(1):588–95

EPIDEMIOLOGY

Distribution of coronal and root caries experience among persons aged 60+ in South Australia. Slade GD, et al. **Aust Dent J** 1997 Jun;42(3):178–84

Five–year incidence rates and intraoral distribution of root caries among community–dwelling older adults. Lawrence HP, et al. **Caries Res** 1996;30(3):169–79

Incidence of root caries in an older Canadian population. Locker D. **Community Dent Oral Epidemiol** 1996 Dec; 24(6):403–7

Do root lesions tend to develop in the same people who develop coronal lesions? Beck JD, et al.
J Public Health Dent 1997 Spring;57(2):82–8

MICROBIOLOGY

Human root caries: microbiota of a limited number of root caries lesions. Schüpbach P, et al. **Caries Res** 1996; 30(1):52–64

Plaque pH and microflora of dental plaque on sound and carious root surfaces. Aamdal–Scheie A, et al.
J Dent Res 1996 Nov;75(11):1901–8

PATHOLOGY

Human root caries: microbiota of a limited number of root caries lesions. Schüpbach P, et al. **Caries Res** 1996; 30(1):52–64

PREVENTION & CONTROL

In vitro evaluation of topical fluorides for overdenture abutments. Ettinger RL, et al. **J Prosthet Dent** 1997 Sep; 78(3):309–14

[Preventive effect of 10% (NH4)2MoO2F4 solution on artificial root–surface caries in vitro] Yang D, et al.
Chung Hua Kou Chiang Hsueh Tsa Chih 1995 Sep; 30(5):274–6, 319–20 (Eng. Abstr.) **(Chi)**

RADIOGRAPHY

A computer–assisted videodensitometric method to visualize mineral distributions in in vitro and in vivo formed root caries lesions. Inaba D, et al. **Eur J Oral Sci** 1997 Feb; 105(1):74–80

THERAPY

Effect of a two–solution fluoride mouth rinse on deposition of loosely bound fluoride on sound root tissue and remineralization of root lesions in vitro. Takagi S, et al. **Caries Res** 1997;31(3):206–11

A new challenge—root caries in mature people. Christensen GJ. **J Am Dent Assoc** 1996 Mar;127(3):379–80

ROOT PLANING

Effectiveness of periodontal treatments on cyclosporine–induced gingival overgrowth in transplant patients. Somacarrera ML, et al. **Br Dent J** 1997 Aug 9; 183(3):89–94

Root cleaning or root smoothing. An in vivo study. Oberholzer R, et al. **J Clin Periodontol** 1996 Apr; 23(4):326–30

Smear removal and collagen exposure after non–surgical root planing followed by etching with an EDTA gel preparation. Blomlöf JP, et al. **J Periodontol** 1996 Sep; 67(9):841–5

The effects of different tetracyclines on the dentin root surface of instrumented, periodontally involved human teeth: a comparative scanning electron microscope study. Madison JG 3rd, et al. **J Periodontol** 1997 Aug;68(8):739–45

ADVERSE EFFECTS

Root surface removal with diamond–coated ultrasonic instruments: an in vitro and SEM study. Lavespere JE, et al. **J Periodontol** 1996 Dec;67(12):1281–7

INSTRUMENTATION

Root surface smoothness or roughness following open debridement. An in vivo study. Schlageter L, et al.
J Clin Periodontol 1996 May;23(5):460–4

Root surface removal with diamond–coated ultrasonic instruments: an in vitro and SEM study. Lavespere JE, et al. **J Periodontol** 1996 Dec;67(12):1281–7

METHODS

Root planing following short–term pocket distention. Shen EC, et al. **J Periodontol** 1997 Jul;68(7):632–5

ROOT RESORPTION

CHEMICALLY INDUCED

Progressive cervical root resorption related to tetracycline root conditioning. Ben–Yehouda A. **J Periodontol** 1997 May;68(5):432–5

COMPLICATIONS

Forceps extraction of teeth with severe internal root resorption. Javaheri DS, et al. **J Am Dent Assoc** 1997 Jun; 128(6):751–4

DRUG THERAPY

[Experimental study on the healing of immediate replanted tooth after using exogenous fibronectin] Zhang X, et al.
Chung Hua Kou Chiang Hsueh Tsa Chih 1996 Jan;31(1):16–8 (Eng. Abstr.) **(Chi)**

ETIOLOGY

Maxillary incisor root resorption in relation to the ectopic canine: a review of 26 patients. Rimes RJ, et al.
Eur J Orthod 1997 Feb;19(1):79–84

Effect of non–erupted 3rd molars on distal roots and supporting structures of approximal teeth. A radiographic survey of 202 cases. Nemcovsky CE, et al.
J Clin Periodontol 1996 Sep;23(9):810–5

Influence of conventional forceps extraction and extraction with an extrusion instrument on cementoblast loss and external root resorption of replanted monkey incisors. Oikarinen KS, et al. **J Periodontal Res** 1996 Jul; 31(5):337–44

Recurrent peripheral giant cell granuloma associated with cervical resorption. Nedir R, et al. **J Periodontol** 1997 Apr; 68(4):381–4

GENETICS

A heritable component for external apical root resorption in patients treated orthodontically. Harris EF, et al.
Am J Orthod Dentofacial Orthop 1997 Mar;111(3):301–9

METABOLISM

Interleukin–1 beta and tumor necrosis factor–alpha production by human monocytes cultured with L–thyroxine and thyrocalcitonin: relation to severe root shortening. Rossi M, et al.
Am J Orthod Dentofacial Orthop 1996 Oct;110(4):399–404

PATHOLOGY

The hyaline zone and associated root surface changes in experimental orthodontics in rats: a light and scanning electron microscope study. Hellsing E, et al.
Eur J Orthod 1996 Feb;18(1):11–8

Healing of the root surface–associated periodontium: an immunohistochemical study of orthodontic root resorption in man. Sismanidou C, et al. **Eur J Orthod** 1996 Oct; 18(5):435–44

Cervical root resorption. Trope M. **J Am Dent Assoc** 1997 Apr;128 Suppl:56S–59S (11 ref.)

Examination of external apical root resorption with scanning electron microscopy. Malueg LA, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Jul;82(1):89–93

PREVENTION & CONTROL

Inhibitory effect of the topical administration of a bisphosphonate (risedronate) on root resorption incident to orthodontic tooth movement in rats. Igarashi K, et al.
J Dent Res 1996 Sep;75(9):1644–9

ROOT RESORPTION

RADIOGRAPHY

Root resorption--long-term outcome. Parker WS. **Am J Orthod Dentofacial Orthop** 1997 Aug;112(2):119-23

Pseudo root resorption. Case report. Keur JJ, et al. **Aust Dent J** 1996 Aug;41(4):246-7

ROOT SCALING see **DENTAL SCALING**

RORSCHACH TEST

Personality characteristics of mental health professionals who have engaged in sexualized dual relationships: a Rorschach investigation. Celenza A, et al. **Bull Menninger Clin** 1997 Winter;61(1):90-107

Rorschach assessment of cognitive impairment from an object relations perspective. Lerner PM. **Bull Menninger Clin** 1996 Summer;60(3):351-65

Measuring the effect of the Rorschach color cards (VIII-X) on perceptual accuracy and special scores in differentiating borderline from schizophrenic protocols. Peters JE, et al. **J Clin Psychol** 1996 Sep;52(5):581-8

A Rorschach comparison of psychopathic and nonpsychopathic conduct disordered adolescents. Smith AM, et al. **J Clin Psychol** 1997 Jun;53(4):289-300

Comparing the diagnostic efficiency of the MMPI, MCMI-II, and Rorschach: a review. Ganellen RJ. **J Pers Assess** 1996 Oct;67(2):219-43

Teaching the Rorschach and learning psychodiagnostic testing: a commentary on Hilsenroth and Handler (1995). Silverstein ML. **J Pers Assess** 1996 Apr;66(2):355-62

An examination of the relationship between form level ratings on the Rorschach and learning disability status. Cruz EB, et al. **J Psychol** 1997 Mar;131(2):167-74

[Rorschach response process in schizophrenia] Harada N. **Seishin Shinkeigaku Zasshi** 1996;98(6):378-412 (Eng. Abstr.) **(Jpn)**

HISTORY

[A document: Hermann Rorschach supports psychoanalysis] Müller C. **Gesnerus** 1996;53(3-4):243-6 **(Ger)**

STANDARDS

Rorschach revised DEPI and CDI with inpatient Major Depressives and Borderline Personality Disorder with major depression: validity issues. Carlson CF, et al. **J Clin Psychol** 1997 Jan;53(1):51-8

Rorschach interpretation with high-ability adolescent females: psychopathology or creative thinking? Franklin KW, et al. **J Pers Assess** 1997 Feb;68(1):184-96

STATISTICS & NUMERICAL DATA

Indicators of feminine gender identity in latency-aged boys in the Draw a Person and the Rorschach tests. Benziman H, et al. **J Clin Psychol** 1997 Feb;53(2):143-57

Construct validity of the Rorschach Oral Dependency (ROD) Scale: relationship of ROD scores to WAIS-R scores in a psychiatric inpatient sample. Bornstein RF, et al. **J Clin Psychol** 1997 Feb;53(2):99-105

Critical bits and the Rorschach response process. Exner JE Jr. **J Pers Assess** 1996 Dec;67(3):464-77 (15 ref.)

Standardizing procedures for calculating rorschach interrater reliability: conceptual and empirical foundations. McDowell C, et al. **J Pers Assess** 1996 Apr;66(2):308-20

Authenticity of recovered sexual abuse memories: a Rorschach study. Leavitt F, et al. **J Trauma Stress** 1996 Jul;9(3):483-96

State-dependent psychiatric phenomena on the Rorschach: two case studies of acutely unstable suicidal mental status. Hart LR. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1155-62

Rorschach cognitive developmental indices of mentally retarded persons: a comparison with scores on Wechsler Intelligence Scale for children-revised. Di Nuovo SF, et al. **Psychol Rep** 1997 Aug;81(1):139-45

Comparison between the Rorschach Depression Index and depression-related measures in a nonpatient sample. Greenwald DF. **Psychol Rep** 1997 Jun;80(3 Pt 2):1151-4

The Rorschach in contemporary forensic psychology. Piotrowski C. **Psychol Rep** 1996 Apr;78(2):458

Rorschach responses of police applicants. Zacker J. **Psychol Rep** 1997 Apr;80(2):523-8

ROSA see **PLANTS, MEDICINAL**

ROSACEA see **ACNE ROSACEA**

ROSAI-DORFMAN DISEASE see **HISTIOCYTOSIS, SINUS**

ROSANILINE DYES

Zymography: a single-step staining method for quantitation of proteolytic activity on substrate gels. Leber TM, et al. **Anal Biochem** 1997 Jun 15;249(1):24-8

Repeated probing of western blots obtained from coomassie brilliant blue-stained or unstained polyacrylamide gels. Suck RW, et al. **Biotechniques** 1996 Sep;21(3):418-22

Crystal violet staining of Bordetella bronchiseptica colonies for differentiation of phase-I strains from variant strains in degraded phases. Ishikawa H, et al. **Can J Vet Res** 1997 Jul;61(3):232-4

Combined immunostaining and Coomassie Brilliant Blue staining of polyvinylidene difluoride membranes without organic solvent. Houen G, et al. **Electrophoresis** 1997 May; 18(5):701-5

Quantitative densitometry of proteins stained with coomassie blue using a Hewlett Packard scanjet scanner and Scanplot software. Vincent SG, et al. **Electrophoresis** 1997 Jan; 18(1):67-71

[Utility of the Stamp method (letter)] Dorronsoro I, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):276 **(Spa)**

ADVERSE EFFECTS

Chondrolysis of the shoulder following a "color test"-assisted rotator cuff repair--a report of 2 cases. Tamai K, et al. **Acta Orthop Scand** 1997 Aug;68(4):401-2

ANALYSIS

Simultaneous determination of malachite green, gentian violet and their leuco metabolites in catfish or trout tissue by high-performance liquid chromatography with visible detection. Rushing LG, et al. **J Chromatogr B Biomed Appl** 1997 Jan 24;688(2):325-30

CHEMISTRY

A mathematical model for the description of the Coomassie brilliant blue protein assay. Atherton BA, et al. **Anal Biochem** 1996 Jan 15;233(2):160-8

Effect of vanadate on protein determination by the coomassie brilliant blue microassay procedure [published erratum appears in Anal Biochem 1997 Jul 15;250(1):130] Matejovicova M, et al. **Anal Biochem** 1997 Feb 15; 245(2):252-4

Combined use of malachite green fixation and PLA2-gold complex technique to localize phospholipids in areas of early calcification of rat epiphyseal cartilage and bone. Silvestrini G, et al. **Bone** 1996 Jun;18(6):559-65

Chromophore-assisted laser inactivation of a repulsive axonal guidance molecule. Müller BK, et al. **Curr Biol** 1996 Nov 1;6(11):1497-502

DIAGNOSTIC USE

Localizing the sentinel node in cutaneous melanoma: gamma probe detection versus blue dye. Kapteijn BA, et al. **Ann Surg Oncol** 1997 Mar;4(2):156-60

Intraoperative identification of sentinel lymph node in patients with malignant melanoma. Lingam MK, et al. **Br J Cancer** 1997;75(10):1505-8

The applicability of hematoxylin-eosin staining plus fluorescence or confocal laser scanning microscopy to the study of elastic fibers in cartilages. de Carvalho HF, et al. **C R Acad Sci III** 1996 Nov;319(11):991-6

Preoperative lymph-node staining with liposomes containing patent blue violet. A clinical case report. Pump B, et al. **J Pharm Pharmacol** 1996 Jul;48(7):699-701

Intradermal blue dye to identify sentinel lymph node in breast cancer [letter] Giuliano AE. **Lancet** 1997 Sep 27; 350(9082):958

ISOLATION & PURIFICATION

Purification of commercial coomassie brilliant blue R-250 and characterization of the chromogenic fractions. Kundu SK, et al. **Anal Biochem** 1996 Mar 15;235(2):134-40

PHARMACOLOGY

Field evaluation of an improved Kato-Katz thick smear technique for quantitative determination of helminth eggs in faeces. Odongo-Aginya EI, et al. **Trop Med Parasitol** 1995 Dec;46(4):275-7

ROSE BENGAL

ADMINISTRATION & DOSAGE

Importance of photo activation of rose bengal for platelet activation in experimental models of photochemically induced thrombosis. Inamo J, et al. **Thromb Res** 1996 Aug 1;83(3):229-35

CHEMISTRY

Electron transfer quenching of the rose bengal triplet state. Lambert CR, et al. **Photochem Photobiol** 1997 Jul; 66(1):15-25

DIAGNOSTIC USE

Patient tolerance and ocular surface staining characteristics of lissamine green versus rose bengal. Manning FJ, et al. **Ophthalmology** 1995 Dec;102(12):1953-7

PHARMACOKINETICS

Hepatobiliary excretion of bile acids and rose bengal in streptozotocin-induced and genetic diabetic rats. Stone JL, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):412-9

POISONING

In vitro study for staining and toxicity of rose bengal on cultured bovine corneal endothelial cells. Lee YC, et al. **Cornea** 1996 Jul;15(4):376-85

STANDARDS

Quality control of two rose bengal and modified DRBC and DG18 media. Olsen M, et al. **Int J Food Microbiol** 1997 Apr 1;35(2):163-8

THERAPEUTIC USE

Effect of green argon (514 nm) laser exposure on rose bengal-stained guinea pig cornea. Kremer I, et al. **Isr J Med Sci** 1996 Dec;32(12):1243-8

Enzyme-assisted cell photosensitization: a proposal for an efficient approach to tumor therapy and diagnosis. The rose bengal fluorogenic substrate. Bottiroli G, et al. **Photochem Photobiol** 1997 Sep;66(3):374-83

TOXICITY

Comparative studies on the tolerance to photoinduced cutaneous inflammatory reactions by psoralen and rose bengal. Kumar JR, et al. **J Photochem Photobiol B** 1997 Feb;37(3):245-53

ROSENZWEIG PICTURE-FRUSTRATION STUDY

[Formalized R. Rosenzweig frustration test in occupational selection of personnel] Noss IN, et al. **Fiziol Cheloveka** 1997 Mar-Apr;23(2):150-3 **(Rus)**

ROSEOLA INFANTUM see **EXANTHEMA SUBITUM**

ROSETTE FORMATION

Influence of technique and transplantation site on rosette formation in rabbit retinal transplants. Sharma RK, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):3-10

Short report: Rosette formation in Plasmodium ovale infection. Angus BJ, et al. **Am J Trop Med Hyg** 1996 Nov; 55(5):560-1

Rosette-like structures in a lymph node aspirate: pitfall in the diagnosis of neuroblastoma [letter] Sethi S, et al. **Cytopathology** 1997 Apr;8(2):139-41

Plaque-forming cell responses and antibody titers following injection of sheep red blood cells in nonstressed, acute, and/or chronically stressed handled and nonhandled animals. Bhatnagar S, et al. **Dev Psychobiol** 1996 Mar; 29(2):171-81

Rosette-forming non-Hodgkin's lymphomas. Koo CH, et al. **Histopathology** 1996 Dec;29(6):557-63

Plasmodium falciparum: inhibition of erythrocyte rosette formation and detachment of rosettes by pentoxifylline. Lehman LG, et al. **Trans R Soc Trop Med Hyg** 1997 Jan-Feb;91(1):74-5

Disruption of erythrocyte rosettes and agglutination of erythrocytes infected with Plasmodium falciparum by the sera of Papua New Guineans. Rogerson SJ, et al. **Trans R Soc Trop Med Hyg** 1996 Jan-Feb;90(1):80-4

[Dynamics of immune response to single exposure to low-frequency acoustic oscillations] Voblikov IV, et al. **Gig Sanit** 1996 Jul-Aug;(4):39-40 **(Rus)**

[Study of auto-rosette formation in circulating blood] Belchenko DI. **Klin Lab Diagn** 1993 May-Jun;(3):58-62 (Eng. Abstr.) **(Rus)**

[Relationship between cytochemical activity of leukocytes and autorosette formation phenomenon and its clinical significance in patients with leptospirosis] Subich MG, et al. **Klin Lab Diagn** 1997 Jan;(1):13-4 (Eng. Abstr.) **(Rus)**

[Use of parameters of E-rosette formation and electrophoretic mobility for comprehensive evaluation of the functional state of leukocytes] Metelitsa LA, et al. **Ukr Biokhim Zh** 1996 Jan-Feb;68(1):84-7 (Eng. Abstr.) **(Rus)**

METHODS

Development and validation of an assay for measuring preimplantation factor (PIF) of embryonal origin. Roussev RG, et al. **Am J Reprod Immunol** 1996 Mar;35(3):281-7

ROSS RIVER VIRUS

Ross River virus and Barmah Forest virus infection. Commonly asked questions. Hills S. **Aust Fam Physician** 1996 Dec;25(12):1822-4

Ross River virus infection on the North Coast of New South Wales. Westley-Wise VJ, et al. **Aust N Z J Public Health** 1996 Feb;20(1):87-92

Communicable diseases surveillance. Ross River virus infection reports increasing. **Commun Dis Intell** 1997 Feb 6;21(3):34-9

Ross River virus in a joint military exercise. Hueston L, et al. **Commun Dis Intell** 1997 Jul 10;21(14):193

An outbreak of Ross River virus disease in Southwestern Australia. Lindsay M, et al. **Emerg Infect Dis** 1996 Apr-Jun; 2(2):117-20

An ecological approach to public health intervention: Ross River virus in Australia. Weinstein P. **Environ Health Perspect** 1997 Apr;105(4):364-6

The changing epidemiology of Ross River virus disease in South Australia [letter; comment] Careless DJ. **Med J Aust** 1997 Mar 17;166(6):334. Comment on: Med J Aust 1996 Sep 16;165(6):313-7.

The Southern Oscillation Index and Ross river virus outbreaks [letter] Harley DO, et al. **Med J Aust** 1996 Nov 4;165(9):531–2

The changing epidemiology of Ross River virus disease in South Australia [letter; comment] Keary PJ, et al. **Med J Aust** 1997 Mar 17;166(6):333; discussion 334. Comment on: Med J Aust 1996 Sep 16;165(6):313–7.

Changing epidemiology of Ross River virus disease in South Australia [see comments] Selden SM, et al. **Med J Aust** 1996 Sep 16;165(6):313–7. Comment in: Med J Aust 1997 Mar 17;166(6):333; discussion 334. Comment in: Med J Aust 1997 Mar 17;166(6):334.

IMMUNOLOGY

Ross River virus disease and rheumatoid arthritis [letter] Douglas WA. **Med J Aust** 1997 Aug 18;167(4):229–30

A candidate Ross River virus vaccine: preclinical evaluation. Aaskov J, et al. **Vaccine** 1997 Aug–Sep;15(12–13):1396–404

ISOLATION & PURIFICATION

Ross River virus infection. Diagnosis and treatment by general practitioners in South Australia. Stocks N, et al. **Aust Fam Physician** 1997 Jun;26(6):710–7

Evidence of vertical transmission of Ross River and Sindbis viruses (Togaviridae: Alphavirus) by mosquitoes (Diptera: Culicidae) in southeastern Australia. Dhileepan K, et al. **J Med Entomol** 1996 Jan;33(1):180–2

Ross River virus in mosquitoes (Diptera:Culicidae) during the 1994 epidemic around Brisbane, Australia. Ritchie SA, et al. **J Med Entomol** 1997 Mar;34(2):156–9

PATHOGENICITY

Chimeric Sindbis–Ross River viruses to study interactions between alphavirus nonstructural and structural regions. Kuhn RJ, et al. **J Virol** 1996 Nov;70(11):7900–9

PHYSIOLOGY

Interactions between PE2, E1, and 6K required for assembly of alphaviruses studied with chimeric viruses. Yao JS, et al. **J Virol** 1996 Nov;70(11):7910–20

ROTATION

see related
CENTRIFUGATION
GRAVITY, ALTERED

Basilar artery blood flow during head rotation in vertebrobasilar ischemia. Petersen B, et al. **Acta Neurol Scand** 1996 Oct;94(4):294–301

Eye movements and motion perception induced by off-vertical axis rotation (OVAR) at small angles of tilt after spaceflight. Clement G, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):603–9

The subjective horizontal in eccentric rotation influenced by peripheral vestibular lesion. Odkvist LM, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):181–4

Discrimination and association processes for faces and non-faces: the effect of rotation. Bäuml KH, et al. **Acta Psychol (Amst)** 1997 Feb;95(2):107–18

Effects of rotational myocardial anisotropy in forward potential computations with equivalent heart dipoles. Thivierge M, et al. **Ann Biomed Eng** 1997 May–Jun; 25(3):477–98

Effects of spatial frequency of a vertically striped rotating drum on vection–induced motion sickness. Hu S, et al. **Aviat Space Environ Med** 1997 Apr;68(4):306–11

Visual vestibular interaction in the dynamic visual acuity test during voluntary head rotation. Lee MH, et al. **Aviat Space Environ Med** 1997 Feb;68(2):111–7

A sex difference in turning bias in humans. Mead LA, et al. **Behav Brain Res** 1996 Aug;78(2):73–9

Head coordination in the sagittal plane in toddlers during walking: preliminary results. Ledebt A, et al. **Brain Res Bull** 1996;40(5–6):371–3

Rotated object identification with and without orientation cues. McMullen PA, et al. **Can J Exp Psychol** 1995 Jun; 49(2):133–49

Effects of continuous bed rotation and prolonged mechanical ventilation on healthy, adult baboons [see comments] Anzueto A, et al. **Crit Care Med** 1997 Sep;25(9):1560–4. Comment in: Crit Care Med 1997 Sep;25(9):1456–7.

Measuring anteversion and femoral neck–shaft angle in cerebral palsy. Miller F, et al. **Dev Med Child Neurol** 1997 Feb;39(2):113–8

Measurement of vertebral rotation in idiopathic scoliosis using the Perdriolle torsionmeter: a clinical study on intraobserver and interobserver error. Omeroğlu H, et al. **Eur Spine J** 1996;5(3):167–71

Coronal plane rotation of the first metatarsal [letter; comment] Stephens MM. **Foot Ankle Int** 1996 Nov; 17(11):720–1. Comment on: Foot Ankle Int 1996 Mar;17(3):157–61.

Hallucal rotation: a method of measurement and relationship to bunion deformity. Talbot KD, et al. **Foot Ankle Int** 1997 Sep;18(9):550–6

Turning bias in humans is influenced by phase of the menstrual cycle. Mead LA, et al. **Horm Behav** 1997 Feb; 31(1):65–74

Quality assurance system to correct for errors arising from couch rotation in linac–based stereotactic radiosurgery. Brezovich IA, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):883–90

Clinical implications of short–axis aortopulmonary rotation on juxtacommissural origin of the coronary artery in transposition of the great arteries and surgical strategy. Chiu IS, et al. **J Card Surg** 1997 Jan–Feb;12(1):23–31

Mental rotation interferes with response preparation. Band GP, et al. **J Exp Psychol Hum Percept Perform** 1997 Apr; 23(2):319–38

"Torso rotation" experiments; 3: Effects of acute changes in vestibular function on the control of voluntary head movements. Bouyer LJ, et al. **J Vestib Res** 1996 Sep–Oct; 6(5):387–93

"Torso rotation" experiments; 1: Adaptation to motion sickness does not correlate with changes in VOR gain. Bouyer LJ, et al. **J Vestib Res** 1996 Sep–Oct;6(5):367–75

"Torso rotation" experiments; 2: Gaze stability during voluntary head movements improves with adaptation to motion sickness. Bouyer LJ, et al. **J Vestib Res** 1996 Sep–Oct;6(5):377–85

Visual influence on head shaking using the vestibular autorotation test. Cheung B, et al. **J Vestib Res** 1996 Nov–Dec;6(6):411–22

Do infants have motor responses to sudden surface rotations in prone position? Hirschfeld H. **J Vestib Res** 1997 Mar–Jun;7(2–3):265–76

Psychophysical scaling of circular vection (CV) produced by optokinetic (OKN) motion: individual differences and effects of practice. Kennedy RS, et al. **J Vestib Res** 1996 Sep–Oct;6(5):331–41

Influence of otolith organs, semicircular canals, and neck afferents on post–rotatory nystagmus. Koizuka I, et al. **J Vestib Res** 1996 Sep–Oct;6(5):319–29

The influence of otoliths and somatic graviceptors on angular velocity estimation. Mittelstaedt ML, et al. **J Vestib Res** 1996 Sep–Oct;6(5):355–66

Mental rotation may underlie apparent object–based neglect. Buxbaum LJ, et al. **Neuropsychologia** 1996 Feb;34(2):113–26

Motion sickness during off–vertical axis rotation: prediction by a model of sensory interactions and correlation with other forms of motion sickness. Denise P, et al. **Neurosci Lett** 1996 Jan 26;203(3):183–6

Rotation and radical motion thresholds support a two–stage model of differential–motion analysis. Gurney K, et al. **Perception** 1996;25(1):5–26

Paw preference, rotation, and dopamine function in Collins HI and LO mouse strains. Nielsen DM, et al. **Physiol Behav** 1997 Apr;61(4):525–35

Axial rotation measurement of scoliotic vertebrae by means of computed tomography scans. Krismer M, et al. **Spine** 1996 Mar 1;21(5):576–81

Adaptation of vertical eye alignment in relation to head tilt. Maxwell JS, et al. **Vision Res** 1996 Apr;36(8):1195–205

The effect of ocular torsional position on perception of the roll–tilt of visual stimuli. Wade SW, et al. **Vision Res** 1997 Apr;37(8):1071–8

[The significance of rotation tests in diagnosis of vestibule and otolith] Latkowski B, et al. **Otolaryngol Pol** 1996; 50(5):528–35 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Effect of direction of head movement on motion sickness caused by Coriolis stimulation. Woodman PD, et al. **Aviat Space Environ Med** 1997 Feb;68(2):93–8

Rotational vertebral artery occlusion: a mechanism of vertebrobasilar insufficiency. Kuether TA, et al. **Neurosurgery** 1997 Aug;41(2):427–32; discussion 432–3 (26 ref.)

ROTATIONAL ATHERECTOMY see **ATHERECTOMY, CORONARY**

ROTATOR CUFF

see related
SHOULDER IMPINGEMENT SYNDROME

Cuff tear arthropathy with hemarthrosis. A report on 3 elderly patients. Sjödén GO, et al. **Acta Orthop Scand** 1996 Dec;67(6):571–4

Sports medicine. Shoulder pain. Part II: Rotator cuff tendinitis. Brukner P. **Aust Fam Physician** 1996 Nov; 25(11):1743–5

Relationship between calcifying tendinitis and subacromial impingement: a prospective radiography and magnetic resonance imaging study. Loew M, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):314–9

Development and use of an animal model for investigations on rotator cuff disease. Soslowsky LJ, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct;5(5):383–92

Calcific tendinitis of the rotator cuff showing a contracted state of abduction: a report of four cases. Takahashi M, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb;6(1):72–6

Hemiarthroplasty in rotator cuff–deficient shoulders. Williams GR Jr, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct; 5(5):362–7

Rotator cuff evaluation: imaging and diagnosis. Miniaci A, et al. **Orthop Clin North Am** 1997 Jan;28(1):43–58 (61 ref.)

Rotator cuff calcifications: treatment with ultrasound–guided percutaneous needle aspiration and lavage. Farin PU, et al. **Skeletal Radiol** 1996 Aug;25(6):551–4

[Calcareous tendinitis] Löhr JF, et al. **Orthopade** 1996 Sep; 25(5):484–93 **(Ger)**

ANATOMY & HISTOLOGY

Biology of the rotator cuff tendon. Blevins FT, et al. **Orthop Clin North Am** 1997 Jan;28(1):1–16 (121 ref.)

Rotator cuff disease. An arthroscopic view. Warner JJ. **Orthop Clin North Am** 1997 Apr;28(2):251–65

MR arthrography of the rotator cuff and labral–ligamentous complex. Palmer WE. **Semin Ultrasound CT MR** 1997 Aug; 18(4):278–90 (19 ref.)

Evaluation of post–exercise magnetic resonance images of the rotator cuff. Cahoy PM, et al. **Skeletal Radiol** 1996 Nov;25(8):739–41

Anatomical relationships and scapular attachments of the supraspinatus muscle. Thomazeau H, et al. **Surg Radiol Anat** 1996;18(3):221–5

BLOOD SUPPLY

Anatomic study of the tendinous rotator cuff of the shoulder. Determe D, et al. **Surg Radiol Anat** 1996;18(3):195–200

[Rotator cuff rupture. Vascular supply and collagen fiber processes as pathogenetic factors] Katzer A, et al. **Unfallchirurgie** 1997 Apr;23(2):52–9 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Local corticosteroid injections in the treatment of rotator cuff tendinitis (except for frozen shoulder and calcific tendinitis). Groupe Rhumatologique Français de l'Epaule (G.R.E.P.). Goupille P, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):561–6 (41 ref.)

INJURIES

Chondrolysis of the shoulder following a "color test"–assisted rotator cuff repair—a report of 2 cases. Tamai K, et al. **Acta Orthop Scand** 1997 Aug;68(4):401–2

MR arthrography in the diagnosis of rotator cuff tears. Standard spin–echo alone or with fat suppression? Funke M, et al. **Acta Radiol** 1996 Sep;37(5):627–32

MR imaging of rotator cuff tears in individuals with paraplegia. Escobedo EM, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):919–23

MR imaging of rotator cuff tendon tears: comparison of T2*–weighted gradient–echo and conventional dual–echo sequences. Parsa M, et al. **AJR Am J Roentgenol** 1997 Jun; 168(6):1519–24

Early results of continuous passive motion after rotator cuff repair: a prospective, randomized, blinded, controlled study. Raab MG, et al. **Am J Orthop** 1996 Mar;25(3):214–20

Rotator cuff repairs in individuals with paraplegia. Goldstein B, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug;76(4):316–22

Traumatic tears of the subscapularis tendon. Clinical diagnosis, magnetic resonance imaging findings, and operative treatment [see comments] Deutsch A, et al. **Am J Sports Med** 1997 Jan–Feb;25(1):13–22. Comment in: Am J Sports Med 1997 Jul–Aug;25(4):587–8.

Arthroscopic treatment of partial rotator cuff tears in young athletes. A preliminary report. Payne LZ, et al. **Am J Sports Med** 1997 May–Jun;25(3):299–305

Traumatic tears of the subscapularis tendon [letter; comment] Schiff DC. **Am J Sports Med** 1997 Jul–Aug;25(4):587–8. Comment on: Am J Sports Med 1997 Jan–Feb;25(1):13–22.

Massive rotator cuff tears. Jokiranta J, et al. **Ann Chir Gynaecol** 1996;85(2):128–31 (54 ref.)

Arthroscopic treatment of bursal side and full thickness rotator cuff tears. Snyder SJ, et al. **Ann Chir Gynaecol** 1996; 85(2):117–25

Arthroscopic assisted rotator cuff repair: results using a mini–open deltoid splitting approach. Blevins FT, et al. **Arthroscopy** 1996 Feb;12(1):50–9

The incidence of glenohumeral joint abnormalities associated with full–thickness, reparable rotator cuff tears. Gartsman GM, et al. **Arthroscopy** 1997 Aug;13(4):450–5

Arthroscopic assessment of rotator cuff tear reparability. Gartsman GM. **Arthroscopy** 1996 Oct;12(5):546–9

Histological analysis of the coracoacromial arch: correlation between age–related changes and rotator cuff tears. Panni AS, et al. **Arthroscopy** 1996 Oct;12(5):531–40

The clinical role of shoulder ultrasound. Sonnabend DH, et al. **Aust N Z J Surg** 1997 Sep;67(9):630–3

Isokinetic testing to evaluate patients submitted to surgery for the treatment of surgical lesion of the rotator cuff. Porcellini G, et al. **Chir Organi Mov** 1996 Jul–Sep; 81(3):295–302 **(Eng, Ita)**

Sonographic signs of complete rotator cuff tears. Chiou HJ, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Dec; 58(6):428–34

The anterior slide test for identifying superior glenoid labral tears. Wright SA, et al. **Clin J Sport Med** 1996 Jan;6(1):64

Extraarticular pigmented villonodular synovitis of the shoulder: a case report. Sawmiller CJ, et al. **Clin Orthop** 1997 Feb;(335):262–7 (26 ref.)

Shoulder arthroscopy in the throwing athlete. Craig EV. **Clin Sports Med** 1996 Oct;15(4):673–700 (13 ref.)

Arthroscopic treatment of rotator cuff disorders. Peterson CA 2nd, et al. **Clin Sports Med** 1996 Oct;15(4):715–36 (78 ref.)

Diagnosis of rotator cuff lesions: comparison of US and MRI on 38 joint specimens. Bachmann GF, et al. **Eur Radiol** 1997;7(2):192–7

Arthrolysis of the shoulder for ruptures of the rotator cuff. Bruns J, et al. **Int Orthop** 1997;21(3):157–60

Partial–thickness tears of the rotator cuff. A

clinicopathological review based on 66 surgically verified cases. Fukuda H, et al. **Int Orthop** 1996;20(4):257-65

Site and size of rotator-cuff tear. Findings at ultrasound, double-contrast arthrography, and computed tomography arthrography with surgical correlation. Farin PU, et al. **Invest Radiol** 1996 Jul;31(7):387-94

Massive, irreparable tears of the rotator cuff. Results of operative debridement and subacromial decompression. Gartsman GM. **J Bone Joint Surg Am** 1997 May; 79(5):715-21

Operative treatment of irreparable rupture of the subscapularis. Wirth MA, et al. **J Bone Joint Surg Am** 1997 May;79(5):722-31

Transfer of latissimus dorsi for irreparable rotator-cuff tears. Aoki M, et al. **J Bone Joint Surg Br** 1996 Sep;78(5):761-6

Isokinetic strength after tears of the supraspinatus tendon. Itoi E, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):77-82

Comment on "Diagnosis and treatment of rotator cuff tears in the emergency department" [letter; comment] Donovan PJ. **J Emerg Med** 1997 Mar-Apr;15(2):248. Comment on: J Emerg Med 1996 May-Jun;14(3):309-17.

Diagnosis and treatment of rotator cuff tears in the emergency department [see comments] SooHoo NF, et al. **J Emerg Med** 1996 May-Jun;14(3):309-17 (25 ref.). Comment in: J Emerg Med 1997 Mar-Apr;15(2):248.

Radiology case of the month. Internal derangement of the shoulder. Complete tear of the supraspinatus tendon with severe retraction of the tendon medially. Neitzschman HR, et al. **J La State Med Soc** 1997 Feb;149(2):53-4

Comparison of fat-saturation fast spin echo versus conventional spin-echo MRI in the detection of rotator cuff pathology. Needell SD, et al. **J Magn Reson Imaging** 1997 Jul-Aug;7(4):674-7

Hemiarthroplasty of the shoulder for rotator cuff arthropathy. Field LD, et al. **J Shoulder Elbow Surg** 1997 Jan-Feb;6(1):18-23

Lag signs in the diagnosis of rotator cuff rupture. Hertel R, et al. **J Shoulder Elbow Surg** 1996 Jul-Aug;5(4):307-13

Postoperative assessment of shoulder function: a prospective study of full-thickness rotator cuff tears. Iannotti JP, et al. **J Shoulder Elbow Surg** 1996 Nov-Dec;5(6):449-57

"Bursal reactions" in rotator cuff tearing, the impingement syndrome, and calcifying tendinitis. Ishii H, et al. **J Shoulder Elbow Surg** 1997 Mar-Apr;6(2):131-6

Shoulder function after surgical repair of rotator cuff tears. Kronberg M, et al. **J Shoulder Elbow Surg** 1997 Mar-Apr; 6(2):125-30

Traumatic tear of the rotator interval. Le Huec JC, et al. **J Shoulder Elbow Surg** 1996 Jan-Feb;5(1):41-6

Fatty degeneration in the supraspinatus muscle after rotator cuff tear. Nakagaki K, et al. **J Shoulder Elbow Surg** 1996 May-Jun;5(3):194-200

Inferior subluxation of the humeral head after trauma or surgery. Pritchett JW. **J Shoulder Elbow Surg** 1997 Jul-Aug;6(4):356-9

The vacuum arthrogram in the shoulder: correlation with rotator cuff disease. Reed SC, et al. **J Shoulder Elbow Surg** 1996 Sep-Oct;5(5):368-70

Management of partial-thickness rotator cuff tears. Wright SA, et al. **J Shoulder Elbow Surg** 1996 Nov-Dec; 5(6):458-66

The low incidence of suprascapular nerve injury after primary repair of massive rotator cuff tears. Zanotti RM, et al. **J Shoulder Elbow Surg** 1997 May-Jun;6(3):258-64

Sonographic detection of tears of the anterior portion of the rotator cuff (subscapularis tendon tears). Farin P, et al. **J Ultrasound Med** 1996 Mar;15(3):221-5

Partial-thickness rotator cuff tears. Pathogenesis and treatment. Breazeale NM, et al. **Orthop Clin North Am** 1997 Apr;28(2):145-55 (48 ref.)

Partial repair of massive rotator cuff tears: the evolution of a concept. Burkhart SS. **Orthop Clin North Am** 1997 Jan; 28(1):125-32

Arthroplasty for arthritis and rotator cuff deficiency. Collins DN, et al. **Orthop Clin North Am** 1997 Apr;28(2):225-39 (59 ref.)

The rotator cuff. Large and massive tears. Technique of open repair. Cordasco FA, et al. **Orthop Clin North Am** 1997 Apr;28(2):179-93 (88 ref.)

The rotator cuff. Commentary. Flatow EL, et al. **Orthop Clin North Am** 1997 Apr;28(2):277-94

Full-thickness tears: arthroscopic repair. Gartsman GM, et al. **Orthop Clin North Am** 1997 Jan;28(1):83-98

Tendon transfers for the treatment of irreparable rotator cuff defects. Gerber C, et al. **Orthop Clin North Am** 1997 Apr; 28(2):195-203

Results of surgical repair of full-thickness tears of the rotator cuff. Gupta R, et al. **Orthop Clin North Am** 1997 Apr; 28(2):241-8 (46 ref.)

Superior glenoid impingement. Jobe CM. **Orthop Clin North Am** 1997 Apr;28(2):137-43

Complications of rotator cuff repair. Mansat P, et al. **Orthop Clin North Am** 1997 Apr;28(2):205-13

Massive rotator cuff tears: debridement versus repair. Melillo AS, et al. **Orthop Clin North Am** 1997 Jan;28(1):117-24

Evaluation and management of failed rotator cuff repairs. Neviaser RJ. **Orthop Clin North Am** 1997 Apr;28(2):215-24

The rotator cuff. Full-thickness tears. Mini-open repair. Pollock RG, et al. **Orthop Clin North Am** 1997 Apr; 28(2):169-77 (28 ref.)

Single-tendon tears of the rotator cuff. Evaluation and treatment of subscapularis tears and principles of treatment for supraspinatus tears. Ticker JB, et al. **Orthop Clin North Am** 1997 Jan;28(1):99-116

Arthroscopic debridement and acromioplasty versus mini-open repair in the management of significant partial-thickness tears of the rotator cuff. Weber SC. **Orthop Clin North Am** 1997 Jan;28(1):79-82

Nonoperative management of full-thickness tears of the rotator cuff. Wirth MA, et al. **Orthop Clin North Am** 1997 Jan;28(1):59-67 (34 ref.)

Comparison of fast spin-echo and conventional spin-echo sequences in the MR diagnosis of rotator cuff tears. Sashi R, et al. **Radiat Med** 1997 Mar-Apr;15(2):75-8

MR imaging of the rotator cuff tendon: interobserver agreement and analysis of interpretive errors. Balich SM, et al. **Radiology** 1997 Jul;204(1):191-4

Rotator cuff strain: a post-traumatic mimicker of tendonitis on MRI. Anzilotti KF Jr, et al. **Skeletal Radiol** 1996 Aug; 25(6):555-8

[A study of the neurologic risk in tendino-muscular advancement of supra-spinatus and infra-spinatus in the repair of large rotator cuff rupture] Goutallier D, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):299-305 (Eng. Abstr.) **(Fre)**

[The acromio-humeral interval. A study of the factors influencing its height] Nové-Josserand L, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(5):379-85 (Eng. Abstr.) **(Fre)**

[Isolated rupture of the tendon of the supra spinatus muscle. Results of 49 surgical repair] Saragaglia D, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1995;81(7):575-80 (Eng. Abstr.) **(Fre)**

[Ultrasound diagnosis of the shoulder] Helweg G, et al. **Radiologe** 1996 Dec;36(12):971-80 (28 ref.) (Eng. Abstr.) **(Ger)**

[MR arthrography of the shoulder joint in a postoperative patient sample] Rand T, et al. **Radiologe** 1996 Dec; 36(12):966-70 (Eng. Abstr.) **(Ger)**

[Indirect MR arthrography of the shoulder. An alternative to direct MR arthrography?] Vahlensieck M, et al. **Radiologe** 1996 Dec;36(12):960-5 (Eng. Abstr.) **(Ger)**

[Biomechanics of the shoulder and therapeutic applications] Weinstabl R, et al. **Radiologe** 1996 Dec;36(12):981-90 (Eng. Abstr.) **(Ger)**

[Diagnostic imaging of the shoulder joint in impingement] Merl T, et al. **Rontgenpraxis** 1996 Jan;49(1):8-11 **(Ger)**

METABOLISM

Estimation of total collagen and types I and III collagen in canine rotator cuff tendons. Fan L, et al. **Calcif Tissue Int** 1997 Sep;61(3):223-9

PATHOLOGY

MR imaging of the shoulder after rotator cuff repair. Gusmer PB, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):559-63

Not-so-fast MR imaging of the rotator cuff [letter; comment] Rubin DA. **AJR Am J Roentgenol** 1997 Apr;168(4):1112-3 . Comment on: AJR Am J Roentgenol 1996 Aug;167(2);333-8.

Magnetic resonance imaging studies of the shoulder: diagnosis of lesions of the rotator cuff. Recht MP, et al. **Instr Course Lect** 1994;43:483-92 (50 ref.)

Ossification of the coracoacromial ligament: association with rotator cuff pathology of the shoulder. Reichmister JP, et al. **Md Med J** 1996 Oct;45(10):849-52

Pathology of failure of the rotator cuff tendon. Uhthoff HK, et al. **Orthop Clin North Am** 1997 Jan;28(1):31-41 (21 ref.)

Rotator cuff disease. An arthroscopic view. Warner JJ. **Orthop Clin North Am** 1997 Apr;28(2):251-65

Comparison of fast spin-echo and conventional spin-echo sequences in the MR diagnosis of rotator cuff tears. Sashi R, et al. **Radiat Med** 1997 Mar-Apr;15(2):75-8

MR imaging of the rotator cuff tendon: interobserver agreement and analysis of interpretive errors. Balich SM, et al. **Radiology** 1997 Jul;204(1):191-4

Rotator cuff: evaluation with fast spin-echo versus conventional spin-echo MR imaging. Carrino JA, et al. **Radiology** 1997 Feb;202(2):533-9

[Proton spin tomography imaging of the rotator cuff in calcific tendinitis of the shoulder] Loew M, et al. **Z Orthop Ihre Grenzgeb** 1996 Jul-Aug;134(4):354-9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Activation of the rotator cuff in generating isometric shoulder rotation torque. Jenp YN, et al. **Am J Sports Med** 1996 Jul-Aug;24(4):477-85

The manual muscle examination for rotator cuff strength. An electromyographic investigation. Kelly BT, et al. **Am J Sports Med** 1996 Sep-Oct;24(5):581-8

End range eccentric antagonist/concentric agonist strength ratios: a new perspective in shoulder strength assessment. Scoville CR, et al. **J Orthop Sports Phys Ther** 1997 Mar; 25(3):203-7

Electromyography of shoulder muscles in relation to force direction. Arwert HJ, et al. **J Shoulder Elbow Surg** 1997 Jul-Aug;6(4):360-70

Biomechanics of the rotator cuff. Soslowsky LJ, et al. **Orthop Clin North Am** 1997 Jan;28(1):17-30 (71 ref.)

PHYSIOPATHOLOGY

Assessment of isokinetic and hand-held dynamometer measures of shoulder rotator strength among individuals with spinal cord injury. May LA, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):251-5

Postoperative eccentric and concentric isokinetic strength for the shoulder rotators in the scapular and neutral planes. Hartsell HD, et al. **J Orthop Sports Phys Ther** 1997 Jan; 25(1):19-25

[A dynamic shoulder model for biomechanical measurements of shoulder specimen] Roetman B, et al. **Biomed Tech (Berl)** 1996 Dec;41(12):359-63 (Eng. Abstr.) **(Ger)**

SURGERY

MR imaging of the shoulder after rotator cuff repair. Gusmer PB, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):559-63

Early results of continuous passive motion after rotator cuff repair: a prospective, randomized, blinded, controlled study. Raab MG, et al. **Am J Orthop** 1996 Mar;25(3):214-20

Cyclic loading of transosseous rotator cuff repairs: tension overload as a possible cause of failure. Burkhart SS, et al. **Arthroscopy** 1997 Apr;13(2):172-6

Margin convergence: a method of reducing strain in massive rotator cuff tears. Burkhart SS, et al. **Arthroscopy** 1996 Jun; 12(3):335-8

Tissue fixation security in transosseous rotator cuff repairs: a mechanical comparison of simple versus mattress sutures. Burkhart SS, et al. **Arthroscopy** 1996 Dec;12(6):704-8

Captured shoulder: a complication of rotator cuff surgery. Mormino MA, et al. **Arthroscopy** 1996 Aug;12(4):457-61

Rotator interval capsule closure: an arthroscopic technique. Treacy SH, et al. **Arthroscopy** 1997 Feb;13(1):103-6

Isokinetic testing to evaluate patients submitted to surgery for the treatment of surgical lesion of the rotator cuff. Porcellini G, et al. **Chir Organi Mov** 1996 Jul-Sep; 81(3):295-302 **(Eng, Ita)**

Calcific tendinitis of the rotator cuff with trochiteal osteolysis. A rare clinical radiologic complication. Porcellini G, et al. **Chir Organi Mov** 1996 Apr-Jun; 81(2):207-12 **(Eng, Ita)**

Arthroscopic treatment of rotator cuff disorders. Peterson CA 2nd, et al. **Clin Sports Med** 1996 Oct;15(4):715-36 (78 ref.)

Arthrolysis of the shoulder for ruptures of the rotator cuff. Bruns J, et al. **Int Orthop** 1997;21(3):157-60

Partial-thickness tears of the rotator cuff. A clinicopathological review based on 66 surgically verified cases. Fukuda H, et al. **Int Orthop** 1996;20(4):257-65

Strength of fixation with transosseous sutures in rotator cuff repair. Caldwell GL, et al. **J Bone Joint Surg Am** 1997 Jul;79(7):1064-8

Massive, irreparable tears of the rotator cuff. Results of operative debridement and subacromial decompression. Gartsman GM. **J Bone Joint Surg Am** 1997 May; 79(5):715-21

Operative treatment of irreparable rupture of the subscapularis. Wirth MA, et al. **J Bone Joint Surg Am** 1997 May;79(5):722-31

A biomechanical evaluation of suture anchors in repair of the rotator cuff. Rossouw DJ, et al. **J Bone Joint Surg Br** 1997 May;79(3):458-61

Arthroscopic decompression for subacromial impingement syndrome. Kim SJ, et al. **J Korean Med Sci** 1997 Apr; 12(2):123-7

Fixation strength of rotator cuff repairs with suture anchors and the transosseous suture technique. Craft DV, et al. **J Shoulder Elbow Surg** 1996 Jan-Feb;5(1):32-40

Postoperative assessment of shoulder function: a prospective study of full-thickness rotator cuff tears. Iannotti JP, et al. **J Shoulder Elbow Surg** 1996 Nov-Dec;5(6):449-57

Shoulder function after surgical repair of rotator cuff tears. Kronberg M, et al. **J Shoulder Elbow Surg** 1997 Mar-Apr; 6(2):125-30

Inferior subluxation of the humeral head after trauma or surgery. Pritchett JW. **J Shoulder Elbow Surg** 1997 Jul-Aug;6(4):356-9

Strength after surgical repair of the rotator cuff. Rokito AS, et al. **J Shoulder Elbow Surg** 1996 Jan-Feb;5(1):12-7

The low incidence of suprascapular nerve injury after primary repair of massive rotator cuff tears. Zanotti RM, et al. **J Shoulder Elbow Surg** 1997 May-Jun;6(3):258-64

Arthroplasty for arthritis and rotator cuff deficiency. Collins DN, et al. **Orthop Clin North Am** 1997 Apr;28(2):225-39 (59 ref.)

The rotator cuff. Large and massive tears. Technique of open repair. Cordasco FA, et al. **Orthop Clin North Am** 1997 Apr;28(2):179-93 (88 ref.)

The rotator cuff. Commentary. Flatow EL, et al. **Orthop Clin North Am** 1997 Apr;28(2):277-94

Full-thickness tears: arthroscopic repair. Gartsman GM, et al. **Orthop Clin North Am** 1997 Jan;28(1):83-98

Tendon transfers for the treatment of irreparable rotator cuff defects. Gerber C, et al. **Orthop Clin North Am** 1997 Apr; 28(2):195-203

Results of surgical repair of full-thickness tears of the rotator cuff. Gupta R, et al. **Orthop Clin North Am** 1997 Apr; 28(2):241-8 (46 ref.)

Complications of rotator cuff repair. Mansat P, et al. **Orthop Clin North Am** 1997 Apr;28(2):205-13

Massive rotator cuff tears: debridement versus repair. Melillo

AS, et al. **Orthop Clin North Am** 1997 Jan;28(1):117–24
Evaluation and management of failed rotator cuff repairs. Neviaser RJ. **Orthop Clin North Am** 1997 Apr;28(2):215–24
The rotator cuff. Full-thickness tears. Mini-open repair. Pollock RG, et al. **Orthop Clin North Am** 1997 Apr; 28(2):169–77 (28 ref.)
Technique of arthroscopic rotator cuff repair using implantable 4-mm Revo suture anchors, suture Shuttle Relays, and no. 2 nonabsorbable mattress sutures. Snyder SJ. **Orthop Clin North Am** 1997 Apr;28(2):267–75

ULTRASONOGRAPHY

Sonographic signs of complete rotator cuff tears. Chiou HJ, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Dec; 58(6):428–34
Sonography of the biceps tendon of the shoulder: normal and pathologic findings. Farin PU. **J Clin Ultrasound** 1996 Jul–Aug;24(6):309–16

ROTAVIRUS

Enterotoxigenic Escherichia coli, rotavirus, porcine epidemic diarrhoea virus, adenovirus and calici-like virus in porcine postweaning diarrhoea in Hungary. Nagy B, et al. **Acta Vet Hung** 1996;44(1):9–19
Natural history of human rotavirus infection. Bishop RF. **Arch Virol Suppl** 1996;12:119–28 (47 ref.)
Overview of viral gastroenteritis. Kapikian AZ. **Arch Virol Suppl** 1996;12:7–19 (38 ref.)
Rotavirus-associated hemorrhagic shock and encephalopathy [letter; comment] Rotbart HA. **Clin Infect Dis** 1996 Dec; 23(6):1334. Comment on: Clin Infect Dis 1996 May;22(5):834–6.
The rotavirus enterotoxin NSP4 mobilizes intracellular calcium in human intestinal cells by stimulating phospholipase C-mediated inositol 1,4,5-trisphosphate production. Dong Y, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3960–5
Characterisation of rotaviruses recovered from neonates with symptomatic infection. Steele AD, et al. **S Afr Med J** 1996 Dec;86(12):1546–9
Immunogenicity, safety and protective efficacy of one dose of the rhesus rotavirus vaccine and serotype 1 and 2 human-rhesus rotavirus reassortants in children from Lima, Peru. Lanata CF, et al. **Vaccine** 1996 Feb;14(3):237–43

CLASSIFICATION

Prevalence and characteristics of severe rotavirus infections in Nicaraguan children. Espinoza F, et al. **Ann Trop Paediatr** 1997 Mar;17(1):25–32
G3P2 rotaviruses causing diarrhoeal disease in neonates differ in VP4, VP7 and NSP4 sequence from G3P2 strains causing asymptomatic neonatal infection. Kirkwood CD, et al. **Arch Virol** 1996;141(9):1661–76
Bovine rotavirus strain 678 possesses VP4 of serotype P7[5] specificity. Nakagomi T, et al. **Arch Virol** 1997; 142(6):1255–62
VP4 and VP7 typing using monoclonal antibodies. Coulson BS. **Arch Virol Suppl** 1996;12:113–8 (23 ref.)
Development of rotavirus molecular epidemiology: electropherotyping. Holmes IH. **Arch Virol Suppl** 1996; 12:87–91 (29 ref.)
Classification of rotavirus VP4 and VP7 serotypes. Hoshino Y, et al. **Arch Virol Suppl** 1996;12:99–111
Molecular epidemiology of human rotaviruses: genogrouping by RNA-RNA hybridization. Nakagomi O, et al. **Arch Virol Suppl** 1996;12:93–8 (18 ref.)
Classification of rotavirus into G and P types with specimens from children with acute diarrhea in New Delhi, India. Husain M, et al. **J Clin Microbiol** 1996 Jun;34(6):1592–4
Molecular analysis of outer capsid glycoprotein (VP7) genes from two isolates of human group C rotavirus with different genome electropherotypes. Kuzuya M, et al. **J Clin Microbiol** 1996 Dec;34(12):3185–9
Inter-relationships among subgroups, serotypes, and electropherotypes of rotaviruses isolated from humans. el-Assouli SM. **J Diarrhoeal Dis Res** 1996 Sep;14(3):201–6
Temporal distribution of rotavirus G-serotypes in the West Midlands region of the United Kingdom, 1983–1994. Beards G, et al. **J Diarrhoeal Dis Res** 1995 Dec;13(4):235–7
A novel human rotavirus serotype with dual G5–G11 specificity. Timenetsky M do C, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1373–8
Sequence analysis of NSP4 gene of human rotavirus allows classification into two main genetic groups. Cunliffe NA, et al. **J Med Virol** 1997 Sep;53(1):41–50
Diversity of rotavirus strains infecting pediatric patients in New Delhi, India. Chatterjee B, et al. **J Trop Pediatr** 1996 Aug;42(4):207–10
Genetic and antigenic analysis of human rotavirus prevalent in Al-Taif, Saudi Arabia. elAssouli SM, et al. **J Trop Pediatr** 1996 Aug;42(4):211–9
Use of non-radioactive probes for VP4 typing of human rotaviruses. Gorrell RJ, et al. **J Virol Methods** 1996 Sep; 61(1–2):59–64
Identification of bovine rotaviruses in Venezuela: antigenic and molecular characterization of a bovine rotavirus strain. Ciarlet M, et al. **Res Virol** 1997 Jul–Aug;148(4):289–97
Concomitant rotavirus serotypes 1 and 4 infections in a diarrhoeic child from Belém, Brazil. Mascarenhas JD, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul–Aug;38(4):249–52
Comparison of polymerase chain reaction and monoclonal antibodies for G-typing of group A bovine rotavirus directly from fecal material. Hussein HA, et al. **Vet Microbiol** 1996 Jul;51(1–2):11–7
The distribution of G and P types within isolates of bovine rotavirus in Japan. Ishizaki H, et al. **Vet Microbiol** 1996 Feb;48(3–4):367–72
The VP4 and VP7 of bovine rotavirus VMRI are antigenically and genetically closely related to P-type 5, G-type 6 strains. Mummidi S, et al. **Vet Microbiol** 1996 Aug;51(3–4):241–55
Subgroup determination of group A rotaviruses recovered from piglets in Nigeria. Atii DJ, et al. **Viral Immunol** 1995; 8(3):151–7

DRUG EFFECTS

Effect of human milk prostaglandins and lactoferrin on respiratory syncytial virus and rotavirus. Grover M, et al. **Acta Paediatr** 1997 Mar;86(3):315–6
Effect of isoprinosine on rotavirus replication in vitro. Linhares RE, et al. **Braz J Med Biol Res** 1996 Feb; 29(2):219–22
Interferon gamma and interleukin 1, but not interferon alfa, inhibit rotavirus entry into human intestinal cell lines. Bass DM. **Gastroenterology** 1997 Jul;113(1):81–9
Two proline residues are essential in the calcium-binding activity of rotavirus VP7 outer capsid protein. Gajardo R, et al. **J Virol** 1997 Mar;71(3):2211–6
Inactivation of rotavirus by new polymeric water disinfectants. Panangala VS, et al. **J Virol Methods** 1997 Jul;66(2):263–8

ENZYMOLOGY

Serine protein kinase activity associated with rotavirus phosphoprotein NSP5. Blackhall J, et al. **J Virol** 1997 Jan; 71(1):138–44

GENETICS

Sequence analysis of VP7 gene of two Nigerian rotavirus strains. Adah MI, et al. **Acta Virol** 1996 Sep;40(4):187–93
Characterization of human rotaviruses isolated from symptomatic and asymptomatic infections. Tietzová J, et al. **Acta Virol** 1995 Sep;39(4):211–214
Sequence analysis of VP7 gene of a bovine rotavirus with G6 subtype. Mummidi S, et al. **Adv Exp Med Biol** 1997; 412:93–4
Genome rearrangements of rotaviruses. Desselberger U. **Adv Virus Res** 1996;46:69–95 (69 ref.)
Comparison of the genome ds RNA of human rotavirus strains shed in parts of Ibadan, Nigeria. Ojeh CK, et al. **Afr J Med Med Sci** 1995 Dec;24(4):359–63
Selection of rotavirus VP7 gene in the genetic background of simian rotavirus SA11: implications for rotavirus reassortant vaccine development. Kobayashi N, et al. **Antiviral Res** 1996 Jul;31(3):185–90
The characterization of VP7 (G type) and VP4 (P type) genes of bovine group A rotaviruses from field samples using RT-PCR and RFLP analysis. Chang KO, et al. **Arch Virol** 1996;141(9):1727–39
Comparative amino acid sequence analysis of the outer capsid protein VP4 from four lapine rotavirus strains reveals identity with genotype P[14] human rotaviruses. Ciarlet M, et al. **Arch Virol** 1997;142(5):1059–69
Survey of equine rotaviruses shows conservation of one P genotype in background of two G genotypes. Iša P, et al. **Arch Virol** 1996;141(9):1601–12
Divergence of VP7 genes of G1 rotaviruses isolated from infants vaccinated with reassortant rhesus rotaviruses. Jin Q, et al. **Arch Virol** 1996;141(11):2057–76
Genetic variation in the VP7 gene of human rotavirus serotype 3 (G3 type) isolated in China and Japan. Wen L, et al. **Arch Virol** 1997;142(7):1481–9
Genome rearrangements of rotaviruses. Desselberger U. **Arch Virol Suppl** 1996;12:37–51 (50 ref.)
Development of rotavirus molecular epidemiology: electropherotyping. Holmes IH. **Arch Virol Suppl** 1996; 12:87–91 (29 ref.)
Molecular epidemiology of human rotaviruses: genogrouping by RNA-RNA hybridization. Nakagomi O, et al. **Arch Virol Suppl** 1996;12:93–8 (18 ref.)
Identification of the minimal replicase and the minimal promoter of (-)-strand synthesis, functional in rotavirus RNA replication in vitro. Wentz MJ, et al. **Arch Virol Suppl** 1996;12:59–67
Rotavirus vaccines: an overview. Midthun K, et al. **Clin Microbiol Rev** 1996 Jul;9(3):423–34 (153 ref.)
Sequence of the VP7 gene of an atypical human rotavirus: evidence for genetic and antigenic drift. Palombo EA, et al. **DNA Seq** 1997;7(5):307–11
Periplasmic expression of part of the major rotavirus capsid protein VP7 containing all the three antigenic regions in Escherichia coli. Wang L, et al. **Gene** 1996 Oct 24; 177(1–2):155–62
Detection of group B rotaviruses in fecal samples from diarrheic calves and adult cows and characterization of their VP7 genes. Chang KO, et al. **J Clin Microbiol** 1997 Aug;35(8):2107–10
Molecular analysis of outer capsid glycoprotein (VP7) genes from two isolates of human group C rotavirus with different genome electropherotypes. Kuzuya M, et al. **J Clin Microbiol** 1996 Dec;34(12):3185–9
Three major alleles of rotavirus NSP4 proteins identified by sequence analysis. Horie Y, et al. **J Gen Virol** 1997 Sep; 78 (Pt 9):2341–6
Sequence analysis of NSP4 gene of human rotavirus allows classification into two main genetic groups. Cunliffe NA, et al. **J Med Virol** 1997 Sep;53(1):41–50
Genetic and antigenic analysis of human rotavirus prevalent in Al-Taif, Saudi Arabia. elAssouli SM, et al. **J Trop Pediatr** 1996 Aug;42(4):211–9
The 3'-terminal consensus sequence of rotavirus mRNA is the minimal promoter of negative-strand RNA synthesis. Wentz MJ, et al. **J Virol** 1996 Nov;70(11):7833–41
Use of non-radioactive probes for VP4 typing of human rotaviruses. Gorrell RJ, et al. **J Virol Methods** 1996 Sep; 61(1–2):59–64
Molecular epidemiology of human rotaviruses in Santiago, Chile. O'Ryan ML, et al. **Pediatr Infect Dis J** 1997 Mar; 16(3):305–11
Identification of bovine rotaviruses in Venezuela: antigenic and molecular characterization of a bovine rotavirus strain. Ciarlet M, et al. **Res Virol** 1997 Jul–Aug;148(4):289–97
Distinctness of NSP1 gene of human rotavirus AU-1 from NSP1 gene of other human genogroups. Nakagomi O, et al. **Res Virol** 1995 Nov–Dec;146(6):423–428
A major rearrangement of the VP6 gene of a strain of rotavirus provides replication advantage. Xu Z, et al. **Vet Microbiol** 1996 Oct;52(3–4):235–47
Genetic stability of a porcine rotavirus RNA segment during repeated plaque isolation. Blackhall J, et al. **Virology** 1996 Nov 1;225(1):181–90
Sequence analysis of normal and rearranged NSP5 genes from human rotavirus strains isolated in nature: implications for the occurrence of the rearrangement at the step of plus strand synthesis. Kojima K, et al. **Virology** 1996 Oct 15; 224(2):446–52
Sequence and phylogenetic analysis of the VP7 gene of a bovine rotavirus with G6 subtype [letter] Mummidi S, et al. **Virus Genes** 1996;12(3):203–4
Bovine rotavirus 993/83 shows a third subtype of avian VP7 protein. Rohwedder A, et al. **Virus Genes** 1997;14(2):147–51
The VP3 gene of human group C rotavirus. Samarbaf-Zadeh AR, et al. **Virus Genes** 1996;13(2):169–73
Sequence analysis of the VP6 gene in group A turkey and chicken rotaviruses. Ito H, et al. **Virus Res** 1997 Jan; 47(1):79–83

GROWTH & DEVELOPMENT

Elucidating the cell entry mechanisms of porcine rotaviruses. Garduno RA, et al. **Adv Exp Med Biol** 1997;412:213–5
Replication as a determinant of the intestinal response to rotavirus. Shaw RD, et al. **J Infect Dis** 1996 Dec; 174(6):1328–31
Isolation and serial propagation of human group C rotaviruses in a cell line (CaCo-2). Shinozaki K, et al. **J Med Virol** 1996 Jan;48(1):48–52

IMMUNOLOGY

Virus-like particle vaccines for mucosal immunization. Estes MK, et al. **Adv Exp Med Biol** 1997;412:387–95
Maternal immunization of pregnant cattle with recombinant VP8* protein of bovine rotavirus elicits neutralizing antibodies to multiple serotypes. Colostral neutralizing antibody by rotavirus VP8*. Yoo D, et al. **Adv Exp Med Biol** 1997;412:405–11
Mapping of antigenic sites on the major inner capsid protein of avian rotavirus using an Escherichia coli expression system. Ito H, et al. **Arch Virol** 1996;141(11):2129–38
Neutralization of rotavirus and recognition of immunologically important epitopes on VP4 and VP7 by human IgA. Johansen K, et al. **Arch Virol** 1997; 142(7):1491–8
Field evaluation of chicken egg yolk immunoglobulins specific for bovine rotavirus in neonatal calves. Kuroki M, et al. **Arch Virol** 1997;142(4):843–51
WC3 reassortant vaccines in children. Clark HF, et al. **Arch Virol Suppl** 1996;12:187–98 (25 ref.)
Rotavirus subunit vaccines. Conner ME, et al. **Arch Virol Suppl** 1996;12:199–206
Prophylaxis of rotavirus gastroenteritis using immunoglobulin. Ebina T. **Arch Virol Suppl** 1996;12:217–23
Rotavirus immunity in the mouse. Franco MA, et al. **Arch Virol Suppl** 1996;12:141–52 (36 ref.)
DNA vaccines against rotavirus infections. Herrmann JE, et al. **Arch Virol Suppl** 1996;12:207–15
Protective immunity against group A rotavirus infection and illness in infants. Matson DO. **Arch Virol Suppl** 1996; 12:129–39 (46 ref.)
The gnotobiotic piglet as a model for studies of disease pathogenesis and immunity to human rotaviruses. Saif LJ, et al. **Arch Virol Suppl** 1996;12:153–61 (24 ref.)
Trials of oral bovine and rhesus rotavirus vaccines in Finland: a historical account and present status. Vesikari T. **Arch Virol Suppl** 1996;12:177–86
A single oral dose of inactivated rotavirus and ISCOM matrices induces partial protection in lambs. Van Pinxteren LA, et al. **Biochem Soc Trans** 1997 May;25(2):340S
Immunogenicity, safety and efficacy of tetravalent rhesus-human, reassortant rotavirus vaccine in Belém, Brazil. Linhares AC, et al. **Bull World Health Organ** 1996; 74(5):491–500
Rotavirus vaccines: an overview. Midthun K, et al.

ROTAVIRUS

Clin Microbiol Rev 1996 Jul;9(3):423–34 (153 ref.)

Expression of mucosal homing receptor alpha4beta7 by circulating CD4+ cells with memory for intestinal rotavirus. Rott LS, et al. **J Clin Invest** 1997 Sep 1; 100(5):1204–8

Quantification of systemic and local immune responses to individual rotavirus proteins during rotavirus infection in mice. Ishida S, et al. **J Clin Microbiol** 1996 Jul; 34(7):1694–700

Epidemiology of group C rotavirus infection in Western New York women of childbearing age. Riepenhoff-Talty M, et al. **J Clin Microbiol** 1997 Feb;35(2):486–8

Assay of neutralizing antibodies to animal rotavirus strains and human rotavirus serotype G8 by a modified method in the residents of Pune, India. Kelkar SD, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):101–6

Mapping of the target antigens of the rotavirus-specific cytotoxic T cell response. Heath RR, et al. **J Gen Virol** 1997 May;78 (Pt 5):1065–75

Heterotypic protection following oral immunization with live heterologous rotaviruses in a mouse model. Feng N, et al. **J Infect Dis** 1997 Feb;175(2):330–41

Immune responses to individual rotavirus proteins following heterologous and homologous rotavirus infection in mice. Ishida SI, et al. **J Infect Dis** 1997 Jun;175(6):1317–23

Replication as a determinant of the intestinal response to rotavirus. Shaw RD, et al. **J Infect Dis** 1996 Dec; 174(6):1328–31

Serologic correlates of immunity in a tetravalent reassortant rotavirus vaccine trial. US Rotavirus Vaccine Efficacy Group. Ward RL, et al. **J Infect Dis** 1997 Sep;176(3):570–7

Construction of four double gene substitution human x bovine rotavirus reassortant vaccine candidates: each bears two outer capsid human rotavirus genes, one encoding P serotype 1A and the other encoding G serotype 1, 2, 3, or 4 specificity. Hoshino Y, et al. **J Med Virol** 1997 Apr; 51(4):319–25

Seroepidemiology of human group C rotavirus in the UK. James VL, et al. **J Med Virol** 1997 May;52(1):86–91

Neonatal rotavirus infection: possible effect on prevalence of severe diarrhoea in a community [letter] Bishop RF, et al. **J Paediatr Child Health** 1997 Feb;33(1):80

Rotavirus vaccines [editorial] Ebrahim GJ. **J Trop Pediatr** 1996 Oct;42(5):254–5 (18 ref.)

Identification of a T-helper cell epitope on the rotavirus VP6 protein. Baños DM, et al. **J Virol** 1997 Jan;71(1):419–26

Immunologic correlates of protection against rotavirus challenge after intramuscular immunization of mice. Coffin SE, et al. **J Virol** 1997 Oct;71(10):7851–6

Evidence for CD8+ T-cell immunity to murine rotavirus in the absence of perforin, fas, and gamma interferon. Franco MA, et al. **J Virol** 1997 Jan;71(1):479–86

Attenuation of a human rotavirus vaccine candidate did not correlate with mutations in the NSP4 protein gene. Ward RL, et al. **J Virol** 1997 Aug;71(8):6267–70

Rotavirus vaccines: a perspective. Nakagomi O, et al. **Microbiol Immunol** 1996;40(10):701–9 (61 ref.)

Comparative evaluation of reactogenicity and immunogenicity of two dosages of oral tetravalent rhesus rotavirus vaccine. US Rhesus Rotavirus Vaccine Study Group. Dennehy PH, et al. **Pediatr Infect Dis J** 1996 Nov; 15(11):1012–8

Protective immunity induced by rotavirus DNA vaccines. Chen SC, et al. **Vaccine** 1997 Jun;15(8):899–902

Isotype-specific antibody responses to rotavirus and virus proteins in cows inoculated with subunit vaccines composed of recombinant SA11 rotavirus core-like particles (CLP) or virus-like particles (VLP). Fernandez FM, et al. **Vaccine** 1996 Oct;14(14):1303–12

Aqueous-based microencapsulation enhances virus-specific humoral immune responses in mice after parenteral inoculation. Moser CA, et al. **Vaccine** 1996 Sep; 14(13):1235–8

Subgroup determination of group A rotaviruses recovered from piglets in Nigeria. Atii DJ, et al. **Viral Immunol** 1995; 8(3):151–7

Particle bombardment-mediated DNA vaccination with rotavirus VP6 induces high levels of serum rotavirus IgG but fails to protect mice against challenge. Choi AH, et al. **Virology** 1997 May 26;232(1):129–38

Production and characterization of murine IgA monoclonal antibodies to the surface antigens of rhesus rotavirus. Giammarioli AM, et al. **Virology** 1996 Nov 1;225(1):97–110

Vaccine research and development. Rotavirus vaccines for developing countries. **Wkly Epidemiol Rec** 1997 Feb 7; 72(6):35–40 **(Eng, Fre)**

[Clinical and experimental study on treatment of rotaviral enteritis with qiwei baizhu powder] He ST, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Mar; 16(3):132–5 (Eng. Abstr.) **(Chi)**

[Serologic overview of rotavirus antibodies in children under 2 years of age] Pazdiora P, et al. **Epidemiol Mikrobiol Imunol** 1997 Mar;46(1):34–5 (Eng. Abstr.) **(Cze)**

ISOLATION & PURIFICATION

Molecular epidemiological survey of rotaviruses in sewage by reverse transcriptase seminested PCR and restriction fragment length polymorphism assay. Dubois E, et al. **Appl Environ Microbiol** 1997 May;63(5):1794–800

Characterization of rotaviral RNA isolated from children with gastroenteritis in Poland. Szczepaniak Z, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(5–6):303–8

The characterization of VP7 (G type) and VP4 (P type) genes of bovine group A rotaviruses from field samples using RT-PCR and RFLP analysis. Chang KO, et al. **Arch Virol** 1996;141(9):1727–39

Isolation and identification of avian rotavirus from pheasant chicks with signs of clinical enteritis. Legrottaglie R, et al. **Comp Immunol Microbiol Infect Dis** 1997 Jun; 20(3):205–10

Evaluation of different methods (ELISA, IF, EM, PAGE) for the diagnosis of rotavirus infection in piglets. Markowska-Daniel I, et al. **Comp Immunol Microbiol Infect Dis** 1996 Jun;19(3):219–32

Outbreaks of nosocomial rotavirus gastro-enteritis in a paediatric ward. Nakata S, et al. **Eur J Pediatr** 1996 Nov; 155(11):954–8

Three-step isolation method for sensitive detection of enterovirus, rotavirus, hepatitis A virus, and small round structured viruses in water samples. Gilgen M, et al. **Int J Food Microbiol** 1997 Jul 22;37(2–3):189–99

Rotavirus and hepatitis A virus in market lettuce (Latuca sativa) in Costa Rica. Hernández F, et al. **Int J Food Microbiol** 1997 Jul 22;37(2–3):221–3

Classification of rotavirus into G and P types with specimens from children with acute diarrhea in New Delhi, India. Husain M, et al. **J Clin Microbiol** 1996 Jun;34(6):1592–4

Isolation from diarrheal and asymptomatic kittens of three rotavirus strains that belong to the AU-1 genogroup of human rotaviruses. Mochizuki M, et al. **J Clin Microbiol** 1997 May;35(5):1272–5

Isolation of group B porcine rotavirus in cell culture. Sanekata T, et al. **J Clin Microbiol** 1996 Mar;34(3):759–61

Isolation of serotype G8, P6[1] bovine rotavirus from adult cattle with diarrhea. Sato M, et al. **J Clin Microbiol** 1997 May;35(5):1266–8

Rotavirus an emerging enteropathogen of man and animals: an overview. Malik SV, et al. **J Commun Dis** 1995 Dec; 27(4):199–207 (50 ref.)

RNA profile and structural protein analysis of rotaviruses isolated from diarrhoeal calves in India. Gulati BR, et al. **J Diarrhoeal Dis Res** 1997 Mar;15(1):12–6

Outbreak of severe gastroenteritis in adults and children associated with type G2 rotavirus. Study Group on Diarrhea of the Instituto Adolfo Lutz. Timenetsky MC, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):71–4

Humoral immunity patterns based on antibody reactivity to rotavirus antigens in Brazilian children under 5 years of age. Andrade GP, et al. **J Med Virol** 1996 Jul;49(3):212–7

Incidence of human calicivirus and rotavirus infection in patients with gastroenteritis in South Africa. Wolfaardt M, et al. **J Med Virol** 1997 Apr;51(4):290–6

Group B and C porcine rotaviruses identified for the first time in South Africa. Geyer A, et al. **J S Afr Vet Assoc** 1996 Sep;67(3):115–6

Acute pancreatitis associated with rotavirus infection [letter] De La Rubia L, et al. **Pancreas** 1996 Jan;12(1):98–9

Neonatal rotavirus infection in Bangladesh: strain characterization and risk factors for nosocomial infection. Kilgore PE, et al. **Pediatr Infect Dis J** 1996 Aug; 15(8):672–7

Detection of rotavirus RNA in cerebrospinal fluid in a case of rotavirus gastroenteritis with febrile seizures. Pang XL, et al. **Pediatr Infect Dis J** 1996 Jun;15(6):543–5

Lack of evidence for rotavirus by polymerase chain reaction/enzyme immunoassay of hepatobiliary samples from children with biliary atresia. Bobo L, et al. **Pediatr Res** 1997 Feb;41(2):229–34

Evaluation of reverse transcription and polymerase chain reaction (RT/PCR) for the detection of rotaviruses: applications of the assay. Buesa J, et al. **Res Virol** 1996 Nov-Dec;147(6):353–61

Serotype of Nigerian rotavirus strains. Adah MI, et al. **Trop Med Int Health** 1997 Apr;2(4):363–70

Aetiology of acute diarrhoea in hospitalized children in Hong Kong. Biswas R, et al. **Trop Med Int Health** 1996 Oct; 1(5):679–83

The distribution of G and P types within isolates of bovine rotavirus in Japan. Ishizaki H, et al. **Vet Microbiol** 1996 Feb;48(3–4):367–72

Rapid vertical agarose: silver stain detection of rotavirus. Giordano MO, et al. **Viral Immunol** 1997;10(1):59–64

[Occurrence of rota-I adenoviruses in diarrhea states of children] Rybicka E, et al. **Med Dosw Mikrobiol** 1996; 48(3–4):177–81 (Eng. Abstr.) **(Pol)**

[Rotavirus: clinical and epidemiological study in hospitalized children under two years of age] Rodríguez Cervilla J, et al. **An Esp Pediatr** 1996 Nov;45(5):499–504 (Eng. Abstr.) **(Spa)**

METABOLISM

Structure and function of rotavirus nonstructural protein NSP3. Poncet D, et al. **Arch Virol Suppl** 1996;12:29–35

Rotavirus structure: interactions between the structural proteins. Shaw AL, et al. **Arch Virol Suppl** 1996;12:21–7

Structure and function of rotavirus NSP1. Taniguchi K, et al. **Arch Virol Suppl** 1996;12:53–8 (22 ref.)

The cytoplasmic tail of NSP4, the endoplasmic reticulum-localized non-structural glycoprotein of rotavirus, contains distinct virus binding and coiled coil domains. Taylor JA, et al. **EMBO J** 1996 Sep 2; 15(17):4469–76

Deletion mapping of functional domains in the rotavirus capsid protein VP6. Affranchino JL, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1949–55

Phosphorylation generates different forms of rotavirus NSP5. Afrikanova I, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2059–65

Solubilized and cleaved VP7, the outer glycoprotein of rotavirus, induces permeabilization of cell membrane vesicles. Charpilienne A, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1367–71

Functional and structural analysis of the sialic acid-binding domain of rotaviruses. Iša P, et al. **J Virol** 1997 Sep; 71(9):6749–56

In vivo and in vitro phosphorylation of rotavirus NSP5 correlates with its localization in viroplasms. Poncet D, et al. **J Virol** 1997 Jan;71(1):34–41

The concentration of Ca2+ that solubilizes outer capsid proteins from rotavirus particles is dependent on the strain. Ruiz MC, et al. **J Virol** 1996 Aug;70(8):4877–83

Three-dimensional visualization of mRNA release from actively transcribing rotavirus particles [letter] Lawton JA, et al. **Nat Struct Biol** 1997 Feb;4(2):118–21

PATHOGENICITY

Characterization of a porcine enterocyte receptor for group A rotavirus. Kuhlenschmidt MS, et al. **Adv Exp Med Biol** 1997;412:135–43

Comparative studies of the pathogenesis, antibody immune responses, and homologous protection to porcine and human rotaviruses in gnotobiotic piglets. Saif L, et al. **Adv Exp Med Biol** 1997;412:397–403

Induction of apoptosis in HT-29 cells infected with SA-11 rotavirus. Superti F, et al. **J Med Virol** 1996 Dec; 50(4):325–34

Viral determinants of rotavirus pathogenicity in pigs: production of reassortants by asynchronous coinfection. Tauscher GI, et al. **J Virol** 1997 Jan;71(1):853–7

PHYSIOLOGY

A hypothesis about the mechanism of assembly of double-shelled rotavirus particles. Suzuki H. **Arch Virol Suppl** 1996;12:79–85 (30 ref.)

Rotavirus protein expression is important for virus assembly and pathogenesis. Tian P, et al. **Arch Virol Suppl** 1996; 12:69–77 (26 ref.)

Virus-like particle-induced fusion from without in tissue culture cells: role of outer-layer proteins VP4 and VP7. Gilbert JM, et al. **J Virol** 1997 Jun;71(6):4555–63

The rotavirus nonstructural glycoprotein NSP4 possesses membrane destabilization activity. Tian P, et al. **J Virol** 1996 Oct;70(10):6973–81

Superinfection by Listeria monocytogenes of cultured human enterocyte-like cells infected with poliovirus or rotavirus. Superti F, et al. **Med Microbiol Immunol (Berl)** 1996 Nov; 185(3):131–7

Human serum immunoglobulin counteracts rotaviral infection in Caco-2 cells. Guarino A, et al. **Pediatr Res** 1996 Dec;40(6):881–7

Rotavirus contains integrin ligand sequences and a disintegrin-like domain that are implicated in virus entry into cells. Coulson BS, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5389–94

[Effects of qiwei baizhu san in inhibiting replication of human rotavirus in vitro] He ST, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Nov; 15(11):669–71 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

Rotavirus structure: interactions between the structural proteins. Shaw AL, et al. **Arch Virol Suppl** 1996;12:21–7

Three-dimensional structural analysis of recombinant rotavirus-like particles with intact and amino-terminal-deleted VP2: implications for the architecture of the VP2 capsid layer. Lawton JA, et al. **J Virol** 1997 Oct;71(10):7353–60

ROTAVIRUS INFECTIONS

Haemorrhagic shock and encephalopathy syndrome [editorial; comment] Holmberg L. **Acta Paediatr** 1996 May; 85(5):535–6. Comment on: Acta Paediatr 1996 May;85(5):632–4.

Haemorrhagic shock and encephalopathy associated with rotavirus infection [see comments] Makino M, et al. **Acta Paediatr** 1996 May;85(5):632–4. Comment in: Acta Paediatr 1996 May;85(5):535–6.

Natural history of human rotavirus infection. Bishop RF. **Arch Virol Suppl** 1996;12:119–28 (47 ref.)

Human group B rotavirus: adult diarrhea rotavirus. Hong T. **Chin Med J (Engl)** 1996 Jan;109(1):11–2 (0 ref.)

Outbreaks of nosocomial rotavirus gastro-enteritis in a paediatric ward. Nakata S, et al. **Eur J Pediatr** 1996 Nov; 155(11):954–8

Rotavirus infection and diarrhea in healthy and HIV-infected children: a cohort study [published erratum appears in J Pediatr Gastroenterol Nutr 1997 Mar;24(3):367] Fontana M, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):492–6

Epidemiological and clinical features of rotavirus gastroenteritis in Oman. Aithala G, et al. **J Trop Pediatr** 1996 Feb;42(1):54–7

[Nosocomial rotavirus infections in children] Táborská J, et al. **Cas Lek Cesk** 1996 Aug 21;135(16):516–20 (Eng. Abstr.) **(Cze)**

[Fatal outcome in rotavirus infection] Anisimova IN, et al. **Klin Med (Mosk)** 1996;74(5):59–62 **(Rus)**

BLOOD

Seroepidemiology of human group C rotavirus in the UK. James VL, et al. **J Med Virol** 1997 May;52(1):86–91

COMPLICATIONS

Rotavirus infection in AIDS-associated diarrhoea [letter] Mura MS, et al. **J Infect** 1996 Jul;33(1):66–7

Diversity of rotavirus strains infecting pediatric patients in New Delhi, India. Chatterjee B, et al. **J Trop Pediatr** 1996 Aug;42(4):207–10

Genetic and antigenic analysis of human rotavirus prevalent in Al-Taif, Saudi Arabia. elAssouli SM, et al. **J Trop Pediatr** 1996 Aug;42(4):211–9

Acute pancreatitis associated with rotavirus infection [letter] De La Rubia L, et al. **Pancreas** 1996 Jan;12(1):98–9

Central pontine myelinolysis in a previously healthy 4-year-old child with acute rotavirus gastroenteritis. Gregorio L, et al. **Pediatrics** 1997 May;99(5):738–43

DIAGNOSIS

Isolation and characterization of cytopathic strains of rotavirus from hares (Lepus europaeus). Legrottaglie R, et al. **New Microbiol** 1997 Apr;20(2):135–40

DRUG THERAPY

[Clinical and experimental study on treatment of rotaviral enteritis with qiwei baizhu powder] He ST, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Mar; 16(3):132–5 (Eng. Abstr.) **(Chi)**

ECONOMICS

Rotavirus gastroenteritis: impact on young children, their families and the health care system. Liddle JL, et al. **Med J Aust** 1997 Sep 15;167(6):304–7

EPIDEMIOLOGY

Prevalence and characteristics of severe rotavirus infections in Nicaraguan children. Espinoza F, et al. **Ann Trop Paediatr** 1997 Mar;17(1):25–32

Molecular epidemiological survey of rotaviruses in sewage by reverse transcriptase seminested PCR and restriction fragment length polymorphism assay. Dubois E, et al. **Appl Environ Microbiol** 1997 May;63(5):1794–800

Rotavirus infection and prevention. Barnes GL, et al. **Curr Opin Pediatr** 1997 Feb;9(1):19–23 (52 ref.)

Asymptomatic rotavirus infection within Benin City urban community, Nigeria. Omoigberale AI, et al. **East Afr Med J** 1996 Oct;73(10):688–90

Survey on rotavirus infections in a German pediatric hospital [letter] Berner R, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):479–81

Epidemiology of group C rotavirus infection in Western New York women of childbearing age. Riepenhoff-Talty M, et al. **J Clin Microbiol** 1997 Feb;35(2):486–8

Rotavirus an emerging enteropathogen of man and animals: an overview. Malik SV, et al. **J Commun Dis** 1995 Dec; 27(4):199–207 (50 ref.)

Temporal distribution of rotavirus G-serotypes in the West Midlands region of the United Kingdom, 1983–1994. Beards G, et al. **J Diarrhoeal Dis Res** 1995 Dec;13(4):235–7

Oscillatory fluctuations in the incidence of rotavirus infections by serotypes 1, 2, 3, and 4. José MV, et al. **J Diarrhoeal Dis Res** 1996 Sep;14(3):194–200

Outbreak of severe gastroenteritis in adults and children associated with type G2 rotavirus. Study Group on Diarrhea of the Instituto Adolfo Lutz. Timenetsky MC, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):71–4

Seroepidemiology of human group C rotavirus in the UK. James VL, et al. **J Med Virol** 1997 May;52(1):86–91

Longitudinal study of rotavirus infection in child-care centres. Ferson MJ, et al. **J Paediatr Child Health** 1997 Apr;33(2):157–60

Trends in hospitalizations for diarrhea in United States children from 1979 through 1992: estimates of the morbidity associated with rotavirus. Jin S, et al. **Pediatr Infect Dis J** 1996 May;15(5):397–404

Neonatal rotavirus infection in Bangladesh: strain characterization and risk factors for nosocomial infection. Kilgore PE, et al. **Pediatr Infect Dis J** 1996 Aug; 15(8):672–7

Molecular epidemiology of human rotaviruses in Santiago, Chile. O'Ryan ML, et al. **Pediatr Infect Dis J** 1997 Mar; 16(3):305–11

Serotype of Nigerian rotavirus strains. Adah MI, et al. **Trop Med Int Health** 1997 Apr;2(4):363–70

[Long-term follow-up of nosocomial rotavirus infections at the Infectious Diseases Clinic of the Medical School Hospital in Plžen (1987–1994)] Pazdiora P, et al. **Epidemiol Mikrobiol Imunol** 1996 Sep;45(3):95–100 (Eng. Abstr.) **(Cze)**

[Serologic overview of rotavirus antibodies in children under 2 years of age] Pazdiora P, et al. **Epidemiol Mikrobiol Imunol** 1997 Mar;46(1):34–5 (Eng. Abstr.) **(Cze)**

[Rotaviruses in human and veterinary medicine] Dodet B, et al. **Sante** 1997 May-Jun;7(3):195–9 (7 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

Rotaviruses in human and veterinary medicine. Dodet B, et al. **Trends Microbiol** 1997 May;5(5):176–8

IMMUNOLOGY

Murine model of rotavirus infection. Feng N, et al. **Adv Exp Med Biol** 1997;412:233–40 (25 ref.)

Neutralization of rotavirus and recognition of immunologically important epitopes on VP4 and VP7 by human IgA. Johansen K, et al. **Arch Virol** 1997; 142(7):1491–8

A single oral dose of inactivated rotavirus and ISCOM matrices induces partial protection in lambs. Van Pinxteren LA, et al. **Biochem Soc Trans** 1997 May;25(2):340S

Quantification of systemic and local immune responses to individual rotavirus proteins during rotavirus infection in mice. Ishida S, et al. **J Clin Microbiol** 1996 Jul; 34(7):1694–700

Assay of neutralizing antibodies to animal rotavirus strains and human rotavirus serotype G8 by a modified method in the residents of Pune, India. Kelkar SD, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):101–6

Heterotypic protection following oral immunization with live heterologous rotaviruses in a mouse model. Feng N, et al. **J Infect Dis** 1997 Feb;175(2):330–41

Immune responses to individual rotavirus proteins following heterologous and homologous rotavirus infection in mice. Ishida SI, et al. **J Infect Dis** 1997 Jun;175(6):1317–23

Replication as a determinant of the intestinal response to rotavirus. Shaw RD, et al. **J Infect Dis** 1996 Dec; 174(6):1328–31

Immunologic correlates of protection against rotavirus challenge after intramuscular immunization of mice. Coffin SE, et al. **J Virol** 1997 Oct;71(10):7851–6

Evidence for CD8+ T-cell immunity to murine rotavirus in the absence of perforin, fas, and gamma interferon. Franco MA, et al. **J Virol** 1997 Jan;71(1):479–86

CD8+ T cells can mediate almost complete short-term and partial long-term immunity to rotavirus in mice. Franco MA, et al. **J Virol** 1997 May;71(5):4165–70

Rotavirus infections in young Nicaraguan children. Espinoza F, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):564–71

Concomitant rotavirus serotypes 1 and 4 infections in a diarrhoeic child from Belém, Brazil. Mascarenhas JD, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul-Aug;38(4):249–52

METABOLISM

Study of oxidative-stress in rotavirus infected infant mice. Sodhi CP, et al. **Indian J Med Res** 1996 Oct;104:245–9

Protein-energy malnutrition delays small-intestinal recovery in neonatal pigs infected with rotavirus. Zijlstra RT, et al. **J Nutr** 1997 Jun;127(6):1118–27

The rotavirus enterotoxin NSP4 mobilizes intracellular calcium in human intestinal cells by stimulating phospholipase C-mediated inositol 1,4,5-trisphosphate production. Dong Y, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3960–5

MICROBIOLOGY

[Rotaviruses in human and veterinary medicine] Dodet B, et al. **Sante** 1997 May-Jun;7(3):195–9 (7 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Uptake of yeast (Saccharomyces boulardii) in normal and rotavirus treated intestine. Cartwright-Shamoon J, et al. **Gut** 1996 Aug;39(2):204–9

New aspects in a murine model for extrahepatic biliary atresia. Petersen C, et al. **J Pediatr Surg** 1997 Aug; 32(8):1190–5

Tubuloreticular structures induced by rotavirus infection in HT-29 cells. Tinari A, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):571–6

PREVENTION & CONTROL

WC3 reassortant vaccines in children. Clark HF, et al. **Arch Virol Suppl** 1996;12:187–98 (25 ref.)

Rotavirus subunit vaccines. Conner ME, et al. **Arch Virol Suppl** 1996;12:199–206

Prophylaxis of rotavirus gastroenteritis using immunoglobulin. Ebina T. **Arch Virol Suppl** 1996;12:217–23

Rotavirus immunity in the mouse. Franco MA, et al. **Arch Virol Suppl** 1996;12:141–52 (36 ref.)

DNA vaccines against rotavirus infections. Herrmann JE, et al. **Arch Virol Suppl** 1996;12:207–15

Jennerian and modified Jennerian approach to vaccination against rotavirus diarrhea using a quadrivalent rhesus rotavirus (RRV) and human-RRV reassortant vaccine. Kapikian AZ, et al. **Arch Virol Suppl** 1996;12:163–75 (30 ref.)

Protective immunity against group A rotavirus infection and illness in infants. Matson DO. **Arch Virol Suppl** 1996; 12:129–39 (46 ref.)

The gnotobiotic piglet as a model for studies of disease pathogenesis and immunity to human rotaviruses. Saif LJ, et al. **Arch Virol Suppl** 1996;12:153–61 (24 ref.)

Trials of oral bovine and rhesus rotavirus vaccines in Finland: a historical account and present status. Vesikari T. **Arch Virol Suppl** 1996;12:177–86

Immunogenicity, safety and efficacy of tetravalent rhesus-human, reassortant rotavirus vaccine in Belém, Brazil. Linhares AC, et al. **Bull World Health Organ** 1996; 74(5):491–500

Rotavirus vaccines: an overview. Midthun K, et al. **Clin Microbiol Rev** 1996 Jul;9(3):423–34 (153 ref.)

Rotavirus infection and prevention. Barnes GL, et al. **Curr Opin Pediatr** 1997 Feb;9(1):19–23 (52 ref.)

Interferon gamma and interleukin 1, but not interferon alfa, inhibit rotavirus entry into human intestinal cell lines. Bass DM. **Gastroenterology** 1997 Jul;113(1):81–9

Heterotypic protection following oral immunization with live heterologous rotaviruses in a mouse model. Feng N, et al. **J Infect Dis** 1997 Feb;175(2):330–41

Serologic correlates of immunity in a tetravalent reassortant rotavirus vaccine trial. US Rotavirus Vaccine Efficacy Group. Ward RL, et al. **J Infect Dis** 1997 Sep;176(3):570–7

Neonatal rotavirus infection: possible effect on prevalence of severe diarrhoea in a community [letter] Bishop RF, et al. **J Paediatr Child Health** 1997 Feb;33(1):80

Rotavirus vaccines [editorial] Ebrahim GJ. **J Trop Pediatr** 1996 Oct;42(5):254–5 (18 ref.)

Rotavirus vaccines: a perspective. Nakagomi O, et al. **Microbiol Immunol** 1996;40(10):701–9 (61 ref.)

A vaccine against rotavirus—when is too much too much? [editorial; comment] Keusch GT, et al. **N Engl J Med** 1997 Oct 23;337(17):1228–9. Comment on: N Engl J Med 1997 Oct 23;337(17):1181–7.

Efficacy of the rhesus rotavirus-based quadrivalent vaccine in infants and young children in Venezuela [see comments] Pérez-Schael I, et al. **N Engl J Med** 1997 Oct 23; 337(17):1181–7. Comment in: N Engl J Med 1997 Oct 23;337(17):1228–9.

Gut reaction: new locale for antibody activity [news] **Oncology (Huntingt)** 1996 Aug;10(8):1264–5

Protective immunity induced by rotavirus DNA vaccines. Chen SC, et al. **Vaccine** 1997 Jun;15(8):899–902

Effect of MDP-Lys(L18) as a mucosal immunoadjuvant on protection of mucosal infections by Sendai virus and rotavirus. Fukushima A, et al. **Vaccine** 1996 Apr; 14(6):485–91

Immunogenicity, safety and protective efficacy of one dose of the rhesus rotavirus vaccine and serotype 1 and 2 human-rhesus rotavirus reassortants in children from Lima, Peru. Lanata CF, et al. **Vaccine** 1996 Feb;14(3):237–43

Particle bombardment-mediated DNA vaccination with rotavirus VP6 induces high levels of serum rotavirus IgG but fails to protect mice against challenge. Choi AH, et al. **Virology** 1997 May 26;232(1):129–38

Vaccine research and development. Rotavirus vaccines for developing countries. **Wkly Epidemiol Rec** 1997 Feb 7; 72(6):35–40 **(Eng, Fre)**

THERAPY

Passive immunotherapy for rotavirus-induced diarrhoea in children with HIV infection [letter] Guarino A, et al. **AIDS** 1996 Sep;10(10):1176–8

Can a super oral rehydration solution stimulate intestinal repair in acute viral enteritis? Rhoads JM, et al. **J Diarrhoeal Dis Res** 1996 Sep;14(3):175–81

Active treatment of viral diarrhea with passive immunotherapy [letter; comment] Guarino A. **J Pediatr Gastroenterol Nutr** 1996 Oct;23(3):337. Comment on: J Pediatr Gastroenterol Nutr 1994 Nov;19(4):473–4.

VETERINARY

Rotavirus infection in African, non-human primates. Otsyula M, et al. **Ann Trop Med Parasitol** 1996 Dec;90(6):659–61

The characterization of VP7 (G type) and VP4 (P type) genes of bovine group A rotaviruses from field samples using RT-PCR and RFLP analysis. Chang KO, et al. **Arch Virol** 1996;141(9):1727–39

Isolation and identification of avian rotavirus from pheasant chicks with signs of clinical enteritis. Legrottaglie R, et al. **Comp Immunol Microbiol Infect Dis** 1997 Jun; 20(3):205–10

Evaluation of different methods (ELISA, IF, EM, PAGE) for the diagnosis of rotavirus infection in piglets. Markowska-Daniel I, et al. **Comp Immunol Microbiol Infect Dis** 1996 Jun;19(3):219–32

Foal diarrhoea between 1991 and 1994 in the United Kingdom associated with Clostridium perfringens, rotavirus, Strongyloides westeri and Cryptosporidium spp. Netherwood T, et al. **Epidemiol Infect** 1996 Oct; 117(2):375–83

Assay of neutralizing antibodies to animal rotavirus strains and human rotavirus serotype G8 by a modified method in the residents of Pune, India. Kelkar SD, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):101–6

Group B and C porcine rotaviruses identified for the first time in South Africa. Geyer A, et al. **J S Afr Vet Assoc** 1996 Sep;67(3):115–6

Rotaviruses associated with neonatal lamb diarrhea in two Wyoming shed-lambing operations. Theil KW, et al. **J Vet Diagn Invest** 1996 Apr;8(2):245–8

The effect of combined rotavirus and Escherichia coli infections in rabbits. Thouless ME, et al. **Lab Anim Sci** 1996 Aug;46(4):381–5

Isolation and characterization of cytopathic strains of

rotavirus from hares (Lepus europaeus). Legrottaglie R, et al. **New Microbiol** 1997 Apr;20(2):135–40

Identification of bovine rotaviruses in Venezuela: antigenic and molecular characterization of a bovine rotavirus strain. Ciarlet M, et al. **Res Virol** 1997 Jul–Aug;148(4):289–97

Study of natural rotavirus infection in buffalo calves in Sri Lanka. Sunil-Chandra NP, et al. **Trop Anim Health Prod** 1995 Nov;27(4):221–4

Comparison of polymerase chain reaction and monoclonal antibodies for G-typing of group A bovine rotavirus directly from fecal material. Hussein HA, et al. **Vet Microbiol** 1996 Jul;51(1–2):11–7

The distribution of G and P types within isolates of bovine rotavirus in Japan. Ishizaki H, et al. **Vet Microbiol** 1996 Feb;48(3–4):367–72

One-step test for rotavirus [letter; comment] Anderton DJ. **Vet Rec** 1996 Jun 15;138(24):599; discussion 599–600. Comment on: Vet Rec 1996 Apr 20;138(16):393–5.

VIROLOGY

Characterization of human rotaviruses isolated from symptomatic and asymptomatic infections. Tietzová J, et al. **Acta Virol** 1995 Sep;39(4):211–214

Comparison of the genome ds RNA of human rotavirus strains shed in parts of Ibadan, Nigeria. Ojeh CK, et al. **Afr J Med Med Sci** 1995 Dec;24(4):359–63

Characterization of rotaviral RNA isolated from children with gastroenteritis in Poland. Szczepaniak Z, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(5–6):303–8

Divergence of VP7 genes of G1 rotaviruses isolated from infants vaccinated with reassortant rhesus rotaviruses. Jin Q, et al. **Arch Virol** 1996;141(11):2057–76

G3P2 rotaviruses causing diarrhoeal disease in neonates differ in VP4, VP7 and NSP4 sequence from G3P2 strains causing asymptomatic neonatal infection. Kirkwood CD, et al. **Arch Virol** 1996;141(9):1661–76

Classification of rotavirus VP4 and VP7 serotypes. Hoshino Y, et al. **Arch Virol Suppl** 1996;12:99–111

Molecular epidemiology of human rotaviruses: genogrouping by RNA-RNA hybridization. Nakagomi O, et al. **Arch Virol Suppl** 1996;12:93–8 (18 ref.)

Non-seasonal viral and bacterial episode of diarrhoea in the Jordan Valley, West of Jordan. Meqdam MM, et al. **FEMS Immunol Med Microbiol** 1997 Jun;18(2):133–8

Classification of rotavirus into G and P types with specimens from children with acute diarrhea in New Delhi, India. Husain M, et al. **J Clin Microbiol** 1996 Jun;34(6):1592–4

Isolation from diarrheal and asymptomatic kittens of three rotavirus strains that belong to the AU-1 genogroup of human rotaviruses. Mochizuki M, et al. **J Clin Microbiol** 1997 May;35(5):1272–5

Isolation of serotype G8, P6[1] bovine rotavirus from adult cattle with diarrhea. Sato M, et al. **J Clin Microbiol** 1997 May;35(5):1266–8

Inter-relationships among subgroups, serotypes, and electropherotypes of rotaviruses isolated from humans. el-Assouli SM. **J Diarrhoeal Dis Res** 1996 Sep;14(3):201–6

RNA profile and structural protein analysis of rotaviruses isolated from diarrhoeal calves in India. Gulati BR, et al. **J Diarrhoeal Dis Res** 1997 Mar;15(1):12–6

Replication as a determinant of the intestinal response to rotavirus. Shaw RD, et al. **J Infect Dis** 1996 Dec; 174(6):1328–31

Humoral immunity patterns based on antibody reactivity to rotavirus antigens in Brazilian children under 5 years of age. Andrade GP, et al. **J Med Virol** 1996 Jul;49(3):212–7

Incidence of human calicivirus and rotavirus infection in patients with gastroenteritis in South Africa. Wolfaardt M, et al. **J Med Virol** 1997 Apr;51(4):290–6

Diversity of rotavirus strains infecting pediatric patients in New Delhi, India. Chatterjee B, et al. **J Trop Pediatr** 1996 Aug;42(4):207–10

Genetic and antigenic analysis of human rotavirus prevalent in Al-Taif, Saudi Arabia. elAssouli SM, et al. **J Trop Pediatr** 1996 Aug;42(4):211–9

Characterisation of rotaviruses recovered from neonates with symptomatic infection. Steele AD, et al. **S Afr Med J** 1996 Dec;86(12):1546–9

Rapid vertical agarose: silver stain detection of rotavirus. Giordano MO, et al. **Viral Immunol** 1997;10(1):59–64

[Virus carriers in rotavirus infection] Vasil'ev BIa, et al. **Vopr Virusol** 1996 Nov-Dec;41(6):265–7 (Eng. Abstr.) **(Rus)**

ROTENONE

ANALOGS & DERIVATIVES

Structural factors of rotenone required for inhibition of various NADH-ubiquinone oxidoreductases. Ueno H, et al. **Biochim Biophys Acta** 1996 Sep 30;1276(3):195–202

Epothilone B stabilizes microtubuli of macrophages like taxol without showing taxol-like endotoxin activity. Muhlradt PF, et al. **Cancer Res** 1997 Aug 15;57(16):3344–6

Intrastriatal neurotoxin injections reduce in vitro and in vivo binding of radiolabeled rotenoids to mitochondrial complex I. Kilbourn MR, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):265–72

METABOLISM

Interaction of the mitochondrial NADH-ubiquinone reductase with rotenone as related to the enzyme active/inactive transition. Grivennikova VG, et al. **Biochim Biophys Acta** 1997 Apr 11;1319(2–3):223–32

PHARMACOLOGY

Inhibition of WY-14,643 induced hepatic lesion growth in mice by rotenone. Isenberg JS, et al. **Carcinogenesis** 1997 Aug;18(8):1511–9

Anomalous structure-activity relationships of 13-homo-13-oxarotenoids and 13-homo-13-oxadehyrorotenoids. Fang N, et al. **Chem Res Toxicol** 1997 Aug;10(8):853–8

The presence of rotenone-sensitive NADH dehydrogenase in the long slender bloodstream and the procyclic forms of Trypanosoma brucei brucei. Beattie DS, et al. **Eur J Biochem** 1996 Nov 1;241(3):888–94

Decrease of rotenone inhibition is a sensitive parameter of complex I damage in brain non-synaptic mitochondria of aged rats. Genova ML, et al. **FEBS Lett** 1997 Jun 30; 410(2–3):467–9

Involvement of cyanide-resistant and rotenone-insensitive pathways of mitochondrial electron transport during oxidation of glycine in higher plants. Igamberdiev AU, et al. **FEBS Lett** 1997 Jul 28;412(2):265–9

Production of rotenone-inactivating substance(s) by rotenone-resistant insect cell line. Yanagimoto Y, et al. **In Vitro Cell Dev Biol Anim** 1996 Jul–Aug;32(7):399–402

Purification and characterization of a 43-kDa rotenone-insensitive NADH dehydrogenase from plant mitochondria. Menz RI, et al. **J Biol Chem** 1996 Sep 20; 271(38):23117–20

Rotenone, a mitochondrial NADH dehydrogenase inhibitor, induces cell surface expression of CD13 and CD38 and apoptosis in HL-60 cells. Matsunaga T, et al. **Leuk Lymphoma** 1996 Feb;20(5–6):487–94

TOXICITY

Systemic administration of rotenone produces selective damage in the striatum and globus pallidus, but not in the substantia nigra. Ferrante RJ, et al. **Brain Res** 1997 Apr 4;753(1):157–62

ROTHMUND-THOMSON SYNDROME see **POIKILODERMA CONGENITALE**

ROTIFERA

CHEMISTRY

Determination of vitamin E in aquatic organisms by high-performance liquid chromatography with fluorescence detection. Huo JZ, et al. **Anal Biochem** 1996 Nov 1;242(1):123–8

CLASSIFICATION

Molecular evidence for Acanthocephala as a subtaxon of Rotifera. Garey JR, et al. **J Mol Evol** 1996 Sep;43(3):287–92

DRUG EFFECTS

Chronic toxicity of fenitrothion to an algae (Nannochloris oculata), a rotifer (Brachionus calyciflorus), and the cladoceran (Daphnia magna). Ferrando MD, et al. **Ecotoxicol Environ Saf** 1996 Nov;35(2):112–20

Effect of absorption enhancers on ciliated epithelium: a novel in vivo toxicity screening method using rotifers. Adriaens E, et al. **Pharm Res** 1997 Apr;14(4):541–5

GENETICS

Molecular evidence for Acanthocephala as a subtaxon of Rotifera. Garey JR, et al. **J Mol Evol** 1996 Sep;43(3):287–92

ROUGHAGE see **DIETARY FIBER**

ROUND LIGAMENT

[Endometriosis of the round ligament presenting as inguinal hernia (letter)] Manzanera M, et al. **Rev Esp Enferm Dig** 1996 Jul;88(7):518–20 **(Spa)**

BLOOD SUPPLY

Round ligament varices in pregnancy mimicking inguinal hernia: an ultrasound diagnosis. Cheng D, et al. **Ultrasound Obstet Gynecol** 1997 Mar;9(3):198–9

RADIOGRAPHY

Endometriosis of the extraperitoneal portion of the round ligament: US and CT findings. Freed KS, et al. **J Clin Ultrasound** 1996 Nov-Dec;24(9):540–2

ULTRASTRUCTURE

Endometriosis of the extraperitoneal portion of the round ligament: US and CT findings. Freed KS, et al. **J Clin Ultrasound** 1996 Nov-Dec;24(9):540–2

ROUND WINDOW

DRUG EFFECTS

Cell death caused by the acute effects of aminoglycoside and zinc in the ampullary cristae of guinea pigs. Nakagawa T, et al. **Eur Arch Otorhinolaryngol** 1997;254(3):153–7

INJURIES

Changes in cochlear function after double-membrane rupture in the guinea pig. Saitoh M, et al. **Hear Res** 1997 Feb; 104(1–2):147–54

PHYSIOLOGY

Summating potential and action potential gradients on and in the vicinity of the round window in guinea pig. Badr-el-Dine M, et al. **Ann Otol Rhinol Laryngol** 1997 Feb;106(2):139–44

Auditory nerve neurophonic tuning curves produced by masking of round window responses. Henry KR. **Hear Res** 1997 Feb;104(1–2):167–76

Auditory nerve neurophonic recorded from the round window of the Mongolian gerbil. Henry KR. **Hear Res** 1995 Oct;90(1–2):176–84

Is the pressure difference between the oval and round windows the effective acoustic stimulus for the cochlea? Voss SE, et al. **J Acoust Soc Am** 1996 Sep;100(3):1602–16

Round window membrane. Structure function and permeability: a review. Goycoolea MV, et al. **Microsc Res Tech** 1997 Feb 1;36(3):201–11 (60 ref.)

ULTRASTRUCTURE

Round window membrane. Structure function and permeability: a review. Goycoolea MV, et al. **Microsc Res Tech** 1997 Feb 1;36(3):201–11 (60 ref.)

ROUS-ASSOCIATED VIRUS see **LEUKOSIS VIRUS, AVIAN**

ROUS SARCOMA see **SARCOMA, AVIAN**

ROUS SARCOMA VIRUS see **SARCOMA VIRUSES, AVIAN**

ROUSSY-LEVY SYNDROME see **CHARCOT-MARIE DISEASE**

ROUTINE DIAGNOSTIC TESTS see **DIAGNOSTIC TESTS, ROUTINE**

ROUX-EN-Y ANASTOMOSIS see **ANASTOMOSIS, ROUX-EN-Y**

ROUX-EN-Y DIVERSION see **ANASTOMOSIS, ROUX-EN-Y**

ROUX-EN-Y LOOP see **ANASTOMOSIS, ROUX-EN-Y**

ROWSON-PARR VIRUS see **FRIEND VIRUS**

ROXARSONE

THERAPEUTIC USE

Effect of roxarsone and bacitracin methylene disalicylate on the development of immunity to Eimeria in broilers given a live coccidiosis vaccine. Chapman HD, et al. **Poult Sci** 1996 Dec;75(12):1488–92

ROXITHROMYCIN

ADMINISTRATION & DOSAGE

Effects of long-term low-dose macrolide administration on neutrophil recruitment and IL-8 in the nasal discharge of chronic sinusitis patients. Suzuki H, et al. **Tohoku J Exp Med** 1997 Jun;182(2):115–24

[Prophylactic use of roxithromycin in dental procedures] Gáspár L, et al. **Fogorv Sz** 1997 Aug;90(8):241–5 (Eng. Abstr.) **(Hun)**

ADVERSE EFFECTS

Roxithromycin-induced digoxin toxicity. Corallo CE, et al. **Med J Aust** 1996 Oct 21;165(8):433–4

Economic analysis of treatment with roxithromycin in comparison with erythromycin in patients with lower respiratory tract infections. Norinder A, et al. **Scand J Infect Dis** 1997;29(1):83–6

[Vascular purpura and cryoglobulinémia: the difficulties of pharmacovigilance (letter)] Sentenac L, et al. **Presse Med** 1996 Sep 21;25(27):1259 **(Fre)**

ECONOMICS

Economic analysis of antibiotic regimens used in the treatment pharyngitis: a prospective comparison of azithromycin versus roxithromycin. Carbon C, et al. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:151–61

Economic analysis of treatment with roxithromycin in comparison with erythromycin in patients with lower respiratory tract infections. Norinder A, et al. **Scand J Infect Dis** 1997;29(1):83–6

PHARMACOKINETICS

Pharmacokinetic interactions between erythromycin, clarithromycin, roxithromycin and phenytoin in the rat.

al-Humayyd MS. **Chemotherapy** 1997 Mar-Apr; 43(2):77-85

[New pharmacologic approaches to macrolides: example of roxithromycin] Bergogne-Bérézin E. **Presse Med** 1996 Dec 14;25(39):1982-8 (29 ref.) (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Inhibitory effect of roxithromycin on biofilm formation of Pseudomonas aeruginosa. Ozeki M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:61-3

Effects of roxithromycin and erythromycin on interleukin 8-induced neutrophil recruitment and goblet cell secretion in guinea pig tracheas. Tamaoki J, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1726-8

Effect of single oral dose of azithromycin, clarithromycin, and roxithromycin on polymorphonuclear leukocyte function assessed ex vivo by flow cytometry. Wenisch C, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2039-42

Suppression of cytokine production of human memory T cells by roxithromycin. Hirohata S, et al. **Arerugi** 1995 Nov; 44(11):1322-30

Effect of new macrolide roxithromycin upon nasal polyps associated with chronic sinusitis. Ichimura K, et al. **Auris Nasus Larynx** 1996;23:48-56

The macrolide antibiotic, roxithromycin suppresses IFN-gamma-mediated immunological functions of cultured normal human keratinocytes. Wakita H, et al. **Biol Pharm Bull** 1996 Feb;19(2):224-7

Interaction of macrolides with alpha dornase during DNA hydrolysis. Ripoll L, et al. **J Antimicrob Chemother** 1996 May;37(5):987-91

Effects of erythromycin and roxithromycin on oxidation of testosterone and nifedipine catalyzed by CYP3A4 in human liver microsomes. Yamazaki H, et al. **J Toxicol Sci** 1996 Nov;21(4):215-26

Modulatory effect of roxithromycin on human neutrophil function. Mitsuyama T, et al. **Res Exp Med (Berl)** 1996; 196(5):301-7

Effects of roxithromycin, erythromycin and troleandomycin on their N-demethylation by rat and human cytochrome P450 enzymes. Yamazaki H, et al. **Xenobiotica** 1996 Nov; 26(11):1143-53

[New pharmacologic approaches to macrolides: example of roxithromycin] Bergogne-Bérézin E. **Presse Med** 1996 Dec 14;25(39):1982-8 (29 ref.) (Eng. Abstr.) **(Fre)**

[New pharmacological approaches of macrolides. Example of roxithromycin] Bergogne-Bérézin E. **Presse Med** 1997 Mar;26 Suppl 2:4-10 (29 ref.) **(Fre)**

[Roxithromycin--a new macrolide antibiotic] Iakovlev SV, et al. **Ter Arkh** 1995;67(12):61-6 (72 ref.) **(Rus)**

THERAPEUTIC USE

Oral treatment of late Lyme borreliosis with a combination of roxithromycin and co-trimoxazole--a pilot study on 18 patients. Gasser R, et al. **Acta Med Austriaca** 1996; 23(3):99-101

Clinical effect of low-dose, long-term roxithromycin chemotherapy in patients with chronic sinusitis. Kimura N, et al. **Acta Med Okayama** 1997 Feb;51(1):33-7

Effect of new macrolide roxithromycin upon nasal polyps associated with chronic sinusitis. Ichimura K, et al. **Auris Nasus Larynx** 1996;23:48-56

Effects of long-term administration of roxithromycin on neutrophil count and interleukin-8 level in endometrial cavity subjected to pyometra. Mikamo H, et al. **Chemotherapy** 1997 Mar-Apr;43(2):148-52

Oral empiric treatment of community-acquired pneumonia. A multicenter, double-blind, randomized study comparing sparfloxacin with roxithromycin. The Scandinavian Sparfloxacin Study Group. Ortqvist A, et al. **Chest** 1996 Dec;110(6):1499-506

Effect of roxithromycin on airway responsiveness in children with bronchiectasis: a double-blind, placebo-controlled study [see comments] Koh YY, et al. **Eur Respir J** 1997 May;10(5):994-9. Comment in: Eur Respir J 1997 May;10(5):971-2.

Economic analysis of antibiotic regimens used in the treatment pharyngitis: a prospective comparison of azithromycin versus roxithromycin. Carbon C, et al. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:151-61

Efficacy, safety and tolerability of azithromycin versus roxithromycin in the treatment of acute lower respiratory tract infections. Laurent K. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:115-24

An open comparative study of azithromycin and roxithromycin in the treatment of acute upper respiratory tract infections. Müller O. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:83-92

Experience with roxithromycin in visceral leishmaniasis in north Bihar. Lal SK, et al. **J Assoc Physicians India** 1996 Sep;44(9):615-7

Roxithromycin attenuates acid-induced cough and water-induced bronchoconstriction in children with asthma. Shimizu T, et al. **J Asthma** 1997;34(3):211-7

Randomised trial of roxithromycin in non-Q-wave coronary syndromes: ROXIS Pilot Study. ROXIS Study Group [see comments] Gurfinkel E, et al. **Lancet** 1997 Aug 9; 350(9075):404-7. Comment in: Lancet 1997 Aug 9;350(9075):378-9.

An open evaluation of the efficacy and safety of the new macrolide roxithromycin in the treatment of lower respiratory tract infections and pneumonia in Nigerian patients. Isah AO, et al. **West Afr J Med** 1996 Apr-Jun; 15(2):111-6

[Antibiotic strategy in bronchial infections. Role of roxithromycin] Gaillat J. **Presse Med** 1997 Mar;26 Suppl 2:16-21 (26 ref.) **(Fre)**

[Asthma and Chlamydia pneumoniae. A future prospect for macrolides in general and roxithromycin in particular?] Mayaud C. **Presse Med** 1997 Mar;26 Suppl 2:27-9 (21 ref.) **(Fre)**

ROYAL FREE DISEASE see **FATIGUE SYNDROME, CHRONIC**

RRNA GENES see **RRNA OPERON**

RRNA OPERON

Sequence and copy number of the Xanthomonas campestris pv. campestris gene encoding 16S rRNA. Lin NT, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):276-80

Sex chromosome linkage of 5S rDNA in rainbow trout (Oncorhynchus mykiss). Moran P, et al. **Cytogenet Cell Genet** 1996;75(2-3):145-50

Upstream interactions at the lambda pRM promoter are sequence nonspecific and activate the promoter to a lesser extent than an introduced UP element of an rRNA promoter. Tang Y, et al. **J Bacteriol** 1996 Dec; 178(23):6945-51

DNA topoisomerases regulate R-loop formation during transcription of the rrnB operon in Escherichia coli. Massé E, et al. **J Biol Chem** 1997 May 9;272(19):12816-23

Source of variation detected in ribotyping patterns of Haemophilus influenzae: comparison of traditional ribotyping, PCR-ribotyping and rDNA restriction analysis. Jordens JZ, et al. **J Med Microbiol** 1997 Sep;46(9):763-72

Role of the spacer boxA of Escherichia coli ribosomal RNA operons in efficient 23 S rRNA synthesis in vivo. Pfeiffer T, et al. **J Mol Biol** 1997 Jan 31;265(4):385-93

Borrelia tanukii sp. nov. and Borrelia turdae sp. nov. found from ixodid ticks in Japan: rapid species identification by 16S rRNA gene-targeted PCR analysis. Fukunaga M, et al. **Microbiol Immunol** 1996;40(11):877-81

Functional promoter elements common to ribosomal protein and ribosomal RNA genes in Neurospora crassa. Cujec TP, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):205-16

Lack of polymorphism within the rRNA operons of group A streptococci. Sriprakash KS, et al. **Mol Gen Genet** 1997 Jun;255(1):125-30

Ribosomal RNA gene dosage in marine bacteria. Kerkhof L, et al. **Mol Mar Biol Biotechnol** 1997 Sep;6(3):260-7

Introducing mutations into a chromosomal rRNA gene using a genetically modified eubacterial host with a single rRNA operon. Sander P, et al. **Mol Microbiol** 1996 Dec; 22(5):841-8

System to study horizontal gene exchange among microorganisms without cultivation of recipients. Strätz M, et al. **Mol Microbiol** 1996 Oct;22(2):207-15

GENETICS

Molecular anatomy of a transcription activation patch: FIS-RNA polymerase interactions at the Escherichia coli rrnB P1 promoter. Bokal AJ, et al. **EMBO J** 1997 Jan 2;16(1):154-62

Regulation of ribosomal RNA gene transcription during retinoic acid-induced differentiation of mouse teratocarcinoma cells. Datta PK, et al. **Exp Cell Res** 1997 Feb 25;231(1):198-205

Organization and nucleotide sequence analysis of the ribosomal gene set (rrnB) from Streptomyces lividans. Zarko-Postawka M, et al. **Gene** 1997 Feb 7;185(2):231-7

Identification of sequences necessary for transcription in vitro from the Chlamydia trachomatis rRNA P1 promoter. Tan M, et al. **J Bacteriol** 1996 Dec;178(23):6975-82

Organ-specific transcription of the rrn operon in spinach plastids. Iratni R, et al. **J Biol Chem** 1997 May 23; 272(21):13676-82

Roles of DNA topoisomerases in the regulation of R-loop formation in vitro. Phoenix P, et al. **J Biol Chem** 1997 Jan 17;272(3):1473-9

Amplification and restriction endonuclease digestion of a large fragment of genes coding for rRNA as a rapid method for discrimination of closely related pathogenic bacteria [letter; comment] Smith-Vaughan HC, et al. **J Clin Microbiol** 1997 Jun;35(6):1646-7. Comment on: J Clin Microbiol 1996 Dec;34(12):2894-6.

Nucleotide sequence and analysis of the phoB-rrnE-groESL region of the Bacillus subtilis chromosome. Sadaie Y, et al. **Microbiology** 1997 Jun;143 (Pt 6):1861-6

RRNA PROMOTER see **RRNA OPERON**

RSH SYNDROME see **SMITH-LEMLI-OPITZ SYNDROME**

RT7 ANTIGENS see **ANTIGENS, CD45**

RU-486 see **MIFEPRISTONE**

RUBBER

Allergenic proteins in different brands of latex and synthetic medical examination gloves. Hoeyveld EM, et al. **Acta Clin Belg** 1997;52(2):99-105

An observation of the effects of paraffin paste on nasal epistaxis balloons. Ong CC, et al. **Acta Otorhinolaryngol Belg** 1996;50(3):171-5

Worker exposures to nitrosamines in a rubber vehicle sealing plant. Reh BD, et al. **Am Ind Hyg Assoc J** 1996 Oct; 57(10):918-23

Glove-related rhinopathy among hospital personnel. Kujala VM, et al. **Am J Ind Med** 1996 Aug;30(2):164-70

Longitudinal study of respiratory findings in rubber workers. Zuskin E, et al. **Am J Ind Med** 1996 Aug;30(2):171-9

Median nerve somatosensory evoked potentials in rubber factory workers. Kumar V, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):372-6

Auditory event related potentials (P300) in rubber factory workers--a preliminary study [letter] Kumar V, et al. **Indian J Physiol Pharmacol** 1996 Jul;40(3):274-6

Survival of Acinetobacter baumannii on dry surfaces. Wendt C, et al. **J Clin Microbiol** 1997 Jun;35(6):1394-7

Diffusion and molecular mobility in microporous media: applications to rubber and zeolite 4A powders. Halse MR. **Magn Reson Imaging** 1996;14(7-8):745-50

Cancer mortality among workers in the German rubber industry [letter; comment] Frentzel-Beyme F. **Occup Environ Med** 1997 Mar;54(3):216. Comment on: Occup Environ Med 1996 May;53(5):289-98.

Visual evoked potentials in rubber factory workers. Tandon OP, et al. **Occup Med (Oxf)** 1997 Jan;47(1):11-4

Microbial barrier assessment of Tyvek stopper packaging for rubber closures. Moldenhauer JE, et al. **PDA J Pharm Sci Technol** 1996 Nov-Dec;50(6):391-8

A follow-up study of synthetic rubber workers. Delzell E, et al. **Toxicology** 1996 Oct 28;113(1-3):182-9

Leukemia and cumulative exposure to butadiene, styrene and benzene among workers in the synthetic rubber industry. Macaluso M, et al. **Toxicology** 1996 Oct 28; 113(1-3):190-202

[An evaluation of the mutagenic activity of the air pollutants in the area of a plant for the manufacture of synthetic rubber by using Tradescantia (clone 02) as the test object] Atoiants AL, et al. **Tsitol Genet** 1996 May-Jun;30(3):26-31 (Eng. Abstr.) **(Rus)**

[Investigation of immune response in rubber workers at high risk for cancer] Belokhvostova AT, et al. **Vopr Onkol** 1996; 42(5):72-5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

IgE-mediated hypersensitivity to latex in childhood. Theissen U, et al. **Allergy** 1997 Jun;52(6):665-9

Natural rubber latex allergy. Turjanmaa K, et al. **Allergy** 1996 Sep;51(9):593-602 (96 ref.)

Safe use of natural rubber latex [editorial] Sussman GL, et al. **Allergy Asthma Proc** 1996 Mar-Apr;17(2):101-2

NIOSH recommends steps for reducing work-related exposure to latex [news] **Am J Health Syst Pharm** 1997 Aug 1;54(15):1688, 1691

Postal questionnaire study of disability associated with latex allergy among health care workers in Finland. Kujala VM, et al. **Am J Ind Med** 1997 Sep;32(3):197-204

Latex sensitivity in children with spina bifida: implications for occupational therapy practitioners. Scoggin AE, et al. **Am J Occup Ther** 1997 Jul-Aug;51(7):608-11 (21 ref.)

Latex allergy: an emerging clinical and occupational health problem. Kam PC, et al. **Anaesthesia** 1997 Jun;52(6):570-5 (45 ref.)

Association between latex sensitization and repeated latex exposure in children. Porri F, et al. **Anesthesiology** 1997 Mar;86(3):599-602

Latex allergy [letter] McKenna J. **Br Dent J** 1997 Aug 23; 183(4):120

Allergies and anaesthesia [letter] Seigne R. **Br J Anaesth** 1997 Jun;78(6):778

Latex allergy: an emerging health hazard for operating theatre staff [letter] Cresswell T. **Br J Surg** 1997 Aug; 84(8):1170-1

Latex allergy: an emerging health hazard for operating theatre staff. Kam PC, et al. **Br J Surg** 1997 Mar; 84(3):289-90

Latex allergy in patients with spinal dysraphism: the role of multiple surgery. Ziylan HO, et al. **Br J Urol** 1996 Nov; 78(5):777-9

Crossreactivity between allergens in natural rubber latex and banana studied by immunoblot inhibition. Alenius H, et al. **Clin Exp Allergy** 1996 Mar;26(3):341-8

Prevalence of latex sensitization in subjects attending health screening: implications for a perioperative screening. Porri F, et al. **Clin Exp Allergy** 1997 Apr;27(4):413-7

Latex allergy. Wooding LG, et al. **Compr Ther** 1996 Jun; 22(6):384-92 (30 ref.)

Natural rubber latex contact dermatitis with features of erythema multiforme. Bourrain JL, et al. **Contact Dermatitis** 1996 Jul;35(1):55-6

Isolated delayed-type hypersensitivity to latex rubber. Häffner AC, et al. **Contact Dermatitis** 1996 Oct;35(4):247-8

Results of patch testing with a special series of rubber allergens. Holness DL, et al. **Contact Dermatitis** 1997 Apr; 36(4):207-11

Allergic patch test reactions caused by the rubber chemical cyclohexyl thiophthalimide. Kanerva L, et al. **Contact Dermatitis** 1996 Jan;34(1):23-6

Contact allergy and exposure patterns to thiurams and

carbamates in consecutive patients. Knudsen BB, et al. **Contact Dermatitis** 1996 Aug;35(2):97–9

Contact dermatitis due to rubber boots worn by Japanese farmers, with special attention to 6–ethoxy–2,2,4–trimethyl–1,2–dihydroquinoline (ETMDQ) sensitivity. Nishioka K, et al. **Contact Dermatitis** 1996 Oct; 35(4):241–5

Coexistence of type I and type IV allergy to rubber latex. Placucci F, et al. **Contact Dermatitis** 1996 Jan;34(1):76

Footwear contact dermatitis in children. Roul S, et al. **Contact Dermatitis** 1996 Dec;35(6):334–6

Natural rubber latex as an aeroallergen in the general environment. Ruëff F, et al. **Contact Dermatitis** 1996 Jul; 35(1):46–7

The first report of latex contact urticaria in Hungary. Temesvári E, et al. **Contact Dermatitis** 1996 Jul;35(1):52–3

Rubber glove dermatitis: a significant occupational hazard–prevention. Estlander T, et al. **Curr Probl Dermatol** 1996;25:170–6 (32 ref.)

Contact dermatitis of the ear due to a rubber earplug. Deguchi M, et al. **Dermatology** 1996;193(3):251–2

Latex allergies stretch beyond rubber gloves [news] **Environ Health Perspect** 1996 Sep;104(9):916

Natural rubber latex skin testing reagents: safety and diagnostic accuracy of nonammoniated latex, ammoniated latex, and latex rubber glove extracts. Hamilton RG, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):872–83

Absence of cross–reactivity of IgE antibodies from subjects allergic to Hevea brasiliensis latex with a new source of natural rubber latex from guayule (Parthenium argentatum). Siler DJ, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):895–902

Concurrent sensitization to natural rubber latex and human seminal fluid [letter] Yocum MW, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 1):1135–6

The use of powdered gloves in dental practice: a cause for concern? Field EA. **J Dent** 1997 May–Jul;25(3–4):209–14

Natural rubber latex allergy: spectrum, diagnostic approach, and therapy. Woods JA, et al. **J Emerg Med** 1997 Jan–Feb; 15(1):71–85 (80 ref.)

Use of a breathable glove liner for prevention of delayed hypersensitivity to rubber accelerators [letter] Scheman A, et al. **J Occup Environ Med** 1997 Jul;39(7):605

Current perspectives on latex allergy [see comments] Landwehr LP, et al. **J Pediatr** 1996 Mar;128(3):305–12 (63 ref.). Comment in: J Pediatr 1996 Nov;129(5):771–2.

Do latex precautions in children with myelodysplasia reduce intraoperative allergic reactions? Birmingham PK, et al. **J Pediatr Orthop** 1996 Nov–Dec;16(6):799–802

Latex allergy: a real problem [letter] Christopher CN. **Med J Aust** 1996 Oct 21;165(8):460

Latex allergy. Considerations for the care of pediatric patients and employee safety. Young MA, et al. **Nurs Clin North Am** 1997 Mar;32(1):169–82 (47 ref.)

Latex allergy: epidemiological study of 1351 hospital workers. Liss GM, et al. **Occup Environ Med** 1997 May; 54(5):335–42

Latex allergy and anaphylaxis in a child undergoing craniofacial surgery. Peng C, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1290–2

In vivo and vitro in diagnosis of latex allergy at Groote Schuur Hospital. Marais GI, et al. **S Afr Med J** 1997 Aug; 87(8):1004–8

Transvaginal ultrasound may cause latex anaphylaxis [letter] Bronshtein M, et al. **Ultrasound Obstet Gynecol** 1996 May; 7(5):379–80

An alternative to the Penrose drain in children at risk for latex allergy. Vates TS, et al. **Urology** 1997 Mar;49(3):454–5

Latex allergy. Fame TM. **Va Med Q** 1997 Winter;124(1):45–7

Latex allergy. Shusterman D. **West J Med** 1996 Sep; 165(3):141–2

[Latex allergy—it concerns all of us. Primary, secondary and tertiary prevention from the viewpoint of occupational medicine] Drexler H, et al. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1198–203 (17 ref.) **(Ger)**

[Allergic sensitization and latex–associated symptoms in a group of health workers] Fiorito A, et al. **Med Lav** 1996 Sep–Oct;87(5):423–31 (Eng. Abstr.) **(Ita)**

[Latex: an allergological emergency? An update and outlook] La Grutta S, et al. **Pediatr Med Chir** 1996 Nov–Dec; 18(6):545–8 (24 ref.) (Eng. Abstr.) **(Ita)**

[Latex allergy in children with myelomeningocele. Incidence and associated factors] Estornell Moragues F, et al. **Actas Urol Esp** 1997 Mar;21(3):227–35 (46 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

Protein and allergen content of various natural latex articles. Baur X, et al. **Allergy** 1997 Jun;52(6):661–4

Rubber stoppers as sources of contaminants in electrospray analysis of peptides and proteins. Zhang XK, et al. **Anal Chem** 1996 Sep 15;68(18):3288–9

Extraction of mercaptobenzothiazole compounds from rubber products. Hansson C, et al. **Contact Dermatitis** 1997 Apr;36(4):195–200

N–nitrosodibenzylamine in boneless hams processed in elastic rubber nettings. Fiddler W, et al. **J AOAC Int** 1997 Mar–Apr;80(2):353–8

The protein content of dental rubber dams. Martin KM, et al. **J Dent** 1997 May–Jul;25(3–4):347–50

Environmental health implications of heavy metal pollution from car tires. Horner JM. **Rev Environ Health** 1996 Oct–Dec;11(4):175–8 (12 ref.)

CHEMISTRY

Accuracy of filled elastomeric infusion device after long–term storage [letter; comment] Dasher T. **Am J Health Syst Pharm** 1996 Sep 1;53(17):2099. Comment on: Am J Health Syst Pharm 1996 Apr 1;53(7):794–5.

Force decay and deformation of orthodontic elastomeric ligatures. Taloumis LJ, et al. **Am J Orthod Dentofacial Orthop** 1997 Jan;111(1):1–11

Determination of fluoride from fluoride–releasing elastomeric ligature ties [see comments] Wiltshire WA. **Am J Orthod Dentofacial Orthop** 1996 Oct;110(4):383–7. Comment in: Am J Orthod Dentofacial Orthop 1997 Apr;111(4):33A.

A laboratory study of dimensional changes for three elastomeric impression materials using custom and stock trays. Boulton JL, et al. **Aust Dent J** 1996 Dec; 41(6):398–404

Mechanical properties of hydrogels and their experimental determination. Anseth KS, et al. **Biomaterials** 1996 Sep; 17(17):1647–57 (51 ref.)

Analysis of medication off–odors using an electronic nose. Schiffman SS, et al. **Chem Senses** 1997 Apr;22(2):119–28

The 14.6 kd rubber elongation factor (Hev b 1) and 24 kd (Hev b 3) rubber particle proteins are recognized by IgE from patients with spina bifida and latex allergy. Yeang HY, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):628–39

The effect of strain state on the biostability of a poly(etherurethane urea) elastomer. Schubert MA, et al. **J Biomed Mater Res** 1997 Jun 5;35(3):319–28

Adhesion of elastomeric impression materials to trays. Bindra B, et al. **J Oral Rehabil** 1997 Jan;24(1):63–9

Dimensional stability of seven elastomeric impression materials immersed in disinfectants [published erratum appears in J Prosthet Dent 1997 Apr;77(4):422] Thouati A, et al. **J Prosthet Dent** 1996 Jul;76(1):8–14

Investigation of aging in polymer networks by T1 rho material property NMR imaging. Barth P, et al. **Magn Reson Imaging** 1997;15(1):107–12

The influence of molecular motion on cross–polarization in cross–linked elastomers. Fülber C, et al. **Solid State Nucl Magn Reson** 1996 Jun;6(3):213–23

Visualization of residual anisotropic interactions in crosslinked natural rubbers by dipolar local field measurements and 2H natural abundance NMR spectroscopy. Malveau C, et al. **Solid State Nucl Magn Reson** 1997 Feb;7(4):271–80

METABOLISM

Bacteria breakfast. Frazer L. **Environ Health Perspect** 1996 Nov;104(11):1162–4

Bacterial degradation of natural rubber: a privilege of actinomycetes? Jendrossek D, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):179–88

PHARMACOLOGY

Lymphocyte proliferation response to extracts from different latex materials and to the purified latex allergen Hev b 1 (rubber elongation factor). Raulf–Heimsoth M, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):640–51

RADIATION EFFECTS

Color changes in dry–pigmented maxillofacial elastomer resulting from ultraviolet light exposure. Beatty MW, et al. **J Prosthet Dent** 1995 Nov;74(5):493–8

STANDARDS

Latex allergy diagnosis: in vivo and in vitro standardization of a natural rubber latex extract. Turjanmaa K, et al. **Allergy** 1997 Jan;52(1):41–50

TOXICITY

Rubber tire leachates in the aquatic environment. Evans JJ. **Rev Environ Contam Toxicol** 1997;151:67–115 (125 ref.)

RUBBER DAMS

Relevance of the use of rubber dam in microbiological sampling of carious dentine. Kidd EA, et al. **Caries Res** 1997;31(1):41–3

Fissure sealants and dental dam. Liebenberg WH. **J Can Dent Assoc** 1997 Jul–Aug;63(7):565–6

The protein content of dental rubber dams. Martin KM, et al. **J Dent** 1997 May–Jul;25(3–4):347–50

RUBBER SILICONE see **SILICONE ELASTOMERS**

RUBEFACIENTS see **IRRITANTS**

RUBELLA

[Encephalitis located at bilateral corpus callosum on MRI—a case report] Sakamoto T, et al. **No To Shinkei** 1997 Apr; 49(4):349–52 (Eng. Abstr.) **(Jpn)**

[Effect of infection with herpes simplex and rubella virus of highly differentiated human and guinea pig astrocytes] Poleshchuk NN, et al. **Biull Eksp Biol Med** 1996 Oct; 122(10):413–7 **(Rus)**

COMPLICATIONS

[Rubella virus] Abe T, et al. **Nippon Rinsho** 1997 Apr; 55(4):865–9 (14 ref.) (Eng. Abstr.) **(Jpn)**

[A case of encephalitis of mixed Coxsackievirus B4 and rubella viral etiology in a 9–year old boy] Taraszkiewicz F, et al. **Pol Merkuriusz Lek** 1996 Dec;1(6):417–8 (Eng. Abstr.) **(Pol)**

CONGENITAL

Plotting the demise of congenital rubella and varicella [editorial] Forrest JM, et al. **Aust N Z J Public Health** 1996 Feb;20(1):4–6

DIAGNOSIS

Seroconversion to human herpesvirus 6 and human herpesvirus 7 among Brazilian children with clinical diagnoses of measles or rubella. Black JB, et al. **Clin Infect Dis** 1996 Nov;23(5):1156–8

Evaluation of a new enzyme immunoassay based on recombinant Rubella virus–like particles for detection of immunoglobulin M antibodies to Rubella virus. Grangeot–Keros L, et al. **J Clin Microbiol** 1997 Feb; 35(2):398–401

The role of rubella–immunoblot and rubella–peptide–EIA for the diagnosis of the congenital rubella syndrome during the prenatal and newborn periods. Meitsch K, et al. **J Med Virol** 1997 Apr;51(4):280–3

Use of reverse–transcription polymerase chain reaction for detection of rubella virus RNA in cell cultures inoculated with clinical samples. Revello MG, et al. **New Microbiol** 1997 Jul;20(3):197–206

[Simplified avidity assay of rubella IgG antibody in rubella virus infection] Hoshiba T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Jun;48(6):413–8 (Eng. Abstr.) **(Jpn)**

[Specific IgG avidity in the diagnosis of rubella virus infection (letter)] de Ory F, et al. **Med Clin (Barc)** 1996 Jun 15;107(3):118 **(Spa)**

DRUG THERAPY

Antiviral activity of natural and semisynthetic polysaccharides on the early steps of rubella virus infection. Mastromarino P, et al. **J Antimicrob Chemother** 1997 Mar; 39(3):339–45

EPIDEMIOLOGY

The epidemiology of rubella in England and Wales before and after the 1994 measles and rubella vaccination campaign: fourth joint report from the PHLS and the National Congenital Rubella Surveillance Programme. Miller E, et al. **Commun Dis Rep CDR Rev** 1997 Feb 7; 7(2):R26–32

An outbreak of rubella in British troops in Bosnia. Adams MS, et al. **Epidemiol Infect** 1997 Jun;118(3):253–7

Age–stratified seroprevalence of measles, mumps and rubella (MMR) virus infections in Switzerland after the introduction of MMR mass vaccination. Matter L, et al. **Eur J Epidemiol** 1997 Jan;13(1):61–6

Rubella infection during pregnancy in the 1985–86 epidemic: follow–up after seven years. Zgórniak–Nowosielska I, et al. **Eur J Epidemiol** 1996 Jun;12(3):303–8

Rubella and congenital rubella syndrome--United States, 1994–1997. **MMWR Morb Mortal Wkly Rep** 1997 Apr 25; 46(16):350–4

Rubella immunization. Kimberlin DW. **Pediatr Ann** 1997 Jun; 26(6):366–70 (22 ref.)

[Rubella in 1995] Rudnicka H. **Przegl Epidemiol** 1997; 51(1–2):63–6 **(Pol)**

[Acute rubella virus infection in women of reproductive age in Vojvodina 1994–1995] Miloševic V, et al. **Med Pregl** 1997 Mar–Apr;50(3–4):81–5 (Eng. Abstr.) **(Scr)**

IMMUNOLOGY

Rubella seroprevalence in the Singapore Armed Forces (SAF) and the changing need of the SAF rubella immunisation programme. Lim MK, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):37–9

Definition of three minimal T helper cell epitopes of rubella virus E1 glycoprotein. Marttila J, et al. **Clin Exp Immunol** 1996 Jun;104(3):394–7

Detection and comparison of viral antigens in measles and rubella rashes. Takahashi H, et al. **Clin Infect Dis** 1996 Jan;22(1):36–9

Immunoglobulin G subclass antibodies to rubella virus in chronic liver disease, acute rubella and healthy controls. Kalvenes MB, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):43–50

Seroprevalence of rubella in women of reproductive age. Yadav S, et al. **Indian J Pathol Microbiol** 1995 Apr; 38(2):139–42

Immunogenicity and reactogenicity of indigenously produced MMR vaccine. Bhargava I, et al. **Indian Pediatr** 1995 Sep;32(9):983–8

Improvement in establishing the period of rubella virus primary infection using a mild protein denaturant. Condorelli F, et al. **J Virol Methods** 1997 Jun;66(1):109–12

Congenital rubella reinfection in a mother with anti–cardiolipin and anti–platelet antibodies. Barfield W, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):249–51

[Autoimmune hemolytic anemia caused by cold agglutinins of the anti-Pr specificity after rubella infection] König AL, et al. **Beitr Infusionsther Transfusionsmed** 1996;33:26-9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Encephalitis and polyradiculoneuritis following rubella virus infection--a case report. Chang DI, et al. **J Korean Med Sci** 1997 Apr;12(2):168-70

PREVENTION & CONTROL

A comparison of hospital policies for measles, mumps, and rubella infection control in Los Angeles County, 1989 and 1992. Ewert DP, et al. **Am J Infect Control** 1995 Dec; 23(6):369-72

Rubella seroprevalence in the Singapore Armed Forces (SAF) and the changing need of the SAF rubella immunisation programme. Lim MK, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):37-9

Plotting the demise of congenital rubella and varicella [editorial] Forrest JM, et al. **Aust N Z J Public Health** 1996 Feb;20(1):4-6

Control of rubella and congenital rubella syndrome (CRS) in developing countries, Part 1: Burden of disease from CRS. Cutts FT, et al. **Bull World Health Organ** 1997; 75(1):55-68 (104 ref.)

Control of rubella and congenital rubella syndrome (CRS) in developing countries, Part 2: Vaccination against rubella. Robertson SE, et al. **Bull World Health Organ** 1997; 75(1):69-80 (67 ref.)

Should Sri Lanka reconsider its rubella immunisation strategy? Gunasekara PC, et al. **Ceylon Med J** 1997 Jun; 42(2):64-6

The epidemiology of rubella in England and Wales before and after the 1994 measles and rubella vaccination campaign: fourth joint report from the PHLS and the National Congenital Rubella Surveillance Programme. Miller E, et al. **Commun Dis Rep CDR Rev** 1997 Feb 7; 7(2):R26-32

The measles/rubella immunisation campaign in Scotland. Skinner R, et al. **Health Bull (Edinb)** 1996 Jan;54(1):88-98

Rubella reimmunization: comparative analysis of the immunoglobulin G response to rubella virus vaccine in previously seronegative and seropositive individuals. Mitchell LA, et al. **J Clin Microbiol** 1996 Sep;34(9):2210-8

Randomised double-blind placebo-controlled study on adverse effects of rubella immunisation in seronegative women. Tingle AJ, et al. **Lancet** 1997 May 3; 349(9061):1277-81

Seroepidemiology of measles, mumps and rubella virus infections in normal children and adults in southern Granada, Spain: response to a vaccination programme. Gutiérrez J, et al. **Microbios** 1996;88(356):143-8

Rubella immunization. Kimberlin DW. **Pediatr Ann** 1997 Jun; 26(6):366-70 (22 ref.)

Control of rubella in Israel: progress and challenge. Slater PE, et al. **Public Health Rev** 1996;24(2):183-92

Rubella immunity and morbidity: impact of different vaccination programs in Finland 1979-1992. Ukkonen P. **Scand J Infect Dis** 1996;28(1):31-5

Seroprevalence of rubella antibodies and effects of vaccination among healthy university women students in Korea. Park KS, et al. **Yonsei Med J** 1996 Dec;37(6):420-6

[Measles, mumps and rubella vaccination status of school beginners in Munich] Markuzzi A, et al. **Soz Praventivmed** 1997;42(3):133-43 (Eng. Abstr.) **(Ger)**

[Study and assessment of the antigenic activity and reactivity of rubella vaccine] Popov VF, et al. **Vopr Virusol** 1997 Jul-Aug;42(4):165-7 (Eng. Abstr.) **(Rus)**

[The vaccinal prophylaxis of rubella] Lavrent'eva IN. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov-Dec; (6):109-13 (45 ref.) **(Rus)**

TRANSMISSION

Subclinical rubella reinfection during pregnancy followed by transmission of virus to the fetus. Aboudy Y, et al. **J Infect** 1997 May;34(3):273-6

VIROLOGY

A search for persistent rubella virus infection in persons with chronic symptoms after rubella and rubella immunization and in patients with juvenile rheumatoid arthritis. Frenkel LM, et al. **Clin Infect Dis** 1996 Feb;22(2):287-94

Molecular epidemiology of rubella by nucleotide sequences of the rubella virus E1 gene in three East Asian countries. Katow S, et al. **J Infect Dis** 1997 Sep;176(3):602-16

Reinfection-induced increase of rubella persistently infected cells in a macrophage-like cell line. Sarmiento RE, et al. **Virus Res** 1997 Jul;50(1):15-22

RUBELLA SYNDROME, CONGENITAL

[Congenital rubella syndrome] Ozasa H, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):464-6 (12 ref.) **(Jpn)**

COMPLICATIONS

[Progressive rubella panencephalitis] Kuroda Y, et al. **Nippon Rinsho** 1997 Apr;55(4):922-5 (11 ref.) (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Prenatal diagnosis of rubella virus infection by direct detection and semiquantitation of viral RNA in clinical samples by reverse transcription-PCR. Revello MG, et al. **J Clin Microbiol** 1997 Mar;35(3):708-13

The role of rubella-immunoblot and rubella-peptide-EIA for the diagnosis of the congenital rubella syndrome during the prenatal and newborn periods. Meitsch K, et al. **J Med Virol** 1997 Apr;51(4):280-3

[Computed tomography and magnetic resonance imaging of the brain in congenital rubella syndrome] Yoshimura M, et al. **No To Hattatsu** 1996 Sep;28(5):385-90 (Eng. Abstr.) **(Jpn)**

[Supravalvar and valvar aortic stenosis associated with valvar and subvalvar pulmonary stenosis. Coexistence of two clinical syndromes] Atik FA, et al. **Arq Bras Cardiol** 1996 May;66(5):281-4 (Eng. Abstr.) **(Por)**

EPIDEMIOLOGY

Rubella and congenital rubella syndrome--United States, 1994-1997. **MMWR Morb Mortal Wkly Rep** 1997 Apr 25; 46(16):350-4

Prevalence of sensorineural hearing loss due to rubella in Saudi children. Zakzouk SM, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Mar-Apr; 58(2):74-7

IMMUNOLOGY

Congenital rubella reinfection in a mother with anti-cardiolipin and anti-platelet antibodies. Barfield W, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):249-51

PATHOLOGY

Frequency of linear hyperechogenicity over the basal ganglia in young infants with congenital rubella syndrome. Chang YC, et al. **Clin Infect Dis** 1996 Mar;22(3):569-71

RUBELLA VACCINE

No sex differences in immunisation rates of British south Asian children: the effect of migration? Martineau A, et al. **BMJ** 1997 Mar 1;314(7081):642-3

Control of rubella and congenital rubella syndrome (CRS) in developing countries, Part 2: Vaccination against rubella. Robertson SE, et al. **Bull World Health Organ** 1997; 75(1):69-80 (67 ref.)

Measles control [letter] Durham G. **N Z Med J** 1997 Jul 11;110(1047):259

Rubella immunization. Kimberlin DW. **Pediatr Ann** 1997 Jun; 26(6):366-70 (22 ref.)

[Comparison of the efficacy of various strains of mumps vaccine: a school survey] Toscani L, et al. **Soz Praventivmed** 1996;41(6):341-7 (Eng. Abstr.) **(Fre)**

ADMINISTRATION & DOSAGE

A second dose of MMR vaccine for children in the United Kingdom. **Commun Dis Rep CDR Wkly** 1996 Jul 26; 6(30):259

Seroepidemiological study of measles after the 1992 nationwide MMR revaccination program in Taiwan. Chiu HH, et al. **J Med Virol** 1997 Jan;51(1):32-5

From the Centers for Disease Control and Prevention. Immunization of adolescents. Recommendations of the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Medical Association. **JAMA** 1997 Jan 15;277(3):202-7

From the Centers for Disease Control and Prevention. Measles--United States, 1996, and the interruption of indigenous transmission. **JAMA** 1997 May 7;277(17):1345-6

Immunization of adolescents. Recommendations of the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Medical Association. **MMWR Morb Mortal Wkly Rep** 1996 Nov 22;45(RR-13):1-16

Measles, mumps, and rubella: recommendations for children/adolescents. **Nurse Pract** 1996 Oct;21(10):88, 91-2, 94

Antibody persistence after primary measles-mumps-rubella vaccine and response to a second dose given at four to six vs. eleven to thirteen years. Johnson CE, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):687-92

Would better adherence to guidelines improve childhood immunization rates? Lieu TA, et al. **Pediatrics** 1996 Dec; 98(6 Pt 1):1062-8

[Opinions and practices of family physicians regarding measles-mumps-rubella vaccination] Janvrin MP, et al. **Arch Pediatr** 1996 Jun;3(6):602-7 (Eng. Abstr.) **(Fre)**

[Mumps epidemic in vaccinated children in West Switzerland] Ströhle A, et al. **Schweiz Med Wochenschr** 1997 Jun 28;127(26):1124-33 (Eng. Abstr.) **(Ger)**

[Measles, mumps and rubella vaccination status of school beginners in Munich] Markuzzi A, et al. **Soz Praventivmed** 1997;42(3):133-43 (Eng. Abstr.) **(Ger)**

[Pre- and postgestational vaccination] Figueroa-Damián R. **Ginecol Obstet Mex** 1996 Jul;64:310-5 (27 ref.) (Eng. Abstr.) **(Spa)**

[Is a second dose of the triple viral vaccine necessary? (letter; comment)] Echevarría JM, et al. **Med Clin (Barc)** 1997 Jun 28;109(5):196-7. Comment on: Med Clin (Barc) 1996 Apr 20;106(15):561-4. **(Spa)**

ADVERSE EFFECTS

Chronic arthropathy and musculoskeletal symptoms associated with rubella vaccines. A review of 124 claims submitted to the National Vaccine Injury Compensation Program [published erratum appears in Arthritis Rheum 1996 Nov;39(11):1930] Weibel RE, et al. **Arthritis Rheum** 1996 Sep;39(9):1529-34

Optic neuritis following measles/rubella vaccination in two 13-year-old children [letter] Stevenson VL, et al. **Br J Ophthalmol** 1996 Dec;80(12):1110-1

A search for persistent rubella virus infection in persons with chronic symptoms after rubella and rubella immunization and in patients with juvenile rheumatoid arthritis. Frenkel LM, et al. **Clin Infect Dis** 1996 Feb;22(2):287-94

Risk of chronic arthropathy among women after rubella vaccination. Vaccine Safety Datalink Team [see comments] Ray P, et al. **JAMA** 1997 Aug 20;278(7):551-6. Comment in: JAMA 1997 Aug 20;278(7):594-5.

Chronic arthropathy after rubella vaccination in women. False alarm? [editorial; comment] Slater PE. **JAMA** 1997 Aug 20;278(7):594-5. Comment on: JAMA 1997 Aug 20;278(7):551-6.

Randomised double-blind placebo-controlled study on adverse effects of rubella immunisation in seronegative women. Tingle AJ, et al. **Lancet** 1997 May 3; 349(9061):1277-81

Risk of hospitalization because of aseptic meningitis after measles-mumps-rubella vaccination in one- to two-year-old children: an analysis of the Vaccine Safety Datalink (VSD) Project. Black S, et al. **Pediatr Infect Dis J** 1997 May;16(5):500-3

Indications for measles-mumps-rubella vaccination in a child with prior thrombocytopenia purpura. Pool V, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):423-4

Safety and immunogenicity of concurrent administration of measles-mumps-rubella-varicella vaccine and PedvaxHIB vaccines in healthy children twelve to eighteen months old. The MMRV Study Group. Reuman PD, et al. **Pediatr Infect Dis J** 1997 Jul;16(7):662-7

Modified varicella-like syndrome in children previously vaccinated with live attenuated measles, mumps, rubella and varicella vaccine. Walter EB, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):626-7

Recurrent thrombocytopenic purpura [letter] Lloyd-Puryear MA, et al. **Pediatrics** 1997 Mar;99(3):499

Expanded programme on immunization (EPI). Adverse events following administration of measles-rubella vaccine. **Wkly Epidemiol Rec** 1996 Oct 25;71(43):321-3 **(Eng, Fre)**

[Thrombocytopenic purpura after isolated or combined vaccination against measles, mumps and rubella] Autret E, et al. **Therapie** 1996 Nov-Dec;51(6):677-80 (Eng. Abstr.) **(Fre)**

[Acute thrombocytopenic purpura following rubella vaccination] Yamamoto T, et al. **Rinsho Ketsueki** 1996 Nov; 37(11):1328-30 (Eng. Abstr.) **(Jpn)**

[Neurological involvement following triple virus vaccine] Palao Sánchez A, et al. **Rev Neurol** 1997 Jan;25(137):75-7 (Eng. Abstr.) **(Spa)**

GENETICS

Genomic sequence of the RA27/3 vaccine strain of rubella virus. Pugachev KV, et al. **Arch Virol** 1997;142(6):1165-80

IMMUNOLOGY

Response to measles, mumps and rubella vaccine in paediatric bone marrow transplant recipients. King SM, et al. **Bone Marrow Transplant** 1996 Apr;17(4):633-6

Age-stratified seroprevalence of measles, mumps and rubella (MMR) virus infections in Switzerland after the introduction of MMR mass vaccination. Matter L, et al. **Eur J Epidemiol** 1997 Jan;13(1):61-6

Evaluation of a new enzyme immunoassay based on recombinant Rubella virus-like particles for detection of immunoglobulin M antibodies to Rubella virus. Grangeot-Keros L, et al. **J Clin Microbiol** 1997 Feb; 35(2):398-401

Serum levels of rubella virus antibodies indicating immunity: response to vaccination of subjects with low or undetectable antibody concentrations. Matter L, et al. **J Infect Dis** 1997 Apr;175(4):749-55

Seroepidemiological study of measles after the 1992 nationwide MMR revaccination program in Taiwan. Chiu HH, et al. **J Med Virol** 1997 Jan;51(1):32-5

Antibody persistence after primary measles-mumps-rubella vaccine and response to a second dose given at four to six vs. eleven to thirteen years. Johnson CE, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):687-92

Indications for measles-mumps-rubella vaccination in a child with prior thrombocytopenia purpura. Pool V, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):423-4

Rubella immunity and morbidity: impact of different vaccination programs in Finland 1979-1992. Ukkonen P. **Scand J Infect Dis** 1996;28(1):31-5

Serologic response to measles-mumps-rubella vaccine among children with upper respiratory tract infection. Cilla G, et al. **Vaccine** 1996 Apr;14(6):492-4

Kinetics of immunologic responses after primary MMR

RUBELLA VACCINE

vaccination. Pabst HF, et al. **Vaccine** 1997 Jan;15(1):10–4

[Study and assessment of the antigenic activity and reactivity of rubella vaccine] Popov VF, et al. **Vopr Virusol** 1997 Jul–Aug;42(4):165–7 (Eng. Abstr.) **(Rus)**

[The vaccinal prophylaxis of rubella] Lavrent'eva IN. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec; (6):109–13 (45 ref.) **(Rus)**

THERAPEUTIC USE

Rubella reimmunization: comparative analysis of the immunoglobulin G response to rubella virus vaccine in previously seronegative and seropositive individuals. Mitchell LA, et al. **J Clin Microbiol** 1996 Sep;34(9):2210–8

RUBELLA VIRUS

Non Hepatitis viruses in causation of acute sporadic non–A, non–B viral hepatitis. Prakash C, et al. **J Commun Dis** 1996 Sep;28(3):185–8

[A case report of subacute panencephalitis associated with specific T cells sensitized to proteolipid protein (PLP) synthetic peptides identified with rubella virus] Nomura K, et al. **Rinsho Shinkeigaku** 1996 Sep;36(9):1074–8 (Eng. Abstr.) **(Jpn)**

[Effect of infection with herpes simplex and rubella virus of highly differentiated human and guinea pig astrocytes] Poleshchuk NN, et al. **Biull Eksp Biol Med** 1996 Oct; 122(10):413–7 **(Rus)**

CHEMISTRY

Purification of rubella virus E1–E2 protein complexes by immunoaffinity chromatography. van Sommeren AP, et al. **J Virol Methods** 1997 Jan;63(1–2):37–46

Analyses of disulfides present in the rubella virus E1 glycoprotein. Gros C, et al. **Virology** 1997 Apr 14; 230(2):179–86

GENETICS

Genomic sequence of the RA27/3 vaccine strain of rubella virus. Pugachev KV, et al. **Arch Virol** 1997;142(6):1165–80

Prenatal diagnosis of rubella virus infection by direct detection and semiquantitation of viral RNA in clinical samples by reverse transcription–PCR. Revello MG, et al. **J Clin Microbiol** 1997 Mar;35(3):708–13

Nucleotide sequence analysis of a major antigenic domain of the E1 glycoprotein of 22 rubella virus isolates. Bosma TJ, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2523–30

Molecular epidemiology of rubella by nucleotide sequences of the rubella virus E1 gene in three East Asian countries. Katow S, et al. **J Infect Dis** 1997 Sep;176(3):602–16

Detection of rubella, mumps, and measles virus genomic RNA in cells from synovial fluid and peripheral blood in early rheumatoid arthritis. Zhang D, et al. **J Rheumatol** 1997 Jul;24(7):1260–5

Improvement of the specific infectivity of the rubella virus (RUB) infectious clone: determinants of cytopathogenicity induced by RUB map to the nonstructural proteins. Pugachev KV, et al. **J Virol** 1997 Jan;71(1):562–8

GROWTH & DEVELOPMENT

Reinfection–induced increase of rubella persistently infected cells in a macrophage–like cell line. Sarmiento RE, et al. **Virus Res** 1997 Jul;50(1):15–22

IMMUNOLOGY

Rubella seroprevalence in the Singapore Armed Forces (SAF) and the changing need of the SAF rubella immunisation programme. Lim MK, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):37–9

Presence of a neutralizing domain in isolates of rubella virus in Cordoba, Argentina. Cordoba P, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):493–5

Detection of rubella virus–specific immunoglobulin M antibodies with a baculovirus–expressed E1 protein. Schmidt M, et al. **Clin Diagn Lab Immunol** 1996 Mar; 3(2):216–8

Definition of three minimal T helper cell epitopes of rubella virus E1 glycoprotein. Marttila J, et al. **Clin Exp Immunol** 1996 Jun;104(3):394–7

False–positive results of an enzyme immunoassay for rubella IgM in a case of measles. Donovan SM. **Clin Infect Dis** 1997 Feb;24(2):271–2

Immunoglobulin G subclass antibodies to rubella virus in chronic liver disease, acute rubella and healthy controls. Kalvenes MB, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):43–50

Characterization of the HLA–restrictive elements of a rubella virus–specific cytotoxic T cell clone: influence of HLA–DR4 beta chain residue 74 polymorphism on antigenic peptide–T cell interaction. Ou D, et al. **Int Immunol** 1996 Oct;8(10):1577–86

Evaluation of a new enzyme immunoassay based on recombinant Rubella virus–like particles for detection of immunoglobulin M antibodies to Rubella virus. Grangeot–Keros L, et al. **J Clin Microbiol** 1997 Feb; 35(2):398–401

Rubella reimmunization: comparative analysis of the immunoglobulin G response to rubella virus vaccine in previously seronegative and seropositive individuals. Mitchell LA, et al. **J Clin Microbiol** 1996 Sep;34(9):2210–8

Serum levels of rubella virus antibodies indicating immunity: response to vaccination of subjects with low or undetectable antibody concentrations. Matter L, et al. **J Infect Dis** 1997 Apr;175(4):749–55

Risk of chronic arthropathy among women after rubella vaccination. Vaccine Safety Datalink Team [see comments] Ray P, et al. **JAMA** 1997 Aug 20;278(7):551–6. Comment in: JAMA 1997 Aug 20;278(7):594–5.

Prevalence of sensorineural hearing loss due to rubella in Saudi children. Zakzouk SM, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Mar–Apr; 58(2):74–7

Recognition of contiguous allele–specific peptide elements in the rubella virus E1 envelope protein. Nepom GT, et al. **Vaccine** 1997 Apr–May;15(6–7):648–52

Different affinity of monoclonal antibodies for conserved neutralizing epitopes on two strains of rubella virus. Cordoba P, et al. **Viral Immunol** 1997;10(2):103–10

Characterization of an overlapping CD8+ and CD4+ T–cell epitope on rubella capsid protein. Ou D, et al. **Virology** 1997 Sep 1;235(2):286–92

[Simplified avidity assay of rubella IgG antibody in rubella virus infection] Hoshiba T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Jun;48(6):413–8 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

A search for persistent rubella virus infection in persons with chronic symptoms after rubella and rubella immunization and in patients with juvenile rheumatoid arthritis. Frenkel LM, et al. **Clin Infect Dis** 1996 Feb;22(2):287–94

Prenatal diagnosis of rubella virus infection by direct detection and semiquantitation of viral RNA in clinical samples by reverse transcription–PCR. Revello MG, et al. **J Clin Microbiol** 1997 Mar;35(3):708–13

Isolation of viruses from clinical specimens in microtitre plates with cells inoculated in suspension. O'Neill HJ, et al. **J Virol Methods** 1996 Dec;62(2):169–78

Use of reverse–transcription polymerase chain reaction for detection of rubella virus RNA in cell cultures inoculated with clinical samples. Revello MG, et al. **New Microbiol** 1997 Jul;20(3):197–206

METABOLISM

Cell surface expression of a functional rubella virus E1 glycoprotein by addition of a GPI anchor. Bernasconi E, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1195–201

Brefeldin A and monensin arrest cell surface expression of membrane glycoproteins and release of rubella virus. Qiu Z, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):855–63

PATHOGENICITY

Improvement of the specific infectivity of the rubella virus (RUB) infectious clone: determinants of cytopathogenicity induced by RUB map to the nonstructural proteins. Pugachev KV, et al. **J Virol** 1997 Jan;71(1):562–8

PHYSIOLOGY

Membrane junctions associated with rubella virus infected cells. Lee JY, et al. **J Submicrosc Cytol Pathol** 1996 Jan; 28(1):101–8

Characterization of an endoplasmic reticulum retention signal in the rubella virus E1 glycoprotein. Hobman TC, et al. **J Virol** 1997 Oct;71(10):7670–80

RUBEOLA see **MEASLES**

RUBIDIUM

Unsuccessful rubidium marking of American dog tick (Acari:Ixodidae) adults. Burg JG. **J Med Entomol** 1997 Jan; 34(1):29–32

CHEMISTRY

Synthesis and evaluation of Ru–complexes as anisotropy probes for protein hydrodynamics and immunoassays of high–molecular–weight antigens. Szmacinski H, et al. **Biophys Chem** 1996 Nov 29;62(1–3):109–20

The inner membrane barrier of lipid membranes experienced by the valinomycin/Rb+ complex: charge pulse experiments at high membrane voltages. Bihler H, et al. **Biophys J** 1997 Aug;73(2):746–56

Two–dimensional magic–angle spinning isotropic reconstruction sequences for quadrupolar nuclei. Massiot D, et al. **Solid State Nucl Magn Reson** 1996 Feb;6(1):73–83

METABOLISM

Effects of K+ channel inhibitors on potassium transport in bovine adrenal chromaffin granules. Lobanov NA, et al. **Biochem Mol Biol Int** 1997 Apr;41(4):679–86

Characterization of Ca(2+)–activated 86Rb+ fluxes in rat C6 glioma cells: a system for identifying novel IKCa–channel toxins. de–Allie FA, et al. **Br J Pharmacol** 1996 Feb;117(3):479–487

The effects of cetiedil and its congeners on levcromakalim–stimulated 86Rb efflux from smooth and skeletal muscle. Benton DC. **Eur J Pharmacol** 1996 Dec 19;317(2–3):329–33

Stimulation of ouabain–sensitive 86Rb+ uptake and Na+,K+–ATPase alpha–subunit phosphorylation by a cAMP–dependent signalling pathway in intact cells from rat kidney cortex. Carranza ML, et al. **FEBS Lett** 1996 Nov 4;396(2–3):309–14

Dynamics of the cationic and secretory responses to A–4166 in perifused pancreatic islets. Jijakli H, et al. **Fundam Clin Pharmacol** 1997;11(4):300–4

Rubidium uptake and accumulation in peripheral myelinated internodal axons and Schwann cells. Lehning EJ, et al. **J Neurochem** 1997 Sep;69(3):968–77

The effects of elevated glucose on Na+/K(+)–ATPase of cultured bovine retinal pigment epithelial cells measured by a new nonradioactive rubidium uptake assay. Crider JY, et al. **J Ocul Pharmacol Ther** 1997 Aug;13(4):337–52

KCl cotransport activation in human erythrocytes by high hydrostatic pressure. Godart H, et al. **J Physiol (Lond)** 1996 Mar 1;491 (Pt 2):423–34

Activators of protein kinase A induce a glibenclamide–sensitive 86Rb+ efflux in rat isolated aorta. Kessler C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr;355(4):483–90

Concentration–response relationship of alpha 1–adrenoceptor–stimulated increase of 86Rb+ efflux in rat heart. Andersen GO, et al. **Pharmacol Toxicol** 1996 Oct; 79(4):169–76

The Na+/K+ATPase mediates the alpha 1–adrenoceptor stimulated increase in 86Rb(+)–uptake in isolated ventricular cardiomyocytes from adult rat heart. Viko H, et al. **Res Commun Mol Pathol Pharmacol** 1997 Apr; 96(1):89–106

PHARMACOKINETICS

Tracing the Na/K–ATPase with rubidium. Beck FX, et al. **Wien Klin Wochenschr** 1997 Jun 27;109(12–13):424–8

PHARMACOLOGY

Effect of low dietary rubidium on plasma biochemical parameters and mineral levels in rats. Yokoi K, et al. **Biol Trace Elem Res** 1996 Feb;51(2):199–208

Stimulation of Rb+ influx by bradykinin through Na+/K+/Cl– cotransport and Na+/K(+)–ATPase in NIH–3T3 fibroblasts. Hichami A, et al. **Life Sci** 1996; 59(22):1829–37

PHYSIOLOGY

Rb+, Cs+ ions and the inwardly rectifying K+ channels in guinea–pig ventricular cells. Matsuda H. **Pflugers Arch** 1996 May;432(1):26–33

THERAPEUTIC USE

[The pharmacological action of rubidium chloride in depression] Brundusino AO, et al. **Minerva Psichiatr** 1996 Mar;37(1):45–9 (Eng. Abstr.) **(Ita)**

RUBIDIUM RADIOISOTOPES

DIAGNOSTIC USE

Increased hepatocyte permeability surface area product for 86Rb with increase in blood flow. Goresky CA, et al. **Circ Res** 1997 May;80(5):645–54

The incidence of scintigraphically viable and nonviable tissue by rubidium–82 and fluorine–18–fluorodeoxyglucose positron emission tomographic imaging in patients with prior infarction and left ventricular dysfunction. Go RT, et al. **J Nucl Cardiol** 1996 Mar–Apr;3(2):96–104

Consequences of using a simplified kinetic model for dynamic PET data. Coxson PG, et al. **J Nucl Med** 1997 Apr; 38(4):660–7

Detection of coronary collaterals using dipyridamole PET myocardial perfusion imaging with rubidium–82. Garza D, et al. **J Nucl Med** 1997 Jan;38(1):39–43

Coronary flow and flow reserve by PET simplified for clinical applications using rubidium–82 or nitrogen–13–ammonia. Yoshida K, et al. **J Nucl Med** 1996 Oct;37(10):1701–12

METABOLISM

Alpha 1–adrenoceptor subtypes involved in increased 86Rb+ influx rate and inositol 1,4,5–trisphosphate mass in adult rat cardiomyocytes. Viko H, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):269–75

Alpha(1)– and beta–adrenoceptor–mediated increase in 86Rb(+)–uptake in isolated cardiomyocytes from adult rat heart: evidence for interaction between the two receptor systems. Viko H, et al. **Pharmacol Toxicol** 1996 Dec; 79(6):287–92

PHARMACOKINETICS

Kinetic analysis of rubidium and thallium as deposited myocardial blood flow tracers in isolated rabbit heart. Marshall RC, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1480–90

A new chromatographic method for measurement of rubidium transport activities in cultured bovine retinal pigment epithelial cells. Crider JY, et al. **Ophthalmic Res** 1997;29(3):117–23

RUBIDOMYCIN see **DAUNORUBICIN**

RUBINSTEIN-TAYBI SYNDROME

[Rubinstein-Taybi syndrome] Fukushima Y.
Ryoikibetsu Shokogun Shirizu 1996;(15):295-6 (6 ref.) **(Jpn)**

COMPLICATIONS

Medulloblastoma in patient with Rubinstein-Taybi syndrome [letter] Skousen GJ, et al. **Am J Med Genet** 1996 Dec 18; 66(3):367

Granular cell tumour of the spinal cord in a patient with Rubenstein-Taybi syndrome. Burton BJ, et al.
Br J Neurosurg 1997 Jun;11(3):257-9

DIAGNOSIS

Rubinstein-Taybi syndrome with multiple flamboyant keloids. Hendrix JD Jr, et al. **Cutis** 1996 May;57(5):346-8

Multiple-marker screen positive results in Rubinstein-Taybi syndrome [letter; comment] Fryns JP, et al.
Prenat Diagn 1996 Oct;16(10):968-9. Comment on: Prenat Diagn 1996 Feb;16(2):183-4.

GENETICS

Rubinstein-Taybi syndrome with deletions of FISH probe RT1 at 16p13.3: two UK patients. McGaughran JM, et al. **J Med Genet** 1996 Jan;33(1):82-3

Submicroscopic deletions at 16p13.3 in Rubinstein-Taybi syndrome: frequency and clinical manifestations in a North American population. Wallerstein R, et al.
J Med Genet 1997 Mar;34(3):203-6

PATHOLOGY

Rubinstein-Taybi syndrome: objective evaluation of craniofacial structure. Allanson JE, et al.
Am J Med Genet 1997 Sep 5;71(4):414-9

PHYSIOPATHOLOGY

Vascular ring leading to tracheoesophageal compression in a patient with Rubinstein-Taybi syndrome. Shashi V, et al. **Clin Genet** 1995 Dec;48(6):324-7

RUBOMYCIN see **DAUNORUBICIN**

RUBREDOXINS

CHEMISTRY

Conversion of desulforedoxin into a rubredoxin center. Yu L, et al. **Biochem Biophys Res Commun** 1997 Feb 24; 231(3):679-82

Dissecting contributions to the thermostability of Pyrococcus furiosus rubredoxin: beta-sheet chimeras. Eidsness MK, et al. **Biochemistry** 1997 Aug 26;36(34):10406-13

Temperature dependence of the redox potential of rubredoxin from Pyrococcus furiosus: a molecular dynamics study. Swartz PD, et al. **Biochemistry** 1996 Oct 29;35(43):13772-9

Structural origins of redox potentials in Fe-S proteins: electrostatic potentials of crystal structures. Swartz PD, et al. **Biophys J** 1996 Dec;71(6):2958-69

Physical characterization of a totally synthetic rubredoxin. Christen R, et al. **J Inorg Biochem** 1997 Jan;65(1):53-6

Zinc- and iron-rubredoxins from Clostridium pasteurianum at atomic resolution: a high-precision model of a ZnS4 coordination unit in a protein. Dauter Z, et al.
Proc Natl Acad Sci U S A 1996 Aug 20;93(17):8836-40

2D 1H and 3D 1H-15N NMR of zinc-rubredoxins: contributions of the beta-sheet to thermostability. Richie KA, et al. **Protein Sci** 1996 May;5(5):883-94

GENETICS

Cloning and expression of the rubredoxin gene from Desulfovibrio vulgaris (Miyazaki F)--comparison of the primary structure of desulfoferrodoxin. Kitamura M, et al. **Biochim Biophys Acta** 1997 Mar 20;1351(1-2):239-47

METABOLISM

Rubredoxin/rubredoxin reductase of Pseudomonas oleovorans: a model system for investigating interprotein electron transfer. Lee HJ, et al. **Biochem Soc Trans** 1996 Aug;24(3):447S

Studies on the redox centers of the terminal oxidase from Desulfovibrio gigas and evidence for its interaction with rubredoxin. Gomes CM, et al. **J Biol Chem** 1997 Sep 5; 272(36):22502-8

RUBULAVIRUS

GENETICS

Analysis of the fusion protein gene of the porcine rubulavirus LPMV: comparative analysis of paramyxovirus F proteins. Berg M, et al. **Virus Genes** 1997;14(1):55-61

Analysis of the large (L) protein gene of the porcine rubulavirus LPMV: identification of possible functional domains. Svenda M, et al. **Virus Res** 1997 Apr;48(1):57-70

RUBULAVIRUS INFECTIONS

EPIDEMIOLOGY

Parainfluenza virus type 4 infections in pediatric patients. Lindquist SW, et al. **Pediatr Infect Dis J** 1997 Jan; 16(1):34-8

PATHOLOGY

Failure to induce formation of proteinase K resistant fibrils in pigeons through experimental infection with paramyxovirus type 1. Kostka VM, et al.
DTW Dtsch Tierarztl Wochenschr 1997 May;104(5):174-5

VETERINARY

Prevention of entry of avian influenza and paramyxoviruses into an ornithological collection. Shortridge KF, et al.
Vet Rec 1997 Apr 5;140(14):373-4

RUFFINI'S CORPUSCLES see **MECHANORECEPTORS**

RUFOCROMOMYCIN see **STREPTONIGRIN**

RUGBY see **FOOTBALL**

RUMEN

Postparturient change in endotoxin levels of ruminal fluid and serum in dairy cows. Mochizuki M, et al.
J Vet Med Sci 1996 Jun;58(6):577-80

First compartment cannulation of the dromedary camel. Manefield JW, et al. **Vet Res** 1997;28(2):191-4

Influence of diet on the occurrence of intraepithelial microabscesses and foreign bodies in the ruminal mucosa of reindeer calves (Rangifer tarandus tarandus). Josefsen TD, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):249-57

ANATOMY & HISTOLOGY

The effect of formalin on rumen surface area in red deer. Lentle RG, et al. **Anat Histol Embryol** 1997 Jun; 26(2):127-30

Effects of dietary energy intake and protein concentration on performance and visceral organ mass in lambs. Fluharty FL, et al. **J Anim Sci** 1997 Mar;75(3):604-10

CHEMISTRY

Rumen dry matter and crude protein degradability of extracted or untreated oilseeds and Leucaena leucocephala leaves. Gralak MA, et al. **Arch Tierernahr** 1997; 50(2):173-85

Inhibition of GH releasing factor (GRF)-induced GH secretion by intraruminal infusion of volatile fatty acids (VFA) in sheep. Matsunaga N, et al. **Endocr J** 1997 Feb; 44(1):133-40

Comparison of nitrogen-15 and purines as microbial markers in continuous culture. Calsamiglia S, et al. **J Anim Sci** 1996 Jun;74(6):1375-81

Identification of bovine decorin in the fetal bovine rumen. Takanosu M, et al. **J Vet Med Sci** 1997 Feb;59(2):121-3

DRUG EFFECTS

Acute effects of intravenously administered hypertonic saline solution on transruminal rehydration in dairy cows. Roeder BL, et al. **Am J Vet Res** 1997 May;58(5):549-54

The effect of formalin on rumen surface area in red deer. Lentle RG, et al. **Anat Histol Embryol** 1997 Jun; 26(2):127-30

Studies on the effects of selenium on rumen microbial fermentation in vitro. Kim J, et al.
Biol Trace Elem Res 1997 Feb;56(2):203-13

Participation of NH4+ in total ammonia absorption across the rumen epithelium of sheep (Ovis aries). Bödeker D, et al. **Comp Biochem Physiol A Physiol** 1996 Aug; 114(4):305-10

Inhibitory effects of short intravascular infusions of propionate on reticulo-rumen motility in the sheep. McLeay LM, et al. **Comp Biochem Physiol A Physiol** 1996 Sep;115(1):63-71

Ardacin for steers grazing endophyte-free fescue pasture: effects on live weight gain, forage intake, nitrogen and fiber digestion, ruminal fluid kinetics, ruminal fermentation, and serum hormones and metabolites. Judkins MB, et al.
J Anim Sci 1997 Apr;75(4):1100-11

Effect of intraruminal monensin capsules on reproductive performance and milk production of dairy cows fed pasture. Hayes DP, et al. **J Dairy Sci** 1996 Jun;79(6):1000-8

Lasalocid effects on ruminal degradation of protein and postruminal supply of amino acids in Holstein steers. Wessels RH, et al. **J Dairy Sci** 1996 Oct;79(10):1802-08

Modification of methane emission in sheep by cysteine and a microbial preparation. Takahashi J, et al.
Sci Total Environ 1997 Sep 26;204(2):117-23

EMBRYOLOGY

Identification of bovine decorin in the fetal bovine rumen. Takanosu M, et al. **J Vet Med Sci** 1997 Feb;59(2):121-3

GROWTH & DEVELOPMENT

Effect of volatile fatty acid infusion on development of the rumen epithelium in neonatal sheep. Lane MA, et al.
J Dairy Sci 1997 Apr;80(4):740-6

Influence of weaning method on growth, intake, and selected blood metabolites in Jersey calves. Quigley JD 3rd.
J Dairy Sci 1996 Dec;79(12):2255-60

METABOLISM

Distribution of chondroitin sulfate proteoglycans during bovine fetal ruminal papillae formation. Takanosu M, et al. **Acta Anat (Basel)** 1996;156(4):283-8

Effect of quillaja saponins on in vitro rumen fermentation. Makkar HP, et al. **Adv Exp Med Biol** 1996;405:387-94

Effects of potassium on magnesium transport across rumen epithelium. Leonhard-Marek S, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1034-8

Prediction of folding stability and degradability of the de novo designed protein MB-1 in cow rumen. MacCallum JD, et al. **Appl Biochem Biotechnol** 1997 Apr;66(1):83-93

Effect of 2-bromoethanesulfonic acid and Peptostreptococcus productus ATCC 35244 addition on stimulation of reductive acetogenesis in the ruminal ecosystem by selective inhibition of methanogenesis. Nollet L, et al. **Appl Environ Microbiol** 1997 Jan;63(1):194-200

Attempts to induce reductive acetogenesis into a sheep rumen. Immig I, et al. **Arch Tierernahr** 1996;49(4):363-70

Immunocytochemical localization of arabinoxylans in the cell wall of maize apical internode after microbial degradation in the rumen. Migné C, et al. **Biol Cell** 1996;88(3):137-44

The degradability characteristics of fifty-four roughages and roughage neutral-detergent fibres as described by in vitro gas production and their relationship to voluntary feed intake. Blümmel M, et al. **Br J Nutr** 1997 May;77(5):757-68

Food intake and diet selection in sheep: the effect of manipulating the rates of digestion of carbohydrates and protein of the foods offered as a choice. Kyriazakis I, et al. **Br J Nutr** 1997 Feb;77(2):243-54

The effect of condensed tannins in Lotus pedunculatus on the solubilization and degradation of ribulose-1,5-bisphosphate carboxylase (EC 4.1.1.39; Rubisco) protein in the rumen and the sites of Rubisco digestion. McNabb WC, et al. **Br J Nutr** 1996 Oct; 76(4):535-49

Excretion of benzoic acid derivatives in urine of sheep given intraruminal infusions of 3-phenylpropionic and cyclohexanecarboxylic acids. Pagella JH, et al.
Br J Nutr 1997 Apr;77(4):577-92

Digestion of feed amino acids in the rumen and small intestine of dairy cows measured with nylon-bag techniques. van Straalen WM, et al. **Br J Nutr** 1997 Jan;77(1):83-97

Transport of sodium across the isolated bovine rumen epithelium: interaction with short-chain fatty acids, chloride and bicarbonate. Schested J, et al. **Exp Physiol** 1996 Jan;81(1):79-94

Propionate modulation of ruminal ketogenesis. Baldwin RL 6th, et al. **J Anim Sci** 1996 Jul;74(7):1694-700

Effects of organic acid and monensin treatment on in vitro mixed ruminal microorganism fermentation of cracked corn. Callaway TR, et al. **J Anim Sci** 1996 Aug; 74(8):1982-9

Wheat middlings in high-concentrate diets: feedlot performance, carcass characteristics, nutrient digestibilities, passage rates, and ruminal metabolism in finishing steers. Dalke BS, et al. **J Anim Sci** 1997 Sep;75(9):2561-6

Effect of ruminally degraded protein on protein available at the intestine assessed using blood amino acid concentrations. Dhiman TR, et al. **J Anim Sci** 1997 Jun; 75(6):1674-80

In vitro inhibition of microbial methane production by 9,10-anthraquinone. Garcia-Lopez PM, et al.
J Anim Sci 1996 Sep;74(9):2276-84

Ruminally degradable protein requirement of gestating beef cows grazing native winter sandhills range. Hollingsworth-Jenkins KJ, et al. **J Anim Sci** 1996 Jun; 74(6):1343-8

In vitro determination of ruminal protein degradation using freeze-stored ruminal microorganisms. Luchini ND, et al. **J Anim Sci** 1996 Oct;74(10):2488-99

Effects of ruminally degradable nitrogen intake and in vitro addition of ammonia and propionate on the metabolic fate of L-[1-14C]alanine and L-[15N]alanine in isolated sheep hepatocytes. Mutsvangwa T, et al. **J Anim Sci** 1997 Apr; 75(4):1149-59

The amino acid composition of protein feedstuffs before and after ruminal incubation and after subsequent passage through the intestines of dairy cows. O'Mara FP, et al. **J Anim Sci** 1997 Jul;75(7):1941-9

Absorption of short-chain fatty acids across ruminal epithelium of sheep. Kramer T, et al.
J Comp Physiol [B] 1996;166(4):262-9

Relationship between fermentation acid production in the rumen and the requirement for physically effective fiber. Allen MS. **J Dairy Sci** 1997 Jul;80(7):1447-62 (102 ref.)

Effect of the degradation of organic matter and crude protein on ruminal fermentation in dairy cows. Arieli A, et al.
J Dairy Sci 1996 Oct;79(10):1774-80

Effects of a supplemental liquid yeast product on feed intake, ruminal profiles, and yield, composition, and organoleptic characteristics of milk from lactating Holstein cows. Besong S, et al. **J Dairy Sci** 1996 Sep;79(9):1654-8

Production and composition of milk from Jersey cows administered bovine somatotropin and fed ruminally protected amino acids. Bremmer DR, et al. **J Dairy Sci**

1997 Jul;80(7):1374–80

Effects of ruminally inert fat and evaporative cooling on dairy cows in hot environmental temperatures. Chan SC, et al. **J Dairy Sci** 1997 Jun;80(6):1172–8

Effects of supplemental fat and protein source on ruminal fermentation and nutrient flow to the duodenum in dairy cows. Chan SC, et al. **J Dairy Sci** 1997 Jan;80(1):152–9

Influence of niacin supplementation on in vivo digestibility and ruminal digestion in dairy cows. Doreau M, et al. **J Dairy Sci** 1996 Dec;79(12):2247–54

Effect of nigericin, monensin, and tetronasin on biohydrogenation in continuous flow-through ruminal fermenters. Fellner V, et al. **J Dairy Sci** 1997 May; 80(5):921–8

Soybeans versus animal sources of rumen-undergradable protein and fat for early lactation dairy cows. Grummer RR, et al. **J Dairy Sci** 1996 Oct;79(10):1809–16

Lactational evaluation of protein supplements of varying ruminal degradabilities. Henson JE, et al. **J Dairy Sci** 1997 Feb;80(2):385–92

Ruminal degradation, amino acid composition, and intestinal digestibility of the residual components of five protein supplements. Maiga HA, et al. **J Dairy Sci** 1996 Sep; 79(9):1647–53

Effects of the ratio of ruminal propionate to butyrate on milk yield and blood metabolites in dairy cows. Miettinen H, et al. **J Dairy Sci** 1996 May;79(5):851–61

Response of cows fed a low crude protein diet to ruminally protected methionine and lysine. Piepenbrink MS, et al. **J Dairy Sci** 1996 Sep;79(9):1638–46

Roasted soybeans, blood meal, and tallow as sources of fat and ruminally undegradable protein in the diets of lactating cows. Pires AV, et al. **J Dairy Sci** 1996 Sep;79(9):1603–10

Lactational and systemic responses of dairy cows to postruminal infusions of increasing amounts of methionine. Pisulewski PM, et al. **J Dairy Sci** 1996 Oct;79(10):1781–91

Effect of yeast culture in the diets of early lactation dairy cows on ruminal fermentation and passage of nitrogen fractions and amino acids to the small intestine. Putnam DE, et al. **J Dairy Sci** 1997 Feb;80(2):374–84

Influence of time of feeding a protein meal on ruminal fermentation and forestomach digestion in dairy cows. Robinson PH, et al. **J Dairy Sci** 1997 Jul;80(7):1366–73

Effect of degradability of dietary protein and fat on ruminal, blood, and milk components of Jersey and Holstein cows. Rodriguez LA, et al. **J Dairy Sci** 1997 Feb;80(2):353–63

Effects of supplementation of energy or ruminally undegraded protein to lactating cows fed alfalfa hay or silage. Vagnoni DB, et al. **J Dairy Sci** 1997 Aug; 80(8):1703–12

Effects of amount and ruminal degradability of protein on nutrient digestibility and production by cows fed tallow. Weigel DJ, et al. **J Dairy Sci** 1997 Jun;80(6):1150–9

Lasalocid effects on ruminal degradation of protein and postruminal supply of amino acids in Holstein steers. Wessels RH, et al. **J Dairy Sci** 1996 Oct;79(10):1802–08

Lactational performance of cows fed low or high ruminally undegradable protein prepartum and supplemental methionine and lysine postpartum. Wu Z, et al. **J Dairy Sci** 1997 Apr;80(4):722–9

In vivo indicators of pathologic ruminal sulfide production in steers with diet-induced polioencephalomalacia. Gould DH, et al. **J Vet Diagn Invest** 1997 Jan;9(1):72–6

Bioavailability of ruminally protected sulfamethoxazole after oral administration in ruminating calves. Nishida Y, et al. **J Vet Med Sci** 1997 Apr;59(4):289–91

Stability of ivermectin in rumen fluids. Andrew NW, et al. **J Vet Pharmacol Ther** 1996 Aug;19(4):295–9

Effect of a high sulfur diet on rumen microbial activity and rumen thiamine status in sheep receiving a semi-synthetic, thiamine-free diet. Alves de Oliveira L, et al. **Reprod Nutr Dev** 1996;36(1):31–42

Quantitative review of ruminal and total tract digestion of mixed diet organic matter and carbohydrates. Archimède H, et al. **Reprod Nutr Dev** 1997;37(2):173–89 (31 ref.)

In situ and in vitro ruminal starch degradation of untreated and formaldehyde-treated wheat and maize. Michalet-Doreau B, et al. **Reprod Nutr Dev** 1997 May-Jun; 37(3):305–12

Influence of pH on lipolysis and biohydrogenation of soybean oil by rumen contents in vitro. Van Nevel CJ, et al. **Reprod Nutr Dev** 1996;36(1):53–63

Modification of methane emission in sheep by cysteine and a microbial preparation. Takahashi J, et al. **Sci Total Environ** 1997 Sep 26;204(2):117–23

Characterization of Na+/H+ exchange in sheep rumen epithelial cells kept in primary culture. Gäbel G, et al. **Zentralbl Veterinarmed A** 1996 Aug;43(6):365–75

Lactate transport across the bovine rumen epithelium in vitro. Møller PD, et al. **Zentralbl Veterinarmed A** 1997 Mar; 44(1):31–8

[Effect of level and nature of degradable nitrogen on rumen digestion with a maize based silage diet in lactating cows] Peyraud JL, et al. **Reprod Nutr Dev** 1997 May-Jun; 37(3):313–28 (Eng. Abstr.) **(Fre)**

[Uptake of amino acids in the rumen epithelium in sheep] Faixová Z, et al. **Vet Med (Praha)** 1997 Mar;42(3):61–5 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

Factors influencing microbial growth and the efficiency of microbial protein synthesis: a review. Fébel H, et al. **Acta Vet Hung** 1996;44(1):39–56 (83 ref.)

Identity and interactions of rumen microbes associated with dietary sulfate-induced polioencephalomalacia in cattle. Cummings BA, et al. **Am J Vet Res** 1995 Oct;56(10):1384–9

Ruminal microbial alterations associated with sulfide generation in steers with dietary sulfate-induced polioencephalomalacia. Cummings BA, et al. **Am J Vet Res** 1995 Oct;56(10):1390–5

Enrichment and isolation of a nitropropanol-metabolizing bacterium from the rumen. Anderson RC, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3885–6

Group-specific 16S rRNA hybridization probes for determinative and community structure studies of Butyrivibrio fibrisolvens in the rumen. Forster RJ, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1256–60

Glucose transport by mixed ruminal bacteria from a cow. Kajikawa H, et al. **Appl Environ Microbiol** 1997 May; 63(5):1847–51

Isolation and characterization of a bacteriocin (Butyrivibriocin AR10) from the ruminal anaerobe Butyrivibrio fibrisolvens AR10: evidence in support of the widespread occurrence of bacteriocin-like activity among ruminal isolates of B. fibrisolvens. Kalmokoff ML, et al. **Appl Environ Microbiol** 1997 Feb;63(2):394–402

An rRNA approach for assessing the role of obligate amino acid-fermenting bacteria in ruminal amino acid deamination. Krause DO, et al. **Appl Environ Microbiol** 1996 Mar;62(3):815–21

Use of potassium depletion to assess adaptation of ruminal bacteria to ionophores. Lana RP, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4499–503

Biochemical and mutational analysis of a gingipain-like peptidase activity from Prevotella ruminicola B(1)4 and its role in ammonia production by ruminal bacteria. Madeira HM, et al. **Appl Environ Microbiol** 1997 Feb; 63(2):670–5

Activity of H(+)-ATPase in ruminal bacteria with special reference to acid tolerance. Miwa T, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2155–8

Effect of 2-bromoethanesulfonic acid and Peptostreptococcus productus ATCC 35244 addition on stimulation of reductive acetogenesis in the ruminal ecosystem by selective inhibition of methanogenesis. Nollet L, et al. **Appl Environ Microbiol** 1997 Jan;63(1):194–200

Molecular beacons: trial of a fluorescence-based solution hybridization technique for ecological studies with ruminal bacteria. Schofield P, et al. **Appl Environ Microbiol** 1997 Mar;63(3):1143–7

Competition for cellulose among three predominant ruminal cellulolytic bacteria under substrate-excess and substrate-limited conditions. Shi Y, et al. **Appl Environ Microbiol** 1997 Feb;63(2):734–42

Competition for cellobiose among three predominant ruminal cellulolytic bacteria under substrate-excess and substrate-limited conditions. Shi Y, et al. **Appl Environ Microbiol** 1997 Feb;63(2):743–8

Utilization of individual cellodextrins by three predominant ruminal cellulolytic bacteria. Shi Y, et al. **Appl Environ Microbiol** 1996 Mar;62(3):1084–8

The effect of growth and starvation on the lysis of the ruminal cellulolytic bacterium Fibrobacter succinogenes. Wells JE, et al. **Appl Environ Microbiol** 1996 Apr; 62(4):1342–6

Studies on the effects of selenium on rumen microbial fermentation in vitro. Kim J, et al. **Biol Trace Elem Res** 1997 Feb;56(2):203–13

Influence of foliage from African multipurpose trees on activity of rumen protozoa and bacteria. Newbold CJ, et al. **Br J Nutr** 1997 Aug;78(2):237–49

Characteristics of a nitropropanol-metabolizing bacterium isolated from the rumen. Anderson RC, et al. **Can J Microbiol** 1997 Jul;43(7):617–24

Effects of a strain of Saccharomyces cerevisiae (Levucell SC1), a microbial additive for ruminants, on lactate metabolism in vitro. Chaucheyras F, et al. **Can J Microbiol** 1996 Sep;42(9):927–33

Ecology, metabolism, and genetics of ruminal selenomonads. Ricke SC, et al. **Crit Rev Microbiol** 1996;22(1):27–56 (279 ref.)

Complete nucleotide sequence of a cryptic plasmid, pBAW301, from the ruminal anaerobe Ruminococcus flavefaciens R13e2. May T, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2-3):221–7

Phenotypic diversity among ruminal isolates of Prevotella ruminicola: proposal of Prevotella brevis sp. nov., Prevotella bryantii sp. nov., and Prevotella albensis sp. nov. and redefinition of Prevotella ruminicola. Avgustin G, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):284–8

Schwartzia succinivorans gen. nov., sp. nov., another ruminal bacterium utilizing succinate as the sole energy source. van Gylswyk NO, et al. **Int J Syst Bacteriol** 1997 Jan; 47(1):155–9

Effects of organic acid and monensin treatment on in vitro mixed ruminal microorganism fermentation of cracked corn. Callaway TR, et al. **J Anim Sci** 1996 Aug; 74(8):1982–9

Comparison of nitrogen-15 and purines as microbial markers in continuous culture. Calsamiglia S, et al. **J Anim Sci** 1996 Jun;74(6):1375–81

In vitro inhibition of microbial methane production by 9,10-anthraquinone. Garcia-Lopez PM, et al. **J Anim Sci** 1996 Sep;74(9):2276–84

In vitro determination of ruminal protein degradation using freeze-stored ruminal microorganisms. Luchini ND, et al. **J Anim Sci** 1996 Oct;74(10):2488–99

Characterization of proteolytic activities of rumen bacterial isolates from forage-fed cattle. Attwood GT, et al. **J Appl Bacteriol** 1996 Nov;81(5):545–52

Survival of the recombinant Bacteroides thetaiotaomicron strain BTX in in vitro rumen incubations. Cotta MA, et al. **J Appl Microbiol** 1997 Jun;82(6):743–50

Measurement of total and separate stereoisomers of diaminopimelic acid in rumen bacteria by high-performance liquid chromatography. el-Waziry AM, et al. **J Chromatogr B Biomed Appl** 1996 Feb 23;677(1):53–9

Comparison of mechanistic rumen models on mathematical formulation of extramicrobial and microbial processes. Bannink A, et al. **J Dairy Sci** 1997 Jul;80(7):1296–314

Effects of cellobiose and monensin on in vitro fermentation of organic acids by mixed ruminal bacteria. Callaway TR, et al. **J Dairy Sci** 1997 Jun;80(6):1126–35

Degradation of protein and utilization of the hydrolytic products by a predominant ruminal bacterium, Prevotella ruminicola B1(4). Griswold KE, et al. **J Dairy Sci** 1997 Jan;80(1):167–75

Synthesis of microbial protein in ruminally cannulated cows fed alfalfa silage, alfalfa hay, or corn silage. Hristov AN, et al. **J Dairy Sci** 1996 Sep;79(9):1627–37

Are ruminal bacteria armed with bacteriocins? Kalmokoff ML, et al. **J Dairy Sci** 1996 Dec;79(12):2297–306 (53 ref.)

How many ruminal bacteria are there? Krause DO, et al. **J Dairy Sci** 1996 Aug;79(8):1467–75 (85 ref.)

Do ruminal bacteria exchange genetic material? Morrison M. **J Dairy Sci** 1996 Aug;79(8):1476–86 (62 ref.)

Effect of glucose fermentation on fiber digestion by ruminal microorganisms in vitro. Piwonka EJ, et al. **J Dairy Sci** 1996 Dec;79(12):2196–206

Why are ruminal cellulolytic bacteria unable to digest cellulose at low pH? Russell JB, et al. **J Dairy Sci** 1996 Aug;79(8):1503–9 (55 ref.)

The effect of amino nitrogen on the energetics of ruminal bacteria and its impact on energy spilling. Van Kessel JS, et al. **J Dairy Sci** 1996 Jul;79(7):1237–43

Why don't ruminal bacteria digest cellulose faster? Weimer PJ. **J Dairy Sci** 1996 Aug;79(8):1496–502 (45 ref.)

Why do many ruminal bacteria die and lyse so quickly? Wells JE, et al. **J Dairy Sci** 1996 Aug;79(8):1487–95 (97 ref.)

Microbial and animal limitations to fiber digestion and utilization. Varga GA, et al. **J Nutr** 1997 May;127(5 Suppl):819S–823S (34 ref.)

Anaerobic fungi in the digestive tract of mammalian herbivores and their potential for exploitation. Theodorou MK, et al. **Proc Nutr Soc** 1996 Nov;55(3):913–26 (72 ref.)

Effect of a high sulfur diet on rumen microbial activity and rumen thiamine status in sheep receiving a semi-synthetic, thiamine-free diet. Alves de Oliveira L, et al. **Reprod Nutr Dev** 1996;36(1):31–42

Breakdown of peptides from a casein hydrolysate by rumen bacteria. Simultaneous study of enzyme activities and physicochemical parameters. Depardon N, et al. **Reprod Nutr Dev** 1996;36(5):457–66

Acetogenic coccoid spore-forming bacteria isolated from the rumen. Rieu-Lesme F, et al. **Res Microbiol** 1996 Nov-Dec; 147(9):753–64

PARASITOLOGY

Influence of foliage from African multipurpose trees on activity of rumen protozoa and bacteria. Newbold CJ, et al. **Br J Nutr** 1997 Aug;78(2):237–49

Effect of prolonged high-concentrate feeding on ruminal protozoa concentrations. Franzolin R, et al. **J Anim Sci** 1996 Nov;74(11):2803–9

Comparative study of rumen ciliates in buffalo, cattle and sheep in Egypt. Selim HM, et al. **J Vet Med Sci** 1996 Aug; 58(8):799–801

Ciliate protozoa in the forestomach of the dromedary camel, (Camelus dromedarius), in Egypt, with description of a new species. Selim HM, et al. **J Vet Med Sci** 1996 Sep; 58(9):833–7

PATHOLOGY

[Hyperplasia of the ruminal villi in three wild roe deer] Hinterdorfer F, et al. **Tierarztl Prax** 1996 Aug;24(4):357–8 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Ammonia in ruminal and abomasal contents of cows with abomasal displacement. Geishauser T, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Nov;103(11):465–8

Barley varieties for finishing steers: II. Ruminal characteristics and rate, site, and extent of digestion. Boss DL, et al. **J Anim Sci** 1996 Aug;74(8):1973–81

Free amino acid supplementation to steers: effects on ruminal fermentation and performance. Campbell CG, et al. **J Anim Sci** 1997 Apr;75(4):1167–78

Effect of forage quality and monensin on the ruminal fermentation of fistulated cows fed continuously at a constant intake. Lana RP, et al. **J Anim Sci** 1997 Jan; 75(1):224–9

Amino acid and energy interrelationships in growing beef steers: I. The effect of level of feed intake on ruminal characteristics and intestinal amino acid flows. Ludden PA, et al. **J Anim Sci** 1997 Sep;75(9):2550–60

Preference for flavored wheat straw by lambs conditioned with intraruminal administrations of sodium propionate. Villalba JJ, et al. **J Anim Sci** 1996 Oct;74(10):2362–8

Comparative ruminal and total tract digestion of a finishing diet containing fresh vs air–dry steam–flaked corn. Zinn RA, et al. **J Anim Sci** 1997 Jul;75(7):1704–7

Inhibition by 1,10–phenanthroline of the breakdown of peptides by rumen bacteria and protozoa. Wallace RJ, et al. **J Appl Bacteriol** 1996 Apr;80(4):425–30

Influence of supplementary fish oil and rumen–protected methionine on milk yield and composition in dairy cows. Chilliard Y, et al. **J Dairy Res** 1997 May;64(2):173–9

Comparison of mechanistic rumen models on mathematical formulation of extramicrobial and microbial processes. Bannink A, et al. **J Dairy Sci** 1997 Jul;80(7):1296–314

Optimizing the utilization of animal fat and ruminal bypass proteins in the diets of lactating dairy cows. Maiga HA, et al. **J Dairy Sci** 1997 Feb;80(2):343–52

Effects of ruminal or postruminal fish oil supplementation on intake and digestion in dairy cows. Doreau M, et al. **Reprod Nutr Dev** 1997;37(1):113–24

Excitatory effects of volatile fatty acids on the in vitro motility of the rumen of sheep. Kendall PE, et al. **Res Vet Sci** 1996 Jul;61(1):1–6

Endotoxaemia in dairy cattle: mechanism of reticulorumen stasis. Eades SC. **Vet J** 1997 May;153(3):321–7

[Effects of orally administered substances on rumen fermentation patterns in cattle (in vitro). 7. Effect of dried yeast in chronic ruminal acidosis] Höltershinken M, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug;104(8):317–20 (Eng. Abstr.) **(Ger)**

[Effect of moldy grass on intraluminal fermentation and thiamine metabolism in cattle (in vitro)] Höltershinken M, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Jan; 104(1):17–22 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Unusual cause of rumen stasis in a cow [letter] Clarke PJ. **Vet Rec** 1997 Jun 14;140(24):636

[Effects of orally administered substances on rumen fermentation patterns in cattle (in vitro). 7. Effect of dried yeast in chronic ruminal acidosis] Höltershinken M, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug;104(8):317–20 (Eng. Abstr.) **(Ger)**

VIROLOGY

Natural variability and diurnal fluctuations within the bacteriophage population of the rumen. Swain RA, et al. **Appl Environ Microbiol** 1996 Mar;62(3):994–7

RUMINANTIA see **RUMINANTS**

RUMINANTS

Cytokines as adjuvants for ruminant vaccines. Lofthouse SA, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):835–42 (57 ref.)

FDA proposes ruminant–to–ruminant feeding ban [news] **J Am Vet Med Assoc** 1997 Mar 1;210(5):595

Relationship between soil type and Mycobacterium paratuberculosis. Johnson–Ifearulundu YJ, et al. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1735–40 (44 ref.)

The insulin–like growth factor and epidermal growth factor families in mammary cell growth in ruminants: action and interaction with hormones. Forsyth IA. **J Dairy Sci** 1996 Jun;79(6):1085–96 (84 ref.)

Bovids as indicators of Plio–Pleistocene paleoenvironments in east Africa. Kappelman J, et al. **J Hum Evol** 1997 Feb–Mar;32(2–3):229–56

Dietary adaptations of Plio–Pleistocene Bovidae: implications for hominid habitat use. Spencer LM. **J Hum Evol** 1997 Feb–Mar;32(2–3):201–28

Prevalence of antibody to malignant catarrhal fever virus in wild and domestic ruminants by competitive–inhibition ELISA. Li H, et al. **J Wildl Dis** 1996 Jul;32(3):437–43

From the Food and Drug Administration. Nightingale SL. **JAMA** 1997 Feb 5;277(5):370

Observations on the epidemiology of ruminant trypanosomosis in Kano State, Nigeria. Kalu AU, et al. **Rev Elev Med Vet Pays Trop** 1996;49(3):213–7

Sustainable helminth control of ruminants in developing countries. Waller PJ. **Vet Parasitol** 1997 Jul 31; 71(2–3):195–207 (33 ref.)

[Bovine spongiform encephalopathy. Second update of data collected since the report of February 6, 1996] Brugère–Picoux J, et al. **Bull Acad Natl Med** 1996 Jun–Jul; 180(6):1443–9; discussion 1450–4 (21 ref.) (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

A comparative ultrastructural study of the parotid gland acinar cells of nine wild ruminant species (mammalia, artiodactyla). Stolte M, et al. **Eur J Morphol** 1996; 34(2):79–85

Internal carotid artery in rostral epidural rete mirabile in animals of the suborder of Ruminantia. Godynicki S, et al. **Folia Morphol (Warsz)** 1996;55(4):267–9

Physical constraints on voluntary intake of forages by ruminants. Allen MS. **J Anim Sci** 1996 Dec;74(12):3063–75 (134 ref.)

BLOOD

Unique pits on the erythrocytes of the lesser mouse–deer, Tragulus javanicus. Fukuta K, et al. **J Anat** 1996 Aug;189 (Pt 1):211–3

CLASSIFICATION

Phylogenetics of the Caprinae based on cytochrome b sequence. Groves P, et al. **Mol Phylogenet Evol** 1996 Jun; 5(3):467–76

EMBRYOLOGY

Comparison between in vivo–derived and in vitro–produced pre–elongation embryos from domestic ruminants. Thompson JG. **Reprod Fertil Dev** 1997;9(3):341–54 (133 ref.)

GENETICS

Genetic diversity and divergence in Chinese yak (Bos grunniens) populations inferred from blood protein electrophoresis. Tu ZC, et al. **Biochem Genet** 1997 Feb; 35(1–2):13–6

A karyotypic analysis of the lesser Malay chevrotain, Tragulus javanicus (Artiodactyla: Tragulidae). Gallagher DS Jr, et al. **Chromosome Res** 1996 Nov;4(7):545–51

The interferon–tau genes of the giraffe, a nonbovid species. Liu L, et al. **J Interferon Cytokine Res** 1996 Nov; 16(11):949–51

A cladistic analysis of mitochondrial ribosomal DNA from the Bovidae. Gatesy J, et al. **Mol Phylogenet Evol** 1997 Jun;7(3):303–19

Phylogenetics of the Caprinae based on cytochrome b sequence. Groves P, et al. **Mol Phylogenet Evol** 1996 Jun; 5(3):467–76

Proceedings of the 3rd workshop on ruminant leukocyte antigens. Davis, California, 16 July 1995. **Vet Immunol Immunopathol** 1996 Aug;52(4):213–468

IMMUNOLOGY

Nomenclature and characterization of leukocyte differentiation antigens in ruminants. Naessens J, et al. **Immunol Today** 1997 Aug;18(8):365–8

Proceedings of the 3rd workshop on ruminant leukocyte antigens. Davis, California, 16 July 1995. **Vet Immunol Immunopathol** 1996 Aug;52(4):213–468

Ruminant cluster CD14. Berthon P, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):245–8

Ruminant cluster CD62L. Howard CJ. **Vet Immunol Immunopathol** 1996 Aug;52(4):255–6

Ruminant cluster WC14. Howard CJ. **Vet Immunol Immunopathol** 1996 Aug;52(4):261–2

Ruminant cluster WC15. Howard CJ. **Vet Immunol Immunopathol** 1996 Aug;52(4):263

Ruminant cluster WC13. Mateo A, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):259–60

Ruminant cluster CD41/CD61. Mateo A, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):251–3

Ruminant cluster CD71. Naessens J, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):257–8

Ruminant cluster CD21. Sopp P. **Vet Immunol Immunopathol** 1996 Aug;52(4):249

METABOLISM

The effects of acute and chronic protein depletion and accretion on plasma concentrations of insulin–like growth factor–1, fibronectin and total protein for ruminants nourished by intragastric infusion of nutrients. Liu SM, et al. **Br J Nutr** 1997 Sep;78(3):411–26

Starch utilization by ruminants: from basics to the bunk. Huntington GB. **J Anim Sci** 1997 Mar;75(3):852–67 (117 ref.)

Metabolic constraints on voluntary intake in ruminants. Illius AW, et al. **J Anim Sci** 1996 Dec;74(12):3052–62 (73 ref.)

A review on environmental impacts of nutritional strategies in ruminants. Tamminga S. **J Anim Sci** 1996 Dec; 74(12):3112–24 (60 ref.)

Ruminant nutrition from an environmental perspective: factors affecting whole–farm nutrient balance. Van Horn HH, et al. **J Anim Sci** 1996 Dec;74(12):3082–102 (81 ref.)

Relationships between in situ protein degradability and grass developmental morphology. Mitchell RB, et al. **J Dairy Sci** 1997 Jun;80(6):1143–9

Interferon–tau and pregnancy. Roberts RM. **J Interferon Cytokine Res** 1996 Apr;16(4):271–3

Amino acid supply and metabolism by the ruminant mammary gland. Bequette BJ, et al. **Proc Nutr Soc** 1997 Jul;56(2):593–605 (45 ref.)

Modelling post–absorptive protein and amino acid metabolism in the ruminant. Hanigan MD, et al. **Proc Nutr Soc** 1997 Jul;56(2):631–43 (49 ref.)

Regulation of hepatic nitrogen metabolism in ruminants. Lobley GE, et al. **Proc Nutr Soc** 1997 Jul;56(2):547–63 (57 ref.)

MICROBIOLOGY

Phylogeny of some mycoplasmas from ruminants based on 16S rRNA sequences and definition of a new cluster within the hominis group. Pettersson B, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1093–8

The pathology and pathogenesis of paratuberculosis in ruminants and other species. Clarke CJ. **J Comp Pathol** 1997 Apr;116(3):217–61 (262 ref.)

Relationships among strains classified with the ruminant Pasteurella haemolytica–complex using quantitative evaluation of phenotypic data. Angen O, et al. **Zentralbl Bakteriol** 1997 Apr;285(4):459–79

PARASITOLOGY

Some relationships between age, immune responsiveness and resistance to parasites in ruminants. Colditz IG, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):869–77 (30 ref.)

Nutrition and parasite interaction. Coop RL, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):951–62 (89 ref.)

Are the 26–kDa somatic and the 24–kDa excretory/secretory antigens of Haemonchus contortus one and the same? Cornelissen AW. **Int J Parasitol** 1996 Oct;26(10):1131 (9 ref.)

Nutritional enhancement of parasite control in small ruminant production systems in developing countries of South–East Asia and the Pacific. Knox M, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):963–70 (44 ref.)

Prospects for the immunological control of ruminant gastrointestinal nematodes: natural immunity, can it be harnessed? Miller HR. **Int J Parasitol** 1996 Aug–Sep; 26(8–9):801–11 (87 ref.)

Controlling internal parasites in grazing ruminants without recourse to anthelmintics: approaches, experiences and prospects. Niezen JH, et al. **Int J Parasitol** 1996 Aug–Sep; 26(8–9):983–92 (35 ref.)

Approaches to the control of fasciolosis in ruminants. Roberts JA, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):971–81 (90 ref.)

Implications of nutrition for the ability of ruminants to withstand gastrointestinal nematode infections. van Houtert MF, et al. **Int J Parasitol** 1996 Nov;26(11):1151–67 (167 ref.)

A new host record of Camelostrongylus mentulatus (Nematoda; Trichostrongyloidea) from abomasum of a giraffe at a zoo in Japan. Fukumoto S, et al. **J Vet Med Sci** 1996 Dec;58(12):1223–5

Identification of Haemonchus species in domestic ruminants based on morphometrics of spicules. Jacquiet P, et al. **Parasitol Res** 1997;83(1):82–6

Comments on the paper 'World Association for the Advancement of Veterinary Parasitology (W.A.A.V.P.) Second Edition of Guidelines for Evaluating the Efficacy of Anthelmintics in Ruminants (Bovine, Ovine, Caprine)' [letter; comment] van Wyk JA, et al. **Vet Parasitol** 1997 Jul 1;70(4):283–8. Comment on: Vet Parasitol 1995 Jun;58(3):181–213.

Characterization of acetylcholinesterase secreted by the trichostrongyle nematode parasites of ruminants. Mallet S, et al. **Vet Res** 1997 May–Jun;28(3):287–93

PHYSIOLOGY

Interferon tau: a novel pregnancy recognition signal. Bazer FW, et al. **Am J Reprod Immunol** 1997 Jun;37(6):412–20 (53 ref.)

Plant phenolic amines: potential effects on sympathoadrenal medullary, hypothalamic–pituitary–adrenal, and hypothalamic–pituitary–gonadal function in ruminants. Vera–Avila HR, et al. **Domest Anim Endocrinol** 1996 Jul; 13(4):285–96 (74 ref.)

Physical constraints on voluntary intake of forages by ruminants. Allen MS. **J Anim Sci** 1996 Dec;74(12):3063–75 (134 ref.)

Peptide regulation of intestinal glucose absorption. Bird AR, et al. **J Anim Sci** 1996 Oct;74(10):2523–40 (267 ref.)

Influence of energy supplementation on grazing ruminants: requirements and responses. Caton JS, et al. **J Anim Sci** 1997 Feb;75(2):533–42 (64 ref.)

Modeling ruminant feed intake with protein, chemostatic, and distention feedbacks. Fisher DS. **J Anim Sci** 1996 Dec; 74(12):3076–81 (13 ref.)

Integration of regulatory signals controlling forage intake in ruminants. Forbes JM. **J Anim Sci** 1996 Dec; 74(12):3029–35 (38 ref.)

Metabolic constraints on voluntary intake in ruminants. Illius AW, et al. **J Anim Sci** 1996 Dec;74(12):3052–62 (73 ref.)

Role of ruminant livestock in sustainable agricultural systems. Oltjen JW, et al. **J Anim Sci** 1996 Jun;74(6):1406–9 (13 ref.)

Acquired aversions as the basis for varied diets of ruminants foraging on rangelands. Provenza FD. **J Anim Sci** 1996 Aug;74(8):2010–20 (167 ref.)

Regulatory and legal aspects of supplementing grazing ruminants. Sellers R. **J Anim Sci** 1997 Feb;75(2):551–5 (5 ref.)

A review on environmental impacts of nutritional strategies in ruminants. Tamminga S. **J Anim Sci** 1996 Dec; 74(12):3112–24 (60 ref.)

Ruminant nutrition from an environmental perspective: factors affecting whole–farm nutrient balance. Van Horn HH, et al. **J Anim Sci** 1996 Dec;74(12):3082–102 (81 ref.)

Plant limitations to fiber digestion and utilization. Buxton DR, et al. **J Nutr** 1997 May;127(5 Suppl):814S–818S (22 ref.)

Analysis of forage fiber and cell walls in ruminant nutrition. Jung HJ. **J Nutr** 1997 May;127(5 Suppl):810S–813S (25 ref.)

Microbial and animal limitations to fiber digestion and

utilization. Varga GA, et al. **J Nutr** 1997 May;127(5 Suppl):819S–823S (34 ref.)

Recent developments and potentialities for reducing embryo mortality in ruminants: the role of IFN–tau and other cytokines in early pregnancy. Martal J, et al. **Reprod Fertil Dev** 1997;9(3):355–80 (250 ref.)

[Motor, digestive and secretory processes of the forestomach and the abomasum––a short review] Wolffram S. **Schweiz Arch Tierheilkd** 1996;138(7):343–50 (6 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Physiologic and pathophysiologic considerations for ruminant and swine anesthesia. Jorgensen JS, et al. **Vet Clin North Am Food Anim Pract** 1996 Nov; 12(3):481–500 (64 ref.)

Management and emergency intervention during anesthesia. Kruse–Elliott KT. **Vet Clin North Am Food Anim Pract** 1996 Nov;12(3):563–78 (29 ref.)

Local and regional anesthesia in ruminants and swine. Skarda RT. **Vet Clin North Am Food Anim Pract** 1996 Nov; 12(3):579–626 (140 ref.)

Supplies and technical considerations for ruminant and swine anesthesia. Tobin E, et al. **Vet Clin North Am Food Anim Pract** 1996 Nov;12(3):531–62 (24 ref.)

Comments on tube cystostomy in small ruminants [letter; comment] Haven ML. **Vet Surg** 1996 Jul–Aug;25(4):351–2 . Comment on: Vet Surg 1995 Nov–Dec;24(6):498–505.

VIROLOGY

Phosphoprotein profile analysis of ruminant respiratory syncytial virus isolates. Shadomy SV, et al. **Am J Vet Res** 1997 May;58(5):478–81

Phylogenetic analysis of pestiviruses from domestic and wild ruminants. Becher P, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1357–66

RUNAWAY REACTION

Responsibility for services for runaway children must be shared [letter; comment] MacLeod M. **BMJ** 1997 Aug 2; 315(7103):312. Comment on: BMJ 1997 Apr 12;314(7087):1064.

Families of homeless and runaway adolescents: a comparison of parent/caretaker and adolescent perspectives on parenting, family violence, and adolescent conduct. Whitbeck LB, et al. **Child Abuse Negl** 1997 Jun;21(6):517–28

Shelters for runaway and homeless youths: capacity and occupancy. Greene JM, et al. **Child Welfare** 1997 Jul–Aug; 76(4):549–61

Evaluation of a peer–led drug abuse risk reduction project for runaway/homeless youths. Fors SW, et al. **J Drug Educ** 1995;25(4):321–33

Severe aggression and related conduct problems among runaway and homeless adolescents. Booth RE, et al. **Psychiatr Serv** 1996 Jan;47(1):75–80

"Substance abuse" disorders among runaway and homeless youth. Kipke MD, et al. **Subst Use Misuse** 1997 Jun; 32(7–8):969–86

RUNNING

Effect of training on the aerobic power and anaerobic performance of prepubertal girls. McManus AM, et al. **Acta Paediatr** 1997 May;86(5):456–9

Racing performance in standardbred trotters with chronic synovitis after partial arthroscopic synovectomy in the metacarpophalangeal, metatarsophalangeal and intercarpal (midcarpal) joints. Roneus B, et al. **Acta Vet Scand** 1997; 38(1):87–95

Evidence for the incompatibility of age–neutral overweight and age–neutral physical activity standards from runners. Williams PT. **Am J Clin Nutr** 1997 May;65(5):1391–6

Leptin is related to body fat content in male distance runners. Hickey MS, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E938–40

Absence of age–related decline in total blood volume in physically active females. Jones PP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2534–40

Postmarathon paradox: insulin resistance in the face of glycogen depletion. Tuominen JA, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E336–43

Force–velocity and force–power properties of single muscle fibers from elite master runners and sedentary men. Widrick JJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C676–83

Isometric force and maximal shortening velocity of single muscle fibers from elite master runners. Widrick JJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C666–75

Atherosclerosis vascular damage in elderly athletes and sedentary people. Galetta F, et al. **Angiology** 1997 Jul; 48(7):623–8

Running and its effect on family life: a follow–up of spouses' perceptions [letter] Fick DS, et al. **Arch Fam Med** 1997 Jan–Feb;6(1):18

Relative risk of sudden cardiac death during marathon running [letter; comment] Siegel AJ. **Arch Intern Med** 1997 Jun 9;157(11):1269–70. Comment on: Arch Intern Med 1996 Nov 11;156(20):2297–302.

Relationship of distance run per week to coronary heart disease risk factors in 8283 male runners. The National Runners' Health Study [see comments] Williams PT. **Arch Intern Med** 1997 Jan 27;157(2):191–8. Comment in: Arch Intern Med 1997 Jan 27;157(2):153–4.

Ground reaction forces during locomotion in simulated microgravity. Davis BL, et al. **Aviat Space Environ Med** 1996 Mar;67(3):235–42

Hazards of running a marathon. Troponin–T concentrations should be measured [letter; comment] Hood S. **BMJ** 1997 Aug 9;315(7104):370. Comment on: BMJ 1997 Apr 5;314(7086):1023–5.

Hazards of running a marathon. 41–Fold increase in creatine kinase has been reported [letter; comment] Laing IA. **BMJ** 1997 Aug 9;315(7104):370. Comment on: BMJ 1997 Apr 5;314(7086):1023–5.

Grand rounds––Hammersmith Hospital. Hazards of running a marathon [clinical conference] [published erratum appears in BMJ 1997 May 24;314(7093):1535] [see comments] Thompson GR. **BMJ** 1997 Apr 5;314(7086):1023–5. Comment in: BMJ 1997 Aug 9;315(7104):370.

The sub–24–minute 10,000 metres, 2040 AD. Sharp C. **Br J Sports Med** 1996 Jun;30(2):181–2

Dynamic obstruction of the external iliac artery in endurance athletes and its relationship to endothelial function: the case of a long distance runner. Wright IA, et al. **Br J Sports Med** 1997 Jun;31(2):156–8 (10 ref.)

Exercise–induced syncope and Holter–documented asystole in an endurance runner with moderate aortic stenosis. Shapira Y, et al. **Clin Cardiol** 1996 Jan;19(1):71–3

Haematological status in elite long–distance runners: influence of body composition. Suetta C, et al. **Clin Physiol** 1996 Nov;16(6):563–74

Mild endotoxaemia and the inflammatory response induced by a marathon race. Camus G, et al. **Clin Sci (Colch)** 1997 Apr;92(4):415–22

The longitudinal development of running economy in males and females aged between 13 and 27 years: the Amsterdam Growth and Health Study. Ariëns GA, et al. **Eur J Appl Physiol** 1997;76(3):214–20

A 5–min running field test as a measurement of maximal aerobic velocity. Berthon P, et al. **Eur J Appl Physiol** 1997; 75(3):233–8

Some aspects of the acute phase response after a marathon race, and the effects of glutamine supplementation. Castell LM, et al. **Eur J Appl Physiol** 1997;75(1):47–53

Fuel kinetics during intense running and cycling when fed carbohydrate. Derman KD, et al. **Eur J Appl Physiol** 1996; 74(1–2):36–43

Increase in energy cost of running at the end of a triathlon. Guezennec CY, et al. **Eur J Appl Physiol** 1996;73(5):440–5

Critical velocity of continuous and intermittent running exercise. An example of the limits of the critical power concept. Kachouri M, et al. **Eur J Appl Physiol** 1996; 73(5):484–7

Perceived exertion and blood lactate concentration during graded treadmill running. Kolkhorst FW, et al. **Eur J Appl Physiol** 1996;72(3):272–7

Ventilatory response at the onset of voluntary exercise and passive movement in endurance runners. Miyamura M, et al. **Eur J Appl Physiol** 1997;76(3):221–9

Influence of running different distances on renal glomerular and tubular impairment in humans. Poortmans JR, et al. **Eur J Appl Physiol** 1996;72(5–6):522–7

Could a satellite–based navigation system (GPS) be used to assess the physical activity of individuals on earth? Schutz Y, et al. **Eur J Clin Nutr** 1997 May;51(5):338–9

The effect of climatic heat stress on intermittent supramaximal running performance in humans. Maxwell NS, et al. **Exp Physiol** 1996 Sep;81(5):833–45

The endurance training on hormone and semen profiles in marathon runners [letter; comment] Miller BE, et al. **Fertil Steril** 1997 Mar;67(3):585–6; discussion 586–7. Comment on: Fertil Steril 1995 Dec;64(6):1189–96.

High incidence of scintigraphic myocardial uptake defects at rest and during exercise in male elite runners. Bouvier F, et al. **Heart** 1997 Mar;77(3):252–5

The influence of a high carbohydrate intake during recovery from prolonged, constant–pace running. Fallowfield JL, et al. **Int J Sport Nutr** 1997 Mar;7(1):10–25

Water versus carbohydrate–electrolyte ingestion before and during a 15–km run in the heat. Millard–Stafford M, et al. **Int J Sport Nutr** 1997 Mar;7(1):26–38

Nutrition knowledge, eating practices, and health of adolescent female runners: a 3–year longitudinal study. Wiita BG, et al. **Int J Sport Nutr** 1996 Dec;6(4):414–25

Hip pains in a recreational runner. Batt ME, et al. **Int J Sports Med** 1995 Nov;16(8):563–7

Selected psychological characteristics and health behaviors of aging marathon runners: a longitudinal study. Morgan WP, et al. **Int J Sports Med** 1996 May;17(4):305–12

Risk for sudden cardiac death associated with marathon running [letter; comment] Rich MW. **J Am Coll Cardiol** 1997 Jan;29(1):224. Comment on: J Am Coll Cardiol 1996 Aug;28(2):428–31.

Carbohydrate ingestion and single muscle fiber glycogen metabolism during prolonged running in men. Tsintzas OK, et al. **J Appl Physiol** 1996 Aug;81(2):801–9

Effect of reduced gravity on the preferred walk–run transition speed. Kram R, et al. **J Exp Biol** 1997 Feb;200 (Pt 4):821–6

Optimization models for the force and energy in competitive running. Behncke H. **J Math Biol** 1997 Mar;35(4):375–90

Dynamic trunk strength of Canadian football players, soccer players, and middle to long distance runners. Williams CA, et al. **J Orthop Sports Phys Ther** 1997 Apr;25(4):271–6

Visual–vestibular interaction during standing, walking, and running. Demer JL, et al. **J Vestib Res** 1996 Jul–Aug; 6(4):295–313

Could women outrun men in ultramarathon races? Bam J, et al. **Med Sci Sports Exerc** 1997 Feb;29(2):244–7

Marathon medical services: strategies to reduce runner morbidity. Crouse B, et al. **Med Sci Sports Exerc** 1996 Sep; 28(9):1093–6

Metabolic determinants of the age–related improvement in one–mile run/walk performance in youth. Cureton KJ, et al. **Med Sci Sports Exerc** 1997 Feb;29(2):259–67

Concurrent positive and negative goalbox events produce runway behaviors comparable to those of cocaine–reinforced rats. Geist TD, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):145–50

Weight loss in rats produced by running: effects of prior experience and individual housing. Boakes RA, et al. **Q J Exp Psychol B** 1997 May;50(2):129–48

Greyhound welfare [letter] Graham–Jones O. **Vet Rec** 1996 Jun 22;138(25):627

Use of the relationship between blood lactate and running speed to determine the exercise intensity of horses. Guhl A, et al. **Vet Rec** 1996 Aug 3;139(5):108–10

[Disorders of water– and electrolyte balance in a triathlon. 2 case reports and review of the literature] Günthard H, et al. **Schweiz Rundsch Med Prax** 1997 May 28; 86(22):937–42 (Eng. Abstr.) **(Ger)**

[Exercise–induced acute renal failure observed in a boy with idiopathic renal hypouricemia caused by postsecretary reabsorption defect of uric acid] Tazawa M, et al. **Nippon Jinzo Gakkai Shi** 1996 Sep;38(9):407–12 (Eng. Abstr.) **(Jpn)**

[Iron intake and pharmacologic supplements in medium and long–distance runners] Castillo MC, et al. **Sangre (Barc)** 1996 Jun;41(3):195–200 (Eng. Abstr.) **(Spa)**

EDUCATION

Prescribed and self–reported seasonal training of distance runners. Hewson DJ, et al. **J Sports Sci** 1995 Dec; 13(6):463–70

INJURIES

Three stress fractures at different sites in the same tibia––a case report. Ariyoshi M, et al. **Acta Orthop Scand** 1997 Aug;68(4):406–7

Common overuse running injuries: diagnosis and management. Ballas MT, et al. **Am Fam Physician** 1997 May 15;55(7):2473–84

Rectal temperature in marathon runners [letter; comment] Ash CJ, et al. **Ann Emerg Med** 1997 May;29(5):693. Comment on: Ann Emerg Med 1996 Oct;28(4):414–7.

An intermeniscal fibrous band in a recreational runner [letter; comment] Warren RF, et al. **Arthroscopy** 1996 Jun; 12(3):390–1. Comment on: Arthroscopy 1995 Dec;11(6):735–7.

Musculoskeletal injuries in the ultramarathon: the 1990 Westfield Sydney to Melbourne run. Fallon KE. **Br J Sports Med** 1996 Dec;30(4):319–23

Unusual patellar tendon injury in an adolescent runner with generalised ligamentous laxity. Karnezis IA, et al. **Br J Sports Med** 1996 Jun;30(2):178–80

Incidence of injuries and other health problems in the Auckland Citibank marathon, 1993. Satterthwaite P, et al. **Br J Sports Med** 1996 Dec;30(4):324–6

Sacral stress fractures in long–distance runners. Eller DJ, et al. **Clin J Sport Med** 1997 Jul;7(3):222–5

Maintenance of aerobic capacity during recovery from right foot Jones fracture: a case report. Frangolias DD, et al. **Clin J Sport Med** 1997 Jan;7(1):54–7; discussion 57–8 (16 ref.)

Survey of competitive distance runners in Alberta: satisfaction with health care services with respect to running injuries. Rendall EO, et al. **Clin J Sport Med** 1997 Apr;7(2):104–12

Immobilizing heel pain in a runner [see comments] Sack KE. **Hosp Pract (Off Ed)** 1997 Mar 15;32(3):243. Comment in: Hosp Pract (Off Ed) 1997 May 15;32(5):25–6.

This is proper management? [letter; comment] Sanders SP. **Hosp Pract (Off Ed)** 1997 May 15;32(5):25–6. Comment on: Hosp Pract (Off Ed) 1997 Mar 15;32(3):243.

Ankle bracing in running: the effect of a Push type medium ankle brace upon movements of the foot and ankle during the stance phase. De Clercq DL. **Int J Sports Med** 1997 Apr;18(3):222–8

Lower extremity injuries at the New York City Marathon. Caselli MA, et al. **J Am Podiatr Med Assoc** 1997 Jan; 87(1):34–7

Bone marrow edema caused by altered pedal biomechanics. Yochum TR, et al. **J Manipulative Physiol Ther** 1997 Jan; 20(1):56–9

Does running exercise cause osteoarthritis? Lahr DD. **Md Med J** 1996 Aug;45(8):641–4 (18 ref.)

Bilateral anterior inferior iliac spine avulsion fractures. Gomez JE. **Med Sci Sports Exerc** 1996 Feb;28(2):161–4

Tenosynovitis of the flexor hallucis longus in a long–distance runner. Theodore GH, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):277–9

Injuries in Australian Army recruits. Part I: Decreased incidence and severity of injury seen with reduced running

distance. Rudzki SJ. **Mil Med** 1997 Jul;162(7):472–6
Injuries in Australian Army recruits. Part II: Location and cause of injuries seen in recruits. Rudzki SJ. **Mil Med** 1997 Jul;162(7):477–80
Injuries in Australian Army recruits. Part III: The accuracy of a pretraining orthopedic screen in predicting ultimate injury outcome. Rudzki SJ. **Mil Med** 1997 Jul;162(7):481–3
Walking aches and running pains. Injuries of the foot and ankle. Gellman R, et al. **Prim Care** 1996 Jun;23(2):263–80
Can running cause the appearance of marrow edema on MR images of the foot and ankle? Lazzarini KM, et al. **Radiology** 1997 Feb;202(2):540–2
[Pubic septic osteoarthritis of athletes. A case complicated by deep venous thrombosis (letter)] Albert D, et al. **Ann Med Interne (Paris)** 1997;148(2):190–1 **(Fre)**
[Pronation angle of the rear foot during running in relation to load] Fromme A, et al. **Sportverletz Sportschaden** 1997 Jun;11(2):52–7 (Eng. Abstr.) **(Ger)**
[Pain in the groin of a young female sportsman] Belzunegui Otano J, et al. **Rev Clin Esp** 1997 May;197(5):369–70 **(Spa)**

PHYSIOLOGY

Comparison of left ventricular function using isometric exercise Doppler echocardiography in competitive runners and weightlifters versus sedentary individuals. Fisman EZ, et al. **Am J Cardiol** 1997 Feb 1;79(3):355–9
Lack of detection of myocardial injury during competitive races of 100 miles lasting 18 to 30 hours. Laslett L, et al. **Am J Cardiol** 1997 Aug 1;80(3):379–80
Echocardiographic features of left atrium in elite male athletes. Toutouzas K, et al. **Am J Cardiol** 1996 Dec 1; 78(11):1314–7
Carbohydrate supplementation affects blood granulocyte and monocyte trafficking but not function after 2.5 h or running. Nieman DC, et al. **Am J Clin Nutr** 1997 Jul; 66(1):153–9
The role of dietary fat on performance, metabolism, and health. Pendergast DR, et al. **Am J Sports Med** 1996;24(6 Suppl):S53–8
Effects of airway obstruction on transmural pulmonary artery pressure in exercising horses. Jackson JA, et al. **Am J Vet Res** 1997 Aug;58(8):897–903
Agreement between rectal and tympanic membrane temperatures in marathon runners [see comments] Roth RN, et al. **Ann Emerg Med** 1996 Oct;28(4):414–7. Comment in: Ann Emerg Med 1997 May;29(5):693.
Joint kinetics in unilateral below-knee amputee patients during running. Sanderson DJ, et al. **Arch Phys Med Rehabil** 1996 Dec;77(12):1279–85
The effect of a chocolate bar supplementation on moderate exercise recovery of recreational runners. Chen JD, et al. **Biomed Environ Sci** 1996 Sep;9(2–3):247–55
Why do marathon runners have less bone than weight lifters? A vital-biomechanical view and explanation [see comments] Frost HM. **Bone** 1997 Mar;20(3):183–9. Comment in: Bone 1997 Mar;20(3):179–81.
Recovery from infectious mononucleosis after altitude training in an elite middle distance runner. Bailey DM, et al. **Br J Sports Med** 1997 Jun;31(2):153–4
Relation of speed of a mile run, maximum energy cost of running, and maximum oxygen consumption: a field study. Das SK, et al. **Br J Sports Med** 1995 Dec;29(4):271–2
Effects of alterations in dietary carbohydrate intake on running performance during a 10 km treadmill time trial. Pitsiladis YP, et al. **Br J Sports Med** 1996 Sep;30(3):226–31
Energy expenditure estimates of the Caltrac accelerometer for running, race walking, and stepping. Swan PD, et al. **Br J Sports Med** 1997 Sep;31(3):235–9
Energy cost and stride duration variability at preferred transition gait speed between walking and running. Brisswalter J, et al. **Can J Appl Physiol** 1996 Dec; 21(6):471–80
One-mile run–walk performance in young men and women: role of anaerobic metabolism. Sloniger MA, et al. **Can J Appl Physiol** 1997 Aug;22(4):337–50
The influence of musculotendinous stiffness on drop jump performance. Walshe AD, et al. **Can J Appl Physiol** 1997 Apr;22(2):117–32
Acute and persistent effects of a 46-kilometer wilderness trail run at altitude: cardiovascular autonomic modulation and baroreflexes. Bernardi L, et al. **Cardiovasc Res** 1997 May; 34(2):273–80
Spontaneous running increases aortic compliance in Wistar-Kyoto rats. Kingwell BA, et al. **Cardiovasc Res** 1997 Jul;35(1):132–7
Coagulation factor changes following endurance exercise. Rock G, et al. **Clin J Sport Med** 1997 Apr;7(2):94–9
Weight changes and serum sodium concentrations after an ultradistance multisport triathlon. Speedy DB, et al. **Clin J Sport Med** 1997 Apr;7(2):100–3
Running biomechanics. Thordarson DB. **Clin Sports Med** 1997 Apr;16(2):239–47 (9 ref.)
Post-marathon paradox in IDDM: unchanged insulin sensitivity in spite of glycogen depletion. Tuominen JA, et al. **Diabet Med** 1997 Apr;14(4):301–8
The significance of routine radiographic findings with respect to subsequent racing performance and longevity in standardbred trotters. Jørgensen HS, et al. **Equine Vet J** 1997 Jan;29(1):55–9
The effect of an acute hoof wall angulation on the stride kinematics of trotting horses [see comments] Clayton HM. **Equine Vet J Suppl** 1990 Jun;(9):86–90. Comment in: Equine Vet J Suppl 1990 Jun;(9):6–7.
The effect of an acute angulation of the hind hooves on diagonal synchrony of trotting horses [see comments] Clayton HM. **Equine Vet J Suppl** 1990 Jun;(9):91–4. Comment in: Equine Vet J Suppl 1990 Jun;(9):6–7.
A quantitative analysis of skin displacement in the trotting horse. van Weeren PR, et al. **Equine Vet J Suppl** 1990 Jun; (9):101–9
The longitudinal development of running economy in males and females aged between 13 and 27 years: the Amsterdam Growth and Health Study. Ariëns GA, et al. **Eur J Appl Physiol** 1997;76(3):214–20
Increased ventilation in runners during running as compared to walking at similar metabolic rates. Berry MJ, et al. **Eur J Appl Physiol** 1996;73(3–4):245–50
Benefits of training at moderate altitude versus sea level training in amateur runners. Burtscher M, et al. **Eur J Appl Physiol** 1996;74(6):558–63
Effects of caffeine ingestion on endurance racing in heat and humidity. Cohen BS, et al. **Eur J Appl Physiol** 1996; 73(3–4):358–63
Relationship of critical velocity to marathon running performance. Florence S, et al. **Eur J Appl Physiol** 1997; 75(3):274–8
Performance and fibre characteristics of human skeletal muscle during short sprint training and detraining on a cycle ergometer. Linossier MT, et al. **Eur J Appl Physiol** 1997;75(6):491–8
Short-term changes in 10-km race pace aerobic demand and gait mechanics following a bout of high-intensity distance running. Morgan DW, et al. **Eur J Appl Physiol** 1996; 73(3–4):267–72
Water balance during and after marathon running. Pastene J, et al. **Eur J Appl Physiol** 1996;73(1–2):49–55
Habitual long-distance running does not enhance urinary excretion of 8-hydroxydeoxyguanosine. Pilger A, et al. **Eur J Appl Physiol** 1997;75(5):467–9
Vitamin C, neutrophil function, and upper respiratory tract infection risk in distance runners: the missing link. Peters-Futre EM. **Exerc Immunol Rev** 1997;3:32–52 (99 ref.)
Treadmill running induces striatal Fos expression via NMDA glutamate and dopamine receptors. Liste I, et al. **Exp Brain Res** 1997 Jul;115(3):458–68
Idiopathic hypogonadotropic hypogonadism in a male runner is reversed by clomiphene citrate. Burge MR, et al. **Fertil Steril** 1997 Apr;67(4):783–5
Foot orientation and lower limb kinematics during running. Viale F, et al. **Foot Ankle Int** 1997 Mar;18(3):157–62
ECG-ST level, maximal oxygen uptake, and ventilatory threshold during treadmill exercise test in athletes and non-athletes. Kitagawa T, et al. **In Vivo** 1996 May-Jun; 10(3):307–11
Deviations from maximum weight predict high-density lipoprotein cholesterol levels in runners: the National Runners' Health Study. Williams PT. **Int J Obes Relat Metab Disord** 1997 Jan;21(1):6–13
Vitamin C supplementation does not alter the immune response to 2.5 hours of running. Nieman DC, et al. **Int J Sport Nutr** 1997 Sep;7(3):173–84
Dietary practices of South African ultradistance runners. Peters EM, et al. **Int J Sport Nutr** 1997 Jun;7(2):80–103
The effect of oral creatine monohydrate supplementation on running velocity. Redondo DR, et al. **Int J Sport Nutr** 1996 Sep;6(3):213–21
The effect of creatine supplementation on two 700-m maximal running bouts. Terrillion KA, et al. **Int J Sport Nutr** 1997 Jun;7(2):138–43
Administration of a GABAB agonist baclofen before running to exhaustion in the rat: effects on performance and on some indicators of fatigue. Abdelmalki A, et al. **Int J Sports Med** 1997 Feb;18(2):75–8
Pepsinogens and gastrointestinal symptoms in mountain marathon runners. Banfi G, et al. **Int J Sports Med** 1996 Nov;17(8):554–8
Endurance running performance in relation to cardiovascular risk indicators in adolescents. Bergström E, et al. **Int J Sports Med** 1997 May;18(4):300–7
Intracompartmental pressure before and after fasciotomy in runners with chronic deep posterior compartment syndrome. Biedert RM, et al. **Int J Sports Med** 1997 Jul; 18(5):381- 6
Effect of oral creatine supplementation on jumping and running performance. Bosco C, et al. **Int J Sports Med** 1997 Jul;18(5):369–72
Blood glutathione status following distance running. Dufaux B, et al. **Int J Sports Med** 1997 Feb;18(2):89–93
Hormonal responses to excessive training: influence of cross training. Flynn MG, et al. **Int J Sports Med** 1997 Apr; 18(3):191–6
Effects of a 110 kilometers ultra-marathon race on plasma hormone levels. Fournier PE, et al. **Int J Sports Med** 1997 May;18(4):252–6
Heart rate response to submaximal and maximal workloads during running and swimming. Hauber C, et al. **Int J Sports Med** 1997 Jul;18(5):347–53
Relationships between running mechanics and energy cost of running at the end of a triathlon and a marathon. Hausswirth C, et al. **Int J Sports Med** 1997 Jul;18(5):330–9
Variability in energy cost of running at the end of a triathlon and a marathon. Hausswirth C, et al. **Int J Sports Med** 1996 Nov;17(8):572–9
Relationships between running economy and temporal EMG characteristics of bi-articular leg muscles. Heise GD, et al. **Int J Sports Med** 1996 Feb;17(2):128–33
Responses to exercise at 92% and 100% of the velocity associated with VO2max. Hill DW, et al. **Int J Sports Med** 1997 Jul;18(5):325–9
Influence of sleep and meal schedules on performance peaks in competitive sprinters. Javierre C, et al. **Int J Sports Med** 1996 Aug;17(6):404–8
Effect of combined endurance, strength and sprint training on maximal oxygen uptake, isometric strength and sprint performance in female elite handball players during a season. Jensen J, et al. **Int J Sports Med** 1997 Jul; 18(5):354–8
Lack of reliability in Conconi's heart rate deflection point. Jones AM, et al. **Int J Sports Med** 1995 Nov;16(8):541–4
Force-velocity relationships and fatiguability of strength and endurance-trained subjects. Kanehisa H, et al. **Int J Sports Med** 1997 Feb;18(2):106–12
Respiratory muscle fatigue after an ultra-marathon measured as inspiratory task failure. Ker JA, et al. **Int J Sports Med** 1996 Oct;17(7):493–6
Inspiratory muscle fatigue following running to volitional fatigue: the influence of baseline strength. McConnell AK, et al. **Int J Sports Med** 1997 Apr;18(3):169–73
Physiological correlates of 3-kilometer running performance in male children. Mahon AD, et al. **Int J Sports Med** 1996 Nov;17(8):580–4
Economy during a simulated laboratory test triathlon is highly related to Olympic distance triathlon. Miura H, et al. **Int J Sports Med** 1997 May;18(4):276–80
Neutrophil chemotactic activity is increased in nasal secretions of long-distance runners. Müns G, et al. **Int J Sports Med** 1996 Jan;17(1):56–9
Iron deficiency in distance runners. A reinvestigation using Fe-labelling and non-invasive liver iron quantification. Nachtigall D, et al. **Int J Sports Med** 1996 Oct;17(7):473–9
DNA damage after exhaustive treadmill running in trained and untrained men. Niess AM, et al. **Int J Sports Med** 1996 Aug;17(6):397–403
Effect of inclination on the results of the maximal anaerobic running test. Nummela A, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S103–8
Effects of sprint training on anaerobic performance characteristics determined by the MART. Nummela A, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S114–9
Important determinants of anaerobic running performance in male athletes and non-athletes. Nummela A, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S91–6
Reliability and validity of the maximal anaerobic running test. Nummela A, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S97–102
Time course of anaerobic and aerobic energy expenditure during short-term exhaustive running in athletes. Nummela A, et al. **Int J Sports Med** 1995 Nov;16(8):522–7
Intraindividual variation of running economy in highly trained and moderately trained males. Pereira MA, et al. **Int J Sports Med** 1997 Feb;18(2):118–24
Serum haptoglobin and ferritin during a competitive running and swimming season. Pizza FX, et al. **Int J Sports Med** 1997 May;18(4):233–7
Evidence of a secondary hypervolemia in trained man following acute high intensity exercise. Richardson RS, et al. **Int J Sports Med** 1996 May;17(4):243–7
Measurement of maximal and submaximal anaerobic performance capacity: concluding chapter. Rusko HK, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S125–9 (29 ref.)
Skeletal muscle damage in the rat hindlimb following single or repeated daily bouts of downhill exercise. Smith HK, et al. **Int J Sports Med** 1997 Feb;18(2):94–100
Changes in plasma tryptophan/branched chain amino acid ratio in responses to training volume variation. Tanaka H, et al. **Int J Sports Med** 1997 May;18(4):270–5
Comparison of two maximal anaerobic cycling tests. Tossavainen M, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S120–4
Physiologic correlates to running performance in pre-pubertal distance runners. Unnithan VB, et al. **Int J Sports Med** 1995 Nov;16(8):528–33
Sports-specific adaptation of left ventricular muscle mass in athlete's heart. II: An echocardiographic study with 400-m runners and soccer players. Urhausen A, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S152–6
Blood pH and lactate kinetics in the assessment of running endurance. Usaj A, et al. **Int J Sports Med** 1996 Jan; 17(1):34–40
Comparison of three maximal anaerobic running test protocols in marathon runners, middle-distance runners and sprinters. Vuorimaa T, et al. **Int J Sports Med** 1996 Jul;17 Suppl 2:S109–13
The validity of isokinetic knee extensor endurance measurements with reference to treadmill running capacities. Westblad P, et al. **Int J Sports Med** 1996 Feb; 17(2):134–9
Zinc status relates to hematological deficits in women endurance runners [see comments] Nishiyama S, et al. **J Am Coll Nutr** 1996 Aug;15(4):359–63. Comment in: J Am Coll Nutr 1996 Aug;15(4):323–4.
Comparison of racing performance before and after treatment of incomplete, midsagittal fractures of the proximal phalanx in standardbreds: 49 cases (1986–1992) [see comments]

Tetens J, et al. **J Am Vet Med Assoc** 1997 Jan 1;210(1):82–6 . Comment in: J Am Vet Med Assoc 1997 Mar 1;210(5):608–9.

Effect of marathon run on serum IGF-I and IGF-binding protein 1 and 3 levels. Koistinen H, et al. **J Appl Physiol** 1996 Mar;80(3):760–4

Carbohydrate and the cytokine response to 2.5 h of running. Nehlsen-Cannarella SL, et al. **J Appl Physiol** 1997 May; 82(5):1662–7

Energy transfer mechanisms as a compensatory strategy in below knee amputee runners. Czerniecki JM, et al. **J Biomech** 1996 Jun;29(6):717–22

Leg stiffness and stride frequency in human running. Farley CT, et al. **J Biomech** 1996 Feb;29(2):181–6

Mechanical output from individual muscles during explosive leg extensions: the role of biarticular muscles. Jacobs R, et al. **J Biomech** 1996 Apr;29(4):513–23

Minimum-time running and swimming: an optimal control approach. Maroński R. **J Biomech** 1996 Feb;29(2):245–9

Effect of skin movement on the analysis of skeletal knee joint motion during running. Reinschmidt C, et al. **J Biomech** 1997 Jul;30(7):729–32

Identification and correlation of human footfall load parameters using multivariate analysis. Wilson JF, et al. **J Biomech Eng** 1997 Feb;119(1):115–23

Bone health is not affected by luteal phase abnormalities and decreased ovarian progesterone production in female runners. De Souza MJ, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2867–76

Economy of mobility in older adults. Davies MJ, et al. **J Orthop Sports Phys Ther** 1997 Aug;26(2):69–72

The effect of quadriceps femoris, hamstring, and placebo eccentric fatigue on knee and ankle dynamics during crossover cutting. Nyland JA, et al. **J Orthop Sports Phys Ther** 1997 Mar;25(3):171–84

Sprinting and intoeing. Fuchs R, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):489–91

Effect of a 12-week training programme on Maximal Aerobic Speed (MAS) and running time to exhaustion at 100% of MAS for students aged 14 to 17 years. Berthoin S, et al. **J Sports Med Phys Fitness** 1995 Dec;35(4):251–6

Physiological profile of best Czech male and female young triathletes. Bunc V, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):265–70

Biochemical markers of nutrition in elite-marathon runners. Crespo R, et al. **J Sports Med Phys Fitness** 1995 Dec; 35(4):268–72

Effects of aerobic and anaerobic physical conditioning on fibrinolysis. De Paz JA, et al. **J Sports Med Phys Fitness** 1995 Dec;35(4):263–7

Blood lactate and ammonia in short-term anaerobic work following induced alkalosis. Ibanez J, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):187–93

Effect of exercise on mouth-to-cecum transit in trained athletes: a case against the role of runners' abdominal bouncing. Kayaleh RA, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):271–4

Influence of an unaccustomed increase in training volume vs intensity on performance, hematological and blood-chemical parameters in distance runners. Lehmann M, et al. **J Sports Med Phys Fitness** 1997 Jun;37(2):110–6

Physiological characteristics of female 100 metre sprinters of different performance levels. Meckel Y, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):169–75

Nutritional, immunologic and psychological responses to a 7250 km run. Mertens DJ, et al. **J Sports Med Phys Fitness** 1996 Jun;36(2):132–8

Using heart rate and ratings of perceived exertion to monitor intensity in runners. Potteiger JA, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):181–6

Cross-training between cycling and running in untrained females. Ruby B, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):246–54

The effects of sodium bicarbonate and sodium citrate on 600 m running time of trained females. Tiryaki GR, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):194–8

Correlations between short-course triathlon performance and physiological variables determined in laboratory cycle and treadmill tests. Zhou S, et al. **J Sports Med Phys Fitness** 1997 Jun;37(2):122–30

Muscle tenderness and peak torque changes after downhill running following a prior bout of isokinetic eccentric exercise. Eston RG, et al. **J Sports Sci** 1996 Aug; 14(4):291–9

Effect of water ingestion on endurance capacity during prolonged running. Fallowfield JL, et al. **J Sports Sci** 1996 Dec;14(6):497–502

The relationship between 3 km running performance and selected physiological variables. Grant S, et al. **J Sports Sci** 1997 Aug;15(4):403–10

Nutritional practices of athletes: are they sub-optimal? Hawley JA, et al. **J Sports Sci** 1995 Summer;13 Spec No:S75–81 (73 ref.)

The Conconi test in not valid for estimation of the lactate turnpoint in runners. Jones AM, et al. **J Sports Sci** 1997 Aug;15(4):385–94

A 1% treadmill grade most accurately reflects the energetic cost of outdoor running. Jones AM, et al. **J Sports Sci** 1996 Aug;14(4):321–7

Accumulated oxygen deficit and shuttle run performance in physically active men and women. Ramsbottom R, et al. **J Sports Sci** 1997 Apr;15(2):207–14

American College of Sports Medicine position stand. Heat and cold illnesses during distance running. Armstrong LE, et al. **Med Sci Sports Exerc** 1996 Dec;28(12):i–x (97 ref.)

Gender effect on the relationship of time limit at 100% VO2max with other bioenergetic characteristics. Billat V, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):1049–55

Improved running performance in hot humid conditions following whole body precooling. Booth J, et al. **Med Sci Sports Exerc** 1997 Jul;29(7):943–9

Effect of 4 wk of deep water run training on running performance. Bushman BA, et al. **Med Sci Sports Exerc** 1997 May;29(5):694–9

The association between flexibility and running economy in sub-elite male distance runners. Craib MW, et al. **Med Sci Sports Exerc** 1996 Jun;28(6):737–43

A new method for quantifying pronation in overpronating and normal runners. Engsberg JR. **Med Sci Sports Exerc** 1996 Mar;28(3):299–304

Relationship between rearfoot and forefoot orientation and ground reaction forces during running. Freychat P, et al. **Med Sci Sports Exerc** 1996 Feb;28(2):225–32

Running velocity at VO2max. Hill DW, et al. **Med Sci Sports Exerc** 1996 Jan;28(1):114–9

Comparison of critical speed determined from track running and treadmill tests in elite runners. Kranenburg KJ, et al. **Med Sci Sports Exerc** 1996 May;28(5):614–8

Six weeks of training does not change running mechanics or improve running economy. Lake MJ, et al. **Med Sci Sports Exerc** 1996 Jul;28(7):860–9

Effect of a high or a low fat diet on cardiovascular risk factors in male and female runners. Leddy J, et al. **Med Sci Sports Exerc** 1997 Jan;29(1):17–25

Dietary red pepper ingestion increases carbohydrate oxidation at rest and during exercise in runners. Lim K, et al. **Med Sci Sports Exerc** 1997 Mar;29(3):355–61

Wet bulb globe temperature index and performance in competitive distance runners. McCann DJ, et al. **Med Sci Sports Exerc** 1997 Jul;29(7):955–61

Exercise responses to running and in-line skating at self-selected paces. Melanson EL, et al. **Med Sci Sports Exerc** 1996 Feb;28(2):247–50

Changes in VO2max and maximal treadmill time after 9 wk of running or in-line skate training. Melanson EL, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1422–6

Gastrointestinal permeability following aspirin intake and prolonged running. Ryan AJ, et al. **Med Sci Sports Exerc** 1996 Jun;28(6):698–705

Effect of the slow-component rise in oxygen uptake on VO2max. Sloniger MA, et al. **Med Sci Sports Exerc** 1996 Jan;28(1):72–8

Differences in ultra-endurance exercise in performance-matched male and female runners. Speechly DP, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):359–65

Lateral stability in sideward cutting movements. Stacoff A, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):350–8

Influence of carbohydrate supplementation early in exercise on endurance running capacity. Tsintzas OK, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1373–9

Influence of the level of dietary lipid intake and maximal exercise on the immune status in runners. Venkatraman JT, et al. **Med Sci Sports Exerc** 1997 Mar;29(3):333–44

Influence of water run training on the maintenance of aerobic performance. Wilber RL, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):1056–62

Bone density and cyclic ovarian function in trained runners and active controls. Winters KM, et al. **Med Sci Sports Exerc** 1996 Jul;28(7):776–85

Prolonged exercise decreases serum leptin concentrations. Landt M, et al. **Metabolism** 1997 Oct;46(10):1109–12

Human blood lactate and ammonia levels after supramaximal uphill and downhill running. Itoh H, et al. **Nagoya J Med Sci** 1996 Dec;59(3–4):135–42

Perceptual responses to deep water running and treadmill exercise. Brown SP, et al. **Percept Mot Skills** 1996 Aug; 83(1):131–9

Physiological correlates with perceived exertion during deep water running. Brown SP, et al. **Percept Mot Skills** 1996 Aug;83(1):155–62

Cardiorespiratory responses of patients with rheumatoid arthritis during bicycle riding and running in water. Melton-Rogers S, et al. **Phys Ther** 1996 Oct;76(10):1058–65

Running economy: comparison of body mass adjustment methods. Davies MJ, et al. **Res Q Exerc Sport** 1997 Jun; 68(2):177–81

Is the post-lunch dip in sprinting performance associated with the timing of food ingestion? Javierre C, et al. **Rev Esp Fisiol** 1996 Dec;52(4):247–53

A treadmill test of sprint running. Falk B, et al. **Scand J Med Sci Sports** 1996 Oct;6(5):259–64

The relationship of sustained exercise training and bone mineral density in aging male runners. Goodpaster BH, et al. **Scand J Med Sci Sports** 1996 Aug;6(4):216–21

Saliva and marathon running. Ljungberg G, et al. **Scand J Med Sci Sports** 1997 Aug;7(4):214–9

Omega-3 fatty acid supplementation does not improve maximal aerobic power, anaerobic threshold and running performance in well-trained soccer players. Raastad T, et al. **Scand J Med Sci Sports** 1997 Feb;7(1):25–31

Prevalence of menstrual dysfunction in Norwegian long-distance runners participating in the Oslo Marathon games. Tomten SE. **Scand J Med Sci Sports** 1996 Jun; 6(3):164–71

Calf muscle strength in former elite distance runners. Trappe SW, et al. **Scand J Med Sci Sports** 1996 Aug;6(4):205–10

Biomechanics and running economy. Anderson T. **Sports Med** 1996 Aug;22(2):76–89 (131 ref.)

Use of blood lactate measurements for prediction of exercise performance and for control of training. Recommendations for long-distance running. Billat LV. **Sports Med** 1996 Sep; 22(3):157–75 (138 ref.)

The effect of endurance training on reproductive function in male runners. A 'volume threshold' hypothesis. De Souza MJ, et al. **Sports Med** 1997 Jun;23(6):357–74 (79 ref.)

Metabolic responses and mechanisms during water immersion running and exercise. Frangolias DD, et al. **Sports Med** 1996 Jul;22(1):38–53 (47 ref.)

Biomechanics of the sprint start. Harland MJ, et al. **Sports Med** 1997 Jan;23(1):11–20

Physical and physiological factors associated with success in the triathlon. Sleivert GG, et al. **Sports Med** 1996 Jul; 22(1):8–18

[Effect of a three month training period on the maximal oxygen deficiency in high level performance sprinters] Heugas AM, et al. **Can J Appl Physiol** 1997 Apr; 22(2):171–81 (Eng. Abstr.) **(Fre)**

[Isolated pelvic vein thrombosis in a young marathon runner] Amann W, et al. **Sportverletz Sportschaden** 1997 Mar; 11(1):33–4 (Eng. Abstr.) **(Ger)**

[Changes in the production of reactive oxygen species from neutrophils following a 100-km marathon] Sato H, et al. **Nippon Eiseigaku Zasshi** 1996 Jul;51(2):612–6 (Eng. Abstr.) **(Jpn)**

[The intake of proteins and essential amino acids in top-competing women athletes] Nuviala Mateo RJ, et al. **Nutr Hosp** 1997 Mar–Apr;12(2):85–91 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Influence of time of day on the anxiolytic effects of exercise. Trine MR, et al. **Int J Sports Med** 1997 Apr;18(3):161–8

Reported alcohol use and behavior in long-distance runners. Gutgesell ME, et al. **Med Sci Sports Exerc** 1996 Aug; 28(8):1063–70

Goal confidence and difficulty as predictors of goal attainment in junior high school cross-country runners. Lane AM, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):747–52

Sex differences on exercise dependence for men and women in a marathon road race. Pierce EF, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):991–4

STANDARDS

Determination of maximum aerobic velocity by a five minute test with reference to running world records. A theoretical approach. Chamoux A, et al. **Arch Physiol Biochem** 1996; 104(2):207–11

RUNT DISEASE see **GRAFT VS HOST DISEASE**

RUPTURE

SURGERY

Laparoscopic repair of traumatic intraperitoneal bladder rupture. Iselin CE, et al. **Urol Int** 1996;57(2):119–21

RURAL HEALTH

see related
AGRICULTURAL WORKERS' DISEASES

Ketamine safety profile in the developing world: survey of practitioners. Green SM, et al. **Acad Emerg Med** 1996 Jun; 3(6):598–604

Impact of a statewide trauma system on rural emergency department patient assessment documentation. OHSU Rural Trauma Research Group. Hedges JR, et al. **Acad Emerg Med** 1997 Apr;4(4):268–76

Work-related injuries in a rural emergency department population. Williams JM, et al. **Acad Emerg Med** 1997 Apr; 4(4):277–81

The effect of semi-automatic external defibrillation by emergency medical technicians on survival after out-of-hospital cardiac arrest: an observational study in urban and rural areas in Belgium. Calle PA, et al. **Acta Clin Belg** 1997;52(2):72–83

Short stature: an obstetric risk factor? A comparison of two villages in Tanzania. Møller B, et al. **Acta Obstet Gynecol Scand** 1997 May;76(5):394–7

Rapid community diagnosis of lymphatic filariasis. Gyapong JO, et al. **Acta Trop** 1996 Mar;61(1):65–74

Pattern of paediatric blood pressure in rural, semi-urban and urban communities in Ilorin, Nigeria. Obika LF, et al. **Afr J Med Med Sci** 1995 Dec;24(4):371–7

A pre-intervention survey to determine understanding of HIV and AIDS in farm worker communities in Zimbabwe. Laver SM, et al. **AIDS Educ Prev** 1997 Feb;9(1):94–110

AIDS: risk behaviors among rural Mexican women married to migrant workers in the United States. Salgado de Snyder VN, et al. **AIDS Educ Prev** 1996 Apr;8(2):134–42

Epidemiology of pollution-induced airway disease: urban/rural differences in East and West Germany. Nicolai T. **Allergy** 1997;52(38 Suppl):26–9; discussion 35–6 (18 ref.)

Rural physicians as educators: why take on another job?

Crouse BJ, et al. **Am Fam Physician** 1996 Oct;54(5):1457–60
Rural hospitals' experience with the National Practitioner Data Bank. Neighbor WE, et al. **Am J Public Health** 1997 Apr;87(4):663–6
Diagnostic accuracy of a rural live video telepathology system. Callas PW, et al. **Am J Surg Pathol** 1997 Jul; 21(7):812–9
Experimental evaluation of rodent exclusion methods to reduce hantavirus transmission to humans in rural housing. Glass GE, et al. **Am J Trop Med Hyg** 1997 Apr; 56(4):359–64
Spinal morphine in remote practice [letter] [see comments] Goldblatt M. **Anaesth Intensive Care** 1996 Oct;24(5):615–6 . Comment in: Anaesth Intensive Care 1997 Apr;25(2):198.
A coronary artery bypass "fast-track" protocol is practical and realistic in a rural environment. Quigley RL, et al. **Ann Thorac Surg** 1997 Sep;64(3):706–9
Human behaviour, water usage and schistosomiasis transmission in a small settlement near Yola, Nigeria. Akogun OB, et al. **Ann Trop Med Parasitol** 1996 Jun; 90(3):303–11
Epidemiology of intestinal taeniasis in four, rural, Guatemalan communities. Allan JC, et al. **Ann Trop Med Parasitol** 1996 Apr;90(2):157–65
Patterns of health-care utilization and morbidity in a rural community near Lahore, Pakistan. Suleman M. **Ann Trop Med Parasitol** 1996 Feb;90(1):79–85
Salt intake and blood pressure in rural and metropolitan Mexico. Sánchez-Castillo CP, et al. **Arch Med Res** 1996 Winter;27(4):559–66
Knowledge, attitude and practice of family planning in rural communities in Nigeria. Aja GN, et al. **Asia Pac J Public Health** 1995;8(2):85–90
Obstetrics in general practice. A rural perspective. Gillett JM. **Aust Fam Physician** 1997 Mar;26(3):263–9 (6 ref.)
Options in education for advanced trainees in isolated general practice. Hays RB, et al. **Aust Fam Physician** 1996 Mar; 25(3):362–6
Application of primary health care standards to a developing community health group: a rural case history. Sheehan M, et al. **Aust N Z J Public Health** 1996 Apr;20(2):201–9
Child spacing and two child policy in practice in rural Vietnam: cross sectional survey. Hoa HT, et al. **BMJ** 1996 Nov 2;313(7065):1113–6
Equalizing rural health professionals' information access: lessons from a follow-up outreach project. Dorsch JL. **Bull Med Libr Assoc** 1997 Jan;85(1):39–47
Intestinal parasitism in San Cayetano, Corrientes, Argentina. Borda CE, et al. **Bull Pan Am Health Organ** 1996 Sep; 30(3):227–33
General practice training in Uganda. Part 1: Setting, personnel, and facilities. Ross JM. **Can Fam Physician** 1996 Feb;42:213–6
General practice training in Uganda. Part 2: Training program and clinical practice. Ross JM. **Can Fam Physician** 1996 Feb;42:226–9
Medication use and rural seniors. Who really knows what they are taking? Torrible SJ, et al. **Can Fam Physician** 1997 May;43:893–8
Identifying the need for curriculum change. When a rural training program needs reform. Whiteside C, et al. **Can Fam Physician** 1997 Aug;43:1390–4
Radical mastectomy now outdated [letter; comment] Johnstone T. **Can Med Assoc J** 1997 May 15; 156(10):1379–80. Comment on: Can Med Assoc J 1997 Jan 1;156(1):25–35. Comment on: Can Med Assoc J 1997 Jan 1;156(1):43–5.
Nova Scotia hopes to solve recruitment problem with joint effort from MDS, government. Robb N. **Can Med Assoc J** 1996 Dec 1;155(11):1615–6
Association of smoking, body mass, and physical activity with risk of prostate cancer in the Iowa 65+ Rural Health Study (United States). Cerhan JR, et al. **Cancer Causes Control** 1997 Mar;8(2):229–38
Aggregation of childhood leukemia in geographic areas of Greece. Petridou E, et al. **Cancer Causes Control** 1997 Mar; 8(2):239–45
Substance use among rural secondary schools in Zimbabwe: patterns and prevalence. Khan N, et al. **Cent Afr J Med** 1996 Aug;42(8):223–9
Factors associated with human anthrax outbreak in the Chikupo and Ngandu villages of Murewa district in Mashonaland East Province, Zimbabwe. Mwenye KS, et al. **Cent Afr J Med** 1996 Nov;42(11):312–5
Aeromonas and Plesiomonas species as bacterial agents of diarrhoea in urban and rural areas of Nigeria: antibiogram of isolates [see comments] Obi CL, et al. **Cent Afr J Med** 1995 Dec;41(12):397–403. Comment in: Cent Afr J Med 1996 May;42(5):156–7.
Diabetes mellitus, lipid peroxidation and antioxidant status in rural patients [letter] Srinivasan KN, et al. **Clin Chim Acta** 1997 Mar 18;259(1–2):183–6
The urban/rural divide in head and neck cancer--the effect of atmospheric pollution. Wake M. **Clin Otolaryngol** 1993 Aug;18(4):298–302
Regional and rural-urban differences in obesity in Canada. Canadian Heart Health Surveys Research Group. Reeder BA, et al. **CMAJ** 1997 Jul 1;157 Suppl 1:S10–6
An outbreak of Salmonella enteritidis phage type 4 infection in a rural community in Northern Ireland. Doherty L, et al. **Commun Dis Rep CDR Rev** 1997 May 2;7(5):R73–6
Wild brown rats (Rattus norvegicus) as a zoonotic risk on farms in England and Wales. Webster JP. **Commun Dis Rep CDR Rev** 1996 Mar 1;6(3):R46–9
A hierarchical model of contraceptive use in urban and rural Bangladesh. Khan HT. **Contraception** 1997 Feb;55(2):91–6
Exotic perspectives and salient cases [editorial] McLaughlin JF. **Dev Med Child Neurol** 1997 Jul;39(7):429
The need for disability awareness training among rurally based Australian general medical practitioners. Gething L, et al. **Disabil Rehabil** 1997 Jun;19(6):249–59
A study on disabled children in a rural community in southern Thailand. Pongprapai S, et al. **Disabil Rehabil** 1996 Jan;18(1):42–6
Health behaviour of rural mothers to acute respiratory infections in children in Gondar, Ethiopia. Teka T, et al. **East Afr Med J** 1995 Oct;72(10):623–5
Talc and amosite/crocidolite preferentially deposited in the lungs of nonoccupational female lung cancer cases in urban areas of Japan. Yamada H, et al. **Environ Health Perspect** 1997 May;105(5):504–8
Change in social ties and subsequent mortality in rural elders [see comments] Cerhan JR, et al. **Epidemiology** 1997 Sep; 8(5):475–81. Comment in: Epidemiology 1997 Sep;8(5):469–70.
Physical punishment of elementary school children in urban and rural communities in Ethiopia. Ketsela T, et al. **Ethiop Med J** 1997 Jan;35(1):23–33
Risk profiles for non-communicable diseases in rural and urban schoolchildren in the Republic of Cameroon. Proctor MH, et al. **Ethn Dis** 1996 Autumn;6(3–4):235–43
Prevalence of hepatitis A, B, and C markers in school children of a rural area of Crete, Greece. Lionis C, et al. **Eur J Epidemiol** 1997 Jun;13(4):417–20
When your practice is under the microscope: how to survive a rural preceptorship site visit. Brand JL. **Fam Med** 1997 Jul–Aug;29(7):461–2
Effects of a one-year physical activity intervention for older adults at congregate nutrition sites. Sharpe PA, et al. **Gerontologist** 1997 Apr;37(2):208–15
The case for integration of social work psychosocial services into rural primary care practice. Badger LW, et al. **Health Soc Work** 1997 Feb;22(1):20–9
Culturally specific health care model for ensuring health care use by rural, ethnically diverse families affected by HIV/AIDS. Goicoechea-Balbona AM. **Health Soc Work** 1997 Aug;22(3):172–80
Alternative health practices in ethnically diverse rural areas: a collaborative research project. Vest GW, et al. **Health Soc Work** 1997 May;22(2):95–100
Spontaneous abortion pattern in an isolated Mediterranean population: La Alta Alpujarra Oriental (southeast Spain). Luna F, et al. **Hum Biol** 1997 Jun;69(3):345–56
Food intake and nutrient adequacy of rural population of Guntur district (Andra Pradesh). Khader V. **Indian J Med Sci** 1996 Feb;50(2):34–42
Dr. P.C. Sen Memorial Award--1994. Role of various risk factors in the epidemiology of hypertension in a rural community of Varanasi district. Goel NK, et al. **Indian J Public Health** 1996 Jul–Sep;40(3):71–6
Strategy developed for rural health management: Chertala (Kerala) experiment for Brugian filariasis control. Sabesan S, et al. **Indian J Public Health** 1996 Apr–Jun;40(2):54–5
Childhood injury deaths: rural and urban differences, Colorado 1980–8. Hwang HC, et al. **Inj Prev** 1997 Mar; 3(1):35–7
Bundling, a newly identified risk factor for neonatal tetanus: implications for global control. Bennett J, et al. **Int J Epidemiol** 1996 Aug;25(4):879–84
A study of risk factors for pneumococcal disease among children in a rural area of west Africa. O'Dempsey TJ, et al. **Int J Epidemiol** 1996 Aug;25(4):885–93
Population risk factors for hospitalization for stroke in Scotland. Starr JM, et al. **Int J Epidemiol** 1996 Apr; 25(2):276–81
Rural nurses' use of universal precautions in relation to perceived knowledge of patient's HIV status. Young EW, et al. **Int J Nurs Stud** 1996 Jun;33(3):249–58
A study of the educational and research priorities of registered nurses in rural Australia. Bell PF, et al. **J Adv Nurs** 1997 Apr;25(4):794–800
Prevalence of asymptomatic electrocardiographic abnormalities in a rural population. Gupta R, et al. **J Assoc Physicians India** 1996 Nov;44(11):775–7
Changing trends of communicable diseases in rural areas of western Maharashtra [letter] Khubnani H, et al. **J Assoc Physicians India** 1996 Oct;44(10):753–4
Health problems in rural elderly at Varanasi, Uttar Pradesh. Singh AK, et al. **J Assoc Physicians India** 1996 Aug; 44(8):540–3
Outbreak and control of dengue in a village in Dharmapuri, Tamil Nadu. Abdul Kader MS, et al. **J Commun Dis** 1997 Mar;29(1):69–71
V. cholerae 01 outbreak in remote villages of Shimla district, Himachal Pradesh, 1994. Bora D, et al. **J Commun Dis** 1997 Jun;29(2):121–5
Malaria epidemic in Lamta PHC of Balaghat district--a rice cultivating ecosystem. Chand G, et al. **J Commun Dis** 1997 Jun;29(2):179–81
Filariasis survey in a rural area of West Bengal. Chandra G, et al. **J Commun Dis** 1996 Sep;28(3):206–8
Immunization coverage among urban and rural children in the Shimla hills. Dhadwal D, et al. **J Commun Dis** 1997 Jun;29(2):127–30
Risk behavioural practices of rural mothers as determinants of childhood diarrhoea. Ghosh S, et al. **J Commun Dis** 1997 Mar;29(1):7–14
First outbreak of Dengue fever in a typical rural area of Haryana state in northern India. Jamaluddain M, et al. **J Commun Dis** 1997 Jun;29(2):169–70
Validity of using slide positivity rate (SPR) in identification of high risk malarious segments in rural areas. Joshi PL, et al. **J Commun Dis** 1997 Mar;29(1):41–5
Changing malaria endemicity--a village based study in Sonitpur, Assam. Prakash A, et al. **J Commun Dis** 1997 Jun;29(2):175–8
Intestinal parasitism: a childhood problem in rural Bengal. Saha DR, et al. **J Commun Dis** 1995 Sep;27(3):170–4
Knowledge and attitudes of pregnant women regarding AIDS in a semi arid area of Rajasthan. Singh MB, et al. **J Commun Dis** 1997 Jun;29(2):139–44
A 15.5-year cohort study on risk factors for possible myocardial infarction and sudden death within 24 hours in a rural Japanese community. Shimozato M, et al. **J Epidemiol** 1996 Mar;6(1):15–22
Deprivation and mortality in non-metropolitan areas of England and Wales. Jessop EG. **J Epidemiol Community Health** 1996 Oct;50(5):524–6
Impact of CLIA on physician office laboratories in rural Washington State [published erratum appears in J Fam Pract 1997 Feb;44(2):214] Roussel PL. **J Fam Pract** 1996 Sep;43(3):249–54
Smoking cessation interventions in rural family practices: an UPRNet study. Sesney JW, et al. **J Fam Pract** 1997 Jun; 44(6):578–85
Characteristics of depressive symptoms in elderly urban and rural African Americans. Okwumabua JO, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jul;52(4):M241–6
Determining specific health care needs of rural communities [letter] Escovitz A, et al. **J Health Care Poor Underserved** 1996 Nov;7(4):285–9
The mortality risk associated with hypertension: preliminary results of a prospective study in rural Nigeria. Kaufman JS, et al. **J Hum Hypertens** 1996 Jul;10(7):461–4
Circadian rhythm of blood pressure and life style: a study of clinically healthy subjects living in rural and industrialized countries. Kawasaki T, et al. **J Hum Hypertens** 1996 May;10(5):281–5
Design and baseline characteristics of a hypertension intervention program in a South African village: patient awareness and understanding of their disease process are important [letter; comment] Lip GY, et al. **J Hum Hypertens** 1996 Jul;10(7):499. Comment on: J Hum Hypertens 1996 Jan;10(1):21–6.
Endemic goitre in rural South Delhi. Chaturvedi S, et al. **J Indian Med Assoc** 1996 Mar;94(3):99–100
Day-case adenoidectomy: how popular and safe in a rural environment? Siddiqui N, et al. **J Laryngol Otol** 1997 May; 111(5):444–6
An overview of rural health [editorial] Lawrence DJ. **J Manipulative Physiol Ther** 1996 Feb;19(2):75–81 (61 ref.)
Use of plant-derived therapies in a rural, biracial population in Mississippi. Frate DA, et al. **J Miss State Med Assoc** 1996 Jan;37(1):427–9
Building a shared vision for nursing in rural Missouri. Kuehn AF. **J Nurs Adm** 1997 Sep;27(9):4–7
Advanced education for the role of rural nurse generalist. Long KA, et al. **J Nurs Educ** 1997 Feb;36(2):91–4
Unheard and unseen. Rural women and domestic violence. Adler C. **J Nurse Midwifery** 1996 Nov-Dec;41(6):463–6 (3 ref.)
Questionnaire-based measures are valid for the identification of rural households with hunger and food insecurity. Frongillo EA Jr, et al. **J Nutr** 1997 May;127(5):699–705
A population-based study of tractor-related injuries: Regional Rural Injury Study-I (RRIS-I). Lee TY, et al. **J Occup Environ Med** 1996 Aug;38(8):782–93
Paediatric urolithiasis in a remote Australian aboriginal community. Williams WM, et al. **J Paediatr Child Health** 1996 Aug;32(4):344–6
Going home with AIDS [news] **J Psychosoc Nurs Ment Health Serv** 1996 Jul;34(7):12
A profile of rural Texas adolescents who carry handguns to school. Kingery PM, et al. **J Sch Health** 1996 Jan; 66(1):18–22
A referrer and patient evaluation of a telepsychiatry consultation-liaison service in South Australia. Clarke PH. **J Telemed Telecare** 1997;3 Suppl 1:12–4
Urban-rural differences in prehospital care of major trauma. Grossman DC, et al. **J Trauma** 1997 Apr;42(4):723–9
Previous trauma as a risk factor for recurrent trauma in rural northern Israel. Sayfan J, et al. **J Trauma** 1997 Jul; 43(1):123–5
The effects of health services utilization on the recovery from dysentery. Myaux JA, et al. **J Trop Pediatr** 1996 Feb; 42(1):38–42
Immunization carnivals for the hard-to-reach. Brown SG, et al. **MCN Am J Matern Child Nurs** 1996 Mar-Apr; 21(2):100–3
The rural medical crisis [letter] Gorton SM. **Med J Aust** 1997 Jun 2;166(11):614
The relationship between prevalence of asthma and environmental factors in rural households. Noorhassim I, et al. **Med J Malaysia** 1995 Sep;50(3):263–7
Molecular epidemiology study of a suspected community cluster of childhood cancers. Li FP, et al.

Med Pediatr Oncol 1997 Apr;28(4):243–7

A retrospective study of suicides in a rural health district over ten years. Roberts AP, et al. **Med Sci Law** 1996 Jul; 36(3):259–62

Caring for persons with AIDS in greater Minnesota. Chial H, et al. **Minn Med** 1997 Feb;80(2):43–5

Dermatophytomycoses in children in rural Kenya: the impact of primary health care. Schmeller W, et al. **Mycoses** 1997 Jan–Feb;40(1–2):55–63

Rural Substance Abuse: State of Knowledge and Issues. Proceedings of a meeting. April 26–27, 1994. **NIDA Res Monogr** 1997;168:1–533

Parity–associated body weight: modification by sociodemographic and behavioral factors. Wolfe WS, et al. **Obes Res** 1997 Mar;5(2):131–41

Development of a rural oncology nursing conference: proposal through implementation. Forney DF, et al. **Oncol Nurs Forum** 1997 Apr;24(3):537–43

The exercise capacity of three socio–economic groups of elderly hypertensive patients. Eales CJ, et al. **Physiother Res Int** 1996;1(4):255–64

Determinants of fat and fiber consumption in American rural energy workers. Kuppens R, et al. **Prev Med** 1996 Mar–Apr;25(2):212–7

Skin cancer prevention and early detection practices in a sample of rural women. Michielutte R, et al. **Prev Med** 1996 Nov–Dec;25(6):673–83

A trial of church–based smoking cessation interventions for rural African Americans. Schorling JB, et al. **Prev Med** 1997 Jan–Feb;26(1):92–101

Rural and urban differences in continuity of care after state hospital discharge. Farrell SP, et al. **Psychiatr Serv** 1996 Jun;47(6):652–4

Children's smoking habits in an agricultural community in Japan and the importance of a no smoking program integrating family, school and community health. Fukushima T, et al. **Public Health** 1997 Sep;111(5):289–92

Hearing impairment among young Chinese in a rural area. Morioka I, et al. **Public Health** 1996 Sep;110(5):293–7

Hypertension among rural Hispanics and non–Hispanic whites: the San Luis Valley Diabetes Study. Rewers M, et al. **Public Health Rep** 1996;111 Suppl 2:27–9

Primary health care in Khayelitsha [letter] [see comments] Bohm L. **S Afr Med J** 1996 Jul;86(7):847–8. Comment in: S Afr Med J 1996 Sep;86(9):1131–2.

Malnutrition––food parcels and follow–up [letter] Cooper GJ. **S Afr Med J** 1997 Apr;87(4):476, 478

First International Conference on Rural Medicine [letter] Couper ID, et al. **S Afr Med J** 1996 Nov;86(11):1434

Curriculum development for the rural specialist [letter; comment] [see comments] Erasmus RJ. **S Afr Med J** 1997 Feb;87(2):179. Comment on: S Afr Med J 1996 Dec;86(12):1528. Comment in: S Afr Med J 1997 Apr;87(4):472. Comment in: S Afr Med J 1997 Apr;87(4):472–3.

Curriculum development for the rural specialist [letter; comment] Hill PV. **S Afr Med J** 1997 Apr;87(4):472–3. Comment on: S Afr Med J 1997 Feb;87(2):179.

Curriculum development for the rural specialist [letter; comment] van Velden DP, et al. **S Afr Med J** 1997 Apr; 87(4):472. Comment on: S Afr Med J 1997 Fab;87(2):179.

The increasing burden of tuberculosis in rural South Africa––impact of the HIV epidemic. Wilkinson D, et al. **S Afr Med J** 1997 Apr;87(4):447–50

Prevalence and risk factors for Chlamydia trachomatis infection in low–income rural and suburban populations of Mexico. Acosta–Cázares B, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):283–8

Examining the gender gap in nutrition: an example from rural Mexico. Backstrand JR, et al. **Soc Sci Med** 1997 Jun; 44(11):1751–9

The Yoruba farm market as a communication channel in guinea worm disease surveillance. Brieger WR, et al. **Soc Sci Med** 1996 Jan;42(2):233–43

Ethnography of fertility and menstruation in rural Mexico. Castaneda X, et al. **Soc Sci Med** 1996 Jan;42(1):133–40

Sociocultural factors and the promotion of exclusive breastfeeding in rural Yoruba communities of Osun State, Nigeria. Davies–Adetugbo AA. **Soc Sci Med** 1997 Jul; 45(1):113–25

Health status and risk factors of seminomadic pastoralists in Mongolia: a geographical approach. Foggin PM, et al. **Soc Sci Med** 1997 Jun;44(11):1623–47

Cultural factors, caloric intake and micronutrient sufficiency in rural Nepali households. Gittelsohn J, et al. **Soc Sci Med** 1997 Jun;44(11):1739–49

Food allocation in rural Peruvian households: concepts and behavior regarding children. Graham MA. **Soc Sci Med** 1997 Jun;44(11):1697–709

Bore holes and the vanishing of guinea worm disease in Ghana's upper region. Hunter JM. **Soc Sci Med** 1997 Jul; 45(1):71–89

Rethinking methods for the study of sexual behaviour. Huygens P, et al. **Soc Sci Med** 1996 Jan;42(2):221–31

White, red and black: colour classification and illness management in Northern Ghana. Kirby JP. **Soc Sci Med** 1997 Jan;44(2):215–30 (38 ref.)

Spatial patterns of human water contact and Schistosoma mansoni transmission and infection in four rural areas in Machakos District, Kenya. Kloos H, et al. **Soc Sci Med** 1997 Apr;44(7):949–68

Health care allocation and selective neglect in rural Peru. Larme AC. **Soc Sci Med** 1997 Jun;44(11):1711–23

Physician location survey: self–reported and census–defined rural/urban locations. Lin GE, et al. **Soc Sci Med** 1997 Jun;44(11):1761–6

What explains rural–urban differentials in child mortality in Brazil? Sastry N. **Soc Sci Med** 1997 Apr;44(7):989–1002

Credit programs, patriarchy and men's violence against women in rural Bangladesh. Schuler SR, et al. **Soc Sci Med** 1996 Dec;43(12):1729–42

The role of clinical vignettes in rapid ethnographic research: a folk taxonomy of diarrhoea in Thailand. Shawyer RJ, et al. **Soc Sci Med** 1996 Jan;42(1):111–23

Prevalance of obesity and overweight in northeastern peninsular Malaysia and their relationship with cardiovascular risk factors. Mohamad WB, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):339–42

Direct and indirect estimates of maternal mortality in rural Burkina Faso. Garenne M, et al. **Stud Fam Plann** 1997 Mar; 28(1):54–61

Health service accessibility and deaths from asthma in 401 local authority districts in England and Wales, 1988–92 [see comments] Jones AP, et al. **Thorax** 1997 Mar;52(3):218–22 . Comment in: Thorax 1997 Mar;52(3):205–6.

Screening assessment of the elderly in rural Thailand by a mobile unit. Swaddiwudhipong W, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):223–7

A community–based investigation of maternal mortality from obstetric haemorrhage in rural Zimbabwe. Maternal Mortality Study Group. Fawcus S, et al. **Trop Doct** 1997 Jul;27(3):159–63

Primary small bowel volvulus in rural Nepal. Parkes G. **Trop Doct** 1997 Jul;27(3):156–8

Case management quality assessment in rural areas of Papua New Guinea [letter; comment] San Sebastian M, et al. **Trop Doct** 1996 Oct;26(4):200. Comment on: Trop Doct 1995 Apr;25(2):69–74.

Perinatal mortality in northern Benin. Tomlinson AJ, et al. **Trop Doct** 1997 Jul;27(3):172–3

Prevalence of blindness in a rural ophthalmically underserved Nigerian community. Fafowora OF. **West Afr J Med** 1996 Oct–Dec;15(4):228–31

HIV–1 and HIV–2 in Ghana, west Africa: community surveys compared to surveys of pregnant women. Neequaye AR, et al. **West Afr J Med** 1997 May–Jun; 16(2):102–8

Life in the country: physicians discuss practicing in rural Wisconsin. Kennedy M. **Wis Med J** 1997 Aug;96(8):17–21

Marshfield Clinic's role in primary care and rural health in Wisconsin. Mazza JJ. **Wis Med J** 1997 Aug;96(8):12–3

Changes in agriculture bring potential for new health and safety risks. Olenchock SA, et al. **Wis Med J** 1997 Aug; 96(8):10–1

Rural medicine: it's come a long way. Osborn SL. **Wis Med J** 1997 Aug;96(8):5–6

Domestic abuse: complicated by rural living. Pittenger J. **Wis Med J** 1997 Aug;96(8):22–4

University of Wisconsin agricultural safety and health activities. Purschwitz M. **Wis Med J** 1997 Aug;96(8):25–9

Farm injuries don't just involve farmers [editorial] Purschwitz MA. **Wis Med J** 1997 Aug;96(8):9

Cancer screening and prevention in rural Wisconsin: the Greater Marshfield Experience. Reding DJ, et al. **Wis Med J** 1997 Aug;96(8):32–7

Rural EMS: who are you and what do you need? Stamas P Jr. **Wis Med J** 1997 Aug;96(8):14

Lessons on sustainability for community health projects. Aubel J, et al. **World Health Forum** 1996;17(1):52–7

What do people expect from their doctors? [letter; comment] Goswami K. **World Health Forum** 1996;17(2):171. Comment on: World Health Forum 1995;16(3):221–7; discussion 227–47.

Community–based health insurance in China: bending to the wind of change [see comments] Khan MM, et al. **World Health Forum** 1996;17(1):58–62. Comment in: World Health Forum 1997;18(1):63–4.

The theatre: an effective tool for health promotion. Seguin A, et al. **World Health Forum** 1996;17(1):64–9

[Impact of improved sanitary conditions and domestic hygiene on the incidence of ascaridiasis and ancylostomiasis in children two to four years old in the rural zones of Ivory Coast] Messou E, et al. **Bull Soc Pathol Exot** 1997; 90(1):48–50 (Eng. Abstr.) **(Fre)**

[Practical gynecology in the African bush: from humanitarianism to humanism] Géraud R, et al. **Contracept Fertil Sex** 1997 Jun;25(6):482–91 (28 ref.) **(Fre)**

[Knowledge and treatment of malaria in rural Senegal] Faye O, et al. **Med Trop (Mars)** 1997;57(2):161–4 (Eng. Abstr.) **(Fre)**

[Lipid profile in a rural population in western Cameroon] Gouado I, et al. **Sante** 1996 Nov–Dec;6(6):397–400 (Eng. Abstr.) **(Fre)**

[How to manage HIV seropositive or AIDS patients in rural Burkina Faso?] Taverne B. **Sante** 1997 May–Jun; 7(3):177–86 (16 ref.) (Eng. Abstr.) **(Fre)**

[Ambulatory management of moderately and severely malnourished children in the rural health district of Kapolowe in Shaba (Zaire)] Tellier V, et al. **Sante** 1996 Jul–Aug;6(4):213–9 (Eng. Abstr.) **(Fre)**

[Rendering public health reports in cities and regions––results of a model trial in Brandenburg and North Rhine–Westphalia] Streich W, et al. **Gesundheitswesen** 1996 Sep;58 Suppl 2:110–4 (Eng. Abstr.) **(Ger)**

[The early intervention team––a model for multi–institutional cooperation in diagnosis of child developmental delay in a rural district] Bohlen G. **Prax Kinderpsychol Kinderpsychiatr** 1996 Jan;45(1):25–9 (Eng. Abstr.) **(Ger)**

[An epidemiologic study on the prevalence of alcohol consumption in a rural area of Asturias (council of Somiedo)] Fuentes Alvarez MD, et al. **An Med Interna** 1995 Nov;12(11):524–9 (Eng. Abstr.) **(Spa)**

[Current status of postgraduate training in family and community medicine in the rural environment] Igual Fraile D, et al. **Aten Primaria** 1997 Jun 30;20(2):94–7 (Eng. Abstr.) **(Spa)**

[Domestic infestation by Triatoma infestans and prevalence of Trypanosoma cruzi seropositives in a rural area of the Argentinian northeast] Bar ME, et al. **Rev Soc Bras Med Trop** 1996 Nov–Dec;29(6):549–55 (Eng. Abstr.) **(Spa)**

HISTORY

Malaria control, the cold war, and the postwar reorganization of international assistance. Litsios S. **Med Anthropol** 1997 May;17(3):255–78

Early prepaid health care on Tangier Island. Potter HP Jr. **Va Med Q** 1996 Winter;123(1):52–3

STANDARDS

[Use of an index of social welfare for health planning at a municipal level] Ochoa–Díaz López H, et al. **Salud Publica Mex** 1996 Jul–Aug;38(4):257–67 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

Caries experience and treatment need among adults responding to an invitation for dental examination and treatment in two Karelian communities in Russia. Honkala E, et al. **Acta Odontol Scand** 1996 Jun;54(3):171–5

Access to and use of physician resources by the rural and urban populations in Manitoba. Fakhoury WK, et al. **Can J Public Health** 1996 Jul–Aug;87(4):248–52

Caries experience in deciduous dentition of rural Chinese children 3–5 years old in relation to the presence or absence of enamel hypoplasia. Li Y, et al. **Caries Res** 1996; 30(1):8–15

Prevalence of developmental enamel defects and dental caries in rural pre–school Thai children. Kanchanakamol U, et al. **Community Dent Health** 1996 Dec;13(4):204–7

Rural–urban differences in psychiatric status and functioning among clients with severe mental illness. Dottl SL, et al. **Community Ment Health J** 1997 Aug;33(4):311–21

Prevalence of glucose intolerance in urban and rural communities in Saudi Arabia. Al–Nuaim AR. **Diabet Med** 1997 Jul;14(7):595–602

Periodontal status and treatment needs in a rural area of Ukonga, Tanzania. Mumghamba EG, et al. **Int Dent J** 1996 Jun;46(3):156–60

Sexual risk factors for cervical cancer among rural Indian women: a case–control study. Biswas LN, et al. **Int J Epidemiol** 1997 Jun;26(3):491–5

Serum uric acid and its correlates in Chinese adult populations, urban and rural, of Beijing. The PRC–USA Collaborative Study in Cardiovascular and Cardiopulmonary Epidemiology. Li Y, et al. **Int J Epidemiol** 1997 Apr;26(2):288–96

Prevalence of wheeze and asthma and relation to atopy in urban and rural Ethiopia. Yemaneberhan H, et al. **Lancet** 1997 Jul 12;350(9071):85–90

Health care utilization [letter; comment] Devadasan N. **Natl Med J India** 1997 Mar–Apr;10(2):97–8. Comment on: Natl Med J India 1996 Nov–Dec;9(6):259–62.

Employment status and its health–related effects in rural Styria, Austria. Rásky E, et al. **Prev Med** 1996 Nov–Dec; 25(6):757–63

Diversity in VA settings [letter; comment] Kofoed L. **Psychiatr Serv** 1997 Jul;48(7):956–7. Comment on: Psychiatr Serv 1997 Jan;48(1):71–5.

Depressive disorders among older residents in a Chinese rural community. Liu CY, et al. **Psychol Med** 1997 Jul; 27(4):943–9

Prenatal factors and birth outcomes in the public health service: a rural/urban comparison. Alexy B, et al. **Res Nurs Health** 1997 Feb;20(1):61–70

Improving rural health care in South Dakota. Mortinsen R. **S D J Med** 1996 Dec;49(12):452–6

Maternal and non–maternal time–allocation to infant care, and care during infant illness in rural Java, Indonesia. Gryboski KL. **Soc Sci Med** 1996 Jul;43(2):209–19

Prevalence of coronary heart disease risk factors among rural blacks: a community–based study. Willems JP, et al. **South Med J** 1997 Aug;90(8):814–20

Evidence of an increasing AIDS burden in rural America. Fordyce EJ, et al. **Stat Bull Metrop Insur Co** 1997 Apr–Jun; 78(2):2–9

[Brachial indicators of fat and muscle in schoolchildren of a rural community according to social groups (General Lavalle, Buenos Aires, Argentina)] Bolzán AG, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):281–5 (Eng. Abstr.) **(Spa)**

TRENDS

Rural psychiatric services. Tobin MJ.
Aust N Z J Psychiatry 1996 Feb;30(1):114–23

The National Health Service Corps: rural physician service and retention. Cullen TJ, et al. **J Am Board Fam Pract** 1997 Jul–Aug;10(4):272–9

1945–1995 The Golden Years of Medicine. Sanderson EW. **S D J Med** 1996 Apr;49(4):131–2

Seasonal variations of household costs of illness in Burkina Faso. Sauerborn R, et al. **Soc Sci Med** 1996 Aug; 43(3):281–90

Perceptions of rural addictions and related HIV. Leukefeld CG, et al. **Subst Use Misuse** 1997 Jan;32(1):83–8

Office of rural health: forging the future of rural health recruitment and retention. Jolley B. **Tenn Med** 1996 Sep; 89(9):330–1

RURAL HEALTH SERVICES

Education for rural practice in Canada and Australia. Rourke JT, et al. **Acad Med** 1996 May;71(5):464–9

Rural family practice program for first–year students [letter] Seim HC. **Acad Med** 1997 Sep;72(9):735–6

Evaluation of American College of Surgeons trauma triage criteria in a suburban and rural setting. Henry MC, et al. **Am J Emerg Med** 1996 Mar;14(2):124–9

The Royal Flying Doctor Service. The South Australian operation (central section)––past and present. Cooter R. **Aust Fam Physician** 1997 Jan;26(1):58–61

1995 Brown Craig Travelling Fellowship. Destination: Ethiopia. Goh JT, et al. **Aust N Z J Obs:et Gynaecol** 1996 Aug;36(3):335–8

Pilot trial of integrating pharmacy into primary care in rural areas is needed [letter] Ford S. **BMJ** 1997 Feb 22; 314(7080):607

Out of hours primary care. Attitudes are evidence of change [letter; comment] Roff WR. **BMJ** 1997 Apr 19; 314(7088):1197. Comment on: BMJ 1997 Jan 18;314(7075):157–8.

Examination of attendance patterns before and after introduction of South Africa's policy of free health care for children aged under 6 years and pregnant women [see comments] Wilkinson D, et al. **BMJ** 1997 Mar 29; 314(7085):940–1. Comment in: BMJ 1997 Mar 29;314(7085):941.

One–year prospective study of cases of suspected acute myocardial infarction managed by urban and rural general practitioners. Murphy AW, et al. **Br J Gen Pract** 1996 Feb; 46(403):73–6

Telemedicine may help change the face of medical care in eastern Canada. Robb N. **Can Med Assoc J** 1997 Apr 1; 156(7):1009–11

Knowledge on collection and analysis of health information of state certified nurses from rural health centres, Masvingo Province. Mudzamiri WS, et al. **Cent Afr J Med** 1996 Jun; 42(6):161–2

Analysis of prehospital ALS cases in a rural community. Hu SC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep; 58(3):171–6

Facing breast cancer far from radiation therapy centres [letter; comment] Bathe OF, et al. **CMAJ** 1997 Aug 1; 157(3):251–3. Comment on: Can Med Assoc J 1997 Jan 1;156(1):25–35. Comment on: Can Med Assoc J 1997 Jan 1;156(1):43–5.

Suicide and crisis intervention in rural communities in Sri Lanka. Ratnayeke L. **Crisis** 1996;17(4):149–51, 154

The influence of community context on the preferences of older adults for entering a nursing home. Peek CW, et al. **Gerontologist** 1997 Aug;37(4):533–42

Randomised controlled field trial of two antenatal care packages in rural south India. Srinivasan V, et al. **Indian J Med Res** 1995 Aug;102:86–94

Solar energy and rural health care. **Indian Pediatr** 1996 Oct; 33(10):883–5

Compounding facility for dermatologic topical medications: a prototype for rural areas of developing countries [news] Maddin S, et al. **Int J Dermatol** 1996 Jan;35(1):63–4

Programs and services to prevent pregnancy, childbearing, and poor birth outcomes among adolescents in rural areas of the southeastern United States. Loda FA, et al. **J Adolesc Health** 1997 Sep;21(3):157–66

Allied health faculty attitudes toward rural clinical practice. Boonyawiroj EB, et al. **J Allied Health** 1996 Summer; 25(3):263–74

Rural telemedicine data/image transfer methods and purposes of interactive video sessions. Hassol A, et al. **J Am Med Inform Assoc** 1997 Jan–Feb;4(1):36–7

Implementation of in–home telemedicine in rural kansas: answering an elderly patient's needs [see comments] Lindberg CC. **J Am Med Inform Assoc** 1997 Jan–Feb; 4(1):14–7. Comment in: J Am Med Inform Assoc 1997 Jan–Feb;4(1):69–70.

Knowledge of, attitudes toward, and barriers to cancer control and screening among primary care physicians in Egypt: the need for postgraduate medical education. Soliman AS, et al. **J Cancer Educ** 1997 Summer;12(2):100–7

The advanced practice nurse: meeting the information needs of the rural cancer patient. White NJ, et al. **J Cancer Educ** 1996 Winter;11(4):203–9

Immunization services in rural areas. Steiner JF, et al. **J Fam Pract** 1996 Oct;43(4):326–8

Cancer–screening determinants among Hispanic women using migrant health clinics. Skaer TL, et al. **J Health Care Poor Underserved** 1996 Nov;7(4):338–54

Evaluation of an RN–to–BSN distance education program via satellite for nurses in rural health care. Shomaker D, et al. **J Nurs Educ** 1997 Sep;36(7):328–30

A study of the beliefs and birthing practices of traditional midwives in rural Guatemala. Lang JB, et al. **J Nurse Midwifery** 1997 Jan–Feb;42(1):25–31

The South Carolina Geriatric Rural Initiative Project: the paraprofessional geriatric technician in care coordination. Hornung CA, et al. **J S C Med Assoc** 1997 Jul;93(7):248–54

Rural school–based clinics: are adolescents willing to use them and what services do they want? Rickert VI, et al. **J Sch Health** 1997 Apr;67(4):144–8

Trauma patients: an analysis of rural ambulance trip reports. Morrisey MA, et al. **J Trauma** 1996 Oct;41(4):741–6

Politics, practical logic, and primary health care in rural Haiti. Brodwin PE. **Med Anthropol Q** 1997 Mar;11(1):69–88 (58 ref.)

Women and men and the medical workforce in Australia [letter; comment] Arnold PC. **Med J Aust** 1997 Jun 16; 166(12):667, 670. Comment on: Med J Aust 1997 Jan 6;166(1):7–8.

Urinary diagnosis of gonorrhoea and Chlamydia in men in remote aboriginal communities [see comments] Skov SJ, et al. **Med J Aust** 1997 May 5;166(9):468–71. Comment in: Med J Aust 1997 May 5;166(9):456–7.

Mental health service delivery in rural areas: organizational and clinical issues. Wagenfeld MO, et al. **NIDA Res Monogr** 1997;168:418–37 (59 ref.)

Bringing endocrine nursing to rural and outback Australia. Nery ML. **Nurs Clin North Am** 1996 Dec;31(4):689–93

Yaxley Group Practice and Patients' Association. Thomas P. **Occas Pap R Coll Gen Pract** 1994 Jan;(64):24–5

Peritoneal dialysis by twin bags is a good alternative to hemodialysis for sparsely populated areas [letter] Stegmayr BG, et al. **Perit Dial Int** 1997 Jan–Feb;17(1):95–6

Traveling for care: factors influencing health care access for rural dwellers. Horner SD, et al. **Public Health Nurs** 1994 Jun;11(3):145–9

Rural health care and health care reform [editorial] Knollmueller RN. **Public Health Nurs** 1994 Jun;11(3):143–4

Community cardiac awareness teaching in a rural area: the potential for a health promotion message. Bury G, et al. **Resuscitation** 1996 Dec;33(2):141–5

Curriculum development for the rural specialist [editorial] [see comments] de Villiers MR, et al. **S Afr Med J** 1996 Dec;86(12):1528. Comment in: S Afr Med J 1997 Feb;87(2):179.

Experiences and findings of a medical officer on Tristan da Cunha, February 1994–February 1995. Morris J. **S Afr Med J** 1997 Mar;87(3):323–7

Improving job satisfaction of rural South Dakota mental health providers through education: a pilot study. Bhatara VS, et al. **S D J Med** 1996 Mar;49(3):93–6

Scope for fly control as a diarrhoea intervention in Pakistan: a community perspective. Chavasse D, et al. **Soc Sci Med** 1996 Oct;43(8):1289–94

The impact of health education to promote cloth filters on dracunculiasis prevalence in the northern region, Ghana. Tayeh A, et al. **Soc Sci Med** 1996 Oct;43(8):1205–11

Evaluation of HIV/AIDS education initiatives among women in northeastern Thai villages. Elkins D, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):430–42

The road to freedom: ending violence against women. Harris M, et al. **Womens Health Issues** 1997 Mar–Apr;7(2):99–108

Oral rehydration at home––with a little help from friends. Akpede GO, et al. **World Health Forum** 1997;18(1):75–9

Reproductive tract infections––and associated difficulties. Kumar R, et al. **World Health Forum** 1997;18(1):80–2

One person, two roles: nurse and traditional healer. Tessendorf KE, et al. **World Health Forum** 1997;18(1):59–62

[Noncompliance with the medical prescription in primary care in a rural setting] Mateos Campos R, et al. **Aten Primaria** 1997 Jan;19(1):41–6 (Eng. Abstr.) **(Spa)**

[A honorary doctor in a sparsely populated region...He follows his patients from the birth and may play at funerals] Fällman m G. **Lakartidningen** 1996 Dec 18; 93(51–52):4700–2 **(Swe)**

ECONOMICS

Health professional shortage areas, health status, and reform [letter] Good RG. **Arch Fam Med** 1996 Apr;5(4):196–7

Models for horizontal equity in resource allocation in aboriginal health. McDermott R, et al. **Aust N Z J Public Health** 1996 Feb;20(1):13–5

Equitable provision of health services to aboriginal and Torres Strait Islander people of Queensland. Runciman C, et al. **Aust N Z J Public Health** 1996 Feb;20(1):15–7

Variations in health care expenditure in the Alice Springs Rural District in 1993–94. Warchivker I. **Aust N Z J Public Health** 1996 Feb;20(1):11–3

Rural clinics become bonanza. Emmerich W. **J Miss State Med Assoc** 1996 Nov;37(11):833–4

Financial outcome of treating trauma in a rural environment. Rogers FB, et al. **J Trauma** 1997 Jul;43(1):65–72; discussion 72–3

How economic demand influences access to medical care for rural Hispanic children. Smith MW, et al. **Med Care** 1996 Nov;34(11):1135–48

GP fundholding and prescribing in UK general practice: evidence from two rural, English Family Health Services Authorities. Baines DL, et al. **Public Health** 1997 Sep; 111(5):321–5

Community–based health insurance [letter; comment] Tang SL. **World Health Forum** 1997;18(1):63–4. Comment on: World Health Forum 1996;17(1):58–62.

[The economic basis for the work of the dental service in an agricultural region] Opeshko VV. **Stomatologiia (Mosk)** 1996;Spec No:29–30 **(Rus)**

HISTORY

[Peculiarities from the past: ABC of rural medical practice] Theves G. **Bull Soc Sci Med Grand Duche Luxemb** 1996; 133(1):43–6 **(Ger)**

LEGISLATION & JURISPRUDENCE

Rural physician falls between interprovincial cracks [letter] Brothers A. **Can Med Assoc J** 1996 Dec 1;155(11):1548–9

MANPOWER

Restructuring of general practice will lead to shortage of rural locums [letter] Porter G. **Aust Fam Physician** 1997 Jan;26(1):76

Practice intensity: urban vs rural [letter; comment] Dawes CR. **Can Fam Physician** 1997 Jun;43:1048–9. Comment on: Can Fam Physician 1997 Apr;43:677–83, 733.

Physician supply in rural Canada. Can urban medical schools produce rural physicians? [editorial] Godwin M, et al. **Can Fam Physician** 1996 Sep;42:1641–4, 1653–6 **(Eng, Fre)**

U of Manitoba program delivers care to natives, hope to aboriginal students [published erratum appears in Can Med Assoc J 1997 Feb 15;156(4):485] Square D. **Can Med Assoc J** 1996 Dec 1;155(11):1609–11

Manitoba municipalities want foreign–trained physicians to fill medical–care gap. Square D. **Can Med Assoc J** 1997 Apr 1;156(7):1038–9

Can we finally change the system? [letter; comment] Becker AB. **CMAJ** 1997 Jul 15;157(2):136; discussion 139. Comment on: Can Med Assoc J 1997 Mar 1;156(5):665–7.

A fellowship in rural family medicine: program development and outcomes. Norris TE, et al. **Fam Med** 1997 Jun; 29(6):414–20

Changes in student perceptions of interdisciplinary practice in the rural setting. Hayward KS, et al. **J Allied Health** 1996 Fall;25(4):315–27

Geographic origin and its impact on practice location in Kentucky. Elam CL, et al. **J Ky Med Assoc** 1996 Oct; 94(10):446–50

The role of chiropractors in the delivery of interdisciplinary health care in rural areas. Hawk C, et al. **J Manipulative Physiol Ther** 1996 Feb;19(2):82–91 (65 ref.)

HUGs: holidays for undergraduates. Harris J. **Med J Aust** 1996 Dec 2–16;165(11–12):628

Health personnel needs and attitudes to rural service in KwaZulu–Natal. Sankar U, et al. **S Afr Med J** 1997 Mar; 87(3):293–8

Community and self: concepts for rural physician integration and retention. Cutchin MP. **Soc Sci Med** 1997 Jun; 44(11):1661–74

ORGANIZATION & ADMINISTRATION

An academic health center–community partnership: the Morgantown Health Right free clinic. Smego RA Jr, et al. **Acad Med** 1996 Jun;71(6):613–21

Toward reducing the spread of HIV in northeastern Thai villages: evaluation of a village–based intervention. Elkins D, et al. **AIDS Educ Prev** 1997 Feb;9(1):49–69

Access to maternity care in rural Washington: its effect on neonatal outcomes and resource use. Nesbitt TS, et al. **Am J Public Health** 1997 Jan;87(1):85–90

Resources allocation to OPD services at public and private dispensaries in Iringa District, Tanzania. Conestà N, et al. **Ann Ig** 1997 Mar–Apr;9(2):169–76

A nursing practice paradigm for depressed rural women: the Women's Affective Illness Treatment Program. Hauenstein EJ. **Arch Psychiatr Nurs** 1997 Feb;11(1):37–45

Integrating family medicine residents into a rural practice. Kelly L. **Can Fam Physician** 1997 Feb;43:277–86

Dilemma of rural obstetrics. One community's solution. Osmun WE, et al. **Can Fam Physician** 1997 Jun;43:1115–9

Innovative models for rural child protection teams. Crocker D. **Child Abuse Negl** 1996 Mar;20(3):205–11

Mental health services for rural elderly: innovative service strategies. Chalifoux Z, et al. **Community Ment Health J** 1996 Oct;32(5):463–80 (70 ref.)

The provision of services for rural youth with serious emotional and behavioral problems: Virginia's Comprehensive Services Act. Sheldon–Keller AE, et al. **Community Ment Health J** 1996 Oct;32(5):481–95

High touch meets high tech. Distance mental health screening for rural youth using Teleform. Puskar KR, et al. **Comput Nurs** 1996 Nov–Dec;14(6):323–9; quiz 330–2 (31 ref.)

From relief to development: food for work in Bangladesh. Hyder M. **Disasters** 1996 Mar;20(1):21–33

Minor surgery and resources at small clinics in rural Kenya. Nordberg E, et al. **East Afr Med J** 1996 Jun;73(6):385–9

Teleconsultation: a new neurosurgical image transfer system for daily routine and emergency cases––a four–year study.

Urban V, et al. **Eur J Emerg Med** 1996 Mar;3(1):5–8

Integrated networks and health care provider cooperatives: new models for rural health care delivery and financing. Casey MM. **Health Care Manage Rev** 1997 Spring; 22(2):41–8

Time utilisation pattern of staff of two primary health centres in Ballavgarh, Haryana. Kapoor SK, et al. **Indian J Public Health** 1996 Oct–Dec;40(4):112–9

Developing rural interdisciplinary geriatrics teams in a changing health care environment. Gariola G. **J Allied Health** 1997 Winter;26(1):27–9

Nutrition and health for older persons in rural America: a managed care model. Klein GL, et al. **J Am Diet Assoc** 1997 Aug;97(8):885–8

Telemedicine expanding the scope of health care information [see comments] Balch DC, et al. **J Am Med Inform Assoc** 1997 Jan–Feb;4(1):1–5. Comment in: J Am Med Inform Assoc 1997 Jan–Feb;4(1):69–70.

Who ever heard of family physicians performing cesarean sections? [editorial] Deutchman M. **J Fam Pract** 1996 Nov; 43(5):449–53

Rural health network development: public policy issues and state initiatives. Casey MM, et al. **J Health Polit Policy Law** 1997 Feb;22(1):23–47

Services for clients of community support programs in rural Wisconsin. Hollingsworth EJ. **J Ment Health Adm** 1997 Winter;24(1):55–63

Community outreach: rural mobile health unit. Alexy BB, et al. **J Nurs Adm** 1996 Dec;26(12):38–42

Chemung Valley Health Network: the development of a community health information network. Zeidman C. **J Nurs Care Qual** 1997 Jun;11(5):5–8

Nurse–midwifery service in a rural setting. Stone SE, et al. **J Nurse Midwifery** 1996 Sep–Oct;41(5):377–82

An inter district quality partnership: the experience of a large rural health service. Turner R. **J Qual Clin Pract** 1996 Sep;16(3):145–50

Telemedicine and the New Children's Hospital (Royal Alexandra Hospital for Children). Manson N. **J Telemed Telecare** 1997;3 Suppl 1:46–8

Dracunculiasis eradication [letter] Hopkins DR. **Lancet** 1997 Sep 13;350(9080):812–3

Breast cancer in rural Australia. Furnival CM. **Med J Aust** 1997 Jan 6;166(1):25–6

Women for women's health: Uganda. Andrews CM. **Nurs Outlook** 1996 May–Jun;44(3):141–5

Nurse practitioner developments in Australia [letter] de la Rue B. **Nurse Pract** 1997 Apr;22(4):252–3

Community education programs to promote mammography participation in rural New York State. Flynn BS, et al. **Prev Med** 1997 Jan–Feb;26(1):102–8

A dynamo with a mission: Nicholas Crisp [interview by Ina van der Linde] Crisp N. **S Afr Med J** 1997 Jan;87(1):83–4

"Popular" health and the state: dialectics of the peace process in El Salvador. Smith–Nonini S. **Soc Sci Med** 1997 Mar; 44(5):635–45

The effect of a combined approach to schistosomiasis control on the transmission of Schistosoma japonicum in Xingzi of Poyang Lake area, China. Jiang Q, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):535–41

Community health centers. Providing access to care in Virginia's medically underserved areas. Cafazza JB Jr. **Va Med Q** 1997 Summer;124(3):167–9

NGO–promoted women's credit program, immunization coverage, and child mortality in rural Bangladesh. Amin R, et al. **Women Health** 1997;25(1):71–87

Challenges in health development. Nugroho G, et al. **World Health Forum** 1997;18(1):44–7

[The methodological–organizational aspects of surgical care for the rural population] Nahorna AM, et al. **Lik Sprava** 1996 Mar–Apr;(3–4):178–81 **(Ukr)**

STANDARDS

An obstetric and gynecologic clerkship's influence on a medical community. The Washington, Alaska, Montana, and Idaho Anchorage obstetric and gynecologic clerkship. Hanson HB. **Am J Obstet Gynecol** 1997 Jun;176(6):1363–5; discussion 1366–7

Evaluation of a model for improving emergency medical and trauma services for children in rural areas. Smith GA, et al. **Ann Emerg Med** 1997 Apr;29(4):504–10

Poor pay the problem [letter] Sullivan S. **Aust Vet J** 1996 Aug;74(2):164

The ethics of non–sexual dual relationships: a dilemma for the rural mental health professional. Brownlee K. **Community Ment Health J** 1996 Oct;32(5):497–503

Patients' perception of public, voluntary and private dispensaries in rural areas of Tanzania. Ahmed AM, et al. **East Afr Med J** 1996 Jun;73(6):370–4

Reduction of maternal and perinatal mortality in rural and peri–urban settings: what works? Kwast BE. **Eur J Obstet Gynecol Reprod Biol** 1996 Oct;69(1):47–53 (22 ref.)

Trial of rural practice evaluation: mutual rotation by family physicians. Inoue K, et al. **Fam Pract** 1997 Aug;14(4):293–4

Residency training and rural practice [letter; comment] Wells S. **J Am Board Fam Pract** 1996 Jul–Aug;9(4):305–6. Comment on: J Am Board Fam Pract 1996 Mar–Apr;9(2):86–93.

Are rural family physicians comfortable performing cesarean sections? Norris TE, et al. **J Fam Pract** 1996 Nov; 43(5):455–60

The social and educational outcome of a cohort of rural children in relation to the racial and socioeconomic groupings of their parents [letter; comment] McDermott R, et al. **J Paediatr Child Health** 1997 Apr;33(2):175–6. Comment on: J Paediatr Child Health 1996 Apr;32(2):99–102.

Social and educational outcome of rural children [letter; comment] Stanley F. **J Paediatr Child Health** 1997 Apr; 33(2):174; discussion 175–6. Comment on: J Paediatr Child Health 1996 Apr;32(2):99–102.

A pragmatic approach to educating rural health services on quality management. Turner R, et al. **J Qual Clin Pract** 1997 Mar;17(1):13–9

Ethical considerations in rural health nursing. Stark R. **Med Law** 1996;15(2):277–82

The high road to rural medicine [letter] Mankazana M, et al. **S Afr Med J** 1997 Jun;87(6):768, 770

Acceptance, efficacy, and side effects of Norplant implants in four counties in north China. Tu P, et al. **Stud Fam Plann** 1997 Jun;28(2):122–31

Professional perceptions of availability and quality of mental health services in Wisconsin. Taman MS, et al. **Wis Med J** 1997 Jan;96(1):40–5

STATISTICS & NUMERICAL DATA

Missed injuries in a rural area trauma center. Robertson R, et al. **Am J Surg** 1996 Nov;172(5):564–7; discussion 567–8

Spectrum of general surgery in rural America. Landercasper J, et al. **Arch Surg** 1997 May;132(5):494–6; discussion 496–8

Hospital readmissions for rural elderly. 1992–1993. Alexy BB, et al. **J Nurs Adm** 1996 Nov;26(11):10–6

Access to care in post–economic reform rural China: results from a 1994 cross–sectional survey. Shi L. **J Public Health Policy** 1996;17(3):347–61

Simplifying the assessment of rural emergency medical service trauma transport. Ohsfeldt RL, et al. **Med Care** 1996 Nov;34(11):1085–92

Simplifying the assessment of rural emergency medical services trauma transport. Ohsfeldt RL, et al. **Med Care** 1996 Dec;34(12):1180–7

Breast cancer management: a rural perspective. Tulloh BR, et al. **Med J Aust** 1997 Jan 6;166(1):26–9

Pediatric prehospital care: epidemiology of use in a predominantly rural state. Svenson JE, et al. **Pediatr Emerg Care** 1996 Jun;12(3):173–9

A survey of professional activities of psychiatrists in South Africa. Flisher AJ, et al. **Psychiatr Serv** 1997 May; 48(5):707–9

[A long–term pharmacoepidemiological study on drug dispensing by the pharmacy office in rural primary care. The influence of age and sex] Bernárdez M, et al. **Aten Primaria** 1997 Jan;19(1):7–11 (Eng. Abstr.) **(Spa)**

SUPPLY & DISTRIBUTION

GP cooperatives. Don't serve rural patients well [letter] Robertson DA. **BMJ** 1997 Mar 29;314(7085):976

Health care reform and rural mental health: severe mental illness. Kane CF, et al. **Community Ment Health J** 1996 Oct;32(5):445–62 (80 ref.)

The needs of patients with cancer and their caregivers in rural areas. Silveira JM, et al. **Oncol Nurs Forum** 1997 Jan–Feb;24(1):71–6

TRENDS

Pharmaceutical care for rural patients: ominous trends. Gangeness DE. **J Am Pharm Assoc (Wash)** 1997 Jan–Feb; NS37(1):62–5, 84 (21 ref.)

The future of rural medicine in South Africa [editorial] [see comments] Couper I. **S Afr Med J** 1997 Mar;87(3):290–2 . Comment in: S Afr Med J 1997 Jun;87(6):768.

The high road to rural medicine [letter; comment] O'Keefe SJ. **S Afr Med J** 1997 Jun;87(6):768. Comment on: S Afr Med J 1997 Mar;87(3):290–2.

UTILIZATION

Nithsdale, Nunhead and Norwood: similarities and differences in prevalence of schizophrenia and utilisation of services in rural and urban areas. McCreadie RG, et al. **Br J Psychiatry** 1997 Jan;170:31–6

Scope of ethnopsychiatry in Pakistan [editorial] Gadit AA. **JPMA J Pak Med Assoc** 1996 Jun;46(6):119

Predicting treatment–seeking behavior in Guatemala: a comparison of the health services research and decision–theoretic approaches. Weller SC, et al. **Med Anthropol Q** 1997 Jun;11(2):224–45

Factors in accessibility of general practice in rural Australia. Humphreys JS, et al. **Med J Aust** 1997 Jun 2;166(11):577–80

Utilization of health services among rural women in Gujarat, India. Vissandjée B, et al. **Public Health** 1997 May; 111(3):135–48

Identification of needs of and utilization of resources by rural and urban elders after hospital discharge to the home. Schultz AA. **Public Health Nurs** 1997 Feb;14(1):28–36

Use of emergency departments by the elderly in rural areas. Hamdy RC, et al. **South Med J** 1997 Jun;90(6):616–20

Underutilization of maternal health services [letter] Sarin AR. **World Health Forum** 1997;18(1):67–8

RURAL HOSPITALS see **HOSPITALS, RURAL**

RURAL POPULATION

Study on possible increase in twinning rate at a small village in south Brazil. Matte U, et al. **Acta Genet Med Gemellol (Roma)** 1996;45(4):431–7

The epidemiology of infertility in a rural population. Buckett W, et al. **Acta Obstet Gynecol Scand** 1997 Mar;76(3):233–7

Maternal mortality in rural Zambia. Vork FC, et al. **Acta Obstet Gynecol Scand** 1997 Aug;76(7):646–50

Familial–genetic and reproductive epidemiology of schizophrenia in rural Ireland: age at onset, familial morbid risk and parental fertility. Waddington JL, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):62–8

Rural adolescent drinking behavior: three year follow–up in the New Hampshire substance abuse prevention study. Stevens MM, et al. **Adolescence** 1996 Spring;31(121):159–66

HIV–1 infection among female commercial sex workers in rural Thailand. Gray JA, et al. **AIDS** 1997 Jan;11(1):89–94

Knowledge, attitudes and perception of AIDS in rural Senegal: relationship to sexual behaviour and behaviour change. Lagarde E, et al. **AIDS** 1996 Mar;10(3):327–34

Sexual behaviour patterns and other risk factors for HIV infection in rural Tanzania: a case–control study. Quigley M, et al. **AIDS** 1997 Feb;11(2):237–48

Rural practice and obstetrics fellowships for family physicians [letter; comment] Taylor HA. **Am Fam Physician** 1997 Jun;55(8):2603–4. Comment on: Am Fam Physician 1996 Aug;54(2):471–4, 479, 483.

Special commentary. Bowman BJ. **Am Indian Alsk Native Ment Health Res** 1996;7(2):42–50; discussion 51–2

Assessment of dietary intake in rural communities in Africa: experiences in Kenya. Kigutha HN. **Am J Clin Nutr** 1997 Apr;65(4 Suppl):1168S–1172S (9 ref.)

Effects of cigarette smoking, caffeine consumption, and alcohol intake on fecundability. Curtis KM, et al. **Am J Epidemiol** 1997 Jul 1;146(1):32–41

Urbs in rure redux: changing risk factors for rural HIV infection. Roberts NE, et al. **Am J Med Sci** 1997 Jul; 314(1):3–10

Perceptions and experiences of occupational therapists in rural schools. Wills K, et al. **Am J Occup Ther** 1996 May; 50(5):370–9

The deterioration in children's nutritional status in rural Chad: the effect of mothers' influence on feeding. Bégin F, et al. **Am J Public Health** 1997 Aug;87(8):1356–9

The epidemiology of dengue virus infection among urban, jungle, and rural populations in the Amazon region of Peru. Hayes CG, et al. **Am J Trop Med Hyg** 1996 Oct; 55(4):459–63

Changes over time in blood lipids and their correlates in Polish rural and urban populations: the Poland–United States Collaborative Study in cardiopulmonary disease epidemiology. Pajak A, et al. **Ann Epidemiol** 1997 Feb; 7(2):115–24

Environmental and occupational determinants of blood pressure in rural communities in China. Xu X, et al. **Ann Epidemiol** 1997 Feb;7(2):95–106

Pediatric facial fractures: a demographic analysis outside an urban environment. Sherick DG, et al. **Ann Plast Surg** 1997 Jun;38(6):578–84; discussion 584–5

Social support and physical health in the rural elderly. Johnson JE. **Appl Nurs Res** 1996 May;9(2):61–6

Rural physicians, rural networks, and free market health care in the 1990s. Rosenthal TC, et al. **Arch Fam Med** 1997 Jul–Aug;6(4):319–23 (59 ref.)

Psychiatric assessment and confirmation of dual disorders in rural substance abusing women. Boyd MR, et al. **Arch Psychiatr Nurs** 1997 Apr;11(2):74–81

A nursing practice paradigm for depressed rural women: theoretical basis. Hauenstein EJ. **Arch Psychiatr Nurs** 1996 Oct;10(5):283–92

Penetrating eye injuries in rural New South Wales. Thompson CG, et al. **Aust N Z J Ophthalmol** 1997 Feb; 25(1):37–41

The making of a rural surgeon. Faris I. **Aust N Z J Surg** 1997 Apr;67(4):153–6

Vitamin A and carotenoid status in rural China. Wang G, et al. **Br J Nutr** 1996 Dec;76(6):809–20

Stress and psychiatric disorder in the Hindu Kush: a community survey of mountain villages in Chitral, Pakistan [see comments] Mumford DB, et al. **Br J Psychiatry** 1996 Mar;168(3):299–307. Comment in: Br J Psychiatry 1996 Jun;168(6):788–9.

Urban–rural differences in the prevalence of coronary heart disease and its risk factors in Delhi. Chadha SL, et al. **Bull World Health Organ** 1997;75(1):31–8

Child psychiatric consultation service to community agencies: a collaborative approach involving three community agencies. Froese A, et al. **Can J Psychiatry** 1997 Aug;42(6):656–8

The cost of conducting face–to–face household interviews in a rural, Native American population. The North Carolina Native American Cervical Cancer Prevention Project. Blinson K, et al. **Cancer** 1996 Oct 1;78(7 Suppl):1587–91

Psychometric analysis of the Functional Assessment of Cancer Therapy–General (FACT–G) scale in a rural sample. Winstead–Fry P, et al. **Cancer** 1997 Jun 15; 79(12):2446–52

Health beliefs of rural Appalachian women and the practice of breast self–examination. Sortet JP, et al. **Cancer Nurs**

1997 Aug;20(4):231–5
Lack of diabetes in rural Colombian Amerindians [letter] Briceño I, et al. **Diabetes Care** 1996 Aug;19(8):900–1
Growth retardation starts in the first three months of life among rural Guatemalan children. Rivera J, et al. **Eur J Clin Nutr** 1997 Feb;51(2):92–6
Risk factors for ectopic pregnancy in a rural population. Garrett AM, et al. **Fam Med** 1996 Feb;28(2):111–3
Seroepidemiology of Helicobacter pylori infection and hepatitis A in a rural area: evidence against a common mode of transmission. Luzza F, et al. **Gut** 1997 Aug; 41(2):164–8
Adolescents' perceptions of health concerns: an exploratory study among rural midwestern youth. Weiler RM. **Health Educ Behav** 1997 Jun;24(3):287–99
Inbreeding patterns in the Gredos Mountain Range (Spain). Fuster V, et al. **Hum Biol** 1996 Feb;68(1):75–93
Genealogical information and the structure of rural Latin-American populations: reality and fantasy. Castilla EE, et al. **Hum Hered** 1996 Sep–Oct;46(5):241–55
Ambulatory blood pressure monitoring in evaluating the prevalence of hypertension in adults in Ohasama, a rural Japanese community. Imai Y, et al. **Hypertens Res** 1996 Sep;19(3):207–12
An exploration of factors influencing adjustment among relocating rural elders. Armer JM. **Image J Nurs Sch** 1996 Spring;28(1):35–9
Awareness of AIDS among school children in Haryana. Aggarwal AK, et al. **Indian J Public Health** 1996 Apr–Jun; 40(2):38–45
Association of trans fatty acids (vegetable ghee) and clarified butter (Indian ghee) intake with higher risk of coronary artery disease in rural and urban populations with low fat consumption. Singh RB, et al. **Int J Cardiol** 1996 Oct 25; 56(3):289–98; discussion 299–300
Incidence of HIV-1 infection in adults and socio-demographic characteristics of seroconverters in a rural population in Uganda: 1990–1994. Kengeya-Kayondo JF, et al. **Int J Epidemiol** 1996 Oct;25(5):1077–82
Fermentation--a traditional anti-diarrhoeal practice lost? The use of fermented foods in urban and rural Kenya. Watson FE, et al. **Int J Food Sci Nutr** 1996 Mar;47(2):171–9
Prevalence of dementia in a rural setting: A report from India [editorial] Rajkumar S, et al. **Int J Geriatr Psychiatry** 1997 Jul;12(7):702–7
Hearing impairment and otitis media in a rural primary school in south India. Jacob A, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):133–8
Prevalence of otitis media, hearing impairment and cerumen impaction among school children in rural and urban Dar es Salaam, Tanzania. Minja BM, et al. **Int J Pediatr Otorhinolaryngol** 1996 Sep;37(1):29–34
Life satisfaction among low-income rural youth from Appalachia. Wilson SM, et al. **J Adolesc** 1997 Aug; 20(4):443–59
Assessing fruit and vegetable consumption in a 5 a day study targeting rural blacks: the issue of portion size. Kramish Campbell M, et al. **J Am Diet Assoc** 1996 Oct;96(10):1040–2
Smoking and socioeconomic status in a population-based inner city sample of African-Americans, Latinos and whites. Siegel D, et al. **J Cardiovasc Risk** 1996 Jun; 3(3):295–300
Prevalence and determinants of coronary heart disease in a rural population of India. Gupta R, et al. **J Clin Epidemiol** 1997 Feb;50(2):203–9
Medical drug utilization patterns for febrile patients in rural areas of Mexico. Leyva-F. R, et al. **J Clin Epidemiol** 1997 Mar;50(3):329–35
Estimation of the prevalence of non-insulin dependent diabetes mellitus in a rural area of Japan. Yamamoto W, et al. **J Epidemiol** 1996 Sep;6(3):114–9
Rural gay men in northern New England: life experiences and coping styles. Cody PJ, et al. **J Homosex** 1997; 33(1):51–67
Autism in immigrants: a population-based study from Swedish rural and urban areas. Gillberg IC, et al. **J Intellect Disabil Res** 1996 Feb;40 (Pt 1):24–31
Chiropractic and rural health; the role of chiropractors in the delivery of interdisciplinary health care in rural settings [letter] Gatterman MI. **J Manipulative Physiol Ther** 1996 Jul–Aug;19(6):425
Targeted perinatal drug screening in a rural population. O'Connor TA, et al. **J Matern Fetal Med** 1997 Mar–Apr; 6(2):108–10
The social and educational outcome of a cohort of rural children in relation to the racial and socio-economic groupings of their parents [see comments] Cox JW. **J Paediatr Child Health** 1996 Apr;32(2):99–102. Comment in: J Paediatr Child Health 1997 Apr;33(2):174; discussion 175–6. Comment in: J Paediatr Child Health 1997 Apr;33(2):175–6.
Neonatal resuscitation and newborn outcomes in rural Kenya. Kamenir SA. **J Trop Pediatr** 1997 Jun;43(3):170–3
Acute respiratory infections in children: a community-based longitudinal study in rural Bangladesh. Zaman K, et al. **J Trop Pediatr** 1997 Jun;43(3):133–7
A piece of my mind. Be careful what you wish for. Ducatman BS. **JAMA** 1997 Oct 8;278(14):1130
Tracing patients in rural Africa [letter; comment] Karas JA. **Lancet** 1996 Dec 7;348(9041):1598. Comment on: Lancet 1996 Oct 19;348(9034):1083–4.
Popular therapeutics and medical preferences in rural north India [see comments] Lambert H. **Lancet** 1996 Dec 21–28; 348(9043):1706–9. Comment in: Lancet 1997 Jul 26;350(9073):298.
Tracing patients in rural Africa [see comments] Strang JI. **Lancet** 1996 Oct 19;348(9034):1083–4. Comment in: Lancet 1996 Dec 7;348(9041):1598.
Epidemiological study of magnesium status and risk of coronary artery disease in elderly rural and urban populations of north India. Singh RB, et al. **Magnes Res** 1996 Oct;9(3):165–72
Epidemiological study of magnesium status and risk of hypertension in a rural population of north India. Singh RB, et al. **Magnes Res** 1996 Oct;9(3):173–81
The prevalence of skin disease among school children in rural Ethiopia--a preliminary assessment of dermatologic needs. Figueroa JI, et al. **Pediatr Dermatol** 1996 Sep–Oct; 13(5):378–81
Usage patterns and contribution of fermented foods to the nutrient intakes of low income households in Emene, Nigeria. Onofiok N, et al. **Plant Foods Hum Nutr** 1996 Apr;49(3):199–211
Long-term follow-up of rehabilitated patients with chronic psychiatric illness in Ireland. Farragher B, et al. **Psychiatr Serv** 1996 Oct;47(10):1120–2
Substance abuse, community service use, and symptom severity of urban and rural residents with schizophrenia. Fischer EP, et al. **Psychiatr Serv** 1996 Sep;47(9):980–4
Rural sex education: assessment of programs and interagency collaboration. Polivka BJ. **Public Health Nurs** 1996 Dec; 13(6):425–33
Child sexual abuse in a rural population [letter] Larsen JV, et al. **S Afr Med J** 1996 Nov;86(11):1432–3
Migrancy and HIV/STDs in South Africa--a rural perspective [letter; comment] Lurie M, et al. **S Afr Med J** 1997 Jul;87(7):908–9. Comment on: S Afr Med J 1996 Oct;86(10):1249–51.
Racist attitudes in country GP practices [letter] van Rensburg AJ. **S Afr Med J** 1997 Jan;87(1):74
Ozone pollution in the rural United States and the new NAAQS. Chameides WL, et al. **Science** 1997 May 9; 276(5314):916
Suicide among young rural Australians 1964–1993: a comparison with metropolitan trends. Dudley M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):251–60
Communicating with the people about HIV infection risk as a basis for planning interventions: lessons from the Kagera Region of Tanzania. Killewo J, et al. **Soc Sci Med** 1997 Jul;45(2):319–29
Patterns of sexual behaviour in a rural population in north-western Tanzania. Munguti K, et al. **Soc Sci Med** 1997 May;44(10):1553–61
Wife-beating in rural south India: a qualitative and econometric analysis. Rao V. **Soc Sci Med** 1997 Apr; 44(8):1169–80
Longitudinal epidemiological study of coronary heart disease in a rural population of Kheda district, Gujarat, India. Trivedi DH, et al. **Soz Praventivmed** 1996;41(6):373–9
The prevalence and motivating factors of adolescent smoking at a rural middle school in Taiwan. Wang CS, et al. **Subst Use Misuse** 1996 Aug;31(10):1447–58
The spread of methicillin-resistant Staphylococcus aureus in a rural community: will it become a common microorganism colonizing among the general population? Kayaba H, et al. **Surg Today** 1997;27(3):217–9
Exercise induced bronchospasm in Ghana: differences in prevalence between urban and rural schoolchildren. Addo Yobo EO, et al. **Thorax** 1997 Feb;52(2):161–5
Nutritional evaluation of women in urban and rural areas in Korea as studied by total food duplicate method. Moon CS, et al. **Tohoku J Exp Med** 1997 Feb;181(2):245–65
Talking about health and health care: experiences and perspectives of Latina women in a farmworking community. Farr KA, et al. **Women Health** 1997; 25(2):23–40
Bringing basic health care to the rural poor. Tang SL, et al. **World Health Forum** 1996;17(4):404–8
[Gestational diabetes: an example of a rural region. The DIAGEST Group] Vambergue A, et al. **Journ Annu Diabetol Hotel Dieu** 1997;:69–80 (49 ref.) **(Fre)**
[An outline of a method for estimating the calculated economic cost of malaria cases: its application to a rural area in Burkina Faso (Western Africa)] Guiguemdé TR, et al. **Trop Med Int Health** 1997 Jul;2(7):646–53 (Eng. Abstr.) **(Fre)**
[Trends for left ventricular echocardiographic findings and their related factors--a ten-year follow-up study in rural and urban Japanese populations] Kiyama M. **Nippon Koshu Eisei Zasshi** 1997 Jan;44(1):12–21 (Eng. Abstr.) **(Jpn)**
[Survival factors in healthy aging among rural Japanese residents of Aichi] Takezaki T, et al. **Nippon Koshu Eisei Zasshi** 1996 Oct;43(10):901–8 (Eng. Abstr.) **(Jpn)**
[Geography of effective size of rural populations of Northern Eurasia. Geographic correlation between effective size and level of heterozygosity of populations] Evsiukov AN, et al. **Genetika** 1996 Nov;32(11):1583–91 (Eng. Abstr.) **(Rus)**
[Geography of effective size in the rural population of northern Eurasia: effective size and the intensity of random genetic drift] Evsiukov AN, et al. **Genetika** 1996 Oct; 32(10):1396–405 (Eng. Abstr.) **(Rus)**
[Population-demographic structure in the Kurskaya district. Isolation by distance] Ivanov VP, et al. **Genetika** 1997 Mar; 33(3):381–6 (Eng. Abstr.) **(Rus)**
[Population-demographic structure of the population of Kurskaia district. Migration processes] Ivanov VP, et al. **Genetika** 1997 Mar;33(3):375–80 (Eng. Abstr.) **(Rus)**
[Blood lipid characteristics and the incidence of dyslipoproteinemia in the unorganized rural population of Moldova] Kishlaru LL. **Lik Sprava** 1995 Mar–Apr; (3–4):58–61 (Eng. Abstr.) **(Rus)**
[The technology of introducing the system of obligatory medical insurance for the rural population] Kafidov IN. **Probl Sotsialnoi Gig Istor Med** 1995 Jan–Feb;(1):43–8 (Eng. Abstr.) **(Rus)**
[Peculiarities and trends in the mortality of the urban and rural population in the Angar river region] Leshchenko YaA. **Probl Sotsialnoi Gig Istor Med** 1995 Jul–Aug;(4):13–6 (Eng. Abstr.) **(Rus)**
[The rising of first aid efficiency to the rural population] Pozdeev VG. **Probl Sotsialnoi Gig Istor Med** 1994 Jul–Aug; (4):36–9 (Eng. Abstr.) **(Rus)**
[Characteristics of medical-demographic processes in rural regions of Russia] Veselkova IN, et al. **Probl Sotsialnoi Gig Istor Med** 1995 Nov–Dec;(6):3–6 (Eng. Abstr.) **(Rus)**
[The ATP content of the neutrophils and whole blood in the inhabitants of regions in the Altai Territory subjected to nuclear testing exposure] Frundzhian VG, et al. **Radiats Biol Radioecol** 1997 Jan–Feb;37(1):13–9 (Eng. Abstr.) **(Rus)**
[Psychiatric disorders in a rural area: descriptive study of 2106 cases] Ruiz Doblado S, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1997 Jan–Feb;25(1):23–33 (Eng. Abstr.) **(Spa)**
[Dietary pattern and nutrient intake in preschool children from three rural villages in the Province of Santa Rosa, Guatemala] Gamero H, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):22–6 (Eng. Abstr.) **(Spa)**
[Food habits in the school population from rural areas] Pena Blanco G, et al. **Aten Primaria** 1996 Nov 15;18(8):452–6 (Eng. Abstr.) **(Spa)**
[Dietary and personal hygiene habits of adolescents in a rural population] Martín Moreno V, et al. **Rev Esp Salud Publica** 1996 May–Jun;70(3):331–43 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

Differences between urban and rural suicides. Isometsä E, et al. **Acta Psychiatr Scand** 1997 Apr;95(4):297–305
Tobacco use in rural Alaska and the trampling tobacco project. Beltz DN. **Alaska Med** 1996 Jan–Mar;38(1):24–5
Patterns of injury mortality among Athabascan Indians in interior Alaska 1977–1987. Andon HB. **Am Indian Alsk Native Ment Health Res** 1997;7(3):11–33
Illegal drug use among rural adults: mental health consequences and treatment utilization. Robertson EB, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):467–84
A descriptive study of elderly community-dwelling alcoholic patients in the rural south. Holroyd S, et al. **Am J Geriatr Psychiatry** 1997 Summer;5(3):221–8
Alcohol, tobacco, and other drug use among rural/small town and urban youth: a secondary analysis of the monitoring the future data set. Cronk CE, et al. **Am J Public Health** 1997 May;87(5):760–4
Differential cancer morbidity towards year 2000 in a population disease outlook across Europe.I. The female gender. Davidson K, et al. **Anticancer Res** 1997 Jan–Feb; 17(1B):541–54
Psychiatric morbidity in rural v. urban regions [letter; comment] Lee S. **Br J Psychiatry** 1996 Jun;168(6):788–9. Comment on: Br J Psychiatry 1996 Mar;168(3):299–307.
An epidemiological study of dementia in a rural community in Kerala, India. Shaji S, et al. **Br J Psychiatry** 1996 Jun; 168(6):745–9
Comparison of two enzyme-linked immunosorbent assay tests for diagnosis of Helicobacter pylori infection in China. Groves FD, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):551–2
Management of minor ailments in primary schoolchildren in rural and urban areas. Cantrill JA, et al. **Child Care Health Dev** 1996 May;22(3):167–74
Children of farm laborers: utilization of services for mental health problems. Martin SL, et al. **Community Ment Health J** 1996 Aug;32(4):327–40
Effect of socioeconomic risk factors on the difference in prevalence of diabetes between rural and urban populations in Bangladesh. abu Sayeed M, et al. **Diabetes Care** 1997 Apr;20(4):551–5
Prevalence of NIDDM and impaired glucose tolerance in a rural and an urban population in Cameroon. Mbanya JC, et al. **Diabetologia** 1997 Jul;40(7):824–9
Incidence of epilepsy in rural central Ethiopia. Tekle-Haimanot R, et al. **Epilepsia** 1997 May;38(5):541–6
Social class and coronary disease in rural population of north India. The Indian Social Class and Heart Survey. Singh RB, et al. **Eur Heart J** 1997 Apr;18(4):588–95
Rural and urban differences in physician resource use for low-risk obstetrics. Hart LG, et al. **Health Serv Res** 1996 Oct;31(4):429–52
Breast feeding practices in Varanasi district (U.P.). Kaur P, et al. **Indian J Public Health** 1996 Apr–Jun;40(2):52–3

RURAL POPULATION

A study of aged population and associated health risks in rural India. Yadava KN, et al. **Int J Aging Hum Dev** 1997; 44(4):293–315

Mood disorders: rural/urban differences in prevalence, health care utilization, and disability in Ontario. Parikh SV, et al. **J Affect Disord** 1996 Apr 26;38(1):57–65

Over-the-counter medication use in an older rural community: the MoVIES Project. Stoehr GP, et al. **J Am Geriatr Soc** 1997 Feb;45(2):158–65

Detection of HBsAg and HIV carriage among blood donors or rural population of Loni areas. Jain RC, et al. **J Assoc Physicians India** 1995 May;43(5):378

Relationship between survival status of first child and subsequent child death. Rahman MM, et al. **J Biosoc Sci** 1996 Apr;28(2):185–91

Role of weaning in the nutritional status of infant—a longitudinal study in the rural area of Aligarh. Hasan J, et al. **J Indian Med Assoc** 1996 May;94(5):169, 215

Alcohol and injury: a comparison of three emergency room samples in two regions. Cherpitel CJ. **J Stud Alcohol** 1997 May;58(3):323–31

Characteristics of persons with severe mental illness and substance abuse in rural areas. Barry KL, et al. **Psychiatr Serv** 1996 Jan;47(1):88–90

Characteristics and service use of seriously mentally ill persons living in rural areas. Sullivan G, et al. **Psychiatr Serv** 1996 Jan;47(1):57–61

The influence of male care givers on child health in rural Haiti. Devin RB, et al. **Soc Sci Med** 1996 Aug;43(4):479–88

Factors affecting the most recent fertility rates in urban-rural Bangladesh. Khan HT, et al. **Soc Sci Med** 1997 Feb; 44(3):279–89

Is non-metropolitan residence a risk factor for poor birth outcome in the U.S.? Larson EH, et al. **Soc Sci Med** 1997 Jul;45(2):171–88

Growth status of homeless Nepali boys: do they differ from rural and urban controls? Panter-Brick C, et al. **Soc Sci Med** 1996 Aug;43(4):441–51

Health behaviour and risk behaviour: socioeconomic differences in an Austrian rural county. Stronegger WJ, et al. **Soc Sci Med** 1997 Feb;44(3):423–6

Birthweight distribution in rural north-west Burkina Faso. Wendl-Richter HU. **Trop Med Int Health** 1997 Apr; 2(4):404–8

[Leukemias and other hemoblastoses: description of unusual clustering and difficulties in evaluation. A report on the epidemiology of leukemias and related diseases in rural communities] Curio F. **Gesundheitswesen** 1996 Jul; 58(7):391–9 (Eng. Abstr.) **(Ger)**

[Increased daytime tiredness, nocturnal hypertension and sleep apnea: studies in rural general practice] Grote L, et al. **Pneumologie** 1997 Aug;51 Suppl 3:750–3 (Eng. Abstr.) **(Ger)**

[Selected psychosocial factors and the sexual development of girls] Raboch J Jr, et al. **Zentralbl Gynakol** 1997; 119(6):273–7 (Eng. Abstr.) **(Ger)**

[The epidemiological and laboratory aspects of the risk factors for essential arterial hypertension in adults in a rural area] Azoicăi D, et al. **Bacteriol Virusol Parazitol Epidemiol** 1993 Jan-Jun; 38(1-2):44–51 **(Rum)**

[The detectability and risk factors of peptic ulcer in a rural population (an epidemiological screening trial)] El'shtein NV, et al. **Ter Arkh** 1996;68(2):14–8 (Eng. Abstr.) **(Rus)**

[A genetic epidemiological study of arterial hypertension in an isolated mountain area of Dagestan] Guseinov GG, et al. **Ter Arkh** 1996;68(12):64–6 (Eng. Abstr.) **(Rus)**

[The prevalence and structure of biliary tract diseases in the rural population of northern regions of Siberia] Tsukanov VV. **Ter Arkh** 1997;69(2):30–2 (Eng. Abstr.) **(Rus)**

[Urinary incontinence in adult women: a descriptive study of a rural population] Bretones Alcaraz JJ, et al. **Aten Primaria** 1997 Jun 15;20(1):45–8 (Eng. Abstr.) **(Spa)**

[The prevalence and characteristics of breast feeding in the rural environment] Gómez Sanchiz M, et al. **Aten Primaria** 1997 Apr 15;19(6):318–22 (Eng. Abstr.) **(Spa)**

[The incidence and characteristics of the clinical picture of recurrent myocardial infarct in the rural population] Rudyk BI, et al. **Lik Sprava** 1995 Sep-Dec;(9–12):41–4 (Eng. Abstr.) **(Ukr)**

TRENDS

Maternal determinants of child survival in a rural African community. Van den Broeck J, et al. **Int J Epidemiol** 1996 Oct;25(5):998–1004

RUSSELL'S VIPER

Aortic medial necrosis with or without thrombosis in rabbits treated with Russell's viper venom and angiotensin II. Nakamura M, et al. **Atherosclerosis** 1997 Feb 10; 128(2):149–56

Lysosomal membrane stabilization by alpha-tocopherol against the damaging action of Vipera russelli venom phospholipase A2. Mukherjee AK, et al. **Cell Mol Life Sci** 1997 Feb;53(2):152–5

Clinical trial of intramuscular anti-snake venom administration as a first aid measure in the field in the management of Russell's viper bite patients. Win-Aung, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):494–7

Diluted Russell's viper venom time and colloidal silica clotting time for the identification of the phospholipid-dependent inhibitors of coagulation. Norbis F, et al. **Thromb Res** 1997 Mar 1;85(5):427–31

A platelet aggregation inhibitor phospholipase A2 from Russell's viper (Vipera russelli) venom: isolation and characterization. Prasad BN, et al. **Toxicon** 1996 Oct; 34(10):1173–85

RUSSELL'S VIPER VENOM TIME see **PROTHROMBIN TIME**

RUTHENIUM

Long-lifetime metal-ligand pH probe. Murtaza Z, et al. **Anal Biochem** 1997 May 1;247(2):216–22

Lifetime-based sensing of glucose using energy transfer with a long lifetime donor. Tolosa L, et al. **Anal Biochem** 1997 Jul 15;250(1):102–8

Photolabile donors of nitric oxide: ruthenium nitrosyl chlorides as caged nitric oxide. Bettache N, et al. **Methods Enzymol** 1996;268:266–81

CHEMISTRY

Synthesis and luminescence spectral characterization of long-lifetime lipid metal-ligand probes [published erratum appears in Anal Biochem 1997 May 1;247(2):465] Li L, et al. **Anal Biochem** 1997 Jan 1;244(1):80–5

Study of the interaction between novel ruthenium(II)-polypyridyl complexes and calf thymus DNA. Yang G, et al. **J Inorg Biochem** 1997 May 1; 66(2):141–4

METABOLISM

Long-range oxidation of guanine by Ru(III) in duplex DNA. Arkin MR, et al. **Chem Biol** 1997 May;4(5):389–400

PHARMACOLOGY

Antimicrobial activity of carbene complexes of rhodium(I) and ruthenium(II). Cetinkaya B, et al. **Arzneimittelforschung** 1996 Aug;46(8):821–3

THERAPEUTIC USE

Treatment of residual metastases with Na[trans-RuCl4 (DMSO)Im] and ruthenium uptake by tumor cells. Bergamo A, et al. **Anticancer Drugs** 1996 Aug;7(6):697–702

RUTHENIUM COMPOUNDS

METABOLISM

Binding mode of [ruthenium(II) (1,10-phenanthroline)2L]2+ with poly (dT*dA-dT) triplex. Ligand size effect on third-strand stabilization. Choi SD, et al. **Biochemistry** 1997 Jan 7;36(1):214–23

PHARMACOLOGY

Compared effects of ruthenium red and cis [Ru(NH3)4Cl2]Cl on the isolated ischaemic-reperfused rat heart. Leperre A, et al. **Fundam Clin Pharmacol** 1995;9(6):545–53

Comparative study of Ru(bpz)3(2+) Ru(bipy)3(2+) and Ru(bpz)2Cl2 as photosensitizers of DNA cleavage and adduct formation. Vicendo P, et al. **Photochem Photobiol** 1997 Apr;65(4):647–55

RUTHENIUM RADIOISOTOPES

ADVERSE EFFECTS

Radiation related complications after ruthenium plaque radiotherapy of uveal melanoma. Summanen P, et al. **Br J Ophthalmol** 1996 Aug;80(8):732–9

THERAPEUTIC USE

Tumour cell proliferation after failed ruthenium plaque radiotherapy for posterior uveal melanoma. Seregard S, et al. **Acta Ophthalmol Scand** 1997 Apr;75(2):148–54

Results following episcleral ruthenium plaque radiotherapy for posterior uveal melanoma. The Swedish experience. Seregard S, et al. **Acta Ophthalmol Scand** 1997 Feb; 75(1):11–6

Plaque radiotherapy for the management of uveal metastasis. Shields CL, et al. **Arch Ophthalmol** 1997 Feb;115(2):203–9

Ruthenium-106 eye plaque brachytherapy in the conservative treatment of uveal melanoma: evaluation of 175 patients treated with 150 Gy from 1981–1989. Pötter R, et al. **Front Radiat Ther Oncol** 1997;30:143–9

A histologic study (including DNA quantification and Ki-67 labeling index) in uveal melanomas after brachytherapy with ruthenium plaques. Schilling H, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2081–92

Need for confirmation of positioning of ruthenium plaques by postoperative B-scan ultrasonography. Anteby II, et al. **Ophthalmic Surg Lasers** 1996 Dec;27(12):1024–9

Visual outcome of eyes with malignant melanoma of the uvea after ruthenium plaque radiotherapy. Summanen P, et al. **Ophthalmic Surg Lasers** 1995 Sep-Oct;26(5):449–60

[Criteria for assessing the efficacy of brachytherapy of uveal melanomas, complications of therapy and there prevention] Brovkina AF, et al. **Vestn Oftalmol** 1997 May-Jun; 113(3):14–6 (Eng. Abstr.) **(Rus)**

RUTHENIUM RED

METABOLISM

Adriamycin binds to the matrix of secretory granules during mast cell exocytosis. Crivellato E, et al. **Biotech Histochem** 1997 Mar;72(2):111–6

PHARMACOLOGY

Extracellularly applied ruthenium red and cADP ribose elevate cytosolic Ca2+ in isolated rat osteoclasts. Adebanjo OA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F469–75

Divergent effects of ruthenium red and ryanodine on Ca2+/calmodulin-dependent phosphorylation of the Ca2+ release channel (ryanodine receptor) in cardiac sarcoplasmic reticulum. Netticadan T, et al. **Arch Biochem Biophys** 1996 Sep 15;333(2):368–76

Compared effects of ruthenium red and cis [Ru(NH3)4Cl2]Cl on the isolated ischaemic-reperfused rat heart. Leperre A, et al. **Fundam Clin Pharmacol** 1995;9(6):545–53

Ruthenium Red potently inhibits immune responses both in vitro and in vivo. Dwyer DS, et al. **Int J Immunopharmacol** 1995 Nov;17(11):931–40

Antithetic effects of ryanodine and ruthenium red on osteoclast-mediated bone resorption and intracellular calcium concentrations. Ritchie CK, et al. **J Cell Biochem** 1995 Oct;59(2):281–9

Intraocular effects of ruthenium red in responses to compound 48/80 and topical formaldehyde in rabbit. Stenbäck H, et al. **J Ocul Pharmacol Ther** 1996 Spring; 12(1):85–93

Effects of ruthenium red on the cellular functions and ultrastructure in intact ferret ventricular muscles. Tanaka E, et al. **Jpn J Physiol** 1997 Jun;47(3):273–81

Paraformaldehyde effect on ruthenium red and lysine preservation and staining of the staphylococcal glycocalyx. Fassel TA, et al. **Microsc Res Tech** 1997 Mar 1;36(5):422–7

Ruthenium red, a novel enhancer of K+ currents at mouse motor nerve terminals. Lin MJ, et al. **Neuropharmacology** 1996 May;35(5):615–23

[Ruthenium red inhibits energy-dependent and passive Ca2+ transport in permeabilized smooth muscle cells] Shinlova OP, et al. **Biokhimiia** 1996 Aug;61(8):1440–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Ruthenium red neurotoxicity and interaction with gangliosides in primary cortical cultures. Velasco I, et al. **J Neurosci Res** 1997 Jul 1;49(1):72–9

Ruthenium red as a tool to study calcium channels, neuronal death and the function of neural pathways. Tapia R, et al. **Neurochem Int** 1997 Feb;30(2):137–47 (59 ref.)

RUTIN

ADMINISTRATION & DOSAGE

[Drug therapy of activated arthrosis. On the effectiveness of an enzyme mixture versus diclofenac] Singer F, et al. **Wien Med Wochenschr** 1996;146(3):55–8 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Direct detection of the antioxidant activity of a new flavonic derivative using the chemiluminescence method. Saramet A, et al. **Arzneimittelforschung** 1996 May;46(5):501–4

Antioxidant action of a new flavonic derivative in acute carbon tetrachloride intoxication. Paduraru I, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jan-Mar;21(1):1–6

Protection by alpha G-rutin, a water-soluble antioxidant flavonoid, against renal damage in mice treated with ferric nitrilotriacetate. Shimoi K, et al. **Jpn J Cancer Res** 1997 May;88(5):453–60

ANALYSIS

[Concerning a contaminated drug (letter; comment)] Franco Patiño R. **Rev Invest Clin** 1996 May-Jun;48(3):247. Comment on: Rev Invest Clin 1995 Jul-Aug;47(4):311–3. **(Spa)**

CHEMISTRY

The flavonols quercetin, rutin and morin in DNA solution: UV-vis dichroic (and mid-infrared) analysis explain the possible association between the biopolymer and a nucleophilic vegetable-dye. Solimani R. **Biochim Biophys Acta** 1997 Aug 29;1336(2):281–94

PHARMACOKINETICS

Bioavailability of rutin and quercetin in rats. Manach C, et al. **FEBS Lett** 1997 Jun 2;409(1):12–6

PHARMACOLOGY

Evidence for antiradical and antioxidant properties of four biologically active N,N-diethylaminoethyl ethers of flavanone oximes: a comparison with natural polyphenolic

flavonoid (rutin) action. Metodiewa D, et al. **Biochem Mol Biol Int** 1997 Apr;41(5):1067–75

Protective effect of rutin, a flavonol glycoside, on the carcinogen-induced DNA damage and repair enzymes in rats. Webster RP, et al. **Cancer Lett** 1996 Dec 3; 109(1–2):185–91

Protective effect of natural flavonoids on rat peritoneal macrophages injury caused by asbestos fibers. Kostyuk VA, et al. **Free Radic Biol Med** 1996;21(4):487–93

Flavonoids as phospholipase A2 inhibitors: importance of their structure for selective inhibition of group II phospholipase A2. Lindahl M, et al. **Inflammation** 1997 Jun; 21(3):347–56

Application of natural products in experimental models of intestinal inflammation in rats. Gálvez J. **Methods Find Exp Clin Pharmacol** 1996;18 Suppl B:7–10

Protecting fibrinogen with rutin during UVC irradiation for viral inactivation. Marx G, et al. **Photochem Photobiol** 1996 Apr;63(4):541–6

Protective effect of flavonoids on doxorubicin-induced cardiotoxicity. Sadzuka Y, et al. **Toxicol Lett** 1997 Jun 16; 92(1):1–7

[The effect of the combined use of mineral water and rutin on the function of the adrenal cortex and pancreatic islet apparatus (an experimental study)] Polushina ND, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Jan–Feb;(1):14–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Adjuvant therapy with hydrolytic enzymes in recurrent laryngeal papillomatosis. Mudrák J, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;527:128–30

Protection by alpha G-rutin, a water-soluble antioxidant flavonoid, against renal damage in mice treated with ferric nitrilotriacetate. Shimoi K, et al. **Jpn J Cancer Res** 1997 May;88(5):453–60

[Enzyme therapy in the treatment of lymphedema in the arm after breast carcinoma surgery] Adámek J, et al. **Rozhl Chir** 1997 Apr;76(4):203–4 (Eng. Abstr.) **(Cze)**

RYANODINE

ADMINISTRATION & DOSAGE

Evaluation of the regional responsivity to ryanodine of human myocardium from patients with idiopathic dilated cardiomyopathy and secondary cardiomyopathies. Padrini R, et al. **Basic Res Cardiol** 1996 Sep–Oct;91(5):361–6

Ryanodine perfusion decreases cardiac mechanical function without affecting homogenate sarcoplasmic reticulum Ca2+ uptake: comparison with the stunned heart. Wu QY, et al. **J Mol Cell Cardiol** 1996 May;28(5):943–55

ANALOGS & DERIVATIVES

Electrophysiological effects of ryanodine derivatives on the sheep cardiac sarcoplasmic reticulum calcium-release channel. Tinker A, et al. **Biophys J** 1996 May;70(5):2110–9

Novel actions of ryanodine and analogues—perturbers of potassium channels. Vais H, et al. **Biosci Rep** 1995 Dec; 15(6):515–30

Ryanoids change the permeability of potassium channels of locust (Schistocerca gregaria) muscle. Vais H, et al. **Pflugers Arch** 1996 Aug;432(4):700–7

METABOLISM

Factors influencing [3H]ryanodine binding to the skeletal muscle Ca2+ release channel. Needleman DH, et al. **Anal Biochem** 1997 May 15;248(1):173–9

Interaction of S100A1 with the Ca2+ release channel (ryanodine receptor) of skeletal muscle. Treves S, et al. **Biochemistry** 1997 Sep 23;36(38):11496–503

Ryanodine receptor type III (Ry3R) identification in mouse parotid acini. Properties and modulation of [3H]ryanodine-binding sites. DiJulio DH, et al. **J Biol Chem** 1997 Jun 20;272(25):15687–96

Dihydropyridine and ryanodine binding in ventricles from rat, trout, dogfish and hagfish. Thomas MJ, et al. **J Exp Biol** 1996 Sep;199 (Pt 9):1999–2009

Effect of ischemia on the fraction of ryanodine-sensitive cardiac sarcoplasmic reticulum. Wu QY, et al. **J Mol Cell Cardiol** 1997 May;29(5):1363–73

Rapid reduction in ryanodine binding of hippocampus CA1 in cerebral ischemia. Nozaki H, et al. **Keio J Med** 1997 Jun;46(2):85–9

The ryanodine binding sarcoplasmic reticulum calcium release channel in nonfailing and in failing human myocardium. Schumacher C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):80–5

PHARMACOLOGY

Modal gating in neuronal and skeletal muscle ryanodine-sensitive Ca2+ release channels. Armisén R, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C144–53

Caffeine- and ryanodine-sensitive Ca2+ stores in cultured guinea pig myenteric neurons. Kimball BC, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):G594–603

Bastadins relate ryanodine-sensitive and -insensitive Ca2+ efflux pathways in skeletal SR and BC3H1 cells. Pessah IN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C601–14

Ryanodine and left ventricular function in intact dogs: dissociation of force-based and velocity-based indexes. Prabhu SD, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1561–8

Effect of preconditioning on ryanodine-sensitive Ca2+ release from sarcoplasmic reticulum of rat heart. Tani M, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H876–81

Divergent effects of ruthenium red and ryanodine on Ca2+/calmodulin-dependent phosphorylation of the Ca2+ release channel (ryanodine receptor) in cardiac sarcoplasmic reticulum. Netticadan T, et al. **Arch Biochem Biophys** 1996 Sep 15;333(2):368–76

Pharmacological distinction between dantrolene and ryanodine binding sites: evidence from normal and malignant hyperthermia-susceptible porcine skeletal muscle. Palnitkar SS, et al. **Biochem J** 1997 Sep 15;326 (Pt 3):847–52

Conformation state of the ryanodine receptor and functional effects of ryanodine on skeletal muscle. Bianchi CP. **Biochem Pharmacol** 1997 Apr 4;53(7):909–12 (30 ref.)

Structural components of ryanodine responsible for modulation of sarcoplasmic reticulum calcium channel function. Welch W, et al. **Biochemistry** 1997 Mar 11; 36(10):2939–50

Purification and characterization of ryanotoxin, a peptide with actions similar to those of ryanodine. Morrissette J, et al. **Biophys J** 1996 Aug;71(2):707–21

Electrophysiological effects of ryanodine derivatives on the sheep cardiac sarcoplasmic reticulum calcium-release channel. Tinker A, et al. **Biophys J** 1996 May;70(5):2110–9

Novel actions of ryanodine and analogues—perturbers of potassium channels. Vais H, et al. **Biosci Rep** 1995 Dec; 15(6):515–30

Effects of cyclopiazonic acid and ryanodine on cytosolic calcium and contraction in vascular smooth muscle. Abe F, et al. **Br J Pharmacol** 1996 Aug;118(7):1711–6

Possible mechanism of the potent vasoconstrictor actions of ryanodine on femoral arteries from spontaneously hypertensive rats. Asano M, et al. **Br J Pharmacol** 1996 Jun;118(4):1019–27

Action of ryanodine on neurogenic responses in rat isolated mesenteric small arteries. Garcha RS, et al. **Br J Pharmacol** 1997 Sep;122(1):142–8

5-HT2B receptor-mediated calcium release from ryanodine-sensitive intracellular stores in human pulmonary artery endothelial cells. Ullmer C, et al. **Br J Pharmacol** 1996 Mar;117(6):1081–8

Effect of brief hypoxia on reperfusion arrhythmias and release of Ca2+ by rat heart homogenate blocked by ryanodine. Tani M, et al. **Cardiovasc Res** 1996 Feb;31(2):263–9

A ryanodine-sensitive calcium store in ascidian eggs monitored by whole-cell patch-clamp recordings. Arnoult C, et al. **Cell Calcium** 1997 Feb;21(2):93–101

A caffeine/ryanodine-sensitive Ca2+ pool is involved in triggering spontaneous variations of Ca2+ in Jurkat T lymphocytes by a Ca(2+)-induced Ca2+ release (CICR) mechanism. Ricard I, et al. **Cell Signal** 1997 Feb; 9(2):197–206

Possible mechanism of the potent vasoconstrictor responses to ryanodine in dog cerebral arteries. Asano M, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):53–60

Regulation of intracellular Ca2+ by 8-bromoguanosine 3',5'-cyclic monophosphate, felodipine and ryanodine in rat caudal artery. Lum Min SA, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):97–100

Subcellular localization of ryanodine receptors in rat brain. Padua RA, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):185–9

The effects of ryanodine on calcium uptake by the sarcoplasmic reticulum of ischemic and reperfused rat myocardium. Mubagwa K, et al. **Fundam Clin Pharmacol** 1997;11(4):315–21

Electrophysiological actions of ryanodine on single rabbit sinoatrial nodal cells. Satoh H. **Gen Pharmacol** 1997 Jan; 28(1):31–8

Evidence for a role of intracellular-calcium release in nitric oxide-stimulated relaxation of the rabbit corpus cavernosum. Levin RM, et al. **J Androl** 1997 May–Jun; 18(3):246–9

Antithetic effects of ryanodine and ruthenium red on osteoclast-mediated bone resorption and intracellular calcium concentrations. Ritchie CK, et al. **J Cell Biochem** 1995 Oct;59(2):281–9

Kinetic isoforms of intramembrane charge in intact amphibian striated muscle. Huang CL. **J Gen Physiol** 1996 Apr;107(4):515–34

Ryanodine-sensitive component of calcium transients evoked by nerve firing at presynaptic nerve terminals. Peng Y. **J Neurosci** 1996 Nov 1;16(21):6703–12

Changes in ryanodine-induced contractures by stimulus frequency in malignant hyperthermia susceptible and malignant hyperthermia nonsusceptible dog skeletal muscle. Sudo RT, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1331–6

Ryanodine-sensitive calcium stores involved in neurotransmitter release from sympathetic nerve terminals of the guinea-pig. Smith AB, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):657–64

Ryanodine produces a low frequency stimulation-induced NMDA receptor-independent long-term potentiation in the rat dentate gyrus in vitro. Wang Y, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):755–67

[Ca2+]i elevation evoked by Ca2+ readdition to the medium after agonist-induced Ca2+ release can involve both IP3-, and ryanodine-sensitive Ca2+ release. Mozhayeva MG. **Pflugers Arch** 1996 Nov–Dec;433(1–2):180–7

Evidence for the existence of inositol (1,4,5)-trisphosphate- and ryanodine-sensitive pools in bovine endothelial cells. Ca2+ releases in cells with different basal level of intracellular Ca2+ Mozhayeva MG, et al. **Pflugers Arch** 1996 Aug;432(4):614–22

The pharmacology of ryanodine and related compounds. Sutko JL, et al. **Pharmacol Rev** 1997 Mar;49(1):53–98 (196 ref.)

Constructive priming of myocardium against ischemia-reperfusion injury. Meldrum DR, et al. **Shock** 1996 Oct;6(4):238–42

Depletion of ryanodine-sensitive Ca2+ store activates Ca2+ entry in rat submandibular gland acinar cells. Fukushi Y, et al. **Tohoku J Exp Med** 1996 Apr;178(4):399–411

[Effects of thapsigargin and ryanodine on cochlear electrical potentials in guinea pigs examined by the perilymphatic perfusion method] Take K. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Nov;99(11):1641–7 (Eng. Abstr.) **(Jpn)**

RYE

Soy and rye diets inhibit the development of Dunning R3327 prostatic adenocarcinoma in rats. Zhang JX, et al. **Cancer Lett** 1997 Mar 19;114(1–2):313–4

CHEMISTRY

Molecular diversification of tandemly organized DNA sequences and heterochromatic chromosome regions in some Triticeae species. Vershinin AV, et al. **Chromosome Res** 1996 Nov;4(7):517–25

Rye flour allergens associated with baker's asthma. Correlation between in vivo and in vitro activities and comparison with their wheat and barley homologues. García-Casado G, et al. **Clin Exp Allergy** 1996 Apr; 26(4):428–35

The secalosides, novel tumor cell growth inhibitory glycosides from a pollen extract. Jaton JC, et al. **J Nat Prod** 1997 Apr;60(4):356–60

[Selenium content in wheat and rye flow from Russia, cis nations and Baltic countries] Golubkina NA. **Vopr Pitan** 1997;(3):17–20 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Changes in chromosomal ultrastructure during the cell cycle. Martin R, et al. **Chromosome Res** 1996 Jun;4(4):288–94

ENZYMOLOGY

Purification and some properties of a novel dsRNA degrading nuclease bound to rye germ ribosomes. Siwecka MA. **Acta Biochim Pol** 1997;44(1):61–8

GENETICS

Relationship between the levels of wheat-rye metaphase I chromosomal pairing and recombination revealed by GISH. Benavente E, et al. **Chromosoma** 1996 Aug; 105(2):92–6

The Sec-1 locus on the short arm of chromosome 1R of rye (Secale cereale). Clarke BC, et al. **Chromosoma** 1996 Dec;105(5):269–75

Molecular cytogenetic characterisation of the terminal heterochromatic segment of the B-chromosome of rye (Secale cereale). Houben A, et al. **Chromosoma** 1996 Aug; 105(2):97–103

Painting rye B chromosomes in wheat: interphase chromatin organization, nuclear disposition and association in plants with two, three or four Bs. Morais-Cecílio L, et al. **Chromosome Res** 1996 Apr;4(3):195–200

Interphase arrangement of rye B chromosomes in rye and wheat. Morais-Cecílio L, et al. **Chromosome Res** 1997 May; 5(3):177–81

Nucleolar dominance in triticales: control by unlinked genes. Neves N, et al. **Chromosome Res** 1997 Apr;5(2):125–31

A cytogenetic analysis of rye introgression into a Portuguese bread wheat cultivar Barbela. Silva JP, et al. **Chromosome Res** 1996 Aug;4(5):399–401

Distribution of highly repeated DNA sequences in species of the genus Secale. Cuadrado A, et al. **Genome** 1997 Jun; 40(3):309–17

Chromosomal location of three wheat sequences with homology to pollen allergen encoding, DNA replication regulating, and DNA (cytosine-5)-methyltransferase genes in wheat and rye. Korzun V, et al. **Genome** 1996 Dec; 39(6):1213–5

[An analysis of the genetic sequelae of the contamination of winter rye crops by the radioactive fallout from the Chernobyl Atomic Electric Power Station] Ziablitskaia Ela, et al. **Radiats Biol Radioecol** 1996 Jul–Aug; 36(4):498–505 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Rye flour allergens associated with baker's asthma. Correlation between in vivo and in vitro activities and comparison with their wheat and barley homologues. García-Casado G, et al. **Clin Exp Allergy** 1996 Apr; 26(4):428–35

RYE

MICROBIOLOGY

Leavening ability and freeze tolerance of yeasts isolated from traditional corn and rye bread doughs. Almeida MJ, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4401–4

Viability of Cryptosporidium parvum during ensilage of perennial ryegrass. Merry RJ, et al. **J Appl Microbiol** 1997 Jan;82(1):115–20

Cel1, probably encoding a cellobiohydrolase lacking the substrate binding domain, is expressed in the initial infection phase of Claviceps purpurea on Secale cereale. Müller U, et al. **Mol Plant Microbe Interact** 1997 Mar;10(2):268–79

RADIATION EFFECTS

[An analysis of the genetic sequelae of the contamination of winter rye crops by the radioactive fallout from the Chernobyl Atomic Electric Power Station] Ziablitskaia EIa, et al. **Radiats Biol Radioecol** 1996 Jul–Aug; 36(4):498–505 (Eng. Abstr.) **(Rus)**

RYEGRASS see **LOLIUM**

S-ANTIGEN, RETINAL see **ARRESTIN**

S PHASE

Flow cytometric evaluation of proliferating cell nuclear antigen expression in human hematopoietic malignancies. Erlanson M, et al. **Acta Oncol** 1997;36(1):17–22

Ki–67, p53, Er–receptors, ploidy and S–phase as prognostic factors in T1 node negative breast cancer. Railo M, et al. **Acta Oncol** 1997;36(4):369–74

Sequential assessment of cell cycle S phase in flow cytometry: a non–isotopic method to measure lymphocyte activation in vitro. Kohler C, et al. **Anal Cell Pathol** 1997;14(1):51–9

Reliable DNA histogram interpretation. Number of nuclei requiring measurement with flow cytometry. Bergers E, et al. **Anal Quant Cytol Histol** 1997 Aug;19(4):277–84

Induction of premature mitosis in cells blocked in S–phase: possibilities of its use in cancer therapy. Ghosh S, et al. **Anticancer Res** 1997 Jul–Aug;17(4A):2357–61

The interconversion of protein phosphatase 2A between PP2A1 and PP2A0 during retinoic acid–induced granulocytic differentiation and a modification on the catalytic subunit in S phase of HL–60 cells. Zhu T, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):210–7

Evidence for a mammalian Nim1–like kinase pathway acting at the G0–1/S transition. Baldin V, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):130–4

P21waf–1/cip–1/sdi–1 is expressed at G1 phase in primary culture of hepatocytes from old rats, presumably preventing the cells from entering the S phase of the cell cycle. Sawada N, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):819–24

p100: a novel proliferation–associated nuclear protein specifically restricted to cell cycle phases S, G2, and M. Heidebrecht HJ, et al. **Blood** 1997 Jul 1;90(1):226–33

Flow cytometric S–phase fraction in soft–tissue sarcoma: prognostic importance analysed in 160 patients. Gustafson P, et al. **Br J Cancer** 1997;75(1):94–100

S–phase fraction identifies high–risk subgroups among DNA–diploid breast cancers. Romero H, et al. **Breast Cancer Res Treat** 1996;38(3):265–75

Cellular proliferative activity of mammographic normal dense and fatty tissue determined by DNA S phase percentage. Stomper PC, et al. **Breast Cancer Res Treat** 1996;37(3):229–36

S–phase fraction and tumor aneuploidy in colorectal carcinoma of young patients. Cascinu S, et al. **Cancer** 1996 Nov 1;78(9):1857–60

Flow cytometric DNA content analysis of 185 soft tissue neoplasms indicates that S–phase fraction is a prognostic factor for sarcomas. French Federation of Cancer Centers (FNCLCC) Sarcoma Group. Collin F, et al. **Cancer** 1997 Jun 15;79(12):2371–9

A comparison of proliferation markers and their prognostic value for women with endometrial carcinoma. Ki–67, proliferating cell nuclear antigen, and flow cytometric S–phase fraction. Nordström B, et al. **Cancer** 1996 Nov 1;78(9):1942–51

Dissociation of radiation–induced phosphorylation of replication protein A from the S–phase checkpoint. Morgan SE, et al. **Cancer Res** 1997 Aug 15;57(16):3386–9

Intratumoral heterogeneity of S phase transition in solid tumours determined by bromodeoxyuridine labelling and flow cytometry. Baisch H, et al. **Cell Prolif** 1993 Sep; 26(5):439–48

Complementary replication R– and G–band patterns induced by cell blocking at the R–band/G–band transition, a possible regulatory checkpoint within the S phase of the cell cycle. Fetni R, et al. **Cytogenet Cell Genet** 1996; 75(2–3):172–9

Quality control study by the French Cytometry Association on flow cytometric DNA content and S–phase fraction (S%). The Association Française de Cytométrie. D'hautcourt JL, et al. **Cytometry** 1996 Mar 15;26(1):32–9

Comparison of Vindelov et al. and bromodeoxyuridine/DNA double–staining flow cytometry methods for analysis of cell cycle distribution in rat thymocytes. Orfao A, et al. **Cytometry** 1996 Sep 1;25(1):104–8

Carcinoma of the rectum. Possible cellular predictors of metastatic potential and response to radiation therapy. Desai GR, et al. **Dis Colon Rectum** 1996 Oct;39(10):1090–6

Flow cytometric DNA ploidy and S–phase fraction correlate with histopathologic indicators of tumor behavior in colorectal carcinoma. Pinto AE, et al. **Dis Colon Rectum** 1997 Apr;40(4):411–9

Bax alpha perturbs T cell development and affects cell cycle entry of T cells. Brady HJ, et al. **EMBO J** 1996 Dec 16; 15(24):6991–7001

MAP kinase links the fertilization signal transduction pathway to the G1/S–phase transition in starfish eggs. Tachibana K, et al. **EMBO J** 1997 Jul 16;16(14):4333–9

A novel S phase inhibitor in fission yeast. Woollard A, et al. **EMBO J** 1996 Sep 2;15(17):4603–12

Mitotic percentage index: a new prognostic factor for childhood medulloblastoma. Gilbertson RJ, et al. **Eur J Cancer** 1997 Apr;33(4):609–15

S–phase fractions of breast cancer predict overall and post–relapse survival. Remvikos Y, et al. **Eur J Cancer** 1997 Apr;33(4):581–6

The ORC1 homolog orp1 in fission yeast plays a key role in regulating onset of S phase. Grallert B, et al. **Genes Dev** 1996 Oct 15;10(20):2644–54

Proliferation of epithelia of noninvolved mucosa in patients with head and neck cancer. Kotelnikov VM, et al. **Head Neck** 1996 Nov–Dec;18(6):522–8

The influence of fixation delay on mitotic activity and flow cytometric cell cycle variables. Bergers E, et al. **Hum Pathol** 1997 Jan;28(1):95–100

Flow cytometrical comparison of different semi–automatic ways of measuring S–phase fractions using fresh and formalin–treated normal endometrial tissue. Lindahl B, et al. **In Vivo** 1996 May–Jun;10(3):335–7

Prognostic implications of different cell cycle analysis models of flow cytometric DNA histograms of 1,301 breast cancer patients: results from the Multicenter Morphometric Mammary Carcinoma Project (MMMCP). Bergers E, et al. **Int J Cancer** 1997 Jun 20;74(3):260–9

Prognostic significance of S–phase fraction detected by antithymidine antibodies in epidermoid cervix carcinomas. Zamulaeva IA, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):685–8

GATA–1 DNA binding activity is down–regulated in late S phase in erythroid cells. Cullen ME, et al. **J Biol Chem** 1997 Jan 24;272(4):2464–9

Role for cyclin A–dependent kinase in DNA replication in human S phase cell extracts. Fotedar A, et al. **J Biol Chem** 1996 Dec 6;271(49):31627–37

Dependence of activated Galpha12–induced G1 to S phase cell cycle progression on both Ras/mitogen–activated protein kinase and Ras/Rac1/Jun N–terminal kinase cascades in NIH3T3 fibroblasts. Mitsui H, et al. **J Biol Chem** 1997 Feb 21;272(8):4904–10

Accumulation of E2F–4.DP–1 DNA binding complexes correlates with induction of dhfr gene expression during the G1 to S phase transition. Wells JM, et al. **J Biol Chem** 1997 Feb 14;272(7):4483–92

Sea urchin zygote chromatin exhibit an unfolded nucleosomal array during the first S phase. Imschenetzky M, et al. **J Cell Biochem** 1995 Oct;59(2):161–7

Apoptotic cell death in neuronal differentiation of P19 EC cells: cell death follows reentry into S phase. Ninomiya Y, et al. **J Cell Physiol** 1997 Jul;172(1):25–35

Immunohistochemical demonstration of S–phase cells by anti–bromodeoxyuridine monoclonal antibody in cattle tissues. Yanai T, et al. **J Comp Pathol** 1996 Apr; 114(3):265–72

Studies on the proliferative activity of diethylnitrosamine–induced hepatocellular carcinomas in monkeys. Lapis K, et al. **J Pathol** 1997 Apr;181(4):439–43

DNA ploidy and S–phase fraction of neoplastic and non–neoplastic lesions of the human gallbladder. Yoshida T, et al. **J Surg Oncol** 1996 Sep;63(1):9–16

Human cytomegalovirus infection inhibits G1/S transition. Dittmer D, et al. **J Virol** 1997 Feb;71(2):1629–34

Accumulation of human papillomavirus type 16 E7 protein bypasses G1 arrest induced by serum deprivation and by the cell cycle inhibitor p21. Morozov A, et al. **J Virol** 1997 May;71(5):3451–7

S–phase–dependent cell cycle disturbances caused by Aleutian mink disease parvovirus. Oleksiewicz MB, et al. **J Virol** 1997 Feb;71(2):1386–96

DNA ploidy, S–phase, and Ki–67 antigen expression in the evaluation of cell content of pleural effusions. Sikora J, et al. **Lung** 1996;174(5):303–13

Comparison of quantitative and semiquantitative methods of assessing MIB–1 with the S–phase fraction in breast carcinoma. MacGrogan G, et al. **Mod Pathol** 1997 Aug; 10(8):769–76

DNA ploidy and S–phase fraction by image and flow cytometry in breast cancer fine–needle cytopunctures. Spyratos F, et al. **Mod Pathol** 1997 Jun;10(6):556–63

Plasmodium falciparum protein kinase 5 and the malarial nuclear division cycles. Graeser R, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):37–49

Persistent DNA damage inhibits S–phase and G2 progression, and results in apoptosis. Orren DK, et al. **Mol Biol Cell** 1997 Jun;8(6):1129–42

Induction of S–phase entry by E2F transcription factors depends on their nuclear localization. Müller H, et al. **Mol Cell Biol** 1997 Sep;17(9):5508–20

A novel mutant allele of Schizosaccharomyces pombe rad26 defective in monitoring S–phase progression to prevent premature mitosis. Uchiyama M, et al. **Mol Cell Biol** 1997 Jun;17(6):3103–15

Yeast L double–stranded ribonucleic acid is synthesized during the G1 phase but not the S phase of the cell cycle. Zakian VA, et al. **Mol Cell Biol** 1981 Aug;1(8):673–9

Molecular analysis of hus1+, a fission yeast gene required for S–M and DNA damage checkpoints. Kostrub CF, et al. **Mol Gen Genet** 1997 Apr 28;254(4):389–99

The 70 kDa subunit of replication protein A is required for the G1/S and intra–S DNA damage checkpoints in budding yeast. Longhese MP, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3533–7

mcm5/cdc46–bob1 bypasses the requirement for the S phase activator Cdc7p. Hardy CF, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3151–5

A p53–independent damage–sensing mechanism that functions as a checkpoint at the G1/S transition in Chinese hamster ovary cells. Lee H, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):526–31

The significance of DNA–ploidy and S–phase fraction in node–positive (stage D1) prostate cancer treated with androgen ablation. Pollack A, et al. **Prostate** 1997 Apr 1; 31(1):21–8

Proteolysis and DNA replication: the CDC34 requirement in the Xenopus egg cell cycle. Yew PR, et al. **Science** 1997 Sep 12;277(5332):1672–6

Prognostic significance of the bromodeoxyuridine labeling index in primary colorectal carcinoma. Kitagawa T, et al. **Surg Today** 1997;27(7):613–6

Expression of MIB–1, mitotic index and S–phase fraction as indicators of cell proliferation in superficial bladder cancer. Finnbladder Group. Liukkonen TJ, et al. **Urol Res** 1996;24(1):61–6

[Intratumor pO2, S–phase fraction and p53 status in cervix carcinomas] Hänsgen G, et al. **Strahlenther Onkol** 1997 Jul; 173(7):385–7 (Eng. Abstr.) **(Ger)**

[Regulation of cyclin E and Cdk2 expression at G1/S transition: post–transcriptional reguration mediated by delta FosB] Oda S, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1725–31 (43 ref.) **(Jpn)**

[DNA checkpoint control in Saccharomyces cerevisae] Sugimoto K, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep; 41(12 Suppl):1807–12 (20 ref.) **(Jpn)**

DRUG EFFECTS

Paraquat causes S–phase arrest of rat liver and lung cells in vivo. Matsubara M, et al. **Arch Toxicol** 1996;70(8):514–8

Oestrogen increases S–phase fraction and oestrogen and progesterone receptors in human cervical cancer in vivo. Bhattacharya D, et al. **Br J Cancer** 1997;75(4):554–8

Correlations between S and G2 arrest and the cytotoxicity of camptothecin in human colon carcinoma cells. Goldwasser F, et al. **Cancer Res** 1996 Oct 1;56(19):4430–7

Abrogation of an S–phase checkpoint and potentiation of camptothecin cytotoxicity by 7–hydroxystaurosporine (UCN–01) in human cancer cell lines, possibly influenced by p53 function. Shao RG, et al. **Cancer Res** 1997 Sep 15;57(18):4029–35

Down–regulation of DNA replication in extracts of camptothecin–treated cells: activation of an S–phase checkpoint? Wang Y, et al. **Cancer Res** 1997 May 1; 57(9):1654–9

7–Hydroxystaurosporine (UCN–01) causes redistribution of proliferating cell nuclear antigen and abrogates cisplatin–induced S–phase arrest in Chinese hamster ovary cells. Bunch RT, et al. **Cell Growth Differ** 1997 Jul; 8(7):779–88

Fission yeast pheromone blocks S–phase by inhibiting the G1 cyclin B–p34cdc2 kinase. Stern B, et al. **EMBO J** 1997 Feb 3;16(3):534–44

Uncoupling of S–phase and mitosis by recombinant cytotoxic necrotizing factor 2 (CNF2). Denko N, et al. **Exp Cell Res** 1997 Jul 10;234(1):132–8

The phosphatase inhibitor okadaic acid stimulates the TSH–induced G1–S phase transition in thyroid cells. Lazzereschi D, et al. **Exp Cell Res** 1997 Aug 1; 234(2):425–33

MTX–block during S–phase in BrdU–treated cells depends on species and medium used. Di Meo GP, et al. **Hereditas** 1996;124(3):233–6

Methimazole inhibits peripheral lymphocyte proliferation by inducing S–quiescent phase arrest. Chabernaud ML, et al. **Int J Immunopharmacol** 1996 Aug–Sep;18(8–9):499–504

Both cyclin A and cyclin E have S–phase promoting (SPF) activity in Xenopus egg extracts. Strausfeld UP, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1555–63

Effect of epirubicin on 3H–thymidine labelling index in cultured L–strain cells. Ozcan FG, et al. **J Exp Clin Cancer Res** 1997 Mar;16(1):23–7

Interferon–beta induces S phase accumulation selectively in human transformed cells. Qin XQ, et al. **J Interferon Cytokine Res** 1997 Jun;17(6):355–67

Interferon–beta inhibits proliferation and progression through S phase of the cell cycle in five glioma cell lines. Garrison JI, et al. **J Neurooncol** 1996 Dec;30(3):213–23

G1/S cell cycle blockers and inhibitors of cyclin–dependent kinases suppress camptothecin–induced neuronal apoptosis. Park DS, et al. **J Neurosci** 1997 Feb 15;17(4):1256–70

Colcemid alters S phase and other parameters in skin during chronic exposure to benzo(a)pyrene. Miller ML, et al. **Microsc Res Tech** 1996 Nov 1;35(4):307–13

Inhibition of cell proliferation by an RNA ligand that

selectively blocks E2F function. Ishizaki J, et al. **Nat Med** 1996 Dec;2(12):1386–9

Inhibition of the growth of WI–38 fibroblasts by benzyloxycarbonyl–Leu–Leu–Tyr diazomethyl ketone: evidence that cleavage of p53 by a calpain–like protease is necessary for G1 to S–phase transition. Zhang W, et al. **Oncogene** 1997 Jan 23;14(3):255–63

Caffeine overrides the S–phase cell cycle block in sea urchin embryos. Patel R, et al. **Zygote** 1997 May;5(2):127–38

GENETICS

Comparative flow cytometric analysis of DNA–bound PCNA and DNA content as estimators of S–phase cells in cell cultures. Bustamante AS, et al. **Anal Cell Pathol** 1996 Jul;11(2):127–36

S phase determination in intact colonic crypts by histone H3 messenger RNA in situ hybridization and confocal microscopy. Konishi H, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):531–6

Role for E2F in DNA damage–induced entry of cells into S phase. Huang Y, et al. **Cancer Res** 1997 Sep 1; 57(17):3640–3

Cyclin–dependent kinase activation and S–phase induction of the cyclin B1 gene are linked through the CCAAT elements. Katula KS, et al. **Cell Growth Differ** 1997 Jul; 8(7):811–20

c–erbB–2/neu protein expression, DNA ploidy and S phase in breast cancer. Dittadi R, et al. **Cell Prolif** 1996 Jul; 29(7):403–12

Cell cycle control of S phase: a comparison of two yeasts. Huberman JA. **Chromosoma** 1996 Oct;105(4):197–203 (40 ref.)

Control of S–phase periodic transcription in the fission yeast mitotic cycle. Baum B, et al. **EMBO J** 1997 Aug 1; 16(15):4676–88

rqh1+, a fission yeast gene related to the Bloom's and Werner's syndrome genes, is required for reversible S phase arrest. Stewart E, et al. **EMBO J** 1997 May 15; 16(10):2682–92

Targeted expression of MDM2 uncouples S phase from mitosis and inhibits mammary gland development independent of p53. Lundgren K, et al. **Genes Dev** 1997 Mar 15;11(6):714–25

Mutations in Drosophila DP and E2F distinguish G1–S progression from an associated transcriptional program. Royzman I, et al. **Genes Dev** 1997 Aug 1;11(15):1999–2011

Prognostic significance of nuclear DNA content and S–phase fraction by flow cytometry in primary papillary superficial bladder cancer. Têtu B, et al. **Hum Pathol** 1996 Sep; 27(9):922–6

Human T cells require IL–2 but not G1/S transition to acquire susceptibility to Fas–mediated apoptosis. Fournel S, et al. **J Immunol** 1996 Nov 15;157(10):4309–15

DNA ploidy and S–phase in recurrent astrocytomas: a retrospective study by flow cytometry of deparaffinized specimens. Vavruch L, et al. **J Neurooncol** 1996 Oct; 30(1):37–45

Cdc53p acts in concert with Cdc4p and Cdc34p to control the G1–to–S–phase transition and identifies a conserved family of proteins. Mathias N, et al. **Mol Cell Biol** 1996 Dec;16(12):6634–43

Endometrial carcinomas––flow cytometric DNA content and S–phase values. Jacobsen M, et al. **Pathol Res Pract** 1997; 193(4):283–90

Measurement of DNA ploidy and proliferation rate in lung tumours by bromodeoxyuridine labelling index, S–phase fraction and AgNOR technique. Gasińska A, et al. **Pol J Pathol** 1996;47(4):201–7

A quantitative model for the cdc2 control of S phase and mitosis in fission yeast. Stern B, et al. **Trends Genet** 1996 Sep;12(9):345–50 (36 ref.)

[The fission yeast cdc18+ gene links S phase to START and plays a major role in the initiation of DNA replication] Nishitani H. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1761–8 (34 ref.) **(Jpn)**

[Units of DNA replication in S–phase human cells] Solovéva LV, et al. **Tsitologiia** 1997;39(2–3):138–49 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Telomerase activity is elevated in early S phase in hamster cells. Kruk PA, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):717–22

Overview of the regulation of S–phase in Xenopus egg extracts. Chevalier S, et al. **Biochimie** 1995;77(10):808–16 (103 ref.)

Prognostic impact of proliferation–associated factors MIB1 (Ki–67) and S–phase in node–negative breast cancer. Dettmar P, et al. **Br J Cancer** 1997;75(10):1525–33

p53 mutation is associated with high S–phase fraction in primary fallopian tube adenocarcinoma. Runnebaum IB, et al. **Br J Cancer** 1996 Oct;74(8):1157–60

Cyclin/Cdk–dependent initiation of DNA replication in a human cell–free system. Krude T, et al. **Cell** 1997 Jan 10; 88(1):109–19

The molecular basis of E2F–1/DP–1–induced S–phase entry and apoptosis. Shan B, et al. **Cell Growth Differ** 1996 Jun; 7(6):689–97

S–phase function of Drosophila cyclin A and its downregulation in G1 phase. Sprenger F, et al. **Curr Biol** 1997 Jul 1;7(7):488–99

S–phase and DNA–damage checkpoints: a tale of two yeasts. Stewart E, et al. **Curr Opin Cell Biol** 1996 Dec;8(6):781–7 (64 ref.)

E2F–induced S phase requires cyclin E. Duronio RJ, et al. **Genes Dev** 1996 Oct 1;10(19):2505–13

The Drosophila endocycle is controlled by Cyclin E and lacks a checkpoint ensuring S–phase completion. Lilly MA, et al. **Genes Dev** 1996 Oct 1;10(19):2514–26

Duration of cell cycle, onset of S phase and induced mitotic synchronisation in seeds of opium poppy, Papaver somniferum L. Lavania UC. **Indian J Exp Biol** 1996 Aug; 34(8):773–5

A role for Cdk2 kinase in negatively regulating DNA replication during S phase of the cell cycle. Hua XH, et al. **J Cell Biol** 1997 Apr 7;137(1):183–92

Newt myotubes reenter the cell cycle by phosphorylation of the retinoblastoma protein. Tanaka EM, et al. **J Cell Biol** 1997 Jan 13;136(1):155–65

PKC phosphorylation disrupts gap junctional communication at G0/S phase in clone 9 cells. Koo SK, et al. **Mol Cell Biochem** 1997 Feb;167(1–2):41–9

WAF1 retards S–phase progression primarily by inhibition of cyclin–dependent kinases. Ogryzko VV, et al. **Mol Cell Biol** 1997 Aug;17(8):4877–82

Rfc5, a replication factor C component, is required for regulation of Rad53 protein kinase in the yeast checkpoint pathway. Sugimoto K, et al. **Mol Cell Biol** 1997 Oct; 17(10):5905–14

Control by basal phosphorylation of cell cycle–dependent, hormone–induced glucocorticoid receptor hyperphosphorylation. Hu JM, et al. **Mol Endocrinol** 1997 Mar;11(3):305–11

Apoptosis induced by ectopic expression of cyclin D1 but not cyclin E. Sofer–Levi Y, et al. **Oncogene** 1996 Dec 5; 13(11):2431–7

Protein geranylgeranylation, not farnesylation, is required for the G1 to S phase transition in mouse fibroblasts. Vogt A, et al. **Oncogene** 1996 Nov 7;13(9):1991–9

The origin recognition complex, SIR1, and the S phase requirement for silencing. Fox CA, et al. **Science** 1997 Jun 6;276(5318):1547–51

[Control mechanisms of cell transition from the G1 phase to the S phase––the R point] Bártek J, et al. **Cas Lek Cesk** 1996 Oct 9;135(19):634–5 (Eng. Abstr.) **(Cze)**

RADIATION EFFECTS

Alterations in p53 do not correlate with radioresistant DNA synthesis. Laderoute MP. **Anticancer Res** 1996 Sep–Oct; 16(5A):2825–30

Adenine–induced arrest of mammalian cells in early S–phase is related to the prevention of DNA synthesis inhibition caused by gamma–irradiation. Mlejnek P, et al. **Int J Radiat Biol** 1997 May;71(5):505–13

The merits of cell kinetic parameters for the assessment of intrinsic cellular radiosensitivity to photon and high linear energy transfer neutron irradiation. Theron T, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15;37(2):423–8

Lack of uncoupling of S phase and mitosis after irradiation in p53– human lymphoblast cell lines. Wenz F, et al. **Radiat Res** 1997 Aug;148(2):129–34

[Quantitative patterns in the yield of chromosome aberrations in a human lymphocyte culture with fractionated gamma–neutron irradiation at different stages of the mitotic cycle. The cytogenetic effects at stage S] Pozdyshkina OV. **Radiats Biol Radioecol** 1997 Mar–Apr;37(2):257–66 (Eng. Abstr.) **(Rus)**

SABIA VIRUS see **TACARIBE COMPLEX VIRUSES**

SABIN VACCINE see **POLIOVIRUS VACCINE, ORAL**

SABO VIRUS see **SIMBU GROUP VIRUSES**

SACCADES

Relative sparing of extraocular muscles in myotonic dystrophy: an electrooculographic study. Di Costanzo A, et al. **Acta Neurol Scand** 1997 Mar;95(3):158–63

Non–visually induced smooth pursuit eye movements using sinusoidal target motion. Hashiba M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:158–62

Antisaccadic eye movements and attentional asymmetry in schizophrenia in three Pacific populations. Allen JS, et al. **Acta Psychiatr Scand** 1996 Oct;94(4):258–65

Eye tracking, attention, and schizotypal symptoms in nonpsychotic relatives of patients with schizophrenia. Keefe RS, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):169–76

Medical treatments for abnormal eye movements: pharmacological, optical and immunological strategies. Averbuch–Heller L, et al. **Aust N Z J Ophthalmol** 1997 Feb;25(1):7–13 (36 ref.)

Eye–movements and visual imagery: a working memory approach to the treatment of post–traumatic stress disorder. Andrade J, et al. **Br J Clin Psychol** 1997 May;36 (Pt 2):209–23

Smooth pursuit and saccades to moving targets in blind hemifields. A comparison of medial occipital, lateral occipital and optic radiation lesions. Barton JJ, et al. **Brain** 1997 Apr;120 (Pt 4):681–99

Saccadic eye movements, even in darkness, generate event–related potentials recorded in medial sputum and medial temporal cortex. Sobotka S, et al. **Brain Res** 1997 May 9;756(1–2):168–73

Compensatory saccades made to remembered targets following orbital displacement by electrically stimulating the dorsomedial frontal cortex or frontal eye fields of primates. Tehovnik EJ, et al. **Brain Res** 1996 Jul 15; 727(1–2):221–4

Searching eye movement, smooth pursuit eye movement and schizophrenia. Yan W, et al. **Chin Med J (Engl)** 1996 Jul; 109(7):566–71

Eye movement abnormalities in a case of Tourette syndrome. Narita AS, et al. **Dev Med Child Neurol** 1997 Apr; 39(4):270–3

Effects of stimulus duration and task experience on gaze shift. Wang L, et al. **Ergonomics** 1996 Jan;39(1):141–51

Interference between saccadic eye and goal–directed hand movements. Bekkering H, et al. **Exp Brain Res** 1995; 106(3):475–84

Antisaccade performance in patients with schizophrenia and affective disorder. Katsanis J, et al. **J Abnorm Psychol** 1997 Aug;106(3):468–72

Eye movements during parallel–serial visual search. Zelinsky GJ, et al. **J Exp Psychol Hum Percept Perform** 1997 Feb; 23(1):244–62

Initiation and inhibition of saccadic eye movements in younger and older adults: an analysis of the gap effect. Pratt J, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Mar; 52(2):P103–7

Saccade velocity in idiopathic and autosomal dominant cerebellar ataxia. Bürk K, et al. **J Neurol Neurosurg Psychiatry** 1997 Jun;62(6):662–4

Visual perception. Where are the things we see? [news; comment] Miller JM, et al. **Nature** 1997 Apr 10; 386(6625):550–1. Comment on: Nature 1997 Apr 10;386(6625):598–601. Comment on: Nature 1997 Apr 10;386(6625):601–4.

Neuroradiological and eye movement correlates in children with intermittent saccade failure: "ocular motor apraxia". Shawkat FS, et al. **Neuropediatrics** 1995 Dec;26(6):298–305

Attentional mechanisms of saccadic eye movements in schizophrenia. Evans WJ, et al. **Neuropsychiatry Neuropsychol Behav Neurol** 1997 Jan; 10(1):17–24

Visual attention in Huntington's disease: the effect of cueing on saccade latencies and manual reaction times. Tsai TT, et al. **Neuropsychologia** 1995 Dec;33(12):1617–26

How the brain keeps the eyes still. Seung HS. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13339–44

Does pursuit abnormality in schizophrenia represent a deficit in the predictive mechanism? Thaker GK, et al. **Psychiatry Res** 1996 Jan 31;59(3):221–37

Presaccadic attention allocation and express saccades. Cavegn D, et al. **Psychol Res** 1996;59(3):157–75

Visually–guided saccadic eye movements in adolescents at genetic risk for schizophrenia. Schreiber H, et al. **Schizophr Res** 1997 May 24;25(2):97–109

Automatic control of saccadic eye movements made in visual inspection of briefly presented 2–D images. Mannan S, et al. **Spat Vis** 1995;9(3):363–86

High refresh rate and oculomotor adaptation facilitate reading from video displays. Montegut MJ, et al. **Spat Vis** 1997;10(4):305–22

A pixel–resolution video switcher for eye–contingent display changes. van Diepen PM. **Spat Vis** 1997;10(4):335–44

Mixture models for eye–tracking data: a case study. Pauler DK, et al. **Stat Med** 1996 Jul 15;15(13):1365–76

DRUG EFFECTS

Reduced benzodiazepine sensitivity in patients with panic disorder: comparison with patients with obsessive–compulsive disorder and normal subjects. Roy–Byrne P, et al. **Am J Psychiatry** 1996 Nov; 153(11):1444–9

Central action of cinnarizine and flunarizine: a saccadic eye movement study. Casucci G, et al. **Clin Neuropharmacol** 1994 Oct;17(5):417–22

Reduced benzodiazepine sensitivity in patients with premenstrual syndrome: a pilot study. Sundström I, et al. **Psychoneuroendocrinology** 1997 Jan;22(1):25–38

[Effect of low alcohol concentrations on visual attention in street traffic] Buser A, et al. **Ophthalmologe** 1996 Aug; 93(4):371–6 (Eng. Abstr.) **(Ger)**

GENETICS

Oculomotor apraxia in a case of Gaucher's disease with homozygous T1448C mutation. Tsai LP, et al. **Acta Paediatr Sin** 1996 Jan–Feb;37(1):52–5

PHYSIOLOGY

Saccadic and smooth pursuit eye movements in memory–impaired elderly people. Versino M, et al. **Acta Neurol Scand** 1996 Jan;93(1):39–43

Quantitative assessment of fixational eye movements by scanning laser ophthalmoscopy. Møller F, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):578–83

Transient motion of visual texture delays saccadic eye movements. Crawford TJ. **Acta Psychol (Amst)** 1996 Aug; 92(3):251–62

Saccade amplitude as a discriminator of flight types. Katoh Z. **Aviat Space Environ Med** 1997 Mar;68(3):205–8

Suppression of the magnocellular pathway during saccades.

Ross J, et al. **Behav Brain Res** 1996 Oct;80(1-2):1-8 (63 ref.)

Colliding saccades evoked by frontal eye field stimulation: artifact or evidence for an oculomotor compensatory mechanism underlying double-step saccades? Dominey PF, et al. **Biol Cybern** 1997 Jan;76(1):41-52

Smooth-pursuit eye movement and saccadic intrusions in obsessive-compulsive disorder. Pallanti S, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1164-72

On the development of voluntary and reflexive components in human saccade generation. Fischer B, et al. **Brain Res** 1997 Apr 18;754(1-2):285-97

Saccular impact on ocular torsion. De Graaf B, et al. **Brain Res Bull** 1996;40(5-6):321-6; discussion 326-30

Monkey superior colliculus activity during short-term saccadic adaptation. Frens MA, et al. **Brain Res Bull** 1997; 43(5):473-83

Neural network simulations of the primate oculomotor system. II. Frames of reference. Moschovakis AK. **Brain Res Bull** 1996;40(5-6):337-43; discussion 344-5

Time course of inhibition induced by a putative saccadic suppression circuit in the dorsal lateral geniculate nucleus of the rabbit. Zhu JJ, et al. **Brain Res Bull** 1996;41(5):281-91

Eye movement patterns in reading as a function of visual field defects and contrast sensitivity loss. De Luca M, et al. **Cortex** 1996 Sep;32(3):491-502

Sensorimotor processing: charting the frontier. Carpenter RH. **Curr Biol** 1997 Jun 1;7(6):R348-51 (10 ref.)

The anatomical localization of saccades using functional imaging studies and transcranial magnetic stimulation. Carter N, et al. **Curr Opin Neurol** 1997 Feb;10(1):10-7 (47 ref.)

Changes of presaccadic cortical activity when performing horizontal, visually guided saccades. Evdokimidis I, et al. **Electroencephalogr Clin Neurophysiol** 1997 Mar; 102(3):256-60

Cortical potentials preceding pro- and antisaccades in man. Everling S, et al. **Electroencephalogr Clin Neurophysiol** 1997 Apr;102(4):356-62

Rapid-rate transcranial magnetic stimulation of human frontal cortex can evoke saccades under facilitating conditions. Li J, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jun; 105(3):246-54

Time on task and blink effects on saccade duration. McGregor DK, et al. **Ergonomics** 1996 Apr;39(4):649-60

Shift in saccadic direction induced in humans by proprioceptive manipulation: a comparison between memory-guided and visually guided saccades. Allin F, et al. **Exp Brain Res** 1996 Aug;110(3):473-81

Analysis of the step response of the saccadic feedback: system behavior. Breznen B, et al. **Exp Brain Res** 1996 Oct; 111(3):337-44

Eye acceleration during large horizontal saccades in man. Brown P, et al. **Exp Brain Res** 1997 Jan;113(1):153-7

Fixation and saccade control in an express-saccade maker. Cavegn D, et al. **Exp Brain Res** 1996 Apr;109(1):101-16

Bilateral interactions in saccade programming. A saccade-latency study. Cavegn D. **Exp Brain Res** 1996 May;109(2):312-32

The ability to produce express saccades as a function of gap interval among schizophrenia patients. Clementz BA. **Exp Brain Res** 1996 Sep;111(1):121-30

Neural control of fast-regular saccades and antisaccades: an investigation using positron emission tomography. Doricchi F, et al. **Exp Brain Res** 1997 Aug;116(1):50-62

Cortical potentials during the gap prior to express saccades and fast regular saccades. Everling S, et al. **Exp Brain Res** 1996 Sep;111(1):139-43

Influence of pre-target cortical potentials on saccadic reaction times. Everling S, et al. **Exp Brain Res** 1997 Jul; 115(3):479-84

Hypometric primary saccades of schizophrenics in a delayed-response task. Everling S, et al. **Exp Brain Res** 1996 Sep;111(2):289-95

Effects of procues on error rate and reaction times of antisaccades in human subjects. Fischer B, et al. **Exp Brain Res** 1996 Jun;109(3):507-12

Response properties of relay cells in the A-laminae of the cat's dorsal lateral geniculate nucleus after saccades. Fischer WH, et al. **Exp Brain Res** 1996 Aug;110(3):435-45

Eye position and target amplitude effects on human visual saccadic latencies. Fuller JH. **Exp Brain Res** 1996 Jun; 109(3):457-66

Reaction times of vertical prosaccades and antisaccades in gap and overlap tasks. Goldring J, et al. **Exp Brain Res** 1997 Jan;113(1):88-103

Firing properties of preposito-collicular neurones related to horizontal eye movements in the alert cat. Hardy O, et al. **Exp Brain Res** 1996 Aug;110(3):413-24

Saccade-related burst neurons with torsional and vertical on-directions in the interstitial nucleus of Cajal of the alert monkey. Helmchen C, et al. **Exp Brain Res** 1996 Nov; 112(1):63-78

Interaction of extraretinal eye position signals in a double-step saccade task: psychophysical estimation. Honda H. **Exp Brain Res** 1997 Feb;113(2):327-36

Reference frames in saccadic targeting. Karn KS, et al. **Exp Brain Res** 1997 Jun;115(2):267-82

Accuracies of saccades to moving targets during pursuit initiation and maintenance. Kim CE, et al. **Exp Brain Res** 1997 Feb;113(2):371-7

On the short-term adaptation of eye saccades and its transfer to head movements. Kröller J, et al. **Exp Brain Res** 1996 Oct;111(3):477-82

The effect of fixation condition manipulations on antisaccade performance in schizophrenia: studies of diagnostic specificity. McDowell JE, et al. **Exp Brain Res** 1997 Jun; 115(2):333-44

Minimal synaptic delay in the saccadic output pathway of the superior colliculus studied in awake monkey. Miyashita N, et al. **Exp Brain Res** 1996 Nov;112(2):187-96

Adaptive modifications of human postsaccadic pursuit eye movements induced by a step-ramp-ramp paradigm. Ogawa T, et al. **Exp Brain Res** 1997 Aug;116(1):83-96

The "gap paradigm" leads to express-like saccadic reaction times in Parkinson's disease. Roll A, et al. **Exp Brain Res** 1996 Sep;111(1):131-8

Effects of spatial attention on directional manual and ocular responses. Sheliga BM, et al. **Exp Brain Res** 1997 Apr; 114(2):339-51

Validity of Listing's law during fixations, saccades, smooth pursuit eye movements, and blinks. Straumann D, et al. **Exp Brain Res** 1996 Nov;112(1):135-46

Anatomical distribution of arm-movement-related neurons in the primate superior colliculus and underlying reticular formation in comparison with visual and saccadic cells. Werner W, et al. **Exp Brain Res** 1997 Jun;115(2):206-16

Saccadic eye movements to visual and auditory targets. Yao L, et al. **Exp Brain Res** 1997 Jun;115(1):25-34

The role of ERG/VEP and eye movement recordings in children with ocular motor apraxia. Shawkat FS, et al. **Eye** 1996;10 (Pt 1):53-60

Motor programs of spontaneous and visually guided saccades in macaque monkey: an electrophysiological approach. Lucchetti C, et al. **Int J Neurosci** 1997 Jun;90(1-2):37-43

The increased reaction time of antisaccades. What makes the difference? Evdokimidis I, et al. **Int J Psychophysiol** 1996 Apr-May;22(1-2):61-5

Response latencies and event-related potentials during the gap paradigm using saccadic responses in human subjects. Gómez C, et al. **Int J Psychophysiol** 1996 Aug-Sep; 23(1-2):91-9

Topography of visually evoked brain activity during eye movements: lambda waves, saccadic suppression, and discrimination performance. Skrandies W, et al. **Int J Psychophysiol** 1997 Jul;27(1):15-27

Square-root relations between main saccadic parameters. Lebedev S, et al. **Invest Ophthalmol Vis Sci** 1996 Dec; 37(13):2750-8

Reliability of the NYSOA King-Devick saccadic eye movement test in kindergartners and first graders. Kulp MT, et al. **J Am Optom Assoc** 1997 Sep;68(9):589-94

Slow saccades and other eye movement disorders in spinocerebellar atrophy type 1. Klostermann W, et al. **J Neurol** 1997 Feb;244(2):105-11

Pathological torsional eye deviation during voluntary saccades: a violation of Listing's law. Helmchen C, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):253-60

Binocular saccadic eye movements in multiple sclerosis. Flipse JP, et al. **J Neurol Sci** 1997 May 1;148(1):53-65

Transcranial magnetic stimulation of the human frontal eye field. Thickbroom GW, et al. **J Neurol Sci** 1996 Dec; 144(1-2):114-8

Human express saccade makers are impaired at suppressing visually evoked saccades. Biscaldi M, et al. **J Neurophysiol** 1996 Jul;76(1):199-214

Motor intention activity in the macaque's lateral intraparietal area. II. Changes of motor plan. Bracewell RM, et al. **J Neurophysiol** 1996 Sep;76(3):1457-64

Suppression of task-related saccades by electrical stimulation in the primate's frontal eye field. Burman DD, et al. **J Neurophysiol** 1997 May;77(5):2252-67

Monosynaptic activation of medium-lead burst neurons from the superior colliculus in the alert cat. Chimoto S, et al. **J Neurophysiol** 1996 Jun;75(6):2658-61

Visual, presaccadic, and cognitive activation of single neurons in monkey lateral intraparietal area. Colby CL, et al. **J Neurophysiol** 1996 Nov;76(5):2841-52

Eye-head coordination during head-unrestrained gaze shifts in rhesus monkeys. Freedman EG, et al. **J Neurophysiol** 1997 May;77(5):2328-48

Transfer of gain changes from targeting to other types of saccade in the monkey: constraints on possible sites of saccadic gain adaptation. Fuchs AF, et al. **J Neurophysiol** 1996 Oct;76(4):2522-35

Saccades to somatosensory targets. I. behavioral characteristics. Groh JM, et al. **J Neurophysiol** 1996 Jan; 75(1):412-27

Saccades to somatosensory targets. II. motor convergence in primate superior colliculus. Groh JM, et al. **J Neurophysiol** 1996 Jan;75(1):428-38

Saccades to somatosensory targets. III. eye-position-dependent somatosensory activity in primate superior colliculus. Groh JM, et al. **J Neurophysiol** 1996 Jan;75(1):439-53

Effect of ibotenic acid lesions of the omnipause neurons on saccadic eye movements in rhesus macaques. Kaneko CR. **J Neurophysiol** 1996 Jun;75(6):2229-42

Ablation of the pursuit area in the frontal cortex of the primate degrades foveal but not optokinetic smooth eye movements. Keating EG, et al. **J Neurophysiol** 1996 Jul; 76(1):637-41

Discharge of superior collicular neurons during saccades made to moving targets. Keller EL, et al. **J Neurophysiol** 1996 Nov;76(5):3573-7

Release of fixation for pursuit and saccades in humans: evidence for shared inputs acting on different neural substrates. Krauzlis RJ, et al. **J Neurophysiol** 1996 Nov; 76(5):2822-33

Transitions between pursuit eye movements and fixation in the monkey: dependence on context. Krauzlis RJ, et al. **J Neurophysiol** 1996 Sep;76(3):1622-38

Initiation of saccades during fixation or pursuit: evidence in humans for a single mechanism. Krauzlis RJ, et al. **J Neurophysiol** 1996 Dec;76(6):4175-9

Motor intention activity in the macaque's lateral intraparietal area. I. Dissociation of motor plan from sensory memory. Mazzoni P, et al. **J Neurophysiol** 1996 Sep;76(3):1439-56

Short-term adaptation of electrically induced saccades in monkey superior colliculus. Melis BJ, et al. **J Neurophysiol** 1996 Sep;76(3):1744-58

Activity of neurons in monkey superior colliculus during interrupted saccades. Munoz DP, et al. **J Neurophysiol** 1996 Jun;75(6):2562-80

Effects of single-pulse transcranial magnetic stimulation over the prefrontal and posterior parietal cortices during memory-guided saccades in humans. Müri RM, et al. **J Neurophysiol** 1996 Sep;76(3):2102-6

Visually guided saccade versus eye-hand reach: contrasting neuronal activity in the cortical supplementary and frontal eye fields. Mushiake H, et al. **J Neurophysiol** 1996 May; 75(5):2187-91

Independent feedback control of horizontal and vertical amplitude during oblique saccades evoked by electrical stimulation of the superior colliculus. Nichols MJ, et al. **J Neurophysiol** 1996 Dec;76(6):4080-93

Component stretching during oblique stimulation-evoked saccades: the role of the superior colliculus. Nichols MJ, et al. **J Neurophysiol** 1996 Jul;76(1):582-600

Saccadic reaction time in the monkey: advanced preparation of oculomotor programs is primarily responsible for express saccade occurrence. Paré M, et al. **J Neurophysiol** 1996 Dec;76(6):3666-81

Dissociation of saccade-related and pursuit-related activation in human frontal eye fields as revealed by fMRI. Petit L, et al. **J Neurophysiol** 1997 Jun;77(6):3386-90

Model with distributed vectorial premotor bursters accounts for the component stretching of oblique saccades. Quaia C, et al. **J Neurophysiol** 1997 Aug;78(2):1120-34

Neurons in the cat pretectum that project to the dorsal lateral geniculate nucleus are activated during saccades. Schmidt M. **J Neurophysiol** 1996 Nov;76(5):2907-18

Anatomy and physiology of saccadic long-lead burst neurons recorded in the alert squirrel monkey. II. Pontine neurons. Scudder CA, et al. **J Neurophysiol** 1996 Jul;76(1):353-70

Anatomy and physiology of saccadic long-lead burst neurons recorded in the alert squirrel monkey. I. Descending projections from the mesencephalon. Scudder CA, et al. **J Neurophysiol** 1996 Jul;76(1):332-52

Site and parameters of microstimulation: evidence for independent effects on the properties of saccades evoked from the primate superior colliculus. Stanford TR, et al. **J Neurophysiol** 1996 Nov;76(5):3360-81

Characteristics of saccadic gain adaptation in rhesus macaques. Straube A, et al. **J Neurophysiol** 1997 Feb; 77(2):874-95

Positron emission tomography study of voluntary saccadic eye movements and spatial working memory. Sweeney JA, et al. **J Neurophysiol** 1996 Jan;75(1):454-68

Modulation of the human vestibuloocular reflex during saccades: probing by high-frequency oscillation and torque pulses of the head. Tabak S, et al. **J Neurophysiol** 1996 Nov;76(5):3249-63

Dissociation of visual discrimination from saccade programming in macaque frontal eye field. Thompson KG, et al. **J Neurophysiol** 1997 Feb;77(2):1046-50

Perceptual and motor processing stages identified in the activity of macaque frontal eye field neurons during visual search. Thompson KG, et al. **J Neurophysiol** 1996 Dec; 76(6):4040-55

Functionally defined smooth and saccadic eye movement subregions in the frontal eye field of Cebus monkeys. Tian JR, et al. **J Neurophysiol** 1996 Oct;76(4):2740-53

Corticocortical input to the smooth and saccadic eye movement subregions of the frontal eye field in Cebus monkeys. Tian JR, et al. **J Neurophysiol** 1996 Oct; 76(4):2754-71

Three-dimensional model of the human eye-head saccadic system. Tweed D. **J Neurophysiol** 1997 Feb;77(2):654-66

Effect of remote distractors on saccade programming: evidence for an extended fixation zone. Walker R, et al. **J Neurophysiol** 1997 Aug;78(2):1108-19

Saccades to remembered targets: the effects of smooth pursuit and illusory stimulus motion. Zivotofsky AZ, et al. **J Neurophysiol** 1996 Dec;76(6):3617-32

How is a sensory map read Out? Effects of microstimulation in visual area MT on saccades and smooth pursuit eye movements. Groh JM, et al. **J Neurosci** 1997 Jun 1; 17(11):4312-30

Apparent position of visual targets during real and simulated saccadic eye movements. Morrone MC, et al. **J Neurosci** 1997 Oct 15;17(20):7941-53

A method for automatic identification of saccades from eye movement recordings. Marple-Horvat DE, et al. **J Neurosci Methods** 1996 Aug;67(2):191-5

Saccadic eye movements in idiopathic blepharospasm. Bollen E, et al. **Mov Disord** 1996 Nov;11(6):678–82
Saccades in Gilles de la Tourette's syndrome. Straube A, et al. **Mov Disord** 1997 Jul;12(4):536–46
Modulation of neuronal activity by target uncertainty. Basso MA, et al. **Nature** 1997 Sep 4;389(6646):66–9
Perceived geometrical relationships affected by eye-movement signals [see comments] Cai RH, et al. **Nature** 1997 Apr 10;386(6625):601–4. Comment in: Nature 1997 Apr 10;386(6625):550–1.
Shared neural control of attentional shifts and eye movements. Kustov AA, et al. **Nature** 1996 Nov 7; 384(6604):74–7
Compression of visual space before saccades [see comments] Ross J, et al. **Nature** 1997 Apr 10;386(6625):598–601. Comment in: Nature 1997 Apr 10;386(6625):550–1.
Target predictability influences the distribution of coordinated eye-head gaze saccades in patients with homonymous hemianopia. Schoepf D, et al. **Neurol Res** 1996 Oct;18(5):425–39
Functional MRI mapping of occipital and frontal cortical activity during voluntary and imagined saccades. Bodis-Wollner I, et al. **Neurology** 1997 Aug;49(2):416–20
Ocular-motor delayed-response task performance among schizophrenia patients. McDowell JE, et al. **Neuropsychobiology** 1996;34(2):67–71
Attention and oculomotor control: a high-density ERP study of the gap effect. Csibra G, et al. **Neuropsychologia** 1997 Jun;35(6):855–65
Saccadic eye movement programming in unilateral neglect. Walker R, et al. **Neuropsychologia** 1996 Jun;34(6):493–508
Effects of eye position on saccades evoked by stimulation of the monkey superior colliculus. Azuma M, et al. **Neuroreport** 1996 Oct 2;7(14):2287–92
Magnetic source imaging during a visually guided task. Jousmäki V, et al. **Neuroreport** 1996 Nov 25;7(18):2961–4
Topographic representation in human intraparietal sulcus of reaching and saccade. Kawashima R, et al. **Neuroreport** 1996 May 17;7(7):1253–6
Saccade-related omnivectoral pause neurons in the primate zona incerta. Ma TP. **Neuroreport** 1996 Nov 4; 7(15–17):2713–6
Deficient antisaccades in the social-emotional processing disorder. Manoach DS, et al. **Neuroreport** 1997 Mar 3; 8(4):901–5
Abnormalities of predictive saccades in Parkinson's disease. O'Sullivan EP, et al. **Neuroreport** 1997 Mar 24;8(5):1209–13
Monkey saccadic latency and pursuit velocity show a preference for upward directions of target motion. Schlykowa L, et al. **Neuroreport** 1996 Jan 31;7(2):409–12
Motion templates with eye velocity gain fields for transformation of retinal to head centric flow. van den Berg AV, et al. **Neuroreport** 1997 Mar 3;8(4):835–40
The caudo ventral pontine tegmentum is involved in the generation of high velocity eye saccades in bursts during paradoxical sleep in the cat. Vanni-Mercier G, et al. **Neurosci Lett** 1996 Aug 2;213(2):127–31
The relation of clinical saccadic eye movement testing to reading in kindergartners and first graders. Kulp MT, et al. **Optom Vis Sci** 1997 Jan;74(1):37–42
Auditory stimulus detection is not suppressed during saccadic eye movements. Harris LR, et al. **Perception** 1996; 25(8):999–1004
Visual inspection of three-dimensional objects by human observers. Niemann T, et al. **Perception** 1996;25(9):1027–42
Suppressive effect of multimodal surface representation on ocular smooth pursuit of invisible hand. Watanabe K, et al. **Perception** 1997;26(3):277–85
Functional connectivity of the superior colliculus with saccade-related brain stem neurons in the cat. Chimoto S, et al. **Prog Brain Res** 1996;112:157–65
Visual inputs to cerebellar ventral paraflocculus during ocular following responses. Kawano K, et al. **Prog Brain Res** 1996;112:415–22
Context dependent discharge characteristics of saccade-related Purkinje cells in the cerebellar hemispheres of the monkey. Mano N, et al. **Prog Brain Res** 1996; 112:423–30
Task-dependence of saccade-related activity in monkey superior solliculus: implications for models of the saccadic system. Van Opstal AJ, et al. **Prog Brain Res** 1996; 112:179–94
The microscopic anatomy and physiology of the mammalian saccadic system. Moschovakis AK, et al. **Prog Neurobiol** 1996 Oct;50(2–3):133–254 (699 ref.)
Mr. Chips: an ideal-observer model of reading. Legge GE, et al. **Psychol Rev** 1997 Jul;104(3):524–53 (130 ref.)
Saccades to moving targets in schizophrenia: evidence for normal posterior cortex functioning. Clementz BA. **Psychophysiology** 1996 Nov;33(6):650–4
Neural control of voluntary movement initiation [see comments] Hanes DP, et al. **Science** 1996 Oct 18; 274(5286):427–30. Comment in: Science 1996 Oct 18;274(5286):344. Comment in: Science 1997 Jan 10;275(5297):142–3; discussion 144–5. Comment in: Science 1997 Jan 10;275(5297):143–4; discussion 144–5. Comment in: Science 1997 Jan 10;275(5297):144; discussion 144–5.
Neurons and reaction times [letter; comment] Lynch JC. **Science** 1997 Jan 10;275(5297):143–4; discussion 144–5. Comment on: Science 1996 Oct 18;274(5286):427–30.
The relationship between the locations of spatial features and those of fixations made during visual examination of briefly presented images. Mannan SK, et al. **Spat Vis** 1996; 10(3):165–88
Countermanding saccades in macaque. Hanes DP, et al. **Vis Neurosci** 1995 Sep-Oct;12(5):929–37
Endpoint accuracy in saccades interrupted by stimulation in the omnipause region in monkey. Keller EL, et al. **Vis Neurosci** 1996 Nov-Dec;13(6):1059–67
The 'center of gravity' of words: evidence for an effect of the word-initial letters. Beauvillain C, et al. **Vision Res** 1996 Feb;36(4):589–603
Very short-term visual memory via reverberation: a role for the cortico-thalamic excitatory circuit in temporal filling-in during blinks and saccades? Billock VA. **Vision Res** 1997 Apr;37(7):949–53
Specificity of saccadic adaptation in three-dimensional space. Chaturvedi V, et al. **Vision Res** 1997 May;37(10):1367–82
Saccade target selection during visual search. Findlay JM. **Vision Res** 1997 Mar;37(5):617–31
Cyclopean and disconjugate adaptive recovery from post-saccadic drift in strabismic children before and after surgery. Inchingolo P, et al. **Vision Res** 1996 Sep; 36(18):2897–913
Fixation conditions, the foveola and saccadic latency. Kalesnykas RP, et al. **Vision Res** 1996 Oct;36(19):3195–203
Disconjugate adaptation of the vertical oculomotor system. Kapoula Z, et al. **Vision Res** 1996 Sep;36(17):2735–45
Saccadic suppression of displacement: separate influences of saccade size and of target retinal eccentricity. Li W, et al. **Vision Res** 1997 Jul;37(13):1779–97
Listing's plane dependence on alternating fixation in a strabismus patient. Melis BJ, et al. **Vision Res** 1997 May; 37(10):1355–66
Visually elicited head rotation in pigeons (Columba livia). Türke W, et al. **Vision Res** 1996 Oct;36(20):3329–37
[Measuring saccades in endocrine orbitopathy] Schworm HD, et al. **Ophthalmologe** 1997 Mar;94(3):211–6 (Eng. Abstr.) **(Ger)**
[Functional eye muscle changes in endocrine orbitopathy] Schworm HD, et al. **Ophthalmologe** 1997 Apr;94(4):290–4 (Eng. Abstr.) **(Ger)**
[Analysis of ocular saccadic movements with a fatigue test and neostigmine in Graves' ophthalmopathy] di Lorenzo L, et al. **Minerva Endocrinol** 1997 Mar;22(1):7–12 (Eng. Abstr.) **(Ita)**
[Changes and disorders in voluntary saccades during development and aging] Hikosaka O. **No To Hattatsu** 1997 May;29(3):213–9 (21 ref.) (Eng. Abstr.) **(Jpn)**
[Rorschach response process in schizophrenia] Harada N. **Seishin Shinkeigaku Zasshi** 1996;98(6):378–412 (Eng. Abstr.) **(Jpn)**
[Fast positive cortical potentials of the human cerebral hemispheres to visual stimuli evoking saccades] Shul'govskiĭ VV, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):469–79 (Eng. Abstr.) **(Rus)**
[Human positive brain potentials before visually evoked saccades] Slavutskaia MV, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul-Aug; 46(4):795–9 **(Rus)**

SACCADIC EYE MOVEMENTS see **SACCADES**

SACCHARIDE-MEDIATED CELL ADHESION MOLECULES see **CELL ADHESION MOLECULES**

SACCHARIN

Effects of the benzodiazepine receptor inverse agonist Ro 15-4513 on the ingestion of sucrose and sodium saccharin solutions: a microstructural analysis of licking behavior. Higgs S, et al. **Behav Neurosci** 1996 Jun;110(3):559–66
Role of taste aversion in calcium channel inhibitor-induced suppression of saccharin and alcohol drinking in rats. Pucilowski O, et al. **Physiol Behav** 1996 Feb;59(2):319–24

ADMINISTRATION & DOSAGE

Taste responses in the nucleus of the solitary tract in saccharin-preferring and saccharin-averse rats. Giza BK, et al. **Chem Senses** 1996 Apr;21(2):147–57
Effects of gamma-aminobutyric acid agonists and N-methyl-D-aspartate antagonists on a multiple schedule of ethanol and saccharin self-administration in rats. Shelton KL, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1250–60
Continuous intraoral saccharin infusions in high vs. low saccharin-consuming rats. Thiele TE, et al. **Physiol Behav** 1997 Jan;61(1):149–52

ANALOGS & DERIVATIVES

Amino acid-derived phthalimide and saccharin derivatives as inhibitors of human leukocyte elastase, cathepsin G, and proteinase 3. Groutas WC, et al. **Arch Biochem Biophys** 1996 Aug 15;332(2):335–40

METABOLISM

Saccharin mechanistic data and risk assessment: urine composition, enhanced cell proliferation, and tumor promotion. Whysner J, et al. **Pharmacol Ther** 1996; 71(1-2):225–52 (172 ref.)

PHARMACOLOGY

Antihyperglycaemic effect of saccharin in diabetic ob/ob mice. Bailey CJ, et al. **Br J Pharmacol** 1997 Jan;120(1):74–8
Insular cortex lesions impair the acquisition of conditioned immunosuppression. Ramírez-Amaya V, et al. **Brain Behav Immun** 1996 Jun;10(2):103–14
Multielemental stimulus control: effects of saccharin concentration on a discriminated morphine-saccharin taste aversion. Lamb RJ, et al. **Exp Clin Psychopharmacol** 1997 May;5(2):123–9
Effect of glucose and peripheral glucose regulation on memory in the elderly. Messier C, et al. **Neurobiol Aging** 1997 May-Jun;18(3):297–304
Beyond sweet taste: saccharin, sucrose, and polycose differ in their effects upon morphine-induced analgesia. D'Anci KE, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):341–5
Prenatal exposure to morphine alters analgesic responses and preference for sweet solutions in adult rats. Gagin R, et al. **Pharmacol Biochem Behav** 1996 Dec;55(4):629–34
Fluoxetine reduces saccharin-induced elevation of fluid intake in alcohol-preferring Fawn-Hooded rats. Kampov-Polevoy AB, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):51–4
Unconditioned stimulus intensity and retention interval effects. Batsell WR Jr, et al. **Physiol Behav** 1996 Dec; 60(6):1463–7
Saccharin increases the effectiveness of glucose in stimulating ingestion in rats but has little effect on negative feedback. Breslin PA, et al. **Physiol Behav** 1996 Aug;60(2):411–6
Preference for saccharin-sweetened alcohol relative to isocaloric sucrose. Heyman GM. **Psychopharmacology (Berl)** 1997 Jan;129(1):72–8
A comparison of progressive ratio schedules versus behavioral economic measures: effect of an alternative reinforcer on the reinforcing efficacy of phencyclidine. Rodefer JS, et al. **Psychopharmacology (Berl)** 1997 Jul; 132(1):95–103

TOXICITY

Reproductive toxicology. Sodium saccharin. **Environ Health Perspect** 1997 Feb;105 Suppl 1:347–8
"Report of the Rodent Bladder Carcinogenesis Working Group" [letter] Anderson RL. **Food Chem Toxicol** 1997 Feb;35(2):295
Saccharin mechanistic data and risk assessment: urine composition, enhanced cell proliferation, and tumor promotion. Whysner J, et al. **Pharmacol Ther** 1996; 71(1-2):225–52 (172 ref.)

SACCHAROMYCES

Saccharomyces boulardii prevents diarrhea in critically ill tube-fed patients. A multicenter, randomized, double-blind placebo-controlled trial. Bleichner G, et al. **Intensive Care Med** 1997 May;23(5):517–23
[Meaningless with an expensive yeast preparation in diarrhea (letter)] Cronberg S. **Lakartidningen** 1996 Nov 27; 93(48):4389–90 **(Swe)**

CHEMISTRY

Two types of alpha-factor receptor determinants for pheromone specificity in the mating-incompatible yeasts S. cerevisiae and S. kluyveri. Sen M, et al. **Curr Genet** 1997 Mar;31(3):235–40

CLASSIFICATION

Saccharomyces boulardii is not Saccharomyces cerevisiae [letter] McFarland LV. **Clin Infect Dis** 1996 Jan;22(1):200–1
A phylogenetic analysis of the genus Saccharomyces based on 18S rRNA gene sequences: description of Saccharomyces kunashirensis sp. nov. and Saccharomyces martiniae sp. nov. James SA, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):453–60
Application of DNA typing methods and genetic analysis to epidemiology and taxonomy of Saccharomyces isolates. Clemons KV, et al. **J Clin Microbiol** 1997 Jul;35(7):1822–8

CYTOLOGY

A yeast heat shock transcription factor (Hsf1) mutant is defective in both Hsc82/Hsp82 synthesis and spindle pole body duplication. Zarzov P, et al. **J Cell Sci** 1997 Aug; 110 (Pt 16):1879–91
[MCM protein complex in fission yeast] Adachi Y. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1777–83 (20 ref.) **(Jpn)**
[The fission yeast cdc18+ gene links S phase to START and plays a major role in the initiation of DNA replication] Nishitani H. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1761–8. (34 ref.) **(Jpn)**

DRUG EFFECTS

Mitochondrial DNA loss caused by ethanol in Saccharomyces flor yeasts. Ibeas JI, et al. **Appl Environ Microbiol** 1997 Jan;63(1):7–12

ENZYMOLOGY

Secretion of Bacillus alpha-amylase from yeast directed by glucoamylase I signal sequence of Saccharomyces diastaticus. Kang DO, et al. **Biochem Mol Biol Int** 1996

May;39(1):181–90
Saccharomyces boulardii protease inhibits Clostridium difficile toxin A effects in the rat ileum. Castagliuolo I, et al. **Infect Immun** 1996 Dec;64(12):5225–32
Differentiation of European and Far East Asian populations of Saccharomyces paradoxus by allozyme analysis. Naumov GI, et al. **Int J Syst Bacteriol** 1997 Apr; 47(2):341–4
Biochemical and immunological characterization of deoxyhypusine synthase purified from the yeast Saccharomyces carlsbergensis. Abid MR, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):769–78

GENETICS

Mitochondrial DNA loss caused by ethanol in Saccharomyces flor yeasts. Ibeas JI, et al. **Appl Environ Microbiol** 1997 Jan;63(1):7–12
Incidence of SUC-RTM telomeric repeated genes in brewing and wild wine strains of Saccharomyces. Denayrolles M, et al. **Curr Genet** 1997 Jun;31(6):457–61
Isolation of early meiotic recombination genes analogous to S. cerevisiae REC104 from the yeasts S. paradoxus and S. pastorianus. Nau JJ, et al. **Curr Genet** 1997 Jan;31(1):7–14
Rapid characterization of wild and collection strains of the genus Zygosaccharomyces according to mitochondrial DNA patterns. Guillamón JM, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):267–72
Development of a polymerase chain reaction/restriction fragment length polymorphism method for Saccharomyces cerevisiae and Saccharomyces bayanus identification in enology. Masneuf I, et al. **FEMS Microbiol Lett** 1996 May 1;138(2–3):239–44
PCR amplification of the rDNA internal transcribed spacer region for differentiation of Saccharomyces cultures. Valente P, et al. **FEMS Microbiol Lett** 1996 Apr 1; 137(2–3):253–6
The construction of novel mobilizable YAC plasmids and their behavior during trans-kingdom conjugation between bacteria and yeasts. Mahmood A, et al. **Genet Anal** 1996 Jul;13(2):25–31
A phylogenetic analysis of the genus Saccharomyces based on 18S rRNA gene sequences: description of Saccharomyces kunashirensis sp. nov. and Saccharomyces martiniae sp. nov. James SA, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):453–60
Differentiation of European and Far East Asian populations of Saccharomyces paradoxus by allozyme analysis. Naumov GI, et al. **Int J Syst Bacteriol** 1997 Apr; 47(2):341–4
The cloning of a cDNA for a protein designated human nup 36 [letter; comment] [see comments] Wistow G. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2363–4. Comment on: Invest Ophthalmol Vis Sci 1996 Aug;37(9):1877–83. Comment in: Invest Ophthalmol Vis Sci 1997 May;38(6):1053.
Amino acid and adenine cross-pathway regulation act through the same 5'-TGACTC-3' motif in the yeast HIS7 promoter. Springer C, et al. **J Biol Chem** 1996 Nov 22; 271(47):29637–43
Evolution of mitochondrial genomes in yeast: a study of mitochondrial divergence in two closely related species, Saccharomyces douglasii and Saccharomyces cerevisiae [letter] Cardazzo B, et al. **Mol Biol Evol** 1997 Feb; 14(2):200–3
Examination of the intron in the meiosis-specific recombination gene REC114 in Saccharomyces. Malone RE, et al. **Mol Gen Genet** 1997 Jul;255(4):410–9
Superfamily of alpha-galactosidase MEL genes of the Saccharomyces sensu stricto species complex. Naumova ES, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):111–7
A fungal minisatellite [letter] Andersen TH, et al. **Nature** 1997 Apr 24;386(6627):771
The construction of mobilizable YACs and their direct conjugative transfer from E. coli to yeasts. Mahmood A, et al. **Nucleic Acids Symp Ser** 1995;(34):45–6
Saccharomyces sapiens. Richards W. **Trends Genet** 1997 Feb; 13(2):49–50
Nucleotide sequences of alcohol acetyltransferase genes from lager brewing yeast, Saccharomyces carlsbergensis. Fujii T, et al. **Yeast** 1996 May;12(6):593–8
Genomic reorganization between two sibling yeast species, Saccharomyces bayanus and Saccharomyces cerevisiae. Ryu SL, et al. **Yeast** 1996 Jun 30;12(8):757–64
Saccharomycodes ludwigii has seven chromosomes. Yamazaki T, et al. **Yeast** 1996 Mar 15;12(3):237–40
[Analysis of genetic properties of meiotic products from an interspecific triploid fusion-hybrid itself constructed by protoplast fusion in Saccharomvces] Li T, et al. **I Chuan Hsueh Pao** 1995;22(6):487–93 (Eng. Abstr.) **(Chi)**

GROWTH & DEVELOPMENT

Influence of modified atmosphere and preservatives on the growth of Zygosaccharomyces rouxii isolated from dried fruits. el Halouat A, et al. **Int J Food Microbiol** 1996 Dec; 33(2–3):219–29
Evaluation of media for enumerating heat-stressed, benzoate-resistant Zygosaccharomyces bailii. Makdesi AK, et al. **Int J Food Microbiol** 1996 Dec;33(2–3):169–81
The combined effects of temperature, pH and NaCl on growth of Debaryomyces hansenii analyzed by flow cytometry and predictive microbiology [published erratum appears in Int J Food Microbiol 1997 Apr 29;36(1):83–4] Sørensen BB, et al. **Int J Food Microbiol** 1997 Mar 3; 34(3):209–20
Effect of Saccharomyces boulardii against experimental oral infection with Salmonella typhimurium and Shigella flexneri in conventional and gnotobiotic mice. Rodrigues AC, et al. **J Appl Bacteriol** 1996 Sep;81(3):251–6

METABOLISM

Ca2+/calmodulin-binding proteins in yeast. Catabolite repression and induction by carbon sources. dos Santos CF, et al. **Biochem Mol Biol Int** 1997 Feb;41(2):359–66
Function of a pseudoknot in the suppression of an alternative splicing event in a group I intron. Jaeger L, et al. **Biochimie** 1996;78(6):466–73
Immobilization of Saccharomyces diastaticus on wood chips for ethanol production. Razmovski R, et al. **Folia Microbiol (Praha)** 1996;41(2):201–7
Weak acid inhibition of fermentation by Zygosaccharomyces bailii and Saccharomyces cerevisiae. Ferreira MM, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):145–53
Lipolysis of pork fat by the meat starter culture Debaryomyces hansenii at various environmental conditions. Sørensen BB. **Int J Food Microbiol** 1997 Feb; 34(2):187–93
Protein transport from the cytoplasm into the vacuole. Klionsky DJ. **J Membr Biol** 1997 May 15;157(2):105–15 (65 ref.)

PHYSIOLOGY

Leavening ability and freeze tolerance of yeasts isolated from traditional corn and rye bread doughs. Almeida MJ, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4401–4
Induction of desiccation tolerance by osmotic treatment in Saccharomyces uvarum var. carlsbergensis. Eleutherio EC, et al. **Can J Microbiol** 1997 May;43(5):495–8
A yeast heat shock transcription factor (Hsf1) mutant is defective in both Hsc82/Hsp82 synthesis and spindle pole body duplication. Zarzov P, et al. **J Cell Sci** 1997 Aug; 110 (Pt 16):1879–91
A microbiology investigation on probiotic pharmaceutical products used for human health. Canganella F, et al. **Microbiol Res** 1997 Jul;152(2):171–9

ULTRASTRUCTURE

Uptake of yeast (Saccharomyces boulardii) in normal and rotavirus treated intestine. Cartwright-Shamoon J, et al. **Gut** 1996 Aug;39(2):204–9

SACCHAROMYCES CEREVISIAE

see related
YEAST, DRIED

Baker's yeast biomass (Saccharomyces cerevisae) for selective on-line trace enrichment and liquid chromatography of polar pesticides in water. Martín-Esteban A, et al. **Anal Chem** 1997 Aug 15; 69(16):3267–71
ACTIN: general principles from studies in yeast. Ayscough KR, et al. **Ann Rev Cell Dev Biol** 1996;12:129–60 (115 ref.)
Nuclear fusion in the yeast Saccharomyces cerevisiae. Rose MD. **Ann Rev Cell Dev Biol** 1996;12:663–95 (131 ref.)
Brewery waste as a substitute for soy protein in soy-brewer's yeast mixtures to feed broiler chickens. Carías D, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):67–70
Effect of the type of dietary fat on cholesterolemia in rabbits fed brewer's yeast. Millán N, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):71–4
Calcium-mediated DNA adsorption to yeast cells and kinetics of cell transformation by electroporation. Neumann E, et al. **Biophys J** 1996 Aug;71(2):868–77
Self-seeded fibers formed by Sup35, the protein determinant of [PSI+], a heritable prion-like factor of S. cerevisiae. Glover JR, et al. **Cell** 1997 May 30;89(5):811–9
Prevalence and antifungal susceptibility of vaginal yeasts in outpatients attending a gynecological center in Ancona, Italy. Arzeni D, et al. **Eur J Epidemiol** 1997 Jun; 13(4):447–50
Effects of a yeast-based dietary supplementation on premenstrual syndrome. A double-blind placebo-controlled study. Facchinetti F, et al. **Gynecol Obstet Invest** 1997;43(2):120–4
Central noradrenergic & dopaminergic modulation of brewer's yeast-induced inflammation & nociception in rats. Hore SK, et al. **Indian J Med Res** 1997 Feb;105:93–7
Central modulation of Brewer's yeast-induced peripheral inflammation by neuropeptides bradykinin and substance P. Hore SK, et al. **Indian J Physiol Pharmacol** 1996 Oct; 40(4):367–71
The yeast Saccharomyces cerevisiae as a genetic system for obtaining variants of poliovirus protease 2A. Barco A, et al. **J Biol Chem** 1997 May 9;272(19):12683–91
Effects of a supplemental liquid yeast product on feed intake, ruminal profiles, and yield, composition, and organoleptic characteristics of milk from lactating Holstein cows. Besong S, et al. **J Dairy Sci** 1996 Sep;79(9):1654–8
Effect of yeast culture in the diets of early lactation dairy cows on ruminal fermentation and passage of nitrogen fractions and amino acids to the small intestine. Putnam DE, et al. **J Dairy Sci** 1997 Feb;80(2):374–84
Cloning cell cycle regulatory genes by transcomplementation in yeast. Norbury C, et al. **Methods Enzymol** 1997; 283:44–59
Use of conditional promoters for expression of heterologous proteins in Saccharomyces cerevisiae. Rönicke V, et al. **Methods Enzymol** 1997;283:313–22
Yeast two-hybrid library screening. Cowell IG. **Methods Mol Biol** 1997;69:185–202
Analysis of a meiosis-specific URS1 site: sequence requirements and involvement of replication protein A. Gailus-Durner V, et al. **Mol Cell Biol** 1997 Jul; 17(7):3536–46
Saccharomyces cerevisiae peritonitis complicating CAPD [letter] Mydlik M, et al. **Perit Dial Int** 1996 Mar-Apr; 16(2):188
[LILAs (lipid-like leukocyte activators) isolated from Saccharomyces cerevisiae induce calcium mobilization in human neutrophilic granulocytes[Bülow M, et al. **Mycoses** 1996;39 Suppl 1:87–93 (Eng. Abstr.) **(Ger)**

CHEMISTRY

Reduction of stress-induced changes in meat quality with thermolysed brewer's yeast of high nucleotide content in pigs. Kovács-Zomborszky M, et al. **Acta Vet Hung** 1997; 45(2):207–12
A simplified procedure for a rapid and reliable assay of both glycogen and trehalose in whole yeast cells. Parrou JL, et al. **Anal Biochem** 1997 May 15;248(1):186–8
Electrophoretic behavior of L- and D-alanine-scanning analogs of a yeast tridecapeptide pheromone in a fused-silica capillary. Zhang YL, et al. **Anal Biochem** 1996 Oct 15;241(2):220–7
Copper toxicity towards Saccharomyces cerevisiae: dependence on plasma membrane fatty acid composition. Avery SV, et al. **Appl Environ Microbiol** 1996 Nov; 62(11):3960–6
Critical roles for arginine 1061/1060 and tyrosine 1057 in Saccharomyces cerevisiae arginine-specific carbamoyl-phosphate synthetase. Lim AL, et al. **Arch Biochem Biophys** 1997 Mar 15;339(2):344–52
Replacement of Lys by Glu in a transmembrane segment strongly impairs the function of the uracil permease from Saccharomyces cerevisiae. Urban-Grimal D, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):847–51
Immunoreactivities of p11 and calcyclin in baker's yeast, wheat germ and lobster. Kuo WN, et al. **Biochem Mol Biol Int** 1997 Jan;41(1):209–15
Three-dimensional solution structure of Saccharomyces cerevisiae reduced iso-1-cytochrome c. Baistrocchi P, et al. **Biochemistry** 1996 Oct 29;35(43):13788–96
Polymerization and in vitro motility properties of yeast actin: a comparison with rabbit skeletal alpha-actin. Kim E, et al. **Biochemistry** 1996 Dec 24;35(51):16566–72
Kinetics and motional dynamics of spin-labeled yeast iso-1-cytochrome c: 1. Stopped-flow electron paramagnetic resonance as a probe for protein folding/unfolding of the C-terminal helix spin-labeled at cysteine 102. Qu K, et al. **Biochemistry** 1997 Mar 11; 36(10):2884–97
The exchangeable yeast ribosomal acidic protein YP2beta shows characteristics of a partly folded state under physiological conditions. Zurdo J, et al. **Biochemistry** 1997 Aug 5;36(31):9625–35
Characterization of a non-specific lipid transfer protein associated with the peroxisomal membrane of the yeast, Saccharomyces cerevisiae. Ceolotto C, et al. **Biochim Biophys Acta** 1996 Nov 13;1285(1):71–8
Characterization, purification and properties of the yeast mitochondrial dicarboxylate carrier (Saccharomyces cerevisiae). Lançar-Benba J, et al. **Biochimie** 1996; 78(3):195–200
Membrane-anchoring domains of Cdc25p, a Saccharomyces cerevisiae ras exchange factor. Garreau H, et al. **Biol Cell** 1996;86(2–3):93–102
The application of various protic acids in the extraction of (1-->3)-beta-D-glucan from Saccharomyces cerevisiae. Müller A, et al. **Carbohydr Res** 1997 Apr 21;299(3):203–8
Imaging and microanalysis of 14N and 15N by SIMS microscopy in yeast and plant samples. Gojon A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 May;42(3):351–60
Yeast, creatinine and false diagnosis of porphyria. Schoenfeld N, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Feb;43(1):81–8
Two types of alpha-factor receptor determinants for pheromone specificity in the mating-incompatible yeasts S. cerevisiae and S. kluyveri. Sen M, et al. **Curr Genet** 1997 Mar;31(3):235–40
Two-dimensional gel protein database of Saccharomyces cerevisiae. Boucherie H, et al. **Electrophoresis** 1996 Nov; 17(11):1683–99
Proteome analysis of Saccharomyces cerevisiae: a methodological outline. Fey SJ, et al. **Electrophoresis** 1997 Aug;18(8):1361–72
Proteome studies of Saccharomyces cerevisiae: identification and characterization of abundant proteins. Garrels JI, et al. **Electrophoresis** 1997 Aug;18(8):1347–60
Identification of two-dimensional gel electrophoresis resolved yeast proteins by matrix-assisted laser desorption ionization mass spectrometry. Larsson T, et al. **Electrophoresis** 1997 Mar-Apr;18(3–4):418–23
Bni1p implicated in cytoskeletal control is a putative target of Rho1p small GTP binding protein in Saccharomyces cerevisiae. Kohno H, et al. **EMBO J** 1996 Nov 15;

15(22):6060–8
Phosphoinositolglycan–peptides from yeast potently induce metabolic insulin actions in isolated rat adipocytes, cardiomyocytes, and diaphragms. Müller G, et al. **Endocrinology** 1997 Aug;138(8):3459–75
Identification of a yeast peroxisomal member of the family of AMP–binding proteins. Blobel F, et al. **Eur J Biochem** 1996 Sep 1;240(2):468–76
The Saccharomyces cerevisiae processing alpha 1,2–mannosidase is localized in the endoplasmic reticulum, independently of known retrieval motifs. Burke J, et al. **Eur J Cell Biol** 1996 Aug;70(4):298–305
The complete inventory of the yeast Saccharomyces cerevisiae P–type transport ATPases. Catty P, et al. **FEBS Lett** 1997 Jun 16;409(3):325–32 (57 ref.)
Identification of the antigenic determinants of factors 8, 9, and 34 of genus Candida. Kobayashi H, et al. **FEBS Lett** 1996 Oct 21;395(2–3):109–12
Fluorescent measurement of the intracellular pH during sporulation of Saccharomyces cerevisiae. Aon JC, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):17–23
Characterization of a barotolerant mutant of the yeast Saccharomyces cerevisiae: importance of trehalose content and membrane fluidity. Fujii S, et al. **FEMS Microbiol Lett** 1996 Jul 15;141(1):97–101
Glutathione is an important antioxidant molecule in the yeast Saccharomyces cerevisiae. Stephen DW, et al. **FEMS Microbiol Lett** 1996 Aug 1;141(2–3):207–12
Identification of putative glucose transporters in Saccharomyces cerevisiae DFY1. Martin HJ, et al. **Folia Microbiol (Praha)** 1996;41(1):107
Yeast plasma–membrane H(+)–ATPase: the role of cysteine residues. Petrov VV, et al. **Folia Microbiol (Praha)** 1996; 41(1):119–21
Conservation of a putative inhibitory domain in the GAL4 family members. Poch O. **Gene** 1997 Jan 15;184(2):229–35
Analysis of yeast trimethylguanosine–capped RNAs by midwestern blotting. Rasmussen TP, et al. **Gene** 1996 Dec 5;182(1–2):89–96
Isolation of NADH from Saccharomyces cerevisiae by ether permeabilization and its purification by affinity ultrafiltration. Goyal A, et al. **Indian J Exp Biol** 1996 Oct; 34(10):999–1004
Identification of a mannoprotein present in the inner layer of the cell wall of Saccharomyces cerevisiae. Moukadiri I, et al. **J Bacteriol** 1997 Apr;179(7):2154–62
Purification and biochemical properties of Saccharomyces cerevisiae's Mge1p, the mitochondrial cochaperone of Ssc1p. Deloche O, et al. **J Biol Chem** 1996 Sep 27; 271(39):23960–6
Functional subdomains of yeast elongation factor 3. Localization of ribosome–binding domain. Kambampati R, et al. **J Biol Chem** 1997 Mar 7;272(10):6377–81
The effects of severely decreased hydrophobicity in a subdomain 3/4 loop on the dynamics and stability of yeast G–actin. Kuang B, et al. **J Biol Chem** 1997 Feb 14; 272(7):4412–8
Identification of Triton X–100 insoluble membrane domains in the yeast Saccharomyces cerevisiae. Lipid requirements for targeting of heterotrimeric G–protein subunits. Kübler E, et al. **J Biol Chem** 1996 Dec 20;271(51):32975–80
Ssd1p of Saccharomyces cerevisiae associates with RNA. Uesono Y, et al. **J Biol Chem** 1997 Jun 27;272(26):16103–9
The clustering of telomeres and colocalization with Rap1, Sir3, and Sir4 proteins in wild–type Saccharomyces cerevisiae. Gotta M, et al. **J Cell Biol** 1996 Sep; 134(6):1349–63
The yeast Red1 protein localizes to the cores of meiotic chromosomes. Smith AV, et al. **J Cell Biol** 1997 Mar 10; 136(5):957–67
The sequence NPFXD defines a new class of endocytosis signal in Saccharomyces cerevisiae. Tan PK, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1789–800
Impact of cell disruption and polymer recycling upon aqueous two–phase processes for protein recovery. Rito–Palomares M, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):81–9
The X–ray structure of the DNA–binding domain from the Saccharomyces cerevisiae cell–cycle transcription factor Mbp1 at 2.1 A resolution. Taylor IA, et al. **J Mol Biol** 1997 Sep 12;272(1):1–8
Electrophoretic analysis of yeast proteins. Grant CM, et al. **Methods Mol Biol** 1996;53:259–67 (8 ref.)
Effects of various types of stress on the metabolism of reserve carbohydrates in Saccharomyces cerevisiae: genetic evidence for a stress–induced recycling of glycogen and trehalose. Parrou JL, et al. **Microbiology** 1997 Jun;143 (Pt 6):1891–900
Cell cycle studies on the mode of action of yeast K28 killer toxin. Schmitt MJ, et al. **Microbiology** 1996 Sep;142 (Pt 9):2655–62
Multilamellar endosome–like compartment accumulates in the yeast vps28 vacuolar protein sorting mutant. Rieder SE, et al. **Mol Biol Cell** 1996 Jun;7(6):985–99
A large protein complex containing the yeast Sin3p and Rpd3p transcriptional regulators. Kasten MM, et al. **Mol Cell Biol** 1997 Aug;17(8):4852–8
Comparative analysis in three fungi reveals structurally and functionally conserved regions in the Mig1 repressor. Cassart JP, et al. **Mol Gen Genet** 1997 Jun;255(1):9–18
Structure determination of yeast cofilin [letter] Fedorov AA, et al. **Nat Struct Biol** 1997 May;4(5):366–9
Identification of a Saccharomyces cerevisiae Ku80 homologue: roles in DNA double strand break rejoining and in telomeric maintenance. Boulton SJ, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4639–48
Association of the Rho family small GTP–binding proteins with Rho GDP dissociation inhibitor (Rho GDI) in Saccharomyces cerevisiae. Koch G, et al. **Oncogene** 1997 Jul 24;15(4):417–22
Expression, purification, and characterization of the G domain of Saccharomyces cerevisiae elongation factor 2. Rao S, et al. **Protein Expr Purif** 1996 Aug;8(1):91–6
Requirements for perpendicular helix pairing. Beasley JR, et al. **Proteins** 1996 Sep;26(1):95–107
Expression, purification, and crystallization of the DNA–binding domain from the Saccharomyces cerevisae cell–cycle transcription factor MBP–1. Taylor IA, et al. **Proteins** 1997 Feb;27(2):325–7
Secondary structure of the yeast Saccharomyces cerevisiae pre–U3A snoRNA and its implication for splicing efficiency. Mougin A, et al. **RNA** 1996 Nov;2(11):1079–93
Inhibition of pathogenicity of the rice blast fungus by Saccharomyces cerevisiae alpha–factor. Beckerman JL, et al. **Science** 1997 May 16;276(5315):1116–9
Essential yeast protein with unexpected similarity to subunits of mammalian cleavage and polyadenylation specificity factor (CPSF) [see comments] Chanfreau G, et al. **Science** 1996 Nov 29;274(5292):1511–4. Comment in: Science 1996 Nov 29;274(5292):1481–2.
Identification of subunits of the anaphase–promoting complex of Saccharomyces cerevisiae. Zachariae W, et al. **Science** 1996 Nov 15;274(5290):1201–4
Phylogenetic classification of the mitochondrial carrier family of Saccharomyces cerevisiae. el Moualij B, et al. **Yeast** 1997 May;13(6):573–81
Identification of proteins of the yeast protein map using genetically manipulated strains and peptide–mass fingerprinting. Sagliocco F, et al. **Yeast** 1996 Dec; 12(15):1519–33
Functional conservation of cytosolic proteins required for endosomal vesicle fusion. Woodman PG, et al. **Yeast** 1996 Sep 30;12(12):1251–62

CLASSIFICATION

Saccharomyces boulardii is not Saccharomyces cerevisiae [letter] McFarland LV. **Clin Infect Dis** 1996 Jan;22(1):200–1

CYTOLOGY

Saccharomyces cerevisiae as a model organism for studying function and biogenesis of peroxisomes. Skoneczny M, et al. **Acta Microbiol Pol** 1995;44(3–4):209–18 (26 ref.)
Development of the FUN–1 family of fluorescent probes for vacuole labeling and viability testing of yeasts. Millard PJ, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2897–905
Passive response of Saccharomyces cerevisiae to osmotic shifts: cell volume variations depending on the physiological state. Martinez de Marañon I, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):519–23
Cdc6 and DNA replication: limited to humble origins. Heichman KA. **Bioessays** 1996 Nov;18(11):859–62 (27 ref.)
Cell cycle control and initiation of DNA replication in Saccharomyces cerevisiae. Küntzel H, et al. **Biol Chem** 1996 Jul–Aug;377(7–8):481–7 (74 ref.)
Membrane fatty acid composition and membrane fluidity as parameters of stress tolerance in yeast. Swan TM, et al. **Can J Microbiol** 1997 Jan;43(1):70–7
Redistribution of silencing proteins from telomeres to the nucleolus is associated with extension of life span in S. cerevisiae. Kennedy BK, et al. **Cell** 1997 May 2; 89(3):381–91
14–3–3 proteins are essential for RAS/MAPK cascade signaling during pseudohyphal development in S. cerevisiae. Roberts RL, et al. **Cell** 1997 Jun 27; 89(7):1055–65
Interhomolog bias during meiotic recombination: meiotic functions promote a highly differentiated interhomolog–only pathway. Schwacha A, et al. **Cell** 1997 Sep 19;90(6):1123–35
Programming of cell polarity in budding yeast by endogenous and exogenous signals. Herskowitz I, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:717–27 (80 ref.)
Establishment of cell polarity in yeast. Pringle JR, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:729–44 (111 ref.)
Cell biology: alternatives to baker's yeast. Glick BS. **Curr Biol** 1996 Dec 1;6(12):1570–2 (23 ref.)
Bud10p directs axial cell polarization in budding yeast and resembles a transmembrane receptor. Halme A, et al. **Curr Biol** 1996 May 1;6(5):570–9
Novel aspects of pheromone–induced cell–cycle arrest in yeast. Dolan JW. **Curr Genet** 1996 Dec;30(6):469–75
Interspecies transplacement of mitochondria in yeasts. Osuský M, et al. **Curr Genet** 1997 Jul;32(1):24–6
S–phase and DNA–damage checkpoints: a tale of two yeasts. Stewart E, et al. **Curr Opin Cell Biol** 1996 Dec;8(6):781–7 (64 ref.)
Phosphorylation and proteolysis: partners in the regulation of cell division in budding yeast [published erratum appears in Curr Opin Genet Dev 1997 Jun;7(3):424] Deshaies RJ. **Curr Opin Genet Dev** 1997 Feb;7(1):7–16 (80 ref.)
Physiological and morphological effects of genetic alterations leading to a reduced synthesis of UDP–glucose in Saccharomyces cerevisiae. Daran JM, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):89–96
Block of the cell cycle of the yeast Saccharomyces cerevisiae by tyrphostin, an inhibitor of protein tyrosine kinase. Fujimura H. **FEMS Microbiol Lett** 1997 Aug 1; 153(1):233–6
Immobilization and ethanol stress induce the same molecular response at the level of the cell wall in growing yeast. Parascandola P, et al. **FEMS Microbiol Lett** 1997 May 1; 150(1):121–6
Genetic interactions between CDC7 and CDC28: growth inhibition of cdc28–1N by Cdc7 point mutants. Ohtoshi A, et al. **Genes Cells** 1996 Oct;1(10):895–904
Nik1: a Nim1–like protein kinase of S. cerevisiae interacts with the Cdc28 complex and regulates cell cycle progression. Tanaka S, et al. **Genes Cells** 1996 Oct; 1(10):905–21
Anaphase initiation in Saccharomyces cerevisiae is controlled by the APC–dependent degradation of the anaphase inhibitor Pds1p. Cohen–Fix O, et al. **Genes Dev** 1996 Dec 15;10(24):3081–93
Modulation of cell death in yeast by the Bcl–2 family of proteins. Tao W, et al. **J Biol Chem** 1997 Jun 13; 272(24):15547–52
Synchronized heat flux oscillations in yeast cell populations. Teusink B, et al. **J Biol Chem** 1996 Oct 4;271(40):24442–8
Kinetic analysis of ethanol production from glucose fermentation by yeast cells immobilized onto ceramic supports. Zhang Y, et al. **J Biomater Sci Polym Ed** 1996; 7(12):1119–26
High rates of actin filament turnover in budding yeast and roles for actin in establishment and maintenance of cell polarity revealed using the actin inhibitor latrunculin–A. Ayscough KR, et al. **J Cell Biol** 1997 Apr 21; 137(2):399–416
Kinesin–related KIP3 of Saccharomyces cerevisiae is required for a distinct step in nuclear migration [see comments] DeZwaan TM, et al. **J Cell Biol** 1997 Sep 8; 138(5):1023–40. Comment in: J Cell Biol 1997 Sep 8;138(5):957–60.
Role of the ABC transporter Ste6 in cell fusion during yeast conjugation. Elia L, et al. **J Cell Biol** 1996 Nov; 135(3):741–51
A proteasome cap subunit required for spindle pole body duplication in yeast. McDonald HB, et al. **J Cell Biol** 1997 May 5;137(3):539–53
The Saccharomyces cerevisiae kinesin–related motor Kar3p acts at preanaphase spindle poles to limit the number and length of cytoplasmic microtubules. Saunders W, et al. **J Cell Biol** 1997 Apr 21;137(2):417–31
Identification of a mid–anaphase checkpoint in budding yeast. Yang SS, et al. **J Cell Biol** 1997 Jan 27;136(2):345–54
The anaphase–promoting complex is required in G1 arrested yeast cells to inhibit B–type cyclin accumulation and to prevent uncontrolled entry into S–phase. Irniger S, et al. **J Cell Sci** 1997 Jul;110 (Pt 13):1523–31
Mini review: mitosis and the spindle pole body in Saccharomyces cerevisiae. Sobel SG. **J Exp Zool** 1997 Feb 1;277(2):120–38 (168 ref.)
Alpha–factor synchronization of budding yeast. Breeden LL. **Methods Enzymol** 1997;283:332–41
Flow cytometric analysis of DNA content in budding yeast. Haase SB, et al. **Methods Enzymol** 1997;283:322–32
Elutriation of budding yeast. Johnston LH, et al. **Methods Enzymol** 1997;283:342–50
Genomic footprinting of budding yeast replication origins during the cell cycle. Santocanale C, et al. **Methods Enzymol** 1997;283:377–90
The spindle assembly checkpoint in budding yeast. Straight AF, et al. **Methods Enzymol** 1997;283:425–40
Functional analysis of FAR1 in yeast. Valtz N, et al. **Methods Enzymol** 1997;283:350–65
A simple assay for optimizing yeast–mammalian cell fusion conditions. Markie D. **Mol Biotechnol** 1996 Oct;6(2):99–104
Plk is a functional homolog of Saccharomyces cerevisiae Cdc5, and elevated Plk activity induces multiple septation structures. Lee KS, et al. **Mol Cell Biol** 1997 Jun; 17(6):3408–17
The mating–specific G(alpha) protein of Saccharomyces cerevisiae downregulates the mating signal by a mechanism that is dependent on pheromone and independent of G(beta)(gamma) sequestration. Stratton HF, et al. **Mol Cell Biol** 1996 Nov;16(11):6325–37
EH domain proteins Pan1p and End3p are components of a complex that plays a dual role in organization of the cortical actin cytoskeleton and endocytosis in Saccharomyces cerevisiae. Tang HY, et al. **Mol Cell Biol** 1997 Aug;17(8):4294–304
Mutations in the homologous ZDS1 and ZDS2 genes affect cell cycle progression. Yu Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5254–63
Cdc20, a beta–transducin homologue, links RAD9–mediated G2/M checkpoint control to mitosis in Saccharomyces cerevisiae. Lim HH, et al. **Mol Gen Genet** 1996 Nov 27; 253(1–2):138–48
PWP2, a member of the WD–repeat family of proteins, is an essential Saccharomyces cerevisiae gene involved in cell separation. Shafaatian R, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):101–14
Actin–dependent localization of an RNA encoding a cell–fate determinant in yeast. Takizawa PA, et al. **Nature** 1997 Sep 4;389(6646):90–3

SACCHAROMYCES CEREVISIAE

The ATM homologue MEC1 is required for phosphorylation of replication protein A in yeast. Brush GS, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15075–80

Cell cycle–regulated generation of single–stranded G–rich DNA in the absence of telomerase. Dionne I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13902–7

New cell cycle–regulated genes in the yeast Saccharomyces cerevisiae. Schuster T, et al. **Recent Results Cancer Res** 1997;143:251–61 (42 ref.)

Bni1p, a yeast formin linking cdc42p and the actin cytoskeleton during polarized morphogenesis. Evangelista M, et al. **Science** 1997 Apr 4;276(5309):118–22

APC–mediated proteolysis of Ase1 and the morphogenesis of the mitotic spindle. Juang YL, et al. **Science** 1997 Feb 28;275(5304):1311–4

Accelerated aging and nucleolar fragmentation in yeast sgs1 mutants [see comments] Sinclair DA, et al. **Science** 1997 Aug 29;277(5330):1313–6. Comment in: Science 1997 Aug 29;277(5330):1259–6.

Mitosis in living budding yeast: anaphase A but no metaphase plate. Straight AF, et al. **Science** 1997 Jul 25; 277(5325):574–8

The essential Schizosaccharomyces pombe gpi1+ gene complements a bakers' yeast GPI anchoring mutant and is required for efficient cell separation. Colussi PA, et al. **Yeast** 1997 Feb;13(2):139–50

Cyclins and the wiring of the yeast cell cycle. Futcher B. **Yeast** 1996 Dec;12(16):1635–46 (69 ref.)

Review: an overview of the Saccharomyces cerevisiae microtubule and microfilament cytoskeleton. Winsor B, et al. **Yeast** 1997 Apr;13(5):399–434 (240 ref.)

[Calcineurin–mediated signalling important for growth regulation in yeast] Hirata D, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1695–703 (40 ref.) **(Jpn)**

[Ca2+ signaling in budding yeast] Iida H. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1704–11 (19 ref.) **(Jpn)**

[The Rho1 small GTP–binding protein in cell cycle control in Saccharomyces cerevisiae] Imamura H, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1891–8 (27 ref.) **(Jpn)**

["Inositol" signal transduction in yeast] Nikawa J. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1680–7 (36 ref.) **(Jpn)**

[Regulatory network of the yeast cell cycle by the yeast CDK family] Nishizawa M. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1742–50 (22 ref.) **(Jpn)**

[DNA checkpoint control in Saccharomyces cerevisae] Sugimoto K, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep; 41(12 Suppl):1807–12 (20 ref.) **(Jpn)**

[Regulation of cell cycle progression by proteolysis] Toh–e A. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1820–5 (22 ref.) **(Jpn)**

[The role of SUP35 and SUP45 genes in controlling Saccharomycetes cell cycle] Borkhsenius AS, et al. **Dokl Akad Nauk** 1997 Apr;353(4):553–6 **(Rus)**

[Formation of resting cells in microbial suspensions undergoing autolysis] Muliukin AL, et al. **Mikrobiologiia** 1997 Jan–Feb;66(1):42–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Glutathione–glutathione reductase system and lipid peroxidation in Saccharomyces cerevisiae under alcohol stress. Gupta S, et al. **Acta Microbiol Immunol Hung** 1996; 43(1):33–8

Effect of antineoplastic agents on non proliferating yeast cells: a possible membrane effect of doxorubicin. Karavokyros I, et al. **Anticancer Res** 1997 Mar–Apr; 17(2A):1079–82

Fungicidal action of aureobasidin A, a cyclic depsipeptide antifungal antibiotic, against Saccharomyces cerevisiae. Endo M, et al. **Antimicrob Agents Chemother** 1997 Mar; 41(3):672–6

Activity of a new triazole, Sch 56592, compared with those of four other antifungal agents tested against clinical isolates of Candida spp. and Saccharomyces cerevisiae. Pfaller MA, et al. **Antimicrob Agents Chemother** 1997 Feb; 41(2):233–5

Salt–induced changes in lipid composition and ethanol tolerance in Saccharomyces cerevisiae. Sharma SC, et al. **Appl Biochem Biotechnol** 1996 Feb;56(2):189–95

Copper toxicity towards Saccharomyces cerevisiae: dependence on plasma membrane fatty acid composition. Avery SV, et al. **Appl Environ Microbiol** 1996 Nov; 62(11):3960–6

Thiram and dimethyldithiocarbamic acid interconversion in Saccharomyces cerevisiae: a possible metabolic pathway under the control of the glutathione redox cycle. Elskens MT, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2857–62

Metabolic responses of pyruvate decarboxylase–negative Saccharomyces cerevisiae to glucose excess. Flikweert MT, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3399–404

Use of INAA to study the interaction between Se and Te in cells of Saccharomyces cerevisiae. Czauderna M, et al. **Appl Radiat Isot** 1996 Feb;47(2):153–7

Importance of catalase in the adaptive response to hydrogen peroxide: analysis of acatalasaemic Saccharomyces cerevisiae. Izawa S, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):61–7

Dicarbanonaborates in yeast respiration and membrane transport. Kotyk A, et al. **Biochem Mol Biol Int** 1997 Apr; 41(5):933–40

Copper–release from yeast Cu(I)–thionein by hypothiocyanite (OSCN–). Hartmann HJ, et al. **Biometals** 1996 Oct;9(4):345–9

Toxicity QSAR of substituted benzenes to yeast Saccharomyces cerevisiae. Liao YY, et al. **Bull Environ Contam Toxicol** 1996 Mar;56(3):460–6

Genotoxicity of aflatoxin B1: evidence for a recombination–mediated mechanism in Saccharomyces cerevisiae [published erratum appears in Cancer Res 1997 Feb 15;57(4):793] Sengstag C, et al. **Cancer Res** 1996 Dec 1;56(23):5457–65

The control of mitochondrial respiration in yeast: a possible role of the outer mitochondrial membrane. Ahmadzadeh M, et al. **Cell Biochem Funct** 1996 Sep;14(3):201–8

Analysis of the membrane structures involved in autophagy in yeast by freeze–replica method. Baba M, et al. **Cell Struct Funct** 1995 Dec;20(6):465–71

Functional mitochondria are essential for Saccharomyces cerevisiae cellular resistance to bleomycin. He CH, et al. **Curr Genet** 1996 Sep;30(4):279–83

The possible role of yeast cell walls in modifying cellular response to chlorhexidine diacetate. Hiom SJ, et al. **Cytobios** 1996;86(345):123–35

Increased stress parameter synthesis in the yeast Saccharomyces cerevisiae after treatment with 4–hydroxy–2–nonenal. Wonisch W, et al. **FEBS Lett** 1997 Mar 17;405(1):11–5

The immunosuppressant leflunomide blocks the yeast Saccharomyces cerevisiae cell cycle at the G1 phase. Fujimura H. **FEMS Microbiol Lett** 1996 Oct 1; 143(2–3):273–7

Inhibition of ergosterol biosynthesis is not accompanied by a change in fatty acid composition in Saccharomyces cerevisiae treated with the antifungal agent 6–amino–2–n–pentylthiobenzothiazole. Kuchta T, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):43–7

A possible role of trehalose in osmotolerance and ethanol tolerance in Saccharomyces cerevisiae. Sharma SC. **FEMS Microbiol Lett** 1997 Jul 1;152(1):11–5

Molecular cloning of a novel allele of SMR1 which determines sulfometuron methyl resistance in Saccharomyces cerevisiae. Xie Q, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):165–8

The target of sodium toxicity in Saccharomyces cerevisiae. Almagro A, et al. **Folia Microbiol (Praha)** 1996;41(1):82–3

Enhancement of yeast ethanol tolerance by calcium and magnesium. Ciesarová Z, et al. **Folia Microbiol (Praha)** 1996;41(6):485–8

Significance of the lag phase in K1 killer toxin action on sensitive yeast cells. Kurzweilová H, et al. **Folia Microbiol (Praha)** 1995;40(2):213–15

DL–leucine transport in a Saccharomyces cerevisiae mutant resistant to quaternary ammonium salts. Obłąk E, et al. **Folia Microbiol (Praha)** 1996;41(1):116–8

Wortmannin inhibits the production of reactive oxygen and nitrogen intermediates and the killing of the Saccharomyces cerevisiae by isolated chicken macrophages. Yang M, et al. **Immunopharmacol Immunotoxicol** 1996 Nov; 18(4):597–608

The effect of chitinase inhibitors, cyclo(Arg–Pro) against cell separation of Saccharomyces cerevisiae and the morphological change of Candida albicans. Izumida H, et al. **J Antibiot (Tokyo)** 1996 Aug;49(8):829–31

Effect of calcium channel blockers on the action of various antitumour agents in the yeast Saccharomyces cerevisiae. Tillgada E, et al. **J Appl Bacteriol** 1996 Nov;81(5):481–5

Saccharomyces cerevisiae exhibits a yAP–1–mediated adaptive response to malondialdehyde. Turton HE, et al. **J Bacteriol** 1997 Feb;179(4):1096–101

AP1–mediated multidrug resistance in Saccharomyces cerevisiae requires FLR1 encoding a transporter of the major facilitator superfamily. Alarco AM, et al. **J Biol Chem** 1997 Aug 1;272(31):19304–13

In vitro susceptibility testing and DNA typing of Saccharomyces cerevisiae clinical isolates. Zerva L, et al. **J Clin Microbiol** 1996 Dec;34(12):3031–4

Nystatin–rhodamine B assay for estimating activity of killer toxin from Kluyveromyces lactis. Palková Z, et al. **Methods Mol Biol** 1996;53:325–9 (5 ref.)

Killer plaque technique for selecting hybrids and cybrids obtained by induced protoplast fusion. Palková Z, et al. **Methods Mol Biol** 1996;53:339–42 (2 ref.)

Application of killer toxins in stepwise selection of hybrids and cybrids obtained by induced protoplast fusion. Vondrejs V, et al. **Methods Mol Biol** 1996;53:331–8 (15 ref.)

Mutants that show increased sensitivity to hydrogen peroxide reveal an important role for the pentose phosphate pathway in protection of yeast against oxidative stress. Juhnke H, et al. **Mol Gen Genet** 1996 Sep 25;252(4):456–64

Aniline and its metabolites generate free radicals in yeast. Brennan RJ, et al. **Mutagenesis** 1997 Jul;12(4):215–20

Cadmium is an inducer of oxidative stress in yeast. Brennan RJ, et al. **Mutat Res** 1996 Sep 23;356(2):171–8

Anti–recombinogenic and convertible co–mutagenic effects of (E)–5–(2–bromovinyl)–2'–deoxyuridine (BVDU) and other 5–substituted pyrimidine nucleoside analogs in S. cerevisiae MP1. Fahrig R. **Mutat Res** 1996 Nov 11; 372(1):133–9

Effects of Salmonella assay negative and positive carcinogens on intrachromosomal recombination in G1–arrested yeast cells. Galli A, et al. **Mutat Res** 1996 Oct 1;370(3–4):209–21

Enhanced cell permeability increases the sensitivity of a yeast test for mutagens. Staleva L, et al. **Mutat Res** 1996 Sep 13;370(2):81–9

Biological consequences of E.coli RecA protein expression in the repair defective pso4–1 and rad51::URA3 mutants of S. cerevisiae after treatment with N–methyl–N'–nitro–N–nitrosoguanidine. Slaninová M, et al. **Neoplasma** 1996;43(5):315–9

A1 toxicity in yeast. A role for Mg? MacDiarmid CW, et al. **Plant Physiol** 1996 Nov;112(3):1101–9

Hyperthermia and paraquat–induced G1 arrest in the yeast Saccharomyces cerevisiae is independent of the RAD9 gene. Nunes E, et al. **Radiat Environ Biophys** 1996 Feb; 35(1):55–7

Evaluation of chemicals with endocrine modulating activity in a yeast–based steroid hormone receptor gene transcription assay. Gaido KW, et al. **Toxicol Appl Pharmacol** 1997 Mar;143(1):205–12

Isolation of three contiguous genes, ACR1, ACR2 and ACR3, involved in resistance to arsenic compounds in the yeast Saccharomyces cerevisiae. Bobrowicz P, et al. **Yeast** 1997 Jul;13(9):819–28

A set of vectors with a tetracycline–regulatable promoter system for modulated gene expression in Saccharomyces cerevisiae. Gari E, et al. **Yeast** 1997 Jul;13(9):837–48

Characterization of two new genes down–regulated by alpha–factor. Seidel J, et al. **Yeast** 1997 Jul;13(9):809–17

Expression cassettes for formaldehyde and fluoroacetate resistance, two dominant markers in Saccharomyces cerevisiae. van den Berg MA, et al. **Yeast** 1997 May; 13(6):551–9

Effect of platinum (II) complexes of 4–methoxy– and 4–chlorobenzoic acid hydrazides on Saccharomyces cerevisiae. Tabakova S, et al. **Z Naturforsch [C]** 1997 Jan–Feb;52(1–2):45–8

[Multisite evaluation of a colorimetric broth microdilution antifungal susceptibility testing] Yamane N, et al. **Rinsho Byori** 1997 Feb;45(2):190–9 (Eng. Abstr.) **(Jpn)**

[Quantitative evaluation of biological activity of toxic agents (unicellular model)] Ershov IuA, et al. **Biull Eksp Biol Med** 1997 May;123(5):594–600 **(Rus)**

[Stimulating effect of ADP on the calcium ion transport system in yeast mitochondria] Bazhenova EN, et al. **Dokl Akad Nauk** 1997 Apr;353(4):550–2 **(Rus)**

[The effect of antioxidant on the growth and lipid composition of Saccharomyces cerevisiae yeasts at different phases of the development of a culture] Reshetnik OA, et al. **Izv Akad Nauk Ser Biol** 1997 Mar–Apr;(2):172–6 (Eng. Abstr.) **(Rus)**

[Effect of cell wall polyphosphates on the sensitivity of the yeast Saccharomyces carlsbergensis to the damaging action of cetyltrimethylammonium bromide] Ivanov AIu, et al. **Mikrobiologiia** 1996 Sep–Oct;65(5):607–12 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Targeting the fungal plasma membrane proton pump. Monk BC, et al. **Acta Biochim Pol** 1995;42(4):481–96

3' Noncoding sequences of the CTA 1 gene enhance expression of the recombinant serine protease inhibitor, CPTI II, in Saccharomyces cerevisiae. Stankiewicz M, et al. **Acta Biochim Pol** 1996;43(3):525–9

Yeast aldehyde dehydrogenase sensitivity to inhibition by chlorpropamide analogues as an indicator of human aldehyde dehydrogenase sensitivity to these agents. Devaraj VR, et al. **Adv Exp Med Biol** 1997;414:155–69

Formaldehyde dehydrogenase from yeast and plant. Implications for the general functional and structural significance of class III alcohol dehydrogenase. Fernández MR, et al. **Adv Exp Med Biol** 1997;414:373–81

A tryptophan pyrrole–ring cleavage enzyme in the most primitive eukaryote. Iwamoto Y, et al. **Adv Exp Med Biol** 1996;398:441–7

Saccharomyces cerevisiae aldehyde dehydrogenases. Identification and expression. Wang X, et al. **Adv Exp Med Biol** 1997;414:277–80

Mechanism for the inhibition of aldehyde dehydrogenase by nitric oxide. DeMaster EG, et al. **Alcohol** 1997 Mar–Apr; 14(2):181–9

Separation by blue native and colorless native polyacrylamide gel electrophoresis of the oxidative phosphorylation complexes of yeast mitochondria solubilized by different detergents: specific staining of the different complexes. Grandier–Vazeille X, et al. **Anal Biochem** 1996 Nov 15; 242(2):248–54

Using yeast to understand drugs that target topoisomerases. Nitiss JL, et al. **Ann N Y Acad Sci** 1996 Dec 13;803:32–43 (62 ref.)

Antifungal azoxybacilin exhibits activity by inhibiting gene expression of sulfite reductase. Aoki Y, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):127–32

Characterization of Saccharomyces cerevisiae CYP51 and a CYP51 fusion protein with NADPH cytochrome P–450 oxidoreductase expressed in Escherichia coli. Venkateswarlu K, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):776–80

Asparaginase II of Saccharomyces cerevisiae. GLN3/URE2 regulation of a periplasmic enzyme. Bon EP, et al. **Appl Biochem Biotechnol** 1997 Spring;63–65:203–12

Enzymic activity of whole cells entrapped in reversed

micelles. Studies on alpha-amylase and invertase in the entrapped yeast cells. Gajjar L, et al. **Appl Biochem Biotechnol** 1997 May;66(2):159–72

Physiological response to anaerobicity of glycerol-3-phosphate dehydrogenase mutants of Saccharomyces cerevisiae. Björkqvist S, et al. **Appl Environ Microbiol** 1997 Jan;63(1):128–32

Effect of aeration and unsaturated fatty acids on expression of the Saccharomyces cerevisiae alcohol acetyltransferase gene. Fujii T, et al. **Appl Environ Microbiol** 1997 Mar; 63(3):910–5

A glycerol-3-phosphate dehydrogenase-deficient mutant of Saccharomyces cerevisiae expressing the heterologous XYL1 gene. Lidén G, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3894–6

Characterization of a sphingomyelinase activity in Saccharomyces cerevisiae. Ella KM, et al. **Arch Biochem Biophys** 1997 Apr 1;340(1):101–10

Substrate-based inhibitors of the (S)-adenosyl-L-methionine:delta24(25)- to delta24(28)-sterol methyl transferase from Saccharomyces cerevisiae. Nes WD, et al. **Arch Biochem Biophys** 1997 Jun 1;342(1):68–81

Metabolic effects of altering redundant targeting signals for yeast mitochondrial malate dehydrogenase. Small WC, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):53–60

Molecular cloning and kinetic characterization of a flavin-containing monooxygenase from Saccharomyces cerevisiae. Suh JK, et al. **Arch Biochem Biophys** 1996 Dec 15;336(2):268–74

Urea-induced equilibrium unfolding of single tryptophan mutants of yeast phosphoglycerate kinase: evidence for a stable intermediate. Szpikowska BK, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):173–82

Probing energy coupling in the yeast plasma membrane H+-ATPase with acetyl phosphate. Wang G, et al. **Arch Biochem Biophys** 1997 Aug 15;344(2):309–15

Genetic determination of polygalacturonase production in wild-type and laboratory strains of Saccharomyces cerevisiae. Blanco P, et al. **Arch Microbiol** 1997 May; 167(5):284–8

Activity of plasma membrane H+-ATPase and expression of PMA1 and PMA2 genes in Saccharomyces cerevisiae cells grown at optimal and low pH. Carmelo V, et al. **Arch Microbiol** 1996 Nov;166(5):315–20

Photoaffinity labeling of yeast farnesyl protein transferase and enzymatic synthesis of a Ras protein incorporating a photoactive isoprenoid. Edelstein RL, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):377–82

Structural modifications of RNA influence the 5' exoribonucleolytic hydrolysis by XRN1 and HKE1 of Saccharomyces cerevisiae. Poole TL, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):799–805

Glucose-independent inhibition of yeast plasma-membrane H+-ATPase by calmodulin antagonists. Romero I, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):823–8

Ktr1p is an alpha-1,2-mannosyltransferase of Saccharomyces cerevisiae. Comparison of the enzymic properties of soluble recombinant Ktr1p and Kre2p/Mnt1p produced in Pichia pastoris. Romero PA, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):289–95

Comparative studies on the 5-aminolaevulinic acid dehydratases from Pisum sativum, Escherichia coli and Saccharomyces cerevisiae. Senior NM, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):401–12

Localization and targeting of isocitrate lyases in Saccharomyces cerevisiae. Taylor KM, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):255–62

Mechanism and ion-dependence of in vitro autoactivation of yeast proteinase A: possible implications for compartmentalized activation in vivo. Van Den Hazel H, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):339–44

A regulatory role for TSL1 on trehalose synthase activity. Ferreira JC, et al. **Biochem Mol Biol Int** 1996 Feb; 38(2):259–65

A monoclonal antibody specific for carboxy-terminal region of yeast translation elongation factor-3 inhibits ribosome-activated ATPase activity but not intrinsic ATPase activity. Masahiro U, et al. **Biochem Mol Biol Int** 1996 May;39(2):227–34

Non-functional variants of yeast mitochondrial ATP synthase subunit 8 that assemble into the complex. Papakonstantinou T, et al. **Biochem Mol Biol Int** 1996 May; 39(2):253–60

Multiple forms of human P450 expressed in Saccharomyces cerevisiae. Systematic characterization and comparison with those of the rat. Imaoka S, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1041–50

Isocyanate inactivation of yeast glutathione reductase & its modulation by oxidised glutathione and NADPH. Baylor KJ, et al. **Biochem Soc Trans** 1996 May;24(2):325S

Isocyanate binding to yeast glutathione reductase measured by fluorescence spectroscopy. Baylor KJ, et al. **Biochem Soc Trans** 1997 Feb;25(1):47S

Chiral preference of cutinase in the reaction with phosphonate inhibitors. Mannesse ML, et al. **Biochem Soc Trans** 1997 Feb;25(1):165–70

Structural studies on 5-aminolaevulinic acid dehydratase from Saccharomyces cerevisiae (yeast). Senior NM, et al. **Biochem Soc Trans** 1997 Feb;25(1):78S

Purification, characterization, gene cloning, and expression of Saccharomyces cerevisiae redoxyendonuclease, a homolog of Escherichia coli endonuclease III. Augeri L, et al. **Biochemistry** 1997 Jan 28;36(4):721–9

Solution structure of oxidized Saccharomyces cerevisiae iso-1-cytochrome c. Banci L, et al. **Biochemistry** 1997 Jul 22;36(29):8992–9001

Titration calorimetric analysis of AcylCoA recognition by myristoylCoA:protein N-myristoyltransferase. Bhatnagar RS, et al. **Biochemistry** 1997 Jun 3;36(22):6700–8

Role of deprotonation events in ubihydroquinone:cytochrome c oxidoreductase from bovine heart and yeast mitochondria. Brandt U, et al. **Biochemistry** 1997 Sep 16;36(37):11234–40

Crystal structure of a class I ubiquitin conjugating enzyme (Ubc7) from Saccharomyces cerevisiae at 2.9 angstroms resolution. Cook WJ, et al. **Biochemistry** 1997 Feb 18; 36(7):1621–7

Autophosphorylation-inactivation site of hexokinase 2 in Saccharomyces cerevisiae. Heidrich K, et al. **Biochemistry** 1997 Feb 25;36(8):1960–4

Role of Glu51 for cofactor binding and catalytic activity in pyruvate decarboxylase from yeast studied by site-directed mutagenesis. Killenberg-Jabs M, et al. **Biochemistry** 1997 Feb 18;36(7):1900–5

Design and characterization of a multisite fluorescence energy-transfer system for protein folding studies: a steady-state and time-resolved study of yeast phosphoglycerate kinase. Lillo MP, et al. **Biochemistry** 1997 Sep 16;36(37):11261–72

Real-time measurement of multiple intramolecular distances during protein folding reactions: a multisite stopped-flow fluorescence energy-transfer study of yeast phosphoglycerate kinase. Lillo MP, et al. **Biochemistry** 1997 Sep 16;36(37):11273–81

Metal-ion-mediated allosteric triggering of yeast pyruvate kinase. 1. A multidimensional kinetic linked-function analysis. Mesecar AD, et al. **Biochemistry** 1997 Jun 3; 36(22):6792–802

Metal-ion-mediated allosteric triggering of yeast pyruvate kinase. 2. A multidimensional thermodynamic linked-function analysis. Mesecar AD, et al. **Biochemistry** 1997 Jun 3;36(22):6803–13

Yeast sterol C8-C7 isomerase: identification and characterization of a high-affinity binding site for enzyme inhibitors. Moebius FF, et al. **Biochemistry** 1996 Dec 24; 35(51):16871–8

Crystal structure of Kex1deltap, a prohormone-processing carboxypeptidase from Saccharomyces cerevisiae,. Shilton BH, et al. **Biochemistry** 1997 Jul 22;36(29):9002–12

Sequence requirement for trimethylation of yeast cytochrome c. Takakura H, et al. **Biochemistry** 1997 Mar 4;36(9):2642–8

Determination of constants of substrate primary binding with baker's yeast transketolase by kinetic modelling. Selivanov VA, et al. **Biochemistry (Mosc)** 1997 Apr;62(4):425–32

Identification of reactive conserved histidines in phosphoenolpyruvate carboxykinases from Escherichia coli and Saccharomyces cerevisiae. Bazaes S, et al. **Biochim Biophys Acta** 1997 Feb 8;1337(2):166–74

Overexpression of the sodium ATPase of Saccharomyces cerevisiae: conditions for phosphorylation from ATP and Pi. Benito B, et al. **Biochim Biophys Acta** 1997 Sep 4; 1328(2):214–26

Possible role of isoaspartyl methyltransferase towards regulation of acid trehalase activity in Saccharomyces cerevisiae. Biswas N, et al. **Biochim Biophys Acta** 1997 Jun 6;1335(3):273–82

Effect of site-directed mutagenesis of His373 of yeast enolase on some of its physical and enzymatic properties. Brewer JM, et al. **Biochim Biophys Acta** 1997 Jun 20;1340(1):88–96

Modulation of trehalase activity in Saccharomyces cerevisiae by an intrinsic protein. de Mesquita JF, et al. **Biochim Biophys Acta** 1997 Mar 15;1334(2-3):233–9

Trehalose accumulation in mutants of Saccharomyces cerevisiae deleted in the UDPG-dependent trehalose synthase-phosphatase complex. Ferreira JC, et al. **Biochim Biophys Acta** 1997 Apr 17;1335(1-2):40–50

A N(alpha)-acetyltransferase selectively transfers an acetyl group to NH2-terminal methionine residues: purification and partial characterization. Lee FJ, et al. **Biochim Biophys Acta** 1997 Apr 4;1338(2):244–52

Acetyl-CoA hydrolase involved in acetate utilization in Saccharomyces cerevisiae. Lee FJ, et al. **Biochim Biophys Acta** 1996 Sep 13;1297(1):105–9

Functional complementation between transmembrane loops of Saccharomyces cerevisiae and Candida albicans plasma membrane H(+)-ATPases. Mason AB, et al. **Biochim Biophys Acta** 1996 Oct 23;1284(2):181–90

Structural and functional analysis of deficient mutants in subunit I of cytochrome c oxidase from Saccharomyces cerevisiae. Ortwein C, et al. **Biochim Biophys Acta** 1997 Jul 31;1321(1):79–92

Exploring an antifungal target in the plasma membrane H(+)-ATPase of fungi. Seto-Young D, et al. **Biochim Biophys Acta** 1997 Jun 12;1326(2):249–56

Identification of critical amino acid residues of Saccharomyces cerevisiae carbamoyl-phosphate synthetase: definition of the ATP site involved in carboxy-phosphate formation. Zheng W, et al. **Biochim Biophys Acta** 1997 Aug 15;1341(1):35–48

Isolation and functional characterization of mutant ferrochelatases in Saccharomyces cerevisiae. Góra M, et al. **Biochimie** 1996;78(2):144–52

Products of S cerevisiae cis-prenyltransferase activity in vitro. Szkopińska A, et al. **Biochimie** 1996;78(2):111–6

Functional analysis of the yeast 40 kDa cyclophilin Cyp40 and its role for viability and steroid receptor regulation. Warth R, et al. **Biol Chem** 1997 May;378(5):381–91

Purification and characterisation of the pyruvate decarboxylase from a haploid strain of Saccharomyces cerevisiae. Killenberg-Jabs M, et al. **Biol Chem Hoppe Seyler** 1996 May;377(5):313–7

Affinity chromatography of yeast alcohol dehydrogenase using immobilized monochlorotriazine colourless compounds. Li Y, et al. **Biomed Chromatogr** 1997 May–Jun; 11(3):180–4

Stereochemistry of yeast delta 24-sterol methyl transferase. Acuna-Johnson AP, et al. **Bioorg Med Chem** 1997 May; 5(5):821–32

Strategy for RNA recognition by yeast histidyl-tRNA synthetase. Rudinger J, et al. **Bioorg Med Chem** 1997 Jun; 5(6):1001–9 (56 ref.)

A second DNA polymerase activity in yeast mitochondria. Lucas P, et al. **C R Acad Sci III** 1997 Apr;320(4):299–305

Complementation of temperature-sensitive topoisomerase II mutations in Saccharomyces cerevisiae by a human TOP2 beta construct allows the study of topoisomerase II beta inhibitors in yeast. Meczes EL, et al. **Cancer Chemother Pharmacol** 1997;39(4):367–75

The major cytoplasmic histone acetyltransferase in yeast: links to chromatin replication and histone metabolism. Parthun MR, et al. **Cell** 1996 Oct 4;87(1):85–94

The yeast phosphatidylinositol kinase homolog TOR2 activates RHO1 and RHO2 via the exchange factor ROM2. Schmidt A, et al. **Cell** 1997 Feb 21;88(4):531–42

The yeast La protein is required for the 3' endonucleolytic cleavage that matures tRNA precursors. Yoo CJ, et al. **Cell** 1997 May 2;89(3):393–402

Temporal and spatial distributions of yeast nucleoside diphosphate kinase activities and its association with the Cdc8p. Zhang SQ, et al. **Cell Mol Biol Res** 1995; 41(5):333–46

The Saccharomyces cerevisiae oligosaccharyltransferase: a large hetero-oligomeric complex in the endoplasmic reticulum. Karaoglu D, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:83–92

Cloning and sequencing of the gene encoding the soluble fumarate reductase from Saccharomyces cerevisiae. Enomoto K, et al. **DNA Res** 1996 Aug 31;3(4):263–7

Distinct activated and non-activated RNA polymerase II complexes in yeast. Akhtar A, et al. **EMBO J** 1996 Sep 2;15(17):4654–64

In vivo disassembly of free polyubiquitin chains by yeast Ubp14 modulates rates of protein degradation by the proteasome. Amerik AYu, et al. **EMBO J** 1997 Aug 15; 16(16):4826–38

The two isoenzymes for yeast NAD+-dependent glycerol 3-phosphate dehydrogenase encoded by GPD1 and GPD2 have distinct roles in osmoadaptation and redox regulation. Ansell R, et al. **EMBO J** 1997 May 1;16(9):2179–87

Endosomal transport function in yeast requires a novel AAA-type ATPase, Vps4p. Babst M, et al. **EMBO J** 1997 Apr 15;16(8):1820–31

Two GTPase isoforms, Ypt31p and Ypt32p, are essential for Golgi function in yeast. Benli M, et al. **EMBO J** 1996 Dec 2;15(23):6460–75

Localization of yeast RNA polymerase I core subunits by immunoelectron microscopy. Klinger C, et al. **EMBO J** 1996 Sep 2;15(17):4643–53

A role for DNA primase in coupling DNA replication to DNA damage response. Marini F, et al. **EMBO J** 1997 Feb 3;16(3):639–50

A specific screen for oligosaccharyltransferase mutations identifies the 9 kDa OST5 protein required for optimal activity in vivo and in vitro. Reiss G, et al. **EMBO J** 1997 Mar 17;16(6):1164–72

Identification and characterization of a yeast homolog of U1 snRNP-specific protein C. Tang J, et al. **EMBO J** 1997 Jul 1;16(13):4082–91

The CDK-activating kinase CAK1 can dosage suppress sporulation defects of smk1 MAP kinase mutants and is required for spore wall morphogenesis in Saccharomyces cerevisiae. Wagner M, et al. **EMBO J** 1997 Mar 17; 16(6):1305–17

Unequal potency of transgenic yeast hexokinase on pancreatic beta cell metabolism and secretion. Xu B, et al. **Endocr Res** 1996 May;22(2):147–58

Immunological identification and localization of yeast aspartic protease 3-like prohormone-processing enzymes in mammalian brain and pituitary. Cawley NX, et al. **Endocrinology** 1996 Nov;137(11):5135–43

Periplasmic Bar1 protease of Saccharomyces cerevisiae is active before reaching its extracellular destination. Ballensiefen W, et al. **Eur J Biochem** 1997 Jul 1; 247(1):142–7

Differential requirement of the yeast sugar kinases for sugar sensing in establishing the catabolite-repressed state. De Winde JH, et al. **Eur J Biochem** 1996 Oct 15;241(2):633–43

Characterization of recombinant yeast dolichyl mannosyl phosphate synthase and site-directed mutagenesis of its cysteine residues. Forsee WT, et al. **Eur J Biochem** 1997 Mar 15;244(3):953–8

Phenylalanyl-tRNA synthetase from yeast and its discrimination of 19 amino acids in aminoacylation of tRNA(Phe)-C-C-A and tRNA(Phe)-C-C-A(3'NH2). Freist W, et al. **Eur J Biochem** 1996 Sep 15;240(3):526–31

Examination of the thiamin diphosphate binding site in yeast transketolase by site-directed mutagenesis. Meshalkina L, et al. **Eur J Biochem** 1997 Mar 1;244(2):646–52

Pre-tRNA 3'-processing in Saccharomyces cerevisiae. Purification and characterization of exo- and endoribonucleases. Papadimitriou A, et al. **Eur J Biochem** 1996 Dec 15;242(3):747–59

The subunit f of mitochondrial yeast ATP synthase--characterization of the protein and disruption of the structural gene ATP17. Spannagel C, et al. **Eur J Biochem** 1997 Aug 1;247(3):1111–7

Cytosolic aspartate aminotransferase encoded by the AAT2 gene is targeted to the peroxisomes in oleate-grown Saccharomyces cerevisiae. Verleur N, et al. **Eur J Biochem** 1997 Aug 1;247(3):972–80

Yeast mitochondrial F1F0-ATPase: the novel subunit e is identical to Tim11. Arnold I, et al. **FEBS Lett** 1997 Jul 14;411(2–3):195–200

The complete inventory of the yeast Saccharomyces cerevisiae P-type transport ATPases. Catty P, et al. **FEBS Lett** 1997 Jun 16;409(3):325–32 (57 ref.)

Glucose activation of the yeast plasma membrane H+-ATPase requires the ubiquitin-proteasome proteolytic pathway. de la Fuente N, et al. **FEBS Lett** 1997 Jul 14; 411(2–3):308–12

Functional mapping reveals the importance of yeast cytochrome b C-terminal region in assembly and function of the bc1 complex. Edderkaoui B, et al. **FEBS Lett** 1997 Mar 3;404(1):51–5

Existence of two different species of mitochondrially translated proteolipids in ATPase complex of yeast mitochondria. Esparza M, et al. **FEBS Lett** 1981 Nov 2; 134(1):63–6

Expression of PEP carboxylase from Escherichia coli complements the phenotypic effects of pyruvate carboxylase mutations in Saccharomyces cerevisiae. Flores CL, et al. **FEBS Lett** 1997 Aug 4;412(3):531–4

Submitochondrial distributions and stabilities of subunits 4, 5, and 6 of yeast cytochrome oxidase in assembly defective mutants. Glerum DM, et al. **FEBS Lett** 1997 Aug 4; 412(3):410–4

Sterol 22-desaturase, cytochrome P45061, possesses activity in xenobiotic metabolism. Kelly SL, et al. **FEBS Lett** 1997 Jul 21;412(1):233–5

Ser644 is important for catalytic activity but is not involved in cAMP-dependent phosphorylation of yeast 6-phosphofructo-2-kinase. Kessler R, et al. **FEBS Lett** 1996 Oct 21;395(2–3):225–7

Serine-threonine protein kinase activity of Elm1p, a regulator of morphologic differentiation in Saccharomyces cerevisiae. Koehler CM, et al. **FEBS Lett** 1997 May 12; 408(1):109–14

The aromatic domain 66(YWYWW)70 of subunit VIII of the yeast ubiquinol-cytochrome c oxidoreductase is important for both assembly and activity of the enzyme. Lobo-Hajdu G, et al. **FEBS Lett** 1996 Oct 21; 395(2–3):199–203

Novel tetramer assembly of pyruvate decarboxylase from brewer's yeast observed in a new crystal form. Lu G, et al. **FEBS Lett** 1997 Feb 24;403(3):249–53

Identification of a novel, Ca(2+)-dependent phospholipase D with preference for phosphatidylserine and phosphatidylethanolamine in Saccharomyces cerevisiae. Mayr JA, et al. **FEBS Lett** 1996 Sep 16;393(2–3):236–40

Substrate specificity of alpha-1,6-mannosyltransferase that initiates N-linked mannose outer chain elongation in Saccharomyces cerevisiae. Nakayama K, et al. **FEBS Lett** 1997 Aug 4;412(3):547–50

Characterization of dominant lethal mutations in the yeast plasma membrane H+-ATPase gene. Portillo F. **FEBS Lett** 1997 Feb 3;402(2–3):136–40

A novel fluorescent marker for assembled mitochondria ATP synthase of yeast. OSCP subunit fused to green fluorescent protein is assembled into the complex in vivo. Prescott M, et al. **FEBS Lett** 1997 Jul 7;411(1):97–101

Cyclophilin active site mutants have native prolyl isomerase activity with a protein substrate. Scholz C, et al. **FEBS Lett** 1997 Sep 1;414(1):69–73

Molecular cloning of rat phosphatidylinositol synthase cDNA by functional complementation of the yeast Saccharomyces cerevisiae pis mutation. Tanaka S, et al. **FEBS Lett** 1996 Sep 9;393(1):89–92

RNA polymerase I from S. cerevisiae depends on an additional factor to release terminated transcripts from the template. Tschochne H, et al. **FEBS Lett** 1997 Jun 30; 410(2–3):461–6

Neutral trehalase Nth1p of Saccharomyces cerevisiae encoded by the NTH1 gene is a multiple stress responsive protein. Zähringer H, et al. **FEBS Lett** 1997 Aug 4; 412(3):615–20

The Saccharomyces cerevisiae acetyl-coenzyme A synthetase encoded by the ACS1 gene, but not the ACS2-encoded enzyme, is subject to glucose catabolite inactivation. de Jong-Gubbels P, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):75–81

Molecular analysis of the promoter region of the hexokinase 2 gene of Saccharomyces cerevisiae. Martínez-Campa C, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):69–74

Identification of Saccharomyces cerevisiae GLY1 as a threonine aldolase: a key enzyme in glycine biosynthesis. Monschau N, et al. **FEMS Microbiol Lett** 1997 May 1; 150(1):55–60

Ca(2+)-transporting ATPase(s) of the reticulum type in intracellular membranes of Saccharomyces cerevisiae: biochemical identification. Okorokov LA, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):39–46

The beta-1, 6-glucan containing side-chain of cell wall proteins of Saccharomyces cerevisiae is bound to the glycan core of the GPI moiety. Van Der Vaart JM, et al. **FEMS Microbiol Lett** 1996 Dec 15;145(3):401–7

Formation of cadaverine derivatives in Saccharomyces cerevisiae. Walters DR, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):255–9

Use of a yeast strain expressing glucoamylase in malt whisky fermentations. Klaassen P, et al. **Folia Microbiol (Praha)** 1996;41(1):100–1

Immunological characterization of the purine-cytosine permease of Saccharomyces cerevisiae: evidence of in vivo phosphorylation of the carrier. Pinson B, et al. **Folia Microbiol (Praha)** 1996;41(1):121–4

Cloning of a human cDNA encoding a protein with high homology to yeast methionyl-tRNA synthetase. Lage H, et al. **Gene** 1996 Oct 31;178(1–2):187–9

The presence of two tightly bound Zn2+ ions is essential for the structural and functional integrity of yeast RNA polymerase II. Mayalagu S, et al. **Gene** 1997 Apr 29; 190(1):77–85

PAT1, an evolutionarily conserved acetyltransferase homologue, is required for multiple steps in the cell cycle. Lin R, et al. **Genes Cells** 1996 Oct;1(10):923–42

Genetic interactions between CDC7 and CDC28: growth inhibition of cdc28-1N by Cdc7 point mutants. Ohtoshi A, et al. **Genes Cells** 1996 Oct;1(10):895–904

Nik1: a Nim1-like protein kinase of S. cerevisiae interacts with the Cdc28 complex and regulates cell cycle progression. Tanaka S, et al. **Genes Cells** 1996 Oct; 1(10):905–21

Mitotic chromosome condensation in the rDNA requires TRF4 and DNA topoisomerase I in Saccharomyces cerevisiae. Castaño IB, et al. **Genes Dev** 1996 Oct 15; 10(20):2564–76

Yeast Gcn5 functions in two multisubunit complexes to acetylate nucleosomal histones: characterization of an Ada complex and the SAGA (Spt/Ada) complex. Grant PA, et al. **Genes Dev** 1997 Jul 1;11(13):1640–50

Glucose regulates protein interactions within the yeast SNF1 protein kinase complex. Jiang R, et al. **Genes Dev** 1996 Dec 15;10(24):3105–15

A shared subunit belongs to the eukaryotic core RNA polymerase. Lanzendörfer M, et al. **Genes Dev** 1997 Apr 15;11(8):1037–47

A newly identified DNA ligase of Saccharomyces cerevisiae involved in RAD52-independent repair of DNA double-strand breaks. Schär P, et al. **Genes Dev** 1997 Aug 1;11(15):1912–24

Differential regulation of FUS3 MAP kinase by tyrosine-specific phosphatases PTP2/PTP3 and dual-specificity phosphatase MSG5 in Saccharomyces cerevisiae. Zhan XL, et al. **Genes Dev** 1997 Jul 1; 11(13):1690–702

Alanine-scanning mutagenesis of protein phosphatase type 1 in the yeast Saccharomyces cerevisiae. Baker SH, et al. **Genetics** 1997 Mar;145(3):615–26

RNA polymerase III defects suppress a conditional-lethal poly(A) polymerase mutation in Saccharomyces cerevisiae. Briggs MW, et al. **Genetics** 1996 Jul;143(3):1149–61

Isolation and identification of genes activating UAS2-dependent ADH2 expression in Saccharomyces cerevisiae. Donoviel MS, et al. **Genetics** 1996 Jul; 143(3):1137–48

Mutations in the Saccharomyces cerevisiae type 2A protein phosphatase catalytic subunit reveal roles in cell wall integrity, actin cytoskeleton organization and mitosis. Evans DR, et al. **Genetics** 1997 Feb;145(2):227–41

Isolation of degradation-deficient mutants defective in the targeting of fructose-1,6-bisphosphatase into the vacuole for degradation in Saccharomyces cerevisiae. Hoffman M, et al. **Genetics** 1996 Aug;143(4):1555–66

Assignment of the closest human homologue (DNA2L:KIAA0083) of the yeast Dna2 helicase gene to chromosome band 10q21.3-q22.1. Eki T, et al. **Genomics** 1996 Nov 1;37(3):408–10

Molecular and phenotypic analysis of the S. cerevisiae MNN10 gene identifies a family of related glycosyltransferases. Dean N, et al. **Glycobiology** 1996 Jan; 6(1):73–81

Protein-O-glycosylation in yeast: protein-specific mannosyltransferases. Gentzsch M, et al. **Glycobiology** 1997 Jun;7(4):481–6

Targeting of active rat alpha 2,3-sialyltransferase to the yeast cell wall by the aid of the hsp 150 delta-carrier: toward synthesis of sLe(x)-decorated L-selectin ligands. Mattila P, et al. **Glycobiology** 1996 Dec;6(8):851–9

Use of pH studies to determine the kinetic and chemical mechanism of yeast alcohol dehydrogenase with primary aliphatic alcohols and aldehydes. Leskovac V, et al. **Indian J Biochem Biophys** 1996 Jun;33(3):177–83

Determination of sulphite reductase activity and its response to assimilable nitrogen status in a commercial Saccharomyces cerevisiae wine yeast. Jiranek V, et al. **J Appl Bacteriol** 1996 Sep;81(3):329–36

The Saccharomyces cerevisiae mevalonate diphosphate decarboxylase is essential for viability, and a single Leu-to-Pro mutation in a conserved sequence leads to thermosensitivity. Bergès T, et al. **J Bacteriol** 1997 Aug; 179(15):4664–70

Characterization of a glucose-repressed pyruvate kinase (Pyk2p) in Saccharomyces cerevisiae that is catalytically insensitive to fructose-1,6-bisphosphate. Boles E, et al. **J Bacteriol** 1997 May;179(9):2987–93

Mck1, a member of the glycogen synthase kinase 3 family of protein kinases, is a negative regulator of pyruvate kinase in the yeast Saccharomyces cerevisiae. Brazill DT, et al. **J Bacteriol** 1997 Jul;179(13):4415–8

Studies on an amylolytic strain of Saccharomyces cerevisiae isolated from yam tuber. Olasupo NA, et al. **J Basic Microbiol** 1996;36(4):283–8

Interaction with D-glucose and thermal denaturation of yeast hexokinase B: A DSC study. Catanzano F, et al. **J Biochem (Tokyo)** 1997 Mar;121(3):568–77

Characterization of rat monoamine oxidase A with noncovalently-bound FAD expressed in yeast cells. Hiro I, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):759–65

Individual expression of Candida tropicalis peroxisomal and mitochondrial carnitine acetyltransferase-encoding genes and subcellular localization of the products in Saccharomyces cerevisiae. Kawachi H, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):731–5

Isolation and characterization of ECT1 gene encoding CTP: phosphoethanolamine cytidylyltransferase of Saccharomyces cerevisiae. Min-Seok R, et al. **J Biochem (Tokyo)** 1996 Nov;120(5):1040–7

Crystallization of eukaryotic E3, lipoamide dehydrogenase, from yeast, for exhibiting X-ray diffraction beyond 2.5 A resolution, and preliminary structure analysis. Toyoda T, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):1–4

Alanine-scanning mutagenesis along membrane segment 4 of the yeast plasma membrane H+-ATPase. Effects on structure and function. Ambesi A, et al. **J Biol Chem** 1996 Sep 20;271(38):22999–3005

Study of yeast DNA topoisomerase II and its truncation derivatives by transmission electron microscopy. Benedetti P, et al. **J Biol Chem** 1997 May 2;272(18):12132–7

A yeast Ubc9 mutant protein with temperature-sensitive in vivo function is subject to conditional proteolysis by a ubiquitin- and proteasome-dependent pathway. Betting J, et al. **J Biol Chem** 1996 Oct 18;271(42):25790–6

Identification and phenotypic analysis of two glyoxalase II encoding genes from Saccharomyces cerevisiae, GLO2 and GLO4, and intracellular localization of the corresponding proteins. Bito A, et al. **J Biol Chem** 1997 Aug 22; 272(34):21509–19

Substrate specificity of the RNase activity of yeast RNA polymerase III. Bobkova EV, et al. **J Biol Chem** 1997 Sep 5;272(36):22832–9

Purification and characterization of an RNA polymerase II phosphatase from yeast. Chambers RS, et al. **J Biol Chem** 1996 Oct 4;271(40):24498–504

Homocitrate synthase is located in the nucleus in the yeast Saccharomyces cerevisiae. Chen S, et al. **J Biol Chem** 1997 Apr 18;272(16):10839–46

Purification and characterization of Fet3 protein, a yeast homologue of ceruloplasmin. de Silva D, et al. **J Biol Chem** 1997 May 30;272(22):14208–13

Mammalian Mg2+-independent phosphatidate phosphatase (PAP2) displays diacylglycerol pyrophosphate phosphatase activity. Dillon DA, et al. **J Biol Chem** 1997 Apr 18; 272(16):10361–6

Functional analysis of mutated purine-cytosine permease from Saccharomyces cerevisiae. A possible role of the hydrophilic segment 371–377 in the active carrier conformation. Ferreira T, et al. **J Biol Chem** 1997 Apr 11;272(15):9697–702

COX15 codes for a mitochondrial protein essential for the assembly of yeast cytochrome oxidase. Glerum DM, et al. **J Biol Chem** 1997 Jul 25;272(30):19088–94

The Saccharomyces cerevisiae peroxisomal 2,4-dienoyl-CoA reductase is encoded by the oleate-inducible gene SPS19. Gurvitz A, et al. **J Biol Chem** 1997 Aug 29;272(35):22140–7

The active sites of the eukaryotic 20 S proteasome and their involvement in subunit precursor processing. Heinemeyer W, et al. **J Biol Chem** 1997 Oct 3;272(40):25200–9

VMA11 and VMA16 encode second and third proteolipid subunits of the Saccharomyces cerevisiae vacuolar membrane H+-ATPase. Hirata R, et al. **J Biol Chem** 1997 Feb 21;272(8):4795–803

Glucose-6-P control of glycogen synthase phosphorylation in yeast. Huang D, et al. **J Biol Chem** 1997 Sep 5; 272(36):22495–501

Identification of the structural gene for glyoxalase I from Saccharomyces cerevisiae. Inoue Y, et al. **J Biol Chem** 1996 Oct 18;271(42):25958–65

Characterization of Saccharomyces cerevisiae CYP61, sterol delta22-desaturase, and inhibition by azole antifungal agents. Kelly SL, et al. **J Biol Chem** 1997 Apr 11; 272(15):9986–8

Mitochondrial and cytosolic branched-chain amino acid transaminases from yeast, homologs of the myc oncogene-regulated Eca39 protein. Kispal G, et al. **J Biol Chem** 1996 Oct 4;271(40):24458–64

Structure-function relationships of the Saccharomyces cerevisiae fatty acid synthase. Three-dimensional structure. Kolodziej SJ, et al. **J Biol Chem** 1996 Nov 8; 271(45):28422–9

Selective inhibitors of the proteasome-dependent and vacuolar pathways of protein degradation in

Saccharomyces cerevisiae. Lee DH, et al. **J Biol Chem** 1996 Nov 1;271(44):27280–4

Expression and purification of the RNA polymerase III transcription specificity factor IIIB70 from Saccharomyces cerevisiae and its cooperative binding with TATA-binding protein. Librizzi MD, et al. **J Biol Chem** 1996 Dec 20; 271(51):32695–701

Role of the cysteine residues in the alpha1,2–mannosidase involved in N-glycan biosynthesis in Saccharomyces cerevisiae. The conserved Cys340 and Cys385 residues form an essential disulfide bond. Lipari F, et al. **J Biol Chem** 1996 Nov 1;271(44):27615–22

Site-directed mutagenesis of the yeast V-ATPase A subunit. Liu Q, et al. **J Biol Chem** 1997 May 2;272(18):11750–6

Identification and characterization of the CLK1 gene product, a novel CaM kinase-like protein kinase from the yeast Saccharomyces cerevisiae. Melcher ML, et al. **J Biol Chem** 1996 Nov 22;271(47):29958–68

Structurally related Spc1p and Spc2p of yeast signal peptidase complex are functionally distinct. Mullins C, et al. **J Biol Chem** 1996 Nov 15;271(46):29094–9

Reactive cysteines of the yeast plasma-membrane H+-ATPase (PMA1). Mapping the sites of inactivation by N-ethylmaleimide. Petrov VV, et al. **J Biol Chem** 1997 Jan 17;272(3):1688–93

The yeast copper/zinc superoxide dismutase and the pentose phosphate pathway play overlapping roles in oxidative stress protection. Slekar KH, et al. **J Biol Chem** 1996 Nov 15;271(46):28831–6

On the unique structural organization of the Saccharomyces cerevisiae pyruvate dehydrogenase complex. Stoops JK, et al. **J Biol Chem** 1997 Feb 28;272(9):5757–64

The activity of Cdc14p, an oligomeric dual specificity protein phosphatase from Saccharomyces cerevisiae, is required for cell cycle progression. Taylor GS, et al. **J Biol Chem** 1997 Sep 19;272(38):24054–63

Endoplasmic reticulum glucosidase II is composed of a catalytic subunit, conserved from yeast to mammals, and a tightly bound noncatalytic HDEL-containing subunit. Trombetta ES, et al. **J Biol Chem** 1996 Nov 1; 271(44):27509–16

The two acetyl-coenzyme A synthetases of Saccharomyces cerevisiae differ with respect to kinetic properties and transcriptional regulation. van den Berg MA, et al. **J Biol Chem** 1996 Nov 15;271(46):28953–9

Identification of a novel Ca2+-dependent, phosphatidylethanolamine-hydrolyzing phospholipase D in yeast bearing a disruption in PLD1. Waksman M, et al. **J Biol Chem** 1997 Jan 3;272(1):36–9

Probing conserved regions of the cytoplasmic LOOP1 segment linking transmembrane segments 2 and 3 of the Saccharomyces cerevisiae plasma membrane H+-ATPase. Wang G, et al. **J Biol Chem** 1996 Oct 11;271(41):25438–45

Structure-function analysis of the mRNA cap methyltransferase of Saccharomyces cerevisiae. Wang SP, et al. **J Biol Chem** 1997 Jun 6;272(23):14683–9

MNN6, a member of the KRE2/MNT1 family, is the gene for mannosylphosphate transfer in Saccharomyces cerevisiae. Wang XH, et al. **J Biol Chem** 1997 Jul 18; 272(29):18117–24

Potassium transport by amino acid permeases in Saccharomyces cerevisiae. Wright MB, et al. **J Biol Chem** 1997 May 23;272(21):13647–52

Phosphorylation and regulation of CTP synthetase from Saccharomyces cerevisiae by protein kinase A. Yang WL, et al. **J Biol Chem** 1996 Nov 15;271(46):28777–83

Molecular cloning and characterization of two isoforms of Saccharomyces cerevisiae acyl-CoA:sterol acyltransferase. Yu C, et al. **J Biol Chem** 1996 Sep 27;271(39):24157–63

Biochemical studies of Saccharomyces cerevisiae myristoyl-coenzyme A:protein N-myristoyltransferase mutants. Zhang L, et al. **J Biol Chem** 1996 Dec 20; 271(51):33131–40

Affinity purification and kinetic analysis of mutant forms of yeast NAD+-specific isocitrate dehydrogenase. Zhao WN, et al. **J Biol Chem** 1997 Aug 29;272(35):21811–7

Saccharomyces cerevisiae homologs of mammalian B and B' subunits of protein phosphatase 2A direct the enzyme to distinct cellular functions. Zhao Y, et al. **J Biol Chem** 1997 Mar 28;272(13):8256–62

Homology modeling of adenylosuccinate synthetase from Saccharomyces cerevisiae reveals a possible binding region for single-stranded ARS sequences. Sticht H, et al. **J Biomol Struct Dyn** 1997 Jun;14(6):667–75

Differential trafficking and timed localization of two chitin synthase proteins, Chs2p and Chs3p [published erratum appears in J Cell Biol 1996 Dec;135(6 Pt 2):1925] Chuang JS, et al. **J Cell Biol** 1996 Nov;135(3):597–610

Aminopeptidase I is targeted to the vacuole by a nonclassical vesicular mechanism. Scott SV, et al. **J Cell Biol** 1997 Jul 14;138(1):37–44

Liquid-liquid partitioning of some enzymes, especially phosphofructokinase, from Saccharomyces cerevisiae at sub-zero temperature. Grimonprez B, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):55–63

Ucon-benzoyl dextran aqueous two-phase systems: protein purification with phase component recycling. Lu M, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):65–70

The three-dimensional structure at 2.4 A resolution of glycosylated proteinase A from the lysosome-like vacuole of Saccharomyces cerevisiae. Aguilar CF, et al. **J Mol Biol** 1997 Apr 11;267(4):899–915

Substrate recognition and induced DNA distortion by the PI-SceI endonuclease, an enzyme generated by protein splicing. Gimble FS, et al. **J Mol Biol** 1996 Oct 25; 263(2):163–80

A histidine variant of yeast iso-1-cytochrome c that strongly affects the energetics of the denatured state. Godbole S, et al. **J Mol Biol** 1997 May 23;268(5):816–21

The yeast site-specific recombinase Flp mediates alcoholysis and hydrolysis of the strand cleavage product: mimicking the strand-joining reaction with non-DNA nucleophiles. Knudsen BR, et al. **J Mol Biol** 1997 Feb 14;266(1):93–107

Investigation of the enzymatic mechanism of the yeast chorismate mutase by docking a transition state analog. Lin SL, et al. **J Mol Biol** 1997 Sep 5;271(5):838–45

Species-specific tRNA recognition in relation to tRNA synthetase contact residues. Nair S, et al. **J Mol Biol** 1997 May 30;269(1):1–9

Recognition of tRNA(Gly) by three widely diverged glycyl-tRNA synthetases. Nameki N, et al. **J Mol Biol** 1997 May 9;268(3):640–7

The resolving enzyme CCE1 of yeast opens the structure of the four-way DNA junction. White MF, et al. **J Mol Biol** 1997 Feb 14;266(1):122–34

Site-directed mutagenesis in basic amino acid residues of Saccharomyces cerevisiae phosphoenolpyruvate carboxykinase. Chávez R, et al. **J Protein Chem** 1997 Apr; 16(3):233–6

Sterol specificity of the Saccharomyces cerevisiae ERG6 gene product expressed in Escherichia coli. Venkatramesh M, et al. **Lipids** 1996 Apr;31(4):373–7

Monofunctional NAD-dependent 5,10-methylenetetrahydrofolate dehydrogenase from Saccharomyces cerevisiae. Appling DR, et al. **Methods Enzymol** 1997;281:178–88

Allotopic expression of yeast mitochondrial maturase to study mitochondrial import of hydrophobic proteins. Claros MG, et al. **Methods Enzymol** 1996;264:389–403

Genetic and biochemical approaches for analysis of mitochondrial RNase P from Saccharomyces cerevisiae. Groom KR, et al. **Methods Enzymol** 1996;264:86–99

Purification of yeast RNA polymerase II holoenzymes. Koleske AJ, et al. **Methods Enzymol** 1996;273:176–84 (12 ref.)

Purification and properties of coproporphyrinogen III oxidase from yeast. Labbe P. **Methods Enzymol** 1997; 281:367–78

Yeast RNA polymerase II holoenzyme. Li Y, et al. **Methods Enzymol** 1996;273:172–5 (11 ref.)

Analysis of budding yeast kinases controlled by DNA damage. Sanchez Y, et al. **Methods Enzymol** 1997; 283:398–410

Generation of the cytosolic domain of microsomal P450 52A3 after high-level expression in Saccharomyces cerevisiae. Scheller U, et al. **Methods Enzymol** 1996;272:65–75

Purification and quantification of Saccharomyces cerevisiae cytochrome P450. Stansfield I, et al. **Methods Mol Biol** 1996;53:355–66 (4 ref.)

Biochemical properties and excretion behavior of repressible acid phosphatases with altered subunit composition. Shnyreva MG, et al. **Microbiol Res** 1996 Aug; 151(3):291–300

Mitochondrial superoxide dismutase is essential for ethanol tolerance of Saccharomyces cerevisiae in the post-diauxic phase. Costa V, et al. **Microbiology** 1997 May;143 (Pt 5):1649–56

Acid proteinase secreted by Candida tropicalis: functional analysis of preproregion cleavages in C. tropicalis and Saccharomyces cerevisiae. Togni G, et al. **Microbiology** 1996 Mar;142 (Pt 3):493–503

Different subcellular localization of Saccharomyces cerevisiae HMG-CoA reductase isozymes at elevated levels corresponds to distinct endoplasmic reticulum membrane proliferations. Koning AJ, et al. **Mol Biol Cell** 1996 May;7(5):769–89

FKBP12 physically and functionally interacts with aspartokinase in Saccharomyces cerevisiae. Alarcón CM, et al. **Mol Cell Biol** 1997 Oct;17(10):5968–75

Cla4p, a Saccharomyces cerevisiae Cdc42p-activated kinase involved in cytokinesis, is activated at mitosis. Benton BK, et al. **Mol Cell Biol** 1997 Sep;17(9):5067–76

PAN3 encodes a subunit of the Pab1p-dependent poly(A) nuclease in Saccharomyces cerevisiae. Brown CE, et al. **Mol Cell Biol** 1996 Oct;16(10):5744–53

A yeast replicative helicase, Dna2 helicase, interacts with yeast FEN-1 nuclease in carrying out its essential function. Budd ME, et al. **Mol Cell Biol** 1997 Apr;17(4):2136–42

Exonuclease I of Saccharomyces cerevisiae functions in mitotic recombination in vivo and in vitro. Fiorentini P, et al. **Mol Cell Biol** 1997 May;17(5):2764–73

Rat1p and Xrn1p are functionally interchangeable exoribonucleases that are restricted to and required in the nucleus and cytoplasm, respectively. Johnson AW. **Mol Cell Biol** 1997 Oct;17(10):6122–30

A complex containing two transcription factors regulates peroxisome proliferation and the coordinate induction of beta-oxidation enzymes in Saccharomyces cerevisiae. Karpichev IV, et al. **Mol Cell Biol** 1997 Jan;17(1):69–80

Biological role of the general control of amino acid biosynthesis in Saccharomyces cerevisiae. Niederberger P, et al. **Mol Cell Biol** 1981 Jul;1(7):584–93

Rpo26p, a subunit common to yeast RNA polymerases, is essential for the assembly of RNA polymerases I and II and for the stability of the largest subunits of these enzymes. Nouraini S, et al. **Mol Cell Biol** 1996 Nov;16(11):5985–96

Glucose derepression of gluconeogenic enzymes in Saccharomyces cerevisiae correlates with phosphorylation of the gene activator Cat8p. Randez-Gil F, et al. **Mol Cell Biol** 1997 May;17(5):2502–10

Effect of association with adenylyl cyclase-associated protein on the interaction of yeast adenylyl cyclase with Ras protein. Shima F, et al. **Mol Cell Biol** 1997 Mar; 17(3):1057–64

The multiubiquitin-chain-binding protein Mcb1 is a component of the 26S proteasome in Saccharomyces cerevisiae and plays a nonessential, substrate-specific role in protein turnover. van Nocker S, et al. **Mol Cell Biol** 1996 Nov;16(11):6020–8

Histone acetyltransferase activity is conserved between yeast and human GCN5 and is required for complementation of growth and transcriptional activation. Wang L, et al. **Mol Cell Biol** 1997 Jan;17(1):519–27

Regulation of the Saccharomyces cerevisiae HOG1 mitogen-activated protein kinase by the PTP2 and PTP3 protein tyrosine phosphatases. Wurgler-Murphy SM, et al. **Mol Cell Biol** 1997 Mar;17(3):1289–97

Purines are required at the 5' ends of newly initiated RNAs for optimal RNA polymerase III gene expression. Zecherle GN, et al. **Mol Cell Biol** 1996 Oct;16(10):5801–10

PRS1 is a key member of the gene family encoding phosphoribosylpyrophosphate synthetase in Saccharomyces cerevisiae. Carter AT, et al. **Mol Gen Genet** 1997 Mar 26;254(2):148–56

Cytoplasmic tyrosyl-tRNA synthetase rescues the defect in mitochondrial genome maintenance caused by the nuclear mutation mgm104-1 in the yeast Saccharomyces cerevisiae. Guan MX. **Mol Gen Genet** 1997 Aug;255(5):525–32

Human DNA topoisomerases II alpha and II beta can functionally substitute for yeast TOP2 in chromosome segregation and recombination. Jensen S, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):79–86

Mutational analysis of the beta-subunit of yeast geranylgeranyl transferase I. Ohya Y, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):1–10

Glutamic acid-371 of the barnase homology domain in RNA polymerase II is not required for SII-activated RNA cleavage. Powell W, et al. **Mol Gen Genet** 1997 Jan 27; 253(4):507–11

Regulation of genes encoding subunits of the trehalose synthase complex in Saccharomyces cerevisiae: novel variations of STRE-mediated transcription control? Winderickx J, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):470–82

Cloning of the ASN1 and ASN2 genes encoding asparagine synthetases in Saccharomyces cerevisiae: differential regulation by the CCAAT-box-binding factor. Dang VD, et al. **Mol Microbiol** 1996 Nov;22(4):681–92

The Flp recombinase cleaves Holliday junctions in trans. Dixon JE, et al. **Mol Microbiol** 1995 Nov;18(3):449–58

Membrane topology of the yeast uracil permease. Garnier C, et al. **Mol Microbiol** 1996 Sep;21(5):1061–73

Stationary-phase induction of GLR1 expression is mediated by the yAP-1 transcriptional regulatory protein in the yeast Saccharomyces cerevisiae. Grant CM, et al. **Mol Microbiol** 1996 Nov;22(4):739–46

Yeast glutathione reductase is required for protection against oxidative stress and is a target gene for yAP-1 transcriptional regulation. Grant CM, et al. **Mol Microbiol** 1996 Jul;21(1):171–9

A C-terminal di-leucine motif and nearby sequences are required for NH4(+)-induced inactivation and degradation of the general amino acid permease, Gap1p, of Saccharomyces cerevisiae. Hein C, et al. **Mol Microbiol** 1997 May;24(3):607–16

Saccharomyces cerevisiae chorismate synthase has a flavin reductase activity. Henstrand JM, et al. **Mol Microbiol** 1996 Dec;22(5):859–66

The CIT3 gene of Saccharomyces cerevisiae encodes a second mitochondrial isoform of citrate synthase. Jia YK, et al. **Mol Microbiol** 1997 Apr;24(1):53–9

Regulation of inositol monophosphatase in Saccharomyces cerevisiae. Murray M, et al. **Mol Microbiol** 1997 Aug; 25(3):541–6

Structural analysis of the subunits of the trehalose-6-phosphate synthase/phosphatase complex in Saccharomyces cerevisiae and their function during heat shock. Reinders A, et al. **Mol Microbiol** 1997 May; 24(4):687–95

Increased potato tuber size resulting from apoplastic expression of a yeast invertase. Sonnewald U, et al. **Nat Biotechnol** 1997 Aug;15(8):794–7

Complete inventory of the yeast ABC proteins. Decottignies A, et al. **Nat Genet** 1997 Feb;15(2):137–45

Human homologues of yeast helicase [letter] Lu J, et al. **Nature** 1996 Oct 24;383(6602):678–9

Yeast DNA ligase IV mediates non-homologous DNA end joining [see comments] Wilson TE, et al. **Nature** 1997 Jul 31;388(6641):495–8. Comment in: Nature 1997 Jul 31;388(6641):428–9.

RNase YI* and RNA structure studies. Cannistraro VJ, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1405–12

Similar upstream regulatory elements of genes that encode the two largest subunits of RNA polymerase II in Saccharomyces cerevisiae. Jansma DB, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4543–51

SACCHAROMYCES CEREVISIAE

Two distinct DNA ligase activities in mitotic extracts of the yeast Saccharomyces cerevisiae. Ramos W, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1485–92

Functional analysis of the DNA–stimulated ATPase domain of yeast SWI2/SNF2. Richmond E, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3685–92

Modification of seed oil content and acyl composition in the brassicaceae by expression of a yeast sn–2 acyltransferase gene. Zou J, et al. **Plant Cell** 1997 Jun;9(6):909–23

Yeast 5–aminolevulinate synthase provides additional chlorophyll precursor in transgenic tobacco. Zavgorodnyaya A, et al. **Plant J** 1997 Jul;12(1):169–78

The catalytic subunit of yeast telomerase. Counter CM, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9202–7

Base excision of oxidative purine and pyrimidine DNA damage in Saccharomyces cerevisiae by a DNA glycosylase with sequence similarity to endonuclease III from Escherichia coli. Eide L, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10735–40

A glutamate residue in the catalytic center of the yeast chorismate mutase restricts enzyme activity to acidic conditions. Schnappauf G, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8491–6

In vitro characterization of mutant yeast RNA polymerase II with reduced binding for elongation factor TFIIS. Wu J, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11552–7

A eukaryotic enzyme that can disjoin dead–end covalent complexes between DNA and type I topoisomerases. Yang SW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11534–9

Purification of alcohol dehydrogenase from Entamoeba histolytica and Saccharomyces cerevisiae using zinc–affinity chromatography. Cabrera N, et al. **Protein Expr Purif** 1997 Aug;10(3):340–4

The secretion of active recombinant human gastric lipase by Saccharomyces cerevisiae. Crabbe T, et al. **Protein Expr Purif** 1996 May;7(3):229–36

Functional and structural properties of the homogeneous beta–glycosidase from the extreme thermoacidophilic archaeon sulfolobus solfataricus expressed in Saccharomyces cerevisiae. D'Auria S, et al. **Protein Expr Purif** 1996 May;7(3):299–308

Overexpression and characterization of Aspergillus awamori wild–type and mutant glucoamylase secreted by the methylotrophic yeast Pichia pastoris: comparison with wild–type recombinant glucoamylase produced using Saccharomyces cerevisiae and Aspergillus niger as hosts. Fierobe HP, et al. **Protein Expr Purif** 1997 Mar;9(2):159–70

Production of human pancreatic ribonuclease in Saccharomyces cerevisiae and Escherichia coli. Ribó M, et al. **Protein Expr Purif** 1996 May;7(3):253–61

Bacterial expression of the Saccharomyces cerevisiae ubiquitin–conjugating enzyme Ubc7. Yamazaki RK, et al. **Protein Expr Purif** 1996 Feb;7(1):122–7

Crystallization and preliminary structural analysis of catalase A from Saccharomyces cerevisiae. Berthet S, et al. **Protein Sci** 1997 Feb;6(2):481–3

Substrate–induced conformational changes in yeast 3–phosphoglycerate kinase monitored by fluorescence of single tryptophan probes. Cheung CW, et al. **Protein Sci** 1996 Jun;5(6):1144–9

Crystallization of 5–aminolaevulinic acid dehydratase from Escherichia coli and Saccharomyces cerevisiae and preliminary X–ray characterization of the crystals. Erskine PT, et al. **Protein Sci** 1997 Aug;6(8):1774–6

Analysis of the structure and stability of omega loop A replacements in yeast iso–1–cytochrome c. Fetrow JS, et al. **Protein Sci** 1997 Jan;6(1):197–210

An engineered amino–terminal domain of yeast phosphoglycerate kinase with native–like structure. Sherman MA, et al. **Protein Sci** 1997 Apr;6(4):882–91

Crystallization of the NAD–dependent 5,10–methylenetetrahydrofolate dehydrogenase from Saccharomyces cerevisiae. Monzingo AF, et al. **Proteins** 1996 Dec;26(4):481–2

RNA–dependent RNA polymerase activity associated with the yeast viral p91/20S RNA ribonucleoprotein complex. García–Cuéllar MP, et al. **RNA** 1997 Jan;3(1):27–36

Osmotic activation of the HOG MAPK pathway via Ste11p MAPKKK: scaffold role of Pbs2p MAPKK. Posas F, et al. **Science** 1997 Jun 13;276(5319):1702–5

The structural basis for pyrophosphatase catalysis. Heikinheimo P, et al. **Structure** 1996 Dec 15;4(12):1491–508

Enrichment of yeast protein tyrosine kinase activity by substrate affinity chromatography. Adamíková L, et al. **Yeast** 1996 Jul;12(9):833–8

Sequence analysis of a 12 801 bp fragment of the left arm of yeast chromosome XV containing a putative 6–phosphofructo–2–kinase gene, a gene for a possible glycophospholipid–anchored surface protein and six other open reading frames. Aldea M, et al. **Yeast** 1996 Sep;12(10B Suppl):1053–8

Evidence for a selective and electroneutral K+/H(+)–exchange in Saccharomyces cerevisiae using plasma membrane vesicles. Camarasa C, et al. **Yeast** 1996 Oct;12(13):1301–13

Sequence analysis of a 13.4 kbp fragment from the left arm of chromosome XV reveals a malate dehydrogenase gene, a putative Ser/Thr protein kinase, the ribosomal L25 gene and four new open reading frames. Casamayor A, et al. **Yeast** 1996 Sep;12(10B Suppl):1013–20

Yeast PIG genes: PIG1 encodes a putative type 1 phosphatase subunit that interacts with the yeast glycogen synthase Gsy2p. Cheng C, et al. **Yeast** 1997 Jan;13(1):1–8

Review: subcellular traffic of the plasma membrane H(+)–ATPase in Saccharomyces cerevisiae. de Kerchove d'Exaerde A, et al. **Yeast** 1996 Aug;12(10):907–16 (64 ref.)

Identification and expression of the Saccharomyces cerevisiae cytoplasmic tryptophanyl–tRNA synthetase gene. John TR, et al. **Yeast** 1997 Jan;13(1):37–41

A putative helicase, the SUA5, PMR1, tRNALys1 genes and four open reading frames have been detected in the DNA sequence of an 8.8 kb fragment of the left arm of chromosome VII of Saccharomyces cerevisiae. Klima R, et al. **Yeast** 1996 Sep;12(10B Suppl):1033–40

N–Glycosylation affects endoplasmic reticulum degradation of a mutated derivative of carboxypeptidase yscY in yeast. Knop M, et al. **Yeast** 1996 Sep 30;12(12):1229–38

Characterization of the Saccharomyces cerevisiae cdc42–1ts allele and new temperature–conditional–lethal cdc42 alleles. Miller PJ, et al. **Yeast** 1997 May;13(6):561–72

Reduced pyruvate decarboxylase and increased glycerol–3–phosphate dehydrogenase [NAD+] levels enhance glycerol production in Saccharomyces cerevisiae. Nevoigt E, et al. **Yeast** 1996 Oct;12(13):1331–7

Expression of the SUC2 gene of Saccharomyces cerevisiae is induced by low levels of glucose. Ozcan S, et al. **Yeast** 1997 Feb;13(2):127–37

The branched–chain amino acid permease gene of Saccharomyces cerevisiae, BAP2, encodes the high–affinity leucine permease (S1). Schreve J, et al. **Yeast** 1997 Apr; 13(5):435–9

Yeast protein serine/threonine phosphatases: multiple roles and diverse regulation. Stark MJ. **Yeast** 1996 Dec; 12(16):1647–75 (200 ref.)

Identification of a putative methylenetetrahydrofolate reductase by sequence analysis of a 6.8 kb DNA fragment of yeast chromosome VII. Tizon B, et al. **Yeast** 1996 Sep; 12(10B Suppl):1047–51

Vacuolar and extracellular maturation of Saccharomyces cerevisiae proteinase A. Wolff AM, et al. **Yeast** 1996 Jul; 12(9):823–32

The isolation of a Dol–P–Man synthase from Ustilago maydis that functions in Saccharomyces cerevisiae. Zimmerman JW, et al. **Yeast** 1996 Jun 30;12(8):765–71

A particulate guanylate cyclase (EC 4.6.1.2) from growing yeast cells (Saccharomyces cerevisiae). Eckstein H, et al. **Z Naturforsch [C]** 1997 May–Jun;52(5–6):373–9

[Purification and characteristics of Saccharomyces cerevisiae cytosol polyphosphatase] Andreeva NA, et al. **Biokhimiia** 1996 Sep;61(9):1714–24 (Eng. Abstr.) **(Rus)**

[Characteristics of polyphosphatase activity of isolated mitochondria from Saccharomyces cerevisiae] Lichko LP, et al. **Biokhimiia** 1996 Sep;61(9):1664–71 (Eng. Abstr.) **(Rus)**

[Superfamily of alpha–galactosidase MEL genes from Saccharomyces cerevisiae] Naumov GI, et al. **Dokl Akad Nauk** 1997 Mar;353(3):426–9 **(Rus)**

[Comparative analysis of primary structures of yeast dolicholphosphomannosyl– and dolichophosphoglucosyl synthetases and other dolichol–conjugated enzymes] Shpakov AO, et al. **Ukr Biokhim Zh** 1996 Jul–Aug; 68(4):64–75 (Eng. Abstr.) **(Rus)**

GENETICS

Selection of diphtheria toxin active–site mutants in yeast. Rediscovery of glutamic acid–148 as a key residue. Fu H, et al. **Adv Exp Med Biol** 1997;419:45–52

Characterization of two mutations associated with epimerase–deficiency galactosemia, by use of a yeast expression system for human UDP–galactose–4–epimerase. Quimby BB, et al. **Am J Hum Genet** 1997 Sep;61(3):590–8

Vectors for expressing proteins at the amino–terminus of an activation domain for use in the yeast two–hybrid system. Brown MA, et al. **Anal Biochem** 1997 May 1;247(2):451–2

An in vitro transcription assay for yeast mitochondria using organellar lysates. Iqbal J, et al. **Anal Biochem** 1996 Dec 15;243(2):270–6

A rapid method for the preparation of yeast lysates that facilitates the immunodetection of proteins generated by the yeast two–hybrid system. Langlands K, et al. **Anal Biochem** 1997 Jul 1;249(2):250–2

Rapid construction of three–fragment recombinant DNAs by polymerase chain reaction: application for gene–targeting in Saccharomyces cerevisiae. Ling M, et al. **Anal Biochem** 1996 Nov 1;242(1):155–8

Refinement of vectors for use in the yeast two–hybrid system. Roder KH, et al. **Anal Biochem** 1996 Oct 15;241(2):260–2

Transformations of membrane–bound organelles in sec 14 mutants of the yeasts Saccharomyces cerevisiae and Yarrowia lipolytica. Rambourg A, et al. **Anat Rec** 1996 Jul;245(3):447–58

Mapping of 22 YACs on human chromosomes by fish using yeast DNA Alu–PCR products for competition. Goguel AF, et al. **Ann Genet** 1996;39(2):64–8

A new strategy for isolating genes expressing proteins involved in the import of peroxisomal proteins. Kragler F, et al. **Ann N Y Acad Sci** 1996 Dec 27;804:658–9

Yeast transcriptional regulatory mechanisms. Struhl K. **Annu Rev Genet** 1995;29:651–74 (151 ref.)

Structure, function, and replication of Saccharomyces cerevisiae telomeres. Zakian VA. **Annu Rev Genet** 1996; 30:141–72 (147 ref.)

Antifungal azoxybacilin exhibits activity by inhibiting gene expression of sulfite reductase. Aoki Y, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):127–32

Physiological response to anaerobicity of glycerol–3–phosphate dehydrogenase mutants of Saccharomyces cerevisiae. Björkqvist S, et al. **Appl Environ Microbiol** 1997 Jan;63(1):128–32

Expression of a Trichoderma reesei beta–xylanase gene (XYN2) in Saccharomyces cerevisiae. la Grange DC, et al. **Appl Environ Microbiol** 1996 Mar;62(3):1036–44

Cloning of genes encoding alpha–L–arabinofuranosidase and beta–xylosidase from Trichoderma reesei by expression in Saccharomyces cerevisiae. Margolles–Clark E, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3840–6

Influence of cosubstrate concentration on xylose conversion by recombinant, XYL1–expressing Saccharomyces cerevisiae: a comparison of different sugars and ethanol as cosubstrates. Meinander NQ, et al. **Appl Environ Microbiol** 1997 May;63(5):1959–64

Construction of a starch–utilizing yeast by cell surface engineering. Murai T, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1362–6

Silencing MIG1 in Saccharomyces cerevisiae: effects of antisense MIG1 expression and MIG1 gene disruption. Olsson L, et al. **Appl Environ Microbiol** 1997 Jun; 63(6):2366–71

Comparison of cell wall proteins of Saccharomyces cerevisiae as anchors for cell surface expression of heterologous proteins. Van der Vaart JM, et al. **Appl Environ Microbiol** 1997 Feb;63(2):615–20

Mutations in the IDH2 gene encoding the catalytic subunit of the yeast NAD+–dependent isocitrate dehydrogenase can be suppressed by mutations in the CIT1 gene encoding citrate synthase and other genes of oxidative metabolism. Gadde DM, et al. **Arch Biochem Biophys** 1997 Aug 1; 344(1):139–49

Establishment of a novel host, high–red yeast that stably expresses hamster NADPH–cytochrome P450 oxidoreductase: usefulness for examination of the function of mammalian cytochrome P450. Ohgiya S, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):215–24

Saccharomyces cerevisiae expresses two genes encoding isozymes of 5–aminoimidazole–4–carboxamide ribonucleotide transformylase. Tibbetts AS, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):195–200

Genetic determination of polygalacturonase production in wild–type and laboratory strains of Saccharomyces cerevisiae. Blanco P, et al. **Arch Microbiol** 1997 May; 167(5):284–8

Activity of plasma membrane H+–ATPase and expression of PMA1 and PMA2 genes in Saccharomyces cerevisiae cells grown at optimal and low pH. Carmelo V, et al. **Arch Microbiol** 1996 Nov;166(5):315–20

The hexose transporter family of Saccharomyces cerevisiae. Kruckeberg AL. **Arch Microbiol** 1996 Nov;166(5):283–92 (70 ref.)

A novel fungal gene encoding chitin synthase with a myosin motor–like domain. Fujiwara M, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):75–8

Modulation of lipid unsaturation and membrane fluid state in mammalian cells by stable transformation with the delta9–desaturase gene of Saccharomyces cerevisiae. Gyorfy Z, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):362–6

Several synthetic chemicals inhibit progesterone receptor–mediated transactivation in yeast. Jin L, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):139–46

Deletion of the nuclear gene encoding the mitochondrial citrate transport protein from Saccharomyces cerevisiae. Kaplan RS, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):657–62

Structure and functional analysis of the multistress response gene DDR2 from Saccharomyces cerevisiae. Kobayashi N, et al. **Biochem Biophys Res Commun** 1996 Dec 13; 229(2):540–7

A second gene encoding a putative serine/threonine protein kinase which enhances spermine uptake in Saccharomyces cerevisiae. Nozaki T, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):452–8

Trans–acting factors in yeast pre–rRNA and pre–snoRNA processing. Lafontaine D, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):803–12 (71 ref.)

The accuracy center of a eukaryotic ribosome. Liebman SW, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):1141–9 (49 ref.)

Relocation of the unusual VAR1 gene from the mitochondrion to the nucleus. Sanchirico M, et al. **Biochem Cell Biol** 1995 Nov–Dec;73(11–12):987–95 (46 ref.)

Isolation and characterization of Saccharomyces cerevisiae SAB2, a suppressor gene for temperature–sensitive phenotype of ARS–binding factor 1 mutant. Shin YH, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):915–21

Partial purification of Pde1 from Saccharomyces cerevisiae: enzymatic redundancy for the repair of 3'–terminal DNA lesions and abasic sites in yeast. Sander M, et al. **Biochemistry** 1997 May 20;36(20):6100–6

Double–reciprocal crossover mediated by FLP–recombinase: a concept and an assay. Seibler J, et al. **Biochemistry** 1997 Feb 18;36(7):1740–7

The modified wobble base inosine in yeast tRNAIle is a positive determinant for aminoacylation by isoleucyl–tRNA synthetase. Senger B, et al.

Biochemistry 1997 Jul 8;36(27):8269–75

In vivo processing of the precursor of the major exoglucanase by KEX2 endoprotease in the Saccharomyces cerevisiae secretory pathway. Basco RD, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):110–8

Heterologous Kluyveromyces lactis beta-galactosidase production and release by Saccharomyces cerevisiae osmotic-remedial thermosensitive autolytic mutants. Becerra M, et al. **Biochim Biophys Acta** 1997 Jun 6; 1335(3):235–41

Characterization of rat Glut4 glucose transporter expressed in the yeast Saccharomyces cerevisiae: comparison with Glut1 glucose transporter. Kasahara T, et al. **Biochim Biophys Acta** 1997 Feb 21;1324(1):111–9

An amino terminal prosequence is required for efficient synthesis of S. cerevisiae a-factor. Quinby GE, et al. **Biochim Biophys Acta** 1997 Mar 27;1356(1):23–34

Requirement of heme to replace the sparking sterol function in the yeast Saccharomyces cerevisiae. Smith SJ, et al. **Biochim Biophys Acta** 1997 Mar 10;1345(1):71–6

Cloning and expression in Escherichia coli and Saccharomyces cerevisiae of a novel tobacco cytochrome P-450-like cDNA. Sugiura M, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):231–40

Mutations in yeast ribosomal proteins S28 and S4 affect the accuracy of translation and alter the sensitivity of the ribosomes to paromomycin. Synetos D, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):156–66

BZLF1 (ZEBRA, Zta) protein of Epstein-Barr virus selected in a yeast one-hybrid system by binding to a consensus site in the IgH intronic enhancer: a role in immunoglobulin expression? Gstaiger M, et al. **Biol Chem** 1996 Oct; 377(10):669–73

Cell cycle control and initiation of DNA replication in Saccharomyces cerevisiae. Küntzel H, et al. **Biol Chem** 1996 Jul-Aug;377(7–8):481–7 (74 ref.)

RNA packaging of yeast retrotransposon Ty1 in the heterologous host, Escherichia coli. Luschnig C, et al. **Biol Chem** 1997 Jan;378(1):39–46

Molecular cloning of pea cDNA encoding cycloartenol synthase and its functional expression in yeast. Morita M, et al. **Biol Pharm Bull** 1997 Jul;20(7):770–5

Identification and phylogenetic classification of eleven putative P-type calcium transport ATPase genes in the yeasts Saccharomyces cerevisiae and Schizosaccharomyces pombe. Catty P, et al. **Biosci Rep** 1996 Apr;16(2):75–85 (58 ref.)

Screening of yeast transformants by chemiluminescence for detection of secreted heterologous proteins. Arffman A, et al. **Biotechniques** 1997 Jun;22(6):1030–2

Method for rapid restriction analysis of YAC clones. Del-Favero J, et al. **Biotechniques** 1996 Sep;21(3):404–6

Rapid method for construction of gene disruption plasmids in Saccharomyces cerevisiae. Fujimura H. **Biotechniques** 1996 Aug;21(2):208–9

Vectors encoding alternative antibiotic resistance for use in the yeast two-hybrid system. Watson MA, et al. **Biotechniques** 1996 Aug;21(2):255–9

Nonselective URA3 colony-color assay in yeast ade1 or ade2 mutants. Weng YS, et al. **Biotechniques** 1997 Aug; 23(2):237–41

Is there a human [psi]? Jean-Jean O, et al. **C R Acad Sci III** 1996 Jun;319(6):487–92

Segregation of yeast polymorphic STA genes in meiotic recombinants and analysis of glucoamylase production. Balogh I, et al. **Can J Microbiol** 1996 Dec;42(12):1190–6

A Saccharomyces cerevisiae phleomycin-sensitive mutant, ph140, is defective in the RAD6 DNA repair gene. He CH, et al. **Can J Microbiol** 1996 Dec;42(12):1263–6

A Saccharomyces cerevisiae mutant defines a new locus essential for resistance to the antitumour drug bleomycin. Ramotar D, et al. **Can J Microbiol** 1996 Aug;42(8):835–43

DNA polymerase zeta and the control of DNA damage induced mutagenesis in eukaryotes. Lawrence CW, et al. **Cancer Surv** 1996;28:21–31 (38 ref.)

Cross-intron bridging interactions in the yeast commitment complex are conserved in mammals. Abovich N, et al. **Cell** 1997 May 2;89(3):403–12

Induction of large DNA palindrome formation in yeast: implications for gene amplification and genome stability in eukaryotes. Butler DK, et al. **Cell** 1996 Dec 13; 87(6):1115–22

RSC, an essential, abundant chromatin-remodeling complex. Cairns BR, et al. **Cell** 1996 Dec 27;87(7):1249–60

A novel mechanism for regulating activity of a transcription factor that controls the unfolded protein response [see comments] Cox JS, et al. **Cell** 1996 Nov 1;87(3):391–404 . Comment in: Cell 1996 Nov 1;87(3):357–9.

Site-specific pseudouridine formation in preribosomal RNA is guided by small nucleolar RNAs [see comments] Ganot P, et al. **Cell** 1997 May 30;89(5):799–809. Comment in: Cell 1997 May 30;89(5):669–72.

Meiosis-specific DNA double-strand breaks are catalyzed by Spo11, a member of a widely conserved protein family. Keeney S, et al. **Cell** 1997 Feb 7;88(3):375–84

Properties of H. volcanii tRNA intron endonuclease reveal a relationship between the archaeal and eucaryal tRNA intron processing systems. Kleman-Leyer K, et al. **Cell** 1997 Jun 13;89(6):839–47

Mutator specificity and disease: looking over the FENce [comment] Kunkel TA, et al. **Cell** 1997 Jan 24;88(2):155–8 (20 ref.). Comment on: Cell 1997 Jan 24;88(2):253–63.

Mixed mechanisms in yeast pre-mRNA splicing? [comment] Rosbash M. **Cell** 1996 Nov 1;87(3):357–9 (15 ref.). Comment on: Cell 1996 Nov 1;87(3):391–404. Comment on: Cell 1996 Nov 1;87(3):405–13.

Yeast TAF(II)145 functions as a core promoter selectivity factor, not a general coactivator. Shen WC, et al. **Cell** 1997 Aug 22;90(4):615–24

tRNA ligase is required for regulated mRNA splicing in the unfolded protein response [see comments] Sidrauski C, et al. **Cell** 1996 Nov 1;87(3):405–13. Comment in: Cell 1996 Nov 1;87(3):357–9.

A novel mutation avoidance mechanism dependent on S. cerevisiae RAD27 is distinct from DNA mismatch repair [see comments] Tishkoff DX, et al. **Cell** 1997 Jan 24; 88(2):253–63. Comment in: Cell 1997 Jan 24;88(2):155–8.

The yeast tRNA splicing endonuclease: a tetrameric enzyme with two active site subunits homologous to the archaeal tRNA endonucleases. Trotta CR, et al. **Cell** 1997 Jun 13; 89(6):849–58

Characterization of the yeast transcriptome. Velculescu VE, et al. **Cell** 1997 Jan 24;88(2):243–51

Yeast TAF(II)145 required for transcription of G1/S cyclin genes and regulated by the cellular growth state. Walker SS, et al. **Cell** 1997 Aug 22;90(4):607–14

A 700 bp cis-acting region controls mating-type dependent recombination along the entire left arm of yeast chromosome III. Wu X, et al. **Cell** 1996 Oct 18;87(2):277–85

Holliday junctions accumulate in replication mutants via a RecA homolog-independent mechanism. Zou H, et al. **Cell** 1997 Jul 11;90(1):87–96

Isolation of a trifluoroleucine-resistant mutant of Saccharomyces cerevisiae deficient in both high- and low-affinity L-leucine transport. Chianelli MS, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Sep;42(6):847–57

Mitochondrial inheritance: cell cycle and actin cable dependence of polarized mitochondrial movements in Saccharomyces cerevisiae. Simon VR, et al. **Cell Motil Cytoskeleton** 1997;37(3):199–210

Topogenic effect of positively charged N-terminal amino acid in ER translocation of yeast alpha-factor precursor. Lee MA, et al. **Cell Struct Funct** 1996 Jun;21(3):175–81

Induction of terata in hamsters by solanidane alkaloids derived from Solanum tuberosum. Gaffield W, et al. **Chem Res Toxicol** 1996 Mar;9(2):426–33

Simulation of human benzo[a]pyrene metabolism deduced from the analysis of individual kinetic steps in recombinant yeast. Gautier JC, et al. **Chem Res Toxicol** 1996 Mar; 9(2):418–25

Construction of a brewing yeast having glucoamylase activity and its fermentation characteristics. Tang G, et al. **Chin J Biotechnol** 1996;12(4):263–7

Integration of glucoamylase gene from Aspergillus niger into Saccharomyces cerevisiae genome and its stable expression. Tang G, et al. **Chin J Biotechnol** 1995;11(4):237–41

Cell cycle control of S phase: a comparison of two yeasts. Huberman JA. **Chromosoma** 1996 Oct;105(4):197–203 (40 ref.)

Does Saccharomyces need an organized nucleolus? Nierras CR, et al. **Chromosoma** 1997 Jun;105(7–8):444–51

Yeast silencers create domains of nuclease-resistant chromatin in an SIR4-dependent manner. Reimer SK, et al. **Chromosoma** 1997 Aug;106(3):136–48

Variable region V1 of Saccharomyces cerevisiae 18S rRNA participates in biogenesis and function of the small ribosomal subunit. van Nues RW, et al. **Chromosoma** 1997 Jun;105(7–8):523–31

Chromosome mapping of the mouse homologue of DMC1, the yeast meiosis-specific homologous recombination gene. Matsuda Y, et al. **Chromosome Res** 1996 Apr;4(3):249–50

Complex multigene family of functionally distinct Hsp70s of yeast. Craig E, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:441–9 (59 ref.)

Sequence comparison of yeast ATP-binding cassette proteins. Michaelis S, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:291–307 (89 ref.)

Porphyrin biosynthesis in normal and haem mutants of Saccharomyces cerevisiae. Studies on the inheritance of the HEM R+ phenotype. De Siervi A, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Oct; 115(2):167–73

Approaching the function of new genes by detection of their potential upstream activation sequences in Saccharomyces cerevisiae: application to chromosome III. Fondrat C, et al. **Comput Appl Biosci** 1996 Oct;12(5):363–74

DNA repair: how yeast repairs radical damage. Cunningham RP. **Curr Biol** 1996 Oct 1;6(10):1230–3 (16 ref.)

The complete code for a eukaryotic cell. Genome sequencing. Johnston M. **Curr Biol** 1996 May 1;6(5):500–3 (29 ref.)

Cloning of a yeast 8-oxoguanine DNA glycosylase reveals the existence of a base-excision DNA-repair protein superfamily. Nash HM, et al. **Curr Biol** 1996 Aug 1; 6(8):968–80

Genetic recombination: sex-change operations in yeast. Shore D. **Curr Biol** 1997 Jan 1;7(1):R24–7

Keeping the centrosome cycle on track. Genome stability. Winey M. **Curr Biol** 1996 Aug 1;6(8):962–4 (13 ref.)

Over-expression of S. cerevisiae G1 cyclins restores the viability of alg1 N-glycosylation mutants. Benton BK, et al. **Curr Genet** 1996 Jan;29(2):106–13

Analysis of exon and intron mutants in the cytochrome b mitochondrial gene of Saccharomyces cerevisiae. Bonjardim CA, et al. **Curr Genet** 1996 Aug;30(3):200–5

Stimulation of mitotic recombination upon transcription from the yeast GAL1 promoter but not from other RNA polymerase I, II and III promoters. Bratty J, et al. **Curr Genet** 1996 Nov;30(5):381–8

The yeast ORF YDL202w codes for the mitochondrial ribosomal protein YmL11. Bui DM, et al. **Curr Genet** 1997 May;31(5):396–400

Natural translocation of a large segment of chromosome III to chromosome I in a laboratory strain of Saccharomyces cerevisiae. Camasses A. **Curr Genet** 1996 Aug;30(3):218–23

Molecular analysis of UFE1, a Saccharomyces cerevisiae gene essential for spore formation and vegetative growth. Downing TA, et al. **Curr Genet** 1996 Nov;30(5):396–403

Characterization of the Saccharomyces cerevisiae FCY1 gene encoding cytosine deaminase and its homologue FCA1 of Candida albicans. Erbs P, et al. **Curr Genet** 1997 Jan; 31(1):1–6

Mutations in SPK1/RAD53 that specifically abolish checkpoint but not growth-related functions. Fay DS, et al. **Curr Genet** 1997 Feb;31(2):97–105

Involvement of the RE V3 gene in the methylated base-excision repair system. Co-operation of two DNA polymerases, delta and Rev3p, in the repair of MMS-induced lesions in the DNA of Saccharomyces cerevisiae. Halas A, et al. **Curr Genet** 1997 Apr; 31(4):292–301

Functional mitochondria are essential for Saccharomyces cerevisiae cellular resistance to bleomycin. He CH, et al. **Curr Genet** 1996 Sep;30(4):279–83

Starvation for a specific amino acid induces high frequencies of rho- mutants in Saccharomyces cerevisiae. Heidenreich E, et al. **Curr Genet** 1997 May;31(5):408–13

Genomic complexity and chromosomal rearrangements in wine-laboratory yeast hybrids. Ibeas JI, et al. **Curr Genet** 1996 Nov;30(5):410–6

A probable cis-regulatory element on yeast mitochondrial DNA responsible for cAMP-mediated transcription. Iqbal J, et al. **Curr Genet** 1996 Dec;30(6):493–501

Cloning and characterization of MRP10, a yeast gene coding for a mitochondrial ribosomal protein. Jin C, et al. **Curr Genet** 1997 Mar;31(3):228–34

Deletion of flanking ARS elements does not affect meiotic recombination at the HIS4 locus in yeast. Kirkpatrick DT. **Curr Genet** 1997 Feb;31(2):106–11

Structural analysis of a Candida glabrata centromere and its functional homology to the Saccharomyces cerevisiae centromere. Kitada K, et al. **Curr Genet** 1997 Feb; 31(2):122–7

A new point mutation in the nuclear gene of yeast mitochondrial RNA polymerase, RPO41, identifies a functionally important amino-acid residue in a protein region conserved among mitochondrial core enzymes. Lisowsky T, et al. **Curr Genet** 1996 Nov;30(5):389–95

Identification of a Saccharomyces cerevisiae mitochondrial-DNA which can act as a promoter tightly regulated by carbon source when placed in the nucleus. MacIver FH, et al. **Curr Genet** 1997 Feb;31(2):119–21

A mutation in cytochrome oxidase subunit 2 restores respiration of the mutant pet ts1402. Meyer W, et al. **Curr Genet** 1997 May;31(5):401–7

Cloning and characterization of the first two genes of the non-oxidative part of the Saccharomyces cerevisiae pentose-phosphate pathway. Miosga T, et al. **Curr Genet** 1996 Nov;30(5):404–9

Isolation of early meiotic recombination genes analogous to S. cerevisiae REC104 from the yeasts S. paradoxus and S. pastorianus. Nau JJ, et al. **Curr Genet** 1997 Jan;31(1):7–14

Heme regulates SOD2 transcription by activation and repression in Saccharomyces cerevisiae. Pinkham JL, et al. **Curr Genet** 1997 Apr;31(4):281–91

Three genes for mitochondrial proteins suppress null-mutations in both Afg3 and Rca1 when over-expressed. Rep M, et al. **Curr Genet** 1996 Aug; 30(3):206–11

Influence of gene dosage and autoregulation of the regulatory genes INO2 and INO4 on inositol/choline-repressible gene transcription in the yeast Saccharomyces cerevisiae. Schwank S, et al. **Curr Genet** 1997 Jun;31(6):462–8

The unusual inheritance of multidrug-resistance factors in Saccharomyces. Shallom JM, et al. **Curr Genet** 1996 Aug; 30(3):212–7

Expression and secretion of the Candida wickerhamii extracellular beta-glucosidase gene, bglB, in Saccharomyces cerevisiae. Skory CD, et al. **Curr Genet** 1996 Nov;30(5):417–22

Organization and characterization of the two yeast ribosomal protein YL19 genes. Song JM, et al. **Curr Genet** 1996 Sep; 30(4):273–8

The mus-8 gene of Neurospora crassa encodes a structural and functional homolog of the Rad6 protein of Saccharomyces cerevisiae. Soshi T, et al. **Curr Genet** 1996 Aug;30(3):224–31

Cloning the Yarrowia lipolytica homologue of the Saccharomyces cerevisiae SEC62 gene. Swennen D, et al. **Curr Genet** 1997 Feb;31(2):128–32

The repair of DNA methylation damage in Saccharomyces cerevisiae. Xiao W, et al. **Curr Genet** 1996 Dec;30(6):461–8

A comparison of mammalian and yeast pre-mRNA 3'-end processing. Keller W, et al. **Curr Opin Cell Biol** 1997 Jun; 9(3):329–36 (52 ref.)

SACCHAROMYCES CEREVISIAE

Exploiting the complete yeast genome sequence. Bassett DE Jr, et al. **Curr Opin Genet Dev** 1996 Dec;6(6):763–6 (20 ref.)

From gene to screen with yeast. Oliver SG. **Curr Opin Genet Dev** 1997 Jun;7(3):405–9 (49 ref.)

Morphogenesis at the retrotransposon–retrovirus interface: gypsy and copia families in yeast and Drosophila. Sandmeyer SB, et al. **Curr Top Microbiol Immunol** 1996; 214:261–96 (136 ref.)

Surveillance and genome stability in budding yeast: implications for mammalian carcinogenesis. Spencer F. **Curr Top Microbiol Immunol** 1997;221:19–35 (98 ref.)

Identification of the coding region of Saccharomyces cerevisiae chromosome VI using the computer program GenMark. Hagiwara H, et al. **DNA Res** 1995 Dec 31; 2(6):247–53

Sequencing 39,350 bp of Saccharomyces cerevisiae chromosome XII utilizing ordered shotgun libraries. Scholler P, et al. **DNA Seq** 1996;6(5):257–62

Propranolol hydroxylation and N–desisopropylation by cytochrome P4502D6: studies using the yeast–expressed enzyme and NADPH/O2 and cumene hydroperoxide–supported reactions. Bichara N, et al. **Drug Metab Dispos** 1996 Jan;24(1):112–8

Proteome analysis of Saccharomyces cerevisiae: a methodological outline. Fey SJ, et al. **Electrophoresis** 1997 Aug;18(8):1361–72

Proteome studies of Saccharomyces cerevisiae: identification and characterization of abundant proteins. Garrels JI, et al. **Electrophoresis** 1997 Aug;18(8):1347–60

Stress and developmental regulation of the yeast C–type cyclin Ume3p (Srb11p/Ssn8p). Cooper KF, et al. **EMBO J** 1997 Aug 1;16(15):4665–75

The PMT gene family: protein O–glycosylation in Saccharomyces cerevisiae is vital. Gentzsch M, et al. **EMBO J** 1996 Nov 1;15(21):5752–9

Random mutagenesis reveals a region important for gating of the yeast K+ channel Ykc1. Loukin SH, et al. **EMBO J** 1997 Aug 15;16(16):4817–25

The role of branchpoint–3'splice site spacing and interaction between intron terminal nucleotides in 3' splice site selection in Saccharomyces cerevisiae. Luukkonen BG, et al. **EMBO J** 1997 Feb 17;16(4):779–92

The Skn7 response regulator controls gene expression in the oxidative stress response of the budding yeast Saccharomyces cerevisiae. Morgan BA, et al. **EMBO J** 1997 Mar 3;16(5):1035–44

Suppressors of YCK–encoded yeast casein kinase 1 deficiency define the four subunits of a novel clathrin AP–like complex. Panek HR, et al. **EMBO J** 1997 Jul 16; 16(14):4194–204

Recombination between DNA repeats in yeast hpr1delta cells is linked to transcription elongation. Prado F, et al. **EMBO J** 1997 May 15;16(10):2826–35

A specific screen for oligosaccharyltransferase mutations identifies the 9 kDa OST5 protein required for optimal activity in vivo and in vitro. Reiss G, et al. **EMBO J** 1997 Mar 17;16(6):1164–72

Histone octamer function in vivo: mutations in the dimer–tetramer interfaces disrupt both gene activation and repression. Santisteban MS, et al. **EMBO J** 1997 May 1; 16(9):2493–506

ORC– and Cdc6–dependent complexes at active and inactive chromosomal replication origins in Saccharomyces cerevisiae. Santocanale C, et al. **EMBO J** 1996 Dec 2; 15(23):6671–9

Mex67p, a novel factor for nuclear mRNA export, binds to both poly(A)+ RNA and nuclear pores. Segref A, et al. **EMBO J** 1997 Jun 2;16(11):3256–71

The CDK–activating kinase CAK1 can dosage suppress sporulation defects of smk1 MAP kinase mutants and is required for spore wall morphogenesis in Saccharomyces cerevisiae. Wagner M, et al. **EMBO J** 1997 Mar 17; 16(6):1305–17

Cell type–specific chromatin organization of the region that governs directionality of yeast mating type switching. Weiss K, et al. **EMBO J** 1997 Jul 16;16(14):4352–60

Nucleosome structure and positioning modulate nucleotide excision repair in the non–transcribed strand of an active gene. Wellinger RE, et al. **EMBO J** 1997 Aug 15; 16(16):5046–56

Characterization of recombinant yeast dolichyl mannosyl phosphate synthase and site–directed mutagenesis of its cysteine residues. Forsee WT, et al. **Eur J Biochem** 1997 Mar 15;244(3):953–8

The absence of the mitochondrial ATP synthase delta subunit promotes a slow growth phenotype of rho– yeast cells by a lack of assembly of the catalytic sector F1. Giraud MF, et al. **Eur J Biochem** 1997 May 1;245(3):813–8

Identification and characterization of the genes for mitochondrial ribosomal proteins of Saccharomyces cerevisiae. Kitakawa M, et al. **Eur J Biochem** 1997 Apr 15;245(2):449–56

Mitochondrial asparaginyl–tRNA synthetase is encoded by the yeast nuclear gene YCR24c [published erratum appears in Eur J Biochem 1997 Apr 15;245(2):520] Landrieu I, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):268–73

The wheat poly(A)–binding protein functionally complements pab1 in yeast. Le H, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):350–7

Examination of the thiamin diphosphate binding site in yeast transketolase by site–directed mutagenesis. Meshalkina L, et al. **Eur J Biochem** 1997 Mar 1;244(2):646–52

Some DNA targets of the yeast CYP1 transcriptional activator are functionally asymmetric––evidence of two half–sites with different affinities. Näit–Kaoudjt R, et al. **Eur J Biochem** 1997 Mar 1;244(2):301–9

Addition of acetaldehyde to the N–terminus of a recombinant Schistosoma mansoni glutathione S–transferase upon high–level expression in Saccharomyces cerevisiae. Roecklin D, et al. **Eur J Biochem** 1997 May 1;245(3):589–99

A heterodimer of the Zn2Cys6 transcription factors Pip2p and Oaf1p controls induction of genes encoding peroxisomal proteins in Saccharomyces cerevisiae. Rottensteiner H, et al. **Eur J Biochem** 1997 Aug 1; 247(3):776–83

A conditional–lethal translation termination defect in a sup45 mutant of the yeast Saccharomyces cerevisiae. Stansfield I, et al. **Eur J Biochem** 1997 May 1;245(3):557–63

The VPS8 gene is required for localization and trafficking of the CPY sorting receptor in Saccharomyces cerevisiae. Chen YJ, et al. **Eur J Cell Biol** 1996 Aug;70(4):289–97

The transcription of NAM7/UPF1 is enhanced in the absence of Cyp1p/Hap1p concomitant with the appearance of an ISF1–NAM7 cotranscript in Saccharomyces cerevisiae. Altamura N, et al. **FEBS Lett** 1997 Jun 2;409(1):96–100

Functional mapping reveals the importance of yeast cytochrome b C–terminal region in assembly and function of the bc1 complex. Edderkaoui B, et al. **FEBS Lett** 1997 Mar 3;404(1):51–5

Deletion of the yeast homologue of the human gene associated with Friedreich's ataxia elicits iron accumulation in mitochondria. Foury F, et al. **FEBS Lett** 1997 Jul 14; 411(2–3):373–7

Isolation and characterization of mutations affecting expression of the delta9– fatty acid desaturase gene, OLE1, in Saccharomyces cerevisiae. Fujimori K, et al. **FEBS Lett** 1997 Aug 18;413(2):226–30

Submitochondrial distributions and stabilities of subunits 4, 5, and 6 of yeast cytochrome oxidase in assembly defective mutants. Glerum DM, et al. **FEBS Lett** 1997 Aug 4; 412(3):410–4

High expression of the yeast syntaxin–related Vam3 protein suppresses the protein transport defects of a pep12 null mutant. Götte M, et al. **FEBS Lett** 1997 Jul 7;411(1):48–52

Identification and characterization of homologues of the Exocyst component Sec10p. Guo W, et al. **FEBS Lett** 1997 Mar 10;404(2–3):135–9

Yeast RAS2 mutations modulating the ras–guanine exchange factor interaction. Hermann–Le Denmat S, et al. **FEBS Lett** 1997 Feb 10;403(1):95–9

The yeast mic2 mutant is defective in the formation of mannosyl–diinositolphosphorylceramide. Leber A, et al. **FEBS Lett** 1997 Jul 14;411(2–3):211–4

Modification of 18 S rRNA in the 40 S ribosomal subunit of yeast with dimethyl sulfate. Mankin AS, et al. **FEBS Lett** 1981 Nov 2;134(1):11–4

The presence of a transcription activation function in the hormone–binding domain of androgen receptor is revealed by studies in yeast cells. Moilanen A, et al. **FEBS Lett** 1997 Jul 28;412(2):355–8

Identification by bacterial expression and functional reconstitution of the yeast genomic sequence encoding the mitochondrial dicarboxylate carrier protein. Palmieri L, et al. **FEBS Lett** 1996 Dec 16;399(3):299–302

Characterization of dominant lethal mutations in the yeast plasma membrane H+–ATPase gene. Portillo F. **FEBS Lett** 1997 Feb 3;402(2–3):136–40

Core promoter elements are essential as selective determinants for function of the yeast transcription factor GAL11. Sakurai H, et al. **FEBS Lett** 1996 Nov 25; 398(1):113–9

Biochemical evidence that Saccharomyces cerevisiae YGR262c gene, required for normal growth, encodes a novel Ser/Thr–specific protein kinase. Stocchetto S, et al. **FEBS Lett** 1997 Sep 1;414(1):171–5

Regulation of maltose utilization in Saccharomyces cerevisiae by genes of the RAS/protein kinase A pathway. Wanke V, et al. **FEBS Lett** 1997 Feb 3;402(2–3):251–5

Does selective gene activation direct evolution? Wright BE. **FEBS Lett** 1997 Jan 27;402(1):4–8 (42 ref.)

Neutral trehalase Nth1p of Saccharomyces cerevisiae encoded by the NTH1 gene is a multiple stress responsive protein. Zähringer H, et al. **FEBS Lett** 1997 Aug 4; 412(3):615–20

At–GDI1 from Arabidopsis thaliana encodes a rab–specific GDP dissociation inhibitor that complements the sec19 mutation of Saccharomyces cerevisiae. Zárský V, et al. **FEBS Lett** 1997 Feb 24;403(3):303–8

Effect of heme and vacuole deficiency on FRE1 gene expression and ferrireductase activity in Saccharomyces cerevisiae. Amillet JM, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):25–9

HySP26 gene transcription is strongly induced during Saccharomyces cerevisiae growth at low pH. Carmelo V, et al. **FEMS Microbiol Lett** 1997 Apr 1;149(1):85–8

Yeast linear plasmids with T2AG3 telomeres: TEL+CEN antagonism and genetic and molecular stability. Guerrini AM, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):165–71

Catabolite inactivation of the yeast maltose transporter requires ubiquitin–ligase npi1/rsp5 and ubiquitin–hydrolase npi2/doa4. Lucero P, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):273–7

Molecular analysis of the promoter region of the hexokinase 2 gene of Saccharomyces cerevisiae. Martínez–Campa C, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):69–74

Development of a polymerase chain reaction/restriction fragment length polymorphism method for Saccharomyces cerevisiae and Saccharomyces bayanus identification in enology. Masneuf I, et al. **FEMS Microbiol Lett** 1996 May 1;138(2–3):239–44

Isolation and characterization of a mutant of Saccharomyces cerevisiae affected in the FLO1 locus. Reboredo NM, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):57–61

Cloning of a new FLO gene from the flocculating Saccharomyces cerevisiae IM1–8b strain. Sieiro C, et al. **FEMS Microbiol Lett** 1997 Jan 1;146(1):109–15

Properties of yeast expressed Aspergillus nidulans chitin synthase B which is essential for hyphal growth. Tatsuno K, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):279–84

Molecular cloning of a novel allele of SMR1 which determines sulfometuron methyl resistance in Saccharomyces cerevisiae. Xie Q, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):165–8

The transcriptional apparatus required for mRNA encoding genes in the yeast Saccharomyces cerevisiae emerges from a jigsaw puzzle of transcription factors. Künzler M, et al. **FEMS Microbiol Rev** 1996 Dec;19(2):117–36 (167 ref.)

The target of sodium toxicity in Saccharomyces cerevisiae. Almagro A, et al. **Folia Microbiol (Praha)** 1996;41(1):82–3

NCR–sensitive transport gene expression in S. cerevisiae is controlled by a branched regulatory pathway consisting of multiple NCR–responsive activator proteins. Coffman J, et al. **Folia Microbiol (Praha)** 1996;41(1):85–6

Import of branched–chain amino acids in Saccharomyces cerevisiae. Didion T, et al. **Folia Microbiol (Praha)** 1996; 41(1):87

Functional analyses of yeast purine–cytosine permease mutants. Ferreira T, et al. **Folia Microbiol (Praha)** 1996; 41(1):90–1

SHR3 function is linked to cOPII mediated ER vesicle formation. Gilstring CF, et al. **Folia Microbiol (Praha)** 1996; 41(1):93

ACO1 expression in Saccharomyces cerevisiae is regulated by the HAP complex. Haviernik P, et al. **Folia Microbiol (Praha)** 1996;41(1):96–8

Properties of Candida albicans CAN1 permease expressed in Saccharomyces cerevisiae. Matějčková A, et al. **Folia Microbiol (Praha)** 1996;41(1):107–9

Oxygen– and carbon source–dependent transactivation effect of ABF1 on the expression of the AAC2 gene encoding mitochondrial ADP/ATP carrier. Nebohá čová M, et al. **Folia Microbiol (Praha)** 1996;41(1):115–6

Yeast plasma–membrane H(+)–ATPase: the role of cysteine residues. Petrov VV, et al. **Folia Microbiol (Praha)** 1996; 41(1):119–21

Regulation of AAC isogenes encoding mitochondrial ADP/ATP translocator in the yeast Saccharomyces cerevisiae. Sabová L, et al. **Folia Microbiol (Praha)** 1996; 41(1):124–6

Expression of Escherichia coli recA and ada genes in Saccharomyces cerevisiae using a vector with geneticin resistance. Šlaninová M, et al. **Folia Microbiol (Praha)** 1995; 40(3):257–62

Accumulation of Ade+ reversions in isoauxotrophic stains of Saccharomyces cerevisiae allelic in RAD6 during adenine starvation. Storchová Z, et al. **Folia Microbiol (Praha)** 1997;42(1):47–51

Yeast killer toxin K1 and its exploitation in genetic manipulations. Vondrejs V, et al. **Folia Microbiol (Praha)** 1996;41(5):379–93 (88 ref.)

The P–OLE1 gene of Pichia angusta encodes a delta 9–fatty acid desaturase and complements the ole1 mutation of Saccharomyces cerevisiae. Anamnart S, et al. **Gene** 1997 Jan 15;184(2):299–306

Mutation in a new gene MAF1 affects tRNA suppressor efficiency in Saccharomyces cerevisiae. Boguta M, et al. **Gene** 1997 Feb 7;185(2):291–6

The yeast SME1 gene encodes the homologue of the human E core protein. Bordonné R, et al. **Gene** 1996 Oct 17; 176(1–2):111–7

Integration of the yeast retrovirus–like element Ty3 upstream of a human tRNA gene expressed in yeast. Dildine SL, et al. **Gene** 1997 Jul 31;194(2):227–33

Human genetic diseases: a cross–talk between man and yeast. Foury F. **Gene** 1997 Aug 11;195(1):1–10 (58 ref.)

Analyses of APG13 gene involved in autophagy in yeast, Saccharomyces cerevisiae. Funakoshi T, et al. **Gene** 1997 Jun 19;192(2):207–13

Application of yeasts in gene expression studies: a comparison of Saccharomyces cerevisiae, Hansenula polymorpha and Kluyveromyces lactis — a review. Gellissen G, et al. **Gene** 1997 Apr 29;190(1):87–97 (94 ref.)

Identification of Cdc45p, an essential factor required for DNA replication. Hardy CF. **Gene** 1997 Mar 18; 187(2):239–46

Structural and functional analyses of APG5, a gene involved in autophagy in yeast. Kametaka S, et al. **Gene** 1996 Oct 31;178(1–2):139–43

A gene encoding a yeast equivalent of mammalian NADPH–adrenodoxin oxidoreductases. Lacour T, et al. **Gene** 1996 Oct 3;174(2):289–92

Cloning, and molecular characterization of the GCV1 gene encoding the glycine cleavage T–protein from Saccharomyces cerevisiae. McNeil JB, et al. **Gene** 1997 Feb 20;186(1):13–20

Characterisation of 3' end formation of the yeast HIS3 mRNA. Mahadevan S, et al. **Gene** 1997 Apr 29; 190(1):69–76

Satellite DNA from the brine shrimp Artemia affects the expression of a flanking gene in yeast. Maiorano D, et al. **Gene** 1997 Apr 11;189(1):13–8

Apg1p, a novel protein kinase required for the autophagic process in Saccharomyces cerevisiae. Matsuura A, et al. **Gene** 1997 Jun 19;192(2):245–50

RIC1, a novel gene required for ribosome synthesis in Saccharomyces cerevisiae. Mizuta K, et al. **Gene** 1997 Mar 18;187(2):171–8

Regulation of phosphatase synthesis in Saccharomyces cerevisiae—a review. Oshima Y, et al. **Gene** 1996 Nov 7; 179(1):171–7 (50 ref.)

Distribution and variability of trinucleotide repeats in the genome of the yeast Saccharomyces cerevisiae. Richard GF, et al. **Gene** 1996 Sep 26;174(1):165–74

ENP1, an essential gene encoding a nuclear protein that is highly conserved from yeast to humans. Roos J, et al. **Gene** 1997 Jan 31;185(1):137–46

The DAN1 gene of S. cerevisiae is regulated in parallel with the hypoxic genes, but by a different mechanism. Sertil O, et al. **Gene** 1997 Jun 19;192(2):199–205

Cloning and characterization of mouse Dhm2 cDNA, a functional homolog of budding yeast SEP1. Shobuike T, et al. **Gene** 1997 Jun 3;191(2):161–6

Gene overexpression reveals alternative mechanisms that induce GCN4 mRNA translation. Tavernarakis N, et al. **Gene** 1996 Nov 14;179(2):271–7

The SPO1 gene product required for meiosis in yeast has a high similarity to phospholipase B enzymes. Tevzadze GG, et al. **Gene** 1996 Oct 24;177(1–2):253–5

Cloning and characterization of two yeast genes encoding members of the CCCH class of zinc finger proteins: zinc finger–mediated impairment of cell growth. Thompson MJ, et al. **Gene** 1996 Oct 3;174(2):225–33

The Saccharomyces cerevisiae SSD1 gene is involved in the tolerance to high concentration of Ca2+ with the participation of HST1/NRC1/BFR1. Tsuchiya E, et al. **Gene** 1996 Oct 17;176(1–2):35–8

NBP35 encodes an essential and evolutionary conserved protein in Saccharomyces cerevisiae with homology to a superfamily of bacterial ATPases. Vitale G, et al. **Gene** 1996 Oct 31;178(1–2):97–106

Multicopy suppressors of temperature–sensitive mutations of yeast mRNA capping enzyme. Schwer B, et al. **Gene Expr** 1996;5(6):331–44

Communication between homologous chromosomes: genetic alterations at a nuclease–hypersensitive site can alter mitotic chromatin structure at that site both in cis and in trans. Keeney S, et al. **Genes Cells** 1996 May;1(5):475–89

A yeast gene product, Fob1 protein, required for both replication fork blocking and recombinational hotspot activities. Kobayashi T, et al. **Genes Cells** 1996 May; 1(5):465–74

Sensing of DNA non–homology lowers the initiation of meiotic recombination in yeast. Rocco V, et al. **Genes Cells** 1996 Jul;1(7):645–61

Transcriptional silencing of Ty1 elements in the RDN1 locus of yeast. Bryk M, et al. **Genes Dev** 1997 Jan 15;11(2):255–69

Essential role of Swp73p in the function of yeast Swi/Snf complex. Cairns BR, et al. **Genes Dev** 1996 Sep 1; 10(17):2131–44

Tam1, a telomere–associated meiotic protein, functions in chromosome synapsis and crossover interference. Chua PR, et al. **Genes Dev** 1997 Jul 15;11(14):1786–800

Stn1, a new Saccharomyces cerevisiae protein, is implicated in telomere size regulation in association with Cdc13. Grandin N, et al. **Genes Dev** 1997 Feb 15;11(4):512–27

GTP hydrolysis controls stringent selection of the AUG start codon during translation initiation in Saccharomyces cerevisiae. Huang HK, et al. **Genes Dev** 1997 Sep 15; 11(18):2396–413

Mlh1 is unique among mismatch repair proteins in its ability to promote crossing–over during meiosis. Hunter N, et al. **Genes Dev** 1997 Jun 15;11(12):1573–82

Ultraviolet radiation sensitivity and reduction of telomeric silencing in Saccharomyces cerevisiae cells lacking chromatin assembly factor–I. Kaufman PD, et al. **Genes Dev** 1997 Feb 1;11(3):345–57

mre11S—a yeast mutation that blocks double–strand–break processing and permits nonhomologous synapsis in meiosis. Nairz K, et al. **Genes Dev** 1997 Sep 1;11(17):2272–90

RAD9 and DNA polymerase epsilon form parallel sensory branches for transducing the DNA damage checkpoint signal in Saccharomyces cerevisiae. Navas TA, et al. **Genes Dev** 1996 Oct 15;10(20):2632–43

ORC–dependent and origin–specific initiation of DNA replication at defined foci in isolated yeast nuclei. Pasero P, et al. **Genes Dev** 1997 Jun 15;11(12):1504–18

A hierarchy of SSB protomers in replication protein A. Philipova D, et al. **Genes Dev** 1996 Sep 1;10(17):2222–33

Telomerase RNA mutations in Saccharomyces cerevisiae alter telomerase action and reveal nonprocessivity in vivo and in vitro. Prescott J, et al. **Genes Dev** 1997 Feb 15; 11(4):528–40

An unusual form of transcriptional silencing in yeast ribosomal DNA. Smith JS, et al. **Genes Dev** 1997 Jan 15; 11(2):241–54

Rpp1, an essential protein subunit of nuclear RNase P required for processing of precursor tRNA and 35S precursor rRNA in Saccharomyces cerevisiae. Stolc V, et al. **Genes Dev** 1997 Sep 15;11(18):2414–25

Alpha2p controls donor preference during mating type interconversion in yeast by inactivating a recombinational enhancer of chromosome III. Szeto L, et al. **Genes Dev** 1997 Aug 1;11(15):1899–911

In vivo analysis reveals that the interdomain region of the yeast proliferating cell nuclear antigen is important for DNA replication and DNA repair. Amin NS, et al. **Genetics** 1996 Oct;144(2):479–93

Underproduction of the largest subunit of RNA polymerase II causes temperature sensitivity, slow growth, and inositol auxotrophy in Saccharomyces cerevisiae. Archambault J, et al. **Genetics** 1996 Mar;142(3):737–47

Multicopy FZF1 (SUL1) suppresses the sulfite sensitivity but not the glucose derepression or aberrant cell morphology of a grr1 mutant of Saccharomyces cerevisiae. Avram D, et al. **Genetics** 1996 Oct;144(2):511–21

Molecular characterization of two high affinity sulfate transporters in Saccharomyces cerevisiae. Cherest H, et al. **Genetics** 1997 Mar;145(3):627–35

Mutations in the SPT4, SPT5, and SPT6 genes alter transcription of a subset of histone genes in Saccharomyces cerevisiae. Compagnone–Post PA, et al. **Genetics** 1996 Aug; 143(4):1543–54

A novel Ty1–mediated fragmentation method for native and artificial yeast chromosomes reveals that the mouse steel gene is a hotspot for Ty1 integration. Dalgaard JZ, et al. **Genetics** 1996 Jun;143(2):673–83

Genesis and variability of [PSI] prion factors in Saccharomyces cerevisiae. Derkatch IL, et al. **Genetics** 1996 Dec;144(4):1375–86

DLH1 is a functional Candida albicans homologue of the meiosis–specific gene DMC1. Diener AC, et al. **Genetics** 1996 Jun;143(2):769–76

Genetic analysis of default mating behavior in Saccharomyces cerevisiae. Dorer R, et al. **Genetics** 1997 May;146(1):39–55

The role of Sas2, an acetyltransferase homologue of Saccharomyces cerevisiae, in silencing and ORC function. Ehrenhofer–Murray AE, et al. **Genetics** 1997 Apr; 145(4):923–34

Synergy between trehalose and Hsp104 for thermotolerance in Saccharomyces cerevisiae. Elliott B, et al. **Genetics** 1996 Nov;144(3):923–33

Mutations in the RNA polymerase II transcription machinery suppress the hyperrecombination mutant hpr1 delta of Saccharomyces cerevisiae. Fan HY, et al. **Genetics** 1996 Mar;142(3):749–59

Competition between adjacent meiotic recombination hotspots in the yeast Saccharomyces cerevisiae. Fan QQ, et al. **Genetics** 1997 Mar;145(3):661–70

CDP1, a novel Saccharomyces cerevisiae gene required for proper nuclear division and chromosome segregation. Foreman PK, et al. **Genetics** 1996 Dec;144(4):1387–97

Recombination and the progression of meiosis in Saccharomyces cerevisiae. Galbraith AM, et al. **Genetics** 1997 Jun;146(2):481–9

A test of the double–strand break repair model for meiotic recombination in Saccharomyces cerevisiae. Gilbertson LA, et al. **Genetics** 1996 Sep;144(1):27–41

The efficiency of meiotic recombination between dispersed sequences in Saccharomyces cerevisiae depends upon their chromosomal location. Goldman AS, et al. **Genetics** 1996 Sep;144(1):43–55

SEC3 mutations are synthetically lethal with profilin mutations and cause defects in diploid–specific bud–site selection. Haarer BK, et al. **Genetics** 1996 Oct; 144(2):495–510

Isolation of degradation–deficient mutants defective in the targeting of fructose–1,6–bisphosphatase into the vacuole for degradation in Saccharomyces cerevisiae. Hoffman M, et al. **Genetics** 1996 Aug;143(4):1555–66

Cha4p of Saccharomyces cerevisiae activates transcription via serine/threonine response elements. Holmberg S, et al. **Genetics** 1996 Oct;144(2):467–78

Identification and characterization of FAR3, a gene required for pheromone–mediated G1 arrest in Saccharomyces cerevisiae. Horecka J, et al. **Genetics** 1996 Nov; 144(3):905–21

Genetic analysis of the Saccharomyces cerevisiae RHO3 gene, encoding a rho–type small GTPase, provides evidence for a role in bud formation. Imai J, et al. **Genetics** 1996 Feb;142(2):359–69

Genetic requirements for the single–strand annealing pathway of double–strand break repair in Saccharomyces cerevisiae. Ivanov EL, et al. **Genetics** 1996 Mar; 142(3):693–704

Genomic libraries and a host strain designed for highly efficient two–hybrid selection in yeast. James P, et al. **Genetics** 1996 Dec;144(4):1425–36

Meiotic crossing over between nonhomologous chromosomes affects chromosome segregation in yeast. Jinks–Robertson S, et al. **Genetics** 1997 May;146(1):69–78

The yeast BSD2–1 mutation influences both the requirement for phosphatidylinositol transfer protein function and derepression of phospholipid biosynthetic gene expression in yeast. Kagiwada S, et al. **Genetics** 1996 Jun;143(2):685–97

Regional bivalent–univalent pairing versus trivalent pairing of a trisomic chromosome in Saccharomyces cerevisiae. Koller A, et al. **Genetics** 1996 Nov;144(3):957–66

Increased length of long terminal repeats inhibits Ty1 transposition and leads to the formation of tandem multimers. Lauermann V, et al. **Genetics** 1997 Apr; 145(4):911–22

Senescence mutants of Saccharomyces cerevisiae with a defect in telomere replication identify three additional EST genes. Lendvay TS, et al. **Genetics** 1996 Dec; 144(4):1399–412

Dominant mutations of Drosophila MAP kinase kinase and their activities in Drosophila and yeast MAP kinase cascades. Lim YM, et al. **Genetics** 1997 May;146(1):263–73

Saccharomyces cerevisiae S288C has a mutation in FLO8, a gene required for filamentous growth. Liu H, et al. **Genetics** 1996 Nov;144(3):967–78

Karyotype variability in yeast caused by nonallelic recombination in haploid meiosis. Loidl J, et al. **Genetics** 1997 May;146(1):79–88

Mutants of Saccharomyces cerevisiae with defects in acetate metabolism: isolation and characterization of Acn– mutants. McCammon MT. **Genetics** 1996 Sep;144(1):57–69

Yeast mutants deficient in ER–associated degradation of the Z variant of alpha–1–protease inhibitor. McCracken AA, et al. **Genetics** 1996 Dec;144(4):1355–62

A general method for identifying recessive diploid–specific mutations in Saccharomyces cerevisiae, its application to the isolation of mutants blocked at intermediate stages of meiotic prophase and characterization of a new gene SAE2. McKee AH, et al. **Genetics** 1997 Jul;146(3):797–816

Mutations in Saccharomyces cerevisiae that block meiotic prophase chromosome metabolism and confer cell cycle arrest at pachytene identify two new meiosis–specific genes SAE1 and SAE3. McKee AH, et al. **Genetics** 1997 Jul; 146(3):817–34

Meiotic recombination initiated by a double–strand break in rad50 delta yeast cells otherwise unable to initiate meiotic recombination. Malkova A, et al. **Genetics** 1996 Jun; 143(2):741–54

Roles of replication protein–A subunits 2 and 3 in DNA replication fork movement in Saccharomyces cerevisiae. Maniar HS, et al. **Genetics** 1997 Apr;145(4):891–902

Poorly repaired mismatches in heteroduplex DNA are hyper–recombinagenic in Saccharomyces cerevisiae. Manivasakam P, et al. **Genetics** 1996 Feb;142(2):407–16

Analysis of meiotic recombination pathways in the yeast Saccharomyces cerevisiae. Mao–Draayer Y, et al. **Genetics** 1996 Sep;144(1):71–86

A 140–bp–long palindromic sequence induces double–strand breaks during meiosis in the yeast Saccharomyces cerevisiae. Nag DK, et al. **Genetics** 1997 Jul;146(3):835–47

Saccharomyces cerevisiae HOC1, a suppressor of pkc1, encodes a putative glycosyltransferase. Neiman AM, et al. **Genetics** 1997 Mar;145(3):637–45

Induction of Ty recombination in yeast by cDNA and transcription: role of the RAD1 and RAD52 genes. Nevo–Caspi Y, et al. **Genetics** 1996 Nov;144(3):947–55

RAD9, RAD17, and RAD24 are required for S phase regulation in Saccharomyces cerevisiae in response to DNA damage. Paulovich AG, et al. **Genetics** 1997 Jan; 145(1):45–62

Stabilization of microsatellite sequences by variant repeats in the yeast Saccharomyces cerevisiae. Petes TD, et al. **Genetics** 1997 Jun;146(2):491–8

Mutations in the yeast SRB2 general transcription factor suppress hpr1–induced recombination and show defects in DNA repair. Piruat JI, et al. **Genetics** 1996 Aug; 143(4):1533–42

Homologous and homeologous intermolecular gene conversion are not differentially affected by mutations in the DNA damage or the mismatch repair genes RAD1, RAD50, RAD51, RAD52, RAD54, PMS1 and MSH2. Porter G, et al. **Genetics** 1996 Jun;143(2):755–67

Isolation of COM1, a new gene required to complete meiotic double–strand break–induced recombination in Saccharomyces cerevisiae. Prinz S, et al. **Genetics** 1997 Jul; 146(3):781–95

Influences of histone stoichiometry on the target site preference of retrotransposons Ty1 and Ty2 in Saccharomyces cerevisiae. Rinckel LA, et al. **Genetics** 1996 Mar;142(3):761–76

The yeast HRS1 gene encodes a polyglutamine–rich nuclear protein required for spontaneous and hpr1–induced deletions between direct repeats. Santos–Rosa H, et al. **Genetics** 1996 Mar;142(3):705–16

Requirement of mismatch repair genes MSH2 and MSH3 in the RAD1–RAD10 pathway of mitotic recombination in Saccharomyces cerevisiae. Saparbaev M, et al. **Genetics** 1996 Mar;142(3):727–36

3'–>5'exonucleases of DNA polymerases epsilon and delta correct base analog induced DNA replication errors on opposite DNA strands in Saccharomyces cerevisiae. Shcherbakova PV, et al. **Genetics** 1996 Mar;142(3):717–26

Los1p, involved in yeast pre–tRNA splicing, positively regulates members of the SOL gene family. Shen WC, et al. **Genetics** 1996 Jun;143(2):699–712

Mismatch repair mutants in yeast are not defective in transcription–coupled DNA repair of UV–induced DNA damage. Sweder KS, et al. **Genetics** 1996 Jul;143(3):1127–35

Deletion of the leader peptide of the mitochondrially encoded precursor of Saccharomyces cerevisiae cytochrome c oxidase subunit II. Torello AT, et al. **Genetics** 1997 Apr; 145(4):903–10

The Swi5 transcription factor of Saccharomyces cerevisiae has a role in exit from mitosis through induction of the

cdk-inhibitor Sic1 in telophase. Toyn JH, et al. **Genetics** 1997 Jan;145(1):85–96

The prevention of repeat-associated deletions in Saccharomyces cerevisiae by mismatch repair depends on size and origin of deletions. Tran HT, et al. **Genetics** 1996 Aug;143(4):1579–87

Effects of mutations of RAD50, RAD51, RAD52, and related genes on illegitimate recombination in Saccharomyces cerevisiae. Tsukamoto Y, et al. **Genetics** 1996 Feb; 142(2):383–91

Mutagenesis of the yeast gene PRP8 reveals domains governing the specificity and fidelity of 3' splice site selection. Umen JG, et al. **Genetics** 1996 Jun;143(2):723–39

Evidence that the transcriptional regulators SIN3 and RPD3, and a novel gene (SDS3) with similar functions, are involved in transcriptional silencing in S. cerevisiae. Vannier D, et al. **Genetics** 1996 Dec;144(4):1343–53

Suppression of pdc2 regulating pyruvate decarboxylase synthesis in yeast. Velmurugan S, et al. **Genetics** 1997 Mar; 145(3):587–94

The Saccharomyces cerevisiae RTG2 gene is a regulator of aconitase expression under catabolite repression conditions. Vélot C, et al. **Genetics** 1996 Nov;144(3):893–903

SGS1, a homologue of the Bloom's and Werner's syndrome genes, is required for maintenance of genome stability in Saccharomyces cerevisiae. Watt PM, et al. **Genetics** 1996 Nov;144(3):935–45

Destabilization of simple repetitive DNA sequences by transcription in yeast. Wierdl M, et al. **Genetics** 1996 Jun; 143(2):713–21

Microsatellite instability in yeast: dependence on the length of the microsatellite. Wierdl M, et al. **Genetics** 1997 Jul; 146(3):769–79

New mutants of Saccharomyces cerevisiae affected in the transport of proteins from the endoplasmic reticulum to the Golgi complex. Wuestehube LJ, et al. **Genetics** 1996 Feb;142(2):393–406

Fine-structure mapping of meiosis-specific double-strand DNA breaks at a recombination hotspot associated with an insertion of telomeric sequences upstream of the HIS4 locus in yeast. Xu F, et al. **Genetics** 1996 Jul;143(3):1115–25

Yeast mutants that produce a novel type of ascus containing asci instead of spores. Xue Z, et al. **Genetics** 1996 Nov; 144(3):979–89

A mutation in a Saccharomyces cerevisiae gene (RAD3) required for nucleotide excision repair and transcription increases the efficiency of mismatch correction. Yang Y, et al. **Genetics** 1996 Oct;144(2):459–66

Suppression analysis reveals a functional difference between the serines in positions two and five in the consensus sequence of the C-terminal domain of yeast RNA polymerase II. Yuryev A, et al. **Genetics** 1996 Jun; 143(2):661–71

Sex and the spread of retrotransposon Ty3 in experimental populations of Saccharomyces cerevisiae. Zeyl C, et al. **Genetics** 1996 Aug;143(4):1567–77

MDP1, a Saccharomyces cerevisiae gene involved in mitochondrial/cytoplasmic protein distribution, is identical to the ubiquitin-protein ligase gene RSP5. Zoládek T, et al. **Genetics** 1997 Mar;145(3):595–603

Cloning maize telomeres by complementation in Saccharomyces cerevisiae. Gardiner JM, et al. **Genome** 1996 Aug;39(4):736–48

Analysis of a 103 kbp cluster homology region from the left end of Saccharomyces cerevisiae chromosome I. Storms RK, et al. **Genome** 1997 Feb;40(1):151–64

Associations of UBE2I with RAD52, UBL1, p53, and RAD51 proteins in a yeast two-hybrid system. Shen Z, et al. **Genomics** 1996 Oct 15;37(2):183–6

Cloning and characterization of the ALG3 gene of Saccharomyces cerevisiae. Aebi M, et al. **Glycobiology** 1996 Jun;6(4):439–44

Molecular and phenotypic analysis of the S. cerevisiae MNN10 gene identifies a family of related glycosyltransferases. Dean N, et al. **Glycobiology** 1996 Jan; 6(1):73–81

Defective threonine-linked glycosylation of human insulin-like growth factor in mutants of the yeast Saccharomyces cerevisiae. Finck M, et al. **Glycobiology** 1996 Apr;6(3):313–20

Isolation of new nonconditional Saccharomyces cerevisiae mutants defective in asparagine-linked glycosylation. Mañas P, et al. **Glycobiology** 1997 Jun;7(4):487–97

Isolation of the ALG6 locus of Saccharomyces cerevisiae required for glucosylation in the N-linked glycosylation pathway. Reiss G, et al. **Glycobiology** 1996 Jul;6(5):493–8

Isolation of a cDNA encoding the human homolog of COX17, a yeast gene essential for mitochondrial copper recruitment. Amaravadi R, et al. **Hum Genet** 1997 Mar; 99(3):329–33

Functional analysis in Saccharomyces cerevisiae of naturally occurring amino acid substitutions in human dihydrolipoamide dehydrogenase. Lanterman MM, et al. **Hum Mol Genet** 1996 Oct;5(10):1643–8

Expression and immunogenicity of the C-terminus of a major blood-stage surface protein of Plasmodium vivax, Pv200(19), secreted from Saccharomyces cerevisiae. Kaslow DC, et al. **Immunol Lett** 1996 Jul;51(3):187–9

Ecology of inoculated and spontaneous fermentations in Rioja (Spain) musts, examined by mitochondrial DNA restriction analysis. Gutiérrez AR, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):241–5

GDH3 encodes a glutamate dehydrogenase isozyme, a previously unrecognized route for glutamate biosynthesis in Saccharomyces cerevisiae. Avendaño A, et al. **J Bacteriol** 1997 Sep;179(17):5594–7

Molecular cloning and characterization of Saccharomyces cerevisiae RAD28, the yeast homolog of the human Cockayne syndrome A (CSA) gene. Bhatia PK, et al. **J Bacteriol** 1996 Oct;178(20):5977–88

Characterization of a glucose-repressed pyruvate kinase (Pyk2p) in Saccharomyces cerevisiae that is catalytically insensitive to fructose-1,6-bisphosphate. Boles E, et al. **J Bacteriol** 1997 May;179(9):2987–93

A stationary-phase gene in Saccharomyces cerevisiae is a member of a novel, highly conserved gene family. Braun EL, et al. **J Bacteriol** 1996 Dec;178(23):6865–72

Cross regulation of four GATA factors that control nitrogen catabolic gene expression in Saccharomyces cerevisiae. Coffman JA, et al. **J Bacteriol** 1997 Jun;179(11):3416–29

Nitrogen GATA factors participate in transcriptional regulation of vacuolar protease genes in Saccharomyces cerevisiae. Coffman JA, et al. **J Bacteriol** 1997 Sep; 179(17):5609–13

Regulation of yeast phospholipid biosynthetic genes in phosphatidylserine decarboxylase mutants. Griač P. **J Bacteriol** 1997 Sep;179(18):5843–8

A nuclear genetic lesion affecting Saccharomyces cerevisiae mitochondrial translation is complemented by a homologous Bacillus gene. Kim SI, et al. **J Bacteriol** 1997 Sep;179(17):5625–7

FLO11, a yeast gene related to the STA genes, encodes a novel cell surface flocculin. Lo WS, et al. **J Bacteriol** 1996 Dec;178(24):7144–51

Isolation of the Candida albicans homologs of Saccharomyces cerevisiae KRE6 and SKN1: expression and physiological function. Mio T, et al. **J Bacteriol** 1997 Apr;179(7):2363–72

Regulation of the proteinase B structural gene PRB1 in Saccharomyces cerevisiae. Naik RR, et al. **J Bacteriol** 1997 Mar;179(5):1469–74

Identification of a Cryptococcus neoformans gene that directs expression of the cryptic Saccharomyces cerevisiae mannitol dehydrogenase gene. Perfect JR, et al. **J Bacteriol** 1996 Sep;178(17):5257–62

Increase in chitin as an essential response to defects in assembly of cell wall polymers in the gpg1delta mutant of Saccharomyces cerevisiae. Popolo L, et al. **J Bacteriol** 1997 Jan;179(2):463–9

Role of GATA factor Nil2p in nitrogen regulation of gene expression in Saccharomyces cerevisiae. Rowen DW, et al. **J Bacteriol** 1997 Jun;179(11):3761–6

AUT1, a gene essential for autophagocytosis in the yeast Saccharomyces cerevisiae. Schlumpberger M, et al. **J Bacteriol** 1997 Feb;179(4):1068–76

The Saccharomyces cerevisiae MEC1 gene, which encodes a homolog of the human ATM gene product, is required for G1 arrest following radiation treatment. Siede W, et al. **J Bacteriol** 1996 Oct;178(19):5841–3

AUT3, a serine/threonine kinase gene, is essential for autophagocytosis in Saccharomyces cerevisiae. Straub M, et al. **J Bacteriol** 1997 Jun;179(12):3875–83

Control of the Myc-Max mediated transactivation in yeast by natural promoter elements. Hänel F, et al. **J Basic Microbiol** 1997;37(1):23–8

Identification and characterization of extragenic suppressors of the yeast sec12 ts mutation. Nakano A. **J Biochem (Tokyo)** 1996 Sep;120(3):642–6

Saccharomyces cerevisiae KAR2 (BiP) gene expression is induced by loss of cytosolic HSP70/Ssa1p through a heat shock element-mediated pathway. Oka M, et al. **J Biochem (Tokyo)** 1997 Mar;121(3):578–84

Characterization of yeast sar1 temperature-sensitive mutants, which are defective in protein transport from the endoplasmic reticulum. Yamanushi T, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):452–8

Characterization of an upstream activation sequence and two Rox1p-responsive sites controlling the induction of the yeast HEM13 gene by oxygen and heme deficiency. Amillet JM, et al. **J Biol Chem** 1996 Oct 4;271(40):24425–32

Carbon source regulation of PIS1 gene expression in Saccharomyces cerevisiae involves the MCM1 gene and the two-component regulatory gene, SLN1. Anderson MS, et al. **J Biol Chem** 1996 Oct 25;271(43):26596–601

Relationship between yeast polyribosomes and Upf proteins required for nonsense mRNA decay. Atkin AL, et al. **J Biol Chem** 1997 Aug 29;272(35):22163–72

Characterization of the COQ5 gene from Saccharomyces cerevisiae. Evidence for a C-methyltransferase in ubiquinone biosynthesis. Barkovich RJ, et al. **J Biol Chem** 1997 Apr 4;272(14):9182–8

Identification and phenotypic analysis of two glyoxalase II encoding genes from Saccharomyces cerevisiae, GLO2 and GLO4, and intracellular localization of the corresponding proteins. Bito A, et al. **J Biol Chem** 1997 Aug 22; 272(34):21509–19

Saccharomyces cerevisiae basic region-leucine zipper protein regulatory networks converge at the ATR1 structural gene. Coleman ST, et al. **J Biol Chem** 1997 Sep 12; 272(37):23224–30

The ARG11 gene of Saccharomyces cerevisiae encodes a mitochondrial integral membrane protein required for arginine biosynthesis. Crabeel M, et al. **J Biol Chem** 1996 Oct 4;271(40):25011–8

A 2'-phosphotransferase implicated in tRNA splicing is essential in Saccharomyces cerevisiae. Culver GM, et al. **J Biol Chem** 1997 May 16;272(20):13203–10

Expression and purification of the Saccharomyces cerevisiae alpha-factor receptor (Ste2p), a 7-transmembrane-segment G protein-coupled receptor. David NE, et al. **J Biol Chem** 1997 Jun 13;272(24):15553–61

The COQ5 gene encodes a yeast mitochondrial protein necessary for ubiquinone biosynthesis and the assembly of the respiratory chain. Dibrov E, et al. **J Biol Chem** 1997 Apr 4;272(14):9175–81

QSR1, an essential yeast gene with a genetic relationship to a subunit of the mitochondrial cytochrome bc1 complex, codes for a 60 S ribosomal subunit protein. Dick FA, et al. **J Biol Chem** 1997 May 16;272(20):13372–9

A point mutation in the mitochondrial cytochrome b gene obviates the requirement for the nuclear encoded core protein 2 subunit in the cytochrome bc1 complex in Saccharomyces cerevisiae. di Rago JP, et al. **J Biol Chem** 1997 Feb 21;272(8):4699–704

Characterization of the FET4 protein of yeast. Evidence for a direct role in the transport of iron. Dix D, et al. **J Biol Chem** 1997 May 2;272(18):11770–7

Isolation and characterization of a thiamin transport gene, THI10, from Saccharomyces cerevisiae. Enjo F, et al. **J Biol Chem** 1997 Aug 1;272(31):19165–70

The PPS1 gene of Saccharomyces cerevisiae codes for a dual specificity protein phosphatase with a role in the DNA synthesis phase of the cell cycle. Ernsting BR, et al. **J Biol Chem** 1997 Apr 4;272(14):9332–43

In addition to SEC11, a newly identified gene, SPC3, is essential for signal peptidase activity in the yeast endoplasmic reticulum. Fang H, et al. **J Biol Chem** 1997 May 16;272(20):13152–8

Activated alleles of yeast SLN1 increase Mcm1-dependent reporter gene expression and diminish signaling through the Hog1 osmosensing pathway. Fassler JS, et al. **J Biol Chem** 1997 May 16;272(20):13365–71

The human homologue of the yeast CHL1 gene is a novel keratinocyte growth factor-regulated gene. Frank S, et al. **J Biol Chem** 1996 Oct 4;271(40):24337–40

Fatty acid-responsive control of mRNA stability. Unsaturated fatty acid-induced degradation of the Saccharomyces OLE1 transcript. Gonzalez CI, et al. **J Biol Chem** 1996 Oct 18;271(42):25801–9

Yeast Rad7-Rad16 complex, specific for the nucleotide excision repair of the nontranscribed DNA strand, is an ATP-dependent DNA damage sensor. Guzder SN, et al. **J Biol Chem** 1997 Aug 29;272(35):21665–8

Saccharomyces cerevisiae VIG9 encodes GDP-mannose pyrophosphorylase, which is essential for protein glycosylation. Hashimoto H, et al. **J Biol Chem** 1997 Jun 27;272(26):16308–14

Translational regulation of yeast GCN4. A window on factors that control initiator-trna binding to the ribosome. Hinnebusch AG. **J Biol Chem** 1997 Aug 29;272(35):21661–4 (61 ref.)

Ho endonuclease cleaves MAT DNA in vitro by an inefficient stoichiometric reaction mechanism. Jin Y, et al. **J Biol Chem** 1997 Mar 14;272(11):7352–9

Identification of cDNA clones for the large subunit of eukaryotic translation initiation factor 3. Comparison of homologues from human, Nicotiana tabacum, Caenorhabditis elegans, and Saccharomyces cerevisiae. Johnson KR, et al. **J Biol Chem** 1997 Mar 14; 272(11):7106–13

Identification of a novel gene encoding the yeast mitochondrial dicarboxylate transport protein via overexpression, purification, and characterization of its protein product. Kakhniashvili D, et al. **J Biol Chem** 1997 Feb 14;272(7):4516–21

Multiple Pdr1p/Pdr3p binding sites are essential for normal expression of the ATP binding cassette transporter protein-encoding gene PDR5. Katzmann DJ, et al. **J Biol Chem** 1996 Sep 20;271(38):23049–54

Cloning and characterization of an essential Saccharomyces cerevisiae gene, TAF40, which encodes yTAFII40, an RNA polymerase II-specific TATA-binding protein-associated factor. Klebanow ER, et al. **J Biol Chem** 1997 Apr 4;272(14):9436–42

The position dependence of translational regulation via RNA-RNA and RNA-protein interactions in the 5'-untranslated region of eukaryotic mRNA is a function of the thermodynamic competence of 40 S ribosomes in translational initiation. Koloteva N, et al. **J Biol Chem** 1997 Jun 27;272(26):16531–9

Distinct regulation of osmoprotective genes in yeast and mammals. Aldose reductase osmotic response element is induced independent of p38 and stress-activated protein kinase/Jun N-terminal kinase in rabbit kidney cells. Kültz D, et al. **J Biol Chem** 1997 May 16;272(20):13165–70

Copper-specific transcriptional repression of yeast genes encoding critical components in the copper transport pathway. Labbé S, et al. **J Biol Chem** 1997 Jun 20; 272(25):15951–8

Ribosomal 5 S rRNA maturation in Saccharomyces cerevisiae. Lee Y, et al. **J Biol Chem** 1997 Jun 13; 272(24):15206–12

A role for the Saccharomyces cerevisiae ATX1 gene in copper trafficking and iron transport. Lin SJ, et al. **J Biol Chem** 1997 Apr 4;272(14):9215–20

Negative control of heavy metal uptake by the Saccharomyces cerevisiae BSD2 gene. Liu XF, et al.

J Biol Chem 1997 May 2;272(18):11763–9

Characterization of translation initiation factor 5 (eIF5) from Saccharomyces cerevisiae. Functional homology with mammalian eIF5 and the effect of depletion of eIF5 on protein synthesis in vivo and in vitro. Maiti T, et al. **J Biol Chem** 1997 Jul 18;272(29):18333–40

SHY1, the yeast homolog of the mammalian SURF–1 gene, encodes a mitochondrial protein required for respiration. Mashkevich G, et al. **J Biol Chem** 1997 May 30; 272(22):14356–64

The yeast SPC22/23 homolog Spc3p is essential for signal peptidase activity. Meyer HA, et al. **J Biol Chem** 1997 May 16;272(20):13159–64

Molecular characterization of GCV3, the Saccharomyces cerevisiae gene coding for the glycine cleavage system hydrogen carrier protein. Nagarajan L, et al. **J Biol Chem** 1997 Feb 14;272(7):4444–50

Vam2/Vps41p and Vam6/Vps39p are components of a protein complex on the vacuolar membranes and involved in the vacuolar assembly in the yeast Saccharomyces cerevisiae. Nakamura N, et al. **J Biol Chem** 1997 Apr 25; 272(17):11344–9

The yeast JEM1p is a DnaJ–like protein of the endoplasmic reticulum membrane required for nuclear fusion. Nishikawa S, et al. **J Biol Chem** 1997 May 16;272(20):12889–92

Ribosome concentration contributes to discrimination against poly(A)– mRNA during translation initiation in Saccharomyces cerevisiae. Proweller A, et al. **J Biol Chem** 1997 Feb 28;272(9):6004–10

Identification of a Saccharomyces gene, LCB3, necessary for incorporation of exogenous long chain bases into sphingolipids. Qie L, et al. **J Biol Chem** 1997 Jun 27; 272(26):16110–7

Camptothecin sensitivity is mediated by the pleiotropic drug resistance network in yeast. Reid RJ, et al. **J Biol Chem** 1997 May 2;272(18):12091–9

The transcriptional activators BAS1, BAS2, and ABF1 bind positive regulatory sites as the critical elements for adenine regulation of ADE5,7. Rolfes RJ, et al. **J Biol Chem** 1997 May 16;272(20):13343–54

Promoter structure–dependent functioning of the general transcription factor IIE in Saccharomyces cerevisiae. Sakurai H, et al. **J Biol Chem** 1997 Jun 20;272(25):15936–42

Chromatin remodeling by transcriptional activation domains in a yeast episome. Stafford GA, et al. **J Biol Chem** 1997 Apr 25;272(17):11526–34

Cloning, yeast expression, and characterization of the coupling of two distantly related Arabidopsis thaliana NADPH–cytochrome P450 reductases with P450 CYP73A5. Urban P, et al. **J Biol Chem** 1997 Aug 1; 272(31):19176–86

MNN6, a member of the KRE2/MNT1 family, is the gene for mannosylphosphate transfer in Saccharomyces cerevisiae. Wang XH, et al. **J Biol Chem** 1997 Jul 18; 272(29):18117–24

Molecular mechanism of base excision repair of uracil–containing DNA in yeast cell–free extracts. Wang Z, et al. **J Biol Chem** 1997 Sep 19;272(38):24064–71

The ZRT2 gene encodes the low affinity zinc transporter in Saccharomyces cerevisiae. Zhao H, et al. **J Biol Chem** 1996 Sep 20;271(38):23203–10

Expression of the vitamin D and the retinoid X receptors in Saccharomyces cerevisiae: alternative in vivo models for ligand–induced transactivation. Berghöfer–Hochheimer Y, et al. **J Cell Biochem** 1997 Aug 1;66(2):184–96

Dynamics of nuclear pore distribution in nucleoporin mutant yeast cells. Belgareh N, et al. **J Cell Biol** 1997 Feb 24; 136(4):747–59

The lumenal domain of Sec63p stimulates the ATPase activity of BiP and mediates BiP recruitment to the translocon in Saccharomyces cerevisiae. Corsi AK, et al. **J Cell Biol** 1997 Jun 30;137(7):1483–93

The SH3 domain of the Saccharomyces cerevisiae peroxisomal membrane protein Pex13p functions as a docking site for Pex5p, a mobile receptor for the import PTS1–containing proteins. Elgersma Y, et al. **J Cell Biol** 1996 Oct;135(1):97–109

Identification of Pex13p a peroxisomal membrane receptor for the PTS1 recognition factor. Erdmann R, et al. **J Cell Biol** 1996 Oct;135(1):111–21

Mutational analysis of Mdm1p function in nuclear and mitochondrial inheritance. Fisk HA, et al. **J Cell Biol** 1997 Aug 11;138(3):485–94

COPI–independent anterograde transport: cargo–selective ER to Golgi protein transport in yeast COPI mutants. Gaynor EC, et al. **J Cell Biol** 1997 Feb 24;136(4):789–802

The yeast gene, MDM20, is necessary for mitochondrial inheritance and organization of the actin cytoskeleton. Hermann GJ, et al. **J Cell Biol** 1997 Apr 7;137(1):141–53

Active site mutations in yeast protein disulfide isomerase cause dithiothreitol sensitivity and a reduced rate of protein folding in the endoplasmic reticulum. Holst B, et al. **J Cell Biol** 1997 Sep 22;138(6):1229–38

MHP1, an essential gene in Saccharomyces cerevisiae required for microtubule function. Irminger–Finger I, et al. **J Cell Biol** 1996 Dec;135(5):1323–39

Human Bcl–2 reverses survival defects in yeast lacking superoxide dismutase and delays death of wild–type yeast. Longo VD, et al. **J Cell Biol** 1997 Jun 30;137(7):1581–8

The yeast CDC37 gene interacts with MPS1 and is required for proper execution of spindle pole body duplication. Schutz AR, et al. **J Cell Biol** 1997 Mar 10;136(5):969–82

Endosome to Golgi retrieval of the vacuolar protein sorting receptor, Vps10p, requires the function of the VPS29, VPS30, and VPS35 gene products. Seaman MN, et al. **J Cell Biol** 1997 Apr 7;137(1):79–92

The yeast v–SNARE Vti1p mediates two vesicle transport pathways through interactions with the t–SNAREs Sed5p and Pep12p. von Mollard GF, et al. **J Cell Biol** 1997 Jun 30;137(7):1511–24

Sec2p mediates nucleotide exchange on Sec4p and is involved in polarized delivery of post–Golgi vesicles. Walch–Solimena C, et al. **J Cell Biol** 1997 Jun 30; 137(7):1495–509

The SAC3 gene encodes a nuclear protein required for normal progression of mitosis. Bauer A, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1575–83

A genetic screen reveals a role for the late G1–specific transcription factor Swi4p in diverse cellular functions including cytokinesis. Igual JC, et al. **J Cell Sci** 1997 Jul; 110 (Pt 14):1647–54

Putative GTPase Gtr1p genetically interacts with the RanGTPase cycle in Saccharomyces cerevisiae. Nakashima N, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2311–8

The yeast VPS5/GRD2 gene encodes a sorting nexin–1–like protein required for localizing membrane proteins to the late Golgi. Nothwehr SF, et al. **J Cell Sci** 1997 May;110 (Pt 9):1063–72

NNF1 is an essential yeast gene required for proper spindle orientation, nucleolar and nuclear envelope structure and mRNA export. Shan X, et al. **J Cell Sci** 1997 Jul;110 (Pt 14):1615–24

In vitro susceptibility testing and DNA typing of Saccharomyces cerevisiae clinical isolates. Zerva L, et al. **J Clin Microbiol** 1996 Dec;34(12):3031–4

Yeasts: from genetics to biotechnology. Russo S, et al. **J Environ Pathol Toxicol Oncol** 1995;14(3–4):133–57 (175 ref.)

Target gene identification: target specific transcriptional activation by three murine homeodomain/VP16 hybrid proteins in Saccharomyces cerevisiae. Friedman–Einat M, et al. **J Exp Zool** 1996 Feb 15;274(3):145–56

Colony phenotype switching in clinical and non–clinical isolates of Saccharomyces cerevisiae. Clemons KV, et al. **J Med Vet Mycol** 1996 Jul–Aug;34(4):259–64

Saccharomyces cerevisiae MSH2, a mispaired base recognition protein, also recognizes Holliday junctions in DNA. Alani E, et al. **J Mol Biol** 1997 Jan 24;265(3):289–301

Only one nucleotide insertion to the long variable arm confers an efficient serine acceptor activity upon Saccharomyces cerevisiae tRNA(Leu) in vitro. Himeno H, et al. **J Mol Biol** 1997 May 16;268(4):704–11

In vivo analyses of upstream promoter sequence elements in the 5 S rRNA gene from Saccharomyces cerevisiae. Lee Y, et al. **J Mol Biol** 1997 Jun 27;269(5):676–83

Very fast identification of RNA motifs in genomic DNA. Application to tRNA search in the yeast genome. el–Mabrouk N, et al. **J Mol Biol** 1996 Nov 22;264(1):46–55

RNA polymerase I transcription termination: similar mechanisms are employed by yeast and mammals. Mason SW, et al. **J Mol Biol** 1997 May 2;268(2):229–34

Transfer RNA gene redundancy and translational selection in Saccharomyces cerevisiae. Percudani R, et al. **J Mol Biol** 1997 May 2;268(2):322–30

Complete transcriptional map of yeast chromosome XI in different life conditions. Richard GF, et al. **J Mol Biol** 1997 May 2;268(2):303–21

The anticodon loop is a major identity determinant of Saccharomyces cerevisiae tRNA(Leu). Soma A, et al. **J Mol Biol** 1996 Nov 15;263(5):707–14

Excision repair at the level of the nucleotide in the Saccharomyces cerevisiae MFA2 gene: mapping of where enhanced repair in the transcribed strand begins or ends and identification of only a partial rad16 requisite for repairing upstream control sequences. Teng Y, et al. **J Mol Biol** 1997 Mar 28;267(2):324–37

Role of PSO genes in the repair of photoinduced interstrand cross–links and photooxidative damage in the DNA of the yeast Saccharomyces cerevisiae. Henriques JA, et al. **J Photochem Photobiol B** 1997 Jul;39(3):185–96 (110 ref.)

The relation between codon usage, base correlation and gene expression level in Escherichia coli and yeast. Li H, et al. **J Theor Biol** 1996 Jul 21;181(2):111–24

Analysis of genomic patchiness of Haemophilus influenzae and Saccharomyces cerevisiae chromosomes. Liò P, et al. **J Theor Biol** 1996 Dec 21;183(4):455–69

Mapping the multimerization domains of the Gag protein of yeast retrotransposon Ty1. Brachmann CB, et al. **J Virol** 1997 Jan;71(1):812–7

A critical proteolytic cleavage site near the C terminus of the yeast retrotransposon Ty1 Gag protein. Merkulov GV, et al. **J Virol** 1996 Aug;70(8):5548–56

Regulation of hypoxic gene expression in yeast. Zitomer RS, et al. **Kidney Int** 1997 Feb;51(2):507–13

Using GCN4 as a reporter of eIF2 alpha phosphorylation and translational regulation in yeast. Dever TE. **Methods** 1997 Apr;11(4):403–17

Translation–competent extracts from Saccharomyces cerevisiae: effects of L–A RNA, 5' cap, and 3' poly(A) tail on translational efficiency of mRNAs. Iizuka N, et al. **Methods** 1997 Apr;11(4):353–60

Yeast metallothionein gene expression in response to metals and oxidative stress. Liu XD, et al. **Methods** 1997 Mar; 11(3):289–99 (56 ref.)

Approaches to the study of Rox1 repression of the hypoxic genes in the yeast Saccharomyces cerevisiae. Zitomer RS, et al. **Methods** 1997 Mar;11(3):279–88

Gene identification using the yeast two–hybrid system. Bai C, et al. **Methods Enzymol** 1996;273:331–47 (17 ref.)

Transformation of Saccharomyces cerevisiae mitochondria using the biolistic gun. Butow RA, et al. **Methods Enzymol** 1996;264:265–78

Allotopic expression of yeast mitochondrial maturase to study mitochondrial import of hydrophobic proteins. Claros MG, et al. **Methods Enzymol** 1996;264:389–403

Genetic strategies for identification of mitochondrial translation factors in Saccharomyces cerevisiae. Fox TD. **Methods Enzymol** 1996;264:228–37

Chromatin structure mapping in vivo using methyltransferases. Kladde MP, et al. **Methods Enzymol** 1996;274:214–33

Use of cdc13–1–induced DNA damage to study effects of checkpoint genes on DNA damage processing. Lydall D, et al. **Methods Enzymol** 1997;283:410–24

Yeast expression of animal and plant P450s in optimized redox environments. Pompon D, et al. **Methods Enzymol** 1996;272:51–64

Analysis of budding yeast kinases controlled by DNA damage. Sanchez Y, et al. **Methods Enzymol** 1997; 283:398–410

Genomic footprinting of budding yeast replication origins during the cell cycle. Santocanale C, et al. **Methods Enzymol** 1997;283:377–90

Generation of the cytosolic domain of microsomal P450 52A3 after high–level expression in Saccharomyces cerevisiae. Scheller U, et al. **Methods Enzymol** 1996;272:65–75

The spindle assembly checkpoint in budding yeast. Straight AF, et al. **Methods Enzymol** 1997;283:425–40

Random fragment libraries using yeast expression plasmid. Bénichou S, et al. **Methods Mol Biol** 1996;66:241–55

Protoplast fusion in Saccharomyces cerevisiae. Curran BP, et al. **Methods Mol Biol** 1996;53:45–9 (6 ref.)

Insertional mutagenesis by Ty elements in Saccharomyces cerevisiae. Garfinkel DJ. **Methods Mol Biol** 1996;53:227–37 (23 ref.)

Alternative yeast two–hybrid systems. The interaction trap and interaction mating. Golemis EA, et al. **Methods Mol Biol** 1997;63:197–218

Constitutive expression vectors: PGK. Graham IR, et al. **Methods Mol Biol** 1997;62:159–69

Determination of chromosome ploidy in yeast. Hadfield C, et al. **Methods Mol Biol** 1996;53:205–16 (10 ref.)

Preparation and use of yeast cell–free translation lysate. Hartley AD, et al. **Methods Mol Biol** 1996;53:249–57 (9 ref.)

Determination of plasmid copy number in yeast. Jordan BE, et al. **Methods Mol Biol** 1996;53:193–203 (5 ref.)

Yeast colony hybridization. Kleinman MJ. **Methods Mol Biol** 1996;53:189–92 (1 ref.)

Reporter gene systems for assaying gene expression in yeast. Mount RC, et al. **Methods Mol Biol** 1996;53:239–48 (8 ref.)

Transformation of lithium–treated yeast cells and the selection of auxotrophic and dominant markers. Mount RC, et al. **Methods Mol Biol** 1996;53:139–45 (19 ref.)

Inducible expression cassettes in yeast: GAL4. Mylin LM, et al. **Methods Mol Biol** 1997;62:131–48

Chromosome engineering in yeast with a site–specific recombination system from a heterologous yeast plasmid. Oshima Y, et al. **Methods Mol Biol** 1996;53:217–25 (10 ref.)

Induction of heat shock proteins and thermotolerance. Piper P. **Methods Mol Biol** 1996;53:313–7 (15 ref.)

Inducible expression cassettes in yeast: ADH2. Price VL. **Methods Mol Biol** 1997;62:149–57

Polysome analysis. Sagliocco FA, et al. **Methods Mol Biol** 1996;53:297–311 (13 ref.)

Yeast plasmids. Singh KK, et al. **Methods Mol Biol** 1997; 62:113–30

Rare–mating and cytoduction in Saccharomyces cerevisiae. Spencer JF, et al. **Methods Mol Biol** 1996;53:39–44 (5 ref.)

Mutagenesis in yeast. Spencer JF, et al. **Methods Mol Biol** 1996;53:17–38 (22 ref.)

Yeast GAL4 two–hybrid system. A genetic system to identify proteins that interact with a target protein. Zhu L. **Methods Mol Biol** 1997;63:173–96

Genetic regulation of phospholipid biosynthesis in Saccharomyces cerevisiae. Greenberg ML, et al. **Microbiol Rev** 1996 Mar;60(1):1–20 (230 ref.)

Genetic constitution of industrial yeasi. Benítez T, et al. **Microbiologia** 1996 Sep;12(3):371–84 (41 ref.)

Mapping of the FLO5 gene in saccharomyces cerevisiae. Sieiro C, et al. **Microbiologia** 1996 Sep;12(3):449–56

High cAMP levels antagonize the reprogramming of gene expression that occurs at the diauxic shift in Saccharomyces cerevisiae. Boy–Marcotte E, et al. **Microbiology** 1996 Mar; 142 (Pt 3):459–67

SYR2, a gene necessary for syringomycin growth inhibition of Saccharomyces cerevisiae. Cliften P, et al. **Microbiology** 1996 Mar;142 (Pt 3):477–84

The Sch9 protein kinase in the yeast Saccharomyces cerevisiae controls cAPK activity and is required for nitrogen activation of the fermentable–growth–medium–induced (FGM) pathway. Crauwels M, et al. **Microbiology** 1997 Aug;143 (Pt 8):2627–37

SPR28, a sixth member of the septin gene family in Saccharomyces cerevisiae that is expressed specifically in

sporulating cells. De Virgilio C, et al. **Microbiology** 1996 Oct;142 (Pt 10):2897-905

nuvA, an Aspergillus nidulans gene involved in DNA repair and recombination, is a homologue of Saccharomyces cerevisiae RAD18 and Neurospora crassa uvs-2. Iwanejko L, et al. **Microbiology** 1996 Mar;142 (Pt 3):505-15

Yeast as a navigational aid in genome analysis. 1996 Kathleen Barton-Wright Memorial Lecture. Oliver SG. **Microbiology** 1997 May;143 (Pt 5):1483-7

Identification of an overexpressed yeast gene which prevents aminoglycoside toxicity. Prezant TR, et al. **Microbiology** 1996 Dec;142 (Pt 12):3407-14

Filamentous growth of the budding yeast Saccharomyces cerevisiae induced by overexpression of the WHi2 gene. Radcliffe PA, et al. **Microbiology** 1997 Jun;143 (Pt 6):1867-76

MIG1 overexpression causes flocculation in Saccharomyces cerevisiae. Shankar CS, et al. **Microbiology** 1996 Sep;142 (Pt 9):2663-7

Nuclear transport defects and nuclear envelope alterations are associated with mutation of the Saccharomyces cerevisiae NPL4 gene. DeHoratius C, et al. **Mol Biol Cell** 1996 Nov;7(11):1835-55

The product of the Saccharomyces cerevisiae RSS1 gene, identified as a high-copy suppressor of the rat7-1 temperature-sensitive allele of the RAT7/NUP159 nucleoporin, is required for efficient mRNA export. Del Priore V, et al. **Mol Biol Cell** 1996 Oct;7(10):1601-21

Genes that control the fidelity of endoplasmic reticulum to Golgi transport identified as suppressors of vesicle budding mutations. Elrod-Erickson MJ, et al. **Mol Biol Cell** 1996 Jul;7(7):1043-58

Sec3p is involved in secretion and morphogenesis in Saccharomyces cerevisiae. Finger FP, et al. **Mol Biol Cell** 1997 Apr;8(4):647-62

Characterization of a novel CDC gene (ORC1) partly homologous to CDC6 of Saccharomyces cerevisiae. Hori Y, et al. **Mol Biol Cell** 1996 Mar;7(3):409-18

Yeast counterparts of subunits S5a and p58 (S3) of the human 26S proteasome are encoded by two multicopy suppressors of nin1-1. Kominami K, et al. **Mol Biol Cell** 1997 Jan; 8(1):171-87

A novel signal transduction pathway in Saccharomyces cerevisiae defined by Snf3-regulated expression of HXT6. Liang H, et al. **Mol Biol Cell** 1996 Dec;7(12):1953-66

GLE2, a Saccharomyces cerevisiae homologue of the Schizosaccharomyces pombe export factor RAE1, is required for nuclear pore complex structure and function. Murphy R, et al. **Mol Biol Cell** 1996 Dec;7(12):1921-37

Three-dimensional analysis and ultrastructural design of mitotic spindles from the cdc20 mutant of Saccharomyces cerevisiae. O'Toole ET, et al. **Mol Biol Cell** 1997 Jan; 8(1):1-11

Cloning and functional characterization of mammalian homologues of the COPII component Sec23. Paccaud JP, et al. **Mol Biol Cell** 1996 Oct;7(10):1535-46

Abnormal kinetochore structure activates the spindle assembly checkpoint in budding yeast. Pangilinan F, et al. **Mol Biol Cell** 1996 Aug;7(8):1195-208

Evolution of mitochondrial genomes in yeast: a study of mitochondrial divergence in two closely related species, Saccharomyces douglasii and Saccharomyces cerevisiae [letter] Cardazzo B, et al. **Mol Biol Evol** 1997 Feb; 14(2):200-3

Screening the p53 status of human cell lines using a yeast functional assay. Jia LQ, et al. **Mol Carcinog** 1997 Aug; 19(4):243-53

Identification of proteins that interact with a protein of interest: applications of the yeast two-hybrid system. Gietz RD, et al. **Mol Cell Biochem** 1997 Jul;172(1-2):67-79

The dual role of mRNA half-lives in the expression of the yeast ALG7 gene. Lennon K, et al. **Mol Cell Biochem** 1997 Apr;169(1-2):95-106

Saccharomyces cerevisiae DNA repair processes: an update. Ramotar D, et al. **Mol Cell Biochem** 1996 May 10; 158(1):65-75 (98 ref.)

Yeast Pab1 interacts with Rna15 and participates in the control of the poly(A) tail length in vitro. Amrani N, et al. **Mol Cell Biol** 1997 Jul;17(7):3694-701

Molecular analysis of the SNF2/SWI2 protein family member MOT1, an ATP-driven enzyme that dissociates TATA-binding protein from DNA. Auble DT, et al. **Mol Cell Biol** 1997 Aug;17(8):4842-51

Domains required for dimerization of yeast Rad6 ubiquitin-conjugating enzyme and Rad18 DNA binding protein. Bailly V, et al. **Mol Cell Biol** 1997 Aug; 17(8):4536-43

ZDS1 and ZDS2, genes whose products may regulate Cdc42p in Saccharomyces cerevisiae. Bi E, et al. **Mol Cell Biol** 1996 Oct;16(10):5264-75

Multicopy suppressors of phenotypes resulting from the absence of yeast VDAC encode a VDAC-like protein. Blachly-Dyson E, et al. **Mol Cell Biol** 1997 Oct; 17(10):5727-38

Met31p and Met32p, two related zinc finger proteins, are involved in transcriptional regulation of yeast sulfur amino acid metabolism. Blaiseau PL, et al. **Mol Cell Biol** 1997 Jul;17(7):3640-8

The yeast SWI-SNF complex facilitates binding of a transcriptional activator to nucleosomal sites in vivo. Burns LG, et al. **Mol Cell Biol** 1997 Aug;17(8):4811-9

The yeast nucleolar protein Cbf5p is involved in rRNA biosynthesis and interacts genetically with the RNA polymerase I transcription factor RRN3. Cadwell C, et al. **Mol Cell Biol** 1997 Oct;17(10):6175-83

The mismatch repair system reduces meiotic homeologous recombination and stimulates recombination-dependent chromosome loss. Chambers SR, et al. **Mol Cell Biol** 1996 Nov;16(11):6110-20

The NOT, SPT3, and MOT1 genes functionally interact to regulate transcription at core promoters. Collart MA. **Mol Cell Biol** 1996 Dec;16(12):6668-76

Characterization of Cdc47p-minichromosome maintenance complexes in Saccharomyces cerevisiae: identification of Cdc45p as a subunit. Dalton S, et al. **Mol Cell Biol** 1997 Oct;17(10):5867-75

Cyclic AMP-dependent protein kinase inhibits ADH2 expression in part by decreasing expression of the transcription factor gene ADR1. Dombek KM, et al. **Mol Cell Biol** 1997 Mar;17(3):1450-8

Mpp10p, a U3 small nucleolar ribonucleoprotein component required for pre-18S rRNA processing in yeast. Dunbar DA, et al. **Mol Cell Biol** 1997 Oct;17(10):5803-12

SQT1, which encodes an essential WD domain protein of Saccharomyces cerevisiae, suppresses dominant-negative mutations of the ribosomal protein gene QSR1. Eisinger DP, et al. **Mol Cell Biol** 1997 Sep;17(9):5146-55

Heat shock factor gains access to the yeast HSC82 promoter independently of other sequence-specific factors and antagonizes nucleosomal repression of basal and induced transcription. Erkine AM, et al. **Mol Cell Biol** 1996 Dec; 16(12):7004-17

Stability of a CTG/CAG trinucleotide repeat in yeast is dependent on its orientation in the genome. Freudenreich CH, et al. **Mol Cell Biol** 1997 Apr;17(4):2090-8

Frameshift intermediates in homopolymer runs are removed efficiently by yeast mismatch repair proteins. Greene CN, et al. **Mol Cell Biol** 1997 May;17(5):2844-50

The osmoregulatory pathway represses mating pathway activity in Saccharomyces cerevisiae: isolation of a FUS3 mutant that is insensitive to the repression mechanism. Hall JP, et al. **Mol Cell Biol** 1996 Dec;16(12):6715-23

A novel role for Cdc5p in DNA replication. Hardy CF, et al. **Mol Cell Biol** 1996 Dec;16(12):6775-82

Mutations in trans-acting factors affecting mRNA decapping in Saccharomyces cerevisiae. Hatfield L, et al. **Mol Cell Biol** 1996 Oct;16(10):5830-8

Identification of RNR4, encoding a second essential small subunit of ribonucleotide reductase in Saccharomyces cerevisiae. Huang M, et al. **Mol Cell Biol** 1997 Oct; 17(10):6105-13

A basic helix-loop-helix-leucine zipper transcription complex in yeast functions in a signaling pathway from mitochondria to the nucleus. Jia Y, et al. **Mol Cell Biol** 1997 Mar;17(3):1110-7

Spliceosome activation by PRP2 ATPase prior to the first transesterification reaction of pre-mRNA splicing. Kim SH, et al. **Mol Cell Biol** 1996 Dec;16(12):6810-9

Genetic analysis of the large subunit of yeast transcription factor IIE reveals two regions with distinct functions. Kuldell NH, et al. **Mol Cell Biol** 1997 Sep;17(9):5288-98

Dual requirement for the yeast MMS19 gene in DNA repair and RNA polymerase II transcription. Lauder S, et al. **Mol Cell Biol** 1996 Dec;16(12):6783-93

A transcriptional mediator protein that is required for activation of many RNA polymerase II promoters and is conserved from yeast to humans. Lee YC, et al. **Mol Cell Biol** 1997 Aug;17(8):4622-32

Saccharomyces cerevisiae G1 cyclins differ in their intrinsic functional specificities. Levine K, et al. **Mol Cell Biol** 1996 Dec;16(12):6794-803

The rRNA-processing function of the yeast U14 small nucleolar RNA can be rescued by a conserved RNA helicase-like protein. Liang WQ, et al. **Mol Cell Biol** 1997 Jul;17(7):4124-32

A novel 66-kilodalton protein complexes with Rrn6, Rrn7, and TATA-binding protein to promote polymerase I transcription initiation in Saccharomyces cerevisiae. Lin CW, et al. **Mol Cell Biol** 1996 Nov;16(11):6436-43

Functional equivalency and diversity of cis-acting elements among yeast replication origins. Lin S, et al. **Mol Cell Biol** 1997 Sep;17(9):5473-84

Cdc53p acts in concert with Cdc4p and Cdc34p to control the G1-to-S-phase transition and identifies a conserved family of proteins. Mathias N, et al. **Mol Cell Biol** 1996 Dec;16(12):6634-43

Orientation dependence of trinucleotide CAG repeat instability in Saccharomyces cerevisiae. Maurer DJ, et al. **Mol Cell Biol** 1996 Dec;16(12):6617-22

A family of cyclin-like proteins that interact with the Pho85 cyclin-dependent kinase. Measday V, et al. **Mol Cell Biol** 1997 Mar;17(3):1212-23

A lesion in the DNA replication initiation factor Mcm10 induces pausing of elongation forks through chromosomal replication origins in Saccharomyces cerevisiae. Merchant AM, et al. **Mol Cell Biol** 1997 Jun;17(6):3261-71

Instability of CAG and CTG trinucleotide repeats in Saccharomyces cerevisiae. Miret JJ, et al. **Mol Cell Biol** 1997 Jun;17(6):3382-7

The 39-kilodalton subunit of eukaryotic translation initiation factor 3 is essential for the complex's integrity and for cell viability in Saccharomyces cerevisiae. Naranda T, et al. **Mol Cell Biol** 1997 Jan;17(1):145-53

Expression of the HsOrc1 gene, a human ORC1 homolog, is regulated by cell proliferation via the E2F transcription factor. Ohtani K, et al. **Mol Cell Biol** 1996 Dec; 16(12):6977-84

Regulation of gene expression during meiosis in Saccharomyces cerevisiae: SPR3 is controlled by both ABF1 and a new sporulation control element. Ozsarac N, et al. **Mol Cell Biol** 1997 Mar;17(3):1152-9

Homologous segments in three subunits of the guanine nucleotide exchange factor eIF2B mediate translational regulation by phosphorylation of eIF2. Pavitt GD, et al. **Mol Cell Biol** 1997 Mar;17(3):1298-313

Characterization of the Wtm proteins, a novel family of Saccharomyces cerevisiae transcriptional modulators with roles in meiotic regulation and silencing. Pemberton LF, et al. **Mol Cell Biol** 1997 Aug;17(8):4830-41

Saccharomyces cerevisiae BUR6 encodes a DRAP1/NC2alpha homolog that has both positive and negative roles in transcription in vivo. Prelich G. **Mol Cell Biol** 1997 Apr;17(4):2057-65

Integration of an insertion-type transferred DNA vector from Agrobacterium tumefaciens into the Saccharomyces cerevisiae genome by gap repair. Risseeuw E, et al. **Mol Cell Biol** 1996 Oct;16(10):5924-32

CHS5, a gene involved in chitin synthesis and mating in Saccharomyces cerevisiae. Santos B, et al. **Mol Cell Biol** 1997 May;17(5):2485-96

Premature 3'-end formation of CBP1 mRNA results in the downregulation of cytochrome b mRNA during the induction of respiration in Saccharomyces cerevisiae. Sparks KA, et al. **Mol Cell Biol** 1997 Aug;17(8):4199-207

Hir1p and Hir2p function as transcriptional corepressors to regulate histone gene transcription in the Saccharomyces cerevisiae cell cycle. Spector MS, et al. **Mol Cell Biol** 1997 Feb;17(2):545-52

Repression of gene expression by an exogenous sequence element acting in concert with a heterogeneous nuclear ribonucleoprotein-like protein, Nrd1, and the putative helicase Sen1. Steinmetz EJ, et al. **Mol Cell Biol** 1996 Dec; 16(12):6993-7003

Identification of RTF1, a novel gene important for TATA site selection by TATA box-binding protein in Saccharomyces cerevisiae. Stolinski LA, et al. **Mol Cell Biol** 1997 Aug;17(8):4490-500

Genetic complementation of the Saccharomyces cerevisiae leu2 gene by the Escherichia coli leuB gene. Storms RK, et al. **Mol Cell Biol** 1981 Sep;1(9):836-42

A role for nucleoporin FG repeat domains in export of human immunodeficiency virus type 1 Rev protein and RNA from the nucleus. Stutz F, et al. **Mol Cell Biol** 1996 Dec; 16(12):7144-50

Rfc5, a replication factor C component, is required for regulation of Rad53 protein kinase in the yeast checkpoint pathway. Sugimoto K, et al. **Mol Cell Biol** 1997 Oct; 17(10):5905-14

Role of alpha2 protein in donor locus selection during mating type interconversion. Szeto L, et al. **Mol Cell Biol** 1997 Feb;17(2):751-9

Differential requirements for DNA replication in the activation of mitotic checkpoints in Saccharomyces cerevisiae. Tavormina PA, et al. **Mol Cell Biol** 1997 Jun; 17(6):3315-22

Altered replication and inverted repeats induce mismatch repair-independent recombination between highly diverged DNAs in yeast. Tran H, et al. **Mol Cell Biol** 1997 Feb;17(2):1027-36

Interaction of a Swi3 homolog with Sth1 provides evidence for a Swi/Snf-related complex with an essential function in Saccharomyces cerevisiae. Treich I, et al. **Mol Cell Biol** 1997 Apr;17(4):1768-75

The Cyc8 (Ssn6)-Tup1 corepressor complex is composed of one Cyc8 and four Tup1 subunits. Varanasi US, et al. **Mol Cell Biol** 1996 Dec;16(12):6707-14

Rnr4p, a novel ribonucleotide reductase small-subunit protein. Wang PJ, et al. **Mol Cell Biol** 1997 Oct; 17(10):6114-21

Identification of a protein that binds to the Ho endonuclease recognition sequence at the yeast mating type locus. Wang R, et al. **Mol Cell Biol** 1997 Feb;17(2):770-7

Cdc55p, the B-type regulatory subunit of protein phosphatase 2A, has multiple functions in mitosis and is required for the kinetochore/spindle checkpoint in Saccharomyces cerevisiae. Wang Y, et al. **Mol Cell Biol** 1997 Feb;17(2):620-6

The RAD7, RAD16, and RAD23 genes of Saccharomyces cerevisiae: requirement for transcription-independent nucleotide excision repair in vitro and interactions between the gene products. Wang Z, et al. **Mol Cell Biol** 1997 Feb; 17(2):635-43

Dbp3p, a putative RNA helicase in Saccharomyces cerevisiae, is required for efficient pre-rRNA processing predominantly at site A3. Weaver PL, et al. **Mol Cell Biol** 1997 Mar;17(3):1354-65

Identification and characterization of mutations in the UPF1 gene that affect nonsense suppression and the formation of the Upf protein complex but not mRNA turnover. Weng Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5491-506

The Saccharomyces cerevisiae DNA polymerase alpha catalytic subunit interacts with Cdc68/Spt16 and with Pob3, a protein similar to an HMG1-like protein. Wittmeyer J, et al. **Mol Cell Biol** 1997 Jul;17(7):4178-90

Characterization of rco-1 of Neurospora crassa, a pleiotropic gene affecting growth and development that encodes a

homolog of Tup1 of Saccharomyces cerevisiae. Yamashiro CT, et al. **Mol Cell Biol** 1996 Nov;16(11):6218–28

Yeast L double-stranded ribonucleic acid is synthesized during the G1 phase but not the S phase of the cell cycle. Zakian VA, et al. **Mol Cell Biol** 1981 Aug;1(8):673–9

Saccharomyces cerevisiae Nip7p is required for efficient 60S ribosome subunit biogenesis. Zanchin NI, et al. **Mol Cell Biol** 1997 Sep;17(9):5001–15

Genetic redundancy between SPT23 and MGA2: regulators of Ty-induced mutations and Ty1 transcription in Saccharomyces cerevisiae. Zhang S, et al. **Mol Cell Biol** 1997 Aug;17(8):4718–29

Zap1p, a metalloregulatory protein involved in zinc-responsive transcriptional regulation in Saccharomyces cerevisiae. Zhao H, et al. **Mol Cell Biol** 1997 Sep;17(9):5044–52

Human vitamin D receptor-dependent transactivation in Saccharomyces cerevisiae requires retinoid X receptor. Jin CH, et al. **Mol Endocrinol** 1996 Feb;10(2):196–205

Screening and identification of yeast sequences that cause growth inhibition when overexpressed. Akada R, et al. **Mol Gen Genet** 1997 Apr 16;254(3):267–74

Mutations in STS1 suppress the defect in 3' mRNA processing caused by the rna15-2 mutation in Saccharomyces cerevisiae. Amrani N, et al. **Mol Gen Genet** 1996 Oct 16;252(5):552–62

Heat stress transcription factors from tomato can functionally replace HSF1 in the yeast Saccharomyces cerevisiae. Boscheinen O, et al. **Mol Gen Genet** 1997 Jul;255(3):322–31

A simple signal element mediates transcription termination and mRNA 3' end formation in the DEG1 gene of Saccharomyces cerevisiae. Brambilla A, et al. **Mol Gen Genet** 1997 May;254(6):681–8

A change in sister chromatid behavior precedes nuclear division in Saccharomyces cerevisiae. Burke DJ, et al. **Mol Gen Genet** 1997 Mar 18;254(1):21–8

PRS1 is a key member of the gene family encoding phosphoribosylpyrophosphate synthetase in Saccharomyces cerevisiae. Carter AT, et al. **Mol Gen Genet** 1997 Mar 26;254(2):148–56

Measuring the toxic effects of high gene dosage on yeast cells. Daniel J. **Mol Gen Genet** 1996 Dec 13;253(3):393–6

Integration of the multiple controls regulating the expression of the arginase gene CAR1 of Saccharomyces cerevisiae in response to differentnitrogen signals: role of Gln3p, ArgRp-Mcm1p, and Ume6p. Dubois E, et al. **Mol Gen Genet** 1997 Feb 20;253(5):568–80

Saccharomyces cerevisiae mutants defective in plasmid-chromosome recombination. Elias-Arnanz M, et al. **Mol Gen Genet** 1996 Oct 16;252(5):530–8

Functional analysis of homologs of translation initiation factor 2gamma in yeast. Erickson FL, et al. **Mol Gen Genet** 1997 Feb 27;253(6):711–9

SOM 1, a small new gene required for mitochondrial inner membrane peptidase function in Saccharomyces cerevisiae. Esser K, et al. **Mol Gen Genet** 1996 Sep 25;252(4):437–45

Rig2, a RING finger protein that interacts with the Kin28/Ccl1 CTD kinase in yeast. Faye G, et al. **Mol Gen Genet** 1997 Aug;255(5):460–6

Illegitimate integration of single-stranded DNA in Saccharomyces cerevisiae. Gjuračić K, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):173–81

Cytoplasmic tyrosyl-tRNA synthetase rescues the defect in mitochondrial genome maintenance caused by the nuclear mutation mgm104-1 in the yeast Saccharomyces cerevisiae. Guan MX. **Mol Gen Genet** 1997 Aug;255(5):525–32

Genetic interaction of DED1 encoding a putative ATP-dependent RNA helicase with SRM1 encoding a mammalian RCC1 homolog in Saccharomyces cerevisiae. Hayashi N, et al. **Mol Gen Genet** 1996 Nov 27; 253(1–2):149–56

Respiration and low cAMP-dependent protein kinase activity are required for high-level expression of the peroxisomal thiolase gene in Saccharomyces cerevisiae. Igual JC, et al. **Mol Gen Genet** 1996 Sep 25;252(4):446–55

Mutants that show increased sensitivity to hydrogen peroxide reveal an important role for the pentose phosphate pathway in protection of yeast against oxidative stress. Juhnke H, et al. **Mol Gen Genet** 1996 Sep 25;252(4):456–64

A novel yeast gene, RHK1, is involved in the synthesis of the cell wall receptor for the HM-1 killer toxin that inhibits beta-1,3-glucan synthesis. Kimura T, et al. **Mol Gen Genet** 1997 Mar 26;254(2):139–47

Transcription of mutS and mutL-homologous genes in Saccharomyces cerevisiae during the cell cycle. Kramer W, et al. **Mol Gen Genet** 1996 Sep 13;252(3):275–83

In vitro mutagenesis of the mitochondrial leucyl tRNA synthetase of Saccharomyces cerevisiae shows that the suppressor activity of the mutant proteins is related to the splicing function of the wild-type protein. Li GY, et al. **Mol Gen Genet** 1996 Oct 28;252(6):667–75

UAS(MAG1), a yeast cis-acting element that regulates the expression of MAG1, is located within the protein coding region of DDI1. Liu Y, et al. **Mol Gen Genet** 1997 Aug; 255(5):533–42

Characterization of a promoter mutation in the CYP3 gene of Saccharomyces cerevisiae which cancels regulation by Cyp1p (Hap1p) without affecting its binding site. Lodi T, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):103–10

Mutations occurring at the human minisatellite MS1 integrated in haploid yeast are similar to MS1 mutations in humans. Maleki S, et al. **Mol Gen Genet** 1997 Mar 18; 254(1):37–42

Examination of the intron in the meiosis-specific recombination gene REC114 in Saccharomyces. Malone RE, et al. **Mol Gen Genet** 1997 Jul;255(4):410–9

Gene isolation in Arabidopsis thaliana by conditional overexpression of cDNAs toxic to Saccharomyces cerevisiae: identification of a novel early response zinc-finger gene. Martínez-García M, et al. **Mol Gen Genet** 1996 Oct 16;252(5):587–96

Characterization of a novel DNA damage-inducible gene of Saccharomyces cerevisiae, DIN7, which is a structural homolog of the RAD2 and RAD27 DNA repair genes. Mieczkowski PA, et al. **Mol Gen Genet** 1997 Feb 27; 253(6):655–65

Regulation by tetracycline of gene expression in Saccharomyces cerevisiae. Nagahashi S, et al. **Mol Gen Genet** 1997 Jul;255(4):372–5

Analyses of Saccharomyces cerevisiae Cdc7 kinase point mutants: dominant-negative inhibition of DNA replication on overexpression of kinase-negative Cdc7 proteins. Ohtoshi A, et al. **Mol Gen Genet** 1997 May 20;254(5):562–70

The MBR1 gene from Saccharomyces cerevisiae is activated by and required for growth under sub-optimal conditions. Reisdorf P, et al. **Mol Gen Genet** 1997 Jul;255(4):400–9

Enhancement of Ty transposition at the ADH4 and ADH2 loci in meiotic yeast cells. Ribeiro-dos-Santos G, et al. **Mol Gen Genet** 1997 May 20;254(5):555–61

SLS1, a new Saccharomyces cerevisiae gene involved in mitochondrial metabolism, isolated as a syntheticlethal in association with an SSM4 deletion. Rouillard JM, et al. **Mol Gen Genet** 1996 Oct 28;252(6):700–8

Aluminum-sensitive mutants of Saccharomyces cerevisiae. Schott EJ, et al. **Mol Gen Genet** 1997 Mar 18;254(1):63–72

Inducible nucleotide excision repair (NER) of UV-induced cyclobutane pyrimidine dimers in the cell cycle of the budding yeast Saccharomyces cerevisiae: evidence that inducible NER is confined to the G1 phase of the mitotic cell cycle. Scott AD, et al. **Mol Gen Genet** 1997 Mar 18; 254(1):43–53

PWP2, a member of the WD-repeat family of proteins, is an essential Saccharomyces cerevisiae gene involved in cell separation. Shafaatian R, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):101–14

Inactivation of OGG1 increases the incidence of G . C—>T . A transversions in Saccharomyces cerevisiae: evidence for endogenous oxidative damage to DNA in eukaryotic cells. Thomas D, et al. **Mol Gen Genet** 1997 Mar 26; 254(2):171–8

Budding yeast Rad50, Mre11, Xrs2, and Hdf1, but not Rad52, are involved in the formation of deletions on a dicentric plasmid. Tsukamoto Y, et al. **Mol Gen Genet** 1997 Aug; 255(5):543–7

Transcription elongation factor S-II is not required for transcription-coupled repair in yeast. Verhage RA, et al. **Mol Gen Genet** 1997 Apr 16;254(3):284–90

UBI4, the polyubiquitin gene of Saccharomyces cerevisiae, is a heat shock gene that is also subject to catabolite derepression control. Watt R, et al. **Mol Gen Genet** 1997 Jan 27;253(4):439–47

Regulation of genes encoding subunits of the trehalose synthase complex in Saccharomyces cerevisiae: novel variations of STRE-mediated transcription control? Winderickx J, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):470–82

Complementation of a yeast top2ts mutation by a cDNA encoding rat DNA topoisomerase II alpha. Yoon JH, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):81–8

Cloning of a second gene encoding 5-phosphofructo-2-kinase in yeast, and characterization of mutant strains without fructose-2,6-bisphosphate. Boles E, et al. **Mol Microbiol** 1996 Apr;20(1):65–76

Highly conserved toxicity of Saccharomyces cerevisiae Rap1p. Chambers A. **Mol Microbiol** 1996 Nov;22(3):449–58

Regulation by low temperatures and anaerobiosis of a yeast gene specifying a putative GPI-anchored plasma membrane protein [corrected] [published erratum appears in Mol Microbiol 1996 Jul;21(2):431] Donzeau M, et al. **Mol Microbiol** 1996 Apr;20(2):449–59

Role of the conserved carboxy-terminal alpha-helix of Rad6p in ubiquitination and DNA repair. Dor Y, et al. **Mol Microbiol** 1996 Sep;21(6):1197–206

Stationary-phase regulation of the Saccharomyces cerevisiae SOD2 gene is dependent on additive effects of HAP2/3/4/5- and STRE-binding elements. Flattery-O'Brien JA, et al. **Mol Microbiol** 1997 Jan; 23(2):303–12

Signalling pathways leading to transcriptional regulation of genes involved in the activation of glycolysis in yeast. Gonçalves PM, et al. **Mol Microbiol** 1997 Aug;25(3):483–93

Yeast glutathione reductase is required for protection against oxidative stress and is a target gene for yAP-1 transcriptional regulation. Grant CM, et al. **Mol Microbiol** 1996 Jul;21(1):171–9

ERA, a novel cis-acting element required for autoregulation and ethanol repression of PDC1 transcription in Saccharomyces cerevisiae. Liesen T, et al. **Mol Microbiol** 1996 Aug;21(3):621–32

Bidirectional regulation of two DNA-damage-inducible genes, MAG1 and DDI1, from Saccharomyces cerevisiae. Liu Y, et al. **Mol Microbiol** 1997 Feb;23(4):777–89

Organization of the Saccharomyces cerevisiae actin gene UAS: functional significance of reiterated REB1 binding sites and AT-rich elements. McLean M, et al. **Mol Microbiol** 1995 Nov;18(4):605–14

The ATP-binding cassette multidrug transporter Snq2 of Saccharomyces cerevisiae: a novel target for the transcription factors Pdr1 and Pdr3. Mahé Y, et al. **Mol Microbiol** 1996 Apr;20(1):109–17

Characterization of SKM1, a Saccharomyces cerevisiae gene encoding a novel Ste20/PAK-like protein kinase. Martín H, et al. **Mol Microbiol** 1997 Feb;23(3):431–44

Identification of proteolytic cleavage sites within the gag-analogue protein of Ty1 virus-like particles. Martin-Rendon E, et al. **Mol Microbiol** 1996 Dec; 22(5):1035–43

Normal processing of AP sites in Apn1-deficient Saccharomyces cerevisiae is restored by Escherichia coli genes expressing either exonuclease III or endonuclease III. Masson JY, et al. **Mol Microbiol** 1997 May;24(4):711–21

Gzf3p, a fourth GATA factor involved in nitrogen-regulated transcription in Saccharomyces cerevisiae. Soussi-Boudekou S, et al. **Mol Microbiol** 1997 Mar; 23(6):1157–68

Amino acid-dependent regulation of the Saccharomyces cerevisiae GSH1 gene by hydrogen peroxide. Stephen DW, et al. **Mol Microbiol** 1997 Jan;23(2):203–10

In Saccharomyces cerevisiae a short amino acid sequence facilitates excretion in the growth medium of periplasmic proteins. Venturini M, et al. **Mol Microbiol** 1997 Mar; 23(5):997–1007

Anti-recombinogenic and convertible co-mutagenic effects of (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVDU) and other 5-substituted pyrimidine nucleoside analogs in S. cerevisiae MP1. Fahrig R. **Mutat Res** 1996 Nov 11; 372(1):133–9

Genotoxicity of ethyl carbamate (urethane) in Salmonella, yeast and human lymphoblastoid cells. Hübner P, et al. **Mutat Res** 1997 Apr 24;390(1–2):11–9

Damage-induced ectopic recombination in the yeast Saccharomyces cerevisiae. Kupiec M, et al. **Mutat Res** 1997 Jun 9;384(1):33–44

Structural and mechanistic bases for the induction of mitotic chromosomal loss and duplication ('malsegregation') in the yeast Saccharomyces cerevisiae: relevance to human carcinogenesis and developmental toxicology. Liu M, et al. **Mutat Res** 1997 Mar 21;374(2):209–31

Modulation of mitomycin C mutagenicity on Saccharomyces cerevisiae by glutathione, cytochrome P-450, and mitochondria interactions. Rossi C, et al. **Mutat Res** 1997 Apr 24;390(1–2):113–20

The Saccharomyces cerevisiae RAD7 and RAD16 genes are required for inducible excision of endonuclease III sensitive-sites, yet are not needed for the repair of these lesions following a single UV dose. Scott AD, et al. **Mutat Res** 1997 Jan 31;383(1):39–48

Different repair of O6-methylguanine occurring in DNA modified by MMS in vivo or in vitro. Sledziewska-Gójska E, et al. **Mutat Res** 1997 Jan 31;383(1):31–7

Utility of a test for chromosomal malsegregation in Saccharomyces cerevisiae strain D61.M for the detection of antianeugens: test of the model combination of chlorophyllin and nocodazole. Verma A, et al. **Mutat Res** 1996 Oct 28;358(1):73–80

Yeast surface display for screening combinatorial polypeptide libraries. Boder ET, et al. **Nat Biotechnol** 1997 Jun; 15(6):553–7

Entering the total-genomic era [editorial] **Nat Genet** 1997 Feb;15(2):111–2

Looms to weave genomic nets [news; comment] Brent R. **Nat Genet** 1997 Jul;16(3):216–7. Comment on: Nat Genet 1997 Jul;16(3):277–81.

Toward a functional analysis of the yeast genome through exhaustive two-hybrid screens [see comments] Fromont-Racine M, et al. **Nat Genet** 1997 Jul;16(3):277–82 . Comment in: Nat Genet 1997 Jul;16(3):216–7.

HIP1, a human homologue of S. cerevisiae Sla2p, interacts with membrane-associated huntingtin in the brain. Kalchman MA, et al. **Nat Genet** 1997 May;16(1):44–53

Quantitative phenotypic analysis of yeast deletion mutants using a highly parallel molecular bar-coding strategy [see comments] Shoemaker DD, et al. **Nat Genet** 1996 Dec; 14(4):450–6. Comment in: Nat Genet 1996 Dec;14(4):367–70.

Telomeric transcriptional silencing in a natural context [letter] Vega-Palas MA, et al. **Nat Genet** 1997 Mar; 15(3):232–3

The yeast genome directory. **Nature** 1997 May 29;387(6632 Suppl):5

The nucleotide sequence of Saccharomyces cerevisiae chromosome XIII. Bowman S, et al. **Nature** 1997 May 29; 387(6632 Suppl):90–3

The nucleotide sequence of Saccharomyces cerevisiae chromosome XVI. Bussey H, et al. **Nature** 1997 May 29; 387(6632 Suppl):103–5

Genetic and physical maps of Saccharomyces cerevisiae. Cherry JM, et al. **Nature** 1997 May 29;387(6632 Suppl):67–73

The nucleotide sequence of Saccharomyces cerevisiae chromosome IX. Churcher C, et al. **Nature** 1997 May 29; 387(6632 Suppl):84–7

The first genome from the third domain of life [news] Clayton RA, et al. **Nature** 1997 May 29;387(6632):459–62

Biology's new Rosetta stone [letter] Das S, et al. **Nature** 1997 Jan 2;385(6611):29–30

SACCHAROMYCES CEREVISIAE

The nucleotide sequence of Saccharomyces cerevisiae chromosome V. Dietrich FS, et al. **Nature** 1997 May 29; 387(6632 Suppl):78–81

The nucleotide sequence of Saccharomyces cerevisiae chromosome XV. Dujon B, et al. **Nature** 1997 May 29; 387(6632 Suppl):98–102

The nucleotide sequence of Saccharomyces cerevisiae chromosome IV. Jacq C, et al. **Nature** 1997 May 29; 387(6632 Suppl):75–8

The nucleotide sequence of Saccharomyces cerevisiae chromosome XII. Johnston M, et al. **Nature** 1997 May 29; 387(6632 Suppl):87–90

Repair of DNA loops involves DNA-mismatch and nucleotide-excision repair proteins. Kirkpatrick DT, et al. **Nature** 1997 Jun 26;387(6636):929–31

Overview of the yeast genome [published erratum appears in Nature 1997 Jun 12;387(6634):737] Mewes HW, et al. **Nature** 1997 May 29;387(6632 Suppl):7–65

The nucleotide sequence of Saccharomyces cerevisiae chromosome XIV and its evolutionary implications. Philippsen P, et al. **Nature** 1997 May 29;387(6632 Suppl):93–8

The nucleotide sequence of Saccharomyces cerevisiae chromosome VII. Tettelin H, et al. **Nature** 1997 May 29; 387(6632 Suppl):81–4

Silencing factors participate in DNA repair and recombination in Saccharomyces cerevisiae [see comments] Tsukamoto Y, et al. **Nature** 1997 Aug 28;388(6645):900–3 . Comment in: Nature 1997 Aug 28;388(6645):829–30.

Molecular evidence for an ancient duplication of the entire yeast genome. Wolfe KH, et al. **Nature** 1997 Jun 12; 387(6634):708–13

The RAD5 gene product is involved in the avoidance of non-homologous end-joining of DNA double strand breaks in the yeast Saccharomyces cerevisiae. Ahne F, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):743–9

Cloning and characterization of HUPF1, a human homolog of the Saccharomyces cerevisiae nonsense mRNA-reducing UPF1 protein. Applequist SE, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):814–21

The homeodomain protein Pho2 and the basic-helix-loop-helix protein Pho4 bind DNA cooperatively at the yeast PHO5 promoter. Barbarić S, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4479–86

Variations of the C2H2 zinc finger motif in the yeast genome and classification of yeast zinc finger proteins. Böhm S, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2464–9

mRNA turnover in yeast promoted by the MATalpha1 instability element. Caponigro G, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4304–12

The Ogg1 protein of Saccharomyces cerevisiae: a 7,8-dihydro-8-oxoguanine DNA glycosylase/AP lyase whose lysine 241 is a critical residue for catalytic activity. Girard PM, et al. **Nucleic Acids Res** 1997 Aug 15; 25(16):3204–11

Characterization of the basal inhibitor of class II transcription NC2 from Saccharomyces cerevisiae. Goppelt A, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4450–5

Allelism of PSO4 and PRP19 links pre-mRNA processing with recombination and error-prone DNA repair in Saccharomyces cerevisiae. Grey M, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4009–14

Matrix-assisted laser desorption/ionisation mass spectrometry of transfer ribonucleic acids isolated from yeast. Gruic-Sovulj I, et al. **Nucleic Acids Res** 1997 May 1;25(9):1859–61

Pleiotropic effects of intron removal on base modification pattern of yeast tRNAPhe: an in vitro study. Jiang HQ, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2694–701

Stabilization of yeast artificial chromosome clones in a rad54-3 recombination-deficient host strain. Le Y, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1248–53

The reverse two-hybrid system: a genetic scheme for selection against specific protein/protein interactions. Leanna CA, et al. **Nucleic Acids Res** 1996 Sep 1; 24(17):3341–7

A yeast cap binding protein complex (yCBC) acts at an early step in pre-mRNA splicing. Lewis JD, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3332–6

The 70 kDa subunit of replication protein A is required for the G1/S and intra-S DNA damage checkpoints in budding yeast. Longhese MP, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3533–7

Global alterations in chromatin accessibility associated with loss of SIN4 function. Macatee T, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1240–7

Rapid isolation of yeast plasmids as native chromatin. Martinez-Campa C, et al. **Nucleic Acids Res** 1997 May 1; 25(9):1872–3

MIPS: a database for protein sequences, homology data and yeast genome information. Mewes HW, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):28–30

Saccharomyces cerevisiae IRE2/HAC1 is involved in IRE1-mediated KAR2 expression. Nikawa J, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4222–6

Genetic evidence for selective degradation of RNA polymerase subunits by the 20S proteasome in Saccharomyces cerevisiae. Nouraini S, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3570–9

Recombination-mediated PCR-directed plasmid construction in vivo in yeast. Oldenburg KR, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):451–2

Yeast Protein database (YPD): a database for the complete proteome of Saccharomyces cerevisiae. Payne WE, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):57–62

Multiplex Cre/lox recombination permits selective site-specific DNA targeting to both a natural and an engineered site in the yeast genome. Sauer B. **Nucleic Acids Res** 1996 Dec 1;24(23):4608–13

A shuttle system for transfer of YACs between yeast and mammalian cells. Simpson K, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4693–9

Transcription-coupled and global genome repair in the Saccharomyces cerevisiae RPB2 gene at nucleotide resolution. Tijsterman M, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3499–506

Pat1: a topoisomerase II-associated protein required for faithful chromosome transmission in Saccharomyces cerevisiae. Wang X, et al. **Nucleic Acids Res** 1996 Dec 1; 24(23):4791–7

Functional and physical interaction between the yeast splicing factors Slu7 and Prp18. Zhang X, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2146–52

The Saccharomyces retrotransposon Ty5 influences the organization of chromosome ends. Zou S, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4825–31

Similarities and differences in tRNA identity between Escherichia coli and Saccharomyces cerevisiae: evolutionary conservation and divergence. Nameki N, et al. **Nucleic Acids Symp Ser** 1995;(34):205–6

Determining mutational fingerprints at the human p53 locus with a yeast functional assay: a new tool for molecular epidemiology. Inga A, et al. **Oncogene** 1997 Mar 20; 14(11):1307–13

The use of sonication for the efficient delivery of plasmid DNA into cells. Wyber JA, et al. **Pharm Res** 1997 Jun; 14(6):750–6

A pollen-, ovule-, and early embryo-specific poly(A) binding protein from Arabidopsis complements essential functions in yeast. Belostotsky DA, et al. **Plant Cell** 1996 Aug;8(8):1261–75

Salt stress-induced proline transporters and salt stress-repressed broad specificity amino acid permeases identified by suppression of a yeast amino acid permease-targeting mutant. Rentsch D, et al. **Plant Cell** 1996 Aug;8(8):1437–46

Modified plant plasma membrane H(+)-ATPase with improved transport coupling efficiency identified by mutant selection in yeast. Baunsgaard L, et al. **Plant J** 1996 Sep; 10(3):451–8

The CDC6 gene is required for centromeric, episomal, and 2-microns plasmid stability in the yeast Saccharomyces cerevisiae. Storici F, et al. **Plasmid** 1995 Nov;34(3):184–97

Mso1p: a yeast protein that functions in secretion and interacts physically and genetically with Sec1p. Aalto MK, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7331–6

Changes of telomere length cause reciprocal changes in the lifespan of mother cells in Saccharomyces cerevisiae. Austriaco NR Jr, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9768–72

DNA double-strand-break sensitivity, DNA replication, and cell cycle arrest phenotypes of Ku-deficient Saccharomyces cerevisiae. Barnes G, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):867–72

Clustering of meiotic double-strand breaks on yeast chromosome III. Baudat F, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5213–8

Double strand breaks at the HIS2 recombination hot spot in Saccharomyces cerevisiae. Bullard SA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13054–9

Integration of Agrobacterium tumefaciens T-DNA in the Saccharomyces cerevisiae genome by illegitimate recombination. Bundock P, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15272–5

Human and Saccharomyces cerevisiae dolichol phosphate mannose synthases represent two classes of the enzyme, but both function in Schizosaccharomyces pombe. Colussi PA, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22; 94(15):7873–8

Dual roles for DNA sequence identity and the mismatch repair system in the regulation of mitotic crossing-over in yeast. Datta A, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9757–62

Cell cycle-regulated generation of single-stranded G-rich DNA in the absence of telomerase. Dionne I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13902–7

Replication infidelity during a single cycle of Ty1 retrotransposition [see comments] Gabriel A, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7767–71. Comment in: Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7427–31.

Lack of chromosome territoriality in yeast: promiscuous rejoining of broken chromosome ends. Haber JE, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13949–54

Transcription factor TFIIH and DNA endonuclease Rad2 constitute yeast nucleotide excision repair factor 3: implications for nucleotide excision repair and Cockayne syndrome. Habraken Y, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10718–22

mcm5/cdc46-bob1 bypasses the requirement for the S phase activator Cdc7p. Hardy CF, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3151–5

Role of the casein kinase I isoform, Hrr25, and the cell cycle-regulatory transcription factor, SBF, in the transcriptional response to DNA damage in Saccharomyces cerevisiae. Ho U, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):581–6

The Dr1/DRAP1 heterodimer is a global repressor of transcription in vivo. Kim S, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):820–5

The k43 gene, required for chorion gene amplification and diploid cell chromosome replication, encodes the Drosophila homolog of yeast origin recognition complex subunit 2. Landis G, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3888–92

ECA1 complements yeast mutants defective in Ca2+ pumps and encodes an endoplasmic reticulum-type Ca2+-ATPase in Arabidopsis thaliana. Liang F, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8579–84

Identification of a new mammalian centrin gene, more closely related to Saccharomyces cerevisiae CDC31 gene. Middendorp S, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9141–6

An essential cell division gene of Drosophila, absent from Saccharomyces, encodes an unusual protein with tubulin-like and myosin-like peptide motifs. Miklos GL, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5189–94

Yeast homologues of higher eukaryotic TFIID subunits. Moqtaderi Z, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14654–8

DNA strand annealing is promoted by the yeast Rad52 protein. Mortensen UH, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10729–34

The yeast peptide-methionine sulfoxide reductase functions as an antioxidant in vivo. Moskovitz J, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9585–9

Mammalian orthologues of a yeast regulator of nonsense transcript stability. Perlick HA, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10928–32

Cloning and characterization of hOGG1, a human homolog of the OGG1 gene of Saccharomyces cerevisiae. Radicella JP, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22; 94(15):8010–5

A multipurpose transposon system for analyzing protein production, localization, and function in Saccharomyces cerevisiae. Ross-Macdonald P, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):190–5

HDA1 and RPD3 are members of distinct yeast histone deacetylase complexes that regulate silencing and transcription. Rundlett SE, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14503–8

Chromatin assembly in a yeast whole-cell extract. Schultz MC, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19; 94(17):9034–9

Linking genome and proteome by mass spectrometry: large-scale identification of yeast proteins from two dimensional gels. Shevchenko A, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14440–5

Role of Saccharomyces cerevisiae Msh2 and Msh3 repair proteins in double-strand break-induced recombination. Sugawara N, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9214–9

Transitions in the coupling of transcription and nucleotide excision repair within RNA polymerase II-transcribed genes of Saccharomyces cerevisiae. Tijsterman M, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8027–32

Identification and characterization of Saccharomyces cerevisiae EXO1, a gene encoding an exonuclease that interacts with MSH2. Tishkoff DX, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7487–92

The cyclin-dependent kinase inhibitor p40SIC1 imposes the requirement for Cln G1 cyclin function at Start. Tyers M. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7772–6

Reverse two-hybrid and one-hybrid systems to detect dissociation of protein-protein and DNA-protein interactions [see comments] Vidal M, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10315–20. Comment in: Proc Natl Acad Sci U S A 1996 Sep 17;93(19):10001–3.

Genetic characterization of a mammalian protein-protein interaction domain by using a yeast reverse two-hybrid system [see comments] Vidal M, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10321–6. Comment in: Proc Natl Acad Sci U S A 1996 Sep 17;93(19):10001–3.

Degradation of CYC1 mRNA in the yeast Saccharomyces cerevisiae does not require translation. Yun DF, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8895–900

Stress proteins on the yeast cell surface determine resistance to osmotin, a plant antifungal protein. Yun DJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):7082–7

Silent chromatin determines target preference of the Saccharomyces retrotransposon Ty5. Zou S, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7412–6

Molecular genetics of yeast TCA cycle isozymes. McAlister-Henn L, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:317–39 (89 ref.)

Overexpression and rapid purification of biologically active yeast proliferating cell nuclear antigen. Biswas EE, et al. **Protein Expr Purif** 1995 Dec;6(6):763–70

Overexpression and characterization of Aspergillus awamori wild-type and mutant glucoamylase secreted by the methylotrophic yeast Pichia pastoris: comparison with wild-type recombinant glucoamylase produced using Saccharomyces cerevisiae and Aspergillus niger as hosts. Fierobe HP, et al. **Protein Expr Purif** 1997 Mar;9(2):159–70

Saccharomyces cerevisiae mitochondria lack a bacterial-type sec machinery. Glick BS, et al. **Protein Sci** 1996 Dec; 5(12):2651-2

Expression and crystallization of the yeast Hsp82 chaperone, and preliminary X-ray diffraction studies of the amino-terminal domain. Prodromou C, et al. **Proteins** 1996 Aug;25(4):517-22

New cell cycle-regulated genes in the yeast Saccharomyces cerevisiae. Schuster T, et al. **Recent Results Cancer Res** 1997;143:251-61 (42 ref.)

Production of adrenergic receptors in yeast. Sizmann D, et al. **Receptors Channels** 1996;4(3):197-203

A novel protein shared by RNase MRP and RNase P. Chu S, et al. **RNA** 1997 Apr;3(4):382-91

Variable regions V13 and V3 of Saccharomyces cerevisiae contain structural features essential for normal biogenesis and stability of 5.8S and 25S rRNA. Jeeninga RE, et al. **RNA** 1997 May;3(5):476-88

YRA1, an essential Saccharomyces cerevisiae gene, encodes a novel nuclear protein with RNA annealing activity. Portman DS, et al. **RNA** 1997 May;3(5):527-37

Polysome-associated mRNAs are substrates for the nonsense-mediated mRNA decay pathway in Saccharomyces cerevisiae. Zhang S, et al. **RNA** 1997 Mar; 3(3):234-44

Effect of nucleotides 37 and 38 on cleavage of tRNAPhe precursors. Liu J, et al. **Sci China C Life Sci** 1996 Jun; 39(3):243-50

Yeast as a model organism [comment] Botstein D, et al. **Science** 1997 Aug 29;277(5330):1259-60. Comment on: Science 1997 Aug 29;277(5330):1313-6.

Requirement of the DEAD-Box protein ded1p for messenger RNA translation. Chuang RY, et al. **Science** 1997 Mar 7; 275(5305):1468-71

The origin recognition complex, SIR1, and the S phase requirement for silencing. Fox CA, et al. **Science** 1997 Jun 6;276(5318):1547-51

Life with 6000 genes [see comments] Goffeau A, et al. **Science** 1996 Oct 25;274(5287):546, 563-7 (86 ref.). Comment in: Science 1997 Feb 21;275(5303):1051-2.

Selecting the needle. Sikorski R, et al. **Science** 1997 Aug 15;277(5328):975

Accelerated aging and nucleolar fragmentation in yeast sgs1 mutants [see comments] Sinclair DA, et al. **Science** 1997 Aug 29;277(5330):1313-6. Comment in: Science 1997 Aug 29;277(5330):1259-6.

Functional analysis of the genes of yeast chromosome V by genetic footprinting. Smith V, et al. **Science** 1996 Dec 20; 274(5295):2069-74

Use of the yeast one-hybrid system to screen for mutations in the ligand-binding domain of the estrogen receptor. Bush SM, et al. **Steroids** 1996 Mar;61(3):102-9

Secretion of active Fc fragments of immunoglobulin E directed by the yeast invertase signal sequence in mammalian cells. Kamiya T, et al. **Tohoku J Exp Med** 1996 Dec;180(4):297-308

3'-end-forming signals of yeast mRNA. Guo Z, et al. **Trends Biochem Sci** 1996 Dec;21(12):477-81 (41 ref.)

False positives from the yeast two-hybrid system. Hengen PN. **Trends Biochem Sci** 1997 Jan;22(1):33-4

The protein kinases of budding yeast: six score and more. Hunter T, et al. **Trends Biochem Sci** 1997 Jan;22(1):18-22 (39 ref.)

A likely histone H2A.F/Z variant in Saccharomyces cerevisiae. Jackson JD, et al. **Trends Biochem Sci** 1996 Dec; 21(12):466-7

Histone H1 in Saccharomyces cerevisiae: a double mystery solved? [see comments] Landsman D. **Trends Biochem Sci** 1996 Aug;21(8):287-8. Comment in: Trends Biochem Sci 1997 Feb;22(2):49.

Making sense of nonsense in yeast. Ruiz-Echevarria MJ, et al. **Trends Biochem Sci** 1996 Nov;21(11):433-8 (31 ref.)

H1 histone in yeast [letter; comment] Zlatanova J. **Trends Biochem Sci** 1997 Feb;22(2):49. Comment on: Trends Biochem Sci 1996 Aug;21(8):287-8.

The yeast genome project: what did we learn? Dujon B. **Trends Genet** 1996 Jul;12(7):263-70 (42 ref.)

Genetic analysis of aging in Saccharomyces cerevisiae. Kennedy BK, et al. **Trends Genet** 1996 Sep;12(9):355-9 (45 ref.)

At the heart of the budding yeast cell cycle. Nasmyth K. **Trends Genet** 1996 Oct;12(10):405-12 (68 ref.)

An uncertain silence [see comments] Sherman JM, et al. **Trends Genet** 1997 Aug;13(8):308-13 (53 ref.). Comment in: Trends Genet 1997 Aug;13(8):293-5.

Mechanisms of transcriptional activation in vivo: two steps forward. Stargell LA, et al. **Trends Genet** 1996 Aug; 12(8):311-5 (54 ref.)

The Saccharomyces cerevisiae genome on the World Wide Web. Walsh S, et al. **Trends Genet** 1996 Jul;12(7):276-7

Expression of human cytochrome P4501A1 (CYP1A1) in Saccharomyces cerevisiae inhibits cell division. Beresford AP, et al. **Xenobiotica** 1996 Oct;26(10):1013-23

Sequence analysis of a 12 801 bp fragment of the left arm of yeast chromosome XV containing a putative 6-phosphofructo-2-kinase gene, a gene for a possible glycophospholipid-anchored surface protein and six other open reading frames. Aldea M, et al. **Yeast** 1996 Sep;12(10B Suppl):1053-8

Analysis of the structure of a natural alternating d(TA)n sequence in yeast chromatin. Aranda A, et al. **Yeast** 1997 Mar 30;13(4):313-26

DNA sequence analysis of a 23,002 bp DNA fragment of the right arm of Saccharomyces cerevisiae chromosome VII. Arroyo J, et al. **Yeast** 1997 Mar 30;13(4):357-63

Review: to bud until death: the genetics of ageing in the yeast, Saccharomyces. Austriaco NR Jr. **Yeast** 1996 Jun 15;12(7):623-30 (36 ref.)

The nucleotide sequence of a 39 kb segment of yeast chromosome IV: 12 new open reading frames, nine known genes and one genes for Gly-tRNA. Bahr A, et al. **Yeast** 1997 Feb;13(2):163-9

Sequencing analysis of a 4.1 kb subtelomeric region from yeast chromosome IV identifies HXT15, a new member of the hexose transporter family. Bargues M, et al. **Yeast** 1996 Sep;12(10B Suppl):1005-11

A computer filtering method to drive out tiny genes from the yeast genome. Barry C, et al. **Yeast** 1996 Sep 15; 12(11):1163-78

Construction of a yeast strain deleted for the TRP1 promoter and coding region that enhances the efficiency of the polymerase chain reaction-disruption method. Baudin-Baillieu A, et al. **Yeast** 1997 Mar 30;13(4):353-6

Characterization of the SAC3 gene of Saccharomyces cerevisiae. Bauer A, et al. **Yeast** 1996 Aug;12(10):965-75

Saccharomyces cerevisiae cell lysis mutations cly5 and cly7 define temperature-sensitive alleles of PKC1, the gene encoding yeast protein kinase C. Baymiller J, et al. **Yeast** 1997 Mar 30;13(4):305-12

Tandemly repeated 147 bp elements cause structural and functional variation in divergent MAL promoters of Saccharomyces cerevisiae. Bell PJ, et al. **Yeast** 1997 Sep 30;13(12):1135-44

Corrigendum to: the sequence of a 44 458 bp fragment located on the left arm of chromosome XIV from Saccharomyces cervisiae. Bergez P, et al. **Yeast** 1996 Mar 15;12(3):297

Isolation of three contiguous genes, ACR1, ACR2 and ACR3, involved in resistance to arsenic compounds in the yeast Saccharomyces cerevisiae. Bobrowicz P, et al. **Yeast** 1997 Jul;13(9):819-28

Analysis of a 35.6 kb region on the right arm of Saccharomyces cerevisiae chromosome XV. Bordonné R, et al. **Yeast** 1997 Jan;13(1):73-83

The sequence of a 16,691 bp segment of Saccharomyces cerevisiae chromosome IV identifies the DUN1, PMT1, PMT5, SRP14 and DPR1 genes, and five new open reading frames. Boskovic J, et al. **Yeast** 1996 Oct;12(13):1377-84

Constitutive flocculation in Saccharomyces cerevisiae through overexpression of the GTS1 gene, coding for a 'Glo'-type Zn-finger-containing protein. Bossier P, et al. **Yeast** 1997 Jun 30;13(8):717-25

Sequence and analysis of a 26.9 kb fragment from chromosome XV of the yeast Saccharomyces cerevisiae. Boyer J, et al. **Yeast** 1996 Dec;12(15):1575-86

Sequence analysis of a 13.4 kbp fragment from the left arm of chromosome XV reveals a malate dehydrogenase gene, a putative Ser/Thr protein kinase, the ribosomal L25 gene and four new open reading frames. Casamayor A, et al. **Yeast** 1996 Sep;12(10B Suppl):1013-20

The AFT1 transcriptional factor is differentially required for expression of high-affinity iron uptake genes in Saccharomyces cerevisiae. Casas C, et al. **Yeast** 1997 Jun 15;13(7):621-37

DNA sequence analysis of the VPH1-SNF2 region on chromosome XV of Saccharomyces cerevisiae. Chéret G, et al. **Yeast** 1996 Sep;12(10B Suppl):1059-64

Rapid amplification of uncharacterized transposon-tagged DNA sequences from genomic DNA. Chun KT, et al. **Yeast** 1997 Mar 15;13(3):233-40

Analysis of an 11.6 kb region from the right arm of chromosome VII of Saccharomyces cerevisiae between the RAD2 and the MES1 genes reveals the presence of three new genes. Clemente ML, et al. **Yeast** 1997 Mar 15; 13(3):287-90

Sequencing of a 40.5 kb fragment located on the left arm of chromosome VII from Saccharomyces cerevisiae. Coglievina M, et al. **Yeast** 1997 Jan;13(1):55-64

Sequence of a 39,411 bp DNA fragment covering the left end of chromosome VII of Saccharomyces cerevisiae. Coissac E, et al. **Yeast** 1996 Dec;12(15):1555-62

Selection of yeast cells with a higher plasmid copy number in a Saccharomyces cerevisiae autoselection system. Compagno C, et al. **Yeast** 1996 Mar 15;12(3):199-205

PetCR46, a gene which is essential for respiration and integrity of the mitochondrial genome. Coppée JY, et al. **Yeast** 1996 May;12(6):577-82

A useful colony colour phenotype associated with the yeast selectable/counter-selectable marker MET15. Cost GJ, et al. **Yeast** 1996 Aug;12(10):939-41

Identification of genes with nutrient-controlled expression by PCR-mapping in the yeast Saccharomyces cerevisiae. Crauwels M, et al. **Yeast** 1997 Aug;13(10):973-84

Functional analysis of YCL09C: evidence for a role as the regulatory subunit of acetolactate synthase. Cullin C, et al. **Yeast** 1996 Dec;12(15):1511-8

Sequencing analysis of a 40.2 kb fragment of yeast chromosome X reveals 19 open reading frames including URA2 (5' end), TRK1, PBS2, SPT10, GCD14, RPE1, PHO86, NCA3, ASF1, CCT7, GZF3, two tRNA genes, three remnant delta elements and a Ty4 transposon. Cziepluch C, et al. **Yeast** 1996 Nov;12(14):1471-4

The DNA sequence of cosmid 14-13b from chromosome XIV of Saccharomyces cerevisiae reveals an unusually high number of overlapping open reading frames. De Antoni A, et al. **Yeast** 1997 Mar 15;13(3):261-6

HST1, a new member of the SIR2 family of genes. Derbyshire MK, et al. **Yeast** 1996 Jun 15;12(7):631-40

The KNH1 gene of Saccharomyces cerevisiae is a functional homolog of KRE9. Dijkgraaf GJ, et al. **Yeast** 1996 Jun 15;12(7):683-92

Identification of two CyP-40-like cyclophilins in Saccharomyces cerevisiae, one of which is required for normal growth. Duina AA, et al. **Yeast** 1996 Aug; 12(10):943-52

Sequencing and analysis of a 35.4 kb region on the right [corrected] arm of chromosome IV from Saccharomyces cerevisiae reveal 23 open reading frames [published erratum appears in Yeast 1997 Feb;13(2):189] Eide LG, et al. **Yeast** 1996 Sep;12(10B Suppl):1085-90

Reconstitution of the NF-kappa B system in Saccharomyces cerevisiae for isolation of effectors by phenotype modulation. Epinat JC, et al. **Yeast** 1997 Jun 15; 13(7):599-612

Sequence analysis of a 14.6 kb DNA fragment of Saccharomyces cerevisiae chromosome VII reveals SEC27, SSM1b, a putative S-adenosylmethionine-dependent enzyme and six new open reading frames. Escribano V, et al. **Yeast** 1996 Jul; 12(9):887-92

Analysis of a 17.9 kb region from Saccharomyces cerevisiae chromosome VII reveals the presence of eight open reading frames, including BRF1 (TFIIIB70) and GCN5 genes. Feroli F, et al. **Yeast** 1997 Mar 30;13(4):373-7

The characterization of two new clusters of duplicated genes suggests a 'Lego' organization of the yeast Saccharomyces cerevisiae chromosomes. Feuermann M, et al. **Yeast** 1997 Jul;13(9):861-9

Analysis of 21.7 kb DNA sequence from the left arm of chromosome VII reveals 11 open reading frames: two correspond to new genes. Feuermann M, et al. **Yeast** 1997 Apr;13(5):475-7

Sequence of the GLT1 gene from Saccharomyces cerevisiae reveals the domain structure of yeast glutamate synthase. Filetici P, et al. **Yeast** 1996 Oct;12(13):1359-66

Sequence and analysis of a 33 kb fragment from the right arm of chromosome XV of the yeast Saccharomyces cerevisiae. Galisson F, et al. **Yeast** 1996 Jul;12(9):877-85

Analysis of the DNA sequence of a 15,500 bp fragment near the left telomere of chromosome XV from Saccharomyces cerevisiae reveals a putative sugar transporter, a carboxypeptidase homologue and two new open reading frames. Gamo FJ, et al. **Yeast** 1996 Jun 15;12(7):709-14

Sequence analysis of a 14.2 kb fragment of Saccharomyces cerevisiae chromosome XIV that includes the ypt53, tRNALeu and gsr m2 genes and four new open reading frames. Garcia-Cantalejo JM, et al. **Yeast** 1996 May; 12(6):599-608

A set of vectors with a tetracycline-regulatable promoter system for modulated gene expression in Saccharomyces cerevisiae. Garí E, et al. **Yeast** 1997 Jul;13(9):837-48

Cloning and identification of HEM14, the yeast gene for mitochondrial protoporphyrinogen oxidase. Glerum DM, et al. **Yeast** 1996 Nov;12(14):1421-5

1996: a vintage year for yeast and Yeast [editorial] Goffeau A. **Yeast** 1996 Dec;12(16):1603-5

Subtelomeric duplications in Saccharomyces cerevisiae chromosomes III and XI: topology, arrangements, corrections of sequence and strain-specific polymorphism. Gromadka R, et al. **Yeast** 1996 May;12(6):583-91

Sequencing of a 17.6 kb segment on the right arm of yeast chromosome VII reveals 12 ORFs, including CCT, ADE3 and TR-I genes, homologues of the yeast PMT and EF1G genes, of the human and bacterial electron-transferring flavoproteins (beta-chain) and of the Escherichia coli phosphoserine phosphohydrolase, and five new ORFs. Guerreiro P, et al. **Yeast** 1996 Mar 15;12(3):273-80

Sequencing of a 9.9 kb segment on the right arm of yeast chromosome VII reveals four open reading frames, including PFK1, the gene coding for succinyl-CoA synthetase (beta-chain) and two ORFs sharing homology with ORFs of the yeast chromosome VIII. Guerreiro P, et al. **Yeast** 1997 Mar 15;13(3):275-80

Determination of the relative ploidy in different Saccharomyces cerevisiae strains used for fermentation and 'flor' film ageing of dry sherry-type wines. Guijo S, et al. **Yeast** 1997 Feb;13(2):101-17

The sequence of a 23.4 kb segment on the right arm of chromosome VII from Saccharomyces cerevisiae reveals CLB6, SPT6, RP28A and NUP57 genes, a Ty3 element and 11 new open reading frames. Hansen M, et al. **Yeast** 1996 Sep 30;12(12):1273-7

Molecular genetics of ICL2, encoding a non-functional isocitrate lyase in Saccharomyces cerevisiae. Heinisch JJ, et al. **Yeast** 1996 Oct;12(13):1285-95

Disruption of six novel yeast genes reveals three genes essential for vegetative growth and one required for growth at low temperature. Huang ME, et al. **Yeast** 1997 Sep 30; 13(12):1181-94

Identification of ACT4, a novel essential actin-related gene in the yeast Saccharomyces cerevisiae. Huang ME, et al. **Yeast** 1996 Jul;12(9):839-48

Analysis of a 62 kb DNA sequence of chromosome X reveals 36 open reading frames and a gene cluster with a counterpart on chromosome XI. Huang ME, et al. **Yeast** 1996 Jul;12(9):869-75

SACCHAROMYCES CEREVISIAE

The Saccharomyces cerevisiae MFS superfamily SGE1 gene confers resistance to cationic dyes. Jacquot C, et al. **Yeast** 1997 Aug;13(10):891–902

Identification and expression of the Saccharomyces cerevisiae cytoplasmic tryptophanyl–tRNA synthetase gene. John TR, et al. **Yeast** 1997 Jan;13(1):37–41

Characterization of the rad14–2 mutant of Saccharomyces cerevisiae: implications for the recognition of UV photoproducts by the Rad14 protein. Jones GW, et al. **Yeast** 1997 Jan;13(1):31–6

Lambda clone B22 contains a 7676 bp genomic fragment of Saccharomyces cerevisiae chromosome VII spanning the VAM7–SPM2 intergenic region and containing three novel transcribed open reading frames. Kail M, et al. **Yeast** 1996 Jun 30;12(8):799–807

SHM1: a multicopy suppressor of a temperature-sensitive null mutation in the HMG1-like abf2 gene. Kao LR, et al. **Yeast** 1996 Sep 30;12(12):1239–50

Genetic aspects of carbon catabolite repression of the STA2 glucoamylase gene in Saccharomyces cerevisiae. Kartasheva NN, et al. **Yeast** 1996 Oct;12(13):1297–300

Sequence analysis of a 40.7 kb segment from the left arm of yeast chromosome X reveals 14 known genes and 13 new open reading frames including homologues of genes clustered on the right arm of chromosome XI. Katsoulou C, et al. **Yeast** 1996 Jun 30;12(8):787–97

Meiotic inheritance of functional Gal80S gene product in Saccharomyces cerevisiae. Keller AD, et al. **Yeast** 1997 Apr;13(5):441–7

Characterization of the checkpoint gene RAD53/MEC2 in Saccharomyces cerevisiae. Kim S, et al. **Yeast** 1997 Jun 30;13(8):735–45

A putative helicase, the SUA5, PMR1, tRNALys1 genes and four open reading frames have been detected in the DNA sequence of an 8.8 kb fragment of the left arm of chromosome VII of Saccharomyces cerevisiae. Klima R, et al. **Yeast** 1996 Sep;12(10B Suppl):1033–40

Functional characterization of the repeated UASINO element in the promoters of the INO1 and CHO2 genes of yeast. Koipally J, et al. **Yeast** 1996 Jun 15;12(7):653–65

The RAD29 gene: map position on the right arm of chromosome II. Kozhin SA, et al. **Yeast** 1997 Apr; 13(5):489–90

DNA sequence analysis of a 10 624 bp fragment of the left arm of chromosome XV from Saccharomyces cerevisiae reveals a RNA binding protein, a mitochondrial protein, two ribosomal proteins and two new open reading frames. Lafuente MJ, et al. **Yeast** 1996 Sep;12(10B Suppl):1041–5

Multiple copies of PBS2, MHP1 or LRE1 produce glucanase resistance and other cell wall effects in Saccharomyces cerevisiae. Lai MH, et al. **Yeast** 1997 Mar 15;13(3):199–213

ERG1, encoding squalene epoxidase, is located on the right arm of chromosome VII of Saccharomyces cerevisiae. Landl KM, et al. **Yeast** 1996 May;12(6):609–13

Sequencing of a 9.2 kb telomeric fragment from the right arm of Saccharomyces cerevisiae chromosome XIV. Levesque H, et al. **Yeast** 1996 Mar 15;12(3):289–95

Removal of an intron with unique 3' branch site creates an amino-terminal protein sequence directing the scERV1 gene product to mitochondria. Lisowsky T. **Yeast** 1996 Dec;12(15):1501–10

Completion of the Saccharomyces cerevisiae genome sequence allows identification of KTR5, KTR6 and KTR7 and definition of the nine-membered KRE2/MNT1 mannosyltransferase gene family in this organism. Lussier M, et al. **Yeast** 1997 Mar 15;13(3):267–74

Analysis of a 22,956 bp region on the right arm of Saccharomyces cerevisiae chromosome XV. Madania A, et al. **Yeast** 1996 Dec;12(15):1563–73

Sticky-end polymerase chain reaction method for systematic gene disruption in Saccharomyces cerevisiae. Maftahi M, et al. **Yeast** 1996 Jul;12(9):859–68

Intergenic Flip Flop, a method for systematic gene disruption and cloning in yeast. Mallet L, et al. **Yeast** 1996 Oct; 12(13):1351–7

FEN2: a gene implicated in the catabolite repression-mediated regulation of ergosterol biosynthesis in yeast. Marcireau C, et al. **Yeast** 1996 May;12(6):531–9

The yeast Rad6 protein: a mediator of homologous recombination across the scaffold attached region at the replication origin ARS1. Markvart MB, et al. **Yeast** 1996 Nov;12(14):1427–38

Identification of gene encoding a putative RNA-helicase, homologous to SKI2, in chromosome VII of Saccharomyces cerevisiae. Martegani E, et al. **Yeast** 1997 Mar 30;13(4):391–7

Sequence analysis of a 10.5 kb DNA fragment from the yeast chromosome VII reveals the presence of three new open reading frames and of a tRNAThr gene. Mazzoni C, et al. **Yeast** 1997 Mar 30;13(4):369–72

Modulation of glycerol and ethanol yields during alcoholic fermentation in Saccharomyces cerevisiae strains overexpressed or disrupted for GPD1 encoding glycerol 3-phosphate dehydrogenase. Michnick S, et al. **Yeast** 1997 Jul;13(9):783–93

Sequence analysis of the CEN12 region of Saccharomyces cerevisiae on a 43.7 kb fragment of chromosome XII including an open reading frame homologous to the human cystic fibrosis transmembrane conductance regulator protein CFTR. Miosga T, et al. **Yeast** 1996 Jun 15; 12(7):693–708

Cloning and expression of two chitin deacetylase genes of Saccharomyces cerevisiae. Mishra C, et al. **Yeast** 1997 Mar 30;13(4):327–36

Green fluorescent protein as a marker for gene expression and subcellular localization in budding yeast. Niedenthal RK, et al. **Yeast** 1996 Jun 30;12(8):773–86

Ribosomal protein L9 is the product of GRC5, a homolog of the putative tumor suppressor QM in S. cerevisiae. Nika J, et al. **Yeast** 1997 Sep 30;13(12):1155–66

Mutations in an Abf1p binding site in the promoter of yeast RPO26 shift the transcription start sites and reduce the level of RPO26 mRNA. Nouraini S, et al. **Yeast** 1996 Oct; 12(13):1339–50

Identification of ASK10 as a multicopy activator of Skn7p-dependent transcription of a HIS3 reporter gene. Page N, et al. **Yeast** 1996 Mar 15;12(3):267–72

The DNA sequence of cosmid 14–5 from chromosome XIV reveals 21 open reading frames including a novel gene encoding a globin-like domain. Pandolfo D, et al. **Yeast** 1996 Sep;12(10B Suppl):1071–6

The genes encoding the transcription factor yTAFII60, the G4p1 protein and a putative glucose transporter are contained in a 12.3 kb DNA fragment on the left arm of Saccharomyces cerevisiae chromosome VII. Paoluzi S, et al. **Yeast** 1997 Jan;13(1):85–91

Sequence of 29 kb around the PDR10 locus on the right arm of Saccharomyces cerevisiae chromosome XV: similarity to part of chromosome I. Parle-McDermott AG, et al. **Yeast** 1996 Sep;12(10B Suppl):999–1004

BTN1, a yeast gene corresponding to the human gene responsible for Batten's disease, is not essential for viability, mitochondrial function, or degradation of mitochondrial ATP synthase. Pearce DA, et al. **Yeast** 1997 Jun 30; 13(8):691–7

Sequencing of a 35.71 kb DNA segment on the right arm of yeast chromosome XV reveals regions of similarity to chromosomes I and XIII. Pearson BM, et al. **Yeast** 1996 Sep;12(10B Suppl):1021–31

Sequence and analysis of a 36.2 kb fragment from the right arm of yeast chromosome XV reveals 19 open reading frames including SNF2 (5' end), CPA1, SLY41, a putative transport ATPase, a putative ribosomal protein and an SNF2 homologue. Poirey R, et al. **Yeast** 1997 Apr; 13(5):479–82

Sequencing analysis of a 36.8 kb fragment of yeast chromosome XV reveals 26 open reading frames including SEC63, CDC31, SUG2, GCD1, RBL2, PNT1, PAC1 and VPH1. Poirey R, et al. **Yeast** 1997 Apr;13(5):483–7

The sequence of 32b on the left arm of yeast chromosome XII reveals six known genes, a new member of the seripauperins family and a new ABS transporter homologous to the human multidrug resistance protein. Purnelle B, et al. **Yeast** 1997 Feb;13(2):183–8

Nucleotide sequence analysis of a 40 kb segment on the right arm of yeast chromosome XV reveals 18 open reading frames including a new pyruvate kinase and three homologues to chromosome I genes. Purnelle B, et al. **Yeast** 1996 Nov;12(14):1475–81

The sequence of 55 kb on the left arm of yeast chromosome XVI identifies a small nuclear RNA, a new putative protein kinase and two new putative regulators. Purnelle B, et al. **Yeast** 1996 Nov;12(14):1483–92

Analysis of the DNA sequence of a 34,038 bp region on the left arm of yeast chromosome XV. Rad MR, et al. **Yeast** 1997 Mar 15;13(3):281–6

Deregulation of CLN1 and CLN2 in the Saccharomyces cerevisiae whi2 mutant. Radcliffe P, et al. **Yeast** 1997 Jun 30;13(8):707–15

Identification of a gene encoding a homocitrate synthase isoenzyme of Saccharomyces cerevisiae. Ramos F, et al. **Yeast** 1996 Oct;12(13):1315–20

RNA-dependent RNA polymerase activity related to the 20S RNA replicon of Saccharomyces cerevisiae. Ribas JC, et al. **Yeast** 1996 Sep 30;12(12):1219–28

Mechanisms of salt tolerance conferred by overexpression of the HAL1 gene in Saccharomyces cerevisiae. Rios G, et al. **Yeast** 1997 May;13(6):515–28

Stationary-phase gene expression in Saccharomyces cerevisiae during wine fermentation. Riou C, et al. **Yeast** 1997 Aug;13(10):903–15

Mapping of gene controlling thiamine transport in Saccharomyces cerevisiae. Ruml T, et al. **Yeast** 1996 Sep 30;12(12):1279–83

The sequence of a 8 kb segment on the right arm of yeast chromosome VII identifies four new open reading frames and the genes for yTAFII145. Ruzzi M, et al. **Yeast** 1997 Mar 30;13(4):365–8

Genomic reorganization between two sibling yeast species, Saccharomyces bayanus and Saccharomyces cerevisiae. Ryu SL, et al. **Yeast** 1996 Jun 30;12(8):757–64

The sequence of a 20.3 kb DNA fragment from the left arm of Saccharomyces cerevisiae chromosome IV contains the KIN28, MSS2, PHO2, POL3 and DUN1 genes, and six new open reading frames. Saiz JE, et al. **Yeast** 1996 Sep; 12(10B Suppl):1077–84

The sequence of a 36.7 kb segment on the left arm of chromosome IV from Saccharomyces cerevisiae reveals 20 non-overlapping open reading frames (ORFs) including SIT4, FAD1, NAM1, RNA11, SIR2, NAT1, PRP9, ACT2 and MPS1 and 11 new ORFs. Sarén AM, et al. **Yeast** 1997 Jan;13(1):65–71

Characterization of two new genes down-regulated by alpha-factor. Seidel J, et al. **Yeast** 1997 Jul;13(9):809–17

Sequence analysis of the 33 kb long region between ORC5 and SUI1 from the left arm of chromosome XIV from Saccharomyces cerevisiae. Sen-Gupta M, et al. **Yeast** 1997 Jul;13(9):849–60

Cloning of the multicopy suppressor gene SUR7: evidence for a functional relationship between the yeast actin-binding protein Rvs167 and a putative membranous protein. Sivadon P, et al. **Yeast** 1997 Jun 30;13(8):747–61

The sequence of a 30 kb fragment on the left arm of chromosome XV from Saccharomyces cerevisiae reveals 15 open reading frames, five of which correspond to previously identified genes. Sterky F, et al. **Yeast** 1996 Sep; 12(10B Suppl):1091–5

Review: the Cct eukaryotic chaperonin subunits of Saccharomyces cerevisiae and other yeasts. Stoldt V, et al. **Yeast** 1996 May;12(6):523–9 (36 ref.)

A simplified method for the repeated replacement of yeast chromosomal sequences with in vitro mutations. Szent-Gyorgyi C. **Yeast** 1996 Jun 15;12(7):667–72

Applications of the long and accurate polymerase chain reaction method in yeast molecular biology: direct sequencing of the amplified DNA and its introduction into yeast. Takita Y, et al. **Yeast** 1997 Jun 30;13(8):763–8

Identification of a putative methylenetetrahydrofolate reductase by sequence analysis of a 6.8 kb DNA fragment of yeast chromosome VII. Tizon B, et al. **Yeast** 1996 Sep; 12(10B Suppl):1047–51

Characterization of CHS4 (CAL2), a gene of Saccharomyces cerevisiae involved in chitin biosynthesis and allelic to SKT5 and CSD4. Trilla JA, et al. **Yeast** 1997 Jul; 13(9):795–807

GCR1-dependent transcriptional activation of yeast retrotransposon Ty2–917. Türkel S, et al. **Yeast** 1997 Aug; 13(10):917–30

Histone H1 in Saccharomyces cerevisiae. Ushinsky SC, et al. **Yeast** 1997 Feb;13(2):151–61

The sequence of a 54.7 kb fragment of yeast chromosome XV reveals the presence of two tRNAs and 24 new open reading frames. Valens M, et al. **Yeast** 1997 Mar 30; 13(4):379–90

An 18.3 kb DNA fragment from yeast chromosome VII carries four unknown open reading frames, the gene for an Asn synthase, remnants of Ty and three tRNA genes. Van Dyck L, et al. **Yeast** 1997 Feb;13(2):171–6

The sequence of 23 kb surrounding the SNF3 locus on the left arm of yeast chromosome IV reveals the location of five known genes and characterizes at least six new open reading frames including putative genes for ribosomal protein L35 and a sugar transport protein. Verhasselt P, et al. **Yeast** 1996 Sep;12(10B Suppl):1065–70

Sequence analysis of a 37.6 kbp cosmid clone from the right arm of Saccharomyces cerevisiae chromosome XII, carrying YAP3, HOG1, SNR6, tRNA-Arg3 and 23 new open reading frames, among which several homologies to proteins involved in cell division control and to mammalian growth factors and other animal proteins are found. Verhasselt P, et al. **Yeast** 1997 Mar 15;13(3):241–50

The sequence of a nearly unclonable 22.8 kb segment on the left arm chromosome VII from Saccharomyces cerevisiae reveals ARO2, RPL9A, TIP1, MRF1 genes and six new open reading frames. Voet M, et al. **Yeast** 1997 Feb;13(2):177–82

Sequence analysis of a near-subtelomeric 35.4 kb DNA segment on the right arm of chromosome VII from Saccharomyces cerevisiae carrying the MAL1 locus reveals 15 complete open reading frames, including ZUO1, BGL2 and BIO2 genes and an ABC transporter gene. Volckaert G, et al. **Yeast** 1997 Mar 15;13(3):251–9

DNA sequencing and analysis of 130 kb from yeast chromosome XV. Voss H, et al. **Yeast** 1997 Jun 15; 13(7):655–72

PCR-synthesis of marker cassettes with long flanking homology regions for gene disruptions in S. cerevisiae. Wach A. **Yeast** 1996 Mar 15;12(3):259–65

Sequencing and analysis of 51 kb on the right arm of chromosome XV from Saccharomyces cerevisiae reveals 30 open reading frames. Wiemann S, et al. **Yeast** 1996 Mar 15;12(3):281–8

Analysis of a 26,756 bp segment from the left arm of yeast chromosome IV. Wölfl S, et al. **Yeast** 1996 Dec; 12(15):1549–54

The 2 micron plasmid of laboratory yeast strains is a type-1/type-2 hybrid. Xiao W, et al. **Yeast** 1996 Jun 30; 12(8):809–13

The SKS1 protein kinase is a multicopy suppressor of the snf3 mutation of Saccharomyces cerevisiae. Yang Z, et al. **Yeast** 1996 Nov;12(14):1407–19

[Fine physical mapping of yeast chromosome V] Yang Z, et al. **I Chuan Hsueh Pao** 1997;24(1):87–93 (Eng. Abstr.) **(Chi)**

[Functional screening of p53 status in tumor cells using Saccharomyces cerevisiae] Jia LQ, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(4):466–70 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Role of yeast global repressors, Bel2 and Tup1, in chromatin-and nucleosome-mediated transcriptional regulation] Harashima S. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1187–97 (31 ref.) **(Jpn)**

[Analysis of the mechanism of transcriptional regulation based on yeast system] Horikoshi M, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1148–61 (57 ref.) **(Jpn)**

[Present status and the future of the whole genome analysis of Saccharomyces cerevisiae] Ogasawara N, et al. **Tanpakushitsu Kakusan Koso** 1997 Mar;42(4):673–8 (34 ref.) **(Jpn)**

[Interaction between yeast transcription factor GAL11 and general transcription factors] Sakurai H, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1178–86 (70 ref.) **(Jpn)**

[The role of nuclear genome in regulation of mitochondrial function in Saccharomyces cerevisiae] Boguta M. **Postepy Biochem** 1996;42(3):259–68 (84 ref.) **(Pol)**

[Cloning of cDNA for RNA polymerase subunit from the fission yeast Schizosaccharomyces pombe by heterospecific complementation in Saccharomyces cerevisiae] Shpakovskiĭ GV, et al. **Bioorg Khim** 1997 Feb;23(2):110–7 (Eng. Abstr.) **(Rus)**

[Mapping segments of the S1 nuclease hypersensitive sites in chromosome III of Saccharomyces cerevisiae] Svetlova EIu, et al. **Dokl Akad Nauk** 1997 Apr;353(6):831–3 **(Rus)**

[A simple method of selecting Saccharomyces cerevisiae ade1 and ade2 mutants] Alenin VV, et al. **Genetika** 1997 Jun; 33(6):858–61 (Eng. Abstr.) **(Rus)**

[Fusion of glutathione S-transferase with the N-terminus of yeast Sup35p protein inhibits its prion-like properties] Dagkesamanskaia AR, et al. **Genetika** 1997 May; 33(5):610–5 (Eng. Abstr.) **(Rus)**

[Mutator genes from Saccharomyces cerevisiae. Repair of artificial heteroduplexes in him and hsm mutants] Gracheva LM, et al. **Genetika** 1996 Jul;32(7):922–6 (Eng. Abstr.) **(Rus)**

[Characteristics of spontaneous mutagenesis in haploid yeast] Korogodina VL, et al. **Genetika** 1996 May;32(5):629–36 (Eng. Abstr.) **(Rus)**

[Mutator genes from Saccharomyces cerevisiae. Interaction between HIM- and HSM-genes] Koval'tsova SV, et al. **Genetika** 1996 Jul;32(7):927–32 (Eng. Abstr.) **(Rus)**

[Mutator genes of the yeast Saccharomyces cerevisiae. Interaction of mutations him and his with mutations blocking three principal pathways of repair of induced DNA damage] Koval'tsova SV, et al. **Genetika** 1996 Aug; 32(8):1061–7 (Eng. Abstr.) **(Rus)**

[Genotoxic effect of cadmium chloride in various test-systems] Pesheva MG, et al. **Genetika** 1997 Feb; 33(2):183–8 (Eng. Abstr.) **(Rus)**

[Structural and functional chromatin organization of the SUP35 gene in Saccharomyces cerevisiae yeast] Riabinkova NA, et al. **Genetika** 1997 Apr;33(4):451–7 (Eng. Abstr.) **(Rus)**

[Polymorphism of virus-like particles of retrotransposons in Drosophila and yeast cells] Zolotova LI, et al. **Genetika** 1996 Nov;32(11):1528–35 (Eng. Abstr.) **(Rus)**

[NAD-metabolizing capacity of Saccharomyces cerevisiae mutants] Khalmuradov AG, et al. **Mikrobiologiia** 1996 May-Jun;65(3):345–7 (Eng. Abstr.) **(Rus)**

[Cloning the Saccharomycopsis fibuligera alpha-amylase gene and its expression in Saccharomyces cerevisiae] Baeva LF, et al. **Prikl Biokhim Mikrobiol** 1996 May-Jun; 32(3):311–4 (Eng. Abstr.) **(Rus)**

[A theoretical analysis of the primary structure of the yeast SEC59 gene product. Topology in the membrane, identification of the repetitive sequences and internal symmetry] Shpakov AO. **Zh Evol Biokhim Fiziol** 1996 Sep-Oct;32(5):545–55 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Estimation of the optimal concentrations of residual sugar and cell growth rate for a fed-batch culture of Saccharomyces cerevisiae. He RQ, et al. **Appl Biochem Biotechnol** 1996 Sep;60(3):229–44

Oscillatory, stochastic and chaotic growth rate fluctuations in permittistatically controlled yeast cultures. Davey HM, et al. **Biosystems** 1996;39(1):43–61

Pattern of growth and respiratory activity of Saccharomyces cerevisiae (baker's yeast) cells growing entrapped in an insolubilized gelatin gel. Parascandola P, et al. **Biotechnol Appl Biochem** 1996 Feb;23 (Pt 1):7–12

Programming of cell polarity in budding yeast by endogenous and exogenous signals. Herskowitz I, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:717–27 (80 ref.)

Pheromone signalling and polarized morphogenesis in yeast. Leberer E, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):59–66 (60 ref.)

Differential response to UV stress and DNA damage during the yeast replicative life span. Kale SP, et al. **Dev Genet** 1996;18(2):154–60

Single point mutations in various domains of a plant plasma membrane H(+)-ATPase expressed in Saccharomyces cerevisiae increase H(+)-pumping and permit yeast growth at low pH. Morsomme P, et al. **EMBO J** 1996 Oct 15;15(20):5513–26

HIV-1 protein Vpr causes gross mitochondrial dysfunction in the yeast Saccharomyces cerevisiae. Macreadie IG, et al. **FEBS Lett** 1997 Jun 30;410(2-3):145–9

Autonomous metabolic oscillation in continuous culture of Saccharomyces cerevisiae grown on ethanol. Keulers M, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2-3):253–8

Modelling glucose transport in Saccharomyces cerevisiae DFY1 in different growth phases. Fuhrmann GF, et al. **Folia Microbiol (Praha)** 1996;41(1):91–2

Two novel targets of the MAP kinase Kss1 are negative regulators of invasive growth in the yeast Saccharomyces cerevisiae. Cook JG, et al. **Genes Dev** 1996 Nov 15; 10(22):2831–48

Genetic analysis of the Saccharomyces cerevisiae RHO3 gene, encoding a rho-type small GTPase, provides evidence for a role in bud formation. Imai J, et al. **Genetics** 1996 Feb;142(2):359–69

Proteolytic activation of Rim1p, a positive regulator of yeast sporulation and invasive growth. Li W, et al. **Genetics** 1997 Jan;145(1):63–73

Saccharomyces cerevisiae S288C has a mutation in FLO8, a gene required for filamentous growth. Liu H, et al. **Genetics** 1996 Nov;144(3):967–78

Dissection of filamentous growth by transposon mutagenesis in Saccharomyces cerevisiae. Mösch HU, et al. **Genetics** 1997 Mar;145(3):671–84

Growth of yeasts in milk and associated changes to milk composition. Roostita R, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):205–19

Comparison of the Petrifilm dry rehydratable film and conventional culture methods for enumeration of yeasts and molds in foods: collaborative study. Knight MT, et al. **J AOAC Int** 1997 Jul-Aug;80(4):806–23

A stationary-phase gene in Saccharomyces cerevisiae is a member of a novel, highly conserved gene family. Braun EL, et al. **J Bacteriol** 1996 Dec;178(23):6865–72

Metabolic and regulatory changes associated with growth of Saccharomyces cerevisiae in 1.4 M NaCl. Evidence for osmotic induction of glycerol dissimilation via the dihydroxyacetone pathway. Norbeck J, et al. **J Biol Chem** 1997 Feb 28;272(9):5544–54

Targeting of chitin synthase 3 to polarized growth sites in yeast requires Chs5p and Myo2p. Santos B, et al. **J Cell Biol** 1997 Jan 13;136(1):95–110

Pea2 protein of yeast is localized to sites of polarized growth and is required for efficient mating and bipolar budding. Valtz N, et al. **J Cell Biol** 1996 Nov;135(3):725–39

A role for the actin cytoskeleton of Saccharomyces cerevisiae in bipolar bud-site selection. Yang S, et al. **J Cell Biol** 1997 Jan 13;136(1):111–23

Flux distributions in anaerobic, glucose-limited continuous cultures of Saccharomyces cerevisiae. Nissen TL, et al. **Microbiology** 1997 Jan;143 (Pt 1):203–18

Filamentous growth of the budding yeast Saccharomyces cerevisiae induced by overexpression of the WHi2 gene. Radcliffe PA, et al. **Microbiology** 1997 Jun;143 (Pt 6):1867–76

Amounts of free amino acids during early sporulation in Saccharomyces cerevisiae. Ota A. **Microbios** 1996; 86(347):117–20

Structure-function analysis of the Saccharomyces cerevisiae G1 cyclin Cln2. Huang KN, et al. **Mol Cell Biol** 1997 Aug; 17(8):4654–66

Multiple phosphorylated forms of the Saccharomyces cerevisiae Mcm1 protein include an isoform induced in response to high salt concentrations. Kuo MH, et al. **Mol Cell Biol** 1997 Feb;17(2):819–32

Yeast colony size reflects YAC copy number. Popov AV, et al. **Nucleic Acids Res** 1997 May 15;25(10):2039–40

Expression in yeast of binding regions of karyopherins alpha and beta inhibits nuclear import and cell growth. Enenkel C, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12986–91

Human BRCA1 inhibits growth in yeast: potential use in diagnostic testing. Humphrey JS, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5820–5

The cyclin-dependent kinase inhibitor p40SIC1 imposes the requirement for Cln G1 cyclin function at Start. Tyers M. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7772–6

Genetic analysis of aging in Saccharomyces cerevisiae. Kennedy BK, et al. **Trends Genet** 1996 Sep;12(9):355–9 (45 ref.)

Review: to bud until death: the genetics of ageing in the yeast, Saccharomyces. Austriaco NR Jr. **Yeast** 1996 Jun 15;12(7):623–30 (36 ref.)

Pyruvate decarboxylase: an indispensable enzyme for growth of Saccharomyces cerevisiae on glucose. Flikweert MT, et al. **Yeast** 1996 Mar 15;12(3):247–57

IMMUNOLOGY

Specific antibody response to oligomannosidic epitopes in Crohn's disease. Sendid B, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):219–26

Acidification of vacuoles is required for autophagic degradation in the yeast, Saccharomyces cerevisiae. Nakamura N, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):338–44

Overexpression and rapid purification of biologically active yeast proliferating cell nuclear antigen. Biswas EE, et al. **Protein Expr Purif** 1995 Dec;6(6):763–70

ISOLATION & PURIFICATION

Characterization of universal small-subunit rRNA hybridization probes for quantitative molecular microbial ecology studies. Zheng D, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4504–13

Bilateral ureteral obstruction due to Saccharomyces cerevisiae fungus balls. Senneville E, et al. **Clin Infect Dis** 1996 Sep;23(3):636–7

Effect of high pressure on the reduction of microbial populations in vegetables. Arroyo G, et al. **J Appl Microbiol** 1997 Jun;82(6):735–42

Filtration of bacteria and yeast by ultrasound-enhanced sedimentation. Hawkes JJ, et al. **J Appl Microbiol** 1997 Jan;82(1):39–47

Affinity adsorption of Saccharomyces cerevisiae on concanavalin A perflurocarbon emulsions. McCreath GE, et al. **J Mol Recognit** 1996 Sep-Dec;9(5-6):607–16

[Morphological and biochemical characteristics of new isolates Saccharomyces cerevisiae U-503] Abramov ShA, et al. **Prikl Biokhim Mikrobiol** 1997 May-Jun;33(3):325–8 (Eng. Abstr.) **(Rus)**

[Saccharomyces cerevisiae vaginitis (letter)] García-Martos P, et al. **Enferm Infecc Microbiol Clin** 1996 Aug-Sep; 14(7):453–4 **(Spa)**

METABOLISM

Fungal glycoproteins and their biosynthetic pathway as potential targets for antifungal agents. Tanner W, et al. **Acta Biochim Pol** 1995;42(4):505–8 (21 ref.)

Glutathione-glutathione reductase system and lipid peroxidation in Saccharomyces cerevisiae under alcohol stress. Gupta S, et al. **Acta Microbiol Immunol Hung** 1996; 43(1):33–8

High-glutathione containing yeast Saccharomyces cerevisiae: optimization of production. Udeh KO, et al. **Acta Microbiol Pol** 1997;46(1):105–14

Old and new synthetic capacities of baker's yeast. D'Arrigo P, et al. **Adv Appl Microbiol** 1997;44:81–123 (110 ref.)

Expression of the house dust mite allergen Der p2 and mutants in the baker's yeast Saccharomyces cerevisiae. Hakkaart GA, et al. **Adv Exp Med Biol** 1996;409:395–8 (5 ref.)

The proteasome and protein degradation in yeast. Hilt W, et al. **Adv Exp Med Biol** 1996;389:197–202 (28 ref.)

An in vitro transcription assay for yeast mitochondria using organellar lysates. Iqbal J, et al. **Anal Biochem** 1996 Dec 15;243(2):270–6

Salt-induced changes in lipid composition and ethanol tolerance in Saccharomyces cerevisiae. Sharma SC, et al. **Appl Biochem Biotechnol** 1996 Feb;56(2):189–95

Performance of coimmobilized yeast and amyloglucosidase in a fluidized bed reactor for fuel ethanol production. Sun MY, et al. **Appl Biochem Biotechnol** 1997 Spring; 63-65:483–93

Effects of overproduction of the catalytic domain of 3-hydroxy-3-methylglutaryl coenzyme A reductase on squalene synthesis in Saccharomyces cerevisiae. Donald KA, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3341–4

Thiram and dimethyldithiocarbamic acid interconversion in Saccharomyces cerevisiae: a possible metabolic pathway under the control of the glutathione redox cycle. Elskens MT, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2857–62

Metabolic responses of pyruvate decarboxylase-negative Saccharomyces cerevisiae to glucose excess. Flikweert MT, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3399–404

Induction of lipid peroxidation during heavy metal stress in Saccharomyces cerevisiae and influence of plasma membrane fatty acid unsaturation. Howlett NG, et al. **Appl Environ Microbiol** 1997 Aug;63(8):2971–6

Polyunsaturated fatty acid biosynthesis in Saccharomyces cerevisiae: expression of ethanol tolerance and the FAD2 gene from Arabidopsis thaliana. Kajiwara S, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4309–13

Alleviation of glucose repression of maltose metabolism by MIG1 disruption in Saccharomyces cerevisiae. Klein CJ, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4441–9

Nitrogen availability of grape juice limits killer yeast growth and fermentation activity during mixed-culture fermentation with sensitive commercial yeast strains. Medina K, et al. **Appl Environ Microbiol** 1997 Jul; 63(7):2821–5

Influence of cosubstrate concentration on xylose conversion by recombinant, XYL1-expressing Saccharomyces cerevisiae: a comparison of different sugars and ethanol as cosubstrates. Meinander NQ, et al. **Appl Environ Microbiol** 1997 May;63(5):1959–64

Development of the FUN-1 family of fluorescent probes for vacuole labeling and viability testing of yeasts. Millard PJ, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2897–905

Influence of invertase activity and glycerol synthesis and retention on fermentation of media with a high sugar concentration by Saccharomyces cerevisiae. Myers DK, et al. **Appl Environ Microbiol** 1997 Jan;63(1):145–50

Silencing MIG1 in Saccharomyces cerevisiae: effects of antisense MIG1 expression and MIG1 gene disruption. Olsson L, et al. **Appl Environ Microbiol** 1997 Jun; 63(6):2366–71

Ethanolic fermentation of xylose with Saccharomyces cerevisiae harboring the Thermus thermophilus xylA gene, which expresses an active xylose (glucose) isomerase. Walfridsson M, et al. **Appl Environ Microbiol** 1996 Dec; 62(12):4648–51

Use of INAA to study the interaction between Se and Te in cells of Saccharomyces cerevisiae. Czauderna M, et al. **Appl Radiat Isot** 1996 Feb;47(2):153–7

The nature and regulation of the ATP-induced anion permeability in Saccharomyces cerevisiae mitochondria. Prieto S, et al. **Arch Biochem Biophys** 1996 Oct 1; 334(1):43–9

Involvement of a 50-kDa mRNP protein from Saccharomyces cerevisiae in mRNA binding to ribosomes. Triana L, et al. **Arch Biochem Biophys** 1997 Aug 1; 344(1):1–10

Modeling interpretation of microbe metabolism detected by nuclear magnetic resonance. Bastianoni S, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):53–8

Effect of ATP binding cassette/multidrug resistance proteins on ATP efflux of Saccharomyces cerevisiae. Boyum R, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):22–6

Sac1p of Saccharomyces cerevisiae is not involved in ATP release to the extracellular fluid. Boyum R, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):50–3

Mutations in a putative zinc-binding domain inactivate the mitochondrial intermediate peptidase. Chew A, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):822–9

Irreversible metabolic transitions: the glucose 6-phosphate metabolism in yeast cell-free extracts. Coevoet MA, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):162–6

Deletion of the nuclear gene encoding the mitochondrial citrate transport protein from Saccharomyces cerevisiae. Kaplan RS, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):657–62

A second gene encoding a putative serine/threonine protein kinase which enhances spermine uptake in Saccharomyces cerevisiae. Nozaki T, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):452–8

The inhibition of estrogen receptor-mediated responses by chloro-S-triazine-derived compounds is dependent on estradiol concentration in yeast. Tran DQ, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):140–6

Phase-specific protein expression in the dimorphic yeast Saccharomyces cerevisiae. Viard B, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):480–6

Global regulators of ribosome biosynthesis in yeast. Planta RJ, et al. **Biochem Cell Biol** 1995 Nov-Dec; 73(11–12):825–34 (70 ref.)

Asymmetrical distribution of cardiolipin in yeast inner mitochondrial membrane triggered by carbon catabolite repression. Gallet PF, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):627–34

eIF2B, the guanine nucleotide-exchange factor for eukaryotic initiation factor 2. Sequence conservation between the alpha, beta and delta subunits of eIF2B from mammals and yeast. Price NT, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):637–43

Glutathione depletion in the yeast Saccharomyces cerevisiae. Fortuniak A, et al. **Biochem Mol Biol Int** 1996 Apr; 38(5):901–10

Identification of a cAMP-dependent protein-DNA interaction at a sequence near the yeast mitochondrial rRNA genes. Rahman MU, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1115–23

Mitochondrial NADH dehydrogenase activity and ability to tolerate acetaldehyde determine faster ethanol production in Saccharomyces cerevisiae. Shankar CS, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):145–50

Basic helix-loop-helix transcription factors and the cross-regulation of sulphate and phosphate metabolism in yeast. Crowther DJ, et al. **Biochem Soc Trans** 1996 May; 24(2):354–9 (53 ref.)

Novel modifications to the farnesyl moiety of the a-factor lipopeptide pheromone from Saccharomyces cerevisiae: a role for isoprene modifications in ligand presentation. Dawe AL, et al. **Biochemistry** 1997 Oct 7;36(40):12036–44

Deletion of amino acids 261–269 in the brown fat uncoupling protein converts the carrier into a pore. González-Barroso MM, et al. **Biochemistry** 1997 Sep 9;36(36):10930–5

Probing the role of positive residues in the ADP/ATP carrier from yeast. The effect of six arginine mutations on transport and the four ATP versus ADP exchange modes. Heidkämper D, et al. **Biochemistry** 1996 Dec 17; 35(50):16144–52

Conformational changes of the yeast mitochondrial adenosine diphosphate/adenosine triphosphate carrier studied through its intrinsic fluorescence. 1. Tryptophanyl residues of the carrier can be mutated without impairing protein activity. Le Saux A, et al. **Biochemistry** 1996 Dec 17; 35(50):16116–24

Probing the role of positive residues in the ADP/ATP carrier from yeast. The effect of six arginine mutations of oxidative phosphorylation and AAC expression. Müller V, et al. **Biochemistry** 1996 Dec 17;35(50):16132–43

Conformational changes of the yeast mitochondrial adenosine diphosphate/adenosine triphosphate carrier studied through its intrinsic fluorescence. 2. Assignment of tryptophanyl residues of the carrier to the responses to specific ligands. Roux P, et al. **Biochemistry** 1996 Dec 17; 35(50):16125–31

Partial constitutive activation of pheromone responses by a palmitoylation-site mutant of a G protein alpha subunit in yeast. Song J, et al. **Biochemistry** 1996 Nov 26; 35(47):14806–17

Regulation of cellular Mg2+ by Saccharomyces cerevisiae. Beeler T, et al. **Biochim Biophys Acta** 1997 Jan 31; 1323(2):310–8

Protein complexes for remodeling chromatin. Burns LG, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):159–68 (73 ref.)

The ATP-induced K(+)-transport pathway of yeast mitochondria may function as an uncoupling pathway. Manon S, et al. **Biochim Biophys Acta** 1997 Feb 15; 1318(3):317–21

Purification of functional human P-glycoprotein expressed in Saccharomyces cerevisiae. Mao Q, et al. **Biochim Biophys Acta** 1997 Jul 5;1327(1):107–18

Kinetic analysis of hexose uptake in Saccharomyces cerevisiae cultivated in continuous culture. Meijer MM, et al. **Biochim Biophys Acta** 1996 Dec 18;1277(3):209–16

H+/K+ exchange in reconstituted yeast plasma membrane vesicles. Ramírez J, et al. **Biochim Biophys Acta** 1996 Dec 4;1285(2):175–82

Different activation energies in glucose uptake in Saccharomyces cerevisiae DFY1 suggest two transport systems. Reinhardt C, et al. **Biochim Biophys Acta** 1997 Apr 3;1325(1):126–34

Conditions allowing different states of ATP- and GDP-induced permeability in mitochondria from different strains of Saccharomyces cerevisiae. Roucou X, et al. **Biochim Biophys Acta** 1997 Feb 21;1324(1):120–32

The retention mechanism of cell wall proteins in Saccharomyces cerevisiae. Wall-bound Cwp2p is beta-1,6-glucosylated. van der Vaart JM, et al. **Biochim Biophys Acta** 1996 Dec 6;1291(3):206–14

Conservation and diversity in the structure of translation initiation factor EIF3 from humans and yeast. Hershey JW, et al. **Biochimie** 1996;78(11–12):903–7 (24 ref.)

mRNA decapping activities and their biological roles. LaGrandeur TE, et al. **Biochimie** 1996;78(11–12):1049–55 (45 ref.)

Mechanisms of tRNA import into yeast mitochondria: an overview. Tarassov IA, et al. **Biochimie** 1996;78(6):502–10 (55 ref.)

Synaptotagmin II expression partially rescues the growth defect of the yeast sec15 secretory mutant. Damer CK, et al. **Biol Cell** 1996;88(1–2):55–63

Role of the ubiquitin/proteasome system in regulated protein degradation in Saccharomyces cerevisiae. Smith SE, et al. **Biol Chem** 1996 Jul-Aug;377(7–8):437–46 (107 ref.)

Copper-release from yeast Cu(I)-thionein by hypothiocyanite (OSCN-). Hartmann HJ, et al. **Biometals** 1996 Oct;9(4):345–9

Macromolecular recognition: effect of multivalency in the inhibition of binding of yeast mannan to concanavalin A and pea lectins by mannosylated dendrimers. Pagé D, et al. **Bioorg Med Chem** 1996 Nov;4(11):1949–61

Control analysis of glycolytic oscillations. Bier M, et al. **Biophys Chem** 1996 Nov 29;62(1–3):15–24

Rapid purification of microtubule motor domain proteins expressed in bacteria. Song H, et al. **Biotechniques** 1997 Jan;22(1):82–5

Correlation of the OSR/ZRCI gene product and the intracellular glutathione levels in Saccharomyces cerevisiae. Kobayashi S, et al. **Biotechnol Appl Biochem** 1996 Feb;23 (Pt 1):3–6

Strain-dependent variation in the NADH-dependent diacetyl reductase activities of larger- and alebrewing yeasts. Murphy CA, et al. **Biotechnol Appl Biochem** 1996 Feb;23 (Pt 1):19–22

The role of trehalose in cell stress. de-Araujo PS. **Braz J Med Biol Res** 1996 Jul;29(7):873–5 (40 ref.)

Effects of a strain of Saccharomyces cerevisiae (Levucell SC1), a microbial additive for ruminants, on lactate metabolism in vitro. Chaucheyras F, et al. **Can J Microbiol** 1996 Sep;42(9):927–33

Increased cellular fatty acid desaturation as a possible key factor in thermotolerance in Saccharomyces cerevisiae. Guerzoni ME, et al. **Can J Microbiol** 1997 Jun;43(6):569–76

A functional assay in yeast for the human estrogen receptor displays wild-type and variant estrogen receptor messenger RNAs present in breast carcinoma. van Dijk MA, et al. **Cancer Res** 1997 Aug 15;57(16):3478–85

Mad cows meet psi-chotic yeast: the expansion of the prion hypothesis. Lindquist S. **Cell** 1997 May 16;89(4):495–8 (21 ref.)

Yeast HOG1 MAP kinase cascade is regulated by a multistep phosphorelay mechanism in the SLN1-YPD1-SSK1 "two-component" osmosensor. Posas F, et al. **Cell** 1996 Sep 20;86(6):865–75

delta-Aminolevulinic acid uptake is mediated by the gamma-aminobutyric acid-specific permease UGA4. Bermúdez Moretti M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jun;42(4):519–23

Hsp30, the integral plasma membrane heat shock protein of Saccharomyces cerevisiae, is a stress-inducible regulator of plasma membrane H(+)-ATPase. Piper PW, et al. **Cell Stress Chaperones** 1997 Mar;2(1):12–24

Induction of terata in hamsters by solanidane alkaloids derived from Solanum tuberosum. Gaffield W, et al. **Chem Res Toxicol** 1996 Mar;9(2):426–33

Simulation of human benzo[a]pyrene metabolism deduced from the analysis of individual kinetic steps in recombinant yeast. Gautier JC, et al. **Chem Res Toxicol** 1996 Mar; 9(2):418–25

Research on fermentation scale-up based on the OUR obtained from a shake flask. Fan D, et al. **Chin J Biotechnol** 1996;12(3):177–84

Enantiofacial selective reduction of 2-allyl-2-carboethoxy-cyclopentanone mediated by baker's yeast. Fraga CA, et al. **Chirality** 1996;8(4):305–10

Complex multigene family of functionally distinct Hsp70s of yeast. Craig E, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:441–9 (59 ref.)

The DOA pathway: studies on the functions and mechanisms of ubiquitin-dependent protein degradation in the yeast Saccharomyces cerevisiae. Hochstrasser M, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:503–13 (36 ref.)

Factors mediating the late stages of ER-to-Golgi transport in yeast. Jiang Y, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:119–26

The role of Hsp104 in stress tolerance and [PSI+] propagation in Saccharomyces cerevisiae. Lindquist S, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:451–60

Control of exocytosis in yeast. Novick P, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:171–7 (39 ref.)

Novel protein kinase/phosphatidylinositol 3-kinase complex essential for receptor-mediated protein sorting to the vacuole in yeast. Stack JH, et al. **Cold Spring Harb Symp Quant Biol** 1995;60:157–70

Porphyrin biosynthesis in normal and haem mutants of Saccharomyces cerevisiae. Studies on the inheritance of the HEM R+ phenotype. De Siervi A, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Oct; 115(2):167–73

Fibronectin type III domains in yeast detected by a hidden Markov model [letter] Bateman A, et al. **Curr Biol** 1996 Dec 1;6(12):1544–7

Protein phosphatase 2A regulates MPF activity and sister chromatid cohesion in budding yeast. Minshull J, et al. **Curr Biol** 1996 Dec 1;6(12):1609–20

Glucose repression/derepression in budding yeast: SNF1 protein kinase is activated by phosphorylation under derepressing conditions, and this correlates with a high AMP:ATP ratio. Wilson WA, et al. **Curr Biol** 1996 Nov 1;6(11):1426–34

STP1, a gene involved in pre-tRNA processing in yeast, is important for amino-acid uptake and transcription of the permease gene BAP2. Jorgensen MU, et al. **Curr Genet** 1997 Mar;31(3):241–7

Translational activator proteins required for cytochrome b synthesis in Saccharomyces cerevisiae. Rödel G. **Curr Genet** 1997 May;31(5):375–9 (56 ref.)

Intracellular location of the Saccharomyces cerevisiae CDC6 gene product. Jong A, et al. **DNA Cell Biol** 1996 Oct; 15(10):883–95

Osmoresponsive proteins and functional assessment strategies in Saccharomyces cerevisiae. Blomberg A. **Electrophoresis** 1997 Aug;18(8):1429–40 (58 ref.)

A novel inhibitor of cap-dependent translation initiation in yeast: p20 competes with eIF4G for binding to eIF4E. Altmann M, et al. **EMBO J** 1997 Mar 3;16(5):1114–21

Yeast Gpi8p is essential for GPI anchor attachment onto proteins. Benghezal M, et al. **EMBO J** 1996 Dec 2; 15(23):6575–83

Stress and developmental regulation of the yeast C-type cyclin Ume3p (Srb11p/Ssn8p). Cooper KF, et al. **EMBO J** 1997 Aug 1;16(15):4665–75

The PMT gene family: protein O-glycosylation in Saccharomyces cerevisiae is vital. Gentzsch M, et al. **EMBO J** 1996 Nov 1;15(21):5752–9

Reconstitution of the protein insertion machinery of the mitochondrial inner membrane. Haucke V, et al. **EMBO J** 1997 Aug 1;16(15):4560–7

Direct study of DNA-protein interactions in repressed and active chromatin in living cells. Kladde MP, et al. **EMBO J** 1996 Nov 15;15(22):6290–300

Functional characterization of the Cdc42p binding domain of yeast Ste20p protein kinase. Leberer E, et al. **EMBO J** 1997 Jan 2;16(1):83–97

AAA proteases with catalytic sites on opposite membrane surfaces comprise a proteolytic system for the ATP-dependent degradation of inner membrane proteins in mitochondria. Leonhard K, et al. **EMBO J** 1996 Aug 15;15(16):4218–29

Yeast telomeric sequences function as chromosomal anchorage points in vivo. Mirabella A, et al. **EMBO J** 1997 Feb 3;16(3):523–33

Transcriptional pulse-chase analysis reveals a role for a novel snRNP-associated protein in the manufacture of spliceosomal snRNPs. Noble SM, et al. **EMBO J** 1996 Aug 15;15(16):4368–79

Functional analysis of the interaction between the small GTP binding protein Cdc42 and the Ste20 protein kinase in yeast. Peter M, et al. **EMBO J** 1996 Dec 16;15(24):7046–59

Sec61p mediates export of a misfolded secretory protein from the endoplasmic reticulum to the cytosol for degradation. Pilon M, et al. **EMBO J** 1997 Aug 1;16(15):4540–8

A multisubunit 3'end processing factor from yeast containing poly(A) polymerase and homologues of the subunits of mammalian cleavage and polyadenylation specificity factor. Preker PJ, et al. **EMBO J** 1997 Aug 1;16(15):4727–37

In vivo commitment to splicing in yeast involves the nucleotide upstream from the branch site conserved sequence and the Mud2 protein. Rain JC, et al. **EMBO J** 1997 Apr 1;16(7):1759–71

Transmembrane domain-dependent sorting of proteins to the ER and plasma membrane in yeast. Rayner JC, et al. **EMBO J** 1997 Apr 15;16(8):1832–41

Lipid remodeling leads to the introduction and exchange of defined ceramides on GPI proteins in the ER and Golgi of Saccharomyces cerevisiae. Reggiori F, et al. **EMBO J** 1997 Jun;16(12):3506–18

Alternative lipid remodelling pathways for glycosylphosphatidylinositol membrane anchors in Saccharomyces cerevisiae. Sipos G, et al. **EMBO J** 1997 Jun;16(12):3494–505

Functional interchangeability of TFIIIB components from yeast and human cells in vitro. Teichmann M, et al. **EMBO J** 1997 Aug 1;16(15):4708–16

Identification of Saccharomyces cerevisiae DNA ligase IV:

involvement in DNA double-strand break repair. Teo SH, et al. **EMBO J** 1997 Aug 1;16(15):4788–95

Transbilayer phosphatidylethanolamine movements in the yeast plasma membrane. Evidence for a protein-mediated, energy-dependent mechanism. Balasubramanian K, et al. **Eur J Biochem** 1996 Sep 15;240(3):798–806

The nuclear ABC1 gene is essential for the correct conformation and functioning of the cytochrome bc1 complex and the neighbouring complexes II and IV in the mitochondrial respiratory chain. Brasseur G, et al. **Eur J Biochem** 1997 May 15;246(1):103–11

Dimerization of Cdc25p, the guanine-nucleotide exchange factor for Ras from Saccharomyces cerevisiae, and its interaction with Sdc25p. Camus C, et al. **Eur J Biochem** 1997 Jul 15;247(2):703–8

Some DNA targets of the yeast CYP1 transcriptional activator are functionally asymmetric--evidence of two half-sites with different affinities. Näit-Kaoudjt R, et al. **Eur J Biochem** 1997 Mar 1;244(2):301–9

Mathematical models for determining metabolic fluxes through the citric acid and the glyoxylate cycles in Saccharomyces cerevisiae by 13C-NMR spectroscopy. Tran-Dinh S, et al. **Eur J Biochem** 1996 Dec 15; 242(3):770–8

Mathematical model for evaluating the Krebs cycle flux with non-constant glutamate-pool size by 13C-NMR spectroscopy. Evidence for the existence of two types of Krebs cycles in cells. Tran-Dinh S, et al. **Eur J Biochem** 1996 Dec 1;242(2):220–7

The VPS8 gene is required for localization and trafficking of the CPY sorting receptor in Saccharomyces cerevisiae. Chen YJ, et al. **Eur J Cell Biol** 1996 Aug;70(4):289–97

Polypeptide translocation machinery of the yeast endoplasmic reticulum. Lyman SK, et al. **Experientia** 1996 Dec 15;52(12):1042–9 (63 ref.)

Actin-, myosin- and ubiquitin-dependent endocytosis. Riezman H, et al. **Experientia** 1996 Dec 15;52(12):1033–41 (102 ref.)

S. cerevisiae and sulfur: a unique way to deal with the environment. Scheibel T, et al. **FASEB J** 1997 Sep; 11(11):917–21

Osmoregulation and protein expression in a pbs2delta mutant of Saccharomyces cerevisiae during adaptation to hypersaline stress. Akhtar N, et al. **FEBS Lett** 1997 Feb 17;403(2):173–80

Metabolic analysis of S. cerevisiae strains engineered for malolactic fermentation. Bony M, et al. **FEBS Lett** 1997 Jun 30;410(2–3):452–6

Mitochondrial acyl carrier protein is involved in lipoic acid synthesis in Saccharomyces cerevisiae. Brody S, et al. **FEBS Lett** 1997 May 19;408(2):217–20

High-affinity binding of the yeast cis-Golgi t-SNARE, Sed5p, to wild-type and mutant Sly1p, a modulator of transport vesicle docking. Grabowski R, et al. **FEBS Lett** 1997 Jul 14;411(2–3):169–72

Siroheme biosynthesis in Saccharomyces cerevisiae requires the products of both the MET1 and MET8 genes. Hansen J, et al. **FEBS Lett** 1997 Jan 13;401(1):20–4

Glycosylation of rat NGF receptor ectodomain in the yeast Saccharomyces cerevisiae. Holkeri H, et al. **FEBS Lett** 1996 Apr 1;383(3):255–8

The involvement of the Saccharomyces cerevisiae multidrug resistance transporters Pdr5p and Snq2p in cation resistance. Miyahara K, et al. **FEBS Lett** 1996 Dec 16; 399(3):317–20

The heat shock factor and mitochondrial Hsp70 are necessary for survival of heat shock in Saccharomyces cerevisiae. Nwaka S, et al. **FEBS Lett** 1996 Dec 16;399(3):259–63

Fatty acids induced uncoupling of Saccharomyces cerevisiae mitochondria requires an intact ADP/ATP carrier. Polcic P, et al. **FEBS Lett** 1997 Jul 21;412(1):207–10

Regulation of maltose utilization in Saccharomyces cerevisiae by genes of the RAS/protein kinase A pathway. Wanke V, et al. **FEBS Lett** 1997 Feb 3;402(2–3):251–5

Effect of heme and vacuole deficiency on FRE1 gene expression and ferrireductase activity in Saccharomyces cerevisiae. Amillet JM, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):25–9

GAP1 activity is dependent on cAMP in Saccharomyces cerevisiae. Amitrano AA, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):131–3

Physiological and morphological effects of genetic alterations leading to a reduced synthesis of UDP-glucose in Saccharomyces cerevisiae. Daran JM, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):89–96

Autonomous metabolic oscillation in continuous culture of Saccharomyces cerevisiae grown on ethanol. Keulers M, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):253–8

Catabolite inactivation of the yeast maltose transporter requires ubiquitin-ligase npi1/rsp5 and ubiquitin-hydrolase npi2/doa4. Lucero P, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):273–7

Protein expression during exponential growth in 0.7 M NaCl medium of Saccharomyces cerevisiae. Norbeck J, et al. **FEMS Microbiol Lett** 1996 Mar 15;137(1):1–8

On the unidirectionality of arginine uptake in the yeast Saccharomyces cerevisiae. Opekarová M, et al. **FEMS Microbiol Lett** 1997 Jul 15;152(2):261–7

Mutants of Saccharomyces cerevisiae defective in vacuolar function confirm a role for the vacuole in toxic metal ion detoxification. Ramsay LM, et al. **FEMS Microbiol Lett** 1997 Jul 15;152(2):293–8

Induction of flocculation in brewing yeasts by change in pH value. Stratford M. **FEMS Microbiol Lett** 1996 Feb 1; 136(1):13–8

Fluorescence measurement of intracellular pH of the yeast Saccharomyces cerevisiae. Cimprich P, et al. **Folia Microbiol (Praha)** 1996;41(1):84

NCR-sensitive transport gene expression in S. cerevisiae is controlled by a branched regulatory pathway consisting of multiple NCR-responsive activator proteins. Coffman J, et al. **Folia Microbiol (Praha)** 1996;41(1):85–6

Import of branched-chain amino acids in Saccharomyces cerevisiae. Didion T, et al. **Folia Microbiol (Praha)** 1996; 41(1):87

Functional analyses of yeast purine-cytosine permease mutants. Ferreira T, et al. **Folia Microbiol (Praha)** 1996; 41(1):90–1

Modelling glucose transport in Saccharomyces cerevisiae DFY1 in different growth phases. Fuhrmann GF, et al. **Folia Microbiol (Praha)** 1996;41(1):91–2

SHR3 function is linked to cOPII mediated ER vesicle formation. Gilstring CF, et al. **Folia Microbiol (Praha)** 1996; 41(1):93

Mechanism of sterol uptake in yeast. Hapala I, et al. **Folia Microbiol (Praha)** 1996;41(1):95–6

Growth of Saccharomyces cerevisiae, Rhodotorula rubra and Bullera alba in the presence of beechwood prehydrolyzate-based lignin fractions. Košiková B, et al. **Folia Microbiol (Praha)** 1996;41(5):430–2

Aminoethyl esters of fatty acids as model lysosomotropic substances. Lachowicz TM, et al. **Folia Microbiol (Praha)** 1996;41(1):102–5

DL-leucine transport in a Saccharomyces cerevisiae mutant resistant to quaternary ammonium salts. Obłąk E, et al. **Folia Microbiol (Praha)** 1996;41(1):116–8

Kinetic effects of extracellular calcium on the potassium outward rectifier in the plasma membrane of Saccharomyces cerevisiae. Scheurmann-Kettner C, et al. **Folia Microbiol (Praha)** 1996;41(1):126–8

Accumulation of Ade+ reversions in isoauxotrophic stains of Saccharomyces cerevisiae allelic in RAD6 during adenine starvation. Storchová Z, et al. **Folia Microbiol (Praha)** 1997;42(1):47–51

Spermidine biosynthesis in Saccharomyces cerevisae: polyamine requirement of a null mutant of the SPE3 gene (spermidine synthase). Hamasaki-Katagiri N, et al. **Gene** 1997 Mar 10;187(1):35–43

Reexamining interaction of the SH2 domains of SYP and GAP with insulin and IGF-1 receptors in the two-hybrid system. Lamothe B, et al. **Gene** 1996 Dec 5;182(1–2):77–80

A yeast gene product, Fob1 protein, required for both replication fork blocking and recombinational hotspot activities. Kobayashi T, et al. **Genes Cells** 1996 May; 1(5):465–74

The probabilities of supercoil removal and decatenation by yeast DNA topoisomerase II. Roca J, et al. **Genes Cells** 1996 Jan;1(1):17–27

The 30-kD subunit of mammalian cleavage and polyadenylation specificity factor and its yeast homolog are RNA-binding zinc finger proteins. Barabino SM, et al. **Genes Dev** 1997 Jul 1;11(13):1703–16

mre11S--a yeast mutation that blocks double-strand-break processing and permits nonhomologous synapsis in meiosis. Nairz K, et al. **Genes Dev** 1997 Sep 1;11(17):2272–90

Yeast HMG proteins NHP6A/B potentiate promoter-specific transcriptional activation in vivo and assembly of preinitiation complexes in vitro. Paull TT, et al. **Genes Dev** 1996 Nov 1;10(21):2769–81

The role of TBP in rDNA transcription by RNA polymerase I in Saccharomyces cerevisiae: TBP is required for upstream activation factor-dependent recruitment of core factor. Steffan JS, et al. **Genes Dev** 1996 Oct 15; 10(20):2551–63

SIR2 and SIR4 interactions differ in core and extended telomeric heterochromatin in yeast. Strahl-Bolsinger S, et al. **Genes Dev** 1997 Jan 1;11(1):83–93

Yeast Rad55 and Rad57 proteins form a heterodimer that functions with replication protein A to promote DNA strand exchange by Rad51 recombinase. Sung P. **Genes Dev** 1997 May 1;11(9):1111–21

Meiotic cells monitor the status of the interhomolog recombination complex. Xu L, et al. **Genes Dev** 1997 Jan 1;11(1):106–18

Dosage suppressors of a benomyl-dependent tubulin mutant: evidence for a link between microtubule stability and cellular metabolism. Machin NA, et al. **Genetics** 1996 Dec; 144(4):1363–73

In vivo analysis of folate coenzymes and their compartmentation in Saccharomyces cerevisiae. McNeil JB, et al. **Genetics** 1996 Feb;142(2):371–81

Mutations in the yeast SRB2 general transcription factor suppress hpr1-induced recombination and show defects in DNA repair. Piruat JI, et al. **Genetics** 1996 Aug; 143(4):1533–42

Vacuole partitioning during meiotic division in yeast. Roeder AD, et al. **Genetics** 1996 Oct;144(2):445–58

The prevention of repeat-associated deletions in Saccharomyces cerevisiae by mismatch repair depends on size and origin of deletions. Tran HT, et al. **Genetics** 1996 Aug;143(4):1579–87

Progression into the first meiotic division is sensitive to histone H2A-H2B dimer concentration in Saccharomyces cerevisiae. Tsui K, et al. **Genetics** 1997 Mar;145(3):647–59

Defective threonine-linked glycosylation of human insulin-like growth factor in mutants of the yeast Saccharomyces cerevisiae. Finck M, et al. **Glycobiology** 1996 Apr;6(3):313–20

Retention of Saccharomyces cerevisiae cell wall proteins through a phosphodiester-linked beta-1,3-/beta-1,6-glucan heteropolymer. Kapteyn JC, et al. **Glycobiology** 1996 Apr;6(3):337–45

Immunogold labeling of yeast cells: an efficient tool for the study of protein targeting and morphological alterations due to overexpression and inactivation of genes. Binder M, et al. **Histochem Cell Biol** 1996 Jul;106(1):115–30 (58 ref.)

RAS2/PKA pathway activity is involved in the nitrogen regulation of L-leucine uptake in Saccharomyces cerevisiae. Sáenz DA, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):505–12

Weak acid inhibition of fermentation by Zygosaccharomyces bailii and Saccharomyces cerevisiae. Ferreira MM, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):145–53

Munkoyo beverage, a traditional Zambian fermented maize gruel using Rhynchosia root as amylase source. Zulu RM, et al. **Int J Food Microbiol** 1997 Mar 3;34(3):249–58

Brewery yeast as a biosorbent for uranium. Omar NB, et al. **J Appl Bacteriol** 1996 Sep;81(3):283–7

Localization and cell surface anchoring of the Saccharomyces cerevisiae flocculation protein Flo1p. Bony M, et al. **J Bacteriol** 1997 Aug;179(15):4929–36

Expression of bacterial mtlD in Saccharomyces cerevisiae results in mannitol synthesis and protects a glycerol-defective mutant from high-salt and oxidative stress. Chaturvedi V, et al. **J Bacteriol** 1997 Jan; 179(1):157–62

Structure-function analyses of the Ssc1p, Mdj1p, and Mge1p Saccharomyces cerevisiae mitochondrial proteins in Escherichia coli. Deloche O, et al. **J Bacteriol** 1997 Oct; 179(19):6066–75

Catabolite inactivation of the galactose transporter in the yeast Saccharomyces cerevisiae: ubiquitination, endocytosis, and degradation in the vacuole. Horak J, et al. **J Bacteriol** 1997 Mar;179(5):1541–9

Suppressor gene analysis reveals an essential role for sphingolipids in transport of glycosylphosphatidylinositol-anchored proteins in Saccharomyces cerevisiae. Skrzypek M, et al. **J Bacteriol** 1997 Mar;179(5):1513–20

Restrictive glycosylphosphatidylinositol anchor synthesis in cwh6/gpi3 yeast cells causes aberrant biogenesis of cell wall proteins. Vossen JH, et al. **J Bacteriol** 1997 Apr; 179(7):2202–9

Amino acid substitutions in membrane-spanning domains of Hol1, a member of the major facilitator superfamily of transporters, confer nonselective cation uptake in Saccharomyces cerevisiae. Wright MB, et al. **J Bacteriol** 1996 Dec;178(24):7197–205

Identification and characterization of extragenic suppressors of the yeast sec12 ts mutation. Nakano A. **J Biochem (Tokyo)** 1996 Sep;120(3):642–6

Characterization of yeast sar1 temperature-sensitive mutants, which are defective in protein transport from the endoplasmic reticulum. Yamanushi T, et al. **J Biochem (Tokyo)** 1996 Aug;120(2):452–8

The high-conductance channels of yeast mitochondrial outer membranes: a planar bilayer study. Bathori G, et al. **J Bioenerg Biomembr** 1996 Apr;28(2):191–8

Extracellular ascorbate stabilization as a result of transplasma electron transfer in Saccharomyces cerevisiae. Santos-Ocaña C, et al. **J Bioenerg Biomembr** 1995 Dec; 27(6):597–603

Transcription elongation through DNA arrest sites. A multistep process involving both RNA polymerase II subunit RPB9 and TFIIS. Awrey DE, et al. **J Biol Chem** 1997 Jun 6;272(23):14747–54

Yeast respond to hypotonic shock with a calcium pulse. Batiza AF, et al. **J Biol Chem** 1996 Sep 20;271(38):23357–62

Functional expression of the murine Golgi CMP-sialic acid transporter in saccharomyces cerevisiae. Berninsone P, et al. **J Biol Chem** 1997 May 9;272(19):12616–9

Phosphate transport in yeast vacuoles. Booth JW, et al. **J Biol Chem** 1997 Aug 15;272(33):20408–13

Effects of oxygen concentration on the expression of cytochrome c and cytochrome c oxidase genes in yeast. Burke PV, et al. **J Biol Chem** 1997 Jun 6;272(23):14705–12

Mft52, an acid-bristle protein in the cytosol that delivers precursor proteins to yeast mitochondria. Cartwright P, et al. **J Biol Chem** 1997 Feb 21;272(8):5320–5

Interactions of nucleotide release factor Dss4p with Sec4p in the post-Golgi secretory pathway of yeast. Collins RN, et al. **J Biol Chem** 1997 Jul 18;272(29):18281–9

Characterization of the FET4 protein of yeast. Evidence for a direct role in the transport of iron. Dix D, et al. **J Biol Chem** 1997 May 2;272(18):11770–7

Analysis of the carboxyl-terminal peroxisomal targeting signal 1 in a homologous context in Saccharomyces cerevisiae. Elgersma Y, et al. **J Biol Chem** 1996 Oct 18; 271(42):26375–82

HDF2, the second subunit of the Ku homologue from Saccharomyces cerevisiae. Feldmann H, et al. **J Biol Chem** 1996 Nov 1;271(44):27765–9

The yeast Fre1p/Fre2p cupric reductases facilitate copper uptake and are regulated by the copper-modulated Mac1p activator. Georgatsou E, et al. **J Biol Chem** 1997 May 23;

272(21):13786–92
The role of phosphatidylcholine biosynthesis in the regulation of the INO1 gene of yeast. Griac P, et al. **J Biol Chem** 1996 Oct 11;271(41):25692–8
Cer1p, a novel Hsp70-related protein required for posttranslational endoplasmic reticulum translocation in yeast. Hamilton TG, et al. **J Biol Chem** 1996 Nov 29; 271(48):30610–3
The role of charged residues in determining transmembrane protein insertion orientation in yeast. Harley CA, et al. **J Biol Chem** 1996 Oct 4;271(40):24625–33
A cryptic DNA binding domain at the COOH terminus of TFIIIB70 affects formation, stability, and function of preinitiation complexes. Huet J, et al. **J Biol Chem** 1997 Jul 18;272(29):18341–9
Purification of the Saccharomyces cerevisiae cleavage/polyadenylation factor I. Separation into two components that are required for both cleavage and polyadenylation of mRNA 3' ends. Kessler MM, et al. **J Biol Chem** 1996 Oct 25;271(43):27167–75
Endopolyphosphatases for long chain inorganic polyphosphate in yeast and mammals. Kumble KD, et al. **J Biol Chem** 1996 Oct 25;271(43):27146–51
Transcriptional remodeling and G1 arrest in dioxygen stress in Saccharomyces cerevisiae. Lee J, et al. **J Biol Chem** 1996 Oct 4;271(40):24885–93
Gpi1, a Saccharomyces cerevisiae protein that participates in the first step in glycosylphosphatidylinositol anchor synthesis. Leidich SD, et al. **J Biol Chem** 1996 Nov 1; 271(44):27829–37
Negative control of heavy metal uptake by the Saccharomyces cerevisiae BSD2 gene. Liu XF, et al. **J Biol Chem** 1997 May 2;272(18):11763–9
The Ktr1p, Ktr3p, and Kre2p/Mnt1p mannosyltransferases participate in the elaboration of yeast O- and N-linked carbohydrate chains. Lussier M, et al. **J Biol Chem** 1997 Jun 13;272(24):15527–31
The ATP binding cassette transporters Pdr5 and Snq2 of Saccharomyces cerevisiae can mediate transport of steroids in vivo. Mahé Y, et al. **J Biol Chem** 1996 Oct 11; 271(41):25167–72
Characterization of translation initiation factor 5 (eIF5) from Saccharomyces cerevisiae. Functional homology with mammalian eIF5 and the effect of depletion of eIF5 on protein synthesis in vivo and in vitro. Maiti T, et al. **J Biol Chem** 1997 Jul 18;272(29):18333–40
Initiation of glycogen synthesis in yeast. Requirement of multiple tyrosine residues for function of the self-glucosylating Glg proteins in vivo. Mu J, et al. **J Biol Chem** 1996 Oct 25;271(43):26554–60
Dissociation of import of the Rieske iron-sulfur protein into Saccharomyces cerevisiae mitochondria from proteolytic processing of the presequence. Nett JH, et al. **J Biol Chem** 1996 Oct 25;271(43):26713–6
A yeast ATP-binding cassette-type protein mediating ATP-dependent bile acid transport. Ortiz DF, et al. **J Biol Chem** 1997 Jun 13;272(24):15358–65
High levels of the GTPase Ran/TC4 relieve the requirement for nuclear protein transport factor 2. Paschal BM, et al. **J Biol Chem** 1997 Aug 22;272(34):21534–9
Role of the yeast phosphatidylinositol/phosphatidylcholine transfer protein (Sec14p) in phosphatidylcholine turnover and INO1 regulation. Patton-Vogt JL, et al. **J Biol Chem** 1997 Aug 15;272(33):20873–83
Molecular engineering study on electron transfer from NADPH-P450 reductase to rat mitochondrial P450c27 in yeast microsomes. Sakaki T, et al. **J Biol Chem** 1996 Oct 18;271(42):26209–13
Disruption of the gene encoding the acyl-CoA-binding protein (ACB1) perturbs acyl-CoA metabolism in Saccharomyces cerevisiae. Schjerling CK, et al. **J Biol Chem** 1996 Sep 13;271(37):22514–21
The reversible antiport-uniport conversion of the phosphate carrier from yeast mitochondria depends on the presence of a single cysteine. Schroers A, et al. **J Biol Chem** 1997 Apr 18;272(16):10558–64
Regulation of phospholipid biosynthetic enzymes by the level of CDP-diacylglycerol synthase activity. Shen H, et al. **J Biol Chem** 1997 Apr 25;272(17):11215–20
Reduction of CDP-diacylglycerol synthase activity results in the excretion of inositol by Saccharomyces cerevisiae. Shen H, et al. **J Biol Chem** 1996 Nov 15;271(46):29043–8
Covalent attachment of FAD derivatives to a fusion protein consisting of 6-hydroxy-D-nicotine oxidase and a mitochondrial presequence. Folding, enzyme activity, and import of the modified protein into yeast mitochondria. Stoltz M, et al. **J Biol Chem** 1996 Oct 11;271(41):25208–12
A single-stranded DNA-binding protein is needed for efficient presynaptic complex formation by the Saccharomyces cerevisiae Rad51 protein. Sugiyama T, et al. **J Biol Chem** 1997 Mar 21;272(12):7940–5
Yeast Rad51 recombinase mediates polar DNA strand exchange in the absence of ATP hydrolysis. Sung P, et al. **J Biol Chem** 1996 Nov 8;271(45):27983–6
The Saccharomyces cerevisiae AP-1 protein discriminates between oxidative stress elicited by the oxidants H2O2 and diamide. Wemmie JA, et al. **J Biol Chem** 1997 Mar 21; 272(12):7908–14
Ras2 and Ras1 protein phosphorylation in Saccharomyces cerevisiae. Whistler JL, et al. **J Biol Chem** 1997 Jul 25; 272(30):18790–800
Determination of the transmembrane topology of yeast Sec61p, an essential component of the endoplasmic reticulum translocation complex. Wilkinson BM, et al. **J Biol Chem** 1996 Oct 11;271(41):25590–7
Elements of neural adhesion molecules and a yeast vacuolar protein sorting receptor are present in a novel mammalian low density lipoprotein receptor family member. Yamazaki H, et al. **J Biol Chem** 1996 Oct 4;271(40):24761–8
Cleavage factor II of Saccharomyces cerevisiae contains homologues to subunits of the mammalian Cleavage/polyadenylation specificity factor and exhibits sequence-specific, ATP-dependent interaction with precursor RNA. Zhao J, et al. **J Biol Chem** 1997 Apr 18; 272(16):10831–8
A small conserved domain in the yeast Spa2p is necessary and sufficient for its polarized localization. Arkowitz RA, et al. **J Cell Biol** 1997 Jul 14;138(1):17–36
Mdm12p, a component required for mitochondrial inheritance that is conserved between budding and fission yeast. Berger KH, et al. **J Cell Biol** 1997 Feb 10; 136(3):545–53
Two separate signals act independently to localize a yeast late Golgi membrane protein through a combination of retrieval and retention. Bryant NJ, et al. **J Cell Biol** 1997 Jan 27;136(2):287–97
In vivo dynamics of nuclear pore complexes in yeast. Bucci M, et al. **J Cell Biol** 1997 Mar 24;136(6):1185–99
The refolding activity of the yeast heat shock proteins Ssa1 and Ssa2 defines their role in protein translocation. Bush GL, et al. **J Cell Biol** 1996 Dec;135(5):1229–37
Biogenesis of the Saccharomyces cerevisiae mating pheromone a-factor. Chen P, et al. **J Cell Biol** 1997 Jan 27;136(2):251–69
A multispecificity syntaxin homologue, Vam3p, essential for autophagic and biosynthetic protein transport to the vacuole. Darsow T, et al. **J Cell Biol** 1997 Aug 11; 138(3):517–29
A novel membrane-associated metalloprotease, Ste24p, is required for the first step of NH2-terminal processing of the yeast a-factor precursor. Fujimura-Kamada K, et al. **J Cell Biol** 1997 Jan 27;136(2):271–85
A pathway for targeting soluble misfolded proteins to the yeast vacuole. Hong E, et al. **J Cell Biol** 1996 Nov; 135(3):623–33
Two new Ypt GTPases are required for exit from the yeast trans-Golgi compartment. Jedd G, et al. **J Cell Biol** 1997 May 5;137(3):563–80
Plasma membrane translocation of fluorescent-labeled phosphatidylethanolamine is controlled by transcription regulators, PDR1 and PDR3. Kean LS, et al. **J Cell Biol** 1997 Jul 28;138(2):255–70
Transport of a large oligomeric protein by the cytoplasm to vacuole protein targeting pathway. Kim J, et al. **J Cell Biol** 1997 May 5;137(3):609–18
In vitro reconstitution of cortical actin assembly sites in budding yeast. Lechler T, et al. **J Cell Biol** 1997 Jul 14; 138(1):95–103
Docking of yeast vacuoles is catalyzed by the Ras-like GTPase Ypt7p after symmetric priming by Sec18p (NSF). Mayer A, et al. **J Cell Biol** 1997 Jan 27;136(2):307–17
The membrane protein alkaline phosphatase is delivered to the vacuole by a route that is distinct from the VPS-dependent pathway. Piper RC, et al. **J Cell Biol** 1997 Aug 11;138(3):531–45
A heterodimer of thioredoxin and I(B)2 cooperates with Sec18p (NSF) to promote yeast vacuole inheritance. Xu Z, et al. **J Cell Biol** 1997 Jan 27;136(2):299–306
The SAC3 gene encodes a nuclear protein required for normal progression of mitosis. Bauer A, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1575–83
Sec12p requires Rer1p for sorting to coatomer (COPI)-coated vesicles and retrieval to the ER. Boehm J, et al. **J Cell Sci** 1997 Apr;110 (Pt 8):991–1003
DNA damage inhibits proteolysis of the B-type cyclin Clb5 in S. cerevisiae. Germain D, et al. **J Cell Sci** 1997 Aug; 110 (Pt 15):1813–20
The anaphase-promoting complex is required in G1 arrested yeast cells to inhibit B-type cyclin accumulation and to prevent uncontrolled entry into S-phase. Irniger S, et al. **J Cell Sci** 1997 Jul;110 (Pt 13):1523–31
Putative GTPase Gtr1p genetically interacts with the RanGTPase cycle in Saccharomyces cerevisiae. Nakashima N, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2311–8
The spacer protein Spc110p targets calmodulin to the central plaque of the yeast spindle pole body. Spang A, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2229–37
Inhibition of ethanol production by Saccharomyces cerevisiae in human blood by sodium fluoride. Amick GD, et al. **J Forensic Sci** 1997 Jul;42(4):690–2
Incorporation of copper into the yeast Saccharomyces cerevisiae. Identification of Cu(I)---metallothionein in intact yeast cells. Presta A, et al. **J Inorg Biochem** 1997 Jun;66(4):231–40
Polyprenol formation in the yeast Saccharomyces cerevisiae: effect of farnesyl diphosphate synthase overexpression. Szkopińska A, et al. **J Lipid Res** 1997 May;38(5):962–8
Inactivation of the peptide-sensitive channel from the yeast mitochondrial outer membrane: properties, sensitivity to trypsin and modulation by a basic peptide. Pelleschi M, et al. **J Membr Biol** 1997 Mar 1;156(1):37–44
Only one nucleotide insertion to the long variable arm confers an efficient serine acceptor activity upon Saccharomyces cerevisiae tRNA(Leu) in vitro. Himeno H, et al. **J Mol Biol** 1997 May 16;268(4):704–11
The study of methionine uptake in Saccharomyces cerevisiae reveals a new family of amino acid permeases. Isnard AD, et al. **J Mol Biol** 1996 Oct 4;262(4):473–84
Rat RL23a ribosomal protein efficiently competes with its Saccharomyces cerevisiae L25 homologue for assembly into 60 S subunits. Jeeninga RE, et al. **J Mol Biol** 1996 Nov 15;263(5):648–56
Mge1 functions as a nucleotide release factor for Ssc1, a mitochondrial Hsp70 of Saccharomyces cerevisiae. Miao B, et al. **J Mol Biol** 1997 Feb 7;265(5):541–52
Modulation of yeast F-actin structure by a mutation in the nucleotide-binding cleft. Orlova A, et al. **J Mol Biol** 1997 Aug 15;271(2):235–43
Infectious RNA transcripts from full-length dengue virus type 2 cDNA clones made in yeast. Polo S, et al. **J Virol** 1997 Jul;71(7):5366–74
Regulation of hypoxic gene expression in yeast. Zitomer RS, et al. **Kidney Int** 1997 Feb;51(2):507–13
Translation initiation factor-dependent extracts from yeast Saccharomyces cerevisiae. Altmann M, et al. **Methods** 1997 Apr;11(4):343–52
Use of 13C nuclear magnetic resonance to evaluate metabolic flux through folate one-carbon pools in Saccharomyces cerevisiae. Appling DR, et al. **Methods Enzymol** 1997; 281:218–31
Transformation of Saccharomyces cerevisiae mitochondria using the biolistic gun. Butow RA, et al. **Methods Enzymol** 1996;264:265–78
Genetic strategies for identification of mitochondrial translation factors in Saccharomyces cerevisiae. Fox TD. **Methods Enzymol** 1996;264:228–37
Allotopic expression of mitochondrial ATP synthase genes in nucleus of Saccharomyces cerevisiae. Gray RE, et al. **Methods Enzymol** 1996;264:369–89
Interaction between acidic transcriptional activation domains of herpes simplex virus activator protein VP16 and transcriptional initiation factor IID. Greenblatt J, et al. **Methods Enzymol** 1996;274:120–33
RNA polymerase III and class III transcription factors from Saccharomyces cerevisiae. Huet J, et al. **Methods Enzymol** 1996;273:249–67 (70 ref.)
Thiamin transporters in yeast. Iwashima A, et al. **Methods Enzymol** 1997;279:109–17 (15 ref.)
Transcription in vitro with Saccharomyces cerevisiae mitochondrial RNA-polymerase. Mangus DA, et al. **Methods Enzymol** 1996;264:57–66
In organello mitochondrial protein and RNA synthesis systems from Saccharomyces cerevisiae. Poyton RO, et al. **Methods Enzymol** 1996;264:36–42
Biochemical mechanism of transcriptional activation by GAL4-VP16. Tantin D, et al. **Methods Enzymol** 1996; 274:133–49
Isotopically labeled precursors and mass spectrometry in elucidating biosynthesis of pyrimidine moiety of thiamin in Saccharomyces cerevisiae. Tazuya K, et al. **Methods Enzymol** 1997;279:97–108 (9 ref.)
mRNA abundance and half-life measurements. Brown AJ, et al. **Methods Mol Biol** 1996;53:277–95 (10 ref.)
Yeast two-hybrid library screening. Cowell IG. **Methods Mol Biol** 1997;69:185–202
Mechanisms and control of mRNA turnover in Saccharomyces cerevisiae. Caponigro G, et al. **Microbiol Rev** 1996 Mar;60(1):233–49 (126 ref.)
A Candida albicans gene expressed in Saccharomyces cerevisiae results in a distinct pattern of mRNA processing. Iborra A, et al. **Microbiologia** 1996 Sep;12(3):443–8
Transport of phosphate into vacuoles of Saccharomyces cerevisiae. Kulakovskaya TV, et al. **Microbiologia** 1997 Mar;13(1):71–4
Alteration in membrane fluidity and lipid composition, and modulation of H(+)-ATPase activity in Saccharomyces cerevisiae caused by decanoic acid. Alexandre H, et al. **Microbiology** 1996 Mar;142 (Pt 3):469–75
Reduction of ATPase activity accompanied by photodecomposition of ergosterol by near-UV irradiation in plasma membranes prepared from Saccharomyces cerevisiae. Arami S, et al. **Microbiology** 1997 Jul;143 (Pt 7):2465–71
Glucose-dependent, cAMP-mediated ATP efflux from Saccharomyces cerevisiae. Boyum R, et al. **Microbiology** 1997 Jun;143 (Pt 6):1901–8
Expulsion of uracil and thymine from the yeast Saccharomyces cerevisiae: contrasting responses to changes in the proton electrochemical gradient. Eddy AA. **Microbiology** 1997 Jan;143 (Pt 1):219–29
Cytosine accumulation as a measure of the proton electrochemical gradient acting on the overexpressed cytosine permease of Saccharomyces cerevisiae. Eddy AA, et al. **Microbiology** 1996 Mar;142 (Pt 3):449–57
Extrusion of benzoic acid in Saccharomyces cerevisiae by an energy-dependent mechanism. Henriques M, et al. **Microbiology** 1997 Jun;143 (Pt 6):1877–83
Cloning of a protopectinase gene of Trichosporon penicillatum and its expression in Saccharomyces cerevisiae. Iguchi K, et al. **Microbiology** 1997 May;143 (Pt 5):1657–64
Flux distributions in anaerobic, glucose-limited continuous cultures of Saccharomyces cerevisiae. Nissen TL, et al. **Microbiology** 1997 Jan;143 (Pt 1):203–18
Cell cycle studies on the mode of action of yeast K28 killer toxin. Schmitt MJ, et al. **Microbiology** 1996 Sep;142 (Pt

9):2655–62
Response of Saccharomyces cerevisiae to changes in external osmolarity. Varela JC, et al. **Microbiology** 1996 Apr;142 (Pt 4):721–31 (105 ref.)
Amino- and carboxy-terminal domains of the yeast Rab escort protein are both required for binding of Ypt small G proteins. Bauer BE, et al. **Mol Biol Cell** 1996 Oct; 7(10):1521–33
A novel Sec18p/NSF-dependent complex required for Golgi-to-endosome transport in yeast. Burd CG, et al. **Mol Biol Cell** 1997 Jun;8(6):1089–104
Genes that control the fidelity of endoplasmic reticulum to Golgi transport identified as suppressors of vesicle budding mutations. Elrod-Erickson MJ, et al. **Mol Biol Cell** 1996 Jul;7(7):1043–58
Interaction between yeast Cdc6 protein and B-type cyclin/Cdc28 kinases. Elsasser S, et al. **Mol Biol Cell** 1996 Nov;7(11):1723–35
Sec3p is involved in secretion and morphogenesis in Saccharomyces cerevisiae. Finger FP, et al. **Mol Biol Cell** 1997 Apr;8(4):647–62
Evidence for physical and functional interactions among two Saccharomyces cerevisiae SH3 domain proteins, an adenylyl cyclase-associated protein and the actin cytoskeleton. Lila T, et al. **Mol Biol Cell** 1997 Feb; 8(2):367–85
A glutathione reductase mutant of yeast accumulates high levels of oxidized glutathione and requires thioredoxin for growth. Muller EG. **Mol Biol Cell** 1996 Nov;7(11):1805–13
The effects of clathrin inactivation on localization of Kex2 protease are independent of the TGN localization signal in the cytosolic tail of Kex2p. Redding K, et al. **Mol Biol Cell** 1996 Nov;7(11):1667–77
Cdc28 tyrosine phosphorylation and the morphogenesis checkpoint in budding yeast. Sia RA, et al. **Mol Biol Cell** 1996 Nov;7(11):1657–66
Pep7p provides a novel protein that functions in vesicle-mediated transport between the yeast Golgi and endosome. Webb GC, et al. **Mol Biol Cell** 1997 May; 8(5):871–95
An essential role of the yeast pheromone-induced Ca2+ signal is to activate calcineurin. Withee JL, et al. **Mol Biol Cell** 1997 Feb;8(2):263–77
Chs1p and Chs3p, two proteins involved in chitin synthesis, populate a compartment of the Saccharomyces cerevisiae endocytic pathway. Ziman M, et al. **Mol Biol Cell** 1996 Dec;7(12):1909–19
The yeast, Saccharomyces cerevisiae, RNase P/MRP ribonucleoprotein endoribonuclease family. Reilly TH, et al. **Mol Biol Rep** 1995–96;22(2–3):87–93 (63 ref.)
ATPase and ubiquitin-binding proteins of the yeast proteasome. Rubin DM, et al. **Mol Biol Rep** 1997 Mar; 24(1–2):17–26
Genetic and biochemical analyses of yeast RNase MRP. Tollervey D. **Mol Biol Rep** 1995–96;22(2–3):75–9 (32 ref.)
Screening the p53 status of human cell lines using a yeast functional assay. Jia LQ, et al. **Mol Carcinog** 1997 Aug; 19(4):243–53
Regulation of intracellular level of Na+, K+ and glycerol in Saccharomyces cerevisiae under osmotic stress. Sunder S, et al. **Mol Cell Biochem** 1996 May 24;158(2):121–4
The Saccharomyces cerevisiae Msh2 and Msh6 proteins form a complex that specifically binds to duplex oligonucleotides containing mismatched DNA base pairs. Alani E. **Mol Cell Biol** 1996 Oct;16(10):5604–15
Length changes in the joining segment between domains 5 and 6 of a group II intron inhibit self-splicing and alter 3' splice site selection. Boulanger SC, et al. **Mol Cell Biol** 1996 Oct;16(10):5896–904
In vivo analysis of the Hsp90 cochaperone Sti1 (p60). Chang HC, et al. **Mol Cell Biol** 1997 Jan;17(1):318–25
C-terminal truncations of the yeast nucleoporin Nup145p produce a rapid temperature-conditional mRNA export defect and alterations to nuclear structure [published erratum appears in Mol Cell Biol 1997 Apr;17(4):2347–50] Dockendorff TC, et al. **Mol Cell Biol** 1997 Feb;17(2):906–20
The Saccharomyces cerevisiae MADS-box transcription factor Rlm1 is a target for the Mpk1 mitogen-activated protein kinase pathway. Dodou E, et al. **Mol Cell Biol** 1997 Apr;17(4):1848–59
A34.5, a nonessential component of yeast RNA polymerase I, cooperates with subunit A14 and DNA topoisomerase I to produce a functional rRNA synthesis machine. Gadal O, et al. **Mol Cell Biol** 1997 Apr;17(4):1787–95
Mutations in trans-acting factors affecting mRNA decapping in Saccharomyces cerevisiae. Hatfield L, et al. **Mol Cell Biol** 1996 Oct;16(10):5830–8
Upf1p, Nmd2p, and Upf3p are interacting components of the yeast nonsense-mediated mRNA decay pathway. He F, et al. **Mol Cell Biol** 1997 Mar;17(3):1580–94
A novel DNA binding motif for yeast zinc cluster proteins: the Leu3p and Pdr3p transcriptional activators recognize everted repeats. Hellauer K, et al. **Mol Cell Biol** 1996 Nov; 16(11):6096–102
Nop2p is required for pre-rRNA processing and 60S ribosome subunit synthesis in yeast. Hong B, et al. **Mol Cell Biol** 1997 Jan;17(1):378–88
Identification of seven hydrophobic clusters in GCN4 making redundant contributions to transcriptional activation. Jackson BM, et al. **Mol Cell Biol** 1996 Oct;16(10):5557–71
A novel 66-kilodalton protein complexes with Rrn6, Rrn7, and TATA-binding protein to promote polymerase I transcription initiation in Saccharomyces cerevisiae. Lin CW, et al. **Mol Cell Biol** 1996 Nov;16(11):6436–43
A family of ammonium transporters in Saccharomyces cerevisiae. Marini AM, et al. **Mol Cell Biol** 1997 Aug; 17(8):4282–93
Two different repressors collaborate to restrict expression of the yeast glucose transporter genes HXT2 and HXT4 to low levels of glucose. Ozcan S, et al. **Mol Cell Biol** 1996 Oct;16(10):5536–45
Rgt1p of Saccharomyces cerevisiae, a key regulator of glucose-induced genes, is both an activator and a repressor of transcription. Özcan S, et al. **Mol Cell Biol** 1996 Nov; 16(11):6419–26
Allele-specific suppression of a defective trans-Golgi network (TGN) localization signal in Kex2p identifies three genes involved in localization of TGN transmembrane proteins. Redding K, et al. **Mol Cell Biol** 1996 Nov; 16(11):6208–17
A yeast acetyl coenzyme A carboxylase mutant links very-long-chain fatty acid synthesis to the structure and function of the nuclear membrane-pore complex. Schneiter R, et al. **Mol Cell Biol** 1996 Dec;16(12):7161–72
In vitro analysis of elongation and termination by mutant RNA polymerases with altered termination behavior. Shaaban SA, et al. **Mol Cell Biol** 1996 Nov;16(11):6468–76
Transcriptional regulation by ergosterol in the yeast Saccharomyces cerevisiae. Smith SJ, et al. **Mol Cell Biol** 1996 Oct;16(10):5427–32
Ribosomal protein L32 of Saccharomyces cerevisiae influences both the splicing of its own transcript and the processing of rRNA. Vilardell J, et al. **Mol Cell Biol** 1997 Apr;17(4):1959–65
Identification and characterization of mutations in the UPF1 gene that affect nonsense suppression and the formation of the Upf protein complex but not mRNA turnover. Weng Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5491–506
Genetic and biochemical characterization of mutations in the ATPase and helicase regions of the Upf1 protein. Weng Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5477–90
Interaction between the small GTPase Ran/Gsp1p and Ntf2p is required for nuclear transport. Wong DH, et al. **Mol Cell Biol** 1997 Jul;17(7):3755–67
Plant farnesyltransferase can restore yeast Ras signaling and mating. Yalovsky S, et al. **Mol Cell Biol** 1997 Apr; 17(4):1986–94
Identification of a regulatory subcomplex in the guanine nucleotide exchange factor eIF2B that mediates inhibition by phosphorylated eIF2. Yang W, et al. **Mol Cell Biol** 1996 Nov;16(11):6603–16
The Uba2 and Ufd1 proteins of Saccharomyces cerevisiae interact with poly(A) polymerase and affect the polyadenylation activity of cell extracts. del Olmo M, et al. **Mol Gen Genet** 1997 Jun;255(2):209–18
Rig2, a RING finger protein that interacts with the Kin28/Ccl1 CTD kinase in yeast. Faye G, et al. **Mol Gen Genet** 1997 Aug;255(5):460–6
A novel yeast gene, RHK1, is involved in the synthesis of the cell wall receptor for the HM-1 killer toxin that inhibits beta-1,3-glucan synthesis. Kimura T, et al. **Mol Gen Genet** 1997 Mar 26;254(2):139–47
Inactivation of OGG1 increases the incidence of G . C-->T . A transversions in Saccharomyces cerevisiae: evidence for endogenous oxidative damage to DNA in eukaryotic cells. Thomas D, et al. **Mol Gen Genet** 1997 Mar 26; 254(2):171–8
Molecular biology of iron acquisition in Saccharomyces cerevisiae. Askwith CC, et al. **Mol Microbiol** 1996 Apr; 20(1):27–34 (54 ref.)
Signalling pathways leading to transcriptional regulation of genes involved in the activation of glycolysis in yeast. Gonçalves PM, et al. **Mol Microbiol** 1997 Aug;25(3):483–93
Evidence for trehalose-6-phosphate-dependent and -independent mechanisms in the control of sugar influx into yeast glycolysis. Hohmann S, et al. **Mol Microbiol** 1996 Jun;20(5):981–91
The role of the Saccharomyces cerevisiae CCC1 gene in the homeostasis of manganese ions. Lapinskas PJ, et al. **Mol Microbiol** 1996 Aug;21(3):519–28
Depletion in the levels of the release factor eRF1 causes a reduction in the efficiency of translation termination in yeast. Stansfield I, et al. **Mol Microbiol** 1996 Jun; 20(6):1135–43
In Saccharomyces cerevisiae a short amino acid sequence facilitates excretion in the growth medium of periplasmic proteins. Venturini M, et al. **Mol Microbiol** 1997 Mar; 23(5):997–1007
Ste50p sustains mating pheromone-induced signal transduction in the yeast Saccharomyces cerevisiae. Xu G, et al. **Mol Microbiol** 1996 May;20(4):773–83
A yeast whole cell extract supports nucleotide excision repair and RNA polymerase II transcription in vitro. Wang Z, et al. **Mutat Res** 1996 Sep 2;364(1):33–41
Engineering pathways for malate degradation in Saccharomyces cerevisiae. Volschenk H, et al. **Nat Biotechnol** 1997 Mar;15(3):253–7
Respiratory deficiency due to loss of mitochondrial DNA in yeast lacking the frataxin homologue. Wilson RB, et al. **Nat Genet** 1997 Aug;16(4):352–7
Picture story. Phosphorylation turns it on. Felsenfeld AL. **Nat Struct Biol** 1996 Oct;3(10):841
G2 cyclins are required for the degradation of G1 cyclins in yeast. Blondel M, et al. **Nature** 1996 Nov 21; 384(6606):279–82
Essential role for diacylglycerol in protein transport from the yeast Golgi complex [see comments] Kearns BG, et al. **Nature** 1997 May 1;387(6628):101–5. Comment in: Nature 1997 May 1;387(6628):21–2.
Protein transport. Greasing the Golgi budding machine [news; comment] Martin TF. **Nature** 1997 May 1; 387(6628):21–2. Comment on: Nature 1997 May 1;387(6628):101–5.
Nucleotide exchange on ARF mediated by yeast Gea1 protein. Peyroche A, et al. **Nature** 1996 Dec 5; 384(6608):479–81
Import of carrier proteins into the mitochondrial inner membrane mediated by Tim22. Sirrenberg C, et al. **Nature** 1996 Dec 12;384(6609):582–5
Sequence requirements of the bidirectional yeast TRP4 mRNA 3'-end formation signal. Egli CM, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):417–22
The Cbp2 protein stimulates the splicing of the omega intron of yeast mitochondria. Shaw LC, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1597–604
Contribution of human cytochrome P450 to benzo[a]pyrene and benzo[a]pyrene-7,8-dihydrodiol metabolism, as predicted from heterologous expression in yeast. Gautier JC, et al. **Pharmacogenetics** 1996 Dec;6(6):489–99
Saccharomyces cerevisiae mutants defective in heme biosynthesis as a tool for studying the mechanism of phototoxicity of porphyrins. Zołądek T, et al. **Photochem Photobiol** 1996 Dec;64(6):957–62
A pollen-, ovule-, and early embryo-specific poly(A) binding protein from Arabidopsis complements essential functions in yeast. Belostotsky DA, et al. **Plant Cell** 1996 Aug;8(8):1261–75
Two cDNAs from potato are able to complement a phosphate uptake-deficient yeast mutant: identification of phosphate transporters from higher plants. Leggewie G, et al. **Plant Cell** 1997 Mar;9(3):381–92
Vacuolar function in the phosphate homeostasis of the yeast Saccharomyces cerevisiae. Shirahama K, et al. **Plant Cell Physiol** 1996 Dec;37(8):1090–3
The ATM homologue MEC1 is required for phosphorylation of replication protein A in yeast. Brush GS, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15075–80
Double strand breaks at the HIS2 recombination hot spot in Saccharomyces cerevisiae. Bullard SA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13054–9
The p20 and Ded1 proteins have antagonistic roles in eIF4E-dependent translation in Saccharomyces cerevisiae. de la Cruz J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5201–6
Cdc6p-dependent loading of Mcm proteins onto pre-replicative chromatin in budding yeast. Donovan S, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5611–6
Significance of chaperonin 10-mediated inhibition of ATP hydrolysis by chaperonin 60. Dubaquié Y, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9011–6
Expression in yeast of binding regions of karyopherins alpha and beta inhibits nuclear import and cell growth. Enenkel C, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12986–91
Copper-mediated repression of the activation domain in the yeast Mac1p transcription factor. Graden JA, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5550–5
Functional cell surface expression of the anion transport domain of human red cell band 3 (AE1) in the yeast Saccharomyces cerevisiae. Groves JD, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12245–50
Prion-inducing domain 2–114 of yeast Sup35 protein transforms in vitro into amyloid-like filaments. King CY, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6618–22
The Saccharomyces CDC13 protein is a single-strand TG1–3 telomeric DNA-binding protein in vitro that affects telomere behavior in vivo. Lin JJ, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13760–5
Cytohesin-1, a cytosolic guanine nucleotide-exchange protein for ADP-ribosylation factor. Meacci E, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1745–8
The major yeast poly(A)-binding protein is associated with cleavage factor IA and functions in premessenger RNA 3'-end formation. Minvielle-Sebastia L, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7897–902
Silent information regulator protein complexes in Saccharomyces cerevisiae: a SIR2/SIR4 complex and evidence for a regulatory domain in SIR4 that inhibits its interaction with SIR3. Moazed D, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2186–91
Evidence for a transcriptional activation function of BRCA1 C-terminal region. Monteiro AN, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13595–9
Saccharomyces cerevisiae Gcs1 is an ADP-ribosylation factor GTPase-activating protein. Poon PP, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10074–7
Similar processes mediate glycopeptide export from the endoplasmic reticulum in mammalian cells and Saccharomyces cerevisiae. Römisch K, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6730–4
Rer1p as common machinery for the endoplasmic reticulum localization of membrane proteins. Sato K, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9693–8
Importin/karyopherin protein family members required for mRNA export from the nucleus. Seedorf M, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8590–5

The Ku-like protein from Saccharomyces cerevisiae is required in vitro for the assembly of a stable multiprotein complex at a eukaryotic origin of replication. Shakibai N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11569–74

A Saccharomyces cerevisiae homolog of the human adrenoleukodystrophy transporter is a heterodimer of two half ATP-binding cassette transporters. Shani N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11901–6

Mutational studies of yeast transcription factor IIB in vivo reveal a functional surface important for gene activation. Shaw SP, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18; 94(6):2427–32

The essential yeast RNA binding protein Np13p is methylated. Siebel CW, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13641–6

A novel RNA polymerase I-dependent RNase activity that shortens nascent transcripts from the 3' end. Tschochner H. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12914–9

Transcriptional repression by YY1 is mediated by interaction with a mammalian homolog of the yeast global regulator RPD3. Yang WM, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12845–50

Galactose-dependent reversible interaction of Gal3p with Gal80p in the induction pathway of Gal4p-activated genes of Saccharomyces cerevisiae. Yano K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1721–6

Molecular biology of trehalose and the trehalases in the yeast Saccharomyces cerevisiae. Nwaka S, et al. **Prog Nucleic Acid Res Mol Biol** 1998;58:197–237 (178 ref.)

Overexpression and purification of elongation factor 3 from Saccharomyces cerevisiae. Kambampati R, et al. **Protein Expr Purif** 1997 Jul;10(2):209–13

Synthetic leaders with potential BiP binding mediate high-yield secretion of correctly folded insulin precursors from Saccharomyces cerevisiae. Kjeldsen T, et al. **Protein Expr Purif** 1997 Apr;9(3):331–6

Yeast chromatin reconstitution system using purified yeast core histones and yeast nucleosome assembly protein-1. Pilon J, et al. **Protein Expr Purif** 1997 Jun;10(1):132–40

Secretory expression of a single-chain insulin precursor in yeast and its conversion into human insulin. Zhang Y, et al. **Sci China C Life Sci** 1996 Jun;39(3):225–33

Kap104p: a karyopherin involved in the nuclear transport of messenger RNA binding proteins. Aitchison JD, et al. **Science** 1996 Oct 25;274(5287):624–7

Regulation of mitochondrial iron accumulation by Yfh1p, a putative homolog of frataxin. Babcock M, et al. **Science** 1997 Jun 13;276(5319):1709–12

Cells count proteins to keep their telomeres in line [news; comment] Barinaga M. **Science** 1997 Feb 14;275(5302):928 . Comment on: Science 1997 Feb 14;275(5302):973–7. Comment on: Science 1997 Feb 14;275(5302):986–90.

Modulation of Ras and a-factor function by carboxyl-terminal proteolysis [see comments] Boyartchuk VL, et al. **Science** 1997 Mar 21;275(5307):1796–800. Comment in: Science 1997 Mar 21;275(5307):1750–1.

Bni1p, a yeast formin linking cdc42p and the actin cytoskeleton during polarized morphogenesis. Evangelista M, et al. **Science** 1997 Apr 4;276(5309):118–22

Ste5 RING-H2 domain: role in Ste4-promoted oligomerization for yeast pheromone signaling. Inouye C, et al. **Science** 1997 Oct 3;278(5335):103–6

Combinatorial control required for the specificity of yeast MAPK signaling. Madhani HD, et al. **Science** 1997 Feb 28;275(5304):1314–7

A protein-counting mechanism for telomere length regulation in yeast [see comments] Marcand S, et al. **Science** 1997 Feb 14;275(5302):986–90. Comment in: Science 1997 Feb 14;275(5302):928.

Cdc13p: a single-strand telomeric DNA-binding protein with a dual role in yeast telomere maintenance. Nugent CI, et al. **Science** 1996 Oct 11;274(5285):249–52

Cell cycle-dependent establishment of a late replication program. Raghuraman MK, et al. **Science** 1997 May 2; 276(5313):806–9

Dependence of yeast pre-mRNA 3'-end processing on CFT1: a sequence homolog of the mammalian AAUAAA binding factor [see comments] Stumpf G, et al. **Science** 1996 Nov 29;274(5292):1517–20. Comment in: Science 1996 Nov 29;274(5292):1481–2.

Differential interaction of natural and synthetic estrogens with extracellular binding proteins in a yeast estrogen screen. Arnold SF, et al. **Steroids** 1996 Nov;61(11):642–6

Signaling phosphate starvation. Lenburg ME, et al. **Trends Biochem Sci** 1996 Oct;21(10):383–7 (42 ref.)

The biochemistry of polyadenylation. Wahle E, et al. **Trends Biochem Sci** 1996 Jul;21(7):247–50

Stimulation of yeast EF-3 factor by mammalian ribosomes. El'skaya EV, et al. **Ukr Biokhim Zh** 1995 Nov-Dec; 67(6):28–32

Malolactic fermentation by engineered Saccharomyces cerevisiae as compared with engineered Schizosaccharomyces pombe. Ansanay V, et al. **Yeast** 1996 Mar 15;12(3):215–25

The osmotic hypersensitivity of the yeast Saccharomyces cerevisiae is strain and growth media dependent: quantitative aspects of the phenomenon. Blomberg A. **Yeast** 1997 May;13(6):529–39

The C-terminal domain of Snf3p is sufficient to complement the growth defect of snf3 null mutations in Saccharomyces cerevisiae: SNF3 functions in glucose recognition. Coons DM, et al. **Yeast** 1997 Jan;13(1):9–20

Multiple copies of PBS2, MHP1 or LRE1 produce glucanase resistance and other cell wall effects in Saccharomyces cerevisiae. Lai MH, et al. **Yeast** 1997 Mar 15;13(3):199–213

Modulation of glycerol and ethanol yields during alcoholic fermentation in Saccharomyces cerevisiae strains overexpressed or disrupted for GPD1 encoding glycerol 3-phosphate dehydrogenase. Michnick S, et al. **Yeast** 1997 Jul;13(9):783–93

Specific labelling of cell wall proteins by biotinylation. Identification of four covalently linked O-mannosylated proteins of Saccharomyces cerevisiae. Mrsă V, et al. **Yeast** 1997 Sep 30;13(12):1145–54

Reduced pyruvate decarboxylase and increased glycerol-3-phosphate dehydrogenase [NAD+] levels enhance glycerol production in Saccharomyces cerevisiae. Nevoigt E, et al. **Yeast** 1996 Oct;12(13):1331–7

Regulation of sulphate assimilation in Saccharomyces cerevisiae. Ono B, et al. **Yeast** 1996 Sep 15;12(11):1153–62

The fate of glucose in strains S288C and S173-6B of the yeast Saccharomyces cerevisiae. Pedler SM, et al. **Yeast** 1997 Feb;13(2):119–25

Role of the cytoskeleton in endocytosis of the yeast maltose transporter. Peñalver E, et al. **Yeast** 1997 May;13(6):541–9

Pyruvate metabolism in Saccharomyces cerevisiae. Pronk JT, et al. **Yeast** 1996 Dec;12(16):1607–33 (162 ref.)

Sustained oscillations in free-energy state and hexose phosphates in yeast. Richard P, et al. **Yeast** 1996 Jun 30; 12(8):731–40

Enhancement of protein secretion in Saccharomyces cerevisiae by overproduction of Sso protein, a late-acting component of the secretory machinery. Ruohonen L, et al. **Yeast** 1997 Mar 30;13(4):337–51

The targeting of Bacillus subtilis levansucrase in yeast is correlated to both the hydrophobicity of the signal peptide and the net charge of the N-terminus mature part. Scotti PA, et al. **Yeast** 1996 Aug;12(10):953–63

A conditional sterol esterification defect in yeast having either a sec1 or sec5 mutation in the secretory pathway. Tomeo ME, et al. **Yeast** 1997 Apr;13(5):449–62

Characterization of CHS4 (CAL2), a gene of Saccharomyces cerevisiae involved in chitin biosynthesis and allelic to SKT5 and CSD4. Trilla JA, et al. **Yeast** 1997 Jul; 13(9):795–807

[Ras proteins in Saccharomyces cerevisiae, their partners and their activation] Jacquet M. **C R Seances Soc Biol Fil** 1997; 191(2):221–35 (63 ref.) (Eng. Abstr.) **(Fre)**

["Inositol" signal transduction in yeast] Nikawa J. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1680–7 (36 ref.) **(Jpn)**

[Participation of the respiratory system of saccharomycetes yeasts in protection against the toxic effect of oxygen] Chistiakov VA, et al. **Biokhimiia** 1996 Sep;61(9):1610–6 (Eng. Abstr.) **(Rus)**

[Genetic control of metabolism of a mutagenic analog of 6-N-hydroxylaminopurine bases in Saccharomyces cerevisiae yeasts] Koz'min SG, et al. **Genetika** 1997 May; 33(5):591–8 (Eng. Abstr.) **(Rus)**

[The possible carcinogenic action of a protein concentrate from Saccharomyces yeasts grown on molasses] Pliss MB, et al. **Lik Sprava** 1996 Oct-Dec;(10–12):107–11 (Eng. Abstr.) **(Rus)**

[NAD-metabolizing capacity of Saccharomyces cerevisiae mutants] Khalmuradov AG, et al. **Mikrobiologiia** 1996 May-Jun;65(3):345–7 (Eng. Abstr.) **(Rus)**

[Interaction of yeast TATA-binding protein with short promotor segments] Sokolenko AA, et al. **Mol Biol (Mosk)** 1996 Mar-Apr;30(2):279–85 **(Rus)**

PATHOGENICITY

Brewer's yeast as a cause of infection [letter] Smith DL. **Clin Infect Dis** 1996 Jan;22(1):201

Over-expression of Saccharomyces cerevisiae hsp90 enhances the virulence of this yeast in mice. Hodgetts S, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3-4):229–34

PHYSIOLOGY

Physiological action of PAF in yeast Saccharomyces cerevisiae. Nakayama R, et al. **Adv Exp Med Biol** 1996; 416:45–50 (15 ref.)

Deregulation of the first N-glycosylation gene, ALG7, perturbs the expression of G1 cyclins and cell cycle arrest in Saccharomyces cerevisiae. Lennon K, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):562–5

Passive response of Saccharomyces cerevisiae to osmotic shifts: cell volume variations depending on the physiological state. Martinez de Marañon I, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):519–23

Dicarbanonaborates in yeast respiration and membrane transport. Kotyk A, et al. **Biochem Mol Biol Int** 1997 Apr; 41(5):933–40

The yeast cell wall, a dynamic structure engaged in growth and morphogenesis. Cabib E, et al. **Biochem Soc Trans** 1997 Feb;25(1):200–4 (30 ref.)

Effect of extracellular acidification on the activity of plasma membrane ATPase and on the cytosolic and vacuolar pH of Saccharomyces cerevisiae. Carmelo V, et al. **Biochim Biophys Acta** 1997 Apr 3;1325(1):63–70

Dielectric behavior of wild-type yeast and vacuole-deficient mutant over a frequency range of 10 kHz to 10 GHz. Asami K, et al. **Biophys J** 1996 Oct;71(4):2192–200

Electrorotation of single yeast cells at frequencies between 100 Hz and 1.6 GHz. Hölzel R. **Biophys J** 1997 Aug; 73(2):1103–9

The correlation between adhesion of schizophyllan to yeast glucan and its effect on regeneration of yeast protoplast. Hisamatsu M, et al. **Carbohydr Res** 1997 Feb 20; 298(1-2):117–21

Translational thermotolerance in Saccharomyces cerevisiae. Hallberg EM, et al. **Cell Stress Chaperones** 1996 Apr; 1(1):70–7

Signaling toward yeast 1,3-beta-glucan synthesis. Inoue SB, et al. **Cell Struct Funct** 1996 Oct;21(5):395–402 (58 ref.)

Vesicle traffic: get your coat! Schimmöller F, et al. **Curr Biol** 1997 Apr 1;7(4):R235–7 (19 ref.)

Splicing together the unfolded-protein response. Shamu CE. **Curr Biol** 1997 Feb 1;7(2):R67–70 (15 ref.)

Regulation of the mating pheromone and invasive growth responses in yeast by two MAP kinase substrates. Tedford K, et al. **Curr Biol** 1997 Apr 1;7(4):228–38

Motor proteins: myosin V--the multi-purpose transport motor. Titus MA. **Curr Biol** 1997 May 1;7(5):R301–4 (26 ref.)

The complex containing actin-related proteins Arp2 and Arp3 is required for the motility and integrity of yeast actin patches. Winter D, et al. **Curr Biol** 1997 Jul 1;7(7):519–29

A genetic analysis of the role of calcineurin and calmodulin in Ca++-dependent improvement of NaCl tolerance of Saccharomyces cerevisiae. Danielsson A, et al. **Curr Genet** 1996 Dec;30(6):476–84

Molecular analysis of UFE1, a Saccharomyces cerevisiae gene essential for spore formation and vegetative growth. Downing TA, et al. **Curr Genet** 1996 Nov;30(5):396–403

Cloning and characterization of the first two genes of the non-oxidative part of the Saccharomyces cerevisiae pentose-phosphate pathway. Miosga T, et al. **Curr Genet** 1996 Nov;30(5):404–9

yAP-1- and yAP-2-mediated, heat shock-induced transcriptional activation of the multidrug resistance ABC transporter genes in Saccharomyces cerevisiae. Miyahara K, et al. **Curr Genet** 1996 Jan;29(2):103–5

The red/white colony color assay in the yeast Saccharomyces cerevisiae: epistatic growth advantage of white ade8-18, ade2 cells over red ade2 cells. Ugolini S, et al. **Curr Genet** 1996 Dec;30(6):485–92

Coatomer (COPI)-coated vesicles: role in intracellular transport and protein sorting. Cosson P, et al. **Curr Opin Cell Biol** 1997 Aug;9(4):484–7 (29 ref.)

COPII and secretory cargo capture into transport vesicles. Kuehn MJ, et al. **Curr Opin Cell Biol** 1997 Aug;9(4):477–83 (57 ref.)

Regulation of B-type cyclin proteolysis by Cdc28-associated kinases in budding yeast. Amon A. **EMBO J** 1997 May 15;16(10):2693–702

Novel Golgi to vacuole delivery pathway in yeast: identification of a sorting determinant and required transport component. Cowles CR, et al. **EMBO J** 1997 May 15;16(10):2769–82

Kes1p shares homology with human oxysterol binding protein and participates in a novel regulatory pathway for yeast Golgi-derived transport vesicle biogenesis. Fang M, et al. **EMBO J** 1996 Dec 2;15(23):6447–59

A role for the Pkc1 MAP kinase pathway of Saccharomyces cerevisiae in bud emergence and identification of a putative upstream regulator. Gray JV, et al. **EMBO J** 1997 Aug 15;16(16):4924–37

Bni1p and Bnr1p: downstream targets of the Rho family small G-proteins which interact with profilin and regulate actin cytoskeleton in Saccharomyces cerevisiae. Imamura H, et al. **EMBO J** 1997 May 15;16(10):2745–55

The spindle pole body component Spc97p interacts with the gamma-tubulin of Saccharomyces cerevisiae and functions in microtubule organization and spindle pole body duplication. Knop M, et al. **EMBO J** 1997 Apr 1; 16(7):1550–64

Regulation of yAP-1 nuclear localization in response to oxidative stress. Kuge S, et al. **EMBO J** 1997 Apr 1; 16(7):1710–20

Heat shock disassembles the nucleolus and inhibits nuclear protein import and poly(A)+ RNA export. Liu Y, et al. **EMBO J** 1996 Dec 2;15(23):6750–7

The Exocyst is a multiprotein complex required for exocytosis in Saccharomyces cerevisiae. TerBush DR, et al. **EMBO J** 1996 Dec 2;15(23):6483–94

Kinetic characterization of individual hexose transporters of Saccharomyces cerevisiae and their relation to the triggering mechanisms of glucose repression. Reifenberger E, et al. **Eur J Biochem** 1997 Apr 15;245(2):324–33

Derepression of gene expression mediated by the 5' upstream region of the isocitrate lyase gene of Candida tropicalis is controlled by two distinct regulatory pathways in Saccharomyces cerevisiae. Umemura K, et al. **Eur J Biochem** 1997 Feb 1;243(3):748–52

Exocytosis in excitable cells: a conserved molecular machinery from yeast to neuron. Lledo PM. **Eur J Endocrinol** 1997 Jul;137(1):1–9 (55 ref.)

Mitochondrial function is required for resistance to oxidative stress in the yeast Saccharomyces cerevisiae. Grant CM, et al. **FEBS Lett** 1997 Jun 30;410(2-3):219–22

Involvement of CIF1 (GGS1/TPS1) in osmotic stress response in Saccharomyces cerevisiae. Hazell BW, et al. **FEBS Lett** 1997 Sep 8;414(2):353–8

Modulation of intracellular protein degradation by SSB1-SIS1 chaperon system in yeast S. cerevisiae. Ohba M. **FEBS Lett** 1997 Jun 9;409(2):307-11

Fluorescent measurement of the intracellular pH during sporulation of Saccharomyces cerevisiae. Aon JC, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):17-23

Effect of hydrostatic pressure of a mutant of Saccharomyces cerevisiae deleted in the trehalose-6-phosphate synthase gene. Fernandes PM, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):17-21

Inhibitory effects of nucleoside 5'-alkylphosphates on sexual agglutination in Saccharomyces cerevisiae. Machida K, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):17-22

RLF2, a subunit of yeast chromatin assembly factor-I, is required for telomeric chromatin function in vivo. Enomoto S, et al. **Genes Dev** 1997 Feb 1;11(3):358-70

Genetic analysis of default mating behavior in Saccharomyces cerevisiae. Dorer R, et al. **Genetics** 1997 May;146(1):39-55

Saccharomyces cerevisiae PAC2 functions with CIN1, 2 and 4 in a pathway leading to normal microtubule stability. Hoyt MA, et al. **Genetics** 1997 Jul;146(3):849-57

The induction of cell polarity by pheromone in Saccharomyces cerevisiae. Dorer R, et al. **Harvey Lect** 1994-95;90:95-104 (20 ref.)

Effects of low temperatures (9-33 degrees C) and pH (3.3-5.7) in the loss of Saccharomyces cerevisiae viability by combining lethal concentrations of ethanol with octanoic and decanoic acids. Viegas CA, et al. **Int J Food Microbiol** 1997 Mar 3;34(3):267-77

Salt tolerance in plants and microorganisms: toxicity targets and defense responses. Serrano R. **Int Rev Cytol** 1996; 165:1-52 (264 ref.)

SSU1 encodes a plasma membrane protein with a central role in a network of proteins conferring sulfite tolerance in Saccharomyces cerevisiae. Avram D, et al. **J Bacteriol** 1997 Sep;179(18):5971-4

Two sporulation-specific chitin deacetylase-encoding genes are required for the ascospore wall rigidity of Saccharomyces cerevisiae. Christodoulidou A, et al. **J Biol Chem** 1996 Dec 6;271(49):31420-5

The light chain subunit is required for clathrin function in Saccharomyces cerevisiae. Chu DS, et al. **J Biol Chem** 1996 Dec 20;271(51):33123-30

The G beta gamma complex of the yeast pheromone response pathway. Subcellular fractionation and protein-protein interactions. Hirschman JE, et al. **J Biol Chem** 1997 Jan 3;272(1):240-8

Properties of a cyclosporin-insensitive permeability transition pore in yeast mitochondria. Jung DW, et al. **J Biol Chem** 1997 Aug 22;272(34):21104-12

Gpa2p, a G-protein alpha-subunit, regulates growth and pseudohyphal development in Saccharomyces cerevisiae via a cAMP-dependent mechanism. Kübler E, et al. **J Biol Chem** 1997 Aug 15;272(33):20321-3

Activated calcineurin confers high tolerance to ion stress and alters the budding pattern and cell morphology of yeast cells. Mendoza I, et al. **J Biol Chem** 1996 Sep 20; 271(38):23061-7

The yeast nucleolar protein Nop4p contains four RNA recognition motifs necessary for ribosome biogenesis. Sun C, et al. **J Biol Chem** 1997 Oct 3;272(40):25345-52

Overexpression of the G1-cyclin gene CLN2 represses the mating pathway in Saccharomyces cerevisiae at the level of the MEKK Ste11. Wassmann K, et al. **J Biol Chem** 1997 May 16;272(20):13180-8

Function and expression of flavohemoglobin in Saccharomyces cerevisiae. Evidence for a role in the oxidative stress response. Zhao XJ, et al. **J Biol Chem** 1996 Oct 11;271(41):25131-8

Cell fusion during yeast mating requires high levels of a-factor mating pheromone. Brizzio V, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1727-39

Mitotic spindle positioning in Saccharomyces cerevisiae is accomplished by antagonistically acting microtubule motor proteins [see comments] Cottingham FR, et al. **J Cell Biol** 1997 Sep 8;138(5):1041-53. Comment in: J Cell Biol 1997 Sep 8;138(5):957-60.

Kinesin-related KIP3 of Saccharomyces cerevisiae is required for a distinct step in nuclear migration [see comments] DeZwaan TM, et al. **J Cell Biol** 1997 Sep 8; 138(5):1023-40. Comment in: J Cell Biol 1997 Sep 8;138(5):957-60.

Actin and myosin function in directed vacuole movement during cell division in Saccharomyces cerevisiae. Hill KL, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1535-49

Identification of novel vesicles in the cytosol to vacuole protein degradation pathway. Huang PH, et al. **J Cell Biol** 1997 Feb 24;136(4):803-10

Osmotic balance regulates cell fusion during mating in Saccharomyces cerevisiae. Philips J, et al. **J Cell Biol** 1997 Sep 8;138(5):961-74

Physiological regulation of membrane protein sorting late in the secretory pathway of Saccharomyces cerevisiae. Roberg KJ, et al. **J Cell Biol** 1997 Jun 30;137(7):1469-82

In vivo nuclear transport kinetics in Saccharomyces cerevisiae: a role for heat shock protein 70 during targeting and translocation. Shulga N, et al. **J Cell Biol** 1996 Oct; 135(2):329-39

Motoring to the finish: kinesin and dynein work together to orient the yeast mitotic spindle [comment] Stearns T. **J Cell Biol** 1997 Sep 8;138(5):957-60 (23 ref.). Comment on: J Cell Biol 1997 Sep 8;138(5):1023-40. Comment on: J Cell Biol 1997 Sep 8;138(5):1041-53.

Activation of an MAP kinase cascade leads to Sir3p hyperphosphorylation and strengthens transcriptional silencing. Stone EM, et al. **J Cell Biol** 1996 Nov; 135(3):571-83

A novel fluorescence-activated cell sorter-based screen for yeast endocytosis mutants identifies a yeast homologue of mammalian eps15. Wendland B, et al. **J Cell Biol** 1996 Dec; 135(6 Pt 1):1485-500

Vam3p, a new member of syntaxin related protein, is required for vacuolar assembly in the yeast Saccharomyces cerevisiae. Wada Y, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1299-306

Effect of yeast culture (Saccharomyces cerevisiae) on adaptation of cows to diets postpartum. Robinson PH. **J Dairy Sci** 1997 Jun;80(6):1119-25

Function of metal-ion homeostasis in the cell division cycle, mitochondrial protein processing, sensitivity to mycobacterial infection and brain function. Supek F, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):321-30 (73 ref.)

Alpha-factor synchronization of budding yeast. Breeden LL. **Methods Enzymol** 1997;283:332-41

Preparation of active Cdc7/Dbf4 kinase from yeast cells. Dixon WJ, et al. **Methods Enzymol** 1997;283:390-7

Functional analysis of FAR1 in yeast. Valtz N, et al. **Methods Enzymol** 1997;283:350-65

Cell-free ubiquitination of cell cycle regulators in budding yeast extracts. Verma R, et al. **Methods Enzymol** 1997; 283:366-76

Long-term effects of restrictive culture conditions on Saccharomyces cerevisiae sec7 cells. Kuhnel C, et al. **Microbiol Res** 1996 Mar;151(1):93-7

Comparative physiology of salt tolerance in Candida tropicalis and Saccharomyces cerevisiae. García MJ, et al. **Microbiology** 1997 Apr;143 (Pt 4):1125-31

An important role for glutathione and gamma-glutamyltranspeptidase in the supply of growth requirements during nitrogen starvation of the yeast Saccharomyces cerevisiae. Mehdi K, et al. **Microbiology** 1997 Jun;143 (Pt 6):1885-9

Amounts of free amino acids during early sporulation in Saccharomyces cerevisiae. Ota A. **Microbios** 1996; 86(347):117-20

Aip3p/Bud6p, a yeast actin-interacting protein that is involved in morphogenesis and the selection of bipolar budding sites. Amberg DC, et al. **Mol Biol Cell** 1997 Apr; 8(4):729-53

Functional analysis of the interaction between Afr1p and the Cdc12p septin, two proteins involved in pheromone-induced morphogenesis. Giot L, et al. **Mol Biol Cell** 1997 Jun;8(6):987-98

Mitochondrial transmission during mating in Saccharomyces cerevisiae is determined by mitochondrial fusion and fission and the intramitochondrial segregation of mitochondrial DNA. Nunnari J, et al. **Mol Biol Cell** 1997 Jul;8(7):1233-42

SSI1 encodes a novel Hsp70 of the Saccharomyces cerevisiae endoplasmic reticulum. Baxter BK, et al. **Mol Cell Biol** 1996 Nov;16(11):6444-56

An Ssn6-Tup1-dependent negative regulatory element controls sporulation-specific expression of DIT1 and DIT2 in Saccharomyces cerevisiae. Friesen H, et al. **Mol Cell Biol** 1997 Jan;17(1):123-34

The transcription factor Swi5 regulates expression of the cyclin kinase inhibitor p40SIC1. Knapp D, et al. **Mol Cell Biol** 1996 Oct;16(10):5701-7

Spindle pole body separation in Saccharomyces cerevisiae requires dephosphorylation of the tyrosine 19 residue of Cdc28. Lim HH, et al. **Mol Cell Biol** 1996 Nov; 16(11):6385-97

Suppression of oxidative damage by Saccharomyces cerevisiae ATX2, which encodes a manganese-trafficking protein that localizes to Golgi-like vesicles. Lin SJ, et al. **Mol Cell Biol** 1996 Nov;16(11):6303-12

Adenovirus E1A specifically blocks SWI/SNF-dependent transcriptional activation. Miller ME, et al. **Mol Cell Biol** 1996 Oct;16(10):5737-43

The mating-specific G(alpha) protein of Saccharomyces cerevisiae downregulates the mating signal by a mechanism that is dependent on pheromone and independent of G(beta)(gamma) sequestration. Stratton HF, et al. **Mol Cell Biol** 1996 Nov;16(11):6325-37

Prenylated isoforms of yeast casein kinase I, including the novel Yck3p, suppress the gcs1 blockage of cell proliferation from stationary phase. Wang X, et al. **Mol Cell Biol** 1996 Oct;16(10):5375-85

Yeast mitochondria lacking the phosphate carrier/p32 are blocked in phosphate transport but can import preproteins after regeneration of a membrane potential. Zara V, et al. **Mol Cell Biol** 1996 Nov;16(11):6524-31

Structure-function comparisons of the proapoptotic protein Bax in yeast and mammalian cells. Zha H, et al. **Mol Cell Biol** 1996 Nov;16(11):6494-508

A meiosis-specific protein kinase, Ime2, is required for the correct timing of DNA replication and for spore formation in yeast meiosis. Foiani M, et al. **Mol Gen Genet** 1996 Dec 13;253(3):278-88

The role of cysteine residues in the homeodomain protein Mat alpha 2 in mating-type control of Saccharomyces cerevisiae. Mukai Y, et al. **Mol Gen Genet** 1997 Jun; 255(2):166-71

Adhesion of yeast isolated from fish gut to crude intestinal mucus of rainbow trout, Salmo gairdneri. Vázquez-Juárez R, et al. **Mol Mar Biol Biotechnol** 1997 Mar;6(1):64-71

The advantage of sex in evolving yeast populations. Zeyl C, et al. **Nature** 1997 Jul 31;388(6641):465-8

Enhanced sensitivity of ubiquinone-deficient mutants of Saccharomyces cerevisiae to products of autoxidized polyunsaturated fatty acids. Do TQ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7534-9

Two eukaryote-specific regions of Hsp82 are dispensable for its viability and signal transduction functions in yeast. Louvion JF, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13937-42

Two active states of the Ras-related Bud1/Rsr1 protein bind to different effectors to determine yeast cell polarity. Park HO, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4463-8

Characterization of VPS41, a gene required for vacuolar trafficking and high-affinity iron transport in yeast. Radisky DC, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5662-6

TOR2 is required for organization of the actin cytoskeleton in yeast. Schmidt A, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13780-5

I2B is a small cytosolic protein that participates in vacuole fusion. Slusarewicz P, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5582-7

Nucleus-associated pools of Rna1p, the Saccharomyces cerevisiae Ran/TC4 GTPse activating protein involved in nucleus/cytosol transit. Traglia HM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7667-72

Proteasome-dependent endoplasmic reticulum-associated protein degradation: an unconventional route to a familiar fate. Werner ED, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13797-801

The yeast two-hybrid system: forward and reverse [comment] White MA. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10001-3 (12 ref.). Comment on: Proc Natl Acad Sci U S A 1996 Sep 17;93(19):10315-20. Comment on: Proc Natl Acad Sci U S A 1996 Sep 17;93(19):10321-6.

Dimerization of Ste5, a mitogen-activated protein kinase cascade scaffold protein, is required for signal transduction. Yablonski D, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13864-9

The S. cerevisiae outwardly-rectifying potassium channel (DUK1) identifies a new family of channels with duplicated pore domains. Reid JD, et al. **Receptors Channels** 1996; 4(1):51-62

Ndj1p, a meiotic telomere protein required for normal chromosome synapsis and segregation in yeast [see comments] Conrad MN, et al. **Science** 1997 May 23; 276(5316):1252-5. Comment in: Science 1997 May 23;276(5316):1215.

A cyclophilin function in Hsp90-dependent signal transduction [see comments] Duina AA, et al. **Science** 1996 Dec 6;274(5293):1713-5. Comment in: Science 1996 Dec 6;274(5293):1613-4.

Surface properties of top- and bottom-fermenting yeast. Dengis PB, et al. **Yeast** 1997 Aug;13(10):931-43

A review of phenotypes in Saccharomyces cerevisiae. Hampsey M. **Yeast** 1997 Sep 30;13(12):1099-133 (204 ref.)

Synchronization affector of autonomous short-period-sustained oscillation of Saccharomyces cerevisiae. Keulers M, et al. **Yeast** 1996 Jun 15;12(7):673-82

The S. cerevisiae nitrogen starvation-induced Yvh1p and Ptp2p phosphatases play a role in control of sporulation. Park HD, et al. **Yeast** 1996 Sep 15;12(11):1135-51

A rapid and selective assay for measuring cell surface hydrophobicity of brewer's yeast cells. Straver MH, et al. **Yeast** 1996 Mar 15;12(3):207-13

[Autophagy in yeast, bulk protein degradation in the vacuole] Ohsumi Y. **Seikagaku** 1997 Jan;69(1):39-44 (15 ref.) **(Jpn)**

RADIATION EFFECTS

A radiobiological probe for simultaneous NMR spectroscopy and 192Ir gamma irradiation of Saccharomyces cerevisiae. Magness JE, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):238-43

Extremely high frequency electromagnetic fields at low power density do not affect the division of exponential phase Saccharomyces cerevisiae cells. Gos P, et al. **Bioelectromagnetics** 1997;18(2):142-55

Differential response to UV stress and DNA damage during the yeast replicative life span. Kale SP, et al. **Dev Genet** 1996;18(2):154-60

The Saccharomyces cerevisiae MEC1 gene, which encodes a homolog of the human ATM gene product, is required for G1 arrest following radiation treatment. Siede W, et al. **J Bacteriol** 1996 Oct;178(19):5841-3

The role of membrane-bound porphyrin-type compound as endogenous sensitizer in photodynamic damage to yeast plasma membranes. Fraikin GYa, et al. **J Photochem Photobiol B** 1996 Jul;34(2-3):129-35

Fluence rate as a determinant of synergistic interaction under simultaneous action of UV light and mild heat in Saccharomyces cerevisiae. Petin VG, et al. **J Photochem Photobiol B** 1997 Apr;38(2-3):123-8

Near-UV-induced absorbance change and photochemical decomposition of ergosterol in the plasma membrane of the yeast Saccharomyces cerevisiae. Arami S, et al. **Microbiology** 1997 May;143 (Pt 5):1665-71

UV-induced mutagenesis of human p53 in a vector replicated

SACCHAROMYCES CEREVISIAE

in Saccharomyces cerevisiae. Moshinsky DJ, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2266–71

[The chronic action of gamma radiation on a growing population of Saccharomyces cerevisiae yeasts at different dose rates] Ziuzikov NA, et al. **Radiats Biol Radioecol** 1996 Nov–Dec;36(6):888–94 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Transformations of membrane-bound organelles in sec 14 mutants of the yeasts Saccharomyces cerevisiae and Yarrowia lipolytica. Rambourg A, et al. **Anat Rec** 1996 Jul;245(3):447–58

Modifications of the Golgi apparatus in Saccharomyces cerevisiae lacking microtubules. Rambourg A, et al. **Anat Rec** 1996 Oct;246(2):162–8

Maintenance of the peroxisomal compartment in glucose-repressed and anaerobically grown Saccharomyces cerevisiae cells. Skoneczny M, et al. **Biochimie** 1996;78(2):95–102

Dielectric behavior of wild-type yeast and vacuole-deficient mutant over a frequency range of 10 kHz to 10 GHz. Asami K, et al. **Biophys J** 1996 Oct;71(4):2192–200

The yeast spindle pole body is assembled around a central crystal of Spc42p. Bullitt E, et al. **Cell** 1997 Jun 27; 89(7):1077–86

Schizosaccharomyces pombe is more sensitive to pressure stress than Saccharomyces cerevisiae. Sato M, et al. **Cell Struct Funct** 1996 Jun;21(3):167–74

Molecular model for telomeric heterochromatin in yeast. Grunstein M. **Curr Opin Cell Biol** 1997 Jun;9(3):383–7 (42 ref.)

Kes1p shares homology with human oxysterol binding protein and participates in a novel regulatory pathway for yeast Golgi-derived transport vesicle biogenesis. Fang M, et al. **EMBO J** 1996 Dec 2;15(23):6447–59

Localization of Sir2p: the nucleolus as a compartment for silent information regulators. Gotta M, et al. **EMBO J** 1997 Jun 2;16(11):3243–55

Spc110p: assembly properties and role in the connection of nuclear microtubules to the yeast spindle pole body. Kilmartin JV, et al. **EMBO J** 1996 Sep 2;15(17):4592–602

Immunogold labeling of yeast cells: an efficient tool for the study of protein targeting and morphological alterations due to overexpression and inactivation of genes. Binder M, et al. **Histochem Cell Biol** 1996 Jul;106(1):115–30 (58 ref.)

Microtubules orient the mitotic spindle in yeast through dynein-dependent interactions with the cell cortex. Carminati JL, et al. **J Cell Biol** 1997 Aug 11;138(3):629–41

Mitotic spindle positioning in Saccharomyces cerevisiae is accomplished by antagonistically acting microtubule motor proteins [see comments] Cottingham FR, et al. **J Cell Biol** 1997 Sep 8;138(5):1041–53. Comment in: J Cell Biol 1997 Sep 8;138(5):957–60.

Mapping of nucleosome positions. Thoma F. **Methods Enzymol** 1996;274:197–214

Peroxisome isolation. Distel B, et al. **Methods Mol Biol** 1996; 53:133–8 (7 ref.)

Centromere position in budding yeast: evidence for anaphase A. Guacci V, et al. **Mol Biol Cell** 1997 Jun;8(6):957–72

Yeast actin cytoskeleton mutants accumulate a new class of Golgi-derived secretary vesicle. Mulholland J, et al. **Mol Biol Cell** 1997 Aug;8(8):1481–99

Resinless section electron microscopy reveals the yeast cytoskeleton. Penman J, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3732–5

VIROLOGY

Prions and RNA viruses of Saccharomyces cerevisiae. Wickner RB. **Annu Rev Genet** 1996;30:109–39 (141 ref.)

Structure of L-A virus: a specialized compartment for the transcription and replication of double-stranded RNA. Castón JR, et al. **J Cell Biol** 1997 Sep 8;138(5):975–85

Translocation of hepatitis B virus core particles through nuclear pores in transformed yeast cells. Yamaguchi M, et al. **J Electron Microsc (Tokyo)** 1996 Aug;45(4):321–4

In vitro selection of packaging sites in a double-stranded RNA virus. Yao W, et al. **J Virol** 1997 Mar;71(3):2157–62

Double-stranded RNA viruses of Saccharomyces cerevisiae. Wickner RB. **Microbiol Rev** 1996 Mar;60(1):250–65 (172 ref.)

Serine palmitoyltransferase (scs1/lcb2) mutants have elevated copy number of the L-A dsRNA virus. Garnepudi VR, et al. **Yeast** 1997 Mar 30;13(4):299–304

Cloning, sequencing and expression of a full-length cDNA copy of the M1 double-stranded RNA virus from the yeast, Saccharomyces cerevisiae. Russell PJ, et al. **Yeast** 1997 Jul;13(9):829–36

SACCHAROMYCOPSIS

ENZYMOLOGY

Purification and characterization of the cell-wall-associated and extracellular alpha-glucosidases from Saccharomycopsis fibuligera. Reiser V, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):753–60

[Cloning the Saccharomycopsis fibuligera alpha-amylase gene and its expression in Saccharomyces cerevisiae] Baeva LF, et al. **Prikl Biokhim Mikrobiol** 1996 May–Jun; 32(3):311–4 (Eng. Abstr.) **(Rus)**

SACCHAROPINE DEHYDROGENASES

ISOLATION & PURIFICATION

The enzymology of lysine catabolism in rice seeds—isolation, characterization, and regulatory properties of a lysine 2-oxoglutarate reductase/saccharopine dehydrogenase bifunctional polypeptide. Gaziola SA, et al. **Eur J Biochem** 1997 Jul 1;247(1):364–71

METABOLISM

Regulation of lysine catabolism through lysine-ketoglutarate reductase and saccharopine dehydrogenase in Arabidopsis. Tang G, et al. **Plant Cell** 1997 Aug;9(8):1305–16

SACCHAROPOLYSPORA

CHEMISTRY

Structural studies of the major glycolipid from Saccharopolyspora genus. Gamian A, et al. **Carbohydr Res** 1996 Dec 24;296:55–67

GENETICS

Nucleotide sequence of the ermE distal flank of the erythromycin biosynthesis cluster in Saccharopolyspora erythraea. Pereda A, et al. **Gene** 1997 Jul 1;193(1):65–71

IMMUNOLOGY

Interferon-gamma is necessary for the expression of hypersensitivity pneumonitis. Gudmundsson G, et al. **J Clin Invest** 1997 May 15;99(10):2386–90

Viral infection enhances the response to Saccharopolyspora rectivirgula in mice prechallenged with this farmer's lung antigen. Cormier Y, et al. **Lung** 1996;174(6):399–407

ISOLATION & PURIFICATION

[The isolation and characteristics of mutants of the Saccharopolyspora erythraea strain resistant to thiostrepton] Nastasiak IN, et al. **Antibiot Khimioter** 1997; 42(1):7–11 (Eng. Abstr.) **(Rus)**

SACCHAROPOLYSPORA ERYTHRAEA see **SACCHAROPOLYSPORA**

SACCULE AND UTRICLE

CHEMISTRY

Carbohydrate composition of stereociliary glycocalyx of the utricle of guinea pig inner ear. Suzuki H, et al. **Acta Otolaryngol (Stockh)** 1996 Jan;116(1):12–6

Distribution of endothelin-1-like activity in the vestibule of normal guinea pigs. Jinnouchi K, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Jan–Feb;58(1):4–8

Identification of a structural constituent and one possible site of postembryonic formation of a teleost otolithic membrane. Davis JG, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):707–12

CYTOLOGY

Distribution of ionocytes in the saccular epithelium of the inner ear of two teleosts (Oncorhynchus mykiss and Scophthalmus maximus). Mayer-Gostan N, et al. **Cell Tissue Res** 1997 Jul;289(1):53–61

Hair cell precursors are ultrastructurally indistinguishable from mature support cells in the ear of a postembryonic fish. Presson JC, et al. **Hear Res** 1996 Oct;100(1–2):10–20

Induction of cell proliferation by fibroblast and insulin-like growth factors in pure rat inner ear epithelial cell cultures. Zheng JL, et al. **J Neurosci** 1997 Jan 1;17(1):216–26

DRUG EFFECTS

Induction of cell proliferation by fibroblast and insulin-like growth factors in pure rat inner ear epithelial cell cultures. Zheng JL, et al. **J Neurosci** 1997 Jan 1;17(1):216–26

INJURIES

An RT-PCR analysis of mRNA for growth factor receptors in damaged and control sensory epithelia of rat utricles. Saffer LD, et al. **Hear Res** 1996 May;94(1–2):14–23

INNERVATION

Utricular input to cat extraocular motoneurons. Uchino Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;528:44–8

Connections between otolith receptors and neck motoneurons. Uchino Y. **Acta Otolaryngol Suppl (Stockh)** 1997;528:49–51

Properties of utricular nerve-activated vestibulospinal neurons in cats. Sato H, et al. **Exp Brain Res** 1996 Nov; 112(2):197–202

Sacculocollic reflex arcs in cats. Uchino Y, et al. **J Neurophysiol** 1997 Jun;77(6):3003–12

METABOLISM

Inwardly rectifying currents in hair cells and supporting cells in the goldfish sacculus. Sugihara I, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):665–79

[The mechanism of formation of the otoconia in the utricular supporting cells of the guinea pig] Mori N. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Feb;100(2):253–63 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Ultrastructural findings of the macula utriculi in a case of a petrous apex cholesteatoma: a comparison with findings in a patient with an acoustic neuroma. Adachi M, et al. **Eur Arch Otorhinolaryngol** 1997;254(5):255–8

PHYSIOLOGY

Saccule contribution to immediate early gene induction in the gerbil brainstem with posterior canal galvanic or hypergravity stimulation. Marshburn TH, et al. **Brain Res** 1997 Jun 27;761(1):51–8

Utriculoocular reflex arc of the cat. Uchino Y, et al. **J Neurophysiol** 1996 Sep;76(3):1896–903

Interactions within and between the spatial senses. Howard IP. **J Vestib Res** 1997 Jul–Aug;7(4):311–45 (216 ref.)

PHYSIOPATHOLOGY

Saccular influence on the otolith-spinal reflex and posture during sudden falls of the cat. Mhoon EE, et al. **Am J Otol** 1997 Jan;18(1):86–92

[Individual differences in susceptibility to motion sickness] Helling K, et al. **HNO** 1997 Apr;45(4):210–5 (Eng. Abstr.) **(Ger)**

[Clinical features and utricular dysfunction in patients with benign paroxysmal positional vertigo] Takeda N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Apr;100(4):449–56 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Meshwork arrangement of mitochondria-rich, Na+,K+-ATPase-rich cells in the saccular epithelium of rainbow trout (Oncorhynchus mykiss) inner ear. Takagi Y. **Anat Rec** 1997 Aug;248(4):483–9

Morphological evidence for supporting cell to hair cell conversion in the mammalian utricular macula. Li L, et al. **Int J Dev Neurosci** 1997 Jul;15(4–5):433–46

[Scanning electron microscopic observation of human vestibular sensory epithelia] Sun J, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1995;30(6):326–8 (Eng. Abstr.) **(Chi)**

SACRAL PLEXUS see **LUMBOSACRAL PLEXUS**

SACRAL REGION see **SACROCOCCYGEAL REGION**

SACROCOCCYGEAL REGION

Fine-needle aspiration diagnosis of metastatic anaplastic sacrococcygeal ependymoma to the lungs. Martin GA, et al. **Diagn Cytopathol** 1996 Sep;15(3):228–30

Endodermal sinus tumor in children. Davidoff AM, et al. **J Pediatr Surg** 1996 Aug;31(8):1075–8; discussion 1078–9

A rapidly growing fetal teratoma. Adzick NS, et al. **Lancet** 1997 Feb 22;349(9051):538

Clinics in diagnostic imaging (6). Peh WC, et al. **Singapore Med J** 1995 Oct;36(5):551–3

Gluteus maximus island flap for the repair of sacral pressure sores. Aggarwal A, et al. **Spinal Cord** 1996 Jun;34(6):346–50

[Radiological case of the month. Pelvic neuroblastoma and sacrococcygeal teratoma] Monpoux F, et al. **Arch Pediatr** 1996 Sep;3(9):917–8 **(Fre)**

[The diagnosis and treatment of an epithelial coccygeal cyst complicated by fistulae of the gluteal-sacrococcygeal area] Lavreshin PM, et al. **Vestn Khir Im I I Grek** 1996;(1):83–5 **(Rus)**

GROWTH & DEVELOPMENT

Postnatal development and structure of the neurocentral junction. Its relevance for spinal surgery. Maat GJ, et al. **Spine** 1996 Mar 15;21(6):661–6

PATHOLOGY

Primary presacral extradural hydatid disease. Erdinçler P, et al. **Acta Neurochir (Wien)** 1997;139(2):151–2

Clonal analysis of sacrococcygeal "teratomas". Sinnock KL, et al. **Pediatr Pathol Lab Med** 1996 Nov–Dec;16(6):865–75

Cystic coccygeal medullary vestige presenting as a sacrococcygeal mass: a case report and MRI findings. Ito F, et al. **Pediatr Radiol** 1997 Mar;27(3):257–9

SURGERY

Surgical treatment of severe L5-S1 spondylolisthesis in children and adolescents. Results of intraoperative reduction, posterior interbody fusion, and segmental pedicle fixation. Fabris DA, et al. **Spine** 1996 Mar 15; 21(6):728–33

[The treatment of epithelial coccygeal cyst] Rudin EP, et al. **Khirurgiia (Mosk)** 1996;(6):73–4 (Eng. Abstr.) **(Rus)**

[A case of malignant degeneration of the walls of an epithelial coccygeal cyst] Lavreshin PM, et al. **Vestn Khir Im I I Grek** 1996;155(5):95 **(Rus)**

SACROILIAC JOINT

Bilateral pyogenic sacroiliitis following uncomplicated pregnancy and labor. Linnet KM, et al. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):950–1

Three cases of pyogenic sacro–iliiitis, and factors in the relapse of the disease. Tokuda K, et al. **Acta Paediatr Jpn** 1997 Jun;39(3):385–9 (19 ref.)

The Fortin finger test: an indicator of sacroiliac pain. Fortin JD, et al. **Am J Orthop** 1997 Jul;26(7):477–80

Dysplasia epiphysealis hemimelica of the sacroiliac joint: a case report. Segal LS, et al. **Clin Orthop** 1996 Dec; (333):202–7

Psoas muscle abscess associated with pyogenic sacroiliitis. Assalia A, et al. **Eur J Surg** 1996 May;162(5):415–7

Recurrent sacro–iliac joint abscess. Eskander MB, et al. **J R Army Med Corps** 1994 Jun;140(2):95–6 (7 ref.)

Treatment of coccidioidal spinal infection: experience in 16 cases. Herron LD, et al. **J Spinal Disord** 1997 Jun; 10(3):215–22 (11 ref.)

Acute sacroiliac arthritis and sarcoidosis [letter] Alijotas–Reig J, et al. **Rev Rhum Engl Ed** 1997 Apr; 64(4):278

Evaluation of magnetic resonance imaging for the detection of sacroiliitis in patients with early seronegative spondylarthropathy. Rémy M, et al. **Rev Rhum Engl Ed** 1996 Oct;63(9):577–83

Psoriatic arthritis with spinal involvement in a patient receiving alpha–interferon for chronic hepatitis C. Lombardini F, et al. **Scand J Rheumatol** 1997;26(1):58–60

Septic sacroiliitis. Zimmermann B 3rd, et al. **Semin Arthritis Rheum** 1996 Dec;26(3):592–604 (89 ref.)

The value of medical history and physical examination in diagnosing sacroiliac joint pain. Dreyfuss P, et al. **Spine** 1996 Nov 15;21(22):2594–602

The value of radionuclide imaging in the diagnosis of sacroiliac joint syndrome. Slipman CW, et al. **Spine** 1996 Oct 1;21(19):2251–4

Sacroiliac joint pain [letter] Tanner J. **Spine** 1997 Jul 15; 22(14):1673–4

[Septic sacroiliac arthritis in an adolescent] de Tournemire R, et al. **Arch Pediatr** 1997 May;4(5):420–3 (Eng. Abstr.) **(Fre)**

[Pyogenic sacroiliitis in children. Apropos of 11 cases] Lenfant J, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(2):139–47 (Eng. Abstr.) **(Fre)**

[Sacroiliitis:the key symptom of spondylarthropathies. 2: morphological aspects] Bollow M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Apr;166(4):275–89 (84 ref.) (Eng. Abstr.) **(Ger)**

[Sacroiliitis: the key symptom of spondylathropathies. 1. The clinical aspects] Bollow M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Feb;166(2):95–100 (107 ref.) (Eng. Abstr.) **(Ger)**

[A case with systemic lupus erythematosus complicated with tuberculosis sacroiliac arthritis] Sugiyama K, et al. **Ryumachi** 1997 Feb;37(1):36–41 (Eng. Abstr.) **(Jpn)**

[An epidemiological study of sacroiliitis among the native inhabitants of Chukotka] Erdes Sh, et al. **Ter Arkh** 1997; 69(5):50–4 (Eng. Abstr.) **(Rus)**

[Non–specific sacroiliitis] Poleksić Z, et al. **Acta Chir Iugosl** 1995;42(1):55–8 (Eng. Abstr.) **(Scr)**

[Psoas abscess secondary to brucellar sacroiliitis. Resolution after conservative treatment (letter)] Martín–Dávila P, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):45–6 **(Spa)**

[Myoclonus associated with tuberculous sacroiliitis (letter)] Fernández–Fernández FJ, et al. **Med Clin (Barc)** 1996 Oct 5;107(11):439 **(Spa)**

ABNORMALITIES

[Fusion of vertebrae and the sacroiliac joint by cartilaginous tissue in HLA–B27 transgenic rats] Kriegsmann J, et al. **Verh Dtsch Ges Pathol** 1996;80:334 **(Ger)**

ANATOMY & HISTOLOGY

Sacroiliac joint injection: a cadaveric study. Ebraheim NA, et al. **Am J Orthop** 1997 May;26(5):338–41

Anatomic considerations of an anterior approach to the sacroiliac joint. Ebraheim NA, et al. **Am J Orthop** 1996 Oct;25(10):697–700

Ventral sacroiliac ligament. Anatomic and pathologic considerations. Jaovisidha S, et al. **Invest Radiol** 1996 Aug; 31(8):532–41

Anatomic considerations for posterior approach to the sacroiliac joint. Ebraheim NA, et al. **Spine** 1996 Dec 1; 21(23):2709–12

The sacroiliac joint: anatomical study in the coronal plane and MR correlation. Le Blanche AF, et al. **Surg Radiol Anat** 1996;18(3):215–20

INJURIES

Risk factors associated with development of pelvic canal stenosis secondary to sacroiliac separation: 84 cases (1985–1995). Averill SM, et al. **J Am Vet Med Assoc** 1997 Jul 1;211(1):75–8

Missed sacral fracture before chiropractic adjustment. Plaugher G, et al. **J Manipulative Physiol Ther** 1996 Sep; 19(7):480–3

Long–term outcome of sacroiliac disruptions in children. Heeg M, et al. **J Pediatr Orthop** 1997 May–Jun; 17(3):337–41

Pubic osteolysis mimicking a malignant lesion: report a case with a fracture dislocation of the sacroiliac joint. Matsumoto K, et al. **Skeletal Radiol** 1997 Jul;26(7):438–42

Traumatic spondylopelvic dissociation. A case report and literature review [see comments] Bents RT, et al. **Spine** 1996 Aug 1;21(15):1814–9 (25 ref.). Comment in: Spine 1997 Jun 1;22(11):1276.

INNERVATION

The relationship of lumbosacral plexus to the sacrum and the sacroiliac joint. Ebraheim NA, et al. **Am J Orthop** 1997 Feb;26(2):105–10

MICROBIOLOGY

Nested polymerase chain reaction strategy simultaneously targeting DNA sequences of multiple bacterial species in inflammatory joint diseases. II. Examination of sacroiliac and knee joint biopsies of patients with spondyloarthropathies and other arthritides. Braun J, et al. **J Rheumatol** 1997 Jun;24(6):1101–5

Propionibacterium avidum sacroiliitis and osteomyelitis. Estoppey O, et al. **Rev Rhum Engl Ed** 1997 Jan;64(1):54–6

Pneumococcal sacroiliitis. Pinson AG, et al. **South Med J** 1997 Jun;90(6):649–52 (36 ref.)

[Could Helicobacter pylori cause reactive arthro–osteitis? (letter)] Szántó D, et al. **Orv Hetil** 1997 Sep 14;138(37):2382 **(Hun)**

PATHOLOGY

Immunoscintigraphy as an adjunct to diagnostic imaging in septic sacroiliitis. Report of a case. Rambaldi PF, et al. **Clin Rheumatol** 1996 Jan;15(1):67–71

The sacroiliac joint in the spondyloarthropathies. Braun J, et al. **Curr Opin Rheumatol** 1996 Jul;8(4):275–87 (130 ref.)

Crohn's disease and sacroiliac pain: not always sacroiliitis [letter] Barr SG, et al. **J Rheumatol** 1996 Mar;23(3):572

Magnetic resonance imaging (MRI) for detection of active sacroiliitis—a prospective study comparing conventional radiography, scintigraphy, and contrast enhanced MRI. Blum U, et al. **J Rheumatol** 1996 Dec;23(12):2107–15

Magnetic resonance imaging of the sacroiliac joints: worth the cost? [editorial] Fenton P. **J Rheumatol** 1996 Dec; 23(12):2020–1

PHYSIOLOGY

Ultrasound evaluation of sacroiliac motion in normal volunteers. Lund PJ, et al. **Acad Radiol** 1996 Mar;3(3):192–6

The mobility of the sacroiliac joint in healthy subjects. Kissling RO, et al. **Bull Hosp Jt Dis** 1996;54(3):158–64

The use of color Doppler imaging for the assessment of sacroiliac joint stiffness: a study on embalmed human pelvises. Buyruk HM, et al. **Eur J Radiol** 1995 Dec 15; 21(2):112–6

The measurements of sacroiliac joint stiffness with colour Doppler imaging: a study on healthy subjects. Buyruk HM, et al. **Eur J Radiol** 1995 Dec 15;21(2):117–21

Biomechanical modelling of the human sacroiliac joint. Zheng N, et al. **Med Biol Eng Comput** 1997 Mar;35(2):77–82

A new in vitro measurement technique for small three–dimensional joint motion and its application to the sacroiliac joint. Wang M, et al. **Med Eng Phys** 1996 Sep; 18(6):495–501

The function of the long dorsal sacroiliac ligament: its implication for understanding low back pain. Vleeming A, et al. **Spine** 1996 Mar 1;21(5):556–62

PHYSIOPATHOLOGY

Sacroiliac joint assessment. Broadhurst N. **Aust Fam Physician** 1997 Apr;26(4):431

Rapid spinal trabecular bone loss in female patients with ileitis terminalis Crohn and additional sacroiliac joint inflammation. Teichmann J, et al. **Rheumatol Int** 1997; 17(2):45–8

Results of sacroiliac joint double block and value of sacroiliac pain provocation tests in 54 patients with low back pain. Maigne JY, et al. **Spine** 1996 Aug 15;21(16):1889–92

RADIOGRAPHY

A 42–year–old woman with low back pain. McGrory BJ, et al. **Am J Orthop** 1996 Sep;25(9):653–4, 657–8 (14 ref.)

Radiology of the sacroiliac joint. Ebraheim NA, et al. **Spine** 1997 Apr 15;22(8):869–76

Vacuum phenomena in the sacroiliac joints and in association with sacral insufficiency fractures. Incidence and significance. Peh WC, et al. **Spine** 1997 Sep 1;22(17):2005–8

RADIONUCLIDE IMAGING

Technetium–99m–IgG polyclonal human immunoglobulin scintigraphy in the evaluation of sacroiliitis [letter; comment] Leslie WD, et al. **Eur J Nucl Med** 1996 Oct; 23(10):1416. Comment on: Eur J Nucl Med 1995 Nov;22(11):1339–46. Comment on: Eur J Nucl Med 1996 Apr;23(4):459–65.

The influence of two bone agents (99Tcm–pyrophosphate and 99Tcm–methylenediphosphonate) on quantitative sacroiliac joint scintigraphy [letter; comment] Buell U. **Nucl Med Commun** 1997 May;18(5):497. Comment on: Nucl Med Commun 1996 Dec;17(12):1035–8.

The influence of two bone agents (99Tcm–pyrophosphate and 99Tcm–methylenediphosphonate) on quantitative sacroiliac joint scintigraphy [see comments] Lin WY, et al. **Nucl Med Commun** 1996 Dec;17(12):1035–8. Comment in: Nucl Med Commun 1997 May;18(5):497.

Hypophosphatemic rickets with sacroiliitis–like presentation in an adolescent. Onur O, et al. **Scand J Rheumatol** 1997; 26(4):332–5

SURGERY

Anatomic considerations of an anterior approach to the sacroiliac joint. Ebraheim NA, et al. **Am J Orthop** 1996 Oct;25(10):697–700

Anatomic considerations for posterior approach to the sacroiliac joint. Ebraheim NA, et al. **Spine** 1996 Dec 1; 21(23):2709–12

ULTRASONOGRAPHY

Ultrasound evaluation of sacroiliac motion in normal volunteers. Lund PJ, et al. **Acad Radiol** 1996 Mar;3(3):192–6

SACRUM

Primary spinal column sarcomas. Tasdemiroglu E, et al. **Acta Neurochir (Wien)** 1996;138(11):1261–6

Transarticular invasion of iliopelvic sarcomas into the sacrum. Radiological analysis of 47 cases. Ozaki T, et al. **Acta Orthop Scand** 1997 Aug;68(4):381–3

Sacrospinous vault suspension and abdominal colposacropexy: success rates and complications. Hardiman PJ, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):612–6

Reduction–fixation spinal system in spondylolisthesis. Niu CC, et al. **Am J Orthop** 1996 Jun;25(6):418–24

An unusual presentation of telangiectatic osteosarcoma. Simon RG, et al. **Am J Orthop** 1996 May;25(5):375–9 (19 ref.)

Sacrococcygeal teratoma and anorectal malformation. Ng WT, et al. **Aust N Z J Surg** 1997 Apr;67(4):218–20 (28 ref.)

Control of pre–sacral haemorrhage by drawing pin tamponade. Stewart BT, et al. **Aust N Z J Surg** 1996 Oct; 66(10):715–6

Sacrospinous vault fixation. Hogston P. **Br J Hosp Med** 1997 Jan 15–Feb 5;57(1–2):39–40 (4 ref.)

Interactive image–guided surgery of the spine—use of the ISG/Elekta Viewing Wand to aid intraoperative localization of a sacral osteoblastoma. Patel N, et al. **Br J Neurosurg** 1997 Feb;11(1):60–4

Radiation induced malignant schwannoma arising in a neurofibroma. Isler MH, et al. **Clin Orthop** 1996 Apr; (325):251–5

Sacrospinous ligament fixation by palpation: variation of the Richter procedure. Salvat J, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Sep; 68(1–2):199–203

Markedly improved survival in malignant sacro–coccygeal teratomas—16 years, experience. Misra D, et al. **Eur J Pediatr Surg** 1997 Jun;7(3):152–5

Diverticulitis of the sigmoid colon complicated by vertebral osteomyelitis. Van Dam H, et al. **Eur J Surg** 1996 Aug; 162(8):661–3

Ewing's tumor of the spine: report on seven cases including one with a 10–year follow–up. Villas C, et al. **Eur Spine J** 1996;5(6):412–7

Posterior approach for radical excision of sacral chordoma. Waisman M, et al. **Int Orthop** 1997;21(3):181–4

Dermatomal somatosensory evoked potentials in the diagnosis of lumbosacral radiculopathies. Righetti CA, et al. **Ital J Neurol Sci** 1996 Jun;17(3):193–9

What is your diagnosis? Lumbrosacral luxation in a ram. Klapprich H, et al. **J Am Vet Med Assoc** 1997 Mar 1; 210(5):623–4

Pediatric sacrococcygeal chordomas: a rare tumor to be differentiated from sacrococcygeal teratoma. Cable DG, et al. **J Pediatr Surg** 1997 May;32(5):759–61

Lumbar disk disease in pregnancy. Garmel SH, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):821–2

Chordoma: long–term follow–up after radical photon irradiation. Catton C, et al. **Radiother Oncol** 1996 Oct; 41(1):67–72

Cauda equina syndrome caused by osteosarcoma in a patient with Paget's disease of bone: value of modern imaging. Cots R, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):807–8

Large symptomatic sacral intraspinal cyst successfully treated by surgical excision [letter] Kalfon JP, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):204–6

Efficacy of combined clarithromycin and sparfloxacin therapy in a patient with discitis: due to Mycobacterium xenopi [letter] Roche B, et al. **Rev Rhum Engl Ed** 1997 Jan;64(1):64–5

Sacral chordoma with unusual posterior radiographic presentation. Coombs RJ, et al. **Skeletal Radiol** 1996 Oct; 25(7):679–81

[Fracture of the sacrum caused by bone insufficiency in a pregnant woman] Grimaud A, et al. **J Radiol** 1997 Jul; 78(7):511–2 (Eng. Abstr.) **(Fre)**

[Giant sacral schwannoma with pelvic extension. Therapeutic strategy. Apropos of a case] Stecken J, et al. **Neurochirurgie** 1996;42(6):294–9 (16 ref.) (Eng. Abstr.) **(Fre)**

SACRUM

[Transperitoneal laparoscopic approach to the L5–S1 disk. Value of computed x-ray tomography] Norotte G, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(7):615–9 (Eng. Abstr.) **(Fre)**

[Clinico-diagnostic aspects and therapeutic considerations of the combined surgical and radiotherapeutic approach in 2 cases of sacrococcygeal chordoma: our experience] Zoppi S, et al. **G Chir** 1997 Mar;18(3):107–10 (Eng. Abstr.) **(Ita)**

[Integrated imaging in a case of pelvic bone hydatidosis] Iannicelli E, et al. **Radiol Med (Torino)** 1996 Jul–Aug; 92(1–2):132–4 **(Ita)**

[Tuberculosis of the bones and joints] Krychniak-Soszka A, et al. **Pol Merkuriusz Lek** 1996 Jul;1(1):49–52 (Eng. Abstr.) **(Pol)**

[Kawasaki's syndrome in the adult and bilateral sacroiliitis] Herrero JB, et al. **An Med Interna** 1995 Nov;12(11):549–5 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Recurrent meningitis in a case of congenital anterior sacral meningocele and agenesis of sacral and coccygeal vertebrae. Funayama CA, et al. **Arq Neuropsiquiatr** 1995 Dec;53(4):799–801

Congenital lumbosacral lipomas. Pierre-Kahn A, et al. **Childs Nerv Syst** 1997 Jun;13(6):298–334; discussion 335 (199 ref.)

Bone scintigraphy of caudal regression syndrome. Nguyen BD, et al. **Clin Nucl Med** 1996 Oct;21(10):802–4

Distribution and incidence of degenerative spine changes in patients with a lumbo-sacral transitional vertebra. Vergauwen S, et al. **Eur Spine J** 1997;6(3):168–72

Natural history of distal spinal agenesis. Van Buskirk CS, et al. **J Pediatr Orthop B** 1997 Apr;6(2):146–52

Currarino triad: anorectal malformation, sacral bony abnormality, and presacral mass--a review of 11 cases. Lee SC, et al. **J Pediatr Surg** 1997 Jan;32(1):58–61

A case of anterior sacral meningocele totally excised using the posterior sagittal approach. Somuncu S, et al. **J Pediatr Surg** 1997 May;32(5):730–2

The Currarino triad: its importance in pediatric neurosurgery. Gaskill SJ, et al. **Pediatr Neurosurg** 1996 Sep;25(3):143–6

[Retro-iliac ureter. Report of a case lumbosacral agenesis] Moscovici J, et al. **Bull Assoc Anat (Nancy)** 1996 Jun; 80(249):23–6 (Eng. Abstr.) **(Fre)**

[Therapy in nearthrosis of the partially sacralized 5th lumbar corpus vertebrae] Holz U. **Dtsch Med Wochenschr** 1996 Oct 11;121(41):1278 **(Ger)**

[Total agenesis of the sacrum and neurogenic bladder dysfunction] Capitanucci ML, et al. **Pediatr Med Chir** 1997 Mar-Apr;19(2):113–6 (Eng. Abstr.) **(Ita)**

[Sacro-coccygeal agenesis with central nervous system malformations: embryogenetic features of a case] Manfrè L, et al. **Radiol Med (Torino)** 1996 Oct;92(4):479–82 (19 ref.) **(Ita)**

[Currarino triad : a case report] Miyake S, et al. **No Shinkei Geka** 1996 Feb;24(2):189–93 (Eng. Abstr.) **(Jpn)**

[Partial agenesis of the sacrum and microcephaly: an uncommon association] Ruiz Moreno JA, et al. **An Esp Pediatr** 1997 Jun;46(6):607–10 (18 ref.) **(Spa)**

ANATOMY & HISTOLOGY

The osteology of the African elephant (Loxodonta africana): vertebral column, ribs and sternum. Bezuidenhout AJ, et al. **Onderstepoort J Vet Res** 1996 Jun;63(2):131–47

Morphologic considerations of the first sacral pedicle for iliosacral screw placement. Ebraheim NA, et al. **Spine** 1997 Apr 15;22(8):841–6

Determination of the position of the pelvic girdle by the method of external markers in the sagittal plane: a preliminary feasibility study. Vanneuville G, et al. **Surg Radiol Anat** 1996;18(3):245–7

EMBRYOLOGY

Deletion of a HoxD enhancer induces transcriptional heterochrony leading to transposition of the sacrum. Zákány J, et al. **EMBO J** 1997 Jul 16;16(14):4393–402

Development of the lumbar and sacral vertebral canal in utero. Ursu TR, et al. **Spine** 1996 Dec 1;21(23):2705–8

GROWTH & DEVELOPMENT

Study of the course of the incidence angle during growth. Mangione P, et al. **Eur Spine J** 1997;6(3):163–7

INJURIES

Insufficiency fracture of the sacrum revealing a pregnancy associated osteoporosis. First case report [letter] Breuil V, et al. **Ann Rheum Dis** 1997 Apr;56(4):278–9

Posterior pelvic ring fractures: closed reduction and percutaneous CT-guided sacroiliac screw fixation. Jacob AL, et al. **Cardiovasc Intervent Radiol** 1997 Jul–Aug; 20(4):285–94

Sacral stress fractures in long-distance runners. Eller DJ, et al. **Clin J Sport Med** 1997 Jul;7(3):222–5

Case report: sacral insufficiency fractures masking malignancy. Peh WC, et al. **Clin Radiol** 1997 Jan;52(1):71–2

Time-dependent changes of insufficiency fractures of the sacrum: intraosseous vacuum phenomenon as an early sign. Stäbler A, et al. **Eur Radiol** 1996;6(5):655–7

The strength of iliosacral lag screws and transiliac bars in the fixation of vertically unstable pelvic injuries with sacral fractures. Gorczyca JT, et al. **Injury** 1996 Oct;27(8):561–4

Missed sacral fracture before chiropractic adjustment. Plaugher G, et al. **J Manipulative Physiol Ther** 1996 Sep; 19(7):480–3

Innominosacral dissociation: mechanism of injury as a predictor of resuscitation requirements, morbidity, and mortality. Whitbeck MG Jr, et al. **J Orthop Trauma** 1997 Feb-Mar;11(2):82–8

Long-term outcome of sacroiliac disruptions in children. Heeg M, et al. **J Pediatr Orthop** 1997 May-Jun; 17(3):337–41

Posttraumatic scoliosis. Gangloff S, et al. **J Pediatr Orthop B** 1996 Summer;5(3):216–9

Imaging of pelvic insufficiency fractures. Peh WC, et al. **Radiographics** 1996 Mar;16(2):335–48

Lumbosacral junction injury associated with unstable pelvic fracture: classification and diagnosis. Leone A, et al. **Radiology** 1997 Oct;205(1):253–9

Truncated sciatica as the first manifestation of a fatigue fracture of the sacrum in a young male [letter] Lechevalier D, et al. **Rev Rhum Engl Ed** 1996 Jul-Sep;63(7–8):505 (11 ref.)

Zone III fractures of the sacrum. A case report. Ebraheim NA, et al. **Spine** 1996 Oct 15;21(20):2390–6

Traumatic spondylopelvic dissociation: a case report and literature review [letter; comment] Isler B. **Spine** 1997 Jun 1;22(11):1276. Comment on: Spine 1996 Aug 1;21(15):1814–9.

Severe fracture-dislocation of S1 in a 12-year-old boy. A case report. Novkov HV, et al. **Spine** 1996 Nov 1; 21(21):2500–3

Vacuum phenomena in the sacroiliac joints and in association with sacral insufficiency fractures. Incidence and significance. Peh WC, et al. **Spine** 1997 Sep 1;22(17):2005–8

[Impalement injury of the colon, iliac vein and sacrum--a rare combination in penetrating abdominal trauma. A case report] Funke M, et al. **Chirurg** 1996 Nov;67(11):1184–7 (27 ref.) (Eng. Abstr.) **(Ger)**

[Osteoporotic stress fractures of the sacrum: MR-tomography findings] Staatz G, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Apr;166(4):307–11 (Eng. Abstr.) **(Ger)**

INNERVATION

The relationship of lumbosacral plexus to the sacrum and the sacroiliac joint. Ebraheim NA, et al. **Am J Orthop** 1997 Feb;26(2):105–10

PATHOLOGY

Lumbosacral nerve root enhancement with disk herniation on contrast-enhanced MR. Itoh R, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1619–25

Spondylolysis of the sacrum in Alaskan and Canadian Inuit skeletons. Merbs CF. **Am J Phys Anthropol** 1996 Nov; 101(3):357–67

Sacral chordoma, gas gangrene and bilateral renal cell carcinomas. Harrington KJ, et al. **Clin Oncol (R Coll Radiol)** 1996;8(2):123–4

Foraminal changes with distraction and compression of the L4/5 and L5/S1 segments. Humke T, et al. **Eur Spine J** 1996;5(3):183–6

Changes in the lumbosacral segment of the spine due to overweight in adults. Preliminary remarks. Ridola C, et al. **Ital J Anat Embryol** 1994 Jul-Sep;99(3):133–43

Urodynamic and neurophysiologic evaluation of patients with diastematomyelia. Kothari MJ, et al. **J Child Neurol** 1997 Feb;12(2):97–100

Dorsal approach to presacral biopsy: technical case report. Rapport RL 2nd, et al. **Neurosurgery** 1997 May; 40(5):1087–8

Dedifferentiated chordoma arising in irradiated sacral chordoma. Ikeda H, et al. **Radiat Med** 1997 Mar-Apr; 15(2):109–11

[Osteoporotic stress fractures of the sacrum: MR-tomography findings] Staatz G, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Apr;166(4):307–11 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

In-vitro biomechanical study of a dorso-lumbo-sacral posterior supple instrumentation with variable section. Gayet LE, et al. **Eur J Pediatr Surg** 1996 Oct;6(5):294–300

Loads transmitted during lumbosacral spinal manipulative therapy. Triano J, et al. **Spine** 1997 Sep 1;22(17):1955–64

Effect of sacral and iliac instrumentation on strains in the pelvis. A biomechanical study. Wood KB, et al. **Spine** 1996 May 15;21(10):1185–91

PHYSIOPATHOLOGY

The effect of a plaster cast on lumbosacral joint motion. An in vivo assessment with precision motion analysis system. Willems PC, et al. **Spine** 1997 Jun 1;22(11):1229–34

RADIOGRAPHY

Two parallel linear densities on lateral radiographs of the lumbosacral spine: neither iliopectineal lines nor basis ossis sacri. Wong-Chung J, et al. **Br J Radiol** 1997 Jan;70:58–61

Distribution and incidence of degenerative spine changes in patients with a lumbo-sacral transitional vertebra. Vergauwen S, et al. **Eur Spine J** 1997;6(3):168–72

Radiological evaluation of S1 dorsal screw placement. Ebraheim NA, et al. **J Spinal Disord** 1996 Dec;9(6):527–35

Plain film evaluation of degenerative disk disease at the lumbosacral junction. Cohn EL, et al. **Skeletal Radiol** 1997 Mar;26(3):161–6

Reliability of roentgenogram evaluation of pedicle screw position. Ferrick MR, et al. **Spine** 1997 Jun 1; 22(11):1249–52; discussion 1253

Epithelioid sarcoma of the spine: a case report. Steib JP, et al. **Spine** 1996 Mar 1;21(5):634–8

RADIONUCLIDE IMAGING

Bone scintigraphy of caudal regression syndrome. Nguyen BD, et al. **Clin Nucl Med** 1996 Oct;21(10):802–4

SURGERY

Colposacropexy: an alternative technique. Smith MR. **Am J Obstet Gynecol** 1997 Jun;176(6):1374–5

Giant sacral schwannoma: removal by an anterior, transabdominal approach. Acciarri N, et al. **Br J Neurosurg** 1996 Oct;10(5):489–92

Complications of transpedicular lumbosacral fixation for non-traumatic disorders. Pihlajämaki H, et al. **J Bone Joint Surg Br** 1997 Mar;79(2):183–9

Regarding safe and effective placement of ileosacral screws [letter; comment] Matta JM. **J Orthop Trauma** 1996; 10(7):514. Comment on: J Orthop Trauma 1996;10(3):171–7.

Posterior stabilization in L5–S1 isthmic spondylolisthesis with paralaminar screw fixation: anatomical and clinical results. Jeanneret B, et al. **J Spinal Disord** 1996 Jun;9(3):223–33

The role of external transpedicular fixation in anterior interbody lumbar fusion. Tiusanen H, et al. **J Spinal Disord** 1996 Oct;9(5):433–8

Surgical Treatment of sacrococcygeal chordoma. Ozaki T, et al. **J Surg Oncol** 1997 Apr;64(4):274–9

Primary hydatid cyst of sacral spinal canal: case report. Pandey M, et al. **Neurosurgery** 1997 Feb;40(2):407–9

In vitro simulation. Early results of stereotaxy for pedicle screw placement. Carl AL, et al. **Spine** 1997 May 15; 22(10):1160–4

Results of disc prosthesis after a minimum follow-up period of 2 years. Cinotti G, et al. **Spine** 1996 Apr 15; 21(8):995–1000

Intraradicular, intervertebral disc herniation. A case report. Finkel HZ. **Spine** 1997 May 1;22(9):1028–9 (8 ref.)

Controversy. Fusion of L5–S1 in adult scoliosis. Horton WC, et al. **Spine** 1996 Nov 1;21(21):2520–2 (8 ref.)

Improved accuracy of pedicle screw insertion with computer-assisted surgery. A prospective clinical trial of 30 patients. Laine T, et al. **Spine** 1997 Jun 1;22(11):1254–8

Endoscopic transiliac approach to L5–S1 disc and foramen. A cadaver study. Osman SG, et al. **Spine** 1997 Jun 1; 22(11):1259–63

Laparoscopic assisted fusion of the lumbosacral spine. A biomechanical and histologic analysis of the open versus laparoscopic technique in an animal model. Riley LH 3rd, et al. **Spine** 1997 Jun 15;22(12):1407–12

[Advantages and disadvantages of retro- and transperitoneal approach for fusion of the presacral intervertebral disk] Wimmer C, et al. **Orthopade** 1997 Jun;26(6):563–7 (Eng. Abstr.) **(Ger)**

[Minimal interventions in the surgery of osteochondrosis of the lumbar spine] Musalatov KhA, et al. **Vestn Khir Im I I Grek** 1996;(1):56–9 (Eng. Abstr.) **(Rus)**

[Transcutaneous diskectomy in a combined treatment system for patients with discogenic lumbosacral radiculitis] Sheliakin SIu. **Zh Vopr Neirokhir Im N N Burdenko** 1996 Apr-Jun;(2):32–3 **(Rus)**

ULTRASONOGRAPHY

Color Doppler aided prenatal diagnosis of a type 1 cystic sacrococcygeal teratoma simulating a meningomyelocele. Sherer DM, et al. **Am J Perinatol** 1997 Jan;14(1):13–5

SADISM

Voice of the Analyst. "Only in the meeting": an unexpected visitor. Gerardi J. **Am J Psychoanal** 1996 Dec;56(4):447–52

Archaic sadism. Chessick RD. **J Am Acad Psychoanal** 1996 Winter;24(4):605–18 (37 ref.)

PSYCHOLOGY

Soiling and the anal-narcissistic character. Schoenewolf G. **Am J Psychoanal** 1997 Mar;57(1):47–62

Antisocial personality disorder, sexual sadism, malignant narcissism, and serial murder. Geberth VJ, et al. **J Forensic Sci** 1997 Jan;42(1):49–60 (54 ref.)

The sexually sadistic serial killer. Warren JI, et al. **J Forensic Sci** 1996 Nov;41(6):970–4

SAETHRE-CHOTZEN SYNDROME see **ACROCEPHALOSYNDACTYLIA**

SAFETY

A comparison of two direct-observation methods for measuring daytime safety belt use. Eby DW, et al. **Accid Anal Prev** 1996 May;28(3):403–7

Does prior knowledge of safety effect help to predict how effective a measure will be? Elvik R. **Accid Anal Prev** 1996 May;28(3):339–47

Black times: temporal determinants of transport safety. Folkard S. **Accid Anal Prev** 1997 Jul;29(4):417–30 (25 ref.)

Age, gender and the effectiveness of high–threat letters: an analysis of Oregon's driver improvement advisory letters. Jones B. **Accid Anal Prev** 1997 Mar;29(2):225–34

Age and experience in motorcycling safety. Rutter DR, et al. **Accid Anal Prev** 1996 Jan;28(1):15–21

Statistical analysis of accident severity on rural freeways. Shankar V, et al. **Accid Anal Prev** 1996 May;28(3):391–401

Safety and the car size effect: a fundamental explanation. Wood DP. **Accid Anal Prev** 1997 Mar;29(2):139–51

Minimizing inter city transportation risk—a matter of perspective. Wulff P. **Accid Anal Prev** 1996 May; 28(3):409–13

Risks and safety standards of flying intensive care units. Kroesen GA. **Acta Anaesthesiol Scand Suppl** 1996; 109:108–9

Alcohol policy and aviation safety. Cook CC. **Addiction** 1997 Jul;92(7):793–804 (36 ref.)

Alcohol use and a safe environment. Holder HD. **Addiction** 1997 Mar;92 Suppl 1:S117–20

Is the typical modern house designed for future adaptation for disabled older people? Frain JP, et al. **Age Ageing** 1996 Sep;25(5):398–401

Safe mobility for people with Alzheimer disease: a commentary. Eberhard JW. **Alzheimer Dis Assoc Disord** 1997 Jun;11 Suppl 1:76–7

Crashes: outcome of choice in assessing driver safety? Marottoli RA. **Alzheimer Dis Assoc Disord** 1997 Jun;11 Suppl 1:28–30 (23 ref.)

Action on worksite health and safety problems: a follow–up survey of workers participating in a hazardous waste worker training program. Cole BL, et al. **Am J Ind Med** 1996 Dec;30(6):730–43

Don't lose hope [letter; comment] Adams BL. **Am J Nurs** 1996 Dec;96(12):16. Comment on: Am J Nurs 1996 Oct;96(10):16.

Violence prevention begins at home—with nurses. Hatcher PA. **Am J Nurs** 1997 May;97(5):80

Teaching gun safety [letter] Hunter E. **Am J Nurs** 1997 Sep; 97(9):16

A meta–analysis review of revision stapes surgery with argon laser: effectiveness and safety. Wiet RJ, et al. **Am J Otol** 1997 Mar;18(2):166–71

National Highway Traffic Safety Administration (NHTSA) notes. New Technologies from NHTSA. **Ann Emerg Med** 1997 Jun;29(6):812–3

Building a smarter car: visions of the future at NHTSA. Jolly BT. **Ann Emerg Med** 1997 Jun;29(6):813–4

Safety signals and human anxiety: a fear–potentiated startle study. Grillon C, et al. **Anxiety** 1994;1(1):13–21

Training in firearm safety counseling in pediatric residency programs. Price JH, et al. **Arch Pediatr Adolesc Med** 1997 Mar;151(3):306–10

A multinational study of psychiatric nursing staffs' beliefs and concerns about work safety and patient assault. Poster EC. **Arch Psychiatr Nurs** 1996 Dec;10(6):365–73

Narratives of risk in occupational health and safety: why the 'good' boss blames his tradesman and the 'good' tradesman blames his tools [see comments] Holmes N, et al. **Aust N Z J Public Health** 1997 Feb;21(1):11–6. Comment in: Aust N Z J Public Health 1997 Feb;21(1):9–10.

Safety of commercial air travel following myocardial infarction. Cox GR, et al. **Aviat Space Environ Med** 1996 Oct;67(10):976–82

Passenger safety, health, and comfort: a review. Rayman RB. **Aviat Space Environ Med** 1997 May;68(5):432–40 (43 ref.)

Some practical considerations and policy implications of studies of sleep patterns. Mitler MM, et al. **Behav Med** 1996 Winter;21(4):184–5

A SHOT in the arm for safer blood transfusion [editorial] Williamson LM, et al. **BMJ** 1996 Nov 16;313(7067):1221–2

Simultaneous lumbar and intraventricular manometry to evaluate the role and safety of lumbar puncture in raised intracranial pressure following subarachnoid haemorrhage. Kapadia FN, et al. **Br J Neurosurg** 1996 Dec;10(6):585–7

Some aspects of the safety of high speed catamarans. Grainger R. **Bull Inst Marit Trop Med Gdynia** 1996; 47(1–4):61–6

Safety and efficacy of physical restraints for the elderly. Review of the evidence. Frank C, et al. **Can Fam Physician** 1996 Dec;42:2402–9 (42 ref.)

Improving the safety of transfusion therapy. Polesky HF. **Clin Lab Med** 1996 Dec;16(4):975–88 (71 ref.)

Biosafety in the clinical mycobacteriology laboratory. Richmond JY, et al. **Clin Lab Med** 1996 Sep;16(3):527–50 (38 ref.)

The safety of injecting insulin through clothing [see comments] Fleming DR, et al. **Diabetes Care** 1997 Mar; 20(3):244–7. Comment in: ACP J Club 1997 Jul–Aug;127(1):14.

Secondary safety of car adaptations for disabled motorists. Turner–Stokes L, et al. **Disabil Rehabil** 1996 Jun; 18(6):317–27 (1 ref.)

The wreck of Amtrak's Sunset Limited: news coverage of a mass transport disaster. Garner AC, et al. **Disasters** 1997 Mar;21(1):4–19

Safety of rapid–rate transcranial magnetic stimulation: heart rate and blood pressure changes. Foerster A, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 104(3):207–12

What is the radiation exposure to patients during a gynecoradiologic procedure? Karande VC, et al. **Fertil Steril** 1997 Feb;67(2):401–3

Safety during sperm banking [letter] Bahadur G, et al. **Hum Reprod** 1997 Jan;12(1):198

The safety of overhead power lines. Ashley JR. **IEEE Eng Med Biol Mag** 1997 Jan–Feb;16(1):25–6, 28

The safety of older pedestrians at signal–controlled crossings. Harrell WA. **Int J Aging Hum Dev** 1996;42(1):65–79

The Great Ormond Street protocol for ward decannulation of children with tracheostomy: increasing safety and decreasing cost. Waddell A, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):111–8

Childhood accidents [letter; comment] [see comments] Carley SD, et al. **J Accid Emerg Med** 1997 Jan;14(1):58–9. Comment on: J Accid Emerg Med 1996 May;13(3):196–7. Comment in: J Accid Emerg Med 1997 May;14(3):199–200.

How safe are schools? [letter; comment] Choyce MQ. **J Accid Emerg Med** 1997 May;14(3):199–200. Comment on: J Accid Emerg Med 1996 May;13(3):196–7. Comment on: J Accid Emerg Med 1997 Jan;14(1):58–9.

Are schools safer for children than public places? [see comments] Maitra AK, et al. **J Accid Emerg Med** 1996 May;13(3):196–7. Comment in: J Accid Emerg Med 1997 Jan;14(1):58–9. Comment in: J Accid Emerg Med 1997 May;14(3):199–200.

Accelerating children's risk for injury: mothers' decisions regarding common safety rules. Peterson L, et al. **J Behav Med** 1996 Aug;19(4):317–31

Will "cost containment" decrease safety? Noted observer considers relative safety risks [news] Gravenstein JS [news]. **J Clin Monit** 1996 Mar;12(2):199–202

Training in firearm safety counseling in family practice residency programs. Price JH, et al. **J Community Health** 1997 Apr;22(2):91–9

Safer sex: social and psychological predictors of behavioral maintenance and change among heterosexual women. Morrill AC, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):819–28

A firearm safety program for children: they just can't say no. Hardy MS, et al. **J Dev Behav Pediatr** 1996 Aug; 17(4):216–21

Safety in long–term EEG/video monitoring. Sanders PT, et al. **J Neurosci Nurs** 1996 Oct;28(5):305–13 (14 ref.)

Agricultural safety and health: principles and possibilities for nursing education. Martin SR. **J Nurs Educ** 1997 Feb; 36(2):74–8

Safety of topical ear drops containing ototoxic antibiotics. Rakover Y, et al. **J Otolaryngol** 1997 Jun;26(3):194–6

A content analysis of safety behaviors of television characters: implications for children's safety and injury. Potts R, et al. **J Pediatr Psychol** 1996 Aug;21(4):517–28

Progress towards a fire–safe cigarette. Brigham PA, et al. **J Public Health Policy** 1995;16(4):433–9 (0 ref.)

Parents' self–reported behaviors related to health and safety of very young children. Hendricks CM, et al. **J Sch Health** 1996 Sep;66(7):247–51

Preventing non–family child abductions: are children aware they are being followed? Stevenson MR, et al. **J Sch Health** 1996 Dec;66(10):359–60

Identification of social cognitive variables as predictors of safer sex behavior and intent in heterosexual college students. Raj A. **J Sex Marital Ther** 1996 Winter; 22(4):247–58

A theory of mixed chains applied to safety factors in biological systems. Alexander RM. **J Theor Biol** 1997 Feb 7;184(3):247–52

State gun safe storage laws and child mortality due to firearms. Cummings P, et al. **JAMA** 1997 Oct 1; 278(13):1084–6

Safety of surfaces and equipment for children in playgrounds. Mott A, et al. **Lancet** 1997 Jun 28;349(9069):1874–6

Proposal to develop a detailed safety program for general/laser surgical patients infected with AIDS. Goldman L. **Lasers Surg Med** 1996;19(3):351–8

Promoting automobile safety for young children. Gaines SK, et al. **MCN Am J Matern Child Nurs** 1996 May–Jun; 21(3):148–51

Safety and efficacy of strength training in patients with sporadic inclusion body myositis. Spector SA, et al. **Muscle Nerve** 1997 Oct;20(10):1242–8

The scope of gene therapy in humans: scientific, safety and ethical considerations. Karpati G, et al. **Neuromuscul Disord** 1997 Jul;7(5):273–6 (30 ref.)

Latex allergy. Considerations for the care of pediatric patients and employee safety. Young MA, et al. **Nurs Clin North Am** 1997 Mar;32(1):169–82 (47 ref.)

Counseling children and adolescents on safety. **Nurse Pract** 1997 Jul;22(7):112, 115–6

Early and midtrimester genetic amniocenteses. Safety and outcomes. Reece EA. **Obstet Gynecol Clin North Am** 1997 Mar;24(1):71–81 (44 ref.)

The missing letter in TQM. Quality principles are tailor–made for safety. Jonas P. **Occup Health Saf** 1996 Mar;65(3):18–9

Online help with PPE choices. Check out some software from your favorite suppliers. Krasowska F. **Occup Health Saf** 1996 Mar;65(3):22

The Fort McMurray Demonstration Project in social marketing: health– and safety–related behaviour among oil sands workers. Guidotti TL, et al. **Occup Med (Oxf)** 1996 Aug;46(4):265–74

Pediatric injury prevention counseling priorities [see comments] Cohen LR, et al. **Pediatrics** 1997 May; 99(5):704–10. Comment in: Pediatrics 1997 May;99(5):728.

How child–resistant are stroller belt buckles? Ridenour MV. **Percept Mot Skills** 1997 Apr;84(2):611–6

Safety concerns affecting delivery of home health care. Kendra MA, et al. **Public Health Nurs** 1996 Apr;13(2):83–9

Perception of risk by home health care administrators and field workers. Kendra MA. **Public Health Nurs** 1996 Dec; 13(6):386–93

Federal guidelines needed to ensure safety in animal–human transplants [news] **Public Health Rep** 1997 Jan–Feb; 112(1):2–3

Comparing methods for maintaining the safety of a child with pica. LeBlanc LA, et al. **Res Dev Disabil** 1997 May–Jun; 18(3):215–20

Impulse noise and acute acoustic trauma in Finnish conscripts. Number of shots fired and safe distances. Savolainen S, et al. **Scand Audiol** 1997;26(2):122–6

Effect of sleep deprivation on driving safety in housestaff. Marcus CL, et al. **Sleep** 1996 Dec;19(10):763–6

Application of full–scale fire tests to characterize and improve the aircraft postcrash fire environment. Sarkos CP. **Toxicology** 1996 Dec 31;115(1–3):79–87 (16 ref.)

Firearms prevalence and storage practices in Wisconsin households. Chatterjee BF, et al. **Wis Med J** 1996 May; 95(5):286–91

[Health risks in connection with fungi: a contribution to the assessment of fungi in the risk potential of safety provisions] Meinhof W, et al. **Mycoses** 1996;39 Suppl 1:48–50 (Eng. Abstr.) **(Ger)**

[An international exchange and dissemination of chemical safety information on the Internet] Ohtake C, et al. **Eisei Shikenjo Hokoku** 1996;(114):76–83 (5 ref.) (Eng. Abstr.) **(Jpn)**

[Concise International Chemical Assessment Document (CICAD): a new chemical safety series in IPCS, internationalizing national reviews] Sekizawa J. **Eisei Shikenjo Hokoku** 1996;(114):89–94 (3 ref.) (Eng. Abstr.) **(Jpn)**

[A safety program for blood transfusion therapy (editorial)] Vorob'ev AI, et al. **Ter Arkh** 1996;68(7):5–8 **(Rus)**

[The hygienic aspects of supporting the safe activities of living for servicemen and their family members in a radioactively contaminated area] Greben'kov SV, et al. **Voen Med Zh** 1996 Jun;317(6):25–31 **(Rus)**

[Preventive rehabilitative measures for preserving the health and occupational safety of flight personnel] Varus VI. **Voen Med Zh** 1997 Feb;318(2):54–7, 79 (Eng. Abstr.) **(Rus)**

[A method for evaluating the safety of decompression regimens for divers] Volkov LK, et al. **Voen Med Zh** 1996 Sep;317(9):48–50, 80 (Eng. Abstr.) **(Rus)**

[Study of children's safety inside the car] García–Matres y Cortés B, et al. **An Esp Pediatr** 1996 Aug;45(2):125–8 **(Spa)**

[Methodological bases for risk analysis in medico–ecological research and its importance for the ecological safety of Ukraine] Kachyns'kyi AB, et al. **Lik Sprava** 1995 Mar–Apr; (3–4):5–15 **(Ukr)**

ECONOMICS

Defining total corporate health and safety costs—significance and impact. Review and recommendations. Brady W, et al. **J Occup Environ Med** 1997 Mar;39(3):224–31 (23 ref.)

HISTORY

Housewives as home safety managers: the changing perception of the home as a place of hazard and risk, 1870–1940. Tarr JA, et al. **Clio Med** 1997;41:196–233

LEGISLATION & JURISPRUDENCE

Observational evaluation of compliance with traffic regulations among helmeted and nonhelmeted bicyclists [see comments] Farris C, et al. **Ann Emerg Med** 1997 May; 29(5):625–9. Comment in: Ann Emerg Med 1997 May;29(5):643–4.

General practices and health and safety at work. Sen D, et al. **Br J Gen Pract** 1997 Feb;47(415):103–4

Feel good legislation: prevention or calamity [see comments] Freeman–Longo RE. **Child Abuse Negl** 1996 Feb; 20(2):95–101. Comment in: Child Abuse Negl 1996 Nov;20(11):1133–5.

Ethical and legal issues related to endovascular graft investigation and early usage [editorial] Veith FJ, et al. **J Endovasc Surg** 1997 Feb;4(1):66–71

At the summit. Minnesota youth lobby for gun safety. Belcamino K. **Minn Med** 1996 Feb;79(2):8–9

Africa spearheads bid for strict rules on biosafety [news] Masood E. **Nature** 1997 May 22;387(6631):326

Occupational exposure limits for chemicals in the European Union. Hunter WJ, et al. **Occup Environ Med** 1997 Apr; 54(4):217–22

Managing the MSDS mess. Helmrich DM. **Occup Health Saf** 1996 Mar;65(3):47–8

STANDARDS

The Safe Motherhood Symposium Nijmegen, The

Netherlands, 30th September, 1995 [editorial; comment] Matomora MK. **Eur J Obstet Gynecol Reprod Biol** 1996 Oct;69(1):3–4. Comment on: Eur J Obstet Gynecol Reprod Biol 1996 Oct;69(1):31–6. Comment on: Eur J Obstet Gynecol Reprod Biol 1996 Oct;69(1):41–5.

Safe motherhood and district health systems. Tarimo E. **Eur J Obstet Gynecol Reprod Biol** 1996 Oct;69(1):5–10 (18 ref.)

Occupational exposure limits for chemicals in the European Union. Hunter WJ, et al. **Occup Environ Med** 1997 Apr; 54(4):217–22

Successful health and safety management. Doidge JP. **Perfusion** 1997 Jul;12(4):217–20

STATISTICS & NUMERICAL DATA

Public perception of safety and metal detectors in an urban emergency department. McNamara R, et al. **Am J Emerg Med** 1997 Jan;15(1):40–2

SAFETY, CONSUMER PRODUCT see **CONSUMER PRODUCT SAFETY**

SAFETY DEVICES see **PROTECTIVE DEVICES**

SAFETY, EQUIPMENT see **EQUIPMENT SAFETY**

SAFETY GLASSES see **EYE PROTECTIVE DEVICES**

SAFETY LENSES see **EYE PROTECTIVE DEVICES**

SAFETY MANAGEMENT

Introduction to the biosafety guidelines for sorting of unfixed cells [editorial] Schmid I, et al. **Cytometry** 1997 Jun 1; 28(2):97–8

Biosafety guidelines for sorting of unfixed cells. Schmid I, et al. **Cytometry** 1997 Jun 1;28(2):99–117

High-tech hazards. Fields S. **Environ Health Perspect** 1996 Jul;104(7):700–3

A computerized radioactive material inventory system using a commercially available database program. Hamrick PE. **Health Phys** 1997 May;72(5):788–94

Automotive HUDs: the overlooked safety issues. Tufano DR. **Hum Factors** 1997 Jun;39(2):303–11

Patient risks: an underdeveloped area. Zelders T. **J Clin Monit** 1996 May;12(3):237–41

Class distinctions. Those who don't distinguish their flammable liquids' flashpoint classes, storage specifications and compliance codes can wind up trying to extinguish a blaze. Buric A. **Occup Health Saf** 1994 Nov;63(11):42–4, 50

Physicians' work in emergency response. Couturier AJ, et al. **Occup Health Saf** 1997 Feb;66(2):46–8, 50–2

Tools for developing a workplace violence prevention program. Askari E. **Occup Med** 1996 Apr–Jun;11(2):363–74 (5 ref.)

Occupational safety and health: a method to test the collection of 'grey data' by line managers. Falconer L, et al. **Occup Med (Oxf)** 1997 Feb;47(2):81–9

Predicting accidents at work with measures of locus of control and job hazards. Janicak CA. **Psychol Rep** 1996 Feb;78(1):115–21

An empirical analysis of rock climbers' response to hazard warnings. Jakus PM, et al. **Risk Anal** 1996 Aug;16(4):581–6

Biosafety concerns and Coxiella burnetii [letter; comment] Hackstadt T. **Trends Microbiol** 1996 Sep;4(9):341–2. Comment on: Trends Microbiol 1996 Apr;4(4):158–61.

[Public health safety and transfusion organization] Vachey L. **Bull Acad Natl Med** 1997 May;181(5):853–61 (Eng. Abstr.) **(Fre)**

[Company obligations in matters of occupational hazard prevention] Manzano F. **Rev Esp Salud Publica** 1996 Jul–Aug;70(4):469–83 (Eng. Abstr.) **(Spa)**

[The prevention and control of the risks with chemical products] Vargas Marcos F. **Rev Esp Salud Publica** 1996 Jul–Aug;70(4):409–20 (Eng. Abstr.) **(Spa)**

[New emphasis on patient safety in the USA. Something for us to learn?] Bergentz SE. **Lakartidningen** 1997 Jan 22; 94(4):243–4 **(Swe)**

LEGISLATION & JURISPRUDENCE

Patient Safety Act of 1996 introduced. Walker JF. **AORN J** 1996 Jul;64(1):119–21

Hazardous chemical exposure: guidelines for the optometric office. Moates KN, et al. **J Am Optom Assoc** 1997 Apr; 68(4):225–32

The biosafety protocol slouches toward Montreal. Hoyle R. **Nat Biotechnol** 1997 Aug;15(8):694

[Occupational health and the Prevention of Occupational Hazards Act] Carlos Cárcoba A. **Rev Esp Salud Publica** 1996 Jul–Aug;70(4):463–8 (Eng. Abstr.) **(Spa)**

[The viewpoint of social workers on the future legislative framework for the prevention of occupational hazards] Díaz Ojeda M, et al. **Rev Esp Salud Publica** 1996 Jul–Aug; 70(4):453–61 (Eng. Abstr.) **(Spa)**

[Safety and health in work from the perspective of the Prevention of Occupational Hazards Act] Gómez-Hortigüela Amillo J. **Rev Esp Salud Publica** 1996 Jul–Aug;70(4):385–92 (Eng. Abstr.) **(Spa)**

METHODS

U.S. naval aviation mishaps, 1977–92: differences between single- and dual-piloted aircraft. Shappell SA, et al. **Aviat Space Environ Med** 1996 Jan;67(1):65–9

Evaluation of the hazard quotient method for risk assessment of selenium. Lemly AD. **Ecotoxicol Environ Saf** 1996 Nov; 35(2):156–62

The 'ABCs' of noise measurements set the stage for responsive controls. Banach J. **Occup Health Saf** 1994 Oct; 63(10):75–8

Sick of the system? Laird R. **Occup Health Saf** 1994 Sep; 63(9):65–8

Weighing the evidence. Lund K, et al. **Occup Health Saf** 1994 Nov;63(11):33–5

In plane view: blind spots and visual limits. Miller BC. **Occup Health Saf** 1994 May;63(5):98–102

Improving workplace security. D'Addario FJ. **Occup Med** 1996 Apr–Jun;11(2):349–61 (15 ref.)

State hospitals' responses to the sexual behavior of psychiatric inpatients. Buckley PF, et al. **Psychiatr Serv** 1997 Mar; 48(3):398–9

Prevention of aggressive incidents on a closed psychiatric ward. Nijman HL, et al. **Psychiatr Serv** 1997 May; 48(5):694–8

[Results of integrated tests of the facility to disinfect gaseous environment of orbital stations] Balashov EV, et al. **Aviakosm Ekolog Med** 1996;30(6):37–42 (Eng. Abstr.) **(Rus)**

ORGANIZATION & ADMINISTRATION

Trade unions and the effectiveness of worker representation in health and safety in Britain. Walters D. **Int J Health Serv** 1996;26(4):625–41

Practice points: translating research into practice. Attention to food safety should not wait for a crisis. Hess MA. **J Am Diet Assoc** 1997 Jun;97(6):625

STANDARDS

Practical methods to improve transfusion safety by using novel blood unit and patient identification systems. Wenz B, et al. **Am J Clin Pathol** 1997 Apr;107(4 Suppl 1):S12–6 (26 ref.)

Falls in construction: injury rates for OSHA-inspected employers before and after citation for violating the Washington State Fall Protection Standard. Nelson NA, et al. **Am J Ind Med** 1997 Mar;31(3):296–302

Human subject research at Armstrong Laboratory, 1973–93: medical and musculoskeletal disqualifications. Morris CE, et al. **Aviat Space Environ Med** 1997 May;68(5):378–83

An open letter to the FDA regarding changes in reporting procedures for drugs and biologics proposed in the wake of the FIAU tragedy. Meinert CL. **Control Clin Trials** 1996 Aug;17(4):273–84

Radiation hazards from horses undergoing scintigraphy using technetium-99m. Whitelock RG. **Equine Vet J** 1997 Jan; 29(1):26–30

Safety management: expanding the role of clinical engineers. **Health Devices** 1996 Jan;25(1):6–37

Integrating Hazard Analysis and Critical Control Point (HACCP) and sanitation for verifiable food safety. Setiabuhdi M, et al. **J Am Diet Assoc** 1997 Aug; 97(8):889–91

Food safety training needs exist for staff and consumers in a variety of community-based homes for people with developmental disabilities. Walter A, et al. **J Am Diet Assoc** 1997 Jun;97(6):619–25

Health and safety behaviour and compliance in electroplating workshops. Halliday-Bell J, et al. **Occup Med (Oxf)** 1997 May;47(4):237–40

Validation of a poultry biosecurity survey. Nespeca R, et al. **Prev Vet Med** 1997 Jul;31(1–2):73–86

STATISTICS & NUMERICAL DATA

Supervision of suicidal patients in adult inpatient psychiatric units in general hospitals. Green JS, et al. **Psychiatr Serv** 1996 Aug;47(8):859–63

SAFFLOWER OIL

ADVERSE EFFECTS

Lack of promotion of colon carcinogenesis by high-oleic safflower oil. Takeshita M, et al. **Cancer** 1997 Apr 15; 79(8):1487–93

PHARMACOLOGY

Dietary safflower phospholipid reduces liver lipids in laying hens. An BK, et al. **Poult Sci** 1997 May;76(5):689–95

THERAPEUTIC USE

Prevention of diabetic embryopathy in offspring of diabetic rats with use of a cocktail of deficient substrates and an antioxidant. Reece EA, et al. **Am J Obstet Gynecol** 1997 Apr;176(4):790–7; discussion 797–8

SAFROLE

ANALOGS & DERIVATIVES

Covalent binding to DNA in vitro of 2',3'-oxides derived from allylbenzene analogs. Luo G, et al. **Drug Metab Dispos** 1996 Sep;24(9):1020–7

PHARMACOLOGY

Distinction of CYP1A1 and CYP1A2 activity by selective inhibition using fluvoxamine and isosafrole. Pastrakuljic A, et al. **Biochem Pharmacol** 1997 Feb 21;53(4):531–8

TOXICITY

Analysis of cytogenetic effects and DNA adduct formation induced by safrole in Chinese hamster lung cells. Daimon H, et al. **Teratog Carcinog Mutagen** 1997;17(1):7–18

SAGUINUS

Cytokines in the cotton top tamarin model of human ulcerative colitis. Warren BF. **Aliment Pharmacol Ther** 1996;10 Suppl 2:45–7; discussion 48 (8 ref.)

Metabolism of reproductive steroids during the ovarian cycle in two species of callitrichids, Saguinus oedipus and Callithrix jacchus, and estimation of the ovulatory period from fecal steroids. Ziegler TE, et al. **Biol Reprod** 1996 Jan;54(1):91–9

Treatment of ulcerative colitis in the cottontop tamarin using antibody to tumour necrosis factor alpha. Watkins PE, et al. **Gut** 1997 May;40(5):628–33

Lack of susceptibility of the cottontop tamarin to hepatitis C infection. Garson JA, et al. **J Med Virol** 1997 Jul; 52(3):286–8

ANATOMY & HISTOLOGY

Age of epiphyseal closure in tamarins and marmosets. Kohn LA, et al. **Am J Primatol** 1997;41(2):129–39

GENETICS

DRB, DQA, DQB and DPB nucleotide sequences of Saguinus oedipus B95-8. Bidwell JL, et al. **Eur J Immunogenet** 1994 Feb;21(1):67–77

Riverine barriers and gene flow in Amazonian saddle-back tamarins. Peres CA, et al. **Folia Primatol (Basel)** 1996; 67(3):113–24

The T-cell receptor beta chain-encoding gene repertoire of a New World primate species, the cotton-top tamarin. Allen TM, et al. **Immunogenetics** 1996;45(2):151–60

MHC class I-processed pseudogenes in New World primates provide evidence for rapid turnover of MHC class I genes. Cadavid LF, et al. **J Immunol** 1996 Sep 15;157(6):2403–9

IMMUNOLOGY

MHC class I-processed pseudogenes in New World primates provide evidence for rapid turnover of MHC class I genes. Cadavid LF, et al. **J Immunol** 1996 Sep 15;157(6):2403–9

PSYCHOLOGY

Role of prolactin in paternal care in a monogamous New World primate, Saguinus oedipus. Ziegler TE, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:599–601

VIROLOGY

The sequence and genomic organization of a GB virus A variant isolated from captive tamarins. Leary TP, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2307–13

Five new or recently discovered (GBV-A) virus species are indigenous to New World monkeys and may constitute a separate genus of the Flaviviridae. Bukh J, et al. **Virology** 1997 Mar 17;229(2):429–36

SAIDS see **SIMIAN ACQUIRED IMMUNODEFICIENCY SYNDROME**

SAIDS RETROVIRUS see **RETROVIRUSES TYPE D, SIMIAN**

SAIDS VACCINES

Expression of gamma interferon by simian immunodeficiency virus increases attenuation and reduces postchallenge virus load in vaccinated rhesus macaques. Giavedoni L, et al. **J Virol** 1997 Feb;71(2):866–72

Induction of vigorous cytotoxic T-lymphocyte responses by live attenuated simian immunodeficiency virus. Johnson RP, et al. **J Virol** 1997 Oct;71(10):7711–8

Toward a poliovirus-based simian immunodeficiency virus vaccine: correlation between genetic stability and immunogenicity. Tang S, et al. **J Virol** 1997 Oct; 71(10):7841–50

Early cytokine and chemokine gene expression in lymph nodes of macaques infected with simian immunodeficiency virus is predictive of disease outcome and vaccine efficacy. Zou W, et al. **J Virol** 1997 Feb;71(2):1227–36

ADMINISTRATION & DOSAGE

Vaccination of cynomolgus monkeys with whole inactivated or live-attenuated simian immunodeficiency virus. Titti F, et al. **Antibiot Chemother** 1996;48:131–8

SIV and HIV prophylaxis [letter; comment] Ada GL, et al. **Nat Med** 1996 Oct;2(10):1054–5. Comment on: Nat Med 1996 Jul;2(7):767–75.

Fetal or neonatal infection with attenuated simian

immunodeficiency virus results in protective immunity against oral challenge with pathogenic SIVmac251. Otsyula MG, et al. **Virology** 1996 Aug 1;222(1):275–8

ADVERSE EFFECTS

Live-attenuated HIV vaccines: how safe is safe enough? [news; comment] Murphey-Corb M. **Nat Med** 1997 Jan; 3(1):17–8. Comment on: Nat Med 1997 Jan;3(1):32–6.

Weakened SIV vaccine still kills [news] Cohen J. **Science** 1997 Oct 3;278(5335):24–5

IMMUNOLOGY

Simian retrovirus vaccines: simian retrovirus and simian immunodeficiency lentivirus. Gardner MB, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):399–401 (20 ref.)

Recombinant subunit vaccines against primate lentiviruses. Hu SL. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):451–3 (26 ref.)

Live attenuated SIV vaccines are not effective in a postexposure vaccination model. Linhart H, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):593–9

Simian immunodeficiency virus live and inactivated experimental vaccines. Norley S, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):447–9 (41 ref.)

"Attenuated" simian immunodeficiency virus in macaque neonates. Ruprecht RM, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):459–60 (3 ref.)

Rapid development of vaccine protection in macaques by live-attenuated simian immunodeficiency virus. Stahl-Hennig C, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):2969–81

Evolution of envelope-specific antibody responses in monkeys experimentally infected or immunized with simian immunodeficiency virus and its association with the development of protective immunity. Cole KS, et al. **J Virol** 1997 Jul;71(7):5069–79

Detection of simian immunodeficiency virus (SIV)-specific CD8+ T cells in macaques protected from SIV challenge by prior SIV subunit vaccination. Kent SJ, et al. **J Virol** 1996 Aug;70(8):4941–7

Resistance of neonatal monkeys to live attenuated vaccine strains of simian immunodeficiency virus [see comments] Wyand MS, et al. **Nat Med** 1997 Jan;3(1):32–6. Comment in: Nat Med 1997 Jan;3(1):17–8. Comment in: Nat Med 1997 Aug;3(8):816.

Simian immunodeficiency virus (SIV)-specific CD8+ cytotoxic T lymphocyte responses of naive and vaccinated cynomolgus macaques infected with SIVmac32H(J5): quantitative analysis by in vitro antigenic stimulation. Geretti AM, et al. **Vaccine** 1997 Aug;15(11):1269–75

SIV DNA vaccine trial in macaques: post-challenge necropsy in vaccine and control groups. Lu S, et al. **Vaccine** 1997 Jun;15(8):920–3

SAIMIRI

Squirrel monkeys as animal models of pelvic relaxation [letter] Hartwig WC. **Am J Obstet Gynecol** 1997 Aug; 177(2):489–90

Histopathological and immunocytochemical demonstration of retinal degeneration in the squirrel monkey. Warfvinge K, et al. **Exp Eye Res** 1996 Sep;63(3):245–53

Nesidioblastosis associated with hyperglycemia in two squirrel monkeys (Saimiri sciureus). King CS, et al. **J Med Primatol** 1996 Oct;25(5):361–6

An illustrated guide to endotracheal intubation in small non-human primates. Morris TH, et al. **Lab Anim** 1997 Apr;31(2):157–62

ANATOMY & HISTOLOGY

Interlaminar astroglial processes in the cerebral cortex of adult monkeys but not of adult rats. Colombo JA. **Acta Anat (Basel)** 1996;155(1):57–62

Cranial growth in Saimiri sciureus (Cebidae) and its alteration by nutritional factors: a longitudinal study. Dressino V, et al. **Am J Phys Anthropol** 1997 Apr;102(4):545–54

Differential synaptic innervation of striatofugal neurones projecting to the internal or external segments of the globus pallidus by thalamic afferents in the squirrel monkey. Sidibé M, et al. **J Comp Neurol** 1996 Feb 12;365(3):445–65

GENETICS

Strategy using pooled DNA to identify 56 short tandem repeat polymorphisms for the Bolivian squirrel monkey. Zhong F, et al. **Biotechniques** 1996 Oct;21(4):580, 582, 584, 586

Cloning and expression of the glucocorticoid receptor from the squirrel monkey (Saimiri boliviensis boliviensis), a glucocorticoid-resistant primate. Reynolds PD, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):465–72

Sequences and evolution of human and squirrel monkey blue opsin genes. Shimmin LC, et al. **J Mol Evol** 1997 Apr; 44(4):378–82

GROWTH & DEVELOPMENT

Cranial growth in Saimiri sciureus (Cebidae) and its alteration by nutritional factors: a longitudinal study. Dressino V, et al. **Am J Phys Anthropol** 1997 Apr;102(4):545–54

IMMUNOLOGY

Antigens linked to synthetic microspheres induce immune responses in primates in the absence of adjuvant. Sedlik C, et al. **Immunobiology** 1996 Jan;195(1):105–18

Cytokine secretion in squirrel monkeys. Hinze-Selch D, et al. **Psychoneuroendocrinology** 1997 Jul;22(5):311–23

METABOLISM

Cloning and expression of the glucocorticoid receptor from the squirrel monkey (Saimiri boliviensis boliviensis), a glucocorticoid-resistant primate. Reynolds PD, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):465–72

AMPA and NMDA glutamate receptor subunits in midbrain dopaminergic neurons in the squirrel monkey: an immunohistochemical and in situ hybridization study. Paquet M, et al. **J Neurosci** 1997 Feb 15;17(4):1377–96

PARASITOLOGY

Plasmodium falciparum: genetic diversity of several strains infectious for the squirrel monkey (Saimiri sciureus). Fandeur T, et al. **Exp Parasitol** 1996 Oct;84(1):1–15

Studies on a primaquine-tolerant strain of Plasmodium vivax from Brazil in Aotus and Saimiri monkeys. Nayar JK, et al. **J Parasitol** 1997 Aug;83(4):739–45

Direct comparison of antimalarial activity among PS-15 combination therapies by bioassay of serum samples from treated Saimiri sciureus. Yeo AE. **J Parasitol** 1997 Jun; 83(3):515–8

PHYSIOLOGY

Viscero-somatic neurons in the primary somatosensory cortex (SI) of the squirrel monkey. Brüggemann J, et al. **Brain Res** 1997 May 9;756(1–2):297–300

Canal-otolith interactions driving vertical and horizontal eye movements in the squirrel monkey. Telford L, et al. **Exp Brain Res** 1996 Jun;109(3):407–18

Calretinin immunoreactivity in the thalamus of the squirrel monkey. Fortin M, et al. **J Chem Neuroanat** 1996 Apr; 10(2):101–17

Efferent connections of the internal globus pallidus in the squirrel monkey: II. Topography and synaptic organization of pallidal efferents to the pedunculopontine nucleus. Shink E, et al. **J Comp Neurol** 1997 Jun 9;382(3):348–63

Efferent connections of the internal globus pallidus in the squirrel monkey: I. Topography and synaptic organization of the pallidothalamic projection. Sidibé M, et al. **J Comp Neurol** 1997 Jun 9;382(3):323–47

Initial cortical reactions to injury of the median and radial nerves to the hands of adult primates. Silva AC, et al. **J Comp Neurol** 1996 Mar 18;366(4):700–16

Anatomical demonstration of ocular dominance columns in striate cortex of the squirrel monkey. Horton JC, et al. **J Neurosci** 1996 Sep 1;16(17):5510–22

PSYCHOLOGY

Judgements of ordinality and summation of number symbols by squirrel monkeys (Saimiri sciureus). Olthof A, et al. **J Exp Psychol Anim Behav Process** 1997 Jul;23(3):325–39

Effect of infants on adult social relations in the squirrel monkey (Saimiri Sciureus). Aruguete MS, et al. **Psychol Rep** 1996 Oct;79(2):603–11

VIROLOGY

Nonhuman primate models of measles. Kobune F, et al. **Lab Anim Sci** 1996 Jun;46(3):315–20

SAIMIRINAE

ANATOMY & HISTOLOGY

Functional morphology of the postcranium and locomotor behavior of Neosaimiri fieldsi, a Saimiri-like Middle Miocene platyrrhine. Nakatsukasa M, et al. **Am J Phys Anthropol** 1997 Apr;102(4):515–44

PHYSIOLOGY

Functional morphology of the postcranium and locomotor behavior of Neosaimiri fieldsi, a Saimiri-like Middle Miocene platyrrhine. Nakatsukasa M, et al. **Am J Phys Anthropol** 1997 Apr;102(4):515–44

SAIMIRINE HERPESVIRUS 2 see **HERPESVIRUS 2, SAIMIRINE**

SAINTS

HISTORY

The illness of Saint Fina [letter] Ryan SJ. **J Child Neurol** 1996 May;11(3):258

[Epilepsy, eponyms and patron saints (history of Western civilization)] Janković SM, et al. **Srp Arh Celok Lek** 1996 May-Jun;124(5–6):162–5 (Eng. Abstr.) **(Scc)**

SALAAM SEIZURES see **SPASMS, INFANTILE**

SALAMANDERS see **URODELA**

SALAMANDRA

GENETICS

Gypsy/Ty3-like elements in the genome of the terrestrial Salamander hydromantes (Amphibia, Urodela). Marracci S, et al. **J Mol Evol** 1996 Dec;43(6):584–93

METABOLISM

Ovarian steroid levels in Salamandra salamandra infraimmaculata during the reproductive cycle. Degani G, et al. **Gen Comp Endocrinol** 1997 Jun;106(3):356–60

SALAMANDRIDAE

Genesis of newt sperm axial fiber: cDNA cloning and expression of a 29 kDa protein, a major component of the axial fiber, during spermatogenesis. Furukawa K, et al. **Int J Dev Biol** 1996 Dec;40(6):1109–18

ANATOMY & HISTOLOGY

Catecholamines and indoleamines in the central nervous system of a urodele amphibian: a microdissection study with emphasis on the distribution of epinephrine. Lowry CA, et al. **Brain Behav Evol** 1996;48(2):70–93

EMBRYOLOGY

Effect of protein phosphatase inhibitors on cleavage furrow formation in newt eggs: inhibition of normal furrow formation and concomitant induction of furrow-like dents. Sawai T. **Dev Growth Differ** 1997 Apr;39(2):235–42

Changes in microtubule structures during the first cell cycle of physiologically polyspermic newt eggs. Iwao Y, et al. **Mol Reprod Dev** 1997 Jun;47(2):210–21

GENETICS

A novel family of T-box genes in urodele amphibian limb development and regeneration: candidate genes involved in vertebrate forelimb/hindlimb patterning. Simon HG, et al. **Development** 1997 Apr;124(7):1355–66

[An analysis of the expression of the genes containing the LeR-1 and VeR-1 sequences in the embryogenesis, regeneration and in the intact tissues of newts] Markitantova IuV, et al. **Ontogenez** 1997 Jul-Aug; 28(4):262–70 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Salamander pigment patterns: how can they be used to study developmental mechanisms and their evolutionary transformation? Parichy DM. **Int J Dev Biol** 1996 Aug; 40(4):871–84 (130 ref.)

Direct development in the lungless salamanders: what are the consequences for developmental biology, evolution and phylogenesis? Wake DB, et al. **Int J Dev Biol** 1996 Aug; 40(4):859–69 (118 ref.)

METABOLISM

Intermolecular cleavage by the newt ribozyme. Marusic L, et al. **Eur J Biochem** 1997 Jul 1;247(1):396–401

Radioimmunoassay of a newt sex pheromone, sodefrin, and the influence of hormones on its level in the abdominal gland. Yamamoto K, et al. **Gen Comp Endocrinol** 1996 Dec; 104(3):356–63

Neuroanatomical distribution of vasotocin in a urodele amphibian (Taricha granulosa) revealed by immunohistochemical and in situ hybridization techniques. Lowry CA, et al. **J Comp Neurol** 1997 Aug 18;385(1):43–70

Presence of pituitary adenylate cyclase-activating polypeptide 38-immuno-like material in the brain and ovary of the female crested newt, Triturus carnifex: its involvement in the ovarian synthesis of prostaglandins and steroids. Gobbetti A, et al. **J Endocrinol** 1997 Jan; 152(1):141–6

PHYSIOLOGY

Perspective: a suggested role for basement membrane structures during newt limb regeneration. Neufeld DA, et al. **Anat Rec** 1996 Oct;246(2):155–61

Activation of a single retinoic acid receptor isoform mediates proximodistal respecification. Pecorino LT, et al. **Curr Biol** 1996 May 1;6(5):563–9

Reduction of the current of injury leaving the amputation inhibits limb regeneration in the red spotted newt. Jenkins LS, et al. **Dev Biol** 1996 Sep 15;178(2):251–62

Involvement of endogenous prolactin in the expression of courtship behavior in the newt, Cynops pyrrhogaster. Toyoda F, et al. **Gen Comp Endocrinol** 1996 May; 102(2):191–6

Correlation between RA-induced apoptosis and patterning defects in regenerating fins and limbs. Géraudie J, et al. **Int J Dev Biol** 1997 Jun;41(3):529–32

Mechanisms of retina regeneration in urodeles. Mitashov VI. **Int J Dev Biol** 1996 Aug;40(4):833–44 (140 ref.)

Basal ganglia organization in amphibians: afferent connections to the striatum and the nucleus accumbens. Marín O, et al. **J Comp Neurol** 1997 Feb 3;378(1):16–49

Spinal ascending pathways in amphibians: cells of origin and main targets. Muñoz A, et al. **J Comp Neurol** 1997 Feb 10;378(2):205–28

SALAMANDRIDAE

T-type Ca2+ channel lowers the threshold of spike generation in the newt olfactory receptor cell. Kawai F, et al. **J Gen Physiol** 1996 Dec;108(6):525–35

Expression of type XII collagen by wound epithelial, mesenchymal, and ependymal cells during blastema formation in regenerating newt (Notophthalmus viridescens) tails. Wei Y, et al. **J Morphol** 1996 Nov; 230(2):177–86

Expression of Sonic hedgehog gene in regenerating newt limb blastemas recapitulates that in developing limb buds. Imokawa Y, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9159–64

SALARIES AND FRINGE BENEFITS

The salary responsibility program for full-time faculty members in an academic clinical department. Kastor JA, et al. **Acad Med** 1997 Jan;72(1):23–9

You get what you pay for [letter] Mylonas P. **Aust Vet J** 1996 Aug;74(2):164

Poor pay the problem [letter] Sullivan S. **Aust Vet J** 1996 Aug;74(2):164

BMA asks for 53% pay increase. General practitioners want parity with hospital consultants [letter] Fordham S. **BMJ** 1997 Jan 4;314(7073):77

BMA asks for 53% pay increase. Morality of such claims is doubtful in light of growing disparity in society [letter] Joseph AE. **BMJ** 1997 Jan 4;314(7073):77

Low-wage maternal employment and outcomes for children: a study [comment] Moore KA, et al. **Future Child** 1997 Spring;7(1):122–7. Comment on: Future Child 1997 Spring;7(1):110–5.

Negotiating with administration—or how to get paid for doing hospital epidemiology. Deery HG 2nd. **Infect Control Hosp Epidemiol** 1997 Mar;18(3):209–14

Design of a compensation system for dental practice. Scheetz JP, et al. **J Am Coll Dent** 1997 Spring;64(1):30–7

Report on the 1995 membership database of the American Dietetic Association. Bryk JA, et al. **J Am Diet Assoc** 1997 Feb;97(2):197–203

Getting the most from your employee benefits: evaluating priorities. Goodyear JA. **J Am Pharm Assoc (Wash)** 1996 Oct;NS36(10):607–8, 621

Employment, starting salaries, and educational indebtedness of 1996 graduates of US veterinary medical colleges. Gehrke BC. **J Am Vet Med Assoc** 1996 Dec 15; 209(12):2022–3

Gender and perceived pay entitlement: testing for effects of experience with income. Desmarais S, et al. **J Pers Soc Psychol** 1997 Jan;72(1):141–50

Analysis of the typicalness of supported employment jobs, natural supports, and wage and integration outcomes. Mank D, et al. **Ment Retard** 1997 Jun;35(3):185–97

Compensation of lawyers and doctors [letter] Williams RG. **N Engl J Med** 1996 Nov 28;335(22):1691

Salary survey of ambulatory care clinical pharmacists. Anastasio GD, et al. **Pharmacotherapy** 1997 May-Jun; 17(3):565–8

Salary guidelines for academic plastic surgery faculty. Stevenson TR, et al. **Plast Reconstr Surg** 1997 Apr; 99(4):1180–3

Clinical benefits of paid work activity in schizophrenia: 1-year followup. Bell MD, et al. **Schizophr Bull** 1997; 23(2):317–28

Salary inequality and primary care integration in South Africa. Bachmann MO, et al. **Soc Sci Med** 1997 Sep; 45(5):723–9

[German physicians earn lower salaries (letter)] Reimer S. **Tidsskr Nor Laegeforen** 1996 Oct 10;116(24):2919–20 **(Nor)**

[Not exactly accurate about salaries to fellowship recipients (letter)] Røttingen JA. **Tidsskr Nor Laegeforen** 1997 Jun 10;117(15):2224 **(Nor)**

[Approval of the list of organizations, enterprises, works and their structural divisions whose activities grant the right to fix an extra 20% payment (wage rate) for diagnosing and treating HIV-infected persons and also for work connected with HIV-containing specimens] **Klin Lab Diagn** 1997 Apr;(4):49–50 **(Rus)**

[Mechanism of differentiated work payment under conditions of intensified medical activities] Dontsov VG. **Probl Sotsialnoi Gig Istor Med** 1995 Mar-Apr;(2):41–3 (Eng. Abstr.) **(Rus)**

[Compensation to participants in experiments, is it considered as salary?] Westerhäll L. **Lakartidningen** 1997 Jan 22; 94(4):212–3 **(Swe)**

ECONOMICS

Path model for analyzing factors associated with salaries of Louisiana hospital pharmacists. Dighe MS, et al. **Am J Health Syst Pharm** 1996 Jul 15;53(14):1706–8

Measuring immigrant wage growth using matched CPS files. Duleep HO, et al. **Demography** 1997 May;34(2):239–49

The effect of the sex composition of jobs on starting wages in an organization: findings from the NLSY. England P, et al. **Demography** 1996 Nov;33(4):511–21

HISTORY

The ANA's Economic Security Program: the first 20 years. Grando VT. **Nurs Res** 1997 Mar-Apr;46(2):111–5

LEGISLATION & JURISPRUDENCE

Determining the compensation status—salaried or nonsalaried—of pharmacists. Williams KG. **Am J Health Syst Pharm** 1996 Sep 15;53(18):2152, 2155

Federal labor laws. Are you in compliance? Stern JS. **Mich Med** 1996 Mar;95(3):18

STATISTICS & NUMERICAL DATA

Gender and compensation in health care management. Weil PA, et al. **Health Care Manage Rev** 1996 Summer; 21(3):19–33

Leadership ... medical group pay goes up, up and away [news] **Hosp Health Netw** 1996 Nov 5;70(21):14

Executive advancement ... health care's millionaire club [news] **Hosp Health Netw** 1996 Dec 5;70(23):11

What are you worth? Fralicx RD, et al. **Hosp Health Netw** 1997 Sep 5;71(17):36–40, 42, 44 passim

Compensation. Show them the money. Hudson T. **Hosp Health Netw** 1997 May 5;71(9):40, 42

Paywatch: physician compensation. Solovy A. **Hosp Health Netw** 1996 Oct 5;70(19):64, 66

NMTCB 1995–1996 employment and salary survey results. Crosthwaite MH, et al. **J Nucl Med Technol** 1997 Mar; 25(1):73–5

Sex differences in academic advancement. Results of a national study of pediatricians. Kaplan SH, et al. **N Engl J Med** 1996 Oct 24;335(17):1282–9

TRENDS

Predicting the earnings of supported employees with mental retardation: a longitudinal study. Rusch FR, et al. **Am J Ment Retard** 1997 May;101(6):630–44

Measuring immigrant wage growth using matched CPS files. Duleep HO, et al. **Demography** 1997 May;34(2):239–49

Economic mobility of young workers in the 1970s and 1980s. Duncan GJ, et al. **Demography** 1996 Nov;33(4):497–509

Human resources ... health care professionals who work in ambulatory and home health care are getting paid more [news] **Hosp Health Netw** 1996 Dec 20;70(24):13

Human resources ... rash of hospital cost-cutting [news] **Hosp Health Netw** 1997 Feb 20;71(4):14

Managed care. Payback time. Nordhaus-Bike AM. **Hosp Health Netw** 1997 Aug 5;71(15):70, 72

Changes in psychologists' salaries. Kohout JL, et al. **Psychiatr Serv** 1997 Apr;48(4):467

SALBUTAMOL see **ALBUTEROL**

SALDINO-NOONAN SYNDROME see **SHORT RIB-POLYDACTYLY SYNDROME**

SALICYLAMIDES

Antagonism by the 5-HT2A/C receptor agonist DOI of raclopride-induced catalepsy in the rat. Wadenberg ML, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):247–51

ADMINISTRATION & DOSAGE

Kinetic modeling of [11C]raclopride: combined PET-microdialysis studies. Endres CJ, et al. **J Cereb Blood Flow Metab** 1997 Sep;17(9):932–42

Effects of intermittent and continuous subchronic administration of raclopride on motor activity, dopamine turnover and receptor occupancy in the rat. Ericson H, et al. **Pharmacol Toxicol** 1996 Dec;79(6):277–86

ADVERSE EFFECTS

Fixed drug eruption induced by ethenzamide. Kawada A, et al. **Contact Dermatitis** 1996 May;34(5):369–70

CHEMICAL SYNTHESIS

Preparation of [76Br]FLB 457 and [76Br]FLB 463 for examination of striatal and extrastriatal dopamine D-2 receptors with PET. Loc'h C, et al. **Nucl Med Biol** 1996 Aug;23(6):813–9

CHEMISTRY

Antitumor activity studies of newly synthesized N-salicyloyl-N'-(p-hydroxybenzthioyl)hydrazine and its copper(II) complex both in vivo and in vitro. Singh NK, et al. **Bioorg Med Chem** 1997 Feb;5(2):245–51

DIAGNOSTIC USE

Serotonergic modulation of dopamine measured with [11C]raclopride and PET in normal human subjects. Smith GS, et al. **Am J Psychiatry** 1997 Apr;154(4):490–6

METABOLISM

PET study of competition between intravenous cocaine and [11C]raclopride at dopamine receptors in human subjects [see comments] Schlaepfer TE, et al. **Am J Psychiatry** 1997 Sep;154(9):1209–13. Comment in: Am J Psychiatry 1997 Sep;154(9):1195–7.

Sequestered endoplasmic reticulum space for sequential metabolism of salicylamide. Coupling of hydroxylation and glucuronidation. Tirona RG, et al. **Drug Metab Dispos** 1996 Aug;24(8):821–33

Quantification of amphetamine-induced changes in [11C]raclopride binding with continuous infusion. Carson RE, et al. **J Cereb Blood Flow Metab** 1997 Apr;17(4):437–47

Difference in response of D2 receptor binding between 11C-N-methylspiperone and 11C-raclopride against anesthetics in rhesus monkey brain. Kobayashi K, et al. **J Neural Transm Gen Sect** 1995;100(2):147–51

Persistent spontaneous oral dyskinesias in haloperidol-withdrawn rats neonatally lesioned with 6-hydroxydopamine: absence of an association with the Bmax for [3H]raclopride binding to neostriatal homogenates. Huang NY, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):268–76

Distinct binding patterns of [3H]raclopride and [3H]spiperone at dopamine D2 receptors in vivo in rat brain. Implications for pet studies. Bischoff S, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):419–31

In vitro receptor binding characteristics of the new dopamine D2 antagonist [125I]NCQ-298: methodological considerations of high affinity binding. Jerning E, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1-4):503–15

Kinetic evidence for isomerization of the dopamine receptor-raclopride complex. Lepiku M, et al. **Neurochem Int** 1996 May-Jun;28(5-6):591–5

Mechanism of modulation of [3H]raclopride binding to dopaminergic receptors in rat striatal membranes by sodium ions. Lepiku M, et al. **Neurochem Int** 1997 Jun;30(6):575–81

[3H]raclopride binding to brain tissue from subjects with schizophrenia: methodological aspects. Dean B, et al. **Neuropharmacology** 1997 Jun;36(6):779–86

Preparation of [76Br]FLB 457 and [76Br]FLB 463 for examination of striatal and extrastriatal dopamine D-2 receptors with PET. Loc'h C, et al. **Nucl Med Biol** 1996 Aug;23(6):813–9

Effect of reserpine-induced depletion of synaptic dopamine on [11C]raclopride binding to D2-dopamine receptors in the monkey brain. Ginovart N, et al. **Synapse** 1997 Apr; 25(4):321–5

PHARMACOKINETICS

Long-term changes of striatal dopamine D2 receptors in patients with Parkinson's disease: a study with positron emission tomography and [11C]raclopride. Antonini A, et al. **Mov Disord** 1997 Jan;12(1):33–8

Test-retest reliability of central [11C]raclopride binding at high D2 receptor occupancy. A PET study in haloperidol-treated patients. Nyberg S, et al. **Psychiatry Res** 1996 Oct 7;67(3):163–71

Measuring age-related changes in dopamine D2 receptors with 11C-raclopride and 18F-N-methylspiroperidol. Volkow ND, et al. **Psychiatry Res** 1996 May 31;67(1):11–6

PHARMACOLOGY

Inhibition of succinate-ubiquinone reductase by nitrosalicyl-N-alkylamides. Liu C, et al. **Biochim Biophys Acta** 1991 May;1057(3):373–6

Motor depressant effects mediated by dopamine D2 and adenosine A2A receptors in the nucleus accumbens and the caudate-putamen. Hauber W, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):127–31

Enhancement of antipsychotic-like properties of the dopamine D2 receptor antagonist, raclopride, by the additional treatment with the 5-HT2 receptor blocking agent, ritanserin, in the rat. Wadenberg ML, et al. **Eur Neuropsychopharmacol** 1996 Nov;6(4):305–10

Dopamine receptor subtypes: differential regulation after 8 months treatment with antipsychotic drugs. Florijn WJ, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):561–9

Mu opioid receptor mRNA in nucleus accumbens is elevated following dopamine receptor activation. Azaryan AV, et al. **Neurochem Res** 1996 Nov;21(11):1411–5

Inverse agonism at dopamine D2 receptors. Haloperidol-induced prolactin release from GH4C1 cells transfected with the human D2 receptor is antagonized by R(-)-n-propylnorapomorphine, raclopride, and phenoxybenzamine. Nilsson CL, et al. **Neuropsychopharmacology** 1996 Jul;15(1):53–61

D2-type dopamine receptors in postmortem human brain sections from normal and schizophrenic subjects. Lahti RA, et al. **Neuroreport** 1996 Aug 12;7(12):1945–8

Reduced eticlopride-induced Fos expression in caudate-putamen and globus pallidus after unilateral frontal cortex injury: relation to neglect. Vargo JM, et al. **Neuroscience** 1997 Feb;76(4):1083–95

Influence of eticlopride on cocaine- and DA D2 agonist-induced behavioral effects in rats. Ferrari F, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):525–30

Involvement of dopamine receptors in the antipsychotic profile of (-) eticlopride. Giuliani D, et al. **Physiol Behav** 1997 Apr;61(4):563–7

The effects of raclopride on vacuous jaw movements in rats following acute administration. Steinpreis RE, et al. **Physiol Behav** 1996 Jul;60(1):253–6

Potentiation of the effects of raclopride on sucrose consumption by the 5-HT2 antagonist ritanserin. Montgomery AM, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):98–102

The advantage of using positron emission tomography in drug research. Farde L. **Trends Neurosci** 1996 Jun; 19(6):211–4

POISONING

Salicylamide toxicity in overdose [letter] Chan TY. **Int J Clin Pharmacol Ther** 1996 Aug;34(8):366

SALICYLANILIDES

METABOLISM

Haemonchus contortus: the uptake and metabolism of closantel. Rothwell J, et al. **Int J Parasitol** 1997 Mar; 27(3):313–9

PHARMACOKINETICS

Haemonchus contortus: the uptake and metabolism of closantel. Rothwell J, et al. **Int J Parasitol** 1997 Mar; 27(3):313–9

PHARMACOLOGY

Lymphotropic antifilarial agents derived from closantel and chlorambucil. Loiseau PM, et al. **Int J Parasitol** 1997 Apr; 27(4):443–7

THERAPEUTIC USE

The effects of closantel treatment on the ultrastructure of Haemonchus contortus. Rothwell JT, et al. **Int J Parasitol** 1996 Jan;26(1):49–57

Some effects of mouthrinses containing salifluor on de novo plaque formation and developing gingivitis. Furuichi Y, et al. **J Clin Periodontol** 1996 Aug;23(8):795–802

In vitro and in vivo studies on salifluor/PVM/MA copolymer/NaF combination as an antiplaque agent. Nabi N, et al. **J Clin Periodontol** 1996 Dec;23(12):1084–92

Comparative efficacies of closantel, ivermectin, oxfendazole, thiophanate and levamisole against thiabendazole resistant Haemonchus contortus in sheep. Waruiru RM, et al. **Trop Anim Health Prod** 1996 Aug;28(3):216–20

Efficacy of closantel against Fasciola hepatica in Korean native goats. Lee CG, et al. **Vet Parasitol** 1996 Oct 25; 65(3–4):307–11

TOXICITY

In vitro culture of Oestrus ovis (Linné 1761) first instar larvae: its application to antiparasitic drug screening. Duranton C, et al. **Int J Parasitol** 1997 Jan;27(1):125–8

SALICYLATES

see related
ANTI-INFLAMMATORY AGENTS, NON-STEROIDAL
CYCLOOXYGENASE INHIBITORS

ADMINISTRATION & DOSAGE

Could salicylates in food have contributed to the decline in cardiovascular disease mortality? A new hypothesis. Ingster LM, et al. **Am J Public Health** 1997 Sep;87(9):1554–7 (27 ref.)

One-week therapy for Helicobacter pylori. A randomized trial of two treatment regimens. Scheiman JM, et al. **J Clin Gastroenterol** 1996 Oct;23(3):170–3

Copper-salicylate gel for pain relief in osteoarthritis: a randomised controlled trial. Shackel NA, et al. **Med J Aust** 1997 Aug 4;167(3):134–6

[Eradication of Helicobacter pylori in patients with recurrent abdominal pain using a triple drug treatment] Ramírez Mayans J, et al. **Rev Gastroenterol Mex** 1996 Oct–Dec; 61(4):310–3 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Effect of leukotriene inhibitor on otoacoustic emissions in salicylate ototoxicity. Arruda J, et al. **Am J Otol** 1996 Sep; 17(5):787–92

Potential dangers from topical preparations containing methyl salicylate. Chan TY. **Hum Exp Toxicol** 1996 Sep; 15(9):747–50 (34 ref.)

Black granules on the skin after bismuth subsalicylate ingestion. Ruiz-Maldonado R, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):489–90

Warfarin--topical salicylate interactions: case reports. Ramanathan M. **Med J Malaysia** 1995 Sep;50(3):278–9

Health effects of salicylates in foods and drugs. Perry CA, et al. **Nutr Rev** 1996 Aug;54(8):225–40 (47 ref.)

More questions about varicella vaccination. Gershon AA. **Pediatr Infect Dis J** 1996 Jun;15(6):560–1

ANALYSIS

Acetylsalicylate and salicylates in foods. Janssen PL, et al. **Cancer Lett** 1997 Mar 19;114(1–2):163–4

High-performance liquid chromatographic assay for common sunscreening agents in cosmetic products, bovine serum albumin solution and human plasma. Jiang R, et al. **J Chromatogr B Biomed Appl** 1996 Jun 28;682(1):137–45

Salicylates in foods. Janssen PL, et al. **Nutr Rev** 1996 Nov; 54(11 Pt 1):357–9 (24 ref.)

BLOOD

Use of a plasma salicylate assay service in a medical unit in Hong Kong: a follow-up study. Chan TY, et al. **Vet Hum Toxicol** 1996 Aug;38(4):278–9

METABOLISM

Salicylate levels in rat stomach tissues after administration of aspalatone and acetylsalicylic acid in relation to their ulcerogenicity. Suh DY, et al. **Arzneimittelforschung** 1997 Jul;47(7):826–8

Interaction of salicylate and ibuprofen with the carboxylic acid: CoA ligases from bovine liver mitochondria. Vessey DA, et al. **J Biochem Toxicol** 1996;11(2):73–8

Glutathione conjugates recognize the Rossmann fold of glyceraldehyde-3-phosphate dehydrogenase. Puder M, et al. **J Biol Chem** 1997 Apr 18;272(16):10936–40

Percutaneous absorption of sunscreen agents from liquid paraffin: self-association of octyl salicylate and effects on skin flux. Jiang R, et al. **J Pharm Sci** 1997 Jul;86(7):791–6

PHARMACOKINETICS

Serum concentrations of salicylic acid following topically applied salicylate derivatives. Morra P, et al. **Ann Pharmacother** 1996 Sep;30(9):935–40

Comparative absorption of bismuth in Sprague-Dawley rats following oral administration of preparations containing bismuth sucrose octasulfate, bismuth subsalicylate, and bismuth subcitrate. Rao N, et al. **Biopharm Drug Dispos** 1997 Jan;18(1):1–8

Is local biotransformation the key to understanding the pharmacological activity of salicylates and gold drugs? Whitehouse MW, et al. **Inflamm Res** 1996 Dec; 45(12):579–82

Is there tissue penetration after application of topical salicylate formulations? [letter] Cross SE, et al. **Lancet** 1997 Aug 30;350(9078):636

PHARMACOLOGY

Biologic testing of leachable aromatic compounds from denture base materials. Lygre H, et al. **Acta Odontol Scand** 1995 Dec;53(6):397–401

Cytoprotective effect of bismuth subsalicylate in indomethacin-treated rats is associated with enhanced mucus bismuth concentration. Tanaka S, et al. **Aliment Pharmacol Ther** 1997 Jun;11(3):605–12

Effect of leukotriene inhibitor on otoacoustic emissions in salicylate ototoxicity. Arruda J, et al. **Am J Otol** 1996 Sep; 17(5):787–92

In vitro synergy testing of clarithromycin and 14-hydroxyclarithromycin with amoxicillin or bismuth subsalicylate against Helicobacter pylori. Meyer JM, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1607–8

Salicylate alters 2-DG uptake in the auditory system: a model for tinnitus? Wallhäusser-Franke E, et al. **Neuroreport** 1996 Jul 8;7(10):1585–8

The effect of a pulsed magnetic field and that of methyl-silane triol on galactosamine induced hepatitis among rats. Bellossi A, et al. **Panminerva Med** 1996 Sep; 38(3):133–8

Antipyretic activity of carboxylatocopper(II) complexes with salicylate skeleton. Sokolík J, et al. **Pharmazie** 1996 Aug; 51(8):610–1

POISONING

Photo quiz. Pepto Bismol poisoning. Hearney EG, et al. **Clin Infect Dis** 1996 Jul;23(1):37,159

THERAPEUTIC USE

The actions of bismuth in the treatment of Helicobacter pylori infection. Lambert JR, et al. **Aliment Pharmacol Ther** 1997 Apr;11 Suppl 1:27–33 (62 ref.)

Bismuth subsalicylate instead of metronidazole with lansoprazole and clarithromycin for Helicobacter pylori infection: a randomized trial. Chey WD, et al. **Am J Gastroenterol** 1997 Sep;92(9):1483–6

Cure of gastric ulcer disease after cure of Helicobacter pylori infection--German Gastric Ulcer Study [see comments] Bayerdörffer E, et al. **Eur J Gastroenterol Hepatol** 1996 Apr;8(4):343–9. Comment in: Eur J Gastroenterol Hepatol 1996 Apr;8(4):333–4.

Plaque bacteria counts and vitality during chlorhexidine, meridol and listerine mouthrinses. Netuschil L, et al. **Eur J Oral Sci** 1995 Dec;103(6):355–61

Bismuth subsalicylate prophylaxis of Cryptosporidium parvum infection in immunodeficient mice. Greenfield RA, et al. **J Eukaryot Microbiol** 1996 Sep–Oct;43(5):69S

More questions about varicella vaccination. Gershon AA. **Pediatr Infect Dis J** 1996 Jun;15(6):560–1

[The tolerance of two therapeutic uses of triflusal in patients with ischemic stroke. Letter] Alvarez-Sabín J, et al. **Rev Neurol** 1996 Oct;24(134):1306–7 **(Spa)**

TOXICITY

Reproductive toxicology. Methyl salicylate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:321–2

Reproductive toxicology. Methyl salicylate. **Environ Health Perspect** 1997 Feb;105 Suppl 1:323–4

Local lymph node activation and IgE responses in brown Norway and Wistar rats after dermal application of sensitizing and non-sensitizing chemicals. Arts JH, et al. **Toxicology** 1997 Feb 28;117(2–3):229–34

URINE

Acetylsalicylate and salicylates in foods. Janssen PL, et al. **Cancer Lett** 1997 Mar 19;114(1–2):163–4

SALICYLAZOSULFAPYRIDINE see **SULFASALAZINE**

SALICYLIC ACIDS

Experimental study of the antithrombogenic behavior of Dacron vascular grafts coated with hydrophilic acrylic copolymers bearing salicylic acid residues. San Román J, et al. **J Biomed Mater Res** 1996 Sep;32(1):19–27

ADMINISTRATION & DOSAGE

Long-term efficacy and safety of Jessner's solution and 35% trichloroacetic acid vs 5% fluorouracil in the treatment of widespread facial actinic keratoses. Witheiler DD, et al. **Dermatol Surg** 1997 Mar;23(3):191–6

Dermo-epidermal stimulation elicited by a beta-lipohydroxyacid: a comparison with salicylic acid and all-trans-retinoic acid. Piérard GE, et al. **Dermatology** 1997;194(4):398–401

Near the lights of Vegas, chemists are on a roll [news] Service RF. **Science** 1997 Oct 3;278(5335):32–3

Medium-depth chemical peeling. Otley CC, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):145–54 (23 ref.)

ADVERSE EFFECTS

Salicylate intoxication using a skin ointment. Chiaretti A, et al. **Acta Paediatr** 1997 Mar;86(3):330–1

Contact dermatitis among cashew nut workers. Diogenes MJ, et al. **Contact Dermatitis** 1996 Aug;35(2):114–5

Environmental hazard assessment of pharmaceuticals. Henschel KP, et al. **Regul Toxicol Pharmacol** 1997 Jun; 25(3):220–5

[Toxic inner ear damage in topical treatment of psoriasis with salicylates] Maune S, et al. **Laryngorhinootologie** 1997 Jun; 76(6):368–70 (Eng. Abstr.) **(Ger)**

ANALYSIS

A highly sensitive HPLC method for the simultaneous determination of acetylsalicylic, salicylic and salicyluric acids in biologic fluids: pharmacokinetic, metabolic and monitoring implications. Krivosíková Z, et al. **Methods Find Exp Clin Pharmacol** 1996 Oct;18(8):527–32

BLOOD

Diflunisal cross-reactivity with the Trinder method for salicylate determination [letter] Nordt SP. **Ann Pharmacother** 1996 Sep;30(9):1041–2

Quantitation of acetaminophen and salicylic acid in plasma using capillary electrophoresis without sample pretreatment. Improvement of precision. Kunkel A, et al. **J Chromatogr A** 1997 Apr 18;768(1):125–33

Simultaneous determination of acetylsalicylic acid and salicylic acid in human plasma by high-performance liquid chromatography. Kees F, et al. **J Chromatogr B Biomed Appl** 1996 Feb 23;677(1):172–7

Rapid high-performance liquid chromatographic assay for salicylic acid in plasma without solvent extraction. Coudray C, et al. **J Chromatogr Sci** 1996 Apr;34(4):166–73

CHEMICAL SYNTHESIS

Synthesis and biological evaluation of caloporoside analogs [letter] Tatsuta K, et al. **J Antibiot (Tokyo)** 1996 Jul; 49(7):713–5

Production and characteristics of an infusible oxygen-carrying fluid based on hemoglobin intramolecularly cross-linked with sebacic acid [see comments] Bucci E, et al. **J Lab Clin Med** 1996 Aug; 128(2):146–53. Comment in: J Lab Clin Med 1996 Aug;128(2):126–7.

CHEMISTRY

2-Hydroxybiphenyl-3-carboxylic acid (3-phenylsalicylic acid). Dobson AJ, et al. **Acta Crystallogr C** 1996 Dec 15; 52 (Pt 12):3088–91

Determination of hydroxyl radicals using salicylate as a trapping agent by gas chromatography-mass spectrometry. Luo X, et al. **Clin Biochem** 1997 Feb;30(1):41–6

Peroxynitrite-dependent aromatic hydroxylation and nitration of salicylate and phenylalanine. Is hydroxyl radical involved? Kaur H, et al. **Free Radic Res** 1997 Jan; 26(1):71–82

Biological reactions of peroxynitrite: evidence for an alternative pathway of salicylate hydroxylation. Narayan M, et al. **Free Radic Res** 1997 Jul;27(1):63–72

The change in hydrogen bond strength accompanying charge rearrangement: implications for enzymatic catalysis. Shan SO, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10; 93(25):14474–9

[The effect of amphoteric tensides on the pharmaceutic availability of model drugs according to formulation] Bialik W, et al. **Acta Pol Pharm** 1992;49(1–2):21–3 (Eng. Abstr.) **(Pol)**

METABOLISM

Hydroxylation of salicylate in lungs of Fischer 344 rats: effects of aging and ozone exposure. Liu L, et al.

Am J Physiol 1996 Dec;271(6 Pt 1):L995–1003

Biological reactions of peroxynitrite: evidence for an alternative pathway of salicylate hydroxylation. Narayan M, et al. **Free Radic Res** 1997 Jul;27(1):63–72

Recent advances in systemic acquired resistance research--a review. Hunt MD, et al. **Gene** 1996 Nov 7;179(1):89–95 (50 ref.)

Salicylic acid is a modulator of tobacco and mammalian catalases. Durner J, et al. **J Biol Chem** 1996 Nov 8; 271(45):28492–501

Salicylic acid is a reducing substrate and not an effective inhibitor of ascorbate peroxidase. Kvaratskhelia M, et al. **J Biol Chem** 1997 Aug 22;272(34):20998–1001

The disposition of aspirin and salicylic acid in the isolated perfused rat liver: the effect of normal and retrograde flow on availability and mean transit time. Mellick GD, et al. **J Pharm Pharmacol** 1996 Jul;48(7):738–43

Evidence for formation of hydroxyl radicals during reperfusion after global cerebral ischaemia in rats using salicylate trapping and microdialysis. Christensen T, et al. **Neurobiol Dis** 1994 Dec;1(3):131–8

Systemic resistance in Arabidopsis induced by biocontrol bacteria is independent of salicylic acid accumulation and pathogenesis-related gene expression. Pieterse CM, et al. **Plant Cell** 1996 Aug;8(8):1225–37

Phosphorylation of nuclear proteins directs binding to salicylic acid-responsive elements. Stange C, et al. **Plant J** 1997 Jun;11(6):1315–24

Development of necrosis and activation of disease resistance in transgenic tobacco plants with severely reduced catalase levels. Takahashi H, et al. **Plant J** 1997 May;11(5):993–1005

PHARMACOKINETICS

Urinary salicylate excretion in subjects eating a variety of diets shows that amounts of bioavailable salicylates in foods are low. Janssen PL, et al. **Am J Clin Nutr** 1996 Nov; 64(5):743–7

Introduction of negative charges to a crosslinked hemoglobin: lack of effect on plasma half time. Thomas M, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 May;25(3):309–14

Percutaneous absorption of salicylic acid after repeated (14-day) in vivo administration to normal, acnegenic or aged human skin. Davis DA, et al. **J Pharm Sci** 1997 Aug; 86(8):896–9

Effects of vasoconstriction on dermal pharmacokinetics and local tissue distribution of compounds. Singh P, et al. **J Pharm Sci** 1994 Jun;83(6):783–91

The pharmacokinetics of salicylate in dairy cattle are not altered by simultaneous intravenous ceftiofur sodium and DL-lysine-acetyl salicylate (aspirin). Whittem T, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):104–8

PHARMACOLOGY

Cardiac microdialysis of salicylic acid .OH generation on nonenzymatic oxidation by norepinephrine in rat heart. Obata T, et al. **Biochem Pharmacol** 1997 May 9;53(9):1375–8

Activation of the CaMV as-1 cis-element by salicylic acid: differential DNA-binding of a factor related to TGA1a. Jupin I, et al. **EMBO J** 1996 Oct 15;15(20):5679–89

Activation of signaling pathways in HL60 cells and human neutrophils by farnesylthiosalicylate. Tisch D, et al. **Eur J Biochem** 1996 Dec 15;242(3):529–36

Salicylic acid-independent induction of pathogenesis-related protein transcripts by sugars is dependent on leaf developmental stage. Herbers K, et al. **FEBS Lett** 1996 Nov 18;397(2-3):239–44

Effects of lidocaine on salicylate-induced discharge of neurons in the inferior colliculus of the guinea pig. Manabe Y, et al. **Hear Res** 1997 Jan;103(1-2):192–8

Synthesis and biological evaluation of caloporoside analogs [letter] Tatsuta K, et al. **J Antibiot (Tokyo)** 1996 Jul; 49(7):713–5

Antibacterial activity of anacardic acid and totarol, alone and in combination with methicillin, against methicillin-resistant Staphylococcus aureus. Muroi H, et al. **J Appl Bacteriol** 1996 Apr;80(4):387–94

Salicylate is a transcriptional inhibitor of the inducible nitric oxide synthase in cultured cardiac fibroblasts. Farivar RS, et al. **J Biol Chem** 1996 Dec 6;271(49):31585–92

Activity of amoxicillin, metronidazole, bismuth salicylate and six aminoglycosides against Helicobacter pylori. Brenciaglia MI, et al. **J Chemother** 1996 Feb;8(1):52–4

Effects of salicylate and lanthanides on outer hair cell motility and associated gating charge. Kakehata S, et al. **J Neurosci** 1996 Aug 15;16(16):4881–9

Salicylic acid induces changes in the physical properties of model and native kidney membranes. Balasubramanian SV, et al. **J Pharm Sci** 1997 Feb;86(2):199–204

Effect of salicylic acid on the plasma protein binding and pharmacokinetics of misoprostol acid. Cook CS, et al. **J Pharm Sci** 1994 Jun;83(6):883–6

Effect of lobaric acid on cysteinyl-leukotriene formation and contractile activity of guinea pig taenia coli. Gissurarson SR, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):770–3

Characterization of a salicylic acid-insensitive mutant (sai1) of Arabidopsis thaliana, identified in a selective screen utilizing the SA-inducible expression of the tms2 gene. Shah J, et al. **Mol Plant Microbe Interact** 1997 Jan; 10(1):69–78

Cardiac microdialysis of salicylic acid to detect hydroxyl radical generation associated with sympathetic nerve stimulation. Obata T, et al. **Neurosci Lett** 1996 Jun 28; 211(3):216–8

The p53 activation and apoptosis induced by DNA damage are reversibly inhibited by salicylate. Chernov MV, et al. **Oncogene** 1997 May 29;14(21):2503–10

Salicylic acid potentiates an agonist-dependent gain control that amplifies pathogen signals in the activation of defense mechanisms. Shirasu K, et al. **Plant Cell** 1997 Feb; 9(2):261–70

Salicylic acid activates a 48-kD MAP kinase in tobacco. Zhang S, et al. **Plant Cell** 1997 May;9(5):809–24

Identification of a salicylic acid-responsive element in the promoter of the tobacco pathogenesis-related beta-1,3-glucanase gene, PR-2d. Shah J, et al. **Plant J** 1996 Dec;10(6):1089–101

Identification of an immediate-early salicylic acid-inducible tobacco gene and characterization of induction by other compounds. Horvath DM, et al. **Plant Mol Biol** 1996 Aug; 31(5):1061–72

[Effects of salicylate and quinine on cat primary auditory cortex--spontaneous firing rate] Ochi K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jan;100(1):51–8 (Eng. Abstr.) **(Jpn)**

POISONING

Diflunisal cross-reactivity with the Trinder method for salicylate determination [letter] Nordt SP. **Ann Pharmacother** 1996 Sep;30(9):1041–2

Salicylate interference with the Roche Cobas Integra chloride electrode [letter] Mori L, et al. **Clin Chem** 1997 Jul;43(7):1249–50

[Life threatening salicylate poisoning caused by percutaneous absorption in severe ichthyosis vulgaris] Germann R, et al. **Hautarzt** 1996 Aug;47(8):624–7 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Calcipotriol in psoriasis vulgaris: a controlled trial comparing betamethasone dipropionate + salicylic acid. Crosti C, et al. **Int J Dermatol** 1997 Jul;36(7):537–9

Treatment of melasma with Jessner's solution versus glycolic acid: a comparison of clinical efficacy and evaluation of the predictive ability of Wood's light examination. Lawrence N, et al. **J Am Acad Dermatol** 1997 Apr; 36(4):589–93

Dose-dependent competitive block by topical acetylsalicylic and salicylic acid of low pH-induced cutaneous pain. Steen KH, et al. **Pain** 1996 Jan;64(1):71–82

TOXICITY

Mutagenic, carcinogenic and cocarcinogenic activity of cashewnut shell liquid. George J, et al. **Cancer Lett** 1997 Jan 15;112(1):11–6

Different effects of noise and salicylate and their interactions on the guinea pig cochlea. Aoyagi M, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):429–34

URINE

Urinary salicylate excretion in subjects eating a variety of diets shows that amounts of bioavailable salicylates in foods are low. Janssen PL, et al. **Am J Clin Nutr** 1996 Nov; 64(5):743–7

Determination of aromatic metabolites in ruminant urine by high-performance liquid chromatography. Chen XB, et al. **J Chromatogr B Biomed Appl** 1996 Jul 12;682(2):201–8

SALIENTIA see **ANURA**

SALINE see **SODIUM CHLORIDE**

SALINE FRAGILITY see **OSMOTIC FRAGILITY**

SALINE SOLUTION, HYPERTONIC

Survival of selected bacteria and fungi in hypertonic (7.2%) saline. St Jean G, et al. **Aust Vet J** 1997 Feb;75(2):137–8

Chorda tympani nerve transection disrupts taste aversion learning to potassium chloride, but not sodium chloride. St. John SJ, et al. **Behav Neurosci** 1997 Feb;111(1):188–94

Direct hypertonic stimulation of the rat supraoptic nucleus increases c-fos expressionin glial cells rather than magnocellular neurones. Ludwig M, et al. **Cell Tissue Res** 1997 Jan;287(1):79–90

The benefits and side-effects of ramped hypertonic sodium dialysis [letter; comment] Locatelli F, et al. **J Am Soc Nephrol** 1996 Dec;7(12):2704–6. Comment on: J Am Soc Nephrol 1996 Feb;7(2):242–6.

ADMINISTRATION & DOSAGE

Hyperosmotic-hyperoncotic solutions during abdominal aortic aneurysm (AAA) resection. Christ F, et al. **Acta Anaesthesiol Scand** 1997 Jan;41(1 Pt 1):62–70

Brain angiotensinergic pathways mediate renal nerve inhibition by central hypertonic NaCl in conscious sheep. May CN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R593–600

Hypertonic saline dextran (HSD) and intraosseous vascular access for the treatment of haemorrhagic hypotension in the far-forward combat arena. Dubick MA, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):64–9 (48 ref.)

Dopamine and sodium appetite: antagonists suppress sham drinking of NaCl solutions in the rat. Roitman MF, et al. **Behav Neurosci** 1997 Jun;111(3):606–11

Interaction of hydration and subfornical organ lesions in sodium-depletion induced salt appetite. Starbuck EM, et al. **Behav Neurosci** 1997 Feb;111(1):206–13

Release of vasopressin in response to altered plasma volume and sodium concentrations following pinealectomy in the rat. Forsling ML, et al. **J Pineal Res** 1996 May;20(4):211–6

The use of hypertonic saline for the treatment of increased intracranial pressure. Einhaus SL, et al. **J Tenn Med Assoc** 1996 Mar;89(3):81–2

Mucociliary clearance and buffered hypertonic saline solution. Talbot AR, et al. **Laryngoscope** 1997 Apr; 107(4):500–3

Confining ingested fluid to the stomach increases water and decreases saline intake in the rat [corrected] [published erratum appears in Physiol Behav 1997 Mar;61(3):475] Davis JD, et al. **Physiol Behav** 1997 Jan;61(1):127–30

Progress in treating equine shock [news] **Vet Rec** 1996 Aug 3;139(5):104

Treatment of refractory intracranial hypertension in severe traumatic brain injury with repetitive hypertonic/hyperoncotic infusions. Härtl R, et al. **Zentralbl Chir** 1997;122(3):181–5

[The effect of hypertonic saline infusion on lumbar epidural anesthesia] Ishikawa G. **Masui** 1996 Feb;45(2):205–14 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Heat and pain sensations induced by arterial injection of low-osmolality contrast media: a comparison of patients' discomfort with ionic saline, nonionic glucose, and vasodilator nitrate. Himi K, et al. **Acad Radiol** 1996 Aug; 3 Suppl 2:S214–7

Ischemic colitis caused by oral hyperosmotic saline laxatives. Oh JK, et al. **Gastrointest Endosc** 1997 Mar;45(3):319–22

Low-dose hypertonic saline (NaCl 8.0%) treatment of uncontrolled abdominal hemorrhage: effects on arterial versus venous injury. Elgjo GI, et al. **Shock** 1996 Jan; 5(1):52–8

DIAGNOSTIC USE

Does a hypertonic saline load predict fluid retention in pacing induced heart failure? Fu Y, et al. **Cardiovasc Res** 1997 Jan;33(1):172–80

Comparison between hypertonic and isotonic saline-induced sputum in the evaluation of airway inflammation in subjects with moderate asthma. Bacci E, et al. **Clin Exp Allergy** 1996 Dec;26(12):1395–400

Comparison of bronchial challenge with ultrasonic nebulized distilled water and hypertonic saline in children with mild-to-moderate asthma. Wojnarowski C, et al. **Eur Respir J** 1996 Sep;9(9):1896–901

Vasopressin and atrial natriuretic hormone response to hypertonic saline during the follicular and luteal phases of the menstrual cycle. Trigoso WF, et al. **Hum Reprod** 1996 Nov;11(11):2392–5

Airway responsiveness to hyperosmolar saline challenge in cystic fibrosis: a pilot study. Rodwell LT, et al. **Pediatr Pulmonol** 1996 May;21(5):282–9

[The usefulness of induced sputum in the diagnosis of pulmonary tuberculosis] Kawada H, et al. **Kekkaku** 1996 Nov;71(11):603–6 (Eng. Abstr.) **(Jpn)**

[Carter-Robbins test] Kimura T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:291–4 (5 ref.) **(Jpn)**

[Clinical studies in antidiuretic hormone secretion] Shoji M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:299–302 (3 ref.) **(Jpn)**

PHARMACOKINETICS

Volume kinetics of Ringer solution, dextran 70, and hypertonic saline in male volunteers [see comments] Svensén C, et al. **Anesthesiology** 1997 Aug;87(2):204–12. Comment in: Anesthesiology 1997 Aug;87(2):200–2.

PHARMACOLOGY

Intravenous pretreatment of hypertonic saline can prevent systemic hypotension induced by spinal anesthesia. Wang BW, et al. **Acta Anaesthesiol Sin** 1997 Jun;35(2):85–90

Airway responsiveness in asthma: bronchial challenge with histamine and 4.5% sodium chloride before and after budesonide. du Toit JI, et al. **Allergy Asthma Proc** 1997 Jan-Feb;18(1):7–14

Preoptic recess alpha-adrenoceptors control cardiovascular responses to hyperosmolality. Bealer SL. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1283–9

Intragastric hypertonic saline increases vasopressin and central Fos immunoreactivity in conscious rats. Carlson SH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R750–8

Role of NO on vasopressin and oxytocin release and blood pressure responses during osmotic stimulation in rats. Kadekaro M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1024–30

Vasopressin responses to corticotropin-releasing factor and hypertonicity after truncal vagotomy in dogs. Raff H, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R94–8

Thirst and fluid regulatory responses to hypertonicity in older adults. Stachenfeld NS, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R757–65

Rheology of cystic fibrosis sputum after in vitro treatment with hypertonic saline alone and in combination with recombinant human deoxyribonuclease I. King M, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):173–7

Acute effects of intravenously administered hypertonic saline solution on transruminal rehydration in dairy cows. Roeder BL, et al. **Am J Vet Res** 1997 May;58(5):549–54

Hypertonic–hyperosmotic solution modifies myoglobin levels in early reperfusion after ischemic cardiac arrest. Experimental model. Careaga G, et al. **Arch Med Res** 1997 Summer;28(2):223–7

Differential responses of oxytocin and vasopressin neurons to the osmotic and stressful components of hypertonic saline injections: a Fos protein double labeling study. Xiong JJ, et al. **Brain Res** 1996 May 6;719(1–2):143–53

Inhalation of hypertonic saline aerosol enhances mucociliary clearance in asthmatic and healthy subjects. Daviskas E, et al. **Eur Respir J** 1996 Apr;9(4):725–32

Induced sputum cell and fluid–phase indices of inflammation: comparison of treatment with dithiothreitol vs phosphate–buffered saline. Efthimiadis A, et al. **Eur Respir J** 1997 Jun;10(6):1336–40

Hyperosmotic stress as a stimulant for proinflammatory cytokine production. Shapiro L, et al. **Exp Cell Res** 1997 Mar 15;231(2):354–62

Role of ouabain–like compound in the regulation of transmembrane sodium and potassium gradients in rats. Goto A, et al. **Hypertension** 1997 Sep;30(3 Pt 2):753–8

3.5% hypertonic saline produces sympathetic activation in hemorrhaged rabbits. Seki K, et al. **J Auton Nerv Syst** 1997 May 12;64(1):49–56

Hypertonic saline does not reverse the sodium channel blocking actions of lidocaine: evidence from electrophysiologic and defibrillation studies. Ujhelyi MR, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):61–8

Ribonuclease and high salt sensitivity of the ribonucleoprotein complex formed by the human LINE–1 retrotransposon. Hohjoh H, et al. **J Mol Biol** 1997 Aug 8;271(1):7–12

Regulation of pituitary vasopressin V1b receptor mRNA during stress in the rat. Rabadan–Diehl C, et al. **J Neuroendocrinol** 1995 Dec;7(12):903–10

Hypertonic saline activates protein tyrosine kinases and mitogen–activated protein kinase p38 in T–cells. Junger WG, et al. **J Trauma** 1997 Mar;42(3):437–43; discussion 443–5

Antagonism produced by hypertonic nutrient solutions on the depressive effect of carbofuran on isolated guinea pig atria. Nascimento DC, et al. **Pharmacol Res** 1996 Apr–May; 33(4–5):251–4

Development of the enhanced neural response to NaCl in Fischer 344 rats. Schafe GE, et al. **Physiol Behav** 1997 May; 61(5):775–8

Centrally administered losartan inhibits the reduction in plasma renin concentration caused by intracerebroventricular hypertonic saline in Na–depleted sheep. McKinley MJ, et al. **Regul Pept** 1996 Oct 8; 66(1–2):37–40

Osmoregulation in Pseudomonas aeruginosa under hyperosmotic shock. Velasco R, et al. **Rev Latinoam Microbiol** 1995 Jul–Sep;37(3):209–16

Hypertonic saline/dextran treatment for severe pressure–driven hemorrhage in dehydrated conscious swine [see comments] Alemayehu A, et al. **Shock** 1996 Oct; 6(4):298–306. Comment in: Shock 1996 Oct;6(4):307.

Effects of hypertonic saline on regional function and blood flow in canine hearts during acute coronary occlusion. Kien ND, et al. **Shock** 1997 Apr;7(4):274–81

[The effect of renal dopamtne receptor blockade on natriuresis induced by volume expansion and intracerebroventricular injection of hypertonic saline in rabbits] Xu YJ, et al. **Sheng Li Hsueh Pao** 1995 Dec; 47(6):580–8 (Eng. Abstr.) **(Chi)**

[Hypertonic saline induced bronchoconstriction in sensitized rabbits] Morimoto R, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 May; 34(5):545–51 (Eng. Abstr.) **(Jpn)**

[The effect of different concentrations of saline solutions on the proteolytic activity of trypsin and microbial proteases] Vashchuk VV, et al. **Vestn Khir Im I I Grek** 1996; 155(5):42–5 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Efficacy of hypertonic saline dextran (HSD) in patients with traumatic hypotension: meta–analysis of individual patient data. Wade C, et al. **Acta Anaesthesiol Scand Suppl** 1997; 110:77–9

Fluid replacement in burned patients. Bortolani A, et al. **Acta Chir Plast** 1996;38(4):132–6

Small–volume resuscitation using hypertonic saline improves organ perfusion in burned rats. Kien ND, et al. **Anesth Analg** 1996 Oct;83(4):782–8

Myelinolysis after correction of hyponatremia [see comments] Laureno R, et al. **Ann Intern Med** 1997 Jan 1;126(1):57–62 (49 ref.). Comment in: Ann Intern Med 1997 Jul 15;127(2):163.

Randomised controlled trial of colloid or crystalloid in hypotensive preterm infants. So KW, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jan;76(1):F43–6

Burn resuscitation: crystalloid versus colloid versus hypertonic saline hyperoncotic colloid in sheep. Guha SC, et al. **Crit Care Med** 1996 Nov;24(11):1849–57

Hypertonic saline and cerebral oxygen delivery in head–injured cats [letter; comment] Shackford SR. **Crit Care Med** 1996 Nov;24(11):1933–6. Comment on: Crit Care Med 1996 Jan;24(1):109–17.

Interaction of osmotic and nonosmotic stimuli in regulation of vasopressin secretion in hypoosmolar state of man. Kamoi K, et al. **Endocr J** 1997 Apr;44(2):311–7

Prospective, randomized trial of hypertonic glucose water and sodium tetradecyl sulfate for gastric variceal bleeding in patients with advanced liver cirrhosis. Chang KY, et al. **Endoscopy** 1996 Aug;28(6):481–6

Hypertonic saline infusion with or without dextran 70 in the reperfusion phase of experimental acute limb ischaemia. Waagstein LM, et al. **Eur J Vasc Endovasc Surg** 1997 Mar; 13(3):285–95

Evaluation of a hypertonic saline–dextran solution for treatment of dogs with shock induced by gastric dilatation–volvulus. Schertel ER, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):226–30

Spinal echinococcal cyst: treatment using computerized tomography–guided needle aspiration and hypertonic saline irrigation. Case report. Spektor S, et al. **J Neurosurg** 1997 Sep;87(3):464–7

Hypertonic saline: A review of the literature and evaluation of its role in resuscitation of traumatic hypovolaemic shock. Heath KJ. **J R Army Med Corps** 1994 Feb;140(1):37–41 (29 ref.)

Initial small–volume hypertonic resuscitation of shock and brain injury: short– and long–term effects. Anderson JT, et al. **J Trauma** 1997 Apr;42(4):592–600; discussion 600–1

Hypertonic saline resuscitation decreases susceptibility to sepsis after hemorrhagic shock. Coimbra R, et al. **J Trauma** 1997 Apr;42(4):602–6; discussion 606–7

Hypertonic/hyperoncotic saline attenuates microcirculatory disturbances after traumatic brain injury. Härtl R, et al. **J Trauma** 1997 May;42(5 Suppl):S41–7

Effect of small–volume resuscitation on intracranial pressure and related cerebral variables. Shackford SR. **J Trauma** 1997 May;42(5 Suppl):S48–53

Hypertonic saline administration attenuates spinal cord injury. Tuma RF, et al. **J Trauma** 1997 May;42(5 Suppl):S54–60

Individual patient cohort analysis of the efficacy of hypertonic saline/dextran in patients with traumatic brain injury and hypotension. Wade CE, et al. **J Trauma** 1997 May;42(5 Suppl):S61–5 (22 ref.)

Hypertonic saline in cystic fibrosis [editorial] Canny GJ. **Pediatr Pulmonol** 1996 Feb;21(2):73–4

Short–term efficacy of ultrasonically nebulized hypertonic saline in cystic fibrosis. Eng PA, et al. **Pediatr Pulmonol** 1996 Feb;21(2):77–83

Efficacy of hypertonic 7.5% saline and 6% dextran–70 in treating trauma: a meta–analysis of controlled clinical studies. Wade CE, et al. **Surgery** 1997 Sep;122(3):609–16

The effects of hypertonic saline in healthy and diseased animals. Cambier C, et al. **Vet Res Commun** 1997 Jul; 21(5):303–16 (52 ref.)

[Hypertonic saline solutions in resuscitation in hemorrhagic shock. An experimental study] Chiara O, et al. **Minerva Chir** 1997 Jun;52(6):753–62 (Eng. Abstr.) **(Ita)**

[Report of a case of hydatid cyst of the thigh treated with hypertonic saline solution and reaspiration] Belfiore G, et al. **Radiol Med (Torino)** 1996 Dec;92(6):792–3 **(Ita)**

TOXICITY

Potential preventive effects of Chelidonium majis L. (Papaveraceae) herb extract on glandular stomach tumor development in rats treated with N–methyl–N'–nitro–N nitrosoguanidine (MNNG) and hypertonic sodium chloride. Kim DJ, et al. **Cancer Lett** 1997 Jan 30; 112(2):203–8

Role of sensory afferent neurons in hypertonic damage and restitution of the rat gastric mucosa. Grønbech JE, et al. **Gastroenterology** 1996 Dec;111(6):1474–83

Nebulisation of hypertonic saline causes oedema of the airway wall. Högman M, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):59–64

Effect of prenatal stress on ontogenesis of immunoregulatory cell maturation in mice. Mazur–Kolecka B, et al. **Pol J Pharmacol** 1996 Nov–Dec;48(6):621–5

SALIVA

Measurement and comparison of the residual saliva on various oral mucosal and dentition surfaces in humans. DiSabato–Mordarski T, et al. **Arch Oral Biol** 1996 Jul; 41(7):655–65

Use of a paper–strip absorption method to measure the depth and volume of saliva retained in embrasures and occlusal fussae of the human dentition. Disabato–Mordarski T, et al. **Arch Oral Biol** 1996 Aug–Sep;41(8–9):809–20

Kinetic properties of glucosyltransferase adsorbed onto saliva–coated hydroxyapatite. Steinberg D, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 Sep; 24(5):553–66

Increasing DNA extraction yield from saliva stains with a modified Chelex method. Sweet D, et al. **Forensic Sci Int** 1996 Dec 27;83(3):167–77

Volume–dependent pulmonary aspiration of a swallowed radionuclide bolus. Heyman S. **J Nucl Med** 1997 Jan; 38(1):103–4

An in vitro investigation of the wear of enamel on porcelain and gold in saliva. Hacker CH, et al. **J Prosthet Dent** 1996 Jan;75(1):14–7

The saliva solution: new choices for alcohol testing. Wilson F, et al. **Occup Health Saf** 1997 Apr;66(4):40–3

Salivary factors in children and adolescents with insulin–dependent diabetes mellitus. Karjalainen KM, et al. **Pediatr Dent** 1996 Jul–Aug;18(4):306–11

CHEMISTRY

Diagnosing ethanol toxicity [letter; comment] Watson WA, et al. **Acad Emerg Med** 1996 Jul;3(7):728–9. Comment on: Acad Emerg Med 1996 Jan;3(1):85–7.

Salivary fluoride concentration in adults after different fluoride procedures. Seppä L, et al. **Acta Odontol Scand** 1997 Apr;55(2):84–7

Age–related changes of IgA immunocytes and serum and salivary IgA after tonsillectomy. Jung KY, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:115–9

Serum and salivary antigliadin antibodies and serum IgA anti–endomysium antibodies as a screening test for coeliac disease. Rujner J, et al. **Acta Paediatr** 1996 Jul;85(7):814–7

Saliva cotinine levels as a function of collection method. Schneider NG, et al. **Addiction** 1997 Mar;92(3):347–51

Purification and partial characterization of the PAF antagonist from the saliva of the leech Hirudo medicinalis. Orevi M, et al. **Adv Exp Med Biol** 1996;416:73–7

Human submandibular saliva specifically inhibits HIV type 1. Nagashunmugam T, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):371–6

Salivary cortisol and daily events in nursing home residents. Samuels SC, et al. **Am J Geriatr Psychiatry** 1997 Spring; 5(2):172–6

Modulatory effect of esophageal intraluminal mechanical and chemical stressors on salivary prostaglandin E2 in humans. Namiot Z, et al. **Am J Med Sci** 1997 Feb;313(2):90–8

Salivary nickel and chromium in subjects with different types of fixed orthodontic appliances. Kerosuo H, et al. **Am J Orthod Dentofacial Orthop** 1997 Jun;111(6):595–8

Fluoride level in saliva after bonding orthodontic brackets with a fluoride containing adhesive. Ogaard B, et al. **Am J Orthod Dentofacial Orthop** 1997 Feb;111(2):199–202

Thiocyanate levels in human saliva: quantitation by Fourier transform infrared spectroscopy. Schultz CP, et al. **Anal Biochem** 1996 Aug 15;240(1):7–12

Fluorimetric detection of aldehyde dehydrogenase activity in human blood, saliva, and organ biopsies and kinetic differentiation between class I and class III isozymes. Wierzchowski J, et al. **Anal Biochem** 1997 Feb 1; 245(1):69–78

Enhanced chemiluminescent assay for measuring the total antioxidant capacity of serum, saliva and crevicular fluid. Chapple IL, et al. **Ann Clin Biochem** 1997 Jul;34 (Pt 4):412–21

Salivary creatinine assays as a potential screen for renal disease. Lloyd JE, et al. **Ann Clin Biochem** 1996 Sep;33 (Pt 5):428–31

Use of salivary caffeine tests to assess the inducer effect of a drug on hepatic metabolism. Soto J, et al. **Ann Pharmacother** 1996 Jul–Aug;30(7–8):736–9

Monitoring of methotrexate and 7–hydroxymethotrexate in saliva from children with acute lymphoblastic leukemia receiving high–dose consolidation treatment: relation to oral mucositis. Albertioni F, et al. **Anticancer Drugs** 1997 Feb;8(2):119–24

Sodium and chlorine concentrations in mixed saliva of healthy and cystic fibrosis children. Jiménez–Reyes M, et al. **Appl Radiat Isot** 1996 Mar;47(3):273–7

Lipids in human saliva. Larsson B, et al. **Arch Oral Biol** 1996 Jan;41(1):105–10

Salivary levels of alpha 2–macroglobulin, alpha 1–antitrypsin, C–reactive protein, cathepsin G and elastase in humans with or without destructive periodontal disease. Pederson ED, et al. **Arch Oral Biol** 1995 Dec;40(12):1151–5

Human supragingival in vivo calculus formation in relation to saturation of saliva with respect to calcium phosphates. Poff AM, et al. **Arch Oral Biol** 1997 Feb;42(2):93–9

Hyaluronan (hyaluronic acid) in human saliva. Pogrel MA, et al. **Arch Oral Biol** 1996 Jul;41(7):667–71

Salivary albumin of edentulous patients. Terrapon B, et al. **Arch Oral Biol** 1996 Dec;41(12):1183–5

Decreased levels of salivary prostaglandin E2 and epidermal growth factor in recurrent aphthous stomatitis. Wu–Wang CY, et al. **Arch Oral Biol** 1995 Dec;40(12):1093–8

Relationship between acid neutralization capacity of saliva and gastro–oesophageal reflux. Bouchoucha M, et al. **Arch Physiol Biochem** 1997 Feb;105(1):19–26

Effects of hypobaric–hypoxia on the salivary cortisol levels of aircraft pilots. Obmiński Z, et al. **Aviat Space Environ Med** 1997 Mar;68(3):183–6

Gastrointestinal absorption of insulin–like growth factor in the mouse in the absence of salivary insulin–like growth factor binding protein. Nakagawa Y, et al. **Biochem Pharmacol** 1997 Jan 24;53(2):233–40

Sample handling techniques for analysis of neurokinin A in human saliva. Lundy FT, et al. **Biochem Soc Trans** 1996 May;24(2):336S

Inhibition of the growth and cysteine proteinase activity of Porphyromonas gingivalis by human salivary cystatin S and chicken cystatin. Blankenvoorde MF, et al. **Biol Chem** 1996 Dec;377(12):847–50

alpha–Amylase and salivary albumin adsorption onto titanium, enamel and dentin: an in vivo study. Kohavi D,

et al. **Biomaterials** 1997 Jul;18(13):903–6

A new approach to the assessment of anaerobic metabolism: measurement of lactate in saliva. Segura R, et al. **Br J Sports Med** 1996 Dec;30(4):305–9

Epidermal growth factor in plasma and saliva of patients with active breast cancer and breast cancer patients in follow-up compared with healthy women. Navarro MA, et al. **Breast Cancer Res Treat** 1997 Jan;42(1):83–6

Salivary and urinary fluoride levels after 1-month use of fluoride-releasing removable appliances. Alaçam A, et al. **Caries Res** 1996;30(3):200–3

Properties of whole saliva and dental plaque in relation to 40-month consumption of chewing gums containing xylitol, sorbitol of sucrose. Mäkinen KK, et al. **Caries Res** 1996;30(3):180–8

Acidogenic potential and total salivary carbohydrate content of expectorants following the consumption of some cereal-based foods and fruits. Pollard MA, et al. **Caries Res** 1996;30(2):132–7

Salivary fluoride concentration and plaque pH after using a fluoride-containing chewing gum. Sjögren K, et al. **Caries Res** 1997;31(5):366–72

Specificity of salivary thiocyanate as marker of cigarette smoking is not affected by alimentary sources. Galanti LM. **Clin Chem** 1997 Jan;43(1):184–5

Direct colorimetric monoclonal antibody enzyme immunoassay for estradiol-17 beta in saliva. Tamate K, et al. **Clin Chem** 1997 Jul;43(7):1159–64

Salivary mucous glycoprotein MG1 in Sjögren's syndrome. Saari H, et al. **Clin Chim Acta** 1997 Mar 18;259(1–2):83–96

The reliability of saliva as a sample for the detection of hepatitis A immunoglobulins under various sampling conditions. O'Farrell BJ, et al. **Clin Diagn Virol** 1997 Feb; 7(3):153–7

Increased soluble CD23 molecules in serum/saliva and correlation with the stage of sialoectasis in patients with primary Sjögren's syndrome. Takei M, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):711–5

Resistance of the normal human microflora to mercury and antimicrobials after exposure to mercury from dental amalgam fillings. Edlund C, et al. **Clin Infect Dis** 1996 Jun; 22(6):944–50

Differential excretion of leucocyte granule components in inflammatory bowel disease: implications for pathogenesis. Dwarakanath AD, et al. **Clin Sci (Colch)** 1997 Mar; 92(3):307–13

Temperament, social competence, and adrenocortical activity in preschoolers. Gunnar MR, et al. **Dev Psychobiol** 1997 Jul;31(1):65–85

Bisphenol-A dental sealants: the inappropriateness of continued reference to a single female patient [letter; comment] Ashby J. **Environ Health Perspect** 1997 Apr; 105(4):362. Comment on: Environ Health Perspect 1996 Mar;104(3):298–305.

Problems with salivary 17-hydroxyprogesterone determinations using the Salivette device. Krüger C, et al. **Eur J Clin Chem Clin Biochem** 1996 Nov;34(11):926–9

Bioavailability study of paracetamol tablets in saliva and urine. Retaco P, et al. **Eur J Drug Metab Pharmacokinet** 1996 Oct–Dec; 21(4):295–300

Quantification of swallowed saliva in aspirated gastric juice. Tunio AM, et al. **Eur J Gastroenterol Hepatol** 1997 Mar; 9(3):279–82

Glycosylation of secretory proteins in salivary glands and saliva studied by lectin-probes. Garrett JR, et al. **Eur J Morphol** 1996 Aug;34(3):177–80 (10 ref.)

Indicators of salivary gland inflammation in primary Sjogren's syndrome. Cuida M, et al. **Eur J Oral Sci** 1997 Jun;105(3):228–33

Elevated cortisol levels in whole saliva in HIV infected individuals. Enwonwu CO, et al. **Eur J Oral Sci** 1996 Jun; 104(3):322–4

Analysis of the concentration and output of whole salivary constituents in patients with Sjögren's syndrome. van der Reijden WA, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):335–40

Human glandular salivas: their separate collection and analysis. Veerman EC, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):346–52

The use of salivary cortisol measurements for the non-invasive assessment of adrenal cortical function in guinea pigs. Fenske M. **Exp Clin Endocrinol Diabetes** 1997; 105(3):163–8

A discussion of 'PCR DNA typing of stamps: evaluation of the DNA extraction' [letter; comment] Hochmeister MN. **Forensic Sci Int** 1996 Nov 11;83(1):75–9. Comment on: Forensic Sci Int 1996 Apr 2;78(2):103–10.

Cocaine in hair, saliva, skin swabs, and urine of cocaine users' children. Smith FP, et al. **Forensic Sci Int** 1996 Dec 27; 83(3):179–89

Multicomponent spectroscopic investigations of salivary antioxidant consumption by an oral rinse preparation containing the stable free radical species chlorine dioxide (ClO_2.). Lynch E, et al. **Free Radic Res** 1997 Mar; 26(3):209–34

Mouse submandibular gland salivary apomucin contains repeated N-glycosylation sites. Denny PC, et al. **Glycobiology** 1996 Jan;6(1):43–50

Identification of a major human high molecular weight salivary mucin (MG1) as tracheobronchial mucin MUC5B. Nielsen PA, et al. **Glycobiology** 1997 Apr;7(3):413–9

A monoclonal antibody directed against high M(r) salivary mucins recognizes the SO3-3Gal beta 1-3GlcNAc moiety of sulfo-Lewis(a): a histochemical survey of human and rat tissue. Veerman EC, et al. **Glycobiology** 1997 Feb; 7(1):37–43

Use of lectin-probes for correlative histochemical and biochemical assessments of the glycosylation patterns of secretory proteins, including kallikreins, in salivary glands and saliva. Garrett JR, et al. **Histol Histopathol** 1996 Apr; 11(2):503–12

Utilization of salivary concentrations of ciprofloxacin in subjects with cystic fibrosis. Smith A, et al. **Infection** 1997 Mar–Apr;25(2):106–8

Comparison of heroin and cocaine concentrations in saliva with concentrations in blood and plasma. Jenkins AJ, et al. **J Anal Toxicol** 1995 Oct;19(6):359–74

Sensitive reversed-phase high-performance liquid chromatographic method for the determination of atevirdine and its N-desethyl metabolite in human saliva or cerebrospinal fluid using solid-phase extraction. Howard GM, et al. **J Chromatogr B Biomed Appl** 1997 Jun 6; 693(2):431–6

Study of salivary catecholamines using fully automated column-switching high-performance liquid chromatography. Okumura T, et al. **J Chromatogr B Biomed Appl** 1997 Jul 4;694(2):305–16

Saliva composition in children and young adults with Papillon-Lefèvre syndrome. Lundgren T, et al. **J Clin Periodontol** 1996 Dec;23(12):1068–72

Human salivary mucin MG1 selectively forms heterotypic complexes with amylase, proline-rich proteins, statherin, and histatins. Iontcheva I, et al. **J Dent Res** 1997 Mar; 76(3):734–43

Increased overnight fluoride concentrations in saliva, plaque, and plaque fluid after a novel two-solution rinse. Vogel GL, et al. **J Dent Res** 1997 Mar;76(3):761–7

Autonomic neuropathy and salivary composition in diabetic patients. Ben-Aryeh H, et al. **J Diabetes Complications** 1996 Jul–Aug;10(4):226–7

Measurement of salivary cortisol in guinea pigs. Fenske M. **J Exp Anim Sci** 1996 Aug;38(1):13–9

An improved method to recover saliva from human skin: the double swab technique. Sweet D, et al. **J Forensic Sci** 1997 Mar;42(2):320–2

PCR-based DNA typing of saliva stains recovered from human skin. Sweet D, et al. **J Forensic Sci** 1997 May; 42(3):447–51

Direct radioimmunoassay of progesterone in saliva. Lu YC, et al. **J Immunoassay** 1997 May;18(2):149–63

Calcium kinetics with microgram stable isotope doses and saliva sampling. Smith SM, et al. **J Mass Spectrom** 1996 Nov;31(11):1265–70

Salivary cortisol and anxiety in recurrent aphthous stomatitis. McCartan BE, et al. **J Oral Pathol Med** 1996 Aug; 25(7):357–9

Competition stress in soccer coaches increases salivary. Immunoglobin A and salivary cortisol concentrations. Kugler J, et al. **J Sports Med Phys Fitness** 1996 Jun; 36(2):117–20

Salivary cortisol response to a 30 mn submaximal test adjusted to a constant heart rate. Lac G, et al. **J Sports Med Phys Fitness** 1997 Mar;37(1):56–60

Comparison of the testosterone-to-cortisol ratio values obtained from hormonal assays in saliva and serum. Obmiński Z, et al. **J Sports Med Phys Fitness** 1997 Mar; 37(1):50–5

Determination of atrazine levels in whole saliva and plasma in rats: potential of salivary monitoring for occupational exposure. Lu C, et al. **J Toxicol Environ Health** 1997 Feb 7;50(2):101–11

Early pregnancy diagnosis in the sow by saliva progesterone measurement using a bovine milk progesterone qualitative test EIA kit. Moriyoshi M, et al. **J Vet Med Sci** 1996 Aug; 58(8):737–41

Neuropeptides in the saliva of healthy subjects. Dawidson I, et al. **Life Sci** 1997;60(4–5):269–78

Salivary lipid profiles of the leech (Hirudo medicinalis). Rabinowitz JL. **Lipids** 1996 Aug;31(8):887–8

Salivary testosterone during the menstrual cycle in women with systemic lupus erythematosus [letter] Navarro MA, et al. **Lupus** 1997;6(5):484–5

A study on carcinogenesis of endogenous nitrite and nitrosamine, and prevention of cancer. Huang YG, et al. **Mutat Res** 1996 Oct 28;358(1):7–14

Salivary IgA as a marker of social stress in rats. Guhad FA, et al. **Neurosci Lett** 1996 Sep 27;216(2):137–40

Salivary progesterone concentrations after tubal sterilization. Sumiala S, et al. **Obstet Gynecol** 1996 Nov;88(5):792–6

Fluoride levels in whole saliva of preschool children after brushing with 0.25 g (pea-sized) as compared to 1.0 g (full-brush) of a fluoride dentifrice. DenBesten P, et al. **Pediatr Dent** 1996 Jul–Aug;18(4):277–80

Solid-phase synthesis and characterization of human salivary statherin: a tyrosine-rich phosphoprotein inhibitor of calcium phosphate precipitation. Gururaja TL, et al. **Pept Res** 1996 Nov–Dec;9(6):283–9

Saliva and marathon running. Ljungberg G, et al. **Scand J Med Sci Sports** 1997 Aug;7(4):214–9

Saliva cortisol and testosterone in the guinea pig: measures for the endocrine function of adrenals and testes? Fenske M. **Steroids** 1996 Nov;61(11):647–50

Salivary factors in children with recurrent parotitis. Part 2: Protein, albumin, amylase, IgA, lactoferrin lysozyme and kallikrein concentrations. Ericson S, et al. **Swed Dent J** 1996;20(5):199–207

Saliva as a valid alternative to serum in monitoring intravenous caffeine treatment for apnea of prematurity. Lee TC, et al. **Ther Drug Monit** 1996 Jun;18(3):288–93

Salivary measurement of deferiprone concentrations and correlation with serum levels. Pope E, et al. **Ther Drug Monit** 1997 Feb;19(1):95–7

Relation between plasma and saliva concentrations of enoxacin, ciprofloxacin, and theophylline. Zhai S, et al. **Ther Drug Monit** 1996 Dec;18(6):666–71

Mercury in saliva and feces after removal of amalgam fillings. Björkman L, et al. **Toxicol Appl Pharmacol** 1997 May; 144(1):156–62

Intra-oral lactic acid production during clearance of different foods containing various carbohydrates. Linke HA, et al. **Z Ernahrungswiss** 1997 Jun;36(2):191–7

[Saliva as a diagnostic fluid] Tenovuo J. **Duodecim** 1995; 111(14):1355–9 (16 ref.) **(Fin)**

[Assay of salivary cortisol. An interesting method for exploring the adrenal cortex] Barrou Z, et al. **Presse Med** 1997 Mar 8;26(7):329–31 (Eng. Abstr.) **(Fre)**

[Detection of saliva traces on perpetrator masks and their attribution to a particular criminal] Schneider H, et al. **Arch Kriminol** 1996 Jul–Aug;198(1–2):31–7 (Eng. Abstr.) **(Ger)**

[Quantitative studies of the kallikrein-prokallikrein system in mixed saliva in oral squamous epithelial carcinoma] Meyer P, et al. **HNO** 1997 Jan;45(1):7–10 (Eng. Abstr.) **(Ger)**

[The measurement of PAF (platelet activating factor) in human saliva: standardization of the method] Staffolani N, et al. **Minerva Stomatol** 1996 Mar;45(3):69–73 (Eng. Abstr.) **(Ita)**

[General tests--factors responsible for errors in sampling of urine, feces, cerebrospinal fluid, saliva, and other body fluids and prevention of these errors] Ito K. **Rinsho Byori** 1996 Nov;Suppl 103:81–91 **(Jpn)**

[Changes in the electrolyte content of human saliva, urine and sweat under repeated heat exposures] Klimina NV. **Fiziol Cheloveka** 1997 May–Jun;23(3):97–103 **(Rus)**

[The determination of the coagulation threshold of the electrolyte potassium chloride in human mixed saliva] Leont'ev VK, et al. **Stomatologiia (Mosk)** 1996;75(4):9–11 **(Rus)**

[Thyrotropin and thyroid hormones in human saliva before and after the taking of food] Korot'ko GF, et al. **Vopr Pitan** 1996;(1):7–8 (Eng. Abstr.) **(Rus)**

[Quantification of lead, cadmium and chromium by sialochemistry] González M, et al. **Salud Publica Mex** 1997 May–Jun;39(3):179–86 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Comparison of susceptibility to apoptosis induced by rhTNF-alpha and cycloheximide between human circulating and exudated neutrophils. Niwa M, et al. **Life Sci** 1997;61(2):205–15

DRUG EFFECTS

Effects of oral hygiene products containing lactoperoxidase, lysozyme, and lactoferrin on the composition of whole saliva and on subjective oral symptoms in patients with xerostomia. Kirstilä V, et al. **Acta Odontol Scand** 1996 Dec; 54(6):391–7

Systemic oral isotretinoin therapy and flow rate, pH, and matrix metalloproteinase-9 activity of stimulated saliva. Oikarinen K, et al. **Acta Odontol Scand** 1995 Dec; 53(6):369–71

Effect of hormone replacement therapy on salivary flow rate, buffer effect and pH on perimenopausal and postmenopausal women. Laine M, et al. **Arch Oral Biol** 1996 Jan;41(1):91–6

Esophagoprotective potential of cisapride. An additional benefit for gastroesophageal reflux disease. Goldin GF, et al. **Dig Dis Sci** 1997 Jul;42(7):1362–9

Effects of the antihypertensive drug captopril on human salivary secretion rate and composition. Nederfors T, et al. **Eur J Oral Sci** 1995 Dec;103(6):351–4

Effects on salivary flow rate and composition of withdrawal of and re-exposure to the beta 1-selective antagonist metoprolol in a hypertensive patient population. Nederfors T, et al. **Eur J Oral Sci** 1996 Jun;104(3):262–8

The effect of topical fluoride agents on saliva secretion. Engel-Brill N, et al. **J Oral Rehabil** 1996 Jul;23(7):501–4

Five-year follow-up of saliva in patients treated for lymphomas. Meurman JH, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):447–52

Effect of time interval between food and drug ingestion on the absorption of oxybutynin from a controlled-release tablet. Lukkari E, et al. **Pharmacol Toxicol** 1997 Jul; 81(1):31–4

ENZYMOLOGY

Apical secretion of rat submandibular tissue kallikrein continues in the absence of external stimulation: evidence for a constitutive secretory pathway [corrected and republished in Acta Physiol Scand 1996 Jun;157(2):299–304] Garrett JR, et al. **Acta Physiol Scand** 1996 Feb;156(2):109–14

alpha1,4-Fucosyltransferase activity in human serum and saliva. DeBose-Boyd RA, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):109-17

A comparison of cysteine and serine proteinases in human gingival crevicular fluid with tissue, saliva and bacterial enzymes by analytical isoelectric focusing. Gazi MI, et al. **Arch Oral Biol** 1996 May;41(5):393-400

Interindividual differences in degradation of sodium monofluorophosphate by saliva in relation to oral health status. Klimek J, et al. **Arch Oral Biol** 1997 Feb;42(2):181-4

A population-based study of salivary lysozyme concentrations and candidal counts. Yeh CK, et al. **Arch Oral Biol** 1997 Jan;42(1):25-31

A rapid procedure for the purification of human salivary peroxidase. Marcozzi G. **Biomed Chromatogr** 1996 Mar-Apr;10(2):97-8

Salivary alpha-amylase as a measure of endogenous adrenergic activity. Chatterton RT Jr, et al. **Clin Physiol** 1996 Jul;16(4):433-48

Salivary carbonic anhydrase protects gastroesophageal mucosa from acid injury. Parkkila S, et al. **Dig Dis Sci** 1997 May;42(5):1013-9

Quantification of human myeloperoxidase in oral fluids. Ortiz GC, et al. **Eur J Oral Sci** 1997 Apr;105(2):143-52

Salivary peroxidase activity in whole saliva of patients with insulin-dependent (type-1) diabetes mellitus. Güven Y, et al. **J Clin Periodontol** 1996 Sep;23(9):879-81

Matrix metalloproteinases and their inhibitors in gingival crevicular fluid and saliva of periodontitis patients. Ingman T, et al. **J Clin Periodontol** 1996 Dec;23(12):1127-32

Characterization of matrix metalloproteinase (MMP-8 and -9) activities in the saliva and in gingival crevicular fluid of children with Down's syndrome. Halinen S, et al. **J Periodontol** 1996 Aug;67(8):748-54

An evaluation of a dentifrice containing salivary peroxidase elements for the control of gingival disease in patients with irradiated head and neck cancer. Toljanic JA, et al. **J Prosthet Dent** 1996 Sep;76(3):292-6

Elevated levels of cysteine protease activity in saliva and salivary glands of the nonobese diabetic (NOD) mouse model for Sjögren syndrome. Robinson CP, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5767-71

[A simple method of measuring ornithine decarboxylase activity in mixed human saliva] Khramov VA. **Klin Lab Diagn** 1997 Apr;(4):14-5 (Eng. Abstr.) **(Rus)**

[Determination of hyaluronidase activity in biological fluids] Sharaev PN, et al. **Klin Lab Diagn** 1996 May-Jun;(3):21-2 **(Rus)**

[Activity of glutamate dehydrogenase, gamma-glutamyltranspeptidase and creatine kinase in saliva in gingivitis] Petrovich IuA, et al. **Patol Fiziol Eksp Ter** 1996 Oct-Dec;(4):28-30 (Eng. Abstr.) **(Rus)**

[The urease activity of the saliva in patients with acute odontogenic infection of the maxillofacial area] Gavrikova LM, et al. **Stomatologiia (Mosk)** 1996;Spec No:49-50 **(Rus)**

[The determination of the ureolytic and glycolytic activities of human oral fluid] Khramov VA, et al. **Stomatologiia (Mosk)** 1996;75(3):7-9 (Eng. Abstr.) **(Rus)**

[Diagnostic value of studying salivary enzymes in leukemia patients] Volchkova VM, et al. **Vopr Med Khim** 1996 Jan-Mar;42(1):46-53 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Human T-lymphotropic virus type I excretion and specific antibody response in paired saliva and cervicovaginal secretions. Belec L, et al. **AIDS Res Hum Retroviruses** 1996 Jan 20;12(2):157-167

Detection of mosquito saliva-specific IgE antibodies by capture ELISA. Brummer-Korvenkontio H, et al. **Allergy** 1997 Mar;52(3):342-5

Future applications of oral fluid specimen technology. George JR, et al. **Am J Med** 1997 Apr 1;102(4A):21-5

Evaluation of salivary antibodies to detect infection with Helicobacter pylori. Loeb MB, et al. **Can J Gastroenterol** 1997 Jul-Aug;11(5):437-40

Salivary binding antibodies induced by human immunodeficiency virus type 1 recombinant gp120 vaccine. The NIAID AIDS Vaccine Evaluation Group. Gorse GJ, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):769-73

Comparison of saliva and serum for human immunodeficiency virus type 1 antibody testing in Uganda using a rapid recombinant assay. Grant RM, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):640-4

The reliability of saliva as a sample for the detection of hepatitis A immunoglobulins under various sampling conditions. O'Farrell BJ, et al. **Clin Diagn Virol** 1997 Feb;7(3):153-7

Quantification of IgA and IgG and specificities of antibodies to viral proteins in parotid saliva at different stages of HIV-1 infection. Cartry O, et al. **Clin Exp Immunol** 1997 Jul;109(1):47-53

Salivary mucins in oral mucosal defense. Slomiany BL, et al. **Gen Pharmacol** 1996 Jul;27(5):761-71 (60 ref.)

Molecular basis for erythrocyte Le(a+ b+) and salivary ABH partial-secretor phenotypes: expression of a FUT2 secretor allele with an A-->T mutation at nucleotide 385 correlates with reduced alpha(1,2) fucosyltransferase activity. Henry S, et al. **Glycoconj J** 1996 Dec;13(6):985-93

Is saliva serology useful for the diagnosis of Helicobacter pylori? Christie JM, et al. **Gut** 1996 Jul;39(1):27-30

Salivary IgG subclasses in individuals with and without homozygous IGHG gene deletions. Engström PE, et al. **Immunology** 1996 Oct;89(2):178-82

Characterization of Aedes communis, Aedes aegypti and Anopheles stephensi mosquito saliva antigens by immunoblotting. Brummer-Korvenkontio H, et al. **Int Arch Allergy Immunol** 1997 Feb;112(2):169-74

Evaluation of a saliva test kit for feline leukemia virus antigen. Babyak SD, et al. **J Am Anim Hosp Assoc** 1996 Sep-Oct;32(5):397-400

Evaluation of two novel immunoassays designed to detect HIV antibodies in oral fluids. Saville RD, et al. **J Clin Lab Anal** 1997;11(1):63-8

Salivary antibodies to cytomegalovirus (CMV) glycoprotein B accurately predict CMV infections among preschool children. Wang JB, et al. **J Clin Microbiol** 1996 Oct; 34(10):2632-4

An in vitro qualitative assay for the detection of antibodies to HIV type 1/2 contained in human saliva. Chakrabarti T, et al. **J Commun Dis** 1996 Jun;28(2):107-10

Reactivity of Candida albicans germ tubes with salivary secretory IgA. Pontón J, et al. **J Dent Res** 1996 Dec; 75(12):1979-85

The anti-HIV-1 activity associated with saliva. Shine N, et al. **J Dent Res** 1997 Feb;76(2):634-40 (86 ref.)

Secretory immunoglobulin A increases during relaxation in children with and without recurrent upper respiratory tract infections. Hewson-Bower B, et al. **J Dev Behav Pediatr** 1996 Oct;17(5):311-6

Thyrotropin receptor antibodies in parotid saliva. Tumilasci OR, et al. **J Endocrinol Invest** 1996 Jul-Aug;19(7):412-4

Anti-HIV antibody in saliva: an assessment of the role of the components of saliva, testing methodologies and collection systems. Lamey PJ, et al. **J Oral Pathol Med** 1996 Mar;25(3):104-7

Salivary and serum interleukin 6 in primary Sjögren's syndrome. Grisius MM, et al. **J Rheumatol** 1997 Jun; 24(6):1089-91

Salivary secretory IgA reference values in Brazilian healthy children [letter] Nagao AT, et al. **J Trop Pediatr** 1996 Apr; 42(2):119

Detection of IgA against the mycobacterial antigen A60 in serum and saliva in patients with active pulmonary tuberculosis: preliminary results. Del Pezzo M, et al. **New Microbiol** 1996 Oct;19(4):363-7

Salivary antigens of the cat flea, Ctenocephalides felis felis. Lee SE, et al. **Parasite Immunol** 1997 Jan;19(1):13-9

Salivary testing for human immunodeficiency virus type 1 infection in children born to infected mothers in Sao Paulo, Brazil. The Sao Paulo Collaborative Study for Vertical Transmission of HIV-1. Tess BH, et al. **Pediatr Infect Dis J** 1996 Sep;15(9):787-90

Salivary IgA secretion rate in young and elderly persons. Miletic ID, et al. **Physiol Behav** 1996 Jul;60(1):243-8

Psychological stress as a determinant of protein levels and salivary-induced aggregation of Streptococcus gordonii in human whole saliva. Bosch JA, et al. **Psychosom Med** 1996 Jul-Aug;58(4):374-82

A non-invasive assessment of hepatitis B virus carrier status using saliva samples. Richards AL, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):80-4

Potential for diagnosis of intestinal nematode infections through antibody detection in saliva. Needham CS, et al. **Trans R Soc Trop Med Hyg** 1996 Sep-Oct;90(5):526-30

Multi-center European evaluation of HIV testing on serum and saliva samples. François-Gérard C, et al. **Transfus Clin Biol** 1996;3(2):89-98

Human T-lymphotropic virus type I (HTLV-I)-specific antibodies and cell-free RNA in crevicular fluid-rich saliva from patients with tropical spastic paraparesis/HTLV-I-associated myelopathy. Soto-Ramirez LE, et al. **Viral Immunol** 1995;8(3):141-50

[Immunoglobulin A in saliva of children: age dependence and effect of respiratory tract diseases] Hofstötter H, et al. **Wien Klin Wochenschr** 1996;108(20):640-2 (Eng. Abstr.) **(Ger)**

[Assessment of secretory and humoral immune response to group A polysaccharide in rheumatism] Miasoedova SE, et al. **Klin Lab Diagn** 1996 Jul-Aug;(4):43-5 **(Rus)**

[The level of secretory immunoglobulin A in the saliva and the body resistance of medical workers in the dental field] Lakshin AM, et al. **Stomatologiia (Mosk)** 1996;75(4):56-8 (Eng. Abstr.) **(Rus)**

[Immunoglobulin A levels in the saliva in patients with periodontal disease] Bokor M. **Med Pregl** 1997 Jan-Feb; 50(1-2):9-11 (Eng. Abstr.) **(Scr)**

METABOLISM

Salivary endothelin and its response to postural changes in humans. Whitson PA, et al. **Acta Physiol Scand** 1997 Jul; 160(3):291-3

Salivary EGF regulates eosinophil-derived TGF-alpha expression in hamster oral wounds. Yang J, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G191-202

Single-dose, comparative study of venous, capillary and salivary artemisinin concentrations in healthy, male adults. Sidhu JS, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):13-6

Salivary cortisol and PTSD symptoms in Persian Gulf War combatants. Kellner M, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:442-3

Pharmacokinetics of fluconazole in saliva and plasma after administration of an oral suspension and capsules. Koks CH, et al. **Antimicrob Agents Chemother** 1996 Aug; 40(8):1935-7

Effects of pH and thiocyanate on hydrogen peroxide-induced evolution of molecular oxygen in human mixed saliva. Nishioka T, et al. **Arch Oral Biol** 1996 Oct;41(10):911-7

Absorption and imagery locate immune responses in the body. Gregerson MB, et al. **Biofeedback Self Regul** 1996 Jun;21(2):149-65

Salivary flow-rate and composition in schizophrenic patients on clozapine: subjective reports and laboratory data. Ben-Aryeh H, et al. **Biol Psychiatry** 1996 Jun 1; 39(11):946-9

Salivary and plasma measures of dim light melatonin onset (DLMO) in patients with rapid cycling bipolar disorder. Leibenluft E, et al. **Biol Psychiatry** 1996 Oct 15;40(8):731-5

A single sample saliva test to determine acetylator phenotype. Hutchings AD, et al. **Br J Clin Pharmacol** 1996 Nov; 42(5):635-7

Salivary kallikrein output during the stress response to surgery. Smith-Hanrahan C. **Can J Physiol Pharmacol** 1997 Apr;75(4):301-4

Salivary drug monitoring of irinotecan and its active metabolite in cancer patients. Takahashi T, et al. **Cancer Chemother Pharmacol** 1997;40(5):449-52

Modulation of nitrate-nitrite conversion in the oral cavity. van Maanen JM, et al. **Cancer Detect Prev** 1996;20(6):590-6

Effect of citric acid clearance on the saturation with respect to hydroxyapatite in saliva. Bashir E, et al. **Caries Res** 1996; 30(3):213-7

Effect of a protein-rich meal on urinary and salivary free amino acid concentrations in human subjects. Brand HS, et al. **Clin Chim Acta** 1997 Aug 8;264(1):37-47

Longitudinal evaluation of the development of salivary cortisol circadian rhythm in infancy. Santiago LB, et al. **Clin Endocrinol (Oxf)** 1996 Feb;44(2):157-61

IL-1 receptor antagonist in saliva; characterization in normal saliva and reduced concentration in Sjögren's syndrome (SS). Dubost JJ, et al. **Clin Exp Immunol** 1996 Nov; 106(2):237-42

Drug monitoring in nonconventional biological fluids and matrices [see comments] Pichini S, et al. **Clin Pharmacokinet** 1996 Mar;30(3):211-28 (140 ref.). Comment in: Clin Pharmacokinet 1996 Jul;31(1):81.

Alpha-2-HS-glycoprotein (AHSG) polymorphism in semen and saliva. Yasuda T, et al. **Electrophoresis** 1996 Apr; 17(4):793-6

Saliva cortisol, physical exercise and training: influences of swimming and handball on cortisol concentrations in women. Filaire E, et al. **Eur J Appl Physiol** 1996; 74(3):274-8

Pathogenesis of oral Kaposi's Sarcoma in HIV-infection: relevance of endogenous glucocorticoid excess in blood and saliva. Enwonwu CO. **Eur J Cancer B Oral Oncol** 1996 Jul;32B(4):271-4 (49 ref.)

Disopyramide concentrations in human plasma and saliva: comparison of disopyramide concentrations in saliva and plasma unbound concentrations. Sagawa K, et al. **Eur J Clin Pharmacol** 1997;52(1):65-9

Periodontal disease, oral microbial flora and salivary antibacterial factors in diabetes mellitus type 1 patients. Pinducciu G, et al. **Eur J Epidemiol** 1996 Dec;12(6):631-6

Analysis of site-specific N-glycosylation of recombinant Desmodus rotundus salivary plasminogen activator rDSPA alpha 1 expressed in Chinese hamster ovary cells. Gohlke M, et al. **Glycobiology** 1997 Feb;7(1):67-77

The use of saliva cortisol, urinary cortisol, and catecholamine measurements for a noninvasive assessment of stress responses in dogs. Beerda B, et al. **Horm Behav** 1996 Sep; 30(3):272-9

Salivary testosterone levels among Tamang and Kami males of central Nepal. Ellison PT, et al. **Hum Biol** 1996 Dec; 68(6):955-65

Comparison of salivary steroid profiles in naturally occurring conception and non-conception cycles. Lipson SF, et al. **Hum Reprod** 1996 Oct;11(10):2090-6

Correlation between proguanil and metabolites in plasma and saliva [letter] Alexander C, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1113-5

The salivary lipocalin von Ebner's gland protein is a cysteine proteinase inhibitor. van't Hof W, et al. **J Biol Chem** 1997 Jan 17;272(3):1837-41

Accumulation of fermentable sugars and metabolic acids in food particles that become entrapped on the dentition. Kashket S, et al. **J Dent Res** 1996 Nov;75(11):1885-91

Incorporation of caseinoglycomacropeptide and caseinophosphopeptide into the salivary pellicle inhibits adherence of mutans streptococci. Schüpbach P, et al. **J Dent Res** 1996 Oct;75(10):1779-88

Salivary cortisol levels and stress reactivity in human aging. Nicolson N, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):M68-75

Identification of hemolytic activity in saliva of the lone star tick (Acari:Ixodidae). Zhu K, et al. **J Med Entomol** 1997 Mar;34(2):160-6

Release of cariostatic agents from a new buffering fluoride- and xylitol-containing lozenge to human whole saliva in vivo. Tenovuo J, et al. **J Oral Rehabil** 1997 May; 24(5):325-31

Effect of acceleration stress on salivary cortisol and plasma cortisol and testosterone levels in cadet pilots. Obmiński Z, et al. **J Physiol Pharmacol** 1997 Jun;48(2):193-200

Absence of chronic effect of exposure to short-wave radio broadcast signal on salivary melatonin concentrations in dairy cattle. Stärk KD, et al. **J Pineal Res** 1997 May; 22(4):171–6

Salivary testosterone and cortisol in a delinquent and violent urban subculture. Banks T, et al. **J Soc Psychol** 1996 Feb; 136(1):49–56

Wound licking and nitric oxide [letter] Benjamin N, et al. **Lancet** 1997 Jun 14;349(9067):1776

The cortisol response to psychological challenge is preceded by a transient rise in endogenous inhibitor of monoamine oxidase. Clow A, et al. **Life Sci** 1997;61(5):567–75

Salivary monoamine oxidase A and B inhibitory activities correlate with stress. Doyle A, et al. **Life Sci** 1996; 59(16):1357–62

Salivary testosterone levels in left- and right-handed adults. Moffat SD, et al. **Neuropsychologia** 1996 Mar;34(3):225–33

Plasma and saliva substance P levels: the effects of acute pain in pregnant and non-pregnant women. Dalby PL, et al. **Pain** 1997 Feb;69(3):263–7

Salivary excretion of endogenous proteins in nephrotic syndrome in children. Neuhaus TJ, et al. **Pediatr Nephrol** 1997 Aug;11(4):411–4

Time-dependent variability of chloroquine secretion into human saliva [see comments] Onyeji CO, et al. **Pharm World Sci** 1996 Dec;18(6):211–6. Comment in: Pharm World Sci 1996 Dec;18(6):193–4.

Saliva as a specimen for therapeutic drug monitoring in pharmacies [editorial; comment] Zuidema J, et al. **Pharm World Sci** 1996 Dec;18(6):193–4 (9 ref.). Comment on: Pharm World Sci 1996 Dec;18(6):211–6.

The circadian rhythm of cortisol in the saliva of young pigs. Ekkel ED, et al. **Physiol Behav** 1996 Sep;60(3):985–9

The effects of mixing on behavior and circadian parameters of salivary cortisol in pigs. Ekkel ED, et al. **Physiol Behav** 1997 Jul;62(1):181–4

Stressful events and salivary cortisol. Canals J, et al. **Psychol Rep** 1997 Feb;80(1):305–6

The effects of perceived stress, traits, mood states, and stressful daily events on salivary cortisol. van Eck M, et al. **Psychosom Med** 1996 Sep–Oct;58(5):447–58

The effect of local radiotherapy on kallikrein activity in saliva secreted by parotid gland in patients with head and neck cancers. Czokało M, et al. **Rocz Akad Med Bialymst** 1996; 41(2):441–51

Ratios of plasma and salivary testosterone throughout puberty: production versus bioavailability. Rilling JK, et al. **Steroids** 1996 Jun;61(6):374–8

Column-switching high-performance liquid chromatography of ofloxacin in human saliva and correlation of ofloxacin level in saliva and serum. Ohkubo T, et al. **Ther Drug Monit** 1996 Oct;18(5):598–603

Plasma and saliva concentrations of rifampicin in man after oral administration. Orisakwe OE, et al. **Tokai J Exp Clin Med** 1996 Feb;21(1):45–9

[Iron in oral cavity fluid in gingival inflammation] Petrovich IuA, et al. **Patol Fiziol Eksp Ter** 1996 Jul–Sep;(3):22–4 (Eng. Abstr.) **(Rus)**

[The stimulation of nitric oxide synthesis as a possible protective function of the saliva and its disorders in periodontal diseases] Kankanian AL, et al. **Stomatologiia (Mosk)** 1996;75(3):19–21 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Risk factors for colonization of salivary lactobacilli and Candida in children. Ollila P, et al. **Acta Odontol Scand** 1997 Jan;55(1):9–13

Bacteriological method for detecting small intestinal hypomotility. Riordan SM, et al. **Am J Gastroenterol** 1996 Nov;91(11):2399–405

Polymerase chain reaction reveals herpes simplex virus DNA in saliva of patients with Behçet's disease. Lee S, et al. **Arch Dermatol Res** 1996 Apr;288(4):179–83

A population-based study of salivary lysozyme concentrations and candidal counts. Yeh CK, et al. **Arch Oral Biol** 1997 Jan;42(1):25–31

Dental caries and caries-associated micro-organisms in the saliva and plaque of 3- and 4-year-old Afro-Caribbean and Caucasian children in south London. Zoitopoulos L, et al. **Arch Oral Biol** 1996 Nov;41(11):1011–8

N-nitrosation of medicinal drugs catalysed by bacteria from human saliva and gastro-intestinal tract, including Helicobacter pylori. Ziebarth D, et al. **Carcinogenesis** 1997 Feb;18(2):383–9

Effect of repeated treatment with sustained-release chlorhexidine mouth guards on salivary levels of mutans streptococci. Hildebrandt GH. **Caries Res** 1996; 30(6):445–53

The effect of chlorhexidine/xylitol chewing-gum on cariogenic salivary microflora: a clinical trial in elderly patients. Simons D, et al. **Caries Res** 1997;31(2):91–6

Effect of different chlorhexidine varnish regimens on mutans streptococci levels in interdental plaque and saliva. Twetman S, et al. **Caries Res** 1997;31(3):189–93

Does assessment of microbial composition of plaque/saliva allow for diagnosis of disease activity of individuals? Bowden GH. **Community Dent Oral Epidemiol** 1997 Feb; 25(1):76–81 (61 ref.)

Number of mutans streptococci or lactobacilli in a total dental plaque sample does not explain the variation in caries better than the numbers in stimulated whole saliva. Sullivan A, et al. **Community Dent Oral Epidemiol** 1996 Jun; 24(3):159–63

Salivary mutans streptococci and dental caries patterns in pre-school children. Thibodeau EA, et al. **Community Dent Oral Epidemiol** 1996 Jun;24(3):164–8

A newly developed PCR assay of H. pylori in gastric biopsy, saliva, and feces. Evidence of high prevalence of H. pylori in saliva supports oral transmission. Li C, et al. **Dig Dis Sci** 1996 Nov;41(11):2142–9

N-nitrosation at non-gastric sites. Hill MJ. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:105–8 (12 ref.)

Salivary distribution of Streptococcus mutans in schoolchildren from Rome (Italy). Petti S. **Eur J Epidemiol** 1997 Jan;13(1):113–5

Helicobacter pylori in the mouth--negative isolation from dental plaque and saliva [see comments] Luman W, et al. **Eur J Gastroenterol Hepatol** 1996 Jan;8(1):11–4. Comment in: Eur J Gastroenterol Hepatol 1996 Jan;8(1):1–2.

Trends in dental health among Icelandic urban children. Bjarnason S, et al. **Eur J Oral Sci** 1997 Jun;105(3):189–95

Influence of temperature on the co-adhesion of oral microbial pairs in saliva. Bos R, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):372–7

Controlled study of the association of smoking with lactobacilli, mutans streptococci and yeasts in saliva. Sakki T, et al. **Eur J Oral Sci** 1996 Oct–Dec;104(5–6):619–22

Plaque fluoride and mutans streptococci in plaque and saliva before and after discontinuation of water fluoridation. Seppä L, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):353–8

Prediction of caries in pre-school children in relation to fluoride exposure. Twetman S, et al. **Eur J Oral Sci** 1996 Oct–Dec;104(5–6):523–8

The effect of areca nut on salivary and selected oral microorganisms. de Miranda CM, et al. **Int Dent J** 1996 Aug;46(4):350–6

Evaluation of enzyme immunoassay for detection of salivary antibody to Helicobacter pylori. Simor AE, et al. **J Clin Microbiol** 1996 Mar;34(3):550–3

Restoration-related salivary Streptococcus mutans level: a dental caries risk factor? Petti S, et al. **J Dent** 1997 May–Jul; 25(3–4):257–62

Vital microorganisms in early supragingival dental plaque and in stimulated human saliva. Weiger R, et al. **J Periodontal Res** 1997 Feb;32(2):233–40

Oral carriage of Helicobacter pylori: a review. Madinier IM, et al. **J Periodontol** 1997 Jan;68(1):2–6 (55 ref.)

Meningococcal infection from saliva [letter] Holdsworth G, et al. **Lancet** 1996 Nov 23;348(9039):1443

Caries-related salivary microorganisms and salivary flow rate in bone marrow recipients. Dens F, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):38–43

Caries experience and mutans streptococci as indicators of caries incidence. O'Sullivan DM, et al. **Pediatr Dent** 1996 Sep–Oct;18(5):371–4

[Saliva as a diagnostic fluid] Tenovuo J. **Duodecim** 1995; 111(14):1355–9 (16 ref.) **(Fin)**

[Bacteriological tests: quantitative bacterial cultivation by the spiral system] Nakai T, et al. **Rinsho Byori** 1996 Nov;Suppl 103:235–40 **(Jpn)**

PHYSIOLOGY

Caries prevalence and salivary and microbial conditions in 88-year-old Swedish dentate people. Lundgren M, et al. **Acta Odontol Scand** 1996 Jun;54(3):193–9

Anticoagulant activity of Triatoma infestans and Panstrongylus megistus saliva (Hemiptera/Triatominae). Pereira MH, et al. **Acta Trop** 1996 May;61(3):255–61

Saliva mediated adherence, aggregation and prevalence in dental plaque of Streptococcus mutans, Streptococcus sanguis and Actinomyces spp, in young and elderly humans. Carlén A, et al. **Arch Oral Biol** 1996 Dec; 41(12):1133–40

Saliva-mediated binding in vitro and prevalence in vivo of Streptococcus mutans. Carlen A, et al. **Arch Oral Biol** 1996 Jan;41(1):35–9

Effects of copper, iron and fluoride co-crystallized with sugar on caries development and acid formation in deslivated rats. Rosalen PL, et al. **Arch Oral Biol** 1996 Nov; 41(11):1003–10

Adsorption of saliva-coated and plain streptococcal cells to the surfaces of hydroxyapatite beads. Tanaka H, et al. **Arch Oral Biol** 1996 May;41(5):505–8

Development of a recording system for saliva pH with and complete denture by telemetry. Watanabe T, et al. **Arch Oral Biol** 1997 Mar;42(3):251–3

Antioxidant activity of rat parotid saliva. Nagler RM, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):989–93

Uptake and release of fluoride by saliva-coated glass ionomer cement. Damen JJ, et al. **Caries Res** 1996;30(6):454–7

Effects of frequency of exposure to iron-sucrose on the incidence of dental caries in desalivated rats. Miguel JC, et al. **Caries Res** 1997;31(3):238–43

Influence of iron alone or with fluoride on caries development in desalivated and intact rats. Miguel JC, et al. **Caries Res** 1997;31(3):244–8

Salivary factors in vomiting bulimics with and without pathological tooth wear. Milosevic A, et al. **Caries Res** 1996;30(5):361–6

Evaluation of salivary tests and dental status in the prediction of caries increment in caries-susceptible teenagers. Vehkalahti M, et al. **Caries Res** 1996;30(1):22–8

Dental caries in relation to diet, saliva and cariogenic microorganisms in Tanzanians of selected age groups. Mazengo MC, et al. **Community Dent Oral Epidemiol** 1996 Jun;24(3):169–74

Salivary parameters of relevance for assessing caries activity in individuals and populations. Tenovuo J. **Community Dent Oral Epidemiol** 1997 Feb;25(1):82–6 (48 ref.)

Experiences with the Montgomery Salivary Bypass Tube (MSBT) [see comments] Lörken A, et al. **Dysphagia** 1997 Spring;12(2):79–83. Comment in: Dysphagia 1997 Spring;12(2):84–5.

Variations in fibrinolytic activity of human whole saliva. Majerus P, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):341–5

Experimental salivary pellicles formed on titanium surfaces mediate adhesion of streptococci. Edgerton M, et al. **Int J Oral Maxillofac Implants** 1996 Jul–Aug;11(4):443–9

Potential application of human interferon-alpha in microbial infections of the oral cavity. Fujioka N, et al. **J Interferon Cytokine Res** 1995 Dec;15(12):1047–51

Effects of salivary or serum pellicles on the Candida albicans growth and biofilm formation on soft lining materials in vitro. Nikawa H, et al. **J Oral Rehabil** 1997 Aug; 24(8):594–604

Role of submandibular and sublingual saliva in maintenance of taste sensitivity recorded in the chorda tympani of rats. Matsuo R, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):797–807

Experimental tongue cancer in desalivated rats. Dayan D, et al. **Oral Oncol** 1997 Mar;33(2):105–9

The cortisol response to psychological stress in temporomandibular dysfunction. Jones DA, et al. **Pain** 1997 Aug;72(1–2):171–82

Milk and egg albumen are superior to human saliva in preserving human skin fibroblasts. Rozenfarb N, et al. **Pediatr Dent** 1997 Jul–Aug;19(5):347–8

Relation between saliva flow and flavor release from chewing gum. Guinard JX, et al. **Physiol Behav** 1997 Apr; 61(4):591–6

[Saliva and periodontal disease] Giuliana G, et al. **Minerva Stomatol** 1996 Mar;45(3):101–11 (46 ref.) (Eng. Abstr.) **(Ita)**

[The structural properties of the saliva in the modelling of a cariogenic situation] Leont'ev VK, et al. **Stomatologiia (Mosk)** 1996;75(2):9–11 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effects of hyperthyroidism and radioactive iodine given to ablate the thyroid on the composition of whole stimulated saliva. Ford H, et al. **Clin Endocrinol (Oxf)** 1997 Feb; 46(2):189–93

Sialochemical profile of X-irradiated major salivary glands in the rat. Nagler R, et al. **Int J Radiat Biol** 1997 Apr; 71(4):441–8

SECRETION

Rat salivary gland function after fractionated irradiation. Funegård U, et al. **Acta Oncol** 1997;36(2):191–8

Studies on human minor salivary gland secretions using the Periotron method. Eliasson L, et al. **Arch Oral Biol** 1996 Dec;41(12):1179–82

Effect of gustatory stimulation on flow rate and protein content of human parotid saliva according to the side of preferential mastication. Losso EM, et al. **Arch Oral Biol** 1997 Jan;42(1):83–7

Novel O-linked glycosylation on basic human parotid proteins. Proctor GB, et al. **Biochem Soc Trans** 1997 Feb; 25(1):11S

Flow rate and composition of whole saliva in children from rural and urban Thailand with different caries prevalence and dietary intake. Kedjarune U, et al. **Caries Res** 1997; 31(2):148–54

Continuous monitoring of salivary flow rate and pH at the surface of the dentition following consumption of acidic beverages. Millward A, et al. **Caries Res** 1997;31(1):44–9

Salivary flow and risk of tooth loss in an elderly population. Caplan DJ, et al. **Community Dent Oral Epidemiol** 1996 Feb;24(1):68–71

Oesophageal acid and salivary secretion: is chewing gum a treatment option for gastro-oesophageal reflux? von Schönfeld J, et al. **Digestion** 1997;58(2):111–4

A comparative study of the effects of yohimbine and anetholtrithione on salivary secretion in depressed patients treated with psychotropic drugs. Bagheri H, et al. **Eur J Clin Pharmacol** 1997;52(5):339–42

Peroxidase and kallikrein in atropine-resistant secretion of submandibular saliva on parasympathetic nerve stimulation in anaesthetized rats. Garrett JR, et al. **Exp Physiol** 1996 May;81(3):361–6

Saliva and esophagoprotection [letter; comment] Piotrowski J. **Gastroenterology** 1996 Sep;111(3):834–7. Comment on: Gastroenterology 1996 Mar;110(3):675–81.

Whole salivary flow rates following submandibular gland resection. Jacob RF, et al. **Head Neck** 1996 May–Jun; 18(3):242–7

Saliva composition in children and young adults with Papillon-Lefèvre syndrome. Lundgren T, et al. **J Clin Periodontol** 1996 Dec;23(12):1068–72

The influence of acupuncture on salivary flow rates in healthy subjects. Dawidson I, et al. **J Oral Rehabil** 1997

Mar;24(3):204–8
The effects of a long-term powdered diet on the amounts of two principal neurotransmitters in the major salivary glands and on stimulated salivary secretion in mice. Murai S, et al. **Methods Find Exp Clin Pharmacol** 1996 Sep; 18(7):459–63
Caries-related salivary microorganisms and salivary flow rate in bone marrow recipients. Dens F, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):38–43
Effects of glycemic control on saliva flow rates and protein composition in non-insulin-dependent diabetes mellitus. Dodds MW, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):465–70
Pilot study of controlled-release pilocarpine in normal subjects. Lockhart PB, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Nov;82(5):517–24
Saliva substitutes or stimulants? [letter; comment] Davies A. **Palliat Med** 1997 May;11(3):254–5. Comment on: Palliat Med 1996 Oct;10(4):284–92.
Effect of PG-SPI and PG-KII, two novel and natural tachykinins, on salivary secretion in the rat. Broccardo M, et al. **Peptides** 1996;17(4):729–31
Increased fluid secretion after adenoviral-mediated transfer of the aquaporin-1 cDNA to irradiated rat salivary glands. Delporte C, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3268–73
Sialogogue-related radioprotection of salivary gland function: the degranulation concept revisited. Coppes RP, et al. **Radiat Res** 1997 Sep;148(3):240–7
Irradiation-induced damage to the salivary glands: the role of redox-active iron and copper. Nagler R, et al. **Radiat Res** 1997 Apr;147(4):468–76
Atrial natriuretic factor modifies the composition of induced-salivary secretion in the rat. Bianciotti LG, et al. **Regul Pept** 1996 Sep 9;65(2):139–43
Salivary factors in children with recurrent parotitis. Part 1: Salivary flow rate, buffering capacity and inorganic components. Ericson S, et al. **Swed Dent J** 1996; 20(4):121–32
[Evaluation method of salivary gland function] Nagai T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:89–91 (9 ref.) **(Jpn)**
[Preparation and evaluation of solid dispersions of pilocarpine hydrochloride for alleviation of xerostomia] Oda M, et al. **Yakugaku Zasshi** 1997 Jan;117(1):59–64 (Eng. Abstr.) **(Jpn)**

VIROLOGY

Search for infectious HIV in gingival crevicular fluid and saliva of advanced AIDS patients with severe periodontitis [letter] Chebbi F, et al. **AIDS** 1997 Jun;11(7):927–8
The use of oral fluid to determine HIV-1 prevalence rates among men in Mexico City [letter] del Rio C, et al. **AIDS** 1996 Feb;10(2):233–4
Analysis of HIV-1 load in blood, semen and saliva: evidence for different viral compartments in a cross-sectional and longitudinal study [see comments] Liuzzi G, et al. **AIDS** 1996 Dec;10(14):F51–6. Comment in: AIDS 1997 Jul;11(8):1058–9.
HIV-1 viral load in blood, semen and saliva [letter; comment] Vernazza PL, et al. **AIDS** 1997 Jul;11(8):1058–9. Comment on: AIDS 1996 Dec;10(14):F51–6.
Detection of HTLV type I provirus by in situ polymerase chain reaction in mouthwash mononuclear cells of HAM/TSP patients and HTLV type I carriers. Achiron A, et al. **AIDS Res Hum Retroviruses** 1997 Aug 10; 13(12):1067–70
Accuracy of oral specimen testing for human immunodeficiency virus. Emmons W. **Am J Med** 1997 Apr 1;102(4A):15–20 (41 ref.)
Future applications of oral fluid specimen technology. George JR, et al. **Am J Med** 1997 Apr 1;102(4A):21–5
Oral diagnostic testing for detecting human immunodeficiency virus-1 antibodies: a technology whose time has come. Malamud D. **Am J Med** 1997 Apr 1; 102(4A):9–14 (37 ref.)
Transmission of human immunodeficiency virus through saliva after a lip bite [letter] Khajotia RR, et al. **Arch Intern Med** 1997 Sep 8;157(16):1901
Lack of detection of human immunodeficiency virus type 1 in the saliva of infected children and adolescents. Melvin AJ, et al. **Arch Pediatr Adolesc Med** 1997 Mar; 151(3):228–32
Hepatitis C virus in saliva of haemophiliac patients attending an oral surgery unit. Roy KM, et al. **Br J Oral Maxillofac Surg** 1996 Apr;34(2):162–5
Comparison of saliva and serum for human immunodeficiency virus type 1 antibody testing in Uganda using a rapid recombinant assay. Grant RM, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):640–4
Kaposi's sarcoma herpesvirus-like DNA sequences in the saliva of individuals infected with human immunodeficiency virus. Boldogh I, et al. **Clin Infect Dis** 1996 Aug;23(2):406–7
Whole saliva dried on filter paper or diagnosis of HIV-1 infection by detection of antibody IgG to HIV-1 with ultrasensitive enzyme immunoassay using recombinant reverse transcriptase as antigen. Ishikawa S, et al. **J Clin Lab Anal** 1996;10(1):35–41
Presence of human herpesvirus 6 variants A and B in saliva and peripheral blood mononuclear cells of healthy adults. Aberle SW, et al. **J Clin Microbiol** 1996 Dec;34(12):3223–5
Detection of hepatitis G virus (GB virus C) RNA in human saliva. Chen M, et al. **J Clin Microbiol** 1997 Apr;35(4):973–5
New, ultrasensitive enzyme immunoassay for detecting vaccine- and disease-induced hepatitis A virus-specific immunoglobulin G in saliva. Ochnio JJ, et al. **J Clin Microbiol** 1997 Jan;35(1):98–101
Analysis of risk factors and evaluation of HIV testing in saliva and blood samples [letter] Solomon S, et al. **J Infect** 1997 Jan;34(1):85–6
Frequent detection of Kaposi's sarcoma-associated herpesvirus (human herpesvirus 8) DNA in saliva of human immunodeficiency virus-infected men: clinical and immunologic correlates. Koelle DM, et al. **J Infect Dis** 1997 Jul;176(1):94–102
ELISA for the detection of serum and saliva IgA against the BMRFI gene product of Epstein-Barr virus. Nadala EC, et al. **J Med Virol** 1996 Sep;50(1):93–6
Transmissible Kaposi's sarcoma-associated herpesvirus (human herpesvirus 8) in saliva of men with a history of Kaposi's sarcoma. Vieira J, et al. **J Virol** 1997 Sep; 71(9):7083–7
Detection of IgG antibody to Epstein-Barr virus viral capsid antigen in saliva by antibody capture radioimmunoassay. Vyse AJ, et al. **J Virol Methods** 1997 Jan;63(1-2):93–101
Relationship of cytomegalovirus to salivary gland dysfunction in HIV-infected patients. Greenberg MS, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Mar;83(3):334–9
Multi-center European evaluation of HIV testing on serum and saliva samples. François-Gérard C, et al. **Transfus Clin Biol** 1996;3(2):89–98

SALIVA, ARTIFICIAL

Corrosion of the intra-oral magnets by multi-species biofilms in the presence and absence of sucrose. Wilson M, et al. **Biomaterials** 1997 Jan;18(1):53–7

CHEMISTRY

Dissolution of stainless steel in artificial saliva. Lakatos-Varsányi M, et al. **Int J Oral Maxillofac Implants** 1997 May-Jun;12(3):387–98
Filler leachability of composites stored in distilled water or artificial saliva. Söderholm KJ, et al. **J Dent Res** 1996 Sep; 75(9):1692–9

METABOLISM

Metallic ion release in artificial saliva of titanium oral implants coupled with different metal superstructures. Cortada M, et al. **Biomed Mater Eng** 1997;7(3):213–20

PHARMACOLOGY

Influence of polymers for use in saliva substitutes on de- and remineralization of enamel in vitro. van der Reijden WA, et al. **Caries Res** 1997;31(3):216–23

THERAPEUTIC USE

Saliva substitutes or stimulants? [letter; comment] Davies A. **Palliat Med** 1997 May;11(3):254–5. Comment on: Palliat Med 1996 Oct;10(4):284–92.
Clinical trial of a mucin-containing oral spray for treatment of xerostomia in hospice patients. Sweeney MP, et al. **Palliat Med** 1997 May;11(3):225–32

SALIVARY DUCT CALCULI

IMMUNOLOGY

Anaphylactoid reaction in relation to sialolithiasis. Jorro Martinez G, et al. **Allergy** 1996 Aug;51(8):590–2

RADIONUCLIDE IMAGING

Increased submandibular gland uptake on thyroid scintigraphy due to Wharton's duct stone. Kipper MS, et al. **Clin Nucl Med** 1996 Nov;21(11):881–2

SURGERY

Laser surgery for sialolithiasis [letter; comment] Baurmash H. **J Oral Maxillofac Surg** 1996 Dec;54(12):1479. Comment on: J Oral Maxillofac Surg 1996 Jun;54(6):685–8; discussion 689.

THERAPY

Interventional sialography: a single-center experience. Davies RP, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):331–6
[Lithotripsy in the conservative treatment of salivary stones] Vavrina J, et al. **Schweiz Rundsch Med Prax** 1997 Mar 25;86(13):524–8 (Eng. Abstr.) **(Ger)**

SALIVARY DUCT STONES see **SALIVARY DUCT CALCULI**

SALIVARY DUCTS

Per oral balloon sialoplasty: results in the treatment of salivary duct stenosis. Brown AL, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):337–42
What is your diagnosis? Infiltrative lipoma with chronic salivary duct obstruction. Stubbs WP, et al. **J Am Vet Med Assoc** 1996 Jul 1;209(1):55–6
Sialoendoscopy: three years' experience as a diagnostic and treatment modality. Nahlieli O, et al. **J Oral Maxillofac Surg** 1997 Sep;55(9):912–8;discussion 919–20
Obstructive sialadenitis caused by intraparotid deposits of gold salts: a case report. Zuazua JS, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jun;81(6):649–51
Supposed parotid fistula following rhytidectomy [letter; comment] Gleason MC. **Plast Reconstr Surg** 1996 Oct; 98(5):908. Comment on: Plast Reconstr Surg 1996 Mar;97(3):641–2.
Salivary duct carcinoma metastasizing to the small bowel. Krušlin B, et al. **Tumori** 1996 Sep-Oct;82(5):502–4

CYTOLOGY

Histochemical staining of ducts in submandibular glands by DMAB-nitrite detects stored tissue kallikreins. Shori DK, et al. **Biochem Soc Trans** 1997 Feb;25(1):28S

DRUG EFFECTS

Different signalling pathways involved in transforming growth factor-beta 1-induced morphological change and type IV collagen synthesis in simian virus-40-immortalized normal human salivary gland duct and myoepithelial cell clones. Azuma M, et al. **Arch Oral Biol** 1996 May; 41(5):413–24
2-Acetylaminofluorene-produced selective cytotoxic damage of a ductal compartment and its repair in the submandibular gland of rats. Danz M, et al. **Cell Tissue Res** 1997 May;288(2):371–9

ENZYMOLOGY

Increased matrix metalloproteinase-2 activity induced by TGF-beta 1 in duct cells of human salivary gland is associated with the development of cyst formation in vivo. Azuma M, et al. **J Oral Pathol Med** 1996 Oct;25(9):467–73

IMMUNOLOGY

Ductal Fas antigen and the pathobiology of Sjögren's syndrome [editorial; comment] De Vita S. **Clin Exp Rheumatol** 1996 May-Jun;14(3):231–4. Comment on: Clin Exp Rheumatol 1996 May-Jun;14(3):309–11.
Expression of ductal Fas antigen in sialoadenitis of Sjögren's syndrome [see comments] Matsumura R, et al. **Clin Exp Rheumatol** 1996 May-Jun;14(3):309–11. Comment in: Clin Exp Rheumatol 1996 May-Jun;14(3):231–4.

METABOLISM

Elevation of intracellular cAMP by noradrenaline and vasoactive intestinal peptide in striated ducts isolated from the rabbit mandibular salivary gland. Evans RL, et al. **Arch Oral Biol** 1996 Jul;41(7):689–94
Bombesin-like peptide is present in duct cells in salivary glands: studies on normal and irradiated animals. Aalto Y, et al. **Neuropeptides** 1997 Apr;31(2):167–73

PATHOLOGY

Salivary duct carcinoma of the parotid gland. Report of a case with cytologic and immunocytochemical findings on fine needle aspiration biopsy. Colecchia M, et al. **Acta Cytol** 1997 Mar-Apr;41(2):593–7
High-resolution MR of the intraparotid facial nerve and parotid duct. Dailiana T, et al. **AJNR Am J Neuroradiol** 1997 Jan;18(1):165–72
Salivary duct carcinoma: a cytological and histopathological study. Simpson RH, et al. **Cytopathology** 1996 Apr; 7(2):141–4
MR sialography: initial experience using a T2-weighted fast SE sequence. Fischbach R, et al. **J Comput Assist Tomogr** 1997 Sep-Oct;21(5):826–30
Salivary duct carcinoma: a clinicopathologic study of three cases with a review of the literature. Minamiguchi S, et al. **Pathol Int** 1996 Aug;46(8):614–22 (22 ref.)
Mucoepidermoid carcinoma in a salivary duct cyst of the parotid gland. Contribution to the development of tumours in salivary gland cysts. Seifert G. **Pathol Res Pract** 1996 Dec;192(12):1211–7

RADIATION EFFECTS

Bombesin-like peptide is present in duct cells in salivary glands: studies on normal and irradiated animals. Aalto Y, et al. **Neuropeptides** 1997 Apr;31(2):167–73

RADIOGRAPHY see SIALOGRAPHY

SURGERY

The surgical management of drooling--a 15 year follow-up. O'Dwyer TP, et al. **Clin Otolaryngol** 1997 Jun;22(3):284–7
Diversion of salivary flow to treat drooling in patients with cerebral palsy. Becmeur F, et al. **J Pediatr Surg** 1996 Dec; 31(12):1629–33

SALIVARY DUCTS

TRANSPLANTATION

[Management of the dry eye with parotid duct transplantation: a summary on 40 cases] Zhang H, et al. **Yen Ko Hsueh Pao** 1995 Jun;11(2):67–9 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

Fine structure of tuft cells of the main excretory duct epithelium in the rat submandibular gland. Sato A, et al. **Anat Rec** 1997 Jul;248(3):325–31

SALIVARY GLAND CALCULI

DIAGNOSIS

Sialoendoscopy: three years' experience as a diagnostic and treatment modality. Nahlieli O, et al. **J Oral Maxillofac Surg** 1997 Sep;55(9):912–8;discussion 919–20

[Minor salivary gland lithiasis simulating a mucocele. Apropos of a case] Karengera D, et al. **Rev Stomatol Chir Maxillofac** 1997 Aug;98(2):81–3 (Eng. Abstr.) **(Fre)**

[Salivary calculi. Apropos of 41 cases] Karengera D, et al. **Rev Stomatol Chir Maxillofac** 1996 Oct;97(5):264–9 (Eng. Abstr.) **(Fre)**

[Salivary gland endoscopy: a new technique for diagnosis and treatment of sialolithiasis] Nahlieli O, et al. **Harefuah** 1997 May 15;132(10):693–5, 743 (Eng. Abstr.) **(Heb)**

ETIOLOGY

Bilateral parotid sialolithiasis in a patient with acquired immunodeficiency syndrome and immunoglobulin G multiple myeloma. Ottaviani F, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 May;83(5):552–4

RADIOGRAPHY

[The role of sialography in the evaluation of submandibular gland functions] Zhang F, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Nov; 30(6):337–9 **(Chi)**

SURGERY

Paresthesia of the cutaneous branch of the mylohyoid nerve after removal of a submandibular salivary gland [see comments] Marinho RO, et al. **J Oral Maxillofac Surg** 1997 Feb;55(2):170–1. Comment in: J Oral Maxillofac Surg 1997 Jul;55(7):788.

[Sialolithiasis of the submandibular gland: therapeutic options and technical notes] Berretta S, et al. **G Chir** 1996 Jun–Jul; 17(6–7):367–9 (Eng. Abstr.) **(Ita)**

THERAPY

Pulsed dye laser lithotripsy of submandibular gland salivary calculus. Ito H, et al. **J Laryngol Otol** 1996 Oct; 110(10):942–6

Sialoendoscopy: three years' experience as a diagnostic and treatment modality. Nahlieli O, et al. **J Oral Maxillofac Surg** 1997 Sep;55(9):912–8;discussion 919–20

Sialolithiasis of the submandibular gland in an 8-year-old child [letter] Steiner M, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):188

Salivary gland stones: US evaluation in shock wave lithotripsy. Ottaviani F, et al. **Radiology** 1997 Aug; 204(2):437–41

[Current status of minimally invasive treatment methods in sialolithiasis] Iro H, et al. **HNO** 1996 Feb;44(2):78–84 (19 ref.) (Eng. Abstr.) **(Ger)**

[Salivary gland endoscopy: a new technique for diagnosis and treatment of sialolithiasis] Nahlieli O, et al. **Harefuah** 1997 May 15;132(10):693–5, 743 (Eng. Abstr.) **(Heb)**

[Extracorporeal shock-wave lithotripsy for salivary gland calculi: role of ultrasonography] Rubaltelli L, et al. **Radiol Med (Torino)** 1996 Sep;92(3):274–8 **(Ita)**

ULTRASONOGRAPHY

Salivary gland stones: US evaluation in shock wave lithotripsy. Ottaviani F, et al. **Radiology** 1997 Aug; 204(2):437–41

[Extracorporeal shock-wave lithotripsy for salivary gland calculi: role of ultrasonography] Rubaltelli L, et al. **Radiol Med (Torino)** 1996 Sep;92(3):274–8 **(Ita)**

VETERINARY

Parotid sialolithiasis in a dog. Jeffreys DA, et al. **J Small Anim Pract** 1996 Jun;37(6):296–7

SALIVARY GLAND DISEASES

COMPLICATIONS

Stomatitis glandularis—two confirmed cases of a rare condition. Cannell H, et al. **Br Dent J** 1997 Mar 22; 182(6):222–5

Etiologies of the sicca syndrome: primary systemic amyloidosis and others. Richey TK, et al. **Int J Dermatol** 1996 Aug;35(8):553–7

Wegener's presenting as submandibular swelling. Singh S, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar; 14(1):81–2

[A case of gastric, pulmonary, and submandibular gland mucosa-associated lymphoid tissue lymphomas with colon and submandibular gland amyloidosis] Shirasaka D, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jun;94(6):402–6 **(Jpn)**

DIAGNOSIS

Salivary gland disorders and heredity. Wiedemann HR. **Am J Med Genet** 1997 Jan 20;68(2):222–4

Oral cryptococcosis: case report of salivary gland involvement in an AIDS patient. Monteil RA, et al. **J Oral Pathol Med** 1997 Jan;26(1):53–6

Fine-needle aspiration of the salivary glands. Zarka MA. **Pathology (Phila)** 1996;4(2):287–318 (52 ref.)

Diagnostic imaging in pediatric AIDS. Haller JO, et al. **Pediatr Clin North Am** 1997 Jun;44(3):721–40 (64 ref.)

EPIDEMIOLOGY

[Quantitative salivary gland scintigraphy—a recommended examination prior to and after radioiodine therapy] Bohuslavizki KH, et al. **Nuklearmedizin** 1997 Apr; 36(3):103–9 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Evidence for early and persistent impairment of salivary gland excretion after irradiation of head and neck tumours. Liem IH, et al. **Eur J Nucl Med** 1996 Nov;23(11):1485–90

Immediate inflammatory responses to adenovirus-mediated gene transfer in rat salivary glands. Adesanya MR, et al. **Hum Gene Ther** 1996 Jun 10;7(9):1085–93

Radiation-induced changes in the central nervous system and head and neck. Rabin BM, et al. **Radiographics** 1996 Sep; 16(5):1055–72 (24 ref.)

[Salivary glands and the organism—interrelations and correlating reactions] Seifert G. **Laryngorhinootologie** 1997 Jun;76(6):387–93 (39 ref.) (Eng. Abstr.) **(Ger)**

GENETICS

Salivary gland disorders and heredity. Wiedemann HR. **Am J Med Genet** 1997 Jan 20;68(2):222–4

IMMUNOLOGY

Current concepts of autoimmune exocrinopathy: immunologic mechanisms in the salivary pathology of Sjögren's syndrome. Fox PC, et al. **Crit Rev Oral Biol Med** 1996;7(2):144–58 (111 ref.)

NURSING

A guide to salivary gland disorders. McEwen DR, et al. **AORN J** 1997 Mar;65(3):554–6, 559–67; quiz 568–9, 571–2 (36 ref.)

PATHOLOGY

Salivary gland lesions with a prominent lymphoid component: cytologic findings and differential diagnosis by fine-needle aspiration biopsy. Chai C, et al. **Diagn Cytopathol** 1997 Sep;17(3):183–90

Fine-needle biopsy of pediatric lesions: a three-year study in an outpatient biopsy clinic. Eisenhut CC, et al. **Diagn Cytopathol** 1996 Feb;14(1):43–50

Amyloid deposits in labial salivary glands identified by electron microscopy. Delgado WA, et al. **J Oral Pathol Med** 1997 Jan;26(1):51–2

Fine-needle aspiration cytology of lymphoid lesions of the salivary gland: a review of 35 cases. MacCallum PL, et al. **J Otolaryngol** 1996 Oct;25(5):300–4

Lupus erythematosus profundus around the salivary glands: a case resembling submandibular salivary gland disease. Ogura N, et al. **Lupus** 1997;6(5):477–9

Kimura's disease: a clinicopathologic study of 54 Chinese patients. Li TJ, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Nov;82(5):549–55

Mucoepidermoid carcinoma in a salivary duct cyst of the parotid gland. Contribution to the development of tumours in salivary gland cysts. Seifert G. **Pathol Res Pract** 1996 Dec;192(12):1211–7

SURGERY

A guide to salivary gland disorders. McEwen DR, et al. **AORN J** 1997 Mar;65(3):554–6, 559–67; quiz 568–9, 571–2 (36 ref.)

THERAPY

[The organization of specialized care for patients with diseases and traumatic lesions of the salivary glands] Afanas'ev VV, et al. **Stomatologiia (Mosk)** 1996;Spec No:43–4 **(Rus)**

VETERINARY

Lipomatous infiltration of the canine salivary gland. Brown PJ, et al. **J Small Anim Pract** 1997 Jun;38(6):234–6

Lipomatosis causing tumour-like swelling of a mandibular salivary gland in a dog. Bindseil E, et al. **Vet Rec** 1997 May 31;140(22):583–4

SALIVARY GLAND FISTULA

DIAGNOSIS

[A rare case of a preauricular fistula] Semkin VA, et al. **Stomatologiia (Mosk)** 1995;74(6):72–3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Palatal trauma: an unusual cause of a parotid sinus. Grieve JP, et al. **Int J Pediatr Otorhinolaryngol** 1996 Feb; 34(3):253–7

Salivary fistula after secondary rhytidoplasty [letter; comment] Muirragui AG. **Plast Reconstr Surg** 1997 Mar; 99(3):919. Comment on: Plast Reconstr Surg 1996 Mar;97(3):641–2.

SALIVARY GLAND NEOPLASMS

Lymphoepithelial carcinoma of the minor salivary gland. Worley NK, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jun;123(6):638–40

[A rare case of thyroid carcinoma associated with salivary gland carcinoma] Napolitano L, et al. **Ann Ital Chir** 1995 Sep–Oct;66(5):719–22 (Eng. Abstr.) **(Ita)**

CHEMISTRY

DNA flow cytometry and glial fibrillary acidic protein reactivity in pleomorphic adenomas of the salivary glands. Desinan L, et al. **Anal Quant Cytol Histol** 1996 Oct; 18(5):355–60

Epithelial-myoepithelial carcinoma of the salivary glands: a clinico-pathologic, immunohistochemical and DNA flow cytometric study of three cases. Tralongo V, et al. **Anticancer Res** 1997 Jan–Feb;17(1B):761–8

Proliferating patterns of salivary gland adenocarcinomas with the use of PCNA labeling. Zhao M, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2693–8

The evaluation of salivary gland tumours using proliferating cell nuclear antigen. Trendell-Smith NJ, et al. **J Laryngol Otol** 1997 Jun;111(6):551–5

Expression and mutations of p53 in salivary gland tumours. Kärjä VJ, et al. **J Oral Pathol Med** 1997 May;26(5):217–23

Immunohistochemical localization of fibroblast growth factor-1 (FGF-1), FGF-2 and fibroblast growth factor receptor-1 (FGFR-1) in pleomorphic adenoma of the salivary glands. Myoken Y, et al. **J Oral Pathol Med** 1997 Jan;26(1):17–22

Immunohistochemical study of acinic cell carcinoma of minor salivary gland. Crivelini MM, et al. **Oral Oncol** 1997 May; 33(3):204–8

Identification of Metallothionein- and parathyroid hormone-related peptide (PTHrP)-positive cells in salivary gland tumours. Sunardhi-Widyaputra S, et al. **Pathol Res Pract** 1995 Nov;191(11):1092–8

Immunohistochemical pattern of Bcl-2- and PTHrP-positive cells in primary, in recurrent and in carcinoma in pleomorphic adenomas. Sunardhi-Widyaputra S, et al. **Pathol Res Pract** 1995 Dec;191(12):1186–91

[An electron microscopic histochemical study on proteoglycans in salivary gland myoepithelioma] Wang J, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Jul; 30(4):215–7, 256 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Salivary gland lymphoplasmacytoid lymphoma with nodular cutaneous amyloid deposition and lambda chain paraproteinaemia. Badell A, et al. **Br J Dermatol** 1996 Aug; 135(2):327–9

CONGENITAL

Salivary gland anlage tumor. A case with widespread necrosis and large cyst formation. Michal M, et al. **Pathology** 1996 May;28(2):128–30

DIAGNOSIS

Sialoblastoma (embryoma): MR findings of a rare pediatric salivary gland tumor. Som PM, et al. **AJNR Am J Neuroradiol** 1997 May;18(5):847–50

Cytokeratin 20 immunoreactivity distinguishes Merkel cell (primary cutaneous neuroendocrine) carcinomas and salivary gland small cell carcinomas from small cell carcinomas of various sites. Chan JK, et al. **Am J Surg Pathol** 1997 Feb;21(2):226–34

Cytologic diagnosis of acinic-cell carcinoma of salivary glands. Nagel H, et al. **Diagn Cytopathol** 1997 May; 16(5):402–12

Poorly-differentiated adenoid cystic carcinoma: cytologic appearance in fine-needle aspirates of distant metastases. Yu GH, et al. **Diagn Cytopathol** 1996 Nov;15(4):296–300 (27 ref.)

MRI in carcinomatous encephalitis. Shirai H, et al. **Neuroradiology** 1997 Jun;39(6):437–40

[Comments on the clinical picture of Warthin's tumors] Gierek T, et al. **Otolaryngol Pol** 1995;49(6):549–54 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Cisplatin, doxorubicin and cyclophosphamide in advanced salivary gland carcinoma. A phase II trial of 22 patients. Licitra L, et al. **Ann Oncol** 1996 Aug;7(6):640–2

Emergence of osteoblast–like cells in a neoplastic human salivary cancer cell line after treatment with 22–oxa–1alpha, 25–dihydroxyvitamin D3. Sato M, et al. **Cancer Lett** 1997 May 19;115(2):149–60

Induction of cyclin–dependent kinase inhibitor, p21WAF1, by treatment with 3,4–dihydro–6–[4–(3,4)–dimethoxybenzoyl)–1–piperazinyl]–2(1H)–quinoline (vesnarinone) in a human salivary cancer cell line with mutant p53 gene. Sato M, et al. **Cancer Lett** 1997 Jan 30;112(2):181–9

ENZYMOLOGY

Immunohistochemical evaluation of transglutaminase C in tumours of salivary glands. Lee CH, et al. **Eur J Cancer B Oral Oncol** 1996 Nov;32B(6):401–6

EPIDEMIOLOGY

Diet and the risk of salivary gland cancer. Horn–Ross PL, et al. **Am J Epidemiol** 1997 Jul 15;146(2):171–6

Cancers of the salivary gland: workplace risks among women and men. Swanson GM, et al. **Ann Epidemiol** 1997 Aug; 7(6):369–74

Tumors of the major and minor salivary glands: review of 25 years of experience. Nagler RM, et al. **Anticancer Res** 1997 Jan–Feb;17(1B):701–7

Salivary gland tumors among atomic bomb survivors, 1950–1987. Saku T, et al. **Cancer** 1997 Apr 15;79(8):1465–75

ABO blood groups and salivary gland tumors (Alabama, United States). Pinkston JA, et al. **Cancer Causes Control** 1996 Nov;7(6):572–4

Environmental factors and the risk of salivary gland cancer. Horn–Ross PL, et al. **Epidemiology** 1997 Jul;8(4):414–9

Are cancers of the salivary gland increasing? Experience from Connecticut, USA. Zheng T, et al. **Int J Epidemiol** 1997 Apr;26(2):264–71

Intraoral minor salivary gland tumors: a retrospective study of 62 cases in a Venezuelan population. Rivera–Bastidas H, et al. **J Oral Pathol Med** 1996 Jan;25(1):1–4

Malignant salivary gland tumours in Sweden 1960–1989—an epidemiological study. Ostman J, et al. **Oral Oncol** 1997 May;33(3):169–76

ETIOLOGY

Environmental factors and the risk of salivary gland cancer. Horn–Ross PL, et al. **Epidemiology** 1997 Jul;8(4):414–9

Warthin's tumor and cigarette smoking. Vories AA, et al. **South Med J** 1997 Apr;90(4):416–8

GENETICS

Genotypic alterations in benign and malignant salivary gland tumors: histogenetic and clinical implications. el–Naggar AK, et al. **Am J Surg Pathol** 1997 Jun;21(6):691–7

Cytogenetical observations in a cultured polymorphous low–grade adenocarcinoma originating from the minor salivary glands. Dahlenfors R, et al. **Anticancer Res** 1997 Jan–Feb;17(1A):105–6

Ongoing Ig gene hypermutation in salivary gland mucosa–associated lymphoid tissue–type lymphomas. Bahler DW, et al. **Blood** 1997 May 1;89(9):3335–44

Detection of numeric abnormalities of chromosome 17 and p53 deletions by fluorescence in situ hybridization in pleomorphic adenomas and carcinomas in pleomorphic adenoma. Correlation with p53 expression. Li X, et al. **Cancer** 1997 Jun 15;79(12):2314–9

Molecular characterization of a complex chromosomal rearrangement in a pleomorphic salivary gland adenoma involving the 3'–UTR of HMGIC. Geurts JM, et al. **Cancer Genet Cytogenet** 1997 Jun;95(2):198–205

Expression of reciprocal hybrid transcripts of HMGIC and FHIT in a pleomorphic adenoma of the parotid gland. Geurts JM, et al. **Cancer Res** 1997 Jan 1;57(1):13–7

The t(11;18)(q21;q21) chromosome translocation is a frequent and specific aberration in low–grade but not high–grade malignant non–Hodgkin's lymphomas of the mucosa–associated lymphoid tissue (MALT–) type. Ott G, et al. **Cancer Res** 1997 Sep 15;57(18):3944–8

Analysis of c–erbB–2 amplification in salivary gland tumours by differential polymerase chain reaction. Birek C, et al. **Eur J Cancer B Oral Oncol** 1994 Jan;30B(1):47–50

Identification of a yeast artificial chromosome spanning the 8q12 translocation breakpoint in pleomorphic adenomas with t(3;8)(p21;q12). Röijer E, et al. **Genes Chromosomes Cancer** 1996 Nov;17(3):166–71

Chromosomal and DNA ploidy characterization of salivary gland neoplasms by combined FISH and flow cytometry. El–Naggar AK, et al. **Hum Pathol** 1997 Aug;28(8):881–6

Mutations associated with carcinomas arising from pleomorphic adenomas of the salivary glands. Yamamoto Y, et al. **Hum Pathol** 1996 Aug;27(8):782–6

Increased tumor proliferation and genomic instability without decreased apoptosis in MMTV–ras mice deficient in p53. Hundley JE, et al. **Mol Cell Biol** 1997 Feb;17(2):723–31

Promoter swapping between the genes for a novel zinc finger protein and beta–catenin in pleiomorphic adenomas with t(3;8)(p21;q12) translocations [published erratum appears in Nat Genet 1997 Apr;15(4):411] Kas K, et al. **Nat Genet** 1997 Feb;15(2):170–4

Noninvasive and minimally invasive carcinoma ex mixed tumor: a clinicopathologic and ploidy study of 12 patients with major salivary tumors of low (or no?) malignant potential. Brandwein M, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jun;81(6):655–64

Cytogenetic analysis of salivary gland type tumors. Mark HF, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Aug;82(2):187–92

Triplet repeat polymorphism in the NOTCH4 gene with the human major histocompatibility complex in a healthy population and patients with a salivary gland tumor in Japan. Ando A, et al. **Tissue Antigens** 1997 Jul;50(1):66–70

Observations by chromosome banding, FISH and immunohistochemistry in an adenoid cystic carcinoma with del(17)(p13) as the sole deviation. Röijer E, et al. **Virchows Arch** 1997 Apr;430(4):339–42

[Relationship between c–erbB–2 oncoprotein expression and prognosis in salivary gland malignant pleomorphic adenoma] Yan Y, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Nov; 30(6):326–8, 383 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Ongoing Ig gene hypermutation in salivary gland mucosa–associated lymphoid tissue–type lymphomas. Bahler DW, et al. **Blood** 1997 May 1;89(9):3335–44

Immunocompetent cells in benign and malignant salivary gland tumors. Kärjä VJ, et al. **Gen Diagn Pathol** 1996 Oct; 142(2):75–81

Chondroid syringoma: an immunohistochemical study using antibodies to Ca 15–3, KA–93, Ca 19–9, CD44 and BM–1. Tsuji T. **J Cutan Pathol** 1996 Dec;23(6):530–6

Comparison of integrin alpha chain expression in benign and malignant salivary gland tumors. Franchi A, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 May;83(5):588–95

Salivary gland anlage tumor of the nasopharynx: a clinicopathologic and immunohistochemical study of three cases. Boccon–Gibod LA, et al. **Pediatr Pathol Lab Med** 1996 Nov–Dec;16(6):973–83 (23 ref.)

METABOLISM

Immunomorphological characteristics of pleomorphic adenoma of salivary glands. Angelov A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1996 Jun–Sep; 39(3–4):67–75

Induction of cyclin–dependent kinase inhibitor, p21WAF1, by treatment with 3,4–dihydro–6–[4–(3,4)–dimethoxybenzoyl)–1–piperazinyl]–2(1H)–quinoline (vesnarinone) in a human salivary cancer cell line with mutant p53 gene. Sato M, et al. **Cancer Lett** 1997 Jan 30;112(2):181–9

Extracellular matrices expression in invasion area of adenoid cystic carcinoma of salivary glands. Shintani S, et al. **Cancer Lett** 1997 Jun 3;116(1):9–14

Enhancement of bFGF export associated with malignant progression of human salivary gland cell clones. Azuma M, et al. **Int J Cancer** 1997 May 29;71(5):891–6

Immunoexpression of c–erbB–2 and p53 in benign and malignant salivary neoplasms with myoepithelial differentiation. Rosa JC, et al. **J Clin Pathol** 1997 Aug; 50(8):661–3

p53 oncoprotein accumulation in adenoid cystic carcinoma of parotid and palatine salivary glands. Zhu QR, et al. **Pathology** 1997 May;29(2):154–8

Bcl–2 immunoreactivity in salivary gland neoplasms is unrelated to the expression of mRNA for natural killer cell stimulatory cytokines interleukin (IL)–2 and IL–12. Hellquist HB, et al. **Virchows Arch** 1996 Oct; 429(2–3):149–58

Coexpression of p53 and c–erbB–2 proteins is associated with histological type, tumour stage, and cell proliferation in malignant salivary gland tumours. Kamio N. **Virchows Arch** 1996 May;428(2):75–83

PATHOLOGY

Fine needle aspiration biopsy of the salivary glands. A five–year experience with emphasis on diagnostic pitfalls. Cajulis RS, et al. **Acta Cytol** 1997 Sep–Oct;41(5):1412–20

Salivary duct carcinoma of the parotid gland. Report of a case with cytologic and immunocytochemical findings on fine needle aspiration biopsy. Colecchia M, et al. **Acta Cytol** 1997 Mar–Apr;41(2):593–7

Fine needle aspiration biopsy of salivary gland, 1985–1995. Cristallini EG, et al. **Acta Cytol** 1997 Sep–Oct;41(5):1421–5

Fine needle aspiration cytology of cellular pleomorphic adenoma. Elsheikh TM, et al. **Acta Cytol** 1996 Nov–Dec; 40(6):1165–75

Fine needle aspiration of pleomorphic adenoma and adenoid cystic carcinoma of salivary gland origin. Kapadia SB, et al. **Acta Cytol** 1997 Mar–Apr;41(2):487–92

Differential diagnosis of adenoid cystic carcinoma from pleomorphic adenoma of the salivary gland on fine needle aspiration cytology. Lee SS, et al. **Acta Cytol** 1996 Nov–Dec;40(6):1246–52

Fine needle aspiration biopsy findings in lymphoepithelial carcinoma of salivary gland. Safneck JR, et al. **Acta Cytol** 1997 Jul–Aug;41(4):1023–30

Fine needle aspiration cytology of pleomorphic adenoma. An analysis of 212 cases. Viguer JM, et al. **Acta Cytol** 1997 May–Jun;41(3):786–94

Uncommon tumors of the salivary gland in fine needle aspiration biopsies. A surgeon's perspective. Yang GC, et al. **Acta Cytol** 1997 Jul–Aug;41(4):1015–22

Major salivary gland lesions: correlation of MR findings with flow cytometric DNA analysis and prognosis. Takashima S, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1297–304

Salivary gland cystadenocarcinomas. A clinicopathologic study of 57 cases. Foss RD, et al. **Am J Surg Pathol** 1996 Dec;20(12):1440–7

Salivary gland–like tumors of the sellar region. Hampton TA, et al. **Am J Surg Pathol** 1997 Apr;21(4):424–34

Genotypic alterations in benign and malignant salivary gland tumors: histogenetic and clinical implications. el–Naggar AK, et al. **Am J Surg Pathol** 1997 Jun;21(6):691–7

Malignant myoepithelioma of the minor salivary glands arising in a pleomorphic adenoma. Tralongo V, et al. **Anticancer Res** 1997 Jul–Aug;17(4A):2671–5

Epithelial–myoepithelial carcinoma of the salivary glands: a clinico–pathologic, immunohistochemical and DNA flow cytometric study of three cases. Tralongo V, et al. **Anticancer Res** 1997 Jan–Feb;17(1B):761–8

Clear cell carcinoma of the minor salivary glands. Report of a case. Triantafillidou E, et al. **Aust Dent J** 1997 Feb; 42(1):8–10

Polymorphous low–grade adenocarcinoma of the palate in a 16–year–old male patient [letter] Minić AJ. **Br J Oral Maxillofac Surg** 1996 Dec;34(6):540–1

Undifferentiated carcinoma of the major salivary glands. Sheen TS, et al. **Cancer** 1997 Aug 1;80(3):357–63

Emergence of osteoblast–like cells in a neoplastic human salivary cancer cell line after treatment with 22–oxa–1alpha, 25–dihydroxyvitamin D3. Sato M, et al. **Cancer Lett** 1997 May 19;115(2):149–60

Primary epithelial tumors of salivary glands—histogenesis, histomorphological and immunohistochemical implications—diagnosis and clinical management. Shrestha P, et al. **Crit Rev Oncol Hematol** 1996 Jul;23(3):239–60 (281 ref.)

Lymphoid infiltrates of the salivary glands: pathology, biology and clinical significance. DiGiuseppe JA, et al. **Curr Opin Oncol** 1996 May;8(3):232–7 (36 ref.)

Salivary epithelial–myoepithelial carcinoma: report of a case misinterpreted as pleomorphic adenoma on fine needle aspiration (FNA). Stewart CJ, et al. **Cytopathology** 1997 Jun;8(3):203–9

Sources of diagnostic error in the fine–needle aspiration diagnosis of Warthin's tumor and clues to a correct diagnosis. Ballo MS, et al. **Diagn Cytopathol** 1997 Sep; 17(3):230–4

Salivary gland anlage tumor: cytologic features in a case examined by fine–needle aspiration. Bondeson L, et al. **Diagn Cytopathol** 1997 Jun;16(6):518–21

Salivary gland lesions with a prominent lymphoid component: cytologic findings and differential diagnosis by fine–needle aspiration biopsy. Chai C, et al. **Diagn Cytopathol** 1997 Sep;17(3):183–90

Fine–needle aspiration biopsy of salivary duct carcinoma: report of five cases. Fýrat P, et al. **Diagn Cytopathol** 1997 Jun;16(6):526–30

Fine–needle sampling of salivary gland lesions. IV. Review of 50 cases of mucoepidermoid carcinoma with histologic correlation. Klijanienko J, et al. **Diagn Cytopathol** 1997 Aug;17(2):92–8 (41 ref.)

Fine–needle sampling of salivary gland lesions. III. Cytologic and histologic correlation of 75 cases of adenoid cystic carcinoma: review and experience at the Institut Curie with emphasis on cytologic pitfalls. Klijanienko J, et al. **Diagn Cytopathol** 1997 Jul;17(1):36–41

Fine–needle sampling of salivary gland lesions. II. Cytology and histology correlation of 71 cases of Warthin's tumor (adenolymphoma). Klijanienko J, et al. **Diagn Cytopathol** 1997 Mar;16(3):221–5

Squamous cells in fine–needle aspiration biopsies of salivary gland lesions: potential pitfalls in cytologic diagnosis. Mooney EE, et al. **Diagn Cytopathol** 1996 Dec;15(5):447–52

Poorly–differentiated adenoid cystic carcinoma: cytologic appearance in fine–needle aspirates of distant metastases. Yu GH, et al. **Diagn Cytopathol** 1996 Nov;15(4):296–300 (27 ref.)

Prognostic significance of DNA ploidy in mucoepidermoid carcinoma. Gemryd P, et al. **Eur Arch Otorhinolaryngol** 1997;254(4):180–5

Hybrid tumours of salivary glands. Definition and classification of five rare cases. Seifert G, et al. **Eur J Cancer B Oral Oncol** 1996 Jul;32B(4):251–9

Low malignant intraductal carcinoma on the hard palate: a variant of salivary duct carcinoma? Tatemoto Y, et al. **Eur J Cancer B Oral Oncol** 1996 Jul;32B(4):275–7

Comparison of proliferating cell nuclear antigen index in benign and malignant salivary pleomorphic adenoma. Yang L, et al. **Eur J Cancer B Oral Oncol** 1994 Jan;30B(1):56–60

Immunocompetent cells in benign and malignant salivary gland tumors. Kärjä VJ, et al. **Gen Diagn Pathol** 1996 Oct; 142(2):75–81

Cell proliferation in salivary gland tumors. Skálová A, et al. **Gen Diagn Pathol** 1996 Jun;142(1):7–16 (75 ref.)

Intra–vascular tumour in pleomorphic adenomas—a report of four cases. Altini M, et al. **Histopathology** 1997 Jul;

31(1):55-9
Solitary fibrous tumour of the major salivary glands. Ferreiro JA, et al. **Histopathology** 1996 Mar;28(3):261-4
Clear cell malignant myoepithelioma of the salivary glands. Michal M, et al. **Histopathology** 1996 Apr;28(4):309-15
T- and T/natural killer-cell lymphomas of the salivary gland: a clinicopathologic, immunohistochemical and molecular study of six cases. Chan JK, et al. **Hum Pathol** 1997 Feb; 28(2):238-45
Well-differentiated acinic cell carcinoma of salivary glands associated with lymphoid stroma. Michal M, et al. **Hum Pathol** 1997 May;28(5):595-600
Salivary gland lymphoid infiltrates associated with lymphoepithelial lesions: a clinicopathologic, immunophenotypic, and genotypic study [see comments] Quintana PG, et al. **Hum Pathol** 1997 Jul;28(7):850-61. Comment in: Hum Pathol 1997 Jul;28(7):757-9.
Epithelial-myoepithelial carcinoma of the lung: immunohistochemical and ultrastructural observations and review of the literature. Wilson RW, et al. **Hum Pathol** 1997 May;28(5):631-5 (32 ref.)
Loss of heterozygosity and microsatellite alterations in p53 and RB genes in adenoid cystic carcinoma of the salivary glands. Yamamoto Y, et al. **Hum Pathol** 1996 Nov; 27(11):1204-10
Four cases of polymorphous low-grade adenocarcinoma. Crean SJ, et al. **Int J Oral Maxillofac Surg** 1996 Feb; 25(1):40-4
Pleomorphic adenoma of the palate in a child: 9-year follow-up. de Courten A, et al. **Int J Oral Maxillofac Surg** 1996 Aug;25(4):293-5 (13 ref.)
Heterotopic salivary gland adenocarcinoma in the cervical region. Hata T, et al. **Int J Oral Maxillofac Surg** 1997 Aug; 26(4):290-2
Pleomorphic adenoma of the palate in children: report of a case. López-Cedrún JL, et al. **Int J Oral Maxillofac Surg** 1996 Jun;25(3):206-7 (11 ref.)
Fine needle aspiration of salivary gland tumors. Shintani S, et al. **Int J Oral Maxillofac Surg** 1997 Aug;26(4):284-6
A salivary gland-type monomorphic adenoma with trabecular proliferation in the lung. Shirasaki A, et al. **Intern Med** 1995 Nov;34(11):1086-8
Multiple malignant cylindromas of skin in association with basal cell adenocarcinoma with adenoid cystic features of minor salivary gland. Antonescu CR, et al. **J Cutan Pathol** 1997 Aug;24(7):449-53
Prenatal development of human major salivary glands. Histological and immunohistochemical characteristics with reference to adult and neoplastic salivary glands. Chi JG. **J Korean Med Sci** 1996 Jun;11(3):203-16 (47 ref.)
Carcinoma ex pleomorphic adenoma of the palate--a case report. Kim KM, et al. **J Korean Med Sci** 1997 Feb; 12(1):63-6
Stromal bone formation in pleomorphic adenoma of minor salivary gland origin. Takeda Y, et al. **J Nihon Univ Sch Dent** 1996 Jul;38(2):102-4 (6 ref.)
Sialadenoma papilliferum of the hard palate: a case report and review of literature. Asahina I, et al. **J Oral Maxillofac Surg** 1997 Sep;55(9):1000-3 (25 ref.)
Retromolar swelling in a 61-year-old woman [clinical conference] Chafitz ED, et al. **J Oral Maxillofac Surg** 1996 Dec;54(12):1446-50
Papillary cystadenoma of the palate: a case report and ultrastructural study. Guccion JG, et al. **J Oral Maxillofac Surg** 1997 Jul;55(7):759-64
Basaloid monomorphic adenoma presenting as an expanding buccal mass: a case report. Lucas JH, et al. **J Oral Maxillofac Surg** 1997 Jun;55(6):631-4
Red-blue lesion of the hard palate [clinical conference] Manganaro AM, et al. **J Oral Maxillofac Surg** 1997 Feb; 55(2):159-65
Immunohistochemical evaluation of the Ca(2+)-binding S-100 proteins S-100A1, S-100A2, S-100A4, S-100A6 and S-100B in salivary gland tumors. Huang JW, et al. **J Oral Pathol Med** 1996 Nov;25(10):547-55
Sialadenoma papilliferum: an immunohistochemical study of five cases. Maiorano E, et al. **J Oral Pathol Med** 1996 Jul; 25(6):336-42
Quantitation and localization of cycling tumor cells in pleomorphic adenomas and myoepitheliomas: an immunohistochemical analysis. Norberg L, et al. **J Oral Pathol Med** 1997 Mar;26(3):124-8
Hyalinizing clear cell carcinoma: report of a case. Urban SD, et al. **J Oral Pathol Med** 1996 Nov;25(10):562-4
Primary non-Hodgkin's lymphoma of the salivary glands. An analysis of 22 cases. Wolvlus EB, et al. **J Oral Pathol Med** 1996 Apr;25(4):177-81
Tumour growth fraction and apoptosis in salivary gland acinic cell carcinomas. Prognostic implications of Ki-67 and bcl-2 expression and of in situ end labelling (TUNEL). Hellquist HB, et al. **J Pathol** 1997 Mar;181(3):323-9
MALT lymphoma [letter; comment] Thejpal R, et al. **Lancet** 1997 Feb 8;349(9049):434-5. Comment on: Lancet 1996 Nov 30;348(9040):1526-7.
Atypical features in salivary gland mixed tumors: their relationship to malignant transformation. Auclair PL, et al. **Mod Pathol** 1996 Jun;9(6):652-7
Effect of individual and multiple antioxidant vitamins on growth and morphology of human nontumorigenic and tumorigenic parotid acinar cells in culture. Prasad KN, et al. **Nutr Cancer** 1996;26(1):11-9
Noninvasive and minimally invasive carcinoma ex mixed tumor: a clinicopathologic and ploidy study of 12 patients with major salivary tumors of low (or no?) malignant potential. Brandwein M, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jun;81(6):655-64
Computer expert system for the histopathologic diagnosis of salivary gland neoplasms. Firriolo FJ, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Aug;82(2):179-86
Polymorphous low-grade adenocarcinoma: glial fibrillary acidic protein staining in the differential diagnosis with cellular mixed tumors. Gnepp DR, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jun;83(6):691-5
Stromal melanocytosis of an adenoid cystic carcinoma arising from the palatal minor salivary gland. Takeda Y. **Pathol Int** 1996 Jun;46(6):467-70 (19 ref.)
Oncocytic adenocarcinoma of minor salivary gland. An unusual glossal presentation of a minor salivary gland tumor. Ruby SG, et al. **Pathol Res Pract** 1996 Aug; 192(8):856-64; discussion 865-8
Salivary gland anlage tumor. A case with widespread necrosis and large cyst formation. Michal M, et al. **Pathology** 1996 May;28(2):128-30
Salivary gland anlage tumor of the nasopharynx: a clinicopathologic and immunohistochemical study of three cases. Boccon-Gibod LA, et al. **Pediatr Pathol Lab Med** 1996 Nov-Dec;16(6):973-83 (23 ref.)
Adenocarcinoma of minor salivary gland origin with skeletal metastasis in a child. McDermott M, et al. **Pediatr Pathol Lab Med** 1996 Jan-Feb;16(1):89-98
Massive pleural effusion as isolated manifestation of metastatic spread of salivary adenoid cystic carcinoma. Torre W, et al. **Respir Med** 1997 Mar;91(3):169-70
Clear cell tumors of the salivary glands, jaws, and oral mucosa. Maiorano E, et al. **Semin Diagn Pathol** 1997 Aug; 14(3):203-12 (80 ref.)
Salivary duct carcinoma metastasizing to the small bowel. Krušlin B, et al. **Tumori** 1996 Sep-Oct;82(5):502-4
Cell proliferation in salivary gland adenocarcinomas with myoepithelial participation. A study of 78 cases. Fonseca I, et al. **Virchows Arch** 1997 Mar;430(3):227-32
Effect of spatial arrangement of the basement membrane on cultured pleomorphic adenoma cells. Study by immunocytochemistry and electron and confocal microscopy. Jaeger MM, et al. **Virchows Arch** 1997 Jun; 430(6):467-77
A hybrid carcinoma: adenoid cystic carcinoma and salivary duct carcinoma of the salivary gland. An immunohistochemical study. Kamio N, et al. **Virchows Arch** 1997 Jun;430(6):495-500
Coexpression of p53 and c-erbB-2 proteins is associated with histological type, tumour stage, and cell proliferation in malignant salivary gland tumours. Kamio N. **Virchows Arch** 1996 May;428(2):75-83
[Human mucoepidermoid carcinoma MEC-1 cells induced differentiation by HMBA] Chen Y, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1996 Jan; 31(1):28-30 (Eng. Abstr.) **(Chi)**
[Fuchsinophilic (orceinophilic) intercellular interstitium of salivary gland mixed tumors] Feyrter F. **Frankf Z Pathol** 1966;75(4):317-20 **(Ger)**
[Absence of herpesvirus saimiri STPC oncogene in salivary gland tumors and epithelial thymus tumors] Gattenlöhner S, et al. **Verh Dtsch Ges Pathol** 1996;80:312-7 (Eng. Abstr.) **(Ger)**
[Proliferation and differentiation of human salivary gland adenocarcinoma cell line HSG] Ota M, et al. **Hum Cell** 1996 Mar;9(1):79-88 (Eng. Abstr.) **(Jpn)**
[Immunohistological study on proliferative activities and expression of c-erbB-2 oncoprotein in salivary gland tumors] Kuroda Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Mar;99(3):353-60 (Eng. Abstr.) **(Jpn)**
[Comments on the clinical picture of Warthin's tumors] Gierek T, et al. **Otolaryngol Pol** 1995;49(6):549-54 (Eng. Abstr.) **(Pol)**
[Clinico-morphologic characterization of mucoepidermoid carcinoma of the salivary glands] Kulikov LS, et al. **Arkh Patol** 1997 Mar-Apr;59(2):28-32 (Eng. Abstr.) **(Rus)**
[Monomorphic adenoma of basal cells in a minor salivary gland] Zabaleta M, et al. **Acta Otorrinolaringol Esp** 1997 Mar;48(2):169-72 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Diet and the risk of salivary gland cancer. Horn-Ross PL, et al. **Am J Epidemiol** 1997 Jul 15;146(2):171-6

RADIOGRAPHY

[Computed tomography in the diagnosis of salivary gland neoplasms] Iudin LA, et al. **Vestn Rentgenol Radiol** 1997 May-Jun;(3):23-6 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

European results in neutron therapy of malignant salivary gland tumors. Krüll A, et al. **Bull Cancer Radiother** 1996; 83 Suppl:125-9s (44 ref.)
Neutron radiotherapy for adenoid cystic carcinoma of minor salivary glands. Douglas JG, et al. **Int J Radiat Oncol Biol Phys** 1996 Aug 1;36(1):87-93

SECONDARY

Low grade papillary adenocarcinoma of minor salivary gland origin. Diagnosis by fine needle aspiration cytology. Pisharodi LR. **Acta Cytol** 1997 Sep-Oct;41(5):1407-11

SURGERY

Surgical treatment of oral cavity carcinomas. Moenir M. **Adv Otorhinolaryngol** 1997;51:103-11
Huge pleomorphic adenoma of the upper retromolar area. Hirabayashi S, et al. **Ann Plast Surg** 1997 Feb;38(2):184-6
Intrascrotal chondroid syringoma. Miyakawa A, et al. **Br J Urol** 1997 Feb;79(2):293-5
Mucoepidermoid carcinoma of salivary gland origin: classification, clinical-pathological correlation, treatment results and long-term follow-up in 55 patients. Plambeck K, et al. **J Craniomaxillofac Surg** 1996 Jun;24(3):133-9

THERAPY

Long-term follow-up of over 1000 patients with salivary gland tumours treated in a single centre. Renehan A, et al. **Br J Surg** 1996 Dec;83(12):1750-4
Regression of MALT lymphoma and treatment for Helicobacter pylori [letter; comment] Walt RP. **Lancet** 1996 Oct 12;348(9033):1041-2. Comment on: Lancet 1996 Jul 27;348(9022):268-9.
Adenoid cystic carcinoma of the salivary glands: a review of 10 years. Sur RK, et al. **Laryngoscope** 1997 Sep; 107(9):1276-80 (9 ref.)

ULTRASONOGRAPHY

[Ultrasound diagnosis of salivary gland tumors] Fernández-Martínez A, et al. **An Med Interna** 1997 Mar; 14(3):119-24 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Prognostic significance of nucleolar organizer regions in adenoid cystic carcinomas of the head and neck. Xie X, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jun; 123(6):615-20
Papillary cystadenoma of the palate: a case report and ultrastructural study. Guccion JG, et al. **J Oral Maxillofac Surg** 1997 Jul;55(7):759-64

VETERINARY

Tumours of the oral cavity, buccal pouch, oesophagus, forestomach and salivary glands. Takahashi M, et al. **IARC Sci Publ** 1996;(126):59-77 (60 ref.)

VIROLOGY

Adenolymphoma and non-Hodgkin's lymphoma of the salivary glands and oral cavity in immunocompetent patients are not associated with latent Epstein-Barr virus. Wolvius EB, et al. **Oral Oncol** 1997 Mar;33(2):119-23
No Epstein Barr and cytomegalovirus DNA found in salivary gland tumours. Kärjä V, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Mar-Apr; 59(2):97-9
Epstein-Barr virus (EBV) infection in salivary gland tumors: lytic EBV infection in nonmalignant epithelial cells surrounded by EBV-positive T-lymphoma cells. Wen S, et al. **Virology** 1997 Jan 20;227(2):484-7

SALIVARY GLAND TUMOR, MIXED see **ADENOMA, PLEOMORPHIC**

SALIVARY GLAND VIRUS DISEASE see **CYTOMEGALOVIRUS INFECTIONS**

SALIVARY GLAND VIRUSES see **CYTOMEGALOVIRUS**

SALIVARY GLANDS

consider also terms at SIAL-

see related

SIALOGRAPHY

Orifices at the lower neck: heterotopic salivary glands. Sevila A, et al. **Dermatology** 1997;194(4):360-1
10th European Anatomical Congress. Florence, September 17-21, 1995. Proceedings of the symposium on salivary glands dedicated to Niels Stensen (Niccolò Stenone). **Eur J Morphol** 1996 Aug;34(3):133-236
Freeze-induced shrinkage of individual cells and cell-to-cell propagation of intracellular ice in cell chains from salivary glands. Berger WK, et al. **Experientia** 1996 Sep 15; 52(9):843-50
Transfer of a gene encoding the anticandidal protein histatin 3 to salivary glands. O'Connell BC, et al. **Hum Gene Ther** 1996 Dec 1;7(18):2255-61
Heterotopic salivary gland adenocarcinoma in the cervical region. Hata T, et al. **Int J Oral Maxillofac Surg** 1997 Aug; 26(4):290-2
Heterotopic salivary glands simulating bronchial cleft fistular in the lower neck. Hwang SM, et al. **J Dermatol** 1996 Apr; 23(4):287-9
[Ectopic salivary gland located on the palatine tonsil and simulating papilloma] Shchepin NV, et al. **Vestn Otorinolaringol** 1997;(4):55 **(Rus)**

ABNORMALITIES

Salivary gland disorders and heredity. Wiedemann HR. **Am J Med Genet** 1997 Jan 20;68(2):222–4

[Salivary cysts of the maxillary sinus. One case report] González Ortín M. **An Otorrinolaringol Ibero Am** 1996; 23(6):589–95 (Eng. Abstr.) **(Spa)**

CHEMISTRY

Immunohistochemical and quantitative changes in salivary EGF, amylase and haptocorrin following radiotherapy for oral cancer. Christensen ME, et al. **Acta Otolaryngol (Stockh)** 1996 Jan;116(1):137–43

Identification of a salivary vasodilator in the primary North American vector of bluetongue viruses, Culicoides variipennis. Perez de Leon AA, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):375–81

Basket and basal–duct cells in domestic animals: different cytokeratin expression and shape. Zedda M, et al. **Anat Histol Embryol** 1996 Dec;25(4):257–62

ICAM–1, E–selectin, and TNF alpha expression in labial salivary glands of patients with rheumatoid vasculitis. Flipo RM, et al. **Ann Rheum Dis** 1997 Jan;56(1):41–4

Transblot identification of avidin–interacting proteins in rat salivary glands. Shirakawa S, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):67–72

Ultrastructural localization of blood group antigens in human salivary glands. Cossu M, et al. **Eur J Morphol** 1996 Aug; 34(3):191–5

Use of lectin–probes for correlative histochemical and biochemical assessments of the glycosylation patterns of secretory proteins, including kallikreins, in salivary glands and saliva. Garrett JR, et al. **Histol Histopathol** 1996 Apr; 11(2):503–12

Re: Detection of prostate specific antigen in pancreas and salivary glands: a potential impact on prostate cancer overestimation [letter; comment] Horan AH. **J Urol** 1997 Apr;157(4):1373; discussion 1373–4. Comment on: J Urol 1996 Aug;156(2 Pt 1):464–8.

Re: Detection of prostate specific antigen in pancreas and salivary glands: a potential impact on prostate cancer overestimation [letter; comment] Ignatoff JM. **J Urol** 1997 Apr;157(4):1373; discussion 1373–4. Comment on: J Urol 1996 Aug;156(2 Pt 1):464–8.

Relationship between the cellular distribution of the alpha(v)beta3/5 integrins and adenoviral infection in salivary glands. Delporte C, et al. **Lab Invest** 1997 Aug; 77(2):167–73

The effects of a long–term powdered diet on the amounts of two principal neurotransmitters in the major salivary glands and on stimulated salivary secretion in mice. Murai S, et al. **Methods Find Exp Clin Pharmacol** 1996 Sep; 18(7):459–63

Purification, characterization and cDNA cloning of a novel anticoagulant of the intrinsic pathway, (prolixin–S) from salivary glands of the blood sucking bug, Rhodnius prolixus. Sun J, et al. **Thromb Haemost** 1996 Apr; 75(4):573–7

CYTOLOGY

Histochemical study of lectin binding in the major salivary glands of adult fallow–deer (Dama dama L.). Pedini V, et al. **Acta Histochem** 1997 Mar;99(1):81–9

Basket and basal–duct cells in domestic animals: different cytokeratin expression and shape. Zedda M, et al. **Anat Histol Embryol** 1996 Dec;25(4):257–62

T–cell receptor repertoire of infiltrating T cells in lachrymal glands, salivary glands and kidneys from alymphoplasia (aly) mutant mice: a new model for Sjögren's syndrome. Furukawa M, et al. **Br J Rheumatol** 1996 Dec; 35(12):1223–30

Salivary glands: a paradigm for diversity of gland development. Denny PC, et al. **Crit Rev Oral Biol Med** 1997;8(1):51–75 (166 ref.)

An edgewise look at basal epithelial cells: three–dimensional views of the rat prostate, mammary gland and salivary gland. Hayward SW, et al. **Differentiation** 1996 Jul; 60(4):219–27

Incorporation of ethidium bromide in the Drosophila salivary gland approached by microspectrofluorometry: evidence for the presence of both free and bound dye in the nuclei of cells in viable conditions. Favard C, et al. **Eur Biophys J** 1997;25(4):225–37

Salivary glands, cellular evolution, and adaptive radiation in mammals. Phillips CJ, et al. **Eur J Morphol** 1996 Aug; 34(3):155–61 (30 ref.)

Further data on intracellular structures of human salivary glands. A SEM study. Riva A, et al. **Eur J Morphol** 1996 Aug;34(3):209–14

Tuft cells in the main excretory duct epithelia of the three major rat salivary glands. Sato A, et al. **Eur J Morphol** 1996 Aug;34(3):225–8 (17 ref.)

DRUG EFFECTS

Interferon–gamma induces persistent depletion of internal Ca2+ stores in a human salivary gland cell line. Wu AJ, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C514–21

Changes in the noradrenaline and acetylcholine content of three major salivary glands and in the salivation and protein component patterns of whole saliva in chronically isoprenaline–administered mice. Kawaguchi T, et al. **Arch Oral Biol** 1997 Mar;42(3):225–34

Rapid activation of calcium–sensitive Na+/H+ exchange induced by 20–hydroxyecdysone in salivary gland cells of Drosophila melanogaster. Schneider S, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):73–9

Epidermal growth factor induces cell proliferation in mouse pancreas and salivary glands. Ohlsson B, et al. **Pancreas** 1997 Jan;14(1):94–8

Expression of HLA–DR and cytokine genes on interferon–gamma–stimulated human salivary gland cell line. Hamano H, et al. **Pathobiology** 1996;64(5):255–61

Atrial natriuretic factor modifies the composition of induced–salivary secretion in the rat. Bianciotti LG, et al. **Regul Pept** 1996 Sep 9;65(2):139–43

Histological and ultrastructural study of the effects of cholinergic and adrenergic agonists on salivary secretion from the lingual epithelium and the lingual gland of the Tokyo Daruma pond frog. Iwasaki S, et al. **Tissue Cell** 1997 Jun;29(3):323–38

EMBRYOLOGY

Salivary glands: a paradigm for diversity of gland development. Denny PC, et al. **Crit Rev Oral Biol Med** 1997;8(1):51–75 (166 ref.)

Involvement of the Bombyx Scr gene in development of the embryonic silk gland. Kokubo H, et al. **Dev Biol** 1997 Jun 1;186(1):46–57

Dystroglycan and laminins: glycoconjugates involved in branching epithelial morphogenesis. Durbeej M, et al. **Exp Lung Res** 1997 Mar–Apr;23(2):109–18 (43 ref.)

Prenatal development of human major salivary glands. Histological and immunohistochemical characteristics with reference to adult and neoplastic salivary glands. Chi JG. **J Korean Med Sci** 1996 Jun;11(3):203–16 (47 ref.)

[Evaluation of fetal condition in pregnancy complicated by hypertension—biochemical assessment of amniotic fluid. II. Enzymes] Smolarczyk R, et al. **Ginekol Pol** 1996 Dec; 67(12):598–602 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Anatomic dissociation between HIV–1 and its endogenous inhibitor in mucosal tissues. Wahl SM, et al. **Am J Pathol** 1997 Apr;150(4):1275–84

Apyrase and alpha–glucosidase in the salivary glands of Aedes albopictus. Marinotti O, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Apr; 113(4):675–9

Separation and characterisation of cyclic nucleotide phosphodiesterases from the lacrimal, harderian and zygomatic glands of the rabbit. Koutavas H, et al. **Curr Eye Res** 1996 Dec;15(12):1191–7

Immunohistochemical and immunoblotting identification of protein phosphatase 1 gamma 1 in rat salivary glands. Shirakawa S, et al. **FEBS Lett** 1996 Sep 9;393(1):57–9

Cloning and sequence analysis of the human salivary peroxidase–encoding cDNA. Kiser C, et al. **Gene** 1996 Sep 16;173(2):261–4

Cloning and expression of human carboxypeptidase Z, a novel metallocarboxypeptidase. Song L, et al. **J Biol Chem** 1997 Apr 18;272(16):10543–50

Protein kinase C expression in salivary gland acinar epithelial cells in Sjögren's syndrome [letter] Törnwall J, et al. **Lancet** 1997 Jun 21;349(9068):1814–5

Effect of substance P and receptor antagonists on secretion of lingual lipase and amylase from rat von Ebner's gland. Field RB, et al. **Peptides** 1997;18(2):277–85

IMMUNOLOGY

Association of Epstein–Barr virus (EBV) with Sjögren's syndrome: differential EBV expression between epithelial cells and lymphocytes in salivary glands. Wen S, et al. **Am J Pathol** 1996 Nov;149(5):1511–7

Ethnic differences in the expression of blood group antigens in the salivary gland secretory cells from German and Japanese non–secretor individuals. Tanegashima A, et al. **Glycoconj J** 1996 Aug;13(4):537–45

Different La/SS–B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757–66

Sjögren's syndrome salivary gland immunopathology: increased laminin expression precedes lymphocytic infiltration. McArthur CP, et al. **J Autoimmun** 1997 Feb; 10(1):59–65

Up–regulation of cytokine mRNA, adhesion molecule proteins, and MHC class II proteins in salivary glands of TGF–beta1 knockout mice: MHC class II is a factor in the pathogenesis of TGF–beta1 knockout mice. Nakabayashi T, et al. **J Immunol** 1997 Jun 1; 158(11):5527–35

Shared TCR Vbeta gene expression by the pancreas and salivary gland in immunodeficient alymphoplasic mice. Yamamichi M, et al. **J Immunol** 1997 Jul 1;159(1):427–32

New T–cell epitope of Ro/SS–A 52 kDa protein in labial salivary glands from patients with Sjögren's syndrome [letter] Sumida T, et al. **Lancet** 1996 Dec 14;348(9042):1667

The submandibular gland: a key organ in the neuro–immuno–regulatory network? Sabbadini E, et al. **Neuroimmunomodulation** 1995 Jul–Aug;2(4):184–202 (205 ref.)

Salivary, gut, vaginal and nasal antibody responses after oral immunization with biodegradable microparticles. Challacombe SJ, et al. **Vaccine** 1997 Feb;15(2):169–75

Enhanced immunity to Hyalomma anatolicum anatolicum ticks in cross–bred (Bos indicus x Bos taurus) calves using ascaris extract immunomodulator with the tick salivary gland extract antigens. Sran HS, et al. **Vet Immunol Immunopathol** 1996 Jun 1;51(3–4):333–43

INJURIES

Quantitative salivary gland scintigraphy in the diagnosis of parenchymal damage after treatment with radioiodine. Bohuslavizki KH, et al. **Nucl Med Commun** 1996 Aug; 17(8):681–6

[The organization of specialized care for patients with diseases and traumatic lesions of the salivary glands] Afanas'ev VV, et al. **Stomatologiia (Mosk)** 1996;Spec No:43–4 **(Rus)**

INNERVATION

Peptidergic innervation in human von Ebner's glands: an immunohistochemical study. Matsuda H, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):447–51

Preganglionic parasympathetic salivatory neurons in the brainstem contain markers for nitric oxide synthesis in the rabbit. Zhu BS, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):128–32

METABOLISM

Histochemical study of lectin binding in the major salivary glands of adult fallow–deer (Dama dama L.). Pedini V, et al. **Acta Histochem** 1997 Mar;99(1):81–9

Premature fat deposition in the salivary glands associated with Sjögren syndrome: MR and CT evidence. Izumi M, et al. **AJNR Am J Neuroradiol** 1997 May;18(5):951–8

Changes in P2Y1 nucleotide receptor activity during the development of rat salivary glands. Park MK, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1388–93

Upregulation of P2Y2 nucleotide receptors in rat salivary gland cells during short–term culture. Turner JT, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C1100–7

Interferon–gamma induces persistent depletion of internal Ca2+ stores in a human salivary gland cell line. Wu AJ, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C514–21

Aggressive symptoms and salivary cortisol in clinic–referred boys with conduct disorder. McBurnett K, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:169–78

Cytokine expression in the salivary glands of Sjögren's syndrome patients in relation to tissue infiltration and lymphoepithelial lesions [letter; comment] Ferraccioli GF, et al. **Arthritis Rheum** 1997 May;40(5):987–90. Comment on: Arthritis Rheum 1996 Aug;39(8):1376–84.

Fas and Fas ligand expression in the salivary glands of patients with primary Sjögren's syndrome. Kong L, et al. **Arthritis Rheum** 1997 Jan;40(1):87–97

Regulation of salivary–gland–specific gene expression. Ann DK, et al. **Crit Rev Oral Biol Med** 1997;8(3):244–52 (62 ref.)

Immunodetection of 11 beta–hydroxysteroid dehydrogenase type 2 in human mineralocorticoid target tissues: evidence for nuclear localization. Shimojo M, et al. **Endocrinology** 1997 Mar;138(3):1305–11

Glycosylation of secretory proteins in salivary glands and saliva studied by lectin–probes. Garrett JR, et al. **Eur J Morphol** 1996 Aug;34(3):177–80 (10 ref.)

Histoenzymological detection of sialic acids in the rodent salivary glands. Accili D, et al. **Histol Histopathol** 1996 Jul;11(3):647–58

Evidence for the systemic delivery of a transgene product from salivary glands. Kagami H, et al. **Hum Gene Ther** 1996 Nov 10;7(17):2177–84

Differential interleukin (IL)–10 and IL–13 gene expression in vivo in salivary glands and peripheral blood mononuclear cells from patients with primary Sjögren's syndrome. Villarreal GM, et al. **Immunol Lett** 1996 Jan; 49(1–2):105–9

Different La/SS–B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757–66

Polarized expression of Ca2+ channels in pancreatic and salivary gland cells. Correlation with initiation and propagation of [Ca2+]i waves. Lee MG, et al. **J Biol Chem** 1997 Jun 20;272(25):15765–70

Polarized expression of Ca2+ pumps in pancreatic and salivary gland cells. Role in initiation and propagation of [Ca2+]i waves. Lee MG, et al. **J Biol Chem** 1997 Jun 20; 272(25):15771–6

Interferon–gamma–induced JAK2 and STAT1 signalling in a human salivary gland cell line. Wu AJ, et al. **J Cell Physiol** 1997 Oct;173(1):110–4

Stimulation of platelet–activating factor synthesis by neurotransmitters in salivary glands. Dohi T, et al. **J Dent Res** 1997 Jan;76(1):568–74

Rapid activation of calcium–sensitive Na+/H+ exchange induced by 20–hydroxyecdysone in salivary gland cells of Drosophila melanogaster. Schneider S, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):73–9

Expression of HLA–DR and cytokine genes on interferon–gamma–stimulated human salivary gland cell line. Hamano H, et al. **Pathobiology** 1996;64(5):255–61

The circadian rhythm of salivary cortisol in growing pigs: effects of age, gender, and stress. Ruis MA, et al. **Physiol Behav** 1997 Sep;62(3):623–30

SALIVARY GLANDS

Cytokine production by lymph node cells from mice infested with Ixodes ricinus ticks and the effect of tick salivary gland extracts on IL-2 production. Ganapamo F, et al. **Scand J Immunol** 1996 Oct;44(4):388–93

Detection of alterations in the levels of neuropeptides and salivary gland responses in the non-obese diabetic mouse model for autoimmune sialoadenitis. Yamamoto H, et al. **Scand J Immunol** 1997 Jan;45(1):55–61

PARASITOLOGY

Microfilaria in a fine needle aspirate from the salivary gland [letter] Sahu KK, et al. **Acta Cytol** 1997 May–Jun;41(3):954

TRAP is necessary for gliding motility and infectivity of plasmodium sporozoites. Sultan AA, et al. **Cell** 1997 Aug 8;90(3):511–22

PATHOLOGY

Fine needle aspiration biopsy of the salivary glands. A five-year experience with emphasis on diagnostic pitfalls. Cajulis RS, et al. **Acta Cytol** 1997 Sep–Oct;41(5):1412–20

Immunohistochemical findings of arterial fibrinoid necrosis in major and lingual minor salivary glands of primary Sjögren's syndrome. Takahashi H, et al. **Anal Cell Pathol** 1996 Dec;12(3):145–57

Experimental graft versus host disease in the (BN x LEW) F1 rat hybrid as a model for autoimmune disease. Study of early adenitis in lacrimal and salivary glands. Peszkowski MJ, et al. **Autoimmunity** 1996;24(2):101–11

Molecular cloning of anti-SS-A/Ro 60-kDa peptide Fab fragments from infiltrating salivary gland lymphocytes of a patient with Sjögren's syndrome. Suzuki H, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):101–6

Increased soluble CD23 molecules in serum/saliva and correlation with the stage of sialoectasis in patients with primary Sjögren's syndrome. Takei M, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):711–5

Lymphoid infiltrates of the salivary glands: pathology, biology and clinical significance. DiGiuseppe JA, et al. **Curr Opin Oncol** 1996 May;8(3):232–7 (36 ref.)

B-cells are required for the initiation of insulitis and sialitis in nonobese diabetic mice. Noorchashm H, et al. **Diabetes** 1997 Jun;46(6):941–6

Fine-needle sampling of salivary gland lesions. II. Cytology and histology correlation of 71 cases of Warthin's tumor (adenolymphoma). Klijanienko J, et al. **Diagn Cytopathol** 1997 Mar;16(3):221–5

Ostensible oncocytoma of accessory lacrimal glands. Pecorella I, et al. **Histopathology** 1997 Mar;30(3):264–70

Massive salivary gland swelling due to primary cytomegalovirus infection in an AIDS patient. Smith NA, et al. **Int J STD AIDS** 1997 Aug;8(8):528–9

A hamartoma-like mass on the palate? A possible discussion regarding the components of a pigmented naevus and hyperplastic salivary gland. Harada H, et al. **J Laryngol Otol** 1997 Mar;111(3):296–9 (17 ref.)

Biopsy of labial salivary glands and lacrimal glands in the diagnosis of Sjögren's syndrome [see comments] Xu KP, et al. **J Rheumatol** 1996 Jan;23(1):76–82. Comment in: J Rheumatol 1997 Feb;24(2):409.

Salivary gland. Ranchod M. **Pathology (Phila)** 1996; 3(2):305–19 (12 ref.)

Fine-needle aspiration of the salivary glands. Zarka MA. **Pathology (Phila)** 1996;4(2):287–318 (52 ref.)

[The pathology of labial salivary gland in the diagnosis of Sjogren's syndrome] Li X, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Feb; 18(1):19–22 (Eng. Abstr.) **(Chi)**

[Comments on the clinical picture of Warthin's tumors] Gierek T, et al. **Otolaryngol Pol** 1995;49(6):549–54 (Eng. Abstr.) **(Pol)**

[Transplantation of the embryonal pancreas into the salivary gland of adult rats] Sergeev VG. **Biull Eksp Biol Med** 1996 Oct;122(10):465–6 **(Rus)**

[Monomorphic adenoma of basal cells in a minor salivary gland] Zabaleta M, et al. **Acta Otorrinolaringol Esp** 1997 Mar;48(2):169–72 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Rat salivary gland function after fractionated irradiation. Funegård U, et al. **Acta Oncol** 1997;36(2):191–8

Pituitary adenylate cyclase activating peptide (PACAP) in salivary glands of the rat: origin, and secretory and vascular effects. Mirfendereski S, et al. **Acta Physiol Scand** 1997 May;160(1):15–22

Platelet-activating factor synthesis and its role in salivary glands. Dohi T, et al. **Adv Exp Med Biol** 1996;416:41–4 (35 ref.)

Salivary glands, their hormones, and thermoregulation. Mathison RD, et al. **Ann N Y Acad Sci** 1997 Mar 15; 813:338–43

Salivary glands and human selection: a hypothesis. Shields ED, et al. **J Craniofac Genet Dev Biol** 1996 Apr–Jun; 16(2):126–36

Implantation of Candida albicans and other Candida species in the oral cavity of rats. Totti MA, et al. **J Oral Pathol Med** 1996 Jul;25(6):308–10

Serotonin-induced intercellular calcium waves in salivary glands of the blowfly Calliphora erythrocephala. Zimmermann B, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):17–28

Role of calcium ions in the potentiation by isoproterenol of carbachol-induced ionic currents and secretion activity in rat salivary glands. Hirono C, et al. **Jpn J Physiol** 1997; 47 Suppl 1:S60–1

Initial transient phase of salivary secretion by the submandibular glands of rats under anoxic conditions. Nakamura A, et al. **Jpn J Physiol** 1996 Apr;46(2):155–61

Sialogogue-related radioprotection of salivary gland function: the degranulation concept revisited. Coppes RP, et al. **Radiat Res** 1997 Sep;148(3):240–7

[Chromosomal localization of M/SAR from DNA of the clone lambda20p1.4 in Drosophila melanogaster salivary glands] Sharakhov IV, et al. **Genetika** 1997 Feb; 33(2):277–80 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Treatment of salivary stones by extracorporeal lithotripsy. Aïdan P, et al. **Am J Otolaryngol** 1996 Jul–Aug; 17(4):246–50

Response of rat salivary glands to mastication of pelleted vitamin A-deficient diet. Horn VJ, et al. **Arch Oral Biol** 1996 Aug–Sep;41(8–9):769–77

Effects of short-term (2 weeks) streptozotocin-induced diabetes on acetylcholine and noradrenaline in the salivary glands and secretory responses to cholinergic and adrenergic sialogogues in mice. Murai S, et al. **Arch Oral Biol** 1996 Jul;41(7):673–7

Saliva composition in children and young adults with Papillon-Lefèvre syndrome. Lundgren T, et al. **J Clin Periodontol** 1996 Dec;23(12):1068–72

Role of cytokines in the destruction of acinar structure in Sjögren's syndrome salivary glands. Azuma M, et al. **Lab Invest** 1997 Sep;77(3):269–80

Gastrointestinal dysfunction in multiple system atrophy. Mathias CJ. **Semin Neurol** 1996 Sep;16(3):251–8 (44 ref.)

[Salivary cysts of the maxillary sinus. One case report] González Ortín M. **An Otorrinolaringol Ibero Am** 1996; 23(6):589–95 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Rat salivary gland function after fractionated irradiation. Funegård U, et al. **Acta Oncol** 1997;36(2):191–8

Immunohistochemical and quantitative changes in salivary EGF, amylase and haptocorrin following radiotherapy for oral cancer. Christensen ME, et al. **Acta Otolaryngol (Stockh)** 1996 Jan;116(1):137–43

A 2 week pair-fed study of early X-irradiation effects on rat major salivary gland function. Nagler RM, et al. **Arch Oral Biol** 1996 Jul;41(7):713–7

Evidence for early and persistent impairment of salivary gland excretion after irradiation of head and neck tumours. Liem IH, et al. **Eur J Nucl Med** 1996 Nov;23(11):1485–90

Researchers make slow headway in managing dry mouth [news] Thakkar SS. **J Natl Cancer Inst** 1997 Sep 17; 89(18):1337–8

Absence of chronic effect of exposure to short-wave radio broadcast signal on salivary melatonin concentrations in dairy cattle. Stärk KD, et al. **J Pineal Res** 1997 May; 22(4):171–6

Sialogogue-related radioprotection of salivary gland function: the degranulation concept revisited. Coppes RP, et al. **Radiat Res** 1997 Sep;148(3):240–7

RADIOGRAPHY see SIALOGRAPHY

RADIONUCLIDE IMAGING

Value of technetium-99m pertechnetate imaging in the differential of salivary gland lesions. Bongers V, et al. **Ann Otol Rhinol Laryngol** 1997 May;106(5):432–4

Will thallium-201 replace gallium-67 in salivary gland scintigraphy? Arbab AS, et al. **J Nucl Med** 1996 Nov; 37(11):1819–23

Salivary gland scintigraphy with 99mTc-pertechnetate in Sjögren's syndrome: relationship to clinicopathologic features of salivary and lacrimal glands. Saito T, et al. **J Oral Pathol Med** 1997 Jan;26(1):46–50

Quantitative salivary gland scintigraphy in the diagnosis of parenchymal damage after treatment with radioiodine. Bohuslavizki KH, et al. **Nucl Med Commun** 1996 Aug; 17(8):681–6

[Quantitative salivary gland scintigraphy--a recommended examination prior to and after radioiodine therapy] Bohuslavizki KH, et al. **Nuklearmedizin** 1997 Apr; 36(3):103–9 (Eng. Abstr.) **(Ger)**

[The imaging diagnosis of Sjögren's syndrome: echography, sialography and scintigraphy compared in the study of the salivary glands] Napoli V, et al. **Minerva Stomatol** 1996 Apr;45(4):141–8 (Eng. Abstr.) **(Ita)**

[Evaluation method of salivary gland function] Nagai T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:89–91 (9 ref.) **(Jpn)**

SECRETION

Interferon alpha-2 (IFN alpha 2) increases lacrimal and salivary function in Sjögren's syndrome patients. Preliminary results of an open pilot trial versus OH-chloroquine. Ferraccioli GF, et al. **Clin Exp Rheumatol** 1996 Jul–Aug;14(4):367–71

Increased soluble CD23 molecules in serum/saliva and correlation with the stage of sialoectasis in patients with primary Sjögren's syndrome. Takei M, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):711–5

Glycosylation of secretory proteins in salivary glands and saliva studied by lectin-probes. Garrett JR, et al. **Eur J Morphol** 1996 Aug;34(3):177–80 (10 ref.)

Human glandular salivas: their separate collection and analysis. Veerman EC, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):346–52

Role of calcium ions in the potentiation by isoproterenol of carbachol-induced ionic currents and secretion activity in rat salivary glands. Hirono C, et al. **Jpn J Physiol** 1997; 47 Suppl 1:S60–1

Neuropeptides in the saliva of healthy subjects. Dawidson I, et al. **Life Sci** 1997;60(4–5):269–78

Uptake index and stimulated salivary gland response in 99Tcm-pertechnetate salivary gland scintigraphy in normal subjects. Vigh L, et al. **Nucl Med Commun** 1997 Apr; 18(4):363–6

Detection of alterations in the levels of neuropeptides and salivary gland responses in the non-obese diabetic mouse model for autoimmune sialoadenitis. Yamamoto H, et al. **Scand J Immunol** 1997 Jan;45(1):55–61

[Buccal dryness, xerostomia and measurement of salivary secretory activity] Jehl-Pietri C, et al. **Ann Med Interne (Paris)** 1997;148(3):209–16 (54 ref.) (Eng. Abstr.) **(Fre)**

[Evaluation method of salivary gland function] Nagai T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:89–91 (9 ref.) **(Jpn)**

SURGERY

Treatment of salivary stones by extracorporeal lithotripsy. Aïdan P, et al. **Am J Otolaryngol** 1996 Jul–Aug; 17(4):246–50

Effect of sialoadenectomy and epidermal growth factor administration on liver regeneration after partial hepatectomy. Lambotte L, et al. **Hepatology** 1997 Mar; 25(3):607–12

Salivary gland. Ranchod M. **Pathology (Phila)** 1996; 3(2):305–19 (12 ref.)

TRANSPLANTATION

Salivary gland transplantation: a canine model. Eid A, et al. **Transplantation** 1997 Sep 15;64(5):679–83

ULTRASONOGRAPHY

[The imaging diagnosis of Sjögren's syndrome: echography, sialography and scintigraphy compared in the study of the salivary glands] Napoli V, et al. **Minerva Stomatol** 1996 Apr;45(4):141–8 (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

Further data on intracellular structures of human salivary glands. A SEM study. Riva A, et al. **Eur J Morphol** 1996 Aug;34(3):209–14

Tuft cells in the main excretory duct epithelia of the three major rat salivary glands. Sato A, et al. **Eur J Morphol** 1996 Aug;34(3):225–8 (17 ref.)

[Chromocenter organization in salivary glands of the malaria mosquito Anopheles messeae Fall.] Sharakhova MV, et al. **Genetika** 1997 Feb;33(2):196–201 (Eng. Abstr.) **(Rus)**

VIROLOGY

Association of Epstein-Barr virus (EBV) with Sjögren's syndrome: differential EBV expression between epithelial cells and lymphocytes in salivary glands. Wen S, et al. **Am J Pathol** 1996 Nov;149(5):1511–7

Treatment of murine cytomegalovirus salivary-gland infection by combined therapy with ganciclovir and thymic humoral factor gamma 2. Palmon A, et al. **Antiviral Res** 1996 Dec;33(1):55–64

Retrovirus in salivary glands from patients with Sjögren's syndrome. Yamano S, et al. **J Clin Pathol** 1997 Mar; 50(3):223–30

Hepatitis C virus infection of salivary gland epithelial cells. Lack of evidence. Taliani G, et al. **J Hepatol** 1997 Jun; 26(6):1200–6

Detection of Epstein-Barr virus in salivary gland specimens from Sjögren's syndrome patients. Merne ME, et al. **Laryngoscope** 1996 Dec;106(12 Pt 1):1534–9

Epstein-Barr virus (EBV) infection in salivary gland tumors: lytic EBV infection in nonmalignant epithelial cells surrounded by EBV-positive T-lymphoma cells. Wen S, et al. **Virology** 1997 Jan 20;227(2):484–7

SALIVARY GLANDS, MINOR

Low grade papillary adenocarcinoma of minor salivary gland origin. Diagnosis by fine needle aspiration cytology. Pisharodi LR. **Acta Cytol** 1997 Sep–Oct;41(5):1407–11

Immunohistochemical study of acinic cell carcinoma of minor salivary gland. Crivelini MM, et al. **Oral Oncol** 1997 May; 33(3):204–8

CYTOLOGY

TCR in Fas-sensitive T cells from labial salivary glands of patients with Sjögren's syndrome. Sumida T, et al. **J Immunol** 1997 Jan 15;158(2):1020–5

IMMUNOLOGY

Characterisation of follicular dendritic cells in labial salivary glands of patients with primary Sjögren syndrome: comparison with tonsillar lymphoid follicles. Aziz KE, et al. **Ann Rheum Dis** 1997 Feb;56(2):140–3

Immunohistochemistry of minor salivary gland biopsy specimens from patients with Sjögren's syndrome with and without hepatitis C virus infection. Coll J, et al. **Ann Rheum Dis** 1997 Jun;56(6):390–2

TCR in Fas-sensitive T cells from labial salivary glands of patients with Sjögren's syndrome. Sumida T, et al. **J Immunol** 1997 Jan 15;158(2):1020–5

Tumor-associated glycoprotein (TAG-72) in chronic submandibular sialadenitis and normal minor salivary glands defined by monoclonal antibody B72.3. Epivatianos A, et al. **Laryngoscope** 1997 Aug;107(8):1138–41

METABOLISM

Ion transport systems in human labial acinar cells. Paulais M, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G213–9

[Expression of cytokines in labial gland of Sjögren's syndrome] Ding D, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jun;76(6):427–30 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Immunohistochemical findings of arterial fibrinoid necrosis in major and lingual minor salivary glands of primary Sjögren's syndrome. Takahashi H, et al. **Anal Cell Pathol** 1996 Dec;12(3):145–57

Clear cell carcinoma of the minor salivary glands. Report of a case. Triantafillidou E, et al. **Aust Dent J** 1997 Feb; 42(1):8–10

Stomatitis glandularis--two confirmed cases of a rare condition. Cannell H, et al. **Br Dent J** 1997 Mar 22; 182(6):222–5

Polymorphous low-grade adenocarcinoma of the palate in a 16-year-old male patient [letter] Minić AJ. **Br J Oral Maxillofac Surg** 1996 Dec;34(6):540–1

Four cases of polymorphous low-grade adenocarcinoma. Crean SJ, et al. **Int J Oral Maxillofac Surg** 1996 Feb; 25(1):40–4

Pleomorphic adenoma of the palate in a child: 9-year follow-up. de Courten A, et al. **Int J Oral Maxillofac Surg** 1996 Aug;25(4):293–5 (13 ref.)

Pleomorphic adenoma of the palate in children: report of a case. López-Cedrún JL, et al. **Int J Oral Maxillofac Surg** 1996 Jun;25(3):206–7 (11 ref.)

Stromal bone formation in pleomorphic adenoma of minor salivary gland origin. Takeda Y, et al. **J Nihon Univ Sch Dent** 1996 Jul;38(2):102–4 (6 ref.)

Retromolar swelling in a 61-year-old woman [clinical conference] Chafitz ED, et al. **J Oral Maxillofac Surg** 1996 Dec;54(12):1446–50

Basaloid monomorphic adenoma presenting as an expanding buccal mass: a case report. Lucas JH, et al. **J Oral Maxillofac Surg** 1997 Jun;55(6):631–4

Red-blue lesion of the hard palate [clinical conference] Manganaro AM, et al. **J Oral Maxillofac Surg** 1997 Feb; 55(2):159–65

Sialadenoma papilliferum: an immunohistochemical study of five cases. Maiorano E, et al. **J Oral Pathol Med** 1996 Jul; 25(6):336–42

Intraoral minor salivary gland tumors: a retrospective study of 62 cases in a Venezuelan population. Rivera-Bastidas H, et al. **J Oral Pathol Med** 1996 Jan;25(1):1–4

Hyalinizing clear cell carcinoma: report of a case. Urban SD, et al. **J Oral Pathol Med** 1996 Nov;25(10):562–4

Biopsy of labial salivary glands and lacrimal glands in the diagnosis of Sjögren's syndrome [letter; comment] Norman JE. **J Rheumatol** 1997 Feb;24(2):409. Comment on: J Rheumatol 1996 Jan;23(1):76–82.

Stromal melanocytosis of an adenoid cystic carcinoma arising from the palatal minor salivary gland. Takeda Y. **Pathol Int** 1996 Jun;46(6):467–70 (19 ref.)

Oncocytic adenocarcinoma of minor salivary gland. An unusual glossal presentation of a minor salivary gland tumor. Ruby SG, et al. **Pathol Res Pract** 1996 Aug; 192(8):856–64; discussion 865–8

Adenocarcinoma of minor salivary gland origin with skeletal metastasis in a child. McDermott M, et al. **Pediatr Pathol Lab Med** 1996 Jan-Feb;16(1):89–98

[Minor salivary gland lithiasis simulating a mucocele. Apropos of a case] Karengera D, et al. **Rev Stomatol Chir Maxillofac** 1997 Aug;98(2):81–3 (Eng. Abstr.) **(Fre)**

[Histopathological study of minor salivary glands in alcoholics] Smith P, et al. **Rev Med Chil** 1995 Nov; 123(11):1387–93 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

A comparison of glandular involvement between chronic graft-versus-host disease and Sjögren's syndrome. Hiroki A, et al. **Int J Oral Maxillofac Surg** 1996 Aug;25(4):298–307

SECRETION

Studies on human minor salivary gland secretions using the Periotron method. Eliasson L, et al. **Arch Oral Biol** 1996 Dec;41(12):1179–82

SURGERY

Huge pleomorphic adenoma of the upper retromolar area. Hirabayashi S, et al. **Ann Plast Surg** 1997 Feb;38(2):184–6

VIROLOGY

Absence of cytomegalovirus and Epstein-Barr virus expression in labial salivary glands of patients with chronic graft-versus-host disease. Mariette X, et al. **Bone Marrow Transplant** 1996 Apr;17(4):607–10

Detection of human herpesvirus 6 and human herpesvirus 7 in the submandibular gland, parotid gland, and lip salivary gland by PCR. Sada E, et al. **J Clin Microbiol** 1996 Sep; 34(9):2320–1

SALIVARY PROTEINS

ANALYSIS

Effect of gustatory stimulation on flow rate and protein content of human parotid saliva according to the side of preferential mastication. Losso EM, et al. **Arch Oral Biol** 1997 Jan;42(1):83–7

Immunocytochemical study of cathepsin L and rat salivary cystatin-3 in rat osteoclasts treated with E-64 in vivo. Moroi R, et al. **Arch Oral Biol** 1997 Apr;42(4):305–15

Salivary levels of alpha 2-macroglobulin, alpha 1-antitrypsin, C-reactive protein, cathepsin G and elastase in humans with or without destructive periodontal disease. Pederson ED, et al. **Arch Oral Biol** 1995 Dec;40(12):1151–5

Improved staining of human salivary proteins following electrophoresis. Carpenter GH, et al. **Biochem Soc Trans** 1997 Feb;25(1):32S

Effects of hyperthyroidism and radioactive iodine given to ablate the thyroid on the composition of whole stimulated saliva. Ford H, et al. **Clin Endocrinol (Oxf)** 1997 Feb; 46(2):189–93

Adherence of oral microorganisms to human parotid salivary proteins. Newman F, et al. **Electrophoresis** 1996 Jan; 17(1):266–70

The concentration of calmodulin present in parotid cells [letter; comment] Henkin RI. **J Dent Res** 1997 Aug; 76(8):1430. Comment on: J Dent Res 1997 Mar;76(3):744–53.

Salivary protein composition in epileptic patients on different medications. Henskens YM, et al. **J Oral Pathol Med** 1996 Aug;25(7):360–6

Characterization of matrix metalloproteinase (MMP-8 and -9) activities in the saliva and in gingival crevicular fluid of children with Down's syndrome. Halinen S, et al. **J Periodontol** 1996 Aug;67(8):748–54

Parotid saliva protein profiles in caries-free and caries-active adults. Dodds MW, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):244–51

Effects of glycemic control on saliva flow rates and protein composition in non-insulin-dependent diabetes mellitus. Dodds MW, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):465–70

Evaluation of major parotid glycoproteins in patients with burning mouth syndrome. Lundy FT, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):252–8

Salivary factors in children with recurrent parotitis. Part 2: Protein, albumin, amylase, IgA, lactoferrin lysozyme and kallikrein concentrations. Ericson S, et al. **Swed Dent J** 1996;20(5):199–207

BIOSYNTHESIS

Chromosomal organization and expression analysis of two distinct genes encoding glutamine/glutamic acid-rich proteins. Ten Hagen KG, et al. **Biochem J** 1997 May 15; 324 (Pt 1):177–84

Expression of proline-rich proteins in the parotid & submandibular glands of the untreated rat. Suares JC, et al. **Biochem Soc Trans** 1997 Feb;25(1):31S

Expression of the gene for tear lipocalin/von Ebner's gland protein in human prostate. Holzfeind P, et al. **FEBS Lett** 1996 Oct 21;395(2-3):95–8

CRISP-3, a protein with homology to plant defense proteins, is expressed in mouse B cells under the control of Oct2. Pfisterer P, et al. **Mol Cell Biol** 1996 Nov;16(11):6160–8

Toxins produced by arthropod parasites: salivary gland proteins of human body lice and venom proteins of chelonine wasps. Jones D, et al. **Toxicon** 1996 Nov-Dec; 34(11-12):1421–9 (32 ref.)

CHEMICAL SYNTHESIS

Solid-phase synthesis and characterization of human salivary statherin: a tyrosine-rich phosphoprotein inhibitor of calcium phosphate precipitation. Gururaja TL, et al. **Pept Res** 1996 Nov-Dec;9(6):283–9

CHEMISTRY

Identification of zinc proteins in rat parotid saliva. Etzel KR, et al. **Arch Oral Biol** 1997 Feb;42(2):173–9

Characteristics and localization of rat submandibular gland proteoglycans. Kamada A, et al. **Arch Oral Biol** 1996 Oct; 41(10):951–8

Novel O-linked glycosylation on basic human parotid proteins. Proctor GB, et al. **Biochem Soc Trans** 1997 Feb; 25(1):11S

The adherence of Streptococcus mutans and streptococcal antigen I/II to a high molecular weight human salivary glycoprotein. Tulloch B, et al. **Biochem Soc Trans** 1996 May;24(2):257S

Characterization of glucosyltransferase of human saliva adsorbed onto hydroxyapatite surfaces. Vacca-Smith AM, et al. **Caries Res** 1996;30(5):354–60

Differential expression of human high-molecular-weight salivary mucin (MG1) and low-molecular-weight salivary mucin (MG2). Nielsen PA, et al. **J Dent Res** 1996 Nov; 75(11):1820–6

Adsorption of salivary proteins onto prosthetic titanium components. Kohavi D, et al. **J Prosthet Dent** 1995 Nov; 74(5):531–4

DRUG EFFECTS

Changes in the noradrenaline and acetylcholine content of three major salivary glands and in the salivation and protein component patterns of whole saliva in chronically isoprenaline-administered mice. Kawaguchi T, et al. **Arch Oral Biol** 1997 Mar;42(3):225–34

GENETICS

Isolation and characterization of the androgen-dependent mouse cysteine-rich secretory protein-1 (CRISP-1) gene. Schwidetzky U, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):325–32

Chromosomal organization and expression analysis of two distinct genes encoding glutamine/glutamic acid-rich proteins. Ten Hagen KG, et al. **Biochem J** 1997 May 15; 324 (Pt 1):177–84

Regulation of salivary-gland-specific gene expression. Ann DK, et al. **Crit Rev Oral Biol Med** 1997;8(3):244–52 (62 ref.)

Glycoproteins in human parotid saliva assessed by lectin probes after resolution by sodium dodecyl sulphate-polyacrylamide gel electrophoresis. Carpenter GH, et al. **Electrophoresis** 1996 Jan;17(1):91–7

Molecular characterization of the C-3 DNA puff gene of Rhynchosciara americana. Penalva LO, et al. **Gene** 1997 Jul 9;193(2):163–72

Structure and chromosomal localization of the human salivary mucin gene, MUC7. Bobek LA, et al. **Genomics** 1996 Feb 1;31(3):277–82

MUC7 gene expression and genetic polymorphism. Biesbrock AR, et al. **Glycoconj J** 1997 Jun;14(4):415–22

Transfer of a gene encoding the anticandidal protein histatin 3 to salivary glands. O'Connell BC, et al. **Hum Gene Ther** 1996 Dec 1;7(18):2255–61

An expanded histatin gene polymorphism and test of a possible disease resistant phenotype. Araki M, et al. **Hum Mutat** 1997;10(1):58–64

Candidacidal activity of recombinant human salivary histatin-5 and variants. Tsai H, et al. **Infect Immun** 1996 Dec;64(12):5000–7

The microevolution of mouse salivary androgen-binding protein (ABP) paralleled subspeciation of Mus musculus. Hwang JM, et al. **J Hered** 1997 Mar-Apr;88(2):93–7

Expression of a synthetic gene encoding the anticoagulant-antimetastatic protein ghilanten by the methylotropic yeast Pichia pastoris. Brankamp RG, et al. **Protein Expr Purif** 1995 Dec;6(6):813–20

IMMUNOLOGY

Detection of anti-Entamoeba histolytica IgA salivary antibodies: evaluation of its diagnostic capability in a rural setting. Escandón Romero C, et al. **Arch Med Res** 1997; 28 Spec No:306–8

Anti-E. histolytica IgA antibodies in saliva of E. histolytica or E.dispar infected individuals: longitudinal study of cohorts. Ramos F, et al. **Arch Med Res** 1997;28 Spec No:327–9

Effects of sand fly vector saliva on development of cutaneous lesions and the immune response to Leishmania braziliensis in BALB/c mice. Lima HC, et al. **Infect Immun** 1996 Dec; 64(12):5442–5

cDNA cloning and sequencing reveal the major horse allergen Equ c1 to be a glycoprotein member of the lipocalin superfamily. Gregoire C, et al. **J Biol Chem** 1996 Dec 20;271(51):32951–9

Comparison of the Lewis phenotypes among the different population groups of Taiwan. Broadberry RE, et al. **Transfus Med** 1996 Sep;6(3):255–60

Immunological cross-reactivity between salivary gland proteins of Hyalomma anatolicum anatolicum and Boophilus microplus ticks. Parmar A, et al. **Vet Immunol Immunopathol** 1996 Jun 1;51(3-4):345–52

ISOLATION & PURIFICATION

Human salivary mucin MG1 selectively forms heterotypic complexes with amylase, proline-rich proteins, statherin, and histatins. Iontcheva I, et al. **J Dent Res** 1997 Mar; 76(3):734–43

Identification of salivary basic proline-rich proteins as receptors for Candida albicans adhesion. O'Sullivan JM, et al. **Microbiology** 1997 Feb;143 (Pt 2):341–8

Expression of a synthetic gene encoding the anticoagulant-antimetastatic protein ghilanten by the

methylotropic yeast Pichia pastoris. Brankamp RG, et al. **Protein Expr Purif** 1995 Dec;6(6):813–20

Purification, characterization and cDNA cloning of a novel anticoagulant of the intrinsic pathway, (prolixin-S) from salivary glands of the blood sucking bug, Rhodnius prolixus. Sun J, et al. **Thromb Haemost** 1996 Apr; 75(4):573–7

METABOLISM

PSP expression in murine lacrimal glands and function as a bacteria binding protein in exocrine secretions. Robinson CP, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G863–71

The relative abundance of a salivary protein, bSP30, is correlated with susceptibility to bloat in cattle herds selected for high or low bloat susceptibility. Rajan GH, et al. **Anim Genet** 1996 Dec;27(6):407–14

Interaction of the salivary low-molecular-weight mucin (MG2) with Actinobacillus actinomycetemcomitans. Groenink J, et al. **Antonie Van Leeuwenhoek** 1996 Jul; 70(1):79–87

Effects of pH and thiocyanate on hydrogen peroxide-induced evolution of molecular oxygen in human mixed saliva. Nishioka T, et al. **Arch Oral Biol** 1996 Oct;41(10):911–7

Nitric oxide binding and crystallization of recombinant nitrophorin I, a nitric oxide transport protein from the blood-sucking bug Rhodnius prolixus. Andersen JF, et al. **Biochemistry** 1997 Apr 15;36(15):4423–8

Multiple interactions between polyphenols and a salivary proline-rich protein repeat result in complexation and precipitation. Baxter NJ, et al. **Biochemistry** 1997 May 6; 36(18):5566–77

Interaction of oligonucleotides with barrier fluid proteins. Laktionov PP, et al. **Biochemistry (Mosc)** 1997 Jun; 62(6):613–8

In vivo binding of the salivary glycoprotein EP-GP (identical to GCDFP-15) to oral and non-oral bacteria detection and identification of EP-GP binding species. Schenkels LC, et al. **Biol Chem** 1997 Feb;378(2):83–8

Expression, purification and characterisation of recombinant pallidipin, a novel platelet aggregation inhibitor from the haematophageous triatomine bug Triatoma pallidipennis. Haendler B, et al. **Blood Coagul Fibrinolysis** 1996 Mar; 7(2):183–6

Glycosylation of secretory proteins in salivary glands and saliva studied by lectin-probes. Garrett JR, et al. **Eur J Morphol** 1996 Aug;34(3):177–80 (10 ref.)

Sialylation patterns of the mouse parotid secretory granules. Combined deacetylation, enzymatic degradation and lectin-gold binding. Menghi G, et al. **Eur J Morphol** 1996 Aug;34(3):181–5

Secretory granule formation and synthesis pathway of secretory proteins in parotid gland cells. Takano K, et al. **Eur J Morphol** 1996 Aug;34(3):233–6

Absence of binding of human salivary glycoprotein to human gingival fibroblast-like cells in vitro. Zentner A, et al. **Eur J Oral Sci** 1996 Oct-Dec;104(5–6):634–6

The effects of 5-hydroxydopamine on salivary flow rates and protein secretion by the submandibular and parotid glands of rats. Abe K, et al. **Exp Physiol** 1996 Jul; 81(4):645–53

Binding sites of salivary statherin for Porphyromonas gingivalis recombinant fimbrillin. Amano A, et al. **Infect Immun** 1996 Oct;64(10):4249–54

Active sites of salivary proline-rich protein for binding to Porphyromonas gingivalis fimbriae. Kataoka K, et al. **Infect Immun** 1997 Aug;65(8):3159–64

Role of the carboxyl-terminal region of Porphyromonas gingivalis fimbrillin in binding to salivary proteins. Nagata H, et al. **Infect Immun** 1997 Feb;65(2):422–7

The salivary lipocalin von Ebner's gland protein is a cysteine proteinase inhibitor. van't Hof W, et al. **J Biol Chem** 1997 Jan 17;272(3):1837–41

Passive sorting in maturing granules of AtT-20 cells: the entry and exit of salivary amylase and proline-rich protein. Castle AM, et al. **J Cell Biol** 1997 Jul 14;138(1):45–54

Two regulated secretory pathways for newly synthesized parotid salivary proteins are distinguished by doses of secretagogues. Castle JD, et al. **J Cell Sci** 1996 Oct;109 (Pt 10):2591–9

Pathway for uptake and degradation of X-prolyl tripeptides in Streptococcus mutans VA-29R and Streptococcus sanguis ATCC 10556. Cowman RA, et al. **J Dent Res** 1997 Aug;76(8):1477–84

Saliva protein binding to streptococcal layers placed at different oral sites in 48 persons. Rudney JD, et al. **J Dent Res** 1996 Oct;75(10):1789–97

Incorporation of caseinoglycomacropeptide and caseinophosphopeptide into the salivary pellicle inhibits adherence of mutans streptococci. Schüpbach P, et al. **J Dent Res** 1996 Oct;75(10):1779–88

Lipocalin-type prostaglandin D synthase (beta-trace) is located in pigment epithelial cells of rat retina and accumulates within interphotoreceptor matrix. Beuckmann CT, et al. **J Neurosci** 1996 Oct 1;16(19):6119–24

Effects of chronic isoproterenol treatment or submandibular and sublingual ablation on microflora of mouse tooth surfaces. Maeda N, et al. **Microbiol Immunol** 1997; 41(7):513–7

Psychological stress as a determinant of protein levels and salivary-induced aggregation of Streptococcus gordonii in human whole saliva. Bosch JA, et al. **Psychosom Med** 1996 Jul-Aug;58(4):374–82

The elimination of secretory leukocyte protease inhibitor (SLPI) from the gastrointestinal tract in man. Nyström M, et al. **Scand J Clin Lab Invest** 1997 Apr;57(2):119–25

PHARMACOLOGY

Antioxidant activity of rat parotid saliva. Nagler RM, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):989–93

Tridegin, a new peptidic inhibitor of factor XIIIa, from the blood-sucking leech Haementeria ghilianii. Finney S, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):797–805

Reduction of plasma clot stability by a novel factor XIIIa inhibitor from the Giant Amazon Leech, Haementeria ghilianii. Wallis RB, et al. **Blood Coagul Fibrinolysis** 1997 Jul;8(5):291–5

Histidine-rich human salivary peptides are inhibitors of proprotein convertases furin and PC7 but act as substrates for PC1. Basak A, et al. **J Pept Res** 1997 Jun;49(6):596–603

Platelet aggregation and coagulation inhibitors in leech saliva and their roles in leech therapy. Rigbi M, et al. **Semin Thromb Hemost** 1996;22(3):273–8

Inhibition of thrombin-mediated cellular effects by triabin, a highly potent anion-binding exosite thrombin inhibitor. Glusa E, et al. **Thromb Haemost** 1997 Jun;77(6):1196–200

PHYSIOLOGY

PSP expression in murine lacrimal glands and function as a bacteria binding protein in exocrine secretions. Robinson CP, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G863–71

Salivary glands, their hormones, and thermoregulation. Mathison RD, et al. **Ann N Y Acad Sci** 1997 Mar 15; 813:338–43

Inhibition of human immunodeficiency virus type 1 infectivity by secretory leukocyte protease inhibitor occurs prior to viral reverse transcription. McNeely TB, et al. **Blood** 1997 Aug 1;90(3):1141–9

Candidacidal activity of human salivary histatin recombinant variants produced by site-directed mutagenesis. Driscoll J, et al. **Gene** 1996 Oct 24;177(1–2):29–34

RADIATION EFFECTS

Sialochemical profile of X-irradiated major salivary glands in the rat. Nagler R, et al. **Int J Radiat Biol** 1997 Apr; 71(4):441–8

SECRETION

Isolation and characterization of the androgen-dependent mouse cysteine-rich secretory protein-1 (CRISP-1) gene. Schwidetzky U, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):325–32

Glycosylation of secretory proteins in salivary glands and saliva studied by lectin-probes. Garrett JR, et al. **Eur J Morphol** 1996 Aug;34(3):177–80 (10 ref.)

The role of nitric oxide in the control of protein secretion in the submandibular gland of the cat. Buckle AD, et al. **Exp Physiol** 1995 Nov;80(6):1019–30

Two regulated secretory pathways for newly synthesized parotid salivary proteins are distinguished by doses of secretagogues. Castle JD, et al. **J Cell Sci** 1996 Oct;109 (Pt 10):2591–9

THERAPEUTIC USE

Inhibition of experimental gingivitis in beagle dogs with topical salivary histatins. Paquette DW, et al. **J Clin Periodontol** 1997 Apr;24(4):216–22

An evaluation of a dentifrice containing salivary peroxidase elements for the control of gingival disease in patients with irradiated head and neck cancer. Toljanic JA, et al. **J Prosthet Dent** 1996 Sep;76(3):292–6

TOXICITY

Toxins produced by arthropod parasites: salivary gland proteins of human body lice and venom proteins of chelonine wasps. Jones D, et al. **Toxicon** 1996 Nov-Dec; 34(11–12):1421–9 (32 ref.)

SALIVARY STONES see **SALIVARY GLAND CALCULI**

SALIVATION

see related
SIALORRHEA
XEROSTOMIA

cAMP modulation of a Ca2+-dependent K+ conductance in rat submandibular acinar cells. Ishikawa T. **Am J Physiol** 1997 Mar;272(3 Pt 1):G454–62

Salivary reactivity in restrained and unrestrained eaters and women with bulimia nervosa. Bulik CM, et al. **Appetite** 1996 Aug;27(1):15–24

DRUG EFFECTS

Changes in the noradrenaline and acetylcholine content of three major salivary glands and in the salivation and protein component patterns of whole saliva in chronically isoprenaline-administered mice. Kawaguchi T, et al. **Arch Oral Biol** 1997 Mar;42(3):225–34

The streptozocin-diabetic state depresses saliva secretion stimulated by pilocarpine and noradrenaline in mice. Kimura I, et al. **Biol Pharm Bull** 1996 Mar;19(3):384–7

Combined potentiating effect of byakko-ka-ninjin-to, its constituents, rhizomes of Anemarrhena asphodeloides, tomosaponin A-III, and calcium on pilocarpine-induced saliva secretion in streptozocin-diabetic mice. Kimura M, et al. **Biol Pharm Bull** 1996 Jul;19(7):926–31

The effect of clozapine on saliva flow rate: a pilot study. Rabinowitz T, et al. **Biol Psychiatry** 1996 Dec 1; 40(11):1132–4

Fluoride and pilocarpine reduce the risk of caries produced by chronic clomipramine treatment in rats. Martínez-Gomis J, et al. **Caries Res** 1997;31(2):155–60

Effect of antireflux medication on salivary drooling in children with cerebral palsy. Heine RG, et al. **Dev Med Child Neurol** 1996 Nov;38(11):1030–6

Peripheral effects of three novel non-peptide tachykinin NK1 receptor antagonists in the anaesthetized rat. Cellier E, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):377–85

The effects of 5-hydroxydopamine on salivary flow rates and protein secretion by the submandibular and parotid glands of rats. Abe K, et al. **Exp Physiol** 1996 Jul; 81(4):645–53

Kallikrein and salivary secretion in rats during heat exposure. Damas J. **Immunopharmacology** 1996 May;32(1–3):125–7

Effects of oxyphenonium bromide and some antihistaminics (H1) on salivary flow in human volunteers [letter] Dharmadhikari SD, et al. **Indian J Physiol Pharmacol** 1997 Apr;41(2):183–4

Effect of byakko-ka-ninjin-to on the efferent activity of the autonomic nerve fibers innervating the sublingual gland of the rat. Niijima A, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):46–50

PHYSIOLOGY

Apical secretion of rat submandibular tissue kallikrein continues in the absence of external stimulation: evidence for a constitutive secretory pathway [corrected and republished article originally printed in Acta Physiol Scand 1996 Feb;156(2):109–14] Garrett JR, et al. **Acta Physiol Scand** 1996 Jun;157(2):299–304

Chorda tympani transection and selective desalivation differentially disrupt two-lever salt discrimination performance in rats. St. John SJ, et al. **Behav Neurosci** 1997 Apr;111(2):450–9

Salivary reactivity in women with bulimia nervosa across treatment. Bulik CM, et al. **Biol Psychiatry** 1996 Jun 15; 39(12):1009–12

The effect of dietary fat on salivary habituation and satiation. Myers MD, et al. **Physiol Behav** 1997 Jul;62(1):155–61

Allocation of attentional resources during habituation to food cues. Epstein LH, et al. **Psychophysiology** 1997 Jan; 34(1):59–64

Differences in salivation to repeated food cues in obese and nonobese women. Epstein LH, et al. **Psychosom Med** 1996 Mar-Apr;58(2):160–4

RADIATION EFFECTS

A 2 week pair-fed study of early X-irradiation effects on rat major salivary gland function. Nagler RM, et al. **Arch Oral Biol** 1996 Jul;41(7):713–7

Evidence for early and persistent impairment of salivary gland excretion after irradiation of head and neck tumours. Liem IH, et al. **Eur J Nucl Med** 1996 Nov;23(11):1485–90

SALK VACCINE see **POLIOVIRUS VACCINE**

SALMO GAIRDNERI see **ONCORHYNCHUS MYKISS**

SALMO SALMO see **SALMON**

SALMON

Salmon import bans to remain [news] **Aust Vet J** 1997 Feb; 75(2):88

First use in North America of azamethiphos to treat Atlantic salmon for sea lice infestation: procedures and efficacy. O'Halloran J, et al. **Can Vet J** 1996 Oct;37(10):610–1

Descriptive epidemiology of marine anemia in seapen-reared salmon in southern British Columbia. Stephen C, et al. **Can Vet J** 1996 Jul;37(7):420–5

Scombrotoxicosis-like illness following the ingestion of smoked salmon that demonstrated low histamine levels and high toxicity on mouse bioassay. Gessner BD, et al. **Clin Infect Dis** 1996 Dec;23(6):1316–8

Diphyllobothriasis after eating raw salmon. Hutchinson JW, et al. **Hawaii Med J** 1997 Jul;56(7):176–7

Determination of amoxicillin in catfish and salmon tissues by liquid chromatography with precolumn formaldehyde derivatization. Ang CYW, et al. **J AOAC Int** 1996 Mar-Apr;79(2):389–96

Comparison in prescribing patterns of antibacterial drugs in salmonid farming in Norway during the periods 1980–1988 and 1989–1994. Grave K, et al. **J Vet Pharmacol Ther** 1996 Jun;19(3):184–91

Differences in patterns of meningoencephalitis due to bacterial kidney disease in farmed Atlantic and chinook salmon. Speare DJ. **Res Vet Sci** 1997 Jan-Feb;62(1):79–80

Novel cypermethrin formulation for the control of sea lice on salmon (Salmo salar) [see comments] Hart JL, et al. **Vet Rec** 1997 Feb 15;140(7):179–81. Comment in: Vet Rec 1997 Feb 22;140(8):212.

An outbreak of amoebic gill disease in Ireland. Rodger HD, et al. **Vet Rec** 1996 Oct 5;139(14):348–9

ANATOMY & HISTOLOGY

Effect of exogenous cholecystokinin on the discharge of the gallbladder and the secretion of trypsin and chymotrypsin from the pancreas of the Atlantic salmon, Salmo salar L. Einarsson S, et al.
Comp Biochem Physiol C Pharmacol Toxicol Endocrinol 1997 May;117(1):63–7

[Morphofunctional characteristics of the Leydig cells in the testes of the humpback salmon Oncorhynchus gorbuscha during spawning migration] Arbuzova LL. **Morfologiia** 1995;108(3):72–4 (Eng. Abstr.) **(Rus)**

[The thyroid gland of humpback salmon (Oncorhynchus gorbuscha) fry and of humpback and cherry salmon (Oncorhynchus masu) hybrids during smoltification] Maksimovich AA, et al. **Morfologiia** 1995;108(3):63–6 (Eng. Abstr.) **(Rus)**

BLOOD

Fish zona radiata (eggshell) protein: a sensitive biomarker for environmental estrogens. Arukwe A, et al.
Environ Health Perspect 1997 Apr;105(4):418–22

Sequence analysis and tissue expression of a non-Bohr beta-globin cDNA from Atlantic salmon. McMorrow T, et al. **Gene** 1997 Apr 21;189(2):183–8

Multiple route and dose pharmacokinetics of enrofloxacin in juvenile Atlantic salmon. Stoffregen DA, et al.
J Vet Pharmacol Ther 1997 Apr;20(2):111–23

Evidence of a protein C-like anticoagulant system in bony fish [published erratum appears in Thromb Res 1996 Nov 15;84(4):300–1] Salte R, et al. **Thromb Res** 1996 Sep 1; 83(5):389–97

CLASSIFICATION

Details of retropositional genome dynamics that provide a rationale for a generic division: the distinct branching of all the pacific salmon and trout (Oncorhynchus) from the Atlantic salmon and trout (Salmo). Murata S, et al.
Genetics 1996 Mar;142(3):915–26

Postglacial genetic differentiation of reproductive ecotypes of kokanee Oncorhynchus nerka in Okanagan Lake, British Columbia. Taylor EB, et al. **Mol Ecol** 1997 Jun;6(6):503–17

GENETICS

A chinook salmon PCR-RFLP marker in the p53 locus. Park LK, et al. **Anim Genet** 1996 Apr;27(2):127–8

Gonadotropin-releasing hormone gene expression in teleosts. Parhar IS, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1–2):216–27

Uniparental chromosome elimination in the early embryogenesis of the inviable salmonid hybrids between masu salmon female and rainbow trout male. Fujiwara A, et al. **Chromosoma** 1997 Jun;106(1):44–52

Isolation of major histocompatibility complex class I cDNA from pink salmon (Oncorhynchus gorbuscha). Katagiri T, et al. **Dev Comp Immunol** 1996 May–Jun;20(3):217–28

Structural organization and sequence analysis of the globin locus in Atlantic salmon. McMorrow T, et al.
DNA Cell Biol 1996 May;15(5):407–14

A novel and ancient vertebrate opsin. Soni BG, et al.
FEBS Lett 1997 Apr 14;406(3):279–83

Hepatocyte nuclear factor 4 (HNF4) binding sites in the salmon HNF1 promoter. Deryckere F, et al. **Gene** 1996 Oct 10;175(1–2):35–41

Sequence analysis and tissue expression of a non-Bohr beta-globin cDNA from Atlantic salmon. McMorrow T, et al. **Gene** 1997 Apr 21;189(2):183–8

Physical localization and characterization of the BglI element in the genomes of Atlantic salmon (Salmo salar L.) and brown trout (S. trutta L.). Moran P, et al. **Gene** 1997 Jul 18;194(1):9–18

Details of retropositional genome dynamics that provide a rationale for a generic division: the distinct branching of all the pacific salmon and trout (Oncorhynchus) from the Atlantic salmon and trout (Salmo). Murata S, et al.
Genetics 1996 Mar;142(3):915–26

The salmon SmaI family of short interspersed repetitive elements (SINEs): interspecific and intraspecific variation of the insertion of SINEs in the genomes of chum and pink salmon. Takasaki N, et al. **Genetics** 1997 May; 146(1):369–80

A NOR-associated repetitive element present in the genome of two Salmo species (Salmo salar and Salmo trutta). Abuín M, et al. **Genome** 1996 Aug;39(4):671–9

Protein and microsatellite single locus variability in Salmo salar L. (Atlantic salmon). Sánchez JA, et al. **Heredity** 1996 Oct;77 (Pt 4):423–32

Segregation studies and linkage analysis of Atlantic salmon microsatellites using haploid genetics. Slettan A, et al.
Heredity 1997 Jun;78 (Pt 6):620–7

Developmental stability and environmental stress in Salmo salar (Atlantic salmon). Vøllestad LA, et al. **Heredity** 1997 Feb;78 (Pt 2):215–22

Transport-associated proteins in Atlantic salmon (Salmo salar). Grimholt U. **Immunogenetics** 1997;46(3):213–21

Characterization of species-specifically amplified SINEs in three salmonid species—chum salmon, pink salmon, and kokanee: the local environment of the genome may be important for the generation of a dominant source gene at a newly retroposed locus. Takasaki N, et al.
J Mol Evol 1996 Feb;42(2):103–16

Postglacial genetic differentiation of reproductive ecotypes of kokanee Oncorhynchus nerka in Okanagan Lake, British Columbia. Taylor EB, et al. **Mol Ecol** 1997 Jun;6(6):503–17

Steroidogenic factor 1 and estradiol receptor act in synergism to regulate the expression of the salmon gonadotropin II beta subunit gene. Drean YL, et al. **Mol Endocrinol** 1996 Mar;10(3):217–29

Teleost FTZ-F1 homolog and its splicing variant determine the expression of the salmon gonadotropin IIbeta subunit gene. Liu D, et al. **Mol Endocrinol** 1997 Jun;11(7):877–90

Identification of a new calcitonin gene in the salmon Oncorhynchus gorbuscha. Jansz H, et al.
Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12344–8

GROWTH & DEVELOPMENT

Activation of salmon GnRH mRNA expression prior to differentiation of precocious males in Masu salmon. Amano M, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):365–71

Developmental stability and environmental stress in Salmo salar (Atlantic salmon). Vøllestad LA, et al. **Heredity** 1997 Feb;78 (Pt 2):215–22

IMMUNOLOGY

Isolation of major histocompatibility complex class I cDNA from pink salmon (Oncorhynchus gorbuscha). Katagiri T, et al. **Dev Comp Immunol** 1996 May–Jun;20(3):217–28

Cloning of two distinct cDNAs encoding parvalbumin, the major allergen of Atlantic salmon (Salmo salar). Lindstrøm CD, et al. **Scand J Immunol** 1996 Oct;44(4):335–44

METABOLISM

Subcellular localization of neuronal nitric oxide synthase in the brain of a teleost; an immunoelectron and confocal microscopical study. Holmqvist B, et al. **Brain Res** 1997 Jan 16;745(1–2):67–82

Aliphatic hydrocarbon levels in turbot and salmon farmed close to the site of the Aegean Sea oil spill. Alvarez Piñeiro ME, et al. **Bull Environ Contam Toxicol** 1996 Nov; 57(5):811–5

PCB intake from sport fishing along the northern Illinois shore of Lake Michigan. Pellettieri MB, et al.
Bull Environ Contam Toxicol 1996 Nov;57(5):766–70

Effect of exogenous cholecystokinin on the discharge of the gallbladder and the secretion of trypsin and chymotrypsin from the pancreas of the Atlantic salmon, Salmo salar L. Einarsson S, et al.
Comp Biochem Physiol C Pharmacol Toxicol Endocrinol 1997 May;117(1):63–7

Vitamins C and E interact in juvenile Atlantic salmon (Salmo salar, L.). Hamre K, et al. **Free Radic Biol Med** 1997; 22(1–2):137–49

The effect of the aromatase inhibitor fadrozole and two polynuclear aromatic hydrocarbons on sex steroid secretion by ovarian follicles of coho salmon. Afonso LO, et al.
Gen Comp Endocrinol 1997 May;106(2):169–74

Ovarian receptors for insulin and insulin-like growth factor I (IGF-I) and effects of IGF-I on steroid production by isolated follicular layers of the preovulatory coho salmon ovarian follicle. Maestro MA, et al.
Gen Comp Endocrinol 1997 May;106(2):189–201

Determination of lincomycin residue in salmon tissues by ion-pair reversed-phase liquid chromatography with electrochemical detection. Luo W, et al. **J AOAC Int** 1996 Jul–Aug;79(4):839–43

Determination and confirmation of identities of flumequine and nalidixic, oxolinic, and piromidic acids in salmon and shrimp. Pfenning AP, et al. **J AOAC Int** 1996 Sep–Oct; 79(5):1227–35

Rapid liquid chromatographic method to distinguish wild salmon from aquacultured salmon fed synthetic astaxanthin. Turujman SA, et al. **J AOAC Int** 1997 May–Jun; 80(3):622–32

DNA polymerase betas from liver and testes of cherry salmon, Oncorhynchus masou: purification and characterization of DNA polymerase betas with acidic isoelectric points. Yamaguchi T, et al.
J Biochem (Tokyo) 1996 Jan;119(1):186–92

Immunocytochemical localization of the GABAA/benzodiazepine receptor beta2/beta3 subunits in the optic tectum of the salmon. Anzelius M, et al.
J Recept Signal Transduct Res 1995 Jan–Mar; 15(1–4):413–25

The effect of dietary lipid on polyunsaturated fatty acid metabolism in Atlantic salmon (Salmo salar) undergoing parr–smolt transformation. Bell JG, et al. **Lipids** 1997 May; 32(5):515–25

Modification of membrane fatty acid composition, eicosanoid production, and phospholipase A activity in Atlantic salmon (Salmo salar) gill and kidney by dietary lipid. Bell JG, et al. **Lipids** 1996 Nov;31(11):1163–71

Digestion of the 1-O-alkyl diacylglycerol ethers of Atlantic dogfish liver oils by Atlantic salmon Salmo salar. Kang SJ, et al. **Lipids** 1997 Jan;32(1):19–30

Normal isoform of amyloid protein (PrP) in brains of spawning salmon. Gibbs CJ Jr, et al. **Mol Psychiatry** 1997 Mar;2(2):146–7

Dietary lipid affects phospholipid fatty acid compositions, eicosanoid production and immune function in Atlantic salmon (Salmo salar). Bell JG, et al.
Prostaglandins Leukot Essent Fatty Acids 1996 Mar; 54(3):173–82

14C-labeled microcystin-LR administered to Atlantic salmon via intraperitoneal injection provides in vivo evidence for covalent binding of microcystin-LR in salmon livers. Williams DE, et al. **Toxicon** 1997 Jun;35(6):985–9

MICROBIOLOGY

PCR and probe-PCR assays to monitor broodstock Atlantic salmon (Salmo salar L.) ovarian fluid and kidney tissue for presence of DNA of the fish pathogen Renibacterium salmoninarum. Miriam A, et al. **J Clin Microbiol** 1997 Jun; 35(6):1322–6

A sequential light microscopic and ultrastructural study on the uptake and handling of Vibrio salmonicida in phagocytes of the head kidney in experimentally infected Atlantic salmon (Salmo salar L.). Brattgjerd S, et al.
Vet Pathol 1996 Jan;33(1):55–65

Isolation of Yersinia ruckeri from an otter and salmonid fish from adjacent freshwater catchments. Collins RO, et al.
Vet Rec 1996 Aug 17;139(7):169

[Yeasts contaminating salmon roe] Nagornaia SS, et al.
Mikrobiol Z 1996 Mar–Apr;58(2):8–12 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Characterisation of a monoclonal antibody which recognises the enzyme chitinase from Lepeophtheirus salmonis. Labus MB, et al. **Biochem Soc Trans** 1996 May;24(2):207S

Protozoal dermatitis of farmed Atlantic salmon in British Columbia. Brocklebank JR. **Can Vet J** 1997 Jun;38(6):386–7

Haemobaphes disphaerocephalus, an accidental parasite of seawater pen-reared Atlantic salmon. Kent ML, et al.
Can Vet J 1997 Feb;38(2):110–1

Transmission experiments to determine the relationship between Sphaerospora sp. from Atlantic salmon, Salmo salar, and Sphaerospora truttae: a revised species description for S. truttae. McGeorge J, et al.
Folia Parasitol (Praha) 1996;43(2):107–16

Finnish salmon resistant to Gyrodactylus salaris: a long-term study at fish farms. Rintamäki-Kinnunen P, et al.
Int J Parasitol 1996 Jul;26(7):723–32

Taxonomy studies and diagnostic tests for myxosporean and microsporidian pathogens of salmonid fishes utilising ribosomal DNA sequence. Kent ML, et al.
J Eukaryot Microbiol 1996 Sep–Oct;43(5):98S–99S

Population dynamics of Gyrodactylus salaris (Monogenea) infecting Atlantic salmon, Salmo salar, parr in the river Batnfjordselva, Norway. Appleby C, et al. **J Parasitol** 1997 Feb;83(1):23–30

Random amplified polymorphic DNA (RAPD) analysis of three Norwegian Gyrodactylus salaris populations (Monogenea:Gyrodactylidae). Cunningham CO, et al.
J Parasitol 1997 Apr;83(2):311–4

Control of sea lice on salmon [letter; comment] Braidwood J. **Vet Rec** 1997 Mar 8;140(10):263–4. Comment on: Vet Rec 1997 Feb 22;140(8):212.

Control of sea lice in salmon using unlicensed products [letter; comment] [see comments] Muir I. **Vet Rec** 1997 Feb 22;140(8):212. Comment on: Vet Rec 1997 Feb 15;140(7):179–81. Comment in: Vet Rec 1997 Mar 8;140(10):263–4.

PHYSIOLOGY

Is the short-term modulation of heart rate in teleost fish physiologically significant? Assessment by spectral analysis techniques. Altimiras J, et al. **Braz J Med Biol Res** 1995 Nov–Dec;28(11–12):1197–206

Milt and endocrine responses of mature male Atlantic salmon (Salmo salar L.) parr to water-borne testosterone, 17,20 beta-dihydroxy-4-pregnen-3-one 20-sulfate, and the urines from adult female and male salmon. Waring CP, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):142–9

Effect of manipulation of the renin-angiotensin system in control of drinking in juvenile Atlantic salmon (Salmo salar L) in fresh water and after transfer to sea water. Fuentes J, et al. **J Comp Physiol [B]** 1997 Aug;167(6):438–43

Spatial projections to the olfactory bulb of functionally distinct and randomly distributed primary neurons in salmonid fishes. Hara TJ, et al. **Neurosci Res** 1996 Sep; 26(1):65–74

VIROLOGY

Genomic characterization of the virus causing infectious salmon anemia in Atlantic salmon (Salmo salar L.): an orthomyxo-like virus in a teleost. Mjaaland S, et al.
J Virol 1997 Oct;71(10):7681–6

[Salmonid herpesvirus] Yoshimizu M. **Uirusu** 1996 Jun; 46(1):53–9 (46 ref.) **(Jpn)**

SALMON, CHINOOK see **SALMON**

SALMON, CHUM see **ONCORHYNCHUS KETA**

SALMON, COHO see **ONCORHYNCHUS KISUTCH**

SALMON, DOG see **ONCORHYNCHUS KETA**

SALMON, PINK see **SALMON**

SALMON, SILVER see **ONCORHYNCHUS KISUTCH**

SALMON, SOCKEYE see **SALMON**

SALMONELLA

Safety and efficacy of an avirulent live Salmonella choleraesuis vaccine for protection of calves against S dublin infection. Fox BC, et al. **Am J Vet Res** 1997 Mar; 58(3):265–71

On–farm monitoring of mouse–invasive Salmonella enterica serovar enteritidis and a model for its association with the production of contaminated eggs. Guard–Petter J, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1588–93

Risk factors for sporadic salmonellosis in Switzerland. Schmid H, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):725–32

Salmonella detection in dried milk products by motility enrichment on modified semisolid Rappaport–Vassiliadis medium: collaborative study. Bolderdijk RF, et al. **J AOAC Int** 1996 Mar–Apr;79(2):441–50

Endotoxin priming of thromboxane–related vasoconstrictor responses in perfused rabbit lungs. Steudel W, et al. **J Appl Physiol** 1997 Jul;83(1):18–24

Dimethylthiourea protects rats against gram–negative sepsis and decreases tumor necrosis factor and nuclear factor kappaB activity. Sprong RC, et al. **J Lab Clin Med** 1997 Apr;129(4):470–81

Evidence that the receptor for soluble CD14:LPS complexes may not be the putative signal–transducing molecule associated with membrane–bound CD14. Haziot A, et al. **Scand J Immunol** 1997 Sep;46(3):242–5

Partial purification and characterization of Salmonella cytotoxin. Malik P, et al. **Vet Microbiol** 1996 Mar; 49(1–2):11–9

CHEMISTRY

Structure of the O–specific polysaccharide of Salmonella enterica ssp. arizonae O50 (Arizona 9a,9b). Senchenkova SN, et al. **Carbohydr Res** 1997 Jun 11;301(1–2):61–7

Expression profile and subcellular location of the plasmid–encoded virulence (Spv) proteins in wild–type Salmonella dublin. El–Gedaily A, et al. **Infect Immun** 1997 Aug;65(8):3406–11

Analysis of a monophosphoryl lipid A immunostimulant preparation from Salmonella minnesota R595 by high–performance liquid chromatography. Hagen SR, et al. **J Chromatogr A** 1997 Apr 11;767(1–2):53–61

[Conjugative and non–conjugative plasmids in Salmonella serovar Wien coded for broad–spectrum beta–lactamase] Bouabdallah F, et al. **Pathol Biol (Paris)** 1996 Oct; 44(8):701–4 (Eng. Abstr.) **(Fre)**

[Comparative characterization of the physico–chemical properties of lipopolysaccharides of Yersinia pestis and R–mutants of enterobacteria] Gremiakova TA, et al. **Mikrobiologiia** 1996 Nov–Dec;65(6):763–7 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

An homogeneous fluorescence polymerase chain reaction assay to identify Salmonella. Tseng SY, et al. **Anal Biochem** 1997 Feb 15;245(2):207–12

Molecular genetic relationships of the salmonellae. Boyd EF, et al. **Appl Environ Microbiol** 1996 Mar;62(3):804–8

Salmonella in retail poultry in Northern Ireland. Wilson IG, et al. **Commun Dis Rep CDR Rev** 1996 Mar 29;6(4):R64–6

Salmonella serogroups identified from adult diarrhoeal out–patients in Addis Ababa, Ethiopia: antibiotic resistance and plasmid profile analysis. Mache A, et al. **East Afr Med J** 1997 Mar;74(3):183–6

Comparison of random amplified polymorphic DNA analysis and enterobacterial repetitive intergenic consensus–PCR for epidemiological studies of Salmonella. Millemann Y, et al. **FEMS Immunol Med Microbiol** 1996 Jun; 14(2–3):129–34

Investigation of an outbreak of human salmonellosis caused by Salmonella enterica ssp. enterica serovar Infantis by use of pulsed field gel electrophoresis. Wegener HC, et al. **Int J Food Microbiol** 1996 Sep;32(1–2):125–31

Random amplification of polymorphic DNA (RAPD) of Salmonella: strain differentiation and characterization of amplified sequences. Hilton AC, et al. **J Appl Bacteriol** 1996 Dec;81(6):575–84

Conventional and molecular approaches to isolates of Salmonella hadar from sporadic and epidemic cases. Fantasia M, et al. **J Appl Microbiol** 1997 Apr;82(4):494–8

Rapid identification of Salmonella serovars in feces by specific detection of virulence genes, invA and spvC, by an enrichment broth culture–multiplex PCR combination assay. Chiu CH, et al. **J Clin Microbiol** 1996 Oct; 34(10):2619–22

Evaluation of L–pyrrolidonyl peptidase paper strip test for differentiation of members of the family Enterobacteriaceae, particularly Salmonella spp. Inoue K, et al. **J Clin Microbiol** 1996 Jul;34(7):1811–2

PCR ribotyping for characterizing Salmonella isolates of different serotypes. Lagatolla C, et al. **J Clin Microbiol** 1996 Oct;34(10):2440–3

Evaluation and comparison of molecular techniques for epidemiological typing of Salmonella enterica subsp. enterica serovar dublin. Liebisch B, et al. **J Clin Microbiol** 1996 Mar;34(3):641–6

An enzyme–linked immunosorbent assay to detect PCR products of the rfbS gene from serogroup D salmonellae: a rapid screening prototype. Luk JM, et al. **J Clin Microbiol** 1997 Mar;35(3):714–8

Phenotypic and genotypic discrimination of strains of Salmonella serotype Eimsbuettel from human and animal sources. Old DC, et al. **J Med Microbiol** 1997 Jul; 46(7):617–22

From the Centers for Disease Control and Prevention. Salmonella serotype Montevideo infections associated with chicks—Idaho, Washington, and Oregon, spring 1995 and 1996. **JAMA** 1997 Apr 9;277(14):1108–9

Salmonella serotype Montevideo infections associated with chicks—Idaho, Washington, and Oregon, spring 1995 and 1996. **MMWR Morb Mortal Wkly Rep** 1997 Mar 21; 46(11):237–9

Salmonella or Smithella? [letter; comment] Katscher F. **Nature** 1997 Jul 24;388(6640):320. Comment on: Nature 1997 Jun 26;387(6636):831.

Supplement 1995 (no. 39) to the Kauffmann–White scheme. Popoff MY, et al. **Res Microbiol** 1996 Nov–Dec; 147(9):765–9

Potential virulence determinants of Salmonella serovars from poultry and human sources in Spain. Carramiñana JJ, et al. **Vet Microbiol** 1997 Mar;54(3–4):375–83

Characterization of Salmonella dublin and Salmonella typhimurium (Copenhagen) isolates from cattle. Brackelsberg CA, et al. **Vet Res Commun** 1997 Aug; 21(6):409–20

Human infection caused by Salmonellae of subspecies II to VI in Germany, 1977–1992. Aleksic S, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):391–8

Screening for Salmonella with a murine monoclonal antibody M105 detects both Felix O1 bacteriophage sensitive and resistant Salmonella strains. Tsang RS, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):23–32

Differentiation of Salmonella gallinarum and Salmonella pullorum by their whole–cell fatty acid methyl ester profiles. Ryll M, et al. **Zentralbl Veterinarmed [B]** 1996 Aug;43(6):357–63

[Extraintestinal Salmonella infections in four Danish counties. Inverse relationship between invasiveness and zoonotic serotypes] Schønheyder HC, et al. **Ugeskr Laeger** 1997 Mar 31;159(14):2082–5 (Eng. Abstr.) **(Dan)**

[Molecular biological methods for epidemiological typing of Salmonella—a review] Liebisch B, et al. **Berl Munch Tierarztl Wochenschr** 1996 Sep;109(9):348–54 (96 ref.) (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Antimicrobial effect of acidified nitrite on gut pathogens: importance of dietary nitrate in host defense. Dykhuizen RS, et al. **Antimicrob Agents Chemother** 1996 Jun; 40(6):1422–5

Antimicrobial resistance in Salmonella and Escherichia coli isolated from horses. Bucknell DG, et al. **Aust Vet J** 1997 May;75(5):355–6

Antibiotic resistance of Shigella spp., Salmonella spp., and Yersinia spp. isolated in Quebec. Gaudreau C, et al. **Can Commun Dis Rep** 1997 Apr 15;23(8):57–9 **(Eng, Fre)**

Emerging quinolone–resistant Salmonella in the United States. Herikstad H, et al. **Emerg Infect Dis** 1997 Jul–Sep; 3(3):371–2

Antibiotic resistance in Shigella and Salmonella in a region of Lithuania. Jensen G, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):872–6

A plasmid–mediated CMY–2 beta–lactamase from an Algerian clinical isolate of Salmonella senftenberg. Koeck JL, et al. **FEMS Microbiol Lett** 1997 Jul 15;152(2):255–60

Influence of cadmium on resistance to antibiotics in salmonellae isolated from pigs. Hluštavová H, et al. **Folia Microbiol (Praha)** 1995;40(3):274–8

The determination of efficacy of antimicrobial rinses on turkey carcasses using response surface designs. Bautista DA, et al. **Int J Food Microbiol** 1997 Mar 3;34(3):279–92

Comparison of chemical treatments to kill Salmonella on alfalfa seeds destined for sprout production. Beuchat LR. **Int J Food Microbiol** 1997 Mar 3;34(3):329–33

Drug resistance, plasmids, biotypes and susceptibility to bacteriophages of Salmonella isolated from poultry in Canada. Poppe C, et al. **Int J Food Microbiol** 1996 Jul; 30(3):325–44

Antimicrobial susceptibility testing in progress [news] **J Am Vet Med Assoc** 1997 Jan 15;210(2):145–7

Multi–drug resistant non–typhi salmonellae in Kenya. Kariuki S, et al. **J Antimicrob Chemother** 1996 Sep;38(3):425–34

In–vitro activity of antiviral agents used in AIDS against Salmonella typhi and non–typhoid salmonella [letter] Sanchez–Carrillo C, et al. **J Antimicrob Chemother** 1996 Jul;38(1):153–4

Brucella–Salmonella lipopolysaccharide chimeras are less permeable to hydrophobic probes and more sensitive to cationic peptides and EDTA than are their native Brucella sp. counterparts. Freer E, et al. **J Bacteriol** 1996 Oct; 178(20):5867–76

The minimum inhibitory concentration of seventeen antimicrobials for Salmonella isolates from septic patients. Dobardzic R, et al. **J Chemother** 1996 Oct;8(5):369–74

Development of quinolone resistance in salmonella: failure to prevent splenic abscess [letter] Boswell TC, et al. **J Infect** 1997 Jan;34(1):86–7

Emergence of ciprofloxacin resistance during treatment of Salmonella osteomyelitis in three patients with sickle cell disease. Workman MR, et al. **J Infect** 1996 Jan;32(1):27–32

Characterization of a nosocomial outbreak involving an epidemic plasmid encoding for TEM–27 in Salmonella enterica subspecies enterica serotype Othmarschen. Morosini MI, et al. **J Infect Dis** 1996 Nov;174(5):1015–20

Quinolone resistance mutations in the gyrA gene of clinical isolates of Salmonella. Ouabdesselam S, et al. **Microb Drug Resist** 1996 Fall;2(3):299–302

Prediction of Salmonella mutagenicity. Zeiger E, et al. **Mutagenesis** 1996 Sep;11(5):471–84

Mutagenic analysis of 2,3–diaminophenazine and 2–amino–3–hydroxyphenazine in Salmonella strains expressing different levels of O–acetyltransferase with and without plant and mammalian activation. Wagner ED, et al. **Mutat Res** 1996 Nov 11;372(1):65–74

[The distribution of antibiotically–resistant organisms in the environment with special attention to salmonellae] Tschäpe H. **DTW Dtsch Tierarztl Wochenschr** 1996 Jul;103(7):273–7 (3 ref.) (Eng. Abstr.) **(Ger)**

[Serovar–distribution and drug–resistance of Salmonella strains isolated from domestic and imported cases in 1990–1994 in Tokyo] Matsushita S, et al. **Kansenshogaku Zasshi** 1996 Jan;70(1):42–50 (Eng. Abstr.) **(Jpn)**

[Serovars and drug susceptibility of Salmonella isolated in humans from 1987–1993 in Aichi prefecture] Arakawa S, et al. **Nippon Koshu Eisei Zasshi** 1996 Oct;43(10):894–900 (Eng. Abstr.) **(Jpn)**

[The sensitivity of Salmonella strains in diarrheal disease to new quinolones compared with other antimicrobial substances] David E, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun; 41(1–2):43–6 (Eng. Abstr.) **(Rum)**

[Antibiotic resistance in Salmonella enterica: an increasing problem] Galán JC, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):528–32 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Identification of sodC encoding periplasmic [Cu,Zn]–superoxide dismutase in Salmonella. Canvin J, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):215–20

Expression, purification and characterization of recombinant phosphomannomutase and GDP–alpha–D–mannose pyrophosphorylase from Salmonella enterica, group B, for the synthesis of GDP–alpha–D–mannose from D–mannose. Elling L, et al. **Glycobiology** 1996 Sep;6(6):591–7

Evaluation of L–pyrrolidonyl peptidase paper strip test for differentiation of members of the family Enterobacteriaceae, particularly Salmonella spp. Inoue K, et al. **J Clin Microbiol** 1996 Jul;34(7):1811–2

The specificity of sty SKI, a type I restriction enzyme, implies a structure with rotational symmetry. Thorpe PH, et al. **Nucleic Acids Res** 1997 May 1;25(9):1694–700

GENETICS

Unique Salmonella choleraesuis surface protein affecting invasiveness. Possible inv related sequence. Maddox CW, et al. **Adv Exp Med Biol** 1997;412:341–8

Evolution of drug resistance in Salmonella panama isolates in Chile. Cordano AM, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):336–41

Identification of Salmonella abortusovis by PCR amplification of a serovar–specific IS200 element. Beuzón CR, et al. **Appl Environ Microbiol** 1997 May;63(5):2082–5

Utilization of both phenotypic and molecular analyses to investigate an outbreak of multidrug–resistant Salmonella anatum in horses. Hartmann FA, et al. **Can J Vet Res** 1997 Jul;61(3):173–81

Hsp70 protects macrophages infected with Salmonella choleraesuis against TNF–alpha–induced cell death. Nishimura H, et al. **Cell Stress Chaperones** 1997 Mar; 2(1):50–9

Molecular analysis of Salmonella enterica serotype Dublin: building bridges between population genetic and molecular epidemiological studies. Platt DJ, et al. **Electrophoresis** 1996 Apr;17(4):667–71

Application of pulsed–field gel electrophoresis to an international outbreak of Salmonella agona. Threlfall EJ, et al. **Emerg Infect Dis** 1996 Apr–Jun;2(2):130–2

Molecular epidemiological tools for Salmonella Dublin typing. Kerouanton A, et al. **FEMS Immunol Med Microbiol** 1996 May;14(1):25–9

Expression and immunogenicity of an Echinococcus granulosus fatty acid–binding protein in live attenuated Salmonella vaccine strains. Chabalgoity JA, et al. **Infect Immun** 1997 Jun;65(6):2402–12

Naturally occurring deletions in the centisome 63 pathogenicity island of environmental isolates of Salmonella spp. Ginocchio CC, et al. **Infect Immun** 1997 Apr;65(4):1267–72

The spv genes on the Salmonella dublin virulence plasmid are required for severe enteritis and systemic infection in the natural host. Libby SJ, et al. **Infect Immun** 1997 May; 65(5):1786–92

Distribution of pathogenicity islands in Salmonella spp. Ochman H, et al. **Infect Immun** 1996 Dec;64(12):5410–2

Multi–drug resistant non–typhi salmonellae in Kenya. Kariuki S, et al. **J Antimicrob Chemother** 1996 Sep;38(3):425–34

Random amplification of polymorphic DNA (RAPD) of Salmonella: strain differentiation and characterization of

amplified sequences. Hilton AC, et al. **J Appl Bacteriol** 1996 Dec;81(6):575–84

Contribution of horizontal gene transfer and deletion events to development of distinctive patterns of fimbrial operons during evolution of Salmonella serotypes. Bäumler AJ, et al. **J Bacteriol** 1997 Jan;179(2):317–22

Recent horizontal transmission of plasmids between natural populations of Escherichia coli and Salmonella enterica. Boyd EF, et al. **J Bacteriol** 1997 Mar;179(5):1622–7

Comparative genetics of the inv–spa invasion gene complex of Salmonella enterica. Boyd EF, et al. **J Bacteriol** 1997 Mar;179(6):1985–91

Plasmid virulence gene expression induced by short–chain fatty acids in Salmonella dublin: identification of rpoS–dependent and rpo–S–independent mechanisms. El–Gedaily A, et al. **J Bacteriol** 1997 Feb;179(4):1409–12

Transcriptional regulation of Salmonella virulence: a PhoQ periplasmic domain mutation results in increased net phosphotransfer to PhoP. Gunn JS, et al. **J Bacteriol** 1996 Nov;178(21):6369–73

A novel pathway for O–polysaccharide biosynthesis in Salmonella enterica serovar Borreze. Keenleyside WJ, et al. **J Biol Chem** 1996 Nov 8;271(45):28581–92

Evolutionary origin of a monophasic Salmonella serovar, 9,12:l,v:–, revealed by IS200 ·profiles and restriction fragment polymorphisms of the fljB gene. Burnens AP, et al. **J Clin Microbiol** 1996 Jul;34(7):1641–5

An enzyme–linked immunosorbent assay to detect PCR products of the rfbS gene from serogroup D salmonellae: a rapid screening prototype. Luk JM, et al. **J Clin Microbiol** 1997 Mar;35(3):714–8

Phenotypic and genotypic discrimination of strains of Salmonella serotype Eimsbuettel from human and animal sources. Old DC, et al. **J Med Microbiol** 1997 Jul; 46(7):617–22

Genomic lineage of Salmonella enterica serotype Gallinarum. Olsen JE, et al. **J Med Microbiol** 1996 Dec;45(6):413–8

DNA insertion sequences and the molecular epidemiology of Salmonella and Mycobacterium. Stanley J, et al. **J Med Microbiol** 1996 Oct;45(4):236–51 (116 ref.)

Detection of Salmonella DNA in chicken embryos and environmental samples by polymerase chain reaction. Tuchili LM, et al. **J Vet Med Sci** 1996 Sep;58(9):881–4

Increase in multiple antibiotic resistance in nontyphoidal salmonellas from humans in England and Wales: a comparison of data for 1994 and 1996. Threlfall EJ, et al. **Microb Drug Resist** 1997 Fall;3(3):263–6

Homologous regions of the Salmonella enteritidis virulence plasmid and the chromosome of Salmonella typhi encode thiol: disulphide oxidoreductases belonging to the DsbA thioredoxin family. Rodríguez–Peña JM, et al. **Microbiology** 1997 Apr;143 (Pt 4):1405–13

Diagnostic potential of sefA DNA probes to Salmonella enteritidis and certain other O–serogroup D1 Salmonella serovars. Doran JL, et al. **Mol Cell Probes** 1996 Aug; 10(4):233–46

Molecular genetic bases of Salmonella entry into host cells. Galán JE. **Mol Microbiol** 1996 Apr;20(2):263–71 (43 ref.)

Functional analysis of ssaJ and the ssaK/U operon, 13 genes encoding components of the type III secretion apparatus of Salmonella Pathogenicity Island 2. Hensel M, et al. **Mol Microbiol** 1997 Apr;24(1):155–67

A third family of allelic hsd genes in Salmonella enterica: sequence comparisons with related proteins identify conserved regions implicated in restriction of DNA. Titheradge AJ, et al. **Mol Microbiol** 1996 Nov;22(3):437–47

Prediction of Salmonella mutagenicity. Zeiger E, et al. **Mutagenesis** 1996 Sep;11(5):471–84

Formation of 8–hydroxy–2'–deoxyguanosine following treatment of 2'–deoxyguanosine or DNA by hydrogen peroxide or glutathione. Abu–Shakra A, et al. **Mutat Res** 1997 Apr 24;390(1–2):45–50

Mutagenicity of dihydroxybenzenes and dihydroxynaphthalenes for Ames Salmonella tester strains. Hakura A, et al. **Mutat Res** 1996 Dec 20;371(3–4):293–9

Genotoxicity of ethyl carbamate (urethane) in Salmonella, yeast and human lymphoblastoid cells. Hübner P, et al. **Mutat Res** 1997 Apr 24;390(1–2):11–9

Mutagenic analysis of 2,3–diaminophenazine and 2–amino–3–hydroxyphenazine in Salmonella strains expressing different levels of O–acetyltransferase with and without plant and mammalian activation. Wagner ED, et al. **Mutat Res** 1996 Nov 11;372(1):65–74

High mutation frequencies among Escherichia coli and Salmonella pathogens [see comments] LeClerc JE, et al. **Science** 1996 Nov 15;274(5290):1208–11. Comment in: Science 1996 Nov 15;274(5290):1081.

The record of horizontal gene transfer in Salmonella. Bäumler AJ. **Trends Microbiol** 1997 Aug;5(8):318–22 (44 ref.)

Protection in a gerbil model of amebiasis by oral immunization with Salmonella expressing the galactose/N–acetyl D–galactosamine inhibitable lectin of Entamoeba histolytica. Mann BJ, et al. **Vaccine** 1997 Apr–May;15(6–7):659–63

Further search for virulence factors encoded by Salmonella serovar–specific plasmids. Glockner S, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):69–82

[The gentic principles for the design of live Salmonella vaccines] Petrovskaia VG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):25–8 (47 ref.) (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Note: comparison of media for the isolation of lactose–positive Salmonella. Ruiz J, et al. **J Appl Bacteriol** 1996 Nov;81(5):571–4

Survival and degradation of Salmonella enterica serotype Enteritidis in intestinal epithelial cells in vitro. Saarinen M, et al. **J Med Microbiol** 1996 Dec;45(6):463–71

Relationship between aerobic bacteria, salmonellae and Campylobacter on broiler carcasses. Cason JA, et al. **Poult Sci** 1997 Jul;76(7):1037–41

Application of direct–fed microbial bacteria and fructooligosaccharides for salmonella control in broilers during feed withdrawal. Oyarzabal OA, et al. **Poult Sci** 1996 Feb;75(2):186–90

IMMUNOLOGY

Immunoprophylaxis of Salmonella gallinarum infection by Salmonella enteritidis–immune lymphokines in broiler chicks. Kogut M, et al. **Adv Exp Med Biol** 1997;412:413–20

Hybrid hepatitis B virus core antigen as a vaccine carrier moiety. II. Expression in avirulent Salmonella spp. for mucosal immunization. Schödel F, et al. **Adv Exp Med Biol** 1996;397:15–21 (18 ref.)

Detection of antibodies to Salmonella lipopolysaccharide in muscle fluid from cattle. Hoorfar J, et al. **Am J Vet Res** 1997 Apr;58(4):334–7

Efficacy of two avian Salmonella–immune lymphokines against liver invasion in chickens by Salmonella serovars with different O–group antigens. Ziprin RL, et al. **Avian Dis** 1997 Jan–Mar;41(1):181–6

Some properties and protective activity of specific DLE against Salmonella cholerae suis infection. Arnaudov A, et al. **Biotherapy** 1996;9(1–3):105–8

Activity of antibodies against Salmonella dublin, Toxoplasma gondii, or Actinobacillus pleuropneumoniae in sera after treatment with electron beam irradiation or binary ethylenimine. Kyvsgaard NC, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):628–34

Serological characterisation of anti–endotoxin sera directed against the conjugates of oligosaccharide core of Escherichia coli type R1, R2, R3, J5 and Salmonella Ra with tetanus toxoid. Lugowski C, et al. **FEMS Immunol Med Microbiol** 1996 Nov;16(1):21–30

Stimulation of splenocytes in C3H/HeJ mice with Porphyromonas gingivalis lipid A in comparison with enterobacterial lipid A. Ogawa T, et al. **Immunobiology** 1996;196(4):399–414

Immune deviation: a historical perspective. Parish CR. **Immunol Cell Biol** 1996 Oct;74(5):449–56 (53 ref.)

O–antigenic determinants in Salmonella species of serogroup C1 are expressed in distinct immunochemical populations of chains. Nnalue NA, et al. **Microbiology** 1997 Feb;143 (Pt 2):653–62

Mucosal immune responses to intestinal bacterial pathogens. Bloom PD, et al. **Semin Gastrointest Dis** 1996 Jul; 7(3):151–66 (125 ref.)

Oral delivery of foreign antigens by attenuated Salmonella: consequences of prior exposure to the vector strain. Attridge SR, et al. **Vaccine** 1997 Feb;15(2):155–62

In a vaccine model, selected substitution of a highly stimulatory T cell epitope of hen's egg lysozyme into a Salmonella flagellin does not result in a homologous, specific, cellular immune response and may alter the way in which the total antigen is processed. Vanegas RA, et al. **Vaccine** 1997 Feb;15(3):321–4

Flow cytometric analysis of the reactivity of workshop monoclonal antibodies on sheep lymph node cells, after infection with Salmonella abortusovis. Bernard S, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):403–9

Characterisation of monoclonal antibodies specific to SEF 21 fimbriae of Salmonella enteritidis and their reactivity with other Salmonellae and Enterobacteria. Sojka MG, et al. **Vet Microbiol** 1996 Feb;48(3–4):207–21

Influence of prior infection on the dynamics of bacterial counts in calves experimentally infected with Salmonella dublin. Steinbach G, et al. **Vet Microbiol** 1996 Feb; 48(3–4):199–206

In vitro cellular responses from sheep draining lymph node cells after subcutaneous inoculation with Salmonella abortusovis. Doucet F, et al. **Vet Res** 1997;28(2):165–78

[Early endotoxin tolerance––a preventive concept against infection] Staubach KH, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:360–3 (Eng. Abstr.) **(Ger)**

[Use of Salmonellas as a vector in the designing of recombinant vaccines] Boĭchenko MN, et al. **Vestn Ross Akad Med Nauk** 1997;(3):43–6 (28 ref.) **(Rus)**

ISOLATION & PURIFICATION

A comparison of EF–18 agar and modified brilliant green agar with lutensit for isolation of Salmonella from poultry samples. Petersen L. **Acta Vet Scand** 1997;38(1):79–85

Immunoelectrochemical assays for bacteria: use of epifluorescence microscopy and rapid–scan electrochemical techniques in development of an assay for Salmonella. Brewster JD, et al. **Anal Chem** 1996 Dec 1; 68(23):4153–9

Identification of Salmonella abortusovis by PCR amplification of a serovar–specific IS200 element. Beuzón CR, et al. **Appl Environ Microbiol** 1997 May;63(5):2082–5

Comparison of commercially available kits with standard methods for detection of Salmonella strains in foods. Hanai K, et al. **Appl Environ Microbiol** 1997 Feb;63(2):775–8

The isolation of Salmonellas from piggery waste water after orthodox pondage treatment. Henry DP, et al. **Aust Vet J** 1995 Dec;72(12):478–9

Prevalence of Salmonella in municipal sewage treatment plant effluents in southern California. Kinde H, et al. **Avian Dis** 1997 Apr–Jun;41(2):392–8

Application of normal avian gut flora by prolonged aerosolization onto turkey hatching eggs naturally exposed to Salmonella. Primm ND, et al. **Avian Dis** 1997 Apr–Jun; 41(2):455–60

Status of Salmonella gallinarum–pullorum infections in poultry in Zambia. Sato Y, et al. **Avian Dis** 1997 Apr–Jun; 41(2):490–5

Campylobacter spp. and Salmonella spp. in black–headed gulls (Larus ridibundus). Sixl W, et al. **Cent Eur J Public Health** 1997 Mar;5(1):24–6

Salmonella neck abscess in a patient with beta–thalassemia major: case report and review. Behr MA, et al. **Clin Infect Dis** 1996 Aug;23(2):404–5 (8 ref.)

Salmonella parotitis with abscess formation in a patient with human immunodeficiency virus infection. Knee TS, et al. **Clin Infect Dis** 1997 May;24(5):1009–10

Clinical spectrum of urinary tract infections due on nontyphoidal Salmonella species. Ramos JM, et al. **Clin Infect Dis** 1996 Aug;23(2):388–90

Surveillance on Salmonella in turkey flocks and processing plants. Hafez HM, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Jan;104(1):33–5

Emerging quinolone–resistant Salmonella in the United States. Herikstad H, et al. **Emerg Infect Dis** 1997 Jul–Sep; 3(3):371–2

Salmonella isolated from humans, animals and other sources in Canada, 1983–92. Khakhria R, et al. **Epidemiol Infect** 1997 Aug;119(1):15–23

An outbreak of abortion in mares associated with Salmonella abortusequi infection. Madić J, et al. **Equine Vet J** 1997 May;29(3):230–3

Specific and sensitive two–step polymerase chain reaction assay for the detection of Salmonella species. Haedicke W, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):603–7

Performance of six culture media for isolation of Salmonella species from stool samples. Ruiz J, et al. **Eur J Clin Microbiol Infect Dis** 1996 Dec;15(12):922–6

Interregional foodborne salmonellosis outbreak due to powdered infant formula contaminated with lactose–fermenting Salmonella virchow. Usera MA, et al. **Eur J Epidemiol** 1996 Aug;12(4):377–81

Microbiological analysis of 'black pudding', a Trinidadian delicacy and health risk to consumers. Adesiyun AA, et al. **Int J Food Microbiol** 1996 Aug;31(1–3):283–99

A comparison of procedures involving single step Salmonella, 1–2 Test, and modified semisolid Rappaport–Vassiliadis medium for detection of Salmonella in ground beef. Afflu L, et al. **Int J Food Microbiol** 1997 Jul 22;37(2–3):241–4

Identification and quantification of risk factors regarding Salmonella spp. on pork carcasses. Berends BR, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):199–206

Assay of Salmonella in enrichment cultures of foods, feeds and environmental samples by the polymyxin–cloth enzyme immunoassay. Blais BW, et al. **Int J Food Microbiol** 1997 Jul 22;37(2–3):183–8

Detection of Salmonella from raw food samples using Dynabeads anti–Salmonella and a conventional reference method. Cudjoe KS, et al. **Int J Food Microbiol** 1997 Jun 17;37(1):55–62

Screening of Salmonella in naturally contaminated feeds with rapid methods. Fierens H, et al. **Int J Food Microbiol** 1996 Aug;31(1–3):301–9

Prevalence of Salmonella in broilers at retail outlets, processing plants and farms in Malaysia. Rusul G, et al. **Int J Food Microbiol** 1996 Dec;33(2–3):183–94

Risk of shedding Salmonella organisms by market–age hogs in a barn with open–flush gutters. Davies PR, et al. **J Am Vet Med Assoc** 1997 Feb 1;210(3):386–9

Prevalence of Salmonella organisms in swine feed. Harris IT, et al. **J Am Vet Med Assoc** 1997 Feb 1;210(3):382–5

Usefulness of cellulase in recovery of Salmonella spp. from guar gum. Amaguaña RM, et al. **J AOAC Int** 1996 Jul–Aug; 79(4):853–7

VIDAS enzyme–linked fluorescent immunoassay for detection of Salmonella in foods: collaborative study. Curiale MS, et al. **J AOAC Int** 1997 May–Jun;80(3):491–504

The certification of a reference material for the evaluation of the ISO method for the detection of Salmonella. in 't Veld PH, et al. **J Appl Bacteriol** 1996 May;80(5):496–504

The use of bacteriophage–based systems for the separation and concentration of Salmonella. Bennett AR, et al. **J Appl Microbiol** 1997 Aug;83(2):259–65

Comparison of five plating media for isolation of Salmonella species from human stools. Ruiz J, et al. **J Clin Microbiol** 1996 Mar;34(3):686–8

"Automatic" diagnosis of viral enteritis [letter; comment] Palla G, et al. **J Pediatr** 1997 Jun;130(6):1013. Comment on: J Pediatr 1996 Jun;128(6):731–41.

Multiplex polymerase chain reaction for simultaneous detection of Lawsonia intracellularis, Serpulina hyodysenteriae, and salmonellae in porcine intestinal specimens. Elder RO, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):281–6

SALMONELLA

A clinical trial of probiotic administration for prevention of Salmonella shedding in the postoperative period in horses with colic. Parraga ME, et al. **J Vet Intern Med** 1997 Jan–Feb;11(1):36–41

Fecal shedding of Salmonella in exotic felids. Clyde VL, et al. **J Zoo Wildl Med** 1997 Jun;28(2):148–52

Labeling Salmonella live vaccine strains with the lux operon from Vibrio fischeri improves their detection and discrimination from wild type. Beyer W, et al. **Microbiol Res** 1996 Dec;151(4):407–19

Use of hybridization assay and direct immuno assay for detection of Salmonella spp. in surface waters and a comparison with conventional culture procedure. Marranzano M, et al. **New Microbiol** 1997 Jul;20(3):283–7

Principles of ex ovo competitive exclusion and in ovo administration of Lactobacillus reuteri. Edens FW, et al. **Poult Sci** 1997 Jan;76(1):179–96 (120 ref.)

Detecting infections of chickens with recent Salmonella pullorum isolates using standard serological methods. Gast RK. **Poult Sci** 1997 Jan;76(1):17–23

Management and nutritional factors associated with the detection of Salmonella sp. from cattle fecal specimens from feedlot operations in the United States. Losinger WC, et al. **Prev Vet Med** 1997 Aug;31(3–4):231–44

Nation-wide Salmonella enterica surveillance and control in Danish slaughter swine herds. Mousing J, et al. **Prev Vet Med** 1997 Feb;29(4):247–61

The role of public health laboratory in the problem of salmonellosis in São Paulo, Brazil. Taunay AE, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar–Apr;38(2):119–27

Aetiology of acute diarrhoea in hospitalized children in Hong Kong. Biswas R, et al. **Trop Med Int Health** 1996 Oct; 1(5):679–83

Comparison between persisting anti-lipopolysaccharide antibodies and culture at postmortem in salmonella-infected cattle herds. Hoorfar J, et al. **Vet Microbiol** 1996 May;50(1–2):81–94

Campylobacter and Salmonella contaminating fresh chicken meat. Geilhausen B, et al. **Zentralbl Bakteriol** 1996 Jul; 284(2–3):241–5

[Rapid detection of Salmonella with MUCAP reagent] Zhen H, et al. **Wei Sheng Wu Hsueh Pao** 1996 Feb;36(1):58–62 (Eng. Abstr.) **(Chi)**

[Sanitation of biowaste compost by using Salmonella enteritidis as a pathogen indicator and survival of Salmonella in seepage water] Knop M, et al. **Berl Munch Tierarztl Wochenschr** 1996 Nov–Dec; 109(11–12):451–6 (Eng. Abstr.) **(Ger)**

[Prevalence of motile salmonellae in egg-laying hens at the end of the laying period] Hinz KH, et al. **Zentralbl Veterinarmed [B]** 1996 Mar;43(1):23–33 (Eng. Abstr.) **(Ger)**

[Detection methods for Salmonella abortus ovis and examinations in sheep flocks in northern Baden-Württemberg] Sting R, et al. **Zentralbl Veterinarmed [B]** 1997 Apr;44(2):87–98 (Eng. Abstr.) **(Ger)**

[Efficiency of Rappaport-Vassiliadis semi-solid agar in the isolation of Salmonella from frozen foods of animal origin] De Medici D, et al. **Ann Ig** 1997 May–Jun;9(3):215–9 **(Ita)**

[Salmonellosis caused by unusual vehicles in Molise] Manfredi Selvaggi TM, et al. **Ann Ig** 1996 Sep–Oct; 8(5):523–30 (Eng. Abstr.) **(Ita)**

[Serovar-distribution and drug-resistance of Salmonella strains isolated from domestic and imported cases in 1990–1994 in Tokyo] Matsushita S, et al. **Kansenshogaku Zasshi** 1996 Jan;70(1):42–50 (Eng. Abstr.) **(Jpn)**

[Characteristics of Salmonella strains isolated from sporadic diarrheal cases during 1992–1994 in the Philippines] Matsushita S, et al. **Kansenshogaku Zasshi** 1996 Nov; 70(11):1154–9 (Eng. Abstr.) **(Jpn)**

[Serovars and drug susceptibility of Salmonella isolated in humans from 1987–1993 in Aichi prefecture] Arakawa S, et al. **Nippon Koshu Eisei Zasshi** 1996 Oct;43(10):894–900 (Eng. Abstr.) **(Jpn)**

[Isolation of salmonella species from healthy adult in Fukuoka city] Shiotsu S. **Nippon Koshu Eisei Zasshi** 1996 Feb; 43(2):136–41 **(Jpn)**

[Enterobacteria of the genera Salmonella, Shigella and Yersinia with an etiological role in acute diarrheal disease] Vaida T, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun;41(1–2):33–6 (Eng. Abstr.) **(Rum)**

[Salmonellosis peritonitis] Varshavskiĭ IM, et al. **Klin Med (Mosk)** 1997;75(8):71–2 **(Rus)**

[The effect of various doses of zeolite on counts of salmonellae, coliform and fecal coliform microorganisms in pig slurry in laboratory conditions] Pačajová Z, et al. **Vet Med (Praha)** 1997 Jun;42(6):161–4 (Eng. Abstr.) **(Slo)**

[Bacteremia during the course of Salmonella gastroenteritis] Prado Muñoz S, et al. **An Esp Pediatr** 1997 Feb;46(2):151–5 (Eng. Abstr.) **(Spa)**

[Sensitivity of XG medium for the isolation of Salmonella, Shigella, and Yersinia (letter)] García-Aguayo JM, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):400–1 **(Spa)**

[Epidemiological profile of non-typhi salmonellosis in a hospital in urban Madrid (1980–1994)] Ramos JM, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):345–51 (35 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Comparison of modified TECRA visual immunoassay with AOAC method 989.14 and reference culture methods 967.25–967.28 for detection of Salmonella in foods and related samples. Hughes D, et al. **J AOAC Int** 1996 Nov–Dec;79(6):1344–59

Relative effectiveness of selenite cystine broth, tetrathionate broth, and rappaport-vassiliadis medium for recovery of Salmonella spp. from raw flesh, highly contaminated foods, and poultry feed: collaborative study. June GA, et al. **J AOAC Int** 1996 Nov–Dec;79(6):1307–23

In vitro 14C-amino acid fermentation by CF3, a characterized continuous-flow competitive exclusion culture of caecal bacteria. Hume ME, et al. **J Appl Microbiol** 1997 Aug;83(2):236–42

Detection of motility and putative synthesis of flagellar proteins in Salmonella pullorum cultures. Holt PS, et al. **J Clin Microbiol** 1997 Apr;35(4):1016–20

A comparison of febrile responses induced by LPS from E. coli and S. abortus in unrestrained rats placed in a thermal gradient. Bodurka M, et al. **J Physiol Pharmacol** 1997 Mar; 48(1):81–8

Induction of TNF-alpha mRNA in murine macrophages by virulent and avirulent strains of Salmonella choleraesuis serovar typhimurium and serovar Choleraesuis. Mitsui-Yamaguchi T, et al. **Microb Pathog** 1997 Jan; 22(1):59–66

A secreted Salmonella protein with homology to an avirulence determinant of plant pathogenic bacteria. Hardt WD, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9887–92

[Stable expression of heterologous proteins in salmonella: problems and approaches to their designing] Abaev IV, et al. **Vestn Ross Akad Med Nauk** 1997;(6):48–52 (75 ref.) (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Unique Salmonella choleraesuis surface protein affecting invasiveness. Possible inv related sequence. Maddox CW, et al. **Adv Exp Med Biol** 1997;412:341–8

Virulence determinants invA and spvC in salmonellae isolated from poultry products, wastewater, and human sources. Swamy SC, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3768–71

The invasion-associated type-III protein secretion system in Salmonella--a review. Collazo CM, et al. **Gene** 1997 Jun 11;192(1):51–9 (76 ref.)

Host responses to pathogenic Salmonella infection. Jones BD. **Genes Dev** 1997 Mar 15;11(6):679–87 (78 ref.)

The spv genes on the Salmonella dublin virulence plasmid are required for severe enteritis and systemic infection in the natural host. Libby SJ, et al. **Infect Immun** 1997 May; 65(5):1786–92

Comparative genetics of the inv-spa invasion gene complex of Salmonella enterica. Boyd EF, et al. **J Bacteriol** 1997 Mar;179(6):1985–91

Plasmid virulence gene expression induced by short-chain fatty acids in Salmonella dublin: identification of rpoS-dependent and rpo-S-independent mechanisms. El-Gedaily A, et al. **J Bacteriol** 1997 Feb;179(4):1409–12

Mutational characterization of promoter regions recognized by the Salmonella dublin virulence plasmid regulatory protein SpvR. Grob P, et al. **J Bacteriol** 1997 Sep; 179(17):5398–406

Analysis of the boundaries of Salmonella pathogenicity island 2 and the corresponding chromosomal region of Escherichia coli K-12. Hensel M, et al. **J Bacteriol** 1997 Feb;179(4):1105–11

Diurnal variations in the human host response to endotoxin [see comments] Pollmächer T, et al. **J Infect Dis** 1996 Nov; 174(5):1040–5. Comment in: J Infect Dis 1997 May;175(5):1283–4.

Salmonella spp. are cytotoxic for cultured macrophages. Chen LM, et al. **Mol Microbiol** 1996 Sep;21(5):1101–15

Molecular genetic bases of Salmonella entry into host cells. Galán JE. **Mol Microbiol** 1996 Apr;20(2):263–71 (43 ref.)

SopE, a secreted protein of Salmonella dublin, is translocated into the target eukaryotic cell via a sip-dependent mechanism and promotes bacterial entry. Wood MW, et al. **Mol Microbiol** 1996 Oct;22(2):327–38

Quick-change pathogens gain an evolutionary edge [news; comment] Grady D. **Science** 1996 Nov 15;274(5290):1081 . Comment on: Science 1996 Nov 15;274(5290):1208–11.

High mutation frequencies among Escherichia coli and Salmonella pathogens [see comments] LeClerc JE, et al. **Science** 1996 Nov 15;274(5290):1208–11. Comment in: Science 1996 Nov 15;274(5290):1081.

How Salmonella became a pathogen. Groisman EA, et al. **Trends Microbiol** 1997 Sep;5(9):343–9 (74 ref.)

Flow cytometric analysis of the reactivity of workshop monoclonal antibodies on sheep lymph node cells, after infection with Salmonella abortusovis. Bernard S, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):403–9

Potential virulence determinants of Salmonella serovars from poultry and human sources in Spain. Carramiñana JJ, et al. **Vet Microbiol** 1997 Mar;54(3–4):375–83

Epidemiology and virulence assessment of Salmonella dublin. Rice DH, et al. **Vet Microbiol** 1997 May;56(1–2):111–24

Further search for virulence factors encoded by Salmonella serovar-specific plasmids. Glockner S, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):69–82

[The immunosuppressive activity of filtrates of the culture broth from nonvirulent salmonellae] Molozhavaia OS, et al. **Mikrobiol Z** 1997 Mar–Apr;59(2):73–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Molecular and cellular bases of Salmonella entry into host cells. Galán JE. **Curr Top Microbiol Immunol** 1996; 209:43–60 (103 ref.)

Survival in a cruel world: how Vibrio cholerae and Salmonella respond to an unwilling host. Slauch J, et al. **Genes Dev** 1997 Jul 15;11(14):1761–74 (125 ref.)

Intracellular Salmonella dublin induces substantial secretion of the 40-kilodalton subunit of interleukin-12 (IL-12) but minimal secretion of IL-12 as a 70-kilodalton protein in murine macrophages. Bost KL, et al. **Infect Immun** 1997 Aug;65(8):3186–92

Effect of adherent Lactobacillus spp. on in vitro adherence of salmonellae to the intestinal epithelial cells of chicken. Jin LZ, et al. **J Appl Bacteriol** 1996 Aug;81(2):201–6

Partially purified soy hydrolysates retard proliferation and inhibit bacterial translocation in cultured C2BBe cells. Kops SK, et al. **J Nutr** 1997 Sep;127(9):1744–51

Interaction of Salmonella with lysosomes of eukaryotic cells. García-del Portillo F. **Microbiologia** 1996 Jun;12(2):259–66 (30 ref.)

Salmonella invasion and delivery of protein effectors to mammalian cell cytoplasm. Scherer CA, et al. **Trends Microbiol** 1997 Apr;5(4):127–9 (16 ref.)

ULTRASTRUCTURE

Crystal structure of phage P22 tailspike protein complexed with Salmonella sp. O-antigen receptors. Steinbacher S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10584–8

VIROLOGY

A Salmonella phage-P22 mutant defective in abortive transduction. Benson NR, et al. **Genetics** 1997 Jan; 145(1):17–27

Isolation of Salmonella senftenberg bacteriophages. Kumar S, et al. **Indian J Med Res** 1997 Feb;105:47–52

The use of bacteriophage-based systems for the separation and concentration of Salmonella. Bennett AR, et al. **J Appl Microbiol** 1997 Aug;83(2):259–65

Screening for Salmonella with a murine monoclonal antibody M105 detects both Felix O1 bacteriophage sensitive and resistant Salmonella strains. Tsang RS, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):23–32

SALMONELLA ARIZONAE

GROWTH & DEVELOPMENT

Note: comparison of media for the isolation of lactose-positive Salmonella. Ruiz J, et al. **J Appl Bacteriol** 1996 Nov;81(5):571–4

IMMUNOLOGY

Structural and serological studies of lipopolysaccharides of Citrobacter O35 and O38 antigenically related to Salmonella. Kocharova NA, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):1–8

PATHOGENICITY

Respiratory and digestive lesions caused by Salmonella arizonae in two snakes. Orós J, et al. **J Comp Pathol** 1996 Aug;115(2):185–9

SALMONELLA ENTERITIDIS

Severe nontyphoidal salmonellosis probably in relation with omeprazole treatment: report of 2 cases. Schapira M, et al. **Acta Gastroenterol Belg** 1996 Apr–Jun;59(2):168–9

The mechanism of bactericidal action of normal human serum against Salmonella rods. Mokracka-Latajka G, et al. **Acta Microbiol Pol** 1996;45(2):169–80

Transient radiological and colonoscopic features of inflammatory bowel disease in a patient with severe Salmonella gastroenteritis. Dagash M, et al. **Am J Gastroenterol** 1997 Feb;92(2):349–51 (6 ref.)

In vivo treatment with endotoxin increases rat pulmonary vascular contractility despite NOS induction. Griffiths MJ, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):654–8

Studies of contamination of three broiler breeder houses with Salmonella enteritidis before and after cleansing and disinfection. Davies RH, et al. **Avian Dis** 1996 Jul–Sep; 40(3):626–33

The effects of induced molting on the severity of acute intestinal inflammation caused by Salmonella enteritidis. Macri NP, et al. **Avian Dis** 1997 Jan–Mar;41(1):117–24

Destruction of Salmonella enteritidis in poultry feed by combination of heat and propionic acid. Matlho G, et al. **Avian Dis** 1997 Jan–Mar;41(1):58–61

Salmonella enteritidis contamination of eggs from hens inoculated by vaginal, cloacal, and intravenous routes. Miyamoto T, et al. **Avian Dis** 1997 Apr–Jun;41(2):296–303

The effect of the flow of air on horizontal transmission of Salmonella enteritidis in chickens. Nakamura M, et al. **Avian Dis** 1997 Apr–Jun;41(2):354–60

Effect of Eimeria tenella infection on the production of Salmonella enteritidis-contaminated eggs and susceptibility of laying hens to S. enteritidis infection. Qin Z, et al. **Avian Dis** 1996 Apr-Jun;40(2):361-7

Heterophil response to intraperitoneal challenge with invasion-deficient salmonella enteritidis and Salmonella-immune lymphokines. Ziprin RL. **Avian Dis** 1997 Apr-Jun;41(2):438-41

Changes in composition and polyamine content in the gastrointestinal tract due to pathogenic infection. Naughton PJ, et al. **Biochem Soc Trans** 1996 May;24(2):263S

Faecal calprotectin: non-invasive marker of gastrointestinal inflammation in Salmonella infected rats. Naughton PJ, et al. **Biochem Soc Trans** 1996 May;24(2):308S

Renal Salmonella enteritidis abscess in a patient with severe aplastic anemia after allogeneic stem cell transplantation. Hashino S, et al. **Bone Marrow Transplant** 1996 Oct; 18(4):807-8

Variations of invasive Salmonella infection in elderly people. Bruce-Jones PN, et al. **Br J Clin Pract** 1996 Dec; 50(8):470-1

Gastroenteritis causing critical limb ischaemia. Mamode N, et al. **Br J Clin Pract** 1996 Oct-Nov;50(7):410

Line differences in resistance to Salmonella enteritidis PT4 infection. Protais J, et al. **Br Poult Sci** 1996 May; 37(2):329-39

Salmonella meningitis complicated by brain infarctions. Huang LT. **Clin Infect Dis** 1996 Jan;22(1):194-5

Acute hematogenous osteomyelitis of a closed fracture with chronic superinfection. Aluisio FV, et al. **Clin Orthop** 1996 Apr;(325):239-44

Bodybuilders, raw egg drink, and Salmonella enteritidis. Barnes GH, et al. **Commun Dis Rep CDR Rev** 1996 Mar 29;6(4):R67

Outbreak of Salmonella enteritidis phage type 6 infection associated with food items provided at a buffet meal. Holtby I, et al. **Commun Dis Rep CDR Rev** 1997 May 30; 7(6):R87-90

An outbreak of gastroenteritis associated with Salmonella enteritidis phage type 6a in Malta. **Commun Dis Rep CDR Wkly** 1996 Aug 16;6(33):283, 286

Salmonella enteritidis in an endometriotic ovarian cyst. Burgmans JP, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Apr;72(2):207-11 (18 ref.)

Intratracheal aerosolization of endotoxin (LPS) in the rat: a comprehensive animal model to study adult (acute) respiratory distress syndrome. van Helden HP, et al. **Exp Lung Res** 1997 Jul-Aug;23(4):297-316

Increasing the intestinal resistance of rats to the invasive pathogen Salmonella enteritidis: additive effects of dietary lactulose and calcium. Bovee-Oudenhoven IM, et al. **Gut** 1997 Apr;40(4):497-504

Salmonella enteritidis urinary tract infection. Geffken J, et al. **Heart Lung** 1996 Jan-Feb;25(1):81-3

Intrahepatic hematoma with secondary Salmonella infection via biliary fistula. Cerwenka H, et al. **Hepatogastroenterology** 1997 Mar-Apr;44(14):529-32

Salmonella outbreak from ice cream. Chugh K. **Indian Pediatr** 1996 Nov;33(11):976-7

The major sources of Salmonella enteritidis in Thailand. Sakai T, et al. **Int J Food Microbiol** 1996 Aug; 31(1-3):173-80

A rat model of infection by Salmonella typhimurium or Salm. enteritidis. Naughton PJ, et al. **J Appl Bacteriol** 1996 Dec; 81(6):651-6

Salmonella osteomyelitis in sickle cell disease children in the east end of London. Atkins BL, et al. **J Infect** 1997 Mar; 34(2):133-8

A rare case of Salmonella neck abscess. Ray J, et al. **J Laryngol Otol** 1997 May;111(5):489-90 (4 ref.)

Salmonella enteritidis in Antarctica: zoonosis in man or humanosis in penguins? [letter] Olsen B, et al. **Lancet** 1996 Nov 9;348(9037):1319-20

Fatal Salmonella enteritidis sepsis acquired prenatally in a premature infant. Roll C, et al. **Obstet Gynecol** 1996 Oct; 88(4 Pt 2):692-3

Free versus liposome-entrapped streptomycin sulfate in treatment of infections caused by Salmonella enteritidis. Khalil RM, et al. **Pharmazie** 1996 Mar;51(3):182-4

Protein metabolism in specific tissues of endotoxin-treated rats: effect of nutritional status. Holeček M, et al. **Physiol Res** 1995;44(6):399-406

Characterisation of colony-stimulating activity in the avian T cell-derived factor, Salmonella enteritidis-immune lymphokine. McGruder ED, et al. **Res Vet Sci** 1996 May; 60(3):222-7

Protective effects of dietary lactulose and calcium phosphate against Salmonella infection. Bovee-Oudenhoven I, et al. **Scand J Gastroenterol Suppl** 1997;222:112-4

Impact of infecting dose on severity of disease in an outbreak of food-borne Salmonella enteritidis. Rejnmark L, et al. **Scand J Infect Dis** 1997;29(1):37-40

Simulation of the transmission of Salmonella enteritidis phage type 4 in a flock of laying hens. Leslie J. **Vet Rec** 1996 Oct 19;139(16):388-91

[Salmonella enteritidis and Salmonella typhimurium research and control in reproductive poultry. 1993-1994-1995.6th report by the Work Group Salmonella poultry, formerly Work Group Salmonella enteritidis] Edel W, et al. **Tijdschr Diergeneeskd** 1996 Oct 1;121(19):561-5 **(Dut)**

[15th International Symposium of Salmonellosis and Brucellosis: a report] Notermans S, et al. **Tijdschr Diergeneeskd** 1997 Apr 15;122(8):227-8 **(Dut)**

[Immunization with potential Salmonella enteritidis mutants--1. Production and in vitro characterization] Martin G, et al. **Berl Munch Tierarztl Wochenschr** 1996 Sep;109(9):325-9 (Eng. Abstr.) **(Ger)**

[A case of acute acalculous cholecystitis due to Salmonella] Hirata K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Feb;93(2):137-40 **(Jpn)**

[Salmonellosis in 1995] Gonera E. **Przegl Epidemiol** 1997; 51(1-2):79-88 **(Pol)**

[Osteomyelitis by Salmonella enteritidis and sickle cell hemoglobinopathy. Report of a case and review of the literature] Pierrotti LC, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 May-Jun; 51(3):96-8 (8 ref.) (Eng. Abstr.) **(Por)**

[The clinical picture of generalized forms of salmonellosis] Bondarev LS, et al. **Ter Arkh** 1996;68(4):73-4 (Eng. Abstr.) **(Rus)**

[The pathogenetic and clinico-diagnostic significance of changes in leukocyte migration activity in patients with shigellosis and salmonellosis] Cherkasov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):34-7 (Eng. Abstr.) **(Rus)**

[Epidemiological data on salmonellosis due to Salmonella enteritidis in some areas of the Russian Federation] Khazenson LB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):53-7 (Eng. Abstr.) **(Rus)**

[Salmonellosis in Moscow: its epidemiological characteristics and the prevention tasks] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):46-9 (Eng. Abstr.) **(Rus)**

[A small outbreak of salmonellosis due to Salmonella enteritidis] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov-Dec;(6):116 **(Rus)**

[Epidemiology of gastroenteritis by Salmonella (1983-1994)] Dorronsoro I, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):604-7 (Eng. Abstr.) **(Spa)**

[Enterocolitis and acute non-calculous cholecystitis caused by Salmonella enteritidis (letter)] Otero Antón E, et al. **Med Clin (Barc)** 1996 Feb 3;106(4):155-6 **(Spa)**

[The enterosorption treatment of patients with acute intestinal infections and chronic colitis with diarrhea] Andreĭchyn MA, et al. **Lik Sprava** 1996 Jul-Sep;(7-9):147-51 (Eng. Abstr.) **(Ukr)**

CLASSIFICATION

Phage types and plasmid profiles of Salmonella enteritidis strains. Gryko R. **Acta Microbiol Pol** 1996;45(2):213-5

Typing of Salmonella enterica serovar Saintpaul: an outbreak investigation. Baggesen DL, et al. **APMIS** 1996 Jun; 104(6):411-8

Analysis of whole-cell fatty acid profiles of verotoxigenic Escherichia coli and Salmonella enteritidis with the microbial identification system. Steele M, et al. **Appl Environ Microbiol** 1997 Feb;63(2):757-60

An outbreak of Salmonella enteritidis phage type 4 infection in a rural community in Northern Ireland. Doherty L, et al. **Commun Dis Rep CDR Rev** 1997 May 2;7(5):R73-6

Occurrence of Salmonella enterica serotype Enteritidis phage types in the Slovak Republic. Majtánová L. **Eur J Epidemiol** 1997 Feb;13(2):243-5

Rapid detection of Salmonella enterica with primers specific for iroB. Bäumler AJ, et al. **J Clin Microbiol** 1997 May; 35(5):1224-30

Epidemiological differentiation of pathogenic strains of Salmonella enteritidis by ribotyping. Landeras E, et al. **J Clin Microbiol** 1996 Sep;34(9):2294-6

Epidemiological analysis of strains of Salmonella enterica serotype Enteritidis from foodborne outbreaks occurring in Italy, 1980-1994. Nastasi A, et al. **J Med Microbiol** 1997 May;46(5):377-82

Salmonella enteritidis: phage types and drug resistance among the strains isolated in India and Zimbabwe [letter] Sharma NC, et al. **Natl Med J India** 1996 Jul-Aug;9(4):199-200

Experimental infection of laying hens with Salmonella enteritidis strains that express different types of fimbriae. Thiagarajan D, et al. **Poult Sci** 1996 Nov;75(11):1365-72

Progression of Salmonella enteritidis phage type 4 strains in São Paulo State, Brazil. Irino K, et al. **Rev Inst Med Trop Sao Paulo** 1996 May-Jun;38(3):193-6

Airborne challenge of chickens vaccinated orally with the genetically-defined Salmonella enteritidis aroA strain CVL30. Cooper GL, et al. **Vet Rec** 1996 Nov 2; 139(18):447-8

Epidemic Salmonella enteritidis infection in Los Angeles County, California. The predominance of phage type 4. Passaro DJ, et al. **West J Med** 1996 Sep;165(3):126-30

Phage types and ribotypes of Salmonella enteritidis in southern Italy. Pignato S, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):399-405

CYTOLOGY

SEF17 fimbriae are essential for the convoluted colonial morphology of Salmonella enteritidis. Allen-Vercoe E, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):33-42

DRUG EFFECTS

Treatment of experimental endocarditis due to ampicillin-susceptible or ampicillin-resistant Salmonella enteritidis. Fernández Guerrero ML, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1589-93

Substratum topography influences susceptibility of Salmonella enteritidis biofilms to trisodium phosphate. Korber DR, et al. **Appl Environ Microbiol** 1997 Sep; 63(9):3352-8

Evaluation of disinfectants against Salmonella enteritidis. Davison S, et al. **Avian Dis** 1996 Apr-Jun;40(2):272-7

Molecular epidemiology of antibiotic resistance of Salmonella enteritidis during a 7-year period in Greece. Tassios PT, et al. **J Clin Microbiol** 1997 Jun;35(6):1316-21

ENZYMOLOGY

Novel transferable beta-lactam resistance with cephalosporinase characteristics in Salmonella enteritidis. Gaillot O, et al. **J Antimicrob Chemother** 1997 Jan; 39(1):85-7

GENETICS

Characterization of the agfBA fimbrial operon encoding thin aggregative fimbriae of Salmonella enteritidis. Collinson SK, et al. **Adv Exp Med Biol** 1997;412:247-8

A novel relationship between O-antigen variation, matrix formation, and invasiveness of Salmonella enteritidis. Guard-Petter J, et al. **Epidemiol Infect** 1996 Oct; 117(2):219-31

Sequence analysis and distribution of an IS3-like insertion element isolated from Salmonella enteritidis. Collighan RJ, et al. **FEMS Microbiol Lett** 1997 Sep 15;154(2):207-13

Detection of the induction of Salmonella enterotoxin gene expression by contact with epithelial cells with RT-PCR. Dinjus U, et al. **FEMS Microbiol Lett** 1997 Jan 15; 146(2):175-9

Genetic map of the virulence plasmid of Salmonella enteritidis and nucleotide sequence of its replicons. Rodríguez-Peña JM, et al. **Gene** 1997 Mar 25;188(1):53-61

Multilocus enzyme electrophoretic (MEE) analysis of Australian isolates of Salmonella enteritidis. Cox JM, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):273-82

Correlation of conversion of Salmonella enterica serovar enteritidis phage type 1, 4, or 6 to phage type 7 with loss of lipopolysaccharide. Baggesen DL, et al. **J Clin Microbiol** 1997 Jan;35(1):330-3

Molecular characterization of Salmonella enterica subsp. enterica serovar choleraesuis field isolates and differentiation from homologous live vaccine strains suisaloral and SC-54. Weide-Botjes M, et al. **J Clin Microbiol** 1996 Oct;34(10):2460-3

An epidemiological study of Salmonella enteritidis by pulsed-field gel electrophoresis (PFGE): several PFGE patterns observed in isolates from a food poisoning outbreak. Murase T, et al. **Microbiol Immunol** 1996; 40(11):873-5

Diagnostic potential of sefA DNA probes to Salmonella enteritidis and certain other O-serogroup D1 Salmonella serovars. Doran JL, et al. **Mol Cell Probes** 1996 Aug; 10(4):233-46

Salmonella enteritidis outbreak in Thailand: study by random amplified polymorphic DNA (RAPD) analysis. Kantama L, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar;27(1):119-25

Genomic analyses of Salmonella enteritidis phage type 4 strains from Austria and phage type 8 strains from the United States. Buchrieser C, et al. **Zentralbl Bakteriol** 1997 Feb;285(3):379-88

[Immunization with potential Salmonella enteritidis mutants-- 2. Investigations on the attenuation and immunogenicity for mice and young hens] Martin G, et al. **Berl Munch Tierarztl Wochenschr** 1996 Oct; 109(10):369-74 (Eng. Abstr.) **(Ger)**

GROWTH & DEVELOPMENT

Salmonella enteritidis colonization in turkey poults. Hafez HM, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Mar; 104(3):118-9

Fate of Salmonella enteritidis and Salmonella typhimurium during the fermentation of siljo. Dessie G, et al. **East Afr Med J** 1996 Jul;73(7):432-4

Inhibition of in vitro growth of enteropathogens by new Lactobacillus isolates of human intestinal origin. Drago L, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):455-63

Induction of flagellation and a novel agar-penetrating flagellar structure in Salmonella enterica grown on solid media: possible consequences for serological identification. Guard-Petter J. **FEMS Microbiol Lett** 1997 Apr 15; 149(2):173-80

Luminescent Salmonella strains as real time reporters of growth and recovery from sublethal injury in food. Chen J, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):27-43

IMMUNOLOGY

Immunoglobulin response to Salmonella enteritidis outer membrane proteins. Use for evaluating infectious status. Maddox CW, et al. **Adv Exp Med Biol** 1997;412:89-92

Applying tests for specific yolk antibodies to predict contamination by Salmonella enteritidis in eggs from experimentally infected laying hens. Gast RK, et al. **Avian Dis** 1997 Jan-Mar;41(1):195-202

A novel relationship between O-antigen variation, matrix formation, and invasiveness of Salmonella enteritidis.

Guard-Petter J, et al. **Epidemiol Infect** 1996 Oct; 117(2):219-31

HLA-B27 modulates intracellular survival of Salmonella enteritidis in human monocytic cells. Laitio P, et al. **Eur J Immunol** 1997 Jun;27(6):1331-8

Neutralization of G-CSF inhibits ILK-induced heterophil influx: granulocyte-colony stimulating factor mediates the Salmonella enteritidis-immune lymphokine potentiation of the acute avian inflammatory response. Kogut MH, et al. **Inflammation** 1997 Feb;21(1):9-25

Comparative study of the protective effect against Salmonella colonisation in newly hatched SPF chickens using live, attenuated Salmonella vaccine strains, wild-type Salmonella strains or a competitive exclusion product. Methner U, et al. **Int J Food Microbiol** 1997 Apr 15; 35(3):223-30

Assessing the sensitivity of egg yolk antibody testing for detecting Salmonella enteritidis infections in laying hens. Gast RK, et al. **Poult Sci** 1997 Jun;76(6):798-801

Characterisation of monoclonal antibodies specific to SEF 21 fimbriae of Salmonella enteritidis and their reactivity with other Salmonellae and Enterobacteria. Sojka MG, et al. **Vet Microbiol** 1996 Feb;48(3-4):207-21

Airborne challenge of chickens vaccinated orally with the genetically-defined Salmonella enteritidis aroA strain CVL30. Cooper GL, et al. **Vet Rec** 1996 Nov 2; 139(18):447-8

[Immunization with potential Salmonella enteritidis mutants— 2. Investigations on the attenuation and immunogenicity for mice and young hens] Martin G, et al. **Berl Munch Tierarztl Wochenschr** 1996 Oct; 109(10):369-74 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

The first Salmonella enteritidis phage type 1 infection of a commercial layer flock in Finland. Johansson TM, et al. **Acta Vet Scand** 1996;37(4):471-9

Intestinal colonization and organ invasion in chicks experimentally infected with Salmonella enteritidis phage type 4 and other phage types isolated from poultry in the United States. Gast RK, et al. **Avian Dis** 1996 Oct-Dec; 40(4):853-7

Salmonella enteritidis, phase type 4 infection in a commercial layer flock in southern California: bacteriologic and epidemiologic findings. Kinde H, et al. **Avian Dis** 1996 Jul-Sep;40(3):665-71

Sewage effluent: likely source of Salmonella enteritidis, phage type 4 infection in a commercial chicken layer flock in southern California. Kinde H, et al. **Avian Dis** 1996 Jul-Sep; 40(3):672-6

Persistence of Salmonella enteritidis in poultry units and poultry food. Davies RH, et al. **Br Poult Sci** 1996 Jul; 37(3):589-96

Osteomyelitis of the spine due to Salmonella infection--conservative treatment with quinolone: a case report. Tsui HF, et al. **Can J Surg** 1997 Feb;40(1):48-50

Recurrent salmonella sepsis with different species in a systemic lupus erythematosus patient. Green L, et al. **Clin Rheumatol** 1996 Jan;15(1):72-4

Four outbreaks of Salmonella enteritidis phage type 4 food poisoning linked to a single baker. Wight JP, et al. **Commun Dis Rep CDR Rev** 1996 Jul 19;6(8):R112-5

Salmonella enteritidis phage type 21b. **Commun Dis Rep CDR Wkly** 1996 Mar 29;6(13):109

Development of a quantitative risk assessment model for Salmonella enteritidis in pasteurized liquid eggs. Whiting RC, et al. **Int J Food Microbiol** 1997 May 20;36(2-3):111-25

Application of molecular methods to a nosocomial outbreak of Salmonella enteritidis phage type 4. Rushdy AA, et al. **J Hosp Infect** 1997 Jun;36(2):123-31

An outbreak of Salmonella enteritidis in a maternity and neonatal intensive care unit. Umasankar S, et al. **J Hosp Infect** 1996 Oct;34(2):117-22

Salmonella spondylitis. Cottalorda J, et al. **J Pediatr Orthop B** 1997 Jan;6(1):73-5

A dot immunobinding assay (dot-ELISA) for the rapid serodiagnosis of Salmonella enteritidis infection in chickens. Charles SD, et al. **J Vet Diagn Invest** 1996 Jul;8(3):310-4

Management of Salmonella infections during pregnancy and puerperium. van der Klooster JM, et al. **Neth J Med** 1997 Aug;51(2):83-6 (24 ref.)

Effect of feed withdrawal on the incidence of Salmonella in the crops and ceca of market age broiler chickens. Ramirez GA, et al. **Poult Sci** 1997 Apr;76(4):654-6

Pasteurization of eggs in the shell. Stadelman WJ, et al. **Poult Sci** 1996 Sep;75(9):1122-5

Selection of multiple resistance in Salmonella enteritidis during treatment with ciprofloxacin. Pers C, et al. **Scand J Infect Dis** 1996;28(5):529-31

Determination of an effective sampling regime to detect salmonella enteritidis in the environment of poultry units. Davies RH, et al. **Vet Microbiol** 1996 May;50(1-2):117-27

Comparison of an LPS-specific competitive ELISA with a motility enrichment culture method (MSRV) for detection of Salmonella typhimurium and S. enteritidis in chickens. Tan S, et al. **Vet Microbiol** 1997 May;56(1-2):79-86

[Use of semi-solid Diasalm medium for isolation of Salmonella enteritidis] Ružičková V, et al. **Vet Med (Praha)** 1996 Sep;41(9):283-8 (Eng. Abstr.) **(Cze)**

[Salmonella enteritidis pericarditis. Apropos of a case and review of the literature] Victor F, et al. **Arch Mal Coeur Vaiss** 1997 Feb;90(2):301-3 (10 ref.) (Eng. Abstr.) **(Fre)**

[Sanitation of biowaste compost by using Salmonella enteritidis as a pathogen indicator and survival of Salmonella in seepage water] Knop M, et al. **Berl Munch Tierarztl Wochenschr** 1996 Nov-Dec; 109(11-12):451-6 (Eng. Abstr.) **(Ger)**

[Epidemiological characters of Salmonella serovar enteritidis isolated from patients with sporadic diarrhea in Yamanashi prefecture during the last 11 years (1985-1995)] Kaneko M, et al. **Kansenshogaku Zasshi** 1996 Aug;70(8):792-800 (Eng. Abstr.) **(Jpn)**

[Characterization of Salmonella ser. enteritidis phage type 34 isolated from food poisoning outbreaks in Tokyo by epidemiological makers] Kusunoki J, et al. **Kansenshogaku Zasshi** 1996 Jul;70(7):702-9 (Eng. Abstr.) **(Jpn)**

[Septic and other forms of salmonellosis] Bogomolova BP, et al. **Klin Med (Mosk)** 1996;74(7):12-5 **(Rus)**

[Psoas abscess caused by Salmonella enteritidis: presentation of a case (see comments)] Torres Cortada G, et al. **An Med Interna** 1995 Sep;12(9):447-9 (Eng. Abstr.). Comment in: An Med Interna 1996 May;13(5):254-5. **(Spa)**

METABOLISM

Salmonella enterica var Typhimurium and Salmonella enterica var Enteritidis express type 1 fimbriae in the rat in vivo. Ewen SW, et al. **FEMS Immunol Med Microbiol** 1997 Jul;18(3):185-92

Enterotoxin and cytotoxin production by Salmonella enteritidis strains isolated from gastroenteritis outbreaks. Rumeu MT, et al. **J Appl Microbiol** 1997 Jan;82(1):19-31

PATHOGENICITY

Salmonella typhimurium and Salmonella enteritidis induce gut growth and increase the polyamine content of the rat small intestine in vivo. Naughton PJ, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3-4):251-8

Role of SefA subunit protein of SEF14 fimbriae in the pathogenesis of Salmonella enterica serovar Enteritidis. Ogunniyi AD, et al. **Infect Immun** 1997 Feb;65(2):708-17

A virulent isolate of Salmonella enteritidis produces a Salmonella typhi-like lipopolysaccharide. Rahman MM, et al. **J Bacteriol** 1997 Apr;179(7):2126-31

Pathogenesis of Salmonella enteritidis phage type four after experimental infection of young chickens. Desmidt M, et al. **Vet Microbiol** 1997 May;56(1-2):99-109

PHYSIOLOGY

Dietary calcium inhibits the intestinal colonization and translocation of Salmonella in rats. Bovee-Oudenhoven IM, et al. **Gastroenterology** 1997 Aug;113(2):550-7

In vitro attachment and invasion of chicken ovarian granulosa cells by Salmonella enteritidis phage type 8. Thiagarajan D, et al. **Infect Immun** 1996 Dec; 64(12):5015-21

Synergism in biofilm formation between Salmonella enteritidis and a nitrogen-fixing strain of Klebsiella pneumoniae. Jones K, et al. **J Appl Microbiol** 1997 May; 82(5):663-8

The effect of environmental pH on the physiology and surface structures of Salmonella serotype enteritidis phage type 4. McDermid AS, et al. **J Med Microbiol** 1996 Dec; 45(6):452-8

RADIATION EFFECTS

D values of Salmonella enteritidis isolates and quality attributes of shell eggs and liquid whole eggs treated with irradiation. Serrano LE, et al. **Poult Sci** 1997 Jan; 76(1):202-6

ULTRASTRUCTURE

Induction of flagellation and a novel agar-penetrating flagellar structure in Salmonella enterica grown on solid media: possible consequences for serological identification. Guard-Petter J. **FEMS Microbiol Lett** 1997 Apr 15; 149(2):173-80

Experimental infection of laying hens with Salmonella enteritidis strains that express different types of fimbriae. Thiagarajan D, et al. **Poult Sci** 1996 Nov;75(11):1365-72

VIROLOGY

Interactions of phage P22 tails with their cellular receptor, Salmonella O-antigen polysaccharide. Baxa U, et al. **Biophys J** 1996 Oct;71(4):2040-8

Plasmid characterization and pulsed-field electrophoretic analysis demonstrate that ampicillin-resistant strains of Salmonella enteritidis phage type 6a are derived from Salm. enteritidis phage type 4. Ridley AM, et al. **J Appl Bacteriol** 1996 Dec;81(6):613-8

SALMONELLA FOOD POISONING

Salmonella anatum infection in infants linked to dried milk. **Commun Dis Rep CDR Wkly** 1997 Jan 31;7(5):33, 36

A mixed foodborne outbreak with Salmonella heidelberg and Campylobacter jejuni in a nursing home. Layton MC, et al. **Infect Control Hosp Epidemiol** 1997 Feb;18(2):115-21

Salmonellosis associated with a Thanksgiving dinner--Nevada, 1995. **MMWR Morb Mortal Wkly Rep** 1996 Nov 22;45(46):1016-7

[Food poisoning: a survey on intervention methodology in 6 public health units of the Lombardy Region. 2. Sporadic forms of salmonellosis] Pontello M, et al. **Ann Ig** 1997 Jan-Feb;9(1):23-33 **(Ita)**

BLOOD

[The effect of fibronectin on generation of superoxide anion by neutrophils during food poisoning and experimental salmonella endotoxemia] Poluéktova VB, et al. **Biull Eksp Biol Med** 1996 Jun;121(6):628-31 **(Rus)**

COMPLICATIONS

Prevalence of gastrointestinal symptoms six months after bacterial gastroenteritis and risk factors for development of the irritable bowel syndrome: postal survey of patients [see comments] Neal KR, et al. **BMJ** 1997 Mar 15; 314(7083):779-82. Comment in: BMJ 1997 Jun 28;314(7098):1902; discussion 1903. Comment in: BMJ 1997 Jun 28;314(7098):1902-3. Comment in: BMJ 1997 Jun 28;314(7098):1903.

Variations of invasive Salmonella infection in elderly people. Bruce-Jones PN, et al. **Br J Clin Pract** 1996 Dec; 50(8):470-1

DIAGNOSIS

Transient radiological and colonoscopic features of inflammatory bowel disease in a patient with severe Salmonella gastroenteritis. Dagash M, et al. **Am J Gastroenterol** 1997 Feb;92(2):349-51 (6 ref.)

[The use of the television microscopicanalysis for the serodiagnosis of salmonellosis and brucellosis] Shub GM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan-Feb; (1):46-9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[The efficacy of the new bacterial preparation biosporin in treating acute intestinal infections] Gracheva NM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan-Feb;(1):75-7 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

International epidemiological and microbiological study of outbreak of Salmonella agona infection from a ready to eat savoury snack--I: England and Wales and the United States [see comments] Killalea D, et al. **BMJ** 1996 Nov 2;313(7065):1105-7. Comment in: BMJ 1996 Nov 2;313(7065):1093-4.

International epidemiological and microbiological study of outbreak of Salmonella agona infection from a ready to eat savoury snack--II: Israel [see comments] Shohat T, et al. **BMJ** 1996 Nov 2;313(7065):1107-9. Comment in: BMJ 1996 Nov 2;313(7065):1093-4.

Outbreak of Salmonella food poisoning at Junior World Rowing Championships. Anderson AC. **Br J Sports Med** 1996 Dec;30(4):347-8

Concurrent outbreaks of Salmonella Typhimurium in South Australia. Andrews R, et al. **Commun Dis Intell** 1997 Mar 6;21(5):61-2

Salmonella in Victoria, 1997: the story so far. Lester R, et al. **Commun Dis Intell** 1997 May 1;21(9):120-2

Food poisoning among clients of a meals on wheels service. Jakubovic MO, et al. **Commun Dis Rep CDR Rev** 1996 Dec 6;6(13):R186-8

Marshmallows cause an outbreak of infection with Salmonella enteritidis phage type 4. Lewis DA, et al. **Commun Dis Rep CDR Rev** 1996 Dec 6;6(13):R183-6

Four outbreaks of Salmonella enteritidis phage type 4 food poisoning linked to a single baker. Wight JP, et al. **Commun Dis Rep CDR Rev** 1996 Jul 19;6(8):R112-5

An outbreak of gastroenteritis associated with Salmonella enteritidis phage type 6a in Malta. **Commun Dis Rep CDR Wkly** 1996 Aug 16;6(33):283, 286

An outbreak of Salmonella hadar phage type 5 infection in London. **Commun Dis Rep CDR Wkly** 1997 Jul 25;7(30):263

Salmonella java phage type Worksop in young children associated with fresh fortified milk. **Commun Dis Rep CDR Wkly** 1997 Aug 1;7(31):275

Salmonella gold-coast. **Commun Dis Rep CDR Wkly** 1996 Dec 20;6(51):443

Salmonella gold-coast and cheddar cheese: update. **Commun Dis Rep CDR Wkly** 1997 Mar 14;7(11):93, 96

Interregional foodborne salmonellosis outbreak due to powdered infant formula contaminated with lactose-fermenting Salmonella virchow. Usera MA, et al. **Eur J Epidemiol** 1996 Aug;12(4):377-81

Estimating the incidence of food-borne Salmonella and the effectiveness of alternative control measures using the Delphi method. Henson S. **Int J Food Microbiol** 1997 Apr 15;35(3):195-204 (18 ref.)

A large community outbreak of salmonellosis caused by intentional contamination of restaurant salad bars. Török TJ, et al. **JAMA** 1997 Aug 6;278(5):389-95

An epidemiological study of Salmonella enteritidis by pulsed-field gel electrophoresis (PFGE): several PFGE patterns observed in isolates from a food poisoning outbreak. Murase T, et al. **Microbiol Immunol** 1996; 40(11):873-5

Impact of infecting dose on severity of disease in an outbreak

of food-borne Salmonella enteritidis. Rejnmark L, et al. **Scand J Infect Dis** 1997;29(1):37-40

Epidemic Salmonella enteritidis infection in Los Angeles County, California. The predominance of phage type 4. Passaro DJ, et al. **West J Med** 1996 Sep;165(3):126-30

Foodborne salmonellosis. Gomez TM, et al. **World Health Stat Q** 1997;50(1-2):81-9 (35 ref.)

[Characterization of Salmonella ser. enteritidis phage type 34 isolated from food poisoning outbreaks in Tokyo by epidemiological makers] Kusunoki J, et al. **Kansenshogaku Zasshi** 1996 Jul;70(7):702-9 (Eng. Abstr.) **(Jpn)**

[Epidemiological data on salmonellosis due to Salmonella enteritidis in some areas of the Russian Federation] Khazenson LB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):53-7 (Eng. Abstr.) **(Rus)**

[A small outbreak of salmonellosis due to Salmonella enteritidis] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov-Dec;(6):116 **(Rus)**

[A milk-borne outbreak of salmonellosis in Moscow] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov-Dec; (6):117-8 **(Rus)**

[Epidemiology of gastroenteritis by Salmonella (1983-1994)] Dorronsoro I, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):604-7 (Eng. Abstr.) **(Spa)**

[Outbreak of Salmonella enteritidis food poisoning. Potential protective effect of alcoholic beverages (see comments)] Bellido Blasco JB, et al. **Med Clin (Barc)** 1996 Nov 16; 107(17):641-4 (Eng. Abstr.). Comment in: Med Clin (Barc) 1996 Nov 16;107(17):655-6. **(Spa)**

ETIOLOGY

[Salmonellosis caused by unusual vehicles in Molise] Manfredi Selvaggi TM, et al. **Ann Ig** 1996 Sep-Oct; 8(5):523-30 (Eng. Abstr.) **(Ita)**

[The pathogenetic and clinico-diagnostic significance of changes in leukocyte migration activity in patients with shigellosis and salmonellosis] Cherkasov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):34-7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

An outbreak of Salmonella typhimurium DT104 food poisoning associated with eating beef. Davies A, et al. **Commun Dis Rep CDR Rev** 1996 Oct 11;6(11):R159-62

An outbreak of Salmonella enteritidis phage type 4 infection in a rural community in Northern Ireland. Doherty L, et al. **Commun Dis Rep CDR Rev** 1997 May 2;7(5):R73-6

Salmonella java phage type Worksop in young children associated with fresh fortified milk. **Commun Dis Rep CDR Wkly** 1997 Aug 1;7(31):275

An outbreak of Salmonella hadar phage type 5 infection in London. **Commun Dis Rep CDR Wkly** 1997 Jul 25;7(30):263

Salmonella outbreak from ice cream. Chugh K. **Indian Pediatr** 1996 Nov;33(11):976-7

The effect of environmental pH on the physiology and surface structures of Salmonella serotype enteritidis phage type 4. McDermid AS, et al. **J Med Microbiol** 1996 Dec; 45(6):452-8

Epidemiological analysis of strains of Salmonella enterica serotype Enteritidis from foodborne outbreaks occurring in Italy, 1980-1994. Nastasi A, et al. **J Med Microbiol** 1997 May;46(5):377-82

Salmonella enteritidis: phage types and drug resistance among the strains isolated in India and Zimbabwe [letter] Sharma NC, et al. **Natl Med J India** 1996 Jul-Aug;9(4):199-200

Incompleteness of statutory notification of bacterial gastro-intestinal infection. Barrett P, et al. **Public Health** 1997 May;111(3):183-5

Epidemic Salmonella enteritidis infection in Los Angeles County, California. The predominance of phage type 4. Passaro DJ, et al. **West J Med** 1996 Sep;165(3):126-30

[An outbreak of Salmonella typhimurium in the county of Funen during late summer. A case-controlled study] Mølbak K, et al. **Ugeskr Laeger** 1997 Sep 1;159(36):5372-7 (Eng. Abstr.) **(Dan)**

[Characterization of Salmonella ser. enteritidis phage type 34 isolated from food poisoning outbreaks in Tokyo by epidemiological makers] Kusunoki J, et al. **Kansenshogaku Zasshi** 1996 Jul;70(7):702-9 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

MAFF statutory incident reports in surveillance, prevention, and control of human Salmonella typhimurium infection. Fone DL, et al. **Commun Dis Rep CDR Rev** 1996 Apr 26; 6(5):R76-8

Salmonella in retail poultry in Northern Ireland. Wilson IG, et al. **Commun Dis Rep CDR Rev** 1996 Mar 29;6(4):R64-6

Estimating the incidence of food-borne Salmonella and the effectiveness of alternative control measures using the Delphi method. Henson S. **Int J Food Microbiol** 1997 Apr 15;35(3):195-204 (18 ref.)

Safe eggs and egg products: a government and consumer responsibility [news] Reed CA, et al. **J Am Vet Med Assoc** 1996 Dec 1;209(11):1829-30

Foodborne salmonellosis. Gomez TM, et al. **World Health Stat Q** 1997;50(1-2):81-9 (35 ref.)

[Outbreak of Salmonella enteritidis food poisoning. Potential protective effect of alcoholic beverages (see comments)] Bellido Blasco JB, et al. **Med Clin (Barc)** 1996 Nov 16; 107(17):641-4 (Eng. Abstr.). Comment in: Med Clin (Barc) 1996 Nov 16;107(17):655-6. **(Spa)**

TRANSMISSION

Food- and milk-borne zoonotic infections. Humphrey TJ. **J Med Microbiol** 1997 Jan;46(1):11-3, 28-33 (228 ref.)

Salmonella enteritidis outbreak in Thailand: study by random amplified polymorphic DNA (RAPD) analysis. Kantama L, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar;27(1):119-25

SALMONELLA INFECTIONS

Neonatal Salmonella meningitis: two case reports. Hansen LN, et al. **Acta Paediatr** 1996 May;85(5):629-31

Treatment of experimental endocarditis due to ampicillin-susceptible or ampicillin-resistant Salmonella enteritidis. Fernández Guerrero ML, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1589-93

Familial Salmonella-triggered reactive arthritis [letter] Aragon A, et al. **Br J Rheumatol** 1996 Sep;35(9):908-9

Salmonella endocarditis of a ventricular aneurysm: a case report and review of the literature. Amyot R, et al. **Can J Cardiol** 1997 Mar;13(3):299-301 (07 ref.)

Neonatal jaundice, animal-induced injuries and disease, and immunizations. Gerson WT. **Curr Opin Pediatr** 1997 Aug; 9(4):447-55 (45 ref.)

Evolution of susceptibility of non-typhi Salmonella in a Spanish hospital (1992-1994) and report of a Salmonella ser. Typhimurium isolate resistant to quinolones. Campo P, et al. **Eur J Epidemiol** 1997 Feb;13(2):239-41

Recurrent bacterial meningitis [letter; comment] Wang HS. **Eur J Pediatr** 1997 Feb;156(2):155. Comment on: Eur J Pediatr 1996 Jan;155(1):26-30.

Salmonella enteritidis urinary tract infection. Geffken J, et al. **Heart Lung** 1996 Jan-Feb;25(1):81-3

Intrahepatic hematoma with secondary Salmonella infection via biliary fistula. Cerwenka H, et al. **Hepatogastroenterology** 1997 Mar-Apr;44(14):529-32

Salmonella hepatitis: analysis of 27 cases and comparison with acute viral hepatitis. El-Newihi HM, et al. **Hepatology** 1996 Sep;24(3):516-9

Fast food arthritis--a clinico-pathologic study of post-Salmonella reactive arthritis. Samuel MP, et al. **J Rheumatol** 1995 Oct;22(10):1947-52

[A case of acute acalculous cholecystitis due to Salmonella] Hirata K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Feb;93(2):137-40 **(Jpn)**

[Enterocolitis and acute non-calculous cholecystitis caused by Salmonella enteritidis (letter)] Otero Antón E, et al. **Med Clin (Barc)** 1996 Feb 3;106(4):155-6 **(Spa)**

CLASSIFICATION

Classifying extraintestinal non-typhoid Salmonella infections. Ramos JM, et al. **QJM** 1996 Feb;89(2):123-6

COMPLICATIONS

Variations of invasive Salmonella infection in elderly people. Bruce-Jones PN, et al. **Br J Clin Pract** 1996 Dec; 50(8):470-1

Gastroenteritis causing critical limb ischaemia. Mamode N, et al. **Br J Clin Pract** 1996 Oct-Nov;50(7):410

Salmonella pericarditis and empyema: a case report. Yang CH, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Sep; 56(3):199-204 (25 ref.)

Salmonella meningitis complicated by brain infarctions. Huang LT. **Clin Infect Dis** 1996 Jan;22(1):194-5

Acute anterior uveitis in juvenile Reiter's syndrome. Fischel JD, et al. **Clin Rheumatol** 1996 Jan;15(1):83-5

Recurrent salmonella sepsis with different species in a systemic lupus erythematosus patient. Green L, et al. **Clin Rheumatol** 1996 Jan;15(1):72-4

Vertebral osteomyelitis presenting with bilateral pleural effusions in a leprous patient. Shimada T, et al. **Diagn Microbiol Infect Dis** 1996 Feb;24(2):101-3

Infectious ileocecitis caused by Yersinia, Campylobacter, and Salmonella: clinical, radiological and US findings. Puylaert JB, et al. **Eur Radiol** 1997;7(1):3-9 (42 ref.)

Neonatal polyarthritis caused by Salmonella bareilly [letter] Gupta P, et al. **Indian Pediatr** 1996 Apr;33(4):341-2

Unicameral bone cyst. An unusual complication. Yoho RM, et al. **J Am Podiatr Med Assoc** 1996 May;86(5):236-8

Salmonella bacteremia presenting with visual loss [letter] Kulkarni AC, et al. **J Assoc Physicians India** 1995 Jan; 43(1):69-70

Multiple Salmonella typhi subcutaneous abscesses in a sickle cell anaemia patient. Sarma PS, et al. **J Assoc Physicians India** 1996 Aug;44(8):563-4

Salmonella infection in sickle cell disease: a clear and present danger [editorial; comment] Ware RE. **J Pediatr** 1997 Mar; 130(3):350-1. Comment on: J Pediatr 1997 Mar;130(3):394-9.

Septicemia caused by Salmonella infection: an overlooked complication of sickle cell disease [see comments] Wright J, et al. **J Pediatr** 1997 Mar;130(3):394-9. Comment in: J Pediatr 1997 Mar;130(3):350-1.

Mycotic aneurysm of a coronary artery in SLE--a rare complication of salmonella infection. Howe HS, et al. **Lupus** 1997;6(4):404-7

Crescentic IgA nephropathy and acute renal failure in an HIV-positive patient with enteric salmonella infection. Hsieh WS, et al. **Nephrol Dial Transplant** 1996 Nov; 11(11):2320-3

A rare cause of acute tubulointerstitial nephritis: Salmonella typhimurium infection [letter] Ozdemir S, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1542-3

An uncommon presentation of Salmonella. Deutsch A, et al. **Pediatr Emerg Care** 1996 Aug;12(4):285-7 (16 ref.)

Polycystic liver disease, complicated by Salmonella infection. Grossmann E, et al. **Scand J Gastroenterol** 1996 Sep; 31(9):940-2

[Salmonella enteritidis pericarditis. Apropos of a case and review of the literature] Victor F, et al. **Arch Mal Coeur Vaiss** 1997 Feb;90(2):301-3 (10 ref.) (Eng. Abstr.) **(Fre)**

[Septic arthritis in an HIV-positive hemophiliac] Bar Dayan Y, et al. **Harefuah** 1996 Sep;131(5-6):145-6, 216 (Eng. Abstr.) **(Heb)**

[Extraintestinal Salmonella typhi infection] Neri S, et al. **Minerva Med** 1997 Jun;88(6):257-9 (Eng. Abstr.) **(Ita)**

[MRSA enteritis following severe gastroenteritis of salmonellosis] Saito S, et al. **Kansenshogaku Zasshi** 1996 Sep;70(9):981-5 (Eng. Abstr.) **(Jpn)**

[Osteomyelitis by Salmonella enteritidis and sickle cell hemoglobinopathy. Report of a case and review of the literature] Pierrotti LC, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 May-Jun; 51(3):96-8 (8 ref.) (Eng. Abstr.) **(Por)**

[Lupus erythematosus systemic and persistent pulmonary salmonellosis] Godoy P, et al. **Rev Soc Bras Med Trop** 1996 Nov-Dec;29(6):603-6 (Eng. Abstr.) **(Por)**

[Septic and other forms of salmonellosis] Bogomolova BP, et al. **Klin Med (Mosk)** 1996;74(7):12-5 **(Rus)**

[Drepanocytosis: acute osteomyelitis due to Salmonella and bone infarct. Difficulties for diagnosis] Casanova Matutano C, et al. **An Esp Pediatr** 1997 May;46(5):495-8 **(Spa)**

[Salmonella D spontaneous peritonitis in a cirrhotic patient with hepatocarcinoma (letter)] Aller R, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):575 **(Spa)**

[Salmonella septic arthritis in a hemophiliac with AIDS: aggressive treatment (letter)] Ferré R, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):573-4 **(Spa)**

-Prolonged fever syndrome and infection of abdominal aortic aneurysm due to Salmonella enteritidis] Winkel M, et al. **Medicina (B Aires)** 1995;55(4):341-4 (Eng. Abstr.) **(Spa)**

CONGENITAL

Fatal Salmonella enteritidis sepsis acquired prenatally in a premature infant. Roll C, et al. **Obstet Gynecol** 1996 Oct; 88(4 Pt 2):692-3

DIAGNOSIS

Salmonella braenderup sacroiliac osteomyelitis in a nonsickle cell patient: case report. Hunt BK, et al. **Bull Hosp Jt Dis** 1996;55(2):86-7 (9 ref.)

Salmonella parotitis with abscess formation in a patient with human immunodeficiency virus infection. Knee TS, et al. **Clin Infect Dis** 1997 May;24(5):1009-10

Salmonella osteomyelitis in a patient with human immunodeficiency virus infection [letter] Belzunegui J, et al. **Clin Rheumatol** 1997 May;16(3):319-20 (10 ref.)

Outbreak of Salmonella enteritidis phage type 6 infection associated with food items provided at a buffet meal. Holtby I, et al. **Commun Dis Rep CDR Rev** 1997 May 30; 7(6):R87-90

Salmonella typhi meningitis in infants. Abuekteish F, et al. **Indian Pediatr** 1996 Dec;33(12):1037-40

Salmonella aortitis with pseudoaneurysm formation diagnosed by transesophageal echocardiography. Kures P, et al. **J Am Soc Echocardiogr** 1996 Nov-Dec;9(6):885-7

Salmonella infection mimicking acute rheumatic fever. Kamili MA, et al. **J Assoc Physicians India** 1996 Aug; 44(8):579-80

Management of Salmonella infections during pregnancy and puerperium. van der Klooster JM, et al. **Neth J Med** 1997 Aug;51(2):83-6 (24 ref.)

Clinical definition for invasive Salmonella infection in African children. Cheesbrough JS, et al. **Pediatr Infect Dis J** 1997 Mar;16(3):277-83

Pediatric case of the day. Extralobar pulmonary sequestration with cystic adenomatoid features and acute and chronic inflammation. Kim FM, et al. **Radiographics** 1996 May; 16(3):717-9

Salmonella as a cause of bacteremia and subdural empyema in a patient with HIV infection. Kanchanapongkul J, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):196-9

[The clinical picture of generalized forms of salmonellosis] Bondarev LS, et al. **Ter Arkh** 1996;68(4):73-4 (Eng. Abstr.) **(Rus)**

[The clinical manifestations and treatment of shock in acute intestinal infections] Brodov LE, et al. **Ter Arkh** 1996; 68(11):27-9 (Eng. Abstr.) **(Rus)**

[The nosoparasitic form of salmonellosis] Brodov LE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan-Feb; (1):78-80 (Eng. Abstr.) **(Rus)**

SALMONELLA INFECTIONS

DRUG THERAPY

Osteomyelitis of the spine due to Salmonella infection--conservative treatment with quinolone: a case report. Tsui HF, et al. **Can J Surg** 1997 Feb;40(1):48–50

A pilot study of seven days of ceftriaxone therapy for children with Salmonella enterocolitis. Chiu CH, et al. **Chang Keng I Hsueh** 1997 Jun;20(2):115–21

Antibiotic resistance in Shigella and Salmonella in a region of Lithuania. Jensen G, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):872–6

Decreasing trend of multiresistant Salmonella typhi in Bangladesh [letter] Saha SK, et al. **J Antimicrob Chemother** 1997 Apr;39(4):554–6

Development of quinolone resistance in salmonella: failure to prevent splenic abscess [letter] Boswell TC, et al. **J Infect** 1997 Jan;34(1):86–7

Emergence of ciprofloxacin resistance during treatment of Salmonella osteomyelitis in three patients with sickle cell disease. Workman MR, et al. **J Infect** 1996 Jan;32(1):27–32

Free versus liposome-entrapped streptomycin sulfate in treatment of infections caused by Salmonella enteritidis. Khalil RM, et al. **Pharmazie** 1996 Mar;51(3):182–4

Selection of multiple resistance in Salmonella enteritidis during treatment with ciprofloxacin. Pers C, et al. **Scand J Infect Dis** 1996;28(5):529–31

Norfloxacin and Salmonella excretion in acute gastroenteritis--a 6-month follow-up study. Pitkäjärvi T, et al. **Scand J Infect Dis** 1996;28(2):177–80

[Multiresistant Salmonella typhimurium] **J Pharm Belg** 1997 May–Jun;52(3):141–2 **(Fre)**

[An attempt to use ofloxacin in the treatment of acute intestinal infections] Lobzin IuV. **Antibiot Khimioter** 1996; 41(9):96–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Increased expression of urokinase type plasminogen activator(u-PA), plasminogen activator inhibitor-1(PAI-1), and collagenases in Caco-2 cells infected by Salmonella typhimurium. Park CG, et al. **J Korean Med Sci** 1997 Feb;12(1):23–31

EPIDEMIOLOGY

A case-control study of Salmonella gastrointestinal infection in Italian children. Borgnolo G, et al. **Acta Paediatr** 1996 Jul;85(7):804–8

Typing of Salmonella enterica serovar Saintpaul: an outbreak investigation. Baggesen DL, et al. **APMIS** 1996 Jun; 104(6):411–8

Outbreaks of salmonellosis [editorial] Cowden J. **BMJ** 1996 Nov 2;313(7065):1094–5

Nosocomial outbreak of gastroenteritis due to Salmonella senftenberg. L'Ecuyer PB, et al. **Clin Infect Dis** 1996 Oct; 23(4):734–42

Mycotic aneurysm due to non-typhi salmonella: report of 16 cases. Wang JH, et al. **Clin Infect Dis** 1996 Oct; 23(4):743–7

Bodybuilders, raw egg drink, and Salmonella enteritidis. Barnes GH, et al. **Commun Dis Rep CDR Rev** 1996 Mar 29;6(4):R67

Salmonella enteritidis phage type 21b. **Commun Dis Rep CDR Wkly** 1996 Mar 29;6(13):109

Investigating Salmonella typhimurium DT104 infections. **Commun Dis Rep CDR Wkly** 1997 Apr 18;7(16):137, 140

Using laboratory-based surveillance data for prevention: an algorithm for detecting Salmonella outbreaks. Hutwagner LC, et al. **Emerg Infect Dis** 1997 Jul–Sep;3(3):395–400

Electronic communication facilitates investigation of a highly dispersed foodborne outbreak: Salmonella on the superhighway. Mahon BE, et al. **Emerg Infect Dis** 1995 Jul–Sep;1(3):94–5

Salmonella isolated from humans, animals and other sources in Canada, 1983–92. Khakhria R, et al. **Epidemiol Infect** 1997 Aug;119(1):15–23

Risk factors for sporadic salmonellosis in Switzerland. Schmid H, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):725–32

Occurrence of Salmonella enterica serotype Enteritidis phage types in the Slovak Republic. Majtánová L. **Eur J Epidemiol** 1997 Feb;13(2):243–5

Nosocomial Salmonella bareilly septicemia: a nursery outbreak. Gupta P, et al. **Indian Pediatr** 1997 Feb; 34(2):144–6

The major sources of Salmonella enteritidis in Thailand. Sakai T, et al. **Int J Food Microbiol** 1996 Aug; 31(1–3):173–80

Risk assessment of use of cracked eggs in Canada. Todd EC. **Int J Food Microbiol** 1996 Jun;30(1–2):125–43

Molecular epidemiology of antibiotic resistance of Salmonella enteritidis during a 7-year period in Greece. Tassios PT, et al. **J Clin Microbiol** 1997 Jun;35(6):1316–21

Characterization of multiple-antibiotic-resistant Salmonella typhimurium stains: molecular epidemiology of PER-1-producing isolates and evidence for nosocomial plasmid exchange by a clone. Vahaboglu H, et al. **J Clin Microbiol** 1996 Dec;34(12):2942–6

An outbreak of Salmonella enteritidis in a maternity and neonatal intensive care unit. Umasankar S, et al. **J Hosp Infect** 1996 Oct;34(2):117–22

Outbreaks of salmonellosis in hospitals in England and Wales: 1992–1994. Wall PG, et al. **J Hosp Infect** 1996 Jul; 33(3):181–90

An international outbreak of Salmonella infections caused by alfalfa sprouts grown from contaminated seeds. Mahon BE, et al. **J Infect Dis** 1997 Apr;175(4):876–82

DNA insertion sequences and the molecular epidemiology of Salmonella and Mycobacterium. Stanley J, et al. **J Med Microbiol** 1996 Oct;45(4):236–51 (116 ref.)

From the Centers for Disease Control and Prevention. Salmonella serotype Montevideo infections associated with chicks--Idaho, Washington, and Oregon, spring 1995 and 1996. **JAMA** 1997 Apr 9;277(14):1108–9

From the Centers for Disease Control and Prevention. Multidrug-resistant Salmonella serotype Typhimurium--United States, 1996. **JAMA** 1997 May 21; 277(19):1513

Salmonella serotype Montevideo infections associated with chicks--Idaho, Washington, and Oregon, spring 1995 and 1996. **MMWR Morb Mortal Wkly Rep** 1997 Mar 21; 46(11):237–9

Multidrug-resistant Salmonella serotype Typhimurium--United States, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Apr 11; 46(14):308–10

Trends in reported Campylobacter, Salmonella and Shigella infections, Kansas City, Missouri. Hoff GL, et al. **Mo Med** 1996 Jul;93(7):361–6

Extraintestinal salmonellosis in a children's hospital. Schutze GE, et al. **Pediatr Infect Dis J** 1997 May;16(5):482–5

Study of the association between waterborne diseases and microbial water quality in Israel. Elkana Y, et al. **Public Health Rev** 1996;24(1):49–63

The role of public health laboratory in the problem of salmonellosis in São Paulo, Brazil. Taunay AE, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar–Apr;38(2):119–27

Salmonella infections in Taiwan and typhoid polysaccharide Vi vaccination [letter] Arya SC. **Scand J Infect Dis** 1997; 29(1):96

High frequency of septicaemia in an outbreak of Salmonella stanley infections [letter] Kontiainen S, et al. **Scand J Infect Dis** 1996;28(2):207

Salmonella infections: a retrospective 10-year analysis of 134 cases in a regional hospital in Taiwan. Yang CH, et al. **Scand J Infect Dis** 1996;28(2):171–5

Zoonosis control. **Wkly Epidemiol Rec** 1996 Nov 8; 71(45):337–9 **(Eng, Fre)**

Human infection caused by Salmonellae of subspecies II to VI in Germany, 1977–1992. Aleksic S, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):391–8

[Incidence of Salmonella infections in general practice. Changes in diagnostic behavior or an actual increase?] Beste S. **Fortschr Med** 1997 May 20;115(14):52 **(Ger)**

[Salmonellosis in the territory of the Local Health Unit of Imola. An epidemiological study of notified cases in 1976–1993] Leoni E, et al. **Ann Ig** 1996 Jul–Aug;8(4):425–34 (Eng. Abstr.) **(Ita)**

[Salmonellosis in 1995] Gonera E. **Przegl Epidemiol** 1997; 51(1–2):79–88 **(Pol)**

[Salmonella infection in a large general hospital] Akimkin VG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec;(6):32–6 (Eng. Abstr.) **(Rus)**

[Salmonellosis in Moscow: its epidemiological characteristics and the prevention tasks] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):46–9 (Eng. Abstr.) **(Rus)**

[Epidemiological profile of non-typhi salmonellosis in a hospital in urban Madrid (1980–1994)] Ramos JM, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):345–51 (35 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Renal Salmonella enteritidis abscess in a patient with severe aplastic anemia after allogeneic stem cell transplantation. Hashino S, et al. **Bone Marrow Transplant** 1996 Oct; 18(4):807–8

Acute hematogenous osteomyelitis of a closed fracture with chronic superinfection. Aluisio FV, et al. **Clin Orthop** 1996 Apr;(325):239–44

Salmonella enteritidis in an endometriotic ovarian cyst. Burgmans JP, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Apr;72(2):207–11 (18 ref.)

Evolution of salmonella aortitis towards the formation of abdominal aneurysm. Carreras M, et al. **Eur Radiol** 1997; 7(1):54–6

Host responses to pathogenic Salmonella infection. Jones BD. **Genes Dev** 1997 Mar 15;11(6):679–87 (78 ref.)

Salmonella osteomyelitis in sickle cell disease children in the east end of London. Atkins BL, et al. **J Infect** 1997 Mar; 34(2):133–8

[Salmonella typhimurium cerebral abscess in a patient with HIV infection (letter; comment)] Gueit I, et al. **Presse Med** 1996 Dec 21;25(40):2052. Comment on: Presse Med 1996 Mar 30;25(11):556. **(Fre)**

[The pathogenetic and clinico-diagnostic significance of changes in leukocyte migration activity in patients with shigellosis and salmonellosis] Cherkasov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):34–7 (Eng. Abstr.) **(Rus)**

[Non-typhoid salmonellosis and human immunodeficiency virus (HIV) infection] Ramos JM, et al. **Med Clin (Barc)** 1997 Mar 8;108(9):349–55 (168 ref.) **(Spa)**

GENETICS

hilA is a novel ompR/toxR family member that activates the expression of Salmonella typhimurium invasion genes. Bajaj V, et al. **Mol Microbiol** 1995 Nov;18(4):715–27

Genomic analyses of Salmonella enteritidis phage type 4 strains from Austria and phage type 8 strains from the United States. Buchrieser C, et al. **Zentralbl Bakteriol** 1997 Feb;285(3):379–88

IMMUNOLOGY

Hybrid hepatitis B virus core antigen as a vaccine carrier moiety. II. Expression in avirulent Salmonella spp. for mucosal immunization. Schödel F, et al. **Adv Exp Med Biol** 1996;397:15–21 (18 ref.)

Salmonellosis: host immune responses and bacterial virulence determinants. Jones BD, et al. **Annu Rev Immunol** 1996; 14:533–61 (155 ref.)

Comparison of peptides eluted from the groove of HLA-B27 from Salmonella infected and non-infected cells. Ringrose JH, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:74–8

A possible mechanism for host-specific pathogenesis of Salmonella serovars. Ishibashi Y, et al. **Microb Pathog** 1996 Dec;21(6):435–46

Immune response to Escherichia coli O157:H7 in hemolytic uremic syndrome following salmonellosis. Flores FX, et al. **Pediatr Nephrol** 1997 Aug;11(4):488–90

[The humoral immunity indices and complement functional activity in salmonellosis during the dynamics of the disease] Kulikova IN, et al. **Ter Arkh** 1996;68(4):75–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Severe nontyphoidal salmonellosis probably in relation with omeprazole treatment: report of 2 cases. Schapira M, et al. **Acta Gastroenterol Belg** 1996 Apr–Jun;59(2):168–9

Typing of Salmonella enterica serovar Saintpaul: an outbreak investigation. Baggesen DL, et al. **APMIS** 1996 Jun; 104(6):411–8

Salmonella neck abscess in a patient with beta-thalassemia major: case report and review. Behr MA, et al. **Clin Infect Dis** 1996 Aug;23(2):404–5 (8 ref.)

Clinical spectrum of urinary tract infections due on nontyphoidal Salmonella species. Ramos JM, et al. **Clin Infect Dis** 1996 Aug;23(2):388–90

Epidemiological application of differentiating multiresistant Salmonella typhimurium DT104 by plasmid profile. Threlfall EJ, et al. **Commun Dis Rep CDR Rev** 1996 Oct 11;6(11):R155–9

Application of pulsed-field gel electrophoresis to an international outbreak of Salmonella agona. Threlfall EJ, et al. **Emerg Infect Dis** 1996 Apr–Jun;2(2):130–2

Occurrence of Salmonella enterica serotype Enteritidis phage types in the Slovak Republic. Majtánová L. **Eur J Epidemiol** 1997 Feb;13(2):243–5

Investigation of an outbreak of human salmonellosis caused by Salmonella enterica ssp. enterica serovar Infantis by use of pulsed field gel electrophoresis. Wegener HC, et al. **Int J Food Microbiol** 1996 Sep;32(1–2):125–31

Decreasing trend of multiresistant Salmonella typhi in Bangladesh [letter] Saha SK, et al. **J Antimicrob Chemother** 1997 Apr;39(4):554–6

Conventional and molecular approaches to isolates of Salmonella hadar from sporadic and epidemic cases. Fantasia M, et al. **J Appl Microbiol** 1997 Apr;82(4):494–8

Characterization of multiple-antibiotic-resistant Salmonella typhimurium stains: molecular epidemiology of PER-1-producing isolates and evidence for nosocomial plasmid exchange by a clone. Vahaboglu H, et al. **J Clin Microbiol** 1996 Dec;34(12):2942–6

Characterization of a nosocomial outbreak involving an epidemic plasmid encoding for TEM-27 in Salmonella enterica subspecies enterica serotype Othmarschen. Morosini MI, et al. **J Infect Dis** 1996 Nov;174(5):1015–20

A three-way ribotyping scheme for Salmonella serotype Typhimurium and its usefulness for phylogenetic and epidemiological purposes. Guerra B, et al. **J Med Microbiol** 1997 Apr;46(4):307–13

Phenotypic and genotypic discrimination of strains of Salmonella serotype Eimsbuettel from human and animal sources. Old DC, et al. **J Med Microbiol** 1997 Jul; 46(7):617–22

Analysis of the mechanism of quinolone resistance in nalidixic acid-resistant clinical isolates of Salmonella serotype Typhimurium. Ruiz J, et al. **J Med Microbiol** 1997 Jul; 46(7):623–8

Salmonella spondylitis. Cottalorda J, et al. **J Pediatr Orthop B** 1997 Jan;6(1):73–5

Identification of DNA gyrase A mutations in ciprofloxacin-resistant isolates of Salmonella typhimurium from men and cattle in Germany. Heisig P, et al. **Microb Drug Resist** 1995 Fall;1(3):211–8

Quinolone resistance mutations in the gyrA gene of clinical isolates of Salmonella. Ouabdesselam S, et al. **Microb Drug Resist** 1996 Fall;2(3):299–302

Increase in multiple antibiotic resistance in nontyphoidal salmonellas from humans in England and Wales: a comparison of data for 1994 and 1996. Threlfall EJ, et al. **Microb Drug Resist** 1997 Fall;3(3):263–6

Potential virulence determinants of Salmonella serovars from poultry and human sources in Spain. Carramiñana JJ, et al. **Vet Microbiol** 1997 Mar;54(3–4):375–83

Multiple-resistant Salmonella group G outbreak in a neonatal intensive care unit. Newman MJ. **West Afr J Med** 1996 Jul-Sep;15(3):165-9

Phage types and ribotypes of Salmonella enteritidis in southern Italy. Pignato S, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):399-405

[Extraintestinal Salmonella infections in four Danish counties. Inverse relationship between invasiveness and zoonotic serotypes] Schønheyder HC, et al. **Ugeskr Laeger** 1997 Mar 31;159(14):2082-5 (Eng. Abstr.) **(Dan)**

[Multiresistant Salmonella typhimurium] **J Pharm Belg** 1997 May-Jun;52(3):141-2 **(Fre)**

[The sensitivity of Salmonella strains in diarrheal disease to new quinolones compared with other antimicrobial substances] David E, et al.
Bacteriol Virusol Parazitol Epidemiol 1996 Jan-Jun; 41(1-2):43-6 (Eng. Abstr.) **(Rum)**

[Salmonellosis peritonitis] Varshavskiĭ IM, et al.
Klin Med (Mosk) 1997;75(8):71-2 **(Rus)**

[Psoas abscess caused by Salmonella enteritidis: presentation of a case (see comments)] Torres Cortada G, et al.
An Med Interna 1995 Sep;12(9):447-9 (Eng. Abstr.). Comment in: An Med Interna 1996 May;13(5):254-5. **(Spa)**

[Vertebral osteomyelitis caused by Salmonella typhimurium (letter)] Blanco JR, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):507-8 **(Spa)**

PREVENTION & CONTROL

A community waterborne outbreak of salmonellosis and the effectiveness of a boil water order. Angulo FJ, et al.
Am J Public Health 1997 Apr;87(4):580-4

MAFF statutory incident reports in surveillance, prevention, and control of human Salmonella typhimurium infection. Fone DL, et al. **Commun Dis Rep CDR Rev** 1996 Apr 26; 6(5):R76-8

Using laboratory-based surveillance data for prevention: an algorithm for detecting Salmonella outbreaks. Hutwagner LC, et al. **Emerg Infect Dis** 1997 Jul-Sep;3(3):395-400

Application of molecular methods to a nosocomial outbreak of Salmonella enteritidis phage type 4. Rushdy AA, et al.
J Hosp Infect 1997 Jun;36(2):123-31

Virulence and vaccine potential of Salmonella typhimurium mutants deficient in the expression of the RpoS (sigma S) regulon. Coynault C, et al. **Mol Microbiol** 1996 Oct; 22(1):149-60

Protection against bacterial infection by urea extracts from Salmonella. Schlecht S, et al. **Zentralbl Bakteriol** 1996 Aug; 284(4):559-64

[Food hygiene aspects in the production of food fish in fishing] Hörmansdorfer S, et al.
Berl Munch Tierarztl Wochenschr 1997 Mar;110(3):96-101 (Eng. Abstr.) **(Ger)**

[Salmonellosis in Moscow: its epidemiological characteristics and the prevention tasks] Solodovnikov IuP, et al.
Zh Mikrobiol Epidemiol Immunobiol 1996 Jul-Aug;(4):46-9 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Mycotic aneurysm of the abdominal aorta: CT finding in three patients. Parellada JA, et al. **Abdom Imaging** 1997 May-Jun;22(3):321-4

SURGERY

Ruptured Salmonella mycotic aneurysm of the extracranial carotid artery. Rice HE, et al. **Ann Vasc Surg** 1997 Jul; 11(4):416-9

Acalculous nontyphoidal salmonellal cholecystitis requiring surgical intervention despite ciprofloxacin therapy: report of three cases. McCarron B, et al. **Clin Infect Dis** 1997 Apr;24(4):707-9

Infectious aneurysm of the interosseous artery at the forearm. Case report. Illuminati G, et al.
J Cardiovasc Surg (Torino) 1996 Dec;37(6):589-91

Surgical experience with Salmonella-infected aneurysms of the abdominal aorta. Luo CY, et al.
J Formos Med Assoc 1997 May;96(5):346-52

THERAPY

[The clinico-pathogenetic validation of intravascular laser therapy in the combined treatment of salmonellosis in young infants] Ibadova GA.
Zh Mikrobiol Epidemiol Immunobiol 1997 May-Jun; (3):96-9 (Eng. Abstr.) **(Rus)**

[The enterosorption treatment of patients with acute intestinal infections and chronic colitis with diarrhea] Andreĭchyn MA, et al. **Lik Sprava** 1996 Jul-Sep;(7-9):147-51 (Eng. Abstr.) **(Ukr)**

TRANSMISSION

A community waterborne outbreak of salmonellosis and the effectiveness of a boil water order. Angulo FJ, et al.
Am J Public Health 1997 Apr;87(4):580-4

Salmonella urinary tract infections associated with exposure to pet iguanas [letter] Embil JM, et al. **Clin Infect Dis** 1997 Jul;25(1):172

An outbreak of Salmonella enteritidis in a maternity and neonatal intensive care unit. Umasankar S, et al.
J Hosp Infect 1996 Oct;34(2):117-22

Salmonella enteritidis in Antarctica: zoonosis in man or humanosis in penguins? [letter] Olsen B, et al. **Lancet** 1996 Nov 9;348(9037):1319-20

Management of Salmonella infections during pregnancy and puerperium. van der Klooster JM, et al. **Neth J Med** 1997 Aug;51(2):83-6 (24 ref.)

Iguanas and Salmonella marina infection in children: a reflection of the increasing incidence of reptile-associated salmonellosis in the United States. Mermin J, et al.
Pediatrics 1997 Mar;99(3):399-402

ULTRASONOGRAPHY

A rare case of Salmonella neck abscess. Ray J, et al.
J Laryngol Otol 1997 May;111(5):489-90 (4 ref.)

VETERINARY see SALMONELLA INFECTIONS, ANIMAL

SALMONELLA INFECTIONS, ANIMAL

A rat model of infection by Salmonella typhimurium or Salm. enteritidis. Naughton PJ, et al. **J Appl Bacteriol** 1996 Dec; 81(6):651-6

BLOOD

Decreased serum apolipoprotein A-I concentrations in cows infected with Salmonella typhimurium. Oikawa S, et al.
Can J Vet Res 1997 Jul;61(3):182-6

Biochemical changes in fowl serum during infection with Salmonella typhimurium. Itoh N, et al. **J Vet Med Sci** 1996 Oct;58(10):1021-3

[The effect of fibronectin on generation of superoxide anion by neutrophils during food poisoning and experimental salmonella endotoxemia] Poluéktova VB, et al.
Biull Eksp Biol Med 1996 Jun;121(6):628-31 **(Rus)**

CLASSIFICATION

Experimental infection of laying hens with Salmonella enteritidis strains that express different types of fimbriae. Thiagarajan D, et al. **Poult Sci** 1996 Nov;75(11):1365-72

DIAGNOSIS

Salmonella Dublin infection in Queensland dairy cattle. Trueman KF, et al. **Aust Vet J** 1996 Nov;74(5):367-9

A dot immunobinding assay (dot-ELISA) for the rapid serodiagnosis of Salmonella enteritidis infection in chickens. Charles SD, et al. **J Vet Diagn Invest** 1996 Jul;8(3):310-4

Multiplex polymerase chain reaction for simultaneous detection of Lawsonia intracellularis, Serpulina hyodysenteriae, and salmonellae in porcine intestinal specimens. Elder RO, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):281-6

Diagnostic potential of sefA DNA probes to Salmonella enteritidis and certain other O-serogroup D1 Salmonella serovars. Doran JL, et al. **Mol Cell Probes** 1996 Aug; 10(4):233-46

Assessing the sensitivity of egg yolk antibody testing for detecting Salmonella enteritidis infections in laying hens. Gast RK, et al. **Poult Sci** 1997 Jun;76(6):798-801

Detecting infections of chickens with recent Salmonella pullorum isolates using standard serological methods. Gast RK. **Poult Sci** 1997 Jan;76(1):17-23

Management and nutritional factors associated with the detection of Salmonella sp. from cattle fecal specimens from feedlot operations in the United States. Losinger WC, et al. **Prev Vet Med** 1997 Aug;31(3-4):231-44

A modelling approach to the quantification of the benefits of a national surveillance programme. Sanson RL, et al.
Prev Vet Med 1997 Apr;30(1):37-47

Diagnosing emerging bacterial infections: salmonellosis, campylobacteriosis, clostridial toxicosis, and helicobacteriosis. McDonough PL, et al.
Semin Vet Med Surg (Small Anim) 1996 Aug;11(3):187-97 (32 ref.)

Comparison of an LPS-specific competitive ELISA with a motility enrichment culture method (MSRV) for detection of Salmonella typhimurium and S. enteritidis in chickens. Tan S, et al. **Vet Microbiol** 1997 May;56(1-2):79-86

[Prevalence of motile salmonellae in egg-laying hens at the end of the laying period] Hinz KH, et al.
Zentralbl Veterinarmed [B] 1996 Mar;43(1):23-33 (Eng. Abstr.) **(Ger)**

[Detection methods for Salmonella abortus ovis and examinations in sheep flocks in northern Baden-Württemberg] Sting R, et al.
Zentralbl Veterinarmed [B] 1997 Apr;44(2):87-98 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Effect of ochratoxin A on Salmonella typhimurium-challenged layer chickens. Fukata T, et al.
Avian Dis 1996 Oct-Dec;40(4):924-6

Antimicrobial effects of amikacin therapy on experimentally induced Salmonella typhimurium infection in fowls. Itoh N, et al. **J Vet Med Sci** 1996 May;58(5):425-9

Clonal spread of tetracycline-resistant Salmonella typhimurium in Danish dairy herds. Aarestrup FM, et al.
Vet Rec 1997 Mar 22;140(12):313-4

Antibiotic resistance [letter] Reilly WJ, et al. **Vet Rec** 1997 Jul 5;141(1):26

EPIDEMIOLOGY

The first Salmonella enteritidis phage type 1 infection of a commercial layer flock in Finland. Johansson TM, et al.
Acta Vet Scand 1996;37(4):471-9

Typing of Salmonella enterica serovar Saintpaul: an outbreak investigation. Baggesen DL, et al. **APMIS** 1996 Jun; 104(6):411-8

Salmonella Dublin infection in Queensland dairy cattle. Trueman KF, et al. **Aust Vet J** 1996 Nov;74(5):367-9

Intestinal colonization and organ invasion in chicks experimentally infected with Salmonella enteritidis phage type 4 and other phage types isolated from poultry in the United States. Gast RK, et al. **Avian Dis** 1996 Oct-Dec; 40(4):853-7

Utilization of both phenotypic and molecular analyses to investigate an outbreak of multidrug-resistant Salmonella anatum in horses. Hartmann FA, et al. **Can J Vet Res** 1997 Jul;61(3):173-81

Salmonella infection in wild birds from Quebec. Mikaelian I, et al. **Can Vet J** 1997 Jun;38(6):385

Surveillance on Salmonella in turkey flocks and processing plants. Hafez HM, et al.
DTW Dtsch Tierarztl Wochenschr 1997 Jan;104(1):33-5

Molecular epidemiological tools for Salmonella Dublin typing. Kerouanton A, et al.
FEMS Immunol Med Microbiol 1996 May;14(1):25-9

Case-control study of an outbreak of clinical disease attributable to Salmonella menhaden infection in eight dairy herds. Anderson RJ, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):528-30

Risk of shedding Salmonella organisms by market-age hogs in a barn with open-flush gutters. Davies PR, et al.
J Am Vet Med Assoc 1997 Feb 1;210(3):386-9

Infectivity and persistence of Salmonella Typhimurium for zebra finches (Poephila guttata) isolated from the same species. Sato Y, et al. **J Vet Med Sci** 1996 Sep;58(9):845-8

Fecal shedding of Salmonella in exotic felids. Clyde VL, et al. **J Zoo Wildl Med** 1997 Jun;28(2):148-52

The influence of complex carbohydrates on Salmonella typhimurium colonization, pH, and density of broiler ceca. Chambers JR, et al. **Poult Sci** 1997 Mar;76(3):445-51

Effect of feed withdrawal on the incidence of Salmonella in the crops and ceca of market age broiler chickens. Ramirez GA, et al. **Poult Sci** 1997 Apr;76(4):654-6

Nation-wide Salmonella enterica surveillance and control in Danish slaughter swine herds. Mousing J, et al.
Prev Vet Med 1997 Feb;29(4):247-61

A modelling approach to the quantification of the benefits of a national surveillance programme. Sanson RL, et al.
Prev Vet Med 1997 Apr;30(1):37-47

Prevalence of salmonellae in broiler, layer and breeder flocks in Thailand. Sasipreeyajan J, et al.
Trop Anim Health Prod 1996 May;28(2):174-80

Epidemiology and virulence assessment of Salmonella dublin. Rice DH, et al. **Vet Microbiol** 1997 May;56(1-2):111-24

Salmonellosis associated with S typhimurium DT104 in the USA [letter; comment] Besser TE, et al. **Vet Rec** 1997 Jan 18;140(3):75. Comment on: Vet Rec 1994 May 28;134(22):577. Comment on: Vet Rec 1996 Jun 29;138(26):650-1.

Salmonella hindmarsh infection in sheep and ponies [letter] Daniel RG, et al. **Vet Rec** 1997 Aug 23;141(8):203

Case control study of multiple-resistant Salmonella typhimurium DT104 infection of cattle in Great Britain. Evans S, et al. **Vet Rec** 1996 Dec 7;139(23):557-8

Prevalence of bacterial enteropathogens in pet dogs in Trinidad. Adesiyun AA, et al.
Zentralbl Veterinarmed [B] 1997 Mar;44(1):19-27

[Preliminary epidemiological survey on prevalences of Salmonella spp. at Bissau abattoir (Guinea-Bissau)] Bernardo FM, et al. **Rev Elev Med Vet Pays Trop** 1996; 49(2):102-6 (Eng. Abstr.) **(Fre)**

[Molecular biological methods for epidemiological typing of Salmonella--a review] Liebisch B, et al.
Berl Munch Tierarztl Wochenschr 1996 Sep;109(9):348-54 (96 ref.) (Eng. Abstr.) **(Ger)**

[Significance of causes of infectious abortion in sheep flocks in northern Baden-Württemberg with special reference to Chlamydia psittaci] Sting R, et al.
Berl Munch Tierarztl Wochenschr 1997 Jan;110(1):5-11 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Sewage effluent: likely source of Salmonella enteritidis, phage type 4 infection in a commercial chicken layer flock in southern California. Kinde H, et al. **Avian Dis** 1996 Jul-Sep; 40(3):672-6

Development of a murine model of chronic Salmonella infection. Sukupolvi S, et al. **Infect Immun** 1997 Feb; 65(2):838-42

Salmonella enterica infection. Hess J, et al. **Res Immunol** 1996 Oct-Dec;147(8-9):581-6 (24 ref.)

GENETICS

Identification of Salmonella abortusovis by PCR amplification of a serovar-specific IS200 element. Beuzón CR, et al. **Appl Environ Microbiol** 1997 May;63(5):2082-5

Resistance to salmonellosis in the chicken is linked to NRAMP1 and TNC. Hu J, et al. **Genome Res** 1997 Jul; 7(7):693-704

The spv genes on the Salmonella dublin virulence plasmid

are required for severe enteritis and systemic infection in the natural host. Libby SJ, et al. **Infect Immun** 1997 May; 65(5):1786–92

Predominant appearance of NK1.1+ T cells producing IL–4 may be involved in the increased susceptibility of mice with the beige mutation during Salmonella infection. Enomoto A, et al. **J Immunol** 1997 Mar 1;158(5):2268–77

Labeling Salmonella live vaccine strains with the lux operon from Vibrio fischeri improves their detection and discrimination from wild type. Beyer W, et al. **Microbiol Res** 1996 Dec;151(4):407–19

Genomic analyses of Salmonella enteritidis phage type 4 strains from Austria and phage type 8 strains from the United States. Buchrieser C, et al. **Zentralbl Bakteriol** 1997 Feb;285(3):379–88

IMMUNOLOGY

Immune response to phospholipase–A fractions of Salmonella typhi on experimental typhoid infection in mice. Punj V, et al. **Acta Microbiol Pol** 1996;45(3–4):261–7

Hybrid hepatitis B virus core antigen as a vaccine carrier moiety. II. Expression in avirulent Salmonella spp. for mucosal immunization. Schödel F, et al. **Adv Exp Med Biol** 1996;397:15–21 (18 ref.)

Salmonellosis: host immune responses and bacterial virulence determinants. Jones BD, et al. **Annu Rev Immunol** 1996; 14:533–61 (155 ref.)

Immunity to experimental Salmonella typhimurium infections in rats. Transfer of immunity with primed CD45RC+ and CD45RC- CD4 T-cell subpopulations. Thygesen P, et al. **APMIS** 1996 Oct;104(10):750–4

Transfer of primed CD4+OX40- T lymphocytes induces increased immunity to experimental Salmonella typhimurium infections in rats. Thygesen P, et al. **APMIS** 1997 May;105(5):410–3

Applying tests for specific yolk antibodies to predict contamination by Salmonella enteritidis in eggs from experimentally infected laying hens. Gast RK, et al. **Avian Dis** 1997 Jan–Mar;41(1):195–202

Efficacy of two avian Salmonella–immune lymphokines against liver invasion in chickens by Salmonella serovars with different O–group antigens. Ziprin RL, et al. **Avian Dis** 1997 Jan–Mar;41(1):181–6

Line differences in resistance to Salmonella enteritidis PT4 infection. Protais J, et al. **Br Poult Sci** 1996 May; 37(2):329–39

Hsp70 protects macrophages infected with Salmonella choleraesuis against TNF–alpha–induced cell death. Nishimura H, et al. **Cell Stress Chaperones** 1997 Mar; 2(1):50–9

Infection with Salmonella typhimurium modulates the immune response to Schistosoma mansoni glutathione–S–transferase. Comoy EE, et al. **Infect Immun** 1997 Aug;65(8):3261–6

Critical roles of neutrophils in host defense against experimental systemic infections of mice by Listeria monocytogenes, Salmonella typhimurium, and Yersinia enterocolitica. Conlan JW. **Infect Immun** 1997 Feb; 65(2):630–5

Induction of nitric oxide synthesis and xanthine oxidase and their roles in the antimicrobial mechanism against Salmonella typhimurium infection in mice. Umezawa K, et al. **Infect Immun** 1997 Jul;65(7):2932–40

Role of alphabeta and gammadelta T cells in the host response to Salmonella infection as demonstrated in T–cell–receptor–deficient mice of defined Ity genotypes. Weintraub BC, et al. **Infect Immun** 1997 Jun;65(6):2306–12

Neutralization of G–CSF inhibits ILK–induced heterophil influx: granulocyte–colony stimulating factor mediates the Salmonella enteritidis–immune lymphokine potentiation of the acute avian inflammatory response. Kogut MH, et al. **Inflammation** 1997 Feb;21(1):9–25

Splenic and intestinal lymphocyte proliferation response in mice fed milk or yogurt and challenged with Salmonella typhimurium. Puri P, et al. **Int J Food Sci Nutr** 1996 Sep; 47(5):391–8

Effects of FK–506 on the course of murine salmonellosis. Nichterlein T, et al. **J Chemother** 1996 Dec;8(6):449–56

Identification of a natural T cell epitope presented by Salmonella–infected macrophages and recognized by T cells from orally immunized mice. Cookson BT, et al. **J Immunol** 1997 May 1;158(9):4310–9

Predominant appearance of NK1.1+ T cells producing IL–4 may be involved in the increased susceptibility of mice with the beige mutation during Salmonella infection. Enomoto A, et al. **J Immunol** 1997 Mar 1;158(5):2268–77

Salmonella typhimurium infections in mice deficient in interleukin–4 production: role of IL–4 in infection–associated pathology. Everest P, et al. **J Immunol** 1997 Aug 15;159(4):1820–7

Detecting infections of chickens with recent Salmonella pullorum isolates using standard serological methods. Gast RK. **Poult Sci** 1997 Jan;76(1):17–23

Salmonella enterica infection. Hess J, et al. **Res Immunol** 1996 Oct–Dec;147(8–9):581–6 (24 ref.)

Characterisation of colony–stimulating activity in the avian T cell–derived factor, Salmonella enteritidis–immune lymphokine. McGruder ED, et al. **Res Vet Sci** 1996 May; 60(3):222–7

Factors influencing phagocytosis of Salmonella typhimurium by macrophages in murine schistosomiasis. Muniz–Junqueira MI, et al. **Rev Soc Bras Med Trop** 1997 Mar–Apr;30(2):101–6

Flow cytometric analysis of the reactivity of workshop monoclonal antibodies on sheep lymph node cells, after infection with Salmonella abortusovis. Bernard S, et al. **Vet Immunol Immunopathol** 1996 Aug;52(4):403–9

Influence of prior infection on the dynamics of bacterial counts in calves experimentally infected with Salmonella dublin. Steinbach G, et al. **Vet Microbiol** 1996 Feb; 48(3–4):199–206

Evaluation of an aroA mutant Salmonella typhimurium vaccine in chickens using modified semisolid Rappaport Vassiliadis medium to monitor faecal shedding. Tan S, et al. **Vet Microbiol** 1997 Mar;54(3–4):247–54

In vitro cellular responses from sheep draining lymph node cells after subcutaneous inoculation with Salmonella abortusovis. Doucet F, et al. **Vet Res** 1997;28(2):165–78

Seroreactivity of Salmonella–infected cattle herds against a fimbrial antigen in comparison with lipopolysaccharide antigens. Hoorfar J, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):461–7

[Vaccination of pigeons against Salmonella infections] Grund S, et al. **Berl Munch Tierarztl Wochenschr** 1997 May; 110(5):171–5 (Eng. Abstr.) **(Ger)**

[Immunization with potential Salmonella enteritidis mutants— 2. Investigations on the attenuation and immunogenicity for mice and young hens] Martin G, et al. **Berl Munch Tierarztl Wochenschr** 1996 Oct; 109(10):369–74 (Eng. Abstr.) **(Ger)**

METABOLISM

Changes in composition and polyamine content in the gastrointestinal tract due to pathogenic infection. Naughton PJ, et al. **Biochem Soc Trans** 1996 May;24(2):263S

Induction of nitric oxide synthesis and xanthine oxidase and their roles in the antimicrobial mechanism against Salmonella typhimurium infection in mice. Umezawa K, et al. **Infect Immun** 1997 Jul;65(7):2932–40

MICROBIOLOGY

Typing of Salmonella enterica serovar Saintpaul: an outbreak investigation. Baggesen DL, et al. **APMIS** 1996 Jun; 104(6):411–8

Antagonistic activity exerted in vitro and in vivo by Lactobacillus casei (strain GG) against Salmonella typhimurium C5 infection. Hudault S, et al. **Appl Environ Microbiol** 1997 Feb;63(2):513–8

Antimicrobial resistance in Salmonella and Escherichia coli isolated from horses. Bucknell DG, et al. **Aust Vet J** 1997 May;75(5):355–6

Salmonella enteritidis, phase type 4 infection in a commercial layer flock in southern California: bacteriologic and epidemiologic findings. Kinde H, et al. **Avian Dis** 1996 Jul–Sep;40(3):665–71

Effect of inv mutations on Salmonella virulence and colonization in 1–day–old White Leghorn chicks. Porter SB, et al. **Avian Dis** 1997 Jan–Mar;41(1):45–57

Dynamics of growth and death within a Salmonella typhimurium population during infection of macrophages. Buchmeier NA, et al. **Can J Microbiol** 1997 Jan;43(1):29–34

Epidemiological application of differentiating multiresistant Salmonella typhimurium DT104 by plasmid profile. Threlfall EJ, et al. **Commun Dis Rep CDR Rev** 1996 Oct 11;6(11):R155–9

Antimicrobial resistance of Salmonella enterica typhimurium DT104 isolates and investigation of strains with transferable apramycin resistance. Low JC, et al. **Epidemiol Infect** 1997 Apr;118(2):97–103

Comparison of random amplified polymorphic DNA analysis and enterobacterial repetitive intergenic consensus–PCR for epidemiological studies of Salmonella. Millemann Y, et al. **FEMS Immunol Med Microbiol** 1996 Jun; 14(2–3):129–34

The gene slyA of Salmonella typhimurium is required for destruction of M cells and intracellular survival but not for invasion or colonization of the murine small intestine. Daniels JJ, et al. **Infect Immun** 1996 Dec;64(12):5075–84

Role of sigma factor RpoS in initial stages of Salmonella typhimurium infection. Nickerson CA, et al. **Infect Immun** 1997 May;65(5):1814–23

Role of SefA subunit protein of SEF14 fimbriae in the pathogenesis of Salmonella enterica serovar Enteritidis. Ogunniyi AD, et al. **Infect Immun** 1997 Feb;65(2):708–17

Salmonella typhimurium aroA, htrA, and aroD htrA mutants cause progressive infections in athymic (nu/nu) BALB/c mice. Sinha K, et al. **Infect Immun** 1997 Apr;65(4):1566–9

Development of a murine model of chronic Salmonella infection. Sukupolvi S, et al. **Infect Immun** 1997 Feb; 65(2):838–42

In vitro attachment and invasion of chicken ovarian granulosa cells by Salmonella enteritidis phage type 8. Thiagarajan D, et al. **Infect Immun** 1996 Dec; 64(12):5015–21

Contribution of TonB– and Feo–mediated iron uptake to growth of Salmonella typhimurium in the mouse. Tsolis RM, et al. **Infect Immun** 1996 Nov;64(11):4549–56

Identification and quantification of risk factors in animal management and transport regarding Salmonella spp. in pigs. Berends BR, et al. **Int J Food Microbiol** 1996 Jun; 30(1–2):37–53

Murine salmonellosis studied by confocal microscopy: Salmonella typhimurium resides intracellularly inside macrophages and exerts a cytotoxic effect on phagocytes in vivo. Richter–Dahlfors A, et al. **J Exp Med** 1997 Aug 18;186(4):569–80

Phenotypic and genotypic discrimination of strains of Salmonella serotype Eimsbuettel from human and animal sources. Old DC, et al. **J Med Microbiol** 1997 Jul; 46(7):617–22

Infectivity and persistence of Salmonella typhimurium for bengalees, a variety of Lonchura striata, using an isolate from a bengalee. Sato Y. **J Vet Med Sci** 1996 Dec; 58(12):1175–9

Multiple–resistant Salmonella typhimurium DT104 in cats [letter; comment] Low JC, et al. **Lancet** 1996 Nov 16; 348(9038):1391. Comment on: Lancet 1996 Aug 17;348(9025):471.

Identification of . DNA gyrase A mutations in ciprofloxacin–resistant isolates of Salmonella typhimurium from men and cattle in Germany. Heisig P, et al. **Microb Drug Resist** 1995 Fall;1(3):211–8

Induction of TNF–alpha mRNA in murine macrophages by virulent and avirulent strains of Salmonella choleraesuis serovar typhimurium and serovar Choleraesuis. Mitsui–Yamaguchi T, et al. **Microb Pathog** 1997 Jan; 22(1):59–66

Photonic detection of bacterial pathogens in living hosts. Contag CH, et al. **Mol Microbiol** 1995 Nov;18(4):593–603

Bacterial infection as assessed by in vivo gene expression. Heithoff DM, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):934–9

Potential virulence determinants of Salmonella serovars from poultry and human sources in Spain. Carramiñana JJ, et al. **Vet Microbiol** 1997 Mar;54(3–4):375–83

Determination of an effective sampling regime to detect salmonella enteritidis in the environment of poultry units. Davies RH, et al. **Vet Microbiol** 1996 May;50(1–2):117–27

Pathogenesis of Salmonella enteritidis phage type four after experimental infection of young chickens. Desmidt M, et al. **Vet Microbiol** 1997 May;56(1–2):99–109

Comparison between persisting anti–lipopolysaccharide antibodies and culture at postmortem in salmonella–infected cattle herds. Hoorfar J, et al. **Vet Microbiol** 1996 May;50(1–2):81–94

Influence of prior infection on the dynamics of bacterial counts in calves experimentally infected with Salmonella dublin. Steinbach G, et al. **Vet Microbiol** 1996 Feb; 48(3–4):199–206

Characterization of Salmonella dublin and Salmonella typhimurium (Copenhagen) isolates from cattle. Brackelsberg CA, et al. **Vet Res Commun** 1997 Aug; 21(6):409–20

[Salmonella enteritidis and Salmonella typhimurium research and control in reproductive poultry. 1993–1994–1995.6th report by the Work Group Salmonella poultry, formerly Work Group Salmonella enteritidis] Edel W, et al. **Tijdschr Diergeneeskd** 1996 Oct 1;121(19):561–5 **(Dut)**

[15th International Symposium of Salmonellosis and Brucellosis: a report] Notermans S, et al. **Tijdschr Diergeneeskd** 1997 Apr 15;122(8):227–8 **(Dut)**

[The characteristics of an experimental infection in mice induced by salmonellae with different persistence features] Chaĭnikova IN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug; (4):77–80 (Eng. Abstr.) **(Rus)**

[The role of inactivation by salmonellae of the antibacterial component in an interferon preparation in an experimental infectious process] Rishchuk SV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):98–9 **(Rus)**

PATHOLOGY

The effects of induced molting on the severity of acute intestinal inflammation caused by Salmonella enteritidis. Macri NP, et al. **Avian Dis** 1997 Jan–Mar;41(1):117–24

Status of Salmonella gallinarum–pullorum infections in poultry in Zambia. Sato Y, et al. **Avian Dis** 1997 Apr–Jun; 41(2):490–5

An outbreak of abortion in mares associated with Salmonella abortusequi infection. Madić J, et al. **Equine Vet J** 1997 May;29(3):230–3

Salmonella typhimurium and Salmonella enteritidis induce gut growth and increase the polyamine content of the rat small intestine in vivo. Naughton PJ, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):251–8

PHYSIOPATHOLOGY

Effect of a characterized continuous–flow culture of cecal bacteria on Salmonella typhimurium crop colonization in broiler chicks. Hume ME, et al. **Avian Dis** 1996 Apr–Jun; 40(2):391–7

The effects of induced molting on the severity of acute intestinal inflammation caused by Salmonella enteritidis. Macri NP, et al. **Avian Dis** 1997 Jan–Mar;41(1):117–24

Effect of Eimeria tenella infection on the production of Salmonella enteritidis–contaminated eggs and susceptibility of laying hens to S. enteritidis infection. Qin Z, et al. **Avian Dis** 1996 Apr–Jun;40(2):361–7

Heterophil response to intraperitoneal challenge with invasion–deficient salmonella enteritidis and Salmonella–immune lymphokines. Ziprin RL. **Avian Dis** 1997 Apr–Jun;41(2):438–41

Faecal calprotectin: non–invasive marker of gastrointestinal

inflammation in Salmonella infected rats. Naughton PJ, et al. **Biochem Soc Trans** 1996 May;24(2):308S

Persistence of Salmonella enteritidis in poultry units and poultry food. Davies RH, et al. **Br Poult Sci** 1996 Jul; 37(3):589–96

Salmonella enteritidis colonization in turkey poults. Hafez HM, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Mar; 104(3):118–9

Evidence for a rapid, direct effect on epithelial monolayer integrity and transepithelial transport in response to Salmonella invasion. Jepson MA, et al. **Pflugers Arch** 1996 Jun;432(2):225–33

PREVENTION & CONTROL

Decision criteria for vaccination against Salmonella in poultry. Schaller G. **Acta Vet Scand Suppl** 1996;90:69–71

Immunoprophylaxis of Salmonella gallinarum infection by Salmonella enteritidis–immune lymphokines in broiler chicks. Kogut M, et al. **Adv Exp Med Biol** 1997;412:413–20

Current concepts of competitive exclusion cultures for the control of salmonellae in domestic poultry. Scanlan CM. **Adv Exp Med Biol** 1997;412:421–6

Role of metabolic products produced by competitive exclusion cultures for the control of salmonellae in domestic poultry. Scanlan CM. **Adv Exp Med Biol** 1997; 412:435–6

Safety and efficacy of an avirulent live Salmonella choleraesuis vaccine for protection of calves against S dublin infection. Fox BC, et al. **Am J Vet Res** 1997 Mar; 58(3):265–71

Application of normal avian gut flora by prolonged aerosolization onto turkey hatching eggs naturally exposed to Salmonella. Primm ND, et al. **Avian Dis** 1997 Apr–Jun; 41(2):455–60

Some properties and protective activity of specific DLE against Salmonella cholerae suis infection. Arnaudov A, et al. **Biotherapy** 1996;9(1–3):105–8

Antibacterial activity of formic and propionic acids in the diet of hens on Salmonellas in the crop. Thompson JL, et al. **Br Poult Sci** 1997 Mar;38(1):59–65

Prevention of Salmonella typhimurium caecal colonisation by different preparations for competitive exclusion. Hoszowski A, et al.
Comp Immunol Microbiol Infect Dis 1997 Feb;20(2):111–7

Increasing the intestinal resistance of rats to the invasive pathogen Salmonella enteritidis: additive effects of dietary lactulose and calcium. Bovee-Oudenhoven IM, et al.
Gut 1997 Apr;40(4):497–504

Correlates of protection induced by live Aro– Salmonella typhimurium vaccines in the murine typhoid model. Harrison JA, et al. **Immunology** 1997 Apr;90(4):618–25

Recombinant human prolactin induces protection against Salmonella typhimurium infection in the mouse: role of nitric oxide. Meli R, et al. **Immunopharmacology** 1996 Aug; 34(1):1–7

Protective effect of adenylate deaminase (from Penicillium lanoso-viride) against acute infections in mice. Nikolajeva V, et al. **Immunopharmacology** 1996 Nov;35(2):163–9

Comparative study of the protective effect against Salmonella colonisation in newly hatched SPF chickens using live, attenuated Salmonella vaccine strains, wild-type Salmonella strains or a competitive exclusion product. Methner U, et al. **Int J Food Microbiol** 1997 Apr 15; 35(3):223–30

Federal agencies collaborate to control dangerous new Salmonella strain [news] Hollingsworth J, et al.
J Am Vet Med Assoc 1997 Jun 15;210(12):1712, 1716

Effect of Saccharomyces boulardii against experimental oral infection with Salmonella typhimurium and Shigella flexneri in conventional and gnotobiotic mice. Rodrigues AC, et al. **J Appl Bacteriol** 1996 Sep;81(3):251–6

Dimethylthiourea protects rats against gram-negative sepsis and decreases tumor necrosis factor and nuclear factor kappaB activity. Sprong RC, et al. **J Lab Clin Med** 1997 Apr;129(4):470–81

A clinical trial of probiotic administration for prevention of Salmonella shedding in the postoperative period in horses with colic. Parraga ME, et al. **J Vet Intern Med** 1997 Jan–Feb;11(1):36–41

Immunoprotection by monoclonal antibodies to the porins and lipopolysaccharide of Salmonella typhimurium. Singh SP, et al. **Microb Pathog** 1996 Oct;21(4):249–63

Application of direct-fed microbial bacteria and fructooligosaccharides for salmonella control in broilers during feed withdrawal. Oyarzabal OA, et al. **Poult Sci** 1996 Feb;75(2):186–90

Nation-wide Salmonella enterica surveillance and control in Danish slaughter swine herds. Mousing J, et al.
Prev Vet Med 1997 Feb;29(4):247–61

Experimental study of the mixed (oral–intradermal) vaccination method in enteric diseases. Dimache G, et al.
Roum Arch Microbiol Immunol 1996 Jul–Sep;55(3):215–23

Protective effects of dietary lactulose and calcium phosphate against Salmonella infection. Bovee-Oudenhoven I, et al.
Scand J Gastroenterol Suppl 1997;222:112–4

Determination of an effective sampling regime to detect salmonella enteritidis in the environment of poultry units. Davies RH, et al. **Vet Microbiol** 1996 May;50(1–2):117–27

S typhimurium DT104 in cattle in the UK [letter; comment] Barley JP. **Vet Rec** 1997 Jan 18;140(3):75. Comment on: Vet Rec 1996 Jun 29;138(26):650–1.

Airborne challenge of chickens vaccinated orally with the genetically-defined Salmonella enteritidis aroA strain CVL30. Cooper GL, et al. **Vet Rec** 1996 Nov 2; 139(18):447–8

Elimination of Salmonella typhimurium infection by the strategic movement of pigs. Dahl J, et al. **Vet Rec** 1997 Jun 28;140(26):679–81

[Vaccination of pigeons against Salmonella infections] Grund S, et al. **Berl Munch Tierarztl Wochenschr** 1997 May; 110(5):171–5 (Eng. Abstr.) **(Ger)**

[Immunization with potential Salmonella enteritidis mutants—1. Production and in vitro characterization] Martin G, et al. **Berl Munch Tierarztl Wochenschr** 1996 Sep;109(9):325–9 (Eng. Abstr.) **(Ger)**

[Immunization with potential Salmonella enteritidis mutants— 2. Investigations on the attenuation and immunogenicity for mice and young hens] Martin G, et al. **Berl Munch Tierarztl Wochenschr** 1996 Oct; 109(10):369–74 (Eng. Abstr.) **(Ger)**

[Inhibition phenomena between Salmonella strains—a new aspect of salmonella infection control in poultry] Martin G, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Nov; 103(11):468–72 (Eng. Abstr.) **(Ger)**

[The role of the thrombocytic cationic protein (beta-lysin) in anti-infectious protection] Bukharin OV, et al.
Zh Mikrobiol Epidemiol Immunobiol 1997 Jan–Feb;(1):3–6 (Eng. Abstr.) **(Rus)**

[The use of a live Salmonella bivalent vaccine for decreasing the circulation of salmonellae in a poultry plant] Efremov VE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):36–9 (Eng. Abstr.) **(Rus)**

THERAPY

[A new sorbent for the treatment of intestinal infections] Rudychenko VF, et al. **Lik Sprava** 1996 Jan–Feb; (1–2):98–100 (Eng. Abstr.) **(Ukr)**

TRANSMISSION

Salmonella meningitis acquired from pet snakes [letter] Paton JH, et al. **Arch Dis Child** 1997 Jul;77(1):93

The effect of the flow of air on horizontal transmission of Salmonella enteritidis in chickens. Nakamura M, et al.
Avian Dis 1997 Apr–Jun;41(2):354–60

Salmonella urinary tract infections associated with exposure to pet iguanas [letter] Embil JM, et al. **Clin Infect Dis** 1997 Jul;25(1):172

Infectivity of Salmonella typhimurium isolated from the bengalee to chickens. Sato Y, et al. **J Vet Med Sci** 1996 Jun;58(6):543–6

Salmonella enteritidis in Antarctica: zoonosis in man or humanosis in penguins? [letter] Olsen B, et al. **Lancet** 1996 Nov 9;348(9037):1319–20

Effect of hatching cabinet sanitation treatments on Salmonella cross-contamination and hatchability of broiler eggs. Bailey JS, et al. **Poult Sci** 1996 Feb;75(2):191–6

Simulation of the transmission of Salmonella enteritidis phage type 4 in a flock of laying hens. Leslie J. **Vet Rec** 1996 Oct 19;139(16):388–91

SALMONELLA PARATYPHI see **SALMONELLA PARATYPHI A**

SALMONELLA PARATYPHI A

Limitations of typhoid vaccination for travellers. Stephen J, et al. **Br J Clin Pract** 1996 Dec;50(8):468–9

Hepatitis E virus and Salmonella paratyphi A coinfection. Phadke AY, et al. **Indian J Gastroenterol** 1997 Jul; 16(3):115–6

CLASSIFICATION

Paratyphoid fever due to Salmonella enterica serotype Paratyphi A [letter] Kapil A, et al. **Emerg Infect Dis** 1997 Jul–Sep;3(3):407

[The identification of salmonellae by means of a rapid polymerase chain reaction] Satorov S, et al.
Zh Mikrobiol Epidemiol Immunobiol 1997 Jan–Feb;(1):63–6 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Spontaneous perforation of the gallbladder from cholecystitis with acute appendicitis in pregnancy. A case report. Grimes DA. **J Reprod Med** 1996 Jun;41(6):450–2

PATHOGENICITY

Paratyphoid fever due to Salmonella enterica serotype Paratyphi A [letter] Kapil A, et al. **Emerg Infect Dis** 1997 Jul–Sep;3(3):407

SALMONELLA PARATYPHI B see **SALMONELLA SCHOTTMUELLERI**

SALMONELLA PHAGES

Food poisoning among clients of a meals on wheels service. Jakubovic MO, et al. **Commun Dis Rep CDR Rev** 1996 Dec 6;6(13):R186–8

Marshmallows cause an outbreak of infection with Salmonella enteritidis phage type 4. Lewis DA, et al.
Commun Dis Rep CDR Rev 1996 Dec 6;6(13):R183–6

An outbreak of gastroenteritis associated with Salmonella enteritidis phage type 6a in Malta.
Commun Dis Rep CDR Wkly 1996 Aug 16;6(33):283, 286

GENETICS

Sequence comparison of the genes for immunity, DNA replication, and cell lysis of the P22-related Salmonella phages ES18 and L. Schicklmaier P, et al. **Gene** 1997 Aug 11;195(1):93–100

Plasmid characterization and pulsed-field electrophoretic analysis demonstrate that ampicillin-resistant strains of Salmonella enteritidis phage type 6a are derived from Salm. enteritidis phage type 4. Ridley AM, et al.
J Appl Bacteriol 1996 Dec;81(6):613–8

Identification of a strong promoter of bacteriophage MB78 that lacks consensus sequence around minus 35 region and interacts with phage specific factor. Zargar MA, et al.
Virus Genes 1997;14(2):137–46

IMMUNOLOGY

Sequence comparison of the genes for immunity, DNA replication, and cell lysis of the P22-related Salmonella phages ES18 and L. Schicklmaier P, et al. **Gene** 1997 Aug 11;195(1):93–100

ISOLATION & PURIFICATION

Isolation of Salmonella senftenberg bacteriophages. Kumar S, et al. **Indian J Med Res** 1997 Feb;105:47–52

PHYSIOLOGY

Drug resistance, plasmids, biotypes and susceptibility to bacteriophages of Salmonella isolated from poultry in Canada. Poppe C, et al. **Int J Food Microbiol** 1996 Jul; 30(3):325–44

SALMONELLA SCHOTTMUELLERI

Treatment of enteric fever with pefloxacin for 7 days versus 5 days: a randomized clinical trial. Unal S, et al.
Antimicrob Agents Chemother 1996 Dec;40(12):2898–900

CLASSIFICATION

[The identification of salmonellae by means of a rapid polymerase chain reaction] Satorov S, et al.
Zh Mikrobiol Epidemiol Immunobiol 1997 Jan–Feb;(1):63–6 (Eng. Abstr.) **(Rus)**

SALMONELLA TYPHI

Rapid increase in inducible nitric oxide synthase gene expression in the heart during endotoxemia. Bateson AN, et al. **Eur J Pharmacol** 1996 May 6;303(1–2):141–4

Salmonella typhi meningitis in infants. Abuekteish F, et al.
Indian Pediatr 1996 Dec;33(12):1037–40

Salmonella infection mimicking acute rheumatic fever. Kamili MA, et al. **J Assoc Physicians India** 1996 Aug; 44(8):579–80

Multiple Salmonella typhi subcutaneous abscesses in a sickle cell anaemia patient. Sarma PS, et al.
J Assoc Physicians India 1996 Aug;44(8):563–4

Endotoxin-induced local inflammation and hyperalgesia in rats and mice: a new model for inflammatory pain. Kanaan SA, et al. **Pain** 1996 Aug;66(2–3):373–9

Salmonella infections in Taiwan and typhoid polysaccharide Vi vaccination [letter] Arya SC. **Scand J Infect Dis** 1997; 29(1):96

[Hemorrhagic cystitis as a presenting symptom of acute infection with Salmonella typhi] Arad E, et al.
Harefuah 1996 Jun 16;130(12):815–6 (Eng. Abstr.) **(Heb)**

[Extraintestinal Salmonella typhi infection] Neri S, et al.
Minerva Med 1997 Jun;88(6):257–9 (Eng. Abstr.) **(Ita)**

CHEMISTRY

Plasma endotoxin in typhoid fever. Suyasa IG, et al.
Kobe J Med Sci 1995 Oct;41(5):175–86

CLASSIFICATION

Epidemic typhoid in Chile: analysis by molecular and conventional methods of Salmonella typhi strain diversity in epidemic (1977 and 1981) and nonepidemic (1990) years. Fica AE, et al. **J Clin Microbiol** 1996 Jul;34(7):1701–7

Molecular typing of Salmonella typhi strains from Dhaka (Bangladesh) and development of DNA probes identifying plasmid-encoded multidrug-resistant isolates. Hermans PW, et al. **J Clin Microbiol** 1996 Jun;34(6):1373–9

Molecular typing of Salmonella enterica serovar typhi. Navarro F, et al. **J Clin Microbiol** 1996 Nov;34(11):2831–4

Differentiation of Salmonella typhi strains by ribosomal RNA gene restriction patterns. Chou WH, et al.
Southeast Asian J Trop Med Public Health 1995 Dec; 26(4):620–4

Drug susceptibility profile of Salmonella typhi blood isolates in Port Harcourt, Nigeria. Ibe SN, et al.
West Afr J Med 1996 Oct–Dec;15(4):219–22

[The identification of salmonellae by means of a rapid polymerase chain reaction] Satorov S, et al.
Zh Mikrobiol Epidemiol Immunobiol 1997 Jan–Feb;(1):63–6 (Eng. Abstr.) **(Rus)**

SALMONELLA TYPHI

DRUG EFFECTS

A clinical comparison of typhoid fever caused by susceptible and multidrug-resistant strains of Salmonella typhi. Alsoub H, et al. **Br J Clin Pract** 1997 Jan-Feb;51(1):8-10

Anti-Salmonella activity of CP-99,219, a novel azabicyclo-naphthridone fluoroquinolone. Qadri SM, et al. **Chemotherapy** 1996 Nov-Dec;42(6):439-42

In vitro activity of sparfloxacin against Salmonella typhi. Qadri SM, et al. **Chemotherapy** 1997 Jan-Feb;43(1):6-9

Multidrug-resistant Salmonella typhi: a worldwide epidemic. Rowe B, et al. **Clin Infect Dis** 1997 Jan;24 Suppl 1:S106-9 (30 ref.)

Survival of Vi-capsulated and Vi-deleted Salmonella typhi strains in cultured macrophage expressing different levels of CD14 antigen. Hirose K, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):259-65

Prevalence of multi-drug resistant Salmonella typhi in Ludhiana Punjab. Prabhakar H, et al. **Indian J Med Sci** 1996 Aug;50(8):277-9

Plasmid mediated resistance to chloramphenicol, ampicillin, sulphame thoxazole and trimethoprim in Salmonella typhi [letter] Agrawal V, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):223

Mutations responsible for reduced susceptibility to 4-quinolones in clinical isolates of multi-resistant Salmonella typhi in India. Brown JC, et al. **J Antimicrob Chemother** 1996 May;37(5):891-900

Decreasing trend of multiresistant Salmonella typhi in Bangladesh [letter] Saha SK, et al. **J Antimicrob Chemother** 1997 Apr;39(4):554-6

In-vitro activity of antiviral agents used in AIDS against Salmonella typhi and non-typhoid salmonella [letter] Sanchez-Carrillo C, et al. **J Antimicrob Chemother** 1996 Jul;38(1):153-4

Present status of drug resistance in cases of enteric fever in Rajasthan. Maheshwari VD, et al. **J Assoc Physicians India** 1996 Sep;44(9):618-9

Treatment of multidrug-resistant typhoid fever [letter] Mishra OP, et al. **J Trop Pediatr** 1996 Oct;42(5):310-1

Ciprofloxacin-resistant Salmonella typhi: an emerging problem [letter] Mitchell DH. **Med J Aust** 1997 Aug 4; 167(3):172

PhoP/Q regulated genes in Salmonella typhi identification of melittin sensitive mutants. Baker SJ, et al. **Microb Pathog** 1997 Mar;22(3):165-79

In vitro activity of cefixime versus ceftizoxime against Salmonella typhi. Rastegar Lari A, et al. **Pathol Biol (Paris)** 1997 May;45(5):415-9

Antimicrobial resistance pattern and plasmid profile of Salmonella typhi isolated from an outbreak in Tehran province. Bahrmand AR, et al. **Scand J Infect Dis** 1997; 29(3):265-9

ENZYMOLOGY

StyD4I restriction-modification system of Salmonella typhi D4: cloning and sequence analysis. Miyahara M, et al. **Biol Pharm Bull** 1997 Feb;20(2):201-3

GENETICS

Mini-Mu technology in Salmonella typhi: isolation of stable MudJ operon fusions by cis complementation. Contreras I, et al. **Biol Res** 1994;27(3-4):233-9

Epidemiology of an unusually prolonged outbreak of typhoid fever in Terrassa, Spain. Xercavins M, et al. **Clin Infect Dis** 1997 Mar;24(3):506-10

Identification of a new iron regulated locus of Salmonella typhi. Bäumler AJ, et al. **Gene** 1996 Dec 12;183(1-2):207-13

Expression and immunogenicity of pertussis toxin S1 subunit-tetanus toxin fragment C fusions in Salmonella typhi vaccine strain CVD 908. Barry EM, et al. **Infect Immun** 1996 Oct;64(10):4172-81

Detection of Salmonella typhi by polymerase chain reaction. Zhu Q, et al. **J Appl Bacteriol** 1996 Mar;80(3):244-51

Salmonella typhi contains identical intervening sequences in all seven rrl genes. Mattatall NR, et al. **J Bacteriol** 1996 Sep;178(17):5323-6

Molecular typing of Salmonella typhi strains from Dhaka (Bangladesh) and development of DNA probes identifying plasmid-encoded multidrug-resistant isolates. Hermans PW, et al. **J Clin Microbiol** 1996 Jun;34(6):1373-9

Molecular typing of Salmonella enterica serovar typhi. Navarro F, et al. **J Clin Microbiol** 1996 Nov;34(11):2831-4

PhoP/Q regulated genes in Salmonella typhi identification of melittin sensitive mutants. Baker SJ, et al. **Microb Pathog** 1997 Mar;22(3):165-79

The nadB gene of Salmonella typhimurium complements the nicotinic acid auxotrophy of Shigella flexneri. Mantis NJ, et al. **Mol Gen Genet** 1996 Oct 16;252(5):626-9

Identification of Salmonella typhi promoters activated by invasion of eukaryotic cells. Staendner LH, et al. **Mol Microbiol** 1995 Dec;18(5):891-902

Highly plastic chromosomal organization in Salmonella typhi. Liu SL, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10303-8

Barriers to recombination between closely related bacteria: MutS and RecBCD inhibit recombination between Salmonella typhimurium and Salmonella typhi. Zahrt TC, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9786-91

Antimicrobial resistance pattern and plasmid profile of Salmonella typhi isolated from an outbreak in Tehran province. Bahrmand AR, et al. **Scand J Infect Dis** 1997; 29(3):265-9

Differentiation of Salmonella typhi strains by ribosomal RNA gene restriction patterns. Chou WH, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):620-4

Evaluation of a phoP/phoQ-deleted, aroA-deleted live oral Salmonella typhi vaccine strain in human volunteers. Hohmann EL, et al. **Vaccine** 1996 Jan;14(1):19-24

Expression of the serine rich Entamoeba histolytica protein (SREHP) in the avirulent vaccine strain Salmonella typhi TY2 chi 4297 (delta cya delta crp delta asd): safety and immunogenicity in mice. Zhang T, et al. **Vaccine** 1997 Aug-Sep;15(12-13):1319-22

[The molecular epidemiology of typhoid] Riapis LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):96-9 (39 ref.) **(Rus)**

GROWTH & DEVELOPMENT

Serovar specific differences in Salmonella survival within macrophage cells. Schwan WR, et al. **Adv Exp Med Biol** 1997;412:277-8

IMMUNOLOGY

Immune response to phospholipase-A fractions of Salmonella typhi on experimental typhoid infection in mice. Punj V, et al. **Acta Microbiol Pol** 1996;45(3-4):261-7

Construction of CTB fusion proteins for screening of monoclonal antibodies against Salmonella typhi OmpC peptide loops. Paniagua-Solís J, et al. **FEMS Microbiol Lett** 1996 Jul 15;141(1):31-6

Human cell-mediated immune responses to antigenic fractions of Salmonella typhi. Pérez C, et al. **Immunology** 1996 Oct;89(2):262-7

Elevated levels of anti-proteus antibodies in patients with active rheumatoid arthritis. Wanchu A, et al. **Indian J Med Res** 1997 Jan;105:39-42

Synthesis and immunological properties of Vi and di-O-acetyl pectin protein conjugates with adipic acid dihydrazide as the linker. Kossaczka Z, et al. **Infect Immun** 1997 Jun;65(6):2088-93

Oral and rectal immunization of adult female volunteers with a recombinant attenuated Salmonella typhi vaccine strain. Nardelli-Haefliger D, et al. **Infect Immun** 1996 Dec; 64(12):5219-24

Safety of live oral Salmonella typhi vaccine strains with deletions in htrA and aroC aroD and immune response in humans. Tacket CO, et al. **Infect Immun** 1997 Feb; 65(2):452-6

Salmonella typhi stimulation of human intestinal epithelial cells induces secretion of epithelial cell-derived interleukin-6. Weinstein DL, et al. **Infect Immun** 1997 Feb; 65(2):395-404

Safety and immunogenicity of live oral cholera and typhoid vaccines administered alone or in combination with antimalarial drugs, oral polio vaccine, or yellow fever vaccine. Kollaritsch H, et al. **J Infect Dis** 1997 Apr; 175(4):871-5

Antibody response to Salmonella typhi in human schistosomiasis mansoni. Muniz-Junqueira MI, et al. **Rev Soc Bras Med Trop** 1996 Sep-Oct;29(5):441-5

Experimental study of the mixed (oral-intradermal) vaccination method in enteric diseases. Dimache G, et al. **Roum Arch Microbiol Immunol** 1996 Jul-Sep;55(3):215-23

Retrospective review of dot enzyme immunoassay test for typhoid fever in an endemic area. Jackson AA, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):625-30

Efficacy of Salmonella typhi Vi capsular polysaccharide vaccine in South Africa [letter] Arya SC. **Vaccine** 1997 Feb;15(2):244

Evaluation of a phoP/phoQ-deleted, aroA-deleted live oral Salmonella typhi vaccine strain in human volunteers. Hohmann EL, et al. **Vaccine** 1996 Jan;14(1):19-24

ISOLATION & PURIFICATION

Characteristics of typhoid fever in children and adolescents in a major metropolitan area in the United States. Misra S, et al. **Clin Infect Dis** 1997 May;24(5):998-1000

100 years of Widal test & its reappraisal in an endemic area. Shukla S, et al. **Indian J Med Res** 1997 Feb;105:53-7

Neonatal Salmonella infection [letter; comment] Mukherjee D, et al. **Indian Pediatr** 1996 May;33(5):438-9. Comment on: Indian Pediatr 1995 Jun;32(6):678-80.

Molecular analysis of isolates of Salmonella typhi from patients with fatal or nonfatal typhoid fever or aberrant clinical presentations [letter; comment] Arya SC. **J Clin Microbiol** 1996 Sep;34(9):2340. Comment on: J Clin Microbiol 1996 Apr;34(4):1029-33.

Standardisation of polymerase chain reaction for the detection of Salmonella typhi in typhoid fever. Chaudhry R, et al. **J Clin Pathol** 1997 May;50(5):437-9

METABOLISM

Lactose-fermenting Salmonella typhi strain isolated from patient with typhoid fever [letter] Kechrid A, et al. **Ann Biol Clin (Paris)** 1996;54(3-4):169-70

Induction and characterization of heat shock proteins of Salmonella typhi and their reactivity with sera from patients with typhoid fever. Tang SW, et al. **Infect Immun** 1997 Jul;65(7):2983-6

PATHOGENICITY

Salmonellosis: host immune responses and bacterial virulence determinants. Jones BD, et al. **Annu Rev Immunol** 1996; 14:533-61 (155 ref.)

Survival of Vi-capsulated and Vi-deleted Salmonella typhi strains in cultured macrophage expressing different levels of CD14 antigen. Hirose K, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):259-65

Interaction of Salmonella typhi strains with cultured human monocyte-derived macrophages. Sizemore DR, et al. **Infect Immun** 1997 Jan;65(1):309-12

A possible mechanism for host-specific pathogenesis of Salmonella serovars. Ishibashi Y, et al. **Microb Pathog** 1996 Dec;21(6):435-46

Migration of Salmonella typhi through intestinal epithelial monolayers: an in vitro study. Kops SK, et al. **Microbiol Immunol** 1996;40(11):799-811

Salmonella typhi mutants defective in anaerobic respiration are impaired in their ability to replicate within epithelial cells. Contreras I, et al. **Microbiology** 1997 Aug;143 (Pt 8):2665-72

PHYSIOLOGY

Migration of Salmonella typhi through intestinal epithelial monolayers: an in vitro study. Kops SK, et al. **Microbiol Immunol** 1996;40(11):799-811

SALMONELLA TYPHIMURIUM

The mechanism of bactericidal action of normal human serum against Salmonella rods. Mokracka-Latajka G, et al. **Acta Microbiol Pol** 1996;45(2):169-80

Alphavirus hybrid virion vaccines. Shafferman A, et al. **Adv Exp Med Biol** 1996;397:41-7

Neutrophil depletion attenuates endotoxin-induced dysfunction of cGMP-mediated pulmonary vasorelaxation. Sheridan BC, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L820-8

A community waterborne outbreak of salmonellosis and the effectiveness of a boil water order. Angulo FJ, et al. **Am J Public Health** 1997 Apr;87(4):580-4

Faecal calprotectin: non-invasive marker of gastrointestinal inflammation in Salmonella infected rats. Naughton PJ, et al. **Biochem Soc Trans** 1996 May;24(2):308S

Changes in composition and polyamine content in the gastrointestinal tract due to pathogenic infection. Naughton PJ, et al. **Biochem Soc Trans** 1996 May;24(2):263S

Variations of invasive Salmonella infection in elderly people. Bruce-Jones PN, et al. **Br J Clin Pract** 1996 Dec; 50(8):470-1

Decreased serum apolipoprotein A-I concentrations in cows infected with Salmonella typhimurium. Oikawa S, et al. **Can J Vet Res** 1997 Jul;61(3):182-6

Immunization of HLA-B27 transgenic and non transgenic mice with Salmonella typhimurium results predominantly in the generation of proliferative T cell responses. Ringrose JH, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:79-85

MAFF statutory incident reports in surveillance, prevention, and control of human Salmonella typhimurium infection. Fone DL, et al. **Commun Dis Rep CDR Rev** 1996 Apr 26; 6(5):R76-8

Investigating Salmonella typhimurium DT104 infections. **Commun Dis Rep CDR Wkly** 1997 Apr 18;7(16):137, 140

The Ames miniscreen assay: volatility of sodium azide can cause an increase in the reversion frequencies of adjacent, untreated wells. Wilson JD Jr, et al. **Environ Mol Mutagen** 1997;29(2):217-9

Tissue differences in antioxidant enzyme gene expression in response to endotoxin. Ghosh B, et al. **Free Radic Biol Med** 1996;21(4):533-40

Interleukin 10 inhibits inflammatory cells infiltration in endotoxin-induced uveitis. Hayashi S, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Oct;234(10):633-6

Recombinant human prolactin induces protection against Salmonella typhimurium infection in the mouse: role of nitric oxide. Meli R, et al. **Immunopharmacology** 1996 Aug; 34(1):1-7

Induction of nitric oxide synthesis and xanthine oxidase and their roles in the antimicrobial mechanism against Salmonella typhimurium infection in mice. Umezawa K, et al. **Infect Immun** 1997 Jul;65(7):2932-40

Splenic and intestinal lymphocyte proliferation response in mice fed milk or yogurt and challenged with Salmonella typhimurium. Puri P, et al. **Int J Food Sci Nutr** 1996 Sep; 47(5):391-8

Distribution of intercellular adhesion molecule-1 on leukocytes and corneal endothelium after endotoxin stimulation in rats. Yamaguchi K, et al. **Int Ophthalmol** 1995-96;19(5):303-6

Expression of inducible nitric oxide synthase in bovine corneal endothelial cells and keratocytes in vitro after lipopolysaccharide and cytokines stimulation. Dighiero P, et al. **Invest Ophthalmol Vis Sci** 1997 Sep;38(10):2045-52

In vivo quantification of leukocyte behavior in the retina during endotoxin-induced uveitis. Miyamoto K, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2708-15

Effect of transforming growth factor beta-1 in endotoxin-induced uveitis. Peng B, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):257-60

A rat model of infection by Salmonella typhimurium or Salm. enteritidis. Naughton PJ, et al. **J Appl Bacteriol** 1996 Dec;

81(6):651–6
Salmonella osteomyelitis in sickle cell disease children in the east end of London. Atkins BL, et al. **J Infect** 1997 Mar; 34(2):133–8
Antitumor mechanisms of attenuated Salmonella typhimurium containing the gene for human interleukin-2: a novel antitumor agent? Saltzman DA, et al. **J Pediatr Surg** 1997 Feb;32(2):301–6
Pathobiology of lipopolysaccharide. Mayeux PR. **J Toxicol Environ Health** 1997 Aug 8;51(5):415–35 (117 ref.)
Neutrophils mediate pulmonary vasomotor dysfunction in endotoxin-induced acute lung injury. Sheridan BC, et al. **J Trauma** 1997 Mar;42(3):391–6; discussion 396–7
Antimicrobial effects of amikacin therapy on experimentally induced Salmonella typhimurium infection in fowls. Itoh N, et al. **J Vet Med Sci** 1996 May;58(5):425–9
Biochemical changes in fowl serum during infection with Salmonella typhimurium. Itoh N, et al. **J Vet Med Sci** 1996 Oct;58(10):1021–3
Infectivity of Salmonella typhimurium isolated from the bengalee to chickens. Sato Y, et al. **J Vet Med Sci** 1996 Jun;58(6):543–6
Role of ICAM-1 and LFA-1 in endotoxin-induced uveitis in mice. Kanagawa T, et al. **Jpn J Ophthalmol** 1996; 40(2):174–80
Crescentic IgA nephropathy and acute renal failure in an HIV-positive patient with enteric salmonella infection. Hsieh WS, et al. **Nephrol Dial Transplant** 1996 Nov; 11(11):2320–3
Evidence for a rapid, direct effect on epithelial monolayer integrity and transepithelial transport in response to Salmonella invasion. Jepson MA, et al. **Pflugers Arch** 1996 Jun;432(2):225–33
The enhancing effect of tumour necrosis factor-alpha on oxidative stress in endotoxemia. Sakaguchi S, et al. **Pharmacol Toxicol** 1996 Nov;79(5):259–65
Factors influencing phagocytosis of Salmonella typhimurium by macrophages in murine schistosomiasis. Muniz-Junqueira MI, et al. **Rev Soc Bras Med Trop** 1997 Mar-Apr;30(2):101–6
Induction of feline immunodeficiency virus specific antibodies in cats with an attenuated Salmonella strain expressing the Gag protein. Tijhaar EJ, et al. **Vaccine** 1997 Apr-May;15(6-7):587–96
Salmonellosis associated with S typhimurium DT104 in the USA [letter; comment] Besser TE, et al. **Vet Rec** 1997 Jan 18;140(3):75. Comment on: Vet Rec 1994 May 28;134(22):577. Comment on: Vet Rec 1996 Jun 29;138(26):650–1.
Elimination of Salmonella typhimurium infection by the strategic movement of pigs. Dahl J, et al. **Vet Rec** 1997 Jun 28;140(26):679–81
[An outbreak of Salmonella typhimurium in the county of Funen during late summer. A case-controlled study] Mølbak K, et al. **Ugeskr Laeger** 1997 Sep 1;159(36):5372–7 (Eng. Abstr.) **(Dan)**
[15th International Symposium of Salmonellosis and Brucellosis: a report] Notermans S, et al. **Tijdschr Diergeneeskd** 1997 Apr 15;122(8):227–8 **(Dut)**
[Multiresistant Salmonella typhimurium] **J Pharm Belg** 1997 May-Jun;52(3):141–2 **(Fre)**
[Salmonella typhimurium cerebral abscess in a patient with HIV infection (letter; comment)] Gueit I, et al. **Presse Med** 1996 Dec 21;25(40):2052. Comment on: Presse Med 1996 Mar 30;25(11):556. **(Fre)**
[The participation of the renin-angiotensin-aldosterone system in the pathogenesis of acute kidney failure in endotoxemia] Krishtal' NV, et al. **Lik Sprava** 1995 Mar-Apr;(3-4):92–4 (Eng. Abstr.) **(Rus)**
[The clinical picture of generalized forms of salmonellosis] Bondarev LS, et al. **Ter Arkh** 1996;68(4):73–4 (Eng. Abstr.) **(Rus)**
[Salmonella infection in a large general hospital] Akimkin VG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov-Dec;(6):32–6 (Eng. Abstr.) **(Rus)**
[The role of the thrombocytic cationic protein (beta-lysin) in anti-infectious protection] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jan-Feb;(1):3–6 (Eng. Abstr.) **(Rus)**
[The characteristics of an experimental infection in mice induced by salmonellae with different persistence features] Chaĭnikova IN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug; (4):77–80 (Eng. Abstr.) **(Rus)**
[The pathogenetic and clinico-diagnostic significance of changes in leukocyte migration activity in patients with shigellosis and salmonellosis] Cherkasov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):34–7 (Eng. Abstr.) **(Rus)**
[Salmonellosis in Moscow: its epidemiological characteristics and the prevention tasks] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul-Aug;(4):46–9 (Eng. Abstr.) **(Rus)**
[A new sorbent for the treatment of intestinal infections] Rudychenko VF, et al. **Lik Sprava** 1996 Jan-Feb; (1-2):98–100 (Eng. Abstr.) **(Ukr)**

CHEMISTRY

Adiabatic compressibility of flagellin and flagellar filament of Salmonella typhimurium. Tamura Y, et al. **Biochim Biophys Acta** 1997 Apr 17;1335(1-2):120–6
The proteome of Salmonella enterica serovar typhimurium: current progress on its determination and some applications. O'Connor CD, et al. **Electrophoresis** 1997 Aug;18(8):1483–90
Phosphate groups in lipopolysaccharides of Salmonella typhimurium rfaP mutants. Helander IM, et al. **FEBS Lett** 1997 Jun 16;409(3):457–60
A purified protein from Salmonella typhimurium inhibits proliferation of murine splenic anti-CD3 antibody-activated T-lymphocytes. Matsui K. **FEMS Immunol Med Microbiol** 1996 Jun;14(2-3):121–7
Structure of maltoporin from Salmonella typhimurium ligated with a nitrophenyl-maltotrioside. Meyer JE, et al. **J Mol Biol** 1997 Mar 7;266(4):761–75
Purified protein from Salmonella typhimurium inhibits the interleukin-2 response of murine splenic T-lymphocytes activated with anti-CD3 antibody. Matsui K. **Microbiol Immunol** 1996;40(9):681–4
Immunochemical structure of the OmpD porin from Salmonella typhimurium. Singh SP, et al. **Microbiology** 1996 Nov;142 (Pt 11):3201–10
Salmonella typhimurium secreted invasion determinants are homologous to Shigella Ipa proteins. Hueck CJ, et al. **Mol Microbiol** 1995 Nov;18(3):479–90
Peptidoglycan structure of Salmonella typhimurium growing within cultured mammalian cells. Quintela JC, et al. **Mol Microbiol** 1997 Feb;23(4):693–704

CLASSIFICATION

An outbreak of Salmonella typhimurium DT104 food poisoning associated with eating beef. Davies A, et al. **Commun Dis Rep CDR Rev** 1996 Oct 11;6(11):R159–62
Epidemiological application of differentiating multiresistant Salmonella typhimurium DT104 by plasmid profile. Threlfall EJ, et al. **Commun Dis Rep CDR Rev** 1996 Oct 11;6(11):R155–9
Antimicrobial resistance of Salmonella enterica typhimurium DT104 isolates and investigation of strains with transferable apramycin resistance. Low JC, et al. **Epidemiol Infect** 1997 Apr;118(2):97–103
Separation of Salmonella typhimurium DT2 and DT135: molecular characterization of isolates of avian origin. Baggesen DL, et al. **Eur J Epidemiol** 1997 Apr;13(3):347–52
Federal agencies collaborate to control dangerous new Salmonella strain [news] Hollingsworth J, et al. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1712, 1716
Application of whole cell protein analysis by SDS PAGE to establish the source of Salmonella typhimurium. Khan IA, et al. **J Infect** 1996 Nov;33(3):169–71
A three-way ribotyping scheme for Salmonella serotype Typhimurium and its usefulness for phylogenetic and epidemiological purposes. Guerra B, et al. **J Med Microbiol** 1997 Apr;46(4):307–13
Genomic relationships between selected phage types of Salmonella enterica subsp. enterica serotype typhimurium defined by ribotyping, IS200 typing and PFGE. Olsen JE, et al. **Microbiology** 1997 Apr;143 (Pt 4):1471–9
Characterization of Salmonella dublin and Salmonella typhimurium (Copenhagen) isolates from cattle. Brackelsberg CA, et al. **Vet Res Commun** 1997 Aug; 21(6):409–20

CYTOLOGY

Promotion of Salmonella typhimurium adherence and membrane ruffling in MDCK epithelia by staurosporine. Reed KA, et al. **FEMS Microbiol Lett** 1996 Dec 1; 145(2):233–8
Locations of terminal segments of flagellin in the filament structure and their roles in polymerization and polymorphism. Mimori-Kiyosue Y, et al. **J Mol Biol** 1997 Jul 11;270(2):222–37

DRUG EFFECTS

Characteristics of mutagenesis by bleomycin and adriamycin in salmonella typhimurium: action of superoxide dismutase. Ejchart A, et al. **Acta Pol Pharm** 1996 Jan-Feb;53(1):13–7
Diverse mutagenicity of methylbenz[c]acridines in the direct Ames' Salmonella mutagenicity assay. Tanaka M, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2837–41
Antibacterial effect of the adhering human Lactobacillus acidophilus strain LB. Coconnier MH, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1046–52
Effects of amphiphilic compounds on metabolic and biological activities of Salmonella typhimurium. Majtánová L, et al. **Arzneimittelforschung** 1996 Jan;46(1):64–7
Mutagenic activity of incense smoke in comparison to formaldehyde and acetaldehyde in Salmonella typhimurium TA102. Chang HL, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):394–401
Genotoxicity of human mammary lipid. Martin FL, et al. **Cancer Res** 1996 Dec 1;56(23):5342–6
Activation and inactivation of carcinogenic dihaloalkanes and other compounds by glutathione S-transferase 5-5 in Salmonella typhimurium tester strain NM5004. Shimada T, et al. **Chem Res Toxicol** 1996 Jan-Feb;9(1):333–40
Anomalous nonidentity between Salmonella genotoxicants and rodent carcinogens: nongenotoxic carcinogens and genotoxic noncarcinogens. Yoshikawa K. **Environ Health Perspect** 1996 Jan;104(1):40–6 (80 ref.)
Studies on the mutagenicity of mild gasification products of coal and their subfractions by the Salmonella/microsomal assay. Zhong BZ, et al. **Environ Res** 1997 Jan;72(1):32–44
Evolution of susceptibility of non-typhi Salmonella in a Spanish hospital (1992-1994) and report of a Salmonella ser. Typhimurium isolate resistant to quinolones. Campo P, et al. **Eur J Epidemiol** 1997 Feb;13(2):239–41
Subinhibitory concentrations of organic ammonium salts: the effect on biological properties of Salmonella typhimurium. Majtánová L, et al. **Folia Microbiol (Praha)** 1995; 40(2):153–8
Bacterial mutagenicity of terasi and antimutagenicity of Indonesian jasmine tea against terasi. Surono IS, et al. **Int J Food Microbiol** 1996 Sep;32(1-2):49–58
Reduced susceptibility to co-amoxiclav in Escherichia coli, Salmonella typhimurium and Klebsiella pneumoniae isolated in Romania between 1985 and 1993. Espinasse F, et al. **J Antimicrob Chemother** 1997 Jan;39(1):103–6
Antimicrobial resistance in Salmonella enterica subsp. enterica serovar typhimurium from humans and production animals. Seyfarth AM, et al. **J Antimicrob Chemother** 1997 Jul;40(1):67–75
Antibacterial efficacy of new commercially manufactured disinfectant substances against Salmonella typhimurium. Majtán V, et al. **J Basic Microbiol** 1997;37(1):41–4
Effects of FK-506 on the course of murine salmonellosis. Nichterlein T, et al. **J Chemother** 1996 Dec;8(6):449–56
Characterization of multiple-antibiotic-resistant Salmonella typhimurium stains: molecular epidemiology of PER-1-producing isolates and evidence for nosocomial plasmid exchange by a clone. Vahaboglu H, et al. **J Clin Microbiol** 1996 Dec;34(12):2942–6
Analysis of the mechanism of quinolone resistance in nalidixic acid-resistant clinical isolates of Salmonella serotype Typhimurium. Ruiz J, et al. **J Med Microbiol** 1997 Jul; 46(7):623–8
Comparative assessment of DNA adduct formation, Salmonella mutagenicity, and chromosome aberration assays as short-term tests for DNA damage. Choi MJ, et al. **J Toxicol Environ Health** 1996 Oct 25;49(3):271–84
Mutagenicity of scooter exhaust particulate matter. Zhou W, et al. **J Toxicol Environ Health** 1997 Sep;52(1):35–44
From the Centers for Disease Control and Prevention. Multidrug-resistant Salmonella serotype Typhimurium--United States, 1996. **JAMA** 1997 May 21; 277(19):1513
The antibacterial action of protamine: evidence for disruption of cytoplasmic membrane energization in Salmonella typhimurium. Aspedon A, et al. **Microbiology** 1996 Dec; 142 (Pt 12):3389–97
The acid tolerance response of Salmonella typhimurium provides protection against organic acids. Baik HS, et al. **Microbiology** 1996 Nov;142 (Pt 11):3195–200
Effect of bisquaternary ammonium salts on Salmonella typhimurium. Majtán V, et al. **Microbios** 1996; 87(351):89–96
Multidrug-resistant Salmonella serotype Typhimurium--United States, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Apr 11; 46(14):308–10
Essential roles of core starvation-stress response loci in carbon-starvation-inducible cross-resistance and hydrogen peroxide-inducible adaptive resistance to oxidative challenge in Salmonella typhimurium. Seymour RL, et al. **Mol Microbiol** 1996 May;20(3):497–505
Regionally-targeted mutagenesis by metabolically-activated steviol: DNA sequence analysis of steviol-induced mutants of guanine phosphoribosyltransferase (gpt) gene of Salmonella typhimurium TM677. Matsui M, et al. **Mutagenesis** 1996 Nov;11(6):565–72
Mutagenicity and toxicity of the DNA alkylation carcinogens 1,2-dimethylhydrazine and azoxymethane in Escherichia coli and Salmonella typhimurium. Xiao W, et al. **Mutagenesis** 1996 May;11(3):241–5
Mutagenicity of nitro- and amino-substituted carbazoles in Salmonella typhimurium. III. Methylated derivatives of 9H-carbazole. André V, et al. **Mutat Res** 1997 Mar 17; 389(2-3):247–60
Genotoxicity of 4-chloro-o-toluidine in Salmonella typhimurium, human lymphocytes and V79 cells. Göggelmann W, et al. **Mutat Res** 1996 Aug;370(1):39–47
Re-examination of the mutagenicity of ethylene glycol monobutyl ether to Salmonella tester strain TA97a. Gollapudi BB, et al. **Mutat Res** 1996 Aug;370(1):61–4
Development of a standard reference material for diesel mutagenicity in the Salmonella plate incorporation assay. Hughes TJ, et al. **Mutat Res** 1997 Jul 14;391(3):243–58
Use of Salmonella typhimurium TA 98, YG 1024 and YG 1021 and deconjugating enzymes for evaluating the mutagenicity from smokers' urine. Kuenemann-Migeot C, et al. **Mutat Res** 1997 May 23;390(3):283–91
Types of mutations induced by glyoxal, a major oxidative DNA-damage product, in Salmonella typhimurium. Murata-Kamiya N, et al. **Mutat Res** 1997 Jun 9;377(1):13–6
Activity of a nitroalkene derivative, 1-(5-bromofur-2-il)-2-bromo-2-nitroethene, in the Salmonella/microsome assay and the mouse bone marrow micronucleus test. Ramos A, et al. **Mutat Res** 1997 May 23;390(3):233–8
Genotoxicity of six pesticides by Salmonella mutagenicity test and SOS chromotest. Ruiz MJ, et al. **Mutat Res** 1997 May 23;390(3):245–55
Targeted disruption of the gene encoding the classical nitroreductase enzyme in Salmonella typhimurium Ames

test strains TA1535 and TA1538. Yamada M, et al. **Mutat Res** 1997 Apr 14;375(1):9–17

Shape-dependent effects in a series of aromatic nitro compounds acting as mutagenic agents on S. typhimurium TA98. Caliendo G, et al. **SAR QSAR Environ Res** 1995; 4(1):21–7

An investigation of some Turkish herbal medicines in Salmonella typhimurium and in the COMET assay in human lymphocytes. Basaran AA, et al. **Teratog Carcinog Mutagen** 1996;16(2):125–38

Mutagenic activity of glycine upon nitrosation in the presence of chloride and human gastric juice: a possible role in gastric carcinogenesis. Gaspar J, et al. **Teratog Carcinog Mutagen** 1996;16(5):275–86

Mutagenic and cytotoxic activity of an isocoumarin (Paepalantine) isolated from Paepalanthus vellozioides. Varanda EA, et al. **Teratog Carcinog Mutagen** 1997; 17(2):85–95

Clonal spread of tetracycline-resistant Salmonella typhimurium in Danish dairy herds. Aarestrup FM, et al. **Vet Rec** 1997 Mar 22;140(12):313–4

Case control study of multiple-resistant Salmonella typhimurium DT104 infection of cattle in Great Britain. Evans S, et al. **Vet Rec** 1996 Dec 7;139(23):557–8

Antibiotic resistant Salmonella typhimurium DT104 in cattle [letter] [see comments] Low JC, et al. **Vet Rec** 1996 Jun 29;138(26):650–1. Comment in: Vet Rec 1997 Jan 18;140(3):75.

Antibiotic resistance [letter] Reilly WJ, et al. **Vet Rec** 1997 Jul 5;141(1):26

[Theoretical rationale for structure-genotoxicity relationships in the series of halogenated short-chain aliphatic compounds for mammals and bacteria] Kharchevnikova NV, et al. **Vestn Ross Akad Med Nauk** 1997;(7):8–13 (Eng. Abstr.) **(Rus)**

[Use of hydrated lime for disinfection of sewage sludge containing Salmonella typhimurium and Ascaris suum as model pathogens] Plachý P, et al. **Vet Med (Praha)** 1996 Aug;41(8):255–9 (Eng. Abstr.) **(Slo)**

ENZYMOLOGY

Purification of an alpha,beta-ketoalkene double bond reductase from Salmonella typhimurium. Ishida M, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1157–65

A supercoil-specific endonuclease from Salmonella typhimurium cleaves both negatively and positively supercoiled DNA. Zargar MA, et al. **Biochem Mol Biol Int** 1996 May;39(2):307–17

Cloning and characterization of the tyrB gene from Salmonella typhimurium. Nakai Y, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):189–92

A thermodynamic analysis of conformational change due to the alpha 2 beta 2 complex formation of tryptophan synthase. Hiraga K, et al. **Eur J Biochem** 1996 Aug 15; 240(1):63–70

Evolution of dnaQ, the gene encoding the editing 3' to 5' exonuclease subunit of DNA polymerase III holoenzyme in Gram-negative bacteria. Huang Y, et al. **FEBS Lett** 1997 Jan 2;400(1):94–8

Isolation and sequencing of a gene coding for glyoxalase I activity from Salmonella typhimurium and comparison with other glyoxalase I sequences. Clugston SL, et al. **Gene** 1997 Feb 20;186(1):103–11

DNA adenine methylase mutants of Salmonella typhimurium and a novel dam-regulated locus. Torreblanca J, et al. **Genetics** 1996 Sep;144(1):15–26

Conservation of the Escherichia coli dnaX programmed ribosomal frameshift signal in Salmonella typhimurium. Blinkova A, et al. **J Bacteriol** 1997 Jul;179(13):4438–42

Topology of the outer membrane phospholipase A of Salmonella typhimurium. Merck KB, et al. **J Bacteriol** 1997 Jun;179(11):3443–50

Identification and characterization of an operon in Salmonella typhimurium involved in thiamine biosynthesis. Petersen LA, et al. **J Bacteriol** 1997 Aug;179(15):4894–900

Regulation of heme biosynthesis in Salmonella typhimurium: activity of glutamyl-tRNA reductase (HemA) is greatly elevated during heme limitation by a mechanism which increases abundance of the protein. Wang LY, et al. **J Bacteriol** 1997 May;179(9):2907–14

Substitution of pyridoxal 5'-phosphate in the O-acetylserine sulfhydrylase from Salmonella typhimurium by cofactor analogs provides a test of the mechanism proposed for formation of the alpha-aminoacrylate intermediate. Cook PF, et al. **J Biol Chem** 1996 Oct 18;271(42):25842–9

Purification and characterization of CobT, the nicotinate-mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase enzyme from Salmonella typhimurium LT2. Trzebiatowski JR, et al. **J Biol Chem** 1997 Jul 11;272(28):17662–7

Crystal structures of Escherichia coli and Salmonella typhimurium 3-isopropylmalate dehydrogenase and comparison with their thermophilic counterpart from Thermus thermophilus. Wallon G, et al. **J Mol Biol** 1997 Mar 14;266(5):1016–31

A class of gyrase mutants of Salmonella typhimurium show quinolone-like lethality and require rec functions for viability. Gari E, et al. **Mol Microbiol** 1996 Jul;21(1):111–22

A secreted protein tyrosine phosphatase with modular effector domains in the bacterial pathogen Salmonella typhimurium. Kaniga K, et al. **Mol Microbiol** 1996 Aug; 21(3):633–41

Characterization of enzyme activities and cofactors involved in bioactivation and bioinactivation of chemical carcinogens in the tester strains Escherichia coli K12 MX100 and Salmonella typhimurium LT2 TA100. Kranendonk M, et al. **Mutagenesis** 1997 Jul;12(4):245–54

PCR mutagenesis and overexpression of tryptophan synthase from Salmonella typhimurium: on the roles of beta2 subunit Lys-382. Yang Lh, et al. **Protein Expr Purif** 1996 Aug; 8(1):126–36

Crystal structure of the chemotaxis receptor methyltransferase CheR suggests a conserved structural motif for binding S-adenosylmethionine. Djordjevic S, et al. **Structure** 1997 Apr 15;5(4):545–58

A new function for a common fold: the crystal structure of quinolinic acid phosphoribosyltransferase. Eads JC, et al. **Structure** 1997 Jan 15;5(1):47–58

GENETICS

Sequences of beta-lactamase genes encoding CTX-M-1 (MEN-1) and CTX-M-2 and relationship of their amino acid sequences with those of other beta-lactamases. Bauernfeind A, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):509–13

PCR amplification of the fimA gene sequence of Salmonella typhimurium, a specific method for detection of Salmonella spp. Cohen HJ, et al. **Appl Environ Microbiol** 1996 Dec; 62(12):4303–8

Assessment of genotoxic effect of piperine using Salmonella typhimurium and somatic and somatic and germ cells of Swiss albino mice. Karekar VR, et al. **Arzneimittelforschung** 1996 Oct;46(10):972–5

Effect of inv mutations on Salmonella virulence and colonization in 1-day-old White Leghorn chicks. Porter SB, et al. **Avian Dis** 1997 Jan-Mar;41(1):45–57

Producing positive, negative, and no cooperativity by mutations at a single residue located at the subunit interface in the aspartate receptor of Salmonella typhimurium. Kolodziej AF, et al. **Biochemistry** 1996 Nov 26; 35(47):14782–92

Structure and regulation of the Salmonella typhimurium rnc-era-recO operon. Anderson PE, et al. **Biochimie** 1996; 78(11–12):1025–34

Rapid mapping of cloned DNA fragments on the Salmonella chromosome. Ali T, et al. **Biotechniques** 1996 Dec; 21(6):1016–8, 1020, 1022

Mutational spectra of Salmonella typhimurium revertants induced by chlorohydroxyfuranones, byproducts of chlorine disinfection of drinking water. Knasmüller S, et al. **Chem Res Toxicol** 1996 Mar;9(2):374–81

The proteome of Salmonella enterica serovar typhimurium: current progress on its determination and some applications. O'Connor CD, et al. **Electrophoresis** 1997 Aug;18(8):1483–90

Predicting rodent carcinogenicity from mutagenic potency measured in the Ames Salmonella assay. Fetterman BA, et al. **Environ Mol Mutagen** 1997;29(3):312–22 (23 ref.)

Phosphate groups in lipopolysaccharides of Salmonella typhimurium rfaP mutants. Helander IM, et al. **FEBS Lett** 1997 Jun 16;409(3):457–60

Surface display compared to periplasmic expression of a malarial antigen in Salmonella typhimurium and its implications for immunogenicity. Haddad D, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):175–86

Molecular analysis of the genes mediating Salmonella invasion. Park JU. **FEMS Immunol Med Microbiol** 1997 Jun;18(2):113–7

Identification of a new prp locus required for propionate catabolism in Salmonella typhimurium LT2. Hammelman TA, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):233–9

Genotoxicity of photoilluminated riboflavin in the presence of Cu(II). Jazzar MM, et al. **Free Radic Biol Med** 1996; 21(1):7–14

A search for a general phenomenon of adaptive mutability. Galitski T, et al. **Genetics** 1996 Jun;143(2):645–59

Pathways for homologous recombination between chromosomal direct repeats in Salmonella typhimurium. Galitski T, et al. **Genetics** 1997 Jul;146(3):751–67

Transduction of low-copy number plasmids by bacteriophage P22. Mann BA, et al. **Genetics** 1997 Jun;146(2):447–56

Deletion formation between the two Salmonella typhimurium flagellin genes encoded on the mini F plasmid: Escherichia coli ssb alleles enhance deletion rates and change hot-spot preference for deletion endpoints. Mukaihara T, et al. **Genetics** 1997 Mar;145(3):563–72

SlyA, a transcriptional regulator of Salmonella typhimurium, is required for resistance to oxidative stress and is expressed in the intracellular environment of macrophages. Buchmeier N, et al. **Infect Immun** 1997 Sep;65(9):3725–30

Expression of Salmonella typhimurium rpoS and rpoS-dependent genes in the intracellular environment of eukaryotic cells. Chen CY, et al. **Infect Immun** 1996 Nov; 64(11):4739–43

The gene slyA of Salmonella typhimurium is required for destruction of M cells and intracellular survival but not for invasion or colonization of the murine small intestine. Daniels JJ, et al. **Infect Immun** 1996 Dec;64(12):5075–84

Oral immunization of mice with attenuated Salmonella typhimurium aroA expressing a recombinant Mycoplasma hyopneumoniae antigen (NrdF). Fagan PK, et al. **Infect Immun** 1997 Jun;65(6):2502–7

Decreased intracellular survival of an fkpA mutant of Salmonella typhimurium Copenhagen. Horne SM, et al. **Infect Immun** 1997 Feb;65(2):806–10

Human papillomavirus type 16 virus-like particles expressed in attenuated Salmonella typhimurium elicit mucosal and systemic neutralizing antibodies in mice. Nardelli-Haefliger D, et al. **Infect Immun** 1997 Aug;65(8):3328–36

Salmonella typhimurium aroA, htrA, and aroD htrA mutants cause progressive infections in athymic (nu/nu) BALB/c mice. Sinha K, et al. **Infect Immun** 1997 Apr;65(4):1566–9

Development of a murine model of chronic Salmonella infection. Sukupolvi S, et al. **Infect Immun** 1997 Feb; 65(2):838–42

Safety and immunogenicity in humans of an attenuated Salmonella typhi vaccine vector strain expressing plasmid-encoded hepatitis B antigens stabilized by the Asd-balanced lethal vector system. Tacket CO, et al. **Infect Immun** 1997 Aug;65(8):3381–5

Expression of the Yersinia pestis capsular antigen (F1 antigen) on the surface of an aroA mutant of Salmonella typhimurium induces high levels of protection against plague. Titball RW, et al. **Infect Immun** 1997 May; 65(5):1926–30

Repression of the cob operon of Salmonella typhimurium by adenosylcobalamin is influenced by mutations in the pdu operon. Ailion M, et al. **J Bacteriol** 1997 Oct; 179(19):6084–91

Utilization of orotate as a pyrimidine source by Salmonella typhimurium and Escherichia coli requires the dicarboxylate transport protein encoded by dctA. Baker KE, et al. **J Bacteriol** 1996 Dec;178(24):7099–105

Recent horizontal transmission of plasmids between natural populations of Escherichia coli and Salmonella enterica. Boyd EF, et al. **J Bacteriol** 1997 Mar;179(5):1622–7

Mutations that increase expression of the rpoS gene and decrease its dependence on hfq function in Salmonella typhimurium. Brown L, et al. **J Bacteriol** 1997 Feb; 179(3):656–62

Mutations in the alpha and sigma-70 subunits of RNA polymerase affect expression of the mer operon. Caslake LF, et al. **J Bacteriol** 1997 Mar;179(5):1787–95

Mutations that render the promoter of the histidine operon of Salmonella typhimurium insensitive to nutrient-rich medium repression and amino acid downshift. Da Costa XJ, et al. **J Bacteriol** 1997 Aug;179(16):5211–7

Identification of sigma S-regulated genes in Salmonella typhimurium: complementary regulatory interactions between sigma S and cyclic AMP receptor protein. Fang FC, et al. **J Bacteriol** 1996 Sep;178(17):5112–20

Identification of the ahp operon of Salmonella typhimurium as a macrophage-induced locus. Francis KP, et al. **J Bacteriol** 1997 Jun;179(12):4046–8

Characterization of transcriptional regulation of the kdp operon of Salmonella typhimurium. Frymier JS, et al. **J Bacteriol** 1997 May;179(9):3061–3

PhoP-PhoQ activates transcription of pmrAB, encoding a two-component regulatory system involved in Salmonella typhimurium antimicrobial peptide resistance. Gunn JS, et al. **J Bacteriol** 1996 Dec;178(23):6857–64

A Salmonella typhimurium genetic locus which confers copper tolerance on copper-sensitive mutants of Escherichia coli. Gupta SD, et al. **J Bacteriol** 1997 Aug; 179(16):4977–84

Propionate catabolism in Salmonella typhimurium LT2: two divergently transcribed units comprise the prp locus at 8.5 centisomes, prpR encodes a member of the sigma-54 family of activators, and the prpBCDE genes constitute an operon. Horswill AR, et al. **J Bacteriol** 1997 Feb;179(3):928–40

Hook-length control of the export-switching machinery involves a double-locked gate in Salmonella typhimurium flagellar morphogenesis. Kutsukake K. **J Bacteriol** 1997 Feb;179(4):1268–73

Regulation of the Salmonella typhimurium pepT gene by cyclic AMP receptor protein (CRP) and FNR acting at a hybrid CRP-FNR site. Lombardo MJ, et al. **J Bacteriol** 1997 Mar;179(6):1909–17

Regulation of gene expression by repressor localization: biochemical evidence that membrane and DNA binding by the PutA protein are mutually exclusive. Muro-Pastor AM, et al. **J Bacteriol** 1997 Apr;179(8):2788–91

Mutations in apbC (mrp) prevent function of the alternative pyrimidine biosynthetic pathway in Salmonella typhimurium. Petersen L, et al. **J Bacteriol** 1996 Oct; 178(19):5676–82

Transposition without transposase: a spontaneous mutation in bacteria. Rappleye CA, et al. **J Bacteriol** 1997 Mar; 179(6):2047–52

A role for Salmonella typhimurium cbiK in cobalamin (vitamin B12) and siroheme biosynthesis. Raux E, et al. **J Bacteriol** 1997 May;179(10):3202–12

Integration host factor is required for 1,2-propanediol-dependent transcription of the cob/pdu regulon in Salmonella typhimurium LT2. Rondon MR, et al. **J Bacteriol** 1997 Jun;179(11):3797–800

Effect of lipopolysaccharide mutations on recipient ability of Salmonella typhimurium for incompatibility group H plasmids. Sherburne C, et al. **J Bacteriol** 1997 Feb; 179(3):952–5

Molecular characterization of the oafA locus responsible for acetylation of Salmonella typhimurium O-antigen: oafA is a member of a family of integral membrane trans-acylases. Slauch JM, et al. **J Bacteriol** 1996 Oct; 178(20):5904–9

Molecular basis of the magnesium deprivation response in

Salmonella typhimurium: identification of PhoP-regulated genes. Soncini FC, et al. **J Bacteriol** 1996 Sep; 178(17):5092-9

Two-component regulatory systems can interact to process multiple environmental signals. Soncini FC, et al. **J Bacteriol** 1996 Dec;178(23):6796-801

Long-distance effect of downstream transcription on activity of the supercoiling-sensitive leu-500 promoter in a topA mutant of Salmonella typhimurium. Spirito F, et al. **J Bacteriol** 1996 Dec;178(24):7129-37

The Salmonella typhimurium mar locus: molecular and genetic analyses and assessment of its role in virulence. Sulavik MC, et al. **J Bacteriol** 1997 Mar;179(6):1857-66

Deletion analysis of the FliM flagellar switch protein of Salmonella typhimurium. Toker AS, et al. **J Bacteriol** 1996 Dec;178(24):7069-79

cobB function is required for catabolism of propionate in Salmonella typhimurium LT2: evidence for existence of a substitute function for CobB within the 1,2-propanediol utilization (pdu) operon. Tsang AW, et al. **J Bacteriol** 1996 Dec;178(23):7016-9

Genetic characterization of the pdu operon: use of 1,2-propanediol in Salmonella typhimurium. Walter D, et al. **J Bacteriol** 1997 Feb;179(4):1013-22

Characterization of thiI, a new gene involved in thiazole biosynthesis in Salmonella typhimurium. Webb E, et al. **J Bacteriol** 1997 Jul;179(13):4399-402

Characterization of multiple-antibiotic-resistant Salmonella typhimurium stains: molecular epidemiology of PER-1-producing isolates and evidence for nosocomial plasmid exchange by a clone. Vahaboglu H, et al. **J Clin Microbiol** 1996 Dec;34(12):2942-6

Protective immunity against herpes simplex virus (HSV) type 1 following oral administration of recombinant Salmonella typhimurium vaccine strains expressing HSV antigens. Karem KL, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):427-34

Structural requirements for the formation of 1-methylguanosine in vivo in tRNA(Pro)GGG of Salmonella typhimurium. Qian Q, et al. **J Mol Biol** 1997 Feb 21;266(2):283-96

Identification of DNA gyrase A mutations in ciprofloxacin-resistant isolates of Salmonella typhimurium from men and cattle in Germany. Heisig P, et al. **Microb Drug Resist** 1995 Fall;1(3):211-8

Induction of the phoE promoter upon invasion of Salmonella typhimurium into eukaryotic cells. Janssen R, et al. **Microb Pathog** 1995 Oct;19(4):193-201

Expression of an F1/V fusion protein in attenuated Salmonella typhimurium and protection of mice against plague. Leary SEC, et al. **Microb Pathog** 1997 Sep; 23(3):167-79

Bacterial phenotypes mediated by mviA and their relationship to the mouse virulence of Salmonella typhimurium. Swords WE, et al. **Microb Pathog** 1997 Jun; 22(6):353-62

The flagellin N-methylase gene fliB and an adjacent serovar-specific IS200 element in Salmonella typhimurium. Burnens AP, et al. **Microbiology** 1997 May;143 (Pt 5):1539-47

Autogenous and global control of the flagellar master operon, flhD, in Salmonella typhimurium. Kutsukake K. **Mol Gen Genet** 1997 Apr 28;254(4):440-8

Co-ordinate regulation of Salmonella typhimurium invasion genes by environmental and regulatory factors is mediated by control of hilA expression. Bajaj V, et al. **Mol Microbiol** 1996 Nov;22(4):703-14

hilA is a novel ompR/toxR family member that activates the expression of Salmonella typhimurium invasion genes. Bajaj V, et al. **Mol Microbiol** 1995 Nov;18(4):715-27

The specificity of fumarate as a switching factor of the bacterial flagellar motor. Barak R, et al. **Mol Microbiol** 1996 Jan;19(1):139-44

In vitro characterization of constitutive CysB proteins from Salmonella typhimurium. Colyer TE, et al. **Mol Microbiol** 1996 Jul;21(2):247-56

A class of gyrase mutants of Salmonella typhimurium show quinolone-like lethality and require rec functions for viability. Garí E, et al. **Mol Microbiol** 1996 Jul;21(1):111-22

Transcriptional activation of Salmonella typhimurium invasion genes by a member of the phosphorylated response-regulator superfamily. Johnston C, et al. **Mol Microbiol** 1996 Nov;22(4):715-27

Promoter identification and expression analysis of Salmonella typhimurium and Escherichia coli nrdEF operons encoding one of two class I ribonucleotide reductases present in both bacteria. Jordan A, et al. **Mol Microbiol** 1996 Feb; 19(4):777-90

Vitamin B12 repression of the btuB gene in Salmonella typhimurium is mediated via a translational control which requires leader and coding sequences. Ravnum S, et al. **Mol Microbiol** 1997 Jan;23(1):35-42

Essential roles of core starvation-stress response loci in carbon-starvation-inducible cross-resistance and hydrogen peroxide-inducible adaptive resistance to oxidative challenge in Salmonella typhimurium. Seymour RL, et al. **Mol Microbiol** 1996 May;20(3):497-505

Identification of a Salmonella virulence gene required for formation of filamentous structures containing lysosomal membrane glycoproteins within epithelial cells. Stein MA, et al. **Mol Microbiol** 1996 Apr;20(1):151-64

Bacterial genetics by flow cytometry: rapid isolation of Salmonella typhimurium acid-inducible promoters by differential fluorescence induction. Valdivia RH, et al. **Mol Microbiol** 1996 Oct;22(2):367-78

Mutagenicity of cyclopenta-fused polynuclear aromatic hydrocarbons and a non-polar fraction from a fuel combustion sample in a Salmonella forward mutation assay without exogenous metabolic activation. Busby WF Jr, et al. **Mutat Res** 1997 Jul 14;391(3):117-25

The selection-induced His+ reversion in Salmonella typhimurium. Gizatullin FS, et al. **Mutat Res** 1996 Oct 25; 357(1-2):43-56

Development of a standard reference material for diesel mutagenicity in the Salmonella plate incorporation assay. Hughes TJ, et al. **Mutat Res** 1997 Jul 14;391(3):243-58

Types of mutations induced by glyoxal, a major oxidative DNA-damage product, in Salmonella typhimurium. Murata-Kamiya N, et al. **Mutat Res** 1997 Jun 9;377(1):13-6

Suppressive effects of chlorophyllin on mutagen-induced umu C gene expression in Salmonella typhimurium (TA 1535/pSK 1002) and tumor promoter-dependent ornithine decarboxylase induction in BALB/c 3T3 fibroblast cells. Okai Y, et al. **Mutat Res** 1996 Aug;370(1):11-7

Detection of mutagenicity in Ames test using a metalloporphyrin/oxidant model system for cytochrome P450 [see comments] Okochi E, et al. **Mutat Res** 1997 Jan 3;373(1):99-105. Comment in: Mutat Res 1997 Jul 3;377(2):287, 289.

Effects of vitamins A and E on methylazoxymethanol-induced mutagenesis in Salmonella typhimurium strain TA100. Tavan E, et al. **Mutat Res** 1997 Jul 3;377(2):231-7

Effect of overexpression of E. coli 3-methyladenine-DNA glycosylase I (Tag) on survival and mutation induction in Salmonella typhimurium. Tomicic M, et al. **Mutat Res** 1996 Oct 28;358(1):81-7

The VITOTOX test, an SOS bioluminescence Salmonella typhimurium test to measure genotoxicity kinetics. van der Lelie D, et al. **Mutat Res** 1997 Mar 17;389(2-3):279-90

Comparisons on chemically-induced mutagenicity among four bacterial strains, Salmonella typhimurium TA102 and TA2638, and Escherichia coli WP2/pKM101 and WP2 uvrA/pKM101: collaborative study I. Watanabe K, et al. **Mutat Res** 1996 Dec 12;361(2-3):143-55

Targeted disruption of the gene encoding the classical nitroreductase enzyme in Salmonella typhimurium Ames test strains TA1535 and TA1538. Yamada M, et al. **Mutat Res** 1997 Apr 14;375(1):9-17

Conserved structure of IS200 elements in Salmonella. Beuzón CR, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1355-61

Functional Escherichia coli 23S rRNAs containing processed and unprocessed intervening sequences from Salmonella typhimurium. Gregory ST, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4918-23

Bacterial infection as assessed by in vivo gene expression. Heithoff DM, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):934-9

Identification of a pathogenicity island required for Salmonella survival in host cells. Ochman H, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7800-4

Barriers to recombination between closely related bacteria: MutS and RecBCD inhibit recombination between Salmonella typhimurium and Salmonella typhi. Zahrt TC, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9786-91

Regulation of lipid A modifications by Salmonella typhimurium virulence genes phoP-phoQ. Guo L, et al. **Science** 1997 Apr 11;276(5310):250-3

Fluorescence-based isolation of bacterial genes expressed within host cells. Valdivia RH, et al. **Science** 1997 Sep 26; 277(5334):2007-11

Glutathione S-transferase-mediated mutagenicity of trihalomethanes in Salmonella typhimurium: contrasting results with bromodichloromethane off chloroform. Pegram RA, et al. **Toxicol Appl Pharmacol** 1997 May; 144(1):183-8

Oral immunization with recombinant Salmonella typhimurium expressing surface protein antigen A (SpaA) of Streptococcus sobrinus: effects of the Salmonella virulence plasmid on the induction of protective and sustained humoral responses in rats. Redman TK, et al. **Vaccine** 1996 Jun;14(9):868-78

[The genotoxicity and carcinogenic potential of gastrofenzin] Mirkova E. **Eksp Med Morfol** 1994;32(3-4):57-68 (Eng. Abstr.) **(Bul)**

[Regulation of purine biosynthetic genes expression in Salmonella typhimurium. III. Isolation of O+ and Oc fragments of pur JHD] Li K, et al. **I Chuan Hsueh Pao** 1995;22(2):152-60 (Eng. Abstr.) **(Chi)**

[Specificity and time of the appearance of His+ reversions induced by histidine starvation in Salmonella typhimurium] Gizatullin FSh, et al. **Genetika** 1996 Oct;32(10):1333-40 (Eng. Abstr.) **(Rus)**

[Structure-mutagenic activity relationships on the TA100 strain of Salmonella typhimurium exposed to a series of halogenated hydrocarbons and short-chain alcohols] Kharchevnikova NV, et al. **Genetika** 1997 May;33(5):710-3 (Eng. Abstr.) **(Rus)**

[Genotoxic effect of cadmium chloride in various test-systems] Pesheva MG, et al. **Genetika** 1997 Feb; 33(2):183-8 (Eng. Abstr.) **(Rus)**

[Identification of genes controlling the transition of Salmonella typhimurium bacteria to a non-culturable state] Romanova IuM, et al. **Genetika** 1996 Sep;32(9):1184-90 (Eng. Abstr.) **(Rus)**

[Genetic control of the induction of a nonculturable state in pathogenic bacteria] Romanova IuM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):16-8 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Fermentation and growth response of a primary poultry isolate of Salmonella typhimurium grown under strict anaerobic conditions in continuous culture and amino acid-limited batch culture. Maciorowski KG, et al. **Adv Exp Med Biol** 1997;412:201-8

Serovar specific differences in Salmonella survival within macrophage cells. Schwan WR, et al. **Adv Exp Med Biol** 1997;412:277-8

Dynamics of growth and death within a Salmonella typhimurium population during infection of macrophages. Buchmeier NA, et al. **Can J Microbiol** 1997 Jan;43(1):29-34

Prevention of Salmonella typhimurium caecal colonisation by different preparations for competitive exclusion. Hoszowski A, et al. **Comp Immunol Microbiol Infect Dis** 1997 Feb;20(2):111-7

Fate of Salmonella enteritidis and Salmonella typhimurium during the fermentation of siljo. Dessie G, et al. **East Afr Med J** 1996 Jul;73(7):432-4

Decreased intracellular survival of an fkpA mutant of Salmonella typhimurium Copenhagen. Horne SM, et al. **Infect Immun** 1997 Feb;65(2):806-10

Contribution of TonB- and Feo-mediated iron uptake to growth of Salmonella typhimurium in the mouse. Tsolis RM, et al. **Infect Immun** 1996 Nov;64(11):4549-56

Water availability and the survival of Salmonella typhimurium in porous systems. Hills BP, et al. **Int J Food Microbiol** 1997 May 20;36(2-3):187-98

The growth of Salmonella typhimurium on irradiated, raw, skinless chicken breast. McKay AL, et al. **Int J Food Microbiol** 1997 Jul 22;37(2-3):121-9

Inhibition of Salmonella typhimurium by the products of tartrate metabolism by a Veillonella species. Hinton A Jr, et al. **J Appl Bacteriol** 1996 Aug;81(2):188-90

Effect of Saccharomyces boulardii against experimental oral infection with Salmonella typhimurium and Shigella flexneri in conventional and gnotobiotic mice. Rodrigues AC, et al. **J Appl Bacteriol** 1996 Sep;81(3):251-6

The effects of growth dynamics upon pH gradient formation within and around subsurface colonies of Salmonella typhimurium. Walker SL, et al. **J Appl Microbiol** 1997 May; 82(5):610-4

Characterization of transcriptional regulation of the kdp operon of Salmonella typhimurium. Frymier JS, et al. **J Bacteriol** 1997 May;179(9):3061-3

Clonal spread of tetracycline-resistant Salmonella typhimurium in Danish dairy herds. Aarestrup FM, et al. **Vet Rec** 1997 Mar 22;140(12):313-4

[Inhibition phenomena between Salmonella strains--a new aspect of salmonella infection control in poultry] Martin G, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Nov; 103(11):468-72 (Eng. Abstr.) **(Ger)**

[The nonculturable state in pathogenic bacteria modelled on Salmonella typhimurium: the phenomenon and its genetic control] Romanova IuM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug; (4):35-41 (Eng. Abstr.) **(Rus)**

[Survival of Salmonella typhimurium in the solid fraction from a farm waste water treatment plant] Plachá I, et al. **Vet Med (Praha)** 1997 May;42(5):133-7 (Eng. Abstr.) **(Slo)**

IMMUNOLOGY

Immunity to experimental Salmonella typhimurium infections in rats. Transfer of immunity with primed CD45RC+ and CD45RC- CD4 T-cell subpopulations. Thygesen P, et al. **APMIS** 1996 Oct;104(10):750-4

Transfer of primed CD4+OX40- T lymphocytes induces increased immunity to experimental Salmonella typhimurium infections in rats. Thygesen P, et al. **APMIS** 1997 May;105(5):410-3

Epitope specificity and application of Salmonella typhimurium O-antigen-specific monoclonal antibodies [letter; comment] Luk JM, et al. **Appl Environ Microbiol** 1997 Mar;63(3):1192-4. Comment on: Appl Environ Microbiol 1996 Jan;62(1):1-5.

Antibody responses and infertility in mice following oral immunization with attenuated Salmonella typhimurium expressing recombinant murine ZP3 [published erratum appears in Biol Reprod 1997 Apr;56(4):1069] Zhang X, et al. **Biol Reprod** 1997 Jan;56(1):33-41

Acute anterior uveitis in juvenile Reiter's syndrome. Fischel JD, et al. **Clin Rheumatol** 1996 Jan;15(1):83-5

A purified protein from Salmonella typhimurium inhibits high-affinity interleukin-2 receptor expression on CTLL-2 cells. Arai T, et al. **FEMS Immunol Med Microbiol** 1997 Mar;17(3):155-60

The oxidative burst triggered by Salmonella typhimurium in differentiated U937 cells requires complement and a complete bacterial lipopolysaccharide. Château MT, et al. **FEMS Immunol Med Microbiol** 1997 Jan;17(1):57-66

Surface display compared to periplasmic expression of a malarial antigen in Salmonella typhimurium and its implications for immunogenicity. Haddad D, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3-4):175-86

Purification of a product from Salmonella typhimurium with the ability to inhibit mitogen-induced proliferation of murine splenic T-lymphocytes. Matsui K. **FEMS Immunol Med Microbiol** 1996 Feb;13(2):155-60

Salmonella typhimurium InvA expression probed with a monoclonal antibody to the C-terminal peptide of InvA. Clark CG, et al. **FEMS Microbiol Lett** 1996 Mar 1; 136(3):263-8

Application of cloth-based enzyme immunoassay for the characterization of monoclonal antibodies to Salmonella lipopolysaccharide antigens. Brown JG, et al. **Immunol Invest** 1996 Jul;25(4):369-81

Correlates of protection induced by live Aro- Salmonella typhimurium vaccines in the murine typhoid model. Harrison JA, et al. **Immunology** 1997 Apr;90(4):618-25

Protective immunity against Salmonella typhimurium elicited in mice by oral vaccination with phosphorylcholine encapsulated in poly(DL-lactide-co-glycolide) microspheres. Allaoui-Attarki K, et al. **Infect Immun** 1997 Mar;65(3):853-7

Critical roles of neutrophils in host defense against experimental systemic infections of mice by Listeria monocytogenes, Salmonella typhimurium, and Yersinia enterocolitica. Conlan JW. **Infect Immun** 1997 Feb; 65(2):630-5

Generation of gamma interferon responses in murine Peyer's patches following oral immunization. George A. **Infect Immun** 1996 Nov;64(11):4606-11

Mucosal immunogenicity of a recombinant Salmonella typhimurium-cloned heterologous antigen in the absence or presence of coexpressed cholera toxin A2 and B subunits. Harokopakis E, et al. **Infect Immun** 1997 Apr;65(4):1445-54

Protection against murine listeriosis by an attenuated recombinant Salmonella typhimurium vaccine strain that secretes the naturally somatic antigen superoxide dismutase. Hess J, et al. **Infect Immun** 1997 Apr;65(4):1286-92

Control by H-2 genes of the Th1 response induced against a foreign antigen expressed by attenuated Salmonella typhimurium. Lo-Man R, et al. **Infect Immun** 1996 Nov; 64(11):4424-32

Evaluation of bacterial survival and phagocyte function with a fluorescence-based microplate assay. Shiloh MU, et al. **Infect Immun** 1997 Aug;65(8):3193-8

Safety and immunogenicity in humans of an attenuated Salmonella typhi vaccine vector strain expressing plasmid-encoded hepatitis B antigens stabilized by the Asd-balanced lethal vector system. Tacket CO, et al. **Infect Immun** 1997 Aug;65(8):3381-5

Comparative study of the protective effect against Salmonella colonisation in newly hatched SPF chickens using live, attenuated Salmonella vaccine strains, wild-type Salmonella strains or a competitive exclusion product. Methner U, et al. **Int J Food Microbiol** 1997 Apr 15; 35(3):223-30

Enterobacteria-infected T cells as antigen-presenting cells for cytotoxic CD8 T cells: a contribution to the self-limitation of cellular immune reactions in reactive arthritis? Ackermann B, et al. **J Infect Dis** 1997 May; 175(5):1121-7

Immunization of Macaca mulatta with aroA attenuated Salmonella typhimurium expressing the SIVp27 antigen. Steger KK, et al. **J Med Primatol** 1997 Feb-Apr; 26(1-2):44-50

Immunoprotection by monoclonal antibodies to the porins and lipopolysaccharide of Salmonella typhimurium. Singh SP, et al. **Microb Pathog** 1996 Oct;21(4):249-63

Salmonella enterica infection. Hess J, et al. **Res Immunol** 1996 Oct-Dec;147(8-9):581-6 (24 ref.)

Experimental study of the mixed (oral-intradermal) vaccination method in enteric diseases. Dimache G, et al. **Roum Arch Microbiol Immunol** 1996 Jul-Sep;55(3):215-23

Delivery of the Pertactin/P.69 polypeptide of Bordetella pertussis using an attenuated Salmonella typhimurium vaccine strain: expression levels and immune response. Anderson R, et al. **Vaccine** 1996 Oct;14(14):1384-90

A murine model of intranasal immunization to assess the immunogenicity of attenuated Salmonella typhi live vector vaccines in stimulating serum antibody responses to expressed foreign antigens. Galen JE, et al. **Vaccine** 1997 Apr-May;15(6-7):700-8

Construction and oral immunogenicity of a Salmonella typhimurium strain expressing a streptococcal adhesin linked to the A2/B subunits of cholera toxin. Hajishengallis G, et al. **Vaccine** 1996 Nov;14(16):1545-8

Cytokine expression in the gut associated lymphoid tissue after oral administration of attenuated Salmonella vaccine strains. Karem KL, et al. **Vaccine** 1996 Nov; 14(16):1495-502

Immunisation of mice using Salmonella typhimurium expressing human papillomavirus type 16 E7 epitopes inserted into hepatitis B virus core antigen. Londoño LP, et al. **Vaccine** 1996 Apr;14(6):545-52

Induction of SIV capsid-specific CTL and mucosal sIgA in mice immunized with a recombinant S. typhimurium aroA mutant. Valentine PJ, et al. **Vaccine** 1996 Feb; 14(2):138-46

Nonrecombinant and recombinant avirulent Salmonella vaccines for poultry. Curtiss R 3rd, et al. **Vet Immunol Immunopathol** 1996 Nov;54(1-4):365-72 (40 ref.)

Evaluation of an aroA mutant Salmonella typhimurium vaccine in chickens using modified semisolid Rappaport Vassiliadis medium to monitor faecal shedding. Tan S, et al. **Vet Microbiol** 1997 Mar;54(3-4):247-54

S typhimurium DT104 in cattle in the UK [letter; comment] Barley JP. **Vet Rec** 1997 Jan 18;140(3):75. Comment on: Vet Rec 1996 Jun 29;138(26):650-1.

Protection against bacterial infection by urea extracts from Salmonella. Schlecht S, et al. **Zentralbl Bakteriol** 1996 Aug; 284(4):559-64

Seroreactivity of Salmonella-infected cattle herds against a fimbrial antigen in comparison with lipopolysaccharide antigens. Hoorfar J, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):461-7

[Vaccination of pigeons against Salmonella infections] Grund S, et al. **Berl Munch Tierarztl Wochenschr** 1997 May; 110(5):171-5 (Eng. Abstr.) **(Ger)**

[Apparent wall shear rate and leukocyte-endothelium interaction in iris blood vessels in endotoxin-induced uveitis] Baatz H, et al. **Ophthalmologe** 1996 Dec; 93(6):749-53 (Eng. Abstr.) **(Ger)**

[The immunobiological characteristics of a Salmonella typhimurium strain acquiring a plasmid that controls antibiotic resistance and antibactericidal activity] Chainikova IN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):50-3 (Eng. Abstr.) **(Rus)**

[The use of a live Salmonella bivalent vaccine for decreasing the circulation of salmonellae in a poultry plant] Efremov VE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep-Oct;(5):36-9 (Eng. Abstr.) **(Rus)**

[The evaluation of different agglutination and adhesion tests with erythrocytic reagents in determining antibodies to the O and H antigens of Salmonella typhimurium in comparison with immunoenzyme analysis (IEA)] Karal'nik BV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep-Oct;(5):76-80 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Effect of ochratoxin A on Salmonella typhimurium-challenged layer chickens. Fukata T, et al. **Avian Dis** 1996 Oct-Dec;40(4):924-6

Salmonella infection in wild birds from Quebec. Mikaelian I, et al. **Can Vet J** 1997 Jun;38(6):385

Hartman interferometer: versatile integrated optic sensor for label-free, real-time quantification of nucleic acids, proteins, and pathogens. Schneider BH, et al. **Clin Chem** 1997 Sep;43(9):1757-63

Recurrent salmonella sepsis with different species in a systemic lupus erythematosus patient. Green L, et al. **Clin Rheumatol** 1996 Jan;15(1):72-4

Concurrent outbreaks of Salmonella Typhimurium in South Australia. Andrews R, et al. **Commun Dis Intell** 1997 Mar 6;21(5):61-2

Evolution of susceptibility of non-typhi Salmonella in a Spanish hospital (1992-1994) and report of a Salmonella ser. Typhimurium isolate resistant to quinolones. Campo P, et al. **Eur J Epidemiol** 1997 Feb;13(2):239-41

The evaluation of a fluorogenic polymerase chain reaction assay for the detection of Salmonella species in food commodities. Chen S, et al. **Int J Food Microbiol** 1997 Apr 15;35(3):239-50

Effects of stress treatments on the detection of Salmonella typhimurium by in situ hybridization. Tolker-Nielsen T, et al. **Int J Food Microbiol** 1997 Apr 15;35(3):251-8

Salmonella DNA persistence in natural seawaters using PCR analysis. Dupray E, et al. **J Appl Microbiol** 1997 Apr; 82(4):507-10

Enzyme-linked immunomagnetic electrochemical detection of Salmonella typhimurium. Gehring AG, et al. **J Immunol Methods** 1996 Sep 9;195(1-2):15-25

Infectivity and persistence of Salmonella Typhimurium for zebra finches (Poephila guttata) isolated from the same species. Sato Y, et al. **J Vet Med Sci** 1996 Sep;58(9):845-8

Multiple-resistant Salmonella typhimurium DT104 in cats [letter; comment] Low JC, et al. **Lancet** 1996 Nov 16; 348(9038):1391. Comment on: Lancet 1996 Aug 17;348(9025):471.

Photonic detection of bacterial pathogens in living hosts. Contag CH, et al. **Mol Microbiol** 1995 Nov;18(4):593-603

The influence of complex carbohydrates on Salmonella typhimurium colonization, pH, and density of broiler ceca. Chambers JR, et al. **Poult Sci** 1997 Mar;76(3):445-51

Comparison of an LPS-specific competitive ELISA with a motility enrichment culture method (MSRV) for detection of Salmonella typhimurium and S. enteritidis in chickens. Tan S, et al. **Vet Microbiol** 1997 May;56(1-2):79-86

[The appearance of an antibiotic-multiresistant strain of Salmonella typhimurium in a pediatrics ward and its spread in the country] Lucinescu S, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan-Jun; 42(1-2):27-31 **(Rum)**

[Vertebral osteomyelitis caused by Salmonella typhimurium (letter)] Blanco JR, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):507-8 **(Spa)**

METABOLISM

Lipopolysaccharide's role in the association of Salmonella cells to the mouse intestine studied by ribosomal in situ hybridization. Krogfelt KA, et al. **Adv Exp Med Biol** 1996; 408:123-8 (25 ref.)

Effects of amphiphilic compounds on metabolic and biological activities of Salmonella typhimurium. Majtánová L, et al. **Arzneimittelforschung** 1996 Jan;46(1):64-7

The DNA-directed in vitro protein synthesizing system of Salmonella typhimurium: the effect of glutamate substitution. Choy HE. **Biochim Biophys Acta** 1997 Jul 17; 1353(1):61-8

Functional specificity of amino acid at position 246 in the tRNA mimicry domain of bacterial release factor 2. Uno M, et al. **Biochimie** 1996;78(11-12):935-43

Salmonella enterica var Typhimurium and Salmonella enterica var Enteritidis express type 1 fimbriae in the rat in vivo. Ewen SW, et al. **FEMS Immunol Med Microbiol** 1997 Jul;18(3):185-92

Acid stress responses in enterobacteria. Bearson S, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):173-80 (39 ref.)

Identification of a new prp locus required for propionate catabolism in Salmonella typhimurium LT2. Hammelman TA, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2-3):233-9

Transcriptional downregulation of a mouse Golgi mannosidase gene following Salmonella typhimurium uptake into murine macrophages. Schwan WR, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):215-9

Role of ribosome degradation in the death of heat-stressed Salmonella typhimurium. Tolker-Nielsen T, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2-3):155-60

A novel involvement of the PurG and PurI proteins in thiamine synthesis via the alternative pyrimidine biosynthetic (APB) pathway in Salmonella typhimurium. Zilles JL, et al. **Genetics** 1996 Nov;144(3):883-92

Release of lipopolysaccharide from intracellular compartments containing Salmonella typhimurium to vesicles of the host epithelial cell. Garcia-del Portillo F, et al. **Infect Immun** 1997 Jan;65(1):24-34

Bacterial porins stimulate bone resorption. Meghji S, et al. **Infect Immun** 1997 Apr;65(4):1313-6

Specific detection of Salmonella typhimurium proteins synthesized intracellularly. Burns-Keliher LL, et al. **J Bacteriol** 1997 Jun;179(11):3604-12

Changes in host cell energetics in response to bacteriophage PRD1 DNA entry. Daugelavicius R, et al. **J Bacteriol** 1997 Aug;179(16):5203-10

Mutations in sdh (succinate dehydrogenase genes) alter the thiamine requirement of Salmonella typhimurium. Enos-Berlage JL, et al. **J Bacteriol** 1997 Jun; 179(12):3989-96

Evidence that the CysG protein catalyzes the first reaction specific to B12 synthesis in Salmonella typhimurium, insertion of cobalt. Fazzio TG, et al. **J Bacteriol** 1996 Dec; 178(23):6952-9

Ferrous iron uptake by a magnesium transport system is toxic for Escherichia coli and Salmonella typhimurium. Hantke K. **J Bacteriol** 1997 Oct;179(19):6201-4

Hook-length control of the export-switching machinery involves a double-locked gate in Salmonella typhimurium flagellar morphogenesis. Kutsukake K. **J Bacteriol** 1997 Feb;179(4):1268-73

The FliO, FliP, FliQ, and FliR proteins of Salmonella typhimurium: putative components for flagellar assembly. Ohnishi K, et al. **J Bacteriol** 1997 Oct;179(19):6092-9

Iron-regulated excretion of alpha-keto acids by Salmonella typhimurium. Reissbrodt R, et al. **J Bacteriol** 1997 Jul; 179(14):4538-44

DNA binding is not sufficient for H-NS-mediated repression of proU expression. Jordi BJ, et al. **J Biol Chem** 1997 May 2;272(18):12083-90

Characterization of the bacterial sensor protein PhoQ. Evidence for distinct binding sites for Mg2+ and Ca2+ Véscovi EG, et al. **J Biol Chem** 1997 Jan 17;272(3):1440-3

Production of sodium azide inactivating substance by resistant mutants of Salmonella typhimurium and other bacteria. Banic S. **J Chemother** 1996 Dec;8(6):432-7

Three modified nucleosides present in the anticodon stem and loop influence the in vivo aa-tRNA selection in a tRNA-dependent manner. Li J, et al. **J Mol Biol** 1997 Aug 15;271(2):209-21

Induction of TNF-alpha mRNA in murine macrophages by virulent and avirulent strains of Salmonella choleraesuis serovar typhimurium and serovar Choleraesuis. Mitsui-Yamaguchi T, et al. **Microb Pathog** 1997 Jan; 22(1):59-66

Interaction of a rat intestinal brush border membrane glycoprotein with type-1 fimbriae of Salmonella typhimurium. Ghosh S, et al. **Mol Cell Biochem** 1996 May 24;158(2):125-31

Flagellar assembly in Salmonella typhimurium. Aizawa SI. **Mol Microbiol** 1996 Jan;19(1):1-5 (30 ref.)

In vitro characterization of constitutive CysB proteins from Salmonella typhimurium. Colyer TE, et al. **Mol Microbiol** 1996 Jul;21(2):247-56

A putative helical domain in the MalK subunit of the ATP-binding-cassette transport system for maltose of Salmonella typhimurium (MalFGK2) is crucial for interaction with MalF and MalG. A study using the LacK protein of Agrobacterium radiobacter as a tool. Wilken S, et al. **Mol Microbiol** 1996 Nov;22(4):655-66

Kdp-like system in Salmonella typhimurium LT-2. Garcia-Cuellar C, et al. **Rev Latinoam Microbiol** 1995 Jul-Sep;37(3):227-36

Construction and oral immunogenicity of a Salmonella typhimurium strain expressing a streptococcal adhesin linked to the A2/B subunits of cholera toxin. Hajishengallis G, et al. **Vaccine** 1996 Nov;14(16):1545-8

PATHOGENICITY

Fimbrial adhesins of Salmonella typhimurium. Role in bacterial interactions with epithelial cells. Bäumler AJ, et al. **Adv Exp Med Biol** 1997;412:149–58 (56 ref.)

Interactions of enteric pathogens with human epithelial cells. Bacterial exploitation of host processes. Finlay BB. **Adv Exp Med Biol** 1997;412:289–93

Fimbrial colonisation factors F18ab and F18ac of Escherichia coli isolated from pigs with postweaning diarrhea and edema disease. Imberechts H, et al. **Adv Exp Med Biol** 1997; 412:175–83

Plasminogen receptors. Turning Salmonella and Escherichia coli into proteolytic organisms. Korhonen TK, et al. **Adv Exp Med Biol** 1997;412:185–92

Salmonellosis: host immune responses and bacterial virulence determinants. Jones BD, et al. **Annu Rev Immunol** 1996; 14:533–61 (155 ref.)

Antagonistic activity exerted in vitro and in vivo by Lactobacillus casei (strain GG) against Salmonella typhimurium C5 infection. Hudault S, et al. **Appl Environ Microbiol** 1997 Feb;63(2):513–8

Effect of inv mutations on Salmonella virulence and colonization in 1-day-old White Leghorn chicks. Porter SB, et al. **Avian Dis** 1997 Jan–Mar;41(1):45–57

Inhibition of Salmonella typhimurium adhesion to Caco-2 cell cultures by Lactobacillus strain GG spent culture supernate: only a pH effect? Lehto EM, et al. **FEMS Immunol Med Microbiol** 1997 Jun;18(2):125–32

Salmonella typhimurium and Salmonella enteritidis induce gut growth and increase the polyamine content of the rat small intestine in vivo. Naughton PJ, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):251–8

Molecular analysis of the genes mediating Salmonella invasion. Park JU. **FEMS Immunol Med Microbiol** 1997 Jun;18(2):113–7

Synergistic effect of mutations in invA and lpfC on the ability of Salmonella typhimurium to cause murine typhoid. Bäumler AJ, et al. **Infect Immun** 1997 Jun;65(6):2254–9

Invasion of murine intestinal M cells by Salmonella typhimurium inv mutants severely deficient for invasion of cultured cells. Clark MA, et al. **Infect Immun** 1996 Oct; 64(10):4363–8

Simultaneous prevention of glutamine synthesis and high-affinity transport attenuates Salmonella typhimurium virulence. Klose KE, et al. **Infect Immun** 1997 Feb; 65(2):587–96

Role of sigma factor RpoS in initial stages of Salmonella typhimurium infection. Nickerson CA, et al. **Infect Immun** 1997 May;65(5):1814–23

Avirulence of LT2 strains of Salmonella typhimurium results from a defective rpoS gene. Swords WE, et al. **Infect Immun** 1997 Jun;65(6):2451–3

An altered rpoS allele contributes to the avirulence of Salmonella typhimurium LT2. Wilmes-Riesenberg MR, et al. **Infect Immun** 1997 Jan;65(1):203–10

Mutation of the htrB gene in a virulent Salmonella typhimurium strain by intergeneric transduction: strain construction and phenotypic characterization. Sunshine MG, et al. **J Bacteriol** 1997 Sep;179(17):5521–33

Murine salmonellosis studied by confocal microscopy: Salmonella typhimurium resides intracellularly inside macrophages and exerts a cytotoxic effect on phagocytes in vivo. Richter-Dahlfors A, et al. **J Exp Med** 1997 Aug 18;186(4):569–80

Increased expression of urokinase type plasminogen activator(u-PA), plasminogen activator inhibitor-1(PAI-1), and collagenases in Caco-2 cells infected by Salmonella typhimurium. Park CG, et al. **J Korean Med Sci** 1997 Feb;12(1):23–31

Infectivity and persistence of Salmonella typhimurium for bengalees, a variety of Lonchura striata, using an isolate from a bengalee. Sato Y. **J Vet Med Sci** 1996 Dec; 58(12):1175–9

A possible mechanism for host-specific pathogenesis of Salmonella serovars. Ishibashi Y, et al. **Microb Pathog** 1996 Dec;21(6):435–46

Induction of TNF-alpha mRNA in murine macrophages by virulent and avirulent strains of Salmonella choleraesuis serovar typhimurium and serovar Choleraesuis. Mitsui-Yamaguchi T, et al. **Microb Pathog** 1997 Jan; 22(1):59–66

Bacterial phenotypes mediated by mviA and their relationship to the mouse virulence of Salmonella typhimurium. Swords WE, et al. **Microb Pathog** 1997 Jun; 22(6):353–62

hilA is a novel ompR/toxR family member that activates the expression of Salmonella typhimurium invasion genes. Bajaj V, et al. **Mol Microbiol** 1995 Nov;18(4):715–27

The invasion-associated type III system of Salmonella typhimurium directs the translocation of Sip proteins into the host cell. Collazo CM, et al. **Mol Microbiol** 1997 May; 24(4):747–56

Photonic detection of bacterial pathogens in living hosts. Contag CH, et al. **Mol Microbiol** 1995 Nov;18(4):593–603

Virulence and vaccine potential of Salmonella typhimurium mutants deficient in the expression of the RpoS (sigma S) regulon. Coynault C, et al. **Mol Microbiol** 1996 Oct; 22(1):149–60

Non-invasive Salmonella typhimurium mutants are avirulent because of an inability to enter and destroy M cells of ileal Peyer's patches. Penheiter KL, et al. **Mol Microbiol** 1997 May;24(4):697–709

Identification of a Salmonella virulence gene required for formation of filamentous structures containing lysosomal membrane glycoproteins within epithelial cells. Stein MA, et al. **Mol Microbiol** 1996 Apr;20(1):151–64

Identification of a pathogenicity island required for Salmonella survival in host cells. Ochman H, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7800–4

Regulation of lipid A modifications by Salmonella typhimurium virulence genes phoP-phoQ. Guo L, et al. **Science** 1997 Apr 11;276(5310):250–3

Fluorescence-based isolation of bacterial genes expressed within host cells. Valdivia RH, et al. **Science** 1997 Sep 26; 277(5334):2007–11

Oral immunization with recombinant Salmonella typhimurium expressing surface protein antigen A (SpaA) of Streptococcus sobrinus: effects of the Salmonella virulence plasmid on the induction of protective and sustained humoral responses in rats. Redman TK, et al. **Vaccine** 1996 Jun;14(9):868–78

[The role of inactivation by salmonellae of the antibacterial component in an interferon preparation in an experimental infectious process] Rishchuk SV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):98–9 **(Rus)**

[Genetic control of the induction of a nonculturable state in pathogenic bacteria] Romanova IuM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):16–8 (Eng. Abstr.) **(Rus)**

[Salmonella no typhi septic arthritis] Centelles Sales I, et al. **An Esp Pediatr** 1997 Jan;46(1):60–2 **(Spa)**

PHYSIOLOGY

Use of computer-assisted motion analysis for quantitative measurements of swimming behavior in peritrichously flagellated bacteria. Amsler CD. **Anal Biochem** 1996 Mar 1;235(1):20–5

Acid adaptation sensitizes Salmonella typhimurium to hypochlorous acid. Leyer GJ, et al. **Appl Environ Microbiol** 1997 Feb;63(2):461–7

Induction of alternative splicing of HLA-B27 by bacterial invasion. Huang F, et al. **Arthritis Rheum** 1997 Apr; 40(4):694–703

Effect of a characterized continuous-flow culture of cecal bacteria on Salmonella typhimurium crop colonization in broiler chicks. Hume ME, et al. **Avian Dis** 1996 Apr–Jun; 40(2):391–7

A proteinaceous gene regulatory thermometer in Salmonella. Hurme R, et al. **Cell** 1997 Jul 11;90(1):55–64

Bacterial chemotaxis: a field in motion. Stock AM, et al. **Curr Opin Struct Biol** 1995 Dec;5(6):744–51 (56 ref.)

Inhibition of Salmonella typhimurium adhesion to Caco-2 cell cultures by Lactobacillus strain GG spent culture supernate: only a pH effect? Lehto EM, et al. **FEMS Immunol Med Microbiol** 1997 Jun;18(2):125–32

The unique trafficking pattern of Salmonella typhimurium-containing phagosomes in murine macrophages is independent of the mechanism of bacterial entry. Rathman M, et al. **Infect Immun** 1997 Apr; 65(4):1475–85

Effects of stress treatments on the detection of Salmonella typhimurium by in situ hybridization. Tolker-Nielsen T, et al. **Int J Food Microbiol** 1997 Apr 15;35(3):251–8

Antimicrobial resistance in Salmonella enterica subsp. enterica serovar typhimurium from humans and production animals. Seyfarth AM, et al. **J Antimicrob Chemother** 1997 Jul;40(1):67–75

The role of fur in the acid tolerance response of Salmonella typhimurium is physiologically and genetically separable from its role in iron acquisition. Hall HK, et al. **J Bacteriol** 1996 Oct;178(19):5683–91

An extreme clockwise switch bias mutation in fliG of Salmonella typhimurium and its suppression by slow-motile mutations in motA and motB. Togashi F, et al. **J Bacteriol** 1997 May;179(9):2994–3003

Glycerol elicits energy taxis of Escherichia coli and Salmonella typhimurium. Zhulin IB, et al. **J Bacteriol** 1997 May;179(10):3196–201

Locations of terminal segments of flagellin in the filament structure and their roles in polymerization and polymorphism. Mimori-Kiyosue Y, et al. **J Mol Biol** 1997 Jul 11;270(2):222–37

Adhesion, invasion and intracellular replication of Salmonella typhimurium in a murine hepatocyte cell line. Effect of cytokines and LPS on antibacterial activity of hepatocytes. Lajarin F, et al. **Microb Pathog** 1996 Nov;21(5):319–29

Internal pH crisis, lysine decarboxylase and the acid tolerance response of Salmonella typhimurium. Park YK, et al. **Mol Microbiol** 1996 May;20(3):605–11

Signal termination in bacterial chemotaxis: CheZ mediates dephosphorylation of free rather than switch-bound CheY. Bren A, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10090–3

Direct interaction of flagellin termini essential for polymorphic ability of flagellar filament. Mimori-Kiyosue Y, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15108–13

Requirement of CDC42 for Salmonella-induced cytoskeletal and nuclear responses. Chen LM, et al. **Science** 1996 Dec 20;274(5295):2115–8

Adherence of Salmonella typhimurium to murine peritoneal macrophages is mediated by lipopolysaccharide and complement receptors. al-Bahry SN, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):83–92

RADIATION EFFECTS

[The mutagenic action of radioactive contaminants of feed and food products on strains TA98 and TA100 of Salmonella typhimurium] Matseliukh BP, et al. **Mikrobiol Z** 1996 May–Jun;58(3):49–53 (Eng. Abstr.) **(Ukr)**

ULTRASTRUCTURE

The flk gene of Salmonella typhimurium couples flagellar P- and L-ring assembly to flagellar morphogenesis. Karlinsey JE, et al. **J Bacteriol** 1997 Apr;179(7):2389–400

Assembly of the switch complex onto the MS ring complex of Salmonella typhimurium does not require any other flagellar proteins. Kubori T, et al. **J Bacteriol** 1997 Feb; 179(3):813–7

[A novel method of concentrating bacterial suspensions for transmission electron microscopy] Didenko LV, et al. **Mol Gen Mikrobiol Virusol** 1996 Oct–Dec;(4):35–9 (Eng. Abstr.) **(Rus)**

VIROLOGY

Interactions of phage P22 tails with their cellular receptor, Salmonella O-antigen polysaccharide. Baxa U, et al. **Biophys J** 1996 Oct;71(4):2040–8

SALMONELLA TYPHOSA see **SALMONELLA TYPHI**

SALMONELLOSIS see **SALMONELLA INFECTIONS**

SALMONIDAE

Further characterisation of fast, slow and cardiac muscle tropomyosins from salmonid fish. Jackman DM, et al. **Eur J Biochem** 1996 Dec 1;242(2):363–71

Disease problems of salmonid fish in Japan caused by international trade. Yoshimizu M. **Rev Sci Tech** 1996 Jun; 15(2):533–49 (28 ref.)

ANATOMY & HISTOLOGY

Summer osmoregulatory capacity of the world's northernmost living salmonid. Nilssen KJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R743–9

EMBRYOLOGY

Characteristics of current international trade of live salmonid eggs. Jansen M, et al. **Rev Sci Tech** 1996 Jun;15(2):423–33 (20 ref.)

GENETICS

Localization of the repetitive telomeric sequence (TTAGGG)n in four salmonid species. Abuín M, et al. **Genome** 1996 Oct;39(5):1035–8

Complex evolution of a salmonid microsatellite locus and its consequences in inferring allelic divergence from size information. Angers B, et al. **Mol Biol Evol** 1997 Mar; 14(3):230–8

IMMUNOLOGY

Vaccination strategies in freshwater salmonid aquaculture. Larsen JL, et al. **Dev Biol Stand** 1997;90:391–400 (30 ref.)

Vaccination strategies in seawater cage culture of salmonids. Lillehaug A. **Dev Biol Stand** 1997;90:401–8 (23 ref.)

METABOLISM

Distribution of neuropeptide Y and gonadotropin-releasing hormone immunoreactivities in the brain and hypophysis of the ayu, Plecoglossus altivelis (Teleostei). Chiba A, et al. **Arch Histol Cytol** 1996 May;59(2):137–48

MICROBIOLOGY

In vitro infection of a cell line from Ictalurus nebulosus with Piscirickettsia salmonis. Almendras FE, et al. **Can J Vet Res** 1997 Jan;61(1):66–8

Growth of the fish pathogen Renibacterium salmoninarum on different media. Bandín I, et al. **Microbiologia** 1996 Sep; 12(3):439–42

PARASITOLOGY

Epizootiology of protozoans in farmed salmonids at northern latitudes. Rintamäki-Kinnunen P, et al. **Int J Parasitol** 1997 Jan;27(1):89–99

Colonization and establishment of Pomphorhynchus laevis (Acanthocephala) in an isolated English river. Kennedy CR. **J Helminthol** 1996 Mar;70(1):27–31

PHYSIOLOGY

Summer osmoregulatory capacity of the world's northernmost living salmonid. Nilssen KJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R743–9

Relationship between vitellogenin and its related egg yolk proteins in Sakhalin taimen (Hucho perryi). Hiramatsu N, et al. **Comp Biochem Physiol A Physiol** 1996 Nov; 115(3):243–51

Phylogenetic relationship of the genus Oncorhynchus species inferred from nuclear and mitochondrial markers. Kitano

SALMONIDAE

T, et al. **Genes Genet Syst** 1997 Feb;72(1):25–34
Cone photoreceptor topography in the retina of sexually mature Pacific salmonid fishes. Beaudet L, et al. **J Comp Neurol** 1997 Jun 23;383(1):49–59

SALPINGITIS

COMPLICATIONS

[Laparoscopic diagnosis of tubal infertility and fallopian tube lesions] Yang Y, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Jun;31(6):327–9 (Eng. Abstr.) **(Chi)**
[Ectopic pregnancy recurrence: role of gynecologic, obstetric, contraceptive and smoking history] Saada M, et al. **Contracept Fertil Sex** 1997 Jun;25(6):457–62 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Oral contraceptives do not alter the course of experimentally induced chlamydial salpingitis in monkeys. Patton DL, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):89–92
[Use of an experimental Chlamydia trachomatis salpingitis model for evaluating the effectiveness of antibiotics and anti-inflammatory agents on fertility] Verhoest P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(3):309–14 (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

[Salpingitis: has it really disappeared?] Judlin P, et al. **Contracept Fertil Sex** 1997 Jan;25(1):11–4 **(Fre)**

IMMUNOLOGY

Antibodies to the chlamydial 60 kd heat-shock protein are associated with laparoscopically confirmed perihepatitis. Money DM, et al. **Am J Obstet Gynecol** 1997 Apr; 176(4):870–7

MICROBIOLOGY

Tuboovarian abscess and peritonitis caused by Streptococcus pneumoniae serotype 1 in young girls. Sirotnak AP, et al. **Clin Infect Dis** 1996 Jun;22(6):993–6
Does Chlamydia trachomatis MoPn enter a microbiologically-inapparent state during experimental infection of the mouse genital tract? Beale AS. **Microb Pathog** 1997 Feb;22(2):99–112
Haemophilus influenzae salpingitis and septicemia in an adult. Carmeci C, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):863
[Mycobacterial antigens and antitubercular antibodies in patients with tuberculosis salpingo-oophoritis] Bazarova AB, et al. **Probl Tuberk** 1997;(4):26–8 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Vaginal cryotherapy procedures in the treatment of patients with chronic salpingo-oophoritis] Myzenskaia ME, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Nov–Dec; (6):25–6 (Eng. Abstr.) **(Rus)**

SURGERY

A study of second-look laparoscopy after acute salpingitis. Gerber B, et al. **Arch Gynecol Obstet** 1996;258(4):193–200

ULTRASONOGRAPHY

Endovaginal sonography for the diagnosis of upper genital tract infection. Boardman LA, et al. **Obstet Gynecol** 1997 Jul;90(1):54–7

SALPINGOGRAPHY see **HYSTEROSALPINGOGRAPHY**

SALPINGOSTOMY

Laparoscopic salpingostomy versus methotrexate injections [letter; comment] Creinin MD. **Am J Obstet Gynecol** 1997 Apr;176(4):949; discussion 949–50. Comment on: Am J Obstet Gynecol 1996 Sep;175(3 Pt 1):600–2.
Laparoscopic salpingostomy versus methotrexate injection [letter; comment] Peleg D. **Am J Obstet Gynecol** 1997 Apr; 176(4):949; discussion 949–50. Comment on: Am J Obstet Gynecol 1996 Sep;175(3 Pt 1):600–2.
Laparoscopic salpingostomy versus laparoscopic local methotrexate injection in the management of unruptured ectopic gestation [see comments] Zilber U, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):600–2. Comment in: Am J Obstet Gynecol 1997 Apr;176(4):949; discussion 949–50.
Pregnancy outcome after laparoscopic fimbrioplasty in nonocclusive distal tubal disease. Saleh WA, et al. **Fertil Steril** 1997 Mar;67(3):474–80
Tubal patency and conception rates with three methods of laparoscopic terminal neosalpingostomy. Oh ST. **J Am Assoc Gynecol Laparosc** 1996 Aug;3(4):519–23
Comparison of local injection of methotrexate and linear salpingostomy in the conservative laparoscopic treatment of ectopic pregnancy. Porpora MG, et al. **J Am Assoc Gynecol Laparosc** 1996 Feb;3(2):271–6
Methotrexate prophylaxis for persistent ectopic pregnancy after conservative treatment by salpingostomy. Graczykowski JW, et al. **Obstet Gynecol** 1997 Jan; 89(1):118–22

ADVERSE EFFECTS

Ruptured isthmal pregnancy following laparoscopic salpingostomy in the ipsilateral tube. Tsutsumi O, et al. **Int J Gynaecol Obstet** 1997 May;57(2):187–9

METHODS

Impact of the learning curve on term delivery rates following laparoscopic salpingostomy for infertility associated with distal tubal occlusive disease. Dunphy BC, et al. **Hum Reprod** 1997 Jun;12(6):1181–3
Randomised trial of systemic methotrexate versus laparoscopic salpingostomy in tubal pregnancy. Hajenius PJ, et al. **Lancet** 1997 Sep 13;350(9080):774–9
[Distal tubal surgery: a critical review of 104 laparoscopic distal tuboplasties] Filippini F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(5):471–8 (31 ref.) (Eng. Abstr.) **(Fre)**

SALSOLINE ALKALOIDS

ANALYSIS

Assay for the (R)- and (S)-enantiomers of salsolinols in biological samples and foods with ion-pair high-performance liquid chromatography using beta-cyclodextrin as a chiral mobile phase additive. Deng Y, et al. **J Chromatogr B Biomed Appl** 1997 Feb 21; 689(2):313–20
N-methyl-(R)salsolinol as a dopaminergic neurotoxin: from an animal model to an early marker of Parkinson's disease. Naoi M, et al. **J Neural Transm Suppl** 1997;50:89–105 (49 ref.)

METABOLISM

A dopaminergic neurotoxin, 1(R), 2(N)-dimethyl-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline, N-methyl(R)salsolinol, and its oxidation product, 1,2(N)-dimethyl-6,7-dihydroxyisoquinolinium ion, accumulate in the nigro-striatal system of the human brain. Maruyama W, et al. **Neurosci Lett** 1997 Feb 14;223(1):61–4

PHARMACOLOGY

An endogenous dopaminergic neurotoxin, N-methyl-(R)-salsolinol, induces DNA damage in human dopaminergic neuroblastoma SH-SY5Y cells. Maruyama W, et al. **J Neurochem** 1997 Jul;69(1):322–9

SALT GLAND

Ultrastructural and cytochemical characterization of cultured dogfish shark rectal gland cells. Valentich JD, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1993–2003

CYTOLOGY

Electrophysiological properties of different cell types in the shark rectal gland. Xiao YF. **Life Sci** 1997;60(24):2231–43

DRUG EFFECTS

Responses of gull kidneys and salt glands to NaCl loading. Hughes MR. **Can J Physiol Pharmacol** 1995 Dec; 73(12):1727–32
A preliminary investigation of the effects of vasoactive intestinal peptide on secretion from the lingual salt glands of Crocodylus porosus. Franklin CE, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):74–8

ENZYMOLOGY

Localization of NADPH-diaphorase activity in the salt gland of the saltwater-acclimated Pekin duck. Hübschle T, et al. **Neurosci Lett** 1995 Nov 24;200(3):163–6

METABOLISM

Clustered distribution of calcium sensitivities: an indication of hetero-tetrameric gating components in Ca2+-activated K+ channels reconstituted from avian nasal gland cells. Wu JV, et al. **J Membr Biol** 1996 Dec;154(3):275–82

PHYSIOLOGY

cAMP activates an ATP-conductive pathway in cultured shark rectal gland cells. Cantiello HF, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C466–75
Endogenous plasma atrial natriuretic peptide and the control of salt gland function in the Pekin duck. Gray DA, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1080–5
Cellular and molecular biology of chloride secretion in the shark rectal gland: regulation by adenosine receptors. Forrest JN Jr. **Kidney Int** 1996 Jun;49(6):1557–62 (20 ref.)
The rectal gland of Squalus acanthias: a model for the transport of chloride. Silva P, et al. **Kidney Int** 1996 Jun; 49(6):1552–6 (50 ref.)

SALTS

Suppressive effects of salts on droplet coalescence in a commercially available fat emulsion during freezing for storage. Komatsu H, et al. **J Pharm Sci** 1997 Apr; 86(4):497–502

ADMINISTRATION & DOSAGE

Nutritional and metabolic effects and significance of mild orotic aciduria during dietary supplementation with arginine or its organic salts after trauma injury in rats. Jeevanandam M, et al. **Metabolism** 1997 Jul;46(7):785–92

ADVERSE EFFECTS

Salt dermatitis in the aquarium industry. Tong D. **Contact Dermatitis** 1996 Jan;34(1):59–60

CHEMISTRY

Capillary isoelectric focusing of physiologically derived proteins with on-line desalting of isotonic salt concentrations. Clarke NJ, et al. **Anal Chem** 1997 Jul 15; 69(14):2786–92
Exceptionally stable salt bridges in cytochrome P450cam have functional roles. Lounnas V, et al. **Biochemistry** 1997 May 6;36(18):5402–17
Simplified desalting of ligation reactions immediately prior to electroporation into E. coli. Atrazhev AM, et al. **Biotechniques** 1996 Dec;21(6):1024
Thermodynamics of water-lipid interaction in presence and absence of salts. Dutta P, et al. **Indian J Biochem Biophys** 1996 Apr;33(2):131–40
Effects of metal salts on poly(DL-lactide-co-glycolide) polymer hydrolysis. Zhang Y, et al. **J Biomed Mater Res** 1997 Mar 15;34(4):531–8
Stabilization of helical peptides by mixed spaced salt bridges. Berger JS, et al. **J Biomol Struct Dyn** 1996 Dec; 14(3):285–91
Theory of phase formation in aqueous two-phase systems. Cabezas H Jr. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):3–30 (98 ref.)
Protein partition between the different phases comprising poly(ethylene glycol)-salt aqueous two-phase systems, hydrophobic interaction chromatography and precipitation: a generic description in terms of salting-out effects. Huddleston J, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):31–41
Partitioning behavior of group 1 and 2 cations in poly(ethylene glycol)-based aqueous biphasic systems. Rogers RD, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):237–41
Effects of neutral salts on RNA chain elongation and pausing by Escherichia coli RNA polymerase. Chan CL, et al. **J Mol Biol** 1997 Apr 25;268(1):37–53

METABOLISM

Haloanaerobium congolense sp. nov., an anaerobic, moderately halophilic, thiosulfate- and sulfur-reducing bacterium from an African oil field. Ravot G, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):81–8
Comparative physiology of salt tolerance in Candida tropicalis and Saccharomyces cerevisiae. García MJ, et al. **Microbiology** 1997 Apr;143 (Pt 4):1125–31

PHARMACOLOGY

Interaction of recombinant rat nucleoside diphosphate kinase alpha with bleached bovine retinal rod outer segment membranes: a possible mode of pH and salt effects. Orlov NYa, et al. **Biochem Mol Biol Int** 1997 Jan;41(1):189–98
Salinity and osmotic stress-regulated proteins in cowpea Rhizobium 4a (peanut isolate). Wankhade S, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):621–8
Thermal stability of calf skin collagen type I in salt solutions. Komsa-Penkova R, et al. **Biochim Biophys Acta** 1996 Oct 17;1297(2):171–81
Temperature and amiloride alter taste nerve responses to Na+, K+, and NH+4 salts in rats. Lundy RF Jr, et al. **Brain Res** 1997 Jan 9;744(2):309–17
Water versus salty taste and Iontophoretic ANGII responses of septopreoptic neurons in dehydrated and euhydrated awake rats. Mousseau MC, et al. **Brain Res Bull** 1996; 41(3):167–73
Enhancing effects of binary mixtures of acid with salt on the gustatory neural activity in the clawed toad, Xenopus laevis. Yamashita S, et al. **Brain Res Bull** 1997;42(5):385–92
Studies on high salt tolerance of transgenic tobacco. Liu J, et al. **Chin J Biotechnol** 1995;11(4):275–80
Isolation of differentially expressed cDNA clones from salt-adapted Aspergillus nidulans. Redkar RJ, et al. **Curr Genet** 1996 Jan;29(2):130–5
A varicella vaccine stable at 5 degrees C. Fanget B, et al. **Dev Biol Stand** 1996;87:167–71
DL-leucine transport in a Saccharomyces cerevisiae mutant resistant to quaternary ammonium salts. Obłąk E, et al. **Folia Microbiol (Praha)** 1996;41(1):116–8
Alkaline unfolding and salt-induced folding of yeast alcohol dehydrogenase under high pH conditions. Le WP, et al. **Int J Pept Protein Res** 1996 Jun;47(6):484–90
Salt effects on protein stability: two-stranded alpha-helical coiled-coils containing inter- or intrahelical ion pairs. Kohn WD, et al. **J Mol Biol** 1997 Apr 11;267(4):1039–52
Salt taste responses of mouse chorda tympani neurons: evidence for existence of two different amiloride-sensitive receptor components for NaCl with different temperature dependencies. Ninomiya Y. **J Neurophysiol** 1996 Nov; 76(5):3550–4

Salt enhances flavour by suppressing bitterness. Breslin PA, et al. **Nature** 1997 Jun 5;387(6633):563

Influence of different dietary salts on the cardiovascular and renal effects of moxonidine in spontaneously hypertensive rats. Mervaala EM, et al.
Naunyn Schmiedebergs Arch Pharmacol 1997 Jul; 356(1):107–14

Increase of urocortin–like immunoreactivity in the rat hypothalamo–neurohypophysial system after salt loading and hypophysectomy. Hara Y, et al. **Neurosci Lett** 1997 May 16;227(2):127–30

Salt loading abolishes osmotically stimulated vasopressin release within the supraoptic nucleus. Ludwig M, et al. **Neurosci Lett** 1996 Aug 30;215(1):1–4

Inhibition of proliferation of psoriatic and healthy fibroblasts in cell culture by selected Dead–sea salts. Levi–Schaffer F, et al. **Pharmacology** 1996 May;52(5):321–8

Effect of umami taste on pleasantness of low–salt soups during repeated testing. Roininen K, et al.
Physiol Behav 1996 Sep;60(3):953–8

Mineralocorticoids, salt, hypertension: effects on the heart. Young MJ, et al. **Steroids** 1996 Apr;61(4):233–5 (16 ref.)

SALVAGE THERAPY

Prognostic variables and results of salvage treatment in Hodgkin's disease. Abrahamsen AF, et al. **Acta Oncol** 1996; 35 Suppl 8:67–72

Massive autoclaved allografts and autografts for limb salvage surgery. A 1–8 year follow–up of 23 patients. Asada N, et al. **Acta Orthop Scand** 1997 Aug;68(4):392–5

Re–evaluation of time to progression of foscarnet salvage therapy for cytomegalovirus retinitis in AIDS patients clinically resistant to ganciclovir [letter] Mueller AJ, et al. **AIDS** 1997 Mar;11(3):397–9

Alternating mini–BEAM/ESHAP as salvage therapy for refractory non–Hodgkin's lymphomas. Caballero MD, et al. **Ann Hematol** 1997 Feb;74(2):79–82

Salvage treatment for primary resistant acute myelogenous leukemia consisting of intermediate–dose cytosine arabinoside and interspaced continuous infusions of idarubicin: a phase–II study (no. 06901) of the EORTC Leukemia Cooperative Group. De Witte T, et al.
Ann Hematol 1996 Mar;72(3):119–24

Ifosfamide and paclitaxel salvage chemotherapy for advanced epithelial ovarian cancer. Dimopoulos MA, et al.
Ann Oncol 1997 Feb;8(2):195–7

High–dose chemotherapy in germ–cell tumors. Droz JP, et al. **Ann Oncol** 1996 Dec;7(10):997–1003 (65 ref.)

Phase II study of paclitaxel as salvage treatment in advanced endometrial cancer. Lissoni A, et al. **Ann Oncol** 1996 Oct; 7(8):861–3

Paclitaxel and vinorelbine in anthracycline–pretreated breast cancer: a phase II study. Michelotti A, et al.
Ann Oncol 1996 Oct;7(8):857–60

Intensive therapy and autotransplant for patients with an incomplete response to front–line therapy for lymphoma. Prince HM, et al. **Ann Oncol** 1996 Dec;7(10):1043–9

Cricohyoidoepiglottopexy for glottic carcinoma with fixation or impaired motion of the true vocal cord: 5–year oncologic results with 112 patients. Chevalier D, et al.
Ann Otol Rhinol Laryngol 1997 May;106(5):364–9

Results of surgical salvage of locoregional recurrence of carcinoma of the tongue after radiotherapy failure. Yuen AP, et al. **Ann Otol Rhinol Laryngol** 1997 Sep;106(9):779–82

Antitumor activity of paclitaxel after failure of high–dose chemotherapy in a patient with late relapse of a non–seminomatous germ cell tumor. Gerl A, et al.
Anticancer Drugs 1996 Aug;7(6):716–8

Recurrent supratentorial malignant gliomas in children. Long–term salvage therapy with oral etoposide. Chamberlain MC. **Arch Neurol** 1997 May;54(5):554–8

Surgical salvage after radiotherapy for advanced laryngopharyngeal carcinoma. Davidson J, et al.
Arch Otolaryngol Head Neck Surg 1997 Apr;123(4):420–4

Salvage neck dissection for cervical recurrence of nasopharyngeal carcinoma. Yen KL, et al.
Arch Otolaryngol Head Neck Surg 1997 Jul;123(7):725–9

Paclitaxel (Taxol) as salvage therapy for relapsed ovarian cancer. Planner RS, et al. **Aust N Z J Obstet Gynaecol** 1996 May;36(2):168–70

Phase I study of high–dose continuous intravenous infusion of VP–16 in combination with high–dose melphalan followed by autologous bone marrow transplantation in children with stage IV neuroblastoma. Valteau–Couanet D, et al. **Bone Marrow Transplant** 1996 Apr;17(4):485–9

Salvage chemotherapy in metastatic breast cancer: an experience with the combination of mitoxantrone, 5–fluorouracil, and L–leucovorin. Colozza M, et al.
Breast Cancer Res Treat 1996;38(3):277–82

Response to second–line chemotherapy in patients with metastatic breast carcinoma previously responsive to first–line treatment: prognostic factors. Brun B, et al.
Cancer 1997 Jun 1;79(11):2137–46

Delayed/salvage radiation therapy in patients with elevated prostate specific antigen levels after radical prostatectomy. A long term follow–up. Medini E, et al. **Cancer** 1996 Sep 15;78(6):1254–9

Design and analysis of trials of salvage therapy in acute myelogenous leukemia. Estey E, et al.
Cancer Chemother Pharmacol 1997;40 Suppl:S9–12 (08 ref.)

Contractile versus microvascular reserve for the determination of the extent of myocardial salvage after reperfusion. The effect of residual coronary stenosis. Sklenar J, et al. **Circulation** 1996 Sep 15;94(6):1430–40

Salvage therapy for pelvic recurrence following curative rectal cancer resection. Cunningham JD, et al.
Dis Colon Rectum 1997 Apr;40(4):393–400

Trofosfamide as a salvage treatment with low toxicity in malignant lymphoma. A phase II study. Helsing MD.
Eur J Cancer 1997 Mar;33(3):500–2

Remission of recurrent mixed germ cell tumor of the ovary after treatment with vincristine, carboplatin, fluorouracil, and ifosfamide: a case report and review of the literature. Balat O, et al. **Eur J Gynaecol Oncol** 1996;17(5):342–4 (20 ref.)

Prolonged stabilization of progressive platinum–refractory ovarian cancer with paclitaxel: brief report. Balat O, et al. **Eur J Gynaecol Oncol** 1996;17(4):264–6

Salvage intraperitoneal therapy of advanced epithelial ovarian cancer: impact of retroperitoneal nodal disease. Barakat RR, et al. **Eur J Gynaecol Oncol** 1997;18(3):161–3

Leuprolide acetate as a salvage–therapy in relapsed epithelial ovarian cancer. Marinaccio M, et al.
Eur J Gynaecol Oncol 1996;17(4):286–8

Salvage treatment of relapsing Wilms' tumour by autologous bone marrow transplantation. Kullendorff CM, et al.
Eur J Pediatr Surg 1997 Jun;7(3):177–9

Arthrodesis of the first metatarsophalangeal joint to salvage failed silicone implant arthroplasty. Hecht PJ, et al.
Foot Ankle Int 1997 Jul;18(7):383–90 (63 ref.)

Prolonged low doses of oral etoposide may be effective in individual patients with advanced lymphoproliferative disorders refractory to aggressive chemotherapy [letter] Caruso R, et al. **Haematologica** 1997 Jan–Feb;82(1):126–7

Salvage surgery after radiotherapy failure in T1–T2 squamous cell carcinoma of the glottic larynx. McLaughlin MP, et al. **Head Neck** 1996 May–Jun;18(3):229–35

Partial laryngectomy in the treatment of radiation–failure of early glottic carcinoma. Nibu K, et al. **Head Neck** 1997 Mar;19(2):116–20

Salvage procedures for calcaneus fractures. Sangeorzan BJ.
Instr Course Lect 1997;46:339–46 (13 ref.)

Amputation versus limb salvage. Tornetta P 3rd, et al.
Instr Course Lect 1997;46:511–8

Feasibility of salvage chemotherapy for refractory or relapsed non–Hodgkin's lymphoma with two topoisomerase II inhibitors, MST–16 and VP–16. MST–16 Study Group. Kagami Y, et al. **Int J Hematol** 1996 Oct; 64(3–4):221–9

Recurrent cerebellar gliomas: salvage therapy with oral etoposide. Chamberlain MC. **J Child Neurol** 1997 Apr; 12(3):200–4

Role of mitomycin in combination with fluorouracil and radiotherapy, and of salvage chemoradiation in the definitive nonsurgical treatment of epidermoid carcinoma of the anal canal: results of a phase III randomized intergroup study. Flam M, et al. **J Clin Oncol** 1996 Sep; 14(9):2527–39

Late relapse in patients with diffuse large–cell lymphoma treated with MACOP–B. Lee AY, et al. **J Clin Oncol** 1997 May;15(5):1745–53

Ifosfamide– and cisplatin–containing chemotherapy as first–line salvage therapy in germ cell tumors: response and survival. McCaffrey JA, et al. **J Clin Oncol** 1997 Jul; 15(7):2559–63

MVP (mitomycin–C, vinblastine, cisplatin) salvage chemotherapy for relapsed and refractory metastatic breast cancer. Hsu C, et al. **J Formos Med Assoc** 1997 Mar; 96(3):185–8

Salvage chemotherapy for oligodendroglioma. Peterson K, et al. **J Neurosurg** 1996 Oct;85(4):597–601

Regression of advanced refractory ovarian cancer treated with iodine–131–labeled anti–CEA monoclonal antibody. Juweid M, et al. **J Nucl Med** 1997 Feb;38(2):257–60

Neonatal gangrene of the extremities. Letts M, et al.
J Pediatr Orthop 1997 May–Jun;17(3):397–401

Renal salvage procedures in patients with synchronous bilateral Wilms' tumors: a report from the National Wilms' Tumor Study Group. Horwitz JR, et al. **J Pediatr Surg** 1996 Aug;31(8):1020–5

Does extracorporeal membrane oxygenation benefit neonates with congenital diaphragmatic hernia? Application of a predictive equation. Keshen TH, et al. **J Pediatr Surg** 1997 Jun;32(6):818–22

Salvage resection of a chemorefractory mediastinal germ cell tumor. Rivoire M, et al. **J Thorac Cardiovasc Surg** 1996 Oct;112(4):1124–6

The efficacy and complications of salvage cryotherapy of the prostate. Pisters LL, et al. **J Urol** 1997 Mar;157(3):921–5

High–dose cytarabine and mitoxantrone as salvage therapy for refractory non–Hodgkin's lymphoma. Wang WS, et al.
Jpn J Clin Oncol 1997 Jun;27(3):154–7 (26 ref.)

Salvage treatment after failure or relapse following initial chemotherapy for follicular non–Hodgkin's lymphoma. Davidge–Pitts M, et al. **Leuk Lymphoma** 1997 Jan; 24(3–4):341–7

Clinical trials referral resource. New autologous stem–cell transplant protocols. Cheson BD, et al.
Oncology (Huntingt) 1997 Feb;11(2):178–80

Soft tissue sarcoma of the extremity. Limb salvage after failure of combined conservative therapy. Catton C, et al.
Radiother Oncol 1996 Dec;41(3):209–14

Salvage radiotherapy for local failures of lumpectomy and breast irradiation. Mullen EE, et al. **Radiother Oncol** 1997 Jan;42(1):25–9

Fludarabine monophosphate as salvage for refractory chronic lymphocytic leukaemia. Pillay GS, et al. **S Afr Med J** 1996 Aug;86(8):949–51

Salvage lung resection for massive hemoptysis after resolution of pulmonary aspergillosis in a patient with acute leukemia. Venuta F, et al. **Scand Cardiovasc J** 1997; 31(1):51–3

Paclitaxel combinations as front–line and salvage chemotherapy regimens in advanced breast cancer. Conte PF, et al. **Semin Oncol** 1996 Dec;23(6 Suppl 15):39–42 (10 ref.)

Management of hormone–resistant prostate cancer: an Australian trial. Raghavan D, et al. **Semin Oncol** 1996 Dec; 23(6 Suppl 14):20–3

Late relapse of nonseminomatous germ cell tumor of the testis: successful treatment with salvage chemotherapy alone. Papadimitris C, et al. **Urology** 1997 Mar;49(3):469–70 (7 ref.)

CLASSIFICATION

Limb salvage using distraction osteogenesis. A classification of the technique [published erratum appears in J Bone Joint Surg Br 1997 Jul;79(4):693] Tsuchiya H, et al.
J Bone Joint Surg Br 1997 May;79(3):403–11

METHODS

Surgery without radiotherapy in soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:117–9

A prospective phase II trial to evaluate the efficacy and toxicity of hepatic arterial infusion of ifosfamide in patients with inoperable localized hepatocellular carcinoma. Malik IA, et al. **Am J Clin Oncol** 1997 Jun;20(3):289–92

Paclitaxel as salvage therapy in advanced pretreated ovarian cancer: a phase II study. Nardi M, et al.
Am J Clin Oncol 1997 Jun;20(3):230–2

Fibular head autograft. A salvage technique for severely comminuted lateral fractures of the tibial plateau: report of five cases. Russell TA, et al. **Am J Orthop** 1996 Nov; 25(11):766–71

Paclitaxel in the salvage treatment of Hodgkin's disease and non–Hodgkin's lymphoma [letter] Hopfinger G, et al.
Ann Oncol 1996 Apr;7(4):423–4

Salvage therapy with ifosfamide and mitoxantrone in advanced ovarian cancer. Marzola M, et al. **Ann Oncol** 1996 Apr;7(4):419–21

Is there a place for surgery in central small cell lung cancer? Kohman LJ. **Chest Surg Clin N Am** 1997 Feb;7(1):105–12 (36 ref.)

Atovaquone for salvage treatment and suppression of toxoplasmic encephalitis in patients with AIDS. Atovaquone/Toxoplasmic Encephalitis Study Group. Torres RA, et al. **Clin Infect Dis** 1997 Mar;24(3):422–9

Limb salvage in periacetabular sarcomas: review of 21 consecutive cases. Windhager R, et al. **Clin Orthop** 1996 Oct;(331):265–76 (33 ref.)

Salvage brachytherapy of posterior pharyngeal wall squamous cell carcinoma in a previously irradiated area. Pommier P, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1;38(1):53–8

Resection arthrodesis of the knee in the treatment of tumours—a long–term follow–up. Salai M, et al.
Int Orthop 1997;21(2):101–3

Ifosfamide, mesna and epirubicin as second–line chemotherapy in advanced breast cancer. Kiraz S, et al.
J Chemother 1996 Aug;8(4):310–4

Limb salvage surgery and adjuvant radiotherapy for soft tissue sarcomas of the forearm and hand. Bray PW, et al.
J Hand Surg [Am] 1997 May;22(3):495–503

Circumferential wrapping of a flap around a scarred peripheral nerve for salvage of end–stage traction neuritis. Jones NF, et al. **J Hand Surg [Am]** 1997 May;22(3):527–35

Reemployment of patients with surgical salvage of open, high–energy tibial fractures: an outcome study. Arangio GA, et al. **J Trauma** 1997 May;42(5):942–5

Distal revascularization–interval ligation for limb salvage and maintenance of dialysis access in ischemic steal syndrome. Berman SS, et al. **J Vasc Surg** 1997 Sep;26(3):393–402; discussion 402–4

The logistics of damage control. Granchi TS, et al.
Surg Clin North Am 1997 Aug;77(4):921–8 (13 ref.)

Postoperative care and complications of damage control surgery. Martin RR, et al. **Surg Clin North Am** 1997 Aug; 77(4):929–42 (16 ref.)

Limb salvage in peripheral vascular trauma. Adebo O.
West Afr J Med 1996 Jul–Sep;15(3):139–42 (33 ref.)

STANDARDS

Salvage liver surgery of a chemorefractory ovarian choriocarcinoma. Rivoire M, et al. **Gynecol Oncol** 1997 Apr;65(1):185–7

SALVELINUS see **TROUT**

SAMARIUM

ADMINISTRATION & DOSAGE

Dose response relationship and multiple dose efficacy and toxicity of samarium–153–EDTMP in metastatic cancer to

SAMARIUM

bone. Alberts AS, et al. **Radiother Oncol** 1997 May; 43(2):175–9

ANALYSIS

Rare earth elements as nonabsorbable fecal markers in studies of iron absorption. Fairweather-Tait SJ, et al. **Am J Clin Nutr** 1997 Apr;65(4):970–6

DIAGNOSTIC USE

Colonic delivery of dexamethasone: a pharmacoscintigraphic evaluation. Kenyon CJ, et al. **Aliment Pharmacol Ther** 1997 Feb;11(1):205–13

PHARMACOKINETICS

Biospeciation, by potentiometry and computer simulation, of Sm-EDTMP, a bone tumor palliative agent. Charmaine de Witt G, et al. **Biometals** 1996 Oct;9(4):351–61

Evaluation of samarium-153 and holmium-166-EDTMP in the normal baboon model. Louw WK, et al. **Nucl Med Biol** 1996 Nov;23(8):935–40

PHARMACOLOGY

[Influence on extratumoral organ activities of tumor-affinity samarium-153 preparations] Schomäcker K, et al. **Nuklearmedizin** 1997 Mar;36(2):47–51 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Samarium-153 lexidronam for painful bone metastases. **Med Lett Drugs Ther** 1997 Aug 29;39(1008):83–4

Clinical outcome after one year following samarium-153 particulate hydroxyapatite radiation synovectomy [letter; comment] Boerbooms AM. **Scand J Rheumatol** 1997; 26(2):136–7. Comment on: Scand J Rheumatol 1996;25(6):360–6.

Clinical outcome after one year following samarium-153 particulate hydroxyapatite radiation synovectomy [see comments] Clunie G, et al. **Scand J Rheumatol** 1996; 25(6):360–6. Comment in: Scand J Rheumatol 1997;26(2):136–7.

SAMPLE SIZE

A statistics primer. Power analysis and sample size determination. Greenfield ML, et al. **Am J Sports Med** 1997 Jan-Feb;25(1):138–40

Sample size estimation for nominal data [letter] Lerman J. **Can J Anaesth** 1997 Aug;44(8):901

Study design in clinical research: sample size estimation and power analysis [published erratum appears in Can J Anaesth 1996 Aug;43(8):880] Lerman J. **Can J Anaesth** 1996 Feb;43(2):184–91 (11 ref.)

Randomized clinical trials in the presence of diagnostic uncertainty: implications for measures of efficacy and sample size. Berlin JA, et al. **Control Clin Trials** 1996 Jun; 17(3):191–200

A user's review of commercial sample size software for design of biomedical studies using survival data. Iwane M, et al. **Control Clin Trials** 1997 Feb;18(1):65–83 (18 ref.)

Sample size calculations for within-patient comparisons with a binary or survival endpoint. Law MG. **Control Clin Trials** 1996 Jun;17(3):221–5

Sample size calculations for repeated measures experiments [letter; comment] Rochon J. **Control Clin Trials** 1995 Dec; 16(6):449–52. Comment on: Control Clin Trials 1994 Apr;15(2):100–23. Comment on: Control Clin Trials 1994 Jun;15(3):165–72.

Sample size calculation for complex clinical trials with survival endpoints. Shih JH. **Control Clin Trials** 1995 Dec; 16(6):395–407

The importance of sample size for the estimation of F wave latency parameters in the peroneal nerve. Chroni E, et al. **Electroencephalogr Clin Neurophysiol** 1996 Oct; 101(5):375–8

Critical factors in the determination of focus group size. Tang KC, et al. **Fam Pract** 1995 Dec;12(4):474–5 (13 ref.)

Using aspects of study design in sample size estimation. Phillips A, et al. **J Biopharm Stat** 1997 May;7(2):215–26

The effects of sample size and variability on the correlation coefficient. Bates BT, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):386–91

Motor unit number estimation: sample size considerations. Slawnych M, et al. **Muscle Nerve** 1997 Jan;20(1):22–8

Summary of work group II: small-scale clinical studies. Dutta C, et al. **Muscle Nerve Suppl** 1997;5:S117–20

Realities of the effect size calculation process: considerations for beginning meta-analysts. Perry PD. **NIDA Res Monogr** 1997;170:120–9

The overemphasis on power analysis. Knapp TR. **Nurs Res** 1996 Nov-Dec;45(6):379–81 (18 ref.)

Sample sizes for randomized trials measuring quality of life in cancer patients. Julious SA, et al. **Qual Life Res** 1997 Mar;6(2):109–17

Planning significant and meaningful research in exercise science: estimating sample size. Thomas JR, et al. **Res Q Exerc Sport** 1997 Mar;68(1):33–43

Determining sample size and power in clinical trials: the forgotten essential. Grimes DA, et al. **Semin Reprod Endocrinol** 1996 May;14(2):125–31 (16 ref.)

Power determination for geographically clustered data using generalized estimating equations. Hendricks SA, et al. **Stat Med** 1996 Sep 15-30;15(17-18):1951–60

Bayesian and mixed Bayesian/likelihood criteria for sample size determination. Joseph L, et al. **Stat Med** 1997 Apr 15;16(7):769–81

Two sample comparison for large groups of correlated binary responses. Lee EW. **Stat Med** 1996 Jun 15;15(11):1187–97

Exact equivalence test for risk ratio and its sample size determination under inverse sampling. Lui KJ. **Stat Med** 1997 Aug 15;16(15):1777–86

Sample size requirements for stratified prospective studies with null hypothesis of non-unity relative risk using the score test. Nam JM. **Stat Med** 1994 Jan 15;13(1):79–86

Some optimal and non-optimal two-stage designs using an alpha-spending function. Patel HI. **Stat Med** 1996 Aug 30; 15(16):1739–45

A method for determining the size of internal pilot studies. Sandvik L, et al. **Stat Med** 1996 Jul 30;15(14):1587–90

Sample sizes calculations for ordered categorical data [letter] Whitehead J. **Stat Med** 1996 May 30;15(10):1065–6

[Sample size in research papers] Sentís J. **Med Clin (Barc)** 1997 Apr 5;108(13):512–6 **(Spa)**

[Practical aspects regarding sample size in clinical research] Vega Ramos B, et al. **Rev Gastroenterol Mex** 1996 Jul-Sep; 61(3):246–51 (12 ref.) (Eng. Abstr.) **(Spa)**

SAMPLING BIAS see **SELECTION BIAS**

SAMPLING STUDIES

Statistical methodology: I. Incorporating the prevalence of disease into the sample size calculation for sensitivity and specificity [see comments] Buderer NM. **Acad Emerg Med** 1996 Sep;3(9):895–900 (5 ref.). Comment in: Acad Emerg Med 1996 Sep;3(9):824.

Re: "Survey inference for subpopulations" [letter; comment] Wen SW. **Am J Epidemiol** 1997 Mar 15;145(6):569–70. Comment on: Am J Epidemiol 1996 Jul 1;144(1):102–6.

Are task-based exposure levels a valuable index of exposure for epidemiology? [letter; comment] Cherrie JW. **Ann Occup Hyg** 1996 Dec;40(6):715–22. Comment on: Ann Occup Hyg 1995 Apr;39(2):193–201.

Sampling for qualitative research. Marshall MN. **Fam Pract** 1996 Dec;13(6):522–5

Multiple sites for the detection of Chlamydia trachomatis in women--does it matter? [letter] [see comments] Joseph AT, et al. **Int J STD AIDS** 1996 Mar-Apr;7(2):146–7. Comment in: Int J STD AIDS 1997 Feb;8(2):139.

A population pharmacokinetic model for docetaxel (Taxotere): model building and validation. Bruno R, et al. **J Pharmacokinet Biopharm** 1996 Apr;24(2):153–72

Comparison of some practical sampling strategies for population pharmacokinetic studies. Jonsson EN, et al. **J Pharmacokinet Biopharm** 1996 Apr;24(2):245–63

Adaptive sampling in behavioral surveys. Thompson SK. **NIDA Res Monogr** 1997;167:296–319 (76 ref.)

Incorporating auxiliary variables into probability sampling designs. Trinkoff AM, et al. **Nurs Res** 1997 May-Jun; 46(3):182–5

Comparing a sample proportion with a specified population proportion based on the mid-P method. Tai BC, et al. **Psychiatry Res** 1997 Aug 8;71(3):201–3

The Young Men's Survey: methods for estimating HIV seroprevalence and risk factors among young men who have sex with men. MacKellar D, et al. **Public Health Rep** 1996;111 Suppl 1:138–44

Estimating means and percentages in a complex sampling survey: application to a French national survey on sexual behaviour (ACSF). Analyse des Comportements Sexuels en France. Warszawski J, et al. **Stat Med** 1997 Feb 28; 16(4):397–423

Multi-stage sampling in genetic epidemiology. Whittemore AS, et al. **Stat Med** 1997 Jan 15-Feb 15;16(1-3):153–67

Conducting a descriptive survey: 2. Choosing a sampling strategy. Macfarlane SB. **Trop Doct** 1997 Jan;27(1):14–21

[Estimation methods in a sampling survey] Warszawski J, et al. **Rev Epidemiol Sante Publique** 1997 Apr;45(2):150–68 (Eng. Abstr.) **(Fre)**

SAN MIGUEL SEA LION VIRUSES see **CALICIVIRUS**

SAND BATHS see **AMMOTHERAPY**

SAND-DOLLAR see **SEA URCHINS**

SANDFLIES see **PSYCHODIDAE**

SANDFLY FEVER see **PHLEBOTOMUS FEVER**

SANDFLY FEVER GROUP VIRUSES

IMMUNOLOGY

Immunoblot detection of antibodies to Toscana virus. Schwarz TF, et al. **J Med Virol** 1996 Jun;49(2):83–6

SANDFLY FEVER SICILIAN VIRUS see **PHLEBOVIRUS**

SANDFLY FEVER VIRUS see **SANDFLY FEVER GROUP VIRUSES**

SANDHOFF DISEASE

COMPLICATIONS

Neuroleptic malignant syndrome with gangliosidosis type II. Manor I, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1222–4

DIAGNOSIS

MRI in a case of Sandhoff's disease. Hittmair K, et al. **Neuroradiology** 1996 May;38 Suppl 1:S178–80

[Juvenile GM2 gangliosidosis with progressive spinal muscular atrophy onset] Rondot P, et al. **Rev Neurol (Paris)** 1997 Mar;153(2):120–3 (Eng. Abstr.) **(Fre)**

[Evolutive neuroradiological alterations in Sandhoff's disease] Gutiérrez-Solana LG, et al. **Rev Neurol** 1996 Oct; 24(134):1263–6 (Eng. Abstr.) **(Spa)**

GENETICS

Significance of two point mutations present in each HEXB allele of patients with adult GM2 gangliosidosis (Sandhoff disease) homozygosity for the Ile207-->Val substitution is not associated with a clinical or biochemical phenotype. Redonnet-Vernhet I, et al. **Biochim Biophys Acta** 1996 Nov 15;1317(2):127–33

PHYSIOPATHOLOGY

[Evolutive neuroradiological alterations in Sandhoff's disease] Gutiérrez-Solana LG, et al. **Rev Neurol** 1996 Oct; 24(134):1263–6 (Eng. Abstr.) **(Spa)**

SANFILIPPO'S SYNDROME see **MUCOPOLYSACCHARIDOSIS III**

SANGO VIRUS see **SIMBU GROUP VIRUSES**

SANITARY ENGINEERING

Requirements for sustainable schistosomiasis control. Traoré M. **World Health Forum** 1996;17(2):184–6

[The evaluation of the efficiency of operating purification installations in relation to intestinal parasitic agents] Skripova LV, et al. **Med Parazitol (Mosk)** 1996 Oct-Dec; (4):51–2 **(Rus)**

INSTRUMENTATION

[The hygienic evaluation of a local unit for sewage treatment] Zholdakova ZI, et al. **Gig Sanit** 1997 Mar-Apr;(2):8–10 (Eng. Abstr.) **(Rus)**

[The disinfection of water, water-supply systems, tanks and pools by using an electrochemically activated solution of a neutral anolyte] Prilutskiĭ VI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Jul-Aug;(4):31–2 **(Rus)**

SANITATION

The effect of toilet sanitizers and detergents on immunological occult blood tests. Imafuku Y, et al. **Clin Chim Acta** 1996 Sep 30;253(1-2):51–9

Sanitation of the liberated territories in Croatia after the Storm campaign: the example of Lika-Senj County. Puntarić, et al. **Mil Med** 1997 May;162(5):333–7

No laundry detergent, no clean linens, no surgery in African hospital. McCollum C. **Wis Med J** 1996 Aug;95(8):546, 548

[Treatment of sludge from purification stations with the purpose of ameliorating soils intended for agriculture: parasitic contamination and model development with a view to managing the sanitation risk] Gaspard P, et al. **Bull Acad Natl Med** 1997 Jan;181(1):43–56; discussion 57 (Eng. Abstr.) **(Fre)**

[The use of 4 immunological exams for the determination of Chagas disease prevalence in streetsweepers of the City Sanitation Service in the Federal District] Tinoco DL, et al. **Rev Soc Bras Med Trop** 1996 Jan-Feb;29(1):33–40 (Eng. Abstr.) **(Por)**

[Evaluation of the sanitary and hygienic well-being at preschool institutions] Iakubova ISh, et al. **Gig Sanit** 1997 Jan-Feb;(1):26–9 **(Rus)**

[Necessary correction of the existing concept of the sanitary-epidemiological service in the prevention and actions in emergency situations] Morozov VV, et al. **Gig Sanit** 1997 Jan-Feb;(1):57–9 **(Rus)**

[Regarding the article by V.V. Morozov, S.K. Moiseenko, V.A. Trifonov, V.V. Fedorov, N.V. Pigalova, "Necessary correction of the existing concept of the sanitary-epidemiologic service in the prevention and actions in emergency situations" (letter)] Shestopalov NV. **Gig Sanit** 1997 Jan-Feb;(1):60 **(Rus)**

HISTORY

Sanitary reform and nursing. Edwin Chadwick and Florence Nightingale. Widerquist JG. **Nurs Hist Rev** 1997;5:149–60

[Anniversary dates of history of hygiene and sanitation in 1996] Mirskiĭ MB. **Gig Sanit** 1996 Jul-Aug;(4):48–50 **(Rus)**

[Role of the public in ensuring health wellbeing of the population of Moscow] Goncharova SG. **Probl Sotsialnoi Gig Istor Med** 1995 May-Jun;(3):47–9 **(Rus)**

[History of sanitary protection in the Far East] Korshunov VA. **Probl Sotsialnoi Gig Istor Med** 1996 Mar-Apr;(2):62 **(Rus)**

LEGISLATION & JURISPRUDENCE

Evaluation of tax bill inserts as a public health strategy to influence septic tank pumping practice. Carr PA, et al. **Can J Public Health** 1996 Sep-Oct;87(5):343-4

[Improvement of sanitary legislation of the Russian Federation] Kutsenko GI, et al. **Gig Sanit** 1997 May-Jun; (3):52-4 **(Rus)**

METHODS

Effect of hatching cabinet sanitation treatments on Salmonella cross-contamination and hatchability of broiler eggs. Bailey JS, et al. **Poult Sci** 1996 Feb;75(2):191-6

STANDARDS

Recommended practices for environmental cleaning in the surgical practice setting. Association of Operating Room Nurses. **AORN J** 1996 Oct;64(4):611-5

Half of the world lives in "medieval" squalor [news] Hope B. **BMJ** 1997 Jul 26;315(7102):208

Sustainability of a water, sanitation and hygiene education project in rural Bangladesh: a 5-year follow-up. Hoque BA, et al. **Bull World Health Organ** 1996;74(4):431-7

Integrating Hazard Analysis and Critical Control Point (HACCP) and sanitation for verifiable food safety. Setiabuhdi M, et al. **J Am Diet Assoc** 1997 Aug; 97(8):889-91

[Impact of improved sanitary conditions and domestic hygiene on the incidence of ascaridiasis and ancylostomiasis in children two to four years old in the rural zones of Ivory Coast] Messou E, et al. **Bull Soc Pathol Exot** 1997; 90(1):48-50 (Eng. Abstr.) **(Fre)**

SANTONIN

ANALOGS & DERIVATIVES

[Reaction of 3-hydroxy-dihydrosantonin with TsOH. A formal synthesis of dihydrocotunolide] Kawamata T, et al. **Yakugaku Zasshi** 1996 Sep;116(9):748-52 (Eng. Abstr.) **(Jpn)**

SAO PAULO TYPHUS see **ROCKY MOUNTAIN SPOTTED FEVER**

SAPHENOUS VEIN

Percutaneous central venous catheterization via the great saphenous vein in neonates. Ohki Y, et al. **Acta Paediatr Jpn** 1997 Jun;39(3):312-6

Primary saphenous vein aneurysm presenting as a femoral hernia: radiographic findings [letter] Gilkeson RC, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1621-2

Cryopreserved veins in myocardial revascularization: possible mechanism for their increased failure. Bilfinger TV, et al. **Ann Thorac Surg** 1997 Apr;63(4):1063-9

Percutaneous occlusion of an iatrogenic aortosaphenous vein--coronary vein fistula via retrograde coronary sinus approach. Lopez JJ, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):339-41

PTCA, thrombolysis or atherectomy: rational treatment of recently occluded saphenous vein grafts. Mehta S, et al. **Indian Heart J** 1995 Sep-Oct;47(5):481-4

Perfused human saphenous veins for the study of the origin of varicose veins: role of the endothelium and of hypoxia. Michiels C, et al. **Int Angiol** 1997 Jun;16(2):134-41

Contractile function of human veins after long-term storage in different media. Grohs JG, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):89-93

A rare uterine tumor presenting as deep venous thrombosis. Theuer HH, et al. **J Ky Med Assoc** 1997 Mar;95(3):102-4

Thrombosis of the proximal greater saphenous vein: ultrasonographic diagnosis and clinical significance. Sover ER, et al. **J Ultrasound Med** 1997 Feb;16(2):113-6

Failure patterns of cryopreserved vein grafts in liver transplantation. Kuang AA, et al. **Transplantation** 1996 Sep 27;62(6):742-7 (21 ref.)

[Pelvic vein thrombosis despite anticoagulant therapy in a 17-year-old patient] Eschrich S, et al. **Internist (Berl)** 1997 Jan;38(1):77-80 **(Ger)**

[Experimental study on preparation of a blood vessel substitute with a small diameter using human ureter and preserved human saphenous vein] Uematsu M, et al. **Nippon Geka Gakkai Zasshi** 1996 Nov;97(11):1027 **(Jpn)**

ABNORMALITIES

Distribution of venous valves in the great saphenous vein in human fetuses (preliminary study). Bruska M. **Folia Morphol (Warsz)** 1995;54(4):279-82

ANATOMY & HISTOLOGY

Contrasting structure of the saphenous vein and internal mammary artery used as coronary bypass vessels. Canham PB, et al. **Cardiovasc Res** 1997 Jun;34(3):557-67

The anatomical variables of the sapheno-popliteal junction visualization by radiological and echographic examinations. Corcos L, et al. **Ital J Anat Embryol** 1996 Jan-Mar; 101(1):15-28

[Vascularization of the wall of the superficial veins. Anatomic study of the vasa vasorum] Lefebvre D, et al. **J Mal Vasc** 1996;21 Suppl C:245-8 (Eng. Abstr.) **(Fre)**

CHEMISTRY

Measurement of thromboxane and prostacyclin in valvulotomized human saphenous veins. Barman SA, et al. **Am Surg** 1997 Mar;63(3):291-3

Immunolocalization of basic fibroblast growth factor receptors in internal thoracic artery and saphenous vein grafts. St Rammos K, et al. **J Thorac Cardiovasc Surg** 1997 Jun;113(6):1111-2

Estrogen receptors in the cardiovascular system. Perrot-Applanat M. **Steroids** 1996 Apr;61(4):212-5

[Hyaluronic acid (hyaluronan) levels in pathological human saphenous veins. Effects of procyanidol oligomers] Drubaix I, et al. **Pathol Biol (Paris)** 1997 Jan;45(1):86-91 (Eng. Abstr.) **(Fre)**

CYTOLOGY

Cell proliferation in aortic, mammary artery and saphenous vein biopsies in patients subjected to open heart surgery. Aaltomaa S, et al. **In Vivo** 1997 May-Jun;11(3):243-7

Characteristics of vascular wall cells subjected to dynamic cyclic strain and fluid shear conditions in vitro. Benbrahim A, et al. **J Surg Res** 1996 Oct;65(2):119-27

Wound healing around and within saphenous vein bypass grafts. O'Brien JE Jr, et al. **J Thorac Cardiovasc Surg** 1997 Jul;114(1):38-45

DRUG EFFECTS

In vivo dose-response characteristics of endothelin-1: studies on rat saphenous vein. Nádasy GL, et al. **Acta Physiol Hung** 1996;84(1):1-7

Nitric oxide-dependent opposite effects of somatostatin on arterial and venous caliber in situ. Szentiványi M Jr, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2238-45

Molecular structure and antioxidant specificity of purpurogallin in three types of human cardiovascular cells. Wu TW, et al. **Biochem Pharmacol** 1996 Oct 11; 52(7):1073-80

Variability in the proliferative responsiveness of cultured human vascular smooth muscle cells to alpha-thrombin. Kanthou C, et al. **Blood Coagul Fibrinolysis** 1995 Dec; 6(8):753-60

Reciprocal inhibition of nitric oxide and prostacyclin synthesis in human saphenous vein. Barker JE, et al. **Br J Pharmacol** 1996 Jun;118(3):643-8

Mechanism of contraction induced by bradykinin in the rabbit saphenous vein. Eguchi D, et al. **Br J Pharmacol** 1997 Feb; 120(3):371-8

Pharmacological studies on prostanoid receptors in the rabbit isolated saphenous vein: a comparison with the rabbit isolated ear artery. Lydford SJ, et al. **Br J Pharmacol** 1996 Jan;117(1):13-20

Influence of the endothelium and nitric oxide on the contractile responses evoked by 5-HT1D receptor agonists in the rabbit isolated saphenous vein. Valentin JP, et al. **Br J Pharmacol** 1996 Sep;119(1):35-42

Endothelin-1 is a mediator of intimal hyperplasia in organ culture of human saphenous vein. Masood I, et al. **Br J Surg** 1997 Apr;84(4):499-503

Preserved vasodilatory response to nitroglycerin in saphenous vein bypass grafts. Berglund H, et al. **Circulation** 1996 Dec 1;94(11):2871-6

Effect of epidural analgesia on venous blood flow after hip arthroplasty. Markel DC, et al. **Clin Orthop** 1997 Jan; (334):168-74

Inhibition of release of tumor necrosis factor-alpha from human vascular tissue and smooth muscle cells by glucocorticoids. Newman WH, et al. **Crit Care Med** 1997 Mar;25(3):519-22

Nitric oxide-dependent and -independent modulation of sympathetic vasoconstriction in the human saphenous vein. Fabi F, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):41-50

Interaction of 5-methyl-urapidil with alpha 1-adrenoceptors in canine blood vessels: impact of pacing-induced heart failure. Forster C. **Eur J Pharmacol** 1996 Dec 27; 318(1):55-63

The dog saphenous vein: a sensitive and selective preparation for the Y2 receptor of neuropeptide Y. Pheng LH, et al. **Eur J Pharmacol** 1997 May 30;327(2-3):163-7

Dilatation of saphenous vein grafts by nitric oxide. Golledge J, et al. **Eur J Vasc Endovasc Surg** 1997 Jul;14(1):41-7

Rilmenidine activates postjunctional alpha 1- and alpha 2-adrenoceptors in the canine saphenous vein. Marsault R, et al. **Fundam Clin Pharmacol** 1996;10(4):379-86

The human saphenous vein in pharmacology: effect of a new micronized flavonoidic fraction (Daflon 500 mg) on norepinephrine induced contraction. Juteau N, et al. **Int Angiol** 1995 Sep;14(3 Suppl 1):8-13

Pharmacological characterization of the muscarinic receptors mediating contraction of canine saphenous vein. Watson N, et al. **J Auton Pharmacol** 1995 Dec;15(6):437-41

Direct effects of triiodothyronine on human internal mammary artery and saphenous veins. Krasner LJ, et al. **J Cardiothorac Vasc Anesth** 1997 Jun;11(4):463-6

Comparative vasoconstrictor effects of angiotensin II, III, and IV in human isolated saphenous vein. Li Q, et al. **J Cardiovasc Pharmacol** 1997 Apr;29(4):451-6

Alpha-adrenoceptor-mediated prejunctional effects of chloroethylclonidine in the canine saphenous vein. Guimarães S, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1326-30

The dipeptide carnosine constricts rabbit saphenous vein as a zinc complex apparently via a serotonergic receptor. O'Dowd A, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):535-43

Endothelium-dependent relaxation of human saphenous veins in response to vasopressin and desmopressin. Aldasoro M, et al. **J Vasc Surg** 1997 Apr;25(4):696-703

Altered endothelial and smooth muscle cell reactivity caused by University of Wisconsin preservation solution in human saphenous vein. Anastasiou N, et al. **J Vasc Surg** 1997 Apr; 25(4):713-21

Alpha 2C-adrenoceptors mediate contractile responses to noradrenaline in the human saphenous vein. Gavin KT, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):406-11

Simultaneous measurement of [3H]noradrenaline release and neurogenic contraction under identical conditions, to determine the prejunctional inhibitory effects of SKF 99101H and BRL 56905 in dog saphenous vein. Medhurst AD, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr;355(4):475-82

EMBRYOLOGY

Connections between the great saphenous vein and other cutaneous veins of the thigh in human fetuses. Bruska M, et al. **Folia Morphol (Warsz)** 1996;55(4):222-3

ENZYMOLOGY

Protein kinase C isoenzymes in rat and human cardiovascular tissues. Erdbrügger W, et al. **Br J Pharmacol** 1997 Jan; 120(2):177-86

Role of protein kinase C in the endothelin-induced contraction in the rabbit saphenous vein. Sudjarwo SA, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):261-9

Increased myosin light chain kinase content in sensitized canine saphenous vein. Liu G, et al. **J Appl Physiol** 1996 Feb;80(2):665-9

Reactive oxygen species produced by macrophage-derived foam cells regulate the activity of vascular matrix metalloproteinases in vitro. Implications for atherosclerotic plaque stability. Rajagopalan S, et al. **J Clin Invest** 1996 Dec 1;98(11):2572-9

INJURIES

Surgical preparative injury and neointima formation increase MMP-9 expression and MMP-2 activation in human saphenous vein. George SJ, et al. **Cardiovasc Res** 1997 Feb; 33(2):447-59

Perforation of saphenous vein graft during coronary stenting: a case report. Shammas NW, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):274-6

Endogenous basic fibroblast growth factor displaced by heparin from the lumenal surface of human blood vessels is preferentially sequestered by injured regions of the vessel wall. Medalion B, et al. **Circulation** 1997 Apr 1; 95(7):1853-62

Stab avulsion of the short saphenous vein [letter; comment] Georgiev M, et al. **Dermatol Surg** 1997 Jul;23(7):597. Comment on: Dermatol Surg 1996 Jul;22(7):657-62.

INNERVATION

The relationship between cutaneous C fibre type and antidromic vasodilatation in the rabbit and the rat. Gee MD, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):31-44

METABOLISM

Nitric oxide activates an iberiotoxin-sensitive potassium channel in human saphenous vein. Höhn J, et al. **Acta Physiol Hung** 1996;84(3):293-4

Vitamin E levels in human atherosclerotic plaque: the influence of risk factors. Killion SL, et al. **Atherosclerosis** 1996 Oct 25;126(2):289-97

Recombinant saphenous vein 5-HT1B receptors of the rabbit: comparative pharmacology with human 5-HT1B receptors. Wurch T, et al. **Br J Pharmacol** 1997 Jan; 120(1):153-9

Changes in the intracellular free amino acid pool in human saphenous vein tissue culture. Suleiman MS, et al. **Exp Physiol** 1996 May;81(3):435-46

Nonsuperoxide lucigenin-enhanced chemiluminescence from phospholipids and human saphenous veins. Barber DA, et al. **Free Radic Biol Med** 1995 Mar;18(3):565-9

Bcl-2 and p53 protein expression in aortic, mammary artery and saphenous vein biopsies in patients subjected to open heart surgery. Aaltomaa S, et al. **In Vivo** 1997 Jul-Aug; 11(4):337-43

Characterization of endothelin receptors in human varicose veins. Barber DA, et al. **J Vasc Surg** 1997 Jul;26(1):61-9

Plasminogen activator levels are influenced by location and varicosity in greater saphenous vein. Shireman PK, et al. **J Vasc Surg** 1996 Nov;24(5):719-24

Production of plasminogen activator inhibitor-1 by human saphenous vein endothelial cells seeded onto endarterectomy surfaces in vitro. Smyth JV, et al. **J Vasc Surg** 1997 Apr;25(4):722-5

Effects of propionate and ammonium on contractions

produced by sodium removal in human internal mammary artery and saphenous vein. Miyahara K, et al. **Jpn J Physiol** 1996 Jun;46(3):243–8

Interaction of BW A868C, a prostanoid DP-receptor antagonist, with two receptor subtypes in the rabbit isolated saphenous vein [published erratum appears in **Prostaglandins** 1997 Jan;53(1):59–62] Lydford SJ, et al. **Prostaglandins** 1996 Aug;52(2):125–39

PATHOLOGY

Short- and long-term outcome of narrowed saphenous vein bypass graft: a comparison of Palmaz-Schatz stent, directional coronary atherectomy, and balloon angioplasty. Waksman R, et al. **Am Heart J** 1997 Aug;134(2 Pt 1):274–81

Late myocardial ischemic events after saphenous vein graft intervention--importance of initially "nonsignificant" vein graft lesions. Ellis SG, et al. **Am J Cardiol** 1997 Jun 1; 79(11):1460–4

Vein morphology and bypass graft stenosis. Varty K, et al. **Br J Surg** 1996 Oct;83(10):1375–9

Luminal foam cell accumulation is associated with smooth muscle cell death in the intimal thickening of human saphenous vein grafts. Kockx MM, et al. **Circulation** 1996 Sep 15;94(6):1255–62

Coronary artery and saphenous vein graft remodeling: a review of histologic findings after various interventional procedures--Part I. Waller BF, et al. **Clin Cardiol** 1996 Sep;19(9):744–8

Coronary artery and saphenous vein graft remodeling: a review of histologic findings after various interventional procedures--Part V. Waller BF, et al. **Clin Cardiol** 1997 Jan;20(1):67–74 (52 ref.)

Coronary artery and saphenous vein graft remodeling: a review of histologic findings after various interventional procedures--Part VI. Waller BF, et al. **Clin Cardiol** 1997 Feb;20(2):153–60 (25 ref.)

Proliferation, migration, matrix turnover, and death of smooth muscle cells in native coronary and vein graft atherosclerosis. Newby AC, et al. **Curr Opin Cardiol** 1996 Nov;11(6):574–82 (77 ref.)

Sapheno-femoral valves. Histopathological observations and diagnostic approach before surgery. Corcos L, et al. **Dermatol Surg** 1996 Oct;22(10):873–80

Pre-bypass quality assessment of the long saphenous vein wall with ultrasound and histology. Giannoukas AD, et al. **Eur J Vasc Endovasc Surg** 1997 Jul;14(1):37–40

Vein quality influences neointimal hyperplasia in an organ culture model of human saphenous vein. Wilson YG, et al. **Eur J Vasc Endovasc Surg** 1997 Jun;13(6):557–62

Collagen subtype pattern in normal and varicose saphenous veins in humans. Waksman Y, et al. **Isr J Med Sci** 1997 Feb;33(2):81–6

Influence of angioscopic vein graft preparation on development of neointimal hyperplasia in an organ culture model of human saphenous vein. Wilson YG, et al. **J Endovasc Surg** 1996 Nov;3(4):436–44

Lateral venous ulcer and short saphenous vein insufficiency. Bass A, et al. **J Vasc Surg** 1997 Apr;25(4):654–7

The treatment of chronic hemodialysis vascular access by directional atherectomy. Mizumoto D, et al. **Nephron** 1996; 74(1):45–52

[Morphology and vascularization of the varicose internal saphenous vein. Comparison with the normal structure] Bigel P, et al. **J Mal Vasc** 1996;21 Suppl C:249–52 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Surgical preparation abolishes endothelium-derived hyperpolarizing factor-mediated hyperpolarization in the human saphenous vein. Yang JA, et al. **Ann Thorac Surg** 1997 Feb;63(2):429–33

Experimental aortocoronary saphenous vein graft function after mechanical cardiac massage with the Anstadt Cup. Anstadt MP, et al. **ASAIO J** 1996 Jul-Aug;42(4):295–300

Regulation of nitric oxide-like activity by prostanoids in smooth muscle of the canine saphenous vein. Illiano S, et al. **Br J Pharmacol** 1996 Jan;117(2):360–4

Endothelium-dependent and endothelium-independent flow regulation in coronary vascular regions supplied by arterial and venous bypass grafts. Hartmann A, et al. **Cardiology** 1997 Sep-Oct;88(5):425–32

Effects of pulsatile perfusion on human saphenous vein vasoreactivity: a preliminary report. Schwartz LB, et al. **Cardiovasc Surg** 1996 Apr;4(2):143–9

No-reflow no more? [editorial; comment] Kahn JK, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):119. Comment on: Cathet Cardiovasc Diagn 1996 Oct;39(2):113–8.

Treatment of no-reflow in degenerated saphenous vein graft interventions: comparison of intracoronary verapamil and nitroglycerin [see comments] Kaplan BM, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):113–8. Comment in: Cathet Cardiovasc Diagn 1996 Oct;39(2):119.

Development of an in vitro model to study the response of saphenous vein endothelium to pulsatile arterial flow and circumferential deformation. Golledge J, et al. **Eur J Vasc Endovasc Surg** 1997 Jun;13(6):605–12

The effects of cryopreservation on the biaxial mechanical properties of canine saphenous veins. Brossollet LJ, et al. **J Biomech Eng** 1997 Feb;119(1):1–5

Interleukin-10 stimulation of endogenous nitric oxide release from human saphenous veins diminishes immunocyte adherence. Stefano GB, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):90–5

Circumferential deformation and shear stress induce differential responses in saphenous vein endothelium exposed to arterial flow. Golledge J, et al. **J Clin Invest** 1997 Jun 1;99(11):2719–26

Influence of twist on vein and PTFE graft hemodynamics: an ex vivo experimental study. Karacagil S, et al. **Panminerva Med** 1997 Jun;39(2):95–9

Activation of pp60c-src is necessary for human vascular smooth muscle cell migration. Mureebe L, et al. **Surgery** 1997 Aug;122(2):138–44; discussion 144–5

PHYSIOPATHOLOGY

Distal vessel pullback angiography and pressure gradient measurement: an innovative diagnostic approach to evaluate the no-reflow phenomenon [see comments] Sherman JR, et al. **Cathet Cardiovasc Diagn** 1996 Sep; 39(1):1–6. Comment in: Cathet Cardiovasc Diagn 1996 Sep;39(1):7–8.

Significant difference of focal compensatory enlargement process between human coronary arteries and coronary saphenous vein bypass grafts [letter; comment] Friedrich GJ, et al. **Circulation** 1996 Dec 1;94(11):2987–8. Comment on: Circulation 1996 Feb 15;93(4):683–90.

Remodeling of autologous saphenous vein grafts. The role of perivascular myofibroblasts. Shi Y, et al. **Circulation** 1997 Jun 17;95(12):2684–93

The influence of diabetes on the vasomotor responses of saphenous vein and the development of infra-inguinal vein graft stenosis. Hicks RC, et al. **Diabetes** 1997 Jan; 46(1):113–8

The relationship between in vitro and in vivo venous compliance measurement. Zamboni P, et al. **Int Angiol** 1996 Jun;15(2):149–52

Detection of "functional" valves in reversed saphenous vein bypass grafts: identification with duplex ultrasonography. Tullis MJ, et al. **J Vasc Surg** 1997 Mar;25(3):522–7

[Measurement of oxygen tension in normal and varicose vein walls] Taccoen A, et al. **J Mal Vasc** 1996;21 Suppl C:259–65 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Paracardiac masses caused by a right coronary artery aneurysm and a saphenous vein graft aneurysm. Chalasani P, et al. **Clin Cardiol** 1997 Jan;20(1):79–81

RADIONUCLIDE IMAGING

Aneurysm of saphenous vein bypass graft detected by first-pass radionuclide ventriculography. Benari B, et al. **Am Heart J** 1997 Jan;133(1):133–6

SURGERY

Femoral and genitofemoral nerve blocks versus spinal anesthesia for outpatients undergoing long saphenous vein stripping surgery. Vloka JD, et al. **Anesth Analg** 1997 Apr; 84(4):749–52

Venous changes in expanded skin: a microangiographic and histological study in rabbits. Mutaf M. **Ann Plast Surg** 1996 Jul;37(1):75–83

Surgical preparation abolishes endothelium-derived hyperpolarizing factor-mediated hyperpolarization in the human saphenous vein. Yang JA, et al. **Ann Thorac Surg** 1997 Feb;63(2):429–33

Effects of intraoperative manual descending compressions on saphenous vein incision healing. Moody CA, et al. **AORN J** 1995 Dec;62(6):913–23

Leg wound infections associated with coronary revascularization. Wong SW, et al. **Aust N Z J Surg** 1997 Oct;67(10):689–91

Saphenous vein stripping and quality of outcome [see comments] Bergan JJ. **Br J Surg** 1996 Aug;83(8):1027–7. Comment in: Br J Surg 1997 Jan;84(1):139. Comment in: Br J Surg 1997 Mar;84(3):424–5.

Prospective randomized trial comparing sequential avulsion with stripping of the long saphenous vein [see comments] Khan B, et al. **Br J Surg** 1996 Nov;83(11):1559–62. Comment in: Br J Surg 1997 May;84(5):727.

Endoscopic subfascial division of incompetent perforating calf veins. Paraskeva PA, et al. **Br J Surg** 1996 Aug; 83(8):1105–6

Prospective randomized trial comparing sequential avulsion with stripping of the long saphenous vein [letter; comment] Sudhindran S. **Br J Surg** 1997 May;84(5):727. Comment on: Br J Surg 1996 Nov;83(11):1559–62.

Subcutaneous, video-assisted saphenous vein harvest: report of the first 30 cases. Lumsden AB, et al. **Cardiovasc Surg** 1996 Dec;4(6):771–6

Beneficial impact of aorto-coronary graft markers on post-operative angiography. Eisenhauer MD, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):249–53; discussion 254

The influence of surgical preparation on cyclic nucleotide synthesis in an organ culture of human saphenous vein. Jeremy JY, et al. **Eur J Vasc Endovasc Surg** 1997 Jan; 13(1):72–8

Neovascularisation is the principal cause of varicose vein recurrence: results of a randomised trial of stripping the long saphenous vein. Jones L, et al. **Eur J Vasc Endovasc Surg** 1996 Nov;12(4):442–5

Re-exploration of the saphenofemoral junction in the treatment of recurrent varicose veins. Viani MP, et al. **Int Surg** 1996 Oct-Dec;81(4):382–4

Valvectomy with use of a percutaneous directional atherectomy catheter in failing in situ saphenous vein grafts. Weintraub JL, et al. **J Vasc Interv Radiol** 1997 May-Jun; 8(3):355–8

Vein-graft wrapping for the treatment of recurrent compression of the median nerve. Sotereanos DG, et al. **Microsurgery** 1995;16(11):752–6

The use of bifurcated and not reversed saphenous vein. Report of two cases. Locati P, et al. **Panminerva Med** 1997 Jun;39(2):144–8

Single-anastomosis femoral arteriovenous shunt as recipient vessels for free-flap reconstruction of a massive lumbosacral wound. Rechnic M, et al. **Plast Reconstr Surg** 1997 Jan;99(1):242–4

[Initial experience with angioscopy in infrainguinal reconstruction using the in situ saphenous vein technique] Tošenovský P, et al. **Rozhl Chir** 1997 Jun;76(6):289–93 (Eng. Abstr.) **(Cze)**

[Vena saphena magna in situ bypass to the ankel and foot. A prospective assessment of results of 101 procedures in 94 patients with threatening amputation] Røder OC, et al. **Ugeskr Laeger** 1997 Aug 4;159(32):4846–9 (Eng. Abstr.) **(Dan)**

[Varicose veins: surgical removal (stripping) of the greater saphenous veins is preferable (see comments)] Keeman JN. **Ned Tijdschr Geneeskd** 1996 Dec 14;140(50):2492–4. Comment in: Ned Tijdschr Geneeskd 1997 Mar 1;141(9):447. **(Dut)**

[Varices of the lower limbs and surgery: current problems] Buchheim G. **Rev Med Suisse Romande** 1997 Feb; 117(2):107–11 **(Fre)**

[Superselective spinal anesthesia for saphenectomy intervention. Comparison of 2 concentrations of hyperbaric bupivacaine] Santagostino G, et al. **Minerva Anestesiol** 1996 Dec;62(12):389–94 (Eng. Abstr.) **(Ita)**

[Transcutaneous ligation of the great saphenous vein in the combined surgical treatment of varicose veins of the lower extremities] Izmailov GA. **Khirurgiia (Mosk)** 1996;(6):90–2 (Eng. Abstr.) **(Rus)**

[The possibilities for hemostasis on the thigh when performing a saphenectomy on patients with varicose veins] Tanasienko ID, et al. **Klin Khir** 1996;(7):47 **(Rus)**

TRANSPLANTATION

Long-term results of using the in situ saphenous vein bypass. Shah DM, et al. **Adv Surg** 1996;30:123–40

Saphenous vein graft aneurysm after coronary artery bypass surgery. Doyle MT, et al. **AJR Am J Roentgenol** 1997 Mar; 168(3):747–9

Asymptomatic large coronary artery saphenous vein bypass graft aneurysm: a case report and review of the literature. Wight JN Jr, et al. **Am Heart J** 1997 Apr;133(4):454–60 (37 ref.)

Comparison of stenting and balloon angioplasty for narrowings in aortocoronary saphenous vein conduits in place for more than five years. Brener SJ, et al. **Am J Cardiol** 1997 Jan 1;79(1):13–8

Late myocardial ischemic events after saphenous vein graft intervention--importance of initially "nonsignificant" vein graft lesions. Ellis SG, et al. **Am J Cardiol** 1997 Jun 1; 79(11):1460–4

Saphenous vein graft aneurysm presenting as a large mediastinal mass compressing the right atrium. Ferreira AC, et al. **Am J Cardiol** 1997 Mar 1;79(5):706–7

Saphenous vein versus polytetrafluoroethylene carotid patch angioplasty. Allen PJ, et al. **Am J Surg** 1997 Aug; 174(2):115–7

Immunohistochemical and ultrastructural examination of smooth muscle cells in aortocoronary saphenous vein grafts. Yamada T, et al. **Angiology** 1997 May;48(5):381–90

Endoscopic saphenous vein harvesting. Allen KB, et al. **Ann Thorac Surg** 1997 Jul;64(1):265–6

Operation for two-vessel coronary artery disease: midterm results of bilateral ITA grafting versus unilateral ITA and saphenous vein grafting. Carrel T, et al. **Ann Thorac Surg** 1996 Nov;62(5):1289–94

Nitric oxide synthase and adenylyl and guanylyl cyclase activity in porcine interposition vein grafts. Jeremy JY, et al. **Ann Thorac Surg** 1997 Feb;63(2):470–6

1989: Thermal coronary angiography: a method for assessing graft patency and coronary anatomy in coronary bypass surgery. Updated in 1997. Mohr FW, et al. **Ann Thorac Surg** 1997 May;63(5):1506–7

Lymphorrhea in the thigh after a saphenous vein harvest [letter] Terada Y, et al. **Ann Thorac Surg** 1996 Dec; 62(6):1883

Minimally invasive harvest of the saphenous vein for coronary artery bypass grafting. Tevaearai HT, et al. **Ann Thorac Surg** 1997 Jun;63(6 Suppl):S119–21

Use of the in-situ lesser saphenous vein bypass from popliteal to peroneal artery. Gelabert HA, et al. **Ann Vasc Surg** 1997 Jul;11(4):378–82

Femorodistal bypass using cryopreserved venous allografts for limb salvage. Lesèche G, et al. **Ann Vasc Surg** 1997 May;11(3):230–6

Intraoperative color duplex scanning for infrainguinal vein grafts. Papanicolaou G, et al. **Ann Vasc Surg** 1996 Jul; 10(4):347–55

Factors influencing the outcome of paramalleolar bypass

grafts. Plecha EJ, et al. **Ann Vasc Surg** 1996 Jul; 10(4):356–60

Measurement of vascular input impedance in infrainguinal vein grafts. Schwartz LB, et al. **Ann Vasc Surg** 1997 Jan; 11(1):35–43

Subclavian–carotid bypass to an "isolated" carotid bifurcation: a retrospective analysis. Sullivan TM. **Ann Vasc Surg** 1996 May;10(3):283–9

Popliteal–to–distal bypass grafts for limb salvage. Verhelst R, et al. **Ann Vasc Surg** 1997 Sep;11(5):505–9

Potential advantages of treatment of transplanted saphenous vein aorto–coronary artery bypass grafts with beta irradiation to prevent graft occlusion. Smith RG. **Artery** 1997;22(5):278–86 (25 ref.)

Minimally invasive cardiac surgery for removal of the greater saphenous vein. Cusimano RJ, et al. **Can J Surg** 1996 Oct; 39(5):386–8

Extraluminal endoscopic–assisted ligation of venous tributaries for infrainguinal in situ saphenous vein bypass: a preliminary report. Rosenthal D, et al. **Cardiovasc Surg** 1996 Aug;4(4):512–4

Angioplasty followed by coronary stenting at the anastomotic site of saphenous vein bypass graft with the native vessel: a case that needs special procedural strategy. Antonellis IP, et al. **Cathet Cardiovasc Diagn** 1997 Sep; 42(1):61–3

Successful stenting after coumadin therapy and thrombus resolution in a stenotic saphenous vein graft [letter; comment] Chow WH, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):438–9. Comment on: Cathet Cardiovasc Diagn 1996 Aug;38(4):415–6.

Percutaneous revascularization of an extensively diseased saphenous vein bypass graft with a saphenous vein–covered Palmaz stent [see comments] Gurbel PA, et al. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):75–8 (12 ref.). Comment in: Cathet Cardiovasc Diagn 1997 Jan;40(1):79.

Transcatheter aspiration of atheroma prolapsing through saphenous vein graft stents. Jaffar A, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):258–61

Reduced distal embolization with transluminal extraction atherectomy compared to balloon angioplasty for saphenous vein graft disease. Misumi K, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):246–51

Transluminal extraction atherectomy for aortosaphenous vein graft stent restenosis. Patel JJ, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):320–4

Communication between a nongrafted left internal mammary artery and left anterior descending coronary artery following saphenous vein bypass grafting. Salachas A, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):170–2

Perforation of saphenous vein graft during coronary stenting: a case report. Shammas NW, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):274–6

Distal vessel pullback angiography and pressure gradient measurement: an innovative diagnostic approach to evaluate the no–reflow phenomenon [see comments] Sherman JR, et al. **Cathet Cardiovasc Diagn** 1996 Sep; 39(1):1–6. Comment in: Cathet Cardiovasc Diagn 1996 Sep;39(1):7–8.

Autologous vein graft–coated stents for the treatment of thrombus–containing coronary artery lesions. Stefanadis C, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):217–22

Preserved vasodilatory response to nitroglycerin in saphenous vein bypass grafts. Berglund H, et al. **Circulation** 1996 Dec 1;94(11):2871–6

Significant difference of focal compensatory enlargement process between human coronary arteries and coronary saphenous vein bypass grafts [letter; comment] Friedrich GJ, et al. **Circulation** 1996 Dec 1;94(11):2987–8. Comment on: Circulation 1996 Feb 15;93(4):683–90.

Enhanced cellular proliferation in intact stenotic lesions derived from human arteriovenous fistulas and peripheral bypass grafts. Does it correlate with flow parameters? Hofstra L, et al. **Circulation** 1996 Sep 15;94(6):1283–90

Influence of external stent size on early medial and neointimal thickening in a pig model of saphenous vein bypass grafting. Izzat MB, et al. **Circulation** 1996 Oct 1;94(7):1741–5

Luminal foam cell accumulation is associated with smooth muscle cell death in the intimal thickening of human saphenous vein grafts. Kockx MM, et al. **Circulation** 1996 Sep 15;94(6):1255–62

Remodeling of autologous saphenous vein grafts. The role of perivascular myofibroblasts. Shi Y, et al. **Circulation** 1997 Jun 17;95(12):2684–93

Coronary artery and saphenous vein graft remodeling: a review of histologic findings after various interventional procedures––Part I. Waller BF, et al. **Clin Cardiol** 1996 Sep;19(9):744–8

Proliferation, migration, matrix turnover, and death of smooth muscle cells in native coronary and vein graft atherosclerosis. Newby AC, et al. **Curr Opin Cardiol** 1996 Nov;11(6):574–82 (77 ref.)

ITA versus SVG: a comparison of instantaneous pressure and flow dynamics during competitive flow. Pagni S, et al. **Eur J Cardiothorac Surg** 1997 Jun;11(6):1086–92

True aneurysms of infrainguinal vein bypass grafts: the need for active, not passive management. Barker SG, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):378–9

Infrainguinal saphenous vein graft aneurysm and aortic aneurysm. Casha A, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):380–2

Development of an in vitro model to study the response of saphenous vein endothelium to pulsatile arterial flow and circumferential deformation. Golledge J, et al. **Eur J Vasc Endovasc Surg** 1997 Jun;13(6):605–12

Composite polytetrafluroethylene/vein bypass grafts: conventional distal vein segment or vein cuff? Karacagil S, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):337–41

Use of intravascular ultrasound for in vivo assessment of changes in intimal thickness of angiographically normal saphenous vein grafts one year after aortocoronary bypass surgery. Hozumi T, et al. **Heart** 1996 Oct;76(4):317–20

Validation of coronary artery saphenous vein bypass graft diameter measurements using quantitative angiography. Lespérance J, et al. **Int J Card Imaging** 1996 Dec; 12(4):299–303

Expression rate of vinculin isoforms in human aortocoronary saphenous vein grafts. Brinck U, et al. **Int J Cardiol** 1997 Apr 18;59(2):125–32

Clinical outcome in venous coronary artery bypass grafting: a 15–year follow–up study. van Brussel BL, et al. **Int J Cardiol** 1997 Jan 31;58(2):119–26

Effect of muscle ischaemia and iloprost during femorodistal reconstruction on capillary endothelial swelling. Thomson IA, et al. **Int J Microcirc Clin Exp** 1996 Nov–Dec; 16(6):284–90

Biopsy specimen findings in patients with previous lower extremity cellulitis after saphenous venectomy for coronary artery bypass graft surgery. Baddour LM, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):246–9

Transluminal extraction catheter atherectomy followed by immediate stenting in treatment of saphenous vein grafts. Braden GA, et al. **J Am Coll Cardiol** 1997 Sep;30(3):657–63

Pressure controlled preparation of the saphenous vein with papaverine for aortocoronary venous bypass. Hausmann H, et al. **J Card Surg** 1996 Mar–Apr;11(2):155–62

Endoluminal grafting for percutaneous aneurysm exclusion in an aortocoronary saphenous vein graft: the first clinical experience. Heuser RR, et al. **J Endovasc Surg** 1995 Feb; 2(1):81–8

Saphenous vein graft bypass of the sigmoid sinus and jugular bulb during the removal of glomus jugulare tumors. Report of two cases. Sekhar LN, et al. **J Neurosurg** 1997 Jun; 86(6):1036–41

Wound healing around and within saphenous vein bypass grafts. O'Brien JE Jr, et al. **J Thorac Cardiovasc Surg** 1997 Jul;114(1):38–45

New approach to patency and flow assessment after left internal thoracic artery hypoperfusion syndrome with additional saphenous vein graft to the left anterior descending artery with phase–contrast magnetic resonance angiography. Zünd G, et al. **J Thorac Cardiovasc Surg** 1997 Sep;114(3):428–33

Prospective randomized trial of carotid endarterectomy with primary closure and patch angioplasty with saphenous vein, jugular vein, and polytetrafluoroethylene: perioperative (30–day) results [see comments] AbuRahma AF, et al. **J Vasc Surg** 1996 Dec;24(6):998–1006; discussion 1006–7. Comment in: J Vasc Surg 1997 Jun;25(6):1118–20.

Wall thickness after carotid endarterectomy in patients with paired vein and Dacron patch reconstruction. Archie JP. **J Vasc Surg** 1997 Mar;25(3):554–60

Infrainguinal arterial reconstruction with nonreversed greater saphenous vein. Belkin M, et al. **J Vasc Surg** 1996 Dec; 24(6):957–62

Immunosuppression for human saphenous vein allograft bypass surgery: a prospective randomized trial. Carpenter JP, et al. **J Vasc Surg** 1997 Jul;26(1):32–42

Video–assisted saphenous vein harvest: the evolution of a new technique. Jordan WD Jr, et al. **J Vasc Surg** 1997 Sep;26(3):405–12; discussion 413–4

Predictors of long–term patient survival after in situ vein leg bypass. Kalman PG, et al. **J Vasc Surg** 1997 May; 25(5):899–904

Regarding "Flush saphenofemoral ligation and multiple stab phlebectomy preserve a useful greater saphenous vein four years after surgery" [letter; comment] Lucertini G, et al. **J Vasc Surg** 1996 Nov;24(5):905–6. Comment on: J Vasc Surg 1995 Nov;22(5):588–92.

Endothelin–1 expression in vein graft stenosis [letter] Masood I, et al. **J Vasc Surg** 1996 Nov;24(5):901–2

A blinded trial of local recombinant tissue factor pathway inhibitor versus either local or systemic heparin in a vein bypass model. Rapp JH, et al. **J Vasc Surg** 1997 Apr; 25(4):726–9

Superficial femoral artery eversion endarterectomy: a useful adjunct for infrainguinal bypass in the presence of limited autogenous vein. Taylor SM, et al. **J Vasc Surg** 1997 Sep; 26(3):439–45; discussion 445–6

Detection of "functional" valves in reversed saphenous vein bypass grafts: identification with duplex ultrasonography. Tullis MJ, et al. **J Vasc Surg** 1997 Mar;25(3):522–7

Aortocoronary bypass with saphenous vein graft. Seven–year follow–up. 1973 [classical article] [see comments] Garrett HE, et al. **JAMA** 1996 Nov 13;276(18):1517, 1519–20. Comment in: JAMA 1996 Nov 13;276(18):1521, 1523–5.

Aortocoronary bypass with saphenous vein graft [comment] Willman VL. **JAMA** 1996 Nov 13;276(18):1521, 1523–5. Comment on: JAMA 1996 Nov 13;276(18):1517, 1519–20.

Intracoronary stent implantation in native coronary arteries and saphenous vein grafts: a consecutive experience with six types of stents without prolonged anticoagulation [see comments] Itoh A, et al. **Mayo Clin Proc** 1997 Feb; 72(2):101–11. Comment in: Mayo Clin Proc 1997 Feb;72(2):185–7.

Experience of a new surgical procedure for the treatment of unilateral obstructive lymphedema of the lower extremity: adipo–lymphatico venous transfer. Tanaka Y, et al. **Microsurgery** 1996;17(4):209–16

Cervical–to–petrous internal carotid artery saphenous vein in situ bypass for the treatment of a high cervical dissecting aneurysm: technical case report. Candon E, et al. **Neurosurgery** 1996 Oct;39(4):863–6

Complications resulting from saphenous vein patch graft after carotid endarterectomy. Yamamoto Y, et al. **Neurosurgery** 1996 Oct;39(4):670–5; discussion 675–6

A new no–touch preparation technique. Technical notes. Souza D. **Scand J Thorac Cardiovasc Surg** 1996;30(1):41–4

[Application of the local flap pedicled with a superficial vein in the repair of limb wounds] Xiong M, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):181–3 (Eng. Abstr.) **(Chi)**

[Postoperative infection with Mycobacterium chelonae] Engelhardt E, et al. **Hautarzt** 1996 Nov;47(11):863–6 (Eng. Abstr.) **(Ger)**

[Distal popliteal bypass in the diabetic patient. Clinical case] Cavallini M, et al. **Minerva Chir** 1996 Jul–Aug; 51(7–8):589–95 (23 ref.) (Eng. Abstr.) **(Ita)**

[Evaluation of the graft flow reserve after coronary artery bypass grafting by stress 201T1 myocardial SPECT: comparison between arterial grafts and venous grafts] Ichikawa A, et al. **Kaku Igaku** 1997 Jan;34(1):19–23 (Eng. Abstr.) **(Jpn)**

[A case of saphenous vein graft donor site dermatitis] Minowa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul; 45(7):990–2 (Eng. Abstr.) **(Jpn)**

[Coronary artery bypass grafting in an octogenarian with chronic myelomonocytic leukemia] Taniyasu N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May;45(5):750–3 (Eng. Abstr.) **(Jpn)**

[Usefulness of percutaneous transluminal angioplasty of lesions in saphenous vein graft] Yasuda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1729–34 (Eng. Abstr.) **(Jpn)**

ULTRASONOGRAPHY

The value of pre–operative ultrasound mapping of the greater saphenous vein prior to 'closed' in situ bypass operations. van Dijk LC, et al. **Eur J Radiol** 1996 Nov;23(3):235–7

Pre–bypass quality assessment of the long saphenous vein wall with ultrasound and histology. Giannoukas AD, et al. **Eur J Vasc Endovasc Surg** 1997 Jul;14(1):37–40

[Simultaneous echographic and endoscopic examination of morphologic anomalies of the valves of the internal saphenous vein] Chleir F, et al. **J Mal Vasc** 1997; 22(1):18–23 (Eng. Abstr.) **(Fre)**

SAPOGENINS

CHEMISTRY

Thermal behavior of steroidal glycosides. Bobeyko VA, et al. **Adv Exp Med Biol** 1996;405:271–80

IMMUNOLOGY

Influence of Quillaja saponaria triterpenoid content on the immunomodulatory capacity of Epstein–Barr virus iscoms. Dotsika E, et al. **Scand J Immunol** 1997 Mar;45(3):261–8

PHARMACOLOGY

Anti–inflammatory activity of aqueous extracts and steroidal sapogenins of Agave americana. Peana AT, et al. **Planta Med** 1997 Jun;63(3):199–202

URINE

Gas chromatographic–mass spectrometric determination of 20(S)–protopanaxadiol and 20(S)–protopanaxatriol for study on human urinary excretion of ginsenosides after ingestion of ginseng preparations. Cui JF, et al. **J Chromatogr B Biomed Appl** 1997 Feb 21;689(2):349–55

Determination of aglycones of ginsenosides in ginseng preparations sold in Sweden and in urine samples from Swedish athletes consuming ginseng. Cui JF, et al. **Scand J Clin Lab Invest** 1996 Apr;56(2):151–60

SAPONINS

Novel sweet–tasting saponins of the cycloartane, oleanane, secodammarane, and steroidal types. Kennelly EJ, et al. **Adv Exp Med Biol** 1996;405:13–24 (47 ref.)

Alfalfa saponins: structure, biological activity, and chemotaxonomy. Oleszek W. **Adv Exp Med Biol** 1996; 405:155–70 (85 ref.)

Steroid saponins from fenugreek and some of their biological properties. Sauvaire Y, et al. **Adv Exp Med Biol** 1996; 405:37–46 (21 ref.)

Triterpenoid saponins from a Siberian chemorace of the Thalictrum genus. Semenov AA, et al. **Adv Exp Med Biol** 1996;405:193–207 (26 ref.)

Application of saponins in foods and cosmetics: saponins of Mohave yucca and Sapindus mukurossi. Tanaka O, et al. **Adv Exp Med Biol** 1996;405:1–11 (14 ref.)

[Saponin in the phosphorylation system in vitro] Echikov SN, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):453–6 **(Rus)**

SAPONINS

ADMINISTRATION & DOSAGE

Effect of a novel saponin adjuvant derived from Quillaja saponaria on the immune response to recombinant hepatitis B surface antigen. So HS, et al. **Mol Cells** 1997 Apr 30; 7(2):178–86

ADVERSE EFFECTS

Biological effects of feed and forage saponins and their impacts on animal production. Cheeke PR. **Adv Exp Med Biol** 1996;405:377–85 (57 ref.)

Do steroidal saponins have a role in hepatogenous photosensitization diseases of sheep? Flåøyen A. **Adv Exp Med Biol** 1996;405:395–403 (51 ref.)

ANALYSIS

Saponins from alfalfa, clover, and mungbeans analyzed by electrospray ionization–mass spectrometry as compared with positive and negative FAB–mass spectrometry. Lee MK, et al. **Adv Exp Med Biol** 1996;405:353–64

Effect of processing on saponin content and composition of chickpeas. Ruiz RG, et al. **Biochem Soc Trans** 1996 Aug; 24(3):393S

A preliminary study on the effect of germination on saponin content and composition of lentils and chick peas. Ruiz RG, et al. **Z Lebensm Unters Forsch** 1996 Oct;203(4):366–9

BIOSYNTHESIS

Specificity of elementary composition of plants in synthesizing saponins. Lovkova MJ, et al. **Adv Exp Med Biol** 1996;404:81–5

BLOOD

The influence of feeding regimens on endogenous digoxin–like immunoreactive substance concentrations in infants. Kurugöl Z, et al. **Acta Paediatr** 1996 Jun; 85(6):753–4

Altered Na(+)–K+ ATPase activity in uraemic adolescents. Vásárhelyi B, et al. **Acta Paediatr** 1996 Aug;85(8):919–22

Elevated endoxin–like factor complicating a multifetal second trimester pregnancy: treatment with digoxin–binding immunoglobulin. Adair CD, et al. **Am J Nephrol** 1996;16(6):529–31

Heterogeneity and lability of endogenous digitalis–like substances in the plasma of the toad, Bufo marinus. Butler VP Jr, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R325–32

Effects of head down tilt on hemodynamics, fluid volumes, and plasma Na–K pump inhibitor in rats. Pamnani MB, et al. **Aviat Space Environ Med** 1996 Oct;67(10):928–34

A new interference in some digoxin assays: anti–murine heterophilic antibodies. Liendo C, et al. **Clin Pharmacol Ther** 1996 Nov;60(5):593–8

Development of a high–performance liquid chromatographic–atmospheric pressure chemical ionization–tandem mass spectrometric assay for beta–tigogenin cellobioside in human serum. Avery MJ, et al. **J Chromatogr B Biomed Appl** 1997 Feb 21; 689(2):365–70

Different methods for measuring endogenous digitalis–like factor(s). Paci A, et al. **J Pharm Biomed Anal** 1996 Jun; 14(8–10):983–8

Purification and characterization of endogenous digoxin–like immunoreactive factors in chicken blood. Wei JS, et al. **Life Sci** 1996;59(19):1617–29

Effects of opioid–type stressors on serum digoxin–like immunoreactivity in rats. Uresin Y, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov;18(9):569–71

[Effect of dialysis on Na+/K+–ATP–ase activity in uremic children] Vásárhelyi B, et al. **Orv Hetil** 1996 Oct 6; 137(40):2193–6 (Eng. Abstr.) **(Hun)**

[Endogenous digoxin–like factor in myocardial infarction] Bagrov AI, et al. **Klin Med (Mosk)** 1996;74(4):15–7 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Saponin network for mass spectrometry and nuclear magnetic resonance spectrometry. **Adv Exp Med Biol** 1996;404:575–7

A systematic NMR approach for the determination of the molecular structure of steroidal saponins. Agrawal PK. **Adv Exp Med Biol** 1996;405:299–315 (117 ref.)

Acylated saponins from Crocosmia plants. Asada Y, et al. **Adv Exp Med Biol** 1996;404:459–69 (12 ref.)

Triterpene saponins from plants of the flora of Turkey. Calis I, et al. **Adv Exp Med Biol** 1996;404:485–500 (44 ref.)

Herniaria saponin B. a novel triterpenoid saponin from Herniaria fontanesii. Charrouf Z, et al. **Adv Exp Med Biol** 1996;405:241–5

Application of tandem mass spectral approaches to structural determinations of saponins. Costello CE. **Adv Exp Med Biol** 1996;405:317–30

Chemistry and biological activity of steroid saponins from Moldovian plants. Kintia PK. **Adv Exp Med Biol** 1996; 404:309–34 (28 ref.)

Structural determination of saponins from mungbean sprouts by tandem mass spectrometry. Lee MR, et al. **Adv Exp Med Biol** 1996;405:331–7

Saponins with antifilarial activity from Acacia auriculiformis. Mahato SB. **Adv Exp Med Biol** 1996;404:173–84

Saponins and artifacts. Massiot G, et al. **Adv Exp Med Biol** 1996;405:183–92 (16 ref.)

Saponins from the compositae plants: structures of the saponins from Aster scaber Thunb. Nagao T, et al. **Adv Exp Med Biol** 1996;404:297–307 (8 ref.)

Intensely sweet saponin osladin: synthetic and structural study. Nishizawa M, et al. **Adv Exp Med Biol** 1996; 405:25–36 (41 ref.)

Analysis, heat stability and physiological effects of saponins from oats. Onning G, et al. **Adv Exp Med Biol** 1996; 405:365–75 (49 ref.)

19 new steroidal saponins from Allium plants: isolation, structural elucidation and effect on blood coagulability. Peng JP, et al. **Adv Exp Med Biol** 1996;404:511–26

Triterpene saponins from maté, Ilex paraguariensis. Schenkel EP, et al. **Adv Exp Med Biol** 1996;405:47–56 (18 ref.)

Saponins from Medicago Spp.: chemical characterization and biological activity against insects. Tava A, et al. **Adv Exp Med Biol** 1996;405:97–109 (42 ref.)

Chemistry and biological activity of triterpenoid glycosides from Medicago sativa. Timbekova AE, et al. **Adv Exp Med Biol** 1996;405:171–82 (19 ref.)

Molecular structures of saponins from Quillaja saponaria Molina. van Setten DC, et al. **Adv Exp Med Biol** 1996; 404:185–93 (30 ref.)

Liquid secondary ion mass spectrometry and linked scanning at constant B/ELSIMS/MS for structure confirmation of saponins in Medicago sativa (alfalfa). West PR, et al. **Adv Exp Med Biol** 1996;405:339–52

Digoxinlike immunoreactive factor isolated from human pleural fluid is structurally similar to digoxin. Weinberg U, et al. **Am J Med Sci** 1997 Jul;314(1):28–30

Isolation and structure elucidation of a highly haemolytic saponin from the Merck saponin extract using high–field gradient–enhanced NMR techniques. Delay C, et al. **Carbohydr Res** 1997 Jul 11;302(1–2):67–78

NMR determination of the structure of Julibroside J1. Ma L, et al. **Carbohydr Res** 1996 Feb 7;281(1):35–46

Determination of the sugar linkage position in glycosides using ammonia chemical ionization mass spectrometry at low gas pressure. Reznicek G, et al. **Carbohydr Res** 1996 Oct 23;293(1):133–7

Acacia concinna saponins. I. Structures of prosapogenols, concinnosides A–F, isolated from the alkaline hydrolysate of the highly polar saponin fraction. Abul Gafur M, et al. **Chem Pharm Bull (Tokyo)** 1997 Apr;45(4):620–5

Oleanene–type triterpene glycosides from puerariae radix. III. Three new saponins from Pueraria thomsonii. Arao T, et al. **Chem Pharm Bull (Tokyo)** 1996 Oct;44(10):1970–2

Two new saponins, congmuyenosides A and B, from the leaves of Aralia elata collected in Heilongjiang, China. Kuang HX, et al. **Chem Pharm Bull (Tokyo)** 1996 Nov; 44(11):2183–5

New polyhydroxylated steroidal saponins from the tubers of Brodiaea californica. Mimaki Y, et al. **Chem Pharm Bull (Tokyo)** 1997 Mar;45(3):558–60

Minor saponins from Tetrapanax papyriferum. Mutsuga M, et al. **Chem Pharm Bull (Tokyo)** 1997 Mar;45(3):552–4

Antisweet natural products. XII. Structures of sitakisosides XI–XX from Stephanotis lutchuensis Koidz. var. japonica. Yoshikawa K, et al. **Chem Pharm Bull (Tokyo)** 1997 Jan; 45(1):62–7

Medicinal foodstuffs. IV. Fenugreek seed. (1): structures of trigoneosides Ia, Ib, IIa, IIb, IIIa, and IIIb, new furostanol saponins from the seeds of Indian Trigonella foenum–graecum L. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 Jan;45(1):81–7

Bioactive saponins and glycosides. VIII. Notoginseng (1): new dammarane–type triterpene oligoglycosides, notoginsenosides–A, –B, –C, and –D, from the dried root of Panax notoginseng (Burk.) F.H. Chen. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 Jun;45(6):1039–45

Bioactive saponins and glycosides. X. On the constituents of zizyphi spinosi semen, the seeds of Zizyphus jujuba Mill. var. spinosa Hu (1): structures and histamine release–inhibitory effect of jujubosides A1 and C and acetyljujuboside B. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 Jul;45(7):1186–92

Bioactive saponins and glycosides. IV. Four methyl–migrated 16,17–seco–dammarane triterpene gylcosides from Chinese natural medicine, hoveniae semen seu fructus, the seeds and fruit of Hovenia dulcis THUNB.: absolute stereostructures and inhibitory activity on histamine release of hovenidulciosides A1, A2, B1, and B2. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1996 Sep;44(9):1736–43

Bioactive saponins and glycosides. V. Acylated polyhydroxyolean–12–ene triterpene oligoglycosides, camelliasaponins A1, A2, B1, B2, C1, and C2, from the seeds of Camellia japonica L.: structures and inhibitory activity on alcohol absorption. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1996 Oct;44(10):1899–907

Steroidal glycoside cholesterol absorption inhibitors. DeNinno MP, et al. **J Med Chem** 1997 Aug 1; 40(16):2547–54

New triterpenoid saponins from Gynostemma pentaphyllum. Hu L, et al. **J Nat Prod** 1996 Dec;59(12):1143–5

Argenteanones C–E and argenteanols B–E, cytotoxic cycloartanes from Aglaia argentea. Mohamad K, et al. **J Nat Prod** 1997 Feb;60(2):81–5

Structure elucidation of three triterpene glycosides from the trunk of Argania spinosa. Oulad–Ali A, et al. **J Nat Prod** 1996 Feb;59(2):193–5

Isomerization and formulation stability of the vaccine adjuvant QS–21. Cleland JL, et al. **J Pharm Sci** 1996 Jan; 85(1):22–8

Photosensitivity in South Africa. IX. Structure elucidation of a beta–glucosidase–treated saponin from Tribulus terrestris, and the identification of saponin chemotypes of South African T. terrestris. Wilkins AL, et al. **Onderstepoort J Vet Res** 1996 Dec;63(4):327–34

New furostanol glycosides, chinenoside IV and V, from Allium chinense. Peng J, et al. **Planta Med** 1996 Oct; 62(5):465–8

Application of MS–MS for the rapid, comparative analysis of saponin mixtures as exemplified by the deacylated and partially deacylated triterpenoid saponins of Bellis annua. Schöpke T, et al. **Planta Med** 1996 Aug;62(4):336–40

Steroidal saponins from Asparagus officinalis and their cytotoxic activity. Shao Y, et al. **Planta Med** 1997 Jun; 63(3):258–62

Determination of aglycones of ginsenosides in ginseng preparations sold in Sweden and in urine samples from Swedish athletes consuming ginseng. Cui JF, et al. **Scand J Clin Lab Invest** 1996 Apr;56(2):151–60

Induction of cross–reactive cytotoxic T–lymphocyte responses specific for HIV–1 gp120 using saponin adjuvant (QS–21) supplemented subunit vaccine formulations. Newman MJ, et al. **Vaccine** 1997 Jun;15(9):1001–7

[Effect of ginseng ginsenosides on phase transitions of dipalmitoylphosphatidylcholine membranes] Abdrasilov BS, et al. **Antibiot Khimioter** 1996 Feb;41(2):22–9 (Eng. Abstr.) **(Rus)**

HISTORY

Cover illustration: regional sources of saponins, and their role in the development of oral contraceptive steroids. Huxtable RJ. **Proc West Pharmacol Soc** 1996;39:1–6

IMMUNOLOGY

Saponins as vaccine adjuvants. Kensil CR. **Crit Rev Ther Drug Carrier Syst** 1996;13(1–2):1–55 (178 ref.)

Saponin adjuvant primes for a dominant interleukin–10 production to ovalbumin and to Trypanosoma cruzi antigen. Tadokoro CE, et al. **Immunology** 1996 Nov; 89(3):368–74

Generation of atypical pulmonary inflammatory responses in BALB/c mice after immunization with the native attachment (G) glycoprotein of respiratory syncytial virus. Hancock GE, et al. **J Virol** 1996 Nov;70(11):7783–91

Further evidence for an endogenous digitalis–like compound in newborn and adult plasma detected by anti–ouabain antiserum. Balzan S, et al. **Life Sci** 1997;60(12):893–8

Induction of cross–reactive cytotoxic T–lymphocyte responses specific for HIV–1 gp120 using saponin adjuvant (QS–21) supplemented subunit vaccine formulations. Newman MJ, et al. **Vaccine** 1997 Jun;15(9):1001–7

Haemolytic activities of plant saponins and adjuvants. Effect of Periandra mediterranea saponin on the humoral response to the FML antigen of Leishmania donovani. Santos WR, et al. **Vaccine** 1997 Jun;15(9):1024–9

ISOLATION & PURIFICATION

Herniaria saponin B. a novel triterpenoid saponin from Herniaria fontanesii. Charrouf Z, et al. **Adv Exp Med Biol** 1996;405:241–5

New saponins from Vietnamese ginseng: highlights on biogenesis of dammarane triterpenoids. Duc NM, et al. **Adv Exp Med Biol** 1996;404:129–49 (24 ref.)

Search for molluscicidal and antifungal saponins from tropical plants. Hostettmann K, et al. **Adv Exp Med Biol** 1996;404:117–28 (18 ref.)

Triterpene and steroid saponins isolated from two Melilotus species. Khodakov GV, et al. **Adv Exp Med Biol** 1996; 405:211–22 (17 ref.)

Structural and antimalarial studies of saponins from Nauclea diderrichii bark. Lamidi M, et al. **Adv Exp Med Biol** 1996; 404:383–99

Investigations of molluscicidal saponins from the Endod plant Phytolacca dodecandra. Thiilborg ST, et al. **Adv Exp Med Biol** 1996;404:151–64 (52 ref.)

Can soyasaponin I and mono– and bi–desmosides isolated from mungbeans serve as growth enhancers in mungbeans and lettuce? Waller GR, et al. **Adv Exp Med Biol** 1996; 405:123–39

Studies on bioactive saponins from Chinese medicinal plants. Xu R, et al. **Adv Exp Med Biol** 1996;404:371–82 (9 ref.)

A novel triterpenoid saponin from the leaves of Majorana hortensis (Moench). Yadava RN. **Adv Exp Med Biol** 1996; 405:223–30

Bioactive triterpenoid and steroid saponins from medicinal plants in southwest China. Yang CR, et al. **Adv Exp Med Biol** 1996;404:225–38 (20 ref.)

Digoxinlike immunoreactive factor isolated from human pleural fluid is structurally similar to digoxin. Weinberg U, et al. **Am J Med Sci** 1997 Jul;314(1):28–30

Isolation and structure elucidation of a highly haemolytic saponin from the Merck saponin extract using high–field gradient–enhanced NMR techniques. Delay C, et al. **Carbohydr Res** 1997 Jul 11;302(1–2):67–78

Oleanene–type triterpene glycosides from puerariae radix. IV. Six new saponins from Pueraria lobata. Arao T, et al. **Chem Pharm Bull (Tokyo)** 1997 Feb;45(2):362–6

Triterpene saponins from Tetrapanax papyriferum K. Koch. Kojima K, et al. **Chem Pharm Bull (Tokyo)** 1996 Nov;

44(11):2107–10

Medicinal foodstuffs. VI. 1) Histamine release inhibitors from kidney bean, the seeds of Phaseolus vulgaris L.: chemical structures of sandosaponins A and B. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 May;45(5):877–82

Nine new triterpene saponins, polygalasaponins XXXIII--XLI from the roots of Polygala fallax Hemsl. Zhang D, et al. **Chem Pharm Bull (Tokyo)** 1996 Nov; 44(11):2092–9

Sodium pump isoform specificity for the digitalis-like factor isolated from human peritoneal dialysate. Tao QF, et al. **Hypertension** 1997 Mar;29(3):815–21

Four novel cycloartane glycosides from Astragalus oleifolius. Caliş I, et al. **J Nat Prod** 1996 Nov;59(11):1019–23

Triterpene saponins from Cyclamen mirabile and their biological activities. Caliş T, et al. **J Nat Prod** 1997 Mar; 60(3):315–8

Leonticins A–C, three octasaccharide saponins from Leontice kiangnanensis. Chen M, et al. **J Nat Prod** 1996 Aug; 59(8):722–8

Three new oleanane saponins from Zanha africana. Cuéllar MJ, et al. **J Nat Prod** 1997 Feb;60(2):191–4

Novel saponins hainaneosides A and B isolated from Marsdenia hainanensis. Ma B, et al. **J Nat Prod** 1997 Feb; 60(2):134–8

Triterpenoid saponins from Bellis bernardii. Schöpke T, et al. **J Nat Prod** 1996 Oct;59(10):939–43

Purification and characterization of endogenous digoxin-like immunoreactive factors in chicken blood. Wei JS, et al. **Life Sci** 1996;59(19):1617–29

Effect of a novel saponin adjuvant derived from Quillaja saponaria on the immune response to recombinant hepatitis B surface antigen. So HS, et al. **Mol Cells** 1997 Apr 30; 7(2):178–86

Triterpene saponins from Cyclamen coum var. coum. Caliş I, et al. **Planta Med** 1997 Apr;63(2):166–70

A new triterpenoid saponin, bredemeyeroside B. from the roots of Bredemeyera floribunda. Daros M do D, et al. **Planta Med** 1996 Dec;62(6):523–7

New spirostanol glycosides from Anemarrhena asphodeloides [letter] Ma B, et al. **Planta Med** 1997 Aug;63(4):376–9

Cyclocariosides II and III: two secodammarane triterpenoid saponins from Cyclocarya paliurus. Shu RG, et al. **Planta Med** 1995 Dec;61(6):551–3

METABOLISM

Oxygen-radical-scavenging activity of DDMP-conjugated saponins and physiological role in leguminous plant. Okubo K, et al. **Adv Exp Med Biol** 1996;405:141–54 (27 ref.)

Saponin detoxification by plant pathogenic fungi. Osbourn AE, et al. **Adv Exp Med Biol** 1996;404:547–55 (44 ref.)

Inhibition of erythrocyte Na,K-ATPase activity during anticipatory hypoventilation in micropigs. Fedorova OV, et al. **Am J Hypertens** 1996 Nov;9(11):1126–31

Stereospecific formation of (24R,25R)-3 alpha,7 alpha,12 alpha,24-tetrahydroxy-5 beta-cholestan-26-oic acid catalyzed with a peroxisomal bifunctional D-3-hydroxyacyl-CoA dehydratase/D-3-hydroxyacyl-CoA dehydrogenase. Kurosawa T, et al. **Biol Pharm Bull** 1997 Mar;20(3):295–7

Plasma and urinary digitalis-like substance levels during atrial natriuretic peptide infusion in essential hypertensive patients. Baldoncini R, et al. **Clin Invest Med** 1996 Feb; 19(1):13–9

Gas chromatographic-mass spectrometric determination of 20(S)-protopanaxadiol and 20(S)-protopanaxatriol for study on human urinary excretion of ginsenosides after ingestion of ginseng preparations. Cui JF, et al. **J Chromatogr B Biomed Appl** 1997 Feb 21;689(2):349–55

Atrial natriuretic factor and digoxin-like immunoreactive factor in diabetic patients: their interrelation and the influence of the autonomic nervous system [letter; comment] Paci A, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2375–6. Comment on: J Clin Endocrinol Metab 1996 Sep;81(9):3385–9.

The endogenous digitalis-like factor. Kölbel F, et al. **Mol Cell Biochem** 1996 Jul–Aug;160–161:111–5 (51 ref.)

Digoxin-like immunoreactive substance and sodium-potassium-adenosine triphosphatase inhibition in normal pregnancy: a longitudinal study. Gilson GJ, et al. **Obstet Gynecol** 1997 May;89(5 Pt 1):743–6

Main ginseng saponin metabolites formed by intestinal bacteria. Hasegawa H, et al. **Planta Med** 1996 Oct; 62(5):453–7

Hepatogenous photosensitization of ruminants by Brachiaria decumbens and panicum dichotomiflorum in the absence of sporidesmin: lithogenic saponins may be responsible. Meagher LP, et al. **Vet Hum Toxicol** 1996 Aug;38(4):271–4

Metabolism of saponins from Narthecium ossifragum--a plant implicated in the aetiology of alveld, a hepatogenous photosensitization of sheep. Flåøyen A, et al. **Vet Res Commun** 1997 Jul;21(5):335–45

[Competition of ethanol with endogenous digoxin-like natriuretic factor as a possible mechanism of addiction] Bagrov IaIu, et al. **Dokl Akad Nauk** 1996 May;348(2):268–9 **(Rus)**

PHARMACOKINETICS

Metabolites of nuatigenin ((22S,25S)22,25-epoxy-3 beta, 26-dihydroxy-furost-5-ene) accumulate in the bile of rabbits fed oats. St. Pyrek J, et al. **Adv Exp Med Biol** 1996; 404:443–58

PHARMACOLOGY

New cardioactive steroid saponins and other glycosides from Mexican Tribulus cistoides. Achenbach H, et al. **Adv Exp Med Biol** 1996;404:357–70 (17 ref.)

Commercial utilization of plant-derived saponins: an overview of medicinal, pharmaceutical, and industrial applications. Balandrin MF. **Adv Exp Med Biol** 1996; 404:1–14 (43 ref.)

Medical activities of Aesculus hippocastaneum (horse-chestnut) saponins. Dworschák E, et al. **Adv Exp Med Biol** 1996;404:471–4

Fungitoxic activity of saponins: practical use and fundamental principles. Gruiz K. **Adv Exp Med Biol** 1996;404:527–34

Studies of the phytotoxicity of saponins on weed and crop plants. Hoagland RE, et al. **Adv Exp Med Biol** 1996; 405:57–73 (68 ref.)

Antifungal and hemolytic activity of aerial parts of alfalfa (Medicago) species in relation to saponin composition. Jurzysta M, et al. **Adv Exp Med Biol** 1996;404:565–74

Structure/function studies on QS-21, a unique immunological adjuvant from Quillaja saponaria. Kensil CR, et al. **Adv Exp Med Biol** 1996;404:165–72

Chemistry and biological activity of steroid saponins from Moldovian plants. Kintia PK. **Adv Exp Med Biol** 1996; 404:309–34 (28 ref.)

Regulatory effects of saponins in the pathogenesis of root rots in cereal crops. Kintia PK, et al. **Adv Exp Med Biol** 1996;405:75–82

Anti-tumor-promoting activities or triterpenoid glycosides; cancer chemoprevention by saponins. Konoshima T. **Adv Exp Med Biol** 1996;404:87–100 (11 ref.)

Effect of quillaja saponins on in vitro rumen fermentation. Makkar HP, et al. **Adv Exp Med Biol** 1996;405:387–94

Steroidal saponins from the Liliaceae plants and their biological activities. Mimaki Y, et al. **Adv Exp Med Biol** 1996;404:101–10 (29 ref.)

Bioactive saponins from solanaceous and leguminous plants. Nohara T, et al. **Adv Exp Med Biol** 1996;404:263–76 (22 ref.)

Biological activity of saponins from two Dracaena species. Okunji CO, et al. **Adv Exp Med Biol** 1996;404:415–28

Analysis, heat stability and physiological effects of saponins from oats. Onning G, et al. **Adv Exp Med Biol** 1996; 405:365–75 (49 ref.)

19 new steroidal saponins from Allium plants: isolation, structural elucidation and effect on blood coagulability. Peng JP, et al. **Adv Exp Med Biol** 1996;404:511–26

Chemistry and biological activity of triterpenoid glycosides from Medicago sativa. Timbekova AE, et al. **Adv Exp Med Biol** 1996;405:171–82 (19 ref.)

Studies on bioactive saponins from Chinese medicinal plants. Xu R, et al. **Adv Exp Med Biol** 1996;404:371–82 (9 ref.)

Effect of some saponins on glucose transport system. Yamasaki K. **Adv Exp Med Biol** 1996;404:195–206

Effect of saponins on the growth and activity of rhizosphere bacteria. Zablotowicz RM, et al. **Adv Exp Med Biol** 1996; 405:83–95

Saponins as antimycotic agents: glycosides of medicagenic acid. Zehavi U, et al. **Adv Exp Med Biol** 1996;404:535–46 (37 ref.)

Enhanced SR function in saponin-treated ventricular trabeculae from rabbits with heart failure. Denvir MA, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H850–9

Notoginsenoside R1 counteracts endotoxin-induced activation of endothelial cells in vitro and endotoxin-induced lethality in mice in vivo. Zhang WJ, et al. **Arterioscler Thromb Vasc Biol** 1997 Mar;17(3):465–74

Ginsenoside-Rg1 positively regulates cyclin E-dependent kinase activity in human hepatoma SK-HEP-1 cells. Lee KY, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):539–46

Ginsenoside-Rh1 and Rh2 inhibit the induction of nitric oxide synthesis in murine peritoneal macrophages. Park YC, et al. **Biochem Mol Biol Int** 1996 Nov;40(4):751–7

Specific interaction between tetrandrine and Quillaja saponins in promoting permeabilization of plasma membrane in human leukemic HL-60 cells. Leung YM, et al. **Biochim Biophys Acta** 1997 Apr 26;1325(2):318–28

Anti-allergic effect of tea-leaf saponin (TLS) from tea leaves (Camellia sinensis var. sinensis). Akagi M, et al. **Biol Pharm Bull** 1997 May;20(5):565–7

Influence of OSW-1 [3 beta,16 beta,17 alpha-trihydroxycholest-5-en-22-one 16-O-(2-O-4-methoxybenzoyl-beta-D-xylopyranosyl)-(1--> 3)-(2-O-acetyl-alpha-L-arabinopyranoside)], a steroidal saponin, on endothelium dependent relaxation caused by acetylcholine in rat aorta. Honda H, et al. **Biol Pharm Bull** 1997 Apr;20(4):428–30

Combined potentiating effect of byakko-ka-ninjin-to, its constituents, rhizomes of Anemarrhena asphodeloides, tomosaponin A-III, and calcium on pilocarpine-induced saliva secretion in streptozocin-diabetic mice. Kimura M, et al. **Biol Pharm Bull** 1996 Jul;19(7):926–31

Effect of ginsenoside Rb1 on rat liver phosphoproteins induced by carbon tetrachloride. Park HJ, et al. **Biol Pharm Bull** 1996 Jun;19(6):834–8

Ginsenoside Rb1 regulates ChAT, NGF and trkA mRNA expression in the rat brain. Salim KN, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):177–82

Ginsenoside-Rh2 blocks the cell cycle of SK-HEP-1 cells at the G1/S boundary by selectively inducing the protein expression of p27kip1. Lee KY, et al. **Cancer Lett** 1996 Dec 20;110(1–2):193–200

Iscoms containing purified Quillaja saponins upregulate both Th1-like and Th2-like immune responses. Sjölander A, et al. **Cell Immunol** 1997 Apr 10;177(1):69–76

Effect of notoginsenoside R1 on the synthesis of components of the fibrinolytic system in cultured smooth muscle cells of human pulmonary artery. Zhang WJ, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jun;43(4):581–7

Structures and antiproliferative activity of saponins from Sechium pittieri and S. talamancense. Castro VH, et al. **Chem Pharm Bull (Tokyo)** 1997 Feb;45(2):349–58

Bioactive saponins and glycosides. X. On the constituents of zizyphi spinosi semen, the seeds of Zizyphus jujuba Mill. var. spinosa Hu (1): structures and histamine release-inhibitory effect of jujubosides A1 and C and acetyljujuboside B. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 Jul;45(7):1186–92

Bioactive saponins and glycosides. VI. Elatosides A and B, potent inhibitors of ethanol absorption, from the bark of Aralia elata SEEM. (Araliaceae): the structure-requirement in oleanolic acid glucuronide-saponins for the inhibitory activity. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1996 Oct;44(10):1915–22

Bioactive saponins and glycosides. VII. On the hypoglycemic principles from the root cortex of Aralia elata Seem.: structure related hypoglycemic activity of oleanolic acid oligoglycoside. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1996 Oct;44(10):1923–7

Immunologic effect of traditional Chinese drugs. Yang G. **Chin Med J (Engl)** 1996 Jan;109(1):59–60 (0 ref.)

Influences of ginsenosides Rb1 and Rg1 on reversible focal brain ischemia in rats. Zhang YG, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan;17(1):44–8

Vascular effects of selected antihypertensive drugs derived from traditional medicinal herbs. Kwan CY. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S297–9 (12 ref.)

Inhibition of cholesterol absorption with CP-148,623 lowers serum cholesterol in humans. Harris WS, et al. **Clin Pharmacol Ther** 1997 Mar;61(3):385–9

In vitro induction of differentiation by ginsenoides in F9 teratocarcinoma cells. Lee YN, et al. **Eur J Cancer** 1996 Jul;32A(8):1420–8

Effects of ginsenosides on impaired performance caused by scopolamine in rats. Yamaguchi Y, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):149–51

Effects of ginsenosides on maze performance and brain choline acetyltransferase activity in scopolamine-treated young rats and aged rats. Yamaguchi Y, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):37–41

Blockade by ginseng total saponin of methamphetamine-induced hyperactivity and conditioned place preference in mice. Kim HS, et al. **Gen Pharmacol** 1996 Mar;27(2):199–204

Antinociceptive mechanisms of dipsacus saponin C administered intracerebroventricularly in the mouse. Suh HW, et al. **Gen Pharmacol** 1996 Oct;27(7):1167–72

Sodium pump isoform specificity for the digitalis-like factor isolated from human peritoneal dialysate. Tao QF, et al. **Hypertension** 1997 Mar;29(3):815–21

Effect of byakko-ka-ninjin-to on the efferent activity of the autonomic nerve fibers innervating the sublingual gland of the rat. Niijima A, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):46–50

Transcriptional activation of the Cu,Zn-superoxide dismutase gene through the AP2 site by ginsenoside Rb2 extracted from a medicinal plant, Panax ginseng. Kim YH, et al. **J Biol Chem** 1996 Oct 4;271(40):24539–43

The effects of extracts from Tetrapleura tetraptera (Taub.) and Bayluscide on cells and tissue structures of Biomphalaria glabrata (Say). Bode AU, et al. **J Ethnopharmacol** 1996 Feb;50(2):103–13

Asterlingulatosides C and D, cytotoxic triterpenoid saponins from Aster lingulatus. Shao Y, et al. **J Nat Prod** 1997 Jul; 60(7):743–6

Molecular biological analysis of the effects of ginsenoside-Rb2 on albumin mRNA in streptozotocin-induced diabetic rats. Yokozawa T, et al. **J Pharm Pharmacol** 1996 Jul;48(7):763–7

Isomerization and formulation stability of the vaccine adjuvant QS-21. Cleland JL, et al. **J Pharm Sci** 1996 Jan; 85(1):22–8

Regulation of the fibrinolytic potential of cultured human umbilical vein endothelial cells: astragaloside IV downregulates plasminogen activator inhibitor-1 and upregulates tissue-type plasminogen activator expression. Zhang WJ, et al. **J Vasc Res** 1997 Jul–Aug;34(4):273–80

The possible involvement of GABAA systems in the antinarcotic effect of majonoside-R2, a major constituent of Vietnamese ginseng, in mice. Nguyen TT, et al. **Jpn J Pharmacol** 1996 Aug;71(4):345–9

Majonoside-R2 reverses social isolation stress-induced decrease in pentobarbital sleep in mice: possible involvement of neuroactive steroids. Nguyen TT, et al. **Life Sci** 1997;61(4):395–402

Involvement of supraspinal GABA receptors in majonoside-R2 suppression of clonidine-induced antinociception in mice. Nguyen TT, et al. **Life Sci** 1997; 61(4):427–36

G1 phase-specific suppression of the Cdk2 activity by ginsenoside Rh2 in cultured murine cells. Ota T, et al. **Life Sci** 1997;60(2):PL39–44

SAPONINS

Protection of ischemic hippocampal neurons by ginsenoside Rb1, a main ingredient of ginseng root. Lim JH, et al. **Neurosci Res** 1997 Jul;28(3):191–200

Majonoside–R2, a major constituent of Vietnamese ginseng, attenuates opioid–induced antinociception. Huong NT, et al. **Pharmacol Biochem Behav** 1997 May–Jun; 57(1–2):285–91

Biological activities of buddlejasaponin isolated from Buddleja madagascariensis and Scrophularia scorodonia. Emam AM, et al. **Pharmazie** 1997 Jan;52(1):76–7

Inhibitory activity of soyasaponin II on virus replication in vitro. Hayashi K, et al. **Planta Med** 1997 Apr;63(2):102–5

Protective effects of red ginseng saponins against carbon tetrachloride–induced hepatotoxicity in Sprague Dawley rats. Jeong TC, et al. **Planta Med** 1997 Apr;63(2):136–40

The action of ginsenoside Re on inotropy and chronotropy of isolated atria prepared from guinea pigs. Jin ZQ. **Planta Med** 1996 Aug;62(4):314–6

Ginseng total saponin inhibits the dopaminergic depletions induced by methamphetamine. Oh KW, et al. **Planta Med** 1997 Feb;63(1):80–1

Effect of saponin on the transmucosal passage of beta–lactoglobulin across the proximal small intestine of normal and beta–lactoglobulin–sensitised rats. Gee JM, et al. **Toxicology** 1997 Feb 28;117(2–3):219–28

Study of the adjuvant activity of new MDP derivatives and purified saponins and their influence on HIV–1 replication in vitro. Krivorutchenko YL, et al. **Vaccine** 1997 Aug–Sep; 15(12–13):1479–86

Stimulation of pancreatic lipase activity by saponins isolated from Medicago sativa L. Sroka Z, et al. **Z Naturforsch [C]** 1997 Mar–Apr;52(3–4):235–9

[Mechanism of action of ginsenoside Rb1 in decreasing intracellular Ca2+] Jiang XY, et al. **Yao Hsueh Hsueh Pao** 1996;31(5):321–6 (Eng. Abstr.) **(Chi)**

[Effect of tea–leaf saponin on blood pressure of spontaneously hypertensive rats] Sagesaka–Mitane Y, et al. **Yakugaku Zasshi** 1996 May;116(5):388–95 (Eng. Abstr.) **(Jpn)**

[Learning by mice of Y–maze using drinking reinforcement and aversive olfactory stimulus (beneficial effect of ginsenosides)] Chepurnov SA, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):253–7 **(Rus)**

[Effect of saponins from Hedera taurica Carr. and modified muramylpeptides on replication of human immunodeficiency virus in vitro] Krivorutchenko IuL, et al. **Vopr Virusol** 1997 Jan–Feb;42(1):34–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Inhibiting cholesterol absorption with CP–88,818 (beta–tigogenin cellobioside; tiqueside): studies in normal and hyperlipidemic subjects. Harris WS, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):55–60

Cestocidal activity of Acacia auriculiformis. Ghosh NK, et al. **J Helminthol** 1996 Jun;70(2):171–2

Effect of soya bean saponins on azoxymethane–induced preneoplastic lesions in the colon of mice. Koratkar R, et al. **Nutr Cancer** 1997;27(2):206–9

Effects of Panax Ginseng C.A. Meyer saponins on male fertility. Salvati G, et al. **Panminerva Med** 1996 Dec; 38(4):249–54

Pulmonary protective and vasodilator effects of a standardized Panax ginseng preparation following artificial gastric digestion. Rimar S, et al. **Pulm Pharmacol** 1996 Aug; 9(4):205–9

[Nuclear cardiology study on effective ingredients of Astragalus membranaceus in treating heart failure] Luo HM, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Dec;15(12):707–9 (Eng. Abstr.) **(Chi)**

TOXICITY

Investigations of molluscicidal saponins from the Endod plant Phytolacca dodecandra. Thiilborg ST, et al. **Adv Exp Med Biol** 1996;404:151–64 (52 ref.)

URINE

Isolation and characterization of a digoxin–like immunoreactive substance from human urine by affinity chromatography. De Angelis C, et al. **Clin Chem** 1997 Aug; 43(8 Pt 1):1416–20

SAQUINAVIR

Saquinavir. A review of its pharmacology and clinical potential in the management of HIV infection. Noble S, et al. **Drugs** 1996 Jul;52(1):93–112 (75 ref.)

ADMINISTRATION & DOSAGE

Efficiency of nanoparticles as a carrier system for antiviral agents in human immunodeficiency virus–infected human monocytes/macrophages in vitro. Bender AR, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1467–71

ADVERSE EFFECTS

Hypersensitivity reactions during antiretroviral regimens with protease inhibitors [letter] Bonfanti P, et al. **AIDS** 1997 Aug;11(10):1301–2

Side–effects of ritonavir and its combination with saquinavir with special regard to renal function [letter] Witzke O, et al. **AIDS** 1997 May;11(6):836–8

Hypoprothrombinemia during concomitant therapy with warfarin and saquinavir [letter] Darlington MR. **Ann Pharmacother** 1997 May;31(5):647

BLOOD

Determination of saquinavir in human plasma by high–performance liquid chromatography. Ha HR, et al. **J Chromatogr B Biomed Appl** 1997 Jul 4;694(2):427–33

METABOLISM

Selective biotransformation of the human immunodeficiency virus protease inhibitor saquinavir by human small–intestinal cytochrome P4503A4: potential contribution to high first–pass metabolism. Fitzsimmons ME, et al. **Drug Metab Dispos** 1997 Feb;25(2):256–66

PHARMACOKINETICS

Saquinavir pharmacokinetics alone and in combination with ritonavir in HIV–infected patients. Merry C, et al. **AIDS** 1997 Mar 15;11(4):F29–33

PHARMACOLOGY

HIV protease inhibitors. Carr A, et al. **AIDS** 1996;10 Suppl A:S151–7 (51 ref.)

HIV phenotype switching during antiretroviral therapy: emergence of saquinavir–resistant strains with less cytopathogenicity. Ercoli L, et al. **AIDS** 1997 Aug; 11(10):1211–7

Removal of human immunodeficiency virus type 1 (HIV–1) protease inhibitors from preparations of immature HIV–1 virions does not result in an increase in infectivity or the appearance of mature morphology. Humphrey RW, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1017–23

Kinetic properties of saquinavir–resistant mutants of human immunodeficiency virus type 1 protease and their implications in drug resistance in vivo. Ermolieff J, et al. **Biochemistry** 1997 Oct 7;36(40):12364–70

Differential inhibition of cytochrome P450 isoforms by the protease inhibitors, ritonavir, saquinavir and indinavir. Eagling VA, et al. **Br J Clin Pharmacol** 1997 Aug; 44(2):190–4

Antagonism between human immunodeficiency virus type 1 protease inhibitors indinavir and saquinavir in vitro. Merrill DP, et al. **J Infect Dis** 1997 Jul;176(1):265–8

THERAPEUTIC USE

Rational approaches to resistance: using saquinavir. Boucher C. **AIDS** 1996 Nov;10 Suppl 1:S15–9 (16 ref.)

Saquinavir interaction with midazolam: pharmacokinetic considerations when prescribing protease inhibitors for patients with HIV disease [letter] Merry C, et al. **AIDS** 1997 Feb;11(2):268–9

Adding saquinavir to stavudine in patients with advanced HIV–1 infection [letter] Rutschmann OT, et al. **AIDS** 1997 Mar 15;11(4):548

Correlation between changes in plasma HIV RNA levels and in plasma infectivity in response to antiretroviral therapy. Andreoni M, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):555–61

Kinetic properties of saquinavir–resistant mutants of human immunodeficiency virus type 1 protease and their implications in drug resistance in vivo. Ermolieff J, et al. **Biochemistry** 1997 Oct 7;36(40):12364–70

New drugs—reports of new drugs recently approved by the FDA. Saquinavir. **Bioorg Med Chem** 1997 Mar;5(3):465–6

Saquinavir in the management of HIV infection. Moyle G. **Br J Hosp Med** 1997 Jun 4–17;57(11):560–4

Emergence of resistant variants of HIV in vivo during monotherapy with the proteinase inhibitor saquinavir. Ives KJ, et al. **J Antimicrob Chemother** 1997 Jun;39(6):771–9

Saquinavir. Porche DJ. **J Assoc Nurses AIDS Care** 1996 Jul–Aug;7(4):61–4 (5 ref.)

Human immunodeficiency virus. Mutations in the viral protease that confer resistance to saquinavir increase the dissociation rate constant of the protease–saquinavir complex. Maschera B, et al. **J Biol Chem** 1996 Dec 27; 271(52):33231–5

Monitoring responses to antiretroviral treatment in human immunodeficiency virus type 1 (HIV–1)–infected patients by serial lymph node aspiration. Bürgisser P, et al. **J Infect Dis** 1997 May;175(5):1202–5

Patient compliance and drug failure in protease inhibitor monotherapy [letter] Vanhove GF, et al. **JAMA** 1996 Dec 25;276(24):1955–6

[The combination of saquinavir and ddC ensures longer survival (news)] Hoof T. **Dtsch Med Wochenschr** 1996 Sep 13;121(37):A30 **(Ger)**

[Control of the AIDS virus. The protease inhibitor Saquinavir apparently controls the disease course significantly and decreases death rate (news)] **Fortschr Med** 1996 Dec 20;114(35–36):60–2 **(Ger)**

1–SAR–8–ALA ANGIOTENSIN II see **SARALASIN**

1–SAR–8–ILE ANGIOTENSIN II see **1–SARCOSINE–8–ISOLEUCINE ANGIOTENSIN II**

SARALASIN

ANALYSIS

TLC characterization of liposomes containing angiotensinogen, angiotensine I, angiotensine II and saralazin. Brailoiu E, et al. **Biomed Chromatogr** 1997 May–Jun;11(3):160–3

DIAGNOSTIC USE

[Angiotensin II analogue infusion test] Katsuragi M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:321–4 (10 ref.) **(Jpn)**

METABOLISM

Glaucoma, capillaries and pericytes. 3. Peptide hormone binding and influence on pericytes. Ferrari–Dileo G, et al. **Ophthalmologica** 1996;210(5):269–75

PHARMACOLOGY

Effects of angiotensin converting enzyme inhibitor cilazapril and angiotensin II antagonist saralasin in ovarian hyperstimulation syndrome in the rabbit. Sahin Y, et al. **Gynecol Endocrinol** 1997 Aug;11(4):231–6

Effects of angiotensin II receptor blockade during exercise: comparison of losartan and saralasin. Symons JD, et al. **J Cardiovasc Pharmacol** 1996 Aug;28(2):223–31

SARCINA

GROWTH & DEVELOPMENT

Sensitivity and specificity of in situ bacterial chain reaction (BCR) in detecting sparse human tumor cells in peripheral blood. Rotman B, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):80–5

ISOLATION & PURIFICATION

Abomasal bloat associated with Sarcina–like bacteria in goat kids. DeBey BM, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1468–9

SARCOCYSTIS

[Sarcocystosis] Lian Z. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):295–9 (34 ref.) **(Chi)**

[Effect of Sarcocystis gigantea extract (SGE) on the replication of human immunodeficiency virus (HIV)] Drössigk VU, et al. **Berl Munch Tierarztl Wochenschr** 1996 Feb;109(2):41–5 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Sequence analysis and polymerase chain reaction amplification of small subunit ribosomal DNA from Sarcocystis neurona. Marsh AE, et al. **Am J Vet Res** 1996 Jul;57(7):975–81

Sarcocystis buffalonis n.sp. (Protozoa: Sarcocystidae) from the water buffalo (Bubalus bubalis) in Vietnam. Huong LT, et al. **J Parasitol** 1997 Jun;83(3):471–4

The European badger (Carnivora:Mustelidae) as intermediate host of further three Sarcocystis species (Sporozoa). Odening K, et al. **Parasite** 1994 Mar;1(1):23–30

GENETICS

Genetic diversity in Sarcocystis gigantea assessed by RFLP analysis of the ITS1 region. Jeffries AC, et al. **Appl Parasitol** 1996 Dec;37(4):275–83

Identification of synapomorphic characters in the genus Sarcocystis based on 18S rDNA sequence comparison. Jeffries AC, et al. **J Eukaryot Microbiol** 1997 Sep–Oct; 44(5):388–92

Production of a recombinant fusion protein of Sarcocystis tenella and evaluation of its diagnostic potential in an ELISA. Mertens CM, et al. **Vet Parasitol** 1996 Oct 25; 65(3–4):185–97

GROWTH & DEVELOPMENT

Early generation merogonies of Sarcocystis muriviperae in liver and muscles of white mice. Paperna I, et al. **Folia Parasitol (Praha)** 1996;43(2):91–9

In vitro cultivation of the vascular phase of Sarcocystis singaporensis. Jäkel T, et al. **J Eukaryot Microbiol** 1997 Jul–Aug;44(4):293–9

IMMUNOLOGY

Seroprevalence of antibodies to Sarcocystis neurona in horses residing in a county of southeastern Pennsylvania [see comments] Bentz BG, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):517–8. Comment in: J Am Vet Med Assoc 1997 Feb 15;210(4):482–3.

Seroprevalence of antibodies to Sarcocystis neurona in horses residing in Oregon [see comments] Blythe LL, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):525–7. Comment in: J Am Vet Med Assoc 1997 Feb 15;210(4):482–3.

Serum antibodies to Sarcocystis neurona—half the horses in the United States have them! [comment] MacKay RJ. **J Am Vet Med Assoc** 1997 Feb 15;210(4):482–3 (12 ref.) . Comment on: J Am Vet Med Assoc 1997 Feb 15;210(4

):517–8. Comment on: J Am Vet Med Assoc 1997 Feb 15;210(4):519–24. Comment on: J Am Vet Med Assoc 1997 Feb 15;210(4):525–7.
Seroprevalence of antibodies to Sarcocystis neurona in horses residing in Ohio [see comments] Saville WJ, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):519–24. Comment in: J Am Vet Med Assoc 1997 Feb 15;210(4):482–3.
In vitro biosynthesis and in vivo processing of the major microneme antigen of Sarcocystis muris cyst merozoites. Klein H, et al. **Parasitol Res** 1996;82(5):468–74
Collagen cross-reactive antigen of Sarcocystis cruzi. Inoue N, et al. **Vet Parasitol** 1996 May;63(1–2):17–23

ISOLATION & PURIFICATION

Sequence analysis and polymerase chain reaction amplification of small subunit ribosomal DNA from Sarcocystis neurona. Marsh AE, et al. **Am J Vet Res** 1996 Jul;57(7):975–81
Pyogranulomatous encephalitis associated with an unidentified Sarcocystis neurona–like organism in a horse. Hamir AN, et al. **J Vet Diagn Invest** 1997 Jul;9(3):331–3
Sarcocystis mihoensis n. sp. from sheep in Japan. Saito M, et al. **J Vet Med Sci** 1997 Feb;59(2):103–6
Ultrastructure of the cyst wall of Sarcocystis species with canine final host in Japan. Saito M, et al. **J Vet Med Sci** 1996 Sep;58(9):861–7
Equine protozoal myeloencephalitis. MacKay RJ. **Vet Clin North Am Equine Pract** 1997 Apr;13(1):79–96 (72 ref.)
Experimental induction of equine protozoal myeloencephalitis in horses using Sarcocystis sp. sporocysts from the opossum (Didelphis virginiana). Fenger CK, et al. **Vet Parasitol** 1997 Feb;68(3):199–213
Prevalence of sarcocysts in livestock of northwest Ethiopia. Woldemeskel M, et al. **Zentralbl Veterinarmed [B]** 1996 Mar;43(1):55–8
[Isolation and experimental transmission of Sarcocystis moulei Neveu–Lemaire, 1912] Heydorn AO, et al. **Berl Munch Tierarztl Wochenschr** 1996 Nov–Dec; 109(11–12):440–5 (Eng. Abstr.) **(Ger)**
[Sarcocystis sp. in the diaphragm of a domestic cat (Felis catus) from Valdivia, Chile] Torres P, et al. **Bol Chil Parasitol** 1996 Jan–Jun;51(1–2):30–2 (Eng. Abstr.) **(Spa)**

PATHOGENICITY

Instar susceptibility of the monarch butterfly (Danaus plexippus) to the neogregarine parasite, Ophryocystis elektroscirrha. Leong KLH, et al. **J Invertebr Pathol** 1997 Jan;69(1):79–83
Experimental infection of nude mice as a model for Sarcocystis neurona–associated encephalitis. Marsh AE, et al. **Parasitol Res** 1997;83(7):706–11
Gut Coccidia–– Isospora, Cryptosporidium, Cyclospora and Sarcocystis. Ackers JP. **Semin Gastrointest Dis** 1997 Jan; 8(1):33–44 (166 ref.)
[The effect of coccidia of the genus Sarcocystis on the morphofunctional organization of the skeletal musculature in experimentally infected mice. II. The connective tissue elements of the endomysium] Radchenko AI, et al. **Tsitologiia** 1996;38(6):656–60 (Eng. Abstr.) **(Rus)**
[The effect of coccidia of the genus Sarcocystis on the morphofunctional organization of the skeletal musculature in experimentally infected mice. I. The muscle fiber] Radchenko AI, et al. **Tsitologiia** 1996;38(6):650–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Antelopes (Bovidae) kept in European zoological gardens as intermediate hosts of Sarcocystis species. Stolte M, et al. **Parassitologia** 1996 Dec;38(3):565–70
Viability of the sporocysts of Sarcocystis cruzi after exposure to different temperatures and relative humidities. Savini G, et al. **Vet Parasitol** 1996 Dec 31;67(3–4):153–60

ULTRASTRUCTURE

Ultrastructure of the cyst wall of Sarcocystis species with canine final host in Japan. Saito M, et al. **J Vet Med Sci** 1996 Sep;58(9):861–7
On the diagnostics of Sarcocystis in cattle: sarcocysts of a species unusual for Bos taurus in a dwarf zebu. Odening K, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):19–24
[Sarcocystis phoeniconaii n. sp. Murata, 1986 (Apicomplexa: Sarcocystidae) of the lesser flamingo (Phoeniconaias mirror: Ciconiiformes)] Göbel E, et al. **Berl Munch Tierarztl Wochenschr** 1996 Jun–Jul; 109(6–7):239–44 (Eng. Abstr.) **(Ger)**

SARCOCYSTOSIS

[Sarcocystosis] Lian Z. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):295–9 (34 ref.) **(Chi)**

EPIDEMIOLOGY

Intestinal sarcocystosis in Thai laborers. Wilairatana P, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):43–6

ETIOLOGY

Instar susceptibility of the monarch butterfly (Danaus plexippus) to the neogregarine parasite, Ophryocystis elektroscirrha. Leong KLH, et al. **J Invertebr Pathol** 1997 Jan;69(1):79–83

PARASITOLOGY

Early generation merogonies of Sarcocystis muriviperae in liver and muscles of white mice. Paperna I, et al. **Folia Parasitol (Praha)** 1996;43(2):91–9
Experimental infection of nude mice as a model for Sarcocystis neurona–associated encephalitis. Marsh AE, et al. **Parasitol Res** 1997;83(7):706–11

PATHOLOGY

Diagnosis of human sarcocystis infection from biopsies of the skeletal muscle. Mehrotra R, et al. **Pathology** 1996 Aug; 28(3):281–2
[The effect of coccidia of the genus Sarcocystis on the morphofunctional organization of the skeletal musculature in experimentally infected mice. I. The muscle fiber] Radchenko AI, et al. **Tsitologiia** 1996;38(6):650–5 (Eng. Abstr.) **(Rus)**
[The effect of coccidia of the genus Sarcocystis on the morphofunctional organization of the skeletal musculature in experimentally infected mice. II. The connective tissue elements of the endomysium] Radchenko AI, et al. **Tsitologiia** 1996;38(6):656–60 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Experimental induction of equine protozoal myeloencephalitis in horses using Sarcocystis sp. sporocysts from the opossum (Didelphis virginiana). Fenger CK, et al. **Vet Parasitol** 1997 Feb;68(3):199–213

VETERINARY

Sequence analysis and polymerase chain reaction amplification of small subunit ribosomal DNA from Sarcocystis neurona. Marsh AE, et al. **Am J Vet Res** 1996 Jul;57(7):975–81
Neurological symptoms associated with sarcocystosis in adult sheep. Henderson JM, et al. **Can Vet J** 1997 Mar; 38(3):168–70
Seroprevalence of antibodies to Sarcocystis neurona in horses residing in a county of southeastern Pennsylvania [see comments] Bentz BG, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):517–8. Comment in: J Am Vet Med Assoc 1997 Feb 15;210(4):482–3.
Seroprevalence of antibodies to Sarcocystis neurona in horses residing in Oregon [see comments] Blythe LL, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):525–7. Comment in: J Am Vet Med Assoc 1997 Feb 15;210(4):482–3.
Epizootic of equine protozoal myeloencephalitis on a farm. Fenger CK, et al. **J Am Vet Med Assoc** 1997 Apr 1; 210(7):923–7
Serum antibodies to Sarcocystis neurona––half the horses in the United States have them! [comment] MacKay RJ. **J Am Vet Med Assoc** 1997 Feb 15;210(4):482–3 (12 ref.) . Comment on: J Am Vet Med Assoc 1997 Feb 15;210(4):517–8. Comment on: J Am Vet Med Assoc 1997 Feb 15;210(4):519–24. Comment on: J Am Vet Med Assoc 1997 Feb 15;210(4):525–7.
Seroprevalence of antibodies to Sarcocystis neurona in horses residing in Ohio [see comments] Saville WJ, et al. **J Am Vet Med Assoc** 1997 Feb 15;210(4):519–24. Comment in: J Am Vet Med Assoc 1997 Feb 15;210(4):482–3.
What is your neurologic diagnosis? Equine protozoal myeloencephalitis. Sedrish SA, et al. **J Am Vet Med Assoc** 1996 Sep 1;209(5):903–5
Fatal hepatic sarcocystosis in two polar bears (Ursus maritimus). Garner HM, et al. **J Parasitol** 1997 Jun; 83(3):523–6
Sarcocystis buffalonis n.sp. (Protozoa: Sarcocystidae) from the water buffalo (Bubalus bubalis) in Vietnam. Huong LT, et al. **J Parasitol** 1997 Jun;83(3):471–4
Pyogranulomatous encephalitis associated with an unidentified Sarcocystis neurona–like organism in a horse. Hamir AN, et al. **J Vet Diagn Invest** 1997 Jul;9(3):331–3
Sarcocystis mihoensis n. sp. from sheep in Japan. Saito M, et al. **J Vet Med Sci** 1997 Feb;59(2):103–6
Ultrastructure of the cyst wall of Sarcocystis species with canine final host in Japan. Saito M, et al. **J Vet Med Sci** 1996 Sep;58(9):861–7
Protozoan parasites and pathological findings in Hydromys chrysogaster (Muridae: Hydromyinae) from Queensland. Smales LR, et al. **J Wildl Dis** 1996 Apr;32(2):344–7
The European badger (Carnivora:Mustelidae) as intermediate host of further three Sarcocystis species (Sporozoa). Odening K, et al. **Parasite** 1994 Mar;1(1):23–30
Antelopes (Bovidae) kept in European zoological gardens as intermediate hosts of Sarcocystis species. Stolte M, et al. **Parassitologia** 1996 Dec;38(3):565–70
Equine protozoal myeloencephalitis. MacKay RJ. **Vet Clin North Am Equine Pract** 1997 Apr;13(1):79–96 (72 ref.)
Collagen cross-reactive antigen of Sarcocystis cruzi. Inoue N, et al. **Vet Parasitol** 1996 May;63(1–2):17–23
Production of a recombinant fusion protein of Sarcocystis tenella and evaluation of its diagnostic potential in an ELISA. Mertens CM, et al. **Vet Parasitol** 1996 Oct 25; 65(3–4):185–97
On the diagnostics of Sarcocystis in cattle: sarcocysts of a species unusual for Bos taurus in a dwarf zebu. Odening K, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):19–24
Studies on pathogenesis, tissue infection and congenital transmission in cows experimentally infected with Sarcocystis cruzi by various routes. Savini G, et al. **Vet Parasitol** 1996 Sep 16;64(4):319–27
Prevalence of sarcocysts in livestock of northwest Ethiopia. Woldemeskel M, et al. **Zentralbl Veterinarmed [B]** 1996 Mar;43(1):55–8
[Sarcocystis phoeniconaii n. sp. Murata, 1986 (Apicomplexa: Sarcocystidae) of the lesser flamingo (Phoeniconaias mirror: Ciconiiformes)] Göbel E, et al. **Berl Munch Tierarztl Wochenschr** 1996 Jun–Jul; 109(6–7):239–44 (Eng. Abstr.) **(Ger)**
[Isolation and experimental transmission of Sarcocystis moulei Neveu–Lemaire, 1912] Heydorn AO, et al. **Berl Munch Tierarztl Wochenschr** 1996 Nov–Dec; 109(11–12):440–5 (Eng. Abstr.) **(Ger)**

SARCODINA

GENETICS

Sequence analysis and immunofluorescence study of alpha– and beta–tubulins in Reticulomyxa filosa: implications of the high degree of beta2–tubulin divergence. Linder S, et al. **Cell Motil Cytoskeleton** 1997;36(2):164–78

PHYSIOLOGY

Reactivation of cell surface transport in Reticulomyxa. Orokos DD, et al. **Cell Motil Cytoskeleton** 1997; 37(2):139–48

SARCOIDOSIS

Ulcerative sarcoidosis. Case report and review of the literature. Albertini JG, et al. **Arch Dermatol** 1997 Feb; 133(2):215–9 (50 ref.)
Cardiac sarcoidosis [editorial] Mitchell DN, et al. **BMJ** 1997 Feb 1;314(7077):320–1
Sarcoid arthropathy. Totemchokchyakarn K, et al. **Bull Rheum Dis** 1997 May;46(3):3–5 (5 ref.)
Sarcoidosis of the sella turcica in association with bilateral sarcoidosis of the lacrimal glands. Khalil MK, et al. **Can J Ophthalmol** 1996 Feb;31(1):32–5
Sarcoidosis: a clinical overview. Puryear DW, et al. **Compr Ther** 1996 Oct;22(10):649–53 (12 ref.)
An update of the benign proliferative monocyte–macrophage and dendritic cell disorders. Moschella SL. **J Dermatol** 1996 Nov;23(11):805–15 (56 ref.)
Fallopian tube and pulmonary sarcoidosis. A case report. Boakye K, et al. **J Reprod Med** 1997 Aug;42(8):533–5
Early onset sarcoidosis: not a benign disease. Fink CW, et al. **J Rheumatol** 1997 Jan;24(1):174–7
Sarcoidosis [published erratum appears in N Engl J Med 1997 Jul 10;337(2):139] Newman LS, et al. **N Engl J Med** 1997 Apr 24;336(17):1224–34 (159 ref.)
Sarcoidosis in children. Pattishall EN, et al. **Pediatr Pulmonol** 1996 Sep;22(3):195–203 (74 ref.)
Sarcoidosis of hands. Rivera–Sanfeliz G, et al. **Skeletal Radiol** 1996 Nov;25(8):786–8
[Sarcoidosis] Chilosi M, et al. **Pathologica** 1996 Dec; 88(6):527–8 **(Ita)**
[Cardiac sarcoidosis] Sekiguchi M, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):451–6 (22 ref.) **(Jpn)**
[Sarcoidosis: 25–year clinical follow–up] Khomenko AG, et al. **Probl Tuberk** 1996;(6):64–8 (Eng. Abstr.) **(Rus)**

BLOOD

Serum type I and type III procollagen peptide levels in sarcoidosis. Bacchella L, et al. **Eur Respir J** 1996 Aug; 9(8):1648–51
Serum levels of interleukin–8 as a marker of disease activity in patients with chronic sarcoidosis. Yokoyama T, et al. **J Med** 1995;26(5–6):209–19

CHEMICALLY INDUCED

Neurosarcoidosis following augmentation mammoplasty with silicone. Yoshida T, et al. **Neurol Res** 1996 Aug; 18(4):319–20
[Sarcoidosis in interferon–alpha therapy] Otte HG, et al. **Hautarzt** 1997 Jul;48(7):482–7 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

The sarcoidosis–lymphoma syndrome: acceleration of the cutaneous sarcoidosis during chemotherapy of the lymphoma [letter] Keohane SG, et al. **Acta Derm Venereol** 1996 May;76(3):251–3
Flexion contracture of fingers due to sarcoidosis––a case report. Ikeda K, et al. **Acta Orthop Scand** 1996 Dec; 67(6):623–5
Unusual sarcoidosis in a child [letter] Rodríguez–Núñez A. **Acta Paediatr** 1997 Jan;86(1):119
Sarcoid reactions in association with a leiomyosarcoma of the stomach. Matsuhashi N, et al. **Am J Gastroenterol** 1996 Dec;91(12):2623–4
Biliary tract obstruction due to sarcoidosis: a case report. Rezeig MA, et al. **Am J Gastroenterol** 1997 Mar;92(3):527–8

An unusual case of sarcoidosis presenting as a pancreatic mass [letter] Rodriguez J, et al. **Am J Gastroenterol** 1996 Oct;91(10):2253–4

Hemophagocytic syndrome responding to high–dose gammaglobulin as presenting feature of sarcoidosis [letter] Balduini CL, et al. **Am J Hematol** 1997 Jan;54(1):88–9

Wegener's granulomatosis followed by development of sarcoidosis. Ahuja TS, et al. **Am J Kidney Dis** 1996 Dec; 28(6):893–8

Selective vestibular damage in neurosarcoidosis. von Brevern M, et al. **Ann Neurol** 1997 Jul;42(1):117–20

Onycholysis in sarcoidosis––a previously undescribed association [letter] Davies MG, et al. **Br J Dermatol** 1996 Aug;135(2):340

Fuchs' heterochromic uveitis and sarcoidosis [letter; comment] Jones NP. **Br J Ophthalmol** 1996 Aug;80(8):774 . Comment on: Br J Ophthalmol 1995 Nov;79(11):1021–3.

Unusual orbital presentations of dural sarcoidosis. Kao SC, et al. **Can J Ophthalmol** 1996 Jun;31(4):195–200

Sarcoidosis presenting as a central nervous system mass lesion. Veres L, et al. **Chest** 1997 Feb;111(2):518–21

Pneumococcal pericarditis––out of sight, out of mind? McMechan SR, et al. **Clin Cardiol** 1996 Oct;19(10):829–30 (5 ref.)

Sarcoidosis presenting as erythema annulare centrifugum. Altomare GF, et al. **Clin Exp Dermatol** 1995 Nov; 20(6):502–3

Umbilicated papular sarcoidosis [letter] Kashyap S, et al. **Clin Exp Dermatol** 1996 Sep;21(5):395–6

Scar sarcoidosis associated with vitiligo, autoimmune thyroiditis and autoimmune chronic hepatitis [letter] Marzano AV, et al. **Clin Exp Dermatol** 1996 Nov; 21(6):466–7

Endobronchial involvement in a patient presenting with cutaneous sarcoid. Weller R, et al. **Clin Exp Dermatol** 1996 May;21(3):239–40

A case of scleroderma associated with sarcoidosis [letter] Arapis J, et al. **Clin Exp Rheumatol** 1997 May–Jun; 15(3):337–8

Rheumatic features of sarcoidosis. Pettersson T. **Curr Opin Rheumatol** 1997 Jan;9(1):62–7 (42 ref.)

Diffuse intrahepatic biliary strictures in sarcoidosis resembling sclerosing cholangitis. Case report and review of the literature. Alam I, et al. **Dig Dis Sci** 1997 Jun; 42(6):1295–301 (45 ref.)

Effect of ursodeoxycholic acid on chronic intrahepatic cholestasis due to sarcoidosis. Bécheur H, et al. **Dig Dis Sci** 1997 Apr;42(4):789–91

Chronic pancreatitis: a complication of sarcoidosis? Boruchowicz A, et al. **Eur J Gastroenterol Hepatol** 1996 Nov;8(11):1125–7 (25 ref.)

Myasthenia gravis and sarcoidosis: report of 2 cases. De Bleecker J, et al. **Eur Neurol** 1996;36(5):326–7

Necrotizing sarcoid granulomatosis with extrapulmonary involvement. Dykhuizen RS, et al. **Eur Respir J** 1997 Jan; 10(1):245–7

Warfarin therapy complicated by recurrent hemobilia in a patient with sarcoidosis. Pollack BJ, et al. **Gastrointest Endosc** 1997 Jul;46(1):72–6

Kaposi's sarcoma and sarcoidosis coexisting in lesions of HIV–seronegative patient. Dessoukey MW, et al. **Int J Dermatol** 1996 Nov;35(11):824–6

Subungual hyperkeratosis due to sarcoidosis. Fujii K, et al. **Int J Dermatol** 1997 Feb;36(2):125–7

Intralesional chloroquine for the treatment of cutaneous sarcoidosis [letter] Liedtka JE. **Int J Dermatol** 1996 Sep; 35(9):682–3

A rare case of cardiac sarcoidosis in a patient with progressive systemic sclerosis, Sjogren's syndrome, and polymyositis. Hosoya N, et al. **Intern Med** 1995 Dec; 34(12):1164–7

Sarcoidosis presenting as bilateral hydronephrosis [see comments] Miyazaki E, et al. **Intern Med** 1996 Jul; 35(7):579–82. Comment in: Intern Med 1996 Jul;35(7):523–4.

Acquired ichthyosiform erythroderma and sarcoidosis. Feind–Koopmans AG, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):826–8

Symptomatic gastric sarcoidosis and Helicobacter pylori infection. Pope JB, et al. **J Am Board Fam Pract** 1996 Nov–Dec;9(6):451–4

A 52–year–old woman complaining of back pain. Hada Y. **J Cardiol** 1996 Feb;27(2):85–87

Sarcoidosis associated with Basedow's disease [letter] Yamamoto T, et al. **J Dermatol** 1996 Dec;23(12):908–9

Extrapulmonary sarcoidosis: rapid spontaneous remission of marked splenomegaly. Ali Y, et al. **J Natl Med Assoc** 1996 Nov;88(11):714–6

Sarcoidosis presenting with prolonged fever in a patient with sickle cell anemia. Chan ED, et al. **J Natl Med Assoc** 1995 Nov;87(11):826–8

Sarcoidosis presenting as late–onset dementia [letter] Sanson M, et al. **J Neurol** 1996 Jun;243(6):484–7

Sarcoidosis resulting in duodenal obstruction in an adolescent. Noël JM, et al. **J Pediatr Gastroenterol Nutr** 1997 May;24(5):594–8

Long–term management of hypercalcaemia in chronically active sarcoidosis. Sinha RN, et al. **J R Soc Med** 1997 Mar; 90(3):156–7

Endometrial sarcoidosis as a cause of postmenopausal bleeding. A case report. Pearce KF, et al. **J Reprod Med** 1996 Nov;41(11):878–80

Juvenile systemic granulomatosis manifesting as premature aging syndrome and renal failure. Umemoto M, et al. **J Rheumatol** 1997 Feb;24(2):393–5

Otolaryngologic manifestations of sarcoidosis: presentation and diagnosis. Shah UK, et al. **Laryngoscope** 1997 Jan; 107(1):67–75

Carcinoid tumors and sarcoidosis––does a link exist? Levy NT, et al. **Mayo Clin Proc** 1997 Feb;72(2):112–6

Hemoptysis in sarcoidosis: a case report. Parker AL, et al. **Med Health R I** 1996 Sep;79(9):328–30

Hemidystonia occurring in a patient with sarcoidosis [letter] Caviness JN, et al. **Mov Disord** 1996 May;11(3):340–1

Respiratory muscle involvement in severe sarcoid myositis. Pringle CE, et al. **Muscle Nerve** 1997 Mar;20(3):379–81

Primary cutaneous cryptococcosis following trauma of the right forearm. Bohne T, et al. **Mycoses** 1996 Nov–Dec; 39(11–12):457–9

Sarcoidosis [letter] Salvatori R. **N Engl J Med** 1997 Sep 11; 337(11):790; discussion 791

Sarcoidosis and primary systemic vasculitis. Watson I, et al. **Nephrol Dial Transplant** 1996 Aug;11(8):1631–3

Steroid–responsive hypercalcaemic nephropathy in diabetes mellitus probably due to occult sarcoidosis [letter] Gupta VK. **Nephron** 1996;74(1):214–5

Subfoveal choroidal neovascularization in uveitis. Inagaki M, et al. **Ophthalmologica** 1996;210(4):229–33

Prognosticators for visual outcome in sarcoid uveitis. Dana MR, et al. **Ophthalmology** 1996 Nov;103(11):1846–53

Unusual ocular feature to the possible protean manifestations of sarcoidosis [letter; comment] Lee AG. **Retina** 1996; 16(3):266–7. Comment on: Retina 1995;15(5):422–7.

Acute sacroiliac arthritis and sarcoidosis [letter] Alijotas–Reig J, et al. **Rev Rhum Engl Ed** 1997 Apr; 64(4):278

Sarcoidosis involving a paratesticular adenomatoid tumor. Berkowitz JM, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep;13(2):183–5

Positive Lyme titers in a patient with active sarcoidosis [letter] Graber TA, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):86

Periampullary carcinoma in a patient with sarcoidosis [letter] Kadayifci A, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):87–8

Sarcoidosis presenting as heart disease. Nelson JE, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep;13(2):178–82 (48 ref.)

Systemic sarcoidosis with severe proliferative sarcoid retinopathy [letter] Ohta M, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar;13(1):81

Nephrolithiasis as a presenting feature of chronic sarcoidosis: a prospective study. Rizzato G, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep;13(2):167–72

Sudden hearing loss as the initial manifestation of neurosarcoidosis. Sugaya F, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar;13(1):54–6

Sarcoidosis and primary biliary cirrhosis with co–existing myositis. Hughes P, et al. **Thorax** 1997 Feb;52(2):201–2

Coccidioidomycosis and sarcoidosis. Multiple recurrences. Sharma OP, et al. **West J Med** 1997 May;166(5):345–7

[Ulcer lesions in sarcoidosis: apropos of a case (letter)] Porteau L, et al. **Ann Med Interne (Paris)** 1997;148(1):105–6 **(Fre)**

[Sarcoidosis with hematologic involvement and hypogammaglobulinemia] Bader–Meunier B, et al. **Arch Pediatr** 1996 Jun;3(6):576–9 (Eng. Abstr.) **(Fre)**

[Sarcoidosis symptomatic cardiomyopathy: report of 10 cases] Godeau P, et al. **Bull Acad Natl Med** 1996 Nov; 180(8):2005–15; discussion 2015–8 (Eng. Abstr.) **(Fre)**

[Association of low malignancy gastric B–cell lymphoma and mediastinal sarcoidosis (letter)] Mohand D, et al. **Gastroenterol Clin Biol** 1997;21(6–7):526–7 **(Fre)**

[Involvement of nasal bones in sarcoidosis (letter)] el Hassani S, et al. **Presse Med** 1997 Mar 15;26(8):371 **(Fre)**

[Type AA renal amyloidosis in sarcoidosis] Tchénio X, et al. **Rev Mal Respir** 1996 Dec;13(6):601–2 (Eng. Abstr.) **(Fre)**

[Spinal cord compression of sarcoidosis origin: a case] Tieulie N, et al. **Rev Med Interne** 1997 Jul;18(7):578–81 (18 ref.) (Eng. Abstr.) **(Fre)**

[Isolated involvement of the trigeminal nerve of sarcoidosis origin] Bonnet F, et al. **Rev Neurol (Paris)** 1997 Feb; 155(1):59–61 (Eng. Abstr.) **(Fre)**

[Acute renal failure. Isolated manifestation of a systemic disease] Harendza S, et al. **Internist (Berl)** 1997 Jun; 38(6):606–9 **(Ger)**

[Sensory Jacksonian seizures as initial manifestation of sarcoidosis] Meincke U, et al. **Nervenarzt** 1996 Oct; 67(10):883–5 (Eng. Abstr.) **(Ger)**

[A case of sarcoidosis with proliferative retinopathy] Miyao A, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun; 101(6):532–7 (Eng. Abstr.) **(Jpn)**

[Dermatomyositis complicated by sarcoidosis] Takano Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Nov; 34(11):1255–9 (Eng. Abstr.) **(Jpn)**

[A case of sarcoidosis with cranial mononeuritis multiplex and peripheral polyneuropathy] Kugi M, et al. **Rinsho Shinkeigaku** 1996 May;36(5):702–4 (Eng. Abstr.) **(Jpn)**

[Hodgkin's disease in a patient with sarcoidosis] Silva GN, et al. **Acta Med Port** 1996 Jul–Sep;9(7–9):287–93 (Eng. Abstr.) **(Por)**

[Sarcoidosis in combination with chlamydiasis] Dobin VL, et al. **Klin Med (Mosk)** 1996;74(5):62–3 **(Rus)**

[Experience in treating uveitis of sarcoid etiology] Chernysheva MV, et al. **Probl Tuberk** 1996;(5):34–5 **(Rus)**

[A case of a combination of sarcoidosis and myeloma] Kamaeva OI, et al. **Ter Arkh** 1995;67(12):57–9 (19 ref.) **(Rus)**

[Neurosarcoidosis. Sensorineural hearing loss] Avilés Mañoso P, et al. **Acta Otorrinolaringol Esp** 1997 Apr;48(3):229–31 (Eng. Abstr.) **(Spa)**

[Sarcoidosis and prostatic carcinoma (letter)] Ros E, et al. **An Med Interna** 1996 Feb;13(2):95–6 **(Spa)**

[Asymptomatic chronic intrahepatic cholestasis and multiple hypodense nodules in the liver and the spleen: manifestations of a case of sarcoidosis] Guilarte López–Mañas J, et al. **Gastroenterol Hepatol** 1996 Aug–Sep;19(7):359–62 (Eng. Abstr.) **(Spa)**

[Sarcoidosis and HIV infection (letter; comment)] Juega J, et al. **Med Clin (Barc)** 1996 Jun 15;107(3):115–6. Comment on: Med Clin (Barc) 1995 Jun 24;105(4):158. **(Spa)**

DIAGNOSIS

Gastric sarcoidosis. Farman J, et al. **Abdom Imaging** 1997 May–Jun;22(3):248–52

Preschool sarcoidosis mimicking juvenile rheumatoid arthritis: the significance of gallium scintigraphy and skin biopsy in the differential diagnosis. Sakurai Y, et al. **Acta Paediatr Jpn** 1997 Feb;39(1):74–8

Cystic pituitary mass in neurosarcoidosis. Sato N, et al. **AJNR Am J Neuroradiol** 1997 Jun–Jul;18(6):1182–5

Disorders that resemble lymphomas [clinical conference] Phatak PD, et al. **Am J Hematol** 1997 Sep;56(1):63–8

Case records of the Medical College of Virginia, Virginia Commonwealth University, clinicopathologic conference. Case presentation. A 38–year–old woman with new–onset ascites [clinical conference] Edmond M, et al. **Am J Med Sci** 1997 Mar;313(3):170–5

Disseminated histoplasmosis in a patient with sarcoidosis: a controversial relationship and a diagnostic dilemma. Yaseen Z, et al. **Am J Med Sci** 1997 Mar;313(3):187–90

Sarcoidosis manifesting as uveitis and menometrorrhagia. Sherman MD, et al. **Am J Ophthalmol** 1997 May; 123(5):703–5

Sarcoidosis of the pancreas: a case report. Snook B, et al. **Am Surg** 1996 Nov;62(11):947–8

Diagnosis and management of neurological sarcoidosis. Lower EE, et al. **Arch Intern Med** 1997 Sep 8; 157(16):1864–8

Association of sarcoidosis, insulin–dependent diabetes mellitus, and ulcerative colitis [letter] Yoshioka K, et al. **Arch Intern Med** 1997 Feb 24;157(4):465, 467

Imaging quiz case 1. Neurosarcoidosis (NS). Prasad M, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jan;123(1):110, 112–3

Spectrum of sarcoidosis involving the eye and brain. Ghabrial R, et al. **Aust N Z J Ophthalmol** 1997 Aug;25(3):221–4

Neurological cases for MRCP: 2. Multiple system atrophy (MSA). Manji H. **Br J Hosp Med** 1997 Jun 4–17; 57(11):577–9

Sarcoidosis presenting as a cutaneous eyelid mass [letter] Cacciatori M, et al. **Br J Ophthalmol** 1997 Apr;81(4):329–30

Systemic sclerosis and sarcoidosis, a report of five cases. De Bandt M, et al. **Br J Rheumatol** 1997 Jan;36(1):117–9

Cardiac sarcoidosis: diagnostic, prognostic, and therapeutic considerations. Sekiguchi M, et al. **Cardiovasc Drugs Ther** 1996 Nov;10(5):495–510 (288 ref.)

The importance of ethnicity in the diagnosis and prognosis of sarcoidosis [editorial; comment] Israel HL, et al. **Chest** 1997 Apr;111(4):838–40. Comment on: Chest 1997 Mar;111(3):619–22.

Sarcoidosis presenting as a central nervous system mass lesion. Veres L, et al. **Chest** 1997 Feb;111(2):518–21

Detection of M. tuberculosis complex DNA in a lesion resembling sarcoidosis. Baselga E, et al. **Clin Exp Dermatol** 1996 May;21(3):235–8

Solitary spinal cord sarcoidosis without other manifestations of systemic sarcoidosis. Jaster JH, et al. **Clin Imaging** 1997 Jan–Feb;21(1):17–22

Cerebral relapse of sarcoidlike Whipple's disease. Peters FP, et al. **Clin Infect Dis** 1997 Jun;24(6):1252–5

Systemic sarcoidosis presenting in the black dye of a tattoo. Jones MS, et al. **Cutis** 1997 Mar;59(3):113–5

Painful leg lesions: a case report. Zabawski E Jr, et al. **Dermatol Online J** 1997 Mar;3(1):4

Granulomatous mycosis fungoides presenting as sarcoidosis. Bessis D, et al. **Dermatology** 1996;193(4):330–2

Sarcoidosis presenting as a scarring alopecia: report of a rare cutaneous manifestation of systemic sarcoidosis. Takahashi H, et al. **Dermatology** 1996;193(2):144–6

Sarcoidosis manifesting as acute appendicitis: report of a case. Cullinane DC, et al. **Dis Colon Rectum** 1997 Jan; 40(1):109–11 (11 ref.)

Childhood sarcoidosis presenting with prevalent muscular symptoms: report of a case [letter] Celle ME, et al. **Eur J Pediatr** 1997 Apr;156(4):340–1

Uveitis as a presenting feature of chronic sarcoidosis [see comments] Rizzato G, et al. **Eur Respir J** 1996 Jun; 9(6):1201–5. Comment in: Eur Respir J 1997 Feb;10(2):508.

Diagnosis of ocular sarcoidosis and ACE in tears [letter; comment] Sharma OP. **Eur Respir J** 1997 Feb;10(2):508. Comment on: Eur Respir J 1996 Jun;9(6):1201–5.

Usefulness of electron microscopy in the diagnosis of cardiac

sarcoidosis. Takemura G, et al. **Heart Vessels** 1995; 10(5):275–8

Mantoux test site granuloma: an appraisal of the diagnostic value in sarcoidosis. Gupta SK.
Indian J Chest Dis Allied Sci 1997 Jan–Mar;39(1):13–8

Leprosy and pulmonary tuberculosis or sarcoidosis? Sawhney MP, et al. **Indian J Lepr** 1995 Oct–Dec;67(4):473–7

Sarcoidosis. Stanbury RM, et al. **Int Ophthalmol Clin** 1995 Summer;35(3):123–37 (43 ref.)

Sarcoidosis presenting as bilateral hydronephrosis [see comments] Miyazaki E, et al. **Intern Med** 1996 Jul; 35(7):579–82. Comment in: Intern Med 1996 Jul;35(7):523–4.

Boeck sarcoidosis of the breast: mammographic, ultrasound, and MR findings. Kenzel PP, et al.
J Comput Assist Tomogr 1997 May–Jun;21(3):439–41

Inflammatory nodules of the lower legs: a clinical and histological analysis of 134 cases in Korea. Cho KH, et al. **J Dermatol** 1997 Aug;24(8):522–9

Sarcoid flexor tenosynovitis of the wrist: a case report. Katzman BM, et al. **J Hand Surg [Am]** 1997 Mar; 22(2):336–7

Sarcoidosis mimicking toxoplasmosis with severe hypercalcaemia and normal 1,25-dihydroxy vitamin D. Levy Y, et al. **J Intern Med** 1996 Sep;240(3):165–7

Primary care paradigm for management of sarcoidosis, Part 2. Young RC Jr, et al. **J Natl Med Assoc** 1997 Apr; 89(4):243–52

Primary optic pathway sarcoidosis in a 38–year–old white man. Kosmorsky GS, et al. **J Neuroophthalmol** 1996 Sep; 16(3):188–90

Neurosarcoidosis presenting as an intracranial mass in childhood. Leiba H, et al. **J Neuroophthalmol** 1996 Dec; 16(4):269–73

Childhood sarcoidosis—does age of onset predict clinical manifestations? [letter] Cron RQ, et al. **J Rheumatol** 1997 Aug;24(8):1654–6

Urologic manifestation of spinal cord sarcoidosis. Fitzpatrick KJ, et al. **J Spinal Cord Med** 1996 Jul;19(3):201–3

Expand your differential. Waltzman RJ, et al. **Leuk Res** 1997 Jan;21(1):85–6

Sarcoid masquerading as optic nerve sheath meningioma [see comments] Ing EB, et al. **Mayo Clin Proc** 1997 Jan; 72(1):38–43 (32 ref.). Comment in: Mayo Clin Proc 1997 Aug;72(8):791.

Optic nerve sarcoidosis [letter; comment] Wachtel AS, et al. **Mayo Clin Proc** 1997 Aug;72(8):791. Comment on: Mayo Clin Proc 1997 Jan;72(1):38–43.

Sarcoidosis and common variable immunodeficiency. Report of 8 cases and review of the literature. Fasano MB, et al. **Medicine (Baltimore)** 1996 Sep;75(5):251–61 (37 ref.)

Sarcoidosis mythology. Teirstein AS, et al.
Mt Sinai J Med 1996 Oct–Nov;63(5–6):335–41 (51 ref.)

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 37–1996. A 51–year–old man with visual problems and an intracranial mass [clinical conference] **N Engl J Med** 1996 Nov 28;335(22):1668–74

Sarcoidosis [letter] Diaz F. **N Engl J Med** 1997 Sep 11; 337(11):790; discussion 791

Sarcoidosis [letter] Piagnerelli M, et al. **N Engl J Med** 1997 Sep 11;337(11):789–90; discussion 791

Sarcoidosis [letter] Schmit A, et al. **N Engl J Med** 1997 Sep 11;337(11):789; discussion 791

Sarcoidosis presenting as an intra– or extra–axial cranial mass: report of two cases. Urbach H, et al. **Neuroradiology** 1997 Jul;39(7):516–9

MRI of intramedullary sarcoidosis: follow–up of a case. Waubant E, et al. **Neuroradiology** 1997 May;39(5):357–60

The value of combined serum angiotensin–converting enzyme and gallium scan in diagnosing ocular sarcoidosis. Power WJ, et al. **Ophthalmology** 1995 Dec;102(12):2007–11

Taches de bougie. Vrabec TR, et al. **Ophthalmology** 1995 Nov;102(11):1712–21

Sarcoidosis presenting as bilateral testicular masses. Evans SS, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):392–4

Schizophrenia vs. neurosarcoidosis in a young male [letter] John S, et al. **Psychosomatics** 1996 Mar–Apr;37(2):166–8

Image interpretation session: 1996. Testicular sarcoidosis.
Radiographics 1997 Jan–Feb;17(1):250–3

Are the pulmonary function tests and the markers of activity helpful to establish the prognosis of sarcoidosis? Mañá J, et al. **Respiration** 1996;63(5):298–303

Vasculitis and sarcoidosis: why the connection? [editorial; comment] DeRemee RA.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):13. Comment on: Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):14–27.

Pancreatic sarcoidosis. Garcia C, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):28–32

Intraoral localized sarcoid lesion masquerading as a neoplasm [letter] Panayeas S, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):191–2

The mode of presentation of sarcoidosis in Finland and Hokkaido, Japan. A comparative analysis of 571 Finnish and 686 Japanese patients [see comments] Pietinalho A, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep; 13(2):159–66. Comment in: Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):117–9.

Tenosynovitis as initial diagnosis of sarcoidosis. Case report. Larsen TK. **Scand J Plast Reconstr Surg Hand Surg** 1996 Jun;30(2):157–9

Multiorgan sarcoidosis presenting with symmetric polyarthralgia, cutaneous vasculitis, and sicca symptoms. Gran JT. **Scand J Rheumatol** 1997;26(3):225–6

[Tumoral sarcoidosis] Koessler A, et al.
Ann Dermatol Venereol 1995;122(11–12):783–5 (Eng. Abstr.) **(Fre)**

[Inflammatory pseudotumor of the orbit and suspected sarcoidosis] Monfort–Gouraud M, et al. **Arch Pediatr** 1996 Jul;3(7):697–700 (Eng. Abstr.) **(Fre)**

[Conference at the Salpêtrière. 1995 March. Acute hydrocephalus and hypothalamic involvement in a 24–year–old French Guinean female patient] Defer G, et al. **Rev Neurol (Paris)** 1997 Apr;153(3):215–22 **(Fre)**

[Differential diagnosis of berylliosis/sarcoidosis in a dental technician] Müller–Quernheim J, et al.
Dtsch Med Wochenschr 1996 Nov 22;121(47):1462–6 (Eng. Abstr.) **(Ger)**

[Band–like corneal degeneration as the initial sign of sarcoidosis] Braun M, et al. **Klin Monatsbl Augenheilkd** 1996 Nov;209(5):328–9 (Eng. Abstr.) **(Ger)**

[Sarcoidosis of the paranasal sinuses as the etiology of therapy refractory dacryocystitis] Anderhuber W, et al.
Laryngorhinootologie 1997 May;76(5):315–7 (Eng. Abstr.) **(Ger)**

[A case of sarcoidosis of the mastoid] Verse T, et al.
Laryngorhinootologie 1997 May;76(5):312–4 (Eng. Abstr.) **(Ger)**

[Cardiovascular imaging in a month. A 64–year–old man complaining of orthopnea] Murata K, et al. **J Cardiol** 1997 Jun;29(6):353–4 **(Jpn)**

[Two siblings with sarcoidosis diagnosed by younger sister's central nervous symptoms] Mochizuki T, et al.
Rinsho Shinkeigaku 1996 Nov;36(11):1249–55 (Eng. Abstr.) **(Jpn)**

[Neurosarcoidosis or Guillain–Barre syndrome complicating sarcoidosis] Jamrozik Z, et al. **Neurol Neurochir Pol** 1996 May–Jun;30(3):481–7 (Eng. Abstr.) **(Pol)**

[A case of sarcoidosis with massive pleural and pericardial effusion] Krawczyk I, et al. **Pneumonol Alergol Pol** 1997; 65(1–2):81–5 (Eng. Abstr.) **(Pol)**

[Pulmonary function tests and bronchoalveolar lavage in sarcoidosis patients with 1changes and without changes in high resolution computed tomography] Ziora D, et al.
Pneumonol Alergol Pol 1996;64(11–12):715–22 (Eng. Abstr.) **(Pol)**

[The differential diagnostic characteristics of sarcoidosis of the intrathoracic lymph nodes and of cardiovascular diseases] Kostina ZI, et al. **Probl Tuberk** 1996;(4):18–20 (Eng. Abstr.) **(Rus)**

[Advances in microbiological diagnosis of tuberculosis and sarcoidosis] Safonova SG, et al. **Probl Tuberk** 1996;(6):75–8 (Eng. Abstr.) **(Rus)**

[A case of sarcoidosis complicated by myopathy] Dobin VL.
Ter Arkh 1996;68(6):64–6 **(Rus)**

[Sarcoidosis with calcium–related nephropathy] Dobin VL, et al. **Ter Arkh** 1993;65(2):62–3 **(Rus)**

[Parotid sarcoidosis: report of a new case] Pila Pérez R, et al. **Acta Otorrinolaringol Esp** 1997 Jan–Feb;48(1):78–80 (Eng. Abstr.) **(Spa)**

[Neurosarcoidosis mimicking cerebral tumor] Herrero Fernández B, et al. **An Med Interna** 1997 Mar;14(3):139–41 (13 ref.) (Eng. Abstr.) **(Spa)**

[Extrathoracic sarcoidosis with giant splenomegaly and cranial osteolysis] Molina M, et al. **An Med Interna** 1996 Dec;13(12):598–600 (Eng. Abstr.) **(Spa)**

[Subcutaneous nodules as the initial manifestation of systemic sarcoidosis: response to treatment with oral corticoids (Letter)] Navarro Moreno L, et al. **An Med Interna** 1996 Jun;13(6):308–9 **(Spa)**

[Myopathy as presentation form of sarcoidosis (letter)] Triviño López A, et al. **Med Clin (Barc)** 1996 Sep 7; 107(7):278 **(Spa)**

[Constitutional syndrome in a 55–year–old woman. Cervical adenopathy and giant splenomegaly with nodular images in CAT and MR] Carmena J, et al. **Rev Clin Esp** 1996 Nov;196(11):789–90 **(Spa)**

DRUG THERAPY

Diagnosis and management of neurological sarcoidosis. Lower EE, et al. **Arch Intern Med** 1997 Sep 8; 157(16):1864–8

Allopurinol: a therapeutic alternative for disseminated cutaneous sarcoidosis. Brechtel B, et al. **Br J Dermatol** 1996 Aug;135(2):307–9

Corticosteroids restore the balance between locally produced Th1 and Th2 cytokines and immunoglobulin isotypes to normal in sarcoid lung. Milburn HJ, et al.
Clin Exp Immunol 1997 Apr;108(1):105–13

Sarcoidosis. Stanbury RM, et al. **Int Ophthalmol Clin** 1995 Summer;35(3):123–37 (43 ref.)

Primary care paradigm for management of sarcoidosis, Part 1. Young RC Jr, et al. **J Natl Med Assoc** 1997 Mar; 89(3):181–90 (53 ref.)

Methotrexate therapy for chronic sarcoidosis: is the therapeutic index acceptable? [editorial; comment] Feagan BG. **J Pediatr** 1997 Jan;130(1):3–4. Comment on: J Pediatr 1997 Jan;130(1):25–9.

Low–dose methotrexate therapy for childhood sarcoidosis [see comments] Gedalia A, et al. **J Pediatr** 1997 Jan; 130(1):25–9. Comment in: J Pediatr 1997 Jan;130(1):3–4.

Sarcoidosis [letter] Than N, et al. **N Engl J Med** 1997 Sep 11;337(11):790–1

Course of asymptomatic liver involvement in sarcoidosis: role of therapy in selected cases. Vatti R, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1997 Mar;14(1):73–6

BTS sarcoidosis study [letter; comment] Israel H, et al.
Thorax 1997 Jan;52(1):102. Comment on: Thorax 1996 Mar;51(3):238–47.

BTS sarcoidosis study [letter; comment] Reich JM.
Thorax 1997 Jan;52(1):102. Comment on: Thorax 1996 Mar;51(3):238–47.

[Favourable course of a pseudotumoral form of hepatic and splenic sarcoidosis under treatment with hydroxychloroquine and colchicine (letter)] Joundy N, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1066–8 **(Fre)**

[Granuloma annulare disseminatum as a rare side effect of allopurinol (letter; comment)] Brechtel B, et al.
Hautarzt 1996 Feb;47(2):143. Comment on: Hautarzt 1995 May;46(5):343–5. **(Ger)**

ENZYMOLOGY

Interpopulation effect of ACE I/D polymorphism on serum concentration of ACE in diagnosis of sarcoidosis [letter; comment] Császár A, et al. **Lancet** 1997 Aug 16; 350(9076):518. Comment on: Lancet 1997 May 31;349(9065):1602–3.

Serum angiotensin converting enzyme activity in pulmonary diseases: correlation with lung function parameters. Uçar G, et al. **Life Sci** 1997;61(11):1075–82

N–acetylation polymorphism in Japanese patients with sarcoidosis. Asada M, et al. **Pharmacogenetics** 1997 Aug; 7(4):341–4

EPIDEMIOLOGY

Neurosarcoidosis: a personal perspective based on the study of 37 patients. Sharma OP. **Chest** 1997 Jul;112(1):220–8

Sarcoidosis among Chinese in Taiwan. Perng RP, et al.
J Formos Med Assoc 1997 Sep;96(9):697–9

Periarticular ankle sarcoidosis: a variant of Löfgren's syndrome [letter; comment] Molina JF, et al.
J Rheumatol 1997 Jan;24(1):239. Comment on: J Rheumatol 1996 May;23(5):874–7.

Sarcoidosis among U.S. Navy enlisted men, 1965–1993.
MMWR Morb Mortal Wkly Rep 1997 Jun 13;46(23):539–43

Epidemiology of sarcoidosis in Catalonia: 1979–1989. Fité E, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep; 13(2):153–8

Incidence of clinically identified sarcoidosis in a northwest United States population. Reich JM, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):173–7

ETIOLOGY

Cutaneous sarcoid reactions during long–term remission in a patient with acute myelogenous leukemia. Isoda M.
J Dermatol 1996 Apr;23(4):293–5

Mycobacteria as possible causes of sarcoidosis and Crohn's disease. McFadden JJ, et al.
Soc Appl Bacteriol Symp Ser 1996;25:47S–52S (45 ref.)

A hypothesis for the induction of sarcoidosis [letter] Kashihara K. **Trends Microbiol** 1996 Sep;4(9):342

[Sarcoidosis occurring after breast cancer (letter)] Cutuli B, et al. **Presse Med** 1997 Jul 12;26(24):1144–5 **(Fre)**

[Etiology of sarcoidosis] Nakada Y. **Arerugi** 1995 Nov; 44(11):1255–61 (53 ref.) **(Jpn)**

[Sarcoidosis representing multiple splenic nodules in a patient with IgA nephropathy] Nishiya H, et al.
Nippon Jinzo Gakkai Shi 1996 Jan;38(1):40–5 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Sarcoidosis in a patient with autoimmune hemolytic anemia] Yasuda N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Aug;34(8):931–6 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Evaluation of effects of antituberculous treatment on the course of sarcoidosis] Puścińska E, et al.
Pneumonol Alergol Pol 1996;64(5–6):261–6 (Eng. Abstr.) **(Pol)**

GENETICS

Racial differences in sarcoidosis incidence: a 5–year study in a health maintenance organization. Rybicki BA, et al.
Am J Epidemiol 1997 Feb 1;145(3):234–41 (30 ref.)

Polymorphism in the angiotensin–converting enzyme (ACE) gene and sarcoidosis. Tomita H, et al.
Am J Respir Crit Care Med 1997 Jul;156(1):255–9

HLA–DPB1 and TAP1 polymorphisms in sarcoidosis. Foley P, et al. **Chest** 1997 Jun;111(6 Suppl):73S

Finding disease genes. From cystic fibrosis to sarcoidosis. Thomas A. Neff Lecture. Iannuzzi MC, et al. **Chest** 1997 Jun;111(6 Suppl):70S–73S (38 ref.)

HLA–DPB polymorphisms: Glu 69 association with sarcoidosis. Lympany PA, et al. **Eur J Immunogenet** 1996 Oct;23(5):353–9

Genetic polymorphisms of the major histocompatibility complex–encoded antigen–processing genes TAP and LMP in sarcoidosis. Ishihara M, et al. **Hum Immunol** 1996 Feb; 45(2):105–110

Analysis of HLA–DM polymorphisms in sarcoidosis. Ishihara M, et al. **Hum Immunol** 1996 Sep 1;49(2):144–6

LMP7 polymorphism in Japanese patients with sarcoidosis and Behçet's disease. Ishihara M, et al. **Hum Immunol** 1996 Dec;51(2):103–5

HLA class II genotyping of sarcoidosis patients in Hokkaido by PCR–RFLP. Ishihara M, et al. **Jpn J Ophthalmol** 1996; 40(4):540–3

SARCOIDOSIS

Interpopulation effect of ACE I/D polymorphism on serum concentration of ACE in diagnosis of sarcoidosis [letter; comment] Császár A, et al. **Lancet** 1997 Aug 16; 350(9076):518. Comment on: Lancet 1997 May 31;349(9065):1602–3.

Clinical value of ACE genotyping in diagnosis of sarcoidosis [letter] [see comments] Sharma P, et al. **Lancet** 1997 May 31;349(9065):1602–3. Comment in: Lancet 1997 Aug 16;350(9076):518.

N-acetylation polymorphism in Japanese patients with sarcoidosis. Asada M, et al. **Pharmacogenetics** 1997 Aug; 7(4):341–4

Sarcoidosis: chest radiograph screening of familial contacts. Fité E, et al. **Respiration** 1996;63(3):160–3

Analysis of allelic variation of the TAP2 gene in sarcoidosis. Ishihara M, et al. **Tissue Antigens** 1997 Feb;49(2):107–10

[Familial sarcoidosis. Report of 2 cases in brothers] Zielonka TM, et al. **Pneumonol Alergol Pol** 1996;64(5–6):340–4 (Eng. Abstr.) **(Pol)**

[Epidemiology, genetics and familial occurrence of sarcoidosis] Zielonka TM. **Pneumonol Alergol Pol** 1996; 64(5–6):345–51 (45 ref.) **(Pol)**

IMMUNOLOGY

Alveolar macrophages in sarcoidosis coexpress high levels of CD86 (B7.2), CD40, and CD30L. Nicod LP, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):91–6

Selection of T lymphocytes bearing limited TCR-Vbeta regions in the lung of hypersensitivity pneumonitis and sarcoidosis. Trentin L, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):587–96

High incidence of positive autoantibodies against thyroid peroxidase and thyroglobulin in patients with sarcoidosis. Nakamura H, et al. **Clin Endocrinol (Oxf)** 1997 Apr; 46(4):467–72

Increased IL-6 and IL-8 in bronchoalveolar lavage fluids (BALF) from patients with sarcoidosis: correlation with the clinical parameters. Takizawa H, et al. **Clin Exp Immunol** 1997 Jan;107(1):175–81

Detection of psoriasis-associated antigen pso p27 in sarcoidosis bronchoalveolar lavage fluid using monoclonal antibodies. Jacobsen T, et al. **Clin Immunol Immunopathol** 1996 Oct;81(1):82–7

Tumour necrosis factor-alpha gene expression by alveolar macrophages in human lung allograft recipient with recurrence of sarcoidosis. Toulouse Lung Transplantation Group. Martel S, et al. **Eur Respir J** 1996 May;9(5):1087–9

Detection of antibodies to Borrelia species among patients with confirmed sarcoidosis in a region where Lyme disease is nonendemic. Ishihara M, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Dec;234(12):770–3

Genetic polymorphisms of the major histocompatibility complex-encoded antigen-processing genes TAP and LMP in sarcoidosis. Ishihara M, et al. **Hum Immunol** 1996 Feb; 45(2):105–110

Recurrence of sarcoidosis following interferon alpha therapy for chronic hepatitis C. Nakajima M, et al. **Intern Med** 1996 May;35(5):376–9

HLA association with sarcoidosis and diffuse interstitial pulmonary fibrosis. Mahbubani V, et al. **J Assoc Physicians India** 1995 Jan;43(1):28–9

Cytokine patterns in tuberculous and sarcoid granulomas: correlations with histopathologic features of the granulomatous response. Bergeron A, et al. **J Immunol** 1997 Sep 15;159(6):3034–43

Sarcoidosis and common variable immunodeficiency. Report of 8 cases and review of the literature. Fasano MB, et al. **Medicine (Baltimore)** 1996 Sep;75(5):251–61 (37 ref.)

Immunological, clinical and molecular aspects of sarcoidosis. Agostini C, et al. **Mol Aspects Med** 1997 Apr;18(2):91–165 (170 ref.)

Normocalcaemic hepatorenal sarcoidosis with crescentic glomerulonephritis. Auinger M, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1474–7

Release of prostaglandin E2 and leukotriene B4 by alveolar macrophages from patients with sarcoidosis. De Rose V, et al. **Thorax** 1997 Jan;52(1):76–83

Gamma/delta cells in tissue from patients with sarcoidosis. Wilsher ML, et al. **Thorax** 1996 Nov;51(11):1123–6

[Co-stimulating effect of extracellular matrix proteins on T lymphocyte proliferation in patients with sarcoidosis. Preliminary tests] Puścińska E, et al. **Pneumonol Alergol Pol** 1996;64(9–10):671–8 (Eng. Abstr.) **(Pol)**

METABOLISM

Circulating soluble intercellular adhesion molecule-1 (sICAM-1) in patients with sarcoidosis. Shijubo N, et al. **Clin Exp Immunol** 1996 Dec;106(3):549–54

Elevated levels of type II soluble tumor necrosis factor receptors in the bronchoalveolar lavage fluids of patients with sarcoidosis. Hino T, et al. **Lung** 1997;175(3):187–93

Interleukin-1 expression in inflammatory myopathies: evidence of marked immunoreactivity in sarcoid granulomas and muscle fibres showing ischaemic and regenerative changes. Authier FJ, et al. **Neuropathol Appl Neurobiol** 1997 Apr;23(2):132–40

Increased inflammatory cytokines and new collagen formation in cutaneous tuberculosis and sarcoidosis [see comments] Marshall BG, et al. **Thorax** 1996 Dec; 51(12):1253–61. Comment in: Thorax 1997 Jun;52(6):588.

MICROBIOLOGY

Presence of mycobacterial DNA in sarcoidosis. Popper HH, et al. **Hum Pathol** 1997 Jul;28(7):796–800

Identification of Mycobacterium avium complex in sarcoidosis. el-Zaatari FA, et al. **J Clin Microbiol** 1996 Sep;34(9):2240–5

Serological response to Chlamydia pneumoniae in patients with sarcoidosis. Puolakkainen M, et al. **J Infect** 1996 Nov; 33(3):199–205

Mycobacteria and sarcoidosis. Mitchell DN. **Lancet** 1996 Sep 21;348(9030):768–9

Detection of Mycobacterium tuberculosis DNA in tissue samples of children with sarcoidosis [letter] Ozçelik U, et al. **Pediatr Pulmonol** 1997 Aug;24(2):122–4

Detection of Mycobacterium avium complex in cerebrospinal fluid of a sarcoid patient by specific polymerase chain reaction assays. el-Zaatari FA, et al. **Scand J Infect Dis** 1997;29(2):202–4

MORTALITY

Sarcoidosis mortality in the United States [letter; comment] Reich JM. **Am J Med** 1997 Jan;102(1):131–2. Comment on: Am J Med 1996 Apr;100(4):423–7.

PATHOLOGY

Coexistence of subcutaneous sarcoidosis of the sole and scar sarcoidosis [letter] Ohi T, et al. **Acta Derm Venereol** 1996 Nov;76(6):500

Ultrasound-guided fine-needle aspiration cytology of non-palpable supraclavicular lymph nodes in sarcoidosis. Lohela P, et al. **Acta Radiol** 1996 Nov;37(6):896–9

Granulomatous interstitial nephritis: drug hypersensitivity, infection, or sarcoidosis? Miller BW, et al. **Am J Kidney Dis** 1997 Oct;30(4):586–8

Cutaneous involvement in sarcoidosis. Relationship to systemic disease [editorial] Mañá J, et al. **Arch Dermatol** 1997 Jul;133(7):882–8 (75 ref.)

Pathological case of the month. Childhood sarcoidosis. Shetty AK, et al. **Arch Pediatr Adolesc Med** 1997 Sep; 151(9):955–6

Overlap of sarcoidosis and rosacea. Simonart T, et al. **Dermatology** 1997;194(4):416–8

The role of granulomatous phlebitis and thrombosis in the pathogenesis of cirrhosis and portal hypertension in sarcoidosis. Moreno-Merlo F, et al. **Hepatology** 1997 Sep; 26(3):554–60 (29 ref.)

Childhood sarcoid myopathy manifesting as joint contractures. Lanjewar DN, et al. **Indian Pediatr** 1996 Feb; 33(2):128–30

Utility of Wang transbronchial needle biopsy in sarcoidosis. Leonard C, et al. **Ir J Med Sci** 1997 Jan-Mar;166(1):41–3

Multiple antral ulcers in gastric sarcoid. Fireman Z, et al. **J Clin Gastroenterol** 1997 Mar;24(2):97–9

Granulomatous sarcoidotic lesion of hypothalamic-pituitary region associated with Rathke's cleft cyst. Cannavò S, et al. **J Endocrinol Invest** 1997 Feb;20(2):77–81

Recurrent chin swelling [clinical conference] Monasebian DM, et al. **J Oral Maxillofac Surg** 1997 Jun;55(6):610–2

Giant cell myocarditis: an entity distinct from sarcoidosis characterized by multiphasic myocyte destruction by cytotoxic T cells and histiocytic giant cells. Litovsky SH, et al. **Mod Pathol** 1996 Dec;9(12):1126–34

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 34–1996. A 50-year-old woman with cardiac disease, an electronic pacemaker, and cardiac arrest in ventricular fibrillation [clinical conference] **N Engl J Med** 1996 Oct 31;335(18):1378–86

Oral manifestations of sarcoidosis. Blinder D, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):458–61 (53 ref.)

Oral sarcoidosis with tongue involvement. Serrat Soto A, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jun;83(6):668–71

Neurosarcoidosis of the conus medullaris and cauda equina presenting as paraparesis: case report and literature review. Ku A, et al. **Paraplegia** 1996 Feb;34(2):116–20

Vascular involvement in cutaneous sarcoidosis. Takemura T, et al. **Pathol Int** 1997 Feb-Mar;47(2-3):84–9

Intrascrotal sarcoidosis: case reports and review. Carmody JP, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep; 13(2):129–34 (73 ref.)

Is there an anatomic explanation for chest pain in patients with pulmonary sarcoidosis? Highland KB, et al. **South Med J** 1997 Sep;90(9):911–4

[Cardiac sarcoidosis: diagnostic validation by endomyocardial biopsy and therapy with corticosteroids] Badorff C, et al. **Z Kardiol** 1997 Jan;86(1):9–14 (Eng. Abstr.) **(Ger)**

[Systemic sarcoidosis with involvement of the spermatic cord] Nagayama M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):328–33 (Eng. Abstr.) **(Jpn)**

[Pulmonary sarcoidosis presenting with many cotton-like unilateral shadows] Shimada T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 May; 34(5):616–20 (Eng. Abstr.) **(Jpn)**

[Case of sarcoidosis diagnosed by myocardial biopsy] Ohira N, et al. **Nippon Naika Gakkai Zasshi** 1996 Aug 10; 85(8):1298–300 **(Jpn)**

[A case of sarcoidosis with skull lesions] Watanabe Y, et al. **Nippon Naika Gakkai Zasshi** 1996 May 10;85(5):759–60 **(Jpn)**

[The comparative clinico-morphological characteristics of chronic parotitis in sarcoidosis and primary Sjögren's syndrome] Varshavskiĭ AI, et al. **Ter Arkh** 1996;68(5):36–41 (Eng. Abstr.) **(Rus)**

[A 69-year-old woman with predominantly proximal muscle weakness for 6 years (clinical conference)] Cardellach F, et al. **Med Clin (Barc)** 1996 Jun 15;107(3):107–14 **(Spa)**

[Sarcoidosis: the presentation of a case with clinical features limited to the nervous system] Campello-Morer I, et al. **Rev Neurol** 1997 Jul;25(143):1079–81 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Characterization and quantification of alveolar monocyte-like cells in human chronic inflammatory lung disease. Krombach F, et al. **Eur Respir J** 1996 May; 9(5):984–91

Renal dysfunction in patients with sarcoidosis [editorial; comment] Sato A. **Intern Med** 1996 Jul;35(7):523–4 (13 ref.) . Comment on: Intern Med 1996 Jul;35(7):579–82.

Sarcoidosis in a pregnant woman. Euliano TY, et al. **J Clin Anesth** 1997 Feb;9(1):78–86

Serum levels of interleukin-8 as a marker of disease activity in patients with chronic sarcoidosis. Yokoyama T, et al. **J Med** 1995;26(5-6):209–19

Schizophrenia vs. neurosarcoidosis in a young male [letter] John S, et al. **Psychosomatics** 1996 Mar-Apr;37(2):166–8

[Sarcoidosis with predominant cardiac involvement] Gori F, et al. **Cardiologia** 1997 Apr;42(4):421–3 (Eng. Abstr.) **(Ita)**

[Neurosarcoidosis or Guillain-Barre syndrome complicating sarcoidosis] Jamrozik Z, et al. **Neurol Neurochir Pol** 1996 May-Jun;30(3):481–7 (Eng. Abstr.) **(Pol)**

RADIOGRAPHY

Unilateral pleural thickening. Lum GH, et al. **Chest** 1996 Nov;110(5):1348–50

CT hepatic and splenic appearances with sarcoidosis. Hoeffel C, et al. **Eur J Radiol** 1996 Sep;23(2):94–6

Sarcoidosis with multiple nodular shadows in bilateral lung fields. Nakamura H, et al. **Intern Med** 1995 Nov; 34(11):1144–5

Pancreatic involvement in systemic sarcoidosis: CT findings. Bonhomme A, et al. **J Belge Radiol** 1997 Jun;80(3):116–7

CT patterns of nodular hepatic and splenic sarcoidosis: a review of the literature. Scott GC, et al. **J Comput Assist Tomogr** 1997 May-Jun;21(3):369–72 (11 ref.)

Radiology case of the month. Sudden onset of shortness of breath. Sarcoidosis, complicated by acute pneumothorax. Neitzschman HR, et al. **J La State Med Soc** 1997 May; 149(5):145–6

Sarcoidosis: chest radiograph screening of familial contacts. Fité E, et al. **Respiration** 1996;63(3):160–3

[Infiltration shadows of a chest radiograph in a patient with sarcoidosis] Kaburagi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Aug; 34(8):943–6 (Eng. Abstr.) **(Jpn)**

[Acute respiratory insufficiency and bilateral interstitial pattern] Rodríguez Hernández MC, et al. **Rev Clin Esp** 1997 Aug;197(8):583–4 **(Spa)**

RADIONUCLIDE IMAGING

Resting Tl-201 scintigraphy in the evaluation of myocardial sarcoidosis. Chin BB, et al. **Clin Nucl Med** 1997 Jul; 22(7):475–8

High fluorine-18 labeled deoxyglucose uptake in sarcoidosis. Yasuda S, et al. **Clin Nucl Med** 1996 Dec;21(12):983–4

Images in cardiology. Cardiac sarcoidosis. Zimmermann R, et al. **Heart** 1997 Jul;78(1):6

Scintigraphic demonstration of myocardial sarcoidosis: the added value of single-photon emission computed tomography. Barneveld PC, et al. **J Nucl Cardiol** 1997 May-Jun;4(3):256–7

Technetium-99m-MDP uptake in hilar lymph nodes in sarcoidosis. Quin GA, et al. **J Nucl Med** 1997 Feb; 38(2):262–3

Scintigraphic detection of regional disruption of the adrenergic nervous system in sarcoid heart disease. Misumi I, et al. **Jpn Circ J** 1996 Oct;60(10):774–8

[Radionuclide study of capillary circulation in the lungs in rheumatism and sarcoidosis] Vyrenkova NIu. **Probl Tuberk** 1996;(3):24–5 **(Rus)**

RADIOTHERAPY

Radiotherapy for nasal congestion [letter] Douds AC, et al. **Lancet** 1997 Sep 13;350(9080):786

SURGERY

CO2 laser excision of lupus pernio of the face. Stack BC Jr, et al. **Am J Otolaryngol** 1996 Jul-Aug;17(4):260–3

Sarcoidosis of the penis. Mahmood N, et al. **Br J Urol** 1997 Jul;80(1):155

Helicobacter pylori gastritis associated with a gastric inflammatory fibroid tumour and sarcoidosis. Buciuto R, et al. **Eur J Surg** 1996 May;162(5):421–4

Tumour necrosis factor-alpha gene expression by alveolar macrophages in human lung allograft recipient with recurrence of sarcoidosis. Toulouse Lung Transplantation

Group. Martel S, et al. **Eur Respir J** 1996 May;9(5):1087–9
Intraspinal epidural sarcoidosis: case report. Weissman MN, et al. **Neurosurgery** 1996 Jul;39(1):179–81
Sarcoidosis of the nose treated with laser surgery. Frederiksen LG, et al. **Rhinology** 1996 Dec;34(4):245–6
Sarcoidosis and transplantation. Padilla ML, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1997 Mar;14(1):16–22 (25 ref.)
[Tumorous neurosarcoidosis—a rare manifestation of Boeck disease—3 cases and review of the literature] Probst-Cousin S, et al. **Zentralbl Neurochir** 1996; 57(1):37–43 (29 ref.) (Eng. Abstr.) **(Ger)**
[The potentials for the surgical treatment of intrathoracic sarcoidosis complicated by chronic pleurisy] Duzhiĭ ID, et al. **Lik Sprava** 1996 Jul-Sep;(7–9):168–70 (12 ref.) (Eng. Abstr.) **(Rus)**

THERAPY

Cardiac sarcoidosis: diagnostic, prognostic, and therapeutic considerations. Sekiguchi M, et al.
Cardiovasc Drugs Ther 1996 Nov;10(5):495–510 (288 ref.)
Primary care paradigm for management of sarcoidosis, Part 2. Young RC Jr, et al. **J Natl Med Assoc** 1997 Apr; 89(4):243–52
Immunological, clinical and molecular aspects of sarcoidosis. Agostini C, et al. **Mol Aspects Med** 1997 Apr;18(2):91–165 (170 ref.)
Recurrent hepatic sarcoidosis following liver transplantation. Fidler HM, et al. **Transplant Proc** 1997 Aug;29(5):2509–10

SARCOIDOSIS, PULMONARY

Pulmonary sarcoidosis: current concepts & controversies. Lynch JP 3rd. **Compr Ther** 1997 Mar;23(3):197–210 (30 ref.)
Fallopian tube and pulmonary sarcoidosis. A case report. Boakye K, et al. **J Reprod Med** 1997 Aug;42(8):533–5

BLOOD

Laminin fragment P1 in the sera of patients with pulmonary sarcoidosis. Schoenfeld N, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):135–8
Tissue factor pathway inhibitor (TFPI) antigen plasma level in patients with interstitial lung disease before and after heparin administration. Cella G, et al.
Semin Thromb Hemost 1997;23(1):45–9

COMPLICATIONS

Hypothyroidism due to thyrotropin-receptor blocking antibodies associated with sarcoidosis [letter] Heshmati HM, et al. **Ann Med Interne (Paris)** 1997;148(1):102–3
Pneumothorax as a first manifestation of sarcoidosis. Froudarakis ME, et al. **Chest** 1997 Jul;112(1):278–80
Umbilicated papular sarcoidosis [letter] Kashyap S, et al. **Clin Exp Dermatol** 1996 Sep;21(5):395–6
Endobronchial involvement in a patient presenting with cutaneous sarcoid. Weller R, et al. **Clin Exp Dermatol** 1996 May;21(3):239–40
Necrotizing sarcoid granulomatosis with extrapulmonary involvement. Dykhuizen RS, et al. **Eur Respir J** 1997 Jan; 10(1):245–7
Association of progressive systemic sclerosis with pulmonary sarcoidosis. Just a chance occurrence? Takahashi T, et al. **Intern Med** 1997 Jun;36(6):435–8
Role of IL-15, IL-2, and their receptors in the development of T cell alveolitis in pulmonary sarcoidosis. Agostini C, et al. **J Immunol** 1996 Jul 15;157(2):910–8
Diffuse histoplasmosis in a patient with sarcoidosis. Badesha PS, et al. **Postgrad Med J** 1997 Feb;73(856):101–3
Schmidt's syndrome associated with sarcoidosis. Watson JP, et al. **Postgrad Med J** 1996 Jul;72(849):435–6
Sarcoidosis and spondylarthropathy. Three case-reports. Kremer P, et al. **Rev Rhum Engl Ed** 1996 Jun;63(6):405–11 (36 ref.)
Sarcoidosis with thyroid involvement [letter] Cöplü L, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):86–7
Sarcoidosis and regional enteritis in two patients. Johard U, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar; 13(1):50–3
Substance P-like immunoreactive substance in bronchoalveolar lavage fluids from patients with idiopathic pulmonary fibrosis and pulmonary sarcoidosis. Takeyama M, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar; 13(1):33–7
Sleep apnea in sarcoidosis. Turner GA, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1997 Mar;14(1):61–4
Association between inflammatory bowel disease and sarcoidosis. Report of two cases and review of the literature. Fries W, et al. **Scand J Gastroenterol** 1995 Dec; 30(12):1221–3 (35 ref.)
Sarcoidosis associated with recurrent pancreatitis. Limaye AP, et al. **South Med J** 1997 Apr;90(4):431–3
Pleural sarcoidosis: Sarcoidosis and primary biliary cirrhosis. Mitchell D. **Thorax** 1997 Feb;52(2):198–9
[Systemic scleroderma and sarcoidosis: 3 new cases] Bandt MD, et al. **Ann Med Interne (Paris)** 1996;147(8):590–4 (10 ref.) (Eng. Abstr.) **(Fre)**
[Chylothorax as a complication of sarcoidosis] Haitsch R, et al. **Pneumologie** 1996 Dec;50(12):912–4 (13 ref.) (Eng. Abstr.) **(Ger)**
[Coincidence of primary sclerosing cholangitis and sarcoidosis—case report and review of the literature] Keller K, et al. **Z Gastroenterol** 1997 Jan;35(1):33–9 (33 ref.) (Eng. Abstr.) **(Ger)**
[Bronchial involvement in sarcoidosis. Study with high resolution computerized tomography] Battaglia M, et al. **Radiol Med (Torino)** 1996 Sep;92(3):199–205 (Eng. Abstr.) **(Ita)**
[Unusual computerized tomography finding of hepato-splenic granuloma in a case of sarcoidosis] Calculli L, et al. **Radiol Med (Torino)** 1996 Dec;92(6):808–9 **(Ita)**
[Thymic carcinoma associated with pulmonary sarcoidosis] Ohmichi M, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1997 May; 35(5):571–6 (Eng. Abstr.) **(Jpn)**
[Sarcoidosis with bilateral pleural effusion and endobronchial involvement. Report of a case (letter)] Hernández Borge J, et al. **Arch Bronconeumol** 1996 Nov;32(9):493–4 **(Spa)**

DIAGNOSIS

Comparative merits of different tissue biopsies in the diagnosis of sarcoidosis: Indian perspective. Gupta SK, et al. **J Assoc Physicians India** 1996 Sep;44(9):609–11
Differentiation of sarcoidosis from tuberculosis by use of electron capture gas-liquid chromatography. Almenoff PL, et al. **Lung** 1996;174(6):349–58
Use of lung function tests in sarcoidosis. Brådvik I.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):59–62 (14 ref.)
An iceberg from Hokkaido and Scandinavia [editorial; comment] Rizzato G. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Sep;13(2):117–9. Comment on: Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):159–66.
[Severe, isolated and prolonged febrile syndrome revealing sarcoidosis in a child (letter)] Ferraro F, et al.
Arch Pediatr 1996 Jun;3(6):613–4 **(Fre)**
[Pseudotumor presentation of pulmonary sarcoidosis apropos of 3 cases] Louzir B, et al. **Rev Pneumol Clin** 1997; 53(3):144–8 (Eng. Abstr.) **(Fre)**
[Sarcoidosis in an 82-year-old woman who presented with ocular symptoms] Kawano H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1996 Dec; 34(12):1375–9 (Eng. Abstr.) **(Jpn)**
[Extrapulmonary manifestation of sarcoidosis] Kornev BM. **Klin Med (Mosk)** 1996;74(8):62–3 **(Rus)**

DRUG THERAPY

Pentoxifylline in treatment of sarcoidosis. Zabel P, et al.
Am J Respir Crit Care Med 1997 May;155(5):1665–9
Outcome in sarcoidosis. The relationship of relapse to corticosteroid therapy. Gottlieb JE, et al. **Chest** 1997 Mar; 111(3):623–31
Inhaled corticosteroids and pulmonary sarcoidosis [letter; comment] Pietinalho A, et al. **Eur Respir J** 1996 Jan; 9(1):180–1. Comment on: Eur Respir J 1995 May;8(5):679–81. Comment on: Eur Respir J 1995 May;8(5):682–8.
Primary care paradigm for management of sarcoidosis, Part 1. Young RC Jr, et al. **J Natl Med Assoc** 1997 Mar; 89(3):181–90 (53 ref.)
Evaluation of the efficacy and toxicity of the cyclosporine A-flucortolone-methotrexate combination in the treatment of sarcoidosis. Pia G, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):146–52

ENZYMOLOGY

Serum angiotensin converting enzyme does not correlate with radiographic stage at initial diagnosis of sarcoidosis. Shorr AF, et al. **Respir Med** 1997 Aug;91(7):399–401
Extracellular phospholipase A2 expression in sarcoidosis. Andersen S, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar;13(1):70–6

ETHNOLOGY

Endobronchial disease and racial differences in pulmonary sarcoidosis [see comments] Torrington KG, et al. **Chest** 1997 Mar;111(3):619–22. Comment in: Chest 1997 Apr;111(4):838–40.
Sarcoidosis in an Australian aborigine and a Torres Strait Islander. MacGinley RJ, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1997 Mar;14(1):83–5

ETIOLOGY

Pulmonary sarcoid-like granulomata in a patient treated for extrapulmonary Hodgkin's disease. van den Berg, et al.
Respiration 1997;64(1):114–7
[Sarcoidosis in a patient with Crohn disease (letter)] Brunin G, et al. **Presse Med** 1997 Mar 15;26(8):369 **(Fre)**
[Intralobar pulmonary sequestration treated surgically in a patient with sarcoidosis] Sobczyński R, et al.
Pneumonol Alergol Pol 1997;65(1-2):71–6 (Eng. Abstr.) **(Pol)**
[New aspects in pathogenesis of respiratory sarcoidosis] Kostina ZI, et al. **Probl Tuberk** 1997;(1):50–2 (Eng. Abstr.) **(Rus)**

GENETICS

The role of human leukocyte antigen in susceptibility and clinical manifestations of sarcoidosis. Xu Z, et al.
Chin Med J (Engl) 1996 Jul;109(7):515–8
Differential display of messenger RNA expressed in bronchoalveolar lavage cells in pulmonary sarcoidosis patients. Wiwien HW, et al. **Hiroshima J Med Sci** 1996 Mar;45(1):1–10
[Genetic markers of the ABO blood system in pulmonary sarcoidosis patients of different ethnic origin] Volkova KI, et al. **Klin Med (Mosk)** 1996;74(8):44–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Non-restricted T cell receptor (TCR)-V alpha and -V beta gene usage in patients with pulmonary sarcoidosis. Hoshino T, et al. **Clin Exp Immunol** 1997 Jun;108(3):529–38
TCR expression and clonality analysis in pulmonary sarcoidosis. Vissinga C, et al. **Hum Immunol** 1996 Jun-Jul; 48(1-2):98–106
Limited heterogeneity of biased T-cell receptor V beta gene usage in lung but not blood T cells in active pulmonary sarcoidosis. Silver RF, et al. **Immunology** 1996 Aug; 88(4):516–23
Accessory function of alveolar macrophages from patients with sarcoidosis and other granulomatous and nongranulomatous lung diseases. Zissel G, et al.
J Investig Med 1997 Feb;45(2):75–86
Shed soluble ICAM-1 molecules in bronchoalveolar lavage cell supernatants and serum of patients with pulmonary sarcoidosis. Bäumer I, et al. **Lung** 1997;175(2):105–16
Spontaneous interleukin 2 release of bronchoalveolar lavage cells in sarcoidosis is a codeterminator of prognosis. Müller-Quernheim J, et al. **Lung** 1996;174(4):243–53
Is the different T helper cell activity in sarcoidosis and extrinsic allergic alveolitis also reflected by the cellular bronchoalveolar lavage fluid profile? Drent M, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1997 Mar;14(1):31–8
Non invasive evaluation of the inflammatory activity in sarcoidosis with high-resolution computed tomography. Oberstein A, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):65–72
Analysis of T cell subsets and beta chemokines in patients with pulmonary sarcoidosis. Iida K, et al. **Thorax** 1997 May; 52(5):431–7
[T-cell antigen receptor repertoire in patients with pulmonary sarcoidosis] Usui H.
Nihon Rinsho Meneki Gakkai Kaishi 1995 Dec;18(6):664 **(Jpn)**
[The activity of immunocompetent cells and macrophages in pulmonary sarcoidosis (in comparison to tuberculosis)] Gergert VIa, et al. **Probl Tuberk** 1996;(1):35–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Progastrin-releasing peptide(31–98) in idiopathic pulmonary fibrosis and sarcoidosis. Shijubo N, et al.
Am J Respir Crit Care Med 1996 Dec;154(6 Pt 1):1694–9
Pulmonary sarcoidosis: patterns of cytokine release in vitro. Prior C, et al. **Eur Respir J** 1996 Jan;9(1):47–53
ICAM-1 expression on alveolar macrophages and in serum of sarcoidosis patients. Pforte A, et al.
J Clin Lab Immunol 1995;46(3):125–35
Increased expression of tumor necrosis factor-alpha, interleukin-6, platelet-derived growth factor-B and granulocyte-macrophage colony-stimulating factor mRNA in cells of bronchoalveolar lavage fluids from patients with sarcoidosis. Ishioka S, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Sep;13(2):139–45

MICROBIOLOGY

Anti-Borrelia burgdorferi immunoglobulin seroprevalence in pulmonary sarcoidosis: a negative report. Martens H, et al. **Eur Respir J** 1997 Jun;10(6):1356–8
Immunolocalization of cell-wall-deficient forms of Mycobacterium tuberculosis complex in sarcoidosis and in sinus histiocytosis of lymph nodes draining carcinoma. Alavi HA, et al. **Histol Histopathol** 1996 Jul;11(3):683–94

PATHOLOGY

Experimental extrinsic allergic alveolitis and pulmonary angiitis induced by intratracheal or intravenous challenge with Corynebacterium parvum in sensitized rats. Yi ES, et al. **Am J Pathol** 1996 Oct;149(4):1303–12
Th1/Th2 cell distribution in pulmonary sarcoidosis. Bäumer I, et al. **Am J Respir Cell Mol Biol** 1997 Feb;16(2):171–7
Tachykinin activation of human alveolar macrophages in tobacco smoke and sarcoidosis: a phenotypical and functional study. Brunelleschi S, et al. **Neuropeptides** 1996 Oct;30(5):456–64
Necrotizing sarcoid granulomatosis with and without extrapulmonary involvement. Le Gall F, et al.
Pathol Res Pract 1996 Mar;192(3):306–13; discussion 314
Facial swelling in a patient with sarcoidosis. Ledson MJ, et al. **Postgrad Med J** 1997 Mar;73(857):181–2
Pulmonary sarcoidosis: spirometric correlation with transbronchial biopsy. Gupta D, et al.
Sarcoidosis Vasc Diffuse Lung Dis 1997 Mar;14(1):77–80
Pathology of pulmonary granulomatous vasculitis [see comments] Travis WD.
Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):14–27 (107 ref.). Comment in: Sarcoidosis Vasc Diffuse Lung Dis 1996 Mar;13(1):13.

SARCOIDOSIS, PULMONARY

[Lung cancer with a sarcoid-like reaction in the primary tumor] Aoki K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Apr; 35(4):466-70 (Eng. Abstr.) **(Jpn)**

[Phenotype of lymphocytes in bronchoalveolar lavage and peripheral blood with different clinical presentations of sarcoidosis] Kieszko R, et al. **Pneumonol Alergol Pol** 1996; 64 Suppl 1:52-8 (Eng. Abstr.) **(Pol)**

[A case of a combination of sarcoidosis and myeloma] Kamaeva OI, et al. **Ter Arkh** 1995;67(12):57-9 (19 ref.) **(Rus)**

PHYSIOPATHOLOGY

Relationship between respiratory muscle function and quality of life in sarcoidosis. Wirnsberger RM, et al. **Eur Respir J** 1997 Jul;10(7):1450-5

Pulmonary sarcoidosis: spirometric correlation with transbronchial biopsy. Gupta D, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):77-80

Exercise and resting pulmonary function in sarcoidosis. Karetzky M, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Mar;13(1):43-9

PSYCHOLOGY

Relationship between respiratory muscle function and quality of life in sarcoidosis. Wirnsberger RM, et al. **Eur Respir J** 1997 Jul;10(7):1450-5

RADIOGRAPHY

High-resolution CT findings of pulmonary sarcoidosis. Traill ZC, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1557-60

Unilateral pleural thickening. Lum GH, et al. **Chest** 1996 Nov;110(5):1348-50

Pulmonary sarcoidosis mimicking cryptogenic fibrosing alveolitis on CT. Padley SP, et al. **Clin Radiol** 1996 Nov; 51(11):807-10

Pulmonary sarcoidosis. Verstraeten V, et al. **J Belge Radiol** 1996 Dec;79(6):284

A simple radiographic scoring method for monitoring pulmonary sarcoidosis: relations between radiographic scores, dyspnoea grade and respiratory function in the British Thoracic Society Study of Long-Term Corticosteroid Treatment. Muers MF, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):46-56

Non invasive evaluation of the inflammatory activity in sarcoidosis with high-resolution computed tomography. Oberstein A, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):65-72

Pleural sarcoidosis: a rare presentation. Loughney E, et al. **Thorax** 1997 Feb;52(2):200-1

The CT findings of pulmonary sarcoidosis. Hashimoto M, et al. **Tohoku J Exp Med** 1996 Aug;179(4):259-66

[Correlation between roentgenogram and CT scans with the changes of cells in bronchoalveolar lavage fluid in sarcoidosis] Lu C, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Dec; 18(6):360-2, 383-4 (Eng. Abstr.) **(Chi)**

[A radiographic classification for sarcoidosis based on the ILP/UC classification bacillus] Wang H, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Dec; 18(6):354-6, 383 (Eng. Abstr.) **(Chi)**

[Roentgen morphology of pulmonary sarcoidosis] Hald HJ. **Rontgenpraxis** 1996 Aug;49(8):201-6 (38 ref.) **(Ger)**

[Bronchial involvement in sarcoidosis. Study with high resolution computerized tomography] Battaglia M, et al. **Radiol Med (Torino)** 1996 Sep;92(3):199-205 (Eng. Abstr.) **(Ita)**

[An unusual presentation of sarcoidosis] Nakano Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Feb;35(2):220-6 (Eng. Abstr.) **(Jpn)**

[Changes in lung parenchyma in high resolution computer tomography of patients with type type I sarcoidosis] Grzanka P, et al. **Pneumonol Alergol Pol** 1997; 65(5-6):338-42 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Gallium-67 scanning for detection of alveolitis in idiopathic pulmonary fibrosis and sarcoidosis. Jin S, et al. **Chin Med J (Engl)** 1996 Jul;109(7):519-21

SURGERY

Sarcoidosis [letter] Palmer SM, et al. **N Engl J Med** 1997 Sep 11;337(11):790; discussion 791

SARCOLEMMA

CHEMISTRY

Rapid interaction of FRCRCFa with the cytosolic side of the cardiac sarcolemma Na(+)-Ca2+ exchanger blocks the ion transport without preventing the binding of either sodium or calcium. Khananshvili D, et al. **Biochemistry** 1996 Dec 10;35(49):15933-40

Membrane-associated carbonic anhydrase IV in skeletal muscle: subcellular localization. Decker B, et al. **Histochem Cell Biol** 1996 Oct;106(4):405-11

Preferential subsarcolemmal localization of dystrophin and beta-dystroglycan mRNA in human skeletal muscles. Mitsui T, et al. **J Neuropathol Exp Neurol** 1997 Jan; 56(1):94-101

Interactions between dystrophin and the sarcolemma membrane. Chamberlain JS, et al. **Soc Gen Physiol Ser** 1997; 52:19-29

Syntrophins: modular adapter proteins at the neuromuscular junction and the sarcolemma. Froehner SC, et al. **Soc Gen Physiol Ser** 1997;52:197-207 (49 ref.)

The cysteine-rich and C-terminal domains of dystrophin are not required for normal costameric localization in the mouse. Maconochie MK, et al. **Transgenic Res** 1996 Mar; 5(2):123-30

DRUG EFFECTS

Dilazep inhibits binding of batrachotoxin to sodium channels in canine sarcolemmal vesicles. Chiba K, et al. **Arch Int Pharmacodyn Ther** 1995 Sep-Oct;330(2):138-50

The influence of nifedipine and verapamil on the ischaemia-induced changes in canine sarcolemmal membranes. Kobusiewicz W, et al. **Arch Vet Pol** 1995; 35(1-2):79-87

Effects of KT-362, a sarcolemmal and intracellular calcium antagonist, on calcium transients of cultured neonatal rat ventricular cells: a comparison with gallopamil and ryanodine. Tatsukawa Y, et al. **Cardiovasc Drugs Ther** 1997 Jan;10(6):667-75

Cardiac membrane Ca(2+)-transport in alloxan-induced diabetes in rats. Golfman LS, et al. **Diabetes Res Clin Pract** 1996 Jul;31 Suppl:S73-7

Extracellular K+ and protection against cellular damage in the rat heart. Harding RJ, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):223-8

Myotoxic activity of the toxic phospholipase, notexin, from the venom of the Australian tiger snake. Dixon RW, et al. **J Neuropathol Exp Neurol** 1996 Dec;55(12):1230-7

ENZYMOLOGY

Nitric oxide synthase I (NOS-I) is deficient in the sarcolemma of striated muscle fibers in patients with Duchenne muscular dystrophy, suggesting an association with dystrophin. Grozdanovic Z, et al. **Acta Histochem** 1996 Jan;98(1):61-9

Decrease in myocardial Na(+)-K(+)-ATPase activity and ouabain binding sites in hypercholesterolemic rabbits. Chen WJ, et al. **Basic Res Cardiol** 1997 Feb;92(1):1-7

Phosphorylation of cardiac Na+-K+ ATPase by Ca2+/calmodulin dependent protein kinase. Netticadan T, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):544-8

Diabetic cardiomyopathy in rats: biochemical mechanisms of increased tolerance to calcium overload. Ziegelhöffer A, et al. **Diabetes Res Clin Pract** 1996 Jul;31 Suppl:S93-103

Enzyme kinetics and the activation energy of Mg-ATPase in cardiac sarcolemma: ADP as an alternative substrate. Vrbjar N, et al. **Gen Physiol Biophys** 1995 Aug;14(4):313-21

Smooth muscle sarcolemma-associated phospholipase C-beta 2; agonist-evoked translocation. Coburn RF, et al. **J Cell Physiol** 1997 Jun;171(3):271-83

Identification of changes in cardiac phospholipase C activity in congestive heart failure. Meij JT, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):237-46

Characterization and localization of an ATP diphosphohydrolase activity (EC 3.6.1.5) in sarcolemmal membrane from rat heart. Menezes de Oliveira E, et al. **Mol Cell Biochem** 1997 May;170(1-2):115-23

Prevention by 7-oxo-prostacyclin of the calcium paradox in rat heart: role of the sarcolemmal (Na,K)-ATPase. Ziegelhöffer A, et al. **Mol Cell Biochem** 1996 Jul-Aug; 160-161:257-63

Inhibition of the cardiac sarcolemma Na+/Ca2+ exchanger by conformationally constrained small cyclic peptides. Khananshvili D, et al. **Mol Pharmacol** 1997 Jan; 51(1):126-31

METABOLISM

Regulation of Ca2+ transport by insulin and taurine. Interaction at the level of the Na(+)-Ca2+ exchanger. Schaffer SW, et al. **Adv Exp Med Biol** 1996;403:551-60

Increased sarcolemmal glucose transporter abundance in myocardial ischemia. Brosius FC 3rd, et al. **Am J Cardiol** 1997 Aug 4;80(3A):77A-84A

Extrasynaptic location of laminin beta 2 chain in developing and adult human skeletal muscle. Wewer UM, et al. **Am J Pathol** 1997 Aug;151(2):621-31

Carbonic anhydrase facilitates CO2 and NH3 transport across the sarcolemma of trout white muscle. Henry RP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1754-61

Fructose transport and GLUT-5 protein in human sarcolemmal vesicles. Kristiansen S, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):E543-8

Progressive increase in glucose transport and GLUT-4 in human sarcolemmal vesicles during moderate exercise. Kristiansen S, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):E385-9

Global ischemia increases the density of voltage-dependent calcium channels in porcine cardiac sarcolemma. Blanck TJ, et al. **Anesth Analg** 1997 May;84(5):972-5

Alteration in cardiac sarcolemmal ATP receptors by oxyradicals. Musat S, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:1-12

Localization of an exchange inhibitory peptide (XIP) binding site on the cardiac sodium-calcium exchanger. Hale CC, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):113-7

Inner sarcolemmal leaflet Ca(2+) binding: its role in cardiac Na/Ca exchange. Wang SY, et al. **Biophys J** 1996 May; 70(5):2266-74

Pre-treatment with trimetazidine increases sarcolemmal mechanical resistance in reoxygenated myocytes. Ruiz-Meana M, et al. **Cardiovasc Res** 1996 Sep;32(3):587-92

Contribution of sarcolemmal calcium current to total cellular calcium in postnatally developing rat heart. Vornanen M. **Cardiovasc Res** 1996 Aug;32(2):400-10

Dystrophin is not a specific component of the cardiac costamere. Stevenson S, et al. **Circ Res** 1997 Feb; 80(2):269-80

Thrombin activates the sarcolemmal Na(+)-H+ exchanger. Evidence for a receptor-mediated mechanism involving protein kinase C. Yasutake M, et al. **Circ Res** 1996 Oct; 79(4):705-15

Low-flow ischemia leads to translocation of canine heart GLUT-4 and GLUT-1 glucose transporters to the sarcolemma in vivo [see comments] Young LH, et al. **Circulation** 1997 Jan 21;95(2):415-22. Comment in: Circulation 1997 Jan 21;95(2):313-5.

Plasmalogen and anionic phospholipid dependence of the cardiac sarcolemmal sodium-calcium exchanger. Ford DA, et al. **FEBS Lett** 1996 Sep 23;394(1):99-102

Dystrobrevin deficiency at the sarcolemma of patients with muscular dystrophy. Metzinger L, et al. **Hum Mol Genet** 1997 Jul;6(7):1185-91

Lactate uptake by skeletal muscle sarcolemmal vesicles decreases after 4 wk of hindlimb unweighting in rats. Dubouchaud H, et al. **J Appl Physiol** 1996 Feb;80(2):416-21

Effect of 2-chloropropionate on initial lactate uptake by rat skeletal muscle sarcolemmal vesicles. Granier P, et al. **J Appl Physiol** 1996 Nov;81(5):1973-7

Exercise training increases sarcolemmal GLUT-4 protein and mRNA content in diabetic heart. Osborn BA, et al. **J Appl Physiol** 1997 Mar;82(3):828-34

Protein import into subsarcolemmal and intermyofibrillar skeletal muscle mitochondria. Differential import regulation in distinct subcellular regions. Takahashi M, et al. **J Biol Chem** 1996 Nov 1;271(44):27285-91

Insulin unmasks a COOH-terminal Glut4 epitope and increases glucose transport across T-tubules in skeletal muscle. Wang W, et al. **J Cell Biol** 1996 Oct;135(2):415-30

A dihydropyridine-sensitive voltage-dependent calcium channel in the sarcolemmal membrane of crustacean muscle. Erxleben C, et al. **J Gen Physiol** 1997 Mar; 109(3):313-26

Uptake and metabolism of palmitate by isolated cardiac myocytes from adult rats: involvement of sarcolemmal proteins. Luiken JJ, et al. **J Lipid Res** 1997 Apr; 38(4):745-58

Opening of cardiac sarcolemmal KATP channels by dinitrophenol separate from metabolic inhibition. Alekseev AE, et al. **J Membr Biol** 1997 May 15;157(2):203-14

Sarcolemmal calcium transporters in myocardial ischemia. Bersohn MM, et al. **J Mol Cell Cardiol** 1997 Sep; 29(9):2525-32

Cardiac Na+-H+ exchanger during postnatal development in the rat: changes in mRNA expression and sarcolemmal activity. Haworth RS, et al. **J Mol Cell Cardiol** 1997 Jan; 29(1):321-32

K(ATP) channels contribute to the cardioprotection of preconditioning independent of anaesthetics in rabbit hearts. Morita Y, et al. **J Mol Cell Cardiol** 1997 Apr; 29(4):1267-76

Rhythm anomalies related to delayed repolarization in vivo: influence of sarcolemmal Ca++ entry and intracellular Ca++ overload. Carlsson L, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):231-9

Measurement of sarcoplasmic reticulum Ca2+ content and sarcolemmal Ca2+ fluxes in isolated rat ventricular myocytes during spontaneous Ca2+ release. Díaz ME, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):3-16

Dissociation of subsarcolemmal from global cytosolic [Ca2+] in myocytes from guinea-pig coronary artery. Ganitkevich VY, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):305-18

Comparison of sarcolemmal calcium channel current in rabbit and rat ventricular myocytes. Yuan W, et al. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):733-46

The source of contracticle calcium in guinea-pig cardiac myocytes treated with thapsigargin. Janiak R, et al. **J Physiol Pharmacol** 1996 Sep;47(3):411-23

Relationship between mechanical dysfunction and depression of sarcolemmal Ca(2+)-pump activity in hearts perfused with oxygen free radicals. Matsubara T, et al. **Mol Cell Biochem** 1996 Jul-Aug;160-161:179-85

Membrane--vanadium interaction: a toxicokinetic evaluation. Upreti RK. **Mol Cell Biochem** 1995 Dec 6-20; 153(1-2):167-71 (26 ref.)

Sarcolemmal phosphatidylethanolamine reorganization during simulated ischaemia and reperfusion: reversibility and ATP dependency. Musters RJ, et al. **Mol Membr Biol** 1996 Jul-Sep;13(3):159-64

Opioid receptor agonists activate pertussis toxin-sensitive G proteins and inhibit adenylyl cyclase in canine cardiac sarcolemma. Niroomand F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):643-9

Interactions between dystrophin and the sarcolemma membrane. Chamberlain JS, et al. **Soc Gen Physiol Ser** 1997; 52:19-29

[Relation between the energy state and permeability of

cardiomyocyte sarcolemma during "calcium paradox" and activity of glycolysis] Alabovskiĭ VV, et al. **Vopr Med Khim** 1997 Jan-Feb;43(1):29-33 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Mini-dystrophin gene transfer in mdx4cv diaphragm muscle fibers increases sarcolemmal stability. Decrouy A, et al. **Gene Ther** 1997 May;4(5):401-8

Muscle pathology and clinical features of the sarcolemmopathies. Fadic R, et al. **Pediatr Neurol** 1997 Jan; 16(1):79-82

PHYSIOLOGY

Membrane domain localization of pH-regulating transporters in frog skeletal muscle membrane vesicles. Putnam RW, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1367-79

Functional identification of a sarcolemmal chloride channel from bovine tracheal smooth muscle. Salvail D, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1716-24

Activation and inhibition of reconstituted cardiac L-type calcium channels by palmitoyl-L-carnitine. Liu QY, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):252-8

Spatial relationships of enteric nerve fibers to vagal motor terminals and the sarcolemma in motor endplates of the rat esophagus: a confocal laser scanning and electron-microscopic study. Wörl J, et al. **Cell Tissue Res** 1997 Jan;287(1):113-8

'Cross talk' between opioid peptide and adrenergic receptor signaling in isolated rat heart. Pepe S, et al. **Circulation** 1997 Apr 15;95(8):2122-9

Osmotic gradient-induced water permeation across the sarcolemma of rabbit ventricular myocytes. Suleymanian MA, et al. **J Gen Physiol** 1996 Apr;107(4):503-14

Tensile strength and dilatational elasticity of giant sarcolemmal vesicles shed from rabbit muscle. Nichol JA, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):187-98

Ca2+ loading reduces the tensile strength of sarcolemmal vesicles shed from rabbit muscle. Nichol JA, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):199-209

The sarcolemmal mechanisms involved in the control of diastolic intracellular calcium in isolated rat cardiac trabeculae. Lamont C, et al. **Pflugers Arch** 1996 Oct; 432(6):961-9

Hyper- and hypocardiodynamic states are associated with externalization and internalization, respectively, of alpha-adrenergic receptors in rat heart during sepsis. Wu LL, et al. **Shock** 1997 May;7(5):318-23

[Dystrophin-glycoprotein complex of skeletal muscle sarcolemma] Jakubiec-Puka A, et al. **Postepy Biochem** 1996;42(2):204-13 (90 ref.) **(Pol)**

ULTRASTRUCTURE

X-linked vacuolated myopathy: membrane attack complex deposition on muscle fiber membranes with calcium accumulation on sarcolemma. Louboutin JP, et al. **Ann Neurol** 1997 Jan;41(1):117-20

Microfilament-membrane interactions in Xenopus myocytes. Samuelsson SJ, et al. **Cell Motil Cytoskeleton** 1996; 35(1):68-80

Autosomal dominant hyaline body myopathy presenting as scapuloperoneal syndrome: clinical features and muscle pathology. Masuzugawa S, et al. **Neurology** 1997 Jan; 48(1):253-7

SARCOLYSINE see **MELPHALAN**

SARCOMA

see related

SARCOMA VIRUSES, AVIAN

Cutaneous melanoma in patients with sarcoma. Berking C, et al. **Cancer** 1997 Feb 15;79(4):843-8

Sarcomas. **Curr Opin Oncol** 1996 Jul;8(4):B114-20

Sarcomas. **Curr Opin Oncol** 1997 Jul;9(4):B99-105

Diagnosis and treatment of soft tissue sarcomas in adults. Dirix LY, et al. **Curr Opin Oncol** 1996 Jul;8(4):289-98 (69 ref.)

Rhabdomyosarcoma and other soft tissue sarcomas in children. Pappo AS. **Curr Opin Oncol** 1996 Jul;8(4):311-6 (20 ref.)

Soft tissue sarcomas. Lewis JJ, et al. **Curr Probl Surg** 1996 Oct;33(10):817-72 (202 ref.)

Retinoic acid syndrome (RAS) in an aplasic patient with secondary acute promyelocytic leukemia (APL) [letter] Castagna L, et al. **Eur J Haematol** 1996 Nov;57(5):392-3

Second malignant neoplasms in children after treatment of soft tissue sarcoma. Rich DC, et al. **J Pediatr Surg** 1997 Feb;32(2):369-72

Sarcomatoid variant of renal cell carcinoma. Muzaffar M, et al. **JPMA J Pak Med Assoc** 1997 Apr;47(4):125-6

Biology of sarcomas. Chang HA, et al. **Med Health R I** 1997 Jan;80(1):8-14 (35 ref.)

Fibromyxoid sarcoma in a four-year-old child: case report and review of the literature. Canpolat C, et al. **Med Pediatr Oncol** 1996 Dec;27(6):561-4

Pulmonary artery sarcoma in a pregnant woman: report of a case. Salamat SM, et al. **Obstet Gynecol** 1994 Oct;84(4 Pt 2):668-9

Society of Surgical Oncology practice guidelines. Soft-tissue sarcoma surgical practice guidelines. Pollack R, et al. **Oncology (Huntingt)** 1997 Sep;11(9):1327-32

[Retroperitoneal sarcomas: recent advances in nosographic framework, diagnosis and integrated surgical treatment] Capaldi M, et al. **G Chir** 1997 Jan-Feb;18(1-2):55-60 (17 ref.) (Eng. Abstr.) **(Ita)**

[Primary pulmonary artery sarcoma (e.g. spindle cell sarcoma of the pulmonary artery, pulmonary artery leiomyosarcoma)] Miyahara Y, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):598-600 (16 ref.) **(Jpn)**

[Atypical coarctation. Repair with Dacron graft and aortic sarcoma] Caralps Riera JM, et al. **Rev Esp Cardiol** 1996 Sep;49(9):693-6 (Eng. Abstr.) **(Spa)**

BLOOD

[Concentration of epidermal growth factor (EGF) in serum of women with endometrial cancer] Tomaszewski J, et al. **Ginekol Pol** 1996 May;67(5):248-53 (Eng. Abstr.) **(Pol)**

CHEMISTRY

Elevation of glutathione and related enzyme activities in high-grade and metastatic extremity soft tissue sarcoma. Hochwald SN, et al. **Ann Surg Oncol** 1997 Jun;4(4):303-9

Overexpression of bcl-2 protein in synovial sarcoma: a comparative study of other soft tissue spindle cell sarcomas and an additional analysis by fluorescence in situ hybridization. Hirakawa N, et al. **Hum Pathol** 1996 Oct; 27(10):1060-5

P-glycoprotein expression in soft-tissue sarcomas. Nakanishi H, et al. **J Cancer Res Clin Oncol** 1997;123(6):352-6

Immunohistochemical detection of bcl-2 and p53 proteins and apoptosis in soft tissue sarcoma: their correlations with prognosis. Nakanishi H, et al. **Oncology** 1997 May-Jun; 54(3):238-44

CLASSIFICATION

Comparative study of the National Cancer Institute and French Federation of Cancer Centers Sarcoma Group grading systems in a population of 410 adult patients with soft tissue sarcoma. Guillou L, et al. **J Clin Oncol** 1997 Jan;15(1):350-62

Sarcoma: a challenging frontier for the oncologist. Wanebo HJ. **Med Health R I** 1997 Jan;80(1):5-7 (30 ref.)

[TNM classification of bone and soft tissue sarcomas] Fukuma H, et al. **Gan To Kagaku Ryoho** 1997 Jun;24(8):1035-40 (9 ref.) (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Pathological fractures in bone sarcomas. Morris HG. **Acta Orthop Scand Suppl** 1997 Feb;273:106-7

Treatment of malignant obstruction of the right ventricular outflow tract and pulmonary artery with metallic stents. Balkin PW, et al. **AJR Am J Roentgenol** 1997 Aug; 169(2):439-40

Sarcoma arising from an abdominal aortic aneurysm. Compagnoni G, et al. **Ann Vasc Surg** 1997 Mar;11(2):183-5

Pre leukemic granulocytic sarcoma of vagina. A case report with review of literature. Lakshminarasimhan S, et al. **Indian J Cancer** 1996 Sep;33(3):145-8 (13 ref.)

Aortic intimal sarcoma with acute myocardial infarction. Nanjo H, et al. **Pathol Int** 1996 Sep;46(9):673-81 (40 ref.)

Are soft-tissue sarcomas of the thigh particularly prone to thromboembolic phenomena? [letter] Richards AM, et al. **Plast Reconstr Surg** 1997 Sep;100(4):1074-5

[Vascular complication disclosing lung cancer in children] Humbertclaude V, et al. **Rev Neurol (Paris)** 1996 Aug-Sep; 152(8-9):552-3 (Eng. Abstr.) **(Fre)**

[Soft tissue sarcomas as a rare cause of pleural effusion] Zaleska M, et al. **Pneumonol Alergol Pol** 1997; 65(5-6):348-54 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Granulocytic sarcoma presenting as a retroperitoneal lymph node mass. A case report with diagnosis by fine needle aspiration biopsy and flow cytometry. Mockli G. **Acta Cytol** 1997 Sep-Oct;41(5):1525-7

Aortic wall sarcoma with tumor emboli and peripheral ischemia: case report with review of literature. Khan A, et al. **Am J Clin Oncol** 1997 Feb;20(1):73-7

Follicular dendritic cell sarcoma mimicking diffuse large cell lymphoma: a case report. Fonseca R, et al. **Am J Hematol** 1997 Jul;55(3):148-55 (45 ref.)

Prognostic relevance of a novel proliferation marker, Ki-S11, for soft-tissue sarcoma. A multivariate study. Rudolph P, et al. **Am J Pathol** 1997 Jun;150(6):1997-2007

Soft tissue sarcoma of the extremity. Cooper TM, et al. **Ann R Coll Surg Engl** 1996 Sep;78(5):453-6

Core needle biopsy for diagnosis of extremity soft tissue sarcoma. Heslin MJ, et al. **Ann Surg Oncol** 1997 Jul-Aug; 4(5):425-31

Detection of local recurrence of soft-tissue sarcoma with positron emission tomography using [18F]fluorodeoxyglucose. Kole AC, et al. **Ann Surg Oncol** 1997 Jan;4(1):57-63

Surgical management of primary pulmonary artery sarcoma [letter; comment] Luciani GB, et al. **Ann Thorac Surg** 1997 Feb;63(2):601-2. Comment on: Ann Thorac Surg 1996 May;61(5):1536-8.

Flow cytometric S-phase fraction in soft-tissue sarcoma: prognostic importance analysed in 160 patients. Gustafson P, et al. **Br J Cancer** 1997;75(1):94-100

Does magnetic resonance imaging make a difference for patients with musculoskeletal sarcoma? Bloem JL, et al. **Br J Radiol** 1997 Apr;70:327-37 (68 ref.)

Pulmonary artery sarcoma. Clinical features. Parish JM, et al. **Chest** 1996 Dec;110(6):1480-8

Primary retroperitoneal sarcomas: common symptoms, common diagnoses, uncommon disease. Ziran BH, et al. **Clin Orthop** 1996 Oct;(331):277-82

Malignancy after retinoblastoma: secondary cancer or recurrence? Dickman PS, et al. **Hum Pathol** 1997 Feb; 28(2):200-5

Relevance of cytogenetic and fluorescent in situ hybridization analyses in the clinical assessment of soft tissue sarcoma. Sozzi G, et al. **Hum Pathol** 1997 Feb;28(2):134-42

Endometrial stromal sarcoma diagnosed by operative hysteroscopy. Flam F, et al. **Hum Reprod** 1996 Dec; 11(12):2797-8

Magnetic resonance chemical shift imaging in bone and soft tissue tumours. Ozaki T, et al. **Int Orthop** 1997;21(1):9-13

Divergent differentiation in soft tissue sarcomas [editorial; comment] Fisher C. **J Clin Pathol** 1996 Sep;49(9):697-8. Comment on: J Clin Pathol 1996 Sep;49(9):770-2.

Pulmonary artery sarcomas: a review of clinical and radiologic features. Cox JE, et al. **J Comput Assist Tomogr** 1997 Sep-Oct;21(5):750-5 (30 ref.)

Assessment of molecular genetic detection of chromosome translocations in the differential diagnosis of pediatric sarcomas. Dockhorn-Dworniczak B, et al. **Klin Padiatr** 1997 Jul-Aug;209(4):156-64

Thyroid cancers. II. Medullary, anaplastic, lymphoma, sarcoma, squamous cell. Austin JR, et al. **Otolaryngol Clin North Am** 1996 Aug;29(4):611-27 (86 ref.)

Myeloradicular features as the initial presentation of sarcomas of childhood. Geller TJ, et al. **Pediatr Neurol** 1996 May; 14(4):297-300

Epithelioid sarcoma of the spine: a case report. Steib JP, et al. **Spine** 1996 Mar 1;21(5):634-8

Use of electron microscopy and other special techniques in the investigation of suspected specimen contamination. Zuppan CW, et al. **Ultrastruct Pathol** 1997 Sep-Oct; 21(5):453-6

[Epithelioid sarcoma. Diagnostic and therapeutic aspects apropos of a coccygeal localization] Tournigand C, et al. **Rev Med Interne** 1997;18(1):50-3 (16 ref.) (Eng. Abstr.) **(Fre)**

[Rare etiology of multiple pulmonary lacunae] Nourdine K, et al. **Rev Pneumol Clin** 1996;52(6):391-7 (32 ref.) (Eng. Abstr.) **(Fre)**

[Soft tissue sarcomas of the ENT area. A report of experiences of the Vienna University ENT Clinic] Cartellieri M, et al. **Laryngorhinootologie** 1996 Sep; 75(9):538-42 (Eng. Abstr.) **(Ger)**

[Retrovesical schwannosarcoma] Gonzalvo Pérez V, et al. **Actas Urol Esp** 1997 Apr;21(4):416-9 (8 ref.) (Eng. Abstr.) **(Spa)**

[Unnecessary follow up of myoma. Bleeding disorders are specific symptoms for sarcoma] Liedman R, et al. **Lakartidningen** 1997 May 21;94(21):2012-4 **(Swe)**

DRUG THERAPY

Chemotherapy for soft tissue sarcomas. Indications and advances. Phillips KA, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:133-8 (42 ref.)

Chemotherapy for adult soft tissue sarcoma. Does it work? Saeter G. **Acta Orthop Scand Suppl** 1997 Feb;273:139-44 (35 ref.)

Phase II study of docetaxel in advanced soft tissue sarcomas. Edmonson JH, et al. **Am J Clin Oncol** 1996 Dec;19(6):574-6

Infusional chemotherapy combined with recombinant human granulocyte colony stimulating factor: advantages and limitations. Weiss AJ, et al. **Am J Clin Oncol** 1997 Feb; 20(1):63-8 (30 ref.)

Can molgramostim enhance the antitumor effects of cytotoxic drugs in patients with advanced sarcomas? Edmonson JH, et al. **Ann Oncol** 1997 Jul;8(7):637-41

Value of laboratory tests in monitoring acute regional toxicity after isolated limb perfusion. Vrouenraets BC, et al. **Ann Surg Oncol** 1997 Jan;4(1):88-94

Establishment and characterization of an epithelioid sarcoma cell line with an autocrine response to interleukin-6. Kusakabe H, et al. **Arch Dermatol Res** 1997 Mar; 289(4):224-33

High dose tumor necrosis factor-alpha and melphalan administered via isolated limb perfusion for advanced limb soft tissue sarcoma results in a >90% response rate and limb preservation. Gutman M, et al. **Cancer** 1997 Mar 15; 79(6):1129-37

GM-CSF did not allow doxorubicin dose escalation in the MAID regimen: a phase I trial. A Southwest Oncology Group study. Hicks LG, et al. **Cancer Invest** 1996; 14(6):507-12

Intraoperative hyperthermic lavage with cisplatin for peritoneal carcinomatosis and sarcomatosis. Stephens AD, et al. **Cancer Treat Res** 1996;81:15-30 (35 ref.)

Chemotherapy for metastatic soft tissue sarcomas. Steward WP. **Cancer Treat Res** 1997;91:157-72 (71 ref.)

Early postoperative intraperitoneal Adriamycin as an adjuvant treatment for visceral and retroperitoneal sarcoma. Sugarbaker PH. **Cancer Treat Res** 1996;81:7-14 (12 ref.)

Adjuvant chemotherapy of soft tissue sarcomas. Verweij J,

et al. **Cancer Treat Res** 1997;91:173–87 (27 ref.)
Imaging assessment of the response of bone tumors to preoperative chemotherapy. Kawai A, et al. **Clin Orthop** 1997 Apr;(337):216–25
Randomised study of high–dose epirubicin versus high–dose epirubicin–cisplatin chemotherapy for advanced soft tissue sarcoma. Jelić S, et al. **Eur J Cancer** 1997 Feb;33(2):220–5
The outcome of advanced soft tissue sarcoma patients with complete tumour regression after either chemotherapy alone or chemotherapy plus surgery. The Scandinavian Sarcoma Group experience. Wiklund T, et al. **Eur J Cancer** 1997 Mar;33(3):357–61
Effects of isolated limb perfusion with tumour necrosis factor–alpha on the function of monocytes and T lymphocytes in patients with cancer. Stam TC, et al. **Eur J Clin Invest** 1996 Dec;26(12):1085–91
The use of combined chemotherapy for the treatment of advanced sarcoma of the uterus. Psikakos G, et al. **Eur J Gynaecol Oncol** 1996;17(4):289–91
Cytotoxicity of phenol to musculoskeletal tumours. Quint U, et al. **J Bone Joint Surg Br** 1996 Nov;78(6):984–5
Interferons as biochemical modulators [editorial; comment] Borden EC, et al. **J Clin Oncol** 1996 Oct;14(10):2627–30 . Comment on: J Clin Oncol 1996 Oct;14(10):2653–65. Comment on: J Clin Oncol 1996 Oct;14(10):2774–84.
Isolated limb perfusion with high–dose tumor necrosis factor–alpha in combination with interferon–gamma and melphalan for nonresectable extremity soft tissue sarcomas: a multicenter trial [letter; comment] Brodowicz T, et al. **J Clin Oncol** 1997 May;15(5):2174–5. Comment on: J Clin Oncol 1996 Oct;14(10):2653–65.
Phase I trial of dose–intense liposome–encapsulated doxorubicin in patients with advanced sarcoma. Casper ES, et al. **J Clin Oncol** 1997 May;15(5):2111–7
Increasing 4'–epidoxorubicin and fixed ifosfamide doses plus granulocyte–macrophage colony–stimulating factor in advanced soft tissue sarcomas: a pilot study. Frustaci S, et al. **J Clin Oncol** 1997 Apr;15(4):1418–26
High–dose ifosfamide in bone and soft tissue sarcomas: results of phase II and pilot studies––dose–response and schedule dependence. Patel SR, et al. **J Clin Oncol** 1997 Jun; 15(6):2378–84
Re: Response of aleukemic granulocytic sarcoma to all–trans–retinoic acid plus interferon alfa–2a [letter] Fleming GF, et al. **J Natl Cancer Inst** 1997 Jan 15; 89(2):172–3
Response of aleukemic granulocytic sarcoma to all–trans–retinoic acid plus interferon alfa–2a [letter] Toma S, et al. **J Natl Cancer Inst** 1996 Oct 16;88(20):1494–5
Recombinant human erythropoietin reduces the need for erythrocyte and platelet transfusions in pediatric patients with sarcoma: a randomized, double–blind, placebo–controlled trial [see comments] Porter JC, et al. **J Pediatr** 1996 Nov;129(5):656–60. Comment in: J Pediatr 1996 Nov;129(5):625–6.
Chemotherapy for soft tissue sarcomas. Clark JW. **Med Health R I** 1997 Jan;80(1):37–8 (23 ref.)
Treatment of childhood post–irradiation sarcoma of bone in cancer survivors. Cefalo G, et al. **Med Pediatr Oncol** 1997 Dec;29(6):568–72
Treatment of recurrent sarcoma of the extremities by isolated limb perfusion using tumor necrosis factor alpha and melphalan. Santinami M, et al. **Tumori** 1996 Nov–Dec; 82(6):579–84
[High dose ifosfamide at 15 g/m2/cycle: a feasibility study in 10 patients] Baranzelli MC, et al. **Bull Cancer** 1997 Feb; 84(2):141–6 (Eng. Abstr.) **(Fre)**
[Role of adjuvant chemotherapy in the treatment of soft tissue sarcoma] Debled M, et al. **Bull Cancer** 1997 Jun; 84(6):653–63 (Eng. Abstr.) **(Fre)**
[A pilot study of high–dose zorubicin in advanced stages of soft tissue sarcoma in adults] Jelić S, et al. **Bull Cancer** 1996 Dec;83(12):1002–7 (Eng. Abstr.) **(Fre)**
[Isolated hyperthermic extremity perfusion in soft tissue sarcoma (letter; comment)] Eigler FW, et al. **Chirurg** 1997 Jun;68(6):649. Comment on: Chirurg 1996 Dec;67(12):1237–43. **(Ger)**
[Isolated limb perfusion with tumor necrosis factor for malignancies of the limbs] Abu–Abid S, et al. **Harefuah** 1996 Oct;131(7–8):227–32, 296, 295 (Eng. Abstr.) **(Heb)**
[Stimulating and protective effect of recombinant interleukin–1–beta (beta–leukin) on leukopoiesis in chemotherapy of malignant tumors] Gershanovich ML, et al. **Vopr Onkol** 1996;42(6):13–8 (Eng. Abstr.) **(Rus)**
[High–dose ifosfamide in the treatment of patients with soft tissue sarcoma] Tiuliandin SA, et al. **Vopr Onkol** 1996; 42(6):19–22 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

gamma–Glutamyl hydrolase from human sarcoma HT–1080 cells: characterization and inhibition by glutamine antagonists. Waltham MC, et al. **Mol Pharmacol** 1997 May; 51(5):825–32
Expression of thymidine phosphorylase in uterine sarcoma and uterine leiomyoma: association with microvessel density and Doppler blood flow analysis. Hata K, et al. **Ultrasound Obstet Gynecol** 1997 Jul;10(1):54–8

EPIDEMIOLOGY

Sarcoma of the uterus. A clinical study of 42 patients. Jereczek B, et al. **Arch Gynecol Obstet** 1996;258(4):171–80
Soft tissue sarcomas among female paper sorters in Denmark [letter] Rix BA, et al. **Cancer Causes Control** 1997 Mar; 8(2):259
Uterine sarcomas in Norway 1956–1992: incidence, survival and mortality. Nordal RR, et al. **Eur J Cancer** 1997 May; 33(6):907–11
Granulocytic sarcoma in acute non–lymphocytic leukemia. Prajapati NC, et al. **Indian Pediatr** 1996 May;33(5):392–4
A population–based study of the incidence of malignant small bowel tumours: SEER, 1973–1990. Chow JS, et al. **Int J Epidemiol** 1996 Aug;25(4):722–8
Second malignancies after Ewing's sarcoma: radiation dose–dependency of secondary sarcomas. Kuttesch JF Jr, et al. **J Clin Oncol** 1996 Oct;14(10):2818–25
Cancer incidence after retinoblastoma. Radiation dose and sarcoma risk [see comments] Wong FL, et al. **JAMA** 1997 Oct 15;278(15):1262–7. Comment in: JAMA 1997 Oct 15;278(15):1284–5.
Molecular epidemiology study of a suspected community cluster of childhood cancers. Li FP, et al. **Med Pediatr Oncol** 1997 Apr;28(4):243–7
Diet and risk of lymphoid neoplasms and soft tissue sarcomas. Tavani A, et al. **Nutr Cancer** 1997;27(3):256–60
Soft tissue sarcoma after treatment for breast cancer. Karlsson P, et al. **Radiother Oncol** 1996 Jan;38(1):25–31

ETIOLOGY

Radiation–associated malignant tumors of the chest wall. Schwarz RE, et al. **Ann Surg Oncol** 1996 Jul;3(4):387–92
Sarcoma of bone–cement membrane: a case report and review of the literature. Bell RS, et al. **Can J Surg** 1997 Feb; 40(1):51–5 (32 ref.)
Radiation–induced bone and soft tissue sarcomas: clinical aspects and molecular biology. Spiro IJ, et al. **Cancer Treat Res** 1997;91:143–55 (107 ref.)
Radiation–induced sarcoma of the skull: report of two cases. Salvati M, et al. **Ital J Neurol Sci** 1997 Apr;18(2):101–4
Radium dial workers: issues concerning dose response and modeling. Carnes BA, et al. **Radiat Res** 1997 Jun; 147(6):707–14
[Incidence of malignant soft tissue tumors (sarcomas) after previous radiotherapy] Hernandez–Richter T, et al. **Langenbecks Arch Chir** 1996;381(5):295–8 (19 ref.) (Eng. Abstr.) **(Ger)**
[Secondary malignancies in patients with Ewing's sarcoma] Dunst J. **Strahlenther Onkol** 1997 Jun;173(6):338–9 **(Ger)**

GENETICS

Musculoskeletal oncology––advances in cytogenetics and molecular genetics and their clinical implications. Choong PF, et al. **Acta Oncol** 1997;36(3):245–54 (120 ref.)
p53: functions, mutations and sarcomas. Hung J, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:68–73 (65 ref.)
Molecular and cytogenetics of soft tissue sarcomas. Nilbert M. **Acta Orthop Scand Suppl** 1997 Feb;273:60–7 (53 ref.)
Li–Fraumeni syndrome in pediatric patients with soft tissue sarcoma or osteosarcoma. Carnevale A, et al. **Arch Med Res** 1997 Autumn;28(3):383–6
Familial aggregation of soft tissue sarcomas: a report of three cases from a Li–Fraumeni–like family. Narita T, et al. **Arch Pathol Lab Med** 1997 May;121(5):493–8
p53 gene mutations and p53 protein expression in human soft tissue sarcomas. Yoo J, et al. **Arch Pathol Lab Med** 1997 Apr;121(4):395–9
Flow cytometric DNA content analysis of 185 soft tissue neoplasms indicates that S–phase fraction is a prognostic factor for sarcomas. French Federation of Cancer Centers (FNCLCC) Sarcoma Group. Collin F, et al. **Cancer** 1997 Jun 15;79(12):2371–9
Genetic transmission of susceptibility to cancer in families of children with soft tissue sarcomas. Moutou C, et al. **Cancer** 1996 Oct 1;78(7):1483–91
Epithelioid sarcoma with an 18q aberration. Iwasaki H, et al. **Cancer Genet Cytogenet** 1996 Oct 1;91(1):46–52
Cytogenetic and molecular genetic analysis of a pediatric pleomorphic sarcoma reveals similarities to adult malignant fibrous histiocytoma. Palmer JL, et al. **Cancer Genet Cytogenet** 1997 Jun;95(2):141–7
Involvement of 8q, 22q, and monosomy 21 in an epithelioid sarcoma [letter] Sonobe H, et al. **Cancer Genet Cytogenet** 1997 Jul 15;96(2):178–80
Molecular genetics of soft tissue sarcomas. Cooper CS, et al. **Cancer Treat Res** 1997;91:31–50 (93 ref.)
Cytogenetics of soft tissue tumors. Fletcher JA. **Cancer Treat Res** 1997;91:9–29 (114 ref.)
Cytogenetics and experimental models. Toretsky JA, et al. **Curr Opin Oncol** 1997 Jul;9(4):342–7 (42 ref.)
Separate amplified regions encompassing CDK4 and MDM2 in human sarcomas. Berner JM, et al. **Genes Chromosomes Cancer** 1996 Dec;17(4):254–9
Fusion of an ETS–family gene, EIAF, to EWS by t(17;22)(q12;q12) chromosome translocation in an undifferentiated sarcoma of infancy. Kaneko Y, et al. **Genes Chromosomes Cancer** 1996 Feb;15(2):115–21
Expression patterns of the human sarcoma–associated genes FUS and EWS and the genomic structure of FUS. Aman P, et al. **Genomics** 1996 Oct 1;37(1):1–8
Clinical outcome of patients with previously untreated soft tissue sarcomas in relation to tumor grade, DNA ploidy and karyotype. Plaat BE, et al. **Int J Cancer** 1997 Aug 22;74(4):396–402
Multidrug–resistant human sarcoma cells with a mutant P–glycoprotein, altered phenotype, and resistance to cyclosporins. Chen G, et al. **J Biol Chem** 1997 Feb 28; 272(9):5974–82
p53 gene mutations in soft–tissue sarcomas––correlations with p53 immunohistochemistry and DNA ploidy. Schneider–Stock R, et al. **J Cancer Res Clin Oncol** 1997; 123(4):211–8
Molecular analysis of the adenomatous polyposis coli gene in sarcomas, hematological malignancies and noncolonic, neoplastic tissues. Wada M, et al. **J Mol Med** 1997 Feb; 75(2):139–44
Molecular and immunohistochemical identification of p53 alterations in bone and soft tissue sarcomas. Mousses S, et al. **Mod Pathol** 1996 Jan;9(1):1–6
Loss of heterozygosity on chromosome 9q21 (p16 gene) uncommon in soft–tissue sarcomas. Schneider–Stock R, et al. **Mol Carcinog** 1997 Feb;18(2):63–5
HMGIC, the gene for an architectural transcription factor, is amplified and rearranged in a subset of human sarcomas. Berner JM, et al. **Oncogene** 1997 Jun 19;14(24):2935–41
Chromosomal translocations in human soft tissue sarcomas by interphase fluorescence in situ hybridization. Yoshida H, et al. **Pathol Int** 1997 Apr;47(4):222–9

HISTORY

The journal 150 & 100 years ago. July 1846 and 1896. Colon GA. **J La State Med Soc** 1996 Jul;148(7):287–9

IMMUNOLOGY

Molecular cloning and primary characterization of a single–chain antibody against human sarcoma–associated antigen p200. Chen H, et al. **Anticancer Res** 1996 Nov–Dec; 16(6B):3551–6
Primary sarcomas of the lung: a clinicopathological and immunohistochemical study of 14 cases. Attanoos RL, et al. **Histopathology** 1996 Jul;29(1):29–36
Dominant TCRB–V–J chain usage and clonal expansion of sarcoma–reactive CD4+ HLA–DR–restricted T cells suggest a limited set of immunodominant sarcoma antigens. Heike M, et al. **Int J Cancer** 1997 Jul 29;72(3):403–7
Binding and internalization of anti–sarcoma IgG and IgM antibodies. Chao TC, et al. **J Surg Res** 1997 Jun;70(1):27–33
Contrary roles of IL–4 and IL–12 on IL–10 production and proliferation of human tumour reactive T cells. Heike M, et al. **Scand J Immunol** 1997 Feb;45(2):221–6
Cytokine production by human soft tissue sarcomas: implications for immunosuppression within the tumour bed. Spellman JE, et al. **Surg Oncol** 1996 Oct–Dec;5(5–6):237–44
Immunohistochemical characterization of hemangiopericytomas and other spindle cell tumors in the dog. Pérez J, et al. **Vet Pathol** 1996 Jul;33(4):391–7

METABOLISM

The association between nm23 gene expression and survival in patients with sarcomas. Royds JA, et al. **Br J Cancer** 1997;75(8):1195–200
Assessment of proliferative activity, DNA values and some clinicopathologic parameters in mesenchymal tumors. Immunohistochemical and flow cytometric study. Niezabitowski A, et al. **Gen Diagn Pathol** 1997 Jun; 142(5–6):327–33
MIB–1 expression and iododeoxyuridine labelling in soft tissue sarcomas: an immunohistochemical study including correlations with p53, bcl–2 and histological characteristics. Jensen V, et al. **Histopathology** 1996 May;28(5):437–44
Loss of RB and MTS1/CDKN2 (p16) expression in human sarcomas. Cohen JA, et al. **Hum Pathol** 1997 Aug; 28(8):893–8
Coexpression of stromelysin–3 and insulin–like growth factor II in tumors of ectodermal, mesodermal, and endodermal origin: indicator of a fetal cell phenotype. Singer CF, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1917–22
Alteration of tissue oxygen partial pressure during isolated, hyperthermic limb perfusion with cytostatic drugs or recombinant human tumor necrosis factor alpha combined with melphalan. Hohenberger P, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:14–5
Immunohistochemical and clinical evaluation of cathepsin expression in soft tissue sarcomas. Würl P, et al. **Virchows Arch** 1997 Mar;430(3):221–5

MORTALITY

Cancer mortality among rice growers in Novara Province, northern Italy. Gambini GF, et al. **Am J Ind Med** 1997 Apr;31(4):435–41
Assessing prognosis for high–grade soft–tissue sarcomas: search for a marker. Li XQ, et al. **Ann Surg Oncol** 1996 Nov;3(6):550–7
Influence of local recurrence on the prognosis of soft–tissue sarcomas. Ueda T, et al. **J Bone Joint Surg Br** 1997 Jul; 79(4):553–7
Prognostic factors associated with long–term survival for retroperitoneal sarcoma: implications for management. Heslin MJ, et al. **J Clin Oncol** 1997 Aug;15(8):2832–9
Association of local recurrence with subsequent survival in extremity soft tissue sarcoma. Lewis JJ, et al. **J Clin Oncol** 1997 Feb;15(2):646–52

PATHOLOGY

Malignant fibrous histiocytoma--the commonest soft tissue sarcoma or a nonexistent entity? Akerman M. **Acta Orthop Scand Suppl** 1997 Feb;273:41–6

The cytology of soft tissue tumours. Akerman M. **Acta Orthop Scand Suppl** 1997 Feb;273:54–9

The role of magnetic resonance imaging. When to use it and what to look for. McKenzie AF. **Acta Orthop Scand Suppl** 1997 Feb;273:21–4

Prognostic factors in soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:148–55 (36 ref.)

Prognostic factors in bone sarcomas. Saeter G, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:156–60 (36 ref.)

Fine needle aspiration in the diagnosis of bone tumors. Willén H. **Acta Orthop Scand Suppl** 1997 Feb;273:47–53

Chondrosarcomatous cutaneous metastasis. A unique manifestation of sarcomatoid (metaplastic) breast carcinoma. Sexton CW, et al. **Am J Dermatopathol** 1996 Oct;18(5):538–42

Massive pulmonary tumor emboli in a sarcoma. An unusual cause of sudden death. Rees H, et al. **Am J Forensic Med Pathol** 1996 Jun;17(2):146–50

Florid soft-tissue decidual reaction: a potential mimic of neoplasia. Bégin LR. **Am J Surg Pathol** 1997 Mar; 21(3):348–53

"Proximal-type" epithelioid sarcoma, a distinctive aggressive neoplasm showing rhabdoid features. Clinicopathologic, immunohistochemical, and ultrastructural study of a series. Guillou L, et al. **Am J Surg Pathol** 1997 Feb;21(2):130–46 (70 ref.)

Pancreatic mucinous cystic neoplasm with sarcomatous stroma: a report of three cases. Wenig BM, et al. **Am J Surg Pathol** 1997 Jan;21(1):70–80

Urethral caruncle with atypical stromal cells simulating lymphoma or sarcoma--a distinctive pseudoneoplastic lesion of females. A report of six cases. Young RH, et al. **Am J Surg Pathol** 1996 Oct;20(10):1190–5

Small round cell tumors of bone and soft tissue. A morphometric and stereometric comparative analysis of 119 cases. Callaghan RC, et al. **Anal Quant Cytol Histol** 1995 Dec;17(6):374–82

The abundant presence of Söderström bodies in cytology smears of fine-needle aspirates contributes to distinguishing high-grade non-Hodgkin's lymphoma from carcinoma and sarcoma. Bangerter M, et al. **Ann Hematol** 1997 Apr; 74(4):175–8

Needle tract recurrences after closed biopsy for sarcoma: three cases and review of the literature. Schwartz HS, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):228–36 (58 ref.)

In vitro characterisation of soft tissue tumor chemosensitivity. Remmelink M, et al. **Anticancer Res** 1997 May–Jun; 17(3C):2009–17

Metastasizing sarcoma of the aorta. A case report. Ingeholm P, et al. **APMIS** 1997 Aug;105(8):609–11

Soft tissue Langerhans' cell histiocytosis in an adult. A case presentation with flow cytometric analysis and literature review. al-Abbadi M, et al. **Arch Pathol Lab Med** 1997 Feb;121(2):169–72 (34 ref.)

Familial aggregation of soft tissue sarcomas: a report of three cases from a Li-Fraumeni-like family. Narita T, et al. **Arch Pathol Lab Med** 1997 May;121(5):493–8

Aortic intimal sarcoma: a case report. Wills VL, et al. **Aust N Z J Surg** 1997 Jul;67(7):482–5

Follicular dendritic cell sarcoma. Clinicopathologic analysis of 17 cases suggesting a malignant potential higher than currently recognized. Chan JK, et al. **Cancer** 1997 Jan 15; 79(2):294–313 (39 ref.)

Flow cytometric DNA content analysis of 185 soft tissue neoplasms indicates that S-phase fraction is a prognostic factor for sarcomas. French Federation of Cancer Centers (FNCLCC) Sarcoma Group. Collin F, et al. **Cancer** 1997 Jun 15;79(12):2371–9

Value of peer review of pathology in soft tissue sarcomas. Harris M, et al. **Cancer Treat Res** 1997;91:1–8 (13 ref.)

Soft tissue sarcomas in children. Pappo AS, et al. **Cancer Treat Res** 1997;91:205–22

Patterns of spread of recurrent intraabdominal sarcoma. Sugarbaker TA, et al. **Cancer Treat Res** 1996;82:65–77

Imaging assessment of the response of bone tumors to preoperative chemotherapy. Kawai A, et al. **Clin Orthop** 1997 Apr;(337):216–25

Soft tissue sarcoma in adults. Dirix LY, et al. **Curr Opin Oncol** 1997 Jul;9(4):348–59 (62 ref.)

Flow cytometric analysis of P-glycoprotein expression and drug efflux in human soft tissue and bone sarcomas. Kunikane H, et al. **Cytometry** 1997 Aug 15;30(4):197–203

Fine-needle aspiration biopsy of metaplastic carcinoma of the breast: report of a case with abundant myxoid ground substance. Castellà E, et al. **Diagn Cytopathol** 1996 Jun; 14(4):325–7

Fine-needle aspiration cytology of sarcoma: retrospective review of diagnostic utility and specificity. Costa MJ, et al. **Diagn Cytopathol** 1996 Jul;15(1):23–32

Fine-needle aspiration cytology of sarcomatoid carcinoma of the breast: a cytologically overlooked neoplasm. Straathof D, et al. **Diagn Cytopathol** 1997 Mar;16(3):242–6

Is histological grading of value for the prognosis of soft tissue sarcomas? Daugaard S, et al. **Eur J Cancer** 1997 Apr; 33(4):521–5

Uterine sarcoma: the Hacettepe hospital experience of 88 consecutive patients. Ayhan A, et al. **Eur J Gynaecol Oncol** 1997;18(2):146–8

Breast mass due to alveolar soft part sarcoma of the pectoris major muscle. Liu TT, et al. **Eur J Radiol** 1997 Jan; 24(1):57–9

Sarcomatoid chromophobe cell renal carcinoma: immunohistochemical and lectin study in one case. Gómez-Román JJ, et al. **Gen Diagn Pathol** 1997 Jul; 143(1):63–9

Desmoids with sarcomatous change and metastases [letter] Allen PW. **Histopathology** 1995 Aug;27(2):202

Primary sarcomas of the lung: a clinicopathological and immunohistochemical study of 14 cases. Attanoos RL, et al. **Histopathology** 1996 Jul;29(1):29–36

MIB-1 expression and iododeoxyuridine labelling in soft tissue sarcomas: an immunohistochemical study including correlations with p53, bcl-2 and histological characteristics. Jensen V, et al. **Histopathology** 1996 May;28(5):437–44

Epithelioid sarcoma masquerading as perforating granuloma annulare [letter] Lopez-Rios F, et al. **Histopathology** 1997 Jul;31(1):102–3

Malignant transformation in a schwannoma. Nayler SJ, et al. **Histopathology** 1996 Aug;29(2):189–92

Malignant transformation of chondroblastoma. Pösl M, et al. **Histopathology** 1996 Nov;29(5):477–80

Progression of inflammatory myofibroblastic tumor (inflammatory pseudotumor) of soft tissue into sarcoma after several recurrences. Donner LR, et al. **Hum Pathol** 1996 Oct;27(10):1095–8

Synchronous Hodgkin's disease and granulocytic sarcoma with no prior therapy. Suh YK, et al. **Hum Pathol** 1996 Oct;27(10):1103–6

Tumours of the oral cavity, buccal pouch, oesophagus, forestomach and salivary glands. Takahashi M, et al. **IARC Sci Publ** 1996;(126):59–77 (60 ref.)

Granulocytic sarcoma in acute non-lymphocytic leukemia. Prajapati NC, et al. **Indian Pediatr** 1996 May;33(5):392–4

Establishment, characterization and drug sensitivity of four new human soft tissue sarcoma cell lines. Li WW, et al. **Int J Cancer** 1996 Nov 15;68(4):514–9

Clinical outcome of patients with previously untreated soft tissue sarcomas in relation to tumor grade, DNA ploidy and karyotype. Plaat BE, et al. **Int J Cancer** 1997 Aug 22;74(4):396–402

Association of local recurrence with subsequent survival in extremity soft tissue sarcoma. Lewis JJ, et al. **J Clin Oncol** 1997 Feb;15(2):646–52

Adult genitourinary sarcomas: a report of seventeen cases and review of the literature. Berkmen F, et al. **J Exp Clin Cancer Res** 1997 Mar;16(1):45–8 (20 ref.)

Mucinous cystadenocarcinoma with sarcoma-like mural nodules arising in a mature cystic teratoma of the ovary: a case report. Mizuno K, et al. **J Obstet Gynaecol Res** 1996 Oct;22(5):461–5

Epithelioid sarcoma of the temporomandibular region: a case report. Vadmal M, et al. **J Oral Maxillofac Surg** 1997 Jul; 55(7):754–8

Tumor size as a prognostic indicator of histologic grade of soft tissue sarcoma. Nakanishi H, et al. **J Surg Oncol** 1997 Jul;65(3):183–7

Isolation of viable cells in canine transmissible sarcoma (CTS) using density gradient centrifugation. Okamoto Y, et al. **J Vet Med Sci** 1996 Nov;58(11):1149–51

A combined hepatocellular/cholangiocellular carcinoma with sarcomatoid features. Papotti M, et al. **Liver** 1997 Feb; 17(1):47–52

Undifferentiated sarcomas of children: pathology and clinical behavior--an Intergroup Rhabdomyosarcoma study. Pawel BR, et al. **Med Pediatr Oncol** 1997 Sep;29(3):170–80

Predictive value of proliferation-related markers, p53, and DNA ploidy for survival in patients with soft tissue spindle-cell sarcomas. Golouh R, et al. **Mod Pathol** 1996 Sep;9(9):919–24

Proliferative activity, angiogenesis, and necrosis in peripheral nerve sheath tumors: a quantitative evaluation for prognosis. Miracco C, et al. **Mod Pathol** 1996 Dec; 9(12):1108–17

Molecular and immunohistochemical identification of p53 alterations in bone and soft tissue sarcomas. Mousses S, et al. **Mod Pathol** 1996 Jan;9(1):1–6

More on cardiac myxomas [letter; comment] Burke A, et al. **N Engl J Med** 1996 Nov 7;335(19):1462–63; discussion 1463–4. Comment on: N Engl J Med 1996 May 23;334(21):1407–8; discussion 1408–9. Comment on: N Engl J Med 1996 May 23;334(21):1408; discussion 1408–9.

Uterine sarcoma. Levenback CF, et al. **Obstet Gynecol Clin North Am** 1996 Jun;23(2):457–73 (37 ref.)

Immunohistochemical detection of bcl-2 and p53 proteins and apoptosis in soft tissue sarcoma: their correlations with prognosis. Nakanishi H, et al. **Oncology** 1997 May–Jun; 54(3):238–44

A case of sarcomatoid carcinoma of the thymus. Nishimura M, et al. **Pathol Int** 1997 Apr;47(4):260–3 (11 ref.)

Sarcomatoid hepatocellular carcinoma with osteoclast-like giant cells: case report and immunohistochemical observations. Sasaki A, et al. **Pathol Int** 1997 May; 47(5):318–24 (30 ref.)

Corticomedullary tumors of the adrenal glands. Report of two cases. Association of corticomedullary tumor with spindle cell sarcoma. Michal M, et al. **Pathol Res Pract** 1996 Nov;192(11):1082–9

The effect of whole-body irradiation of nude mice on the tumor transplantability and control probability of a human soft tissue sarcoma xenograft. Huang P, et al. **Radiat Res** 1996 Mar;145(3):337–42

Spontaneous metastasis, proliferation characteristics and radiation sensitivity of fractionated irradiation recurrent and unirradiated human xenografts. Huang P, et al. **Radiother Oncol** 1996 Oct;41(1):73–81

Soft tissue sarcoma nodal metastases: biologic significance and therapeutic considerations. Skinner KA, et al. **Surg Oncol Clin N Am** 1996 Jan;5(1):121–7 (14 ref.)

Sarcomatoid renal cell carcinoma with widespread metastases to liver and bones in a kidney transplant recipient. Katai M, et al. **Transplantation** 1997 May 15;63(9):1361–3

[A tumorous lesion of the thumb in an adolescent] Brel D, et al. **Ann Pathol** 1997 Apr;17(2):125–6 **(Fre)**

[Spindle cell breast sarcoma] Randrianjafisamindrakotroka NS, et al. **Arch Anat Cytol Pathol** 1996;44(1):55–9 (Eng. Abstr.) **(Fre)**

[In vitro studies of DNA synthesis inhibition by hyperthermia (42.5 degrees C, 120 min) and cytostatic drugs in embryonal tumors and sarcomas in childhood] Willnow U, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1100–1 (Eng. Abstr.) **(Ger)**

[A mesenchymal malignant mesothelioma that changed from mixed type to purely sarcomatous type] Miyazaki H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):341–5 (Eng. Abstr.) **(Jpn)**

[Mesenchymal tumor of the small pelvis with hypoglycemic syndrome] Kalinin AP, et al. **Arkh Patol** 1997 Mar–Apr; 59(2):59–62 (Eng. Abstr.) **(Rus)**

[Sarcomatoid renal carcinoma] Martinez Jabaloyas JM, et al. **Actas Urol Esp** 1996 Oct;20(9):800–5 (Eng. Abstr.) **(Spa)**

[Small cell-sarcomatoid carcinoma of the urinary bladder] Domínguez Iglesias F, et al. **Arch Esp Urol** 1996 Jul–Aug; 49(6):631–5 (15 ref.) (Eng. Abstr.) **(Spa)**

[Gastrointestinal stromal sarcoma. Report of a case and review of the literature] Estrada SM, et al. **G E N** 1995 Oct–Dec;49(4):310–3 (Eng. Abstr.) **(Spa)**

[Sarcoma in the diverticulum of Meckel (letter)] Sánchez JL, et al. **Rev Esp Enferm Dig** 1997 Apr;89(4):334–5 **(Spa)**

PSYCHOLOGY

A psychosocial intervention for patients with soft tissue sarcoma. Payne DK, et al. **Psychooncology** 1997 Mar; 6(1):65–71

RADIOGRAPHY

Fine-needle aspiration biopsy of mesenchymal lesions: the value of clinicoradiologic correlation and the importance of histogenetic subtyping [letter; comment] Kilpatrick SE, et al. **Am J Clin Pathol** 1997 Aug;108(2):237. Comment on: Am J Clin Pathol 1996 Nov;106(5):561–4.

Epithelioid sarcoma of the forearm. Hanley SD, et al. **Australas Radiol** 1996 Aug;40(3):254–6

Computed tomography of retroperitoneal and mesenteric sarcomas: a pictorial essay. Munk PL, et al. **Can Assoc Radiol J** 1996 Oct;47(5):335–41

Pericardial sarcoma. Hagspiel KD, et al. **J Belge Radiol** 1996 Dec;79(6):269

RADIONUCLIDE IMAGING

Nuclear medicine techniques provide unique physiologic characterization of suspected and known soft tissue and bone sarcomas. Hicks RJ. **Acta Orthop Scand Suppl** 1997 Feb;273:25–36 (38 ref.)

Inguinoscrotal lymphatic reflux detected by lymphoscintigraphy. Kinuya S, et al. **Ann Nucl Med** 1996 Aug;10(3):351–2

PET imaging in soft tissue sarcomas. Miraldi F, et al. **Cancer Treat Res** 1997;91:51–64 (40 ref.)

Correlation of the findings of thallium-201 chloride scans with those of other imaging modalities and histology following therapy in patients with bone and soft tissue sarcomas [letter] Kostakoglu L, et al. **Eur J Nucl Med** 1996 Nov;23(11):1558

Comparison of technetium-99m-MIBI and technetium-99m-tetrofosmin uptake by musculoskeletal sarcomas. Söderlund V, et al. **J Nucl Med** 1997 May; 38(5):682–6

RADIOTHERAPY

Soft tissue sarcomas. Alvegård T. **Acta Oncol** 1996;35 Suppl 7:117–22

Bone sarcomas. Alvegård T. **Acta Oncol** 1996;35 Suppl 7:123–4

Radiotherapy in soft tissue sarcoma of the extremities. Ngan SY. **Acta Orthop Scand Suppl** 1997 Feb;273:112–6

Soft tissue sarcomas: radiation as a therapeutic option. Suit H, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):855–61 (45 ref.)

Intra-operative implant brachytherapy in the management of soft-tissue sarcomas. Burmeister BH, et al. **Aust N Z J Surg** 1997 Jan;67(1):5–8

Neutrontherapy in soft tissue sarcomas: a review of European results. Schwarz R, et al. **Bull Cancer Radiother** 1996;83 Suppl:110s–4s

Fast neutron therapy in treatment of soft tissue sarcoma--the Berlin-Buch study. Steingräber M, et al. **Bull Cancer Radiother** 1996;83 Suppl:122s–4s

Brachytherapy for soft tissue sarcomas. Devlin PM, et al. **Cancer Treat Res** 1997;91:107–28 (41 ref.)

Three–dimensional planning and conformal radiotherapy. Harmer C, et al. **Cancer Treat Res** 1997;91:129–41 (24 ref.)

IORT for extremity sarcomas. Eble MJ, et al. **Front Radiat Ther Oncol** 1997;31:146–50

IORT in the management of extremity and limb girdle soft tissue sarcomas. Haddock MG, et al. **Front Radiat Ther Oncol** 1997;31:151–2

Radiotherapy in the treatment of uterine sarcomas. A retrospective analysis of 54 cases. Hoffmann W, et al. **Gynecol Obstet Invest** 1996;42(1):49–57

The effect of combined external beam radiotherapy and brachytherapy on local control and wound complications in patients with high–grade soft tissue sarcomas of the extremity with positive microscopic margin. Alekhteyar KM, et al. **Int J Radiat Oncol Biol Phys** 1996 Sep 1; 36(2):321–4

Prognostic factors in adult soft–tissue sarcomas of the head and neck. Le QT, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):975–84

Radiotherapy vs. radiotherapy and razoxane in the treatment of soft tissue sarcomas: final results of a randomized study. Rhomberg W, et al. **Int J Radiat Oncol Biol Phys** 1996 Dec 1;36(5):1077–84

Innovation in the management of soft tissue sarcomas in infants and young children: high–dose–rate brachytherapy. Nag S, et al. **J Clin Oncol** 1997 Sep;15(9):3075–84

Complications of combined radiotherapy and isolated limb perfusion with tumor necrosis factor alpha +/– interferon gamma and melphalan in patients with irresectable soft tissue tumors. Vrouenraets BC, et al. **J Surg Oncol** 1997 Jun;65(2):88–94

The role of radiation in the management of soft tissue sarcoma. Liu L, et al. **Med Health R I** 1997 Jan;80(1):32–6 (36 ref.)

Role of radiation therapy in retroperitoneal sarcomas. Clark JA, et al. **Oncology (Huntingt)** 1996 Dec;10(12):1867–72; discussion 1872–4 (27 ref.)

Soft tissue sarcoma of the extremity. Limb salvage after failure of combined conservative therapy. Catton C, et al. **Radiother Oncol** 1996 Dec;41(3):209–14

Spontaneous metastasis, proliferation characteristics and radiation sensitivity of fractionated irradiation recurrent and unirradiated human xenografts. Huang P, et al. **Radiother Oncol** 1996 Oct;41(1):73–81

Role of brachytherapy in adult soft tissue sarcomas. Hilaris BS, et al. **Semin Surg Oncol** 1997 May–Jun;13(3):196–203 (20 ref.)

[Uterine sarcoma treated by surgery and postoperative radiation therapy. Patterns of relapse, prognostic factors and role of radiation therapy] Coquard R, et al. **Bull Cancer** 1997 Jun;84(6):625–9 (29 ref.) (Eng. Abstr.) **(Fre)**

[Soft tissue sarcoma of the head and neck area in adults. Outcome of combined surgery and irradiation and radiotherapy alone] Willers H, et al. **Strahlenther Onkol** 1997 Mar;173(3):131–5 (Eng. Abstr.) **(Ger)**

SECONDARY

The role of pulmonary metastasectomy for soft tissue sarcoma. Alvegård TA, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:145–7

Chondrosarcomatous cutaneous metastasis. A unique manifestation of sarcomatoid (metaplastic) breast carcinoma. Sexton CW, et al. **Am J Dermatopathol** 1996 Oct;18(5):538–42

Inguinoscrotal lymphatic reflux detected by lymphoscintigraphy. Kinuya S, et al. **Ann Nucl Med** 1996 Aug;10(3):351–2

A phase I/II study of sequential, dose–escalated, high dose ifosfamide plus doxorubicin with peripheral blood stem cell support for the treatment of patients with advanced soft tissue sarcomas. Bokemeyer C, et al. **Cancer** 1997 Oct 1; 80(7):1221–7

Purification and characterization of human lung fibroblast motility–stimulating factor for human soft tissue sarcoma cells: identification as an NH2–terminal fragment of human fibronectin. Hu M, et al. **Cancer Res** 1997 Aug 15; 57(16):3577–84

Treatment of the patient with lung metastases. Roth JA, et al. **Curr Probl Surg** 1996 Nov;33(11):881–952 (326 ref.)

Metastasising sarcoma of the aorta. Ruijter ET, et al. **Histopathology** 1996 Sep;29(3):278–81

Skeletal metastases from soft–tissue sarcomas. Incidence, patterns, and radiological features. Yoshikawa H, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):548–52

Isolated limb perfusion with high–dose tumor necrosis factor–alpha in combination with interferon–gamma and melphalan for nonresectable extremity soft tissue sarcomas: a multicenter trial [letter; comment] Brodowicz T, et al. **J Clin Oncol** 1997 May;15(5):2174–5. Comment on: J Clin Oncol 1996 Oct;14(10):2653–65.

Extremity soft tissue sarcoma with metastases to abdominopelvic surfaces. Zanarini D, et al. **J Surg Oncol** 1997 Jan;64(1):68–72; discussion 72–3

Major vessel resection during limb–preserving surgery for soft tissue sarcomas. Karakousis CP, et al. **World J Surg** 1996 Mar–Apr;20(3):345–9; discussion 350

[Surgical treatment and result for metastatic pulmonary tumor: comparison between sarcoma and carcinoma] Nakamura H, et al. **Kyobu Geka** 1997 Mar;50(3):181–5; discussion 185–7 (Eng. Abstr.) **(Jpn)**

[Treatment of lung metastasis in patients with soft–tissue sarcoma] Trishkin VA, et al. **Vopr Onkol** 1997;43(2):154–7 (Eng. Abstr.) **(Rus)**

[Epithelioid sarcoma of the right arm with brain metastases (letter)] Ulla Anes M, et al. **An Med Interna** 1997 Feb; 14(2):105 **(Spa)**

SURGERY

The role of pulmonary metastasectomy for soft tissue sarcoma. Alvegård TA, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:145–7

Malignant soft tissue tumours of the trunk and retroperitoneum. Henderson MA. **Acta Orthop Scand Suppl** 1997 Feb;273:108–11

The role of prostheses after resection of primary sarcomas of bone. Morris H. **Acta Orthop Scand Suppl** 1997 Feb; 273:86–8

Surgical margins for soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:81–5

Centralization of soft tissue sarcoma. The southern Sweden experience. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:4–8

Surgery without radiotherapy in soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:117–9

Soft tissue sarcomas: radiation as a therapeutic option. Suit H, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):855–61 (45 ref.)

Isolated limb perfusion with tumor necrosis factor and melphalan for limb salvage in 186 patients with locally advanced soft tissue extremity sarcomas. The cumulative multicenter European experience. Eggermont AM, et al. **Ann Surg** 1996 Dec;224(6):756–64; discussion 764–5

The enigma of local recurrence. The Society of Surgical Oncology. Brennan MF. **Ann Surg Oncol** 1997 Jan; 4(1):1–12

Nephrectomy during operative management of retroperitoneal sarcoma. Russo P, et al. **Ann Surg Oncol** 1997 Jul–Aug;4(5):421–4

Vascular reconstruction for limb salvage in sarcoma of the lower extremity. Koperna T, et al. **Arch Surg** 1996 Oct; 131(10):1103–7; discussion 1108

Cardiopulmonary bypass and cell–saver technique in combined oncologic and cardiovascular surgery. Akchurin RS, et al. **Artif Organs** 1997 Jul;21(7):763–5

Chest wall resection and reconstruction. Sabanathan S, et al. **Br J Hosp Med** 1997 Mar 19–Apr 1;57(6):255–9 (21 ref.)

Limb–salvage strategies to optimize quality of life: the M.D. Anderson Cancer Center experience. Yasko AW, et al. **CA Cancer J Clin** 1997 Jul–Aug;47(4):226–38

Metastasectomy for soft tissue sarcomas. Pastorino U. **Cancer Treat Res** 1997;91:65–75 (32 ref.)

Surgical management of primary retroperitoneal sarcoma. Wang TY, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep;58(3):177–82

Limb salvage in periacetabular sarcomas: review of 21 consecutive cases. Windhager R, et al. **Clin Orthop** 1996 Oct;(331):265–76 (33 ref.)

Primary resection of soft–tissue sarcomas: yes and no. Frey E, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):227–9

The pedicled omentoplasty and split skin graft (POSSG) for reconstruction of large chest wall defects. A validity study of 34 patients. Contant CM, et al. **Eur J Surg Oncol** 1996 Oct;22(5):532–7

Oncological outcomes of operative treatment of subcutaneous soft–tissue sarcomas of the extremities. Gibbs CP, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):888–97

Limb salvage for neoplasms of the shoulder girdle. Intermediate reconstructive and functional results. O'Connor MI, et al. **J Bone Joint Surg Am** 1996 Dec; 78(12):1872–88

Surgical resection of primary soft–tissue sarcoma [letter; comment] Grimer RJ, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):171–2. Comment on: J Bone Joint Surg Br 1996 Jul;78(4):658–61.

Prognostic factors associated with long–term survival for retroperitoneal sarcoma: implications for management. Heslin MJ, et al. **J Clin Oncol** 1997 Aug;15(8):2832–9

Limb salvage surgery and adjuvant radiotherapy for soft tissue sarcomas of the forearm and hand. Bray PW, et al. **J Hand Surg [Am]** 1997 May;22(3):495–503

Outcome of treatment for pediatric sarcoma of the foot: a retrospective review over a 20–year period. Gross E, et al. **J Pediatr Surg** 1997 Aug;32(8):1181–4

Soft tissue sarcoma of the hand in children: clinical outcome and management. Gross E, et al. **J Pediatr Surg** 1997 May; 32(5):698–702

Coverage of knee–tumor–resection prostheses with free flaps. Senyuva C, et al. **J Reconstr Microsurg** 1997 May; 13(4):277–84

Surgery of sarcomas in the multimodality era [editorial; comment] Karakousis CP. **J Surg Oncol** 1996 Sep;63(1):1–2 . Comment on: J Surg Oncol 1996 Sep;63(1):3–8.

Limb–sparing treatment for soft tissue sarcomas: influence of prognostic factors [see comments] Rossi CR, et al. **J Surg Oncol** 1996 Sep;63(1):3–8. Comment in: J Surg Oncol 1996 Sep;63(1):1–2.

Predictive factors for complete removal in soft tissue sarcomas: a retrospective analysis in a series of 592 cases. Sastre–Garau X, et al. **J Surg Oncol** 1997 Jul;65(3):175–82

Sternal resection for primary or secondary tumors. Incarbone M, et al. **J Thorac Cardiovasc Surg** 1997 Jul;114(1):93–9

Development of a measure of physical function for patients with bone and soft tissue sarcoma. Davis AM, et al. **Qual Life Res** 1996 Oct;5(5):508–16

Soft tissue sarcoma of the extremity. Limb salvage after failure of combined conservative therapy. Catton C, et al. **Radiother Oncol** 1996 Dec;41(3):209–14

Hemipelvectomy for soft tissue sarcoma: clinical results in fifty–three patients. Prewitt TW, et al. **Surg Oncol** 1995; 4(5):261–9

Radical scapulectomy with limb salvage for shoulder girdle soft tissue sarcoma. Volpe CM, et al. **Surg Oncol** 1996 Feb; 5(1):43–8 (20 ref.)

Spindle cell stromal tumor of the pancreas: treatment by pancreatoduodenectomy. Owen CH, et al. **Surgery** 1997 Jul;122(1):105–11 (22 ref.)

[Treatment and prognosis of soft tissue sarcoma] Wang Y, et al. **Chung Hua Wai Ko Tsa Chih** 1996 Jan;34(1):29–32 (Eng. Abstr.) **(Chi)**

[Reconstruction of the long bones of the legs in children via free vascularized transplant of the fibula after resection for sarcoma] Germain MA, et al. **Bull Acad Natl Med** 1996 May;180(5):1125–41; discussion 1141–5 (Eng. Abstr.) **(Fre)**

[Uterine sarcoma treated by surgery and postoperative radiation therapy. Patterns of relapse, prognostic factors and role of radiation therapy] Coquard R, et al. **Bull Cancer** 1997 Jun;84(6):625–9 (29 ref.) (Eng. Abstr.) **(Fre)**

[Primary malignant intraluminal tumor of the aorta] Settmacher U, et al. **Langenbecks Arch Chir** 1997; 382(3):138–40 (Eng. Abstr.) **(Ger)**

[Are expanded tumor resection and reconstruction of soft tissue sarcoma justified by recurrence rate and survival time?] Hohenberger P, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:229–31 (Eng. Abstr.) **(Ger)**

[Intraoperative radiotherapy in advanced soft tissue sarcoma of the extremities] Schwarzbach M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:214–7 (Eng. Abstr.) **(Ger)**

[Primary malignant bone and soft tissue tumors of the pelvis—oncologic and functional outcome] Wirbel RJ, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:914–7 (Eng. Abstr.) **(Ger)**

[Epithelioid sarcoma of the parotid region] Johannssen V, et al. **Laryngorhinootologie** 1996 Sep;75(9):556–9 (29 ref.) (Eng. Abstr.) **(Ger)**

[Soft tissue sarcoma of the head and neck area in adults. Outcome of combined surgery and irradiation and radiotherapy alone] Willers H, et al. **Strahlenther Onkol** 1997 Mar;173(3):131–5 (Eng. Abstr.) **(Ger)**

[Experience in the treatment of breast sarcomas] Farkas E, et al. **Orv Hetil** 1997 Jan 26;138(4):195–8 (Eng. Abstr.) **(Hun)**

[Surgical treatment and result for metastatic pulmonary tumor: comparison between sarcoma and carcinoma] Nakamura H, et al. **Kyobu Geka** 1997 Mar;50(3):181–5; discussion 185–7 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary sarcoma with a differential diagnosis from preoperative pulmonary thromboembolism] Okada H, et al. **Kyobu Geka** 1996 Nov;49(12):1036–9 (Eng. Abstr.) **(Jpn)**

[A case of primary pulmonary intimal sarcoma of the pulmonary artery] Araki Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul;45(7):1039–43 (Eng. Abstr.) **(Jpn)**

[Our experience with surgical treatment of soft tissue neoplasms] Trishkin VA. **Vopr Onkol** 1996;42(5):100–2 (Eng. Abstr.) **(Rus)**

THERAPY

Preoperative multidisciplinary treatment with hyperthermia for soft tissue sarcoma. Makihata E, et al. **Acta Med Okayama** 1997 Apr;51(2):93–9

The Scandinavian—Australian Symposium on the Management of Bone and Soft Tissue Sarcomas. **Acta Orthop Scand Suppl** 1997 Feb;273:1–160

The Scandinavian Sarcoma Group. Background, organization and the Central Registry—the first 17 years. Alvegård TA. **Acta Orthop Scand Suppl** 1997 Feb;273:9–13

Angiographic response of locally advanced soft–tissue sarcoma following hyperthermic isolated limb perfusion with tumor necrosis factor. Olieman AF, et al. **Ann Surg Oncol** 1997 Jan;4(1):64–9

Polychemotherapy combined with G–CSF–mobilized donor buffy coat transfusion for granulocytic sarcoma after allogeneic BMT for AML. Nachbaur D, et al. **Bone Marrow Transplant** 1997 May;19(9):947–9

Problems and controversies in the management of childhood sarcomas. Womer RB. **Br Med Bull** 1996 Oct;52(4):826–43 (57 ref.)

A phase I/II study of sequential, dose–escalated, high dose ifosfamide plus doxorubicin with peripheral blood stem cell support for the treatment of patients with advanced soft tissue sarcomas. Bokemeyer C, et al. **Cancer** 1997 Oct 1; 80(7):1221–7

The National Cancer Data Base report on soft tissue sarcoma. Pollock RE, et al. **Cancer** 1996 Nov 15;78(10):2247–57

Optimization of chemotherapy administration for clinical 41.8 degrees C whole body hyperthermia. Katschinski DM, et al. **Cancer Lett** 1997 May 19;115(2):195–9

Radiation therapy and hyperthermia improve the oxygenation of human soft tissue sarcomas. Brizel DM, et al. **Cancer Res** 1996 Dec 1;56(23):5347-50

Isolated limb perfusion with high-dose tumor necrosis factor-alpha for locally advanced extremity soft tissue sarcomas. Eggermont AM, et al. **Cancer Treat Res** 1997; 91:189-203

Post-treatment limb function in soft tissue sarcomas. Robinson MH. **Cancer Treat Res** 1997;91:77-93 (38 ref.)

Soft tissue sarcoma in adults. Dirix LY, et al. **Curr Opin Oncol** 1997 Jul;9(4):348-59 (62 ref.)

Ifosfamide, carboplatin and etoposide (ICE) combined with 41.8 degrees C whole body hyperthermia in patients with refractory sarcoma. Wiedemann GJ, et al. **Eur J Cancer** 1996 May;32A(5):888-92

The success of TNF alpha in isolated limb perfusion for irresectable extremity soft tissue sarcomas, melanoma and carcinomas: observations in patients and preclinical perfusion models. Eggermont AM. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1357-70 (74 ref.)

Phase I/IB study of immunization with autologous tumor cells transfected with the GM-CSF gene by particle-mediated transfer in patients with melanoma or sarcoma. Mahvi DM, et al. **Hum Gene Ther** 1997 May 1; 8(7):875-91

Isolated limb perfusion with high-dose tumor necrosis factor-alpha in combination with interferon-gamma and melphalan for nonresectable extremity soft tissue sarcomas: a multicenter trial [see comments] Eggermont AM, et al. **J Clin Oncol** 1996 Oct;14(10):2653-65. Comment in: J Clin Oncol 1996 Oct;14(10):2627-30. Comment in: J Clin Oncol 1997 May;15(5):2174-5.

Phase II trial of recombinant human macrophage colony-stimulating factor in metastatic soft tissue sarcoma. Momin FA, et al. **J Immunother** 1994 Oct;16(3):224-8

Transient induction of E-selectin expression following TNF alpha-based isolated limb perfusion in melanoma and sarcoma patients is not tumor specific. Nooijen PT, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan; 19(1):33-44

Epithelioid sarcoma in children. Gross E, et al. **J Pediatr Surg** 1996 Dec;31(12):1663-5

Uterine sarcoma in the south of Israel: study of 36 cases. Piura B, et al. **J Surg Oncol** 1997 Jan;64(1):55-62

Management of soft tissue sarcomas of the extremity in adults. Valle AA, et al. **J Surg Oncol** 1996 Dec;63(4):271-9 (80 ref.)

Complications of combined radiotherapy and isolated limb perfusion with tumor necrosis factor alpha +/- interferon gamma and melphalan in patients with irresectable soft tissue tumors. Vrouenraets BC, et al. **J Surg Oncol** 1997 Jun;65(2):88-94

Soft tissue sarcoma. Avradopoulos DA, et al. **Med Health R I** 1997 Jan;80(1):15-8 (33 ref.)

Sarcoma of bone. Terek RM. **Med Health R I** 1997 Jan; 80(1):19-25 (24 ref.)

Head and neck sarcoma. Wanebo HJ. **Med Health R I** 1997 Jan;80(1):26-30 (24 ref.)

Nonrhabdomyosarcoma soft tissue sarcomas in children. Dillon PW. **Semin Pediatr Surg** 1997 Feb;6(1):24-8 (55 ref.)

Alteration of tissue oxygen partial pressure during isolated, hyperthermic limb perfusion with cytostatic drugs or recombinant human tumor necrosis factor alpha combined with melphalan. Hohenberger P, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:14-5

[Results of isolated hyperthermic extremity perfusion in soft tissue sarcomas within the scope of a multimodality treatment concept (see comments)] Schwarzbach M, et al. **Chirurg** 1996 Dec;67(12):1237-43 (Eng. Abstr.). Comment in: Chirurg 1997 Jun;68(6):649. **(Ger)**

[O2 utilization during hyperthermic extremity perfusion with rhTNF alpha and melphalan] Haier J, et al. **Langenbecks Arch Chir** 1997;382(3):128-33 (Eng. Abstr.) **(Ger)**

[Head and neck sarcoma] Zohar Y, et al. **Harefuah** 1996 Jun 2;130(11):740-4, 799 (Eng. Abstr.) **(Heb)**

[Treatment of lung metastasis in patients with soft-tissue sarcoma] Trishkin VA, et al. **Vopr Onkol** 1997;43(2):154-7 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

Uterine sarcoma: can it be differentiated from uterine leiomyoma with Doppler ultrasonography? A preliminary report. Hata K, et al. **Ultrasound Obstet Gynecol** 1997 Feb; 9(2):101-4

Luteal phase defect: comparison between Doppler velocimetry, histological and hormonal markers. Kupešić S, et al. **Ultrasound Obstet Gynecol** 1997 Feb;9(2):105-12

[Findings of uterine sarcoma and uterine myoma by color and power Doppler] Sase M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Dec; 48(12):1159-60 **(Jpn)**

ULTRASTRUCTURE

Ultrastructural evidence for divergent and alternating differentiations in spindle cell sarcoma xenografts. Schmidt U, et al. **J Submicrosc Cytol Pathol** 1997 Apr;29(2):187-95

Integrity of the 1,25-dihydroxyvitamin D3 receptor in bone, lung, and other cancers. Miller CW, et al. **Mol Carcinog** 1997 Aug;19(4):254-7

Gastrointestinal autonomic nerve tumors: immunohistochemical and ultrastructural studies in cases of gastrointestinal stromal tumor. Matsumoto K, et al. **Pathol Int** 1997 May;47(5):308-14

Head and neck fibromyxoid sarcoma: clinicopathological correlation with emphasis on peculiar ultrastructural features related to collagen processing. Papadimitriou JC, et al. **Ultrastruct Pathol** 1997 Jan-Feb;21(1):81-7

VETERINARY

Generation of in vitro natural cytotoxicity of horse lymphocytes against sarcoid-derived tumor cells not expressing major histocompatibility complex antigens. Broström H, et al. **Am J Vet Res** 1996 Jul;57(7):992-9

Do postvaccinal sarcomas occur in Australian cats? Burton G, et al. **Aust Vet J** 1997 Feb;75(2):102-6

Longitudinal and cross-sectional studies to evaluate the risk of sarcoid associated with castration. Reid SW, et al. **Can J Vet Res** 1997 Apr;61(2):89-93

Anaplastic sarcoma of the mandible in a llama. Malone E, et al. **Can Vet J** 1996 Jul;37(7):426-8

Tumours of soft tissues. Berman LD. **IARC Sci Publ** 1996; (126):321-49 (79 ref.)

Tumours of the nervous system. Cardesa A, et al. **IARC Sci Publ** 1996;(126):427-65 (109 ref.)

Tumours of the testis and accessory male sex glands. Ribas JL, et al. **IARC Sci Publ** 1996;(126):261-80 (94 ref.)

Re: Kapp editorial IJROBP 35:189-194; 1996 [letter; comment] Thrall DE, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):989. Comment on: Int J Radiat Oncol Biol Phys 1996 Apr 1;35(1):189-94.

Estimated prevalence of injection-site sarcomas in cats during 1992 [see comments] Coyne MJ, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):249-51. Comment in: J Am Vet Med Assoc 1997 Apr 1;210(7):889-90.

Feline sarcoma task force meets [news] [see comments] Richards JR. **J Am Vet Med Assoc** 1997 Feb 1;210(3):310-1 . Comment in: J Am Vet Med Assoc 1997 Apr 1;210(7):890.

Single-tube heminested PCR coupled with touchdown PCR for the analysis of the walleye dermal sarcoma virus env gene. Zhang Z, et al. **J Virol Methods** 1996 Jun;60(1):29-37

Molecular characterization of a piscine retrovirus, walleye dermal sarcoma virus. Holzschu DL, et al. **Leukemia** 1997 Apr;11 Suppl 3:172-5

1H MRI phase thermometry in vivo in canine brain, muscle, and tumor tissue. MacFall JR, et al. **Med Phys** 1996 Oct; 23(10):1775-82

Tumour suppressor gene p53 in the horse: identification, cloning, sequencing and a possible role in the pathogenesis of equine sarcoid. Bucher K, et al. **Res Vet Sci** 1996 Sep; 61(2):114-9

The potential role of inflammation in the development of postvaccinal sarcomas in cats. Macy DW, et al. **Vet Clin North Am Small Anim Pract** 1996 Jan;26(1):103-9 (36 ref.)

Soft tissue sarcomas. Mauldin GN. **Vet Clin North Am Small Anim Pract** 1997 Jan;27(1):139-48 (32 ref.)

Immunohistochemical staining characteristics of canine gastrointestinal stromal tumors. LaRock RG, et al. **Vet Pathol** 1997 Jul;34(4):303-11

Immunohistochemical characterization of hemangiopericytomas and other spindle cell tumors in the dog. Pérez J, et al. **Vet Pathol** 1996 Jul;33(4):391-7

VIROLOGY

Soft tissue sarcomas in HIV-infected adult patients. Fizazi K, et al. **Eur J Cancer** 1996 Sep;32A(10):1812-4

SARCOMA 180

BLOOD SUPPLY

Effects of cytogenin, a novel microbial product, on embryonic and tumor cell-induced angiogenic responses in vivo. Oikawa T, et al. **Anticancer Res** 1997 May-Jun; 17(3C):1881-6

Evaluation of angiogenic inhibitors with an in vivo quantitative angiogenesis method using agarose microencapsulation and mouse hemoglobin enzyme-linked immunosorbent assay. Okada N, et al. **Jpn J Cancer Res** 1996 Sep;87(9):952-7

DRUG THERAPY

Synthesis and in vivo antitumor activity of new heterocyclic derivatives of the 1,3,4-thiadiazolium-2-aminide class. Grynberg N, et al. **Anticancer Drugs** 1997 Jan;8(1):88-91

Actions of lectins from the mushroom Tricholoma mongolicum on macrophages, splenocytes and life-span in sarcoma-bearing mice. Wang HX, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):419-24

Photodynamic treatment of subcutaneous tumors in mice with photofrin II and Argon ion laser. You JS, et al. **Chin Med J (Engl)** 1996 Jan;109(1):83-8

Toxicity and antitumor activity of niosomal bleomycin in tumor bearing mice. Naresh RA, et al. **Indian J Exp Biol** 1996 Aug;34(8):764-72

Pharmacokinetics of mitomycin C (MMC) after intraperitoneal administration of MMC-gelatin gel and its anti-tumor effects against sarcoma-180 bearing mice. Fujita T, et al. **J Drug Target** 1997;4(5):289-96

Cytotoxicity of platinum (II) dinuclear complexes with 1-alkylthymine ligands against mouse sarcoma 180 cells. Rekonen P, et al. **J Med Chem** 1997 Feb 14;40(4):515-9

Evaluation of angiogenic inhibitors with an in vivo quantitative angiogenesis method using agarose microencapsulation and mouse hemoglobin enzyme-linked immunosorbent assay. Okada N, et al. **Jpn J Cancer Res** 1996 Sep;87(9):952-7

Evaluation of phthalmustine, a new anticancer compound. II. Tumor inhibitory effect in murine Ehrlich ascites carcinoma and sarcoma-180. Bhattacharya S, et al. **Neoplasma** 1996;43(3):209-13

In vitro characterization of methotrexate loaded poly(lactic-co-glycolic) acid microspheres and antitumor efficacy in Sarcoma-180 mice bearing tumor. Singh UV, et al. **Pharm Acta Helv** 1997 Jun;72(3):165-73

ETIOLOGY

Effects of Phytolacca acinosa polysaccharides I with different schedules on its antitumor efficiency in tumor bearing mice and production of IL-1, IL-2, IL-6, TNF, CSF activity in normal mice. Wang HB, et al. **Immunopharmacol Immunotoxicol** 1997 May;19(2):197-213

METABOLISM

Marked induction of HSP47, a collagen-binding stress protein, during solid tumor formation of ascitic Sarcoma 180 in vivo. Morino M, et al. **In Vivo** 1995 Sep-Oct; 9(5):503-8

Inhibition of HSP47 during the transition from solid to ascitic form of Sarcoma 180 in vivo. Shirakami T, et al. **In Vivo** 1995 Sep-Oct;9(5):509-12

Humoral factors of ascites sarcoma 180 stimulate osteoblastic UMR 106-01 cell proliferation and bone resorption via signal transduction pathways, which are clearly different from those of parathyroid hormone. Suzuki K, et al. **Jpn J Pharmacol** 1996 Oct;72(2):149-59

A distribution study of 11C platelet-activating factor (PAF) analogs in normal and tumor-bearing mice. Sasaki T, et al. **Nucl Med Biol** 1996 Apr;23(3):309-14

PREVENTION & CONTROL

[Studies on the anticarcinogenic and immunomodulatory actions of 4-seleno-carrageenan] Suo JL. **Sheng Li Ko Hsueh Chin Chan** 1996 Jan;27(1):43-6 (Eng. Abstr.) **(Chi)**

THERAPY

Immunopotentiating activity of Clostridium butyricum in mice. Wang GR, et al. **Proc Natl Sci Counc Repub China B** 1996 Oct;20(4):101-9

SARCOMA 180, CROCKER see **SARCOMA 180**

SARCOMA, ALVEOLAR SOFT PART

PATHOLOGY

Intracytoplasmic crystals of alveolar soft part sarcoma: demonstration by Riu's stain [letter] Tsou MH, et al. **Acta Cytol** 1997 Jul-Aug;41(4):1234-6

Bilateral mammary metastasis of alveolar soft part sarcoma--a case report. Muzumdar GA, et al. **Indian J Pathol Microbiol** 1996 Oct;39(4):325-7

Does alveolar soft-part sarcoma exhibit skeletal muscle differentiation? An immunocytochemical and biochemical study of myogenic regulatory protein expression. Wang NP, et al. **Mod Pathol** 1996 May;9(5):496-506

SECONDARY

[A case of gastrointestinal bleeding from metastatic alveolar soft part sarcoma of the jejunum] Sueyoshi T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Sep; 56(11):712-4 (Eng. Abstr.) **(Jpn)**

[A case of alveolar soft-part sarcoma with cerebral metastases] Haga Y, et al. **No To Shinkei** 1996 Mar; 48(3):269-74 (Eng. Abstr.) **(Jpn)**

THERAPY

Antegrade catheterization of the brachial artery for embolizing a sarcoma of the forearm. Daly CA, et al. **Br J Radiol** 1997 Jan;70:99-101

SARCOMA, AVIAN

CHEMISTRY

Two tumor-associated membrane antigens defined by monoclonal antibodies in a transplantable sarcoma induced by Rous sarcoma virus in rat. Alexandrov I, et al. **Neoplasma** 1996;43(4):275-82

ETIOLOGY

Vaccination with a low-oncogenic strain of Rous sarcoma virus prevents visceral tumors in chickens. Plachy J, et al. **Exp Clin Immunogenet** 1995;12(4):272-82

IMMUNOLOGY

Detection of antibodies to avian leukosis/sarcoma viruses and

SARCOMA, AVIAN

reticuloendotheliosis viruses in humans by western blot assay. Johnson ES, et al. **Cancer Detect Prev** 1995; 19(6):472–86

PREVENTION & CONTROL

Vaccination with a low-oncogenic strain of Rous sarcoma virus prevents visceral tumors in chickens. Plachy J, et al. **Exp Clin Immunogenet** 1995;12(4):272–82

ULTRASTRUCTURE

Ultrastructure of virus-induced soft-tissue tumours. Levenbook IS, et al. **IARC Sci Publ** 1996;(126):351–63 (27 ref.)

VIROLOGY

Injury models of the vascular endothelium: apoptosis and loss of thromboresistance induced by a viral protein. Eldor A, et al. **Haemostasis** 1996 Oct;26 Suppl 4:37–45 (46 ref.)

Two tumor-associated membrane antigens defined by monoclonal antibodies in a transplantable sarcoma induced by Rous sarcoma virus in rat. Alexandrov I, et al. **Neoplasma** 1996;43(4):275–82

SARCOMA, CLEAR CELL

GENETICS

Clear cell sarcoma of tendons and aponeuroses with t(12;22)(q13;q12) diagnosed initially as malignant melanoma. Nedoszytko B, et al. **Cancer Genet Cytogenet** 1996 Oct 1; 91(1):37–9

Establishment of a new continuous clear cell sarcoma cell line. Morphological and cytogenetic characterization and detection of chimaeric EWS/ATF-1 transcripts. Hiraga H, et al. **Virchows Arch** 1997 Jul;431(1):45–51

METABOLISM

Implications of p53 protein expression in clear cell sarcoma of the kidney. Cheah PL, et al. **Pathology** 1996 Aug; 28(3):229–31

PATHOLOGY

Fine needle aspiration cytology of clear cell sarcoma of the kidney and its distinction from Wilms' tumor [letter] Srinivasan R, et al. **Acta Cytol** 1997 May-Jun;41(3):950–1

Chondrocytic cell differentiation in clear cell chondrosarcoma. Aigner T, et al. **Hum Pathol** 1996 Dec; 27(12):1301–5

Clear cell rhabdomyosarcoma. Boman F, et al. **Pediatr Pathol Lab Med** 1996 Nov-Dec;16(6):951–9

Establishment of a new continuous clear cell sarcoma cell line. Morphological and cytogenetic characterization and detection of chimaeric EWS/ATF-1 transcripts. Hiraga H, et al. **Virchows Arch** 1997 Jul;431(1):45–51

SECONDARY

[Flap of the musculus latissimus dorsi to prevent alveolar air leakage from sectional plane of the lung after resection of metastatic pulmonary and chest wall tumor] Nishiyama N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Nov; 44(11):2076–81 (Eng. Abstr.) **(Jpn)**

SURGERY

Surgical tactics in the treatment of malignant renal tumors in childhood. Pýcha K, et al. **Pediatr Surg Int** 1997 Feb; 12(2-3):145–7

[Clear cell chondrosarcoma. Study of 13 clinical cases and review of the literature] Laporte C, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(8):691–9 (21 ref.) (Eng. Abstr.) **(Fre)**

[Flap of the musculus latissimus dorsi to prevent alveolar air leakage from sectional plane of the lung after resection of metastatic pulmonary and chest wall tumor] Nishiyama N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Nov; 44(11):2076–81 (Eng. Abstr.) **(Jpn)**

SARCOMA, ENDOMETRIAL STROMAL

CHEMICALLY INDUCED

Endolymphatic stromal myosis associated with tamoxifen use. Eddy GL, et al. **Gynecol Oncol** 1997 Feb;64(2):262–4

DIAGNOSIS

Cytogenetics revealing the diagnosis in a metastatic endometrial stromal sarcoma. Pauwels P, et al. **Histopathology** 1996 Jul;29(1):84–7 (10 ref.)

An interesting unusual case of endometrial stromal sarcoma. Mittal S, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):29–32

DRUG THERAPY

Treatment of stage IV "high-grade" endometrial stromal sarcoma with ifosfamide, adriamycin, and cisplatin. Yamawaki T, et al. **Gynecol Oncol** 1997 Feb;64(2):265–9

EPIDEMIOLOGY

Endometrial stromal sarcoma: analysis of treatment failures and survival. Gadducci A, et al. **Gynecol Oncol** 1996 Nov; 63(2):247–53

ETIOLOGY

Endometrial stromal sarcoma arising in pelvic endometriosis in a patient receiving unopposed oestrogen therapy. McCluggage WG, et al. **Br J Obstet Gynaecol** 1996 Dec; 103(12):1252–4

GENETICS

Prognostic parameters for survival of patients with malignant mesenchymal tumors of the uterus. Nola M, et al. **Cancer** 1996 Dec 15;78(12):2543–50

A third case of a low-grade endometrial stromal sarcoma with a t(7;17)(p14 approximately 21;q11.2 approximately 21). Hennig Y, et al. **Cancer Genet Cytogenet** 1997 Oct 1;98(1):84–6

Cytogenetics revealing the diagnosis in a metastatic endometrial stromal sarcoma. Pauwels P, et al. **Histopathology** 1996 Jul;29(1):84–7 (10 ref.)

METABOLISM

Pulmonary metastatic lesion of endolymphatic stromal myosis expresses metastasis-related genes but not invasion-related matrix type metalloproteinase. Sakamoto H, et al. **Cancer Lett** 1997 Jan 30;112(2):245–9

PATHOLOGY

Primary lymphoma of the endometrium. A report of two cases diagnosed on cervicovaginal smears. Cahill LA, et al. **Acta Cytol** 1997 Mar-Apr;41(2):533–8

Hyaline matrix material in high-grade endometrial stromal sarcoma diagnosed by fine-needle aspiration: case report. Liu K, et al. **Diagn Cytopathol** 1997 Feb;16(2):151–5

Uterine sarcoma: a clinicopathological study of 93 cases. González-Bosquet E, et al. **Eur J Gynaecol Oncol** 1997; 18(3):192–5

Lymphangioleiomyomatosis of the uterus simulating high-stage endometrial stromal sarcoma. Longacre TA, et al. **Gynecol Oncol** 1996 Dec;63(3):404–10 (39 ref.)

Endometrial stromal sarcoma with sex cord-like areas and focal rhabdoid differentiation. McCluggage WG, et al. **Histopathology** 1996 Oct;29(4):369–74

Interphase cytogenetic study of endometrial stromal sarcoma by chromosome in situ hybridization. Cheung AN, et al. **Mod Pathol** 1996 Sep;9(9):910–8

Endometrial low-grade stromal sarcoma with ovarian sex cord-like differentiation: report of two cases with an immunohistochemical and flow cytometric study. Fukunaga M, et al. **Pathol Int** 1997 Jun;47(6):412–5

SECONDARY

Pulmonary metastatic lesion of endolymphatic stromal myosis expresses metastasis-related genes but not invasion-related matrix type metalloproteinase. Sakamoto H, et al. **Cancer Lett** 1997 Jan 30;112(2):245–9

Pelvic bone involvement in low-grade endometrial stromal sarcoma with ovarian sex cord-like differentiation [letter] Fukunaga M, et al. **Histopathology** 1996 Oct;29(4):391–3

SARCOMA, ENGELBRETH-HOLM-SWARM see **SARCOMA, EXPERIMENTAL**

SARCOMA, EPITHELIOID see **SARCOMA**

SARCOMA, EWING'S

Ewing's sarcoma and peripheral primitive neuroectodermal tumor: an interim report. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1996 Oct;105(10):838–43 (32 ref.)

Poor prognosis Ewing's sarcoma and peripheral primitive neuroectodermal tumours (PNET). Maurel J, et al. **Cancer Treat Rev** 1996 Nov;22(6):425–36 (80 ref.)

Ewing's sarcoma and extracranial primitive neuroectodermal tumors. Granowetter L. **Curr Opin Oncol** 1996 Jul; 8(4):305–10 (48 ref.)

Late effects of therapy in survivors of Ewing's sarcoma family tumors. Novakovic B, et al. **J Pediatr Hematol Oncol** 1997 May-Jun;19(3):220–5

CHEMISTRY

Expression of interleukin 15 (IL-15) in human rhabdomyosarcoma, osteosarcoma and Ewing's sarcoma. Lollini PL, et al. **Int J Cancer** 1997 May 29;71(5):732–6

DIAGNOSIS

Reverse transcriptase polymerase chain reaction for detecting Ewing's sarcoma in archival fine needle aspiration biopsies. Schlott T, et al. **Acta Cytol** 1997 May-Jun;41(3):795–801

Primary spinal column sarcomas. Tasdemiroglu E, et al. **Acta Neurochir (Wien)** 1996;138(11):1261–6

Traumatic ossifying periostitis of the ulna masquerading as a malignancy in a football player. A case report and literature review. Ward WG Sr, et al. **Am J Sports Med** 1996 Nov-Dec;24(6):852–6

Diagnostic difficulties in extraosseous Ewing's sarcoma: a proposal for diagnostic criteria. Christie DR, et al. **Australas Radiol** 1997 Feb;41(1):22–8 (19 ref.)

Ewing's sarcoma and primitive neuroectodermal tumor in adults: are they different from Ewing's sarcoma and primitive neuroectodermal tumor in children? Verrill MW, et al. **J Clin Oncol** 1997 Jul;15(7):2611–21

Fat-saturated contrast-enhanced T1-weighted MRI in evaluation of osteosarcoma and Ewing sarcoma. Cronemeyer SA, et al. **J Magn Reson Imaging** 1997 May-Jun;7(3):585–9

Validation of family history of cancer in deceased family members. Novakovic B, et al. **J Natl Cancer Inst** 1996 Oct 16;88(20):1492–3

EWS/FLI-1 fusion transcript detection and MIC2 immunohistochemical staining in the diagnosis of Ewing's sarcoma. Lee CS, et al. **Pediatr Pathol Lab Med** 1996 May-Jun;16(3):379–92

Small round blue cell tumors in bone: prognostic factors correlated to Ewing's sarcoma and neuroectodermal tumors. Terrier P, et al. **Semin Diagn Pathol** 1996 Aug; 13(3):250–7 (61 ref.)

[Extra-osseous Ewing sarcoma: diagnostic value of molecular biology (letter)] Mathieu E, et al. **Presse Med** 1996 Dec 21;25(40):2046 **(Fre)**

[Ewing's sarcoma at the occipital bone presenting as acute epidural hematoma: a case report] Yamashita Y, et al. **No Shinkei Geka** 1997 Jun;25(6):567–71 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Chemotherapy for osteosarcoma and Ewing's sarcoma. Saeter G, et al. **Acta Orthop Scand Suppl** 1997 Feb; 273:120–5 (51 ref.)

Chemotherapy-induced tumor necrosis as a prognostic factor in localized Ewing's sarcoma of the extremities. Picci P, et al. **J Clin Oncol** 1997 Apr;15(4):1553–9

Differences in dose scheduling as a factor in the etiology of anthracycline-induced cardiotoxicity in Ewing sarcoma patients. Kakadekar AP, et al. **Med Pediatr Oncol** 1997 Jan;28(1):22–6

Therapy-related acute myeloid leukemia with t(8;21) in a child with previous Ewing's sarcoma. Lesesve JF, et al. **Med Pediatr Oncol** 1997 Aug;29(2):132–4

Multimodal therapy for children and adolescents with Ewing sarcoma: results of the First National Chilean Trial (1986–1991). Villarroel M, et al. **Med Pediatr Oncol** 1997 Sep;29(3):190–6

Bleomycin and cyclophosphamide toxicity simulating metastatic nodules to the lungs in childhood cancer. Ben Arush MW, et al. **Pediatr Hematol Oncol** 1997 Jul-Aug; 14(4):381–6

[The type of local treatment conditions the prognosis in patients with nonmetastatic Ewing's sarcoma of the extremities treated with adjuvant chemotherapy] Bacci G, et al. **Minerva Chir** 1997 Apr;52(4):415–26 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Serum neuron-specific enolase (NSE) as a tumour marker for the Ewing's sarcoma family of tumours [letter] Fizazi K, et al. **Eur J Cancer** 1996 Sep;32A(10):1823–4

GENETICS

Molecular analysis of the fusion of EWS to an orphan nuclear receptor gene in extraskeletal myxoid chondrosarcoma. Brody RI, et al. **Am J Pathol** 1997 Mar;150(3):1049–58

Expression of PAX3 in Ewing's sarcoma family of tumors. Schulte TW, et al. **Biochem Mol Med** 1997 Apr;60(2):121–6

Myeloablative therapy, stem cell rescue and gene transfer in advanced Ewing tumors. Burdach S, et al. **Bone Marrow Transplant** 1996 Sep;18 Suppl 1:S67–8

Recurrent gains of 1q, 8 and 12 in the Ewing family of tumours by comparative genomic hybridization. Armengol G, et al. **Br J Cancer** 1997;75(10):1403–9

Qualitative assessment of mixed chimerism after allogeneic bone marrow transplantation with regard to leukemic relapse. Kögler G, et al. **Cancer Detect Prev** 1996; 20(6):601–9

Multiple chromosomal mechanisms generate an EWS/FLI1 or an EWS/ERG fusion gene in Ewing tumors. Desmaze C, et al. **Cancer Genet Cytogenet** 1997 Aug;97(1):12–9

In vitro proliferative advantage of bone marrow cells with tetrasomy 8 in Ewing sarcoma. Trakhtenbrot L, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):176–8

Translocations in solid tumours. Cooper CS. **Curr Opin Genet Dev** 1996 Feb;6(1):71–5 (27 ref.)

Biology of EWS/FLI and related fusion genes in Ewing's sarcoma and primitive neuroectodermal tumor. May WA, et al. **Curr Top Microbiol Immunol** 1997;220:143–50 (35 ref.)

Activation of TRK genes in Ewing's sarcoma. Trk A receptor expression linked to neural differentiation. Nogueira E, et al. **Diagn Mol Pathol** 1997 Feb;6(1):10–6

Demonstration of the translocation der(16)t(1;16)(q12;q11.2) in interphase nuclei of Ewing tumors. Hattinger CM, et al. **Genes Chromosomes Cancer** 1996 Nov;17(3):141–50

EWS-ERG fusion transcript produced by chromosomal insertion in a Ewing sarcoma. Kaneko Y, et al. **Genes Chromosomes Cancer** 1997 Mar;18(3):228–31

Interethnic polymorphism of EWS intron 6: genome plasticity mediated by Alu retroposition and recombination. Zucman-Rossi J, et al. **Hum Genet** 1997 Mar;99(3):357–63

Expression of multidrug resistance-associated protein gene in Ewing's sarcoma and malignant peripheral neuroectodermal tumor of bone. Oda Y, et al.

J Cancer Res Clin Oncol 1997;123(4):237–9

EWS–Fli1 antisense oligodeoxynucleotide inhibits proliferation of human Ewing's sarcoma and primitive neuroectodermal tumor cells. Tanaka K, et al. **J Clin Invest** 1997 Jan 15;99(2):239–47

Detection of circulating tumor cells in patients with Ewing's sarcoma and peripheral primitive neuroectodermal tumor. West DC, et al. **J Clin Oncol** 1997 Feb;15(2):583–8

Validation of family history of cancer in deceased family members. Novakovic B, et al. **J Natl Cancer Inst** 1996 Oct 16;88(20):1492–3

Additional chromosome 1q aberrations and der(16)t(1;16), correlation to the phenotypic expression and clinical behavior of the Ewing family of tumors. Stark B, et al. **J Neurooncol** 1997 Jan;31(1–2):3–8

Inhibition of EWS–FLI–1 fusion protein with antisense oligodeoxynucleotides. Toretsky JA, et al. **J Neurooncol** 1997 Jan;31(1–2):9–16

Chromosomal rearrangement t(11;22) in extraskeletal Ewing's sarcoma and primitive neuroectodermal tumour analysed by fluorescence in situ hybridization using paraffin–embedded tissue. Nagao K, et al. **J Pathol** 1997 Jan;181(1):62–6

Fusion of the EWS1 and WT1 genes as a result of the t(11;22)(p13;q12) translocation in desmoplastic small round cell tumors. Benjamin LE, et al. **Med Pediatr Oncol** 1996 Nov;27(5):434–9 (34 ref.)

A new member of the ETS family fused to EWS in Ewing tumors. Peter M, et al. **Oncogene** 1997 Mar 13; 14(10):1159–64

EAT–2 is a novel SH2 domain containing protein that is up regulated by Ewing's sarcoma EWS/FLI1 fusion gene. Thompson AD, et al. **Oncogene** 1996 Dec 19; 13(12):2649–58

EWS/FLI–1 fusion transcript detection and MIC2 immunohistochemical staining in the diagnosis of Ewing's sarcoma. Lee CS, et al. **Pediatr Pathol Lab Med** 1996 May–Jun;16(3):379–92

Intra–abdominal polyphenotypic tumor. Thorner P. **Pediatr Pathol Lab Med** 1996 Jan–Feb;16(1):161–9

METABOLISM

Insulin–like growth factor I receptor–mediated circuit in Ewing's sarcoma/peripheral neuroectodermal tumor: a possible therapeutic target. Scotlandi K, et al. **Cancer Res** 1996 Oct 15;56(20):4570–4

EWS/FLI–1 antagonists induce growth inhibition of Ewing tumor cells in vitro. Kovar H, et al. **Cell Growth Differ** 1996 Apr;7(4):429–37

An intra–abdominal small round cell neoplasm with features of primitive neuroectodermal and desmoplastic round cell tumor and a EWS/FLI–1 fusion transcript. Katz RL, et al. **Hum Pathol** 1997 Apr;28(4):502–9

Heat shock protein 72 (HSP72), a hyperthermia–inducible immunogenic determinant on leukemic K562 and Ewing's sarcoma cells. Multhoff G. **Int J Hyperthermia** 1997 Jan–Feb;13(1):39–48

Regulation of the release of tumour necrosis factor (TNF)alpha and soluble TNF receptor by gamma irradiation and interferon gamma in Ewing's sarcoma/peripheral primitive neuroectodermal tumour cells. van Valen F, et al. **J Cancer Res Clin Oncol** 1997; 123(5):245–52

Expression of type I interferon receptor in solid tumors of childhood. Rosolen A, et al. **Mod Pathol** 1997 Jan; 10(1):55–61

A new member of the ETS family fused to EWS in Ewing tumors. Peter M, et al. **Oncogene** 1997 Mar 13; 14(10):1159–64

PATHOLOGY

Tumour necrosis and prognosis in Ewing's sarcoma. Akerman M. **Acta Orthop Scand Suppl** 1997 Feb;273:130–2

Cytology of typical and atypical Ewing's sarcoma/PNET [see comments] Renshaw AA, et al. **Am J Clin Pathol** 1996 Nov;106(5):620–4. Comment in: Am J Clin Pathol 1996 Nov;106(5):561–4.

Primary cutaneous Ewing's family sarcoma. Report of a case with immunostaining for glycoprotein p30/32 mic2. Sexton CW, et al. **Am J Dermatopathol** 1996 Dec;18(6):601–5

In vitro proliferative advantage of bone marrow cells with tetrasomy 8 in Ewing sarcoma. Trakhtenbrot L, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):176–8

Apoptosis of Ewing's sarcoma cells is accompanied by accumulation of ubiquitinated proteins. Soldatenkov VA, et al. **Cancer Res** 1997 Sep 15;57(18):3881–5

Pancreatic metastasis from Ewing's sarcoma. Mulligan ME, et al. **Clin Imaging** 1997 Jan–Feb;21(1):23–6

A 14–year–old patient with Ewing's sarcoma presenting at autopsy with multiple neurofibrillary tangles and Lewy bodies in addition to hemiatrophy of the central nervous system. Okeda R, et al. **Clin Neuropathol** 1997 Mar–Apr; 16(2):77–84

Cytogenetic studies on fine–needle aspiration samples from osteosarcoma and Ewing's sarcoma. Akerman M, et al. **Diagn Cytopathol** 1996 Jul;15(1):17–22

Chemotherapy–induced tumor necrosis as a prognostic factor in localized Ewing's sarcoma of the extremities. Picci P, et al. **J Clin Oncol** 1997 Apr;15(4):1553–9

Ewing's sarcoma of soft tissues in childhood: a report from the Intergroup Rhabdomyosarcoma Study, 1972 to 1991. Raney RB, et al. **J Clin Oncol** 1997 Feb;15(2):574–82

Ewing's sarcoma of bone—a study of 71 cases by fine needle aspiration cytology. Mondal A, et al. **J Indian Med Assoc** 1996 Apr;94(4):135–7, 142

Inhibition of apoptosis by normal and aberrant Fli–1 and erg proteins involved in human solid tumors and leukemias. Yi H, et al. **Oncogene** 1997 Mar 20;14(11):1259–68

Intra–abdominal polyphenotypic tumor. Thorner P. **Pediatr Pathol Lab Med** 1996 Jan–Feb;16(1):161–9

Neurogenic potential of Ewing's sarcoma cells. Sugimoto T, et al. **Virchows Arch** 1997 Jan;430(1):41–6

[Primary Ewing's sarcoma of the mandible. A clinico–pathological and immunohistochemical case study] Zavaglia V, et al. **Minerva Stomatol** 1997 Apr;46(4):207–12 (8 ref.) (Eng. Abstr.) **(Ita)**

PSYCHOLOGY

Experiences of cancer in children and adolescents. Novakovic B, et al. **Cancer Nurs** 1996 Feb;19(1):54–9

RADIOGRAPHY

Unifocal Langerhans' cell histiocytosis [letter; comment] Hoeffel C, et al. **Australas Radiol** 1996 Aug;40(3):369–70 . Comment on: Australas Radiol 1994 Nov;38(4):313–4.

Ewing's sarcoma of the hand: a case report. Cook MA, et al. **Bull Hosp Jt Dis** 1996;55(2):75–7 (12 ref.)

Quantitative analysis of the plain radiographic appearance of Ewing's sarcoma of bone. Zelazny A, et al. **Invest Radiol** 1997 Jan;32(1):59–65

Skip metastases in Ewing's sarcoma: a report of three cases. Davies AM, et al. **Skeletal Radiol** 1997 Jun;26(6):379–84

RADIOTHERAPY

Surgical complications after preoperative irradiation of Ewing's sarcoma. Hillmann A, et al. **J Cancer Res Clin Oncol** 1997;123(1):57–62

The impact of intraoperative brachytherapy on surgery of Ewing's sarcoma. Ozaki T, et al. **J Cancer Res Clin Oncol** 1997;123(1):53–6

Vertebral abnormalities after treatment for Ewing sarcoma [clinical conference] Burgers JM, et al. **Med Pediatr Oncol** 1997 Jan;28(1):54–7; discussion 57–8

[Secondary malignancies in patients with Ewing's sarcoma] Dunst J. **Strahlenther Onkol** 1997 Jun;173(6):338–9 **(Ger)**

[The demonstration of the radiation–induced production of tumor necrosis factor–alpha in Ewing's sarcoma RM 82 in vitro and in vivo] Rübe C, et al. **Strahlenther Onkol** 1997 Aug;173(8):407–14 (Eng. Abstr.) **(Ger)**

SECONDARY

Transarticular invasion of iliopelvic sarcomas into the sacrum. Radiological analysis of 47 cases. Ozaki T, et al. **Acta Orthop Scand** 1997 Aug;68(4):381–3

Metastatic Ewing cell sarcoma of the sinus and osteoid osteoma of the orbit. Chynn EW, et al. **Am J Ophthalmol** 1997 Apr;123(4):565–7

Brain metastases in children with solid tumors. Bouffet E, et al. **Cancer** 1997 Jan 15;79(2):403–10

SURGERY

Complete fibular regeneration following removal of the fibula for bone grafting. Vandeweyer E, et al. **Acta Chir Belg** 1996 Jul–Aug;96(4):182–4

The surgical management of osseous cranial base tumours in children. Holmes AD, et al. **Aust N Z J Surg** 1997 Oct; 67(10):722–30

Surgical complications after preoperative irradiation of Ewing's sarcoma. Hillmann A, et al. **J Cancer Res Clin Oncol** 1997;123(1):57–62

The impact of intraoperative brachytherapy on surgery of Ewing's sarcoma. Ozaki T, et al. **J Cancer Res Clin Oncol** 1997;123(1):53–6

Primary Ewing's sarcoma of the temporal bone with intracranial, extracranial and intraorbital extension. Case report. Kuzeyli K, et al. **Neurosurg Rev** 1997;20(2):132–4

Ewing's sarcoma of the skull in an infant. A case report and review. Hadfield MG, et al. **Pediatr Neurosurg** 1996 Aug; 25(2):100–4 (64 ref.)

[Ewing's sarcoma at the occipital bone presenting as acute epidural hematoma: a case report] Yamashita Y, et al. **No Shinkei Geka** 1997 Jun;25(6):567–71 (Eng. Abstr.) **(Jpn)**

THERAPY

Ewing's sarcoma of the femur. Prognosis in 69 patients treated by the CESS group. Ozaki T, et al. **Acta Orthop Scand** 1997 Feb;68(1):20–4

Disappearance of Ewing's sarcoma following bacterial infection: a case report. Mori Y, et al. **Anticancer Res** 1997 Mar–Apr;17(2B):1391–7

Myeloablative therapy, stem cell rescue and gene transfer in advanced Ewing tumors. Burdach S, et al. **Bone Marrow Transplant** 1996 Sep;18 Suppl 1:S67–8

High–dose melphalan +/– total body irradiation and autologous hematopoietic stem cell rescue for adult patients with Ewing's sarcoma or peripheral neuroectodermal tumor. Stewart DA, et al. **Bone Marrow Transplant** 1996 Aug;18(2):315–8

Ewing's tumor of the spine: report on seven cases including one with a 10–year follow–up. Villas C, et al. **Eur Spine J** 1996;5(6):412–7

Intraoperative high–dose–rate brachytherapy after preoperative radiochemotherapy in the treatment of Ewing's sarcoma. Schuck A, et al. **Front Radiat Ther Oncol** 1997;31:153–6

Second malignancies after Ewing's sarcoma: radiation dose–dependency of secondary sarcomas. Kuttesch JF Jr, et al. **J Clin Oncol** 1996 Oct;14(10):2818–25

Ewing's sarcoma of soft tissues in childhood: a report from the Intergroup Rhabdomyosarcoma Study, 1972 to 1991. Raney RB, et al. **J Clin Oncol** 1997 Feb;15(2):574–82

Ewing's sarcoma and primitive neuroectodermal tumor in adults: are they different from Ewing's sarcoma and primitive neuroectodermal tumor in children? Verrill MW, et al. **J Clin Oncol** 1997 Jul;15(7):2611–21

Circulating CD34+ cell counts as predictive parameter for the efficacy of peripheral stem cell apheresis in Ewing tumor patients. Engel BC, et al. **Klin Padiatr** 1997 Jul–Aug; 209(4):186–90

The Ewing family of tumors. Ewing's sarcoma and primitive neuroectodermal tumors. Grier HE. **Pediatr Clin North Am** 1997 Aug;44(4):991–1004 (84 ref.)

[Therapeutic pathomorphism of Ewing's tumor] Makretsov NA, et al. **Arkh Patol** 1997 Jul–Aug;59(4):28–31 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Appraisal of the comparative utility of immunohistochemistry and electron microscopy in the diagnosis of childhood round cell tumors. Mierau GW, et al. **Ultrastruct Pathol** 1996 Nov–Dec;20(6):507–17

SARCOMA, EXPERIMENTAL

Establishment of an experimental intrapulmonary tumor nodule model. Wang HY, et al. **Ann Thorac Surg** 1997 Jul; 64(1):216–9

Establishment of a reproducible transplantable sarcoma in a rat. Gutman M, et al. **In Vivo** 1997 Mar–Apr;11(2):153–6

Mouse G2–GPI AChE is processed as a membrane–bound ectoenzyme in transfected mouse sarcoma cells but is not a homophilic adhesion molecule. Guenneugues M, et al. **Neurosci Lett** 1996 May 24;210(1):17–20

BLOOD SUPPLY

Detection of microregional fluctuations in erythrocyte flow using laser Doppler microprobes. Hill SA, et al. **Adv Exp Med Biol** 1996;388:367–71

The response to carbogen breathing in experimental tumour models monitored by gradient–recalled echo magnetic resonance imaging. Robinson SP, et al. **Br J Cancer** 1997; 75(7):1000–6

Increase in immunoreactivity for endothelin–1 in blood vessels of rat liver metastases: experimental sarcoma and carcinoma. Loesch A, et al. **J Anat** 1997 Aug;191 (Pt 2):291–9

Measurement of tumor oxygenation: a comparison between polarographic needle electrodes and a time–resolved luminescence–based optical sensor. Collingridge DR, et al. **Radiat Res** 1997 Mar;147(3):329–34

CHEMICALLY INDUCED

7–Sulfooxymethyl–12–methylbenz[a]anthracene is an exceptionally reactive electrophilic mutagen and ultimate carcinogen. Flesher JW, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):144–8

7–Sulfooxymethylbenz[a]anthracene is an ultimate electrophilic and carcinogenic form of 7–hydroxymethylbenz[a]anthracene. Flesher JW, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):712–6

Tissue–specific differences in adduct formation by hepatocarcinogenic and sarcomatogenic derivatives of 7H–dibenzo[c,g]carbazole in mouse parenchymal and nonparenchymal liver cells. Périn–Roussel O, et al. **Environ Mol Mutagen** 1997;29(4):346–56

MCA sarcomas induced in scid mice are more immunogenic than MCA sarcomas induced in congenic, immunocompetent mice. Engel AM, et al. **Scand J Immunol** 1997 May;45(5):463–70

The susceptibility to cytotoxic T lymphocyte mediated lysis of chemically induced sarcomas from immunodeficient and normal mice. Svane IM, et al. **Scand J Immunol** 1997 Jan; 45(1):28–35

Mesenchymal tumors of the mouse urinary bladder with vascular and smooth muscle differentiation. Butler WH, et al. **Toxicol Pathol** 1997 May–Jun;25(3):268–74

CHEMISTRY

Tumor 31P NMR pH measurements in vivo: a comparison of inorganic phosphate and intracellular 2–deoxyglucose–6–phosphate as pHnmr indicators in murine radiation–induced fibrosarcoma–1. Soto GE, et al. **Magn Reson Med** 1996 Nov;36(5):698–704

Variability of differentiation patterns in xenotransplanted spindle cell sarcomas: a histomorphological, immunohistochemical, and ultrastructural study. Schmidt U, et al. **Ultrastruct Pathol** 1996 Mar–Apr;20(2):131–40

SARCOMA, EXPERIMENTAL

COMPLICATIONS

Early detection of cancer cachexia in the rat using 31P magnetic resonance spectroscopy of the liver and a fructose stress test. Gehman KE, et al. **NMR Biomed** 1996 Sep; 9(6):271–5

DIAGNOSIS

Laser–induced fluorescence studies of the biodistribution of carotenoporphyrins in mice. Nilsson H, et al. **Br J Cancer** 1997;76(3):355–64

DRUG THERAPY

Isolated lung perfusion with doxorubicin prolongs survival in a rodent model of pulmonary metastases. Abolhoda A, et al. **Ann Thorac Surg** 1997 Jul;64(1):181–4

Development of a novel form of an oral 5–fluorouracil derivative (S–1) directed to the potentiation of the tumor selective cytotoxicity of 5–fluorouracil by two biochemical modulators. Shirasaka T, et al. **Anticancer Drugs** 1996 Jul; 7(5):548–57

Regional chemotherapy via pulmonary artery with blood flow occlusion in a solitary tumor nodule model. Wang HY, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3749–53

Application of long–circulating liposomes to cancer photodynamic therapy. Oku N, et al. **Biol Pharm Bull** 1997 Jun;20(6):670–3

Synergistic effects of TNF–alpha and melphalan in an isolated limb perfusion model of rat sarcoma: a histopathological, immunohistochemical and electron microscopical study. Nooijen PT, et al. **Br J Cancer** 1996 Dec;74(12):1908–15

Tumour–localising and –photosensitising properties of a novel zinc(II) octadecylphthalocyanine. Ometto C, et al. **Br J Cancer** 1996 Dec;74(12):1891–9

Advantages and safety of local treatment with MMC/Beriplast P for cancer tumors. Matsuoka H, et al. **Cancer Chemother Pharmacol** 1996;38(6):508–12

In vivo antitumor effects of murine interferon–gamma–inducing factor/interleukin–18 in mice bearing syngeneic Meth A sarcoma malignant ascites. Micallef MJ, et al. **Cancer Immunol Immunother** 1997 Jan; 43(6):361–7

Sustained release of adriamycin from implanted hydroxyapatite blocks for the treatment of experimental osteogenic sarcoma in mice. Itokazu M, et al. **Cancer Lett** 1996 Oct 1;107(1):11–8

The role of host lymphoid populations in the response of mouse EMT6 tumor to photodynamic therapy. Korbelik M, et al. **Cancer Res** 1996 Dec 15;56(24):5647–52

Cisplatin combined with the new cisplatin–procaine complex DPR: in vitro and in vivo studies. Viale M, et al. **Eur J Cancer** 1996 Dec;32A(13):2327–33

Restoration of immune responses in tumor–bearing mice by ONO–4007, an antitumor lipid A derivative. Matsumoto N, et al. **Immunopharmacology** 1997 Apr;36(1):69–78

Development of differential cytotoxic compounds containing nitrosourea and benzothiazine nucleus. Nyati MK, et al. **In Vivo** 1997 Jan–Feb;11(1):95–9

Combination chemo–immunotherapy of murine solid tumor with OK–432, G–CSF, IL–2, and chemotherapeutics. Iida S, et al. **Int J Immunopharmacol** 1995 Dec;17(12):973–80

Isolated lung perfusion with melphalan for the treatment of metastatic pulmonary sarcoma. Nawata S, et al. **J Thorac Cardiovasc Surg** 1996 Dec;112(6):1542–7; discussion 1547–8

In vitro and in vivo studies of murine sarcoma cells after prolonged treatment with promoting phorbol ester TPA. Janik P, et al. **Neoplasma** 1997;44(1):25–9

Correlation between primary chemo– and radiation sensitivity in a panel of highly malignant human soft tissue sarcoma xenografts. Budach W, et al. **Radiother Oncol** 1997 Feb;42(2):181–7

ENZYMOLOGY

Purification and characterization of a 39kDa apurinic/apyrimidinic endonuclease from mouse ascites sarcoma cells. Wakabayashi H, et al. **Acta Med Okayama** 1996 Jun;50(3):131–7

Stimulation of decreased lipoprotein lipase activity in the tumor–bearing state by the antihyperlipidemic drug bezafibrate. Nomura K, et al. **Surg Today** 1996;26(2):89–94

Regulation of gelatinase production and invasiveness by organ–specific fibroblasts in high– and low–metastatic clones from murine RCT sarcoma. Ohmori K, et al. **Tumour Biol** 1997;18(4):219–31

GENETICS

Role of p53 mutation in polyomavirus–induced tumorigenesis. Qian W, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):893–903

Demonstration of ras and p53 gene mutations in carcinomas in the forestomach and intestine and soft tissue sarcomas induced by N–methyl–N–nitrosourea in the rat. Matsumoto K, et al. **Jpn J Cancer Res** 1997 Feb;88(2):129–36

IMMUNOLOGY

The effect of IL–12 on immune privilege of the eye. Uno T, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:426–8

In vivo effects of locally secreted IL–10 on the murine antitumor immune response. Barth RJ Jr, et al. **Ann Surg Oncol** 1996 Jul;3(4):381–6

Methylcholanthrene–induced sarcomas in nude mice have short induction times and relatively low levels of surface MHC class I expression. Engel AM, et al. **APMIS** 1996 Sep;104(9):629–39

Interleukin–2 secretion by KHT sarcoma cells leads to loss of their vaccine potential. Hsu SC, et al. **Cancer Immunol Immunother** 1997 Apr;44(2):117–24

Tumor reactivity of immune T cells in short–term culture. Krauss JC, et al. **Cancer Immunol Immunother** 1996 Dec; 43(4):231–9

The role of host lymphoid populations in the response of mouse EMT6 tumor to photodynamic therapy. Korbelik M, et al. **Cancer Res** 1996 Dec 15;56(24):5647–52

Molecular aberrations in the MHC class I–restricted pathway for antigen presentation in methylcholanthrene sarcomas from nude mice: discrepancies between MHC mRNA and surface protein. Engel AM, et al. **Clin Exp Immunol** 1997 Aug;109(2):323–31

Changes in lymphokine–activated killer activity in peripheral blood lymphocytes from canine transmissible venereal sarcoma models. Mizuno S, et al. **Exp Anim** 1996 Jul; 45(3):289–92

Restoration of immune responses in tumor–bearing mice by ONO–4007, an antitumor lipid A derivative. Matsumoto N, et al. **Immunopharmacology** 1997 Apr;36(1):69–78

Growth of transplanted tumours in mice treated with macrophages and their products. Stern K, et al. **In Vivo** 1995 Sep–Oct;9(5):479–88

Altered MHC class I antigens in tumors. Algarra I, et al. **Int J Clin Lab Res** 1997;27(2):95–102 (63 ref.)

Combination chemo–immunotherapy of murine solid tumor with OK–432, G–CSF, IL–2, and chemotherapeutics. Iida S, et al. **Int J Immunopharmacol** 1995 Dec;17(12):973–80

Augmentation of tumor immunity by 6–MPG, a water–soluble derivative of 6–mercaptopurine, in mice. Kashida T, et al. **Int J Immunopharmacol** 1996 May; 18(5):311–9

IFN regulatory factor–1 gene transfer into an aggressive, nonimmunogenic sarcoma suppresses the malignant phenotype and enhances immunogenicity in syngeneic mice. Yim JH, et al. **J Immunol** 1997 Feb 1;158(3):1284–92

Manipulation of T cell response to tumors by targeting on costimulatory pathway. Chen L. **Leukemia** 1997 Apr;11 Suppl 3:567–9

Augmentation with serum thymic factor of suppressive effects on retroviral tumor development in hosts immune to v–onc product. Miyauchi M, et al. **Leukemia** 1997 Apr; 11 Suppl 3:213–5

Immunostimulation following fish oil–based parenteral nutrition in tumor–bearing rats. Chance WT, et al. **Nutr Cancer** 1996;26(3):303–12

Effect of immunosuppression and splenectomy in transplantation sarcomas in mice. Nigam SK, et al. **Panminerva Med** 1996 Dec;38(4):217–22

Major histocompatibility complex class II–transfected tumor cells present endogenous antigen and are potent inducers of tumor–specific immunity. Armstrong TD, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6886–91

Role of p300–family proteins in E1A oncogene induction of cytolytic susceptibility and tumor cell rejection. Cook JL, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13985–90

Mutated mitogen–activated protein kinase: a tumor rejection antigen of mouse sarcoma [see comments] Ikeda H, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6375–9. Comment in: Proc Natl Acad Sci U S A 1997 Jun 10;94(12):5991–2.

MCA sarcomas induced in scid mice are more immunogenic than MCA sarcomas induced in congenic, immunocompetent mice. Engel AM, et al. **Scand J Immunol** 1997 May;45(5):463–70

The susceptibility to cytotoxic T lymphocyte mediated lysis of chemically induced sarcomas from immunodeficient and normal mice. Svane IM, et al. **Scand J Immunol** 1997 Jan; 45(1):28–35

Expression of MHC Class II and B7–1 and B7–2 costimulatory molecules accompanies tumor rejection and reduces the metastatic potential of tumor cells. Ostrand–Rosenberg S, et al. **Tissue Antigens** 1996 May; 47(5):414–21

[Augmentation of vaccination effects of PGE2–producing tumor cells by transfection with cytokine genes] Ohiro Y. **Hokkaido Igaku Zasshi** 1997 May;72(3):273–84 (Eng. Abstr.) **(Jpn)**

METABOLISM

In vivo trafficking of long–circulating liposomes in tumour–bearing mice determined by positron emission tomography. Oku N, et al. **Biopharm Drug Dispos** 1996 Jul;17(5):435–41

Tumor growth, weight loss and cytokines in SCID mice. Murray S, et al. **Cancer Lett** 1997 Jan 1;111(1–2):111–5

Purification of autocrine growth factor from conditioned medium of rat sarcoma (XC) cells. Chęciówna D, et al. **Folia Histochem Cytobiol** 1996;34(3–4):135–40

Mouse mastocytoma cells synthesize undersulfated heparin and chondroitin sulfate in the presence of brefeldin A. Uhlin–Hansen L, et al. **J Biol Chem** 1997 Feb 7; 272(6):3200–6

Increased whole–body protein and glutamine turnover in advanced cancer is not matched by an increased muscle protein and glutamine turnover. de Blaauw I, et al. **J Surg Res** 1997 Feb 15;68(1):44–55

Oxygenation and metabolic status of KHT tumors as measured simultaneously by 19F magnetic resonance imaging and 31P magnetic resonance spectroscopy. Baldwin NJ, et al. **Magn Reson Imaging** 1996;14(5):541–51

Localization and efficacy analysis of the phototherapeutic lutetium texaphyrin (PCI–0123) in the murine EMT6 sarcoma model. Woodburn KW, et al. **Photochem Photobiol** 1997 Mar;65(3):410–5

Tumour hypoxia and hyperbaric oxygenation studied by quenching of Pd porphine phosphorescence. Ince C, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:4–6

[Effect of imidazen in combination with RNA on the structure of DNA from sarcoma 45] Babaian IuS, et al. **Biofizika** 1997 Jan–Feb;42(1):125–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Lewis lung carcinoma and two transplantable sarcomas in mice as experimental therapy models: biological characteristics and cell population kinetics. Gasińska A, et al. **Folia Histochem Cytobiol** 1997;35(3):165–73

Morphological characteristics of a transplantable histiocytic sarcoma (HS–J) in F344 rats and appearance of renal tubular hyaline droplets in HS–J–bearing rats. Yamate J, et al. **J Comp Pathol** 1997 Jan;116(1):73–86

Experimental pulmonary sarcoma metastases in athymic nude mice. Chao TC, et al. **J Surg Oncol** 1997 Jun;65(2):123–6

Oxygenation and metabolic status of KHT tumors as measured simultaneously by 19F magnetic resonance imaging and 31P magnetic resonance spectroscopy. Baldwin NJ, et al. **Magn Reson Imaging** 1996;14(5):541–51

In vitro and in vivo studies of murine sarcoma cells after prolonged treatment with promoting phorbol ester TPA. Janik P, et al. **Neoplasma** 1997;44(1):25–9

Effect of immunosuppression and splenectomy in transplantation sarcomas in mice. Nigam SK, et al. **Panminerva Med** 1996 Dec;38(4):217–22

Mesenchymal tumors of the mouse urinary bladder with vascular and smooth muscle differentiation. Butler WH, et al. **Toxicol Pathol** 1997 May–Jun;25(3):268–74

Cell proliferative modulation of MCG 101 sarcoma from mice exposed to hyperbaric oxygenation. Lyden E, et al. **Undersea Hyperb Med** 1997 Jun;24(2):123–9

[Dependence of tumor metastasis on the pH of tissues in the tumor–host] Abakarova OR. **Biull Eksp Biol Med** 1995 Dec;120(12):613–5 **(Rus)**

[A comparative study of the effect of chick embryo and cyclophosphamide hymogenate on the growth and metastasis of Pliss sarcoma in rats] Rodionov SIu, et al. **Biull Eksp Biol Med** 1995 Dec;120(12):610–2 **(Rus)**

PHYSIOPATHOLOGY

Serotoninergic block in the ventromedial nucleus of hypothalamus improves food intake in anorectic tumor bearing rats. Laviano A, et al. **Adv Exp Med Biol** 1996; 398:551–3

Tumor growth, weight loss and cytokines in SCID mice. Murray S, et al. **Cancer Lett** 1997 Jan 1;111(1–2):111–5

Control of vasogenic edema in a brain tumor model: comparison between dexamethasone and superoxide dismutase. Shoshan Y, et al. **Neurosurgery** 1996 Dec; 39(6):1206–13; discussion 1213–4

Alteration of cell membrane by stress waves in vitro. Lee S, et al. **Ultrasound Med Biol** 1996;22(9):1285–93

PREVENTION & CONTROL

Augmentation with serum thymic factor of suppressive effects on retroviral tumor development in hosts immune to v–onc product. Miyauchi M, et al. **Leukemia** 1997 Apr; 11 Suppl 3:213–5

RADIOTHERAPY

Effects of IL–3 gene expression on tumor response to irradiation in vitro and in vivo. Chiang CS, et al. **Cancer Res** 1997 Sep 15;57(18):3899–903

Lewis lung carcinoma and two transplantable sarcomas in mice as experimental therapy models: biological characteristics and cell population kinetics. Gasińska A, et al. **Folia Histochem Cytobiol** 1997;35(3):165–73

Multimodality treatment using AK–2123, hydralazine, radiation & hyperthermia on a transplantable mouse tumour. Rao BS, et al. **Indian J Med Res** 1996 Aug; 104:182–9

Uptake and retention of nitroimidazole–carboranes designed for boron neutron capture therapy in experimental murine tumours: detection by 11B magnetic resonance spectroscopy. Wood PJ, et al. **Int J Radiat Biol** 1996 Nov; 70(5):587–92

Improvement in the therapeutic ratio of radiotherapy for a murine sarcoma by indomethacin plus fludarabine. Grégoire V, et al. **Radiat Res** 1996 Nov;146(5):548–53

Correlation between primary chemo– and radiation sensitivity in a panel of highly malignant human soft tissue sarcoma xenografts. Budach W, et al. **Radiother Oncol** 1997 Feb;42(2):181–7

Effects of carbogen plus fractionated irradiation on KHT tumor oxygenation. Fenton BM. **Radiother Oncol** 1997 Aug;44(2):183–90

Continuous, pulsed or single acute irradiation of a transplanted rodent tumour model. Sethi T, et al. **Radiother Oncol** 1997 May;43(2):203–9

SECONDARY

Isolated lung perfusion with doxorubicin prolongs survival in a rodent model of pulmonary metastases. Abolhoda A, et al. **Ann Thorac Surg** 1997 Jul;64(1):181–4

Inhibition of matrix metalloproteinase 9 expression by a ribozyme blocks metastasis in a rat sarcoma model system. Hua J, et al. **Cancer Res** 1996 Nov 15;56(22):5279–84

Blood vessels in liver metastases from both sarcoma and carcinoma lack perivascular innervation and smooth muscle cells. Ashraf S, et al. **Clin Exp Metastasis** 1997 Sep; 15(5):484–98

[Characterization of spontaneous liver metastatic model of BALB/c retroperitoneal sarcoma (LMFS) injected in footpad and antitumor effects of HCFU] Fujii Y, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):343–8 (Eng. Abstr.) **(Jpn)**

THERAPY

IL–12–engineered dendritic cells serve as effective tumor vaccine adjuvants in vivo. Zitvogel L, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:284–93

Antibody–based therapy targeting tumor vascular endothelial cells suppresses solid tumor growth in rats. Ohizumi I, et al. **Biochem Biophys Res Commun** 1997 Jul 18;236(2):493–6

Tumor reactivity of immune T cells in short–term culture. Krauss JC, et al. **Cancer Immunol Immunother** 1996 Dec; 43(4):231–9

Treatment of subcutaneous tumor with adoptively transferred T cells. Peng L, et al. **Cell Immunol** 1997 May 25; 178(1):24–32

Recombinant interleukin–2 acts as an adjuvant and helps to increase the efficacy of tumour vaccines. Vondrys P, et al. **Folia Biol (Praha)** 1997;43(1):39–40

Cytokine gene therapy of cancer using gene gun technology: superior antitumor activity of interleukin–12. Rakhmilevich AL, et al. **Hum Gene Ther** 1997 Jul 20;8(11):1303–11

Multimodality treatment using AK–2123, hydralazine, radiation & hyperthermia on a transplantable mouse tumour. Rao BS, et al. **Indian J Med Res** 1996 Aug; 104:182–9

Tumour–growth inhibition by induced hyperglycaemia/hyperlactacidaemia and localized hyperthermia. Mueller–Klieser W, et al. **Int J Hyperthermia** 1996 Jul–Aug;12(4):501–11

Adoptive transfer of bryostatin–activated tumor–sensitized lymphocytes prevents or destroys tumor metastases without expansion in vitro. Fleming MD, et al. **J Immunother Emphasis Tumor Immunol** 1995 Oct; 18(3):147–55

Adenoviral thymidine kinase prodrug gene therapy inhibits sarcoma growth in vivo. Ross HM, et al. **J Surg Res** 1997 Jun;70(1):7–11

Manipulation of T cell response to tumors by targeting on costimulatory pathway. Chen L. **Leukemia** 1997 Apr;11 Suppl 3:567–9

Monoclonal antibodies against the 4–1BB T–cell activation molecule eradicate established tumors. Melero I, et al. **Nat Med** 1997 Jun;3(6):682–5

Antitumor activities of combined treatment with a novel immunomodulator, (2S,3S,4R)–1–O–(alpha–D–Galactopyranosyl)–2–(N–Hexacosanoylamino)–1,3,4 - octadecanetriol (KRN7000), and radiotherapy in tumor–bearing mice. Motoki K, et al. **Oncol Res** 1996;8(4):155–62

Tumour hypoxia and hyperbaric oxygenation studied by quenching of Pd porphine phosphorescence. Ince C, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:4–6

Hyperbaric oxygenation of experimental tumors. Thews O, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:24–5

[Regional adoptive immunotherapy using activated lymphocytes] Ebina T, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1549–52 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Ultrastructure of virus–induced soft–tissue tumours. Levenbook IS, et al. **IARC Sci Publ** 1996;(126):351–63 (27 ref.)

Variability of differentiation patterns in xenotransplanted spindle cell sarcomas: a histomorphological, immunohistochemical, and ultrastructural study. Schmidt U, et al. **Ultrastruct Pathol** 1996 Mar–Apr;20(2):131–40

SARCOMA, GERMINOBLASTIC see **LYMPHOMA**

SARCOMA, IMMUNOBLASTIC see **LYMPHOMA, LARGE–CELL, IMMUNOBLASTIC**

SARCOMA, JENSEN see **SARCOMA, EXPERIMENTAL**

SARCOMA, KAPOSI'S

Kaposi's sarcoma after autologous bone marrow transplantation for multiple myeloma. Vivancos P, et al. **Bone Marrow Transplant** 1996 Apr;17(4):669–71

Pulmonary complications of HIV–associated malignancies. White DA. **Clin Chest Med** 1996 Dec;17(4):755–61 (72 ref.)

What's new in AIDS related malignancies? A report from the XI International Conference on AIDS, Vancouver, 7–12 July 1996. Harrison M, et al. **Clin Oncol (R Coll Radiol)** 1996;8(5):336–7

Management and treatment of Kaposi's sarcoma in AIDS. The Jefferiss Wing Therapeutics and Protocols Group. Tomlinson DR, et al. **Int J STD AIDS** 1996 Nov–Dec; 7(7):466–70 (10 ref.)

HIV–related skin diseases. Geusau A, et al. **J R Coll Physicians Lond** 1997 Jul–Aug;31(4):374–9 (38 ref.)

Kaposi's sarcoma and its management in AIDS patients. Recommendations from a Scandinavian Study Group. **Scand J Infect Dis** 1997;29(1):3–12 (76 ref.)

[Human herpesvirus 8. A Kaposi sarcoma–associated herpesvirus?] Benfield TL. **Ugeskr Laeger** 1997 Aug 4; 159(32):4837–8 **(Dan)**

BLOOD

Kaposi's sarcoma and sex hormones [letter] Bouscarat F, et al. **AIDS** 1997 Apr;11(5):687–8

Detection of the herpesvirus–like DNA sequences in matched specimens of semen and blood from patients with AIDS–related Kaposi's sarcoma by polymerase chain reaction in situ hybridization. Huang YQ, et al. **Am J Pathol** 1997 Jan;150(1):147–53

Kaposi's sarcoma cells express the macrophage–associated antigen mannose receptor and develop in peripheral blood cultures of Kaposi's sarcoma patients. Uccini S, et al. **Am J Pathol** 1997 Mar;150(3):929–38

Population pharmacokinetics and pharmacodynamics of pegylated–liposomal doxorubicin in patients with AIDS–related Kaposi's sarcoma. Amantea MA, et al. **Clin Pharmacol Ther** 1997 Mar;61(3):301–11

Effect of interferon alpha on high serum androgen concentrations in HIV positive men with Kaposi's sarcoma. Christeff N, et al. **J Clin Pathol** 1997 Apr;50(4):341–5

Kaposi's sarcoma–associated herpesvirus/human herpesvirus 8 is not detectable in peripheral blood mononuclear cells of the relatives of sporadic KS patients [letter] Uccini S, et al. **J Invest Dermatol** 1997 Jan;108(1):119–20

Circulating spindle cells: correlation with human herpesvirus–8 (HHV–8) infection and Kaposi's sarcoma [letter] Sirianni MC, et al. **Lancet** 1997 Jan 25;349(9047):255

BLOOD SUPPLY

Vascular endothelial growth factor regulates angiogenesis and vascular permeability in Kaposi's sarcoma. Cornali E, et al. **Am J Pathol** 1996 Dec;149(6):1851–69

Involvement of vascular endothelial growth factor in Kaposi's sarcoma associated with acquired immunodeficiency syndrome. Sakurada S, et al. **Jpn J Cancer Res** 1996 Nov;87(11):1143–52

The pharmacokinetics of TNP–470, a new angiogenesis inhibitor. Figg WD, et al. **Pharmacotherapy** 1997 Jan–Feb; 17(1):91–7

CHEMICALLY INDUCED

Involvement of vascular endothelial growth factor in Kaposi's sarcoma associated with acquired immunodeficiency syndrome. Sakurada S, et al. **Jpn J Cancer Res** 1996 Nov;87(11):1143–52

[Kaposi sarcoma in cyclosporin A therapy of actinic reticuloid] Waldmann V, et al. **Hautarzt** 1997 Apr; 48(4):262–5 (Eng. Abstr.) **(Ger)**

CHEMISTRY

An immunohistochemical study of p53 protein expression in classical Kaposi's sarcoma. Bergman R, et al. **Am J Dermatopathol** 1996 Aug;18(4):367–70

The immunoexpression of bcl–2 and p53 in Kaposi's sarcoma. Dada MA, et al. **Histopathology** 1996 Aug;29(2):159–63

The soluble form of the IL–6 receptor (sIL–6R alpha) is a potent growth factor for AIDS–associated Kaposi's sarcoma (KS) cells; the soluble form of gp130 is antagonistic for sIL–6R alpha–induced AIDS–KS cell growth. Murakami–Mori K, et al. **Int Immunol** 1996 Apr; 8(4):595–602

Immunohistochemical analysis of p53 protein in transplant recipients with Kaposi's sarcoma. Flamini G, et al. **J Cancer Res Clin Oncol** 1997;123(4):240–2

CLASSIFICATION

Kaposi's sarcoma classification: a problem not yet defined. Cottoni F, et al. **Int J Dermatol** 1996 Jul;35(7):480–3

AIDS–related Kaposi's sarcoma: prospective validation of the AIDS Clinical Trials Group staging classification. AIDS Clinical Trials Group Oncology Committee. Krown SE, et al. **J Clin Oncol** 1997 Sep;15(9):3085–92

COMPLICATIONS

Kaposi's sarcoma in women with AIDS. Cooley TP, et al. **AIDS** 1996 Sep;10(11):1221–5

Lack of association of low testosterone with HIV–associated Kaposi's sarcoma [letter; comment] Falutz J. **AIDS** 1996 Jun;10(7):794–5. Comment on: AIDS 1995 Nov;9(11):1295–6.

Regression of AIDS–related Kaposi's sarcoma following treatment with an HIV–1 protease inhibitor [letter] Murphy M, et al. **AIDS** 1997 Feb;11(2):261–2

High frequency of non–Hodgkin's lymphoma in patients with HIV–associated Kaposi's sarcoma. Ridolfo AL, et al. **AIDS** 1996 Feb;10(2):181–5

High prevalence of cutaneous viral infections in AIDS patients with Kaposi's sarcoma: insight into the role of human herpesvirus 8? [letter] Simonart T, et al. **AIDS** 1997 May;11(6):824–6

Pericardial tamponade from Kaposi's sarcoma: role of early pericardial window. Vijay V, et al. **Am Heart J** 1996 Oct; 132(4):897–9 (6 ref.)

Leishmaniasis and Kaposi's sarcoma in an HIV–infected patient [letter; comment] Abajo P, et al. **Am J Dermatopathol** 1997 Feb;19(1):101–3. Comment on: Am J Dermatopathol 1995 Apr;17(2):145–50.

Malignant tumors and AIDS. Nasti G, et al. **Biomed Pharmacother** 1997;51(6–7):243–51 (78 ref.)

Recent advances. HIV infection–II. Beiser C. **BMJ** 1997 Feb 22;314(7080):579–83 (56 ref.)

Simultaneous onset of primary cutaneous B–cell lymphoma and human herpesvirus 8–associated Kaposi's sarcoma. Berti E, et al. **Br J Dermatol** 1997 Jun;136(6):924–9

Perforation of the jejunum secondary to AIDS–related gastrointestinal Kaposi's sarcoma. Yoshida EM, et al. **Can J Gastroenterol** 1997 Jan–Feb;11(1):38–40 (15 ref.)

Clostridium paraputrificum bacteremia in a patient with AIDS and Duodenal Kaposi's sarcoma. Nerad JL, et al. **Clin Infect Dis** 1996 Nov;23(5):1183–4

Kaposi's sarcoma in severe alcoholic hepatitis. Colli A, et al. **Eur J Gastroenterol Hepatol** 1997 Feb;9(2):215–6

Hepatic localisation of an aggressive Kaposi's sarcoma leading to liver graft failure [letter] Mazza D, et al. **Gastroenterol Clin Biol** 1996;20(12):1136

Kaposi's sarcoma and non–Hodgkin's lymphoma following the diagnosis of AIDS. Multistate AIDS/Cancer Match Study Group [published erratum appears in Int J Cancer 1997 Mar 17;70(6):727] Biggar RJ, et al. **Int J Cancer** 1996 Dec 11;68(6):754–8

Kaposi's sarcoma and sarcoidosis coexisting in lesions of HIV–seronegative patient. Dessoukey MW, et al. **Int J Dermatol** 1996 Nov;35(11):824–6

Blastomycosis–like pyoderma in a man with AIDS. Crowley JJ, et al. **J Am Acad Dermatol** 1997 Apr;36(4):633–4

Classical Kaposi's: a rare cause of gastrointestinal haemorrhage. Chapman SM, et al. **J Gastroenterol Hepatol** 1996 Apr;11(4):408–10

Human herpesvirus–8 DNA sequences in a patient with pemphigus vulgaris, but without HIV infection or Kaposi's sarcoma [letter] Memar OM, et al. **J Invest Dermatol** 1997 Jan;108(1):118–9

Spindle cell (Kaposiform) hemangioendothelioma with Kasabach–Merritt syndrome in an infant: successful treatment with alpha–2A interferon. Deb G, et al. **Med Pediatr Oncol** 1997 May;28(5):358–61

Kaposi sarcoma and gonadoblastoma dysgerminoma with gonadal dysgenesis following cadaveric renal transplantation. Yeğenağa–Bakioğlu I, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1750–2

HHV–8 and AIDS–related CNS lymphoma. Morgello S, et al. **Neurology** 1997 May;48(5):1333–5

Kaposi's sarcoma in liver transplant recipients on FK506: two case reports. Rezeig MA, et al. **Transplantation** 1997 May 27;63(10):1520–1

[Isolated Kaposi sarcoma of the small intestine disclosed by occlusion in an HIV–positive patient (letter)] Bussy C, et al. **Ann Med Interne (Paris)** 1996;147(5):345–6 **(Fre)**

[Kaposi's sarcoma of the bile ducts with cutaneous involvement in a patient with AIDS] Segarra P, et al. **Rev Esp Enferm Dig** 1996 Sep;88(9):637–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Non–AIDS–related primary intraosseous Kaposi's sarcoma: case report and literature review. Chen HH, et al. **Acta Oncol** 1997;36(2):224–7 (14 ref.)

Kaposi's sarcoma. Clearlhan L. **Aust Fam Physician** 1996 Mar;25(3):428–9

Case report: mammographic and ultrasound appearances of Kaposi's sarcoma of the breast. Ng CS, et al. **Clin Radiol** 1996 Oct;51(10):735–6

Multinucleate cell angiohistiocytoma. Romiti R, et al. **Cutis** 1997 Apr;59(4):190–2

Detection of herpesvirus–like DNA in the bronchoalveolar lavage fluid of patients with pulmonary Kaposi's sarcoma. Cathomas G, et al. **Eur Respir J** 1996 Aug;9(8):1743–6

Bronchial Kaposi's sarcoma after single lung transplantation. Sleiman C, et al. **Eur Respir J** 1997 May;10(5):1181–3

Kaposi's sarcoma of the skin. Consider HIV testing in older patients with this malignant neoplasm. Gross JS, et al. **Geriatrics** 1996 Dec;51(12):21,51

Uncommon cutaneous neoplasms. Harrington AC, et al. **Md Med J** 1997 May–Jun;46(5):255–62 (48 ref.)

The importance of clinical features in differentiating HIV related from non–HIV related Kaposi's sarcoma: experience from Dar es Salaam, Tanzania. Bakari M, et al. **Trop Doct** 1996 Jul;26(3):104–7

[A case of Kaposi sarcoma of the pharynx as a primary manifestation of the acquired immunodeficiency syndrome] Fusetti M, et al. **Acta Otorhinolaryngol Ital** 1996 Apr; 16(2):129–31 (Eng. Abstr.) **(Ita)**

[Primary lung Kaposi sarcoma associated to AIDS in a heterosexual drug addict man] Troncoso AR, et al. **Medicina (B Aires)** 1996;56(4):397–402 (Eng. Abstr.) **(Spa)**

SARCOMA, KAPOSI'S

DRUG THERAPY

The beta-core fragment of human chorionic gonadotrophin inhibits growth of Kaposi's sarcoma-derived cells and a new immortalized Kaposi's sarcoma cell line. Albini A, et al. **AIDS** 1997 May;11(6):713-21

Reduction of Kaposi's sarcoma lesions following treatment of AIDS with ritonovir [letter] Conant MA, et al. **AIDS** 1997 Aug;11(10):1300-1

Evidence of activity of vinorelbine in patients with previously treated AIDS-associated Kaposi's sarcoma [letter] Errante D, et al. **AIDS** 1996 Dec;10(14):1742-3

Phase II study of liposomal encapsulated daunorubicin in the treatment of AIDS-associated mucocutaneous Kaposi's sarcoma. Girard PM, et al. **AIDS** 1996 Jun;10(7):753-7

Kaposi's sarcoma: relationship to a novel herpesvirus and advances in therapy. Lee FC, et al. **AIDS** 1996;10 Suppl A:S173-9 (71 ref.)

In vitro antiviral drug sensitivity of the Kaposi's sarcoma-associated herpesvirus. Medveczky MM, et al. **AIDS** 1997 Sep;11(11):1327-32

Chemotherapy for AIDS-related malignancies does not increase HIV viraemia [letter] Rutschmann OT, et al. **AIDS** 1997 Jun;11(7):944-5

Human chorionic gonadotrophin in the treatment of HIV-related Kaposi's sarcoma [letter] Tirelli U, et al. **AIDS** 1997 Mar;11(3):387-8

Modulation of all-trans-retinoic acid administered on intermittent schedule by alpha-interferon 2a in a patient with AIDS-related Kaposi's sarcoma [letter] Toma S, et al. **AIDS** 1996 Aug;10(9):1049-50

Liposomal daunorubicin is not recommended in patients with less than advanced HIV-related Kaposi's sarcoma [letter] White RM. **AIDS** 1997 Sep;11(11):1412-3

Liposomal daunorubicin marketed for HIV-related Kaposi's sarcoma [news] **Am J Health Syst Pharm** 1996 Jul 1; 53(13):1500, 1505

Misprint of dosage interval for liposomal doxorubicin hydrochloride [letter] Subach RA, et al. **Am J Health Syst Pharm** 1996 Jul 15;53(14):1727

Efficacy and tolerance of liposomal daunorubicin in Kaposi sarcoma associated with human immunodeficiency virus infection [letter] Fournier S, et al. **Arch Dermatol** 1997 Jul; 133(7):918-9

Non-HIV-related Kaposi's sarcoma suppressed by dapsone. de Haas ER, et al. **Br J Dermatol** 1996 Nov;135(5):813-4

Vinca alkaloids and macrolides in human immunodeficiency virus-related malignancies: a safe association [letter; comment] Torresin A, et al. **Cancer Chemother Pharmacol** 1996;39(1-2):176-7. Comment on: Cancer Chemother Pharmacol 1995;35(3):188-90.

Regression of AIDS-related Kaposi's sarcoma during therapy with thalidomide. Solèr RA, et al. **Clin Infect Dis** 1996 Sep;23(3):501-3; discussion 504-5

Population pharmacokinetics and pharmacodynamics of pegylated-liposomal doxorubicin in patients with AIDS-related Kaposi's sarcoma. Amantea MA, et al. **Clin Pharmacol Ther** 1997 Mar;61(3):301-11

Vinorelbine therapy for Kaposi's sarcoma in a kidney transplant patient. Brambilla L, et al. **Dermatology** 1997; 194(3):281-3

Increased risk for opportunistic infections during chemotherapy in HIV-infected patients with Kaposi's sarcoma. Plettenberg A, et al. **Dermatology** 1997; 194(3):234-7

Polyethylene glycol-liposomal doxorubicin. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in the management of AIDS-related Kaposi's sarcoma. Coukell AJ, et al. **Drugs** 1997 Mar; 53(3):520-38 (68 ref.)

Potential therapeutic efficacy of Ukrain (NSC 631570) in AIDS patients with Kaposi's sarcoma. Voltchek IV, et al. **Drugs Exp Clin Res** 1996;22(3-5):283-6

Beta-human choriogonadotropin therapy and HIV-related Kaposi's sarcoma. Witzke O, et al. **Eur J Med Res** 1997 Apr 21;2(4):155-8

Chemotherapy of AIDS--related Kaposi's sarcoma. Lee FC, et al. **Hematol Oncol Clin North Am** 1996 Oct;10(5):1051-68 (87 ref.)

Advanced epidemic Kaposi's sarcoma: treatment with bleomycin or combination of doxorubicin, bleomycin, and vincristine. Hernández DE, et al. **Int J Dermatol** 1996 Nov; 35(11):831-3

Phase II trial of 13-cis-retinoic acid for poor risk HIV-associated Kaposi's sarcoma. Bower M, et al. **Int J STD AIDS** 1997 Aug;8(8):518-21

Hyaluronidase enhances the therapeutic effect of vinblastine in intralesional treatment of Kaposi's sarcoma. Military Medical Consortium for the Advancement of Retroviral Research (MMCARR). Smith KJ, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):239-42

Mislabeling of drug for Kaposi's sarcoma rectified [news] **J Am Osteopath Assoc** 1997 Aug;97(8):445

Experience with adriamycin, bleomycin, vincristine (ABV) palliative chemotherapy in advanced AIDS-related Kaposi's sarcoma. Paparizos VA, et al. **J Chemother** 1996 Oct;8(5):403-6

Efficacy of pegylated-liposomal doxorubicin in the treatment of AIDS-related Kaposi's sarcoma after failure of standard chemotherapy. Northfelt DW, et al. **J Clin Oncol** 1997 Feb; 15(2):653-9

Clinical and pharmacokinetic study of oral etoposide in patients with AIDS-related Kaposi's sarcoma with no prior exposure to cytotoxic therapy. Schwartsmann G, et al. **J Clin Oncol** 1997 May;15(5):2118-24

Treatment of Kaposi's sarcoma after solid organ transplantation. Shepherd FA, et al. **J Clin Oncol** 1997 Jun; 15(6):2371-7

Doxorubicin encapsulated in liposomes containing surface-bound polyethylene glycol: pharmacokinetics, tumor localization, and safety in patients with AIDS-related Kaposi's sarcoma. Northfelt DW, et al. **J Clin Pharmacol** 1996 Jan;36(1):55-63

High-dose interferon-alpha2a exerts potent activity against human immunodeficiency virus type 1 not associated with antitumor activity in subjects with Kaposi's sarcoma. Frissen PH, et al. **J Infect Dis** 1997 Sep;176(3):811-4

Continuous infusion etoposide in advanced AIDS-related kaposi sarcoma. Remick SC, et al. **J Infus Chemother** 1996 Spring;6(2):92-6

Combination chemotherapy in the treatment of Kaposi sarcoma in a child infected with human immunodeficiency virus [letter] Mastroianni A, et al. **J Pediatr** 1997 Apr; 130(4):675

Inhibition of angiogenesis in Kaposi's sarcoma by captopril [letter] Vogt B, et al. **Lancet** 1997 Apr 19;349(9059):1148

Spindle cell (Kaposiform) hemangioendothelioma with Kasabach-Merritt syndrome in an infant: successful treatment with alpha-2A interferon. Deb G, et al. **Med Pediatr Oncol** 1997 May;28(5):358-61

The effects of preparations of human chorionic gonadotropin on AIDS-related Kaposi's sarcoma [see comments] [published erratum appears in N Engl J Med 1997 Feb 27;336(9):670] Gill PS, et al. **N Engl J Med** 1996 Oct 24; 335(17):1261-9. Comment in: N Engl J Med 1996 Oct 24;335(17):1309-10. Comment in: N Engl J Med 1997 Apr 17;336(16):1187; discussion 1188-9.

Intralesional human chorionic gonadotropin for Kaposi's sarcoma [letter; comment] Harris PJ. **N Engl J Med** 1997 Apr 17;336(16):1187; discussion 1188-9. Comment on: N Engl J Med 1996 Oct 24;335(17):1261-9. Comment on: N Engl J Med 1996 Oct 24;335(17):1309-10.

Kaposi's sarcoma--what's human chorionic gonadotropin got to do with it? [editorial; comment] [see comments] Krown SE. **N Engl J Med** 1996 Oct 24;335(17):1309-10. Comment on: N Engl J Med 1996 Oct 24;335(17):1261-9. Comment in: N Engl J Med 1997 Apr 17;336(16):1187; discussion 1188-9. Comment in: N Engl J Med 1997 Apr 17;336(16):1187-8; discussion 1188-9.

Intralesional human chorionic gonadotropin for Kaposi's sarcoma [letter; comment] Russo IH. **N Engl J Med** 1997 Apr 17;336(16):1187; discussion 1188-9. Comment on: N Engl J Med 1996 Oct 24;335(17):1261-9.

Chimeric protein cytotoxic against KS tumors [news] Marshall A, et al. **Nat Biotechnol** 1997 Apr;15(4):304

DaunoXome data presented at international cancer meeting [news] **Oncology (Huntingt)** 1996 Jun;10(6):830

Kaposi's sarcoma: advances in tumor biology and pharmacotherapy. Sung JC, et al. **Pharmacotherapy** 1997 Jul-Aug;17(4):670-83 (103 ref.)

[New data: daunoxome against Kaposi sarcoma. Fifth European Conference on clinical aspects and treatment of HIV infection (news)] **Pharm Unserer Zeit** 1996 Jan; 25(1):42-3 **(Ger)**

[Colony-stimulating factors and HIV-related neoplasms] Valencia ME, et al. **An Med Interna** 1996 Jul;13(7):317-21 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Immunohistochemical analysis of procathepsin L and cathepsin B in cutaneous Kaposi's sarcoma. Thewes M, et al. **Int J Dermatol** 1997 Feb;36(2):100-3

EPIDEMIOLOGY

Declining incidence and later occurrence of Kaposi's sarcoma among persons with AIDS in Australia: the Australian AIDS cohort. Dore GJ, et al. **AIDS** 1996 Oct; 10(12):1401-6

Epidemiology of AIDS-related Kaposi's sarcoma in Europe over 10 years. AIDS in Europe Study Group. Hermans P, et al. **AIDS** 1996 Jul;10(8):911-7

Frequency of Kaposi's sarcoma in European AIDS patients who stayed in Africa [letter] Seilhean D, et al. **AIDS** 1997 Sep;11(11):1401-2

Kaposi's sarcoma and non-Hodgkin's lymphomas in children and adolescents with AIDS. Serraino D, et al. **AIDS** 1996 Jun;10(6):643-7

The epidemiology of HIV-associated Kaposi's sarcoma: the unraveling mystery. Strathdee SA, et al. **AIDS** 1996;10 Suppl A:S51-7 (112 ref.)

Interleukin 6 and AIDS-associated Kaposi's sarcoma: a nested case control study within the Multicenter AIDS Cohort Study. Dourado I, et al. **AIDS Res Hum Retroviruses** 1997 Jun 10;13(9):781-8

Cancer incidence among an HIV-infected cohort. Pulmonary Complications of HIV Infection Study Group. Johnson CC, et al. **Am J Epidemiol** 1997 Sep 15;146(6):470-5

AIDS--associated Kaposi's sarcoma: a rare entity at Maharaj Nakorn Chiang Mai Hospital. Bhoopat SK, et al. **Asian Pac J Allergy Immunol** 1996 Dec;14(2):115-20

Trends of Kaposi's sarcoma at AIDS diagnosis in Europe and the United States, 1987-94. Franceschi S, et al. **Br J Cancer** 1997;76(1):114-7

Epidemiology of Kaposi's sarcoma in the Nordic countries before the AIDS epidemic. Hjalgrim H, et al. **Br J Cancer** 1996 Nov;74(9):1499-502

Epidemic and non-epidemic Kaposi's sarcoma: diagnosis, staging and treatment. Iwamasa T, et al. **Crit Rev Oncol Hematol** 1996 Nov;24(3):153-63 (50 ref.)

AIDS related neoplasms in Genoa, Italy. Gabutti G, et al. **Eur J Epidemiol** 1995 Dec;11(6):609-14

Kaposi's Sarcoma (KS)-associated herpesvirus and its role in KS. Chang Y, et al. **Infect Agents Dis** 1996 Oct; 5(4):215-22 (71 ref.)

The epidemiologic profile of Kaposi's sarcoma in Greece prior to and during the AIDS era. Touloumi G, et al. **Int J Cancer** 1997 Mar 4;70(5):538-41

Changing seroepidemiology of HHV-8 [comment] Rickinson AB. **Lancet** 1996 Oct 26;348(9035):1110-1. Comment on: Lancet 1996 Oct 26;348(9035):1133-8.

Prevalence of Kaposi's sarcoma associated herpesvirus infection measured by antibodies to recombinant capsid protein and latent immunofluorescence antigen [see comments] Simpson GR, et al. **Lancet** 1996 Oct 26; 348(9035):1133-8. Comment in: Lancet 1996 Oct 26;348(9035):1110-1.

Intralesional human chorionic gonadotropin for Kaposi's sarcoma [letter; comment] Grulich AE, et al. **N Engl J Med** 1997 Apr 17;336(16):1187-8; discussion 1188-9. Comment on: N Engl J Med 1996 Oct 24;335(17):1309-10.

Kaposi's sarcoma in transplant recipients. Penn I. **Transplantation** 1997 Sep 15;64(5):669-73 (52 ref.)

[Kaposi sarcoma and human herpes virus type 8: recent data] Camparo P, et al. **Med Trop (Mars)** 1996;56(3):231-7 (84 ref.) **(Fre)**

ETIOLOGY

Frequency of Kaposi's sarcoma in European AIDS patients who stayed in Africa [letter] Seilhean D, et al. **AIDS** 1997 Sep;11(11):1401-2

Kaposi's sarcoma--associated herpesvirus: a newly recognized pathogen. Boshoff C, et al. **AIDS Clin Rev** 1997-98;:323-47 (108 ref.)

Risk of Kaposi's sarcoma and oroanal sexual contact. Grulich AE, et al. **Am J Epidemiol** 1997 Apr 15;145(8):673-9

Short report: herpes-like DNA sequences in African-endemic and acquired immunodeficiency syndrome-associated Kaposi's sarcoma. Eto H, et al. **Am J Trop Med Hyg** 1996 Oct;55(4):405-6

Detection of herpesvirus-like DNA in HIV-associated and classical Kaposi's sarcoma. Simon M, et al. **Arch Dermatol Res** 1996 Jun;288(7):402-4

HIV related Kaposi's sarcoma [letter; comment] Coulter JB, et al. **Arch Dis Child** 1996 Dec;75(6):547. Comment on: Arch Dis Child 1996 May;74(5):455-7.

Kaposi's sarcoma associated with immunosuppression for bullous pemphigoid. Halpern SM, et al. **Br J Dermatol** 1997 Jul;137(1):140-3

A new human herpesvirus as a factor in the pathogenesis of Kaposi's sarcoma and body-cavity lymphoma [comment] Sarris A. **Cancer J Sci Am** 1997 May-Jun; 3(3):140-1 (29 ref.). Comment on: Cancer J Sci Am 1997 May-Jun;3(3):153-6.

Cutaneous cryptococcosis and Kaposi's sarcoma occurring in the same lesions in a patient with the acquired immunodeficiency syndrome. Glassman SJ, et al. **Clin Exp Dermatol** 1995 Nov;20(6):480-6

Pathogenesis of Kaposi's sarcoma. Cooke FJ. **Clin Oncol (R Coll Radiol)** 1996;8(3):189-94 (22 ref.)

A patient with classical Kaposi's sarcoma and angiosarcoma: bad luck or a common aetiology? Steiner MC, et al. **Clin Oncol (R Coll Radiol)** 1997;9(3):186-8

Advances in Kaposi's sarcoma. Myskowski PL, et al. **Dermatol Clin** 1997 Jan;15(1):177-88 (122 ref.)

Kaposi's sarcoma as manifestation of immunosuppression in organ transplant recipients. Aebischer MC, et al. **Dermatology** 1997;195(1):91-2

Kaposi's sarcoma after liver transplantation. Besnard V, et al. **Dermatology** 1996;193(2):100-4

Kaposi's sarcoma in renal-transplant recipients: experience at the Catholic University in Rome, 1988-1996. Lesnoni La Parola I, et al. **Dermatology** 1997;194(3):229-33

Kaposi's sarcoma during immunosuppressive therapy for atopic dermatitis. Vandercam B, et al. **Dermatology** 1997; 194(2):180-2

Pathogenesis of oral Kaposi's Sarcoma in HIV-infection: relevance of endogenous glucocorticoid excess in blood and saliva. Enwonwu CO. **Eur J Cancer B Oral Oncol** 1996 Jul;32B(4):271-4 (49 ref.)

Absence of human herpesvirus 8 DNA sequences in neoplastic Kaposi's sarcoma cell lines. Flamand L, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Oct 1;13(2):194-7

Post-transplant Kaposi's sarcoma. Gotti E, et al. **J Am Soc Nephrol** 1997 Jan;8(1):130-7 (98 ref.)

Inflammatory cytokines induce endothelial cells to produce and release basic fibroblast growth factor and to promote Kaposi's sarcoma-like lesions in nude mice. Samaniego F, et al. **J Immunol** 1997 Feb 15;158(4):1887-94

Laryngeal Kaposi's sarcoma in patients with AIDS. Mochloulis G, et al. **J Laryngol Otol** 1996 Nov; 110(11):1034-7

Kaposi's Sarcoma of the intestine in an HIV-negative patient associated with immunosuppressive therapy for severe

aplastic anemia [letter] Abhyankar SH, et al. **J Pediatr Hematol Oncol** 1997 Jan–Feb;19(1):86–8

Expression of interleukin–6 receptors and NF–kappa B in AIDS–related Kaposi sarcoma cell strains. Bailer RT, et al. **Lymphology** 1997 Jun;30(2):63–76

Acquired immunodeficiency syndrome–associated Kaposi's sarcoma. Biology and management. Krown SE. **Med Clin North Am** 1997 Mar;81(2):471–94 (170 ref.)

Kaposi's sarcoma after renal transplantation [letter] Vella JP, et al. **N Engl J Med** 1997 Jun 12;336(24):1761

Post–transplantation Kaposi's sarcoma appearing simultaneously in same cadaver donor renal transplant recipients. Bottalico D, et al. **Nephrol Dial Transplant** 1997 May;12(5):1055–7

Kaposi sarcoma in a paediatric renal transplant recipient. Ozen S, et al. **Nephrol Dial Transplant** 1996 Jun; 11(6):1162–3

The spectrum of African Kaposi's sarcoma: is it consequential upon diverse immunological responses? Matondo P, et al. **Scand J Infect Dis** 1996;28(3):225–30 (51 ref.)

HHV–8 is associated with recurrent Kaposi's sarcoma in a renal transplant recipient [letter] Noel JC, et al. **Transpl Int** 1997;10(1):81–2

Transplantation–associated malignancies: restriction of human herpes virus 8 to Kaposi's sarcoma. Cathomas G, et al. **Transplantation** 1997 Jul 15;64(1):175–8

[Multivisceral Kaposi's disease and encrusted pyelitis in a renal transplantation recipient] Foulet A, et al. **Ann Pathol** 1996 Dec;16(6):453–6 (Eng. Abstr.) **(Fre)**

[Human herpesvirus 8 infections] Agut H. **Presse Med** 1997 Jan;26 Suppl 1:16–8 (26 ref.) **(Fre)**

[The enigma of Kaposi sarcoma] Rüdlinger R. **Hautarzt** 1996 Feb;47(2):91–5 (43 ref.) (Eng. Abstr.) **(Ger)**

[Kaposi sarcoma–associated herpesvirus; human herpesvirus 8] Kemény L, et al. **Orv Hetil** 1997 Apr 20;138(16):979–83 (49 ref.) (Eng. Abstr.) **(Hun)**

[Pulmonary Kaposi's sarcoma in a patient with the acquired immunodeficiency syndrome] Takechi A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Feb;35(2):231–5 (Eng. Abstr.) **(Jpn)**

[Kaposi's sarcoma: an infectious disease? (editorial) (see comments)] Casabona J. **Enferm Infecc Microbiol Clin** 1996 May;14(5):283–4. Comment in: Enferm Infecc Microbiol Clin 1996 Nov;14(9):569–70. **(Spa)**

GENETICS

Expression and mutation of the tumor suppressor gene p53 in AIDS–associated Kaposi's sarcoma. Li JJ, et al. **Am J Dermatopathol** 1997 Aug;19(4):373–8

DNA diploidy in AIDS–related and steroid–induced Kaposi's sarcoma [letter; comment] Simonart T, et al. **Br J Dermatol** 1997 May;136(5):804. Comment on: Br J Dermatol 1995 Apr;132(4):548–50.

Generalized endemic Kaposi's sarcoma. Coleman R, et al. **Clin Exp Dermatol** 1995 Nov;20(6):471–3

Antioxidant–sensitive regulation of inflammatory–response genes in Kaposi's sarcoma cells. Offermann MK, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Sep; 13(1):1–11

Molecular analysis of clonality in Kaposi's sarcoma. Delabesse E, et al. **J Clin Pathol** 1997 Aug;50(8):664–8

Clonality in Kaposi's sarcoma [letter; comment] Diaz–Cano SJ, et al. **N Engl J Med** 1997 Aug 21;337(8):571–2. Comment on: N Engl J Med 1997 Apr 3;336(14):988–93.

Clonality in Kaposi's sarcoma [letter; comment] Gill P, et al. **N Engl J Med** 1997 Aug 21;337(8):570–1; discussion 571–2. Comment on: N Engl J Med 1997 Apr 3;336(14):988–93.

Monoclonal origin of multicentric Kaposi's sarcoma lesions [see comments] Rabkin CS, et al. **N Engl J Med** 1997 Apr 3;336(14):988–93. Comment in: N Engl J Med 1997 Aug 21;337(8):570–1; discussion 571–2. Comment in: N Engl J Med 1997 Aug 21;337(8):571–2.

A Bcl–2 homolog encoded by Kaposi sarcoma–associated virus, human herpesvirus 8, inhibits apoptosis but does not heterodimerize with Bax or Bak. Cheng EH, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):690–4

Vascular endothelial growth factor/vascular permeability factor is an autocrine growth factor for AIDS–Kaposi sarcoma. Masood R, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):979–84

IMMUNOLOGY

Human herpesvirus 8 in classic Kaposi sarcoma. Kemény L, et al. **Acta Microbiol Immunol Hung** 1996;43(4):391–5

The sex ratio of AIDS–associated Kaposi's sarcoma does not provide evidence that sex hormones play a role in pathogenesis [letter] Grulich AE, et al. **AIDS** 1996 Nov; 10(13):1595–6

Interleukin 6 and AIDS–associated Kaposi's sarcoma: a nested case control study within the Multicenter AIDS Cohort Study. Dourado I, et al. **AIDS Res Hum Retroviruses** 1997 Jun 10;13(9):781–8

Analysis of clonal antigen receptor gene rearrangements in T–cells involved with Kaposi's sarcoma. Alaibac M, et al. **Anticancer Res** 1997 Mar–Apr;17(2A):1205–7

Specific pattern of circulating endothelial adhesion molecules in HIV–associated Kaposi's sarcoma. Becker K, et al. **Int Arch Allergy Immunol** 1997 Aug;113(4):512–5

Macrophages and vascular adhesion molecules in oral Kaposi's sarcoma. MacPhail LA, et al. **J Cutan Pathol** 1996 Oct;23(5):464–72

Kaposi's sarcoma associated with lung cancer and immunosuppression. Kato N, et al. **J Dermatol** 1996 Aug; 23(8):564–71

Detection of antibodies against viral capsid proteins of human herpesvirus 8 in AIDS–associated Kaposi's sarcoma. André S, et al. **J Mol Med** 1997 Feb;75(2):145–52

The spectrum of African Kaposi's sarcoma: is it consequential upon diverse immunological responses? Matondo P, et al. **Scand J Infect Dis** 1996;28(3):225–30 (51 ref.)

METABOLISM

Lack of association of low testosterone with HIV–associated Kaposi's sarcoma [letter; comment] Falutz J. **AIDS** 1996 Jun;10(7):794–5. Comment on: AIDS 1995 Nov;9(11):1295–6.

Induction of apoptosis in Kaposi's sarcoma spindle cell cultures by the subunits of human chorionic gonadotropin. Lang ME, et al. **AIDS** 1997 Sep;11(11):1333–40

Low molecular weight components but not dimeric HCG inhibit growth and down–regulate AP–1 transcription factor in Kaposi's sarcoma cells. Kachra Z, et al. **Endocrinology** 1997 Sep;138(9):4038–41

Expression of adhesion molecules in endemic and epidemic Kaposi's sarcoma. Kaaya EE, et al. **Histopathology** 1996 Oct;29(4):337–46

The soluble form of the IL–6 receptor (sIL–6R alpha) is a potent growth factor for AIDS–associated Kaposi's sarcoma (KS) cells; the soluble form of gp130 is antagonistic for sIL–6R alpha–induced AIDS–KS cell growth. Murakami–Mori K, et al. **Int Immunol** 1996 Apr; 8(4):595–602

Cytokine signaling through the novel tyrosine kinase RAFTK in Kaposi's sarcoma cells. Liu ZY, et al. **J Clin Invest** 1997 Apr 1;99(7):1798–804

Doxorubicin encapsulated in liposomes containing surface–bound polyethylene glycol: pharmacokinetics, tumor localization, and safety in patients with AIDS–related Kaposi's sarcoma. Northfelt DW, et al. **J Clin Pharmacol** 1996 Jan;36(1):55–63

Enhancement of gp130–mediated tyrosine phosphorylation of STAT3 and its DNA–binding activity in dexamethasone–treated AIDS–associated Kaposi's sarcoma cells: selective synergy between dexamethasone and gp130–related growth factors in Kaposi's sarcoma cell proliferation. Murakami–Mori K, et al. **J Immunol** 1997 Jun 1;158(11):5518–26

Expression of interleukin–6 receptors and NF–kappa B in AIDS–related Kaposi sarcoma cell strains. Bailer RT, et al. **Lymphology** 1997 Jun;30(2):63–76

Interleukin–4 receptor expression on AIDS–associated Kaposi's sarcoma cells and their targeting by a chimeric protein comprised of circularly permuted interleukin–4 and Pseudomonas exotoxin. Husain SR, et al. **Mol Med** 1997 May;3(5):327–38

Interleukin 1 induces an autocrine loop hepatocyte growth factor/c–Met in murine Kaposi–like spindle cells. Maier J, et al. **Oncogene** 1996 Sep 5;13(5):1009–15

MICROBIOLOGY

Cell–homologous genes in the Kaposi's sarcoma–associated rhadinovirus human herpesvirus 8: determinants of its pathogenicity? Neipel F, et al. **J Virol** 1997 Jun; 71(6):4187–92 (66 ref.)

MORTALITY

Survival of European patients with Kaposi's sarcoma as AIDS–defining condition during the first decade of AIDS. AIDS in Europe Study Group. Hermans P, et al. **AIDS** 1997 Mar 15;11(4):525–31

Survival of classic Kaposi's sarcoma and risk of second cancer. Franceschi S, et al. **Br J Cancer** 1996 Dec; 74(11):1812–4

Survival of AIDS patients according to type of AIDS–defining event. The AIDS in Europe Study Group. Mocroft AJ, et al. **Int J Epidemiol** 1997 Apr;26(2):400–7

PATHOLOGY

Spindle cells isolated from Kaposi's sarcoma–like lesions of BKV/tat–transgenic mice co–express markers of different cell types. Cavallaro U, et al. **AIDS** 1996 Sep;10(11):1211–9

Bullous lesions in Kaposi's sarcoma: case report. Borroni G, et al. **Am J Dermatopathol** 1997 Aug;19(4):379–83

Lymphangioma–like variant of Kaposi's sarcoma: clinicopathologic study of seven cases with review of the literature. Cossu S, et al. **Am J Dermatopathol** 1997 Feb; 19(1):16–22 (25 ref.)

Consensus–interferon and platelet–derived growth factor adversely regulate proliferation and migration of Kaposi's sarcoma cells by control of c–myc expression. Köster R, et al. **Am J Pathol** 1996 Dec;149(6):1871–85

Kaposi's sarcoma–associated herpesvirus and human herpesvirus 8 (KSHV/HHV8)–associated lymphoma of the bowel. Report of two cases in HIV–positive men with secondary effusion lymphomas. DePond W, et al. **Am J Surg Pathol** 1997 Jun;21(6):719–24

Kaposi's sarcoma of the larynx. Schiff NF, et al. **Ann Otol Rhinol Laryngol** 1997 Jul;106(7 Pt 1):563–7 (18 ref.)

Characterization of in vitro culture of HIV–negative Kaposi's sarcoma–derived cells. In vitro responses to alfa interferon. Lebbé C, et al. **Arch Dermatol Res** 1997 Jun;289(7):421–8

Glucocorticoids induce Kaposi's sarcoma cell proliferation through the regulation of transforming growth factor–beta. Cai J, et al. **Blood** 1997 Mar 1;89(5):1491–500

Kaposi's sarcoma in the cerebellum of a patient with AIDS. Büttner A, et al. **Clin Neuropathol** 1997 Jul–Aug; 16(4):185–9

Oral pathology of acquired immunodeficiency syndrome and oro–facial Kaposi's sarcoma. Reichart PA. **Curr Top Pathol** 1996;90:97–123 (43 ref.)

Anaplastic progression of classic Kaposi's sarcoma. Cerimele D, et al. **Dermatology** 1997;194(3):287–9

Low molecular weight components but not dimeric HCG inhibit growth and down–regulate AP–1 transcription factor in Kaposi's sarcoma cells. Kachra Z, et al. **Endocrinology** 1997 Sep;138(9):4038–41

Kaposi's sarcoma diagnosed in the Department of Pathology, Addis Ababa University Medical Faculty: a 15 years retrospective review of biopsy results 1981–1994. Getachew A, et al. **Ethiop Med J** 1997 Jan;35(1):53–6

Clinical presentation and natural history of AIDS–-related Kaposi's sarcoma. Dezube BJ. **Hematol Oncol Clin North Am** 1996 Oct;10(5):1023–9 (31 ref.)

Pathogenesis of AIDS–-related Kaposi's sarcoma. Evidence of a viral etiology. Miles SA. **Hematol Oncol Clin North Am** 1996 Oct;10(5):1011–21 (80 ref.)

Kaposiform haemangioendothelioma associated with Kasabach–Merritt syndrome. Fukunaga M, et al. **Histopathology** 1996 Mar;28(3):281–4

AIDS–related Kaposi's sarcoma. van den Brink MR, et al. **J Clin Oncol** 1997 Mar;15(3):1283–4

Vascular endothelial growth factor is a potent angiogenic factor in AIDS–associated Kaposi's sarcoma–derived spindle cells. Nakamura S, et al. **J Immunol** 1997 May 15; 158(10):4992–5001

Retinoid antagonism of NF–IL6: insight into the mechanism of antiproliferative effects of retinoids in Kaposi's sarcoma. Nagpal S, et al. **Mol Cell Biol** 1997 Jul;17(7):4159–68

Kaposi's sarcoma: advances in tumor biology and pharmacotherapy. Sung JC, et al. **Pharmacotherapy** 1997 Jul–Aug;17(4):670–83 (103 ref.)

CD68+ cells of monocyte/macrophage lineage in the environment of AIDS–associated and classic–sporadic Kaposi sarcoma are singly or doubly infected with human herpesviruses 7 and 6B. Kempf W, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7600–5

Kaposi's sarcoma–associated herpesvirus: a lymphotropic human herpesvirus associated with Kaposi's sarcoma, primary effusion lymphoma, and multicentric Castleman's disease. Cesarman E, et al. **Semin Diagn Pathol** 1997 Feb; 14(1):54–66 (153 ref.)

Absence of Kaposi's sarcoma–associated human herpes virus 8 in transplantation–related tumors other than Kaposi's sarcoma. Cathomas G, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):836–7

[Detection of human herpesvirus 8 (HHV 8) in Kaposi sarcomas of the gastrointestinal tract] Cathomas G, et al. **Schweiz Med Wochenschr** 1997 Jun 7;127(23):988–91 (Eng. Abstr.) **(Ger)**

[Detection of herpes virus–like DNA in various forms of Kaposi's sarcoma but not in other mesenchymal tumors or inflammatory changes in skin] Cathomas G, et al. **Verh Dtsch Ges Pathol** 1996;80:318–21 (Eng. Abstr.) **(Ger)**

[Morphologic characteristics of epidermal cells in HIV infection] Barkhina TG, et al. **Arkh Patol** 1996 Sep–Oct; 58(5):64–7 (Eng. Abstr.) **(Rus)**

[A case of Kaposi's sarcoma with involvement of the facial skin and the mucosa of the right cheek] Popov NV, et al. **Stomatologiia (Mosk)** 1996;75(3):30–2 (16 ref.) (Eng. Abstr.) **(Rus)**

[A case of Kaposi's sarcoma of the eye in an AIDS patient] Barshtein IuA, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):172–4 (Eng. Abstr.) **(Ukr)**

PREVENTION & CONTROL

Anti–herpesvirus treatment and risk of Kaposi's sarcoma in HIV infection. Royal Free/Chelsea and Westminster Hospitals Collaborative Group. Mocroft A, et al. **AIDS** 1996 Sep;10(10):1101–5

Some antivirals may lower Kaposi's sarcoma risk [news] Larkin M. **Lancet** 1996 Sep 21;348(9030):812

RADIOGRAPHY

CT appearances of intrathoracic Kaposi's sarcoma in patients with AIDS. Traill ZC, et al. **Br J Radiol** 1996 Dec; 69(828):1104–7

AIDS–related Kaposi sarcoma involving the tarsal bones. Nguyen C, et al. **Skeletal Radiol** 1996 Jan;25(1):100–2 (9 ref.)

[Bone lesions due to endemic African Kaposi sarcoma: a case report] Simon F, et al. **Med Trop (Mars)** 1997;57(2):174–6 (Eng. Abstr.) **(Fre)**

[AIDS–associated illnesses in radiologic diagnosis: overview and differential diagnosis] Rademaker J, et al. **Aktuelle Radiol** 1997 Mar;7(2):69–73 (30 ref.) **(Ger)**

[CT and supplementary HR–CT of Kaposi's sarcoma of the pulmonary parenchyma–-the morphology of the findings

and the diagnostic value] Zeschnigk T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):8–13 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

HIV–associated cutaneous Kaposi's sarcoma––palliative local treatment by radiotherapy. Saran FH, et al. **Acta Oncol** 1997;36(1):55–8

Kaposi sarcoma unrelated to human immunodeficiency virus infection: long–term results of radiotherapy [letter; comment] González–Acosta P, et al. **Arch Dermatol** 1997 Jan;133(1):107–8. Comment on: Arch Dermatol 1996 Mar;132(3):285–90.

Kaposi's sarcoma after allogeneic bone marrow transplantation. Erer B, et al. **Bone Marrow Transplant** 1997 Mar;19(6):629–31

Radiation therapy in AIDS–related cutaneous Kaposi's sarcoma. Conill C, et al. **Dermatology** 1997;195(1):40–2

The role of radiation therapy in the management of HIV–related Kaposi's sarcoma. Swift PS. **Hematol Oncol Clin North Am** 1996 Oct;10(5):1069–80 (71 ref.)

Radiation treatment of oral epidemic Kaposi's sarcoma lesions: potential adverse effects. Fogel SC, et al. **J Assoc Nurses AIDS Care** 1996 Jul–Aug;7(4):25–30 (23 ref.)

Kaposi's sarcoma limited to penis treated with cobalt–60 radiotherapy. Ruszczak Z, et al. **J Med** 1996;27(3–4):211–20

Whole–limb irradiation of the lower calf using a six–field electron technique. Wooden KK, et al. **Med Dosim** 1996 Winter;21(4):211–8

Radiation therapy for malignancies in the setting of HIV disease. Swift PS. **Oncology (Huntingt)** 1997 May; 11(5):683–94; discussion 694, 701–2 (82 ref.)

High dose rate Microselectron moulds for Kaposi sarcoma of the palate. Syndikus I, et al. **Radiother Oncol** 1997 Feb; 42(2):167–70

[Bullous skin reactions after soft roentgen radiotherapy of HIV–associated Kaposi sarcomas] Thoma–Greber E, et al. **Hautarzt** 1997 May;48(5):339–42 (Eng. Abstr.) **(Ger)**

[Radiotherapy in Kaposi's sarcoma: a complex palliative treatment (editorial)] Calvo Manuel FA. **Rev Clin Esp** 1996 Dec;196(12):803–5 **(Spa)**

[Skin lesions in epidemic Kaposi's sarcoma (AIDS): local control assessment and esthetic results of a schedule of superficial radiotherapy] Pinazo J, et al. **Rev Clin Esp** 1996 Dec;196(12):806–10 (Eng. Abstr.) **(Spa)**

REHABILITATION

Transtibial prosthesis for a patient with Kaposi's sarcoma lesions on the residual limb. Ethans KD, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):106–8

SECRETION

AIDS–associated Kaposi's sarcoma cells secrete a neurotrophic growth factor(s). Weeks BS, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):408–12

SURGERY

Acroangiodermatitis (pseudo–Kaposi's sarcoma) associated with Klippel–Trénaunay syndrome. Lyle WG, et al. **Ann Plast Surg** 1996 Dec;37(6):654–6

Transtibial prosthesis for a patient with Kaposi's sarcoma lesions on the residual limb. Ethans KD, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):106–8

Extracorporeal bypassing of a partial obstruction of the afferent loop by percutaneous endoscopic jejunostomy and gastrostomy. Caca K, et al. **Endoscopy** 1997 Feb; 29(2):142–3

Subglottic stenosis in an HIV positive patient: an exceptional form of clinical presentation in Kaposi's sarcoma. Belda J, et al. **Eur J Cardiothorac Surg** 1997 Jan;11(1):191–3

Nodular Kaposi's sarcoma as a presenting feature of HIV infection. González–Martínez R, et al. **Int J Dermatol** 1996 Nov;35(11):813–5

Laparoscopically assisted sigmoid colectomy in human immunodeficiency virus (HIV) patients: a good indication for laparoscopic surgery. Oliveira L, et al. **Surg Laparosc Endosc** 1996 Oct;6(5):414–6

THERAPY

Non–AIDS–related primary intraosseous Kaposi's sarcoma: case report and literature review. Chen HH, et al. **Acta Oncol** 1997;36(2):224–7 (14 ref.)

Interleukin–4 in the treatment of AIDS–related Kaposi's sarcoma. Tulpule A, et al. **Ann Oncol** 1997 Jan;8(1):79–83

Overview of the management of AIDS–related Kaposi's sarcoma. Morris AK, et al. **Ann Pharmacother** 1996 Oct; 30(10):1150–63 (81 ref.)

Targeted gene delivery to Kaposi's sarcoma cells via the fibroblast growth factor receptor. Goldman CK, et al. **Cancer Res** 1997 Apr 15;57(8):1447–51

Two cases of Kaposi's sarcoma in renal and liver transplant recipients treated with interferon. Halmos O, et al. **Clin Transplant** 1996 Aug;10(4):374–8

Adoptive CD8+ T–cell immunotherapy of AIDS patients with Kaposi's sarcoma. Patarca R, et al. **Crit Rev Oncog** 1995;6(3–6):179–234 (685 ref.)

Epidemic and non–epidemic Kaposi's sarcoma: diagnosis, staging and treatment. Iwamasa T, et al. **Crit Rev Oncol Hematol** 1996 Nov;24(3):153–63 (50 ref.)

Advances in Kaposi's sarcoma. Myskowski PL, et al. **Dermatol Clin** 1997 Jan;15(1):177–88 (122 ref.)

AIDS–related Kaposi's sarcoma. A template for the translation of molecular pathogenesis into targeted therapeutic approaches. Karp JE, et al. **Hematol Oncol Clin North Am** 1996 Oct;10(5):1031–49 (132 ref.)

Clinical Trials Referral Resource. Clinical trials in AIDS related malignancies. Feigal EG, et al. **Oncology (Huntingt)** 1997 Mar;11(3):337–8, 341

[Interferon–alpha–induced psoriasis vulgaris] Wölfer LU, et al. **Hautarzt** 1996 Feb;47(2):124–8 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Ultrastructural study of Kaposi's sarcoma. Bosman C, et al. **Pathologica** 1996 Feb;88(1):8–17

VIROLOGY

Human herpesvirus 8 in classic Kaposi sarcoma. Kemény L, et al. **Acta Microbiol Immunol Hung** 1996;43(4):391–5

Distribution of human herpesvirus–8 sequences throughout the spectrum of AIDS–related neoplasia. Gaidano G, et al. **AIDS** 1996 Aug;10(9):941–9

Kaposi's sarcoma: relationship to a novel herpesvirus and advances in therapy. Lee FC, et al. **AIDS** 1996;10 Suppl A:S173–9 (71 ref.)

Kaposi's sarcoma–associated herpesvirus infection prior to onset of Kaposi's sarcoma. Moore PS, et al. **AIDS** 1996 Feb;10(2):175–80

Visualization of human herpesvirus type 8 in Kaposi's sarcoma by light and transmission electron microscopy. Orenstein JM, et al. **AIDS** 1997 Apr;11(5):F35–45

Corrected prevalence of Kaposi's sarcoma (KS)–associated herpesvirus infection prior to onset of KS [letter] Parry JP, et al. **AIDS** 1997 Jan;11(1):127–8

Potential heterosexual Kaposi's sarcoma–associated herpesvirus transmission in a couple with HIV–induced immunodepression and with Kaposi's sarcoma and multicentric Castleman's disease [letter] Tirelli U, et al. **AIDS** 1996 Sep;10(11):1291–2

Detection of the herpesvirus–like DNA sequences in matched specimens of semen and blood from patients with AIDS–related Kaposi's sarcoma by polymerase chain reaction in situ hybridization. Huang YQ, et al. **Am J Pathol** 1997 Jan;150(1):147–53

Detection of Kaposi's sarcoma–associated herpesvirus–like DNA sequence in angiosarcoma. McDonagh DP, et al. **Am J Pathol** 1996 Oct;149(4):1363–8

Short report: herpes–like DNA sequences in African–endemic and acquired immunodeficiency syndrome–associated Kaposi's sarcoma. Eto H, et al. **Am J Trop Med Hyg** 1996 Oct;55(4):405–6

Body cavity–based malignant lymphoma containing Kaposi sarcoma–associated herpesvirus in an HIV–negative man with previous Kaposi sarcoma. Strauchen JA, et al. **Ann Intern Med** 1996 Nov 15;125(10):822–5

The Kaposi's sarcoma–associated herpesvirus (human herpesvirus–8) in Kaposi's sarcoma, malignant lymphoma, and other diseases. Knowles DM, et al. **Ann Oncol** 1997; 8 Suppl 2:123–9 (57 ref.)

Role of human herpesvirus 8 in Kaposi sarcoma unclear [letter; comment] Drago F, et al. **Arch Dermatol** 1997 Aug; 133(8):1050–1. Comment on: Arch Dermatol 1997 Jan;133(1):25–30.

Kaposi sarcoma–associated herpesvirus/human herpesvirus type 8 and Epstein–Barr virus in iatrogenic Kaposi sarcoma [letter] Henghold WB 2nd, et al. **Arch Dermatol** 1997 Jan; 133(1):109–11

Detection of human herpesvirus 8 and human T–cell lymphotropic virus type 1 sequences in Kaposi sarcoma [see comments] Lebbé C, et al. **Arch Dermatol** 1997 Jan; 133(1):25–30. Comment in: Arch Dermatol 1997 Jan;133(1):83–5. Comment in: Arch Dermatol 1997 Aug;133(8):1050–1.

Kaposi sarcoma, Kaposi sarcoma–associated herpesvirus, and human T–cell lymphotropic virus type 1. What is the current evidence for causality? [editorial; comment] Warmuth I, et al. **Arch Dermatol** 1997 Jan;133(1):83–5. Comment on: Arch Dermatol 1997 Jan;133(1):25–30.

Kaposi's sarcoma: evaluation of the role of human papillomaviruses. A study using the high sensitivity hot–start polymerase chain reaction detection method and a review of the literature. Noel JC, et al. **Arch Dermatol Res** 1996 Nov;288(12):786–8

Detection of herpesvirus–like DNA in HIV–associated and classical Kaposi's sarcoma. Simon M, et al. **Arch Dermatol Res** 1996 Jun;288(7):402–4

Latent Epstein–Barr virus infection demonstrated in low–grade leiomyosarcomas of adults with acquired immunodeficiency syndrome, but not in adjacent Kaposi's lesion or smooth muscle tumors in immunocompetent patients. Boman F, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):834–8

Viruses in the pathogenesis of Kaposi's sarcoma––a review. Kempf W, et al. **Biochem Mol Med** 1996 Jun;58(1):1–12 (116 ref.)

Is Kaposi sarcoma caused by new herpesvirus? [letter] Haverkos HW. **Biomed Pharmacother** 1996;50(6–7):318–9 (15 ref.)

Primary effusion lymphoma in women: report of two cases of Kaposi's sarcoma herpes virus–associated effusion–based lymphoma in human immunodeficiency virus–negative women. Said JW, et al. **Blood** 1996 Oct 15;88(8):3124–8

Herpesvirus–like DNA sequences in classic Kaposi's sarcoma and angiosarcoma in Japan [letter] Koizumi H, et al. **Br J Dermatol** 1996 Dec;135(6):1009–10

Human herpesvirus–8/Kaposi's sarcoma–associated herpesvirus in organ transplant patients with immunosuppression. Alkan S, et al. **Br J Haematol** 1997 Feb;96(2):412–4

Kaposi's sarcoma–associated herpesvirus DNA sequences in AIDS–related and AIDS–unrelated lymphomatous effusions. Carbone A, et al. **Br J Haematol** 1996 Sep; 94(3):533–43

Human herpesvirus 8 in Kaposi's sarcoma of an HIV–negative Japanese woman with adult T–cell leukemia [letter] Daibata M, et al. **Br J Haematol** 1997 May; 97(2):507–8

Absence of Kaposi's sarcoma associated herpesvirus–like DNA sequences (KSHV) in HIV–negative multicentric Castleman's disease complicated by KSHV–positive Kaposi's sarcoma [letter] Kwong YL, et al. **Br J Haematol** 1997 Mar;96(4):881–2

Kaposi's sarcoma herpesvirus–like DNA sequences in the saliva of individuals infected with human immunodeficiency virus. Boldogh I, et al. **Clin Infect Dis** 1996 Aug;23(2):406–7

Kaposi's sarcoma–associated herpesvirus in Kaposi's sarcoma occurring in immunosuppressed renal transplant recipients. Kedda MA, et al. **Clin Transplant** 1996 Oct;10(5):429–31

Demonstration of herpes virus 8 in a lymphangioma–like Kaposi's sarcoma occurring in a non–immunosuppressed patient [letter] Noël JC, et al. **Dermatology** 1997;194(1):90–1

Kaposi's sarcoma and herpesvirus 8: a word of caution [letter] Simonart T, et al. **Dermatology** 1996;193(3):272

Polyethylene glycol–liposomal doxorubicin. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in the management of AIDS–related Kaposi's sarcoma. Coukell AJ, et al. **Drugs** 1997 Mar; 53(3):520–38 (68 ref.)

Potential therapeutic efficacy of Ukrain (NSC 631570) in AIDS patients with Kaposi's sarcoma. Voltchek IV, et al. **Drugs Exp Clin Res** 1996;22(3–5):283–6

HIV–1 and Kaposi's sarcoma. Ensoli B, et al. **Eur J Cancer Prev** 1996 Oct;5(5):410–2 (16 ref.)

Herpes virus (KSHV) associated Kaposi sarcoma in a 3–year–old child with non–HIV–induced immunodeficiency. Kusenbach G, et al. **Eur J Pediatr** 1997 Jun;156(6):440–3

Kaposi's Sarcoma (KS)–associated herpesvirus and its role in KS. Chang Y, et al. **Infect Agents Dis** 1996 Oct; 5(4):215–22 (71 ref.)

Expression of HHV–8 latency–associated T0.7 RNA in spindle cells and endothelial cells of AIDS–associated, classical and African Kaposi's sarcoma. Stürzl M, et al. **Int J Cancer** 1997 Jul 3;72(1):68–71

Absence of human herpesvirus 8 DNA sequences in neoplastic Kaposi's sarcoma cell lines. Flamand L, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Oct 1;13(2):194–7

In situ polymerase chain reaction–based localization studies support role of human herpesvirus–8 as the cause of two AIDS–related neoplasms: Kaposi's sarcoma and body cavity lymphoma. Foreman KE, et al. **J Clin Invest** 1997 Jun 15;99(12):2971–8

Sensitivity of Kaposi's sarcoma–associated herpesvirus replication to antiviral drugs. Implications for potential therapy. Kedes DH, et al. **J Clin Invest** 1997 May 1; 99(9):2082–6

Prevalence of human herpesvirus 8 DNA sequences in several patient populations. Marchioli CC, et al. **J Clin Microbiol** 1996 Oct;34(10):2635–8

AIDS–related Kaposi's sarcoma: prospective validation of the AIDS Clinical Trials Group staging classification. AIDS Clinical Trials Group Oncology Committee. Krown SE, et al. **J Clin Oncol** 1997 Sep;15(9):3085–92

Efficacy of pegylated–liposomal doxorubicin in the treatment of AIDS–related Kaposi's sarcoma after failure of standard chemotherapy. Northfelt DW, et al. **J Clin Oncol** 1997 Feb; 15(2):653–9

Detection of herpesvirus–like DNA by nested PCR on archival skin biopsy specimens of various forms of Kaposi sarcoma. Cathomas G, et al. **J Clin Pathol** 1996 Aug; 49(8):631–3

Search for Kaposi's sarcoma–associated virus DNA in hemangioproliferative disorders and cutaneous malignant lymphoma. Serfling U, et al. **J Cutan Pathol** 1997 May; 24(5):298–304

Infection with AIDS–related herpesviruses in human immunodeficiency virus–negative infants and endemic childhood Kaposi's sarcoma in Africa. Kasolo FC, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):847–55

Detection of serum antibodies to a Kaposi's sarcoma–associated herpesvirus–specific peptide. Davis DA, et al. **J Infect Dis** 1997 May;175(5):1071–9

Absence of detectable human herpesvirus 8 in the semen of human immunodeficiency virus–infected men without Kaposi's sarcoma. Diamond C, et al. **J Infect Dis** 1997 Sep; 176(3):775–7

Human herpesvirus type 8 DNA sequences in cell–free plasma and mononuclear cells of Kaposi's sarcoma patients [see comments] Harrington WJ Jr, et al. **J Infect Dis** 1996

Nov;174(5):1101–5. Comment in: J Infect Dis 1997 Aug;176(2):541.

Frequent detection of Kaposi's sarcoma–associated herpesvirus (human herpesvirus 8) DNA in saliva of human immunodeficiency virus–infected men: clinical and immunologic correlates. Koelle DM, et al. **J Infect Dis** 1997 Jul;176(1):94–102

High incidence of Kaposi's sarcoma–associated herpesvirus and Epstein–Barr virus in tumor lesions and peripheral blood mononuclear cells from patients with Kaposi's sarcoma in Uganda. Purvis SF, et al. **J Infect Dis** 1997 Apr;175(4):947–50

Human herpesvirus 8 DNA sequences in CD8+ T cells [letter; comment] Sirianni MC, et al. **J Infect Dis** 1997 Aug; 176(2):541. Comment on: J Infect Dis 1996 Nov;174(5):1101–5.

Detection of human herpesvirus 8 DNA in Kaposi's sarcoma lesions and peripheral blood of human immunodeficiency virus–positive patients and correlation with serologic measurements. Smith MS, et al. **J Infect Dis** 1997 Jul; 176(1):84–93

Continuous infusion etoposide in advanced AIDS–related kaposi sarcoma. Remick SC, et al. **J Infus Chemother** 1996 Spring;6(2):92–6

Detection of human herpes virus 8 DNA and sequence polymorphism in classical, epidemic, and iatrogenic Kaposi's sarcoma in South Africa. Engelbrecht S, et al. **J Med Virol** 1997 Jun;52(2):168–72

Human herpesvirus–8: detection of novel herpesvirus–like DNA sequences in Kaposi's sarcoma and other lesions. Memar OM, et al. **J Mol Med** 1995 Dec;73(12):603–9 (49 ref.)

Kaposi's sarcoma: is the hunt for the culprit over now? Schatz O, et al. **J Mol Med** 1997 Jan;75(1):28–34 (58 ref.)

Monocytes in Kaposi's sarcoma lesions are productively infected by human herpesvirus 8. Blasig C, et al. **J Virol** 1997 Oct;71(10):7963–8

Kaposi's sarcoma–associated herpesvirus contains G protein–coupled receptor and cyclin D homologs which are expressed in Kaposi's sarcoma and malignant lymphoma. Cesarman E, et al. **J Virol** 1996 Nov; 70(11):8218–23

Kaposi's sarcoma–associated herpesvirus encodes a functional cyclin. Li M, et al. **J Virol** 1997 Mar;71(3):1984–91

Identification, expression, and immunogenicity of Kaposi's sarcoma–associated herpesvirus–encoded small viral capsid antigen. Lin SF, et al. **J Virol** 1997 Apr;71(4):3069–76

Human herpesvirus 8 strain variability in clinical conditions other than Kaposi's sarcoma [letter] Luppi M, et al. **J Virol** 1997 Oct;71(10):8082–3

Selective switch between latency and lytic replication of Kaposi's sarcoma herpesvirus and Epstein–Barr virus in dually infected body cavity lymphoma cells. Miller G, et al. **J Virol** 1997 Jan;71(1):314–24

A single 13–kilobase divergent locus in the Kaposi sarcoma–associated herpesvirus (human herpesvirus 8) genome contains nine open reading frames that are homologous to or related to cellular proteins. Nicholas J, et al. **J Virol** 1997 Mar;71(3):1963–74

The size and conformation of Kaposi's sarcoma–associated herpesvirus (human herpesvirus 8) DNA in infected cells and virions. Renne R, et al. **J Virol** 1996 Nov;70(11):8151–4

Kaposi's sarcoma–associated herpesvirus gene expression in endothelial (spindle) tumor cells. Staskus KA, et al. **J Virol** 1997 Jan;71(1):715–9

Transmissible Kaposi's sarcoma–associated herpesvirus (human herpesvirus 8) in saliva of men with a history of Kaposi's sarcoma. Vieira J, et al. **J Virol** 1997 Sep; 71(9):7083–7

Strain variability among Kaposi sarcoma–associated herpesvirus (human herpesvirus 8) genomes: evidence that a large cohort of United States AIDS patients may have been infected by a single common isolate. Zong JC, et al. **J Virol** 1997 Mar;71(3):2505–11

Development of a quantitative competitive polymerase chain reaction for human herpesvirus 8. Lock MJ, et al. **J Virol Methods** 1997 Feb;64(1):19–26

The prevalence of serum antibody to human herpesvirus 8 (Kaposi sarcoma–associated herpesvirus) among HIV–seropositive and high–risk HIV–seronegative women. Kedes DH, et al. **JAMA** 1997 Feb 12;277(6):478–81

Antibodies to human herpesvirus type 8 in the general population and in Kaposi's sarcoma patients [see comments] Lennette ET, et al. **Lancet** 1996 Sep 28;348(9031):858–61 . Comment in: Lancet 1996 Dec 7;348(9041):1587–8.

Patterns of AIDS–related malignancies discussed at US meeting [news] Rowe PM. **Lancet** 1997 May 10; 349(9062):1372

Detection of human herpes virus type 8 DNA sequences as a valuable aid in the differential diagnosis of Kaposi's sarcoma. Maiorana A, et al. **Mod Pathol** 1997 Mar; 10(3):182–7

HHV8 and Kaposi's sarcoma: a time cohort study. Kennedy MM, et al. **Mol Pathol** 1997 Apr;50(2):96–100

Kaposi's sarcoma associated herpes virus (KSHV/HHV 8): epidemiology, molecular biology and tissue distribution. O'Leary JJ, et al. **Mol Pathol** 1997 Feb;50(1):4–8 (49 ref.)

Propagation of a human herpesvirus from AIDS–associated Kaposi's sarcoma [letter; comment] Blauvelt A, et al. **N Engl J Med** 1997 Jun 19;336(25):1837–9. Comment on: N Engl J Med 1997 Jan 16;336(3):163–71.

Absence of HHV–8 in prostate and semen [letter; comment] Corbellino M, et al. **N Engl J Med** 1996 Oct 17; 335(16):1237; discussion 1238–9. Comment on: N Engl J Med 1996 May 2;334(18):1168–72.

Propagation of a human herpesvirus from AIDS–associated Kaposi's sarcoma [see comments] Foreman KE, et al. **N Engl J Med** 1997 Jan 16;336(3):163–71. Comment in: N Engl J Med 1997 Jan 16;336(3):214–5. Comment in: N Engl J Med 1997 Jun 19;336(25):1837–9.

Propagating Kaposi's sarcoma–associated herpesvirus [editorial; comment] Mocarski ES Jr. **N Engl J Med** 1997 Jan 16;336(3):214–5. Comment on: N Engl J Med 1997 Jan 16;336(3):163–71.

Absence of HHV–8 in prostate and semen [letter; comment] Tasaka T, et al. **N Engl J Med** 1996 Oct 17;335(16):1237–8; discussion 1238–9. Comment on: N Engl J Med 1996 May 2;334(18):1168–72.

Pirated genes in Kaposi's sarcoma [news; comment] Murphy PM. **Nature** 1997 Jan 23;385(6614):296–7, 299. Comment on: Nature 1997 Jan 23;385(6614):347–50.

Isolation of new transmissible herpesvirus suggests additional therapeutic approaches for KS [news] **Oncology (Huntingt)** 1996 Mar;10(3):423–4

Kaposi's sarcoma–associated herpesvirus–like DNA sequences (KSHV/HHV–8) in oral AIDS–Kaposi's sarcoma: a PCR and clinicopathologic study. Flaitz CM, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):259–64

CD68+ cells of monocyte/macrophage lineage in the environment of AIDS–associated and classic–sporadic Kaposi sarcoma are singly or doubly infected with human herpesviruses 7 and 6B. Kempf W, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7600–5

Nucleotide sequence of the Kaposi sarcoma–associated herpesvirus (HHV8). Russo JJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14862–7

Polyadenylylated nuclear RNA encoded by Kaposi sarcoma–associated herpesvirus. Sun R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11883–8

KSHV sequences in biopsies and cultured spindle cells of epidemic, iatrogenic and Mediterranean forms of Kaposi's sarcoma. Aluigi MG, et al. **Res Virol** 1996 Sep–Oct; 147(5):267–75

Occurrence of human herpes virus 8 in Kaposi's sarcoma and other tumours in South Africa [letter] Sitas F, et al. **S Afr Med J** 1997 Aug;87(8):1020, 1022

Human herpes virus–8 DNA in bronchoalveolar lavage samples from patients with AIDS–associated pulmonary Kaposi's sarcoma. Benfield TL, et al. **Scand J Infect Dis** 1997;29(1):13–6

Absence of Kaposi's sarcoma–associated human herpes virus 8 in transplantation–related tumors other than Kaposi's sarcoma. Cathomas G, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):836–7

Transplantation–associated malignancies: restriction of human herpes virus 8 to Kaposi's sarcoma. Cathomas G, et al. **Transplantation** 1997 Jul 15;64(1):175–8

Kaposi's sarcoma and HHV–8 [letter] Offermann MK. **Trends Microbiol** 1996 Nov;4(11):419

HHV–8: a new herpesvirus associated with Kaposi's sarcoma. Offermann MK. **Trends Microbiol** 1996 Oct;4(10):383–6 (51 ref.)

Phase II study of pentosan polysulfate (PPS) in patients with AIDS–related Kaposi's sarcoma. Schwartsmann G, et al. **Tumori** 1996 Jul–Aug;82(4):360–3

Characterization of a chemokine receptor–related gene in human herpesvirus 8 and its expression in Kaposi's sarcoma. Guo HG, et al. **Virology** 1997 Feb 17;228(2):371–8

Kaposi's sarcoma–associated herpesvirus (KSHV): a new viral pathogen associated with Kaposi's sarcoma, primary effusion lymphoma, and multicentric Castleman's disease. Said J. **West J Med** 1997 Jul;167(1):37–8

[Kaposi sarcoma and human herpes virus type 8: recent data] Camparo P, et al. **Med Trop (Mars)** 1996;56(3):231–7 (84 ref.) **(Fre)**

[Kaposi disease] Dupin N, et al. **Presse Med** 1997 Jun 14; 26(20):964–5 **(Fre)**

[The 8th human herpesvirus] Huraux JM, et al. **Presse Med** 1997 Jun 28;26(22):1058–62 (26 ref.) **(Fre)**

[Current aspects of Kaposi sarcoma virus (news)] **Schweiz Rundsch Med Prax** 1996 Sep 17;85(38):1189 **(Ger)**

[Detection of herpes virus–like DNA in various forms of Kaposi's sarcoma but not in other mesenchymal tumors or inflammatory changes in skin] Cathomas G, et al. **Verh Dtsch Ges Pathol** 1996;80:318–21 (Eng. Abstr.) **(Ger)**

[A new gamma–2 herpesvirus, defined as HHV8 or Kaposi's sarcoma herpes virus (KSHV), could be involved in the pathogenesis of Kaposi's sarcoma] Ruco LP. **Pathologica** 1996 Dec;88(6):525–6 **(Ita)**

[Is HVH–8 the etiologic agent for Kaposi's sarcoma? (letter; comment)] Aspíroz MC, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):569–70. Comment on: Enferm Infecc Microbiol Clin 1996 May;14(5):283–4. **(Spa)**

SARCOMA, LYMPHATIC see **LYMPHOMA, DIFFUSE**

SARCOMA, MAST-CELL

BLOOD

[Mast cells in the peripheral blood as a presenting form of malignant mastocytosis (letter)] García Erce J, et al. **Sangre (Barc)** 1997 Feb;42(1):89–90 **(Spa)**

CHEMISTRY

Expression of stem cell factor receptor (c–kit) by the malignant mast cells from spontaneous canine mast cell tumours. London CA, et al. **J Comp Pathol** 1996 Nov; 115(4):399–414

DRUG THERAPY

The effect of novel opioids on natural killer activity and tumor surveillance in vivo. Carr DJ, et al. **Adv Exp Med Biol** 1996;402:5–11

Modulation of immune effector cell cytolytic activity and tumour growth inhibition in vivo by Ukrain (NSC 631570). Liepins A, et al. **Drugs Exp Clin Res** 1996;22(3–5):103–13

A retroviral peptide encoded by mutated env p15E gene is recognized by specific CD8+ T lymphocytes on drug–treated murine mastocytoma P815. Belladonna ML, et al. **Int J Immunopharmacol** 1996 Oct;18(10):563–76

Photodynamic effect on the specific antitumor immune activity. Vonarx V, et al. **Int J Immunopharmacol** 1997 Feb;19(2):101–10

IMMUNOLOGY

Targeting an anti–viral CD8+ T cell response to a growing tumor facilitates its rejection. Böhm W, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):230–8

Priming of the antitumor response promotes efficacy of interleukin–2 therapy. Everse LA, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):221–9

The expression of mouse gene P1A in testis does not prevent safe induction of cytolytic T cells against a P1A–encoded tumor antigen. Uyttenhove C, et al. **Int J Cancer** 1997 Jan 27;70(3):349–56

A retroviral peptide encoded by mutated env p15E gene is recognized by specific CD8+ T lymphocytes on drug–treated murine mastocytoma P815. Belladonna ML, et al. **Int J Immunopharmacol** 1996 Oct;18(10):563–76

Photodynamic effect on the specific antitumor immune activity. Vonarx V, et al. **Int J Immunopharmacol** 1997 Feb;19(2):101–10

IL–2 gene delivery within an established murine tumor causes its regression without proliferation of preexisting antitumor–specific CTL. Levraud JP, et al. **J Immunol** 1997 Apr 1;158(7):3335–43

Involvement of altered B7 expression in dioxin immunotoxicity: B7 transfection restores the CTL but not the autoantibody response to the P815 mastocytoma. Prell RA, et al. **J Immunol** 1997 Mar 15;158(6):2695–703

B7–negative versus B7–positive P815 tumor: differential requirements for priming of an antitumor immune response in lymph nodes. Yang G, et al. **J Immunol** 1997 Jan 15; 158(2):851–8

METABOLISM

Mouse mastocytoma cells synthesize undersulfated heparin and chondroitin sulfate in the presence of brefeldin A. Uhlin–Hansen L, et al. **J Biol Chem** 1997 Feb 7; 272(6):3200–6

PATHOLOGY

Targeting an anti–viral CD8+ T cell response to a growing tumor facilitates its rejection. Böhm W, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):230–8

Growth of P511 mastocytoma cells in BALB/c mouse brain elicits CTL response without tumor elimination: a new tumor model for regional central nervous system immunity. Gordon LB, et al. **J Immunol** 1997 Sep 1;159(5):2399–408

The relationship between adherence and liver metastatic ability in murine mastocytoma cell line. Sun R, et al. **Tohoku J Exp Med** 1996 Apr;178(4):413–24

[Association of bone marrow mastocytosis with extremely immature extramedullary mast cell sarcoma] Sotlar K, et al. **Pathologe** 1997 May;18(3):252–6 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Successful and unsuccessful approaches to imaging carcinoids: comparison of a radiolabelled tryptophan hydroxylase inhibitor with a tracer of biogenic amine uptake and storage, and a somatostatin analogue. Macfarlane D, et al. **Eur J Nucl Med** 1996 Feb;23(2):131–40

SECONDARY

Differential production of interleukin–6 and its close relation to liver metastasis in clones from murine P815 mastocytoma. Hojo H, et al. **Cancer Lett** 1996 Nov 12; 108(1):55–9

THERAPY

Anti–estrogens potentiate the immunotherapy of the P815 murine mastocytoma by cytotoxic T lymphocytes. Nagy E, et al. **Anticancer Res** 1997 Mar–Apr;17(2A):1083–8

Priming of the antitumor response promotes efficacy of

SARCOMA, MAST-CELL

interleukin-2 therapy. Everse LA, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):221-9

IL-2 gene delivery within an established murine tumor causes its regression without proliferation of preexisting antitumor-specific CTL. Levraud JP, et al. **J Immunol** 1997 Apr 1;158(7):3335-43

Immunotherapy of established murine tumors with large multivalent immunogen and cyclophosphamide. Mescher MF, et al. **J Immunother Emphasis Tumor Immunol** 1996 Mar;19(2):102-12

Monoclonal antibodies against the 4-1BB T-cell activation molecule eradicate established tumors. Melero I, et al. **Nat Med** 1997 Jun;3(6):682-5

VETERINARY

Primary intraosseous mast cell tumour of the third phalanx in a quarter horse. Ritmeester AM, et al. **Equine Vet J** 1997 Mar;29(2):151-2

Radiotherapy of incompletely resected, moderately differentiated mast cell tumors in the dog: 37 cases (1989-1993). Frimberger AE, et al. **J Am Anim Hosp Assoc** 1997 Jul-Aug;33(4):320-4

Frequency of argyrophilic nucleolar organizer regions in fine-needle aspirates and biopsy specimens from mast cell tumors in dogs. Kravis LD, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1418-20

Expression of stem cell factor receptor (c-kit) by the malignant mast cells from spontaneous canine mast cell tumours. London CA, et al. **J Comp Pathol** 1996 Nov; 115(4):399-414

What is your diagnosis? Mast cell sarcoma. Dunn K. **J Small Anim Pract** 1997 Mar;38(3):93, 108

A prospective study of radiation therapy for the treatment of grade 2 mast cell tumors in 32 dogs. al-Sarraf R, et al. **J Vet Intern Med** 1996 Nov-Dec;10(6):376-8

Growth and metastasis of two canine mast cell tumors in SCID mice. Maruo K, et al. **J Vet Med Sci** 1996 Jun; 58(6):567-9

Mast cell tumors: dilemmas of diagnosis and treatment. Rogers KS. **Vet Clin North Am Small Anim Pract** 1996 Jan;26(1):87-102 (36 ref.)

SARCOMA, OSTEOGENIC see **OSTEOSARCOMA**

SARCOMA, RETICULUM-CELL see **LYMPHOMA, LARGE-CELL**

SARCOMA, ROUS see **SARCOMA, AVIAN**

SARCOMA, SMALL CELL

CHEMISTRY

Ca125 and neuron-specific enolase (NSE) as tumour markers for intra-abdominal desmoplastic small round-cell tumours. Fizazi K, et al. **Br J Cancer** 1997;75(1):76-8

COMPLICATIONS

Malignancy-associated membranoproliferative glomerulonephritis. Rahman RC, et al. **Pediatr Nephrol** 1997 Apr;11(2):208-9

DIAGNOSIS

Desmoplastic small round cell tumor. Leuschner I, et al. **Semin Diagn Pathol** 1996 Aug;13(3):204-12 (46 ref.)

Differential diagnosis of small round cell tumors. Meis-Kindblom JM, et al. **Semin Diagn Pathol** 1996 Aug; 13(3):213-41 (196 ref.)

Small round blue cell tumors in bone: prognostic factors correlated to Ewing's sarcoma and neuroectodermal tumors. Terrier P, et al. **Semin Diagn Pathol** 1996 Aug; 13(3):250-7 (61 ref.)

Differentiating small round cell sarcomas of the soft parts by an innovative immunogold labeling method: an ultrastructural study. Kawauchi S, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):549-61

Appraisal of the comparative utility of immunohistochemistry and electron microscopy in the diagnosis of childhood round cell tumors. Mierau GW, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):507-17

GENETICS

Chromosome translocation-mediated conversion of a tumor suppressor gene into a dominant oncogene: fusion of EWS1 to WT1 in desmoplastic small round cell tumors. Rauscher FJ 3rd. **Curr Top Microbiol Immunol** 1997;220:151-62 (47 ref.)

LINE-1 element insertion at the t(11;22) translocation breakpoint of a desmoplastic small round cell tumor. Liu J, et al. **Genes Chromosomes Cancer** 1997 Mar;18(3):232-9

Fusion of the EWS1 and WT1 genes as a result of the t(11;22)(p13;q12) translocation in desmoplastic small round cell tumors. Benjamin LE, et al. **Med Pediatr Oncol** 1996 Nov;27(5):434-9 (34 ref.)

Molecular genetics of small round cell tumors. López-Terrada D. **Semin Diagn Pathol** 1996 Aug; 13(3):242-9 (93 ref.)

Cytogenetics and tissue culture of small round cell tumors of bone and soft tissue. Noguera R. **Semin Diagn Pathol** 1996 Aug;13(3):171-83 (134 ref.)

IMMUNOLOGY

Small round cell tumors of bone and soft tissue. Introduction. Llombart-Bosch A. **Semin Diagn Pathol** 1996 Aug; 13(3):149-52 (47 ref.)

Histology, immunohistochemistry, and electron microscopy of small round cell tumors of bone. Llombart-Bosch A, et al. **Semin Diagn Pathol** 1996 Aug;13(3):153-70 (147 ref.)

Appraisal of the comparative utility of immunohistochemistry and electron microscopy in the diagnosis of childhood round cell tumors. Mierau GW, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):507-17

PATHOLOGY

Postmenopausal intra-abdominal desmoplastic small cell tumor. Fukunaga M, et al. **Pathol Int** 1996 Apr;46(4):281-5

Soft tissue small round cell tumors: morphological parameters. d'Amore ES, et al. **Semin Diagn Pathol** 1996 Aug;13(3):184-203 (105 ref.)

Desmoplastic small round cell tumor. Leuschner I, et al. **Semin Diagn Pathol** 1996 Aug;13(3):204-12 (46 ref.)

Histology, immunohistochemistry, and electron microscopy of small round cell tumors of bone. Llombart-Bosch A, et al. **Semin Diagn Pathol** 1996 Aug;13(3):153-70 (147 ref.)

Small round cell tumors of bone and soft tissue. Introduction. Llombart-Bosch A. **Semin Diagn Pathol** 1996 Aug; 13(3):149-52 (47 ref.)

Cytogenetics and tissue culture of small round cell tumors of bone and soft tissue. Noguera R. **Semin Diagn Pathol** 1996 Aug;13(3):171-83 (134 ref.)

[Pleural effusion and mediastinal mass in a 21-year-old male (clinical conference)] Barberá MJ, et al. **Med Clin (Barc)** 1996 Sep 28;107(10):388-95 **(Spa)**

SURGERY

[Small-cell sarcoma of the esophagus as a fourth malignancy. Its palliative therapy with argon gas coagulation] Glaser J, et al. **Dtsch Med Wochenschr** 1997 Aug 22; 122(34-35):1037-40 (8 ref.) (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Soft tissue small round cell tumors: morphological parameters. d'Amore ES, et al. **Semin Diagn Pathol** 1996 Aug;13(3):184-203 (105 ref.)

Differentiating small round cell sarcomas of the soft parts by an innovative immunogold labeling method: an ultrastructural study. Kawauchi S, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):549-61

SARCOMA, SOFT TISSUE see **SARCOMA**

SARCOMA, SPINDLE CELL see **SARCOMA**

SARCOMA, SYNOVIAL

[Synovial sarcoma of the heart] Chin W, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(14):233-6 (20 ref.) **(Jpn)**

[Lasting disease-free course of synovial sarcoma] Shukin VV, et al. **Vopr Onkol** 1997;43(2):228-9 **(Rus)**

CHEMISTRY

Overexpression of bcl-2 protein in synovial sarcoma: a comparative study of other soft tissue spindle cell sarcomas and an additional analysis by fluorescence in situ hybridization. Hirakawa N, et al. **Hum Pathol** 1996 Oct; 27(10):1060-5

COMPLICATIONS

Tumor-induced hypercalcemia in a patient with extensive soft tissue sarcoma: effects of bisphosphonate therapy and surgery. Oleffe V, et al. **J Surg Oncol** 1996 Oct;63(2):125-9 (25 ref.)

DIAGNOSIS

Synovial sarcomas of the head and neck: MR findings. Hirsch RJ, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1185-8

Cytogenetics as an adjunct in establishing a definitive diagnosis of synovial sarcoma by fine-needle aspiration. Saboorian MH, et al. **Cancer** 1997 Jun 25;81(3):187-92

Synovial sarcoma of the neck. Doval DC, et al. **Eur Arch Otorhinolaryngol** 1997;254(5):246-50

Primary synovial cardiac sarcoma: a rare cause of tamponade [letter] Constantinou LL, et al. **Eur Heart J** 1996 Nov; 17(11):1766-8

Synovial sarcoma in the prevertebral space of the neck: CT and MR findings. Mizutani H, et al. **Radiat Med** 1997 Mar-Apr;15(2):121-4

[Synovial sarcoma of the foot] Beus J, et al. **Aktuelle Radiol** 1996 Sep;6(5):261-3 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

[A prospective study on nephrotoxicity induced by continuous infusion of high-dose ifosfamide (15/m2)] Ferrari S, et al. **Minerva Pediatr** 1997 Jan-Feb; 49(1-2):29-37 (Eng. Abstr.) **(Ita)**

GENETICS

The SSX-2 gene, which is involved in the t(X;18) translocation of synovial sarcomas, codes for the human tumor antigen HOM-MEL-40. Türeci O, et al. **Cancer Res** 1996 Oct 15;56(20):4766-72

Translocations in solid tumours. Cooper CS. **Curr Opin Genet Dev** 1996 Feb;6(1):71-5 (27 ref.)

Synovial sarcoma of the head and neck: chromosomal translation (X;18) as a diagnostic aid. Cihak RA, et al. **Head Neck** 1997 Sep;19(6):549-53

METABOLISM

Synovial sarcoma: immunohistochemical expression of P-glycoprotein and glutathione S transferase-pi and clinical drug resistance. Lopes JM, et al. **Pathol Res Pract** 1997;193(1):21-36

PATHOLOGY

Fine-needle aspiration biopsy of synovial sarcoma. A cytomorphologic analysis of primary, recurrent, and metastatic tumors. Kilpatrick SE, et al. **Am J Clin Pathol** 1996 Dec;106(6):769-75

Primary monophasic synovial sarcoma of the brachial plexus: report of a case and review of the literature. Tacconi L, et al. **Clin Neurol Neurosurg** 1996 Aug;98(3):249-52 (7 ref.)

Fine needle aspiration (FNA) of synovial sarcoma--a comparative histological-cytological study of 15 cases, including immunohistochemical, electron microscopic and cytogenetic examination and DNA-ploidy analysis. Akerman M, et al. **Cytopathology** 1996 Jun;7(3):187-200

Synovial sarcoma of the heart. Nicholson AG, et al. **Histopathology** 1997 Apr;30(4):349-52 (16 ref.)

Synovial sarcoma: frequency of nonaggressive MR characteristics. Blacksin MF, et al. **J Comput Assist Tomogr** 1997 Sep-Oct;21(5):785-9

Synovial sarcoma of the vulva: a report of two cases. Nielsen GP, et al. **Mod Pathol** 1996 Oct;9(10):970-4

Intraneural biphasic synovial sarcoma: an alternative "glandular" tumor of peripheral nerve. O'Connell JX, et al. **Mod Pathol** 1996 Jul;9(7):738-41

RADIOGRAPHY

Spontaneous pneumothorax from radiographically occult metastatic sarcoma. Furrer M, et al. **Eur J Cardiothorac Surg** 1997 Jun;11(6):1171-3

Intra-articular calcifying synovial sarcoma mimicking synovial chondromatosis. Ishida T, et al. **Skeletal Radiol** 1996 Nov;25(8):766-9

RADIOTHERAPY

Fractures in children treated with radiotherapy for soft tissue sarcoma. Wall JE, et al. **Orthopedics** 1996 Aug;19(8):657-64 (24 ref.)

SECONDARY

Fine-needle aspiration biopsy of synovial sarcoma. A cytomorphologic analysis of primary, recurrent, and metastatic tumors. Kilpatrick SE, et al. **Am J Clin Pathol** 1996 Dec;106(6):769-75

Acute vascular embolus resulting from metastatic endocardial involvement with synovial sarcoma: report of a case and review of the literature. Khoo V, et al. **Australas Radiol** 1997 Feb;41(1):49-52 (71 ref.)

Spontaneous pneumothorax from radiographically occult metastatic sarcoma. Furrer M, et al. **Eur J Cardiothorac Surg** 1997 Jun;11(6):1171-3

Aggressive pulmonary metastasectomies for synovial sarcoma. Maruyama R, et al. **Respiration** 1997;64(4):316-8

SURGERY

Tumor-induced hypercalcemia in a patient with extensive soft tissue sarcoma: effects of bisphosphonate therapy and surgery. Oleffe V, et al. **J Surg Oncol** 1996 Oct;63(2):125-9 (25 ref.)

Patellar tendon reconstruction augmented by a free autograft of the biceps tendon attached to the fibular head. Peyser AB, et al. **Orthopedics** 1996 Jun;19(6):545-9

Aggressive pulmonary metastasectomies for synovial sarcoma. Maruyama R, et al. **Respiration** 1997;64(4):316-8

[Synovial sarcoma of the neck] Sznajder-Luczak M, et al. **Otolaryngol Pol** 1996;50(2):178-83 (Eng. Abstr.) **(Pol)**

THERAPY

Synovial sarcoma of the esophagus. Antón-Pacheco J, et al. **J Pediatr Surg** 1996 Dec;31(12):1703-5

Circulating CD34+ cell counts as predictive parameter for the efficacy of peripheral stem cell apheresis in Ewing tumor patients. Engel BC, et al. **Klin Padiatr** 1997 Jul-Aug; 209(4):186-90

ULTRASONOGRAPHY

Synovial sarcoma: an unexpected ultrasound finding in a post-partum patient. Acton CM, et al. **Australas Radiol** 1996 Nov;40(4):452-3

ULTRASTRUCTURE

Fine needle aspiration (FNA) of synovial sarcoma--a comparative histological-cytological study of 15 cases, including immunohistochemical, electron microscopic and cytogenetic examination and DNA-ploidy analysis.

Akerman M, et al. **Cytopathology** 1996 Jun;7(3):187–200

VETERINARY

Metastatic carcinoma presenting as hind-limb lameness: diagnosis by synovial fluid cytology. Meinkoth JH, et al. **J Am Anim Hosp Assoc** 1997 Jul–Aug;33(4):325–8

Synovial sarcoma in a ferret. Lloyd MH, et al. **Vet Rec** 1996 Dec 21–28;139(25):627–8

SARCOMA VIRUS, FELINE

Differentiation of human fibroblasts to tissue macrophages by the Snyder–Theilen feline sarcoma virus (ST:FeSV): growth modulation of human tumor cell lines in agar. Wesseling B, et al. **Anticancer Res** 1997 Jul–Aug; 17(4A):2599–602

IMMUNOLOGY

Augmentation with serum thymic factor of suppressive effects on retroviral tumor development in hosts immune to v-onc product. Miyauchi M, et al. **Leukemia** 1997 Apr; 11 Suppl 3:213–5

ISOLATION & PURIFICATION

Use of immunohistochemistry and polymerase chain reaction for detection of oncornaviruses in formalin-fixed, paraffin-embedded fibrosarcomas from cats. Ellis JA, et al. **J Am Vet Med Assoc** 1996 Aug 15;209(4):767–71

SARCOMA VIRUSES, AVIAN

Two tumor-associated membrane antigens defined by monoclonal antibodies in a transplantable sarcoma induced by Rous sarcoma virus in rat. Alexandrov I, et al. **Neoplasma** 1996;43(4):275–82

Engineering unnatural nucleotide specificity for Rous sarcoma virus tyrosine kinase to uniquely label its direct substrates. Shah K, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3565–70

CHEMISTRY

Genetic analysis of interactions between Gag proteins of Rous sarcoma virus. Li X, et al. **J Virol** 1997 Jul; 71(7):5624–30

ENZYMOLOGY

Binding of different divalent cations to the active site of avian sarcoma virus integrase and their effects on enzymatic activity. Bujacz G, et al. **J Biol Chem** 1997 Jul 18; 272(29):18161–8

Subcellular localization of avian sarcoma virus and human immunodeficiency virus type 1 integrases. Kukolj G, et al. **J Virol** 1997 Jan;71(1):843–7

GENETICS

Growth factor ligands of tyrosine kinase receptors activate the Rous sarcoma virus promoter by a Ras- and Raf-dependent mechanism. Cosgaya JM, et al. **Gene** 1997 Apr 1;188(2):291–3

Evaluation of relative promoter strengths of the HIV-1-LTR and a chimeric RSV-LTR in T lymphocytic cells and peripheral blood mononuclear cells: promoters for anti-HIV-1 gene therapies. Mukhtar M, et al. **Gene Ther** 1996 Aug;3(8):725–30

Neurotoxicity of intracerebral injection of a replication-defective adenoviral vector in a semipermissive species (cotton rat). Shine HD, et al. **Gene Ther** 1997 Apr; 4(4):275–9

Avian retrovirus U3 and U5 DNA inverted repeats. Role Of nonsymmetrical nucleotides in promoting full-site integration by purified virion and bacterial recombinant integrases. Vora AC, et al. **J Biol Chem** 1997 Sep 19; 272(38):23938–45

Mutational analysis of the oligomer assembly domain in the transmembrane subunit of the Rous sarcoma virus glycoprotein. Einfeld DA, et al. **J Virol** 1997 Mar; 71(3):2383–9

Chicken YB-2, a Y-box protein, is a potent activator of Rous sarcoma virus long terminal repeat-driven transcription in avian fibroblasts. Swamynathan SK, et al. **J Virol** 1997 Apr; 71(4):2873–80

Replication-competent retroviral vectors for expressing genes in avian cells in vitro and in vivo. Bell EJ, et al. **Mol Biotechnol** 1997 Jun;7(3):289–98 (45 ref.)

Enhancement of transcription by short alternating C.G tracts incorporated within a Rous sarcoma virus-based chimeric promoter: in vivo studies. Krajewski WA. **Mol Gen Genet** 1996 Sep 13;252(3):249–54

Association of rous sarcoma virus DNA with Xenopus laevis spermatozoa and its transfer to ova through fertilization. Habrová V, et al. **Mol Reprod Dev** 1996 Jul;44(3):332–42

Characterization of an RNP complex that assembles on the Rous sarcoma virus negative regulator of splicing element. Cook CR, et al. **Nucleic Acids Res** 1996 Dec 15; 24(24):4962–8

Transformation of chicken cells by the gene encoding the catalytic subunit of PI 3-kinase. Chang HW, et al. **Science** 1997 Jun 20;276(5320):1848–50

Cloning of Rous sarcoma virus enhancer factor genes. II. RSV-EF-II, abundantly expressed in fibroblasts and muscle tissue, binds to an octamer sequence, 5'-GTACCACC-3', in the noncoding strand of RSV enhancer. Cleavinger PJ, et al. **Virology** 1996 Aug 1; 222(1):133–43

Presence of a hypervariable region within the hr2 domain of the host range determining sequences of the envelope protein gp85 (SU) of subgroup-A avian sarcoma-leukosis viruses. Hara H, et al. **Virus Genes** 1996;12(1):37–46

[Expression of the CMV-lacZ- and RSV-lacZ-genes in transgenic fish and mouse embryos] Andreeva LE, et al. **Genetika** 1996 Dec;32(12):1661–8 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Vaccination with a low-oncogenic strain of Rous sarcoma virus prevents visceral tumors in chickens. Plachy J, et al. **Exp Clin Immunogenet** 1995;12(4):272–82

ISOLATION & PURIFICATION

Ultrastructure of virus-induced soft-tissue tumours. Levenbook IS, et al. **IARC Sci Publ** 1996;(126):351–63 (27 ref.)

METABOLISM

Production of defective virus by terminally differentiated myotubes infected with Rous sarcoma virus. Park HT, et al. **Acta Virol** 1995 Sep;39(4):197–204

Decreased susceptibility to calpains of v-FosFBR but not of v-FosFBJ or v-JunASV17 retroviral proteins compared with their cellular counterparts. Steff AM, et al. **Biochem J** 1997 May 1;323 (Pt 3):685–92

Analysis of cleavage site mutations between the NC and PR Gag domains of Rous sarcoma virus. Schatz G, et al. **J Virol** 1997 Jan;71(1):444–50

Fine mapping and characterization of the Rous sarcoma virus Pr76gag late assembly domain. Xiang Y, et al. **J Virol** 1996 Aug;70(8):5695–700

Altered Rous sarcoma virus Gag polyprotein processing and its effects on particle formation. Xiang Y, et al. **J Virol** 1997 Mar;71(3):2083–91

Residue Trp-48 of Tva is critical for viral entry but not for high-affinity binding to the SU glycoprotein of subgroup A avian leukosis and sarcoma viruses. Zingler K, et al. **J Virol** 1996 Nov;70(11):7510–6

PATHOGENICITY

Injury models of the vascular endothelium: apoptosis and loss of thromboresistance induced by a viral protein. Eldor A, et al. **Haemostasis** 1996 Oct;26 Suppl 4:37–45 (46 ref.)

PHYSIOLOGY

Production of env-deficient rous sarcoma virus (RSV) early after infection. Hara H, et al. **Folia Biol (Praha)** 1997; 43(2):63–70

The LTR, v-src, LTR provirus in H-19 hamster tumor cell line is integrated adjacent to the negative regulatory region. Machoň O, et al. **Gene** 1996 Sep 26;174(1):9–17

Multiple biological roles associated with the Rous sarcoma virus 5' untranslated RNA U5-IR stem and loop. Miller JT, et al. **J Virol** 1997 Oct;71(10):7648–56

Autogenous regulation of RNA translation and packaging by Rous sarcoma virus Pr76gag. Sonstegard TS, et al. **J Virol** 1996 Oct;70(10):6542–52

Selection of an avian retrovirus mutant with extended receptor usage. Taplitz RA, et al. **J Virol** 1997 Oct; 71(10):7814–9

ULTRASTRUCTURE

In vitro assembly of virus-like particles with Rous sarcoma virus Gag deletion mutants: identification of the p10 domain as a morphological determinant in the formation of spherical particles. Campbell S, et al. **J Virol** 1997 Jun; 71(6):4425–35

SARCOMA VIRUSES, MURINE

Antiretroviral activities of acyclic nucleoside phosphonates [9-(2-phosphonylmethoxyethyl)adenine, 9-(2-phosphonylmethoxyethyl)guanine, (R)-9-(2-phosphonylmethoxypropyl)adenine, and MDL 74,968] in cell cultures and murine sarcoma virus-infected newborn NMRI mice. Balzarini J, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):611–6

High-dose multidrug resistance in primary human hematopoietic progenitor cells transduced with optimized retroviral vectors. Eckert HG, et al. **Blood** 1996 Nov 1; 88(9):3407–15

GENETICS

In vitro and in vivo liposome-mediated gene transfer leads to human MDR1 expression in mouse bone marrow progenitor cells. Aksentijevich I, et al. **Hum Gene Ther** 1996 Jun 10;7(9):1111–22

Myristylation of FBR v-fos dictates the differentiation pathways in malignant osteosarcoma. Jotte RM, et al. **J Cell Biol** 1996 Oct;135(2):457–67

Efficient recovery and regeneration of integrated retroviruses. Schott B, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2940–2

METABOLISM

Decreased susceptibility to calpains of v-FosFBR but not of v-FosFBJ or v-JunASV17 retroviral proteins compared with their cellular counterparts. Steff AM, et al. **Biochem J** 1997 May 1;323 (Pt 3):685–92

SARCOMA, YOSHIDA

DRUG THERAPY

Increased growth and incidence of lymph node metastases due to the angiogenesis inhibitor AGM-1470. Hori K, et al. **Br J Cancer** 1997;75(12):1730–4

METABOLISM

Modification of the erythrocyte surface in rats bearing Yoshida ascites sarcoma is brought about by a tumour variant of alpha2-macroglobulin. Sanjay A, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):379–84

Enhanced cytotoxicity in combination of low dose-rate irradiation with hyperthermia in vitro. Sakurai H, et al. **Int J Hyperthermia** 1996 May-Jun;12(3):355–66

Glutamine and arginine metabolism in tumor-bearing rats receiving total parenteral nutrition. Yoshida S, et al. **Metabolism** 1997 Apr;46(4):370–3

[Reoxygenation in Yoshida sarcoma during different fractionated radiotherapy] Strnad V, et al. **Strahlenther Onkol** 1996 Nov;172(11):619–25 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Stimulation of brown adipose tissue activity in tumor-bearing rats. Oudart H, et al. **Can J Physiol Pharmacol** 1995 Nov; 73(11):1625–31

RADIOTHERAPY

[A reply to the comment by K. R. Trott in Strahlenther. Onkol. 173 (1997), 146–147 on the article by Strnad et al.: "The regression of Yoshida sarcoma during normoxia and hypoxia after fractionated irradiation" in Strahlenther. Onkol. 173 (1997), 141–145 (letter)] Kamprad F. **Strahlenther Onkol** 1997 May;173(5):287 **(Ger)**

[Reoxygenation in Yoshida sarcoma during different fractionated radiotherapy] Strnad V, et al. **Strahlenther Onkol** 1996 Nov;172(11):619–25 (Eng. Abstr.) **(Ger)**

[Regression of Yoshida sarcoma during normoxia and hypoxia after fractionated irradiation] Strnad V, et al. **Strahlenther Onkol** 1997 Mar;173(3):141–5 (Eng. Abstr.) **(Ger)**

[Regression of Yoshida sarcoma during normoxia and hypoxia after fractionated irradiation. Commentary on the article by Strnad et al in this issue] Trott KR. **Strahlenther Onkol** 1997 Mar;173(3):146–7 **(Ger)**

THERAPY

Methionine depletion modulates the antitumor and antimetastatic efficacy of ethionine. Guo H, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2719–23

SARCOMASTIGOPHORA

Effect of flagellates on free-living bacterial abundance in an organically contaminated aquifer. Kinner NE, et al. **FEMS Microbiol Rev** 1997 Jul;20(3–4):249–59

SARCOMERES

Sarcomere length changes after flexor carpi ulnaris to extensor digitorum communis tendon transfer. Lieber RL, et al. **J Hand Surg [Am]** 1996 Jul;21(4):612–8

CHEMISTRY

Molecular structure of the sarcomeric M band: mapping of titin and myosin binding domains in myomesin and the identification of a potential regulatory phosphorylation site in myomesin. Obermann WM, et al. **EMBO J** 1997 Jan 15;16(2):211–20

Point mutations in human beta cardiac myosin heavy chain have differential effects on sarcomeric structure and assembly: an ATP binding site change disrupts both thick and thin filaments, whereas hypertrophic cardiomyopathy mutations display normal assembly. Becker KD, et al. **J Cell Biol** 1997 Apr 7;137(1):131–40

The structure of the sarcomeric M band: localization of defined domains of myomesin, M-protein, and the 250-kD carboxy-terminal region of titin by immunoelectron microscopy. Obermann WM, et al. **J Cell Biol** 1996 Sep; 134(6):1441–53

DRUG EFFECTS

Anthracyclines enhance tension development in cardiac muscle by direct interaction with the contractile system. Bottone AE, et al. **J Mol Cell Cardiol** 1997 Mar; 29(3):1001–8

ENZYMOLOGY

Elements regulating cardiomyocyte expression of the human sarcomeric mitochondrial creatine kinase gene in transgenic

mice. Qin W, et al. **J Biol Chem** 1997 Oct 3;272(40):25210–6
Purification and characterization of human sarcomeric mitochondrial creatine kinase. Walterscheid-Müller U, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):921–7
Use of gene targeting for compromising energy homeostasis in neuro-muscular tissues: the role of sarcomeric mitochondrial creatine kinase. Steeghs K, et al. **J Neurosci Methods** 1997 Jan;71(1):29–41

METABOLISM

Assembly of nebulin into the sarcomeres of avian skeletal muscle. Moncman CL, et al. **Cell Motil Cytoskeleton** 1996; 34(3):167–84
Assembly of titin, myomesin and M-protein into the sarcomeric M band in differentiating human skeletal muscle cells in vitro. van der Ven PF, et al. **Cell Struct Funct** 1997 Feb;22(1):163–71
The intracompartmental sorting of myosin alkali light chain isoproteins reflects the sequence of developmental expression as determined by double epitope-tagging competition. Komiyama M, et al. **J Cell Sci** 1996 Aug;109 (Pt 8):2089–99
Sarcomere length versus interfilament spacing as determinants of cardiac myofilament Ca2+ sensitivity and Ca2+ binding. Fuchs F, et al. **J Mol Cell Cardiol** 1996 Jul;28(7):1375–83

PATHOLOGY

Sarcomere length in wrist extensor muscles. Changes may provide insights into the etiology of chronic lateral epicondylitis. Lieber RL, et al. **Acta Orthop Scand** 1997 Jun;68(3):249–54

PHYSIOLOGY

The super-repeats of titin/connectin and their interactions: glimpses at sarcomeric assembly. Gautel M. **Adv Biophys** 1996;33:27–37 (61 ref.)
Viscoelasticity and function of connectin/titin filaments in skinned muscle fibers. Higuchi H. **Adv Biophys** 1996; 33:159–71 (26 ref.)
Nebulin and nebulin-related proteins in striated muscle. Horowits R, et al. **Adv Biophys** 1996;33:143–50 (32 ref.)
Physiological significance of viscoelastic structures in myoplasm. Takemori S, et al. **Adv Biophys** 1996;33:151–7 (16 ref.)
Force decline during muscle relaxation promotes calcium release to the cytosol. Baker AJ, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):C85–91
Basis of passive tension and stiffness in isolated rabbit myofibrils. Bartoo ML, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):C266–76
Anterior and posterior left ventricular sarcomere lengths behave similarly during ejection. Guccione JM, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H469–77
Uncontrolled sarcomere shortening increases intracellular Ca2+ transient in rat cardiac trabeculae. Janssen PM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1892–7
Muscle function during jumping in frogs. I. Sarcomere length change, EMG pattern, and jumping performance. Lutz GJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C563–70
Theoretical considerations on myofibril stiffness. Forcinito M, et al. **Biophys J** 1997 Mar;72(3):1278–86
Force enhancement without changes in cross-bridge turnover kinetics: the effect of EMD 57033. Kraft T, et al. **Biophys J** 1997 Jan;72(1):272–81
Calcium alone does not fully activate the thin filament for S1 binding to rigor myofibrils. Swartz DR, et al. **Biophys J** 1996 Oct;71(4):1891–904
Isotonic contraction as a result of cooperation of sarcomeres—a model and simulation outcome. Wünsch Z. **Biosystems** 1996;37(3):239–52
Extent of radial sarcomere coupling revealed in passively stretched cardiac myocytes. Palmer RE, et al. **Cell Motil Cytoskeleton** 1997;37(4):378–88
Functional analysis of the chicken sarcomeric myosin rod: regulation of dimerization, solubility, and fibrillogenesis. Bandman E, et al. **Cell Struct Funct** 1997 Feb;22(1):131–7 (39 ref.)
Sarcomere relaxation in hamster diaphragm muscle [see comments] Coirault C, et al. **J Appl Physiol** 1996 Aug; 81(2):858–65. Comment in: J Appl Physiol 1997 May;82(5):1712–4.
Instantaneous force-velocity-length relationship in diaphragmatic sarcomere. Coirault C, et al. **J Appl Physiol** 1997 Feb;82(2):404–12
Optimum sarcomere length in mammalian diaphragm [letter; comment] Poole DC. **J Appl Physiol** 1997 May; 82(5):1712–4. Comment on: J Appl Physiol 1996 Aug;81(2):858–65.
Optical methods to evaluate the contractile function of unloaded isolated cardiac myocytes. Delbridge LM, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):11–25 (68 ref.)
The visco-elasticity of resting intact mammalian (rat) fast muscle fibres. Mutungi G, et al. **J Muscle Res Cell Motil** 1996 Jun;17(3):357–64
Influences of sarcomere length and selective elimination of myosin filaments on the localization and orientation of triads in rat muscle fibres. Takekura H, et al. **J Muscle Res Cell Motil** 1996 Apr;17(2):235–42
Quantitative analysis of sarcomere non-uniformities in active muscle following a stretch. Talbot JA, et al. **J Muscle Res Cell Motil** 1996 Apr;17(2):261–8
The biphasic force-velocity relationship in frog muscle fibres and its evaluation in terms of cross-bridge function. Edman KA, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):141–56
Sarcomere length dependence of the rate of tension redevelopment and submaximal tension in rat and rabbit skinned skeletal muscle fibres. McDonald KS, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):607–21
Sarcomere dynamics and contraction-induced injury to maximally activated single muscle fibres from soleus muscles of rats. Macpherson PC, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):523–33
The viscous, viscoelastic and elastic characteristics of resting fast and slow mammalian (rat) muscle fibres. Mutungi G, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):827–36

ULTRASTRUCTURE

Nebulin and nebulin-related proteins in striated muscle. Horowits R, et al. **Adv Biophys** 1996;33:143–50 (32 ref.)
Myomesin, M-protein and the structure of the sarcomeric M-band. Van Der Ven PF, et al. **Adv Biophys** 1996;33:91–9 (37 ref.)
Anterior and posterior left ventricular sarcomere lengths behave similarly during ejection. Guccione JM, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H469–77
Effects of anisosmotic stress on cardiac muscle cell length, diameter, area, and sarcomere length. Tanaka R, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1414–22
Three-dimensional structure of the human temporalis muscle. van Eijden TM, et al. **Anat Rec** 1996 Dec;246(4):565–72
Architecture of the human jaw-closing and jaw-opening muscles. Van Eijden TM, et al. **Anat Rec** 1997 Jul; 248(3):464–74
Theoretical considerations on myofibril stiffness. Forcinito M, et al. **Biophys J** 1997 Mar;72(3):1278–86
Molecular mechanisms of myofibril assembly in heart. Auerbach D, et al. **Cell Struct Funct** 1997 Feb;22(1):139–46
Architecture and function in the muscle sarcomere. Squire JM. **Curr Opin Struct Biol** 1997 Apr;7(2):247–57 (87 ref.)
Sarcomere length dependence of the rate of tension redevelopment and submaximal tension in rat and rabbit skinned skeletal muscle fibres. McDonald KS, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):607–21
Nemaline rod and central core disease: a coexisting Z-band myopathy. Thomas C. **Muscle Nerve** 1997 Jul;20(7):893–6
A-band movement and junctional gap dissociation during caffeine-induced contracture of skeletal muscle fibers. Yoshioka T, et al. **Tokai J Exp Clin Med** 1995 Jul; 20(2):99–108

SARCOPLASMIC RETICULUM

CHEMISTRY

Structural components of ryanodine responsible for modulation of sarcoplasmic reticulum calcium channel function. Welch W, et al. **Biochemistry** 1997 Mar 11; 36(10):2939–50
Membrane-associated carbonic anhydrase IV in skeletal muscle: subcellular localization. Decker B, et al. **Histochem Cell Biol** 1996 Oct;106(4):405–11
A novel muscle protein located inside the terminal cisternae of the sarcoplasmic reticulum. Presotto C, et al. **J Biol Chem** 1997 Mar 7;272(10):6534–8
Complex formation between junctin, triadin, calsequestrin, and the ryanodine receptor. Proteins of the cardiac junctional sarcoplasmic reticulum membrane. Zhang L, et al. **J Biol Chem** 1997 Sep 12;272(37):23389–97
Sarcoplasmic reticulum Ca2+ATPase and phospholamban mRNA and protein levels in end-stage heart failure due to ischemic or dilated cardiomyopathy. Flesch M, et al. **J Mol Med** 1996 Jun;74(6):321–32

DRUG EFFECTS

Different effects of halothane, isoflurane and sevoflurane on sarcoplasmic reticulum of vascular smooth muscle in dog mesenteric artery. Yamamoto M, et al. **Acta Anaesthesiol Scand** 1997 Mar;41(3):376–80
Enhanced SR function in saponin-treated ventricular trabeculae from rabbits with heart failure. Denvir MA, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H850–9
Rapid kinetic studies of SH oxidation-induced calcium release from sarcoplasmic reticulum vesicles. Donoso P, et al. **Arch Biochem Biophys** 1997 May 15;341(2):295–9
2,3-Butanedione 2-monoxime (BDM) induces calcium release from canine cardiac sarcoplasmic reticulum. Phillips RM, et al. **Biochem Biophys Res Commun** 1996 Dec 4; 229(1):154–7
Effects of phosphatidylethanolamines on the activity of the Ca(2+)-ATPase of sarcoplasmic reticulum. Starling AP, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):309–14
Stimulation of the Ca(2+)-ATPase of sarcoplasmic reticulum by disulfiram. Starling AP, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):101–5
Inhibition of calcium accumulation by the sarcoplasmic reticulum: a putative mechanism for the cardiotoxicity of adriamycin. Halili-Rutman I, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):211–4
Effect of haloperidol on the sarcoplasmic reticulum Ca-dependent adenosine triphosphatase. Takara D, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1-2):57–65
Volatile anaesthetic effects on calcium conductance of planar lipid bilayers formed with synthetic lipids or extracted lipids from sarcoplasmic reticulum. Andoh T, et al. **Br J Anaesth** 1997 Jan;78(1):66–74
Role of sarcoplasmic reticulum in inhibitory junction potentials and hyperpolarizations by nitric oxide donors in opossum oesophagus. Cayabyab FS, et al. **Br J Pharmacol** 1996 Aug;118(8):2185–91
Effect of calmodulin antagonists on calmodulin-induced biphasic modulation of Ca(2+)-induced Ca2+ release. Ikemoto T, et al. **Br J Pharmacol** 1996 Jun;118(3):690–4
Thyroid hormones increase the contractility but suppress the effects of beta-adrenergic agonist by decreasing phospholamban expression in rat atria. Kaasik A, et al. **Cardiovasc Res** 1997 Jul;35(1):106–12
Cardiac membrane Ca(2+)-transport in alloxan-induced diabetes in rats. Golfman LS, et al. **Diabetes Res Clin Pract** 1996 Jul;31 Suppl:S73–7
Mechanism of action of sarcoplasmic reticulum calcium-uptake activators--discrimination between sarco(endo)plasmic reticulum Ca2+ ATPase and phospholamban interaction. Berrebi-Bertrand I, et al. **Eur J Biochem** 1997 Aug 1;247(3):801–9
Sarcoplasmic reticulum Ca(2+)-pump dysfunction in rat cardiomyocytes briefly exposed to hydroxyl radicals. Morris TE, et al. **Free Radic Biol Med** 1997;22(1-2):37–47
The effects of ryanodine on calcium uptake by the sarcoplasmic reticulum of ischemic and reperfused rat myocardium. Mubagwa K, et al. **Fundam Clin Pharmacol** 1997;11(4):315–21
Lactate inhibits Ca(2+) -activated Ca(2+)-channel activity from skeletal muscle sarcoplasmic reticulum. Favero TG, et al. **J Appl Physiol** 1997 Feb;82(2):447–52
Effect on the indo-1 transient of applying Ca2+ channel blocker for a single beat in voltage-clamped guinea-pig cardiac myocytes. Levi AJ, et al. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):653–73
Effects of 8-(N-N-diethylamino)octyl-3,4,5-trimethoxybenzoate hydrochloride (TMB-8) on skinned myocardial fibres of the rat: reversible inhibition of calcium release from the sarcoplasmic reticulum. Takahashi S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):650–5
Contribution of the sodium-calcium exchanger to contractions in immature rabbit ventricular myocytes. Chin TK, et al. **Pediatr Res** 1997 Apr;41(4 Pt 1):480–5
Sarcoplasmic reticulum calcium release in frog cut muscle fibers in the presence of a large concentration of EGTA. Jong DS, et al. **Soc Gen Physiol Ser** 1996;51:255–68 (28 ref.)

ENZYMOLOGY

Novel isoform of myotonin protein kinase: gene product of myotonic dystrophy is localized in the sarcoplasmic reticulum of skeletal muscle. Shimokawa M, et al. **Am J Pathol** 1997 Apr;150(4):1285–95
Ischemia-induced alterations in sarcoplasmic reticulum Ca(2+)-ATPase activity in rat soleus and EDL muscles. Green HJ, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1942–8
SR Ca(2+)-ATPase activity and expression in ventricular myocardium of dogs with heart failure. Gupta RC, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H12–8
Parvalbumin relaxes frog skeletal muscle when sarcoplasmic reticulum Ca(2+)-ATPase is inhibited. Jiang Y, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C411–7
Phorbol 12-myristate 13-acetate alters SR Ca(2+)-ATPase gene expression in cultured neonatal rat heart cells. Qi M, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H1031–9
The relative phospholamban and SERCA2 ratio: a critical determinant of myocardial contractility. Koss KL, et al. **Basic Res Cardiol** 1997;92 Suppl 1:17–24
Phosphorylation and regulation of the Ca(2+)-pumping ATPase in cardiac sarcoplasmic reticulum by calcium/calmodulin-dependent protein kinase. Narayanan N, et al. **Basic Res Cardiol** 1997;92 Suppl 1:25–35 (68 ref.)
Sarcoplasmic reticulum-associated and protein kinase C-regulated ADP-ribosyl cyclase in cardiac muscle. Mészáros LG, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):252–6
Elevated plasma membrane and sarcoplasmic reticulum Ca2+ pump mRNA levels in cultured aortic smooth muscle cells from spontaneously hypertensive rats. Monteith GR, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):344–6
Genetic linkage of the sarco(endo)plasmic reticulum Ca(2+)-dependent ATPase II gene to intracellular Ca2+ concentration in the spontaneously hypertensive rat. Ohno Y, et al. **Biochem Biophys Res Commun** 1996 Oct 23; 227(3):789–93
cDNA cloning, expression and chromosomal localization of the human sarco/endoplasmic reticulum Ca(2+)-ATPase 3 gene [published erratum appears in Biochem J 1996 Nov 1;319(pt 3):1008] Dode L, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):689–99
Preservation of the native structure and function of Ca2+-ATPase from sarcoplasmic reticulum: solubilization and reconstitution by new short-chain phospholipid detergent 1,2-diheptanoyl-sn-phosphatidylcholine. Shivanna BD, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):533–42

Role of sarcoplasmic/endoplasmic-reticulum Ca2+-ATPases in mediating Ca2+ waves and local Ca2+-release microdomains in cultured glia. Simpson PB, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):239-47

Electrical stimulation of C2C12 myotubes induces contractions and represses thyroid-hormone-dependent transcription of the fast-type sarcoplasmic-reticulum Ca2+-ATPase gene. Thelen MH, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):845-8

Sequence elements surrounding the acceptor site suppress alternative splicing of the sarco/endoplasmic reticulum Ca2+-ATPase 2 gene transcript. Van Den Bosch L, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):885-91

Isoforms of endoplasmic reticulum Ca(2+)-ATPase are differentially expressed in normal and diabetic islets of Langerhans. Váradi A, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):521-7

Sarco/endoplasmic reticulum Ca2+-ATPase isoforms: diverse responses to acidosis. Wolosker H, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):545-50

Dissociation of Ca2+ from sarcoplasmic reticulum Ca2+-ATPase and changes in fluorescence of optically selected Trp residues. Effects of KCl and NaCl and implications for substeps in Ca2+ dissociation. Champeil P, et al. **Biochemistry** 1997 Oct 7;36(40):12383-93

Synthesis of a radioactive azido derivative of thapsigargin and photolabeling of the sarcoplasmic reticulum ATPase. Hua S, et al. **Biochemistry** 1997 Sep 30;36(39):11865-72

Carboxy-terminal regions of the sarcoplasmic/endoplasmic reticulum Ca(2+)- and the Na+/K(+)-ATPases control their K+ sensitivity. Ishii T, et al. **Biochemistry** 1997 Jan 14;36(2):442-51

Destabilization of the Ca2+-ATPase of sarcoplasmic reticulum by thiol-specific, heat shock inducers results in thermal denaturation at 37 degrees C. Senisterra GA, et al. **Biochemistry** 1997 Sep 9;36(36):11002-11

Identification of oxidation-sensitive peptides within the cytoplasmic domain of the sarcoplasmic reticulum Ca2+-ATPase. Viner RI, et al. **Biochemistry** 1997 Jun 24; 36(25):7706-16

Ca2+ transport by the sarcoplasmic reticulum ATPase. Mintz E, et al. **Biochim Biophys Acta** 1997 Jan 16; 1318(1-2):52-70 (171 ref.)

Rotational mobility of Ca2+-ATPase of sarcoplasmic reticulum in viscous media. Török M, et al. **Biochim Biophys Acta** 1997 Jun 12;1326(2):193-200

Stimulation of sarcoplasmic reticulum Ca(2+)-ATPase by gingerol analogues. Ohizumi Y, et al. **Biol Pharm Bull** 1996 Oct;19(10):1377-9

Time-resolved charge translocation by the Ca-ATPase from sarcoplasmic reticulum after an ATP concentration jump. Hartung K, et al. **Biophys J** 1997 Jun;72(6):2503-14

Vectorially oriented monolayers of detergent-solubilized Ca(2+) -ATPase from sarcoplasmic reticulum. Prokop LA, et al. **Biophys J** 1996 May;70(5):2131-43

A time-resolved Fourier transformed infrared difference spectroscopy study of the sarcoplasmic reticulum Ca(2+)-ATPase: kinetics of the high-affinity calcium binding at low temperature. Troullier A, et al. **Biophys J** 1996 Dec;71(6):2970-83

Dissection of the functional domains of the sarcoplasmic reticulum Ca(2+)-ATPase by site-directed mutagenesis. Andersen JP. **Biosci Rep** 1995 Oct;15(5):243-61 (45 ref.)

Fluorometric study on conformational changes in the catalytic cycle of sarcoplasmic reticulum Ca(2+)-ATPase. Kanazawa T, et al. **Biosci Rep** 1995 Oct;15(5):317-26 (49 ref.)

Heterologous expression of sarcoplasmic reticulum Ca(2+)-ATPase. Reis EM, et al. **Biosci Rep** 1996 Apr; 16(2):107-13 (20 ref.)

Catalytic and structural modifications of sarcoplasmic reticulum and plasma membrane (Ca(2+) + Mg2+) ATPases induced by organic solutes that accumulate in living systems. Vieyra A. **Biosci Rep** 1996 Apr;16(2):115-27 (53 ref.)

The SERCA3-type of organellar Ca2+ pumps. Wuytack F, et al. **Biosci Rep** 1995 Oct;15(5):299-306 (27 ref.)

Alterations in the force-frequency relationship by tert-butylbenzohydroquinone, a putative SR Ca2+ pump inhibitor, in rabbit and rat ventricular muscle. Baudet S, et al. **Br J Pharmacol** 1996 Jan;117(2):258-67

Differential effects of tert-butyl-benzohydroquinone, a putative SR Ca2+ pump inhibitor, on isometric relaxation during the staircase in the rabbit and rat ventricle. Baudet S, et al. **Br J Pharmacol** 1996 Jan;117(2):268-76

Sarcoplasmic reticular Ca2+ pump ATPase activity in congestive heart failure due to myocardial infarction. Afzal N, et al. **Can J Cardiol** 1996 Oct;12(10):1065-73

Reductions in sarcoplasmic reticulum Ca2+ ATPase activity in rat skeletal muscles of different fibre composition with ischemia and reperfusion. Green HJ, et al. **Can J Physiol Pharmacol** 1997 Jan;75(1):78-82

Ca2+ effluxes from the sarcoplasmic reticulum vesicles of frog muscle: effects of cyclopiazonic acid and thapsigargin. Du GG, et al. **Cell Calcium** 1996 Oct;20(4):355-9

Co-ordinated regulation of the plasma membrane calcium pump and the sarco(endo)plasmic reticular calcium pump gene expression by Ca2+. Kuo TH, et al. **Cell Calcium** 1997 Jun;21(6):399-408

Transcription of the rat sarcoplasmic reticulum Ca2+ adenosine triphosphatase gene is increased by 3,5,3'-triiodothyronine receptor isoform-specific interactions with the myocyte-specific enhancer factor-2a. Moriscot AS, et al. **Endocrinology** 1997 Jan;138(1):26-32

Alpha 1-adrenergic stimulation inhibits 3,5,3'-triiodothyronine-induced expression of the rat heart sarcoplasmic reticulum Ca2+ adenosine triphosphatase gene. Wu PS, et al. **Endocrinology** 1997 Jan;138(1):114-20

Modification of sarcoplasmic reticulum gene expression in pressure overload cardiac hypertrophy by etomoxir. Zarain-Herzberg A, et al. **FASEB J** 1996 Sep;10(11):1303-9

The endogenous cardiac sarcoplasmic reticulum Ca2+/calmodulin-dependent kinase is activated in response to beta-adrenergic stimulation and becomes Ca2+-independent in intact beating hearts. Baltas LG, et al. **FEBS Lett** 1997 Jun 9;409(2):131-6

Control of energy fluxes by the sarcoplasmic reticulum Ca2+-ATPase: ATP hydrolysis, ATP synthesis and heat production. de Meis L, et al. **FEBS Lett** 1997 Apr 7; 406(1-2):201-4

Heterogeneous halothane binding in the SR Ca2+-ATPase. Kosk-Kosicka D, et al. **FEBS Lett** 1997 Feb 3; 402(2-3):189-92

Oligomerization of sarcoplasmic reticulum Ca2+-ATPase from rabbit skeletal muscle. Maguire PB, et al. **FEBS Lett** 1996 Nov 4;396(2-3):115-8

Cardiac sarcoplasmic reticulum Ca2+ pump as a target for benzoquinones. Floreani M, et al. **Gen Pharmacol** 1996 Jul; 27(5):873-8

Characterization of cDNA and genomic DNA encoding SERCA1, the Ca(2+)-ATPase of human fast-twitch skeletal muscle sarcoplasmic reticulum, and its elimination as a candidate gene for Brody disease. Zhang Y, et al. **Genomics** 1995 Dec 10;30(3):415-24

Inhibition of sarco-endoplasmic reticulum calcium ATPases (SERCA) by polycyclic aromatic hydrocarbons: lack of evidence for direct effects on cloned rat enzymes. Zhao M, et al. **Int J Immunopharmacol** 1996 Oct;18(10):589-98

Temperature sensitivity of proteoliposomes reconstituted from a mixture of scallop and rabbit sarcoplasmic reticulum Ca2+-ATPases. Nagata Y, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):648-53

Comparison of the effects of phospholamban and jasmone on the calcium pump of cardiac sarcoplasmic reticulum. Evidence for modulation by phospholamban of both Ca2+ affinity and Vmax (Ca) of calcium transport. Antipenko AY, et al. **J Biol Chem** 1997 Jan 31;272(5):2852-60

The cytoplasmic loop between putative transmembrane segments 6 and 7 in sarcoplasmic reticulum Ca2+-ATPase binds Ca2+ and is functionally important. Falson P, et al. **J Biol Chem** 1997 Jul 11;272(28):17258-62

Identification of arginyl residues located at the ATP binding site of sarcoplasmic reticulum Ca2+-ATPase. Modification with 1,2-cyclohexanedione. Kimura K, et al. **J Biol Chem** 1996 Nov 15;271(46):28933-41

Mutagenesis of segment 487Phe-Ser-Arg-Asp-Arg-Lys492 of sarcoplasmic reticulum Ca2+-ATPase produces pumps defective in ATP binding. McIntosh DB, et al. **J Biol Chem** 1996 Oct 18;271(42):25778-89

Dissociation of phospholamban regulation of cardiac sarcoplasmic reticulum Ca2+ATPase by quercetin. McKenna E, et al. **J Biol Chem** 1996 Oct 4; 271(40):24517-25

Smooth muscle cell cycle and proliferation. Relationship between calcium influx and sarco-endoplasmic reticulum Ca2+ATPase regulation. Magnier-Gaubil C, et al. **J Biol Chem** 1996 Nov 1;271(44):27788-94

Independence of two conformations of sarcoplasmic reticulum Ca2+-ATPase molecules in hydrolyzing acetyl phosphate. A two-pair model of the ATPase structural unit. Nakamura J, et al. **J Biol Chem** 1997 Aug 1; 272(31):19290-4

Stoichiometry of phosphorylation to fluorescein 5-isothiocyanate binding in the Ca2+-ATPase of sarcoplasmic reticulum vesicles. Nakamura S, et al. **J Biol Chem** 1997 Mar 7;272(10):6232-7

On the inhibition mechanism of sarcoplasmic or endoplasmic reticulum Ca2+-ATPases by cyclopiazonic acid. Plenge-Tellechea F, et al. **J Biol Chem** 1997 Jan 31; 272(5):2794-800

Scanning mutagenesis reveals a similar pattern of mutation sensitivity in transmembrane sequences M4, M5, and M6, but not in M8, of the Ca2+-ATPase of sarcoplasmic reticulum (SERCA1a). Rice WJ, et al. **J Biol Chem** 1996 Dec 6;271(49):31412-9

Nmoc-DBHQ, a new caged molecule for modulating sarcoplasmic/endoplasmic reticulum Ca2+ ATPase activity with light flashes. Rossi FM, et al. **J Biol Chem** 1997 Feb 7;272(6):3266-71

Modification of arginine-198 in sarcoplasmic reticulum Ca2+-ATPase by 1,2-cyclohexanedione causes inhibition of formation of the phosphoenzyme intermediate from inorganic phosphate. Saino T, et al. **J Biol Chem** 1997 Aug 22;272(34):21142-50

Characterization of the promoter of the rat sarcoplasmic endoplasmic reticulum Ca2+-ATPase 1 gene and analysis of thyroid hormone responsiveness. Simonides WS, et al. **J Biol Chem** 1996 Dec 13;271(50):32048-56

PMR1, a Ca2+-ATPase in yeast Golgi, has properties distinct from sarco/endoplasmic reticulum and plasma membrane calcium pumps. Sorin A, et al. **J Biol Chem** 1997 Apr 11;272(15):9895-901

SR Ca(2+)-ATPase/phospholamban in cardiomyocyte function. Tada M, et al. **J Card Fail** 1996 Dec;2(4 Suppl):S77-85 (39 ref.)

Overexpression of the rat sarcoplasmic reticulum Ca2+ ATPase gene in the heart of transgenic mice accelerates calcium transients and cardiac relaxation. He H, et al. **J Clin Invest** 1997 Jul 15;100(2):380-9

Molecular characterization of a sarcoplasmic-endoplasmic reticulum Ca+2 ATPase gene from Trichomonas vaginalis. Meade JC, et al. **J Eukaryot Microbiol** 1997 Sep-Oct; 44(5):480-6

The stable, inactive but reactivatable, unfolding intermediate of rat muscle sarcoplasmic reticulum Ca(2+)-ATPase differs from the age-modified form of this protein. Bergenhem NC, et al. **J Gerontol A Biol Sci Med Sci** 1997 Sep;52(5):B240-4

Phorbol myristate acetate-induced hypertrophy of neonatal rat cardiac myocytes is associated with decreased sarcoplasmic reticulum Ca2+ ATPase (SERCA2) gene expression and calcium reuptake. Hartong R, et al. **J Mol Cell Cardiol** 1996 Dec;28(12):2467-77

Plakortides, novel cyclic peroxides from the sponge Plakortis halichondrioides: activators of cardiac SR-CA(2+)-pumping ATPase. Patil AD, et al. **J Nat Prod** 1996 Mar;59(3):219-23

Plasma membrane and sarcoplasmic reticulum Ca-ATPase and smooth muscle. Gonzalez JM, et al. **Miner Electrolyte Metab** 1996;22(5-6):345-8 (27 ref.)

Decreased expression of cardiac sarcoplasmic reticulum Ca(2+)-pump ATPase in congestive heart failure due to myocardial infarction. Zarain-Herzberg A, et al. **Mol Cell Biochem** 1996 Oct-Nov;163-164:285-90

Pharmacological differentiation between intracellular calcium pump isoforms. Engelender S, et al. **Mol Pharmacol** 1996 Nov;50(5):1243-52

The contribution of the sarcoplasmic reticulum Ca2+-transport ATPase to caffeine-induced Ca2+ transients of murine skinned skeletal muscle fibres. Makabe M, et al. **Pflugers Arch** 1996 Aug;432(4):717-26

The role of sarcoplasmic reticulum and sarcoplasmic reticulum Ca2+-ATPase in the smooth muscle tone of the cat gastric fundus. Petkov GV, et al. **Pflugers Arch** 1996 Apr;431(6):928-35

Fast- and slow-twitch isoforms (SERCA1 and SERCA2a) of sarcoplasmic reticulum Ca-ATPase are expressed simultaneously in chronically stimulated muscle fibers. Zhang KM, et al. **Pflugers Arch** 1997 Apr;433(6):766-72

Effect of N,N-dimethylalkylamine N-oxides on the activity of purified sarcoplasmic reticulum (Ca-Mg)ATPase. Andriamainty F, et al. **Pharmazie** 1997 Mar;52(3):240-2

[A study of the expression of sarcoplasmic reticulum calcium ATP-ase gene in the left ventricle of the sheep's fetus submitted to chronic increased afterload in utero] Bonnet N, et al. **Arch Mal Coeur Vaiss** 1997 May;90(5):699-705 (Eng. Abstr.) **(Fre)**

[Influence of sarcoplasmic reticulum Ca-ATPase inhibition on carotid artery smooth muscle in stroke-prone spontaneously hypertensive rats and Wistar Kyoto rats] Sekiguchi F, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):388-9 **(Jpn)**

GENETICS

Differences in sarcoplasmic reticulum gene expression in myocardium from patients undergoing cardiac surgery. Quantification of steady-state levels of messenger RNA using the reverse transcription-polymerase chain reaction. Ohkusa T, et al. **Heart Vessels** 1997;12(1):1-9

Sarcoplasmic reticulum genes are upregulated in mild cardiac hypertrophy but downregulated in severe cardiac hypertrophy induced by pressure overload. Arai M, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1583-90

METABOLISM

Effect of bovine serum albumin on the calcium release channel of sarcoplasmic reticulum from rabbit skeletal muscle. Catinot MP, et al. **Acta Physiol Scand** 1997 Jul; 160(3):199-205

Diastolic SR Ca efflux in atrial pacemaker cells and Ca-overloaded myocytes. Bassani RA, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H886-92

Ca(2+)- and pH-dependent halothane stimulation of Ca2+ release in sarcoplasmic reticulum from frog muscle [published errata appear in Am J Physiol 1996 Dec;271(6 Pt 1):section C following table of contents and 1996 Dec;271(6 Pt 3):section C following table of contents] Beltrán M, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C540-6

Calcium removal kinetics of the sarcoplasmic reticulum ATPase in skeletal muscle. Burmeister Getz EE, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1087-98

SR Ca2+ pump heterogeneity in coronary artery: free radicals and IP3-sensitive and -insensitive pools. Elmoselhi AB, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1652-9

Regulation of SERCA 2 expression by thyroid hormone in cultured chick embryo cardiomyocytes. Fisher DJ, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H638-44

Sarcoplasmic reticulum Ca2+ pump in pig coronary artery smooth muscle is regulated by a novel pathway. Grover AK, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C181-7

Sarco(endo)plasmic reticulum Ca2+ pump isoform SERCA3 is more resistant than SERCA2b to peroxide. Grover AK, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C420-5

Coordinate regulation of SR Ca(2+)-ATPase and phospholamban expression in developing murine heart.

Harrer JM, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H57–66

Calcium handling by sarcoplasmic reticulum of neonatal swine cardiac myocytes. Hohl CM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H192–9

Cyclic ADP-ribose stimulates sarcoplasmic reticulum calcium release in porcine coronary artery smooth muscle. Kannan MS, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H801–6

Nitric oxide inhibits calcium release from sarcoplasmic reticulum of porcine tracheal smooth muscle cells. Kannan MS, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):L1–7

Upregulation of expression of sarcoplasmic reticulum by TGF-beta 1 in cultured rat cardiac myocytes. Kimura H, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2639–44

A redox O2 sensor modulates the SR Ca2+ countercurrent through voltage- and Ca(2+)-dependent Cl- channels. Kourie JI. **Am J Physiol** 1997 Jan;272(1 Pt 1):C324–32

Survival of metabolically inhibited ventricular myocytes is enhanced by inhibition of rigor and SR Ca2+ cycling. Koyama T, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H643–50

cADP-ribose releases Ca2+ from cardiac sarcoplasmic reticulum independently of ryanodine receptor. Lahouratate P, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1082–9

Ca2+ uptake by cardiac sarcoplasmic reticulum at low temperature in rat and ground squirrel. Liu B, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1121–7

Chimeric calsequestrin and its targeting to the junctional sarcoplasmic reticulum of skeletal muscle. Nori A, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1420–8

Modulation of frog skeletal muscle Ca2+ release channel gating by anion channel blockers. Oba T, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C819–24

Ethanol enhances caffeine-induced Ca2+-release channel activation in skeletal muscle sarcoplasmic reticulum. Oba T, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C622–7

Effect of the organic Ca2+ channel blocker D-600 on sarcoplasmic reticulum Ca2+ uptake in skeletal muscle. Ortega A, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C310–7

Bastadins relate ryanodine-sensitive and -insensitive Ca2+ efflux pathways in skeletal SR and BC3H1 cells. Pessah IN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C601–14

Effects of [Ca2+]i, SR Ca2+ load, and rest on Ca2+ spark frequency in ventricular myocytes. Satoh H, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H657–68

Effect of preconditioning on ryanodine-sensitive Ca2+ release from sarcoplasmic reticulum of rat heart. Tani M, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H876–81

Reloading of Ca(2+)-depleted sarcoplasmic reticulum during rest in guinea pig ventricular myocytes. Terracciano CM, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1814–22

Alterations in sarcoplasmic reticulum calcium-storing proteins in pressure-overload cardiac hypertrophy. Tsutsui H, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H168–75

Buffering of plasmalemmal Ca2+ current by sarcoplasmic reticulum of guinea pig urinary bladder myocytes. Yoshikawa A, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C833–41

Factors influencing [3H]ryanodine binding to the skeletal muscle Ca2+ release channel. Needleman DH, et al. **Anal Biochem** 1997 May 15;248(1):173–9

Divergent effects of ruthenium red and ryanodine on Ca2+/calmodulin-dependent phosphorylation of the Ca2+ release channel (ryanodine receptor) in cardiac sarcoplasmic reticulum. Netticadan T, et al. **Arch Biochem Biophys** 1996 Sep 15;333(2):368–76

Contributions of Ca(2+)-influx via the L-type Ca(2+)-current and Ca(2+)-release from the sarcoplasmic reticulum to [Ca2+]i-transients in human myocytes. Beuckelmann DJ. **Basic Res Cardiol** 1997;92 Suppl 1:105–10

Calcium cycling proteins and force-frequency relationship in heart failure. Hasenfuss G, et al. **Basic Res Cardiol** 1996; 91 Suppl 2:17–22 (31 ref.)

Site-specific phosphorylation of a phospholamban peptide by cyclic nucleotide- and Ca2+/calmodulin-dependent protein kinases of cardiac sarcoplasmic reticulum. Karczewski P, et al. **Basic Res Cardiol** 1997;92 Suppl 1:37–43

Biochemical characterization of calsequestrin-binding 30-kDa protein in sarcoplasmic reticulum of skeletal muscle. Kagari T, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):700–6

Sphingosylphosphocholine modulates the ryanodine receptor/calcium-release channel of cardiac sarcoplasmic reticulum membranes. Betto R, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):327–33

Fatty acyl-CoA-acyl-CoA-binding protein complexes activate the Ca2+ release channel of skeletal muscle sarcoplasmic reticulum. Fulceri R, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):423–8

Effects of pH on phosphorylation of the Ca2+-ATPase of sarcoplasmic reticulum by inorganic phosphate. Khan YM, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):671–6

Calmodulin sensitivity of the sarcoplasmic reticulum ryanodine receptor from normal and malignant-hyperthermia-susceptible muscle. O'Driscoll S, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):421–6

Acylphosphatase stimulates Ca2+ transport and Ca(2+)-dependent ATPase activity in cardiac sarcoplasmic reticulum. Fiorillo C, et al. **Biochem Mol Biol Int** 1996 May;39(2):387–94

Luminal pH regulated calcium release kinetics in sarcoplasmic reticulum vesicles. Donoso P, et al. **Biochemistry** 1996 Oct 15;35(41):13419–25

Interaction of S100A1 with the Ca2+ release channel (ryanodine receptor) of skeletal muscle. Treves S, et al. **Biochemistry** 1997 Sep 23;36(38):11496–503

Histidine-containing dipeptides as endogenous regulators of the activity of sarcoplasmic reticulum Ca-release channels. Batrukova MA, et al. **Biochim Biophys Acta** 1997 Feb 21; 1324(1):142–50

Manganese as a cosubstrate for the phosphorylation of the sarcoplasmic reticulum Ca-dependent adenosine triphosphatase with orthophosphate. González DA, et al. **Biochim Biophys Acta** 1996 Sep 30;1276(3):188–94

Conducting and voltage-dependent behaviors of the native and purified SR Ca2+-release channels from the canine diaphragm. Picher M, et al. **Biochim Biophys Acta** 1997 Sep 4;1328(2):243–60

Localization of type-1 porin channel (VDAC) in the sarcoplasmatic reticulum. Jürgens L, et al. **Biol Chem Hoppe Seyler** 1995 Nov;376(11):685–9

Sensing and refilling calcium stores in an excitable cell. Li YX, et al. **Biophys J** 1997 Mar;72(3):1080–91

Factors shaping the confocal image of the calcium spark in cardiac muscle cells. Pratusevich VR, et al. **Biophys J** 1996 Dec;71(6):2942–57

Assessment of intra-SR free [Ca] and buffering in rat heart. Shannon TR, et al. **Biophys J** 1997 Sep;73(3):1524–31

Measurements of Ca2+ entry and sarcoplasmic reticulum Ca2+ content during the cardiac cycle in guinea pig and rat ventricular myocytes. Terracciano CM, et al. **Biophys J** 1997 Mar;72(3):1319–26

Sarcoplasmic reticulum lumenal Ca2+ has access to cytosolic activation and inactivation sites of skeletal muscle Ca2+ release channel. Tripathy A, et al. **Biophys J** 1996 Jun;70(6):2600–15

Adaptation of single cardiac ryanodine receptor channels. Vélez P, et al. **Biophys J** 1997 Feb;72(2 Pt 1):691–7

Luminal calcium regulation of calcium release from sarcoplasmic reticulum. Hidalgo C, et al. **Biosci Rep** 1995 Oct;15(5):387–97 (85 ref.)

Ca2+ binding and translocation by the sarcoplasmic reticulum ATPase: functional and structural considerations. Inesi G, et al. **Biosci Rep** 1995 Oct;15(5):327–39 (49 ref.)

The mechanism of coupling chemical and physical reactions by the calcium ATPase of sarcoplasmic reticulum and other coupled vectorial systems. Jencks WP. **Biosci Rep** 1995 Oct;15(5):283–7 (4 ref.)

Lipid structure and Ca(2+)-ATPase function. Lee AG, et al. **Biosci Rep** 1995 Oct;15(5):289–98 (50 ref.)

How do Ca2+ ions pass through the sarcoplasmic reticulum membrane. Mintz E, et al. **Biosci Rep** 1995 Oct;15(5):377–85 (64 ref.)

Ligand-gated channel of the sarcoplasmic reticulum Ca2+ transport ATPase. Wolosker H, et al. **Biosci Rep** 1995 Oct; 15(5):365–76 (53 ref.)

Transmembrane Ca2+ gradient and function of membrane proteins. Yang FY, et al. **Biosci Rep** 1995 Oct;15(5):351–64 (44 ref.)

Induction of calcium release from sarcoplasmic reticulum of skeletal muscle by xanthone and norathyriol. Kang JJ, et al. **Br J Pharmacol** 1996 Aug;118(7):1736–42

Enhancement of calcium cycling by atrial sarcoplasmic reticulum after cardiopulmonary bypass and cardioplegia during open heart surgery. O'Brien PJ, et al. **Can J Physiol Pharmacol** 1997 Feb;75(2):143–52

Sarcoplasmic reticulum Ca2+ uptake is not decreased in aorta from deoxycorticosterone acetate hypertensive rats: functional assessment with cyclopiazonic acid. Tostes RC, et al. **Can J Physiol Pharmacol** 1995 Nov;73(11):1536–45

Effects of inhibition of sarcoplasmic reticulum calcium uptake on contraction in myocytes isolated from failing human ventricle. Davia K, et al. **Cardiovasc Res** 1997 Jan; 33(1):88–97

Ca(2+)- and caffeine-induced Ca2+ release from the sarcoplasmic reticulum in rat skinned trabeculae: effects of pH and Pi. Kentish JC, et al. **Cardiovasc Res** 1997 Feb; 33(2):314–23

Measurement of changes in sarcoplasmic reticulum [Ca2+] in rat tail artery with targeted apoaequorin delivered by an adenoviral vector. Rembold CM, et al. **Cell Calcium** 1997 Jan;21(1):69–79

Nitric oxide activates skeletal and cardiac ryanodine receptors. Stoyanovsky D, et al. **Cell Calcium** 1997 Jan; 21(1):19–29

A method for measuring sarcoplasmic reticulum calcium uptake in the skeletal muscle using Fura-2. Warmington SA, et al. **Cell Calcium** 1996 Jul;20(1):73–82

Cyclic ADP-ribose does not regulate sarcoplasmic reticulum Ca2+ release in intact cardiac myocytes. Guo X, et al. **Circ Res** 1996 Jul;79(1):147–51

Adenoviral gene transfer of phospholamban in isolated rat cardiomyocytes. Rescue effects by concomitant gene transfer of sarcoplasmic reticulum Ca(2+)-ATPase. Hajjar RJ, et al. **Circ Res** 1997 Aug;81(2):145–53

Effects of thyroid hormone on left ventricular performance and regulation of contractile and Ca(2+)-cycling proteins in the baboon. Implications for the force-frequency and relaxation-frequency relationships. Khoury SF, et al. **Circ Res** 1996 Oct;79(4):727–35

Hydroxyl radical inhibits sarcoplasmic reticulum Ca(2+)-ATPase function by direct attack on the ATP binding site. Xu KY, et al. **Circ Res** 1997 Jan;80(1):76–81

Adenovirus-mediated gene transfer reconstitutes depressed sarcoplasmic reticulum Ca2+-ATPase levels and shortens prolonged cardiac myocyte Ca2+ transients. Giordano FJ, et al. **Circulation** 1997 Jul 15;96(2):400–3

Physiological effects of adenoviral gene transfer of sarcoplasmic reticulum calcium ATPase in isolated rat myocytes. Hajjar RJ, et al. **Circulation** 1997 Jan 21; 95(2):423–9

Expression of sarcoplasmic reticulum Ca2+ -ATPase mRNA in the hypertrophied heart of young spontaneously hypertensive rats. Ohta K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S228–9

Increased calcium sequestration by sarcoplasmic reticulum in small muscular arteries in young spontaneously hypertensive rats. Toyoda Y, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S223–4

Involvement of lysine residues in the gating of the ryanodine receptor/Ca2+-release channel of skeletal muscle sarcoplasmic reticulum. Feng W, et al. **Eur J Biochem** 1997 Aug 1;247(3):955–62

Cloning and characterization of the 5'-upstream regulatory region of the Ca(2+)-release channel gene of cardiac sarcoplasmic reticulum. Nishida K, et al. **Eur J Biochem** 1996 Sep 1;240(2):408–15

Possible role of calcium release from the sarcoplasmic reticulum in pacemaking in guinea-pig sino-atrial node. Rigg L, et al. **Exp Physiol** 1996 Sep;81(5):877–80

Biochemical characterization of cardiotin, a sarcoplasmic reticulum associated protein. Schaart G, et al. **FEBS Lett** 1997 Feb 17;403(2):168–72

The role of Ca2+ release from sarcoplasmic reticulum in the regulation of sinoatrial node automaticity. Hata T, et al. **Heart Vessels** 1996;11(5):234–41

Regulation of calcium release channel in sarcoplasmic reticulum. Kasai M, et al. **Ion Channels** 1996;4:303–31 (41 ref.)

Hydrogen peroxide disrupts Ca2+ release from the sarcoplasmic reticulum of rat skeletal muscle fibers [see comments] Brotto MA, et al. **J Appl Physiol** 1996 Aug; 81(2):731–7. Comment in: J Appl Physiol 1997 Jun;82(6):2054–6.

Diaphragm disuse reduces Ca2+ uptake capacity of sarcoplasmic reticulum. Howell S, et al. **J Appl Physiol** 1997 Jan;82(1):164–71

Induction of calcium release from isolated sarcoplasmic reticulum by triphenyltin. Kang JJ, et al. **J Biochem (Tokyo)** 1997 Jul;122(1):173–7

Protection of scallop sarcoplasmic reticulum ATPase from thermal inactivation by removal of calcium from high-affinity binding sites on the enzyme. Nagata Y, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1100–5

Characterization of type 3 ryanodine receptor (RyR3) of sarcoplasmic reticulum from rabbit skeletal muscles. Murayama T, et al. **J Biol Chem** 1997 Sep 19; 272(38):24030–7

Ectopic expression of phospholamban in fast-twitch skeletal muscle alters sarcoplasmic reticulum Ca2+ transport and muscle relaxation. Slack JP, et al. **J Biol Chem** 1997 Jul 25;272(30):18862–8

Glutathione modulates ryanodine receptor from skeletal muscle sarcoplasmic reticulum. Evidence for redox regulation of the Ca2+ release mechanism. Zable AC, et al. **J Biol Chem** 1997 Mar 14;272(11):7069–77

Role of malignant hyperthermia domain in the regulation of Ca2+ release channel (ryanodine receptor) of skeletal muscle sarcoplasmic reticulum. Zorzato F, et al. **J Biol Chem** 1996 Sep 13;271(37):22759–63

Movement of Ca(2+)-ATPase molecules within the sarcoplasmic/endoplasmic reticulum in skeletal muscle. Kaprielian Z, et al. **J Cell Sci** 1996 Oct;109 (Pt 10):2529–37

Inositol polyphosphates modify the kinetics of a small chloride channel in skeletal muscle sarcoplasmic reticulum. Kourie JI, et al. **J Membr Biol** 1997 May 15;157(2):147–58

ATP-sensitive voltage- and calcium-dependent chloride channels in sarcoplasmic reticulum vesicles from rabbit skeletal muscle. Kourie JI. **J Membr Biol** 1997 May 1; 157(1):39–51

Chloride-induced Ca2+ release from the sarcoplasmic reticulum of chemically skinned rabbit psoas fibers and isolated vesicles of terminal cisternae. Patel JR, et al. **J Membr Biol** 1996 Nov;154(1):81–9

Biochemical regulation of sarcoplasmic reticulum Cl-channel from human atrial myocytes: involvement of phospholamban. Decrouy A, et al. **J Mol Cell Cardiol** 1996 Apr;28(4):767–80

Early changes in the functions of cardiac sarcoplasmic reticulum in volume-overloaded cardiac hypertrophy in rats. Hisamatsu Y, et al. **J Mol Cell Cardiol** 1997 Apr; 29(4):1097–109

Alterations of expression and distribution of the Ca(2+)-storing proteins in endo/sarcoplasmic reticulum during differentiation of rat cardiomyocytes. Imanaka-Yoshida K, et al. **J Mol Cell Cardiol** 1996 Mar; 28(3):553–62

Magnesium and hydrogen ions inhibit sarcoplasmic reticulum function in cardiac muscle. Kawai M, et al. **J Mol Cell Cardiol** 1996 Jul;28(7):1401–13

Progression of left ventricular hypertrophy does not change the sarcoplasmic reticulum calcium store in the spontaneously hypertensive rat heart. Keller E, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):461–9

Effect of ischemia on the fraction of ryanodine-sensitive cardiac sarcoplasmic reticulum. Wu QY, et al. **J Mol Cell Cardiol** 1997 May;29(5):1363–73

Ontogeny of sarcoplasmic reticulum protein phosphorylation by Ca2+--calmodulin-dependent protein kinase. Xu A, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):405–18

Cardiac sarcoplasmic reticular function in rats with chronic heart failure following myocardial infarction. Yamaguchi F, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):753–63

Differences in expression of sarcoplasmic reticulum Ca2+-ATPase and Na+-Ca2+ exchanger genes between adjacent and remote noninfarcted myocardium after myocardial infarction. Yoshiyama M, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):255–64

Sarcoplasmic reticulum calcium uptake in human myocardium subjected to ischemia and reperfusion during cardiac surgery. Zucchi R, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1693–701

Phosphate transport into the sarcoplasmic reticulum of skinned fibres from rat skeletal muscle. Fryer MW, et al. **J Muscle Res Cell Motil** 1997 Apr;18(2):161–7

Superficial sarcoplasmic reticulum calcium buffering of resting, voltage-dependent Ca++ influx in rat femoral arterial smooth muscle. Nomura Y, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):830–7

Measurement of sarcoplasmic reticulum Ca2+ content and sarcolemmal Ca2+ fluxes in isolated rat ventricular myocytes during spontaneous Ca2+ release. Díaz ME, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):3–16

Total and sarcoplasmic reticulum calcium contents of skinned fibres from rat skeletal muscle. Fryer MW, et al. **J Physiol (Lond)** 1996 Jun 1;493 (Pt 2):357–70

Ca2+ diffusion and sarcoplasmic reticulum transport both contribute to [Ca2+]i decline during Ca2+ sparks in rat ventricular myocytes. Gómez AM, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):575–81

The source of contracticle calcium in guinea-pig cardiac myocytes treated with thapsigargin. Janiak R, et al. **J Physiol Pharmacol** 1996 Sep;47(3):411–23

Effect of sarcoplasmic reticulum Ca release into diadic region on Na/Ca exchange in cardiac myocytes. Lewartowski B, et al. **J Physiol Pharmacol** 1996 Dec;47(4):577–90

Comparison of indolidan analog binding sites of drug antibody and sarcoplasmic reticulum with inhibition of cyclic AMP phosphodiesterase. Ashikaga T, et al. **J Recept Signal Transduct Res** 1996 Sep–Nov; 16(5–6):315–37

Oxidative damage to sarcoplasmic reticulum Ca(2+)-pump induced by Fe2+/H2O2/ascorbate is not mediated by lipid peroxidation or thiol oxidation and leads to protein fragmentation. Castilho RF, et al. **Mol Cell Biochem** 1996 Jun 21;159(2):105–14

Early postnatal changes in sarcoplasmic reticulum calcium transport function in spontaneously hypertensive rats. Freestone N, et al. **Mol Cell Biochem** 1996 Oct–Nov; 163–164:57–66

Spectroscopic determination of sarcoplasmic reticulum Ca2+ uptake and Ca2+ release. Gilchrist JS, et al. **Mol Cell Biochem** 1997 Jul;172(1–2):159–70

Early after-depolarisations induced by noradrenaline may be initiated by calcium released from sarcoplasmic reticulum. Janiak R, et al. **Mol Cell Biochem** 1996 Oct–Nov; 163–164:125–30

Sarcoplasmic reticulum Ca(2+)-pump density is higher in distal than in proximal segments of porcine left coronary artery. Misquitta CM, et al. **Mol Cell Biochem** 1996 May 10;158(1):91–5

Rapid, simple and sensitive microassay for skeletal muscle homogenates in the functional assessment of the Ca-release channel of sarcoplasmic reticulum: application to diagnosis of susceptibility to malignant hyperthermia. O'Brien PJ, et al. **Mol Cell Biochem** 1997 Feb;167(1–2):61–72

The action of carboxyl modifying reagents on the ryanodine receptor/Ca2+ release channel of skeletal muscle sarcoplasmic reticulum. Feng W, et al. **Mol Membr Biol** 1996 Apr–Jun;13(2):85–93

Low levels of glucose-6-phosphate hydrolysis in the sarcoplasmic reticulum of skeletal muscle: involvement of glucose-6-phosphatase. Gamberucci A, et al. **Mol Membr Biol** 1996 Apr–Jun;13(2):103–8

The ryanodine binding sarcoplasmic reticulum calcium release channel in nonfailing and in failing human myocardium. Schumacher C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):80–5

Effects of thapsigargin and cyclopiazonic acid on sarcoplasmic reticulum Ca2+ uptake, spontaneous force oscillations and myofilament Ca2+ sensitivity in skinned rat ventricular trabeculae. Du GG, et al. **Pflugers Arch** 1996 May;432(1):59–65

Regulation of the purified Ca2+ release channel/ryanodine receptor complex of skeletal muscle sarcoplasmic reticulum by luminal calcium. Herrmann-Frank A, et al. **Pflugers Arch** 1996 May;432(1):155–7

Regulation of calcium release by calcium inside the sarcoplasmic reticulum in ventricular myocytes. Lukyanenko V, et al. **Pflugers Arch** 1996 Oct; 432(6):1047–54

The effects of changes to action potential duration on the calcium content of the sarcoplasmic reticulum in isolated guinea-pig ventricular myocytes. Terracciano CM, et al. **Pflugers Arch** 1997 Feb;433(4):542–4

The sarcoplasmic reticulum Ca2+ channel/ryanodine receptor: modulation by endogenous effectors, drugs and disease states. Zucchi R, et al. **Pharmacol Rev** 1997 Mar; 49(1):1–51 (759 ref.)

Regulation of cytosolic calcium levels in vascular smooth muscle. Orallo F. **Pharmacol Ther** 1996;69(3):153–71 (267 ref.)

Sarcoplasmic reticulum Ca2+ release flux underlying Ca2+ sparks in cardiac muscle. Blatter LA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4176–81

Spatially and functionally distinct Ca2+ stores in sarcoplasmic and endoplasmic reticulum. Golovina VA, et al. **Science** 1997 Mar 14;275(5306):1643–8

Sepsis inhibits synthesis of myofibrillar and sarcoplasmic proteins: modulation by interleukin-1 receptor antagonist. Vary TC, et al. **Shock** 1996 Jul;6(1):13–8

Fast and slow gating types of SR ryanodine receptor/channel purified from canine latissimus dorsi muscle. Shin JH, et al. **Yonsei Med J** 1996 Feb;37(1):72–80

Ca2+ uptake coupled to glycogen phosphorolysis in the glycogenolytic-sarcoplasmic reticulum complex from rat skeletal muscle. Nogues M, et al. **Z Naturforsch [C]** 1996 Jul-Aug;51(7–8):591–8

[Changes in calcium uptake and Ca(2+)-ATPase activity of cardiac sarcoplasmic reticulum in rat associated with hypoxia of various degrees] Sun X, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Feb; 18(1):38–42 (Eng. Abstr.) **(Chi)**

[Experimental analysis of the calcium source for cardiac excitation-contraction coupling in hibernator Citellus dauricus] Wang SQ, et al. **Sheng Li Hsueh Pao** 1995 Dec; 47(6):551–8 (Eng. Abstr.) **(Chi)**

[Effects of the number of carbon atoms of alcohols on the Ca(2+)-related functions of skinned skeletal muscle fibers from the guinea pigs] Nakajima T. **Masui** 1996 Nov; 45(11):1347–53 (Eng. Abstr.) **(Jpn)**

[Effect of physical load deficiency on the system of calcium transport in the sarcoplasmic reticulum of skeletal muscles amd myocardium] Stepanova VV, et al. **Aviakosm Ekolog Med** 1996;30(5):33–5 (24 ref.) (Eng. Abstr.) **(Rus)**

[Opposite effects of adaptation to physical exertion on the myocardium and skeletal muscle. Ca-transporting system of the sarcoplasmic reticulum and the enzymes of the antioxidant defense] Sazontova TG, et al. **Biull Eksp Biol Med** 1996 Jun;121(6):623–8 **(Rus)**

[Development of increased resistance of Ca-pump of the myocardial sarcoplasmic reticulum during adaptation to stress] Sazontova TG, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):272–6 **(Rus)**

[Ca2+ ion transport in the sarcoplasmic reticulum of the gastrocnemius muscles of white rats under treatment of the sciatic nerve with a colchicine solution] Brazaluk AZ, et al. **Ukr Biokhim Zh** 1996 Mar–Apr;68(2):114–9 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Early-onset myopathy with tubular aggregates. Tulinius MH, et al. **Pediatr Neurol** 1996 Jul;15(1):68–71 (15 ref.)

PHYSIOLOGY

Ca2+ transients in embryonic chick heart: contributions from Ca2+ channels and the sarcoplasmic reticulum. Brotto MA, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H518–25

Actions of sulfhydryl reagents on single ryanodine receptor Ca(2+)-release channels from sheep myocardium. Eager KR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1908–18

Effects of aging on sarcoplasmic reticulum function and contraction duration in skeletal muscles of the rat. Narayanan N, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1032–40

Hypertension alters rapid cooling contractures in single rat cardiocytes. Stauffer BL, et al. **Am J Physiol** 1997 Mar; 272(3 Pt 1):C1000–6

The role of the calcium release channel of skeletal muscle sarcoplasmic reticulum in malignant hyperthermia. MacLennan DH, et al. **Ann N Y Acad Sci** 1993 Dec 20; 707:294–304 (46 ref.)

Permeation through the calcium release channel of cardiac muscle. Chen D, et al. **Biophys J** 1997 Sep;73(3):1337–54

Chloride-dependent sarcoplasmic reticulum Ca2+ release correlates with increased Ca2+ activation of ryanodine receptors. Fruen BR, et al. **Biophys J** 1996 Nov; 71(5):2522–30

Indo-1 fluorescence signals elicited by membrane depolarization in enzymatically isolated mouse skeletal muscle fibers. Jacquemond V. **Biophys J** 1997 Aug; 73(2):920–8

Surface potentials measure ion concentrations near lipid bilayers during rapid solution changes. Laver DR, et al. **Biophys J** 1996 Aug;71(2):722–31

Purification and characterization of ryanotoxin, a peptide with actions similar to those of ryanodine. Morrissette J, et al. **Biophys J** 1996 Aug;71(2):707–21

Electrophysiological effects of ryanodine derivatives on the sheep cardiac sarcoplasmic reticulum calcium-release channel. Tinker A, et al. **Biophys J** 1996 May;70(5):2110–9

Modulation of SERCA2 activity: regulated splicing and interaction with phospholamban. Verboomen H, et al. **Biosci Rep** 1995 Oct;15(5):307 (48 ref.)

Sarcomeric calcium sparks activated by fiber depolarization and by cytosolic Ca2+ in skeletal muscle [published erratum appears in Cell Calcium 1997 Feb;21(2):173] Schneider MF, et al. **Cell Calcium** 1996 Aug;20(2):123–8 (27 ref.)

An estimate of the participation of the sarcoplasmic reticulum in the intracellular Ca2+ regulation in adult and newborn ferret hearts. Bonnet V, et al. **Comp Biochem Physiol A Physiol** 1996 Dec;115(4):341–8

Reciprocal control of the conformational state of the sarcoplasmic reticulum calcium channel protein by polarization and depolarization in the transverse tubule. Ikemoto N, et al. **FEBS Lett** 1996 Oct 7;394(3):330–4

Effects of tissue fractionation on exercise-induced alterations in SR function in rat gastrocnemius muscle. Chin ER, et al. **J Appl Physiol** 1996 Mar;80(3):940–8

Contractile apparatus and sarcoplasmic reticulum function: effects of fatigue, recovery, and elevated Ca2+. Williams JH. **J Appl Physiol** 1997 Aug;83(2):444–50

Heat stress improves functional recovery and induces synthesis of 27- and 70-kDa heat shock proteins without preserving sarcoplasmic reticulum function in the ischemic rat heart. Kontos MC, et al. **J Mol Cell Cardiol** 1996 Sep; 28(9):1885–94

Altered cardiac mechanism and sarcoplasmic reticulum function in pressure overload-induced cardiac hypertrophy in rats. Ohkusa T, et al. **J Mol Cell Cardiol** 1997 Jan; 29(1):45–54

Ryanodine perfusion decreases cardiac mechanical function without affecting homogenate sarcoplasmic reticulum Ca2+ uptake: comparison with the stunned heart. Wu QY, et al. **J Mol Cell Cardiol** 1996 May;28(5):943–55

Effects of the functional elimination of sarcoplasmic reticulum on the manganese-dependent norepinephrine-induced contractions of the guinea pig vas deferens. Tsunobuchi-Ushijima H, et al. **J Smooth Muscle Res** 1996 Aug;32(4):135–44

Early effects of denervation on sarcoplasmic reticulum properties of slow-twitch rat muscle fibres. Midrio M, et al. **Pflugers Arch** 1997 Aug;434(4):398–405

The role of sarcoplasmic reticulum and sarcoplasmic reticulum Ca2+-ATPase in the smooth muscle tone of the cat gastric fundus. Petkov GV, et al. **Pflugers Arch** 1996 Apr;431(6):928–35

[Sarcoplasmic reticulum function in ischemic cardiopathy] Mariani M, et al. **Cardiologia** 1995 Dec;40(12 Suppl 1):67–70 **(Ita)**

ULTRASTRUCTURE

Ultra-high-resolution scanning electron microscopy of the sarcoplasmic reticulum of the rat atrial myocardial cells. Yamasaki Y, et al. **Anat Rec** 1997 May;248(1):70–5

Location of endoplasmic reticulum relative to sarcoplasmic reticulum in cultured chick myotubes. van Goethem ID, et al. **Biochem Soc Trans** 1997 Feb;25(1):9S

MHC and sarcoplasmic reticulum protein isoforms in functionally overloaded cat plantaris muscle fibers. Talmadge RJ, et al. **J Appl Physiol** 1996 Apr; 80(4):1296–303

Morphological changes in the triads and sarcoplasmic reticulum of rat slow and fast muscle fibres following denervation and immobilization. Takekura H, et al. **J Muscle Res Cell Motil** 1996 Aug;17(4):391–400

SARCOPTES SCABIEI

Epiluminescence microscopy. A new approach to in vivo detection of Sarcoptes scabiei. Argenziano G, et al. **Arch Dermatol** 1997 Jun;133(6):751–3

Topical (pour-on) ivermectin in the treatment of canine scabies. Paradis M, et al. **Can Vet J** 1997 Jun;38(6):379–82

GENETICS

A DNA fingerprinting system for the ectoparasite Sarcoptes scabiei. Walton SF, et al. **Mol Biochem Parasitol** 1997 Apr; 85(2):187–96

IMMUNOLOGY

Skin test and radioallergosorbent test characteristics of scabietic patients. Morgan MS, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):190–6

Production of IL-1 alpha and IL-1 beta by human skin equivalents parasitized by Sarcoptes scabiei. Arlian LG, et al. **J Parasitol** 1996 Oct;82(5):719–23

Seroprevalence of Sarcoptes scabiei var canis antibodies among aborigines in peninsular Malaysia. Normaznah Y, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):53–6

Serodiagnosis of sarcoptic mange in pigs. Bornstein S, et al. **Vet Rec** 1997 Jul 5;141(1):8–12

ULTRASTRUCTURE

The behaviour of Sarcoptes scabiei var. hominis in human skin: an ultrastructural study. Fimiani M, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):105–13

SARCOSINE

ANALOGS & DERIVATIVES

Characterization of intracellular copper pools in rat hepatocytes using the chelator diamsar. Bingham MJ, et

SARCOSINE

al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1400–7

Improvement of PrPSc-detection in mouse spleen early at the preclinical stage of scrapie with collagenase-completed tissue homogenization and Sarkosyl-NaCl extraction of PrPSc. Grathwohl KU, et al. **Arch Virol** 1996; 141(10):1863–74

Influence of non-steroidal anti-inflammatory drugs on the binding kinetics of dansylsarcosine to human serum albumin. Stereoselectivity, steric and inductive effects. Keita Y, et al. **Arzneimittelforschung** 1996 Feb;46(2):164–8

High-performance liquid chromatographic determination of the imino acids (opines) meso-alanopine and D-strombine in muscle extract of invertebrates. Sandee B, et al. **J Chromatogr B Biomed Appl** 1996 Oct 11;685(1):176–80

METABOLISM

The mouse mutation sarcosinemia (sar) maps to chromosome 2 in a region homologous to human 9q33–q34. Brunialti AL, et al. **Genomics** 1996 Aug 15;36(1):182–4

1-SARCOSINE-8-ALANINE ANGIOTENSIN II see **SARALASIN**

1-SARCOSINE-8-ISOLEUCINE ANGIOTENSIN II

ANALOGS & DERIVATIVES

Receptor binding radiotracers for the angiotensin II receptor: radioiodinated [Sar1, Ile8]Angiotensin II. Gibson RE, et al. **Nucl Med Biol** 1994 May;21(4):593–600

SARCOSOMES see **MITOCHONDRIA, MUSCLE**

SARCOSPORIDIA see **SARCOCYSTIS**

SARCOSPORIDIOSIS see **SARCOCYSTOSIS**

SARIN

Structural and functional diversity of paraoxonases [news] La Du BN. **Nat Med** 1996 Nov;2(11):1186–7

ADVERSE EFFECTS

Ocular symptoms due to organophosphorus gas (Sarin) poisoning in Matsumoto [letter] Nohara M, et al. **Br J Ophthalmol** 1996 Nov;80(11):1023

Single fibre electromyographic changes in man after organophosphate exposure. Baker DJ, et al. **Hum Exp Toxicol** 1996 May;15(5):369–75

ANALYSIS

In-line respeciation: an ion-exchange ion chromatographic method applied to the separation of degradation products of chemical warfare nerve agents in soil. Vermillion WD, et al. **J Chromatogr A** 1997 May 16;770(1-2):253–60

METABOLISM

Method for the analysis of the methylphosphonic acid metabolites of sarin and its ethanol-substituted analogue in urine as applied to the victims of the Tokyo sarin disaster. Minami M, et al. **J Chromatogr B Biomed Sci Appl** 1997 Aug 1;695(2):237–44

The effect of the human serum paraoxonase polymorphism is reversed with diazoxon, soman and sarin. Davies HG, et al. **Nat Genet** 1996 Nov;14(3):334–6

POISONING

Unexpected nerve gas exposure in the city of Matsumoto: report of rescue activity in the first sarin gas terrorism. Okudera H, et al. **Am J Emerg Med** 1997 Sep;15(5):527–8

Organophosphate poisoning in pregnancy [letter; comment] Bailey B. **Ann Emerg Med** 1997 Feb;29(2):299. Comment on: Ann Emerg Med 1996 Aug;28(2):129–35. Comment on: Ann Emerg Med 1996 Aug;28(2):223–4.

Non cholinergic toxicity of Sarin [editorial; comment] Ishikawa S. **Intern Med** 1997 Jul;36(7):447. Comment on: Intern Med 1997 Jul;36(7):466–70.

Eighteen cases exposed to sarin in Matsumoto, Japan [see comments] Suzuki J, et al. **Intern Med** 1997 Jul;36(7):466–70 . Comment in: Intern Med 1997 Jul;36(7):447.

Sarin [letter; comment] Morgan-Jones D, et al. **J Accid Emerg Med** 1996 Nov;13(6):431–2. Comment on: J Accid Emerg Med 1996 May;13(3):202–6.

Sarin: guidelines on the management of victims of a nerve gas attack [see comments] Volans AP. **J Accid Emerg Med** 1996 May;13(3):202–6 (16 ref.). Comment in: J Accid Emerg Med 1996 Nov;13(6):431–2.

Tokyo subway gas attack [letter] Woodall J. **Lancet** 1997 Jul 26;350(9073):296

Sarin poisoning on Tokyo subway. Ohbu S, et al. **South Med J** 1997 Jun;90(6):587–93

Definitive evidence for the acute sarin poisoning diagnosis in the Tokyo subway. Nagao M, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):198–203

[Acute poisoning by neuroparalytic agents and its long-term effects] Ianno LV, et al. **Med Tr Prom Ekol** 1997;(6):5–7 (Eng. Abstr.) **(Rus)**

[The nerve gas terrorist attack in Tokyo subway 1995. Cooperation during the relief work is necessary] Kulling P, et al. **Lakartidningen** 1997 Jun 18;94(25):2395–8 **(Swe)**

TOXICITY

New method for retrospective detection of exposure to organophosphorus anticholinesterases: application to alleged sarin victims of Japanese terrorists. Polhuijs M, et al. **Toxicol Appl Pharmacol** 1997 Sep;146(1):156–61

SARKOLYSIN see **MELPHALAN**

SATELLITE COMMUNICATIONS

Remotely sensed surrogates of meteorological data for the study of the distribution and abundance of arthropod vectors of disease. Hay SI, et al. **Ann Trop Med Parasitol** 1996 Feb;90(1):1–19 (93 ref.)

Predicting the distribution of tsetse flies in West Africa using temporal Fourier processed meteorological satellite data. Rogers DJ, et al. **Ann Trop Med Parasitol** 1996 Jun; 90(3):225–41 (39 ref.)

The ecology of malaria—as seen from Earth-observation satellites. Thomson MC, et al. **Ann Trop Med Parasitol** 1996 Jun;90(3):243–64 (110 ref.)

SatelLife: getting relevant information to the developing world. Groves T. **BMJ** 1996 Dec 21–28;313(7072):1606–9

Could a satellite-based navigation system (GPS) be used to assess the physical activity of individuals on earth? Schutz Y, et al. **Eur J Clin Nutr** 1997 May;51(5):338–9

Study on the feasibility of delineating mosquitogenic conditions in and around Delhi using Indian Remote Sensing Satellite data. Sharma VP, et al. **Indian J Malariol** 1996 Sep;33(3):107–25

Remote sensing operations. Badran F, et al. **Int J Neural Syst** 1995 Dec;6(4):447–53 (11 ref.)

Remote, mobile telemedicine: the satellite transmission of medical data from Mount Logan. Otto C, et al. **J Telemed Telecare** 1997;3 Suppl 1:84–5

Telepsychiatry, the satellite system and family consultation. Paul NL. **J Telemed Telecare** 1997;3 Suppl 1:52–3

Use of the new media for medical education. Tangalos EG, et al. **J Telemed Telecare** 1997;3(1):40–7

Performance tests of a satellite-based asymmetric communication network for the 'hyper hospital'. Yamaguchi T. **J Telemed Telecare** 1997;3(2):78–82

Medical image transmission via communication satellite: evaluation of ultrasonographic images. Suzuki H, et al. **Radiat Med** 1996 Jul-Aug;14(4):205–9

Remote sensing and disease control: past, present and future. Hay SI. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr; 91(2):105–6

SATELLITE DNA see **DNA, SATELLITE**

SATELLITE RNA see **RNA, SATELLITE**

SATELLITE TOBACCO MOSAIC VIRUS see **TOBACCO MOSAIC VIRUS SATELLITE**

SATELLITE VIRUSES

see related
HELPER VIRUSES
RNA, SATELLITE

CHEMISTRY

Incorporation of microcrystals by growing protein and virus crystals. Malkin AJ, et al. **Proteins** 1996 Feb;24(2):247–52

GENETICS

Bacteriophage PSP3 and phiR73 activator proteins: analysis of promoter specificities. Julien B, et al. **J Bacteriol** 1996 Oct;178(19):5668–75

GROWTH & DEVELOPMENT

Polynucleotide phosphorylase of Escherichia coli is required for the establishment of bacteriophage P4 immunity. Piazza F, et al. **J Bacteriol** 1996 Sep;178(18):5513–21

SATELLITES, ARTIFICIAL see **SPACECRAFT**

SATIATION

Satiety power of dietary fat: a new appraisal. Himaya A, et al. **Am J Clin Nutr** 1997 May;65(5):1410–8

Sensory properties of a nonabsorbable fat substitute did not affect regulation of energy intake. Rolls BJ, et al. **Am J Clin Nutr** 1997 May;65(5):1375–83

Sensitivity theory and mental retardation: why functional analysis is not enough. Reiss S, et al. **Am J Ment Retard** 1997 May;101(6):553–66

Subjective and objective indices of the satiating effect of foods. Can people predict how filling a food will be? Green SM, et al. **Eur J Clin Nutr** 1996 Dec;50(12):798–806

DRUG EFFECTS

Investigation of the effects of opiate antagonists infused into the nucleus accumbens on feeding and sucrose drinking in rats. Kelley AE, et al. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1499–507

Simultaneous administration of neuromedin B-10 and gastrin-releasing peptide(1-27) reproduces the satiating and microstructural effects of bombesin. Stratford TR, et al. **Peptides** 1996;17(1):107–10

CP-94, 253: a selective serotonin1B (5-HT1B) agonist that promotes satiety. Lee MD, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):264–70

PHYSIOLOGY

Intake suppression after hepatic portal glucose infusion: all-or-none effect and its temporal threshold. Baird JP, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1454–60

The effect of social setting on response to a preloading manipulation in non-obese women and men. Kim JY, et al. **Appetite** 1996 Aug;27(1):25–40

Control of food intake. A physiologically complex, motivated behavioral system. Geiselman PJ. **Endocrinol Metab Clin North Am** 1996 Dec;25(4):815–29 (123 ref.)

Interrelationships among postprandial satiety, glucose and insulin responses and changes in subsequent food intake. Holt SH, et al. **Eur J Clin Nutr** 1996 Dec;50(12):788–97

Scintigraphic measurement of gastric emptying and ultrasonographic assessment of antral area: relation to appetite. Hveem K, et al. **Gut** 1996 Jun;38(6):816–21

Fat as a risk factor for overconsumption: satiation, satiety, and patterns of eating. Blundell JE, et al. **J Am Diet Assoc** 1997 Jul;97(7 Suppl):S63–9 (42 ref.)

[The circadian rhythms of the hydrolytic enzyme activity of the small intestine in fasting and satiated rats] Gordova LA, et al. **Fiziol Zh Im I M Sechenova** 1996 Mar; 82(3):27–35 (Eng. Abstr.) **(Rus)**

SATIETY RESPONSE

Hyperglycemia affects proximal gastric motor and sensory function during small intestinal triglyceride infusion. Hebbard GS, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G814–9

DRUG EFFECTS

Capsaicin attenuates feeding suppression but not reinforcement by intestinal nutrients. Lucas F, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1059–64

Central implants of dilute estradiol enhance the satiety effect of CCK-8. Butera PC, et al. **Behav Neurosci** 1996 Aug; 110(4):823–30

Bombesin and cholecystokinin differentially affect ingestive microstructural variables whether given alone or in combination. Moran TH, et al. **Behav Neurosci** 1996 Oct; 110(5):1110–6

The increased satiating potency of CCK-8 by estradiol is not mediated by upregulation of NTS CCK receptors. Geary N, et al. **Brain Res** 1996 May 6;719(1-2):179–86

A 35 amino acid fragment of leptin inhibits feeding in the rat [see comments] Samson WK, et al. **Endocrinology** 1996 Nov;137(11):5182–5. Comment in: Endocrinology 1996 Nov;137(11):4533–5.

Relative effects of carbohydrates and protein on satiety — a review of methodology. Reid M, et al. **Neurosci Biobehav Rev** 1997 May;21(3):295–308 (83 ref.)

The arcuate nucleus as a primary site of satiety effect of leptin in rats. Satoh N, et al. **Neurosci Lett** 1997 Mar 21; 224(3):149–52

The 5-HT2 receptor agonist MK-212 reduces food intake and increases resting but prevents the behavioural satiety sequence. Halford JC, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):41–6

Effect of pyloric cuffs on cholecystokinin satiety. Cox JE. **Physiol Behav** 1996 Sep;60(3):1023–6

The 5-HT1B receptor agonist CP-94,253 reduces food intake and preserves the behavioural satiety sequence. Halford JC, et al. **Physiol Behav** 1996 Sep;60(3):933–9

Peripheral atropinization does not change meal size controlled by prepyloric mechanisms. Rauhofer EA, et al. **Physiol Behav** 1996 Feb;59(2):237–40

Vena caval bombesin infusion decreases spontaneous meal size in undisturbed rats. Rushing PA, et al. **Physiol Behav** 1996 Feb;59(2):307–10

Effect of replacement of fat by nonabsorbable fat (sucrose polyester) in meals or snacks as a function of dietary restraint. Westerterp-Plantenga MS, et al. **Physiol Behav** 1997 Jun;61(6):939–47

PHYSIOLOGY

Effect of cimetidine on basal and postprandial plasma concentrations of cholecystokinin and gastrin in humans. Støa-Birketvedt G, et al. **Acta Physiol Scand** 1997 Apr; 159(4):321–5

Does ingested fat produce satiety? Horn CC, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R761–5

Effect of one week of fibre supplementation on hunger and satiety ratings and energy intake. Pasman WJ, et al. **Appetite** 1997 Aug;29(1):77–87

Serotonergic control of the organization of feeding and satiety. Simansky KJ. **Behav Brain Res** 1996;73(1-2):37–42 (61 ref.)

Intragastric carbohydrate exerts both intake-stimulating and intake-suppressing effects. Ramirez I. **Behav Neurosci** 1997 Jun;111(3):612–22

The effect of satiety on responses of gustatory neurons in the amygdala of alert cynomolgus macaques. Yan J, et al.

Brain Res 1996 Nov 18;740(1-2):193-200

Pathophysiological significance of the obese gene product, leptin, in ventromedial hypothalamus (VMH)-lesioned rats: evidence for loss of its satiety effect in VMH-lesioned rats. Satoh N, et al. **Endocrinology** 1997 Mar;138(3):947-54

Reduced meal-related gastrointestinal hormone response to adrenocorticotropic hormone stimulation test in female athletes. Lindén Hirschberg A, et al. **Gynecol Endocrinol** 1997 Apr;11(2):83-9

Fat as a risk factor for overconsumption: satiation, satiety, and patterns of eating. Blundell JE, et al. **J Am Diet Assoc** 1997 Jul;97(7 Suppl):S63-9 (42 ref.)

aFGF, endogenous satiety substance, facilitates learning, memory and immune function in aging. Oomura Y, et al. **Jpn J Physiol** 1997;47 Suppl 1:S52-4

Glucagon-like peptide-1 and satiety [letter; comment] van Dijk G, et al. **Nature** 1997 Jan 16;385(6613):214. Comment on: Nature 1996 Jan 4;379(6560):69-72.

Eating-associated VMN-dopamine levels of rats: comparison of oral and intragastric feeding. Yang ZJ, et al. **Neuroreport** 1997 Apr 14;8(6):1543-7

Postingestive factors influencing operant sugar intake in pigs. Baldwin BA. **Physiol Behav** 1996 Jul;60(1):283-6

The satiating potency of hepatic portal glucagon in rats is not affected by [corrected] insulin or insulin antibodies [published erratum appears in Physiol Behav 1997 Apr;61(4):631] Geary N, et al. **Physiol Behav** 1997 Feb; 61(2):199-208

The effect of caloric load and nutrient composition on induction of small intestinal satiety in dogs. Geoghegan JG, et al. **Physiol Behav** 1997 Jul;62(1):39-42

Ovariectomy and estradiol affect postingestive controls of sucrose licking. Hrupka BJ, et al. **Physiol Behav** 1997 Feb; 61(2):243-7

A direct measure of satiety disturbance in patients with bulimia nervosa. Kissileff HR, et al. **Physiol Behav** 1996 Oct;60(4):1077-85

Changes in taste and satiety in dietary-restrained women following stress. Mitchell SL, et al. **Physiol Behav** 1996 Aug;60(2):495-9

The effect of dietary fat on salivary habituation and satiation. Myers MD, et al. **Physiol Behav** 1997 Jul;62(1):155-61

Olfactory sensory-specific satiety in humans. Rolls ET, et al. **Physiol Behav** 1997 Mar;61(3):461-73

Flavor-postingestive consequence associations incorporate the behaviorally opposing effects of positive reinforcement and anticipated satiety: implications for interpreting two-bottle tests. Warwick ZS, et al. **Physiol Behav** 1996 Sep;60(3):711-5

Diet-induced thermogenesis and satiety in humans after full-fat and reduced-fat meals. Westerterp-Plantenga MS, et al. **Physiol Behav** 1997 Feb;61(2):343-9

The controls of fat intake. Greenberg D, et al. **Psychosom Med** 1996 Nov-Dec;58(6):559-69

Breakfasts with different fiber and macronutrient contents do not differentially affect timing, size or microstructure of the subsequent lunch. Silberbauer C, et al. **Z Ernahrungswiss** 1996 Dec;35(4):356-68

[Glucagon-like peptide 1—a new physiologic mediator of satiety?] Gallwitz B, et al. **Z Gastroenterol** 1996 Nov; 34(11):775-7 **(Ger)**

SATURN

Detection of ozone on Saturn's satellites Rhea and Dione. Noll KS, et al. **Nature** 1997 Jul 3;388(6637):45-7

Chemical evolution on Titan: comparisons to the prebiotic earth. Clarke DW, et al. **Orig Life Evol Biosph** 1997 Jun; 27(1-3):225-48 (77 ref.)

Photochemically driven collapse of Titan's atmosphere. Lorenz RD, et al. **Science** 1997 Jan 31;275(5300):642-4

SAUNA see **BATHS, FINNISH**

SAVANNA BABOONS see **PAPIO**

SAXITOXIN

ANALOGS & DERIVATIVES

Comparative binding and toxicity of saxitoxin and saxitoxinol in mice and in cultured cells. Naseem SM, et al. **Biochem Mol Biol Int** 1997 Feb;41(2):377-88

Determination of decarbamoyl saxitoxin and its analogues in shellfish by prechromatographic oxidation and liquid chromatography with fluorescence detection. Lawrence JF, et al. **J AOAC Int** 1996 Sep-Oct;79(5):1111-5

A simple procedure for sulfation and 35S radiolabelling of paralytic shellfish poisoning (PSP) gonyautoxins. Laycock MV, et al. **Nat Toxins** 1997;5(1):36-42

Toxicokinetics of [3H]saxitoxinol in peripheral and central nervous system of rats. Naseem SM. **Toxicol Appl Pharmacol** 1996 Nov;141(1):49-58

Paralytic shellfish poisoning in southern China. Anderson DM, et al. **Toxicon** 1996 May;34(5):579-90

Toxin production of Alexandrium minutum (Dinophyceae) from the Bay of Plenty, New Zealand. Chang FH, et al. **Toxicon** 1997 Mar;35(3):393-409

Occurrence of tetrodotoxin and paralytic shellfish poison in the Taiwanese crab Lophozozymus pictor. Tsai YH, et al. **Toxicon** 1995 Dec;33(12):1669-73

Occurrence of paralytic shellfish poison in Bangladeshi freshwater puffers. Zaman L, et al. **Toxicon** 1997 Mar; 35(3):423-31

ANALYSIS

Comparison of mouse bioassay and sodium channel cytotoxicity assay for detecting paralytic shellfish poisoning toxins in shellfish extracts. Truman P, et al. **J AOAC Int** 1996 Sep-Oct;79(5):1130-3

Development and preliminary validation of a microtiter plate-based receptor binding assay for paralytic shellfish poisoning toxins. Doucette GJ, et al. **Toxicon** 1997 May; 35(5):625-36

Immobilization of small molecules on solid matrices: a novel approach to enzyme-linked immunosorbent assay screening for saxitoxin and evaluation of anti-saxitoxin antibodies. Kralovec JA, et al. **Toxicon** 1996 Oct;34(10):1127-40

Occurrence of paralytic shellfish poison in Bangladeshi freshwater puffers. Zaman L, et al. **Toxicon** 1997 Mar; 35(3):423-31

ANTAGONISTS & INHIBITORS

Effects of 4-aminopyridine on saxitoxin intoxication. Chen HM, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):44-8

ISOLATION & PURIFICATION

A new saxitoxin analogue from a xanthid crab Atergatis floridus. Arakawa O, et al. **Toxicon** 1995 Dec; 33(12):1577-84

METABOLISM

Evidence for paralytic shellfish poisons in the freshwater cyanobacterium Lyngbya wollei (Farlow ex Gomont) comb. nov. Carmichael WW, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3104-10

Comparative binding and toxicity of saxitoxin and saxitoxinol in mice and in cultured cells. Naseem SM, et al. **Biochem Mol Biol Int** 1997 Feb;41(2):377-88

The guanidinium toxin binding site on the sodium channel. Fozzard HA, et al. **Jpn Heart J** 1996 Sep;37(5):683-92 (29 ref.)

Phylogenetic survey of soluble saxitoxin-binding activity in pursuit of the function and molecular evolution of saxiphilin, a relative of transferrin. Llewellyn LE, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):891-902

PHARMACOLOGY

[Sodium channel plugs and an almost perfect crime (editorial)] Kotsias BA. **Medicina (B Aires)** 1995;55(5 Pt 2):621-4 **(Spa)**

POISONING

Hypertension and identification of toxin in human urine and serum following a cluster of mussel-associated paralytic shellfish poisoning outbreaks. Gessner BD, et al. **Toxicon** 1997 May;35(5):711-22

TOXICITY

Evidence for paralytic shellfish poisons in the freshwater cyanobacterium Lyngbya wollei (Farlow ex Gomont) comb. nov. Carmichael WW, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3104-10

Comparative binding and toxicity of saxitoxin and saxitoxinol in mice and in cultured cells. Naseem SM, et al. **Biochem Mol Biol Int** 1997 Feb;41(2):377-88

Effects of 4-aminopyridine on saxitoxin intoxication. Chen HM, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):44-8

Paralytic shellfish poisoning in southern China. Anderson DM, et al. **Toxicon** 1996 May;34(5):579-90

4-Aminopyridine antagonizes saxitoxin-and tetrodotoxin-induced cardiorespiratory depression. Chang FC, et al. **Toxicon** 1996 Jun;34(6):671-90

Saxitoxin as a toxic principle of a freshwater puffer, Tetraodon fangi, in Thailand. Sato S, et al. **Toxicon** 1997 Jan;35(1):137-40

Occurrence of paralytic shellfish poison in Bangladeshi freshwater puffers. Zaman L, et al. **Toxicon** 1997 Mar; 35(3):423-31

SC-19220

PHARMACOLOGY

EP1 receptor blockade attenuates both spontaneous tone and PGE2-elicited contraction in guinea pig trachealis. Ndukwu IM, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):L626-33

SC DISEASE see **HEMOGLOBIN SC DISEASE**

SCABIES

[Apropos of human scabies (letter; comment)] Rigo Carratalá F, et al. **Aten Primaria** 1996 Oct 15;18(6):340-1. Comment on: Aten Primaria 1996 Mar 31;17(5):358-60. **(Spa)**

CHEMICALLY INDUCED

[Steroid-induced scabies norvegica] Karrer S, et al. **Hautarzt** 1997 May;48(5):343-6 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Skin test and radioallergosorbent test characteristics of scabietic patients. Morgan MS, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):190-6

Scabies in HTLV-I seropositive patients [letter; comment] del Giudice P. **J Am Acad Dermatol** 1997 Jan;36(1):134-5 . Comment on: J Am Acad Dermatol 1996 Jan;34(1):69-76.

Crusted scabies associated with systemic lupus erythematosus: response to benzyl benzoate therapy. Chutimunt N. **J Med Assoc Thai** 1996 Jan;79(1):65-8 (10 ref.)

[Crusted scabies (Norwegian scabies) in a patient with neuroAIDS (letter)] Font A, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):634-5 **(Spa)**

[Hyperkeratotic lesions in a patient with AIDS] Fernández-Martín JI, et al. **Rev Clin Esp** 1996 Jan; 196(1):55-6 **(Spa)**

DIAGNOSIS

Bullous scabies [letter] Veraldi S, et al. **Acta Derm Venereol** 1996 Mar;76(2):167-8 (11 ref.)

Scabies mimicking systemic lupus erythematosus. Bastian HM, et al. **Am J Med** 1997 Mar;102(3):305-6 (6 ref.)

Epiluminescence microscopy. A new approach to in vivo detection of Sarcoptes scabiei. Argenziano G, et al. **Arch Dermatol** 1997 Jun;133(6):751-3

An intensely pruritic rash. Golledge CL. **Aust Fam Physician** 1996 Sep;25(9):1493

Splenomegaly, eosinophilia, and pruritis: Hodgkin's disease, or...? [letter] Seymour JF. **Blood** 1997 Aug 15;90(4):1719-20

Bedside testing: the diagnostic cornerstone of dermatology. Brodell RT, et al. **Compr Ther** 1997 Mar;23(3):211-7 (25 ref.)

[Scabies: a common infection nevertheless often misdiagnosed] Barthe L, et al. **Rev Med Liege** 1996 Aug; 51(8):522-6 (27 ref.) **(Fre)**

[Erythematous papules in an adult woman] García Rodríguez J, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):39-40 **(Spa)**

DRUG THERAPY

Comparing antiscabies treatments [letter; comment] Downs A. **Arch Dermatol** 1997 Apr;133(4):526. Comment on: Arch Dermatol 1996 Aug;132(8):901-5.

Successful use of ivermectin in the treatment of endemic scabies in a nursing home. Sullivan JR, et al. **Australas J Dermatol** 1997 Aug;38(3):137-40

Successful treatment of crusted (Norwegian) scabies with ivermectin in two patients with human immunodeficiency virus infection [letter] DelGiudice P, et al. **Br J Dermatol** 1996 Sep;135(3):494-5

Ivermectin-responsive crusted scabies in HTLV1 carrier. Cordoliani F, et al. **Dermatology** 1996;192(4):351-2

A risk-benefit assessment of agents used in the treatment of scabies. Elgart ML. **Drug Saf** 1996 Jun;14(6):386-93 (44 ref.)

The use of ivermectin in the treatment of scabies [editorial] [see comments] Coleman R. **Ir Med J** 1996 Sep-Oct; 89(5):167. Comment in: Ir Med J 1997 Jan-Feb;90(1):38.

Deaths associated with ivermectin treatment of scabies [letter] [see comments] Barkwell R, et al. **Lancet** 1997 Apr 19;349(9059):1144-5. Comment in: Lancet 1997 Jul 19;350(9072):215; discussion 216. Comment in: Lancet 1997 Jul 19;350(9072):215-6; discussion 216. Comment in: Lancet 1997 Jul 19;350(9072):216.

Deaths associated with ivermectin for scabies [letter; comment] Coyne PE, et al. **Lancet** 1997 Jul 19; 350(9072):215-6; discussion 216. Comment on: Lancet 1997 Apr 19;349(9059):1144-5.

Deaths after ivermectin treatment [letter] Diazgranados JA, et al. **Lancet** 1997 Jun 7;349(9066):1698

Deaths associated with ivermectin for scabies [letter; comment] Reintjes R, et al. **Lancet** 1997 Jul 19; 350(9072):215; discussion 216. Comment on: Lancet 1997 Apr 19;349(9059):1144-5.

Scabies. Peterson CM, et al. **Pediatr Ann** 1996 Feb; 25(2):97-100 (13 ref.)

Advance in scabies treatment [letter; comment] Marsden PD. **Rev Soc Bras Med Trop** 1996 Jan-Feb;29(1):81. Comment on: Rev Soc Bras Med Trop 1995 Apr-Jun;28(2):97-8.

[Oral treatment of scabies with ivermectin] Tzenow I, et al. **Hautarzt** 1997 Jan;48(1):2-4 **(Ger)**

EPIDEMIOLOGY

Seroprevalence of Sarcoptes scabiei var canis antibodies among aborigines in peninsular Malaysia. Normaznah Y, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):53-6

ETHNOLOGY

Success of a scabies control program in an Australian aboriginal community. Carapetis JR, et al. **Pediatr Infect Dis J** 1997 May;16(5):494-9

ETIOLOGY

[Acquired scabies in Cuba: risks of "sexual tourism" (letter)] Ródenas López JM, et al. **Med Clin (Barc)** 1997 May 31; 109(1):39 **(Spa)**

SCABIES

GENETICS

A DNA fingerprinting system for the ectoparasite Sarcoptes scabiei. Walton SF, et al. **Mol Biochem Parasitol** 1997 Apr; 85(2):187–96

IMMUNOLOGY

[Norwegian scabies in immunosuppressed patients. Report of a case] Terra L, et al. **Minerva Med** 1996 Sep;87(9):423–5 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Localized crusted scabies in a patient with acquired immunodeficiency syndrome [letter] Porras-Luque JI, et al. **Acta Derm Venereol** 1997 Jul;77(4):326–7

Scabies and leukocytoclastic vasculitis in an HIV-seropositive man [letter] Valks R, et al. **Int J Dermatol** 1996 Aug;35(8):605–6

Immunohistopathological status of the skin in cases infested with three species of mites. Yassien NA, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):567–73

The behaviour of Sarcoptes scabiei var. hominis in human skin: an ultrastructural study. Fimiani M, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):105–13

THERAPY

Crusted ("Norwegian") scabies in a specialist HIV unit [letter; comment] Nandwani R, et al. **Genitourin Med** 1996 Dec; 72(6):453. Comment on: Genitourin Med 1996 Apr;72(2):115–7.

VETERINARY

Topical (pour-on) ivermectin in the treatment of canine scabies. Paradis M, et al. **Can Vet J** 1997 Jun;38(6):379–82

Efficacy of doramectin against intestinal nematodes and sarcoptic manage mites in naturally infected swine. Saeki H, et al. **J Vet Med Sci** 1997 Feb;59(2):129–32

Deaths associated with ivermectin for scabies [letter; comment] Bredal WP. **Lancet** 1997 Jul 19;350(9072):216. Comment on: Lancet 1997 Apr 19;349(9059):1144–5.

An assessment of the efficacy of deltamethrin with HCH for the treatment of sarcoptic mange in camels. Teame G. **Trop Anim Health Prod** 1997 Feb;29(1):33–4

Characterization of lymphocyte subtypes in scabietic skin lesions of naive and sensitized dogs. Arlian LG, et al. **Vet Parasitol** 1997 Mar;68(4):347–58

Using slaughter inspections to evaluate sarcoptic mange infestation of finishing swine. Cargill CF, et al. **Vet Parasitol** 1997 Jun;70(1–3):191–200

Effect of a herbal compound for treatment of sarcoptic mange infestations on dogs. Das SS. **Vet Parasitol** 1996 Jun; 63(3–4):303–6

Evaluation of an enzyme-linked immunosorbent assay (ELISA) for the serological diagnosis of sarcoptic mange in swine. Hollanders W, et al. **Vet Parasitol** 1997 Apr; 69(1–2):117–23

Activity of doramectin against nematode and arthropod parasites of swine. Logan NB, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):87–94

Characterization of antigen presenting cells and T-cells in progressing scabietic skin lesions. Stemmer BL, et al. **Vet Parasitol** 1996 Dec 31;67(3–4):247–58

Endectocidal efficacies of doramectin in naturally parasitized pigs. Yazwinski TA, et al. **Vet Parasitol** 1997 Jun; 70(1–3):123–8

Serodiagnosis of sarcoptic mange in pigs. Bornstein S, et al. **Vet Rec** 1997 Jul 5;141(1):8–12

Resistance of the sheep scab mite Psoroptes ovis to propetamphos [letter] [see comments] Clark AM, et al. **Vet Rec** 1996 Nov 2;139(18):451. Comment in: Vet Rec 1996 Dec 7;139(23):576.

Legislation on sheep scab [letter] Coles GC. **Vet Rec** 1997 Feb 1;140(5):135

Control of sheep scab [letter] Coles GC. **Vet Rec** 1997 Jul 5;141(1):26

Use of 0.25 per cent fipronil spray to treat sarcoptic manage in a litter of five-week-old puppies. Curtis CF. **Vet Rec** 1996 Jul 13;139(2):43–4

Avermectin toxicity in the dog [letter; comment] Doody GM. **Vet Rec** 1997 Jun 7;140(23):611–2. Comment on: Vet Rec 1997 May 24;140(21)563.

Control of sheep scab [letter] Taylor KC. **Vet Rec** 1997 Jul 5;141(1):26

Control of sheep scab (Psoroptes ovis) by a single prophylactic injection of moxidectin. Williams HG, et al. **Vet Rec** 1996 Dec 14;139(24):598–9

SCALA MEDIA see **COCHLEAR DUCT**

SCALA TYMPANI

ANATOMY & HISTOLOGY

A transparent model of the human scala tympani cavity. Rebscher SJ, et al. **J Neurosci Methods** 1996 Jan; 64(1):105–14

METABOLISM

Effect of asphyxia on the composition of cationic elements in the perilymph. Hara A, et al. **Hear Res** 1995 Oct; 90(1–2):228–31

SCALDED SKIN SYNDROME, NONSTAPHYLOCOCCAL see **EPIDERMAL NECROLYSIS, TOXIC**

SCALDED SKIN SYNDROME, STAPHYLOCOCCAL see **STAPHYLOCOCCAL SCALDED SKIN SYNDROME**

SCALENUS ANTICUS SYNDROME see **THORACIC OUTLET SYNDROME**

SCALING, DENTAL see **DENTAL SCALING**

SCALING, ROOT see **DENTAL SCALING**

SCALING, SUBGINGIVAL see **DENTAL SCALING**

SCALING, SUPRAGINGIVAL see **DENTAL SCALING**

SCALP

Syringocystadenoma papilliferum, basal cell carcinoma and trichilemmoma arising from nevus sebaceus of Jadassohn [letter] Yoon DH, et al. **Acta Derm Venereol** 1997 May; 77(3):242–3

Metastatic lesion of the cervical spine secondary to an extraocular sebaceous carcinoma. Antuña SA, et al. **Acta Orthop Belg** 1996 Dec;62(4):229–32

Subcutaneous granuloma annulare in a patient with rheumatoid arthritis and diabetes mellitus. Tam MM, et al. **Australas J Dermatol** 1996 Nov;37(4):199–201 (8 ref.)

Angiosarcoma of the scalp associated with renal transplantation. Kibe Y, et al. **Br J Dermatol** 1997 May; 136(5):752–6 (24 ref.)

Cutaneous metastases from a papillary thyroid carcinoma [letter] Makris A, et al. **Br J Dermatol** 1996 Nov; 135(5):860–1

Squamous cell carcinoma of the scalp following a chemical burn and chronic discoid lupus erythematosus [letter] Onayemi O, et al. **Br J Dermatol** 1996 Aug;135(2):342–3

A lesson--a biter bit? [letter] Till K. **Br J Neurosurg** 1997 Jun;11(3):266

Giant congenital naevus of the scalp and cranium: case report and review of the literature. Madaree A, et al. **Br J Plast Surg** 1997 Jan;50(1):20–5 (8 ref.)

Oral pilocarpine improves radiotherapy-induced dry eyes. Kumar S, et al. **Clin Oncol (R Coll Radiol)** 1997;9(1):62–3

Endometrial adenocarcinoma metastatic to the scalp: case report and literature review. Kushner DM, et al. **Gynecol Oncol** 1997 Jun;65(3):530–3 (9 ref.)

Malignant chondroid syringoma of scalp with cervical lymph node metastases. Seenu V, et al. **J Assoc Physicians India** 1996 Aug;44(8):565–6

The combination of scalp and body acupuncture. Zeitler J. **J Belge Med Phys Rehabil** 1980;3(3):215–9

Trichoblastoma with rippled-pattern. Akasaka T, et al. **J Dermatol** 1997 Mar;24(3):174–8

Atypical carcinoid of larynx: presentation with scalp metastases. Ereño C, et al. **J Laryngol Otol** 1997 Jan; 111(1):89–91

Angiosarcoma of the head and neck. el-Sharkawi S. **J Laryngol Otol** 1997 Feb;111(2):175–6

Angiosarcoma of the scalp. Visor RL, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):138

Cellular blue nevus of the scalp infiltrating the underlying bone: case report and review. Micali G, et al. **Pediatr Dermatol** 1997 May-Jun;14(3):199–203 (17 ref.)

A rapidly enlarging keratinised 'skull-cap'. Samuel LM, et al. **Postgrad Med J** 1997 Feb;73(856):111–3

[The effect of scalp acupuncture on the blood biochemical indices of healthy volunteers] Belitskaia RA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Jul-Aug;(4):27–9 (Eng. Abstr.) **(Rus)**

[Contact thermometry of lesions in alopecia areata] Mijailović B, et al. **Vojnosanit Pregl** 1997 Jan-Feb; 54(1):31–3 (Eng. Abstr.) **(Scr)**

ABNORMALITIES

Congenital desmoid tumor of the scalp: a histologically benign lesion with aggressive clinical behavior. Martínez-Lage JF, et al. **Childs Nerv Syst** 1996 Jul; 12(7):409–12

Congenital scalp defect, distal limb reduction anomalies, right spastic hemiplegia and hypoplasia of the left arteria cerebri media. Further evidence that interruption of early embryonic blood supply may result in Adams-Oliver (plus) syndrome. Fryns JP, et al. **Clin Genet** 1996 Dec;50(6):505–9

Cutis verticis gyrata, underrecognized neurocutaneous syndrome. Chang GY. **Neurology** 1996 Aug;47(2):573–5

[Adams-Oliver syndrome] Ishikiriyama S. **Ryoikibetsu Shokogun Shirizu** 1996;(15):234–5 (10 ref.) **(Jpn)**

ANATOMY & HISTOLOGY

Correlation between source asymmetry and scalp potential asymmetry in a prolate spheroid model of the head. Eshel Y, et al. **Comput Biol Med** 1997 Mar;27(2):87–96

Apoptotic pocket-like structures of the bulge of the terminal hair follicles of the human scalp. Narisawa Y, et al. **J Dermatol Sci** 1997 Jan;14(1):45–53

BLOOD SUPPLY

Non-traumatic arteriovenous fistulas of the scalp treated by a combination of embolization and surgical removal. Komiyama M, et al. **Neurol Med Chir (Tokyo)** 1996 Mar; 36(3):162–5

Possible involvement of neuropeptidergic sensory nerves in alopecia areata. Rossi R, et al. **Neuroreport** 1997 Mar 24; 8(5):1135–8

Serendipity or morbidity [letter] Olufolabi AJ, et al. **Paediatr Anaesth** 1996;6(6):499

Encephaloduroarterio-synangiosis in a child with sickle cell anemia and moyamoya disease. Vernet O, et al. **Pediatr Neurol** 1996 Apr;14(3):226–30

The effect of scalp ischaemia on measurement of cerebral blood volume by near-infrared spectroscopy. Owen-Reece H, et al. **Physiol Meas** 1996 Nov;17(4):279–86

Arteriovenous fistula of the scalp secondary to punch autograft hair transplantation: angioarchitecture, histopathology, and endovascular and surgical therapy. Davis AJ, et al. **Plast Reconstr Surg** 1997 Jul;100(1):242–9 (35 ref.)

Cirsoid aneurysm treatment by percutaneous injection of sodium tetradecyl sulfate. Hendrix LE, et al. **Surg Neurol** 1996 Dec;46(6):557–60; discussion 560–1

[A case of congenital AVM in temporoparietal muscle] Nishimura T, et al. **No Shinkei Geka** 1996 Mar;24(3):277–80 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Occupational exposure amongst locomotive shed workers and welders using neutron activation analysis of scalp hair. Ramakrishna VV, et al. **Sci Total Environ** 1996 Dec 9; 192(3):259–67

DRUG EFFECTS

Development of malignant melanoma after repeated topical photodynamic therapy with 5-aminolevulinic acid at the exposed site. Wolf P, et al. **Dermatology** 1997;194(1):53–4

EMBRYOLOGY

Intrapartum fetal atrial bigeminy--diagnostic and therapeutic role of the fetal scalp stimulation test. Wax JR, et al. **Am J Obstet Gynecol** 1996 May;174(5):1649–50

ENZYMOLOGY

LY191704 inhibits type I steroid 5 alpha-reductase in human scalp. Neubauer BL, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2055–60

INJURIES

Calvarial deformity and remodeling following prolonged scalp expansion in a child. Calobrace MB, et al. **Ann Plast Surg** 1997 Aug;39(2):186–9

Preexpanded radial forearm free flap to the scalp. Kobienia BJ, et al. **Ann Plast Surg** 1996 Dec;37(6):629–32

Expanded free scalp flap. Kakibuchi M, et al. **Br J Plast Surg** 1996 Oct;49(7):468–70

Replantation of part of an ear as an open fan composite graft. Lin SC, et al. **Br J Plast Surg** 1997 Feb;50(2):135–8

Primary intracranial malignant tumour mistaken for a postburn scalp Marjolin's ulcer. Cavadas PC, et al. **Burns** 1996 Jun;22(4):331–4

Cranial defect and decrease in cerebral blood flow resulting from deep contact burn of the scalp in the neonatal period. Matsumura H, et al. **Burns** 1996 Nov;22(7):560–5 (14 ref.)

Scalp lacerations demand careful attention before interhospital transfer of head injured patients. Fitzpatrick MO, et al. **J Accid Emerg Med** 1996 May;13(3):207–8

A health hazard for female adolescent farmers: scalp avulsion [letter] Borman H, et al. **J Adolesc Health** 1997 Jan;20(1):2

Industrial high-voltage electrical burn of the skull, a preventable injury. Wright HR, et al. **J Emerg Med** 1997 May-Jun;15(3):345–9

Replantation of the avulsion of the scalp: a case report. Srimuninnimit V, et al. **J Med Assoc Thai** 1996 Sep; 79(9):608–12

Comparison of skin stapling devices and standard sutures for pediatric scalp lacerations: a randomized study of cost and time benefits. Kanegaye JT, et al. **J Pediatr** 1997 May; 130(5):808–13

Vacuum extraction: does duration predict scalp injury? Teng FY, et al. **Obstet Gynecol** 1997 Feb;89(2):281–5

Microsurgical replantation of the avulsed scalp [letter; comment] Bickel KD. **Plast Reconstr Surg** 1997 Jun; 99(7):2105. Comment on: Plast Reconstr Surg 1996 May;97(6):1099–106; discussion 1107–8.

An easy method for scalp injury dressing with the patient's own hair [letter] de la Cruz M. **Plast Reconstr Surg** 1997 Jun;99(7):2116–7

Primary closure of contaminated scalp wound [letter] Chitkara N, et al. **Trop Doct** 1997 Oct;27(4):251–2

[Continuous elastic skin expansion for closure of the loss of substance of the scalp] Chikhani L, et al. **Rev Stomatol Chir Maxillofac** 1997 Aug;98(2):104–8 (Eng. Abstr.) **(Fre)**

[Surgical development in free flaps as exemplified by repair of tissue defects of the skull] Frey M. **Handchir Mikrochir Plast Chir** 1996 Nov;28(6):283–91 (Eng. Abstr.) **(Ger)**

INNERVATION

The effect of bupivacaine skull block on the hemodynamic response to craniotomy [see comments] Pinosky ML, et al. **Anesth Analg** 1996 Dec;83(6):1256–61. Comment in: Anesth Analg 1997 Apr;84(4):942.

Apparent motion confounds early vernier visual evoked potentials. Noss RS, et al. **Brain Res** 1996 Jul 15; 727(1–2):153–61

Relationship between follicular nerve supply and alopecia. Hordinsky MK, et al. **Dermatol Clin** 1996 Oct;14(4):651–60 (25 ref.)

METABOLISM

Increased scalp skin and serum 5 alpha-reductase reduced androgens in a man relevant to the acquired progressive kinky hair disorder and developing androgenetic alopecia. Boudou P, et al. **Arch Dermatol** 1997 Sep;133(9):1129–33 (44 ref.)

Glutathione, glutathione S-transferase and reactive oxygen species of human scalp sebaceous glands in male pattern baldness. Giralt M, et al. **J Invest Dermatol** 1996 Aug; 107(2):154–8

PARASITOLOGY

Human scalps as a reservoir of domestic mites [letter] Naspitz CK, et al. **Lancet** 1997 Feb 8;349(9049):404

Demodex folliculorum in parakeratosis of the scalp in a child [letter] Pietrini P, et al. **Parasite** 1995 Mar;2(1):94

PATHOLOGY

Atretic cephalocele in the adult. Martínez-Lage JF, et al. **Acta Neurochir (Wien)** 1997;139(6):585–6

Malignant proliferating trichilemmal tumor [letter] Noto G, et al. **Am J Dermatopathol** 1997 Apr;19(2):202–4 (16 ref.)

Scalp necrosis in giant cell arteritis and review of the literature. Currey J. **Br J Rheumatol** 1997 Jul;36(7):814–6 (24 ref.)

Headache and scalp edema in sickle cell disease. Pari G, et al. **Can J Neurol Sci** 1996 Aug;23(3):224–6

Carbon dioxide laser-assisted hair transplantation. The effect of laser parameters on scalp tissue--a histologic study. Smithdeal CD. **Dermatol Surg** 1997 Sep;23(9):835–40

Hibernoma of scalp: case report and review of literature. Naik R, et al. **Indian J Cancer** 1996 Jun;33(2):116–8 (13 ref.)

Role of fine needle aspiration cytology in diagnosis of malignant scalp and underlying bone tumours. Mondal A, et al. **Indian J Pathol Microbiol** 1996 Oct;39(4):265–9

Eosinophils in fibrous tracts and near hair bulbs: a helpful diagnostic feature of alopecia areata. Elston DM, et al. **J Am Acad Dermatol** 1997 Jul;37(1):101–6

Intracranial osteolytic meningioma affecting the scalp. Iglesias ME, et al. **J Am Acad Dermatol** 1996 Oct; 35(4):641–2

Atretic encephalocele/myelocele--case reports with emphasis on pathogenesis. Hong EK, et al. **J Korean Med Sci** 1996 Aug;11(4):364–8

Deep cerebral invasion by basal cell carcinoma of the scalp. Parizel PM, et al. **Neuroradiology** 1996 Aug;38(6):575–7

Myxoid liposarcoma of the scalp: case report and literature review. Herman O, et al. **Plast Reconstr Surg** 1997 Jul; 100(1):84–5 (9 ref.)

Alopecia: histologic diagnosis by transverse sections. Templeton SF, et al. **Semin Diagn Pathol** 1996 Feb; 13(1):2–18 (33 ref.)

[Primary meningioma of the scalp. Report of a case (letter)] Le Pelletier F, et al. **Ann Pathol** 1997 Mar;17(1):75–6 **(Fre)**

PHYSIOLOGY

Precision of dipole localization in a spherical volume conductor: a comparison of referential EEG, magnetoencephalography and scalp current density methods. Murro AM, et al. **Brain Topogr** 1995 Winter; 8(2):119–25

Some methods for dynamic analysis of the scalp recorded EEG. Pribram KH, et al. **Brain Topogr** 1996 Summer; 8(4):367–77

Simple methods of identifying the independently generated components of scalp-recorded responses evoked by stationary patterns. Jeffreys DA. **Exp Brain Res** 1996 Sep; 111(1):100–12

A modified boundary element method for the estimation of potential fields on the scalp. Srebro R. **IEEE Trans Biomed Eng** 1996 Jun;43(6):650–3

Transcranial magnetic stimulation of the human frontal eye field. Thickbroom GW, et al. **J Neurol Sci** 1996 Dec; 144(1–2):114–8

Theta band power in the human scalp EEG and the encoding of new information. Klimesch W, et al. **Neuroreport** 1996 May 17;7(7):1235–40

Evidence for rapid face recognition from human scalp and intracranial electrodes. Seeck M, et al. **Neuroreport** 1997 Aug 18;8(12):2749–54

PHYSIOPATHOLOGY

Spine and scalp recordings as a function of intensity. A model for changes during spinal cord monitoring. Slimp JC, et al. **Spine** 1996 Jan 1;21(1):99–103

RADIOGRAPHY

Effect of source location on the scalp potential asymmetry in a numerical model of the head. Abboud S, et al. **IEEE Trans Biomed Eng** 1996 Jul;43(7):690–6

Parietal bone non-secreting solitary myeloma (plasmacytoma) with spread to the epidural space and scalp. Case report. Zingale A, et al. **J Neurosurg Sci** 1995 Dec; 39(4):249–52

RADIONUCLIDE IMAGING

Infected sebaceous cyst. A cause for false-positive total-body I-123 metastatic survey for thyroid cancer. Turoglu HT, et al. **Clin Nucl Med** 1996 Nov;21(11):887

PET for diagnosis of malignant lymphoma of the scalp: comparison of [11C]methyl-L-methionine and [18F]fluoro-2-deoxyglucose. Tsuyuguchi N, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):590–3 (16 ref.)

SURGERY

The management of extensive tumours of the scalp. Kozák J, et al. **Acta Chir Plast** 1995;37(3):71–5

Scarpa's adipofascial flap for repair of wide scalp defects [see comments] Koshima I, et al. **Ann Plast Surg** 1996 Jan; 36(1):88–92. Comment in: Ann Plast Surg 1996 Sep;37(3):343–4.

Tension and flap advancement in the human scalp. Raposio E, et al. **Ann Plast Surg** 1997 Jul;39(1):20–3

Transcranial erosion of a benign dermal cylindroma. Wyld L, et al. **Ann Plast Surg** 1996 Feb;36(2):194–6

Expanded free scalp flap. Kakibuchi M, et al. **Br J Plast Surg** 1996 Oct;49(7):468–70

Cranial defect and decrease in cerebral blood flow resulting from deep contact burn of the scalp in the neonatal period. Matsumura H, et al. **Burns** 1996 Nov;22(7):560–5 (14 ref.)

A comparison of the scalp kinetics in scalp-lifting with and without an intact occipital neurovascular bundle. Brandy DA. **Dermatol Surg** 1997 Sep;23(9):819–27

Experience with a make-it-yourself scalp extender with hooks. Bridenstine JB. **Dermatol Surg** 1997 Jun; 23(6):469–73

Hairline reconstruction utilizing modified winged V-plastic hair-bearing flaps and focal anastomotic line excisions. Field LM. **Dermatol Surg** 1996 Nov;22(11):937–40

Anchor scalp reduction. Seery GE. **Dermatol Surg** 1996 Dec; 22(12):1009–13

Subaponeurotic connective tissue: a safe way to reconstruct facial and oropharyngeal defects. Ristić J, et al. **J Craniomaxillofac Surg** 1996 Oct;24(5):276–80 (6 ref.)

Microsurgical reconstruction during the early puerperium. Iglesias M, et al. **J Reconstr Microsurg** 1996 May; 12(4):211–3

Double V-Y subcutaneous island flap. Parell GJ, et al. **Laryngoscope** 1996 Nov;106(11):1434–5

Concepts in scalp and forehead reconstruction. TerKonda RP, et al. **Otolaryngol Clin North Am** 1997 Aug; 30(4):519–39 (23 ref.)

The necessity for aggressive treatment with Marjolin's ulcers of the scalp [letter] Aköz T, et al. **Plast Reconstr Surg** 1997 Sep;100(3):805–6

Temporal bipedicled scalp flap: zone of necrosis by accidental rupture of one pedicle [letter] Giraldo F, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1317–9

Sideburn reconstruction with an expanded supraauricular trapezoidal flap. Giraldo F, et al. **Plast Reconstr Surg** 1997 Jul;100(1):257–61

Obtaining maximal use of expanded scalp rotation flaps via an experimental model. Vendroux J, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1000–5

TRANSPLANTATION

Fibrosis in galeo pericranial flaps [letter; comment] Tighe JV. **Br J Oral Maxillofac Surg** 1997 Jun;35(3):222–3. Comment on: Br J Oral Maxillofac Surg 1996 Feb;34(1):47–50.

Skin harvesting on the scalp in children: utopia or reality. Gyger D, et al. **Eur J Pediatr Surg** 1996 Jun;6(3):166–9

ULTRASTRUCTURE

Ultrastructural abnormalities in the dermal papillae of both lesional and clinically normal follicles from alopecia areata scalps. Nutbrown M, et al. **Br J Dermatol** 1996 Aug; 135(2):204–10

SCALP DERMATOSES

The facts of lice. **CMAJ** 1997 Sep 15;157(6):747–8 **(Eng, Fre)**

Diffuse heterochromia of scalp hair. Lee WS, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):823–5

CONGENITAL

Conservative management of aplasia cutis congenita [letter] Yilmaz S, et al. **Dermatol Surg** 1997 May;23(5):402–3

Pigmented plaque with hypertrichosis on the scalp of an infant [clinical conference] Knable A, et al. **Pediatr Dermatol** 1996 Sep–Oct;13(5):431–3

Congenital melanoma: a case suggesting rhabdomyogenic differentiation. Koyama T, et al. **Pediatr Dermatol** 1996 Sep–Oct;13(5):389–93

DIAGNOSIS

Differential diagnosis of scalp trichilemmal cyst on MRI. Adachi N, et al. **Dermatology** 1996;193(3):263–5

Sarcoidosis presenting as a scarring alopecia: report of a rare cutaneous manifestation of systemic sarcoidosis. Takahashi H, et al. **Dermatology** 1996;193(2):144–6

Recurrent "unexplained" scalp swelling in an eighteen-month-old child: an atypical presentation of angioedema causing confusion with child abuse. Thakur BK, et al. **J Pediatr** 1996 Jul;129(1):163–5

DRUG THERAPY

Trichophyton mentagrophytes kerion in a woman [letter] Aste N, et al. **Br J Dermatol** 1996 Dec;135(6):1010–1

Medicated shampoos. Shapiro J, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):123–8 (41 ref.)

Effect of ketoconazole-medicated shampoos on squamometry and Malassezia ovalis load in pityriasis capitis. Arrese JE, et al. **Cutis** 1996 Sep;58(3):235–7

Ivermectin-responsive crusted scabies in HTLV1 carrier. Cordoliani F, et al. **Dermatology** 1996;192(4):351–2

Systemic cyclosporine and low-dose prednisone in the treatment of chronic severe alopecia areata: a clinical and immunopathologic evaluation. Shapiro J, et al. **J Am Acad Dermatol** 1997 Jan;36(1):114–7

Drugs for head lice. **Med Lett Drugs Ther** 1997 Jan 17; 39(992):6–7

Treatment with bifonazole shampoo for scalp seborrhea in infants and young children. Zeharia A, et al. **Pediatr Dermatol** 1996 Mar–Apr;13(2):151–3

EPIDEMIOLOGY

[The epidemiological aspects of pediculosis] Khudobin VV. **Voen Med Zh** 1996 Aug;317(8):29–32 **(Rus)**

ETIOLOGY

Allergic contact dermatitis from disodium ricinoleamido MEA-sulfosuccinate in shampoo. Tan BB, et al. **Contact Dermatitis** 1996 Nov;35(5):307

Erosive pustular dermatosis of the scalp in skin grafts: report of three cases. Ena P, et al. **Dermatology** 1997;194(1):80–4 (26 ref.)

Acromegaly and cutis verticis gyrata. O'Reilly FM, et al. **J R Soc Med** 1997 Feb;90(2):79

[A case for diagnosis: erosive pustular dermatosis of the scalp] Loche F, et al. **Ann Dermatol Venereol** 1995; 122(11–12):799–800 **(Fre)**

MICROBIOLOGY

[White piedra. Report of a case] Zaror L, et al. **Rev Med Chil** 1996 May;124(5):593–6 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Adaptive sex-ratio manipulation in Pediculus humanus capitis: possible interpretations of Buxton's data. Rózsa L. **J Parasitol** 1997 Jun;83(3):543–4

Treatment of head lice [letter; comment] Nguyen VX, et al. **N Engl J Med** 1997 Mar 6;336(10):734; discussion 735 . Comment on: N Engl J Med 1996 Sep 12;335(11):790.

PATHOLOGY

Nevus sebaceus with apocrine and sebaceous differentiation. Ng WK. **Am J Dermatopathol** 1996 Aug;18(4):420–3

Papular and nodular lesions of the scalp, face, and neck. Secondary syphilis. Harden D, et al. **Arch Dermatol** 1997 Aug;133(8):1027, 1030

Sebocystomatosis: a clinical variant of steatocystoma multiplex. Lee YJ, et al. **Int J Dermatol** 1996 Oct; 35(10):734–5

Postmenopausal frontal fibrosing alopecia: a frontal variant of lichen planopilaris. Kossard S, et al. **J Am Acad Dermatol** 1997 Jan;36(1):59–66

Folliculotropic mycosis fungoides with large-cell transformation presenting as dissecting cellulitis of the scalp. Gilliam AC, et al. **J Cutan Pathol** 1997 Mar; 24(3):169–75

Congenital melanoma: a case suggesting rhabdomyogenic differentiation. Koyama T, et al. **Pediatr Dermatol** 1996 Sep–Oct;13(5):389–93

PREVENTION & CONTROL

April may be cruel, but November's pretty lousy, too. Siegler EL. **Ann Intern Med** 1996 Nov 1;125(9):774–5

You ought to have your head examined: pediculosis capitis redux. Adams RM. **Pediatr Infect Dis J** 1996 Nov; 15(11):1056–7

Model for the control of pediculus humanus capitis. Vermaak Z. **Public Health** 1996 Sep;110(5):283–8

[Characteristics predicting the quality of pharmaceutical information on the treatment of pediculosis] Nguyen VX, et al. **Can J Public Health** 1995 Nov–Dec;86(6):424–6 **(Fre)**

RADIONUCLIDE IMAGING

I-131 accumulation in folliculitis of the scalp. Kinuya S, et al. **Clin Nucl Med** 1996 Oct;21(10):807–8

SCALP DERMATOSES

THERAPY

Head lice in schoolchildren. Ibarra J, et al. **Arch Dis Child** 1996 Dec;75(6):471–3 (29 ref.)
Treatment of head lice [letter; comment] Garfinkel L. **N Engl J Med** 1997 Mar 6;336(10):735. Comment on: N Engl J Med 1996 Sep 12;335(11):790.
Treatment of head lice [letter; comment] Parker J. **N Engl J Med** 1997 Mar 6;336(10):734–5; discussion 735 . Comment on: N Engl J Med 1996 Sep 12;335(11):790.

SCANNING ELECTRON MICROSCOPY see **MICROSCOPY, ELECTRON, SCANNING**

SCANNING, RADIOISOTOPE see **RADIONUCLIDE IMAGING**

SCANNING TRANSMISSION ELECTRON MICROSCOPY see **MICROSCOPY, ELECTRON, SCANNING TRANSMISSION**

SCANNING TUNNELING MICROSCOPY see **MICROSCOPY, SCANNING TUNNELING**

SCAPEGOATING

Scapegoating the elderly: new voices, old theme [editorial] Minkler M. **J Public Health Policy** 1997;18(1):8–12

SCAPULA

Distal upper extremity function following proximal humeral resection and reconstruction for tumors: contralateral comparison. Damron TA, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):237–46
Practice tip. Interscapular pain. Taylor MD. **Aust Fam Physician** 1996 May;25(5):744
Atrophy of the infraspinatus muscle caused by a suprascapular ganglion. Biedert RM. **Clin J Sport Med** 1996 Oct;6(4):262–3; discussion 264
Split pectoralis major transfer for serratus anterior palsy. Connor PM, et al. **Clin Orthop** 1997 Aug;(341):134–42
Bilateral elastofibroma: a case report and review of the literature. Hoffman JK, et al. **Clin Orthop** 1996 Apr; (325):245–50 (49 ref.)
Limb salvage for neoplasms of the shoulder girdle. Intermediate reconstructive and functional results. O'Connor MI, et al. **J Bone Joint Surg Am** 1996 Dec; 78(12):1872–88
Nutritional myodegeneration associated with dorsal scapular displacement in beef heifers. Buergelt CD, et al. **J Comp Pathol** 1996 May;114(4):445–50
Rapid development of subscapular exostosis bursata. Jacobi CA, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr;6(2):164–6
Post-radiation osteosarcoma of the scapula. Logan PM, et al. **Skeletal Radiol** 1996 Aug;25(6):596–601
[Sciatialgia and scapulalgia disclosing endometriosis (letter)] Reis J. **Rev Neurol (Paris)** 1997 May;153(4):282 **(Fre)**

ABNORMALITIES

A scapula with an unreported canal. Ozturk AH, et al. **Bull Assoc Anat (Nancy)** 1997 Mar;81(252):19–20
Perturbation of BMP signaling in somitogenesis resulted in vertebral and rib malformations in the axial skeletal formation [see comments] Nifuji A, et al. **J Bone Miner Res** 1997 Mar;12(3):332–42. Comment in: J Bone Miner Res 1997 Mar;12(3):343–6.
Modified Woodward procedure for Sprengel deformity of the shoulder: long-term results. Borges JL, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):508–13
Glenoid hypoplasia and its relationship to instability. Trout TE, et al. **Skeletal Radiol** 1996 Jan;25(1):37–40

ANATOMY & HISTOLOGY

The scapula: principles of construction and stress. Anetzberger H, et al. **Acta Anat (Basel)** 1996;156(1):70–80
The glenoid notch and its relation to the shape of the glenoid cavity of the scapula. Prescher A, et al. **J Anat** 1997 Apr; 190 (Pt 3):457–60
Clavicles, scapulae and humeri from the Sima de los Huesos site (Sierra de Atapuerca, Spain). Carretero JM, et al. **J Hum Evol** 1997 Aug–Sep;33(2–3):357–408
Anthropometric study of normal glenohumeral relationships. McPherson EJ, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr; 6(2):105–12
Morphometric examination of the free scapular flap. Shimizu T, et al. **Plast Reconstr Surg** 1997 Jun;99(7):1947–53
Sublabral recess of the superior glenoid labrum: study of cadavers with conventional nonenhanced MR imaging, MR arthrography, anatomic dissection, and limited histologic examination. Smith DK, et al. **Radiology** 1996 Oct; 201(1):251–6
Anatomical relationships and scapular attachments of the supraspinatus muscle. Thomazeau H, et al. **Surg Radiol Anat** 1996;18(3):221–5
[Fundamentals, possibilities and limitations of sonography of osteofibrous tunnels in the shoulder area. 1] Moriggl B. **Anat Anz** 1997 Aug;179(4):355–73 (119 ref.) (Eng. Abstr.) **(Ger)**
[Fundamentals, possibilities and limitations of sonography of osteofibrous tunnels in the shoulder area. 2] Moriggl B. **Anat Anz** 1997 Aug;179(4):375–92 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Subscapular artery as a material for aorto–coronary bypass graft. Lopata P, et al. **Folia Morphol (Warsz)** 1996; 55(4):382–3

EMBRYOLOGY

Anthropomorphology of levator scapulae muscle. Lewandowski J, et al. **Folia Morphol (Warsz)** 1996; 55(4):377–9

INJURIES

Fractures of the scapula. Scavenius M, et al. **Acta Orthop Belg** 1996 Sep;62(3):129–32
Voluntary scapulothoracic subluxation: a case report. Kushwaha VP, et al. **Am J Orthop** 1997 Jul;26(7):499–501
Superior detachment of a glenoid labrum variant resembling an incomplete discoid meniscus in a wheelchair ambulator. Lee SB, et al. **Arthroscopy** 1997 Aug;13(4):511–4
Fracture of the coracoid process in an adolescent. Cottalorda J, et al. **Injury** 1996 Jul;27(6):436–7
Fracture of the scapula with intrathoracic penetration. A case report. Blue JM, et al. **J Bone Joint Surg Am** 1997 Jul; 79(7):1076–8
Fractures of the coracoid process [letter; comment] Goss TP. **J Bone Joint Surg Br** 1997 Jul;79(4):694. Comment on: J Bone Joint Surg Br 1997 Jan;79(1):17–9.
Fractures of the coracoid process [see comments] Ogawa K, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):17–9. Comment in: J Bone Joint Surg Br 1997 Jul;79(4):694.
Concomitant fracture of the coracoid and acromion after direct shoulder trauma. Lim KE, et al. **J Orthop Trauma** 1996;10(6):437–9 (14 ref.)
Bony changes of the glenoid as a consequence of shoulder instability [published erratum appears in J Shoulder Elbow Surg 1997 Jan–Feb;6(1):80] Edelson JG. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):293–8
Posterior approach for glenoid fracture. Kligman M, et al. **J Trauma** 1997 Apr;42(4):733–5
Conservative treatment of ipsilateral fractures of the scapula and clavicle. Ramos L, et al. **J Trauma** 1997 Feb; 42(2):239–42
[Glenoid fossa fracture] Kligman M, et al. **Harefuah** 1997 Apr 15;132(8):546–9, 607 (Eng. Abstr.) **(Heb)**

INNERVATION

Arthroscopic decompression of a ganglion cyst causing suprascapular nerve compression. Iannotti JP, et al. **Arthroscopy** 1996 Dec;12(6):739–45
Electrodiagnostic evidence for cervical radiculopathy and suprascapular neuropathy in shoulder pain. Date ES, et al. **Electromyogr Clin Neurophysiol** 1996 Sep;36(6):333–9
Results of nerve grafting for injuries of the axillary and suprascapular nerves. Mikami Y, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):527–31
Full exposure of the axillary and suprascapular nerves. Ochiai N, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):532–3
Suprascapular nerve entrapment: experience with 28 cases. Antoniadis G, et al. **J Neurosurg** 1996 Dec;85(6):1020–5
Neurogenic lesions after posterolateral thoracotomy in young children. Emmel M, et al. **Thorac Cardiovasc Surg** 1996 Apr;44(2):86–91
[Synovial cyst of the supracapsular notch of the shoulder with supracapsular nerve compression in a sportsman. Apropos of a case. Review of the literature] Rochwerger A, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996; 82(4):344–7 (12 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Caffey's disease of the scapula: CT and MR findings [letter] Katz DS, et al. **AJR Am J Roentgenol** 1997 Jan; 168(1):286–7
MR findings of plasmacytoma with calcified amyloid deposition. Soler R, et al. **Eur J Radiol** 1995 Dec 15; 21(2):152–4
Granulocytic sarcoma of the scapula: an unusual presentation of acute myeloblastic leukemia. Karnak I, et al. **J Pediatr Surg** 1997 Jan;32(1):121–2
Bony changes of the glenoid as a consequence of shoulder instability [published erratum appears in J Shoulder Elbow Surg 1997 Jan–Feb;6(1):80] Edelson JG. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):293–8
Winging of the scapula: the underlying biomechanics and an orthotic solution. Barnett ND, et al. **Proc Inst Mech Eng [H]** 1995;209(4):215–23
Flying scapula in a red deer (Cervus elaphus). David GP, et al. **Vet Rec** 1996 Jul 6;139(1):20
[Indirect MR arthrography in the diagnosis of lesions of the labrum glenoidale] Sommer T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jul;167(1):46–51 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Modelling the muscles of the scapula morphometric and coordinate data and functional implications. Johnson GR, et al. **J Biomech** 1996 Aug;29(8):1039–51
Electromyography of levator scapulae: new findings allow tests of a head stabilization model. Eliot DJ. **J Manipulative Physiol Ther** 1996 Jan;19(1):19–25
The influence of the mobility in the cervicothoracic spine and the upper ribs (shoulder girdle) on the mobility of the scapulohumeral joint. Sobel JS, et al. **J Manipulative Physiol Ther** 1996 Sep;19(7):469–74 (16 ref.)
Three-dimensional scapular orientation and muscle activity at selected positions of humeral elevation. Ludewig PM, et al. **J Orthop Sports Phys Ther** 1996 Aug;24(2):57–65 (58 ref.)
Bone strength and material properties of the glenoid. Frich LH, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr; 6(2):97–104
Measurements of scapular position and rotation: a reliability study. T'Jonck L, et al. **Physiother Res Int** 1996;1(3):148–58

PHYSIOPATHOLOGY

Ways of announcing a late-onset, heritable, disabling disease and their psychological consequences. Delaporte C. **Genet Couns** 1996;7(4):289–96
Scapular instability associated with brachial plexus irritation: a proposed causative relationship with treatment implications. Langley P. **J Hand Ther** 1997 Jan–Mar; 10(1):35–40 (15 ref.)
An objective measurement technique for posterior scapular displacement. Plafcan DM, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):336–41

RADIOGRAPHY

Assessment of radiolucent lines about the glenoid. An in vitro radiographic study. Havig MT, et al. **J Bone Joint Surg Am** 1997 Mar;79(3):428–32
Use of vertebral levels to measure presumed internal rotation at the shoulder: a radiographic analysis. Mallon WJ, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):299–306
The scapula as a window to the diagnosis of skeletal dysplasias. Mortier GR, et al. **Pediatr Radiol** 1997 May; 27(5):447–51
Glenoid hypoplasia and its relationship to instability. Trout TE, et al. **Skeletal Radiol** 1996 Jan;25(1):37–40

SURGERY

An experimental study of tensile strength of six different suture techniques. Heller KD, et al. **Arch Orthop Trauma Surg** 1996;115(2):108–10
Snapping scapula syndrome: three case reports and an analysis of the literature. Carlson HL, et al. **Arch Phys Med Rehabil** 1997 May;78(5):506–11 (14 ref.)
Local arthroscopic bone grafting of a juxta-articular glenoid bone cyst. Lee SB, et al. **Arthroscopy** 1997 Aug;13(4):502–6
Anatomic considerations for a modified posterior approach to the scapula. Ebraheim NA, et al. **Clin Orthop** 1997 Jan; (334):136–43
Modified Woodward procedure for Sprengel deformity of the shoulder: long-term results. Borges JL, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):508–13
Thoracoscapular fusion in facioscapulohumeral dystrophy: clinical review of a new surgical method. Twyman RS, et al. **J Shoulder Elbow Surg** 1996 May–Jun;5(3):201–5
Radical scapulectomy with limb salvage for shoulder girdle soft tissue sarcoma. Volpe CM, et al. **Surg Oncol** 1996 Feb; 5(1):43–8 (20 ref.)
[Surgical approach to the axillary nerve via an anterior trans-coracoid route] Chabernaud D, et al. **Acta Orthop Belg** 1996 Sep;62(3):183–6 (Eng. Abstr.) **(Fre)**

TRANSPLANTATION

Prefabrication of combined scapula flaps for microsurgical reconstruction in oro-maxillofacial defects: a new method [letter; comment] Téot L. **J Craniomaxillofac Surg** 1997 Jun;25(3):174. Comment on: J Craniomaxillofac Surg 1996 Aug;24(4):214–23.

SCARLET FEVER

COMPLICATIONS

Early retropharyngeal abscess formation after treatment of scarlet fever. Chan TC, et al. **J Emerg Med** 1996 May–Jun; 14(3):377

EPIDEMIOLOGY

The dynamics of scarlet fever epidemics in England and Wales in the 19th century. Duncan CJ, et al. **Epidemiol Infect** 1996 Dec;117(3):493–9
[Scarlet fever in 1995] Czarkowski MP. **Przegl Epidemiol** 1997;51(1–2):49–54 **(Pol)**

ETIOLOGY

Scarlatiniform exanthem and hepatitis C [letter] Garavelli PL, et al. **Recenti Prog Med** 1996 Dec;87(12):599

HISTORY

The dynamics of scarlet fever epidemics in England and Wales in the 19th century. Duncan CJ, et al. **Epidemiol Infect** 1996 Dec;117(3):493–9

MICROBIOLOGY

Outbreak of scarlet fever at a hospital day care centre: analysis of strain relatedness with phenotypic and genotypic characteristics. Hsueh PR, et al. **J Hosp Infect** 1997 Jul;

36(3):191–200

SCARPA'S GANGLION see **VESTIBULAR NERVE**

SCARS see **CICATRIX**

SCARS, HYPERTROPHIC see **CICATRIX, HYPERTROPHIC**

SCATTER FACTOR see **HEPATOCYTE GROWTH FACTOR**

SCATTERING, RADIATION

see related
NEPHELOMETRY AND TURBIDIMETRY

On integrating the techniques of direct methods with anomalous dispersion. IV. A simplified perturbation treatment for SAS phasing. Guo DY, et al. **Acta Crystallogr A** 1997 Jan 1;53 (Pt 1):74–83

Absolute molecular weight distribution of low-molecular-weight heparins by size-exclusion chromatography with multiangle laser light scattering detection. Knobloch JE, et al. **Anal Biochem** 1997 Feb 15; 245(2):231–41

Measurement of inherent particle properties by dynamic light scattering: introducing electrorotational light scattering. Prüger B, et al. **Biophys J** 1997 Mar;72(3):1414–24

Teaching light scattering spectroscopy: the dimension and shape of tobacco mosaic virus [published erratum appears in Biophys J 1997 Mar;72(3):1481] Santos NC, et al. **Biophys J** 1996 Sep;71(3):1641–50

Determining mineral content variations in bone using backscattered electron imaging. Bloebaum RD, et al. **Bone** 1997 May;20(5):485–90

The normalized peak scatter factor and normalized scatter functions for high energy photon beams. Day MJ, et al. **Br J Radiol** 1996;Suppl 25:168–76 (18 ref.)

The variation of percentage depth dose and scatter factor with beam quality. Pitchford WG. **Br J Radiol** 1996;Suppl 25:162–7 (3 ref.)

Scatter dose estimation based on dose-area product and the specification of radiation barriers. Williams JR. **Br J Radiol** 1996 Nov;69(827):1032–7

Crystallins from rat lens are especially susceptible to calpain-induced light scattering compared to other species. Shearer TR, et al. **Curr Eye Res** 1996 Aug;15(8):860–8

Normal aging changes of the scattering light intensity in human lens measuring with Scheimpflug photography. Shyn KH, et al. **Dev Ophthalmol** 1997;27:14–8

Rapid size distribution and purity analysis of gastric mucus glycoproteins by size exclusion chromatography/multi angle laser light scattering. Jumel K, et al. **Int J Biol Macromol** 1996 Feb;18(1–2):133–9

Effect of beam blocking on linac head scatter factors. Yu MK, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15; 37(2):465–8

Alterations in the light transmission through single lens fibers during calcium-mediated disintegrative globulization. Bhatnagar A, et al. **Invest Ophthalmol Vis Sci** 1997 Mar; 38(3):586–92

Light scattering by donor lenses as a function of depth and wavelength. van den Berg TJ. **Invest Ophthalmol Vis Sci** 1997 Jun;38(7):1321–32

Collagen fiber architecture of a cultured dermal tissue. Sacks MS, et al. **J Biomech Eng** 1997 Feb;119(1):124–7

The application of ion beam analysis to calcium phosphate-based biomaterials. Russell SW, et al. **J Biomed Mater Res** 1996 Feb;30(2):165–74

High-performance liquid chromatography method with light-scattering detection for measurements of lipid class composition: analysis of brains from alcoholics. Olsson NU, et al. **J Chromatogr B Biomed Appl** 1996 Jun 7;681(2):213–8

Direct localization of the tRNAs within the elongating ribosome by means of neutron scattering (proton-spin contrast-variation). Wadzack J, et al. **J Mol Biol** 1997 Feb 21;266(2):343–56

Radiative transfer implies a modified reciprocity relation. Aronson R. **J Opt Soc Am A** 1997 Feb;14(2):486–90

Luminescence optical tomography of dense scattering media. Chang J, et al. **J Opt Soc Am A** 1997 Jan;14(1):288–99

Regularized progressive expansion algorithm for recovery of scattering media from time-resolved data. Chang J, et al. **J Opt Soc Am A** 1997 Jan;14(1):306–12

Improved solutions of the steady-state and the time-resolved diffusion equations for reflectance from a semi-infinite turbid medium. Kienle A, et al. **J Opt Soc Am A** 1997 Jan;14(1):246–54

Perturbation theory for diffuse light transport in complex biological tissues. Ostermeyer MR, et al. **J Opt Soc Am A** 1997 Jan;14(1):255–61

Photon migration of near-diffusive photons in turbid media: a Lagrangian-based approach. Perelman LT, et al. **J Opt Soc Am A** 1997 Jan;14(1):224–9

Convolution picture of the boundary conditions in photon migration and its implications in time-resolved optical imaging of biological tissues. Wu J. **J Opt Soc Am A** 1997 Jan;14(1):280–7

Frequency-domain optical imaging of absorption and scattering distributions by a Born iterative method. Yao Y, et al. **J Opt Soc Am A** 1997 Jan;14(1):325–42

Imaging objects in tissuelike media with optical tagging and the diffuse photon differential transmittance. Zhu XD, et al. **J Opt Soc Am A** 1997 Jan;14(1):300–5

Small-angle HeNe laser light scatter and the compressive modulus of articular cartilage. Kovach IS, et al. **J Orthop Res** 1997 May;15(3):437–41

Structural analysis of A-protein of cucumber green mottle mosaic virus and tobacco mosaic virus by synchrotron small-angle X-ray scattering. Sano Y, et al. **J Protein Chem** 1997 Feb;16(2):151–9

On refraction in Monte-Carlo simulations of light transport through biological tissues. Kolinko VG, et al. **Med Biol Eng Comput** 1997 May;35(3):287–8

Lateral scatter correction algorithm for percentage depth dose in a large-field photon beam. Sánchez-Nieto B, et al. **Med Dosim** 1997 Summer;22(2):121–5

Added aluminum shielding to attenuate back scatter electrons from intra-oral lead shields. Weidlich GA, et al. **Med Dosim** 1996 Fall;21(3):165–7

A convolution model to convert transmission dose images to exit dose distributions. Boellaard R, et al. **Med Phys** 1997 Feb;24(2):189–99

Scattering of 60 keV photons by biological material and influence in diagnostic radiology. de Magalhães SD, et al. **Med Phys** 1996 Sep;23(9):1635–42

Electron dose calculation using multiple-scattering theory: energy distribution due to multiple scattering. Jette D, et al. **Med Phys** 1997 Mar;24(3):383–400

The finite-element method for the propagation of light in scattering media: frequency domain case. Schweiger M, et al. **Med Phys** 1997 Jun;24(6):895–902

The Compton backscattering process and radiotherapy. Weeks KJ, et al. **Med Phys** 1997 Mar;24(3):417–23

Analytical representation of head scatter factors for shaped photon beams using a two-component x-ray source model. Yu MK, et al. **Med Phys** 1996 Jun;23(6):973–84

Ultraviolet and visible spectroscopies for tissue diagnostics: fluorescence spectroscopy and elastic-scattering spectroscopy. Bigio IJ, et al. **Phys Med Biol** 1997 May; 42(5):803–14 (75 ref.)

Monitoring and correction of multiple scatter during clinical Compton scatter densitometry measurements. Mooney MJ, et al. **Phys Med Biol** 1996 Nov;41(11):2399–410

Radiation dosage from use of the image intensifier in orthopaedic surgery. Lo NN, et al. **Singapore Med J** 1996 Feb;37(1):69–71

Solution structures of GroEL and its complex with rhodanese from small-angle neutron scattering. Thiyagarajan P, et al. **Structure** 1996 Jan 15;4(1):79–88

Low-angle X-ray scattering signatures of urinary calculi. Dawson C, et al. **World J Urol** 1996;14 Suppl 1:S43–7

[Models for describing ultrasound scattering in blood] Xu S, et al. **Biomed Tech (Berl)** 1997 May;42(5):123–31 (Eng. Abstr.) **(Ger)**

[Quantum therapy in ophthalmology: therapy of progressive myopia by ASO devices] Zverev VA, et al. **Vestn Oftalmol** 1997 Mar-Apr;113(2):39–40 (Eng. Abstr.) **(Rus)**

SCENT GLANDS

Competition and chemical communication in wild groups of common marmosets (Callithrix jacchus). Lazaro-Perea C, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:534–7

ANATOMY & HISTOLOGY

Striated muscles and scent glands associated with the vaginal tract of the rabbit. Martínez-Gómez M, et al. **Anat Rec** 1997 Apr;247(4):486–95

CHEMISTRY

Cembrene A and a congeneric ketone isolated from the paracloacal glands of the Chinese alligator (Alligator sinensis). Mattern DL, et al. **J Nat Prod** 1997 Aug; 60(8):828–31

ENZYMOLOGY

[Histochemistry of phosphatases in two types of sole skin glands in various species of Far Eastern voles] Sokolov VE, et al. **Dokl Akad Nauk** 1996 Sep;350(2):284–6 **(Rus)**

PARASITOLOGY

Trypanosoma cruzi in the opossum Didelphis marsupialis: a study of the correlations and kinetics of the systemic and scent gland infections in naturally and experimentally infected animals. Jansen AM, et al. **Exp Parasitol** 1997 May; 86(1):37–44

Trypanosoma cruzi in the anal glands of urban opossums. I--Isolation and experimental infections. Urdaneta-Morales S, et al. **Mem Inst Oswaldo Cruz** 1996 Jul-Aug; 91(4):399–403

PHYSIOLOGY

[The histostructure of the adrenal gland in the Campbell hamster after extirpation of a specific midventral gland] Sokolov VE, et al. **Izv Akad Nauk Ser Biol** 1997 May-Jun; (3):287–96 (Eng. Abstr.) **(Rus)**

SECRETION

[Heterospecific social factors influencing the rate of sexual maturation of Campbell's hamsters (Phodopus campbelli Thomas, 1905): the role of cross-rearing and secretion of the midventral gland of male Djungarian hamsters (Phodopus sungorus pallas, 1773)] Sokolov VE, et al. **Dokl Akad Nauk** 1996 Oct;350(4):571–4 **(Rus)**

SCH-13521 see **FLUTAMIDE**

SCH-23390

Clozapine inhibits catalepsy induced by olanzapine and loxapine, but prolongs catalepsy induced by SCH 23390 in rats. Kalkman HO, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):361–4

Effects of chronic methamphetamine on SCH23390- or haloperidol-induced catalepsy, and effects of coadministration of SCH23390 or haloperidol in mice. Mizuki Y, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):437–40

METABOLISM

High-level expression of rat D1A dopamine receptor cDNA in mouse fibroblast LTK- cells by n-butyrate. Horiuchi A, et al. **Clin Exp Pharmacol Physiol** 1996 Feb;23(2):150–4

Effects of chronic ethanol treatment and ethanol withdrawal on [3H]SCH23390 binding to rat striatal membranes. Gili-Martín E, et al. **Neuropharmacology** 1997 Jan; 36(1):101–6

In vivo striatal binding of the D1 antagonist SCH 23390 is not modified by changes in dopaminergic transmission. Thibaut F, et al. **Neuropharmacology** 1996 Mar;35(3):267–72

PHARMACOLOGY

Ethopharmacology of aggression: impact on autonomic and mesocorticolimbic activity. Miczek KA, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:60–77 (108 ref.)

Effect of dopamine antagonism on the behavioral and hemodynamic responses to cocaine in piglets. Monitto CL, et al. **Biol Neonate** 1996;70(1):52–9

The effect of dopamine D1 receptor stimulation on the up-regulation of histamine H3-receptors following destruction of the ascending dopaminergic neurones. Ryu JH, et al. **Br J Pharmacol** 1996 Jun;118(3):585–92

Microelectrophoretic application of SCH-23390 into the lateral septal nucleus blocks ethanol-induced suppression of LTP, in vivo, in the adult rodent hippocampus. Criado JR, et al. **Brain Res** 1996 Apr 15;716(1–2):192–6

Dopamine release during cocaine self-administration in rats: effect of SCH23390. Egilmez Y, et al. **Brain Res** 1995 Dec 1;701(1–2):142–50

Differential effects of SCH 23390 on the apomorphine subsensitivity in the substantia nigra and ventral tegmental area 1 day following withdrawal from continuous or intermittent cocaine pretreatment. Lee TH, et al. **Brain Res** 1997 Jan 9;744(2):293–301

Dopaminergic and glutamatergic mechanisms mediate the induction of FOS-like protein by cocaethylene. Horowitz JM, et al. **Brain Res Bull** 1997;42(5):393–8

Dopamine D1 and D2 antagonists block L-DOPA-induced air-stepping in decerebrate neonatal rats. McCrea AE, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):130–2

Microinjections of SCH23390 and haloperidol into striatal subregions differentially affect water intake in the rat. Liao RM, et al. **Chin J Physiol** 1996;39(2):117–21

Dopaminergic basis for the facilitation of brain stimulation reward by the NMDA receptor antagonist, MK-801. Olds ME. **Eur J Pharmacol** 1996 Jun 13;306(1–3):23–32

Stimulating dopamine D1 receptors increases the locomotor activity of developing rats. Shieh GJ, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):103–7

The comparative effects of haloperidol, (-)-sulpiride, and SCH23390 on c-fos and c-jun mRNA expressions, and AP-1 DNA binding activity. Ozaki T, et al. **Eur Neuropsychopharmacol** 1997 Aug;7(3):181–7

Self-injurious behavior and dopaminergic neuron system in neonatal 6-hydroxydopamine-lesioned rat: 2. Intracerebral microinjection of dopamine agonists and antagonists. Okamura H, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):1031–7

Chronic treatment with antipsychotic drugs does not alter G protein alpha or beta subunit levels in rat brain. Meller E, et al. **Neuropharmacology** 1996;35(12):1785–91

Cocaine-induced behavioral sensitization: effects of haloperidol and SCH 23390 treatments. Mattingly BA, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):481–6

Vestibular compensation in aged rats with unilateral labyrinthectomy treated with dopaminergic drugs. Drago F, et al. **Pharmacol Res** 1996 Feb;33(2):135–40

Effects of haloperidol and SCH 23390 on acoustic startle in animals depleted of dopamine as neonates: implications for neuropsychiatric syndromes. Schwarzkopf SB, et al. **Psychopharmacology (Berl)** 1996 Feb;123(3):258–66

SCHAMBERG'S DISEASE see **PIGMENTATION DISORDERS**

SCHAUMANN'S DISEASE see **SARCOIDOSIS**

SCHEDULES, PATIENT see **APPOINTMENTS AND SCHEDULES**

SCHEIE'S SYNDROME

SCHEIE'S SYNDROME see **MUCOPOLYSACCHARIDOSIS I**

SCHEUERMANN'S DISEASE

DIAGNOSIS

Painful adult thoracic Scheuermann's disease. Diagnosis by discography and treatment by combined arthrodesis. Winter RB, et al. **Am J Orthop** 1996 Nov;25(11):783–6

[Scheuermann disease as predisposition of later spinal disease and its effect on expert assessment in occupational disease examinations] Wischnewski W, et al. **Versicherungsmedizin** 1996 Aug 1;48(4):126–8 (Eng. Abstr.) **(Ger)**

[Back pain in children] Abril Martín JC, et al. **An Esp Pediatr** 1997 Feb;46(2):133–7 (Eng. Abstr.) **(Spa)**

SURGERY

Painful adult thoracic Scheuermann's disease. Diagnosis by discography and treatment by combined arthrodesis. Winter RB, et al. **Am J Orthop** 1996 Nov;25(11):783–6

SCHIFF BASES

CHEMISTRY

Isolation of animal cell mutants defective in long-chain fatty aldehyde dehydrogenase. Sensitivity to fatty aldehydes and Schiff's base modification of phospholipids: implications for Sj-ogren-Larsson syndrome. James PF, et al. **J Biol Chem** 1997 Sep 19;272(38):23532–9

A series of novel imidazoline I2-receptor selective Schiff bases of 1-(benzylidenamino)-3,3-dimethylguanidine. Wikberg JE, et al. **Neurochem Int** 1997 Jan;30(1):95–9

Synthesis, characterization and biodistribution of new 99mTc oxo and nitrido complexes with bi- and tetradendate unsaturated NS and N2S2 Schiff bases derived from 2-aminocyclopentene-1-dithiocarboxylic acid as potential heart imaging agents. Coulais Y, et al. **Nucl Med Biol** 1994 Feb;21(2):263–8

A lysine to arginine substitution at position 146 of rabbit aldolase A changes the rate-determining step to Schiff base formation. Morris AJ, et al. **Protein Eng** 1996 Jan;9(1):61–7

Crystal structure of the reduced Schiff-base intermediate complex of transaldolase B from Escherichia coli: mechanistic implications for class I aldolases. Jia J, et al. **Protein Sci** 1997 Jan;6(1):119–24

A solution and solid state 15N NMR study of hydrogen bonding in a Schiffs base. Sitkowski J, et al. **Solid State Nucl Magn Reson** 1996 Nov;7(2):83–4

[Free radical processes in the rat blood during hyperbaric oxygenation and in the posthyperoxic period] Mogil'nitskaia LV, et al. **Ukr Biokhim Zh** 1996 Jan-Feb; 68(1):96–100 (Eng. Abstr.) **(Rus)**

METABOLISM

Threonine-89 participates in the active site of bacteriorhodopsin: evidence for a role in color regulation and Schiff base proton transfer. Russell TS, et al. **Biochemistry** 1997 Jun 17;36(24):7490–7

Schiff base forming drugs: mechanisms of immune potentiation and therapeutic potential. Chen H, et al. **J Mol Med** 1996 Sep;74(9):497–504 (61 ref.)

Effect of Schiff base formation on the function of the calcitriol receptor. Patel SR, et al. **Kidney Int** 1996 Nov; 50(5):1539–45

A series of novel imidazoline I2-receptor selective Schiff bases of 1-(benzylidenamino)-3,3-dimethylguanidine. Wikberg JE, et al. **Neurochem Int** 1997 Jan;30(1):95–9

PHARMACOLOGY

The superoxide dismutase-mimic copper-putrescine-pyridine suppresses lipid peroxidation in CHO cells. Implications for its prooxidative and antioxidative mechanisms of action. Nagele A, et al. **Free Radic Res** 1996 Aug;25(2):109–15

SCHILDER'S DISEASE see **ENCEPHALITIS PERIAXIALIS**

SCHILLING TEST

Effect of prior radiopharmaceutical administration on Schilling test performance: analysis and recommendations. Zuckier LS, et al. **J Nucl Med** 1996 Dec;37(12):1995–9

[Absorption test of vitamin] Nakamura T. **Nippon Rinsho** 1997 Apr;55 Suppl 2:113–4 (7 ref.) **(Jpn)**

SCHISTOSOMA

see related
SCHISTOSOMICIDES

Hepatitis viruses, schistosomal infection and liver cancer in Egypt [letter] Bedwani R, et al. **Int J Cancer** 1996 Nov 27;68(5):688–9

Survival of beta and gamma races of Neotricula aperta snail intermediate hosts of Schistosoma mekongi in raw waters. Lohachit C, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):396–9

ENZYMOLOGY

Proteolytic degradation of host hemoglobin by schistosomes. Brindley PJ, et al. **Mol Biochem Parasitol** 1997 Oct; 89(1):1–9 (57 ref.)

Schistosoma japonicum, S. mansoni, S. haematobium, S. intercalatum, and S. rodhaini: cysteine-class cathepsin activities in the vomitus of adult worms. Caffrey CR, et al. **Parasitol Res** 1997;83(1):37–41

GENETICS

Some molecular insights into schistosome evolution. Rollinson D, et al. **Int J Parasitol** 1997 Jan;27(1):11–28 (111 ref.)

Relationships between Schistosoma malayensis and other Asian schistosomes deduced from DNA sequences. Blair D, et al. **Mol Biochem Parasitol** 1997 Apr;85(2):259–63

Repetitive sequences within the first internal transcribed spacer of ribosomal DNA in schistosomes contain a Chi-like site. Kane RA, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):265–9

The karyotype of Trichobilharzia franki Müller et Kimmig, 1994 (Digenea:Schistosomatidae), a new European schistosome agent of swimmers' itch. Spakulová M, et al. **Parasite** 1997 Mar;4(1):63–6

IMMUNOLOGY

The radiation-attenuated vaccine against schistosomes in animal models: paradigm for a human vaccine? Coulson PS. **Adv Parasitol** 1997;39:271–336 (210 ref.)

Regulation of schistosome egg granuloma formation: host-soluble L-selectin enters tissue-trapped eggs and binds to carbohydrate antigens on surface membranes of miracidia. El Ridi R, et al. **Infect Immun** 1996 Nov; 64(11):4700–5

Role of monocyte chemoattractant protein-1 (MCP-1) in Th1 (mycobacterial) and Th2 (schistosomal) antigen-induced granuloma formation: relationship to local inflammation, Th cell expression, and IL-12 production. Chensue SW, et al. **J Immunol** 1996 Nov 15;157(10):4602–8

Experimental Schistosoma bovis infection in goats. Circulating antigen and antibody responses to egg and adult worm antigens during infection and following treatment with praziquantel. Johansen MV, et al. **Parasitology** 1996 Oct;113 (Pt 4):367–75

PHYSIOLOGY

Uncertainties in the epidemiology and control of schistosomiasis. Gryseels B. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):103–8 (53 ref.)

Schistosomiasis. Pathophysiology, diagnosis, and treatment. Elliott DE. **Gastroenterol Clin North Am** 1996 Sep; 25(3):599–625 (150 ref.)

Variations in Schistosoma mattheei egg morphology and viability according to age of infection in cattle. De Bont J, et al. **J Helminthol** 1996 Sep;70(3):265–7

The impact of primary Schistosoma bovis infection on a subsequent challenge infection in goats. Johansen MV, et al. **J Parasitol** 1997 Apr;83(2):242–6

ULTRASTRUCTURE

Morphometric variability of Schistosoma intercalatum eggs: a diagnostic dilemma. Almeda J, et al. **J Helminthol** 1996 Jun;70(2):97–102

SCHISTOSOMA HAEMATOBIUM

Distribution and genetic diversity of Schistosoma haematobium within its bulinid intermediate hosts in Mali. Dabo A, et al. **Acta Trop** 1997 Jun 24;66(1):15–26

Cercarial density in the river of an endemic area of schistosomiasis haematobia in Kenya. Muhoho ND, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):162–7

Observations on compatibility between Bulinus truncatus and Schistosoma haematobium in the Senegal River Basin. Rollinson D, et al. **Ann Trop Med Parasitol** 1997 Jun; 91(4):371–8

ANATOMY & HISTOLOGY

Human bilharzial ureters: I. Fine structure of eggs deposited in the submucosa and muscularis. el-Shoura SM, et al. **Afr J Med Med Sci** 1995 Sep;24(3):219–25

DRUG EFFECTS

Enzymatic basis for the lack of oxamniquine activity in Schistosoma haematobium infections. Pica-Mattoccia L, et al. **Parasitol Res** 1997;83(7):687–9

ENZYMOLOGY

Molecular forms of tegumental and muscle acetylcholinesterases of Schistosoma. Camacho M, et al. **Parasitology** 1996 Feb;112 (Pt 2):199–204

GENETICS

Distribution and genetic diversity of Schistosoma haematobium within its bulinid intermediate hosts in Mali. Dabo A, et al. **Acta Trop** 1997 Jun 24;66(1):15–26

GROWTH & DEVELOPMENT

Intraspecific diversity of Schistosoma haematobium in west Africa: chronobiology of cercarial emergence. N'Goran E, et al. **Acta Trop** 1997 Jun 24;66(1):35–44

Intraspecific variation in Schistosoma haematobium from Algeria. Kechemir N, et al. **J Helminthol** 1997 Mar; 71(1):29–33

Schistosoma haematobium: comparative studies on prevalence and cercarial shedding according to the shell diameter of Planorbarius metidjensis at miracidial exposure. Zekhnini A, et al. **Parasitol Res** 1997;83(3):303–5

IMMUNOLOGY

Extraction of Schistosoma haematobium antigens from infected human urine and generation of potential diagnostic monoclonal antibodies to urinary antigens. Bosompem KM, et al. **Acta Trop** 1996 Oct;62(2):91–103

Immunity and morbidity in infection due to Schistosoma haematobium. Hagan P. **Am J Trop Med Hyg** 1996 Nov; 55(5 Suppl):116–20 (31 ref.)

Day-to-day variation of egg output and schistosome circulating antigens in urine of Schistosoma haematobium-infected school children from Gabon and follow-up after chemotherapy. Van Etten L, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):337–41

A recombinant protein from Schistosoma mansoni useful for the detection of S. mansoni and Schistosoma haematobium antibodies. Hancock K, et al. **J Parasitol** 1997 Aug; 83(4):612–8

Homologous and heterologous protective immunity to Egyptian strains of Schistosoma mansoni and S. haematobium induced by ultraviolet-irradiated cercariae. Dean DA, et al. **Parasite Immunol** 1996 Aug;18(8):403–10

Age-related antibody profiles in Schistosoma haematobium infections in a rural community in Zimbabwe. Ndhlovu P, et al. **Parasite Immunol** 1996 Apr;18(4):181–91

Differential responsiveness of humans with early-stage schistosomiasis haematobium to Schistosoma haematobium soluble adult-worm and egg antigens. El Ridi R, et al. **Parasitol Res** 1997;83(5):471–7

Correlations between specific antibody levels and urine egg counts for Schistosoma haematobium. Ndhlovu PD, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun;90(3):324–5

Circulating anodic and cathodic antigen in serum and urine of mixed Schistosoma haematobium and S. mansoni infections in Office du Niger, Mali. De Clercq D, et al. **Trop Med Int Health** 1997 Jul;2(7):680–5

ISOLATION & PURIFICATION

Recovery of Schistosoma haematobium eggs in venous blood collected for diagnosis of Wuchereria bancrofti infection. Wamae CN, et al. **Ann Trop Med Parasitol** 1996 Feb; 90(1):87–90

Long-term results of endourologic and percutaneous management of ureteral strictures in bilharzial patients. ElAbd SA, et al. **J Endourol** 1996 Feb;10(1):35–43

[Bladder bilharziosis] Sanz Chinesta S, et al. **Arch Esp Urol** 1996 Jul-Aug;49(6):545–9 (Eng. Abstr.) **(Spa)**

SCHISTOSOMA JAPONICUM

Structural mapping of the glycans from the egg glycoproteins of Schistosoma mansoni and Schistosoma japonicum: identification of novel core structures and terminal sequences. Khoo KH, et al. **Glycobiology** 1997 Jul; 7(5):663–77

Structural characterization of glycophingolipids from the eggs of Schistosoma mansoni and Schistosoma japonicum. Khoo KH, et al. **Glycobiology** 1997 Jul;7(5):653–61

The effect of a combined approach to schistosomiasis control on the transmission of Schistosoma japonicum in Xingzi of Poyang Lake area, China. Jiang Q, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):535–41

Allozyme variation among six populations of the freshwater-snail Oncomelania hupensis in Zhejiang, China. Qian BZ, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):400–5

CHEMISTRY

Schistosoma japonicum: immunolocalization of paramyosin during development. Gobert GN, et al. **Parasitology** 1997 Jan;114 (Pt 1):45–52

Immunolocalization of the fatty acid-binding protein Sj-FABPc within adult Schistosoma japonicum. Gobert GN, et al. **Parasitology** 1997 Jul;115 (Pt 1):33–9

DRUG EFFECTS

Studies on prophylactic effect of artesunate on schistosomiasis japonica. Li S, et al. **Chin Med J (Engl)** 1996 Nov;109(11):848–53

ENZYMOLOGY

Characterization of monoclonal antibodies to the 26-kDa glutathione S-transferase of Schistosoma japonicum. Yan BS, et al. **Hybridoma** 1996 Dec;15(6):429–33

Cathepsin B-like activity predominates over cathepsin L-like activity in adult Schistosoma mansoni and S. japonicum.

Caffrey CR, et al. **Parasitol Res** 1997;83(6):632-5
Conformational stability of pGEX-expressed Schistosoma japonicum glutathione S-transferase: a detoxification enzyme and fusion-protein affinity tag. Kaplan W, et al. **Protein Sci** 1997 Feb;6(2):399-406

GENETICS

Engineering and expression of a full length cDNA encoding Schistosoma japonicum paramyosin. Purification of the recombinant protein and its recognition by infected patient sera. Kalinna BH, et al. **Acta Trop** 1997 May 15;65(2):111-5
Identification and molecular cloning of a 67-kilodalton protein in Schistosoma japonicum homologous to a family of actin-binding proteins. Kurtis JD, et al. **Infect Immun** 1997 Jan;65(1):344-7
A novel cDNA clone of Schistosoma japonicum encoding the 34,000 Dalton eggshell precursor protein. Sugiyama H, et al. **Int J Parasitol** 1997 Jul;27(7):811-7
Cloning and characterisation of strain-specific transcripts encoding triosephosphate isomerase, a candidate vaccine antigen from Schistosoma japonicum. Hooker CW, et al. **Mol Biochem Parasitol** 1996 Nov 25;82(2):265-9
Sequence conservation of schistosome cyclophilins. Klinkert MQ, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):239-42
Use of RAPD for the detection of genetic variation in the human blood fluke, Schistosoma japonicum, from mainland China. Gasser RB, et al. **Mol Cell Probes** 1996 Oct; 10(5):353-8
DNA-based vaccination using Schistosoma japonicum (Asian blood-fluke) genes. Waine GJ, et al. **Vaccine** 1997 Jun;15(8):846-8

GROWTH & DEVELOPMENT

Schistosoma japonicum: in vitro cultivation of miracidium to daughter sporocyst using a Biomphalaria glabrata embryonic cell line. Coustau C, et al. **Exp Parasitol** 1997 Oct;87(2):77-87

IMMUNOLOGY

Immunity and morbidity in schistosomiasis japonicum infection. Olds GR, et al. **Am J Trop Med Hyg** 1996 Nov; 55(5 Suppl):121-6 (29 ref.)
Collaborative study on evaluation of immunodiagnostic assays in schistosomiasis japonica by treatment efficacy assessment. Collaboration Group. Guan X, et al. **Chin Med J (Engl)** 1996 Sep;109(9):659-64
Collaborative study on detection of circulating antigens in schistosomiasis japonica. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):277-83
Characterization of monoclonal antibodies to the 26-kDa glutathione S-transferase of Schistosoma japonicum. Yan BS, et al. **Hybridoma** 1996 Dec;15(6):429-33
Effect of IL-12 on granuloma formation induced by injected Schistosoma japonicum eggs. Yang JQ, et al. **Int J Parasitol** 1997 Jul;27(7):861-4
Oral vaccination of mice with recombinant Schistosoma japonicum proteins induces specific anti-parasite antibodies and damage to adult worms after a challenge infection. Yang W, et al. **Int J Parasitol** 1997 Jul;27(7):843-53
In vivo and in vitro cellular response to Schistosoma japonicum eggs in hosts with differing susceptibilities. Hirata M, et al. **Parasite Immunol** 1996 Sep;18(9):431-8
Paramyosin: a candidate vaccine antigen against Schistosoma japonicum. Ramirez BL, et al. **Parasite Immunol** 1996 Jan; 18(1):49-52
A dominant B-cell epitope on the 22 kDa tegumental membrane-associated antigen of Schistosoma japonicum maps to an EF-hand calcium binding domain. Waine GJ, et al. **Parasite Immunol** 1997 Aug;19(8):337-45
Eosinophil chemotactic factor release from neutrophils induced by stimulation with Schistosoma japonicum eggs. Owhashi M, et al. **Parasitol Res** 1997;83(1):42-6
The B cell epitope of paramyosin recognized by a protective monoclonal IgE antibody to Schistosoma japonicum. Nara T, et al. **Vaccine** 1997 Jan;15(1):79-84
Anti-fecundity immunity to Schistosoma japonicum induced in Chinese water buffaloes (Bos buffelus) after vaccination with recombinant 26 kDa glutathione-S-transferase (reSjc26GST). Shuxian L, et al. **Vet Parasitol** 1997 Apr; 69(1-2):39-47
[The sensitizing role of the anti-idiotypic monoclonal antibody-NP30 of Schistosoma japonicum in egg granuloma formation] Feng Z, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):249-54 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Recovery of Schistosoma japonicum from experimentally infected pigs by perfusion of liver and mesenteric veins. Bøgh HO, et al. **Acta Vet Scand** 1997;38(2):147-55
Studies of schistosomiasis japonicum infection have used the results of a single stool examination to classify patients as being infected or not [letter; comment] Watt G. **Am J Trop Med Hyg** 1996 Oct;55(4):353-4. Comment on: Am J Trop Med Hyg 1994 Aug;51(2):162-9.
A method for the isolation of schistosome eggs and miracidia free of contaminating host tissues. Dalton JP, et al. **Parasitology** 1997 Jul;115 (Pt 1):29-32
Evaluation of a monoclonal antibody-based sandwich-ELISA for detection of circulating Schistosoma japonicum antigen (Sj31/32) in an endemic area of China. Li YL, et al. **Trop Med Int Health** 1996 Dec;1(6):847-50

PARASITOLOGY

Schistosoma japonicum infection in the pig: the effect of a patent primary infection on a challenge infection. Willingham AL, et al. **Acta Trop** 1997 Jun 24;66(1):51-9

PATHOGENICITY

In vivo and in vitro cellular response to Schistosoma japonicum eggs in hosts with differing susceptibilities. Hirata M, et al. **Parasite Immunol** 1996 Sep;18(9):431-8

SCHISTOSOMA MANSONI

Transmission of intestinal schistosomiasis in Addis Ababa, Ethiopia. Erko B, et al. **East Afr Med J** 1996 Nov; 73(11):732-4
Structural characterization of glycophingolipids from the eggs of Schistosoma mansoni and Schistosoma japonicum. Khoo KH, et al. **Glycobiology** 1997 Jul;7(5):653-61
Structural mapping of the glycans from the egg glycoproteins of Schistosoma mansoni and Schistosoma japonicum: identification of novel core structures and terminal sequences. Khoo KH, et al. **Glycobiology** 1997 Jul; 7(5):663-77
Schistosoma mansoni infection in mice augments the capacity for interleukin 3 (IL-3) and IL-9 production and concurrently enlarges progenitor pools for mast cells and granulocytes-macrophages. Khalil RM, et al. **Infect Immun** 1996 Dec;64(12):4960-6
Schistosoma mansoni: permanence of modulation of the granulomatous inflammatory response in mice cured in the chronic phase. Coelho PM, et al. **Int J Parasitol** 1996 Dec; 26(12):1393-5
Immunoregulatory idiotypes stimulate T helper 1 cytokine responses in experimental Schistosoma mansoni infections. Montesano MA, et al. **J Immunol** 1997 Apr 15; 158(8):3800-4
Schistosomal-specific nephropathy in Syrian golden hamsters: treatment by induction of antigen excess. Sobh M, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2178-84
IL-10 deficit correlates with chronic, hypersplenomegaly syndrome in male CBA/J mice infected with Schistosoma mansoni. Bosshardt SC, et al. **Parasite Immunol** 1997 Aug; 19(8):347-53
Removal of the submaxillary salivary glands and infection with the trematode Schistosoma mansoni alters exploratory behavior and pain thresholds in female mice. Fiore M, et al. **Physiol Behav** 1997 Aug;62(2):399-406
Schistosoma mansoni: the sex ratios of worms in animals infected with cercariae from three species of Biomphalaria. de Souza CP, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar-Apr;38(2):141-5
[Behavior of hemolymph amebocytes from planorbidae in the presence of Schistosoma mansoni larvae parasitism, after inoculation of Indian ink or fracture of the shell] de Seta L, et al. **Rev Saude Publica** 1996 Aug;30(4):332-40 (Eng. Abstr.) **(Por)**

ANATOMY & HISTOLOGY

Schistosoma mansoni Sambon, 1907: comparative morphological studies of some Brazilian strains. Machado-Silva JR, et al. **Rev Inst Med Trop Sao Paulo** 1995 Sep-Oct;37(5):441-7

CHEMISTRY

Characterization of fucosyllactose determinant-bearing glycoproteins probed by a Biomphalaria alexandrina lectin in Schistosoma mansoni cercariae. Negm HI. **Dev Comp Immunol** 1996 Mar-Apr;20(2):87-96
Molecular identification of a Schistosoma mansoni tegumental protein with similarity to cytoplasmic dynein light chains. Hoffmann KF, et al. **J Biol Chem** 1996 Oct 18;271(42):26117-23
Identification of surface tegumental antigens of normal and irradiated schistosomula. Charmy RA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):479-91
Identification and characterization of Schistosoma mansoni p17.7, a cyclophilin. Kiang D, et al. **Mol Biochem Parasitol** 1996 Feb-Mar;76(1-2):73-82
The Schistosoma mansoni epidermal growth factor receptor homologue, SER, has tyrosine kinase activity and is localized in adult muscle. Ramachandran H, et al. **Mol Biochem Parasitol** 1996 Dec 2;83(1):1-10
Direct PCR on fruitflies and blood flukes without prior DNA isolation. Grevelding CG, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4100-1
Expression of NF-Y nuclear factor in Schistosoma mansoni. Serra E, et al. **Parasitology** 1996 Nov;113 (Pt 5):457-64

CYTOLOGY

Assessment of the viability of Schistosoma mansoni schistosomula by comparative uptake of various vital dyes. Gold D. **Parasitol Res** 1997;83(2):163-9

DRUG EFFECTS

Schistosoma mansoni: maturation rate and drug susceptibility of different geographic isolates. Fallon PG, et al. **Exp Parasitol** 1997 May;86(1):29-36
Schistosoma mansoni: susceptibility differences between male and female mice can be mediated by testosterone during early infection. Nakazawa M, et al. **Exp Parasitol** 1997 Mar; 85(3):233-40
Developmental differences determine larval susceptibility to nitric oxide-mediated killing in a murine model of vaccination against Schistosoma mansoni. Ahmed SF, et al. **Infect Immun** 1997 Jan;65(1):219-26
The effects of lead, cadmium, and mercury on the mortality and infectivity of Schistosoma mansoni cercariae. Abd Allah AT, et al. **J Parasitol** 1996 Dec;82(6):1024-6
Praziquantel has no direct effect on (Na(+)+K+)-ATPases and (Ca2(+)-Mg2+)ATPases of Schistosoma mansoni. Cunha VM, et al. **Life Sci** 1997;60(20):PL 289-94
Cysteine protease inhibitors block schistosome hemoglobin degradation in vitro and decrease worm burden and egg production in vivo. Wasilewski MM, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):179-89
Schistosoma mansoni Sambon, 1907: effects of dilation and constricting anesthetics drugs on adult worms localization in Swiss mice. Machado-Silva JR, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul-Aug;38(4):307-8
[Susceptibility to chemotherapeutic agents of Schistosoma mansoni isolates from patients treated with oxamniquine and praziquantel and not cured] Araújo N, et al. **Rev Soc Bras Med Trop** 1996 Sep-Oct;29(5):467-76 (Eng. Abstr.) **(Por)**

ENZYMOLOGY

Evaluation of a stage-specific proteolytic enzyme of Schistosoma mansoni as a marker of exposure. Ramzy RM, et al. **Am J Trop Med Hyg** 1997 Jun;56(6):668-73
Properties and function in metabolism of schistosomal hexokinase. Tielens AG. **Biochem Soc Trans** 1997 Feb; 25(1):127-31 (27 ref.)
Schistosomes express two forms of cathepsin D. Wong JY, et al. **Biochim Biophys Acta** 1997 Apr 4;1338(2):156-60
Expression of a highly conserved oncofetal gene, TA1/E16, in human colon carcinoma and other primary cancers: homology to Schistosoma mansoni amino acid permease and Caenorhabditis elegans gene products. Wolf DA, et al. **Cancer Res** 1996 Nov 1;56(21):5012-22
Evidence for the presence of two (Ca(2+)-Mg2+) ATPases with different sensitivities to thapsigargin and cyclopiazonic acid in the human flatworm Schistosoma mansoni. Cunha VM, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Jun; 114(2):199-205
Inactivation of Tritrichomonas foetus and Schistosoma mansoni purine phosphoribosyltransferases by arginine-specific reagents. Kanaani J, et al. **Eur J Biochem** 1997 Mar 15;244(3):810-7
Addition of acetaldehyde to the N-terminus of a recombinant Schistosoma mansoni glutathione S-transferase upon high-level expression in Saccharomyces cerevisiae. Roecklin D, et al. **Eur J Biochem** 1997 May 1;245(3):589-99
Deletion analysis of the Schistosoma mansoni 28-kDa glutathione S-transferase gene promoter in mammalian cells--importance of a proximal activator-protein-1 site. Serra E, et al. **Eur J Biochem** 1997 Aug 15;248(1):113-9
Schistosoma mansoni: the developmental regulation and immunolocalization of antioxidant enzymes. Mei H, et al. **Exp Parasitol** 1997 May;86(1):69-78
Infection with Salmonella typhimurium modulates the immune response to Schistosoma mansoni glutathione-S-transferase. Comoy EE, et al. **Infect Immun** 1997 Aug;65(8):3261-6
Expression and characterization of glutathione peroxidase activity in the human blood fluke Schistosoma mansoni. Mei H, et al. **Infect Immun** 1996 Oct;64(10):4299-306
Expression of a Schistosoma mansoni 28-kilodalton glutathione S-transferase in the livers of transgenic mice and its effect on parasite infection. Xu X, et al. **Infect Immun** 1997 Sep;65(9):3867-74
The developmental expression of cysteine proteinases in Schistosoma mansoni. Monroy FP, et al. **Int J Parasitol** 1996 Jan;26(1):109-12
Praziquantel has no direct effect on (Na(+)+K+)-ATPases and (Ca2(+)-Mg2+)ATPases of Schistosoma mansoni. Cunha VM, et al. **Life Sci** 1997;60(20):PL 289-94
Local transient induction of inflammatory cytokines after intranasal administration of recombinant Bordetella pertussis. Remoué F, et al. **Microb Pathog** 1997 May; 22(5):305-13
Cloning and characterization of two genes encoding Schistosoma mansoni elastase. Pierrot C, et al. **Mol Biochem Parasitol** 1995 Dec;75(1):113-7
Tissue localization and stage-specific expression of the phospholipid hydroperoxide glutathione peroxidase of Schistosoma mansoni. Roche C, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):187-95
Purification, kinetics and inhibition by antimonials of recombinant phosphofructokinase from Schistosoma mansoni. Su JG, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):171-8
Cathepsin B-like activity predominates over cathepsin L-like activity in adult Schistosoma mansoni and S. japonicum. Caffrey CR, et al. **Parasitol Res** 1997;83(6):632-5
The cysteine proteinases of Schistosoma mansoni cercariae. Dalton JP, et al. **Parasitology** 1997 Feb;114 (Pt 2):105-12
Schistosoma mansoni elastase: an immune target regulated

during the parasite life-cycle. Pierrot C, et al. **Parasitology** 1996 Dec;113 (Pt 6):519-26

Purification and characterization of the hexokinase from Schistosoma mansoni, expressed in Escherichia coli. Armstrong RL, et al. **Protein Expr Purif** 1996 Nov; 8(3):374-80

GENETICS

Expression of different forms of the heat-shock factor during the life cycle of the parasitic helminth Schistosoma mansoni. Levy-Holtzman R, et al. **Biochim Biophys Acta** 1996 Oct 7;1317(1):1-4

Deletion analysis of the Schistosoma mansoni 28-kDa glutathione S-transferase gene promoter in mammalian cells--importance of a proximal activator-protein-1 site. Serra E, et al. **Eur J Biochem** 1997 Aug 15;248(1):113-9

Schistosoma mansoni: gene structure and localization of a homologue to cysteine protease ER 60. Finken-Eigen M, et al. **Exp Parasitol** 1997 May;86(1):1-7

Schistosoma mansoni: sexing cercariae by PCR without DNA extraction. Grevelding CG, et al. **Exp Parasitol** 1997 Jan;85(1):99-100

Minilibraries constructed from cDNA generated by arbitrarily primed RT-PCR: an alternative to normalized libraries for the generation of ESTs from nanogram quantities of mRNA. Neto ED, et al. **Gene** 1997 Feb 20; 186(1):135-42

Partially degraded DNA of parasitological interest serves as an adequate template for the production of random amplified polymorphic DNAs (RAPDs). Dias Neto E, et al. **J Parasitol** 1997 Aug;83(4):753-5

The schistosome genome project: RNA arbitrarily primed PCR allows the accelerated generation of expressed sequence tags. Dias Neto E, et al. **Mem Inst Oswaldo Cruz** 1996 Sep-Oct;91(5):655-7

Molecular cloning of a Schistosoma mansoni protein expressed in the gynecophoral canal of male worms. Bostic JR, et al. **Mol Biochem Parasitol** 1996 Jul;79(1):79-89

Gene linkage and steady state RNAs suggest trans-splicing may be associated with a polycistronic transcript in Schistosoma mansoni. Davis RE, et al. **Mol Biochem Parasitol** 1997 Oct;89(1):25-39

Sequence conservation of schistosome cyclophilins. Klinkert MQ, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):239-42

Characterization of a schistosome T cell-stimulating antigen (Sm10) associated with protective immunity in humans. Kohlstädt S, et al. **Mol Biochem Parasitol** 1997 Feb; 84(2):155-65

Cloning of two actin genes from Schistosoma mansoni. Oliveira GC, et al. **Mol Biochem Parasitol** 1995 Dec; 75(1):119-22

Cloning and characterization of two genes encoding Schistosoma mansoni elastase. Pierrot C, et al. **Mol Biochem Parasitol** 1995 Dec;75(1):113-7

Functional analysis of the Schistosoma mansoni 28 kDa glutathione S-transferase gene promoter: involvement of SMNF-Y transcription factor in multimeric complexes. Serra E, et al. **Mol Biochem Parasitol** 1996 Dec 2; 83(1):69-80

Cloning of Schistosoma mansoni transcription factor NF-YA subunit: phylogenic conservation of the HAP-2 homology domain. Zemzoumi K, et al. **Mol Biochem Parasitol** 1996 May;77(2):161-72

A retrotransposon of the non-long terminal repeat class from the human blood fluke Schistosoma mansoni. Similarities to the chicken-repeat-1-like elements of vertebrates. Drew AC, et al. **Mol Biol Evol** 1997 Jun;14(6):602-10

Distribution of schistosome genetic diversity within naturally infected Rattus rattus detected by RAPD markers. Barral V, et al. **Parasitology** 1996 Dec;113 (Pt 6):511-7

Cloning, heterologous expression and antigenicity of a schistosome cercarial protease. Price HP, et al. **Parasitology** 1997 May;114 (Pt 5):447-53

GROWTH & DEVELOPMENT

Schistosoma mansoni: effect of aestivation on the intra-molluscan stages and the survival rate of infected Biomphalaria pfeifferi. Badger LI, et al. **Ann Trop Med Parasitol** 1996 Dec;90(6):617-20

Schistosoma mansoni: distribution patterns of miracidia among Biomphalaria glabrata snail as related to host susceptibility and sporocyst regulatory processes. Théron A, et al. **Exp Parasitol** 1997 Jan;85(1):1-9

The developmental expression of cysteine proteinases in Schistosoma mansoni. Monroy FP, et al. **Int J Parasitol** 1996 Jan;26(1):109-12

Axenic in vitro culture of Schistosoma mansoni miracidia. Rashed AA, et al. **J Egypt Soc Parasitol** 1996 Dec; 26(3):575-84

Schistosome egg granulomas and hepatic expression of TNF-alpha are dependent on immune priming during parasite maturation. Leptak CL, et al. **J Immunol** 1997 Jan 1;158(1):301-7

Observed disparity on schistosome infection rates in field Biomphalaria pfeifferi (Krauss) between two areas of the Jos Metropolis, Nigeria. Akufongwe PF, et al. **Parasite** 1995 Mar;2(1):89-91

IMMUNOLOGY

A comparative study on specific antibodies and circulating antigen (CAA) in serum and parasitological findings for diagnosis of schistosomiasis mansoni in an endemic area in Tanzania. Håkangård C, et al. **Acta Trop** 1996 May; 61(3):213-22

Immunity and morbidity in Schistosoma mansoni infection: quantitative aspects. Butterworth AE, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):109-15 (26 ref.)

Geographic clustering and seroprevalence of schistosomiasis in Puerto Rico (1995). Tsang VC, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):107-12

Efficacy of an enzyme-linked immunosorbent assay in the diagnosis of and serologic distinction between acute and chronic Schistosoma mansoni infection. Valli LC, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):358-62

Immunopathogenesis and immunoregulation in schistosomiasis. Distinct chronic pathologic syndromes in CBA/J mice. Freeman GL Jr, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:151-65

Development of an antipathology vaccine for schistosomiasis. Wynn TA. **Ann N Y Acad Sci** 1996 Oct 25;797:191-5 (27 ref.)

Schistosoma mansoni excretory circulating cathodic antigen shares Lewis-x epitopes with a human granulocyte surface antigen and evokes host antibodies mediating complement-dependent lysis of granulocytes. van Dam GJ, et al. **Blood** 1996 Dec 1;88(11):4246-51

Specific immunoglobulin measurements related to exposure and resistance to Schistosoma mansoni infection in Sudanese canal cleaners. Satti MZ, et al. **Clin Exp Immunol** 1996 Oct;106(1):45-54

Humoral immune responses in patients with acute Schistosoma mansoni infection who were followed up for two years after treatment. Rabello AL, et al. **Clin Infect Dis** 1997 Mar;24(3):304-8

CD28-deficient mice generate an impaired Th2 response to Schistosoma mansoni infection. King CL, et al. **Eur J Immunol** 1996 Oct;26(10):2448-55

Schistosoma mansoni: protective immunity in IL-4-deficient mice. King CL, et al. **Exp Parasitol** 1996 Nov;84(2):245-52

Schistosoma mansoni: use of a subtractive cloning strategy to search for RFLPs in parasite-resistant Biomphalaria glabrata. Miller AN, et al. **Exp Parasitol** 1996 Dec; 84(3):420-8

ICAM-1 and iNOS expression increased in the skin of mice after vaccination with gamma-irradiated cercariae of Schistosoma mansoni. Ramaswamy K, et al. **Exp Parasitol** 1997 Jun;86(2):118-32

Intercellular adhesion molecule 1 is the major adhesion molecule expressed during schistosome granuloma formation. Ritter DM, et al. **Infect Immun** 1996 Nov; 64(11):4706-13

Interleukin-12 and -10 and gamma interferon regulate polyclonal and ligand-specific expansion of murine B-1 cells. Velupillai P, et al. **Infect Immun** 1996 Nov; 64(11):4557-60

Human immunoglobulin E responses to a recombinant 22.6-kilodalton antigen from Schistosoma mansoni adult worms are associated with low intensities of reinfection after treatment. Webster M, et al. **Infect Immun** 1996 Oct; 64(10):4042-6

Immunization of mice with ultraviolet-attenuated cercariae of Schistosoma mansoni transiently reduces the fecundity of challenge worms. el Ridi R, et al. **Int J Parasitol** 1997 May;27(5):581-6

Evaluation of purified antigens in haemagglutination test (IHA) for determination of cross reactivities in diagnosis of fascioliasis and schistosomiasis. Azab M el-S, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):677-85

The immunogenic effect of purified antigens of B. alexandrina against Schistosoma mansoni in experimental animals (I) as measured by worm load and viability of ova. Gamal-Eddin FM, et al. **J Egypt Soc Parasitol** 1996 Dec; 26(3):609-17

Host and parasite determinants of morbidity in Egyptian children with schistosomiasis. Hussein HM, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):755-72

A monoclonal antibody-based enzyme immunoassay for detecting parasite antigenaemia and antigenuria in Schistosomiasis mansoni. Kamel MA, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):789-95

Schistosoma mansoni egg-induced early IL-4 production is dependent upon IL-5 and eosinophils. Sabin EA, et al. **J Exp Med** 1996 Nov 1;184(5):1871-8

Electrophoretic differentiation of soluble egg antigens from Schistosoma mansoni isolates using SDS-PAGE. Pillay D. **J Helminthol** 1996 Mar;70(1):91-3

Mycobacterial and schistosomal antigen-elicited granuloma formation in IFN-gamma and IL-4 knockout mice: analysis of local and regional cytokine and chemokine networks. Chensue SW, et al. **J Immunol** 1997 Oct 1;159(7):3565-73

Calpain is the target antigen of a Th1 clone that transfers protective immunity against Schistosoma mansoni. Jankovic D, et al. **J Immunol** 1996 Jul 15;157(2):806-14

Mice with a targeted deletion of the IgE gene have increased worm burdens and reduced granulomatous inflammation following primary infection with Schistosoma mansoni. King CL, et al. **J Immunol** 1997 Jan 1;158(1):294-300

Schistosome egg granulomas and hepatic expression of TNF-alpha are dependent on immune priming during parasite maturation. Leptak CL, et al. **J Immunol** 1997 Jan 1;158(1):301-7

Type 1 CD8+ T cell responses during infection with the helminth Schistosoma mansoni. Pedras-Vasconcelos JA, et al. **J Immunol** 1996 Oct 1;157(7):3046-53

Role of adhesion molecules of the selectin-carbohydrate families in antibody-dependent cell-mediated cytoxicity to schistosome targets. Trottein F, et al. **J Immunol** 1997 Jul 15;159(2):804-11

IL-12 enhances vaccine-induced immunity to schistosomes by augmenting both humoral and cell-mediated immune responses against the parasite. Wynn TA, et al. **J Immunol** 1996 Nov 1;157(9):4068-78

IgG4 and IgE responses to Schistosoma mansoni adult worms after treatment [letter; comment] Webster M, et al. **J Infect Dis** 1997 Feb;175(2):493-4. Comment on: J Infect Dis 1996 May;173(5):1242-7.

A recombinant protein from Schistosoma mansoni useful for the detection of S. mansoni and Schistosoma haematobium antibodies. Hancock K, et al. **J Parasitol** 1997 Aug; 83(4):612-8

Schistosoma mansoni: the immune response against cercarial glycocalyx. Hussein AH, et al. **J Parasitol** 1997 Jun; 83(3):424-9

Involvement of regional lymph nodes after penetration of Schistosoma mansoni cercariae in naive and infected mice. Lozzi SP, et al. **Mem Inst Oswaldo Cruz** 1996 Jul-Aug; 91(4):491-8

Characterization of a schistosome T cell-stimulating antigen (Sm10) associated with protective immunity in humans. Kohlstädt S, et al. **Mol Biochem Parasitol** 1997 Feb; 84(2):155-65

The tegument of Schistosoma mansoni: functional and immunological features. Abath FG, et al. **Parasite Immunol** 1996 Jan;18(1):15-20

Immunological cross reactivity between Schistosoma mansoni and cholera toxin. Akhiani AA, et al. **Parasite Immunol** 1997 Aug;19(8):355-61

Intranasal administration of Schistosoma mansoni adult worm antigen in combination with cholera toxin induces a Th2 cell response. Akhiani AA, et al. **Parasite Immunol** 1997 Apr;19(4):183-90

Cross-reactive idiotypes on rabbit anti-SEA antibodies stimulate anti-idiotype spleen and lymph node cell responses of mice infected with Schistosoma mansoni. Amano T, et al. **Parasite Immunol** 1996 Jan;18(1):21-8

Sm480: a high molecular weight Schistosoma mansoni antigen associated with protective immunity. Curtis RH, et al. **Parasite Immunol** 1996 Mar;18(3):149-57

Elimination of a primary schistosome infection from rats coincides with elevated IgE titres and mast cell degranulation. Cutts L, et al. **Parasite Immunol** 1997 Feb; 19(2):91-102

Homologous and heterologous protective immunity to Egyptian strains of Schistosoma mansoni and S. haematobium induced by ultraviolet-irradiated cercariae. Dean DA, et al. **Parasite Immunol** 1996 Aug;18(8):403-10

The isolation of a 22 kDa band after SDS-PAGE of Schistosoma mansoni adult worms and its use to demonstrate that IgE responses against the antigen(s) it contains are associated with human resistance to reinfection. Dunne DW, et al. **Parasite Immunol** 1997 Feb; 19(2):79-89

Protection of mice against Schistosoma mansoni infection by passive transfer of sera from infected rabbits. Fallon PG, et al. **Parasite Immunol** 1996 Jan;18(1):7-14

Analysis of the immune response elicited by a multiple antigen peptide (MAP) composed of two distinct protective antigens derived from the parasite Schistosoma mansoni. Ferru I, et al. **Parasite Immunol** 1997 Jan;19(1):1-11

Recognition of Schistosoma mansoni cathepsins B and L by human IgG1 and IgG4 antibodies. Grogan J, et al. **Parasite Immunol** 1997 May;19(5):215-20

HPLC fractionated soluble egg antigen from Schistosoma mansoni elicits a heterogeneous human immune response. Moyes RB, et al. **Parasite Immunol** 1996 Dec;18(12):625-33

Stem cell factor dependent hyperplasia of mucosal-type mast cells but not eosinophils in Schistosoma mansoni-infected rats. Newlands GF, et al. **Parasite Immunol** 1995 Nov; 17(11):595-8

Kinetics and mechanism of effector focus formation in the lungs of mice vaccinated with irradiated cercariae of Schistosoma mansoni. Smythies LE, et al. **Parasite Immunol** 1996 Jul;18(7):359-69

The protein antigens secreted in vivo by adult male Schistosoma mansoni. Cutts L, et al. **Parasitology** 1997 Mar; 114 (Pt 3):245-55

Induction of protective immunity and modulation of granulomatous hypersensitivity in mice using PIII, an anionic fraction of Schistosoma mansoni adult worm. Hirsch C, et al. **Parasitology** 1997 Jul;115 (Pt 1):21-8

Ultrastructural localization of Sm28 GST protective antigen in Schistosoma mansoni adult worms. Liu JL, et al. **Parasitology** 1996 Oct;113 (Pt 4):377-91

Induction of cytotoxic T-cell activity by the protective antigen of Schistosoma mansoni Sm28GST or its derived C-terminal lipopeptide. Pancré V, et al. **Scand J Immunol** 1996 Nov;44(5):485-92

Daily fluctuation of levels of circulating cathodic antigen in urine of children infected with Schistosoma mansoni in Brazil. Disch J, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr;91(2):222-5

An enzyme-linked immunosorbent assay using Schistosoma mansoni purified egg antigen for the diagnosis of schistosomiasis in Saudi Arabia. Ghandour AM, et al. **Trans R Soc Trop Med Hyg** 1997 May-Jun;91(3):287-9

Circulating anodic and cathodic antigen in serum and urine of mixed Schistosoma haematobium and S. mansoni infections in Office du Niger, Mali. De Clercq D, et al. **Trop Med Int Health** 1997 Jul;2(7):680–5

Characterization of Schistosoma mansoni 44.7/56.8 kDa egg antigens recognized by human monoclonal antibodies which induce protection against experimental infection and proliferation of peripheral blood mononuclear cells from schistosomiasis patients. Hirsch C, et al. **Vaccine** 1997 Jun; 15(9):948–54

[Immunofluorescence reaction of antibodies directed against the intestinal epithelium of Schistosoma mansoni. VI. Immunolocalization of a carbohydrate epitope at different developmental stages] Ben Younes R, et al. **Parasite** 1997 Mar;4(1):17–25 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Urban schistosomiasis: morbidity, sociodemographic characteristics and water contact patterns predictive of infection. Firmo JO, et al. **Int J Epidemiol** 1996 Dec; 25(6):1292–300

Studies on granuloma formation in Syrian hamsters experimentally infected with Schistosoma mansoni. Abou Rashed A, et al. **J Egypt Soc Parasitol** 1997 Aug; 27(2):411–8

Detection of Schistosoma mansoni in Biomphalaria using nested PCR. Hanelt B, et al. **J Parasitol** 1997 Jun; 83(3):387–94

PCR amplification of the mitochondrial DNA minisatellite region to detect Schistosoma mansoni infection in Biomphalaria glabrata snails. Jannotti-Passos LK, et al. **J Parasitol** 1997 Jun;83(3):395–9

A method for the isolation of schistosome eggs and miracidia free of contaminating host tissues. Dalton JP, et al. **Parasitology** 1997 Jul;115 (Pt 1):29–32

Neutral glycolipids of Schistosoma mansoni as feasible antigens in the detection of schistosomiasis. Dennis RD, et al. **Parasitology** 1996 Mar;112 (Pt 3):295–307

Validation of a chart to estimate true Schistosoma mansoni prevalences from simple egg counts. De Vlas SJ, et al. **Parasitology** 1997 Feb;114 (Pt 2):113–21

Field evaluation of an improved Kato–Katz thick smear technique for quantitative determination of helminth eggs in faeces. Odongo-Aginya EI, et al. **Trop Med Parasitol** 1995 Dec;46(4):275–7

METABOLISM

Light and electron microscopic immunocytochemistry of FMRFamide and neuropeptide F immunoreactivities in the human blood fluke, Schistosoma mansoni. Fairweather I, et al. **Acta Biol Hung** 1995;46(2–4):211–20

Ferritin mRNAs in Schistosoma mansoni do not have iron-responsive elements for post-transcriptional regulation. Schüssler P, et al. **Eur J Biochem** 1996 Oct 1; 241(1):64–9

Molecular characterization of a 20.8-kDa Schistosoma mansoni antigen. Sequence similarity to tegumental associated antigens and dynein light chains. Hoffmann KF, et al. **J Biol Chem** 1997 Jun 6;272(23):14509–15

The incorporation, modification and turnover of fatty acids in adult Schistosoma mansoni. Brouwers JF, et al. **Mol Biochem Parasitol** 1997 Sep;88(1–2):175–85

Characterization of a Schistosoma mansoni cDNA encoding a B-like cyclophilin and its expression in Escherichia coli. Klinkert MQ, et al. **Mol Biochem Parasitol** 1995 Dec; 75(1):99–111

A rab-related GTP-binding protein in Schistosoma mansoni. Loeffler IK, et al. **Mol Biochem Parasitol** 1996 Apr; 77(1):31–40

Cloning and characterization of elongation factor 1-alpha of Schistosoma mansoni. Schüssler P, et al. **Parasitol Res** 1997;83(2):206–8

PATHOGENICITY

[Schistosoma mansoni: the levels of infectivity for intermediate host mollusks in Brazil] de Souza CP, et al. **Rev Soc Bras Med Trop** 1996 Jan–Feb;29(1):11–6 (Eng. Abstr.) **(Por)**

[The resistance of Biomphalaria glabrata to Schistosoma mansoni infection: variations in the prepatent period and in compatibility] Guimarães CT, et al. **Rev Soc Bras Med Trop** 1997 Jul–Aug;30(4):273–8 (Eng. Abstr.) **(Por)**

PHYSIOLOGY

Altered nutrition and assimilation of the snail host (Biomphalaria glabrata) as a consequence of the parasitic spatial constraint (Schistosoma mansoni). Gerard C, et al. **Acta Trop** 1996 Mar;61(1):51–5

Circadian pattern of cercarial emergence in Schistosoma mansoni (Platyhelminthes:Digenea) from isolated Biomphalaria glabrata. Bogéa T, et al. **Chronobiol Int** 1996 Jul;13(2):93–101

Schistosoma mansoni: L-glutamate-induced contractions in isolated muscle fibers; evidence for a glutamate transporter. Miller CL, et al. **Exp Parasitol** 1996 Dec;84(3):410–9

Schistosoma mansoni oviposition in vitro reflects worm fecundity in vivo: individual-, parasite age- and host-dependent variations. el Ridi R, et al. **Int J Parasitol** 1997 Apr;27(4):381–7

Schistosoma mansoni hepatic fibrosis in Syrian golden hamsters: effect of dose and duration of infection as shown by immunohistopathological studies. Moustafa FE, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):585–99

Pairing of Schistosoma mansoni males in infected Syrian hamsters. Rashed AA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):609–14

Susceptibility of three successive snail generations from positive and negative laboratory bred Biomphalaria alexandrina from different localities in Egypt to infection with Schistosoma mansoni from Giza. Shoukry NM, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):317–29

Secretion of an anti-inflammatory, immunomodulatory factor by Schistosomulae of Schistosoma mansoni. Ramaswamy K, et al. **J Inflamm** 1995–96;46(1):13–22

Change in schistosome sex ratio under the influence of a biotic environmental-related factor. Moné H. **J Parasitol** 1997 Apr;83(2):220–3

Fate of Schistosoma mansoni in Biomphalaria obstructa. Sullivan JT, et al. **J Parasitol** 1996 Oct;82(5):743–7

Host–parasite relationships in infections with two Kenyan isolates of Schistosoma mansoni in NMRI mice. Thiongo FW, et al. **J Parasitol** 1997 Apr;83(2):330–2

Schistosoma mansoni: the ultrastructure of larval morphogenesis in Biomphalaria glabrata and of associated host–parasite interactions. Pan SC. **Jpn J Med Sci Biol** 1996 Aug;49(4):129–49 (27 ref.)

Cysteine protease inhibitors block schistosome hemoglobin degradation in vitro and decrease worm burden and egg production in vivo. Wasilewski MM, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):179–89

Assessment of the viability of Schistosoma mansoni schistosomula by comparative uptake of various vital dyes. Gold D. **Parasitol Res** 1997;83(2):163–9

Schistosoma mansoni miracidial host-finding: species specificity of an Egyptian strain. Kalbe M, et al. **Parasitol Res** 1996;82(1):8–13

[The effect of hemolymph inoculation on the mechanism of defense of Biomphalaria tenagophila (Orbigny, 1835)] Reis SM, et al. **Rev Saude Publica** 1995 Aug;29(4):259–64 (Eng. Abstr.) **(Por)**

[Relationship between the pathogenicity of Schistosoma mansoni in mice and the susceptibility of the vector mollusk. III. Mortality, body and viscera weight] Zanotti-Magalhaes EM, et al. **Rev Saude Publica** 1995 Aug; 29(4):265–70 (Eng. Abstr.) **(Por)**

[Susceptibility of Biomphalaria tenagophila from the Paraná and Uruguay River basins to Schistosoma mansoni] Borda CE, et al. **Rev Panam Salud Publica** 1997 Mar;1(3):167–73 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Identification of surface tegumental antigens of normal and irradiated schistosomula. Charmy RA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):479–91

SCHISTOSOMATIDAE

[Modification of the liver phospholipid status of cattle by Orientobilharzia turkestanica trematodes] Olmatov M, et al. **Parazitologiia** 1996 Sep–Oct;30(5):460–3 (Eng. Abstr.) **(Rus)**

GENETICS

Karyotype of an avian schistosome Trichobilharzia szidati (Digenea: Schistosomatidae). Spakulova M, et al. **Int J Parasitol** 1996 Jul;26(7):783–5

SCHISTOSOMIASIS

see related
SCHISTOSOMICIDES

Epidemiologic modeling in schistosomiasis control. Proceedings of a symposium. Geneva, Switzerland, August 1992. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):101–75

Polychlorinated dibenzo-p-dioxins and dibenzofurans in lake sediments from Chinese schistosomiasis areas. Zheng M, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):653–6

Tropical illness profiles: the psychology of illness perception in Malawi. MacLachlan M, et al. **Public Health** 1997 Jul; 111(4):211–3

Cardiopulmonary manifestations of schistosomiasis. Morris W, et al. **Semin Respir Infect** 1997 Jun;12(2):159–70 (89 ref.)

BLOOD

Schistosomiasis infection in relation to the ABO blood groups among school children in Zimbabwe. Ndamba J, et al. **Acta Trop** 1997 May 30;65(3):181–90

Serum retinol concentrations and Schistosoma mansoni, intestinal helminths, and malarial parasitemia: a cross-sectional study in Kenyan preschool and primary school children. Friis H, et al. **Am J Clin Nutr** 1997 Sep; 66(3):665–71

Diagnostic value of serum lactate dehydrogenase isoenzyme and amino acid patterns in several schistosomal and non-schistosomal disorders as compared to other biochemical parameters. Ahmed SA, et al. **Dis Markers** 1996 Aug;13(1):19–29

Acetaminophen plasma level after oral administration in liver cirrhotic patients suffering from schistosomal infection. el-Azab G, et al. **Int J Clin Pharmacol Ther** 1996 Jul; 34(7):299–303

COMPLICATIONS

Combination chemotherapy for advanced bilharzial bladder carcinoma. Khaled HM, et al. **Ann Oncol** 1996 Sep; 7(7):751–4

Katayama fever: an acute manifestation of schistosomiasis. Doherty JF, et al. **BMJ** 1996 Oct 26;313(7064):1071–2

Schistosomiasis of the appendix in the UK. Jones HJ, et al. **Br J Clin Pract** 1997 Apr–May;51(3):183

Hepatopulmonary syndrome associated with schistosomal liver disease. al-Moamary M, et al. **Can J Gastroenterol** 1997 Jul–Aug;11(5):449–50

Endomyocardial fibrosis in Egypt: an illustrated review [letter; comment] Antonio JH, et al. **Heart** 1997 Apr; 77(4):391. Comment on: Br Heart J 1995 Mar;73(3):284–9.

Adenocarcinoma of prostate and schistosomiasis: a rare association. Ma TK, et al. **Histopathology** 1995 Aug; 27(2):187–9

Homozygous deletions of p16(INK4) occur frequently in bilharziasis-associated bladder cancer. Tamimi Y, et al. **Int J Cancer** 1996 Oct 9;68(2):183–7

Schistosomiasis as a cause of rectovaginal fistula: a brief case report. Kunin J, et al. **Isr J Med Sci** 1996 Nov; 32(11):1109–11

Sclerotherapy in bleeding gastric varices of hepatic schistosomiasis. Contractor QQ, et al. **J Clin Gastroenterol** 1996 Sep;23(2):97–100

Endoscopic control of gastric variceal bleeding with butyl cyanoacrylate in patients with schistosomiasis. Mostafa I, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):405–10

Chronic liver disease in the Alexandria governorate, Egypt: contribution of schistosomiasis and hepatitis virus infections. Angelico M, et al. **J Hepatol** 1997 Feb; 26(2):236–43

Bilateral adnexal pathology. Couper ID, et al. **Trop Doct** 1996 Oct;26(4):189–90

[Genital bilharziasis and female infertility. Review of the literature and three case reports] Morice P, et al. **Contracept Fertil Sex** 1996 Jan;24(1):56–61 (25 ref.) (Eng. Abstr.) **(Fre)**

[Colonic obstruction due to endometriosis and schistosomiasis] Estlein D, et al. **Harefuah** 1996 Jun 2; 130(11):737–9, 800, 799 (Eng. Abstr.) **(Heb)**

DIAGNOSIS

Schistosomiasis in women: manifestations in the upper reproductive tract. Helling-Giese G, et al. **Acta Trop** 1996 Dec 30;62(4):225–38 (60 ref.)

Female genital schistosomiasis (FGS): relationship between gynecological and histopathological findings. Helling-Giese G, et al. **Acta Trop** 1996 Dec 30;62(4):257–67

Female genital schistosomiasis due to Schistosoma haematobium. Clinical and parasitological findings in women in rural Malawi. Kjetland EF, et al. **Acta Trop** 1996 Dec 30;62(4):239–55

Diagnosis of female genital schistosomiasis by indirect disease markers: determination of eosinophil cationic protein, neopterin and IgA in vaginal fluid and swab eluates. Poggensee G, et al. **Acta Trop** 1996 Dec 30;62(4):269–80

Cerebral schistosomiasis: MR and CT appearance. Preidler KW, et al. **AJNR Am J Neuroradiol** 1996 Sep; 17(8):1598–600

Schistosomiasis in travellers returning from sub-Saharan Africa. Increase in cases may be due to use of more thorough diagnostic techniques [letter; comment] Jordan P, et al. **BMJ** 1996 Nov 16;313(7067):1260–1. Comment on: BMJ 1996 Aug 3;313(7052):268–9.

Limited field evaluation of a rapid monoclonal antibody-based dipstick assay for urinary schistosomiasis. Bosompem KM, et al. **Hybridoma** 1996 Dec;15(6):443–7

Immunodiagnosis of schistosomiasis. Tsang VC, et al. **Immunol Invest** 1997 Jan–Feb;26(1–2):175–88 (27 ref.)

Evaluation of purified antigens in haemagglutination test (IHA) for determination of cross reactivities in diagnosis of fascioliasis and schistosomiasis. Azab M el-S, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):677–85

Cytoscopy as a diagnostic procedure in the investigation of chronic pelvic pain [letter] Krolikowski A, et al. **S Afr Med J** 1997 Feb;87(2 Suppl):231

[Schistosomiasis and viral hepatitides: a review] Serufo JC, et al. **Rev Soc Bras Med Trop** 1997 Jul–Aug;30(4):313–22 (94 ref.) (Eng. Abstr.) **(Por)**

DRUG THERAPY

Reversibility of lower reproductive tract abnormalities in women with Schistosoma haematobium infection after treatment with praziquantel—an interim report. Richter J, et al. **Acta Trop** 1996 Dec 30;62(4):289–301

New possible molluscicides from Calendula micrantha officinalis and Ammi majus. II. Molluscicidal, physiological, and egg-laying effects against Biomphalaria alexandrina and Bulinus truncatus. Rawi SM, et al. **Ecotoxicol Environ Saf** 1996 Dec;35(3):261–7

Experimental Schistosoma bovis infection in goats: pathological consequences of praziquantel treatment. Johansen MV, et al. **J Comp Pathol** 1996 Jul;115(1):1–11

A case of refractory schistosomiasis [letter; comment] Hipgrave DB. **Med J Aust** 1997 May 19;166(10):567; discussion 568. Comment on: Med J Aust 1996 Oct

21;165(8):458.
A case of refractory schistosomiasis [letter; comment] Prociv P. **Med J Aust** 1997 May 19;166(10):568. Comment on: Med J Aust 1996 Oct 21;165(8):458.
Evaluation of colchicine with or without praziquantel therapy in the control of hepatic fibrosis in murine schistosomiasis. Badawy AA, et al. **Pharmacol Res** 1996 Jun;33(6):319–25

ENZYMOLOGY

Proteolytic degradation of host hemoglobin by schistosomes. Brindley PJ, et al. **Mol Biochem Parasitol** 1997 Oct; 89(1):1–9 (57 ref.)

EPIDEMIOLOGY

Dynamic aspects of morbidity and acquired immunity in schistosomiasis control. Chan MS, et al. **Acta Trop** 1996 Oct;62(2):105–17
Serum levels of eosinophil cationic protein, eosinophil-derived neurotoxin and myeloperoxidase in infections with filariae and schistosomes. Tischendorf FW, et al. **Acta Trop** 1996 Dec 16;62(3):171–82
Uncertainties in the epidemiology and control of schistosomiasis. Gryseels B. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):103–8 (53 ref.)
The microsimulation approach to epidemiologic modeling of helminthic infections, with special reference to schistosomiasis. Habbema JD, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):165–9 (13 ref.)
Dynamic modeling of epidemiologic patterns of schistosomiasis morbidity. Medley GF, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):149–58 (27 ref.)
SCHISTOSIM: a microsimulation model for the epidemiology and control of schistosomiasis. Vlas SJ, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):170–5 (16 ref.)
Hepatitis viruses, schistosomal infection and liver cancer in Egypt [letter] Bedwani R, et al. **Int J Cancer** 1996 Nov 27;68(5):688–9
Development and validation of a satellites based geographic information system (GIS) model for epidemiology of Schistosoma risk assessment on snail level in Kafr El-Sheikh Governorate. Abdel-Rahman MS, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):299–316
A short review of the previous and current epidemiological situation of schistosomiasis in China. Cen LP. **Rev Soc Bras Med Trop** 1996 Jan–Feb;30(1):57–60 (14 ref.)
Epidemiological and genetic observations on human schistosomiasis in Kinshasa, Zaire. Tchuem Tchuenté LA, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun; 91(3):263–9
Schistosomiasis in Cabo Delgado, Mozambique [letter] Ukpe IS. **Trop Doct** 1997 Oct;27(4):248–9
[Intestinal parasitic infections and schistosomiasis in the valley of the Senegal river in the Islamic Republic of Mauritania] Urbani C, et al. **Med Trop (Mars)** 1997; 57(2):157–60 (Eng. Abstr.) **(Fre)**
[Schistosomiasis imported by Spanish travelers: clinico-epidemiologic study of 80 cases] Corachán M, et al. **Med Clin (Barc)** 1997 May 17;108(19):721–5 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Experience with schistosomiasis in Northern Ireland. Ingram PJ, et al. **Ulster Med J** 1996 Nov;65(2):123–5

IMMUNOLOGY

Dynamic aspects of morbidity and acquired immunity in schistosomiasis control. Chan MS, et al. **Acta Trop** 1996 Oct;62(2):105–17
Serum levels of eosinophil cationic protein, eosinophil-derived neurotoxin and myeloperoxidase in infections with filariae and schistosomes. Tischendorf FW, et al. **Acta Trop** 1996 Dec 16;62(3):171–82
Immunologic basis of disease and disease regulation in schistosomiasis. Cheever AW, et al. **Chem Immunol** 1997; 66:159–76 (108 ref.)
Immunodiagnosis of schistosomiasis. Tsang VC, et al. **Immunol Invest** 1997 Jan–Feb;26(1–2):175–88 (27 ref.)
B7–2 requirement for helminth-induced granuloma formation and CD4 type 2 T helper cell cytokine expression. Subramanian G, et al. **J Immunol** 1997 Jun 15; 158(12):5914–20
The impact of primary Schistosoma bovis infection on a subsequent challenge infection in goats. Johansen MV, et al. **J Parasitol** 1997 Apr;83(2):242–6
High prevalence of islet cell antibody and defective insulin release in children with schistosomiasis. Soliman AT, et al. **J Trop Pediatr** 1996 Feb;42(1):46–9
Immunoglobulin-A and the pathogenesis of schistosomal glomerulopathy. Barsoum R, et al. **Kidney Int** 1996 Sep; 50(3):920–8
Involvement of regional lymph nodes after penetration of Schistosoma mansoni cercariae in naive and infected mice. Lozzi SP, et al. **Mem Inst Oswaldo Cruz** 1996 Jul–Aug; 91(4):491–8
Experimental Schistosoma bovis infection in goats. Circulating antigen and antibody responses to egg and adult worm antigens during infection and following treatment with praziquantel. Johansen MV, et al. **Parasitology** 1996 Oct;113 (Pt 4):367–75
Hyperimmunoglobulinemia E, parasitic diseases and staphylococcal infection [editorial] Lambertucci JR. **Rev Soc Bras Med Trop** 1996 Sep–Oct;29(5):407–10 **(Eng, Por)**
Detection of the circulating antigens CAA and CCA in a group of Dutch travellers with acute schistosomiasis. van Lieshout L, et al. **Trop Med Int Health** 1997 Jun;2(6):551–7
Suppression of the immune response to diphtheria toxoid in murine schistosomiasis. Haseeb MA, et al. **Vaccine** 1997 Jan;15(1):45–50

METABOLISM

Substance P receptor antagonist inhibits murine IgM expression in developing schistosome granulomas by blocking the terminal differentiation of intragranuloma B cells. Blum A, et al. **J Neuroimmunol** 1996 May; 66(1–2):1–10

PARASITOLOGY

Schistosomiasis. Pathophysiology, diagnosis, and treatment. Elliott DE. **Gastroenterol Clin North Am** 1996 Sep; 25(3):599–625 (150 ref.)
Morphometric variability of Schistosoma intercalatum eggs: a diagnostic dilemma. Almeda J, et al. **J Helminthol** 1996 Jun;70(2):97–102
Proteolytic degradation of host hemoglobin by schistosomes. Brindley PJ, et al. **Mol Biochem Parasitol** 1997 Oct; 89(1):1–9 (57 ref.)
Circulating antigens in schistosomiasis: detection of 31/32-kDa proteins in sera from patients infected with Schistosoma japonicum, S. mansoni, S. haematobium, or S. intercalatum. Li YL, et al. **Parasitol Res** 1996;82(1):14–8
[Bilharziasis and genital pathology] Tordjeman N, et al. **Contracept Fertil Sex** 1997 Jan;25(1):15–20 (35 ref.) **(Fre)**

PATHOLOGY

Schistosomiasis in women: manifestations in the upper reproductive tract. Helling-Giese G, et al. **Acta Trop** 1996 Dec 30;62(4):225–38 (60 ref.)
Female genital schistosomiasis (FGS): relationship between gynecological and histopathological findings. Helling-Giese G, et al. **Acta Trop** 1996 Dec 30;62(4):257–67
Female genital schistosomiasis due to Schistosoma haematobium. Clinical and parasitological findings in women in rural Malawi. Kjetland EF, et al. **Acta Trop** 1996 Dec 30;62(4):239–55
Neuroschistosomiasis. Pittella JE. **Brain Pathol** 1997 Jan; 7(1):649–62 (134 ref.)
Experimental Schistosoma bovis infection in goats: pathological consequences of praziquantel treatment. Johansen MV, et al. **J Comp Pathol** 1996 Jul;115(1):1–11

PHYSIOPATHOLOGY

IL-4 protects against TNF-alpha-mediated cachexia and death during acute schistosomiasis. Brunet LR, et al. **J Immunol** 1997 Jul 15;159(2):777–85
Immunoglobulin-A and the pathogenesis of schistosomal glomerulopathy. Barsoum R, et al. **Kidney Int** 1996 Sep; 50(3):920–8
Systemic and splanchnic hemodynamic changes in patients with hepatic schistosomiasis. Denié C, et al. **Liver** 1996 Oct;16(5):309–12

PREVENTION & CONTROL

Food selection behaviour of potential biological agents to control intermediate host snails of schistosomiasis: Sargochromis codringtoni and Tilapia rendalli. Chimbari MJ, et al. **Acta Trop** 1996 May;61(3):191–9
Economic evaluation in schistosomiasis: using the Delphi technique to assess effectiveness. Kirigia JM. **Acta Trop** 1997 Apr 15;64(3–4):175–90
The radiation-attenuated vaccine against schistosomes in animal models: paradigm for a human vaccine? Coulson PS. **Adv Parasitol** 1997;39:271–336 (210 ref.)
Different approaches to modeling the cost-effectiveness of schistosomiasis control. Guyatt HL, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):159–64 (27 ref.)
Schistosomiasis vaccine development—the current picture. Waine GJ, et al. **Bioessays** 1997 May;19(5):435–43 (76 ref.)
The interactive effect of some molluscicides on the inermediate host of human bilharziasis and their associated zoosporic fungi in the river Nile, Egypt. Badran RA. **Bull Soc Pathol Exot** 1996;89(3):227–31
Schistosomiasis control in the community [editorial] Estambale BB. **East Afr Med J** 1996 Aug;73(8):493–4
The consequences of uncertainty for the prediction of the effects of schistosomiasis control programmes. Chan MS. **Epidemiol Infect** 1996 Dec;117(3):537–50
Schistosomiasis in Australian travellers to Africa. Hipgrave DB, et al. **Med J Aust** 1997 Mar 17;166(6):294–7
The berry and the parasite [news] Mukerjee M. **Sci Am** 1996 Apr;274(4):22, 24–6
The effect of a combined approach to schistosomiasis control on the transmission of Schistosoma japonicum in Xingzi of Poyang Lake area, China. Jiang Q, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):535–41
Schistosomiasis in two Nile delta villages: an anthropological perspective. el Katsha S, et al. **Trop Med Int Health** 1997 Sep;2(9):846–54
Mucosal vaccination against schistosomiasis using liposome-associated Sm 28 kDa glutathione S-transferase. Ivanoff N, et al. **Vaccine** 1996 Aug;14(12):1123–31
Requirements for sustainable schistosomiasis control. Traoré M. **World Health Forum** 1996;17(2):184–6

THERAPY

Economic evaluation in schistosomiasis: using the Delphi technique to assess effectiveness. Kirigia JM. **Acta Trop** 1997 Apr 15;64(3–4):175–90
An IL-12-based vaccine approach for preventing immunopathology in schistosomiasis. Sher A, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:202–7

TRANSMISSION

Modeling the transmission of schistosomiasis: an introductory view. Barbour AD. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):135–43 (10 ref.)
Mathematical models of transmission dynamics and control of schistosomiasis. Woolhouse ME. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):144–8 (19 ref.)
Human behaviour, water usage and schistosomiasis transmission in a small settlement near Yola, Nigeria. Akogun OB, et al. **Ann Trop Med Parasitol** 1996 Jun; 90(3):303–11
Changes in Neotricula beta-aperta population density following construction of the Pak Mun Dam in northeast Thailand, with implications for the transmission of schistosomiasis. Attwood SW. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):24–8
[Epidemiology and clinical aspects of imported schistosomiasis] Jelinek T, et al. **Med Klin** 1997 Jan 15; 92(1):7–12 (Eng. Abstr.) **(Ger)**

URINE

Limited field evaluation of a rapid monoclonal antibody-based dipstick assay for urinary schistosomiasis. Bosompem KM, et al. **Hybridoma** 1996 Dec;15(6):443–7

VETERINARY

Variations in Schistosoma mattheei egg morphology and viability according to age of infection in cattle. De Bont J, et al. **J Helminthol** 1996 Sep;70(3):265–7
Experimental Schistosoma bovis infection in goats: the inflammatory response in the small intestine and liver in various phases of infection and reinfection. Lindberg R, et al. **J Parasitol** 1997 Jun;83(3):454–9
Schistosoma mattheei infection in cattle: the course of the intestinal syndrome, and an estimate of the lethal dose of cercariae. Van Wyk JA, et al. **Onderstepoort J Vet Res** 1997 Mar;64(1):65–75
Permissiveness of two African wild rodents, Mastomys huberti and Arvicanthis niloticus, to Schistosoma intercalatum: epidemiological consequences. Imbert-Establet D, et al. **Parasitol Res** 1997;83(6):569–73
Circulating antigen levels in serum of cattle naturally infected with Schistosoma mattheei. De Bont J, et al. **Parasitology** 1996 Nov;113 (Pt 5):465–71

SCHISTOSOMIASIS HAEMATOBIA

BLOOD

Serum concentration of micronutrients in relation to schistosomiasis and indicators of infection: a cross-sectional study among rural Zimbabwean schoolchildren. Friis H, et al. **Eur J Clin Nutr** 1996 Jun;50(6):386–91

COMPLICATIONS

Case report: calcified pancreas and bile ducts from schistosomiasis. Fataar S, et al. **Br J Radiol** 1996 Nov; 69(827):1064–6
Altered seminal ejaculate consistency due to schistosomiasis. Lewis DA, et al. **Br J Urol** 1996 Dec;78(6):956–7
Association of schistosomiasis with cervical cancer: detecting bias in clinical studies. Riffenburgh RH, et al. **East Afr Med J** 1997 Jan;74(1):14–6
Long-term results of endourologic and percutaneous management of ureteral strictures in bilharzial patients. ElAbd SA, et al. **J Endourol** 1996 Feb;10(1):35–43
Rectosigmoid bilharziomа causing intestinal obstruction. Elmasalme FN, et al. **J Pediatr Surg** 1997 Apr;32(4):631–3
Human papillomavirus and schistosomiasis associated bladder cancer. Cooper K, et al. **Mol Pathol** 1997 Jun;50(3):145–8

DIAGNOSIS

Urine reagent strips for diagnosis of schistosomiasis haematobium in women of fertile age. Gundersen SG, et al. **Acta Trop** 1996 Dec 30;62(4):281–7
Female genital schistosomiasis (FGS): relationship between gynecological and histopathological findings. Helling-Giese G, et al. **Acta Trop** 1996 Dec 30;62(4):257–67
Female genital schistosomiasis due to Schistosoma haematobium. Clinical and parasitological findings in women in rural Malawi. Kjetland EF, et al. **Acta Trop** 1996 Dec 30;62(4):239–55
Hematuria and proteinuria as predictors of Schistosoma

haematobium infection. Hammad TA, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):363–7

The "Kumasi modified" two glass urine test and urinary schistosomiasis [letter] Adu-Sarkodie Y. **Genitourin Med** 1996 Oct;72(5):383–4

Detection of urinary schistosomiasis in a low prevalence region. Tiemersma EW, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):285–6

[Mixed urogenital schistosomiasis] Pereira Arias JG, et al. **Actas Urol Esp** 1997 Mar;21(3):272–7 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Reversibility of lower reproductive tract abnormalities in women with Schistosoma haematobium infection after treatment with praziquantel—an interim report. Richter J, et al. **Acta Trop** 1996 Dec 30;62(4):289–301

A case of refractory schistosomiasis [letter] [see comments] Murray-Smith SQ, et al. **Med J Aust** 1996 Oct 21; 165(8):458. Comment in: Med J Aust 1997 May 19;166(10):567; discussion 568. Comment in: Med J Aust 1997 May 19;166(10):568.

ENZYMOLOGY

Some urinary enzymes in bilharziasis. el-Naggar MM, et al. **Int Urol Nephrol** 1996;28(2):167–73

EPIDEMIOLOGY

Saulea vitrea and low prevalence of schistosomiasis. Gbakima AA. **Afr J Med Med Sci** 1996 Mar;25(1):91–3

Cercarial density in the river of an endemic area of schistosomiasis haematobia in Kenya. Muhoho ND, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):162–7

Urinary schistosomiasis contracted from an irrigation pool in Ramah, the southern Jordan Valley, Jordan. Saliba EK, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):158–61

Patterns of infection and transmission of human schistosomiasis mansoni and schistosomiasis haematobium in White Nile Province, Sudan. Ahmed ES, et al. **Ann Trop Med Parasitol** 1996 Apr;90(2):173–80

Patterns of infection with Schistosoma haematobium in lakeside resettlement communities at the Oyan Reservoir in Ogun State, south-western Nigeria. Ofoezie IE, et al. **Ann Trop Med Parasitol** 1997 Mar;91(2):187–97

Prevalence and severity of urinary schistosomiasis in Ibadan, Nigeria. Arinola OG. **East Afr Med J** 1995 Nov; 72(11):746–8

The use of questionnaires for the identification of high risk areas for urinary schistosomiasis: the Ethiopian experience. Jemaneh L, et al. **Ethiop Med J** 1996 Apr;34(2):93–105

Schistosomiasis status in urban Sharkia Governorate, Egypt: prevalence and intensity of infection. el Badawy AA, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):733–42

Urinary schistosomiasis in rural communities of some local government areas in Plateau State, Nigeria: a preliminary parasitological and malacological survey. Akufongwe PF, et al. **J Helminthol** 1996 Mar;70(1):3–6

Schistosomiasis in Lake Malawi. Cetron MS, et al. **Lancet** 1996 Nov 9;348(9037):1274–8

Royal Society of Tropical Medicine and Hygiene meeting at Manson House, London, 18 May 1995. The epidemiology of human schistosomiasis in the Senegal river basin Picquet M, et al. **Trans R Soc Trop Med Hyg** 1996 Jul-Aug;90(4):340–6

Molecular characterization of Bulinus globosus and B. nasutus on Zanzibar, and an investigation of their roles in the epidemiology of Schistosoma haematobium. Stothard IR, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun; 91(3):353–7

ETIOLOGY

Schistosomiasis haematobium—a case imported by a Japanese patient. Ohnishi K. **Kansenshogaku Zasshi** 1997 Jul; 71(7):672–4

GENETICS

Expression of glutathione S-transferase activity and glutathione content in squamous cell carcinoma of bladder associated with schistosomiasis in a population in Egypt. Ghazaly GE, et al. **Scand J Urol Nephrol** 1997 Feb; 31(1):43–7

HISTORY

Ancient Egypt and today: enough scourges to go around [letter] Colley DG. **Emerg Infect Dis** 1996 Oct–Dec; 2(4):362–3

IMMUNOLOGY

Extraction of Schistosoma haematobium antigens from infected human urine and generation of potential diagnostic monoclonal antibodies to urinary antigens. Bosompem KM, et al. **Acta Trop** 1996 Oct;62(2):91–103

Immunity and morbidity in infection due to Schistosoma haematobium. Hagan P. **Am J Trop Med Hyg** 1996 Nov; 55(5 Suppl):116–20 (31 ref.)

Effects of calcitriol on eosinophil activity and antibody responses in patients with schistosomiasis. Snyman JR, et al. **Eur J Clin Pharmacol** 1997;52(4):277–80

Age-related antibody profiles in Schistosoma haematobium infections in a rural community in Zimbabwe. Ndhlovu P, et al. **Parasite Immunol** 1996 Apr;18(4):181–91

Differential responsiveness of humans with early-stage schistosomiasis haematobium to Schistosoma haematobium soluble adult-worm and egg antigens. El Ridi R, et al. **Parasitol Res** 1997;83(5):471–7

Correlations between specific antibody levels and urine egg counts for Schistosoma haematobium. Ndhlovu PD, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):324–5

Circulating anodic and cathodic antigen in serum and urine of mixed Schistosoma haematobium and S. mansoni infections in Office du Niger, Mali. De Clercq D, et al. **Trop Med Int Health** 1997 Jul;2(7):680–5

METABOLISM

Expression of bcl-2 and p53 oncoproteins in schistosomiasis-associated transitional and squamous cell carcinoma of urinary bladder. Chaudhary KS, et al. **Br J Urol** 1997 Jan;79(1):78–84

PARASITOLOGY

Human bilharzial ureters: I. Fine structure of eggs deposited in the submucosa and muscularis. el-Shoura SM, et al. **Afr J Med Med Sci** 1995 Sep;24(3):219–25

Age-dependent reduction of schistosome fecundity in Schistosoma haematobium but not Schistosoma mansoni infections in humans. Agnew A, et al. **Am J Trop Med Hyg** 1996 Sep;55(3):338–43

Day-to-day variation of egg output and schistosome circulating antigens in urine of Schistosoma haematobium-infected school children from Gabon and follow-up after chemotherapy. Van Etten L, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):337–41

Circulating antigens in schistosomiasis: detection of 31/32-kDa proteins in sera from patients infected with Schistosoma japonicum, S. mansoni, S. haematobium, or S. intercalatum. Li YL, et al. **Parasitol Res** 1996;82(1):14–8

Modified urine filtration to detect eggs of Schistosoma haematobium [letter] Ravaoalimalala VE, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):366

[Bladder bilharziosis] Sanz Chinesta S, et al. **Arch Esp Urol** 1996 Jul-Aug;49(6):545–9 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Female genital schistosomiasis (FGS): relationship between gynecological and histopathological findings. Helling-Giese G, et al. **Acta Trop** 1996 Dec 30;62(4):257–67

Female genital schistosomiasis due to Schistosoma haematobium. Clinical and parasitological findings in women in rural Malawi. Kjetland EF, et al. **Acta Trop** 1996 Dec 30;62(4):239–55

Schistosoma haematobium induced lesions in the female genital tract in a village in Madagascar. Leutscher P, et al. **Acta Trop** 1997 Jun 24;66(1):27–33

[Anatomopathological aspects of 25 cases of bilharzial bladder cancer] Nouhou PH, et al. **Bull Soc Pathol Exot** 1996;89(3):181–4 (6 ref.) (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Schistosomiasis and the use of indigenous plant molluscicides: a rural South African perspective. Clark TE, et al. **Acta Trop** 1997 Aug;66(2):93–107

Dynamics and control of Schistosoma haematobium transmission in Kenya: an overview of the Msambweni Project. Muchiri EM, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):127–34

Effect of piped water supply on human water contact patterns in a Schistosoma haematobium-endemic area in Coast Province, Kenya. Noda S, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):118–26

Control of Schistosoma haematobium morbidity on Pemba Island: validity and efficiency of indirect screening tests. Lwambo NJ, et al. **Bull World Health Organ** 1997; 75(3):247–52

Costs, benefits and operational implications of using quantitative techniques to screen for schistosomiasis haematobium in Egypt. Talaat M, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):29–35

Who misses out with school-based health programmes? a study of schistosomiasis control in Egypt. Husein MH, et al. **Trans R Soc Trop Med Hyg** 1996 Jul-Aug;90(4):362–65

A school-based approach to the control of urinary schistosomiasis and intestinal helminth infections in children in Matuga, Kenya: impact of a two-year chemotherapy programme on prevalence and intensity of infections. Magnussen P, et al. **Trop Med Int Health** 1997 Sep;2(9):825–31

RADIOGRAPHY

Clinical and radiologic findings in schistosomiasis of the bladder. Walker CJ, et al. **Urology** 1997 Jun;49(6):951–2

SURGERY

Results of renal transplantation in patients with Schistosoma infection. Barrou B, et al. **J Urol** 1997 Apr;157(4):1232–5; discussion 1235–6 (17 ref.)

TRANSMISSION

A mistaken report of the occurrence in India of the freshwater snail Bulinus and its relation to transmission of Schistosoma. Brown DS. **Ann Trop Med Parasitol** 1997 Mar;91(2):225–7

Schistosomiasis: an imported infection [letter] Walker JC. **Med J Aust** 1997 Sep 15;167(6):343

ULTRASONOGRAPHY

Ultrasonographic assessment of Schistosoma mansoni and S haematobium morbidity in Zimbabwean schoolchildren. Friis H, et al. **Am J Trop Med Hyg** 1996 Sep;55(3):290–4

Evaluation of an ultrasonographic score for urinary bladder morbidity in Schistosoma haematobium infection. Medhat A, et al. **Am J Trop Med Hyg** 1997 Jul;57(1):16–9

Schistosomiasis of the male genital tract: transrectal sonographic findings. Vilana R, et al. **J Urol** 1997 Oct; 158(4):1491–3

Schistosoma haematobium infection in western Madagascar: morbidity determined by ultrasonography. Serieye J, et al. **Trans R Soc Trop Med Hyg** 1996 Jul-Aug;90(4):398–401

URINE

Urine reagent strips for diagnosis of schistosomiasis haematobium in women of fertile age. Gundersen SG, et al. **Acta Trop** 1996 Dec 30;62(4):281–7

Control of Schistosoma haematobium morbidity on Pemba Island: validity and efficiency of indirect screening tests. Lwambo NJ, et al. **Bull World Health Organ** 1997; 75(3):247–52

Excretion of N-nitrosamines in patients with bacterial bladder infections or diversions of the urinary tract. Tricker AR. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:95–9

Correlations between specific antibody levels and urine egg counts for Schistosoma haematobium. Ndhlovu PD, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):324–5

Modified urine filtration to detect eggs of Schistosoma haematobium [letter] Ravaoalimalala VE, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):366

SCHISTOSOMIASIS, INTESTINAL see **SCHISTOSOMIASIS MANSONI**

SCHISTOSOMIASIS JAPONICA

COMPLICATIONS

Infections with hepatitis B virus in three villages endemic for schistosomiasis japonica in the Dongting Lake region of China. Li Y, et al. **Ann Trop Med Parasitol** 1997 Apr; 91(3):323–7

A case of microhepatoma associated with schistosomiasis japonica diagnosed by enhanced ultrasonography after hepatic intraarterial injection of carbon dioxide gas. Mizutani K, et al. **Tokai J Exp Clin Med** 1996 Jun; 21(2):89–96

[The effect of gamma-interferon on hepatic fibrosis in schistosomiasis japonica] He Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 May;76(5):371–4 (Eng. Abstr.) **(Chi)**

DIAGNOSIS

Studies of schistosomiasis japonicum infection have used the results of a single stool examination to classify patients as being infected or not [letter; comment] Watt G. **Am J Trop Med Hyg** 1996 Oct;55(4):353–4. Comment on: Am J Trop Med Hyg 1994 Aug;51(2):162–9.

Serological diagnosis of Schistosoma japonicum infections in China. Li Y, et al. **Trans R Soc Trop Med Hyg** 1997 Jan-Feb;91(1):19–21

Evaluation of a monoclonal antibody-based sandwich-ELISA for detection of circulating Schistosoma japonicum antigen (Sj31/32) in an endemic area of China. Li YL, et al. **Trop Med Int Health** 1996 Dec;1(6):847–50

DRUG THERAPY

Collaborative study on evaluation of immunodiagnostic assays in schistosomiasis japonica by treatment efficacy assessment. Collaboration Group. Guan X, et al. **Chin Med J (Engl)** 1996 Sep;109(9):659–64

Colchicine reduces hepatic fibrosis in mice infected with Schistosoma japonicum. Jiang J, et al. **Chin Med J (Engl)** 1996 Oct;109(10):795–800

EPIDEMIOLOGY

Epidemiologic features of Schistosoma japonicum among fishermen and other occupational groups in the Dongting Lake region (Hunan Province) of China. Ross AG, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):302–8

The morbidity attributable to Schistosoma japonicum infection in 3 villages in Dongting Lake region, Hunan province, PR China. Booth M, et al. **Trop Med Int Health** 1996 Oct;1(5):646–54

IMMUNOLOGY

Immunity and morbidity in schistosomiasis japonicum infection. Olds GR, et al. **Am J Trop Med Hyg** 1996 Nov; 55(5 Suppl):121–6 (29 ref.)

Collaborative study on detection of circulating antigens in

schistosomiasis japonica.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1995;13(4):277–83

Regulation of schistosome egg granuloma formation: host-soluble L-selectin enters tissue-trapped eggs and binds to carbohydrate antigens on surface membranes of miracidia. El Ridi R, et al. **Infect Immun** 1996 Nov; 64(11):4700–5

Effect of IL-12 on granuloma formation induced by injected Schistosoma japonicum eggs. Yang JQ, et al.
Int J Parasitol 1997 Jul;27(7):861–4

Oral vaccination of mice with recombinant Schistosoma japonicum proteins induces specific anti-parasite antibodies and damage to adult worms after a challenge infection. Yang W, et al. **Int J Parasitol** 1997 Jul;27(7):843–53

In vivo and in vitro cellular response to Schistosoma japonicum eggs in hosts with differing susceptibilities. Hirata M, et al. **Parasite Immunol** 1996 Sep;18(9):431–8

Function and expression of a human idiotypic network in Schistosomiasis japonica. Wisnewski AV, et al.
Parasite Immunol 1996 Sep;18(9):439–47

The influence of sex and age on antibody isotype responses to Schistosoma mansoni and Schistosoma japonicum in human populations in Kenya and the Philippines. Webster M, et al. **Parasitology** 1997 Apr;114 (Pt 4):383–93

METABOLISM

Kinetic study of eosinophil chemotactic factor production with reference to eosinophilia and granuloma formation in mice infected with Schistosoma japonicum. Owhashi M, et al. **Int J Parasitol** 1996 Jul;26(7):705–11

PARASITOLOGY

Circulating antigens in schistosomiasis: detection of 31/32-kDa proteins in sera from patients infected with Schistosoma japonicum, S. mansoni, S. haematobium, or S. intercalatum. Li YL, et al. **Parasitol Res** 1996;82(1):14–8

A method for the isolation of schistosome eggs and miracidia free of contaminating host tissues. Dalton JP, et al.
Parasitology 1997 Jul;115 (Pt 1):29–32

Schistosoma japonicum: immunolocalization of paramyosin during development. Gobert GN, et al. **Parasitology** 1997 Jan;114 (Pt 1):45–52

PATHOLOGY

Kinetic study of eosinophil chemotactic factor production with reference to eosinophilia and granuloma formation in mice infected with Schistosoma japonicum. Owhashi M, et al. **Int J Parasitol** 1996 Jul;26(7):705–11

In vivo and in vitro cellular response to Schistosoma japonicum eggs in hosts with differing susceptibilities. Hirata M, et al. **Parasite Immunol** 1996 Sep;18(9):431–8

[Comparative study on hepatic and intestinal pathological changes in different animals with schistosomiasis japonica] Zhou J, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1995;13(4):292–4 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

The morbidity attributable to Schistosoma japonicum infection in 3 villages in Dongting Lake region, Hunan province, PR China. Booth M, et al.
Trop Med Int Health 1996 Oct;1(5):646–54

PREVENTION & CONTROL

Studies on prophylactic effect of artesunate on schistosomiasis japonica. Li S, et al. **Chin Med J (Engl)** 1996 Nov;109(11):848–53

DNA-based vaccination using Schistosoma japonicum (Asian blood-fluke) genes. Waine GJ, et al. **Vaccine** 1997 Jun;15(8):846–8

[Progresses in tropical diseases and parasitosis in China, 1996] Zheng J. **Chung Hua I Hsueh Tsa Chih** 1996 Dec; 76(12):898–9 (0 ref.) **(Chi)**

[Experimental studies on the preventive effect of artemether against schistosomal infection] Xiao S, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1995;13(4):241–8 (Eng. Abstr.) **(Chi)**

SURGERY

[Intestinal schistosomiasis, a facultative precancerous condition? Review of the literature with reference to Schistosoma japonicum associated rectum carcinoma] Jatzko G, et al. **Chirurg** 1997 Jul;68(7):727–31 (24 ref.) (Eng. Abstr.) **(Ger)**

VETERINARY

Recovery of Schistosoma japonicum from experimentally infected pigs by perfusion of liver and mesenteric veins. Bøgh HO, et al. **Acta Vet Scand** 1997;38(2):147–55

A methodological study on egg counts in tissues from pigs infected with Schistosoma japonicum. Bøgh HO, et al.
Vet Parasitol 1996 Oct 15;65(1–2):21–7

Anti-fecundity immunity to Schistosoma japonicum induced in Chinese water buffaloes (Bos buffelus) after vaccination with recombinant 26 kDa glutathione-S-transferase (reSjc26GST). Shuxian L, et al. **Vet Parasitol** 1997 Apr; 69(1–2):39–47

SCHISTOSOMIASIS MANSONI

Identification of the mouse calcium-binding proteins, MRP 8 and MRP 14, in Schistosoma mansoni-induced granulomas: biochemical and functional characterization. Yang TH, et al. **J Leukoc Biol** 1997 Mar;61(3):258–66

BLOOD

Trypanolytic activity in vivo of plasma from patients with schistosomiasis against the African trypanosome, Trypanosoma brucei brucei. Bundy RE, et al.
Biochem Soc Trans 1996 Aug;24(3):439S

Endothelium activation related increase of soluble intercellular adhesion molecule-1 in human schistosomiasis. Lack of correlation with serology. Lejoly-Boisseau H, et al. **Eur J Clin Invest** 1996 Jun;26(6):522–3

Serum concentration of micronutrients in relation to schistosomiasis and indicators of infection: a cross-sectional study among rural Zimbabwean schoolchildren. Friis H, et al. **Eur J Clin Nutr** 1996 Jun;50(6):386–91

Fibronectin, platelet factor 4 and beta-thromboglobulin in endemic hepatosplenic schistosomiasis: relation to acute hematemesis. el-Bassiouni NE, et al. **Haemostasis** 1997 Jan-Feb;27(1):39–48

Changes in serum lipids of mice experimentally infected with Schistosoma mansoni. el-Marzouki ZM, et al.
J Egypt Soc Parasitol 1997 Aug;27(2):419–29

TRH-TSH test in patients with schistosomiasis chronic forms. Traina E, et al. **Rev Inst Med Trop Sao Paulo** 1996 May-Jun;38(3):227–8

COMPLICATIONS

Liverbiopsy because of Hbs Ag positive hepatitis revealing a non-suspected hepatic schistosomiasis. Implication for future therapy with recombinant alpha interferon? Loffeld RJ, et al. **Acta Gastroenterol Latinoam** 1996;26(1):35–7

A quantitative assay to detect circulating fibrosin and its application in experimental schistosomiasis. Wyler DJ, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):66–70

Case report: calcified pancreas and bile ducts from schistosomiasis. Fataar S, et al. **Br J Radiol** 1996 Nov; 69(827):1064–6

Esophageal schistosomiasis in a patient with megaesophagus. Gagliardi D, et al. **Dis Esophagus** 1997 Jan;10(1):71–3

Rectosigmoid bilharzioma causing intestinal obstruction. Elmasalme FN, et al. **J Pediatr Surg** 1997 Apr;32(4):631–3

Cytokine regulation of schistosome-induced granuloma and fibrosis. Wahl SM, et al. **Kidney Int** 1997 May;51(5):1370–5 (62 ref.)

Eosinophilic interleukin 5 (IL-5) transgenic mice: eosinophil activity and impaired clearance of Schistosoma mansoni. Dent LA, et al. **Parasite Immunol** 1997 Jul;19(7):291–300

Pulmonary hypertension in schistosomiasis mansoni. Barbosa MM, et al. **Trans R Soc Trop Med Hyg** 1996 Nov-Dec; 90(6):663–5

Schistosomiasis mansoni in Kenya: relationship between infection and anaemia in schoolchildren at the community level. Sturrock RF, et al. **Trans R Soc Trop Med Hyg** 1996 Jan-Feb;90(1):48–54

Pyogenic liver abscesses and acute schistosomiasis mansoni: report on 3 cases and experimental study. Teixeira R, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun;90(3):280–3

Schistosomal myelopathy as a cause of neurogenic bladder dysfunction. Razdan S, et al. **Urology** 1997 May; 49(5):777–80

[A case from practice (365). Acute schistosomiasis mansoni (Katayama fever)] Dubach M.
Schweiz Rundsch Med Prax 1996 Dec 3;85(49):1593–5 **(Ger)**

[Cardiopulmonary involvement in schistosomiasis] Barbosa MM, et al. **Arq Bras Cardiol** 1995 Oct;65(4):343–8 (59 ref.) **(Por)**

[Cardiac granulomas due to Schistosoma eggs and endomyocardial fibrosis] Victor EG, et al.
Arq Bras Cardiol 1996 Oct;67(4):259–61 (Eng. Abstr.) **(Por)**

[Mansonic neuroschistosomiasis: clinical, laboratory and therapeutic aspects] Andrade Filho A de S, et al.
Arq Neuropsiquiatr 1996 Jun;54(2):232–7 (Eng. Abstr.) **(Por)**

[Is glomerulopathy due to schistosomiasis mansoni disappearing?] Correia EI, et al.
Rev Soc Bras Med Trop 1997 Jul-Aug;30(4):341–3 (Eng. Abstr.) **(Por)**

DIAGNOSIS

Liverbiopsy because of Hbs Ag positive hepatitis revealing a non-suspected hepatic schistosomiasis. Implication for future therapy with recombinant alpha interferon? Loffeld RJ, et al. **Acta Gastroenterol Latinoam** 1996;26(1):35–7

Evaluation of alkaline phosphatase immunoassay and comparison with other diagnostic methods in areas of low transmission of schistosomiasis. Alarcón de Noya BA, et al. **Acta Trop** 1997 Aug;66(2):69–78

A comparative study on specific antibodies and circulating antigen (CAA) in serum and parasitological findings for diagnosis of schistosomiasis mansoni in an endemic area in Tanzania. Håkangård C, et al. **Acta Trop** 1996 May; 61(3):213–22

Enhanced detection of Schistosoma circulating antigens by testing 1 ml urine samples using immunomagnetic beads. Nibbeling HA, et al. **Acta Trop** 1997 Aug;66(2):85–92

Cerebral schistosomiasis. Mehta A, et al.
AJR Am J Roentgenol 1997 May;168(5):1322

Adult Schistosoma mansoni worms positively modulate soluble egg antigen-induced inflammatory hepatic granuloma formation in vivo. Stereological analysis and immunophenotyping of extracellular matrix proteins, adhesion molecules, and chemokines. Jacobs W, et al.
Am J Pathol 1997 Jun;150(6):2033–45

Efficacy of an enzyme-linked immunosorbent assay in the diagnosis of and serologic distinction between acute and chronic Schistosoma mansoni infection. Valli LC, et al.
Am J Trop Med Hyg 1997 Sep;57(3):358–62

Case report: spinal cord schistosomiasis: MRI findings. Grand S, et al. **Clin Radiol** 1996 Oct;51(10):739–40

Colonoscopic detection of cecal schistosomiasis mimicking a polyp in an asymptomatic individual. Claudel N, et al.
Endoscopy 1996 Nov;28(9):786

Clinical and endoscopic aspects of hepatosplenic schistosomiasis in Uganda. Ravera M, et al.
Eur J Gastroenterol Hepatol 1996 Jul;8(7):693–7

A monoclonal antibody-based enzyme immunoassay for detecting parasite antigenaemia and antigenuria in Schistosomiasis mansoni. Kamel MA, et al.
J Egypt Soc Parasitol 1996 Dec;26(3):789–95

Schistosomiasis: an unusual cause of right lower quadrant abdominal pain. Donaldson BA, et al.
J Natl Med Assoc 1997 Jul;89(7):461–3

Neutral glycolipids of Schistosoma mansoni as feasible antigens in the detection of schistosomiasis. Dennis RD, et al. **Parasitology** 1996 Mar;112 (Pt 3):295–307

Validation of a chart to estimate true Schistosoma mansoni prevalences from simple egg counts. De Vlas SJ, et al.
Parasitology 1997 Feb;114 (Pt 2):113–21

Parasitological diagnosis of schistosomiasis mansoni: concomitant utilization of Kato-Katz method and hatching test. Lemos CP, et al. **Rev Inst Med Trop Sao Paulo** 1995 Sep-Oct;37(5):471–2

An enzyme-linked immunosorbent assay using Schistosoma mansoni purified egg antigen for the diagnosis of schistosomiasis in Saudi Arabia. Ghandour AM, et al.
Trans R Soc Trop Med Hyg 1997 May-Jun;91(3):287–9

[Severe and recurrent digestive hemorrhage: an uncommon form of colonic schistosomiasis] Rolachon A, et al.
Gastroenterol Clin Biol 1996;20(8–9):693–5 (Eng. Abstr.) **(Fre)**

[Schistosomiasis--a rare cause of iron deficiency anemia] Laudage G, et al. **Leber Magen Darm** 1996 Jul;26(4):216–8 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Praziquantel in the treatment of Schistosoma mansoni infection: comparison of 40 and 60 mg/kg bodyweight regimens. Abu-Elyazeed RR, et al.
Am J Trop Med Hyg 1997 Apr;56(4):404–7

Therapeutic evaluation of two different dose regimens of praziquantel in a recent Schistosoma mansoni focus in Northern Senegal. Guisse F, et al.
Am J Trop Med Hyg 1997 May;56(5):511–4

The impact of passive chemotherapy on Schistosoma mansoni prevalence and intensity of infection in the Egyptian Nile Delta. El Sayed MK, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):266–71

Effect of adamantylamide dipeptide on reinfection resistance after primary infection eradication in experimental Schistosomiasis mansoni. Botros S, et al.
Arzneimittelforschung 1996 Jan;46(1):74–8

Effect of early treatment with praziquantel on serum connective tissue metabolite markers in children and adolescents with intestinal schistosomiasis mansoni. Hassanein HI, et al. **Arzneimittelforschung** 1997 Jan; 47(1):84–7

Study of the efficacy of the new antischistosomal drug 10-[2-(diethylamino)ethyl]-9-acridanone-(thiazolidin-2-ylidene) hydrazone against an Egyptian strain of S. mansoni in mice. Metwally A, et al. **Arzneimittelforschung** 1997 Aug; 47(8):975–9

Praziquantel side effects during treatment of Schistosoma mansoni infected pupils in Kibwezi, Kenya. Jaoko WG, et al. **East Afr Med J** 1996 Aug;73(8):499–501

Efficacy of an antipathology vaccine in murine schistosomiasis administered with and without chemotherapy. Botros SS, et al. **Int J Immunopharmacol** 1996 Dec;18(12):707–18

Schistosoma mansoni: permanence of modulation of the granulomatous inflammatory response in mice cured in the chronic phase. Coelho PM, et al. **Int J Parasitol** 1996 Dec; 26(12):1393–5

Comparative effect of tiaprofenic acid and piroxicam alone and as adjuvants to praziquantel in Schistosoma mansoni infected mice. Hegazy IH, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):397–404

Oxamniquine cures Schistosoma mansoni infection in a focus in which cure rates with praziquantel are unusually low. Stelma FF, et al. **J Infect Dis** 1997 Jul;176(1):304–7

IgG4 and IgE responses to Schistosoma mansoni adult worms after treatment [letter; comment] Webster M, et al.
J Infect Dis 1997 Feb;175(2):493–4. Comment on: J Infect Dis 1996 May;173(5):1242–7.

The immunopathology of human Schistosomiasis-III. Immunoglobulin isotype profiles and response to praziquantel. Ramírez RM, et al.

Mem Inst Oswaldo Cruz 1996 Sep-Oct;91(5):593-9

BCG and praziquantel for Schistosomiasis treatment. Viana L de G, et al. **Mem Inst Oswaldo Cruz** 1996 Sep-Oct; 91(5):637

Effect of praziquantel and oxamniquine treatment on human isotype responses to Schistosoma mansoni: elevated IgE to adult worm. Webster M, et al. **Parasite Immunol** 1997 Jul;19(7):333-5

A reagent strip antigen capture assay for the assessment of cure of schistosomiasis patients. van Etten L, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr;91(2):154-5

[On the reversal of schistosomiasis hepatic fibrosis after specific therapy. Histopathologic study] Chapadeiro E, et al. **Rev Soc Bras Med Trop** 1996 Jan-Feb;30(1):53-6 (Eng. Abstr.) **(Por)**

EPIDEMIOLOGY

Saulea vitrea and low prevalence of schistosomiasis. Gbakima AA. **Afr J Med Med Sci** 1996 Mar;25(1):91-3

The impact of passive chemotherapy on Schistosoma mansoni prevalence and intensity of infection in the Egyptian Nile Delta. El Sayed MK, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):266-71

Geographic clustering and seroprevalence of schistosomiasis in Puerto Rico (1995). Tsang VC, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):107-12

Patterns of infection and transmission of human schistosomiasis mansoni and schistosomiasis haematobium in White Nile Province, Sudan. Ahmed ES, et al. **Ann Trop Med Parasitol** 1996 Apr;90(2):173-80

Clinical, parasitological and immunological features of canal cleaners hyper-exposed to Schistosoma mansoni in the Sudan. Satti MZ, et al. **Clin Exp Immunol** 1996 Jun; 104(3):426-31

Prevalence and intensity of S. mansoni infection along the shores of Lake Tana, Ethiopia. Dagnew M. **East Afr Med J** 1996 Dec;73(12):801-4

Epidemiology of schistosomiasis in Kampala, Uganda. Kabatereine NB, et al. **East Afr Med J** 1996 Dec; 73(12):795-800

Schistosoma mansoni along Lake Albert, Kibale District, Western Uganda. Kabatereine NB, et al. **East Afr Med J** 1996 Aug;73(8):502-4

Schistosomiasis in Addis Ababa. Birrie H, et al. **Ethiop Med J** 1996 Apr;34(2):117-21

Newly identified endemic areas of Schistosomiasis mansoni in Tigray, northern Ethiopia. Woldemichael T, et al. **Ethiop Med J** 1996 Apr;34(2):73-82

Urban schistosomiasis: morbidity, sociodemographic characteristics and water contact patterns predictive of infection. Firmo JO, et al. **Int J Epidemiol** 1996 Dec; 25(6):1292-300

Prevalence of allergic diseases in patients with schistosomiasis mansoni [letter] Catapani WR, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):142

Schistosomiasis status in urban Sharkia Governorate, Egypt: prevalence and intensity of infection. el Badawy AA, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):733-42

Host and parasite determinants of morbidity in Egyptian children with schistosomiasis. Hussein HM, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):755-72

Schistosomiasis in Lake Malawi. Cetron MS, et al. **Lancet** 1996 Nov 9;348(9037):1274-8

Validation of a chart to estimate true Schistosoma mansoni prevalences from simple egg counts. De Vlas SJ, et al. **Parasitology** 1997 Feb;114 (Pt 2):113-21

Effect of skin colour and selected physical characteristics on Schistosoma mansoni dependent morbidity. Cançado CB, et al. **Rev Inst Med Trop Sao Paulo** 1995 Nov-Dec; 37(6):493-500

Modelling the dynamic effects of community chemotherapy on patterns of morbidity due to Schistosoma mansoni. Chan MS, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr; 91(2):216-20

Comparative evaluation of the use of artificial neural networks for modelling the epidemiology of schistosomiasis mansoni. Hammad TA, et al. **Trans R Soc Trop Med Hyg** 1996 Jul-Aug;90(4):372-6

Royal Society of Tropical Medicine and Hygiene meeting at Manson House, London, 18 May 1995. The epidemiology of human schistosomiasis in the Senegal river basin Picquet M, et al. **Trans R Soc Trop Med Hyg** 1996 Jul-Aug;90(4):340-6

Four years' follow-up of hepatosplenic morbidity in a recently emerged focus of Schistosoma mansoni in northern Senegal. Stelma FF, et al. **Trans R Soc Trop Med Hyg** 1997 Jan-Feb;91(1):29-30

Occurrence of a community with high morbidity associated with Schistosoma mansoni infection regardless of low infection intensity in north-east Brazil. Tanabe M, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr;91(2):144-9

[Acute schistosomiasis or Katayama syndrome: apropos of 2 mini-epidemics] Loutan L, et al. **Schweiz Med Wochenschr** 1996 Aug 31;126(35):1482-6 (24 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

Characterization of Schistosoma mansoni 44.7/56.8 kDa egg antigens recognized by human monoclonal antibodies which induce protection against experimental infection and proliferation of peripheral blood mononuclear cells from schistosomiasis patients. Hirsch C, et al. **Vaccine** 1997 Jun; 15(9):948-54

GENETICS

Further evidence suggesting the presence of a locus, on human chromosome 5q31-q33, influencing the intensity of infection with Schistosoma mansoni [letter] Müller-Myhsok B, et al. **Am J Hum Genet** 1997 Aug; 61(2):452-4

B-1 cell (CD5+B220+) outgrowth in murine schistosomiasis is genetically restricted and is largely due to activation by polylactosamine sugars. Velupillai P, et al. **J Immunol** 1997 Jan 1;158(1):338-44

Genetic localization of a locus controlling the intensity of infection by Schistosoma mansoni on chromosome 5q31-q33. Marquet S, et al. **Nat Genet** 1996 Oct;14(2):181-4

IMMUNOLOGY

Vasoactive intestinal peptide regulation of granulomatous inflammation in murine Schistosomiasis mansoni. Weinstock JV. **Adv Neuroimmunol** 1996;6(1):95-105 (51 ref.)

Immunity and morbidity in Schistosoma mansoni infection: quantitative aspects. Butterworth AE, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):109-15 (26 ref.)

Studies on schistosomiasis in western Kenya: I. Evidence for immune-facilitated excretion of schistosome eggs from patients with Schistosoma mansoni and human immunodeficiency virus coinfections. Karanja DM, et al. **Am J Trop Med Hyg** 1997 May;56(5):515-21

Evaluation of a stage-specific proteolytic enzyme of Schistosoma mansoni as a marker of exposure. Ramzy RM, et al. **Am J Trop Med Hyg** 1997 Jun;56(6):668-73

Immunopathogenesis and immunoregulation in schistosomiasis. Distinct chronic pathologic syndromes in CBA/J mice. Freeman GL Jr, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:151-65

Development of an antipathology vaccine for schistosomiasis. Wynn TA. **Ann N Y Acad Sci** 1996 Oct 25;797:191-5 (27 ref.)

Trypanolytic activity in vivo of plasma from patients with schistosomiasis against the African trypanosome, Trypanosoma brucei brucei. Bundy RE, et al. **Biochem Soc Trans** 1996 Aug;24(3):439S

Lack of Fc-epsilon receptors on murine eosinophils: implications for the functional significance of elevated IgE and eosinophils in parasitic infections [see comments] de Andres B, et al. **Blood** 1997 May 15;89(10):3826-36. Comment in: Blood 1997 May 15;89(10):3497-501.

Specific immunoglobulin measurements related to exposure and resistance to Schistosoma mansoni infection in Sudanese canal cleaners. Satti MZ, et al. **Clin Exp Immunol** 1996 Oct;106(1):45-54

Humoral immune responses in patients with acute Schistosoma mansoni infection who were followed up for two years after treatment. Rabello AL, et al. **Clin Infect Dis** 1997 Mar;24(3):304-8

Interleukin-10-mediated T cell apoptosis during the T helper type 2 cytokine response in murine Schistosoma mansoni parasite infection. Estaquier J, et al. **Eur Cytokine Netw** 1997 Jun;8(2):153-60

Direct and sequential switching from mu to epsilon in patients with Schistosoma mansoni infection and atopic dermatitis. Baskin B, et al. **Eur J Immunol** 1997 Jan;27(1):130-5

Differential antigen recognition by T cell populations from strains of mice developing polar forms of granulomatous inflammation in response to eggs of Schistosoma mansoni. Hernandez HJ, et al. **Eur J Immunol** 1997 Mar;27(3):666-70

Expression of class II, but not class I, major histocompatibility complex molecules is required for granuloma formation in infection with Schistosoma mansoni. Hernandez HJ, et al. **Eur J Immunol** 1997 May; 27(5):1170-6

CD28-deficient mice generate an impaired Th2 response to Schistosoma mansoni infection. King CL, et al. **Eur J Immunol** 1996 Oct;26(10):2448-55

Schistosoma mansoni: relationship of tumor necrosis factor-alpha to morbidity and collagen deposition in chronic experimental infection. Adewusi OI, et al. **Exp Parasitol** 1996 Nov;84(2):115-23

Schistosoma mansoni: protective immunity in IL-4-deficient mice. King CL, et al. **Exp Parasitol** 1996 Nov;84(2):245-52

Schistosoma mansoni: susceptibility differences between male and female mice can be mediated by testosterone during early infection. Nakazawa M, et al. **Exp Parasitol** 1997 Mar; 85(3):233-40

B-cell outgrowth and ligand-specific production of IL-10 correlate with Th2 dominance in certain parasitic diseases. Palanivel V, et al. **Exp Parasitol** 1996 Nov;84(2):168-77

IL-4 in schistosomiasis. Pearce EJ, et al. **Exp Parasitol** 1996 Nov;84(2):295-9 (47 ref.)

Rodents infected with Schistosoma mansoni produce cytolytic IgG and IgM antibodies to the Lewis x antigen. Nyame AK, et al. **Glycobiology** 1997 Mar;7(2):207-15

Schistosoma mansoni-infected mice show augmented hepatic fibrosis and selective inhibition of liver cytokine production after treatment with anti-NK1.1 antibodies. Asseman C, et al. **Immunol Lett** 1996 Dec 1;54(1):11-20

Kinetics of interleukin-6 production after experimental infection of mice with Schistosoma mansoni. Khalil RM, et al. **Immunology** 1996 Oct;89(2):256-61

Interleukin-7 in the skin of Schistosoma mansoni-infected mice is associated with a decrease in interferon-gamma production and leads to an aggravation of the disease. Wolowczuk I, et al. **Immunology** 1997 May;91(1):35-44

Mice lacking the gamma interferon receptor have an impaired granulomatous reaction to Schistosoma mansoni infection. Rezende SA, et al. **Infect Immun** 1997 Aug;65(8):3457-61

Regulation of schistosome egg granuloma formation: host-soluble L-selectin enters tissue-trapped eggs and binds to carbohydrate antigens on surface membranes of miracidia. El Ridi R, et al. **Infect Immun** 1996 Nov; 64(11):4700-5

Intercellular adhesion molecule 1 is the major adhesion molecule expressed during schistosome granuloma formation. Ritter DM, et al. **Infect Immun** 1996 Nov; 64(11):4706-13

Expression of a Schistosoma mansoni 28-kilodalton glutathione S-transferase in the livers of transgenic mice and its effect on parasite infection. Xu X, et al. **Infect Immun** 1997 Sep;65(9):3867-74

Unimpaired down-modulation of the hepatic granulomatous response in CD8 T-cell- and gamma interferon-deficient mice chronically infected with Schistosoma mansoni. Yap G, et al. **Infect Immun** 1997 Jul;65(7):2583-6

Schistosoma mansoni in IL-4-deficient mice. Pearce EJ, et al. **Int Immunol** 1996 Apr;8(4):435-44

Immunization of mice with ultraviolet-attenuated cercariae of Schistosoma mansoni transiently reduces the fecundity of challenge worms. el Ridi R, et al. **Int J Parasitol** 1997 May;27(5):581-6

Immunological pattern in Syrian golden hamsters experimentally infected with Schistosoma mansoni and Leishmania d. infantum. Mangoud AM, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):497-504

In infection with Schistosoma mansoni, B cells are required for T helper type 2 cell responses but not for granuloma formation. Hernandez HJ, et al. **J Immunol** 1997 May 15; 158(10):4832-7

Fc epsilonRI-deficient mice infected with Schistosoma mansoni mount normal Th2-type responses while displaying enhanced liver pathology. Jankovic D, et al. **J Immunol** 1997 Aug 15;159(4):1868-75

Calpain is the target antigen of a Th1 clone that transfers protective immunity against Schistosoma mansoni. Jankovic D, et al. **J Immunol** 1996 Jul 15;157(2):806-14

Mice with a targeted deletion of the IgE gene have increased worm burdens and reduced granulomatous inflammation following primary infection with Schistosoma mansoni. King CL, et al. **J Immunol** 1997 Jan 1;158(1):294-300

The granulomatous response in murine Schistosomiasis mansoni does not switch to Th1 in IL-4-deficient C57BL/6 mice. Metwali A, et al. **J Immunol** 1996 Nov 15; 157(10):4546-53

Immunoregulatory idiotypes stimulate T helper 1 cytokine responses in experimental Schistosoma mansoni infections. Montesano MA, et al. **J Immunol** 1997 Apr 15; 158(8):3800-4

Type 1 CD8+ T cell responses during infection with the helminth Schistosoma mansoni. Pedras-Vasconcelos JA, et al. **J Immunol** 1996 Oct 1;157(7):3046-53

Role of adhesion molecules of the selectin-carbohydrate families in antibody-dependent cell-mediated cytoxicity to schistosome targets. Trottein F, et al. **J Immunol** 1997 Jul 15;159(2):804-11

B-1 cell (CD5+B220+) outgrowth in murine schistosomiasis is genetically restricted and is largely due to activation by polylactosamine sugars. Velupillai P, et al. **J Immunol** 1997 Jan 1;158(1):338-44

IL-12 enhances vaccine-induced immunity to schistosomes by augmenting both humoral and cell-mediated immune responses against the parasite. Wynn TA, et al. **J Immunol** 1996 Nov 1;157(9):4068-78

Association of hepatosplenic schistosomiasis with HLA-DQB1*0201. Secor WE, et al. **J Infect Dis** 1996 Nov; 174(5):1131-5

IgG4 and IgE responses to Schistosoma mansoni adult worms after treatment [letter; comment] Webster M, et al. **J Infect Dis** 1997 Feb;175(2):493-4. Comment on: J Infect Dis 1996 May;173(5):1242-7.

Liver granulomas in schistosomiasis: mast cell-dependent induction of SCF expression in hepatic stellate cells is mediated by TNF-alpha. Brito JM, et al. **J Leukoc Biol** 1997 Sep;62(3):389-96

The immunopathology of human Schistosomiasis-III. Immunoglobulin isotype profiles and response to praziquantel. Ramírez RM, et al. **Mem Inst Oswaldo Cruz** 1996 Sep-Oct;91(5):593-9

Granulomas in murine schistosomiasis mansoni have a somatostatin immunoregulatory circuit. Elliott DE, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):88-90 (37 ref.)

Cellular immune response and pathology in schistosomiasis. Auriault C, et al. **Parasite** 1996 Sep;3(3):199-208 (54 ref.)

Cross-reactive idiotypes on rabbit anti-SEA antibodies stimulate anti-idiotype spleen and lymph node cell responses of mice infected with Schistosoma mansoni. Amano T, et al. **Parasite Immunol** 1996 Jan;18(1):21-8

Evidence that cellular immune responses to soluble and membrane associated antigens are independently regulated during human schistosomiasis mansoni. Bahia-Oliveira LM, et al. **Parasite Immunol** 1996 Feb;18(2):53-63

IL-10 deficit correlates with chronic, hypersplenomegaly syndrome in male CBA/J mice infected with Schistosoma

mansoni. Bosshardt SC, et al. **Parasite Immunol** 1997 Aug; 19(8):347–53

Sm480: a high molecular weight Schistosoma mansoni antigen associated with protective immunity. Curtis RH, et al. **Parasite Immunol** 1996 Mar;18(3):149–57

Elimination of a primary schistosome infection from rats coincides with elevated IgE titres and mast cell degranulation. Cutts L, et al. **Parasite Immunol** 1997 Feb; 19(2):91–102

Eosinophilic interleukin 5 (IL–5) transgenic mice: eosinophil activity and impaired clearance of Schistosoma mansoni. Dent LA, et al. **Parasite Immunol** 1997 Jul;19(7):291–300

The isolation of a 22 kDa band after SDS–PAGE of Schistosoma mansoni adult worms and its use to demonstrate that IgE responses against the antigen(s) it contains are associated with human resistance to reinfection. Dunne DW, et al. **Parasite Immunol** 1997 Feb; 19(2):79–89

Protection of mice against Schistosoma mansoni infection by passive transfer of sera from infected rabbits. Fallon PG, et al. **Parasite Immunol** 1996 Jan;18(1):7–14

Recognition of Schistosoma mansoni cathepsins B and L by human IgG1 and IgG4 antibodies. Grogan J, et al. **Parasite Immunol** 1997 May;19(5):215–20

HPLC fractionated soluble egg antigen from Schistosoma mansoni elicits a heterogeneous human immune response. Moyes RB, et al. **Parasite Immunol** 1996 Dec;18(12):625–33

Stem cell factor dependent hyperplasia of mucosal–type mast cells but not eosinophils in Schistosoma mansoni–infected rats. Newlands GF, et al. **Parasite Immunol** 1995 Nov; 17(11):595–8

Effect of praziquantel and oxamniquine treatment on human isotype responses to Schistosoma mansoni: elevated IgE to adult worm. Webster M, et al. **Parasite Immunol** 1997 Jul;19(7):333–5

Schistosoma mansoni: unisexual infections sensitized mice for granuloma formation around intravenously injected eggs. Cheever AW, et al. **Parasitol Res** 1997;83(1):57–9

The protein antigens secreted in vivo by adult male Schistosoma mansoni. Cutts L, et al. **Parasitology** 1997 Mar; 114 (Pt 3):245–55

The influence of sex and age on antibody isotype responses to Schistosoma mansoni and Schistosoma japonicum in human populations in Kenya and the Philippines. Webster M, et al. **Parasitology** 1997 Apr;114 (Pt 4):383–93

Schistosoma mansoni: exacerbation of inflammatory granulomatous response in mice chronically infected and submitted to reinfection. Coelho PM, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul–Aug;38(4):303–5

Antibody response to Salmonella typhi in human schistosomiasis mansoni. Muniz–Junqueira MI, et al. **Rev Soc Bras Med Trop** 1996 Sep–Oct;29(5):441–5

Factors influencing phagocytosis of Salmonella typhimurium by macrophages in murine schistosomiasis. Muniz–Junqueira MI, et al. **Rev Soc Bras Med Trop** 1997 Mar–Apr;30(2):101–6

Flow cytometric study of blood leucocytes in clinical forms of human schistosomiasis. Martins–Filho OA, et al. **Scand J Immunol** 1997 Sep;46(3):304–11

IL–10 plays a role in the modulation of human granulomatous hypersensitivity against Schistosoma mansoni eggs induced by immune complexes. Rezende SA, et al. **Scand J Immunol** 1997 Jul;46(1):96–102

Human schistosomiasis: modulation of in vitro granulomatous hypersensitivity and lymphocyte proliferative response by macrophages undergoing differentiation. Silva–Teixeira DN, et al. **Scand J Immunol** 1996 Nov;44(5):522–9

Specific liver autoreactivity in schistosomiasis mansoni. Pereira LM, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):310–4

Circulating anodic and cathodic antigen in serum and urine of mixed Schistosoma haematobium and S. mansoni infections in Office du Niger, Mali. De Clercq D, et al. **Trop Med Int Health** 1997 Jul;2(7):680–5

Use of a new glass microfibre histamine release method to study the modulation of the host response in human schistosomiasis mansoni. Individuals with different degrees of exposure to the disease show differing antibody biological function. Satti MZ, et al. **Trop Med Int Health** 1996 Oct;1(5):655–66

METABOLISM

Chronic parasite infection in mice induces brain granulomas and differentially alters brain nerve growth factor levels and thermal responses in paws. Aloe L, et al. **Acta Neuropathol (Berl)** 1996 Sep;92(3):300–5

Assessment of body hydration in subjects with schistosomiasis. De Lorenzo A, et al. **Ann Hum Biol** 1997 Jul–Aug;24(4):315–21

Effect of early treatment with praziquantel on serum connective tissue metabolite markers in children and adolescents with intestinal schistosomiasis mansoni. Hassanein HI, et al. **Arzneimittelforschung** 1997 Jan; 47(1):84–7

Hyperfibrinolysis in hepatosplenic schistosomiasis. el–Bassiouni NE, et al. **J Clin Pathol** 1996 Dec;49(12):990–3

Urinary excretion of the collagen cross–link pyridinoline increases during liver fibrogenesis. Grenard P, et al. **J Hepatol** 1997 Jun;26(6):1356–62

Lobular—but not periovular—inhibition of collagen deposition in the liver of S. mansoni infected mice using interferon–gamma. Lortat–Jacob H, et al. **J Hepatol** 1997 Apr;26(4):894–903

Eosinophils from schistosome–induced hepatic granulomas produce superoxide and hydroxyl radical. McCormick ML, et al. **J Immunol** 1996 Dec 1;157(11):5009–15

Expression of intercellular adhesion molecule–1 and lymphocytefunction–associated antigen–1 in experimental Schistosoma mansoni infection and in synchronous periparticular hepatic granulomas in mice: immunohistochemistry, confocal laser scanning microscopy, and immunoelectron microscopy. Jacobs W, et al. **Parasitol Res** 1997;83(5):405–12

PARASITOLOGY

Age–dependent reduction of schistosome fecundity in Schistosoma haematobium but not Schistosoma mansoni infections in humans. Agnew A, et al. **Am J Trop Med Hyg** 1996 Sep;55(3):338–43

Schistosoma mansoni: maturation rate and drug susceptibility of different geographic isolates. Fallon PG, et al. **Exp Parasitol** 1997 May;86(1):29–36

Schistosoma mansoni oviposition in vitro reflects worm fecundity in vivo: individual–, parasite age– and host–dependent variations. el Ridi R, et al. **Int J Parasitol** 1997 Apr;27(4):381–7

Change in schistosome sex ratio under the influence of a biotic environmental–related factor. Moné H. **J Parasitol** 1997 Apr;83(2):220–3

Host–parasite relationships in infections with two Kenyan isolates of Schistosoma mansoni in NMRI mice. Thiongo FW, et al. **J Parasitol** 1997 Apr;83(2):330–2

Circulating antigens in schistosomiasis: detection of 31/32–kDa proteins in sera from patients infected with Schistosoma japonicum, S. mansoni, S. haematobium, or S. intercalatum. Li YL, et al. **Parasitol Res** 1996;82(1):14–8

Schistosoma mansoni: cercarial shedding patterns from a mixed infection of Biomphalaria glabrata with two (early and late) chronobiological variants. Théron A, et al. **Parasitol Res** 1997;83(4):356–8

A method for the isolation of schistosome eggs and miracidia free of contaminating host tissues. Dalton JP, et al. **Parasitology** 1997 Jul;115 (Pt 1):29–32

Schistosoma mansoni: the sex ratios of worms in animals infected with cercariae from three species of Biomphalaria. de Souza CP, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar–Apr;38(2):141–5

[Epidemiology of certain endemic parasitic diseases in the town of Guadalupe (Republic of Sao Tome and Principe) I. Schistosomiasis intercalatum and intestinal worms] Ripert C, et al. **Bull Soc Pathol Exot** 1996;89(4):252–8 (Eng. Abstr.) **(Fre)**

[Susceptibility to chemotherapeutic agents of Schistosoma mansoni isolates from patients treated with oxamniquine and praziquantel and not cured] Araújo N, et al. **Rev Soc Bras Med Trop** 1996 Sep–Oct;29(5):467–76 (Eng. Abstr.) **(Por)**

PATHOLOGY

Vasoactive intestinal peptide regulation of granulomatous inflammation in murine Schistosomiasis mansoni. Weinstock JV. **Adv Neuroimmunol** 1996;6(1):95–105 (51 ref.)

Coelom–associated lymphomyeloid tissue (milky spots): site of lymphoid and myelomonocytic cell generation. Lenzi HL, et al. **Braz J Med Biol Res** 1996 Jan;29(1):19–24

Schistosoma mansoni: development and modulation of the granuloma after or multiple exposures in the baboon (Papio cynocephalus anubis). Farah IO, et al. **Exp Parasitol** 1997 Jun;86(2):93–101

Schistosoma mansoni infection in mice augments the capacity for interleukin 3 (IL–3) and IL–9 production and concurrently enlarges progenitor pools for mast cells and granulocytes–macrophages. Khalil RM, et al. **Infect Immun** 1996 Dec;64(12):4960–6

Schistosoma mansoni in IL–4–deficient mice. Pearce EJ, et al. **Int Immunol** 1996 Apr;8(4):435–44

Studies on granuloma formation in Syrian hamsters experimentally infected with Schistosoma mansoni. Abou Rashed A, et al. **J Egypt Soc Parasitol** 1997 Aug; 27(2):411–8

Schistosoma mansoni hepatic fibrosis in Syrian golden hamsters: effect of dose and duration of infection as shown by immunohistopathological studies. Moustafa FE, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):585–99

The granulomatous response in murine Schistosomiasis mansoni does not switch to Th1 in IL–4–deficient C57BL/6 mice. Metwali A, et al. **J Immunol** 1996 Nov 15; 157(10):4546–53

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 39–1996. A 30–year–old man with a generalized tonic–clonic seizure and a left temporal–lobe mass [clinical conference] Anon. **N Engl J Med** 1996 Dec 19;335(25):1906–14

Schistosomal–specific nephropathy in Syrian golden hamsters: treatment by induction of antigen excess. Sobh M, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2178–84

Acute schistosomiasis mansoni in the baboon Papio anubis gives rise to goblet–cell hyperplasia and villus atrophy that are modulated by an irradiated cercarial vaccine. Farah IO, et al. **Parasitol Res** 1997;83(3):281–4

IL12 as an adjuvant for vaccines designed to prevent infection and immunopathology by schistosomes. Wynn TA, et al. **Res Immunol** 1995 Sep–Oct;146(7–8):582–90 (59 ref.)

[On the reversal of schistosomiasis hepatic fibrosis after specific therapy. Histopathologic study] Chapadeiro E, et al. **Rev Soc Bras Med Trop** 1996 Jan–Feb;30(1):53–6 (Eng. Abstr.) **(Por)**

PHYSIOPATHOLOGY

Evidence of a role for nerve growth factor in the effect of sialoadenectomy on body temperature of parasite–infected mice. Aloe L, et al. **Arch Oral Biol** 1996 Jan;41(1):21–6

Systemic and hepatic hemodynamics in hepatosplenic Manson's schistosomiasis with and without propranolol. Mies S, et al. **Dig Dis Sci** 1997 Apr;42(4):751–61

Schistosoma mansoni: permanence of modulation of the granulomatous inflammatory response in mice cured in the chronic phase. Coelho PM, et al. **Int J Parasitol** 1996 Dec; 26(12):1393–5

The effect of Schistosoma mansoni infection on testicular lipid in mice. Marzouki ZM, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):581–95

Pairing of Schistosoma mansoni males in infected Syrian hamsters. Rashed AA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):609–14

Granulomas in murine schistosomiasis mansoni have a somatostatin immunoregulatory circuit. Elliott DE, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):88–90 (37 ref.)

PREVENTION & CONTROL

Integrated control trial of schistosomiasis at Nakiwogo fishing village near Entebbe, Uganda. Odongo–Aginya EI, et al. **East Afr Med J** 1996 Aug;73(8):495–8

The impact of zinc supplementation on Schistosoma mansoni reinfection rate and intensities: a randomized, controlled trial among rural Zimbabwean schoolchildren. Friis H, et al. **Eur J Clin Nutr** 1997 Jan;51(1):33–7

Developmental differences determine larval susceptibility to nitric oxide–mediated killing in a murine model of vaccination against Schistosoma mansoni. Ahmed SF, et al. **Infect Immun** 1997 Jan;65(1):219–26

Recruitment of lymphocytes to the lung through vaccination enhances the immunity of mice exposed to irradiated schistosomes. Coulson PS, et al. **Infect Immun** 1997 Jan; 65(1):42–8

Intranasal priming with recombinant Bordetella pertussis for the induction of a systemic immune response against a heterologous antigen. Mielcarek N, et al. **Infect Immun** 1997 Feb;65(2):544–50

Efficacy of an antipathology vaccine in murine schistosomiasis administered with and without chemotherapy. Botros SS, et al. **Int J Immunopharmacol** 1996 Dec;18(12):707–18

Susceptibility of three successive snail generations from positive and negative laboratory bred Biomphalaria alexandrina from different localities in Egypt to infection with Schistosoma mansoni from Giza. Shoukry NM, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):317–29

Calpain is the target antigen of a Th1 clone that transfers protective immunity against Schistosoma mansoni. Jankovic D, et al. **J Immunol** 1996 Jul 15;157(2):806–14

Protection of mice against Schistosoma mansoni infection by passive transfer of sera from infected rabbits. Fallon PG, et al. **Parasite Immunol** 1996 Jan;18(1):7–14

Induction of protective immunity and modulation of granulomatous hypersensitivity in mice using PIII, an anionic fraction of Schistosoma mansoni adult worm. Hirsch C, et al. **Parasitology** 1997 Jul;115 (Pt 1):21–8

IL12 as an adjuvant for vaccines designed to prevent infection and immunopathology by schistosomes. Wynn TA, et al. **Res Immunol** 1995 Sep–Oct;146(7–8):582–90 (59 ref.)

Modelling the dynamic effects of community chemotherapy on patterns of morbidity due to Schistosoma mansoni. Chan MS, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr; 91(2):216–20

Who misses out with school–based health programmes? a study of schistosomiasis control in Egypt. Husein MH, et al. **Trans R Soc Trop Med Hyg** 1996 Jul–Aug;90(4):362–65

Characterization of Schistosoma mansoni 44.7/56.8 kDa egg antigens recognized by human monoclonal antibodies which induce protection against experimental infection and proliferation of peripheral blood mononuclear cells from schistosomiasis patients. Hirsch C, et al. **Vaccine** 1997 Jun; 15(9):948–54

PSYCHOLOGY

Removal of the submaxillary salivary glands and infection with the trematode Schistosoma mansoni alters exploratory behavior and pain thresholds in female mice. Fiore M, et al. **Physiol Behav** 1997 Aug;62(2):399–406

RADIOGRAPHY

Ultrasound and CT changes of liver parenchyma in acute schistosomiasis. Cesmeli E, et al. **Br J Radiol** 1997 Jul; 70(835):758–60

THERAPY

Synergistic action of cyclosporin A and polyspecific rabbit anti–sera against murine Schistosoma mansoni. Millership JJ, et al. **Parasite Immunol** 1996 Feb;18(2):71–7

TRANSMISSION

Transmission of intestinal schistosomiasis in Addis Ababa, Ethiopia. Erko B, et al. **East Afr Med J** 1996 Nov; 73(11):732–4

Spatial patterns of human water contact and Schistosoma mansoni transmission and infection in four rural areas in Machakos District, Kenya. Kloos H, et al. **Soc Sci Med** 1997 Apr;44(7):949–68

[Susceptibility of Biomphalaria tenagophila from the Paraná and Uruguay River basins to Schistosoma mansoni] Borda CE, et al. **Rev Panam Salud Publica** 1997 Mar;1(3):167–73 (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

Ultrasonographic assessment of Schistosoma mansoni and S haematobium morbidity in Zimbabwean schoolchildren. Friis H, et al. **Am J Trop Med Hyg** 1996 Sep;55(3):290–4

Organometric investigations of the spleen and liver by ultrasound in Schistosoma mansoni endemic and nonendemic villages in Senegal. Yazdanpanah Y, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):245–9

Ultrasound and CT changes of liver parenchyma in acute schistosomiasis. Cesmeli E, et al. **Br J Radiol** 1997 Jul; 70(835):758–60

Could we diagnose active schistosomiasis in children by abdominal sonography? [letter] Abdel-Ghaffar Y, et al. **J Trop Pediatr** 1996 Dec;42(6):374–5

Ultrasonography of periportal fibrosis in schistosomiasis mansoni in Brazil. Gerapacher-Lara R, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):307–9

[Value of hepatosplenic ultrasonography in the surveillance of Schistosoma mansoni endemics (a study conducted in the Richard Toll region of Senegal)] Lanuit R, et al. **Med Trop (Mars)** 1996;56(3):271–4 (11 ref.) (Eng. Abstr.) **(Fre)**

URINE

Daily fluctuation of levels of circulating cathodic antigen in urine of children infected with Schistosoma mansoni in Brazil. Disch J, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr;91(2):222–5

VETERINARY

Reduction of challenge parasite population in gerbils, Meriones unguiculatus, chronically infected with Schistosoma mansoni. Ozaki T, et al. **J Parasitol** 1997 Apr; 83(2):328–9

Susceptibility of rodents to infection with Schistosoma mansoni in Richard-Toll (Senegal). Sène M, et al. **Parasite** 1996 Dec;3(4):321–6

Distribution of schistosome genetic diversity within naturally infected Rattus rattus detected by RAPD markers. Barral V, et al. **Parasitology** 1996 Dec;113 (Pt 6):511–7

SCHISTOSOMIASIS, URINARY see **SCHISTOSOMIASIS HAEMATOBIA**

SCHISTOSOMICIDES

CHEMICAL SYNTHESIS

Synthesis and antischistosomal activity of a new 2-nicotinoyl dipeptide analogue of praziquantel. Abo-Ghalia MH, et al. **Arzneimittelforschung** 1996 Feb;46(2):207–9

METABOLISM

Enzymatic basis for the lack of oxamniquine activity in Schistosoma haematobium infections. Pica-Mattoccia L, et al. **Parasitol Res** 1997;83(7):687–9

PHARMACOKINETICS

Pharmacokinetics of oxamniquine in rabbit and rat. Kokwaro GO, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jan–Mar; 21(1):13–6

PHARMACOLOGY

Schistosoma mansoni: maturation rate and drug susceptibility of different geographic isolates. Fallon PG, et al. **Exp Parasitol** 1997 May;86(1):29–36

THERAPEUTIC USE

Dynamic aspects of morbidity and acquired immunity in schistosomiasis control. Chan MS, et al. **Acta Trop** 1996 Oct;62(2):105–17

Effect of adamantylamide dipeptide on reinfection resistance after primary infection eradication in experimental Schistosomiasis mansoni. Botros S, et al. **Arzneimittelforschung** 1996 Jan;46(1):74–8

Study of the efficacy of the new antischistosomal drug 10-[2-(diethylamino)ethyl]-9-acridanone-(thiazolidin-2-ylidene) hydrazone against an Egyptian strain of S. mansoni in mice. Metwally A, et al. **Arzneimittelforschung** 1997 Aug; 47(8):975–9

Collaborative study on evaluation of immunodiagnostic assays in schistosomiasis japonica by treatment efficacy assessment. Collaboration Group. Guan X, et al. **Chin Med J (Engl)** 1996 Sep;109(9):659–64

Studies on prophylactic effect of artesunate on schistosomiasis japonica. Li S, et al. **Chin Med J (Engl)** 1996 Nov;109(11):848–53

Oxamniquine cures Schistosoma mansoni infection in a focus in which cure rates with praziquantel are unusually low. Stelma FF, et al. **J Infect Dis** 1997 Jul;176(1):304–7

Synergistic action of cyclosporin A and polyspecific rabbit anti-sera against murine Schistosoma mansoni. Millership JJ, et al. **Parasite Immunol** 1996 Feb;18(2):71–7

Effect of praziquantel and oxamniquine treatment on human isotype responses to Schistosoma mansoni: elevated IgE to adult worm. Webster M, et al. **Parasite Immunol** 1997 Jul;19(7):333–5

Evaluation of colchicine with or without praziquantel therapy in the control of hepatic fibrosis in murine schistosomiasis. Badawy AA, et al. **Pharmacol Res** 1996 Jun;33(6):319–25

[Experimental studies on the preventive effect of artemether against schistosomal infection] Xiao S, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):241–8 (Eng. Abstr.) **(Chi)**

[On the reversal of schistosomiasis hepatic fibrosis after specific therapy. Histopathologic study] Chapadeiro E, et al. **Rev Soc Bras Med Trop** 1996 Jan–Feb;30(1):53–6 (Eng. Abstr.) **(Por)**

TOXICITY

Antimony-induced alterations in thiol homeostasis and adenine nucleotide status in cultured cardiac myocytes. Tirmenstein MA, et al. **Toxicology** 1997 May 16; 119(3):203–11

SCHIZOAFFECTIVE DISORDER see **PSYCHOTIC DISORDERS**

SCHIZOID PERSONALITY DISORDER

COMPLICATIONS

Low body weight in male children and adolescents with schizoid personality disorder or Asperger's disorder. Hebebrand J, et al. **Acta Psychiatr Scand** 1997 Jul; 96(1):64–7

DIAGNOSIS

[Countertransference in schizoid disorders] Lieberz K, et al. **Psychother Psychosom Med Psychol** 1997 Feb;47(2):46–51 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Schizoid personality disorder after prenatal exposure to famine. Hoek HW, et al. **Am J Psychiatry** 1996 Dec; 153(12):1637–9

GENETICS

Association of polymorphisms of dopamine D2 receptor (DRD2), and dopamine transporter (DAT1) genes with schizoid/avoidant behaviors (SAB). Blum K, et al. **Mol Psychiatry** 1997 May;2(3):239–46

HISTORY

The first account of the syndrome Asperger described? Translation of a paper entitled "Die schizoiden Psychopathien im Kindesalter" by Dr. G.E. Ssucharewa; scientific assistant, which appeared in 1926 in the Monatsschrift für Psychiatrie und Neurologie 60:235–261 [classical article] Ssucharewa GE, et al. **Eur Child Adolesc Psychiatry** 1996 Sep;5(3):119–32

PSYCHOLOGY

Failure to inhibit irrelevant information in non-clinical schizotypal individuals. Ferraro FR, et al. **J Clin Psychol** 1996 Jul;52(4):389–94

THERAPY

The mental organization of primitive personalities and its treatment implications. Robbins M. **J Am Psychoanal Assoc** 1996;44(3):755–84

[Long-term inpatient therapy of schizoid personality disorder] Holthoff V, et al. **Psychiatr Prax** 1996 Nov; 23(6):305 **(Ger)**

SCHIZOMYCETES see **BACTERIA**

SCHIZOPHRENIA

Quality of life in schizophrenia: relationship to sociodemographic factors, symptomatology and tardive dyskinesia. Browne S, et al. **Acta Psychiatr Scand** 1996 Aug; 94(2):118–24

Can cocaine addicts with severe mental illness be treated along with singly diagnosed addicts? Galanter M, et al. **Am J Drug Alcohol Abuse** 1996 Nov;22(4):497–507

Molecular attributes of dopamine receptors: new potential for antipsychotic drug development. Hartman DS, et al. **Ann Med** 1996 Jun;28(3):211–9 (77 ref.)

The rationale and ethics of medication-free research in schizophrenia [see comments] Carpenter WT Jr, et al. **Arch Gen Psychiatry** 1997 May;54(5):401–7 (58 ref.). Comment in: Arch Gen Psychiatry 1997 May;54(5):412–3. Comment in: Arch Gen Psychiatry 1997 May;54(5):415–6.

The call of the sirens. Navigating the ethics of medication-free research in schizophrenia [comment] Fins JJ, et al. **Arch Gen Psychiatry** 1997 May;54(5):415–6. Comment on: Arch Gen Psychiatry 1997 May;54(5):401–7.

Medication-free research with schizophrenic patients. A European perspective [comment] Henn FA, et al. **Arch Gen Psychiatry** 1997 May;54(5):412–3. Comment on: Arch Gen Psychiatry 1997 May;54(5):401–7.

A survey of social outcome in schizophrenia in Tasmania. Kirkby K, et al. **Aust N Z J Psychiatry** 1997 Jun; 31(3):405–10

Season of birth and schizophrenia: southern hemisphere data [letter; comment] Torrey EF, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):308–9. Comment on: Aust N Z J Psychiatry 1996 Apr;30(2):220–2.

Cavum septi pellucidi in normals and patients with schizophrenia as detected by magnetic resonance imaging. Nopoulos P, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1102–8

ABC of mental health. Schizophrenia. Turner T. **BMJ** 1997 Jul 12;315(7100):108–11 (7 ref.)

Sensible hypothesis testing in deluded, depressed and normal subjects. Bentall RP, et al. **Br J Psychiatry** 1996 Mar; 168(3):372–5

Outcome in schizophrenia and related disorders compared between developing and developed countries. A recursive partitioning re-analysis of the WHO DOSMD data. Craig TJ, et al. **Br J Psychiatry** 1997 Mar;170:229–33

'Audible thoughts' and 'speech defect' [letter; comment] Moncrieff J. **Br J Psychiatry** 1996 Aug;169(2):249–50. Comment on: Br J Psychiatry 1996 May;168(5):533–5; discussion 536–9.

EEG coherence and syndromes in schizophrenia. Norman RM, et al. **Br J Psychiatry** 1997 May;170:411–5

Informed consent in chronic schizophrenia [letter] Sutherby K, et al. **Br J Psychiatry** 1996 Mar;168(3):381

Speech and language in first onset psychosis differences between people with schizophrenia, mania, and controls. Thomas P, et al. **Br J Psychiatry** 1996 Mar;168(3):337–43

'Audible thoughts' and 'speech defect' [letter; comment] Wilson S. **Br J Psychiatry** 1996 Aug;169(2):250. Comment on: Br J Psychiatry 1996 May;168(5):533–5; discussion 536–9.

Uneventful total intravenous anaesthesia with ketamine for schizophrenic surgical patients. Ishihara H, et al. **Eur J Anaesthesiol** 1997 Jan;14(1):47–51

Family values, religiosity, and emotional reactions to schizophrenia in Mexican and Anglo-American cultures. Weisman AG, et al. **Fam Process** 1996 Jun;35(2):227–37

'A controlled trial of general practitioner's attitudes to patients with schizophrenia'. Health Bulletin 1996; 201–3 [letter] Hamilton R. **Health Bull (Edinb)** 1996 Sep;54(5):430

The acute episode in schizophrenia: diagnosis, prognosis and treatment. Proceedings from a Lundbeck symposium. Copenhagen, 9–10 February 1996. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:1–100

Preferences for schizophrenia-related health states: a comparison of patients, caregivers and psychiatrists. Revicki DA, et al. **Int Clin Psychopharmacol** 1996 Jun; 11(2):101–8

Association between central nervous system infections during childhood and adult onset schizophrenia and other psychoses: a 28-year follow-up. Rantakallio P, et al. **Int J Epidemiol** 1997 Aug;26(4):837–43

Schizophrenia with onset at the extremes of adult life. Castle DJ, et al. **Int J Geriatr Psychiatry** 1997 Jul;12(7):712–7

Requiem for "Schizophrenia". Howard JS 3rd. **Integr Physiol Behav Sci** 1996 Apr–Jun;31(2):148–54; discussion 147 (37 ref.)

Quality of life rediscovered: implications for clinical outcome and health economics in schizophrenia [editorial] Awad AG. **J Psychiatry Neurosci** 1997 Jul;22(4):229–30

Psychopathology and quality of life in schizophrenia. Packer S, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):231–4

Quality of life and social integration of severely mentally ill patients: a longitudinal study. Tempier R, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):249–55

The high price of schizophrenia. Georgia restricts newer anti-psychotics for Medicaid members [news] **J Psychosoc Nurs Ment Health Serv** 1997 Feb;35(2):6–7

Practical issues in clinical research of schizophrenia. Brunello N, et al. **Neuropsychobiology** 1997;35(2):57–60

Workshop on schizophrenia. Barondes SH, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1612–4

Characteristics of patients with schizophrenia in two cities in the U.S. and India. Dani MM, et al. **Psychiatr Serv** 1996 Mar;47(3):300–1

Argyria and convulsive seizures caused by ingestion of silver in a patient with schizophrenia. Ohbo Y, et al. **Psychiatry Clin Neurosci** 1996 Apr;50(2):89–90

A longitudinal study of EEG sleep in schizophrenia. Keshavan MS, et al. **Psychiatry Res** 1996 Jan 31; 59(3):203–11

Quality of well-being in late-life psychosis. Patterson TL, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):169–81

Information processing, social skill, and gender in schizophrenia. Penn DL, et al. **Psychiatry Res** 1996 Jan 31;59(3):213–20

Increased duration and altered topography of EEG microstates during cognitive tasks in chronic schizophrenia. Stevens A, et al. **Psychiatry Res** 1997 Jan 15;66(1):45–57

Does pursuit abnormality in schizophrenia represent a deficit

in the predictive mechanism? Thaker GK, et al. **Psychiatry Res** 1996 Jan 31;59(3):221–37

Gender differences in family attitudes about schizophrenia. Davis JA, et al. **Psychol Med** 1996 Jul;26(4):689–96

Facial and other non-verbal communicative behaviour in chronic schizophrenia [published erratum appears in Psychol Med 1996 Nov;26(6):1291] Davison PS, et al. **Psychol Med** 1996 Jul;26(4):707–13

Predicting the long-term outcome of schizophrenia. Harrison G, et al. **Psychol Med** 1996 Jul;26(4):697–705

Validation of three dimensions of schizophrenic symptoms in a large unselected sample of patients. Johnstone EC, et al. **Psychol Med** 1996 Jul;26(4):669–79

A conceptual model of quality of life in schizophrenia: description and preliminary clinical validation. Awad AG, et al. **Qual Life Res** 1997 Jan;6(1):21–6

Multiple cigarette burn wounds in a chronic paranoid schizophrenic [letter; comment] Assin WD. **S Afr Med J** 1996 Nov;86(11):1437. Comment on: S Afr Med J 1996 May;86(5):572.

Course and outcome for schizophrenia versus other psychotic patients: a longitudinal study. Harrow M, et al. **Schizophr Bull** 1997;23(2):287–303

Neuroimaging and the cognitive neuroscience of schizophrenia. McCarley RW, et al. **Schizophr Bull** 1996; 22(4):703–25

First person account: living with mental illness. Molta VE. **Schizophr Bull** 1997;23(2):349–51

Coping with negative symptoms of schizophrenia: patient and family perspectives. Mueser KT, et al. **Schizophr Bull** 1997;23(2):329–39

The VIth International Congress on Schizophrenia Research. Colorado Springs, Colorado, USA, April 12–16, 1997. Abstracts. **Schizophr Res** 1997 Mar;24(1–2):1–288

VIIIth Biennial Winter Workshop on Schizophrenia. Crans Montana, Switzerland, March 16–22, 1996. Abstracts. **Schizophr Res** 1996 Feb;18(2–3):93–254

Schizophrenia throughout life: sex differences in severity and profile of symptoms. Gur RE, et al. **Schizophr Res** 1996 Jul;21(1):1–12

Thought disorder in adolescent-onset schizophrenia. Makowski D, et al. **Schizophr Res** 1997 Feb 7;23(2):147–65

Expressed emotion among families and course of schizophrenia in Japan: a 2-year cohort study. Mino Y, et al. **Schizophr Res** 1997 Apr 11;24(3):333–9

Preattentive and focal attentional processes in schizophrenia: a visual search study. Mori S, et al. **Schizophr Res** 1996 Oct 18;22(1):69–76

Wakefulness and arousal in neonates born to women with schizophrenia: diminished arousal and its association with neurological deviations. Schubert EW, et al. **Schizophr Res** 1996 Oct 18;22(1):49–59

Patients with deficit, nondeficit, and negative symptom schizophrenia: do they differ during episodes of acute psychotic decompensation? Spalletta G, et al. **Schizophr Res** 1997 Apr 11;24(3):341–8

How do men with schizophrenia fare at work? A follow-up study from India. Srinivasan TN, et al. **Schizophr Res** 1997 May 24;25(2):149–54

Relationship of expressed emotion with relapse of schizophrenia patients in Kelantan. Azhar MZ, et al. **Singapore Med J** 1996 Feb;37(1):82–5

The effect of personal experience with mental illness on the attitude towards individuals suffering from mental disorders. Angermeyer MC, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Nov;31(6):321–6

["The psychiatric law and schizophrenia"] Grosen AM. **Ugeskr Laeger** 1997 Apr 21;159(17):2566–7 **(Dan)**

["Polydipsia, intermittent hyponatremia and psychoses" syndrome: a diagnosis and therapeutic management of a case] Assouly-Besse F, et al. **Ann Med Psychol (Paris)** 1996 Jun;154(4):259–63 (Eng. Abstr.) **(Fre)**

[Stability and predictive role of emotions, expressed by families in the development of a cohort of schizophrenic patients in the course of 5 years] Huguelet P, et al. **Ann Med Psychol (Paris)** 1995 Dec;153(10):687–95 (Eng. Abstr.) **(Fre)**

[Discharge of elderly schizophrenics after prolonged hospitalization] Heinik J. **Harefuah** 1996 Dec 1; 131(11):480–4, 535 (Eng. Abstr.) **(Heb)**

[Behavioral assessment of neuroleptics (3)--Schizophrenia negative symptoms-like model induced by PCP] Noda Y, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Aug; 16(4):123–8 (Eng. Abstr.) **(Jpn)**

[History of translation of the word, "Schizophrenie" and the concept of schizophrenia] Iwadate T. **Seishin Shinkeigaku Zasshi** 1996;98(10):702–7; discussion 726–31 **(Jpn)**

[Nationwide estimation of social services necessary for people with schizophrenia receiving outpatient medical care] Kuroda K, et al. **Seishin Shinkeigaku Zasshi** 1997; 99(2):79–90 **(Jpn)**

[Need for reconsideration of the traditional concept of schizophrenia] Moriyama K. **Seishin Shinkeigaku Zasshi** 1996;98(10):718–21; discussion 726–31 **(Jpn)**

[On the proposed change of the term, "schizophrenia"--results of a survey among members of academic committees] Takagi S. **Seishin Shinkeigaku Zasshi** 1996;98(10):707–13; discussion 726–31 **(Jpn)**

[A study on relapse of schizophrenic patients--10-year-follow-up investigation after initial admission] Uchida S. **Seishin Shinkeigaku Zasshi** 1996; 98(5):299–319 (Eng. Abstr.) **(Jpn)**

[Psychoeducation of families of adolescent patients] Gmitrowicz A, et al. **Psychiatr Pol** 1996 Nov-Dec; 30(6):919–27 (Eng. Abstr.) **(Pol)**

[The family's emotional environment and social skill level in schizophrenia] Motak E. **Psychiatr Pol** 1996 Nov-Dec; 30(6):929–38 (Eng. Abstr.) **(Pol)**

[Neurologic development, morphogenic receptors and schizophrenia (editorial)] Castro R, et al. **Med Clin (Barc)** 1997 Jul 5;109(6):219–21 **(Spa)**

[Schizophrenia--a concept of duality] Petersson L. **Lakartidningen** 1996 Nov 27;93(48):4445–6 **(Swe)**

BLOOD

A two-phase, double-blind randomized study of three haloperidol plasma levels for acute psychosis with reassignment of initial non-responders. Janicak PG, et al. **Acta Psychiatr Scand** 1997 Apr;95(4):343–50

Serum triglyceride levels in patients treated with clozapine. Ghaeli P, et al. **Am J Health Syst Pharm** 1996 Sep 1; 53(17):2079–81

The clinical use of clozapine plasma concentrations in the management of treatment-refractory schizophrenia. Miller DD. **Ann Clin Psychiatry** 1996 Jun;8(2):99–109 (47 ref.)

The relationship between plasma haloperidol concentrations and clinical results [letter; comment] Palao DJ, et al. **Arch Gen Psychiatry** 1996 Dec;53(12):1167–9. Comment on: Arch Gen Psychiatry 1995 Oct;52(10):837–45.

Smoking affects plasma-soluble interleukin-2 receptor levels in patients with schizophrenia [letter; comment] Pollmächer T, et al. **Arch Gen Psychiatry** 1997 Jan;54(1):89–90. Comment on: Arch Gen Psychiatry 1995 Aug;52(8):668–72.

Serum cholesterol and treatment-resistance in schizophrenia. Boston PF, et al. **Biol Psychiatry** 1996 Sep 15;40(6):542–3

Seasonal influence on platelet 5-HT levels in patients with recurrent major depression and schizophrenia. Jakovljević M, et al. **Biol Psychiatry** 1997 May 15;41(10):1028–34

First-episode neuroleptic-free schizophrenics: concentrations of monoamines and their metabolites in plasma and their correlations with clinical responses to haloperidol treatment. Nagaoka S, et al. **Biol Psychiatry** 1997 Apr 15; 41(8):857–64

Increased levels of the nicotine metabolite cotinine in schizophrenic smokers compared to other smokers. Olincy A, et al. **Biol Psychiatry** 1997 Jul 1;42(1):1–5

Plasma protein variations in monozygotic twins discordant for schizophrenia. Vander Putten DM, et al. **Biol Psychiatry** 1996 Sep 15;40(6):437–42

Large variations of plasma levels during maintenance treatment with depot neuroleptics. Tuninger E, et al. **Br J Psychiatry** 1996 Nov;169(5):618–21

Investigations of cytokine production in whole blood cultures of paranoid and residual schizophrenic patients. Wilke I, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(5):279–84

Neuroleptic monitoring: relation between antipsychotic efficiency and radioreceptor assay of serum haloperidol. Odou P, et al. **Eur J Clin Pharmacol** 1996;50(5):357–63

Lack of relationship of neuroleptic dose and blood serum levels to neuropsychological performance on the LNNB in chronic schizophrenia. Puente AE, et al. **Int J Neurosci** 1996 Oct;87(1–2):107–10

Haloperidol blood levels and clinical outcome: a meta-analysis of studies relevant to testing the therapeutic window hypothesis. de Oliveira IR, et al. **J Clin Pharm Ther** 1996 Aug;21(4):229–36

Determination of clozapine in serum by radioreceptor assay versus high-performance liquid chromatography: possible detection of hydroxy-metabolites. Odou P, et al. **J Clin Pharm Ther** 1996 Oct;21(5):337–42

Homocysteinemia is a common feature of schizophrenia. Regland B, et al. **J Neural Transm Gen Sect** 1995; 100(2):165–9

Plasma haloperidol and reduced haloperidol concentrations in a geriatric population. Chang WH, et al. **Neuropsychobiology** 1996;33(1):12–6

Serum and cerebrospinal levels of calcium and magnesium in acute versus remitted schizophrenic patients. Levine J, et al. **Neuropsychobiology** 1996;33(4):169–72

Effect of age on platelet 5-HT concentrations in healthy controls, depressed and schizophrenic patients. Mück-Seler D, et al. **Neuropsychobiology** 1996;34(4):201–3

The influence of clozapine treatment on plasma granulocyte colony-stimulating (G-CSF) levels. Pollmächer T, et al. **Pharmacopsychiatry** 1997 Jul;30(4):118–21

Plasma prolactin concentration and psychopathology of schizophrenia [published erratum appears in Prog Neuropsychopharmacol Biol Psychiatry 1997 Feb;21(2):371] Otani K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Nov; 20(8):1369–74

Membrane fatty acids, niacin flushing and clinical parameters. Glen AI, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):9–15

Essential fatty acid deficiency in erythrocyte membranes from chronic schizophrenic patients, and the clinical effects of dietary supplementation. Peet M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):71–5 (33 ref.)

Reduced susceptibility to oxidative damage of erythrocyte membranes from medicated schizophrenic patients. Ramchand CN, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):27–31

Erythrocyte deformability in schizophrenic patients. Nakashima H, et al. **Psychiatry Clin Neurosci** 1996 Aug; 50(4):191–4

Serum cholesterol levels in patients with panic disorders: a comparison with major depression and schizophrenia. Yamada K, et al. **Psychiatry Clin Neurosci** 1997 Feb; 51(1):31–4

Acute phase proteins in schizophrenia, mania and major depression: modulation by psychotropic drugs. Maes M, et al. **Psychiatry Res** 1997 Jan 15;66(1):1–11

Plasma membrane phospholipid fatty acid composition of cultured skin fibroblasts from schizophrenic patients: comparison with bipolar patients and normal subjects. Mahadik SP, et al. **Psychiatry Res** 1996 Jul 31; 63(2–3):133–42

Plasma levels of interleukin-6 and tumor necrosis factor alpha in chronic schizophrenia: effects of clozapine treatment. Monteleone P, et al. **Psychiatry Res** 1997 Jun 16;71(1):11–7

On the concentration of 5-hydroxyindoleacetic acid in schizophrenia: a meta-analysis. Tuckwell HC, et al. **Psychiatry Res** 1996 Jan 31;59(3):239–44

Decreased serotonergic responsivity in platelets of drug-free patients with schizophrenia. Yao JK, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):123–32

Abnormal incorporation of arachidonic acid into platelets of drug-free patients with schizophrenia. Yao JK, et al. **Psychiatry Res** 1996 Feb 28;60(1):11–21

Schizophrenia, tardive dyskinesia and essential fatty acids. Vaddadi KS, et al. **Schizophr Res** 1996 Jul 5;20(3):287–94

A study of the relationship between the DBH activity in serum and a MspI polymorphic site in intron 9 of the human DBH gene in schizophrenia. Wei J, et al. **Schizophr Res** 1996 Oct 18;22(1):77–80

Increased plasma concentrations of bromperidol and its reduced metabolite with levomepromazine, but not with thioridazine. Suzuki A, et al. **Ther Drug Monit** 1997 Jun; 19(3):261–4

[The study of the relationship between cholesterol and lipid concentration and suicidal behavior in patients with schizophrenia affective illness] Rybakowski J, et al. **Psychiatr Pol** 1996 Sep-Oct;30(5):699–712 (Eng. Abstr.) **(Pol)**

CEREBROSPINAL FLUID

CSF of neuroleptic-naive first-episode schizophrenic patients: levels of biogenic amines, substance P, and peptides derived from chromogranin A (GE-25) and secretogranin II (secretoneurin). Miller C, et al. **Biol Psychiatry** 1996 Jun 1;39(11):911–8

Monozygotic twins discordant for schizophrenia are discordant for N-CAM and L1 in CSF. Poltorak M, et al. **Brain Res** 1997 Mar 14;751(1):152–4

Altered intermediate filament expression in human neuroblastoma cells transformed by a growth-promoting agent derived from schizophrenic CSF. Shirabe S, et al. **Cell Mol Neurobiol** 1997 Feb;17(1):1–11

pros-Methylimidazoleacetic acid in cerebrospinal fluid of patients with chronic schizophrenia: relationships to ratings of symptoms, ventricular brain ratios, and rates of urine excretion. Prell GD, et al. **Clin Neuropharmacol** 1996 Oct; 19(5):415–9

Serum and cerebrospinal levels of calcium and magnesium in acute versus remitted schizophrenic patients. Levine J, et al. **Neuropsychobiology** 1996;33(4):169–72

Transforming growth factors beta 1 and beta 2 in the cerebrospinal fluid of chronic schizophrenic patients. Vawter MP, et al. **Neuropsychopharmacology** 1997 Jan; 16(1):83–7

On the concentration of 5-hydroxyindoleacetic acid in schizophrenia: a meta-analysis. Tuckwell HC, et al. **Psychiatry Res** 1996 Jan 31;59(3):239–44

Schizophrenia, psychosis, and cerebral spinal fluid homovanillic acid concentrations. Maas JW, et al. **Schizophr Bull** 1997;23(1):147–54

Dopamine-responsive neurotrophic factor in schizophrenia. Hedges S, et al. **Schizophr Res** 1995 Dec;18(1):83–4

CHEMICALLY INDUCED

Drug induced psychosis [letter; comment] Allebeck P, et al. **Br J Psychiatry** 1996 Jul;169(1):114–5. Comment on: Br J Psychiatry 1996 Feb;168(2):135–8.

Drug-induced parkinsonism in schizophrenic patients: motor response and psychiatric changes after acute challenge with L-Dopa and apomorphine. Merello M, et al. **Clin Neuropharmacol** 1996 Oct;19(5):439–43

Relapse following clozapine withdrawal: effect of neuroleptic drugs and cyproheptadine. Meltzer HY, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):176–87

Cortical and hippocampal EEG power spectra in animal models of schizophrenia produced with methamphetamine, cocaine, and phencyclidine. Yamamoto J. **Psychopharmacology (Berl)** 1997 Jun;131(4):379–87

Smoking, smoking withdrawal and schizophrenia: case reports and a review of the literature. Dalack GW, et al. **Schizophr Res** 1996 Nov 15;22(2):133–41 (45 ref.)

CLASSIFICATION

Subsyndromes of chronic schizophrenia: a phenomenological

study. Arora A, et al. **Acta Psychiatr Scand** 1997 Sep; 96(3):225–9

Identification of symptomatologic patterns common to major psychoses: proposal for a phenotype definition. Serretti A, et al. **Am J Med Genet** 1996 Jul 26;67(4):393–400

Symptoms, subtype, and suicidality in patients within schizophrenia spectrum disorders. Fenton WS, et al. **Am J Psychiatry** 1997 Feb;154(2):199–204

Affiliation and neuropsychiatric disorders: the deficit syndrome of schizophrenia. Kirkpatrick B. **Ann N Y Acad Sci** 1997 Jan 15;807:455–68 (69 ref.)

Diagnosis, methodology and subtypes of schizophrenia. Andreasen NC, et al. **Neuropsychobiology** 1997;35(2):61–3

Identifying subtypes of schizophrenia by cluster analyses. Dollfus S, et al. **Schizophr Bull** 1996;22(3):545–55

Gender differences in the frequency of schizophrenic subtypes in unselected hospitalized patients. Beratis S, et al. **Schizophr Res** 1997 Feb 28;23(3):239–44

Factor-derived subsyndromes of schizophrenia and familial morbid risks. Cardno AG, et al. **Schizophr Res** 1997 Feb 28;23(3):231–8

Memory deficits in subsyndromes of chronic schizophrenia. Schröder J, et al. **Schizophr Res** 1996 Jul;21(1):19–26

Further exploration of a latent class typology of schizophrenia. Sham PC, et al. **Schizophr Res** 1996 May; 20(1–2):105–15

[Psychiatric handicap—precursor or social sequelae of schizophrenia?] Maurer K, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):79–85 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Communication disturbances in the natural speech of schizophrenic patients and non-schizophrenic parents of patients. Docherty NM, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):500–7

Higher risk of ear disease in schizophrenia [letter; comment] Girard M. **Acta Psychiatr Scand** 1996 Jun;93(6):494–5. Comment on: Acta Psychiatr Scand 1995 Apr;91(4):217–21.

Alcohol dependence and schizophrenia: what are the interrelationships? Soyka M. **Alcohol Alcohol Suppl** 1994; 2:473–8 (58 ref.)

Koro and homicidal behavior [letter] Lewis CF, et al. **Am J Psychiatry** 1997 Aug;154(8):1169

Can pulmonary complications cause schizophrenia remission? [letter] Passman TE. **Am J Psychiatry** 1997 Jan;154(1):130

Schizophrenia and kleptomania: a case report—a biological link? Chong SA. **Ann Acad Med Singapore** 1995 Nov; 24(6):860–2 (23 ref.)

Late-onset anorexia nervosa in schizophrenia: a case report. Muñoz CE, et al. **Ann Clin Psychiatry** 1997 Jun;9(2):109–11

Rehabilitation of frontal/executive impairments in schizophrenia. Delahunty A, et al. **Aust N Z J Psychiatry** 1996 Dec;30(6):760–7 (61 ref.)

Osteoporosis demonstrated by dual energy x-ray absorptiometry in chronic schizophrenic patients [letter] Abraham G, et al. **Biol Psychiatry** 1996 Sep 1;40(5):430–1

Salivary flow-rate and composition in schizophrenic patients on clozapine: subjective reports and laboratory data. Ben-Aryeh H, et al. **Biol Psychiatry** 1996 Jun 1; 39(11):946–9

Semantic matching of pictures in schizophrenia: a cross-cultural ERP study. Bobes MA, et al. **Biol Psychiatry** 1996 Aug 1;40(3):189–202

Neuropsychological, olfactory, and hygiene deficits in men with negative symptom schizophrenia. Brewer WJ, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1021–31

Blood pressure and dementia in the elderly: epidemiologic perspectives. Guo Z, et al. **Biomed Pharmacother** 1997; 51(2):68–73 (50 ref.)

Validity of the schizophrenia diagnosis of the psychiatric assessment schedule for adults with developmental disability (PAS-ADD). Moss S, et al. **Br J Psychiatry** 1996 Mar;168(3):359–67

Role of serotonin in forensic psychiatry [letter; comment] Buckley P, et al. **Bull Am Acad Psychiatry Law** 1996; 24(3):419–22. Comment on: Bull Am Acad Psychiatry Law 1996;24(1):57–72.

Electroconvulsive therapy for a schizophrenic patient with burns in the critical care centre. Mashimo K, et al. **Burns** 1997 Feb;23(1):85–6

Phenomenologic comparison of the idiopathic psychosis of schizophrenia and drug-induced cocaine and phencyclidine psychoses: a retrospective study. Rosse RB, et al. **Clin Neuropharmacol** 1994 Aug;17(4):359–69

Effects of nifedipine, a calcium channel antagonist, on cognitive function in schizophrenic patients with tardive dyskinesia. Schwartz BL, et al. **Clin Neuropharmacol** 1997 Aug;20(4):364–70

Gender differences in patients with schizophrenia and substance abuse. Brunette MF, et al. **Compr Psychiatry** 1997 Mar-Apr;38(2):109–16

Insight and clinical correlates in schizophrenia. Kim Y, et al. **Compr Psychiatry** 1997 Mar-Apr;38(2):117–23

Diabetes mellitus associated with mitochondrial myopathy and schizophrenia: a possible link between diabetes mellitus and schizophrenia [letter] Odawara M, et al. **Diabet Med** 1997 Jun;14(6):503

Trihexyphenidyl (Artane) abuse in schizophrenic patients. Zemishlany Z, et al. **Int Clin Psychopharmacol** 1996 Sep; 11(3):199–202

Clock drawing test in elderly schizophrenia patients. Heinik J, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):653–5

Aggression and schizophrenia: efficacy of risperidone. Buckley PF, et al. **J Am Acad Psychiatry Law** 1997; 25(2):173–81

Ethical aspects of competence for sexual relationships: a case of adult sibling incest. Feldman MJ, et al. **J Am Acad Psychiatry Law** 1997;25(2):217–22

Hypouricemia in chronic schizophrenic patients with polydipsia and hyponatremia. Hanihara T, et al. **J Clin Psychiatry** 1997 Jun;58(6):256–60

Palinacousis after closed-head injury in a patient with schizophrenia [letter] Freudenreich O, et al. **J Clin Psychopharmacol** 1996 Feb;16(1):94

Clozapine reduces water-drinking behavior in schizophrenic patients with polydipsia. Fuller MA, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):329–32

Extrapyramidal signs and clinical symptoms in first-episode schizophrenia: response to low-dose risperidone. Kopala LC, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):308–13

Effectiveness of clomipramine for obsessive-compulsive symptoms and chronic pain in two patients with schizophrenia [letter] Kurokawa K, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):329–30

Inhibition of beta-amyloid formation by haloperidol: a possible mechanism for reduced frequency of Alzheimer's disease pathology in schizophrenia. Higaki J, et al. **J Neurochem** 1997 Jan;68(1):333–6

The influence of neurocognitive deficits and symptoms on quality of life in schizophrenia. Heslegrave RJ, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):235–43

Clinical features of schizophrenia in a woman with hyperandrogenism. Kopala LC, et al. **J Psychiatry Neurosci** 1997 Jan;22(1):56–60

Auditory hallucinations in schizophrenia. Group experience in examining symptom management and behavioral strategies. Buccheri R, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Feb;34(2):12–26

Psychomotor seizures presenting with hypnagogic visual hallucinations. Harvey CA, et al. **J R Soc Med** 1996 Nov; 89(11):640–2

Sexually transmitted diseases and unwanted pregnancies in chronically ill psychiatric patients [editorial] [see comments] Coverdale JH, et al. **Med J Aust** 1997 Mar 3; 166(5):231–2 (10 ref.). Comment in: Med J Aust 1997 Jun 16;166(12):665–6. Comment in: Med J Aust 1997 Jun 16;166(12):666. Comment in: Med J Aust 1997 Jun 16;166(12):666–7.

Substance abuse, community service use, and symptom severity of urban and rural residents with schizoprhenia. Fischer EP, et al. **Psychiatr Serv** 1996 Sep;47(9):980–4

A case of Turner syndrome with schizophrenia: genetic relationship between Turner syndrome and psychosis. Kawanishi C, et al. **Psychiatry Clin Neurosci** 1997 Apr; 51(2):83–5

On the nature of Wisconsin Card Sorting Test performance in schizophrenia. Haut MW, et al. **Psychiatry Res** 1996 Nov 1;65(1):15–22

Effect of neuroleptic treatment on depressive symptoms in acute schizophrenic episodes. Krakowski M, et al. **Psychiatry Res** 1997 Jun 16;71(1):19–26

Impairment of the semantic network in schizophrenia. Paulsen JS, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):109–21

Replication of a P50 auditory gating deficit in Australian patients with schizophrenia. Ward PB, et al. **Psychiatry Res** 1996 Sep 27;64(2):121–35

Cognitive dysfunction in chronic schizophrenia followed prospectively over 10 years and its longitudinal relationship to the emergence of tardive dyskinesia. Waddington JL, et al. **Psychol Med** 1996 Jul;26(4):681–8

Psychopathology in patients with schizophrenia and substance abuse: a comparative clinical study. Krausz M, et al. **Psychopathology** 1996;29(2):95–103

Obsessive-compulsive phenomenon in a so-called 'symptomarme schizophrenie': from the viewpoint of structural dynamics in defense mechanisms. Shoda H. **Psychopathology** 1996;29(2):109–25

Symptom change and extrapyramidal side effects during acute haloperidol treatment in chronic geriatric schizophrenics. Weisbard JJ, et al. **Psychopharmacol Bull** 1997;33(1):119–22

Smoking and vulnerability for schizophrenia. de Leon J. **Schizophr Bull** 1996;22(3):405–9 (19 ref.)

Substance abuse and schizophrenia: editors' introduction. Kosten TR, et al. **Schizophr Bull** 1997;23(2):181–6

Substance use disorder and the early course of illness in schizophrenia and affective psychosis. Kovasznay B, et al. **Schizophr Bull** 1997;23(2):195–201

Longitudinal courses of thought disorder in schizophrenia and schizoaffective disorder. Marengo JT, et al. **Schizophr Bull** 1997;23(2):273–85

Motivation to quit using substances among individuals with schizophrenia: implications for a motivation-based treatment model. Ziedonis DM, et al. **Schizophr Bull** 1997; 23(2):229–38

Schizophrenia and nicotine use: report of a pilot smoking cessation program and review of neurobiological and clinical issues. Ziedonis DM, et al. **Schizophr Bull** 1997; 23(2):247–54

Preattentive information processing as measured by backward masking and texton detection tasks in adolescents at high genetic risk for schizophrenia. Lieb K, et al. **Schizophr Res** 1996 Sep 18;21(3):171–82

Detecting comorbid substance misuse among people with schizophrenia in the community: a study comparing the results of questionnaires with analysis of hair and urine. McPhillips MA, et al. **Schizophr Res** 1997 May 24; 25(2):141–8

Memory deficits in subsyndromes of chronic schizophrenia. Schröder J, et al. **Schizophr Res** 1996 Jul;21(1):19–26

Cigarette use, drinking and voiding in schizophrenic patients with polydipsia and hyponatremia. Shutty MS Jr. **Schizophr Res** 1996 Sep 18;21(3):195–7

Verbal memory impairment in schizophrenia: no sparing of short-term recall. Stirling JD, et al. **Schizophr Res** 1997 May 24;25(2):85–95

Neurocognitive deficits and neurological signs in schizophrenia. Wong AH, et al. **Schizophr Res** 1997 Feb 7;23(2):139–46

[Memory disturbances in schizophrenia] Brand A, et al. **Fortschr Neurol Psychiatr** 1996 Feb;64(2):49–65 (132 ref.) (Eng. Abstr.) **(Ger)**

[A case report of liaison psychiatry and open heart surgery in a patient with schizophrenia] Kawasaki H, et al. **Kyobu Geka** 1997 Mar;50(3):209–11 (Eng. Abstr.) **(Jpn)**

[Late onset schizophrenias: a case of chronic hallucinatory psychosis] Fabregat Navarro V, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Nov-Dec;24(6):353–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Contrasts in neuropsychological test profile between patients with first-episode schizophrenia and first-episode affective disorders. Albus M, et al. **Acta Psychiatr Scand** 1996 Aug; 94(2):87–93

Premorbid adjustment as predictor of outcome in schizophrenia: results of a prospective study. Bailer J, et al. **Acta Psychiatr Scand** 1996 May;93(5):368–77

The assessment of light intensity preference in psychiatric patients: a questionnaire. Gerbaldo H, et al. **Acta Psychiatr Scand** 1997 Mar;95(3):236–41

The use of the Expressed Emotion Index as a predictor of outcome in first admitted schizophrenic patients in a French speaking area of Switzerland. Huguelet P, et al. **Acta Psychiatr Scand** 1995 Dec;92(6):447–52

Decline in diagnoses of schizophrenia in Tasmania during the period 1965–1990. Jones IH, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):13–8

The content and characteristics of auditory hallucinations in Saudi Arabia and the UK: a cross-cultural comparison. Kent G, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):433–7

Early self-experienced neuropsychological deficits and subsequent schizophrenic diseases: an 8-year average follow-up prospective study. Klostarkötter J, et al. **Acta Psychiatr Scand** 1997 May;95(5):396–404

Biological predictors of suicidality in schizophrenia. Lewis CF, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):416–20

Anhedonia, depression and the deficit syndrome of schizophrenia. Loas G, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):477–9

The Nithsdale Schizophrenia Surveys. XV. Social adjustment in schizophrenia: associations with gender, symptoms and childhood antecedents. MacEwan TH, et al. **Acta Psychiatr Scand** 1997 Mar;95(3):254–8

Structure of schizophrenic symptomatology and its changes over time: prospective factor-analytical study. Salokangas RK. **Acta Psychiatr Scand** 1997 Jan;95(1):32–9

Perceived parental rearing behaviour in patients with a schizophrenic disorder and its relationship to aspects of the course of the illness. Skagerlind L, et al. **Acta Psychiatr Scand** 1996 May;93(5):403–6

Symptoms at index admission as predictor for 1–5 year outcome in schizophrenia. Wieselgren IM, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):311–9

Cognitive deficits and psychopathology in elderly schizophrenic patients. Lindenmayer JP, et al. **Am J Geriatr Psychiatry** 1997 Winter;5(1):31–42

Cytoarchitecture of the entorhinal cortex in schizophrenia. Akil M, et al. **Am J Psychiatry** 1997 Jul;154(7):1010–2

Planum temporale asymmetry reversal in schizophrenia: replication and relationship to gray matter abnormalities. Barta PE, et al. **Am J Psychiatry** 1997 May;154(5):661–7

Regionally specific pattern of neurochemical pathology in schizophrenia as assessed by multislice proton magnetic resonance spectroscopic imaging. Bertolino A, et al. **Am J Psychiatry** 1996 Dec;153(12):1554–63

Attentional impairments in deficit and nondeficit forms of schizophrenia. Buchanan RW, et al. **Am J Psychiatry** 1997 Mar;154(3):363–70

Correlation between reduced in vivo benzodiazepine receptor binding and severity of psychotic symptoms in schizophrenia [published erratum appears in Am J Psychiatry 1997 May;154(5):722] Busatto GF, et al. **Am J Psychiatry** 1997 Jan;154(1):56–63

Visual information-processing impairments in deficit and nondeficit schizophrenia. Bustillo JR, et al. **Am J Psychiatry** 1997 May;154(5):647–54

Cognitive functioning in late-life schizophrenia: a comparison of elderly schizophrenic patients and patients with Alzheimer's disease. Davidson M, et al. **Am J Psychiatry** 1996 Oct;153(10):1274–9

Decreased left frontal lobe N-acetylaspartate in schizophrenia. Deicken RF, et al. **Am J Psychiatry** 1997 May;154(5):688–90

Symptoms, subtype, and suicidality in patients with schizophrenia spectrum disorders. Fenton WS, et al.

Am J Psychiatry 1997 Feb;154(2):199–204

Unnatural practices, unspeakable actions: a study of delayed auditory feedback in schizophrenia. Goldberg TE, et al. **Am J Psychiatry** 1997 Jun;154(6):858–60

Age-related differences in formal thought disorder in chronically hospitalized schizophrenic patients: a cross-sectional study across nine decades. Harvey PD, et al. **Am J Psychiatry** 1997 Feb;154(2):205–10

Direct assessment of functional status in older patients with schizophrenia. Klapow JC, et al. **Am J Psychiatry** 1997 Jul;154(7):1022–4

Similar extent of brain dysmorphology in severely ill women and men with schizophrenia. Lauriello J, et al. **Am J Psychiatry** 1997 Jun;154(6):819–25

Correlations of premorbid adjustment in schizophrenia with auditory event-related potential and neuropsychological abnormalities. Levitt JJ, et al. **Am J Psychiatry** 1996 Oct; 153(10):1347–9

Neurocognitive deficits in schizophrenia [letter; comment] Liberman RP. **Am J Psychiatry** 1997 Mar;154(3):443–4. Comment on: Am J Psychiatry 1996 Mar;153(3):321–30.

Cognitive deficit measures in schizophrenia: factor structure and clinical correlates. Lieh-Mak F, et al. **Am J Psychiatry** 1997 Jun;154(6 Suppl):39–46

Cortical gray matter volume deficit in patients with first-episode schizophrenia. Lim KO, et al. **Am J Psychiatry** 1996 Dec;153(12):1548–53

Olfactory identification deficits in schizophrenia: correlation with duration of illness. Moberg PJ, et al. **Am J Psychiatry** 1997 Jul;154(7):1016–8

Aberrant semantic activation in schizophrenia: a neurophysiological study. Nestor PG, et al. **Am J Psychiatry** 1997 May;154(5):640–6

Schizophrenia and the myth of intellectual decline. Russell AJ, et al. **Am J Psychiatry** 1997 May;154(5):635–9

Backward versus forward visual masking deficits in schizophrenic patients: centrally, not peripherally, mediated? Saccuzzo DS, et al. **Am J Psychiatry** 1996 Dec; 153(12):1564–70

PET study of greater visual activation in schizophrenia. Taylor SF, et al. **Am J Psychiatry** 1997 Sep;154(9):1296–8

Revisiting the factor structure for positive and negative symptoms: evidence from a large heterogeneous group of psychiatric patients. Toomey R, et al. **Am J Psychiatry** 1997 Mar;154(3):371–7

Psychosis and etiology [letter; comment] Trémeau F, et al. **Am J Psychiatry** 1997 Jan;154(1):132–4. Comment on: Am J Psychiatry 1995 Oct;152(10):1458–63.

Informative morphogenetic variants in patients with schizophrenia and alcohol-dependent patients: beyond the Waldrop Scale. Trixler M, et al. **Am J Psychiatry** 1997 May;154(5):691–3

Benzodiazepine receptor binding and schizophrenia [letter] Verhoeff NP. **Am J Psychiatry** 1997 Oct;154(10):1480

Schizophrenia and the parvalbumin-containing class of cortical local circuit neurons. Woo TU, et al. **Am J Psychiatry** 1997 Jul;154(7):1013–5

Size, shape, and orientation of neurons in the left and right hippocampus: investigation of normal asymmetries and alterations in schizophrenia. Zaidel DW, et al. **Am J Psychiatry** 1997 Jun;154(6):812–8

The core symptoms of schizophrenia. Flaum M, et al. **Ann Med** 1996 Dec;28(6):525–31 (19 ref.)

Schizophrenia and temporal lobe epilepsy [letter; comment] Anand A. **Arch Gen Psychiatry** 1996 Nov;53(11):1062–3; discussion 1063–4. Comment on: Arch Gen Psychiatry 1994 Apr;51(4):265–72.

Inhibitory gating of an evoked response to repeated auditory stimuli in schizophrenic and normal subjects. Human recordings, computer simulation, and an animal model. Freedman R, et al. **Arch Gen Psychiatry** 1996 Dec; 53(12):1114–21

Increased concentrations of presynaptic proteins in the cingulate cortex of subjects with schizophrenia. Gabriel SM, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):559–66

Auditory working memory and Wisconsin Card Sorting Test performance in schizophrenia. Gold JM, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):159–65

Eye tracking, attention, and schizotypal symptoms in nonpsychotic relatives of patients with schizophrenia. Keefe RS, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):169–76

The influence of expressed emotion, family dynamics, and symptom type on the social adjustment of schizophrenic young adults. King S, et al. **Arch Gen Psychiatry** 1996 Dec; 53(12):1098–104

Schizophrenia and temporal lobe epilepsy [letter; comment] Mitchell AJ. **Arch Gen Psychiatry** 1996 Nov;53(11):1063; discussion 1064–5. Comment on: Arch Gen Psychiatry 1994 Apr;51(4):265–72.

Studies of ventricular enlargement [letter; comment] Persaud R. **Arch Gen Psychiatry** 1996 Dec;53(12):1165–7. Comment on: Arch Gen Psychiatry 1995 Sep;52(9):735–46.

Schizophrenic deficits in the processing of context. A test of a theoretical model. Servan-Schreiber D, et al. **Arch Gen Psychiatry** 1996 Dec;53(12):1105–12

Aggressive behaviour in schizophrenia: the role of psychopathology. Cheung P, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):62–7

The inter-rater and test-retest reliabilities of prodromal symptoms in first-episode psychosis. Jackson HJ, et al. **Aust N Z J Psychiatry** 1996 Aug;30(4):498–504

Women and schizophrenia: a review. Kulkarni J. **Aust N Z J Psychiatry** 1997 Feb;31(1):46–56 (106 ref.)

Depression in schizophrenia: a descriptive study. Markou P. **Aust N Z J Psychiatry** 1996 Jun;30(3):354–7

Schizophrenia. A cognitive model and its implications for psychological intervention. Hemsley DR. **Behav Modif** 1996 Apr;20(2):139–69 (126 ref.)

Physical attractiveness in schizophrenia. The mediating role of social skill. Penn DL, et al. **Behav Modif** 1997 Jan; 21(1):78–85

Spatial working memory deficits and their relationship to negative symptoms in unmedicated schizophrenia patients. Carter C, et al. **Biol Psychiatry** 1996 Nov 1;40(9):930–2

Blink rate, neurocognitive impairments, and symptoms in schizophrenia. Chen EY, et al. **Biol Psychiatry** 1996 Oct 1;40(7):597–603

Visuospatial working memory in patients with schizophrenia. Fleming K, et al. **Biol Psychiatry** 1997 Jan 1;41(1):43–9

Proton magnetic resonance spectroscopy of basal ganglia in chronic schizophrenia. Fujimoto T, et al. **Biol Psychiatry** 1996 Jul 1;40(1):14–8

Kinematic analysis of handwriting movements in schizophrenic patients. Gallucci RM, et al. **Biol Psychiatry** 1997 Apr 1;41(7):830–3

Dexamethasone nonsuppression and short rapid eye movement latency in schizophrenia: markers of an affective diathesis? Goldman M, et al. **Biol Psychiatry** 1996 Nov 1;40(9):927–9

Electrodermal activity as a prodromal sign in schizophrenia. Hazlett H, et al. **Biol Psychiatry** 1997 Jan 1;41(1):111–3

Electroencephalographic photic driving in patients with schizophrenia and depression. Jin Y, et al. **Biol Psychiatry** 1997 Feb 15;41(4):496–9

Cortical abnormality in schizophrenia: an in vivo application of the gyrification index. Kulynych JJ, et al. **Biol Psychiatry** 1997 May 15;41(10):995–9

Gray matter deficits in young onset schizophrenia are independent of age of onset. Lim KO, et al. **Biol Psychiatry** 1996 Jul 1;40(1):4–13

Ziskind-Somerfeld Research Award 1996. Medial and superior temporal gyral volumes and cerebral asymmetry in schizophrenia versus bipolar disorder. Pearlson GD, et al. **Biol Psychiatry** 1997 Jan 1;41(1):1–14

Sex differences in olfactory identification and Wisconsin Card Sorting performance in schizophrenia: relationship to attention and verbal ability. Seidman LJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):104–15

Dynamical analysis of schizophrenia courses. Tschacher W, et al. **Biol Psychiatry** 1997 Feb 15;41(4):428–37

MRI brain abnormalities in chronic schizophrenia: one process or more? Woods BT, et al. **Biol Psychiatry** 1996 Oct 1;40(7):585–96

Coping with hallucinations: exploring stress and coping framework. Farhall J, et al. **Br J Clin Psychol** 1997 May; 36 (Pt 2):259–61

Emotional overinvolvement in parents of patients with schizophrenia or related psychosis: demographic and clinical predictors. Bentsen H, et al. **Br J Psychiatry** 1996 Nov;169(5):622–30

Negative symptoms, neurological signs and neuropsychological impairments in 204 Hong Kong Chinese patients with schizophrenia. Chen EY, et al. **Br J Psychiatry** 1996 Feb;168(2):227–33

Concurrent validity of the OPCRIT diagnostic system. Comparison of OPCRIT diagnoses with consensus best-estimate lifetime diagnoses. Craddock M, et al. **Br J Psychiatry** 1996 Jul;169(1):58–63

First-rank symptoms or rank-and-file symptoms? [editorial] Crichton P. **Br J Psychiatry** 1996 Nov;169(5):537–40; discussion 541–50

A neuropsychological perspective on three schizophrenic patients with midline structural defects. Edelstyn NM, et al. **Br J Psychiatry** 1997 May;170:416–21

'Audible thoughts' and 'speech defects' in schizophrenia [letter] Hoenig J. **Br J Psychiatry** 1996 Sep;169(3):380

Abnormal movements in never-medicated Indian patients with schizophrenia. McCreadie RG, et al. **Br J Psychiatry** 1996 Feb;168(2):221–6

Relationship between insight, educational background and cognition in schizophrenia. Macpherson R, et al. **Br J Psychiatry** 1996 Jun;168(6):718–22

Mixed-handedness in patients with functional psychosis. Malesu RR, et al. **Br J Psychiatry** 1996 Feb;168(2):234–6

Behavioural vigilance in schizophrenia. Evidence for hyperattentional processing. Mar CM, et al. **Br J Psychiatry** 1996 Dec;169(6):781–9

The course of schizophrenia over 13 years. A report from the International Study on Schizophrenia (ISoS) coordinated by the World Health Organization. Mason P, et al. **Br J Psychiatry** 1996 Nov;169(5):580–6

The predictive validity of a diagnosis of schizophrenia. A report from the International Study of Schizophrenia (ISoS) coordinated by the World Health Organization and the Department of Psychiatry, University of Nottingham. Mason P, et al. **Br J Psychiatry** 1997 Apr;170:321–7

Validity of the schizophrenia diagnosis of the psychiatric assessment schedule for adults with developmental disability (PAS-ADD). Moss S, et al. **Br J Psychiatry** 1996 Mar;168(3):359–67

Unwantedness of a pregnancy and schizophrenia in the child. Myhrman A, et al. **Br J Psychiatry** 1996 Nov;169(5):637–40

Symptoms of the schizophrenic negative syndrome. Peralta V, et al. **Br J Psychiatry** 1996 Aug;169(2):209–12

Patterns of positive and negative symptoms in first episode schizophrenia. Vázquez-Barquero JL, et al. **Br J Psychiatry** 1996 Jun;168(6):693–701

'Audible thoughts' and 'speech defects' in schizophrenia [letter] Wyss FE. **Br J Psychiatry** 1996 Sep;169(3):379–80

Tardive dyskinesia and positive and negative symptoms of schizophrenia. A study using instrumental measures. Yuen O, et al. **Br J Psychiatry** 1996 Jun;168(6):702–8

Artificial neural network to assist psychiatric diagnosis [see comments] Zou Y, et al. **Br J Psychiatry** 1996 Jul; 169(1):64–7. Comment in: Br J Psychiatry 1996 Dec;169(6):793–4.

Gender and affect in schizophrenia [see comments] Addington D, et al. **Can J Psychiatry** 1996 Jun;41(5):265–8 . Comment in: Can J Psychiatry 1996 Jun;41(5):263–4.

Intravenous tripelennamine abuse in schizophrenia [letter] Addington J, et al. **Can J Psychiatry** 1996 Feb;41(1):63

Chronic fatigue syndrome: a prodrome to psychosis? [letter; comment] Chagpar A. **Can J Psychiatry** 1996 Oct; 41(8):536–7. Comment on: Can J Psychiatry 1996 May;41(4):217–22.

False memory in schizophrenia [letter] Miyaoka H, et al. **Can J Psychiatry** 1997 Mar;42(2):211

Schizophrenia, gender, and affect [editorial; comment] Seeman MV. **Can J Psychiatry** 1996 Jun;41(5):263–4. Comment on: Can J Psychiatry 1996 Jun;41(5):265–8.

A case report of factitious disorder with psychiatric complaints [letter] Song WY, et al. **Can J Psychiatry** 1997 Jun;42(5):533

The heterogeneity of memory dysfunction in schizophrenia. Stip E, et al. **Can J Psychiatry** 1996 Sep;41(7 Suppl 1):S14–20 (33 ref.)

Searching eye movement, smooth pursuit eye movement and schizophrenia. Yan W, et al. **Chin Med J (Engl)** 1996 Jul; 109(7):566–71

Construct validity of negative symptoms: an empirical and conceptual review. Earnst KS, et al. **Clin Psychol Rev** 1997; 17(2):167–89 (221 ref.)

Psychopathology: an edgeless razor? Monti MR, et al. **Compr Psychiatry** 1996 May–Jun;37(3):196–204

Schizophrenia and Alzheimer's disease: clinical and pathophysiologic analogies. White KE, et al. **Compr Psychiatry** 1996 May–Jun;37(3):188–95

Right hemispatial inattention and magical ideation. Brugger P, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(1):55–7

Expressed-emotion development and course of schizophrenic illness: considerations based on results of a CFI replication. Schulze Mönking H, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(1):31–4

Course of adolescent psychotic disorder with schizoaffective episodes. Lay B, et al. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):32–41

Schizophrenia like syndrome following chronic hydrocephalus in a teenager. Kaiser GL, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:39–40

The effect of fixation condition manipulations on antisaccade performance in schizophrenia: studies of diagnostic specificity. McDowell JE, et al. **Exp Brain Res** 1997 Jun; 115(2):333–44

Card-sort performance and syndromes of schizophrenia. Rowe EW, et al. **Genet Soc Gen Psychol Monogr** 1997 May; 123(2):197–209

How to distinguish between the neuroleptic-induced deficit syndrome, depression and disease-related negative symptoms in schizophrenia. Barnes TR, et al. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:115–21 (63 ref.)

Negative symptoms: diagnosis, treatment and prognosis. Buchanan RW, et al. **Int Clin Psychopharmacol** 1996 May; 11 Suppl 2:3–11 (90 ref.)

Differential diagnosis in acute psychotic episode. Falkai P. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:13–7 (23 ref.)

Lack of relationship of neuroleptic dose and blood serum levels to neuropsychological performance on the LNNB in chronic schizophrenia. Puente AE, et al. **Int J Neurosci** 1996 Oct;87(1–2):107–10

Does quality of life differ in schizophrenic women and men? An empirical study. Röder-Wanner UU, et al. **Int J Soc Psychiatry** 1997 Summer;43(2):129–43

Family and physicians' views of surrogate decision-making: the roles and how to choose. Silberfeld M, et al. **Int Psychogeriatr** 1996 Winter;8(4):589–96

Herpes encephalitis, schizophrenia and the crossroads of psychiatry. Howard JS 3rd. **Integr Physiol Behav Sci** 1996 Jul–Sep;31(3):219–23

Observation of metabolic changes in chronic schizophrenia after neuroleptic treatment by in vivo hydrogen magnetic resonance spectroscopy. Choe BY, et al. **Invest Radiol** 1996 Jun;31(6):345–52

Comparative affective reactivity of different types of communication disturbances in schizophrenia. Docherty NM, et al. **J Abnorm Psychol** 1997 May;106(2):325–30

Pupillary responses index overload of working memory resources in schizophrenia. Granholm E, et al. **J Abnorm Psychol** 1997 Aug;106(3):458–67

Impaired precision, but normal retention, of auditory sensory ("echoic") memory information in schizophrenia. Javitt DC, et al. **J Abnorm Psychol** 1997 May;106(2):315–24

Antisaccade performance in patients with schizophrenia and affective disorder. Katsanis J, et al. **J Abnorm Psychol** 1997 Aug;106(3):468–72

Antisocial personality disorder, conduct disorder, and substance abuse in schizophrenia. Mueser KT, et al. **J Abnorm Psychol** 1997 Aug;106(3):473–7

Behavioral analysis of drinking behaviors in polydipsic patients with chronic schizophrenia. Shutty MS Jr, et al. **J Abnorm Psychol** 1997 Aug;106(3):483–5

Reduced top-down influence in auditory perceptual organization in schizophrenia. Silverstein SM, et al. **J Abnorm Psychol** 1996 Nov;105(4):663–7

Adolescent schizophrenia: a methodologic review of the current neuroimaging and neuropsychologic literature. Findling RL, et al. **J Autism Dev Disord** 1995 Dec; 25(6):627–39 (39 ref.)

Children with schizophrenia-spectrum disorders: thought disorder and communication problems in a family interactional context. Tompson MC, et al. **J Child Psychol Psychiatry** 1997 May;38(4):421–9

Cognitive function in schizophrenic patients. Tollefson GD. **J Clin Psychiatry** 1996;57 Suppl 11:31–9 (62 ref.)

Applicability of telemedicine for assessing patients with schizophrenia: acceptance and reliability. Zarate CA Jr, et al. **J Clin Psychiatry** 1997 Jan;58(1):22–5

Multiple deficit theory of schizophrenia: incidence of markers vs. symptoms. Chapin KJ, et al. **J Clin Psychol** 1996 Mar; 52(2):109–23

Measuring the effect of the Rorschach color cards (VIII–X) on perceptual accuracy and special scores in differentiating borderline from schizophrenic protocols. Peters JE, et al. **J Clin Psychol** 1996 Sep;52(5):581–8

Aristotle, Galileo, and the DSM taxonomy: the case of schizophrenia. Carson RC. **J Consult Clin Psychol** 1996 Dec;64(6):1133–9

A time course analysis of Stroop interference and facilitation: comparing normal individuals and individuals with schizophrenia [see comments] Schooler C, et al. **J Exp Psychol Gen** 1997 Mar;126(1):19–36. Comment in: J Exp Psychol Gen 1997 Mar;126(1):37–41.

Homo-erotomania for a delusional parent: erotomania with Capgras and Fregoli syndromes in a young male with learning difficulties. Mann J, et al. **J Intellect Disabil Res** 1996 Jun;40 (Pt 3):275–8

Discrimination accuracy and decision biases in different types of reality monitoring in schizophrenia. Brébion G, et al. **J Nerv Ment Dis** 1997 Apr;185(4):247–53

Relationships between symptoms of schizophrenia and substance abuse. Brunette MF, et al. **J Nerv Ment Dis** 1997 Jan;185(1):13–20

Affective reactivity of symptoms as a process discriminator in schizophrenia. Docherty NM. **J Nerv Ment Dis** 1996 Sep;184(9):535–41 (46 ref.)

Stability of personality traits in schizophrenia and schizoaffective disorder: a pilot project. Kentros M, et al. **J Nerv Ment Dis** 1997 Sep;185(9):549–55

Cognitive impairment and substance abuse history as predictors of the temporal stability of negative symptoms in schizophrenia. Lysaker PH, et al. **J Nerv Ment Dis** 1997 Jan;185(1):21–6

Language planning processing in schizophrenia using the active or passive voice. Meyer SL, et al. **J Nerv Ment Dis** 1997 Jan;185(1):53–5

Performance characteristics of chronic schizophrenia on attention tests sensitive to unilateral brain damage. Mizuno M, et al. **J Nerv Ment Dis** 1997 Jul;185(7):427–33

Neurosyphilis occurring in a patient with schizophrenia: a cautionary tale. Patkar AA, et al. **J Nerv Ment Dis** 1997 Feb;185(2):119–20

Constricted expressiveness and psychophysiological reactivity in schizophrenia. Sison CE, et al. **J Nerv Ment Dis** 1996 Oct;184(10):589–97

Temperament and substance abuse in schizophrenia: is there a relationship? Van Ammers EC, et al. **J Nerv Ment Dis** 1997 May;185(5):283–8

Consensus on minimal criteria of clinical and neuropathological diagnosis of schizophrenia and affective disorders for post mortem research. Report from the European Dementia and Schizophrenia Network (BIOMED I). Riederer P, et al. **J Neural Transm Gen Sect** 1995;102(3):255–64 (16 ref.)

A clinical and neuropsychological comparison of delusional disorder and schizophrenia. Evans JD, et al. **J Neuropsychiatry Clin Neurosci** 1996 Summer;8(3):281–6

Cognition, negative symptoms, and diagnosis: a comparison of schizophrenic, bipolar, and control samples. Hawkins KA, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter; 9(1):81–9

Detecting feigned depression and schizophrenia on the MMPI-2. Bagby RM, et al. **J Pers Assess** 1997 Jun; 68(3):650–64

Detection of feigned mental disorders on the personality assessment inventory: a discriminant analysis. Rogers R, et al. **J Pers Assess** 1996 Dec;67(3):629–40

Comparison of cognitive performance in RDC-diagnosed schizoaffective and schizophrenic patients with the Luria-Nebraska Neuropsychological Battery. Miller LS, et al. **J Psychiatr Res** 1996 Jul-Aug;30(4):277–82

Covert visual attention in schizophrenia spectrum personality disordered subjects: visuospatial cuing and alerting effects. Moran MJ, et al. **J Psychiatr Res** 1996 Jul-Aug; 30(4):261–75

Facilitation and interference of selective attention in schizophrenia. Taylor SF, et al. **J Psychiatr Res** 1996 Jul-Aug;30(4):251–9

Distractibility and symptoms in schizophrenia. Addington J, et al. **J Psychiatry Neurosci** 1997 May;22(3):180–4

Psychotic symptoms and a diagnosis of schizophrenia follow an initial diagnosis of tic disorder. Fuse-Nagase Y, et al. **J Psychiatry Neurosci** 1996 Nov;21(5):346–8

Memory deficits in schizophrenia: inadequate assimilation or true amnesia? Findings from the Wechsler Memory Scale—revised. Hawkins KA, et al. **J Psychiatry Neurosci** 1997 May;22(3):169–79 (24 ref.)

Magnetic resonance imaging volumetric and phosphorus 31 magnetic resonance spectroscopy measurements in schizophrenia. Hinsberger AD, et al. **J Psychiatry Neurosci** 1997 Mar;22(2):111–7

Some thoughts on understanding why we don't better understand schizophrenia [editorial] Pivik RT. **J Psychiatry Neurosci** 1996 Mar;21(2):81–2

Language generation in schizophrenia and mania: the relationships among verbosity, syntactic complexity, and pausing. Barch DM, et al. **J Psycholinguist Res** 1997 Jul; 26(4):401–12

The role of the general practitioner in the treatment of schizophrenia: general principles. Carr VJ. **Med J Aust** 1997 Jan 20;166(2):91–4 (34 ref.)

"Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Jorm AF, et al. **Med J Aust** 1997 Feb 17;166(4):182–6

Cognitive deficits distinguish patients with adolescent- and adult-onset schizophrenia. Basso MR, et al. **Neuropsychiatry Neuropsychol Behav Neurol** 1997 Apr; 10(2):107–12

Symptom dimensions of schizophrenia: a selective integration of neurophysiological and neuropsychological correlates. Aderibigbe YA, et al. **Neuropsychobiology** 1996; 34(4):192–200 (89 ref.)

Diagnosis, methodology and subtypes of schizophrenia. Andreasen NC, et al. **Neuropsychobiology** 1997;35(2):61–3

The use of scales for clinical monitoring of disease progression and the treatment of schizophrenia. Kane JM. **Neuropsychobiology** 1997;35(2):64–6

Deficits in the endogenous redirection of covert visual attention in chronic schizophrenia. Maruff P, et al. **Neuropsychologia** 1996 Nov;34(11):1079–84

Performance on the Purdue pegboard and finger tapping by schizophrenics after mellow and frenetic antecedent music. Chambliss C, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1161–2

The lipid membrane hypothesis of schizophrenia: implications for possible clinical breath tests. Dodd GH. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):95–9 (24 ref.)

31P magnetic resonance spectroscopy studies in schizophrenia. Williamson PC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):115–8 (19 ref.)

Risk factors for parasuicide among psychiatric inpatients. Bai YM, et al. **Psychiatr Serv** 1997 Sep;48(9):1201–3

Psychiatric labels: still hard to shake. Bjorklund R. **Psychiatr Serv** 1996 Dec;47(12):1329–30

Sexuality, pregnancy, and childrearing among women with schizophrenia-spectrum disorders. Miller LJ, et al. **Psychiatr Serv** 1996 May;47(5):502–6

Family burden of schizophrenia and bipolar disorder: perceptions of relatives and professionals. Mueser KT, et al. **Psychiatr Serv** 1996 May;47(5):507–11

Early identification and treatment of schizophrenia: conceptual and ethical considerations. Larsen TK, et al. **Psychiatry** 1996 Winter;59(4):371–80 (65 ref.)

Cavum septum pellucidum in schizophrenia: a magnetic resonance imaging study. Fukuzako T, et al. **Psychiatry Clin Neurosci** 1996 Jun;50(3):125–8

Computerized electroencephalogram in untreated schizophrenics: a comparison between disorganized and paranoid types. Miyauchi T, et al. **Psychiatry Clin Neurosci** 1996 Apr;50(2):71–8

Performance on the Wisconsin Card Sorting Test in schizophrenia: perseveration in clinical subtypes. Abbruzzese M, et al. **Psychiatry Res** 1996 Aug 30; 64(1):27–33

Relationship between the five-factor model of personality and unipolar, bipolar and schizophrenic patients. Bagby RM, et al. **Psychiatry Res** 1997 May 5;70(2):83–94

The effect of language production manipulations on negative thought disorder and discourse coherence disturbances in schizophrenia. Barch DM, et al. **Psychiatry Res** 1997 Jul 4;71(2):115–27

Auditory evoked potentials, clinical vs. research applications. Boutros N, et al. **Psychiatry Res** 1997 Mar 24; 69(2–3):183–95

Affect recognition in schizophrenia: a function of global impairment or a specific cognitive deficit. Bryson G, et al. **Psychiatry Res** 1997 Jul 4;71(2):105–13

Situational feature recognition in schizophrenic outpatients. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 1;62(3):251–7

Construct validity of two tests of social cognition in schizophrenia. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 26;63(1):77–82

Schizophrenia as a chronic active brain process: a study of progressive brain structural change subsequent to the onset of schizophrenia. DeLisi LE, et al. **Psychiatry Res** 1997 Jul 4;74(3):129–40

Spatial relationships of neuroanatomic landmarks in schizophrenia. DeQuardo JR, et al. **Psychiatry Res** 1996 May 31;67(1):81–95

A comparison of instrument sensitivity to negative symptom change. Eckert SL, et al. **Psychiatry Res** 1996 Jun 26; 63(1):67–75

Quantitative magnetic resonance imaging of the corpus callosum in childhood onset schizophrenia. Jacobsen LK, et al. **Psychiatry Res** 1997 Feb 7;68(2–3):77–86

Eye-tracking performance and adaptive functioning over the short-term course of first-episode psychosis. Katsanis J, et al. **Psychiatry Res** 1996 Aug 30;64(1):19–26

Effects of meta-chlorophenylpiperazine on neuroendocrine and behavioral responses in male schizophrenic patients and normal volunteers. Maes M, et al. **Psychiatry Res** 1996 Oct 16;64(3):147–59

Progression of cerebroventricular enlargement and the subtyping of schizophrenia. Nair TR, et al. **Psychiatry Res** 1997 Jul 4;74(3):141–50

Neurocognitive function in alcoholic, schizophrenic, and dually diagnosed patients. Nixon SJ, et al. **Psychiatry Res** 1996 Aug 30;64(1):35–45

Delayed habituation of the skin-conductance orienting response correlates with impaired performance on the Wisconsin Card Sorting Task in schizophrenia. Schiffer RA, et al. **Psychiatry Res** 1996 Nov 15;63(2):107–12

BPRS symptom factors and sleep variables in schizophrenia. Zarcone VP, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):111–20

Social cognition in schizophrenia. Penn DL, et al. **Psychol Bull** 1997 Jan;121(1):114–32 (285 ref.)

Mechanisms underlying memory impairment in schizophrenia. Brébion G, et al. **Psychol Med** 1997 Mar; 27(2):383–93

Cognitive function in schizophrenia: association with negative and positive symptoms. Capleton RA. **Psychol Rep** 1996 Feb;78(1):123–8

Symptom patterns in schizophrenia for men and women. Cernovsky ZZ, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1267–71

The prototypal view of diagnosis: predictive validity of diagnostic certainty for schizophrenia. Roff JD, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1289–90

Clock drawing in schizophrenia. Tracy JI, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):923–8

Adolescence and diagnostics. Zdanowicz N, et al. **Psychol Rep** 1996 Apr;78(2):459–66 (39 ref.)

Schizophreniform disorder: a 1-year follow-up study. Casacchia M, et al. **Psychopathology** 1996;29(2):104–8

Sensitivity and specificity of relatives' reports on the early course of schizophrenia. Hambrecht M, et al. **Psychopathology** 1997;30(1):12–9

Towards an understanding of sensory soft signs of schizophrenia. Martin P, et al. **Psychopathology** 1995; 28(6):281–4

On interrater reliability for Leonhard's classification of endogenous psychoses. Pfuhlmann B, et al. **Psychopathology** 1997 Mar-Apr;30(2):100–5

Assessment of basic symptoms in schizophrenia, schizoaffective and bipolar disorders. Ricca V, et al. **Psychopathology** 1997;30(1):53–8

Musical hallucinations and musical imagery: prevalence and phenomenology in schizophrenic inpatients. Saba PR, et al. **Psychopathology** 1997;30(4):185–90

Influence of season on manifestation of schizophrenic subtypes. Sperling W, et al. **Psychopathology** 1997; 30(4):200–7

Schizophrenia, schizotypal and delusional disorders (F2). Results from the ICD-10 field trial of the Diagnostic Criteria for Research in German-speaking countries. Stieglitz RD, et al. **Psychopathology** 1996;29(5):280–4

Cross-cultural study of schizophrenia. Taleb M, et al. **Psychopathology** 1996;29(2):85–94

Clinical and psychosocial variables in different diagnostic groups: their interrelationships and value as predictors of course and outcome during a 14-year follow-up. Vetter P, et al. **Psychopathology** 1996;29(3):159–68

Schizophrenia vs. neurosarcoidosis in a young male [letter] John S, et al. **Psychosomatics** 1996 Mar-Apr;37(2):166–8

Maternal representations of patients with schizophrenia as measured by the Parental Bonding Instrument. Helgeland MI, et al. **Scand J Psychol** 1997 Mar;38(1):39–43

Distress, expressed emotion, and attributions in relatives of schizophrenia patients. Barrowclough C, et al. **Schizophr Bull** 1996;22(4):691–702

Perseveration in schizophrenia. Crider A. **Schizophr Bull** 1997;23(1):63–74 (100 ref.)

The factorial structure of schizotypy: Part I. Affinities with syndromes of schizophrenia. Gruzelier JH. **Schizophr Bull** 1996;22(4):611–20

The factorial structure of schizotypy: Part II. Cognitive asymmetry, arousal, handedness, and sex. Gruzelier JH, et al. **Schizophr Bull** 1996;22(4):621–34

Sex-onset effects on neuropsychological function in schizophrenia. Lewine R, et al. **Schizophr Bull** 1997; 23(1):51–61

Common sense, insight, and neuropsychological test performance in schizophrenia patients. McEvoy JP, et al. **Schizophr Bull** 1996;22(4):635–41

Early detection and intervention with schizophrenia: rationale. McGlashan TH, et al. **Schizophr Bull** 1996; 22(2):201–22 (132 ref.)

Risk factors of psychosis: identifying vulnerable populations

premorbidly. Olin SC, et al. **Schizophr Bull** 1996; 22(2):223–40 (93 ref.)

Differential diagnosis of substance-induced psychosis and schizophrenia in patients with substance use disorders. Rosenthal RN, et al. **Schizophr Bull** 1997;23(2):187–93

What determines continuous performance task performance? [published erratum appears in Schizophr Bull 1997;23(2):177] van den Bosch RJ, et al. **Schizophr Bull** 1996;22(4):643–51

Communication patterns and expressed emotion in families of persons with mental disorders. Wuerker AM. **Schizophr Bull** 1996;22(4):671–90

A psychometric comparison of the Calgary Depression Scale for Schizophrenia and the Hamilton Depression Rating Scale. Addington D, et al. **Schizophr Res** 1996 May; 19(2–3):205–12

Implicit and explicit associative memory in patients with schizophrenia. Bazin N, et al. **Schizophr Res** 1996 Dec 15; 22(3):241–8

Negative labelling of individuals with first episode schizophrenia: the effect of premorbid functioning. Bean G, et al. **Schizophr Res** 1996 Nov 15;22(2):111–8

Generalization effects of training on the Wisconsin Card Sorting Test for schizophrenia patients. Bellack AS, et al. **Schizophr Res** 1996 May;19(2–3):189–94

Differential relationships between positive and negative symptoms and neuropsychological deficits in schizophrenia. Berman I, et al. **Schizophr Res** 1997 May 3;25(1):1–10

Reality monitoring failure in schizophrenia: the role of selective attention. Brébion G, et al. **Schizophr Res** 1996 Nov 15;22(2):173–80

Factor analysis of schizophrenic symptoms using the OPCRIT checklist. Cardno AG, et al. **Schizophr Res** 1996 Dec 15;22(3):233–9

Depression in schizophrenia: a comparison of three measures. Collins AA, et al. **Schizophr Res** 1996 May;20(1–2):205–9

Working memory capacity predicts language comprehension in schizophrenic patients. Condray R, et al. **Schizophr Res** 1996 May;20(1–2):1–13

Neurological frontal signs and neuropsychological deficits in schizophrenic patients. Cuesta MJ, et al. **Schizophr Res** 1996 May;20(1–2):15–20

Non-selective impairment of Wisconsin Card Sorting Test performance in patients with schizophrenia. Dieci M, et al. **Schizophr Res** 1997 May 3;25(1):33–42

Does affective blunting in schizophrenia reflect affective deficit or neuromotor dysfunction? Dworkin RH, et al. **Schizophr Res** 1996 Jul 5;20(3):301–6

Family history of autoimmune diseases in psychosis. Gilvarry CM, et al. **Schizophr Res** 1996 Mar;19(1):33–40

Influences on cognitive heterogeneity in schizophrenia. Goldstein G, et al. **Schizophr Res** 1995 Dec;18(1):59–69

Span of apprehension deficits in older outpatients with schizophrenia. Granholm E, et al. **Schizophr Res** 1996 May; 20(1–2):51–6

The Iowa Longitudinal Study of Recent Onset Psychosis: one-year follow-up of first episode patients. Gupta S, et al. **Schizophr Res** 1997 Jan 17;23(1):1–13

Validity of self-administered symptom scales in clients with schizophrenia and schizoaffective disorders. Hamera EK, et al. **Schizophr Res** 1996 May;19(2–3):213–9

Cognitive impairment and negative symptoms in geriatric chronic schizophrenic patients: a follow-up study. Harvey PD, et al. **Schizophr Res** 1996 Dec 15;22(3):223–31

The Stroop effect in schizophrenic patients. Hepp HH, et al. **Schizophr Res** 1996 Dec 15;22(3):187–95

A neuropsychological study of early onset schizophrenia. Hoff AL, et al. **Schizophr Res** 1996 May;20(1–2):21–8

Left cerebral hemiatrophy and schizophrenia-like psychosis in an adolescent. Honer WG, et al. **Schizophr Res** 1996 May;20(1–2):231–4

Insight in schizophrenia and its relationship to psychopathology. Kemp RA, et al. **Schizophr Res** 1995 Dec;18(1):21–8

The deficit syndrome in the Suffolk County Mental Health Project. Kirkpatrick B, et al. **Schizophr Res** 1996 Nov 15; 22(2):119–26

Small head circumference at birth in schizophrenia [see comments] Kunugi H, et al. **Schizophr Res** 1996 May; 20(1–2):165–70. Comment in: Schizophr Res 1997 May 3;25(1):81.

Cortical gray matter volume deficits in schizophrenia: a replication. Lim KO, et al. **Schizophr Res** 1996 May; 20(1–2):157–64

Clinical symptom dimensions and deficits on the Continuous Performance Test in schizophrenia. Liu SK, et al. **Schizophr Res** 1997 Jun 20;25(3):211–9

Length of illness and the gradient from positive to negative semantic priming in schizophrenic patients. Maher BA, et al. **Schizophr Res** 1996 Nov 15;22(2):127–32

The social dysfunction index (SDI) for patients with schizophrenia and related disorders. Munroe-Blum H, et al. **Schizophr Res** 1996 May;20(1–2):211–9

A new approach to discourse analysis in psychiatry, applied to a schizophrenic patient's speech. Noël-Jorand MC, et al. **Schizophr Res** 1997 Jun 20;25(3):183–98

A study of the interrelationship between and comparative interrater reliability of the SAPS, SANS and PANSS. Norman RM, et al. **Schizophr Res** 1996 Mar;19(1):73–85

Associative learning in schizophrenia: a reply to Hemsley (1995) [letter; comment] O'Carroll RE. **Schizophr Res** 1996 May;20(1–2):239–40. Comment on: Schizophr Res 1995 Nov;17(3):287–8.

Attribution of intentions to others in people with schizophrenia: a non-verbal exploration with comic strips. Sarfati Y, et al. **Schizophr Res** 1997 Jun 20;25(3):199–209

The life course of schizophrenia: age and symptom dimensions. Schultz SK, et al. **Schizophr Res** 1997 Jan 17; 23(1):15–23

Spatial selective attention in schizophrenic, affective disorder, and normal subjects. Sereno AB, et al. **Schizophr Res** 1996 May;20(1–2):33–50

Racial differences in the diagnosis of psychosis. Strakowski SM, et al. **Schizophr Res** 1996 Aug 23;21(2):117–24

Latent inhibition in schizophrenia. Swerdlow NR, et al. **Schizophr Res** 1996 May;20(1–2):91–103

Exploratory factor analysis of MRI brain structure measures in schizophrenia. Tien AY, et al. **Schizophr Res** 1996 May; 19(2–3):93–101

Repetitive behaviors in schizophrenia: a single disturbance or discrete symptoms? Tracy JI, et al. **Schizophr Res** 1996 May;20(1–2):221–9

A comparison of reading and demographic-based estimates of premorbid intelligence in schizophrenia. Tracy JI, et al. **Schizophr Res** 1996 Nov 15;22(2):103–9

Symptoms, cognitive and social functioning in recent-onset schizophrenia: a longitudinal study. Van der Does AJ, et al. **Schizophr Res** 1996 Mar;19(1):61–71

The functional significance of symptomatology and cognitive function in schizophrenia. Velligan DI, et al. **Schizophr Res** 1997 May 3;25(1):21–31

Time course of cerebral ventricular enlargement in schizophrenia supports the hypothesis of its neurodevelopmental nature. Vita A, et al. **Schizophr Res** 1997 Jan 17;23(1):25–30 (32 ref.)

Initial schizophrenia-like' psychosis in Pick's disease: case study with neuroimaging and neuropathology, and implications for frontotemporal dysfunction in schizophrenia. Waddington JL, et al. **Schizophr Res** 1995 Dec;18(1):79–82

Childhood behavioral characteristics and adult brain morphology in schizophrenia. Walker EF, et al. **Schizophr Res** 1996 Nov 15;22(2):93–101

Meta-analysis of brain and cranial size in schizophrenia. Ward KE, et al. **Schizophr Res** 1996 Dec 15;22(3):197–213

A comparison of clinical and research DSM-III-R diagnoscs of schizophrenia in a Finnish national birth cohort. Clinical and research diagnoses of schizophrenia. Isohanni M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):303–8

Positive and negative symptoms as risk factors for later suicidal activity in schizophrenics versus depressives. Kaplan KJ, et al. **Suicide Life Threat Behav** 1996 Summer; 26(2):105–21

Spectrum of neuropsychiatric complications in 791 cases of typhoid fever. Ali G, et al. **Trop Med Int Health** 1997 Apr; 2(4):314–8

[Schizophrenias in DSM-IV and ICD-10 and French psychiatry] Chabrol H, et al. **Ann Med Psychol (Paris)** 1995 Dec;153(10):657–66 (Eng. Abstr.) **(Fre)**

[Attention models in evaluating schizophrenia] Bernard D, et al. **Encephale** 1997 Mar–Apr;23(2):113–8 (38 ref.) (Eng. Abstr.) **(Fre)**

[Syndromic and diagnostic heterogeneity of schizophrenia] Brazo P, et al. **Encephale** 1997 Apr;23 Spec No 2:20–4 (30 ref.) (Eng. Abstr.) **(Fre)**

[Chronic hallucinatory psychosis and late onset schizophrenia: the same entity?] Dubertret C, et al. **Encephale** 1997 May–Jun;23(3):157–67 (38 ref.) (Eng. Abstr.) **(Fre)**

[The PANSS (Positive And Negative Symptom) Scale] Guelfi JD. **Encephale** 1997 Apr;23 Spec No 2:35–8 (19 ref.) (Eng. Abstr.) **(Fre)**

[Intentional awareness and schizophrenia] Hardy-Baylé MC, et al. **Encephale** 1996 Oct;22 Spec No 3:104–7 (12 ref.) **(Fre)**

[Frontal lobe cognition disorders in 42 schizophrenic patients compared with 19 normal probands] Jaquet I, et al. **Encephale** 1997 Jan–Feb;23(1):34–41 (Eng. Abstr.) **(Fre)**

[Strategies for coping in schizophrenia] Lalonde P, et al. **Encephale** 1996 Jul–Aug;22(4):240–6 (Eng. Abstr.) **(Fre)**

[Psychometric properties of PANSS (Positive and Negative Syndrome Scale) in the French version in a sample of schizophrenic patients] Lançon C, et al. **Encephale** 1997 Jan–Feb;23(1):1–9 (Eng. Abstr.) **(Fre)**

[Schizophrenia, from classification to dimensions: value of longitudinal studies] Lecrubier Y. **Encephale** 1997 Apr;23 Spec No 2:39–43 (61 ref.) (Eng. Abstr.) **(Fre)**

[Clinical characteristics of chronic schizophrenic patients presenting with severe anhedonia] Loas G, et al. **Encephale** 1996 Sep–Oct;22(5):351–8 (Eng. Abstr.) **(Fre)**

[A four-dimensional model of chronic schizophrenia based on the factorial structure of the Positive and Negative Syndrome Scale (PANSS). A study of a group of 153 chronic schizophrenic patients and comparison with the factorial structure of the BPRS] Loas G, et al. **Encephale** 1997 Jan–Feb;23(1):10–8 (Eng. Abstr.) **(Fre)**

[Cortical atrophy of the left temporal lobe and schizophrenic disorders. Apropos of 7 cases] Luauté JP, et al. **Encephale** 1996 Oct;22 Spec No 3:27–32 **(Fre)**

[Questions instead of conclusions] Parizot S, et al. **Encephale** 1996 Oct;22 Spec No 3:116–8 **(Fre)**

[Agonistic terror and schizophrenia] Roussillon R. **Encephale** 1996 Oct;22 Spec No 3:99–103 **(Fre)**

[Voluntary mercury poisoning: biological consequences and psychiatric significance (published erratum appears in Schweiz Rundsch Med Prax 1997 Jul 2;86(27–28):1123)] Jornod P, et al. **Schweiz Rundsch Med Prax** 1997 May 28; 86(22):946–51 (51 ref.) (Eng. Abstr.) **(Fre)**

[Diagnostic and follow-up typological characteristics of early schizophrenia] Eggers C, et al. **Fortschr Neurol Psychiatr** 1997 Apr;65(4):154–70 (Eng. Abstr.) **(Ger)**

[Significance of primary negative symptoms in schizophrenic and other psychiatric patients] Gerbaldo H, et al. **Fortschr Neurol Psychiatr** 1996 Jun;64(6):221–7 (50 ref.) (Eng. Abstr.) **(Ger)**

[Reliability of family reports of illness anamnesis of schizophrenic patients] Hambrecht M, et al. **Fortschr Neurol Psychiatr** 1997 Apr;65(4):145–53 (Eng. Abstr.) **(Ger)**

[The Munster Prognosis Score (MPS)--prognostic validity of a practical instrument for prediction of progress in schizophrenic psychosis] Schulze Mönking H, et al. **Fortschr Neurol Psychiatr** 1997 Jun;65(6):243–6 (Eng. Abstr.) **(Ger)**

[Aphoria of psychopathology: attempt at a meta-analysis] Sigmund D. **Fortschr Neurol Psychiatr** 1996 Nov; 64(11):452–9 (Eng. Abstr.) **(Ger)**

[Disorders of early information processing and vigilance as vulnerability markers for schizophrenia] Suslow T, et al. **Fortschr Neurol Psychiatr** 1996 Mar;64(3):90–104 (81 ref.) (Eng. Abstr.) **(Ger)**

["Primary and secondary negative symptoms: a reliable differentiation?" Comment on the contribution by W. Barnett et al. (letter; comment)] Amminger GP, et al. **Nervenarzt** 1997 May;68(5):438–40. Comment on: Nervenarzt 1996 Jul;67(7):558–63. **(Ger)**

[Primary and secondary negative symptoms: a useful differentiation? An empirical study (see comments)] Barnett W, et al. **Nervenarzt** 1996 Jul;67(7):558–63 (Eng. Abstr.). Comment in: Nervenarzt 1997 May;68(5):438–40. **(Ger)**

[Physically experienced ego disturbances] Erkwoh R. **Nervenarzt** 1996 Jul;67(7):552–7 (Eng. Abstr.) **(Ger)**

[Structural affinities of the incomprehensible in schizophrenic delusion] Feldmann H, et al. **Nervenarzt** 1997 Mar; 68(3):226–30 (31 ref.) (Eng. Abstr.) **(Ger)**

[Language regression to the mother tongue in polyglot patients with acute psychosis] Heinemann F, et al. **Nervenarzt** 1996 Jul;67(7):599–601 (Eng. Abstr.) **(Ger)**

[Electroencephalography in psychiatry--current status and outlook] Herrmann WM, et al. **Nervenarzt** 1996 May; 67(5):348–59 (139 ref.) (Eng. Abstr.) **(Ger)**

[Subjective quality of life of patients with chronic schizophrenia] Kaiser W, et al. **Nervenarzt** 1996 Jul; 67(7):572–82 (Eng. Abstr.) **(Ger)**

[Borderline disorder and schizophrenia (letter; comment)] Klärner JP. **Nervenarzt** 1997 Mar;68(3):280–1. Comment on: Nervenarzt 1995 Nov;66(11):858–63. **(Ger)**

[Comments on the contribution by T. Steinert and P.-O. Schmidt-Michel. Borderline disorder and schizophrenia (letter; comment)] Klärner JP. **Nervenarzt** 1996 May; 67(5):429–30. Comment on: Nervenarzt 1995 Nov;66(11):858–63. **(Ger)**

[Are self-perceivable neuropsychological deficits in patients with neuroses or personality disorder diagnoses indicative of later schizophrenia?] Klosterkötter J, et al. **Nervenarzt** 1997 Mar;68(3):196–204 (Eng. Abstr.) **(Ger)**

[Psychophysiologic and psychologic correlates of the emotional family climate in schizophrenic patients and their family] Kraemer S, et al. **Nervenarzt** 1996 Mar;67(3):219–28 (Eng. Abstr.) **(Ger)**

[Validity of assessment of schizophrenic basic symptoms] Mass R, et al. **Nervenarzt** 1997 Mar;68(3):205–11 (Eng. Abstr.) **(Ger)**

[Dimensional structure of the German version of the Brief Psychiatric Rating Scale (BPRS)] Mass R, et al. **Nervenarzt** 1997 Mar;68(3):239–44 (Eng. Abstr.) **(Ger)**

[Sensitive delusion of reference--only of historical significance? A current case example] Richartz E, et al. **Nervenarzt** 1996 Jul;67(7):595–8 (Eng. Abstr.) **(Ger)**

[50 years after Manfred Bleuler. What do we know today about late-onset schizophrenia(s)?] Riecher-Rössler A. **Nervenarzt** 1997 Mar;68(3):159–70 (86 ref.) (Eng. Abstr.) **(Ger)**

[Delusional "pseudotranssexualism" in schizophrenic psychosis] Brüne M. **Psychiatr Prax** 1996 Sep;23(5):246–7 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of tuberculous meningoencephalitis, schizophrenic psychosis and severe conflict reaction] Lauer G, et al. **Psychiatr Prax** 1996 Nov;23(6):296–7 **(Ger)**

[Psychopathological study of schizophrenia according to the pyramidal model] Calandra C, et al. **Minerva Psichiatr** 1996 Mar;37(1):1–4 (Eng. Abstr.) **(Ita)**

[Quantitative and topographical analysis of EEG: its application in some psychiatric disorders] Dróżdż W, et al. **Psychiatr Pol** 1995 Nov–Dec;29(6):827–38 (28 ref.) (Eng. Abstr.) **(Pol)**

[The clinical characteristics of endogenous mental diseases with paroxysm-like disorders] Chikovani GO. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(5):18–21 (Eng. Abstr.) **(Rus)**

[The syndrome of drive pathology in children and adolescents (the age-related and nosological aspects)] Luss LA. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(4):36–41 (Eng. Abstr.) **(Rus)**

[Neuroimaging and fundamental symptoms in schizophrenia] Lopez-Ibor MI, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jan-Feb;24(1):25-8 (30 ref.) (Eng. Abstr.) **(Spa)**

[Schizophrenia: a psychobiological view] Rodríguez-Arias M, et al. **Rev Neurol** 1996 Oct;24(134):1210-20 (105 ref.) (Eng. Abstr.) **(Spa)**

DIET THERAPY

Acute dietary tryptophan depletion: effects on schizophrenic positive and negative symptoms. Sharma RP, et al. **Neuropsychobiology** 1997;35(1):5-10

Schizophrenic symptoms and dietary intake of n-3 fatty acids [letter] Mellor JE, et al. **Schizophr Res** 1995 Dec;18(1):85-6

DRUG THERAPY

Caudate nucleus area in drug-induced parkinsonism. Brown KW, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):348-51

Schizophrenic patients' experiences of neuroleptic medication: a Q-methodological investigation. Day JC, et al. **Acta Psychiatr Scand** 1996 May;93(5):397-402

Psychopathological and SPECT findings in never-treated schizophrenia. Erkwoh R, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):51-7

Observations on switching patients with schizophrenia to risperidone treatment. Risperidone Switching Study Group. Kirov GK, et al. **Acta Psychiatr Scand** 1997 May; 95(5):439-43

Ketoacidosis as a side-effect of clozapine: a case report. Kostakoğlu AE, et al. **Acta Psychiatr Scand** 1996 Mar; 93(3):217-8

Subjective experience of treatment, side-effects, mental state and quality of life in chronic schizophrenic out-patients treated with depot neuroleptics. Larsen EB, et al. **Acta Psychiatr Scand** 1996 May;93(5):381-8

Alterations in plasma dipeptidyl peptidase IV enzyme activity in depression and schizophrenia: effects of antidepressants and antipsychotic drugs. Maes M, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):1-8

Risperidone, negative symptoms and cognitive deficit in schizophrenia: an open study. Rossi A, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):40-3

Citalopram as an adjuvant in chronic schizophrenia: a double-blind placebo-controlled study. Salokangas RK, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):175-80

An open trial of adjunctive sertraline in the treatment of chronic schizophrenia. Thakore JH, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):194-7

The role of cognition in the risk--benefit and safety analysis of antipsychotic medication. Borison RL. **Acta Psychiatr Scand Suppl** 1996;389:5-11 (57 ref.)

Minimizing the non-extrapyramidal side-effects of antipsychotics. Keks NA. **Acta Psychiatr Scand Suppl** 1996; 389:18-24 (49 ref.)

Spontaneous and drug-induced movement disorders in schizophrenia. Kopala LC. **Acta Psychiatr Scand Suppl** 1996;389:12-7 (32 ref.)

New drugs for schizophrenia: an update for family physicians. Amadio PB, et al. **Am Fam Physician** 1997 Sep 15; 56(4):1149-56, 1159-60 (19 ref.)

Pancreatitis associated with risperidone treatment? [letter] Berent I, et al. **Am J Psychiatry** 1997 Jan;154(1):130-1

Visual perception in medicated schizophrenic patients [letter; comment] Bonnet D, et al. **Am J Psychiatry** 1997 Apr; 154(4):585; discussion 586-7. Comment on: Am J Psychiatry 1996 May;153(5):687-92.

Augmentation of clozapine therapy with ondansetron [letter] Briskin JK, et al. **Am J Psychiatry** 1997 Aug;154(8):1171

Fluoxetine augmentation of clozapine treatment in patients with schizophrenia. Buchanan RW, et al. **Am J Psychiatry** 1996 Dec;153(12):1625-7

Clozapine conflict [letter; comment] Carpenter WT Jr, et al. **Am J Psychiatry** 1996 Nov;153(11):1505-7. Comment on: Am J Psychiatry 1995 Jun;152(6):821-5.

Time to clozapine response in a standardized trial. Conley RR, et al. **Am J Psychiatry** 1997 Sep;154(9):1243-7

Reducing the "revolving door" phenomenon [letter; comment] Conte G, et al. **Am J Psychiatry** 1996 Nov; 153(11):1512. Comment on: Am J Psychiatry 1995 Jun;152(6):856-61.

D-cycloserine added to clozapine for patients with schizophrenia. Goff DC, et al. **Am J Psychiatry** 1996 Dec; 153(12):1628-30

Does risperidone improve verbal working memory in treatment-resistant schizophrenia? Green MF, et al. **Am J Psychiatry** 1997 Jun;154(6):799-804

SPECT studies of D2 occupancy in low-dose haloperidol treatment [letter; comment] Hirschowitz J, et al. **Am J Psychiatry** 1997 May;154(5):715-6. Comment on: Am J Psychiatry 1996 Jul;153(7):948-50.

Commentary on the clozapine conflict [letter; comment] Kane JM. **Am J Psychiatry** 1996 Nov;153(11):1507-8. Comment on: Am J Psychiatry 1995 Jun;152(6):821-5. Comment on: Am J Psychiatry 1995 Jun;152(6):827-32.

Replication. Liberman RP. **Am J Psychiatry** 1997 Mar; 154(3):440

Age at onset and gender of schizophrenic patients in relation to neuroleptic resistance. Meltzer HY, et al. **Am J Psychiatry** 1997 Apr;154(4):475-82

Granulocyte colony-stimulating factor treatment of clozapine-induced agranulocytosis [letter] Pasquale D, et al. **Am J Psychiatry** 1996 Nov;153(11):1503-4

Chronic schizophrenia: response to clozapine, risperidone, and paroxetine [clinical conference] Patel JK, et al. **Am J Psychiatry** 1997 Apr;154(4):543-6

Nemonapride for the treatment of schizophrenia [letter] Satoh K, et al. **Am J Psychiatry** 1997 Feb;154(2):292

CSF neurotensin concentrations and antipsychotic treatment in schizophrenia and schizoaffective disorder. Sharma RP, et al. **Am J Psychiatry** 1997 Jul;154(7):1019-21

Olanzapine versus haloperidol in the treatment of schizophrenia and schizoaffective and schizophreniform disorders: results of an international collaborative trial. Tollefson GD, et al. **Am J Psychiatry** 1997 Apr; 154(4):457-65

Negative symptoms: a path analytic approach to a double-blind, placebo- and haloperidol-controlled clinical trial with olanzapine. Tollefson GD, et al. **Am J Psychiatry** 1997 Apr;154(4):466-74

Response of patients with treatment-refractory schizophrenia to clozapine within three serum level ranges. VanderZwaag C, et al. **Am J Psychiatry** 1996 Dec;153(12):1579-84

Controlled, dose-response study of sertindole and haloperidol in the treatment of schizophrenia. Sertindole Study Group. Zimbroff DL, et al. **Am J Psychiatry** 1997 Jun; 154(6):782-91

A target-dose finding study of clozapine in patients with schizophrenia. Bennett JA, et al. **Ann Clin Psychiatry** 1996 Mar;8(1):19-21

Subjective muscle weakness and hypotonia during clozapine treatment. Galletly C. **Ann Clin Psychiatry** 1996 Dec; 8(4):189-92

Antipsychotic drug doses and adjunctive drugs in the outpatient treatment of schizophrenia. Galletly CA, et al. **Ann Clin Psychiatry** 1997 Jun;9(2):77-80

Risperidone: once-daily dosage [letter] Gupta S, et al. **Ann Clin Psychiatry** 1996 Dec;8(4):221

Adjunctive loxapine in a clozapine-resistant cohort of schizophrenic patients. Mowerman S, et al. **Ann Clin Psychiatry** 1996 Dec;8(4):193-7

The brain metabolic patterns of clozapine- and fluphenazine-treated patients with schizophrenia during a continuous performance task. Cohen RM, et al. **Arch Gen Psychiatry** 1997 May;54(5):481-6

Mesolimbic dopamine D3 receptors and use of antipsychotics in patients with schizophrenia. A postmortem study. Gurevich EV, et al. **Arch Gen Psychiatry** 1997 Mar; 54(3):225-32

The effects of a selective D4 dopamine receptor antagonist (L-745,870) in acutely psychotic inpatients with schizophrenia. D4 Dopamine Antagonist Group. Kramer MS, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):567-72

Clozapine withdrawal: serotonergic or dopaminergic mechanisms? [letter; comment] Meltzer HY. **Arch Gen Psychiatry** 1997 Aug;54(8):760-3. Comment on: Arch Gen Psychiatry 1995 Dec;52(12):1071-2.

The relationship between plasma haloperidol concentrations and clinical results [letter; comment] Palao DJ, et al. **Arch Gen Psychiatry** 1996 Dec;53(12):1167-9. Comment on: Arch Gen Psychiatry 1995 Oct;52(10):837-45.

Quetiapine in patients with schizophrenia. A high- and low-dose double-blind comparison with placebo. Seroquel Study Group. Small JG, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):549-57

Clinical risk following abrupt and gradual withdrawal of maintenance neuroleptic treatment. Viguera AC, et al. **Arch Gen Psychiatry** 1997 Jan;54(1):49-55

Cost-effectiveness of clozapine monitoring after the first 6 months. Zhang M, et al. **Arch Gen Psychiatry** 1996 Oct; 53(10):954-8

Neuroleptic malignant syndrome and clozapine monotherapy [see comments] Chatterton R, et al. **Aust N Z J Psychiatry** 1996 Oct;30(5):692-3. Comment in: Aust N Z J Psychiatry 1997 Jun;31(3):435-6.

Clozapine and constipation: a serious issue [letter] Drew L, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):149-50

Is clozapine safe in the elderly? Herst L, et al. **Aust N Z J Psychiatry** 1997 Jun;31(3):411-7 (33 ref.)

Drug strategies and treatment-resistant schizophrenia. Pantelis C, et al. **Aust N Z J Psychiatry** 1996 Feb; 30(1):20-37 (184 ref.)

Ocular abnormalities in chronic schizophrenia: clinical implications. Smith D, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):252-6

Serum cholesterol and treatment-resistance in schizophrenia. Boston PF, et al. **Biol Psychiatry** 1996 Sep 15;40(6):542-3

Treatment of long-term tardive dyskinesia with vitamin E. Dorevitch A, et al. **Biol Psychiatry** 1997 Jan 1;41(1):114-6

Impact of neuroleptic medications on continuous performance test measures in schizophrenia. Epstein JI, et al. **Biol Psychiatry** 1996 May 15;39(10):902-5

Clozapine-induced electroencephalogram changes as a function of clozapine serum levels. Freudenreich O, et al. **Biol Psychiatry** 1997 Jul 15;42(2):132-7

Pimozide augmentation for the treatment of schizophrenic patients who are partial responders to clozapine. Friedman J, et al. **Biol Psychiatry** 1997 Sep 15;42(6):522-3

Acute effects of haloperidol on cerebral cortex blood flow in normal and schizophrenic subjects. Goldman RG, et al. **Biol Psychiatry** 1996 Oct 1;40(7):604-8

Empirical evaluation of the factorial structure of clinical symptoms in schizophrenia: effects of typical neuroleptics on the brief psychiatric rating scale. Harvey PD, et al. **Biol Psychiatry** 1996 Oct 15;40(8):755-60

Frontal lobe tasks, antipsychotic medication, and schizophrenia syndromes. Himelhoch S, et al. **Biol Psychiatry** 1996 Feb 1;39(3):227-9

Glycine therapy of schizophrenia [letter; comment] Javitt DC. **Biol Psychiatry** 1996 Oct 1;40(7):684-6. Comment on: Biol Psychiatry 1996 Feb 1;39(3):155-6.

Preliminary investigation of high-dose oral glycine on serum levels and negative symptoms in schizophrenia: an open-label trial [see comments] Leiderman E, et al. **Biol Psychiatry** 1996 Feb 1;39(3):213-5. Comment in: Biol Psychiatry 1996 Feb 1;39(3):155-6.

Heterogeneity of serotonergic response in treatment-refractory schizophrenia patients. Lindenmayer JP, et al. **Biol Psychiatry** 1997 Jul 1;42(1):6-12

The effect of antipsychotic medication on relative cerebral blood perfusion in schizophrenia: assessment with technetium-99m hexamethyl-propyleneamine oxime single photon emission computed tomography. Miller DD, et al. **Biol Psychiatry** 1997 Mar 1;41(5):550-9

Gating of auditory P50 in schizophrenics: unique effects of clozapine. Nagamoto HT, et al. **Biol Psychiatry** 1996 Aug 1;40(3):181-8

First-episode neuroleptic-free schizophrenics: concentrations of monoamines and their metabolites in plasma and their correlations with clinical responses to haloperidol treatment. Nagaoka S, et al. **Biol Psychiatry** 1997 Apr 15; 41(8):857-64

Electroencephalography in schizophrenic patients: comparison between neuroleptic-naive state and after treatment. Nagase Y, et al. **Biol Psychiatry** 1996 Sep 15; 40(6):452-6

Melatonin secretion during fluvoxamine treatment in medicated chronic schizophrenic patients: evidence for the development of tolerance to selective serotonin re-uptake inhibitor. Silver H, et al. **Biol Psychiatry** 1996 Jul 1; 40(1):75-7

Fluvoxamine augmentation in clozapine-resistant schizophrenia: an open pilot study. Silver H, et al. **Biol Psychiatry** 1996 Oct 1;40(7):671-4

Neurological soft signs and response to risperidone in chronic schizophrenia. Smith RC, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1056-9

Auditory event-related potentials, auditory digit span, and clinical symptoms in chronic schizophrenic men on neuroleptic medication. Stefánsson SB, et al. **Biol Psychiatry** 1996 Jul 1;40(1):19-27

Limitations of controlled augmentation trials in schizophrenia. Stern RG, et al. **Biol Psychiatry** 1997 Jul 15;42(2):138-43 (28 ref.)

Seroquel and cognitive improvement in patients with schizophrenia [letter] Stip E, et al. **Biol Psychiatry** 1996 Sep 1;40(5):434-5

Sex differences in plasma homovanillic acid levels in schizophrenia and normal controls: relation to neuroleptic resistance. Sumiyoshi T, et al. **Biol Psychiatry** 1997 Mar 1;41(5):560-6

Efficacy and tolerance of D-cycloserine in drug-free schizophrenic patients. van Berckel BN, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1298-300

Glycine therapy of schizophrenia: some caveats [editorial; comment] [see comments] Waziri R. **Biol Psychiatry** 1996 Feb 1;39(3):155-6. Comment on: Biol Psychiatry 1996 Feb 1;39(3):213-5. Comment in: Biol Psychiatry 1996 Oct 1;40(7):684-6.

The latent inhibition model of schizophrenia: further validation using the atypical neuroleptic, clozapine. Weiner I, et al. **Biol Psychiatry** 1996 Nov 1;40(9):834-43

Changes in symptoms and plasma homovanillic acid with amantadine hydrochloride in chronic schizophrenia. Yamada K, et al. **Biol Psychiatry** 1997 May 15; 41(10):1062-4

Health beliefs and compliance with antipsychotic medication. Budd RJ, et al. **Br J Clin Psychol** 1996 Sep;35 (Pt 3):393-7

Treatment of schizophrenia: advances during the decade of the brain. Buckley PF. **Br J Hosp Med** 1996 Dec 11-1997 Jan 14;56(11):574-80 (31 ref.)

Antipsychotic drug-induced movement disorders in schizophrenics in relation to CYP2D6 genotype. Armstrong M, et al. **Br J Psychiatry** 1997 Jan;170:23-6

Neutropenia and agranulocytosis in patients receiving clozapine in the UK and Ireland. Atkin K, et al. **Br J Psychiatry** 1996 Oct;169(4):483-8

Conventional versus atypical neuroleptics: subjective quality of life in schizophrenic patients. Franz M, et al. **Br J Psychiatry** 1997 May;170:422-5

Double-blind, placebo-controlled, crossover trial of glycine adjuvant therapy for treatment-resistant schizophrenia. Heresco-Levy U, et al. **Br J Psychiatry** 1996 Nov; 169(5):610-7

Consent to treatment [letter; comment] Jackson GA, et al. **Br J Psychiatry** 1996 Sep;169(3):382-3. Comment on: Br J Psychiatry 1996 May;168(5):540-4.

Consent to treatment [letter; comment] Laugharne J, et al. **Br J Psychiatry** 1996 Sep;169(3):382. Comment on: Br J Psychiatry 1996 May;168(5):540-4.

Long-term treatment with clozapine in schizophrenia [letter] Launer MA. **Br J Psychiatry** 1996 Mar;168(3):383

Amisulpride versus placebo in the medium-term treatment of the negative symptoms of schizophrenia. Loo H, et al. **Br J Psychiatry** 1997 Jan;170:18-22

Use of clozapine in a child with treatment-resistant

schizophrenia. MacEwan TH, et al. **Br J Psychiatry** 1996 Mar;168(3):376–8

A controlled study of education about drug treatment in schizophrenia. Macpherson R, et al. **Br J Psychiatry** 1996 Jun;168(6):709–17

Continuing clozapine despite neutropenia. Wesson ML, et al. **Br J Psychiatry** 1996 Feb;168(2):217–20

Schizophrenia, violence, clozapine and risperidone: a review. The Special Hospitals Treatment Resistant Schizophrenia Research Group. **Br J Psychiatry Suppl** 1996 Dec; (31):21–30 (60 ref.)

Management of treatment resistant schizophrenia unresponsive to clozapine. Barnes TR, et al. **Br J Psychiatry Suppl** 1996 Dec;(31):31–40 (65 ref.)

Factors which can make patients difficult to treat. Kane JM. **Br J Psychiatry Suppl** 1996 Dec;(31):10–4 (28 ref.)

Management of treatment refractory schizophrenia. Morrison DP. **Br J Psychiatry Suppl** 1996 Dec;(31):15–20 (40 ref.)

Advances in psychopharmacology--schizophrenia. Owens DG. **Br Med Bull** 1996 Jul;52(3):556–74 (90 ref.)

Ethical concerns about relapse studies [see comments] Shamoo AE, et al. **Camb Q Healthc Ethics** 1996 Summer; 5(3):373–86 (51 ref.). Comment in: Camb Q Healthc Ethics 1997 Spring;6(2):233–4.

Differential effects of D2- and D4-blocking neuroleptics on the procedural learning of schizophrenic patients. Bédard MA, et al. **Can J Psychiatry** 1996 Sep;41(7 Suppl 1):S21–4

Neurocognitive impairment in schizophrenia and how it affects treatment options [see comments] Bilder RM. **Can J Psychiatry** 1997 Apr;42(3):255–64 (58 ref.). Comment in: Can J Psychiatry 1997 Apr;42(3):247–8.

Severe extrapyramidal side effects when discontinuing clozapine and starting haloperidol [letter] Bobba R. **Can J Psychiatry** 1997 Jun;42(5):530

Use of cytokines in clozapine-induced agranulocytosis [see comments] Chin-Yee I, et al. **Can J Psychiatry** 1996 Jun; 41(5):280–4 (42 ref.). Comment in: Can J Psychiatry 1996 Nov;41(9):603.

Risperidone, weight gain, and bulimia nervosa [letter] Crockford DN, et al. **Can J Psychiatry** 1997 Apr; 42(3):326–7

Clozapine-associated retrograde ejaculation [letter] Jeffries JJ, et al. **Can J Psychiatry** 1996 Feb;41(1):62–3

Fluvoxamine-clozapine dose-dependent interaction [letter] Markowitz JS, et al. **Can J Psychiatry** 1996 Dec; 41(10):670–1

Self-induced water intoxication treated with risperidone. Millson RC, et al. **Can J Psychiatry** 1996 Dec;41(10):648–50

Neuroleptic dosing in chronic schizophrenia: a 10-year follow-up. Remington GJ, et al. **Can J Psychiatry** 1997 Feb;42(1):53–7

Clozapine: current status and role in the pharmacotherapy of schizophrenia [see comments] Remington GJ, et al. **Can J Psychiatry** 1996 Apr;41(3):161–6. Comment in: Can J Psychiatry 1996 Sep;41(7):483.

Thinking patterns and patterning drugs [editorial; comment] Seeman MV. **Can J Psychiatry** 1997 Apr;42(3):247–8. Comment on: Can J Psychiatry 1997 Apr;42(3):255–64. Comment on: Can J Psychiatry 1997 Apr;42(3):265–73.

Bromocriptine as adjunctive therapy to clozapine in treatment-resistant schizophrenia [letter] al-Semaan Y. **Can J Psychiatry** 1996 Sep;41(7):484–5

Re: clozapine--current status and role in the pharmacotherapy of schizophrenia [letter; comment] Sharma V. **Can J Psychiatry** 1996 Sep;41(7):483. Comment on: Can J Psychiatry 1996 Apr;41(3):161–6.

Adjunctive carbamazepine or lithium carbonate in therapy-resistant chronic schizophrenia [letter] Simhandl C, et al. **Can J Psychiatry** 1996 Jun;41(5):317

Memory impairment in schizophrenia: perspectives from psychopathology and pharmacotherapy. Stip E. **Can J Psychiatry** 1996 Oct;41(8 Suppl 2):S27–34 (67 ref.)

The effect of risperidone on cognition in patients with schizophrenia. Stip E, et al. **Can J Psychiatry** 1996 Oct; 41(8 Suppl 2):S35–40

Acute dystonic reaction with risperidone [letter] Takhar J, et al. **Can J Psychiatry** 1996 Feb;41(1):61–2

The promise of new drugs for schizophrenia treatment [see comments] Tamminga CA. **Can J Psychiatry** 1997 Apr; 42(3):265–73 (76 ref.). Comment in: Can J Psychiatry 1997 Apr;42(3):247–8.

Swelling of salivary glands with clozapine treatment [letter] Troia M, et al. **Can J Psychiatry** 1996 Sep;41(7):485–6

Methylene blue adjuvant therapy of schizophrenia. Deutsch SI, et al. **Clin Neuropharmacol** 1997 Aug;20(4):357–63

Significantly higher plasma haloperidol level during cotreatment with carbamazepine may herald cardiac change [see comments] Iwahashi K. **Clin Neuropharmacol** 1996 Jun;19(3):267–70. Comment in: Clin Neuropharmacol 1997 Apr;20(2):179.

Drug-induced parkinsonism in schizophrenic patients: motor response and psychiatric changes after acute challenge with L-Dopa and apomorphine. Merello M, et al. **Clin Neuropharmacol** 1996 Oct;19(5):439–43

Involvement of the endogenous opioid system in the drinking behavior of schizophrenic patients displaying self-induced water intoxication: a double-blind controlled study with naloxone. Nishikawa T, et al. **Clin Neuropharmacol** 1996 Jun;19(3):252–8

Fluvoxamine treatment in clozapine-induced obsessive-compulsive symptoms in schizophrenic patients [see comments] Poyurovsky M, et al. **Clin Neuropharmacol** 1996 Aug;19(4):305–13. Comment in: Clin Neuropharmacol 1997 Jun;20(3):281–2.

Smooth pursuit eye movements in the evaluation of famotidine adjunctive therapy of schizophrenia: a preliminary report. Rosenberg PB, et al. **Clin Neuropharmacol** 1996 Jun;19(3):276–81

An open-label study of the therapeutic efficacy of high-dose famotidine adjuvant pharmacotherapy in schizophrenia: preliminary evidence for treatment efficacy. Rosse RB, et al. **Clin Neuropharmacol** 1996 Aug;19(4):341–8

D-cycloserine adjuvant therapy to molindone in the treatment of schizophrenia. Rosse RB, et al. **Clin Neuropharmacol** 1996 Oct;19(5):444–50

Cost-effectiveness and quality of life in psychosis: the pharmacoeconomics of risperidone. Aronson SM. **Clin Ther** 1997 Jan-Feb;19(1):139–47; discussion 126–7

Impact of newer antipsychotics on outcomes in schizophrenia. Keks NA. **Clin Ther** 1997 Jan-Feb; 19(1):148–58; discussion 126–7

Economic evaluation of zuclopenthixol acetate compared with injectable haloperidol in schizophrenic patients with acute psychosis. Laurier C, et al. **Clin Ther** 1997 Mar-Apr; 19(2):316–29

Dimensions of the Brief Psychiatric Rating Scale: an examination of stability during haloperidol treatment. Czobor P, et al. **Compr Psychiatry** 1996 May-Jun; 37(3):205–15

Neuroleptic-resistant schizophrenia treated with clozapine and ECT. Benatov R, et al. **Convuls Ther** 1996 Jun; 12(2):117–21

A risk-benefit assessment of sulpiride in the treatment of schizophrenia. Mauri MC, et al. **Drug Saf** 1996 May; 14(5):288–98 (73 ref.)

Drug treatment of schizophrenia in the 1990s. Achievements and future possibilities in optimising outcomes. Fleischhacker WW, et al. **Drugs** 1997 Jun;53(6):915–29 (151 ref.)

Olanzapine. A review of its pharmacological properties and therapeutic efficacy in the management of schizophrenia and related psychoses. Fulton B, et al. **Drugs** 1997 Feb; 53(2):281–98 (71 ref.)

Statistical differentiation between direct and indirect effects of neuroleptics on negative symptoms. Möller HJ, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(1):1–5

Review: treatment of schizophrenia. State of the art. Möller HJ. **Eur Arch Psychiatry Clin Neurosci** 1996;246(5):229–34 (62 ref.)

D2-dopamine-receptor occupancy during treatment with haloperidol decanoate. Scherer J, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(2):104–6

Combined intoxication with a tricyclic antidepressive agent and a neuroleptic. Diltoer MW, et al. **Eur J Emerg Med** 1996 Mar;3(1):52–5

Olanzapine versus haloperidol: acute phase results of the international double-blind olanzapine trial. Beasley CM Jr, et al. **Eur Neuropsychopharmacol** 1997 May;7(2):125–37

Treatment-resistant schizophrenia: clinical experience with new antipsychotics. Bondolfi G, et al. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S21–5

Risperidone and reversible neutropenia: a negative rechallenge. Bondolfi G, et al. **Eur Neuropsychopharmacol** 1996 Aug;6(3):257

Response in chronic schizophrenia correlated with chlorpromazine, 7-OH-chlorpromazine and chlorpromazine sulfoxide levels. Chetty M, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):85–91

Cognitive dysfunction in schizophrenia: comparison of treatment with atypical antipsychotic agents and conventional neuroleptic drugs. Gallhofer B, et al. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S13–20

Pramipexole as adjunct to haloperidol in schizophrenia. Safety and efficacy. Kasper S, et al. **Eur Neuropsychopharmacol** 1997 Feb;7(1):65–70

Dopamine D4 receptor gene polymorphisms: relation to ethnicity, no association with schizophrenia and response to clozapine in Israeli subjects. Kohn Y, et al. **Eur Neuropsychopharmacol** 1997 Feb;7(1):39–43

Fluvoxamine increases the clozapine serum levels significantly. Koponen HJ, et al. **Eur Neuropsychopharmacol** 1996 Mar;6(1):69–71

Managing the first episode of schizophrenia: the role of new therapies. McCreadie RG. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S3–5

EEG abnormalities in clozapine-treated schizophrenic patients. Treves IA, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):93–4

The expanding indications for clozapine. Young CR, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):216–34 (235 ref.)

Novel antipsychotics and the problem of clinical stabilization in schizophrenia: are they "stabilizer" rather than typical compounds? Altamura AC. **Int Clin Psychopharmacol** 1996 Sep;11(3):153–5 (24 ref.)

Improvement of negative symptoms: Concepts, definition and assessment. Andreasen NC. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S7–10 (17 ref.)

Assessment of the patient's subjective experience in acute neuroleptic treatment: implications for compliance and outcome. Awad AG, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:55–9 (28 ref.)

Pharmacological treatment strategies in the non-responsive schizophrenic patient. Barnes TR, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:67–71 (50 ref.)

Negative symptoms: diagnosis, treatment and prognosis. Buchanan RW, et al. **Int Clin Psychopharmacol** 1996 May; 11 Suppl 2:3–11 (90 ref.)

Aggressive behaviour and extrapyramidal side effects of neuroleptics in schizophrenia. Cheung P, et al. **Int Clin Psychopharmacol** 1996 Dec;11(4):237–40

Towards the improvement of compliance: the significance of psycho-education and new antipsychotic drugs. Gaebel W. **Int Clin Psychopharmacol** 1997 Feb;12 Suppl 1:S37–42 (48 ref.)

Prediction of response to acute neuroleptic treatment in schizophrenia. Gaebel W. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:47–54 (31 ref.)

A double-blind comparative study of clozapine versus chlorpromazine on Chinese patients with treatment-refractory schizophrenia. Hong CJ, et al. **Int Clin Psychopharmacol** 1997 May;12(3):123–30

Antipsychotic dosing strategies in acute schizophrenia. Janicak PG, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:35–40 (29 ref.)

The effect of clozapine on the course of illness in chronic schizophrenia: focus on treatment outcome in out-patients. Joffe G, et al. **Int Clin Psychopharmacol** 1996 Dec; 11(4):265–72

Dosing issues and depot medication in the maintenance treatment of schizophrenia. Kane JM. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:65–71 (46 ref.)

What can we achieve by implementing a compliance-improvement program? Kane JM. **Int Clin Psychopharmacol** 1997 Feb;12 Suppl 1:S43–6 (21 ref.)

What are the therapeutic needs in schizophrenia and how are they satisfied by new antipsychotics? Kane JM. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S3–6 (28 ref.)

Antipsychotic drug--a study of the prescription pattern in a total sample of patients with a schizophrenic syndrome in one catchment area in the county of Uppland, Sweden, in 1991. Lindström E, et al. **Int Clin Psychopharmacol** 1996 Dec;11(4):241–6

Pharmacological treatment strategies in acute schizophrenia. Marder SR. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:29–34 (24 ref.)

Severe withdrawal akathisia following neuroleptic discontinuation successfully controlled by clozapine. Poyurovsky M, et al. **Int Clin Psychopharmacol** 1996 Dec; 11(4):283–6

Clinical update on amisulpride in deficit schizophrenia. Rein W, et al. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S19–27 (27 ref.)

Effects of nemonapride on positive and negative symptoms of schizophrenia. Satoh K, et al. **Int Clin Psychopharmacol** 1996 Dec;11(4):279–81

Amisulpride: from animal pharmacology to therapeutic action. Scatton B, et al. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S29–36 (45 ref.)

Transition from acute to maintenance treatment: prediction of stabilization. Schooler NR, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:85–91

Neurobiological correlates of acute neuroleptic treatment. Sedvall GC. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:41–6 (20 ref.)

Citalopram as an adjuvant in schizophrenia: further evidence for a serotonergic dimension in schizophrenia. Taiminen TJ, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):31–5

Sertindole in the treatment of psychosis in schizophrenia: efficacy and safety. Tamminga CA, et al. **Int Clin Psychopharmacol** 1997 Feb;12 Suppl 1:S29–35 (7 ref.)

Glutamate pharmacology and the treatment of schizophrenia: current status and future directions. Tamminga CA, et al. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:29–37

The new generation of antipsychotic drugs. Tamminga CA, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:73–6 (15 ref.)

Schizophrenia and antipsychotic somatic treatment. Lindström LH, et al. **Int J Technol Assess Health Care** 1996 Fall;12(4):573–84 (94 ref.)

Drug treatment of schizophrenia and delusional disorder in late life. Howard R. **Int Psychogeriatr** 1996 Winter; 8(4):597–608 (60 ref.)

Observation of metabolic changes in chronic schizophrenia after neuroleptic treatment by in vivo hydrogen magnetic resonance spectroscopy. Choe BY, et al. **Invest Radiol** 1996 Jun;31(6):345–52

New drug seen as breakthrough in treatment of schizophrenia [news] **Ir Med J** 1996 Jul-Aug;89(4):136

Phenelzine as a possible treatment for depression in schizophrenic patients [letter] Melamed Y, et al. **Isr J Psychiatry Relat Sci** 1996;33(3):211–2

Risperidone in adolescents with schizophrenia: an open pilot study. Armenteros JL, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):694–700

Case study: risperidone-induced hepatotoxicity in pediatric patients. Kumra S, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):701–5

Aggression and schizophrenia: efficacy of risperidone. Buckley PF, et al. **J Am Acad Psychiatry Law** 1997; 25(2):173–81

Risperidone in the treatment of children and adolescents with schizophrenia: a retrospective study. Grcevich SJ, et al. **J Child Adolesc Psychopharmacol** 1996 Winter;6(4):251–7

Correlated changes in symptoms and neurotransmitter indices during maintenance treatment with clozapine or conventional neuroleptics in adolescents and young adults with schizophrenia. Schulz E, et al. **J Child Adolesc Psychopharmacol** 1996 Summer;6(2):119–31

Risperidone versus haloperidol in the treatment of schizophrenia: a meta-analysis comparing their efficacy and safety. de Oliveira IR, et al. **J Clin Pharm Ther** 1996 Oct; 21(5):349–58

New dimensions in the pharmacologic treatment of schizophrenia and related psychoses. Buckley PF. **J Clin Pharmacol** 1997 May;37(5):363–78 (121 ref.)

The Expert Consensus Guideline Series. Treatment of schizophrenia. Steering Committee. American Psychiatric Association. **J Clin Psychiatry** 1996;57 Suppl 12b:3–58

Adjunctive nadolol in the treatment of acutely aggressive schizophrenic patients. Allan ER, et al. **J Clin Psychiatry** 1996 Oct;57(10):455–9

Efficacy of olanzapine: an overview of pivotal clinical trials. Beasley CM Jr, et al. **J Clin Psychiatry** 1997;58 Suppl 10:7–12

Safety of olanzapine. Beasley CM Jr, et al. **J Clin Psychiatry** 1997;58 Suppl 10:13–7

Pharmacokinetics and drug interactions: update for new antipsychotics. Ereshefsky L. **J Clin Psychiatry** 1996;57 Suppl 11:12–25 (68 ref.)

Pharmacoeconomic evaluation of antipsychotic therapy for schizophrenia. Glazer WM, et al. **J Clin Psychiatry** 1997; 58 Suppl 10:50–4 (29 ref.)

Atypical antipsychotic drugs as a first-line treatment of schizophrenia: a rationale and hypothesis. Lieberman JA. **J Clin Psychiatry** 1996;57 Suppl 11:68–71 (28 ref.)

Management of treatment-resistant patients with schizophrenia. Marder SR. **J Clin Psychiatry** 1996;57 Suppl 11:26–30 (40 ref.)

A decision analysis approach to neuroleptic dosing: insights from a mathematical model. Mossman D. **J Clin Psychiatry** 1997 Feb;58(2):66–73

Dosing the antipsychotic medication olanzapine. Nemeroff CB. **J Clin Psychiatry** 1997;58 Suppl 10:45–9

Clozapine and associated diabetes mellitus. Popli AP, et al. **J Clin Psychiatry** 1997 Mar;58(3):108–11

Efficacy of risperidone in reducing positive and negative symptoms in medication-refractory schizophrenia: an open prospective study. Smith RC, et al. **J Clin Psychiatry** 1996 Oct;57(10):460–6

Clozapine treatment for neuroleptic-induced tardive dyskinesia, parkinsonism, and chronic akathisia in schizophrenic patients. Spivak B, et al. **J Clin Psychiatry** 1997 Jul;58(7):318–22

Clozapine withdrawal resulting in delirium with psychosis: a report of three cases. Stanilla JK, et al. **J Clin Psychiatry** 1997 Jun;58(6):252–5 (26 ref.)

Extrapyramidal symptoms and tolerability of olanzapine versus haloperidol in the acute treatment of schizophrenia [published erratum appears in J Clin Psychiatry 1997 Jun;58(6):275] Tran PV, et al. **J Clin Psychiatry** 1997 May; 58(5):205–11

Atypical antipsychotic drugs and long-term outcome in schizophrenia. Weiden P, et al. **J Clin Psychiatry** 1996;57 Suppl 11:53–60 (36 ref.)

Switching antipsychotic medications. Weiden PJ, et al. **J Clin Psychiatry** 1997;58 Suppl 10:63–72

The effects of clozapine on symptom clusters in treatment-refractory patients. Abraham G, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):49–53

Antipsychotic and anxiolytic properties of risperidone, haloperidol, and methotrimeprazine in schizophrenic patients. Blin O, et al. **J Clin Psychopharmacol** 1996 Feb; 16(1):38–44

Economic and health state utility determinations for schizophrenic patients treated with risperidone or haloperidol. Chouinard G, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):298–307

Effect of rifampin on the plasma concentration and the clinical effect of haloperidol concomitantly administered to schizophrenic patients. Kim YH, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):247–52

Comments on "Clozapine treatment after agranulocytosis induced by classic neuroleptics" [letter; comment] Mahmood T, et al. **J Clin Psychopharmacol** 1996 Jun; 16(3):262–3. Comment on: J Clin Psychopharmacol 1994 Feb;14(1):71–3.

Marked liver enzyme elevations with clozapine [letter] Markowitz JS, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):70–1

Effects of clozapine on plasma cytokine and soluble cytokine receptor levels. Pollmächer T, et al. **J Clin Psychopharmacol** 1996 Oct;16(5):403–9

Nilvadipine is effective for chronic schizophrenia in a double-blind placebo-controlled study. off Yamada K, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):437–9

Citalopram causes no significant alterations in plasma neuroleptic levels in schizophrenic patients. Syvälahti EK, et al. **J Int Med Res** 1997 Jan-Feb;25(1):24–32

Awareness of illness in schizophrenia and outpatient treatment adherence. Cuffel BJ, et al. **J Nerv Ment Dis** 1996 Nov;184(11):653–9

Informed consent and tardive dyskinesia. Long-term follow-up. Kleinman I, et al. **J Nerv Ment Dis** 1996 Sep; 184(9):517–22

Neuroleptic dysphoria may be the missing link between schizophrenia and substance abuse. Voruganti LN, et al. **J Nerv Ment Dis** 1997 Jul;185(7):463–5

A preliminary study of possible psychoactive effects of intravenous forskolin in depressed and schizophrenic patients. Short communication. Bersudsky Y, et al. **J Neural Transm** 1996;103(12):1463–7

Long-term antipsychotic medication of schizophrenics does not promote the development of Alzheimer's disease brain pathology. Niizato K, et al. **J Neurol Sci** 1996 Jun; 138(1-2):165–7

The role of serotonin in the pathophysiology and treatment of schizophrenia. Abi-Dargham A, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter;9(1):1–17 (243 ref.)

Dopamine receptor binding predicts clinical and pharmacological potencies of antischizophrenic drugs. Creese I, et al. **J Neuropsychiatry Clin Neurosci** 1996 Spring;8(2):223–6

The effects of clozapine on cognitive functioning in treatment-resistant schizophrenic patients. Fujii DE, et al. **J Neuropsychiatry Clin Neurosci** 1997 Spring;9(2):240–5

Local and distributed effects of apomorphine on fronto-temporal function in acute unmedicated schizophrenia.*Fletcher PC, et al. **J Neurosci** 1996 Nov 1;16(21):7055–62

Regional cerebral blood flow and negative/positive symptoms in 24 drug-naive schizophrenics. Sabri O, et al. **J Nucl Med** 1997 Feb;38(2):181–8

Effect of haloperidol dose on iodine-123-IBZM brain SPECT imaging in schizophrenic patients. Vallabhajosula S, et al. **J Nucl Med** 1997 Feb;38(2):203–7

Antipsychotic effects of bretazenil, a partial benzodiazepine agonist in acute schizophrenia--a study group report. Delini-Stula A, et al. **J Psychiatr Res** 1996 Jul-Aug; 30(4):239–50

Review the role of dopamine D4 receptors in schizophrenia and antipsychotic action. Sanyal S, et al. **J Psychiatr Res** 1997 Mar-Apr;31(2):219–32 (85 ref.)

The electroencephalographic sleep pattern in schizophrenic patients treated with clozapine or classical antipsychotic drugs. Wetter TC, et al. **J Psychiatr Res** 1996 Nov-Dec; 30(6):411–9

Quality of life and response of negative symptoms in schizophrenia to haloperidol and the atypical antipsychotic remoxipride. The Canadian Remoxipride Group. Awad AG, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):244–8

Methods of pharmacoeconomic evaluation of psychopharmacologic therapies for patients with schizophrenia. Revicki DA. **J Psychiatry Neurosci** 1997 Jul;22(4):256–66 (55 ref.)

Negative symptoms in nondeficit syndrome respond to neuroleptic treatment with changes in plasma homovanillic acid concentrations. Suzuki E, et al. **J Psychiatry Neurosci** 1996 May;21(3):167–71

Quality of life measurement during antipsychotic drug therapy of schizophrenia. Voruganti LN, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):267–74 (37 ref.)

The relevance of serotonergic mechanisms in the treatment of schizophrenia has not been confirmed. Nyberg S, et al. **J Psychopharmacol (Oxf)** 1997;11(1):13–4

What is an atypical antipsychotic? Reynolds GP. **J Psychopharmacol (Oxf)** 1997;11(3):195–9 (45 ref.)

Risperidone in the treatment of schizophrenia: a meta-analysis of randomized controlled trials. Song F. **J Psychopharmacol (Oxf)** 1997;11(1):65–71

Olanzapine: a new atypical antipsychotic. Littrell K, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Aug;34(8):41–6 (16 ref.)

Is the treatment worse than the cure? Attitudes toward medications among persons with severe mental illness. Van Dongen CJ. **J Psychosoc Nurs Ment Health Serv** 1997 Mar; 35(3):21–5

Anticholinergic overdose induced torsade de pointes successfully treated with verapamil. Liao WB, et al. **Jpn Heart J** 1996 Nov;37(6):925–31

Measurement of the validity of utility elicitations performed by computerized interview. Lenert LA, et al. **Med Care** 1997 Sep;35(9):915–20

Paradoxical hypertension associated with clozapine [letter] Ennis LM, et al. **Med J Aust** 1997 Mar 3;166(5):278

Olanzapine for schizophrenia. **Med Lett Drugs Ther** 1997 Jan 17;39(992):5–6

Neuroleptic dosing in Hispanic and Asian Inpatients with schizophrenia. Collazo Y, et al. **Mt Sinai J Med** 1996 Oct-Nov;63(5-6):310–3

Neuroleptic dosing in Asian and Hispanic outpatients with schizophrenia. Ruiz S, et al. **Mt Sinai J Med** 1996 Oct-Nov; 63(5-6):306–9

Pharmacologic advances in the treatment of schizophrenia [editorial; comment] Keith SJ. **N Engl J Med** 1997 Sep 18;337(12):851–2. Comment on: N Engl J Med 1997 Sep 18;337(12):809–15.

A comparison of clozapine and haloperidol in hospitalized patients with refractory schizophrenia. Department of Veterans Affairs Cooperative Study Group on Clozapine in Refractory Schizophrenia [see comments] Rosenheck R, et al. **N Engl J Med** 1997 Sep 18;337(12):809–15. Comment in: N Engl J Med 1997 Sep 18;337(12):851–2.

Haematological side effects of clozapine: patient characteristics. Miller PR, et al. **N Z Med J** 1997 Apr 11; 110(1041):125–7

Plasma alpha-one acid glycoprotein and haloperidol concentrations in schizophrenic patients. Jann MW, et al. **Neuropsychobiology** 1997;36(1):32–6

Amantadine versus biperiden: a double-blind study of treatment efficacy in neuroleptic extrapyramidal movement disorders. König P, et al. **Neuropsychobiology** 1996; 33(2):80–4

Medicated chronic schizophrenic patients do not demonstrate left turning asymmetry. Levine J, et al. **Neuropsychobiology** 1997;36(1):22–4

Biperiden and haloperidol plasma levels and extrapyramidal side effects in schizophrenic patients. Meszaros K, et al. **Neuropsychobiology** 1997;36(2):69–72

Human leukocyte antigen system in clozapine-induced agranulocytosis. Theodoropoulou S, et al. **Neuropsychobiology** 1997;36(1):5–7

Galactorrhea and hyperprolactinemia in schizophrenic patients on neuroleptics: frequency and etiology. Windgassen K, et al. **Neuropsychobiology** 1996;33(3):142–6

Olanzapine versus placebo and haloperidol: acute phase results of the North American double-blind olanzapine trial [see comments] Beasley CM Jr, et al. **Neuropsychopharmacology** 1996 Feb;14(2):111–23. Comment in: Neuropsychopharmacology 1997 Jan;16(1):88–90.

Dopamine turnover in schizophrenia before and after haloperidol withdrawal. CSF, plasma, and urine studies. Beuger M, et al. **Neuropsychopharmacology** 1996 Jul; 15(1):75–86

Activity of "seroquel" (ICI 204,636) in animal models for atypical properties of antipsychotics: a comparison with clozapine. Ellenbroek BA, et al. **Neuropsychopharmacology** 1996 Oct;15(4):406–16

The effects of clozapine on symptom reduction, neurocognitive function, and clinical management in treatment-refractory state hospital schizophrenic inpatients. Hoff AL, et al. **Neuropsychopharmacology** 1996 Oct;15(4):361–9

Nicotine-haloperidol interactions and cognitive performance in schizophrenics. Levin ED, et al. **Neuropsychopharmacology** 1996 Nov;15(5):429–36

Psychobiologic correlates of treatment response in schizophrenia. Lieberman JA, et al. **Neuropsychopharmacology** 1996 Mar;14(3 Suppl):13S–21S (35 ref.)

Neuropsychologic deficits in schizophrenia: relation to social function and effect of antipsychotic drug treatment. Meltzer HY, et al. **Neuropsychopharmacology** 1996 Mar; 14(3 Suppl):27S–33S (61 ref.)

Tardive dyskinesia exacerbated after ingestion of phenylalanine by schizophrenic patients. Mosnik DM, et al. **Neuropsychopharmacology** 1997 Feb;16(2):136–46

Efficacy and side-effects of clozapine: testing for association with allelic variation in the dopamine D4 receptor gene. Rietschel M, et al. **Neuropsychopharmacology** 1996 Nov; 15(5):491–6

Predicting duration of clinical stability following haloperidol withdrawal in schizophrenic patients. van Kammen DP, et al. **Neuropsychopharmacology** 1996 Apr;14(4):275–83

Efficacy and side-effects of clozapine not associated with variation in the 5-HT2C receptor. Rietschel M, et al. **Neuroreport** 1997 May 27;8(8):1999–2003

Analysis of a structural polymorphism in the 5-HT2A receptor and clinical response to clozapine. Arranz MJ, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):177–8

Cognitive function in schizophrenia--do neuroleptics make a difference? Mortimer AM. **Pharmacol Biochem Behav** 1997 Apr;56(4):789–95 (74 ref.)

Interaction between fluoxetine and haloperidol: pharmacokinetic and clinical implications. Avenoso A, et al. **Pharmacol Res** 1997 Apr;35(4):335–9

Reemergence of positive symptoms after initial response to risperidone. Cung DD, et al. **Pharmacotherapy** 1997 Mar-Apr;17(2):383–6

Sedation in acute and chronic agitation. Levy RH. **Pharmacotherapy** 1996 Nov-Dec;16(6 Pt 2):152S–159S; discussion 166S–168S (33 ref.)

Use of novel antipsychotic drugs. Raleigh F. **Pharmacotherapy** 1996 Nov-Dec;16(6 Pt 2):160S–165S; discussion 166S–168S (20 ref.)

Benzodiazepines in schizophrenia. Stimmel GL. **Pharmacotherapy** 1996 Nov-Dec;16(6 Pt 2):148S–151S; discussion 166S–168S (11 ref.)

Possible interaction between cisapride and bromperidol. Ishida M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan; 21(1):235–8

Haloperidol and reduced haloperidol plasma concentrations after a loading dose regimen with haloperidol decanoate. Jann MW, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jan; 20(1):73–86

Clozapine eligibility: the effect of stringent criteria on ethnic, gender and age subgroups of schizophrenic patients. Juarez-Reyes MG, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Nov; 20(8):1341–52

The therapeutic role of naltrexone in negative symptom schizophrenia. Marchesi GF, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1995 Dec;

19(8):1239–49
A longitudinal study of cerebrospinal fluid angiotensin–converting enzyme in neuroleptic–treated schizophrenia. Wahlbeck K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 May; 21(4):591–9
3H–spiperone binding to peripheral mononuclear cells in psychiatric in–patients. Wodarz N, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Apr; 20(3):459–70
Oxidative injury and potential use of antioxidants in schizophrenia. Mahadik SP, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):45–54 (117 ref.)
Clozapine plasma level monitoring: current status. Cooper TB. **Psychiatr Q** 1996 Winter;67(4):297–311 (73 ref.)
Cost–benefits of risperidone [letter] [see comments] Bilsker D. **Psychiatr Serv** 1996 Mar;47(3):309–10. Comment in: Psychiatr Serv 1996 Aug;47(8):877–8.
A centralized system for monitoring clozapine use in British Columbia. Black LL, et al. **Psychiatr Serv** 1996 Jan; 47(1):81–3
Absence of parkinsonism among patients in long–term neuroleptic therapy who abuse cocaine. Dhopesh V, et al. **Psychiatr Serv** 1997 Jan;48(1):95–7
Neuroleptic dosages [letter; comment] Dinakar HS, et al. **Psychiatr Serv** 1997 Jan;48(1):105. Comment on: Psychiatr Serv 1996 May;47(5):536.
Clozapine and excessive psychotropic drug use [letter] [see comments] Drew LR, et al. **Psychiatr Serv** 1996 Aug; 47(8):876. Comment in: Psychiatr Serv 1996 Dec;47(12):1392.
Psychopharmacology. Clozapine and agranulocytosis. Feldman J. **Psychiatr Serv** 1996 Nov;47(11):1177–8
Effects of the clozapine national registry system on incidence of deaths related to agranulocytosis. Honigfeld G. **Psychiatr Serv** 1996 Jan;47(1):52–6
Low– and standard–dose depot haloperidol combined with targeted oral neuroleptics. Huttunen MO, et al. **Psychiatr Serv** 1996 Jan;47(1):83–5
Use of clozapine with nonresponsive patients [letter; comment] Markowitz JS, et al. **Psychiatr Serv** 1996 Dec; 47(12):1392. Comment on: Psychiatr Serv 1996 Aug;47(8):876.
Assessing a drug's cost–benefits [letter; comment] Raleigh F. **Psychiatr Serv** 1996 Aug;47(8):877–8. Comment on: Psychiatr Serv 1996 Mar;47(3):309–10.
Psychiatric patients' attitudes about medication and factors affecting noncompliance. Ruscher SM, et al. **Psychiatr Serv** 1997 Jan;48(1):82–5
Effects of switching inpatients with treatment–resistant schizophrenia from clozapine to risperidone. Still DJ, et al. **Psychiatr Serv** 1996 Dec;47(12):1382–4
Long–term psychiatric patients' knowledge about their medication. Tempier R. **Psychiatr Serv** 1996 Dec; 47(12):1385–7
Impact of risperidone on the use of mental health care resources. Viale G, et al. **Psychiatr Serv** 1997 Sep; 48(9):1153–9
Recurrent paroxysmal episodes characterized by perceptual alteration in three schizophrenic patients on neuroleptic medication. Higuchi H, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):99–101
Effectiveness of nilvadipine in two cases of chronic schizophrenia. Yamada K, et al. **Psychiatry Clin Neurosci** 1995 Aug;49(4):237–8
Improvement of schizophrenic symptoms and changes in plasma HVA concentrations, plasma anti–D2 and anti–5–HT2 receptor activities with clozapine. Yamada K, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):291–4
Effectiveness of shakuyaku–kanzo–to in neuroleptic–induced hyperprolactinemia: a preliminary report. Yamada K, et al. **Psychiatry Clin Neurosci** 1996 Dec;50(6):341–2
Residual symptoms and P300 in schizophrenic outpatients. Juckel G, et al. **Psychiatry Res** 1996 Nov 1;65(1):23–32
Striatal dopamine–2 receptor occupancy in psychotic patients treated with risperidone. Kümfferle B, et al. **Psychiatry Res** 1996 Nov 25;68(1):23–30
Test–retest reliability of central [11C]raclopride binding at high D2 receptor occupancy. A PET study in haloperidol–treated patients. Nyberg S, et al. **Psychiatry Res** 1996 Oct 7;67(3):163–71
Normal sustained effects of selective attention are absent in schizophrenic patients withdrawn from medication. Salo R, et al. **Psychiatry Res** 1996 May 17;62(2):121–30
Prediction of short–term changes in symptom severity by baseline plasma homovanillic acid levels in schizophrenic patients receiving clozapine. Sumiyoshi T, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):113–21
Predicting haloperidol treatment response in chronic schizophrenia. van Kammen DP, et al. **Psychiatry Res** 1996 Aug 30;64(1):47–58
Decreased serotonergic responsivity in platelets of drug–free patients with schizophrenia. Yao JK, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):123–32
Pre–morbid asociality in neuroleptic–resistant and neuroleptic–responsive schizophrenia. Findling RL, et al. **Psychol Med** 1996 Sep;26(5):1033–41
Long–term morbidity associated with delayed treatment of first admission schizophrenic patients: a re–analysis of the Camarillo State Hospital data. Wyatt RJ, et al. **Psychol Med** 1997 Mar;27(2):261–8
Attitude toward medication and perceived competence among chronically psychotic patients. Todman M Jr, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):809–10
Obsessive–compulsive symptoms in schizophrenia: a comparison of olanzapine and placebo. Baker RW, et al. **Psychopharmacol Bull** 1996;32(1):89–93
Regional cerebral blood flow changes associated with risperidone treatment in elderly schizophrenia patients: a pilot study. Berman I, et al. **Psychopharmacol Bull** 1996; 32(1):95–100
Longitudinal analysis of abnormal involuntary movements in long–term clozapine–treated patients. Bunker MT, et al. **Psychopharmacol Bull** 1996;32(4):699–703
Issues in polypharmacotherapy: focus on depression in schizophrenia. Dufresne RL. **Psychopharmacol Bull** 1995; 31(4):789–96 (31 ref.)
Clozapine's effectiveness for patients in state hospitals: results from a randomized trial. Essock SM, et al. **Psychopharmacol Bull** 1996;32(4):683–97
Plasma prolactin in schizophrenia subjects treated with Seroquel (ICI 204,636). Hamner MB, et al. **Psychopharmacol Bull** 1996;32(1):107–10
Glycinergic augmentation of NMDA receptor–mediated neurotransmission in the treatment of schizophrenia. Heresco–Levy U, et al. **Psychopharmacol Bull** 1996; 32(4):731–40
Relationship of ethnicity and gender to schizophrenia and pharmacology of neuroleptics. Jeste DV, et al. **Psychopharmacol Bull** 1996;32(2):243–51
A comparison of an atypical and typical antipsychotic, zotepine versus haloperidol in patients with acute exacerbation of schizophrenia: a parallel–group double–blind trial. Petit M, et al. **Psychopharmacol Bull** 1996;32(1):81–7
Development and implementation of drug use evaluation (DUE) criteria for risperidone in an outpatient psychiatric setting. Shepski JC, et al. **Psychopharmacol Bull** 1996; 32(4):705–19 (45 ref.)
Effect of varying haloperidol plasma levels on negative symptoms in schizophrenia and schizoaffective disorder. Volavka J, et al. **Psychopharmacol Bull** 1996;32(1):75–9
Symptom change and extrapyramidal side effects during acute haloperidol treatment in chronic geriatric schizophrenics. Weisbard JJ, et al. **Psychopharmacol Bull** 1997;33(1):119–22
Olanzapine versus placebo: results of a double–blind, fixed–dose olanzapine trial. Beasley CM Jr, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):159–67
Effect of treatment duration on plasma levels of clozapine and N–desmethylclozapine in men and women. Fabrazzo M, et al. **Psychopharmacology (Berl)** 1996 Mar; 124(1–2):197–200
Open clinical trial on the sigma ligand panamesine in patients with schizophrenia. Frieboes RM, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):82–8
Involvement of the alpha2–adrenergic system in polydipsia in schizophrenic patients: a pilot study. Hayashi T, et al. **Psychopharmacology (Berl)** 1997 Apr;130(4):382–6
Does eosinophilia predict clozapine induced neutropenia? Hummer M, et al. **Psychopharmacology (Berl)** 1996 Mar; 124(1–2):201–4
A clinical evaluation of risperidone in the treatment of schizophrenia: a 10–week, open–label, multicenter trial. ARCS Study Group. Assessment of Risperdal in a Clinical Setting. Jeste DV, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):239–47
Amphetamine and negative symptoms of schizophrenia. Sanfilipo M, et al. **Psychopharmacology (Berl)** 1996 Jan; 123(2):211–4
A randomized, controlled, dose–ranging trial of sertindole in patients with schizophrenia. van Kammen DP, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):168–75
Catatonia associated with lorazepam withdrawal. Glover SG, et al. **Psychosomatics** 1997 Mar–Apr;38(2):148–50
Outcome of first–episode schizophrenia and the new antipsychotics. A literature review. Emsley R. **S Afr Med J** 1996 Jun;86(6 Suppl):729–30, 734 (35 ref.)
The risk of medication–free research. Carpenter WT Jr. **Schizophr Bull** 1997;23(1):11–8 (84 ref.)
Positive and negative symptoms: is their change related? Czobor P, et al. **Schizophr Bull** 1996;22(4):577–90
Risperidone: how good is the evidence for efficacy? Mattes JA. **Schizophr Bull** 1997;23(1):155–61 (36 ref.)
Cholinergic rebound and rapid onset psychosis following abrupt clozapine withdrawal. Shiovitz TM, et al. **Schizophr Bull** 1996;22(4):591–5
Placebo washout in trials of antipsychotic drugs. Volavka J, et al. **Schizophr Bull** 1996;22(4):567–76 (40 ref.)
Pharmacotherapy of schizophrenia patients with comorbid substance abuse. Wilkins JN. **Schizophr Bull** 1997; 23(2):215–28
Research in schizophrenia and the discontinuation of antipsychotic medications. Wyatt RJ. **Schizophr Bull** 1997; 23(1):3–9 (40 ref.)
Chronic haloperidol treatment does not affect structure of attention in schizophrenia. Allen DN, et al. **Schizophr Res** 1997 May 3;25(1):53–61
Change in quantified electroencephalography (QEEG) with medication and altered clinical state in the same subjects with schizophrenia [letter] Harris A, et al. **Schizophr Res** 1997 Jan 17;23(1):87–9
The Dose Reduction in Schizophrenia (DORIS) Study: a final report. Hirschowitz J, et al. **Schizophr Res** 1997 Jan 17;23(1):31–43
A clinical trial of the effects of estrogen in acutely psychotic women. Kulkarni J, et al. **Schizophr Res** 1996 Jul 5; 20(3):247–52
Lack of gender differences in neuroleptic response in patients with schizophrenia. Pinals DA, et al. **Schizophr Res** 1996 Dec 15;22(3):215–22 (38 ref.)
Effect of clozapine on physical and verbal aggression. Rabinowitz J, et al. **Schizophr Res** 1996 Dec 15; 22(3):249–55
CSF IL–1 and IL–2 in medicated schizophrenic patients and normal volunteers. Rapaport MH, et al. **Schizophr Res** 1997 May 24;25(2):123–9
Effect of smoking on neuroleptics in schizophrenia. Salokangas RK, et al. **Schizophr Res** 1997 Jan 17; 23(1):55–60
Age of illness onset and schizophrenic symptomatology during an inpatient washout period. Sharma RP, et al. **Schizophr Res** 1996 Jul 5;20(3):295–300
Relationship between negative symptoms in chronic schizophrenia and neuroleptic dose, plasma levels and side effects. Tugg LA, et al. **Schizophr Res** 1997 May 3; 25(1):71–8
The prevalence of tardive dystonia, tardive dyskinesia, parkinsonism and akathisia The Curaçao Extrapyramidal Syndromes Study: I. van Harten PN, et al. **Schizophr Res** 1996 May;19(2–3):195–203
Effect of clozapine on motor function in schizophrenic patients [published erratum appears in Schizophr Res 1996 Dec 15;22(3):269] Vrtunski PB, et al. **Schizophr Res** 1996 May;20(1–2):187–98
Neuroleptic drug utilisation for acute schizophrenia. Razali MS, et al. **Singapore Med J** 1996 Dec;37(6):611–3
Medication compliance among the seriously mentally ill in a public mental health system. Nageotte C, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Feb;32(2):49–56
Clinical evaluation and plasma clozapine concentrations in Chinese patients with schizophrenia. Chong SA, et al. **Ther Drug Monit** 1997 Apr;19(2):219–23
No effect of the anticholinergic drugs trihexyphenidyl and biperiden on the plasma concentrations of bromperidol and its reduced metabolite. Otani K, et al. **Ther Drug Monit** 1997 Apr;19(2):165–8
Schizophrenia and L–745,870, a novel dopamine D4 receptor antagonist. Bristow LJ, et al. **Trends Pharmacol Sci** 1997 Jun;18(6):186–8 (11 ref.)
[Validation of the Chinese version of "the Drug Attitude Inventory"] Cheng HL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jun; 13(6):370–7 (Eng. Abstr.) **(Chi)**
[Difference in prolaction response of schizophrenic patients to equivalent doses of haloperidol, remoxipride and sulpiride] Liu KL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1996 Dec; 12(12):685–90 (Eng. Abstr.) **(Chi)**
[Serotonin and treatment of mental disorders. Present status and future perspectives] Sevčík J, et al. **Cas Lek Cesk** 1997 Jul 14;136(14):431–3 (17 ref.) (Eng. Abstr.) **(Cze)**
[Efficacy and tolerance of risperidone in various doses (report of a study)] Cešková E, et al. **Ceska Slov Psychiatr** 1996 Feb;92(1):50–6 (Eng. Abstr.) **(Cze)**
[Patient education about neuroleptic treatment, can it reduce costs? A pilot study] Favrod J, et al. **Encephale** 1996 Sep–Oct;22(5):331–6 (Eng. Abstr.) **(Fre)**
[4 years using clozapine in community psychiatry] Fremont P, et al. **Encephale** 1996 Dec;22 Spec No 6:24–7 (Eng. Abstr.) **(Fre)**
[Indications for clozapine] Gaussarès C. **Encephale** 1996 Dec; 22 Spec No 6:12–5 (22 ref.) (Eng. Abstr.) **(Fre)**
[Clinical follow–up — EEG — serum determinations: therapeutic experience with clozapine] Gekiere F, et al. **Encephale** 1996 Dec;22 Spec No 6:16–23 (Eng. Abstr.) **(Fre)**
[Weight gain and clozapine] Jalenques I, et al. **Encephale** 1996 Oct;22 Spec No 3:77–9 **(Fre)**
[Clozapine in the treatment of schizophrenia] Kane JM. **Encephale** 1996 Dec;22 Spec No 6:7–11 **(Fre)**
[A new study of secondary effects in prescribing practices of neuroleptics] Lachaux B, et al. **Encephale** 1997 Apr;23 Spec No 2:25–34 (56 ref.) (Eng. Abstr.) **(Fre)**
[Clinical effects of clozapine: effect on negative symptoms] Llorca PM, et al. **Encephale** 1996 Jul–Aug;22(4):287–92 (Eng. Abstr.) **(Fre)**
[Clozapine and schizophrenias: 1991–1996] Lôo H, et al. **Encephale** 1996 Dec;22 Spec No 6:1–2 **(Fre)**
[Cytolytic hepatitis during treatment with phenothiazines: apropos of a case] Mesure G, et al. **Encephale** 1996 Sep–Oct;22(5):388–90 (Eng. Abstr.) **(Fre)**
[New drug therapies] Olié JP, et al. **Encephale** 1996 Oct;22 Spec No 3:63–71; discussion 76 (33 ref.) **(Fre)**
[New chemotherapy approaches to psychoses] Olié JP, et al. **Encephale** 1997 Apr;23 Spec No 2:2–9 (53 ref.) (Eng. Abstr.) **(Fre)**
[Efficacy of zuclopenthixol acetate on psychotic anxiety evaluated in an open study] Romain JL, et al. **Encephale** 1996 Jul–Aug;22(4):280–6 (Eng. Abstr.) **(Fre)**
[Schizophrenia and neural transmission: an excess of analogical treatment?] Tassin JP. **Encephale** 1996 Oct;22 Spec No 3:91–8 (55 ref.) **(Fre)**
[Prescribing clozapine to that patient: between anarchistic empiricism and arbitrary classification] Uhl R.

Encephale 1996 Dec;22 Spec No 6:33–4 (Eng. Abstr.) **(Fre)**

[Prolactinemia and predictability of therapeutic response of schizophrenic patients in acute decompensation] Vanelle JM, et al. **Encephale** 1996 Oct;22 Spec No 3:82–4 **(Fre)**

[Pharma-clinics. Drug of the month. Risperidone (Risperdal)] Ansseau M. **Rev Med Liege** 1996 Oct;51(10):665–7 **(Fre)**

[Schizophrenia: prophylaxis prevents recurrence. Low dose depot neuroleptics—an exit from the "revolving door" psychiatry] **Fortschr Med Suppl** 1993;147:1–15 **(Ger)**

[Olanzapin: a new perspective in the management of schizophrenia. X. Congress of the World Psychiatric Association, Madrid, August 1996] **Fortschr Neurol Psychiatr** 1996 Nov;64(11 Suppl Olanzapin):1–4 **(Ger)**

[Current knowledge on epilepsy, schizophrenia and spastic conditions. Neuro-Forum, Dresden, 5 April 1997] **Fortschr Neurol Psychiatr** 1997 May;65(5 Suppl Fortschrit):1–16 **(Ger)**

[Risperdal: a new hope for schizophrenic patients?] **Fortschr Neurol Psychiatr** 1994 May;62(5 Suppl):1–4 **(Ger)**

[Risperidon—contribution to an integrated therapy of schizophrenia. Yearly session of the German Society for Psychiatry, Psychotherapy and Neurology. Düsseldorf, 17 September 1996] **Fortschr Neurol Psychiatr** 1996 Dec;64(12 Suppl):1–4 **(Ger)**

[Risperidon: an advance for schizophrenic patients. Why new neuroleptics?] **Nervenarzt** 1994 May;65(5 Suppl [risperid]):1–4 **(Ger)**

[Compliance determines therapeutic success in schizophrenia. Strategy in initial therapy] **Nervenarzt** 1995 Dec;66(12 Suppl):1–4 **(Ger)**

[Zotepin—its value and potentials for further development] **Nervenarzt** 1994 Jul;65(7 Suppl):1–8 **(Ger)**

[Priapism with clozapine therapy] Hövermann P, et al. **Nervenarzt** 1997 Jan;68(1):74–6 (Eng. Abstr.) **(Ger)**

[Fluspirilene—safe weekly tranquilizer?] Kuhn W, et al. **Nervenarzt** 1997 Jun;68(6):528 **(Ger)**

[Body weight increase: a side effect of zotepin (Nipolept)?] Wetterling T, et al. **Nervenarzt** 1996 Mar;67(3):256–61 (Eng. Abstr.) **(Ger)**

[Current knowledge on epilepsy, schizophrenia and spastic conditions. Neuro-Forum, Dresden, 5 April 1997] **Psychiatr Prax** 1997 May;24(3 Suppl):1–16 **(Ger)**

[Neuroleptic non-response due to self-induced hyperosmolar diarrhea] Metzger W, et al. **Psychiatr Prax** 1997 Jan; 24(1):45–6 **(Ger)**

[Urinary retention with risperidone] Siepmann M, et al. **Psychiatr Prax** 1997 Jul;24(4):209 **(Ger)**

[Clozapine, cytokines, fever and sleep] Hinze-Selch D, et al. **Wien Med Wochenschr** 1996;146(13–14):311–3 (Eng. Abstr.) **(Ger)**

[Risperidone-induced priapism] Maizel S, et al. **Harefuah** 1996 Jun 2;130(11):744–5, 799 (Eng. Abstr.) **(Heb)**

[Seroquel in a resistant schizophrenic with negative and positive symptoms] Reznik I, et al. **Harefuah** 1996 May 15;130(10):675–7, 727 (Eng. Abstr.) **(Heb)**

[Bromperidol decanoate in the residual phase of schizophrenia] Smeraldi E, et al. **Minerva Psichiatr** 1996 Mar;37(1):39–44 (Eng. Abstr.) **(Ita)**

[Antioxidants in the treatment of schizophrenia (the correction of lipid peroxidation processes)] Kut'ko II, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(6):32–4 (Eng. Abstr.) **(Rus)**

[Risperidone in the treatment of chronic schizophrenia: multicenter study comparative to haloperidol] López Ibor JJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jul–Aug;24(4):165–72 (Eng. Abstr.) **(Spa)**

[Melatonin in psychiatry] Heinze-Martin G. **Gac Med Mex** 1997 Jan–Feb;133(1):49–51 **(Spa)**

[Promising effects of the new antipsychotic agents in schizophrenia. But recommendations of the Medical Products Agency are conservative] Sedvall GC. **Lakartidningen** 1997 May 14;94(20):1873–6 (19 ref.) **(Swe)**

ECONOMICS

Managing the care of schizophrenia. Lessons from a 4-year Massachusetts Medicaid study. Dickey B, et al. **Arch Gen Psychiatry** 1996 Oct;53(10):945–52

The cost of comprehensive care of people with schizophrenia living in the community. A cost evaluation from a German catchment area [see comments] Salize HJ, et al. **Br J Psychiatry** 1996 Jul;169(1):42–8. Comment in: Br J Psychiatry 1996 Nov;169(5):670.

Cost-effectiveness and quality of life in psychosis: the pharmacoeconomics of risperidone. Aronson SM. **Clin Ther** 1997 Jan–Feb;19(1):139–47; discussion 126–7

Impact of newer antipsychotics on outcomes in schizophrenia. Keks NA. **Clin Ther** 1997 Jan–Feb; 19(1):148–58; discussion 126–7

Economic outcomes and costs in the treatment of schizophrenia. Knapp M, et al. **Clin Ther** 1997 Jan–Feb; 19(1):128–38; discussion 126–7 (32 ref.)

Psychiatric intensive care in acute psychosis. Hyde CE, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:61–5 (31 ref.)

Economic and health state utility determinations for schizophrenic patients treated with risperidone or haloperidol. Chouinard G, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):298–307

Methods of pharmacoeconomic evaluation of psychopharmacologic therapies for patients with schizophrenia. Revicki DA. **J Psychiatry Neurosci** 1997 Jul;22(4):256–66 (55 ref.)

Economic evaluation in schizophrenia. Souêtre E. **Neuropsychobiology** 1997;35(2):67–9

Dependence on public financial support early in the course of schizophrenia. Ho BC, et al. **Psychiatr Serv** 1997 Jul; 48(7):948–50

[Cost assessment in a fragmented psychiatric treatment system] Salize HJ, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):10–7 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Plasma sialyltransferase levels in psychiatric disorders as a possible indicator of HPA axis function. Maguire TM, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1131–6

Lack of association of a functional catechol-O-methyltransferase gene polymorphism in schizophrenia. Strous RD, et al. **Biol Psychiatry** 1997 Feb 15;41(4):493–5

Tyrosine hydroxylase: human isoforms, structure and regulation in physiology and pathology. Nagatsu T. **Essays Biochem** 1995;30:15–35 (45 ref.)

Decreased mesopontine choline acetyltransferase levels in schizophrenia. Correlations with cognitive functions. Karson CN, et al. **Mol Chem Neuropathol** 1996 Oct–Dec; 29(2–3):181–91

Nitric oxide synthase (NOS) in schizophrenia: increases in cerebellar vermis. Karson CN, et al. **Mol Chem Neuropathol** 1996 Apr;27(3):275–84

Neither protein kinase C nor adenylate cyclase are altered in the striatum from subjects with schizophrenia. Opeskin K, et al. **Schizophr Res** 1996 Nov 15;22(2):159–64

Association of DNA polymorphism in the first intron of the tyrosine hydroxylase gene with disturbances of the catecholaminergic system in schizophrenia. Thibaut F, et al. **Schizophr Res** 1997 Feb 28;23(3):259–64

EPIDEMIOLOGY

Fertility in schizophrenia: results from a contemporary US cohort. Nimgaonkar VL, et al. **Acta Psychiatr Scand** 1997 May;95(5):364–9

Schizophrenia with childhood and adolescent onset—a nationwide register-based study. Thomsen PH. **Acta Psychiatr Scand** 1996 Sep;94(3):187–93

Sociodemographic and clinical variables as predictors of the diagnostic characteristics of first episodes of schizophrenia. Vázquez-Barquero JL, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):149–55

Obsessive-compulsive disorder in patients with schizophrenia or schizoaffective disorder. Eisen JL, et al. **Am J Psychiatry** 1997 Feb;154(2):271–3

Suicide and schizophrenia: a nationwide psychological autopsy study on age- and sex-specific clinical characteristics of 92 suicide victims with schizophrenia. Heilä H, et al. **Am J Psychiatry** 1997 Sep;154(9):1235–42

Obstetric complications and age at onset in schizophrenia: an international collaborative meta-analysis of individual patient data. Verdoux H, et al. **Am J Psychiatry** 1997 Sep; 154(9):1220–7

Sex differences in schizophrenia [letter; comment] Pearlson GD, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):189. Comment on: Arch Gen Psychiatry 1995 Dec;52(12):1011–4; discussion 1019–24.

Schizophrenia after prenatal famine [letter; comment] van Os J. **Arch Gen Psychiatry** 1997 Jun;54(6):577–8. Comment on: Arch Gen Psychiatry 1996 Jan;53(1):25–31.

Season of birth and schizophrenia: southern hemisphere data [see comments] Berk M, et al. **Aust N Z J Psychiatry** 1996 Apr;30(2):220–2. Comment in: Aust N Z J Psychiatry 1997 Apr;31(2):308–9.

Season of birth and schizophrenia in Tasmania. Jones IH, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):57–61

HIV risk behaviour and HIV testing of psychiatric patients in Melbourne. Thompson SC, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):566–76

Comment on An epidemiological case for a separate adolescent psychiatry [letter; comment] Werry JS. **Aust N Z J Psychiatry** 1997 Jun;31(3):431–4. Comment on: Aust N Z J Psychiatry 1996 Oct;30(5):563–6.

Drug abuse: a significant variable in schizophrenia research. Boutros N, et al. **Biol Psychiatry** 1996 Jun 15;39(12):1053–4

Famine and schizophrenia: first-trimester malnutrition or second-trimester beriberi [editorial] Davis JO, et al. **Biol Psychiatry** 1996 Jul 1;40(1):1–3

Polydipsia and water intoxication in a long-term psychiatric hospital. de Leon J, et al. **Biol Psychiatry** 1996 Jul 1; 40(1):28–34

Relationship between in utero exposure to influenza epidemics and risk of schizophrenia in Denmark. Takei N, et al. **Biol Psychiatry** 1996 Nov 1;40(9):817–24

First-contact incidence rates of schizophrenia in Trinidad and one-year follow-up [see comments] Bhugra D, et al. **Br J Psychiatry** 1996 Nov;169(5):587–92. Comment in: Br J Psychiatry 1997 Apr;170:389.

Influenza and schizophrenia [letter; comment] Crow TJ. **Br J Psychiatry** 1996 Dec;169(6):790–2. Comment on: Br J Psychiatry 1996 Aug;169(2):252–3.

Is the earlier age at onset of schizophrenia in males a confounded finding? Results from a cross-cultural investigation. Jablensky A, et al. **Br J Psychiatry** 1997 Mar; 170:234–40

The Hampstead Schizophrenia Survey 1991. I: Prevalence and service use comparisons in an inner London health authority, 1986–1991. Jeffreys SE, et al. **Br J Psychiatry** 1997 Apr;170:301–6

Demography and age of onset of schizophrenia [letter] Jennen-Steinmetz C, et al. **Br J Psychiatry** 1997 May; 170:485–6

Nithsdale, Nunhead and Norwood: similarities and differences in prevalence of schizophrenia and utilisation of services in rural and urban areas. McCreadie RG, et al. **Br J Psychiatry** 1997 Jan;170:31–6

The Hampstead Schizophrenia Survey 1991. II: Incidence and migration in inner London. McNaught AS, et al. **Br J Psychiatry** 1997 Apr;170:307–11

Fluctuations in schizophrenic births by year. Torrey EF, et al. **Br J Psychiatry** 1996 Dec;169(6):772–5

Prenatal exposure to the 1957 influenza epidemic [letter; comment] Woodgate M, et al. **Br J Psychiatry** 1996 Jun; 168(6):791. Comment on: Br J Psychiatry 1996 Mar;168(3):368–71.

Epidemiology of schizophrenia [see comments] Häfner H, et al. **Can J Psychiatry** 1997 Mar;42(2):139–51 (142 ref.). Comment in: Can J Psychiatry 1997 Mar;42(2):131–2.

The Johns Hopkins University Collaborative Schizophrenia Study: an epidemiologic-genetic approach to test the heterogeneity hypothesis and identify schizophrenia susceptibility genes. Pulver AE, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:797–814 (160 ref.)

Interactive behavior in bipolar manic and schizophrenic patients and its link to thought disorder. Grossman LS, et al. **Compr Psychiatry** 1996 Jul–Aug;37(4):245–52

Use of potentially abusive psychotropic substances in psychiatric inpatients. Modestin J, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):146–53

Diversity in schizophrenia: toward a richer biopsychosocial understanding for social work practice. Farmer RL, et al. **Health Soc Work** 1997 May;22(2):109–16

Comorbid bulimia nervosa and schizophrenia. Deckelman MC, et al. **Int J Eat Disord** 1997 Jul;22(1):101–5

Wernicke's disease and schizophrenia: a case report and review of the literature. Casanova MF. **Int J Psychiatry Med** 1996;26(3):319–28 (50 ref.)

Criminal recidivism and family histories of schizophrenic and nonschizophrenic fire setters: comorbid alcohol dependence in schizophrenic fire setters. Repo E, et al. **J Am Acad Psychiatry Law** 1997;25(2):207–15

Schizophrenia in people with intellectual disability: the role of pregnancy and birth complications. O'Dwyer JM. **J Intellect Disabil Res** 1997 Jun;41 (Pt 3):238–51

Relationships between symptoms of schizophrenia and substance abuse. Brunette MF, et al. **J Nerv Ment Dis** 1997 Jan;185(1):13–20

Perinatal complications and schizophrenia. Data from the Maternal and Child Health Handbook in Japan. Kunugi H, et al. **J Nerv Ment Dis** 1996 Sep;184(9):542–6

Epidemiology of schizophrenia [letter] Ineichen B. **J Neurol Neurosurg Psychiatry** 1996 Dec;61(6):656

Substance abuse and cognitive functioning in schizophrenia [see comments] Addington J, et al. **J Psychiatry Neurosci** 1997 Mar;22(2):99–104. Comment in: J Psychiatry Neurosci 1997 Mar;22(2):97–8.

Comorbidity: A sign of the times [editorial; comment] Pivik RT. **J Psychiatry Neurosci** 1997 Mar;22(2):97–8. Comment on: J Psychiatry Neurosci 1997 Mar;22(2):99–104.

Anticipation in multiplex schizophrenia pedigrees. Yaw J, et al. **Psychiatr Genet** 1996 Spring;6(1):7–11

Impact of a psychiatric outreach service for homeless persons with schizophrenia. Buhrich N, et al. **Psychiatr Serv** 1996 Jun;47(6):644–6

Depression among aging persons with schizophrenia who live in the community. Cohen CI, et al. **Psychiatr Serv** 1996 Jun;47(6):601–7

Characteristics and service use of seriously mentally ill persons living in rural areas. Sullivan G, et al. **Psychiatr Serv** 1996 Jan;47(1):57–61

Recidivism in Slovenia [letter] Tavcar R, et al. **Psychiatr Serv** 1997 Jul;48(7):955–6

Genetic and clinical correlates of season of birth of schizophrenics. Kitamura T, et al. **Psychiatry Clin Neurosci** 1995 Aug;49(4):189–93

Incidence and outcome of schizophrenia in whites, African-Caribbeans and Asians in London. Bhugra D, et al. **Psychol Med** 1997 Jul;27(4):791–8

Increased rates of schizophrenia among immigrants: some methodological concerns raised by Danish findings. Mortensen PB, et al. **Psychol Med** 1997 Jul;27(4):813–20

Schizophrenia in Surinamese and Dutch Antillean immigrants to The Netherlands: evidence of an increased incidence. Selten JP, et al. **Psychol Med** 1997 Jul;27(4):807–11

Age-period-cohort analysis of the incidence of schizophrenia in Scotland. Takei N, et al. **Psychol Med** 1996 Sep; 26(5):963–73

New perspectives in the epidemiology of schizophrenia. Hafner H, et al. **Psychopathology** 1995;28 Suppl 1:26–40

Familial risks and reproductive fitness in schizophrenia. Battaglia M, et al. **Schizophr Bull** 1996;22(2):191–5 (23 ref.)

Medical comorbidity in schizophrenia. Jeste DV, et al. **Schizophr Bull** 1996;22(3):413–30 (121 ref.)

Medical comorbidity and schizophrenia: editors'

introduction. Josiassen RC, et al. **Schizophr Bull** 1996; 22(3):411–2

Gender differences among civilly committed schizophrenia subjects. Sanguineti VR, et al. **Schizophr Bull** 1996; 22(4):653–8

Schizophrenia and HIV. Sewell DD. **Schizophr Bull** 1996; 22(3):465–73 (39 ref.)

Gender differences in the frequency of schizophrenic subtypes in unselected hospitalized patients. Beratis S, et al. **Schizophr Res** 1997 Feb 28;23(3):239–44

Month of birth and schizophrenia in Taiwan: effect of gender, family history and age at onset. Chen WJ, et al. **Schizophr Res** 1996 May;20(1–2):133–43

Is there an obstetrical explanation for the decline in the incidence of schizophrenia? [letter] Eagles JM, et al. **Schizophr Res** 1996 May;19(2–3):221–2

Relapse in schizophrenia: is there a relationship to substance abuse? Gupta S, et al. **Schizophr Res** 1996 May; 20(1–2):153–6

The relationship between schizophrenia and irritable bowel syndrome (IBS). Gupta S, et al. **Schizophr Res** 1997 Feb 28;23(3):265–8

The deficit syndrome in the DSM–IV Field Trial: I. Alcohol and other drug abuse. Kirkpatrick B, et al. **Schizophr Res** 1996 May;20(1–2):69–77

The deficit syndrome in the DSM–IV Field Trial. Part II. Depressive episodes and persecutory beliefs. Kirkpatrick B, et al. **Schizophr Res** 1996 May;20(1–2):79–90

Is a child's risk of early onset schizophrenia increased in the highest social class? Mäkikyrö T, et al. **Schizophr Res** 1997 Feb 28;23(3):245–52

Substance use: a powerful predictor of relapse in schizophrenia. Swofford CD, et al. **Schizophr Res** 1996 May;20(1–2):145–151

Birth seasonality in bipolar disorder, schizophrenia, schizoaffective disorder and stillbirths. Torrey EF, et al. **Schizophr Res** 1996 Sep 18;21(3):141–9

Seasonality of birth in schizophrenia: the effect of regional population density. Verdoux H, et al. **Schizophr Res** 1997 Feb 7;23(2):175–80

Local geographical variation in the prevalence of schizophrenia in Co. Roscommon, Ireland, in juxtaposition with cases of bipolar disorder [letter] Waddington JL, et al. **Schizophr Res** 1997 Feb 7;23(2):181–3

Incorporating lag effects in register–based age–of–onset distributions in schizophrenia. Welham JL, et al. **Schizophr Res** 1996 May;20(1–2):125–32

Reliability of the recording of schizophrenia and depressive disorder in the Saskatchewan health care datafiles. Rawson NS, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May; 32(4):191–9

[Schizophrenia and exclusion. Current and future perspectives] Furtos J, et al. **Encephale** 1996 Oct;22 Spec No 3:39–48 (50 ref.) **(Fre)**

[Schizophrenia and exclusion. Reflections on a short–term hospitalization at the Polyclinic 18 de Malakoff] Jost F, et al. **Encephale** 1996 Oct;22 Spec No 3:57–9 **(Fre)**

[Stressful life change events and criminal behavior in schizophrenia] Senninger JL, et al. **Encephale** 1996 Oct;22 Spec No 3:49–52 **(Fre)**

[Consumption patterns and motivation for use of addictive drugs in schizophrenic patients] Lambert M, et al. **Psychiatr Prax** 1997 Jul;24(4):185–9 (Eng. Abstr.) **(Ger)**

ETHNOLOGY

Antisaccadic eye movements and attentional asymmetry in schizophrenia in three Pacific populations. Allen JS, et al. **Acta Psychiatr Scand** 1996 Oct;94(4):258–65

Smoking among Chinese patients with schizophrenia. Chong SA, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):350–3

Treatment with clozapine. Black patients' low white cell counts currently mean that they cannot be treated [letter] Fisher N, et al. **BMJ** 1996 Nov 16;313(7067):1262

Erotomanic symptoms in 42 Chinese schizophrenic patients. Phillips MR, et al. **Br J Psychiatry** 1996 Oct;169(4):501–8

Schizophrenia in Trinidad [letter; comment] Ratan DA. **Br J Psychiatry** 1997 Apr;170:389. Comment on: Br J Psychiatry 1996 Nov;169(5):587–92.

Understanding cross–cultural prognostic variability for schizophrenia. Weisman AG. **Cult Divers Ment Health** 1997;3(1):23–35 (80 ref.)

A study of how families care for mentally ill relatives in Japan. Yamashita M. **Int Nurs Rev** 1996 Jul–Aug; 43(4):121–5

A comparison of US–born African–American and African–Caribbean psychiatric outpatients. Cohen CI, et al. **J Natl Med Assoc** 1997 Feb;89(2):117–23

Cross–ethnic symptom differences in schizophrenia: the influence of culture and minority status. Brekke JS, et al. **Schizophr Bull** 1997;23(2):305–16

Acute phase proteins in male Chinese schizophrenic patients in Singapore. Wong CT, et al. **Schizophr Res** 1996 Nov 15;22(2):165–71

[Tolerance of ambiguity in endogenous psychoses from the transcultural viewpoint] Heerlein A, et al. **Fortschr Neurol Psychiatr** 1996 Sep;64(9):358–61 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Schizophrenia: developmental disturbance of brain and mind? Stefan MD, et al. **Acta Paediatr Suppl** 1997 Jul;422:112–6 (63 ref.)

Relatives' beliefs about the causes of schizophrenia. Angermeyer MC, et al. **Acta Psychiatr Scand** 1996 Mar; 93(3):199–204

Ear disease and schizophrenia—brain not needed? [letter; comment] Gordon AG. **Acta Psychiatr Scand** 1996 May; 93(5):409–11. Comment on: Acta Psychiatr Scand 1995 Apr;91(4):217–21.

Maternal infectious illness and schizophrenia [letter; comment] Stöber G, et al. **Am J Psychiatry** 1997 Feb; 154(2):292–3. Comment on: Am J Psychiatry 1995 Dec;152(12):1714–20.

Gene–environment interaction in vulnerability to schizophrenia: findings from the Finnish Adoptive Family Study of Schizophrenia. Wahlberg KE, et al. **Am J Psychiatry** 1997 Mar;154(3):355–62

Abnormalities of brain structure and function in schizophrenia: implications for aetiology and pathophysiology. Cannon TD. **Ann Med** 1996 Dec; 28(6):533–9 (49 ref.)

The neurodevelopmental theory of schizophrenia: evidence concerning structure and neuropsychology. Chua SE, et al. **Ann Med** 1996 Dec;28(6):547–55 (128 ref.)

Dopamine in schizophrenia. Hietala J, et al. **Ann Med** 1996 Dec;28(6):557–61 (43 ref.)

Influenza and schizophrenia [letter; comment] [see comments] Adams W, et al. **Br J Psychiatry** 1996 Aug;169(2):252–3 . Comment on: Br J Psychiatry 1996 Mar;168(3):368–71. Comment in: Br J Psychiatry 1996 Dec;169(6):790–2.

Prenatal exposure to the 1957 influenza epidemic and adult schizophrenia: a follow–up study [see comments] Cannon M, et al. **Br J Psychiatry** 1996 Mar;168(3):368–71. Comment in: Br J Psychiatry 1996 Jun;168(6):791. Comment in: Br J Psychiatry 1996 Aug;169(2):252–3.

Season–of–birth and "age incidence" effects [letter; comment] Crow TJ. **Br J Psychiatry** 1996 Feb;168(2):251. Comment on: Br J Psychiatry 1995 Oct;167(4):469–72.

Obstetric complications and schizophrenia [letter; comment] Falkowski I, et al. **Br J Psychiatry** 1996 Sep;169(3):383. Comment on: Br J Psychiatry 1996 May;168(5):556–61.

Prenatal and neonatal risk factors for schizophrenia. Hultman CM, et al. **Br J Psychiatry** 1997 Feb;170:128–33

The Nithsdale Schizophrenia Surveys. 16. Breast–feeding and schizophrenia: preliminary results and hypotheses. McCreadie RG. **Br J Psychiatry** 1997 Apr;170:334–7

Minor physical anomalies and their relationship to the aetiology of schizophrenia [editorial] [see comments] Murphy KC, et al. **Br J Psychiatry** 1996 Feb;168(2):139–42 (29 ref.). Comment in: Br J Psychiatry 1996 Jun;168(6):789–90.

Theoretical neurobiology and schizophrenia. Friston KJ. **Br Med Bull** 1996 Jul;52(3):644–55

The early origins of schizophrenia. Jones P. **Br Med Bull** 1997 Jan;53(1):135–55 (91 ref.)

Life events preceding relapse of schizophrenia. Das MK, et al. **Int J Soc Psychiatry** 1997 Spring;43(1):56–63

Does choice of scale for scoring obstetric complications influence their relationship to other etiological risk factors in schizophrenia? McNeil TF, et al. **J Nerv Ment Dis** 1997 Jan;185(1):27–31

Lack of clinically significant gross structural abnormalities in MRIs of older patients with schizophrenia and related psychoses. Symonds LL, et al. **J Neuropsychiatry Clin Neurosci** 1997 Spring;9(2):251–8

Schizophrenia, bacterial toxins and the genetics of redundancy. Morris JA. **Med Hypotheses** 1996 Apr; 46(4):362–6 (23 ref.)

The role of candidate genes in the etiology of schizophrenia. Murphy KC, et al. **Mol Med** 1996 Nov;2(6):665–9 (49 ref.)

Glutamate receptors and schizophrenia: opportunities and caveats [news;comment] Javitt DC. **Mol Psychiatry** 1996 Mar;1(1):16–7. Comment on: Mol Psychiatry 1996 Mar;1(1):41–53.

Season of birth and schizophrenia: sex difference. Dassa D, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Feb;20(2):243–51

Dopaminergic sensitization: implications for the pathogenesis of schizophrenia. Glenthøj BY, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan; 21(1):23–46 (93 ref.)

Could schizophrenia be reasonably explained by Dohan's hypothesis on genetic interaction with a dietary peptide overload? Reichelt KL, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1083–114 (205 ref.)

Phospholipase A2 and the hypofrontality hypothesis of schizophrenia. Gattaz WF, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):109–13

Schizophrenia as a membrane lipid disorder which is expressed throughout the body. Horrobin DF. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):3–7 (46 ref.)

Free radical pathology in schizophrenia: a review. Reddy RD, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug;55(1–2):33–43 (137 ref.)

The fate of the ego in contemporary psychiatry with particular reference to etiologic theories of schizophrenia. Diamond DB. **Psychiatry** 1997 Spring;60(1):67–88 (78 ref.)

The schizophrenogenic mother concept in American psychiatry. Hartwell CE. **Psychiatry** 1996 Fall;59(3):274–97

Relationship of birth season to clinical features, family history, and obstetric complication in schizophrenia. Dassa D, et al. **Psychiatry Res** 1996 Aug 30;64(1):11–7

Prenatal exposure to influenza and increased cerebrospinal fluid spaces in schizophrenia. Takei N, et al. **Schizophr Bull** 1996;22(3):521–34

Is schizophrenia a lifetime disorder of brain plasticity, growth and aging? DeLisi LE. **Schizophr Res** 1997 Feb 7; 23(2):119–29 (101 ref.)

Is there a viral or immune dysfunction etiology to schizophrenia? Re–evaluation a decade later. DeLisi LE. **Schizophr Res** 1996 Oct 18;22(1):1–4 (10 ref.)

Exposure to infection and brain development: cytokines in the pathogenesis of schizophrenia [letter] Gilmore JH, et al. **Schizophr Res** 1997 Apr 11;24(3):365–7

Do obstetric complications cause the earlier age at onset in male than female schizophrenics? Kirov G, et al. **Schizophr Res** 1996 May;20(1–2):117–24

Are reduced head circumference at birth and increased obstetric complications associated only with schizophrenic psychosis? A comparison with schizo–affective and unspecified functional psychoses. McNeil TF, et al. **Schizophr Res** 1996 Oct 18;22(1):41–7

Do 'clumsy' fetuses cause labor and delivery complications?: A study of offspring at risk for psychosis [letter] McNeil TF, et al. **Schizophr Res** 1996 Oct 18;22(1):85–8

Developmental insanity or dementia praecox: was the wrong concept adopted? O'Connell P, et al. **Schizophr Res** 1997 Feb 7;23(2):97–106 (108 ref.)

Re: "Small head circumference at birth in schizophrenia" (Kunugi et al., Schizophrenia Research 20 (1996) 165–170) [letter; comment] Stevens JR. **Schizophr Res** 1997 May 3; 25(1):81. Comment on: Schizophr Res 1996 May;20(1–2):165–70.

The effect of diagnostic labelling on the lay theory regarding schizophrenic disorders. Angermeyer MC, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Nov;31(6):316–20

Public beliefs about causes and risk factors for depression and schizophrenia. Jorm AF, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Apr;32(3):143–8

Lay beliefs about the causes of mental disorders: a new methodological approach. Matschinger H, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Nov;31(6):309–15 (37 ref.)

[Risk factor assessment and prevention of psychoses (letter; comment)] Timmerman L. **Ned Tijdschr Geneeskd** 1996 Aug 31;140(35):1783. Comment on: Ned Tijdschr Geneeskd 1996 Jun 22;140(25):1295–9. **(Dut)**

[What is known about the etiology and background of schizophrenia?] Isohanni M, et al. **Duodecim** 1995; 111(18):1745–52 (76 ref.) **(Fin)**

[Schizophrenia: current research and perspectives. Proceedings of a conference. Lyon, France, 21–22 March 1996] **Encephale** 1996 Oct;22 Spec No 3:1–118 **(Fre)**

[Season of birth, obstetric complications and schizophrenia] Dassa D, et al. **Encephale** 1996 Oct;22 Spec No 3:9–12 **(Fre)**

[Models for vulnerability and liability of schizophrenia—heredity, environment, and their interaction] Yoneda H, et al. **Seishin Shinkeigaku Zasshi** 1996;98(10):714–8; discussion 726–31 **(Jpn)**

GENETICS

Schizotypal disorder: at the crossroads of genetics and nosology. Battaglia M, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):303–10 (94 ref.)

An association study of a neurotrophin–3 (NT–3) gene polymorphism with schizophrenia. Dawson E, et al. **Acta Psychiatr Scand** 1995 Dec;92(6):425–8

Schizophrenia and neurotrophin–3 alleles. Jönsson E, et al. **Acta Psychiatr Scand** 1997 May;95(5):414–9

The risk for psychiatric illness in siblings of schizophrenics: the impact of psychotic and non–psychotic affective illness and alcoholism in parents. Kendler KS, et al. **Acta Psychiatr Scand** 1996 Jul;94(1):49–55

Lack of association of schizophrenia with the neurotrophin–3 gene locus. Nimgaonkar VL, et al. **Acta Psychiatr Scand** 1995 Dec;92(6):464–6

A critical review of genetic studies of schizophrenia. II. Molecular genetic studies. Portin P, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):73–80 (128 ref.)

A critical review of genetic studies of schizophrenia. I. Epidemiological and brain studies. Portin P, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):1–5 (55 ref.)

Familial–genetic and reproductive epidemiology of schizophrenia in rural Ireland: age at onset, familial morbid risk and parental fertility. Waddington JL, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):62–8

A prospective 1–5 year outcome study in first–admitted and readmitted schizophrenic patients; relationship to heredity, premorbid adjustment, duration of disease and education level at index admission and neuroleptic treatment. Wieselgren IM, et al. **Acta Psychiatr Scand** 1996 Jan; 93(1):9–19

Anticipation or ascertainment bias in schizophrenia? Penrose's familial mental illness sample. Bassett AS, et al. **Am J Hum Genet** 1997 Mar;60(3):630–7

Expansion of 50 CAG/CTG repeats excluded in schizophrenia by application of a highly efficient approach using repeat expansion detection and a PCR screening set. Bowen T, et al. **Am J Hum Genet** 1996 Oct;59(4):912–7

Search for unstable DNA in schizophrenia families with evidence for genetic anticipation. Petronis A, et al.

Am J Hum Genet 1996 Oct;59(4):905–11

Additional support for schizophrenia linkage on chromosomes 6 and 8: a multicenter study. Schizophrenia Linkage Collaborative Group for Chromosomes 3, 6 and 8. **Am J Med Genet** 1996 Nov 22;67(6):580–94

Nonlinkage of D6S260, a putative schizophrenia locus, to bipolar affective disorder. Adams LJ, et al. **Am J Med Genet** 1996 Sep 20;67(5):485–7

Eye tracking dysfunction is a putative phenotypic susceptibility marker of schizophrenia and maps to a locus on chromosome 6p in families with multiple occurrence of the disease. Arolt V, et al. **Am J Med Genet** 1996 Nov 22;67(6):564–79

Further reflections on linkage results in schizophrenia [letter] Baron M. **Am J Med Genet** 1996 Jul 26;67(4):430–2

Exclusion of linkage between schizophrenia and the gene encoding a neutral amino acid glutamate/aspartate transporter, SLC1A5. Chen AC, et al. **Am J Med Genet** 1997 Feb 21;74(1):50–2

Further evidence of no association between Ser9Gly polymorphism of dopamine D3 receptor gene and schizophrenia. Chen CH, et al. **Am J Med Genet** 1997 Feb 21;74(1):40–3

No association of dopamine D2 receptor molecular variant Cys311 and schizophrenia in Chinese patients. Chen CH, et al. **Am J Med Genet** 1996 Jul 26;67(4):418–20

Identification of a BglI polymorphism of catechol-O-methyltransferase (COMT) gene, and association study with schizophrenia. Chen CH, et al. **Am J Med Genet** 1996 Nov 22;67(6):556–9

Systematic screening for mutations in the 5'-regulatory region of the human dopamine D1 receptor (DRD1) gene in patients with schizophrenia and bipolar affective disorder. Cichon S, et al. **Am J Med Genet** 1996 Jul 26; 67(4):424–8

Dopamine DRD2/Cys311 is not associated with chronic schizophrenia. Crawford F, et al. **Am J Med Genet** 1996 Sep 20;67(5):483–4

Current status of linkage for schizophrenia: polygenes of vanishingly small effect or multiple false positives? Crow TJ. **Am J Med Genet** 1997 Feb 21;74(1):99–103

Linkage study of chromosome 6p in sib-pairs with schizophrenia. Daniels JK, et al. **Am J Med Genet** 1997 May 31;74(3):319–23

Failure to find a chromosome 18 pericentric linkage in families with schizophrenia. DeLisi LE, et al. **Am J Med Genet** 1995 Dec 18;60(6):532–4

Novel transcribed sequences neighbouring a translocation breakpoint associated with schizophrenia. Devon RS, et al. **Am J Med Genet** 1997 Feb 21;74(1):82–90

Assessment of association of D3 dopamine receptor MscI polymorphism with schizophrenia: analysis of symptom ratings, family history, age at onset, and movement disorders. Gaitonde EJ, et al. **Am J Med Genet** 1996 Sep 20;67(5):455–8

Linkage analyses of schizophrenia to chromosome 6p24–p22: an attempt to replicate. Garner C, et al. **Am J Med Genet** 1996 Nov 22;67(6):595–610

Legacy of German psychiatric genetics: hindsight is always 20/20 [editorial] Gottesman II, et al. **Am J Med Genet** 1996 Jul 26;67(4):317–22 (69 ref.)

Concordance of positive and negative symptoms in coaffected sib-pairs with schizophrenia. Hwu HG, et al. **Am J Med Genet** 1997 Feb 21;74(1):1–6

Dopamine transporter gene polymorphism and psychiatric symptoms seen in schizophrenic patients at their first episode. Inada T, et al. **Am J Med Genet** 1996 Jul 26; 67(4):406–8

Anticipation in schizophrenia: biology or bias? Johnson JE, et al. **Am J Med Genet** 1997 May 31;74(3):275–80

Abstract and review of "Zur Erbpathologie der Schizophrenie" (Contribution to the genetics of schizophrenia). 1916 [classical article] Kendler KS, et al. **Am J Med Genet** 1996 Jul 26;67(4):343–6

Abstract and review of "Studien Uber Vererbung und Entstehung Geistiger Störungen. I. Zur Vererbung und Neuentstehung der Dementia praecox." (Studies on the inheritance and origin of mental illness: I. To the problem of the inheritance and primary origin of dementia praecox). 1916 [classical article] Kendler KS, et al. **Am J Med Genet** 1996 Jul 26;67(4):338–42

Association study of dopamine D3 receptor gene and schizophrenia. Kennedy JL, et al. **Am J Med Genet** 1995 Dec 18;60(6):558–62

Can we find genes for schizophrenia? [editorial] Kidd KK. **Am J Med Genet** 1997 Feb 21;74(1):104–11

Pragmatics and statistics in psychiatric genetics [editorial] Levinson DF. **Am J Med Genet** 1997 Apr 18;74(2):220–2

Linkage results on 11Q21–22 in Eastern Quebec pedigrees densely affected by schizophrenia. Maziade M, et al. **Am J Med Genet** 1995 Dec 18;60(6):522–8

Gly(247)–>Asp proenkephalin A mutation is rare in schizophrenia populations. Mikesell MJ, et al. **Am J Med Genet** 1997 Apr 18;74(2):213–5

Identification of a missense mutation and several polymorphisms in the proenkephalin A gene of schizophrenic patients. Mikesell MJ, et al. **Am J Med Genet** 1996 Sep 20;67(5):459–67

Analysis of the CAG repeats in the SCA1 and B37 genes in schizophrenic and bipolar I disorder patients: tentative association between B37 and schizophrenia. Morris-Rosendahl DJ, et al. **Am J Med Genet** 1997 May 31;74(3):324–30

Association study of schizophrenia and the dopamine D3 receptor gene locus in two independent samples. Nimgaonkar VL, et al. **Am J Med Genet** 1996 Nov 22; 67(6):505–14

Exclusion of close linkage between the synaptic vesicular monoamine transporter locus and schizophrenia spectrum disorders. Persico AM, et al. **Am J Med Genet** 1995 Dec 18;60(6):563–5

Genotypic association between dopamine transporter gene polymorphisms and schizophrenia. Persico AM, et al. **Am J Med Genet** 1997 Feb 21;74(1):53–7

The role of meta-analysis in linkage studies of complex traits. Rice JP. **Am J Med Genet** 1997 Feb 21;74(1):112–4

No evidence for linkage of chromosome 22 markers to schizophrenia in southern African Bantu-speaking families. Riley B, et al. **Am J Med Genet** 1996 Nov 22;67(6):515–22

Analysis of polyglutamine-coding repeats in the TATA-binding protein in different human populations and in patients with schizophrenia and bipolar affective disorder. Rubinsztein DC, et al. **Am J Med Genet** 1996 Sep 20;67(5):495–8

Identification of symptomatologic patterns common to major psychoses: proposal for a phenotype definition. Serretti A, et al. **Am J Med Genet** 1996 Jul 26;67(4):393–400

Analysis of clozapine response and polymorphisms of the dopamine D4 receptor gene (DRD4) in schizophrenic patients. Shaikh S, et al. **Am J Med Genet** 1995 Dec 18; 60(6):541–5

Screening the monoamine oxidase B gene in 100 male patients with schizophrenia: a cluster of polymorphisms in African-Americans but lack of functionally significant sequence changes. Sobell JL, et al. **Am J Med Genet** 1997 Feb 21;74(1):44–9

Exclusion of CAG/CTG trinucleotide repeat loci which map to chromosome 4 in bipolar disorder and schizophrenia. Speight G, et al. **Am J Med Genet** 1997 Apr 18;74(2):204–6

Lack of association between dopamine D4 receptor gene and schizophrenia. Tanaka T, et al. **Am J Med Genet** 1995 Dec 18;60(6):580–2

Association study between schizophrenia and dopamine D3 receptor gene polymorphism. Tanaka T, et al. **Am J Med Genet** 1996 Jul 26;67(4):366–8

Genes for interleukin-2 receptor beta chain, interleukin-1 beta, and schizophrenia: no evidence for the association or linkage. Tatsumi M, et al. **Am J Med Genet** 1997 May 31;74(3):338–41

Schizophrenia and chromosome 6p. Turecki G, et al. **Am J Med Genet** 1997 Apr 18;74(2):195–8 (23 ref.)

Psychiatric morbidity in the first-degree relatives of schizophrenic patients. Varma SL, et al. **Am J Med Genet** 1997 Feb 21;74(1):7–11

No association between schizophrenia and the serotonin receptor 5HTR2a in an Italian population. Verga M, et al. **Am J Med Genet** 1997 Feb 21;74(1):21–5

No evidence for an allelic association between schizophrenia and markers D22S278 and D22S283. Williams NM, et al. **Am J Med Genet** 1997 Feb 21;74(1):37–9

Ernst Rüdin (1874–1952) and his genealogic-demographic department in Munich (1917–1986): an introduction to their family studies of schizophrenia. Zerbin-Rüdin E, et al. **Am J Med Genet** 1996 Jul 26;67(4):332–7 (56 ref.)

Lack of evidence for close linkage of the glutamate GluR6 receptor gene with schizophrenia. Chen AC, et al. **Am J Psychistry** 1996 Dec;153(12):1634–6

Chromosomal fragile site 1q21 in schizophrenic patients [letter] Fañanás L, et al. **Am J Psychiatry** 1997 May; 154(5):716

Resemblance of psychotic symptoms and syndromes in affected sibling pairs from the Irish Study of High-Density Schizophrenia Families: evidence for possible etiologic heterogeneity. Kendler KS, et al. **Am J Psychiatry** 1997 Feb;154(2):191–8

Evidence for a schizophrenia vulnerability locus on chromosome 8p in the Irish Study of High-Density Schizophrenia Families. Kendler KS, et al. **Am J Psychiatry** 1996 Dec;153(12):1534–40

Schizophrenia genetics: the quest for an anchor [editorial] Kennedy JL. **Am J Psychiatry** 1996 Dec;153(12):1513–4

Gene-environment interaction in vulnerability to schizophrenia: findings from the Finnish Adoptive Family Study of Schizophrenia. Wahlberg KE, et al. **Am J Psychiatry** 1997 Mar;154(3):355–62

Genetic association of the HLA DRB1 gene locus on chromosome 6p21.3 with schizophrenia. Wright P, et al. **Am J Psychiatry** 1996 Dec;153(12):1530–3

High resolution cytogenetic study in schizophrenia. Casacchia M, et al. **Ann Genet** 1996;39(3):144–6

Genetic analysis of schizophrenia as an example of a putative multifactorial trait. Pritchard DJ. **Ann Hum Genet** 1996 Mar;60 (Pt 2):105–23

The molecular genetics of schizophrenia. O'Donovan MC, et al. **Ann Med** 1996 Dec;28(6):541–6 (52 ref.)

Backward masking performance in unaffected siblings of schizophrenic patients. Evidence for a vulnerability indicator. Green MF, et al. **Arch Gen Psychiatry** 1997 May; 54(5):465–72

Smooth pursuit eye tracking in twins. A critical commentary [comment] Holzman PS, et al. **Arch Gen Psychiatry** 1997 May;54(5):429–31. Comment on: Arch Gen Psychiatry 1997 May;54(5):417–26.

Eye tracking, attention, and schizotypal symptoms in nonpsychotic relatives of patients with schizophrenia. Keefe RS, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):169–76

Thought disorder in schizophrenic and control adoptees and their relatives. Kinney DK, et al. **Arch Gen Psychiatry** 1997 May;54(5):475–9

A quantitative analysis of smooth pursuit eye tracking in monozygotic twins discordant for schizophrenia [see comments] Litman RE, et al. **Arch Gen Psychiatry** 1997 May;54(5):417–26. Comment in: Arch Gen Psychiatry 1997 May;54(5):429–31.

Molecular biological investigations into the role of the NMDA receptor in the pathophysiology of schizophrenia. Catts SV, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):17–26 (110 ref.)

Exclusion of linkage of schizophrenia to the gene for the glutamate GluR5 receptor. Chen AC, et al. **Biol Psychiatry** 1997 Jan 15;41(2):243–5

Association study of NlaIII and MspI genetic polymorphisms of catechol-O-methyltransferase gene and susceptibility to schizophrenia. Chen CH, et al. **Biol Psychiatry** 1997 May 1;41(9):985–7

Association of TaqI A polymorphism of dopamine D2 receptor gene and tardive dyskinesia in schizophrenia. Chen CH, et al. **Biol Psychiatry** 1997 Apr 1;41(7):827–9

Association study between dopamine D1, D2, D3, and D4 receptor genes and schizophrenia defined by several diagnostic systems. Dollfus S, et al. **Biol Psychiatry** 1996 Sep 1;40(5):419–21

Lack of expansion of cytosine adenine guanine trinucleotide repeat in the dentatorubral and pallidoluysian atrophy gene in Swedish schizophrenic patients. Jönsson E, et al. **Biol Psychiatry** 1996 Aug 1;40(3):228–9

Apolipoprotein E-epsilon 4 frequency in patients with schizophrenia. Lan TH, et al. **Biol Psychiatry** 1997 Aug 1;42(3):225–7

Polymorphisms of dopamine D2-like (D2, D3, and D4) receptors in schizophrenia. Ohara K, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1209–17

Lack of association of a functional catechol-O-methyltransferase gene polymorphism in schizophrenia. Strous RD, et al. **Biol Psychiatry** 1997 Feb 15;41(4):493–5

Is the polymorphic microsatellite repeat of the dopamine beta-hydroxylase gene associated with biochemical variability of the catecholamine pathway in schizophrenia? Wei J, et al. **Biol Psychiatry** 1997 Apr 1;41(7):762–7

Identification of differentially expressed RNA transcripts in neuropsychiatric disorders [editorial] Yee F, et al. **Biol Psychiatry** 1997 Apr 1;41(7):759–61

Leukocytes and organ-nonspecific autoantibodies in schizophrenics and their siblings: markers of vulnerability or disease? Zorrilla EP, et al. **Biol Psychiatry** 1996 Nov 1;40(9):825–33

No evidence for association between CNTF null mutant allele and schizophrenia [letter] Arinami T, et al. **Br J Psychiatry** 1996 Aug;169(2):253

Expanded CAG/CTG repeats in schizophrenia. A study of clinical correlates. Cardno AG, et al. **Br J Psychiatry** 1996 Dec;169(6):766–71

The Maudsley Family Study. 4. Normal planum temporale asymmetry in familial schizophrenia. A volumetric MRI study. Frangou S, et al. **Br J Psychiatry** 1997 Apr; 170:328–33

Testing the effect of season of birth on familial risk for schizophrenia and related disorders. Hettema JM, et al. **Br J Psychiatry** 1996 Feb;168(2):205–9

Morbid risk of schizophrenia in first-degree relatives of white and African-Caribbean patients with psychosis. Hutchinson G, et al. **Br J Psychiatry** 1996 Dec;169(6):776–80

Age at onset in schizophrenia and risk of illness in relatives. Results from the Roscommon Family Study. Kendler KS, et al. **Br J Psychiatry** 1996 Aug;169(2):213–8

Increased occurrence of schizophrenia and other psychiatric illnesses among twins [see comments] Kläning U, et al. **Br J Psychiatry** 1996 Jun;168(6):688–92. Comment in: Br J Psychiatry 1996 Oct;169(4):522–3.

Schizophrenia in twins [letter; comment] Lewis S. **Br J Psychiatry** 1996 Oct;169(4):522–3. Comment on: Br J Psychiatry 1996 Jun;168(6):688–92.

Childhood/early adolescence-onset and adult-onset schizophrenia. Heterogeneity at the dopamine D3 receptor gene. Maziade M, et al. **Br J Psychiatry** 1997 Jan;170:27–30

Cytogenetic abnormalities on chromosome 18 associated with bipolar affective disorder or schizophrenia. Mors O, et al. **Br J Psychiatry** 1997 Mar;170:278–80

Minor physical and factual anomalies [letter; comment] Murray RM. **Br J Psychiatry** 1996 Jun;168(6):789–90. Comment on: Br J Psychiatry 1996 Feb;168(2):139–42.

Imaging as a tool in exploring the neurodevelopment and genetics of schizophrenia. Frangou S, et al. **Br Med Bull** 1996 Jul;52(3):587–96 (46 ref.)

Genotype and phenotype analysis at the 22q11 schizophrenia susceptibility locus. Karayiorgou M, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:835–43

Molecular genetic studies of schizophrenia. McGuffin P, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:815–22 (62 ref.)

The Johns Hopkins University Collaborative Schizophrenia Study: an epidemiologic-genetic approach to test the heterogeneity hypothesis and identify schizophrenia susceptibility genes. Pulver AE, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:797–814 (160

ref.)
Support for schizophrenia vulnerability loci on chromosomes 6p and 8p from Irish families. Straub RE, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:823–33 (63 ref.)
Searching for susceptibility genes in schizophrenia by genetic linkage analysis. Wildenauer DB, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:845–50
A gene at 6p? Schizophrenia. Dawson E, et al. **Curr Biol** 1996 Mar 1;6(3):268–71 (20 ref.)
A search for association between schizophrenia and dopamine-related alleles. Jönsson E, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(6):297–304
Lack of association between schizophrenia and the apolipoprotein E epsilon 4 allele. Jönsson E, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(4):182–4
Dopamine D4 receptor gene polymorphisms: relation to ethnicity, no association with schizophrenia and response to clozapine in Israeli subjects. Kohn Y, et al. **Eur Neuropsychopharmacol** 1997 Feb;7(1):39–43
Analysis of case-control/family sampling design. Liang KY, et al. **Genet Epidemiol** 1996;13(3):253–70
Suggestive evidence for a schizophrenia susceptibility locus on chromosome 6q and a confirmation in an independent series of pedigrees. Cao Q, et al. **Genomics** 1997 Jul 1; 43(1):1–8
No linkage of the cytochrome P-450IIE1 (CYP2E1) C1/C2 polymorphism to schizophrenia. Iwahashi K, et al. **Hum Exp Toxicol** 1997 Apr;16(4):208–11
Mapping of the human adenosine A2a receptor gene: relationship to potential schizophrenia loci on chromosome 22q and exclusion from the CATCH 22 region. Deckert J, et al. **Hum Genet** 1997 Mar;99(3):326–8
Suggestive evidence for linkage of schizophrenia to markers on chromosome 13 in Caucasian but not Oriental populations. Lin MW, et al. **Hum Genet** 1997 Mar; 99(3):417–20
Analysis of amino-acid and nucleotide variants in the spinocerebellar ataxia type 1 (SCA1) gene in schizophrenic patients. Pujana MA, et al. **Hum Genet** 1997 Jun;99(6):772–5
Evidence for an association between the dopamine D3 receptor gene DRD3 and schizophrenia. Ebstein RP, et al. **Hum Hered** 1997 Jan-Feb;47(1):6–16
No evidence for linkage between schizophrenia and eight microsatellite markers on chromosome 19. Parfitt E, et al. **Hum Hered** 1996 Jul-Aug;46(4):191–6
A functional polymorphism in the promoter region of the dopamine D2 receptor gene is associated with schizophrenia. Arinami T, et al. **Hum Mol Genet** 1997 Apr; 6(4):577–82
Aetiology of schizophrenia: an evolutionary theory. Crow TJ. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:49–56 (63 ref.)
Attentional dysfunctions in neuroleptic-naive and neuroleptic-withdrawn schizophrenic patients and their siblings. Finkelstein JR, et al. **J Abnorm Psychol** 1997 May; 106(2):203–12
Schizophrenic patients fare badly in the company of scientists [editorial] Clarke L. **J Adv Nurs** 1997 Mar;25(3):429–30
The molecular genetics of schizophrenia. Murphy KC, et al. **J Mol Neurosci** 1996 Summer;7(2):147–57 (75 ref.)
Does choice of scale for scoring obstetric complications influence their relationship to other etiological risk factors in schizophrenia? McNeil TF, et al. **J Nerv Ment Dis** 1997 Jan;185(1):27–31
Human adenosine A2a receptor (A2aAR) gene: systematic mutation screening in patients with schizophrenia. Deckert J, et al. **J Neural Transm** 1996;103(12):1447–55
Enhanced cleavage of an atypical intron of dopamine D3-receptor pre-mRNA in chronic schizophrenia. Schmauss C. **J Neurosci** 1996 Dec 15;16(24):7902–9
Abnormal cholecystokinin mRNA levels in entorhinal cortex of schizophrenics. Bachus SE, et al. **J Psychiatr Res** 1997 Mar-Apr;31(2):233–56 (170 ref.)
Relationship between impairment of prenatal brain growth and family history of psychosis in schizophrenia. Kunugi H, et al. **J Psychiatr Res** 1996 Nov-Dec;30(6):475–81
Cultured skin fibroblasts as a cell model for investigating schizophrenia. Mahadik SP, et al. **J Psychiatr Res** 1996 Nov-Dec;30(6):421–39 (160 ref.)
Familial and developmental abnormalities of front lobe function and neurochemistry in schizophrenia. Deakin FW, et al. **J Psychopharmacol (Oxf)** 1997;11(2):133–42 (110 ref.)
The 5-HT2A (serotonin2A) receptor gene in the aetiology, pathophysiology and pharmacotherapy of schizophrenia. Harrison PJ, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):18–20
Apolipoprotein E epsilon 4 and clinical phenotype in schizophrenia [letter] Pickar D, et al. **Lancet** 1997 Sep 27; 350(9082):930–1
Meta-analysis of association between the 5-HT2a receptor T102C polymorphism and schizophrenia. EMASS Collaborative Group. European Multicentre Association Study of Schizophrenia [letter] Williams J, et al. **Lancet** 1997 Apr 26;349(9060):1221
Possible relevance of phospholipid abnormalities and genetic interactions in psychiatric disorders: the relationship between dyslexia and schizophrenia. Horrobin DF, et al. **Med Hypotheses** 1995 Dec;45(6):605–13 (70 ref.)
Schizophrenia, bacterial toxins and the genetics of redundancy. Morris JA. **Med Hypotheses** 1996 Apr; 46(4):362–6 (23 ref.)
The role of candidate genes in the etiology of schizophrenia. Murphy KC, et al. **Mol Med** 1996 Nov;2(6):665–9 (49 ref.)
The molecular genetics of schizophrenia: progress so far. Kirov G, et al. **Mol Med Today** 1997 Mar;3(3):124–30 (39 ref.)
Linkage, association and mutational analysis of the dopamine D3 receptor gene in schizophrenia. Asherson P, et al. **Mol Psychiatry** 1996 May;1(2):125–32
Neuroimaging and the genetics of schizophrenia [news] Blackwood DH. **Mol Psychiatry** 1996 Jul;1(3):183–4
Association of polymorphisms of dopamine D2 receptor (DRD2), and dopamine transporter (DAT1) genes with schizoid/avoidant behaviors (SAB). Blum K, et al. **Mol Psychiatry** 1997 May;2(3):239–46
Increasing the efficiency of genomic searches for linkage in complex disorders by DNA pooling of affected sib-pairs. Craddock N, et al. **Mol Psychiatry** 1996 Mar;1(1):59–64
The human serotonin 7 (5-HT7) receptor gene: genomic organization and systematic mutation screening in schizophrenia and bipolar affective disorder. Erdmann J, et al. **Mol Psychiatry** 1996 Nov;1(5):392–7
Complex traits, complex answers [news; comment] Gurwitz D. **Mol Psychiatry** 1997 Mar;2(2):89–90. Comment on: Mol Psychiatry 1997 Mar;2(2):148–55. Comment on: Mol Psychiatry 1997 Mar;2(2):156–60.
Schizophrenia, tardive dyskinesia, and a D3 receptor gene variant: a new twist on dyskinesias? [news; comment] Jeste DV, et al. **Mol Psychiatry** 1997 Mar;2(2):86–8. Comment on: Mol Psychiatry 1997 Mar;2(2):139–45.
Dissecting the genetic complexity of schizophrenia. Karayiorgou M, et al. **Mol Psychiatry** 1997 May; 2(3):211–23 (161 ref.)
Individuals with schizophrenia have an increased incidence of the H2R649G allele for the histamine H2 receptor gene. Orange PR, et al. **Mol Psychiatry** 1996 Dec;1(6):466–9
Evidence suggestive of a locus on chromosome 5q31 contributing to susceptibility for schizophrenia in German and Israeli families by multipoint affected sib-pair linkage analysis. Schwab SG, et al. **Mol Psychiatry** 1997 Mar; 2(2):156–60
Ventricular enlargement associated with linkage marker for schizophrenia-related disorders in one pedigree. Shihabuddin L, et al. **Mol Psychiatry** 1996 Jul;1(3):215–22
Dopamine D3-receptor gene variant and susceptibility to tardive dyskinesia in schizophrenic patients [see comments] Steen VM, et al. **Mol Psychiatry** 1997 Mar;2(2):139–45. Comment in: Mol Psychiatry 1997 Mar;2(2):86–8.
Support for a possible schizophrenia vulnerability locus in region 5q22–31 in Irish families [see comments] Straub RE, et al. **Mol Psychiatry** 1997 Mar;2(2):148–55. Comment in: Mol Psychiatry 1997 Mar;2(2):89–90.
The putative schizophrenia locus on chromosome 6p: a brief overview of the linkage studies [news] Straub RE, et al. **Mol Psychiatry** 1996 May;1(2):89–92
NCAM and schizophrenia: genetic studies. Vicente AM, et al. **Mol Psychiatry** 1997 Jan;2(1):65–9
Frequency analysis of large CAG/CTG trinucleotide repeats in schizophrenia and bipolar affective disorder. Vincent JB, et al. **Mol Psychiatry** 1996 May;1(2):141–8
A preliminary report of a strong genetic component for thought disorder in normals. A twin study. Gambini O, et al. **Neuropsychobiology** 1997;36(1):13–8
Intact 5-HT2A receptor exons and the adjoining intron regions in schizophrenia. Ishigaki T. **Neuropsychopharmacology** 1996 Sep;15(3):323
Efficacy and side-effects of clozapine: testing for association with allelic variation in the dopamine D4 receptor gene. Rietschel M, et al. **Neuropsychopharmacology** 1996 Nov; 15(5):491–6
Apolipoprotein E genotype in schizophrenia: frequency, age of onset, and neuropathologic features. Arnold SE, et al. **Neuroreport** 1997 Apr 14;8(6):1523–6
The serotonin transporter is a potential susceptibility factor for bipolar affective disorder. Collier DA, et al. **Neuroreport** 1996 Jul 8;7(10):1675–9
Clozapine response and the 5HT2C Cys23Ser polymorphism. Malhotra AK, et al. **Neuroreport** 1996 Sep 2;7(13):2100–2
Efficacy and side-effects of clozapine not associated with variation in the 5-HT2C receptor. Rietschel M, et al. **Neuroreport** 1997 May 27;8(8):1999–2003
The Gly/Glu polymorphism of the neurotrophin 3 gene: allele frequencies in a Caucasian population and relevance for psychiatric disorders. Thome J, et al. **Neuroreport** 1996 Jul 8;7(10):1623–6
A null mutation allele in the CNTF gene and schizophrenic psychoses. Thome J, et al. **Neuroreport** 1996 May 31; 7(8):1413–6
Analysis of a structural polymorphism in the 5-HT2A receptor and clinical response to clozapine. Arranz MJ, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):177–8
Homozygosity at the dopamine D3 receptor gene in schizophrenic patients. Durany N, et al. **Neurosci Lett** 1996 Dec 20;220(3):151–4
Apolipoprotein E epsilon2 allele and early onset schizophrenia. Kimura T, et al. **Neurosci Lett** 1997 Aug 1;231(1):53–5
Human catechol-O-methyltransferase pharmacogenetics: description of a functional polymorphism and its potential application to neuropsychiatric disorders. Lachman HM, et al. **Pharmacogenetics** 1996 Jun;6(3):243–50
Linkage of a neurophysiological deficit in schizophrenia to a chromosome 15 locus. Freedman R, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):587–92
Could schizophrenia be reasonably explained by Dohan's hypothesis on genetic interaction with a dietary peptide overload? Reichelt KL, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1083–114 (205 ref.)
Phospholipases: in search of a genetic base of schizophrenia. Hudson CJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):119–22
Failure to find associations of the CA repeat polymorphism in the first intron and the Gly-63/Glu-63 polymorphism of the neurotrophin-3 gene with schizophrenia. Arinami T, et al. **Psychiatr Genet** 1996 Spring;6(1):13–5
Linkage analysis of the fragile X gene FMR-1 and schizophrenia: no evidence for linkage but report of a family with schizophrenia and an unstable triplet repeat. Ashworth A, et al. **Psychiatr Genet** 1996 Summer;6(2):81–6
Reduced expression of HLA-B35 in schizophrenia. Blackwood DH, et al. **Psychiatr Genet** 1996 Summer; 6(2):51–9
Analysis of the DRPLA triplet repeat in brain tissue and leukocytes from schizophrenics. Brando LJ, et al. **Psychiatr Genet** 1996 Spring;6(1):1–5
Association study of a null mutation in the dopamine D4 receptor gene in Italian patients with obsessive-compulsive disorder, bipolar mood disorder and schizophrenia. Di Bella D, et al. **Psychiatr Genet** 1996 Fall;6(3):119–21
Neurotrophin-3 gene polymorphisms and schizophrenia: no evidence for linkage or association. Gill M, et al. **Psychiatr Genet** 1996 Winter;6(4):183–6
Analysis of DRPLA trinucleotide repeats in schizophrenia. Guedj F, et al. **Psychiatr Genet** 1996 Spring;6(1):33–4
Preferential transmission of the high activity allele of COMT in schizophrenia. Li T, et al. **Psychiatr Genet** 1996 Fall; 6(3):131–3
Schizophrenia and the dopamine-beta-hydroxylase gene: results of a linkage and association study. Meszaros K, et al. **Psychiatr Genet** 1996 Spring;6(1):17–22
5-HT2 receptor gene locus: association with schizophrenia or treatment response not detected. Nimgaonkar VL, et al. **Psychiatr Genet** 1996 Spring;6(1):23–7
Linkage analysis between schizophrenia and the Darier's disease region on 12q. O'Malley MP, et al. **Psychiatr Genet** 1996 Winter;6(4):187–90
A PstI restriction fragment length polymorphism in the 5' untranslated region of DRD4 is not associated with schizophrenia. Paterson AD, et al. **Psychiatr Genet** 1996 Winter;6(4):191–3
No evidence for linkage of chromosome 6p markers to schizophrenia in southern African Bantu-speaking families. Riley BP, et al. **Psychiatr Genet** 1996 Summer;6(2):41–9
A linkage study of the N-methyl-D-aspartate receptor subunit gene loci and schizophrenia in southern African Bantu-speaking families. Riley BP, et al. **Psychiatr Genet** 1997 Summer;7(2):57–74
Schizophrenia, chronic hospitalization and the 5-HT2C receptor gene. Segman RH, et al. **Psychiatr Genet** 1997 Summer;7(2):75–8
Ciliary neurotrophic factor null mutation and schizophrenia in a Swedish population. Thome J, et al. **Psychiatr Genet** 1997 Summer;7(2):79–82
Association between schizophrenia and a microsatellite polymorphism at the dopamine D5 receptor gene. Williams NM, et al. **Psychiatr Genet** 1997 Summer;7(2):83–5
Apolipoprotein E genotype distribution in schizophrenia. Zhu S, et al. **Psychiatr Genet** 1996 Summer;6(2):75–9
On the trail of the genetics and pathophysiology of schizophrenia. Holzman PS. **Psychiatry** 1996 Summer; 59(2):117–27 (50 ref.)
Genetic and clinical correlates of season of birth of schizophrenics. Kitamura T, et al. **Psychiatry Clin Neurosci** 1995 Aug;49(4):189–93
Production of interferon-gamma in families with multiple occurrence of schizophrenia. Arolt V, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):145–52
Association study between schizophrenia and monoamine oxidase A and B DNA polymorphisms. Coron B, et al. **Psychiatry Res** 1996 Jun 1;62(3):221–6
A linkage study of schizophrenia to markers within Xp11 near the MAOB gene. Dann J, et al. **Psychiatry Res** 1997 May 30;70(3):131–43
Sex differences in neuropsychological function in non-psychotic relatives of schizophrenic probands. Kremen WS, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):131–44
Failure to support a pseudoautosomal locus for schizophrenia. Ponnudurai R. **Psychiatry Res** 1996 Jun 1; 62(3):281–4
Eye-tracking dysfunction in offspring from the New York High-Risk Project: diagnostic specificity and the role of attention. Rosenberg DR, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):121–30
Schizophrenia and the ciliary neurotrophic factor (CNTF) gene: no evidence for association. Sakai T, et al. **Psychiatry Res** 1997 Jun 16;71(1):7–10
Analysis of a functional catechol-O-methyltransferase gene polymorphism in schizophrenia: evidence for association with aggressive and antisocial behavior. Strous RD, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):71–7
Variants in neurotrophic factor genes and schizophrenic psychoses: no associations in a Spanish population. Thome J, et al. **Psychiatry Res** 1997 Jun 16;71(1):1–5

The risk for psychiatric disorders in relatives of schizophrenic and control probands: a comparison of three independent studies. Kendler KS, et al. **Psychol Med** 1997 Mar; 27(2):411–9

Confirmation of association between expanded CAG/CTG repeats and both schizophrenia and bipolar disorder. O'Donovan MC, et al. **Psychol Med** 1996 Nov; 26(6):1145–53

Does the genotype for schizophrenia often remain unexpressed because of canalization and stochastic events during development? Woolf CM. **Psychol Med** 1997 May; 27(3):659–68 (73 ref.)

Is there psychopathology in the coparents of schizophrenic adoptees' half-siblings? Ingraham LJ, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1296–8

Non-functional CYP2D6 alleles and risk for neuroleptic-induced movement disorders in schizophrenic patients. Andreassen OA, et al. **Psychopharmacology (Berl)** 1997 May;131(2):174–9

Familial risks and reproductive fitness in schizophrenia. Battaglia M, et al. **Schizophr Bull** 1996;22(2):191–5 (23 ref.)

Self-report measures of schizotypy as indices of familial vulnerability to schizophrenia. Kendler KS, et al. **Schizophr Bull** 1996;22(3):511–20

Lack of gender differences in age at onset in familial schizophrenia. Albus M, et al. **Schizophr Res** 1995 Dec; 18(1):51–7

Reproductive fitness in familial schizophrenia. Bassett AS, et al. **Schizophr Res** 1996 Sep 18;21(3):151–60

Cerebral lateralization is delayed in children who later develop schizophrenia. Crow TJ, et al. **Schizophr Res** 1996 Dec 15;22(3):181–5

VBR in schizophrenia: relationship to family history of psychosis and season of birth [published erratum appears in Schizophr Res 1997 May 24;25(2):167] DeQuardo JR, et al. **Schizophr Res** 1996 Jul 5;20(3):275–85 (60 ref.)

Dermatoglyphic a-b ridge count as a possible marker for developmental disturbance in schizophrenia: replication in two samples. Fañanas L, et al. **Schizophr Res** 1996 Jul 5; 20(3):307–14

Neuropsychological functioning among the elderly nonpsychotic relatives of schizophrenic patients. Faraone SV, et al. **Schizophr Res** 1996 Jul;21(1):27–31

The Maudsley Family Study, II: Endogenous event-related potentials in familial schizophrenia. Frangou S, et al. **Schizophr Res** 1997 Jan 17;23(1):45–53

The number of triplet repeats in five brain-expressed loci with CAG repeats is not associated with schizophrenia. Gaitonde EJ, et al. **Schizophr Res** 1997 May 24;25(2):111–6

Congenital anomalies in relatives of schizophrenic probands may indicate a retinoid pathology. Goodman AB. **Schizophr Res** 1996 May;19(2–3):163–70

Neuropsychological dysfunction in parents of schizophrenics. Harris JG, et al. **Schizophr Res** 1996 Jul 5;20(3):253–60

Genetic variant near cytosolic phospholipase A2 associated with schizophrenia. Hudson CJ, et al. **Schizophr Res** 1996 Aug 23;21(2):111–6

A linkage study of schizophrenia with DNA markers from chromosome 8p21–p22 in 25 multiplex families. Kunugi H, et al. **Schizophr Res** 1996 Oct 18;22(1):61–8

Preattentive information processing as measured by backward masking and texton detection tasks in adolescents at high genetic risk for schizophrenia. Lieb K, et al. **Schizophr Res** 1996 Sep 18;21(3):171–82

Minor physical anomalies in psychoses: associations with clinical and putative aetiological variables. McGrath JJ, et al. **Schizophr Res** 1995 Dec;18(1):9–20

Genetic relationship between dopamine transporter gene and schizophrenia: linkage and association. Maier W, et al. **Schizophr Res** 1996 May;20(1–2):175–80

The influence of phenotype on the outcome of linkage analysis of schizophrenia [letter] Meszaros K, et al. **Schizophr Res** 1996 Oct 18;22(1):89–90

Negative association of schizophrenia with HLA DQB1*0602: evidence from a second African-American cohort. Nimgaonkar VL, et al. **Schizophr Res** 1997 Jan 17; 23(1):81–6

Further evidence for an association between schizophrenia and the HLA DQB1 gene locus. Nimgaonkar VL, et al. **Schizophr Res** 1995 Dec;18(1):43–9

Dopamine D3 receptor Gly9/Ser9 polymorphism and schizophrenia: no increased frequency of homozygosity in German familial cases. Rietschel M, et al. **Schizophr Res** 1996 May;20(1–2):181–6

The relative abundance of dopamine D4 receptor mRNA in post mortem brains of schizophrenics and controls. Roberts DA, et al. **Schizophr Res** 1996 May;20(1–2):171–4

Schizophrenia, rheumatoid arthritis and natural resistance genes. Rubinstein G. **Schizophr Res** 1997 Jun 20; 25(3):177–81 (40 ref.)

A preliminary study of the neuropsychological heterogeneity of familial schizophrenia. Sautter FJ, et al. **Schizophr Res** 1995 Dec;18(1):1–7

Visually-guided saccadic eye movements in adolescents at genetic risk for schizophrenia. Schreiber H, et al. **Schizophr Res** 1997 May 24;25(2):97–109

Language processing and memory in ill and well siblings from multiplex families affected with schizophrenia. Shedlack K, et al. **Schizophr Res** 1997 May 3;25(1):43–52

Novel etiological hypotheses imply new analysis methods for schizophrenia genetics. Simonic I, et al. **Schizophr Res** 1996 May;20(1–2):235–7

Correlates of left-handedness in a large sample of schizophrenic patients. Tyler M, et al. **Schizophr Res** 1995 Dec;18(1):37–41

An overview of schizophrenia genetic research presented at the 1995 World Congress on Psychiatric Genetics, Cardiff. Vallada HP, et al. **Schizophr Res** 1996 May;19(2–3):87–92

No association of the Ser/Cys311 DRD2 molecular variant with schizophrenia using a classical case control study and the haplotype relative risk. Verga M, et al. **Schizophr Res** 1997 May 24;25(2):117–21

A study of the relationship between the DBH activity in serum and a MspI polymorphic site in intron 9 of the human DBH gene in schizophrenia. Wei J, et al. **Schizophr Res** 1996 Oct 18;22(1):77–80

Autoimmune diseases in the pedigrees of schizophrenic and control subjects. Wright P, et al. **Schizophr Res** 1996 Jul 5;20(3):261–7

Schizophrenia, the heteromodal association neocortex and development: potential for a neurogenetic approach [see comments] Ross CA, et al. **Trends Neurosci** 1996 May; 19(5):171–6. Comment in: Trends Neurosci 1996 Oct;19(10):416–7.

[Risk factors and schizophrenia] d'Amato T, et al. **Encephale** 1996 Oct;22 Spec No 3:3–7; discussion 8 (26 ref.) **(Fre)**

[Dynamic DNA mutations, anticipation and schizophrenia] Thibaut F, et al. **Encephale** 1997 Jan–Feb;23(1):22–7 (35 ref.) (Eng. Abstr.) **(Fre)**

[Genetic heterogeneity of schizophrenia. Results of a systematic twin study] Franzek E, et al. **Nervenarzt** 1996 Jul;67(7):583–94 (Eng. Abstr.) **(Ger)**

[Electrophysiologic correlates of selective attention in children and adolescents at increased risk of schizophrenia] Schreiber H, et al. **Z Kinder Jugenpsychiatr** 1996 Dec; 24(4):282–92 (Eng. Abstr.) **(Ger)**

[Molecular genetic approach to schizophrenia: direct analysis of 5-HT receptor genes] Ozaki N. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Oct; 16(5):175–80 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Models for vulnerability and liability of schizophrenia—heredity, environment, and their interaction] Yoneda H, et al. **Seishin Shinkeigaku Zasshi** 1996;98(10):714–8; discussion 726–31 **(Jpn)**

[Linkage analysis of schizophrenia with markers of chromosomes 2 and 11 in russian families] Golimbet VE, et al. **Genetika** 1996 Aug;32(8):1131–4 (Eng. Abstr.) **(Rus)**

[Search for expansion of CAG-repeats in DNA sequences expressed in the brain of humans with psychiatric and neurological diseases] Ovchinnikov IV, et al. **Vopr Med Khim** 1996 Oct–Dec;42(4):333–7 (Eng. Abstr.) **(Rus)**

[The characteristics of the manifestation of extraversion and neuroticism in the families of schizophrenia patients] Alfimova MV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(3):32–7 (Eng. Abstr.) **(Rus)**

[The psychopathological characteristics of the family status of schizophrenia patients] Golik AN. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(5):38–42 (Eng. Abstr.) **(Rus)**

[Important current genetic findings in schizophrenia] Lannfelt L, et al. **Nord Med** 1996 Sep;111(7):233–4 (15 ref.) (Eng. Abstr.) **(Swe)**

HISTORY

Ernst Rüdin (1874–1952) and his genealogic-demographic department in Munich (1917–1986): an introduction to their family studies of schizophrenia. Zerbin-Rüdin E, et al. **Am J Med Genet** 1996 Jul 26;67(4):332–7 (56 ref.)

The history of the psychopharmacology of schizophrenia [see comments] Lehmann HE, et al. **Can J Psychiatry** 1997 Mar; 42(2):152–62. Comment in: Can J Psychiatry 1997 Mar;42(2):131–2.

Urban birth and residence as risk factors for psychoses: an analysis of 1880 data. Torrey EF, et al. **Schizophr Res** 1997 Jun 20;25(3):169–76

[Georg Büchner, ICD-10 and the physician's basic attitude] Müller-Holthusen T. **Nervenarzt** 1997 Jul;68(7):597–9 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Investigations of cytokine production in whole blood cultures of paranoid and residual schizophrenic patients. Wilke I, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(5):279–84

No evidence for autoimmunity in schizophrenia. Schattner A, et al. **J Autoimmun** 1996 Oct;9(5):661–6

1st Symposium on the Neurovirology and Neuroimmunology of Schizophrenia and Bipolar Disorder. Baltimore, Maryland, November 3–4, 1995. Abstracts. **J Neurovirol** 1996 Jun;2(3):195–223

Differences in the natural autoantibody patterns of patients with schizophrenia and normal individuals. Lévy-Soussan P, et al. **J Psychiatry Neurosci** 1996 Mar;21(2):89–95

Immunological influences in attention-deficit disorder and schizophrenia; is there a link between these two conditions? Holden RJ, et al. **Med Hypotheses** 1995 Dec;45(6):575–87 (121 ref.)

Increased production of interleukin-2 (IL-2) but not soluble interleukin-2 receptors (sIL-2R) in unmedicated patients with schizophrenia and schizophreniform disorder. O'Donnell MC, et al. **Psychiatry Res** 1996 Dec 20; 65(3):171–8

Serum cytokine concentrations in patients with schizophrenia. Baker I, et al. **Schizophr Res** 1996 May; 20(1–2):199–203

Lower plasma CC16, a natural anti-inflammatory protein, and increased plasma interleukin-1 receptor antagonist in schizophrenia: effects of antipsychotic drugs. Maes M, et al. **Schizophr Res** 1996 Jul;21(1):39–50

Elevated circulating levels of IL-6 in schizophrenia. Naudin J, et al. **Schizophr Res** 1996 Jul 5;20(3):269–73

CSF IL-1 and IL-2 in medicated schizophrenic patients and normal volunteers. Rapaport MH, et al. **Schizophr Res** 1997 May 24;25(2):123–9

[Changes of humoral and cellular immunity in schizophrenia] Wojtanowska M, et al. **Psychiatr Pol** 1996 Sep-Oct; 30(5):783–99 (83 ref.) (Eng. Abstr.) **(Pol)**

[The functional activity of the lymphocyte subpopulations in patients with schizophrenia and schizoaffective psychosis] Vasil'eva EF, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(3):76–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Glial fibrillary acidic protein-immunoreactive astrocytosis in elderly patients with schizophrenia and dementia. Arnold SE, et al. **Acta Neuropathol (Berl)** 1996;91(3):269–77

Regionally specific pattern of neurochemical pathology in schizophrenia as assessed by multislice proton magnetic resonance spectroscopic imaging. Bertolino A, et al. **Am J Psychiatry** 1996 Dec;153(12):1554–63

Decreased anterior cingulate gyrus metabolic rate in schizophrenia. Haznedar MM, et al. **Am J Psychiatry** 1997 May;154(5):682–4

Individual variation in D2 dopamine receptor occupancy in clozapine-treated patients. Pickar D, et al. **Am J Psychiatry** 1996 Dec;153(12):1571–8

The brain metabolic patterns of clozapine- and fluphenazine-treated patients with schizophrenia during a continuous performance task. Cohen RM, et al. **Arch Gen Psychiatry** 1997 May;54(5):481–6

Alterations of membrane phospholipid metabolism in patients with schizophrenia assessed by phosphorus magnetic resonance spectroscopy [letter; comment] George TP, et al. **Arch Gen Psychiatry** 1996 Nov;53(11):1065–6. Comment on: Arch Gen Psychiatry 1995 May;52(5):399–406.

Reduction of synaptophysin immunoreactivity in the prefrontal cortex of subjects with schizophrenia. Regional and diagnostic specificity [corrected and republished in Arch Gen Psychiatry 1997 Oct;54(10):943–52] Glantz LA, et al. **Arch Gen Psychiatry** 1997 Jul;54(7):660–9

Psychotic exacerbations and enhanced vasopressin secretion in schizophrenic patients with hyponatremia and polydipsia. Goldman MB, et al. **Arch Gen Psychiatry** 1997 May;54(5):443–9

Disrupted pattern of D2 dopamine receptors in the temporal lobe in schizophrenia. A postmortem study. Goldsmith SK, et al. **Arch Gen Psychiatry** 1997 Jul;54(7):649–58

Mesolimbic dopamine D3 receptors and use of antipsychotics in patients with schizophrenia. A postmortem study. Gurevich EV, et al. **Arch Gen Psychiatry** 1997 Mar; 54(3):225–32

Serotonin2 receptors and the serotonin transporter in the schizophrenic brain. Dean B, et al. **Behav Brain Res** 1996; 73(1–2):169–75

Immunoautoradiographic evidence for a loss of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate-preferring non-N-methyl-D-aspartate glutamate receptors within the medial temporal lobe in schizophrenia. Eastwood SL, et al. **Biol Psychiatry** 1997 Mar 15;41(6):636–43

A postmortem study of frontal cortical dopamine D1 receptors in schizophrenics, psychiatric controls, and normal controls. Knable MB, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1191–9

Increased manganese-superoxide dismutase activity in postmortem brain from neuroleptic-treated psychotic patients. Loven DP, et al. **Biol Psychiatry** 1996 Aug 1; 40(3):230–2

Polymorphisms of dopamine D2-like (D2, D3, and D4) receptors in schizophrenia. Ohara K, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1209–17

In vitro 1H-magnetic resonance spectroscopy of postmortem brains with schizophrenia. Omori M, et al. **Biol Psychiatry** 1997 Sep 1;42(5):359–66

Production of cytokines in acute schizophrenic psychosis. Rothermundt M, et al. **Biol Psychiatry** 1996 Dec 15; 40(12):1294–7

Autoradiography with [3H]8-OH-DPAT reveals increases in 5-HT(1A) receptors in ventral prefrontal cortex in schizophrenia. Simpson MD, et al. **Biol Psychiatry** 1996 Jun 1;39(11):919–28

31P magnetic resonance spectroscopy in the dorsolateral prefrontal cortex of schizophrenics with a volume selective technique—preliminary findings. Volz HP, et al. **Biol Psychiatry** 1997 Mar 15;41(6):644–8

Uncoupling of GABA(A) and benzodiazepine receptor binding activity in the hippocampal formation of schizophrenic brain. Benes FM, et al. **Brain Res** 1997 Apr 25;755(1):121–9

Distribution of kainate receptor subunit mRNAs in human hippocampus, neocortex and cerebellum, and bilateral

reduction of hippocampal GluR6 and KA2 transcripts in schizophrenia. Porter RH, et al. **Brain Res** 1997 Mar 21; 751(2):217–31

GluR2 glutamate receptor subunit flip and flop isoforms are decreased in the hippocampal formation in schizophrenia: a reverse transcriptase–polymerase chain reaction (RT–PCR) study. Eastwood SL, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):92–8

Decrease in sigma but no increase in striatal dopamine D4 sites in schizophrenic brains. Helmeste DM, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):R3–5

Interregional correlation of cerebral glucose metabolism in unmedicated schizophrenia. Biver F, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):141–7

The psychobiology of the acute schizophrenic episode. Müller–Spahn F, et al. **Int Clin Psychopharmacol** 1996 May; 11 Suppl 2:19–28 (50 ref.)

Lack of effect of amitriptyline on risperidone pharmacokinetics in schizophrenic patients. Sommers DK, et al. **Int Clin Psychopharmacol** 1997 May;12(3):141–5

Cause of catecholamine distribution change in the schizophrenic brain. Rosenstein GZ. **J Basic Clin Physiol Pharmacol** 1994 Apr–Jun;5(2):101–5

Quantification of neuroreceptors in the living human brain: IV. Effect of aging and elevations of D2–like receptors in schizophrenia and bipolar illness. Wong WF, et al. **J Cereb Blood Flow Metab** 1997 Mar;17(3):331–42

Lack of pharmacokinetic interaction between buspirone and haloperidol in patients with schizophrenia. Huang HF, et al. **J Clin Pharmacol** 1996 Oct;36(10):963–9

Effects of 'Seroquel' (quetiapine) on platelet serotonin–2 binding in schizophrenia [letter] Faustman WO, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):464–6

Changes in the serotonin transporter in the hippocampus of subjects with schizophrenia identified using [3H]paroxetine. Naylor L, et al. **J Neural Transm Gen Sect** 1996; 103(6):749–57

Age–related abnormalities in expression of mRNAs encoding synapsin 1A, synapsin 1B, and synaptophysin in the temporal cortex of schizophrenics. Tcherepanov AA, et al. **J Neurosci Res** 1997 Sep 1;49(5):639–44

Endogenous neurotoxins relevant to schizophrenia. Smythies J. **J R Soc Med** 1996 Dec;89(12):679–80 (26 ref.)

5–HT2A receptor polymorphism and steady state receptor expression in schizophrenia [letter] Kouzmenko AP, et al. **Lancet** 1997 Jun 21;349(9068):1815

Neurotransmitter aberrations in schizophrenia: new perspectives and therapeutic implications. Carlsson A, et al. **Life Sci** 1997;61(2):75–94 (67 ref.)

Possible relevance of phospholipid abnormalities and genetic interactions in psychiatric disorders: the relationship between dyslexia and schizophrenia. Horrobin DF, et al. **Med Hypotheses** 1995 Dec;45(6):605–13 (70 ref.)

The density of muscarinic M1 receptors is decreased in the caudate–putamen of subjects with schizophrenia [see comments] Dean B, et al. **Mol Psychiatry** 1996 Mar; 1(1):54–8. Comment in: Mol Psychiatry 1996 Nov;1(5):364–6.

Abnormal expression of serotonin transporter mRNA in the frontal and temporal cortex of schizophrenics. Hernandez I, et al. **Mol Psychiatry** 1997 Jan;2(1):57–64

Muscarinic M1 receptors in schizophrenia [letter; comment] Reynolds GP. **Mol Psychiatry** 1996 Nov;1(5):364–6. Comment on: Mol Psychiatry 1996 Mar;1(1):54–8.

Schizophrenia. An emerging pathophysiology [news; comment] Nestler EJ. **Nature** 1997 Feb 13;385(6617):578–9 . Comment on: Nature 1997 Feb 13;385(6617):634–6.

Decreased prefrontal dopamine D1 receptors in schizophrenia revealed by PET [see comments] Okubo Y, et al. **Nature** 1997 Feb 13;385(6617):634–6. Comment in: Nature 1997 Feb 13;385(6617):578–9.

[3H]WAY–100635 for 5–HT1A receptor autoradiography in human brain: a comparison with [3H]8–OH–DPAT and demonstration of increased binding in the frontal cortex in schizophrenia. Burnet PW, et al. **Neurochem Int** 1997 Jun;30(6):565–74

A postmortem study of glycine and its potential precursors in chronic schizophrenics. Kurumaji A, et al. **Neurochem Int** 1996 Sep;29(3):239–45

Mitochondrial involvement in schizophrenia and other functional psychoses. Whatley SA, et al. **Neurochem Res** 1996 Sep;21(9):995–1004

[3H]raclopride binding to brain tissue from subjects with schizophrenia: methodological aspects. Dean B, et al. **Neuropharmacology** 1997 Jun;36(6):779–86

5–HT1A and 5–HT2A receptor mRNAs and binding site densities are differentially altered in schizophrenia. Burnet PW, et al. **Neuropsychopharmacology** 1996 Nov; 15(5):442–55

Clinical and biological markers for outcome in schizophrenia: a review of a longitudinal follow–up study in Uppsala schizophrenia research project. Lindström LH. **Neuropsychopharmacology** 1996 Mar;14(3 Suppl):23S–26S (13 ref.)

Marked elevations of serum creatine kinase activity associated with antipsychotic drug treatment. Meltzer HY, et al. **Neuropsychopharmacology** 1996 Oct;15(4):395–405

Temporal lobe metabolic differences in medication–free outpatients with schizophrenia via the PET–600. Nordahl TE, et al. **Neuropsychopharmacology** 1996 Dec;15(6):541–54

Vulnerability to tardive dyskinesia development in schizophrenia: an FDG–PET study of cerebral metabolism. Szymanski S, et al. **Neuropsychopharmacology** 1996 Dec; 15(6):567–75

NMDA receptor mRNA correlation with antemortem cognitive impairment in schizophrenia. Humphries C, et al. **Neuroreport** 1996 Aug 12;7(12):2051–5

D2–type dopamine receptors in postmortem human brain sections from normal and schizophrenic subjects. Lahti RA, et al. **Neuroreport** 1996 Aug 12;7(12):1945–8

Deficits of [3H]D–aspartate binding to glutamate uptake sites in striatal and accumbens tissue in patients with schizophrenia. Aparicio–Legarza MI, et al. **Neurosci Lett** 1997 Aug 22;232(1):13–6

Elevated endogenous nitric oxide synthase inhibitor in schizophrenic plasma may reflect abnormalities in brain nitric oxide production. Das I, et al. **Neurosci Lett** 1996 Sep 13;215(3):209–11

No difference in the expression of the D4 gene in post–mortem frontal cortex from controls and schizophrenics. Mulcrone J, et al. **Neurosci Lett** 1996 Nov 29;219(3):163–6

Up–regulation of GABAA receptor binding on neurons of the prefrontal cortex in schizophrenic subjects. Benes FM, et al. **Neuroscience** 1996 Dec;75(4):1021–31

Cingulate cortex synaptic terminal proteins and neural cell adhesion molecule in schizophrenia. Honer WG, et al. **Neuroscience** 1997 May;78(1):99–110

A pivotal role for glutamate in the pathogenesis of schizophrenia, and its cognitive dysfunction. Hirsch SR, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):797–802 (51 ref.)

Interaction between fluoxetine and haloperidol: pharmacokinetic and clinical implications. Avenoso A, et al. **Pharmacol Res** 1997 Apr;35(4):335–9

Schizophrenia is associated with elevated amphetamine–induced synaptic dopamine concentrations: evidence from a novel positron emission tomography method. Breier A, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2569–74

Single photon emission computerized tomography imaging of amphetamine–induced dopamine release in drug–free schizophrenic subjects. Laruelle M, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9235–40

Levels of the growth–associated protein GAP–43 are selectively increased in association cortices in schizophrenia. Perrone–Bizzozero NI, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14182–7

Platelet [3H]dopamine uptake is differentially affected by neuroleptic drug treatment in schizophrenia and schizophreniform disorder. Dean B, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jan; 20(1):45–55

Phosphorus magnetic resonance spectroscopy in schizophrenia: correlation between membrane phospholipid metabolism in the temporal lobe and positive symptoms. Fukuzako H, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 May; 20(4):629–40

No interaction between desipramine and bromperidol. Suzuki A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct;20(7):1265–71

Heat stress lipids and schizophrenia. Bates PR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):101–7 (66 ref.)

Utilization of precursor essential fatty acids in culture by skin fibroblasts from schizophrenic patients and normal controls. Mahadik SP, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):65–70

Decreased tyrosine transport in fibroblasts from schizophrenics: implications for membrane pathology. Ramchand CN, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):59–64

Tyrosine transport as an indicator of cell membrane dysfunction in schizophrenia. Wiesel FA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):55–8

Incorporation of 3H–arachidonic acid into platelet phospholipids of patients with schizophrenia. Yao JK, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):21–6

Dextromethorphan phenotyping and haloperidol disposition in schizophrenic patients. Lane HY, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):105–11

Benzodiazepine receptor distribution and diazepam binding in schizophrenia: an exploratory study. Schröder J, et al. **Psychiatry Res** 1997 Feb 7;68(2–3):125–31

Serotonin–mediated increase in cytosolic [Ca++] in platelets of risperidone–treated schizophrenia patients. Ereshefsky L, et al. **Psychopharmacol Bull** 1996;32(1):101–6

In vivo characteristics of dopamine D2 receptor occupancy by amisulpride in schizophrenia. Martinot JL, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):154–8

Increased cyclic AMP response to forskolin in Epstein–Barr virus–transformed human B–lymphocytes derived from schizophrenics. Natsukari N, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):235–41

Dopamine D2 receptor occupancy in vivo by the novel atypical antipsychotic olanzapine—a 123I IBZM single photon emission tomography (SPET) study. Pilowsky LS, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):148–53

Presynaptic dopaminergic function in the striatum of schizophrenic patients. Dao–Castellana MH, et al. **Schizophr Res** 1997 Feb 7;23(2):167–74

Free radical pathology and antioxidant defense in schizophrenia: a review. Mahadik SP, et al. **Schizophr Res** 1996 Mar;19(1):1–17 (165 ref.)

Hippocampal age–related changes in schizophrenia: a proton magnetic resonance spectroscopy study. Maier M, et al. **Schizophr Res** 1996 Oct 18;22(1):5–17

Impaired antioxidant defense at the onset of psychosis. Mukerjee S, et al. **Schizophr Res** 1996 Mar;19(1):19–26

Cerebral metabolic activity correlates of subsyndromes in chronic schizophrenia. Schroder J, et al. **Schizophr Res** 1996 Mar;19(1):41–53

Proton magnetic resonance spectroscopy of the basal ganglia in patients with schizophrenia: a preliminary report. Shioiri T, et al. **Schizophr Res** 1996 Oct 18;22(1):19–26

Regulation of [3H] dopamine release from mesolimbic and mesocortical areas of guinea pig brain by sigma receptors. Weatherspoon JK, et al. **Schizophr Res** 1996 Jul;21(1):51–62

A study of enzymes involved in catecholamine metabolism in parents of patients with schizophrenia. Wei J, et al. **Schizophr Res** 1996 Mar;19(1):27–32

Proton magnetic resonance spectroscopy of the temporal lobes in schizophrenics and normal controls. Yurgelun–Todd DA, et al. **Schizophr Res** 1996 Mar; 19(1):55–9

Schizophrenia clues from monkeys [news; comment] Pennisi E. **Science** 1997 Aug 15;277(5328):900. Comment on: Science 1997 Aug 15;277(5328):953–5.

Differences in the subregional and cellular distribution of GABAA receptor binding in the hippocampal formation of schizophrenic brain. Benes FM, et al. **Synapse** 1996 Apr; 22(4):338–49

Dopamine D2–like sites in schizophrenia, but not in Alzheimer's, Huntington's, or control brains, for [3H]benzquinoline. Seeman P, et al. **Synapse** 1997 Feb; 25(2):137–46

[The binding of 3H–spiperone to lymphocytes in patients with schizophrenia and first–degree relatives: in search of a genetic marker] Heinze G, et al. **Gac Med Mex** 1994 Jul–Aug;130(4):241–5 (Eng. Abstr.) **(Spa)**

MORTALITY

Excess mortality of mental illness [letter] Brown AS, et al. **Br J Psychiatry** 1996 Sep;169(3):383–4

Mortality among patients with schizophrenia. Simpson JC, et al. **Schizophr Bull** 1996;22(3):485–99 (72 ref.)

[Mortality of patients with functional psychiatric illnesses during inpatient treatment] Hewer W, et al. **Fortschr Neurol Psychiatr** 1997 Apr;65(4):171–81 (Eng. Abstr.) **(Ger)**

[Does long–term hospitalization modify cardiovascular morbidity in schizophrenic patients?] Steinert T, et al. **Fortschr Neurol Psychiatr** 1996 Jun;64(6):212–20 (Eng. Abstr.) **(Ger)**

NURSING

The experience of caring for an adult child with schizophrenia. Tuck I, et al. **Arch Psychiatr Nurs** 1997 Jun; 11(3):118–25

A study of how families care for mentally ill relatives in Japan. Yamashita M. **Int Nurs Rev** 1996 Jul–Aug; 43(4):121–5

The human science basis of psychiatric nursing: theory and practice. Barker PJ, et al. **J Adv Nurs** 1997 Apr;25(4):660–7 (44 ref.)

Expressed emotion on long–stay wards. Finnema EJ, et al. **J Adv Nurs** 1996 Sep;24(3):473–8

Psychosocial dimensions of family burden among two groups of carers looking after psychiatric patients. Bibou–Nakou I, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Feb; 32(2):104–8

PATHOLOGY

Recent advances in defining the neuropathology of schizophrenia. Arnold SE, et al. **Acta Neuropathol (Berl)** 1996 Sep;92(3):217–31 (153 ref.)

Schizophrenia: developmental disturbance of brain and mind? Stefan MD, et al. **Acta Paediatr Suppl** 1997 Jul;422:112–6 (63 ref.)

Meta–analysis of postmortem studies of Alzheimer's disease–like neuropathology in schizophrenia. Baldessarini RJ, et al. **Am J Psychiatry** 1997 Jun;154(6):861–3

Increased head circumference in schizophrenia. Bassett AS, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1173–5

Reduction in hippocampal formation volume is caused mainly by its shortening in chronic schizophrenia: assessment by MRI. Fukuzako H, et al. **Biol Psychiatry** 1996 Jun 1; 39(11):938–45

Neuropathology of the cerebellum in schizophrenia—an update: 1996 and future directions. Katsetos CD, et al. **Biol Psychiatry** 1997 Aug 1;42(3):213–24 (160 ref.)

Enough of pooled averages: been there, done that [editorial] Stevens JR. **Biol Psychiatry** 1997 Mar 15;41(6):633–5

Grey matter correlates of syndromes in schizophrenia. A semi–automated analysis of structural magnetic resonance images. Chua SE, et al. **Br J Psychiatry** 1997 May; 170:406–10

The Maudsley Family Study. 4. Normal planum temporale asymmetry in familial schizophrenia. A volumetric MRI study. Frangou S, et al. **Br J Psychiatry** 1997 Apr;

170:328–33

Imaging as a tool in exploring the neurodevelopment and genetics of schizophrenia. Frangou S, et al. **Br Med Bull** 1996 Jul;52(3):587–96 (46 ref.)

A neuropsychiatric disorder associated with dense calcification of the external ears and distal muscle wasting: 'Primrose syndrome'. Lindor NM, et al. **Clin Dysmorphol** 1996 Jan;5(1):27–34 (17 ref.)

Neurobiological findings in first admission patients with schizophrenia or schizophreniform disorder. Rubin P. **Dan Med Bull** 1997 Apr;44(2):140–54

Hippocampal pyramidal cell disarray correlates negatively to cell number: implications for the pathogenesis of schizophrenia. Jönsson SA, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):120–7

The psychobiology of the acute schizophrenic episode. Müller-Spahn F, et al. **Int Clin Psychopharmacol** 1996 May; 11 Suppl 2:19–28 (50 ref.)

The neuropathology of schizophrenia. Bachus SE, et al. **J Clin Psychiatry** 1996;57 Suppl 11:72–83 (240 ref.)

Consensus on minimal criteria of clinical and neuropathological diagnosis of schizophrenia and affective disorders for post mortem research. Report from the European Dementia and Schizophrenia Network (BIOMED I). Riederer P, et al. **J Neural Transm Gen Sect** 1995;102(3):255–64 (16 ref.)

The medial temporal lobe in schizophrenia. Arnold SE. **J Neuropsychiatry Clin Neurosci** 1997 Summer;9(3):460–70 (137 ref.)

Neuropathological studies of brain tissue in schizophrenia. Bunney BG, et al. **J Psychiatr Res** 1997 Mar–Apr; 31(2):159–73 (100 ref.)

A two-process theory of schizophrenia: evidence from studies in post-mortem brain. Deakin JF, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):277–95 (130 ref.)

Frequency of neuropathology in a brain bank from a long-term, domiciliary population. Healy DJ, et al. **J Psychiatr Res** 1996 Jan–Feb;30(1):45–9

Limbic circuits and monoamine receptors: dissecting the effects of antipsychotics from disease processes. Joyce JN, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):197–217 (70 ref.)

Cortical dopamine in schizophrenia: strategies for postmortem studies. Lewis DA, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):175–95 (80 ref.)

Postmortem studies in schizophrenic brain [editorial] Meador-Woodruff JH, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):157–8

Schizophreniform catatonia on 6 cases secondary to hydrocephalus with subthalamic mesencephalic tumor associated with hypodopaminergia. Neuman E, et al. **Neuropsychobiology** 1996;34(2):76–81

Cognitive effects of neonatal hippocampal lesions in a rat model of schizophrenia. Chambers RA, et al. **Neuropsychopharmacology** 1996 Dec;15(6):587–94

Development of the prefrontal cortex during adolescence: insights into vulnerable neural circuits in schizophrenia. Lewis DA. **Neuropsychopharmacology** 1997 Jun; 16(6):385–98 (132 ref.)

On the plausibility of "the neurodevelopmental hypothesis" of schizophrenia. Weinberger DR. **Neuropsychopharmacology** 1996 Mar;14(3 Suppl):1S–11S (78 ref.)

Reduced striatal spine size in schizophrenia: a postmortem ultrastructural study. Roberts RC, et al. **Neuroreport** 1996 Apr 26;7(6):1214–8

Proceedings of 2nd International Workshop on Cell Membrane Pathology in Schizophrenia. London, United Kingdom, 6–8 October 1995. Special issue dedicated to the memory of Dr. Sukdeb Mukherjee. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):1–122

A magnetic resonance imaging study in first-episode disorganized-type patients with schizophrenia. Ohnuma T, et al. **Psychiatry Clin Neurosci** 1997 Feb;51(1):9–15

Quantitative MRI volume changes in late onset schizophrenia and Alzheimer's disease compared to normal controls. Barta PE, et al. **Psychiatry Res** 1997 Feb 7;68(2–3):65–75

The human striatum in schizophrenia. II. Increased number of striatal neurons in schizophrenics. Beckmann H, et al. **Psychiatry Res** 1997 Feb 7;68(2–3):99–109

Altered distribution of parvalbumin-immunoreactive local circuit neurons in the anterior cingulate cortex of schizophrenic patients. Kalus P, et al. **Psychiatry Res** 1997 Aug 8;75(1):49–59

The human striatum in schizophrenia. I. Increase in overall relative striatal volume in schizophrenics. Lauer M, et al. **Psychiatry Res** 1997 Feb 7;68(2–3):87–98

Benzodiazepine receptors in the post-mortem brain of suicide victims and schizophrenic subjects. Pandey GN, et al. **Psychiatry Res** 1997 Aug 8;71(3):137–49

The hippocampus in schizophrenia: lateralized increase in neuronal density and altered cytoarchitectural asymmetry. Zaidel DW, et al. **Psychol Med** 1997 May;27(3):703–13

Anomalous cerebral asymmetry and language processing in schizophrenia. DeLisi LE, et al. **Schizophr Bull** 1997; 23(2):255–71

Regional zinc staining in postmortem hippocampus from schizophrenic patients. Adams CE, et al. **Schizophr Res** 1995 Dec;18(1):71–7

Increased density of microtubule associated protein 2-immunoreactive neurons in the prefrontal white matter of schizophrenic subjects. Anderson SA, et al. **Schizophr Res** 1996 May;19(2–3):111–9

Parvalbumin-immunoreactive neurons are reduced in the prefrontal cortex of schizophrenics. Beasley CL, et al. **Schizophr Res** 1997 Apr 11;24(3):349–55

The number of triplet repeats in five brain-expressed loci with CAG repeats is not associated with schizophrenia. Gaitonde EJ, et al. **Schizophr Res** 1997 May 24;25(2):111–6

Comparisons of morphology and growth rate between cells from skin biopsies of schizophrenic patients and those from normal individuals. Gliddon AE, et al. **Schizophr Res** 1995 Dec;18(1):29–38

Fibrin degradation products in post mortem brain tissue of schizophrenics: a possible marker for underlying inflammatory processes. Körschenhausen DA, et al. **Schizophr Res** 1996 May;19(2–3):103–9

Qualitative cerebral morphology in schizophrenia: a magnetic resonance imaging study and systematic literature review. Lawrie SM, et al. **Schizophr Res** 1997 May 24;25(2):155–66

Corpus callosum size and inter-hemispheric function in schizophrenia. Woodruff PW, et al. **Schizophr Res** 1997 Feb 28;23(3):189–96

Schizophrenia, the heteromodal association neocortex and development: potential for a neurogenetic approach [see comments] Ross CA, et al. **Trends Neurosci** 1996 May; 19(5):171–6. Comment in: Trends Neurosci 1996 Oct;19(10):416–7.

[Intercorrelation of psychopathological, morphologic, neurophysiologic an psychometric parameters in schizophrenic patients] Pester U, et al. **Fortschr Neurol Psychiatr** 1997 Jul;65(7):297–303 (Eng. Abstr.) **(Ger)**

[A case of Schilder's disease] Konstantinov GS. **Arkh Patol** 1997 Mar–Apr;59(2):62–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Age of onset in familial and sporadic schizophrenia. Alda M, et al. **Acta Psychiatr Scand** 1996 Jun;93(6):447–50

Psychopathological and SPECT findings in never-treated schizophrenia. Erkwoh R, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):51–7

Negative symptoms, cognitive dysfunction, tardive akathisia and tardive dyskinesia. Sachdev P, et al. **Acta Psychiatr Scand** 1996 Jun;93(6):451–9

Clinical similarities in siblings with schizophrenia. Burke JG, et al. **Am J Med Genet** 1996 May 31;67(3):239–43

Sensory gating deficits in parents of schizophrenics. Waldo M, et al. **Am J Med Genet** 1995 Dec 18;60(6):506–11

Aberrant semantic activation in schizophrenia: a neurophysiological study. Nestor PG, et al. **Am J Psychiatry** 1997 May;154(5):640–6

Visual perception in medicated schizophrenic patients [letter; comment] Schwartz B, et al. **Am J Psychiatry** 1997 Apr; 154(4):585–7. Comment on: Am J Psychiatry 1996 May;153(5):687–92.

Abnormalities of brain structure and function in schizophrenia: implications for aetiology and pathophysiology. Cannon TD. **Ann Med** 1996 Dec; 28(6):533–9 (49 ref.)

N-methyl-D-aspartate receptor hypofunction in schizophrenia could arise from reduced cortical connectivity rather than receptor dysfunction [letter; comment] Hoffman RE, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):578–80. Comment on: Arch Gen Psychiatry 1995 Dec;52(12):998–1007.

Smooth pursuit eye movements in schizophrenia in New Zealand. Allen JS. **Aust N Z J Psychiatry** 1997 Aug; 31(4):582–91

Rehabilitation of frontal/executive impairments in schizophrenia. Delahunty A, et al. **Aust N Z J Psychiatry** 1996 Dec;30(6):760–7 (61 ref.)

Could the inflammatory cytokines cause schizophrenia? [letter] Holden RJ, et al. **Aust N Z J Psychiatry** 1995 Dec; 29(4):693–5 (35 ref.)

What have we learned from functional imaging studies in schizophrenia? The role of frontal, striatal and temporal areas. Velakoulis D, et al. **Aust N Z J Psychiatry** 1996 Apr;30(2):195–209 (111 ref.)

Electrolytic lesions of the medial prefrontal cortex in rats disrupt performance on an analog of the Wisconsin Card Sorting Test, but do not disrupt latent inhibition: implications for animal models of schizophrenia. Joel D, et al. **Behav Brain Res** 1997 May;85(2):187–201

Fractal property of eye movements in schizophrenia. Yokoyama H, et al. **Biol Cybern** 1996 Aug;75(2):137–40

Electrophysiological responses to transcranial magnetic stimulation in depression and schizophrenia. Abarbanel JM, et al. **Biol Psychiatry** 1996 Jul 15;40(2):148–50

Cholecystokinin tetrapeptide-induced calcium mobilization in T cells of patients with panic disorder, major depression, or schizophrenia. Akiyoshi J, et al. **Biol Psychiatry** 1997 Jul 15;42(2):151–4

Hypothalamic-pituitary-adrenal axis in schizophrenia [letter; comment] Altamura AC. **Biol Psychiatry** 1996 Sep 15; 40(6):560–1. Comment on: Biol Psychiatry 1995 Dec 15;38(12):803–7.

Effects of the PCP analog dizocilpine on sensory gating: potential relevance to clinical subtypes of schizophrenia. al-Amin HA, et al. **Biol Psychiatry** 1996 Oct 15; 40(8):744–54

Backward masking in schizophrenia: relationship to medication status, neuropsychological functioning, and dopamine metabolism. Butler PD, et al. **Biol Psychiatry** 1996 Aug 15;40(4):295–8

P50 suppression among schizophrenia and normal comparison subjects: a methodological analysis. Clementz BA, et al. **Biol Psychiatry** 1997 May 15;41(10):1035–44

Auditory P300 topography and neuropsychological test performance: evidence for left hemispheric dysfunction in schizophrenia. Heidrich A, et al. **Biol Psychiatry** 1997 Feb 1;41(3):327–35

The niacin challenge test: clinical manifestation of altered transmembrane signal transduction in schizophrenia? Hudson CJ, et al. **Biol Psychiatry** 1997 Mar 1;41(5):507–13

Lack of expansion of cytosine adenine guanine trinucleotide repeat in the dentatorubral and pallidoluysian atrophy gene in Swedish schizophrenic patients. Jönsson E, et al. **Biol Psychiatry** 1996 Aug 1;40(3):228–9

Neuropsychiatric implications of basal ganglia dysfunction [editorial] Lidsky TI. **Biol Psychiatry** 1997 Feb 15; 41(4):383–5

Diminished cardiac vagal tone in schizophrenia: associations to brain laterality and age of onset. Malaspina D, et al. **Biol Psychiatry** 1997 Mar 1;41(5):612–7

Relationships between verbal memory performance and the cerebral distribution of fluorodeoxyglucose in patients with schizophrenia. Mozley LH, et al. **Biol Psychiatry** 1996 Sep 15;40(6):443–51

Electroencephalography in schizophrenic patients: comparison between neuroleptic-naive state and after treatment. Nagase Y, et al. **Biol Psychiatry** 1996 Sep 15; 40(6):452–6

N400 abnormalities in late life schizophrenia and related psychoses. Olichney JM, et al. **Biol Psychiatry** 1997 Jul 1;42(1):13–23

Magnetoencephalographic evidence of abnormal early auditory memory function in schizophrenia. Reite M, et al. **Biol Psychiatry** 1996 Aug 15;40(4):299–301

Single trial analysis of event related potentials: a comparison between schizophrenics and depressives. Röschke J, et al. **Biol Psychiatry** 1996 Nov 1;40(9):844–52

Quantitative electroencephalographic frequencies and relative neuroleptic receptor affinities in schizophrenia. Small JG, et al. **Biol Psychiatry** 1996 Jun 1;39(11):986–8

Disturbances of one-carbon metabolism in neuropsychiatric disorders: a review. Smythies JR, et al. **Biol Psychiatry** 1997 Jan 15;41(2):230–3 (35 ref.)

Season of birth and electroencephalogram power abnormalities in schizophrenia. Sponheim SR, et al. **Biol Psychiatry** 1997 May 15;41(10):1020–7

Relationship between DST nonsuppression and shortened REM latency in schizophrenia. Tandon R, et al. **Biol Psychiatry** 1996 Oct 1;40(7):660–3

Left lateralized P300 amplitude deficit in schizophrenic patients depends on pitch disparity. Weisbrod M, et al. **Biol Psychiatry** 1997 Mar 1;41(5):541–9

The neural correlates of inner speech and auditory verbal imagery in schizophrenia: relationship to auditory verbal hallucinations. McGuire PK, et al. **Br J Psychiatry** 1996 Aug;169(2):148–59

EEG coherence and syndromes in schizophrenia. Norman RM, et al. **Br J Psychiatry** 1997 May;170:411–5

An investigation of motor function in schizophrenia using transcranial magnetic stimulation of the motor cortex [see comments] Puri BK, et al. **Br J Psychiatry** 1996 Dec; 169(6):690–5. Comment in: Br J Psychiatry 1996 Dec;169(6):675–7.

Biological determinants of difficult to treat patients with schizophrenia. Sharma T, et al. **Br J Psychiatry Suppl** 1996 Dec;(31):5–9 (45 ref.)

Functional imaging--schizophrenia. Liddle PF. **Br Med Bull** 1996 Jul;52(3):486–94 (28 ref.)

The role of the thalamus in schizophrenia [see comments] Andreasen NC. **Can J Psychiatry** 1997 Feb;42(1):27–33 (48 ref.). Comment in: Can J Psychiatry 1997 Feb;42(1):19–20.

Neonatal insult to the hippocampal region and schizophrenia: a review and a putative animal model. Beauregard M, et al. **Can J Psychiatry** 1996 Sep;41(7):446–56 (145 ref.)

The "marriage bed": brain and outcome in schizophrenia [editorial; comment] Seeman MV. **Can J Psychiatry** 1997 Feb;42(1):19–20. Comment on: Can J Psychiatry 1997 Feb;42(1):27–33.

Functional topography: multidimensional scaling and functional connectivity in the brain. Friston KJ, et al. **Cereb Cortex** 1996 Mar–Apr;6(2):156–64

Cortical development and neuropathology in schizophrenia. Jones EG. **Ciba Found Symp** 1995;193:277–95 (75 ref.)

P50 changes with visual interference in normal subjects: a sensory distraction model for schizophrenia. Jin Y, et al. **Clin Electroencephalogr** 1996 Jul;27(3):151–4

Investigation of the speed of reaction on external stimulus in schizophrenic psychosis. Zampera E. **Coll Antropol** 1997 Jun;21(1):259–68

Differences in the prevalence of psychosensory features among schizophrenic, schizoaffective, and manic patients. Atre-Vaidya N, et al. **Compr Psychiatry** 1997 Mar–Apr; 38(2):88–92

Insight and clinical correlates in schizophrenia. Kim Y, et al. **Compr Psychiatry** 1997 Mar–Apr;38(2):117–23

Schizophrenia: a disorder of neurodevelopment? Harrison PJ. **Curr Opin Neurobiol** 1997 Apr;7(2):285–9 (57 ref.)

Altered endogenous negativities of the visual event-related potential in remitted schizophrenia. Matsuoka H, et al.

Electroencephalogr Clin Neurophysiol 1996 Jan;100(1):18–24
Acute psychological disorders in patients with epilepsy: a nation–wide study. Cockerell OC, et al. **Epilepsy Res** 1996 Oct;25(2):119–31
Neuropsychological impairment in first–episode and chronic schizophrenic patients. Albus M, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(5):249–55
Eye tracking dysfunction in families with multiple cases of schizophrenia. Arolt V, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(4):175–81
Abnormal subjective experiences in schizophrenia: its relationships with neuropsychological disturbances and frontal signs. Cuesta MJ, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(2):101–5
The Prognostic Scale by Strauss and Carpenter and its validity. Händel M, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(4):203–8
A search for association between schizophrenia and dopamine–related alleles. Jönsson E, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(6):297–304
Event–related potential P300 microstate topography during visual one– and two–dimensional tasks in chronic schizophrenics. Kochi K, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(6):288–96
Neurological soft signs in schizophrenia: assessment and correlates. Mohr F, et al.
Eur Arch Psychiatry Clin Neurosci 1996;246(5):240–8
Neurobiology of treatment–resistant schizophrenia: new insights and new models. Beerpoot LJ, et al.
Eur Neuropsychopharmacol 1996;6 Suppl 2:S27–34 (117 ref.)
The impact of managed care systems on relapse prevention and quality of life for patients with schizophrenia. Glazer WM. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S35–9
The ability to produce express saccades as a function of gap interval among schizophrenia patients. Clementz BA.
Exp Brain Res 1996 Sep;111(1):121–30
The effect of fixation condition manipulations on antisaccade performance in schizophrenia: studies of diagnostic specificity. McDowell JE, et al. **Exp Brain Res** 1997 Jun; 115(2):333–44
Nonverbal interactional behavior in the families of persons with schizophrenic and bipolar disorders. Simoneau TL, et al. **Fam Process** 1996 Mar;35(1):83–102
Two faces of cholecystokinin: anxiety and schizophrenia. Bourin M, et al. **Fundam Clin Pharmacol** 1996;10(2):116–26 (140 ref.)
Making sense of schizophrenia. Flaum M.
Hosp Pract (Off Ed) 1996 Nov 15;31(11):51–2, 55–6, 59–60 passim (7 ref.)
Neurocircuitries and neurotransmitter interactions in schizophrenia. Carlsson A. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:21–8 (42 ref.)
A self–rating to measure subjective effects of neuroleptic drugs, relationships to objective psychopathology, quality of life, compliance and other clinical variables. Naber D.
Int Clin Psychopharmacol 1995 Sep;10 Suppl 3:133–8
Noise in models of neurological and psychiatric disorders. Spitzer M, et al. **Int J Neural Syst** 1996 Sep;7(4):355–61 (44 ref.)
Head movements in schizophrenia: new biological marker, critical neurological flaw, or artifact of subvocalization? Olevitch BA, et al. **Int J Neurosci** 1996 Dec;88(3–4):249–60
Neuroanatomical bases of electrodermal hypo–responding: a cluster analytic study. Lencz T, et al.
Int J Psychophysiol 1996 Jun–Jul;22(3):141–53
The postimperative negative variation following ambiguous matching of auditory stimuli. Rockstroh B, et al.
Int J Psychophysiol 1997 Feb;25(2):155–67
Autonomic orienting and the allocation of processing resources in schizophrenia patients and putatively at–risk individuals. Hazlett EA, et al. **J Abnorm Psychol** 1997 May; 106(2):171–81
ERP assessment of visual and auditory language processing in schizophrenia. Niznikiewicz MA, et al.
J Abnorm Psychol 1997 Feb;106(1):85–94
Influence of object size on prehension in leukotomized and unleukotomized individuals with schizophrenia. Carnahan H, et al. **J Clin Exp Neuropsychol** 1996 Feb;18(1):136–47
The biological basis of schizophrenia: new directions. Weinberger DR. **J Clin Psychiatry** 1997;58 Suppl 10:22–7 (47 ref.)
Issues concerning relative speed of processing hypotheses, schizophrenic performance deficits, and prefrontal function: comment on Schooler et al. (1997) [comment] [see comments] Cohen JD, et al. **J Exp Psychol Gen** 1997 Mar;126(1):37–41 (21 ref.). Comment on: J Exp Psychol Gen 1997 Mar;126(1):19–36. Comment in: J Exp Psychol Gen 1997 Mar;126(1):42–4.
Stroop theory, memory, and prefrontal cortical functioning: reply to Cohen et al. (1997) [comment] Schooler C, et al. **J Exp Psychol Gen** 1997 Mar;126(1):42–4 (18 ref.). Comment on: J Exp Psychol Gen 1997 Mar;126(1):37–41.
ECG intervals in acute bipolar and schizophrenic relapse. el–Mallakh RS, et al. **J Ky Med Assoc** 1996 Dec; 94(12):526–8
The predictive value of P300–amplitudes in the course of schizophrenic disorders. Strik WK, et al.
J Neural Transm 1996;103(11):1351–9
The role of serotonin in the pathophysiology and treatment of schizophrenia. Abi–Dargham A, et al.
J Neuropsychiatry Clin Neurosci 1997 Winter;9(1):1–17 (243 ref.)
Dimensional complexity of EEG waveforms in neuroleptic–free schizophrenic patients and normal control subjects. Hoffmann RE, et al.
J Neuropsychiatry Clin Neurosci 1996 Fall;8(4):436–41
Pathophysiology of schizophrenia: dopamine hypothesis. Neylan TC. **J Neuropsychiatry Clin Neurosci** 1996 Spring; 8(2):222
Pattern of brain morphology in patients with schizophrenia and large cavum septi pellucidi. Nopoulos P, et al.
J Neuropsychiatry Clin Neurosci 1996 Spring;8(2):147–52
Temporal lobe perfusion asymmetries in schizophrenia. Russell JM, et al. **J Nucl Med** 1997 Apr;38(4):607–12
The role of stress and dopamine–GABA interactions in the vulnerability for schizophrenia. Benes FM.
J Psychiatr Res 1997 Mar–Apr;31(2):257–75 (105 ref.)
Absence of ketamine effects on memory and other cognitive functions in schizophrenia patients. LaPorte DJ, et al.
J Psychiatr Res 1996 Sep–Oct;30(5):321–30
The effect of laterality of stimulus presentation on auditory P300 topography in schizophrenia. Bolsche F, et al.
J Psychiatry Neurosci 1996 Mar;21(2):83–8
The role of estrogen in schizophrenia. Seeman MV.
J Psychiatry Neurosci 1996 Mar;21(2):123–7
Perspectives on the role of serotonergic mechanisms in the pharmacology of schizophrenia. Busatto GF, et al.
J Psychopharmacol (Oxf) 1997;11(1):3–12 (127 ref.)
Dopamine, the prefrontal cortex and schizophrenia. Knable MB, et al. **J Psychopharmacol (Oxf)** 1997;11(2):123–31 (180 ref.)
Schizophrenia: how should we look at it? Miller AL, et al.
J Psychopharmacol (Oxf) 1997;11(1):21–3; discussion 28
Perspectives on the role of serotonergic mechanisms in the pharmacology of schizophrenia [letter] Seibyl JP.
J Psychopharmacol (Oxf) 1997;11(2):188–9
Hypofrontality in schizophrenia: distributed dysfunctional circuits in neuroleptic–naïve patients. Andreasen NC, et al. **Lancet** 1997 Jun 14;349(9067):1730–4
Correlation of positive symptoms exclusively to hyperperfusion or hypoperfusion of cerebral cortex in never–treated schizophrenics. Sabri O, et al. **Lancet** 1997 Jun 14;349(9067):1735–9
Neural network simulations, cortical connectivity, and schizophrenic psychosis. Hoffman RE. **MD Comput** 1997 May–Jun;14(3):200–8
The alpha rhythm in the electroencephalogram: a theory based on a neurophysiological model. Johannisson T, et al. **Med Hypotheses** 1996 Jun;46(6):557–61
Biophysical shunt theory for neuropsychopathology. Part II: Neuronal network miswiring. Naisberg Y, et al.
Med Hypotheses 1996 Jun;46(6):517–21
Repetitive and non–repetitive violent offending behaviour in male patients in a maximum security mental hospital—clinical and neuroimaging findings. Wong M, et al. **Med Sci Law** 1997 Apr;37(2):150–60
Glutamate receptors and schizophrenia: opportunities and caveats [news;comment] Javitt DC. **Mol Psychiatry** 1996 Mar;1(1):16–7. Comment on: Mol Psychiatry 1996 Mar;1(1):41–53.
Possible role of dopamine D1 receptors in schizophrenia [news] Okubo Y, et al. **Mol Psychiatry** 1997 Jul;2(4):291–2
Functional neuroimaging of hallucinations in schizophrenia: toward an integration of bottom–up and top–down approaches. Silbersweig D, et al. **Mol Psychiatry** 1996 Nov; 1(5):367–75 (100 ref.)
Schizophrenia. The price of language? [news] Maddox J.
Nature 1997 Jul 31;388(6641):424–5
Compensatory mechanisms in an attractor neural network model of schizophrenia. Horn D, et al. **Neural Comput** 1995 Jan;7(1):182–205
Attentional mechanisms of saccadic eye movements in schizophrenia. Evans WJ, et al.
Neuropsychiatry Neuropsychol Behav Neurol 1997 Jan; 10(1):17–24
Impairment of inhibition of unattended stimuli in schizophrenic patients: event–related potential correlates during selective attention. Iwanami A, et al.
Neuropsychobiology 1996;34(2):57–62
Ocular–motor delayed–response task performance among schizophrenia patients. McDowell JE, et al.
Neuropsychobiology 1996;34(2):67–71
Platelet 5–HT levels and hypothalamic–pituitary–adrenal axis activity in schizophrenic patients with positive and negative symptoms. Pivac N, et al. **Neuropsychobiology** 1997; 36(1):19–21
Spectral analysis of P300 generation in depression and schizophrenia. Röschke J, et al. **Neuropsychobiology** 1997; 35(2):108–14
Are low P300 amplitudes a marker for schizophrenia [letter; comment] Strik WK. **Neuropsychobiology** 1996;33(3):168. Comment on: Neuropsychobiology 1995;32(3):171–4.
Auditory information processing in schizophrenia. Van Sweden B, et al. **Neuropsychobiology** 1997;35(4):191–6
The selective breakdown of frontal functions in patients with obsessive–compulsive disorder and in patients with schizophrenia: a double dissociation experimental finding. Abbruzzese M, et al. **Neuropsychologia** 1997 Jun; 35(6):907–12
Is it possible to be schizophrenic yet neuropsychologically normal? Palmer BW, et al. **Neuropsychology** 1997 Jul; 11(3):437–46
Linking the family of D2 receptors to neuronal circuits in human brain: insights into schizophrenia. Joyce JN, et al.
Neuropsychopharmacology 1997 Jun;16(6):375–84 (78 ref.)
1192U90 in animal tests that predict antipsychotic efficacy, anxiolysis, and extrapyramidal side effects. Rigdon GC, et al. **Neuropsychopharmacology** 1996 Sep;15(3):231–42
A left temporal lobe impairment of auditory information processing in schizophrenia: an event–related potential study. Schall U, et al. **Neurosci Lett** 1997 Jun 20;229(1):25–8
Towards a cannabinoid hypothesis of schizophrenia: cognitive impairments due to dysregulation of the endogenous cannabinoid system. Emrich HM, et al.
Pharmacol Biochem Behav 1997 Apr;56(4):803–7
Improvement of cognitive function in schizophrenic patients receiving clozapine or zotepine: results from a double–blind study. Meyer–Lindenberg A, et al. **Pharmacopsychiatry** 1997 Mar;30(2):35–42
The neurobiology of schizophrenia. Littrell RA, et al.
Pharmacotherapy 1996 Nov–Dec;16(6 Pt 2):143S–147S; discussion 166S–168S (19 ref.)
A computational approach to prefrontal cortex, cognitive control and schizophrenia: recent developments and current challenges. Cohen JD, et al.
Philos Trans R Soc Lond B Biol Sci 1996 Oct 29; 351(1346):1515–27 (80 ref.)
Prefrontal function in schizophrenia: confounds and controversies. Weinberger DR, et al.
Philos Trans R Soc Lond B Biol Sci 1996 Oct 29; 351(1346):1495–503 (73 ref.)
Role of cortical N–methyl–D–aspartate receptors in auditory sensory memory and mismatch negativity generation: implications for schizophrenia. Javitt DC, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11962–7
Arousal and locomotion: from schizophrenia to narcolepsy. Garcia–Rill E, et al. **Prog Brain Res** 1996;107:417–34 (73 ref.)
The niacin challenge test in schizophrenia: past, present and future. Lin A, et al.
Prostaglandins Leukot Essent Fatty Acids 1996 Aug; 55(1–2):17–9 (15 ref.)
Investigating the role of lipids in mood, aggression, and schizophrenia. Hillbrand M, et al. **Psychiatr Serv** 1997 Jul; 48(7):875–6, 882
Age at illness onset and left temporal lobe length in males with schizophrenia. Bartzokis G, et al. **Psychiatry Res** 1996 Oct 7;67(3):189–201
Confirmation of reduced temporal limbic structure volume on magnetic resonance imaging in male patients with schizophrenia [published erratum appears in Psychiatry Res 1997 May 16;74(2):127–8] Becker T, et al.
Psychiatry Res 1996 Jul 31;67(2):135–43
Bilateral transfer deficit in schizophrenia: a trait marker. Biswas AK, et al. **Psychiatry Res** 1996 Sep 27;64(2):115–20
Perceptual and attentional asymmetries in schizophrenia: further evidence for a left hemisphere deficit. Carter CS, et al. **Psychiatry Res** 1996 May 17;62(2):111–9
Spatial relationships of neuroanatomic landmarks in schizophrenia. DeQuardo JR, et al. **Psychiatry Res** 1996 May 31;67(1):81–95
Effects of P50 temporal variability on sensory gating in schizophrenia. Jin Y, et al. **Psychiatry Res** 1997 May 5; 70(2):71–81
Regional cerebral blood flow in patients with schizophrenia: relevance to symptom structures. Kawasaki Y, et al.
Psychiatry Res 1996 May 31;67(1):49–58
Schizophrenia and neurological soft signs: gender differences in clinical correlates and antecedent factors. Lane A, et al. **Psychiatry Res** 1996 Sep 27;64(2):105–14
Functional asymmetries in schizophrenia and their relationship to cognitive performance. Sakuma M, et al.
Psychiatry Res 1996 Nov 1;65(1):1–13
A fuzzy clustering approach to study the auditory P50 component in schizophrenia. Zouridakis G, et al.
Psychiatry Res 1997 Mar 24;69(2–3):169–81
Assessment of the dysexecutive syndrome in schizophrenia. Evans JJ, et al. **Psychol Med** 1997 May;27(3):635–46
What voices can do with words: pragmatics of verbal hallucinations. Leudar I, et al. **Psychol Med** 1997 Jul; 27(4):885–98
Disordered functional connectivity in schizophrenia [editorial] McGuire PK, et al. **Psychol Med** 1996 Jul; 26(4):663–7
Cognitive factors in source monitoring and auditory hallucinations. Morrison AP, et al. **Psychol Med** 1997 May; 27(3):669–79
Correlation of auditory 'oddball' P300 with verbal memory deficits in schizophrenia. Shajahan PM, et al.
Psychol Med 1997 May;27(3):579–86
Brain activation during an auditory 'oddball task' in schizophrenia measured by single photon emission tomography. Shajahan PM, et al. **Psychol Med** 1997 May; 27(3):587–94
Insight and cognitive deficits in schizophrenia: evidence for a curvilinear relationship. Startup M. **Psychol Med** 1996 Nov;26(6):1277–81
The relationship between smooth pursuit performance, motion perception and sustained visual attention in patients with schizophrenia and normal controls. Stuve TA, et al.
Psychol Med 1997 Jan;27(1):143–52
Magnetoencephalographic assessment of spontaneous brain activity in schizophrenia. Cañive JM, et al.
Psychopharmacol Bull 1996;32(4):741–50
Gender, estrogen, and schizophrenia. Lindamer LA, et al.
Psychopharmacol Bull 1997;33(2):221–8 (67 ref.)

Movements in never-medicated schizophrenics: a preliminary study. Fenn DS, et al. **Psychopharmacology (Berl)** 1996 Jan;123(2):206–10

Saccades to moving targets in schizophrenia: evidence for normal posterior cortex functioning. Clementz BA. **Psychophysiology** 1996 Nov;33(6):650–4

Characteristics of open- and closed-loop smooth pursuit responses among obsessive-compulsive disorder, schizophrenia, and nonpsychiatric individuals. Farber RH, et al. **Psychophysiology** 1997 Mar;34(2):157–62

Nicotinic receptor function in schizophrenia. Leonard S, et al. **Schizophr Bull** 1996;22(3):431–45 (101 ref.)

Functional disorganization of representations in schizophrenia. Plagnol A, et al. **Schizophr Bull** 1996; 22(2):383–98

A cognitive neuroscience view of schizophrenic thought disorder. Spitzer M. **Schizophr Bull** 1997;23(1):29–50 (110 ref.)

An in vivo proton magnetic resonance spectroscopy study of schizophrenia patients. Stanley JA, et al. **Schizophr Bull** 1996;22(4):597–609

Attentional vulnerability indicators in schizophrenia and bipolar disorder. Addington J, et al. **Schizophr Res** 1997 Feb 28;23(3):197–204

Bladder dysfunction in schizophrenia. Bonney WW, et al. **Schizophr Res** 1997 Jun 20;25(3):243–9

An investigation into movement planning and execution deficits in individuals with schizophrenia. Carnahan H, et al. **Schizophr Res** 1997 Feb 28;23(3):213–21

Neuropsychological evidence supporting a neurodevelopmental model of schizophrenia: a longitudinal study. Censits DM, et al. **Schizophr Res** 1997 Apr 11; 24(3):289–98

Decreased frontal cortical serotonin2A receptors in schizophrenia. Dean B, et al. **Schizophr Res** 1996 Sep 18; 21(3):133–9

Behavioral and P3 amplitude enhancement in schizophrenia following feedback training. Fukuda M, et al. **Schizophr Res** 1997 Jun 20;25(3):231–42

Exaggerated responsivity of brain dopaminergic system activity in schizophrenia: a preliminary finding of increased variance of plasma homovanillic acid level in a chronic patient [letter] Fukuda M, et al. **Schizophr Res** 1996 May; 20(1–2):241–4

Biological predictors of 1-year outcome in schizophrenia in males and females. Goldman M, et al. **Schizophr Res** 1996 Aug 23;21(2):65–73

Latent inhibition effects reflected in event-related brain potentials in healthy controls and schizophrenics. Guterman Y, et al. **Schizophr Res** 1996 Jul 5;20(3):315–26

Abnormalities of auditory evoked magnetic fields in the right hemisphere of schizophrenic females. Hajek M, et al. **Schizophr Res** 1997 Apr 11;24(3):329–32

Subcortical dysfunction in schizophrenia: a comparison with Parkinson's disease and Huntington's disease. Hanes KR, et al. **Schizophr Res** 1996 May;19(2–3):121–8

What influences social skills in patients with schizophrenia? Preliminary study using the role play test, WAIS-R and event-related potential. Ikebuchi E, et al. **Schizophr Res** 1996 Nov 15;22(2):143–50

Attention deficits assessed by Continuous Performance Test and Span of Apprehension Test in Japanese schizophrenic patients. Ito M, et al. **Schizophr Res** 1997 Feb 28; 23(3):205–11

Contingent negative variation (CNV) and determinants of the post-imperative negative variation (PINV) in schizophrenic patients and healthy controls. Klein C, et al. **Schizophr Res** 1996 Aug 23;21(2):97–110

Cognitive and symptom correlates of participation in social skills training groups. McKee M, et al. **Schizophr Res** 1997 Feb 28;23(3):223–9

Aggressive behaviour and platelet 3H-paroxetine binding in schizophrenia. Maguire K, et al. **Schizophr Res** 1997 Jan 17;23(1):61–7

Negative symptoms and EEG alpha in schizophrenia: a replication. Merrin EL, et al. **Schizophr Res** 1996 May; 19(2–3):151–61

Memory impairment in schizophrenia: its' relationship to executive function. Nathaniel-James DA, et al. **Schizophr Res** 1996 Aug 23;21(2):85–96

Cortical gyral anatomy and gross brain dimensions in monozygotic twins discordant for schizophrenia. Noga JT, et al. **Schizophr Res** 1996 Oct 18;22(1):27–40

Developmental insanity or dementia praecox: was the wrong concept adopted? O'Connell P, et al. **Schizophr Res** 1997 Feb 7;23(2):97–106 (108 ref.)

Stroop interference and facilitation in the cerebral hemispheres in schizophrenia. Phillips ML, et al. **Schizophr Res** 1996 May;20(1–2):57–68

The impact of oestradiol on ages at onset in schizophrenia reevaluated through Klinefelter syndrome [letter] Pinabel F, et al. **Schizophr Res** 1997 Feb 28;23(3):269–70 (5 ref.)

The relationship between urine excretion and biogenic amines and their metabolites in cerebrospinal fluid of schizophrenic patients [published erratum appears in Schizophr Res 1996 Dec 15;22(3):267] Prell GD, et al. **Schizophr Res** 1996 May; 19(2–3):171–6

Dissociation of W/REM/NREM states may cause psychotic symptoms [letter] Saucerman SA. **Schizophr Res** 1997 Jun 20;25(3):261–3

Oxidative reactions and schizophrenia: a review-discussion. Smythies JR. **Schizophr Res** 1997 Apr 11;24(3):357–64 (88 ref.)

Inter-hemispheric conflict theory of mind for schizophrenia [letter] Thomas JB. **Schizophr Res** 1997 May 3;25(1):79

Somatic symptoms in schizophrenia [letter] Tyler M. **Schizophr Res** 1995 Dec;18(1):87–8

Ultrastructural alterations of synaptic contacts and astrocytes in postmortem caudate nucleus of schizophrenic patients [letter] Uranova NA, et al. **Schizophr Res** 1996 Oct 18; 22(1):81–3

Developmental trajectory and disease progression in schizophrenia: the conundrum, and insights from a 12-year prospective study in the Monaghan 101. Waddington JL, et al. **Schizophr Res** 1997 Feb 7;23(2):107–18 (141 ref.)

Differential pathophysiological mechanisms of reduced P300 amplitude in schizophrenia and depression: a single trial analysis. Wagner P, et al. **Schizophr Res** 1997 Jun 20; 25(3):221–9

Neurocognitive deficits and neurological signs in schizophrenia. Wong AH, et al. **Schizophr Res** 1997 Feb 7;23(2):139–46

Corpus callosum size and inter-hemispheric function in schizophrenia. Woodruff PW, et al. **Schizophr Res** 1997 Feb 28;23(3):189–96

Linking mind and brain in the study of mental illnesses: a project for a scientific psychopathology. Andreasen NC. **Science** 1997 Mar 14;275(5306):1586–93 (55 ref.)

Mixture models for eye-tracking data: a case study. Pauler DK, et al. **Stat Med** 1996 Jul 15;15(13):1365–76

Differential distribution of tyrosine hydroxylase fibers on small and large neurons in layer II of anterior cingulate cortex of schizophrenic brain. Benes FM, et al. **Synapse** 1997 Jan;25(1):80–92

Schizophrenia as failure of hemispheric dominance for language. Crow TJ. **Trends Neurosci** 1997 Aug; 20(8):339–43 (67 ref.)

Glutamate receptors and schizophrenia [letter; comment] Ishimaru M, et al. **Trends Neurosci** 1996 Oct;19(10):416–7 . Comment on: Trends Neurosci 1996 May;19(5):171–6.

[Schizophrenia and the corpus callosum: morphologic and functional approach] Antoni F, et al. **Encephale** 1996 Oct; 22 Spec No 3:33–8 (47 ref.) **(Fre)**

[Schizophrenia: receptors and clinical aspects] Azorin JM. **Encephale** 1997 Apr;23 Spec No 2:17–9 (9 ref.) (Eng. Abstr.) **(Fre)**

[Electrophysiologic studies] Bougerol T. **Encephale** 1996 Oct; 22 Spec No 3:13–7 (61 ref.) **(Fre)**

[Dopamine D2 and serotonin 5HT2 receptors: functions, interactions and clinical consequences in schizophrenia] Guise S, et al. **Encephale** 1997 Apr;23 Spec No 2:10–6 (20 ref.) (Eng. Abstr.) **(Fre)**

[Brain imaging in schizophrenic psychoses] Martinot JL. **Encephale** 1996 Oct;22 Spec No 3:18–24; discussion 25–6 **(Fre)**

[Neurodevelopmental models of schizophrenia] Verdoux H. **Encephale** 1996 Oct;22 Spec No 3:85–90 (56 ref.) **(Fre)**

[Synaptogenesis and synaptic pruning: role in triggering schizophrenia] Granger B. **Presse Med** 1996 Nov 2; 25(33):1595–8 (25 ref.) (Eng. Abstr.) **(Fre)**

[Analysis of reaction time in post-acute schizophrenia using electrophysiologic variables] Eichert V, et al. **Fortschr Neurol Psychiatr** 1996 Jul;64(7):261–70 (Eng. Abstr.) **(Ger)**

[Intercorrelation of psychopathological, morphologic, neurophysiologic an psychometric parameters in schizophrenic patients] Pester U, et al. **Fortschr Neurol Psychiatr** 1997 Jul;65(7):297–303 (Eng. Abstr.) **(Ger)**

[Event-related potentials in semantic speech processing by schizophrenic patients] Spitzer M, et al. **Nervenarzt** 1997 Mar;68(3):212–25 (Eng. Abstr.) **(Ger)**

[Microhemodynamics and energy metabolism in schizophrenia patients] Kut'ko II, et al. **Lik Sprava** 1997 Jan–Feb;(1):61–5 (Eng. Abstr.) **(Rus)**

[Neuroimaging and fundamental symptoms in schizophrenia] Lopez-Ibor MI, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jan–Feb;24(1):25–8 (30 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Relapse and rehospitalization during maintenance treatment of schizophrenia. The effects of dose reduction and family treatment. Schooler NR, et al. **Arch Gen Psychiatry** 1997 May;54(5):453–63

Early detection and intervention for initial episodes of schizophrenia. Falloon IR, et al. **Schizophr Bull** 1996; 22(2):271–82

Early detection and intervention in schizophrenia: editor's introduction. McGlashan TH. **Schizophr Bull** 1996; 22(2):197–9

Monitoring and care of young people at incipient risk of psychosis. Yung AR, et al. **Schizophr Bull** 1996; 22(2):283–303 (83 ref.)

[Risk factor assessment and prevention of psychoses (letter; comment)] Timmerman L. **Ned Tijdschr Geneeskd** 1996 Aug 31;140(35):1783. Comment on: Ned Tijdschr Geneeskd 1996 Jun 22;140(25):1295–9. **(Dut)**

PSYCHOLOGY see SCHIZOPHRENIC PSYCHOLOGY

RADIOGRAPHY

Morphology according to cranial computed tomography of first-episode cycloid psychosis and its long-term-course: differences compared to schizophrenia. Höffler J, et al. **Acta Psychiatr Scand** 1997 Sep;96(3):184–7

Obstetric complications and age-related changes in brain morphology in schizophrenia. Smith GN, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1200–8

Ventricular enlargement associated with linkage marker for schizophrenia-related disorders in one pedigree. Shihabuddin L, et al. **Mol Psychiatry** 1996 Jul;1(3):215–22

[Correlation of neuropsychological tests and density of brain white matter in schizophrenia] Preiss J, et al. **Ceska Slov Psychiatr** 1996 Feb;92(1):3–17 (Eng. Abstr.) **(Cze)**

RADIONUCLIDE IMAGING

PET study of greater visual activation in schizophrenia. Taylor SF, et al. **Am J Psychiatry** 1997 Sep;154(9):1296–8

PET brain mapping study of auditory verbal supraspan memory versus visual fixation in schizophrenia. Ganguli R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):33–42

Limbic dysfunction in schizophrenia and mania. A study using 18F-labelled fluorodeoxyglucose and positron emission tomography. al-Mousawi AH, et al. **Br J Psychiatry** 1996 Oct;169(4):509–16

Multivariate cluster analysis of dynamic iodine-123 iodobenzamide SPET dopamine D2 receptor images in schizophrenia. Acton PD, et al. **Eur J Nucl Med** 1997 Feb; 24(2):111–8

Regional cerebral blood flow and negative/positive symptoms in 24 drug-naive schizophrenics. Sabri O, et al. **J Nucl Med** 1997 Feb;38(2):181–8

A single photon emission computed tomography scan study of striatal dopamine D2 receptor binding with 123I-epidepride in patients with schizophrenia and controls. Tibbo P, et al. **J Psychiatry Neurosci** 1997 Jan; 22(1):39–45

Correlational patterns of cerebral glucose metabolism in never-medicated schizophrenics. Katz M, et al. **Neuropsychobiology** 1996;33(1):1–11

In schizophrenia, some dopamine D2-like receptors are still elevated [letter; comment] Gjedde A, et al. **Psychiatry Res** 1996 Jul 31;67(2):159–62. Comment on: Psychiatry Res 1995 Aug 8;61(2):67–83.

Temporal lobe dysfunction and correlation of regional cerebral blood flow abnormalities with psychopathology in schizophrenia and major depression—a study with single photon emission computed tomography. Klemm E, et al. **Psychiatry Res** 1996 Nov 25;68(1):1–10

Striatal dopamine D2 receptor quantification and superior temporal gyrus: volume determination in 14 chronic schizophrenic subjects. Tune L, et al. **Psychiatry Res** 1996 Jul 31;67(2):155–8

Positron emission tomography in male violent offenders with schizophrenia. Wong MT, et al. **Psychiatry Res** 1997 Feb 7;68(2–3):111–23

Presynaptic dopaminergic function in the striatum of schizophrenic patients. Dao-Castellana MH, et al. **Schizophr Res** 1997 Feb 7;23(2):167–74

Wisconsin card sorting activated regional cerebral blood flow in first break and chronic schizophrenic patients and normal controls. Steinberg JL, et al. **Schizophr Res** 1996 May; 19(2–3):177–87

Cerebral blood flow activation and functional lesions in schizophrenia. Taylor SF. **Schizophr Res** 1996 May; 19(2–3):129–40 (42 ref.)

REHABILITATION

A new questionnaire assessing coping strategies in relatives of patients with schizophrenia: development and factor analysis. Magliano L, et al. **Acta Psychiatr Scand** 1996 Oct; 94(4):224–8

Clinical interpretation of "predictors of functional outcome among adolescents and young adults with psychotic disorders" [comment] Barrows C. **Am J Occup Ther** 1996 Mar;50(3):182–3. Comment on: Am J Occup Ther 1996 Mar;50(3):171–81.

Predictors of functional outcome among adolescents and young adults with psychotic disorders. Henry AD, et al. **Am J Occup Ther** 1996 Mar;50(3):171–81 (97 ref.)

Neurocognitive deficits in schizophrenia [letter; comment] Liberman RP. **Am J Psychiatry** 1997 Mar;154(3):443–4. Comment on: Am J Psychiatry 1996 Mar;153(3):321–30.

Family psychoeducational support groups in Spain: parents' distress and burden at none-month follow-up. Cañive JM, et al. **Ann Clin Psychiatry** 1996 Jun;8(2):71–9

Rooming-in: an alternative to involuntary detention. Richardson ME. **Aust N Z J Psychiatry** 1996 Apr; 30(2):263–9

Outcome of schizophrenia: the Madras longitudinal study. Thara R, et al. **Aust N Z J Psychiatry** 1996 Aug; 30(4):516–22

Improving schizophrenic in-patients' Wisconsin card-sorting performance. Nisbet H, et al. **Br J Clin Psychol** 1996 Nov; 35 (Pt 4):631–3

The impact of education groups for people with schizophrenia on social functioning and quality of life. Atkinson JM, et al. **Br J Psychiatry** 1996 Feb; 168(2):199–204

Quality of life as an evaluative measure in assessing the impact

of community care on people with long-term psychiatric disorders. Barry MM, et al. **Br J Psychiatry** 1996 Feb; 168(2):210–6

Likelihood of hospital discharge [letter; comment] Duffett R, et al. **Br J Psychiatry** 1996 Jun;168(6):791. Comment on: Br J Psychiatry 1995 Dec;167(6):760–4.

Monitoring psychosis in general practice: a controlled trial. Nazareth I, et al. **Br J Psychiatry** 1996 Oct;169(4):475–82

Readiness to stop smoking in schizophrenia. Addington J, et al. **Can J Psychiatry** 1997 Feb;42(1):49–52

The varied outcomes of schizophrenia. Davidson L, et al. **Can J Psychiatry** 1997 Feb;42(1):34–43 (118 ref.)

Couples communication skills training for schizophrenia [letter] Greer LA, et al. **Can J Psychiatry** 1997 Aug; 42(6):666–7

What do epidemiologists and psychopharmacologists have in common? [editorial; comment] Seeman MV. **Can J Psychiatry** 1997 Mar;42(2):131–2. Comment on: Can J Psychiatry 1997 Mar;42(2):139–51. Comment on: Can J Psychiatry 1997 Mar;42(2):152–63.

Improving the management of patients with schizophrenia in primary care: assessing learning needs as a first step. Toews J, et al. **Can J Psychiatry** 1996 Dec;41(10):617–22

Consumer satisfaction with CMHC services. Sullivan G, et al. **Community Ment Health J** 1997 Apr;33(2):123–31

Patient dynamics in early stages of vocational rehabilitation: a pilot study. Hoffmann H, et al. **Compr Psychiatry** 1996 May–Jun;37(3):216–21

Social networks and service utilisation in patients with severe mental illness. Becker T, et al. **Epidemiol Psichiatr Soc** 1997 Jan–Apr;6(1 Suppl):113–25

Assessment of needs for care among patients with schizophrenic disorders 15 and 17 years after first onset of psychosis. Wiersma D, et al. **Epidemiol Psichiatr Soc** 1997 Jan–Apr;6(1 Suppl):21–8

Predictors of clinical and social outcomes after hospitalization in schizophrenia. Menezes PR, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):137–45

Using the rehab scale in a Greek context. Zissi A, et al. **Int J Rehabil Res** 1997 Jun;20(2):183–8

Electrodermal activity and social network as predictors of outcome of episodes in schizophrenia. Hultman CM, et al. **J Abnorm Psychol** 1996 Nov;105(4):626–36

The impact of service characteristics on functional outcomes from community support programs for persons with schizophrenia: a growth curve analysis. Brekke JS, et al. **J Consult Clin Psychol** 1997 Jun;65(3):464–75

My quest for inner peace. Buchanan D. **J Psychosoc Nurs Ment Health Serv** 1996 Sep;34(9):32

Blending two realities into a unique perspective [interview by Shirley A. Smoyak] Deegan P. **J Psychosoc Nurs Ment Health Serv** 1996 Sep;34(9):39–46

Overcoming schizophrenia [interview by Shirley A. Smoyak] Fisher DB. **J Psychosoc Nurs Ment Health Serv** 1996 Sep; 34(9):33–8

Working with the patient with a chronic mental impairment: An activity group approach [see comments] Smith MK, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Feb; 34(2):27–30. Comment in: J Psychosoc Nurs Ment Health Serv 1996 May;34(5):8.

Ethnic differences in the treatment of dual mental and substance disorders. A preliminary analysis. Jerrell JM, et al. **J Subst Abuse Treat** 1997 Mar–Apr;14(2):133–40

A modified therapeutic community for the dually diagnosed. Greenhouse Program at Bellevue Hospital. Westreich L, et al. **J Subst Abuse Treat** 1996 Nov–Dec;13(6):533–6

Schizophrenia, psychiatric rehabilitation, and healthy development: a theoretical framework. Starkey D, et al. **Psychiatr Q** 1997 Summer;68(2):155–66

Length of inpatient stay and recidivism among patients with schizophrenia. Appleby L, et al. **Psychiatr Serv** 1996 Sep; 47(9):985–90

Lack of insight among outpatients with schizophrenia. Dickerson FB, et al. **Psychiatr Serv** 1997 Feb;48(2):195–9

Rehab rounds. Long-term support and social skills training for patients with schizophrenia. Dobson D. **Psychiatr Serv** 1996 Nov;47(11):1195–6, 1199

The individual placement and support model of supported employment. Drake RE, et al. **Psychiatr Serv** 1996 May; 47(5):473–5

Long-term impact of clozapine and psychosocial treatment on psychiatric symptoms and cognitive functioning. Grace J, et al. **Psychiatr Serv** 1996 Jan;47(1):41–5

Effects of training in psychosocial interventions for community psychiatric nurses in England. Lancashire S, et al. **Psychiatr Serv** 1997 Jan;48(1):39–41

Quality of life of long-stay patients discharged from two psychiatric institutions. Leff J, et al. **Psychiatr Serv** 1996 Jan;47(1):62–7

A comparison of two levels of family-aided assertive community treatment. McFarlane WR, et al. **Psychiatr Serv** 1996 Jul;47(7):744–50

The importance of ward atmosphere in inpatient treatment of schizophrenia on short-term units. Melle I, et al. **Psychiatr Serv** 1996 Jul;47(7):721–6

Effectiveness of clozapine and a social learning program for severely disabled psychiatric inpatients. Menditto AA, et al. **Psychiatr Serv** 1996 Jan;47(1):46–51

Medication noncompliance and substance abuse among patients with schizophrenia. Owen RR, et al. **Psychiatr Serv** 1996 Aug;47(8):853–8

Outcome of patients after reform in Italy [letter] Pariante CM, et al. **Psychiatr Serv** 1996 Nov;47(11):1266–7

Ten-year use of hospital-based services by geriatric veterans with schizophrenia and bipolar disorder. Sajatovic M, et al. **Psychiatr Serv** 1996 Sep;47(9):961–5

Monetary reinforcement of abstinence from cocaine among mentally ill patients with cocaine dependence. Shaner A, et al. **Psychiatr Serv** 1997 Jun;48(6):807–10

Training hospitalized patients with schizophrenia in community reintegration skills. Smith TE, et al. **Psychiatr Serv** 1996 Oct;47(10):1099–103

Psychiatric survivors and nonsurvivors [editorial] [see comments] Torrey EF. **Psychiatr Serv** 1997 Feb;48(2):143 . Comment in: Psychiatr Serv 1997 May;48(5):601; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):601–2; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):602; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):602–3; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):603; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):603–4; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):604; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):604–5; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):605; discussion 605.

Studies on relapse, course and outcome of schizophrenia in Japan. Utena H. **Psychiatry Clin Neurosci** 1996 Apr; 50(2):45–9 (45 ref.)

Profiles of subjective quality of life in schizophrenic in- and out-patient samples. Kaiser W, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):153–66

Difficult to place patients in a psychiatric hospital closure programme: the TAPs project 24. Trieman N, et al. **Psychol Med** 1996 Jul;26(4):765–74

Relationships between social support, social coping and life events in the relapse of schizophrenic patients. Hultman CM, et al. **Scand J Psychol** 1997 Mar;38(1):3–13

First person account: schizophrenia. Bayley R. **Schizophr Bull** 1996;22(4):727–9

Neuropsychological and psychophysiological correlates of psychosocial functioning in schizophrenia. Brekke JS, et al. **Schizophr Bull** 1997;23(1):19–28

Social-Adaptive Functioning Evaluation (SAFE): a rating scale for geriatric psychiatric patients. Harvey PD, et al. **Schizophr Bull** 1997;23(1):131–45

Time use of unemployed and employed single male schizophrenia subjects. Hayes RL, et al. **Schizophr Bull** 1996;22(4):659–69

Relationships between social competence, psychopathology and work performance and their predictive value for vocational rehabilitation of schizophrenic outpatients. Hoffmann H, et al. **Schizophr Res** 1997 Jan 17;23(1):69–79

Cognitive and symptom correlates of participation in social skills training groups. McKee M, et al. **Schizophr Res** 1997 Feb 28;23(3):223–9

Depressive symptoms in acute schizophrenic inpatients. Nakaya M, et al. **Schizophr Res** 1997 May 24;25(2):131–9

The relationship of social cognition to ward behavior in chronic schizophrenia. Penn DL, et al. **Schizophr Res** 1996 Jul 5;20(3):327–35

TAPS project 28: does reprovision benefit elderly long-stay mental patients? Trieman N, et al. **Schizophr Res** 1996 Sep 18;21(3):199–208

Long-term follow-up of schizophrenia in 16 countries. A description of the International Study of Schizophrenia conducted by the World Health Organization. Sartorius N, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Sep; 31(5):249–58

[Exclusion and very long term hospitalization: social and institutional environment] Fraysse P, et al. **Encephale** 1996 Oct;22 Spec No 3:53–6 **(Fre)**

[Multi-referential approach to schizophrenia in daily institutional management] Hayat M. **Encephale** 1996 Oct; 22 Spec No 3:80–1 **(Fre)**

[Comprehensive clinical management of the schizophrenic patient] Lagardère B, et al. **Encephale** 1996 Oct;22 Spec No 3:60–2 **(Fre)**

[A training program for coping with maladaptive emotions of schizophrenic patients. Initial results and experiences] Hodel B, et al. **Nervenarzt** 1996 Jul;67(7):564–71 (Eng. Abstr.) **(Ger)**

[Attitude to schizophrenia: a survey of male and female journalists] Finzen A, et al. **Psychiatr Prax** 1996 Nov; 23(6):294–5 (Eng. Abstr.) **(Ger)**

[Quality of life for schizophrenic patients--that is.... Results of a survey of psychiatrists] Holzinger A, et al. **Psychiatr Prax** 1997 Mar;24(2):61–4 (Eng. Abstr.) **(Ger)**

[Non-compliance and lack of indications for depot treatment as reasons for exclusion from adequate prevention of recurrence] Jakobitsch A, et al. **Psychiatr Prax** 1996 Sep; 23(5):236–9 (Eng. Abstr.) **(Ger)**

[Psychotherapeutic sequence in treatment of chronic schizophrenic patients] Longinus B. **Psychiatr Prax** 1997 May;24(3):153 **(Ger)**

[The social status of schizophrenic patients during the course of 8 years catamnesis and significance of relatives for psychosocial integration] Mönking HS, et al. **Psychiatr Prax** 1996 Nov;23(6):282–4 (Eng. Abstr.) **(Ger)**

[Social integration of patients of a long-term institution] Mönking HS, et al. **Psychiatr Prax** 1997 Jan;24(1):32–6 (Eng. Abstr.) **(Ger)**

[Family meetings] Ostermann J, et al. **Psychiatr Prax** 1996 Nov;23(6):279–81 **(Ger)**

[Family group in schizophrenic diseases. Overview, personal concept and report of experiences] Pott W. **Psychiatr Prax** 1996 Sep;23(5):219–25 (36 ref.) (Eng. Abstr.) **(Ger)**

[A program for the rehabilitation of mentally ill students] Reker T, et al. **Psychiatr Prax** 1997 May;24(3):138–42 (Eng. Abstr.) **(Ger)**

[A schizophrenic patient in a therapy group] Schröder A, et al. **Psychiatr Prax** 1996 Nov;23(6):302 **(Ger)**

[Self determination of patients in social psychiatric practice. A medical ethics model and its practical application] Vollmann J. **Psychiatr Prax** 1997 Jul;24(4):181–4 (Eng. Abstr.) **(Ger)**

[Quality of life and daily coping of chronic schizophrenic patients. Results of a qualitative pilot study] Kühn A, et al. **Psychother Psychosom Med Psychol** 1997 Feb; 47(2):64–71 (Eng. Abstr.) **(Ger)**

[Positive role of family in coping with schizophrenic illness] Waldner P, et al. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):276–81 (30 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Reduction of hyponatremia in a schizophrenic with polydipsia–hyponatremia syndrome by surgical intervention. Itoh N, et al. **Psychiatry Res** 1997 May 5; 70(2):125–9

THERAPY

Schizophrenia: a study comparing a family therapy group following a paradoxical model plus psychodrugs and a group treated by the conventional clinical approach. De Giacomo P, et al. **Acta Psychiatr Scand** 1997 Mar; 95(3):183–8

Recovery and insight in schizophrenia. Jørgensen P. **Acta Psychiatr Scand** 1995 Dec;92(6):436–40

Parental communication deviance: its stability and the effect of family treatment in recent-onset schizophrenia. Nugter MA, et al. **Acta Psychiatr Scand** 1997 Mar;95(3):199–204

APA practice guideline for the treatment of patients with schizophrenia. Rose VL. **Am Fam Physician** 1997 Sep 15; 56(4):1217–20

Practice guideline for the treatment of patients with schizophrenia. American Psychiatric Association. **Am J Psychiatry** 1997 Apr;154(4 Suppl):1–63

Comparison of efficacy of social skills training for deficit and nondeficit negative symptoms in schizophrenia. Kopelowicz A, et al. **Am J Psychiatry** 1997 Mar; 154(3):424–5

Two-year outcome of social skills training and group psychotherapy for outpatients with schizophrenia. Marder SR, et al. **Am J Psychiatry** 1996 Dec;153(12):1585–92

Economic reforms and the acute inpatient care of patients with schizophrenia: the Chinese experience. Phillips MR, et al. **Am J Psychiatry** 1997 Sep;154(9):1228–34

Diagnosis, treatment, and six-month outcome status in first-admission psychosis. Craig TJ, et al. **Ann Clin Psychiatry** 1997 Jun;9(2):89–97

Managing the care of schizophrenia. Lessons from a 4-year Massachusetts Medicaid study. Dickey B, et al. **Arch Gen Psychiatry** 1996 Oct;53(10):945–52

Prediction of compliance with outpatient referral in patients with schizophrenia and psychoactive substance use disorders [see comments] Miner CR, et al. **Arch Gen Psychiatry** 1997 Aug;54(8):706–12. Comment in: Arch Gen Psychiatry 1997 Aug;54(8):691–4.

Cognitive theory applied to the treatment of delusions of schizophrenia. Jensen LH, et al. **Arch Psychiatr Nurs** 1996 Dec;10(6):335–41 (23 ref.)

Transcranial magnetic stimulation as therapy for depression and other disorders. Kirkcaldie MT, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):264–72

Characteristics of the new long-stay population in an inner Melbourne acute psychiatric hospital. Richards J, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):488–95

Advances in the treatment of schizophrenia. Kuperberg GR, et al. **Br J Clin Pract** 1996 Sep;50(6):315–23 (190 ref.)

The experience of caring for former long-stay psychiatric patients. McGilloway S, et al. **Br J Clin Psychol** 1997 Feb; 36 (Pt 1):149–51

The primary care of patients with schizophrenia: a search for good practice. Burns T, et al. **Br J Gen Pract** 1997 Aug;47(421):515–20 (92 ref.)

Early intervention in schizophrenia [editorial] Birchwood M, et al. **Br J Psychiatry** 1997 Jan;170:2–5

Fighting schizophrenia and its stigma. A new World Psychiatric Association educational programme [editorial] Sartorius N. **Br J Psychiatry** 1997 Apr;170:297

The management of difficult to treat patients with schizophrenia, using non-drug therapies. Kuipers E. **Br J Psychiatry Suppl** 1996 Dec;(31):41–51 (100 ref.)

Contemporary treatment of schizophrenia. Munich RL. **Bull Menninger Clin** 1997 Spring;61(2):189–221

Electroconvulsive therapy for a schizophrenic patient with burns in the critical care centre. Mashimo K, et al. **Burns** 1997 Feb;23(1):85–6

The 'psychic surgeon' and the schizophrenic patient: crisis in a 'medicodrama'. Lieban RW. **Cult Med Psychiatry** 1996 Sep;20(3):291–311

Proper psychosocial rehabilitation for stabilised patients with schizophrenia: the role of new therapies. Peuskens J. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S7–12

Patients' subjective experiences on antipsychotic medications: implications for outcome and quality of life. Awad AG, et al. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:123–32 (46 ref.)
Conclusions and treatment recommendations for the acute episode in schizophrenia. Gaebel W, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:93–100 (75 ref.)
Psycho-education and family treatment related to the phase of a psychotic disorder. Goldstein MJ. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:77–83 (21 ref.)
Integration of family and drug treatment strategies in the treatment of schizophrenia: a selective review. Schooler NR. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:73–80 (31 ref.)
Group therapy for schizophrenia: combining and expanding the psychoeducational model with supportive psychotherapy. Nightingale LC, et al. **Int J Group Psychother** 1996 Oct;46(4):517–33
Group therapy on state hospital chronic wards: some guidelines. Sultenfuss J, et al. **Int J Group Psychother** 1996 Apr;46(2):163–76
Schizophrenia, perception, and empathy. Cohen MC. **J Am Acad Psychoanal** 1995 Winter;23(4):603–17
Communicating with the schizophrenic superego. Levin R. **J Am Acad Psychoanal** 1996 Winter;24(4):709–36
The behavioral treatment of auditory hallucinatory responding of a schizophrenic patient. Jimenez JM, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):299–310
Continuation electroconvulsive therapy in schizophrenia: a pilot study. Chanpattana W. **J Med Assoc Thai** 1997 May; 80(5):311–8
Neural network based on adaptive resonance theory as compared to experts in suggesting treatment for schizophrenic and unipolar depressed in-patients. Modai I, et al. **J Med Syst** 1996 Dec;20(6):403–12
Mitigating engulfment: recovering from a first episode of psychosis. McCay E, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Nov;34(11):40–4
Cognitive-behavioral treatment of panic attacks in chronic schizophrenia. Arlow PB, et al. **J Psychother Pract Res** 1997 Spring;6(2):145–50
The search for functionality: the role of the environment in the development and maintenance of psychopathological symptoms. Brierley-Bowers P. **Md Med J** 1997 Apr; 46(4):187–9
The role of the general practitioner in the treatment of schizophrenia: specific issues [see comments] Carr VJ. **Med J Aust** 1997 Feb 3;166(3):143–6 (25 ref.). Comment in: Med J Aust 1997 Feb 3;166(3):117–8.
The role of the general practitioner in the treatment of schizophrenia: general principles. Carr VJ. **Med J Aust** 1997 Jan 20;166(2):91–4 (34 ref.)
Schizophrenia: a tameable tiger? Miller R. **N Z Med J** 1997 Aug 8;110(1049):283–5
Compliance, quality management and standards in the treatment of schizophrenia. Kissling W. **Neuropsychobiology** 1997;35(2):70–2
Treatment of comorbid schizophrenia and substance abuse disorders. Hansell S. **New Dir Ment Health Serv** 1997 Spring;(73):65–73 (47 ref.)
Toward an integrated approach to the study of inpatient treatment of schizophrenia. Olfson M, et al. **New Dir Ment Health Serv** 1997 Spring;(73):25–38 (43 ref.)
Outcomes assessment: information for improving mental health care. Steinwachs DM, et al. **New Dir Ment Health Serv** 1996 Fall;(71):49–57
Slow magnetic stimulation of prefrontal cortex in depression and schizophrenia. Geller V, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan; 21(1):105–10
Taking issue with Taking Issue: "psychiatric survivors" reconsidered [letter; comment] Chiko B. **Psychiatr Serv** 1997 May;48(5):604; discussion 605. Comment on: Psychiatr Serv 1997 Feb;48(2):143.
The effectiveness of outpatient civil commitment. Munetz MR, et al. **Psychiatr Serv** 1996 Nov;47(11):1251–3
Dual diagnosis treatment for patients with schizophrenia who are substance dependent. Tsuang JW, et al. **Psychiatr Serv** 1997 Jul;48(7):887–9
New directions in the prevention and treatment of schizophrenia: a biological perspective. Wyatt RJ, et al. **Psychiatry** 1996 Winter;59(4):357–70 (90 ref.)
Effective electroconvulsive therapy for stupor in the high risk patient: a report of two cases. Mashimo K, et al. **Psychiatry Clin Neurosci** 1996 Jun;50(3):129–31
Effect of ECT treatment number on the ictal EEG. Krystal AD, et al. **Psychiatry Res** 1996 May 17;62(2):179–89
Post-hospitalization treatment adherence of schizophrenic patients: gender differences in skill acquisition. Smith TE, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):123–9
Three grades of subjective experiences in schizophrenia: their phenomenology and implications for initial treatment. Iwawaki A. **Psychopathology** 1997 Mar–Apr;30(2):83–8
Delusional repetitiveness--a peculiar form of delusional remembrance. Nakaya M. **Psychopathology** 1997;30(1):36–8
Clinical benefits of paid work activity in schizophrenia: 1-year followup. Bell MD, et al. **Schizophr Bull** 1997; 23(2):317–28
What do relatives of people with schizophrenia find helpful about family intervention? Budd RJ, et al. **Schizophr Bull** 1997;23(2):341–7
Early detection and intervention for initial episodes of schizophrenia. Falloon IR, et al. **Schizophr Bull** 1996; 22(2):271–82
Patient attributes and expressed emotion as risk factors for psychotic relapse. Linszen DH, et al. **Schizophr Bull** 1997; 23(1):119–30
Early detection and intervention in schizophrenia: research. McGlashan TH. **Schizophr Bull** 1996;22(2):327–45 (34 ref.)
Early detection and intervention with schizophrenia: rationale. McGlashan TH, et al. **Schizophr Bull** 1996; 22(2):201–22 (132 ref.)
Earlier detection and intervention in schizophrenia: unsolved questions. Vaglum P. **Schizophr Bull** 1996;22(2):347–51 (11 ref.)
The perceived family burden scale: measurement and validation. Levene JE, et al. **Schizophr Res** 1996 Nov 15; 22(2):151–7
Dialysis in schizophrenia: successful only in a subtype? [letter] Reichelt KL. **Schizophr Res** 1996 May;19(2–3):223–4
Successful electroconvulsive treatment of a schizophrenic patient suffering from severe haemophilia A [letter] Glaub T, et al. **Thromb Haemost** 1996 Jun;75(6):978
[Psychological theories in relation to the treatment of schizophrenia (letter; comment)] Rosenberg NK, et al. **Ugeskr Laeger** 1996 Oct 21;158(43):6120. Comment on: Ugeskr Laeger 1996 Jul 22;158(30):4283–7. **(Dan)**
[Results of cognitive psychotherapy in long-term treatment of schizophrenic patients] Chambon O, et al. **Encephale** 1996 Oct;22 Spec No 3:72–5; discussion 76 (23 ref.) **(Fre)**
[Role of behavioral and cognitive techniques in the treatment of schizophrenia] Azaïs F, et al. **Presse Med** 1997 Jul 12; 26(24):1157–61 (17 ref.) (Eng. Abstr.) **(Fre)**
[Schizophrenic disorders: current developments] Ferrero F. **Rev Med Suisse Romande** 1996 Sep;116(9):709–12 **(Fre)**
[Subjective criteria of schizophrenic patients in selecting a physician in ambulatory care] Haasen C, et al. **Psychiatr Prax** 1997 Mar;24(2):74–6 (Eng. Abstr.) **(Ger)**
[Psychoeducational family treatment in schizophrenia--a popular concept? A critical evaluation of different treatment models] Klimitz H. **Psychiatr Prax** 1997 May; 24(3):110–6 (71 ref.) (Eng. Abstr.) **(Ger)**
[Follow-up of a "culture-bound psychosis"] Savaskan E, et al. **Psychiatr Prax** 1997 May;24(3):144–6 (Eng. Abstr.) **(Ger)**
[Suicidal behavior in schizophrenia--on the verbal behavior of 2 suicidal patients in group therapy] Schröder A, et al. **Psychiatr Prax** 1996 Sep;23(5):248–9 **(Ger)**
[Insight into the illness by schizophrenic patients: a psychoanalytic perspective] Rittmannsberger H. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):269–75 (55 ref.) (Eng. Abstr.) **(Ger)**
[Psychoses (schizophrenias)] Küchenhoff B, et al. **Ther Umsch** 1997 Jul;54(7):400–4 (Eng. Abstr.) **(Ger)**
[Terminology and the concept of schizophrenia in relation to its therapy] Yagi G. **Seishin Shinkeigaku Zasshi** 1996; 98(10):724–6; discussion 726–31 **(Jpn)**
[The effect of endovascular laser therapy and antioxidants on the immune status and energy metabolism of patients with treatment-resistant forms of schizophrenia] Kut'ko II, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(2):34–8 (Eng. Abstr.) **(Rus)**
[An inquiry on quality of life among young patients with schizophrenia. Crisis intervention in the family] Levin B, et al. **Lakartidningen** 1996 Nov 20;93(47):4259–62 **(Swe)**

URINE

A study of the potential confounding effects of diet, caffeine, nicotine and lorazepam on the stability of plasma and urinary homovanillic acid levels in patients with schizophrenia. Donnelly CL, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1218–21
Diurnal urine volume estimates in schizophrenic patients with polydipsia during water-loaded versus nonloaded states. Shutty MS Jr, et al. **Biol Psychiatry** 1997 Feb 1;41(3):374–6
pros-Methylimidazoleacetic acid in cerebrospinal fluid of patients with chronic schizophrenia: relationships to ratings of symptoms, ventricular brain ratios, and rates of urine excretion. Prell GD, et al. **Clin Neuropharmacol** 1996 Oct; 19(5):415–9
On the concentration of 5-hydroxyindoleacetic acid in schizophrenia: a meta-analysis. Tuckwell HC, et al. **Psychiatry Res** 1996 Jan 31;59(3):239–44

VIROLOGY

1st Symposium on the Neurovirology and Neuroimmunology of Schizophrenia and Bipolar Disorder. Baltimore, Maryland, November 3–4, 1995. Abstracts. **J Neurovirol** 1996 Jun;2(3):195–223
Borna disease virus in brains of North American and European people with schizophrenia and bipolar disorder. Bornavirus Study Group [letter] [see comments] Salvatore M, et al. **Lancet** 1997 Jun 21;349(9068):1813–4. Comment in: Lancet 1997 Aug 23;350(9077):592–3. Comment in: Lancet 1997 Aug 23;350(9077):593.
Retroviruses and schizophrenia in Jamaica. Rodgers-Johnson PE, et al. **Mol Chem Neuropathol** 1996 May–Aug; 28(1–3):237–43
How a poliovirus might cause schizophrenia: a commentary on Eagles' hypothesis. Squires RF. **Neurochem Res** 1997 May;22(5):647–56
Borna disease virus antibodies and the deficit syndrome of schizophrenia. Waltrip RW 2nd, et al. **Schizophr Res** 1997 Feb 28;23(3):253–7

SCHIZOPHRENIA, BORDERLINE see **SCHIZOTYPAL PERSONALITY DISORDER**

SCHIZOPHRENIA, CATATONIC

DIAGNOSIS

The importance of a differentiated psychopathology of catatonia [letter; comment] Pfuhlmann B, et al. **Acta Psychiatr Scand** 1997 Apr;95(4):357–9. Comment on: Acta Psychiatr Scand 1996 Feb;93(2):129–36.
Negative symptoms or catatonia? [letter; comment] Dhossche D, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Mar; 36(3):302–3. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Jul;35(7):838–9.
[A case of "dementia praecox" in a 23 year old woman: Pick's juvenile dementia or hebephrenic-catatonic schizophrenia?] Gallarda T, et al. **Ann Med Psychol (Paris)** 1996 Jun; 154(3):186–90 **(Fre)**

DRUG THERAPY

[Manneristic catatonia. A psychotropic drug refractory chronic progressive course] Stöber G, et al. **Fortschr Neurol Psychiatr** 1996 Jul;64(7):250–60 (Eng. Abstr.) **(Ger)**
[Catatonia, malignant neuroleptic syndrome and myositis ossificans] Topka H, et al. **Nervenarzt** 1996 May;67(5):413–7 (Eng. Abstr.) **(Ger)**

GENETICS

Genetic heterogeneity in catatonic schizophrenia: a family study. Beckmann H, et al. **Am J Med Genet** 1996 May 31;67(3):289–300

HISTORY

Catatonia and the neuroleptics: psychobiologic significance of remote and recent findings. Blumer D. **Compr Psychiatry** 1997 Jul–Aug;38(4):193–201

THERAPY

Maintenance ECT in a patient with catatonic schizophrenia and tardive dyskinesia. Uçok A, et al. **Convuls Ther** 1996 Jun;12(2):108–12

SCHIZOPHRENIA, CHILDHOOD

CEREBROSPINAL FLUID

Cerebrospinal fluid monoamine metabolites in childhood-onset schizophrenia. Jacobsen LK, et al. **Am J Psychiatry** 1997 Jan;154(1):69–74
Cerebrospinal fluid cytokines in pediatric neuropsychiatric disease. Mittleman BB, et al. **J Immunol** 1997 Sep 15; 159(6):2994–9

COMPLICATIONS

Pubertal development and onset of psychosis in childhood onset schizophrenia. Frazier JA, et al. **Psychiatry Res** 1997 Apr 18;70(1):1–7

DIAGNOSIS

Childhood-onset schizophrenia: biological markers in relation to clinical characteristics. Alaghband-Rad J, et al. **Am J Psychiatry** 1997 Jan;154(1):64–8
Three-dimensional cortical morphometry of the planum temporale in childhood-onset schizophrenia. Jacobsen LK, et al. **Am J Psychiatry** 1997 May;154(5):685–7
Long-term stability of diagnosis and symptom dimensions in a systematic sample of patients with onset of schizophrenia in childhood and early adolescence. I: nosology, sex and age of onset. Maziade M, et al. **Br J Psychiatry** 1996 Sep;169(3):361–70
Long-term stability of diagnosis and symptom dimensions in a systematic sample of patients with onset of schizophrenia in childhood and early adolescence. II: Postnegative distinction and childhood predictors of adult outcome. Maziade M, et al. **Br J Psychiatry** 1996 Sep; 169(3):371–8
Negative symptoms or catatonia? [letter; comment] Dhossche D, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Mar; 36(3):302–3. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Jul;35(7):838–9.
Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL): initial reliability and validity data. Kaufman J, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):980–8
The long-term course of childhood-onset schizophrenia: a 42-year followup. Eggers C, et al. **Schizophr Bull** 1997; 23(1):105–17
[Diagnostic and follow-up typological characteristics of early schizophrenia] Eggers C, et al. **Fortschr Neurol Psychiatr** 1997 Apr;65(4):154–70 (Eng. Abstr.) **(Ger)**

SCHIZOPHRENIA, CHILDHOOD

DRUG THERAPY

Risperidone for treatment of childhood schizophrenia [letter] Sourander A. **Am J Psychiatry** 1997 Oct;154(10):1476

Childhood-onset schizophrenia. A double-blind clozapine-haloperidol comparison. Kumra S, et al. **Arch Gen Psychiatry** 1996 Dec;53(12):1090–7

Risperidone in children with schizophrenia -letter- Lykes WC, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Apr; 35(4):405–6

IMMUNOLOGY

[An elevation in the level of autoantibodies to nerve-growth factor in the blood serum of schizophrenic children] Bashina VM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(1):47–51 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Blink rate in childhood-onset schizophrenia: comparison with normal and attention-deficit hyperactivity disorder controls. Jacobsen LK, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1222–9

Smooth pursuit eye movements in childhood-onset schizophrenia: comparison with attention-deficit hyperactivity disorder and normal controls. Jacobsen LK, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1144–54

Clinical features of childhood-onset schizophrenia with obsessive-compulsive symptoms during the prodromal phase. Iida J, et al. **Psychiatry Clin Neurosci** 1995 Aug; 49(4):201–7

RADIOGRAPHY

[Clinical computed tomographic correlations in children from a group at high risk for schizophrenia] Goriunova AV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(4):46–50 (Eng. Abstr.) **(Rus)**

SCHIZOPHRENIA, DISORGANIZED

DIAGNOSIS

[A case of "dementia praecox" in a 23 year old woman: Pick's juvenile dementia or hebephrenic-catatonic schizophrenia?] Gallarda T, et al. **Ann Med Psychol (Paris)** 1996 Jun; 154(3):186–90 **(Fre)**

[Organization and representation of action in schizophrenia] Georgieff N. **Encephale** 1996 Oct;22 Spec No 3:108–15 (46 ref.) **(Fre)**

DRUG THERAPY

Hoarding and clozapine-risperidone combination [letter] Chong SA, et al. **Can J Psychiatry** 1996 Jun;41(5):315–6

Worsening of psychosis with clozapine and selective serotonin reuptake inhibitor combination: two case reports [letter] Chong SA, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):68–9

[Chorea-like motor restlessness in clozapine] Garcí a C, et al. **Fortschr Neurol Psychiatr** 1996 Oct;64(10):418–21 (26 ref.) (Eng. Abstr.) **(Ger)**

SCHIZOPHRENIA, HEBEPHRENIC see **SCHIZOPHRENIA, DISORGANIZED**

SCHIZOPHRENIA, LATENT see **SCHIZOTYPAL PERSONALITY DISORDER**

SCHIZOPHRENIA, PARANOID

First person account: paranoid schizophrenia--a sibling's story. Brown GP. **Schizophr Bull** 1996;22(3):557–61

BLOOD

Investigations of cytokine production in whole blood cultures of paranoid and residual schizophrenic patients. Wilke I, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(5):279–84

CHEMICALLY INDUCED

Cough mixture induced psychosis. Lee DT, et al. **Br J Clin Pract** 1996 Oct-Nov;50(7):400–1

CLASSIFICATION

Further exploration of a latent class typology of schizophrenia. Sham PC, et al. **Schizophr Res** 1996 May; 20(1–2):105–15

COMPLICATIONS

ECT for comorbid obsessive-compulsive disorder and schizophrenia [letter] Lavin MR, et al. **Am J Psychiatry** 1996 Dec;153(12):1652–3

Delusional pregnancy with polydipsia: a case report. Shiwach RS, et al. **J Psychosom Res** 1997 May;42(5):477–80

[Therapy of coinciding trigeminal neuralgia and schizophrenia] Heinemann F, et al. **Psychiatr Prax** 1996 Jul;23(4):197 **(Ger)**

DIAGNOSIS

On an engaging patient with paranoid schizophrenia [letter; comment] Abrahamson D. **Am J Psychiatry** 1997 Aug; 154(8):1178. Comment on: Am J Psychiatry 1996 Aug;153(8):1084–7.

On an engaging patient with paranoid schizophrenia [letter; comment] Moore DP. **Am J Psychiatry** 1997 Aug; 154(8):1178. Comment on: Am J Psychiatry 1996 Aug;153(8):1084–7.

Relapse in young paranoid schizophrenic patients: a prospective study of stressful life events, P300 measures, and coping. Pallanti S, et al. **Am J Psychiatry** 1997 Jun; 154(6):792–8

Magnetic source imaging evidence of sex differences in cerebral lateralization in schizophrenia. Reite M, et al. **Arch Gen Psychiatry** 1997 May;54(5):433–40

Schizophrenia with poor prognosis associated with hemi-atrophy of the left temporal lobe. O'Brien JT, et al. **J Nerv Ment Dis** 1996 Nov;184(11):710–1

Paranoid schizophrenia with delusions regarding the Internet [letter] Tan S, et al. **J Psychiatry Neurosci** 1997 Mar; 22(2):143

Auditory hallucinations inhibit exogenous activation of auditory association cortex. David AS, et al. **Neuroreport** 1996 Mar 22;7(4):932–6

Computerized electroencephalogram in untreated schizophrenics: a comparison between disorganized and paranoid types. Miyauchi T, et al. **Psychiatry Clin Neurosci** 1996 Apr;50(2):71–8

Neuropsychological profiles in schizophrenia: paranoid versus undifferentiated distinctions. Seltzer J, et al. **Schizophr Res** 1997 Feb 7;23(2):131–8

[A case of Capgras syndrome with illusion of intermetamorphosis (letter)] Chabrol H, et al. **Encephale** 1996 Sep-Oct;22(5):391 **(Fre)**

[Language regression to the mother tongue in polyglot patients with acute psychosis] Heinemann F, et al. **Nervenarzt** 1996 Jul;67(7):599–601 (Eng. Abstr.) **(Ger)**

[Comorbidity of schizophrenia and bulimic anorexia. A case with forensic implications] Joos A, et al. **Nervenarzt** 1997 May;68(5):417–20 (Eng. Abstr.) **(Ger)**

[Physical origin of psychosis or schizophrenia?] Blaser N. **Psychiatr Prax** 1996 Jan;23(1):42–3 **(Ger)**

[Transvestism in a schizophrenic patient] Vish IM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):77–8 **(Rus)**

DRUG THERAPY

Neuroleptic malignant syndrome following initiation of clozapine therapy [letter] Dalkilic A, et al. **Am J Psychiatry** 1997 Jun;154(6):881–2

SPECT study of regional cerebral perfusion in neuroleptic-resistant schizophrenic patients who responded or did not respond to clozapine. Molina Rodríguez V, et al. **Am J Psychiatry** 1996 Oct;153(10):1343–6

Withdrawal-emergent dyskinesia in a patient on risperidone undergoing dosage reduction. Anand VS, et al. **Ann Clin Psychiatry** 1996 Sep;8(3):179–82

Increased manganese-superoxide dismutase activity in postmortem brain from neuroleptic-treated psychotic patients. Loven DP, et al. **Biol Psychiatry** 1996 Aug 1; 40(3):230–2

Clozapine-related speech disturbance [letter; comment] Knoll JL 4th. **J Clin Psychiatry** 1997 May;58(5):219–20. Comment on: J Clin Psychiatry 1995 Sep;56(9):418–22.

A case report of risperidone-induced obsessive-compulsive symptoms [letter] Alzaid K, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):58–9

Clozapine-induced myoclonus: two case reports [letter] Barak Y, et al. **J Clin Psychopharmacol** 1996 Aug; 16(4):339–40

Worsening of psychosis with clozapine and selective serotonin reuptake inhibitor combination: two case reports [letter] Chong SA, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):68–9

Unsuccessful reexposure to clozapine [letter] Szarek BL, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):71–3

Restarting clozapine: a case report [letter] Barrons E, et al. **Psychiatr Serv** 1996 Jan;47(1):92

Risperidone-reserpine combination in refractory psychosis [letter] Solon EN. **Schizophr Res** 1996 Dec 15;22(3):265–6

[Remission of schizophrenic psychosis with negative symptoms with risperidone] Lübbe R. **Fortschr Med** 1996 Feb 28;114(6):35–6 (Eng. Abstr.) **(Ger)**

[Peri-/myocarditis with clozapine (Leponex)] Khalil N. **Psychiatr Prax** 1997 Jan;24(1):46 **(Ger)**

ENZYMOLOGY

Increased phospholipid breakdown in schizophrenia. Evidence for the involvement of a calcium-independent phospholipase A2. Ross BM, et al. **Arch Gen Psychiatry** 1997 May;54(5):487–94

GENETICS

An XXYY male with schizophrenia. Lee JW. **Aust N Z J Psychiatry** 1996 Aug;30(4):553–6

IMMUNOLOGY

HLA antigens in schizophrenia and mood disorders. Ozcan ME, et al. **Biol Psychiatry** 1996 May 15;39(10):891–5

Investigations of cytokine production in whole blood cultures of paranoid and residual schizophrenic patients. Wilke I, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(5):279–84

METABOLISM

Prolactin plasma levels and D2-dopamine receptor occupancy measured with IBZM-SPECT. Schlegel S, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):285–7

PHYSIOPATHOLOGY

Conjugate lateral eye movements during exacerbation of paranoid schizophrenia and the acute episode of major depression. Borkowska A, et al. **Biol Psychiatry** 1997 May 15;41(10):1065–7

Impaired attention-dependent augmentation of MMN in nonparanoid vs paranoid schizophrenic patients: a comparison with obsessive-compulsive disorder and healthy subjects. Oades RD, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1196–210

Sleep in schizophrenia: a polysomnographic study on drug-naive patients. Lauer CJ, et al. **Neuropsychopharmacology** 1997 Jan;16(1):51–60

Positron emission tomography and plasma biochemistry findings in schizophrenic patients before and after electroconvulsive therapy. Uesugi H, et al. **Psychiatry Clin Neurosci** 1995 May;49(2):131–5

PSYCHOLOGY

Impaired attention-dependent augmentation of MMN in nonparanoid vs paranoid schizophrenic patients: a comparison with obsessive-compulsive disorder and healthy subjects. Oades RD, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1196–210

The antichrist delusion as a delusional misidentification syndrome of the self [letter] Silva JA, et al. **Can J Psychiatry** 1997 Feb;42(1):90

The quality of life of patients with paranoid schizophrenia in London and Berlin. Heinze M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):292–7

[Body image of patients with acute paranoid schizophrenia. A follow-up study] Röhricht F, et al. **Nervenarzt** 1996 Jul; 67(7):602–7 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Cerebral perfusion correlates of negative symptomatology and parkinsonism in a sample of treatment-refractory schizophrenics: an exploratory 99mTc-HMPAO SPET study. Molina Rodríguez V, et al. **Schizophr Res** 1997 May 3;25(1):11–20

THERAPY

Positron emission tomography and plasma biochemistry findings in schizophrenic patients before and after electroconvulsive therapy. Uesugi H, et al. **Psychiatry Clin Neurosci** 1995 May;49(2):131–5

SCHIZOPHRENIA, PSEUDONEUROTIC see **SCHIZOTYPAL PERSONALITY DISORDER**

SCHIZOPHRENIC DISORDERS see **SCHIZOPHRENIA**

SCHIZOPHRENIC LANGUAGE

Sex differences in olfactory identification and Wisconsin Card Sorting performance in schizophrenia: relationship to attention and verbal ability. Seidman LJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):104–15

'Audible thoughts' and 'speech defects' in schizophrenia [letter] Hoenig J. **Br J Psychiatry** 1996 Sep;169(3):380

'Audible thoughts' and 'speech defects' in schizophrenia [letter] Wyss FE. **Br J Psychiatry** 1996 Sep;169(3):379–80

Semantic priming in schizophrenia: an examination of spreading activation using word pronunciation and multiple SOAs. Barch DM, et al. **J Abnorm Psychol** 1996 Nov; 105(4):592–601

Comparative affective reactivity of different types of communication disturbances in schizophrenia. Docherty NM, et al. **J Abnorm Psychol** 1997 May;106(2):325–30

Language planning processing in schizophrenia using the active or passive voice. Meyer SL, et al. **J Nerv Ment Dis** 1997 Jan;185(1):53–5

Language generation in schizophrenia and mania: the relationships among verbosity, syntactic complexity, and pausing. Barch DM, et al. **J Psycholinguist Res** 1997 Jul; 26(4):401–12

The effect of language production manipulations on negative thought disorder and discourse coherence disturbances in schizophrenia. Barch DM, et al. **Psychiatry Res** 1997 Jul 4;71(2):115–27

At issue: speech fluency and schizophrenic negative signs. Alpert M, et al. **Schizophr Bull** 1997;23(2):171–7

Anomalous cerebral asymmetry and language processing in schizophrenia. DeLisi LE, et al. **Schizophr Bull** 1997; 23(2):255–71

A new approach to discourse analysis in psychiatry, applied to a schizophrenic patient's speech. Noël-Jorand MC, et al. **Schizophr Res** 1997 Jun 20;25(3):183–98

Language processing and memory in ill and well siblings from multiplex families affected with schizophrenia. Shedlack K, et al. **Schizophr Res** 1997 May 3;25(1):43–52

[Event-related potentials in semantic speech processing by schizophrenic patients] Spitzer M, et al. **Nervenarzt** 1997 Mar;68(3):212–25 (Eng. Abstr.) **(Ger)**

[Suicidal behavior in schizophrenia--on the verbal behavior

of 2 suicidal patients in group therapy] Schröder A, et al. **Psychiatr Prax** 1996 Sep;23(5):248–9 **(Ger)**

SCHIZOPHRENIC PSYCHOLOGY

Hopelessness and first-episode psychosis: a longitudinal study. Aguilar EJ, et al. **Acta Psychiatr Scand** 1997 Jul; 96(1):25–30

Relatives' beliefs about the causes of schizophrenia. Angermeyer MC, et al. **Acta Psychiatr Scand** 1996 Mar; 93(3):199–204

Subsyndromes of chronic schizophrenia: a phenomenological study. Arora A, et al. **Acta Psychiatr Scand** 1997 Sep; 96(3):225–9

Premorbid adjustment as predictor of outcome in schizophrenia: results of a prospective study. Bailer J, et al. **Acta Psychiatr Scand** 1996 May;93(5):368–77

Schizophrenia: a study comparing a family therapy group following a paradoxical model plus psychodrugs and a group treated by the conventional clinical approach. De Giacomo P, et al. **Acta Psychiatr Scand** 1997 Mar; 95(3):183–8

Communication disturbances in the natural speech of schizophrenic patients and non-schizophrenic parents of patients. Docherty NM, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):500–7

Psychopathological and SPECT findings in never-treated schizophrenia. Erkwoh R, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):51–7

The assessment of light intensity preference in psychiatric patients: a questionnaire. Gerbaldo H, et al. **Acta Psychiatr Scand** 1997 Mar;95(3):236–41

Ear disease and schizophrenia: confounding factors [letter; comment] Girard M. **Acta Psychiatr Scand** 1996 Mar; 93(3):219–20. Comment on: Acta Psychiatr Scand 1995 Apr;91(4):217–21.

Ear disease and schizophrenia—brain not needed? [letter; comment] Gordon AG. **Acta Psychiatr Scand** 1996 May; 93(5):409–11. Comment on: Acta Psychiatr Scand 1995 Apr;91(4):217–21.

Decline in diagnoses of schizophrenia in Tasmania during the period 1965–1990. Jones IH, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):13–8

Recovery and insight in schizophrenia. Jørgensen P. **Acta Psychiatr Scand** 1995 Dec;92(6):436–40

The content and characteristics of auditory hallucinations in Saudi Arabia and the UK: a cross-cultural comparison. Kent G, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):433–7

Biological predictors of suicidality in schizophrenia. Lewis CF, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):416–20

Anhedonia, depression and the deficit syndrome of schizophrenia. Loas G, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):477–9

The Nithsdale Schizophrenia Surveys. XV. Social adjustment in schizophrenia: associations with gender, symptoms and childhood antecedents. MacEwan TH, et al. **Acta Psychiatr Scand** 1997 Mar;95(3):254–8

Alterations in plasma dipeptidyl peptidase IV enzyme activity in depression and schizophrenia: effects of antidepressants and antipsychotic drugs. Maes M, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):1–8

A new questionnaire assessing coping strategies in relatives of patients with schizophrenia: development and factor analysis. Magliano L, et al. **Acta Psychiatr Scand** 1996 Oct; 94(4):224–8

A critical review of genetic studies of schizophrenia. I. Epidemiological and brain studies. Portin P, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):1–5 (55 ref.)

A critical review of genetic studies of schizophrenia. II. Molecular genetic studies. Portin P, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):73–80 (128 ref.)

Risperidone, negative symptoms and cognitive deficit in schizophrenia: an open study. Rossi A, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):40–3

Structure of schizophrenic symptomatology and its changes over time: prospective factor-analytical study. Salokangas RK. **Acta Psychiatr Scand** 1997 Jan;95(1):32–9

Citalopram as an adjuvant in chronic schizophrenia: a double-blind placebo-controlled study. Salokangas RK, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):175–80

Perceived parental rearing behaviour in patients with a schizophrenic disorder and its relationship to aspects of the course of the illness. Skagerlind L, et al. **Acta Psychiatr Scand** 1996 May;93(5):403–6

An open trial of adjunctive sertraline in the treatment of chronic schizophrenia. Thakore JH, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):194–7

Expressed emotion from the five-minute speech sample and relapse of out-patients with schizophrenia. Uehara T, et al. **Acta Psychiatr Scand** 1997 May;95(5):454–6

Sociodemographic and clinical variables as predictors of the diagnostic characteristics of first episodes of schizophrenia. Vázquez-Barquero JL, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):149–55

Familial-genetic and reproductive epidemiology of schizophrenia in rural Ireland: age at onset, familial morbid risk and parental fertility. Waddington JL, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):62–8

A prospective 1-5 year outcome study in first-admitted and readmitted schizophrenic patients; relationship to heredity, premorbid adjustment, duration of disease and education level at index admission and neuroleptic treatment. Wieselgren IM, et al. **Acta Psychiatr Scand** 1996 Jan; 93(1):9–19

Symptoms at index admission as predictor for 1-5 year outcome in schizophrenia. Wieselgren IM, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):311–9

Predictors of subjective well-being among older, community-dwelling persons with schizophrenia. Cohen CI, et al. **Am J Geriatr Psychiatry** 1997 Spring;5(2):145–55

Cognitive deficits and psychopathology in elderly schizophrenic patients. Lindenmayer JP, et al. **Am J Geriatr Psychiatry** 1997 Winter;5(1):31–42

Visual perception in medicated schizophrenic patients [letter; comment] Bonnet D, et al. **Am J Psychiatry** 1997 Apr; 154(4):585; discussion 586–7. Comment on: Am J Psychiatry 1996 May;153(5):687–92.

Attentional impairments in deficit and nondeficit forms of schizophrenia. Buchanan RW, et al. **Am J Psychiatry** 1997 Mar;154(3):363–70

Correlation between reduced in vivo benzodiazepine receptor binding and severity of psychotic symptoms in schizophrenia [published erratum appears in Am J Psychiatry 1997 May;154(5):722] Busatto GF, et al. **Am J Psychiatry** 1997 Jan;154(1):56–63

Visual information-processing impairments in deficit and nondeficit schizophrenia. Bustillo JR, et al. **Am J Psychiatry** 1997 May;154(5):647–54

Clozapine conflict [letter; comment] Carpenter WT Jr, et al. **Am J Psychiatry** 1996 Nov;153(11):1505–7. Comment on: Am J Psychiatry 1995 Jun;152(6):821–5.

Symptoms, subtype, and suicidality in patients with schizophrenia spectrum disorders. Fenton WS, et al. **Am J Psychiatry** 1997 Feb;154(2):199–204

Unnatural practices, unspeakable actions: a study of delayed auditory feedback in schizophrenia. Goldberg TE, et al. **Am J Psychiatry** 1997 Jun;154(6):858–60

Does risperidone improve verbal working memory in treatment-resistant schizophrenia? Green MF, et al. **Am J Psychiatry** 1997 Jun;154(6):799–804

Age-related differences in formal thought disorder in chronically hospitalized schizophrenic patients: a cross-sectional study across nine decades. Harvey PD, et al. **Am J Psychiatry** 1997 Feb;154(2):205–10

Hallucinatory changes [letter; comment] Hoehn-Saric R. **Am J Psychiatry** 1997 Feb;154(2):293–4. Comment on: Am J Psychiatry 1996 Feb;153(2):265–7.

Commentary on the clozapine conflict [letter; comment] Kane JM. **Am J Psychiatry** 1996 Nov;153(11):1507–8. Comment on: Am J Psychiatry 1995 Jun;152(6):821–5. Comment on: Am J Psychiatry 1995 Jun;152(6):827–32.

Comparison of efficacy of social skills training for deficit and nondeficit negative symptoms in schizophrenia. Kopelowicz A, et al. **Am J Psychiatry** 1997 Mar; 154(3):424–5

Neurocognitive deficits in schizophrenia [letter; comment] Liberman RP. **Am J Psychiatry** 1997 Mar;154(3):443–4. Comment on: Am J Psychiatry 1996 Mar;153(3):321–30.

Cognitive deficit measures in schizophrenia: factor structure and clinical correlates. Lieh-Mak F, et al. **Am J Psychiatry** 1997 Jun;154(6 Suppl):39–46

On an engaging patient with paranoid schizophrenia [letter; comment] Moore DP. **Am J Psychiatry** 1997 Aug; 154(8):1178. Comment on: Am J Psychiatry 1996 Aug;153(8):1084–7.

Aberrant semantic activation in schizophrenia: a neurophysiological study. Nestor PG, et al. **Am J Psychiatry** 1997 May;154(5):640–6

Can pulmonary complications cause schizophrenia remission? [letter] Passman TE. **Am J Psychiatry** 1997 Jan;154(1):130

Schizophrenia and the myth of intellectual decline. Russell AJ, et al. **Am J Psychiatry** 1997 May;154(5):635–9

Negative symptoms: a path analytic approach to a double-blind, placebo- and haloperidol-controlled clinical trial with olanzapine. Tollefson GD, et al. **Am J Psychiatry** 1997 Apr;154(4):466–74

Revisiting the factor structure for positive and negative symptoms: evidence from a large heterogeneous group of psychiatric patients. Toomey R, et al. **Am J Psychiatry** 1997 Mar;154(3):371–7

Psychosis and etiology [letter; comment] Trémeau F, et al. **Am J Psychiatry** 1997 Jan;154(1):132–4. Comment on: Am J Psychiatry 1995 Oct;152(10):1458–63.

Family psychoeducational support groups in Spain: parents' distress and burden at none-month follow-up. Cañive JM, et al. **Ann Clin Psychiatry** 1996 Jun;8(2):71–9

Subjective muscle weakness and hypotonia during clozapine treatment. Galletly C. **Ann Clin Psychiatry** 1996 Dec; 8(4):189–92

Adjunctive loxapine in a clozapine-resistant cohort of schizophrenic patients. Mowerman S, et al. **Ann Clin Psychiatry** 1996 Dec;8(4):193–7

Affiliation and neuropsychiatric disorders: the deficit syndrome of schizophrenia. Kirkpatrick B. **Ann N Y Acad Sci** 1997 Jan 15;807:455–68 (69 ref.)

Psychotic exacerbations and enhanced vasopressin secretion in schizophrenic patients with hyponatremia and polydipsia. Goldman MB, et al. **Arch Gen Psychiatry** 1997 May;54(5):443–9

The influence of expressed emotion, family dynamics, and symptom type on the social adjustment of schizophrenic young adults. King S, et al. **Arch Gen Psychiatry** 1996 Dec; 53(12):1098–104

Thought disorder in schizophrenic and control adoptees and their relatives. Kinney DK, et al. **Arch Gen Psychiatry** 1997 May;54(5):475–9

Schizophrenic deficits in the processing of context. A test of a theoretical model. Servan-Schreiber D, et al. **Arch Gen Psychiatry** 1996 Dec;53(12):1105–12

Smooth pursuit eye movements in schizophrenia in New Zealand. Allen JS. **Aust N Z J Psychiatry** 1997 Aug; 31(4):582–91

Neuroleptic malignant syndrome and clozapine monotherapy [see comments] Chatterton R, et al. **Aust N Z J Psychiatry** 1996 Oct;30(5):692–3. Comment in: Aust N Z J Psychiatry 1997 Jun;31(3):435–6.

Aggressive behaviour in schizophrenia: the role of psychopathology. Cheung P, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):62–7

Smoking among Chinese patients with schizophrenia. Chong SA, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):350–3

Clozapine and constipation: a serious issue [letter] Drew L, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):149–50

The inter-rater and test-retest reliabilities of prodromal symptoms in first-episode psychosis. Jackson HJ, et al. **Aust N Z J Psychiatry** 1996 Aug;30(4):498–504

Women and schizophrenia: a review. Kulkarni J. **Aust N Z J Psychiatry** 1997 Feb;31(1):46–56 (106 ref.)

Depression in schizophrenia: a descriptive study. Markou P. **Aust N Z J Psychiatry** 1996 Jun;30(3):354–7

Drug strategies and treatment-resistant schizophrenia. Pantelis C, et al. **Aust N Z J Psychiatry** 1996 Feb; 30(1):20–37 (184 ref.)

Characteristics of the new long-stay population in an inner Melbourne acute psychiatric hospital. Richards J, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):488–95

Rooming-in: an alternative to involuntary detention. Richardson ME. **Aust N Z J Psychiatry** 1996 Apr; 30(2):263–9

Outcome of schizophrenia: the Madras longitudinal study. Thara R, et al. **Aust N Z J Psychiatry** 1996 Aug; 30(4):516–22

Schizophrenia. A cognitive model and its implications for psychological intervention. Hemsley DR. **Behav Modif** 1996 Apr;20(2):139–69 (126 ref.)

Physical attractiveness in schizophrenia. The mediating role of social skill. Penn DL, et al. **Behav Modif** 1997 Jan; 21(1):78–85

Electrophysiological responses to transcranial magnetic stimulation in depression and schizophrenia. Abarbanel JM, et al. **Biol Psychiatry** 1996 Jul 15;40(2):148–50

Effects of the PCP analog dizocilpine on sensory gating: potential relevance to clinical subtypes of schizophrenia. al-Amin HA, et al. **Biol Psychiatry** 1996 Oct 15; 40(8):744–54

Neuropsychological, olfactory, and hygiene deficits in men with negative symptom schizophrenia. Brewer WJ, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1021–31

Backward masking in schizophrenia: relationship to medication status, neuropsychological functioning, and dopamine metabolism. Butler PD, et al. **Biol Psychiatry** 1996 Aug 15;40(4):295–8

Spatial working memory deficits and their relationship to negative symptoms in unmedicated schizophrenia patients. Carter C, et al. **Biol Psychiatry** 1996 Nov 1;40(9):930–2

Blink rate, neurocognitive impairments, and symptoms in schizophrenia. Chen EY, et al. **Biol Psychiatry** 1996 Oct 1;40(7):597–603

P50 suppression among schizophrenia and normal comparison subjects: a methodological analysis. Clementz BA, et al. **Biol Psychiatry** 1997 May 15;41(10):1035–44

Facial expression in schizophrenia. Earnst KS, et al. **Biol Psychiatry** 1996 Sep 15;40(6):556–8

Visuospatial working memory in patients with schizophrenia. Fleming K, et al. **Biol Psychiatry** 1997 Jan 1;41(1):43–9

Clozapine-induced electroencephalogram changes as a function of clozapine serum levels. Freudenreich O, et al. **Biol Psychiatry** 1997 Jul 15;42(2):132–7

PET brain mapping study of auditory verbal supraspan memory versus visual fixation in schizophrenia. Ganguli R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):33–42

Dexamethasone nonsuppression and short rapid eye movement latency in schizophrenia: markers of an affective diathesis? Goldman M, et al. **Biol Psychiatry** 1996 Nov 1;40(9):927–9

Substance abuse and the onset of schizophrenia. Hambrecht M, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1155–63

Empirical evaluation of the factorial structure of clinical symptoms in schizophrenia: effects of typical neuroleptics on the brief psychiatric rating scale. Harvey PD, et al. **Biol Psychiatry** 1996 Oct 15;40(8):755–60

Electrodermal activity as a prodromal sign in schizophrenia. Hazlett H, et al. **Biol Psychiatry** 1997 Jan 1;41(1):111–3

Auditory P300 topography and neuropsychological test performance: evidence for left hemispheric dysfunction in schizophrenia. Heidrich A, et al. **Biol Psychiatry** 1997 Feb 1;41(3):327–35

Frontal lobe tasks, antipsychotic medication, and schizophrenia syndromes. Himelhoch S, et al. **Biol Psychiatry** 1996 Feb 1;39(3):227–9

Glycine therapy of schizophrenia [letter; comment] Javitt DC. **Biol Psychiatry** 1996 Oct 1;40(7):684–6. Comment on: Biol Psychiatry 1996 Feb 1;39(3):155–6.

Rhythmic finger-tapping task and fast segmentation of neural processing in schizophrenics. Jirsa R, et al. **Biol Psychiatry** 1996 Dec 15;40(12):1301–4

Preliminary investigation of high-dose oral glycine on serum levels and negative symptoms in schizophrenia: an open-label trial [see comments] Leiderman E, et al. **Biol Psychiatry** 1996 Feb 1;39(3):213-5. Comment in: Biol Psychiatry 1996 Feb 1;39(3):155-6.

Heterogeneity of serotonergic response in treatment-refractory schizophrenia patients. Lindenmayer JP, et al. **Biol Psychiatry** 1997 Jul 1;42(1):6-12

Semantic memory is impaired in schizophrenia. McKay AP, et al. **Biol Psychiatry** 1996 Jun 1;39(11):929-37

The effect of antipsychotic medication on relative cerebral blood perfusion in schizophrenia: assessment with technetium-99m hexamethyl-propyleneamine oxime single photon emission computed tomography. Miller DD, et al. **Biol Psychiatry** 1997 Mar 1;41(5):550-9

Relationships between verbal memory performance and the cerebral distribution of fluorodeoxyglucose in patients with schizophrenia. Mozley LH, et al. **Biol Psychiatry** 1996 Sep 15;40(6):443-51

Impaired attention-dependent augmentation of MMN in nonparanoid vs paranoid schizophrenic patients: a comparison with obsessive-compulsive disorder and healthy subjects. Oades RD, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1196-210

N400 abnormalities in late life schizophrenia and related psychoses. Olichney JM, et al. **Biol Psychiatry** 1997 Jul 1;42(1):13-23

Increased levels of the nicotine metabolite cotinine in schizophrenic smokers compared to other smokers. Olincy A, et al. **Biol Psychiatry** 1997 Jul 1;42(1):1-5

Sex differences in olfactory identification and Wisconsin Card Sorting performance in schizophrenia: relationship to attention and verbal ability. Seidman LJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):104-15

Fluvoxamine augmentation in clozapine-resistant schizophrenia: an open pilot study. Silver H, et al. **Biol Psychiatry** 1996 Oct 1;40(7):671-4

Season of birth and electroencephalogram power abnormalities in schizophrenia. Sponheim SR, et al. **Biol Psychiatry** 1997 May 15;41(10):1020-7

Auditory event-related potentials, auditory digit span, and clinical symptoms in chronic schizophrenic men on neuroleptic medication. Stefánsson SB, et al. **Biol Psychiatry** 1996 Jul 1;40(1):19-27

Limitations of controlled augmentation trials in schizophrenia. Stern RG, et al. **Biol Psychiatry** 1997 Jul 15;42(2):138-43 (28 ref.)

Sex differences in plasma homovanillic acid levels in schizophrenia and normal controls: relation to neuroleptic resistance. Sumiyoshi T, et al. **Biol Psychiatry** 1997 Mar 1;41(5):560-6

Relationship between DST nonsuppression and shortened REM latency in schizophrenia. Tandon R, et al. **Biol Psychiatry** 1996 Oct 1;40(7):660-3

Dynamical analysis of schizophrenia courses. Tschacher W, et al. **Biol Psychiatry** 1997 Feb 15;41(4):428-37

Glycine therapy of schizophrenia: some caveats [editorial; comment] [see comments] Waziri R. **Biol Psychiatry** 1996 Feb 1;39(3):155-6. Comment on: Biol Psychiatry 1996 Feb 1;39(3):213-5. Comment in: Biol Psychiatry 1996 Oct 1;40(7):684-6.

The latent inhibition model of schizophrenia: further validation using the atypical neuroleptic, clozapine. Weiner I, et al. **Biol Psychiatry** 1996 Nov 1;40(9):834-43

Antipsychotic drug effects in a model of schizophrenic attentional disorder: a randomized controlled trial of the effects of haloperidol on latent inhibition in healthy people. Williams JH, et al. **Biol Psychiatry** 1996 Dec 1; 40(11):1135-43

MRI brain abnormalities in chronic schizophrenia: one process or more? Woods BT, et al. **Biol Psychiatry** 1996 Oct 1;40(7):585-96

Changes in symptoms and plasma homovanillic acid with amantadine hydrochloride in chronic schizophrenia. Yamada K, et al. **Biol Psychiatry** 1997 May 15; 41(10):1062-4

Modeling schizophrenic behavior using general mixture components. Rubin DB, et al. **Biometrics** 1997 Mar; 53(1):243-61

Health beliefs and compliance with antipsychotic medication. Budd RJ, et al. **Br J Clin Psychol** 1996 Sep;35 (Pt 3):393-7

Coping with hallucinations: exploring stress and coping framework. Farhall J, et al. **Br J Clin Psychol** 1997 May; 36 (Pt 2):259-61

Shadowing on the basis of contextual information in individuals with schizotypal personality. Hall G, et al. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):595-604

The experience of caring for former long-stay psychiatric patients. McGilloway S, et al. **Br J Clin Psychol** 1997 Feb; 36 (Pt 1):149-51

Improving schizophrenic in-patients' Wisconsin card-sorting performance. Nisbet H, et al. **Br J Clin Psychol** 1996 Nov; 35 (Pt 4):631-3

Risk assessment in schizophrenia. Heads TC. **Br J Hosp Med** 1997 May 7-20;57(9):451-3

Natural cognitive coping strategies in schizophrenia. McNally SE, et al. **Br J Med Psychol** 1997 Jun;70 (Pt 2):159-67

The impact of education groups for people with schizophrenia on social functioning and quality of life. Atkinson JM, et al. **Br J Psychiatry** 1996 Feb; 168(2):199-204

Quality of life as an evaluative measure in assessing the impact of community care on people with long-term psychiatric disorders. Barry MM, et al. **Br J Psychiatry** 1996 Feb; 168(2):210-6

Emotional overinvolvement in parents of patients with schizophrenia or related psychosis: demographic and clinical predictors. Bentsen H, et al. **Br J Psychiatry** 1996 Nov;169(5):622-30

First-contact incidence rates of schizophrenia in Trinidad and one-year follow-up [see comments] Bhugra D, et al. **Br J Psychiatry** 1996 Nov;169(5):587-92. Comment in: Br J Psychiatry 1997 Apr;170:389.

Negative symptoms, neurological signs and neuropsychological impairments in 204 Hong Kong Chinese patients with schizophrenia. Chen EY, et al. **Br J Psychiatry** 1996 Feb;168(2):227-33

Concurrent validity of the OPCRIT diagnostic system. Comparison of OPCRIT diagnoses with consensus best-estimate lifetime diagnoses. Craddock M, et al. **Br J Psychiatry** 1996 Jul;169(1):58-63

First-rank symptoms or rank-and-file symptoms? [editorial] Crichton P. **Br J Psychiatry** 1996 Nov;169(5):537-40; discussion 541-50

Likelihood of hospital discharge [letter; comment] Duffett R, et al. **Br J Psychiatry** 1996 Jun;168(6):791. Comment on: Br J Psychiatry 1995 Dec;167(6):760-4.

A neuropsychological perspective on three schizophrenic patients with midline structural defects. Edelstyn NM, et al. **Br J Psychiatry** 1997 May;170:416-21

Double-blind, placebo-controlled, crossover trial of glycine adjuvant therapy for treatment-resistant schizophrenia. Heresco-Levy U, et al. **Br J Psychiatry** 1996 Nov; 169(5):610-7

Delusion, the overvalued idea and religious beliefs: a comparative analysis of their characteristics. Jones E, et al. **Br J Psychiatry** 1997 Apr;170:381-6

Increased occurrence of schizophrenia and other psychiatric illnesses among twins [see comments] Kläning U, et al. **Br J Psychiatry** 1996 Jun;168(6):688-92. Comment in: Br J Psychiatry 1996 Oct;169(4):522-3.

Abnormal movements in never-medicated Indian patients with schizophrenia. McCreadie RG, et al. **Br J Psychiatry** 1996 Feb;168(2):221-6

A controlled study of education about drug treatment in schizophrenia. Macpherson R, et al. **Br J Psychiatry** 1996 Jun;168(6):709-17

Relationship between insight, educational background and cognition in schizophrenia. Macpherson R, et al. **Br J Psychiatry** 1996 Jun;168(6):718-22

Mixed-handedness in patients with functional psychosis. Malesu RR, et al. **Br J Psychiatry** 1996 Feb;168(2):234-6

Behavioural vigilance in schizophrenia. Evidence for hyperattentional processing. Mar CM, et al. **Br J Psychiatry** 1996 Dec;169(6):781-9

The course of schizophrenia over 13 years. A report from the International Study on Schizophrenia (ISoS) coordinated by the World Health Organization. Mason P, et al. **Br J Psychiatry** 1996 Nov;169(5):580-6

Unwantedness of a pregnancy and schizophrenia in the child. Myhrman A, et al. **Br J Psychiatry** 1996 Nov;169(5):637-40

Monitoring psychosis in general practice: a controlled trial. Nazareth I, et al. **Br J Psychiatry** 1996 Oct;169(4):475-82

Neuropsychological correlates of syndromes in schizophrenia. Norman RM, et al. **Br J Psychiatry** 1997 Feb;170:134-9

EEG coherence and syndromes in schizophrenia. Norman RM, et al. **Br J Psychiatry** 1997 May;170:411-5

Erotomanic symptoms in 42 Chinese schizophrenic patients. Phillips MR, et al. **Br J Psychiatry** 1996 Oct;169(4):501-8

Large variations of plasma levels during maintenance treatment with depot neuroleptics. Tuninger E, et al. **Br J Psychiatry** 1996 Nov;169(5):618-21

Patterns of positive and negative symptoms in first episode schizophrenia. Vázquez-Barquero JL, et al. **Br J Psychiatry** 1996 Jun;168(6):693-701

Continuing clozapine despite neutropenia. Wesson ML, et al. **Br J Psychiatry** 1996 Feb;168(2):217-20

Relatives' expressed emotion and non-verbal signs of subclinical psychopathology in schizophrenic patients. Woo SM, et al. **Br J Psychiatry** 1997 Jan;170:58-61

Tardive dyskinesia and positive and negative symptoms of schizophrenia. A study using instrumental measures. Yuen O, et al. **Br J Psychiatry** 1996 Jun;168(6):702-8

Artificial neural network to assist psychiatric diagnosis [see comments] Zou Y, et al. **Br J Psychiatry** 1996 Jul; 169(1):64-7. Comment in: Br J Psychiatry 1996 Dec;169(6):793-4.

Schizophrenia, violence, clozapine and risperidone: a review. The Special Hospitals Treatment Resistant Schizophrenia Research Group. **Br J Psychiatry Suppl** 1996 Dec; (31):21-30 (60 ref.)

Management of treatment resistant schizophrenia unresponsive to clozapine. Barnes TR, et al. **Br J Psychiatry Suppl** 1996 Dec;(31):31-40 (65 ref.)

Factors which can make patients difficult to treat. Kane JM. **Br J Psychiatry Suppl** 1996 Dec;(31):10-4 (28 ref.)

The management of difficult to treat patients with schizophrenia, using non-drug therapies. Kuipers E. **Br J Psychiatry Suppl** 1996 Dec;(31):41-51 (100 ref.)

Management of treatment refractory schizophrenia. Morrison DP. **Br J Psychiatry Suppl** 1996 Dec;(31):15-20 (40 ref.)

Biological determinants of difficult to treat patients with schizophrenia. Sharma T, et al. **Br J Psychiatry Suppl** 1996 Dec;(31):5-9 (45 ref.)

Neuropsychology of schizophrenia, what are the implications of intellectual and experiential abnormalities for the neurobiology of schizophrenia? Frith C. **Br Med Bull** 1996 Jul;52(3):618-26 (28 ref.)

Impairment of self-representation in schizophrenia: the roles of boundary articulation and self-reflexivity. Auerbach JS, et al. **Bull Menninger Clin** 1997 Summer;61(3):297-316

Gender and affect in schizophrenia [see comments] Addington D, et al. **Can J Psychiatry** 1996 Jun;41(5):265-8 . Comment in: Can J Psychiatry 1996 Jun;41(5):263-4.

Readiness to stop smoking in schizophrenia. Addington J, et al. **Can J Psychiatry** 1997 Feb;42(1):49-52

The role of the thalamus in schizophrenia [see comments] Andreasen NC. **Can J Psychiatry** 1997 Feb;42(1):27-33 (48 ref.). Comment in: Can J Psychiatry 1997 Feb;42(1):19-20.

Neurocognitive impairment in schizophrenia and how it affects treatment options [see comments] Bilder RM. **Can J Psychiatry** 1997 Apr;42(3):255-64 (58 ref.). Comment in: Can J Psychiatry 1997 Apr;42(3):247-8.

Chronic fatigue syndrome: a prodrome to psychosis? [letter; comment] Chagpar A. **Can J Psychiatry** 1996 Oct; 41(8):536-7. Comment on: Can J Psychiatry 1996 May;41(4):217-22.

Use of cytokines in clozapine-induced agranulocytosis [see comments] Chin-Yee I, et al. **Can J Psychiatry** 1996 Jun; 41(5):280-4 (42 ref.). Comment in: Can J Psychiatry 1996 Nov;41(9):603.

AIDS knowledge and high-risk behaviour in the chronic mentally ill [see comments] Chuang HT, et al. **Can J Psychiatry** 1996 Jun;41(5):269-72. Comment in: Can J Psychiatry 1996 Nov;41(9):603.

The varied outcomes of schizophrenia. Davidson L, et al. **Can J Psychiatry** 1997 Feb;42(1):34-43 (118 ref.)

Couples communication skills training for schizophrenia [letter] Greer LA, et al. **Can J Psychiatry** 1997 Aug; 42(6):666-7

Epidemiology of schizophrenia [see comments] Häfner H, et al. **Can J Psychiatry** 1997 Mar;42(2):139-51 (142 ref.). Comment in: Can J Psychiatry 1997 Mar;42(2):131-2.

Clozapine-associated retrograde ejaculation [letter] Jeffries JJ, et al. **Can J Psychiatry** 1996 Feb;41(1):62-3

Self-induced water intoxication treated with risperidone. Millson RC, et al. **Can J Psychiatry** 1996 Dec;41(10):648-50

False memory in schizophrenia [letter] Miyaoka H, et al. **Can J Psychiatry** 1997 Mar;42(2):211

Neuroleptic dosing in chronic schizophrenia: a 10-year follow-up. Remington GJ, et al. **Can J Psychiatry** 1997 Feb;42(1):53-7

Clozapine: current status and role in the pharmacotherapy of schizophrenia [see comments] Remington GJ, et al. **Can J Psychiatry** 1996 Apr;41(3):161-6. Comment in: Can J Psychiatry 1996 Sep;41(7):483.

The "marriage bed": brain and outcome in schizophrenia [editorial; comment] Seeman MV. **Can J Psychiatry** 1997 Feb;42(1):19-20. Comment on: Can J Psychiatry 1997 Feb;42(1):27-33.

Thinking patterns and patterning drugs [editorial; comment] Seeman MV. **Can J Psychiatry** 1997 Apr;42(3):247-8. Comment on: Can J Psychiatry 1997 Apr;42(3):255-64. Comment on: Can J Psychiatry 1997 Apr;42(3):265-73.

Schizophrenia, gender, and affect [editorial; comment] Seeman MV. **Can J Psychiatry** 1996 Jun;41(5):263-4. Comment on: Can J Psychiatry 1996 Jun;41(5):265-8.

Bromocriptine as adjunctive therapy to clozapine in treatment-resistant schizophrenia [letter] al-Semaan Y. **Can J Psychiatry** 1996 Sep;41(7):484-5

Re: clozapine--current status and role in the pharmacotherapy of schizophrenia [letter; comment] Sharma V. **Can J Psychiatry** 1996 Sep;41(7):483. Comment on: Can J Psychiatry 1996 Apr;41(3):161-6.

Adjunctive carbamazepine or lithium carbonate in therapy-resistant chronic schizophrenia [letter] Simhandl C, et al. **Can J Psychiatry** 1996 Jun;41(5):317

The effect of risperidone on cognition in patients with schizophrenia. Stip E, et al. **Can J Psychiatry** 1996 Oct; 41(8 Suppl 2):S35-40

Memory impairment in schizophrenia: perspectives from psychopathology and pharmacotherapy. Stip E. **Can J Psychiatry** 1996 Oct;41(8 Suppl 2):S27-34 (67 ref.)

The heterogeneity of memory dysfunction in schizophrenia. Stip E, et al. **Can J Psychiatry** 1996 Sep;41(7 Suppl 1):S14-20 (33 ref.)

Acute dystonic reaction with risperidone [letter] Takhar J, et al. **Can J Psychiatry** 1996 Feb;41(1):61-2

The promise of new drugs for schizophrenia treatment [see comments] Tamminga CA. **Can J Psychiatry** 1997 Apr; 42(3):265-73 (76 ref.). Comment in: Can J Psychiatry 1997 Apr;42(3):247-8.

The first case of autocastration from east Asia [letter] Tang WN. **Can J Psychiatry** 1996 Nov;41(9):607-8

Improving the management of patients with schizophrenia in primary care: assessing learning needs as a first step. Toews J, et al. **Can J Psychiatry** 1996 Dec;41(10):617-22

Consumer satisfaction with CMHC services. Sullivan G, et al. **Community Ment Health J** 1997 Apr;33(2):123-31

Dimensions of the Brief Psychiatric Rating Scale: an examination of stability during haloperidol treatment. Czobor P, et al. **Compr Psychiatry** 1996 May-Jun; 37(3):205-15

Premorbid personality aspects in mood and schizophrenic disorders. Heerlein A, et al. **Compr Psychiatry** 1996 Nov–Dec;37(6):430–4

Patient dynamics in early stages of vocational rehabilitation: a pilot study. Hoffmann H, et al. **Compr Psychiatry** 1996 May–Jun;37(3):216–21

Subjective experience and related symptoms in schizophrenia. Kim Y, et al. **Compr Psychiatry** 1997 Jan–Feb;38(1):49–55

Insight and clinical correlates in schizophrenia. Kim Y, et al. **Compr Psychiatry** 1997 Mar–Apr;38(2):117–23

Psychopathology: an edgeless razor? Monti MR, et al. **Compr Psychiatry** 1996 May–Jun;37(3):196–204

Understanding cross-cultural prognostic variability for schizophrenia. Weisman AG. **Cult Divers Ment Health** 1997;3(1):23–35 (80 ref.)

Eye tracking dysfunction in families with multiple cases of schizophrenia. Arolt V, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(4):175–81

Right hemispatial inattention and magical ideation. Brugger P, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(1):55–7

Abnormal subjective experiences in schizophrenia: its relationships with neuropsychological disturbances and frontal signs. Cuesta MJ, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(2):101–5

The Prognostic Scale by Strauss and Carpenter and its validity. Händel M, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(4):203–8

A subscale for negative symptoms from the Comprehensive Psychopathological Rating Scale (CPRS): a comparison with the Schedule for Assessment of Negative Symptoms (SANS). Lindström E, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(4):219–23

Predictors of clinical and social outcomes after hospitalization in schizophrenia. Menezes PR, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):137–45

Statistical differentiation between direct and indirect effects of neuroleptics on negative symptoms. Möller HJ, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(1):1–5

Expressed-emotion development and course of schizophrenic illness: considerations based on results of a CFI replication. Schulze Mönking H, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(1):31–4

Course of adolescent psychotic disorder with schizoaffective episodes. Lay B, et al. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):32–41

Schizophrenia like syndrome following chronic hydrocephalus in a teenager. Kaiser GL, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:39–40

Proper psychosocial rehabilitation for stabilised patients with schizophrenia: the role of new therapies. Peuskens J. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S7–12

Death on a psychiatric inpatient unit. Effect on a subgroup of schizophrenic patients. Trappler B, et al. **Gen Hosp Psychiatry** 1996 Jul;18(4):261–5

Card-sort performance and syndromes of schizophrenia. Rowe EW, et al. **Genet Soc Gen Psychol Monogr** 1997 May; 123(2):197–209

Diversity in schizophrenia: toward a richer biopsychosocial understanding for social work practice. Farmer RL, et al. **Health Soc Work** 1997 May;22(2):109–16

Improvement of negative symptoms: Concepts, definition and assessment. Andreasen NC. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S7–10 (17 ref.)

Assessment of the patient's subjective experience in acute neuroleptic treatment: implications for compliance and outcome. Awad AG, et al. **Int Clin Psychopharmacol** 1996 May;11 Suppl 2:55–9 (28 ref.)

Aggressive behaviour and extrapyramidal side effects of neuroleptics in schizophrenia. Cheung P, et al. **Int Clin Psychopharmacol** 1996 Dec;11(4):237–40

The cognitive abnormalities underlying the symptomatology and the disability of patients with schizophrenia. Frith CD. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:87–98 (57 ref.)

What are the therapeutic needs in schizophrenia and how are they satisfied by new antipsychotics? Kane JM. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S3–6 (28 ref.)

The psychopathology of schizophrenia: an integrated view on positive symptoms and negative symptoms. Möller HJ. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:57–64 (47 ref.)

Clinical update on amisulpride in deficit schizophrenia. Rein W, et al. **Int Clin Psychopharmacol** 1997 May;12 Suppl 2:S19–27 (27 ref.)

Preferences for schizophrenia-related health states: a comparison of patients, caregivers and psychiatrists. Revicki DA, et al. **Int Clin Psychopharmacol** 1996 Jun; 11(2):101–8

Schizophrenia with onset at the extremes of adult life. Castle DJ, et al. **Int J Geriatr Psychiatry** 1997 Jul;12(7):712–7

Clock drawing test in elderly schizophrenia patients. Heinik J, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):653–5

Health-related quality of life in older patients with schizophrenia and other psychoses: relationships among psychosocial and psychiatric factors. Patterson TL, et al. **Int J Geriatr Psychiatry** 1997 Apr;12(4):452–61

Group therapy on state hospital chronic wards: some guidelines. Sultenfuss J, et al. **Int J Group Psychother** 1996 Apr;46(2):163–76

Violence of psychotic patients: how much responsibility can be attributed? Nedopil N. **Int J Law Psychiatry** 1997 Spring;20(2):243–7 (15 ref.)

Head movements in schizophrenia: new biological marker, critical neurological flaw, or artifact of subvocalization? Olevitch BA, et al. **Int J Neurosci** 1996 Dec;88(3–4):249–60

Using the rehab scale in a Greek context. Zissi A, et al. **Int J Rehabil Res** 1997 Jun;20(2):183–8

Does quality of life differ in schizophrenic women and men? An empirical study. Röder-Wanner UU, et al. **Int J Soc Psychiatry** 1997 Summer;43(2):129–43

The social networks of older schizophrenia patients. Clinical Research Center on Late Life Psychosis Research Group. Semple SJ, et al. **Int Psychogeriatr** 1997 Mar;9(1):81–94

Herpes encephalitis, schizophrenia and the crossroads of psychiatry. Howard JS 3rd. **Integr Physiol Behav Sci** 1996 Jul–Sep;31(3):219–23

Phenelzine as a possible treatment for depression in schizophrenic patients [letter] Melamed Y, et al. **Isr J Psychiatry Relat Sci** 1996;33(3):211–2

Semantic priming in schizophrenia: an examination of spreading activation using word pronunciation and multiple SOAs. Barch DM, et al. **J Abnorm Psychol** 1996 Nov; 105(4):592–601

Comparative affective reactivity of different types of communication disturbances in schizophrenia. Docherty NM, et al. **J Abnorm Psychol** 1997 May;106(2):325–30

Attentional dysfunctions in neuroleptic-naive and neuroleptic-withdrawn schizophrenic patients and their siblings. Finkelstein JR, et al. **J Abnorm Psychol** 1997 May; 106(2):203–12

Pupillary responses index overload of working memory resources in schizophrenia. Granholm E, et al. **J Abnorm Psychol** 1997 Aug;106(3):458–67

Autonomic orienting and the allocation of processing resources in schizophrenia patients and putatively at-risk individuals. Hazlett EA, et al. **J Abnorm Psychol** 1997 May; 106(2):171–81

Electrodermal activity and social network as predictors of outcome of episodes in schizophrenia. Hultman CM, et al. **J Abnorm Psychol** 1996 Nov;105(4):626–36

Impaired precision, but normal retention, of auditory sensory ("echoic") memory information in schizophrenia. Javitt DC, et al. **J Abnorm Psychol** 1997 May;106(2):315–24

Behavioral analysis of drinking behaviors in polydipsic patients with chronic schizophrenia. Shutty MS Jr, et al. **J Abnorm Psychol** 1997 Aug;106(3):483–5

Reduced top-down influence in auditory perceptual organization in schizophrenia. Silverstein SM, et al. **J Abnorm Psychol** 1996 Nov;105(4):663–7

Negative symptoms or catatonia? [letter; comment] Dhossche D, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Mar; 36(3):302–3. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Jul;35(7):838–9.

Schizophrenia, perception, and empathy. Cohen MC. **J Am Acad Psychoanal** 1995 Winter;23(4):603–17

Communicating with the schizophrenic superego. Levin R. **J Am Acad Psychoanal** 1996 Winter;24(4):709–36

The behavioral treatment of auditory hallucinatory responding of a schizophrenic patient. Jimenez JM, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):299–310

Children with schizophrenia-spectrum disorders: thought disorder and communication problems in a family interactional context. Tompson MC, et al. **J Child Psychol Psychiatry** 1997 May;38(4):421–9

Influence of object size on prehension in leukotomized and unleukotomized individuals with schizophrenia. Carnahan H, et al. **J Clin Exp Neuropsychol** 1996 Feb;18(1):136–47

Effect of patient and family insight on compliance of schizophrenic patients. Smith CM, et al. **J Clin Pharmacol** 1997 Feb;37(2):147–54

Efficacy of risperidone in reducing positive and negative symptoms in medication-refractory schizophrenia: an open prospective study. Smith RC, et al. **J Clin Psychiatry** 1996 Oct;57(10):460–6

Cognitive function in schizophrenic patients. Tollefson GD. **J Clin Psychiatry** 1996;57 Suppl 11:31–9 (62 ref.)

Multiple deficit theory of schizophrenia: incidence of markers vs. symptoms. Chapin KJ, et al. **J Clin Psychol** 1996 Mar; 52(2):109–23

Failure to inhibit irrelevant information in non-clinical schizotypal individuals. Ferraro FR, et al. **J Clin Psychol** 1996 Jul;52(4):389–94

A comparison of cognitive profiles in schizophrenia and other psychiatric disorders. Mitrushina M, et al. **J Clin Psychol** 1996 Mar;52(2):177–90

The effects of clozapine on symptom clusters in treatment-refractory patients. Abraham G, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):49–53

Marked liver enzyme elevations with clozapine [letter] Markowitz JS, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):70–1

Amantadine does not exacerbate positive symptoms in medicated, chronic schizophrenic patients: evidence from a double-blind crossover study [letter] Silver H, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):463–4

A time course analysis of Stroop interference and facilitation: comparing normal individuals and individuals with schizophrenia [see comments] Schooler C, et al. **J Exp Psychol Gen** 1997 Mar;126(1):19–36. Comment in: J Exp Psychol Gen 1997 Mar;126(1):37–41.

Homo-erotomania for a delusional parent: erotomania with Capgras and Fregoli syndromes in a young male with learning difficulties. Mann J, et al. **J Intellect Disabil Res** 1996 Jun;40 (Pt 3):275–8

Discrimination accuracy and decision biases in different types of reality monitoring in schizophrenia. Brébion G, et al. **J Nerv Ment Dis** 1997 Apr;185(4):247–53

Affective reactivity of symptoms as a process discriminator in schizophrenia. Docherty NM. **J Nerv Ment Dis** 1996 Sep;184(9):535–41 (46 ref.)

Cognitive impairment and substance abuse history as predictors of the temporal stability of negative symptoms in schizophrenia. Lysaker PH, et al. **J Nerv Ment Dis** 1997 Jan;185(1):21–6

Language planning processing in schizophrenia using the active or passive voice. Meyer SL, et al. **J Nerv Ment Dis** 1997 Jan;185(1):53–5

Constricted expressiveness and psychophysiological reactivity in schizophrenia. Sison CE, et al. **J Nerv Ment Dis** 1996 Oct;184(10):589–97

Assessing the neuropsychological profile of stable schizophrenic outpatients. Cutler NR, et al. **J Neuropsychiatry Clin Neurosci** 1996 Fall;8(4):423–8

A clinical and neuropsychological comparison of delusional disorder and schizophrenia. Evans JD, et al. **J Neuropsychiatry Clin Neurosci** 1996 Summer;8(3):281–6

Cognition, negative symptoms, and diagnosis: a comparison of schizophrenic, bipolar, and control samples. Hawkins KA, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter; 9(1):81–9

Detecting feigned depression and schizophrenia on the MMPI-2. Bagby RM, et al. **J Pers Assess** 1997 Jun; 68(3):650–64

Detection of feigned mental disorders on the personality assessment inventory: a discriminant analysis. Rogers R, et al. **J Pers Assess** 1996 Dec;67(3):629–40

Abnormal cholecystokinin mRNA levels in entorhinal cortex of schizophrenics. Bachus SE, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):233–56 (170 ref.)

The role of stress and dopamine-GABA interactions in the vulnerability for schizophrenia. Benes FM. **J Psychiatr Res** 1997 Mar–Apr;31(2):257–75 (105 ref.)

Antipsychotic effects of bretazenil, a partial benzodiazepine agonist in acute schizophrenia--a study group report. Delini-Stula A, et al. **J Psychiatr Res** 1996 Jul–Aug; 30(4):239–50

Comparison of cognitive performance in RDC-diagnosed schizoaffective and schizophrenic patients with the Luria-Nebraska Neuropsychological Battery. Miller LS, et al. **J Psychiatr Res** 1996 Jul–Aug;30(4):277–82

Covert visual attention in schizophrenia spectrum personality disordered subjects: visuospatial cuing and alerting effects. Moran MJ, et al. **J Psychiatr Res** 1996 Jul–Aug; 30(4):261–75

Review the role of dopamine D4 receptors in schizophrenia and antipsychotic action. Sanyal S, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):219–32 (85 ref.)

Facilitation and interference of selective attention in schizophrenia. Taylor SF, et al. **J Psychiatr Res** 1996 Jul–Aug;30(4):251–9

The electroencephalographic sleep pattern in schizophrenic patients treated with clozapine or classical antipsychotic drugs. Wetter TC, et al. **J Psychiatr Res** 1996 Nov–Dec; 30(6):411–9

Substance abuse and cognitive functioning in schizophrenia [see comments] Addington J, et al. **J Psychiatry Neurosci** 1997 Mar;22(2):99–104. Comment in: J Psychiatry Neurosci 1997 Mar;22(2):97–8.

Distractibility and symptoms in schizophrenia. Addington J, et al. **J Psychiatry Neurosci** 1997 May;22(3):180–4

Memory deficits in schizophrenia: inadequate assimilation or true amnesia? Findings from the Wechsler Memory Scale--revised. Hawkins KA, et al. **J Psychiatry Neurosci** 1997 May;22(3):169–79 (24 ref.)

Magnetic resonance imaging volumetric and phosphorus 31 magnetic resonance spectroscopy measurements in schizophrenia. Hinsberger AD, et al. **J Psychiatry Neurosci** 1997 Mar;22(2):111–7

Psychopathology and quality of life in schizophrenia. Packer S, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):231–4

Some thoughts on understanding why we don't better understand schizophrenia [editorial] Pivik RT. **J Psychiatry Neurosci** 1996 Mar;21(2):81–2

Negative symptoms in nondeficit syndrome respond to neuroleptic treatment with changes in plasma homovanillic acid concentrations. Suzuki E, et al. **J Psychiatry Neurosci** 1996 May;21(3):167–71

Familial and developmental abnormalities of front lobe function and neurochemistry in schizophrenia. Deakin FW, et al. **J Psychopharmacol (Oxf)** 1997;11(2):133–42 (110 ref.)

Perspectives on the role of serotonergic mechanisms in the pharmacology of schizophrenia [letter] Seibyl JP. **J Psychopharmacol (Oxf)** 1997;11(2):188–9

Portrait of schizophrenia [letter] **J Psychosoc Nurs Ment Health Serv** 1997 Feb;35(2):5

My quest for inner peace. Buchanan D. **J Psychosoc Nurs Ment Health Serv** 1996 Sep;34(9):32

Blending two realities into a unique perspective [interview by Shirley A. Smoyak] Deegan P. **J Psychosoc Nurs Ment Health Serv** 1996 Sep;34(9):39–46

Overcoming schizophrenia [interview by Shirley A. Smoyak] Fisher DB. **J Psychosoc Nurs Ment Health Serv** 1996 Sep; 34(9):33–8

Olanzapine: a new atypical antipsychotic. Littrell K, et al.

J Psychosoc Nurs Ment Health Serv 1996 Aug;34(8):41–6 (16 ref.)

Is the treatment worse than the cure? Attitudes toward medications among persons with severe mental illness. Van Dongen CJ. **J Psychosoc Nurs Ment Health Serv** 1997 Mar; 35(3):21–5

Neural network simulations, cortical connectivity, and schizophrenic psychosis. Hoffman RE. **MD Comput** 1997 May–Jun;14(3):200–8

The search for functionality: the role of the environment in the development and maintenance of psychopathological symptoms. Brierley–Bowers P. **Md Med J** 1997 Apr; 46(4):187–9

Decreased mesopontine choline acetyltransferase levels in schizophrenia. Correlations with cognitive functions. Karson CN, et al. **Mol Chem Neuropathol** 1996 Oct–Dec; 29(2–3):181–91

Olfactory identification in elderly schizophrenia and Alzheimer's disease. Moberg PJ, et al. **Neurobiol Aging** 1997 Mar–Apr;18(2):163–7

Cognitive deficits distinguish patients with adolescent- and adult-onset schizophrenia. Basso MR, et al. **Neuropsychiatry Neuropsychol Behav Neurol** 1997 Apr; 10(2):107–12

Symptom dimensions of schizophrenia: a selective integration of neurophysiological and neuropsychological correlates. Aderibigbe YA, et al. **Neuropsychobiology** 1996; 34(4):192–200 (89 ref.)

Plasma haloperidol and reduced haloperidol concentrations in a geriatric population. Chang WH, et al. **Neuropsychobiology** 1996;33(1):12–6

A preliminary report of a strong genetic component for thought disorder in normals. A twin study. Gambini O, et al. **Neuropsychobiology** 1997;36(1):13–8

Plasma alpha-one acid glycoprotein and haloperidol concentrations in schizophrenic patients. Jann MW, et al. **Neuropsychobiology** 1997;36(1):32–6

Correlational patterns of cerebral glucose metabolism in never-medicated schizophrenics. Katz M, et al. **Neuropsychobiology** 1996;33(1):1–11

Medicated chronic schizophrenic patients do not demonstrate left turning asymmetry. Levine J, et al. **Neuropsychobiology** 1997;36(1):22–4

Platelet 5-HT levels and hypothalamic-pituitary-adrenal axis activity in schizophrenic patients with positive and negative symptoms. Pivac N, et al. **Neuropsychobiology** 1997; 36(1):19–21

Acute dietary tryptophan depletion: effects on schizophrenic positive and negative symptoms. Sharma RP, et al. **Neuropsychobiology** 1997;35(1):5–10

Cortical blood flow and negative symptoms in schizophrenia. Zemishlany Z, et al. **Neuropsychobiology** 1996;33(3):127–31

Deficits in the endogenous redirection of covert visual attention in chronic schizophrenia. Maruff P, et al. **Neuropsychologia** 1996 Nov;34(11):1079–84

Visual scan paths are abnormal in deluded schizophrenics. Phillips ML, et al. **Neuropsychologia** 1997 Jan;35(1):99–105

Assessment of differential attention mechanisms in seizure disorders and schizophrenia. Goldstein PC, et al. **Neuropsychology** 1997 Apr;11(2):309–17

Patterns of content, contextual, and working memory impairments in schizophrenia and nonamnesic alcoholism. Sullivan EV, et al. **Neuropsychology** 1997 Apr; 11(2):195–206

The effects of clozapine on symptom reduction, neurocognitive function, and clinical management in treatment-refractory state hospital schizophrenic inpatients. Hoff AL, et al. **Neuropsychopharmacology** 1996 Oct;15(4):361–9

The behavioral effect of m-chlorophenylpiperazine (mCPP) and methylphenidate in first-episode schizophrenia and normal controls. Koreen AR, et al. **Neuropsychopharmacology** 1997 Jan;16(1):61–8

Wisconsin card sorting test and Stroop test performance in schizophrenia: a shared construct. Rossi A, et al. **Neurosci Lett** 1997 Apr 25;226(2):87–90

Performance on the Purdue pegboard and finger tapping by schizophrenics after mellow and frenetic antecedent music. Chambliss C, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1161–2

Towards a cannabinoid hypothesis of schizophrenia: cognitive impairments due to dysregulation of the endogenous cannabinoid system. Emrich HM, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):803–7

A pivotal role for glutamate in the pathogenesis of schizophrenia, and its cognitive dysfunction. Hirsch SR, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):797–802 (51 ref.)

Cognitive function in schizophrenia--do neuroleptics make a difference? Mortimer AM. **Pharmacol Biochem Behav** 1997 Apr;56(4):789–95 (74 ref.)

Improvement of cognitive function in schizophrenic patients receiving clozapine or zotepine: results from a double-blind study. Meyer-Lindenberg A, et al. **Pharmacopsychiatry** 1997 Mar;30(2):35–42

The therapeutic role of naltrexone in negative symptom schizophrenia. Marchesi GF, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1995 Dec; 19(8):1239–49

Plasma prolactin concentration and psychopathology of schizophrenia [published erratum appears in Prog Neuropsychopharmacol Biol Psychiatry 1997 Feb;21(2):371] Otani K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Nov; 20(8):1369–74

Schizophrenia, psychiatric rehabilitation, and healthy development: a theoretical framework. Starkey D, et al. **Psychiatr Q** 1997 Summer;68(2):155–66

Risk factors for parasuicide among psychiatric inpatients. Bai YM, et al. **Psychiatr Serv** 1997 Sep;48(9):1201–3

Psychiatric labels: still hard to shake. Bjorklund R. **Psychiatr Serv** 1996 Dec;47(12):1329–30

A centralized system for monitoring clozapine use in British Columbia. Black LL, et al. **Psychiatr Serv** 1996 Jan; 47(1):81–3

Taking issue with Taking Issue: "psychiatric survivors" reconsidered [letter; comment] Chiko B. **Psychiatr Serv** 1997 May;48(5):604; discussion 605. Comment on: Psychiatr Serv 1997 Feb;48(2):143.

Depression among aging persons with schizophrenia who live in the community. Cohen CI, et al. **Psychiatr Serv** 1996 Jun;47(6):601–7

Lack of insight among outpatients with schizophrenia. Dickerson FB, et al. **Psychiatr Serv** 1997 Feb;48(2):195–9

Rehab rounds. Long-term support and social skills training for patients with schizophrenia. Dobson D. **Psychiatr Serv** 1996 Nov;47(11):1195–6, 1199

The individual placement and support model of supported employment. Drake RE, et al. **Psychiatr Serv** 1996 May; 47(5):473–5

Clozapine and excessive psychotropic drug use [letter] [see comments] Drew LR, et al. **Psychiatr Serv** 1996 Aug; 47(8):876. Comment in: Psychiatr Serv 1996 Dec;47(12):1392.

Psychopharmacology. Clozapine and agranulocytosis. Feldman J. **Psychiatr Serv** 1996 Nov;47(11):1177–8

Long-term impact of clozapine and psychosocial treatment on psychiatric symptoms and cognitive functioning. Grace J, et al. **Psychiatr Serv** 1996 Jan;47(1):41–5

Low- and standard-dose depot haloperidol combined with targeted oral neuroleptics. Huttunen MO, et al. **Psychiatr Serv** 1996 Jan;47(1):83–5

Quality of life of long-stay patients discharged from two psychiatric institutions. Leff J, et al. **Psychiatr Serv** 1996 Jan;47(1):62–7

A comparison of two levels of family-aided assertive community treatment. McFarlane WR, et al. **Psychiatr Serv** 1996 Jul;47(7):744–50

The importance of ward atmosphere in inpatient treatment of schizophrenia on short-term units. Melle I, et al. **Psychiatr Serv** 1996 Jul;47(7):721–6

Effectiveness of clozapine and a social learning program for severely disabled psychiatric inpatients. Menditto AA, et al. **Psychiatr Serv** 1996 Jan;47(1):46–51

Sexuality, pregnancy, and childrearing among women with schizophrenia-spectrum disorders. Miller LJ, et al. **Psychiatr Serv** 1996 May;47(5):502–6

Family burden of schizophrenia and bipolar disorder: perceptions of relatives and professionals. Mueser KT, et al. **Psychiatr Serv** 1996 May;47(5):507–11

The effectiveness of outpatient civil commitment. Munetz MR, et al. **Psychiatr Serv** 1996 Nov;47(11):1251–3

Medication noncompliance and substance abuse among patients with schizophrenia. Owen RR, et al. **Psychiatr Serv** 1996 Aug;47(8):853–8

Outcome of patients after reform in Italy [letter] Pariante CM, et al. **Psychiatr Serv** 1996 Nov;47(11):1266–7

Assessing a drug's cost-benefits [letter; comment] Raleigh F. **Psychiatr Serv** 1996 Aug;47(8):877–8. Comment on: Psychiatr Serv 1996 Mar;47(3):309–10.

Taking issue with Taking Issue: "psychiatric survivors" reconsidered [letter; comment] Siebert A. **Psychiatr Serv** 1997 May;48(5):601–2; discussion 605. Comment on: Psychiatr Serv 1997 Feb;48(2):143.

Training hospitalized patients with schizophrenia in community reintegration skills. Smith TE, et al. **Psychiatr Serv** 1996 Oct;47(10):1099–103

Effects of switching inpatients with treatment-resistant schizophrenia from clozapine to risperidone. Still DJ, et al. **Psychiatr Serv** 1996 Dec;47(12):1382–4

Long-term psychiatric patients' knowledge about their medication. Tempier R. **Psychiatr Serv** 1996 Dec; 47(12):1385–7

Psychiatric survivors and nonsurvivors [editorial] [see comments] Torrey EF. **Psychiatr Serv** 1997 Feb;48(2):143. Comment in: Psychiatr Serv 1997 May;48(5):601; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):601–2; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):602; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):602–3; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):603; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):603–4; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):604; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):604–5; discussion 605. Comment in: Psychiatr Serv 1997 May;48(5):605; discussion 605.

On the trail of the genetics and pathophysiology of schizophrenia. Holzman PS. **Psychiatry** 1996 Summer; 59(2):117–27 (50 ref.)

Early identification and treatment of schizophrenia: conceptual and ethical considerations. Larsen TK, et al. **Psychiatry** 1996 Winter;59(4):371–80 (65 ref.)

The impact of the Gulf War on the mental health of schizophrenic patients. Melamed Y, et al. **Psychiatry** 1996 Fall;59(3):267–73

New directions in the prevention and treatment of schizophrenia: a biological perspective. Wyatt RJ, et al. **Psychiatry** 1996 Winter;59(4):357–70 (90 ref.)

Clinical features of childhood-onset schizophrenia with obsessive-compulsive symptoms during the prodromal phase. Iida J, et al. **Psychiatry Clin Neurosci** 1995 Aug; 49(4):201–7

Genetic and clinical correlates of season of birth of schizophrenics. Kitamura T, et al. **Psychiatry Clin Neurosci** 1995 Aug;49(4):189–93

Is mythical delusion a factor blocking schizophrenic symptoms? Nakaya M. **Psychiatry Clin Neurosci** 1995 May; 49(2):127–30

Performance on the Wisconsin Card Sorting Test in schizophrenia: perseveration in clinical subtypes. Abbruzzese M, et al. **Psychiatry Res** 1996 Aug 30; 64(1):27–33

Production of interferon-gamma in families with multiple occurrence of schizophrenia. Arolt V, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):145–52

Relationship between the five-factor model of personality and unipolar, bipolar and schizophrenic patients. Bagby RM, et al. **Psychiatry Res** 1997 May 5;70(2):83–94

The effect of language production manipulations on negative thought disorder and discourse coherence disturbances in schizophrenia. Barch DM, et al. **Psychiatry Res** 1997 Jul 4;71(2):115–27

Affect recognition in schizophrenia: a function of global impairment or a specific cognitive deficit. Bryson G, et al. **Psychiatry Res** 1997 Jul 4;71(2):105–13

Perceptual and attentional asymmetries in schizophrenia: further evidence for a left hemisphere deficit. Carter CS, et al. **Psychiatry Res** 1996 May 17;62(2):111–9

Association study between schizophrenia and monoamine oxidase A and B DNA polymorphisms. Coron B, et al. **Psychiatry Res** 1996 Jun 1;62(3):221–6

Situational feature recognition in schizophrenic outpatients. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 1;62(3):251–7

Construct validity of two tests of social cognition in schizophrenia. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 26;63(1):77–82

A linkage study of schizophrenia to markers within Xp11 near the MAOB gene. Dann J, et al. **Psychiatry Res** 1997 May 30;70(3):131–43

A comparison of instrument sensitivity to negative symptom change. Eckert SL, et al. **Psychiatry Res** 1996 Jun 26; 63(1):67–75

Reduction of hyponatremia in a schizophrenic with polydipsia-hyponatremia syndrome by surgical intervention. Itoh N, et al. **Psychiatry Res** 1997 May 5; 70(2):125–9

Profiles of subjective quality of life in schizophrenic in- and out-patient samples. Kaiser W, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):153–66

Eye-tracking performance and adaptive functioning over the short-term course of first-episode psychosis. Katsanis J, et al. **Psychiatry Res** 1996 Aug 30;64(1):19–26

Temporal lobe dysfunction and correlation of regional cerebral blood flow abnormalities with psychopathology in schizophrenia and major depression--a study with single photon emission computed tomography. Klemm E, et al. **Psychiatry Res** 1996 Nov 25;68(1):1–10

Sex differences in neuropsychological function in non-psychotic relatives of schizophrenic probands. Kremen WS, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):131–44

Validity of the family history method for identifying schizophrenia-related disorders. Li G, et al. **Psychiatry Res** 1997 Apr 18;70(1):39–48

Effects of meta-chlorophenylpiperazine on neuroendocrine and behavioral responses in male schizophrenic patients and normal volunteers. Maes M, et al. **Psychiatry Res** 1996 Oct 16;64(3):147–59

Neurocognitive function in alcoholic, schizophrenic, and dually diagnosed patients. Nixon SJ, et al. **Psychiatry Res** 1996 Aug 30;64(1):35–45

Eye-tracking dysfunction in offspring from the New York High-Risk Project: diagnostic specificity and the role of attention. Rosenberg DR, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):121–30

Stability in cognitive dysfunctions in schizophrenic patients. Rund BR, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):131–41

Normal sustained effects of selective attention are absent in schizophrenic patients withdrawn from medication. Salo R, et al. **Psychiatry Res** 1996 May 17;62(2):121–30

Delayed habituation of the skin-conductance orienting response correlates with impaired performance on the Wisconsin Card Sorting Task in schizophrenia. Schiffer RA, et al. **Psychiatry Res** 1996 Nov 15;65(2):107–12

Predicting haloperidol treatment response in chronic schizophrenia. van Kammen DP, et al. **Psychiatry Res** 1996 Aug 30;64(1):47–58

Relationship between specific types of communication deviance and attentional performance in patients with schizophrenia. Velligan DI, et al. **Psychiatry Res** 1997 Apr 18;70(1):9–20

BPRS symptom factors and sleep variables in schizophrenia. Zarcone VP, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):111–20

Social cognition in schizophrenia. Penn DL, et al. **Psychol Bull** 1997 Jan;121(1):114–32 (285 ref.)

Mechanisms underlying memory impairment in schizophrenia. Brébion G, et al. **Psychol Med** 1997 Mar; 27(2):383–93

Assessment of the dysexecutive syndrome in schizophrenia. Evans JJ, et al. **Psychol Med** 1997 May;27(3):635–46

The risk for psychiatric disorders in relatives of schizophrenic and control probands: a comparison of three independent studies. Kendler KS, et al. **Psychol Med** 1997 Mar; 27(2):411–9

What voices can do with words: pragmatics of verbal hallucinations. Leudar I, et al. **Psychol Med** 1997 Jul; 27(4):885–98

Cognitive factors in source monitoring and auditory hallucinations. Morrison AP, et al. **Psychol Med** 1997 May; 27(3):669–79

Brain activation during an auditory 'oddball task' in schizophrenia measured by single photon emission tomography. Shajahan PM, et al. **Psychol Med** 1997 May; 27(3):587–94

Correlation of auditory 'oddball' P300 with verbal memory deficits in schizophrenia. Shajahan PM, et al. **Psychol Med** 1997 May;27(3):579–86

Insight and cognitive deficits in schizophrenia: evidence for a curvilinear relationship. Startup M. **Psychol Med** 1996 Nov;26(6):1277–81

Long-term morbidity associated with delayed treatment of first admission schizophrenic patients: a re-analysis of the Camarillo State Hospital data. Wyatt RJ, et al. **Psychol Med** 1997 Mar;27(2):261–8

Cognitive function in schizophrenia: association with negative and positive symptoms. Capleton RA. **Psychol Rep** 1996 Feb;78(1):123–8

Symptom patterns in schizophrenia for men and women. Cernovsky ZZ, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1267–71

The prototypal view of diagnosis: predictive validity of diagnostic certainty for schizophrenia. Roff JD, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1289–90

Attitude toward medication and perceived competence among chronically psychotic patients. Todman M Jr, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):809–10

Clock drawing in schizophrenia. Tracy JI, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):923–8

Delusion of pregnancy in males: a case report and literature review. Adityanjee AM. **Psychopathology** 1995; 28(6):307–11

The comprehension of metaphors in schizophrenia. de Bonis M, et al. **Psychopathology** 1997;30(3):149–54

Sensitivity and specificity of relatives' reports on the early course of schizophrenia. Hambrecht M, et al. **Psychopathology** 1997;30(1):12–9

Three grades of subjective experiences in schizophrenia: their phenomenology and implications for initial treatment. Iwawaki A. **Psychopathology** 1997 Mar-Apr;30(2):83–8

Clinical courses of hypochondriac-cenesthopathic symptoms in schizophrenia. Kato S, et al. **Psychopathology** 1997 Mar-Apr;30(2):76–82

Psychopathology in patients with schizophrenia and substance abuse: a comparative clinical study. Krausz M, et al. **Psychopathology** 1996;29(2):95–103

Delusional repetitiveness--a peculiar form of delusional remembrance. Nakaya M. **Psychopathology** 1997;30(1):36–8

Perceptual grouping due to pitch and amplitude in hallucinating schizophrenics. Nielzén S, et al. **Psychopathology** 1997;30(3):140–8

Assessment of basic symptoms in schizophrenia, schizoaffective and bipolar disorders. Ricca V, et al. **Psychopathology** 1997;30(1):53–8

Musical hallucinations and musical imagery: prevalence and phenomenology in schizophrenic inpatients. Saba PR, et al. **Psychopathology** 1997;30(4):185–90

Influence of season on manifestation of schizophrenic subtypes. Sperling W, et al. **Psychopathology** 1997; 30(4):200–7

Dissociative symptoms in schizophrenic patients with positive and negative symptoms. Spitzer C, et al. **Psychopathology** 1997 Mar-Apr;30(2):67–75

Remediation of Wisconsin Card Sorting Test performance in schizophrenia. A controlled study. Stratta P, et al. **Psychopathology** 1997 Mar-Apr;30(2):59–66

Clinical and psychosocial variables in different diagnostic groups: their interrelationships and value as predictors of course and outcome during a 14-year follow-up. Vetter P, et al. **Psychopathology** 1996;29(3):159–68

A conceptual model of quality of life in schizophrenia: description and preliminary clinical validation. Awad AG, et al. **Qual Life Res** 1997 Jan;6(1):21–6

General life satisfaction and domain-specific quality of life in chronic schizophrenic patients. Kemmler G, et al. **Qual Life Res** 1997 Apr;6(3):265–73

The relationship between personality and quality of life in persons with schizoaffective disorder and schizophrenia. Kentros MK, et al. **Qual Life Res** 1997 Mar;6(2):118–22

Family expectation, social adjustment and gender differences in a sample of schizophrenic patients. Shirakawa I, et al. **Rev Saude Publica** 1996 Jun;30(3):205–12

Maternal representations of patients with schizophrenia as measured by the Parental Bonding Instrument. Helgeland MI, et al. **Scand J Psychol** 1997 Mar;38(1):39–43

Relationships between social support, social coping and life events in the relapse of schizophrenic patients. Hultman CM, et al. **Scand J Psychol** 1997 Mar;38(1):3–13

Distress, expressed emotion, and attributions in relatives of schizophrenia patients. Barrowclough C, et al. **Schizophr Bull** 1996;22(4):691–702

First person account: schizophrenia. Bayley R. **Schizophr Bull** 1996;22(4):727–9

Cue availability and affect perception in schizophrenia. Bellack AS, et al. **Schizophr Bull** 1996;22(3):535–44

Neuropsychological and psychophysiological correlates of psychosocial functioning in schizophrenia. Brekke JS, et al. **Schizophr Bull** 1997;23(1):19–28

The risk of medication-free research. Carpenter WT Jr. **Schizophr Bull** 1997;23(1):11–8 (84 ref.)

Perseveration in schizophrenia. Crider A. **Schizophr Bull** 1997;23(1):63–74 (100 ref.)

Positive and negative symptoms: is their change related? Czobor P, et al. **Schizophr Bull** 1996;22(4):577–90

The factorial structure of schizotypy: Part I. Affinities with syndromes of schizophrenia. Gruzelier JH. **Schizophr Bull** 1996;22(4):611–20

The factorial structure of schizotypy: Part II. Cognitive asymmetry, arousal, handedness, and sex. Gruzelier JH, et al. **Schizophr Bull** 1996;22(4):621–34

Social-Adaptive Functioning Evaluation (SAFE): a rating scale for geriatric psychiatric patients. Harvey PD, et al. **Schizophr Bull** 1997;23(1):131–45

Time use of unemployed and employed single male schizophrenia subjects. Hayes RL, et al. **Schizophr Bull** 1996;22(4):659–69

Sex-onset effects on neuropsychological function in schizophrenia. Lewine R, et al. **Schizophr Bull** 1997; 23(1):51–61

Patient attributes and expressed emotion as risk factors for psychotic relapse. Linszen DH, et al. **Schizophr Bull** 1997; 23(1):119–30

Schizophrenia, psychosis, and cerebral spinal fluid homovanillic acid concentrations. Maas JW, et al. **Schizophr Bull** 1997;23(1):147–54

Common sense, insight, and neuropsychological test performance in schizophrenia patients. McEvoy JP, et al. **Schizophr Bull** 1996;22(4):635–41

Risperidone: how good is the evidence for efficacy? Mattes JA. **Schizophr Bull** 1997;23(1):155–61 (36 ref.)

Gender differences among civilly committed schizophrenia subjects. Sanguineti VR, et al. **Schizophr Bull** 1996; 22(4):653–8

Cholinergic rebound and rapid onset psychosis following abrupt clozapine withdrawal. Shiovitz TM, et al. **Schizophr Bull** 1996;22(4):591–5

A cognitive neuroscience view of schizophrenic thought disorder. Spitzer M. **Schizophr Bull** 1997;23(1):29–50 (110 ref.)

What determines continuous performance task performance? [published erratum appears in Schizophr Bull 1997;23(2):177] van den Bosch RJ, et al. **Schizophr Bull** 1996;22(4):643–51

Placebo washout in trials of antipsychotic drugs. Volavka J, et al. **Schizophr Bull** 1996;22(4):567–76 (40 ref.)

First person account: a voice from another closet. Wagner PS. **Schizophr Bull** 1996;22(2):399–401

Communication patterns and expressed emotion in families of persons with mental disorders. Wuerker AM. **Schizophr Bull** 1996;22(4):671–90

Research in schizophrenia and the discontinuation of antipsychotic medications. Wyatt RJ. **Schizophr Bull** 1997; 23(1):3–9 (40 ref.)

A psychometric comparison of the Calgary Depression Scale for Schizophrenia and the Hamilton Depression Rating Scale. Addington D, et al. **Schizophr Res** 1996 May; 19(2–3):205–12

Attentional vulnerability indicators in schizophrenia and bipolar disorder. Addington J, et al. **Schizophr Res** 1997 Feb 28;23(3):197–204

Lack of gender differences in age at onset in familial schizophrenia. Albus M, et al. **Schizophr Res** 1995 Dec; 18(1):51–7

Chronic haloperidol treatment does not affect structure of attention in schizophrenia. Allen DN, et al. **Schizophr Res** 1997 May 3;25(1):53–61

Implicit and explicit associative memory in patients with schizophrenia. Bazin N, et al. **Schizophr Res** 1996 Dec 15; 22(3):241–8

Negative labelling of individuals with first episode schizophrenia: the effect of premorbid functioning. Bean G, et al. **Schizophr Res** 1996 Nov 15;22(2):111–8

Generalization effects of training on the Wisconsin Card Sorting Test for schizophrenia patients. Bellack AS, et al. **Schizophr Res** 1996 May;19(2–3):189–94

Differential relationships between positive and negative symptoms and neuropsychological deficits in schizophrenia. Berman I, et al. **Schizophr Res** 1997 May 3;25(1):1–10

Reality monitoring failure in schizophrenia: the role of selective attention. Brébion G, et al. **Schizophr Res** 1996 Nov 15;22(2):173–80

Factor analysis of schizophrenic symptoms using the OPCRIT checklist. Cardno AG, et al. **Schizophr Res** 1996 Dec 15;22(3):233–9

An investigation into movement planning and execution deficits in individuals with schizophrenia. Carnahan H, et al. **Schizophr Res** 1997 Feb 28;23(3):213–21

Neuropsychological evidence supporting a neurodevelopmental model of schizophrenia: a longitudinal study. Censits DM, et al. **Schizophr Res** 1997 Apr 11; 24(3):289–98

Neuropsychological correlates of sustained attention in schizophrenia. Chen EY, et al. **Schizophr Res** 1997 Apr 11;24(3):299–310

Month of birth and schizophrenia in Taiwan: effect of gender, family history and age at onset. Chen WJ, et al. **Schizophr Res** 1996 May;20(1–2):133–43

Depression in schizophrenia: a comparison of three measures. Collins AA, et al. **Schizophr Res** 1996 May;20(1–2):205–9

Working memory capacity predicts language comprehension in schizophrenic patients. Condray R, et al. **Schizophr Res** 1996 May;20(1–2):1–13

The appreciation of visual jokes in people with schizophrenia: a study of 'mentalizing' ability. Corcoran R, et al. **Schizophr Res** 1997 Apr 11;24(3):319–27

Neurological frontal signs and neuropsychological deficits in schizophrenic patients. Cuesta MJ, et al. **Schizophr Res** 1996 May;20(1–2):15–20

Smoking, smoking withdrawal and schizophrenia: case reports and a review of the literature. Dalack GW, et al. **Schizophr Res** 1996 Nov 15;22(2):133–41 (45 ref.)

Neurocognitive deficits and social functioning in outpatients with schizophrenia. Dickerson F, et al. **Schizophr Res** 1996 Aug 23;21(2):75–83

Non-selective impairment of Wisconsin Card Sorting Test performance in patients with schizophrenia. Dieci M, et al. **Schizophr Res** 1997 May 3;25(1):33–42

Does affective blunting in schizophrenia reflect affective deficit or neuromotor dysfunction? Dworkin RH, et al. **Schizophr Res** 1996 Jul 5;20(3):301–6

Neuropsychological differences between schizophrenic patients with heterogeneous Wisconsin Card Sorting Test performance. Goldstein G, et al. **Schizophr Res** 1996 Jul; 21(1):13–8

Influences on cognitive heterogeneity in schizophrenia. Goldstein G, et al. **Schizophr Res** 1995 Dec;18(1):59–69

Span of apprehension deficits in older outpatients with schizophrenia. Granholm E, et al. **Schizophr Res** 1996 May; 20(1–2):51–6

Relapse in schizophrenia: is there a relationship to substance abuse? Gupta S, et al. **Schizophr Res** 1996 May; 20(1–2):153–6

The Iowa Longitudinal Study of Recent Onset Psychosis: one-year follow-up of first episode patients. Gupta S, et al. **Schizophr Res** 1997 Jan 17;23(1):1–13

Latent inhibition effects reflected in event-related brain potentials in healthy controls and schizophrenics. Guterman Y, et al. **Schizophr Res** 1996 Jul 5;20(3):315–26

Validity of self-administered symptom scales in clients with schizophrenia and schizoaffective disorders. Hamera EK, et al. **Schizophr Res** 1996 May;19(2–3):213–9

Subcortical dysfunction in schizophrenia: a comparison with Parkinson's disease and Huntington's disease. Hanes KR, et al. **Schizophr Res** 1996 May;19(2–3):121–8

Change in quantified electroencephalography (QEEG) with medication and altered clinical state in the same subjects with schizophrenia [letter] Harris A, et al. **Schizophr Res** 1997 Jan 17;23(1):87–9

Neuropsychological dysfunction in parents of schizophrenics. Harris JG, et al. **Schizophr Res** 1996 Jul 5;20(3):253–60

Cognitive impairment and negative symptoms in geriatric chronic schizophrenic patients: a follow-up study. Harvey PD, et al. **Schizophr Res** 1996 Dec 15;22(3):223–31

The Stroop effect in schizophrenic patients. Hepp HH, et al. **Schizophr Res** 1996 Dec 15;22(3):187–95

The Dose Reduction in Schizophrenia (DORIS) Study: a final report. Hirschowitz J, et al. **Schizophr Res** 1997 Jan 17;23(1):31–43

A neuropsychological study of early onset schizophrenia. Hoff AL, et al. **Schizophr Res** 1996 May;20(1–2):21–8

Relationships between social competence, psychopathology and work performance and their predictive value for vocational rehabilitation of schizophrenic outpatients. Hoffmann H, et al. **Schizophr Res** 1997 Jan 17;23(1):69–79

Left cerebral hemiatrophy and schizophrenia-like psychosis in an adolescent. Honer WG, et al. **Schizophr Res** 1996 May;20(1–2):231–4

What influences social skills in patients with schizophrenia? Preliminary study using the role play test, WAIS-R and event-related potential. Ikebuchi E, et al. **Schizophr Res** 1996 Nov 15;22(2):143–50

Attention deficits assessed by Continuous Performance Test and Span of Apprehension Test in Japanese schizophrenic patients. Ito M, et al. **Schizophr Res** 1997 Feb 28; 23(3):205–11

Insight in schizophrenia and its relationship to psychopathology. Kemp RA, et al. **Schizophr Res** 1995 Dec;18(1):21–8

The deficit syndrome in the DSM-IV Field Trial: I. Alcohol and other drug abuse. Kirkpatrick B, et al. **Schizophr Res** 1996 May;20(1–2):69–77

The deficit syndrome in the DSM-IV Field Trial. Part II. Depressive episodes and persecutory beliefs. Kirkpatrick B, et al. **Schizophr Res** 1996 May;20(1–2):79–90

The deficit syndrome in the Suffolk County Mental Health Project. Kirkpatrick B, et al. **Schizophr Res** 1996 Nov 15; 22(2):119–26

Do obstetric complications cause the earlier age at onset in male than female schizophrenics? Kirov G, et al. **Schizophr Res** 1996 May;20(1–2):117–24

A clinical trial of the effects of estrogen in acutely psychotic

women. Kulkarni J, et al. **Schizophr Res** 1996 Jul 5; 20(3):247–52

Small head circumference at birth in schizophrenia [see comments] Kunugi H, et al. **Schizophr Res** 1996 May; 20(1–2):165–70. Comment in: Schizophr Res 1997 May 3;25(1):81.

The perceived family burden scale: measurement and validation. Levene JE, et al. **Schizophr Res** 1996 Nov 15; 22(2):151–7

Cortical gray matter volume deficits in schizophrenia: a replication. Lim KO, et al. **Schizophr Res** 1996 May; 20(1–2):157–64

Clinical symptom dimensions and deficits on the Continuous Performance Test in schizophrenia. Liu SK, et al. **Schizophr Res** 1997 Jun 20;25(3):211–9

Cognitive and symptom correlates of participation in social skills training groups. McKee M, et al. **Schizophr Res** 1997 Feb 28;23(3):223–9

Aggressive behaviour and platelet 3H–paroxetine binding in schizophrenia. Maguire K, et al. **Schizophr Res** 1997 Jan 17;23(1):61–7

Length of illness and the gradient from positive to negative semantic priming in schizophrenic patients. Maher BA, et al. **Schizophr Res** 1996 Nov 15;22(2):127–32

Schizophrenic symptoms and dietary intake of n–3 fatty acids [letter] Mellor JE, et al. **Schizophr Res** 1995 Dec;18(1):85–6

Negative symptoms and EEG alpha in schizophrenia: a replication. Merrin EL, et al. **Schizophr Res** 1996 May; 19(2–3):151–61

The social dysfunction index (SDI) for patients with schizophrenia and related disorders. Munroe–Blum H, et al. **Schizophr Res** 1996 May;20(1–2):211–9

Negative association of schizophrenia with HLA DQB1*0602: evidence from a second African–American cohort. Nimgaonkar VL, et al. **Schizophr Res** 1997 Jan 17; 23(1):81–6

Associative learning in schizophrenia: a reply to Hemsley (1995) [letter; comment] O'Carroll RE. **Schizophr Res** 1996 May;20(1–2):239–40. Comment on: Schizophr Res 1995 Nov;17(3):287–8.

Neither protein kinase C nor adenylate cyclase are altered in the striatum from subjects with schizophrenia. Opeskin K, et al. **Schizophr Res** 1996 Nov 15;22(2):159–64

The relationship of social cognition to ward behavior in chronic schizophrenia. Penn DL, et al. **Schizophr Res** 1996 Jul 5;20(3):327–35

Stroop interference and facilitation in the cerebral hemispheres in schizophrenia. Phillips ML, et al. **Schizophr Res** 1996 May;20(1–2):57–68

Lack of gender differences in neuroleptic response in patients with schizophrenia. Pinals DA, et al. **Schizophr Res** 1996 Dec 15;22(3):215–22 (38 ref.)

Effect of clozapine on physical and verbal aggression. Rabinowitz J, et al. **Schizophr Res** 1996 Dec 15; 22(3):249–55

Dialysis in schizophrenia: successful only in a subtype? [letter] Reichelt KL. **Schizophr Res** 1996 May;19(2–3):223–4

Effect of smoking on neuroleptics in schizophrenia. Salokangas RK, et al. **Schizophr Res** 1997 Jan 17; 23(1):55–60

Attribution of intentions to others in people with schizophrenia: a non–verbal exploration with comic strips. Sarfati Y, et al. **Schizophr Res** 1997 Jun 20;25(3):199–209

A preliminary study of the neuropsychological heterogeneity of familial schizophrenia. Sautter FJ, et al. **Schizophr Res** 1995 Dec;18(1):1–7

Memory deficits in subsyndromes of chronic schizophrenia. Schröder J, et al. **Schizophr Res** 1996 Jul;21(1):19–26

The life course of schizophrenia: age and symptom dimensions. Schultz SK, et al. **Schizophr Res** 1997 Jan 17; 23(1):15–23

Neuropsychological profiles in schizophrenia: paranoid versus undifferentiated distinctions. Seltzer J, et al. **Schizophr Res** 1997 Feb 7;23(2):131–8

Spatial selective attention in schizophrenic, affective disorder, and normal subjects. Sereno AB, et al. **Schizophr Res** 1996 May;20(1–2):33–50

Further exploration of a latent class typology of schizophrenia. Sham PC, et al. **Schizophr Res** 1996 May; 20(1–2):105–15

Age of illness onset and schizophrenic symptomatology during an inpatient washout period. Sharma RP, et al. **Schizophr Res** 1996 Jul 5;20(3):295–300

Language processing and memory in ill and well siblings from multiplex families affected with schizophrenia. Shedlack K, et al. **Schizophr Res** 1997 May 3;25(1):43–52

Novel etiological hypotheses imply new analysis methods for schizophrenia genetics. Simonic I, et al. **Schizophr Res** 1996 May;20(1–2):235–7

Wisconsin card sorting activated regional cerebral blood flow in first break and chronic schizophrenic patients and normal controls. Steinberg JL, et al. **Schizophr Res** 1996 May; 19(2–3):177–87

Facial–affect recognition and visual scanning behaviour in the course of schizophrenia. Streit M, et al. **Schizophr Res** 1997 Apr 11;24(3):311–7

Latent inhibition in schizophrenia. Swerdlow NR, et al. **Schizophr Res** 1996 May;20(1–2):91–103

Substance use: a powerful predictor of relapse in schizophrenia. Swofford CD, et al. **Schizophr Res** 1996 May;20(1–2):145–151

Cerebral blood flow activation and functional lesions in schizophrenia. Taylor SF. **Schizophr Res** 1996 May; 19(2–3):129–40 (42 ref.)

Repetitive behaviors in schizophrenia: a single disturbance or discrete symptoms? Tracy JI, et al. **Schizophr Res** 1996 May;20(1–2):221–9

A comparison of reading and demographic–based estimates of premorbid intelligence in schizophrenia. Tracy JI, et al. **Schizophr Res** 1996 Nov 15;22(2):103–9

Relationship between negative symptoms in chronic schizophrenia and neuroleptic dose, plasma levels and side effects. Tugg LA, et al. **Schizophr Res** 1997 May 3; 25(1):71–8

Somatic symptoms in schizophrenia [letter] Tyler M. **Schizophr Res** 1995 Dec;18(1):87–8

The functional significance of symptomatology and cognitive function in schizophrenia. Velligan DI, et al. **Schizophr Res** 1997 May 3;25(1):21–31

Time course of cerebral ventricular enlargement in schizophrenia supports the hypothesis of its neurodevelopmental nature. Vita A, et al. **Schizophr Res** 1997 Jan 17;23(1):25–30 (32 ref.)

Effect of clozapine on motor function in schizophrenic patients [published erratum appears in Schizophr Res 1996 Dec 15;22(3):269] Vrtunski PB, et al. **Schizophr Res** 1996 May;20(1–2):187–98

Childhood behavioral characteristics and adult brain morphology in schizophrenia. Walker EF, et al. **Schizophr Res** 1996 Nov 15;22(2):93–101

Incorporating lag effects in register–based age–of–onset distributions in schizophrenia. Welham JL, et al. **Schizophr Res** 1996 May;20(1–2):125–32

Acute phase proteins in male Chinese schizophrenic patients in Singapore. Wong CT, et al. **Schizophr Res** 1996 Nov 15;22(2):165–71

Corpus callosum size and inter–hemispheric function in schizophrenia. Woodruff PW, et al. **Schizophr Res** 1997 Feb 28;23(3):189–96

Long–term follow–up of schizophrenia in 16 countries. A description of the International Study of Schizophrenia conducted by the World Health Organization. Sartorius N, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Sep; 31(5):249–58

The effect of violent attacks by schizophrenic persons on the attitude of the public towards the mentally ill. Angermeyer MC, et al. **Soc Sci Med** 1996 Dec; 43(12):1721–8

Positive and negative symptoms as risk factors for later suicidal activity in schizophrenics versus depressives. Kaplan KJ, et al. **Suicide Life Threat Behav** 1996 Summer; 26(2):105–21

[Correlation of neuropsychological tests and density of brain white matter in schizophrenia] Preiss J, et al. **Ceska Slov Psychiatr** 1996 Feb;92(1):3–17 (Eng. Abstr.) **(Cze)**

[Psychological theories in relation to the treatment of schizophrenia (letter; comment)] Rosenberg NK, et al. **Ugeskr Laeger** 1996 Oct 21;158(43):6120. Comment on: Ugeskr Laeger 1996 Jul 22;158(30):4283–7. **(Dan)**

[Aspects of pica in adult psychiatric patients (see comments)] Schröder ML, et al. **Ned Tijdschr Geneeskd** 1996 Oct 19; 140(42):2069–70. Comment in: Ned Tijdschr Geneeskd 1996 Nov 30;140(48):2427. Comment in: Ned Tijdschr Geneeskd 1997 Feb 8;141(6):306–7. **(Dut)**

["Polydipsia, intermittent hyponatremia and psychoses" syndrome: a diagnosis and therapeutic management of a case] Assouly–Besse F, et al. **Ann Med Psychol (Paris)** 1996 Jun;154(4):259–63 (Eng. Abstr.) **(Fre)**

[Processing of contextual syntactic information in a decision making task in schizophrenic subjects] Besche C, et al. **Can J Psychiatry** 1996 Nov;41(9):587–94 (Eng. Abstr.) **(Fre)**

[Schizophrenia and the corpus callosum: morphologic and functional approach] Antoni F, et al. **Encephale** 1996 Oct; 22 Spec No 3:33–8 (47 ref.) **(Fre)**

[Schizophrenia: receptors and clinical aspects] Azorin JM. **Encephale** 1997 Apr;23 Spec No 2:17–9 (9 ref.) (Eng. Abstr.) **(Fre)**

[Attention models in evaluating schizophrenia] Bernard D, et al. **Encephale** 1997 Mar–Apr;23(2):113–8 (38 ref.) (Eng. Abstr.) **(Fre)**

[Syndromic and diagnostic heterogeneity of schizophrenia] Brazo P, et al. **Encephale** 1997 Apr;23 Spec No 2:20–4 (30 ref.) (Eng. Abstr.) **(Fre)**

[Results of cognitive psychotherapy in long–term treatment of schizophrenic patients] Chambon O, et al. **Encephale** 1996 Oct;22 Spec No 3:72–5; discussion 76 (23 ref.) **(Fre)**

[Risk factors and schizophrenia] d'Amato T, et al. **Encephale** 1996 Oct;22 Spec No 3:3–7; discussion 8 (26 ref.) **(Fre)**

[Season of birth, obstetric complications and schizophrenia] Dassa D, et al. **Encephale** 1996 Oct;22 Spec No 3:9–12 **(Fre)**

[Chronic hallucinatory psychosis and late onset schizophrenia: the same entity?] Dubertret C, et al. **Encephale** 1997 May–Jun;23(3):157–67 (38 ref.) (Eng. Abstr.) **(Fre)**

[Patient education about neuroleptic treatment, can it reduce costs? A pilot study] Favrod J, et al. **Encephale** 1996 Sep–Oct;22(5):331–6 (Eng. Abstr.) **(Fre)**

[Exclusion and very long term hospitalization: social and institutional environment] Fraysse P, et al. **Encephale** 1996 Oct;22 Spec No 3:53–6 **(Fre)**

[Schizophrenia and exclusion. Current and future perspectives] Furtos J, et al. **Encephale** 1996 Oct;22 Spec No 3:39–48 (50 ref.) **(Fre)**

[Organization and representation of action in schizophrenia] Georgieff N. **Encephale** 1996 Oct;22 Spec No 3:108–15 (46 ref.) **(Fre)**

[The PANSS (Positive And Negative Symptom) Scale] Guelfi JD. **Encephale** 1997 Apr;23 Spec No 2:35–8 (19 ref.) (Eng. Abstr.) **(Fre)**

[Dopamine D2 and serotonin 5HT2 receptors: functions, interactions and clinical consequences in schizophrenia] Guise S, et al. **Encephale** 1997 Apr;23 Spec No 2:10–6 (20 ref.) (Eng. Abstr.) **(Fre)**

[Intentional awareness and schizophrenia] Hardy–Baylé MC, et al. **Encephale** 1996 Oct;22 Spec No 3:104–7 (12 ref.) **(Fre)**

[Multi–referential approach to schizophrenia in daily institutional management] Hayat M. **Encephale** 1996 Oct; 22 Spec No 3:80–1 **(Fre)**

[Weight gain and clozapine] Jalenques I, et al. **Encephale** 1996 Oct;22 Spec No 3:77–9 **(Fre)**

[Frontal lobe cognition disorders in 42 schizophrenic patients compared with 19 normal probands] Jaquet I, et al. **Encephale** 1997 Jan–Feb;23(1):34–41 (Eng. Abstr.) **(Fre)**

[Schizophrenia and exclusion. Reflections on a short–term hospitalization at the Polyclinic 18 de Malakoff] Jost F, et al. **Encephale** 1996 Oct;22 Spec No 3:57–9 **(Fre)**

[A new study of secondary effects in prescribing practices of neuroleptics] Lachaux B, et al. **Encephale** 1997 Apr;23 Spec No 2:25–34 (56 ref.) (Eng. Abstr.) **(Fre)**

[Comprehensive clinical management of the schizophrenic patient] Lagardère B, et al. **Encephale** 1996 Oct;22 Spec No 3:60–2 **(Fre)**

[Strategies for coping in schizophrenia] Lalonde P, et al. **Encephale** 1996 Jul–Aug;22(4):240–6 (Eng. Abstr.) **(Fre)**

[Psychometric properties of PANSS (Positive and Negative Syndrome Scale) in the French version in a sample of schizophrenic patients] Lançon C, et al. **Encephale** 1997 Jan–Feb;23(1):1–9 (Eng. Abstr.) **(Fre)**

[Schizophrenia, from classification to dimensions: value of longitudinal studies] Lecrubier Y. **Encephale** 1997 Apr;23 Spec No 2:39–43 (61 ref.) (Eng. Abstr.) **(Fre)**

[Clinical effects of clozapine: effect on negative symptoms] Llorca PM, et al. **Encephale** 1996 Jul–Aug;22(4):287–92 (Eng. Abstr.) **(Fre)**

[Clinical characteristics of chronic schizophrenic patients presenting with severe anhedonia] Loas G, et al. **Encephale** 1996 Sep–Oct;22(5):351–8 (Eng. Abstr.) **(Fre)**

[A four–dimensional model of chronic schizophrenia based on the factorial structure of the Positive and Negative Syndrome Scale (PANSS). A study of a group of 153 chronic schizophrenic patients and comparison with the factorial structure of the BPRS] Loas G, et al. **Encephale** 1997 Jan–Feb;23(1):10–8 (Eng. Abstr.) **(Fre)**

[Cortical atrophy of the left temporal lobe and schizophrenic disorders. Apropos of 7 cases] Luauté JP, et al. **Encephale** 1996 Oct;22 Spec No 3:27–32 **(Fre)**

[Cytolytic hepatitis during treatment with phenothiazines: apropos of a case] Mesure G, et al. **Encephale** 1996 Sep–Oct;22(5):388–90 (Eng. Abstr.) **(Fre)**

[New drug therapies] Olié JP, et al. **Encephale** 1996 Oct;22 Spec No 3:63–71; discussion 76 (33 ref.) **(Fre)**

[New chemotherapy approaches to psychoses] Olié JP, et al. **Encephale** 1997 Apr;23 Spec No 2:2–9 (53 ref.) (Eng. Abstr.) **(Fre)**

[Questions instead of conclusions] Parizot S, et al. **Encephale** 1996 Oct;22 Spec No 3:116–8 **(Fre)**

[Efficacy of zuclopenthixol acetate on psychotic anxiety evaluated in an open study] Romain JL, et al. **Encephale** 1996 Jul–Aug;22(4):280–6 (Eng. Abstr.) **(Fre)**

[Agonistic terror and schizophrenia] Roussillon R. **Encephale** 1996 Oct;22 Spec No 3:99–103 **(Fre)**

[Stressful life change events and criminal behavior in schizophrenia] Senninger JL, et al. **Encephale** 1996 Oct;22 Spec No 3:49–52 **(Fre)**

[Schizophrenia and neural transmission: an excess of analogical treatment?] Tassin JP. **Encephale** 1996 Oct;22 Spec No 3:91–8 (55 ref.) **(Fre)**

[Prolactinemia and predictability of therapeutic response of schizophrenic patients in acute decompensation] Vanelle JM, et al. **Encephale** 1996 Oct;22 Spec No 3:82–4 **(Fre)**

[Voluntary mercury poisoning: biological consequences and psychiatric significance (published erratum appears in Schweiz Rundsch Med Prax 1997 Jul 2;86(27–28):1123)] Jornod P, et al. **Schweiz Rundsch Med Prax** 1997 May 28; 86(22):946–51 (51 ref.) (Eng. Abstr.) **(Fre)**

[Memory disturbances in schizophrenia] Brand A, et al. **Fortschr Neurol Psychiatr** 1996 Feb;64(2):49–65 (132 ref.) (Eng. Abstr.) **(Ger)**

[Analysis of reaction time in post–acute schizophrenia using electrophysiologic variables] Eichert V, et al. **Fortschr Neurol Psychiatr** 1996 Jul;64(7):261–70 (Eng. Abstr.) **(Ger)**

[Significance of primary negative symptoms in schizophrenic and other psychiatric patients] Gerbaldo H, et al. **Fortschr Neurol Psychiatr** 1996 Jun;64(6):221–7 (50 ref.) (Eng. Abstr.) **(Ger)**

[Reliability of family reports of illness anamnesis of schizophrenic patients] Hambrecht M, et al. **Fortschr Neurol Psychiatr** 1997 Apr;65(4):145–53 (Eng. Abstr.) **(Ger)**

[Tolerance of ambiguity in endogenous psychoses from the transcultural viewpoint] Heerlein A, et al. **Fortschr Neurol Psychiatr** 1996 Sep;64(9):358–61 (Eng. Abstr.) **(Ger)**

[What needs following treatment have long-term schizophrenic patients? The problem of self- and external assessment of "needs"] Hoffmann K, et al. **Fortschr Neurol Psychiatr** 1996 Dec;64(12):473–81 (Eng. Abstr.) **(Ger)**

[Intercorrelation of psychopathological, morphologic, neurophysiologic an psychometric parameters in schizophrenic patients] Pester U, et al. **Fortschr Neurol Psychiatr** 1997 Jul;65(7):297–303 (Eng. Abstr.) **(Ger)**

[Disturbances of body experience in schizophrenic patients] Röhricht F, et al. **Fortschr Neurol Psychiatr** 1997 Jul; 65(7):323–36 (124 ref.) (Eng. Abstr.) **(Ger)**

[Aphoria of psychopathology: attempt at a meta-analysis] Sigmund D. **Fortschr Neurol Psychiatr** 1996 Nov; 64(11):452–9 (Eng. Abstr.) **(Ger)**

[Psychiatric handicap--precursor or social sequelae of schizophrenia?] Maurer K, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):79–85 (Eng. Abstr.) **(Ger)**

["Primary and secondary negative symptoms: a reliable differentiation?" Comment on the contribution by W. Barnett et al. (letter; comment)] Amminger GP, et al. **Nervenarzt** 1997 May;68(5):438–40. Comment on: Nervenarzt 1996 Jul;67(7):558–63. **(Ger)**

[Primary and secondary negative symptoms: a useful differentiation? An empirical study (see comments)] Barnett W, et al. **Nervenarzt** 1996 Jul;67(7):558–63 (Eng. Abstr.). Comment in: Nervenarzt 1997 May;68(5):438–40. **(Ger)**

[Physically experienced ego disturbances] Erkwoh R. **Nervenarzt** 1996 Jul;67(7):552–7 (Eng. Abstr.) **(Ger)**

[Structural affinities of the incomprehensible in schizophrenic delusion] Feldmann H, et al. **Nervenarzt** 1997 Mar; 68(3):226–30 (31 ref.) (Eng. Abstr.) **(Ger)**

[Genetic heterogeneity of schizophrenia. Results of a systematic twin study] Franzek E, et al. **Nervenarzt** 1996 Jul;67(7):583–94 (Eng. Abstr.) **(Ger)**

[Subjective quality of life of patients with chronic schizophrenia] Kaiser W, et al. **Nervenarzt** 1996 Jul; 67(7):572–82 (Eng. Abstr.) **(Ger)**

[Borderline disorder and schizophrenia (letter; comment)] Klärner JP. **Nervenarzt** 1997 Mar;68(3):280–1. Comment on: Nervenarzt 1995 Nov;66(11):858–63. **(Ger)**

[Comments on the contribution by T. Steinert and P.-O. Schmidt-Michel. Borderline disorder and schizophrenia (letter; comment)] Klärner JP. **Nervenarzt** 1996 May; 67(5):429–30. Comment on: Nervenarzt 1995 Nov;66(11):858–63. **(Ger)**

[Are self-perceivable neuropsychological deficits in patients with neuroses or personality disorder diagnoses indicative of later schizophrenia?] Klosterkötter J, et al. **Nervenarzt** 1997 Mar;68(3):196–204 (Eng. Abstr.) **(Ger)**

[Psychophysiologic and psychologic correlates of the emotional family climate in schizophrenic patients and their family] Kraemer S, et al. **Nervenarzt** 1996 Mar;67(3):219–28 (Eng. Abstr.) **(Ger)**

[Validity of assessment of schizophrenic basic symptoms] Mass R, et al. **Nervenarzt** 1997 Mar;68(3):205–11 (Eng. Abstr.) **(Ger)**

[Dimensional structure of the German version of the Brief Psychiatric Rating Scale (BPRS)] Mass R, et al. **Nervenarzt** 1997 Mar;68(3):239–44 (Eng. Abstr.) **(Ger)**

[50 years after Manfred Bleuler. What do we know today about late-onset schizophrenia(s)?] Riecher-Rössler A. **Nervenarzt** 1997 Mar;68(3):159–70 (86 ref.) (Eng. Abstr.) **(Ger)**

[Delusional "pseudotranssexualism" in schizophrenic psychosis] Brüne M. **Psychiatr Prax** 1996 Sep;23(5):246–7 (Eng. Abstr.) **(Ger)**

[Attitude to schizophrenia: a survey of male and female journalists] Finzen A, et al. **Psychiatr Prax** 1996 Nov; 23(6):294–5 (Eng. Abstr.) **(Ger)**

[Subjective criteria of schizophrenic patients in selecting a physician in ambulatory care] Haasen C, et al. **Psychiatr Prax** 1997 Mar;24(2):74–6 (Eng. Abstr.) **(Ger)**

[Quality of life for schizophrenic patients--that is.... Results of a survey of psychiatrists] Holzinger A, et al. **Psychiatr Prax** 1997 Mar;24(2):61–4 (Eng. Abstr.) **(Ger)**

[Non-compliance and lack of indications for depot treatment as reasons for exclusion from adequate prevention of recurrence] Jakobitsch A, et al. **Psychiatr Prax** 1996 Sep; 23(5):236–9 (Eng. Abstr.) **(Ger)**

[Psychoeducational family treatment in schizophrenia--a popular concept? A critical evaluation of different treatment models] Klimitz H. **Psychiatr Prax** 1997 May; 24(3):110–6 (71 ref.) (Eng. Abstr.) **(Ger)**

[Consumption patterns and motivation for use of addictive drugs in schizophrenic patients] Lambert M, et al. **Psychiatr Prax** 1997 Jul;24(4):185–9 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of tuberculous meningoencephalitis, schizophrenic psychosis and severe conflict reaction] Lauer G, et al. **Psychiatr Prax** 1996 Nov;23(6):296–7 **(Ger)**

[Psychotherapeutic sequence in treatment of chronic schizophrenic patients] Longinus B. **Psychiatr Prax** 1997 May;24(3):153 **(Ger)**

[Neuroleptic non-response due to self-induced hyperosmolar diarrhea] Metzger W, et al. **Psychiatr Prax** 1997 Jan; 24(1):45–6 **(Ger)**

[The social status of schizophrenic patients during the course of 8 years catamnesis and significance of relatives for psychosocial integration] Mönking HS, et al. **Psychiatr Prax** 1996 Nov;23(6):282–4 (Eng. Abstr.) **(Ger)**

[Family group in schizophrenic diseases. Overview, personal concept and report of experiences] Pott W. **Psychiatr Prax** 1996 Sep;23(5):219–25 (36 ref.) (Eng. Abstr.) **(Ger)**

[A program for the rehabilitation of mentally ill students] Reker T, et al. **Psychiatr Prax** 1997 May;24(3):138–42 (Eng. Abstr.) **(Ger)**

[Follow-up of a "culture-bound psychosis"] Savaskan E, et al. **Psychiatr Prax** 1997 May;24(3):144–6 (Eng. Abstr.) **(Ger)**

[A schizophrenic patient in a therapy group] Schröder A, et al. **Psychiatr Prax** 1996 Nov;23(6):302 **(Ger)**

[Suicidal behavior in schizophrenia--on the verbal behavior of 2 suicidal patients in group therapy] Schröder A, et al. **Psychiatr Prax** 1996 Sep;23(5):248–9 **(Ger)**

[Self determination of patients in social psychiatric practice. A medical ethics model and its practical application] Vollmann J. **Psychiatr Prax** 1997 Jul;24(4):181–4 (Eng. Abstr.) **(Ger)**

[Quality of life and daily coping of chronic schizophrenic patients. Results of a qualitative pilot study] Kühn A, et al. **Psychother Psychosom Med Psychol** 1997 Feb; 47(2):64–71 (Eng. Abstr.) **(Ger)**

[Insight into the illness by schizophrenic patients: a psychoanalytic perspective] Rittmannsberger H. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):269–75 (55 ref.) (Eng. Abstr.) **(Ger)**

[Positive role of family in coping with schizophrenic illness] Waldner P, et al. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):276–81 (30 ref.) (Eng. Abstr.) **(Ger)**

[Clozapine, cytokines, fever and sleep] Hinze-Selch D, et al. **Wien Med Wochenschr** 1996;146(13–14):311–3 (Eng. Abstr.) **(Ger)**

[Electrophysiologic correlates of selective attention in children and adolescents at increased risk of schizophrenia] Schreiber H, et al. **Z Kinder Jugenpsychiatr** 1996 Dec; 24(4):282–92 (Eng. Abstr.) **(Ger)**

[Polydipsia and water intoxication in schizophrenia patients: report of two cases] Pan JJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1996 Sep; 12(9):549–54 (Eng. Abstr.) **(Jpn)**

[Rorschach response process in schizophrenia] Harada N. **Seishin Shinkeigaku Zasshi** 1996;98(6):378–412 (Eng. Abstr.) **(Jpn)**

[Clinical study of prejudicing autochthonous speech act (thought)—acceleration of the activity in the remission process of schizophrenia] Kato S. **Seishin Shinkeigaku Zasshi** 1997;99(5):321–40 (Eng. Abstr.) **(Jpn)**

[ERP study of information processing disturbance on schizophrenia--from aspects of automatic processing and controlled processing] Kirino E, et al. **Seishin Shinkeigaku Zasshi** 1996;98(10):807–21 (Eng. Abstr.) **(Jpn)**

[The characteristics of the manifestation of extraversion and neuroticism in the families of schizophrenia patients] Alfimova MV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(3):32–7 (Eng. Abstr.) **(Rus)**

[Schizophrenia: relationship between negative symptoms and schizotypic features of personality] Donnoli VF, et al. **Acta Psiquiatr Psicol Am Lat** 1995 Sep;41(3):214–8 (Eng. Abstr.) **(Spa)**

[An inquiry on quality of life among young patients with schizophrenia. Crisis intervention in the family] Levin B, et al. **Lakartidningen** 1996 Nov 20;93(47):4259–62 **(Swe)**

SCHIZOPHRENIFORM DISORDERS see **PSYCHOTIC DISORDERS**

SCHIZOPHYLLAN see **SIZOFIRAN**

SCHIZOPHYLLUM

ENZYMOLOGY

Substrate specificity of acetylxylan esterase from Schizophyllum commune: mode of action on acetylated carbohydrates. Biely P, et al. **Biochim Biophys Acta** 1996 Dec 5;1298(2):209–22

Identification of the catalytic nucleophile in the cellulase from Schizophyllum commune and assignment of the enzyme to Family 5, subtype 5 of the glycosidases. Clarke AJ, et al. **FEBS Lett** 1997 Sep 8;414(2):359–61

Riboflavin 5'-hydroxymethyl oxidation. Molecular cloning, expression, and glycoprotein nature of the 5'-aldehyde-forming enzyme from Schizophyllum commune. Chen H, et al. **J Biol Chem** 1997 Aug 8; 272(32):20077–81

GENETICS

The A alpha mating-type locus of Schizophyllum commune: structure and function of gene X. Marion AL, et al. **Curr Genet** 1996 Jan;29(2):143–9

Cloning and characterization of a Schizophyllum gene with A beta 6 mating-type activity. Shen GP, et al. **Curr Genet** 1996 Jan;29(2):136–42

Allelic divergence at B alpha 1 pheromone receptor genes of Schizophyllum commune. Wendland J, et al. **FEMS Microbiol Lett** 1996 Dec 15;145(3):451–5

Deletion of the Schizophyllum commune A alpha locus: the roles of A alpha Y and Z mating-type genes. Robertson CI, et al. **Genetics** 1996 Dec;144(4):1437–44

Multiple genes encoding pheromones and a pheromone receptor define the B beta 1 mating-type specificity in Schizophyllum commune. Vaillancourt LJ, et al. **Genetics** 1997 Jun;146(2):541–51

The specificity determinant of the Y mating-type proteins of Schizophyllum commune is also essential for Y-Z protein binding. Yue C, et al. **Genetics** 1997 Feb; 145(2):253–60

Regions in the Z5 mating gene of Schizophyllum commune involved in Y-Z binding and recognition. Wu J, et al. **Mol Gen Genet** 1996 Oct 28;252(6):739–45

IMMUNOLOGY

Bronchial mucoid impaction due to the monokaryotic mycelium of Schizophyllum commune. Amitani R, et al. **Clin Infect Dis** 1996 Jan;22(1):146–8

ISOLATION & PURIFICATION

[Allergic bronchopulmonary mycosis caused by Schizophyllum commune] Tomita K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Jul;34(7):804–9 (Eng. Abstr.) **(Jpn)**

METABOLISM

Schizostatin, a novel squalene synthase inhibitor produced by the mushroom, Schizophyllum commune. I. Taxonomy, fermentation, isolation, physico-chemical properties and biological activities. Tanimoto T, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):617–23

PATHOGENICITY

Brain abscess caused by Schizophyllum commune: an emerging basidiomycete pathogen. Rihs JD, et al. **J Clin Microbiol** 1996 Jul;34(7):1628–32 (13 ref.)

[Case of allergic bronchopulmonary mycosis caused by Schizophyllum commune] Ikushima S. **Jpn J Antibiot** 1997 Jan;50(1):47–9; discussion 50,75–6 **(Jpn)**

[Case of allergic bronchopulmonary mycosis caused by Schizophyllum commune] Yamashina S. **Jpn J Antibiot** 1997 Jan;50(1):51–3; discussion 54,75–6 **(Jpn)**

SCHIZOPYRENIDA

CLASSIFICATION

On the identity of the amoeboflagellates Didascalus thorntoni and Adelphamoeba galeacystis. De Jonckheere JF, et al. **J Eukaryot Microbiol** 1997 Jan-Feb;44(1):52–4

SCHIZOSACCHAROMYCES

The Josef Steiner Lecture: CDKs and cell-cycle control in fission yeast: relevance to other eukaryotes and cancer. Nurse P. **Int J Cancer** 1997 May 29;71(5):707–8 (21 ref.)

Cloning cell cycle regulatory genes by transcomplementation in yeast. Norbury C, et al. **Methods Enzymol** 1997; 283:44–59

CHEMISTRY

M-factor, a farnesylated mating factor from the fission yeast Schizosaccharomyces pombe. Davey J. **Biochem Soc Trans** 1996 Aug;24(3):718–23 (48 ref.)

tea1 and the microtubular cytoskeleton are important for generating global spatial order within the fission yeast cell. Mata J, et al. **Cell** 1997 Jun 13;89(6):939–49

Identification and localization of the sod2 gene product in fission yeast. Dibrov P, et al. **FEBS Lett** 1997 Mar 17; 405(1):119–24

Abc1: a new ABC transporter from the fission yeast Schizosaccharomyces pombe. Christensen PU, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):97–102

Schizosaccharomyces pombe has a novel eukaryotic initiation factor 4F complex containing a cap-binding protein with the human eIF4E C-terminal motif KSGST. Ptushkina M, et al. **J Biol Chem** 1996 Dec 20;271(51):32818–24

Crystal structure of the yeast cell-cycle control protein, p13suc1, in a strand-exchanged dimer. Khazanovich N, et al. **Structure** 1996 Mar 15;4(3):299–309

Characterization of cwl1+, a gene from Schizosaccharomyces pombe whose overexpression causes cell lysis. Godoy C, et al. **Yeast** 1996 Aug;12(10):983–90

Identification and preliminary characterization of p31, a new PSTAIRE-related protein in fission yeast. Tournier S, et al. **Yeast** 1997 Jun 30;13(8):727–34

CYTOLOGY

Cdc6 and DNA replication: limited to humble origins. Heichman KA. **Bioessays** 1996 Nov;18(11):859–62 (27 ref.)

Mis6, a fission yeast inner centromere protein, acts during G1/S and forms specialized chromatin required for equal segregation. Saitoh S, et al. **Cell** 1997 Jul 11;90(1):131–43

Microtubule function in morphological differentiation: growth zones and growth cones. Vega LR, et al. **Cell** 1997 Jun 13;89(6):825–8 (14 ref.)

Forces acting on the fission yeast anaphase spindle. Hagan

IM, et al. **Cell Motil Cytoskeleton** 1996;34(1):69–75
S-phase and DNA-damage checkpoints: a tale of two yeasts. Stewart E, et al. **Curr Opin Cell Biol** 1996 Dec;8(6):781–7 (64 ref.)
Control of S-phase periodic transcription in the fission yeast mitotic cycle. Baum B, et al. **EMBO J** 1997 Aug 1; 16(15):4676–88
The Schizosaccharomyces pombe rad3 checkpoint gene. Bentley NJ, et al. **EMBO J** 1996 Dec 2;15(23):6641–51
p25rum1 promotes proteolysis of the mitotic B-cyclin p56cdc13 during G1 of the fission yeast cell cycle. Correa-Bordes J, et al. **EMBO J** 1997 Aug 1; 16(15):4657–64
Fission yeast Cut1 and Cut2 are essential for sister chromatid separation, concentrate along the metaphase spindle and form large complexes. Funabiki H, et al. **EMBO J** 1996 Dec 2;15(23):6617–28
The fission yeast dma1 gene is a component of the spindle assembly checkpoint, required to prevent septum formation and premature exit from mitosis if spindle function is compromised. Murone M, et al. **EMBO J** 1996 Dec 2; 15(23):6605–16
A novel S phase inhibitor in fission yeast. Woollard A, et al. **EMBO J** 1996 Sep 2;15(17):4603–12
The role of proteolysis in cell cycle progression in Schizosaccharomyces pombe. Yamano H, et al. **EMBO J** 1996 Oct 1;15(19):5268–79
The Mcs4 response regulator coordinately controls the stress-activated Wak1-Wis1-Sty1 MAP kinase pathway and fission yeast cell cycle. Shieh JC, et al. **Genes Dev** 1997 Apr 15;11(8):1008–22
A novel protein, Psp1, essential for cell cycle progression of Schizosaccharomyces pombe is phosphorylated by Cdc2-Cdc13 upon entry into G0-like stationary phase of cell growth. Jang YJ, et al. **J Biol Chem** 1997 Aug 8; 272(32):19993–20002
Disruption of re-replication control by overexpression of human ORC1 in fission yeast. Wolf DA, et al. **J Biol Chem** 1996 Dec 20;271(51):32503–6
Evidence for cell cycle-specific, spindle pole body-mediated, nuclear positioning in the fission yeast Schizosaccharomyces pombe. Hagan I, et al. **J Cell Sci** 1997 Aug;110 (Pt 16):1851–66
Calmodulin localizes to the spindle pole body of Schizosaccharomyces pombe and performs an essential function in chromosome segregation. Moser MJ, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1805–12
A nitrogen starvation-induced dormant G0 state in fission yeast: the establishment from uncommitted G1 state and its delay for return to proliferation. Su SS, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1347–57
The size control of fission yeast revisited. Sveiczer A, et al. **J Cell Sci** 1996 Dec;109 (Pt 12):2947–57
The fission yeast sts5+ gene is required for maintenance of growth polarity and functionally interacts with protein kinase C and an osmosensing MAP-kinase pathway. Toda T, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2331–42
Cytokinesis in fission yeast Schizosaccharomyces pombe. Balasubramanian MK, et al. **Methods Enzymol** 1997; 283:494–506
Stress-activated protein kinase pathway in cell cycle control of fission yeast. Shiozaki K, et al. **Methods Enzymol** 1997; 283:506–20
Ran1 functions to control the Cdc10/Sct1 complex through Puc1. Caligiuri M, et al. **Mol Biol Cell** 1997 Jun; 8(6):1117–28
Mcs4 mitotic catastrophe suppressor regulates the fission yeast cell cycle through the Wik1-Wis1-Spc1 kinase cascade. Shiozaki K, et al. **Mol Biol Cell** 1997 Mar; 8(3):409–19
Spatial organization of the Nim1-Wee1-Cdc2 mitotic control network in Schizosaccharomyces pombe. Wu L, et al. **Mol Biol Cell** 1996 Nov;7(11):1749–58
Human Bak induces cell death in Schizosaccharomyces pombe with morphological changes similar to those with apoptosis in mammalian cells. Ink B, et al. **Mol Cell Biol** 1997 May;17(5):2468–74
5-Azacytidine treatment of the fission yeast leads to cytotoxicity and cell cycle arrest. Taylor EM, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):128–37

DRUG EFFECTS

Identification of preussin as a selective inhibitor for cell growth of the fission yeast ts mutants defective in Cdc2-regulatory genes. Kasahara K, et al. **Jpn J Antibiot** 1997 Mar;50(3):267–9
5-Azacytidine treatment of the fission yeast leads to cytotoxicity and cell cycle arrest. Taylor EM, et al. **Mol Gen Genet** 1996 Nov 27;253(1-2):128–37
Isolation and characterization of a cisplatin-resistant strain of Schizosaccharomyces pombe. Perego P, et al. **Mol Pharmacol** 1996 Nov;50(5):1080–6
Role of determinants of cadmium sensitivity in the tolerance of Schizosaccharomyces pombe to cisplatin. Perego P, et al. **Mol Pharmacol** 1997 Jan;51(1):12–8
Isolation of a Schizosaccharomyces pombe gene which in high copy confers resistance to the nucleoside analogue 5-azacytidine. Platt GM, et al. **Yeast** 1997 Apr;13(5):463–74

ENZYMOLOGY

Role of the fission yeast nim 1 protein kinase in the cell cycle response to nutritional signals. Belenguer P, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):204–8
PCNA and DNA polymerase delta catalytic subunit from Schizosaccharomyces pombe do not interact directly. Tratner I, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):321–8
Glutathione synthetase: similarities of the proteins from Schizosaccharomyces pombe and Arabidopsis thaliana. Wang CL, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):563–6
Identification and characterization of a mitochondrial endonuclease from yeast, Schizosaccharomyces pombe. Ikeda S, et al. **Biochem Mol Biol Int** 1996 Nov; 40(5):1017–24
Isolation of ptb1, a gene for the beta-subunit of a prenyltransferase from fission yeast. Godfrey R, et al. **Biochem Soc Trans** 1996 Aug;24(3):432S
Purification of Sxa2, a carboxypeptidase involved in pheromone recovery in fission yeast. Ladds G, et al. **Biochem Soc Trans** 1996 Aug;24(3):504S
Characterisation of Sxa2, a carboxypeptidase involved in pheromone recovery in fission yeast. Ladds G, et al. **Biochem Soc Trans** 1996 May;24(2):210S
Sxa2, a carboxypeptidase that degrades extracellular pheromone in fission yeast. Ladds G, et al. **Biochem Soc Trans** 1997 May;25(2):228S
The inositol 1,4,5-trisphosphate 6-kinase of Schizosaccharomyces pombe. Ongusaha PP, et al. **Biochem Soc Trans** 1997 Feb;25(1):105S
Pro-sequence removal is not sufficient for activation of the kexin Krp1. Powner D, et al. **Biochem Soc Trans** 1997 May; 25(2):230S
Maturation of Krp1, an endopeptidase from the fission yeast Schizosaccharomyces pombe. Powner D, et al. **Biochem Soc Trans** 1996 May;24(2):211S
Maturation of Krp1, an endopeptidase from the fission yeast Schizosaccharomyces pombe. Powner D, et al. **Biochem Soc Trans** 1996 Aug;24(3):503S
The reaction of phosphoglycerate mutase from Schizosaccharomyces pombe with diethylpyrocarbonate. Price RM, et al. **Biochem Soc Trans** 1996 May;24(2):324S
Characterisation of a phospholipase C delta from Schizosaccharomyces pombe. Slaaby R, et al. **Biochem Soc Trans** 1997 May;25(2):225S
Identification of a putative G protein-coupled receptor kinase in Schizosaccharomyces pombe. Watson P, et al. **Biochem Soc Trans** 1997 May;25(2):226S
Osmo-stress-induced changes in neutral trehalase activity of the fission yeast Schizosaccharomyces pombe. Fernández J, et al. **Biochim Biophys Acta** 1997 Jun 5;1357(1):41–8
Molecular mimicry in development: identification of ste11+ as a substrate and mei3+ as a pseudosubstrate inhibitor of ran1+ kinase [published erratum appears in Cell 1997 Jan 24;88(2):287] Li P, et al. **Cell** 1996 Nov 29;87(5):869–80
Requirement of S. pombe exonuclease II, a homologue of S. cerevisiae Sep1, for normal mitotic growth and viability. Szankasi P, et al. **Curr Genet** 1996 Sep;30(4):284–93
A functional dominant mutation in Schizosaccharomyces pombe RNase MRP RNA affects nuclear RNA processing and requires the mitochondrial-associated nuclear mutation ptp1-1 for viability. Paluh JL, et al. **EMBO J** 1996 Sep 2;15(17):4723–33
Spm1, a stress-activated MAP kinase that regulates morphogenesis in S.pombe. Zaitsevskaya-Carter T, et al. **EMBO J** 1997 Mar 17;16(6):1318–31
Cloning and characterization of a cDNA encoding a 3-methyladenine DNA glycosylase from the fission yeast Schizosaccharomyces pombe. Memisoglu A, et al. **Gene** 1996 Oct 24;177(1-2):229–35
Subunit composition of RNA polymerase II from the fission yeast Schizosaccharomyces pombe. Sakurai H, et al. **Gene** 1996 Nov 21;180(1-2):63–7
The regulatory subunits of fission yeast protein phosphatase 2A (PP2A) affect cell morphogenesis, cell wall synthesis and cytokinesis. Kinoshita K, et al. **Genes Cells** 1996 Jan; 1(1):29–45
PAT1, an evolutionarily conserved acetyltransferase homologue, is required for multiple steps in the cell cycle. Lin R, et al. **Genes Cells** 1996 Oct;1(10):923–42
Molecular assembly of RNA polymerase II from the fission yeast Schizosaccharomyces pombe: subunit-subunit contact network involving Rpb5. Miyao T, et al. **Genes Cells** 1996 Sep;1(9):843–54
Vacuolar protein sorting in fission yeast: cloning, biosynthesis, transport, and processing of carboxypeptidase Y from Schizosaccharomyces pombe. Tabuchi M, et al. **J Bacteriol** 1997 Jul;179(13):4179–89
Regulation of Schizosaccharomyces pombe Wee1 tyrosine kinase. Aligue R, et al. **J Biol Chem** 1997 May 16; 272(20):13320–5
A DNA helicase from Schizosaccharomyces pombe stimulated by single-stranded DNA-binding protein at low ATP concentration. Park JS, et al. **J Biol Chem** 1997 Jul 25;272(30):18910–9
Schizosaccharomyces pombe Vps34p, a phosphatidylinositol-specific PI 3-kinase essential for normal cell growth and vacuole morphology. Takegawa K, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3745–56
Characteristics of 26 S proteases from fission yeast mutants, which arrest in mitosis. Seeger M, et al. **J Mol Biol** 1996 Nov 1;263(3):423–31
Mcs4 mitotic catastrophe suppressor regulates the fission yeast cell cycle through the Wik1-Wis1-Spc1 kinase cascade. Shiozaki K, et al. **Mol Biol Cell** 1997 Mar; 8(3):409–19
A ubiquitin-conjugating enzyme in fission yeast that is essential for the onset of anaphase in mitosis. Osaka F, et al. **Mol Cell Biol** 1997 Jun;17(6):3388–97
Multiple regulatory domains on the Byr2 protein kinase. Tu H, et al. **Mol Cell Biol** 1997 Oct;17(10):5876–87
Functional analysis of the fission yeast Prp4 protein kinase involved in pre-mRNA splicing and isolation of a putative mammalian homologue. Gross T, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1028–35
Telomerase catalytic subunit homologs from fission yeast and human [see comments] Nakamura TM, et al. **Science** 1997 Aug 15;277(5328):955–9. Comment in: Science 1997 Aug 15;277(5328):911–2.
[Cloning of cDNA for RNA polymerase subunit from the fission yeast Schizosaccharomyces pombe by heterospecific complementation in Saccharomyces cerevisiae] Shpakovskii GV, et al. **Bioorg Khim** 1997 Feb;23(2):110–7 (Eng. Abstr.) **(Rus)**

GENETICS

The ade6 gene of the fission yeast as a target for antisense and ribozyme RNA-mediated suppression. Atkins D, et al. **Antisense Res Dev** 1995 Winter;5(4):295–305
The Schizosaccharomyces pombe gms1+ gene encodes an UDP-galactose transporter homologue required for protein galactosylation. Tabuchi M, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):121–5
Molecular cloning of GAF2, a Schizosaccharomyces pombe GATA factor, which has two zinc-finger sequences. Hoe KL, et al. **Biochem Mol Biol Int** 1996 May;39(1):127–35
Isolation of yeast mutants hypersensitive to mating pheromones. Davis K, et al. **Biochem Soc Trans** 1997 May; 25(2):227S
Isolation of ptb1, a gene for the beta-subunit of a prenyltransferase from fission yeast. Godfrey R, et al. **Biochem Soc Trans** 1996 Aug;24(3):432S
Defining the role of Sxa1 during pheromone adaptation in Schizosaccharomyces pombe. Hughes M, et al. **Biochem Soc Trans** 1996 Aug;24(3):502S
BTF3 is evolutionarily conserved in fission yeast. Potashkin J, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):182–4
Identification and phylogenetic classification of eleven putative P-type calcium transport ATPase genes in the yeasts Saccharomyces cerevisiae and Schizosaccharomyces pombe. Catty P, et al. **Biosci Rep** 1996 Apr;16(2):75–85 (58 ref.)
Cassette for the generation of sequential gene disruptions in the yeast Schizosaccharomyces pombe. McNabb DS, et al. **Biotechniques** 1997 Jun;22(6):1134–9
Mis6, a fission yeast inner centromere protein, acts during G1/S and forms specialized chromatin required for equal segregation. Saitoh S, et al. **Cell** 1997 Jul 11;90(1):131–43
Integrated map of the Schizosaccharomyces pombe genome. Garkavtsev I, et al. **Chromosoma** 1997 Sep;106(4):254–65
Mitosis-specific phosphorylation of gar2, a fission yeast nucleolar protein structurally related to nucleolin. Gulli MP, et al. **Chromosoma** 1997 Jun;105(7-8):532–41
Cell cycle control of S phase: a comparison of two yeasts. Huberman JA. **Chromosoma** 1996 Oct;105(4):197–203 (40 ref.)
Ultrastructural changes in the Schizosaccharomyces pombe nucleolus following the disruption of the gar2+ gene, which encodes a nucleolar protein structurally related to nucleolin. Léger-Silvestre I, et al. **Chromosoma** 1997 Jun; 105(7-8):542–52
Large, complex modular structure of a fission yeast DNA replication origin. Dubey DD, et al. **Curr Biol** 1996 Apr 1;6(4):467–73
Caffeine-resistance in S. pombe: mutations in three novel caf genes increase caffeine tolerance and affect radiation sensitivity, fertility, and cell cycle. Benko Z, et al. **Curr Genet** 1997 Jun;31(6):481–7
Heat-shock response in Schizosaccharomyces pombe cells lacking cyclic AMP-dependent phosphorylation. Fernández J, et al. **Curr Genet** 1997 Feb;31(2):112–8
An approach to identify functional homologues and suppressors of genes in fission yeast. Grallert B, et al. **Curr Genet** 1997 Jul;32(1):27–31
Homologous recombination in the fission yeast Schizosaccharomyces pombe: different requirements for the rhp51+, rhp54+ and rad22+ genes. Muris DFR, et al. **Curr Genet** 1997 Mar;31(3):248–54
Requirement of S. pombe exonuclease II, a homologue of S. cerevisiae Sep1, for normal mitotic growth and viability. Szankasi P, et al. **Curr Genet** 1996 Sep;30(4):284–93
Fission yeast Sop2p: a novel and evolutionarily conserved protein that interacts with Arp3p and modulates profilin function. Balasubramanian MK, et al. **EMBO J** 1996 Dec 2;15(23):6426–37
Control of S-phase periodic transcription in the fission yeast mitotic cycle. Baum B, et al. **EMBO J** 1997 Aug 1; 16(15):4676–88
The Schizosaccharomyces pombe rad3 checkpoint gene. Bentley NJ, et al. **EMBO J** 1996 Dec 2;15(23):6641–51
Transcriptional termination signals for RNA polymerase II in fission yeast. Birse CE, et al. **EMBO J** 1997 Jun; 16(12):3633–43
Meiotic nuclear reorganization: switching the position of centromeres and telomeres in the fission yeast Schizosaccharomyces pombe. Chikashige Y, et al.

EMBO J 1997 Jan 2;16(1):193–202

Cell differentiation by interaction of two HMG-box proteins: Mat1–Mc activates M cell–specific genes in S.pombe by recruiting the ubiquitous transcription factor Ste11 to weak binding sites. Kjaerulff S, et al. **EMBO J** 1997 Jul 1; 16(13):4021–33

The fission yeast dma1 gene is a component of the spindle assembly checkpoint, required to prevent septum formation and premature exit from mitosis if spindle function is compromised. Murone M, et al. **EMBO J** 1996 Dec 2; 15(23):6605–16

rqh1+, a fission yeast gene related to the Bloom's and Werner's syndrome genes, is required for reversible S phase arrest. Stewart E, et al. **EMBO J** 1997 May 15; 16(10):2682–92

Nif1, a novel mitotic inhibitor in Schizosaccharomyces pombe. Wu L, et al. **EMBO J** 1997 Mar 17;16(6):1342–50

Identification and expression of uvi31+, a UV-inducible gene from Schizosaccharomyces pombe. Kim SH, et al. **Environ Mol Mutagen** 1997;30(1):72–81

The ribosomal-RNA-processing pathway in Schizosaccharomyces pombe. Good L, et al. **Eur J Biochem** 1997 Jul 1;247(1):314–21

The purification and characterization of the catalytic domain of Src expressed in Schizosaccharomyces pombe. Comparison of unphosphorylated and tyrosine phosphorylated species. Weijland A, et al. **Eur J Biochem** 1996 Sep 15;240(3):756–64

Abc1: a new ABC transporter from the fission yeast Schizosaccharomyces pombe. Christensen PU, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):97–102

Putative K+ channel in the plasma membrane of the yeast Schizosaccharomyces pombe: evidence of transcription-level regulation. Golubnitchaya-Labudova O, et al. **Folia Microbiol (Praha)** 1996;41(1):93–5

Functional characterization of Schizosaccharomyces pombe genes cloned in potassium transport defective yeast strains. Lichtenberg-Fraté H, et al. **Folia Microbiol (Praha)** 1996; 41(1):105–6

Schizosaccharomyces pombe gene GHT1 is highly homologous to other prokaryotic, yeast and higher eukaryotic genes coding for monosaccharide transporters. Näschen T, et al. **Folia Microbiol (Praha)** 1996;41(1):109–14

General purpose tagging vectors for fission yeast. Forsburg SL, et al. **Gene** 1997 Jun 3;191(2):191–5

Comprehensive cloning of Schizosaccharomyces pombe genes encoding translation elongation factors. Mita K, et al. **Gene** 1997 Mar 18;187(2):259–66

Construction of vectors and a genomic library for use with his3-deficient strains of Schizosaccharomyces pombe. Ohi R, et al. **Gene** 1996 Oct 3;174(2):315–8

Cloning and characterization of hsc1+, a heat shock cognate gene of the fission yeast Schizosaccharomyces pombe. Oishi K, et al. **Gene** 1996 Nov 28;181(1–2):45–9

Cloning and characterization of the S. pombe gene efc25+, a new putative guanine nucleotide exchange factor. Tratner I, et al. **Gene** 1997 Jul 9;193(2):203–10

A novel HSP70 gene of Schizosaccharomyces pombe that confers K-252a resistance. Usui T, et al. **Gene** 1997 Apr 11;189(1):43–7

The Schizosaccharomyces pombe mra1 gene, which is required for cell growth and mating, can suppress the mating inefficiency caused by a deficit in the Ras1 activity. Hakuno F, et al. **Genes Cells** 1996 Mar;1(3):303–15

Schizosaccharomyces pombe gad7+ encodes a phosphoprotein with a bZIP domain, which is required for proper G1 arrest and gene expression under nitrogen starvation. Kanoh J, et al. **Genes Cells** 1996 Apr; 1(4):391–408

The ORC1 homolog orp1 in fission yeast plays a key role in regulating onset of S phase. Grallert B, et al. **Genes Dev** 1996 Oct 15;10(20):2644–54

Fission yeast WD-repeat protein pop1 regulates genome ploidy through ubiquitin-proteasome-mediated degradation of the CDK inhibitor Rum1 and the S-phase initiator Cdc18. Kominami K, et al. **Genes Dev** 1997 Jun 15;11(12):1548–60

A complex structure in the mRNA of Tf1 is recognized and cleaved to generate the primer of reverse transcription. Lin JH, et al. **Genes Dev** 1997 Jan 15;11(2):270–85

The meiotic recombination hot spot created by the single-base substitution ade6-M26 results in remodeling of chromatin structure in fission yeast. Mizuno K, et al. **Genes Dev** 1997 Apr 1;11(7):876–86

Cdc2 tyrosine phosphorylation is required for the DNA damage checkpoint in fission yeast. Rhind N, et al. **Genes Dev** 1997 Feb 15;11(4):504–11

The dmf1/mid1 gene is essential for correct positioning of the division septum in fission yeast. Sohrmann M, et al. **Genes Dev** 1996 Nov 1;10(21):2707–19

Identification of residues in fission yeast and human p34cdc2 required for S-M checkpoint control. Basi G, et al. **Genetics** 1996 Dec;144(4):1413–24

apd1+, a gene required for red pigment formation in ade6 mutants of Schizosaccharomyces pombe, encodes an enzyme required for glutathione biosynthesis: a role for glutathione and a glutathione-conjugate pump. Chaudhuri B, et al. **Genetics** 1997 Jan;145(1):75–83

The Schizosaccharomyces pombe rec16 gene product regulates multiple meiotic events. Li YF, et al. **Genetics** 1997 May;146(1):57–67

Double-strand break-induced mitotic intrachromosomal recombination in the fission yeast Schizosaccharomyces pombe. Osman F, et al. **Genetics** 1996 Feb;142(2):341–57

Epigenetic inheritance of transcriptional silencing and switching competence in fission yeast. Thon G, et al. **Genetics** 1997 Mar;145(3):685–96

Identification of a DNA element in the fission yeast Schizosaccharomyces pombe nmt1 (thi3) promoter involved in thiamine-regulated gene expression. Zurlinden A, et al. **J Bacteriol** 1997 Sep;179(18):5956–8

Analysis of the decaprenyl diphosphate synthase (dps) gene in fission yeast suggests a role of ubiquinone as an antioxidant. Suzuki K, et al. **J Biochem (Tokyo)** 1997 Mar; 121(3):496–505

Pch1(+), a second essential C-type cyclin gene in Schizosaccharomyces pombe. Furnari BA, et al. **J Biol Chem** 1997 May 2;272(18):12100–6

Isolation, expression, and regulation of the pgr1(+) gene encoding glutathione reductase absolutely required for the growth of Schizosaccharomyces pombe. Lee J, et al. **J Biol Chem** 1997 Sep 12;272(37):23042–9

Type II myosin heavy chain encoded by the myo2 gene composes the contractile ring during cytokinesis in Schizosaccharomyces pombe. Kitayama C, et al. **J Cell Biol** 1997 Jun 16;137(6):1309–19

Isolation and characterization of fission yeast mutants defective in the assembly and placement of the contractile actin ring. Chang F, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):131–42

Isolation of the Schizosaccharomyces prombe RAD54 homologue, rhp54+, a gene involved in the repair of radiation damage and replication fidelity. Muris DF, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):73–81

The fission yeast sts5+ gene is required for maintenance of growth polarity and functionally interacts with protein kinase C and an osmosensing MAP-kinase pathway. Toda T, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2331–42

The SpTRK gene encodes a potassium-specific transport protein TKHp in Schizosaccharomyces pombe. Lichtenberg-Fraté H, et al. **J Membr Biol** 1996 Jul; 152(2):169–81

Analysis of radiation-sensitive mutants of fission yeast. Edwards RJ, et al. **Methods Enzymol** 1997;283:471–94

Genetic and physiological analysis of DNA replication in fission yeast. MacNeill SA, et al. **Methods Enzymol** 1997; 283:440–59

Genotoxicity testing in Schizosaccharomyces pombe. McAthey P. **Methods Mol Biol** 1996;53:343–53 (3 ref.)

Ran1 functions to control the Cdc10/Sct1 complex through Puc1. Caligiuri M, et al. **Mol Biol Cell** 1997 Jun; 8(6):1117–28

The Cdc2 protein kinase controls Cdc10/Sct1 complex formation. Connolly T, et al. **Mol Biol Cell** 1997 Jun; 8(6):1105–15

Characterization of novel mutations at the Schizosaccharomyces pombe cdc2 regulatory phosphorylation site, tyrosine 15. Gould KL, et al. **Mol Biol Cell** 1996 Oct;7(10):1573–86

A connection between pre-mRNA splicing and the cell cycle in fission yeast: cdc28+ is allelic with prp8+ and encodes an RNA-dependent ATPase/helicase. Lundgren K, et al. **Mol Biol Cell** 1996 Jul;7(7):1083–94

Fission yeast mal2+ is required for chromosome segregation. Fleig U, et al. **Mol Cell Biol** 1996 Nov;16(11):6169–77

Genes encoding farnesyl cysteine carboxyl methyltransferase in Schizosaccharomyces pombe and Xenopus laevis. Imai Y, et al. **Mol Cell Biol** 1997 Mar;17(3):1543–51

A fission yeast homolog of CDC20/p55CDC/Fizzy is required for recovery from DNA damage and genetically interacts with p34cdc2. Matsumoto T. **Mol Cell Biol** 1997 Feb;17(2):742–50

The centromere enhancer mediates centromere activation in Schizosaccharomyces pombe. Ngan VK, et al. **Mol Cell Biol** 1997 Jun;17(6):3305–14

The Schizosaccharomyces pombe rad11+ gene encodes the large subunit of replication protein A. Parker AE, et al. **Mol Cell Biol** 1997 May;17(5):2381–90

Schizosaccharomyces pombe skp1+ encodes a protein kinase related to mammalian glycogen synthase kinase 3 and complements a cdc14 cytokinesis mutant. Plyte SE, et al. **Mol Cell Biol** 1997 Mar;17(3):1756

The fission yeast pmk1+ gene encodes a novel mitogen-activated protein kinase homolog which regulates cell integrity and functions coordinately with the protein kinase C pathway. Toda T, et al. **Mol Cell Biol** 1996 Dec; 16(12):6752–64

A mutation in a thioredoxin reductase homolog suppresses p53-induced growth inhibition in the fission yeast Schizosaccharomyces pombe. Casso D, et al. **Mol Gen Genet** 1996 Oct 16;252(5):518–29

The Schizosaccharomyces pombe mam1 gene encodes an ABC transporter mediating secretion of M-factor. Christensen PU, et al. **Mol Gen Genet** 1997 Jun; 255(2):226–36

Functional analysis of homologs of translation initiation factor 2gamma in yeast. Erickson FL, et al. **Mol Gen Genet** 1997 Feb 27;253(6):711–9

Cell cycle, DNA damage and heat shock regulate suc22+ expression in fission yeast. Harris P, et al. **Mol Gen Genet** 1996 Sep 13;252(3):284–91

The Schizosaccharomyces pombe cdc6 gene encodes the catalytic subunit of DNA polymerase delta. Iino Y, et al. **Mol Gen Genet** 1997 Mar 18;254(1):93–7

A wat1 mutant of fission yeast is defective in cell morphology. Kemp JT, et al. **Mol Gen Genet** 1997 Mar 26;254(2):127–38

The G protein beta subunit Gpb1 of Schizosaccharomyces pombe is a negative regulator of sexual development. Kim DU, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):20–32

Molecular analysis of hus1+, a fission yeast gene required for S-M and DNA damage checkpoints. Kostrub CF, et al. **Mol Gen Genet** 1997 Apr 28;254(4):389–99

Characterisation of the Schizosaccharomyces pombe rad4/cut5 mutant phenotypes: dissection of DNA replication and G2 checkpoint control function. McFarlane RJ, et al. **Mol Gen Genet** 1997 Jul;255(3):332–40

The Schizosaccharomyces pombe map1 gene encodes an SRF/MCM1-related protein required for P-cell specific gene expression. Nielsen O, et al. **Mol Gen Genet** 1996 Dec 13;253(3):387–92

Tolerance of low pH in Schizosaccharomyces pombe requires a functioning pub1 ubiquitin ligase. Saleki R, et al. **Mol Gen Genet** 1997 May 20;254(5):520–8

A novel fission yeast gene, kms1+, is required for the formation of meiotic prophase-specific nuclear architecture. Shimanuki M, et al. **Mol Gen Genet** 1997 Apr 16;254(3):238–49

Characterization of upstream activating sequences involved in activation and regulation of pho4 expression in Schizosaccharomyces pombe. Silvestre N, et al. **Mol Gen Genet** 1997 Jan 27;253(4):428–38

Isolation of novel pre-mRNA splicing mutants of Schizosaccharomyces pombe. Urushiyama S, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):118–27

Region-specific meiotic recombination in Schizosaccharomyces pombe: the rec11 gene. Li YF, et al. **Mol Microbiol** 1997 Mar;23(5):869–78

Osmoregulation of fission yeast: cloning of two distinct genes encoding glycerol-3-phosphate dehydrogenase, one of which is responsible for osmotolerance for growth. Ohmiya R, et al. **Mol Microbiol** 1995 Dec;18(5):963–73

Cloning of Schizosaccharomyces pombe rph16+, a gene homologous to the Saccharomyces cerevisiae RAD16 gene. Bang DD, et al. **Mutat Res** 1996 Oct 18;364(2):57–71

Analysis of spontaneous and double-strand break-induced recombination in rad mutants of S. pombe. Fortunato EA, et al. **Mutat Res** 1996 Dec 2;364(3):14–60

DNA renaturation activity of the SMC complex implicated in chromosome condensation. Sutani T, et al. **Nature** 1997 Aug 21;388(6644):798–801

The fission yeast UVDR DNA repair pathway is inducible. Davey S, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1002–8

Fission yeast genes which disrupt mitotic chromosome segregation when overexpressed. Javerzat JP, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4676–83

PCR-mediated direct gene disruption in Schizosaccharomyces pombe. Kaur R, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1080–1

Activated levels of rRNA synthesis in fission yeast are driven by an intergenic rDNA region positioned over 2500 nucleotides upstream of the initiation site. Liu Z, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):659–67

Identification of a predominant replication origin in fission yeast. Okuno Y, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):530–7

Complementation of the DNA repair-deficient swi10 mutant of fission yeast by the human ERCC1 gene. Rödel C, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2823–7

Molecular cloning and functional analysis of a Schizosaccharomyces pombe homologue of Escherichia coli endonuclease III. Roldán-Arjona T, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3307–12

Sce3, a suppressor of the Schizosaccharomyces pombe septation mutant cdc11, encodes a putative RNA-binding protein. Schmidt S, et al. **Nucleic Acids Res** 1997 Sep 1; 25(17):3433–9

Characterisation of Schizosaccharomyces pombe rad31, a UBA-related gene required for DNA damage tolerance. Shayeghi M, et al. **Nucleic Acids Res** 1997 Mar 15; 25(6):1162–9

Isolation and characterization of the Schizosaccharomyces pombe rhp9 gene: a gene required for the DNA damage checkpoint but not the replication checkpoint. Willson J, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2138–46

Characterization of the alternative excision repair pathway of UV-damaged DNA in Schizosaccharomyces pombe. Yonemasu R, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1553–8

Molecular cloning and analysis of Schizosaccharomyces pombe Reb1p: sequence-specific recognition of two sites in the far upstream rDNA intergenic spacer. Zhao A, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):904–10

Cloning of the cDNA and genomic clones for glutathione synthetase from Arabidopsis thaliana and complementation of a gsh2 mutant in fission yeast. Wang CL, et al. **Plant Mol Biol** 1996 Sep;31(6):1093–104

Human and Saccharomyces cerevisiae dolichol phosphate mannose synthases represent two classes of the enzyme, but both function in Schizosaccharomyces pombe. Colussi PA, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22; 94(15):7873–8

Position- and orientation-independent activity of the Schizosaccharomyces pombe meiotic recombination hot spot M26. Fox ME, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7446–51

The Schizosaccharomyces pombe spindle checkpoint protein mad2p blocks anaphase and genetically interacts with the anaphase-promoting complex. He X, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7965-70

A human homolog of the Schizosaccharomyces pombe rad9+ checkpoint control gene. Lieberman HB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13890-5

Modeling the control of DNA replication in fission yeast. Novak B, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19; 94(17):9147-52

Identification of fission yeast nuclear markers using random polypeptide fusions with green fluorescent protein. Sawin KE, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15146-51

A general purification protocol for E7 proteins from "high- and low-risk" human papillomavirus types expressed in the yeast Schizosaccharomyces pombe. Braspenning J, et al. **Protein Expr Purif** 1997 Jul;10(2):192-201

Mutations within the yeast U4/U6 snRNP protein Prp4 affect a late stage of spliceosome assembly. Ayadi L, et al. **RNA** 1997 Feb;3(2):197-209

Localization of modified nucleotides in Schizosaccharomyces pombe spliceosomal small nuclear RNAs: modified nucleotides are clustered in functionally important regions [published erratum appears in RNA 1996 Oct;2(10):1077] Gu J, et al. **RNA** 1996 Sep;2(9):909-18

At the heart of the budding yeast cell cycle. Nasmyth K. **Trends Genet** 1996 Oct;12(10):405-12 (68 ref.)

Isolation and characterization of Schizosaccharomyces pombe fragile mutants. Belda F, et al. **Yeast** 1996 May; 12(6):555-64

The essential Schizosaccharomyces pombe gpi1+ gene complements a bakers' yeast GPI anchoring mutant and is required for efficient cell separation. Colussi PA, et al. **Yeast** 1997 Feb;13(2):139-50

The translation initiation factor eIF4A from Schizosaccharomyces pombe is closely related to its mammalian counterpart. Fischli A, et al. **Yeast** 1996 Aug; 12(10):977-81

Characterization of cwl1+, a gene from Schizosaccharomyces pombe whose overexpression causes cell lysis. Godoy C, et al. **Yeast** 1996 Aug;12(10):983-90

Properties and heterologous expression of the glucose transporter GHT1 from Schizosaccharomyces pombe. Lichtenberg-Fraté H, et al. **Yeast** 1997 Mar 15;13(3):215-24

Mapping of ure1, ure2 and ure3 markers in fission yeast. Lubbers MW, et al. **Yeast** 1997 Sep 30;13(12):1195-7

Molecular, functional and evolutionary characterization of the gene encoding HMG-CoA reductase in the fission yeast, Schizosaccharomyces pombe. Lum PY, et al. **Yeast** 1996 Sep 15;12(11):1107-24

Mutational analysis of the gene for Schizosaccharomyces pombe RNase MRP RNA, mrp1, using plasmid shuffle by counterselection on canavanine. Paluh JL, et al. **Yeast** 1996 Nov;12(14):1393-405

Review: the Cct eukaryotic chaperonin subunits of Saccharomyces cerevisiae and other yeasts. Stoldt V, et al. **Yeast** 1996 May;12(6):523-9 (36 ref.)

Advancement through mitosis requires rae1 gene function in fission yeast. Whalen WA, et al. **Yeast** 1997 Sep 30; 13(12):1167-79

Isolation and characterization of the Schizosaccharomyces pombe gene encoding transcript elongation factor TFIIS. Williams LA, et al. **Yeast** 1996 Mar 15;12(3):227-36

[Molecular cloning and characterization of cDNA of the rpc10+ gene encoding the smallest subunit of nuclear RNA polymerases of Schizosaccharomyces pombe] Shpakovskiĭ GV, et al. **Bioorg Khim** 1997 May;23(5):441-8 (Eng. Abstr.) **(Rus)**

[Three regions of Rpb10 mini-subunit of nuclear RNA polymerases are strictly conserved in all eukaryotes (letter)] Shpakovskiĭ GV, et al. **Bioorg Khim** 1996 Dec; 22(12):938-40 (Eng. Abstr.) **(Rus)**

[The first member of a novel family of eukaryotic transcription factors detected by the heterospecific complementation (letter)] Shpakovskiĭ GV, et al. **Bioorg Khim** 1997 Mar;23(3):234-7 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Sexual co-flocculation by heterothallic cells of the fission yeast Schizosaccharomyces pombe modulated by medium constituents. Miyata M, et al. **Antonie Van Leeuwenhoek** 1997 Mar;71(3):207-15

Growth of Schizosaccharomyces pombe on glucose-malate mixtures in continuous cell-recycle cultures. Kinetics of substrate utilization. Uribelarrea JL, et al. **Appl Biochem Biotechnol** 1997 Apr;66(1):69-81

Rho 1 GTPase activates the (1-3)beta-D-glucan synthase and is involved in Schizosaccharomyces pombe morphogenesis. Arellano M, et al. **EMBO J** 1996 Sep 2; 15(17):4584-91

Spm1, a stress-activated MAP kinase that regulates morphogenesis in S.pombe. Zaitsevskaya-Carter T, et al. **EMBO J** 1997 Mar 17;16(6):1318-31

Genetic and physiological analysis of DNA replication in fission yeast. MacNeill SA, et al. **Methods Enzymol** 1997; 283:440-59

Severe growth defect in a Schizosaccharomyces pombe mutant defective in intron lariat degradation. Nam K, et al. **Mol Cell Biol** 1997 Feb;17(2):809-18

Roles of Wee1 and Nim1 protein kinases in regulating the switch from mitotic division to sexual development in Schizosaccharomyces pombe. Wu L, et al. **Mol Cell Biol** 1997 Jan;17(1):10-7

A mutation in a thioredoxin reductase homolog suppresses p53-induced growth inhibition in the fission yeast Schizosaccharomyces pombe. Casso D, et al. **Mol Gen Genet** 1996 Oct 16;252(5):518-29

Tolerance of low pH in Schizosaccharomyces pombe requires a functioning pub1 ubiquitin ligase. Saleki R, et al. **Mol Gen Genet** 1997 May 20;254(5):520-8

METABOLISM

Sexual co-flocculation by heterothallic cells of the fission yeast Schizosaccharomyces pombe modulated by medium constituents. Miyata M, et al. **Antonie Van Leeuwenhoek** 1997 Mar;71(3):207-15

PCNA and DNA polymerase delta catalytic subunit from Schizosaccharomyces pombe do not interact directly. Tratner I, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):321-8

Extracellular Mg2+ regulates intracellular Mg2+ and its subcellular compartmentation in fission yeast, Schizosaccharomyces pombe. Zhang A, et al. **Cell Mol Life Sci** 1997 Jan;53(1):69-72

Heat-shock response in Schizosaccharomyces pombe cells lacking cyclic AMP-dependent phosphorylation. Fernández J, et al. **Curr Genet** 1997 Feb;31(2):112-8

Fission yeast Sop2p: a novel and evolutionarily conserved protein that interacts with Arp3p and modulates profilin function. Balasubramanian MK, et al. **EMBO J** 1996 Dec 2;15(23):6426-37

p25rum1 promotes proteolysis of the mitotic B-cyclin p56cdc13 during G1 of the fission yeast cell cycle. Correa-Bordes J, et al. **EMBO J** 1997 Aug 1; 16(15):4657-64

p56(chk1) protein kinase is required for the DNA replication checkpoint at 37 degrees C in fission yeast. Francesconi S, et al. **EMBO J** 1997 Mar 17;16(6):1332-41

The fission yeast Cdc1 protein, a homologue of the small subunit of DNA polymerase delta, binds to Pol3 and Cdc27. MacNeill SA, et al. **EMBO J** 1996 Sep 2;15(17):4613-28

Chk1 is a wee1 kinase in the G2 DNA damage checkpoint inhibiting cdc2 by Y15 phosphorylation. O'Connell MJ, et al. **EMBO J** 1997 Feb 3;16(3):545-54

Fission yeast pheromone blocks S-phase by inhibiting the G1 cyclin B-p34cdc2 kinase. Stern B, et al. **EMBO J** 1997 Feb 3;16(3):534-44

Functional characterization of the fission yeast Start-specific transcription factor Res2. Zhu Y, et al. **EMBO J** 1997 Mar 3;16(5):1023-34

The activity of the gluconate-H+ symporter of Schizosaccharomyces pombe cells is down-regulated by D-glucose and exogenous cAMP. Caspari T, et al. **FEBS Lett** 1996 Oct 21;395(2-3):272-6

Putative K+ channel in the plasma membrane of the yeast Schizosaccharomyces pombe: evidence of transcription-level regulation. Golubnitchaya-Labudova O, et al. **Folia Microbiol (Praha)** 1996;41(1):93-5

Assessment of delta muH+ in Schizosaccharomyces pombe; intracellular inclusion of impermeable agents by electroporation. Höfer M, et al. **Folia Microbiol (Praha)** 1996;41(1):98-100

Glucose transport in Schizosaccharomyces pombe. Völker B, et al. **Folia Microbiol (Praha)** 1996;41(1):128

Dissection of fission yeast microtubule associating protein p93Dis1: regions implicated in regulated localization and microtubule interaction. Nakaseko Y, et al. **Genes Cells** 1996 Jul;1(7):633-44

An oxidase-permease-based iron transport system in Schizosaccharomyces pombe and its expression in Saccharomyces cerevisiae. Askwith C, et al. **J Biol Chem** 1997 Jan 3;272(1):401-5

Schizosaccharomyces pombe produces novel pyruvate-containing N-linked oligosaccharides. Gemmill TR, et al. **J Biol Chem** 1996 Oct 18;271(42):25945-9

Mdm12p, a component required for mitochondrial inheritance that is conserved between budding and fission yeast. Berger KH, et al. **J Cell Biol** 1997 Feb 10; 136(3):545-53

A centromere DNA-binding protein from fission yeast affects chromosome segregation and has homology to human CENP-B. Halverson D, et al. **J Cell Biol** 1997 Feb 10; 136(3):487-500

The kinetics of the B cyclin p56cdc13 and the phosphatase p80cdc25 during the cell cycle of the fission yeast Schizosaccharomyces pombe. Creanor J, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1647-53

Mutations in the fission yeast silencing factors clr4+ and rik1+ disrupt the localisation of the chromo domain protein Swi6p and impair centromere function. Ekwall K, et al. **J Cell Sci** 1996 Nov;109 (Pt 11):2637-48

The wis1 signal transduction pathway is required for expression of cAMP-repressed genes in fission yeast. Stettler S, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1927-35

A nitrogen starvation-induced dormant G0 state in fission yeast: the establishment from uncommitted G1 state and its delay for return to proliferation. Su SS, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1347-57

Distinct subunit functions and cell cycle regulated phosphorylation of 20S APC/cyclosome required for anaphase in fission yeast. Yamada H, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1793-804

Use of green fluorescent protein for intracellular protein localization in living fission yeast cells. Nabeshima K, et al. **Methods Enzymol** 1997;283:459-71

Protein kinase Sck1 is involved in trehalase activation by glucose and nitrogen source in the fission yeast Schizosaccharomyces pombe. Soto T, et al. **Microbiology** 1997 Jul;143 (Pt 7):2457-63

Isolation and molecular characterization of mRNA transport mutants in Schizosaccharomyces pombe. Azad AK, et al. **Mol Biol Cell** 1997 May;8(5):825-41

A connection between pre-mRNA splicing and the cell cycle in fission yeast: cdc28+ is allelic with prp8+ and encodes an RNA-dependent ATPase/helicase. Lundgren K, et al. **Mol Biol Cell** 1996 Jul;7(7):1083-94

Domains determining the functional distinction of the fission yeast cell cycle "start" molecules Res1 and Res2. Sturm S, et al. **Mol Biol Cell** 1996 Dec;7(12):1967-76

Perturbations in the spi1p GTPase cycle of Schizosaccharomyces pombe through its GTPase-activating protein and guanine nucleotide exchange factor components result in similar phenotypic consequences. Matynia A, et al. **Mol Cell Biol** 1996 Nov; 16(11):6352-62

The sxa2-dependent inactivation of the P-factor mating pheromone in the fission yeast Schizosaccharomyces pombe. Ladds G, et al. **Mol Microbiol** 1996 Apr;20(1):35-42

Trehalose synthesis is important for the acquisition of thermotolerance in Schizosaccharomyces pombe. Ribeiro MJ, et al. **Mol Microbiol** 1997 Aug;25(3):571-81

Regulation of telomere length and function by a Myb-domain protein in fission yeast [see comments] Cooper JP, et al. **Nature** 1997 Feb 20;385(6618):744-7. Comment in: Nature 1997 Feb 20;385(6618):676-7.

20S cyclosome complex formation and proteolytic activity inhibited by the cAMP/PKA pathway. Yamashita YM, et al. **Nature** 1996 Nov 21;384(6606):276-9

An immunoaffinity purified Schizosaccharomyces pombe TBP-containing complex directs correct initiation of the S.pombe rRNA gene promoter. Chen L, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1633-40

The human papillomavirus type 16 E7 protein is associated with the nucleolus in mammalian and yeast cells. Zatsepina O, et al. **Oncogene** 1997 Mar 13;14(10):1137-45

Purification and characterization of a CENP-B homologue protein that binds to the centromeric K-type repeat DNA of Schizosaccharomyces pombe. Lee JK, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8427-32

Identification of fission yeast nuclear markers using random polypeptide fusions with green fluorescent protein. Sawin KE, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15146-51

Cdc25 mitotic inducer targeted by chk1 DNA damage checkpoint kinase [see comments] Furnari B, et al. **Science** 1997 Sep 5;277(5331):1495-7. Comment in: Science 1997 Sep 5;277(5331):1450-1.

Cell cycle inhibitory effects of HIV and SIV Vpr and Vpx in the yeast Schizosaccharomyces pombe. Zhang C, et al. **Virology** 1997 Mar 31;230(1):103-12

Malolactic fermentation by engineered Saccharomyces cerevisiae as compared with engineered Schizosaccharomyces pombe. Ansanay V, et al. **Yeast** 1996 Mar 15;12(3):215-25

Properties and heterologous expression of the glucose transporter GHT1 from Schizosaccharomyces pombe. Lichtenberg-Fraté H, et al. **Yeast** 1997 Mar 15;13(3):215-24

[A mechanism of mRNA transport in fission yeast: nucleolar involvement and heat shock inhibition in mRNA transport] Tani T. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):1193-200 (23 ref.) **(Jpn)**

PHYSIOLOGY

Identification of the transporter for the M-factor mating pheromone in fission yeast. Davey J, et al. **Biochem Soc Trans** 1997 May;25(2):224S

Isolation of yeast mutants hypersensitive to mating pheromones. Davis K, et al. **Biochem Soc Trans** 1997 May; 25(2):227S

The role of Sxa1 in pheromone recovery in Schizosaccharomyces pombe. Hughes M, et al. **Biochem Soc Trans** 1997 May;25(2):229S

Defining the role of Sxa1 during pheromone adaptation in Schizosaccharomyces pombe. Hughes M, et al. **Biochem Soc Trans** 1996 Aug;24(3):502S

Purification of Sxa2, a carboxypeptidase involved in pheromone recovery in fission yeast. Ladds G, et al. **Biochem Soc Trans** 1996 Aug;24(3):504S

Microtubule function in morphological differentiation: growth zones and growth cones. Vega LR, et al. **Cell** 1997 Jun 13;89(6):825-8 (14 ref.)

Heat-shock treatment reduces in situ temperature in yeast at sub-lethal high temperature. Komatsu Y, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Sep;42(6):839-45

Regulation of meiosis in fission yeast. Yamamoto M. **Cell Struct Funct** 1996 Oct;21(5):431-6 (43 ref.)

CED-4 induces chromatin condensation in Schizosaccharomyces pombe and is inhibited by direct physical association with CED-9. James C, et al. **Curr Biol** 1997 Apr 1;7(4):246-52

Fission yeast Cut1 and Cut2 are essential for sister chromatid separation, concentrate along the metaphase spindle and form large complexes. Funabiki H, et al. **EMBO J** 1996 Dec 2;15(23):6617-28

Requirement for PP1 phosphatase and 20S cyclosome/APC

for the onset of anaphase is lessened by the dosage increase of a novel gene sds23+. Ishii K, et al. **EMBO J** 1996 Dec 2;15(23):6629–40

The Schizosaccharomyces pombe actin-related protein, Arp3, is a component of the cortical actin cytoskeleton and interacts with profilin. McCollum D, et al. **EMBO J** 1996 Dec 2;15(23):6438–46

Structural and functional analysis of the nucleolus of the fission yeast Schizosaccharomyces pombe. Léger-Silvestre I, et al. **Eur J Cell Biol** 1997 Jan;72(1):13–23

Autocrine response of Schizosaccharomyces pombe haploid cells to mating pheromones. Kitamura K, et al. **FEMS Microbiol Lett** 1996 Sep 15;143(1):41–5

The Spg1p GTPase is an essential, dosage-dependent inducer of septum formation in Schizosaccharomyces pombe. Schmidt S, et al. **Genes Dev** 1997 Jun 15;11(12):1519–34

Conjugation, meiosis, and the osmotic stress response are regulated by Spc1 kinase through Atf1 transcription factor in fission yeast. Shiozaki K, et al. **Genes Dev** 1996 Sep 15; 10(18):2276–88

The Atf1 transcription factor is a target for the Sty1 stress-activated MAP kinase pathway in fission yeast. Wilkinson MG, et al. **Genes Dev** 1996 Sep 15; 10(18):2289–301

Intrinsic fluorescence properties and structural analysis of p13(suc1) from Schizosaccharomyces pombe. Neyroz P, et al. **J Biol Chem** 1996 Nov 1;271(44):27249–58

cdc12p, a protein required for cytokinesis in fission yeast, is a component of the cell division ring and interacts with profilin. Chang F, et al. **J Cell Biol** 1997 Apr 7; 137(1):169–82

The Schizosaccharomyces pombe pyp1 protein tyrosine phosphatase negatively regulates nutrient monitoring pathways. Dal Santo P, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1919–25

Evidence for cell cycle-specific, spindle pole body-mediated, nuclear positioning in the fission yeast Schizosaccharomyces pombe. Hagan I, et al. **J Cell Sci** 1997 Aug;110 (Pt 16):1851–66

The spTRK gene encodes a potassium-specific transport protein TKHp in Schizosaccharomyces pombe [letter] Bertl A. **J Membr Biol** 1997 Sep 1;159(1):95–7

The spindle pole body of Schizosaccharomyces pombe enters and leaves the nuclear envelope as the cell cycle proceeds. Ding R, et al. **Mol Biol Cell** 1997 Aug;8(8):1461–79

Bax- and Bak-induced cell death in the fission yeast Schizosaccharomyces pombe. Jürgensmeier JM, et al. **Mol Biol Cell** 1997 Feb;8(2):325–39

Fission yeast pkl1 is a kinesin-related protein involved in mitotic spindle function. Pidoux AL, et al. **Mol Biol Cell** 1996 Oct;7(10):1639–55

Identification of Ste4 as a potential regulator of Byr2 in the sexual response pathway of Schizosaccharomyces pombe. Barr MM, et al. **Mol Cell Biol** 1996 Oct;16(10):5597–603

Mkh1, a MEK kinase required for cell wall integrity and proper response to osmotic and temperature stress in Schizosaccharomyces pombe. Sengar AS, et al. **Mol Cell Biol** 1997 Jul;17(7):3508–19

Cell biology. Explorers deliver tea to the pole [news; comment] Mitchell A. **Nature** 1997 Jun 26;387(6636):858. Comment on: Nature 1997 Jun 5;387(6633):561.

Phosphorylation of RNA-binding protein controls cell cycle switch from mitotic to meiotic in fission yeast. Watanabe Y, et al. **Nature** 1997 Mar 13;386(6621):187–90

Interaction of the S phase regulator cdc18 with cyclin-dependent kinase in fission yeast. Brown GW, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6142–7

The highly conserved skb1 gene encodes a protein that interacts with Shk1, a fission yeast Ste20/PAK homolog. Gilbreth M, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13802–7

Microtubules mediate mitochondrial distribution in fission yeast. Yaffe MP, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11664–8

RADIATION EFFECTS

Caffeine-resistance in S. pombe: mutations in three novel caf genes increase caffeine tolerance and affect radiation sensitivity, fertility, and cell cycle. Benko Z, et al. **Curr Genet** 1997 Jun;31(6):481–7

Analysis of radiation-sensitive mutants of fission yeast. Edwards RJ, et al. **Methods Enzymol** 1997;283:471–94

Discrete roles of the Spc1 kinase and the Atf1 transcription factor in the UV response of Schizosaccharomyces pombe. Degols G, et al. **Mol Cell Biol** 1997 Jun;17(6):3356–63

ULTRASTRUCTURE

Schizosaccharomyces pombe is more sensitive to pressure stress than Saccharomyces cerevisiae. Sato M, et al. **Cell Struct Funct** 1996 Jun;21(3):167–74

SCHIZOTYPAL PERSONALITY DISORDER

DIAGNOSIS

Premorbid adjustment as predictor of outcome in schizophrenia: results of a prospective study. Bailer J, et al. **Acta Psychiatr Scand** 1996 May;93(5):368–77

Attentional functioning in schizotypal personality disorder. Roitman SE, et al. **Am J Psychiatry** 1997 May; 154(5):655–60

Eye tracking, attention, and schizotypal symptoms in nonpsychotic relatives of patients with schizophrenia. Keefe RS, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):169–76

The inter-rater and test-retest reliabilities of prodromal symptoms in first-episode psychosis. Jackson HJ, et al. **Aust N Z J Psychiatry** 1996 Aug;30(4):498–504

The initial prodrome in psychosis: descriptive and qualitative aspects. Yung AR, et al. **Aust N Z J Psychiatry** 1996 Oct; 30(5):587–99

The relationship of information-processing deficits and clinical symptoms in schizotypal personality disorder. Cadenhead KS, et al. **Biol Psychiatry** 1996 Nov 1; 40(9):853–8

Abnormal recognition of facial expression of emotions in depressed patients with major depression disorder and schizotypal personality disorder. Mikhailova ES, et al. **Biol Psychiatry** 1996 Oct 15;40(8):697–705

Neuropsychological dysfunction in schizotypal personality disorder: a profile analysis. Voglmaier MM, et al. **Biol Psychiatry** 1997 Mar 1;41(5):530–40

Subclinical hallucinations and delusions in nonpsychotic adolescents. Altman H, et al. **J Child Psychol Psychiatry** 1997 May;38(4):413–20

Children with schizophrenia-spectrum disorders: thought disorder and communication problems in a family interactional context. Tompson MC, et al. **J Child Psychol Psychiatry** 1997 May;38(4):421–9

Using diagnostic efficiency statistics to evaluate the concurrent validity of the perceptual aberration scale. Balogh DW, et al. **J Pers Assess** 1996 Apr;66(2):321–36

Clinical and experimental characteristics of "hypothetically psychosis prone" college students. Cadenhead K, et al. **J Psychiatr Res** 1996 Sep-Oct;30(5):331–40

Early identification and treatment of schizophrenia: conceptual and ethical considerations. Larsen TK, et al. **Psychiatry** 1996 Winter;59(4):371–80 (65 ref.)

Schizophrenia, schizotypal and delusional disorders (F2). Results from the ICD-10 field trial of the Diagnostic Criteria for Research in German-speaking countries. Stieglitz RD, et al. **Psychopathology** 1996;29(5):280–4

The structure of DSM-III-R schizotypal personality disorder diagnosed by direct interviews. Battaglia M, et al. **Schizophr Bull** 1997;23(1):83–92

The factorial structure of schizotypy: Part II. Cognitive asymmetry, arousal, handedness, and sex. Gruzelier JH, et al. **Schizophr Bull** 1996;22(4):621–34

The factorial structure of schizotypy: Part I. Affinities with syndromes of schizophrenia. Gruzelier JH. **Schizophr Bull** 1996;22(4):611–20

Childhood behavior precursors of schizotypal personality disorder. Olin SS, et al. **Schizophr Bull** 1997;23(1):93–103

Abnormal orienting in schizotypal personality disorder. Raine A, et al. **Schizophr Bull** 1997;23(1):75–82

Syndromes of schizotypy and timing of puberty. Gruzelier JH, et al. **Schizophr Res** 1996 Sep 18;21(3):183–94

D-amphetamine challenge effects on Wisconsin Card Sort Test. Performance in schizotypal personality disorder. Siegel BV Jr, et al. **Schizophr Res** 1996 May;20(1-2):29–32

A comparison of reading and demographic-based estimates of premorbid intelligence in schizophrenia. Tracy JI, et al. **Schizophr Res** 1996 Nov 15;22(2):103–9

Childhood behavioral characteristics and adult brain morphology in schizophrenia. Walker EF, et al. **Schizophr Res** 1996 Nov 15;22(2):93–101

[Borderline disorders, schizotypal and narcissistic personality disorders in adolescents: a useful distinction] Meijer M. **Ned Tijdschr Geneeskd** 1996 Dec 14;140(50):2485–7 **(Dut)**

[Disorders of early information processing and vigilance as vulnerability markers for schizophrenia] Suslow T, et al. **Fortschr Neurol Psychiatr** 1996 Mar;64(3):90–104 (81 ref.) (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Relationship of obsessive-compulsive symptomatology to anxiety, depression and schizotypy in a clinical population. Norman RM, et al. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):553–66

Epidemiology of schizophrenia [see comments] Häfner H, et al. **Can J Psychiatry** 1997 Mar;42(2):139–51 (142 ref.). Comment in: Can J Psychiatry 1997 Mar;42(2):131–2.

Familial risks and reproductive fitness in schizophrenia. Battaglia M, et al. **Schizophr Bull** 1996;22(2):191–5 (23 ref.)

GENETICS

Schizotypal disorder: at the crossroads of genetics and nosology. Battaglia M, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):303–10 (94 ref.)

Eye tracking, attention, and schizotypal symptoms in nonpsychotic relatives of patients with schizophrenia. Keefe RS, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):169–76

Testing the effect of season of birth on familial risk for schizophrenia and related disorders. Hettema JM, et al. **Br J Psychiatry** 1996 Feb;168(2):205–9

A preliminary report of a strong genetic component for thought disorder in normals. A twin study. Gambini O, et al. **Neuropsychobiology** 1997;36(1):13–8

Sex differences in neuropsychological function in non-psychotic relatives of schizophrenic probands. Kremen WS, et al. **Psychiatry Res** 1997 Feb 7; 66(2-3):131–44

Familial risks and reproductive fitness in schizophrenia. Battaglia M, et al. **Schizophr Bull** 1996;22(2):191–5 (23 ref.)

Self-report measures of schizotypy as indices of familial vulnerability to schizophrenia. Kendler KS, et al. **Schizophr Bull** 1996;22(3):511–20

Cerebral lateralization is delayed in children who later develop schizophrenia. Crow TJ, et al. **Schizophr Res** 1996 Dec 15;22(3):181–5

Presence of dermatoglyphic ridge dissociation in a schizotypy-affected subject in a pair of discordant MZ twins [letter] Fañanás L, et al. **Schizophr Res** 1996 Aug 23;21(2):125–7

PHYSIOPATHOLOGY

Topographic abnormalities of P3 in schizotypal personality disorder. Salisbury DF, et al. **Biol Psychiatry** 1996 Aug 1;40(3):165–72

Autonomic orienting and the allocation of processing resources in schizophrenia patients and putatively at-risk individuals. Hazlett EA, et al. **J Abnorm Psychol** 1997 May; 106(2):171–81

PSYCHOLOGY

Shadowing on the basis of contextual information in individuals with schizotypal personality. Hall G, et al. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):595–604

The factor structure of schizotypal symptoms in a clinical population. Bergman AJ, et al. **Schizophr Bull** 1996; 22(3):501–9

[Are self-perceivable neuropsychological deficits in patients with neuroses or personality disorder diagnoses indicative of later schizophrenia?] Klosterkötter J, et al. **Nervenarzt** 1997 Mar;68(3):196–204 (Eng. Abstr.) **(Ger)**

[Schizophrenia: relationship between negative symptoms and schizotypic features of personality] Donnoli VF, et al. **Acta Psiquiatr Psicol Am Lat** 1995 Sep;41(3):214–8 (Eng. Abstr.) **(Spa)**

THERAPY

Social skills training in a case of obsessive-compulsive disorder with schizotypal personality disorder. Mckay D, et al. **J Behav Ther Exp Psychiatry** 1996 Jun;27(2):189–94

SCHLICHTER TEST see **SERUM BACTERICIDAL TEST**

SCHMIDT'S SYNDROME see **POLYENDOCRINOPATHIES, AUTOIMMUNE**

SCHOENLEIN-HENOCH PURPURA see **PURPURA, SCHOENLEIN-HENOCH**

SCHOLARSHIPS see **FELLOWSHIPS AND SCHOLARSHIPS**

SCHOOL ADMISSION CRITERIA

A comparison of the overall NRMP match results with the results for 19 specialties for senior U.S. medical students, 1996. Andriole D, et al. **Acad Med** 1997 Sep;72(9):801–3

Match discussion continued [letter; comment] Blacklow RS. **Acad Med** 1996 Aug;71(8):814. Comment on: Acad Med 1995 Jun;70(6):470–6; discussion 490–4. Comment on: Acad Med 1995 Jun;70(6):477–84; discussion 485–9. Comment on: Acad Med 1996 Apr;71(4):309–12. Comment on: Acad Med 1996 May;71(5):414–6.

Match algorithms revisited [letter; comment] [see comments] Colenbrander A. **Acad Med** 1996 May;71(5):414–6. Comment on: Acad Med 1996 Apr;71(4):309–12. Comment in: Acad Med 1996 Aug;71(8):814.

Analysis of match algorithms. Colenbrander A. **Acad Med** 1996 Oct;71(10 Suppl):S94–6

Modifying the culture of medical education: the first three years of the RWJ Generalist Physician Initiative. Colwill JM, et al. **Acad Med** 1997 Sep;72(9):745–53 (34 ref.)

A comparison of specialty choices, residency training, and practice locations of early-decision and regular-admission graduates. Elam CL, et al. **Acad Med** 1997 Feb;72(2):140–3

The effect of a rolling admission policy on a medical school's selection of applicants. Elam CL, et al. **Acad Med** 1997 Jul;72(7):644–6

Recommendations for ERAS users [letter] Mandel LP, et al. **Acad Med** 1996 Dec;71(12):1279

Influence of the interview on the evaluation of applicants to medical school. Nowacek GA, et al. **Acad Med** 1996 Oct;71(10):1093–5

"Without handicap": issues of medical schools and physically disabled students [see comments] Reichgott MJ. **Acad Med** 1996 Jul;71(7):724–9. Comment in: Acad Med 1996 Dec;71(12):1275–6.

Identifying qualified underrepresented-minority students who otherwise appear to be at academic risk. Van Winkle LJ, et al. **Acad Med** 1996 May;71(5):508–10

A pilot study of the use of the analytic hierarchy process for the selection of surgery residents. Weingarten MS, et al. **Acad Med** 1997 May;72(5):400–2

New admission measure needed [letter] Williams AL, et al. **Acad Med** 1997 Mar;72(3):159

The performance of students selected through a special program at St. Louis University School of Medicine. Yeager VL, et al. **Acad Med** 1997 Aug;72(8):731–2

SCHOOL ADMISSION CRITERIA

National mechanisms for the selection of trainees. Procedure in Great Britain. Hide TA.
Acta Neurochir Suppl (Wien) 1997;69:6–7

Matching program for appointment to residency training in neurological surgery in United States. Pevehouse BC.
Acta Neurochir Suppl (Wien) 1997;69:1–5

Neural network and linear regression models in residency selection. Pilon S, et al. **Am J Emerg Med** 1997 Jul; 15(4):361–4

Creating a home page on the World Wide Web: an inexpensive means to promote medical education and physician recruitment. Yamamoto LG.
Am J Emerg Med 1997 Jul;15(4):393–9

Prerequisites for academic occupational therapy assistant programs. Gitlow L. **Am J Occup Ther** 1997 May; 51(5):385–7

The relationship between criteria used to select residents and performance during residency. Papp KK, et al.
Am J Surg 1997 Apr;173(4):326–9

Choosing tomorrow's doctors. Interviews should be structured or semistructured [letter; comment] Boohan M, et al. **BMJ** 1996 Nov 2;313(7065):1149. Comment on: BMJ 1996 Aug 10;313(7053):313.

Hepatitis B and admission to medical school [editorial; comment] [see comments] Gilson RJ. **BMJ** 1996 Oct 5; 313(7061):830–1. Comment on: BMJ 1996 Oct 5;313(7061):856–7. Comment in: BMJ 1997 Jan 18;314(7075):225.

Choosing tomorrow's doctors. Students' knowledge of the realities of the profession is important [letter; comment] Grainger C, et al. **BMJ** 1996 Nov 2;313(7065):1149. Comment on: BMJ 1996 Aug 10;313(7053):313.

Hepatitis B and admission to medical school: an audit of British medical school policy [see comments] Parker G, et al. **BMJ** 1996 Oct 5;313(7061):856–7. Comment in: BMJ 1996 Oct 5;313(7061):830–1. Comment in: BMJ 1997 Jan 18;314(7075):225.

Implementing guidance on hepatitis B for applicants to medical school is time consuming [letter; comment] Williams S, et al. **BMJ** 1997 Jan 18;314(7075):225. Comment on: BMJ 1996 Oct 5;313(7061):830–1. Comment on: BMJ 1996 Oct 5;313(7061):856–7.

A virus, the vice chancellors and principles of vaccination [see comments] [published erratum appears in Br Dent J 1996 Apr 6;180(7):273] Laszlo J, et al. **Br Dent J** 1996 Feb 24;180(4):124–6. Comment in: Br Dent J 1996 Jun 22;180(12):447.

After rejection in Canada, more Canadians pursuing career dreams at offshore medical schools. Korcok M.
Can Med Assoc J 1997 Mar 15;156(6):865–7, 870

Entering medical school means pursuing all options [letter] Morrison GE. **Can Med Assoc J** 1997 May 15;156(10):1384

Teaching medical students to lie. The disturbing contradiction: medical ideals and the resident-selection process [see comments] Young TA. **Can Med Assoc J** 1997 Jan 15;156(2):219–22. Comment in: Can Med Assoc J 1997 Apr 1;156(7):977–8. Comment in: Can Med Assoc J 1997 May 1;156(9):1265–6; discussion 1267. Comment in: Can Med Assoc J 1997 May 1;156(9):1266; discussion 1267. Comment in: Can Med Assoc J 1997 May 1;156(9):1266–7; discussion 1267.

Increasing the effectiveness and efficiency of academic advising through computerization. Bingham RM.
Comput Nurs 1997 May–Jun;15(3):137–40

Personal values related to primary care specialty aspirations. Schubot DB, et al. **Fam Med** 1996 Nov–Dec;28(10):726–31

How useful is selection? Kappelle W. **Int J Psychoanal** 1996 Dec;77 (Pt 6):1213–32 (34 ref.)

Religious discrimination in the selection of medical students: a case study. Gunn AE, et al. **Issues Law Med** 1996 Spring; 11(4):363–78

Entry age, entry mode and academic performance on a Project 2000 common foundation programme. Houltram B. **J Adv Nurs** 1996 Jun;23(6):1089–97

A case for unique allied health student enrollment control within a selective university setting. Shaw RC, et al.
J Allied Health 1996 Spring;25(2):161–70

Admissions test predictors of performance in a foreign-trained dentist program. Simon J, et al.
J Dent Educ 1997 May;61(5):440–3

An expert systems approach to medical school admissions. Houry D, et al. **J La State Med Soc** 1997 Jun;149(6):207–10

Comparison of entrancé requirements for health care professions. Doxey TT, et al.
J Manipulative Physiol Ther 1997 Feb;20(2):86–91

Simulated minority admissions exercise at Louisiana State University School of Medicine: an evaluation. Helm EG, et al. **J Natl Med Assoc** 1997 Sep;89(9):601–5

Direct-entry midwifery education. History in the making [editorial] Shah MA, et al. **J Nurse Midwifery** 1996 Sep–Oct;41(5):351–4

Immunization compliance among public and private school children. Fredrickson DD, et al. **J Sch Health** 1997 Feb; 67(2):75–7

Affirmative action and other special consideration admissions at the University of California, Davis, School of Medicine [see comments] Davidson RC, et al. **JAMA** 1997 Oct 8; 278(14):1153–8. Comment in: JAMA 1997 Oct 8;278(14):1196–7.

A piece of my mind. Seeking Aesculapius. Pang PS.
JAMA 1997 Aug 27;278(8):610–1

Medical school admission criteria. The needs of patients matter [editorial; comment] Scotti MJ Jr. **JAMA** 1997 Oct 8;278(14):1196–7. Comment on: JAMA 1997 Oct 8;278(14):1153–8.

Medical school entrance and career plans of Malaysian medical students. Razali SM. **Med Educ** 1996 Nov; 30(6):418–23

A selection test for Australian graduate-entry medical schools [see comments] Aldous CJ, et al. **Med J Aust** 1997 Mar 3;166(5):247–50. Comment in: Med J Aust 1997 Mar 3;166(5):229–30.

Selecting Australian doctors of the future [letter] Jones KB. **Med J Aust** 1997 Jun 2;166(11):613

Top school marks don't necessarily make top medical students [letter] Powis DA, et al. **Med J Aust** 1997 Jun 2;166(11):613

Selecting Australian doctors of the future [editorial; comment] Rolfe IE, et al. **Med J Aust** 1997 Mar 3; 166(5):229–30. Comment on: Med J Aust 1997 Mar 3;166(5):247–50.

Gays, lesbians, HIV infection, and admission to medical school. A physicians' roundtable [see comments] Fortney JT, et al. **N C Med J** 1997 Mar–Apr;58(2):126–8. Comment in: N C Med J 1997 May–Jun;58(3):166.

Medical school's role in roundtable discussion [letter; comment] Peden JG Jr. **N C Med J** 1997 May–Jun; 58(3):166. Comment on: N C Med J 1997 Mar–Apr;58(2):126–8.

Portrayals of African Americans in family medicine recruiting literature. Nasir LS. **Nebr Med J** 1996 Feb; 81(2):37–8

Selection criteria for APA-accredited internships stratified by type of site and competitiveness. Lopez SJ, et al.
Psychol Rep 1997 Apr;80(2):639–42

Magnet programs for student recruitment. Goetz D, et al.
Radiol Technol 1997 May–Jun;68(5):456, 455

Survey of admission criteria in A.S.-degree R.T. programs. Shehane D. **Radiol Technol** 1996 Nov–Dec;68(2):127–30

Affirmative action. Friedenberg RM. **Radiology** 1997 Jan; 202(1):34A–36A

[Selected certification problems for students and candidates in technical vocational schools] Mucha E, et al.
Med Pr 1997;48(3):273–7 (Eng. Abstr.) **(Pol)**

[Graduation in Medicine: admission criteria vs. scientific production] Paranhos FR. **Rev Assoc Med Bras** 1995 Nov–Dec;41(6):386–90 (Eng. Abstr.) **(Por)**

[Visual tests and their score for selection of candidates to higher aviation schools] Okovitov VV.
Aviakosm Ekolog Med 1996;30(5):62–6 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

How many residents shall we train? The Iberian experience. Antunes JL. **Acta Neurochir Suppl (Wien)** 1997;69:43–4

Neurosurgical manpower in France. Cohadon F.
Acta Neurochir Suppl (Wien) 1997;69:45–6

How many neurosurgeons do we want to educate in Europe annually? The Danish proposal. Gjerris F, et al.
Acta Neurochir Suppl (Wien) 1997;69:40–2

How many residents should we train? The USA experience. Patterson RH Jr. **Acta Neurochir Suppl (Wien)** 1997;69:30–2

How many residents shall we train--the situation in Germany. Schramm J. **Acta Neurochir Suppl (Wien)** 1997; 69:47–54

How many higher neurosurgical trainees shall we train in the British Isles? Shaw MD.
Acta Neurochir Suppl (Wien) 1997;69:36–9

How many neurosurgeons should we train? The Japanese experience. Takakura K. **Acta Neurochir Suppl (Wien)** 1997; 69:55–7

How many residents shall we train? The Netherlands experience. Tulleken CA. **Acta Neurochir Suppl (Wien)** 1997;69:33–5

Recruitment of minority students to U.S. epidemiology degree programs. The American College of Epidemiology Committee on Minority Affairs. St. George DM, et al.
Ann Epidemiol 1997 May;7(4):304–10

Results of the 1996 National Resident Matching Program: family practice. Kahn NB Jr, et al. **Fam Med** 1996 Sep; 28(8):548–52

Nursing education goals changing with the times [news]
J Psychosoc Nurs Ment Health Serv 1996 Aug;34(8):9–10

TRENDS

21st century nursing and implications for nursing school admissions. Leners D, et al. **Nurs Outlook** 1996 May–Jun; 44(3):137–40

SCHOOL DENTISTRY

Delivery of comprehensive children's dental services using portable dental clinics in NYC public schools. A six-year analysis. Herman NG, et al. **N Y State Dent J** 1997 Apr; 63(4):36–41

[School dental care is always topical. The annual congress of the Swiss Association of Pedodontics 23 January 1997 at Olten] Vauthier T. **Schweiz Monatsschr Zahnmed** 1997; 107(8):693–5 **(Fre)**

[Why a continuation of dental prophylaxis in schools? (news)] Marthaler TM. **Schweiz Monatsschr Zahnmed** 1996; 106(1):66, 94 **(Ger, Fre)**

[A comprehensive informational-instructional program for the prevention of stomatological diseases in school: The Day of Stomatological Disease Prevention] Kiseleva EG, et al. **Stomatologiia (Mosk)** 1996;Spec No:23–4 **(Rus)**

SCHOOL DROPOUTS see **STUDENT DROPOUTS**

SCHOOL HEALTH SERVICES

Evaluation of a knowledge- and cognitive-behavioral skills-building intervention to prevent STDs and HIV infection in high school students. Boyer CB, et al.
Adolescence 1997 Spring;32(125):25–42

School-based sex education. Vancouver Conference Review. Wight D. **AIDS Care** 1997 Feb;9(1):66–9

Theory application by school-based occupational therapists. Storch BA, et al. **Am J Occup Ther** 1996 Sep;50(8):662–8

Richmond youth against violence: a school-based program for urban adolescents. Farrell AD, et al.
Am J Prev Med 1996 Sep–Oct;12(5 Suppl):13–21

Guarding paediatricians against allegations of assault [letter; comment] Smith H. **Arch Dis Child** 1997 May;76(5):477. Comment on: Arch Dis Child 1996 Jul;75(1):82–5.

Teacher's questionnaire for vision problems: is it a help or a hindrance for school health screening? Concannon P, et al. **Aust N Z J Public Health** 1997 Feb;21(1):37–9

Educational and environmental interventions for cardiovascular health promotion in socially disadvantaged primary schools. Gore CJ, et al.
Aust N Z J Public Health 1996 Apr;20(2):188–94

Implementation of adolescent vaccination programmes through school. Knops J, et al. **Biologicals** 1997 Jun; 25(2):155–7

Trends in reproductive health knowledge following a health education intervention among adolescents in Zimbabwe. Rusakaniko S, et al. **Cent Afr J Med** 1997 Jan;43(1):1–6

School-based health services. Ryan S, et al.
Curr Opin Pediatr 1996 Oct;8(5):453–8 (30 ref.)

Research in school settings. Fisher M, et al.
J Adolesc Health 1996 May;18(5):309–11

Violence prevention in middle schools: a pilot evaluation. Orpinas P, et al. **J Adolesc Health** 1995 Dec;17(6):360–71

Student attitudes toward school-based health centers. Santelli J, et al. **J Adolesc Health** 1996 May;18(5):349–56

School-based health centers and adolescent use of primary care and hospital care. Santelli J, et al.
J Adolesc Health 1996 Oct;19(4):267–75

The development, reliability, and validity of a risk factor screening survey for urban minority junior high school students. Vaughan RD, et al. **J Adolesc Health** 1996 Sep; 19(3):171–8

Evaluation of a HIV/AIDS education program for adolescents. Morton M, et al. **J Community Health** 1996 Feb;21(1):23–35

Brief treatment of mild-to-moderate child depression using primary and secondary control enhancement training. Weisz JR, et al. **J Consult Clin Psychol** 1997 Aug; 65(4):703–7

Data from a public school health project in Beirut. Saab BR, et al. **J Med Liban** 1996;44(2):63–7

Use of an occupational therapy motor performance checklist by a school health service: a pilot study. Gwynne K, et al. **J Paediatr Child Health** 1996 Oct;32(5):386–90

Opinions in pediatric and adolescent gynecology. Juszczak L, et al. **J Pediatr Adolesc Gynecol** 1997 Feb;10(1):45–8

Guidelines for school health programs to promote lifelong healthy eating. **J Sch Health** 1997 Jan;67(1):9–26 (229 ref.)

Personalizing the food pyramid. Allen D. **J Sch Health** 1996 Nov;66(9):341–3

Nurses' logs as an evaluation tool for school-based violence prevention programs. Brener ND, et al. **J Sch Health** 1997 May;67(5):171–4

How prospective school health educators can build a portfolio to communicate professional expertise. Cleary MJ, et al. **J Sch Health** 1997 Aug;67(6):228–31

A review of the evaluation of 47 drug abuse prevention curricula available nationally. Dusenbury L, et al.
J Sch Health 1997 Apr;67(4):127–32 (38 ref.)

Who dispenses pharmaceuticals to children at school? Francis EE, et al. **J Sch Health** 1996 Dec;66(10):355–8

Considering a decision-making approach to youth violence prevention programs. Haynie DL, et al. **J Sch Health** 1997 May;67(5):165–70

An interdisciplinary health team training program for school staff in Minnesota. Lia-Hoagberg B, et al.
J Sch Health 1997 Mar;67(3):94–7

A school-based hepatitis B immunization program for British Columbia, Canada. Munroe V, et al. **J Sch Health** 1996 Aug;66(6):229–32

Kids at increased risk in a changing environment--challenges, responses, and opportunities. O'Rourke TW. **J Sch Health** 1996 Jan;66(1):41–4

Latino families: partners for success in school settings. Pérez MA, et al. **J Sch Health** 1997 May;67(5):182–4 (19 ref.)

Rural school-based clinics: are adolescents willing to use them and what services do they want? Rickert VI, et al.
J Sch Health 1997 Apr;67(4):144–8

Perceived risk of fighting and actual fighting behavior among middle school students. St. George DM, et al.
J Sch Health 1997 May;67(5):178–81

Working with education reporters to advocate for comprehensive school health education. Sofalvi AJ, et al.
J Sch Health 1997 May;67(5):185–6 (19 ref.)

Evaluation of a third grade sexual abuse curriculum. Telljohann SK, et al. **J Sch Health** 1997 Apr;67(4):149–53
Community reactions to reproductive health care at three school-based clinics in Louisiana. Zeanah PD, et al. **J Sch Health** 1996 Sep;66(7):237–41
A comprehensive school-based clinic: university and community partnership. McClowry SG, et al. **J Soc Pediatr Nurs** 1996 Apr–Jun;1(1):19–26
School-based care: clinical challenges and research opportunities. Walker PH, et al. **J Soc Pediatr Nurs** 1996 Jul–Sep;1(2):64–74 (26 ref.)
Healthy eating in schools and "eating disorders"—are "healthy eating" messages part of the problem or part of the solution? Dixey R. **Nutr Health** 1996;11(1):49–58
The school child with human immunodeficiency virus. Adams RM. **Pediatr Infect Dis J** 1996 May;15(5):472–4
The bug stops here: the school as health care provider. Adams RM. **Pediatr Infect Dis J** 1997 Jul;16(7):722–3
The effectiveness of Drug Abuse Resistance Education (project DARE): 5-year follow-up results. Clayton RR, et al. **Prev Med** 1996 May–Jun;25(3):307–18
To brace or not to brace: the true value of school screening [editorial] Winter RB, et al. **Spine** 1997 Jun 15; 22(12):1283–4
Religious crusade. School health is at center of battle for control of state's education system. Ortolon K. **Tex Med** 1996 Feb;92(2):30–3
Differing values don't change facts of reproductive health. Simpson DM. **Tex Med** 1996 May;92(5):8
Long-term follow-up of school health education programmes [letter] Patil V, et al. **World Health Forum** 1996;17(1):81–2
[Visual acuity screening tests during the school years: how often and which threshold to chose?] Woringer V. **Rev Med Suisse Romande** 1997 May;117(5):429–32 **(Fre)**
[Application of tuberculosis medical examination radiographs to scoliosis screening in high schools] Sugita K, et al. **Nippon Koshu Eisei Zasshi** 1997 Mar;44(3):167–73 (Eng. Abstr.) **(Jpn)**
[School-based intervention trial for cardiovascular health] Yanagi H, et al. **Nippon Koshu Eisei Zasshi** 1997 Mar; 44(3):174–83 (Eng. Abstr.) **(Jpn)**
[Usefulness of a school health program for detecting deficits in visual acuity] Soto Torres M. **Aten Primaria** 1996 Oct 31;18(7):391–4 (Eng. Abstr.) **(Spa)**

HISTORY

[Markusovszky and health care for students and youth] Hidvégi J, et al. **Orv Hetil** 1997 Mar 9;138(10):618–20 **(Hun)**

LEGISLATION & JURISPRUDENCE

Nursing law and education law: a practice dilemma for school nurses. Snyder AA. **Med Law** 1996;15(2):271–6
Screening for tuberculosis infection among secondary school students in Minneapolis–St. Paul: policy implications. Henry PM, et al. **Minn Med** 1996 Sep;79(9):43–9
[Well protected from kindergarten to high school—25 years' mandatory student accident insurance] Reinsberg B. **Rehabilitation (Stuttg)** 1996 Aug;35(3):183–4 **(Ger)**

ORGANIZATION & ADMINISTRATION

Change in junior high school students' AIDS-related knowledge, misconceptions, attitudes, and HIV-preventive behaviors: effects of a school-based intervention. Siegel D, et al. **AIDS Educ Prev** 1995 Dec;7(6):534–43
School-based wraparound planning: integrating services for students with emotional and behavioral needs. Eber L, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):385–95
The uneasy alliance of mental health services and the schools: an historical perspective. Sedlak MW. **Am J Orthopsychiatry** 1997 Jul;67(3):349–62
The Evaluation of the Resolving Conflict Creatively Program: an overview. Aber JL, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):82–90
Using multimedia to teach conflict-resolution skills to young adolescents. Bosworth K, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):65–74
Peacebuilders: a theoretically driven, school-based model for early violence prevention. Embry DD, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):91–100
Attributional bias and reactive aggression. Hudley C, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):75–81
Evaluating a cognitive/ecological program for the prevention of aggression among urban children. Huesmann LR, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):120–8
The students for peace project: a comprehensive violence-prevention program for middle school students. Kelder SH, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):22–30
The cycle of violence and victimization: a study of the school-based intervention of a multidisciplinary youth violence-prevention program. Nadel H, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):109–19
Partnerships in school care: meeting the needs of New York city schoolchildren with complex medical conditions. Lipper EG, et al. **Am J Public Health** 1997 Feb;87(2):291–3
School-based health clinics: remaining viable in a changing health care delivery system. Brindis CD, et al. **Annu Rev Public Health** 1997;18:567–87 (26 ref.)
Reducing the harm of adolescent substance use [editorial; comment] Erickson PG. **Can Med Assoc J** 1997 May 15; 156(10):1397–9 (15 ref.). Comment on: Can Med Assoc J 1997 May 15;156(10):1387–93.
School-based health promotion: the physician as advocate. Mackie JW, et al. **Can Med Assoc J** 1997 May 1; 156(9):1301–5 (36 ref.)
School violence reduction: a model Jamaican secondary school program. Sacco FC, et al. **Community Ment Health J** 1997 Jun;33(3):229–34
Negative effects of a school suicide postvention program—a case example [see comments] Callahan J. **Crisis** 1996; 17(3):108–15. Comment in: Crisis 1996;17(3):98–9.
Teenage pregnancy prevention programs. Pierre N, et al. **Curr Opin Pediatr** 1997 Aug;9(4):310–6 (23 ref.)
School health talks and doctor/lawyer talks update 1997. Platt D, et al. **Del Med J** 1997 May;69(5):263–4
Pregnancy prevention among urban adolescents younger than 15: results of the 'In Your Face' program. Tiezzi L, et al. **Fam Plann Perspect** 1997 Jul–Aug;29(4):173–6, 197
School clinics. Schooled in primary care. White SE. **Hosp Health Netw** 1997 Sep 5;71(17):80, 82
Primary prevention of eating disorders: might it do more harm than good? Carter JC, et al. **Int J Eat Disord** 1997 Sep;22(2):167–72
Initiating health programmes in schools and communities. **Int Nurs Rev** 1997 May–Jun;44(3):76–8 (8 ref.)
Coronary disease risk factor reduction and behavior modification in minority adolescents: the PATH program. Fardy PS, et al. **J Adolesc Health** 1996 Apr;18(4):247–53
Do school-based health centers improve adolescents' access to health care, health status, and risk-taking behavior? Kisker EE, et al. **J Adolesc Health** 1996 May;18(5):335–43
School health centers and primary care for adolescents: a review of the literature. Santelli J, et al. **J Adolesc Health** 1996 May;18(5):357–66 (56 ref.)
Environmental predictors of drinking and drinking-related problems in young adults. Jones-Webb R, et al. **J Drug Educ** 1997;27(1):67–82
Intraclass correlation among measures related to alcohol use by school aged adolescents: estimates, correlates and applications in intervention studies. Murray DM, et al. **J Drug Educ** 1996;26(3):207–30
Curricula, competition and conventional bonds: the educational role in drug control. Norland S, et al. **J Drug Educ** 1996;26(3):231–42 (28 ref.)
A three year outcome evaluation of a theory based drink driving education program. Sheehan M, et al. **J Drug Educ** 1996;26(3):295–312
Effectiveness of a school-based substance abuse prevention program. Shope JT, et al. **J Drug Educ** 1996;26(4):323–37
Impact of two social-cognitive interventions to prevent adolescent substance use: test of an amenability to treatment model. Snow DL, et al. **J Drug Educ** 1997;27(1):1–17
Three-year results of prevention programs on marijuana use: the New Hampshire study. Stevens MM, et al. **J Drug Educ** 1996;26(3):257–73
Enhancing outcomes in an indicated drug prevention program for high-risk youth. Thompson EA, et al. **J Drug Educ** 1997;27(1):19–41
Experimental evaluation of "The Images Within": an alcohol education and prevention program. Woodside M, et al. **J Drug Educ** 1997;27(1):53–65
Increasing access to health care: a study of pediatric nurse practitioner outcomes in a school-based clinic. Jones ME, et al. **J Nurs Care Qual** 1997 Apr;11(4):53–9
Teacher initiated improvement of asthma policy in schools. Hazell J, et al. **J Paediatr Child Health** 1995 Dec; 31(6):519–22
Guidelines for school and community programs to promote lifelong physical activity among young people. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and prevention. **J Sch Health** 1997 Aug;67(6):202–19 (276 ref.)
Developing culturally sensitive HIV/AIDS and substance abuse prevention curricula for Native American youth. Baldwin JA, et al. **J Sch Health** 1996 Nov;66(9):322–7
A culturally appropriate cancer education program for African-American adolescents in an urban middle school. Barg FK, et al. **J Sch Health** 1996 Feb;66(2):50–4
The school of nurse as health educator. Bradley BJ. **J Sch Health** 1997 Jan;67(1):3–8
Lessons learned from three violence prevention projects. Fiester L, et al. **J Sch Health** 1996 Nov;66(9):344–6
Integrating school-based health centers into managed care in Massachusetts. Hacker K. **J Sch Health** 1996 Nov; 66(9):317–21
New Jersey school nurses' perceptions of school-based, prenatal nutrition education. Janas BG, et al. **J Sch Health** 1997 Feb;67(2):62–7
Peer-planned social activities for preventing alcohol use among young adolescents. Komro KA, et al. **J Sch Health** 1996 Nov;66(9):328–34
Key issues affecting school-based health centers and Medicaid. Lear JG, et al. **J Sch Health** 1996 Mar;66(3):83–8
Use of the Healthy School Profile in the Middlesex-London, Ontario, Schools. Mitchell I, et al. **J Sch Health** 1997 Apr; 67(4):154–6
School-based programs for preventing eating disturbances. Neumark-Sztainer D. **J Sch Health** 1996 Feb;66(2):64–71 (55 ref.)
Conducting a comprehensive school health program. Resnicow K, et al. **J Sch Health** 1996 Feb;66(2):59–63 (19 ref.)
The politics of school-based programs which address sexual orientation. Rienzo BA, et al. **J Sch Health** 1996 Jan; 66(1):33–40
Coping with controversy: the professional epidemic of the nineties. Spalt SW. **J Sch Health** 1996 Nov;66(9):339–40
Bridging student health risks and academic achievement through comprehensive school health programs. Symons CW, et al. **J Sch Health** 1997 Aug;67(6):220–7 (73 ref.)
"Eggs-perimenting" with seat belt safety. Wood DN. **J Sch Health** 1996 Feb;66(2):79–80
Stick to life: a sticker competition for smoking prevention. Freitas FA. **MCN Am J Matern Child Nurs** 1997 Jan–Feb; 22(1):50–1
Improving school breakfasts: effects of the CATCH Eat Smart Program on the nutrient content of school breakfasts. Dwyer JT, et al. **Prev Med** 1996 Jul–Aug;25(4):413–22
The effects of the Child and Adolescent Trial for Cardiovascular Health upon psychosocial determinants of diet and physical activity behavior. Edmundson E, et al. **Prev Med** 1996 Jul–Aug;25(4):442–54
Tobacco use measurement, prediction, and intervention in elementary schools in four states: the CATCH Study. Elder JP, et al. **Prev Med** 1996 Jul–Aug;25(4):486–94
Changes in nutrient intakes of elementary school children following a school-based intervention: results from the CATCH Study. Lytle LA, et al. **Prev Med** 1996 Jul–Aug; 25(4):465–77
School physical education: effect of the Child and Adolescent Trial for Cardiovascular Health. McKenzie TL, et al. **Prev Med** 1996 Jul–Aug;25(4):423–31
The effect of adult participation in a school-based family intervention to improve Children's diet and physical activity: the Child and Adolescent Trial for Cardiovascular Health. Nader PR, et al. **Prev Med** 1996 Jul–Aug; 25(4):455–64
Impact of fat reduction on micronutrient density of children's diets: the CATCH Study. Nicklas TA, et al. **Prev Med** 1996 Jul–Aug;25(4):478–85
Changes in the nutrient content of school lunches: results from the CATCH Eat Smart Food service Intervention. Osganian SK, et al. **Prev Med** 1996 Jul–Aug;25(4):400–12
Advances and future directions for school-based health promotion research: commentary on the CATCH intervention Trial. Resnicow K, et al. **Prev Med** 1996 Jul–Aug;25(4):378–83
Operational design and quality control in the CATCH multicenter Trial. Stone EJ, et al. **Prev Med** 1996 Jul–Aug; 25(4):384–99
Cardiovascular risk factors among children after a 2 1/2-year intervention–The CATCH Study. Webber LS, et al. **Prev Med** 1996 Jul–Aug;25(4):432–41
The prevention of substance abuse in schools: a process evaluation of the adoption of a standardised education module. Villalbi JR, et al. **Promot Educ** 1997 Mar;4(1):15–9
Audit of school entry health assessments: to maximise efficient use of health personnel at school entry assessments at 5 years. Leff S, et al. **Public Health** 1996 Sep; 110(5):289–92
Model for the control of pediculus humanus capitis. Vermaak Z. **Public Health** 1996 Sep;110(5):283–8
The Trading Cards Program—using high school role models for drug abuse prevention. Harris JL. **Public Health Rep** 1996 Nov–Dec;111(6):547–8
Prenatal power—education for life. Pan E, et al. **Public Health Rep** 1996 Nov–Dec;111(6):541–5
Integrated community-based screening for cardiovascular diseases of childhood. Thakur JS, et al. **World Health Forum** 1997;18(1):24–7
[Sensitivity training for debriefing in the school context] Leuenberger JF. **Rev Med Suisse Romande** 1997 May; 117(5):413–8 (0 ref.) **(Fre)**
[The organization of medical care in a secondary boarding school for children with diabetes mellitus] Tikhonova EP, et al. **Lik Sprava** 1996 Jan–Feb;(1–2):193–7 **(Rus)**

STANDARDS

An impact evaluation of project SNAPP: an AIDS and pregnancy prevention middle school program. Kirby D, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):44–61
Attitudes about AIDS education and condom availability among parents of high school students in New York City: a focus group approach. Rafferty Y, et al. **AIDS Educ Prev** 1997 Feb;9(1):14–30
Does parental involvement make a difference? The impact of parent interactive activities on students in a school-based AIDS prevention program. Weeks K, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):90–106
A systematic overview of adolescent suicide prevention programs. Ploeg J, et al. **Can J Public Health** 1996 Sep–Oct; 87(5):319–24 (33 ref.)
Postvention in schools: affective or effective? [editorial; comment] Goldney RD, et al. **Crisis** 1996;17(3):98–9. Comment on: Crisis 1996;17(3):108–15.
School-based secondary prevention for children with disruptive behavior: initial outcomes. Braswell L, et al. **J Abnorm Child Psychol** 1997 Jun;25(3):197–208
Efficacy of a dating violence prevention program on attitudes justifying aggression. Avery-Leaf S, et al. **J Adolesc Health** 1997 Jul;21(1):11–7
Prevention and early intervention for anxiety disorders: a controlled trial. Dadds MR, et al.

SCHOOL HEALTH SERVICES

J Consult Clin Psychol 1997 Aug;65(4):627–35

Health instruction responsibilities for elementary classroom teachers in Pennsylvania. Patterson S, et al. **J Sch Health** 1996 Jan;66(1):13–7

[Selected certification problems for students and candidates in technical vocational schools] Mucha E, et al. **Med Pr** 1997;48(3):273–7 (Eng. Abstr.) **(Pol)**

STATISTICS & NUMERICAL DATA

School-based HIV–prevention education––United States, 1994. Division of Adolescent and School Health, CDC. **J Sch Health** 1997 Mar;67(3):103–5

SUPPLY & DISTRIBUTION

A preliminary investigation of high–school counseling resources on the Cape Peninsula. Berard RM, et al. **Adolescence** 1997 Summer;32(126):373–9

TRENDS

Building the capacity of schools to improve the health of the nation. A call for assistance from psychologists. Kolbe LJ, et al. **Am Psychol** 1997 Mar;52(3):256–65

School–based mental health services in the United States: history, current models and needs. Flaherty LT, et al. **Community Ment Health J** 1996 Aug;32(4):341–52 (27 ref.)

[Plea for conversion of youth medical service to "school medical service"] Hurrelmann K, et al. **Gesundheitswesen** 1996 Oct;58(10):525–32 (Eng. Abstr.) **(Ger)**

UTILIZATION

Bridging the gap between service need and service utilization: a school–based mental health program. Armbruster P, et al. **Community Ment Health J** 1997 Jun;33(3):199–211

Reproductive and sexual health at the school–based/school–linked health center: an analysis of services provided by 180 clinics. Peak GL, et al. **J Adolesc Health** 1996 Oct;19(4):276–81

Characteristics of users and nonusers of health clinics in inner–city junior high schools. Walter HJ, et al. **J Adolesc Health** 1996 May;18(5):344–8

Students' acquisition and use of school condoms in a high school condom availability program. Schuster MA, et al. **Pediatrics** 1997 Oct;100(4):689–94

SCHOOL NURSING

Document helps school nurses deal with HIV/AIDS. **Am J Nurs** 1997 Jan;97(1):73

Initiating health programmes in schools and communities. **Int Nurs Rev** 1997 May–Jun;44(3):76–8 (8 ref.)

The school of nurse as health educator. Bradley BJ. **J Sch Health** 1997 Jan;67(1):3–8

Use of the Healthy School Profile in the Middlesex–London, Ontario, Schools. Mitchell I, et al. **J Sch Health** 1997 Apr; 67(4):154–6

The needs of children and the role of school nurses. Nelson KE. **J Sch Health** 1997 May;67(5):187–8

ANA document helps school nurses deal with HIV/AIDS [news] **MCN Am J Matern Child Nurs** 1997 Mar–Apr; 22(2):107

A change of course load for school nurses. Noonan SS. **N J Med** 1997 Apr;94(4):51–3

Indoor air pollutants and sick building syndrome: a case study and implications for the community health nurse. Tsacoyianis R. **Public Health Nurs** 1997 Feb;14(1):58–75 (19 ref.)

ECONOMICS

Medicaid reimbursement for school nursing services: a position paper of the National Association of State School Nurse Consultants. **J Sch Health** 1996 Mar;66(3):95–6

METHODS

Preliminary development of the School Health Intensity Rating Scale. Burt CJ, et al. **J Sch Health** 1996 Oct; 66(8):286–90

Health promotion teaching in preschools. Cagle CS, et al. **MCN Am J Matern Child Nurs** 1996 Mar–Apr;21(2):96–9

ORGANIZATION & ADMINISTRATION

High touch meets high tech. Distance mental health screening for rural youth using Teleform. Puskar KR, et al. **Comput Nurs** 1996 Nov–Dec;14(6):323–9; quiz 330–2 (31 ref.)

The future of community nursing in the United Kingdom: district nursing, health visiting and school nursing. McDonald AL, et al. **J Adv Nurs** 1997 Aug;26(2):257–65

Delegation of school health services to unlicensed assistive personnel: a position paper of the National Association of State School Nurse Consultants. **J Sch Health** 1996 Feb; 66(2):72–4

Functions of school nurses and health assistants in U.S. school health programs. Fryer GE Jr, et al. **J Sch Health** 1996 Feb;66(2):55–8

New Jersey school nurses' perceptions of school–based, prenatal nutrition education. Janas BG, et al. **J Sch Health** 1997 Feb;67(2):62–7

Brief nurse consultations for preventing alcohol use among urban school youth. Werch CE, et al. **J Sch Health** 1996 Nov;66(9):335–8

21st century nursing and implications for nursing school admissions. Leners D, et al. **Nurs Outlook** 1996 May–Jun; 44(3):137–40

Audit of school entry health assessments: to maximise efficient use of health personnel at school entry assessments at 5 years. Leff S, et al. **Public Health** 1996 Sep; 110(5):289–92

STANDARDS

Guidelines for adolescent preventive services: a role for the school nurse. Allensworth DD, et al. **J Sch Health** 1996 Oct;66(8):281–5

SCHOOLS

A successful university–school–district partnership to help San Francisco's K–12 students learn about science and medicine. Clark MR. **Acad Med** 1996 Sep;71(9):950–6

Prevalence of headache in schoolchildren: relation to family and school factors. Carlsson J. **Acta Paediatr** 1996 Jun; 85(6):692–6

Dating–partner preferences among a group of inner–city African–American high school students. Smith SP. **Adolescence** 1996 Spring;31(121):79–90

In search of effective programs to address students' emotional distress and behavioral problems part III: student assessment of school–based support groups. Wassef A, et al. **Adolescence** 1996 Spring;31(121):1–16

The free running athletic screening test as a screening test for exercise–induced asthma in high school. Randolph C, et al. **Allergy Asthma Proc** 1997 Mar–Apr;18(2):93–8

Incidence of exercise–induced asthma in high school population in British Columbia. Vacek L. **Allergy Asthma Proc** 1997 Mar–Apr;18(2):89–91

Strategic planning: purpose and process in transforming state supported special schools for the sensory disabled in the United States. Griffing BL. **Am Ann Deaf** 1996 Dec; 141(5):365–9

Effects of cognitive ability and affect on school mathematics performance and feelings of difficulty. Efklides A, et al. **Am J Psychol** 1997 Summer;110(2):225–58

The effectiveness of a school–based curriculum for reducing violence among urban sixth–grade students. Farrell AD, et al. **Am J Public Health** 1997 Jun;87(6):979–84

School refusal and truancy. Berg I. **Arch Dis Child** 1997 Feb; 76(2):90–1

Fears and other suspected risk factors for carrying lethal weapons among urban youths of middle–school age. Arria A, et al. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):555–60

The association of weapon carrying and fighting on school property and other health risk and problem behaviors among high school students. DuRant RH, et al. **Arch Pediatr Adolesc Med** 1997 Apr;151(4):360–6

Corporal punishment must not be reintroduced into schools [letter] Wynne JM. **BMJ** 1997 Mar 1;314(7081):677

Ultraviolet radiation and primary school children [letter; comment] Lyon CC, et al. **Br J Dermatol** 1997 May; 136(5):799–800. Comment on: Br J Dermatol 1996 Jun;134(6):1030–4.

School attendance, health–risk behaviors, and self–esteem in adolescents applying for working papers. Suss AL, et al. **Bull N Y Acad Med** 1996 Winter;73(2):255–66

Persistent school dysfunction: unrecognized comorbidity and suboptimal therapy. Kube DA, et al. **Clin Pediatr (Phila)** 1996 Nov;35(11):571–6

Investigation of tuberculosis in an adolescent. The Outbreak Control Team. Quigley C. **Commun Dis Rep CDR Rev** 1997 Jul 25;7(8):R113–6

Nature–nurture in the classroom: entrance age, school readiness, and learning in children. Morrison FJ, et al. **Dev Psychol** 1997 Mar;33(2):254–62

Striving to be the best [news] Nicholas D. **Environ Health Perspect** 1997 Feb;105(2):176–7

Survey of New Jersey schools and day care centers for lead in plumbing solder. Identification of lead solder and prevention of exposure to drinking water contaminated with lead from plumbing solder. Berkowitz M. **Environ Res** 1995 Oct;71(1):55–9

Risk factors for Neisseria meningitidis carriage in a school during a community outbreak of meningococcal infection. Davies AL, et al. **Epidemiol Infect** 1996 Oct;117(2):259–66

Hypermobility in two Dutch school populations. Rikken–Bultman DG, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jun;73(2):189–92

Does condom availability make a difference? An evaluation of Philadelphia's health resource centers. Furstenberg FF Jr, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):123–7

School injuries in the west of Scotland: estimate of incidence and health service costs. Stark C, et al. **Health Bull (Edinb)** 1997 Jan;55(1):44–8

A national assessment of secondary school principals' perceptions of violence in schools. Price JH, et al. **Health Educ Behav** 1997 Apr;24(2):218–29

Repeat leprosy survey after 7 years in night high schools in greater Bombay [letter] Naik SS. **Indian J Lepr** 1996 Oct–Dec;68(4):377–8

School injuries in an occupational health perspective: what do we learn from community based epidemiological studies? Laflamme L, et al. **Inj Prev** 1997 Mar;3(1):50–6 (30 ref.)

Hearing impairment and otitis media in a rural primary school in south India. Jacob A, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):133–8

Prevalence of congenital color deficiencies in secondary–school students in Tehran. Modarres M, et al. **Int Ophthalmol** 1996–97;20(4):221–2

Childhood accidents [letter; comment] [see comments] Carley SD, et al. **J Accid Emerg Med** 1997 Jan;14(1):58–9. Comment on: J Accid Emerg Med 1996 May;13(3):196–7. Comment in: J Accid Emerg Med 1997 May;14(3):199–200.

How safe are schools? [letter; comment] Choyce MQ. **J Accid Emerg Med** 1997 May;14(3):199–200. Comment on: J Accid Emerg Med 1996 May;13(3):196–7. Comment on: J Accid Emerg Med 1997 Jan;14(1):58–9.

School accidents to children: time to act. Maitra A. **J Accid Emerg Med** 1997 Jul;14(4):240–2

Are schools safer for children than public places? [see comments] Maitra AK, et al. **J Accid Emerg Med** 1996 May;13(3):196–7. Comment in: J Accid Emerg Med 1997 Jan;14(1):58–9. Comment in: J Accid Emerg Med 1997 May;14(3):199–200.

Characteristics of students who bring weapons to school. Bailey SL, et al. **J Adolesc Health** 1997 Apr;20(4):261–70

Comparison of two violence prevention curricula for middle school adolescents. DuRant RH, et al. **J Adolesc Health** 1996 Aug;19(2):111–7

Students' perceptions of violence in the public schools: the MetLife survey. Everett SA, et al. **J Adolesc Health** 1995 Dec;17(6):345–52

Cockroach allergen (Bla g 1) in school dust. Sarpong SB, et al. **J Allergy Clin Immunol** 1997 Apr;99(4):486–92

Somatic symptoms in anxious–depressed school refusers. Bernstein GA, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):661–8

Pricing strategy to promote fruit and vegetable purchase in high school cafeterias. French SA, et al. **J Am Diet Assoc** 1997 Sep;97(9):1008–10

Potential bias in classroom research: comparison of children with permission and those who do not receive permission to participate. Noll RB, et al. **J Clin Child Psychol** 1997 Mar;26(1):36–42

Structure of health risk behavior among high school students. Basen–Engquist K, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):764–75

An evaluation of 1994 school entry immunization certificates on the Central Coast of New South Wales. Watt PD. **J Paediatr Child Health** 1996 Apr;32(2):125–31

Development of a school–based drug abuse prevention curriculum for high–risk youths. Sussman S. **J Psychoactive Drugs** 1996 Apr–Jun;28(2):169–82

Companion animal health education programmes in schools [letter; comment] McCrindle CM. **J S Afr Vet Assoc** 1996 Sep;67(3):102. Comment on: J S Afr Vet Assoc 1996 Mar;67(1):31–5.

A profile of rural Texas adolescents who carry handguns to school. Kingery PM, et al. **J Sch Health** 1996 Jan; 66(1):18–22

Tobacco prevention in tobacco–raising areas: lessons from the lion's den. Noland MP. **J Sch Health** 1996 Sep; 66(7):266–8

Student victimization at school. Nolin MJ, et al. **J Sch Health** 1996 Aug;66(6):216–21

Effects of a multidimensional anabolic steroid prevention intervention. The Adolescents Training and Learning to Avoid Steroids (ATLAS) Program. Goldberg L, et al. **JAMA** 1996 Nov 20;276(19):1555–62

School bus–related deaths and injuries in New South Wales [letter; comment] Black BP. **Med J Aust** 1997 Jan 20; 166(2):107; discussion 107–8. Comment on: Med J Aust 1996 Aug 5;165(3):134–7.

School bus–related deaths and injuries in New South Wales [letter; comment] Watson DA. **Med J Aust** 1997 Jan 20; 166(2):107; discussion 107–8. Comment on: Med J Aust 1996 Aug 5;165(3):134–7.

Cognitive function and academic performance in neurofibromatosis. 1: consensus statement from the NF1 Cognitive Disorders Task Force. North KN, et al. **Neurology** 1997 Apr;48(4):1121–7 (57 ref.)

Feasibility of a clinic–based hypocaloric dietary intervention implemented in a school setting for obese children. Figueroa–Colon R, et al. **Obes Res** 1996 Sep;4(5):419–29

Visual predictors of reading performance in kindergarten and first grade children. Kulp MT, et al. **Optom Vis Sci** 1996 Apr;73(4):255–62 (99 ref.)

Viable fungi in indoor air in homes and schools in the Sør–Varanger community during winter. Dotterud LK, et al. **Pediatr Allergy Immunol** 1995 Nov;6(4):181–6

Using research to change public policy: reflections on 20 years of effort to eliminate corporal punishment in schools [see comments] Hyman IA. **Pediatrics** 1996 Oct;98(4 Pt 2):818–21. Comment in: Pediatrics 1996 Oct;98(4 Pt 2):821–3.

Scores on self–actualization for gifted junior high school students. Lewis JD. **Psychol Rep** 1996 Aug;79(1):59–64

Indoor air pollutants and sick building syndrome: a case study and implications for the community health nurse. Tsacoyianis R. **Public Health Nurs** 1997 Feb;14(1):58–75 (19 ref.)

New edition updates schools on AIDS policies [news] **Public Health Rep** 1996 Sep–Oct;111(5):389

The teaching of cardiopulmonary resuscitation in schools in Hampshire. Lewis RM, et al. **Resuscitation** 1997 Aug;

35(1):27–31
Cognitive and behavioural effects of a school breakfast. Richter LM, et al. **S Afr Med J** 1997 Jan;87(1 Suppl):93–100
Eating breakfast—does it make a difference? [editorial] Steyn N, et al. **S Afr Med J** 1997 Jan;87(1 Suppl):91–2
Trace elements in drinking water coolers collected from primary schools, Riyadh, Saudi Arabia. Al-Saleh IA. **Sci Total Environ** 1996 Mar 29;181(3):215–21
Treatment of attention deficit hyperactivity disorder. a multi-modal model for schools. Maag JW, et al. **Semin Speech Lang** 1996 Feb;17(1):37–58 (72 ref.)
Educating every teacher, every year: the public schools and parents of children with ADHD. Reid R, et al. **Semin Speech Lang** 1996 Feb;17(1):73–90
Perceptions of school violence as a problem and reports of violent events: a national survey of school social workers. Astor RA, et al. **Soc Work** 1997 Jan;42(1):55–68
[School at the end of life. What objectives what hope?] Bouffet E, et al. **Arch Pediatr** 1996 Jun;3(6):555–60 (Eng. Abstr.) **(Fre)**
[Outbreak of non-bacterial gastroenteritis in a school] Gaulin C, et al. **Can J Public Health** 1996 Jul–Aug;87(4):264–7 (Eng. Abstr.) **(Fre)**
[Study of parental participation in curricular and extracurricular activities] Renaud L, et al. **Can J Public Health** 1997 May–Jun;88(3):184–91 (Eng. Abstr.) **(Fre)**
[Violence in the school—analysis of the problem and possible interventions] Meier U. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):169–81 (31 ref.) (Eng. Abstr.) **(Ger)**
[Decreasing violence in the school: study of a cooperative intervention] Nolting HP, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar; 46(3):195–205 (Eng. Abstr.) **(Ger)**
[Accidents in school. Epidemiological presentation] Astulfoni A, et al. **Minerva Pediatr** 1995 Dec;47(12):527–31 (Eng. Abstr.) **(Ita)**
[Prediction of ijime (bullying)] Kuramoto H. **Nippon Koshu Eisei Zasshi** 1996 Sep;43(9):824–34 (Eng. Abstr.) **(Jpn)**
[Sources of x-rays in school] Bednarek A, et al. **Med Pr** 1996;47(1):45–8 (Eng. Abstr.) **(Pol)**
[Determination of acoustic climate inside high schools in comparison with elementary schools] Koszarny Z, et al. **Rocz Panstw Zakl Hig** 1996;47(4):423–9 (Eng. Abstr.) **(Pol)**
[Some life style elements in students from public and non-public secondary schools] Polus-Szeniawska E. **Rocz Panstw Zakl Hig** 1996;47(3):351–6 (Eng. Abstr.) **(Pol)**
[The health status of children in the new type of educational institutions] Chubirko MI, et al. **Gig Sanit** 1997 Mar–Apr; (2):21–3 (Eng. Abstr.) **(Rus)**
[Evaluation of modern child nutrition in boarding schools in Taimyr] Panin LE, et al. **Vopr Pitan** 1997;(3):26–30 (Eng. Abstr.) **(Rus)**
[Administration of the "Healthy School" project] Bjegović V, et al. **Srp Arh Celok Lek** 1996 Jul–Aug;124(7–8):184–9 (Eng. Abstr.) **(Scc)**
[The role of the School of Health Care and Social Work at the Trnava University in health care education] Krčméry V Jr, et al. **Bratisl Lek Listy** 1996 Nov;97(11):700–1 **(Slo)**
[HIV infection in day-care and school centers] Echeverría Lecuona J. **An Esp Pediatr** 1996 May;44(5):442–4 (Eng. Abstr.) **(Spa)**
[Epidemiological study of the symptomatology of childhood depression in Madrid school-age population] Polaino-Lorente A, et al. **An Esp Pediatr** 1997 Apr; 46(4):344–50 (Eng. Abstr.) **(Spa)**
[Outbreak of tuberculosis in a school] Prieto Lozano A, et al. **Aten Primaria** 1996 Dec;18(10):567–70 (Eng. Abstr.) **(Spa)**
[Tuberculosis outbreak at a public school] Navarro Gracia JF, et al. **Rev Clin Esp** 1997 Mar;197(3):152–7 (59 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

School meals and milk in England and Wales, 1906–45. Welshman J. **Med Hist** 1997 Jan;41(1):6–29

LEGISLATION & JURISPRUDENCE

Protecting the privacy of student education records. Policy Studies Associates, Inc. **J Sch Health** 1997 Apr; 67(4):139–40
The politicizing of science: when "protection" of subjects' rights leads to a wrong. Beauvais F. **Subst Use Misuse** 1997 Jan;32(1):77–82
Religious crusade. School health is at center of battle for control of state's education system. Ortolon K. **Tex Med** 1996 Feb;92(2):30–3

ORGANIZATION & ADMINISTRATION

Addressing barriers to learning: beyond school-linked services and full-service schools. Adelman HS, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):408–21
Toward a restructuring of the schools [editorial] Bassuk EL. **Am J Orthopsychiatry** 1997 Jul;67(3):342–3
School-based wraparound planning: integrating services for students with emotional and behavioral needs. Eber L, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):385–95
Implementing prevention programs in high-risk environments: application of the resiliency paradigm. Gager PJ, et al. **Am J Orthopsychiatry** 1997 Jul; 67(3):363–73
Teacher consultation: impact on teachers' effectiveness and students' cognitive competence and achievement. Goldman RK, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):374–84
The uneasy alliance of mental health services and the schools: an historical perspective. Sedlak MW. **Am J Orthopsychiatry** 1997 Jul;67(3):349–62
Supporting children and families in the schools: the school of the 21st century. Zigler EF, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):396–407
Funding child care and public education. Zigler EF, et al. **Future Child** 1996 Summer–Fall;6(2):104–21; discussion 137–45
The market for residential and day schools for children with severe emotional disturbance. Spencer CS, et al. **J Ment Health Adm** 1997 Winter;24(1):72–81
Superintendents' perceptions of schoolsite health promotion in Missouri. Cox CC, et al. **J Sch Health** 1997 Feb; 67(2):50–5
Assessing stress among public school principals in British Columbia. Allison DG. **Psychol Rep** 1997 Jun;80(3 Pt 2):1103–14
School-as-community activity selection at continuation high schools. Sussman S, et al. **Subst Use Misuse** 1997 Jan; 32(2):113–31

STANDARDS

Immunization compliance among public and private school children. Fredrickson DD, et al. **J Sch Health** 1997 Feb; 67(2):75–7
Guidelines for school and community programs to promote lifelong physical activity among young people. Centers for Disease Control and Prevention. **MMWR Morb Mortal Wkly Rep** 1997 Mar 7; 46(RR-6):1–36

STATISTICS & NUMERICAL DATA

Pertussis containment in schools and day care centers during the Cincinnati epidemic of 1993. Christie CD, et al. **Am J Public Health** 1997 Mar;87(3):460–2
Condom availability programs in U.S. schools. Kirby DB, et al. **Fam Plann Perspect** 1996 Sep–Oct;28(5):196–202
School and neighborhood characteristics associated with school rates of alcohol, cigarette, and marijuana use. Ennett ST, et al. **J Health Soc Behav** 1997 Mar;38(1):55–71
Screening school personnel for cardiovascular disease risk factors: short-term impact on behavior and perceived role as promoters of heart health. O'Loughlin J, et al. **Prev Med** 1996 Nov–Dec;25(6):660–7
Why is MetLife interested in violence issues? [comment] Kamen HP. **Stat Bull Metrop Insur Co** 1996 Jul–Sep; 77(3):11. Comment on: Stat Bull Metrop Insur Co 1996 Jul–Sep;77(3):2–10.
Teenagers' view of violence and social tension in U.S. public schools [see comments] Mushinski M. **Stat Bull Metrop Insur Co** 1996 Jul–Sep;77(3):2–10. Comment in: Stat Bull Metrop Insur Co 1996 Jul–Sep;77(3):11.
Effect of intestinal helminthiasis on school attendance by early primary schoolchildren. Raj SM, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr;91(2):131–2

SCHOOLS, DENTAL

The teaching of all-ceramic restorations in Scandinavian dental schools: a survey. Jokstad A, et al. **Acta Odontol Scand** 1996 Jun;54(3):200–4
Analysis of workplace injuries in a dental school environment. McDonald RI, et al. **Aust Dent J** 1997 Apr; 42(2):109–13
Oral health and personnel needs in the Pacific [letter; comment] Tuisuva J, et al. **Aust Dent J** 1996 Aug;41(4):280 . Comment on: Aust Dent J 1996 Feb;41(1):53–8.
A virus, the vice chancellors and principles of vaccination [see comments] [published erratum appears in Br Dent J 1996 Apr 6;180(7):273] Laszlo J, et al. **Br Dent J** 1996 Feb 24;180(4):124–6. Comment in: Br Dent J 1996 Jun 22;180(12):447.
A national survey to medical and dental schools to assess the level of undergraduate teaching and research about HIV/AIDS in the UK. Carter YH, et al. **Int J STD AIDS** 1997 Feb;8(2):88–94
Public vs. private schools [letter; comment] Fritz ME. **J Am Dent Assoc** 1996 Dec;127(12):1704, 1706. Comment on: J Am Dent Assoc 1996 Aug;127(8):1146, 1148.
More on Nova University [letter; comment] Kay CJ. **J Am Dent Assoc** 1996 Dec;127(12):1706. Comment on: J Am Dent Assoc 1996 Aug;127(8):1146, 1148.
Another dental school, a second opinion [letter; comment] Oliet S. **J Am Dent Assoc** 1996 Nov;127(11):1574. Comment on: J Am Dent Assoc 1996 Aug;127(8):1146, 1148.
Accidental exposures to blood and body fluids among health care workers in dental teaching clinics: a prospective study. Ramos-Gomez F, et al. **J Am Dent Assoc** 1997 Sep; 128(9):1253–61
Problem-based learning at the University of Southern California School of Dentistry. Fincham AG, et al. **J Dent Educ** 1997 May;61(5):417–25
Dental health services research utilizing comprehensive clinical databases and information technology [published erratum appears in J Dent Educ 1997 Jun;61(6):506] Hayden WJ. **J Dent Educ** 1997 Jan;61(1):47–55
What should biomedical sciences education in dental schools achieve? Lantz MS, et al. **J Dent Educ** 1997 May; 61(5):426–33
A survey of faculty practices in U.S. dental schools. Almog DM, et al. **N Y State Dent J** 1996 Dec;62(10):25–9

ECONOMICS

Can Australian dental schools survive? [editorial] Harcourt JK. **Aust Dent J** 1997 Feb;42(1):65

HISTORY

[The 50th anniversary of the Department of General Hygiene of the N. A. Semashko Moscow Medical Stomatology Institute] Lakshin AM, et al. **Stomatologiia (Mosk)** 1996; 75(2):84–5 **(Rus)**
[The 75th anniversary of the N. A. Semashko Moscow Medical Stomatology Institute] Sokolov EI, et al. **Stomatologiia (Mosk)** 1997;76(2):76–8 **(Rus)**

ORGANIZATION & ADMINISTRATION

Characteristics identified by deans as essential to success. Brundo GC, et al. **J Dent Educ** 1997 Jun;61(6):484–8
The University of Florida College of Dentistry response to the IOM report on dental education. Catalanotto FA, et al. **J Dent Educ** 1996 Nov;60(11):895–8
Cultural audits: introduction, process, and results. Inglehart M, et al. **J Dent Educ** 1997 Mar;61(3):283–8
USC's response to the IOM report on dental education. Landesman HM. **J Dent Educ** 1996 Nov;60(11):899–903

STANDARDS

What makes a good dental school? [editorial] McLaughlin G. **Br Dent J** 1996 Oct 19;181(8):274–5

STATISTICS & NUMERICAL DATA

Incidence of percutaneous injuries at a dental school: a 4-year retrospective study. Panagakos FS, et al. **Am J Infect Control** 1997 Aug;25(4):330–4

SCHOOLS, HEALTH OCCUPATIONS

Making the graduate school choice. Rigas M. **IEEE Eng Med Biol Mag** 1997 Jan–Feb;16(1):29–30
Moving toward a core curriculum in Schools of the Allied Health Professions: knowledge and skills considered important by department chairs in four disciplines. Elder OC Jr, et al. **J Allied Health** 1997 Spring;26(2):51–6
A year in the life: Southern California College of Optometry student experience in the Indian Health Service. Hoppe E. **J Am Optom Assoc** 1996 May;67(5):257–62
The School of Clinical Perfusion Sciences. Imms FJ. **Perfusion** 1997 Jul;12(4):247–9

HISTORY

Nurturing scientific minds: Menninger at mid-20th century. Holzman PS. **Bull Menninger Clin** 1996 Fall;60(4):503–13
A tribute to Alden N. Haffner [editorial] Classé JG. **J Am Optom Assoc** 1996 Jun;67(6):305–6
Fitch's choice [editorial] Classé JG. **J Am Optom Assoc** 1996 Apr;67(4):186–7
Opportunity in adversity [editorial] [see comments] Haffner AN. **J Am Optom Assoc** 1996 Jun;67(6):307–12. Comment in: J Am Optom Assoc 1996 Sep;67(9):520.
Celebrating 75 years at the Pennsylvania College of Optometry [editorial] Lewis TL. **J Am Optom Assoc** 1996 Apr;67(4):188–92

ORGANIZATION & ADMINISTRATION

Surveying potential sites for a rural decentralized allied health education program. Hamilton CC, et al. **J Allied Health** 1996 Fall;25(4):293–302
Potential patterns—conceptual and practical issues in interdisciplinary education. Huff F, et al. **J Allied Health** 1995 Fall;24(4):359–65
Faculty role [letter; comment] Flax N. **J Am Optom Assoc** 1996 Sep;67(9):520. Comment on: J Am Optom Assoc 1996 Jun;67(6):307–12.
School and agency collaboration in a cost conscious health care environment. Christ GH. **Soc Work Health Care** 1996; 24(1–2):53–72
Education of staff and students in health care settings: integrating practice and research. Hall JA, et al. **Soc Work Health Care** 1996;24(1–2):93–113

STANDARDS

Comparison of entrance requirements for health care professions. Doxey TT, et al. **J Manipulative Physiol Ther** 1997 Feb;20(2):86–91

TRENDS

Academic affiliations and the role of the professional school in a comprehensive medical center environment. Holsinger J Jr. **Optom Vis Sci** 1996 May;73(5):309–11

SCHOOLS, MEDICAL

Grassroots emergency medicine: a survey of U.S. medical schools [letter] Schlaishunt S, et al. **Acad Emerg Med** 1996 Jun;3(6):648–50

Medical students and urban violence [letter] Benbow EW. **Acad Med** 1997 Feb;72(2):88–9

Leaving the cloister but keeping the faith. Burrow GN. **Acad Med** 1997 Jan;72(1):4–5

The unclaimed cadaver. Coelho DH, et al. **Acad Med** 1997 Sep;72(9):741–3

Refining a method of identifying CUNY Medical School graduates practicing in underserved areas. Cregler LL, et al. **Acad Med** 1997 Sep;72(9):794–7

Student health policies of U.S. medical schools. Diekema DJ, et al. **Acad Med** 1996 Oct;71(10):1090–2

The effect of a rolling admission policy on a medical school's selection of applicants. Elam CL, et al. **Acad Med** 1997 Jul;72(7):644–6

A faculty-development needs assessment at one medical school. McLeod PJ, et al. **Acad Med** 1997 Jun;72(6):558–9

Population-based medical education: linkages between schools of medicine and public health agencies. Melville SK, et al. **Acad Med** 1996 Dec;71(12):1350–2

Influence of the interview on the evaluation of applicants to medical school. Nowacek GA, et al. **Acad Med** 1996 Oct;71(10):1093–5

Capturing the promise of science in medical schools. Ralston HJ 3rd, et al. **Acad Med** 1996 Dec;71(12):1314–23

Nature, nurture, and educational outcomes [letter] Reed VA, et al. **Acad Med** 1997 Apr;72(4):245–6

The development of diagnostic competence: comparison of a problem-based, an integrated, and a conventional medical curriculum. Schmidt HG, et al. **Acad Med** 1996 Jun; 71(6):658–64

A systematic analysis of how medical school characteristics relate to graduates' choices of primary care specialties. Senf JH, et al. **Acad Med** 1997 Jun;72(6):524–33

New admission measure needed [letter] Williams AL, et al. **Acad Med** 1997 Mar;72(3):159

The performance of students selected through a special program at St. Louis University School of Medicine. Yeager VL, et al. **Acad Med** 1997 Aug;72(8):731–2

Meetings of the Association of American Medical Colleges and the Council of Academic Societies, 1995–1996. Friedman PJ. **Acad Radiol** 1996 Sep;3(9):770–7

AIDS education programme in Colombian medical schools: training the teachers [letter] Garcia-Bernard R, et al. **AIDS** 1997 Mar 15;11(4):554–5

Report of the American Medical Student Association's Nutrition Curriculum Project. Essentials of nutrition education in medical schools: a national consensus. **Am J Clin Nutr** 1997 May;65(5):1559–61

Nutrition education in US medical schools. Young EA. **Am J Clin Nutr** 1997 May;65(5):1558

Medicine chairs' views on the impact of managed care on departments of internal medicine. Fogelman AM, et al. **Am J Med** 1996 Oct;101(4):331–7

Electronic mail (Email). Bollen M. **Aust Fam Physician** 1996 Feb;25(2):121–2

Feed us nutrition: final year medical students' perceptions of nutrition medical education. Warden RA, et al. **Aust N Z J Med** 1996 Oct:26(5):640–5

Why do medical students choose St Mary's Hospital Medical School? Baron JH. **BMJ** 1996 Dec 21–28;313(7072):1646–7

Hepatitis B and admission to medical school [editorial; comment] [see comments] Gilson RJ. **BMJ** 1996 Oct 5; 313(7061):830–1. Comment on: BMJ 1996 Oct 5;313(7061):856–7. Comment in: BMJ 1997 Jan 18;314(7075):225.

Hepatitis B and admission to medical school: an audit of British medical school policy [see comments] Parker G, et al. **BMJ** 1996 Oct 5;313(7061):856–7. Comment in: BMJ 1996 Oct 5;313(7061):830–1. Comment in: BMJ 1997 Jan 18;314(7075):225.

Report of research assessment exercise should have focused on British medical schools [letter] Peters K. **BMJ** 1997 Feb 22;314(7080):604

Implementing guidance on hepatitis B for applicants to medical school is time consuming [letter; comment] Williams S, et al. **BMJ** 1997 Jan 18;314(7075):225. Comment on: BMJ 1996 Oct 5;313(7061):830–1. Comment on: BMJ 1996 Oct 5;313(7061):856–7.

A virus, the vice chancellors and principles of vaccination [see comments] [published erratum appears in Br Dent J 1996 Apr 6;180(7):273] Laszlo J, et al. **Br Dent J** 1996 Feb 24;180(4):124–6. Comment in: Br Dent J 1996 Jun 22;180(12):447.

Rethinking the provision of reference services in academic medical school libraries. Heaton GT. **Bull Med Libr Assoc** 1996 Jan;84(1):17–24

Time to "rethink models of medical education," ACMC meeting told. Robb N. **CMAJ** 1997 Aug 1;157(3):304–5

Mercer University School of Medicine: a successful approach to primary care medical education [see comments] Ackermann RJ, et al. **Fam Med** 1996 Jun;28(6):395–402. Comment in: Fam Med 1996 Jun;28(6):439–40.

Surveillance of vaccine preventable diseases--should we involve medical colleges? [editorial] Ray SK. **Indian J Public Health** 1996 Jan-Mar;40(1):1–3

A national survey to medical and dental schools to assess the level of undergraduate teaching and research about HIV/AIDS in the UK. Carter YH, et al. **Int J STD AIDS** 1997 Feb;8(2):88–94

Thoughts on curriculum reform [letter] Schiffer SP. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1727–8

Thomas Jefferson University v. Shalala: dollars or sense? The illogical restriction of medicare's funding of graduate medical education. Koster PR. **J Contemp Health Law Policy** 1995 Fall;12(1):269–96

An expert systems approach to medical school admissions. Houry D, et al. **J La State Med Soc** 1997 Jun;149(6):207–10

Simulated minority admissions exercise at Louisiana State University School of Medicine: an evaluation. Helm EG, et al. **J Natl Med Assoc** 1997 Sep;89(9):601–5

The impact of nonacademic variables on performance at two medical schools. Webb CT, et al. **J Natl Med Assoc** 1997 Mar;89(3):173–80

Medical schools in the United States. **JAMA** 1997 Sep 3; 278(9):765–72

Medical schools in Canada. **JAMA** 1997 Sep 3;278(9):773

The merger of New York University and Mount Sinai Medical Centers: students voice their opinions. Batouli AR, et al. **JAMA** 1996 Dec 4;276(21):1772

Affirmative action and other special consideration admissions at the University of California, Davis, School of Medicine [see comments] Davidson RC, et al. **JAMA** 1997 Oct 8; 278(14):1153–8. Comment in: JAMA 1997 Oct 8;278(14):1196–7.

Academic medical center mergers [editorial] Lin JH. **JAMA** 1996 Dec 4;276(21):1768

A piece of my mind. Seeking Aesculapius. Pang PS. **JAMA** 1997 Aug 27;278(8):610–1

Teaching of human rights in US medical schools [see comments] Sonis J, et al. **JAMA** 1996 Nov 27; 276(20):1676–8. Comment in: JAMA 1996 Nov 27;276(20):1679–81.

International performance of UK medical institutions [letter] Boyd R. **Lancet** 1997 Aug 23;350(9077):595–6

Performance of Indian medical colleges [letter] Medappa N. **Lancet** 1996 Oct 12;348(9033):1034

Medical schools without walls [editorial] Kent A. **Med Educ** 1997 May;31(3):157–8

Role of the medical school. Ledingham IM, et al. **Med Educ** 1995;29 Suppl 1:31–6

Medical education in the USA: lessons from the health care reform era. Mullan F. **Med Educ** 1995;29 Suppl 1:57–60

Settings for learning: the community beyond. Okasha A. **Med Educ** 1995;29 Suppl 1:112–5

A learning resources centre: its utilization by medical students. Premkumar K, et al. **Med Educ** 1996 Nov; 30(6):405–11

The Medical Student Expectation Scale (MSES): a device for measuring students' expectations of each others' values and behaviours. Singleton AF, et al. **Med Educ** 1996 May; 30(3):187–94

The Brown University School of Medicine Class of 1996. Smith SR. **Med Health R I** 1996 Aug;79(8):287–91

A selection test for Australian graduate-entry medical schools [see comments] Aldous CJ, et al. **Med J Aust** 1997 Mar 3;166(5):247–50. Comment in: Med J Aust 1997 Mar 3;166(5):229–30.

The University Integrated Automated Information System at the Uniformed Services University of the Health Sciences. Kinnamon KE, et al. **Mil Med** 1997 May; 162(5):315–8

Medical school's role in roundtable discussion [letter; comment] Peden JG Jr. **N C Med J** 1997 May-Jun; 58(3):166. Comment on: N C Med J 1997 Mar-Apr;58(2):126–8.

Medical College, Baroda. Shah A, et al. **Natl Med J India** 1996 Jan-Feb;9(1):46–7

Harvard faces questions on missing data [news] Dalton R. **Nature** 1997 Mar 20;386(6622):206

Ban has mixed impact on Texas, California grad schools [news] Barinaga M. **Science** 1997 Aug 1;277(5326):633–4

Stanford researcher fights dismissal in hospital spat [news] Holden C. **Science** 1997 Oct 3;278(5335):27

[Basic training st the Györ-Mosom-Sopron County Free University-- a national model for the training and advanced education of family physicians] Schmidt P. **Orv Hetil** 1996 Jul 7;137(27):1503–4 **(Hun)**

[The First Conference of University Surgeons] Picciocchi A. **Ann Ital Chir** 1997 Mar-Apr;68(2):135–6 **(Ita)**

[Freedom from regulation for curriculum and variety in laboratory program of gross anatomy--report of the 1994–5 Committee of Teaching in Japanese Association of Anatomists] Kohno K, et al. **Kaibogaku Zasshi** 1996 Jun; 71(3):219–28 **(Jpn)**

[A report on the present status of education in cardiopulmonary resuscitation] **Masui** 1996 Jun; 45(6):774–81 **(Jpn)**

[University education in geriatrics: medical students' understandings of gerontology and geriatric medicine] Hakamata Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jun; 33(6):444–51 (Eng. Abstr.) **(Jpn)**

[University education in geriatrics: medical student's opinions on gerontology and geriatric medicine] Hakamata Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jun;33(6):452–9 (Eng. Abstr.) **(Jpn)**

[University education in geriatrics--present status and future prospects of gerontology and geriatrics education in pathology] Kanisawa M, et al. **Nippon Ronen Igakkai Zasshi** 1996 Sep;33(9):686–91 (Eng. Abstr.) **(Jpn)**

[Undergraduate teaching of geriatric medicine in western countries--literature review] Matsuse T, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jul;33(7):540–6 (Eng. Abstr.) **(Jpn)**

[New trial of medical education at Fukushima Prefecture Medical School during last 3 years--seminar by the student for education of neurophysiology] Kayama Y. **Nippon Seirigaku Zasshi** 1997;59(2):93–7 **(Jpn)**

[A need for undergraduate education for laboratory medicine in medical schools] Yamanaka M. **Rinsho Byori** 1996 Aug; 44(8):709–14 (10 ref.) (Eng. Abstr.) **(Jpn)**

[A different college of pediatrics] Monteiro JM. **Acta Med Port** 1997 Feb-Mar;10(2–3):127–8 (Eng. Abstr.) **(Por)**

[Proposal of residency integrated with medical masters degree at the UFMG Medical School: an evaluation among residents] Lamounier JA, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 Jul-Aug; 51(4):147–9 (Eng. Abstr.) **(Por)**

[Program evaluation Curriculum of the University of São Paulo Medical School. For the year 1994 and the period 1989–1994] Marcondes E, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 Mar-Apr; 51(2):78–80 (Eng. Abstr.) **(Por)**

[The Museum of the Department of Normal Anatomy of the I. P. Pavlov 1st Leningrad Medical Institute] Muratikova VA, et al. **Arkh Anat Gistol Embriol** 1968 Nov; 55(11):91–8 **(Rus)**

[Experience in training personnel for clinical diagnostic laboratories at a medical university] Emanuél' VL, et al. **Klin Lab Diagn** 1997 Feb;(2):12–4 **(Rus)**

[Psychological and moral aspects of physician's training at the phthisiopulmonological clinic of medical university] Khudzik LB, et al. **Probl Tuberk** 1997;(2):58–9 (0 ref.) **(Rus)**

[An improvement in the teaching of psychiatric disciplines at the Saint Petersburg I. P. Pavlov State Medical University (1974–1996)] Vanchakova NP. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):66–9 **(Rus)**

[Reasons for founding a University of Split Medical School (editorial)] Marušić M, et al. **Lijec Vjesn** 1996 May-Jun; 118(5–6):133–8 (Eng. Abstr.) **(Scr)**

[Graduation discourse] Marcial Rojas R. **P R Health Sci J** 1996 Dec;15(4):297–302 **(Spa)**

[Is Linköping a model again? (letter)] Ludvigsson J. **Lakartidningen** 1997 Mar 12;94(11):934, 937 **(Swe)**

CLASSIFICATION

Medical colleges in India [letter; comment] Medappa N. **Natl Med J India** 1996 Jul-Aug;9(4):198. Comment on: Natl Med J India 1996 May-Jun;9(3):135–40.

Medical colleges in India [letter; comment] Thomas K. **Natl Med J India** 1996 Jul-Aug;9(4):198. Comment on: Natl Med J India 1996 May-Jun;9(3):135–40.

ECONOMICS

Medical school tuition fees reach record levels as MD incomes shrink. Thorne S. **Can Med Assoc J** 1996 Oct 1; 155(7):979–81

Medical schools seeking new ways to cope with funding cutbacks. Thorne S. **Can Med Assoc J** 1997 Jun 1; 156(11):1611–3

Income and expenditures of osteopathic medical colleges. Rayman C. **J Am Osteopath Assoc** 1996 Nov;96(11):660–1

Relationship between market competition and the activities and attitudes of medical school faculty. Campbell EG, et al. **JAMA** 1997 Jul 16;278(3):222–6

Review of US medical school finances, 1995–1996. Ganem JL, et al. **JAMA** 1997 Sep 3;278(9):755–60

Relationship between National Institutes of Health research awards to US medical schools and managed care market penetration. Moy E, et al. **JAMA** 1997 Jul 16;278(3):217–21

Medical school funding [letter; comment] Korn D. **Science** 1997 Mar 28;275(5308):1863–4. Comment on: Science 1997 Jan 3;275(5296):9.

Review of Texas medical school finances [news] Franzini L. **Tex Med** 1997 Jan;93(1):28–9

HISTORY

Why the university-based medical school should survive: a historical perspective. Brieger GH. **Acad Med** 1997 May; 72(5):362–9

Medical universities and academic health centers: lessons of history. Evans HH, et al. **Acad Med** 1996 Nov; 71(11):1141–3

History of medicine in Dalmatia [letter] Kraljević L. **Acta Med Croatica** 1996;50(1):57–8

The beginnings and 50-year history of the Charles University Faculty of Medicine in Hradec Králové. Němeček S. **Acta Medica (Hradec Kralove)** 1996;39(1):49–54

To the history and evolution of hygiene and preventive medicine at the Faculty of Medicine of Charles University in Hradec Králové. Srb V. **Acta Medica (Hradec Kralove)** 1996;39(4):159–66

Mr. Gates's summer vacation: a centennial remembrance. Bryan CS. **Ann Intern Med** 1997 Jul 15;127(2):148–53

The origins of the College of Physicians and Surgeons of Columbia University. Quest DO. **Bull N Y Acad Med** 1997 Summer;74(1):137–47

Competition and reform at the Medical Department of the University of Pennsylvania, 1847–1877. Huddle TS. **J Hist Med Allied Sci** 1996 Jul;51(3):251–92

History of otolaryngology in Canada, the University of Toronto: Part 1. Alberti PW. **J Otolaryngol** 1996 Jun; 25(3):209–14

History of otolaryngology in Canada, the University of Toronto: Part 2. Alberti PW. **J Otolaryngol** 1996 Aug; 25(4):279–86

The history of otolaryngology in Canada: University of Manitoba. Baxter JD. **J Otolaryngol** 1996 Dec;25(6):423–6

The history of otolaryngology in Canada: Laval University. Baxter JD. **J Otolaryngol** 1997 Jun;26(3):215–9

The history of otolaryngology in Canada: University of Western Ontario. Baxter JD. **J Otolaryngol** 1997 Feb; 26(1):70–3

Dartmouth Medical School bicentennial [news] Goldsmith MF. **JAMA** 1997 Aug 13;278(6):453–8

25th Anniversary of Mayo Medical School. Nelson CW. **Mayo Clin Proc** 1997 Mar;72(3):200

Med Chi vs. the Thomsonians: a legislative vignette. Burri M. **Md Med J** 1996 Feb;45(2):127–8

The medical schools of Maryland ... and then there were two. Miller JM. **Md Med J** 1996 Feb;45(2):120–7

Mobility and selection in Scottish university medical education, 1858–1886. Bradley J, et al. **Med Hist** 1996 Jan; 40(1):1–24

The Calcutta School of Tropical Medicine: institutionalizing medical research in the periphery. Power H. **Med Hist** 1996 Apr;40(2):197–214

The Skirball Institute of Biomolecular Medicine: an infant among giants. Philipson L. **Mol Med** 1997 Jun;3(6):353–5

45th Universary of the Medical Academy of Białystok. Bańkowski E, et al. **Rocz Akad Med Bialymst** 1995; 40(2):213–7

Hilton's Rest and Pain, Guy's Hospital personalities and Guy's South African rugby connection. Dubovsky H. **S Afr Med J** 1997 Jul;87(7):898–900

Dr. T. F. Riggs and the Johns Hopkins connection: an early graduate medical experience in South Dakota. Gutch CF. **S D J Med** 1996 Mar;49(3):87–90

Manuel Straub and the Amsterdam School of Ophthalmology. Crone RA. **Surv Ophthalmol** 1996 Jul–Aug;41(1):90–5

Ella Clay Wakeman: Yale School of Medicine, 1921. Baserga SJ, et al. **Yale J Biol Med** 1996 Sep–Dec;68(5–6):171–90

"Extraordinarily interesting and happy years": Martha M. Eliot and pediatrics at Yale, 1921–1935. Hunt M. **Yale J Biol Med** 1996 Sep–Dec;68(5–6):159–70

[20th anniversary of the opening of the new Urologic Clinic facility at Charles University Medical School in Prague] Dvořáček J. **Cas Lek Cesk** 1996 Dec 4;135(23):772–4 **(Cze)**

[Founding of the 3d Physiology Institute at Charles University Medical School and the history of the building Ke Karlovu 4] **Cesk Fysiol** 1997 Jun;46(2):70–83 **(Cze)**

[The teaching of physiology at Charles University in Prague] Laufberger V. **Cesk Fysiol** 1996 Dec;45(4):222–3 **(Cze)**

[The establishment of the Eye Clinic at the Charles University Medical School Hospital in Prague] Kadlecová V. **Cesk Slov Oftalmol** 1996 Nov;52 Suppl:3–5 **(Cze)**

[Between liberty and control, the private docents and medical teaching in Geneva between 1876 and 1917] Rieder P. **Gesnerus** 1997;54(1–2):74–95 (Eng. Abstr.) **(Fre)**

[Some medical remembrances] Stephan E. **J Med Liban** 1996; 44(4 Suppl):S12–8 **(Fre)**

[Albert Fromme (1881–1996) and his circle] Klimpel V. **Chirurg** 1996 Dec;67(12):1276–9 (Eng. Abstr.) **(Ger)**

[Medical education at the School of Medicine of the Erzsébet University of Pécs in the years 1924–1944, as well as some current problems] Donhoffer S. **Orv Hetil** 1997 Apr 6; 138(14):873–5 **(Hun)**

[Medical and natrual scientists behind the museum which became the University of Bergen] Laerum OD. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3618–21 (Eng. Abstr.) **(Nor)**

[First alumni of the Medical Academy in Bialymstok—as we were, as we are] Kuźmiński J, et al. **Rocz Akad Med Bialymst** 1995;40(2):423–31 **(Pol)**

[150th anniversary of the Moscow University School of Medicine Surgical Clinic] **Khirurgiia (Mosk)** 1996;(3):4–8 **(Rus)**

[The 75th anniversary of the Department of Anatomy of the Minsk Medical Institute] Dobko PI, et al. **Morfologiia** 1996; 110(5):103–5 **(Rus)**

[The scientific hygiene schools of Russia at the end of the 19th–the start of the 20th centuries (a comparative analysis)] Korostelev NB. **Probl Sotsialnoi Gig Istor Med** 1996 Jul–Aug;(4):56–9 **(Rus)**

[The teaching of chemistry in the Medical Department of Moscow University in the 18th century] Stochik AM, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Sep–Oct;(5):37–42 **(Rus)**

[The structure and curriculum at the medical department of Moscow University in the 18th century] Stochik AM, et al. **Probl Sotsialnoi Gig Istor Med** 1995 Sep–Oct;(5):43–8 **(Rus)**

[The teaching of a course on medical theory at a medical department of Moscow University] Stochik AM, et al. **Probl Sotsialnoi Gig Istor Med** 1996 May–Jun;(3):49–54 **(Rus)**

[The date of foundation of the Medical Department of the Moscow University] Stochik AM. **Probl Sotsialnoi Gig Istor Med** 1995 Nov–Dec;(6):58–61 **(Rus)**

[Contribution of the Department of Forensic Medicine of the Military Medical (Medico-Surgical) Academy to the development of the toxicological trend in forensic medical research (on the 200th anniversary of the Military Medical Academy)] Isakov VD, et al. **Sud Med Ekspert** 1996 Jul–Sep;39(3):53–6 **(Rus)**

[A. L. Miasnikov and the Hospital Therapeutic Clinic] Chazov EI. **Ter Arkh** 1996;68(9):70–1 **(Rus)**

[Polyclinical therapy—an essential part of the study of internal diseases (on the centenary of the Department of Outpatient Care of Internal Diseases) (editorial)] Galkin VA. **Ter Arkh** 1997;69(1):5–8 **(Rus)**

[The importance of the V. N. Vinogradov Graduate Therapy Clinic of the I. M. Sechenov Moscow Medical Academy in the development of Russian internal medicine] Makolkin VI. **Ter Arkh** 1996;68(4):5–9 **(Rus)**

[The Hospital Therapeutic Clinic of the 50s and 60s through the eyes of a young physician] Men'shikov VV. **Ter Arkh** 1996;68(9):78–9 **(Rus)**

[Generational continuity. On the 150th anniversary of the formation of the Hospital Therapeutic Clinic of the I. M. Sechenov Moscow Medical Academy] Sumarokov AV, et al. **Ter Arkh** 1996;68(9):65–70 **(Rus)**

[The 60th anniversary of the Department of Pediatric Otorhinolaryngology of the Saint Petersburg Pediatric Medical Academy] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1996 Nov–Dec;(6):48–9 **(Rus)**

[The anniversary of the Department of General and Military Epidemiology of the Military Medical Academy] Korol'kov VF, et al. **Voen Med Zh** 1996 Oct;317(10):63–5 **(Rus)**

[The 40th anniversary of the Department of Military and Emergency Medicine of the Russian Medical Academy of Postgraduate Education] Moshetova LK, et al. **Voen Med Zh** 1997 Jul;318(7):70–1 **(Rus)**

[Zemstvo physicians, graduates of the Military Medical Academy who died fulfilling their service obligation] Starenchenko IuL. **Voen Med Zh** 1996 Dec;317(12):45–7 **(Rus)**

[The first department of neurosurgery in Russia] Kirichuk VF, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr–Jun;(2):35–6 **(Rus)**

[History of the development of the Academy of Military Medicine] Jovičić A. **Vojnosanit Pregl** 1996 Mar–Apr; 53(2):149–50 **(Scr)**

[The first school of medicine and the first university of the American continent in Mexico] Quijano-Pitman F. **Gac Med Mex** 1997 Mar–Apr;133(2):148 **(Spa)**

[50 years from the reopening of the Univeristy of Zulia (LUZ) and its Faculty of Medicine (editorial)] Martínez-Leal R. **Invest Clin** 1996 Sep;37(3):151–2 **(Spa)**

[The 125th anniversary of the Department of Pathological Physiology of the Kharkiv State Medical University] Klymenko MO. **Fiziol Zh** 1996;42(5–6):105–10 **(Ukr)**

LEGISLATION & JURISPRUDENCE

Alleviating the physician glut: what's the government's role? Wilensky GR. **JAMA** 1997 Jan 1;277(1):73

Access law threat to medical merger [news] Lehrman S. **Nature** 1997 May 22;387(6631):329

ORGANIZATION & ADMINISTRATION

Restructuring medical schools to better manage their three missions in the face of financial scarcity. Allcorn S, et al. **Acad Med** 1996 Aug;71(8):846–57

Profile of the graduate student population in U.S. medical schools. Ammons SW Jr, et al. **Acad Med** 1997 Sep; 72(9):820–30

Beyond corporate-style downsizing: a better way for medical schools to succeed in a changing world. Bland CJ. **Acad Med** 1997 Jun;72(6):489–95

Organizational models of medical school relationships to the clinical enterprise. Culbertson RA, et al. **Acad Med** 1996 Nov;71(11):1258–74

Preserving medical schools' academic mission in a competitive marketplace. Fogelman AM, et al. **Acad Med** 1996 Nov;71(11):1168–99

How medical schools can maintain quality while adapting to resource constraints. Houpt JL, et al. **Acad Med** 1997 Mar;72(3):180–5

The meaning and application of medical accreditation standards. Kassebaum DG, et al. **Acad Med** 1997 Sep; 72(9):808–18 (11 ref.)

Implementing a comprehensive approach to managing faculty roles, rewards, and development in an era of change. Nieman LZ, et al. **Acad Med** 1997 Jun; 72(6):496–504

School policies and primary care careers [letter; comment] Nkanginieme KE. **Acad Med** 1996 Sep;71(9):934–5. Comment on: Acad Med 1996 Mar;71(3):293–5.

"Bimodal" medical schools: excelling in research and primary care [see comments] Osborn EH, et al. **Acad Med** 1996 Sep;71(9):941–9. Comment in: Acad Med 1997 Feb;72(2):87.

How one teaching hospital system and one medical school are jointly affirming their academic mission. Rosenblatt M, et al. **Acad Med** 1997 Jun;72(6):483–8

Academic general practice comes of age? Kamien M. **Aust Fam Physician** 1997 Jan;26 Suppl 1:S47–9

Physician supply in rural Canada. Can urban medical schools produce rural physicians? [editorial] Godwin M, et al. **Can Fam Physician** 1996 Sep;42:1641–4, 1653–6 **(Eng, Fre)**

Anatomy departments and anatomy education: reflections and myths [letter; comment] Carraway KL. **Clin Anat** 1997; 10(1):60. Comment on: Clin Anat 1997;10(1):34–40.

Twelve years and a valley later [editorial] Green LA. **Fam Med** 1996 Sep;28(8):584

The birth of the RCMI Clinical Research Center is a joint venture of the University of Hawaii and Kapiolani Health. Trockman C, et al. **Hawaii Med J** 1997 Apr;56(4):93–5

Academic medicine. Med school on the make. MacPherson P. **Hosp Health Netw** 1996 Sep 20;70(18):40, 42

A model policy addressing mistreatment of medical students. Strong C, et al. **J Clin Ethics** 1996 Winter;7(4):341–6; discussion 347–8

Despite progress women in academic medicine find glass ceiling still in place. Schafer J. **J Investig Med** 1997 Jun; 45(5):211–20

A medical school in Zambia. Sims P. **J Public Health Med** 1997 Jun;19(2):137–8

The merger of Stanford's and UCSF's clinical enterprises: impact on education. Bauer EA, et al. **JAMA** 1996 Dec 4;276(21):1770–1

The reform of medical education in Iran. Azizi F. **Med Educ** 1997 May;31(3):159–62

Selecting Australian doctors of the future [editorial; comment] Rolfe IE, et al. **Med J Aust** 1997 Mar 3; 166(5):229–30. Comment on: Med J Aust 1997 Mar 3;166(5):247–50.

Creating a health systems department at a medical school. Sun S, et al. **N J Med** 1996 Oct;93(10):51–4

[Under the sign of change (speech on the occasion of the opening of classes] Rossier BC. **Rev Med Suisse Romande** 1997 May;117(5):439–42 **(Fre)**

[2 decades of the work of the Centralized Clinical Diagnostic Laboratory of the I. M. Sechenov Moscow Medical Academy: traditional and nontraditional forms in analysing its activities] Bol'shakova TD. **Klin Lab Diagn** 1997 Feb; (2):39–44 **(Rus)**

[The work experience of the Department of Outpatient Therapy of the Saratov State Medical University] Orlova GG. **Ter Arkh** 1997;69(1):80–1 **(Rus)**

[Experience with integration of research institutes if the Russian Academy of Medical Sciences with the departments if higher educational establishments of the IM Sechenov is an effective type of teaching and research intensification] Paltsev MA, et al. **Vestn Ross Akad Med Nauk** 1997;(3):54–8 (0 ref.) **(Rus)**

STANDARDS

Emergency medicine: a status report [editorial; comment] Bowles LT. **Acad Emerg Med** 1997 Jul;4(7):647–8. Comment on: Acad Emerg Med 1997 Jul;4(7):746–51.

Derivation and validation of a methodology for tracking academic stature of medical schools. Task Force on the Development of Emergency Medicine. Gallagher EJ, et al. **Acad Emerg Med** 1997 Jul;4(7):742–5

The objectives of medical education: reflections in the accreditation looking glass. Kassebaum DG, et al. **Acad Med** 1997 Jul;72(7):648–56

Medical school admission criteria. The needs of patients matter [editorial; comment] Scotti MJ Jr. **JAMA** 1997 Oct 8;278(14):1196–7. Comment on: JAMA 1997 Oct 8;278(14):1153–8.

Assessment and accreditation of Mexican medical schools. Cordova JA, et al. **Med Educ** 1996 Sep;30(5):319–21

Gays, lesbians, HIV infection, and admission to medical school. A physicians' roundtable [see comments] Fortney JT, et al. **N C Med J** 1997 Mar–Apr;58(2):126–8. Comment in: N C Med J 1997 May–Jun;58(3):166.

Basic science and better medicine [letter] Snell K. **Nat Med** 1997 May;3(5):474

Medical colleges in India [letter; comment] Ananthakrishnan N. **Natl Med J India** 1996 Sep–Oct;9(5):252. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

Motilal Nehru Medical College, Allahabad. Dwivedi M, et al. **Natl Med J India** 1997 Jan–Feb;10(1):43–4

Medical colleges in India [letter; comment] Gupta RC. **Natl Med J India** 1996 Sep–Oct;9(5):252. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

Medical colleges in India [letter; comment] Harinath BC. **Natl Med J India** 1996 Sep–Oct;9(5):251. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

Medical colleges in India [letter; comment] Narendranathan M. **Natl Med J India** 1996 Sep–Oct;9(5):252. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

Medical colleges in India [letter; comment] Pai SA, et al. **Natl Med J India** 1996 Sep–Oct;9(5):250. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

Medical colleges in India [letter; comment] Pandya SK. **Natl Med J India** 1996 Sep–Oct;9(5):251. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

Medical colleges in India [letter; comment] Singh M. **Natl Med J India** 1996 Sep–Oct;9(5):250–1. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

SCHOOLS, MEDICAL

STATISTICS & NUMERICAL DATA

Research without external funding in North American psychiatry. Silberman EK, et al. **Am J Psychiatry** 1997 Aug;154(8):1159–60

Entry of US medical school graduates into family practice residencies: 1995–1996 and 3-year summary. Kahn NB Jr, et al. **Fam Med** 1996 Sep;28(8):539–47

The Brown University School of Medicine, Class of 1997. Smith SR, et al. **Med Health R I** 1997 Aug;80(8):245–9

Medical colleges in India [letter; comment] Pai SA, et al. **Natl Med J India** 1996 Sep–Oct;9(5):250. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

TRENDS

Another strategy for rescuing teaching hospitals [letter; comment] Riggs G. **Acad Med** 1997 Jun;72(6):470. Comment on: Acad Med 1997 Feb;72(2):97–102.

Educational programs in US medical schools, 1996–1997. Barzansky B, et al. **JAMA** 1997 Sep 3;278(9):744–9

The Columbia–Cornell Alliance: a strategic response to a changing health care environment. Pardes H, et al. **JAMA** 1996 Dec 4;276(21):1769, 1771

Primary care specialty choices of University of Kansas medical students, 1982–1991. Holmes GE, et al. **Kans Med** 1995 Winter;96(4):169–75

Health care reform in the new South Africa [see comments] Benatar SR. **N Engl J Med** 1997 Mar 20;336(12):891–5. Comment in: N Engl J Med 1997 Jul 24;337(4):281–2.

Of primary concern [see comments] BeSaw L. **Tex Med** 1996 Nov;92(11):36–42. Comment in: Tex Med 1997 Feb;93(2):9.

[Surgical school—an anachronism?] Borst HG. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:723–6 (11 ref.) **(Ger)**

[Technology: training centers—a new method for learning surgery in visceral surgery] Troidl H. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:727–41 (Eng. Abstr.) **(Ger)**

SCHOOLS, NURSERY

see related

CHILD DAY CARE CENTERS

Early acute otitis media and siblings' attendance at nursery. Kvaerner KJ, et al. **Arch Dis Child** 1996 Oct;75(4):338–41

Scripted sequences of teacher interaction. A versatile, low-impact procedure for increasing appropriate behavior in a nursery school. Martens BK, et al. **Behav Modif** 1997 Jul;21(3):308–23

Family empowerment: one outcome of cooperative preschool education. Dunlap KM. **Child Welfare** 1997 Jul–Aug; 76(4):501–18

Parents opinion on pre-primary education [letter] Ganga N. **Indian Pediatr** 1997 Feb;34(2):163

Health promotion teaching in preschools. Cagle CS, et al. **MCN Am J Matern Child Nurs** 1996 Mar–Apr;21(2):96–9

Teachers' ratings of nursery class children's behaviour before and after availability of television by satellite. Charlton T, et al. **Psychol Rep** 1997 Aug;81(1):96–8

Improper use of an insecticide at a kindergarten. Fischer AB, et al. **Toxicol Lett** 1996 Nov;88(1–3):359–64

[Enuresis "as a hindrance for entering nursery school"] Battista M, et al. **Arch Pediatr** 1997;4 Suppl 1:44s–46s (Eng. Abstr.) **(Fre)**

[Quality of indoor air in nursery schools with different building characteristics] Leoni E, et al. **Ann Ig** 1997 Mar–Apr;9(2):133–42 **(Ita)**

SCHOOLS, NURSING

Outcomes of an adjunct executive appointment for faculty. Huber D, et al. **J Nurs Adm** 1996 Oct;26(10):11–3

ACNM accredited and preaccredited nurse–midwifery and midwifery education programs. Program information. Slattery LE, et al. **J Nurse Midwifery** 1996 Jul–Aug; 41(4):305–21

ACNM accredited and preaccredited nurse–midwifery and midwifery education programs. Program information. Slattery LE, et al. **J Nurse Midwifery** 1997 Jul–Aug; 42(4):325–43

Policy and guidelines for prevention and management of human immunodeficiency virus and hepatitis B virus infection in the nursing education community. American Association of Colleges of Nursing. **J Prof Nurs** 1997 Sep–Oct;13(5):325–8

ECONOMICS

Interviews with seven holders of endowed chairs in nursing. Cogliano J. **Image J Nurs Sch** 1996 Winter;28(4):339–42

HISTORY

The Johns Hopkins Training School of Nurses. A tale of vision, labor, and futility. Ramos MC. **Nurs Hist Rev** 1997; 5:23–48

LEGISLATION & JURISPRUDENCE

An issue of conflicting rights: nursing student charged with drug trafficking. Cullen P, et al. **J Prof Nurs** 1997 May–Jun; 13(3):186–92 (23 ref.)

ORGANIZATION & ADMINISTRATION

Job satisfaction and organizational characteristics: results of a nationwide survey of baccalaureate nursing faculty in the United States. Snarr CE, et al. **J Adv Nurs** 1996 Aug; 24(2):405–12

The national Healing Web partnership. An innovative model to improve health. Fosbinder D, et al. **J Nurs Adm** 1997 Apr;27(4):37–41

Nurse practice centers in academia: an emerging subsystem. Boettcher JH. **J Nurs Educ** 1996 Feb;35(2):63–8

Creating a new pedagogy for nursing [editorial] Diekelmann NL. **J Nurs Educ** 1997 Apr;36(4):147–8

Community nursing centers: models of nurse managed care. Henry JK. **J Obstet Gynecol Neonatal Nurs** 1997 Mar–Apr; 26(2):224–8

Faculty uninformed in the information age? [editorial] Archer L. **J Prof Nurs** 1997 Jan–Feb;13(1):1–2

Utilization of an academic nursing center. Cole FL, et al. **J Prof Nurs** 1996 Nov–Dec;12(6):349–53

Partnerships in higher education: a model for joint degree nursing programs. Quinless FW, et al. **J Prof Nurs** 1997 Sep–Oct;13(5):300–6

The Teaching Nursing Home Program: enduring educational outcomes. Mezey MD, et al. **Nurs Outlook** 1997 May–Jun; 45(3):133–40

As schools produce for primary care, training sites grow slim [letter] Mezibov D. **Nurse Pract** 1997 May;22(5):15, 19, 224–6

STANDARDS

Accreditation under siege [editorial] Tanner CA. **J Nurs Educ** 1996 Sep;35(6):243–4

Education. Creating meaningful accreditation practices for the next millennium. Bartels JE. **J Prof Nurs** 1997 May–Jun;13(3):140

Attracting an expert, or what nurse leaders look for in academic jobs. Froman RD. **Nurs Outlook** 1996 Sep–Oct; 44(5):239–42

Assessing master's programs in oncology nursing. Brown J, et al. **Oncol Nurs Forum** 1996 Sep;23(8):1325–35

TRENDS

A changing higher education environment. Sullivan EJ. **J Prof Nurs** 1997 May–Jun;13(3):143–8

SCHOOLS, PHARMACY

HISTORY

[Synthesis of chemical drugs at the Pharmacy School of Brno 1945–60] Nováček L. **Ceska Slov Farm** 1996 Sep; 45(5):265–7 (Eng. Abstr.) **(Cze)**

[The teaching of the pharmaceutical disciplines in the Medical Department of Moscow University in the 18th century] Stochik AM, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Nov–Dec;(6):51–4 **(Rus)**

TRENDS

[A statement on the future development of the pharmacy school] Mutschler E, et al. **Pharm Unserer Zeit** 1996 Nov; 25(6):300 **(Ger)**

SCHOOLS, PUBLIC HEALTH

Public health professionals and interpersonal violence [letter] Kohn MA, et al. **Epidemiology** 1997 Sep;8(5):605; discussion 605–6

Public health professionals and interpersonal violence [letter] LaRosa JH, et al. **Epidemiology** 1997 Sep;8(5):604–5; discussion 605–6

[The Masters of Public Health in Cuba. An experience in advanced health education] Rojo Pérez N, et al. **Educ Med Salud** 1995 Jul–Dec;29(3–4):321–30 (11 ref.) **(Spa)**

HISTORY

[The inaugural speech for the School of Public Health. 1922 (classical article)] Pruneda A. **Salud Publica Mex** 1997 Mar–Apr;39(2):151–5 **(Spa)**

ORGANIZATION & ADMINISTRATION

Public health practitioner incubation plight: following the money trail. Gordon LJ, et al. **J Public Health Policy** 1996; 17(1):59–70

The Dutch experience with regard to the training for public health. Doeleman F. **Public Health** 1997 May;111(3):125–7 (0 ref.)

Training professionals for the new public health [editorial] Davies AM. **Public Health Rev** 1996;24(3–4):205–11

SCHOOLS, VETERINARY

A longitudinal study of veterinary students and recent graduates. 2. Views of the veterinary profession. Heath TJ, et al. **Aust Vet J** 1996 Oct;74(4):297–300

A longitudinal study of veterinary students and recent graduates. 4. Gender issues. Heath TJ, et al. **Aust Vet J** 1996 Oct;74(4):305–8

Subject-based problem-based learning in the veterinary science course at the University of Queensland. Rand JS, et al. **Aust Vet J** 1997 Feb;75(2):120–5

Mississippi State clarifies its curriculum [letter] Bushby PA. **J Am Vet Med Assoc** 1997 Jun 1;210(11):1584

Tufts leads international veterinary medicine [letter] Robinson RA. **J Am Vet Med Assoc** 1996 Dec 15; 209(12):1993

Thoughts on curriculum reform [letter] Schiffer SP. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1727–8

University of Bristol School of Veterinary Science. Webster J. **Vet Rec** 1997 Aug 30;141(9):209–11

[The Animal Welfare Center of the Veterinary School of Hanover] Hackbarth H. **DTW Dtsch Tierarztl Wochenschr** 1997 Feb;104(2):75–6 (Eng. Abstr.) **(Ger)**

HISTORY

[Prof. Dr. Richard Völker and the School for Veterinary Medicine Technical Assistants in Hannover] Hohmann M, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 May; 103(5):178–80 (Eng. Abstr.) **(Ger)**

[The history of veterinary medicine at the Georgia Augusta University of Göttingen] Tolle A. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):371–4 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

Veterinary colleges and academic freedom. Hannah HW. **J Am Vet Med Assoc** 1997 Feb 1;210(3):340–1

ORGANIZATION & ADMINISTRATION

University of Liverpool Faculty of Veterinary Science. Gaskell C. **Vet Rec** 1997 Aug 30;141(9):218–20

Department of Clinical Veterinary Medicine, University of Cambridge. Jeffcott L. **Vet Rec** 1997 Aug 30;141(9):211–3

The Royal (Dick) School of Veterinary Studies, University of Edinburgh. Sewell M. **Vet Rec** 1997 Aug 30;141(9):214–6

Royal Veterinary College, University of London. Smith A. **Vet Rec** 1997 Aug 30;141(9):220–1

University of Glasgow Veterinary School. Wright N. **Vet Rec** 1997 Aug 30;141(9):216–8

STANDARDS

Evaluation of a practice-based ambulatory program in food animal medicine, surgery, and herd health management. Dartt BA, et al. **J Am Vet Med Assoc** 1997 Jun 1; 210(11):1590–4

STATISTICS & NUMERICAL DATA

Survey of veterinary college curriculum requirements relevant to aquatic medicine. The AVMA Aquaculture and Seafood Advisory Committee. **J Am Vet Med Assoc** 1997 Mar 15;210(6):764–5

Employment of male and female graduates of US veterinary medical colleges, 1996. Gehrke BC. **J Am Vet Med Assoc** 1997 Feb 15;210(4):490–1

TRENDS

In support of changes in veterinary curricula [letter] Nusbaum KE, et al. **J Am Vet Med Assoc** 1997 Jul 1; 211(1):27–8

SCHWALBE'S NUCLEUS see **VESTIBULAR NUCLEI**

SCHWANN CELLS

A new sodium channel alpha-subunit gene (Scn9a) from Schwann cells maps to the Scn1a, Scn2a, Scn3a cluster of mouse chromosome 2. Beckers MC, et al. **Genomics** 1996 Aug 15;36(1):202–5

The gene encoding the Schwann cell protein periaxin localizes on mouse chromosome 7 (Prx). Gillespie CS, et al. **Genomics** 1997 Apr 15;41(2):297–8

Improved method for harvesting human Schwann cells from mature peripheral nerve and expansion in vitro. Casella GT, et al. **Glia** 1996 Aug;17(4):327–38

CHEMISTRY

Association of the tetraspan protein CD9 with integrins on the surface of S-16 Schwann cells. Hadjiargyrou M, et al. **J Neurochem** 1996 Dec;67(6):2505–13

The distribution and abundance of MHC and ICAM-1 on Schwann cells in vitro. Lilje O, et al. **J Neuroimmunol** 1997 Jul;77(1):75–84

CYTOLOGY

Glial–Schwann cell specialisations at the central–peripheral nervous system transition of a cyclostome: an ultrastructural study. Fraher J, et al. **Acta Anat (Basel)** 1995; 154(4):300–14

Neural tissue engineering: from polymer to biohybrid organs. Woerly S, et al. **Biomaterials** 1996 Feb;17(3):301–10

Dynamic roles at the neuromuscular junction. Schwann cells. Balice-Gordon RJ. **Curr Biol** 1996 Sep 1;6(9):1054–6 (11 ref.)

Schwann cell differentiation. Zorick TS, et al. **Curr Opin Cell Biol** 1996 Dec;8(6):870–6 (53 ref.)

Division of labor of Schwann cell integrins during migration on peripheral nerve extracellular matrix ligands. Milner R,

et al. **Dev Biol** 1997 May 15;185(2):215–28
Proliferating and differentiating Schwann cell cultures from embryonic chick sciatic nerve maintained for months in vitro without antimitotics or growth factors. Weiss B, et al. **Eur J Cell Biol** 1996 Jun;70(2):106–16
Observations on proliferating sheath cells in the regenerating nerves of lizard. Alibardi L. **Histol Histopathol** 1996 Oct; 11(4):937–42
Insulin-like growth factor-I (IGF-I) and IGF binding protein-5 in Schwann cell differentiation. Cheng HL, et al. **J Cell Physiol** 1997 May;171(2):161–7
Apoptosis regulates the number of Schwann cells at the premyelinating stage. Nakao J, et al. **J Neurochem** 1997 May;68(5):1853–62
Actin plays a role in both changes in cell shape and gene-expression associated with Schwann cell myelination. Fernandez-Valle C, et al. **J Neurosci** 1997 Jan 1; 17(1):241–50
Dual staining assessment of Schwann cell viability within whole peripheral nerves using calcein-AM and ethidium homodimer. Decherchi P, et al. **J Neurosci Methods** 1997 Feb;71(2):205–13
cAMP-dependent protein kinase A is required for Schwann cell growth: interactions between the cAMP and neuregulin/tyrosine kinase pathways. Kim HA, et al. **J Neurosci Res** 1997 Jul 15;49(2):236–47
Embryonic development of Schwann cells: multiple roles for neuregulins along the pathway. Topilko P, et al. **Mol Cell Neurosci** 1996;8(2–3):71–5 (46 ref.)
The expression of serotonin receptors by cultured rat Schwann cells is a function of their differentiation: correlation with a quiescent myelinating phenotype. Yoder EJ, et al. **Mol Cell Neurosci** 1997;8(5):303–10
The transcription factors SCIP and Krox-20 mark distinct stages and cell fates in Schwann cell differentiation. Zorick TS, et al. **Mol Cell Neurosci** 1996;8(2–3):129–45
Nerve expansion in nerve regeneration: effect of time on induction of ornithine decarboxylase and Schwann cell proliferation. Ohkaya S, et al. **Muscle Nerve** 1997 Oct; 20(10):1314–7
Cultured rat neuronal and glial cells entrapped within hydrogel polymer matrices: a potential tool for neural tissue replacement. Woerly S, et al. **Neurosci Lett** 1996 Mar 1; 205(3):197–201
Making of a Schwann. Kioussi C, et al. **Trends Genet** 1996 Mar;12(3):84–6 (22 ref.)

DRUG EFFECTS

Schwann cell changes induced as early as one week after galactose intoxication. Mizisin AP, et al. **Acta Neuropathol (Berl)** 1997 Jun;93(6):611–8
Early growth of regenerating neurites in acrylamide neuropathic mice: application of a film model. Torigoe K, et al. **Brain Res** 1997 Jan 23;746(1–2):269–74
Response of Schwann cells to mitogens in vitro is determined by pre-exposure to serum, time in vitro, and developmental age. Dong Z, et al. **Glia** 1997 Jul;20(3):219–30
Effects of dibutyryl cAMP and bromodeoxyuridine on expression of N-acetylglucosaminyltransferases III and V in GOTO neuroblastoma cells. Ihara Y, et al. **Glycoconj J** 1995 Dec;12(6):787–94
Lead cytotoxicity in primary cultured rat astrocytes and Schwann cells. Tang HW, et al. **J Appl Toxicol** 1996 May-Jun;16(3):187–96
Increased vulnerability to demyelination in streptozotocin diabetic rats. Jaffey PB, et al. **J Comp Neurol** 1996 Sep 9;373(1):55–61
Glial growth factor rescues Schwann cells of mechanoreceptors from denervation-induced apoptosis. Kopp DM, et al. **J Neurosci** 1997 Sep 1;17(17):6697–706
Immunolocalization of cytoplasmic and myelin mcalpain in transfected Schwann cells: I. Effect of treatment with growth factors. Neuberger T, et al. **J Neurosci Res** 1997 Mar 1;47(5):521–30
Basic fibroblast growth factor prevents cAMP-induced apoptosis in cultured Schwann cells. Shaw R, et al. **J Neurosci Res** 1997 Feb 15;47(4):400–4
Effect of high doses of 2-CdA on Schwann cells of mouse peripheral nerve. Djaldetti R, et al. **J Submicrosc Cytol Pathol** 1996 Jul;28(3):319–23
TNF alpha inhibits Schwann cell proliferation, connexin46 expression, and gap junctional communication. Chandross KJ, et al. **Mol Cell Neurosci** 1996 Jun;7(6):479–500
Schwann cells as targets for neurotoxicants. Morell P, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):685–95 (42 ref.)
Cell death prevention, mitogen-activated protein kinase stimulation, and increased sulfatide concentrations in Schwann cells and oligodendrocytes by prosaposin and prosaptides. Hiraiwa M, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4778–81
Cell death in the Schwann cell lineage and its regulation by neuregulin. Syroid DE, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9229–34

ENZYMOLOGY

Impairment of protein kinase C activity in twitcher Schwann cells in vitro. Yamada H, et al. **Brain Res** 1996 Apr 29; 718(1–2):138–44
Axonal contact regulates expression of alpha2 and beta2 isoforms of Na+, K+-ATPase in Schwann cells: adhesion molecules and nerve regeneration. Kawai H, et al. **J Neurochem** 1997 Jul;69(1):330–9
N-acetylated alpha-linked acidic dipeptidase may be involved in axon-Schwann cell signalling. Berger UV, et al. **J Neurocytol** 1996 Sep;25(9):499–512

IMMUNOLOGY

Identification and characterization of differentiation-dependent Schwann cell surface antigens by novel monoclonal antibodies: introduction of a marker common to the non-myelin-forming phenotype. Wewetzer K, et al. **Glia** 1997 Mar;19(3):213–26
CD59 homologue regulates complement-dependent cytolysis of rat Schwann cells. Sawant-Mane S, et al. **J Neuroimmunol** 1996 Sep;69(1–2):63–71
Expression of the 4C5 antigen during development and after injury of the rat sciatic nerve. Thomaidou D, et al. **J Neurosci Res** 1996 Oct 1;46(1):24–33
Nerve regeneration and origin of Schwann cells in peripheral nerve allografts in immunologically pretreated rats. Katsube K, et al. **Transplantation** 1996 Dec 15; 62(11):1643–9

METABOLISM

Polyol pathway and osmoregulation in JS1 Schwann cells grown in hyperglycemic and hyperosmotic conditions. Mizisin AP, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F90–7
Age-related differences in mouse Schwann cell response to cyclic AMP. Yamada H, et al. **Brain Res** 1996 May 6; 719(1–2):187–93
Serotonin receptors expressed by myelinating Schwann cells in rat sciatic nerve. Yoder EJ, et al. **Brain Res** 1997 Apr 11;753(2):299–308
Comparison of RPTP zeta/beta, phosphacan, and trkB mRNA expression in the developing and adult rat nervous system and induction of RPTP zeta/beta and phosphacan mRNA following brain injury. Snyder SE, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):79–96
Immortalization and transformation are associated with specific alterations in choline metabolism. Bhakoo KK, et al. **Cancer Res** 1996 Oct 15;56(20):4630–5
Neurotrophic effects of Schwann cells in culture on spinal anterior horn neurons. Wu B, et al. **Chin Med J (Engl)** 1996 Jul;109(7):547–50
Connexin32 gene expression in rat sciatic nerves and cultured Schwann cells. Satake M, et al. **Dev Neurosci** 1997; 19(2):189–95
The regulation of Krox-20 expression reveals important steps in the control of peripheral glial cell development. Murphy P, et al. **Development** 1996 Sep;122(9):2847–57
A second alternative transcript of the gap junction gene connexin32 is expressed in murine Schwann cells and modulated in injured sciatic nerve. Söhl G, et al. **Eur J Cell Biol** 1996 Mar;69(3):267–75
Activation of acidic sphingomyelinase and protein kinase C zeta is required for IL-1 induction of LIF mRNA in a Schwann cell line. Carlson CD, et al. **Glia** 1996 Sep; 18(1):49–58
Dibutyryl cyclic AMP and inflammatory cytokines mediate C3 expression in Schwann cells. Dashiell SM, et al. **Glia** 1997 Aug;20(4):308–21
Schwann cell-like myelination following transplantation of an olfactory bulb-ensheathing cell line into areas of demyelination in the adult CNS. Franklin RJ, et al. **Glia** 1996 Jul;17(3):217–24
Onion bulb cells in mice deficient for myelin genes share molecular properties with immature, differentiated non-myelinating, and denervated Schwann cells. Guénard V, et al. **Glia** 1996 Sep;18(1):27–38
Beta 4 integrin and other Schwann cell markers in axonal neuropathy. Quattrini A, et al. **Glia** 1996 Aug;17(4):294–306
TGF-betas upregulate NCAM and L1 expression in cultured Schwann cells, suppress cyclic AMP-induced expression of O4 and galactocerebroside, and are widely expressed in cells of the Schwann cell lineage in vivo. Stewart HJ, et al. **Glia** 1995 Dec;15(4):419–36
5-Hydroxytryptamine2A receptors on cultured rat Schwann cells. Yoder EJ, et al. **Glia** 1996 May;17(1):15–27
The expression of the low affinity nerve growth factor receptor in long-term denervated Schwann cells. You S, et al. **Glia** 1997 Jun;20(2):87–100
M. leprae and macrophage secretory products modulate the expression of NgCAM on Schwann cell surface [letter] Singh N, et al. **Int J Lepr Other Mycobact Dis** 1996 Dec; 64(4):449–51
Dystroglycan is a dual receptor for agrin and laminin-2 in Schwann cell membrane. Yamada H, et al. **J Biol Chem** 1996 Sep 20;271(38):23418–23
The neural cell recognition molecule F11 is expressed on Müller cells and Schwann cells in vitro. Willbold E, et al. **J Hirnforsch** 1997;38(1):71–80
Receptor-mediated phosphoinositide metabolism in peripheral nerve and cultured Schwann cells. Eichberg J, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):187–95 (26 ref.)
Tumor necrosis factor alpha and interleukin-6 mRNA expression in neonatal Lewis rat Schwann cells and a neonatal rat Schwann cell line following interferon gamma stimulation. Murwani R, et al. **J Neuroimmunol** 1996 Dec; 71(1–2):65–71
Oct-6 (SCIP/Tst-1) is expressed in Schwann cell precursors, embryonic Schwann cells, and postnatal myelinating Schwann cells: comparison with Oct-1, Krox-20, and Pax-3. Blanchard AD, et al. **J Neurosci Res** 1996 Dec 1; 46(5):630–40
Lipid composition and phospholipid asymmetry of membranes from a Schwann cell line. Calderón RO, et al. **J Neurosci Res** 1997 Aug 1;49(3):372–80
Immunolocalization of cytoplasmic and myelin mcalpain in transfected Schwann cells: II. Effect of withdrawal of growth factors. Chakrabarti AK, et al. **J Neurosci Res** 1997 Mar 15;47(6):609–16
Extracellular matrix upregulates synthesis of glucosylceramide-based glycosphingolipids in primary Schwann cells. Farrer RG, et al. **J Neurosci Res** 1996 Aug 1;45(3):248–57
Schwann cells stimulated by axolemma-enriched fractions express cyclic AMP responsive element binding protein. Lee MM, et al. **J Neurosci Res** 1996 Oct 15;46(2):204–10
Cultured neonatal Schwann cells contain and secrete neuregulins. Raabe TD, et al. **J Neurosci Res** 1996 Oct 15;46(2):263–70
Expression of the neurofibromatosis 2 tumor suppressor gene product, merlin, in Schwann cells. Scherer SS, et al. **J Neurosci Res** 1996 Dec 1;46(5):595–605
Axon-Schwann cell interactions regulate the expression of c-jun in Schwann cells. Shy ME, et al. **J Neurosci Res** 1996 Mar 1;43(5):511–25
Identification of transcriptionally regulated mRNAs from mouse Schwann cell precursors using modified RNA fingerprinting methods. Zoidl G, et al. **J Neurosci Res** 1997 Jul 1;49(1):32–42
Expression of mycobacterial antigens on murine dissociated Schwann cells infected with Mycobacterium leprae. Birdi TJ, et al. **Microb Pathog** 1997 Mar;22(3):181–5
The expression of serotonin receptors by cultured rat Schwann cells is a function of their differentiation: correlation with a quiescent myelinating phenotype. Yoder EJ, et al. **Mol Cell Neurosci** 1997;8(5):303–10
Immortalized schwann cells express endothelin receptors coupled to adenylyl cyclase and phospholipase C. Wilkins PL, et al. **Neurochem Res** 1997 Apr;22(4):409–18
Cultured Schwann cells constitutively express the myelin protein P0. Cheng L, et al. **Neuron** 1996 Feb;16(2):309–19
Nerve growth factor production and expression of p75 by Schwann cells and neurofibroblasts in response to M. leprae infection and macrophage secretory products. Singh N, et al. **Neuropathol Appl Neurobiol** 1997 Feb;23(1):59–67
Expression of schwannomin in lens and Schwann cells. Claudio JO, et al. **Neuroreport** 1997 May 27;8(8):2025–30
Intracellular calcium transients mediated by P2 receptors in the paranodal Schwann cell region of myelinated rat spinal root axons. Mayer C, et al. **Neurosci Lett** 1997 Mar 7; 224(1):49–52
Extracellular ATP increases intracellular calcium in cultured adult Schwann cells. Ansselin AD, et al. **Neuroscience** 1997 Feb;76(3):947–55
ATP acting on P2Y receptors triggers calcium mobilization in Schwann cells at the neuroelectrocyte junction in skate. Green AC, et al. **Neuroscience** 1997 Sep;80(2):635–51
An in-frame deletion in peripheral myelin protein-22 gene causes hypomyelination and cell death of the Schwann cells in the new Trembler mutant mice. Suh JG, et al. **Neuroscience** 1997 Aug;79(3):735–44
Schwann cells produce tumor necrosis factor alpha: expression in injured and non-injured nerves. Wagner R, et al. **Neuroscience** 1996 Aug;73(3):625–9
Changes of Schwann cell antigenic profile after peripheral nerve injury. Popović M, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R287–8

MICROBIOLOGY

Neural targeting of Mycobacterium leprae mediated by the G domain of the laminin-alpha2 chain. Rambukkana A, et al. **Cell** 1997 Mar 21;88(6):811–21

PATHOLOGY

Schwann cell nuclear remodelling and formation of nuclear and coiled bodies in Guillain-Barré syndrome. Berciano MT, et al. **Acta Neuropathol (Berl)** 1996 Oct;92(4):386–94
Schwann cell changes induced as early as one week after galactose intoxication. Mizisin AP, et al. **Acta Neuropathol (Berl)** 1997 Jun;93(6):611–8
Accumulation of peripheral myelin protein 22 in onion bulbs and Schwann cells of biopsied nerves from patients with Charcot-Marie-Tooth disease type 1A. Nishimura T, et al. **Acta Neuropathol (Berl)** 1996 Nov;92(5):454–60
Reversible Schwann cell hyperplasia and sprouting of sensory and sympathetic neurites after intraventricular administration of nerve growth factor. Winkler J, et al. **Ann Neurol** 1997 Jan;41(1):82–93
Impaired differentiation of Schwann cells in transgenic mice with increased PMP22 gene dosage. Magyar JP, et al. **J Neurosci** 1996 Sep 1;16(17):5351–60
Nf1-deficient mouse Schwann cells are angiogenic and invasive and can be induced to hyperproliferate: reversion of some phenotypes by an inhibitor of farnesyl protein transferase. Kim HA, et al. **Mol Cell Biol** 1997 Feb; 17(2):862–72

PHYSIOLOGY

Biology of the repair of central nervous system demyelinated lesions: an appraisal. Peireira LA, et al.

Arq Neuropsiquiatr 1996 Jun;54(2):331-4
The influence of cultured Schwann cells on regeneration through acellular basal lamina grafts. Gulati AK, et al. **Brain Res** 1995 Dec 24;705(1-2):118-24
Schwann cells can misdirect regrowing neuronal processes. Sims TJ, et al. **Brain Res** 1997 Jul 18;763(1):141-4
Serotonin receptors expressed by myelinating Schwann cells in rat sciatic nerve. Yoder EJ, et al. **Brain Res** 1997 Apr 11;753(2):299-308
Schwann cell development, differentiation and myelination. Mirsky R, et al. **Curr Opin Neurobiol** 1996 Feb;6(1):89-96 (70 ref.)
Schwann cells modify expression of acetylcholinesterase and butyrylcholinesterase at rat neuromuscular junctions. Chapron J, et al. **Eur J Neurosci** 1997 Feb;9(2):260-70
GP55 inhibits both cell adhesion and growth of neurons, but not non-neuronal cells, via a G-protein-coupled receptor. Clarke GA, et al. **Eur J Neurosci** 1997 Feb;9(2):334-41
Transplant of Schwann cells allows normal development of the visual cortex of dark-reared rats. Fagiolini M, et al. **Eur J Neurosci** 1997 Jan;9(1):102-12
Regulation of rat Schwann cell Po expression and DNA synthesis by insulin-like growth factors in vitro. Stewart HJ, et al. **Eur J Neurosci** 1996 Mar;8(3):553-64
Response of Schwann cells to mitogens in vitro is determined by pre-exposure to serum, time in vitro, and developmental age. Dong Z, et al. **Glia** 1997 Jul;20(3):219-30
Removal of retrogradely transported material from rat lumbosacral alpha-motor axons by paranodal axon-Schwann cell networks. Gatzinsky KP, et al. **Glia** 1997 Jun;20(2):115-26
Effects of delayed re-innervation on the expression of c-erbB receptors by chronically denervated rat Schwann cells in vivo. Li H, et al. **Glia** 1997 Aug;20(4):333-47
A combination of insulin-like growth factor-I and platelet-derived growth factor enhances myelination but diminishes axonal regeneration into Schwann cell grafts in the adult rat spinal cord. Oudega M, et al. **Glia** 1997 Mar;19(3):247-58
Schwann cell heparan sulfate proteoglycans play a critical role in glial growth factor/neuregulin signaling. Sudhalter J, et al. **Glia** 1996 May;17(1):28-38
The role of Schwann cells during retinal ganglion cell regeneration induced by peripheral nerve transplantation. Dezawa M, et al. **Invest Ophthalmol Vis Sci** 1997 Jun; 38(7):1401-10
Schwann cell invasion of the central nervous system of the myelin mutants. Duncan ID, et al. **J Anat** 1997 Jan;190 (Pt 1):35-49 (58 ref.)
Abnormal Schwann cell/axon interactions in the Trembler-J mouse. Robertson AM, et al. **J Anat** 1997 Apr;190 (Pt 3):423-32
Axonal neuregulin signals cells of the oligodendrocyte lineage through activation of HER4 and Schwann cells through HER2 and HER3. Vartanian T, et al. **J Cell Biol** 1997 Apr 7;137(1):211-20
Hair cycle-dependent plasticity of skin and hair follicle innervation in normal murine skin. Botchkarev VA, et al. **J Comp Neurol** 1997 Sep 29;386(3):379-95
Rubidium uptake and accumulation in peripheral myelinated internodal axons and Schwann cells. Lehning EJ, et al. **J Neurochem** 1997 Sep;69(3):968-77
A Schwann cell matrix component of neuromuscular junctions and peripheral nerves. Astrow SH, et al. **J Neurocytol** 1997 Feb;26(2):63-75
Clusters of axonal Na+ channels adjacent to remyelinating Schwann cells. Novakovic SD, et al. **J Neurocytol** 1996 Jun;25(6):403-12
Bridging Schwann cell transplants promote axonal regeneration from both the rostral and caudal stumps of transected adult rat spinal cord. Xu XM, et al. **J Neurocytol** 1997 Jan;26(1):1-16
Induced upregulation of IL-1, IL-1RA and IL-1R type I gene expression by Schwann cells. Skundric DS, et al. **J Neuroimmunol** 1997 Apr;74(1-2):9-18
Expression of neuregulins and their putative receptors, ErbB2 and ErbB3, is induced during Wallerian degeneration. Carroll SL, et al. **J Neurosci** 1997 Mar 1;17(5):1642-59
Clustering of voltage-sensitive sodium channels on axons is independent of direct Schwann cell contact in the dystrophic mouse. Deerinck TJ, et al. **J Neurosci** 1997 Jul 1;17(13):5080-8
Actin plays a role in both changes in cell shape and gene-expression associated with Schwann cell myelination. Fernandez-Valle C, et al. **J Neurosci** 1997 Jan 1; 17(1):241-50
A distinct pattern of trophic factor expression in myelin-deficient nerves of Trembler mice: implications for trophic support by Schwann cells. Friedman HC, et al. **J Neurosci** 1996 Sep 1;16(17):5344-50
Axonal interactions regulate Schwann cell apoptosis in developing peripheral nerve: neuregulin receptors and the role of neuregulins. Grinspan JB, et al. **J Neurosci** 1996 Oct 1;16(19):6107-18
Nerve terminal withdrawal from rat neuromuscular junctions induced by neuregulin and Schwann cells. Trachtenberg JT, et al. **J Neurosci** 1997 Aug 15;17(16):6243-55
Establishment of Schwann cell lines from normal adult and embryonic rat dorsal root ganglia. Li RH, et al. **J Neurosci Methods** 1996 Jul;67(1):57-69
Measurement of the rate of myelination using a fluorescent analogue of ceramide. Bilderback TR, et al. **J Neurosci Res** 1997 Aug 15;49(4):497-507
Single K channel currents in Schwann cells from normal and neurofibromatosis-affected damselfish. Fieber LA. **J Neurosci Res** 1997 May 15;48(4):342-51
Axon-Schwann cell interactions regulate the expression of c-jun in Schwann cells. Shy ME, et al. **J Neurosci Res** 1996 Mar 1;43(5):511-25
Selective downregulation of an inactivating K+ conductance by analogues of cAMP in mouse Schwann cells. Despeyroux S, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):655-60
Effect of Schwann cells in the enhancement of peripheral-nerve regeneration. Bryan DJ, et al. **J Reconstr Microsurg** 1996 Oct;12(7):439-6
Astrocytoma and Schwann cells in coculture. Lal PG, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):93-104
Growth-associated protein (GAP-43) in terminal Schwann cells of rat Pacinian corpuscles. Dubovy P, et al. **Neuroreport** 1996 Sep 2;7(13):2147-50
Remyelination in the CNS of the hypothyroid rat. Franklin RJ, et al. **Neuroreport** 1996 Jun 17;7(9):1526-30
Blood-brain barrier permeability in astrocyte-free regions of the central nervous system remyelinated by Schwann cells. Felts PA, et al. **Neuroscience** 1996 Nov;75(2):643-55
Molecular biology of axon-glia interactions in the peripheral nervous system. Taylor V, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:225-56 (221 ref.)
Development and differentiation of Schwann cells. Mirsky R, et al. **Rev Neurol (Paris)** 1996 May;152(5):308-13
Schwann cells induce and guide sprouting and reinnervation of neuromuscular junctions. Son YJ, et al. **Trends Neurosci** 1996 Jul;19(7):280-5 (40 ref.)

TRANSPLANTATION

The role of cultured Schwann cell grafts in the repair of gaps within the peripheral nervous system of primates. Levi AD, et al. **Exp Neurol** 1997 Jan;143(1):25-36
Integration of transplanted cultured Schwann cells into the long myelinated fiber tracts of the adult spinal cord. Li Y, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):397-411
Cell-cell interactions during the migration of myelin-forming cells transplanted in the demyelinated spinal cord. Baron-Van Evercooren A, et al. **Glia** 1996 Feb; 16(2):147-64
Bridging Schwann cell transplants promote axonal regeneration from both the rostral and caudal stumps of transected adult rat spinal cord. Xu XM, et al. **J Neurocytol** 1997 Jan;26(1):1-16
Effects of Schwann cell transplantation in a contusion model of rat spinal cord injury. Martin D, et al. **J Neurosci Res** 1996 Sep 1;45(5):588-97
The use of cultured Schwann cells in nerve repair in a rabbit hind-limb model. Brown RE, et al. **J Reconstr Microsurg** 1996 Apr;12(3):149-52
Schwann cell transplantation and myelin repair of the CNS. Baron-Van Evercooren A, et al. **Mult Scler** 1997 Apr; 3(2):157-61 (50 ref.)

ULTRASTRUCTURE

Schwann cell-neuron relationships in spinal cord gray matter. Gilmore SA, et al. **Glia** 1996 Dec;18(4):261-8
Characterization of the technique involved in isolating Schwann cells from adult human peripheral nerve. Levi AD. **J Neurosci Methods** 1996 Sep;68(1):21-6
P0 is constitutively expressed in the rat neural crest and embryonic nerves and is negatively and positively regulated by axons to generate non-myelin-forming and myelin-forming Schwann cells, respectively. Lee M, et al. **Mol Cell Neurosci** 1997;8(5):336-50
Tight junctions between the axon and Schwann cell during PNS regeneration. Dezawa M, et al. **Neuroreport** 1996 Jul 29;7(11):1829-32
Change in the molecular phenotype of Schwann cells upon transplantation into the central nervous system: down-regulation of c-jun. Vaudano E, et al. **Neuroscience** 1996 Sep;74(2):553-65
Ribosome-lamella complexes in the perineurial cells of neurofibromatosis. Hassan MO, et al. **Ultrastruct Pathol** 1996 Mar-Apr;20(2):173-78
Ultrastructural heterogeneity of acquired intradermal melanocytic nevus cells. Yang P, et al. **Ultrastruct Pathol** 1996 May-Jun;20(3):255-61

SCHWANNOMA see **NEURILEMMOMA**

SCHWANNOMA, ACOUSTIC see **NEUROMA, ACOUSTIC**

SCHWANNOMA, ACOUSTIC, BILATERAL see **NEUROFIBROMATOSIS 2**

SCHWARTZ-BARTTER SYNDROME see **INAPPROPRIATE ADH SYNDROME**

SCHWARTZ-JAMPEL SYNDROME see **OSTEOCHONDRODYSPLASIAS**

SCIATIC NERVE

see related
SCIATICA

The piriformis syndrome [see comments] Parziale JR, et al. **Am J Orthop** 1996 Dec;25(12):819-23 (33 ref.). Comment in: Am J Orthop 1997 May;26(5):316, 318.
Prevention of phantom limb pain by infusion of local anaesthetic into the sciatic nerve [see comments] Pavy TJ, et al. **Anaesth Intensive Care** 1996 Oct;24(5):599-600. Comment in: Anaesth Intensive Care 1997 Apr;25(2):200.
Continuous popliteal sciatic nerve block: an original technique to provide postoperative analgesia after foot surgery. Singelyn FJ, et al. **Anesth Analg** 1997 Feb; 84(2):383-6
A common epineural sheath for the nerves in the popliteal fossa and its possible implications for sciatic nerve block. Vloka JD, et al. **Anesth Analg** 1997 Feb;84(2):387-90
Sciatic neuropathies--a retrospective review of electrodiagnostic features in 29 patients. Goh KJ, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):566-9
Regional anesthesia in knee arthroscopy: a new technique involving femoral and sciatic nerve blocks in knee arthroscopy. Cappellino A, et al. **Arthroscopy** 1996 Feb; 12(1):120-3
Supine approach to the sciatic nerve in the popliteal fossa. Vloka JD, et al. **Can J Anaesth** 1996 Sep;43(9):964-7
Slow and unrecognized progression of schwannoma of the sciatic nerve. Riccardi C, et al. **Chir Organi Mov** 1996 Jan-Mar;81(1):79-83 **(Eng, Ita)**
Neuropathy secondary to pigmented villonodular synovitis of the hip. Aboulafia AJ, et al. **Clin Orthop** 1996 Apr; (325):174-80 (19 ref.)
Compression of the peripheral branches of the sciatic nerve by lipoma. Resende LA, et al. **Electromyogr Clin Neurophysiol** 1997 Jun-Jul;37(4):251-5
Popliteal sciatic nerve block for postoperative analgesia. Rongstad K, et al. **Foot Ankle Int** 1996 Jul;17(7):378-82
Cavus deformity of the foot secondary to a neuromuscular choristoma (hamartoma) of the sciatic nerve. A case report. Bassett GS, et al. **J Bone Joint Surg Am** 1997 Sep; 79(9):1398-401
Increased delayed type hypersensitivity in rats subjected to unilateral mononeuropathy is mediated by neurokinin-1 receptors. Herzberg U, et al. **J Neuroimmunol** 1996 Apr; 65(2):119-24
Gluteal compartment syndrome due to rhabdomyolysis after heroin abuse. Klockgether T, et al. **Neurology** 1997 Jan; 48(1):275-6
Abnormal spontaneous activity and responses to norepinephrine in dissociated dorsal root ganglion cells after chronic nerve constriction. Petersen M, et al. **Pain** 1996 Oct;67(2-3):391-7
An observational study of combined continuous lumbar plexus and single-shot sciatic nerve blocks for post-knee surgery analgesia. Mansour NY, et al. **Reg Anesth** 1996 Jul-Aug;21(4):287-91
The parasacral sciatic nerve block. Morris GF, et al. **Reg Anesth** 1997 May-Jun;22(3):223-8
Cyclic sciatica. A manifestation of compression of the sciatic nerve by endometriosis. A case report. Dhôte R, et al. **Spine** 1996 Oct 1;21(19):2277-9
Possibility of blocking n. ischiadicus within foramen ischiadicum majus in sheep. Matičić D, et al. **Vet Med (Praha)** 1996 Sep;41(9):273-8
[Venous surgery of the lower limb: value of nerve blocks] Serri S. **Cah Anesthesiol** 1996;44(5):441-5 (Eng. Abstr.) **(Fre)**
[Pyramidal syndrome. Apropos of 4 cases treated by surgery and review of the literature] Kouvalchouk JF, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(7):647-57 (Eng. Abstr.) **(Fre)**
[Foot drop. A differential diagnosis problem] Dubuisson A, et al. **Rev Med Liege** 1997 May;52(5):355-62 **(Fre)**
[Combined 3-in-1 sciatic block. Prilocaine 500 mg vs. 650 mg] Wagner F, et al. **Anaesthesist** 1997 Mar;46(3):195-200 (Eng. Abstr.) **(Ger)**
[Popliteal fossa block. Possible solutions to the postural inconvenience (letter)] Carrión-Pareja JC, et al. **Rev Esp Anestesiol Reanim** 1996 Oct;43(8):297 **(Spa)**

ABNORMALITIES

A case of popliteal pterygium treated along with nerve expansion. Maral T, et al. **Plast Reconstr Surg** 1997 Jul; 100(1):91-5 (15 ref.)

ANATOMY & HISTOLOGY

Surgical approach to the rabbit sciatic nerve. Technical note. Sameš M, et al. **Acta Chir Plast** 1997;39(2):65-7
Morphometric comparison between contralateral sciatic nerves in the male and female rabbit. Muglia U, et al. **Anat Histol Embryol** 1997 Jun;26(2):147-50
Anatomic considerations for sciatic nerve block in the popliteal fossa through the lateral approach. Vloka JD, et al. **Reg Anesth** 1996 Sep-Oct;21(5):414-8

BLOOD SUPPLY

Chronic constriction model of rat sciatic nerve: nerve blood flow, morphologic and biochemical alterations. Sasaki H, et al. **Acta Neuropathol (Berl)** 1997 Jan;93(1):62-70
Increased sciatic nerve blood flow in diabetic rats: assessment by "molecular" vs. particulate microspheres. Chang K, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E164-73
Diabetes impairs sciatic nerve hyperemia induced by surgical trauma: implications for diabetic neuropathy. Ido Y, et al.

Am J Physiol 1997 Jul;273(1 Pt 1):E174–84
Extreme vasoreactivity of rat epineurial arterioles to vasopressin. Sasaki H, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1307–13
Blood flow and autoregulation in somatic and autonomic ganglia. Comparison with sciatic nerve. McManis PG, et al. **Brain** 1997 Mar;120 (Pt 3):445–9
Nerve function and blood flow in Otsuka Long–Evans Tokushima Fatty rats with sucrose feeding: effect of an anticoagulant. Hotta N, et al. **Eur J Pharmacol** 1996 Oct 17;313(3):201–9
Presynaptic deficit of sympathetic nerves: a cause for disturbed sciatic nerve blood flow responsiveness in diabetic rats. Van Buren T, et al. **Eur J Pharmacol** 1996 Feb 5;296(3):277–83
A disturbed macrocirculatory supply as a determinant for a reduced sciatic nerve blood flow in diabetic rats. Van Buren T, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):73–80
Effects of adrenergic stimulation on sciatic nerve blood flow in diabetic and control rats. Vo PA, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):147–52
Vascular pathology in CCI neuropathy: a quantitative temporal study. Sommer C, et al. **Exp Neurol** 1996 Sep; 141(1):113–9
Age related changes in the density of blood vessels in the human sciatic nerve. Mikusek J, et al. **Folia Morphol (Warsz)** 1996;55(4):398–400
Effects of diabetes on reactivity of sciatic vasa nervorum in rats. Maxfield EK, et al. **J Diabetes Complications** 1997 Jan–Feb;11(1):47–55
Effects of seven days of galactose feeding and aldose reductase inhibition on mast cells and vessel morphometry in rat sciatic nerve. Brett FM, et al. **J Neurol Sci** 1996 Sep 15;141(1–2):6–12
Blood flow in mobilized nerves: results in a rabbit sciatic nerve model. Maki Y, et al. **Plast Reconstr Surg** 1997 Sep; 100(3):627–33; discussion 634–5

CHEMISTRY

Aldose reductase inhibition increases CNTF-like bioactivity and protein in sciatic nerves from galactose-fed and normal rats. Mizisin AP, et al. **Diabetes** 1997 Apr;46(4):647–52
Localization of synapsin I in normal fibers and regenerating axonal sprouts of the rat sciatic nerve. Akagi S, et al. **Histochem Cell Biol** 1996 May;105(5):365–73
Peripheral nerve extract effects on mesenchymal cells. Dietz FR, et al. **Iowa Orthop J** 1996;16:46–57
Biochemical analysis of myelin proteins in a novel neurological mutant: the taiep rat. Möller JR, et al. **J Neurochem** 1997 Aug;69(2):773–9
Differential distribution of thyroid hormone receptor isoform in rat dorsal root ganglia and sciatic nerve in vivo and in vitro. Glauser L, et al. **J Neuroendocrinol** 1997 Mar; 9(3):217–27
Proteolipid/DM-20 proteins bearing the paralytic tremor mutation in peripheral nerves and transfected Cos-7 cells. Tosic M, et al. **Neurochem Res** 1996 Apr;21(4):423–30

CYTOLOGY

Ascending myelinated axons of primary sensory neurons of the sciatic nerve in the posterior column of the rat spinal cord. Yamamoto K, et al. **Acta Neuropathol (Berl)** 1996 Jul;92(1):27–34
Proliferating and differentiating Schwann cell cultures from embryonic chick sciatic nerve maintained for months in vitro without antimitotics or growth factors. Weiss B, et al. **Eur J Cell Biol** 1996 Jun;70(2):106–16
Insulin and the insulin-like growth factors I and II are mitogenic to cultured rat sciatic nerve segments and stimulate [3H]thymidine incorporation through their respective receptors. Svenningsen AF, et al. **Glia** 1996 Sep; 18(1):68–72
Distribution of transferrin binding protein immunoreactivity in the chicken central and peripheral nervous systems. Cho SS, et al. **J Comp Neurol** 1997 Jun 2;382(2):260–71
Bridging Schwann cell transplants promote axonal regeneration from both the rostral and caudal stumps of transected adult rat spinal cord. Xu XM, et al. **J Neurocytol** 1997 Jan;26(1):1–16
Tetrodotoxin-resistant Na+ spikes of C fibers have at least two subtypes in the isolated bullfrog sciatic nerve. Kobayashi J, et al. **Neurosci Lett** 1996 Dec 27;221(1):9–12
Stretching of an isolated part of the sciatic nerve of the frog (Rana rindibunda) causes excitation of its sensory nerve fibres. Theophilidis G, et al. **Neurosci Lett** 1996 Sep 6; 215(2):99–102
Increased neurite outgrowth of cultured rat dorsal root ganglion cells following transection or inhibition of axonal transport of the sciatic nerve. White DM, et al. **Neurosci Lett** 1996 Apr 19;208(2):93–6
Stimulation of neurite outgrowth using an electrically conducting polymer. Schmidt CE, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):8948–53

DRUG EFFECTS

Glucocorticoids prolong rat sciatic nerve blockade in vivo from bupivacaine microspheres. Castillo J, et al. **Anesthesiology** 1996 Nov;85(5):1157–66
Neurologic evaluation of infant and adult rats before and after sciatic nerve blockade. Hu D, et al. **Anesthesiology** 1997 Apr;86(4):957–65
Neurophysiologic actions and neurological consequences of veratridine on the rat sciatic nerve. Vladimirov M, et al. **Anesthesiology** 1997 Apr;86(4):945–56
Clonidine, but not morphine, delays the development of thermal hyperesthesia induced by sciatic nerve constriction injury in the rat. Yamamoto T, et al. **Anesthesiology** 1996 Oct;85(4):835–45
Alteration in neurofilament axonal transport in the sciatic nerve of the diisopropyl phosphorofluoridate (DFP)-treated hen. Gupta RP, et al. **Biochem Pharmacol** 1997 Jun 15;53(12):1799–806
The action of local anesthetics on myelin structure and nerve conduction in toad sciatic nerve. Mateu L, et al. **Biophys J** 1997 Jun;72(6):2581–7
Aminoguanidine--effects on endoneurial vasoactive nitric oxide and on motor nerve conduction velocity in control and streptozotocin-diabetic rats. Dewhurst M, et al. **Br J Pharmacol** 1997 Feb;120(4):593–8
S-100beta stimulates neurite outgrowth in the rat sciatic nerve grafted with acellular muscle transplants. Haglid KG, et al. **Brain Res** 1997 Apr 11;753(2):196–201
Neurotrophin-3 delivered locally via fibronectin mats enhances peripheral nerve regeneration. Sterne GD, et al. **Eur J Neurosci** 1997 Jul;9(7):1388–96
Diisopropylphosphorofluoridate-induced depression of compound action potential of frog sciatic nerve in vitro is mediated through the inhibition of cholinesterase activity. Deshpande SB, et al. **J Appl Toxicol** 1996 Nov–Dec; 16(6):497–500
Prosaposin facilitates sciatic nerve regeneration in vivo. Kotani Y, et al. **J Neurochem** 1996 May;66(5):2019–25
Collateral sprouting of uninjured primary afferent A-fibers into the superficial dorsal horn of the adult rat spinal cord after topical capsaicin treatment to the sciatic nerve. Mannion RJ, et al. **J Neurosci** 1996 Aug 15;16(16):5189–95
Leukemia inhibitory factor enhances the regeneration of transected rat sciatic nerve and the function of reinnervated muscle. Tham S, et al. **J Neurosci Res** 1997 Jan 15; 47(2):208–15
Reversible blockade of retrograde axonal transport in the rat sciatic nerve by vincristine. Macfarlane BV, et al. **J Pharm Pharmacol** 1997 Jan;49(1):97–101
Susceptibility to lidocaine of impulses in different somatosensory afferent fibers of rat sciatic nerve. Huang JH, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):802–11
Comparative dose-dependence study of FK506 and cyclosporin A on the rate of axonal regeneration in the rat sciatic nerve. Wang MS, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):1084–93
Reversal of peripheral nerve conduction and perfusion deficits by the free radical scavenger, BM15.0639, in diabetic rats. Cameron NE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):685–90
Differential effects of tetrodotoxin (TTX) and high external K+ on A and C fibre compound action potential peaks in frog sciatic nerve. Buchanan S, et al. **Neurosci Lett** 1996 Nov 22;219(2):131–4
Application of nitric oxide synthase inhibitor, N omega-nitro-L-arginine methyl ester, on injured nerve attenuates neuropathy-induced thermal hyperalgesia in rats. Thomas DA, et al. **Neurosci Lett** 1996 May 31; 210(2):124–6
Effects of nerve growth factor on acetylcholinesterase activity of the proximal stump of the transected sciatic nerve. Baykal S, et al. **Neurosurg Rev** 1997;20(2):124–7
Nerve injury induced by vibration: prevention of the effect of a conditioning lesion by D600, a Ca2+ channel blocker. Widerberg A, et al. **Occup Environ Med** 1997 May; 54(5):312–5
Neurophysiological and neuropathological evaluation of primates exposed to ethylene oxide and propylene oxide. Setzer JV, et al. **Toxicol Ind Health** 1996 Sep–Oct; 12(5):667–82
[The effect of nerve growth factor on regeneration of the fibers in the rat sciatic nerve] Zhuk ON, et al. **Morfologiia** 1996;110(4):113–5 (Eng. Abstr.) **(Rus)**
[Ca2+ ion transport in the sarcoplasmic reticulum of the gastrocnemius muscles of white rats under treatment of the sciatic nerve with a colchicine solution] Brazaluk AZ, et al. **Ukr Biokhim Zh** 1996 Mar–Apr;68(2):114–9 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Morphogenesis of the node of Ranvier: co-clusters of ankyrin and ankyrin-binding integral proteins define early developmental intermediates. Lambert S, et al. **J Neurosci** 1997 Sep 15;17(18):7025–36
Selective innervation of fast and slow muscle regions during early chick neuromuscular development. Rafuse VF, et al. **J Neurosci** 1996 Nov 1;16(21):6864–77

ENZYMOLOGY

Protein kinase C isozyme expression in sciatic nerves and spinal cords of experimentally diabetic rats. Roberts RE, et al. **Brain Res** 1997 Apr 18;754(1–2):147–56
Protein kinase C and mouse sciatic nerve regeneration. Wiklund P, et al. **Brain Res** 1996 Apr 9;715(1–2):145–54
Chromatographic discrimination of soluble neuropathy target esterase isoenzymes and related phenyl valerate esterases from chicken brain, spinal cord, and sciatic nerve. Escudero MA, et al. **J Neurochem** 1997 May;68(5):2170–6
Phospholipase A2 activity is required for regeneration of sensory axons in cultured adult sciatic nerves. Edström A, et al. **J Neurosci Res** 1996 Jan 15;43(2):183–9
Alterations in the neutral proteinase activities of central and peripheral nervous systems of acrylamide-, carbon disulfide-, or 2,5-hexanedione-treated rats. Gupta RP, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):53–66
Distribution and processing of peptidylglycine alpha-amidating monooxygenase activity in rat dorsal root ganglia and sciatic nerves. Takasugi H, et al. **Neurochem Int** 1996 Oct;29(4):397–403
[Activity of phosphoinositide-specific phospholipase C in rabbit nerves at rest and during stimulation] Revin VV, et al. **Biokhimiia** 1996 May;61(5):815–20 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Angiogenesis at the site of neuroma formation in transected peripheral nerve. Zochodne DW, et al. **J Anat** 1997 Jul; 191 (Pt 1):23–30

INJURIES

Hospitalization and discharge outcome of trauma patients sustaining sciatic nerve or sciatic branch injuries. Melchiorre PJ. **Am J Phys Med Rehabil** 1996 Nov–Dec; 75(6):470–5
Lower extremity iatrogenic nerve injury due to compression during intraabdominal surgery. Dillavou ED, et al. **Am J Surg** 1997 Jun;173(6):504–8
Sciatic nerve palsy following childbirth [see comments] Silva M, et al. **Anaesthesia** 1996 Dec;51(12):1144–8 (53 ref.). Comment in: Anaesthesia 1997 Jun;52(6):605–6.
Sciatic nerve injury and caesarean section [letter; comment] Umo-Etuk J, et al. **Anaesthesia** 1997 Jun;52(6):605–6. Comment on: Anaesthesia 1996 Dec;51(12):1144–8.
Clonidine, but not morphine, delays the development of thermal hyperesthesia induced by sciatic nerve constriction injury in the rat. Yamamoto T, et al. **Anesthesiology** 1996 Oct;85(4):835–45
Evaluation of nerve recovery from minimal-duration crush injury. Dash H, et al. **Ann Plast Surg** 1996 Nov;37(5):526–31
Bilateral traumatic hip dislocation with bilateral sciatic nerve injury. Sener M, et al. **Arch Orthop Trauma Surg** 1997; 116(4):225–6
Exercise training improves functional recovery and motor nerve conduction velocity after sciatic nerve crush lesion in the rat. van Meeteren NL, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):70–7 (39 ref.)
The pathogenesis of non-freezing cold nerve injury. Observations in the rat. Jia J, et al. **Brain** 1997 Apr;120 (Pt 4):631–46 (121 ref.)
Cytokine and growth factor immunohistochemical spinal profiles in two animal models of mononeuropathy. DeLeo JA, et al. **Brain Res** 1997 Jun 6;759(1):50–7
Astrocytes in the aged rat spinal cord fail to increase GFAP mRNA following sciatic nerve axotomy. Kane CJ, et al. **Brain Res** 1997 Jun 6;759(1):163–5
Neuropeptide changes persist in spinal cord despite resolving hyperalgesia in a rat model of mononeuropathy. Munglani R, et al. **Brain Res** 1996 Dec 16;743(1–2):102–8
Transganglionic response of GAP-43 in the gracile nucleus to sciatic nerve injury in young and aged rats. Ohara S, et al. **Brain Res** 1995 Dec 24;705(1–2):325–31
Intrathecal neuropeptide Y exacerbates nerve injury-induced mechanical hyperalgesia. White DM. **Brain Res** 1997 Mar 7;750(1–2):141–6
Serotonin receptors expressed by myelinating Schwann cells in rat sciatic nerve. Yoder EJ, et al. **Brain Res** 1997 Apr 11;753(2):299–308
Differential subcellular localization of SNAP-25a and SNAP-25b RNA transcripts in spinal motoneurons and plasticity in expression after nerve injury. Jacobsson G, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):49–62
Alteration in sensory nerve function following electrical shock. Abramov GS, et al. **Burns** 1996 Dec;22(8):602–6
A quantitative analysis of the glial cell reaction in primary sensory termination areas following sciatic nerve injury and treatment with nerve growth factor in the adult rat. Eriksson NP, et al. **Exp Brain Res** 1997 May;114(3):393–404
A differential and time-dependent decrease in AMPA-type glutamate receptor subunits in spinal motoneurons after sciatic nerve injury. Kennis JH, et al. **Exp Neurol** 1997 Sep;147(1):18–27
Reduced hyperalgesia in nerve-injured WLD mice: relationship to nerve fiber phagocytosis, axonal degeneration, and regeneration in normal mice. Myers RR, et al. **Exp Neurol** 1996 Sep;141(1):94–101
Gel matrix vehicles for growth factor application in nerve gap injuries repaired with tubes: a comparison of biomatrix, collagen, and methylcellulose. Wells MR, et al. **Exp Neurol** 1997 Aug;146(2):395–402
Effect of chronic sciatic nerve lesion on the neurogenic inflammatory response in intact and acutely injured denervated rat skin. Bassirat M, et al. **Inflamm Res** 1996 Aug;45(8):380–5
Effect of peripheral nerve injury on nuclear magnetic resonance relaxation times of rat skeletal muscle. Hayashi Y, et al. **Invest Radiol** 1997 Mar;32(3):135–9
Time course of recovery from nerve injury in skeletal muscle: energy state and local circulation. Hayashi Y, et al.

J Appl Physiol 1997 Mar;82(3):732–7
Injection induced nerve injury : an iatrogenic tragedy. Bhatia M, et al. **J Assoc Physicians India** 1996 Aug;44(8):532–3
Impaired regeneration in rat sciatic nerves exposed to short–term vibration. Strömberg T, et al.
J Hand Surg [Br] 1996 Dec;21(6):746–9
Interleukin–6–mediated hyperalgesia/allodynia and increased spinal IL–6 expression in a rat mononeuropathy model. DeLeo JA, et al. **J Interferon Cytokine Res** 1996 Sep; 16(9):695–700
Neural thrombin and protease nexin I kinetics after murine peripheral nerve injury. Smirnova IV, et al.
J Neurochem 1996 Nov;67(5):2188–99
Adrenoreceptor subtype mediating sympathetic–sensory coupling in injured sensory neurons. Chen Y, et al.
J Neurophysiol 1996 Dec;76(6):3721–30
GABAA–receptor–mediated conductance and action potential waveform in cutaneous and muscle afferent neurons of the adult rat: differential expression and response to nerve injury. Oyelese AA, et al. **J Neurophysiol** 1996 Oct;76(4):2383–92
Downregulation of tetrodotoxin–resistant sodium currents and upregulation of a rapidly repriming tetrodotoxin–sensitive sodium current in small spinal sensory neurons after nerve injury. Cummins TR, et al.
J Neurosci 1997 May 15;17(10):3503–14
Diminished inflammation and nociceptive pain with preservation of neuropathic pain in mice with a targeted mutation of the type I regulatory subunit of cAMP–dependent protein kinase. Malmberg AB, et al.
J Neurosci 1997 Oct 1;17(19):7462–70
A quantitative computer–assisted morphometric analysis of stimulation–induced injury to myelinated fibers in a peripheral nerve. McCreery DB, et al.
J Neurosci Methods 1997 May 16;73(2):159–68
Attenuation and recovery of nerve growth factor receptor mRNA in dorsal root ganglion neurons following axotomy. Krekoski CA, et al. **J Neurosci Res** 1996 Jan 1;43(1):1–11
Expression of the 4C5 antigen during development and after injury of the rat sciatic nerve. Thomaidou D, et al.
J Neurosci Res 1996 Oct 1;46(1):24–33
Spatial pattern of type I collagen expression in injured peripheral nerve. Nath RK, et al. **J Neurosurg** 1997 May; 86(5):866–70
Intraoperative monitoring of motor pathways during operative fixation of acute acetabular fractures. Helfet DL, et al. **J Orthop Trauma** 1997 Jan;11(1):2–6
Incidence of sciatic nerve injury in operatively treated acetabular fractures without somatosensory evoked potential monitoring. Middlebrooks ES, et al.
J Orthop Trauma 1997 Jul;11(5):327–9
Irreducible open intertrochanteric hip fracture secondary to entrapment of the sciatic nerve in a child. Wiss DA, et al. **J Orthop Trauma** 1997 Jan;11(1):38–40 (10 ref.)
Functional consequences of isolated nerve stretch: experimental long–term static loading. de Medinaceli L, et al. **J Reconstr Microsurg** 1997 Apr;13(3):185–92
Influence of partial nerve injury in the rat on efferent function of sympathetic and antidromically acting sensory nerve fibers. Kurvers HA, et al. **J Trauma** 1996 Dec;41(6):981–8
Changes in water diffusion due to Wallerian degeneration in peripheral nerve. Beaulieu C, et al.
Magn Reson Med 1996 Oct;36(4):627–31
Tolrestat improves nerve regeneration after crush injury in streptozocin–induced diabetic rats. Terada M, et al.
Metabolism 1996 Oct;45(10):1189–95
Functional effects of lymphotoxin on crushed peripheral nerve. Algora J, et al. **Microsurgery** 1996;17(3):131–5
Effects of external calcium on contractile responses in rat extensor digitorum longus muscles after sciatic nerve injury at birth. Louboutin JP, et al. **Muscle Nerve** 1996 Nov; 19(11):1421–8
Gene expression and apoptosis in the spinal cord neurons after sciatic nerve injury. Gu ZZ, et al. **Neurochem Int** 1997 Apr–May;30(4–5):417–26
GDNF mRNA in Schwann cells and DRG satellite cells after chronic sciatic nerve injury. Hammarberg H, et al. **Neuroreport** 1996 Mar 22;7(4):857–60
NGF involvement in pain induced by chronic constriction injury of the rat sciatic nerve. Herzberg U, et al.
Neuroreport 1997 May 6;8(7):1613–8
Reduced sympathetic sprouting occurs in dorsal root ganglia after axotomy in mice lacking low–affinity neurotrophin receptor. Ramer M, et al. **Neurosci Lett** 1997 May 30; 228(1):9–12
Release of gamma–aminobutyric acid in the dorsal horn and suppression of tactile allodynia by spinal cord stimulation in mononeuropathic rats. Stiller CO, et al. **Neurosurgery** 1996 Aug;39(2):367–74; discussion 374–5
Venlafaxine hydrochloride (Effexor) relieves thermal hyperalgesia in rats with an experimental mononeuropathy. Lang E, et al. **Pain** 1996 Nov;68(1):151–5
Spontaneous action potential activity in isolated dorsal root ganglion neurons from rats with a painful neuropathy. Study RE, et al. **Pain** 1996 May–Jun;65(2–3):235–42
Behavioral and electrophysiological assessment of hyperalgesia and changes in dorsal horn responses following partial sciatic nerve ligation in rats. Takaishi K, et al. **Pain** 1996 Aug;66(2–3):297–306
An in vitro study of ectopic discharge generation and adrenergic sensitivity in the intact, nerve–injured rat dorsal root ganglion. Zhang JM, et al. **Pain** 1997 Aug;72(1–2):51–7
Vaccine injury––no reports [letter] Marcuse EK, et al.
Pediatrics 1997 Jan;99(1):144
Extensive cortical reorganization following sciatic nerve injury in adult rats versus restricted reorganization after neonatal injury: implications for spatial and temporal limits on somatosensory plasticity. Cusick CG.
Prog Brain Res 1996;108:379–90 (75 ref.)
Effect of local methylprednisolone on pain in a nerve injury model. A pilot study. Johansson A, et al. **Reg Anesth** 1997 Jan–Feb;22(1):59–65
Long–tapered double needle used to reduce needle stick nerve injury. Maruyama M. **Reg Anesth** 1997 Mar–Apr; 22(2):157–60
Jacob's limp. Hoenig LJ. **Semin Arthritis Rheum** 1997 Feb; 26(4):684–8
Most dorsal root ganglion neurons of the adult rat survive nerve crush injury. Swett JE, et al.
Somatosens Mot Res 1995;12(3–4):177–89
[The effect of hydrocortisone on a neurogenic pain syndrome in rats] Igon'kina SI, et al. **Eksp Klin Farmakol** 1997 Jan–Feb;60(1):13–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Cytokine dichotomy in peripheral nervous system influences the outcome of experimental allergic neuritis: dynamics of mRNA expression for IL–1 beta, IL–6, IL–10, IL–12, TNF–alpha, TNF–beta, and cytolysin. Zhu J, et al.
Clin Immunol Immunopathol 1997 Jul;84(1):85–94
Connexin32 gene expression in rat sciatic nerves and cultured Schwann cells. Satake M, et al. **Dev Neurosci** 1997; 19(2):189–95
A second alternative transcript of the gap junction gene connexin32 is expressed in murine Schwann cells and modulated in injured sciatic nerve. Söhl G, et al.
Eur J Cell Biol 1996 Mar;69(3):267–75
Leukaemia inhibitory factor induced in the sciatic nerve after axotomy is involved in the induction of galanin in sensory neurons. Sun Y, et al. **Eur J Neurosci** 1996 Oct; 8(10):2213–20
Ciliary neurotrophic factor immunoreactivity in rat intramuscular nerve during reinnervation through a silicone tube after severing of the rat sciatic nerve. Hiruma S, et al. **Exp Mol Pathol** 1997 Feb;64(1):23–30
p75 neurotrophin receptor induction and macrophage infiltration in peripheral nerve during experimental diabetic neuropathy: possible relevance on regeneration. Conti G, et al. **Exp Neurol** 1997 Jul;146(1):206–11
Differential regulation of fibroblast growth factor (FGF)–2 and FGF receptor 1 mRNAs and FGF–2 isoforms in spinal ganglia and sciatic nerve after peripheral nerve lesion. Meisinger C, et al. **J Neurochem** 1997 Mar;68(3):1150–8
Neural thrombin and protease nexin I kinetics after murine peripheral nerve injury. Smirnova IV, et al.
J Neurochem 1996 Nov;67(5):2188–99
Alpha N–catenin expression in the normal and regenerating chick sciatic nerve. Shibuya Y, et al. **J Neurocytol** 1996 Nov;25(11):615–24
Localization and expression of ciliary neurotrophic factor (CNTF) in postmortem sciatic nerve from patients with motor neuron disease and diabetic neuropathy. Lee DA, et al. **J Neuropathol Exp Neurol** 1996 Aug;55(8):915–23
Neurons promote the translocation of peripheral myelin protein 22 into myelin. Pareek S, et al. **J Neurosci** 1997 Oct 15;17(20):7754–62
Secretion and processing of apolipoprotein A–I in the avian sciatic nerve during development. Lemieux MJ, et al.
J Neurosci Res 1996 Jun 15;44(6):594–605
Expression of the 4C5 antigen during development and after injury of the rat sciatic nerve. Thomaidou D, et al.
J Neurosci Res 1996 Oct 1;46(1):24–33
Spatial pattern of type I collagen expression in injured peripheral nerve. Nath RK, et al. **J Neurosurg** 1997 May; 86(5):866–70
Diffusion of water in rat sciatic nerve measured by 1H pulsed field gradient NMR: compartmentation and anisotropy. Seo Y, et al. **Jpn J Physiol** 1996 Apr;46(2):163–9
An in vitro evaluation of the effects of local magnetic–susceptibility–induced gradients on anisotropic water diffusion in nerve. Beaulieu C, et al.
Magn Reson Med 1996 Jul;36(1):39–44
Glucose transporters in rat peripheral nerve: paranodal expression of GLUT1 and GLUT3. Magnani P, et al.
Metabolism 1996 Dec;45(12):1466–73
Acylation of endogenous acyl acceptors by mouse sciatic nerve microsomes. Juguelin H, et al. **Neurochem Int** 1996 Mar;28(3):271–6
Biosynthesis and compartmentalization of Po, apolipoprotein A–I, and lipids in the myelinating chick sciatic nerve. Lemieux MJ, et al. **Neurochem Res** 1995 Oct;20(10):1239–48
NGF level in the rat sciatic nerve is decreased after long–term consumption of ethanol. Hellweg R, et al.
Neuroreport 1996 Feb 29;7(3):777–80
Specific up–regulation of the POU domain transcription factor Oct–2 following axotomy. Begbie JL, et al.
Neurosci Lett 1996 Apr 5;207(3):183–6
Effect of capsaicin on substance P and nerve growth factor in adjuvant arthritic rats. Garrett NE, et al.
Neurosci Lett 1997 Jul 11;230(1):5–8
Enhanced expression of the peripheral benzodiazepine receptor (PBR) and its endogenous ligand octadecaneuropeptide (ODN) in the regenerating adult rat sciatic nerve. Lacor P, et al. **Neurosci Lett** 1996 Dec 6; 220(1):61–5
Expression of fibroblast growth factor–2 and fibroblast growth factor receptor 1 messenger RNAs in spinal ganglia and sciatic nerve: regulation after peripheral nerve lesion. Grothe C, et al. **Neuroscience** 1997 Jan;76(1):123–35
Ultrastructural localization of B–50/growth–associated protein–43 to anterogradely transported synaptophysin–positive and calcitonin gene–related peptide–negative vesicles in the regenerating rat sciatic nerve. Verkade P, et al. **Neuroscience** 1996 Mar; 71(2):489–505
Intraneural lidocaine uptake compared with analgesic differences between pregnant and nonpregnant rats. Popitz–Bergez FA, et al. **Reg Anesth** 1997 Jul–Aug; 22(4):363–71

PATHOLOGY

Neuropathology of murine mucopolysaccharidosis type VII. Levy B, et al. **Acta Neuropathol (Berl)** 1996 Dec; 92(6):562–8
Neuropathology and blood flow of nerve, spinal roots and dorsal root ganglia in longstanding diabetic rats. Sasaki H, et al. **Acta Neuropathol (Berl)** 1997 Feb;93(2):118–28
Chronic constriction model of rat sciatic nerve: nerve blood flow, morphologic and biochemical alterations. Sasaki H, et al. **Acta Neuropathol (Berl)** 1997 Jan;93(1):62–70
Angiosarcoma arising in a solitary schwannoma (neurilemoma) of the sciatic nerve. Trassard M, et al.
Am J Surg Pathol 1996 Nov;20(11):1412–7
Inflammatory pseudotumor of nerve. Weiland TL, et al.
Am J Surg Pathol 1996 Oct;20(10):1212–8 (17 ref.)
N–butyl tetracaine as a neurolytic agent for ultralong sciatic nerve block. Wang GK, et al. **Anesthesiology** 1996 Dec; 85(6):1386–94
The effects of undernutrition on the physical organization of rat sciatic myelin sheaths: an X–ray scattering study. Vargas V, et al. **Ann N Y Acad Sci** 1997 May 28;817:368–71
p75 neurotrophin receptor induction and macrophage infiltration in peripheral nerve during experimental diabetic neuropathy: possible relevance on regeneration. Conti G, et al. **Exp Neurol** 1997 Jul;146(1):206–11
Effect of T–cell depletion on bacterial multiplication and pattern of nerve damage in M. leprae–infected mice. Shetty VP, et al. **Indian J Lepr** 1995 Oct–Dec;67(4):363–74
Myositis ossificans of the piriformis muscle: an unusual cause of piriformis syndrome. A case report. Beauchesne RP, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):906–10
Ultrastructural localization of sympathetic axons in experimental rat sciatic nerve neuromas. Small JR, et al.
J Neurocytol 1996 Oct;25(10):573–82
Axonal viability and the persistence of thermal hyperalgesia after partial freeze lesions of nerve. Myers RR, et al.
J Neurol Sci 1996 Jul;139(1):28–38
A quantitative computer–assisted morphometric analysis of stimulation–induced injury to myelinated fibers in a peripheral nerve. McCreery DB, et al.
J Neurosci Methods 1997 May 16;73(2):159–68
Photochemically induced ischaemic lesion of the rat sciatic nerve. A novel method providing high incidence of mononeuropathy. Gazelius B, et al. **Neuroreport** 1996 Nov 4;7(15–17):2619–23
Evaluation of brain and nerve pathology in rats chronically dosed with ddI or isoniazid. Schmued LC, et al.
Neurotoxicol Teratol 1996 Sep–Oct;18(5):555–63
[Puncture with an open–sided, interventional MRI system. Illustration with a case report] Schoenenberger AW, et al. **Radiologe** 1996 Sep;36(9):705–8 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Regeneration of myelinated fiber after crush injury is retarded in sciatic nerves of mutant Japanese quails deficient in neurofilaments. Jiang XM, et al.
Acta Neuropathol (Berl) 1996 Nov;92(5):467–72
The dynamics of macrophage recruitment after nerve transection. Taskinen HS, et al. **Acta Neuropathol (Berl)** 1997 Mar;93(3):252–9
Static muscular contraction elicits a pressor reflex in the chicken. Solomon IC, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R759–65
Effect of combined administration of insulin–like growth factor and platelet–derived growth factor on the regeneration of transected and anastomosed sciatic nerve in rats. Welch JA, et al. **Am J Vet Res** 1997 Sep; 58(9):1033–7
Correlation between evoked motor response of the sciatic nerve and sensory blockade. Benzon HT, et al.
Anesthesiology 1997 Sep;87(3):547–52
Exercise training improves functional recovery and motor nerve conduction velocity after sciatic nerve crush lesion in the rat. van Meeteren NL, et al.
Arch Phys Med Rehabil 1997 Jan;78(1):70–7 (39 ref.)
Search for frequency–specific effects of millimeter–wave radiation on isolated nerve function. Pakhomov AG, et al. **Bioelectromagnetics** 1997;18(4):324–34
Rat sciatic nerve regeneration through a micromachined silicon chip. Zhao Q, et al. **Biomaterials** 1997 Jan; 18(1):75–80
Tail currents in the myelinated axon of Xenopus laevis suggest a two–open–state Na channel. Elinder F, et al.
Biophys J 1997 Jul;73(1):179–85
Neural involvement in post–traumatic osteopenia: an

experimental study in the rat. Madsen JE, et al. **Bone** 1996 May;18(5):411–6

Blood flow and autoregulation in somatic and autonomic ganglia. Comparison with sciatic nerve. McManis PG, et al. **Brain** 1997 Mar;120 (Pt 3):445–9

Expression pattern of candidate cell death effector proteins Bax, Bcl–2, Bcl–X, and c–Jun in sensory and motor neurons following sciatic nerve transection in the rat. Gillardon F, et al. **Brain Res** 1996 Nov 11;739(1–2):244–50

Nerve regeneration across a 25–mm gap bridged by a polyglycolic acid–collagen tube: a histological and electrophysiological evaluation of regenerated nerves. Kiyotani T, et al. **Brain Res** 1996 Nov 18;740(1–2):66–74

Impaired myelinated fiber regeneration following freeze–injury in rats with streptozotocin–induced diabetes: involvement of the polyol pathway. Love A, et al. **Brain Res** 1995 Dec 12;703(1–2):105–10

Glial cell reactions in the spinal cord after sensory nerve stimulation are associated with axonal injury. Molander C, et al. **Brain Res** 1997 Jan 30;747(1):122–9

Intrathecal neuropeptide Y exacerbates nerve injury–induced mechanical hyperalgesia. White DM. **Brain Res** 1997 Mar 7;750(1–2):141–6

Protein kinase C and mouse sciatic nerve regeneration. Wiklund P, et al. **Brain Res** 1996 Apr 9;715(1–2):145–54

Serotonin receptors expressed by myelinating Schwann cells in rat sciatic nerve. Yoder EJ, et al. **Brain Res** 1997 Apr 11;753(2):299–308

Islet amyloid polypeptide and calcitonin gene–related peptide expression are down–regulated in dorsal root ganglia upon sciatic nerve transection. Mulder H, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):322–30

Differential spatio–temporal expression of the insulin–like growth factor genes in regenerating sciatic nerve. Pu SF, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):18–28

Differential effects of axotomy on the in vivo synthesis of the stress–inducible and constitutive 70–kDa heat–shock proteins in rat dorsal root ganglia. Tedeschi B, et al. **Brain Res Mol Brain Res** 1997 May;45(2):199–206

Gene expression in nerve regeneration [letter] Müller HW. **Diabet Med** 1996 Jul;13(7):682

Bony foramina facilitate magnetic stimulation: an experimental cat sciatic nerve model. Kobayashi M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb; 105(1):79–85

Differential regulation of mRNAs for GDNF and its receptors Ret and GDNFR alpha after sciatic nerve lesion in the mouse. Naveilhan P, et al. **Eur J Neurosci** 1997 Jul; 9(7):1450–60

Peripheral nerve stimulation increases Fos immunoreactivity without affecting type II Ca2+/calmodulin–dependent protein kinase, glutamic acid decarboxylase, or GABAA receptor gene expression in cat spinal cord. Liang F, et al. **Exp Brain Res** 1996 Oct;111(3):326–36

Microglia responses in the CNS following sciatic nerve transection in C57BL/Wld(s) and BALB/c mice. He BP, et al. **Exp Neurol** 1997 Aug;146(2):587–95

Partial regeneration of the sciatic nerve in rats enhances motor excitability to magnetic stimulation. Kraus KH, et al. **Exp Neurol** 1997 Jan;143(1):18–24

Expression of superoxide dismutase following axotomy. Rosenfeld J, et al. **Exp Neurol** 1997 Sep;147(1):37–47

Comparison of immunohistochemical and functional reinnervation of skin and muscle after peripheral nerve injury. Verdu E, et al. **Exp Neurol** 1997 Jul;146(1):187–98

Statistical analyses and reliability of the sciatic functional index [letter; comment] de Medinaceli L. **Gen Pharmacol** 1996 Jun;27(4):741. Comment on: Gen Pharmacol 1995 Jan;26(1):59–64.

The expression of the low affinity nerve growth factor receptor in long–term denervated Schwann cells. You S, et al. **Glia** 1997 Jun;20(2):87–100

Recruitment characteristics of nerve fascicles stimulated by a multigroove electrode. Koole P, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):40–50

A slowly penetrating interfascicular nerve electrode for selective activation of peripheral nerves. Tyler DJ, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):51–61

Changes in level of certain serum constituents following sciatectomy in the common frog, Rana tigrina (Daud). Karanth S, et al. **Indian J Exp Biol** 1995 Jan;33(1):54–7

Effect of sciatic denervation on cell–mediated immunity. Kubera M, et al. **Int J Immunopharmacol** 1997 Jan; 19(1):25–9

Load, length, and velocity of load–moving tibialis anterior muscle of the cat. Baratta RV, et al. **J Appl Physiol** 1996 Jun;80(6):2243–9

Time course of recovery from nerve injury in skeletal muscle: energy state and local circulation. Hayashi Y, et al. **J Appl Physiol** 1997 Mar;82(3):732–7

A study on the mediators of antidromic vasodilatation elicited by sciatic nerve stimulation in cats. Küçükhüseyin C, et al. **J Basic Clin Physiol Pharmacol** 1996;7(4):363–73

Intact sciatic myelinated primary afferent terminals collaterally sprout in the adult rat dorsal horn following section of a neighbouring peripheral nerve. Doubell TP, et al. **J Comp Neurol** 1997 Mar 31;380(1):95–104

Nerve fiber regeneration following axotomy in the diabetic biobreeding Worcester rat: the effect of ARI treatment. Kamijo M, et al. **J Diabetes Complications** 1996 Jul–Aug; 10(4):183–91

Basement membrane and repair of injury to peripheral nerve: defining a potential role for macrophages, matrix metalloproteinases, and tissue inhibitor of metalloproteinases–1. La Fleur M, et al. **J Exp Med** 1996 Dec 1;184(6):2311–26

Functional and biochemical analysis of CNS–relevant neurotrophic activity in the lesioned sciatic nerve of adult rats. Mey J, et al. **J Hirnforsch** 1996;37(1):25–50

Axonal regrowth upregulates beta–actin and Jun D mRNA expression. Lund LM, et al. **J Neurobiol** 1996 Dec; 31(4):476–86

Differential expression of ciliary neurotrophic factor receptor in skeletal muscle of chick and rat after nerve injury. Ip FC, et al. **J Neurochem** 1996 Oct;67(4):1607–12

Differential axonal transport of soluble and insoluble tau in the rat sciatic nerve. Tashiro T, et al. **J Neurochem** 1996 Oct;67(4):1566–74

The limit of low speed peripheral nerve elongation; neurological and circulatory aspects. Abe Y, et al. **J Neurol Sci** 1996 Sep 1;140(1–2):61–6

Effects of body and hindlimb temperature on laser Doppler blood flow and vascular conductance in rat sciatic nerve and skeletal muscle. Dines KC, et al. **J Neurol Sci** 1997 May 1;148(1):7–13

A longitudinal study of central and peripheral nerve conduction in hypothyroid rats. Lai CL, et al. **J Neurol Sci** 1997 May 29;148(2):139–45

Proximally evoked soleus H reflexes in the evaluation of axonal neuropathy. Sachs GM, et al. **J Neurol Sci** 1996 Jun;138(1–2):88–92

In vitro characterization of a peripheral afferent pathway of the rat after chronic sciatic nerve section. Babbedge RC, et al. **J Neurophysiol** 1996 Nov;76(5):3169–77

Expression of specific tubulin isotypes increases during regeneration of injured CNS neurons, but not after the application of brain–derived neurotrophic factor (BDNF). Fournier AE, et al. **J Neurosci** 1997 Jun 15;17(12):4623–32

Axonal interactions regulate Schwann cell apoptosis in developing peripheral nerve: neuregulin receptors and the role of neuregulins. Grinspan JB, et al. **J Neurosci** 1996 Oct 1;16(19):6107–18

A flexible perforated microelectrode array probe for action potential recording in nerve and muscle tissues. González C, et al. **J Neurosci Methods** 1997 Apr 4;72(2):189–95

Liposome–mediated monocyte depletion during wallerian degeneration defines the role of hematogenous phagocytes in myelin removal. Brück W, et al. **J Neurosci Res** 1996 Nov 15;46(4):477–84

Phospholipase A2 activity is required for regeneration of sensory axons in cultured adult sciatic nerves. Edström A, et al. **J Neurosci Res** 1996 Jan 15;43(2):183–9

Glycosaminoglycans in nerve injury: II. Effects on transganglionic degeneration and on the expression of neurotrophic factors. Gorio A, et al. **J Neurosci Res** 1996 Dec 1;46(5):572–80

Changes in glycosaminoglycans during regeneration of post–crush sciatic nerves of adult guinea pigs. Shum DK, et al. **J Neurosci Res** 1996 Nov 15;46(4):465–76

Functional recovery from sciatic nerve crush lesion in the rat correlates with individual differences in responses to chronic intermittent stress. van Meeteren NL, et al. **J Neurosci Res** 1997 Jun 15;48(6):524–32

Role of ganglionic cotransmission in sympathetic control of the isolated bullfrog aorta. Thorne R, et al. **J Physiol (Lond)** 1997 Jan 1;498 (Pt 1):201–14

Effect of Schwann cells in the enhancement of peripheral–nerve regeneration. Bryan DJ, et al. **J Reconstr Microsurg** 1996 Oct;12(7):439–6

Ankle stance angle: a functional index for the evaluation of sciatic nerve recovery after complete transection. Lin FM, et al. **J Reconstr Microsurg** 1996 Apr;12(3):173–7

Altered connexin expression after peripheral nerve injury. Chandross KJ, et al. **Mol Cell Neurosci** 1996 Jun; 7(6):501–18

Tumor necrosis factor promotes motor functional recovery in crushed peripheral nerve. Chen LE, et al. **Neurochem Int** 1996 Aug;29(2):197–203

Reduction in the mechanonociceptive response by intrathecal administration of glycine and related compounds. Simpson RK Jr, et al. **Neurochem Res** 1996 Oct;21(10):1221–6

Induction of axon–like processes from axotomized retinal ganglion cells of adult hamsters after intravitreal injection of sciatic nerve exudate. Cho KS, et al. **Neuroreport** 1996 Nov 25;7(18):2879–82

Growth–associated protein (GAP–43) in terminal Schwann cells of rat Pacinian corpuscles. Dubovy P, et al. **Neuroreport** 1996 Sep 2;7(13):2147–50

Changes occur in the ability to promote axonal regeneration as the post–injury period increases. Houle JD, et al. **Neuroreport** 1997 Feb 10;8(3):751–5

Injured nerve block alters adjacent nerves spinal interaction in neuropathic rats. Sotgiu ML, et al. **Neuroreport** 1996 May 31;7(8):1385–8

Differential effects of tetrodotoxin (TTX) and high external K+ on A and C fibre compound action potential peaks in frog sciatic nerve. Buchanan S, et al. **Neurosci Lett** 1996 Nov 22;219(2):131–4

Bromocriptine prevents spinal motor neuron death following sciatic nerve transection in neonatal rats. Iwasaki Y, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):139–42

Sciatic nerve section induces mechanical hyperalgesia in skin adjacent to the deafferented region in rats: lack of correlation with autotomy behavior. Kauppila T, et al. **Neurosci Lett** 1996 Jun 14;211(1):65–7

Local application of anti–NGF blocks the collateral sprouting in rats following chronic constriction injury of the sciatic nerve. Ro LS, et al. **Neurosci Lett** 1996 Nov 1;218(2):87–90

Expression of a developmentally regulated, phosphorylated isoform of microtubule–associated protein 1B in regenerating axons of the sciatic nerve. Bush MS, et al. **Neuroscience** 1996 Jul;73(2):553–63

Effects of nerve growth factor, brain–derived neurotrophic factor and neurotrophin–3 on the laminar distribution of transganglionically fransported choleragenoid in the spinal cord dorsal horn following transection of the sciatic nerve in the adult rat. Eriksson NP, et al. **Neuroscience** 1997 Jun; 78(3):863–72

Skin blood flow disturbances in the contralateral limb in a peripheral mononeuropathy in the rat. Kurvers HA, et al. **Neuroscience** 1996 Oct;74(3):935–43

Differential expression of galanin immunoreactivities in the primary sensory neurons following partial and complete sciatic nerve injuries. Ma W, et al. **Neuroscience** 1997 Aug; 79(4):1183–95

Glutamate receptors in spinal motoneurons after sciatic nerve transection. Popratiloff A, et al. **Neuroscience** 1996 Oct; 74(4):953–8

Schwann cells produce tumor necrosis factor alpha: expression in injured and non–injured nerves. Wagner R, et al. **Neuroscience** 1996 Aug;73(3):625–9

An electron microscopic study of peripheral nerve regeneration with pulsing electromagnetic fields. Ito H, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb;64(1):69–70

Ciliary neurotrophic factor as a motor neuron trophic factor. Kuzis K, et al. **Perspect Dev Neurobiol** 1996;4(1):65–74 (89 ref.)

Functional breakdown of the lipid bilayer of the myelin membrane in central and peripheral nervous system by disrupted galactocerebroside synthesis. Bosio A, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13280–5

P2Y1 purinergic receptors in sensory neurons: contribution to touch–induced impulse generation. Nakamura F, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10465–70

Role of macrophages in the stimulation and regeneration of sensory nerves by transposed granulation tissue and temporal aspects of the response. Miyauchi A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar; 31(1):17–23

Bioartificial nerve grafts based on absorbable guiding filament structures--early observations. Terada N, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar;31(1):1–6

[Somatosensory evoked potentials: morphology and interareal S1–M1 relationships in the baboon (Papio papio)] el Kharroussi M, et al. **Neurophysiol Clin** 1996;26(5):279–99 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Peripheral nerve regeneration through silicone chambers in streptozocin–induced diabetic rats. Tantuwaya VS, et al. **Brain Res** 1997 Jun 6;759(1):58–66

Gel matrix vehicles for growth factor application in nerve gap injuries repaired with tubes: a comparison of biomatrix, collagen, and methylcellulose. Wells MR, et al. **Exp Neurol** 1997 Aug;146(2):395–402

Surgical maneuvers placing the sciatic nerve at risk during total hip arthroplasty as assessed by somatosensory evoked potential monitoring. Pereles TR, et al. **J Arthroplasty** 1996 Jun;11(4):438–44

Functional consequences of isolated nerve stretch: experimental long–term static loading. de Medinaceli L, et al. **J Reconstr Microsurg** 1997 Apr;13(3):185–92

Role of input from saphenous afferents in altered spinal processing of noxious signal that follows sciatic nerve constriction in rats. Sotgiu ML, et al. **Neurosci Lett** 1997 Feb 21;223(2):101–4

RADIATION EFFECTS

Search for frequency–specific effects of millimeter–wave radiation on isolated nerve function. Pakhomov AG, et al. **Bioelectromagnetics** 1997;18(4):324–34

In vitro frog sciatic nerve as a peripheral nerve model for studies of the mechanism of action of low energy lasers: Part one. Ebert DW, et al. **Lasers Surg Med** 1997; 21(1):32–41

Importance of using rigorous statistical methods to analyze low energy laser experimental data: Part two. Ebert DW, et al. **Lasers Surg Med** 1997;21(1):42–9

SURGERY

Surgical approach to the rabbit sciatic nerve. Technical note. Sameš M, et al. **Acta Chir Plast** 1997;39(2):65–7

Selective neurotomies for relief of spasticity focalized to the foot and to the knee flexors. Results in a series of 58 patients. Abdennebi B, et al. **Acta Neurochir (Wien)** 1996; 138(8):917–20

Bone marrow capacity for bone cells and trabecular bone turnover in immobilized tibia after sciatic neurectomy in mice. Sakai A, et al. **Bone** 1996 May;18(5):479–86

Time responses of cancellous and cortical bones to sciatic neurectomy in growing female rats. Zeng QQ, et al. **Bone** 1996 Jul;19(1):13–21

Motoneuronal death without expression of NADPH–diaphorase activity after sciatic nerve cut in 5–day–old mice. He BP, et al. **Brain Res** 1996 Sep 9;

733(1):125–8
Timing of c-jun protein induction in lumbar dorsal root ganglia after sciatic nerve transection varies with lesion distance. Kenney AM, et al. **Brain Res** 1997 Mar 14; 751(1):90–5
In vitro laser nerve repair: protein solder strip irradiation or irradiation alone? Trickett I, et al. **Int Surg** 1997 Jan–Mar;82(1):38–41
ADCON-T/N reduces in vivo perineural adhesions in a rat sciatic nerve reoperation model. Palatinsky EA, et al. **J Hand Surg [Br]** 1997 Jun;22(3):331–5
Protective effect of 21-aminosteroid pretreatment in peripheral nerve low-load crush injury in mature and immature rats. Nasser RM, et al. **J Orthop Res** 1996 Sep; 14(5):823–9
Ankle stance angle: a functional index for the evaluation of sciatic nerve recovery after complete transection. Lin FM, et al. **J Reconstr Microsurg** 1996 Apr;12(3):173–7
The histological effect of barrier vein wrapping of peripheral nerves. Ruch DS, et al. **J Reconstr Microsurg** 1996 Jul; 12(5):291–5
Functional evaluation of gap vs. abutment repair of peripheral nerves in the rat. Weber RA, et al. **J Reconstr Microsurg** 1996 Apr;12(3):159–63
Simultaneous treatment with BDNF and CNTF after peripheral nerve transection and repair enhances rate of functional recovery compared with BDNF treatment alone. Lewin SL, et al. **Laryngoscope** 1997 Jul;107(7):992–9
Caudascopic experiences and a new patho-anatomic concept for treatment of sciatica. Beuls EA, et al. **Minim Invasive Neurosurg** 1996 Mar;39(1):4–6
Primary non-Hodgkin's lymphoma of the sciatic nerve followed by localization in the central nervous system: case report and review of the literature. Roncaroli F, et al. **Neurosurgery** 1997 Mar;40(3):618–21; discussion 621–2 (11 ref.)
The role of spinal cord activation before neurectomy in the development of autotomy. Asada H, et al. **Pain** 1996 Jan; 64(1):161–7
Comments on Luo and Wiesenfeld-Hallin (Pain 63 (1995) 173–179) [letter; comment] Katz J. **Pain** 1996 Sep; 67(1):212–4. Comment on: Pain 1995 Nov;63(2):173–9.
Blood flow in mobilized nerves: results in a rabbit sciatic nerve model. Maki Y, et al. **Plast Reconstr Surg** 1997 Sep; 100(3):627–33; discussion 634–5
Midgestational sciatic nerve transection in fetal sheep results in absent nerve regeneration and neurogenic muscle atrophy. Meuli-Simmen C, et al. **Plast Reconstr Surg** 1997 Feb;99(2):486–92
Functional regeneration of C-fibres inside a silicone tube after sciatic neurotomy in rats. Hansson T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar; 31(1):7–11
Bioartificial nerve grafts. A prototype. Lundborg G, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Jun; 30(2):105–10
The role of phospholipase A2 and nitric oxide in pain-related behavior produced by an allograft of intervertebral disc material to the sciatic nerve of the rat. Kawakami M, et al. **Spine** 1997 May 15;22(10):1074–9

TRANSPLANTATION

Immunohistochemical localization of cell adhesion molecules and cell–cell contact proteins during regeneration of the rat optic nerve induced by sciatic nerve autotransplantation. Dezawa M, et al. **Anat Rec** 1996 Sep; 246(1):114–26
The role of Schwann cells during retinal ganglion cell regeneration induced by peripheral nerve transplantation. Dezawa M, et al. **Invest Ophthalmol Vis Sci** 1997 Jun; 38(7):1401–10
Expression of specific tubulin isotypes increases during regeneration of injured CNS neurons, but not after the application of brain-derived neurotrophic factor (BDNF). Fournier AE, et al. **J Neurosci** 1997 Jun 15;17(12):4623–32
Peripheral-nerve allotransplantation in rats immunosuppressed with transient or long-term FK-506. Weinzweig N, et al. **J Reconstr Microsurg** 1996 Oct; 12(7):451–9
Changes occur in the ability to promote axonal regeneration as the post-injury period increases. Houle JD, et al. **Neuroreport** 1997 Feb 10;8(3):751–5
Enhancement of axon growth by detergent-extracted nerve grafts. Dumont CE, et al. **Transplantation** 1997 May 15; 63(9):1210–5

ULTRASTRUCTURE

Reinnervation of cat pacinian corpuscles after nerve crush. Zelená J, et al. **Acta Neuropathol (Berl)** 1997 Mar; 93(3):285–93
Ultrastructure of myelinated fibers of sciatic nerve in acute vincristine intoxication. Maéslińska D, et al. **Folia Neuropathol** 1997;35(1):18–23
An in-frame deletion in peripheral myelin protein-22 gene causes hypomyelination and cell death of the Schwann cells in the new Trembler mutant mice. Suh JG, et al. **Neuroscience** 1997 Aug;79(3):735–44
Ultrastructural co-localization of calmodulin and B-50/growth-associated protein-43 at the plasma membrane of proximal unmyelinated axon shafts studied in the model of the regenerating rat sciatic nerve. Verkade P, et al. **Neuroscience** 1997 Aug;79(4):1207–18
Ultrastructural localization of B-50/growth-associated protein-43 to anterogradely transported synaptophysin-positive and calcitonin gene-related peptide-negative vesicles in the regenerating rat sciatic nerve. Verkade P, et al. **Neuroscience** 1996 Mar; 71(2):489–505
An electron microscopic study of peripheral nerve regeneration with pulsing electromagnetic fields. Ito H, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb;64(1):69–70
Fixed-diameter polyethylene cuffs applied to the rat sciatic nerve induce a painful neuropathy: ultrastructural morphometric analysis of axonal alterations. Mosconi T, et al. **Pain** 1996 Jan;64(1):37–57

SCIATICA

Where does the pain come from? Rydevik BL. **Bull Hosp Jt Dis** 1996;55(4):191–4 (22 ref.)

BLOOD

Fibrinolytical activity in relation to psychological traits in patients with sciatica. Graver V, et al. **Thromb Res** 1997 Feb 15;85(4):363–6

CHEMICALLY INDUCED

Effects of phospholipase A2 on lumbar nerve root structure and function. Chen C, et al. **Spine** 1997 May 15; 22(10):1057–64

CLASSIFICATION

The Quebec Task Force classification for Spinal Disorders and the severity, treatment, and outcomes of sciatica and lumbar spinal stenosis. Atlas SJ, et al. **Spine** 1996 Dec 15; 21(24):2885–92

DIAGNOSIS

Cauda equina tumour presenting as atypical sciatica [letter] Narváez J, et al. **Br J Rheumatol** 1997 May;36(5):605–6
Optimising the image of the intradural nerve root: the value of MR radiculography. Hofman PA, et al. **Neuroradiology** 1996 Oct;38(7):654–7
Sciatic pain and piriformis syndrome. Douglas S. **Nurse Pract** 1997 May;22(5):166–8, 170, 172 passim (18 ref.)
Specificity of diagnostic nerve blocks: a prospective, randomized study of sciatica due to lumbosacral spine disease. North RB, et al. **Pain** 1996 Apr;65(1):77–85
Truncated sciatica as the first manifestation of a fatigue fracture of the sacrum in a young male [letter] Lechevalier D, et al. **Rev Rhum Engl Ed** 1996 Jul–Sep;63(7–8):505 (11 ref.)
A prospective analysis of magnetic resonance imaging findings in patients with sciatica and lumbar disc herniation. Correlation of outcomes with disc fragment and canal morphology. Carragee EJ, et al. **Spine** 1997 Jul 15; 22(14):1650–60
Cyclic sciatica. A manifestation of compression of the sciatic nerve by endometriosis. A case report. Dhôte R, et al. **Spine** 1996 Oct 1;21(19):2277–9

DRUG THERAPY

Epidural steroids for sciatica [letter; comment] McQuay HJ, et al. **Anaesth Intensive Care** 1996 Apr;24(2):284–5. Comment on: Anaesth Intensive Care 1995 Oct;23(5):564–9.
The Cochrane collaboration [letter; comment] Murrell G, et al. **Anaesth Intensive Care** 1996 Apr;24(2):286–7. Comment on: Anaesth Intensive Care 1995 Oct;23(5):564–9.
Epidural corticosteroid injections for sciatica due to herniated nucleus pulposus. Carette S, et al. **N Engl J Med** 1997 Jun 5;336(23):1634–40
Corticosteroid injections for sciatica [letter] Gillies JH, et al. **N Engl J Med** 1997 Oct 23;337(17):1242; discussion 1242–3
Corticosteroid injections for sciatica [letter] Manning DC, et al. **N Engl J Med** 1997 Oct 23;337(17):1242; discussion 1242–3
Corticosteroid injections for sciatica [letter] Raza K. **N Engl J Med** 1997 Oct 23;337(17):1241; discussion 1242–3
Forceful epidural injections for the treatment of lumbosciatic pain with post-operative lumbar spinal fibrosis. Revel M, et al. **Rev Rhum Engl Ed** 1996 Apr;63(4):270–7
[Epidural glucocorticoid injection in lumbago sciatica] Ringsdal VS, et al. **Ugeskr Laeger** 1997 Sep 15; 159(38):5653–7 (40 ref.) (Eng. Abstr.) **(Dan)**
[Caffetin in the treatment of neck pain and lumbago–sciatica] Vornovskaia OV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(4):48–9 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Chymopapain-induced reduction of proinflammatory phospholipase A2 activity and amelioration of neuropathic behavioral changes in an in vivo model of acute sciatica. Sawin PD, et al. **J Neurosurg** 1997 Jun;86(6):998–1006

EPIDEMIOLOGY

Persistent back pain and sciatica in the United States: patient characteristics. Long DM, et al. **J Spinal Disord** 1996 Feb; 9(1):40–58

ETIOLOGY

Piriformis compression causing low back and lower extremity pain [letter; comment] Goldner JL. **Am J Orthop** 1997 May; 26(5):316, 318. Comment on: Am J Orthop 1996 Dec;25(12):819–23.
The piriformis syndrome [see comments] Parziale JR, et al. **Am J Orthop** 1996 Dec;25(12):819–23 (33 ref.). Comment in: Am J Orthop 1997 May;26(5):316, 318.
Giant infiltrating lipoma of the thigh causing sciatica. Hunt JA, et al. **Aust N Z J Surg** 1997 Apr;67(4):225–6
Disc protrusion in the child. Particular features and comparison with neoplasms. Martínez-Lage JF, et al. **Childs Nerv Syst** 1997 Apr;13(4):201–7
Case report: acute radiculopathy due to a haemorrhagic lumbar synovial cyst. Howling SJ, et al. **Clin Radiol** 1997 Jan;52(1):73–4
Piriformis syndrome mimics sural nerve entrapment [letter] Murphy BP. **J Am Podiatr Med Assoc** 1997 Apr;87(4):183–4
Phantom sciatica. A case report. Brown MD, et al. **J Bone Joint Surg Am** 1997 Feb;79(2):252–3
Sciatic neuropathy secondary to intrapelvic migration of an acetabular cup. A case report. Isiklar ZU, et al. **J Bone Joint Surg Am** 1997 Sep;79(9):1395–7
Abnormal colonic position as an explanation for radiculopathy [letter; comment] McPherson SJ, et al. **Lancet** 1997 Jun 14;349(9067):1773. Comment on: Lancet 1997 Mar 22;349(9055):846.
Sciatic pain in a young sportsman [see comments] Merlo IM, et al. **Lancet** 1997 Mar 22;349(9055):846. Comment in: Lancet 1997 Jun 14;349(9067):1773.
Large osteoarthritic bone cyst of the facet joint causing low back pain and sciatica. Shirado O, et al. **Orthopedics** 1997 May;20(5):472–5 (13 ref.)
Sciatica as the first manifestation of a leiomyosarcoma of the buttock. Benyahya E, et al. **Rev Rhum Engl Ed** 1997 Feb;64(2):135–7
Hematocolpos. An unusual cause of sciatica in an adolescent girl. London NJ, et al. **Spine** 1996 Jun 1;21(11):1381–2
Degree of disc disruption and lower extremity pain. Ohnmeiss DD, et al. **Spine** 1997 Jul 15;22(14):1600–5
[Cyst of the lumbar posterior longitudinal ligament. An unusual cause of non-discal sciatica] Barea D, et al. **J Radiol** 1996 Aug;77(8):579–81 (Eng. Abstr.) **(Fre)**
[Intramuscular myxoma. Apropos of two cases] Kamoun N, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997; 83(3):278–82 (Eng. Abstr.) **(Fre)**
[Sciatica caused by avulsion of the vertebral limbus in children] Liquois F, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(3):210–6 (Eng. Abstr.) **(Fre)**
[Sciatialgia and scapulalgia disclosing endometriosis (letter)] Reis J. **Rev Neurol (Paris)** 1997 May;153(4):282 **(Fre)**
[Differential sciatica pain diagnosis from the neurologic viewpoint] Lindner A, et al. **Med Klin** 1997 Jun 15; 92(6):335–43 (83 ref.) (Eng. Abstr.) **(Ger)**
[Sacral intradural arachnoid cysts as the cause of lumbar syndrome] Russegger L, et al. **Nervenarzt** 1996 Dec; 67(12):1030–3 (Eng. Abstr.) **(Ger)**
[The mechanisms of pain in root compression] Karlov VA. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(3):4–6 (Eng. Abstr.) **(Rus)**
[Adolescent with acute sciatica and fever] Gómez-Carrasco JA, et al. **An Esp Pediatr** 1996 Sep;45(3):313–4 **(Spa)**
[Chronic pain simulating lumbago/sciatica as the initial manifestation of multiple sclerosis (letter)] Gómez Rodríguez N, et al. **An Med Interna** 1996 Jul;13(7):353–4 **(Spa)**
[Synovial cyst in the lumbar facet joint. A rare cause of lumbar-sciatic pain] Villas C, et al. **Rev Med Univ Navarra** 1997 Apr–Jun;41(2):32–5 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Spinal epidural abscess: an unusual cause of sciatica. Kotilainen E, et al. **Eur Spine J** 1996;5(3):201–3

PHYSIOPATHOLOGY

Altered lower limb vascular perfusion in patients with sciatica secondary to disc herniation. Maigne JY, et al. **Spine** 1996 Jul 15;21(14):1657–60
P1-latency interroot comparison enhances the validity of scalp-recorded somatosensory-evoked potentials to diagnose nerve root dysfunction in sciatica. Pape E, et al. **Spine** 1997 Apr 1;22(7):798–807

PSYCHOLOGY

Chymopapain-induced reduction of proinflammatory phospholipase A2 activity and amelioration of neuropathic behavioral changes in an in vivo model of acute sciatica. Sawin PD, et al. **J Neurosurg** 1997 Jun;86(6):998–1006
Fibrinolytical activity in relation to psychological traits in patients with sciatica. Graver V, et al. **Thromb Res** 1997 Feb 15;85(4):363–6

RADIOGRAPHY

P1-latency interroot comparison enhances the validity of scalp-recorded somatosensory-evoked potentials to diagnose nerve root dysfunction in sciatica. Pape E, et al. **Spine** 1997 Apr 1;22(7):798–807

SURGERY

Painless lumbar surgery: morphine nerve paste. Needham CW. **Conn Med** 1996 Mar;60(3):141–3

Severe sciatica: a 13–year follow–up of 342 patients. Nykvist F, et al. **Eur Spine J** 1995;4(6):335–8

Doppler color imaging recognition of CSF leakages after spinal surgery. Meuwly JY, et al. **J Clin Ultrasound** 1996 Mar–Apr;24(3):151–3

Evaluation of outcome following lumbar discectomy. Taylor L, et al. **N Z Med J** 1996 Oct 25;109(1032):398–400

Percutaneous radiofrequency rhizotomy of lumbar spinal facets: the results of 46 cases. Göçer AI, et al. **Neurosurg Rev** 1997;20(2):114–6

Lumbar spinal surgery for sciatica due to intervertebral disc disease in the elderly. Kulali A, et al. **Neurosurg Rev** 1996; 19(3):157–62

A prospective analysis of magnetic resonance imaging findings in patients with sciatica and lumbar disc herniation. Correlation of outcomes with disc fragment and canal morphology. Carragee EJ, et al. **Spine** 1997 Jul 15; 22(14):1650–60

Degree of disc disruption and lower extremity pain. Ohnmeiss DD, et al. **Spine** 1997 Jul 15;22(14):1600–5

Minimally invasive disc surgery. Nucleotomy versus fragmentectomy. Onik GM, et al. **Spine** 1997 Apr 1; 22(7):827–8; discussion 828–30 (6 ref.)

Dorsal root ganglionectomy for intractable monoradicular sciatica. A series of 61 patients. Taub A, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):106–10

THERAPY

Application of outcomes research in occupational low back pain: the Maine Lumbar Spine Study. Atlas SJ, et al. **Am J Ind Med** 1996 Jun;29(6):584–9

The disc at risk in athletes: perspectives on operative and nonoperative care. Young JL, et al. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S222–32 (74 ref.)

Methods used to develop clinical guidelines in France. The example of common lumbosciatic syndrome. Schott AM, et al. **Rev Rhum Engl Ed** 1996 Dec;63(11):830–6

The Main Lumbar Spine Study, Part II. 1–year outcomes of surgical and nonsurgical management of sciatica. Atlas SJ, et al. **Spine** 1996 Aug 1;21(15):1777–86

Maine lumbar spine study [letter; comment] Keller R, et al. **Spine** 1997 Feb 15;22(4):463–4. Comment on: Spine 1996 Aug 1;21(15):1787–94; discussion 1794–5.

The Maine Lumbar Spine Study, Part I. Background and concepts. Keller RB, et al. **Spine** 1996 Aug 1;21(15):1769–76

SCID see **SEVERE COMBINED IMMUNODEFICIENCY**

SCID–HU MICE see **MICE, SCID**

SCID MICE see **MICE, SCID**

SCIENCE

see related

RELIGION AND SCIENCE

How does one write satire in Rome? A reply from the editors [letter] Babor TF, et al. **Addiction** 1996 Dec;91(12):1877–9

"Good guys" versus "bad guys" in scientific inquiry [letter; comment] Chafetz ME. **Addiction** 1996 Dec;91(12):1875–6 . Comment on: Addiction 1996 Jan;91(1):5–9.

Alcohol advertising in France [letter; comment] Dubois G. **Addiction** 1996 Dec;91(12):1870. Comment on: Addiction 1996 Jan;91(1):5–9.

Political and economic influences on alcohol–related science: some considerations [letter] Fillmore KM. **Addiction** 1996 Dec;91(12):1872–5

The drinks industry dilemma [letter; comment] Hawks D. **Addiction** 1996 Dec;91(12):1869. Comment on: Addiction 1996 Jan;91(1):5–9.

The drinks industry and alcohol research [letter; comment] Mosher JF. **Addiction** 1996 Dec;91(12):1871–2. Comment on: Addiction 1996 Jan;91(1):5–9.

A personal note from a retiring president [letter; comment] Turner TB. **Addiction** 1996 Dec;91(12):1876–7. Comment on: Addiction 1996 Jan;91(1):5–9.

Is there a need to change the American diet? Dwyer J. **Adv Exp Med Biol** 1996;401:189–98 (48 ref.)

Toxic torts: are they poisoning the scientific literature? [comment] Enterline PE. **Am J Ind Med** 1996 Jul; 30(1):121–2. Comment on: Am J Ind Med 1995 Apr;27(4):593–606.

Science as an ally of practice. Seligman ME. **Am Psychol** 1996 Oct;51(10):1072–9

The three dimensions in medicine: science, art and ethics. Chao TC. **Ann Acad Med Singapore** 1995 Nov;24(6):919–20

Truth, science, and the oncologist. Norton L. **Ann N Y Acad Sci** 1997 Feb 20;809:66–71

Doctor in the lab: what is it like for a doctor to work with scientists? Jorm CM, et al. **BMJ** 1996 Oct 5;313(7061):867–9

Questioning science: how knowledge is socially constructed. Thorogood N. **Br Dent J** 1997 Sep 13;183(5):152–5 (38 ref.)

Political science. Harris RF. **Curr Biol** 1997 Apr 1;7(4):R204

Geographic mobility of scientists: sex differences and family constraints. Shauman KA, et al. **Demography** 1996 Nov; 33(4):455–68

Decisions are only as good as the information considered [editorial] Hook GE. **Environ Health Perspect** 1996 Feb; 104(2):130

The science of today is the clinical practice of tomorrow. Yamada T. **Gastroenterology** 1997 Sep;113(3):1026–30

Atheoretical science: a response to the poverty of popperian epidemiology [letter; comment] Cole SR. **Int J Epidemiol** 1996 Aug;25(4):899–900. Comment on: Int J Epidemiol 1995 Oct;24(5):869–74.

Ethical and unethical conduct in psychoanalysis. Correlations between logic, ethics and science. Klimovsky G, et al. **Int J Psychoanal** 1995 Oct;76 (Pt 5):977–89

Schizophrenic patients fare badly in the company of scientists [editorial] Clarke L. **J Adv Nurs** 1997 Mar;25(3):429–30

Method as madness science, hermeneutics, and art in psychoanalysis. Wax ML. **J Am Acad Psychoanal** 1995 Winter;23(4):525–43

Is psychoanalysis one science, two sciences, or no science at all? A discourse among friendly antagonists. Shevrin H. **J Am Psychoanal Assoc** 1995;43(4):963–1049

Scientific data–exchange in periodontology via Internet. Spallek H, et al. **J Clin Periodontol** 1996 May;23(5):497–504

Scientific knowledge in medicine: a new clinical epistemology? Marshall T. **J Eval Clin Pract** 1997 Apr; 3(2):133–8 (16 ref.)

A Popperian perspective of the term 'evidence–based medicine'. Shahar E. **J Eval Clin Pract** 1997 Apr; 3(2):109–16 (31 ref.)

Lies, damn lies, and statistics [editorial; comment] Manske PR. **J Hand Surg [Am]** 1997 May;22(3):375. Comment on: J Hand Surg [Am] 1997 May;22(3):376–85.

Eleventh Nathalie Barr Lecture. The source of our strength. Evans RB. **J Hand Ther** 1997 Jan–Mar;10(1):14–23

The magic of science and the science of magic: an essay on the process of healing. Coe RM. **J Health Soc Behav** 1997 Mar;38(1):1–8 (47 ref.)

Commentary: purpose–straight chiropractic: not science, not health care [letter] Gentile JM. **J Manipulative Physiol Ther** 1996 Jan;19(1):61–3

Science and clinical medicine: a marriage made in heaven? Luft FC. **J Mol Med** 1996 Jun;74(6):283–4

A pragmatic primer ... lessons from natural science for the profession of dentistry. Nash DA. **J Public Health Dent** 1996;56(5 Spec No):291–300 (25 ref.)

Reductionism [letter] Fisken RA. **J R Soc Med** 1997 Aug; 90(8):471

Medical scientism: good practice or fatal error? Leggett JM. **J R Soc Med** 1997 Feb;90(2):97–101

Medical scientism [letter] Scadding JG. **J R Soc Med** 1997 May;90(5):298

Where's the evidence? Putting clinical science into pediatric rheumatology [editorial] Feldman BM, et al. **J Rheumatol** 1996 Sep;23(9):1502–4

The when and how of advocacy [editorial] [see comments] **Lancet** 1997 Mar 29;349(9056):891. Comment in: Lancet 1997 May 31;349(9065):1630.

Country profile. France. Colin C, et al. **Lancet** 1997 Mar 15;349(9054):791–7

Country profile: United Kingdom. Jewell T, et al. **Lancet** 1997 Jul 5;350(9070):48–58

The when and how of advocacy [letter; comment] Round A. **Lancet** 1997 May 31;349(9065):1630. Comment on: Lancet 1997 Mar 29;349(9056):891.

Country profile: Germany [see comments] Selbmann HK, et al. **Lancet** 1996 Dec 14;348(9042):1631–9. Comment in: Lancet 1997 Feb 15;349(9050):508.

Science in a health service. Swales JD. **Lancet** 1997 May 3;349(9061):1319–21

Reconfiguring nature and culture: intersections of medical anthropology and technoscience studies. Casper MJ, et al. **Med Anthropol Q** 1996 Dec;10(4):523–36 (64 ref.)

The place of science in the health professions. Bloom SW. **Med Educ** 1995;29 Suppl 1:76–8

Basic sciences in problem–based learning and conventional curricula: students' attitudes. Kaufman DM, et al. **Med Educ** 1997 May;31(3):177–80

The scope of medical informatics as art and science [editorial] Kulikowski CA. **Methods Inf Med** 1996 Sep;35(3):185–8

Language, gender and science. Keller EF. **Microbiologia** 1996 Mar;12(1):127–30

The ins and outs of scientific writing. Luttikhuizen F. **Microbiologia** 1996 Sep;12(3):477–80

On science and the soul [editorial] Meyer C. **Minn Med** 1996 Dec;79(12):2

Reductionist science and Alzheimer's disease: redoubling our effort in redox chemistry [news] Wolozia B. **Mol Psychiatry** 1996 Nov;1(5):352–5

The Howard Hughes Medical Institute and science in Central Europe, the Baltics and the former Soviet Union. Choppin PW. **Nat Med** 1997 Sep;3(9):949–50

Collisions between science and media [editorial] **Nature** 1996 Oct 31;383(6603):745

Flawed understanding of the scientific process [editorial] **Nature** 1997 Aug 14;388(6643):607

Voice of US science struggles to be heard [news] Macilwain C. **Nature** 1997 Jan 2;385(6611):10–1

The scope of gene therapy in humans: scientific, safety and ethical considerations. Karpati G, et al. **Neuromuscul Disord** 1997 Jul;7(5):273–6 (30 ref.)

Fostering science and science careers. Frazier DT. **Physiologist** 1997 Aug;40(4):133, 139–40

Belief and believe: seeking scientific truths that underlie the art of physiotherapy [editorial] Wolf SL. **Physiother Res Int** 1996;1(4):iv–vi

Science, technology, and economic growth. Pakes A, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12655–7

Changes in science and changing ideas about knowledge and authority in psychoanalysis. Mayer EL. **Psychoanal Q** 1996 Jan;65(1):158–200

The role of objective science in policy development: evidence versus conjecture. Gori GB. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 2):S3–7

[Medicine versus science of healing (letter)] van Werven HL. **Tijdschr Diergeneeskd** 1997 Apr 1;122(7):192 **(Dut)**

[20 years of progress in dissecting mechanisms of oncogenesis. Relations between magic of science and requirements of medicine (editorial)] Janin N. **Presse Med** 1996 Nov 16;25(35):1669–71 (Eng. Abstr.) **(Fre)**

[Inaugural conference given on the occasion of the Revue d'Epidémiologie et de Santé Publique 20th anniversary on the theme: how does a disease become a public health problem?] Touraine A. **Rev Epidemiol Sante Publique** 1997 Jun;45(3):185–91 **(Fre)**

[Science in anatomy or anatomy in science?] Zilles K. **Anat Anz** 1996 Aug;178(4):305–8 **(Ger)**

[Axioms of systematic progress in medicine] Bauer AW. **Internist (Berl)** 1997 Apr;38(4):299–306 (42 ref.) **(Ger)**

[Reading German—writing English. Specialty periodicals between science, citation index and economic aspects (editorial)] Finzen A, et al. **Psychiatr Prax** 1996 Jan; 23(1):1–3 **(Ger)**

[Medicine and science during the nazi occupation (editorial)] Fleck A. **Harefuah** 1997 Jan 15;132(2):91–2 **(Heb)**

[Laws, principles, and theory of natural sciences] Federici A. **Boll Soc Ital Biol Sper** 1996 Nov–Dec;72(11–12 Suppl):23–9 **(Ita)**

[Scientific publication triad] Forattini OP. **Rev Saude Publica** 1996 Feb;30(1):3–12 (Eng. Abstr.) **(Por)**

[Science and the university. Both need more attention] Krauskopf M, et al. **Arch Biol Med Exp (Santiago)** 1987; 20(3–4):283–94 (Eng. Abstr.) **(Spa)**

[The future of the sciences–industry interaction] Gil A. **Arch Latinoam Nutr** 1994 Dec;44(4 Suppl 2):67S–74S **(Spa)**

[Latin American science form the clinical perspective (editorial)] Allende JE. **Microbiologia** 1997 Jun; 13(2):127–30 **(Spa)**

[Science in Latin America (editorial)] Ayala FJ. **Microbiologia** 1996 Jun;12(2):163–6 **(Spa)**

[Latin American journals: a grain of sand in universal science] Cetto AM. **Microbiologia** 1996 Dec;12(4):647–50 **(Spa)**

[A candle in the dark] Guerrero R. **Microbiologia** 1997 Jun; 13(2):237–42 **(Spa)**

[Scientific publications in Spanish (letter; comment) (see comments)] Castaño C. **Rev Neurol** 1996 Oct;24(134):1307 . Comment on: Rev Neurol 1996 May;24(129):505. Comment on: Rev Neurol 1996 May;24(129):506. Comment in: Rev Neurol 1996 Oct;24(134):1307–8. **(Spa)**

[The concept of "authorship" in scientific journals. Letter] Matías–Guiu J. **Rev Neurol** 1997 Feb;25(138):314 **(Spa)**

ECONOMICS

Show me the science—a cautionary tale [editorial] Wise GE. **Clin Anat** 1997;10(5):365–6

Measuring science: an exploration. Adams J, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12664–70

Selling science: at what price? [news] Lawler A. **Science** 1997 Jan 17;275(5298):296–7

EDUCATION

A successful university–school–district partnership to help San Francisco's K–12 students learn about science and medicine. Clark MR. **Acad Med** 1996 Sep;71(9):950–6

The need for premedical curricular reform [letter] Imperato PJ. **Acad Med** 1997 Sep;72(9):734–5

Elementary school students' attitudes toward science and their course of studies in high school. Shamai S. **Adolescence** 1996 Fall;31(123):677–89

A quarter–long exercise that introduces general education students to neurophysiology and scientific writing. Krilowicz BI, et al. **Am J Physiol** 1997 Jun;272(6 Pt 3):S19–25

Philosophy of science and physiology education. Refinetti R. **Am J Physiol** 1997 Jun;272(6 Pt 3):S31–5 (30 ref.)

A new PhD training track: a proposal to improve basic science teaching. Smith JJ, et al. **Am J Physiol** 1997 Jun; 272(6 Pt 3):S36–46 (45 ref.)

Problem–based learning: what is it? What is it not? What about the basic sciences? de Goeij AF. **Biochem Soc Trans** 1997 Feb;25(1):288–93

Problem–based biochemistry seminars complement, but do not replace, lectures. Jervis L, et al. **Biochem Soc Trans** 1997 Feb;25(1):1S

Making more minority scientists [news] Claudio L. **Environ Health Perspect** 1997 Feb;105(2):174–6

Striving to be the best [news] Nicholas D. **Environ Health Perspect** 1997 Feb;105(2):176–7

Modifications to the problem–based learning (PBL) curriculum increase opportunities for learning basic sciences. Tam LQ. **Hawaii Med J** 1997 Mar;56(3):54, 56–7

Effects of response cards during lesson closure on the

academic performance of secondary students in an earth science course. Cavanaugh RA, et al. **J Appl Behav Anal** 1996 Fall;29(3):403–6

Introduction to the symposium Science Education and Dentistry: Improving the Connection. Baum BJ. **J Dent Educ** 1997 May;61(5):405–6

Science and the shifting paradigm in dental education. Greene JC. **J Dent Educ** 1997 May;61(5):407–11

Assessment of preclinical problem-based learning versus lecture-based learning. Login GR, et al. **J Dent Educ** 1997 Jun;61(6):473–9

Making science clinically relevant. Valachovic RW. **J Dent Educ** 1997 May;61(5):434–6

Student expectancies and academic self-concept as predictors of science achievement. House JD. **J Psychol** 1996 Nov; 130(6):679–81

First, teach the teachers [letter] Kirkman J. **Nature** 1996 Nov 7;384(6604):20

Animal rights: teaching or deceiving kids [editorial] Runkle D, et al. **Science** 1997 Sep 5;277(5331):1419

[The status of science in higher education in the Czech Republic] Trojan S. **Cesk Fysiol** 1997 Jun;46(2):68 **(Cze)**

HISTORY

Welcoming remarks about the Janus phenomenon in science. Esaki L. **Cell Mol Biol (Noisy-le-grand)** 1997 May; 43(3):257–61

Science and food during the Great War: Britain and Germany. Teich M. **Clio Med** 1995;32:213–34

Heredity, intelligence and neuropsychology; or, why The Bell Curve is good science. Weidman N. **J Hist Behav Sci** 1997 Spring;33(2):141–4

William Small 1734–1775: no publications, much influence. Hull G. **J R Soc Med** 1997 Feb;90(2):102–5

Eighteen-ninety-seven and all that. Heilbron JL, et al. **Nature** 1997 Jan 2;385(6611):13–6

A revolutionary philosopher of science [editorial] Hull DL. **Nature** 1996 Jul 18;382(6588):203–4

[From animal automatons to scientific questioning—reflections on the development of veterinary medicine in the 18th century] Frey G. **Berl Munch Tierarztl Wochenschr** 1996 Feb;109(2):64–8 (Eng. Abstr.) **(Ger)**

[75 years Swiss Society of History of Medicine and Natural Sciences (editorial)] Bickel MH. **Gesnerus** 1996; 53(3–4):165–74 **(Ger)**

[Ivan Mikhallovich Sechenov on the history and organization of science] Grigor'ian N. **Fiziol Zh Im I M Sechenova** 1996 May–Jun;82(5–6):132–5 **(Rus)**

[Scientific fallacies in medicine (the historical aspect)] Arkhangel'skii GV. **Probl Sotsialnoi Gig Istor Med** 1996 Sep–Oct;(5):35–7 **(Rus)**

[The scientists of the 2nd Leningrad Medical institute in the years of the Great Patriotic War (1941–1945)] Shabrov AV. **Probl Sotsialnoi Gig Istor Med** 1994 Jul–Aug;(4):46–8 **(Rus)**

[The origin of scientific academies] de Micheli A. **Arch Inst Cardiol Mex** 1997 Jan–Feb;67(1):67–72 **(Spa)**

[The development of cardiology in the evolution of scientific thinking] de Micheli A. **Arch Inst Cardiol Mex** 1996 Jul–Aug;66(4):370–6 **(Spa)**

[Ways of doing science] Guerrero R. **Microbiologia** 1996 Mar; 12(1):131–6 **(Spa)**

LEGISLATION & JURISPRUDENCE

[Physicians' and scientists' relations with the press] Boustany FN. **J Med Liban** 1996;44(4 Suppl):S28–30 **(Fre)**

MANPOWER

Making more minority scientists [news] Claudio L. **Environ Health Perspect** 1997 Feb;105(2):174–6

Fixing the leaky pipeline: women scientists in academia. Pell AN. **J Anim Sci** 1996 Nov;74(11):2843–8 (30 ref.)

METHODS

Subjectivity and intersubjectivity of clinical facts. Mayer EL. **Int J Psychoanal** 1996 Aug;77 (Pt 4):709–37

Scientific credibility requires complete presentation of methods [editorial] Buckwalter JA, et al. **J Orthop Res** 1997 Mar;15(2):161

ORGANIZATION & ADMINISTRATION

[Toward a national system on science and technology] Cilento-Sarli A. **Acta Cient Venez** 1994;45(3):173–7 (Eng. Abstr.) **(Spa)**

STANDARDS

Public science and norms of truthfulness. Guenin LM. **Camb Q Healthc Ethics** 1996 Summer;5(3):325–33

Epidemiology as a toolkit for clinical scientists [comment] Charlton BG. **Epidemiology** 1997 Jul;8(4):461–3. Comment on: Epidemiology 1997 Jul;8(4):459–61.

Epidemiology, clinical science, and beyond [comment] [see comments] Diez-Roux AV, et al. **Epidemiology** 1997 Jul; 8(4):459–61. Comment on: Epidemiology 1996 Sep;7(5):552–4. Comment in: Epidemiology 1997 Jul;8(4):461–3.

The uses and abuses of meta-analysis [see comments] Charlton BG. **Fam Pract** 1996 Aug;13(4):397–401 (26 ref.) . Comment in: Fam Pract 1997 Feb;14(1):90. Comment in: Fam Pract 1997 Feb;14(1):90–1.

On evidence, embellishment and efficacy. Morgan WK. **J Eval Clin Pract** 1997 Apr;3(2):117–22 (12 ref.)

[The challenges to science in Latin America (editorial)] Lazcano A. **Microbiologia** 1997 Mar;13(1):7–10 **(Spa)**

[Considerations around science as a cultural product] Reguant S. **Microbiologia** 1997 Mar;13(1):95–100 **(Spa)**

STATISTICS & NUMERICAL DATA

[Indicators of scientific activity] López Piñero JM. **Microbiologia** 1996 Sep;12(3):469–72 **(Spa)**

TRENDS

Science and knowledge in a changing world. de la Fuente JR. **Arch Med Res** 1997 Spring;28(1):1–3

Science and medicine at the millennium. Kornberg A. **Biochem Mol Med** 1997 Aug;61(2):121–6

Show me the science—a cautionary tale [editorial] Wise GE. **Clin Anat** 1997;10(5):365–6

The flight from science and common sense. Massey RU. **Conn Med** 1997 Aug;61(8):501

The enemy within. My word. Insall R. **Curr Biol** 1997 Feb 1;7(2):R59

Reflections from distant cuvettes. Vesell ES. **Drug Metab Rev** 1996 Nov;28(4):493–511 (32 ref.)

Quite right, Mrs Crick [editorial] **Lancet** 1997 May 17; 349(9063):1407

Measuring science: an exploration. Adams J, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12664–70

Science, imaginable risks, and public policy: anatomy of a mirage. Gori GB. **Regul Toxicol Pharmacol** 1996 Jun; 23(3):304–11 (41 ref.)

Basic science is the fuel that drives the engine of biotechnology: a personal science transfer vision for the 21st century. Slavkin HC. **Technol Health Care** 1996 Sep; 4(3):249–53

[Contributions of science to transitions in public health—the perspective of the Federal Public Health Ministry] Fälker M. **Gesundheitswesen** 1997 Apr;59(4):217–22 **(Ger)**

[Science entails responsibility. Opening address of the president of the 103rd Congress of the German Society of Internal Medicine, Wiesbaden, 6 April 1997] Köbberling J. **Med Klin** 1997 Apr 15;92(4):181–9 **(Ger)**

[On the reductionism of sciences] Chuaqui B. **Rev Med Chil** 1995 Oct;123(10):1306–12 (Eng. Abstr.) **(Spa)**

SCIENTIFIC INTEGRITY REVIEW [Publication Type]

Findings of scientific misconduct [comment] **NIH Guide Grants Contracts** 1996 Jul 5;25(22):2–3. Comment on: J Exp Med 1989 Dec 1;170(6):2183–8. Comment on: Proc Natl Acad Sci U S A 1990 Feb;87(4):1337–41. Comment on: J Exp Med 1990 Sep 1;172(3):1005. Comment on: Proc Natl Acad Sci U S A 1991 Aug 1;88(15):6899.

Findings of scientific misconduct [comment] **NIH Guide Grants Contracts** 1997 May 9;26(15):2–3. Comment on: Biochem Biophys Res Commun 1991 Feb 28;175(1):244–9. Comment on: J Mol Biol 1992 Apr 20;224(4):1185–93.

SCIENTIFIC MISCONDUCT

see related
DUPLICATE PUBLICATION
PLAGIARISM
UNITED STATES OFFICE OF RESEARCH INTEGRITY

Advice to individuals involved in misconduct accusations. Friedman PJ. **Acad Med** 1996 Jul;71(7):716–23

The logical geography of concepts and shared responsibilities concerning research misconduct. Guenin LM. **Acad Med** 1996 Jun;71(6):595–603

The misconduct of redundant publication [editorial; comment] Doherty M. **Ann Rheum Dis** 1996 Nov; 55(11):783–5. Comment on: Ann Rheum Dis 1996 Nov;55(11):794–5.

Misconduct in research: editors respond [editorial] Smith R. **BMJ** 1997 Jul 26;315(7102):201–2

Karolinska professor broke research rules [news] Wise J. **BMJ** 1997 Sep 6;315(7108):563

Fraud and misconduct in medical research. Wells F. **Br J Clin Pharmacol** 1997 Jan;43(1):3–7

Distribution of sodium channels in chronically demyelinated spinal cord axons: immunoultrastructural localization and electrophysiological observations. Brain Research 544 (1991) 59–70 [letter; comment] Black JA, et al. **Brain Res** 1997 Jun 27;761(1):1. Comment on: Brain Res 1991 Mar 22;544(1):59–70.

Alternative dispute resolution and research misconduct. Guenin LM. **Camb Q Healthc Ethics** 1997 Winter;6(1):72–7

The clinical investigator as target. Hershey N. **Control Clin Trials** 1996 Jun;17(3):183–90

Case of plagiarism. Work originating from Denmark, translated into Polish and published in a Polish journal. Four Polish scientists guilty of scientific dishonesty. The Danish Committee on Scientific Dishonesty [comment] **Dan Med Bull** 1996 Sep;43(4):367. Comment on: Przegl Lek 1992;49(9):292–3.

Research misconduct [editorial] Farthing MJ. **Gut** 1997 Jul; 41(1):1–2

Scientific misconduct. Ill-defined, redefined. Palca J. **Hastings Cent Rep** 1996 Sep–Oct;26(5):4

Fabricated data [letter; comment] Clayton GM, et al. **Int J Aging Hum Dev** 1996;42(3):249–50. Comment on: Int J Aging Hum Dev 1992;34(1):19–30. Comment on: Int J Aging Hum Dev 1992;34(1):31–46. Comment on: Int J Aging Hum Dev 1992;34(1):47–56. Comment on: Int J Aging Hum Dev 1992;34(1):57–76. Comment on: Int J Aging Hum Dev 1994;38(1):65–89.

Time to get down and dirty in defining misconduct [editorial; comment] Caplan AL. **J Lab Clin Med** 1997 Feb; 129(2):172–3. Comment on: J Lab Clin Med 1997 Feb;129(2):189–92.

Truth, fairness, and the definition of scientific misconduct [see comments] Grinnell F. **J Lab Clin Med** 1997 Feb; 129(2):189–92. Comment in: J Lab Clin Med 1997 Feb;129(2):172–3.

Do we need a research police? [editorial; comment] Jacobsen G. **J R Coll Physicians Lond** 1997 Jan–Feb;31(1):8–9. Comment on: J R Coll Physicians Lond 1997 Jan–Feb;31(1):90–4.

Fraud in medical research [see comments] Lock S. **J R Coll Physicians Lond** 1997 Jan–Feb;31(1):90–4. Comment in: J R Coll Physicians Lond 1997 Jan–Feb;31(1):8–9. Comment in: J R Coll Physicians Lond 1997 Mar–Apr;31(2):223.

Improving the scientific misconduct hearing process. Parrish DM. **JAMA** 1997 Apr 23–30;277(16):1315–9

Will the UK cope? Horton R. **Lancet** 1997 Jul 26; 350(9073):234

The code of silence. Wilmshurst P. **Lancet** 1997 Feb 22; 349(9051):567–9

Publishing and protecting patient confidentiality [editorial] Van der Weyden MB. **Med J Aust** 1997 Mar 3;166(5):230–1

A lesson on preparedness [editorial] **Nature** 1997 Jun 19; 387(6635):743

AIDS 'cure' researchers guilty of misconduct [news] **Nature** 1997 Jul 10;388(6638):112

Fraud claims shake German complacency [news] Abbott A. **Nature** 1997 Jun 19;387(6635):750

Forged images lead to German inquiry [news] Abbott A. **Nature** 1997 May 29;387(6632):442

Nobel laureates face libel suits from 'water memory' researcher [news] Butler D. **Nature** 1997 Oct 2; 389(6650):427

Karolinska Institute disowns work of cancer researcher [news] Butler D. **Nature** 1997 Aug 28;388(6645):816

Harvard faces questions on missing data [news] Dalton R. **Nature** 1997 Mar 20;386(6622):206

Heat rises over UCSD 'misconduct' charge [news] Dalton R. **Nature** 1997 Feb 13;385(6617):566

Collins' student sanctioned over 'most severe' case of fraud [news] Dalton R. **Nature** 1997 Jul 24;388(6640):313

Baylor backed over 'falsified data' claims [news] Dalton R. **Nature** 1997 Apr 24;386(6627):747

'Whistleblowers face blast of hostility' [news] Macilwain C. **Nature** 1997 Feb 20;385(6618):669

'Ambition and impatience' blamed for fraud [news] Macilwain C. **Nature** 1996 Nov 7;384(6604):6–7

Scientists 'too quick' to back claims [news] [see comments] Nadis S. **Nature** 1996 Nov 7;384(6604):6. Comment in: Nature 1997 Mar 13;386(6621):114.

Passing the buck [letter; comment] Sagar A, et al. **Nature** 1997 Mar 13;386(6621):114. Comment on: Nature 1996 Nov 7;384(6604):6.

Findings of scientific misconduct [comment] **NIH Guide Grants Contracts** 1997 May 9;26(15):2–3. Comment on: Biochem Biophys Res Commun 1991 Feb 28;175(1):244–9. Comment on: J Mol Biol 1992 Apr 20;224(4):1185–93.

Findings of scientific misconduct [comment] **NIH Guide Grants Contracts** 1996 Jul 5;25(22):2–3. Comment on: J Exp Med 1989 Dec 1;170(6):2183–8. Comment on: Proc Natl Acad Sci U S A 1990 Feb;87(4):1337–41. Comment on: J Exp Med 1990 Sep 1;172(3):1005. Comment on: Proc Natl Acad Sci U S A 1991 Aug 1;88(15):6899.

Perceptions of scientific misconduct in nursing. Rankin M, et al. **Nurs Res** 1997 Sep–Oct;46(5):270–6

Misrepresentation of sleep-laboratory dream research with children. Foulkes D. **Percept Mot Skills** 1996 Aug; 83(1):205–6

Fraud and trust in science. Fuchs S, et al. **Perspect Biol Med** 1996 Winter;39(2):248–69

Conduct of an internal review as part of the Application Integrity Policy. Hirsch AF, et al. **Qual Assur** 1995 Dec; 4(4):375–80

ORI's self-assessment: a batting average of .920? [news] Friedly J. **Science** 1997 Feb 28;275(5304):1255

Swift justice salvages reputations [news] Kaiser J. **Science** 1996 Oct 18;274(5286):338

Allegations prompt debate in Germany [news] Koenig R. **Science** 1997 Jul 11;277(5323):172

Panel calls falsification in German case 'unprecedented' [news] Koenig R. **Science** 1997 Aug 15;277(5328):894

Fraud strikes top genome lab [news] Marshall E. **Science** 1996 Nov 8;274(5289):908–10

Misconduct annotations [letter] Pascal CB. **Science** 1996 Nov 15;274(5290):1066–7

[Scientific misconduct. A committee and its function] Andersen D. **Ugeskr Laeger** 1997 Jul 7;159(28):4405–6 **(Dan)**

[Scientific misconduct] Mäkelä PH. **Duodecim** 1995; 111(19):1851–3 (8 ref.) **(Fin)**

[Good practice is a means for preventing fraud in clinical research] Maisonneuve H. **Rev Med Interne** 1996; 17(10):846–51 (Eng. Abstr.) **(Fre)**

["Doping control" may prevent scientific fraud. Scrutinize the raw material for articles and lectures before publication] Hovelius L, et al. **Lakartidningen** 1997 Aug 6; 94(32–33):2711–3 **(Swe)**

HISTORY

Re-reconsidering Burt: beyond a reasonable doubt. Tucker WH. **J Hist Behav Sci** 1997 Spring;33(2):145–62

Something up Dawson's sleeve? [letter; comment] Dempster WJ. **Nature** 1996 Jul 18;382(6588):202. Comment on: Nature 1996 May 23;381(6580):261–2.

Haeckel's embryos: fraud rediscovered [news] Pennisi E. **Science** 1997 Sep 5;277(5331):1435

LEGISLATION & JURISPRUDENCE

Cardiologist admits research misconduct [news] Dyer C. **BMJ** 1997 May 24;314(7093):1501

Giving scientists their due. The Imanishi-Kari decision. Dresser R. **Hastings Cent Rep** 1997 May–Jun;27(3):26–8

Extracting the teeth from the False Claims Act. Walter C, et al. **IEEE Eng Med Biol Mag** 1997 May–Jun;16(3):93–5

Fraud in medical research [letter; comment] Wells F. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):223. Comment on: J R Coll Physicians Lond 1997 Jan–Feb;31(1):90–4.

Fraud and misconduct in medical research. Lock S. **Med Leg J** 1996;64 (Pt 4):139–52

'Misconduct' dispute raises fears of litigation [news] Dalton R. **Nature** 1997 Jan 9;385(6612):105

Gene therapist accused of fraud to seek redress in German court [news] Schiermeier Q. **Nature** 1997 Sep 11; 389(6647):105

The False Claims Act: litigating scientific misconduct II. Sherman S. **Public Health Rep** 1997 May–Jun;112(3):248

Science, integrity, and investigators' rights: current challenges. Daniell WE. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 2):S152–62 (72 ref.)

The 'Gallo case': Popovic strikes back [news] Kaiser J. **Science** 1997 Feb 14;275(5302):920–1

$1.6 million fraud award overturned [news] Kaiser J. **Science** 1997 Jan 31;275(5300):610

SCIENTIFIC SOCIETIES see **SOCIETIES, SCIENTIFIC**

SCILLARENIN RHAMNOSIDE see **PROSCILLARIDIN**

SCIMITAR SYNDROME

[Scimitar syndrome] Shimizu M. **Ryoikibetsu Shokogun Shirizu** 1996;(13):25–8 (13 ref.) **(Jpn)**

COMPLICATIONS

[Progressive dyspnea in a patient with a preceding carcinoma of the breast] Guedea Martín A, et al. **Rev Clin Esp** 1997 May;197(5):371–2 **(Spa)**

DIAGNOSIS

Scimitar syndrome: MR assessment of hemodynamic significance. Henk CB, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):628–30 (9 ref.)

Hypogenetic lung syndrome: functional and anatomic evaluation with magnetic resonance imaging and magnetic resonance angiography. Vrachliotis TG, et al. **J Magn Reson Imaging** 1996 Sep–Oct;6(5):798–800

The scimitar syndrome: demonstration with magnetic resonance imaging. Ramseyer L, et al. **J Okla State Med Assoc** 1996 Sep;89(9):324–5

PHYSIOPATHOLOGY

Electrophysiologic mechanisms and electrocardiographic findings in atrioventricular-nodal reentrant tachycardia in a patient with the scimitar syndrome. Bakker R, et al. **Heart Lung** 1997 Jan–Feb;26(1):45–51

RADIOGRAPHY

Chest case of the day. Scimitar syndrome. Gilkeson RC, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):267, 270

Bronchial stenosis mimicking the scimitar syndrome: report of one case. Hsieh SC, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 May–Jun;38(3):232–4

[What is your diagnosis? Scimitar syndrome (= hypogenetic lung syndrome)] Braunschweig M. **Schweiz Rundsch Med Prax** 1997 Mar 11;86(11):419–20 **(Ger)**

RADIONUCLIDE IMAGING

Scimitar syndrome with dextrocardia and right pulmonary vascular hypoplasia seen on pulmonary imaging. Tsai SC, et al. **Clin Nucl Med** 1996 Apr;21(4):327

SURGERY

Radiofrequency catheter ablation of AV nodal re-entrant tachycardia in scimitar syndrome. Bruinsma GJ, et al. **Int J Cardiol** 1997 Feb;58(3):305–7

Scimitar syndrome: twenty years' experience and results of repair. Najm HK, et al. **J Thorac Cardiovasc Surg** 1996 Nov;112(5):1161–8; discussion 1168–9

ULTRASONOGRAPHY

Echocardiographic clues and accuracy in the diagnosis of scimitar syndrome. Shibuya K, et al. **J Am Soc Echocardiogr** 1996 Mar–Apr;9(2):174–81

Antenatal sonographic findings associated with scimitar syndrome. Grisaru D, et al. **Ultrasound Obstet Gynecol** 1996 Aug;8(2):131–3

SCINTIGRAPHY see **RADIONUCLIDE IMAGING**

SCINTIGRAPHY, COMPUTED TOMOGRAPHIC see **TOMOGRAPHY, EMISSION-COMPUTED**

SCINTIGRAPHY, EQUILIBRIUM see **GATED BLOOD-POOL IMAGING**

SCINTILLATION CAMERAS see **GAMMA CAMERAS**

SCINTILLATION COUNTING

see related
GAMMA CAMERAS

Scintillation proximity assay for human DNA topoisomerase I using recombinant biotinyl-fusion protein produced in baculovirus-infected insect cells. Lerner CG, et al. **Anal Biochem** 1996 Sep 5;240(2):185–96

The utility of FK506-binding protein as a fusion partner in scintillation proximity assays: application to SH2 domains. Sonatore LM, et al. **Anal Biochem** 1996 Sep 5;240(2):289–97

Improvement of the Eakins and Brown method for measuring 59Fe and 55Fe in blood and other iron-containing materials by liquid scintillation counting and sample preparation using microwave digestion and ion-exchange column purification of iron. Viteri FE, et al. **Anal Biochem** 1997 Jan 1;244(1):116–23

Transplacental passage of [3H]-okadaic acid in pregnant mice measured by radioactivity and high-performance liquid chromatography. Matias WG, et al. **Hum Exp Toxicol** 1996 Mar;15(3):226–30

A homogeneous method to quantify mRNA levels: a hybridization of RNase protection and scintillation proximity assay technologies. Kenrick MK, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2947–8

A reply to "comments on 'MTF evaluation of a phosphor-coated CCD for x-ray imaging'" [letter] Gambaccini M, et al. **Phys Med Biol** 1997 Aug;42(8):1674

Comments on the measurement of radionuclide mixtures [letter] Stângă D. **Phys Med Biol** 1996 Aug;41(8):1528–30

HISTORY

Ben Cassen and the development of the rectilinear scanner. Blahd WH. **Semin Nucl Med** 1996 Jul;26(3):165–70

INSTRUMENTATION

Peroperative (123)I-MIBG scan using a sterile probe for staging and resection of neuroblastoma in children. Aslam A, et al. **J Pediatr Surg** 1996 May;31(5):719–20

An evaluation of the Y2O3:Eu3+ scintillator for application in medical x-ray detectors and image receptors. Cavouras D, et al. **Med Phys** 1996 Dec;23(12):1965–75

Characteristics of a scintillator-based daily quality assurance device for radiation oncology beams. Das IJ, et al. **Med Phys** 1996 Dec;23(12):2061–7

[Scintillation probe guided sentinel lymphadenectomy in malignant melanoma] Büchels HK, et al. **Chirurg** 1997 Jan; 68(1):45–50 (Eng. Abstr.) **(Ger)**

METHODS

Development of a novel scintillation proximity competitive hybridization assay for the determination of phosphorothioate antisense oligonucleotide plasma concentrations in a toxicokinetic study. de Serres M, et al. **Anal Biochem** 1996 Jan 15;233(2):228–33

Radioimager quantification of oligonucleotide hybridization with DNA immobilized on transfer membrane: application to the identification of related sequences. Vernier P, et al. **Anal Biochem** 1996 Mar 1;235(1):11–9

Fluorescence lifetime measurement via a radionuclide-scintillation light source and analog cross correlation. Burden DL, et al. **Anal Chem** 1997 May 15; 69(10):1936–41

alpha2-adrenergic agonist-induced inhibition of cyclic AMP formation in transfected cell lines using a microtiter-based scintillation proximity assay. Hancock AA, et al. **J Recept Signal Transduct Res** 1995 Jan–Mar; 15(1–4):557–79

A procedure to study unscheduled DNA synthesis in rat spermatogenic cells in vivo: strain differences between Fisher-344 and Sprague-Dawley rats. Sotomayor RE, et al. **Toxicol Lett** 1996 Dec;89(1):77–81

STANDARDS

Comparison of the French and U.S. national 3H (tritiated H2O) standards by 4 pi beta liquid scintillation spectrometry. Zimmerman BE, et al. **Appl Radiat Isot** 1997 Apr;48(4):521–6

SCINTIPHOTOGRAPHY see **RADIONUCLIDE IMAGING**

SCIURIDAE

Lymphocutaneous sporotrichosis associated with a squirrel bite: case report and review. Saravanakumar PS, et al. **Clin Infect Dis** 1996 Sep;23(3):647–8

Audiogram of the fox squirrel (Sciurus niger). Jackson LL, et al. **J Comp Psychol** 1997 Mar;111(1):100–4

Sleep during arousal episodes as a function of prior torpor duration in hibernating European ground squirrels. Strijkstra AM, et al. **J Sleep Res** 1997 Mar;6(1):36–43

Hepatitis and hepatocellular carcinoma in two prairie dogs (Cynomys ludovicianus). Une Y, et al. **J Vet Med Sci** 1996 Sep;58(9):933–5

Susceptibility of selected rodent species from Colorado to Borrelia burgdorferi. Ubico SR, et al. **J Wildl Dis** 1996 Apr;32(2):293–9

Creutzfeldt-Jakob disease and eating squirrel brains [letter] Berger JR, et al. **Lancet** 1997 Aug 30;350(9078):642

Immunocontraception in rodents: a review of the development of a sperm-based immunocontraceptive vaccine for the grey squirrel (Sciurus carolinensis). Moore HD, et al. **Reprod Fertil Dev** 1997;9(1):125–9 (33 ref.)

Pneumonic pasteurellosis associated with Pasteurella haemolytica in chipmunks (Tamias sibiricus). Astorga RJ, et al. **Zentralbl Veterinarmed [B]** 1996 Mar;43(1):59–62

ANATOMY & HISTOLOGY

Seminiferous tubule stages in the prairie dog (Cynomys ludovicianus) during the annual breeding cycle. Foreman D. **Anat Rec** 1997 Mar;247(3):355–67

Innervation of propatagial musculature in a flying squirrel, Glaucomys volans (Rodentia, Sciuridae). Chickering JG, et al. **Brain Behav Evol** 1996;47(1):1–7

Retinal neurons of the California ground squirrel, Spermophilus beecheyi: a Golgi study. Linberg KA, et al. **J Comp Neurol** 1996 Feb 5;365(2):173–216

Lung morphology of cursorial and non-cursorial mammals: lagomorphs as a case study for a pneumatic stabilization hypothesis. Simons RS. **J Morphol** 1996 Dec; 230(3):299–316

Jaw muscles of Old World squirrels. Thorington RW Jr, et al. **J Morphol** 1996 Nov;230(2):145–65

Scaling of the mandible in squirrels. Velhagen WA, et al. **J Morphol** 1997 May;232(2):107–32

[Neurons of the visual cortex in the squirrel and the rat] Shkol'nik-Iarros EG. **Arkh Anat Gistol Embriol** 1968 Nov; 55(11):35–42 (Eng. Abstr.) **(Rus)**

BLOOD

Diurnal variations in circulating estradiol, testosterone, melatonin and harderian gland porphyrin concentration in Indian palm squirrel, Funambulus pennanti. Haldar C, et al. **Indian J Exp Biol** 1996 Jul;34(7):695–7

GENETICS

Characterization of microsatellite loci in the northern Idaho ground squirrel Spermophilus brunneus brunneus. May B, et al. **Mol Ecol** 1997 Apr;6(4):399–400

Microsatellite loci in Columbian ground squirrels Spermophilus columbianus. Stevens S, et al. **Mol Ecol** 1997 May;6(5):493–5

METABOLISM

Seasonal changes in myoglobin content in muscles of hibernating Yakutian ground squirrels. Postnikova GB, et al. **Biochemistry (Mosc)** 1997 Feb;62(2):141–4

Autoradiographic determination of changes in opioid receptor binding in the limbic system of the Columbian ground squirrel at different hibernation states. Cui Y, et al. **Brain Res** 1997 Feb 7;747(2):189–94

Seasonal variation in the antioxidant defense system of the brain of the ground squirrel (Citellus citellus) and response to low temperature compared with rat. Buzadžić B, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Jun;117(2):141–9

Effects of hypothermia on energy metabolism in rat and Richardson's ground squirrel hearts. Belke DD, et al. **J Appl Physiol** 1997 Apr;82(4):1210–8

Hibernation enhances D-glucose uptake by intestinal brush border membrane vesicles in ground squirrels. Carey HV, et al. **J Comp Physiol [B]** 1996;166(4):254–61

Seasonal variation in levels of prostaglandins D2, E2 and F2(alpha) in the brain of a mammalian hibernator, the Asian chipmunk. Takahata R, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Jan; 54(1):77–81

MICROBIOLOGY

Role of grey squirrels and pheasants in the transmission of Borrelia burgdorferi sensu lato, the Lyme disease spirochaete, in the U.K. Craine NG, et al.

SCIURIDAE

Folia Parasitol (Praha) 1997;44(2):155–60
Tracking the evolutionary origin of the methicillin resistance gene: cloning and sequencing of a homologue of mecA from a methicillin susceptible strain of Staphylococcus sciuri [published erratum appears in Microb Drug Resist 1997 Summer;3(2):212] Wu S, et al. **Microb Drug Resist** 1996 Winter;2(4):435–41

PARASITOLOGY

Eimeria (Protozoa: Eimeriidae) from North American sciurids, Glaucomys sabrinus and Tamias townsendii: with a description of a new species. Fuller CA, et al. **J Parasitol** 1997 Jun;83(3):467–70
Eimeria spp. (Apicomplexa: Eimeriidae) from black- and white-tailed prairie dogs (Cynomys ludovicianus and Cynomys leucurus) in central and southeast Wyoming. Seville RS. **J Parasitol** 1997 Feb;83(1):166–8
A comparison of parasitic helminths and arthropods from two subspecies of fox squirrels (Sciurus niger) in Florida. Coyner DF, et al. **J Wildl Dis** 1996 Jul;32(3):492–7
[Test results on the insecticidal activity of Oradelt and Omait against rodent fleas] Chumakov IV, et al. **Med Parazitol (Mosk)** 1997 Jan–Mar;(1):55–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Preservation of intestinal gene expression during hibernation. Carey HV, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G804–13
Leptin inhibits prehibernation hyperphagia and reduces body weight in arctic ground squirrels. Ormseth OA, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1775–9
Possible involvement of the serotonergic system in intraseptal opioid-induced hypothermia in ground squirrels. Cui Y, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:192–6
In vivo microdialysis study on changes in septal dynorphin and beta-endorphin activities in active and hibernating Columbian ground squirrels. Cui Y, et al. **Brain Res** 1996 Feb 26;710(1–2):271–4
Temperature sensitivity of the suprachiasmatic nucleus of ground squirrels and rats in vitro. Ruby NF, et al. **J Biol Rhythms** 1996 Jun;11(2):126–36
Dietary cholesterol enhances torpor in a rodent hibernator. Geiser F, et al. **J Comp Physiol [B]** 1997 Aug;167(6):416–22
Decreased calcium accumulation in isolated nerve endings during hibernation in ground squirrels. Gentile NT, et al. **Neurochem Res** 1996 Aug;21(8):947–54
Ambient temperature during torpor affects NREM sleep EEG during arousal episodes in hibernating European ground squirrels. Strijkstra AM, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):177–80
Effects of tannins on digestion and detoxification activity in gray squirrels (Sciurus carolinensis). Chung-MacCoubrey AL, et al. **Physiol Zool** 1997 May–Jun;70(3):270–7
Seasonal adjustment of solar heat gain independent of coat coloration in a desert mammal. Walsberg GE, et al. **Physiol Zool** 1997 Mar–Apr;70(2):150–7
[ATPase and regulatory properties of skeletal muscle myosin in Citellus undulatus susliks during various stages of winter hibernation] Lukoianova NA, et al. **Biofizika** 1997 Mar–Apr;42(2):343–8 (Eng. Abstr.) **(Rus)**
[Serotonin-producing cells in the small intestine of hibernating animals during periods of hypothermia in the middle of winter and before spring awakening] Vinogradova MS, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):346–8 **(Rus)**
[Seasonal changes in brain synaptosomal membrane lipids in the ground squirrel Citellus undulatus] Kolomiitseva IK, et al. **Dokl Akad Nauk** 1997 Jan;352(3):413–5 **(Rus)**
[Decrease in brain temperature during paradoxical sleep enables entry into torpor and hibernation] Pastukhov IuF, et al. **Dokl Akad Nauk** 1996 May;348(2):272–4 **(Rus)**
[The effect of short peptides isolated from the brain of a hibernating suslik on the rat EEG and behavior] Ignat'ev DA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov–Dec;46(6):1049–58 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Age differences in the response of California ground Squirrels (Spermophilus beecheyi) to avian and mammalian predators. Hanson MT, et al. **J Comp Psychol** 1997 Jun; 111(2):174–84

VIROLOGY

Parapox virus infection of the grey squirrel [letter; comment] Duff JP, et al. **Vet Rec** 1996 May 25;138(21):527. Comment on: Vet Rec 1996 Apr 20;138(16):400.

SCLERA

see related
LIMBUS CORNEAE
SCLERAL BUCKLING
SCLEROPLASTY
SCLEROSTOMY

Penetrating keratoplasty and transscleral fixation of posterior chamber lens. Jensen OM, et al. **Acta Ophthalmol Scand** 1995 Dec;73(6):551–4
Corrosion casts of the suprachoroidal space and uveoscleral drainage routes in the human eye. Krohn J, et al. **Acta Ophthalmol Scand** 1997 Feb;75(1):32–5
Synthetic scleral reinforcement materials. II. Collagen types in the fibrous capsule. Jacob JT, et al. **J Biomed Mater Res** 1996 Oct;32(2):181–6
Posterior superior oblique tenectomy at the scleral insertion for collapse of A-pattern strabismus. Shin GS, et al. **J Pediatr Ophthalmol Strabismus** 1996 Sep–Oct;33(5):211–8
An applicator-shaped scleral depressor for vitreoretinal surgery. Lewis JM, et al. **Ophthalmic Surg Lasers** 1997 Jul; 28(7):603–4
Use of a scleral shield for the application of mitomycin-C during trabeculectomy: preliminary clinical results. Mietz H, et al. **Ophthalmic Surg Lasers** 1996 Dec;27(12):989–94
Complications of hydroxyapatite orbital implants. A review of 100 consecutive cases and a comparison of Dexon mesh (polyglycolic acid) with scleral wrapping. Oestreicher JH, et al. **Ophthalmology** 1997 Feb;104(2):324–9 (20 ref.)
[Intascleral silicone prosthesis in the dog: a retrospective study of 22 cases] Ruoss E, et al. **Tierarztl Prax** 1997 Apr; 25(2):164–9 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

[Clinical contribution to oculo-dermal melanosis or Ota's syndrome] Morra M. **Minerva Oftalmol** 1967 Jul–Aug; 9(4):152–6 (28 ref.) (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Course of the optic nerve fibers through the lamina cibrosa in human eyes. Dichtl A, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Sep;234(9):581–5
Histology of posterior scleral foramen in normal eyes: its possible role in optic nerve damage in chronic open angle glaucoma. Yanko L, et al. **Isr J Med Sci** 1996 Sep; 32(9):741–4

BLOOD SUPPLY

Bilateral corkscrew episcleral veins from tricuspid incompetence. Fu ER. **Am J Ophthalmol** 1996 Oct; 122(4):577–8
Conjunctival injection, episcleral vessel dilation, and subconjunctival hemorrhage in patients with new tsutsugamushi disease. Kato T, et al. **Jpn J Ophthalmol** 1997 May–Jun;41(3):196–9

CHEMISTRY

Mitomycin C dissolved in a reversible thermosetting gel: target tissue concentrations in the rabbit eye. Ichien K, et al. **Br J Ophthalmol** 1997 Jan;81(1):72–5
Proteoglycans in the human sclera. Evidence for the presence of aggrecan. Rada JA, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1740–51
[Proteoglycan molecules in scleral tissue of enlarged eyeball] Yamamoto S, et al. **Nippon Ganka Gakkai Zasshi** 1996 Mar; 100(3):230–4 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Cytoskeleton and tissue origin in the anterior cynomolgus monkey eye. Hamanaka T, et al. **Jpn J Ophthalmol** 1997 May–Jun;41(3):138–49

DRUG EFFECTS

In vivo and in vitro association of retinoic acid with form-deprivation myopia in the chick. Seko Y, et al. **Exp Eye Res** 1996 Oct;63(4):443–52
Long-term intraocular toxic effects of topical mitomycin C in rabbits. Mietz H, et al. **J Glaucoma** 1996 Oct;5(5):325–33
The effects of subconjunctival verapamil on filtering blebs in rabbits. Gupta B, et al. **Ophthalmic Surg Lasers** 1996 May;27(5):378–83

ENZYMOLOGY

Scleral matrix metalloproteinases, serine proteinase activity and hydrational capacity are increased in myopia induced by retinal image degradation. Jones BE, et al. **Exp Eye Res** 1996 Oct;63(4):369–81

GROWTH & DEVELOPMENT

Growth of the two layers of the chick sclera is modulated reciprocally by visual conditions. Marzani D, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1726–39

INJURIES

The effect of trauma on the ocular penetration of intravenous ciprofloxacin [see comments] Alfaro DV, et al. **Am J Ophthalmol** 1996 Nov;122(5):678–83. Comment in: Am J Ophthalmol 1996 Nov;122(5):724–6.
Preventing symblepharon formation with a gelatin sponge in the eye of a patient with an alkali burn. Yamada M, et al. **Am J Ophthalmol** 1997 Apr;123(4):552–4
Ruptured globes following radial and hexagonal keratotomy surgery [letter; comment] Parmley VC. **Arch Ophthalmol** 1996 Nov;114(11):1431–2. Comment on: Arch Ophthalmol 1996 Feb;114(2):129–34.
Favourable outcome following unusual perforating eye injury. Isaacs TW, et al. **Aust N Z J Ophthalmol** 1997 Feb; 25(1):79–80
Sympathetic ophthalmia from inadvertent ocular perforation during conventional retinal detachment surgery [letter] Lyons C, et al. **Br J Ophthalmol** 1997 Jul;81(7):612
Synthetic patch for scleral tissue loss. Dori D, et al. **Eur J Ophthalmol** 1997 Jan–Mar;7(1):105–7
Selection of suture material for scleral lacerations. Milenković S, et al. **Eur J Ophthalmol** 1996 Jul–Sep; 6(3):327–30
Surgical treatment of penetrating ocular injuries with retained intraocular foreign bodies. Tomic Z, et al. **Eur J Ophthalmol** 1996 Jul–Sep;6(3):322–6
Management of experimental globe perforation during strabismus surgery. Sprunger DT, et al. **J Pediatr Ophthalmol Strabismus** 1996 May–Jun; 33(3):140–3
Perforating BB gun injuries of the globe. Pulido JS, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):625–32
Detection and localization of steel intraocular foreign bodies using computed tomography. A comparison of helical and conventional axial scanning. Chacko JG, et al. **Ophthalmology** 1997 Feb;104(2):319–23
Ocular nail gun injuries. Lee BL, et al. **Ophthalmology** 1996 Sep;103(9):1453–7
Open-globe injury. Update on types of injuries and visual results. Pieramici DJ, et al. **Ophthalmology** 1996 Nov; 103(11):1798–803
Experimental pseudomonal posttraumatic endophthalmitis in a swine model. Treatment with ceftazidime, amikacin, and imipenem. Alfaro DV 3rd, et al. **Retina** 1997;17(2):139–45
[Clinical and immunological criteria of the activity of inflammatory reaction and autolymphokine+ + therapy in penetrating wounds of the eye] Gundorova RA, et al. **Vestn Oftalmol** 1996 Jul–Aug;112(3):19–21 (Eng. Abstr.) **(Rus)**

METABOLISM

Increased expression of matrix metalloproteinases in vivo in scleritis tissue and in vitro in cultured human scleral fibroblasts. Di Girolamo N, et al. **Am J Pathol** 1997 Feb; 150(2):653–66
Retinal control of scleral precursor synthesis. Devadas M, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S73–5
Are there rhythms in scleral precursor synthesis? Devadas M, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):45–7
Compensation for spectacle lenses involves changes in proteoglycan synthesis in both the sclera and choroid [published erratum appears in Curr Eye Res 1997 Jun;16(6):624–5] Nickla DL, et al. **Curr Eye Res** 1997 Apr; 16(4):320–6
Effects of mitomycin C on the expression of proliferating cell nuclear antigen after filtering surgery in rabbits. Watanabe J, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Apr;235(4):234–40
Characterization of paracellular and aqueous penetration routes in cornea, conjunctiva, and sclera. Hämäläinen KM, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):627–34
Immunoelectron microscopic localization of decorin in aged human corneal and scleral stroma. Kimura S, et al. **J Electron Microsc (Tokyo)** 1995 Dec;44(6):445–9
Light controls scleral precursor synthesis. Devadas M, et al. **Neuroreport** 1996 Aug 12;7(12):2010–2
Prostaglandin action on ciliary smooth muscle extracellular matrix metabolism: implications for uveoscleral outflow. Lindsey JD, et al. **Surv Ophthalmol** 1997 Feb;41 Suppl 2:S53–9 (53 ref.)

PATHOLOGY

Corneoscleral perforation following sigmoidoscopy [letter] Sherman MD, et al. **Am Fam Physician** 1997 Sep 15; 56(4):1062, 1064
Bilateral corkscrew episcleral veins from tricuspid incompetence. Fu ER. **Am J Ophthalmol** 1996 Oct; 122(4):577–8
Primary orbital fibrosarcoma developing in the scleral stroma [letter] Ohtsuka K, et al. **Br J Ophthalmol** 1996 Oct; 80(10):932–3
Spontaneous and pharmacologically-modulated wound healing after Nd:YAG laser sclerostomy ab interno in rabbits. Iliev ME, et al. **Eur J Ophthalmol** 1997 Jan–Mar; 7(1):24–8
Regional scleral changes in form-deprivation myopia in chicks. Kusakari T, et al. **Exp Eye Res** 1997 Mar; 64(3):465–76
Psoriasis and blue sclerae in girls with Turner syndrome. Dacou-Voutetakis C, et al. **J Am Acad Dermatol** 1996 Dec; 35(6):1002–4
Histopathologic findings following contact transscleral semiconductor diode laser cyclophotocoagulation in a human eye. Feldman RM, et al. **J Glaucoma** 1997 Apr; 6(2):139–40
The regulation of the scleral growth associated with deprivation myopia in chicks. Wang IJ, et al. **J Ocul Pharmacol Ther** 1997 Jun;13(3):253–60
The clinical detection of scleral icterus: observations of multiple examiners. Ruiz MA, et al. **Mil Med** 1997 Aug; 162(8):560–3
Transscleral diode laser cyclophotocoagulation on autopsy eyes with abnormally thinned sclera. Palmer DJ, et al. **Ophthalmic Surg Lasers** 1997 Jun;28(6):495–500
Tophus-like, conglomerated, crystalline calcification of the sclera. Daicker B. **Ophthalmologica** 1996;210(4):223–8
Hyperbaric oxygen therapy for beta-radiation-induced

scleral necrosis. Green MO, et al. **Ophthalmology** 1995 Jul; 102(7):1038–41

PHYSIOLOGY

Factors affecting the pores of the inner wall endothelium of Schlemm's canal. Sit AJ, et al.
Invest Ophthalmol Vis Sci 1997 Jul;38(8):1517–25

[Effect of active medium on sclera creep] Shchukin ED, et al. **Vestn Oftalmol** 1997 May–Jun;113(3):3–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

[Methods for clinical studies of sclera in myopia] Khodzhabekian NV. **Vestn Oftalmol** 1997 May–Jun; 113(3):45–7 (44 ref.) **(Rus)**

SURGERY

Cilioretinal artery occlusion following scleral reinforcement surgery. Karabatsas CH, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):316–8

Gonioscopic evaluation of haptic position in transsclerally sutured posterior chamber lenses. Holland EJ, et al.
Am J Ophthalmol 1997 Mar;123(3):411–3

Prospective study of ab externo erbium:YAG laser sclerostomy in humans. Jacobi PC, et al.
Am J Ophthalmol 1997 Apr;123(4):478–86

A simple snare for transscleral fixation of dislocated intraocular lenses. Poon A, et al.
Aust N Z J Ophthalmol 1996 Nov;24(4):385–8

The scleral filet technique for secondary orbital implantation surgery. Jordan DR, et al. **Can J Ophthalmol** 1996 Dec; 31(7):356–61

Comparison between the refractive results of combined penetrating keratoplasty/transsclerally sutured posterior chamber lens implantation and the triple procedure. Djalilian AR, et al. **Cornea** 1997 May;16(3):319–21

Anterior segment prosthesis development: evaluation of expanded polytetrafluoroethylene as a sclera-attached prosthetic material. Guo A, et al. **Cornea** 1996 Mar; 15(2):210–4

Synthetic patch for scleral tissue loss. Dori D, et al.
Eur J Ophthalmol 1997 Jan–Mar;7(1):105–7

Semiconductor diode laser transscleral cyclophotocoagulation versus filtering surgery with Mitomycin-C. Pablo LE, et al. **Int Ophthalmol** 1996–97; 20(1–3):11–4

The utilization of a biological adhesive for wound treatment: comparison of suture, self-sealing sutureless and cyanoacrylate closure in the tensile strength test. Shigemitsu T, et al. **Int Ophthalmol** 1996–97;20(6):323–8

Postoperative astigmatism and relative strength of tunnel incisions: a prospective clinical trial. Anders N, et al.
J Cataract Refract Surg 1997 Apr;23(3):332–6

Corneal topography and astigmatism after superior sutured 8 mm scleral tunnel incisions. Bellucci R, et al.
J Cataract Refract Surg 1996 Jul–Aug;22(6):690–5

Transscleral intraocular lens fixation [letter; comment] Berger RR. **J Cataract Refract Surg** 1996 Nov;22(9):1133. Comment on: J Cataract Refract Surg 1996 Apr;22(3):347–51.

Effect of 3.0 mm tunnel and 6.0 mm corneoscleral incisions on the blood–aqueous barrier. Diestelhorst M, et al.
J Cataract Refract Surg 1996 Dec;22(10):1465–70

Monoscleral fixated lens implantation in eyes with partial loss of capsular or zonular support. Günenç U, et al.
J Cataract Refract Surg 1997 Jun;23(5):710–3

Endoscope-assisted transscleral suture fixation of intraocular lenses. Jürgens I, et al. **J Cataract Refract Surg** 1996 Sep; 22(7):879–81

Corneal shape changes and astigmatic aspects of scleral and corneal tunnel incisions [editorial] Kohnen T.
J Cataract Refract Surg 1997 Apr;23(3):301–2

Astigmatism after phacoemulsification with adjusted and unadjusted sutured versus sutureless 5.2 mm superior scleral incisions. Lyhne N, et al. **J Cataract Refract Surg** 1996 Nov;22(9):1206–10

Strength of clear corneal incisions in cadaver eyes. Mackool RJ, et al. **J Cataract Refract Surg** 1996 Jul–Aug;22(6):721–5

Conjunctival wound closure by saline injection in sutureless, scleral tunnel incision phacoemulsification. Meacock WR, et al. **J Cataract Refract Surg** 1996 Nov;22(9):1240–1

Straight-entrance, sclerocorneal valve incision with horizontal sutures for poly(methyl methacrylate) intraocular lenses. Menapace R, et al.
J Cataract Refract Surg 1996 Sep;22(7):882–90

Corneal versus scleral tunnel incision in cataract surgery: a randomized study. Olsen T, et al.
J Cataract Refract Surg 1997 Apr;23(3):337–41

Comparative study of intraocular lens implantation through 3.0 mm temporal clear corneal and superior scleral tunnel self-sealing incisions. Oshima Y, et al.
J Cataract Refract Surg 1997 Apr;23(3):347–53

Corneal astigmatism after clear corneal and corneoscleral incisions for cataract surgery. Poort-van Nouhuijs HM, et al. **J Cataract Refract Surg** 1997 Jun;23(5):758–60

Surgically induced astigmatism following a 4.0 mm sclerocorneal valve incision. Rainer G, et al.
J Cataract Refract Surg 1997 Apr;23(3):358–64

Scleral fixation of an intraocular lens in the absence of capsular support. Trimarchi F, et al.
J Cataract Refract Surg 1997 Jun;23(5):795–7

Effect of incision location on preoperative oblique astigmatism after scleral tunnel incision. Wirbelauer C, et al. **J Cataract Refract Surg** 1997 Apr;23(3):365–71

Resuturing the scleral flap leads to resolution of hypotony maculopathy. Schwartz GF, et al. **J Glaucoma** 1996 Aug; 5(4):246–51 (50 ref.)

Nanophthalmic uveal effusion managed with scleral windows and topical mitomycin-C. Akduman L, et al.
Ophthalmic Surg Lasers 1997 Apr;28(4):325–7

Performing peripheral iridectomy via a scleral tunnel incision: a new approach. Blumenthal M, et al.
Ophthalmic Surg Lasers 1997 Feb;28(2):162–4

Corneal autograft patches for covering exposed transscleral sutures. Lifshitz T, et al. **Ophthalmic Surg Lasers** 1997 May; 28(5):426–7

Erbium:YAG laser sclerectomy with a sapphire optical fiber. McHam ML, et al. **Ophthalmic Surg Lasers** 1997 Jan; 28(1):55–8

Transscleral diode laser cyclophotocoagulation on autopsy eyes with abnormally thinned sclera. Palmer DJ, et al.
Ophthalmic Surg Lasers 1997 Jun;28(6):495–500

Internal sclerostomy with a mechanical trephine versus the neodymium:YAG laser in dogs. Peiffer RL Jr, et al.
Ophthalmic Surg Lasers 1997 Mar;28(3):223–30

A donor corneal patch graft for an incompetent scleral flap following trabeculectomy. Rumelt S, et al.
Ophthalmic Surg Lasers 1996 Oct;27(10):878–80

Scleral fixation of posterior chamber intraocular lenses in children. Sharpe MR, et al. **Ophthalmic Surg Lasers** 1996 May;27(5):337–41

Modification of the scleral openings to reduce tissue breakdown and exposure after hydroxyapatite implantations. Lee SY, et al. **Ophthalmologica** 1995; 209(6):319–22

[Implantation of a silicone lens through a sutureless 4.1 mm. scleral tunnel] Mazal Z. **Cesk Slov Oftalmol** 1997 Jun; 53(3):181–3 (Eng. Abstr.) **(Cze)**

[Posterior scleral reinforcement surgery] Chauvaud D, et al. **J Fr Ophtalmol** 1997;20(5):374–82 (Eng. Abstr.) **(Fre)**

[Non-penetrating deep sclerectomy combined with a collagen implant in primary open-angle glaucoma. Medium-term retrospective results] Demailly P, et al.
J Fr Ophtalmol 1996;19(11):659–66 (Eng. Abstr.) **(Fre)**

[Early postoperative endothelial cell loss after corneoscleral tunnel incision and phacoemulsification in pseudoexfoliation syndrome] Wirbelauer C, et al.
Ophthalmologe 1997 May;94(5):332–6 (Eng. Abstr.) **(Ger)**

[Corneal astigmatism after tunnel incision for cataract extraction] Skubiszewska T, et al. **Klin Oczna** 1996; 98(6):429–32 (Eng. Abstr.) **(Pol)**

TRANSPLANTATION

The fate of scleral grafts in the cornea. Maurice DM, et al.
Cornea 1996 Mar;15(2):204–9

Autogenous labial mucous membrane and banked scleral patch grafting for exposed retinal explants. Murdoch JR, et al. **Eye** 1997;11 (Pt 1):43–6

Scleral free auto-implant plug with mitomycin as limitation of trepanosclerectomy flow in glaucoma filtering surgery. Szymanski A. **Int Ophthalmol** 1996–97;20(1–3):89–94

A full-thickness scleral graft for the surgical management of a late filtration bleb leak. Kosmin AS, et al.
Ophthalmic Surg Lasers 1997 Jun;28(6):461–8

Repair of a giant scleral ulcer with preserved sclera and tissue adhesive. Lin CP, et al. **Ophthalmic Surg Lasers** 1996 Dec; 27(12):995–9

Periocular autografts in socket reconstruction. Beaver HA, et al. **Ophthalmology** 1996 Sep;103(9):1498–502

ULTRASONOGRAPHY

Echographic diagnosis of scleral fold in hypotony. Loewenstein A, et al. **Am J Ophthalmol** 1997 Aug; 124(2):260–1

Intraoperative echographic localization of iodine 125 episcleral radioactive plaques for posterior uveal melanoma. Harbour JW, et al. **Retina** 1996;16(2):129–34

[Acoustic studies of the sclera in progressive myopia in children and adolescents] Avetisov ES, et al.
Vestn Oftalmol 1996 Apr–Jun;112(2):41–3 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Corrosion casts of the suprachoroidal space and uveoscleral drainage routes in the pig eye. Krohn J, et al.
Acta Ophthalmol Scand 1997 Feb;75(1):28–31

Human cornea and sclera studied by atomic force microscopy. Meller D, et al. **Cell Tissue Res** 1997 Apr; 288(1):111–8

Histopathologic and electron-microscopic features of corneal and scleral collagen fibers in osteogenesis imperfecta type III. Mietz H, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jul;235(7):405–10

Trabeculectomy with mitomycin C: an electron microscopic and clinical study. Turáçli ME, et al. **Int Ophthalmol** 1995–96;19(6):337–46

Factors affecting the pores of the inner wall endothelium of Schlemm's canal. Sit AJ, et al.
Invest Ophthalmol Vis Sci 1997 Jul;38(8):1517–25

SCLERAL BUCKLING

Hydrogel exoplant fragmentation 10 years after scleral buckling surgery [letter] Hwang KI, et al.
Arch Ophthalmol 1997 Sep;115(9):1205–6

Rhegmatogenous retinal detachment with posteriorly located break treated with temporary buckle. A case report. Ferrara V, et al. **Eur J Ophthalmol** 1995 Oct–Dec; 5(4):280–2

Visual acuity after segmental buckling and non-drainage: a 15-year follow-up. Kreissig I, et al. **Eur J Ophthalmol** 1995 Oct–Dec;5(4):240–6

Pain prevention after vitreoretinal surgery [letter; comment] Gray PJ, et al. **Eye** 1995;9 (Pt 6):813–4. Comment on: Eye 1994;8 (Pt 6):714–6.

Pneumatic retinopexy versus scleral buckling: a randomised controlled trial. Mulvihill A, et al. **Ir J Med Sci** 1996 Oct–Dec;165(4):274–7

Visual acuity after scleral buckling surgery. Girard P, et al.
Ophthalmologica 1995;209(6):323–8

Extraocular repeat surgery of retinal detachment. A minimal approach. Lincoff H, et al. **Ophthalmology** 1996 Oct; 103(10):1586–92

Parabulbar anesthesia for primary vitreoretinal surgery. Sharma T, et al. **Ophthalmology** 1997 Mar;104(3):425–8

Extraconal bupivacaine in scleral buckling procedures. Bourke RD, et al. **Retina** 1996;16(3):240–5

[Vitrectomy combined with scleral buckling for the treatment of complicated retinal detachment] Zang J, et al.
Yen Ko Hsueh Pao 1995 Jun;11(2):105–7 (Eng. Abstr.) **(Chi)**

ADVERSE EFFECTS

Orbital squamous cell carcinoma following retinal detachment surgery. Lee LR, et al.
Aust N Z J Ophthalmol 1997 Feb;25(1):75–7

Detached superior rectus following scleral buckling: anatomy and surgical management. Macleod JD, et al. **Eye** 1997;11 (Pt 1):30–2

Autogenous labial mucous membrane and banked scleral patch grafting for exposed retinal explants. Murdoch JR, et al. **Eye** 1997;11 (Pt 1):43–6

Subretinal lesions following a scleral buckling procedure. Piguet B, et al. **Ophthalmologica** 1997;211(2):112–4

Corneal shape changes after scleral buckling surgery. Hayashi H, et al. **Ophthalmology** 1997 May;104(5):831–7

Supraciliary effusions and ciliary body thickening after scleral buckling procedures. Pavlin CJ, et al. **Ophthalmology** 1997 Mar;104(3):433–8

[Four cases of late infection following scleral buckling procedure] Watanabe D, et al.
Nippon Ganka Gakkai Zasshi 1997 Jun;101(6):520–4 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

Erosion and migration of a Watzke sleeve into the anterior chamber. Ahn CS, et al. **Retina** 1997;17(1):71–3

METHODS

Our experience in minimized surgery for retinal detachment: first results. Sivkova N, et al. **Folia Med (Plovdiv)** 1997; 39(1):44–7

Scleral buckling surgery in stage 4 retinopathy of prematurity. Ricci B, et al.
Graefes Arch Clin Exp Ophthalmol 1996 Aug;234 Suppl 1:S38–41

Encirclement of the globe and air in the vitreal cavity—unconsidered aspects. Chawla HB. **Klin Oczna** 1996 Jan;98(1):67–8 (3 ref.)

Modified needle drainage of subretinal fluid for conventional scleral buckling procedures. Azad RV, et al.
Ophthalmic Surg Lasers 1997 Feb;28(2):165–7

Effect of scleral buckling on unsutured cataract wound strength. Wyszynski RE, et al. **Ophthalmic Surg Lasers** 1996 Sep;27(9):787–9

Office repair of retinal detachment using a Lincoff Temporary balloon buckle [see comments] Green SN, et al. **Ophthalmology** 1996 Nov;103(11):1804–10. Comment in: Ophthalmology 1997 Jul;104(7):1059–61.

[Modification of axial length and astigmatism by scleral buckling surgery] Grimm G, et al.
Klin Monatsbl Augenheilkd 1997 Mar;210(3):144–6 (16 ref.) (Eng. Abstr.) **(Ger)**

[Conventional methods in retinal detachment surgery] Starzycka M, et al. **Klin Oczna** 1996 Mar;98(3):225–8 (Eng. Abstr.) **(Pol)**

SCLERAL DISEASES

CHEMICALLY INDUCED

Minocycline-induced discolouration of the sclerae. Sabroe RA, et al. **Br J Dermatol** 1996 Aug;135(2):314–6

Corneoscleral melt after pterygium surgery using a single intraoperative application of mitomycin-C. Dougherty PJ, et al. **Cornea** 1996 Sep;15(5):537–40

Minocycline-induced scleral pigmentation. Fraunfelder FT, et al. **Ophthalmology** 1997 Jun;104(6):936–8 (11 ref.)

COMPLICATIONS

Macular complications associated with posterior staphyloma.

SCLERAL DISEASES

Steidl SM, et al. **Am J Ophthalmol** 1997 Feb;123(2):181–7
Scleral ectasia in rhegmatogenous retinal detachment. Lam WC, et al. **Can J Ophthalmol** 1996 Aug;31(5):241–4

CONGENITAL

Case of the month: a newborn with circumscribed swelling of the eyeball. Saatci OA, et al. **Eur J Pediatr** 1996 Dec; 155(12):1063–4

DIAGNOSIS

Primary orbital fibrosarcoma developing in the scleral stroma [letter] Ohtsuka K, et al. **Br J Ophthalmol** 1996 Oct; 80(10):932–3

ETIOLOGY

Idiopathic sclerochoroidal calcification in a 41-year-old woman. McCabe CM, et al. **Arch Ophthalmol** 1997 Aug; 115(8):1082–3
Sclerochoroidal calcification in calcium pyrophosphate dihydrate deposition disease (pseudogout) [letter] Shields JA. **Arch Ophthalmol** 1997 Aug;115(8):1077–9
Recurrent intrascleral cyst after strabismus surgery. Verbeek AM, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug; 234 Suppl 1:S229–31

PATHOLOGY

Histopathologic and electron-microscopic features of corneal and scleral collagen fibers in osteogenesis imperfecta type III. Mietz H, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jul;235(7):405–10
Calcification at the posterior pole in scleritis. A case report. Saatci AO, et al. **Int Ophthalmol** 1996–97;20(5):285–7
Tophus-like, conglomerated, crystalline calcification of the sclera. Daicker B. **Ophthalmologica** 1996;210(4):223–8
Ocular manifestations of the organoid nevus syndrome. Shields JA, et al. **Ophthalmology** 1997 Mar;104(3):549–57
Ophthalmic features of the organoid nevus syndrome. Shields JA, et al. **Trans Am Ophthalmol Soc** 1996;94:65–86; discussion 86–7 (46 ref.)

PREVENTION & CONTROL

Modification of the scleral openings to reduce tissue breakdown and exposure after hydroxyapatite implantations. Lee SY, et al. **Ophthalmologica** 1995; 209(6):319–22

RADIOGRAPHY

[Incidental CT finding: calcinosis of the anterior eye segment. Senile scleral plaques] Windmann R, et al. **Radiologe** 1996 Sep;36(9):759–61 **(Ger)**

SURGERY

Repair of a giant scleral ulcer with preserved sclera and tissue adhesive. Lin CP, et al. **Ophthalmic Surg Lasers** 1996 Dec; 27(12):995–9
The use of processed pericardium in the repair of corneo-scleral fistulas. Sibayan SA, et al. **Ophthalmic Surg Lasers** 1997 Apr;28(4):334–5

ULTRASONOGRAPHY

Complications of misdiagnosed and inadequately treated necrotizing scleritis studied by ultrasound biomicroscopy and computerized corneal topography. Meller D, et al. **Int Ophthalmol** 1997;21(1):35–7

SCLEREDEMA ADULTORUM

DRUG THERAPY

Cyclosporine in scleredema. Mattheou-Vakali G, et al. **J Am Acad Dermatol** 1996 Dec;35(6):990–1

ETIOLOGY

Diabetic scleredema: a case report and biochemical analysis for glycosaminoglycans. Kobayashi T, et al. **J Dermatol** 1997 Feb;24(2):100–3

IMMUNOLOGY

Systemic involvement in scleredema of Buschke associated with IgG-kappa paraproteinaemia. Basarab T, et al. **Br J Dermatol** 1997 Jun;136(6):939–42

METABOLISM

Increased collagen propeptides in the skin of a scleredema patient but no change in re-epithelialisation rate. Haapasaari KM, et al. **Acta Derm Venereol** 1996 Jul; 76(4):305–9

SCLEREMA NEONATORUM

[Sclerema neonatorum: still a controversial anatomo-clinical entity] Scarani P, et al. **Pathologica** 1997 Feb;89(1):91–2 (8 ref.) **(Ita)**

THERAPY

Exchange transfusion in septic neonates with sclerema: effect on immunoglobulin and complement levels. Sadana S, et al. **Indian Pediatr** 1997 Jan;34(1):20–5

SCLERITIS

CHEMICALLY INDUCED

Polyarthropathy, orbital myositis and posterior scleritis: an unusual adverse reaction to influenza vaccine. Thurairajan G, et al. **Br J Rheumatol** 1997 Jan;36(1):120–3
Scleritis after glaucoma filtering surgery with mitomycin C. Fourman S. **Ophthalmology** 1995 Oct;102(10):1569–71

COMPLICATIONS

Scleritis in a patient with limited Wegener's granulomatosis and Takayasu's arteritis. Jolly SS, et al. **Can J Ophthalmol** 1995 Dec;30(7):371–3
Complications of misdiagnosed and inadequately treated necrotizing scleritis studied by ultrasound biomicroscopy and computerized corneal topography. Meller D, et al. **Int Ophthalmol** 1997;21(1):35–7
Calcification at the posterior pole in scleritis. A case report. Saatci AO, et al. **Int Ophthalmol** 1996–97;20(5):285–7
Concurrent bilateral posterior scleritis and Vogt-Koyanagi-Harada disease in a patient with positive rheumatoid factor. Watanabe K, et al. **Ophthalmologica** 1997;211(5):316–9
Scleritis-associated uveitis [see comments] Sainz de la Maza M, et al. **Ophthalmology** 1997 Jan;104(1):58–63. Comment in: Ophthalmology 1997 Aug;104(8):1207–8.
Scleritis-associated uveitis [letter; comment] Wirostko WJ, et al. **Ophthalmology** 1997 Aug;104(8):1207–8. Comment on: Ophthalmology 1997 Jan;104(1);58–63.

DIAGNOSIS

Posterior scleritis with optic perineuritis and internal ophthalmoplegia [letter] Ohtsuka K, et al. **Br J Ophthalmol** 1997 Jun;81(6):514
Scleritis in a patient with limited Wegener's granulomatosis and Takayasu's arteritis. Jolly SS, et al. **Can J Ophthalmol** 1995 Dec;30(7):371–3
Use of laser flare photometry to assess and monitor inflammation in uveitis. Herbort CP, et al. **Ophthalmology** 1997 Jan;104(1):64–71; discussion 71–2
[Posterior scleritis: apropos of 6 cases] Fanourakis S, et al. **Bull Soc Belge Ophtalmol** 1995;259:55–61 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Combination intravenous ceftazidime and aminoglycosides in the treatment of pseudomonal scleritis. Hehm CJ, et al. **Ophthalmology** 1997 May;104(5):838–43 (30 ref.)
[Necrotizing scleritis--case report of a patient effectively treated with high doses of corticosteroids] Chorabik E. **Klin Oczna** 1996 Feb;98(2):133–5 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Scleritis associated with the fibromyalgia syndrome. Fan NI, et al. **Cornea** 1996 Nov;15(6):637–8
[New clinical and epidemiologic aspects of episcleritis and scleritis] Denk PO, et al. **Ophthalmologe** 1997 Mar; 94(3):202–5 (Eng. Abstr.) **(Ger)**
[A case suspected of early active pulmonary tuberculosis detected by CT with the onset of episcleritis] Morita Y, et al. **Kekkaku** 1996 Sep;71(9):519–22 (Eng. Abstr.) **(Jpn)**
[Human leukocyte antigens and episcleritis in leprosy (Hansen's disease)] Joko S, et al. **Nippon Ganka Gakkai Zasshi** 1997 Feb;101(2):167–72 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

[Autoantibody pattern in scleritis and episcleritis] Zierhut M, et al. **Ophthalmologe** 1997 Feb;94(2):157–60 (Eng. Abstr.) **(Ger)**
[A case of myeloperoxidase-specific antineutrophil cytoplasmic antibody (MPO-ANCA)-related glomerulonephritis associated with Cogan's syndrome] Suzuki M, et al. **Nippon Jinzo Gakkai Shi** 1996 Sep; 38(9):423–7 (Eng. Abstr.) **(Jpn)**

METABOLISM

Increased expression of matrix metalloproteinases in vivo in scleritis tissue and in vitro in cultured human scleral fibroblasts. Di Girolamo N, et al. **Am J Pathol** 1997 Feb; 150(2):653–66

MICROBIOLOGY

Nocardia scleritis. Knox CM, et al. **Am J Ophthalmol** 1997 May;123(5):713–4
Scedosporium prolificans corneoscleritis: a successful outcome. Kumar B, et al. **Aust N Z J Ophthalmol** 1997 May;25(2):169–71
A peculiar case of necrotizing sclerokeratitis with Pseudomonas infection. Hanssens M. **Bull Soc Belge Ophtalmol** 1995;259:45–52
Infectious posterior scleritis caused by Pseudallescheria boydii. Clinicopathologic findings. Taravella MJ, et al. **Ophthalmology** 1997 Aug;104(8):1312–6
[Detection of mycobacterial DNA with polymerase chain reaction in eye discharge and gastric juices in a case of scleritis] Tanemoto K, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jan;101(1):97–101 (Eng. Abstr.) **(Jpn)**

SURGERY

Bilateral fascia lata patch grafts in a patient with progressive scleromalacia perforans. Kachmaryk M, et al. **Ophthalmic Surg Lasers** 1996 May;27(5):397–400

SCLEROCORNEAL LIMBUS see **LIMBUS CORNEAE**

SCLERODERMA, CIRCUMSCRIBED

Localized forms of scleroderma, including morphea, linear scleroderma, and eosinophilic fasciitis. Nelson AM. **Curr Opin Rheumatol** 1996 Sep;8(5):473–6 (23 ref.)
Localized scleroderma including morphea, linear scleroderma, and eosinophilic fasciitis. Nelson AM. **Curr Probl Pediatr** 1996 Oct;26(9):318–24 (46 ref.)

BLOOD

Increased lipid peroxidation in children with autoimmune diseases. Michel P, et al. **Acta Paediatr** 1997 Jun; 86(6):609–12

CHEMICALLY INDUCED

Localized indurated brown plaques on arms and right buttock. Pentazocine-induced morphea. Bellman B, et al. **Arch Dermatol** 1996 Nov;132(11):1366–7, 1368–9
Pseudoscleroderma secondary to phytomenadione (vitamin K1) injections: Texier's disease. Pang BK, et al. **Australas J Dermatol** 1996 Feb;37(1):44–7 (11 ref.)
Scleroderma-like disease following occupational exposure to organic solvents [letter] Altomonte A, et al. **Clin Rheumatol** 1996 Jul;15(4):416–7
Morphea after silicone gel breast implantation for cosmetic reasons in an HLA-B8, DR3-positive woman. Di Lorenzo G, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):93–5
Limited cutaneous scleroderma induced by pentazocine abuse [letter] Wanchu A, et al. **J Assoc Physicians India** 1995 Feb;43(2):145
A case of bleomycin-induced scleroderma. Kim KH, et al. **J Korean Med Sci** 1996 Oct;11(5):454–6

COMPLICATIONS

Pseudoainhum associated with linear scleroderma [letter] Park BS, et al. **Arch Dermatol** 1996 Dec;132(12):1520–1
Subcutaneous morphoea with contracture of the the flexor muscles of the finger [letter] Harris A, et al. **Br J Dermatol** 1997 Mar;136(3):476–7
Morphoea associated with B-cell lymphoma [letter] Ishikawa O, et al. **Br J Dermatol** 1997 Feb;136(2):294–5
Linear scleroderma with orbital involvement: follow up and magnetic resonance imaging [letter] [corrected and republished letter originally printed in Br J Ophthalmol 1996 Oct;80(10):930–2] Ramboer K, et al. **Br J Ophthalmol** 1997 Jan;81(1):90–1
Linear scleroderma with orbital involvement: follow up and magnetic resonance imaging [letter] [corrected and republished in Br J Ophthalmol 1997 Jan;81(1):90–3] Ramboer K, et al. **Br J Ophthalmol** 1996 Oct;80(10):930–2
Cardiac abnormalities in a patient with localized scleroderma [letter] Paroli M, et al. **Br J Rheumatol** 1996 Jul;35(7):703–4
Morphea and rheumatoid arthritis [letter] Hernández-Beriain JA, et al. **Clin Exp Rheumatol** 1996 Jul–Aug;14(4):446–7
A localised morphoea/idiopathic polymyositis overlap. al Attia HM, et al. **Clin Rheumatol** 1996 May;15(3):307–9
Linear scleroderma and melorheostosis: case presentation and literature review. Moreno Alvarez MJ, et al. **Clin Rheumatol** 1996 Jul;15(4):389–93 (24 ref.)
Cardiac valvular disease in scleroderma and systemic lupus erythematosus/scleroderma overlap associated with antiphospholipid antibodies. Penmetcha M, et al. **J Rheumatol** 1996 Dec;23(12):2171–4
Neurologic abnormalities in two patients with facial hemiatrophy and sclerosis coexisting with morphea. Menni S, et al. **Pediatr Dermatol** 1997 Mar–Apr;14(2):113–6
Reconstruction of scleroderma of the breast. Slavin SA, et al. **Plast Reconstr Surg** 1997 May;99(6):1736–41
[Lytic lesion of the distal phalanx of a patient with systemic circumscribed sclerosis] Gómez-Rodríguez N, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):449–50 **(Spa)**
[Scleroderma en coup de sabre with intracranial involvement. A case report] Ortigado Matamala A, et al. **Neurologia** 1997 Jun–Jul;12(6):256–8 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

A case of atypical localized scleroderma presenting with pseudoainhum: treatment with tranilast, an anti-fibrotic agent [letter] Tajima S, et al. **Acta Derm Venereol** 1996 Mar;76(2):162
Scléroedème génito-sus-pubien' of the newborn: a forgotten disease? Hernández-Martín A, et al. **Dermatology** 1996; 193(4):347–8 (10 ref.)
A case of linear atrophoderma of Moulin [letter; comment] Braun RP, et al. **J Dermatol** 1996 Sep;23(9):660 (6 ref.). Comment on: J Dermatol 1995 Oct;22(10):767–9.
Circulatory system in children with localized scleroderma.

Rokicki W, et al. **Pediatr Cardiol** 1997 May-Jun;18(3):213-7

[A rare variant of multifocal fibrosis] Iagoda AV, et al. **Ter Arkh** 1997;69(2):65-6 **(Rus)**

DRUG THERAPY

A case of atypical localized scleroderma presenting with pseudoainhum: treatment with tranilast, an anti-fibrotic agent [letter] Tajima S, et al. **Acta Derm Venereol** 1996 Mar;76(2):162

PUVA bath photochemotherapy for localized scleroderma. Evaluation of 17 consecutive patients. Kerscher M, et al. **Arch Dermatol** 1996 Nov;132(11):1280-2

Diffuse blisters and erosions in a patient with limited scleroderma. Penicillamine-induced pemphigus foliaceus (PIPF). McGovern TW, et al. **Arch Dermatol** 1997 Apr; 133(4):501, 504

Acute hemodynamic responses to inhaled nitric oxide in patients with limited scleroderma and isolated pulmonary hypertension. Williamson DJ, et al. **Circulation** 1996 Aug 1;94(3):477-82

Generalized bullous morphoea. Efficacy of salazopyrin [letter] Micalizzi C, et al. **Clin Exp Dermatol** 1996 May; 21(3):246-7

Sclerodermatous changes of chronic graft-versus-host-disease treated with puva. Woscoff A, et al. **Int J Dermatol** 1996 Sep;35(9):656-8 (26 ref.)

D-penicillamine-induced myasthenia gravis in a case of eosinophilic fasciitis. Kato Y, et al. **J Neurol Sci** 1997 Feb 27;146(1):85-6

Response to methotrexate in a patient with idiopathic eosinophilic fasciitis, morphea, IgM hypergammaglobulinemia, and renal involvement. Janzen L, et al. **J Rheumatol** 1995 Oct;22(10):1967-70

[D-penicillamine in treatment of scleroderma "en coup de sabre"] van Bergen BH, et al. **Hautarzt** 1997 Jan;48(1):42-4 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Childhood-onset scleroderma from a dermatologist's perspective: comment on the article by Vancheeswaran et al [letter; comment] Jablonska S, et al. **Arthritis Rheum** 1997 Jun;40(6):1183-4. Comment on: Arthritis Rheum 1996 Jun;39(6):1041-9.

The epidemiology of morphea (localized scleroderma) in Olmsted County 1960-1993. Peterson LS, et al. **J Rheumatol** 1997 Jan;24(1):73-80

ETIOLOGY

Linear scleroderma and intractable epilepsy: neuropathologic evidence for a chronic inflammatory process [letter] Pupillo G, et al. **Ann Neurol** 1996 Feb;39(2):277-8

General and local scleroderma in children and dermatomyositis and associated syndromes. Laxer RM, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):458-64 (44 ref.)

Localized scleroderma in breast cancer patients treated with supervoltage external beam radiation: radiation port scleroderma. Davis DA, et al. **J Am Acad Dermatol** 1996 Dec;35(6):923-7

Acute lipodermatosclerosis is associated with venous insufficiency. Greenberg AS, et al. **J Am Acad Dermatol** 1996 Oct;35(4):566-8

Cutaneous scleroderma following bilateral arteriovenous fistula formation. Quan VA, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1719-20

[Deep morphea-type lesions, first manifestations of lymphocytic lymphoma] Plantin P, et al. **Ann Dermatol Venereol** 1996;123(8):468-70 (Eng. Abstr.) **(Fre)**

[Edema caused by retroperitoneal and tricuspid fibrosis with sclerodermatous cutaneous involvement disclosing carcinoid tumor. Apropos of a case and review of the literature] Morand JJ, et al. **Rev Med Interne** 1997; 18(5):388-95 (61 ref.) (Eng. Abstr.) **(Fre)**

[Immunological reactivity and the hypophyseal-ovarian system in patients with circumscribed scleroderma] Bolotnaia LA. **Lik Sprava** 1995 Mar-Apr;(3-4):116-8 (Eng. Abstr.) **(Rus)**

GENETICS

Borrelia burgdorferi DNA and Borrelia hermsii DNA are not associated with morphea or lichen sclerosus et atrophicus in the southwestern United States [letter] Colomé-Grimmer MI, et al. **Arch Dermatol** 1997 Sep; 133(9):1174

The scleroatrophic syndrome of Huriez. Kavanagh GM, et al. **Br J Dermatol** 1997 Jul;137(1):114-8

Incomplete functional deficiencies of the fourth (C4) and second (C2) components of complement in a patient with linear frontoparietal scleroderma and his family. Deficiencies determined by a gene not linked to human leukocyte antigen system. Venneker GT, et al. **Exp Clin Immunogenet** 1996;13(2):104-11

IMMUNOLOGY

Elevated soluble CD23 levels in the sera from patients with localized scleroderma. Sato S, et al. **Arch Dermatol Res** 1996 Feb;288(2):74-8

Soluble CD4 and CD8 in serum from patients with localized scleroderma. Sato S, et al. **Arch Dermatol Res** 1996 Jun; 288(7):358-62

The absence of antibodies against Borrelia burgdorferi in the sera of Japanese patients with localized scleroderma [letter] Akimoto S, et al. **J Rheumatol** 1996 Mar;23(3):573-4

Cardiac valvular disease in scleroderma and systemic lupus erythematosus/scleroderma overlap associated with antiphospholipid antibodies. Penmetcha M, et al. **J Rheumatol** 1996 Dec;23(12):2171-4

Antinuclear antibodies in children with localized scleroderma. Rosenberg AM, et al. **J Rheumatol** 1995 Dec; 22(12):2337-43

[Results of determining antibodies against Borrelia burgdorferi in patients with limited scleroderma] Silny W, et al. **Pol Tyg Lek** 1996 Jun;51(23-26):329-30 **(Pol)**

METABOLISM

VCAM-1 expression on endothelium in lesions from cutaneous lupus erythematosus is increased compared with systemic and localized scleroderma. Jones SM, et al. **Br J Dermatol** 1996 Nov;135(5):678-86

Disaccharide analysis of skin glycosaminoglycan in localized scleroderma. Yokoyama Y, et al. **Dermatology** 1997; 194(4):329-33

Apoptosis and proliferation of fibroblasts during postnatal skin development and scleroderma in the tight-skin mouse. Pablos JL, et al. **J Histochem Cytochem** 1997 May; 45(5):711-9

Altered x-ray diffraction pattern is accompanied by a change in the mode of cross-link formation in lipodermatosclerosis. Brinckmann J, et al. **J Invest Dermatol** 1996 Oct; 107(4):589-92

MICROBIOLOGY

No evidence for Borrelia burgdorferi infection in lesions of morphea and lichen sclerosus et atrophicus in Spain. A prospective study and literature review. Alonso-Llamazares J, et al. **Acta Derm Venereol** 1997 Jul; 77(4):299-304

Detection of Borrelia burgdorferi DNA (B garinii or B afzelii) in morphea and lichen sclerosus et atrophicus tissues of German and Japanese but not of US patients. Fujiwara H, et al. **Arch Dermatol** 1997 Jan;133(1):41-4

Role of Borrelia burgdorferi in the pathogenesis of morphea/scleroderma and lichen sclerosus et atrophicus: a PCR study of thirty-five cases. De Vito JR, et al. **J Cutan Pathol** 1996 Aug;23(4):350-8

The absence of antibodies against Borrelia burgdorferi in the sera of Japanese patients with localized scleroderma [letter] Akimoto S, et al. **J Rheumatol** 1996 Mar;23(3):573-4

PATHOLOGY

Generalized morphea with vascular involvement. A case report and disaccharide analysis of the skin glycosaminoglycans. Akimoto S, et al. **Acta Derm Venereol** 1996 Mar;76(2):141-3

Keloidlike morphea [letter] Kubo M, et al. **Acta Derm Venereol** 1997 Jan;77(1):90-1

Nonpitting induration of the back. Scleredema adultorum of Buschke type III. Vereecken P, et al. **Arch Dermatol** 1997 May;133(5):649, 652

Pseudoscleroderma secondary to phytomenadione (vitamin K1) injections: Texier's disease. Pang BK, et al. **Australas J Dermatol** 1996 Feb;37(1):44-7 (11 ref.)

Self-involuting atrophoderma of the lateral-upper arm. A new benign variant of morphea? Inazumi T, et al. **Dermatology** 1997;194(2):147-50

Double-lined linear scleroderma. Tabata H, et al. **Int J Dermatol** 1996 Dec;35(12):876

Sclerodermatous changes of chronic graft-versus-host-disease treated with puva. Woscoff A, et al. **Int J Dermatol** 1996 Sep;35(9):656-8 (26 ref.)

Histological comparison of morphea and lichen sclerosus et atrophicus. Nishioka S. **Kurume Med J** 1997;44(2):83-90

Selective ipsilateral neuromuscular involvement in a case of facial and somatic hemiatrophy. Malandrini A, et al. **Muscle Nerve** 1997 Jul;20(7):890-2

PHYSIOPATHOLOGY

Acute hemodynamic responses to inhaled nitric oxide in patients with limited scleroderma and isolated pulmonary hypertension. Williamson DJ, et al. **Circulation** 1996 Aug 1;94(3):477-82

Role of Borrelia burgdorferi in the pathogenesis of morphea/scleroderma and lichen sclerosus et atrophicus: a PCR study of thirty-five cases. De Vito JR, et al. **J Cutan Pathol** 1996 Aug;23(4):350-8

[Tissue oxygenation and microcirculation in dermatoliposclerosis with different degrees of erythema at the margins of venous ulcers. A contribution to hypodermitis symptoms] Schmeller W, et al. **Vasa** 1997; 26(1):18-24 (Eng. Abstr.) **(Ger)**

[Cold-induced cardiac abnormalities in systemic sclerosis] Rey RH, et al. **Medicina (B Aires)** 1995;55(4):289-94 (Eng. Abstr.) **(Spa)**

RADIOTHERAPY

Low dose UVA1 phototherapy in disabling pansclerotic morphoea of childhood [letter] Gruss C, et al. **Br J Dermatol** 1997 Feb;136(2):293-4

Electron beam therapy in Arndt-Gottron's scleromyxoedema [letter] Kavanagh GM, et al. **Br J Dermatol** 1997 Jul; 137(1):152-4

High-dose UVA1 radiation therapy for localized scleroderma. Stege H, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):938-44

SURGERY

Repair of "coup de sabre," a linear form of scleroderma. Sengezer M, et al. **Ann Plast Surg** 1996 Oct;37(4):428-32

Dermal grafting for a patient with scleroderma. Case report. Ho-Asjoe M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Dec; 30(4):325-7

[Computerized tomography and magnetic resonance tomography studies before and after para-tibial fasciotomy] Peschen M, et al. **Hautarzt** 1996 Jul;47(7):521-5 (Eng. Abstr.) **(Ger)**

[Shave therapy for surgical treatment of persistent venous ulcer with large superficial dermatoliposclerosis] Schmeller W, et al. **Hautarzt** 1996 Sep;47(9):676-81 (Eng. Abstr.) **(Ger)**

THERAPY

General and local scleroderma in children and dermatomyositis and associated syndromes. Laxer RM, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):458-64 (44 ref.)

Double-blind, placebo-controlled study of intralesional interferon gamma for the treatment of localized scleroderma. Hunzelmann N, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):433-5

[Acupuncture in treatment of inflammatory rheumatic diseases] Lautenschläger J. **Z Rheumatol** 1997 Jan-Feb; 56(1):8-20 (Eng. Abstr.) **(Ger)**

ULTRASONOGRAPHY

[Echocardiography examinations in children suffering from cutaneous forms of scleroderma] Rokicki W, et al. **Pol Merkuriusz Lek** 1996 Dec;1(6):407-9 (Eng. Abstr.) **(Pol)**

SCLERODERMA, DIFFUSE see **SCLERODERMA, SYSTEMIC**

SCLERODERMA, LOCALIZED see **SCLERODERMA, CIRCUMSCRIBED**

SCLERODERMA, SYSTEMIC

Effect of melatonin on normal and sclerodermic skin fibroblast proliferation. Carossino AM, et al. **Clin Exp Rheumatol** 1996 Sep-Oct;14(5):493-8

Raynaud's phenomenon, scleroderma, overlap syndromes, and other fibrosing syndromes. **Curr Opin Rheumatol** 1996 Nov;8(6):B170-6

Systemic and localized scleroderma in children. Lehman TJ. **Curr Opin Rheumatol** 1996 Nov;8(6):576-9 (15 ref.)

Childhood scleroderma and its peculiarities. Blaszczyk M, et al. **Cutis** 1996 Aug;58(2):141-4, 148-52 (103 ref.)

New aspects in scleroderma research. Sollberg S, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):330-6 (30 ref.)

Pregnancy outcome in systemic sclerosis. Wanchu A, et al. **J Assoc Physicians India** 1996 Sep;44(9):637-40

Scleroderma spectrum disorders, not systemic sclerosis spectrum [letter; comment] Maricq HR. **J Rheumatol** 1997 Jul;24(7):1454. Comment on: J Rheumatol 1996 Dec;23(12):2068-78.

Scleroderma and pregnancy. Steen VD. **Rheum Dis Clin North Am** 1997 Feb;23(1):133-47 (82 ref.)

[Pregnancy and systemic scleroderma. A case report] Diouf A, et al. **Contracept Fertil Sex** 1996 Dec;24(12):917-22 (21 ref.) (Eng. Abstr.) **(Fre)**

[Progressive systemic sclerosis] Takamoto T. **Ryoikibetsu Shokogun Shirizu** 1996;(15):176-8 (8 ref.) **(Jpn)**

BLOOD

Plasma concentration of total and transformed alpha 2-macroglobulin in systemic sclerosis. Birkenmeier G, et al. **Arch Dermatol Res** 1996 Jun;288(7):405-7

von Willebrand factor: increased levels are related to poor prognosis in systemic sclerosis and not to tissue autoantibodies. Blann AD, et al. **Br J Biomed Sci** 1997 Mar;54(1):5-9

Soluble L-selectin in the connective tissue diseases. Blann AD, et al. **Br J Haematol** 1996 Oct;95(1):192-4

Increased nailfold capillary dimensions in primary Raynaud's phenomenon and systemic sclerosis. Bukhari M, et al. **Br J Rheumatol** 1996 Nov;35(11):1127-31

High prolactin and low dehydroepiandrosterone sulphate serum levels in patients with severe systemic sclerosis. Straub RH, et al. **Br J Rheumatol** 1997 Apr;36(4):426-32

Mechanism of serum-mediated endothelial injury in scleroderma: identification of a granular enzyme in scleroderma skin and sera. Kahaleh MB, et al. **Clin Immunol Immunopathol** 1997 Apr;83(1):32-40

High serum level of prolactin in patients with systemic sclerosis [letter] Kucharz EJ, et al. **Clin Rheumatol** 1996 May;15(3):314

Clastogenic activity in the plasma of scleroderma patients: a biomarker of oxidative stress. Emerit I, et al. **Dermatology** 1997;194(2):140-6

Hyaluronic acid in progressive systemic sclerosis. Freitas JP, et al. **Dermatology** 1996;192(1):46–9

Endothelin may be pathogenic in systemic sclerosis of the heart. Kazzam E, et al. **Int J Cardiol** 1997 Jun 27;60(1):31–9

Circadian variations of plasma levels of blood coagulation/fibrinolysis molecular markers in progressive systemic sclerosis (PSS). Maeda M, et al. **J Dermatol Sci** 1996 Oct;13(1):18–24

Peripheral blood mononuclear cells of patients with systemic sclerosis produce increased amounts of interleukin 6, but not transforming growth factor beta 1. Giacomelli R, et al. **J Rheumatol** 1996 Feb;23(2):291–6

Elevated serum levels of interleukin 4 (IL–4), IL–10, and IL–13 in patients with systemic sclerosis. Hasegawa M, et al. **J Rheumatol** 1997 Feb;24(2):328–32

Elevated serum tumor necrosis factor–alpha levels in patients with systemic sclerosis: association with pulmonary fibrosis. Hasegawa M, et al. **J Rheumatol** 1997 Apr;24(4):663–5

Endothelin–1 and cold provocation in health, primary Raynaud's phenomenon, and progressive systemic sclerosis. Dörffler–Melly J, et al. **Microvasc Res** 1996 Sep;52(2):193–7

Antiphospholipid antibodies and disturbances of phospholipid dependent coagulation tests in patients with systemic sclerosis and severe peripheral ischaemia [letter] Lewandowski K, et al. **Thromb Res** 1996 Mar 15; 81(6):693–5

CHEMICALLY INDUCED

Silicone does not potentiate development of the scleroderma–like syndrome in tight skin (TSK/+) mice. Frondoza C, et al. **J Autoimmun** 1996 Aug;9(4):473–83

Systemic sclerosis in German uranium miners under special consideration of autoantibody subsets and HLA class II alleles. Baur X, et al. **Respiration** 1996;63(6):368–75

[Occupational systemic sclerosis in men] Zachariae H, et al. **Ugeskr Laeger** 1997 Apr 28;159(18):2687–9 (Eng. Abstr.) **(Dan)**

[Erasmus syndrome: clinical, tomographic, respiratory function and bronchoalveolar lavage characteristics] Cointrel C, et al. **Rev Mal Respir** 1997 Jan;14(1):21–6 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

[Systemic sclerosis and environmental factors (editorial)] Halberg P. **Ugeskr Laeger** 1997 Apr 28;159(18):2671 **(Dan)**

[Classification of systemic progressive sclerosis] **Reumatizam** 1996;43(1):25–7 **(Scr)**

COMPLICATIONS

Scleredema adultorum associated with anaphylactoid purpura [letter] Okuyama R, et al. **Acta Derm Venereol** 1997 Mar;77(2):159

Treatment of ischaemic digital ulcers and prevention of gangrene with intravenous iloprost in systemic sclerosis. Zachariae H, et al. **Acta Derm Venereol** 1996 May; 76(3):236–8

Refractory Raynaud's phenomenon in scleroderma: an indication for surgery [letter] Wright HR, et al. **Am J Emerg Med** 1997 May;15(3):328–30

Scleroderma, D–penicillamine treatment, and progressive renal failure associated with positive antimyeloperoxidase antineutrophil cytoplasmic antibodies. Hillis GS, et al. **Am J Kidney Dis** 1997 Aug;30(2):279–81

Functional impairment in lone cryptogenic fibrosing alveolitis and fibrosing alveolitis associated with systemic sclerosis: a comparison. Wells AU, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1657–64

Pregnancy complicated by severe preeclampsia and thrombocytopenia in a patient with scleroderma. D'Angelo R, et al. **Anesth Analg** 1997 Oct;85(4):839–41

Raynaud's phenomenon and systemic sclerosis. Generini S, et al. **Ann Ital Med Int** 1996 Apr–Jun;11(2):125–31 (78 ref.)

Pericardial involvement in systemic sclerosis. Byers RJ, et al. **Ann Rheum Dis** 1997 Jun;56(6):393–4

Fibrosing alveolitis in systemic sclerosis: indices of lung function in relation to extent of disease on computed tomography. Wells AU, et al. **Arthritis Rheum** 1997 Jul; 40(7):1229–36

Unique digital skin lesions associated with systemic sclerosis. Marzano AV, et al. **Br J Dermatol** 1997 Apr;136(4):598–600

Case report: severe fibrosis in a patient with scleroderma and previous radiotherapy—a case report and literature review. Aref I, et al. **Br J Radiol** 1996 Nov;69(827):1055–6 (9 ref.)

Intermittent iloprost infusion therapy of pulmonary hypertension in scleroderma—a pilot study [letter] Bartosik I, et al. **Br J Rheumatol** 1996 Nov;35(11):1187–8

Comparison of Doppler echocardiography and right heart catheterization to assess pulmonary hypertension in systemic sclerosis. Denton CP, et al. **Br J Rheumatol** 1997 Feb;36(2):239–43

Autonomic dysfunction in systemic sclerosis: time and frequency domain 24 hour heart rate variability analysis. Ferri C, et al. **Br J Rheumatol** 1997 Jun;36(6):669–76

Pulmonary hypertension in systemic sclerosis: an analysis of 17 patients. Koh ET, et al. **Br J Rheumatol** 1996 Oct; 35(10):989–93

A case of melanoma concurrent with progressive systemic sclerosis. Videtic GM, et al. **Cancer Invest** 1997;15(3):224–6

Prevalence of pulmonary hypertension in limited and diffuse scleroderma. Battle RW, et al. **Chest** 1996 Dec; 110(6):1515–9

Clinical evaluation of pulmonary hypertension in systemic sclerosis and related disorders. A Doppler echocardiographic study of 135 Japanese patients. Murata I, et al. **Chest** 1997 Jan;111(1):36–43

A case of scleroderma associated with sarcoidosis [letter] Arapis J, et al. **Clin Exp Rheumatol** 1997 May–Jun; 15(3):337–8

Pericardial tamponade and systemic sclerosis [letter] Keskin G, et al. **Clin Exp Rheumatol** 1996 Nov–Dec;14(6):701–2

Acute estrogen administration can reverse cold–induced coronary Raynaud's phenomenon in systemic sclerosis. Lekakis J, et al. **Clin Exp Rheumatol** 1996 Jul–Aug; 14(4):421–4

Peripheral nervous system involvement in systemic sclerosis: the median nerve as target structure. Lori S, et al. **Clin Exp Rheumatol** 1996 Nov–Dec;14(6):601–5

Depression and anxiety in patients with systemic sclerosis [letter] Straszecka J, et al. **Clin Rheumatol** 1996 Nov; 15(6):621

Systemic scleroderma and perforating granuloma annulare: differential diagnosis from calcinosis. Tajima S, et al. **Dermatology** 1996;192(3):271–3

Intestinal perforation. A common complication of scleroderma. Ebert EC, et al. **Dig Dis Sci** 1997 Mar; 42(3):549–53

Pathogenesis and evolution of plexiform lesions in pulmonary hypertension associated with scleroderma and human immunodeficiency virus infection. Cool CD, et al. **Hum Pathol** 1997 Apr;28(4):434–42

Peripheral neuropathy in scleroderma successfully treated with amitriptyline [letter] Bondavalli P, et al. **Int J Dermatol** 1997 Mar;36(3):234–5

Nailfold capillary abnormality and pulmonary hypertension in systemic sclerosis. Ohtsuka T, et al. **Int J Dermatol** 1997 Feb;36(2):116–22

Systemic lupus erythematosus, discoid lupus erythematosus, and progressive systemic sclerosis. Foster CS. **Int Ophthalmol Clin** 1997 Spring;37(2):93–110 (76 ref.)

Systemic sclerosis associated with diabetes insipidus. Harada M, et al. **Intern Med** 1997 Jan;36(1):73–6

A rare case of cardiac sarcoidosis in a patient with progressive systemic sclerosis, Sjogren's syndrome, and polymyositis. Hosoya N, et al. **Intern Med** 1995 Dec; 34(12):1164–7

Myeloperoxidase–specific anti–neutrophil cytoplasmic autoantibodies — related scleroderma renal crisis treated with double–filtration plasmapheresis. Omote A, et al. **Intern Med** 1997 Jul;36(7):508–13

Association of progressive systemic sclerosis with pulmonary sarcoidosis. Just a chance occurrence? Takahashi T, et al. **Intern Med** 1997 Jun;36(6):435–8

Development of ischemic colitis and scleroderma renal crisis following methylprednisolone pulse therapy for progressive systemic sclerosis. Yamanishi Y, et al. **Intern Med** 1996 Jul;35(7):583–6

Thrombotic thrombocytopenic purpura in a patient with diffuse scleroderma. Badesha PS, et al. **J Assoc Physicians India** 1996 Apr;44(4):274–5

Progressive systemic sclerosis with breast cancer. Lehl SS, et al. **J Assoc Physicians India** 1996 May;44(5):350

Systemic scleroderma associated with Graves' disease. Anzai H, et al. **J Dermatol** 1996 Dec;23(12):896–8 (9 ref.)

A case of multicentric reticulohistiocytosis, systemic sclerosis and Sjögren syndrome. Takahashi M, et al. **J Dermatol** 1997 Aug;24(8):530–4

Scleroderma renal crisis complicated by hemolytic uremic syndrome in a case of elderly onset systemic sclerosis. Yamanaka K, et al. **J Dermatol** 1997 Mar;24(3):184–8

Progressive systemic sclerosis associated with primary small cell carcinoma of the stomach. Shikuwa S, et al. **J Gastroenterol** 1997 Aug;32(4):538–42 (14 ref.)

Accelerated progressive systemic sclerosis in a patient with hypothenar hammer syndrome. Bhatla A, et al. **J Rheumatol** 1996 Feb;23(2):388–92

Multiple bursitis in systemic sclerosis. Ishikawa O, et al. **J Rheumatol** 1997 Jun;24(6):1189–90

Coexistence of serum anti–DNA topoisomerase I and anti–Sm antibodies: report of 3 cases. Kameda H, et al. **J Rheumatol** 1997 Feb;24(2):400–3

Detection of early asymptomatic esophageal dysfunction in systemic sclerosis using a new scintigraphic grading method. Kaye SA, et al. **J Rheumatol** 1996 Feb; 23(2):297–301

Vasculitis and thrombotic thrombocytopenic purpura in a patient with limited scleroderma. Miller A, et al. **J Rheumatol** 1997 Mar;24(3):598–600

Relationship between cutaneous and pulmonary involvement in systemic sclerosis. Morelli S, et al. **J Rheumatol** 1997 Jan;24(1):81–5

Scleroderma concurrent with culture proven tuberculosis in a Japanese Canadian patient. Roddy J, et al. **J Rheumatol** 1996 Dec;23(12):2168–70

Autonomic and sensorimotor neuropathy in patients with systemic lupus erythematosus and systemic sclerosis. Straub RH, et al. **J Rheumatol** 1996 Jan;23(1):87–92

Scleromyxedema with myopathy and hyperthyroidism. Van Linthoudt D, et al. **J Rheumatol** 1996 Jul;23(7):1299–301

Diffuse alveolar hemorrhage in limited cutaneous systemic sclerosis with positive perinuclear antineutrophil cytoplasmic antibodies. Vázquez–Del Mercado M, et al. **J Rheumatol** 1996 Oct;23(10):1821–3

Bilateral hydronephrosis due to intramural ureteral involvement with systemic sclerosis. Ito H, et al. **J Urol** 1997 Jun;157(6):2244

Malignant lymphoma in patients with rheumatic diseases other than Sjögren's syndrome: a clinicopathologic study of five cases and a review of the Japanese literature. Kojima M, et al. **Jpn J Clin Oncol** 1997 Apr;27(2):84–90 (43 ref.)

Failure of losartan to control blood pressure in scleroderma renal crisis [letter] [see comments] Caskey FJ, et al. **Lancet** 1997 Mar 1;349(9052):620. Comment in: Lancet 1997 Apr 26;349(9060):1255.

Organizing diffuse alveolar damage associated with progressive systemic sclerosis. Muir TE, et al. **Mayo Clin Proc** 1997 Jul;72(7):639–42

Captopril hepatotoxicity in a case of renal crisis due to systemic sclerosis. Deira JL, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1717–8

Calcinosis cutis requiring sculpturing in scleroderma [letter] Sengezer M, et al. **Plast Reconstr Surg** 1996 Dec; 98(7):1319–21

Scleroderma renal crisis is still a life–threatening syndrome. Stratta P, et al. **Ren Fail** 1996 Jul;18(4):567–74

Idiopathic pulmonary fibrosis and pulmonary fibrosis in diffuse systemic sclerosis: two fibroses with different prognoses. Papiris SA, et al. **Respiration** 1997;64(1):81–5

Cystic lung disease in systemic sclerosis: a case report with high resolution computed tomography findings. Bergemann A, et al. **Rev Rhum Engl Ed** 1996 Mar;63(3):213–5

Esophageal manometry in systemic sclerosis: screening procedure or confined to symptomatic patients? Lock G, et al. **Rheumatol Int** 1997;17(2):61–6

Shortness of breath and chest pain in a patient with scleroderma. Engel JZ. **Tenn Med** 1996 Oct;89(10):376–7

[Systemic scleroderma and sarcoidosis: 3 new cases] Bandt MD, et al. **Ann Med Interne (Paris)** 1996;147(8):590–4 (10 ref.) (Eng. Abstr.) **(Fre)**

[Should watermelon stomach be considered to be an unrecognized localization of scleroderma?] Marie I, et al. **J Mal Vasc** 1996;21(3):188–91 (Eng. Abstr.) **(Fre)**

[Cardiovascular manifestations in systemic scleroderma] Kane A, et al. **Presse Med** 1997 May 24;26(17):796–800 (Eng. Abstr.) **(Fre)**

[Systemic scleroderma and cancers: 21 cases and review of the literature] Bielefeld P, et al. **Rev Med Interne** 1996; 17(10):810–3 (34 ref.) (Eng. Abstr.) **(Fre)**

[Systemic scleroderma and cancer. Search for predictive factors of cancer in 123 patients with scleroderma] Kyndt X, et al. **Rev Med Interne** 1997 Jul;18(7):528–32 (Eng. Abstr.) **(Fre)**

[Spontaneous rupture of the esophagus (Boerhaave syndrome) in a patient with scleroderma treated by continuous ambulatory peritoneal dialysis] Level C, et al. **Rev Med Interne** 1997 Jul;18(7):566–70 (20 ref.) (Eng. Abstr.) **(Fre)**

[Kidney involvement in progressive scleroderma] Blumenstein M, et al. **Dtsch Med Wochenschr** 1997 Feb 14;122(7):200–4 (22 ref.) **(Ger)**

[Cardiopathy in systemic sclerosis] Valentini G, et al. **Recenti Prog Med** 1996 Nov;87(11):557–63 (40 ref.) (Eng. Abstr.) **(Ita)**

[A case of systemic sclerosis associated with interstitial pneumonia with various autoantibodies: improvement by intravenous cyclophosphamide therapy] Ishiyama K, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Oct;19(5):512–8 (Eng. Abstr.) **(Jpn)**

[Progressive systemic sclerosis associated with massive pleural and pericardial effusion in a 90–year–old woman] Hiramatsu K, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jul; 33(7):535–9 (Eng. Abstr.) **(Jpn)**

[Systemic sclerosis with various gastrointestinal problems including pneumoperitoneum, pneumatosis cystoides intestinalis and malabsorption syndrome] Satoh A, et al. **Ryumachi** 1995 Dec;35(6):927–33 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Serial computed thermography for Raynaud's phenomenon of patient with progressive systemic sclerosis (PSS)] Tomono N, et al. **Ryumachi** 1996 Jun;36(3):522–7 (Eng. Abstr.) **(Jpn)**

[A case of MPO–ANCA positive progressive systemic sclerosis with status epilepticus] Uriuhara A, et al. **Ryumachi** 1997 Jun;37(3):483–6 (Eng. Abstr.) **(Jpn)**

[Heart lesions in patients with systemic sclerosis (editorial)] Kucharz EJ. **Pol Arch Med Wewn** 1997 Jan;97(1):1–6 **(Pol)**

[Study of bone density in systemic scleroderma] da Silva HC, et al. **Rev Assoc Med Bras** 1997 Jan–Mar;43(1):40–6 (Eng. Abstr.) **(Por)**

DIAGNOSIS

Antiendothelial cell antibodies: useful markers of systemic sclerosis. Salojin KV, et al. **Am J Med** 1997 Feb; 102(2):178–85

Test performance in systemic sclerosis: anti–centromere and anti–Scl–70 antibodies. Spencer–Green G, et al. **Am J Med** 1997 Sep;103(3):242–8 (52 ref.)

The palpable tendon friction rub: an important physical examination finding in patients with systemic sclerosis. Steen VD, et al. **Arthritis Rheum** 1997 Jun;40(6):1146–51

Non–invasive assessment of vascular reactivity in forearm skin of patients with primary Raynaud's phenomenon and systemic sclerosis. Anderson ME, et al. **Br J Rheumatol**

1996 Dec;35(12):1281–8
Systemic sclerosis and sarcoidosis, a report of five cases. De Bandt M, et al. **Br J Rheumatol** 1997 Jan;36(1):117–9
Plicometer skin test: a new technique for the evaluation of cutaneous involvement in systemic sclerosis. Nives Parodi M, et al. **Br J Rheumatol** 1997 Feb;36(2):244–50
Intestinal pseudo–obstruction as an initial presentation of systemic sclerosis in two children. Ortiz–Alvarez O, et al. **Br J Rheumatol** 1997 Feb;36(2):280–4
Comparison of high frequency (20 MHz) ultrasound and palpation for the assessment of skin involvement in systemic sclerosis (scleroderma). Scheja A, et al. **Clin Exp Rheumatol** 1997 May–Jun;15(3):283–8
Eosinophilic fasciitis in an adolescent girl with lymphadenopathy and vitiligo–like and linear scleroderma–like changes. A case report. Stork J, et al. **Clin Exp Rheumatol** 1996 May–Jun;14(3):337–41
Nodular regenerative hyperplasia of the liver in a patient with systemic sclerosis. Kaburaki J, et al. **Clin Rheumatol** 1996 Nov;15(6):613–6
Relationships between electrocardiographic and echocardiographic findings in systemic sclerosis (scleroderma). Morelli S, et al. **Int J Cardiol** 1996 Dec 6; 57(2):151–60
Detection of scleroderma with capillaroscopic abnormalities of nailfolds. Maeda M, et al. **Int J Dermatol** 1996 Dec; 35(12):857–61
Systemic scleroderma associated with Graves' disease. Anzai H, et al. **J Dermatol** 1996 Dec;23(12):896–8 (9 ref.)
Measurement of skin elastic properties with a new suction device (II): systemic sclerosis. Ishikawa T, et al. **J Dermatol** 1996 Mar;23(3):165–8
A case of amyloidosis due to multiple myeloma that resembled systemic sclerosis [letter] Sabadini L, et al. **J Rheumatol** 1997 May;24(5):1018
Rheumatology. 11. Systemic sclerosis and the inflammatory myopathies. Rasaratnam I, et al. **Med J Aust** 1997 Mar 17;166(6):322–7 (15 ref.)
[Erasmus syndrome: clinical, tomographic, respiratory function and bronchoalveolar lavage characteristics] Cointrel C, et al. **Rev Mal Respir** 1997 Jan;14(1):21–6 (Eng. Abstr.) **(Fre)**
[Systemic sclerosis] Dreyfus JL. **Schweiz Rundsch Med Prax** 1997 Mar 4;86(10):404–5 **(Ger)**
[Clinical aspects, pathophysiology, diagnosis and therapy of gastrointestinal manifestations of progressive systemic scleroderma] Folwaczny C, et al. **Z Gastroenterol** 1996 Aug;34(8):497–508 (119 ref.) (Eng. Abstr.) **(Ger)**
[A case report of typical scleroderma accompanied with serum abnormalities characteristic of SLE during the course] Nishiyama S, et al. **Ryumachi** 1997 Feb;37(1):24–9 (Eng. Abstr.) **(Jpn)**
[A case of a combination of systemic scleroderma with diffuse eosinophilic fasciitis] Krasovskiĭ II, et al. **Ter Arkh** 1996; 68(9):84–5 (8 ref.) **(Rus)**
[Diagnostic criteria for systemic scleroderma] Nadashkevych ON, et al. **Lik Sprava** 1997 Jan–Feb;(1):75–7 (Eng. Abstr.) **(Ukr)**

DRUG THERAPY

Clinical aspects of the use of gamma linolenic acid in systemic sclerosis. Stainforth JM, et al. **Acta Derm Venereol** 1996 Mar;76(2):144–6
Implications for the use of topoisomerase I inhibitors in treatment of patients with systemic sclerosis. Rudnicka L, et al. **Ann N Y Acad Sci** 1996 Dec 13;803:318–20
Three cases of progressive systemic sclerosis treated with extracorporeal photochemotherapy. Fimiani M, et al. **Arch Dermatol Res** 1997 Jan;289(2):120–2
A placebo–controlled study on urokinase therapy in systemic sclerosis. Ciompi ML, et al. **Biomed Pharmacother** 1996; 50(8):363–8
Effects of five–day versus one–day infusion of iloprost on the peripheral microcirculation in patients with systemic sclerosis. Ceru S, et al. **Clin Exp Rheumatol** 1997 Jul–Aug; 15(4):381–5
A case of diffuse systemic sclerosis treated with a 28–day infusion of iloprost [letter] Biasi D, et al. **Clin Rheumatol** 1997 Jan;16(1):111–2
Iloprost effects on phagocytes in patients suffering from ischaemic diseases: in vivo evidence for down–regulation of alpha M beta 2 integrin. Mazzone A, et al. **Eur J Clin Invest** 1996 Oct;26(10):860–6
Transient acantholytic dermatosis (Grover's disease) in a patient with progressive systemic sclerosis treated with D–penicillamine [letter] Zvulunov A, et al. **Int J Dermatol** 1997 Jun;36(6):476–7
Steroid pulse therapy for progressive systemic sclerosis [editorial; comment] Hashimoto H. **Intern Med** 1996 Jul; 35(7):525–6 (13 ref.). Comment on: Intern Med 1996 Jul;35(7):525–6.
Development of ischemic colitis and scleroderma renal crisis following methylprednisolone pulse therapy for progressive systemic sclerosis. Yamanishi Y, et al. **Intern Med** 1996 Jul;35(7):583–6
Successful treatment of systemic sclerosis with topical PUVA. Morita A, et al. **J Rheumatol** 1995 Dec; 22(12):2361–5
Left ventricular myocardial perfusion and function in systemic sclerosis before and after diltiazem treatment. Geirsson AJ, et al. **Scand J Rheumatol** 1996;25(5):317–20

EPIDEMIOLOGY

Systemic sclerosis in children: a national retrospective survey in Japan. Fujita Y, et al. **Acta Paediatr Jpn** 1997 Apr; 39(2):263–7
Incidence of systemic sclerosis in Allegheny County, Pennsylvania. A twenty–year study of hospital–diagnosed cases, 1963–1982. Steen VD, et al. **Arthritis Rheum** 1997 Mar;40(3):441–5
Epidemiology of systemic sclerosis. Silman AJ, et al. **Curr Opin Rheumatol** 1996 Nov;8(6):585–9 (38 ref.)
The epidemiology of scleroderma among women: assessment of risk from exposure to silicone and silica. Burns CJ, et al. **J Rheumatol** 1996 Nov;23(11):1904–11
Epidemiology of scleroderma among women: assessment of risk from exposure to silicone and silica [letter] Koeger AC, et al. **J Rheumatol** 1997 Sep;24(9):1853–5
Scleroderma––demographics and survival. Silman AJ. **J Rheumatol Suppl** 1997 May;48:58–61 (42 ref.)
Scleroderma epidemiology. Mayes MD. **Rheum Dis Clin North Am** 1996 Nov;22(4):751–64 (56 ref.)

ETHNOLOGY

Racial differences in scleroderma among women in Michigan. Laing TJ, et al. **Arthritis Rheum** 1997 Apr;40(4):734–42
Scleroderma concurrent with culture proven tuberculosis in a Japanese Canadian patient. Roddy J, et al. **J Rheumatol** 1996 Dec;23(12):2168–70

ETIOLOGY

Scleroderma and silicone gel breast prostheses––the Sydney study revisited [see comments] Englert H, et al. **Aust N Z J Med** 1996 Jun;26(3):349–55. Comment in: Aust N Z J Med 1996 Jun;26(3):341–2.
Silicone? Silica? Scleroderma. A need to look further? [letter; comment] Englert M, et al. **Aust N Z J Med** 1996 Dec; 26(6):858. Comment on: Aust N Z J Med 1996 Jun;26(3):341–2.
Silicone breast implants––where have we been and where are we now? [editorial; comment] [see comments] Gatenby PA. **Aust N Z J Med** 1996 Jun;26(3):341–2. Comment on: Aust N Z J Med 1996 Jun;26(3):349–55. Comment in: Aust N Z J Med 1996 Dec;26(6):858.
Case history of a patient with multiple sclerosis and scleroderma [letter] Jawad SH, et al. **Br J Rheumatol** 1997 Apr;36(4):502–3
Association of TAP1 and TAP2 with systemic sclerosis in Japanese. Takeuchi F, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):513–21
General and local scleroderma in children and dermatomyositis and associated syndromes. Laxer RM, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):458–64 (44 ref.)
Connective tissue metabolism in scleroderma, including cytokines. Unemori EN, et al. **Curr Opin Rheumatol** 1996 Nov;8(6):580–4 (28 ref.)
Systemic sclerosis following physical trauma [editorial; comment] Lee P. **J Rheumatol** 1996 Oct;23(10):1689–90. Comment on: J Rheumatol 1996 Oct;23(10):1816–7.
Position 26 of the first domain of the HLA–DQB1 allele in post–silicone implant scleroderma. Morse JH, et al. **J Rheumatol** 1995 Oct;22(10):1872–5
Increased pigmentation in scleroderma. Pope JE, et al. **J Rheumatol** 1996 Nov;23(11):1912–6
Five patients who developed systemic sclerosis shortly after episodes of physical trauma [see comments] Rahman MA, et al. **J Rheumatol** 1996 Oct;23(10):1816–7. Comment in: J Rheumatol 1996 Oct;23(10):1689–90.
Scleroderma–polymyositis overlap syndrome associated with anti–Ku antibody and rimmed vacuole formation. Yamanishi Y, et al. **J Rheumatol** 1996 Nov;23(11):1991–4
Pathogenesis of scleroderma. Collagen. Jimenez SA, et al. **Rheum Dis Clin North Am** 1996 Nov;22(4):647–74 (195 ref.)
Systemic sclerosis. A vascular perspective. LeRoy EC. **Rheum Dis Clin North Am** 1996 Nov;22(4):675–94 (52 ref.)
Occupational and environmental influences on scleroderma. Silman AJ, et al. **Rheum Dis Clin North Am** 1996 Nov; 22(4):737–49 (82 ref.)
Immunopathogenesis of systemic sclerosis. White B. **Rheum Dis Clin North Am** 1996 Nov;22(4):695–708 (81 ref.)
Scleroderma secondary to silica exposure––a case report. Anandan S, et al. **Singapore Med J** 1995 Oct;36(5):559–61
[Environmental factors and iatrogenic elements in systemic scleroderma and related syndromes. Review of the literature] Hallé O, et al. **Rev Med Interne** 1997; 18(3):219–29 (78 ref.) (Eng. Abstr.) **(Fre)**
[Etiology of diffuse scleroderma––proposal of a hypothesis and subsequent development] Takehara K. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Feb;20(1):1–7 (38 ref.) **(Jpn)**
[The role of free radicals in the etiopathogenesis of systemic sclerosis] Komosińska K, et al. **Postepy Hig Med Dosw** 1997;51(3):285–303 (99 ref.) (Eng. Abstr.) **(Pol)**

GENETICS

DNA allelic alterations within VNTR loci of scleroderma families. Artlett CM, et al. **Br J Rheumatol** 1996 Dec; 35(12):1216–22
Regulation of interleukin–4 on collagen gene expression by systemic sclerosis fibroblasts in culture. Lee KS, et al. **J Dermatol Sci** 1996 Jun;12(2):110–7
c–myb proto–oncogene is expressed by quiescent scleroderma fibroblasts and, unlike B–myb gene, does not correlate with proliferation. Piccinini G, et al. **J Invest Dermatol** 1996 Jun;106(6):1281–6
Characterization of antinucleolar antibody reactivity in patients with systemic sclerosis and their relatives. Harvey G, et al. **J Rheumatol** 1997 Mar;24(3):477–84
Hypothesis for the pathogenesis of systemic sclerosis. Furst DE, et al. **J Rheumatol Suppl** 1997 May;48:53–7 (74 ref.)
Center for genetic research on scleroderma [news] Skolnick AA. **JAMA** 1997 Oct 15;278(15):1224
Association of DM genes in systemic sclerosis is secondary to the association with HLA genes. Takeuchi F, et al. **Scand J Rheumatol** 1997;26(3):174–9

HISTORY

Paul Klee and scleroderma. LeRoy EC, et al. **Bull Rheum Dis** 1996 Oct;45(6):4–6

IMMUNOLOGY

Serum levels of soluble CD14 in scleroderma [letter] Bruns M, et al. **Acta Derm Venereol** 1996 Nov;76(6):494
Test performance in systemic sclerosis: anti–centromere and anti–Scl–70 antibodies. Spencer–Green G, et al. **Am J Med** 1997 Sep;103(3):242–8 (52 ref.)
Lymphocyte phenotyping in systemic sclerosis: a flow cytometry analysis of lymphocytes in bronchoalveolar lavage fluid. Domagała–Kulawik J, et al. **Anal Quant Cytol Histol** 1997 Jun;19(3):264–70
Clinical significance of antinuclear antibodies in systemic rheumatic diseases. Hietarinta M, et al. **Ann Med** 1996 Aug; 28(4):283–91 (84 ref.)
Functional properties and molecular characteristics of autoantibodies associated with tight skin syndrome. Kasturi K, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:253–62 (39 ref.)
CRI–EM is a human idiotype highly specific for scleroderma. Vázquez–Abad D, et al. **Ann N Y Acad Sci** 1997 Apr 5; 815:512–5
Assessment of anti–endothelial cell antibodies in systemic sclerosis and Sjögren's syndrome. Hebbar M, et al. **Ann Rheum Dis** 1997 Apr;56(4):230–4
Epitope analysis of the major reactive region of the 100–kd protein of PM–Scl autoantigen. Ge Q, et al. **Arthritis Rheum** 1996 Sep;39(9):1588–95
Identification of autoantibodies to the I protein of the heterogeneous nuclear ribonucleoprotein complex in patients with systemic sclerosis. Montecucco C, et al. **Arthritis Rheum** 1996 Oct;39(10):1669–76
Autoepitope mapping of the centrosome autoantigen PCM–1 using scleroderma sera with anticentrosome autoantibodies. Bao L, et al. **Autoimmunity** 1995;22(4):219–28
Childhood sclerodermatomyositis: report of a case with the anti–PM/Scl antibody and mechanic's hands. García–Patos V, et al. **Br J Dermatol** 1996 Oct;135(4):613–6
Antinuclear and antinucleolar antibodies in patients with scleroderma–polymyositis overlap syndrome [letter] Hietarinta M, et al. **Br J Rheumatol** 1996 Dec;35(12):1326–7
Systemic sclerosis in men: clinical and immunological differences [letter] Simeón CP, et al. **Br J Rheumatol** 1996 Sep;35(9):910–1
Autoantibodies in systemic sclerosis. Steen VD. **Bull Rheum Dis** 1996 Oct;45(6):6–8
Human chromosome pellicle antibody recognizing centromere protein–C (CENP–C), the main component of the kinetochore. Xie Y, et al. **Cell Res** 1997 Jun;7(1):13–9
Circulating levels of soluble CD30 are increased in patients with systemic sclerosis (SSc) and correlate with serological and clinical features of the disease. Giacomelli R, et al. **Clin Exp Immunol** 1997 Apr;108(1):42–6
Anti–RNA polymerase antibodies in systemic sclerosis (SSc): association with anti–topoisomerase I antibodies and identification of autoreactive subunits of RNA polymerase II. Harvey GR, et al. **Clin Exp Immunol** 1996 Sep; 105(3):468–74
Antibodies to membranes of endothelial cells and fibroblasts in scleroderma. Hill MB, et al. **Clin Exp Immunol** 1996 Dec;106(3):491–7
Measurement of anticardiolipin antibodies by ELISA using beta 2–glycoprotein I (beta 2–GPI) in systemic sclerosis. Ihn H, et al. **Clin Exp Immunol** 1996 Sep;105(3):475–9
A cross–reactive idiotype in scleroderma. Vázquez–Abad D, et al. **Clin Exp Immunol** 1997 Jun;108(3):420–7
Antineutrophil cytoplasmic antibodies in systemic sclerosis [letter] Kiraz S, et al. **Clin Rheumatol** 1996 Sep;15(5):519–20
Clinical setting of patients with systemic sclerosis by serum autoantibodies. Picillo U, et al. **Clin Rheumatol** 1997 Jun; 16(4):378–83
Skewing of the CD8+ T–cell repertoire in the lungs of patients with systemic sclerosis. Yurovsky VV, et al. **Hum Immunol** 1996 Jun–Jul;48(1–2):84–97
Scleroderma autoantigens are uniquely fragmented by metal–catalyzed oxidation reactions: implications for pathogenesis. Casciola–Rosen L, et al. **J Exp Med** 1997 Jan 6;185(1):71–9
Mapping of epitopes recognized by PM/Scl autoantibodies with gene–fragment phage display libraries. Blüthner M, et al. **J Immunol Methods** 1996 Nov 13;198(2):187–98
Characterization of antinucleolar antibody reactivity in patients with systemic sclerosis and their relatives. Harvey G, et al. **J Rheumatol** 1997 Mar;24(3):477–84
Autoantibodies to myeloperoxidase in systemic sclerosis.

Locke IC, et al. **J Rheumatol** 1997 Jan;24(1):86–9

Position 26 of the first domain of the HLA–DQB1 allele in post–silicone implant scleroderma. Morse JH, et al. **J Rheumatol** 1995 Oct;22(10):1872–5

Anti–PM/Scl autoantibodies in patients without clinical polymyositis or scleroderma. Schnitz W, et al. **J Rheumatol** 1996 Oct;23(10):1729–33

Hypothesis for the pathogenesis of systemic sclerosis. Furst DE, et al. **J Rheumatol Suppl** 1997 May;48:53–7 (74 ref.)

Scleroderma: a disease related to damaged proteins? [news] Peng SL, et al. **Nat Med** 1997 Mar;3(3):276–8

Antineutrophil cytoplasmic autoantibodies (ANCA) and systemic sclerosis. Carvajal I, et al. **Nephrol Dial Transplant** 1997 Mar;12(3):576–7

Lack of natural killer cell augmentation in vitro by human interferon gamma in a subset of patients with systemic sclerosis. Wanchu A, et al. **Pathobiology** 1995;63(5):288–92

Characterization of two scleroderma autoimmune antigens that copurify with human ribonuclease P. Eder PS, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1101–6

Antinuclear antibody in systemic sclerosis (scleroderma). Okano Y. **Rheum Dis Clin North Am** 1996 Nov; 22(4):709–35 (138 ref.)

Immunopathogenesis of systemic sclerosis. White B. **Rheum Dis Clin North Am** 1996 Nov;22(4):695–708 (81 ref.)

[Antibodies to collagen type I and fibronectin in patients with scleroderma systemic] Taova MK, et al. **Klin Med (Mosk)** 1996;74(7):50–1 (Eng. Abstr.) **(Rus)**

METABOLISM

Increased endothelial and epidermal thrombomodulin expression and plasma thrombomodulin level in progressive systemic sclerosis. Mizutani H, et al. **Acta Med Okayama** 1996 Dec;50(6):293–7

Increased levels of endothelin–1 and differential endothelin type A and B receptor expression in scleroderma–associated fibrotic lung disease. Abraham DJ, et al. **Am J Pathol** 1997 Sep;151(3):831–41

Tissue factor expression and fibrin deposition in the lungs of patients with idiopathic pulmonary fibrosis and systemic sclerosis. Imokawa S, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):631–6

Decorin and glycosaminoglycan synthesis in skin fibroblasts from patients with systemic sclerosis. Kuroda K, et al. **Arch Dermatol Res** 1997 Jul;289(8):481–5

Cytokine concentrations in bronchoalveolar lavage fluid of patients with systemic sclerosis. Bolster MB, et al. **Arthritis Rheum** 1997 Apr;40(4):743–51

Scleroderma lung fibroblasts exhibit elevated and dysregulated type I collagen biosynthesis. Shi–Wen X, et al. **Arthritis Rheum** 1997 Jul;40(7):1237–44

VCAM–1 expression on endothelium in lesions from cutaneous lupus erythematosus is increased compared with systemic and localized scleroderma. Jones SM, et al. **Br J Dermatol** 1996 Nov;135(5):678–86

Increased levels of type I and III collagen and hyaluronan in scleroderma skin. Sørndergaard K, et al. **Br J Dermatol** 1997 Jan;136(1):47–53

Cytokine production in scleroderma patients: effects of therapy with either iloprost or nifedipine. Della Bella S, et al. **Clin Exp Rheumatol** 1997 Mar–Apr;15(2):135–41

Cutaneous localization of endothelin–1 in patients with systemic sclerosis: immunoelectron microscopic study. Tabata H, et al. **Int J Dermatol** 1997 Apr;36(4):272–5

Effects of a factor derived from polymorphonuclear leukocytes on the growth and collagen metabolism in normal and scleroderma skin fibroblast cultures. Sasaki T, et al. **J Dermatol Sci** 1996 Jan;11(1):10–18

Elevated levels of platelet derived growth factor and transforming growth factor–beta 1 in bronchoalveolar lavage fluid from patients with scleroderma. Ludwicka A, et al. **J Rheumatol** 1995 Oct;22(10):1876–83

Altered dermatan sulfate proteoglycan synthesis in fibroblast cultures established from skin of patients with systemic sclerosis. Westergren–Thorsson G, et al. **J Rheumatol** 1996 Aug;23(8):1398–406

MORTALITY

Survival following the onset of scleroderma: results from a retrospective inception cohort study of the UK patient population. Bryan C, et al. **Br J Rheumatol** 1996 Nov; 35(11):1122–6

Epidemiological analysis of prognosis of 496 Japanese patients with progressive systemic sclerosis (SSc). Scleroderma Research Committee Japan. Nishioka K, et al. **J Dermatol** 1996 Oct;23(10):677–82

PATHOLOGY

Occurrence and distribution of peptidergic nerve fibers in skin biopsies from patients with systemic sclerosis. Wallengren J, et al. **Acta Derm Venereol** 1996 Mar; 76(2):126–8

Up–regulation of class II major histocompatibility complex and intercellular adhesion molecule 1 expression on scleroderma fibroblasts and endothelial cells by interferon–gamma and tumor necrosis factor alpha in the early disease stage. Gruschwitz MS, et al. **Arthritis Rheum** 1997 Mar;40(3):540–50

The abnormalities of nailfold capillaries in scleroderma as assessed by video image analysis and photomicroscopy. Chandran G, et al. **Asian Pac J Allergy Immunol** 1996 Dec; 14(2):81–5

Increased nailfold capillary dimensions in primary Raynaud's phenomenon and systemic sclerosis. Bukhari M, et al. **Br J Rheumatol** 1996 Nov;35(11):1127–31

Progressive systemic sclerosis associated with multiple mononeuropathy. Nitta Y, et al. **Dermatology** 1996; 193(1):22–6 (19 ref.)

Silicone granuloma in acral skin in a patient with silicone–gel breast implants and systemic sclerosis. Anderson DR, et al. **Int J Dermatol** 1996 Jan;35(1):36–8

Electron–microscopic study of sclerodermatous chronic graft–versus–host disease. Tabata H, et al. **Int J Dermatol** 1996 Dec;35(12):862–6

Scleroderma fibroblasts show increased responsiveness to endothelial cell–derived IL–1 and bFGF. Denton CP, et al. **J Invest Dermatol** 1997 Mar;108(3):269–74

Tissue inhibitor of metalloproteinase 1 (TIMP–1) may be an autocrine growth factor in scleroderma fibroblasts. Kikuchi K, et al. **J Invest Dermatol** 1997 Mar;108(3):281–4

Skeletal muscle pathology in systemic sclerosis. Calore EE, et al. **J Rheumatol** 1995 Dec;22(12):2246–9

Basic fibroblast growth factor inhibits basal and transforming growth factor–beta induced collagen alpha 2(I) gene expression in scleroderma and normal fibroblasts. Ichiki Y, et al. **J Rheumatol** 1997 Jan;24(1):90–5

Autonomic and sensorimotor neuropathy in patients with systemic lupus erythematosus and systemic sclerosis. Straub RH, et al. **J Rheumatol** 1996 Jan;23(1):87–92

Connective tissue in skin biopsies from patients suffering systemic sclerosis. Quaglino D Jr, et al. **J Submicrosc Cytol Pathol** 1996 Apr;28(2):287–96

Transplantation of systemic sclerosis (SSc) skin grafts into severe combined immunodeficient mice: increased presence of SSc leukocytes in SSc skin grafts and autoantibody production following autologous leukocyte transfer. Kräling BM, et al. **Pathobiology** 1996;64(2):99–114

PHYSIOPATHOLOGY

Gastrointestinal manifestations of progressive systemic sclerosis. Lock G, et al. **Am J Gastroenterol** 1997 May; 92(5):763–71 (103 ref.)

Increased capillary permeability in systemic sclerosis: help or hindrance? Grassi W, et al. **Ann Rheum Dis** 1996 Sep; 55(9):603–6

Up–regulation of class II major histocompatibility complex and intercellular adhesion molecule 1 expression on scleroderma fibroblasts and endothelial cells by interferon–gamma and tumor necrosis factor alpha in the early disease stage. Gruschwitz MS, et al. **Arthritis Rheum** 1997 Mar;40(3):540–50

Left ventricular function in scleroderma [see comments] Armstrong GP, et al. **Br J Rheumatol** 1996 Oct; 35(10):983–8. Comment in: Br J Rheumatol 1997 May;36(5):609–10.

Left ventricular diastolic function in scleroderma [letter; comment] Montecucco C, et al. **Br J Rheumatol** 1997 May; 36(5):609–10. Comment on: Br J Rheumatol 1996 Oct;35(10):983–8.

Systemic sclerosis in men: clinical and immunological differences [letter] Simeón CP, et al. **Br J Rheumatol** 1996 Sep;35(9):910–1

Cardiorespiratory responses to incremental exercise in patients with systemic sclerosis. Schwaiblmair M, et al. **Chest** 1996 Dec;110(6):1520–5

A longitudinal study of pulmonary function in Danish patients with systemic sclerosis. Jacobsen S, et al. **Clin Rheumatol** 1997 Jun;16(4):384–90

Gastrointestinal features of scleroderma. Sjogren RW. **Curr Opin Rheumatol** 1996 Nov;8(6):569–75 (57 ref.)

Connective tissue metabolism in scleroderma, including cytokines. Unemori EN, et al. **Curr Opin Rheumatol** 1996 Nov;8(6):580–4 (28 ref.)

Raynaud's phenomenon and other features of scleroderma, including pulmonary hypertension. Wigley FM. **Curr Opin Rheumatol** 1996 Nov;8(6):561–8 (92 ref.)

Computerized evaluation of skin stiffening in scleroderma. Nikkels–Tassoudji N, et al. **Eur J Clin Invest** 1996 Jun; 26(6):457–60

Do patients with systemic sclerosis have abnormal gallbladder function? Posthuma WF, et al. **Eur J Gastroenterol Hepatol** 1997 Jul;9(7):675–7

Neutrophil activation in fibrosing alveolitis: a comparison of lone cryptogenic fibrosing alveolitis and systemic sclerosis. Cailes JB, et al. **Eur Respir J** 1996 May;9(5):992–9

Electrophysiologic abnormalities of cardiac function in progressive systemic sclerosis. Rokas S, et al. **J Electrocardiol** 1996 Jan;29(1):17–25

Alteration of arterial distensibility in systemic sclerosis. Constans J, et al. **J Intern Med** 1997 Feb;241(2):115–8

Anorectal dysfunction in systemic sclerosis. Kim KC, et al. **J Korean Med Sci** 1996 Jun;11(3):244–9

Digital vascular responses to cooling in subjects with cold sensitivity, primary Raynaud's phenomenon, or scleroderma spectrum disorders [see comments] Maricq HR, et al. **J Rheumatol** 1996 Dec;23(12):2068–78. Comment in: J Rheumatol 1997 Jul;24(7):1454.

Scleroderma and related conditions. Mitchell H, et al. **Med Clin North Am** 1997 Jan;81(1):129–49 (112 ref.)

Pulmonary function in patients with systemic sclerosis. Spagnolatti L, et al. **Monaldi Arch Chest Dis** 1997 Feb; 52(1):4–8

The nervous system in systemic sclerosis (scleroderma). Clinical features and pathogenetic mechanisms. Cerinic MM, et al. **Rheum Dis Clin North Am** 1996 Nov; 22(4):879–92 (87 ref.)

Cardiac involvement in scleroderma. Deswal A, et al. **Rheum Dis Clin North Am** 1996 Nov;22(4):841–60 (87 ref.)

Muscle abnormalities in scleroderma. Olsen NJ, et al. **Rheum Dis Clin North Am** 1996 Nov;22(4):783–96 (45 ref.)

Scleroderma. Clinical problems. The lungs. Silver RM. **Rheum Dis Clin North Am** 1996 Nov;22(4):825–40 (95 ref.)

Scleroderma renal crisis. Steen VD. **Rheum Dis Clin North Am** 1996 Nov;22(4):861–78 (72 ref.)

Raynaud's phenomenon. Wigley FM, et al. **Rheum Dis Clin North Am** 1996 Nov;22(4):765–81 (121 ref.)

Gastrointestinal manifestations of scleroderma. Young MA, et al. **Rheum Dis Clin North Am** 1996 Nov;22(4):797–823 (117 ref.)

Gallbladder motility in systemic sclerosis. Lock G, et al. **Rheumatol Int** 1996;16(2):61–5

Effect of progressive systemic sclerosis on antral myoelectrical activity and gastric emptying. Pfaffenbach B, et al. **Z Gastroenterol** 1996 Sep;34(9):517–21

[Cold–induced cardiac abnormalities in systemic sclerosis] Rey RH, et al. **Medicina (B Aires)** 1995;55(4):289–94 (Eng. Abstr.) **(Spa)**

[Trigeminal neuropathy in progressive systemic sclerosis. Letter] Campello I, et al. **Rev Neurol** 1997 Jan;25(137):137 **(Spa)**

PSYCHOLOGY

Depression and anxiety in patients with systemic sclerosis [letter] Straszecka J, et al. **Clin Rheumatol** 1996 Nov; 15(6):621

RADIOGRAPHY

Density gradient of the lung parenchyma at computed tomographic scanning in patients with pulmonary hypertension and systemic sclerosis. Cailes JB, et al. **Acad Radiol** 1996 Sep;3(9):724–30

Colon involvement in systemic sclerosis: clinical–radiological correlations. Govoni M, et al. **Clin Rheumatol** 1996 May; 15(3):271–6

Cryptogenic fibrosing alveolitis and the fibrosing alveolitis of systemic sclerosis: morphological differences on computed tomographic scans. Chan TY, et al. **Thorax** 1997 Mar;52(3):265–70

RADIONUCLIDE IMAGING

[Myocardial tomoscintigraphy with 201Tl in the diagnosis of cardiac involvement in systemic scleroderma] Samollenko LE, et al. **Ter Arkh** 1996;68(5):30–3 (Eng. Abstr.) **(Rus)**

REHABILITATION

Systemic sclerosis (scleroderma): an integrated challenge in rehabilitation. Casale R, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):767–73 (91 ref.)

SURGERY

Digital calcification in systemic sclerosis: effective treatment with good tissue preservation using the carbon dioxide laser. Bottomley WW, et al. **Br J Dermatol** 1996 Aug; 135(2):302–4

On surgical microarteriolysis for treatment of Raynaud's phenomenon in scleroderma [letter] van den Broeck D, et al. **Br J Rheumatol** 1997 Jun;36(6):706–7

Compression of the median nerve proximal to the carpal tunnel in scleroderma. Ko CY, et al. **J Hand Surg [Am]** 1996 May;21(3):363–5

THERAPY

Safety and efficacy of recombinant gamma interferon in the treatment of systemic sclerosis. Vlachoyiannopoulos PG, et al. **Ann Rheum Dis** 1996 Oct;55(10):761–8

Systemic scleroderma. Multicenter trial of 1 year of treatment with recombinant interferon gamma [see comments] Hunzelmann N, et al. **Arch Dermatol** 1997 May; 133(5):609–13. Comment in: Arch Dermatol 1997 May;133(5):637–42.

Recombinant cytokine treatment for scleroderma. Can the antifibrotic potential of interferon–gamma be realized clinically? [editorial; comment] Varga J. **Arch Dermatol** 1997 May;133(5):637–42 (42 ref.). Comment on: Arch Dermatol 1997 May;133(5):609–13.

Beneficial effect of granulocyte–colony stimulating factor in scleromyxoedema associated with severe idiopathic neutropenia. Cohen AM, et al. **Br J Dermatol** 1996 Oct; 135(4):626–9

Advances in palliative care for the patient with scleroderma. Herrick AL. **Curr Opin Rheumatol** 1996 Nov;8(6):555–60 (27 ref.)

General and local scleroderma in children and dermatomyositis and associated syndromes. Laxer RM, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):458–64 (44 ref.)

Extracorporeal photochemotherapy in progressive systemic sclerosis: a follow–up study. Schwartz J, et al. **Int J Dermatol** 1997 May;36(5):380–5

Guidelines of care for scleroderma and sclerodermoid disorders. American Academy of Dermatology. Drake LA, et al. **J Am Acad Dermatol** 1996 Oct;35(4):609–14

Monoclonal antibody therapy of diffuse cutaneous scleroderma with CAMPATH-1H. Isaacs JD, et al. **J Rheumatol** 1996 Jun;23(6):1103-6

Hematopoietic stem cell transplantation for autoimmune diseases. Brooks PM. **J Rheumatol Suppl** 1997 May; 48:19-22 (22 ref.)

Choosing appropriate patients with systemic sclerosis for treatment by autologous stem cell transplantation. Clements PJ, et al. **J Rheumatol Suppl** 1997 May;48:85-8 (13 ref.)

Development of a protocol for allogeneic marrow transplantation for severe systemic sclerosis: paradigm for autoimmune disease. Nash RA, et al. **J Rheumatol Suppl** 1997 May;48:72-8 (51 ref.)

The evolving role of blood and marrow transplantation for the treatment of autoimmune diseases. Sullivan KM, et al. **J Rheumatol Suppl** 1997 May;48:1-4 (59 ref.)

Treatment of systemic sclerosis with autologous haemopoietic stem cell transplantation [letter] [see comments] Tyndall A, et al. **Lancet** 1997 Jan 25; 349(9047):254. Comment in: Lancet 1997 Mar 22;349(9055):881.

Treatment of systemic sclerosis. Pope JE. **Rheum Dis Clin North Am** 1996 Nov;22(4):893-907 (95 ref.)

[Acupuncture in treatment of inflammatory rheumatic diseases] Lautenschläger J. **Z Rheumatol** 1997 Jan-Feb; 56(1):8-20 (Eng. Abstr.) **(Ger)**

[The current strategy for pathogenetic therapy in systemic scleroderma] Guseva NG. **Ter Arkh** 1997;69(5):79-81 **(Rus)**

ULTRASONOGRAPHY

A quantitative description of echographic images of sclerotic skin in patients with systemic sclerosis, as assessed by computerized image analysis on 20 MHz B-scan recordings. Seidenari S, et al. **Acta Derm Venereol** 1996 Sep;76(5):361-4

Comparison of high frequency (20 MHz) ultrasound and palpation for the assessment of skin involvement in systemic sclerosis (scleroderma). Scheja A, et al. **Clin Exp Rheumatol** 1997 May-Jun;15(3):283-8

SCLEROMA, NASAL see **RHINOSCLEROMA**

SCLEROPLASTY

[Effectiveness of posterior scleroplasty in progressive myopia in children] Gerinec A, et al. **Cesk Slov Oftalmol** 1996 Sep; 52(4):220-5 (Eng. Abstr.) **(Slo)**

METHODS

[Limbo-sclerotomy--a refractive procedure outside the cornea. Preliminary report] Schatilowa TA, et al. **Klin Monatsbl Augenheilkd** 1996 Nov;209(5):269-74 (Eng. Abstr.) **(Ger)**

SCLEROSING AGENTS see **SCLEROSING SOLUTIONS**

SCLEROSING SOLUTIONS

Prospective, randomized trial of hypertonic glucose water and sodium tetradecyl sulfate for gastric variceal bleeding in patients with advanced liver cirrhosis. Chang KY, et al. **Endoscopy** 1996 Aug;28(6):481-6

Percutaneous management of benign renal cysts. Sanpalmieri G, et al. **Riv Eur Sci Med Farmacol** 1996 Sep-Dec; 18(5-6):229-31

ADMINISTRATION & DOSAGE

Symptomatic hemangiomas and venous malformations in infants, children, and young adults: treatment with percutaneous injection of sodium tetradecyl sulfate. O'Donovan JC, et al. **AJR Am J Roentgenol** 1997 Sep; 169(3):723-9

OK-432 therapy of lymphangiomas in children. Schmidt B, et al. **Eur J Pediatr** 1996 Aug;155(8):649-52

Percutaneous treatment of a congenital splenic cyst with alcohol: a new therapeutic approach. Akhan O, et al. **Eur Radiol** 1997;7(7):1067-70

Endoscopic injection of ethanolamine as a treatment for achalasia: a first report. Terruzzi V, et al. **Gastrointest Endosc** 1997 Jun;45(6):540-2

Factors related to the failure of endoscopic injection therapy for bleeding gastric ulcer. Brullet E, et al. **Gut** 1996 Aug; 39(2):155-8

Endoscopic injection sclerotherapy with 1.5% Sotradecol for bleeding cardiac varices. Chiu KW, et al. **J Clin Gastroenterol** 1997 Apr;24(3):161-4

Scrutinizing sclerotherapy [letter; comment] Bowman WE Jr. **N C Med J** 1996 May-Jun;57(3):127-8. Comment on: N C Med J 1996 Jan-Feb;57(1):42-6.

Cirsoid aneurysm treatment by percutaneous injection of sodium tetradecyl sulfate. Hendrix LE, et al. **Surg Neurol** 1996 Dec;46(6):557-60; discussion 560-1

[Evaluation of the treatment of cystic lymphangioma by percutaneous injection of Ethibloc in 20 patients] Martinot V, et al. **Arch Pediatr** 1997 Jan;4(1):8-14 (Eng. Abstr.) **(Fre)**

[A case of rectal varices treated with endoscopic injection sclerotherapy] Zeniya A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):38-43 (19 ref.) **(Jpn)**

ADVERSE EFFECTS

Paraffinoma of the penis: one-stage repair. Muraro GB, et al. **Arch Esp Urol** 1996 Jul-Aug;49(6):648-50

Impotence after sclerotherapy of haemorrhoids: case reports. Bullock N. **BMJ** 1997 Feb 8;314(7078):419

Acute ischemia followed by hemorrhagic gastric necrosis after injection sclerotherapy for ulcer. Dorta G, et al. **Endoscopy** 1996 Aug;28(6):532

An unusual complication of histoacryl injection. Naga M, et al. **Endoscopy** 1997 Feb;29(2):140

Nefazodone- and/or sodium tetradecyl sulfate-associated leukopenia, fever, and shaking chills in a patient with premenstrual dysphoric disorder [letter] Fogelson DL. **J Clin Psychopharmacol** 1997 Jun;17(3):222-3

Acute renal failure and renal papillary necrosis following instillation of silver nitrate for treatment of chyluria. Dash SC, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1841-2

Phrenic nerve paralysis after doxycycline sclerotherapy for chylous fistula. Kirse DJ, et al. **Otolaryngol Head Neck Surg** 1997 Jun;116(6 Pt 1):680-3

[Stomach wall necrosis after endoscopic sclerotherapy (letter; comment)] Friedrichs O. **Dtsch Med Wochenschr** 1997 Aug 1;122(31-32):990-1. Comment on: Dtsch Med Wochenschr 1997 May 9;122(19):606-9. **(Ger)**

[Complete gastric wall necrosis after endoscopic sclerotherapy for a gastric ulcer with visible arterial stump (see comments)] Scharnke W, et al. **Dtsch Med Wochenschr** 1997 May 9;122(19):606-9 (Eng. Abstr.). Comment in: Dtsch Med Wochenschr 1997 Aug 1;122(31-32):990-1. **(Ger)**

PHARMACOLOGY

Chemical ablation of the gallbladder. Majeed AW, et al. **Br J Surg** 1997 May;84(5):638-41

Histologic effect of doxycycline sclerotherapy on rat femoral nerve. Kirse DJ, et al. **Head Neck** 1996 Nov-Dec; 18(6):506-11

Peritracheal fibrosis induced by sclerosing agents: a putative treatment for tracheomalacia. Abu-Dalu K, et al. **J Invest Surg** 1996 Nov-Dec;9(6):433-7

Comparison of mitoxantrone and tetracycline as pleural sclerosing agents in rabbits. Light RW, et al. **Lung** 1996; 174(6):373-81

Effectiveness of sodium hydroxide as a pleural sclerosing agent in rabbits: influence of concomitant intrapleural lidocaine. Teixeira LR, et al. **Lung** 1996;174(5):325-32

THERAPEUTIC USE

Balloon-occluded retrograde transvenous obliteration for gastric varices with gastrorenal or gastrocaval collaterals. Koito K, et al. **AJR Am J Roentgenol** 1996 Nov; 167(5):1317-20

Endoscopic variceal ligation versus endoscopic injection sclerotherapy: comparison of hepatic and renal function. Nakase H, et al. **Am J Gastroenterol** 1996 Oct;91(10):2170-3

Successful endoscopic injection sclerotherapy with N-butyl-2-cyanoacrylate following the recurrence of bleeding soon after endoscopic ligation for ruptured duodenal varices. Yoshida Y, et al. **Am J Gastroenterol** 1997 Jul;92(7):1227-9

OK-432 therapy for lymphangiomas. Smith RJ, et al. **Arch Otolaryngol Head Neck Surg** 1996 Nov; 122(11):1195-9

Comparison of polidocanol and tetracycline in the sclerotherapy of testicular hydrocele and epididymal cyst. Daehlin L, et al. **Br J Urol** 1997 Sep;80(3):468-71

Successful closure and embolization of a fistula between the pancreatic duct and a pseudocyst using ethibloc. Buecker A, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct; 20(5):394-6

Venous malformations: sclerotherapy with a mixture of ethanol and lipiodol. Suh JS, et al. **Cardiovasc Intervent Radiol** 1997 Jul-Aug;20(4):268-73

Minocycline sclerosis for malignant pericardial effusions [letter; comment] Spodick DH. **Chest** 1997 Feb;111(2):524 . Comment on: Chest 1996 Jun;109(6):1452-4.

Determination of metalloproteinases, plasminogen-activators and their inhibitors in the synovial fluids of patients with rheumatoid arthritis during chemical synoviorthesis. Blaser J, et al. **Clin Chim Acta** 1996 Jan 15;244(1):17-33

Clinical and histologic evaluation of polyiodinated iodine with and without hypertonic saline/dextrose in the rabbit ear vein model. Goldman MP, et al. **Dermatol Surg** 1997 Aug;23(8):701-4

Sclerotherapy in noncirrhotic portal fibrosis. Chawla YK, et al. **Dig Dis Sci** 1997 Jul;42(7):1449-53

Endoscopic treatment of bleeding fundic varices with 50% glucose injection. Chang KY, et al. **Endoscopy** 1996 May; 28(4):398

Treatment of bleeding esophageal varices with cyanoacrylate and polidocanol, or polidocanol alone: results of a prospective study in an unselected group of patients with cirrhosis of the liver [see comments] Lux G, et al. **Endoscopy** 1997 May;29(4):241-6. Comment in: Endoscopy 1997 May;29(4):281-2. Comment in: Endoscopy 1997 May;29(4):283-4.

Thrombin and ethanolamine injection therapy in arresting uncontrolled bleeding from duodenal varices. Sans M, et al. **Endoscopy** 1996 May;28(4):403

Suction sclerotherapy for the treatment of esophageal varices. Blackard WG, et al. **Gastrointest Endosc** 1996 Dec; 44(6):725-8

Hassab operation with intraoperative endoscopic injection sclerotherapy ("Hassab-EIS") for esophagogastric varices: with an autopsied case after excessive gastric vascular damage. Nakamura H, et al. **Hepatogastroenterology** 1996 Jul-Aug;43(10):980-6

Toxicological requirements for sclerosing agents or other chemicals for female sterilization. Heywood R. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S41-5 (12 ref.)

Transcervical quinacrine sterilization: clinical experience. Sokal DC, et al. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S57-69 (50 ref.)

Quinacrine: sclerosing agent of the utero-tubal junction in women, with anticarcinogenic actions in transplanted tumors in mice. Zipper J, et al. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S47-55 (73 ref.)

Obstructive jaundice caused by non-parasitic hepatic cyst treated with percutaneous drainage and instillation of minocycline hydrochloride as a sclerosing agent. Yoshihara K, et al. **Intern Med** 1996 May;35(5):373-5

Eleven-year survey of safety and efficacy of endoscopic injection sclerotherapy using 2% sodium tetradecyl sulfate and contrast medium. Iwase H, et al. **J Clin Gastroenterol** 1996 Jan;22(1):58-65

Cruveilhier-Baumgarten syndrome in which venous hum disappeared following endoscopic variceal sclerotherapy. Yamakawa O, et al. **J Gastroenterol** 1996 Aug;31(4):618-22

Bleomycin sclerosis of pelvic lymphoceles. Kerlan RK Jr, et al. **J Vasc Interv Radiol** 1997 Sep-Oct;8(5):885-7

Percutaneous sclerotherapy of lymphoceles related to renal transplantation. Montalvo BM, et al. **J Vasc Interv Radiol** 1996 Jan-Feb;7(1):117-23

Randomised trial of single and repeated fibrin glue compared with injection of polidocanol in treatment of bleeding peptic ulcer [see comments] Rutgeerts P, et al. **Lancet** 1997 Sep 6;350(9079):692-6. Comment in: Lancet 1997 Sep 6;350(9079):679-80.

Sclerotherapy of telangiectases using sodium tetradecyl sulfate (Sotradecol) [see comments] Hren C, et al. **N C Med J** 1996 Jan-Feb;57(1):42-6 (8 ref.). Comment in: N C Med J 1996 May-Jun;57(3):127-8.

Lymphangiomas in children: percutaneous sclerotherapy with an alcoholic solution of zein. Dubois J, et al. **Radiology** 1997 Sep;204(3):651-4

Randomized trial of endoscopic injection sclerosis with ethanolamine oleate and ethanol for bleeding peptic ulcer. Mäkelä JT, et al. **Scand J Gastroenterol** 1996 Nov; 31(11):1059-62

Percutaneous sclerotherapy of venous malformations of the head and neck using sodium tetradecyl sulphate (sotradecol). Siniluoto TM, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Jun; 31(2):145-50

Long-term outcome of patients treated for hydrocele with the sclerosant agent sodium tetradecyl sulphate. Stattin P, et al. **Scand J Urol Nephrol** 1996 Apr;30(2):109-13

Polidocanol sclerotherapy for simple renal cysts. Ohta S, et al. **Urol Int** 1997;58(3):145-7

[Ethanol sclerotherapy in superficial bladder tumors] Damyanov C. **Ann Urol (Paris)** 1996;30(5):244-6 (Eng. Abstr.) **(Fre)**

[Treatment of a solitary renal cyst using percutaneous drainage and repeat alcoholization] Porpiglia F, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):197-9 (Eng. Abstr.) **(Ita)**

[Study on the sclerosing agent for the treatment of simple renal cysts] Akiyama H, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Dec;87(12):1277-80 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnosis and minor invasive methods of treatment of nonparasitic hepatic cysts] Kuzin NM, et al. **Khirurgiia (Mosk)** 1996;(5):16-20 (Eng. Abstr.) **(Rus)**

[Sclerosing agents in clinical practice] Labaš P, et al. **Cas Lek Cesk** 1996 Dec 18;135(24):796-8 (Eng. Abstr.) **(Slo)**

[The use of the polyurethane adhesive compound KL-3 for treating varicosities of the surface veins] Polous IuM, et al. **Klin Khir** 1996;(7):26-7 **(Ukr)**

SCLEROSIS

Development of tympanosclerosis: can predicting factors be identified? Forséni M, et al. **Am J Otol** 1997 May; 18(3):298-303

COMPLICATIONS

Surgery for intractable epilepsy secondary to viral encephalitis. Davies KG, et al. **Br J Neurosurg** 1995; 9(6):759-62

CONGENITAL

Further clinical delineation and increased morbidity in males with osteopathia striata with cranial sclerosis: an X-linked disorder? Pellegrino JE, et al. **Am J Med Genet** 1997 May 16;70(2):159-65

IMMUNOLOGY

Human leucocyte antigens in tympanosclerosis. Dursun G, et al. **Clin Otolaryngol** 1997 Feb;22(1):62-4

SCLEROSIS

PATHOLOGY

Cytologic features in fine-needle aspirates from a sclerosing mucoepidermoid thyroid carcinoma with eosinophilia. Bondeson L, et al. **Diagn Cytopathol** 1996 Nov;15(4):301–5

Is there a role for fine-needle aspiration in radial scar/complex sclerosing lesions of the breast? Greenberg ML, et al. **Diagn Cytopathol** 1997 Jun;16(6):537–42

Traumatic arterial damage after fine-needle aspirational cytology in mammary complex sclerosing lesions. Davies JD, et al. **Histopathology** 1996 Jan;28(1):65–70

Sclerosing mucoepidermoid carcinoma with eosinophilia of the thyroid: report of two patients, one with distant metastasis, and review of the literature. Sim SJ, et al. **Hum Pathol** 1997 Sep;28(9):1091–6 (15 ref.)

Postmenopausal intra-abdominal desmoplastic small cell tumor. Fukunaga M, et al. **Pathol Int** 1996 Apr;46(4):281–5

PHYSIOPATHOLOGY

Human leucocyte antigens in tympanosclerosis. Dursun G, et al. **Clin Otolaryngol** 1997 Feb;22(1):62–4

Characteristics of temporal lobe epilepsy with mesial temporal sclerosis, with special reference to psychotic episodes. Kanemoto K, et al. **Neurology** 1996 Nov; 47(5):1199–203

SURGERY

Surgery for intractable epilepsy secondary to viral encephalitis. Davies KG, et al. **Br J Neurosurg** 1995; 9(6):759–62

SCLEROSIS, DISSEMINATED see **MULTIPLE SCLEROSIS**

SCLEROSIS, HEREDITARY SPINAL see **FRIEDREICH'S ATAXIA**

SCLEROSIS, PRESENILE see **DEMENTIA, PRESENILE**

SCLEROSIS, PROGRESSIVE SYSTEMIC see **SCLERODERMA, SYSTEMIC**

SCLEROSIS, SYSTEMIC see **SCLERODERMA, SYSTEMIC**

SCLEROSTOMY

Histology of conjunctival vascular endothelium after filtering surgery with mitomycin C in rabbits. Assalian A, et al. **Can J Ophthalmol** 1996 Oct;31(6):289–95

Transconjunctival application of mitomycin C in combination with laser sclerostomy ab interno: a long-term morphological study of the postoperative healing process. Iliev ME, et al. **Exp Eye Res** 1997 Jun;64(6):1013–26

Effects of different formulations of mitoxantrone (solutions, nanospheres, liposomes) on glaucoma surgery in rabbits. Tilleul P, et al. **Ophthalmic Res** 1997;29(4):218–26

The effects of subconjunctival verapamil on filtering blebs in rabbits. Gupta B, et al. **Ophthalmic Surg Lasers** 1996 May;27(5):378–83

[Development of corneal sensitivity after phacoemulsification with scleral tunnel incision] Kohlhaas M, et al. **Klin Monatsbl Augenheilkd** 1997 Jul;211(1):32–6 (Eng. Abstr.) **(Ger)**

[Superficial sponge anesthesia in cataract surgery (with scleral tunnel incision)] Pham DT, et al. **Klin Monatsbl Augenheilkd** 1996 Dec;209(6):347–53 (Eng. Abstr.) **(Ger)**

[Antiproliferative therapy with 5-fluorouracil in erbium:YAG laser sclerostomy ab externo] Schmidbauer JM, et al. **Ophthalmologe** 1996 Oct;93(5):569–75 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Efficacy of autologous blood injection for treating overfiltering or leaking blebs after glaucoma surgery. Choudhri SA, et al. **Am J Ophthalmol** 1997 Apr; 123(4):554–5

TPA for sclerostomy occlusion [letter] Foo K, et al. **Aust N Z J Ophthalmol** 1996 Nov;24(4):391–2

Macrophages during fibrosis following scleral fistulising surgery in a rat model. Sheridan CM, et al. **Curr Eye Res** 1996 May;15(5):559–68

INSTRUMENTATION

[Modified radiation administration in Er:YAG laser ab externo sclerostomy] Kampmeier J, et al. **Klin Monatsbl Augenheilkd** 1997 Jul;211(1):48–52 (Eng. Abstr.) **(Ger)**

METHODS

Prospective study of ab externo erbium:YAG laser sclerostomy in humans. Jacobi PC, et al. **Am J Ophthalmol** 1997 Apr;123(4):478–86

Sutureless pars plana vitrectomy through self-sealing sclerotomies. Chen JC. **Arch Ophthalmol** 1996 Oct; 114(10):1273–5

Holmium laser sclerostomy. Saheb NE. **Can J Ophthalmol** 1996 Aug;31(5):267–8 (16 ref.)

Spontaneous and pharmacologically-modulated wound healing after Nd:YAG laser sclerostomy ab interno in rabbits. Iliev ME, et al. **Eur J Ophthalmol** 1997 Jan-Mar; 7(1):24–8

Subconjunctival THC:YAG laser sclerostomy under a partial thickness flap. Luntz MH, et al. **Eur J Ophthalmol** 1996 Jul-Sep;6(3):268–72

Vitreous management in massive suprachoroidal hemorrhage. Quiroz-Mercado H, et al. **Eur J Ophthalmol** 1997 Jan-Mar; 7(1):101–4

Non-penetrating deep sclerectomy (NPDS) with or without collagen device (CD) in primary open-angle glaucoma: middle-term retrospective study. Demailly P, et al. **Int Ophthalmol** 1996-97;20(1-3):131–40

Holmium YAG laser sclerostomy ab externo for refractory glaucoma. Onda E, et al. **Int Ophthalmol** 1996-97; 20(6):309–14

Deep sclerectomy: results with and without collagen implant. Sanchez E, et al. **Int Ophthalmol** 1996-97;20(1-3):157–62

Scleral free auto-implant plug with mitomycin as limitation of trepanosclerectomy flow in glaucoma filtering surgery. Szymanski A. **Int Ophthalmol** 1996-97;20(1-3):89–94

Update on the subconjunctival THC:YAG (holmium) laser sclerostomy Ab externo clinical trial: a 4-year report. Iwach AG, et al. **Ophthalmic Surg Lasers** 1996 Oct; 27(10):823–31

The results of ab interno laser thermal sclerostomy combined with cataract surgery versus trabeculectomy combined with cataract surgery 6 to 12 months postoperatively. Kendrick R, et al. **Ophthalmic Surg Lasers** 1996 Jul; 27(7):583–6

Erbium:YAG laser sclerectomy with a sapphire optical fiber. McHam ML, et al. **Ophthalmic Surg Lasers** 1997 Jan; 28(1):55–8

Internal sclerostomy with a mechanical trephine versus the neodymium:YAG laser in dogs. Peiffer RL Jr, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):223–30

Mitomycin-C in laser sclerostomy: benefit and complications. Schmidt-Erfurth U, et al. **Ophthalmic Surg Lasers** 1997 Jan;28(1):14–20

Iontophoresis of indocyanine green and monastral blue B for gonioscopic diode laser sclerectomy. Wang Y, et al. **Ophthalmic Surg Lasers** 1996 Jun;27(6):484–7

[Cataract-glaucoma combined surgery: comparison between phacoemulsification combined with deep sclerectomy, or trabeculectomy] Gianoli F, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):256–60 (Eng. Abstr.) **(Fre)**

[Comparative results of deep sclerectomy transformed to trabeculectomy and classical trabeculectomy] Sanchez E, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):261–4 (Eng. Abstr.) **(Fre)**

[Dose-response relationship of trans-scleral contact cyclophotocoagulation] Krott R, et al. **Ophthalmologe** 1997 Apr;94(4):273–6 (Eng. Abstr.) **(Ger)**

SCLEROTHERAPY

see related

SCLEROSING SOLUTIONS

Anastomoses between the spermatic and visceral veins: a retrospective study of 500 consecutive patients. Bigot JM, et al. **Abdom Imaging** 1997 Mar-Apr;22(2):226–32

Symptomatic hemangiomas and venous malformations in infants, children, and young adults: treatment with percutaneous injection of sodium tetradecyl sulfate. O'Donovan JC, et al. **AJR Am J Roentgenol** 1997 Sep; 169(3):723–9

Percutaneous ethanol sclerotherapy of postoperative lymphoceles. Zuckerman DA, et al. **AJR Am J Roentgenol** 1997 Aug;169(2):433–7

Endoscopic variceal ligation versus endoscopic variceal ligation and endoscopic sclerotherapy: a prospective randomized study [see comments] Bhargava DK, et al. **Am J Gastroenterol** 1997 Jun;92(6):950–3. Comment in: Am J Gastroenterol 1997 Jun;92(6):920–3.

Endoscopic variceal ligation versus endoscopic injection sclerotherapy: comparison of hepatic and renal function. Nakase H, et al. **Am J Gastroenterol** 1996 Oct;91(10):2170–3

Esophageal variceal sclerotherapy or band ligation: is two better than one? Srinivasan R, et al. **Am J Gastroenterol** 1997 Aug;92(8):1394–5

Band ligation, sclerotherapy, both or ... brains? [editorial; comment] Strauss E. **Am J Gastroenterol** 1997 Jun; 92(6):920–3. Comment on: Am J Gastroenterol 1997 Jun;92(6):950–3.

Analysis of long-term endoscopic surveillance during follow-up after variceal sclerotherapy from a 13-year experience. Waked I, et al. **Am J Med** 1997 Feb; 102(2):192–9

Endoscopic sclerotherapy compared with percutaneous transjugular intrahepatic portosystemic shunt after initial sclerotherapy in patients with acute variceal hemorrhage. A randomized, controlled trial [see comments] Cello JP, et al. **Ann Intern Med** 1997 Jun 1;126(11):858–65. Comment in: Ann Intern Med 1997 Jun 1;126(11):907–10.

Transjugular intrahepatic portosystemic shunts versus sclerotherapy: a discussion of discordant results [editorial; comment] Conn HO. **Ann Intern Med** 1997 Jun 1; 126(11):907–10. Comment on: Ann Intern Med 1997 Jun 1;126(11):849–57. Comment on: Ann Intern Med 1997 Jun 1;126(11):858–65.

Transjugular intrahepatic portosystemic shunts compared with endoscopic sclerotherapy for the prevention of recurrent variceal hemorrhage. A randomized, controlled trial [see comments] Sanyal AJ, et al. **Ann Intern Med** 1997 Jun 1;126(11):849–57. Comment in: Ann Intern Med 1997 Jun 1;126(11):907–10.

Treatment of high-flow vascular malformations in the head and neck with arterial ligation followed by sclerotherapy. Chen MT, et al. **Ann Plast Surg** 1996 Feb;36(2):147–53

Effect of previous sclerotherapy on the outcome of gastro-oesophageal devascularization and oesophageal transection in bleeding oesophageal varices. Alam MK, et al. **Br J Surg** 1996 Dec;83(12):1702–5

Venous malformations: sclerotherapy with a mixture of ethanol and lipiodol. Suh JS, et al. **Cardiovasc Intervent Radiol** 1997 Jul-Aug;20(4):268–73

Sclerotherapy of varicose veins of the lower limbs. Consensus paper. North American Society of Phlebology. Baccaglini U, et al. **Dermatol Surg** 1996 Oct;22(10):883–9 (15 ref.)

Treatment of esophageal varices [editorial] Armengol-Miró JR. **Endoscopy** 1996 Sep;28(7):572–3

Endoscopic treatment of bleeding fundic varices with 50% glucose injection. Chang KY, et al. **Endoscopy** 1996 May; 28(4):398

Portal hypertensive colopathy: a recently recognized entity [letter] Eleftheriadis E, et al. **Endoscopy** 1997 May; 29(4):328–9

Endoscopic injection of ethanolamine as a treatment for achalasia: a first report. Moretó M, et al. **Endoscopy** 1996 Sep;28(7):539–45

Thrombin and ethanolamine injection therapy in arresting uncontrolled bleeding from duodenal varices. Sans M, et al. **Endoscopy** 1996 May;28(4):403

Medical prophylaxis of haemorrhage from oesophageal varices in patients with liver cirrhosis. Gross M, et al. **Eur J Gastroenterol Hepatol** 1997 Jun;9(6):603–12 (95 ref.)

Further evidence in favor of pharmacological portal pressure reduction in the prevention of variceal hemorrhage. García-Tsao G. **Gastroenterology** 1997 May;112(5):1770–1

Dieulafoy's disease: endosonographic detection and endosonography-guided treatment. Fockens P, et al. **Gastrointest Endosc** 1996 Oct;44(4):437–42

Sclerotherapy for actively bleeding esophageal varices in male alcoholics with cirrhosis. Veterans Affairs Cooperative Variceal Sclerotherapy Group [see comments] Hartigan PM, et al. **Gastrointest Endosc** 1997 Jul;46(1):1–7 . Comment in: Gastrointest Endosc 1997 Jul;46(1):83–4.

Long-term follow-up of gastric variceal sclerotherapy: an eleven-year experience. Sarin SK. **Gastrointest Endosc** 1997 Jul;46(1):8–14

Superficial esophageal carcinoma detected on extensive esophageal varices before endoscopic injection sclerotherapy. Takasaki M, et al. **Gastrointest Endosc** 1997 Jan;45(1):96–8

Sclerotherapy-resistant esophageal varices with enormously enlarged cephalad collateral vessels predictable using portography. Hashizume M, et al. **Hepatogastroenterology** 1995 Sep-Oct;42(5):551–6

Prophylactic endoscopic sclerotherapy in patients with liver cirrhosis, portal hypertension, and esophageal varices. Paquet KJ, et al. **Hepatogastroenterology** 1997 May-Jun; 44(15):625–36 (54 ref.)

How efficient is endoscopic injection sclerotherapy in peptic ulcer hemorrhage. Skok P. **Hepatogastroenterology** 1997 May-Jun;44(15):861–5

Endoscopic versus TIPS therapy for the prevention of variceal hemorrhage: is TIPS tops? Benner KG. **Hepatology** 1996 Dec;24(6):1537–9

Endoscopic variceal ligation is superior to combined ligation and sclerotherapy for esophageal varices: a multicenter prospective randomized trial. Saeed ZA, et al. **Hepatology** 1997 Jan;25(1):71–4

Octreotide in the control of post-sclerotherapy bleeding from oesophageal varices, ulcer and oesophagitis. Jenkins SA, et al. **HPB Surg** 1996;10(1):1–6

Consensus Conference on Sclerotherapy. Padua, 24 September 1994. Baccaglini U. **Int Angiol** 1995 Sep; 14(3):239–40 (0 ref.)

Testicular necrosis after antegrade sclerotherapy of varicocele. Wegner HE, et al. **Int Urol Nephrol** 1996; 28(3):357–8

Obstructive jaundice caused by non-parasitic hepatic cyst treated with percutaneous drainage and instillation of minocycline hydrochloride as a sclerosing agent. Yoshihara K, et al. **Intern Med** 1996 May;35(5):373–5

Sclerotherapy in bleeding gastric varices of hepatic schistosomiasis. Contractor QQ, et al. **J Clin Gastroenterol** 1996 Sep;23(2):97–100

Bacterial endocarditis following endoscopic variceal sclerotherapy. Wong A, et al. **J Clin Gastroenterol** 1997 Mar;24(2):90–1

Prevention of variceal rebleeding. Stevermer JJ, et al. **J Fam Pract** 1996 Sep;43(3):240–1

Sclerotherapy resistant oesophageal varices: what are their clinical significance in prophylactic sclerotherapy? [editorial; comment] Hashizume M, et al. **J Gastroenterol Hepatol** 1996 Dec;11(12):1105–9. Comment on: J Gastroenterol Hepatol 1996 Dec;11(12):1110–4.

Distinctive portal venographic pattern in patients with sclerotherapy resistant oesophageal varices [see comments] Toyonaga A, et al. **J Gastroenterol Hepatol** 1996 Dec; 11(12):1110–4. Comment in: J Gastroenterol Hepatol 1996 Dec;11(12):1105–9.

Effects of endoscopic variceal sclerotherapy on azygos vein

blood flow and systemic haemodynamics. Yokoyama M, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):780–5

Endoscopic sclerotherapy versus variceal ligation in the long-term management of patients with cirrhosis after variceal bleeding. A prospective randomized study. Avgerinos A, et al. **J Hepatol** 1997 May;26(5):1034–41

Propranolol and sclerotherapy in the prevention of gastrointestinal rebleeding in patients with cirrhosis: a meta-analysis. Bernard B, et al. **J Hepatol** 1997 Feb; 26(2):312–24

Prospective randomized trial of endoscopic sclerotherapy versus variceal band ligation for esophageal varices: influence on gastropathy, gastric varices and variceal recurrence. Sarin SK, et al. **J Hepatol** 1997 Apr; 26(4):826–32

Endoscopic sclerotherapy for esophageal varices in children with extrahepatic portal venous obstruction: a follow-up study. Yachha SK, et al. **J Pediatr Gastroenterol Nutr** 1997 Jan;24(1):49–52

Bleomycin sclerosis of pelvic lymphoceles. Kerlan RK Jr, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):885–7

Randomised trial of transjugular-intrahepatic-portosystemic shunt versus endoscopy plus propranolol for prevention of variceal rebleeding. Rössle M, et al. **Lancet** 1997 Apr 12;349(9058):1043–9

Scrutinizing sclerotherapy [letter; comment] Bowman WE Jr. **N C Med J** 1996 May–Jun;57(3):127–8. Comment on: N C Med J 1996 Jan–Feb;57(1):42–6.

Sclerotherapy of telangiectases using sodium tetradecyl sulfate (Sotradecol) [see comments] Hren C, et al. **N C Med J** 1996 Jan–Feb;57(1):42–6 (8 ref.). Comment in: N C Med J 1996 May–Jun;57(3):127–8.

Phrenic nerve paralysis after doxycycline sclerotherapy for chylous fistula. Kirse DJ, et al. **Otolaryngol Head Neck Surg** 1997 Jun;116(6 Pt 1):680–3

Prevention of recurrent esophageal bleeding and survival in patients with alcoholic cirrhosis: a randomized study. Urbistondo M, et al. **P R Health Sci J** 1996 Sep;15(3):195–9

Spinal anaesthesia for a paediatric patient undergoing an image guided invasive procedure in the Open Configuration Magnetic Resonance Imaging Unit. Corn SB. **Paediatr Anaesth** 1997;7(2):155–7

Lymphangiomas in children: percutaneous sclerotherapy with an alcoholic solution of zein. Dubois J, et al. **Radiology** 1997 Sep;204(3):651–4

Percutaneous sclerotherapy of venous malformations of the head and neck using sodium tetradecyl sulphate (sotradecol). Siniluoto TM, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Jun; 31(2):145–50

Long-term outcome of patients treated for hydrocele with the sclerosant agent sodium tetradecyl sulphate. Stattin P, et al. **Scand J Urol Nephrol** 1996 Apr;30(2):109–13

Long-term effects of repeated injection sclerotherapy on esophageal motility and mucosa. Isaksson B, et al. **Surg Endosc** 1997 Jun;11(6):663–7

Sclerotherapy for varicose veins of the lower legs in patients with dysplasminogenemia. Ikeda M, et al. **Surg Today** 1997; 27(8):714–8

[Chronic venous insufficiency—from pathophysiology to therapy. 2: Sclerotherapy of varicose veins] Peschen M, et al. **Fortschr Med** 1996 Oct 10;114(28):365–7 (Eng. Abstr.) **(Ger)**

[Studies on radiation exposure in retrograde sclerotherapy of the testicular vein] Rieger J, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Aug;165(2):170–5 (Eng. Abstr.) **(Ger)**

[Effect of fibroscopic sclerotherapy of hemorrhaging esophageal varices on survival in alcoholic liver cirrhosis (comparative retrospective study)] Kempelen I, et al. **Orv Hetil** 1996 Sep 15;137(37):2019–23 (46 ref.) (Eng. Abstr.) **(Hun)**

[Percutaneous echo-guided drainage and sclerotherapy of symptomatic renal cysts: critical comparison with laparoscopic treatment] Consonni P, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):27–30 (Eng. Abstr.) **(Ita)**

[Treatment of a solitary renal cyst using percutaneous drainage and repeat alcoholization] Porpiglia F, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):197–9 (Eng. Abstr.) **(Ita)**

[Portosystemic shunts in the treatment of bleeding esophageal varices in cirrhotic patients: between sclerotherapy and transplantation] Gozzetti G, et al. **Minerva Chir** 1996 Nov; 51(11):887–95 (Eng. Abstr.) **(Ita)**

[Spermatic phlebography and sclerotherapy of the male varicocele] Burke P, et al. **Radiol Med (Torino)** 1996 Sep; 92(3):279–82 (Eng. Abstr.) **(Ita)**

[The hemodynamic and functional effects of using embolization of the splenic artery and endoscopic sclerotherapy in patients with liver cirrhosis at the decompensation stage] Bulanov KI. **Lik Sprava** 1997 Mar–Apr;(2):46–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Impotence after sclerotherapy of haemorrhoids: case reports. Bullock N. **BMJ** 1997 Feb 8;314(7078):419

Residents' corner. Answer to case of the month #48. Intramural hematoma of the esophagus after sclerotherapy of esophageal varices. Mehta M, et al. **Can Assoc Radiol J** 1997 Jun;48(3):203–4

Photothermal sclerosis of leg veins [letter; comment] Green D. **Dermatol Surg** 1997 Apr;23(4):303–5. Comment on: Dermatol Surg 1996 Apr;22(4):323–30.

Postsclerotherapy pigmentation. Is serum ferritin level an accurate indicator? Scott C, et al. **Dermatol Surg** 1997 Apr; 23(4):281–2; discussion 283

A prospective randomized trial of sclerotherapy versus ligation in the elective treatment of bleeding esophageal varices [see comments] Baroncini D, et al. **Endoscopy** 1997 May;29(4):235–40. Comment in: Endoscopy 1997 May;29(4):281–2. Comment in: Endoscopy 1997 May;29(4):283–4.

Short-term effects of variceal sclerotherapy on portal hypertensive gastropathy. Boldys H, et al. **Endoscopy** 1996 Nov;28(9):735–9

Acute ischemia followed by hemorrhagic gastric necrosis after injection sclerotherapy for ulcer. Dorta G, et al. **Endoscopy** 1996 Aug;28(6):532

An unusual complication of histoacryl injection. Naga M, et al. **Endoscopy** 1997 Feb;29(2):140

Massive necrosis of the gastric wall with gastric perforation after injection therapy of a bleeding duodenal ulcer. Opacic M, et al. **Endoscopy** 1995 Nov;27(9):707–8

A case of portal and splenic vein thrombosis after Histoacryl injection therapy in gastric varices. Shim CS, et al. **Endoscopy** 1996 Jun;28(5):461

Histologic effect of doxycycline sclerotherapy on rat femoral nerve. Kirse DJ, et al. **Head Neck** 1996 Nov–Dec; 18(6):506–11

Oesophageal rupture in the course of conservative treatment of bleeding oesophageal varices. Crerar-Gilbert A. **J Accid Emerg Med** 1996 May;13(3):225–7

Portal hypertensive gastropathy in children with extrahepatic portal venous obstruction: role of variceal obliteration by endoscopic sclerotherapy and Helicobacter pylori infection. Yachha SK, et al. **J Pediatr Gastroenterol Nutr** 1996 Jul;23(1):20–3

Spinal cord venous infarction following endoscopic sclerotherapy for esophageal varices. Heller SL, et al. **Neurology** 1996 Oct;47(4):1081–5

[Forensic medical implications in the course of sclerotherapy of varicose veins] Natali J, et al. **J Mal Vasc** 1996 Nov; 21(4):227–32 (Eng. Abstr.) **(Fre)**

[Obstructive intramural hematoma of the esophagus after sclerotherapy] Benoit R, et al. **Presse Med** 1996 Sep 28; 25(28):1281–4 (18 ref.) (Eng. Abstr.) **(Fre)**

[Hemolytic uremic syndrome after hemorrhoid sclerotherapy (letter)] Eugene M, et al. **Rev Med Interne** 1997;18(1):80–1 **(Fre)**

[Stomach wall necrosis after endoscopic sclerotherapy (letter; comment)] Friedrichs O. **Dtsch Med Wochenschr** 1997 Aug 1;122(31–32):990–1. Comment on: Dtsch Med Wochenschr 1997 May 9;122(19):606–9. **(Ger)**

[Complete gastric wall necrosis after endoscopic sclerotherapy for a gastric ulcer with visible arterial stump (see comments)] Scharnke W, et al. **Dtsch Med Wochenschr** 1997 May 9;122(19):606–9 (Eng. Abstr.). Comment in: Dtsch Med Wochenschr 1997 Aug 1;122(31–32):990–1. **(Ger)**

ECONOMICS

An economic analysis of patients with active arterial peptic ulcer hemorrhage treated with endoscopic heater probe, injection sclerosis, or surgery in a prospective, randomized trial. Gralnek IM, et al. **Gastrointest Endosc** 1997 Aug; 46(2):105–12

[Endoscopic hemostasis in bleeding gastroduodenal ulcer—a contribution to the cost aspect] Salm R, et al. **Zentralbl Chir** 1996;121(10):847–50 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Endoscopic retreatment after successful initial hemostasis prevents ulcer rebleeding: a prospective randomized trial. Saeed ZA, et al. **Endoscopy** 1996 Mar;28(3):288–94

[Video endoscopy-assisted saphenous vein occlusion—minimal invasive concept for treatment of varicose veins] Klose G, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:899–902 (Eng. Abstr.) **(Ger)**

METHODS

Balloon-occluded retrograde transvenous obliteration for gastric varices with gastrorenal or gastrocaval collaterals. Koito K, et al. **AJR Am J Roentgenol** 1996 Nov; 167(5):1317–20

Changes in liver function parameters after occlusion of gastrorenal shunts with balloon-occluded retrograde transvenous obliteration. Akahane T, et al. **Am J Gastroenterol** 1997 Jun;92(6):1026–30

Successful endoscopic injection sclerotherapy with N-butyl-2-cyanoacrylate following the recurrence of bleeding soon after endoscopic ligation for ruptured duodenal varices. Yoshida Y, et al. **Am J Gastroenterol** 1997 Jul;92(7):1227–9

Comparison of polidocanol and tetracycline in the sclerotherapy of testicular hydrocele and epididymal cyst. Daehlin L, et al. **Br J Urol** 1997 Sep;80(3):468–71

Duplex-guided sclerotherapy [letter] Isaacs MN. **Dermatol Surg** 1997 Apr;23(4):309–10

About sclerotherapy in the U.S. [letter; comment] Mantse L. **Dermatol Surg** 1997 Jul;23(7):598. Comment on: Dermatol Surg 1995 May;21(5):393–6.

Treatment of vulvar varicosities by injection–compression sclerotherapy. Ninia JG. **Dermatol Surg** 1997 Jul; 23(7):573–4; discussion 574–5

Suction sclerotherapy for the treatment of esophageal varices: a report of a preliminary feasibility study. Baron TH, et al. **Dig Dis** 1996 Nov–Dec;14(6):356–61

Prospective, randomized trial of hypertonic glucose water and sodium tetradecyl sulfate for gastric variceal bleeding in patients with advanced liver cirrhosis. Chang KY, et al. **Endoscopy** 1996 Aug;28(6):481–6

Achalasia: are we winning the war or losing the peace? [editorial] Pasricha PJ. **Endoscopy** 1996 Sep;28(7):574–5

Endoscopic injection sclerotherapy of bleeding oesophageal varices: a retrospective analysis. Kassa E. **Ethiop Med J** 1997 Jan;35(1):13–22

Outpatient treatment of isolated strangulated haemorrhoids with single dose injection sclerotherapy and oral Daflon. Deen KI. **Eur J Surg** 1996 May;162(5):403–5

Percutaneous sclerotherapy of a symptomatic simple renal cyst in a child: observation of membrane detachment sign. Kabaalioğlu A, et al. **Eur Radiol** 1996;6(6):872–4

Suction sclerotherapy for the treatment of esophageal varices. Blackard WG, et al. **Gastrointest Endosc** 1996 Dec; 44(6):725–8

Management of actively bleeding esophageal varices [editorial; comment] Laine L. **Gastrointest Endosc** 1997 Jul; 46(1):83–4. Comment on: Gastrointest Endosc 1997 Jul;46(1):1–7.

Efficacy of prophylactic sclerotherapy in patients with hepatocellular carcinoma and varices negative for the red color sign. Miyoshi H, et al. **Gastrointest Endosc** 1997 Jun; 45(6):498–502

Fatal outcome following endoscopic fundal variceal ligation [letter] Vitte RL, et al. **Gastrointest Endosc** 1996 Jan; 43(1):82

Eradication of large gastric varices by sclerotherapy combined with percutaneous transhepatic obliteration. Hashizume M, et al. **Hepatogastroenterology** 1997 Jan–Feb; 44(13):221–6

Repeated injection sclerotherapy is preferable to combined therapy with variceal ligation to avoid recurrence of esophageal varices:—a prospective randomized trial. Iso Y, et al. **Hepatogastroenterology** 1997 Mar–Apr; 44(14):467–71

Injection sclerotherapy for oesophageal varices: a ten-year experience. Kiviniemi H, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):546–50

Hassab operation with intraoperative endoscopic injection sclerotherapy ("Hassab-EIS") for esophagogastric varices: with an autopsied case after excessive gastric vascular damage. Nakamura H, et al. **Hepatogastroenterology** 1996 Jul–Aug;43(10):980–6

The treatment of gastric varices by a balloon-occluded retrograde transvenous obliteration; a transjugular venous approach. Saeki H, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):571–4

Symposium on endoscopic hemostasis in gastric diseases. 2. Choice of endoscopic therapy for esophagogastric varices: aiming for safer and more effective therapy. Iwase H, et al. **Intern Med** 1997 Feb;36(2):128–9

Percutaneous sclerotherapy of lymphoceles related to renal transplantation. Montalvo BM, et al. **J Vasc Interv Radiol** 1996 Jan–Feb;7(1):117–23

Treatment of postoperative lymphoceles with percutaneous drainage and alcohol sclerotherapy. Sawhney R, et al. **J Vasc Interv Radiol** 1996 Mar–Apr;7(2):241–5

Treatment of symptomatic congenital hepatic cysts with single-session percutaneous drainage and ethanol sclerosis: technique and outcome. Tikkakoski T, et al. **J Vasc Interv Radiol** 1996 Mar–Apr;7(2):235–9

Wound modulation via sclerotherapy and tissue adhesion. Observations and discussion. Widgerow AD, et al. **S Afr J Surg** 1997 May;35(2):88–92

Successful treatment of an esophageal hemangioma by endoscopic injection sclerotherapy: report of a case. Aoki T, et al. **Surg Today** 1997;27(5):450–2

Successful endoscopic injection sclerotherapy for bleeding from bile duct varices. Ito T, et al. **Surg Today** 1997; 27(2):174–6

[Ethanol sclerotherapy in superficial bladder tumors] Damyanov C. **Ann Urol (Paris)** 1996;30(5):244–6 (Eng. Abstr.) **(Fre)**

[Treatment of a hemorrhagic duodenal varice by endoscopic sclerotherapy] Paupard T, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1051–4 (18 ref.) (Eng. Abstr.) **(Fre)**

[Stomach wall necrosis after endoscopic sclerotherapy (letter; comment)] Friedrichs O. **Dtsch Med Wochenschr** 1997 Aug 1;122(31–32):990–1. Comment on: Dtsch Med Wochenschr 1997 May 9;122(19):606–9. **(Ger)**

[Vascular organization of the pampiniformis plexus in the man and its significance for antegrade sclerosing of testicular varicocele] Ergün S, et al. **Urologe A** 1996 Nov; 35(6):463–7 (Eng. Abstr.) **(Ger)**

[Spermiogram findings following antegrade sclerosing of a varicocele] Johnsen N, et al. **Wien Med Wochenschr** 1997; 147(4–5):81–3 (Eng. Abstr.) **(Ger)**

[Color Doppler echographic monitoring of retrograde and anterograde sclero-embolization of a left varicocele: report of 76 cases] Trombetta C, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):141–6 (Eng. Abstr.) **(Ita)**

[Endoscopic sclerotherapy for gastroesophageal varices] Kitano M. **Nippon Geka Gakkai Zasshi** 1996 Jan;97(1):43–8

SCLEROTHERAPY

(22 ref.) **(Jpn)**

[Endoscopic treatment of digestive system diseases. 2. Selection of endoscopic treatment to be applied to esophagogastric varices-- toward the establishment of outstanding and safest therapeutic methods] Iwase H, et al. **Nippon Naika Gakkai Zasshi** 1996 Sep 10;85(9):1438-41 **(Jpn)**

[A case of rectal varices treated with endoscopic injection sclerotherapy] Zeniya A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):38-43 (19 ref.) **(Jpn)**

[The results of the endoscopic sclerotherapy of varicose dilated esophageal veins in patients with decompensated liver cirrhosis] Kalita NIa, et al. **Klin Khir** 1995;(3):9-11 **(Rus)**

[The use of the polyurethane adhesive compound KL-3 for treating varicosities of the surface veins] Polous IuM, et al. **Klin Khir** 1996;(7):26-7 **(Ukr)**

TRENDS

Sclerotherapy is out--nearly [editorial; comment] Sauerbruch T, et al. **Endoscopy** 1997 May;29(4):281-2 (13 ref.). Comment on: Endoscopy 1997 May;29(4):235-40. Comment on: Endoscopy 1997 May;29(4):241-6.

Is sclerotherapy out? [editorial; comment] Soehendra N, et al. **Endoscopy** 1997 May;29(4):283-4 (10 ref.). Comment on: Endoscopy 1997 May;29(4):235-40. Comment on: Endoscopy 1997 May;29(4):241-6.

SCLEROTINIA see **ASCOMYCETES**

SCOLIOSIS

Scoliosis in Escobar syndrome (multiple pterygium syndrome). Description of two cases. Di Gennaro GL, et al. **Chir Organi Mov** 1996 Jul-Sep;81(3):317-23 **(Eng, Ita)**

Idiopathic scoliosis: biomechanics and biology. Millner PA, et al. **Eur Spine J** 1996;5(6):362-73 (84 ref.)

BLOOD

Melatonin levels in idiopathic scoliosis. Diurnal and nocturnal serum melatonin levels in girls with adolescent idiopathic scoliosis. Bagnall KM, et al. **Spine** 1996 Sep 1;21(17):1974-8

CLASSIFICATION

Fixed pelvic obliquity after poliomyelitis: classification and management. Lee DY, et al. **J Bone Joint Surg Br** 1997 Mar;79(2):190-6

COMPLICATIONS

Melanosis naeviformis of Becker and scoliosis: a coincidence? Maessen-Visch MB, et al. **Acta Derm Venereol** 1997 Mar; 77(2):135-6

Computed tomography scan-guided neurolytic superior hypogastric block complicated by somatic nerve damage in a severely kyphoscoliotic patient [letter] Chan WS, et al. **Anesthesiology** 1997 Jun;86(6):1429-30

Kyphoscoliosis and bronchial torsion. Al-Kattan K, et al. **Chest** 1997 Apr;111(4):1134-7

Central core disease associated with scoliosis: report of one case. Ma JS, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Jul-Aug;38(4):297-9

Effects of long-term nocturnal nasal ventilation on spontaneous breathing during sleep in neuromuscular and chest wall disorders. Piper AJ, et al. **Eur Respir J** 1996 Jul;9(7):1515-22

Syringomyelia and Arnold Chiari in scoliosis initially classified as idiopathic: experience with 25 patients. Emery E, et al. **Eur Spine J** 1997;6(3):158-62

Lumbar spinal stenosis: indications for arthrodesis and spinal instrumentation. Herkowitz HN. **Instr Course Lect** 1994; 43:425-33 (35 ref.)

Respiratory system mechanics in the early phase of acute respiratory failure due to severe kyphoscoliosis. Conti G, et al. **Intensive Care Med** 1997 May;23(5):539-44

The prevalence of back pain in children who have idiopathic scoliosis. Ramirez N, et al. **J Bone Joint Surg Am** 1997 Mar;79(3):364-8

The orthopaedic manifestations of Pelizaeus-Merzbacher disease in children [see comments] Beaulé PE, et al. **J Pediatr Orthop** 1996 Nov-Dec;16(6):727-30. Comment in: J Pediatr Orthop 1996 Nov-Dec;16(6):701-3.

Reconstructive spine surgery in pediatric patients with major loss in vital capacity [see comments] Rawlins BA, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):284-92. Comment in: J Pediatr Orthop 1996 May-Jun;16(3):281-3.

Routine preoperative MRI and SEP studies in adolescent idiopathic scoliosis. Shen WJ, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):350-3

Juvenile progressive scoliosis and congenital horizontal gaze palsy. Thomsen M, et al. **J Pediatr Orthop B** 1996 Summer; 5(3):185-9 (22 ref.)

Revision spine surgery in children with cerebral palsy. Dias RC, et al. **J Spinal Disord** 1997 Apr;10(2):132-44

Efficacy of spinal cord monitoring in scoliosis surgery in patients with cerebral palsy. Ecker ML, et al. **J Spinal Disord** 1996 Apr;9(2):159-64

Prevalence of scoliosis in beta-thalassemia. Korovessis PG, et al. **J Spinal Disord** 1996 Apr;9(2):170-3

Long-term nocturnal mechanical ventilation in patients with kyphoscoliosis. Zaccaria S, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):433-7

Osteopenia in adolescent idiopathic scoliosis. A primary problem or secondary to the spinal deformity? Cheng JC, et al. **Spine** 1997 Aug 1;22(15):1716-21

Chiari I malformation associated with syringomyelia and scoliosis. Ghanem IB, et al. **Spine** 1997 Jun 15; 22(12):1313-7; discussion 1318

Scoliosis in cerebral gigantism, sotos syndrome. A case report. Haga N, et al. **Spine** 1996 Jul 15;21(14):1699-702

Infantile scoliosis in Marfan syndrome. Sponseller PD, et al. **Spine** 1997 Mar 1;22(5):509-16

Scoliosis and congenital anomalies associated with Klippel-Feil syndrome types I-III. Thomsen MN, et al. **Spine** 1997 Feb 15;22(4):396-401

[Dorso-lumbal pain and idiopathic scoliosis in adolescence] Joncas J, et al. **Ann Chir** 1996;50(8):637-40 (Eng. Abstr.) **(Fre)**

[Severe congenital thoracic-lumbar scoliosis in pregnancy. A case report and review of the literature] Restaino A, et al. **Minerva Ginecol** 1996 Dec;48(12):565-71 (29 ref.) (Eng. Abstr.) **(Ita)**

[Pulmonary hypertension caused by a severe scoliosis. Description of a case] Carta M, et al. **Minerva Pediatr** 1996 Nov;48(11):513-7 (Eng. Abstr.) **(Ita)**

[Pulmonary function in persons with kyphoscoliosis] Mitić-Milinkić M, et al. **Srp Arh Celok Lek** 1996 Mar-Apr; 124(3-4):62-4 (Eng. Abstr.) **(Scc)**

CONGENITAL

Coffin-Siris syndrome: a case of an extremely low birthweight infant with severe kyphoscoliosis. Suzumura H, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):537-40 (5 ref.)

Diastematomyelia in congenital scoliosis. A review of the literature and description of one clinical case. Greggi T, et al. **Chir Organi Mov** 1997 Jan-Mar;82(1):83-9 **(Eng, Ita)**

Hemivertebral excision for congenital scoliosis. Callahan BC, et al. **J Pediatr Orthop** 1997 Jan-Feb;17(1):96-9 (19 ref.)

Intermittent distracting rod for correction of high neurologic risk congenital scoliosis. Grass PJ, et al. **Spine** 1997 Aug 15;22(16):1922-7

The long-term follow-up of patients with Klippel-Feil syndrome and congenital scoliosis. Theiss SM, et al. **Spine** 1997 Jun 1;22(11):1219-22

DIAGNOSIS

A computer vision system for diagnosing scoliosis using moiré images. Batouche M, et al. **Comput Biol Med** 1996 Jul;26(4):339-53

The benefits of school screening for scoliosis in the central part of The Netherlands. Pruijs JE, et al. **Eur Spine J** 1996; 5(6):374-9

Idiopathic scoliosis and kyphosis. Pizzutillo PD. **Instr Course Lect** 1994;43:185-91 (10 ref.)

Abdominal reflexes. Yngve D. **J Pediatr Orthop** 1997 Jan-Feb;17(1):105-8

Direct spinal curvature digitization in scoliosis screening--a comparative study with Moiré contourgraphy. Wong HK, et al. **J Spinal Disord** 1997 Jun;10(3):185-92

Adolescent idiopathic scoliosis. Haasbeek JF. **Postgrad Med** 1997 Jun;101(6):207-9, 215-6

Prediction of scoliotic Cobb angle with the scoliometer [letter; comment] Bernbeck J. **Spine** 1997 Apr 15;22(8):926 . Comment on: Spine 1996 Jul 15;21(14):1661-6.

Prediction of scoliotic cobb angle with the use of the scoliometer [see comments] [published erratum appears in Spine 1997 Apr 15;22(8):926] Korovessis PG, et al. **Spine** 1996 Jul 15;21(14):1661-6. Comment in: Spine 1997 Apr 15;22(8):926.

Early detection of progression in adolescent idiopathic scoliosis by measurement of changes in back shape with the Integrated Shape Imaging System scanner. Theologis TN, et al. **Spine** 1997 Jun 1;22(11):1223-7; discussion 1228

[Early diagnosis of scoliosis] Edelmann P. **Z Orthop Ihre Grenzgeb** 1996 Sep-Oct;134(5):Oa8-9 **(Ger)**

[Back pain in children] Abril Martín JC, et al. **An Esp Pediatr** 1997 Feb;46(2):133-7 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Counterparalysis for treatment of paralytic scoliosis with botulinum toxin type A. Nuzzo RM, et al. **Am J Orthop** 1997 Mar;26(3):201-7

Clenbuterol, a beta2-adrenoceptor agonist, reduces scoliosis due to partial transection of rat spinal cord. Zeman RJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E712-5

EPIDEMIOLOGY

Prevalence and risk factors for asymmetric posture in preschool children aged 6-7 years. Juskeliene V, et al. **Int J Epidemiol** 1996 Oct;25(5):1053-9

Kyphoscoliosis complicating pregnancy. To WW, et al. **Int J Gynaecol Obstet** 1996 Nov;55(2):123-8

Prevalence of scoliosis in beta-thalassemia. Korovessis PG, et al. **J Spinal Disord** 1996 Apr;9(2):170-3

Incidence of scoliosis in beta-thalassemia and follow-up evaluation. Korovessis P, et al. **Spine** 1996 Aug 1; 21(15):1798-801

The natural history of idiopathic scoliosis. Incidence of treatment in 15 cohorts of children born between 1963 and 1977. Montgomery F, et al. **Spine** 1997 Apr 1;22(7):772-4

[Result on the screening of scoliosis among school students in Beijing area] Wang YP, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1996 Jun; 17(3):160-2 (Eng. Abstr.) **(Chi)**

[Family prevalence of idiopathic scoliosis] Martín Martín J, et al. **An Esp Pediatr** 1997 Feb;46(2):148-50 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Clenbuterol, a beta2-adrenoceptor agonist, reduces scoliosis due to partial transection of rat spinal cord. Zeman RJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E712-5

Aspects of spinal deformity in familial dysautonomia (Riley-Day syndrome). Kaplan L, et al. **Eur Spine J** 1997; 6(1):33-8

The development of adolescent idiopathic scoliosis. Murray DW, et al. **Eur Spine J** 1996;5(4):251-7

Rib-vertebral angle asymmetry in idiopathic, neuromuscular and experimentally induced scoliosis. Sevastik B, et al. **Eur Spine J** 1997;6(2):84-8

Dystrophic kyphoscoliosis in neurofibromatosis type I: a report of two cases and review of the literature. Vandenbroucke J, et al. **Eur Spine J** 1997;6(4):273-7 (15 ref.)

The spatiotemporal development of innervation in spinal ligaments of chickens. Jiang H, et al. **J Anat** 1996 Aug;189 (Pt 1):57-64

Fixed pelvic obliquity after poliomyelitis: classification and management. Lee DY, et al. **J Bone Joint Surg Br** 1997 Mar;79(2):190-6

Posttraumatic scoliosis. Gangloff S, et al. **J Pediatr Orthop B** 1996 Summer;5(3):216-9

Chest wall and spinal deformities in adults with congenital diaphragmatic defects. Vanamo K, et al. **J Pediatr Surg** 1996 Jun;31(6):851-4

Scoliosis induced by rib resection in chickens [letter; comment] Robin GC. **J Spinal Disord** 1996 Aug;9(4):351 . Comment on: J Spinal Disord 1995 Jun;8(3):179-85.

Painful scoliosis. Hoeffel C, et al. **Klin Padiatr** 1997 Mar-Apr; 209(2):78-83 (6 ref.)

Chest wall deformities and thoracic scoliosis after costal cartilage graft harvesting. Ohara K, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1030-6

Spinal osteoblastoma: relationship between paravertebral muscle abnormalities and scoliosis. Saifuddin A, et al. **Skeletal Radiol** 1996 Aug;25(6):531-5

Structural scoliosis model in dogs with experimentally induced syringomyelia. Chuma A, et al. **Spine** 1997 Mar 15;22(6):589-94; discussion 595

Scoliosis and fused ribs. A case report. Damsin JP, et al. **Spine** 1997 May 1;22(9):1030-2

Fluctuating asymmetry and vertebral malformation. A study of palmar dermatoglyphics in congenital spinal deformities. Goldberg CJ, et al. **Spine** 1997 Apr 1;22(7):775-9

The role of melatonin in the pathogenesis of adolescent idiopathic scoliosis. Hilibrand AS, et al. **Spine** 1996 May 15;21(10):1140-6

Melatonin. A possible role in pathogenesis of adolescent idiopathic scoliosis. Machida M, et al. **Spine** 1996 May 15; 21(10):1147-52

Role of serotonin for scoliotic deformity in pinealectomized chicken. Machida M, et al. **Spine** 1997 Jun 15; 22(12):1297-301

Natural history of scoliosis in the institutionalized adult cerebral palsy population. Majd ME, et al. **Spine** 1997 Jul 1;22(13):1461-6

Progression of vertebral wedging in an asymmetrically loaded rat tail model. Mente PL, et al. **Spine** 1997 Jun 15; 22(12):1292-6

Iliosacral screw fixation for pelvic obliquity in neuromuscular scoliosis. A long-term follow-up study. Miladi LT, et al. **Spine** 1997 Aug 1;22(15):1722-9

Spinal intraosseous arteriovenous malformation as a cause of juvenile scoliosis. A case report. Molina A, et al. **Spine** 1997 Jan 15;22(2):221-4

The treatment of progressive kyphoscoliosis in camptomelic dysplasia. Thomas S, et al. **Spine** 1997 Jun 15;22(12):1330-7

[Extra osseous tumors of the spine in children and adolescents. Spinal complications] Ghanem I, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):313-20 (Eng. Abstr.) **(Fre)**

[Characteristics in the treatment of scoliosis in muscular diseases] Forst R, et al. **Z Orthop Ihre Grenzgeb** 1997 Mar-Apr;135(2):95-105 (84 ref.) (Eng. Abstr.) **(Ger)**

[Scoliosis of sudden evolution due to lumbar osteoblastoma] Amaral J de S, et al. **Acta Med Port** 1997 May;10(5):417-22 (16 ref.) (Eng. Abstr.) **(Por)**

GENETICS

X-linked mental retardation with thin habitus, osteoporosis, and kyphoscoliosis: linkage to Xp21.3-p22.12. Arena JF, et al. **Am J Med Genet** 1996 Jul 12;64(1):50-8

Changes in body weight and organ weight of Ishibashi (IS) rats with growth. Teramoto K, et al. **Exp Anim** 1996 Oct; 45(4):317-23

Genetic analysis of structural elastic fiber and collagen genes

in familial adolescent idiopathic scoliosis. Miller NH, et al. **J Orthop Res** 1996 Nov;14(6):994–9

Scoliosis in twins. A meta–analysis of the literature and report of six cases. Kesling KL, et al. **Spine** 1997 Sep 1; 22(17):2009–14; discussion 2015

Lettsomian Lecture. Scoliosis and kyphoscoliosis cellular and molecular mechanisms inducing spinal curvature. Mason RM. **Trans Med Soc Lond** 1994–95;111:91–6

[Family prevalence of idiopathic scoliosis] Martín Martín J, et al. **An Esp Pediatr** 1997 Feb;46(2):148–50 (Eng. Abstr.) **(Spa)**

HISTORY

Spinal deformity and axial traction. Kumar K. **Spine** 1996 Mar 1;21(5):653–5

[A historical review of treatment of scoliosis] Nowakowski A, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(3):237–46 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Aspects of spinal deformity in familial dysautonomia (Riley–Day syndrome). Kaplan L, et al. **Eur Spine J** 1997; 6(1):33–8

A prospective evaluation of idiopathic left thoracic scoliosis with magnetic resonance imaging. Mejia EA, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):354–8

Natural history of adolescent thoracolumbar and lumbar idiopathic scoliosis into adulthood. Cordover AM, et al. **J Spinal Disord** 1997 Jun;10(3):193–6 (11 ref.)

Construction of surface models of the human trunk. Durdle NG, et al. **Med Biol Eng Comput** 1997 Jan;35(1):73–5

Atypical idiopathic scoliosis in childhood. Barnes PD. **Semin Pediatr Neurol** 1996 Sep;3(3):207–11

A new method using top views of the spine to predict the progression of curves in idiopathic scoliosis during growth. Kohashi Y, et al. **Spine** 1996 Jan 15;21(2):212–7

Axial rotation measurement of scoliotic vertebrae by means of computed tomography scans. Krismer M, et al. **Spine** 1996 Mar 1;21(5):576–81

Magnetic resonance imaging evaluation of the adolescent patient with idiopathic scoliosis before spinal instrumentation and fusion. A prospective, double–blinded study of 140 patients. Winter RB, et al. **Spine** 1997 Apr 15;22(8):855–8

PHYSIOPATHOLOGY

Trunk rotation in scoliosis. The influence of curve type and direction in 150 children. Samuelsson L, et al. **Acta Orthop Scand** 1997 Jun;68(3):273–6

Isoforms of myosin in growing muscles of ky (kyphoscoliotic) mice. Maréchal G, et al. **Eur J Biochem** 1996 Nov 1; 241(3):916–22

Neurophysiological mechanism of the unloading reflex as a prognostic factor in the early stages of idiopathic adolescent scoliosis. Dobosiewicz K. **Eur Spine J** 1997; 6(2):93–7

Rip hump correction and rotation of the lumbar spine after selective thoracic fusion. Hosman AJ, et al. **Eur Spine J** 1996;5(6):394–9

Measurement of vertebral rotation in idiopathic scoliosis using the Perdriolle torsionmeter: a clinical study on intraobserver and interobserver error. Omeroğlu H, et al. **Eur Spine J** 1996;5(3):167–71

Postural imbalance and vibratory sensitivity in patients with idiopathic scoliosis: implications for treatment. Byl NN, et al. **J Orthop Sports Phys Ther** 1997 Aug;26(2):60–8

Impact of orthoses on the rate of scoliosis progression in children with cerebral palsy [see comments] Miller A, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):332–5. Comment in: J Pediatr Orthop 1996 May–Jun;16(3):281–3. Comment in: J Pediatr Orthop 1997 May–Jun;17(3):407.

A new technique for the three–dimensional study of the spine in vitro and in vivo by using a motion–analysis system. Liu XC, et al. **J Spinal Disord** 1997 Aug;10(4):329–38

Immediate response to inspiratory resistive loading in anesthetized patients with kyphoscoliosis: spirometric and neural effects. Baydur A, et al. **Lung** 1996;174(2):99–118

Short–term effects of bracing on exercise performance in mild idiopathic thoracic scoliosis. Ferrari K, et al. **Lung** 1997; 175(5):299–310

Evaluation of pulmonary ventilation and diaphragmatic movement in idiopathic scoliosis using radioaerosol ventilation scintigraphy. Giordano A, et al. **Nucl Med Commun** 1997 Feb;18(2):105–11

Rib cage–spine coupling patterns involved in brace treatment of adolescent idiopathic scoliosis. Aubin CE, et al. **Spine** 1997 Mar 15;22(6):629–35

Comparison of gait patterns between healthy and scoliotic patients using time and frequency domain analysis of ground reaction forces. Giakas G, et al. **Spine** 1996 Oct 1;21(19):2235–42

Natural course of experimental scoliosis in pinealectomized chickens. Kanemura T, et al. **Spine** 1997 Jul 15; 22(14):1563–7

Long–term alterations of respiratory function in adolescents wearing a brace for idiopathic scoliosis. Korovessis P, et al. **Spine** 1996 Sep 1;21(17):1979–84

Geometric analysis of coronal decompensation in idiopathic scoliosis. Patwardhan AG, et al. **Spine** 1996 May 15; 21(10):1192–200

Mechanical modulation of vertebral body growth. Implications for scoliosis progression. Stokes IA, et al. **Spine** 1996 May 15;21(10):1162–7

Rotational changes of the vertebral pelvic axis after sublaminar instrumentation in adolescent idiopathic scoliosis. Wood KB, et al. **Spine** 1997 Jan 1;22(1):51–7

[The pulmonary function in scoliotic patient] Jin J, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):153–5 (Eng. Abstr.) **(Chi)**

[3–D evaluation of posture in normal and scoliotic adolescents] Le Blanc R, et al. **Ann Chir** 1996;50(8):631–6 (Eng. Abstr.) **(Fre)**

[Spatial orientation and postural regulation in patients with idiopathic scoliosis] Krödel A, et al. **Z Orthop Ihre Grenzgeb** 1997 May–Jun;135(3):203–9 (Eng. Abstr.) **(Ger)**

[Scoliosis and postural defect] Labaziewicz L, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(3):247–50 (Eng. Abstr.) **(Pol)**

[Platybasia, basilar groove, odontoid process and kinking of the brainstem: a common etiology with idiopathic syringomyelia, scoliosis and Chiari malformations] Royo–Salvador MB. **Rev Neurol** 1996 Oct;24(134):1241–50 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Unilateral hemilaminectomy for the removal of the spinal space–occupying lesions. Sario–glu AC, et al. **Minim Invasive Neurosurg** 1997 Jun;40(2):74–7

Cut–off point of the Scoliometer in school scoliosis screening. Huang SC. **Spine** 1997 Sep 1;22(17):1985–9

Convex spinal epiphysiodesis in the management of progressive infantile idiopathic scoliosis. Marks DS, et al. **Spine** 1996 Aug 15;21(16):1884–8

To brace or not to brace: the true value of school screening [editorial] Winter RB, et al. **Spine** 1997 Jun 15; 22(12):1283–4

[Application of tuberculosis medical examination radiographs to scoliosis screening in high schools] Sugita K, et al. **Nippon Koshu Eisei Zasshi** 1997 Mar;44(3):167–73 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Does scoliosis have a psychological impact and does gender make a difference? Payne WK 3rd, et al. **Spine** 1997 Jun 15;22(12):1380–4

RADIOGRAPHY

Radiological parameters associated with the evolution of degenerative scoliosis. Sapkas G, et al. **Bull Hosp Jt Dis** 1996;55(1):40–5

Rib–vertebral angle asymmetry in idiopathic, neuromuscular and experimentally induced scoliosis. Sevastik B, et al. **Eur Spine J** 1997;6(2):84–8

Prediction of correction of scoliosis with use of the fulcrum bending radiograph. Cheung KM, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1144–50

Surgical correction of vertebral axial rotation in adolescent idiopathic scoliosis: prediction by lateral bending films. Aronsson DD, et al. **J Spinal Disord** 1996 Jun;9(3):214–9

Flexibility in the scoliotic spine: three–dimensional analysis. Matsumoto T, et al. **J Spinal Disord** 1997 Apr;10(2):125–31

Associations between spinal deformity and outcomes after decompression for spinal stenosis. Frazier DD, et al. **Spine** 1997 Sep 1;22(17):2025–9

Reducing the lifetime risk of cancer from spinal radiographs among people with adolescent idiopathic scoliosis. Levy AR, et al. **Spine** 1996 Jul 1;21(13):1540–7; discussion 1548

Measurement of rib vertebral angle difference. Intraobserver error and interobserver variation. McAlindon RJ, et al. **Spine** 1997 Jan 15;22(2):198–9

A comparison of radiographic and electrogoniometric angles in adolescent idiopathic scoliosis. Mior SA, et al. **Spine** 1996 Jul 1;21(13):1549–55

Comparison of the use of supine bending and traction radiographs in the selection of the fusion area in adolescent idiopathic scoliosis. Vaughan JJ, et al. **Spine** 1996 Nov 1; 21(21):2469–73

RADIONUCLIDE IMAGING

Evaluation of pulmonary ventilation and diaphragmatic movement in idiopathic scoliosis using radioaerosol ventilation scintigraphy. Giordano A, et al. **Nucl Med Commun** 1997 Feb;18(2):105–11

REHABILITATION

Development of an instrument for clinical evaluation after surgery for neuromuscular scoliosis. Samuelsson K, et al. **Eur Spine J** 1996;5(6):400–6

[Idiopathic scoliosis—therapy with the Cheneau corset. Results of treatment of 69 patients with advanced scoliosis] Siebel T, et al. **Fortschr Med** 1996 Aug 30;114(24):287–90 **(Ger)**

[Exercise therapy in postural weakness (news)] Carstens C, et al. **Z Orthop Ihre Grenzgeb** 1997 Jan–Feb;135(1):Oa16–7 **(Ger)**

[The assessment of the immediate results of treatment in children with the initial forms of dysplastic scoliosis using the method of neuromyoelectrostimulation] Komarov LA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Jul–Aug; (4):15–7 **(Rus)**

SURGERY

Deliberate hypotensive anesthesia with labetalol in reconstructive surgery for scoliosis [published erratum appears in Acta Anaesthesiol Sin 19997 Mar;35(1):59] Sum DC, et al. **Acta Anaesthesiol Sin** 1996 Dec;34(4):203–7

Cotrel–Dubousset instrumentation in idiopathic scoliosis a 5–year follow–up. Antuña SA, et al. **Acta Orthop Belg** 1997 Jun;63(2):74–81

Combination of blood–saving methods decreases homologous blood requirements in scoliosis surgery. Lisander B, et al. **Anaesth Intensive Care** 1996 Oct;24(5):555–8

The effect of intravenous lidocaine on intraoperative somatosensory evoked potentials during scoliosis surgery [see comments] Chaves–Vischer V, et al. **Anesth Analg** 1996 Nov;83(5):1122–5. Comment in: Anesth Analg 1997 Jul;85(1):228.

Airway management and rigid spine syndrome. Kitayama M, et al. **Anesth Analg** 1997 Mar;84(3):690–1

The effect of intravenous lidocaine on somatosensory evoked potentials during scoliosis surgery [letter; comment] Klasen J. **Anesth Analg** 1997 Jul;85(1):228. Comment on: Anesth Analg 1996 Nov;83(5):1122–5.

Effects of isoflurane and desflurane on neurogenic motor– and somatosensory–evoked potential monitoring for scoliosis surgery. Bernard JM, et al. **Anesthesiology** 1996 Nov;85(5):1013–9

A study of desmopressin and blood loss during spinal fusion for neuromuscular scoliosis: a randomized, controlled, double–blinded study. Theroux MC, et al. **Anesthesiology** 1997 Aug;87(2):260–7

Surgical treatment of neuropathic scoliosis: morphologic and functional outcome. Frischhut B, et al. **Arch Orthop Trauma Surg** 1997;116(6–7):367–72

Uberschwinger artefact in computed radiographs [letter] Tan TH, et al. **Br J Radiol** 1997 Apr;70:431

Spinal instrumentation in the management of adolescent scoliosis. Bridwell KH. **Clin Orthop** 1997 Feb;(335):64–72 (29 ref.)

Thoracoscopic spine release before posterior instrumentation in scoliosis. Waisman M, et al. **Clin Orthop** 1997 Mar; (336):130–6

Spinal imbalance and decompensation problems in patients treated with Cotrel–Dubousset instrumentation. Benli IT, et al. **Eur Spine J** 1996;5(6):380–6

Neurological complications in segmental spinal instrumentation: analysis of 750 patients. Cervellati S, et al. **Eur Spine J** 1996;5(3):161–6 (25 ref.)

Anterior thoracoscopic epiphysiodesis in the treatment of a crankshaft phenomenon. González Barrios I, et al. **Eur Spine J** 1995;4(6):343–6

Correction of idiopathic scoliosis using the H–frame system. Hosman AJ, et al. **Eur Spine J** 1996;5(3):172–7

Spinal cord compression caused by the rod of a Harrington instrumentation device: a late complication in scoliosis surgery. Krödel A, et al. **Eur Spine J** 1997;6(3):208–10

Immunological suppression after surgery in scoliosis patients. Suzuki N, et al. **Eur Spine J** 1997;6(1):39–44

The segmental effect of Cotrel–Dubousset instrumentation on vertebral rotation, rib hump and the thoracic cage in idiopathic scoliosis. Willers U, et al. **Eur Spine J** 1996; 5(6):387–93

Controversies in low back pain: the surgical approach. Hanley EN Jr, et al. **Instr Course Lect** 1994;43:415–23 (56 ref.)

Patient–controlled analgesia after spinal fusion for idiopathic scoliosis. Beaulieu P, et al. **Int Orthop** 1996;20(5):295–9

Anterior instrumentation in idiopathic scoliosis: a minimum follow–up of 10 years. Otani K, et al. **Int Orthop** 1997; 21(1):4–8

Prediction of correction of scoliosis with use of the fulcrum bending radiograph. Cheung KM, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1144–50

The ankle clonus test for assessment of the integrity of the spinal cord during operations for scoliosis. Hoppenfeld S, et al. **J Bone Joint Surg Am** 1997 Feb;79(2):208–12

Adolescent idiopathic scoliosis. Correction of vertebral rotation with use of Wisconsin segmental spinal instrumentation. Jarvis JG, et al. **J Bone Joint Surg Am** 1996 Nov;78(11):1707–12

Coagulopathy complicating intraoperative blood salvage in a patient who had idiopathic scoliosis. A case report. McKie JS, et al. **J Bone Joint Surg Am** 1997 Sep; 79(9):1391–4

Spinal cord monitoring in operations for neuromuscular scoliosis. Noordeen MH, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):53–7

Doppler color imaging recognition of CSF leakages after spinal surgery. Meuwly JY, et al. **J Clin Ultrasound** 1996 Mar–Apr;24(3):151–3

Posterior spinal fusion for scoliosis in patients with cerebral palsy: a comparison of Luque rod and Unit Rod instrumentation. Bulman WA, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):314–23

Hemivertebral excision for congenital scoliosis. Callahan BC, et al. **J Pediatr Orthop** 1997 Jan–Feb;17(1):96–9 (19 ref.)

Severe lumbar lordosis after dorsal rhizotomy. Crawford K, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):336–9

Surgical correction of spinal deformity using a unit rod in children with cerebral palsy. Dias RC, et al. **J Pediatr Orthop** 1996 Nov–Dec;16(6):734–40

Neuromuscular scoliosis: recent concepts [editorial; comment] Drummond DS. **J Pediatr Orthop** 1996

May-Jun;16(3):281-3. Comment on: J Pediatr Orthop 1996 May-Jun;16(3):284-92. Comment on: J Pediatr Orthop 1996 May-Jun;16(3):332-5.

Same-day versus staged anterior-posterior spinal surgery in a neuromuscular scoliosis population: the evaluation of medical complications. Ferguson RL, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):293-303

Reconstructive spine surgery in pediatric patients with major loss in vital capacity [see comments] Rawlins BA, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):284-92. Comment in: J Pediatr Orthop 1996 May-Jun;16(3):281-3.

The safety of continuous epidural infusion for postoperative analgesia in pediatric spine surgery. Shaw BA, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):374-7

Routine preoperative MRI and SEP studies in adolescent idiopathic scoliosis. Shen WJ, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):350-3

Posterior instrumentation and fusion of the thoracolumbar spine for treatment of neuromuscular scoliosis. Sussman MD, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):304-13

Video-assisted thoracoscopic diskectomy and fusion. Holcomb GW 3rd, et al. **J Pediatr Surg** 1997 Jul; 32(7):1120-2

Surgical correction of vertebral axial rotation in adolescent idiopathic scoliosis: prediction by lateral bending films. Aronsson DD, et al. **J Spinal Disord** 1996 Jun;9(3):214-9

Correction of scoliosis by rib resection in pinealectomized chickens. Deguchi M, et al. **J Spinal Disord** 1996 Jun; 9(3):207-13

Correction of experimental scoliosis by rib resection in the transverse plane. Deguchi M, et al. **J Spinal Disord** 1997 Jun;10(3):197-203

Revision spine surgery in children with cerebral palsy. Dias RC, et al. **J Spinal Disord** 1997 Apr;10(2):132-44

Efficacy of spinal cord monitoring in scoliosis surgery in patients with cerebral palsy. Ecker ML, et al. **J Spinal Disord** 1996 Apr;9(2):159-64

Relapsing pancreatitis after combined anterior and posterior instrumentation for neuropathic scoliosis. Korovessis PG, et al. **J Spinal Disord** 1996 Aug;9(4):347-50

Influence of rigid spinal instrumentation on the neurogenic motor evoked potential. Schwartz DM, et al. **J Spinal Disord** 1996 Oct;9(5):439-45

A scoliosis correction device based on memory metal. Veldhuizen AG, et al. **Med Eng Phys** 1997 Mar;19(2):171-9

The outcome of scoliosis surgery in the severely physically handicapped child. An objective and subjective assessment. Askin GN, et al. **Spine** 1997 Jan 1;22(1):44-50

Lumbar pedicle screws versus hooks. Results in double major curves in adolescent idiopathic scoliosis. Barr SJ, et al. **Spine** 1997 Jun 15;22(12):1369-79

Allograft bone use during instrumentation and fusion in the treatment of adolescent idiopathic scoliosis. Blanco JS, et al. **Spine** 1997 Jun 15;22(12):1338-42

Vertebral column resection for the treatment of rigid coronal decompensation. Bradford DS, et al. **Spine** 1997 Jul 15; 22(14):1590-9

Inappropriate secretion of antidiuretic hormone in postoperative scoliosis patients: the role of fluid management. Brazel PW, et al. **Spine** 1996 Mar 15; 21(6):724-7

Intraoperative optoelectronic analysis of three-dimensional vertebral displacement after Cotrel-Dubousset rod rotation. A preliminary report. Ghanem IB, et al. **Spine** 1997 Aug 15;22(16):1913-21

Effect of intrathecal opioids on somatosensory-evoked potentials during spinal fusion in children. Goodarzi M, et al. **Spine** 1996 Jul 1;21(13):1565-8

Intermittent distracting rod for correction of high neurologic risk congenital scoliosis. Grass PJ, et al. **Spine** 1997 Aug 15;22(16):1922-7

Posterior arthrodesis in the skeletally immature patient. Assessing the risk for crankshaft: is an open triradiate cartilage the answer? Hamill CL, et al. **Spine** 1997 Jun 15; 22(12):1343-51

The use of pedicle screw fixation to improve correction in the lumbar spine of patients with idiopathic scoliosis. Is it warranted? Hamill CL, et al. **Spine** 1996 May 15; 21(10):1241-9

Operative treatment of scoliosis with Cotrel-Dubousset-Hopf instrumentation. New anterior spinal device. Hopf CG, et al. **Spine** 1997 Mar 15; 22(6):618-27; discussion 627-8

Controversy. Fusion of L5-S1 in adult scoliosis. Horton WC, et al. **Spine** 1996 Nov 1;21(21):2520-2 (8 ref.)

Anterior correction of thoracic scoliosis with Kaneda anterior spinal system. A preliminary report. Kaneda K, et al. **Spine** 1997 Jun 15;22(12):1358-68

New anterior instrumentation for the management of thoracolumbar and lumbar scoliosis. Application of the Kaneda two-rod system. Kaneda K, et al. **Spine** 1996 May 15;21(10):1250-61; discussion 1261-2

The crankshaft phenomenon after posterior Harrington fusion in skeletally immature patients with thoracic or thoracolumbar idiopathic scoliosis followed to maturity. Lee CS, et al. **Spine** 1997 Jan 1;22(1):58-67

Use of intravenous Premarin to decrease postoperative blood loss after pediatric scoliosis surgery. McCall RE, et al. **Spine** 1997 Jun 15;22(12):1394-7

Iliosacral screw fixation for pelvic obliquity in neuromuscular scoliosis. A long-term follow-up study. Miladi LT, et al. **Spine** 1997 Aug 1;22(15):1722-9

Delayed postoperative paraparesis in scoliosis surgery. A case report. Mineiro J, et al. **Spine** 1997 Jul 15;22(14):1668-72

Anterior release and fusion in pediatric spinal deformity. A comparison of early outcome and cost of thoracoscopic and open thoracotomy approaches. Newton PO, et al. **Spine** 1997 Jun 15;22(12):1398-406

The possibility of creating lordosis and correcting scoliosis simultaneously after partial disc removal. Balance lines of lumbar motion segments. Ogon M, et al. **Spine** 1996 Nov 1;21(21):2458-62

Spinal shortening in scoliosis surgery, A case with transitory paraplegia. Pedrals JG. **Spine** 1996 Nov 1;21(21):2515-9

Prediction of the crankshaft phenomenon by peak height velocity. Sanders JO, et al. **Spine** 1997 Jun 15; 22(12):1352-6; discussion 1356-7

Changes in the unfused lumbar spine in patients with idiopathic scoliosis. A 5- to 9-year assessment after cotrel-dubousset instrumentation. Takahashi S, et al. **Spine** 1997 Mar 1;22(5):517-23; discussion 524

Comparison of the use of supine bending and traction radiographs in the selection of the fusion area in adolescent idiopathic scoliosis. Vaughan JJ, et al. **Spine** 1996 Nov 1; 21(21):2469-73

Neurologic and vascular complications of scoliosis surgery in patients with Ehlers-Danlos syndrome. A case report. Vogel LC, et al. **Spine** 1996 Nov 1;21(21):2508-14

Prevalence of segmental wire breakage using Cotrel-Dubousset instrumentation in the management of idiopathic scoliosis. Ward M, et al. **Spine** 1997 Feb 15; 22(4):406-7

Rotational changes of the vertebral pelvic axis after sublaminar instrumentation in adolescent idiopathic scoliosis. Wood KB, et al. **Spine** 1997 Jan 1;22(1):51-7

Thoracic volume changes in scoliosis surgery. Wood KB, et al. **Spine** 1996 Mar 15;21(6):718-23

Freeze-dried allograft for posterior spinal fusion in patients with neuromuscular spinal deformities. Yazici M, et al. **Spine** 1997 Jul 1;22(13):1467-71

Internal fixation of the spine in traumatic and scoliotic cases. The potential of pedicle screws. Van Brussel K, et al. **Technol Health Care** 1996 Dec;4(4):365-84 (44 ref.)

[Computer assisted pedicle screw installation. Our first 3 cases] Amiot LP, et al. **Ann Chir** 1996;50(8):626-30 (Eng. Abstr.) **(Fre)**

[Epidural analgesia in the surgery of scoliosis (letter)] Baracco E, et al. **Cah Anesthesiol** 1996;44(4):389 **(Fre)**

[Nasal mask ventilation in the postoperative phase] Henning U. **Med Klin** 1997 Apr 28;92 Suppl 1:101-3 (Eng. Abstr.) **(Ger)**

[The Harrington scoliosis operation: the anesthesiological problems in the perioperative phase] Koch HJ. **Rom J Intern Med** 1996 Jan-Jun;34(1-2):127-36 (Eng. Abstr.) **(Ger)**

[Computerized tomography monitoring of the position of pedicle screws in scoliosis surgery] Halm H, et al. **Z Orthop Ihre Grenzgeb** 1996 Nov-Dec;134(6):492-7 (Eng. Abstr.) **(Ger)**

[The effects of spinal fusion on respiratory function and quality of life in Duchenne muscular dystrophy] Matsumura T, et al. **Rinsho Shinkeigaku** 1997 Feb; 37(2):87-92 (Eng. Abstr.) **(Jpn)**

[The most frequent errors during use of the surgical techniques of Cotrela-Dubousset (C-D) and Texas Scottish Rite Hospital (TSRH) for surgical treatment of idiopathic scoliosis] Nowakowski A, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):543-51 (Eng. Abstr.) **(Pol)**

[Range of distal spondylodesis in surgical treatment of idiopathic scoliosis using multisegmental instrumentation] Nowakowski A, et al. **Chir Narzadow Ruchu Ortop Pol** 1997;62(1):27-37 (Eng. Abstr.) **(Pol)**

[Multistage surgical treatment for idiopathic infantile scoliosis using C-D instrumentation and TSRH--preliminary report] Przybylski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):535-41 (Eng. Abstr.) **(Pol)**

[A new surgical treatment for syringomyelia, scoliosis, Arnold-Chiari malformation, kinking of the brainstem, odontoid recess, idiopathic basilar impression and platybasia] Royo-Salvador MB. **Rev Neurol** 1997 Apr; 25(140):523-30 (Eng. Abstr.) **(Spa)**

THERAPY

Idiopathic scoliosis and kyphosis. Pizzutillo PD. **Instr Course Lect** 1994;43:185-91 (10 ref.)

Use of the Milwaukee brace for progressive idiopathic scoliosis [letter; comment] Bunch WH. **J Bone Joint Surg Am** 1997 Jun;79(6):954; discussion 954-5 . Comment on: J Bone Joint Surg Am 1996 Apr;78(4):557-67.

A meta-analysis of the efficacy of non-operative treatments for idiopathic scoliosis. Rowe DE, et al. **J Bone Joint Surg Am** 1997 May;79(5):664-74

Use of the Milwaukee brace for progressive idiopathic scoliosis [letter; comment] Winter RB, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):954; discussion 954-5 . Comment on: J Bone Joint Surg Am 1996 Apr;78(4):557-67.

Management of Jehovah's Witness patients for scoliosis surgery: the use of platelet and plasmapheresis. Safwat AM, et al. **J Clin Anesth** 1997 Sep;9(6):510-3

Progression of scoliosis [letter; comment] Galasko CS. **J Pediatr Orthop** 1997 May-Jun;17(3):407. Comment on: J Pediatr Orthop 1996 May-Jun;16(3):332-5.

Impact of orthoses on the rate of scoliosis progression in children with cerebral palsy [see comments] Miller A, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):332-5. Comment in: J Pediatr Orthop 1996 May-Jun;16(3):281-3. Comment in: J Pediatr Orthop 1997 May-Jun;17(3):407.

Treatment of adult scoliosis. Albert TJ, et al. **J South Orthop Assoc** 1996 Fall;5(3):229-37 (12 ref.)

Vertical transmission of the hip rolls due to wearing of TLSO for scoliosis. Korovessis P, et al. **J Spinal Disord** 1996 Aug; 9(4):326-33

Rib cage-spine coupling patterns involved in brace treatment of adolescent idiopathic scoliosis. Aubin CE, et al. **Spine** 1997 Mar 15;22(6):629-35

A comparison between the Boston brace and the Charleston bending brace in adolescent idiopathic scoliosis. Katz DE, et al. **Spine** 1997 Jun 15;22(12):1302-12

Long-term alterations of respiratory function in adolescents wearing a brace for idiopathic scoliosis. Korovessis P, et al. **Spine** 1996 Sep 1;21(17):1979-84

Three-dimensional effect of the Boston brace on the thoracic spine and rib cage. Labelle H, et al. **Spine** 1996 Jan 1; 21(1):59-64

The natural history of idiopathic scoliosis. Incidence of treatment in 15 cohorts of children born between 1963 and 1977. Montgomery F, et al. **Spine** 1997 Apr 1;22(7):772-4

The treatment of progressive kyphoscoliosis in camptomelic dysplasia. Thomas S, et al. **Spine** 1997 Jun 15;22(12):1330-7

[A study of biomechanical coupling between spine and rib cage in the treatment by orthosis of scoliosis] Aubin CE, et al. **Ann Chir** 1996;50(8):641-50 (Eng. Abstr.) **(Fre)**

[Orthopedic treatment of scoliosis: new technique using impression by optic procedure] Cottalorda J, et al. **Arch Pediatr** 1997 May;4(5):464-7 (Eng. Abstr.) **(Fre)**

[The effect of halo-gravity traction in the preoperative treatment of neuromuscular scoliosis] Flierl S, et al. **Z Orthop Ihre Grenzgeb** 1997 Mar-Apr;135(2):162-70 (Eng. Abstr.) **(Ger)**

[Characteristics in the treatment of scoliosis in muscular diseases] Forst R, et al. **Z Orthop Ihre Grenzgeb** 1997 Mar-Apr;135(2):95-105 (84 ref.) (Eng. Abstr.) **(Ger)**

[Indications for braces and surgery in scoliosis] Rüdiger F, et al. **Z Orthop Ihre Grenzgeb** 1996 Sep-Oct;134(5):Oa12, Oa14 **(Ger)**

ULTRASONOGRAPHY

[Intraoperative evaluation of surgical correction. Reconstructive interventions on the skeleton with ultrasound topometry] von Deimling U, et al. **Ultraschall Med** 1996 Oct;17(5):239-42 (Eng. Abstr.) **(Ger)**

SCOPOLAMINE

Clinical manifestations of transdermal scopolamine addiction. Luetje CM, et al. **Ear Nose Throat J** 1996 Apr;75(4):210-4

Effects of cholinergic drugs on scopolamine-induced memory impairment in rhesus monkeys. Hironaka N, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Jun; 16(3):103-8

Neurokinin A and senktide attenuate scopolamine-induced impairment of spontaneous alternation performance in mice. Ukai M, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Jun; 16(3):97-101

ADMINISTRATION & DOSAGE

Scopolamine patch can be confusing to the patient and anesthesiologist: a case report. Elias MA, et al. **Anesthesiology** 1997 Mar;86(3):743-4

Effects of low-dose transdermal scopolamine on autonomic cardiovascular control in healthy young subjects. Vesalainen RK, et al. **Clin Physiol** 1997 Mar;17(2):135-48

Double blind placebo controlled trial of short term transdermal scopolamine on heart rate variability in patients with chronic heart failure. Venkatesh G, et al. **Heart** 1996 Aug;76(2):137-43

Transdermal scopolamine for refractory seizures. Kramer U, et al. **J Child Neurol** 1997 Feb;12(2):139-41

The use of scopolamine in the treatment of detrusor instability [see comments] Muskat Y, et al. **J Urol** 1996 Dec; 156(6):1989-90. Comment in: J Urol 1996 Dec;156(6):1999.

ADVERSE EFFECTS

Scopolamine patch can be confusing to the patient and anesthesiologist: a case report. Elias MA, et al. **Anesthesiology** 1997 Mar;86(3):743-4

Central anticholinergic syndrome complicating management of a difficult airway [letter] Ezri T, et al. **Can J Anaesth** 1996 Oct;43(10):1079-80

Physostigmine: going ... going ... gone? Two cases of central anticholinergic syndrome following anaesthesia and its treatment with physostigmine. Martin B, et al. **Eur J Anaesthesiol** 1997 Jul;14(4):467-70

Physostigmine reversal of scopolamine-induced hypofrontality. Prohovnik I, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):220-8

Effects of NIK-247 on cholinesterase and scopolamine-induced amnesia. Kojima J, et al. **Methods Find Exp Clin Pharmacol** 1997 May;19(4):245-51

[An unusual case of psychosis caused by long-term administration of a scopolamine membrane patch. Paranoid hallucinogenic and delusional symptoms] Rubner O, et al. **Nervenarzt** 1997 Jan;68(1):77-9 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES see SCOPOLAMINE DERIVATIVES

ANALYSIS

Genotypes and alkaloid contents of Datura metel varieties. Hiraoka N, et al. **Biol Pharm Bull** 1996 Aug;19(8):1086-9

ANTAGONISTS & INHIBITORS

Benzodiazepine receptor stimulation blocks scopolamine-induced learning impairments in a water maze task. Smythe JW, et al. **Brain Res Bull** 1996;41(5):299-304

Interleukin-6 affects scopolamine-induced amnesia, but not brain amino acid levels in mice. Bianchi M, et al. **Neuroreport** 1997 May 6;8(7):1775-8

Aniracetam restores object recognition impaired by age, scopolamine, and nucleus basalis lesions. Bartolini L, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):277-83

The effects of a benzodiazepine receptor antagonist beta-carboline ZK-93426 on scopolamine-induced impairment on attention, memory and psychomotor skills. Duka T, et al. **Psychopharmacology (Berl)** 1996 Feb; 123(4):361-73

BLOOD

Determination of scopolamine in human serum by gas chromatography-ion trap tandem mass spectrometry. Oertel R, et al. **J Chromatogr B Biomed Appl** 1996 Jul 12; 682(2):259-64

DIAGNOSTIC USE

Differential response of rapid eye movement sleep to cholinergic blockade by scopolamine in currently depressed, remitted, and normal control subjects. Poland RE, et al. **Biol Psychiatry** 1997 May 1;41(9):929-38

PHARMACOKINETICS

Bioavailability of intranasal scopolamine in normal subjects. Putcha L, et al. **J Pharm Sci** 1996 Aug;85(8):899-902

PHARMACOLOGY

The effects of different types of pre-training on the rat's retention performance in a swim-to-platform task following administration of scopolamine. Caldji C, et al. **Behav Brain Res** 1996 Oct;80(1-2):217-20

Dose-related impairment of spatial learning by intrahippocampal scopolamine: antagonism by ondansetron, a 5-HT3 receptor antagonist. Carli M, et al. **Behav Brain Res** 1997 Jan;82(2):185-94

NMDA antagonists potentiate scopolamine-induced amnesic effect. Li HB, et al. **Behav Brain Res** 1997 Feb; 83(1-2):225-8

Effects of repeated treatment with methamphetamine plus scopolamine and methamphetamine on behavioral sensitization and conditioning. Yui K, et al. **Behav Brain Res** 1996 Oct;80(1-2):169-75

Posttraining intrahippocampal estradiol injections enhance spatial memory in male rats: interaction with cholinergic systems. Packard MG, et al. **Behav Neurosci** 1996 Jun; 110(3):626-32

Comparison of the effects of a selective muscarinic receptor antagonist and hyoscine (scopolamine) on motion sickness, skin conductance and heart rate. Golding JF, et al. **Br J Clin Pharmacol** 1997 Jun;43(6):633-7

Peripherally administered GM-CSF interferes with scopolamine-induced amnesia in mice: involvement of interleukin-1. Bianchi M, et al. **Brain Res** 1996 Aug 12; 729(2):285-8

5-Hydroxytryptamine (5-HT) agonists: effects on neocortical slow wave activity after combined muscarinic and serotonergic blockade. Dringenberg HC, et al. **Brain Res** 1996 Jul 29;728(2):181-7

NMDA-but not AMPA-receptor antagonists augment scopolamine-induced spatial cognitive deficit of rats in a radial maze task. Li HB, et al. **Brain Res** 1996 Jul 1; 725(2):268-71

Effects of muscarinic receptor antagonism on the phosphatidylinositol bisphosphate signal transduction pathway after experimental brain injury. Lyeth BG, et al. **Brain Res** 1996 Dec 2;742(1-2):63-70

Role of cholinergic inputs to the medial preoptic area in regulation of sleep-wakefulness and body temperature in freely moving rats. Mallick BN, et al. **Brain Res** 1997 Mar 7;750(1-2):311-7

Galanin microinjected into the medial septum inhibits scopolamine-induced acetylcholine overflow in the rat ventral hippocampus. Robinson JK, et al. **Brain Res** 1996 Feb 12;709(1):81-7

Regionally different effects of scopolamine on NMDA antagonist-induced heat shock protein HSP70. Tomitaka SI, et al. **Brain Res** 1997 Jul 25;763(2):255-8

Anticholinergics improve fibreoptic intubating conditions during general anaesthesia. Brookman CA, et al. **Can J Anaesth** 1997 Feb;44(2):165-7

Different effects of cholinergic agents on responses recorded from the cat visual cortex and lateral geniculate nucleus dorsalis. Arakawa K, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jul; 104(4):375-80

Scopolamine-induced convulsions in food given fasted mice: effects of physostigmine and MK-801. Enginar N, et al. **Epilepsy Res** 1997 Sep;28(2):137-42

Metrifonate improves spatial navigation and avoidance behavior in scopolamine-treated, medial septum-lesioned and aged rats. Riekkinen P Jr, et al. **Eur J Pharmacol** 1996 Aug 8;309(2):121-30

Effects of ginsenosides on maze performance and brain choline acetyltransferase activity in scopolamine-treated young rats and aged rats. Yamaguchi Y, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):37-41

Scopolamine increases prehensile force during object manipulation by reducing palmar sweating and decreasing skin friction. Smith AM, et al. **Exp Brain Res** 1997 May; 114(3):578-83

Scopolamine blocks the effects of swim stress on memory retrieval in rats. Kumar KB, et al. **J Neural Transm** 1996; 103(11):1331-6

Cognitive effects of scopolamine in dementia. Rabey JM, et al. **J Neural Transm Gen Sect** 1996;103(7):873-81

Functional activation of cerebral blood flow abolished by scopolamine is reversed by cognitive enhancers associated with cholinesterase inhibition: a positron emission tomography study in unanesthetized monkeys. Tsukada H, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1408-14

Scopolamine- and morphine-induced deficits in water maze alternation: failure to attenuate with glucose. Means LW, et al. **Neurobiol Learn Mem** 1996 Sep;66(2):167-75

Apparent vs real effects of scopolamine on the learning of an active avoidance task. Vinader-Caerols C, et al. **Neurobiol Learn Mem** 1996 Sep;66(2):246-51

Behavioral responses induced by repeated treatment with methamphetamine alone and in combination with scopolamine in rats. Yui K, et al. **Neuropsychobiology** 1996; 33(1):21-7

Scopolamine-induced deficits in a two-trial object recognition task in mice. Dodart JC, et al. **Neuroreport** 1997 Mar 24;8(5):1173-8

Working memory failure by combined blockade of muscarinic and beta-adrenergic transmission in the rat hippocampus. Ohno M, et al. **Neuroreport** 1997 May 6; 8(7):1571-5

Dorsal hippocampal muscarinic acetylcholine and NMDA receptors disrupt water maze navigation. Riekkinen M, et al. **Neuroreport** 1997 Feb 10;8(3):645-8

Effects of microinjection of scopolamine into the neostriatum of rats on performance of a food conditioned reflex at different levels of fixation. Tikhonravov DL, et al. **Neurosci Behav Physiol** 1997 May-Jun;27(3):312-8

Scopolamine reversal of tremor produced by low doses of physostigmine in rats: evidence for a cholinergic mechanism. Stanford JA, et al. **Neurosci Lett** 1997 Apr 11;225(3):157-60

Increased striatal dopamine efflux follows scopolamine administered systemically or to the tegmental pedunculopontine nucleus. Chapman CA, et al. **Neuroscience** 1997 Jan;76(1):177-86

Electrical stimulation of the cholinergic laterodorsal tegmental nucleus elicits scopolamine-sensitive excitatory postsynaptic potentials in medial pontine reticular formation neurons. Imon H, et al. **Neuroscience** 1996 Sep; 74(2):393-401

Basal forebrain and cerebral cortical muscarinic receptors mediate increase in cortical blood flow provoked by periaqueductal gray matter. Nakai M, et al. **Neuroscience** 1997 Jul;79(2):571-9

Selective muscarinic antagonists differentially affect in vivo acetylcholine release and memory performances of young and aged rats. Vannucchi MG, et al. **Neuroscience** 1997 Aug;79(3):837-46

Scopolamine augments C-FOS and ZIF/268 messenger RNA expression induced by the full D(1) dopamine receptor agonist SKF-82958 in the intact rat striatum. Wang JQ, et al. **Neuroscience** 1996 Jun;72(3):601-16

Effect of combinations of insulin, glucose and scopolamine on radial arm maze performance. Blanchard JG, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):209-14

Acute and chronic arecoline: effects on a scopolamine-induced deficit in complex maze learning. Bratt AM, et al. **Pharmacol Biochem Behav** 1996 Mar; 53(3):713-21

Neonatal cocaine alters behavioural responsiveness to scopolamine and cholinergic development in mice. Calamandrei G, et al. **Pharmacol Biochem Behav** 1997 Apr; 56(4):557-63

Effects of St-587 and prazosin on water maze and passive avoidance performance of scopolamine-treated rats. Puumala T, et al. **Pharmacol Biochem Behav** 1996 Sep; 55(1):107-15

The muscarinic acetylcholine antagonist scopolamine impairs short-distance homing pigeon navigation. Kohler EC, et al. **Physiol Behav** 1996 Oct;60(4):1057-61

Reduction of the scopolamine-induced impairment of passive-avoidance performance by sigma receptor agonist in mice. Senda T, et al. **Physiol Behav** 1997 Feb; 61(2):257-64

Effects of Gastrodia elata and its active constituents on scopolamine-induced amnesia in rats. Wu CR, et al. **Planta Med** 1996 Aug;62(4):317-21

The effects of a benzodiazepine receptor antagonist beta-carboline ZK-93426 on scopolamine-induced impairment on attention, memory and psychomotor skills. Duka T, et al. **Psychopharmacology (Berl)** 1996 Feb; 123(4):361-73

Purine modulation of dizocilpine effects on spontaneous alternation. Fraser CM, et al. **Psychopharmacology (Berl)** 1997 Apr;130(4):334-42

Effects of purine analogues on spontaneous alternation in mice. Hooper N, et al. **Psychopharmacology (Berl)** 1996 Feb;123(3):250-7

Disruption of trace conditioning of the nictitating membrane response in rabbits by central cholinergic blockade. Kaneko T, et al. **Psychopharmacology (Berl)** 1997 May;131(2):161-6

Scopolamine impairs the ability of parturient ewes to learn to recognise their lambs. Lévy F, et al. **Psychopharmacology (Berl)** 1997 Jan;129(1):85-90

The neurosteroid pregnenolone sulfate reduces learning deficits induced by scopolamine and has promnestic effects in mice performing an appetitive learning task. Meziane H, et al. **Psychopharmacology (Berl)** 1996 Aug; 126(4):323-30

Additive deficits in the choice accuracy of rats in the delayed non-matching to position task after cholinolytics and serotonergic lesions are non-mnemonic in nature. Ruotsalainen S, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(4):303-12

Effects of scopolamine on learning and memory in monkeys. Savage UC, et al. **Psychopharmacology (Berl)** 1996 Jan; 123(1):9-14

Age-related decline in central cholinergic function demonstrated with scopolamine. Tariot PN, et al. **Psychopharmacology (Berl)** 1996 May;125(1):50-6

Mecamylamine- or scopolamine-induced learning impairment: ameliorated by nefiracetam. Woodruff-Pak DS, et al. **Psychopharmacology (Berl)** 1997 May; 131(2):130-9

Evidence for an involvement of muscarinic cholinergic systems in the induction but not expression of behavioral sensitization to cocaine. Heidbreder CA, et al. **Synapse** 1996 Oct;24(2):182-92

[Role of the zoosocial factor in acute extinction of exploratory behavior in mice and effects on it of piracetam and scopolamine] Kravchenko EV, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):48-50 **(Rus)**

POISONING

Hyoscyamus falezlez C: a poisonous plant of north Africa. el Bahri L, et al. **Vet Hum Toxicol** 1996 Oct;38(5):378-9 (19 ref.)

THERAPEUTIC USE

The efficacy of hyoscine hydrobromide in reducing side-effects induced during immersion in virtual reality. Regan EC, et al. **Aviat Space Environ Med** 1996 Mar; 67(3):222-6

Drug therapy for acquired pendular nystagmus in multiple sclerosis. Starck M, et al. **J Neurol** 1997 Jan;244(1):9-16

Death rattle: an audit of hyoscine (scopolamine) use and review of management. Bennett MI. **J Pain Symptom Manage** 1996 Oct;12(4):229-33

Effect of transdermal scopolamine on heart rate variability in patients with severe coronary heart disease. Kochiadakis GE, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1867-71

[Transdermal scopolamine for prevention of postoperative nausea and vomiting. No clinically relevant result in spite of reduced postoperative vomiting in general surgical and gynecologic patients] Eberhart LHJ, et al. **Anaesthesist** 1996 Mar;45(3):259-67 (Eng. Abstr.) **(Ger)**

TOXICITY

Minimal effects of dextroamphetamine on scopolamine-induced cognitive impairments in humans. Martinez R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):50-7

Reversal of scopolamine-induced deficits in navigational memory performance by the seed oil of Celastrus paniculatus. Gattu M, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):793-9

The effect of several putative cognition enhancers on a water maze acquisition deficit produced by pCPA + scopolamine combination treatment. Harder JA, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):657-61

Cognitive dysfunctions induced by scopolamine are reduced by systemic or intrahippocampal mineralocorticoid receptor blockade. Smythe JW, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):613-21

[Effect of aceclidine on amnesia induced by scopolamine and electroshock in rats] Mashkovskii MD, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):296-8 **(Rus)**

SCOPOLAMINE DERIVATIVES

ADMINISTRATION & DOSAGE

Study of the bronchodilating effect of three doses of nebulized oxitropium bromide in asthmatic preschool children using the forced oscillation technique. Pauwels JH, et al. **Eur J Pediatr** 1997 Apr;156(4):329-32

Long-term effects of inhaled anticholinergic drug on lung

SCOPOLAMINE DERIVATIVES

function, dyspnea, and exercise capacity in patients with chronic obstructive pulmonary disease. Teramoto S, et al. **Intern Med** 1996 Oct;35(10):772–8

[A case of bronchial asthma for whose status asthmaticus an anticholinergic drug was effective in weaning from inhaled anesthesia] Takizawa T, et al. **Arerugi** 1997 Apr; 46(4):391–4 **(Jpn)**

CHEMISTRY

Effect of purification followed by solubilization of receptor material on quantitative receptor assays for anticholinergic drugs. Smisterová J, et al. **J Pharm Biomed Anal** 1996 Aug; 14(11):1425–33

DIAGNOSTIC USE

[Usefulness of pirenzepine in the study of the upper digestive tract and the large intestine with double contrast media: comparison with scopolamine methylbromide] Braccini G, et al. **Radiol Med (Torino)** 1996 Dec;92(6):733–7 (Eng. Abstr.) **(Ita)**

METABOLISM

Influence of monovalent cations on the binding of a charged and an uncharged ('carbo'-)muscarinic antagonist to muscarinic receptors. Hou X, et al. **Br J Pharmacol** 1996 Mar;117(5):955–61

Selective enhancement of antagonist ligand binding at muscarinic M2 receptors by heparin due to receptor uncoupling. Wang SZ, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):113–8

PHARMACOLOGY

Prolonged effect of tiotropium bromide on methacholine-induced bronchoconstriction in asthma. O'Connor BJ, et al. **Am J Respir Crit Care Med** 1996 Oct; 154(4 Pt 1):876–80

Reducing milk production in ewes at weaning using restricted feeding and methscopolamine bromide. Aaron DK, et al. **J Anim Sci** 1997 Jun;75(6):1434–42

Methscopolamine bromide blocks hypothalamic-stimulated release of growth hormone in ewes. Daniel JA, et al. **J Anim Sci** 1997 May;75(5):1359–62

Characterization of antimuscarinic effect of cimetropium bromide in guinea pig ileum. Saitoh N, et al. **J Smooth Muscle Res** 1997 Feb;33(1):1–9

Scopolamine-induced deficits in a two-trial object recognition task in mice. Dodart JC, et al. **Neuroreport** 1997 Mar 24;8(5):1173–8

[The changes of hemodynamics in ocular trauma and treatment with compound anisodine] Zhu Y, et al. **Chung Hua Yen Ko Tsa Chih** 1996 Mar;32(2):110–3 (Eng. Abstr.) **(Chi)**

[Effects of inhaled anticholinergic agents and beta 2-agonists on distilled water induced cough in patients with chronic cough] Tanaka S. **Arerugi** 1996 Jan;45(1):17–27 (Eng. Abstr.) **(Jpn)**

[Effects of oxitropium bromide on exercise and lung function in patients with pulmonary emphysema] Nakanishi N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan; 35(1):38–42 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Effectiveness of the anticholinergic agent oxitropium bromide in elderly patients with bronchial asthma. Shioya T, et al. **Arzneimittelforschung** 1996 Dec;46(12):1130–3

A comparison of the effects of an alpha-agonist, an anti-muscarinic agent and placebo on intranasal histamine challenge in allergic rhinitis. Birchall MA, et al. **Clin Otolaryngol** 1996 Jun;21(3):212–7

[Tracheal smooth muscle dilation effect by anticholinergic agent in chronic pulmonary emphysema] Shindo T, et al. **J Smooth Muscle Res** 1995 Dec;31(6):480–2 **(Jpn)**

[Use of fast-acting adaptogens and symptomatic means during evacuation of trauma victims by air transportation] Grechko AT, et al. **Aviakosm Ekolog Med** 1997;31(2):47–9 **(Rus)**

SCOPOLAMINEBUTYLBROMIDE see **BUTYLSCOPOLAMMONIUM BROMIDE**

SCORBUTUS see **SCURVY**

SCORPION VENOMS

Purification and characterization of ryanotoxin, a peptide with actions similar to those of ryanodine. Morrissette J, et al. **Biophys J** 1996 Aug;71(2):707–21

[Snake and scorpion envenomation in Tunisia. Tunis, 26–30 January 1995. Abstracts] **Arch Inst Pasteur Tunis** 1995 Jul–Oct;72(3–4):185–245 **(Fre)**

ADVERSE EFFECTS

Non-cardiogenic pulmonary oedema after scorpion envenomation: a true entity? [letter] Gueron M, et al. **Toxicon** 1996 Apr;34(4):393–5

ANTAGONISTS & INHIBITORS

Severe envenoming by the Indian red scorpion Mesobuthus tamulus: the use of prazosin therapy. Bawaskar HS, et al. **QJM** 1996 Sep;89(9):701–4

Immunoreactivity and pharmacokinetics of horse anti-scorpion venom F(ab')2-scorpion venom interactions. Pépin-Covatta S, et al. **Toxicol Appl Pharmacol** 1996 Nov; 141(1):272–7

Neutralizing capacity of antibodies elicited by a non-toxic protein purified from the venom of the scorpion Tityus serrulatus. Chávez-Olórtegui C, et al. **Toxicon** 1997 Feb; 35(2):213–21

Molecular characterization, antigenicity and immunogenicity of anatoxic polymeric forms conferring protection against scorpion venoms. Kharrat R, et al. **Toxicon** 1997 Jun; 35(6):915–30

BIOSYNTHESIS

Synthesis and expression of the gene coding for noxiustoxin, a K+ channel-blocking peptide from the venom of the scorpion Centruroides noxius. Martinez F, et al. **Toxicon** 1996 Nov-Dec;34(11-12):1413–9

BLOOD

Is the severity of Tityus serrulatus scorpion envenoming related to plasma venom concentrations? de Rezende NA, et al. **Toxicon** 1996 Jul;34(7):820–3

CHEMICAL SYNTHESIS

Chemical synthesis and characterization of maurotoxin, a short scorpion toxin with four disulfide bridges that acts on K+ channels. Kharrat R, et al. **Eur J Biochem** 1996 Dec 15;242(3):491–8

Monoclonal antibodies neutralizing the toxin II from Androctonus australis hector scorpion venom: usefulness of a synthetic, non-toxic analog. Devaux C, et al. **FEBS Lett** 1997 Aug 4;412(3):456–60

In vivo protection against Androctonus australis hector scorpion toxin and venom by immunization with a synthetic analog of toxin II. Zenouaki I, et al. **Vaccine** 1997 Feb; 15(2):187–94

CHEMISTRY

TsTX-VII, a new toxin from Tityus serrulatus scorpion venom able to induce the release of neurotransmitters from rat brain synaptosomes not blocked by tetrodotoxin. Sampaio SV, et al. **Biochem Mol Biol Int** 1997 May; 41(6):1255–63

Isolation of toxin TsTX-VI from Tityus serrulatus scorpion venom. Effects on the release of neurotransmitters from synaptosomes. Sampaio SV, et al. **Biochem Mol Biol Int** 1996 Jul;39(4):729–40

A novel potassium channel blocking toxin from the scorpion Pandinus imperator: A 1H NMR analysis using a nano-NMR probe. Delepierre M, et al. **Biochemistry** 1997 Mar 4;36(9):2649–58

Three-dimensional structure of toxin OSK1 from Orthochirus scrobiculosus scorpion venom. Jaravine VA, et al. **Biochemistry** 1997 Feb 11;36(6):1223–32

Purification, characterization, and synthesis of an inward-rectifier K+ channel inhibitor from scorpion venom. Lu Z, et al. **Biochemistry** 1997 Jun 10; 36(23):6936–40

Solution structure for Pandinus toxin K-alpha (PiTX-K alpha), a selective blocker of A-type potassium channels. Tenenholz TC, et al. **Biochemistry** 1997 Mar 11; 36(10):2763–71

Solution structures of a highly insecticidal recombinant scorpion alpha-toxin and a mutant with increased activity. Tugarinov V, et al. **Biochemistry** 1997 Mar 4;36(9):2414–24

Isolation, characterization and comparison of a novel crustacean toxin with a mammalian toxin from the venom of the scorpion Centruroides noxius Hoffmann. García C, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Mar;116(3):315–22

Solution structure of Lqh-8/6, a toxin-like peptide from a scorpion venom--structural heterogeneity induced by proline cis/trans isomerization. Adjadj E, et al. **Eur J Biochem** 1997 May 15;246(1):218–27

1H-NMR-derived secondary structure and overall fold of a natural anatoxin from the scorpion Androctonus australis hector. Blanc E, et al. **Eur J Biochem** 1997 Aug 1; 247(3):1118–26

Biochemical and pharmacological characterization of a depressant insect toxin from the venom of the scorpion Buthacus arenicola. Cestèle S, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):93–9

Anti-insect toxin 5 (AaIT5) from Androctonus australis. Nakagawa Y, et al. **Eur J Biochem** 1997 Jun 1; 246(2):496–501

Characterization of four toxins from Buthus martensi scorpion venom, which act on apamin-sensitive Ca2+-activated K+ channels. Romi-Lebrun R, et al. **Eur J Biochem** 1997 Apr 15;245(2):457–64

An insect-specific toxin from Centruroides noxius Hoffmann. cDNA, primary structure, three-dimensional model and electrostatic surface potentials in comparison with other toxin variants. Selisko B, et al. **Eur J Biochem** 1996 Dec 1;242(2):235–42

Primary structure and synthesis of Imperatoxin A (IpTx(a)), a peptide activator of Ca2+ release channels/ryanodine receptors. Zamudio FZ, et al. **FEBS Lett** 1997 Apr 1; 405(3):385–9

Synthesis and biological evaluation of an iodinated iberiotoxin analogue, [mono-iodo-Tyr5, Phe36]-iberiotoxin. Kozlowski ES, et al. **Int J Pept Protein Res** 1996 Aug;48(2):194–9

Characterization of PO1, a new peptide ligand of the apamin-sensitive Ca2+ activated K+ channel. Zerrouk H, et al. **Int J Pept Protein Res** 1996 Dec;48(6):514–21

The signature sequence of voltage-gated potassium channels projects into the external vestibule. Aiyar J, et al. **J Biol Chem** 1996 Dec 6;271(49):31013–6

Makatoxin I, a novel toxin isolated from the venom of the scorpion Buthus martensi Karsch, exhibits nitrergic actions. Gong J, et al. **J Biol Chem** 1997 Mar 28;272(13):8320–4

Identification of structural elements of a scorpion alpha-neurotoxin important for receptor site recognition. Zilberberg N, et al. **J Biol Chem** 1997 Jun 6;272(23):14810–6

Characterization of a new family of toxin-like peptides from the venom of the scorpion Leiurus quinquestriatus hebraeus. 1H-NMR structure of leiuropeptide II. Buisine E, et al. **J Pept Res** 1997 Jun;49(6):545–55

3D structure of kaliotoxin: is residue 34 a key for channel selectivity? Gairi M, et al. **J Pept Sci** 1997 Jul-Aug; 3(4):314–9

In vitro folding and functional analysis of an anti-insect selective scorpion depressant neurotoxin produced in Escherichia coli. Turkov M, et al. **Protein Expr Purif** 1997 Jun;10(1):123–31

Refined solution structure of the anti-mammal and anti-insect LqqIII scorpion toxin: comparison with other scorpion toxins. Landon C, et al. **Proteins** 1997 Jul;28(3):360–74

Now we're cooking: new successes for shake-and-bake. Ealick SE. **Structure** 1997 Apr 15;5(4):469–72 (30 ref.)

Action of babycurus-toxin 1 from the east African scorpion Babycurus centrurimorphus on the isolated cockroach giant axon. Ben Khalifa R, et al. **Toxicon** 1997 Jul;35(7):1069–80

Two neurotoxins (BmK I and BmK II) from the venom of the scorpion Buthus martensi Karsch: purification, amino acid sequences and assessment of specific activity. Ji YH, et al. **Toxicon** 1996 Sep;34(9):987–1001

Noxiustoxin 2, a novel K+ channel blocking peptide from the venom of the scorpion Centruroides noxius Hoffmann. Nieto AR, et al. **Toxicon** 1996 Aug;34(8):913–22

The CDNA and genomic DNA sequences of a mammalian neurotoxin from the scorpion Buthus martensii Karsch. Xiong YM, et al. **Toxicon** 1997 Jul;35(7):1025–31

CLASSIFICATION

[Scorpion toxins] Legros C, et al. **C R Seances Soc Biol Fil** 1997;191(3):345–80 (126 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Solution structures of a highly insecticidal recombinant scorpion alpha-toxin and a mutant with increased activity. Tugarinov V, et al. **Biochemistry** 1997 Mar 4;36(9):2414–24

Genomic organization of the KTX2 gene, encoding a 'short' scorpion toxin active on K+ channels. Legros C, et al. **FEBS Lett** 1997 Jan 27;402(1):45–9

Synthesis and expression of the gene coding for noxiustoxin, a K+ channel-blocking peptide from the venom of the scorpion Centruroides noxius. Martinez F, et al. **Toxicon** 1996 Nov-Dec;34(11-12):1413–9

IMMUNOLOGY

A conserved sequence region of scorpion toxins rendered immunogenic induces broadly cross-reactive, neutralizing antibodies. Devaux C, et al. **Eur J Biochem** 1996 Dec 15; 242(3):727–35

Monoclonal antibodies neutralizing the toxin II from Androctonus australis hector scorpion venom: usefulness of a synthetic, non-toxic analog. Devaux C, et al. **FEBS Lett** 1997 Aug 4;412(3):456–60

Allergic reactions to North African scorpion venom evaluated by skin test and specific IgE. Leynadier F, et al. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 1):851–3

Fab fragments of the monoclonal antibody BCF2 are capable of neutralizing the whole soluble venom from the scorpion Centruroides noxius Hoffmann. Licea AF, et al. **Toxicon** 1996 Aug;34(8):843–7

In vivo protection against Androctonus australis hector scorpion toxin and venom by immunization with a synthetic analog of toxin II. Zenouaki I, et al. **Vaccine** 1997 Feb; 15(2):187–94

ISOLATION & PURIFICATION

Isolation of toxin TsTX-VI from Tityus serrulatus scorpion venom. Effects on the release of neurotransmitters from synaptosomes. Sampaio SV, et al. **Biochem Mol Biol Int** 1996 Jul;39(4):729–40

Purification, characterization, and synthesis of an inward-rectifier K+ channel inhibitor from scorpion venom. Lu Z, et al. **Biochemistry** 1997 Jun 10; 36(23):6936–40

Isolation, characterization and comparison of a novel crustacean toxin with a mammalian toxin from the venom of the scorpion Centruroides noxius Hoffmann. García C, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Mar;116(3):315–22

Anti-insect toxin 5 (AaIT5) from Androctonus australis. Nakagawa Y, et al. **Eur J Biochem** 1997 Jun 1;

246(2):496–501
Maurotoxin, a four disulfide bridge toxin from Scorpio maurus venom: purification, structure and action on potassium channels. Kharrat R, et al. **FEBS Lett** 1997 Apr 14;406(3):284–90
Makatoxin I, a novel toxin isolated from the venom of the scorpion Buthus martensi Karsch, exhibits nitrergic actions. Gong J, et al. **J Biol Chem** 1997 Mar 28;272(13):8320–4
Three new toxins from the scorpion Pandinus imperator selectively block certain voltage-gated K+ channels. Rogowski RS, et al. **Mol Pharmacol** 1996 Nov; 50(5):1167–77
Toxins and genes isolated from scorpions of the genus Tityus. Becerril B, et al. **Toxicon** 1997 Jun;35(6):821–35 (81 ref.)
Purification, structure and activity of three insect toxins from Buthus occitanus tunetanus venom. Borchani L, et al. **Toxicon** 1997 Mar;35(3):365–82
High performance liquid chromatography purification and amino acid sequence of toxins from the muscarinic fraction of Tityus discrepans scorpion venom. D'Suze G, et al. **Toxicon** 1996 May;34(5):591–8
Purification and sequence determination of a new neutral mammalian neurotoxin from the scorpion Buthus martensii Karsch. Luo MJ, et al. **Toxicon** 1997 May;35(5):723–31

METABOLISM

Margatoxin binds to a homomultimer of K(V)1.3 channels in Jurkat cells. Comparison with K(V)1.3 expressed in CHO cells. Helms LM, et al. **Biochemistry** 1997 Mar 25; 36(12):3737–44
Bot IT2: a new scorpion toxin to study receptor site on insect sodium channels. Cestèle S, et al. **FEBS Lett** 1997 Mar 17;405(1):77–80
Toxin III from Leiurus quinquestriatus quinquestriatus: a specific probe for receptor site 3 on insect sodium channels. Cestèle S, et al. **Insect Biochem Mol Biol** 1997 Jun; 27(6):523–8
A model of scorpion toxin binding to voltage-gated K+ channels. Lipkind GM, et al. **J Membr Biol** 1997 Aug 1; 158(3):187–96
Two neurotoxins (BmK I and BmK II) from the venom of the scorpion Buthus martensi Karsch: purification, amino acid sequences and assessment of specific activity. Ji YH, et al. **Toxicon** 1996 Sep;34(9):987–1001

PHARMACOKINETICS

Body distribution of Tityus serrulatus scorpion venom in mice and effects of scorpion antivenom. Revelo MP, et al. **Toxicon** 1996 Oct;34(10):1119–25
Pharmacokinetics of Tityus serrulatus scorpion venom determined by enzyme-linked immunosorbent assay in the rat. Santana GC, et al. **Toxicon** 1996 Sep;34(9):1063–6

PHARMACOLOGY

Purification and characterization of ryanotoxin, a peptide with actions similar to those of ryanodine. Morrissette J, et al. **Biophys J** 1996 Aug;71(2):707–21
The inhibitory effects of iberiotoxin and 4-aminopyridine on the relaxation induced by beta 1- and beta 2-adrenoceptor activation in rat aortic rings. Satake N, et al. **Br J Pharmacol** 1996 Oct;119(3):505–10
Channel activators reduce the expression of sodium channel alpha-subunit mRNA in developing neurons. Lara A, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):116–24
Insect-resistant tobacco plants expressing insect-specific neurotoxin AaIT. Yao B, et al. **Chin J Biotechnol** 1996; 12(2):67–72
Effects of Tityus serrulatus scorpion toxin gamma on voltage-gated Na+ channels. Marcotte P, et al. **Circ Res** 1997 Mar;80(3):363–9
Block of ShakerB K+ channels by Pi1, a novel class of scorpion toxin. Gómez-Lagunas F, et al. **FEBS Lett** 1997 Jan 3;400(2):197–200
Maurotoxin, a four disulfide bridge toxin from Scorpio maurus venom: purification, structure and action on potassium channels. Kharrat R, et al. **FEBS Lett** 1997 Apr 14;406(3):284–90
Effects of Androctonus crassicauda scorpion venom on endothelium-dependent and -independent vascular responses of rabbit aorta. Ay I, et al. **Gen Pharmacol** 1996 Apr;27(3):519–23
Augmentation of phenyldiguanide-induced bradycardia by Buthus tamulus venom in adult rats. Tiwari AK, et al. **Indian J Exp Biol** 1996 Jul;34(7):667–70
Adrenergic and nitrergic responses of the rat isolated anococcygeus muscle to a new toxin (makatoxin I) from the venom of the scorpion Buthus martensi Karsch. Gong JP, et al. **J Auton Pharmacol** 1997 Apr;17(2):129–35
The mechanism of inhibition of ryanodine receptor channels by imperatoxin I, a heterodimeric protein from the scorpion Pandinus imperator. Zamudio FZ, et al. **J Biol Chem** 1997 May 2;272(18):11886–94
Refined electrophysiological analysis suggests that a depressant toxin is a sodium channel opener rather than a blocker. Benkhalifa R, et al. **Life Sci** 1997;61(8):819–30
Agitoxin footprinting the shaker potassium channel pore. Gross A, et al. **Neuron** 1996 Feb;16(2):399–406
Blockade of voltage-gated outward K+ currents of ramified murine microglia by scorpion peptide toxins. Eder C, et al. **Neurosci Lett** 1996 Nov 15;219(1):29–32
Tityustoxin-induced release of ATP from rat brain cortical synaptosomes. Salgado AH, et al. **Neurosci Lett** 1997 Jun 27;229(2):113–6
Screening of the venoms of two Parabuthus scorpion species on isolated cardiomyocytes. Van Aarde MN, et al. **Onderstepoort J Vet Res** 1996 Jun;63(2):127–30
Refined solution structure of the anti-mammal and anti-insect LqqIII scorpion toxin: comparison with other scorpion toxins. Landon C, et al. **Proteins** 1997 Jul;28(3):360–74
Action of New World scorpion venom and its neurotoxins in secretion. Fletcher PL, et al. **Toxicon** 1996 Nov-Dec; 34(11–12):1399–411
Noxiustoxin 2, a novel K+ channel blocking peptide from the venom of the scorpion Centruroides noxius Hoffmann. Nieto AR, et al. **Toxicon** 1996 Aug;34(8):913–22

POISONING

Both cardiogenic and non-cardiogenic factors are involved in the pathogenesis of pulmonary oedema after scorpion envenoming [letter] Amaral CF, et al. **Toxicon** 1997 Jul; 35(7):997–8

TOXICITY

Isolation, characterization and comparison of a novel crustacean toxin with a mammalian toxin from the venom of the scorpion Centruroides noxius Hoffmann. García C, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Mar;116(3):315–22
Scorpion venom leads to gastrointestinal ischemia despite increased oxygen delivery in pigs. Sofer S, et al. **Crit Care Med** 1997 May;25(5):834–40
A new scorpion venom toxin paralytic to insects that affects Na+ channel activation. Purification, structure, antigenicity and mode of action. Borchani L, et al. **Eur J Biochem** 1996 Oct 15;241(2):525–32
An insect-specific toxin from Centruroides noxius Hoffmann. cDNA, primary structure, three-dimensional model and electrostatic surface potentials in comparison with other toxin variants. Selisko B, et al. **Eur J Biochem** 1996 Dec 1;242(2):235–42
Three new toxins from the scorpion Pandinus imperator selectively block certain voltage-gated K+ channels. Rogowski RS, et al. **Mol Pharmacol** 1996 Nov; 50(5):1167–77
Effect of Leiurus quinquestriatus hebreus venom on calcium and deoxyglucose uptake in cultured cardiac cells. Arie-Saadia G, et al. **Toxicon** 1996 Apr;34(4):435–42
Purification, structure and activity of three insect toxins from Buthus occitanus tunetanus venom. Borchani L, et al. **Toxicon** 1997 Mar;35(3):365–82
Biochemical and histopathological alterations induced in rats by Tityus serrulatus scorpion venom and its major neurotoxin tityustoxin-I. Corrêa MM, et al. **Toxicon** 1997 Jul;35(7):1053–67

SCORPIONS

Severe envenoming by the Indian red scorpion Mesobuthus tamulus: the use of prazosin therapy. Bawaskar HS, et al. **QJM** 1996 Sep;89(9):701–4
Purification and sequence determination of a new neutral mammalian neurotoxin from the scorpion Buthus martensii Karsch. Luo MJ, et al. **Toxicon** 1997 May;35(5):723–31
Body distribution of Tityus serrulatus scorpion venom in mice and effects of scorpion antivenom. Revelo MP, et al. **Toxicon** 1996 Oct;34(10):1119–25
[Scorpion envenomation] Montoya-Cabrera MA. **Gac Med Mex** 1996 Nov-Dec;132(6):645–8 **(Spa)**

GENETICS

Genomic organization of the KTX2 gene, encoding a 'short' scorpion toxin active on K+ channels. Legros C, et al. **FEBS Lett** 1997 Jan 27;402(1):45–9
Toxins and genes isolated from scorpions of the genus Tityus. Becerril B, et al. **Toxicon** 1997 Jun;35(6):821–35 (81 ref.)

METABOLISM

Localization of a crustacean hyperglycemic hormone-like immunoreactivity in the neuroendocrine system of Euscorpius carpathicus (L.) (Scorpionida, Chactidae). Stockmann R, et al. **Gen Comp Endocrinol** 1997 Jun; 106(3):320–6

PHYSIOLOGY

Response properties of chemosensory peg sensilla on the pectines of scorpions. Gaffin DD, et al. **J Comp Physiol [A]** 1997 Sep;181(3):291–300
Electrophysiological evidence of synaptic interactions within chemosensory sensilla of scorpion pectines. Gaffin DD, et al. **J Comp Physiol [A]** 1997 Sep;181(3):301–7
Ecophysiological adaptations to dry thermal environments measured in two unrestrained Namibian scorpions, Parabuthus villosus (Buthidae) and Opisthophthalmus flavescens (Scorpionidae). Bridges CR, et al. **Physiol Zool** 1997 Mar-Apr;70(2):244–56

SCOTOMA

[The phenomenon "visual stress" visualized (letter) (see comments)] Sjöberg B. **Lakartidningen** 1997 May 21; 94(21):1970. Comment in: Lakartidningen 1997 aug 6;94(32–33):2716. **(Swe)**

COMPLICATIONS

A computer and video display based system for training eccentric viewing in macular degeneration with an absolute central scotoma. Frennesson C, et al. **Doc Ophthalmol** 1995; 91(1):9–16
Acute zonal occult outer retinopathy and central nervous system inflammation. Jacobson DM. **J Neuroophthalmol** 1996 Sep;16(3):172–7

DIAGNOSIS

High spatial resolution automated perimetry in glaucoma. Westcott MC, et al. **Br J Ophthalmol** 1997 Jun;81(6):452–9
Topographical reproducibility of small scotoma using computerised dynamic fixation target. Mutlukan E. **Doc Ophthalmol** 1995–96;91(3):223–31
Angioscotometry with the scanning laser ophthalmoscope. Comparison of the effect of different wavelengths. Remky A, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2350–5
The ability of Medmont M600 automated perimetry to detect threats to fixation. Zhang L, et al. **J Glaucoma** 1997 Aug; 6(4):259–62
Polaroid scotometer: a new device to chart suppression scotomata. Prakash P, et al. **J Pediatr Ophthalmol Strabismus** 1996 May-Jun; 33(3):181–4
Pituitary adenoma revealed by paracentral junctional scotoma of traquair. Mojon DS, et al. **Ophthalmologica** 1997;211(2):104–8
Scanning laser ophthalmoscope macular perimetry in the evaluation of submacular surgery. Sabates NR, et al. **Retina** 1996;16(4):296–304
[Scotomas: assessment by the patient and by the physician. There's nothing to see] Safran AB. **Klin Monatsbl Augenheilkd** 1997 May;210(5):316–8 (Eng. Abstr.) **(Fre)**

ETIOLOGY

High-altitude retinopathy. Lang GE, et al. **Am J Ophthalmol** 1997 Mar;123(3):418–20
Visual field loss after vitrectomy for full-thickness macular holes. Paques M, et al. **Am J Ophthalmol** 1997 Jul; 124(1):88–94
Differentiating full thickness macular holes from impending macular holes and macular pseudoholes. Tsujikawa M, et al. **Br J Ophthalmol** 1997 Feb;81(2):117–22
Peripheral visual field loss after vitreous surgery for macular holes. Bopp S, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):362–71
Glaucoma like defect on automated perimetry caused by cataract [published erratum appears in Indian J Ophthalmol 1996 Dec;44(4):190] Thomas R, et al. **Indian J Ophthalmol** 1996 Sep;44(3):167–8
Unusual scotomas after transsphenoidal surgery of a pituitary macroadenoma. Dollfus H, et al. **J Neuroophthalmol** 1997 Sep;17(3):204–6
[Localized glioma in the occipital lobe manifesting as scintillating scotoma: case report] Maruya J, et al. **No Shinkei Geka** 1997 Mar;25(3):265–9 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Evaluation of amblyopic scotoma by electrophysiological examinations and computerized perimetry. Fioretto M, et al. **Eur J Ophthalmol** 1996 Apr-Jun;6(2):201–7
Using two preferred retinal loci for different lighting conditions in patients with central scotomas. Lei H, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1812–8
Preferred retinal loci relationship to macular scotomas in a low-vision population. Fletcher DC, et al. **Ophthalmology** 1997 Apr;104(4):632–8
Fixation patterns and reading rates in eyes with central scotomas from advanced atrophic age-related macular degeneration and Stargardt disease. Sunness JS, et al. **Ophthalmology** 1996 Sep;103(9):1458–66
Perceptual filling-in at the scotoma following a monocular retinal lesion in the monkey. Murakami I, et al. **Vis Neurosci** 1997 Jan-Feb;14(1):89–101
[Effect of fast alternating eye covering on formation of binocular vision in strabismus treated with a localization method. II. Evaluation based on the behavior of functional scotomas] Borowiec-Wojtanowska A, et al. **Klin Oczna** 1996;98(5):383–4 (Eng. Abstr.) **(Pol)**

PREVENTION & CONTROL

[Noise field screening. Results of a television field study for detection of visual field defects] Schiefer U, et al. **Ophthalmologe** 1996 Oct;93(5):604–16 (Eng. Abstr.) **(Ger)**

REHABILITATION

Eccentric viewing spectacles in everyday life, for the optimum use of residual functional retinal areas, in patients with age-related macular degeneration. Verezen CA, et al. **Optom Vis Sci** 1996 Jun;73(6):413–7

THERAPY

Monocular scotomata and spinal manipulation: the step

SCOTOMA

phenomenon. Gorman RF. **J Manipulative Physiol Ther** 1996 Jun;19(5):344–9

SCRAPIE

see related
PRIONS
PRPSC PROTEINS

The biology and molecular biology of scrapie-like diseases. Hope J. **Arch Virol Suppl** 1993;7:201–14 (55 ref.)
Scrapie: recent trends. Parsonson IM. **Aust Vet J** 1996 Nov; 74(5):383–7 (61 ref.)
Characterization of detergent-insoluble complexes containing the cellular prion protein and its scrapie isoform. Naslavsky N, et al. **J Biol Chem** 1997 Mar 7;272(10):6324–31
EU stops fiddling while cows burn [news] O'Brien C. **Science** 1996 Nov 22;274(5291):1297–8

DRUG THERAPY

Scrapie-induced neuron loss is reduced by treatment with basic fibroblast growth factor. Fraser JR, et al. **Neuroreport** 1997 Jul 7;8(9–10):2405–9
Differential effects of a new amphotericin B derivative, MS-8209, on mouse BSE and scrapie: implications for the mechanism of action of polyene antibiotics. Adjou KT, et al. **Res Virol** 1996 Jul–Aug;147(4):213–8
Effectiveness of anthracycline against experimental prion disease in Syrian hamsters. Tagliavini F, et al. **Science** 1997 May 16;276(5315):1119–22

EPIDEMIOLOGY

Association between natural scrapie and PrP genotype in a flock of Suffolk sheep in Scotland. Hunter N, et al. **Vet Rec** 1997 Jan 18;140(3):59–63

ETIOLOGY

Improvement of PrPSc-detection in mouse spleen early at the preclinical stage of scrapie with collagenase-completed tissue homogenization and Sarkosyl-NaCl extraction of PrPSc. Grathwohl KU, et al. **Arch Virol** 1996; 141(10):1863–74
Blockade of glycosylation promotes acquisition of scrapie-like properties by the prion protein in cultured cells. Lehmann S, et al. **J Biol Chem** 1997 Aug 22; 272(34):21479–87
PrP genotype contributes to determining survival times of sheep with natural scrapie. Bossers A, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2669–73
The effect of dry heat on the ME7 strain of mouse-passaged scrapie agent. Taylor DM, et al. **J Gen Virol** 1996 Dec; 77 (Pt 12):3161–4
High prion and PrPSc levels but delayed onset of disease in scrapie-inoculated mice heterozygous for a disrupted PrP gene. Büeler H, et al. **Mol Med** 1994 Nov;1(1):19–30
PrP genetics in sheep and the applications for scrapie and BSE. Hunter N. **Trends Microbiol** 1997 Aug;5(8):331–4 (36 ref.)

GENETICS

A novel hamster prion protein mRNA contains an extra exon: increased expression in scrapie. Li G, et al. **Brain Res** 1997 Mar 21;751(2):265–74
Prion protein structure and scrapie replication: theoretical, spectroscopic, and genetic investigations. Bamborough P, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:495–509 (99 ref.)
Novel polymorphisms in the caprine PrP gene: a codon 142 mutation associated with scrapie incubation period [published erratum appears in J Gen Virol 1997 Mar;78(Pt 3):697] Goldmann W, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2885–91
PrP genotypes and experimental scrapie in orally inoculated Suffolk sheep in the United States. O'Rourke KI, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):975–8
Is scrapie solely a genetic disease? [letter] Hunter N, et al. **Nature** 1997 Mar 13;386(6621):137
Scrapie susceptibility-linked polymorphisms modulate the in vitro conversion of sheep prion protein to protease-resistant forms. Bossers A, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4931–6
Immunolocalisation of the prion protein (PrP) in the brains of sheep with scrapie. Foster JD, et al. **Vet Rec** 1996 Nov 23;139(21):512–5
Natural scrapie and PrP genotype: case-control studies in British sheep. Hunter N, et al. **Vet Rec** 1997 Aug 9; 141(6):137–40
Association between natural scrapie and PrP genotype in a flock of Suffolk sheep in Scotland. Hunter N, et al. **Vet Rec** 1997 Jan 18;140(3):59–63

HISTORY

The scrapie enigma: insights from radiation experiments. 1993 [classical article] Alper T. **Int J Radiat Biol** 1997 Jun; 71(6):759–68

IMMUNOLOGY

The M22 antibody identifies highly activated reactive astrocytes responding to central nervous system disease. Eddleston M, et al. **Acta Neuropathol (Berl)** 1996; 91(3):298–308
Scrapie in immunodeficient mice. Brown KL, et al. **Biochem Soc Trans** 1997 May;25(2):173S
Characterization of a prion protein (PrP) gene from rabbit; a species with apparent resistance to infection by prions. Loftus B, et al. **Gene** 1997 Jan 15;184(2):215–9

METABOLISM

Tubulovesicular structures are not labeled using antibodies to prion protein (PrP) with the immunogold electron microscopy techniques. Liberski PP, et al. **Acta Neuropathol (Berl)** 1997 Mar;93(3):260–4
Immunocytochemical evaluation of blood-brain barrier to endogenous albumin in scrapie-infected mice. Vorbrodt AW, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):341–8
Chemical chaperones interfere with the formation of scrapie prion protein. Tatzelt J, et al. **EMBO J** 1996 Dec 2; 15(23):6363–73
Electrophoretic analysis of nucleic acids isolated from scrapie-infected hamster brain. Bountiff L, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2371–8
Immunodetection of PrPSc in spleens of some scrapie-infected sheep but not BSE-infected cows. Somerville RA, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2389–96
Sensitive enzyme-linked immunosorbent assay for detection of PrP(Sc) in crude tissue extracts from scrapie-affected mice. Grathwohl KU, et al. **J Virol Methods** 1997 Mar; 64(2):205–16
PrP-expressing tissue required for transfer of scrapie infectivity from spleen to brain. Blättler T, et al. **Nature** 1997 Sep 4;389(6646):69–73
Detection of scrapie agent in the peripheral nervous system of a diseased sheep. Groschup MH, et al. **Neurobiol Dis** 1996;3(3):191–5
Scrapie in mice deficient in apolipoprotein E or glial fibrillary acidic protein. Tatzelt J, et al. **Neurology** 1996 Aug; 47(2):449–53
Aberrant induction of neuropeptide Y mRNA in hippocampal CA3 pyramidal neurones in scrapie-infected mice. Diez M, et al. **Neuroreport** 1996 Aug 12;7(12):1887–92
Metabolic changes associated with vacuolation in murine models of scrapie using in vitro 1H-NMR spectroscopy. Chung YL, et al. **NMR Biomed** 1996 Dec;9(8):359–63
Solution structure of a 142-residue recombinant prion protein corresponding to the infectious fragment of the scrapie isoform. James TL, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10086–91
Evidence for protein X binding to a discontinuous epitope on the cellular prion protein during scrapie prion propagation. Kaneko K, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10069–74

MORTALITY

PrP genotype contributes to determining survival times of sheep with natural scrapie. Bossers A, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2669–73

PATHOLOGY

The M22 antibody identifies highly activated reactive astrocytes responding to central nervous system disease. Eddleston M, et al. **Acta Neuropathol (Berl)** 1996; 91(3):298–308
Immunocytochemical evaluation of blood-brain barrier to endogenous albumin in scrapie-infected mice. Vorbrodt AW, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):341–8
Models of amyloid seeding in Alzheimer's disease and scrapie: mechanistic truths and physiological consequences of the time-dependent solubility of amyloid proteins. Harper JD, et al. **Annu Rev Biochem** 1997;66:385–407 (97 ref.)
Interactions between astrocytes and oligodendroglia in human and experimental Creutzfeldt-Jakob disease and scrapie. Liberski PP, et al. **Exp Neurol** 1997 Mar; 144(1):227–34
PrP deposition, microglial activation, and neuronal apoptosis in murine scrapie. Williams A, et al. **Exp Neurol** 1997 Apr; 144(2):433–8
Comparison of biochemical extraction techniques for the detection of scrapie-associated fibrils in the central nervous system of sheep naturally affected with scrapie. Stack MJ, et al. **J Comp Pathol** 1996 Aug;115(2):175–84
Comparison of detergent and protease enzyme combinations for the detection of scrapie-associated fibrils from the central nervous system of sheep naturally affected with scrapie. Stack MJ, et al. **J Comp Pathol** 1997 Feb; 116(2):181–9
Histopathological changes in the pituitary glands of female hamsters infected with the 139H strain of scrapie. Ye X, et al. **J Comp Pathol** 1996 Apr;114(3):291–304
Margination and diapedesis of inflammatory cells in the islets of Langerhans in hamsters infected with the 139H strain of scrapie. Ye X, et al. **J Comp Pathol** 1996 Feb; 114(2):149–63
In vivo toxicity of prion protein in murine scrapie: ultrastructural and immunogold studies. Jeffrey M, et al. **Neuropathol Appl Neurobiol** 1997 Apr;23(2):93–101
Evidence for an early inflammatory response in the central nervous system of mice with scrapie. Betmouni S, et al. **Neuroscience** 1996 Sep;74(1):1–5
The 139H scrapie agent produces hypothalamic neurotoxicity and pancreatic islet histopathology: electron microscopic studies. OFF Ye X, et al. **Neurotoxicology** 1997; 18(2):533–45
Immunolocalisation of the prion protein (PrP) in the brains of sheep with scrapie. Foster JD, et al. **Vet Rec** 1996 Nov 23;139(21):512–5
Neuropathology of scrapie: a study of the distribution patterns of brain lesions in 222 cases of natural scrapie in sheep, 1982–1991. Wood JL, et al. **Vet Rec** 1997 Feb 15; 140(7):167–74
[Prion disease in animals and experimental prion disease] Ikeda S. **No To Shinkei** 1997 Aug;49(8):689–95 (21 ref.) **(Jpn)**

PHYSIOPATHOLOGY

Immunocytochemical appearance of cytokines, prostaglandin E2 and lipocortin-1 in the CNS during the incubation period of murine scrapie correlates with progressive PrP accumulations. Williams A, et al. **Brain Res** 1997 Apr 18; 754(1–2):171–80
The role of PrP in pathogenesis of experimental scrapie. Weissmann C, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:511–22 (76 ref.)
Scrapie infection alters the membrane and synaptic properties of mouse hippocampal CA1 pyramidal neurones. Johnston AR, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):1–15
Scrapie infection of transgenic mice leads to network and intrinsic dysfunction of cortical and hippocampal neurones. Jefferys JGR, et al. **Neurobiol Dis** 1994 Nov;1(1–2):25–30
COOH-terminal sequence of the cellular prion protein directs subcellular trafficking and controls conversion into the scrapie isoform. Kaneko K, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2333–8

PSYCHOLOGY

Spatial reversal learning in preclinical scrapie-inoculated mice. Lysons AM, et al. **Neuroreport** 1996 Apr 10; 7(5):1087–91

TRANSMISSION

Molecular assessment of the potential transmissibilities of BSE and scrapie to humans [see comments] Raymond GJ, et al. **Nature** 1997 Jul 17;388(6639):285–8. Comment in: Nature 1997 Jul 17;388(6639):228–9.
Normal host prion protein (PrPC) is required for scrapie spread within the central nervous system. Brandner S, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13148–51
Observations on the transmission of scrapie in experiments using embryo transfer. Foster JD, et al. **Vet Rec** 1996 Jun 8;138(23):559–62

VIROLOGY

Scrapie strains retain their distinctive characteristics following passages of homogenates from different brain regions and spleen. Carp RI, et al. **J Gen Virol** 1997 Jan; 78 (Pt 1):283–90

SCRAPIE AGENT see **PRPSC PROTEINS**

SCRAPIE AMYLOID PRECURSOR PROTEIN see **PRPC PROTEINS**

SCRAPIE PRP see **PRPSC PROTEINS**

SCREEN-FILM SYSTEMS, X-RAY see **X-RAY INTENSIFYING SCREENS**

SCREW WORM INFECTION

DIAGNOSIS

Souvenirs from Belize: the botfly and the screwworm fly. Sweis IE, et al. **Plast Reconstr Surg** 1997 Mar;99(3):868–70

VETERINARY

Outbreak of Chrysomyia bezziana in Khoozestan province, Iran. Navidpour S, et al. **Vet Rec** 1996 Aug 31;139(9):217
[Presence in Cuba of screw worms (Cochliomyia hominivorax) in the livestock] Rodriguez Diego JG, et al. **Rev Elev Med Vet Pays Trop** 1996;49(3):223–5 (Eng. Abstr.) **(Fre)**

SCROFULA see **TUBERCULOSIS, LYMPH NODE**

SCROTUM

Scrotal angiokeratoma in a young man [letter] Hisa T, et al. **Acta Derm Venereol** 1996 May;76(3):248–9
Bladder cancer within an inguinoscrotal bladder hernia [letter] Darío Casas J, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1194–5
Acute ureteral colic manifested by scrotal pain [letter] Worden AC. **Am Fam Physician** 1996 Nov 1;54(6):1896
Sclerosing lipogranuloma of the scrotum following a laparoscopic herniorraphy and varicocelectomy—a case report. Baladas HG, et al. **Ann Acad Med Singapore** 1997 Mar;26(2):238–40 (4 ref.)
Intrascrotal chondroid syringoma. Miyakawa A, et al. **Br J Urol** 1997 Feb;79(2):293–5
Case report: seminoma metastatic to the scrotum. Carey BM, et al. **Clin Radiol** 1997 Mar;52(3):240–1

Basal cell carcinoma of the scrotum. Schleicher SM, et al. **Cutis** 1997 Mar;59(3):116

Two cases of intrascrotal liposarcoma. Katsuno S, et al. **Hinyokika Kiyo** 1996 Oct;42(10):751–4

Intrascrotal epidermoid cyst: report of two cases. Ohyama C, et al. **Int J Urol** 1996 May;3(3):245–7

Fournier's disease: adjunctive hyperbaric oxygen therapy (HBO) to classic therapy. Baykal K, et al. **Int Urol Nephrol** 1996;28(4):539–41

Scrotal bruising as a sign of retroperitoneal haematoma following extracorporeal shock wave lithotripsy. Biri H, et al. **Int Urol Nephrol** 1997;29(3):287–90

Prospective comparison of colour Doppler ultrasonography and testicular scintigraphy in acute scrotum. Karadeniz T, et al. **Int Urol Nephrol** 1996;28(4):543–8

Blastomycosis-like pyoderma in a man with AIDS. Crowley JJ, et al. **J Am Acad Dermatol** 1997 Apr;36(4):633–4

Theriogenology question of the month. Scrotal hematocele. Blanchard TL, et al. **J Am Vet Med Assoc** 1996 Dec 15; 209(12):2013–4

Chondroid syringoma of the scrotum. Poku JW, et al. **J Int Med Res** 1996 Nov–Dec;24(6):482–6

Case report: scrotal cellulitis secondary to hot tub exposure. Forrest JB, et al. **J Okla State Med Assoc** 1996 Nov; 89(11):400–1

Intrascrotal epidermoid cyst with extension to the rectum wall: a case report. Picanço-Neto JM, et al. **J Pediatr Surg** 1997 May;32(5):766–7

Acute scrotum: an unusual presentation of Henoch–Schönlein purpura in children. Zia-ul-Miraj M, et al. **J R Coll Surg Edinb** 1996 Dec;41(6):420–1

Re: Psoriasis: association with 2 rare cutaneous urological malignancies [letter] Cold CJ, et al. **J Urol** 1997 Oct; 158(4):1527–8

Tumor markers in hydrocele fluids of patients with benign and malignant scrotal diseases. Dorfinger K, et al. **J Urol** 1997 Sep;158(3 Pt 1):851–5

Leech therapy for massive scrotal hematoma following percutaneous transluminal angioplasty. Goessl C, et al. **J Urol** 1997 Aug;158(2):545

Scrotal cystic lymphangioma: the misdiagnosed scrotal mass. Hurwitz RS, et al. **J Urol** 1997 Sep;158(3 Pt 2):1182–5 (8 ref.)

Psoriasis: association with 2 rare cutaneous urological malignancies. Loughlin KR. **J Urol** 1997 Feb;157(2):622–3

Acquired penoscrotal smooth muscle hamartoma. Semerci B, et al. **J Urol** 1997 Sep;158(3 Pt 1):885–6

Elephantiasis of the legs with lichen sclerosus et atrophicus of the penis and scrotum. Wille S, et al. **J Urol** 1997 Jun; 157(6):2262

Surgical treatment of penile-scrotal lymphedema. Guedes Neto HJ. **Lymphology** 1996 Sep;29(3):132–3

Midline teratomas, mullerianosis, the multifariousness of gynaecological neoplasias, and the scrotum. Are they manifestations of a germ-soma barrier? Pansera F. **Med Hypotheses** 1997 Apr;48(4):361–4

Symplastic leiomyoma of the scrotum. A case report. De Rosa G, et al. **Pathologica** 1996 Feb;88(1):55–7

The acute scrotum. Siegel MJ. **Radiol Clin North Am** 1997 Jul;35(4):959–76 (41 ref.)

Strangulation of the scrotum. Zermann DH, et al. **Scand J Urol Nephrol** 1997 Aug;31(4):401–2

The role of the endoscopic extraperitoneal approach in large inguinal scrotal hernias. Ferzli GS, et al. **Surg Endosc** 1997 Mar;11(3):299–302

Malignant lymphoma of the scrotum and Wegener's granulomatosis of the penis--genital presentation of systemic disease. Allen DC, et al. **Ulster Med J** 1996 Nov; 65(2):169–72

Fetal inguinoscrotal hernia: prenatal ultrasound diagnosis and pathogenetic evaluation. Paladini D, et al. **Ultrasound Obstet Gynecol** 1996 Feb;7(2):145–6

Erysipelas and elephantiasis of the scrotum--surgery and drug therapy. Geyer H, et al. **Urol Int** 1997;58(4):243–6

Aggressive angiomyxoma of the scrotum. Sakata K, et al. **Urol Int** 1997;58(4):247–9 (12 ref.)

Massive scrotal epidermal inclusion cysts. Bennett RT, et al. **Urology** 1996 Nov;48(5):781–2

Intrascrotal hemangioendothelioma in infancy. Kolligian ME, et al. **Urology** 1997 Sep;50(3):456–8

Torsion of an indirect hernia sac: an unusual cause of acute scrotal swelling in children. Motta J, et al. **Urology** 1997 Sep;50(3):432–5

[Acute scrotal syndrome in children] Havránek P, et al. **Rozhl Chir** 1996 Oct;75(10):470–3 (Eng. Abstr.) **(Cze)**

[Acute obstructive renal failure and scrotal complete hernia of the bladder. Apropos of a case, review of the literature] Mianné D, et al. **J Chir (Paris)** 1996;133(9–10):459–61 (14 ref.) (Eng. Abstr.) **(Fre)**

[Degenerated Buschke Loewenstein tumor of the scrotum] Kabiri H, et al. **Prog Urol** 1996 Jun;6(3):439–42 (Eng. Abstr.) **(Fre)**

[Filaria: a tropical disease as the etiology of acute scrotum] Müssner W, et al. **Urologe A** 1997 Jan;36(1):84–6 (Eng. Abstr.) **(Ger)**

[Acute scrotum in pediatric age: analysis of 265 consecutive cases] Campobasso P, et al. **Pediatr Med Chir** 1996 Sep–Oct;18(5 Suppl):15–20 (Eng. Abstr.) **(Ita)**

[Hemo-lymphangioma of the scrotum: a case report] Koizumi S, et al. **Hinyokika Kiyo** 1997 Apr;43(4):307–9 (Eng. Abstr.) **(Jpn)**

[Clinical studies on acute scrotum--focusing on torsion of the spermatic cord] Nishimura K, et al. **Hinyokika Kiyo** 1996 Oct;42(10):723–7 (Eng. Abstr.) **(Jpn)**

[Treatment of large recurrent strangulated inguino-scrotal hernias] Antonov AM, et al. **Khirurgiia (Mosk)** 1996;(2):67 (Eng. Abstr.) **(Rus)**

[Incarcerated scrotal hernia containing a sigmoid colon carcinoma] Toncr I, et al. **Rozhl Chir** 1997 Jun;76(6):287–8 (Eng. Abstr.) **(Slo)**

[Inguinoscrotal bladder hernia. Report of a case] Mazketli WR, et al. **Actas Urol Esp** 1996 Oct;20(9):845–8 (Eng. Abstr.) **(Spa)**

[Acute scrotum: unusual presentation of Schönlein–Henoch purpura] Suarez González JA, et al. **Actas Urol Esp** 1997 Jan;21(1):78–81 (22 ref.) (Eng. Abstr.) **(Spa)**

[Scrotal granuloma caused by oil migrating from the hip in 2 transsexual males (scrotal sclerosing lipogranuloma)] Fariña LA, et al. **Arch Esp Urol** 1997 Jan–Feb;50(1):51–3 (Eng. Abstr.) **(Spa)**

[Preparation of the scrotal skin for urethroplasty: depilation technique] Gil-Vernet Sedó A, et al. **Arch Esp Urol** 1997 May;50(4):323–31 (Eng. Abstr.) **(Spa)**

[Adenocarcinoma of the sigmoid in incarcerated inguinoscrotal hernia (letter)] Alonso Poza A, et al. **Rev Esp Enferm Dig** 1996 Dec;88(12):883–4 **(Spa)**

ABNORMALITIES

Deletion (13)(q22) with multiple congenital anomalies, hydranencephaly and penoscrotal transposition. Gershoni-Baruch R, et al. **Clin Dysmorphol** 1996 Oct; 5(4):289–94

Congenital emphysema, cryptorchidism, penoscrotal web, deafness, and mental retardation--a new syndrome? Lynch SA, et al. **Clin Dysmorphol** 1997 Jan;6(1):35–7

Scrotoschisis associated with contralateral meconium periorchitis. Chun K, et al. **J Pediatr Surg** 1997 Jun; 32(6):864–6

Accessory scrotum and anorectal malformation associated with "pseudo" prune belly in a neonate. Shoshany G, et al. **J Perinatol** 1996 May–Jun;16(3 Pt 1):224–6 (25 ref.)

Complete bladder duplication with exstrophy of 1 moiety in a male infant. Fouda-Neel K, et al. **J Urol** 1996 Oct; 156(4):1468

Agenesis of the scrotum: an extremely rare anomaly. Verga G, et al. **J Urol** 1996 Oct;156(4):1467 (1 ref.)

Accessory scrotum with imperforate anus. Rattan KN, et al. **Pediatr Surg Int** 1997 Feb;12(2–3):217

ANATOMY & HISTOLOGY

Age-related changes in scrotal circumference of Hungarian Simmental bulls in self-performance test. Tözsér J, et al. **Acta Vet Hung** 1996;44(3):263–7

Effect of castration method and the provision of local anesthesia on plasma cortisol, scrotal circumference, growth, and feed intake of bull calves. Fisher AD, et al. **J Anim Sci** 1996 Oct;74(10):2336–43

Effects of selection for scrotal circumference in Limousin bulls on reproductive and growth traits of progeny. Moser DW, et al. **J Anim Sci** 1996 Sep;74(9):2052–7

Genetic variation and covariation for ewe reproduction, lamb growth, and lamb scrotal circumference in a fall-lambing sheep flock. al-Shorepy SA, et al. **J Anim Sci** 1996 Jul; 74(7):1490–8

Effect of immunization of rams against bovine inhibin alpha 1-26 on semen characteristics, scrotal size, FSH, LH and testosterone concentrations. McKeown RM, et al. **J Reprod Fertil** 1997 Mar;109(2):237–45

BLOOD SUPPLY

[Antegrade scrotal phlebography of the v. spermatica in left-sided testicular varicocele--are retrograde phlebographic classifications suitable for typing?] Bruns T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):44–50 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Disseminated lipogranulomas and sudden death from self-administered mineral oil injection. Rollins CE, et al. **Am J Forensic Med Pathol** 1997 Mar;18(1):100–3

Exogenous calcitonin gene-related peptide can induce the testis to cross the scrotal septum. Clarnette TD, et al. **Br J Urol** 1997 Apr;79(4):623–7

Fixed drug eruption of the scrotum due to hydroxyzine hydrochloride (Atarax). Cohen HA, et al. **Cutis** 1996 Jun; 57(6):431–2

EMBRYOLOGY

The genitofemoral nerve may link testicular inguinoscrotal descent with congenital inguinal hernia. Clarnette TD, et al. **Aust N Z J Surg** 1996 Sep;66(9):612–7 (66 ref.)

INJURIES

Acute myocardial infarction with origin of the left circumflex coronary artery from the right (anterior) aortic sinus with retroaortic course to the left atrioventricular sulcus. Schoebel FC, et al. **Am J Cardiol** 1996 Sep 15;78(6):720–1

External strangulation of the small bowel following injury to inguinoscrotal hernia. Chaloner EJ, et al. **Injury** 1997 Jan;28(1):69–70 (4 ref.)

Swollen, painful scrotum after basketball injury. Swischuk LE. **Pediatr Emerg Care** 1997 Jun;13(3):227–8

INNERVATION

Electrophysiological evidence for the nomenclature of the pudendal nerve and sacral plexus in the male rat. Pacheco P, et al. **Brain Res** 1997 Jul 25;763(2):202–8

PARASITOLOGY

Scrotal myiasis. Yildiz M, et al. **Br J Urol** 1997 Sep; 80(3):493–4

Assessment of the efficacy of diethylcarbamazine on adult Wuchereria bancrofti in vivo. Norões J, et al. **Trans R Soc Trop Med Hyg** 1997 Jan–Feb;91(1):78–81

Occurrence of living adult Wuchereria bancrofti in the scrotal area of men with microfilaraemia. Norões J, et al. **Trans R Soc Trop Med Hyg** 1996 Jan–Feb;90(1):55–6

PATHOLOGY

Leiomyoma of the scrotum. Ohtake N, et al. **Dermatology** 1997;194(3):299–301

Squamous cell carcinoma of the scrotum. Taniguchi S, et al. **Dermatology** 1996;193(3):253–4

MR of laryngeal and scrotal involvement in multiple symmetrical lipomatosis. Soler R, et al. **Eur Radiol** 1997; 7(6):946–8

Epidermoid cyst of the scrotum: a case report. Kawai N, et al. **Hinyokika Kiyo** 1996 Aug;42(8):609–11

Theriogenology question of the month. Unilateral scrotal hydrocele. Pinto C, et al. **J Am Vet Med Assoc** 1996 Sep 15;209(6):1073–4

Clinical image. MRI of scrotal hemangioma. Aizenstein RI, et al. **J Comput Assist Tomogr** 1996 Nov–Dec;20(6):888–9 (8 ref.)

Smooth-muscle hamartoma of the tunica dartos of the scrotum: report of a case. Quinn TR, et al. **J Cutan Pathol** 1997 May;24(5):322–6

Giant scrotal lipomatosis. Lander EB, et al. **J Urol** 1996 Nov; 156(5):1773

MR imaging of scrotal, testicular, and penile diseases. Sica GT, et al. **Magn Reson Imaging Clin N Am** 1996 Aug; 4(3):545–63 (27 ref.)

Accessory scrotum or perineal collision-hamartoma. A case report to illustrate a misnomer. Amann G, et al. **Pathol Res Pract** 1996 Oct;192(10):1039–43; discussion 1044

Extratesticular epidermoid cyst with extension into the pelvis. Göktas S, et al. **Scand J Urol Nephrol** 1997 Feb; 31(1):109–10

[Scrotal panniculitis due to cold: a pseudo-tumoral lesion in the prepubertal child. Report of a case] Versini P, et al. **Ann Pathol** 1996 Sep;16(4):282–4 (16 ref.) (Eng. Abstr.) **(Fre)**

[Painful scrotum] Salomon L. **Ann Urol (Paris)** 1996; 30(6–7):281–2 (Eng. Abstr.) **(Fre)**

[The contribution of imagery in the early diagnosis of Fournier's gangrene] Michel F, et al. **Prog Urol** 1997 Jun; 7(3):471–5 (Eng. Abstr.) **(Fre)**

[Giant testicular tumor associated with scrotal gangrene: a case report] Hyouchi N, et al. **Hinyokika Kiyo** 1997 Mar; 43(3):237–40 (Eng. Abstr.) **(Jpn)**

[A case of malignant mesothelioma associated intrascrotal mass] Wakasugi E, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Mar;88(3):443–6 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Stomach in inguinal-scrotal hernia] Díaz Oller J, et al. **Rev Esp Enferm Dig** 1997 Apr;89(4):325–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Contribution of the scrotum, testes, and testicular artery to scrotal/testicular thermoregulation in bulls at two ambient temperatures. Kastelic JP, et al. **Anim Reprod Sci** 1997 Jan; 45(4):255–61

The effect of metabotropic excitatory amino-acid receptor agonists and antagonists on hypothalamic neurons which respond to changes in scrotal skin temperature in the anesthetized male rat. Taylor DC, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:184–6

A functional medial preoptic nucleus (MPO) is required for scrotal thermal stimuli to alter the neuronal activity of thermoresponsive ventromedial hypothalamic (VMH) neurons. Li Q, et al. **Brain Res** 1996 Apr 15;716(1–2):134–40

The thermoresponsiveness of ventromedial hypothalamic (VMH) neurons following repeated scrotal thermal stimulation of rats maintained at normothermic or acutely hypothermic core temperatures. Li Q, et al. **Brain Res** 1997 Feb 21;749(1):29–34

Effect of increased scrotal temperature on sperm production in normal men. Wang C, et al. **Fertil Steril** 1997 Aug; 68(2):334–9

Effects of dietary energy on scrotal surface temperature, seminal quality, and sperm production in young beef bulls. Coulter GH, et al. **J Anim Sci** 1997 Apr;75(4):1048–52

Relationship between scrotal infrared temperature patterns and natural-mating fertility in beef bulls. Lunstra DD, et al. **J Anim Sci** 1997 Mar;75(3):767–74

Regulation of ram scrotal temperature during heat exposure, cold exposure, fever and exercise. Maloney SK, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):421–30

Contribution of the scrotum and testes to scrotal and

testicular thermoregulation in bulls and rams. Kastelic JP, et al. **J Reprod Fertil** 1996 Sep;108(1):81–5
Scrotal/testicular thermoregulation and the effects of increased testicular temperature in the bull. Kastelic JP, et al. **Vet Clin North Am Food Anim Pract** 1997 Jul; 13(2):271–82 (36 ref.)

PHYSIOPATHOLOGY

Scrotal pain and swelling. Riviello RJ, et al. **Acad Emerg Med** 1997 Mar;4(3):223–4, 233–5

RADIOGRAPHY

Irradiation of the scrotum: what some men need MOST: the Manual Orchid Shielding Technique. Harris SJ, et al. **Clin Oncol (R Coll Radiol)** 1996;8(4):254–6
Computed tomography findings in scrotal cystocele. Catalano O. **Eur J Radiol** 1995 Dec 15;21(2):126–7
[Antegrade scrotal phlebography of the v. spermatica in left-sided testicular varicocele—are retrograde phlebographic classifications suitable for typing?] Bruns T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):44–50 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Scrotal cellulitis simulating testicular infarction by Tc-99m pertechnetate imaging. Appelbaum A. **Clin Nucl Med** 1997 Jul;22(7):499–500
Tc-99m MAG3 renal transplant imaging of scrotal urinoma. Banzo I, et al. **Clin Nucl Med** 1997 Jun;22(6):401–2
Hot scrotum caused by teratoma of the testis. Choong KK. **Clin Nucl Med** 1996 Dec;21(12):972–3
Large urethral diverticulum presenting as a scrotal tracer collection on renal scintigraphy. Garris EM, et al. **Clin Nucl Med** 1996 Aug;21(8):661–2
Scrotal pathology as the cause for hip pain. Diagnostic findings on bone scintigraphy. Sheafor DH, et al. **Clin Nucl Med** 1997 May;22(5):287–91 (25 ref.)
Incidental finding of a urinoma on bone scintigraphy. Tsai SC, et al. **Clin Nucl Med** 1997 Aug;22(8):558–9

SURGERY

Total scrotal reconstruction after Fournier's gangrene—a case report using rectus abdominis myocutaneous flap. Tan BK, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):890–2
Sensate pedicled neoclitoroplasty for male transsexuals: Amsterdam experience in the first 60 patients. Hage JJ, et al. **Ann Plast Surg** 1996 Jun;36(6):621–4
A new repair technique for penile paraffinoma: bilateral scrotal flaps. Jeong JH, et al. **Ann Plast Surg** 1996 Oct; 37(4):386–93
Clinicopathological study of perineal Paget's disease. Lingam MK, et al. **Br J Surg** 1997 Feb;84(2):231–2
Is the conservative management of the acute scrotum justified on clinical grounds? Watkin NA, et al. **Br J Urol** 1996 Oct;78(4):623–7
Simple continuous closure of canine scrotal urethrostomy: results in 20 cases. Newton JD, et al. **J Am Anim Hosp Assoc** 1996 Nov–Dec;32(6):531–4
A surgical approach to penoscrotal lymphedema. Steinberg J, et al. **J Urol** 1996 Nov;156(5):1770
Transverse testicular ectopia: report of three cases. Al-Samarrai AYI, et al. **Pediatr Surg Int** 1997 Feb; 12(2–3):218–9
Replantation of the complete external genitals. Becker M, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1165–8
The Charles procedure: misquoted and misunderstood since 1950. Dumanian GA, et al. **Plast Reconstr Surg** 1996 Dec; 98(7):1258–63
Use of a paper pattern for scrotal skin replacement [letter] Ueda K, et al. **Plast Reconstr Surg** 1997 Mar;99(3):916–7
Microsurgical replantation of the amputated penis and scrotum in a 29-year-old man. Darewicz J, et al. **Urol Int** 1996;57(3):197–8
Skin graft reconstruction of chronic genital lymphedema. Morey AF, et al. **Urology** 1997 Sep;50(3):423–6
The scrotal hitch for hemostasis and edema prevention and scrotal surgery [letter; comment] Talarico RD. **Urology** 1997 Feb;49(2):307. Comment on: Urology 1996 Jun;47(6):918–9.
Laparoscopic repair of scrotal hernia in two foals. Klohnen A, et al. **Vet Surg** 1996 Sep–Oct;25(5):414–16
[A case of Sparganosis mansoni with a painless mass in the inguinal region and the scrotum] Ishida Y, et al. **Hinyokika Kiyo** 1996 Dec;42(12):983–5 (Eng. Abstr.) **(Jpn)**
[A case of aphallia] Nakaigawa N, et al. **Hinyokika Kiyo** 1996 Sep;42(9):695–7 (10 ref.) (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

A new biaxial epilated scrotal flap for reconstructive urethral surgery. Gil-Vernet J, et al. **J Urol** 1997 Aug;158(2):412–20

ULTRASONOGRAPHY

Scrotal ultrasound. Dewbury K. **Br J Hosp Med** 1997 Jan 15–Feb 5;57(1–2):10–4 (16 ref.)
B-mode and colour-flow duplex ultrasonography: a useful adjunct in diagnosing scrotal diseases? Hendrikx AJ, et al. **Br J Urol** 1997 Jan;79(1):58–65
US evaluation of inguinoscrotal bladder hernias: report of three cases. Catalano O. **Clin Imaging** 1997 Mar–Apr; 21(2):126–8
Differential diagnosis of scrotal masses by ultrasound. Hamm B. **Eur Radiol** 1997;7(5):668–79 (51 ref.)
Clinical relevance of scrotal and transrectal ultrasonography in andrological patients. Behre HM, et al. **Int J Androl** 1995 Dec;18 Suppl 2:27–31 (19 ref.)
Acute penoscrotal edema due to acute necrotizing pancreatitis. Choong KK. **J Ultrasound Med** 1996 Mar; 15(3):247–8
Scrotal cystocele detected by sonography. Weingardt JP, et al. **J Ultrasound Med** 1996 Jul;15(7):539–42
The impact of sonography on the diagnosis of scrotal disorders. Older RA, et al. **J Urol** 1997 Aug;158(2):479–80
Swollen, painful scrotum after basketball injury. Swischuk LE. **Pediatr Emerg Care** 1997 Jun;13(3):227–8
Scrotal hematoma due to neonatal adrenal hemorrhage: the value of ultrasonography in avoiding unnecessary surgery. Miele V, et al. **Pediatr Radiol** 1997 Aug;27(8):672–4
Scrotal ultrasound. Bree RL, et al. **Radiol Clin North Am** 1996 Nov;34(6):1183–205 (38 ref.)
Scrotal imaging. Horstman WG. **Urol Clin North Am** 1997 Aug;24(3):653–71 (106 ref.)
[Complicated spermatocele as a cause of scrotal mass with solid appearance. Ultrasonographic findings] Cozcolluela Cabrejas MR, et al. **Actas Urol Esp** 1996 Sep;20(8):750–2 (Eng. Abstr.) **(Spa)**
[The use of color doppler sonography of the acute scrotum in children] Fernández MS, et al. **Cir Pediatr** 1997 Jan; 10(1):25–8 (Eng. Abstr.) **(Spa)**

SCRUB TYPHUS

[Population density of chigger mites, the vector of tsutsugamushi disease in Chollanam-do, Korea] Song HJ, et al. **Korean J Parasitol** 1996 Mar;34(1):27–33 (Eng. Abstr.) **(Kor)**

COMPLICATIONS

Scrub typhus complicating acute respiratory distress syndrome: a report of two cases. Lee WS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Sep; 56(3):205–10
Life-threatening scrub typhus with meningoencephalitis and acute respiratory distress syndrome [published erratum appears in J Formos Med Assoc 1997 May;96(5):390] Fang CT, et al. **J Formos Med Assoc** 1997 Mar;96(3):213–6
Conjunctival injection, episcleral vessel dilation, and subconjunctival hemorrhage in patients with new tsutsugamushi disease. Kato T, et al. **Jpn J Ophthalmol** 1997 May–Jun;41(3):196–9
[Case of a new type of Tsutsugamushi disease associated with meningoencephalitis] Takekuma K, et al. **Nippon Naika Gakkai Zasshi** 1997 Apr 10;86(4):681–3 **(Jpn)**

DIAGNOSIS

Evaluation of an enzyme-linked immunosorbent assay in Thai scrub typhus patients. Suwanabun N, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):38–43
Pregnancy with scrub typhus and vertical transmission: a case report. Suntharasaj T, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):75–8
Scrub typhus after a trip to Vietnam [letter] Thiebaut MM, et al. **N Engl J Med** 1997 May 29;336(22):1613–4
ELISA-based colorimetric detection of Rickettsia tsutsugamushi DNA from patient sera by nested polymerase chain reaction. Shieh GJ, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):139–44
Diagnosis of scrub typhus in Malaysian aborigines using nested polymerase chain reaction. Tay ST, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):580–3
[The patients without specific antibodies, were diagnosed by PCR as Tsutsugamushi disease] Furuya Y, et al. **Kansenshogaku Zasshi** 1997 May;71(5):474–6 **(Jpn)**
[Analysis of clinical severity of tsutsugamushi disease according to the serotype of pathogenic rickettsia] Shiga K, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):299–306 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

[A case of Tsutsugamushi disease as an imported infection] Ueda S, et al. **Kansenshogaku Zasshi** 1997 May;71(5):464–7 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Antibodies to Orientia tsutsugamushi in Thai soldiers. Eamsila C, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):556–9
Seroepidemiologic evidence for murine and scrub typhus in Malang, Indonesia. Richards AL, et al. **Am J Trop Med Hyg** 1997 Jul;57(1):91–5

ETIOLOGY

Transmission of scrub typhus by needlestick from a patient receiving pefloxacin. Jee HG, et al. **Scand J Infect Dis** 1996;28(4):411–2

GENETICS

Demonstration of antigenic and genotypic variation in Orientia tsutsugamushi which were isolated in Japan, and their classification into type and subtype. Ohashi N, et al. **Microbiol Immunol** 1996;40(9):627–38

IMMUNOLOGY

Antibodies to Orientia tsutsugamushi in Thai soldiers. Eamsila C, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):556–9
Demonstration of antigenic and genotypic variation in Orientia tsutsugamushi which were isolated in Japan, and their classification into type and subtype. Ohashi N, et al. **Microbiol Immunol** 1996;40(9):627–38

MICROBIOLOGY

Central nervous system involvement in patients with scrub typhus. Pai H, et al. **Clin Infect Dis** 1997 Mar;24(3):436–40
Characterization of Orientia tsutsugamushi isolated in Taiwan by immunofluorescence and restriction fragment length polymorphism analyses. Tamura A, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):225–31
Prevalence of genotypes of Orientia tsutsugamushi in patients with scrub typhus in Miyazaki Prefecture. Horinouchi H, et al. **Microbiol Immunol** 1997;41(6):503–7
Virulence in mice of Orientia tsutsugamushi isolated from patients in a new endemic area in Japan. Nagano I, et al. **Microbiol Immunol** 1996;40(10):743–7
Isolation of a new Orientia tsutsugamushi serotype. Seong SY, et al. **Microbiol Immunol** 1997;41(6):437–43

PATHOLOGY

Liver involvement in Tsutsugamushi disease. Kanno A, et al. **Tohoku J Exp Med** 1996 Jul;179(3):213–7

PHYSIOPATHOLOGY

Infection with human immunodeficiency virus does not influence the clinical severity of scrub typhus. Kantipong P, et al. **Clin Infect Dis** 1996 Nov;23(5):1168–70

TRANSMISSION

The role of Leptotrombidium scutellare in the transmission of human diseases. Wu G, et al. **Chin Med J (Engl)** 1996 Sep;109(9):670–3
Pregnancy with scrub typhus and vertical transmission: a case report. Suntharasaj T, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):75–8
[Role of Leptotrombidium (L.) scutellare in transmission of human diseases] Wu G, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1996 May; 30(3):133–5 (Eng. Abstr.) **(Chi)**

SCULPTURE

Medical statues. McIntyre N. **J R Coll Physicians Lond** 1997 Jul–Aug;31(4):442–9
Little honoured in his own country: statues in recognition of Edward Jenner MD FRS. Empson J. **J R Soc Med** 1996 Sep;89(9):514–8
WAWA–SHSH Homerton Hospital, East London. Shand W. **J R Soc Med** 1997 Jan;90(1):55
The Olmec heart effigy: earliest image of the human heart. Bendersky G. **Perspect Biol Med** 1997 Spring;40(3):348–61
Hazards associated with metalworking by artists. Weiss SJ, et al. **South Med J** 1997 Jul;90(7):665–71
[Monuments to physicians for their heroic deeds in wars] Radysh IaF. **Lik Sprava** 1997 Mar–Apr;(2):147–50 **(Ukr)**

HISTORY

Ismond Rosen: a genius by any other name. Rollin HR. **J R Soc Med** 1997 Feb;90(2):110–2
[Sculptor of The Cripple of the Geneva Museum of Art and History. An ancient Greek portrayal of hemimelia?] Dasen V. **Gesnerus** 1997;54(1–2):5–22 (Eng. Abstr.) **(Fre)**

SCURVY

Simulated bleeding—a forgotten disease in a land of plenty. Lim KH, et al. **Singapore Med J** 1996 Apr;37(2):157–9
[Vitamin C deficiency: scurvy. Report of a case (letter; comment)] Terael López C, et al. **An Med Interna** 1996 Sep;13(9):462–3. Comment on: An Med Interna 1995 Sep;12(9):450–2. **(Spa)**

COMPLICATIONS

Scurvy is not a rare cause of pseudovasculitis: comment on the concise communication by Mehta et al [letter; comment] Wallach PM, et al. **Arthritis Rheum** 1997 Mar; 40(3):589. Comment on: Arthritis Rheum 1996 Mar;39(3):532–3.
Scurvy and the gastrointestinal tract. Schuman RW, et al. **Gastrointest Endosc** 1997 Feb;45(2):195–6 (11 ref.)
Induction by 4-nitroquinoline-1-oxide of oral epithelial dysplasia and neoplasia in scurvy-prone osteogenic disorder Shionogi (ODS) rats. Chan SW, et al. **Nutr Cancer** 1996;26(1):83–90
[Scurvy disclosed by hematuria and large parietal and pelvic hematomas (letter)] Boudon P, et al. **Rev Med Interne** 1997; 18(4):340–1 **(Fre)**

DIAGNOSIS

Scurvy presenting with cutaneous and articular signs and decrease in red and white blood cells. Yalçin A, et al. **Int J Dermatol** 1996 Dec;35(12):879–81

ENZYMOLOGY

Regulation and properties of bone alkaline phosphatase during vitamin C deficiency in guinea pigs. Mahmoodian F, et al. **Arch Biochem Biophys** 1996 Dec 1;336(1):86–96

ETIOLOGY

Scurvy, osteoporosis and megaloblastic anaemia due to alleged food intolerance [letter] Barratt JA, et al. **Br J Rheumatol** 1996 Jul;35(7):701–2

[Scurvy after a residue-free diet in Crohn disease (letter)] Vasseur E, et al. **Presse Med** 1997 Feb 22;26(5):214 **(Fre)**

[Scurvy, a serious and rare form of avitaminosis, easily diagnosed and treated. Presentation of a case (see comments)] Gil Llano JR, et al. **An Med Interna** 1995 Sep; 12(9):450–2 (Eng. Abstr.). Comment in: An Med Interna 1996 Sep;13(9):462–3. **(Spa)**

GENETICS

Ascorbic acid deficiency reduces hepatic apolipoprotein A-I mRNA in scurvy-prone ODS rats. Ikeda S, et al. **J Nutr** 1996 Oct;126(10):2505–11

HISTORY

James Lind (1716–94) of Edinburgh and the treatment of scurvy. Dunn PM. **Arch Dis Child Fetal Neonatal Ed** 1997 Jan;76(1):F64–5

Lind, Scott, Amundsen and scurvy [letter] Amory DW. **J R Soc Med** 1997 May;90(5):299

Sailors, scurvy, science and authority [letter; comment] Bardolph EM, et al. **J R Soc Med** 1997 Apr;90(4):238. Comment on: J R Soc Med 1997 Jan;90(1):50–4.

Scurvy, Lancaster, Lind, Scott and Almroth Wright [letter] Baron JH. **J R Soc Med** 1997 Jul;90(7):415

Sailors, scurvy and science [see comments] Thomas DP. **J R Soc Med** 1997 Jan;90(1):50–4. Comment in: J R Soc Med 1997 Apr;90(4):238.

Questions and reflections "go read Crandon's paper". Fritts HW Jr. **Pharos** 1996 Winter;59(1):37

Three eras of vitamin C discovery. Jacob RA. **Subcell Biochem** 1996;25:1–16 (81 ref.)

SCYPHOZOA see **JELLYFISH**

SEA ANEMONE VENOMS see **CNIDARIAN VENOMS**

SEA ANEMONES

CHEMISTRY

Novel polypeptide toxins with crab lethality from the sea anemone Anemonia erythraea. Shiomi K, et al. **Biochim Biophys Acta** 1997 Apr 17;1335(1–2):191–8

A potassium-channel toxin from the sea anemone Bunodosoma granulifera, an inhibitor for Kv1 channels. Revision of the amino acid sequence, disulfide-bridge assignment, chemical synthesis, and biological activity. Cotton J, et al. **Eur J Biochem** 1997 Feb 15;244(1):192–202

Preparation and characterization of a biologically active spin-labeled sea anemone toxin. Monks SA, et al. **J Protein Chem** 1996 Jul;15(5):427–34

Resistance and vulnerability of crustaceans to cytolytic sea anemone toxins. Giese C, et al. **Toxicon** 1996 Aug; 34(8):955–8

Halcurin, a polypeptide toxin from the sea anemone Halcurias sp., with a structural resemblance to type 1 and 2 toxins. Ishida M, et al. **Toxicon** 1997 Apr;35(4):537–44

The humoral and cellular immune response to a lipid attenuated pore-forming toxin from the sea anemone Actinia equina L. Narat M, et al. **Toxicon** 1994 Jan; 32(1):65–71

A simple biochemical method in the search for bioactive polypeptides in a sea anemone (Anemonia sulcata). Sanchez J, et al. **Toxicon** 1996 Nov-Dec;34(11–12):1361–6

ENZYMOLOGY

Effect of high ionic strength and inhibitors of H,K-ATPase on the ouabain-sensitive K-p-nitrophenylphosphatase activity in the sea anemone Stichodactyla helianthus. Specht SC, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):217–24

Purification, characterization and immobilization of proteinase inhibitors from Stichodactyla helianthus. Delfin J, et al. **Toxicon** 1996 Nov-Dec;34(11–12):1367–76

GENETICS

A new potassium channel toxin from the sea anemone Heteractis magnifica: isolation, cDNA cloning, and functional expression. Gendeh GS, et al. **Biochemistry** 1997 Sep 23;36(38):11461–71

Homeoboxes in sea anemones (Cnidaria:Anthozoa): a PCR-based survey of Nematostella vectensis and Metridium senile. Finnerty JR, et al. **Biol Bull** 1997 Aug; 193(1):62–76

METABOLISM

Determination of the C-terminal form of an anemone toxin using capillary electrophoresis and mass spectrometry. Forest E, et al. **Electrophoresis** 1996 May;17(5):962–4

Toxicity of jellyfish and sea-anemone venoms on cultured V79 cells. Carli A, et al. **Toxicon** 1996 Apr;34(4):496–500

Antagonism of glutamate receptors by a chromatographic fraction from the exudate of the sea anemone Phyllactis flosculifera. Garateix A, et al. **Toxicon** 1996 Apr; 34(4):443–50

A polypeptide toxin in the sea anemone Actinia equina homologous with other sea anemone sodium channel toxins: isolation and amino acid sequence. Lin XY, et al. **Toxicon** 1996 Jan;34(1):57–65

PHYSIOLOGY

Hair bundles of sea anemones as a model system for vertebrate hair bundles. Watson GM, et al. **Hear Res** 1997 May;107(1–2):53–66

Physiological actions of the neuropeptide Antho-RNamide on antagonistic muscle systems in sea anemones. Cho K, et al. **Neurosci Lett** 1996 Nov 29;219(3):171–4

ULTRASTRUCTURE

Hair bundles of sea anemones as a model system for vertebrate hair bundles. Watson GM, et al. **Hear Res** 1997 May;107(1–2):53–66

Ultrastructure of neurons and synapses in the tentacle epidermis of the sea anemone Calliactis parasitica. Westfall JA, et al. **J Morphol** 1997 May;232(2):207–16

SEA-BLUE HISTIOCYTE SYNDROME

Syndrome of the sea-blue histiocyte. Hirayama Y, et al. **Intern Med** 1996 May;35(5):419–21 (10 ref.)

ETIOLOGY

Sea-blue histiocyte syndrome in bone marrow secondary to total parenteral nutrition including fat-emulsion sources: a clinicopathologic study of seven cases [see comments] Bigorgne C, et al. **Br J Haematol** 1996 Nov;95(2):258–62 . Comment in: Br J Haematol 1997 Jun;97(3):689.

Sea-blue histiocytes in bone-marrow due to a long-term total parenteral nutrition including fat-emulsions [letter; comment] Maier-Redelsperger M, et al. **Br J Haematol** 1997 Jun;97(3):689. Comment on: Br J Haematol 1996 Nov;95(2):258–62.

SEA CUCUMBERS

SJAMP-induced platelet aggregation defect. Shen D. **Chin Med J (Engl)** 1996 Jan;109(1):46–8 (10 ref.)

CHEMISTRY

Hemolytic activity of triterpene glycosides from the Dendrochirotida order holothurian. Kalinin VI, et al. **Adv Exp Med Biol** 1996;404:557–64

Structure of fucose branches in the glycosaminoglycan from the body wall of the sea cucumber Stichopus japonicus. Kariya Y, et al. **Carbohydr Res** 1997 Jan 17;297(3):273–9

Small-angle X-ray scattering study on CEL-III, a hemolytic lectin from Holothuroidea Cucumaria echinata, and its oligomer induced by the binding of specific carbohydrate. Fujisawa T, et al. **FEBS Lett** 1997 Sep 1;414(1):79–83

Carbohydrate-binding properties of the hemolytic lectin CEL-III from the holothuroidea Cucumaria echinata as analyzed using carbohydrate-coated microplate. Hatakeyama T, et al. **J Biochem (Tokyo)** 1997 Jan; 121(1):63–7

Structure and anticoagulant activity of a fucosylated chondroitin sulfate from echinoderm. Sulfated fucose branches on the polysaccharide account for its high anticoagulant action. Mourão PA, et al. **J Biol Chem** 1996 Sep 27;271(39):23973–84

Koreoside A, a new nonholostane triterpene glycoside from the sea cucumber Cucumaria koraiensis. Avilov SA, et al. **J Nat Prod** 1997 Aug;60(8):808–10

Structure of eximisoside A, a novel triterpene glycoside from the Far-Eastern sea cucumber psolus eximius. Kalinin VI, et al. **J Nat Prod** 1997 Aug;60(8):817–9

Novel marine di-Z-carotenoids: cucumariaxanthins A, B, and C from the sea cucumber Cucumaria japonica. Tsushima M, et al. **J Nat Prod** 1996 Jan;59(1):30–4

Antithrombin III-independent effect of depolymerized holothurian glycosaminoglycan (DHG) on acute thromboembolism in mice. Nagase H, et al. **Thromb Haemost** 1997 Feb;77(2):399–402

CLASSIFICATION

Molecular phylogeny of eastern Pacific sea cucumbers (Echinodermata: Holothuroidea) based on mitochondrial DNA sequence. Arndt A, et al. **Mol Phylogenet Evol** 1996 Dec;6(3):425–37

GENETICS

Structure of histone H2B and H4 genes of the sea cucumber Holothuria tubulosa. Drabent B, et al. **DNA Seq** 1995; 6(1):41–5

METABOLISM

Neothyoside B, a triterpenoid diglycoside from the Pacific sea cucumber Neothyone gibbosa. Encarnación R, et al. **Acta Chem Scand** 1996 Sep;50(9):848–9

Galanin-like immunoreactivity in the sea cucumber Holothuria glaberrima. Díaz-Miranda L, et al. **Cell Tissue Res** 1996 Dec;286(3):385–91

Hemolytic activities of triterpene glycosides from the holothurian order Dendrochirotida: some trends in the evolution of this group of toxins. Kalinin VI, et al. **Toxicon** 1996 Apr;34(4):475–83

SEA LION SPUMAVIRUS see **SPUMAVIRUS**

SEA LIONS see **SEALS**

SEA SNAKE VENOMS see **HYDROPHID VENOMS**

SEA SNAKES see **HYDROPHIDAE**

SEA URCHINS

Marine animal exposures in Florida. Hillman JV. **J Fla Med Assoc** 1996 Mar;83(3):187–91

CHEMISTRY

Isolation of a novel lectin from the globiferous pedicellariae of the sea urchin Toxopneustes pileolus. Nakagawa H, et al. **Adv Exp Med Biol** 1996;391:213–23

Isolation, biochemical and immunological characterisation of two sea urchin glycoproteins bearing sulphated poly(sialic acid) polysaccharides rich in N-glycolyl neuraminic acid. Karamanos NK, et al. **Biochimie** 1996;78(3):171–82

Comparative biochemical analysis of sea urchin peristome and rat tail tendon collagen. Robinson JJ. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):307–13

Characterization of the vitelline envelope of the sea urchin Strongylocentrotus purpuratus. Correa LM, et al. **Dev Growth Differ** 1997 Feb;39(1):69–85

Purification and characterization of a mitochondrial, single-stranded-DNA-binding protein from Paracentrotus lividus eggs. Roberti M, et al. **Eur J Biochem** 1997 Jul 1;247(1):52–8

Separation and characterization of the metal-thiolate-cluster domains of recombinant sea urchin metallothionein. Wang Y, et al. **Eur J Biochem** 1996 Nov 1;241(3):835–9

Identification of actin-binding proteins from sea urchin eggs by F-actin affinity column chromatography. Terasaki AG, et al. **J Biochem (Tokyo)** 1997 Jul;122(1):226–36

DRUG EFFECTS

Cytogenetic, developmental, and biochemical effects of aluminum, iron, and their mixture in sea urchins and mussels. Pagano G, et al. **Arch Environ Contam Toxicol** 1996 Nov;31(4):466–74

Sulfide tolerance of four marine species used to evaluate sediment and pore-water toxicity. Knezovich JP, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):450–7

[Toxicologic effects of cadmium on gametes and embryonal kinetics of paracentrotus lividus] Arru G, et al. **G Ital Med Lav** 1995 Jan-Nov;17(1–6):61–4 (Eng. Abstr.) **(Ita)**

EMBRYOLOGY

Looking into the sea urchin embryo you can see local cell interactions regulate morphogenesis. Wilt FH. **Bioessays** 1997 Aug;19(8):665–8 (22 ref.)

Fate specification along the sea urchin embryo animal-vegetal axis. Angerer RC, et al. **Biol Bull** 1997 Feb; 192(1):175–7 (17 ref.)

The cellular basis of sea urchin gastrulation. Hardin J. **Curr Top Dev Biol** 1996;33:159–262 (328 ref.)

LiCl perturbs ectodermal veg1 lineage allocations in Strongylocentrotus purpuratus embryos. Cameron RA, et al. **Dev Biol** 1997 Jul 15;187(2):236–9

Alternative splicing of the Endo16 transcript produces differentially expressed mRNAs during sea urchin gastrulation. Godin RE, et al. **Dev Biol** 1996 Oct 10; 179(1):148–59

Short-range cell-cell signals control ectodermal patterning in the oral region of the sea urchin embryo. Hardin J, et al. **Dev Biol** 1997 Feb 1;182(1):134–49

Mechanisms of evolutionary changes in timing, spatial expression, and mRNA processing in the msp130 gene in a direct-developing sea urchin, Heliocidaris erythrogramma. Klueg KM, et al. **Dev Biol** 1997 Feb 1; 182(1):121–33

The initial phase of gastrulation in sea urchins is accompanied by the formation of bottle cells. Nakajima Y, et al. **Dev Biol** 1996 Nov 1;179(2):436–46

Multiple positive cis elements regulate the asymmetric expression of the SpHE gene along the sea urchin embryo animal-vegetal axis. Wei Z, et al. **Dev Biol** 1997 Jul 1; 187(1):71–8

SpHbox7, a new Abd-B class homeobox gene from the sea urchin Strongylocentrotus purpuratus: insights into the evolution of hox gene expression and function. Dobias SL,

et al. **Dev Dyn** 1996 Dec;207(4):450–60

Oral–aboral ectoderm differentiation of sea urchin embryos is disrupted in response to calcium ionophore. Akasaka K, et al. **Dev Growth Differ** 1997 Jun;39(3):373–9

Does the respiratory rate in sea urchin embryos increase during early development without proliferation of mitochondria? Fujiwara A, et al. **Dev Growth Differ** 1997 Apr;39(2):179–89

Histological distribution of FR–1, a cyclic RGDS–peptide, binding sites during early embryogenesis, and isolation and initial characterization of FR–1 receptor in the sand dollar embryo. Katow H, et al. **Dev Growth Differ** 1997 Apr; 39(2):207–19

Spfkh1 encodes a transcription factor implicated in gut formation during sea urchin development. Luke NH, et al. **Dev Growth Differ** 1997 Jun;39(3):285–94

Cleavage furrow establishment by the moving mitotic apparatus. Rappaport R. **Dev Growth Differ** 1997 Apr; 39(2):221–6

Oral/aboral ectoderm differentiation of the sea urchin embryo depends on a planar or secretory signal from the vegetal hemisphere. Yoshikawa S. **Dev Growth Differ** 1997 Jun;39(3):319–27

Lithium blocks cell cycle transitions in the first cell cycles of sea urchin embryos, an effect rescued by myo–inositol. Becchetti A, et al. **Development** 1997 Mar;124(6):1099–107

Early gene expression along the animal–vegetal axis in sea urchin embryoids and grafted embryos. Ghiglione C, et al. **Development** 1996 Oct;122(10):3067–74

Skeletal morphogenesis in the sea urchin embryo: regulation of primary mesenchyme gene expression and skeletal rod growth by ectoderm–derived cues. Guss KA, et al. **Development** 1997 May;124(10):1899–908

The allocation of early blastomeres to the ectoderm and endoderm is variable in the sea urchin embryo. Logan CY, et al. **Development** 1997 Jun;124(11):2213–23

Disruption of gastrulation and oral–aboral ectoderm differentiation in the Lytechinus pictus embryo by a dominant/negative PDGF receptor. Ramachandran RK, et al. **Development** 1997 Jun;124(12):2355–64

Multiple signaling events specify ectoderm and pattern the oral–aboral axis in the sea urchin embryo. Wikramanayake AH, et al. **Development** 1997 Jan;124(1):13–20

On the mechanics of the first cleavage division of the sea urchin egg. He X, et al. **Exp Cell Res** 1997 Jun 15; 233(2):252–73

Nicotinic antagonists (piperidines and quinuclidines) reduce the susceptibility of early sea urchin embryos to agents evoking calcium shock. Buznikov GA, et al. **Gen Pharmacol** 1997 Jul;29(1):49–53

Spatial expression of alpha and beta tubulin genes in the late embryogenesis of the sea urchin Paracentrotus lividus. Casano C, et al. **Int J Dev Biol** 1996 Oct;40(5):1033–41

Sea urchin embryology in the sixties. Czihak G. **Int J Dev Biol** 1996 Feb;40(1):97–101

Characterization of a metalloproteinase: a late stage specific gelatinase activity in the sea urchin embryo. Robinson JJ. **J Cell Biochem** 1997 Sep 1;66(3):337–45

Spatial expression of a forkhead homologue in the sea urchin embryo. Harada Y, et al. **Mech Dev** 1996 Dec;60(2):163–73

Expression of S9 and actin CyIIa mRNAs reveals dorso–ventral polarity and mesodermal sublineages in the vegetal plate of the sea urchin embryo. Miller RN, et al. **Mech Dev** 1996 Nov;60(1):3–12

Distal cis–acting elements restrict expression of the CyIIIb actin gene in the aboral ectoderm of the sea urchin embryo. Xu N, et al. **Mech Dev** 1996 Dec;60(2):151–62

Actin gene expression in developing sea urchin embryos. Crain WR Jr, et al. **Mol Cell Biol** 1981 Aug;1(8):711–20

Monocistronic transcription is the physiological mechanism of sea urchin embryonic histone gene expression. Mauron A, et al. **Mol Cell Biol** 1981 Jul;1(7):661–71

Covalent variation is a general property of transcription factors in the sea urchin embryo. Harrington MG, et al. **Mol Mar Biol Biotechnol** 1997 Sep;6(3):153–62

Metallothionein gene expression in embryos of the sea urchin Lytechinus pictus. Cserjesi P, et al. **Mol Reprod Dev** 1997 May;47(1):39–46

Two distinct forms of USF in the Lytechinus sea urchin embryo do not play a role in LpS1 gene inactivation upon disruption of the extracellular matrix. George JM, et al. **Mol Reprod Dev** 1996 Sep;45(1):1–9

ENZYMOLOGY

Purification and metal ion requirements of a candidate matrix metalloproteinase: a 41 kDa gelatinase activity in the sea urchin embryo. Mayne J, et al. **Biochem Cell Biol** 1996; 74(2):211–8

Behavior of Na+/K(+)–ATPase alpha–subunit alleles in sea urchin eggs upon fertilization. Yamazaki K, et al. **Dev Growth Differ** 1997 Feb;39(1):105–9

GENETICS

PCR amplification and cloning of metallothionein complementary DNAs in temperate and Antarctic sea urchin characterized by a large difference in egg metallothionein content. Scudiero R, et al. **Cell Mol Life Sci** 1997 May;53(5):472–7

Evolutionary analysis of sea urchin mitochondrial tRNAs: folding of the molecules as suggested by the non–random occurrence of nucleotides. Giorgi CD, et al. **Curr Genet** 1996 Aug;30(3):191–9

Two Otx proteins generated from multiple transcripts of a single gene in Strongylocentrotus purpuratus. Li X, et al. **Dev Biol** 1997 Jul 15;187(2):253–66

Cloning and characterization of novel beta integrin subunits from a sea urchin. Marsden M, et al. **Dev Biol** 1997 Jan 15;181(2):234–45

SpHmx, a sea urchin homeobox gene expressed in embryonic pigment cells. Martinez P, et al. **Dev Biol** 1997 Jan 15; 181(2):213–22

SpHbox7, a new Abd–B class homeobox gene from the sea urchin Strongylocentrotus purpuratus: insights into the evolution of hox gene expression and function. Dobias SL, et al. **Dev Dyn** 1996 Dec;207(4):450–60

Spfkh1 encodes a transcription factor implicated in gut formation during sea urchin development. Luke NH, et al. **Dev Growth Differ** 1997 Jun;39(3):285–94

Behavior of Na+/K(+)–ATPase alpha–subunit alleles in sea urchin eggs upon fertilization. Yamazaki K, et al. **Dev Growth Differ** 1997 Feb;39(1):105–9

Skeletal morphogenesis in the sea urchin embryo: regulation of primary mesenchyme gene expression and skeletal rod growth by ectoderm–derived cues. Guss KA, et al. **Development** 1997 May;124(10):1899–908

Quantitative functional interrelations within the cis–regulatory system of the S. purpuratus Endo16 gene. Yuh CH, et al. **Development** 1996 Dec;122(12):4045–56

Identification of developmentally regulated sea urchin U5 snRNA genes. Morales J, et al. **DNA Seq** 1997;7(5):243–59

Isolation and amino acid sequence analysis reveal an ancient evolutionary origin of the cleavage stage (CS) histones of the sea urchin. Brandt WF, et al. **Eur J Biochem** 1997 Aug 1;247(3):784–91

The S.//.A.IG amino acid motif is present in a replication dependent late H3 histone variant of P. lividus sea urchin. Fucci L, et al. **FEBS Lett** 1997 Apr 21;407(1):101–4

USF in the Lytechinus sea urchin embryo may act as a transcriptional repressor in non–aboral ectoderm cells for the cell lineage–specific expression of the LpS1 genes. Seid CA, et al. **J Mol Biol** 1996 Nov 22;264(1):7–19

Complete sequence of SpHox8 and its linkage in the single Hox gene cluster of Strongylocentrotus purpuratus. Martinez P, et al. **J Mol Evol** 1997 Apr;44(4):371–7

The evolution of Msx gene function: expression and regulation of a sea urchin Msx class homeobox gene. Dobias SL, et al. **Mech Dev** 1997 Jan;61(1–2):37–48

Rapid evolution in a conserved gene family. Evolution of the actin gene family in the sea urchin genus Heliocidaris and related genera. Kissinger JC, et al. **Mol Biol Evol** 1997 Jun;14(6):654–65

Sea urchin Hox genes: insights into the ancestral Hox cluster. Popodi E, et al. **Mol Biol Evol** 1996 Oct;13(8):1078–86

The five cleavage–stage (CS) histones of the sea urchin are encoded by a maternally expressed family of replacement histone genes: functional equivalence of the CS H1 and frog H1M (B4) proteins. Mandl B, et al. **Mol Cell Biol** 1997 Mar;17(3):1189–200

Organization and expression of multiple actin genes in the sea urchin. Scheller RH, et al. **Mol Cell Biol** 1981 Jul; 1(7):609–28

An extracellular matrix response element in the promoter of the LpS1 genes of the sea urchin Lytechinus pictus. Seid CA, et al. **Nucleic Acids Res** 1997 Aug 1; 25(15):3175–82

GROWTH & DEVELOPMENT

Cell adhesion–dependent regulation of cell growth during sea urchin development. Ghersi G, et al. **Eur J Cell Biol** 1996 Mar;69(3):259–66

Developmental expression of synthetic cis–regulatory systems composed of spatial control elements from two different genes. Kirchhamer CV, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13849–54

METABOLISM

Spatial distribution of collagen type I mRNA in Paracentrotus lividus eggs and embryos. Gambino R, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):334–7

Nicotinamide inhibits cyclic ADP–ribose–mediated calcium signalling in sea urchin eggs. Sethi JK, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):613–7

Two isoforms of orthodenticle–related proteins (HpOtx) bind to the enhancer element of sea urchin arylsulfatase gene. Sakamoto N, et al. **Dev Biol** 1997 Jan 15;181(2):284–95

Effect of caulerpenyne, a toxin extracted from Caulerpa taxifolia on mechanisms regulating intracellular pH in sea urchin eggs and sea bream hepatocytes. Galgani I, et al. **J Biochem Toxicol** 1996;11(5):243–50

Presence of different collagens and collagen mRNAs during embryogenesis and in adult tissues of the sea urchin Paracentrotus lividus. Gambino R, et al. **J Submicrosc Cytol Pathol** 1996 Jan;28(1):41–7

Activation–dependent and activation–independent localisation of calmodulin to the mitotic apparatus during the first cell cycle of the Lytechinus pictus embryo. Wilding M, et al. **Zygote** 1995 Aug;3(3):219–24

PHYSIOLOGY

Occurrence and metabolism of anandamide and related acyl–ethanolamides in ovaries of the sea urchin Paracentrotus lividus. Bisogno T, et al. **Biochim Biophys Acta** 1997 Apr 21;1345(3):338–48

Effects of intracellular pH on the mitotic apparatus and mitotic stage in the sand dollar egg. Watanabe K, et al. **Cell Motil Cytoskeleton** 1997;37(3):263–70

Molecular mechanisms of gamete recognition in sea urchin fertilization. Ohlendieck K, et al. **Curr Top Dev Biol** 1996; 32:39–58 (67 ref.)

Regulated exocytosis and sequential construction of the extracellular matrix surrounding the sea urchin zygote. Matese JC, et al. **Dev Biol** 1997 Jun 1;186(1):16–26

Mapping sperm binding domains on the sea urchin egg receptor for sperm. Stears RL, et al. **Dev Biol** 1997 Jul 15;187(2):200–8

Design strategies of sea urchin teeth: structure, composition and micromechanical relations to function. Wang RZ, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Apr 29; 352(1352):469–80

SEAFOOD

Fish consumption, n–3 fatty acids in cell membranes, and heart rate variability in survivors of myocardial infarction with left ventricular dysfunction. Christensen JH, et al. **Am J Cardiol** 1997 Jun 15;79(12):1670–3

Multiple myeloma: clusters, clues, and dioxins. Schwartz GG. **Cancer Epidemiol Biomarkers Prev** 1997 Jan;6(1):49–56 (84 ref.)

Bacterial mutagenicity of terasi and antimutagenicity of Indonesian jasmine tea against terasi. Surono IS, et al. **Int J Food Microbiol** 1996 Sep;32(1–2):49–58

ADVERSE EFFECTS

How well does a history of seafood allergy predict the likelihood of an adverse reaction to i.v. contrast material? Leder R. **AJR Am J Roentgenol** 1997 Sep;169(3):906–7

Allergic reactions to anisakis simplex parasitizing seafood. Moreno–Ancillo A, et al. **Ann Allergy Asthma Immunol** 1997 Sep;79(3):246–50

Identification of the first major allergen of a squid (Todarodes pacificus). Miyazawa H, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):948–53

The spectrum of allergy to South African bony fish (Teleosti). Evaluation by double–blind, placebo–controlled challenge. Zinn C, et al. **S Afr Med J** 1997 Feb;87(2):146–52

ANALYSIS

Measuring mercury [see comments] Wheeler M. **Environ Health Perspect** 1996 Aug;104(8):826–30. Comment in: Environ Health Perspect 1997 Mar;105(3):266.

Lipid, protein, and calorie content of different Atlantic and Mediterranean fish, shellfish, and molluscs commonly eaten in the south of Spain. Soriguer F, et al. **Eur J Epidemiol** 1997 Jun;13(4):451–63

Estimation of fish consumption and methylmercury intake in the New Jersey population. Stern AH, et al. **J Expo Anal Environ Epidemiol** 1996 Oct–Dec;6(4):503–25

Long–term decline of radiocesium concentration in seafood from the Ligurian sea (northern Italy) after Chernobyl. Gallelli G, et al. **Sci Total Environ** 1997 Mar 20; 196(2):163–70

Current and potential doses from Arctic seafood consumption. Sazykina TG, et al. **Sci Total Environ** 1997 Aug 25;202(1–3):57–65

[Dioxins and furans in edible species of fish from the Gulf of Gdańsk] Falandysz J, et al. **Rocz Panstw Zakl Hig** 1996; 47(2):197–204 (Eng. Abstr.) **(Pol)**

MICROBIOLOGY

Rapid polymerase chain reaction method for detection of Kanagawa positive Vibrio parahaemolyticus in seafoods. Karunasagar I, et al. **Int J Food Microbiol** 1996 Aug; 31(1–3):317–23

[Isolation of Vibrio cholerae in imported frozen seafood and their cholera–enterotoxin production] Shiraishi S, et al. **Kansenshogaku Zasshi** 1996 Feb;70(2):175–9 (Eng. Abstr.) **(Jpn)**

POISONING

Cyanobacterial toxins: occurrence, modes of action, health effects and exposure routes. Codd GA, et al. **Arch Toxicol Suppl** 1997;19:399–410 (35 ref.)

Trouble with tuna: two cases of scombrotoxin poisoning. Stell IM. **J Accid Emerg Med** 1997 Mar;14(2):110–1

[Anaphylactoid manifestations after ingestion of tuna: think about scombroid intoxication (letter)] Maury E, et al. **Presse Med** 1997 May 17;26(16):759 **(Fre)**

STATISTICS & NUMERICAL DATA

Lower consumption of wine and fish as a possible explanation for higher ischaemic heart disease mortality in Spain's Mediterranean region. Rodriguez Artalejo F, et al. **Int J Epidemiol** 1996 Dec;25(6):1196–201

TOXICITY

Assessment of exposure to inorganic arsenic, a human carcinogen, due to the consumption of seafood. Buchet JP, et al. **Arch Toxicol** 1996;70(11):773–8

VIROLOGY

Seminested RT-PCR systems for small round structured viruses and detection of enteric viruses in seafood. Häfliger D, et al. **Int J Food Microbiol** 1997 Jun 17;37(1):27–36

Steaming oysters does not prevent Norwalk-like gastroenteritis. Kirkland KB, et al. **Public Health Rep** 1996 Nov–Dec;111(6):527–30

SEAL DISTEMPER VIRUS see **DISTEMPER VIRUS, PHOCINE**

SEALANTS, ROOT CANAL see **ROOT CANAL FILLING MATERIALS**

SEALANTS, TOOTH see **PIT AND FISSURE SEALANTS**

SEALED CABIN ECOLOGY see **ECOLOGICAL SYSTEMS, CLOSED**

SEALS

Contribution of coplanar and non-coplanar polychlorinated biphenyls to the toxic equivalence of grey seal (Halichoerus grypus) milk. Green NJ, et al. **Chemosphere** 1996 Oct; 33(7):1273–81

Marine mammals as global pollution indicators for organochlorines. Mössner S, et al. **Chemosphere** 1997 Mar–Apr;34(5–7):1285–96

Identification of 2'-fucosyllactose in milk of the crabeater seal (Lobodon carcinophagus). Urashima T, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Mar; 116(3):311–4

Aquatic pollution-induced immunotoxicity in wildlife species. Luebke RW, et al. **Fundam Appl Toxicol** 1997 May; 37(1):1–15

Onboard acoustic recording from diving northern elephant seals. Fletcher S, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2531–9

Temporary threshold shift in a harbor seal (Phoca vitulina) [letter] Kastak D, et al. **J Acoust Soc Am** 1996 Sep; 100(3):1905–8

Acute gastric dilatation with volvulus in a northern fur seal (Callorhinus ursinus). Frasca S Jr, et al. **J Wildl Dis** 1996 Jul;32(3):548–51

Metastatic carcinoma of probable transitional cell origin in 66 free-living California sea lions (Zalophus californianus), 1979 to 1994 [published erratum appears in J Wildl Dis 1996 Jul;32(3):564] Gulland FM, et al. **J Wildl Dis** 1996 Apr;32(2):250–8

Brucella species infection in North Sea seal and cetacean populations. Ross HM, et al. **Vet Rec** 1996 Jun 29; 138(26):647–8

Use of the respiratory stimulant doxapram in southern elephant seals (Mirounga leonina). Woods R, et al. **Vet Rec** 1996 May 25;138(21):514–7

[Seal fingers and other infections transmitted from seals] Krag ML, et al. **Ugeskr Laeger** 1996 Sep 2;158(36):5015–7 (31 ref.) (Eng. Abstr.) **(Dan)**

[Cesium-137 in sea birds and and seals in the Barents sea] Matishov FG, et al. **Dokl Akad Nauk** 1996 Dec; 351(6):844–6 **(Rus)**

[Dioxin and furan levels in Baikal seals] Tarasova EN, et al. **Dokl Akad Nauk** 1997 Jun;354(5):713–8 **(Rus)**

ANATOMY & HISTOLOGY

Morphometric study of specific heart granules in the grey seal (Halichoerus grypus). Ayettey AS, et al. **Acta Anat (Basel)** 1996;156(2):81–6

Histological, histochemical, and fine structural observations on the lymph node of the common seal (Phoca vitulina) and the grey seal (Halichoerus grypus). Welsch U, et al. **Anat Rec** 1997 Feb;247(2):225–42

BLOOD

Metabolic and hormonal changes during the molt of captive gray seals (Halichoerus grypus). Boily P. **Am J Physiol** 1996 May;270(5 Pt 2):R1051–8

Baseline coagulation assay values for northern elephant seals (Mirounga angustirostris), and disseminated intravascular coagulation in this species. Gulland FM, et al. **J Wildl Dis** 1996 Jul;32(3):536–40

[Vestibuloprotective activity of serum proteins from seal's blood] Iasnetsov VV, et al. **Biull Eksp Biol Med** 1994 Apr; 117(4):444–5 **(Rus)**

GENETICS

Chromosome survey of seals in the Baltic Sea in 1988–1992. Hongell K. **Arch Environ Contam Toxicol** 1996 Oct; 31(3):399–403

Chromosomal homeologies between human, harbor seal (Phoca vitulina) and the putative ancestral carnivore karyotype revealed by Zoo-FISH. Frönicke L, et al. **Chromosoma** 1997 Jul;106(2):108–13

Structure and amount of genetic variation at minisatellite loci within the subspecies complex of Phoca vitulina (the harbour seal). Kappe AL, et al. **Heredity** 1997 May;78 (Pt 5):457–63

Genetic variation of southern hemisphere fur seals (Arctocephalus spp.): investigation of population structure and species identity. Lento GM, et al. **J Hered** 1997 May–Jun;88(3):202–8

PCR primers for harbour seal (Phoca vitulina concolour) microsatellites amplify polymorphic loci in other pinniped species. Coltman DW, et al. **Mol Ecol** 1996 Feb;5(1):161–3

Molecular scatology: the use of molecular genetic analysis to assign species, sex and individual identity to seal faeces. Reed JZ, et al. **Mol Ecol** 1997 Mar;6(3):225–34

[The structure of the fragments of 3 exons of the myoglobin gene in the Baikal seal Phoca sibirica] Malikov NG, et al. **Zh Evol Biokhim Fiziol** 1996 Sep–Oct;32(5):656–8 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Impaired immunity in harbour seals (Phoca vitulina) exposed to bioaccumulated environmental contaminants: review of a long-term feeding study. de Swart RL, et al. **Environ Health Perspect** 1996 Aug;104 Suppl 4:823–8 (34 ref.)

Comparative antibody response in harbour and grey seals naturally infected by a morbillivirus. Duignan PJ, et al. **Vet Immunol Immunopathol** 1997 Mar;55(4):341–9

Impaired immunity in harbour seals [Phoca vitulina] fed environmentally contaminated herring. de Swart RL, et al. **Vet Q** 1996;18 Suppl 3:S127–8 (12 ref.)

INJURIES

Dental and mandibular injury in an Antarctic fur seal, Arctocephalus gazella, at Heard Island, Southern Ocean. Erb E, et al. **J Wildl Dis** 1996 Apr;32(2):376–80

METABOLISM

Polychlorinated diphenyl ethers, dibenzo-p-dioxins, dibenzofurans and biphenyls in seals and sediment from the Gulf of Finland. Koistinen J, et al. **Chemosphere** 1997 Sep;35(6):1249–69

Organochlorine contaminants in blubber of four seal species: integrating biomonitoring and specimen banking. Krahn MM, et al. **Chemosphere** 1997 May;34(9–10):2109–21

Polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) in Baikal seal. Tarasova EN, et al. **Chemosphere** 1997 Jun;34(11):2419–27

Vitamins A1 (retinol), A2 (3,4-didehydroretinol) and E (alpha-tocopherol) in the liver and blubber of lacustrine and marine ringed seals (Phoca hispida sp.). Käkelä R, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jan; 116(1):27–33

MICROBIOLOGY

Isolation of Brucella species from cetaceans, seals and an otter. Foster G, et al. **Vet Rec** 1996 Jun 15;138(24):583–6

PARASITOLOGY

Evidence of Brucella infection in Parafilaroides lungworms in a Pacific harbor seal (Phoca vitulina richardsi). Garner MM, et al. **J Vet Diagn Invest** 1997 Jul;9(3):298–303

[Cestode infection of Antarctic seals] Iurakhno MV, et al. **Parazitologiia** 1997 Jan–Feb;31(1):81–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Metabolic and hormonal changes during the molt of captive gray seals (Halichoerus grypus). Boily P. **Am J Physiol** 1996 May;270(5 Pt 2):R1051–8

Effects of hypoxia and hypercapnia on patterns of sleep-associated apnea in elephant seal pups. Milsom W, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1017–24

Use of electroejaculation to collect semen samples from wild seals. Lawson JW, et al. **J Am Vet Med Assoc** 1996 Nov 1;209(9):1615–7

Volume capacity and contraction control of the seal spleen. Cabanac A, et al. **J Appl Physiol** 1997 Jun;82(6):1989–94

Energetics of lactation in harp seals (Phoca groenlandica) from the Gulf of St. Lawrence, Canada. Lydersen C, et al. **J Comp Physiol [B]** 1996;166(5):295–304

Energetics during nursing and early postweaning fasting in hooded seal (Cystophora cristata) pups from the Gulf of St Lawrence, Canada. Lydersen C, et al. **J Comp Physiol [B]** 1997 Feb;167(2):81–8

Heart rates of northern elephant seals diving at sea and resting on the beach. Andrews RD, et al. **J Exp Biol** 1997 Aug; 200 (Pt 15):2083–95

Temperature effects on the breeding distribution of grey seals (Halichoerus grypus). Hansen S, et al. **Physiol Zool** 1997 Jul–Aug;70(4):436–43

Ontogeny of the thermal limits in the harbor seal (Phoca vitulina). Hansen S, et al. **Physiol Zool** 1997 Jan–Feb; 70(1):85–92

PSYCHOLOGY

Mental rotation in a California sea lion (Zalophus californianus). Mauck B, et al. **J Exp Biol** 1997 May;200 (Pt 9):1309–16

VIROLOGY

Morbillivirus in monk seal mass mortality [letter] Osterhaus A, et al. **Nature** 1997 Aug 28;388(6645):838–9

Age-related disease in recurrent outbreak of phocid herpesvirus type-1 infections in a seal rehabilitation centre: evaluation of diagnostic methods. Harder TC, et al. **Vet Rec** 1997 May 10;140(19):500–3

SEASICKNESS see **MOTION SICKNESS**

SEASONAL AFFECTIVE DISORDER

Rhythm and blues: the theory and treatment of seasonal affective disorder. Dalgleish T, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):163–82 (140 ref.)

More on nonaffective seasonality [letter] Weintrob A. **J Am Acad Child Adolesc Psychiatry** 1997 Aug;36(8):1019

BLOOD

Circadian profiles of cortisol, prolactin, and thyrotropin in seasonal affective disorder. Oren DA, et al. **Biol Psychiatry** 1996 Feb 1;39(3):157–70

COMPLICATIONS

Circadian temperature and cortisol rhythms during a constant routine are phase-delayed in hypersomnic winter depression. Avery DH, et al. **Biol Psychiatry** 1997 Jun 1; 41(11):1109–23

Eating style in seasonal affective disorder: who will gain weight in winter? Kräuchi K, et al. **Compr Psychiatry** 1997 Mar–Apr;38(2):80–7

Obesity treated with phototherapy: four case studies. Bylesjö EI, et al. **Int J Eat Disord** 1996 Dec;20(4):443–46

DIAGNOSIS

Circadian rest-activity disturbances in seasonal affective disorder. Teicher MH, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):124–30

Characterization of the "seasonal" bulimic patient. Levitan RD, et al. **Int J Eat Disord** 1996 Mar;19(2):187–92

Seasonal and non-seasonal depression and the five-factor model of personality. Bagby RM, et al. **J Affect Disord** 1996 Jun 5;38(2–3):89–95

Internal consistency of the Seasonal Pattern Assessment Questionnaire (SPAQ). Magnusson A, et al. **J Affect Disord** 1997 Feb;42(2–3):113–6

Validation of the Seasonal Pattern Assessment Questionnaire (SPAQ). Magnusson A. **J Affect Disord** 1996 Oct 14; 40(3):121–9

The Seasonal Pattern Assessment Questionnaire for identifying seasonal affective disorders. Raheja SK, et al. **J Affect Disord** 1996 Dec 16;41(3):193–9

Seasonal alteration in taste detection and recognition threshold in seasonal affective disorder: the proximate source of carbohydrate craving. Arbisi PA, et al. **Psychiatry Res** 1996 Jan 31;59(3):171–82

Seasonality and pituitary volume. Schwartz PJ, et al. **Psychiatry Res** 1997 Jul 4;74(3):151–7

The importance of full summer remission as a criterion for the diagnosis of seasonal affective disorder. Danilenko KV, et al. **Psychopathology** 1996;29(4):230–5

DRUG THERAPY

Moclobemide and fluoxetine in treatment of seasonal affective disorder. Partonen T, et al. **J Affect Disord** 1996 Nov 25; 41(2):93–9

ENZYMOLOGY

Platelet monoamine oxidase activity in patients with winter seasonal affective disorder. Reichborn-Kjennerud T, et al. **Psychiatry Res** 1996 Jun 1;62(3):273–80

EPIDEMIOLOGY

Seasonal variation of mood and behaviour in a healthy middle-aged population in Japan. Okawa M, et al. **Acta Psychiatr Scand** 1996 Oct;94(4):211–6

Seasonal affective disorder: some epidemiological findings from a tropical climate. Morrissey SA, et al. **Aust N Z J Psychiatry** 1996 Oct;30(5):579–86

Seasonal affective disorder in Australia: is photoperiod critical? Murray GW, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):279–84

DSM-III-R personality disorders in seasonal affective disorder: change associated with depression. Reichborn-Kjennerud T, et al. **Compr Psychiatry** 1997 Jan–Feb;38(1):43–8

The influence of seasonal change on suicidal behaviour in Italy. Preti A. **J Affect Disord** 1997 Jul;44(2–3):123–30

A case of seasonal trichotillomania [letter] Feldman-Naim S, et al. **J Clin Psychiatry** 1997 May;58(5):218–9

Subsyndromal seasonal affective disorder in Antarctica. Palinkas LA, et al. **J Nerv Ment Dis** 1996 Sep;184(9):530–4

Seasonal depression and conception. Lester D. **Percept Mot Skills** 1997 Aug;85(1):286

Prevalence of seasonal changes in mood and behavior during the winter months in central Texas. Hegde AL, et al. **Psychiatry Res** 1996 Jun 1;62(3):265–71

Seasonal changes in affective state in samples of Asian and white women. Suhail K, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Apr;32(3):149–57

GENETICS

Two naturally occurring amino acid substitutions of the 5-HT2A receptor: similar prevalence in patients with seasonal affective disorder and controls. Ozaki N, et al.

Biol Psychiatry 1996 Dec 15;40(12):1267–72
Gender differences in the heritability of seasonal mood change. Jang KL, et al. **Psychiatry Res** 1997 May 30; 70(3):145–54

METABOLISM

Suppression of melatonin secretion by bright light in seasonal affective disorder. Partonen T, et al. **Biol Psychiatry** 1997 Sep 15;42(6):509–13
Serotonin in the spotlight [letter] Penev PD, et al. **Nature** 1997 Jan 9;385(6612):123

PHYSIOPATHOLOGY

The relationship between seasonal mood change and personality: more apparent than real? Jang KL, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):539–43
Rapid tryptophan depletion in drug-free depressed patients with seasonal affective disorder. Neumeister A, et al. **Am J Psychiatry** 1997 Aug;154(8):1153–5
Effects of tryptophan depletion on drug-free patients with seasonal affective disorder during a stable response to bright light therapy. Neumeister A, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):133–8
Effects of meta-chlorophenylpiperazine infusions in patients with seasonal affective disorder and healthy control subjects. Diurnal responses and nocturnal regulatory mechanisms. Schwartz PJ, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):375–85
Sleep electroencephalogram in seasonal affective disorder and in control women: effects of midday light treatment and sleep deprivation. Brunner DP, et al. **Biol Psychiatry** 1996 Sep 15;40(6):485–96
Seasonal variation in core temperature regulation during sleep in patients with winter seasonal affective disorder. Schwartz PJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):122–31
Circadian rest-activity disturbances in children with seasonal affective disorder. Glod CA, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):188–95
Possible pathophysiological mechanisms regulating food intake in seasonal affective disorder. Partonen T. **Med Hypotheses** 1996 Sep;47(3):215–6 (7 ref.)
Dopamine and circadian rhythms in seasonal affective disorder. Partonen T. **Med Hypotheses** 1996 Sep; 47(3):191–2 (6 ref.)
Regional cerebral blood flow changes after light therapy in seasonal affective disorder. Matthew E, et al. **Nucl Med Commun** 1996 Jun;17(6):475–9

PSYCHOLOGY

Rapid tryptophan depletion in drug-free depressed patients with seasonal affective disorder. Neumeister A, et al. **Am J Psychiatry** 1997 Aug;154(8):1153–5
Seasonal and non-seasonal depression and the five-factor model of personality. Bagby RM, et al. **J Affect Disord** 1996 Jun 5;38(2–3):89–95
The influence of seasonal change on suicidal behaviour in Italy. Preti A. **J Affect Disord** 1997 Jul;44(2–3):123–30
Atypical depressive symptoms in seasonal and non-seasonal mood disorders. Tam EM, et al. **J Affect Disord** 1997 Jun; 44(1):39–44
Relation of light and exercise to seasonal depressive symptoms: preliminary development of a scale. Groom KN, et al. **Percept Mot Skills** 1996 Oct;83(2):379–83
Psychological factors in the development of mood disorders with a seasonal pattern. Beratis S, et al. **Psychopathology** 1996 Nov–Dec;29(6):331–9
[The use of Kohonen's neuronal network for the analysis of the psychophysiological characteristics of persons with seasonal affective disorder] Vol'f NV, et al. **Fiziol Cheloveka** 1997 May–Jun;23(3):25–9 **(Rus)**

THERAPY

Light visor maintenance of light box response [letter] Clark C, et al. **Am J Psychiatry** 1997 Aug;154(8):1172
Predictors of response and nonresponse to light treatment for winter depression. Terman M, et al. **Am J Psychiatry** 1996 Nov;153(11):1423–9
Effects of tryptophan depletion on drug-free patients with seasonal affective disorder during a stable response to bright light therapy. Neumeister A, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):133–8
Effects of meta-chlorophenylpiperazine infusions in patients with seasonal affective disorder and healthy control subjects. Diurnal responses and nocturnal regulatory mechanisms. Schwartz PJ, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):375–85
Growth hormone response to sumatriptan (5-HT1D agonist) challenge in seasonal affective disorder: effects of light therapy. Yatham LN, et al. **Biol Psychiatry** 1997 Jul 1; 42(1):24–9
Effects of morning phototherapy on circadian markers in seasonal affective disorder. Thompson C, et al. **Br J Psychiatry** 1997 May;170:431–5
Re: Treatment of SAD [letter; comment] Jeffries JJ. **Can J Psychiatry** 1996 Apr;41(3):192. Comment on: Can J Psychiatry 1995 Oct;40(8):457–66.
L-tryptophan augmentation of light therapy in patients with seasonal affective disorder. Lam RW, et al. **Can J Psychiatry** 1997 Apr;42(3):303–6
Prediction of acute and late responses to light therapy from vocal (pitch) and self-rated activation in seasonal affective disorder. Boenink AD, et al. **J Affect Disord** 1997 Feb; 42(2–3):117–26
Response to light therapy in seasonal affective disorder: personality disorders and temperament as predictors of outcome. Reichborn-Kjennerud T, et al. **J Affect Disord** 1996 Nov 25;41(2):101–10
Nonaffective seasonality [letter] Harrison SI. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):163–4
A controlled trial of light therapy for the treatment of pediatric seasonal affective disorder. Swedo SE, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jun;36(6):816–21
Effects of light therapy on neuropsychological function and mood in seasonal affective disorder. Michalon M, et al. **J Psychiatry Neurosci** 1997 Jan;22(1):19–28
Follow-up study of seasonal affective disorder in Switzerland. Graw P, et al. **Psychopathology** 1997; 30(4):208–14
[Phototherapy. An alternative for seasonal affective disorders or sleep disorders] Holsten F, et al. **Tidsskr Nor Laegeforen** 1997 Jun 30;117(17):2484–8 (68 ref.) (Eng. Abstr.) **(Nor)**
[Seasonal affective disorder and light therapy] Matías J, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jul–Aug;24(4):204–8 (50 ref.) (Eng. Abstr.) **(Spa)**

SEASONAL MOOD DISORDER see **SEASONAL AFFECTIVE DISORDER**

SEASONS

Seasonal variation of skin pigmentation. Lock-Andersen J, et al. **Acta Derm Venereol** 1997 May;77(3):219–21
Investigation on seasonality of twin births in Brazil. Krieger H, et al. **Acta Genet Med Gemellol (Roma)** 1996; 45(4):397–403
Seasonal variation in suicides re-examined: no sex difference in Hong Kong and Taiwan. Ho TP, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):26–31
Seasonal variation in the concentration of vitamins A and E in the blood plasma of fat-tailed sheep. Asadian A, et al. **Acta Vet Hung** 1995;43(4):453–61
Serum progesterone levels in mares in winter and during transitional periods. Koskinen E, et al. **Acta Vet Scand** 1996; 37(4):409–14
Reproductive seasonality of corriedale rams under extensive rearing conditions. Pérez R, et al. **Acta Vet Scand** 1997; 38(1):109–17
Seasons and depression: the influence of cigarette smoking. D'Mello DA, et al. **Addict Behav** 1996 Sep–Oct;21(5):671–4
Seasonal variation in 25-hydroxyvitamin D and parathyroid hormone concentrations in healthy elderly people. Hegarty V, et al. **Age Ageing** 1994 Nov;23(6):478–82
Winter excess mortality: a comparison between Norway and England plus Wales. Laake K, et al. **Age Ageing** 1996 Sep; 25(5):343–8
Comparison of allergenic potentials of timothy (Phleum pratense) pollens from different pollen seasons collected in the Belgrade area. Gavrović MD, et al. **Allergy** 1997 Feb;52(2):210–4
Relevance of birth month in respiratory allergy. Singh BP, et al. **Allergy** 1997 Feb;52(2):232–3
Can an antihistamine delay appearance of hay fever symptoms when given prior to pollen season? Stern MA, et al. **Allergy** 1997 Apr;52(4):440–4
Plasma calcidiol, season, and serum parathyroid hormone concentrations in healthy elderly men and women. Dawson-Hughes B, et al. **Am J Clin Nutr** 1997 Jan; 65(1):67–71
Seasonality and malaria in a west African village: does high parasite density predict fever incidence? Bouvier P, et al. **Am J Epidemiol** 1997 May 1;145(9):850–7
Body mass index is associated with differential seasonal change in ambulatory blood pressure levels. Kristal-Boneh E, et al. **Am J Hypertens** 1996 Dec;9(12 Pt 1):1179–85
Seasonal variation in the incidence of end-stage renal disease. Iseki K, et al. **Am J Nephrol** 1996;16(5):375–81
Seasonal and sex variation in physical activity levels among agro-pastoralists in Nepal. Panter-Brick C. **Am J Phys Anthropol** 1996 May;100(1):7–21
Summer osmoregulatory capacity of the world's northernmost living salmonid. Nilssen KJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R743–9
Diurnal and seasonal changes in sympathetic signal transduction in cardiac ventricles of European hamsters. Pleschka K, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R304–9
Determinants of the dramatic seasonal changes in the intake of energy and protein by Japanese monkeys in a cool temperate forest. Nakagawa N. **Am J Primatol** 1997; 41(4):267–88
Seasonality of symptoms in women with late luteal phase dysphoric disorder. Maskall DD, et al. **Am J Psychiatry** 1997 Oct;154(10):1436–41
Acute effects of summer air pollution on respiratory health of asthmatic children. Gielen MH, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2105–8
Seasonal variations in house dust mite influence the circadian peak expiratory flow amplitude. Meijer GG, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):881–4
Seasonal comparison of cytokine profiles in atopic asthmatics and atopic non-asthmatics. Tang C, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1615–22
Seasonality, malaria, and impact of prophylaxis in a West African village I. Effect of anemia in pregnancy. Bouvier P, et al. **Am J Trop Med Hyg** 1997 Apr;56(4):378–83
Seasonality, malaria, and impact of prophylaxis in a West African village. II. Effect on birthweight. Bouvier P, et al. **Am J Trop Med Hyg** 1997 Apr;56(4):384–9
Comparison of seasonal changes in reproductive parameters of adult male European fallow deer (Dama dama dama) and hybrid Mesopotamian x European fallow deer (D. d. mesopotamica x D. d. dama). Asher GW, et al. **Anim Reprod Sci** 1996 Dec 16;45(3):201–15
Seasonal effects on gestation length and birth weight in alpacas. Davis GH, et al. **Anim Reprod Sci** 1997 Apr; 46(3–4):297–303
Oestrous behaviour of Holstein cows during cooler and hotter tropical seasons. Rodtian P, et al. **Anim Reprod Sci** 1996 Dec 2;45(1–2):47–58
Seasonal and acute heat stress effects on steroid production by dominant follicles in cows. Wolfenson D, et al. **Anim Reprod Sci** 1997 May;47(1–2):9–19
Seasonal variation of skin reactivity and specific IgE antibody to house dust mite. Nahm DH, et al. **Ann Allergy Asthma Immunol** 1997 Jun;78(6):589–93
Seasonal growth patterns in rural Nepali children. Panter-Brick C. **Ann Hum Biol** 1997 Jan–Feb;24(1):1–18
Attitudes of patients to elective surgical admissions over Christmas and Easter. Whiteley MS, et al. **Ann R Coll Surg Engl** 1997 Mar;79(2 Suppl):68–71
Gender difference in cereal intake: possible impacts of social group affiliation and season. Chakrabarty M. **Anthropol Anz** 1996 Dec;54(4):355–60
Physiological responses of women during exercise under dry-heat condition in winter and summer. Keatisuwan W, et al. **Appl Human Sci** 1996 Jul;15(4):169–76
Chronobiological fluctuations in semen parameters with a constant abstinence period. Ombelet W, et al. **Arch Androl** 1996 Sep–Oct;37(2):91–6
Stratum corneum lipids: the effect of ageing and the seasons. Rogers J, et al. **Arch Dermatol Res** 1996 Nov; 288(12):765–70
Season of birth as predictor of atopic manifestations. Nilsson L, et al. **Arch Dis Child** 1997 Apr;76(4):341–4
Blood lead level, by year and season, among poor pregnant women. Schell LM, et al. **Arch Environ Health** 1997 Jul–Aug;52(4):286–91
A photophase and seasonal study of the pineal parenchyma and melatonin serum levels in the albino rat subjected to immobilization stress. Martinez-Soriano F, et al. **Arch Ital Biol** 1996 Jul;134(3):235–48
Circannual changes in thyroid hormone physiology: the role of cold environmental temperatures. Reed HL. **Arctic Med Res** 1995;54 Suppl 2:9–15 (55 ref.)
Seasonal variation in hospital admissions for chronic obstructive pulmonary disease in Finland. Vilkman S, et al. **Arctic Med Res** 1996 Oct;55(4):182–6
Polar day and polar night: month of year and time of day and the use of physical and pharmacological restraint in a north Norwegian university psychiatric hospital. Wynn R. **Arctic Med Res** 1996 Oct;55(4):174–81
Seasonal variation in parameters related to coronary heart disease risk in young men. Mustad V, et al. **Atherosclerosis** 1996 Sep 27;126(1):117–29
Season of birth and schizophrenia: southern hemisphere data [see comments] Berk M, et al. **Aust N Z J Psychiatry** 1996 Apr;30(2):220–2. Comment in: Aust N Z J Psychiatry 1997 Apr;31(2):308–9.
Season of birth and schizophrenia in Tasmania. Jones IH, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):57–61
Season of birth and schizophrenia: southern hemisphere data [letter; comment] Torrey EF, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):308–9. Comment on: Aust N Z J Psychiatry 1996 Apr;30(2):220–2.
Regulation of membrane lipid bilayer structure during seasonal variation: a study on the brain membranes of Clarias batrachus. Roy R, et al. **Biochim Biophys Acta** 1997 Jan 14;1323(1):65–74
Seasonal effects in prolactin response to m-chlorophenylpiperazine challenge in obsessive-compulsive disorder. Grossman R, et al. **Biol Psychiatry** 1996 Jun 1;39(11):982–5
Seasonal influence on platelet 5-HT levels in patients with recurrent major depression and schizophrenia. Jakovljević M, et al. **Biol Psychiatry** 1997 May 15;41(10):1028–34
Seasonal variation in core temperature regulation during sleep in patients with winter seasonal affective disorder. Schwartz PJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):122–31
Seasonal variability in blood platelet 3H-imipramine binding in healthy controls: age and gender effects. Soria PR, et al. **Biol Psychiatry** 1996 Nov 15;40(10):981–5
Season of birth and electroencephalogram power abnormalities in schizophrenia. Sponheim SR, et al. **Biol Psychiatry** 1997 May 15;41(10):1020–7
The effects of age, sex and time of testing on skin conductance activity. Venables PH, et al. **Biol Psychol** 1996 Apr 12;43(2):87–101
Influence of previous photoperiodic exposure on the reproductive response to a specific photoperiod signal in ewes. Sweeney T, et al. **Biol Reprod** 1997 Apr;56(4):916–20
Effect of thyroidectomy on maintenance of seasonal reproductive suppression in the ewe. Thrun LA, et al. **Biol Reprod** 1997 Apr;56(4):1035–40

Consumption pattern of carotene rich foods and development of a year calendar. Devadas Rajammal P, et al. **Biomed Environ Sci** 1996 Sep;9(2–3):213–22

Seasonality in the diagnosis of acute lymphocytic leukaemia. Badrinath P, et al. **Br J Cancer** 1997;75(11):1711–3

Seasonal patterns in the diagnosis of cutaneous malignant melanoma: analysis of the data of the German Central Malignant Melanoma Registry [letter] Blum A, et al. **Br J Dermatol** 1997 Jun;136(6):968–9

Seasonal presentation of keratoacanthomas in Rhode Island. Dufresne RG, et al. **Br J Dermatol** 1997 Feb;136(2):227–9

Season–of–birth and "age incidence" effects [letter; comment] Crow TJ. **Br J Psychiatry** 1996 Feb;168(2):251. Comment on: Br J Psychiatry 1995 Oct;167(4):469–72.

Testing the effect of season of birth on familial risk for schizophrenia and related disorders. Hettema JM, et al. **Br J Psychiatry** 1996 Feb;168(2):205–9

Seasonal variation in bipolar disorder. Partonen T, et al. **Br J Psychiatry** 1996 Nov;169(5):641–6

Seasonal variations in bipolar disorder [letter] Pio–Abreu JL. **Br J Psychiatry** 1997 May;170:483–4

Fluctuations in schizophrenic births by year. Torrey EF, et al. **Br J Psychiatry** 1996 Dec;169(6):772–5

Seasonal variations in manifestations and activity of systemic lupus erythematosus. Amit M, et al. **Br J Rheumatol** 1997 Apr;36(4):449–52

Seasonal variations in the body composition of lightweight rowers. Morris FL, et al. **Br J Sports Med** 1996 Dec; 30(4):301–4

Seasonal plasticity in the song nuclei of wild rufous–sided towhees. Smith GT. **Brain Res** 1996 Sep 23;734(1–2):79–85

Exposure to long summer days affects the human melatonin and cortisol rhythms. Vondrasová D, et al. **Brain Res** 1997 Jun 6;759(1):166–70

Seasonal variation in the secretion of mammotrophic hormones in normal women and women with previous breast cancer. Holdaway IM, et al. **Breast Cancer Res Treat** 1997 Jan;42(1):15–22

Seasonal trends in the self–detection of breast cancer: indications from the Cancer and Steroid Hormone (CASH) study. Ross JA, et al. **Breast Cancer Res Treat** 1997 Jan; 42(2):187–92

Environmental monitoring and banking of marine pollutants by using common mussels. Ostapczuk P, et al. **Chemosphere** 1997 May;34(9–10):2143–51

Elemental concentrations in medicinally important leafy materials. Reddy PR, et al. **Chemosphere** 1997 May; 34(9–10):2193–212

Periodicity of asthma, emphysema, and chronic bronchitis in a northwest health maintenance organization. Osborne ML, et al. **Chest** 1996 Dec;110(6):1458–62

Summer holiday respite provision for the families of children and young people with learning disabilities. McGill P. **Child Care Health Dev** 1996 May;22(3):203–12

Seasonal rhythm of semen characteristics of a Brazilian breed ("Mangalarga") stallion. Araujo JF, et al. **Chronobiol Int** 1996 Dec;13(6):477–85

Circannual variation of cell proliferation in lymphoid organs and bone marrow of BDF1 male mice on three lighting regimens. Haus E, et al. **Chronobiol Int** 1997 Jul; 14(4):347–62

Reference values for plasma concentrations of vitamin E and A and carotenoids in a Swiss population from infancy to adulthood, adjusted for seasonal influences. Winklhofer–Roob BM, et al. **Clin Chem** 1997 Jan; 43(1):146–53

Seasonal variations of hemorheological and lipid parameters in middle–aged healthy subjects. Otto C, et al. **Clin Chim Acta** 1996 Dec 9;256(1):87–94

Components of biological variation, including seasonality, in blood concentrations of TSH, TT3, FT4, PRL, cortisol and testosterone in healthy volunteers. Maes M, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):587–98

Seasonal differences in airway hyperresponsiveness in asthmatic patients: relationship with allergen exposure and sensitization to house dust mites. van der Heide S, et al. **Clin Exp Allergy** 1997 Jun;27(6):627–33

Association of invasive pneumococcal disease with season, atmospheric conditions, air pollution, and the isolation of respiratory viruses. Kim PE, et al. **Clin Infect Dis** 1996 Jan;22(1):100–6

Congenital clubfoot. Month of conception. Robertson WW Jr, et al. **Clin Orthop** 1997 May;(338):14–8

Seasonal variations in cyclic GMP response on whole–body cooling in women with primary Raynaud's phenomenon. Leppert J, et al. **Clin Sci (Colch)** 1997 Aug;93(2):175–9

Seasonal variations of blood haptoglobin level of brown bears in Japan. Mominoki K, et al. **Comp Biochem Physiol A Physiol** 1996 Aug;114(4):349–53

Seasonal variation in vitamin D metabolites in southern elephant seal (Mirounga leonina) females at south Georgia. Wilske J, et al. **Comp Biochem Physiol A Physiol** 1996 May; 114(1):9–14

Seasonal variation in the antioxidant defense system of the brain of the ground squirrel (Citellus citellus) and response to low temperature compared with rat. Buzadžić B, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Jun;117(2):141–9

Season and migration alters the corticosterone response to capture and handling in an Arctic migrant, the white–crowned sparrow (Zonotrichia leucophrys gambelii). Romero LM, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Feb;116(2):171–7

Seasonal responses of the mixed–function oxygenase system in the American oyster, Crassostrea virginica (Gmelin 1791), to urban–derived polycyclic aromatic hydrocarbons. Weinstein JE. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1995 Nov;112(3):299–307

Seasonal pattern of posttraumatic stress disorder admissions [letter; comment] Newman E, et al. **Compr Psychiatry** 1996 Jul–Aug;37(4):305. Comment on: Compr Psychiatry 1996 Jan–Feb;37(1):40–2.

Individual, ethnic and seasonal variability in irritant susceptibility of skin: the implications for a predictive human patch test. Basketter DA, et al. **Contact Dermatitis** 1996 Oct;35(4):208–13

Seasonal influence on patch test results in central Europe. Kranke B, et al. **Contact Dermatitis** 1996 Mar;34(3):215–6

Season–specific thymic architecture in the frog, Rana temporaria: SEM studies. Miodoński AJ, et al. **Dev Comp Immunol** 1996 Mar–Apr;20(2):129–37

Absence of seasonal variation in the occurrence of IDDM. A study from southern India [letter] Ramachandran A, et al. **Diabetes Care** 1996 Sep;19(9):1035–6

Corpus luteum activity, fertility, and adrenal cortex response in lactating Carora cows during rainy and dry seasons in the tropics of Venezuela [published erratum appears in Domest Anim Endocrinol 1996 Nov;13(6):539] Leyva–Ocariz H, et al. **Domest Anim Endocrinol** 1996 Jul; 13(4):297–306

A critical period for thyroid hormone action on seasonal changes in reproductive neuroendocrine function in the ewe. Thrun LA, et al. **Endocrinology** 1997 Aug; 138(8):3402–9

Evidence for seasonal plasticity in the gonadotropin–releasing hormone (GnRH) system of the ewe: changes in synaptic inputs onto GnRH neurons. Xiong JJ, et al. **Endocrinology** 1997 Mar;138(3):1240–50

The potential effect of global warming on the geographic and seasonal distribution of Phlebotomus papatasi in southwest Asia. Cross ER, et al. **Environ Health Perspect** 1996 Jul;104(7):724–7

Conditions at conception and risk of menstrual disorders. Smits LJ, et al. **Epidemiology** 1997 Sep;8(5):524–9

Seasonality bias in poor reproductive outcome [letter; comment] Stolwijk AM, et al. **Epidemiology** 1996 Sep; 7(5):561–2. Comment on: Epidemiology 1995 Sep;6(5):520–4.

Seasonal variation in the time to pregnancy: avoiding bias by using the date of onset. Stolwijk AM, et al. **Epidemiology** 1996 Mar;7(2):156–60

The epidemiology of Q fever [letter] Pascual F, et al. **Eur Heart J** 1997 Jul;18(7):1190

The effects of two types of clothing on seasonal heat tolerance. Li X, et al. **Eur J Appl Physiol** 1996;72(4):287–91

Effect of seasonal ultraviolet radiation fluctuations on vitamin D homeostasis during an Antarctic expedition. Pitson GA, et al. **Eur J Appl Physiol** 1996;72(3):231–4

The impact of vitamin A supplementation on physical growth of children is dependent on season. Bahl R, et al. **Eur J Clin Nutr** 1997 Jan;51(1):26–9

Acute PTH response to oral calcium load and seasonal variation of vitamin D status in healthy young adult subjects. Guillemant J, et al. **Eur J Clin Nutr** 1996 Jul; 50(7):469–72

Seasonal variations in the kinetics of bupivacaine in the mouse. Attolini L, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jul–Sep; 21(3):257–60

Seasonal prevalences of Cryptosporidium and Giardia infections in children attending day care centres in Salamanca (Spain) studied for a period of 15 months. Rodríguez–Hernández J, et al. **Eur J Epidemiol** 1996 Jun; 12(3):291–5

Seasonal variation in the time to pregnancy: a secondary analysis of three Danish databases. Stolwijk AM, et al. **Eur J Epidemiol** 1996 Oct;12(5):437–41

Levocabastine eye drops in vernal conjunctivitis [letter] Bonini S, et al. **Eur J Ophthalmol** 1995 Oct–Dec;5(4):283–4

Seasonal variation in childhood asthma hospitalisations in Finland, 1972–1992. Harju T, et al. **Eur J Pediatr** 1997 Jun;156(6):436–9

Seasonal variation in community–acquired pneumonia. Lieberman D, et al. **Eur Respir J** 1996 Dec;9(12):2630–4

Seasonal variation in low density lipoprotein oxidation and antioxidant status. Van de Vijver LP, et al. **Free Radic Res** 1997 Jul;27(1):89–96

The influence of vehicle gavage on seasonality of immune system parameters in the B6C3F1 mouse. Dozier MM, et al. **Fundam Appl Toxicol** 1997 Aug;38(2):116–22

Photorefractoriness in European starlings (Sturnus vulgaris) is not dependent upon the long–day–induced rise in plasma thyroxine. Bentley GE, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):428–38

c–fos– and c–jun–like mRNA expression in frog (Rana esculenta) testis during the annual reproductive cycle. Cobellis G, et al. **Gen Comp Endocrinol** 1997 Apr; 106(1):23–9

Environmental factors and annual harderian–pineal–gonadal interrelationship in Indian jungle bush quail, Perdicula asiatica. Dubey S, et al. **Gen Comp Endocrinol** 1997 Apr; 106(1):17–22

Seasonal changes in gonadal activity and the effects of stress on reproductive hormones in the common snapping turtle, Chelydra serpentina. Mahmoud IY, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):359–72

Correlation among thermosensitive period, estradiol response, and gonad differentiation in the sea turtle Lepidochelys olivacea. Merchant–Larios H, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):373–85

Seasonal variation of LH, sex steroids, body mass, molt, display, and laying in two subspecies of Houbara bustard, Chlamydotis undulata macqueenii and Chlamydotis undulata undulata, housed in outdoor cages under natural conditions. Saint Jalme M, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):102–12

Annual cycle of plasma testosterone in male copperheads, Agkistrodon contortrix (Serpentes, Viperidae): relationship to timing of spermatogenesis, mating, and agonistic behavior. Schuett GW, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):417–24

A role for pancreatic hormones in the regulation of autumnal fat deposition of the garden warbler (Sylvia borin)? Totzke U, et al. **Gen Comp Endocrinol** 1997 Aug;107(2):166–71

Environmental control of the seasonal variations in the daily pattern of melatonin synthesis in the European hamster, Cricetus cricetus. Vivien–Roels B, et al. **Gen Comp Endocrinol** 1997 Apr;106(1):85–94

Plasma steroid profiles in nesting loggerhead turtles (Caretta caretta) in Queensland, Australia: relationship to nesting episode and season. Whittier JM, et al. **Gen Comp Endocrinol** 1997 Apr;106(1):39–47

The timing of thyroid–dependent programming in seasonally breeding male American tree sparrows (Spizella arborea). Wilson FE, et al. **Gen Comp Endocrinol** 1996 Jul; 103(1):82–92

Attenuation or absence of circadian and seasonal rhythms of acute myocardial infarction. Sayer JW, et al. **Heart** 1997 Apr;77(4):325–9

Seasonality and freezability vs routine parameters in stallion semen. Rodriguez H, et al. **Histol Histopathol** 1996 Apr; 11(2):427–30

Seasonal testicular function in male rhesus monkeys. Herndon JG, et al. **Horm Behav** 1996 Sep;30(3):266–71

Effects of gonadal sex steroids on sexual behavior in the big brown bat, Eptesicus fuscus, upon arousal from hibernation. Mendonça MT, et al. **Horm Behav** 1996 Jun;30(2):153–61

Annual patterns of luteinizing hormone, follicle stimulating hormone, testosterone and inhibin in normal men. Meriggiola MC, et al. **Hum Reprod** 1996 Feb;11(2):248–52

Seasonal prevalence of common anophelines in Sagar Island. Sarkar S, et al. **Indian J Malariol** 1996 Sep;33(3):154–8

Some host factors and seasonal variations in the fatal road traffic accidents occurring in eastern suburban Calcutta. Majumder B, et al. **Indian J Public Health** 1996 Apr–Jun; 40(2):46–9

Wheat threshing dust—a "new allergen" in April–May nasobronchial allergy. Lavasa S, et al. **Indian Pediatr** 1996 Jul;33(7):566–70

Clinical relevance of about–yearly changes in blood pressure and the environment. Halberg F, et al. **Int J Biometeorol** 1996 Nov;39(4):161–75 (150 ref.)

Oral temperatures of the elderly in nursing homes in summer and winter in relation to activities of daily living. Nakamura K, et al. **Int J Biometeorol** 1997 Apr;40(2):103–6

Changes in human blood pressure with season, age and solar cycles: a 26 year record. Portela A, et al. **Int J Biometeorol** 1996 Nov;39(4):176–81

Seasonal variation in the incidence of hypertension and coronary artery disease [letter] Narang R, et al. **Int J Cardiol** 1996 Sep;56(1):90–2

Seasonal variations in the severity of acne vulgaris. Gfesser M, et al. **Int J Dermatol** 1996 Feb;35(2):116–7

Characterization of the "seasonal" bulimic patient. Levitan RD, et al. **Int J Eat Disord** 1996 Mar;19(2):187–92

Mortality as a function of temperature. A study in Valencia, Spain, 1991–1993. Ballester F, et al. **Int J Epidemiol** 1997 Jun;26(3):551–61

Analysis of seasonal data using the Lorenz curve and the associated Gini index. Lee WC. **Int J Epidemiol** 1996 Apr; 25(2):426–34

Air population and mortality in East Berlin during the winters of 1981–1989. Rahlenbeck SI, et al. **Int J Epidemiol** 1996 Dec;25(6):1220–6

The effect of season–of–response to ISAAC questions about asthma, rhinitis and eczema in children. Stewart AW, et al. **Int J Epidemiol** 1997 Feb;26(1):126–36

Effects of both a melatonin agonist and antagonist on seasonal changes in body mass and energy intake in the garden dormouse. Le Gouic S, et al. **Int J Obes Relat Metab Disord** 1996 Jul;20(7):661–7

Epizootiology of protozoans in farmed salmonids at northern latitudes. Rintamäki–Kinnunen P, et al. **Int J Parasitol** 1997 Jan;27(1):89–99

Micrometastases to the axilla in breast cancer: their size and season of presentation. Hartveit F. **Invasion Metastasis** 1996;16(3):144–9

Weekly and seasonal variation in sexual behaviors among adolescent women with sexually transmitted diseases. Fortenberry JD, et al. **J Adolesc Health** 1997 Jun; 20(6):420–5

Seasonality prevalence and incidence of depressive disorder in a general practice sample: identifying differences in timing by caseness. Blacker CV, et al. **J Affect Disord** 1997

Mar;43(1):41–52
Seasonal variation in postdexamethasone cortisol values in depressed inpatients. Results of least squares cosine spectral analysis. Maes M, et al. **J Affect Disord** 1997 Jun;44(1):5–12
The Seasonal Pattern Assessment Questionnaire for identifying seasonal affective disorders. Raheja SK, et al. **J Affect Disord** 1996 Dec 16;41(3):193–9
Nonaffective seasonality [letter] Harrison SI. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):163–4
Is season of birth a risk factor for attention-deficit hyperactivity disorder? Mick E, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1470–6
Seasonal pattern of acute myocardial infarction in the National Registry of Myocardial Infarction. Ornato JP, et al. **J Am Coll Cardiol** 1996 Dec;28(7):1684–8
Seasonal abundance and distribution of mosquitoes at a rural waste tire site in Illinois. Lampman R, et al. **J Am Mosq Control Assoc** 1997 Jun;13(2):193–200
Effect of supplemental pig milk replacer on litter performance: seasonal variation in response. Azain MJ, et al. **J Anim Sci** 1996 Sep;74(9):2195–202
Efficiency of production in cattle of two growth potentials on northern great plains rangelands during spring–summer grazing. Grings EE, et al. **J Anim Sci** 1996 Oct; 74(10):2317–26
Forage intake by and site and extent of digestion in beef cattle grazing midgrass prairie rangeland or plains bluestem pasture throughout the summer. Gunter SA, et al. **J Anim Sci** 1997 Feb;75(2):490–501
Effects of dietary fat and season on steroid hormonal profiles before parturition and on hormonal, cholesterol, triglycerides, follicular patterns, and postpartum reproduction in Brahman cows. Lammoglia MA, et al. **J Anim Sci** 1996 Sep;74(9):2253–62
Radiotelemetry measurement of body temperatures of feedlot steers during summer. Lefcourt AM, et al. **J Anim Sci** 1996 Nov;74(11):2633–40
Use of melengestrol acetate-based treatments to induce and synchronize estrus in seasonally anestrous ewes. Powell MR, et al. **J Anim Sci** 1996 Oct;74(10):2292–302
Genetic variation and covariation for ewe reproduction, lamb growth, and lamb scrotal circumference in a fall–lambing sheep flock. al-Shorepy SA, et al. **J Anim Sci** 1996 Jul; 74(7):1490–8
Effects of time of weaning, supplement, and sire breed of calf during the fall grazing period on cow and calf performance. Short RE, et al. **J Anim Sci** 1996 Jul; 74(7):1701–10
Prolactin, gonadotropin, and hair shedding responses to daily sulpiride administration in geldings in winter. Thompson DL Jr, et al. **J Anim Sci** 1997 Apr;75(4):1087–91
Prolactin administration to seasonally anestrous mares: reproductive, metabolic, and hair-shedding responses. Thompson DL Jr, et al. **J Anim Sci** 1997 Apr;75(4):1092–9
Effect of endurance training and seasonal fluctuation on coagulation and fibrinolysis in young sedentary men. van den Burg PJ, et al. **J Appl Physiol** 1997 Feb;82(2):613–20
Correlation of rainfall with upsurge of malaria in Rajasthan. Gupta R. **J Assoc Physicians India** 1996 Jun;44(6):385–9
Photoperiodism in hamsters: abrupt versus gradual changes in day length differentially entrain morning and evening circadian oscillators. Gorman MR, et al. **J Biol Rhythms** 1997 Apr;12(2):122–35
Seasonal timing of reproduction in a tropical bird, the Seychelles warbler: a field experiment using translocation. Komdeur J. **J Biol Rhythms** 1996 Dec;11(4):333–46
Healthy elderly French women living at home have secondary hyperparathyroidism and high bone turnover in winter. EPIDOS Study Group. Chapuy MC, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1129–33
Long-term patterns in seasonality of insulin-dependent diabetes mellitus diagnosis in Austrian children. Waldhoer T, et al. **J Clin Epidemiol** 1997 Feb;50(2):159–65
A case of seasonal trichotillomania [letter] Feldman-Naim S, et al. **J Clin Psychiatry** 1997 May;58(5):218–9
Seasonal variations of culicine mosquitoes in district Rohtak. Gakhar SK, et al. **J Commun Dis** 1996 Sep;28(3):199–205
Changing patterns of Vibrio cholerae isolation over three consecutive cholera seasons (1992–1994) in east Delhi. Rudra S, et al. **J Commun Dis** 1997 Mar;29(1):15–22
Appropriate season for measles immunisation campaign in India. Singh J, et al. **J Commun Dis** 1995 Sep;27(3):164–9 (44 ref.)
Seasonal variation in the resting metabolic rate of male wood mice Apodemus sylvaticus from two contrasting habitats 15 km apart. Corp N, et al. **J Comp Physiol [B]** 1997 Apr; 167(3):229–39
Summer torpor in African woodland dormice Graphiurus murinus (Myoxidae:Graphiurinae). Webb PI, et al. **J Comp Physiol [B]** 1996;166(5):325–30
Effect of season of birth on milk, fat, and protein production of Israeli Holsteins. Barash H, et al. **J Dairy Sci** 1996 Jun; 79(6):1016–20
Seasonal effects of supplemental fat or undegradable protein on the growth and metabolism of Holstein calves. Bunting LD, et al. **J Dairy Sci** 1996 Sep;79(9):1611–20
Yield, composition, and in vitro digestibility of temperate and tropical corn hybrids grown as silage crops planted in summer. Johnson JC Jr, et al. **J Dairy Sci** 1997 Mar; 80(3):550–7
Diarrhoea associated with Candida spp.: incidence and seasonal variation. Chaudhury A, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):110–2
Epidemic carbon monoxide poisoning following a winter storm [see comments] Houck PM, et al. **J Emerg Med** 1997 Jul–Aug;15(4):469–73. Comment in: J Emerg Med 1997 Jul–Aug;15(4):531–2.
Carbon monoxide poisoning during ice storms: a tale of two cities [see comments] Wrenn K, et al. **J Emerg Med** 1997 Jul–Aug;15(4):465–7. Comment in: J Emerg Med 1997 Jul–Aug;15(4):531–2.
Influence of melatonin and oestradiol on the opioidergic regulation of LH and prolactin release in pony mares. Aurich C, et al. **J Endocrinol** 1997 Aug;154(2):241–8
The localisation and characterisation of insulin-like growth factor-I receptors and the investigation of melatonin receptors on the hair follicles of seasonal and non-seasonal fibre-producing goats. Dicks P, et al. **J Endocrinol** 1996 Oct;151(1):55–63
Initiation of the oestradiol-induced inhibition of pulsatile LH secretion in ewes under long days: comparison of peripheral versus central treatment and neurochemical correlates. Gallegos-Sanchez J, et al. **J Endocrinol** 1996 Oct; 151(1):19–28
Effects of season, protein and nutritional state on glucose tolerance during an annual cycle of growth in young red deer stags. McMahon CD, et al. **J Endocrinol** 1997 Aug; 154(2):275–83
There is still seasonality in sudden infant death syndrome in England and Wales. Julious SA. **J Epidemiol Community Health** 1997 Feb;51(1):101–2
Seasonal changes in circulating serum concentration and in vitro testicular secretion of testosterone and androstenedione in the male vespertilionid bat (Scotophilus heathi). Singh K, et al. **J Exp Zool** 1996 Sep 1;276(1):43–52
Seasonal exposure to NO2 and respiratory symptoms in preschool children. Mukala K, et al. **J Expo Anal Environ Epidemiol** 1996 Apr–Jun;6(2):197–210
Seasonal incidence of insect stings: autumn 'yellow jacket delirium'. Bischof RO. **J Fam Pract** 1996 Sep;43(3):271–3
Seasonal variations in lower extremity amputation. Armstrong DG, et al. **J Foot Ankle Surg** 1997 Mar–Apr; 36(2):146–50
Seasonal onset of bronchiolitis obliterans syndrome in lung transplant recipients. Hohlfeld J, et al. **J Heart Lung Transplant** 1996 Sep;15(9):888–94
Seasonal variations in office, home and 24 h ambulatory blood pressure in patients with essential hypertension. Minami J, et al. **J Hypertens** 1996 Dec;14(12):1421–5
Adverse effects of summer amongst people with learning disabilities: neuroleptic malignant syndrome. Fitzgerald B, et al. **J Intellect Disabil Res** 1997 Jun;41 (Pt 3):273–7
Annual and diurnal incidence of Cladosporium conidia in the atmosphere of Córdoba, Spain. Mediavilla Molina A, et al. **J Investig Allergol Clin Immunol** 1997 May–Jun; 7(3):179–82
Importance of supercooling points in the overwintering of the horn fly and stable fly (Diptera:Muscidae). Jones SR, et al. **J Med Entomol** 1997 Jul;34(4):426–9
Roles of photoperiod and testosterone in seasonal plasticity of the avian song control system. Smith GT, et al. **J Neurobiol** 1997 Apr;32(4):426–42
Melatonin and seasonality: filling the gap [letter; comment] Hastings M. **J Neuroendocrinol** 1996 Jun;8(6):482–6. Comment on: J Neuroendocrinol 1995 Nov;7(11):889–95.
Seasonal changes in testosterone, neural attributes of song control nuclei, and song structure in wild songbirds. Smith GT, et al. **J Neurosci** 1997 Aug 1;17(15):6001–10
Seasonal onset of systemic-onset juvenile rheumatoid arthritis. Feldman BM, et al. **J Pediatr** 1996 Oct; 129(4):513–8
Effects of melatonin implants on winter fur growth and testicular recrudescence in adult male raccoon dogs (Nyctereutes procyonoides). Xiao Y, et al. **J Pineal Res** 1996 Apr;20(3):148–56
Seasonal variations in refractive results following excimer laser photorefractive keratectomy. Chatterjee A, et al. **J Refract Surg** 1997 Aug;13(5 Suppl):S447–9
Seasonal spermatogenesis and testosterone production in roe deer (Capreolus capreolus). Blottner S, et al. **J Reprod Fertil** 1996 Nov;108(2):299–305
Delayed development in the short-tailed fruit bat, Carollia perspicillata. Rasweiler JJ 4th, et al. **J Reprod Fertil** 1997 Jan;109(1):7–20
Influence of breeding season and reproductive status on male reproductive characteristics in the common mole-rat, Cryptomys hottentotus hottentotus. Spinks AC, et al. **J Reprod Fertil** 1997 Jan;109(1):79–86
Variation in the ability of a long day followed by a short day photoperiod signal to initiate reproductive activity in ewes at different times of the year. Sweeney T, et al. **J Reprod Fertil** 1997 Jan;109(1):121–7
Seasonal changes in spermatogenesis and testicular steroidogenesis in the male black bear Ursus americanus. Tsubota T, et al. **J Reprod Fertil** 1997 Jan;109(1):21–7
A survey of reproductive parameters in the free-ranging chimpanzees of Gombe National Park. Wallis J. **J Reprod Fertil** 1997 Mar;109(2):297–307
Seasonal covariation of the circadian phases of rectal temperature and slow wave sleep onset. Van Dongen HP, et al. **J Sleep Res** 1997 Mar;6(1):19–25
Regulation of complex host dynamics by a macroparasite. White KA, et al. **J Theor Biol** 1997 May 7;186(1):81–91
Seasonal changes in the immunolocalization of steroidogenic enzymes in the testes of the Japanese black bear (Ursus thibetanus japonicus). Komatsu T, et al. **J Vet Med Sci** 1997 Jul;59(7):521–9
Changing seasonality of mortality from coronary heart disease. Seretakis D, et al. **JAMA** 1997 Sep 24; 278(12):1012–4
Seasonal variations in the rupture of abdominal aortic aneurysms. Manfredini R, et al. **Jpn Heart J** 1997 Jan; 38(1):67–72
Seasonal variation in the correlation of testicular and epididymal weight-dimensions in the red Sokoto goat and white Yankassa ram [published erratum appears in Kaibogaku Zasshi 1996 Apr;71(2):138] Nwoha PU. **Kaibogaku Zasshi** 1996 Feb;71(1):09–14
Collection of seasonally spermatozoa-rich semen by electroejaculation of laboratory woodchucks (Marmota monax), with and without removal of bulbourethral glands. Concannon P, et al. **Lab Anim Sci** 1996 Dec;46(6):667–75
Cold exposure and winter mortality from ischaemic heart disease, cerebrovascular disease, respiratory disease, and all causes in warm and cold regions of Europe. The Eurowinter Group [see comments] **Lancet** 1997 May 10; 349(9062):1341–6. Comment in: Lancet 1997 May 10;349(9062):1335. Comment in: Lancet 1997 May 10;349(9062):1337–8. Comment in: Lancet 1997 Aug 23;350(9077):590–1; discussion 591–2. Comment in: Lancet 1997 Aug 23;350(9077):591. Comment in: Lancet 1997 Aug 23;350(9077):591; discussion 591–2.
Cold exposure and winter mortality in Europe [letter; comment] Bobak M. **Lancet** 1997 Aug 23;350(9077):591. Comment on: Lancet 1997 May 10;349(9062):1341–6.
Cold exposure and winter mortality in Europe [letter; comment] MacKenzie MA. **Lancet** 1997 Aug 23; 350(9077):590–1; discussion 591–2. Comment on: Lancet 1997 May 10;349(9062):1341–6.
Cold exposure and winter mortality in Europe [letter; comment] Mather K, et al. **Lancet** 1997 Aug 23; 350(9077):591; discussion 591–2. Comment on: Lancet 1997 May 10;349(9062):1341–6.
Mind over matter about keeping warm [comment] Sperber AD, et al. **Lancet** 1997 May 10;349(9062):1337–8. Comment on: Lancet 1997 May 10;349(9062):1341–6.
Infectious mononucleosis and Hodgkin's disease—a similar seasonality. Douglas AS, et al. **Leuk Lymphoma** 1996 Oct; 23(3–4):323–31
Month-of-birth and incidence of acute lymphoblastic leukemia in children. Meltzer AA, et al. **Leuk Lymphoma** 1996 Sep;23(1–2):85–92
Seasonal synchronicity and stage-specific life cycles: Topp's beetles revisited. Grist EP, et al. **Math Biosci** 1997 Oct 1;145(1):1–25
Infectious disease persistence when transmission varies seasonally. Williams BG, et al. **Math Biosci** 1997 Oct 1; 145(1):77–88
Photoperiodicity and annual rhythms of wars and violent crimes. Schreiber G, et al. **Med Hypotheses** 1997 Jan; 48(1):89–96
Skin disease in British troops in the Bosnian winter. Smith HR, et al. **Mil Med** 1997 Aug;162(8):548–50
Juvenile spring eruption is a variant of polymorphic light eruption [letter; comment] Hawk J. **N Z Med J** 1996 Oct 11;109(1031):389. Comment on: N Z Med J 1996 Aug 9;109(1027):293–5.
Stochastic seasonality and nonlinear density-dependent factors regulate population size in an African rodent. Leirs H, et al. **Nature** 1997 Sep 11;389(6647):176–80
Season of birth predicts mortality in rural Gambia [letter] Moore SE, et al. **Nature** 1997 Jul 31;388(6641):434
Seasonal variation in neuroendocrine and mood responses to i.v. L-tryptophan in depressed patients and healthy subjects. Cappiello A, et al. **Neuropsychopharmacology** 1996 Nov;15(5):475–83
Seasonal variation in platelet [3H]paroxetine binding in healthy volunteers. Relationship to climatic variables. D'Hondt P, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):187–98
Dependence of synaptic facilitation postsynaptically induced in snail neurones on season and serotonin level. Malyshev A, et al. **Neuroreport** 1997 Mar 24;8(5):1179–82
Seasonal variation in the secretory activity of the subcommissural organ (SCO) of reptiles. Cifuentes M, et al. **Neurosci Lett** 1996 Nov 15;219(1):9–12
Reproducibility of a self-administered diet history questionnaire administered three times over three different seasons. Hartman AM, et al. **Nutr Cancer** 1996;25(3):305–15
Seasonal dynamics of the Karoo paralysis tick (Ixodes rubicundus): a comparative study on Merino and Dorper sheep. Fourie LJ, et al. **Onderstepoort J Vet Res** 1996 Dec; 63(4):273–6
Month of birth as an independent variable in the sudden infant death syndrome. Douglas AS, et al. **Paediatr Perinat Epidemiol** 1997 Jan;11(1):57–66
Month of birth, atopic disease, and sensitization to common aeroallergens in Greece. Karachaliou FH, et al. **Pediatr Allergy Immunol** 1995 Nov;6(4):216–9
Infantile spasms: seasonal onset differences and zeitgebers. Cortez MA, et al. **Pediatr Neurol** 1997 Apr;16(3):220–4
Effects of ambient ozone exposures during the spring and summer of 1994 on pulmonary function of schoolchildren. Ulmer C, et al. **Pediatr Pulmonol** 1997 May;23(5):344–53
The temporal distribution of suicides in Baton Rouge.

Campbell F, et al. **Percept Mot Skills** 1996 Aug;83(1):14
Depression and suicide in the dark months. Kunz PR, et al. **Percept Mot Skills** 1997 Apr;84(2):537–8
Seasonal variation in American Indian suicide. Lester D. **Percept Mot Skills** 1997 Feb;84(1):46
Seasonal depression and conception. Lester D. **Percept Mot Skills** 1997 Aug;85(1):286
Geophysical variables and behavior: LXXXII. A strong association between sudden infant death syndrome and increments of global geomagnetic activity—possible support for the melatonin hypothesis. O'Connor RP, et al. **Percept Mot Skills** 1997 Apr;84(2):395–402
Seasonal variation in urocanic acid isomers in human skin. de Fine Olivarius F, et al. **Photochem Photobiol** 1997 Jul; 66(1):119–23
Running–induced testicular recrudescence in the meadow vole: role of the circadian system. Kerbeshian MC, et al. **Physiol Behav** 1996 Jul;60(1):165–70
Grooming secretions and seasonal adaptations in the blind mole rat (Spalax ehrenbergi). Shanas U, et al. **Physiol Behav** 1996 Aug;60(2):653–6
Circadian and circaannual oscillations of tissue lipoperoxides in rats. Solár P, et al. **Physiol Res** 1995;44(4):249–56
Body temperatures and activity patterns of Tasmanian devils (Sarcophilus harrisii) and eastern quolls (Dasyurus viverrinus) through a subalpine winter. Jones ME, et al. **Physiol Zool** 1997 Jan–Feb;70(1):53–60
The ratio of amount of haemoglobin to total surface area of erythrocytes in birds in relation to body mass, age of nestlings, and season of the year. Kostelecka–Myrcha A. **Physiol Zool** 1997 May–Jun;70(3):278–82
Seasonal variations in the temperature acclimation response of the channel catfish, Ictalurus punctatus. Seddon WL, et al. **Physiol Zool** 1997 Jan–Feb;70(1):33–44
Seasonal adjustment of solar heat gain independent of coat coloration in a desert mammal. Walsberg GE, et al. **Physiol Zool** 1997 Mar–Apr;70(2):150–7
Campylobacter jejuni seasonal recovery observations of retail market broilers. Willis WL, et al. **Poult Sci** 1997 Feb; 76(2):314–7
Age, breed, sex and seasonality as risk factors for equine laminitis. Polzer J, et al. **Prev Vet Med** 1997 Jan; 29(3):179–84
A 'clock for all seasons' in the human brain. Wehr TA. **Prog Brain Res** 1996;111:321–42 (32 ref.)
Season of birth and schizophrenia: sex difference. Dassa D, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Feb;20(2):243–51
Seasonal variation in levels of prostaglandins D2, E2 and F2(alpha) in the brain of a mammalian hibernator, the Asian chipmunk. Takahata R, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Jan; 54(1):77–81
Seasonal alteration in taste detection and recognition threshold in seasonal affective disorder: the proximate source of carbohydrate craving. Arbisi PA, et al. **Psychiatry Res** 1996 Jan 31;59(3):171–82
Relationship of birth season to clinical features, family history, and obstetric complication in schizophrenia. Dassa D, et al. **Psychiatry Res** 1996 Aug 30;64(1):11–7
Seasonal variation of suicide in South Africa. Flisher AJ, et al. **Psychiatry Res** 1997 Jan 15;66(1):13–22
Prevalence of seasonal changes in mood and behavior during the winter months in central Texas. Hegde AL, et al. **Psychiatry Res** 1996 Jun 1;62(3):265–71
Seasonality and pituitary volume. Schwartz PJ, et al. **Psychiatry Res** 1997 Jul 4;74(3):151–7
Prevention of winter seasonal affective disorder by bright–light treatment. Partonen T, et al. **Psychol Med** 1996 Sep;26(5):1075–80
Influence of season on manifestation of schizophrenic subtypes. Sperling W, et al. **Psychopathology** 1997; 30(4):200–7
Seasonal changes in immune function. Nelson RJ, et al. **Q Rev Biol** 1996 Dec;71(4):511–48 (270 ref.)
Seasonal variation in serum eosinophilic cationic protein (S–ECP) in a general population sample. Janson C, et al. **Respir Med** 1997 Jul;91(6):347–9
Seasonal influence in exacerbations of inflammatory bowel disease. Vergara M, et al. **Rev Esp Enferm Dig** 1997 May; 89(5):357–66 **(Eng, Spa)**
Epidemiological aspects of the Brazilian spotted fever: seasonal activity of ticks collected in an endemic area in São Paulo, Brazil. de Lemos ER, et al. **Rev Soc Bras Med Trop** 1997 May–Jun;30(3):181–5
The effect of season and latitude on in vitro vitamin D formation by sunlight in South Africa. Pettifor JM, et al. **S Afr Med J** 1996 Oct;86(10):1270–2
Components of biological variation in serum soluble transferrin receptor: relationships to serum iron, transferrin and ferritin concentrations, and immune and haematological variables. Maes M, et al. **Scand J Clin Lab Invest** 1997 Feb;57(1):31–41
Seasonal change in the exacerbations of Crohn's disease. Zeng L, et al. **Scand J Gastroenterol** 1996 Jan;31(1):79–82
Month of birth and schizophrenia in Taiwan: effect of gender, family history and age at onset. Chen WJ, et al. **Schizophr Res** 1996 May;20(1–2):133–43
VBR in schizophrenia: relationship to family history of psychosis and season of birth [published erratum appears in Schizophr Res 1997 May 24;25(2):167] DeQuardo JR, et al. **Schizophr Res** 1996 Jul 5;20(3):275–85 (60 ref.)
Birth seasonality in bipolar disorder, schizophrenia, schizoaffective disorder and stillbirths. Torrey EF, et al. **Schizophr Res** 1996 Sep 18;21(3):141–9
Seasonality of birth in schizophrenia: the effect of regional population density. Verdoux H, et al. **Schizophr Res** 1997 Feb 7;23(2):175–80
Occurrence of organochlorines (PCBs, pesticides) and herbicides (triazines, phenylureas) in the atmosphere and in the fallout from urban and rural stations of the Paris area. Chevreuil M, et al. **Sci Total Environ** 1996 Apr 5; 182(1–3):25–37
Season of birth: aetiological implications for epilepsy. Procopio M, et al. **Seizure** 1997 Apr;6(2):99–105
Does a subtropical climate imply a seasonal rhythm in REM sleep? Askenasy JJ, et al. **Sleep** 1995 Dec;18(10):895–900
Seasonal variations of household costs of illness in Burkina Faso. Sauerborn R, et al. **Soc Sci Med** 1996 Aug; 43(3):281–90
Role of some environmental factors in modulating seasonal abundance of potential Japanese encephalitis vectors in Assam, India. Khan SA, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):382–91
Incidence of HIV–related deaths in the United States: seasonality and trend. Bacchetti P. **Stat Med** 1997 Mar 30; 16(6):645–52
Circadian and circannual rhythmicity in the occurrence of subarachnoid hemorrhage. Gallerani M, et al. **Stroke** 1996 Oct;27(10):1793–7
Seasonal variation in the occurrence of stroke in a Finnish adult population. The FINMONICA Stroke Register. Finnish Monitoring Trends and Determinants in Cardiovascular Disease. Jakovljević D, et al. **Stroke** 1996 Oct;27(10):1774–9
Seasonality of tuberculosis [letter; comment] Davies PD. **Thorax** 1997 Apr;52(4):398. Comment on: Thorax 1996 Sep;51(9):944–6.
Seasonality of tuberculosis: the reverse of other respiratory diseases in the UK [see comments] Douglas AS, et al. **Thorax** 1996 Sep;51(9):944–6. Comment in: Thorax 1997 Apr;52(4):398.
Acute effects of summer air pollution on respiratory function in primary school children in southern England. Scarlett JF, et al. **Thorax** 1996 Nov;51(11):1109–14
Seasonal change in nutritional status among young children in an urban shanty town in Peru. Marín CM, et al. **Trans R Soc Trop Med Hyg** 1996 Jul–Aug;90(4):442–5
Seasonal fluctuation of ixodid ticks on a herd of indigenous goats at Oodi, Kgatleng district, Botswana. Mushi EZ, et al. **Trop Anim Health Prod** 1997 Feb;29(1):29–30
Seasonal differences and the role of shoe–wearing in western Ethiopia [letter] Adish AA, et al. **Trop Doct** 1996 Oct; 26(4):196–7
Seasonal changes in the level of infective strongylate nematode larvae on pasture in the coastal savanna regions of Ghana. Agyei AD. **Vet Parasitol** 1997 Jun; 70(1–3):175–82
Different seasonal occurrence of anaplasmosis outbreaks in beef and diary cattle in an area of Argentina free of Boophilus microplus ticks. Guglielmone AA, et al. **Vet Q** 1997 Mar;19(1):32–3
The seasonal prevalence of Haemonchus species in Red Sokoto (Maradi) goats in Nigeria. Nwosu CO, et al. **Vet Res Commun** 1996;20(4):367–70
[Manic–depressives, time of birth, time of onset. An epidemiological study] Gisselmann A, et al. **Ann Med Psychol (Paris)** 1995 Dec;153(10):707–11 **(Fre)**
[Season of birth, obstetric complications and schizophrenia] Dassa D, et al. **Encephale** 1996 Oct;22 Spec No 3:9–12 **(Fre)**
[Influence of seasons on risk of flare–up of systemic lupus: retrospective study of 66 patients] Léone J, et al. **Rev Med Interne** 1997;18(4):286–91 (Eng. Abstr.) **(Fre)**
[The effect of the season and sexual stress on the concentration of testosterone and estradiol–17beta in the seminal plasma of stallions] Braun J, et al. **Tierarztl Prax** 1996 Dec;24(6):577–80 (Eng. Abstr.) **(Ger)**
[The period of termination of nasal symptoms in Japanese cedar pollinosis patients and factors participating in the termination of symptoms] Ito Y, et al. **Arerugi** 1996 Dec; 45(12):1277–84 (Eng. Abstr.) **(Jpn)**
[Yearly and seasonal fluctuation of PCB concentration in skin surface lipid] Watanabe M, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):205–6 (Eng. Abstr.) **(Jpn)**
[The efficiency of alprazolam for seasonal affective disorder (SAD, autumn/winter type)] Yamadera H, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb;64(1):53–6 (Eng. Abstr.) **(Jpn)**
[Summer–type hypersensitivity pneumonitis in a family] Kawayama T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec; 34(12):1401–5 (Eng. Abstr.) **(Jpn)**
[Seasonal changes of laboratory data in patients with Japanese cedar pollinosis] Fujiwara H, et al. **Rinsho Byori** 1997 May; 45(5):487–92 (Eng. Abstr.) **(Jpn)**
[Intra–individual and seasonal variations of thyroid function tests in healthy subjects] Nishi I, et al. **Rinsho Byori** 1996 Feb;44(2):159–62 (Eng. Abstr.) **(Jpn)**
[Daily number of births in Norway 1989–93. Variations across months, day of week, phase of the moon and changes in leave entitlements] Ytterstad E, et al. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1098–101 (Eng. Abstr.) **(Nor)**
[Influenza activity in the 1995–1996 season. I. An evaluation of the epidemiological surveillance system] Ion–Nedelcu N, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jul–Dec;41(3–4):107–13 **(Rum)**
[An immunogenicity and reactogenicity study of a purified, inactivated trivalent influenza vaccine for parenteral administration prepared for the 1996–1997 season (letter)] Lupulescu E, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan–Jun; 42(1–2):110–2 **(Rum)**
[Melatonin biosynthesis in the epiphysis during early postnatal ontogenesis in healthy persons and in patients with hereditary retinal degeneration] Pozdeev NV, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):131–4 **(Rus)**
[Seasonal changes in brain synaptosomal membrane lipids in the ground squirrel Citellus undulatus] Kolomiitseva IK, et al. **Dokl Akad Nauk** 1997 Jan;352(3):413–5 **(Rus)**
[The effect of the duration of the stay in the north on the blood serum lipid profile during the polar night] Boĭko ER, et al. **Fiziol Cheloveka** 1997 May–Jun;23(3):75–81 **(Rus)**
[Functional state of the temperature analyzer of operators in the gas condensation industry under conditions of hot climate] Khudaĭberdiev MD, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):20–4 **(Rus)**
[Phenotypic and genotypic structure of a natural Drosophila population with respect to the reaction of individuals to an increase in population density and its seasonal change] Grechanyĭ GV, et al. **Genetika** 1996 Oct;32(10):1341–8 (Eng. Abstr.) **(Rus)**
[Seasonal changes in the resistance of a Drosophila population to low temperatures and their association with fertility] Grechanyĭ GV, et al. **Genetika** 1997 Apr; 33(4):464–70 (Eng. Abstr.) **(Rus)**
[The reaction of adult Roborovskii dwarf hamsters (Phodopus roborovskii) to the odor signals of individuals of their own and the opposite sex at different seasons of the year] Sokolov VE, et al. **Izv Akad Nauk Ser Biol** 1996 Sep–Oct;(5):578–82 (Eng. Abstr.) **(Rus)**
[The season of possible malaria transmission by Anopheles claviger and Anophlese messeae mosquitoes in the Chu River valley of the Kyrgyz Republic] Bublikova LI, et al. **Med Parazitol (Mosk)** 1997 Apr–Jun;(2):30–2 (Eng. Abstr.) **(Rus)**
[Seasonality and population mortality] Ovcharov VK, et al. **Probl Sotsialnoi Gig Istor Med** 1994 Sep–Oct;(5):19–23 (Eng. Abstr.) **(Rus)**
[The seasonal patterns of surgical morbidity of the maxillofacial area under the climatic conditions of the city of Derbent] Bakhmudov BR. **Stomatologiia (Mosk)** 1997; 76(1):60–3 (Eng. Abstr.) **(Rus)**
[Seasonal dynamics of the content of proteins inhibiting trypsin–like proteases in the leaves of common oak (Quercus petraea Liebl.)] Medvedkov AA, et al. **Ukr Biokhim Zh** 1996 Nov–Dec;68(6):44–50 (Eng. Abstr.) **(Rus)**
[Seasonality and psychiatric emergencies] Díaz RJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Sep–Oct;24(5):253–9 (43 ref.) (Eng. Abstr.) **(Spa)**
[Seasonal differences in neonatal jaundice] González de Dios J, et al. **An Esp Pediatr** 1996 Oct;45(4):403–8 (Eng. Abstr.) **(Spa)**
[Metereology and health. The relationship between environmental temperature and mortality] Ballester Díez F. **Rev Esp Salud Publica** 1996 May–Jun;70(3):251–9 (Eng. Abstr.) **(Spa)**
[Determination of 25–hydroxyvitamin D serum levels and its seasonal variations in healthy young people] Aguirre C, et al. **Rev Med Chil** 1996 Jun;124(6):675–9 (Eng. Abstr.) **(Spa)**
[Seasonal variation in mortality in the city of Valencia, Spain] Ballester–Díez F, et al. **Salud Publica Mex** 1997 Mar–Apr; 39(2):95–101 (Eng. Abstr.) **(Spa)**
[Endocrine function of the testicle in the Mexican crossbred ram at different times of the year and its opioidergic control during anoestrus] Fuentes V, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):259–63 (Eng. Abstr.) **(Spa)**
[An analysis of the seasonal differences in the reaction of the hypothalamo–hypophyseal–ovarian system to the light regimen of the housing of animals after destruction of the lateral septal nucleus] Slavetna OV, et al. **Fiziol Zh** 1997; 43(1–2):23–30 (Eng. Abstr.) **(Ukr)**

SEAT BELTS

see related
AIR BAGS

Child safety seat misuse patterns in four states. Decina LE, et al. **Accid Anal Prev** 1997 Jan;29(1):125–32
A comparison of two direct–observation methods for measuring daytime safety belt use. Eby DW, et al. **Accid Anal Prev** 1996 May;28(3):403–7
Light vehicle occupant ejections—a comprehensive investigation. Malliaris AC, et al. **Accid Anal Prev** 1996 Jan;28(1):1–14 (9 ref.)
Farm tractors, and the use of seat belts and roll–over protective structures. Kelsey TW, et al. **Am J Ind Med** 1996 Oct;30(4):447–51
High levels of incorrect use of car seat belts and child

restraints in Fife—an important and under-recognised road safety issue. Campbell H, et al. **Inj Prev** 1997 Mar; 3(1):17-22

General practitioners knowledge of and attitudes to the use of seat belts in pregnancy. Wallace C. **Ir Med J** 1997 Mar; 90(2):63-4

Pediatric chance fractures from lapbelts: unique case report of three in one accident. Voss L, et al. **J Orthop Trauma** 1996;10(6):421-8

Shoulder belt anchor location influences on wheelchair occupant crash protection. Bertocci G, et al. **J Rehabil Res Dev** 1996 Jul;33(3):279-89

"Eggs-perimenting" with seat belt safety. Wood DN. **J Sch Health** 1996 Feb;66(2):79-80

Seat-belt use and relation to neurologic injury in motor vehicle crashes. Sasso RC, et al. **J Spinal Disord** 1997 Aug; 10(4):325-8

Liver injuries and two-point shoulder restraints: case report and discussion. Jolly BT, et al. **J Trauma** 1997 Jun; 42(6):1144-7

Airbag protection versus compartment intrusion effect determines the pattern of injuries in multiple trauma motor vehicle crashes. Loo GT, et al. **J Trauma** 1996 Dec; 41(6):935-51

Air bags alone compared with the combination of mechanical restraints and air bags: implications for the emergency evaluation of crash victims. Sutyak JP, et al. **South Med J** 1997 Sep;90(9):915-9

ADVERSE EFFECTS

Cervical seat belt sign after motor vehicle collision [letter] Riviello RJ, et al. **Acad Emerg Med** 1997 Apr;4(4):335-7

Multiple noncontiguous injuries of the spine in a child: atlantooccipital dislocation and seat-belt injury of the lumbar spine. Vedantam R, et al. **Acta Orthop Belg** 1997 Mar;63(1):23-7

Pediatric seat belt injuries. Smith MD 2nd, et al. **Am Surg** 1997 Mar;63(3):294-8

Cardiac involvement in seat belt-related and direct sternal trauma: a prospective study in management implications. Erbel R. **Eur Heart J** 1995 Nov;16(11):1742-3

Traumatic intervertebral incarceration of ileum: a unique lap belt injury. Patterson R, et al. **Injury** 1996 Oct;27(8):596-8

Mechanisms of thoracic injury in frontal impact. Yoganandan N, et al. **J Biomech Eng** 1996 Nov;118(4):595-7

Clinical image. Shoulder harness seatbelt injury: CT appearance of hepatic avulsion with active arterial hemorrhage. Steinberg ML, et al. **J Comput Assist Tomogr** 1996 Nov-Dec;20(6):938-9

The use of laparoscopy in the management of seat belt trauma in children. VanderKolk WE, et al. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S45-9

Traumatic gastric transection: a case report. Kimmins MH, et al. **J Pediatr Surg** 1996 Jun;31(6):757-8

Intestinal stricture following seat belt injury in children. Lynch JM, et al. **J Pediatr Surg** 1996 Oct;31(10):1354-7 (13 ref.)

Seat belt placement resulting in uterine rupture. Astarita DC, et al. **J Trauma** 1997 Apr;42(4):738-40

Direct injury to the cervical spine of a child by a lap-shoulder belt resulting in quadriplegia: case report. Lynch JM, et al. **J Trauma** 1996 Oct;41(4):747-9

Common carotid artery and tracheal injury from shoulder strap seat belt. McConnell EJ, et al. **J Trauma** 1997 Jul; 43(1):150-2

Delayed pinpoint exposure of a pacemaker following seat belt trauma. Sakakibara Y. **Pacing Clin Electrophysiol** 1997 Feb;20(2 Pt 1):370-1

Roller coasters: let the rider beware. Holtzman DK, et al. **Pediatr Emerg Care** 1997 Jun;13(3):218-20

Seat belt-induced intestinal perforation. Codina Barreras A, et al. **Rev Esp Enferm Dig** 1997 Feb;89(2):94-100 **(Eng, Spa)**

[Spiral computerized tomography diagnosis of abdominal seat belt injuries in children] Klöppel R, et al. **Aktuelle Radiol** 1997 Jan;7(1):19-22 (Eng. Abstr.) **(Ger)**

[Lumbar dislocation fracture with paraplegia after pelvic seat belt injury. Case report] Spetzger U, et al. **Unfallchirurg** 1996 Nov;99(11):905-8 (Eng. Abstr.) **(Ger)**

[Internal carotid artery occlusion related to seat belt shoulder strap: report of two cases] Watanabe Y, et al. **Rinsho Shinkeigaku** 1996 May;36(5):670-4 (12 ref.) (Eng. Abstr.) **(Jpn)**

LEGISLATION & JURISPRUDENCE

Impact of the Illinois child passenger protection act: a retrospective look. Rock SM. **Accid Anal Prev** 1996 Jul; 28(4):487-92 (14 ref.)

[Release from the buckle-up duty] Mattern R, et al. **Dtsch Med Wochenschr** 1996 Dec 6;121(49):1549-50 **(Ger)**

[Effects of seat belt legislation on injuries of traffic accidents] Campello C, et al. **Epidemiol Prev** 1996 Oct-Dec; 20(4):313-7 (Eng. Abstr.) **(Ita)**

STANDARDS

Safety-belt effectiveness: the influence of crash severity and selective recruitment. Evans L. **Accid Anal Prev** 1996 Jul; 28(4):423-33

How child-resistant are stroller belt buckles? Ridenour MV. **Percept Mot Skills** 1997 Apr;84(2):611-6

TRENDS

Motor vehicle occupant protection: have we become too complacent? Rivara FP. **Inj Prev** 1997 Jun;3(2):78

UTILIZATION

The use of feedback signs to increase observed daytime seat belt use in two cities in North Carolina. Malenfant L, et al. **Accid Anal Prev** 1996 Nov;28(6):771-7

Motor vehicle crashes, restraint use, and severity of injury in children in Nevada. Niemcryk SJ, et al. **Am J Prev Med** 1997 Mar-Apr;13(2):109-14

Use of seat belts in a Dublin area. Laffoy M, et al. **Ir Med J** 1997 Apr-May;90(3):103-4

Seat belt use in Kentucky—a comparison of five measures. McKnight RH, et al. **J Ky Med Assoc** 1996 Mar;94(3):110-4

Safety belt use during pregnancy. Pearlman MD, et al. **Obstet Gynecol** 1996 Dec;88(6):1026-9

Motor vehicle crashes and maternal mortality in New Mexico: the significance of seat belt use. Schiff M, et al. **West J Med** 1997 Jul;167(1):19-22

[Estimation of the use of seat belts: an observational study and a telephone survey] Gadoy P, et al. **Gac Sanit** 1997 Jan-Feb;11(1):3-8 (Eng. Abstr.) **(Spa)**

SEAWATER

see related
GEOLOGIC SEDIMENTS
THALASSOTHERAPY

Changes in the apical surface of chloride cells following acclimation of lampreys to seawater. Bartels H, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R125-33

Numerical simulation of environment modulation of chemical signal structure and odor dispersal in the open ocean. Baird RC, et al. **Chem Senses** 1996 Apr;21(2):121-34

Ecological relationship between Aeromonas and Vibrio spp. and planktonic copepods in the coastal marine environment in southern Italy. Dumontet S, et al. **Comp Immunol Microbiol Infect Dis** 1996 Jun;19(3):245-54

Effects of some saturated n-alkanes on the survival of Escherichia coli resting cells in sea water. Attrassi B, et al. **Cytobios** 1996;87(351):207-16

Effect of copper and cadmium on three Malaysian tropical estuarine invertebrate larvae. Ramachandran S, et al. **Ecotoxicol Environ Saf** 1997 Mar;36(2):183-8

Fran squeezes the life out of NC waters [news] **Environ Health Perspect** 1997 Jan;105(1):23-5

Changes in plasma atrial and ventricular natriuretic peptide concentrations after transfer of eels from freshwater to seawater or vice versa. Kaiya H, et al. **Gen Comp Endocrinol** 1996 Dec;104(3):337-45

Adaptation of rainbow trout to seawater: changes in calcitonin gene-related peptide levels are associated with an increase in hormone-receptor interaction in gill membranes. Najib L, et al. **Gen Comp Endocrinol** 1996 May; 102(2):274-80

Effects of open marsh water management on selected tidal marsh resources: a review. Wolfe RJ. **J Am Mosq Control Assoc** 1996 Dec;12(4):701-12 (83 ref.)

Effect of seawater on Escherichia coli beta-galactosidase activity. Pommepuy M, et al. **J Appl Bacteriol** 1996 Aug; 81(2):174-80

Salmonella DNA persistence in natural seawaters using PCR analysis. Dupray E, et al. **J Appl Microbiol** 1997 Apr; 82(4):507-10

Composition and structure of helminth communities in eels Anguilla anguilla from Italian coastal lagoons. Kennedy CR, et al. **J Helminthol** 1997 Mar;71(1):35-40

Microbial respiratory activity in the euphotic zone of the Mediterranean Sea. La Ferla R, et al. **New Microbiol** 1996 Jul;19(3):243-9

Effect of treated sewage on the water quality and phytoplankton populations of Lake Manzala (Egypt) with emphasis on biological assessment of water quality. el-Naggar ME, et al. **New Microbiol** 1997 Jul;20(3):253-76

Comparative randomised clinical study of tolerability and efficacy of Rhinomer Force 3 versus a reference product in post-operative care of the nasal fossae after endonasal surgery. Seppey M, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Mar-Apr; 58(2):87-92

Kidney ATPase response in seawater-transferred rainbow trout (Oncorhynchus mykiss). Effect of salinity and fish size. Fuentes J, et al. **Rev Esp Fisiol** 1996 Dec;52(4):231-8

Sorption/desorption of radioactive contaminants by sediment from the Kara Sea. Fuhrmann M, et al. **Sci Total Environ** 1997 Aug 25;202(1-3):5-24

ADVERSE EFFECTS

Salt dermatitis in the aquarium industry. Tong D. **Contact Dermatitis** 1996 Jan;34(1):59-60

Risk factors for seabather's eruption: a prospective cohort study. Kumar S, et al. **Public Health Rep** 1997 Jan-Feb; 112(1):59-62

ANALYSIS

Polychlorinated biphenyls in Barents and Greenland Seas fish. Ali IB, et al. **Bull Environ Contam Toxicol** 1997 Jun; 58(6):885-92

Cadmium distribution in sediment and the lugworm Arenicola marina in a low concentration exposure experiment. Everaarts JM, et al. **Bull Environ Contam Toxicol** 1996 Nov;57(5):771-8

Contamination in marine turtle (Dermochelys coriaca) egg shells of Playon de Mexiquillo, Michoacan, Mexico. Vazquez GF, et al. **Bull Environ Contam Toxicol** 1997 Feb; 58(2):326-33

CHEMISTRY

Rock-shells (Thais clavigera) as an indicator of As, Cu, and Zn contamination on the Putai Coast of the black-foot disease area in Taiwan. Han BC, et al. **Arch Environ Contam Toxicol** 1997 May;32(4):456-61

Evidence from whole-sediment, porewater, and elutriate testing in toxicity assessment of contaminated sediments. Liss W, et al. **Ecotoxicol Environ Saf** 1997 Mar;36(2):140-7

The ecotoxicity of chlorate to aquatic organisms: a critical review. van Wijk DJ, et al. **Ecotoxicol Environ Saf** 1995 Dec;32(3):244-53 (54 ref.)

Chemical-activated luciferase gene expression (CALUX): a novel in vitro bioassay for Ah receptor active compounds in sediments and pore water. Murk AJ, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):149-60

Excess salt removal with matrix rinsing: direct peptide profiling of neurons from marine invertebrates using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. Garden RW, et al. **J Mass Spectrom** 1996 Oct;31(10):1126-30

Inhibition of proliferation of psoriatic and healthy fibroblasts in cell culture by selected Dead-sea salts. Levi-Schaffer F, et al. **Pharmacology** 1996 May;52(5):321-8

Radioactive contamination from dumped nuclear waste in the Kara Sea--results from the joint Russian-Norwegian expeditions in 1992-1994. Salbu B, et al. **Sci Total Environ** 1997 Aug 25;202(1-3):185-98

Spatial variation in the vulnerability of Norwegian Arctic counties to radiocaesium deposition. Wright SM, et al. **Sci Total Environ** 1997 Aug 25;202(1-3):173-84

[Accumulation and depuration of aldrin in the oyster Crassostrea rhizophorae, of the Ciénaga Grande de Santa Marta (Colombian Caribbean)] Gómez LC, et al. **Rev Biol Trop** 1995 Apr-Dec;43(1-3):161-72 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Phylogenetic analyses of some extremely halophilic archaea isolated from Dead Sea water, determined on the basis of their 16S rRNA sequences. Arahal DR, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3779-86

Diversity and association of psychrophilic bacteria in Antarctic sea ice. Bowman JP, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3068-78

The carotenoid pigments of a marine Bacillus firmus strain. Pane L, et al. **Boll Soc Ital Biol Sper** 1996 Nov-Dec; 72(11-12):303-8

Ultrastructural and biochemical studies on Candida albicans after prolonged incubation in sea water. Gorga F, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):167-72

Psychroserpens burtonensis gen. nov., sp. nov., and Gelidibacter algens gen. nov., sp. nov., psychrophilic bacteria isolated from antarctic lacustrine and sea ice habitats. Bowman JP, et al. **Int J Syst Bacteriol** 1997 Jul; 47(3):670-7

Thermococcus hydrothermalis sp. nov., a new hyperthermophilic archaeon isolated from a deep-sea hydrothermal vent. Godfroy A, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):622-6

Sagittula stellata gen. nov., sp. nov., a lignin-transforming bacterium from a coastal environment. Gonzalez JM, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):773-80

Enumeration of Enterococcus sp. using a modified mE method. Rhodes MW, et al. **J Appl Microbiol** 1997 Jul; 83(1):120-6

Study of the gelatinolytic activities Escherichia coli cells before and after starvation in seawater by substrate gel electrophoresis. Papageorgakopoulou N, et al. **Microbiol Res** 1996 Aug;151(3):329-35

Statistical model fitting Escherichia coli survival data during starvation in artificial sea water. Utzet F, et al. **Microbios** 1996;88(354):45-53

Ribosomal RNA gene dosage in marine bacteria. Kerkhof L, et al. **Mol Mar Biol Biotechnol** 1997 Sep;6(3):260-7

Alteration in plasmid DNA following natural transformation to populations of marine bacteria. Williams HG, et al. **Mol Mar Biol Biotechnol** 1997 Sep;6(3):238-47

[Bacteremia caused by Vibrio vulnificus in a patient with a skin ulcer exposed to sea water (letter)] Olga Pérez-Moreno MM, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):512-3 **(Spa)**

PARASITOLOGY

Settling rate and dispersal of sealworm eggs (Nematoda) determined using a revised protocol for myxozoan spores. McConnell CJ, et al. **J Parasitol** 1997 Apr;83(2):203-6

VIROLOGY

Survival of enteric viruses in the marine environment. Patti AM, et al. **Ann Ig** 1996 May-Jun;8(3):341-8

Coliphage and indigenous phage in Mamala Bay, Oahu, Hawaii. Paul JH, et al. **Appl Environ Microbiol** 1997 Jan;

63(1):133–8
Photoreactivation compensates for UV damage and restores infectivity to natural marine virus communities. Weinbauer MG, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2200–5

SEAWEED

see related
CARRAGEENAN
Heated oyster shell–seaweed calcium (AAA Ca) on osteoporosis. Fujita T, et al. **Calcif Tissue Int** 1996 Apr; 58(4):226–30
Some algae are potentially adequate sources of vitamin B–12 for vegans [letter; comment] Dagnelie PC. **J Nutr** 1997 Feb;127(2):379; discussion 380. Comment on: J Nutr 1995 Oct;125(10):2511–5.
Some algae are potentially adequate sources of vitamin B–12 for vegans [letter; comment] Davis DR. **J Nutr** 1997 Feb; 127(2):378; discussion 380. Comment on: J Nutr 1995 Oct;125(10):2511–5.
[Chilean edible sea macroalgae as sources of dietary fiber: effect on apparent digestibility of protein, fiber, and energy and fecal weight of rats] Pak N, et al.
Arch Latinoam Nutr 1996 Mar;46(1):42–6 (Eng. Abstr.) **(Spa)**

CHEMISTRY
Anticoagulant low molecular weight fucans produced by radical process and ion exchange chromatography of high molecular weight fucans extracted from the brown seaweed Ascophyllum nodosum. Nardella A, et al.
Carbohydr Res 1996 Aug 19;289:201–8
Content and characteristics of vitamin B12 in some seaweeds. Yamada S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Dec; 42(6):497–505
Phlorotannins from the brown algae Cystophora torulosa and Sargassum spinuligerum. Glombitza KW, et al.
Nat Toxins 1997;5(2):58–63
Study of in vitro cytotoxicity of a water soluble organic arsenic compound, arsenosugar, in seaweed. Sakurai T, et al. **Toxicology** 1997 Oct 19;122(3):205–12
[Aluminum contents in dried and cooked sea vegetables] Matsushima F, et al. **Nippon Eiseigaku Zasshi** 1997 Jan; 51(4):763–9 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY
Characterization of hexose oxidase from the red seaweed Chondrus crispus. Groen BW, et al. **Eur J Biochem** 1997 Mar 15;244(3):858–61

METABOLISM
Release and uptake of vitamin B12 by asakusanori (Porphyra tenera) seaweed. Yamada S, et al.
J Nutr Sci Vitaminol (Tokyo) 1996 Dec;42(6):507–15

MICROBIOLOGY
Cholera from raw seaweed transported from the Philippines to California. Vugia DJ, et al. **J Clin Microbiol** 1997 Jan; 35(1):284–5

PHYSIOLOGY
Biochemical responses of the marine macroalgae Ulva lactuca and Fucus vesiculosus to cadmium and copper–from sequestration to oxidative stress. Jervis L, et al.
Biochem Soc Trans 1997 Feb;25(1):63S

SEBACEOUS CYST see **EPIDERMAL CYST**

SEBACEOUS GLAND NEOPLASMS

Sebaceous gland carcinoma: report of a case and review of literature. Janjua TA, et al. **Am J Otolaryngol** 1997 Jan–Feb;18(1):51–4 (15 ref.)

COMPLICATIONS
Coexistent orbital and cerebellar venous anomalies in linear sebaceous naevus syndrome. Seawright AA, et al.
Aust N Z J Ophthalmol 1996 Nov;24(4):373–6

GENETICS
Muir–Torre syndrome: clinical features and molecular genetic analysis. Esche C, et al. **Br J Dermatol** 1997 Jun; 136(6):913–7

PATHOLOGY
Sebaceous carcinoma of the eyelid with metastasis to the parotid region: diagnosis by fine needle aspiration cytology [letter] Mandreker S, et al. **Acta Cytol** 1997 Sep–Oct; 41(5):1636–7
Dermal cysts of the rhino mouse develop into unopened sebaceous glands. Bernerd F, et al. **Arch Dermatol Res** 1996 Sep;288(10):586–95
Intraepithelial sebaceous neoplasia invading the lacrimal gland [letter] Mooy CM. **Br J Ophthalmol** 1997 Jul; 81(7):612–3
Solitary sebaceoma in Muir–Torre syndrome [letter; comment] Donati P. **Int J Dermatol** 1996 Aug;35(8):601–2 . Comment on: J Am Acad Dermatol 1990 Oct;23(4 Pt 1):638–40.
Oral sebaceous carcinoma: report of a case. Li TJ, et al. **J Oral Maxillofac Surg** 1997 Jul;55(7):751–4
[Cancer of the sebaceous gland and precancerous Pinkus fibroepithelioma of the anterior abdominal wall] Samoilov MV, et al. **Arkh Patol** 1997 Jan–Feb;59(1):57–9 (Eng. Abstr.) **(Rus)**

SURGERY
Management of eyelid sebaceous carcinomas. Dogru M, et al. **Ophthalmologica** 1997;211(1):40–3

SEBACEOUS GLANDS

Sebaceous adenitis. Martins C, et al.
J Am Acad Dermatol 1997 May;36(5 Pt 2):845–6
The effect of methotrexate on the expression of a cysteine protease inhibitor (type 2 cystatin) in rat sebaceous glands. Cohen RE, et al. **J Dermatol** 1996 Dec;23(12):863–70
Sebaceous gland, acne and related disorders—basic and clinical research, clinical entities and treatment. IV International Dermatology Symposium. Berlin, Germany, April 11–13, 1997. Abstracts. **J Invest Dermatol** 1997 Mar; 108(3):371–98
Sebaceous glands in the esophagus. Bae JY, et al.
J Korean Med Sci 1996 Jun;11(3):271–4
Squamous carcinoma of the epiglottis with sebaceous differentiation. Report of a case. Baiocco R, et al.
Pathologica 1995 Oct;87(5):531–33
[Sebaceous glands in the esophagus] Beer M, et al.
Leber Magen Darm 1996 Jan;26(1):39–41 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY
Infraorbital glands of a male Formosan serow (Capricornis crispus swinhoei). Atoji Y, et al. **Eur J Morphol** 1996; 34(2):87–94

CYTOLOGY
Culture of cells derived from the human sebaceous gland under serum–free conditions without a biological feeder layer or specific matrices. Fujie T, et al.
Arch Dermatol Res 1996 Oct;288(11):703–8
Human pilosebaceous culture. Kealey T, et al.
Methods Mol Biol 1997;75:101–15 (20 ref.)

DRUG EFFECTS
Benzene induces a dose–responsive increase in the frequency of micronucleated cells in rat Zymbal glands. Angelosanto FA, et al. **Environ Health Perspect** 1996 Dec;104 Suppl 6:1331–6

EMBRYOLOGY
Epidermal growth factor inhibits morphogenesis of the embryonic quail uropygial gland cultured in vitro. Fukui Y. **Dev Growth Differ** 1997 Apr;39(2):157–66

ENZYMOLOGY
Activity of type 1 5 alpha–reductase is greater in the follicular infrainfundibulum compared with the epidermis. Thiboutot DM, et al. **Br J Dermatol** 1997 Feb;136(2):166–71
Preputial sebocyte 5alpha–reductase isoform specificity. Deplewski D, et al. **Endocrinology** 1997 Oct; 138(10):4416–20
Messenger RNA expression of steroidogenesis enzyme subtypes in the human pilosebaceous unit. Courchay G, et al. **Skin Pharmacol** 1996;9(3):169–76

GROWTH & DEVELOPMENT
Adult epidermal keratinocytes are endowed with pilosebaceous forming abilities. Ferraris C, et al.
Int J Dev Biol 1997 Jun;41(3):491–8

METABOLISM
Expression of cutaneous fatty acid–binding protein and its mRNA in rat skin [published erratum appears in Arch Dermatol Res 1997 Feb;289(3):184] Watanabe R, et al.
Arch Dermatol Res 1996 Jul;288(8):481–3
Glutathione, glutathione S–transferase and reactive oxygen species of human scalp sebaceous glands in male pattern baldness. Giralt M, et al. **J Invest Dermatol** 1996 Aug; 107(2):154–8
Influence of ion pairing on ex vivo penetration of erythromycin into sebaceous follicles. Matschiner S, et al.
Skin Pharmacol 1996;9(4):270–3
Sebaceous–gland deposition of isotretinoin after topical application: an in vitro study using human facial skin. Tschan T, et al. **Skin Pharmacol** 1997;10(3):126–34

PATHOLOGY
Folliculosebaceous cystic hamartoma with perifollicular mucinosis. Aloi F, et al. **Am J Dermatopathol** 1996 Feb; 18(1):58–62
Unilateral areolar sebaceous hyperplasia in a male. Fariña MC, et al. **Am J Dermatopathol** 1996 Aug;18(4):417–9
Clear cell hidradenoma associated with the folliculo–sebaceous–apocrine unit. Histologic study of five cases. Gianotti R, et al. **Am J Dermatopathol** 1997 Aug; 19(4):351–7
Eccrine or apocrine poroma? Six poromas with divergent adnexal differentiation. Harvell JD, et al.
Am J Dermatopathol 1996 Feb;18(1):1–9 (30 ref.)
Nevus sebaceus with apocrine and sebaceous differentiation. Ng WK. **Am J Dermatopathol** 1996 Aug;18(4):420–3
Microcystic adnexal carcinoma with extensive sebaceous differentiation. Pujol RM, et al. **Am J Dermatopathol** 1997 Aug;19(4):358–62
Steatocystoma multiplex with smooth muscle. A hamartoma of the pilosebaceous apparatus. Sabater–Marco V, et al.
Am J Dermatopathol 1996 Oct;18(5):548–50
Diffuse sebaceous gland hyperplasia. A case report and an immunohistochemical study with cytokeratins. Schirren CG, et al. **Am J Dermatopathol** 1996 Jun;18(3):296–301
Androgen receptor status of the oral sebaceous glands. Whitaker SB, et al. **Am J Dermatopathol** 1997 Aug; 19(4):415–8
An intra–oral comedo? [letter] [see comments] Colquhoun A. **Br Dent J** 1996 Feb 24;180(4):128. Comment in: Br Dent J 1996 Aug 10;181(3):89.
Areolar sebaceous hyperplasia: a case report. Belinchón I, et al. **Cutis** 1996 Jul;58(1):63–4 (8 ref.)
Familial presenile sebaceous gland hyperplasia. Boonchai W, et al. **J Am Acad Dermatol** 1997 Jan;36(1):120–2 (8 ref.)
Sebaceous hyperplasia in organ transplant recipients: shared aspects of hyperplastic and dysplastic processes? de Berker DA, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):696–9
Cutaneous mixed tumor containing ossification, hair matrix, and sebaceous ductal differentiation. Akasaka T, et al.
J Dermatol 1997 Feb;24(2):125–31
Sebaceous gland hyperplasia of the penis. Carson HJ, et al.
J Urol 1996 Oct;156(4):1441
Fibroblast–dependent induction of a murine skin lesion similar to human nevus sebaceus of Jadassohn. Prouty SM, et al. **Lab Invest** 1997 Feb;76(2):179–89
Oculocerebral dysgenesis in the linear nevus sebaceous syndrome. Brodsky MC, et al. **Ophthalmology** 1997 Mar; 104(3):497–503
Sebaceous metaplasia in the uterine cervix. Sieiński W, et al. **Pol J Pathol** 1996;47(3):147–9

PHYSIOLOGY
The quantification and distribution of nasal sebaceous glands using image analysis. Michelson LN, et al.
Aesthetic Plast Surg 1996 Jul–Aug;20(4):303–9
The promoter of an androgen dependent gene in the hamster flank organ. Aoki H, et al. **J Dermatol Sci** 1997 May; 15(1):36–43
Localization and regulation of expression of the FAR–17A gene in the hamster flank organs. Puy LA, et al.
J Invest Dermatol 1996 Jul;107(1):44–50
Importance of sebaceous glands in cutaneous penetration of an antiandrogen: target effect of liposomes. Bernard E, et al. **J Pharm Sci** 1997 May;86(5):573–8

SECRETION
Minocycline induces an increase in the number of excreting pilosebaceous follicles in acne vulgaris. A randomised study. Bodokh I, et al. **Acta Derm Venereol** 1997 Jul; 77(4):255–9
[Effect of secretions of specific cutaneous glands on enzymatic activity of a series of regions in the digestive tract in Campbell hamsters (Phodopus Campbelli, Thomas, 1905)] Sokolov VE, et al. **Dokl Akad Nauk** 1996 Jul; 349(1):138–40 **(Rus)**

ULTRASTRUCTURE
13C NMR of Nephila clavipes major ampullate silk gland. Hijirida DH, et al. **Biophys J** 1996 Dec;71(6):3442–7

SEBORRHEA see **DERMATITIS, SEBORRHEIC**

SEBORRHEIC KERATOSIS see **KERATOSIS, SEBORRHEIC**

SEBUM

CHEMISTRY
Sebum and water content in the skin of aged immobilized patients. Aisen E, et al. **Acta Derm Venereol** 1997 Mar; 77(2):142–3
A double–blind comparison of levels of terbinafine and itraconazole in plasma, skin, sebum, hair and nails during and after oral medication [letter] Faergemann J, et al.
Acta Derm Venereol 1997 Jan;77(1):74–6
[Stimulation for sebum excretion of PCDDs, PCDFs and coplanar PCBs on bathing ceramic sand bath] Iida T, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):186–92 (Eng. Abstr.) **(Jpn)**
[Levels of PCDDs, PCDFs and coplanar PCBs in sebum and blood of Yusho patients] Iida T, et al.
Fukuoka Igaku Zasshi 1997 May;88(5):177–85 (Eng. Abstr.) **(Jpn)**
[Yearly and seasonal fluctuation of PCB concentration in skin surface lipid] Watanabe M, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):205–6 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS
Topical spironolactone reduces sebum secretion rates in

SEBUM

young adults. Yamamoto A, et al. **J Dermatol** 1996 Apr; 23(4):243–6

The effect of silicol gel compared with placebo on papulopustular acne and sebum production. A double-blind study. Lassus A. **J Int Med Res** 1996 Jul–Aug;24(4):340–4

METABOLISM

MK-386, an inhibitor of 5alpha-reductase type 1, reduces dihydrotestosterone concentrations in serum and sebum without affecting dihydrotestosterone concentrations in semen. Schwartz JI, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1373–7

SECRETION

Sebum excretion rate in subjects treated with oral all-trans-retinoic acid. Hommel L, et al. **Dermatology** 1996; 193(2):127–30

Sebum excretion in hidradenitis suppurativa. Jemec GB, et al. **Dermatology** 1997;194(4):325–8

SECALE see RYE

SECERNENTEA INFECTIONS

DIAGNOSIS

[Microcytic anemia and coproparasitologic findings in a 3-year-old boy] Pemán J, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):111–2 **(Spa)**

SECOBARBITAL

BLOOD

[A double column double pH solid phase extraction and capillary GC/FID method for rapid simultaneous determination of acidic and basic drugs in human plasma] Qiu FH, et al. **Yao Hsueh Hsueh Pao** 1996;31(3):205–8 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Secobarbital-mediated inactivation of cytochrome P450 2B1 and its active site mutants. Partitioning between heme and protein alkylation and epoxidation. He K, et al. **J Biol Chem** 1996 Oct 18;271(42):25864–72

SECOND-GENERATION ANTIDEPRESSIVE AGENTS see ANTIDEPRESSIVE AGENTS, SECOND-GENERATION

SECOND-LOOK SURGERY see REOPERATION

SECOND MALIGNANCY see NEOPLASMS, SECOND PRIMARY

SECOND MESSENGER SYSTEMS

Neurotransmitters, signal transduction and second-messengers in Alzheimer's disease. Cowburn RF, et al. **Acta Neurol Scand Suppl** 1996;165:25–32 (63 ref.)

Carbon monoxide and carotid body chemoreception. Overholt JL, et al. **Adv Exp Med Biol** 1996;410:341–4

The 1996 Massry Prize. Inositol trisphosphate and calcium: two interacting second messengers. Berridge MJ. **Am J Nephrol** 1997;17(1):1–11 (94 ref.)

Nitric oxide, superoxide, and peroxynitrite: the good, the bad, and ugly. Beckman JS, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1424–37 (109 ref.)

Adenine nucleotide diphosphates: emerging second messengers acting via intracellular Ca2+ release. Dousa TP, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1007–24 (136 ref.)

Signal transduction, second messenger, and protein kinase responses during freezing exposures in wood frogs. Holden CP, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1205–11

Classical second messengers are not involved in proteinase-induced degranulation of airway gland cells. Sommerhoff CP, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L796–803

Structural requirements of CCK analogues to differentiate second messengers and pancreatic secretion. Tsunoda Y, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G8–19

The heme oxygenase system: a regulator of second messenger gases. Maines MD. **Annu Rev Pharmacol Toxicol** 1997; 37:517–54 (212 ref.)

Lack of nucleotide-promoted second messenger signaling responses in 1321N1 cells expressing the proposed P2Y receptor, p2y7. Herold CL, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):717–21

Glycosyl-phosphatidylinositol-phospholipase type D: a possible candidate for the generation of second messengers. Jones DR, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):432–7

Chemoattractant-induced respiratory burst: increases in cytosolic Ca2+ concentrations are essential and synergize with a kinetically distinct second signal. Foyouzi-Youssefi R, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):709–18

Sphingosine 1-phosphate stimulates rho-mediated tyrosine phosphorylation of focal adhesion kinase and paxillin in Swiss 3T3 fibroblasts. Wang F, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):481–8

Regulation of Raf-1 kinase by interaction with the lipid second messenger, phosphatidic acid. Ghosh S, et al. **Biochem Soc Trans** 1997 May;25(2):561–5 (19 ref.)

Choline feeding depresses the phospholipase C activity in the regenerating liver of female rats. Sesca E, et al. **Boll Soc Ital Biol Sper** 1996 Nov–Dec;72(11–12):325–9

Norepinephrine transmitter metabolite is a selective cell death messenger in differentiated rat pheochromocytoma cells. Burke WJ, et al. **Brain Res** 1996 May 25;722(1–2):232–5

The role of phosphoinositide-derived second messengers in oxytocin-stimulated prostaglandin F2 alpha release from endometrium of pigs. Tysseling KA, et al. **Domest Anim Endocrinol** 1996 Sep;13(5):411–20

Tumor necrosis factor-alpha and its second messenger, ceramide, stimulate apoptosis in cultured ovarian follicles. Kaipia A, et al. **Endocrinology** 1996 Nov;137(11):4864–70

The nitric oxide/cyclic GMP messenger system in olfactory pathways of the locust brain. Bicker G, et al. **Eur J Neurosci** 1996 Dec;8(12):2635–43

Second messenger up-regulation of androgen receptor gene transcription is absent in androgen insensitive human prostatic carcinoma cell lines, PC-3 and DU-145. Stubbs AP, et al. **FEBS Lett** 1996 Apr 1;383(3):237–40

cGMP as second messenger during Dictyostelium chemotaxis. van Haastert PJ, et al. **FEBS Lett** 1997 Jun 23;410(1):25–8 (43 ref.)

Is there evidence for phospho-oligosaccharides as insulin mediators? Field MC. **Glycobiology** 1997 Mar;7(2):161–8 (65 ref.)

Pharmacological and second messenger signalling selectivities of cloned P2Y receptors. Nicholas RA, et al. **J Auton Pharmacol** 1996 Dec;16(6):319–23

Ehrlich cell plasma membrane redox system is modulated through signal transduction pathways involving cGMP and Ca2+ as second messengers. del Castillo-Olivares A, et al. **J Bioenerg Biomembr** 1995 Dec;27(6):605–11

Yeast respond to hypotonic shock with a calcium pulse. Batiza AF, et al. **J Biol Chem** 1996 Sep 20;271(38):23357–62

Second messenger and cAMP-dependent protein kinase responses to dehydration and anoxia stresses in frogs. Holden CP, et al. **J Comp Physiol [B]** 1997 May; 167(4):305–12

The significance of intracellular insulin to insulin action. Duckworth WC, et al. **J Investig Med** 1997 Feb;45(2):20–7 (64 ref.)

Molecular properties of enzymes involved in diacylglycerol and phosphatidate metabolism. Kanoh H, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):245–50 (18 ref.)

Production and function of lipid second messengers in proliferating and differentiated neuroblastoma cells. Lang D, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):349–59 (38 ref.)

Inositol trisphosphate/Ca2+ as messengers of bradykinin B2 and muscarinic acetylcholine m1-m4 receptors in neuroblastoma-derived hybrid cells. Noda M, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):175–85 (44 ref.)

Poly-phosphoinositide-mediated messengers in focal cerebral ischemia and reperfusion. Sun GY, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):137–45 (19 ref.)

Modulation of second messengers in the nervous system of larval Manduca sexta by muscarinic receptors. Trimmer BA, et al. **J Neurochem** 1996 May;66(5):1903–13

Agonist-specific coupling of a cloned Drosophila melanogaster D1-like dopamine receptor to multiple second messenger pathways by synthetic agonists. Reale V, et al. **J Neurosci** 1997 Sep 1;17(17):6545–53

Beta adrenergic sensitization of gamma-aminobutyric acid receptors to ethanol involves a cyclic AMP/protein kinase A second-messenger mechanism. Freund RK, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1192–200

Nitric oxide acts as a retrograde messenger during long-term potentiation in cultured hippocampal neurons. Arancio O, et al. **J Physiol Paris** 1996;90(5–6):321–2

Ionic and metabolic messengers in the control of insulin secretion. Henquin JC. **Jpn J Physiol** 1997;47 Suppl 1:S9

Thymosin alpha 1 antagonizes dexamethasone and CD3-induced apoptosis of CD4+ CD8+ thymocytes through the activation of cAMP and protein kinase C dependent second messenger pathways. Baumann CA, et al. **Mech Ageing Dev** 1997 Mar;94(1–3):85–101

Metabolism of inositol 1,4,5-trisphosphate in Candida albicans: significance as a precursor of inositol polyphosphates and in signal transduction during the dimorphic transition from yeast cells to germ tubes. Gadd GM, et al. **Microbiology** 1997 Feb;143 (Pt 2):437–48

Fast receptor-induced formation of glycerophosphoinositol-4-phosphate, a putative novel intracellular messenger in the Ras pathway. Falasca M, et al. **Mol Biol Cell** 1997 Mar;8(3):443–53

Gelatinase A secretion and its control in peritubular and Sertoli cell cultures: effects of hormones, second messengers and inducers of cytokine production. Hoeben E, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):37–46

Signalling through the lipid products of phosphoinositide-3-OH kinase. Toker A, et al. **Nature** 1997 Jun 12;387(6634):673–6 (47 ref.)

The regulation of prodynorphin gene expression in cultured spinal cord cells: involvement of second messengers. Ha TS, et al. **Neuropeptides** 1997 Apr;31(2):125–30

Calcium currents in pyramidal CA1 neurons in vitro after kindling epileptogenesis in the hippocampus of the rat. Faas GC, et al. **Neuroscience** 1996 Nov;75(1):57–67

Potentiation of spontaneous acetylcholine release from motor nerve terminals by glutamate in Xenopus tadpoles. Liou HC, et al. **Neuroscience** 1996 Nov;75(1):325–31

Actions of neurotransmitters and other messengers on Ca2+ channels and K+ channels in smooth muscle cells. Beech DJ. **Pharmacol Ther** 1997;73(2):91–119 (353 ref.)

Comparative studies on prostanoid receptors in human non-pigmented ciliary epithelial and mouse fibroblast cell lines. Liu L, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Oct; 55(4):231–40

Biological complexity is under the 'strange attraction' of non-esterified fatty acids. Nunez EA. **Prostaglandins Leukot Essent Fatty Acids** 1997 Jul; 57(1):107–10 (36 ref.)

Nitric oxide, the enigmatic neuronal messenger: its role in synaptic plasticity. Hölscher C. **Trends Neurosci** 1997 Jul; 20(7):298–303 (93 ref.)

Regulation of insulinoma cell proliferation and insulin accumulation by peptides and second messengers. Sjöholm A. **Ups J Med Sci** 1995;100(3):201–16

[Nitric oxide and carbon monoxide--a new generation of neuronal messengers] Gazit V, et al. **Harefuah** 1996 Jun 16;130(12):854–8 (15 ref.) **(Heb)**

[Sphingolipids--a new group of lipid second messengers?] Mesarić M. **Lijec Vjesn** 1996 Jul–Aug;118(7–8):178–83 (81 ref.) (Eng. Abstr.) **(Scr)**

DRUG EFFECTS

Adenosine increases the cAMP content of the rat carotid body in vitro. Monteiro EC, et al. **Adv Exp Med Biol** 1996; 410:299–303

Effects of erythropoietin on endothelin-1 synthesis and the cellular calcium messenger system in vascular endothelial cells. Vogel V, et al. **Am J Hypertens** 1997 Mar; 10(3):289–96

Functional interaction between gonadotropin-releasing hormone and PACAP in gonadotropes and alpha T3-1 cells. McArdle CA. **Ann N Y Acad Sci** 1996 Dec 26; 805:112–20; discussion 120–1

Inositol-1,4,5-trisphosphate induces responses in receptor neurons in rat vomeronasal sensory slices. Inamura K, et al. **Chem Senses** 1997 Feb;22(1):93–103

Diadenosine polyphosphates. A novel class of glucose-induced intracellular messengers in the pancreatic beta-cell. Ripoll C, et al. **Diabetes** 1996 Oct;45(10):1431–4

beta-Adrenergic stimulation induces activation of protein kinase C and inositol 1,4,5-trisphosphate increase in epidermis. Koizumi H, et al. **Exp Dermatol** 1997 Jun; 6(3):128–32

O2 availability modulates transmembrane Ca2+ flux via second-messenger pathways in anoxia-tolerant hepatocytes. Land SC, et al. **J Appl Physiol** 1997 Mar; 82(3):776–83

Effects of endothelin on phospholipases and generation of second messengers in cat iris sphincter and SV-CISM-2 cells. Abdel-Latif AA, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):147–55

Metabotropic glutamate receptor activation modulates kainate and serotonin calcium response in astrocytes. Haak LL, et al. **J Neurosci** 1997 Mar 1;17(5):1825–37

5-HT inhibits calcium current and synaptic transmission from sensory neurons in lamprey. El Manira A, et al. **J Neurosci** 1997 Mar 1;17(5):1786–94

Cellular proliferation and second messenger formation altered by dialysis membranes. Pacini S, et al. **Nephrol Dial Transplant** 1997 Mar;12(3):500–4

Cyclic GMP-phosphodiesterase inhibition does not alter cerebral oxygen consumption. Wei HM, et al. **Neurochem Res** 1996 Jan;21(1):41–6

Generation second messengers by prostanoids in the iris-sphincter and ciliary muscles of cows, cats and humans. Bhattacherjee P, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 Jun; 56(6):443–9

The mechanism for hexachlorocyclohexane-induced cytotoxicity and changes in intracellular Ca2+ homeostasis in cultured cerebellar granule neurons is different for the gamma- and delta-isomers. Rosa R, et al. **Toxicol Appl Pharmacol** 1997 Jan;142(1):31–9

Blockade of multiple costimulatory receptors induces hyporesponsiveness: inhibition of CD2 plus CD28 pathways. Woodward JE, et al. **Transplantation** 1996 Oct 15;62(7):1011–8

GENETICS

Organization of the Drosophila genome in mutants with changes in second messenger metabolism and learning ability. Medvedeva AV, et al. **Neurosci Behav Physiol** 1997 May-Jun;27(3):272–4

[Alström syndrome--a rare disease of diabetic association] Weichenhain B, et al. **Med Klin** 1997 Mar 15;92(3):175–8 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Accessory function of alveolar macrophages from patients with sarcoidosis and other granulomatous and nongranulomatous lung diseases. Zissel G, et al. **J Investig Med** 1997 Feb;45(2):75–86

PHYSIOLOGY

Intracellular Ca2+ deposits and catecholamine secretion by chemoreceptor cells of the rabbit carotid body. Obeso A, et al. **Adv Exp Med Biol** 1996;410:279–84

Identification of hydrogen peroxide as the relevant messenger in the activation pathway of transcription factor NF-kappaB. Schmidt KN, et al. **Adv Exp Med Biol** 1996; 387:63–8

Regulation of somatostatin gene transcription by cAMP. Montminy M, et al. **Adv Pharmacol** 1996;36:1–13 (20 ref.)

Stimulation of eating by the second messenger cAMP in the perifornical and lateral hypothalamus. Gillard ER, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R107–12

Heterogeneity of allergic airway responses in sheep: differences in signal transduction? Ahmed T, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):843–9

Phospholipase C inhibitor, U73122, releases intracellular Ca2+, potentiates Ins(1,4,5)P3-mediated Ca2+ release and directly activates ion channels in mouse pancreatic acinar cells. Mogami H, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):645–51

New physiological importance of two classic residual products: carbon monoxide and bilirubin. Marilena G. **Biochem Mol Med** 1997 Aug;61(2):136–42 (43 ref.)

Regulation of second messengers by the inositol polyphosphate 5-phosphatases. Mitchell CA, et al. **Biochem Soc Trans** 1996 Nov;24(4):994–1000 (40 ref.)

Transcription factors coupled to the cAMP-signalling pathway. Foulkes NS, et al. **Biochim Biophys Acta** 1996 Dec 9;1288(3):F101–21

The function of inositol high polyphosphate binding proteins. Fukuda M, et al. **Bioessays** 1997 Jul;19(7):593–603 (85 ref.)

Insulin second messengers. Strålfors P. **Bioessays** 1997 Apr; 19(4):327–35 (79 ref.)

Real-time fluorescence measurement of cell-free endosome fusion: regulation by second messengers. Emans N, et al. **Biophys J** 1996 Jul;71(1):487–94

Arachidonic acid mediates interleukin-1 and tumor necrosis factor-alpha-induced activation of the c-jun amino-terminal kinases in stromal cells. Rizzo MT, et al. **Blood** 1996 Nov 15;88(10):3792–800

cAMP is not an important messenger for ADP-induced platelet aggregation. Savi P, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):249–52

Second messenger systems in the regulation of cytokines and adhesion molecules in the central nervous system. Benveniste EN, et al. **Brain Behav Immun** 1995 Dec; 9(4):304–14 (79 ref.)

Age-related changes in bindings of second messengers in the rat brain. Araki T, et al. **Brain Res** 1995 Dec 18; 704(2):227–32

Crosstalk between cellular morphology and calcium oscillation patterns. Insights from a stochastic computer model. Kraus M, et al. **Cell Calcium** 1996 Jun;19(6):461–72

'Cross talk' between opioid peptide and adrenergic receptor signaling in isolated rat heart. Pepe S, et al. **Circulation** 1997 Apr 15;95(8):2122–9

Competition by second messenger systems for receptor interaction and activation: implications for tissue-specific responses and disease therapy. Crouch MF, et al. **Clin Exp Pharmacol Physiol** 1997 Aug;24(8):632–8 (22 ref.)

Role of Ca+2 and other second messengers in excitatory amino acid receptor mediated neurodegeneration: clinical perspectives. Schousboe A, et al. **Clin Neurosci** 1997; 4(4):194–8 (87 ref.)

A major second messenger mediator of Electrophorus electricus electric tissue is CaM kinase II. Gotter AL, et al. **Comp Biochem Physiol A Physiol** 1997 Sep;118(1):81–91

The lipid transfer activity of phosphatidylinositol transfer protein is sufficient to account for enhanced phospholipase C activity in turkey erythrocyte ghosts. Currie RA, et al. **Curr Biol** 1997 Mar 1;7(3):184–90

Intracellular signalling: the mad way to do it. Derynck R, et al. **Curr Biol** 1996 Oct 1;6(10):1226–9 (29 ref.)

The calcium-binding protein VILIP in olfactory neurons: regulation of second messenger signaling. Boekhoff I, et al. **Eur J Cell Biol** 1997 Feb;72(2):151–8

The roles of free radicals, peroxides and oxidized lipoproteins in second messenger system dysfunction. Czubryt MP, et al. **EXS** 1996;76:57–69 (37 ref.)

Involvement of calcium in interactions between gingival epithelial cells and Porphyromonas gingivalis. Izutsu KT, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2-3):145–50

Alloproliferation of purified CD4+ T cells to adult human heart endothelial cells, and study of second-signal requirements. McDouall RM, et al. **Immunology** 1996 Oct; 89(2):220–6

A dynamical model of the distributed interaction of intracellular signals. James A, et al. **Int J Neural Syst** 1996 Sep;7(4):333–41

The role of protein kinase C in GH secretion induced by GH-releasing factor and GH-releasing peptides in cultured ovine somatotrophs. Wu D, et al. **J Endocrinol** 1997 Aug; 154(2):219–30

Elementary and global aspects of calcium signalling. Berridge MJ. **J Exp Biol** 1997 Jan;200 (Pt 2):315–9 (25 ref.)

Intracellular Ca2+ signalling in secretory cells. Shuttleworth TJ. **J Exp Biol** 1997 Jan;200 (Pt 2):303–14 (90 ref.)

The listerial exotoxins listeriolysin and phosphatidylinositol-specific phospholipase C synergize to elicit endothelial cell phosphoinositide metabolism. Sibelius U, et al. **J Immunol** 1996 Nov 1;157(9):4055–60

Oleic acid-induced Ca2+ mobilization in human platelets: is oleic acid an intracellular messenger? Siafaka-Kapadai A, et al. **J Lipid Mediat Cell Signal** 1997 Mar;15(3):215–32

AT1 receptor gene regulation in cardiac myocytes and fibroblasts. Everett AD, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1727–36

Gaseous second messengers in vertebrate olfaction. Broillet MC, et al. **J Neurobiol** 1996 May;30(1):49–57 (65 ref.)

Second messenger signaling in olfactory transduction. Restrepo D, et al. **J Neurobiol** 1996 May;30(1):37–48 (111 ref.)

Second messengers, trafficking-related proteins, and amino acid residues that contribute to the functional regulation of the rat brain GABA transporter GAT1. Quick MW, et al. **J Neurosci** 1997 May 1;17(9):2967–79

Rapid coupling of calcium release to depolarization in Limulus polyphemus ventral photoreceptors as revealed by microphotolysis and confocal microscopy. Ukhanov K, et al. **J Neurosci** 1997 Mar 1;17(5):1701–9

Identification of a long-lasting form of odor adaptation that depends on the carbon Monoxide/cGMP second-messenger system. Zufall F, et al. **J Neurosci** 1997 Apr 15;17(8):2703–12

Modulation of the hyperpolarization-activated current (Ih) by cyclic nucleotides in guinea-pig primary afferent neurons. Ingram SL, et al. **J Physiol (Lond)** 1996 Apr 1; 492 (Pt 1):97–106

Role of metabotropic glutamate receptors in the cat's visual cortex during development. Daw NW, et al. **J Physiol Paris** 1996;90(3-4):173–7

Tastes activate different second messengers in taste cells. Miwa K, et al. **J Vet Med Sci** 1997 Jan;59(1):81–3

Analysis of the secretory granule movement in the pancreatic beta-cell: regulation by intracellular messengers. Niki I, et al. **Jpn J Physiol** 1997;47 Suppl 1:S25–6

Osmoregulation in the renal papilla: membranes, messengers and molecules. Kinne RK, et al. **Kidney Int** 1996 Jun; 49(6):1686–9 (29 ref.)

Intracellular diacylglycerol: a mitogenic second messenger proposable as marker of transformation in squamous cell carcinoma of the lung. Casamassima F, et al. **Lung Cancer** 1996 Sep;15(2):161–70

Effect of nitric oxide synthase inhibitor on age-related changes in second messenger systems and calcium channels in rats. Araki T, et al. **Metab Brain Dis** 1996 Mar; 12(1):83–92

Second-messenger regulation of receptor association with clathrin-coated pits: a novel and selective mechanism in the control of CD4 endocytosis. Foti M, et al. **Mol Biol Cell** 1997 Jul;8(7):1377–89

Second messengers induced by the envelope protein of a retrovirus. Bolander FF Jr. **Mol Cell Endocrinol** 1997 Apr 25;129(1):27–32

Acute stimulation of intestinal cell calcium influx induced by 17 beta-estradiol via the cAMP messenger system. Picotto G, et al. **Mol Cell Endocrinol** 1996 May 31; 119(2):129–34

Negative glucorticoid regulation of cyclic adenosine 3', 5'-monophosphate-stimulated corticotropin-releasing hormone-reporter expression in AtT-20 cells. Guardiola-Diaz HM, et al. **Mol Endocrinol** 1996 Mar; 10(3):317–29

Lipocortin 1: a second messenger of glucocorticoid action in the hypothalamo-pituitary-adrenocortical axis. Buckingham JC, et al. **Mol Med Today** 1997 Jul; 3(7):296–302 (39 ref.)

The modulation of calcium currents by the activation of mGluRs. Functional implications. Stefani A, et al. **Mol Neurobiol** 1996 Aug;13(1):81–95 (81 ref.)

Regulation of human alpha4beta2 neuronal nicotinic acetylcholine receptors by cholinergic channel ligands and second messenger pathways. Gopalakrishnan M, et al. **Mol Pharmacol** 1997 Sep;52(3):524–34

Nitric oxide: a spatial second messenger. Schulman H. **Mol Psychiatry** 1997 Jul;2(4):296–9 (24 ref.)

Bioactive lipids in excitatory neurotransmission and neuronal plasticity. Bazan NG, et al. **Neurochem Int** 1997 Feb; 30(2):225–31 (59 ref.)

Pheromone-induced second messenger signaling in the hamster vomeronasal organ. Kroner C, et al. **Neuroreport** 1996 Nov 25;7(18):2989–92

Bursting firing of action potentials in central snail neurons elicited by d-amphetamine: role of cytoplasmic second messengers. Chen YH, et al. **Neurosci Res** 1997 Apr; 27(4):295–304

The enigma of potassium ion in the management of dentine hypersensitivity: is nitric oxide the elusive second messenger? McCormack K, et al. **Pain** 1996 Nov;68(1):5–11 (89 ref.)

Induction of surface fluidity in Trichinella spiralis larvae during penetration of the host intestine: simulation by cyclic AMP in vitro. Modha J, et al. **Parasitology** 1997 Jan;114 (Pt 1):71–7

Arachidonic acid as a second messenger for hypotonicity-induced calcium transients in rat IMCD cells. Tinel H, et al. **Pflugers Arch** 1997 Jan;433(3):245–53

Regulation of entrainment pathways by the suprachiasmatic circadian clock: sensitivities to second messengers. Gillette MU. **Prog Brain Res** 1996;111:121–32 (50 ref.)

Modification of nociceptor responses by inflammatory mediators and second messengers implicated in their action—a study in canine testicular polymodal receptors. Mizumura K, et al. **Prog Brain Res** 1996;113:115–41 (149 ref.)

Calcitonin gene-related peptide induces the formation of second messengers in primary cultures of neonatal rat spinal cord. Parsons AM, et al. **Synapse** 1997 Jul;26(3):235–42

Porcine von Willebrand factor binding to human platelet GPIb induces transmembrane calcium influx. Mazzucato M, et al. **Thromb Haemost** 1996 Apr;75(4):655–60

Serum levels of cytokines and secondary messages after T-cell-depleted and non-T-cell-depleted bone marrow transplantation: influence of conditioning and hematopoietic reconstitution. Schwaighofer H, et al. **Transplantation** 1996 Oct 15;62(7):947–53

[Oxygen radicals as second messengers of gene expression] Schulze-Osthoff K, et al. **Dtsch Med Wochenschr** 1996 Oct 18;121(42):1301–2 **(Ger)**

[Calcium oscillations and waves in a cell] Makowska A, et al. **Postepy Biochem** 1996;42(2):146–53 (54 ref.) **(Pol)**

[Role of intracellular signal systems in regulation of erythrocytes potassium channels activated by Ca2+] Petrova IV, et al. **Biull Eksp Biol Med** 1997 Jun; 123(6):653–5 **(Rus)**

[The role of G-proteins and second messenger systems in the plasticity of the avoidance reflex in the snail] Grinkevich LN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep–Oct; 46(5):886–92 (Eng. Abstr.) **(Rus)**

SECOND NEOPLASM see **NEOPLASMS, SECOND PRIMARY**

SECOND OPINION see **REFERRAL AND CONSULTATION**

SECOND PRIMARY NEOPLASMS see **NEOPLASMS, SECOND PRIMARY**

SECONDARY ION MASS SPECTROMETRY see **SPECTROMETRY, MASS, SECONDARY ION**

SECONDARY ION MASS SPECTROMETRY MICROSCOPY see **SPECTROMETRY, MASS, SECONDARY ION**

SECOSTEROIDS

CHEMISTRY

Luffasterols A-C, 9,11-secosterols from the Palauan sponge Luffariella sp. Reddy MV, et al. **J Nat Prod** 1997 Jan; 60(1):41–3

PHARMACOKINETICS

Synthesis, estrogen receptor binding, and tissue distribution of [18F]fluorodoisynolic acids. Scribner AW, et al. **Nucl Med Biol** 1997 Apr;24(3):209–24

PHARMACOLOGY

Antimalarial activity of tropical Meliaceae extracts and gedunin derivatives. MacKinnon S, et al. **J Nat Prod** 1997 Apr;60(4):336–41

Retinoids and secosteroids induce gene expression in human colorectal carcinoma-derived cells but the macroscopic-scale effects remain unpredictable. Waliszewska MK, et al. **Pol J Pathol** 1997;48(1):15–24

SECRETIN

see related
GASTROINTESTINAL AGENTS

BIOSYNTHESIS

Importance of gastrin-releasing peptide on acid-induced secretin release and pancreaticobiliary and duodenal bicarbonate secretion. Glad H, et al. **Scand J Gastroenterol** 1996 Oct;31(10):993–1000

CHEMISTRY

Speculations on the mechanism of hormone-receptor interactions of the secretin/glucagon family of polypeptide hormones derived from computational structural studies. Momany FA, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:172–81; discussion 181–3 (18 ref.)

The C-terminal domain of the secretin PulD contains the binding site for its cognate chaperone, PulS, and confers PulS dependence on pIVf1 function. Daefler S, et al. **Mol Microbiol** 1997 May;24(3):465–75

DIAGNOSTIC USE

Intraductal secretin test is as useful as duodenal secretin test in assessing exocrine pancreatic function. Ochi K, et al. **Dig Dis Sci** 1997 Mar;42(3):492–6

Ultrasonography-secretin test pattern after acute administration of octreotide in healthy persons and in patients with recurrent acute pancreatitis. Cavallini G, et al. **J Clin Gastroenterol** 1997 Jun;24(4):231–4

Secretin-induced plasma bicarbonate decrease as a simple indicator of exocrine pancreatic function. Wettstein M, et al. **Pancreas** 1996 Aug;13(2):193–7

Pancreatic duct: morphologic and functional evaluation with

dynamic MR pancreatography after secretin stimulation. Matos C, et al. **Radiology** 1997 May;203(2):435–41

Clinical perspectives of a sonographic secretin test. Glaser J. **Z Gastroenterol** 1997 Jul;35(7):579–83 (23 ref.)

[Secretin test (S-test)] Oyama H, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:197–201 (4 ref.) **(Jpn)**

GENETICS

The basic helix–loop–helix transcription factor BETA2/NeuroD is expressed in mammalian enteroendocrine cells and activates secretin gene expression. Mutoh H, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3560–4

IMMUNOLOGY

Sevenspan transmembrane molecules: novel receptors involved in leukocyte adhesion. van Lier RA, et al. **Immunol Lett** 1996 Dec;54(2–3):185–7 (13 ref.)

METABOLISM

The arrangement of the transmembrane helices in the secretin receptor family of G-protein–coupled receptors. Donnelly D. **FEBS Lett** 1997 Jun 16;409(3):431–6

Regrowth of the rat biliary tree after 70% partial hepatectomy is coupled to increased secretin-induced ductal secretion. Lesage G, et al. **Gastroenterology** 1996 Dec;111(6):1633–44

Role of receptor phosphorylation in desensitization and internalization of the secretin receptor. Holtmann MH, et al. **J Biol Chem** 1996 Sep 20;271(38):23566–71

Transcriptional regulation of secretin gene expression. Nishitani J, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S50–55 (21 ref.)

Molecular basis and species specificity of high affinity binding of vasoactive intestinal polypeptide by the rat secretin receptor. Holtmann MH, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):555–60

The C-terminal domain of the secretin PulD contains the binding site for its cognate chaperone, PulS, and confers PulS dependence on pIVf1 function. Daefler S, et al. **Mol Microbiol** 1997 May;24(3):465–75

The secretin-specific, chaperone-like protein of the general secretory pathway: separation of proteolytic protection and piloting functions. Hardie KR, et al. **Mol Microbiol** 1996 Dec;22(5):967–76

The role of insulin in the interaction of secretin and cholecystokinin in exocrine secretion of the isolated perfused rat pancreas. Lee YL, et al. **Pancreas** 1996 Jan; 12(1):58–63

The C-terminus ends of secretin and VIP interact with the N-terminal domains of their receptors. Gourlet P, et al. **Peptides** 1996;17(5):825–9

PHARMACOLOGY

Insulin inhibits secretin-stimulated pancreatic bicarbonate output by a dose-dependent neurally mediated mechanism. Berry SM, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G163–70

Acute pancreatitis in rats: effects of sodium taurocholate, CCK-8, and Sec on pancreatic microcirculation. Plusczyk T, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G310–20

O2 transfer from single microvessels to acinar cells in secretin-stimulated pancreas of rat. Seiyama A, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1704–11

Secretin potentiates guinea pig pancreatic response to cholecystokinin by a cholinergic mechanism. Alcón S, et al. **Can J Physiol Pharmacol** 1996 Dec;74(12):1342–50

Presynaptic modulation by VIP, secretin and isoproterenol of somatostatin release from enriched enteric synaptosomes: role of cAMP. Kurjak M, et al. **Eur J Pharmacol** 1996 Oct 24;314(1–2):165–73

Effects of secretin on the hypothalamo-pituitary-adrenal axis in the rat. Malendowicz K, et al. **Horm Metab Res** 1996 Nov;28(11):613–4

Secretin promotes osmotic water transport in rat cholangiocytes by increasing aquaporin-1 water channels in plasma membrane. Evidence for a secretin-induced vesicular translocation of aquaporin-1. Marinelli RA, et al. **J Biol Chem** 1997 May 16;272(20):12984–8

gamma-Interferon inhibits secretin-induced choleresis and cholangiocyte proliferation in a murine model of cirrhosis. Alpini G, et al. **J Hepatol** 1997 Aug;27(2):371–80

Secretin inhibits canine gastric acid secretion in response to pentagastrin by modulating gastric histamine release. Gerber JG, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):718–23

Interactions between secretin and acetylcholine in the regulation of fluid secretion by isolated rat pancreatic ducts. Evans RL, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):265–73

PHYSIOLOGY

Large but not small intrahepatic bile ducts are involved in secretin-regulated ductal bile secretion. Alpini G, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1064–74

Feedback regulation of pancreatic exocrine secretion in minipigs. Houe T, et al. **Scand J Gastroenterol** 1997 Apr; 32(4):374–9

SECRETORY COMPONENT

ANALYSIS

Effect of nicotine on secretory component synthesis by secretory epithelial cells. Gregory RL, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):578–83

Secretory component, the receptor for polymeric immunoglobulin, has nothing to do with beta-galactosyltransferase in human milk. Kobayashi K, et al. **Immunol Lett** 1996 Apr;50(1–2):99–104

BIOSYNTHESIS

Characterisation of the human secretory component gene promoter. Verrijdt G, et al. **Biochem Soc Trans** 1997 May; 25(2):186S

Effect of nicotine on secretory component synthesis by secretory epithelial cells. Gregory RL, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):578–83

CHEMISTRY

Human free secretory component is composed of the first 585 amino acid residues of the polymeric immunoglobulin receptor. Hughes GJ, et al. **FEBS Lett** 1997 Jun 30; 410(2–3):443–6

GENETICS

Characterisation of the human secretory component gene promoter. Verrijdt G, et al. **Biochem Soc Trans** 1997 May; 25(2):186S

Characterization of the human secretory component gene promoter. Verrijdt G, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):147–54

Cellular processing limits the heterologous expression of secretory component in mammalian cells. Cottet S, et al. **Eur J Biochem** 1997 May 15;246(1):23–31

Lack of association of secretory component with IgA in J chain–deficient mice. Hendrickson BA, et al. **J Immunol** 1996 Jul 15;157(2):750–4

IMMUNOLOGY

Secretory component, the receptor for polymeric immunoglobulin, has nothing to do with beta-galactosyltransferase in human milk. Kobayashi K, et al. **Immunol Lett** 1996 Apr;50(1–2):99–104

METABOLISM

Cellular processing limits the heterologous expression of secretory component in mammalian cells. Cottet S, et al. **Eur J Biochem** 1997 May 15;246(1):23–31

URINE

Mucosal immunity in the urinary tract: changes in sIgA, FSC and total IgA with age and in urinary tract infection. James-Ellison MY, et al. **Clin Nephrol** 1997 Aug; 48(2):69–78

SECRETORY GRANULES see **CYTOPLASMIC GRANULES**

SECRETORY IGA see **IGA, SECRETORY**

SECRETORY PHASE see **MENSTRUAL CYCLE**

SECRETORY PIECE see **SECRETORY COMPONENT**

SECRETORY RATE

DRUG EFFECTS

Sexual differentiation of the surge mode of gonadotropin secretion: prenatal androgens abolish the gonadotropin-releasing hormone surge in the sheep. Herbosa CG, et al. **J Neuroendocrinol** 1996 Aug;8(8):627–33

SECURITY MEASURES

Health registries. Ethics and security. Iversen T. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):875–6

Public perception of safety and metal detectors in an urban emergency department. McNamara R, et al. **Am J Emerg Med** 1997 Jan;15(1):40–2

ED security legislation in California [letter] Zoraster RM. **Am J Emerg Med** 1996 Mar;14(2):231

Attitudes toward the use of a metal detector in an urban emergency department. Meyer T, et al. **Ann Emerg Med** 1997 May;29(5):621–4

Health sector response to security threats during the civil war in El Salvador. Brentlinger PE. **BMJ** 1996 Dec 7; 313(7070):1470–4

Police free to bug surgeries [news] Warden J. **BMJ** 1997 Aug 23;315(7106):446

Security on the Internet [news] Busby B. **Health Phys** 1997 May;72(5):674–5

Detection of orthopaedic implants by airport metal detectors. Basu P, et al. **J Bone Joint Surg Br** 1997 May;79(3):388–9

Detection of orthopaedic prostheses at airport security checks. Grohs JG, et al. **J Bone Joint Surg Br** 1997 May; 79(3):385–7

Preventing worker injuries. Mason K. **J Nurs Care Qual** 1996 Dec;11(2):5, 7

'Never again'. Model mugging: a therapeutic resource for the psychiatric nurse. Ellensweig D. **J Psychosoc Nurs Ment Health Serv** 1997 Jun;35(6):41–4

Staff security and work pressure: contrasting patterns of stability and change across five dialysis units. Alleyne S, et al. **Soc Sci Med** 1996 Aug;43(4):525–35

[Effect of partially open department on unit atmosphere] Modestin J, et al. **Psychiatr Prax** 1996 Nov;23(6):285–9 (Eng. Abstr.) **(Ger)**

ECONOMICS

Characteristics and cost of staff injuries in a forensic hospital. Hillbrand M, et al. **Psychiatr Serv** 1996 Oct;47(10):1123–5

LEGISLATION & JURISPRUDENCE

Symptoms and personality characteristics of patients in a maximum security psychiatric unit. Rasmussen K, et al. **Int J Law Psychiatry** 1996 Winter;19(1):27–37

Security and patient management in a forensic hospital. Woodson R. **New Dir Ment Health Serv** 1996 Spring; (69):35–42

ORGANIZATION & ADMINISTRATION

Collaboration with police officers within a partial hospital program. Steiner JL, et al. **J Nerv Ment Dis** 1997 Apr; 185(4):269–73

[Emerging agents and microbiological laboratory security (editorial)] Touze JE, et al. **Med Trop (Mars)** 1996; 56(3):244–6 **(Fre)**

STANDARDS

Validation of a poultry biosecurity survey. Nespeca R, et al. **Prev Vet Med** 1997 Jul;31(1–2):73–86

SEDATION, CONSCIOUS see **CONSCIOUS SEDATION**

SEDATIVES see **HYPNOTICS AND SEDATIVES**

SEDATIVES, BARBITURATE

Memory performance on the intracarotid amobarbital procedure as a predicator of seizure focus. Roman DD, et al. **Epilepsy Res** 1996 Nov;25(3):243–8

Two modifiers of sperm transport within the fallopian tube of the rat. Sultan KM, et al. **J Reprod Fertil** 1996 Nov; 108(2):179–84

A nonbenzodiazepine partial agonist, S-(+)-DN-2327, has minimal physical dependence-producing liability, but shows cross-dependence on barbital in rats. Inui Y, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1197–211

ADMINISTRATION & DOSAGE

Localization of language cortices by functional MR imaging compared with intracarotid amobarbital hemispheric sedation. Bahn MM, et al. **AJR Am J Roentgenol** 1997 Aug; 169(2):575–9

Is pentobarbital analgesic in the rat formalin test? [letter; comment] Goto T, et al. **Anesthesiology** 1997 Jan; 86(1):265–7. Comment on: Anesthesiology 1996 Mar;84(3):572–9.

Sedation for children undergoing magnetic resonance imaging: efficacy and safety of rectal thiopental [see comments] Beekman RP, et al. **Eur J Pediatr** 1996 Sep; 155(9):820–2. Comment in: Eur J Pediatr 1997 Apr;156(4):338.

A survey of pentobarbital sedation for children undergoing abdominal CT scans after oral contrast medium. Sanderson PM. **Paediatr Anaesth** 1997;7(4):309–15

[Analysis of mild barbiturate–moderate hypothermia therapy on the authors' 152 cases] Young-Su P, et al. **No Shinkei Geka** 1997 Jun;25(6):529–35 (Eng. Abstr.) **(Jpn)**

[Clinical study of pentobarbital treatment for status convulsivus in 14 children] Kobayashi K, et al. **No To Hattatsu** 1996 Nov;28(6):490–4 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Withdrawal strategies for outpatients. Alcohol, benzodiazepine, barbiturate, and opiate addictions. Mezciems PE. **Can Fam Physician** 1996 Sep;42:1745–52 (27 ref.)

Comparative review of the adverse effects of sedatives used in children undergoing outpatient procedures. D'Agostino J, et al. **Drug Saf** 1996 Mar;14(3):146–57 (134 ref.)

[Phenemal to pregnant women and children's intelligence and quality of life 31–33 years later (letter)] Ventegodt S, et al. **Ugeskr Laeger** 1997 Jun 9;159(24):3799–800 **(Dan)**

[Stevens-Johnson syndrome and fixed drug eruption (letter; comment)] Labandeira García J. **An Med Interna** 1995 Nov; 12(11):569. Comment on: An Med Interna 1994 Jun;11(6):311–2. **(Spa)**

ANTAGONISTS & INHIBITORS

Neuropeptide Y reverses corticotropin-releasing hormone- and psychological stress-caused shortening of sodium pentobarbital-induced sleep in rats. Yamada K, et al.

Brain Res 1996 Jul 1;725(2):272–5

BLOOD

High-performance liquid chromatographic assay for thiopental in human plasma. Application to pharmacokinetic studies. Russo H, et al.
J Chromatogr B Biomed Appl 1997 Jun 20;694(1):239–45
[A double column double pH solid phase extraction and capillary GC/FID method for rapid simultaneous determination of acidic and basic drugs in human plasma] Qiu FH, et al. **Yao Hsueh Hsueh Pao** 1996;31(3):205–8 (Eng. Abstr.) **(Chi)**

DIAGNOSTIC USE

Cerebral hemispheric lateralization in cardiac autonomic control. Yoon BW, et al. **Arch Neurol** 1997 Jun;54(6):741–4
Sodium amobarbital memory tests: what do they predict? Dade LA, et al. **Brain Cogn** 1997 Mar;33(2):189–209
An exploratory comparison of three methods of memory assessment with the intracarotid amobarbital procedure. Dodrill CB, et al. **Brain Cogn** 1997 Mar;33(2):210–23
Effect of focus lateralization on memory assessment during the intracarotid amobarbital procedure. Rouleau I, et al. **Brain Cogn** 1997 Mar;33(2):224–41
Reading errors following right hemisphere injection of sodium amobarbital. Schwartz TH, et al. **Brain Lang** 1997 Jun 1;58(1):70–91

HISTORY

[Tomás Alday and the chemical synthesis of somnifen (letter)] Hervás Puyal C. **Rev Esp Anestesiol Reanim** 1996 Nov; 43(9):340 **(Spa)**

METABOLISM

Phenobarbital metabolism by hepatocytes isolated from rat. Vérité P, et al. **Drug Metabol Drug Interact** 1996; 13(1):41–55

PHARMACOKINETICS

Endotoxin depresses hepatic cytochrome P450-mediated drug metabolism in women. Shedlofsky SI, et al.
Br J Clin Pharmacol 1997 Jun;43(6):627–32
Pharmacokinetics of thiamylal enantiomers in humans. Sueyasu M, et al. **Int J Clin Pharmacol Ther** 1997 Mar; 35(3):128–32
Myocardial pharmacokinetics of thiopental in sheep after short-term administration: relationship to thiopental-induced reductions in myocardial contractility. Upton RN, et al. **J Pharm Sci** 1996 Aug;85(8):863–7
Pharmacokinetics of high-dose thiopental in pediatric patients with increased intracranial pressure. Russo H, et al. **Ther Drug Monit** 1997 Feb;19(1):63–70

PHARMACOLOGY

Phenobarbital administration does not affect high-dose ifosfamide pharmacokinetics in humans. Lokiec F, et al. **Anticancer Drugs** 1996 Nov;7(8):893–6
Effects of thiopental on endothelium-dependent responses in rat aorta. Castillo C, et al. **Arch Med Res** 1997 Autumn; 28(3):361–7
A computer program using disposition decomposition analysis in pharmacodynamics. Cheng H, et al.
Biopharm Drug Dispos 1997 Jan;18(1):9–15
Effects of ketamine and pentobarbitone on acetylcholine release from the rat frontal cortex in vivo. Kikuchi T, et al. **Br J Anaesth** 1997 Jul;79(1):128–30
Differential effects of ketamine and pentobarbitone on acetylcholine release from the rat hippocampus and striatum. Sato K, et al. **Br J Anaesth** 1996 Sep;77(3):381–4
Biphasic effect of pentobarbitone on chick myotube nicotinic receptor channel kinetics. Liu GJ, et al.
Br J Pharmacol 1996 Jul;118(6):1385–8
Level of consciousness and memory during the intracarotid sodium amobarbital procedure. Meador KJ, et al.
Brain Cogn 1997 Mar;33(2):178–88
Effects of hemisphere speech dominance and seizure focus on patterns of behavioral response errors for three types of stimuli. Rausch R, et al. **Brain Cogn** 1997 Mar; 33(2):161–77
Serial recovery of language during the intracarotid amobarbital procedure. Ravdin LD, et al. **Brain Cogn** 1997 Mar;33(2):151–60
Flumazenil reverses the decrease in the hypnotic activity of pentobarbital by social isolation stress: are endogenous benzodiazepine receptor ligands involved? Ojima K, et al. **Brain Res** 1997 Jan 16;745(1–2):127–33
Descending inhibition in neonatal rat spinal cord: actions of pentobarbital and morphine. Tarasiuk A, et al.
Brain Res Bull 1996;41(1):39–45
Nocifensive reflex thresholds in rats: measures of central nervous system effects of barbiturates. Archer DP, et al. **Can J Anaesth** 1997 Jul;44(7):765–74
Effect of phenobarbital on the pharmacokinetics of lidocaine, monoethylglycinexylidide and 3-hydroxylidocaine in the rat: correlation with P450 isoform levels. Nakamoto T, et al. **Drug Metab Dispos** 1997 Mar;25(3):296–300
Effect of phenobarbital pretreatment on the pharmacokinetics and metabolism of diltiazem in rats. Yeung PK, et al.
Drug Metabol Drug Interact 1996;13(1):29–39
Ethanol and pentobarbital: comparison of behavioral and subjective effects in sedative drug abusers. Mintzer MZ, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):203–15
Effect of chronic anesthesia on the drug-metabolizing enzyme system and heme pathway regulation. Buzaleh AM, et al. **Gen Pharmacol** 1997 Apr;28(4):577–82
Mechanisms of barbiturate inhibition of acetylcholine receptor channels. Dilger JP, et al. **J Gen Physiol** 1997 Mar;109(3):401–14
In vivo protection of striatal dopaminergic system against 1-methyl-4-phenylpyridinium neurotoxicity by phenobarbital. Vizuete ML, et al. **J Neurosci Res** 1997 Aug 1;49(3):301–8
Selectivity in the generalization profile in baboons trained to discriminate lorazepam: benzodiazepines, barbiturates and other sedative/anxiolytics. Ator NA, et al.
J Pharmacol Exp Ther 1997 Sep;282(3):1442–57
Loss of high-frequency brain electrical response to thiopental administration in Alzheimer's-type dementia. Holschneider DP, et al. **Neuropsychopharmacology** 1997 Apr;16(4):269–75
Involvement of corticosteroid-like neurosteroids in pentobarbital-induced sleep. Burade VS, et al.
Neuroreport 1996 Dec 20;8(1):139–41
Effect of intravenous sodium amytal on cutaneous limb temperatures and sympathetic skin responses in normal subjects and pain patients with and without Complex Regional Pain Syndromes (type I and II). I. Mailis A, et al. **Pain** 1997 Mar;70(1):59–68
Phenobarbital sensitivity in HAS and LAS rats before and after chronic administration of ethanol. Draski LJ, et al.
Pharmacol Biochem Behav 1997 Aug;57(4):651–7
Pentobarbital alters the response of cerebrospinal fluid pressure evoked by two provocative tests in rats. Searles RV, et al. **Pharmacology** 1996 Feb;52(2):78–85
Effects of aflatoxin B1 on the sensitivity of the rat central nervous system to pentobarbital-Na racemate. Stětinová V, et al. **Pol J Pharmacol** 1995 Sep–Oct;47(5):393–9
[Potentiating and delaying effect of dalargin analogs on the duration of experimental nembutal-induced sleep] Khugaeva VK, et al. **Biull Eksp Biol Med** 1996 Dec; 122(12):618–22 **(Rus)**
[The effect of phenobarbital and cimetidine on the elimination kinetics and distribution in the heart and liver of propranolol in rats with acute and chronic inflammations] Lutsevich AN, et al. **Eksp Klin Farmakol** 1996 May–Jun; 59(3):47–52 (Eng. Abstr.) **(Rus)**
[The modification of the pharmacokinetics and analgesic effect of naproxen by cimetidine, phenobarbital and thiamine diphosphate] Vovk OG, et al.
Eksp Klin Farmakol 1996 Mar–Apr;59(2):35–7 (Eng. Abstr.) **(Rus)**
[Changes in the oxidation-reduction potential of the rat brain during nembutal anesthesia] Shvets-Ténéta-Gurii TB, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun; 47(3):523–31 (Eng. Abstr.) **(Rus)**

POISONING

Severe hypoxia and hypothermia following barbiturate poisoning [letter] Hantson P, et al. **Intensive Care Med** 1996 Sep;22(9):998–9

THERAPEUTIC USE

Article on alcohol withdrawal practical [letter; comment] McNeill CA. **Can Fam Physician** 1997 Mar;43:420–1. Comment on: Can Fam Physician 1996 Nov;42:2186–90.
Barbiturate anticonvulsants: a neuropsychological and quantitative electroencephalographic study. Willis J, et al. **J Child Neurol** 1997 Apr;12(3):169–71
Lactate and excitatory amino acids measured by microdialysis are decreased by pentobarbital coma in head-injured patients. Goodman JC, et al. **J Neurotrauma** 1996 Oct; 13(10):549–56
Adequacy of antenatal phenobarbital dosing for neonatal intraventricular hemorrhage prophylaxis [letter] Hole JW. **J Perinatol** 1996 Mar–Apr;16(2 Pt 1):160
Alcohol withdrawal syndrome [letter] Matz R. **Lancet** 1997 Sep 6;350(9079):737
Sodium pentothal hypnosis: a procedure for evaluating medical patients with suspected psychiatric co-morbidity. Russo MB, et al. **Mil Med** 1997 Mar;162(3):215–8
Effect of intravenous sodium amytal on cutaneous sensory abnormalities, spontaneous pain and algometric pain pressure thresholds in neuropathic pain patients: a placebo-controlled study. II. Mailis A, et al. **Pain** 1997 Mar;70(1):69–81
[The effect of difenin, valproate and phenobarbital on the development of an epileptiform seizure attack in Krushinskiĭ-Molodkina rats] Fedotova IB, et al.
Zh Vyssh Nerv Deiat Im I P Pavlova 1996 Nov–Dec; 46(6):1104–8 (Eng. Abstr.) **(Rus)**

TOXICITY

Changes in chromatin structure and nuclear matrix association of the rat cytochrome P450 2B1/2 (CYP2B1/2) gene following induction with phenobarbital. Stroop CJ, et al. **J Biochem Toxicol** 1996;11(2):59–65

SEDATIVES, NONBARBITURATE

Local anaesthesia and propofol-fentanyl sedation for carotid artery surgery. Nordström O, et al.
Acta Anaesthesiol Scand 1996 Jul;40(6):724–8
A comparison of propofol with a propofol-ketamine combination for sedation during spinal anesthesia. Frizelle HP, et al. **Anesth Analg** 1997 Jun;84(6):1318–22
Propofol sedation during awake craniotomy for seizures: patient-controlled administration versus neurolept analgesia. Herrick IA, et al. **Anesth Analg** 1997 Jun; 84(6):1285–91
Electroencephalographic bispectral index correlates with intraoperative recall and depth of propofol-induced sedation. Liu J, et al. **Anesth Analg** 1997 Jan;84(1):185–9
Ten years of sedoanalgesia and how it has affected urological practice. Miller RA. **Arch Ital Urol Androl** 1997 Feb; 69(1):29–33
Examination of the dependence potential of chloral hydrate by oral administration to normal monkeys. Leuschner J, et al. **Arzneimittelforschung** 1996 Aug;46(8):751–4
A comparative study of midazolam to meperidine/promethazine as an IM sedative technique for the pediatric dental patient. Downs AT, et al.
ASDC J Dent Child 1997 May–Jun;64(3):197–200, 165, 228
Conscious sedation for endoscopy. McCloy R, et al.
Eur J Gastroenterol Hepatol 1996 Dec;8(12):1233–40
Development of a sedation policy for upper GI endoscopy based on an audit of patients' perception of the procedure [see comments] Martin JP, et al.
Eur J Gastroenterol Hepatol 1996 Apr;8(4):355–7. Comment in: Eur J Gastroenterol Hepatol 1996 Sep;8(9):933.
Methods of sedation for auditory brainstem response testing. Reich DS, et al. **Int J Pediatr Otorhinolaryngol** 1996 Dec 20;38(2):131–41
Assessment of depth of midazolam sedation using objective parameters. Haberthür C, et al. **Intensive Care Med** 1996 Dec;22(12):1385–90
Conscious sedation with combined hypnotic agents for implantation of implantable cardioverter-defibrillators. Pacifico A, et al. **J Am Coll Cardiol** 1997 Sep;30(3):769–73
Ketamine-midazolam versus meperidine-midazolam for painful procedures in pediatric oncology patients. Marx CM, et al. **J Clin Oncol** 1997 Jan;15(1):94–102
Management of the prescription-drug-dependent adult: case of meprobamate abuse and its treatment. Gonzales JJ, et al. **J Geriatr Psychiatry Neurol** 1996 Apr;9(2):91–6
Patient-controlled sedation using propofol during interventional neuroradiologic procedures. Herrick IA, et al. **J Neurosurg Anesthesiol** 1997 Jul;9(3):237–41
Chloral hydrate versus midazolam sedation for neuroimaging studies [letter; comment] Hollman GA. **J Pediatr** 1996 Dec; 129(6):944–5. Comment on: J Pediatr 1996 Apr;128(4):573–6.
Ask the expert: conscious sedation. Gudlin DJ, et al.
J Soc Pediatr Nurs 1997 Jul–Sep;2(3):143–7
Safe pediatric outpatient sedation: the chloral hydrate debate revisited. Malis DJ, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):53–7
A comparison of propofol and other sedative use in paediatric intensive care in the United Kingdom. Pepperman ML, et al. **Paediatr Anaesth** 1997;7(2):143–53
Psychological and clinical effects of renal biopsy performed using sedation. Blake KD, et al. **Pediatr Nephrol** 1996 Dec; 10(6):693–5
A comparative study of medetomidine-butorphanol-ketamine and medetomidine-ketamine anaesthesia in dogs. Tomizawa N, et al. **Zentralbl Veterinarmed A** 1997 Jun;44(4):189–94
[Combination of propofol-ketamine-vecuronium for total intravenous anesthesia under hazardous conditions] Escarment J, et al. **Can Anesthesiol** 1996;44(5):447–50 (Eng. Abstr.) **(Fre)**
[Intranasal administration of midazolam (Dormicum) in young children in emergency medicine] Goepfert A, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Feb; 31(1):26–8 (Eng. Abstr.) **(Ger)**
[Use of diprivan in anesthesiology of angiographic studies and x-ray endovascular methods of treatment in children] Mikhelson VA, et al. **Anesteziol Reanimatol** 1996 Nov–Dec; (6):14–7 (Eng. Abstr.) **(Rus)**
[New trends in pediatric anesthesiology: diprivan and laryngeal mask (preliminary communication)] Mizikov VM, et al. **Anesteziol Reanimatol** 1996 Nov–Dec;(6):10–4 **(Rus)**
[Propofol in continuous infusion for performing nuclear magnetic resonance in children: an effective alternative to sedation with other drugs] Bellver-Romero J, et al.
Rev Esp Anestesiol Reanim 1997 Jun–Jul;44(6):250–3 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Sedation for enteroclysis using oral diazepam [letter; comment] Gold B, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1591. Comment on: AJR Am J Roentgenol 1988 Nov;151(5):951–2.
Inadvertent intra-arterial midazolam [letter] Iatrou C, et al. **Anaesth Intensive Care** 1997 Aug;25(4):431
Patient-maintained propofol sedation. Assessment of a target-controlled infusion system. Irwin MG, et al.
Anaesthesia 1997 Jun;52(6):525–30
A comparison of midazolam with trimeprazine as an oral premedicant for children. Mitchell V, et al. **Anaesthesia** 1997 May;52(5):416–21
The coherent frequency in the electroencephalogram as an

objective measure of cognitive function during propofol sedation. Andrade J, et al. **Anesth Analg** 1996 Dec; 83(6):1279–84

Use of alfentanil and propofol for outpatient monitored anesthesia care: determining the optimal dosing regimen. Avramov MN, et al. **Anesth Analg** 1997 Sep;85(3):566–72

Effect of flumazenil on ventilatory drive during sedation with midazolam and alfentanil. Gross JB, et al. **Anesthesiology** 1996 Oct;85(4):713–20

Intranasal midazolam in patients with status epilepticus. Kendall JL, et al. **Ann Emerg Med** 1997 Mar;29(3):415–7

Intranasal administration of midazolam: pharmacokinetic and pharmacodynamic properties and sedative potential. Fukuta O, et al. **ASDC J Dent Child** 1997 Mar–Apr; 64(2):89–98

The effectiveness of midazolam and hydroxyzine as sedative agents for young pediatric dental patients. Shapira J, et al. **ASDC J Dent Child** 1996 Nov–Dec;63(6):421–5

Epileptic fits under intravenous midazolam sedation [see comments] Robb ND. **Br Dent J** 1996 Sep 7;181(5):178–9 . Comment in: Br Dent J 1996 Dec 7–21;181(11–12):399. Comment in: Br Dent J 1997 Jan 25;182(2):50.

Propofol patient–controlled sedation during hip or knee arthroplasty in elderly patients. Ganapathy S, et al. **Can J Anaesth** 1997 Apr;44(4):385–9

Patient–controlled propofol sedation for elderly patients: safety and patient attitude toward control. Herrick IA, et al. **Can J Anaesth** 1996 Oct;43(10):1014–8

Intravenous sedation prior to peribulbar anaesthesia for cataract surgery in elderly patients. Wong DH, et al. **Can J Anaesth** 1996 Nov;43(11):1115–20

Propofol sedation for terminal care in a pediatric patient. Tobias JD. **Clin Pediatr (Phila)** 1997 May;36(5):291–3

Prolonged sedation of critically ill patients with midazolam or propofol: impact on weaning and costs [see comments] Barrientos–Vega R, et al. **Crit Care Med** 1997 Jan; 25(1):33–40. Comment in: Crit Care Med 1997 Mar;25(3):556–7.

Midazolam for premedication in children: nasal vs. rectal administration. Lejus C, et al. **Eur J Anaesthesiol** 1997 May; 14(3):244–9

Transurethral ureteroscopy: is local anesthesia with intravenous sedation sufficiently effective and safe? Miroglu C, et al. **Eur Urol** 1997;31(1):36–9

In–vivo study of diazepam transfer across the first trimester human placenta. Jauniaux E, et al. **Hum Reprod** 1996 Apr; 11(4):889–92

Propofol and alfentanil for sedation during placement of retrobulbar block for cataract surgery. Yee JB, et al. **J Clin Anesth** 1996 Dec;8(8):623–6

Patient–controlled sedation and analgesia during SWL. Uyar M, et al. **J Endourol** 1996 Oct;10(5):407–10

Elevated plasma alpha 1–acid glycoprotein levels: lack of connection to resistance to vecuronium blockade induced by anticonvulsant therapy. Hans P, et al. **J Neurosurg Anesthesiol** 1997 Jan;9(1):3–7

Evaluation of intranasal midazolam in children undergoing esophagogastroduodenoscopy. Fishbein M, et al. **J Pediatr Gastroenterol Nutr** 1997 Sep;25(3):261–6

Sedation administered to very low birth weight premature infants. Heller C, et al. **J Perinatol** 1997 Mar–Apr; 17(2):107–12

Propofol versus midazolam for sedation during percutaneous transluminal angioplasty. Wagner HJ, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):673–80

Chemical restraint of African lions (Panthera leo) with medetomidine–ketamine. Tomizawa N, et al. **J Vet Med Sci** 1997 Apr;59(4):307–10

Comparison of sublingually and orally administered triazolam for premedication before oral surgery. Berthold CW, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Aug;84(2):119–24

Multidrug intravenous sedation: determinants of the sedative dose of midazolam. Moore PA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):5–10

Effects of midazolam on pain sensations in the face. Nakanishi O, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):11–5

Oral midazolam premedication for paediatric day case patients. Cray SH, et al. **Paediatr Anaesth** 1996;6(4):265–70

Deep sedation with propofol for paediatric radiotherapy [letter; comment] Dakin MJ, et al. **Paediatr Anaesth** 1997; 7(3):261. Comment on: Paediatr Anaesth 1996;6(3):209–13.

Comparison between three transmucosal routes of administration of midazolam in children. Geldner G, et al. **Paediatr Anaesth** 1997;7(2):103–9

Midazolam following open heart surgery in children: haemodynamic effects of a loading dose [published erratum appears in Paediatr Anaesth 1996;6(6):448] Macnab AJ, et al. **Paediatr Anaesth** 1996;6(5):387–97

Does thiopentone delay recovery in children premedicated with midazolam? Morley–Forster P, et al. **Paediatr Anaesth** 1997;7(4):279–85

Oral midazolam compared with diazepam–droperidol and trimeprazine as premedicants in children. Patel D, et al. **Paediatr Anaesth** 1997;7(4):287–93

Oral premedication with midazolam in paediatric anaesthesia. Effects on sedation and gastric contents. Riva J, et al. **Paediatr Anaesth** 1997;7(3):191–6

Effects of nitrous oxide on diazepam sedation of young children. Houpt MI, et al. **Pediatr Dent** 1996 May–Jun; 18(3):236–41

Effects of tiletamine/zolazepam premedication on propofol anaesthesia in dogs. Cullen LK, et al. **Vet Rec** 1997 Apr 5;140(14):363–6

Medetomidine as a premedicant for ketamine, propofol or fentanyl anaesthesia in dogs. Hellebrekers LJ, et al. **Vet Rec** 1997 May 24;140(21):545–8

[Prolonged propofol (Diprivan) infusion for sedation in the critically ill] Badeva B, et al. **Khirurgiia (Sofiia)** 1996; 49(4):28–30 (Eng. Abstr.) **(Bul)**

[Sedation with oral hydroxyzine and rectal chloral hydrate in pediatric MRI and CT] Dacher JN, et al. **J Radiol** 1996 Dec;77(12):1189–92; discussion 1193–4 (Eng. Abstr.) **(Fre)**

[Halcion (triazolam) in the treatment of insomnia] Muzychenko AP, et al. **Ter Arkh** 1997;69(1):65–8 (Eng. Abstr.) **(Rus)**

[Effects of metoclopramide on the hypnotic dosages of propofol (letter)] Santiveri X, et al. **Rev Esp Anestesiol Reanim** 1996 Oct;43(8):297–8 **(Spa)**

ADVERSE EFFECTS

Pharmacovigilance—should the experts agree to differ? Dower M. **Adverse Drug React Toxicol Rev** 1996 Aug; 15(3):167–71

Fatal side–effects of continuous propofol infusion in children may be related to malignant hyperthermia [letter] Plötz FB, et al. **Anaesth Intensive Care** 1996 Dec;24(6):724

Propofol infusion for conscious sedation in dentistry in patients with involuntary movement disorders—a note of caution. Robb ND, et al. **Anaesth Intensive Care** 1997 Aug; 25(4):429–30

Flumazenil reverses paradoxical reaction to midazolam in a child. Thakker P, et al. **Anaesth Intensive Care** 1996 Aug; 24(4):505–7

Midazolam co–induction and laryngeal mask insertion [letter; comment] Bellman MH. **Anaesthesia** 1997 Jan;52(1):92. Comment on: Anaesthesia 1996 Aug;51(8):782–4.

Hallucinations after orally administered lorazepam in an adult—a problem revisited [letter] van den Berg AA. **Anaesthesia** 1996 Sep;51(9):891–2

Treatment of a paradoxical reaction to midazolam with haloperidol. Khan LC, et al. **Anesth Analg** 1997 Jul; 85(1):213–5

Cobra bite victim: down but not out [letter] Cheng EY, et al. **Ann Pharmacother** 1996 Jul–Aug;30(7–8):885–6

Triazolam and diphenhydramine effects on seizure duration in depressed patients receiving ECT [letter] Guthrie SK, et al. **Convuls Ther** 1996 Dec;12(4):261–5

Fixed drug eruption of the scrotum due to hydroxyzine hydrochloride (Atarax). Cohen HA, et al. **Cutis** 1996 Jun; 57(6):431–2

Livedo reticularis and thrombotic purpura related to the use of diphenhydramine associated with pyrithyldione. Morell A, et al. **Dermatology** 1996;193(1):50–1

Comparative review of the adverse effects of sedatives used in children undergoing outpatient procedures. D'Agostino J, et al. **Drug Saf** 1996 Mar;14(3):146–57 (134 ref.)

Effect of diazepam sedation on arterial oxygen saturation during esophagogastroduodenoscopy: a placebo–controlled study [see comments] Gombar KK, et al. **Indian J Gastroenterol** 1996 Apr;15(2):40–2. Comment in: Indian J Gastroenterol 1996 Jul;15(3):114.

Allergy to tartrazine in alprazolam. Bhatia MS. **Indian J Med Sci** 1996 Aug;50(8):285–6

Hypertriglyceridaemia associated with propofol sedation in critically ill patients [letter] Mateu J, et al. **Intensive Care Med** 1996 Aug;22(8):834–5

Rhabdomyolysis and pulmonary hypertension in a child, possibly due to long–term high–dose propofol infusion [letter] van Straaten EA, et al. **Intensive Care Med** 1996 Sep;22(9):997

A firefighter with pancreatitis. Metkus AP, et al. **Lancet** 1996 Dec 21–28;348(9043):1702

Warfarin–fluoxetine and diazepam–fluoxetine interaction. Dent LA, et al. **Pharmacotherapy** 1997 Jan–Feb;17(1):170–2

Arrhythmia in a 38–year–old man. Ip TP, et al. **Postgrad Med J** 1997 Apr;73(858):249–51

[Physician's personal responsibility. Experiences from the Diprivan issue] Refstad S. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1937–9 **(Nor)**

ANALYSIS

Detection of alprazolam in hair by negative ion chemical ionization mass spectrometry. Höld KM, et al. **Forensic Sci Int** 1997 Jan 17;84(1–3):201–9

Comparison between gas chromatography–atomic emission detection and gas chromatography–mass spectrometry for the assay of propofol. Elbast W, et al. **J Chromatogr B Biomed Appl** 1996 Nov 8;686(1):97–102

Detection of bromisovalum from the bone marrow of skeletonized human remains: a case report with a comparison between gas chromatography/mass spectrometry (GC/MS) and high–performance liquid chromatography/mass spectrometry (LC/MS). Maeda H, et al. **Med Sci Law** 1997 Jul;37(3):248–53

ANTAGONISTS & INHIBITORS

Flumazenil reverses paradoxical reaction to midazolam in a child. Thakker P, et al. **Anaesth Intensive Care** 1996 Aug; 24(4):505–7

Antagonistic effects of atipamezole on medetomidine–induced sedation in horses. Yamashita K, et al. **J Vet Med Sci** 1996 Oct;58(10):1049–52

BLOOD

Measurement by HPLC of midazolam and its major metabolite, 1–hydroxymidazolam in plasma of very premature neonates. Lee TC, et al. **Biomed Chromatogr** 1996 Mar–Apr;10(2):65–8

A routine HPLC method for monitoring midazolam in serum. Odou P, et al. **Biomed Chromatogr** 1997 Jan–Feb; 11(1):19–21

Handling of blood samples for determination of thalidomide [letter; comment] Eriksson T, et al. **Clin Chem** 1997 Jun; 43(6 Pt 1):1094–6. Comment on: Clin Chem 1995 Aug;41(8 Pt 1):1199.

Determination of midazolam and its metabolites in serum microsamples by high–performance liquid chromatography and its application to pharmacokinetics in rats. Ma F, et al. **J Chromatogr B Biomed Appl** 1996 Jun 28;682(1):109–13

Simultaneous determination of midazolam and its metabolites 1–hydroxymidazolam and 4–hydroxymidazolam in human serum using gas chromatography–mass spectrometry. Martens J, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):95–100

Determination of triazolam in serum by deactivated metal capillary gas chromatography with electron–capture detection. Nishioka R. **J Chromatogr B Biomed Appl** 1996 Jun 7;681(2):401–4

Gas chromatographic determination of midazolam in low–volume plasma samples. Podkowik BI, et al. **J Chromatogr B Biomed Appl** 1996 Jun 7;681(2):405–11

Comparison of high–performance liquid chromatography and polyclonal fluorescence polarization immunoassay for the monitoring of midazolam in the plasma of intensive care unit patients. Bouïget P, et al. **Ther Drug Monit** 1996 Oct; 18(5):610–9

DIAGNOSTIC USE

Identification of drug–related cognitive impairment in older individuals. Challenge studies with diphenhydramine. Sands L, et al. **Am J Geriatr Psychiatry** 1997 Spring; 5(2):156–66

HISTORY

Chloral hydrate: a historical note [letter] Kaude JV. **AJR Am J Roentgenol** 1997 Oct;169(4):1195

METABOLISM

Determination of midazolam and its metabolites in serum microsamples by high–performance liquid chromatography and its application to pharmacokinetics in rats. Ma F, et al. **J Chromatogr B Biomed Appl** 1996 Jun 28;682(1):109–13

Investigation of the stereoselective in vitro biotransformation of glutethimide by high–performance liquid chromatography and capillary electrophoresis. Weinz C, et al. **J Chromatogr B Biomed Appl** 1997 Mar 7; 690(1–2):233–42

Involvement of a cytochrome P450 system in microsomal debromination of alpha–(bromisovaleryl)urea. Oka K, et al. **J Pharm Pharmacol** 1996 Sep;48(9):930–2

Identification of metabolites of azaperone in horse urine. Sams RA, et al. **J Pharm Sci** 1996 Jan;85(1):79–84

PHARMACOKINETICS

Pharmacokinetic–pharmacodynamic modeling of the new steroid hypnotic eltanolone in healthy volunteers. Hering WJ, et al. **Anesthesiology** 1996 Dec;85(6):1290–9

Influence of the antibiotics erythromycin and azithromycin on the pharmacokinetics and pharmacodynamics of midazolam. Zimmermann T, et al. **Arzneimittelforschung** 1996 Feb;46(2):213–7

Triazolam pharmacokinetics and pharmacodynamics in Caucasians and Southern Asians: ethnicity and CYP3A activity. Kinirons MT, et al. **Br J Clin Pharmacol** 1996 Jan;41(1):69–72

The effect of ingestion time interval on the interaction between itraconazole and triazolam. Neuvonen PJ, et al. **Clin Pharmacol Ther** 1996 Sep;60(3):326–31

Triazolam is ineffective in patients taking rifampin. Villikka K, et al. **Clin Pharmacol Ther** 1997 Jan;61(1):8–14

Pharmacokinetics and pharmacodynamics of midazolam given via continuous intravenous infusion in intensive care units. Fragen RJ. **Clin Ther** 1997 May–Jun;19(3):405–19; discussion 367–8 (38 ref.)

Pharmacokinetic analysis of chloral hydrate and its metabolism in B6C3F1 mice. Abbas RR, et al. **Drug Metab Dispos** 1996 Dec;24(12):1340–6

Pharmacokinetics of oral triazolam in children. Karl HW, et al. **J Clin Psychopharmacol** 1997 Jun;17(3):169–72

Pharmacokinetics of midazolam in Vietnamese subjects. Balson KR, et al. **J Gastroenterol Hepatol** 1996 Dec; 11(12):1177–80

Single–dose pharmacokinetics and pharmacodynamics of oral triazolam in relation to cytochrome P4502C19 (CYP2C19) activity. Yasui N, et al. **Ther Drug Monit** 1997 Aug; 19(4):371–4

[Kinetics of elimination of diazepam after intravenous injection in horses] Shini S, et al.

DTW Dtsch Tierarztl Wochenschr 1997 Jan;104(1):22–5 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Intravenous sedation for retrobulbar injection and eye surgery: diazepam and/or propofol? Hampl KF, et al. **Acta Anaesthesiol Scand** 1996 Jan;40(1):53–8

Longer brainstem auditory evoked response latencies of individuals with fragile X syndrome related to sedation. Miezejeski CM, et al. **Am J Med Genet** 1997 Apr 18; 74(2):167–71

"Awareness" during endoscopic procedures [letter] Grant G. **Anaesth Intensive Care** 1996 Aug;24(4):517

Midazolam premedication delays recovery after propofol without modifying involuntary movements. Bevan JC, et al. **Anesth Analg** 1997 Jul;85(1):50–4

The effects of midazolam on propofol-induced anesthesia: propofol dose requirements, mood profiles, and perioperative dreams. Oxorn DC, et al. **Anesth Analg** 1997 Sep;85(3):553–9

Effects of midazolam on contractions in smooth muscle of the rabbit mesenteric artery. Yamaguchi S, et al. **Anesth Analg** 1997 Jan;84(1):199–205

Bispectral analysis measures sedation and memory effects of propofol, midazolam, isoflurane, and alfentanil in healthy volunteers. Glass PS, et al. **Anesthesiology** 1997 Apr; 86(4):836–47

Negative and selective effects of propofol on isolated swine myocyte contractile function in pacing-induced congestive heart failure. Hebbar L, et al. **Anesthesiology** 1997 Mar; 86(3):649–59

Pharmacokinetic-pharmacodynamic modeling of the new steroid hypnotic eltanolone in healthy volunteers. Hering WJ, et al. **Anesthesiology** 1996 Dec;85(6):1290–9

Urine and plasma catecholamine and cortisol concentrations after myocardial revascularization. Modulation by continuous sedation. Multicenter Study of Perioperative Ischemia (McSPI) Research Group, and the Ischemia Research and Education Foundation (IREF). Plunkett JJ, et al. **Anesthesiology** 1997 Apr;86(4):785–96

Effects of daytime administration of zolpidem and triazolam on performance. Wesensten NJ, et al. **Aviat Space Environ Med** 1996 Feb;67(2):115–20

Synergistic interactions between midazolam and alfentanil in isolated neonatal rat spinal cord. Feng J, et al. **Br J Anaesth** 1996 Sep;77(3):375–80

Coupling of spontaneous ventilation to heart beat during benzodiazepine sedation. Galletly DC, et al. **Br J Anaesth** 1997 Jan;78(1):100–1

Psychophysical and electrophysiological responses to experimental pain may be influenced by sedation: comparison of the effects of a hypnotic (propofol) and an analgesic (alfentanil). Petersen-Felix S, et al. **Br J Anaesth** 1996 Aug;77(2):165–71

Enhanced effect of triazolam with diltiazem. Kosuge K, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):367–72

Midazolam and awareness with recall during total intravenous anaesthesia. Miller DR, et al. **Can J Anaesth** 1996 Sep;43(9):946–53

Propofol or midazolam for sedation and early extubation following cardiac surgery. Searle NR, et al. **Can J Anaesth** 1997 Jun;44(6):629–35

Cardiorespiratory effects of a 5HT2 antagonist (R51703) in awake and anesthetized dogs. Doherty TJ, et al. **Can J Vet Res** 1996 Jul;60(3):172–8

Pharmacokinetics and pharmacodynamics of midazolam given via continuous intravenous infusion in intensive care units. Fragen RJ. **Clin Ther** 1997 May-Jun;19(3):405–19; discussion 367–8 (38 ref.)

Propofol inhibits epileptiform activity in rat hippocampal slices. Rasmussen PA, et al. **Epilepsy Res** 1996 Nov; 25(3):169–75

Grapefruit juice does not enhance the effects of midazolam and triazolam in man. Vanakoski J, et al. **Eur J Clin Pharmacol** 1996;50(6):501–8

Time course of discriminative stimulus effects of bretazenil and chlordiazepoxide in rats. Bronson M, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):7–12

Behavioural analysis of changes in nociceptive thresholds produced by remoxipride in sheep and rats. Main DC, et al. **Eur J Pharmacol** 1995 Dec 20;287(3):221–31

Evaluation of sedation in quail induced by use of midazolam and reversed by use of flumazenil [see comments] Day TK, et al. **J Am Vet Med Assoc** 1996 Sep 1;209(5):969–71. Comment in: J Am Vet Med Assoc 1996 Dec 15;209(12):1992–3.

Effect of ethanol, haloperidol, and lorazepam on cardiac conduction and contraction. Medlin RP Jr, et al. **J Cardiovasc Pharmacol** 1996 Dec;28(6):792–8

Antisense technology reveals the alpha2A adrenoceptor to be the subtype mediating the hypnotic response to the highly selective agonist, dexmedetomidine, in the locus coeruleus of the rat [see comments] Mizobe T, et al. **J Clin Invest** 1996 Sep 1;98(5):1076–80. Comment in: J Clin Invest 1996 Sep 1;98(5):1074–5.

Gastrodin and p-hydroxybenzyl alcohol facilitate memory consolidation and retrieval, but not acquisition, on the passive avoidance task in rats. Hsieh MT, et al. **J Ethnopharmacol** 1997 Mar;56(1):45–54

Respiratory and circulatory parameters of African elephants (Loxodonta africana) anaesthetised with etorphine and azaperone. Still J, et al. **J S Afr Vet Assoc** 1996 Sep; 67(3):123–7

The influence of midazolam and nitrous oxide on respiratory depression in laboratory rats. Henry RJ, et al. **Pediatr Dent** 1996 Jul-Aug;18(4):281–6

Influence of sedation on arousal and cardiorespiratory responses to airflow obstruction in sleeping lambs. Jakubowska AE, et al. **Pediatr Res** 1996 Oct;40(4):564–70

Evaluation of in vivo interactions in mice between flurazepam and two neuroactive steroids. Deutsch SI, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):323–6

Tolerance develops to the spatial learning deficit produced by diazepam in rats. McNamara RK, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):383–9

Development of tolerance in mice to the sedative effects of the neuroactive steroid minaxolone following chronic exposure. Marshall FH, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):1–8

Chronic treatment with dexmedetomidine desensitizes alpha 2-adrenergic signal transduction. Reid K, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1–2):63–71

Locomotor activity pattern induced by diazepam in control and caffeine-treated mice. Sansone M, et al. **Pol J Pharmacol** 1995 Sep-Oct;47(5):387–92

Effects of a small dose of triazolam on P300 and resting EEG. Urata J, et al. **Psychopharmacology (Berl)** 1996 May; 125(2):179–84

Cardiopulmonary effects of medetomidine in sheep and in ponies. Bryant CE, et al. **Res Vet Sci** 1996 May; 60(3):267–71

[The effect of furosemide and valium on band 3 protein anion transport function in chronic respiratory failure patients] Yang X, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Dec; 18(6):369–71, 384 (Eng. Abstr.) **(Chi)**

[Medetomidine] Hellebrekers LJ. **Tijdschr Diergeneeskd** 1996 Nov 1;121(21):634 **(Dut)**

[Apnea and retarded awakening following oral premedication with midazolam (letter)] Rufino-Ruiz J, et al. **Rev Esp Anestesiol Reanim** 1997 Mar;44(3):129 **(Spa)**

POISONING

Diphenhydramine-induced psychosis with therapeutic doses [letter] Sexton JD, et al. **Am J Emerg Med** 1997 Sep; 15(5):548–9

Triazolam (Halcion) intoxication in a neonate--a first report [letter] Sakai T, et al. **Eur J Pediatr** 1996 Dec; 155(12):1065–6

Meprobamate overdosage: a continuing problem. Sensitive GC-MS quantitation after solid phase extraction in 19 fatal cases. Gaillard Y, et al. **Forensic Sci Int** 1997 May 5; 86(3):173–80

Death attributed to the toxic interaction of triazolam, amitriptyline and other psychotropic drugs. Kudo K, et al. **Forensic Sci Int** 1997 Apr 18;86(1–2):35–41

[A suicidal case of electrocution with hypnotic drug poisoning: an autopsy report] Yamazaki M, et al. **Nippon Hoigaku Zasshi** 1997 Apr;51(2):95–101 (Eng. Abstr.) **(Jpn)**

[The forensic medical aspects of acute Clofelin poisonings] Kedrov VS, et al. **Sud Med Ekspert** 1997 Jul-Sep; 40(3):18–20 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Propofol and midazolam in status epilepticus [letter; comment] Huff JS, et al. **Acad Emerg Med** 1996 Feb; 3(2):179. Comment on: Acad Emerg Med 1995 Feb;2(2):128–33.

Saquinavir interaction with midazolam: pharmacokinetic considerations when prescribing protease inhibitors for patients with HIV disease [letter] Merry C, et al. **AIDS** 1997 Feb;11(2):268–9

Intravenous midazolam as a sedative for colonoscopy: a randomized, double-blind clinical trial. Yuno K, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):981–4

Etomidate use during emergency intubation of trauma patients [letter] Plewa MC, et al. **Am J Emerg Med** 1997 Jan;15(1):98–100

Propofol for sedation during rapid opiate detoxification [letter] Demaria PA Jr, et al. **Am J Psychiatry** 1997 Feb; 154(2):290–1

Comparison of the efficacy of paracetamol versus paracetamol, codeine and promethazine (Painstop) for premedication and analgesia for myringotomy in children. Ragg P, et al. **Anaesth Intensive Care** 1997 Feb;25(1):29–32

Midazolam premedication increases sedation but does not prolong discharge times after brief outpatient general anesthesia for laparoscopic tubal sterilization. Richardson MG, et al. **Anesth Analg** 1997 Aug;85(2):301–5

Propofol in chemotherapy-associated nausea and vomiting. Phelps KC, et al. **Ann Pharmacother** 1996 Mar;30(3):290–2 (22 ref.)

Diazepam [letter; comment] Lott DB. **AORN J** 1996 Feb; 63(2):349. Comment on: AORN J 1995 Oct;62(4):638–45.

Cardiovascular effects of intravenous midazolam after open heart surgery. Shekerdemian L, et al. **Arch Dis Child** 1997 Jan;76(1):57–61

Subhypnotic propofol does not treat postoperative vomiting in children after adenotonsillectomy. Zestos MM, et al. **Can J Anaesth** 1997 Apr;44(4):401–4

The role of midazolam-induced sedation in bone marrow aspiration/trephine biopsies. Mainwaring CJ, et al. **Clin Lab Haematol** 1996 Dec;18(4):285–8

Multidrug comparison (lorazepam, triazolam, zolpidem, and zopiclone) in situational insomnia: polysomnographic analysis by means of the cyclic alternating pattern. Parrino L, et al. **Clin Neuropharmacol** 1997 Jun;20(3):253–63

Sedation with intravenous midazolam in the pediatric intensive care unit. Notterman DA. **Clin Pediatr (Phila)** 1997 Aug;36(8):449–54

Prolonged sedation with midazolam or propofol [letter; comment] Collins P. **Crit Care Med** 1997 Mar;25(3):556–7 . Comment on: Crit Care Med 1997 Jan;25(1):33–40.

Propofol versus midazolam in critically ill patients [letter; comment] Kress JP, et al. **Crit Care Med** 1997 Mar; 25(3):554–5. Comment on: Crit Care Med 1996 Jun;24(6):932–9.

Alternating hemiplegia of childhood: treatment of attacks with chloral hydrate and niaprazine [letter] Veneselli E, et al. **Eur J Pediatr** 1997 Feb;156(2):157–8

Use of 2% propofol to produce diurnal sedation in critically ill patients. McLeod G, et al. **Intensive Care Med** 1997 Apr; 23(4):428–34

Overnight sedation with midazolam or propofol in the ICU: effects on sleep quality, anxiety and depression. Treggiari-Venzi M, et al. **Intensive Care Med** 1996 Nov; 22(11):1186–90

Alprazolam in chronic tension type headache. Shukla R, et al. **J Assoc Physicians India** 1996 Sep;44(9):641–4

Alprazolam and suicidal ideation: a meta-analysis of controlled trials in the treatment of depression [see comments] Jonas JM, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):208–11. Comment in: J Clin Psychopharmacol 1997 Aug;17(4):328; discussion 329.

A review of etomidate for rapid sequence intubation in the emergency department. Bergen JM, et al. **J Emerg Med** 1997 Mar-Apr;15(2):221–30 (162 ref.)

Midazolam: a review of therapeutic uses and toxicity. Nordt SP, et al. **J Emerg Med** 1997 May-Jun;15(3):357–65 (83 ref.)

Visual laser coagulation of the prostate using intraurethral gel anesthesia and light intravenous analgesia and sedation. Karlsen SJ, et al. **J Endourol** 1996 Aug;10(4):389–91

Whither triazolam? Johnson RE, et al. **Med Care** 1997 Apr; 35(4):303–10

Insomnia [letter; comment] Lobo BL, et al. **N Engl J Med** 1997 Jun 26;336(26):1919. Comment on: N Engl J Med 1997 Jan 30;336(5):341–6.

Efficacy and safety of intravenous midazolam and ketamine as sedation for therapeutic and diagnostic procedures in children. Parker RI, et al. **Pediatrics** 1997 Mar;99(3):427–31

Clomethiazole treatment of alcohol withdrawal delirium in a patient under methadone maintenance [letter] Gross A, et al. **Pharmacopsychiatry** 1996 Nov;29(6):229–30

Polysomnographic effects of hypnotic drugs. A review. Parrino L, et al. **Psychopharmacology (Berl)** 1996 Jul; 126(1):1–16 (131 ref.)

Propofol sedation of refractory delirious mania. Fox FL, et al. **Psychosomatics** 1997 May-Jun;38(3):288–90

Oral premedications in paediatric day surgery. Ong BC, et al. **Singapore Med J** 1996 Apr;37(2):139–42

Conscious sedation with high-dose midazolam for pediatric gastrointestinal endoscopy. Gremse DA, et al. **South Med J** 1997 Aug;90(8):821–5

Long-term subcutaneous infusion of midazolam for refractory delirium in terminal breast cancer. Ramani S, et al. **South Med J** 1996 Nov;89(11):1101–3 (12 ref.)

TOXICITY

Negative and selective effects of propofol on isolated swine myocyte contractile function in pacing-induced congestive heart failure. Hebbar L, et al. **Anesthesiology** 1997 Mar; 86(3):649–59

Biochemical effects of the mouse hepatocarcinogen oxazepam: similarities to phenobarbital. Griffin RJ, et al. **Fundam Appl Toxicol** 1996 Jan;29(1):147–54

URINE

Identification of metabolites of azaperone in horse urine. Sams RA, et al. **J Pharm Sci** 1996 Jan;85(1):79–84

SEDIMENTS, GEOLOGIC see **GEOLOGIC SEDIMENTS**

SEDIMENTS, MARINE see **GEOLOGIC SEDIMENTS**

SEED LEAF see **COTYLEDON**

SEEDLINGS see **PLANTS**

SEEDS

see related
NUTS

Legume seeds: friends and foes. Symposium proceedings. Caracas, Venezuela, 26 October 1994. **Arch Latinoam Nutr** 1996 Dec;44(4 Suppl 1):1S–54S

The biochemistry and nutrition group: 30 years of research in a developing country. Levy Benshimol A. **Arch Latinoam Nutr** 1996 Dec;44(4 Suppl 1):6S–9S

Dietary flax seed in prevention of hypercholesterolemic atherosclerosis. Prasad K. **Atherosclerosis** 1997 Jul 11; 132(1):69–76

Poisoning of feedlot cattle by seeds of Heliotropium

europaeum. Hill BD, et al. **Aust Vet J** 1997 May;75(5):360–1

Allergy to peanut, nuts, and sesame seed in Australian children [letter; comment] Sporik R, et al. **BMJ** 1996 Dec 7;313(7070):1477–8. Comment on: BMJ 1996 Apr 27;312(7038):1050–1. Comment on: BMJ 1996 Apr 27;312(7038):1074–8.

Ultra low temperature cryopreservation of somatic embryogenic cell line of foxtail millet [Setaria italica (L.) Beauv]. Dong J, et al. **Chin J Biotechnol** 1996;12(4):235–40

PCR analysis of half-seeds of cereal crops and its application in marker-assisted selection and breeding. Zhai W, et al. **Chin J Biotechnol** 1996;12(4):249–55

Local institutional development and relief in Ethiopia: a kire-based seed distribution programme in North Wollo. Pratten DT. **Disasters** 1997 Jun;21(2):138–54

Removal of a mango seed from the esophagus using a specially designed retrieval device. Misra SP, et al. **Endoscopy** 1996 May;28(4):399

Duration of cell cycle, onset of S phase and induced mitotic synchronisation in seeds of opium poppy, Papaver somniferum L. Lavania UC. **Indian J Exp Biol** 1996 Aug; 34(8):773–5

Regeneration of encapsulated protocorms of Phaius tankervilliae stored at low temperature. Malemnganba H, et al. **Indian J Exp Biol** 1996 Aug;34(8):802–5

A positive THC urinalysis from hemp (Cannabis) seed oil [letter] Callaway JC, et al. **J Anal Toxicol** 1997 Jul–Aug; 21(4):319–20

Effects of aqueous extract of deoiled neem (Azadirachta Indica A. juss) seed kernel and ':aranja (Pongamia Glabra vent) seed kernel against Culex quinquefasciatus. Sagar SK, et al. **J Commun Dis** 1996 Dec;28(4):260–9

Production responses by early lactation cows to whole sunflower seed or tallow supplementation of a diet based on barley. Markus SB, et al. **J Dairy Sci** 1996 Oct; 79(10):1817–25

Lactational responses of dairy cows fed unsaturated fat from extruded soybeans or sunflower seeds. Schingoethe DJ, et al. **J Dairy Sci** 1996 Jul;79(7):1244–9

Effects of the volatile oil of Nigella sativa seeds on the uterine smooth muscle of rat and guinea pig. Aqel M, et al. **J Ethnopharmacol** 1996 May;52(1):23–6

Experimental mitochondrial myopathy induced by chronic intoxication by Senna occidentalis seeds. Calore EE, et al. **J Neurol Sci** 1997 Feb 27;146(1):1–6

Protein-bound selenium in the seeds of coco de mono (Lecythis ollaria). Hammel C, et al. **J Trace Elem Med Biol** 1996 Jun;10(2):96–102

Ergotism and photosensitization in swine produced by the combined ingestion of Claviceps purpurea sclerotia and Ammi majus seeds. López TA, et al. **J Vet Diagn Invest** 1997 Jan;9(1):68–71

Effect of dietary flaxseed on fatty acid composition, superoxide, nitric oxide generation and antilisterial activity of peritoneal macrophages from female Sprague–Dawley rats. Babu US, et al. **Life Sci** 1997;60(8):545–54

American seeds suspected in Japanese food poisoning epidemic [news] Nathan R. **Nat Med** 1997 Jul;3(7):705–6

Wheat kernel ingestion protects from progression of muscle weakness in mdx mice, an animal model of Duchenne muscular dystrophy. Hübner C, et al. **Pediatr Res** 1996 Sep;40(3):444–9

Colonic sunflower seed bezoar. Tsou VM, et al. **Pediatrics** 1997 Jun;99(6):896–7

Effects of debittering methods on the proximate composition, organoleptic and functional properties of sesame (Sesamum indicum L.) seed flour. Badifu GI, et al. **Plant Foods Hum Nutr** 1996 Feb;49(2):119–26

Influence of heat processing of African yam bean seed (Sphenostylis stenocarpa) flour on the growth and organ weights of rats. Onyeike EN, et al. **Plant Foods Hum Nutr** 1995 Sep;48(2):85–93

Seed germination of Arabidopsis thaliana phyA/phyB double mutants is under phytochrome control. Poppe C, et al. **Plant Physiol** 1997 Aug;114(4):1487–92

The combined influence of dietary flaxseed variety, level, form, and storage conditions on egg production and composition among vitamin E-supplemented hens. Scheideler SE, et al. **Poult Sci** 1996 Oct;75(10):1221–6

Variability of fatty acid content in pumpkin seeds (Cucurbita pepo L.). Murkovic M, et al. **Z Lebensm Unters Forsch** 1996 Sep;203(3):216–9

[Intrabronchial inhaled seed migration. Value of ultrasonography in the diagnosis of pleural-cutaneous fistula] Giudicelli J, et al. **Rev Mal Respir** 1996;13(4):428–9 (Eng. Abstr.) **(Fre)**

[Use of a Coffea arabica tosta extract for the prevention and therapy of polyfactorial infectious diseases in newborn calves] Ponepal V, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):390–4 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

The GURKE gene is required for normal organization of the apical region in the Arabidopsis embryo. Torres-Ruiz RA, et al. **Plant J** 1996 Dec;10(6):1005–16

CHEMISTRY

The seed storage proteins of quinoa. Brinegar C. **Adv Exp Med Biol** 1997;415:109–15

Steroidal glycosides from Nicotiana tabacum L. seeds and their biological activity. Shvets SA, et al. **Adv Exp Med Biol** 1996;405:247–57

Partial characterization of the lysine rich 280kD globulin from common buckwheat (Fagopyrum esculentum Moench): its antigenic homology with seed proteins of some other crops. Rout MK, et al. **Biochem Mol Biol Int** 1996 Oct;40(3):587–95

Purification of a new ribosome-inactivating protein from the seeds of Cinnamomum porrectum and characterization of the RNA N-glycosidase activity of the toxic protein. Li XD, et al. **Biol Chem** 1996 Dec;377(12):825–31

Purification and primary structure determination of a Bowman-Birk trypsin inhibitor from Torresea cearensis seeds. Tanaka AS, et al. **Biol Chem** 1997 Mar–Apr; 378(3–4):273–81

Thionation of segetalins A and B, cyclic peptides with estrogen-like activity from seeds of Vaccaria segetalis. Morita H, et al. **Bioorg Med Chem** 1997 Mar;5(3):631–6

Structural features of an arabinan fragment isolated from the water-soluble fraction of dehulled rapeseed. Eriksson I, et al. **Carbohydr Res** 1996 Feb 7;281(1):161–72

Measurement of intracellular pH of maize seeds (Zea mays) during germination by 31P nuclear magnetic resonance spectroscopy. Barba I, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jul;43(5):609–20

Subcellular distribution of jacalin in Artocarpus integrifolia seed. Majumder M, et al. **Cytobios** 1996;88(355):201–8

Biochemical changes during regeneration of sunflower (Helianthus annuus L.). Martinelli L, et al. **Electrophoresis** 1996 Jan;17(1):191–7

Disulphide structure of a sunflower seed albumin: conserved and variant disulphide bonds in the cereal prolamin superfamily. Egorov TA, et al. **FEBS Lett** 1996 Nov 4; 396(2–3):285–8

Pharmacological actions of Pongamia pinnata seeds--a preliminary study. Singh RK, et al. **Indian J Exp Biol** 1996 Dec;34(12):1204–7

Some chemical and physical properties of bambara groundnut (Voandzeia subterranea Thouars) seed and products. Enwere NJ, et al. **Int J Food Sci Nutr** 1996 Nov; 47(6):469–75

Amino acid and fatty acid compositions of Adenopus breviflorus benth seed. Oshodi AA. **Int J Food Sci Nutr** 1996 Jul;47(4):295–8

alpha-Kirilowin, a novel ribosome-inactivating protein from seeds of Trichosanthes kirilowii (family Cucurbitaceae): a comparison with beta-kirilowin and other related proteins. Wong RN, et al. **Int J Pept Protein Res** 1996 Jan–Feb; 47(1–2):103–9

Use of urease-bromothymol blue-agar method for large-scale testing of urine on grain and seeds. Valdes PA, et al. **J AOAC Int** 1996 Jul–Aug;79(4):866–73

A new method for seed oil body purification and examination of oil body integrity following germination. Tzen JT, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):762–8

A plasma membrane sucrose-binding protein that mediates sucrose uptake shares structural and sequence similarity with seed storage proteins but remains functionally distinct. Overvoorde PJ, et al. **J Biol Chem** 1997 Jun 20; 272(25):15898–904

A novel family of small cysteine-rich antimicrobial peptides from seed of Impatiens balsamina is derived from a single precursor protein. Tailor RH, et al. **J Biol Chem** 1997 Sep 26;272(39):24480–7

Characterization of storage cell wall polysaccharides from Brazilian legume seeds and the formation of aqueous two-phase systems. Franco TT, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):255–61

The 1.8 A crystal structure of winged bean albumin 1, the major albumin from Psophocarpus tetragonolobus (L.) DC. McCoy AJ, et al. **J Mol Biol** 1997 Jun 27;269(5):881–91

The evolution of angiosperm seed proteins: a methionine-rich legumin subfamily present in lower angiosperm clades. Fischer H, et al. **J Mol Evol** 1996 Oct;43(4):399–404

Cyclic peptides from higher plants. 34. Segetalins G and H, structures and estrogen-like activity of cyclic pentapeptides from Vaccaria segetalis. Yun YS, et al. **J Nat Prod** 1997 Mar;60(3):216–8

Normal subjects consuming physiological levels of 18:3(n-3) and 20:5(n-3) from flaxseed or fish oils have characteristic differences in plasma lipid and lipoprotein fatty acid levels. Layne KS, et al. **J Nutr** 1996 Sep;126(9):2130–40

Location of the three disulfide bonds in an antimicrobial peptide from Amaranthus caudatus using mass spectrometry. el Bouyoussfi M, et al. **J Pept Res** 1997 Apr; 49(4):336–40

Sequence of a new Bowman-Birk inhibitor from Torresea acreana seeds and comparison with Torresea cearensis trypsin inhibitor (TcTI2). Tanaka AS, et al. **J Protein Chem** 1996 Aug;15(6):553–60

Characterization of polar and nonpolar seed lipid classes from highly saturated fatty acid sunflower mutants. Alvarez-Ortega R, et al. **Lipids** 1997 Aug;32(8):833–7

Ultrasound-assisted synthesis of santalbic acid and a study of triacylglycerol species in Santalum album (Linn.) seed oil. Lie Ken Jie MS, et al. **Lipids** 1996 Oct;31(10):1083–9

Structure analysis of an allene-containing estolide tetraester triglyceride in the seed oil of Sebastiana commersoniana (Euphorbiaceae). Spitzer V, et al. **Lipids** 1997 May; 32(5):549–57

Hydroxyl radical-scavenging property of secoisolariciresinol diglucoside (SDG) isolated from flax-seed. Prasad K. **Mol Cell Biochem** 1997 Mar;168(1–2):117–23

Variability in anticancer lignan levels in flaxseed. Thompson LU, et al. **Nutr Cancer** 1997;27(1):26–30

Modification of seed oil content and acyl composition in the brassicaceae by expression of a yeast sn-2 acyltransferase gene. Zou J, et al. **Plant Cell** 1997 Jun;9(6):909–23

Effect of sesame seed proteins supplementation on the nutritional, physical, chemical and sensory properties of wheat flour bread. El-Adawy TA. **Plant Foods Hum Nutr** 1995 Dec;48(4):311–26

Lipid composition of lesser known tropical seeds. Essien EU, et al. **Plant Foods Hum Nutr** 1995 Sep;48(2):135–40

Composition and functional properties of unprocessed and locally processed seeds from three underutilized food sources in Nigeria. Giami SY, et al. **Plant Foods Hum Nutr** 1997;50(1):27–36

Chemical and biological evaluation of proteins and mucilages from roots and seeds of Glossostemon bruguieri Desf. (Moghat). Ibrahim N, et al. **Plant Foods Hum Nutr** 1997; 50(1):55–61

Protein quality of peas as influenced by location, nitrogen application and seed inoculation. Igbasan FA, et al. **Plant Foods Hum Nutr** 1996 Feb;49(2):93–105

Studies on samh seeds (Mesembryanthemum forsskalei Hochst) growing in Saudi Arabia: 2: Chemical composition and microflora of samh seeds. Al-Jassir MS, et al. **Plant Foods Hum Nutr** 1995 Oct;48(3):185–92

Studies on samh seeds (Mesembryanthemum forsskalei Hochst) growing in Saudi Arabia: 3. Utilization of samh seeds in bakery products. Mustafa AI, et al. **Plant Foods Hum Nutr** 1995 Dec;48(4):279–86

Amino acid composition, available lysine content and in vitro protein digestibility of selected tropical crop seeds. Petzke KJ, et al. **Plant Foods Hum Nutr** 1997;50(2):151–62

Nutrient composition and biological evaluation of mesta (Hibiscus sabdariffa) seeds. Rao PU. **Plant Foods Hum Nutr** 1996 Jan;49(1):27–34

Chemical composition and nutritional potential of yam bean seeds (Pachyrhizus erosus L. urban). Santos AC, et al. **Plant Foods Hum Nutr** 1996 Jan;49(1):35–41

Isolation of molecular markers from the barley endosperm coenocyte and the surrounding nucellus cell layers. Doan DN, et al. **Plant Mol Biol** 1996 Jul;31(4):877–86

Interaction of dietary flaxseed with coccidia infections in chickens. Allen PC, et al. **Poult Sci** 1997 Jun;76(6):822–7

Crystallization and preliminary crystallographic data of a neutrophil migration-inducing lectin (KM+) extracted from the seed of Artocarpus integrifolia. de Oliveira PS, et al. **Proteins** 1997 Jan;27(1):157–9

Analysis of free amino acids in green coffee beans. II. Changes of the amino acid content in arabica coffees in connection with post-harvest model treatment. Arnold U, et al. **Z Lebensm Unters Forsch** 1996 Oct;203(4):379–84

[Analysis of components in natural food additive "grapefruit seed extract" by HPLC and LC/MS] Sakamoto S, et al. **Eisei Shikenjo Hokoku** 1996;(114):38–42 (Eng. Abstr.) **(Jpn)**

[Use of the HPLC method for determination of glucopiranosides during ripening of faba bean seeds] Nestorowicz J, et al. **Rocz Panstw Zakl Hig** 1996; 47(2):231–7 (Eng. Abstr.) **(Pol)**

[Amino acid sequence of anionic protease inhibitors from buckwheat seeds] Belozerskiĭ MA, et al. **Biokhimiia** 1996 Oct;61(10):1743–50 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Apoptosis in barley aleurone during germination and its inhibition by abscisic acid. Wang M, et al. **Plant Mol Biol** 1996 Dec;32(6):1125–34

DRUG EFFECTS

Mechanistic aspects of modification of radiobiological damage in barley seeds by glutathione and buthionine sulfoximine. Singh SP, et al. **Indian J Exp Biol** 1996 Mar; 34(3):247–51

The effects of chemical treatment of whole canola seed on lipid and protein digestion by steers. Aldrich CG, et al. **J Anim Sci** 1997 Feb;75(2):502–11

The effects of chemical treatment of whole canola seed on intake, nutrient digestibilities, milk production, and milk fatty acids of Holstein cows. Aldrich CG, et al. **J Anim Sci** 1997 Feb;75(2):512–21

Dietary Juniperis virginiensis seed oil decreased pentobarbital-associated mortalities among DBA/1 mice treated with collagen-adjuvant emulsions. Yoshida SH, et al. **J Lipid Mediat Cell Signal** 1996 May;13(3):283–93

EMBRYOLOGY

Induction and expression of seed-specific promoters in Arabidopsis embryo-defective mutants. Devic M, et al. **Plant J** 1996 Feb;9(2):205–15

ENZYMOLOGY

Protein proteinase inhibitors in legume seeds--overview. Birk Y. **Arch Latinoam Nutr** 1996 Dec;44(4 Suppl 1):26S–30S (47 ref.)

Interaction of proteases with legume seed inhibitors. Molecular features. de Seidl DS. **Arch Latinoam Nutr** 1996 Dec;44(4 Suppl 1):21S–25S

Substrate specificity of lentil seedling amine oxidase. Medda

R, et al. **Biochem Mol Biol Int** 1996 Oct;40(3):629–37

A simple method for the purification of type 1 RIPs. Marcozzi G, et al. **Biomed Chromatogr** 1997 May–Jun; 11(3):151–3

Transgenic rice (Oryza sativa) endosperm expressing daffodil (Narcissus pseudonarcissus) phytoene synthase accumulates phytoene, a key intermediate of provitamin A biosynthesis. Burkhardt PK, et al. **Plant J** 1997 May;11(5):1071–8

Cuphea wrightii thioesterases have unexpected broad specificities on saturated fatty acids. Leonard JM, et al. **Plant Mol Biol** 1997 Jul;34(4):669–79

The major form of ADP-glucose pyrophosphorylase in maize endosperm is extra-plastidial. Denyer K, et al. **Plant Physiol** 1996 Oct;112(2):779–85

Regulation of acyltransferase activity in immature maize embryos by abscisic acid and the osmotic environment. Pacheco-Moisés F, et al. **Plant Physiol** 1997 Jul; 114(3):1095–101

Broad-range and binary-range acyl-acyl-carrier protein thioesterases suggest an alternative mechanism for medium-chain production in seeds. Voelker TA, et al. **Plant Physiol** 1997 Jun;114(2):669–77

Purification and properties of Oryza sativa Cu–Zn superoxide dismutase. Padiglia A, et al. **Prep Biochem Biotechnol** 1996 May;26(2):135–42

GENETICS

DNA isolation from single or half seeds suitable for random amplified polymorphic DNA analyses. Krishna TG, et al. **Anal Biochem** 1997 Jul 15;250(1):125–7

Characterization, chromosomal mapping, and expression of different ubiquitin fusion protein genes in tissues from control and heat-shocked maize seedlings. Liu L, et al. **Biochem Cell Biol** 1996;74(1):9–19

Simplified selection of transgenic Arabidopsis thaliana seed in liquid culture. Nichols KW, et al. **Biotechniques** 1997 Jan;22(1):62–3

A transposon insertion in the Arabidopsis SSR16 gene causes an embryo-defective lethal mutation. Tsugeki R, et al. **Plant J** 1996 Sep;10(3):479–89

A molecular study of dormancy breaking and germination in seeds of Trollius ledebouri. Bailey PC, et al. **Plant Mol Biol** 1996 Nov;32(3):559–64

A pollen allergen-encoding gene is expressed in wheat ovaries. Balzer HJ, et al. **Plant Mol Biol** 1996 Nov; 32(3):435–45

The 22 bp W1 element in the pea lectin promoter is necessary and, as a multimer, sufficient for high gene expression in tobacco seeds. de Pater S, et al. **Plant Mol Biol** 1996 Nov; 32(3):515–23

Functional dissection of a napin gene promoter: identification of promoter elements required for embryo and endosperm-specific transcription. Ellerström M, et al. **Plant Mol Biol** 1996 Dec;32(6):1019–27

Regulation of two loblolly pine (Pinus taeda L.) isocitrate lyase genes in megagametophytes of mature and stratified seeds and during postgerminative growth. Mullen RT, et al. **Plant Mol Biol** 1997 Mar;33(4):593–604

A peroxiredoxin antioxidant is encoded by a dormancy-related gene, Per1, expressed during late development in the aleurone and embryo of barley grains. Stacy RA, et al. **Plant Mol Biol** 1996 Sep;31(6):1205–16

Molecular cloning and characterization of a cDNA encoding alpha-glucosidase from spinach. Sugimoto M, et al. **Plant Mol Biol** 1997 Mar;33(4):765–8

A 68 bp element of the beta-phaseolin promoter functions as a seed-specific enhancer. van der Geest AH, et al. **Plant Mol Biol** 1996 Nov;32(4):579–88

Developmental expression and regulation by light of two closely related beta-tubulin genes in Lupinus albus. Vassilevskaia TD, et al. **Plant Mol Biol** 1996 Dec; 32(6):1185–9

Seed banks and molecular maps: unlocking genetic potential from the wild. Tanksley SD, et al. **Science** 1997 Aug 22; 277(5329):1063–6 (22 ref.)

Effects of seed-specific expression of a cytokinin biosynthetic gene on canola and tobacco phenotypes. Roeckel P, et al. **Transgenic Res** 1997 Mar;6(2):133–41

[Detection of a new small RNA, induced by heat shock, in wheat seed ribosomes] Zhanybekova SSh, et al. **Biokhimiia** 1996 May;61(5):862–70 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Interactions among genes regulating ovule development in Arabidopsis thaliana. Baker SC, et al. **Genetics** 1997 Apr; 145(4):1109–24

A new method for the identification and isolation of genes essential for Arabidopsis thaliana seed germination. Dubreucq B, et al. **Mol Gen Genet** 1996 Aug 27; 252(1–2):42–50

The MADS domain protein AGL15 localizes to the nucleus during early stages of seed development. Perry SE, et al. **Plant Cell** 1996 Nov;8(11):1977–89

A role for sugar transporters during seed development: molecular characterization of a hexose and a sucrose carrier in fava bean seeds. Weber H, et al. **Plant Cell** 1997 Jun; 9(6):895–908

IMMUNOLOGY

Seed-specific immunomodulation of abscisic acid activity induces a developmental switch. Phillips J, et al. **EMBO J** 1997 Aug 1;16(15):4489–96

METABOLISM

Rumen dry matter and crude protein degradability of extracted or untreated oilseeds and Leucaena leucocephala leaves. Gralak MA, et al. **Arch Tierernahr** 1997; 50(2):173–85

Complete amino-acid sequence of PD-S2, a new ribosome-inactivating protein from seeds of Phytolacca dioica L. Del Vecchio Blanco F, et al. **Biochim Biophys Acta** 1997 Mar 7;1338(1):137–44

Chitin-binding proteins from cowpea (Vigna unguiculata) seeds. Sales MP, et al. **Braz J Med Biol Res** 1996 Mar; 29(3):319–26

Seed-specific immunomodulation of abscisic acid activity induces a developmental switch. Phillips J, et al. **EMBO J** 1997 Aug 1;16(15):4489–96

cDNA cloning and expression of pokeweed antiviral protein from seeds in Escherichia coli and its inhibition of protein synthesis in vitro. Poyet JL, et al. **FEBS Lett** 1997 Apr 7;406(1–2):97–100

Post-translational proteolytic processing and the isolectins of lentil and other Viciae seed lectins. Young NM, et al. **Glycoconj J** 1996 Aug;13(4):575–83

Analysis of lupin seed protein digestibility using gel electrophoresis and immunoblots. Tai HH, et al. **J Anim Sci** 1997 Jul;75(7):1934–40

Effect of lipid extraction methods on total dietary fiber and nonstarch polysaccharide contents of selected nuts and seeds. Li BW, et al. **J AOAC Int** 1997 Jan–Feb;80(1):98–101

BANYULS, a novel negative regulator of flavonoid biosynthesis in the Arabidopsis seed coat. Albert S, et al. **Plant J** 1997 Feb;11(2):289–99

Changes of enzymes and factors involved in DNA synthesis during wheat embryo germination. Benedetto JP, et al. **Plant Mol Biol** 1996 Sep;31(6):1217–25

Analysis of kafirin promoter activity in transgenic tobacco seeds. DeRose RT, et al. **Plant Mol Biol** 1996 Dec; 32(6):1029–35

Oleosins and oil bodies in seeds and other organs. Huang AH. **Plant Physiol** 1996 Apr;110(4):1055–61 (27 ref.)

MICROBIOLOGY

Crop improvement and disease suppression by a Bacillus spp. SR2 from pea nut rhizosphere. Kumar BS. **Indian J Exp Biol** 1996 Aug;34(8):794–8

Comparison of chemical treatments to kill Salmonella on alfalfa seeds destined for sprout production. Beuchat LR. **Int J Food Microbiol** 1997 Mar 3;34(3):329–33

Evaluation of Alternaria and its mycotoxins during ensiling of sunflower seeds. Dacero AM, et al. **Nat Toxins** 1997; 5(1):20–3

Protein quality of peas as influenced by location, nitrogen application and seed inoculation. Igbasan FA, et al. **Plant Foods Hum Nutr** 1996 Feb;49(2):93–105

Studies on samh seeds (Mesembryanthemum forsskalei Hochst) growing in Saudi Arabia: 2: Chemical composition and microflora of samh seeds. Al-Jassir MS, et al. **Plant Foods Hum Nutr** 1995 Oct;48(3):185–92

PARASITOLOGY

Phylogeography and host association in a pollinating seed parasite Greya politella (Lepidoptera: Prodoxidae). Brown JM, et al. **Mol Ecol** 1997 Mar;6(3):215–24

PHYSIOLOGY

Cloning and characterization of a cDNA encoding a maize seedling phytase. Maugenest S, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):511–7

Measurement of intracellular pH of maize seeds (Zea mays) during germination by 31P nuclear magnetic resonance spectroscopy. Barba I, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jul;43(5):609–20

Attractive ovules. Smyth DR. **Curr Biol** 1997 Feb 1; 7(2):R64–6

Developmental basis of homeosis in precociously germinating Brassica napus embryos: phase change at the shoot apex. Fernandez DE. **Development** 1997 Mar;124(6):1149–57

A new method for seed oil body purification and examination of oil body integrity following germination. Tzen JT, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):762–8

Downregulation of ovule-specific MADS box genes from petunia results in maternally controlled defects in seed development. Colombo L, et al. **Plant Cell** 1997 May; 9(5):703–15

Composition and functional properties of unprocessed and locally processed seeds from three underutilized food sources in Nigeria. Giami SY, et al. **Plant Foods Hum Nutr** 1997;50(1):27–36

Pollen embryogenesis. Reynolds TL. **Plant Mol Biol** 1997 Jan;33(1):1–10 (56 ref.)

Action spectra for phytochrome A- and B-specific photoinduction of seed germination in Arabidopsis thaliana. Shinomura T, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8129–33

RADIATION EFFECTS

Effects of heavy ions on the germination and survival of Arabidopsis thaliana. Tanaka A, et al. **Int J Radiat Biol** 1997 Jul;72(1):121–7

SEER PROGRAM

Will primary central nervous system lymphoma be the most frequent brain tumor diagnosed in the year 2000? Corn BW, et al. **Cancer** 1997 Jun 15;79(12):2409–13

A comparison of breast, colorectal, lung, and prostate cancers reported to the National Cancer Data Base and the Surveillance, Epidemiology, and End Results Program. Mettlin CJ, et al. **Cancer** 1997 May 15;79(10):2052–61

Trends in incidence of primary malignant brain tumors in USA, 1981–1990. Ahsan H, et al. **Int J Epidemiol** 1995 Dec;24(6):1078–85

Generalizability of the surveillance, epidemiology, and end results registry population: factors relevant to epidemiologic and health care research. Nattinger AB, et al. **J Clin Epidemiol** 1997 Aug;50(8):939–45

The importance of histologic type on breast cancer survival. Northridge ME, et al. **J Clin Epidemiol** 1997 Mar; 50(3):283–90

Is there a 'cancer corridor' in Louisiana? Groves FD, et al. **J La State Med Soc** 1996 Apr;148(4):155–65

From the Centers for Disease Control and Prevention. Breast cancer incidence and mortality—United States, 1992. **JAMA** 1996 Oct 23–30;276(16):1293–4

Population-based study of long-term survival in patients with clinically localised prostate cancer [see comments] Lu-Yao GL, et al. **Lancet** 1997 Mar 29;349(9056):906–10. Comment in: Lancet 1997 Mar 29;349(9056):892–3. Comment in: Lancet 1997 May 24;349(9064):1551; discussion 1551–2.

Breast cancer incidence and mortality—United States, 1992. **MMWR Morb Mortal Wkly Rep** 1996 Oct 4;45(39):833–7

TRENDS

The war on cancer has a birthday, and a present [editorial] DeVita VT Jr. **J Clin Oncol** 1997 Mar;15(3):867–9

SEGMENTATION STAGE, OVUM see **CLEAVAGE STAGE, OVUM**

SEITELBERGER'S DISEASE see **NEUROAXONAL DYSTROPHIES**

SEIZURES

Seizures and epilepsy in the elderly. Thomas RJ. **Arch Intern Med** 1997 Mar 24;157(6):605–17 (203 ref.)

Clinical analysis of 22 infants with afebrile cluster seizures. Li PH, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 May–Jun;38(3):203–7

Seizure disorders. **Curr Opin Neurol** 1997 Apr;10(2):B29–41

Neonatal seizures. Rennie JM. **Eur J Pediatr** 1997 Feb; 156(2):83–7 (47 ref.)

The evaluation and treatment of seizures in the emergency department. Jagoda A, et al. **Mt Sinai J Med** 1997 Sep–Oct; 64(4–5):249–57 (76 ref.)

Glutamate hyperexcitability and seizure-like activity throughout the brain and spinal cord upon relief from chronic glutamate receptor blockade in culture. Van Den Pol AN, et al. **Neuroscience** 1996 Oct;74(3):653–74

Unilateral megalencephaly in linear nevus sebaceous syndrome: a neuroradiological case report. Wakabayashi C, et al. **Radiat Med** 1997 Jan–Feb;15(1):65–9

BLOOD

Osmolality and electrolytes in cerebrospinal fluid and serum of febrile children with and without seizures. Kiviranta T, et al. **Eur J Pediatr** 1996 Feb;155(2):120–5

Regulations prohibiting blood donation by individuals with seizures or epilepsy are not necessary. Krumholz A, et al. **Med Law** 1997;16(2):339–47

CEREBROSPINAL FLUID

Vasopressin in the cerebrospinal fluid of febrile children with or without seizures. Kiviranta T, et al. **Brain Dev** 1996 Mar–Apr;18(2):110–3

Cerebrospinal fluid concentrations of glutamate and GABA during perinatal cerebral hypoxia-ischemia and seizures. Cataltepe O, et al. **Brain Res** 1996 Feb 19;709(2):326–30

Effect of seizures and diuretics on the osmolality of the cerebrospinal fluid. Stringer JL, et al. **Brain Res** 1997 Jan 16;745(1–2):328–30

Osmolality and electrolytes in cerebrospinal fluid and serum of febrile children with and without seizures. Kiviranta T, et al. **Eur J Pediatr** 1996 Feb;155(2):120–5

Cerebrospinal fluid abnormalities in seizures. Patwari AK. **Indian Pediatr** 1996 Jan;33(1):83–5

CHEMICALLY INDUCED

Postoperative seizure-like activity following sevoflurane anesthesia. Terasako K, et al. **Acta Anaesthesiol Scand** 1996 Sep;40(8 Pt 1):953–4

Seizure-inducing effects of antiepileptic drugs: a review. Bauer J. **Acta Neurol Scand** 1996 Dec;94(6):367–77 (146 ref.)

Alcohol-related seizures and the kindling effect of repeated detoxifications: the influence of cocaine. Moak DH, et al. **Alcohol Alcohol** 1996 Mar;31(2):135–43

Impact of dosage-monitoring system on frequency of seizures associated with imipenem-cilastatin [letter] Guglielmo BJ, et al. **Am J Health Syst Pharm** 1996 Sep 1;53(17):2097–8

SEIZURES

Seizures related to use of imipenem-cilastatin [letter] Lane M, et al. **Am J Health Syst Pharm** 1996 Jul 1;53(13):1605-6

Unexpected alcohol withdrawal. Brent MJ. **Am J Nurs** 1997 Jun;97(6):52-3

The effects of plasma and brain magnesium concentrations on lidocaine-induced seizures in the rat. Kim YJ, et al. **Anesth Analg** 1996 Dec;83(6):1223-8

Clinical course of crack cocaine body stuffers. Sporer KA, et al. **Ann Emerg Med** 1997 May;29(5):596-601

One-way cross-sensitization and cross-tolerance to seizure activity from cocaine to lidocaine. Shimosato K, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:340-52

Comment: seizure resulting from venlafaxine overdose [letter; comment] Durback LF, et al. **Ann Pharmacother** 1997 Jun; 31(6):790-1. Comment on: Ann Pharmacother 1997 Feb;31(2):178-80.

Generalized seizures associated with the use of muromonab-CD3 in two patients after kidney transplantation. Seifeldin RA, et al. **Ann Pharmacother** 1997 May;31(5):586-9

Seizure resulting from a venlafaxine overdose [see comments] White CM, et al. **Ann Pharmacother** 1997 Feb;31(2):178-80 . Comment in: Ann Pharmacother 1997 Jun;31(6):790-1.

Seizures induced by alpha-guanidinoglutaric acid, a nitric oxide synthase inhibitor, are controlled by L-arginine. Habu H, et al. **Biochem Mol Biol Int** 1996 May;39(1):87-95

Antidepressants and seizures: clinical anecdotes overshadow neuroscience. Dailey JW, et al. **Biochem Pharmacol** 1996 Nov 8;52(9):1323-9 (65 ref.)

NMDA receptor-mediated pilocarpine-induced seizures: characterization in freely moving rats by microdialysis. Smolders I, et al. **Br J Pharmacol** 1997 Jul;121(6):1171-9

The vital dye Evans blue mimics limbic seizures induced by kainate or pilocarpine. Dürmüller N, et al. **Brain Res** 1997 Apr 11;753(2):283-90

Medial septal injection of naloxone elevates acetylcholine release in the hippocampus and induces behavioral seizures in rats. Mizuno T, et al. **Brain Res** 1996 Mar 25;713(1-2):1-7

Repeated postnatal phencyclidine administration in female juvenile rat delays onset of puberty but has no effect on pentylenetetrazol-induced seizure-susceptibility. Sircar R. **Brain Res** 1995 Oct 2;694(1-2):318-21

Delayed decrease of calbindin immunoreactivity in the granule cell-mossy fibers after kainic acid-induced seizures. Yang Q, et al. **Brain Res Bull** 1997;43(6):551-9

Two synaptotagmin genes, Syt1 and Syt4, are differentially regulated in adult brain and during postnatal development following kainic acid-induced seizures. Tocco G, et al. **Brain Res Mol Brain Res** 1996 Sep 1;40(2):229-39

Emergency management of acute alcohol problems. Part 2: Alcohol-related seizures, delirium tremens, and toxic alcohol ingestion. Etherington JM. **Can Fam Physician** 1996 Dec;42:2423-31 (17 ref.)

Chlorambucil-induced seizures. Salloum E, et al. **Cancer** 1997 Mar 1;79(5):1009-13 (2 ref.)

Seizures associated with ofloxacin therapy. Traeger SM, et al. **Clin Infect Dis** 1995 Dec;21(6):1504-6 (7 ref.)

Contrast-induced encephalopathy and seizures in a patient with chronic renal insufficiency. Muruve DA, et al. **Clin Nephrol** 1996 Jun;45(6):406-9

Piperacillin-induced seizures. Malanga CJ, et al. **Clin Pediatr (Phila)** 1997 Aug;36(8):475-8

Safe and effective topical application dose of lidocaine for surgery with laryngomicroscopy. Kotaki H, et al. **Clin Pharmacol Ther** 1996 Aug;60(2):229-35 (15 ref.)

Neurotoxicity of carbapenem antibacterials. Norrby SR. **Drug Saf** 1996 Aug;15(2):87-90 (33 ref.)

Temporal changes in proton MRS metabolites after kainic acid-induced seizures in rat brain. Najm IM, et al. **Epilepsia** 1997 Jan;38(1):87-94

Increased susceptibility to tetanus toxin-induced seizures in immature rats. Anderson AE, et al. **Epilepsy Res** 1997 Mar; 26(3):433-42

Flurothyl seizure susceptibility in rats following prenatal methylazoxymethanol treatment. Baraban SC, et al. **Epilepsy Res** 1996 Apr;23(3):189-94

Vulnerability and plasticity of the GABA system in the pilocarpine model of spontaneous recurrent seizures. Houser CR, et al. **Epilepsy Res** 1996 Dec;26(1):207-18

Factors determining proconvulsant and anticonvulsant effects of inhibitors of nitric oxide synthase in rodents. Kirkby RD, et al. **Epilepsy Res** 1996 Jun;24(2):91-100

Spontaneous seizures preferentially injure interneurons in the pilocarpine model of chronic spontaneous seizures. Mello LE, et al. **Epilepsy Res** 1996 Dec;26(1):123-9

Arrest of seizure progression during electrical kindling in guinea-pigs with prior pentylenetetrazol-induced convulsions. Teskey GC, et al. **Epilepsy Res** 1996 Jun; 24(2):101-7

Generation of lipid radicals in the hippocampal extracellular space during kainic acid-induced seizures in rats. Ueda Y, et al. **Epilepsy Res** 1997 Jan;26(2):329-33

Status epilepticus and the late development of spontaneous seizures in the pilocarpine model of epilepsy. Lemos T, et al. **Epilepsy Res Suppl** 1996;12:137-44

Long-term treatment with some methylxanthines decreases the susceptibility to bicuculline- and pentylenetetrazol-induced seizures in mice. Relationship to c-fos expression and receptor binding. Johansson B, et al. **Eur J Neurosci** 1996 Dec;8(12):2447-58

Bicuculline induces ictal seizures in the intact hippocampus recorded in vitro. Khalilov I, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):R5-6

Protection by NMDA receptor antagonists against seizures induced by intracerebral administration of 4-aminopyridine. Morales-Villagrán A, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):87-93

Hyperactivity and behavioral seizures in rodents following treatment with the dopamine D1 receptor agonists A-86929 and ABT-431. Shiosaki K, et al. **Eur J Pharmacol** 1996 Dec 19;317(2-3):183-90

Recovery of decreased seizure threshold for pentylenetetrazole during diazepam withdrawal by NMDA receptor antagonists. Tsuda M, et al. **Eur J Pharmacol** 1997 Apr 11;324(1):63-6

Seizures associated with cisplatin administration. Brauers A, et al. **Eur Urol** 1997;32(1):118-20

Seizures and hippocampal damage produced by dendrotoxin-K in rats is prevented by the 21-aminosteroid U-74389G. Bagetta G, et al. **Exp Neurol** 1997 Sep; 147(1):204-10

Kainic acid-induced focal cortical seizure is associated with an increase of synaptophysin immunoreactivity in the cortex. Chen LS, et al. **Exp Neurol** 1996 Sep;141(1):25-31

Development of spontaneous, age-related nonconvulsive seizure electrocortical activity and radial-maze learning after exposure to m-xylene in rats. Gralewicz S, et al. **Int J Occup Med Environ Health** 1995;8(4):347-60

An unusual cause for collapse in a patient with arthritis. Heath KJ, et al. **Intensive Care Med** 1996 Oct;22(10):1096-7

Accidental ingestion of Ecstasy by a toddler: unusual cause for convulsion in a febrile child. Cooper AJ, et al. **J Accid Emerg Med** 1997 May;14(3):183-4

Medication-induced seizures [letter] Feeney DJ, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug;36(8):1018-9

Nitric oxide of neuronal origin is involved in cerebral blood flow increase during seizures induced by kainate. Montécot C, et al. **J Cereb Blood Flow Metab** 1997 Jan;17(1):94-9

Anatomical localization and time course of Fos expression following soman-induced seizures. Zimmer LA, et al. **J Comp Neurol** 1997 Feb 24;378(4):468-81

Seizures in a boy with succinic semialdehyde dehydrogenase deficiency treated with vigabatrin (gamma-vinyl-GABA). Matern D, et al. **J Inherit Metab Dis** 1996;19(3):313-8

NG-nitro-L-arginine, a nitric oxide synthase inhibitor, and seizure susceptibility in four seizure models in mice. Urbańska EM, et al. **J Neural Transm** 1996;103(10):1145-52

Inadvertent intrathecal use of ionic contrast agents: treatment with immediate ventriculolumbar lavage [letter] Schwab S, et al. **J Neurol** 1996 Sep;243(9):671-3 (9 ref.)

Imaging the induction and spread of seizure activity in the isolated brain of the guinea pig: the roles of GABA and glutamate receptors. Federico P, et al. **J Neurophysiol** 1996 Nov;76(5):3471-92

Seizures induced by intracerebral injection of thrombin: a model of intracerebral hemorrhage. Lee KR, et al. **J Neurosurg** 1997 Jul;87(1):73-8

Reversible cerebral perfusion abnormalities associated with cyclosporine therapy in orthotopic liver transplantation [published erratum appears in J Nucl Med 1996 Jul;37(7):1263] Lorberboym M, et al. **J Nucl Med** 1996 Mar; 37(3):467-9

Seizure after withdrawal from supratherapeutic doses of zolpidem tartrate, a selective omega I benzodiazepine receptor agonist. Gilbert DL, et al. **J Pain Symptom Manage** 1997 Aug;14(2):118-20

Strychnine-like multifocal myoclonus and seizures in extremely high-dose opioid administration: treatment strategies. Hagen N, et al. **J Pain Symptom Manage** 1997 Jul;14(1):51-8

Pharmacokinetic-pharmacodynamic contributions to the convulsant activity of pefloxacin and norfloxacin in rats. Delon A, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):983-7

Seizures after ureteral stone manipulation with lidocaine. Pantuck AJ, et al. **J Urol** 1997 Jun;157(6):2248

Poppy tea and the baker's first seizure [letter] King MA, et al. **Lancet** 1997 Sep 6;350(9079):716

A soldier who had seizures after drinking quarter of a litre of wine. Marquet P, et al. **Lancet** 1996 Oct 19; 348(9034):1070

Aggravation of DMCM-induced seizure by nitric oxide synthase inhibitors in mice. Tsuda M, et al. **Life Sci** 1997; 60(23):PL339-43

Epileptogenic activity induced by combined treatment with antiinflammatory drugs and enoxacin and its inhibition by a calcium antagonist, nicardipine. Kamei C, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov;18(9):579-88

Effect of pH on domoic acid toxicity in mice. Nijjar MS, et al. **Mol Cell Biochem** 1997 Feb;167(1-2):179-85

Suppression of pentylenetetrazol-induced seizures by carnitine in mice. Yu Z, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):545-9

AED withdrawal [letter; comment] Davis BJ. **Neurology** 1997 Apr;48(4):1137. Comment on: Neurology 1996 Jul;47(1):76-8.

Naloxone-induced seizures in rats infected with Borna disease virus. Solbrig MV, et al. **Neurology** 1996 Apr; 46(4):1170-1

Fluoxetine and seizures [letter; comment] Walker MC, et al. **Neurology** 1996 Sep;47(3):850. Comment on: Neurology 1995 Oct;45(10):1926-7.

Effects of non-peptide angiotensin II-receptor antagonists on pentylenetetrazol kindling in mice. Georgiev VP, et al. **Neuropeptides** 1996 Oct;30(5):401-4

Susceptibility to drug-induced seizures of Fyn tyrosine kinase-deficient mice. Miyakawa T, et al. **Neuroreport** 1996 Nov 4;7(15-17):2723-6

Nuclear accumulation of p53 protein following kainic acid-induced seizures. Sakhi S, et al. **Neuroreport** 1996 Jan 31;7(2):493-6

Low Mg2+ induced epileptiform activity in the subiculum before and after disconnection from rat hippocampal and entorhinal cortex slices. Behr J, et al. **Neurosci Lett** 1996 Feb 16;205(1):25-8

Effects of NMDA antagonists on seizure thresholds induced by intrahippocampal microdialysis of picrotoxin in freely moving rats. Sierra-Paredes G, et al. **Neurosci Lett** 1996 Oct 25;218(1):62-6

Increased susceptibility of brain slices from carbonic anhydrase II-deficient mice to low [Mg2+]O-induced seizures. Velíšek L, et al. **Neurosci Lett** 1996 Apr 5; 207(3):143-6

Preventive effect of melatonin against cyanide-induced seizures and lipid peroxidation in mice. Yamamoto H, et al. **Neurosci Lett** 1996 Mar 29;207(2):89-92

Effects of pilocarpine and kainate-induced seizures on N-methyl-D-aspartate receptor gene expression in the rat hippocampus. Lasón W, et al. **Neuroscience** 1997 Jun; 78(4):997-1004

2-Iminothiazolidine-4-carboxylic acid produces hippocampal CA1 lesions independent of seizure excitation and glutamate receptor activation. Bitner RS, et al. **Neurotoxicology** 1997;18(1):191-200

Exacerbation of ethanol withdrawal seizures in mice with a history of multiple withdrawal experience. Becker HC, et al. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1-2):179-83

Chronic caffeine and the anticonvulsant potency of antiepileptic drugs against maximal electroshock. Gasior M, et al. **Pharmacol Biochem Behav** 1996 Aug;54(4):639-44

Distinct effects of N omega-nitro-L-arginine on seizures induced by several drugs in mice. Hara S, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):673-7

Cocaethylene-induced kindling of seizure effects: cross-specificity with cocaine. Meehan SM, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):491-4

Picrotoxin produces a "central" pain-like syndrome when microinjected into the somato-motor cortex of the rat. Oliveras JL, et al. **Physiol Behav** 1996 Dec;60(6):1425-34

MK-801 augments pilocarpine-induced electrographic seizure but protects against brain damage in rats. Lee MG, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Feb;21(2):331-44

Polarization anatomy of a kainic acid seizure. Dasheiff RM, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):145-9

Seizures and hepatotoxicity following sulphasalazine administration. Sentürk T, et al. **Rheumatol Int** 1997; 17(2):75-7

Seizure after overdose of tramadol. Tobias JD. **South Med J** 1997 Aug;90(8):826-7

[MDMA ("Ecstasy") use--an overview of psychiatric and medical sequelae] Thomasius R, et al. **Fortschr Neurol Psychiatr** 1997 Feb;65(2):49-61 (125 ref.) (Eng. Abstr.) **(Ger)**

[Seizures as a late complication of bromocriptine therapy in patients with prolactin-producing macroadenomas: correlation between lateral extension of the adenoma and seizure onset] Niwa J, et al. **No Shinkei Geka** 1996 Oct; 24(10):913-9 (Eng. Abstr.) **(Jpn)**

[Effect of beta 2-adrenergic agonists on neurotoxic action of aminophyllines] Lupina T, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 1:70-7 (Eng. Abstr.) **(Pol)**

[The influence of selected antibiotics on the central action of aminophyllines--experimental studies] Szmygin K. **Pneumonol Alergol Pol** 1996;64 Suppl 1:63-9 (Eng. Abstr.) **(Pol)**

CLASSIFICATION

Focal abnormalities detected by 18FDG PET in epileptic encephalopathies [letter; comment] Clarke MA. **Arch Dis Child** 1997 May;76(5):477-8. Comment on: Arch Dis Child 1996 Aug;75(2):102-7.

Recognition and classification of seizures in infants. Nordli DR Jr, et al. **Epilepsia** 1997 May;38(5):553-60

COMPLICATIONS

Seizure: a rare and transient cause of portal venous gas. Chen KW, et al. **Am J Gastroenterol** 1997 Feb;92(2):351-2 (10 ref.)

The phenomenology of psychosis associated with complex partial seizure disorder. Brewerton TD. **Ann Clin Psychiatry** 1997 Mar;9(1):31-51 (278 ref.)

A patient with mania and photoconvulsive epilepsy. Roxanas MG, et al. **Aust N Z J Psychiatry** 1996 Dec;30(6):867-70

Valproic acid and augmentation of fetal hemoglobin in individuals with and without sickle cell disease [letter] Selby R, et al. **Blood** 1997 Jul 15;90(2):891-3

Decreased cocaine- and lidocaine-induced seizure response by dextromethorphan and DNQX in rat. Barat SA, et al. **Brain Res** 1997 May 9;756(1-2):179-83

HIV transmission by a human bite [news] **Infect Control Hosp Epidemiol** 1996 Oct;17(10):707

Apnea of infancy, seizures, and gastroesophageal reflux: an important but infrequent association. Tirosh E, et al. **J Child Neurol** 1996 Mar;11(2):98–100

Neurological complications of liver transplantation. Guarino M, et al. **J Neurol** 1996 Feb;243(2):137–42

Head injuries due to falls caused by seizures: a group at high risk for traumatic intracranial hematomas. Zwimpfer TJ, et al. **J Neurosurg** 1997 Mar;86(3):433–7

A longitudinal study of early intellectual development in hemiplegic children. Muter V, et al. **Neuropsychologia** 1997 Mar;35(3):289–98

A new case of trichothiodystrophy associated with autism, seizures, and mental retardation. Schepis C, et al. **Pediatr Dermatol** 1997 Mar–Apr;14(2):125–8

Supplementary motor area seizure resembling sleep disorder. Tachibana N, et al. **Sleep** 1996 Dec;19(10):811–6

[Kinesigenic supplementary motor seizure? A case report] Takahashi K, et al. **Rinsho Shinkeigaku** 1997 Jan;37(1):67–9 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Using age-appropriate prolactin levels to diagnose children with seizures in the emergency department. Fein JA, et al. **Acad Emerg Med** 1997 Mar;4(3):202–5

Usefulness of short-term video EEG recording with saline induction in pseudoseizures. Bhatia M, et al. **Acta Neurol Scand** 1997 Jun;95(6):363–6

Clinical policy for the initial approach to patients presenting with a chief complaint of seizure who are not in status epilepticus. American College of Emergency Physicians. **Ann Emerg Med** 1997 May;29(5):706–24

Single ring- or disk-enhancing computed tomographic lesion in Indian children and adolescents after first seizure [letter] Garg RK, et al. **Arch Pediatr Adolesc Med** 1997 Jun; 151(6):632–4

Bilateral perisylvian syndrome not related to malformations: report of two cases. Grasel RP, et al. **Arq Neuropsiquiatr** 1996 Jun;54(2):293–6 (10 ref.)

Laughter in the cockpit: gelastic seizures--a case report. Feeks EF, et al. **Aviat Space Environ Med** 1997 Jan; 68(1):66–8

Fast inversion recovery for myelin suppression (FIRMS). A new MRI pulse sequence for highlighting cerebral gray matter. Wolansky LJ, et al. **Clin Imaging** 1996 Jul–Sep; 20(3):164–70

Automated seizure detection using a self-organizing neural network. Gabor AJ, et al. **Electroencephalogr Clin Neurophysiol** 1996 Sep; 99(3):257–66

Spells. Differential diagnosis and management strategies. Preblick-Salib C, et al. **Emerg Med Clin North Am** 1997 Aug;15(3):637–48 (30 ref.)

False lateralization of seizure perceived by a patient with infarction of the right parietal lobe who showed the neglect syndrome. Heo K, et al. **Epilepsia** 1997 Jan;38(1):122–3

Recognition and classification of seizures in infants. Nordli DR Jr, et al. **Epilepsia** 1997 May;38(5):553–60

Provoking nonepileptic seizures: the ethics of deceptive diagnostic testing. Burack JH, et al. **Hastings Cent Rep** 1997 Jul–Aug;27(4):24–33 (25 ref.)

Children with seizures presenting to accident and emergency. Smith RA, et al. **J Accid Emerg Med** 1996 Jan;13(1):54–8

Video--EEG monitoring in intractable attacks of uncertain etiology. Bhatia M, et al. **J Assoc Physicians India** 1996 Jun;44(6):393–4

Chiari I malformation: association with seizures and developmental disabilities. Brill CB, et al. **J Child Neurol** 1997 Feb;12(2):101–6

Do seizures beget seizures? An assessment of the clinical evidence in humans. Berg AT, et al. **J Clin Neurophysiol** 1997 Mar;14(2):102–10 (48 ref.)

Soman-induced seizures rapidly activate astrocytes and microglia in discrete brain regions. Zimmer LA, et al. **J Comp Neurol** 1997 Feb 24;378(4):482–92

Endovascular electroencephalography: the technique and its application during carotid amytal assessment. Boniface SJ, et al. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):193–5

Intracranial electrode monitoring for seizure localization: indications, methods and the prevention of complications. Dewar S, et al. **J Neurosci Nurs** 1996 Oct;28(5):280–4, 289–92 (30 ref.)

Electroencephalograms, clinical observations and the monitoring of neonatal seizures. Bye A, et al. **J Paediatr Child Health** 1995 Dec;31(6):503–7

Intrauterine stroke, cerebral injury, and seizures. Everett MF, et al. **J Perinatol** 1996 Nov–Dec;16(6):494–7

Ethical use of placebos and provocative testing in diagnosing nonepileptic seizures. Devinsky O, et al. **Neurology** 1996 Oct;47(4):866–70

Reversible MRI lesions [letter; comment] Shak AK. **Neurology** 1996 Apr;46(4):1188–9. Comment on: Neurology 1995 Jan;45(1):104–8.

A pediatrician's view. The fun of the chase [editorial] Altemeier WA 3rd. **Pediatr Ann** 1997 Jul;26(7):397, 401

Pseudoseizures in the pediatric emergency department. Selbst SM, et al. **Pediatr Emerg Care** 1996 Jun;12(3):185–8 (19 ref.)

Reversible MRI lesions after seizures. Aykut-Bingol C, et al. **Seizure** 1997 Jun;6(3):237–9

Pseudoseizures and dissociative disorders: a common mechanism involving traumatic experiences. Harden CL. **Seizure** 1997 Apr;6(2):151–5

Multichannel magnetoencephalography in ablative seizure surgery outside the anteromesial temporal lobe. Smith JR, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):81–5

[Neonatal convulsions in health care. II. Prognostic factors] Carrascosa MC, et al. **Rev Neurol** 1996 Dec;24(136):1516–9 (Eng. Abstr.) **(Spa)**

DIET THERAPY

Rediscovering the benefits of ketogenic diet therapy for children [letter] Amorde-Spalding K, et al. **J Am Diet Assoc** 1996 Nov;96(11):1134–5

Management of intractable childhood seizures using the non-MCT oil ketogenic diet in 20 patients. Edelstein SF, et al. **J Am Diet Assoc** 1996 Nov;96(11):1181–2

DRUG THERAPY

Evaluation and management of first seizures in adults. Moore-Sledge CM. **Am Fam Physician** 1997 Sep 15; 56(4):1113–20 (22 ref.)

Moderate anticonvulsant action of baclofen does not change during development. Kubová H, et al. **Biol Neonate** 1996; 69(6):405–12

Valproic acid and augmentation of fetal hemoglobin in individuals with and without sickle cell disease [letter] Selby R, et al. **Blood** 1997 Jul 15;90(2):891–3

Cocaine and lidocaine in combination are synergistic convulsants. Barat SA, et al. **Brain Res** 1996 Dec 2; 742(1–2):157–62

L-NAME inhibits pentylenetetrazole and strychnine-induced seizures in mice. Kaputlu I, et al. **Brain Res** 1997 Apr 4;753(1):98–101

Astressin, a novel and potent CRF antagonist, is neuroprotective in the hippocampus when administered after a seizure. Maecker H, et al. **Brain Res** 1997 Jan 2; 744(1):166–70

The alpha 2 adrenoreceptor agonist clonidine suppresses seizures, whereas the alpha 2 adrenoreceptor antagonist idazoxan promotes seizures: pontine microinfusion studies of amygdala-kindled kittens. Shouse MN, et al. **Brain Res** 1996 Aug 26;731(1–2):203–7

Neuropeptide Y inhibits hippocampal seizures and wet dog shakes. Woldbye DP, et al. **Brain Res** 1996 Oct 21; 737(1–2):162–8

Add-on gabapentin for refractory seizures in patients with brain tumours. Perry JR, et al. **Can J Neurol Sci** 1996 May; 23(2):128–31

Pyridoxine-dependent seizures: demographic, clinical, MRI and psychometric features, and effect of dose on intelligence quotient. Baxter P, et al. **Dev Med Child Neurol** 1996 Nov;38(11):998–1006

Parent-completed scales for measuring seizure severity and severity of side-effects of antiepileptic drugs in childhood epilepsy: development and psychometric analysis. Carpay HA, et al. **Epilepsy Res** 1996 Jul;24(3):173–81

The effect on maximal electroshock seizures induced by GABA agents and antiepileptic drugs microinfused into the nucleus reticularis pontis oralis. Peterson SL. **Epilepsy Res** 1996 Nov;25(3):161–7

Acute effects of MK801 on kainic acid-induced seizures in neonatal rats. Stafstrom CE, et al. **Epilepsy Res** 1997 Jan; 26(2):335–44

Antiseizure activity of insulin: insulin inhibits pentylenetetrazole, penicillin and kainic acid-induced seizures in rats. Uysal H, et al. **Epilepsy Res** 1996 Nov; 25(3):185–90

Neither intranigral fluoxetine nor 5,7-dihydroxytryptamine alter audiogenic seizures in genetically epilepsy-prone rats. Statnick M, et al. **Eur J Pharmacol** 1996 Mar 28; 299(1–3):93–102

D-23129: a potent anticonvulsant in the amygdala kindling model of complex partial seizures. Tober C, et al. **Eur J Pharmacol** 1996 May 15;303(3):163–9

Anticonvulsant action of both NMDA and non-NMDA receptor antagonists against seizures induced by homocysteine in immature rats. Folbergrová J. **Exp Neurol** 1997 Jun;145(2 Pt 1):442–50

Remacemide hydrochloride: a novel antiepileptic agent. Davies JA. **Gen Pharmacol** 1997 Apr;28(4):499–502 (31 ref.)

Picolinic acid and indole-2-carboxylic acid: two types of glycinergic compounds modulate motor function differentially. Tonohiro T, et al. **Gen Pharmacol** 1997 Apr; 28(4):555–60

Seizure control: how to use the new antiepileptic drugs in older patients. Haider A, et al. **Geriatrics** 1996 Sep; 51(9):42–5 (16 ref.)

Effect of antiepileptic drugs and calcium channel blocker on hyperthermic seizures in rats: animal model for hot water epilepsy. Ullal GR, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):303–8

Resistant seizures [editorial] Kalra V. **Indian Pediatr** 1996 Jan;33(1):5–8

Pyridoxine dependent seizures. Singh UK, et al. **Indian Pediatr** 1996 Feb;33(2):121–3

Antiepileptic drug utilization in out-patients--a prescribing pattern study. Peytchev L, et al. **Int J Clin Pharmacol Ther** 1996 Oct;34(10):444–5

Transdermal scopolamine for refractory seizures. Kramer U, et al. **J Child Neurol** 1997 Feb;12(2):139–41

Treatment with high doses of lamotrigine in children and adolescents with refractory seizures. Mims J, et al. **J Child Neurol** 1997 Jan;12(1):64–7

Treatment of neonatal seizures with carbamazepine. Singh B, et al. **J Child Neurol** 1996 Sep;11(5):378–82

Arachidonic acid inhibits transient potassium currents and broadens action potentials during electrographic seizures in hippocampal pyramidal and inhibitory interneurons. Keros S, et al. **J Neurosci** 1997 May 15;17(10):3476–87

Early postoperative seizures and endovenous phenytoin. Preliminary clinical data. De Santis A, et al. **J Neurosurg Sci** 1996 Sep-Dec;40(3–4):207–12

Long-term studies on anticonvulsant tolerance and withdrawal characteristics of benzodiazepine receptor ligands in different seizure models in mice. I. Comparison of diazepam, clonazepam, clobazam and abecarnil. Löscher W, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):561–72

Long-term studies on anticonvulsant tolerance and withdrawal characteristics of benzodiazepine receptor ligands in different seizure models in mice. II. The novel imidazoquinazolines NNC 14-0185 and NNC 14-0189. Löscher W, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):573–81

The role of histamine H1-receptors in the anticonvulsive effect of morphine against maximal electroconvulsive shock in mice. Karadağ CH, et al. **Jpn J Pharmacol** 1996 Jun; 71(2):109–12

Nasal benzodiazepines for management of acute childhood seizures? Wallace SJ. **Lancet** 1997 Jan 25;349(9047):222

The effect of 'Astressin', a novel antagonist of corticotropin releasing hormone (CRH), on CRH-induced seizures in the infant rat: comparison with two other antagonists. Baram TZ, et al. **Mol Psychiatry** 1996 Jul;1(3):223–6

Powerful inhibition of kainic acid seizures by neuropeptide Y via Y5-like receptors [see comments] Woldbye DP, et al. **Nat Med** 1997 Jul;3(7):761–4. Comment in: Nat Med 1997 Jul;3(7):728–9.

Discontinuation of anticonvulsant therapy in children free of seizures for 1 year: a prospective study. Dooley J, et al. **Neurology** 1996 Apr;46(4):969–74

Lamotrigine potentiates the antiseizure activity of some anticonvulsants in DBA/2 mice. De Sarro G, et al. **Neuropharmacology** 1996 Feb;35(2):153–8

NG-nitro-L-arginine differentially affects glutamate- or kainate-induced seizures. Tutka P, et al. **Neuroreport** 1996 Jul 8;7(10):1605–8

Maternal and fetal implications of anticonvulsive therapy during pregnancy. Eller DP, et al. **Obstet Gynecol Clin North Am** 1997 Sep;24(3):523–34 (46 ref.)

A prospective, randomized study comparing intramuscular midazolam with intravenous diazepam for the treatment of seizures in children. Chamberlain JM, et al. **Pediatr Emerg Care** 1997 Apr;13(2):92–4

Bioavailability of phenytoin and anticonvulsant activity after oral administration of phenytoin-bis-hydroxyisobutyrate to rats. Scriba GK, et al. **Pharm Res** 1997 Feb;14(2):251–3

Nootropic drugs have different effects on kindling-induced learning deficits in rats. Becker A, et al. **Pharmacol Res** 1995 Sep;32(3):115–22

New drug therapy for acute seizure management. Morton LD, et al. **Semin Pediatr Neurol** 1997 Mar;4(1):51–63 (76 ref.)

[Efficacy and side effects of lidocaine by intravenous drip infusion in children with intractable seizures] Sata Y, et al. **No To Hattatsu** 1997 Jan;29(1):39–44 (Eng. Abstr.) **(Jpn)**

[The effect of lamotrigine and carbamazepine on the development of the audiogenic seizure reaction in rats of the Krushinskiĭ-Molodkina strain] Fedotova IB, et al. **Eksp Klin Farmakol** 1996 Nov-Dec;59(6):6–9 (Eng. Abstr.) **(Rus)**

[The effect of difenin, valproate and phenobarbital on the development of an epileptiform seizure attack in Krushinskiĭ-Molodkina rats] Fedotova IB, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov-Dec; 46(6):1104–8 (Eng. Abstr.) **(Rus)**

[Neonatal seizures: the beginning and interruption of the treatment] Koenigsberger MR, et al. **Rev Neurol** 1997 May; 25(141):706–8 (28 ref.) (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Elevated serum amylase levels after seizures [letter] Graham WR, et al. **Ann Intern Med** 1997 Jan 1;126(1):89

Glycogen phosphorylase activity in the cerebral cortex of rats during development: effect of homocysteine-induced seizures. Folbergrová J. **Brain Res** 1995 Oct 2; 694(1–2):128–32

Seizure-induced alterations of plasma membrane calcium ATPase isoforms 1, 2 and 3 mRNA and protein in rat hippocampus. Garcia ML, et al. **Brain Res Mol Brain Res** 1997 May;45(2):230–8

Sustained induction of prostaglandin endoperoxide synthase-2 by seizures in hippocampus. Inhibition by a platelet-activating factor antagonist. Marcheselli VL, et al. **J Biol Chem** 1996 Oct 4;271(40):24794–9

Deficiency of a protein-repair enzyme results in the accumulation of altered proteins, retardation of growth, and fatal seizures in mice. Kim E, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6132–7

EPIDEMIOLOGY

Changes in risk factors for hypoxic-ischaemic seizures in term infants. Gunn AJ, et al.

Aust N Z J Obstet Gynaecol 1997 Feb;37(1):36–9
Poststroke late seizures and their role in rehabilitation of inpatients. Paolucci S, et al. **Epilepsia** 1997 Mar; 38(3):266–70
Seizures in lung transplant recipients. Vaughn BV, et al. **Epilepsia** 1996 Dec;37(12):1175–9
Seizure risk in offspring of individuals with a history of febrile convulsions. Doose H, et al. **Eur J Pediatr** 1997 Jun; 156(6):476–81
[Neonatal convulsions in health care. I. Incidence, etiology and clinical aspects] Carrascosa MC, et al. **Rev Neurol** 1996 Oct;24(134):1258–62 (Eng. Abstr.) **(Spa)**

ETIOLOGY

A case of Guillain–Barré syndrome accompanied by sympathetic overactivity and hypertensive encephalopathy. Okada T, et al. **Acta Paediatr** 1996 Aug;85(8):1006–8
Neonatal seizures in Nigerian infants. Asindi AA, et al. **Afr J Med Med Sci** 1995 Sep;24(3):243–8
Evaluation and management of first seizures in adults. Moore–Sledge CM. **Am Fam Physician** 1997 Sep 15; 56(4):1113–20 (22 ref.)
Seizures and the long–QT syndrome. Bell MR, et al. **Ann Emerg Med** 1996 Nov;28(5):556–60
Severe hyponatremia after "purification" [letter] al–Zaki T, et al. **Ann Emerg Med** 1997 Jan;29(1):194–5
A patient with mania and photoconvulsive epilepsy. Roxanas MG, et al. **Aust N Z J Psychiatry** 1996 Dec;30(6):867–70
Involvement of nitric oxide and N–methyl–D–aspartate in acute hypoxic altitude convulsion in mice. Chen CH, et al. **Aviat Space Environ Med** 1997 Apr;68(4):296–9
Neonatal seizures: a clinician's overview. Lombroso CT. **Brain Dev** 1996 Jan–Feb;18(1):1–28 (276 ref.)
Pontine reticular formation neurons exhibit a premature and precipitous increase in acoustic responses prior to audiogenic seizures in genetically epilepsy–prone rats. Faingold CL, et al. **Brain Res** 1995 Dec 18;704(2):218–26
Adeno–associated virus (AAV) vector antisense gene transfer in vivo decreases GABA(A) alpha1 containing receptors and increases inferior collicular seizure sensitivity. Xiao X, et al. **Brain Res** 1997 May 9;756(1–2):76–83
Febrile seizures: an appropriate–aged model suitable for long–term studies. Baram TZ, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):265–70
The influence of blood gas changes on hyperthermia–induced seizures in developing rats. Morimoto T, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):77–80
Seizure disorders in burned children: a retrospective review. Mukhdomi GJ, et al. **Burns** 1996 Jun;22(4):316–9
Early seizures after severe closed head injury. Lee ST, et al. **Can J Neurol Sci** 1997 Feb;24(1):40–3
Association of pleomorphic xanthoastrocytoma with cortical dysplasia and neuronal tumors. A report of three cases. Lach B, et al. **Cancer** 1996 Dec 15;78(12):2551–63
Neurological complications in hospitalized patients with pertussis: a 15–year Sicilian experience. Incorpora G, et al. **Childs Nerv Syst** 1996 Jun;12(6):332–5
A review of the newer antiepileptic drugs and the ketogenic diet. Barron TF, et al. **Clin Pediatr (Phila)** 1997 Sep; 36(9):513–21 (61 ref.)
Seizures in medically complex patients. Boggs JG. **Epilepsia** 1997;38 Suppl 4:S55–9 (24 ref.)
Provoking nonepileptic seizures: the ethics of deceptive diagnostic testing. Burack JH, et al. **Hastings Cent Rep** 1997 Jul–Aug;27(4):24–33 (25 ref.)
Gross hematuria in a young woman with seizures and skin lesions. Accad MF, et al. **Hosp Pract (Off Ed)** 1997 May 15;32(5):204–6, 208
Pyridoxine dependent seizures. Singh UK, et al. **Indian Pediatr** 1996 Feb;33(2):121–3
D–2–hydroxyglutaric aciduria: hypotonia, cortical blindness, seizures, cardiomyopathy, and cylindrical spirals in skeletal muscle [published erratum appears in J Child Neurol 1997 Apr;12(3):227] Baker NS, et al. **J Child Neurol** 1997 Jan; 12(1):31–6
Seizures during alpha interferon therapy [see comments] Shakil AO, et al. **J Hepatol** 1996 Jan;24(1):48–51. Comment in: J Hepatol 1997 Apr;26(4):956–7.
Seizures in children during interferon alpha therapy [letter; comment] Woynarowski M, et al. **J Hepatol** 1997 Apr; 26(4):956–7. Comment on: J Hepatol 1996 Jan;24(1):48–51.
Pseudoseizures or non–epileptic seizures (NES); 15 synonyms [letter] Scull DA. **J Neurol Neurosurg Psychiatry** 1997 Feb; 62(2):200
Seizures induced by intracerebral injection of thrombin: a model of intracerebral hemorrhage. Lee KR, et al. **J Neurosurg** 1997 Jul;87(1):73–8
Early post–traumatic seizures in children: clinical and radiological aspects of injury. Ong LC, et al. **J Paediatr Child Health** 1996 Apr;32(2):173–6
Seizures and spells: physician awareness of Minnesota driving laws. Selmo KK, et al. **Minn Med** 1997 May;80(5):42–6
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 14–1997. A 30–year–old woman with intractable seizures despite a temporal lobectomy [clinical conference] **N Engl J Med** 1997 May 8;336(19):1373–9
Psychogenic seizures [letter] Benbadis SR. **Neurology** 1997 Mar;48(3):788
Long–term follow–up after temporal lobe resection for lesions associated with chronic seizures [published erratum appears in Neurology 1997 Sep;49(3):904] Eliashiv SD, et al. **Neurology** 1997 Mar;48(3):621–6
Long–term follow–up after temporal lobe resection for lesions associated with chronic seizures [published erratum appears in Neurology 1997 Sep;49(3):904] Eliashiv SD, et al. **Neurology** 1997 May;48(5):1383–8
Seizures, epilepsy, and functional recovery after traumatic brain injury: a reappraisal. Hernandez TD, et al. **Neurology** 1997 Apr;48(4):803–6 (47 ref.)
Effects of hemispheric side of injury, age at injury, and presence of seizure disorder on functional ear and hand asymmetries in hemiplegic children. Isaacs E, et al. **Neuropsychologia** 1996 Feb;34(2):127–37
Gelastic seizures in a child with focal cortical dysplasia of the cingulate gyrus. McConachie NS, et al. **Neuroradiology** 1997 Jan;39(1):44–5
Comparative study of CT and MRI in patients with seizures and a solitary cerebral cysticercus granuloma. Rajshekhar V, et al. **Neuroradiology** 1996 Aug;38(6):542–6
To what degree of an examination? Rosenberg NM, et al. **Pediatr Emerg Care** 1996 Apr;12(2):140–4
Seizure susceptibility during recovery from hypercapnia in neonatal dogs. Yoshioka H, et al. **Pediatr Neurol** 1996 Jul; 15(1):36–40
Pathology of chronic herpes infection associated with seizure disorder: a report of two cases with tissue detection of herpes simplex virus 1 by the polymerase chain reaction. Jay V, et al. **Pediatr Pathol Lab Med** 1995 Jan–Feb; 15(1):131–46
An acute neurologic syndrome temporally associated with postexposure treatment of rabies [see comments] Mortiere MD, et al. **Pediatrics** 1997 Oct;100(4):720–1. Comment in: Pediatrics 1997 Oct;100(4):718–9.
Bali Low [comment] Plotkin SA, et al. **Pediatrics** 1997 Oct; 100(4):718–9. Comment on: Pediatrics 1997 Oct;100(4):720–1.
Stymied by seizures. When the clues point to the wrong path. Cohen MR. **Postgrad Med** 1997 Apr;101(4):289–92
Nuclear polyadenylate polymerase activity in the brain of seizure–prone EL mice. Kioka T, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):151–5
Seizures and status epilepticus in childhood cerebral malaria. Crawley J, et al. **QJM** 1996 Aug;89(8):591–7
The biochemical investigation of epilepsy in childhood. Gibbs J, et al. **Seizure** 1997 Jun;6(3):193–200
Late seizures following a first symptomatic brain infarct are related to large infarcts involving the posterior area around the lateral sulcus. Heuts–van Raak L, et al. **Seizure** 1996 Sep;5(3):185–94
Severe myoclonic epilepsy in infancy: evolution of seizures. Ohki T, et al. **Seizure** 1997 Jun;6(3):219–24
First ever seizures in the elderly: a seven–year follow–up study. Thomas SV, et al. **Seizure** 1997 Apr;6(2):107–10
Seizures after orthotopic liver transplantation. Wszolek ZK, et al. **Seizure** 1997 Feb;6(1):31–9 (33 ref.)
Seizures in acute stroke: predictors and prognostic significance. The Copenhagen Stroke Study. Reith J, et al. **Stroke** 1997 Aug;28(8):1585–9
Wavelength dependency of photoparoxysmal responses in photosensitive nonepileptic subjects. Takahashi Y, et al. **Tohoku J Exp Med** 1997 Feb;181(2):311–9
Central nervous system oxygen toxicity during hyperbaric treatment of patients with carbon monoxide poisoning. Hampson NB, et al. **Undersea Hyperb Med** 1996 Dec; 23(4):215–9
[The Churg–Strauss syndrome with cerebral seizures and terminal kidney failure] Terjung B, et al. **Dtsch Med Wochenschr** 1997 Jul 4;122(27):853–8 (22 ref.) (Eng. Abstr.) **(Ger)**
[Differential diagnosis of seizures in sleep] Mayer G, et al. **Pneumologie** 1997 Aug;51 Suppl 3:698–705 (31 ref.) (Eng. Abstr.) **(Ger)**
[Multicystic encephalopathy with frontal lobe–originated gelastic seizure, ipsilateral oculogyric crisis, and horizontal epileptic nystagmus: an autopsy case] Ohara K, et al. **Rinsho Shinkeigaku** 1996 Aug;36(8):962–7 (Eng. Abstr.) **(Jpn)**
[Role of hypoxia in the development of epileptiform seizures] Agadzhanian NA, et al. **Aviakosm Ekolog Med** 1996; 30(4):40–4 (Eng. Abstr.) **(Rus)**

GENETICS

High resolution characterization of an interstitial deletion of less than 1.9 Mb at 4p16.3 associated with Wolf–Hirschhorn syndrome. Fang YY, et al. **Am J Med Genet** 1997 Sep 5; 71(4):453–7
Allelic association of a dopamine transporter gene polymorphism in alcohol dependence with withdrawal seizures or delirium. Sander T, et al. **Biol Psychiatry** 1997 Feb 1;41(3):299–304
Sparse distribution of NADPH diaphorase neurons in the hippocampal formation of the inbred mutant strain EL mouse. Nagatomo I, et al. **Brain Res** 1996 Aug 19; 730(1–2):223–6
Granule cell disinhibition in dentate gyrus of genetically seizure susceptible El mice. Ono T, et al. **Brain Res** 1997 Jan 16;745(1–2):165–72
Molecular mechanism of regulation of pentylenetetrazol–induced calcium entry by 3'–untranslated region of a seizure–related cDNA, PTZ–17, in Xenopus oocytes. Kajiwara K, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):49–58
Mutation of the Ca2+ channel beta subunit gene Cchb4 is associated with ataxia and seizures in the lethargic (lh) mouse. Burgess DL, et al. **Cell** 1997 Feb 7;88(3):385–92
Two male siblings with cavum septum pellucidum, cavum vergae, macrocephaly, seizures and mental retardation. A new hereditary syndrome? Sánchez O, et al. **Clin Dysmorphol** 1997 Apr;6(2):129–32
Fos–like immunoreactivity after status epilepticus and spontaneous seizures in rats. Mello LE, et al. **Epilepsy Res Suppl** 1996;12:205–13
Seizure–induced molecular changes, sprouting and synaptogenesis of hippocampal mossy fibers. Pollard H, et al. **Epilepsy Res Suppl** 1996;12:355–63 (32 ref.)
A mouse mutant strain highly resistant to methyl beta–carboline–3–carboxylate–induced seizures. Clément Y, et al. **Exp Brain Res** 1996 Jun;110(1):28–35
Sensitivity to jerky gene dosage underlies epileptic seizures in mice. Donovan GP, et al. **J Neurosci** 1997 Jun 15; 17(12):4562–9
Tissue inhibitor of metalloproteinases–1 (TIMP–1) is differentially induced in neurons and astrocytes after seizures: evidence for developmental, immediate early gene, and lesion response. Rivera S, et al. **J Neurosci** 1997 Jun 1;17(11):4223–35
Mutations in the Cacnl1a4 calcium channel gene are associated with seizures, cerebellar degeneration, and ataxia in tottering and leaner mutant mice. Doyle J, et al. **Mamm Genome** 1997 Feb;8(2):113–20
New seizure frequency QTL and the complex genetics of epilepsy in EL mice. Frankel WN, et al. **Mamm Genome** 1995 Dec;6(12):830–8
Sound–induced seizures in serotonin 5–HT2c receptor mutant mice. Brennan TJ, et al. **Nat Genet** 1997 Aug;16(4):387–90
Mice lacking p35, a neuronal specific activator of Cdk5, display cortical lamination defects, seizures, and adult lethality. Chae T, et al. **Neuron** 1997 Jan;18(1):29–42
Mouse chromosome 9 involvement in beta–CCM–induced seizures. Clément Y, et al. **Neuroreport** 1996 Sep 2; 7(13):2226–30
Seizure–induced differential expression of messenger RNAs for neurotrophins and their receptors in genetically fast and slow kindling rats. Kokaia Z, et al. **Neuroscience** 1996 Nov;75(1):197–207
Similarities of EEG and seizures in del(1q) and benign rolandic epilepsy. Vaughn BV, et al. **Pediatr Neurol** 1996 Oct;15(3):261–4 (30 ref.)
Differential cocaine sensitivity between two closely related substrains of C57BL mice. Henricks KK, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):161–8
[Benign infantile familial convulsions] Caraballo R, et al. **Rev Neurol** 1997 May;25(141):682–4 (Eng. Abstr.) **(Spa)**

METABOLISM

Seizures and the regulation of neurotrophic factor expression: associations with structural plasticity in epilepsy. Gall CM, et al. **Adv Neurol** 1997;72:9–24 (97 ref.)
Involvement of nitric oxide and N–methyl–D–aspartate in acute hypoxic altitude convulsion in mice. Chen CH, et al. **Aviat Space Environ Med** 1997 Apr;68(4):296–9
Mice lacking the 65 kDa isoform of glutamic acid decarboxylase (GAD65) maintain normal levels of GAD67 and GABA in their brains but are susceptible to seizures. Asada H, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):891–5
Allelic association of a dopamine transporter gene polymorphism in alcohol dependence with withdrawal seizures or delirium. Sander T, et al. **Biol Psychiatry** 1997 Feb 1;41(3):299–304
Pharmacokinetics of the individual enantiomers of vigabatrin in neonates with uncontrolled seizures. Vauzelle–Kervroëdan F, et al. **Br J Clin Pharmacol** 1996 Dec;42(6):779–81
Mossy fibre reorganization in the hippocampus of prion protein null mice. Colling SB, et al. **Brain Res** 1997 Apr 25;755(1):28–35
Fos induction in subtypes of cerebrocortical neurons following single picrotoxin–induced seizures. Hiscock JJ, et al. **Brain Res** 1996 Nov 4;738(2):301–12
Interictal cerebral metabolic levels in Wistar rats sensitive to audiogenic seizures. Nehlig A, et al. **Brain Res** 1996 Jun 10;724(1):97–102
Forebrain metabolic activation induced by the repetition of audiogenic seizures in Wistar rats. Pereira de Vasconcelos A, et al. **Brain Res** 1997 Jul 11;762(1–2):114–20
Seizure activity causes elevation of endogenous extracellular kynurenic acid in the rat brain. Wu HQ, et al. **Brain Res Bull** 1996;39(3):155–62
Delayed decrease of calbindin immunoreactivity in the granule cell–mossy fibers after kainic acid–induced seizures. Yang Q, et al. **Brain Res Bull** 1997;43(6):551–9
Age–dependent effects of glutamate toxicity in the hippocampus. Liu Z, et al. **Brain Res Dev Brain Res** 1996 Dec 23;97(2):178–84
Increase in mRNAs encoding neonatal II and III sodium channel alpha–isoforms during kainate–induced seizures in adult rat hippocampus. Gastaldi M, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):179–90
Cortical NMDAR–1 gene expression is rapidly upregulated after seizure. Jensen PJ, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):157–62
Expression of c–fos mRNA after audiogenic seizure in adult rats with neonatal hypothyroidism. Kato N, et al. **Brain Res Mol Brain Res** 1996 May;38(1):85–90

Induction of brain derived neurotrophic factor mRNA by seizures in neonatal and juvenile rat brain. Kornblum HI, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):219–28

HZF-3, an immediate-early orphan receptor homologous to NURR1/NOT: induction upon membrane depolarization and seizures. Peña de Ortiz S, et al. **Brain Res Mol Brain Res** 1996 May;38(1):1–13

Rat nurr1 is prominently expressed in perirhinal cortex, and differentially induced in the hippocampal dentate gyrus by electroconvulsive vs. kindled seizures. Xing G, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):251–61

Mutation of the Ca2+ channel beta subunit gene Cchb4 is associated with ataxia and seizures in the lethargic (lh) mouse. Burgess DL, et al. **Cell** 1997 Feb 7;88(3):385–92

Evidence for increased cellular uptake of glutamate and aspartate in the rat hippocampus during kainic acid seizures. A microdialysis study using the 'indicator diffusion' method. Bruhn T, et al. **Epilepsy Res** 1997 Jan;26(2):363–71

Brain creatine kinase reaction rates and reactant concentrations during seizures in developing rats. Holtzman D, et al. **Epilepsy Res** 1997 Apr;27(1):7–11

Fos-immunoreactive responses in inferior colliculi of rats with experimental audiogenic seizure susceptibility. Kwon J, et al. **Epilepsy Res** 1997 May;27(2):89–99

Functional changes in somatostatin and neuropeptide Y containing neurons in the rat hippocampus in chronic models of limbic seizures. Vezzani A, et al. **Epilepsy Res** 1996 Dec;26(1):267–79

Chromogranin mRNA levels in the brain as a marker for acute and chronic changes in neuronal activity: effect of treatments including seizures, osmotic stimulation and axotomy in the rat. Shen PJ, et al. **Eur J Neurosci** 1996 May;8(5):988–1000

Expression of heat shock protein-70 and limbic seizure-induced neuronal death in the rat brain. Zhang X, et al. **Eur J Neurosci** 1996 Jul;8(7):1432–40

Hippocampal and cerebellar extracellular amino acids during pilocarpine-induced seizures in freely moving rats. Smolders I, et al. **Eur J Pharmacol** 1997 Jan 14;319(1):21–9

Developmental regulation of regional functionality of substantial nigra GABAA receptors involved in seizures. Velíšková J, et al. **Eur J Pharmacol** 1996 Aug 8; 309(2):167–73

Kainic acid-induced focal cortical seizure is associated with an increase of synaptophysin immunoreactivity in the cortex. Chen LS, et al. **Exp Neurol** 1996 Sep;141(1):25–31

vesl, a gene encoding VASP/Ena family related protein, is upregulated during seizure, long-term potentiation and synaptogenesis. Kato A, et al. **FEBS Lett** 1997 Jul 21; 412(1):183–9

Neurochemical mechanisms in soman-induced seizures. Shih TM, et al. **J Appl Toxicol** 1997 Jul–Aug;17(4):255–64

Anatomical localization and time course of Fos expression following soman-induced seizures. Zimmer LA, et al. **J Comp Neurol** 1997 Feb 24;378(4):468–81

Seizure-related changes in the glutamate R2 and R5 receptor genes expression in the rat hippocampal formation. Lasoń W, et al. **J Neural Transm** 1997;104(2–3):125–33

Long-term expression of Fos-related antigen and transient expression of delta FosB associated with seizures in the rat hippocampus and striatum. Bing G, et al. **J Neurochem** 1997 Jan;68(1):272–9

Chronic seizures increase glucose transporter abundance in rat brain. Gronlund KM, et al. **J Neuropathol Exp Neurol** 1996 Jul;55(7):832–40

Expression of LIM protein genes Lmo1, Lmo2, and Lmo3 in adult mouse hippocampus and other forebrain regions: differential regulation by seizure activity. Hinks GL, et al. **J Neurosci** 1997 Jul 15;17(14):5549–59

Rapid seizure-induced reduction of benzodiazepine and Zn2+ sensitivity of hippocampal dentate granule cell GABAA receptors. Kapur J et al. **J Neurosci** 1997 Oct 1;17(19):7532–40

Time course and regional expression of C-FOS and HSP70 in hippocampus and piriform cortex following soman-induced seizures. Baille-Le Crom V, et al. **J Neurosci Res** 1996 Sep 1;45(5):513–24

Effect of 5,7-dihydroxytryptamine on audiogenic seizures in genetically epilepsy-prone rats. Statnick MA, et al. **Life Sci** 1996;59(21):1763–71

Possible regulation of high-affinity glutamate uptake in synaptosomes of normal and epileptic mice. Ortiz JG, et al. **Mol Chem Neuropathol** 1996 May–Aug;28(1–3):127–33

Interleukin-1alpha in the brain is induced by audiogenic seizure. Gahring LC, et al. **Neurobiol Dis** 1997;3(4):263–9

Specific [3H]glutamate binding in the cerebral cortex and hippocampus of rats during development: effect of homocysteine-induced seizures. Folbergrová J, et al. **Neurochem Res** 1997 May;22(5):637–46

Electroconvulsive seizures increase levels of PS4, the TRH-enhancing peptide [prepro-TRH(160–169)], in rat brain. Pekary AE, et al. **Neuroendocrinology** 1997 May; 65(5):377–84

c-fos antisense oligonucleotide prevents delayed induction of hsp70 mRNA after soman-induced seizures. Baille V, et al. **Neuroreport** 1997 May 27;8(8):1819–22

Long-term alterations in growth factor mRNA expression following seizures. Garcia ML, et al. **Neuroreport** 1997 Apr 14;8(6):1445–9

Seizure-induced glutamate release in mature and immature animals: an in vivo microdialysis study. Liu Z, et al. **Neuroreport** 1997 May 27;8(8):2019–23

Nuclear accumulation of p53 protein following kainic acid-induced seizures. Sakhi S, et al. **Neuroreport** 1996 Jan 31;7(2):493–6

Persistent elevation of corticotrophin releasing factor and vasopressin but not oxytocin mRNA in the rat after kindled seizures. Greenwood RS, et al. **Neurosci Lett** 1997 Mar 7;224(1):66–70

Fos oncoprotein expression in the rat forebrain following muscimol-induced absence seizures. Zhang X, et al. **Neurosci Lett** 1996 Jun 7;210(3):169–72

Comparison of neurons in rat medulla oblongata with fos immunoreactivity evoked by seizures, chemoreceptor, or baroreceptor stimulation. Kanter RK, et al. **Neuroscience** 1996 Aug;73(3):807–16

Pilocarpine-induced seizures are accompanied by a transient elevation in the messenger RNA expression of the prohormone convertase PC1 in rat hippocampus: comparison with nerve growth factor and brain-derived neurotrophic factor expression. Marcinkiewicz M, et al. **Neuroscience** 1997 Jan;76(2):425–39

Oxytocin and vasopressin mRNA expression in rat hypothalamus following kainic acid-induced seizures. Sun Q, et al. **Neuroscience** 1996 Mar;71(2):543–54

Audiogenic and audiogenic-like seizures: locus of induction and seizure severity determine postictal prolactin patterns. Garcia-Cairasco N, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):503–10

A novel seizure-induced synaptotagmin gene identified by differential display. Babity JM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2638–41

Normal cerebellar development but susceptibility to seizures in mice lacking G protein-coupled, inwardly rectifying K+ channel GIRK2. Signorini S, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):923–7

Serotonin1A receptor autoradiography during alcohol-withdrawal kindling. Ulrichsen J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):19–26

A new non-NMDA antagonist modifies the local cerebral glucose utilization in kainate-induced generalized seizure. Shiraishi K. **Sangyo Ika Daigaku Zasshi** 1997 Mar 1; 19(1):1–12

C-Fos expression as a molecular marker in corticotropin-releasing factor-induced seizures. Marrosu F, et al. **Synapse** 1996 Nov;24(3):297–304

Activation of oxytocin-containing neurons of the paraventricular nucleus (PVN) following generalized seizures. Piekut DT, et al. **Synapse** 1996 Aug;23(4):312–20

[Direct determination of nitric oxide in rat brain during various types of seizures using ESR] Bashkatova VG, et al. **Dokl Akad Nauk** 1996 May;348(1):119–21 **(Rus)**

[The effect of picrotoxin-induced seizure activity on the cAMP-dependent phosphorylation of synapsin-I in rats] Arkhipov VI, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul; 82(7):74–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Unusual neurologic manifestation of enteric fever--case report and review of the literature. Liman AS. **Cent Afr J Med** 1996 Oct;42(10):301–2 (6 ref.)

NURSING

The benevolent overreaction: nursing assessment and intervention in families coping with seizure disorder. Murray JA, et al. **J Neurosci Nurs** 1996 Aug;28(4):252–8

PARASITOLOGY

Presentation of parasites and the radiology of parasitic diseases. Zaiman H. **Trop Doct** 1997 Jul;27(3):187

PATHOLOGY

Apoptotic and necrotic cell death following kindling induced seizures. Pretel S, et al. **Acta Histochem** 1997 Mar; 99(1):71–9

Granule cell disinhibition in dentate gyrus of genetically seizure susceptible El mice. Ono T, et al. **Brain Res** 1997 Jan 16;745(1–2):165–72

Neuroethological and morphological (Neo-Timm staining) correlates of limbic recruitment during the development of audiogenic kindling in seizure susceptible Wistar rats. Garcia-Cairasco N, et al. **Epilepsy Res** 1996 Dec; 26(1):177–92

Spontaneous seizures preferentially injure interneurons in the pilocarpine model of chronic spontaneous seizures. Mello LE, et al. **Epilepsy Res** 1996 Dec;26(1):123–9

Is cell death necessary for hippocampal mossy fiber sprouting? Stringer JL, et al. **Epilepsy Res** 1997 Apr; 27(1):67–76

The relationship between seizures and damage in the maturing brain. Sperber EF. **Epilepsy Res Suppl** 1996; 12:365–76

Age-related appearance of dystrophic axon terminals in cerebellar and vestibular nuclei of Mongolian gerbils. Takeuchi YK, et al. **Exp Anim** 1997 Jan;46(1):59–65

Cocaine administration in pregnant rabbits alters cortical structure and function in their progeny in the absence of maternal seizures. Murphy EH, et al. **Exp Brain Res** 1997 May;114(3):433–41

Increased brain damage after stroke or excitotoxic seizures in melatonin-deficient rats. Manev H, et al. **FASEB J** 1996 Nov;10(13):1546–51

Metyrapone, an inhibitor of glucocorticoid production, reduces brain injury induced by focal and global ischemia and seizures. Smith-Swintosky VL, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):585–98

Seizure-induced damage to the hippocampus is prevented by modulation of the GABAergic system. Jolkkonen J, et al. **Neuroreport** 1996 Aug 12;7(12):2031–5

N-methyl-D-aspartate and non-N-methyl-D-aspartate receptors mediate seizures and CA1 hippocampal damage induced by dendrotoxin-K in rats. Bagetta G, et al. **Neuroscience** 1996 Apr;71(3):613–24

Cholinergic deafferentation exacerbates seizure-induced loss of somatostatin-immunoreactive neurons in the rat hippocampus. Jolkkonen J, et al. **Neuroscience** 1997 Sep; 80(2):401–11

[Kindling induced mossy fiber sprouting has no functional significance in developing seizure discharges in rats] Ohata H, et al. **Nippon Ika Daigaku Zasshi** 1997 Apr;64(2):154–62 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

The effects of malignant glioma on the EEG and seizure thresholds: an experimental study. Beaumont A, et al. **Acta Neurochir (Wien)** 1996;138(4):370–81

Effect of epilepsy, seizures and epileptiform EEG discharges on cognitive function. Aldenkamp AP, et al. **Acta Neurol Scand** 1996 Apr;93(4):253–9

Diagnostic utility of video EEG monitoring in paroxysmal events. Mohan KK, et al. **Acta Neurol Scand** 1996 Nov; 94(5):320–5

The kynurenines and the seizures. Guzeva VI, et al. **Adv Exp Med Biol** 1996;398:263–4

Seizures and the regulation of neurotrophic factor expression: associations with structural plasticity in epilepsy. Gall CM, et al. **Adv Neurol** 1997;72:9–24 (97 ref.)

Molecular and cellular cascades in seizure-induced neosynapse formation. Represa A, et al. **Adv Neurol** 1997; 72:25–34 (60 ref.)

Prevention by cycloheximide of the audiogenic seizures and tryptophan metabolic disturbances of ethanol withdrawal in rats. Oretti R, et al. **Alcohol Alcohol** 1996 May; 31(3):243–7

Characterisation of N-methyl-D-aspartate (NMDA)-induced kindling. Croucher MJ, et al. **Biochem Soc Trans** 1996 May;24(2):295S

Ontogeny and topography of seizure regulation by the substantia nigra. Moshé SL, et al. **Brain Dev** 1995;17 Suppl:61–72 (113 ref.)

Evidence for membrane remodeling in ipsilateral thalamus and amygdala following left amygdala-kindled seizures in awake rats. Arai T, et al. **Brain Res** 1996 Dec 16; 743(1–2):131–40

Decreased time constant in hippocampal dentate granule cells in pilocarpine-treated rats with progressive seizure frequencies. Isokawa M. **Brain Res** 1996 Apr 29; 718(1–2):169–75

Kindling antagonism: interactions of the amygdala with the piriform, perirhinal, and insular cortices. Mohapel P, et al. **Brain Res** 1996 Sep 16;733(2):211–8

Decreased GABA effectiveness in the inferior colliculus neurons during ethanol withdrawal in rats susceptible to audiogenic seizures. N'Gouemo P, et al. **Brain Res** 1996 Jun 17;724(2):200–4

Repetitive audiogenic seizures cause an increased acoustic response in inferior colliculus neurons and additional convulsive behaviors in the genetically-epilepsy prone rat. N'Gouemo P, et al. **Brain Res** 1996 Feb 26;710(1–2):92–6

The effects of N-methyl-D-aspartate (NMDA) and its competitive antagonist, 3-(2-carboxypiperazine-4-yl)propyl-1-phosphonic acid (CPP), injected into caudate-putamen on kindled amygdaloid seizures in rats. Osonoe M, et al. **Brain Res** 1996 Jul 29;728(2):242–6

Forebrain metabolic activation induced by the repetition of audiogenic seizures in Wistar rats. Pereira de Vasconcelos A, et al. **Brain Res** 1997 Jul 11;762(1–2):114–20

Repeated seizures increase GFAP and vimentin in the hippocampus. Stringer JL. **Brain Res** 1996 Apr 22; 717(1–2):147–53

Delayed development of spontaneous seizures and prolonged convulsive state in rats after massed stimulation of the anterior piriform cortex. Timofeeva OA, et al. **Brain Res** 1997 Apr 18;754(1–2):227–38

Dextromethorphan ameliorates effects of neonatal hypoxia on brain morphology and seizure threshold in rats. Laroia N, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):29–34

The influence of blood gas changes on hyperthermia-induced seizures in developing rats. Morimoto T, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):77–80

Cortical NMDAR-1 gene expression is rapidly upregulated after seizure. Jensen PJ, et al. **Brain Res Mol Brain Res** 1997 Feb;44(1):157–62

An indirect method for absorption rate estimation: flurothyl-induced seizures. Lánský P, et al. **Bull Math Biol** 1997 May;59(3):569–79

Exceptionally high seizure threshold: ECT device limitations. Lisanby SH, et al. **Convuls Ther** 1996 Sep;12(3):156–64

Relationship of seizure morphology to the convulsive threshold. McCall WV, et al. **Convuls Ther** 1996 Sep; 12(3):147–51

Neuroperceptual differences in consonant and vowel discrimination: as revealed by direct cortical electrical

interference. Boatman D, et al. **Cortex** 1997 Mar; 33(1):83–98

Noninvasive capnometry monitoring for respiratory status during pediatric seizures. Abramo TJ, et al. **Crit Care Med** 1997 Jul;25(7):1242–6

Seizure disorders. **Curr Opin Neurol** 1996 Apr;9(2):B33–43

The effects of seizures on the brain. Lynch MW, et al. **Curr Opin Neurol** 1996 Apr;9(2):97–102

Syncopes and seizures. Schmidt D. **Curr Opin Neurol** 1996 Apr;9(2):78–81

Perioperative electroencephalographic seizures in infants undergoing repair of complex congenital cardiac defects. Helmers SL, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan;102(1):27–36

Ictal laughter associated with paroxysmal hypothalamopituitary dysfunction. Arroyo S, et al. **Epilepsia** 1997 Jan;38(1):114–7

Effects of sleep and sleep stage on epileptic and nonepileptic seizures. Bazil CW, et al. **Epilepsia** 1997 Jan;38(1):56–62

Functional anatomy of spontaneous seizures in a rat model of limbic epilepsy. Bertram EH. **Epilepsia** 1997 Jan; 38(1):95–105

Post-ictal depression transiently inhibits induction of LTP in area CA1 of the rat hippocampal slice. Barr DS, et al. **Epilepsy Res** 1997 May;27(2):111–8

Rapid and transient increases in cellular immediate early gene and neuropeptide mRNAs in cortical and limbic areas after amygdaloid kindling seizures in the rat. Burazin TC, et al. **Epilepsy Res** 1996 Dec;26(1):281–93

Parent–completed scales for measuring seizure severity and severity of side–effects of antiepileptic drugs in childhood epilepsy: development and psychometric analysis. Carpay HA, et al. **Epilepsy Res** 1996 Jul;24(3):173–81

Anticonvulsant effect of reduced NMDA receptor expression in audiogenic DBA/2 mice. Chapman AG, et al. **Epilepsy Res** 1996 Dec;26(1):25–35

Neuroethological and morphological (Neo–Timm staining) correlates of limbic recruitment during the development of audiogenic kindling in seizure susceptible Wistar rats. Garcia–Cairasco N, et al. **Epilepsy Res** 1996 Dec; 26(1):177–92

Vulnerability and plasticity of the GABA system in the pilocarpine model of spontaneous recurrent seizures. Houser CR, et al. **Epilepsy Res** 1996 Dec;26(1):207–18

Properties of interictal discharges induced by hippocampal kindling. Kogure S. **Epilepsy Res** 1997 May;27(2):139–48

Audiogenic seizures following global ischemia induced by chest compression in Long–Evans rats. Reid KH, et al. **Epilepsy Res** 1996 Apr;23(3):195–209

Effects of chronic morphine pretreatment on amygdaloid kindling development, posttctal seizure and suppression and benzodiazepine receptor binding in rats. Rocha L, et al. **Epilepsy Res** 1996 Apr;23(3):225–33

Assessing changes over time in temporal lobectomy: outcome by scoring seizure frequency. So EL, et al. **Epilepsy Res** 1997 May;27(2):119–25

Effects of single and repeated administration of sulthiame on amygdaloid kindled seizures in rats. Song HK, et al. **Epilepsy Res** 1997 May;27(2):81–7

Arrest of seizure progression during electrical kindling in guinea–pigs with prior pentylenetetrazol–induced convulsions. Teskey GC, et al. **Epilepsy Res** 1996 Jun; 24(2):101–7

Transition between two types of epileptic seizures in developing rats as a sign of progressive epileptogenesis. Mareš P, et al. **Epilepsy Res Suppl** 1996;12:75–8 (30 ref.)

Development and pharmacology of glutamate uptake in audiogenic seizures. Ortiz JG, et al. **Epilepsy Res Suppl** 1996;12:89–98

Abnormal frequency–selective domains in inferior colliculus of audiogenic seizure susceptible rats. Pierson M, et al. **Epilepsy Res Suppl** 1996;12:101–9

Possible mechanisms of seizure–related cell damage in the dentate hilus. Schwartzkroin PA, et al. **Epilepsy Res Suppl** 1996;12:317–24

Functional activation of somatostatin and neuropeptide Y containing neurons in experimental models of limbic seizures. Vezzani A, et al. **Epilepsy Res Suppl** 1996; 12:187–95

Gradation of kainic acid–induced rat limbic seizures and expression of hippocampal heat shock protein–70. Zhang X, et al. **Eur J Neurosci** 1997 Apr;9(4):760–9

Afferents to the seizure–sensitive neurons in layer III of the medial entorhinal area: a tracing study in the rat. Eid T, et al. **Exp Brain Res** 1996 May;109(2):209–18

Seizure–induced damage to somatostatin–immunoreactive neurons in the rat hippocampus is regulated by fimbria–fornix transection. Jolkkonen J, et al. **Exp Neurol** 1997 May;145(1):141–53

Antecedent tone presentation differentially alters the rate of amygdala kindling: continued exposure is not required for this region–specific effect. Kline AE, et al. **Exp Neurol** 1997 Jan;143(1):124–31

Resistance to 3–mercaptopropionic acid–induced seizures in hepatic encephalopathy. Ferreira MR, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):766–9

Spectral analysis of a thalamus–to–cortex seizure pathway. Sherman DL, et al. **IEEE Trans Biomed Eng** 1997 Aug; 44(8):657–64

Extraction of spatio–temporal signatures from depth EEG seizure signals based on objective matching in warped vectorial observations. Wendling F, et al. **IEEE Trans Biomed Eng** 1996 Oct;43(10):990–1000

Enhancement of limbic seizures by nocturnal application of experimental magnetic fields that simulate the magnitude and morphology of increases in geomagnetic activity. Persinger MA. **Int J Neurosci** 1996 Sep;86(3–4):271–80

Respiratory motor nerve activities during experimental seizures in cats. Terndrup TE, et al. **J Appl Physiol** 1996 Mar;80(3):924–30

Nitric oxide of neuronal origin is involved in cerebral blood flow increase during seizures induced by kainate. Montécot C, et al. **J Cereb Blood Flow Metab** 1997 Jan;17(1):94–9

Soman–induced seizures rapidly activate astrocytes and microglia in discrete brain regions. Zimmer LA, et al. **J Comp Neurol** 1997 Feb 24;378(4):482–92

Different patterns of dendritic branching of posterior collicular neurons in two mouse strains are associated with a difference in audiogenic seizure susceptibility. Marchand MJ, et al. **J Hirnforsch** 1996;37(1):135–43

Differential rates of age of seizure onset between sexes and between hemispheres? Strauss E, et al. **J Int Neuropsychol Soc** 1997 Sep;3(5):428–34

Seizures induce tenascin–C mRNA expression in neurons. Ferhat L, et al. **J Neurocytol** 1996 Sep;25(9):535–46

Seizures at the onset of subarachnoid haemorrhage. Pinto AN, et al. **J Neurol** 1996 Feb;243(2):161–4

Characteristics of postischemic seizures in hyperglycemic rats. Uchino H, et al. **J Neurol Sci** 1996 Jul;139(1):21–7

Imaging the induction and spread of seizure activity in the isolated brain of the guinea pig: the roles of GABA and glutamate receptors. Federico P, et al. **J Neurophysiol** 1996 Nov;76(5):3471–92

Dynamic interactions determine partial thalamic quiescence in a computer network model of spike–and–wave seizures. Lytton WW, et al. **J Neurophysiol** 1997 Apr;77(4):1679–96

Auras and experiential responses arising in the temporal lobe. Fried I. **J Neuropsychiatry Clin Neurosci** 1997 Summer; 9(3):420–8 (45 ref.)

Kainic acid–induced seizures enhance dentate gyrus inhibition by downregulation of GABA(B) receptors. Haas KZ, et al. **J Neurosci** 1996 Jul 1;16(13):4250–60

Effects of excitatory amino acid antagonists on dendrotoxin–induced increases in neurotransmitter release and epileptiform bursting in rat hippocampus in vitro. Dorandeu F, et al. **J Neurosci Res** 1997 Jun 15; 48(6):499–506

A crucial role of the alpha–amino–3–hydroxy–5–methylisoxazole–4–propionic acid subtype of glutamate receptors in piriform and perirhinal cortex for the initiation and propagation of limbic motor seizures. Tortorella A, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1401–5

Lack of effect of ECS on rat brain inositol monophosphatase activity and inositol levels and of i.c.v. inositol on ictal and post–ictal length. Patishi Y, et al. **J Psychiatr Res** 1996 Jan–Feb;30(1):39–43

High performance seizure–monitoring system using a vibration sensor and videotape recording: behavioral analysis of genetically epileptic rats. Amano S, et al. **Lab Anim Sci** 1997 Jun;47(3):317–20

Effects of [arginine8, glycine–OH9]–vasopressin on pentylenetetrazol seizures in mice. Interaction with adrenaline. Lambadjieva ND, et al. **Methods Find Exp Clin Pharmacol** 1997 Apr;19(3):161–6

A simple device for recording seizure activity in rats. Malhotra J, et al. **Methods Find Exp Clin Pharmacol** 1997 Jan–Feb;19(1):47–51

Effects of valproate on amino acid and monoamine concentrations in striatum of audiogenic seizure–prone Balb/c mice. Vriend JP, et al. **Mol Chem Neuropathol** 1996 Apr;27(3):307–24

A speculative model of affective illness cyclicity based on patterns of drug tolerance observed in amygdala–kindled seizures. Post RM, et al. **Mol Neurobiol** 1996 Aug; 13(1):33–60 (132 ref.)

Nitric oxide synthase inhibitor facilitates aminopyridine induced neocortical seizure. Boda B, et al. **Neurobiology (Bp)** 1996;4(1–2):103–4

Binding of double stranded oligonucleotide probes for particular transcription factors with leucine–zipper motifs in discrete brain structures of mice with acquired and inherent spontaneous seizures. Azuma Y, et al. **Neurochem Int** 1996 Sep;29(3):323–33

Relevance of early seizures for in–hospital mortality in acute cerebrovascular disease. Arboix A, et al. **Neurology** 1996 Dec;47(6):1429–35

Non–epileptic seizures in temporal lobectomy candidates with medically refractory seizures. Henry TR, et al. **Neurology** 1997 May;48(5):1374–82

Causes and outcome of seizures in liver transplant recipients. Wijdicks EF, et al. **Neurology** 1996 Dec;47(6):1523–5

Anticonvulsant activity of novel derivatives of 2– and 3–piperidinecarboxylic acid in mice and rats. Hinko CN, et al. **Neuropharmacology** 1996;35(12):1721–35

Mouse chromosome 9 involvement in beta–CCM–induced seizures. Clément Y, et al. **Neuroreport** 1996 Sep 2; 7(13):2226–30

Role of the NMDA receptor complex in DMCM–induced seizure in mice. Tsuda M, et al. **Neuroreport** 1997 Feb 10; 8(3):603–6

Selective facilitation of kindled seizures from the amygdala after hippocampal lesions induced by perforant path stimulation. Mazarati AM, et al. **Neurosci Lett** 1997 Mar 21;224(3):165–8

Lack of Fos–like immunoreactivity after spontaneous seizures or reinduction of status epilepticus by pilocarpine in rats. Mello LE, et al. **Neurosci Lett** 1996 Apr 19;208(2):133–7

The role of nitric oxide in chemically– and electrically–induced seizures in mice. Przegaliński E, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):145–8

Plasticity of granule cell–mossy fiber system following kainic acid induced seizures: an immunocytochemical study on neurofilament proteins. Yang Q, et al. **Neurosci Res** 1996 Sep;26(1):57–64

Effects of cholinergic denervation on seizure development and neurotrophin messenger RNA regulation in rapid hippocampal kindling. Ferencz I, et al. **Neuroscience** 1997 Sep;80(2):389–99

The amygdala is critical for seizure propagation from brainstem to forebrain. Hirsch E, et al. **Neuroscience** 1997 Apr;77(4):975–84

The role of nitric oxide in focally–evoked limbic seizures. Proctor MR, et al. **Neuroscience** 1997 Feb;76(4):1231–6

The effect of color on light–induced seizures: a case report. West RW, et al. **Optom Vis Sci** 1996 Feb;73(2):109–13

Long–term consequences of subtle stimuli during the first twenty–four hours of seizure–induced brain injury. Cook LL, et al. **Percept Mot Skills** 1996 Oct;83(2):523–9

Kindled seizures do not affect adenosinergic inhibition of DA or ACh release in rat accumbens or PFC. Engelbrecht AH, et al. **Pharmacol Biochem Behav** 1996 Nov; 55(3):315–21

The role of nitric oxide in soman–induced seizures, neuropathology, and lethality. Lallement G, et al. **Pharmacol Biochem Behav** 1996 Aug;54(4):731–7

Mapping cerebral sites for emotion and emotional expression with direct cortical electrical stimulation and seizure discharges. Gordon B, et al. **Prog Brain Res** 1996; 107:617–22

Psychosis and vulnerability to ECT–induced seizures. Waziri R, et al. **Psychiatry Res** 1996 May 17;62(2):191–201

Two forms of hemitonic seizure in patients with infantile hemiplegia and epilepsy. Adachi N, et al. **Seizure** 1997 Feb; 6(1):73–9

Supplementary motor area seizure resembling sleep disorder. Tachibana N, et al. **Sleep** 1996 Dec;19(10):811–6

[Generalization mechanisms of limbic seizures] Mori N. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Feb; 17(1):25–9 (26 ref.) (Eng. Abstr.) **(Jpn)**

[Kindling induced mossy fiber sprouting has no functional significance in developing seizure discharges in rats] Ohata H, et al. **Nippon Ika Daigaku Zasshi** 1997 Apr;64(2):154–62 (Eng. Abstr.) **(Jpn)**

[Permeability of blood–brain barrier in newborn rats during hyperthermia–induced seizures] Gurina OI, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):146–9 **(Rus)**

[Reactivity of the basilar artery in the brain of Krushinskiĭ–Molodkina line rats one day after an audiogenic epileptiform seizure] Storozhevykh TP, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):131–4 **(Rus)**

[The effect of generalized seizures on the structure of the circadian wakefulness–sleep cycle and on the EEG of rats with a hereditary predisposition for audiogenic convulsions] Oganesian GA, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):1–8 (Eng. Abstr.) **(Rus)**

[The neuropeptide galanin and the seizure reactions of the developing brain] Chepurnov SA, et al. **Usp Fiziol Nauk** 1997 Apr–Jun;28(2):3–20 (102 ref.) (Eng. Abstr.) **(Rus)**

[Audiogenic epilepsy: a morphofunctional analysis] Batuev AS, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar–Apr;47(2):431–8 (Eng. Abstr.) **(Rus)**

[Long–term effects of febrile seizures in early ontogeny on learning processes and memory in adult rats] Chepurnova NE, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun;47(3):601–4 **(Rus)**

[The effect of neural transplantation on audiogenic seizures in rats of different genetic strains] Ermakova IV, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul–Aug; 46(4):776–86 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Peri–operative prophylaxis with phenytoin: dosage and therapeutic plasma levels. Levati A, et al. **Acta Neurochir (Wien)** 1996;138(3):274–8; discussion 278–9

Fosphenytoin injection introduced as replacement for Dilantin injection [news] **Am J Health Syst Pharm** 1996 Oct 1;53(19):2249

Combined valproate or carbamazepine and electroconvulsive therapy. Zarate CA Jr, et al. **Ann Clin Psychiatry** 1997 Mar;9(1):19–25

Revised Winter–Tozer equation for normalized phenytoin concentrations in trauma and elderly patients with hypoalbuminemia. Anderson GD, et al. **Ann Pharmacother** 1997 Mar;31(3):279–84

Ciprofloxacin–phenytoin interaction [letter] Brouwers PJ, et al. **Ann Pharmacother** 1997 Apr;31(4):498

Stimulation of 5–HT1A receptors in the dorsal hippocampus and inhibition of limbic seizures induced by kainic acid in rats. Gariboldi M, et al. **Br J Pharmacol** 1996 Nov; 119(5):813–8

Effect of adenosine receptor modulation on pentylenetetrazole–induced seizures in rats. Malhotra J, et al. **Br J Pharmacol** 1997 Jan;120(2):282–8

Decreased cocaine- and lidocaine-induced seizure response by dextromethorphan and DNQX in rat. Barat SA, et al. **Brain Res** 1997 May 9;756(1-2):179-83

Amelioration by cyclosporin A of brain damage following 5 or 10 min of ischemia in rats subjected to preischemic hyperglycemia. Li PA, et al. **Brain Res** 1997 Apr 4; 753(1):133-40

A low dose of streptozotocin prevents kainic acid-induced seizures and lethal effects in the rat. Kim HC, et al. **Clin Exp Pharmacol Physiol** 1997 Jul;24(7):503-5

Role of magnesium sulfate in seizure prevention in patients with eclampsia and pre-eclampsia. Anthony J, et al. **Drug Saf** 1996 Sep;15(3):188-99 (115 ref.)

A practical guide to when (and how) to withdraw antiepileptic drugs in seizure-free patients. Schmidt D, et al. **Drugs** 1996 Dec;52(6):870-4 (17 ref.)

Modification of kainate-induced behavioral and electrographic seizures following inhibition of nitric oxide synthase in mice. Kirkby RD, et al. **Epilepsy Res** 1996 Jun; 24(2):79-90

D-23129: a new anticonvulsant with a broad spectrum activity in animal models of epileptic seizures. Rostock A, et al. **Epilepsy Res** 1996 Apr;23(3):211-23

Effects of acute treatment and long-term treatment with MK-801 against amygdaloid kindled seizures in rats. Yoshida M, et al. **Epilepsy Res** 1997 Mar;26(3):407-13

Effects of 7-nitroindazole, NG-nitro-L-arginine, and D-CPPene on harmaline-induced postural tremor, N-methyl-D-aspartate-induced seizures, and lisuride-induced rotations in rats with nigral 6-hydroxydopamine lesions. Eblen F, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):9-16

Seizures and hippocampal damage produced by dendrotoxin-K in rats is prevented by the 21-aminosteroid U-74389G. Bagetta G, et al. **Exp Neurol** 1997 Sep; 147(1):204-10

Effect of Sahaja yoga practice on seizure control & EEG changes in patients of epilepsy. Panjwani U, et al. **Indian J Med Res** 1996 Mar;103:165-72

Two cases of dysembryoplastic neuroepithelial tumors with intractable complex partial seizures. Itoh M, et al. **J Child Neurol** 1997 Jan;12(1):67-70

Phenytoin-related chorea in children with deep hemispheric vascular malformations. Koukkari MW, et al. **J Child Neurol** 1996 Nov;11(6):490-1

Evaluation of the calcium-antagonist, antidiarrhoeic and central nervous system activities of Baccharis serraefolia. Tortoriello J, et al. **J Ethnopharmacol** 1996 Sep; 53(3):157-63

The role of antiseizure prophylaxis following head injury. Brain Trauma Foundation. **J Neurotrauma** 1996 Nov; 13(11):731-4 (14 ref.)

Synthesis and anticonvulsant activity of some 1,2,3,3a-tetrahydropyrrolo[2,1-b]-benzothiazol-, -thiazol- or -oxazol-1-ones in rodents. Trapani G, et al. **J Pharm Pharmacol** 1996 Aug;48(8):834-40

Melatonin attenuates L-cysteine-induced seizures and lipid peroxidation in the brain of mice. Yamamoto H, et al. **J Pineal Res** 1996 Sep;21(2):108-13

Surgical treatment of epilepsy: Robert Wood Johnson experience. Lehman RM, et al. **N J Med** 1996 Sep; 93(9):37-45

A randomized, blinded, placebo-controlled trial of divalproex sodium prophylaxis in adults with newly diagnosed brain tumors. Glantz MJ, et al. **Neurology** 1996 Apr;46(4):985-91

Neuroactive steroids protect against pilocarpine- and kainic acid-induced limbic seizures and status epilepticus in mice. Kokate TG, et al. **Neuropharmacology** 1996;35(8):1049-56

The effects of dextromethorphan on kainic acid-induced seizures in the rat. Kim HC, et al. **Neurotoxicology** 1996 Summer;17(2):375-85

Evaluation of in vivo interactions in mice between flurazepam and two neuroactive steroids. Deutsch SI, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):323-6

The leaf essential oil of Psidium guyanensis offers protection against pentylenetetrazole-induced seizures. Santos FA, et al. **Planta Med** 1997 Apr;63(2):133-5

Behavioural and anticonvulsant effects of Ca2+ channel toxins in DBA/2 mice. Jackson HC, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):85-90

Oral administration of glycine and polyamine receptor antagonists blocks ethanol withdrawal seizures. Kotlinska J, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):238-44

Eclampsia--are we doing enough? Low JJ, et al. **Singapore Med J** 1995 Oct;36(5):505-9

PSYCHOLOGY

Diagnostic utility of video EEG monitoring in paroxysmal events. Mohan KK, et al. **Acta Neurol Scand** 1996 Nov; 94(5):320-5

Recurrent seizures in immature rats: effect on auditory and visual discrimination. Neill JC, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):283-92

Pyridoxine-dependent seizures: demographic, clinical, MRI and psychometric features, and effect of dose on intelligence quotient. Baxter P, et al. **Dev Med Child Neurol** 1996 Nov;38(11):998-1006

Chronic illness and emotional distress in adolescence. Surís JC, et al. **J Adolesc Health** 1996 Aug;19(2):153-6

Influence of seizure content on interpreting psychopathology on the MMPI-2 in patients with epilepsy. Derry PA, et al. **J Clin Exp Neuropsychol** 1997 Jun;19(3):396-404

Application of psychometric standards to scoring system evaluation: is "new" necessarily "improved"? Fastenau PS, et al. **J Clin Exp Neuropsychol** 1996 Jun;18(3):462-72

Dynamic psychotherapy for psychogenic nonepileptic seizures [letter; comment] Share IA. **Mayo Clin Proc** 1996 Nov;71(11):1125. Comment on: Mayo Clin Proc 1996 May;71(5):493-500.

Basic fibroblast growth factor is highly neuroprotective against seizure-induced long-term behavioural deficits. Liu Z, et al. **Neuroscience** 1997 Feb;76(4):1129-38

Personality profiles of patients with pseudoseizures. Kalogjera-Sackellares D, et al. **Seizure** 1997 Feb;6(1):1-7

RADIOGRAPHY

Predictors of abnormal findings of computed tomography of the head in pediatric patients presenting with seizures. Warden CR, et al. **Ann Emerg Med** 1997 Apr;29(4):518-23

RADIONUCLIDE IMAGING

Cerebral perfusion SPECT imaging in epileptic and nonepileptic seizures. Blend MJ, et al. **Clin Nucl Med** 1997 Jun;22(6):363-8

Application of ictal brain SPECT for differentiating epileptic from nonepileptic seizures. De León OA, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter;9(1):99-101

SURGERY

Propofol sedation during awake craniotomy for seizures: electrocorticographic and epileptogenic effects. Herrick IA, et al. **Anesth Analg** 1997 Jun;84(6):1280-4

Propofol sedation during awake craniotomy for seizures: patient-controlled administration versus neurolept analgesia. Herrick IA, et al. **Anesth Analg** 1997 Jun; 84(6):1285-91

Minimally invasive surgical approach for intractable seizure. Patil AA, et al. **Stereotact Funct Neurosurg** 1995; 65(1-4):86-9

Multichannel magnetoencephalography in ablative seizure surgery outside the anteromesial temporal lobe. Smith JR, et al. **Stereotact Funct Neurosurg** 1995;65(1-4):81-5

THERAPY

Clinical policy for the initial approach to patients presenting with a chief complaint of seizure who are not in status epilepticus. American College of Emergency Physicians. **Ann Emerg Med** 1997 May;29(5):706-24

Permanent cardiac pacing for reflex anoxic seizure [letter] Sreeram N, et al. **Arch Dis Child** 1996 Nov;75(5):462

Seizures. Bleck TP. **Baillieres Clin Neurol** 1996 Oct; 5(3):565-76 (29 ref.)

Emergency management of acute alcohol problems. Part 2: Alcohol-related seizures, delirium tremens, and toxic alcohol ingestion. Etherington JM. **Can Fam Physician** 1996 Dec;42:2423-31 (17 ref.)

Can we teach psychiatric residents to rate seizure regularity? McCall WV, et al. **Convuls Ther** 1995 Dec;11(4):248-52

Clinical management of syncope and seizures in GUM clinics [editorial] el-Gadi SM, et al. **Int J STD AIDS** 1997 Apr; 8(4):211-5

Altered mental status in an anticoagulated patient [clinical conference] Nadel ES, et al. **J Emerg Med** 1997 Jan-Feb; 15(1):95-8

Dynamic psychotherapy for psychogenic nonepileptic seizures [letter; comment] Share IA. **Mayo Clin Proc** 1996 Nov;71(11):1125. Comment on: Mayo Clin Proc 1996 May;71(5):493-500.

Vagal stimulation [letter] Uysal H, et al. **Neurology** 1996 Nov; 47(5):1355-6

Lipofectin-facilitated transfer of cholecystokinin gene corrects behavioral abnormalities of rats with audiogenic seizures. Zhang LX, et al. **Neuroscience** 1997 Mar; 77(1):15-22

ULTRASONOGRAPHY

Prenatal ultrasound diagnosis of seizures. Osiovich H, et al. **Am J Perinatol** 1996 Nov;13(8):499-501 (16 ref.)

Fetal seizures: a case study. Abrams LA, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):661-3

Fetal seizures: further observations. Skupski DW, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):663-5

VETERINARY

Diagnostic evaluation of cats with seizure disorders: 30 cases (1991-1993). Quesnel AD, et al. **J Am Vet Med Assoc** 1997 Jan 1;210(1):65-71

Clinical management and outcome of cats with seizure disorders: 30 cases (1991-1993). Quesnel AD, et al. **J Am Vet Med Assoc** 1997 Jan 1;210(1):72-7

High performance seizure-monitoring system using a vibration sensor and videotape recording: behavioral analysis of genetically epileptic rats. Amano S, et al. **Lab Anim Sci** 1997 Jun;47(3):317-20

VIROLOGY

Pathology of chronic herpes infection associated with seizure disorder: a report of two cases with tissue detection of herpes simplex virus 1 by the polymerase chain reaction. Jay V, et al. **Pediatr Pathol Lab Med** 1995 Jan-Feb; 15(1):131-46

SEIZURES, FEBRILE see **CONVULSIONS, FEBRILE**

E-SELECTIN

Endothelial adhesion molecules in atherogenesis. A concerto or a solo? [editorial; comment] Vadas MA, et al. **Circ Res** 1996 Dec;79(6):1216-7. Comment on: Circ Res 1996 Dec;79(6):1205-15.

ANALYSIS

Role of adhesion molecules in the development of pustular lesions in patients with pustulosis palmaris et plantaris. Yokochi K, et al. **Acta Derm Venereol** 1996 Mar; 76(2):118-22

Expression of the cutaneous lymphocyte antigen and its counter-receptor E-selectin in the skin and joints of patients with psoriatic arthritis. Jones SM, et al. **Br J Rheumatol** 1997 Jul;36(7):748-57

Adhesion molecules (E-selectin and ICAM-1) in pulmonary allograft rejection. Shreeniwas R, et al. **Chest** 1996 Nov; 110(5):1143-9

Soluble markers of endothelial cell function. Blann A, et al. **Clin Hemorheol Microcirc** 1997 Jan-Feb;17(1):3-11 (100 ref.)

VCAM-1 and E-selectin expression during cytomegalovirus infection in post-transplant myocardial biopsies. Allen MD, et al. **Clin Transplant** 1996 Dec;10(6 Pt 1):528-37

Specific pattern of circulating endothelial adhesion molecules in HIV-associated Kaposi's sarcoma. Becker K, et al. **Int Arch Allergy Immunol** 1997 Aug;113(4):512-5

Evaluation of a soluble E-selectin enzyme-linked immunosorbent assay under posttraumatic conditions. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):520-3

Expression of cell adhesion molecules in primary renal disease and renal allograft rejection. Hauser IA, et al. **Nephrol Dial Transplant** 1997 Jun;12(6):1122-31

Soluble receptors and cytokine antagonists in human milk. Buescher ES, et al. **Pediatr Res** 1996 Dec;40(6):839-44

BIOSYNTHESIS

Vascular expression of E-selectin is increased in estrogen-receptor-negative breast cancer: a role for tumor-cell-secreted interleukin-1 alpha. Nguyen M, et al. **Am J Pathol** 1997 Apr;150(4):1307-14

Loss of cutaneous delayed hypersensitivity reactions in nevus anemicus. Evidence for close concordance of cutaneous delayed hypersensitivity and endothelial E-selectin expression. Mizutani H, et al. **Arch Dermatol** 1997 May; 133(5):617-20

The significance of adhesion molecules in nephrology. Burkhardt K, et al. **Artif Organs** 1996 May;20(5):433-6 (27 ref.)

Induction of mRNAs for ICAM-1, VCAM-1, and ELAM-1 in cultured rat cardiac myocytes and myocardium in vivo. Hattori Y, et al. **Biochem Mol Biol Int** 1997 Apr; 41(5):979-86

Glucocorticoid inhibition of cytokine-induced E-selectin promoter activation. Ray KP, et al. **Biochem Soc Trans** 1997 May;25(2):189S

Human immunodeficiency virus-1-tat protein induces the cell surface expression of endothelial leukocyte adhesion molecule-1, vascular cell adhesion molecule-1, and intercellular adhesion molecule-1 in human endothelial cells. Dhawan S, et al. **Blood** 1997 Aug 15;90(4):1535-44

Histamine enhanced the TNF-alpha-induced expression of E-selectin and ICAM-1 on vascular endothelial cells. Miki I, et al. **Cell Immunol** 1996 Aug 1;171(2):285-8

Inhibition of stimulus-induced endothelial cell intercellular adhesion molecule-1, E-selectin, and vascular cellular adhesion molecule-1 expression by arachidonic acid and its hydroxy and hydroperoxy derivatives. Huang ZH, et al. **Circ Res** 1997 Feb;80(2):149-58

Chylomicrons induce E-selectin and VCAM-1 expression in endothelial cells. Moers A, et al. **Exp Clin Endocrinol Diabetes** 1997;105 Suppl 2:35-7

Expression of the adhesion molecules ICAM, VCAM, and ELAM in the arteriosclerotic plaque. Kasper HU, et al. **Gen Diagn Pathol** 1996 May;141(5-6):289-94

The NF-kappa B inhibitor, tepoxalin, suppresses surface expression of the cell adhesion molecules CD62E, CD11b/CD18 and CD106. Lee DH, et al. **Immunol Lett** 1996 Nov;53(2-3):109-13

Comparative effect of C3a and C5a on adhesion molecule expression on neutrophils and endothelial cells. Foreman KE, et al. **Inflammation** 1996 Feb;20(1):1-9

Hyperthermia decreases cytokine-mediated adhesion molecule expression on human umbilical vein endothelial cells. Brand K, et al. **Int J Hyperthermia** 1996 Jul-Aug; 12(4):527-38

Tumor necrosis factor alpha-induced E-selectin expression is activated by the nuclear factor-kappaB and c-JUN N-terminal kinase/p38 mitogen-activated protein kinase pathways. Read MA, et al. **J Biol Chem** 1997 Jan 31; 272(5):2753-61

Glucocorticoids inhibit E-selectin expression by targeting NF-kappaB and not ATF/c-Jun. Brostjan C, et al. **J Immunol** 1997 Apr 15;158(8):3836-44

Thrombin induces endothelial type II activation in vitro: IL-1 and TNF-alpha-independent IL-8 secretion and

E-selectin expression. Kaplanski G, et al. **J Immunol** 1997 Jun 1;158(11):5435-41

Mechanism of sustained E-selectin expression in cultured human dermal microvascular endothelial cells. Kluger MS, et al. **J Immunol** 1997 Jan 15;158(2):887-96

Transient induction of E-selectin expression following TNF alpha-based isolated limb perfusion in melanoma and sarcoma patients is not tumor specific. Nooijen PT, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan; 19(1):33-44

Expression of the E-selectin gene in human gingival epithelial tissue. Pietrzak ER, et al. **J Oral Pathol Med** 1996 Jul;25(6):320-4

Alterations in the expression of ELAM-1, ICAM-1 and VCAM-1 after in vitro infection of endothelial cells with a clinical isolate of human cytomegalovirus. Shahgasempour S, et al. **Microbiol Immunol** 1997; 41(2):121-9

E-selectin expression on human brain microvascular endothelial cells. Hess DC, et al. **Neurosci Lett** 1996 Jul 26;213(1):37-40

Parturition: steroids, prostaglandin E2, and expression of adhesion molecules by endothelial cells. Winkler M, et al. **Obstet Gynecol** 1997 Mar;89(3):398-402

Vascular endothelial adhesion molecules and tissue inflammation. Malik AB, et al. **Pharmacol Rev** 1996 Jun; 48(2):213-29 (135 ref.)

Sialyl Lewis X mimetics attenuate E-selectin-mediated adhesion of leukocytes to irradiated human endothelial cells. Hallahan DE, et al. **Radiat Res** 1997 Jan;147(1):41-7

Differential effects of transforming growth factor-beta 1 on lipopolysaccharide induction of endothelial adhesion molecules. Kang YH, et al. **Shock** 1996 Aug;6(2):118-25

Novel responses by transgenic pig endothelial cells to stimulation by human cytokines in terms of H-DAF, E-selectin and major histocompatibility complex class II expression. Carrington CA, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):887

A20 expression inhibits endothelial cell activation. Cooper JT, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):881

Activation of primary and immortalized pig endothelial cells by human serum. Vabres B, et al. **Transplant Proc** 1996 Oct;28(5):2920

Adenosine nucleotides induce E-selectin expression in porcine endothelial cells. von Albertini MA, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1062

Human monocytes activate porcine endothelial cells, resulting in increased E-selectin, interleukin-8, monocyte chemotactic protein-1, and plasminogen activator inhibitor-type-1 expression. Millan MT, et al. **Transplantation** 1997 Feb 15;63(3):421-9

BLOOD

Serum soluble selectins in patients undergoing cardiopulmonary bypass. Relationship with circulating blood cells and inflammation-related cytokines. Diago MC, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):725-30

Minocycline-induced acute generalized exanthematous pustulosis in a patient with generalized pustular psoriasis showing elevated level of sELAM-1 [letter] Yamamoto T, et al. **Acta Derm Venereol** 1997 Mar;77(2):168-9

Infections in neonates delivered at term are associated with increased serum levels of ICAM-1 and E-selectin. Austgulen R, et al. **Acta Paediatr** 1997 Mar;86(3):274-80

Elevated levels of circulating soluble adhesion molecules in peripheral blood of patients with unstable angina. Ghaisas NK, et al. **Am J Cardiol** 1997 Sep 1;80(5):617-9

Elevated levels of circulating soluble adhesion molecules in patients with nonrheumatic aortic stenosis. Shahi CN, et al. **Am J Cardiol** 1997 Apr 1;79(7):980-2

Von Willebrand factor and soluble E-selectin in hyperlipidaemia: relationship to lipids and vascular disease. Blann AD, et al. **Am J Hematol** 1997 May;55(1):15-23

Plasma levels of soluble E-selectin in patients with disseminated intravascular coagulation. Okajima K, et al. **Am J Hematol** 1997 Mar;54(3):219-24

Clinical relevance of elevated serum thrombomodulin and soluble E-selectin in patients with Wegener's granulomatosis and other systemic vasculitides. Boehme MW, et al. **Am J Med** 1996 Oct;101(4):387-94

Monitoring of endothelial leucocyte adhesion molecule-1 in anti-neutrophil-cytoplasmic-antibody-positive vasculitis. Yaqoob M, et al. **Am J Nephrol** 1996;16(2):106-13

Circulating endothelial cell adhesion molecules as diagnostic markers for the early identification of pregnant women at risk for development of preeclampsia. Krauss T, et al. **Am J Obstet Gynecol** 1997 Aug;177(2):443-9

Soluble E-selectin levels in sepsis and critical illness. Correlation with infection and hemodynamic dysfunction. Cummings CJ, et al. **Am J Respir Crit Care Med** 1997 Aug; 156(2 Pt 1):431-7

Increased concentration of soluble E-selectin in the sera of breast cancer patients. Matsuura N, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1367-72

Circulating adhesion molecules ICAM-1, E-selectin, and von Willebrand factor in Henoch-Schönlein purpura. Söylemezoglu O, et al. **Arch Dis Child** 1996 Dec; 75(6):507-11

Plasma E-selectin and ICAM-1 in acute Henoch-Schönlein purpura [letter] Willis FR, et al. **Arch Dis Child** 1997 Jul; 77(1):94

Circulating vascular cell adhesion molecule-1 correlates with the extent of human atherosclerosis in contrast to circulating intercellular adhesion molecule-1, E-selectin, P-selectin, and thrombomodulin. Peter K, et al. **Arterioscler Thromb Vasc Biol** 1997 Mar;17(3):505-12

von Willebrand factor and soluble E-selectin in the prediction of cardiovascular disease progression in hyperlipidaemia. Blann AD, et al. **Atherosclerosis** 1997 Jul 25;132(2):151-6

P-selectin glycoprotein ligand-1 is essential for adhesion to P-selectin but not E-selectin in stably transfected hematopoietic cell lines. Snapp KR, et al. **Blood** 1997 Feb 1;89(3):896-901

The serum levels of sE-selectin are increased in patients with bullous pemphigoid or pemphigus vulgaris. Correlation with the number of skin lesions and recovery after corsticosteroid therapy. D'Auria L, et al. **Br J Dermatol** 1997 Jul;137(1):59-64

Circulating endothelial cell/leucocyte adhesion molecules in ischaemic heart disease. Blann AD, et al. **Br J Haematol** 1996 Nov;95(2):263-5

Sex differences in circulating P-selectin, E-selectin and thrombomodulin [letter; comment] Jilma B, et al. **Br J Haematol** 1996 Dec;95(3):575-6. Comment on: Br J Haematol 1996 Feb;92(2):498-500.

The white blood cell adhesion molecule E-selectin predicts restenosis in patients with intermittent claudication undergoing percutaneous transluminal angioplasty [see comments] Belch JJ, et al. **Circulation** 1997 Apr 15; 95(8):2027-31. Comment in: Circulation 1997 Apr 15;95(8):1986-8.

Plasma cholesterol regulates soluble cell adhesion molecule expression in familial hypercholesterolemia. Sampietro T, et al. **Circulation** 1997 Sep 2;96(5):1381-5

Potential significance of circulating E-selectin [editorial; comment] Smith CW. **Circulation** 1997 Apr 15;95(8):1986-8 . Comment on: Circulation 1997 Apr 15;95(8):2027-31.

Circulating soluble selectins in Kawasaki disease. Takeshita S, et al. **Clin Exp Immunol** 1997 Jun;108(3):446-50

von Willebrand factor and soluble E-selectin in hypertension: influence of treatment and value in predicting the progression of atherosclerosis. Blann AD, et al. **Coron Artery Dis** 1996 Feb;7(2):143-7

Endothelial cell activity varies in patients at risk for the adult respiratory distress syndrome. Moss M, et al. **Crit Care Med** 1996 Nov;24(11):1782-6

Increased levels of plasma ELAM-1, ICAM-1 and VCAM-1 in NIDDM: possible role of oxidized LDL [letter] Cominacini L, et al. **Diabetologia** 1996 Oct;39(10):1244

E-selectin plasma concentration is influenced by glycaemic control in NIDDM patients: possible role of oxidative stress. Cominacini L, et al. **Diabetologia** 1997 May; 40(5):584-9

Plasma selectin levels in patients with Graves' disease. Hara H, et al. **Endocr J** 1996 Dec;43(6):709-13

Prognostic value of increased soluble thrombomodulin and increased soluble E-selectin in ischaemic heart disease. Blann AD, et al. **Eur J Haematol** 1997 Aug;59(2):115-20

Increased maternal plasma levels of soluble adhesion molecules (ICAM-1, VCAM-1, E-selectin) in preeclampsia. Austgulen R, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jan;71(1):53-8

Circulating soluble adhesion molecule levels in children with acute lymphoblastic leukaemia. Hatzistilianou M, et al. **Eur J Pediatr** 1997 Jul;156(7):537-40

Increased levels of circulating endothelial leukocyte adhesion molecule-1 (ELAM-1) in children with reflux nephropathy. Kobayashi H, et al. **Eur Urol** 1997;31(3):343-6

Thrombolytic therapy with urokinase reduces increased circulating endothelial adhesion molecules in acute myocardial infarction. Squadrito F, et al. **Inflamm Res** 1996 Jan;45(1):14-9

Circulating adhesion molecules in the critically ill: a comparison between trauma and sepsis patients. Boldt J, et al. **Intensive Care Med** 1996 Feb;22(2):122-8

Soluble E-selectin in cancer patients as a marker of the therapeutic efficacy of CM101, a tumor-inhibiting anti-neovascularization agent, evaluated in phase I clinical trail. Wamil BD, et al. **J Cancer Res Clin Oncol** 1997; 123(3):173-9

Elevated concentrations of circulating adhesion molecules and their association with microvascular complications in insulin-dependent diabetes mellitus. Fasching P, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4313-7

Elevated serum concentrations of soluble selectin and immunoglobulin type adhesion molecules in patients with inflammatory bowel disease. Göke M, et al. **J Gastroenterol** 1997 Aug;32(4):480-6

Comparison of E-selectin-binding glycoprotein ligands on human lymphocytes, neutrophils, and bovine gamma delta T cells. Jones WM, et al. **J Immunol** 1997 Oct 1; 159(7):3574-83

Comparison of endothelial activation during endotoxic and posttraumatic conditions by serum analysis of soluble E-selectin in nonhuman primates. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):515-9

Evaluation of a soluble E-selectin enzyme-linked immunosorbent assay under posttraumatic conditions. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):520-3

Serum levels of intercellular adhesion molecule-1 and E-selectin in patients with acute ischaemic stroke. Shyu KG, et al. **J Neurol** 1997 Feb;244(2):90-3

Raised levels of circulating VCAM-1 and circulating E-selectin in patients with recurrent oral ulceration. Healy CM, et al. **J Oral Pathol Med** 1997 Jan;26(1):23-8

Elevated selectin levels after severe trauma: a marker for sepsis and organ failure and a potential target for immunomodulatory therapy. Simons RK, et al. **J Trauma** 1996 Oct;41(4):653-62

Increased level of circulating adhesion molecules in the sera of breast cancer patients with distant metastases. Matsuura N, et al. **Jpn J Clin Oncol** 1997 Jun;27(3):135-9

Serum levels of endothelial and neural cell adhesion molecules in prostate cancer. Lynch DF Jr, et al. **Prostate** 1997 Aug 1;32(3):214-20

Soluble adhesion molecules and endothelial cell damage in HIV infected patients. Seigneur M, et al. **Thromb Haemost** 1997 Apr;77(4):646-9

Increased soluble E-Selectin is associated with lung inflammation, and lung injury in hyperoxia-exposed rats. Ramsay PL, et al. **Toxicol Lett** 1996 Oct;87(2-3):157-65

Value of circulating immune parameters in renal transplantation. Rebhandl W, et al. **Transplant Proc** 1997 May;29(3):1881-5

[Effects of carcinostatic agents in the hematogenous metastasis of cancer] Nakashio T, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):591-6 (Eng. Abstr.) **(Jpn)**

[Activation of endothelium in cardiac surgery: the circulating levels of soluble E-selectin as a marker of the activation of endothelium] Yamada H, et al. **Masui** 1997 Apr; 46(4):478-83 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Endothelial-derived adhesion molecules in bacterial meningitis: association to cytokine release and intrathecal leukocyte-recruitment. Fassbender K, et al. **J Neuroimmunol** 1997 Apr;74(1-2):130-4

CHEMISTRY

Structure-function studies on synthetic peptides derived from the 109-118 lectin domain of selectins. Tam SH, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):712-7

Structure of a selectin-like mutant of mannose-binding protein complexed with sialylated and sulfated Lewis(x) oligosaccharides. Ng KK, et al. **Biochemistry** 1997 Feb 4; 36(5):979-88

Cytoplasmic domain of E-selectin contains a non-tyrosine endocytosis signal. Chuang PI, et al. **J Biol Chem** 1997 Oct 3;272(40):24813-8

Application of homonuclear 3D NMR experiments and 1D analogs to study the conformation of sialyl Lewis(x) bound to E-selectin. Scheffler K, et al. **J Biomol NMR** 1997 Jun; 9(4):423-36

E-selectin is upregulated in proliferating endothelial cells in vitro. Bischoff J, et al. **Microcirculation** 1997 Jun; 4(2):279-87

Selectin synthesis and inflammation [published erratum appears in Trends Biochem Sci 1996 Apr;21(4):160] Whelan J. **Trends Biochem Sci** 1996 Feb;21(2):65-9

DRUG EFFECTS

Kinetics of soluble TNF-receptors and soluble adhesion molecules ICAM-1, E-selectin and VCAM-1 under systemic rhTNF alpha therapy. Boehme MW, et al. **Eur J Clin Invest** 1996 May;26(5):404-10

The effect of inhaled sodium cromoglycate on cellular infiltration into the bronchial mucosa and the expression of adhesion molecules in asthmatics. Hoshino M, et al. **Eur Respir J** 1997 Apr;10(4):858-65

BMS-190394, a selectin inhibitor, prevents rat cutaneous inflammatory reactions. Todderud G, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1298-304

Regulation of E-selectin, P-selectin, and intercellular adhesion molecule 1 expression in mouse cremaster muscle vasculature. Jung U, et al. **Microcirculation** 1997 Jun; 4(2):311-9

GENETICS

Protein tyrosine kinase inhibitors act downstream of IL-1 alpha and LPS stimulated MAP-kinase phosphorylation to inhibit expression of E-selectin on human umbilical vein endothelial cells. Adamson P, et al. **Cell Adhes Commun** 1996 Apr;3(6):511-25

E-selectin gene expression in vascular smooth muscle cells. Evidence for a tissue-specific repressor protein. Chen XL, et al. **Circ Res** 1997 Mar;80(3):305-11

Monocytes induce E-selectin gene expression in endothelial cells: role of CD11/CD18 and extracellular matrix proteins. Noble KE, et al. **Eur J Immunol** 1996 Dec;26(12):2944-51

The intron-exon structure of the porcine E-selectin-encoding gene. Winkler H, et al. **Gene** 1996 Oct 17;176(1-2):67-72

Double knockout highlights value of endothelial selectins. Frenette PS, et al. **Immunol Today** 1996 May;17(5):205

Interleukin-4 suppression of tumor necrosis factor alpha-stimulated E-selectin gene transcription is mediated by STAT6 antagonism of NF-kappaB. Bennett BL, et al. **J Biol Chem** 1997 Apr 11;272(15):10212-9

Altered mRNA splicing and inhibition of human E-selectin expression by an antisense oligonucleotide in human umbilical vein endothelial cells. Condon TP, et al. **J Biol Chem** 1996 Nov 29;271(48):30398-403

TNF initiates E-selectin transcription in human endothelial cells through parallel TRAF-NF-kappa B and TRAF-RAC/CDC42-JNK-c-Jun/ATF2 pathways. Min W, et al. **J Immunol** 1997 Oct 1;159(7):3508-18

Postinduction transcriptional repression of E-selectin and vascular cell adhesion molecule-1. Read MA, et al. **J Immunol** 1996 Oct 15;157(8):3472-9

Relationship of polymorphisms in the renin-angiotensin system and in E-selectin of patients with early severe coronary heart disease. Wenzel K, et al. **J Mol Med** 1997 Jan;75(1):57-61

IMMUNOLOGY

A comparison between 111In-anti-E-selectin mAb and 99Tcm-labelled human non-specific immunoglobulin in radionuclide imaging of rheumatoid arthritis. Jamar F, et al. **Br J Radiol** 1997 May;70(833):473-81

P-selectin glycoprotein ligand-1 mediates rolling of mouse bone marrow-derived mast cells on P-selectin but not efficiently on E-selectin. Steegmaier M, et al. **Eur J Immunol** 1997 Jun;27(6):1339-45

A new procedure for establishing functional monoclonal antibodies capable of inhibiting E- or P-selectin-dependent cell adhesion. Handa K, et al. **Glycoconj J** 1997 Jan; 14(1):39-43

The in vivo and in vitro characterisation of an engineered human antibody to E-selectin. Owens R, et al. **Immunotechnology** 1997 Jun;3(2):107-16

CD45RA-RO+ (memory) but not CD45RA+RO- (naive) T cells roll efficiently on E- and P-selectin and vascular cell adhesion molecule-1 under flow. Lichtman AH, et al. **J Immunol** 1997 Apr 15;158(8):3640-50

Binding of human peripheral blood polymorphonuclear leukocytes to E-selectin (CD62E) does not promote their activation. Repo H, et al. **J Immunol** 1997 Jul 15; 159(2):943-51

Expression of adhesion molecules on endothelial cells stimulated by Chlamydia pneumoniae. Kaukoranta-Tolvanen SS, et al. **Microb Pathog** 1996 Nov; 21(5):407-11

P- and E-selectin mediate recruitment of T-helper-1 but not T-helper-2 cells into inflammed tissues. Austrup F, et al. **Nature** 1997 Jan 2;385(6611):81-3

METABOLISM

Levels of expression of P-selectin, E-selectin, and intercellular adhesion molecule-1 in coronary atherectomy specimens from patients with stable and unstable angina pectoris. Tenaglia AN, et al. **Am J Cardiol** 1997 Mar 15; 79(6):742-7

In vivo E-selectin upregulation correlates early with infiltration of PMN, later with PBL entry: MAbs block both. Binns RM, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H183-93

Distinct mechanisms for N-acetylcysteine inhibition of cytokine-induced E-selectin and VCAM-1 expression. Faruqi RM, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H817-26

Decrease in cell adhesion molecules by treatment with anti-tumor necrosis factor alpha monoclonal antibody [letter; comment] Smith MD. **Arthritis Rheum** 1997 Apr; 40(4):789-90. Comment on: Arthritis Rheum 1996 Jul;39(7):1077-81.

Metabolic changes of E-selectin caused by the binding of a mucin carrying sialylLewis A antigens. Nakada H, et al. **Biochem Biophys Res Commun** 1997 May 29; 234(3):559-63

A highly practical synthesis of the sialyl Lewis X pentasaccharide and an investigation of binding to E-, P-, and L-selectins. Kiyoi T, et al. **Bioorg Med Chem** 1996 Aug;4(8):1167-76

Design and synthesis of C-linked fucosides as inhibitors of E-selectin. Uchiyama T, et al. **Bioorg Med Chem** 1996 Jul; 4(7):1149-65

Receptor specificity of clinical Plasmodium falciparum isolates: nonadherence to cell-bound E-selectin and vascular cell adhesion molecule-1. Udomsangpetch R, et al. **Blood** 1996 Oct 1;88(7):2754-60

Ionizing radiation mediates expression of cell adhesion molecules in distinct histological patterns within the lung. Hallahan DE, et al. **Cancer Res** 1997 Jun 1;57(11):2096-9

Inotropes inhibit endothelial cell surface adhesion molecules induced by interleukin-1beta. Fortenberry JD, et al. **Crit Care Med** 1997 Feb;25(2):303-8

Novel glycoproteins inhibiting the binding of colorectal cancer cells to E-selectin. Inoue M, et al. **Glycoconj J** 1997 Jan;14(1):147-53

Expression of E-selectin and E-selectin ligands in human liver inflammation. Adams DH, et al. **Hepatology** 1996 Sep; 24(3):533-8

Adhesion of human uroepithelial cells to E-selectin: possible involvement of sialosyl LewisA-ganglioside. Klopocki AG, et al. **Int J Cancer** 1996 Oct 9;68(2):239-44

Endothelial and epithelial expression of sialyl Lewis(x) and sialyl Lewis(a) in lesions of breast carcinoma. Renkonen J, et al. **Int J Cancer** 1997 Jun 20;74(3):296-300

Detection of the chemokine RANTES and endothelial adhesion molecules in nasal polyps. Beck LA, et al. **J Allergy Clin Immunol** 1996 Oct;98(4):766-80

Cytoplasmic domain of E-selectin contains a non-tyrosine endocytosis signal. Chuang PI, et al. **J Biol Chem** 1997 Oct 3;272(40):24813-8

Suppression of sialyl Lewis X expression and E-selectin-mediated cell adhesion in cultured human lymphoid cells by transfection of antisense cDNA of an alpha1-->3 fucosyltransferase (Fuc-T VII). Hiraiwa N, et al. **J Biol Chem** 1996 Dec 6;271(49):31556-61

Novel inhibitors of cytokine-induced IkappaBalpha phosphorylation and endothelial cell adhesion molecule expression show anti-inflammatory effects in vivo. Pierce JW, et al. **J Biol Chem** 1997 Aug 22;272(34):21096-103

Isolated P-selectin glycoprotein ligand-1 dynamic adhesion to P- and E-selectin. Goetz DJ, et al. **J Cell Biol** 1997 Apr 21;137(2):509-19

Threshold levels of fluid shear promote leukocyte adhesion through selectins (CD62L,P,E) [published erratum appears in J Cell Biol 1997 Apr 7;137(1):261] Lawrence MB, et al. **J Cell Biol** 1997 Feb 10;136(3):717-27

L-selectin from human, but not from mouse neutrophils binds directly to E-selectin. Zöllner O, et al. **J Cell Biol** 1997 Feb 10;136(3):707-16

E-selectin in focal cerebral ischemia and reperfusion in the rat. Zhang RL, et al. **J Cereb Blood Flow Metab** 1996 Nov; 16(6):1126-36

Alterations in ICAM-1 and ELAM-1 expression in psoriatic lesions following various treatments. Danno K, et al. **J Dermatol Sci** 1996 Oct;13(1):49-55

UVB radiation suppresses the TNF-alpha-induced expression of E-selectin and ICAM-1 on cultured human umbilical vein endothelial cells. Yamawaki M, et al. **J Dermatol Sci** 1996 Oct;13(1):11-7

Interleukin-10 induces E-selectin on small and large blood vessel endothelial cells. Vora M, et al. **J Exp Med** 1996 Sep 1;184(3):821-9

Expression of leukocyte fucosyltransferases regulates binding to E-selectin: relationship to previously implicated carbohydrate epitopes. Wagers AJ, et al. **J Immunol** 1997 Aug 15;159(4):1917-29

Expression of endothelial adhesion molecules and recruitment of neutrophils after traumatic brain injury in rats. Carlos TM, et al. **J Leukoc Biol** 1997 Mar;61(3):279-85

Selectin-ligand interactions revealed by molecular dynamics simulation in solution. Tsujishita H, et al. **J Med Chem** 1997 Jan 31;40(3):362-9

The effect of interferon beta-1b on lymphocyte-endothelial cell adhesion. Dhib-Jalbut S, et al. **J Neuroimmunol** 1996 Dec;71(1-2):215-22

E-selectin expression in experimental models of inflammation in mice. Henseleit U, et al. **J Pathol** 1996 Nov;180(3):317-25

Selectin ligands, leukocyte trafficking, and fucosyltransferase genes. Lowe JB. **Kidney Int** 1997 May;51(5):1418-26 (113 ref.)

E-selectin is upregulated in proliferating endothelial cells in vitro. Bischoff J, et al. **Microcirculation** 1997 Jun; 4(2):279-87

Regulation of E-selectin, P-selectin, and intercellular adhesion molecule 1 expression in mouse cremaster muscle vasculature. Jung U, et al. **Microcirculation** 1997 Jun; 4(2):311-9

Distamycin prolongs E-selectin expression by interacting with a specific NF-kappaB-HMG-I(Y) binding site in the promoter. Ghersa P, et al. **Nucleic Acids Res** 1997 Jan 15; 25(2):339-46

Leukocyte adhesion molecules and x-ray energy dispersive spectroscopy in Sturge-Weber disease. Prayson RA, et al. **Pediatr Neurol** 1996 Nov;15(4):332-6

Comparison of sialyl-Lewis a-carrying CD43 and MUC1 mucins secreted from a colon carcinoma cell line for E-selectin binding and inhibition of leukocyte adhesion. Zhang K, et al. **Tumour Biol** 1997;18(3):175-87

PHARMACOLOGY

Inhibition of colon carcinoma cell lung colony formation by a soluble form of E-selectin. Mannori G, et al. **Am J Pathol** 1997 Jul;151(1):233-43

E-selectin preferentially supports neutrophil but not eosinophil rolling under conditions of flow in vitro and in vivo. Sriramarao P, et al. **J Immunol** 1996 Nov 15; 157(10):4672-80

PHYSIOLOGY

TNF-alpha induces selectin-mediated leukocyte rolling in mouse cremaster muscle arterioles. Kunkel EJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1391-400

Novel roles for E-selectin in endothelial-leukocyte adhesion. Yoshida M, et al. **Ann N Y Acad Sci** 1997 Apr 15;811:493-7 (12 ref.)

Quantifying rolling adhesion with a cell-free assay: E-selectin and its carbohydrate ligands. Brunk DK, et al. **Biophys J** 1997 Jun;72(6):2820-33

Sialyl Lewis(x)/E-selectin-mediated rolling in a cell-free system. Brunk DK, et al. **Biophys J** 1996 Nov;71(5):2902-7

Differential effect of E-selectin antibodies on neutrophil rolling and recruitment to inflammatory sites. Ramos CL, et al. **Blood** 1997 Apr 15;89(8):3009-18

Inhibition of delayed-type contact hypersensitivity in mice deficient in both E-selectin and P-selectin. Staite ND, et al. **Blood** 1996 Oct 15;88(8):2973-9

Adhesion of memory lymphocytes to vascular cell adhesion molecule-1-transduced human vascular endothelial cells under simulated physiological flow conditions in vitro [see comments] Gerszten RE, et al. **Circ Res** 1996 Dec; 79(6):1205-15. Comment in: Circ Res 1996 Dec;79(6):1216-7.

Distinct phenotype of E-selectin-deficient mice. E-selectin is required for slow leukocyte rolling in vivo. Kunkel EJ, et al. **Circ Res** 1996 Dec;79(6):1196-204

Blocking both E-selectin and P-selectin inhibits endotoxin-induced leukocyte infiltration into the eye. Whitcup SM, et al. **Clin Immunol Immunopathol** 1997 Apr; 83(1):45-52

The role of E- and P-selectin in neutrophil and monocyte migration in adjuvant-induced arthritis in the rat. Walter UM, et al. **Eur J Immunol** 1997 Jun;27(6):1498-505

Superantigens but not mitogens are capable of inducing upregulation of E-selectin ligands on human T lymphocytes. Zollner TM, et al. **Exp Dermatol** 1997 Aug; 6(4):161-6

Liver endothelial E-selectin mediates carcinoma cell adhesion and promotes liver metastasis. Brodt P, et al. **Int J Cancer** 1997 May 16;71(4):612-9

Leukocyte adhesion in angiogenic blood vessels. Role of E-selectin, P-selectin, and beta2 integrin in lymphotoxin-mediated leukocyte recruitment in tumor microvessels. Borgström P, et al. **J Clin Invest** 1997 May 1;99(9):2246-53

The role of E-selectin in lymphocyte and polymorphonuclear cell recruitment into cutaneous delayed hypersensitivity reactions in sensitized pigs. Binns RM, et al. **J Immunol** 1996 Nov 1;157(9):4094-9

A differential role for cell shape in neutrophil tethering and rolling on endothelial selectins under flow. Finger EB, et al. **J Immunol** 1996 Dec 1;157(11):5085-96

Rabbit vascular endothelial adhesion molecules: ELAM-1 is most elevated in acute inflammation, whereas VCAM-1 and ICAM-1 predominate in chronic inflammation. Abe Y, et al. **J Leukoc Biol** 1996 Dec;60(6):692-703

The role of E-selectin for neutrophil activation and tumor metastasis in vivo. Araki M, et al. **Leukemia** 1997 Apr;11 Suppl 3:209-12

E- and L-selectin adhesion molecules in musculocutaneous flap reperfusion injury. Stotland MA, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2010-20

Impact of adhesion molecules of the selectin family on liver microcirculation at reperfusion following cold ischemia. Hamamoto I, et al. **Transpl Int** 1996;9(5):454-60

[Role of adhesion molecules in an animal model of endotoxin-induced acute lung injury] Ishizaka A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec;34 Suppl:136-40 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Expression of E- and P-selectins by vascular endothelial cells in human tonsils. Andoh N, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:52-4

Precise ultrastructural localization of endothelial leukocyte adhesion molecule-1, vascular cell adhesion molecule-1, and intercellular adhesion molecule-1 in patients with IgA nephropathy. Ogawa T, et al. **Nephron** 1997;75(1):54-64

L-SELECTIN

ANALYSIS

Shedding of L-selectin as a mechanism for reduced polymorphonuclear neutrophil exudation in patients with the systemic inflammatory response syndrome. McGill SN, et al. **Arch Surg** 1996 Nov;131(11):1141-6; discussion 1147

Treatment of murine gliomas by adoptive transfer of ex vivo activated tumor-draining lymph node cells. Plautz GE, et al. **Cell Immunol** 1997 Jun 15;178(2):101-7

Glucocorticoid receptor regulates expression of L-selectin and CD11/CD18 on human neutrophils. Filep JG, et al. **Circulation** 1997 Jul 1;96(1):295-301

Differential patterns of neutrophil adhesion molecules during cardiopulmonary bypass in humans. Galiñanes M, et al. **Circulation** 1996 Nov 1;94(9 Suppl):II364-9

Differential expression of ICAM-1 and LFA-1 versus L-selectin and VCAM-1 in autoimmune insulitis of NOD mice and association with both Th1- and Th2-type infiltrates. Martin S, et al. **J Autoimmun** 1996 Oct; 9(5):637-43

Preservation of spatial organization and antigenicity of leukocyte surface molecules by aldehyde fixation: flow cytometry and high-resolution FESEM studies of CD62L, CD11b, and Thy-1. Hasslen SR, et al. **J Histochem Cytochem** 1996 Oct;44(10):1115-22

Soluble adhesion molecules and oral antigen feeding in infants. Paronen J, et al. **Pediatr Res** 1996 Aug;40(2):276-9

Effects of heparin coating on the expression of CD11b, CD11c and CD62L by leucocytes in extracorporeal circulation in vitro. Høgevold HE, et al. **Perfusion** 1997 Mar;12(1):9-20

Selective modulation of T cell memory markers CD62L and CD44 on murine draining lymph node cells following allergen and irritant treatment. Gerberick GF, et al. **Toxicol Appl Pharmacol** 1997 Sep;146(1):1-10

Ruminant cluster CD62L. Howard CJ. **Vet Immunol Immunopathol** 1996 Aug;52(4):255-6

BIOSYNTHESIS

A possible role for L-selectin in the release of polymorphonuclear leukocytes from bone marrow. van

Eeden SF, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1717-24

Isolation based on L-selectin expression of immune effector T cells derived from tumor-draining lymph nodes. Kagamu H, et al. **Cancer Res** 1996 Oct 1;56(19):4338-42

CD4+CD8- thymocytes that express L-selectin protect rats from diabetes upon adoptive transfer. Seddon B, et al. **Eur J Immunol** 1996 Nov;26(11):2702-8

Differential expression of tissue-specific adhesion molecules on human circulating antibody-forming cells after systemic, enteric, and nasal immunizations. A molecular basis for the compartmentalization of effector B cell responses. Quiding-Jäbrink M, et al. **J Clin Invest** 1997 Mar 15; 99(6):1281-6

Mechanisms of L-selectin regulation by activated T cells. Chao CC, et al. **J Immunol** 1997 Aug 15;159(4):1686-94

Tyrosine kinase-dependent regulation of L-selectin expression through the Leu-13 signal transduction molecule: evidence for a protein kinase C-independent mechanism of L-selectin shedding. Frey M, et al. **J Immunol** 1997 Jun 1;158(11):5424-34

Expression of LECAM-1 and LFA-1 on pre-B lymphoma cells but not on preneoplastic pre-B cells in SL/KH mice. Lu LM, et al. **Leuk Res** 1997 Apr;21(4):337-42

BLOOD

Serum soluble selectins in patients undergoing cardiopulmonary bypass. Relationship with circulating blood cells and inflammation-related cytokines. Diago MC, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):725-30

Circulating soluble L-selection levels in Kawasaki disease with coronary artery lesions. Hirao J, et al. **Acta Paediatr Jpn** 1997 Apr;39(2):290-2

L-selectin stimulation of canine neutrophil initiates calcium signal secondary to tyrosine kinase activation. Crockett-Torabi E, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1302-8

Apoptosis in circulating PMN: increased susceptibility in L-selectin-deficient PMN. Matsuba KT, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2852-8

Neutrophil adhesion molecule expression is comparable in perinatal rabbits and humans. Ramamoorthy C, et al. **Anesthesiology** 1997 Feb;86(2):420-7

Soluble L-selectin in peripheral arterial disease: relationship with soluble E-selectin and soluble P-selectin. Blann A, et al. **Atherosclerosis** 1996 Oct 25;126(2):227-31

Role for L-selectin in lipopolysaccharide-induced activation of neutrophils. Malhotra R, et al. **Biochem J** 1996 Dec 1; 320 (Pt 2):589-93

Molecular dynamics of the transition from L-selectin- to beta 2-integrin-dependent neutrophil adhesion under defined hydrodynamic shear. Taylor AD, et al. **Biophys J** 1996 Dec;71(6):3488-500

Soluble L-selectin in the connective tissue diseases. Blann AD, et al. **Br J Haematol** 1996 Oct;95(1):192-4

Circulating soluble selectins in Kawasaki disease. Takeshita S, et al. **Clin Exp Immunol** 1997 Jun;108(3):446-50

Decreased neutrophil L-selectin expression in patients with systemic inflammatory response syndrome. Ahmed NA, et al. **Clin Invest Med** 1996 Dec;19(6):427-34

Plasma selectin levels in patients with Graves' disease. Hara H, et al. **Endocr J** 1996 Dec;43(6):709-13

Purification and quantification of L-selectin-reactive GlyCAM-1 from mouse serum. Singer MS, et al. **J Immunol Methods** 1996 Sep 27;196(2):153-61

Monocyte and granulocyte CD11b/CD18, CD62L expression and sICAM-1 concentration in the interdialytic period. Thylén P, et al. **Nephron** 1996;74(2):275-82

Relationship between interleukin-8 and neutrophil adhesion molecules in rheumatoid arthritis. De Gendt CM, et al. **Rheumatol Int** 1996;16(4):169-73

[A study of soluble form of L-selectin in blood of patients with neuroimmunological disorders] Sakai T, et al. **Arerugi** 1996 Jul;45(7):672-7 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Endothelial-derived adhesion molecules in bacterial meningitis: association to cytokine release and intrathecal leukocyte-recruitment. Fassbender K, et al. **J Neuroimmunol** 1997 Apr;74(1-2):130-4

CHEMISTRY

Synthesis and biological activities of three sulfated sialyl Le(x) ganglioside analogues for clarifying the real carbohydrate ligand structure of L-selection. Komba S, et al. **Bioorg Med Chem** 1996 Nov;4(11):1833-47

DRUG EFFECTS

Inhibitory action of sulfatide, a putative ligand for L-selectin, on B cell proliferation and Ig production. Konno A, et al. **Int Immunol** 1996 Dec;8(12):1905-13

BMS-190394, a selectin inhibitor, prevents rat cutaneous inflammatory reactions. Todderud G, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1298-304

GENETICS

PCR cloning of the cDNA encoding baboon L-selectin. Tsurushita N, et al. **Gene** 1996 Nov 28;181(1-2):219-20

Induction of cell death by chimeric L-selectin-Fas receptors. Ishiwatari-Hayasaka H, et al. **Int Immunol** 1997 Apr; 9(4):627-35

Neutrophil margination, sequestration, and emigration in the lungs of L-selectin-deficient mice. Doyle NA, et al. **J Clin Invest** 1997 Feb 1;99(3):526-33

IMMUNOLOGY

Topographic distribution of homing receptors on B and T cells in human gut-associated lymphoid tissue: relation of L-selectin and integrin alpha 4 beta 7 to naive and memory phenotypes. Farstad IN, et al. **Am J Pathol** 1997 Jan; 150(1):187-99

Blocking L-selectin function attenuates reperfusion injury following hemorrhagic shock in rabbits. Ramamoorthy C, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1871-7

Elevation of CD8+ CD11b+ Leu-8- T cells is associated with the humoral immunodeficiency in myeloma patients. Walchner M, et al. **Clin Exp Immunol** 1997 Aug; 109(2):310-6

In vivo blocking of L-selectin rescues BALB/c mice from fatal Leishmania major infection. Laskay T, et al. **Immunol Lett** 1997 Jun 1;57(1-3):89-91

Severe allergic reactions to foods are predicted by increases of CD4+CD45RO+ T cells and loss of L-selectin expression. Beyer K, et al. **J Allergy Clin Immunol** 1997 Apr;99(4):522-9

Antibody to VLA-4, but not to L-selectin, protects neuronal M2 muscarinic receptors in antigen-challenged guinea pig airways. Fryer AD, et al. **J Clin Invest** 1997 Apr 15; 99(8):2036-44

The route of antigen entry determines the requirement for L-selectin during immune responses. Catalina MD, et al. **J Exp Med** 1996 Dec 1;184(6):2341-51

Ligation of L-selectin on T lymphocytes activates beta1 integrins and promotes adhesion to fibronectin. Giblin PA, et al. **J Immunol** 1997 Oct 1;159(7):3498-507

L-selectin (CD62L) blockade does not impair peritoneal neutrophil emigration or subcutaneous host defense to bacteria in rabbits. Sharar SR, et al. **J Immunol** 1996 Sep 15;157(6):2555-63

Ligation of L-selectin through conserved regions within the lectin domain activates signal transduction pathways and integrin function in human, mouse, and rat leukocytes. Steeber DA, et al. **J Immunol** 1997 Jul 15;159(2):952-63

Humoral immune responses in L-selectin-deficient mice. Steeber DA, et al. **J Immunol** 1996 Dec 1;157(11):4899-907

L-selectin is involved in lymphocyte migration to sites of inflammation in the skin: delayed rejection of allografts in L-selectin-deficient mice. Tang ML, et al. **J Immunol** 1997 Jun 1;158(11):5191-9

A role for L-selectin in monocyte activation by Jurkat tumour cells. Putz EF, et al. **Scand J Immunol** 1996 Dec; 44(6):556-64

Ruminant cluster CD62L. Howard CJ. **Vet Immunol Immunopathol** 1996 Aug;52(4):255-6

METABOLISM

Expression of an L-selectin ligand on hematopoietic progenitor cells. Sackstein R. **Acta Haematol** 1997; 97(1-2):22-8 (51 ref.)

Renal ischemic-reperfusion injury in L-selectin-deficient mice. Rabb H, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F408-13

Polymorphonuclear leukocytes L-selectin expression decreases as they age in circulation. Van Eeden SF, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H401-8

L-selectin regulates actin polymerisation via activation of the small G-protein Rac2. Brenner B, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):802-7

Polysulfated derivatives of beta-cyclodextrin and myo-inositol as potent inhibitors of the interaction between L-selectin and peripheral addressin: implying a requirement for highly clustered sulfate groups. Shailubhai K, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):488-93

Purification of L-selectin ligands synthesised by rat peripheral lymph nodes and cultured high endothelial cells. Derry CJ, et al. **Biochem Soc Trans** 1997 May;25(2):260S

Valency dependent patterns of binding of human L-selectin toward sialyl and sulfated oligosaccharides of Le(a) and Le(x) types: relevance to anti-adhesion therapeutics. Galustian C, et al. **Biochemistry** 1997 Apr 29;36(17):5260-6

L-selectin-carbohydrate interactions: relevant modifications of the Lewis x trisaccharide. Sanders WJ, et al. **Biochemistry** 1996 Nov 26;35(47):14862-7

A highly practical synthesis of the sialyl Lewis X pentasaccharide and an investigation of binding to E-, P-, and L-selectins. Kiyoi T, et al. **Bioorg Med Chem** 1996 Aug;4(8):1167-76

Neutrophil adhesion to fibrinogen and fibrin under flow conditions is diminished by activation and L-selectin shedding. Kuijper PH, et al. **Blood** 1997 Mar 15; 89(6):2131-8

A hematopoietic cell L-selectin ligand exhibits sulfate-independent binding activity. Sackstein R, et al. **Blood** 1997 Apr 15;89(8):2773-81

Synthesis of sialyl Le(x) ganglioside analogues sulfated at C-6 of either the galactose or N-acetylglucosamine residues, and at both of the galactose and N-acetylglucosamine residues: probes for clarifying the real carbohydrate ligand of L-selectin. Komba S, et al. **Carbohydr Res** 1996 May 14;285:C1-8

L-selectin crosslinking induces integrin-dependent adhesion: evidence for a signaling pathway involving PTK but not PKC. Sikorski MA, et al. **Cell Adhes Commun** 1996 Nov; 4(4-5):355-67

Patterns of changes in neutrophil adhesion molecules during normothermic cardiopulmonary bypass. A clinical study. Le Deist F, et al. **Eur J Cardiothorac Surg** 1996; 10(4):279-83

Inhibition of PAF-induced expression of CD11b and shedding of L-selectin on human neutrophils and eosinophils by the type IV selective PDE inhibitor, rolipram. Berends C, et al. **Eur Respir J** 1997 May; 10(5):1000-7

Expression of beta 2-integrins and L-selectin on polymorphonuclear leukocytes in septic patients. Thiel M, et al. **Eur Surg Res** 1997;29(3):160-75

Targeting of active rat alpha 2,3-sialyltransferase to the yeast cell wall by the aid of the hsp 150 delta-carrier: toward synthesis of sLe(x)-decorated L-selectin ligands. Mattila P, et al. **Glycobiology** 1996 Dec;6(8):851-9

Sulfation and sialylation requirements for a glycoform of CD34, a major endothelial ligand for L-selectin in porcine peripheral lymph nodes. Shailubhai K, et al. **Glycobiology** 1997 Mar;7(2):305-14

Characterization of a 180 kDa molecule apparently reactive with recombinant L-selectin. Kawashima H, et al. **Glycoconj J** 1997 Apr;14(3):321-30

Use of receptors immobilized on microspheres to identify ligand binding sites in tissue sections: detection of lymph node ligands for L-Selectin. Huang X, et al. **Histochem Cell Biol** 1997 Jan;107(1):57-64

Antigen-driven shedding of L-selectin from human gamma delta T cells. Sanchez-Garcia J, et al. **Immunology** 1996 Oct;89(2):213-9

Inhibitory action of sulfatide, a putative ligand for L-selectin, on B cell proliferation and Ig production. Konno A, et al. **Int Immunol** 1996 Dec;8(12):1905-13

CD45-mediated signals can trigger shedding of lymphocyte L-selectin. Wroblewski M, et al. **Int Immunol** 1997 Apr; 9(4):555-62

Colchicine interferes with L-selectin and leukocyte function-associated antigen-1 expression on human T lymphocytes and inhibits T cell activation. Perico N, et al. **J Am Soc Nephrol** 1996 Apr;7(4):594-601

Chemoattractant receptor-induced phosphorylation of L-selectin. Haribabu B, et al. **J Biol Chem** 1997 May 23; 272(21):13961-5

6'-Sulfo sialyl Lex but not 6-sulfo sialyl Lex expressed on the cell surface supports L-selectin-mediated adhesion. Tsuboi S, et al. **J Biol Chem** 1996 Nov 1;271(44):27213-6

Interactions through L-selectin between leukocytes and adherent leukocytes nucleate rolling adhesions on selectins and VCAM-1 in shear flow. Alon R, et al. **J Cell Biol** 1996 Nov;135(3):849-65

Sialylated, fucosylated ligands for L-selectin expressed on leukocytes mediate tethering and rolling adhesions in physiologic flow conditions. Fuhlbrigge RC, et al. **J Cell Biol** 1996 Nov;135(3):837-48

Threshold levels of fluid shear promote leukocyte adhesion through selectins (CD62L,P,E) [published erratum appears in J Cell Biol 1997 Apr 7;137(1):261] Lawrence MB, et al. **J Cell Biol** 1997 Feb 10;136(3):717-27

L-selectin from human, but not from mouse neutrophils binds directly to E-selectin. Zöllner O, et al. **J Cell Biol** 1997 Feb 10;136(3):707-16

Engagement of L-selectin impairs the actin polymerizing capacity of beta 2-integrins on neutrophils. Ng-Sikorski J, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2361-9

DNA aptamers block L-selectin function in vivo. Inhibition of human lymphocyte trafficking in SCID mice. Hicke BJ, et al. **J Clin Invest** 1996 Dec 15;98(12):2688-92

Neutrophil-neutrophil interactions under hydrodynamic shear stress involve L-selectin and PSGL-1. A mechanism that amplifies initial leukocyte accumulation of P-selectin in vitro. Walcheck B, et al. **J Clin Invest** 1996 Sep 1; 98(5):1081-7

Differential regulation of leucocyte L-selectin (CD62L) expression in normal lymphoid and inflamed extralymphoid tissues. Munro JM, et al. **J Clin Pathol** 1996 Sep;49(9):721-7

GlyCAM-1, a physiologic ligand for L-selectin, activates beta 2 integrins on naive peripheral lymphocytes. Hwang ST, et al. **J Exp Med** 1996 Oct 1;184(4):1343-8

L-selectin shedding does not regulate human neutrophil attachment, rolling, or transmigration across human vascular endothelium in vitro. Allport JR, et al. **J Immunol** 1997 May 1;158(9):4365-72

Novel anti-inflammatory compounds induce shedding of L-selectin and block primary capture of neutrophils under flow conditions. Endemann G, et al. **J Immunol** 1997 May 15;158(10):4879-85

Ligation of L-selectin on T lymphocytes activates beta1 integrins and promotes adhesion to fibronectin. Giblin PA, et al. **J Immunol** 1997 Oct 1;159(7):3498-507

Protease-resistant L-selectin mutants. Down-modulation by cross-linking but not cellular activation. Stoddart JH Jr, et al. **J Immunol** 1996 Dec 15;157(12):5653-9

L-selectin binds to P-selectin glycoprotein ligand-1 on leukocytes: interactions between the lectin, epidermal growth factor, and consensus repeat domains of the selectins determine ligand binding specificity. Tu L, et al. **J Immunol** 1996 Nov 1;157(9):3995-4004

Increased plasma GlyCAM-1, a mouse L-selectin ligand, in response to an inflammatory stimulus. Suguri T, et al.

J Leukoc Biol 1996 Nov;60(5):593–7

Selectin ligands, leukocyte trafficking, and fucosyltransferase genes. Lowe JB. **Kidney Int** 1997 May;51(5):1418–26 (113 ref.)

L-selectin activates the Ras pathway via the tyrosine kinase p56lck. Brenner B, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15376–81

L-selectin expression on the surface of peripheral blood leucocytes from rheumatoid arthritis patients is linked to disease activity. Bond A, et al. **Scand J Immunol** 1997 Sep; 46(3):312–6

PHARMACOLOGY

Synthesis of a new nanomolar saccharide inhibitor of lymphocyte adhesion: different polylactosamine backbones present multiple sialyl Lewis x determinants to L-selectin in high-affinity mode. Renkonen O, et al. **Glycobiology** 1997 Jun;7(4):453–61

Neutrophil CD18-dependent arrest on intercellular adhesion molecule 1 (ICAM-1) in shear flow can be activated through L-selectin. Gopalan PK, et al. **J Immunol** 1997 Jan 1;158(1):367–75

Intravital microscopy of the peripheral lymph node microcirculation in mice. von Andrian UH. **Microcirculation** 1996 Sep;3(3):287–300

PHYSIOLOGY

Velocity differences between L- and P-selectin-dependent neutrophil rolling in venules of mouse cremaster muscle in vivo. Jung U, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2740–7

TNF-alpha induces selectin-mediated leukocyte rolling in mouse cremaster muscle arterioles. Kunkel EJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1391–400

Polymorphonuclear leukocytes L-selectin expression decreases as they age in circulation. Van Eeden SF, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H401–8

High-endothelial-venule ligands for L-selectin: identification and functions. Rosen SD, et al. **Biochem Soc Trans** 1997 May;25(2):428–33 (45 ref.)

P-selectin glycoprotein ligand-1 (PSGL-1) is a ligand for L-selectin in neutrophil aggregation. Guyer DA, et al. **Blood** 1996 Oct 1;88(7):2415–21

L-selectin-dependent leukocyte adhesion to microvascular but not to macrovascular endothelial cells of the human coronary system. Zakrzewicz A, et al. **Blood** 1997 May 1;89(9):3228–35

Carbohydrate- and CD18-dependent neutrophil adhesion to cardiac myocytes: effects of adenosine. Bullough DA, et al. **Cardiovasc Res** 1996 Aug;32(2):328–34

L-Selectin--a signalling receptor for lipopolysaccharide. Malhotra R, et al. **Chem Biol** 1997 Aug;4(8):543–7 (29 ref.)

L-selectin is not essential for naive CD4 cell trafficking or development of primary responses in Peyer's patches. Bradley LM, et al. **Eur J Immunol** 1997 May;27(5):1140–6

L-selectin ligands in rat high endothelium: multivalent sialyl Lewis x glycans are high-affinity inhibitors of lymphocyte adhesion. Toppila S, et al. **Eur J Immunol** 1997 Jun; 27(6):1360–5

Synthesis of a tetravalent sialyl Lewis x glycan, a high-affinity inhibitor of L-selectin-mediated lymphocyte binding to endothelium. Seppo A, et al. **Glycobiology** 1996 Jan;6(1):65–71

The kinetics of L-selectin tethers and the mechanics of selectin-mediated rolling. Alon R, et al. **J Cell Biol** 1997 Sep 8;138(5):1169–80

Monocyte adhesion to activated aortic endothelium: role of L-selectin and heparan sulfate proteoglycans. Giuffrè L, et al. **J Cell Biol** 1997 Feb 24;136(4):945–56

P-selectin glycoprotein ligand 1 is a ligand for L-selectin on neutrophils, monocytes, and CD34+ hematopoietic progenitor cells. Spertini O, et al. **J Cell Biol** 1996 Oct; 135(2):523–31

Prevention of In vitro neutrophil adhesion to endothelial cells through shedding of L-selectin by C-reactive protein and peptides derived from C-reactive protein. Zouki C, et al. **J Clin Invest** 1997 Aug 1;100(3):522–9

The association between alpha4-integrin, P-selectin, and E-selectin in an allergic model of inflammation. Kanwar S, et al. **J Exp Med** 1997 Mar 17;185(6):1077–87

Vascular adhesion protein 1 (VAP-1) mediates lymphocyte subtype-specific, selectin-independent recognition of vascular endothelium in human lymph nodes. Salmi M, et al. **J Exp Med** 1997 Aug 18;186(4):589–600

P- and L-selectin mediate distinct but overlapping functions in endotoxin-induced leukocyte-endothelial interactions in the rat mesenteric microcirculation. Davenpeck KL, et al. **J Immunol** 1997 Aug 15;159(4):1977–86

Binding of malignant lymphoid cells to the white matter of the human central nervous system: role of different CD44 isoforms, beta 1, beta 2 and beta 7 integrins, and L-selectin. Aho R, et al. **J Neuropathol Exp Neurol** 1997 May; 56(5):557–68

E- and L-selectin adhesion molecules in musculocutaneous flap reperfusion injury. Stotland MA, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2010–20

The effect of anti-L-selectin (EL-246) on remote lung injury after infrarenal ischemia/reperfusion. Seekamp A, et al. **Shock** 1997 Jun;7(6):447–54

Impact of adhesion molecules of the selectin family on liver microcirculation at reperfusion following cold ischemia. Hamamoto I, et al. **Transpl Int** 1996;9(5):454–60

P-SELECTIN

Hypothesis: is soluble P-selectin a new marker of platelet activation? Blann AD, et al. **Atherosclerosis** 1997 Feb 10; 128(2):135–8 (33 ref.)

Endothelial adhesion molecules in atherogenesis. A concerto or a solo? [editorial; comment] Vadas MA, et al. **Circ Res** 1996 Dec;79(6):1216–7. Comment on: Circ Res 1996 Dec;79(6):1205–15.

CD62, thromboxane B2, and beta-thromboglobulin: a comparison between different markers of platelet activation after contact with biomaterials. Cenni E, et al. **J Biomed Mater Res** 1997 Sep 5;36(3):289–94

[Cell adhesion molecules on platelet] Ono M, et al. **Rinsho Byori** 1996 Dec;44(12):1132–7 (28 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Adhesion molecule P-selectin and vascular cell adhesion molecule-1 in enhanced heart allograft arteriosclerosis in the rat. Koskinen PK, et al. **Circulation** 1997 Jan 7; 95(1):191–6

Flow cytometric detection of intracellular platelet antigens. Sedlmayr P, et al. **Cytometry** 1996 Apr 1;23(4):284–9

Modulation of P-selectin expression on isolated human platelets by an NO donor assessed by a novel ELISA application. Whiss PA, et al. **J Immunol Methods** 1997 Jan 15;200(1–2):135–43

Monoclonal antibody C219 immunohistochemistry against P-glycoprotein: sequential analysis and predictive ability in dogs with lymphoma. Bergman PJ, et al. **J Vet Intern Med** 1996 Nov-Dec;10(6):354–9

Soluble P-selectin as parameter for platelet activation during storage. Kostelijk EH, et al. **Thromb Haemost** 1996 Dec; 76(6):1086–9

Molecular insights into the anticoagulant-induced spontaneous activation of platelets in whole blood-various anticoagulants are not equal. Golański J, et al. **Thromb Res** 1996 Aug 1;83(3):199–216

Regulation of P-selectin expression by inflammatory mediators in canine jugular endothelial cells. Doré M, et al. **Vet Pathol** 1996 Nov;33(6):662–71

BIOSYNTHESIS

Measurement of in vitro P-selectin expression by flow cytometry. Kennedy SD, et al. **Am J Clin Pathol** 1997 Jan; 107(1):99–104

P-selectin expression in a metastatic pancreatic tumor cell line (SUIT-2). Iwamura T, et al. **Cancer Res** 1997 Mar 15;57(6):1206–12

Expression of von Willebrand factor, P-selectin (CD62P) and thrombomodulin in human endothelial cells in culture modulated by cyclosporin A. Evans SM, et al. **Clin Lab Haematol** 1997 Jun;19(2):115–22

P-selectin is upregulated early in the course of hyperoxic lung injury in mice. Zeb T, et al. **Free Radic Biol Med** 1996;21(4):567–74

Influence of hypoxia and hypoxia-reoxygenation on endothelial P-selectin expression. Closse C, et al. **Haemostasis** 1996 Oct;26 Suppl 4:177–81

Comparative effect of C3a and C5a on adhesion molecule expression on neutrophils and endothelial cells. Foreman KE, et al. **Inflammation** 1996 Feb;20(1):1–9

Effects of defibrotide on leukocyte-endothelial cell interaction in the rat mesenteric vascular bed: role of P-selectin. Scalia R, et al. **Methods Find Exp Clin Pharmacol** 1996 Dec;18(10):669–76

P-selectin is expressed on the oolemma of human and hamster oocytes following sperm adhesion and is also detected on the equatorial region of acrosome-reacted human spermatozoa. Fusi FM, et al. **Mol Hum Reprod** 1996 May; 2(5):341–7

Postischemic expression of P-selectin immunoreactivity in rat brain. Suzuki H, et al. **Neurosci Lett** 1997 Jun 13; 228(3):151–4

Vascular endothelial adhesion molecules and tissue inflammation. Malik AB, et al. **Pharmacol Rev** 1996 Jun; 48(2):213–29 (135 ref.)

The expression of p-selectin during collection, processing, and storage of platelet concentrates: relationship to loss of in vivo viability. Holme S, et al. **Transfusion** 1997 Jan; 37(1):12–7

Endothelial cell dysfunction after intraportal islet cell transplant in rats. Fernandez L, et al. **Transplant Proc** 1997 Jun;29(4):2064–5

[Proliferative behavior of cultured endothelial cells from human aorta and expression of adhesion molecules] Il'inskaia OP, et al. **Biull Eksp Biol Med** 1996 Aug; 122(8):214–7 **(Rus)**

BLOOD

Serum soluble selectins in patients undergoing cardiopulmonary bypass. Relationship with circulating blood cells and inflammation-related cytokines. Diago MC, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):725–30

Circulating vascular cell adhesion molecule-1 correlates with the extent of human atherosclerosis in contrast to circulating intercellular adhesion molecule-1, E-selectin, P-selectin, and thrombomodulin. Peter K, et al. **Arterioscler Thromb Vasc Biol** 1997 Mar;17(3):505–12

P-selectin glycoprotein ligand-1 is essential for adhesion to P-selectin but not E-selectin in stably transfected hematopoietic cell lines. Snapp KR, et al. **Blood** 1997 Feb 1;89(3):896–901

Soluble P selectin in peripheral vascular disease: relationship to the location and extent of atherosclerotic disease and its risk factors. Blann AD, et al. **Blood Coagul Fibrinolysis** 1996 Nov;7(8):789–93

Soluble P-selectin in hyperlipidaemia with and without symptomatic vascular disease: relationship with von Willebrand factor. Blann AD, et al. **Blood Coagul Fibrinolysis** 1997 Apr;8(3):200–4

Correlation of GP53 and P-selectin expression in myeloproliferative disorders and normal controls. Cahill MR, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):169–71

ADP-induced P-selectin expression on platelets as a predictor of successful thrombolysis. Yusuf SW, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):266–9

Sex differences in circulating P-selectin, E-selectin and thrombomodulin [letter; comment] Jilma B, et al. **Br J Haematol** 1996 Dec;95(3):575–6. Comment on: Br J Haematol 1996 Feb;92(2):498–500.

Circulating soluble selectins in Kawasaki disease. Takeshita S, et al. **Clin Exp Immunol** 1997 Jun;108(3):446–50

Value of plasma P-selectin for vascular complications in liver transplantation. Fábrega E, et al. **Clin Transplant** 1996 Jun; 10(3):261–5

Plasma selectin levels in patients with Graves' disease. Hara H, et al. **Endocr J** 1996 Dec;43(6):709–13

Increased P-selectin plasma levels in patients with thrombotic thrombocytopenic purpura. Vianelli N, et al. **Haematologica** 1996 Jan-Feb;81(1):3–7

Enhanced P-selectin expression in chronic and dermographic urticaria. Zuberbier T, et al. **Int Arch Allergy Immunol** 1997 Sep;114(1):86–9

Effects of estradiol on circulating P-selectin. Jilma B, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2350–5

Elevated serum concentrations of soluble selectin and immunoglobulin type adhesion molecules in patients with inflammatory bowel disease. Göke M, et al. **J Gastroenterol** 1997 Aug;32(4):480–6

C5a-dependent up-regulation in vivo of lung vascular P-selectin. Mulligan MS, et al. **J Immunol** 1997 Feb 15; 158(4):1857–61

Elevated selectin levels after severe trauma: a marker for sepsis and organ failure and a potential target for immunomodulatory therapy. Simons RK, et al. **J Trauma** 1996 Oct;41(4):653–62

Soluble P-selectin, thrombocytopenia and von Willebrand factor in HIV infected patients [letter] Blann AD, et al. **Thromb Haemost** 1997 Jun;77(6):1221–2

Soluble P-selectin in atherosclerosis: a comparison with endothelial cell and platelet markers. Blann AD, et al. **Thromb Haemost** 1997 Jun;77(6):1077–80

The origin of P-selectin as a circulating plasma protein. Fijnheer R, et al. **Thromb Haemost** 1997 Jun;77(6):1081–5

Elevated circulating P-selectin in insulin dependent diabetes mellitus. Jilma B, et al. **Thromb Haemost** 1996 Sep; 76(3):328–32

Plasma macrophage colony-stimulating factor and P-selectin levels in malaria-associated thrombocytopenia. Lee SH, et al. **Thromb Haemost** 1997 Feb;77(2):289–93

[Study on platelet antioxidant enzyme activity and platelet granule membrane glycoprotein in patients with pregnancy induced hypertension] Zhang S, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Aug;31(8):461–4 (Eng. Abstr.) **(Chi)**

[The circulating adhesion molecules sICAM-1 and sP-selectin in patients with sepsis] Egerer K, et al. **Anaesthesist** 1997 Jul;46(7):592–8 (Eng. Abstr.) **(Ger)**

CHEMISTRY

Structure and function of the epidermal growth factor domain of P-selectin. Freedman SJ, et al. **Biochemistry** 1996 Oct 29;35(43):13733–44

Soluble monomeric P-selectin containing only the lectin and epidermal growth factor domains binds to P-selectin glycoprotein ligand-1 on leukocytes. Mehta P, et al. **Blood** 1997 Sep 15;90(6):2381–9

DRUG EFFECTS

BMS-190394, a selectin inhibitor, prevents rat cutaneous inflammatory reactions. Todderud G, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1298–304

Regulation of E-selectin, P-selectin, and intercellular adhesion molecule 1 expression in mouse cremaster muscle vasculature. Jung U, et al. **Microcirculation** 1997 Jun; 4(2):311–9

GENETICS

Exacerbation of cerebral injury in mice that express the P-selectin gene: identification of P-selectin blockade as a new target for the treatment of stroke. Connolly ES Jr, et al. **Circ Res** 1997 Sep;81(3):304–10

Double knockout highlights value of endothelial selectins. Frenette PS, et al. **Immunol Today** 1996 May;17(5):205

The expression of P-selectin in inflammatory and non-inflammatory lung tissue. Ortmann C, et al. **Int J Legal Med** 1997;110(3):155–8

Reduction of allergic airway responses in P-selectin-deficient

mice. De Sanctis GT, et al. **J Appl Physiol** 1997 Sep; 83(3):681–7

Invited editorial on "Reduction of allergic airway responses in P-selectin–deficient mice" [editorial] Moqbel R. **J Appl Physiol** 1997 Sep;83(3):679–80

IMMUNOLOGY

Effects of monoclonal antibody to P-selectin and analogue of sialyl Lewis X on cyclic flow variations in stenosed and endothelium-injured canine coronary arteries. Ueyama T, et al. **Circulation** 1997 Mar 18;95(6):1554–9

P-selectin glycoprotein ligand–1 mediates rolling of mouse bone marrow–derived mast cells on P-selectin but not efficiently on E-selectin. Steegmaier M, et al. **Eur J Immunol** 1997 Jun;27(6):1339–45

Reduction of rat myocardial ischemia and reperfusion injury by sialyl Lewis x oligosaccharide and anti–rat P-selectin antibodies. Tojo SJ, et al. **Glycobiology** 1996 Jun;6(4):463–9

A new procedure for establishing functional monoclonal antibodies capable of inhibiting E– or P–selectin–dependent cell adhesion. Handa K, et al. **Glycoconj J** 1997 Jan; 14(1):39–43

Characterization of a novel adhesion function blocking monoclonal antibody to rat/mouse P-selectin generated in the P-selectin–deficient mouse. Walter UM, et al. **Hybridoma** 1997 Jun;16(3):249–57

CD45RA–RO+ (memory) but not CD45RA+RO– (naive) T cells roll efficiently on E– and P-selectin and vascular cell adhesion molecule–1 under flow. Lichtman AH, et al. **J Immunol** 1997 Apr 15;158(8):3640–50

Anti–P-selectin antibody decreases inflammation and thrombus formation in venous thrombosis. Downing LJ, et al. **J Vasc Surg** 1997 May;25(5):816–27; discussion 828

Monoclonal antibody C219 immunohistochemistry against P-glycoprotein: sequential analysis and predictive ability in dogs with lymphoma. Bergman PJ, et al. **J Vet Intern Med** 1996 Nov–Dec;10(6):354–9

P– and E-selectin mediate recruitment of T-helper–1 but not T-helper–2 cells into inflammed tissues. Austrup F, et al. **Nature** 1997 Jan 2;385(6611):81–3

Anti-selectin therapy modifies skeletal muscle ischemia and reperfusion injury. Weiser MR, et al. **Shock** 1996 Jun; 5(6):402–7

Construction and expression of mouse-human chimeric antibody SZ–51 specific for activated platelet P-selectin. Gu J, et al. **Thromb Haemost** 1997 Apr;77(4):755–9

[Evaluation and its clinical significance of anti–platelet granule membrane protein–140 autoantibodies and anticalmodulin antibody in patients with severe pregnancy–induced hypertension] Zhang S, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1995 Nov;30(11):665–7 (Eng. Abstr.) **(Chi)**

METABOLISM

Levels of expression of P-selectin, E-selectin, and intercellular adhesion molecule–1 in coronary atherectomy specimens from patients with stable and unstable angina pectoris. Tenaglia AN, et al. **Am J Cardiol** 1997 Mar 15; 79(6):742–7

A human colon carcinoma cell line exhibits adhesive interactions with P-selectin under fluid flow via a PSGL–1–independent mechanism. Goetz DJ, et al. **Am J Pathol** 1996 Nov;149(5):1661–73

Regulation of P-selectin expression in human endothelial cells by nitric oxide. Armstead VE, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H740–6

Combined inhibition of P-selectin and ICAM–1 reduces myocardial injury following ischemia and reperfusion. Lefer DJ, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2421–9

P-selectin–mediated attachment of small cell lung carcinoma to endothelial cells. Pottratz ST, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L918–23

Short-term ozone exposure upregulates P-selectin in normal human airways. Krishna MT, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1798–803

P-selectin and vascular cell adhesion molecule–1 are focally expressed in aortas of hypercholesterolemic rabbits before intimal accumulation of macrophages and T lymphocytes. Sakai A, et al. **Arterioscler Thromb Vasc Biol** 1997 Feb; 17(2):310–6

Heat-stable antigen (mouse CD24) in the brain: dual but distinct interaction with P-selectin and L1. Sammar M, et al. **Biochim Biophys Acta** 1997 Feb 8;1337(2):287–94

A highly practical synthesis of the sialyl Lewis X pentasaccharide and an investigation of binding to E–, P–, and L–selectins. Kiyoi T, et al. **Bioorg Med Chem** 1996 Aug;4(8):1167–76

CD24, a mucin-type glycoprotein, is a ligand for P-selectin on human tumor cells. Aigner S, et al. **Blood** 1997 May 1;89(9):3385–95

Core2 beta-1,6-N-acetylglucosaminyltransferase enzyme activity is critical for P-selectin glycoprotein ligand–1 binding to P-selectin. Kumar R, et al. **Blood** 1996 Nov 15;88(10):3672–9

Re-expression of functional P-selectin molecules on the endothelial cell surface by repeated stimulation with thrombin. Kameda H, et al. **Br J Haematol** 1997 May; 97(2):348–55

In-vivo platelet activation correlates with red cell anionic phospholipid exposure in patients with beta-thalassaemia major. Ruf A, et al. **Br J Haematol** 1997 Jul;98(1):51–6

Ionizing radiation mediates expression of cell adhesion molecules in distinct histological patterns within the lung. Hallahan DE, et al. **Cancer Res** 1997 Jun 1;57(11):2096–9

Induction of P-selectin by oxidized lipoproteins. Separate effects on synthesis and surface expression. Vora DK, et al. **Circ Res** 1997 Jun;80(6):810–8

Differential expression of platelet activation markers in aspirin–sensitive asthmatics and normal subjects. Taylor ML, et al. **Clin Exp Allergy** 1996 Feb;26(2):202–15

Oligotide attenuates leukocyte–endothelial cell interaction via P-selectin in the rat mesenteric vascular bed. Scalia R, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):181–7

Endothelial and epithelial expression of sialyl Lewis(x) and sialyl Lewis(a) in lesions of breast carcinoma. Renkonen J, et al. **Int J Cancer** 1997 Jun 20;74(3):296–300

Reduction of allergic airway responses in P–selectin–deficient mice. De Sanctis GT, et al. **J Appl Physiol** 1997 Sep; 83(3):681–7

Invited editorial on "Reduction of allergic airway responses in P–selectin–deficient mice" [editorial] Moqbel R. **J Appl Physiol** 1997 Sep;83(3):679–80

Isolated P-selectin glycoprotein ligand–1 dynamic adhesion to P– and E–selectin. Goetz DJ, et al. **J Cell Biol** 1997 Apr 21;137(2):509–19

Threshold levels of fluid shear promote leukocyte adhesion through selectins (CD62L,P,E) [published erratum appears in J Cell Biol 1997 Apr 7;137(1):261] Lawrence MB, et al. **J Cell Biol** 1997 Feb 10;136(3):717–27

P-selectin glycoprotein ligand–1 (PSGL–1) on T helper 1 but not on T helper 2 cells binds to P-selectin and supports migration into inflamed skin. Borges E, et al. **J Exp Med** 1997 Feb 3;185(3):573–8

Soluble adhesion molecule P-selectin and endothelial dysfunction in essential hypertension: implications for atherogenesis? A preliminary report. Lip GY, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1674–8

T cell adhesion to P-selectin induces tyrosine phosphorylation of pp125 focal adhesion kinase and other substrates. Haller H, et al. **J Immunol** 1997 Feb 1; 158(3):1061–7

C5a–dependent up–regulation in vivo of lung vascular P-selectin. Mulligan MS, et al. **J Immunol** 1997 Feb 15; 158(4):1857–61

Hemorrhage and resuscitation alter the expression of ICAM–1 and P-selectin in mice. Shenkar R, et al. **J Inflamm** 1995;45(4):248–59

Platelet alpha granule deficiency associated with decreased P-selectin and selective impairment of thrombin–induced activation in a new patient with gray platelet syndrome (alpha–storage pool deficiency). Lages B, et al. **J Lab Clin Med** 1997 Mar;129(3):364–75

Studies on selectin blocker. 3. Investigation of the carbohydrate ligand sialyl Lewis X recognition site of P-selectin. Hiramatsu Y, et al. **J Med Chem** 1996 Nov 8; 39(23):4547–53

Isolation and structure determination of sulfonoquinovosyl dipalmitoyl glyceride, a P-selectin receptor inhibitor from the alga Dictyochloris fragrans. Golik J, et al. **J Nat Prod** 1997 Apr;60(4):387–9

Quantification of P–selectin expression after renal ischemia and reperfusion. Zizzi HC, et al. **J Pediatr Surg** 1997 Jul; 32(7):1010–3

Cysteinyl leukotrienes induce P-selectin expression in human endothelial cells via a non–CysLT1 receptor–mediated mechanism. Pedersen KE, et al. **J Pharmacol Exp Ther** 1997 May;281(2):655–62

P-selectin and TNF inhibition reduce venous thrombosis inflammation. Wakefield TW, et al. **J Surg Res** 1996 Jul 15;64(1):26–31

Selectin ligands, leukocyte trafficking, and fucosyltransferase genes. Lowe JB. **Kidney Int** 1997 May;51(5):1418–26 (113 ref.)

Chronic myeloid leukemic granulocytes exhibit reduced and altered binding to P-selectin: modification in the CD15 antigens and sialylation. Vijayan KV, et al. **Leuk Res** 1997 Jan;21(1):59–65

Regulation of E–selectin, P–selectin, and intercellular adhesion molecule 1 expression in mouse cremaster muscle vasculature. Jung U, et al. **Microcirculation** 1997 Jun; 4(2):311–9

Influence of hypoxia and hypoxia–reoxygenation on endothelial P–selectin expression. Closse C, et al. **Thromb Res** 1997 Jan 15;85(2):159–64

Islet allo– and xenotransplantation in normal, intercellular adhesion molecule–1–deficient, and P selectin–deficient mice. Sandberg JO, et al. **Transplantation** 1997 Aug 27; 64(4):584–9

PHARMACOLOGY

Brain endothelium lack one of two pathways of P–selectin–mediated neutrophil adhesion. Barkalow FJ, et al. **Blood** 1996 Dec 15;88(12):4585–93

A tissue plasminogen activator/P-selectin fusion protein is an effective thrombolytic agent. Fujise K, et al. **Circulation** 1997 Feb 4;95(3):715–22

PHYSIOLOGY

Velocity differences between L– and P–selectin–dependent neutrophil rolling in venules of mouse cremaster muscle in vivo. Jung U, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2740–7

TNF-alpha induces selectin–mediated leukocyte rolling in mouse cremaster muscle arterioles. Kunkel EJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1391–400

Effects of a monoclonal antibody directed against P–selectin after myocardial ischemia and reperfusion. Lefer DJ, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H88–98

P-selectin–deficient mice are protected from PAF–induced shock, intestinal injury, and lethality. Sun X, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G56–61

Cytokine–induced leukocyte rolling in mouse cremaster muscle arterioles in P–selectin dependent. Thorlacius H, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1725–9

Platelet/polymorphonuclear leukocyte interaction in dynamic conditions: evidence of adhesion cascade and cross talk between P-selectin and the beta 2 integrin CD11b/CD18. Evangelista V, et al. **Blood** 1996 Dec 1; 88(11):4183–94

Inhibition of delayed–type contact hypersensitivity in mice deficient in both E–selectin and P–selectin. Staite ND, et al. **Blood** 1996 Oct 15;88(8):2973–9

Exacerbation of cerebral injury in mice that express the P-selectin gene: identification of P-selectin blockade as a new target for the treatment of stroke. Connolly ES Jr, et al. **Circ Res** 1997 Sep;81(3):304–10

Plasmin promotes an endothelium–dependent adhesion of neutrophils. Involvement of platelet activating factor and P–selectin. Montrucchio G, et al. **Circulation** 1996 Jun 15; 93(12):2152–60

Blocking both E–selectin and P–selectin inhibits endotoxin–induced leukocyte infiltration into the eye. Whitcup SM, et al. **Clin Immunol Immunopathol** 1997 Apr; 83(1):45–52

Complex roles for P–selectin in the pathophysiology of glomerulonephritis [editorial] Brady HR. **Curr Opin Nephrol Hypertens** 1996 Sep;5(5):423–6

The role of E– and P–selectin in neutrophil and monocyte migration in adjuvant–induced arthritis in the rat. Walter UM, et al. **Eur J Immunol** 1997 Jun;27(6):1498–505

P-selectin induction of tissue factor biosynthesis and expression. Furie B, et al. **Haemostasis** 1996;26 Suppl 1:60–5 (40 ref.)

Role of P–selectin in the early stage of the Arthus reaction. Ohnishi M, et al. **Immunopharmacology** 1996 Sep; 34(2–3):161–70

Role of P–selectin in endotoxin–induced uveitis. Suzuma K, et al. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1610–8

Expression of a P–selectin ligand in zona pellucida of porcine oocytes and P–selectin on acrosomal membrane of porcine sperm cells. Potential implications for their involvement in sperm–egg interactions. Geng JG, et al. **J Cell Biol** 1997 May 5;137(3):743–54

Leukocyte adhesion in angiogenic blood vessels. Role of E–selectin, P–selectin, and beta2 integrin in lymphotoxin–mediated leukocyte recruitment in tumor microvessels. Borgström P, et al. **J Clin Invest** 1997 May 1;99(9):2246–53

The association between alpha4–integrin, P–selectin, and E–selectin in an allergic model of inflammation. Kanwar S, et al. **J Exp Med** 1997 Mar 17;185(6):1077–87

P– and L–selectin mediate distinct but overlapping functions in endotoxin–induced leukocyte–endothelial interactions in the rat mesenteric microcirculation. Davenpeck KL, et al. **J Immunol** 1997 Aug 15;159(4):1977–86

The role of P–selectin and ICAM–1 in acute lung injury as determined using blocking antibodies and mutant mice. Doerschuk CM, et al. **J Immunol** 1996 Nov 15; 157(10):4609–14

A differential role for cell shape in neutrophil tethering and rolling on endothelial selectins under flow. Finger EB, et al. **J Immunol** 1996 Dec 1;157(11):5085–96

Endothelial P–selectin and VCAM–1 each can function as primary adhesive mechanisms for T cells under conditions of flow. Konstantopoulos K, et al. **J Leukoc Biol** 1997 Feb; 61(2):179–87

Inflammation as an early component of atherosclerosis and vascular damage—a role for P–selectin and platelet–activating factor. Prescott SM, et al. **Jpn Circ J** 1996 Mar;60(3):137–41 (26 ref.)

Leukocyte migration in immune complex glomerulonephritis: role of adhesion receptors. Lefkowith JB. **Kidney Int** 1997 May;51(5):1469–75 (54 ref.)

Neutrophil reactive oxygen species production during hemodialysis: role of activated platelet adhesion to neutrophils through P–selectin. Bonomini M, et al. **Nephron** 1997;75(4):402–11

In vivo tracking of platelets: circulating degranulated platelets rapidly lose surface P–selectin but continue to circulate and function. Michelson AD, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11877–82

Failure to express the P–selectin gene or P–selectin blockade confers early pulmonary protection after lung ischemia or transplantation. Naka Y, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):757–61

Lipoxin A4 stable analogs inhibit leukocyte rolling and adherence in the rat mesenteric microvasculature: role of P–selectin. Scalia R, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9967–72

Leukocyte crosstalk at the vascular wall. Furie B, et al. **Thromb Haemost** 1997 Jul;78(1):306–9 (34 ref.)

Early cellular and molecular changes in ischemia/reperfusion injury: inhibition by a selectin antagonist, P–selectin

glycoprotein ligand-1. Takada M, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1324-5

ULTRASTRUCTURE

Expression of E- and P-selectins by vascular endothelial cells in human tonsils. Andoh N, et al.
Acta Otolaryngol Suppl (Stockh) 1996;523:52-4

SELECTINS

Selectins and their ligands: current concepts and controversies. Kansas GS. **Blood** 1996 Nov 1;88(9):3259-87 (340 ref.)

[The selections, selectin ligands and hemopoitic system] Miyakasa M. **Rinsho Ketsueki** 1996 Jun;37(6):502-5 (0 ref.) **(Jpn)**

ANALYSIS

Soluble E-selectin as a marker of disease activity in atopic dermatitis. Yamashita N, et al. **J Allergy Clin Immunol** 1997 Mar;99(3):410-6

BIOSYNTHESIS

The changes of Mac-1 and L-selectin expression on granulocytes and soluble L-selectin level during hemodialysis. Kawabata K, et al. **Nephron** 1996;73(4):573-9

BLOOD

Kinetics of circulating adhesion molecules and chemokines after mechanical trauma and burns. Schinkel C, et al.
Eur J Surg 1996 Oct;162(10):763-8

CHEMISTRY

Structure/activity studies of anti-inflammatory peptides based on a conserved peptide region of the lectin domain of E-, L- and P-selectin. Briggs JB, et al.
Glycobiology 1996 Dec;6(8):831-6

Selectin inhibition: synthesis and evaluation of novel sialylated, sulfated and fucosylated oligosaccharides, including the major capping group of GlyCAM-1. Koenig A, et al. **Glycobiology** 1997 Feb;7(1):79-93

Knowledge-based model building of the tertiary structures for lectin domains of the selectin family. Chou KC.
J Protein Chem 1996 Feb;15(2):161-8

DRUG EFFECTS

Anti-adhesion therapy. Cornejo CJ, et al. **Adv Pharmacol** 1997;39:99-142 (200 ref.)

Blockade of selectin-mediated leukocyte adhesion improves postischemic function in lamb hearts. Miura T, et al.
Ann Thorac Surg 1996 Nov;62(5):1295-300

Retinoic acid inhibits the regulated expression of vascular cell adhesion molecule-1 by cultured dermal microvascular endothelial cells. Gille J, et al. **J Clin Invest** 1997 Feb 1; 99(3):492-500

GENETICS

The role of selectins in Drosophila eye and bristle development. Leshko-Lindsay LA, et al. **Development** 1997 Jan;124(1):169-80

Retinoic acid inhibits the regulated expression of vascular cell adhesion molecule-1 by cultured dermal microvascular endothelial cells. Gille J, et al. **J Clin Invest** 1997 Feb 1; 99(3):492-500

Absence of P-selectin delays fatty streak formation in mice. Johnson RC, et al. **J Clin Invest** 1997 Mar 1;99(5):1037-43

IMMUNOLOGY

The effect of the selectin binding polysaccharide fucoidin on eosinophil recruitment in vivo. Teixeira MM, et al.
Br J Pharmacol 1997 Mar;120(6):1059-66

The selectins: insights into selectin-induced intracellular signaling in leukocytes. Crockett-Torabi E, et al.
Immunol Res 1995;14(4):237-51 (116 ref.)

Role of adhesion molecules of the selectin-carbohydrate families in antibody-dependent cell-mediated cytoxicity to schistosome targets. Trottein F, et al. **J Immunol** 1997 Jul 15;159(2):804-11

Rolling and transient tethering of leukocytes on antibodies reveal specializations of selectins. Chen S, et al.
Proc Natl Acad Sci U S A 1997 Apr 1;94(7):3172-7

METABOLISM

Involvement of selectins in atherogenesis: a primary or secondary event? Miyasaka M, et al.
Ann N Y Acad Sci 1997 Apr 15;811:25-34; discussion 34-5 (19 ref.)

Two selectins converge on sulphate. Leukocyte adhesion. Rosen SD, et al. **Curr Biol** 1996 Mar 1;6(3):261-4 (21 ref.)

Solution conformation of Lewis a--derived selectin ligands is unaffected by anionic substituents at the 3'- and 6'-positions. Kurutz JW, et al. **Glycobiology** 1997 Apr; 7(3):337-47

Regulation of schistosome egg granuloma formation: host-soluble L-selectin enters tissue-trapped eggs and binds to carbohydrate antigens on surface membranes of miracidia. El Ridi R, et al. **Infect Immun** 1996 Nov; 64(11):4700-5

Ligand-specificity of the selectins. Vestweber D.
J Cell Biochem 1996 Jun 15;61(4):585-91 (53 ref.)

Interactions through L-selectin between leukocytes and adherent leukocytes nucleate rolling adhesions on selectins and VCAM-1 in shear flow. Alon R, et al. **J Cell Biol** 1996 Nov;135(3):849-65

Selectin ligands: will the real ones please stand up? Varki A. **J Clin Invest** 1997 Jan 15;99(2):158-62 (74 ref.)

The faster kinetics of L-selectin than of E-selectin and P-selectin rolling at comparable binding strength. Puri KD, et al. **J Immunol** 1997 Jan 1;158(1):405-13

An ELISA for selectins based on binding to a physiological ligand. Bertozzi CR, et al. **J Immunol Methods** 1997 Apr 25;203(2):157-65

Studies on selectin blockers. 4. Structure-function relationships of sulfated sialyl Lewis X hexasaccharide ceramides toward E-, P-, and L-selectin binding. Yoshino K, et al. **J Med Chem** 1997 Feb 14;40(4):455-62

Adhesion molecule interactions in human glomerulonephritis: importance of the tubulointerstitium. Roy-Chaudhury P, et al. **Kidney Int** 1996 Jan;49(1):127-34

The changes of Mac-1 and L-selectin expression on granulocytes and soluble L-selectin level during hemodialysis. Kawabata K, et al. **Nephron** 1996;73(4):573-9

[Selectin receptors. 5. Monoclonal antibodies to the synthetic antigens SiaLe(a) and SiaLe(x)] Vlasova EV, et al.
Bioorg Khim 1996 May;22(5):358-65 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Role of endothelial selectins in wound repair. Subramaniam M, et al. **Am J Pathol** 1997 May;150(5):1701-9

A sialyl Lewis(x)-containing carbohydrate reduces infarct size: role of selectins in myocardial reperfusion injury. Flynn DM, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H2086-96

Monosodium urate crystals promote neutrophil adhesion via a CD18-independent and selectin-independent mechanism. Reinhardt PH, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C31-9

Downregulation of the selectin ligand-producing fucosyltransferases Fuc-TIV and Fuc-TVII during foam cell formation in monocyte-derived macrophages. Cullen P, et al. **Arterioscler Thromb Vasc Biol** 1997 Aug; 17(8):1591-8

The role of selectins and CD18 in leukotriene B4-mediated white blood cell emigration in human skin grafts transplanted on SCID mice. Yan HC, et al.
Cell Adhes Commun 1996 Apr;3(6):475-86

The role of selectins in Drosophila eye and bristle development. Leshko-Lindsay LA, et al. **Development** 1997 Jan;124(1):169-80

Soluble selectins and ICAM-1 modulate neutrophil-endothelial adhesion and diapedesis in vitro. Ohno N, et al. **Inflammation** 1997 Jun;21(3):313-24

Cell adhesion and angiogenesis. Bischoff J. **J Clin Invest** 1997 Feb 1;99(3):373-6 (27 ref.)

Out on first [editorial] Furie BC. **J Clin Invest** 1997 Jun 1; 99(11):2557-8

Absence of P-selectin delays fatty streak formation in mice. Johnson RC, et al. **J Clin Invest** 1997 Mar 1;99(5):1037-43

Therapeutic inhibition of carbohydrate-protein interactions in vivo. Lowe JB, et al. **J Clin Invest** 1997 Mar 1; 99(5):822-6 (39 ref.)

Perspectives series: cell adhesion in vascular biology. Role of PSGL-1 binding to selectins in leukocyte recruitment. McEver RP, et al. **J Clin Invest** 1997 Aug 1;100(3):485-91 (70 ref.)

A minimal role for selectins in the recruitment of leukocytes into the inflamed liver microvasculature. Wong J, et al. **J Clin Invest** 1997 Jun 1;99(11):2782-90

Contribution of selectins to leucocyte sequestration in pulmonary microvessels by intravital microscopy in rabbits. Kuebler WM, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):375-86

Selectins, T-cell rolling and inflammation. Rossiter H, et al. **Mol Med Today** 1997 May;3(5):214-22 (49 ref.)

Sialomucin ligands for selectins: a new family of cell adhesion molecules. Lasky LA. **Princess Takamatsu Symp** 1994; 24:81-90 (39 ref.)

Intervention of carbohydrate recognition by proteins and nucleic acids. Sears P, et al.
Proc Natl Acad Sci U S A 1996 Oct 29;93(22):12086-93 (117 ref.)

Interactions of neutrophils and endothelial cells under low flow conditions in vitro. Yoshida N, et al. **Shock** 1997 Aug; 8(2):125-30

Selectins and their counter receptors: a bitter sweet attraction. Symon FA, et al. **Thorax** 1996 Nov; 51(11):1155-7 (12 ref.)

Insights into selectin function from knockout mice. Frenette PS, et al. **Thromb Haemost** 1997 Jul;78(1):60-4 (42 ref.)

The role of leukocyte and endothelial adhesion molecules in ischemia-reperfusion injury. Thiagarajan RR, et al.
Thromb Haemost 1997 Jul;78(1):310-4 (35 ref.)

[Regulation of leukocyte migration by adhesion molecules] Spertini O. **Schweiz Med Wochenschr** 1996 Nov 9; 126(45):1926-34 (81 ref.) (Eng. Abstr.) **(Fre)**

[Selectin family] Nakamura S, et al. **Rinsho Byori** 1996 Sep; Suppl 102:24-32 (17 ref.) **(Jpn)**

SELECTION (GENETICS)

The value of immunodiagnostic tests in detecting tuberculosis in an infected red deer herd and in eradication of the disease by selection. Zomborszky Z, et al. **Acta Vet Hung** 1995; 43(4):385-92

Human immunodeficiency virus type 1 molecular evolution and the measure of selection. Rodrigo AG, et al.
AIDS Res Hum Retroviruses 1996 Dec 10;12(18):1681-5

Correlated responses to selection in FAST and SLOW mice: effects of ethanol on ataxia, temperature, sedation, and withdrawal. Shen EH, et al. **Alcohol Clin Exp Res** 1996 Jun;20(4):688-96

High and low drinking rat lines: contributions to current understanding and future development. Sinclair JD.
Alcohol Clin Exp Res 1996 Nov;20(8 Suppl):109A-112A

Evaluating the "dual selection" hypothesis of canine reduction. Plavcan JM, et al. **Am J Phys Anthropol** 1996 Mar;99(3):379-87

On the incomplete architecture of human ontogeny. Selection, optimization, and compensation as foundation of developmental theory. Baltes PB. **Am Psychol** 1997 Apr; 52(4):366-80 (110 ref.)

The arena test and cortisol response of sheep as indirect selection criteria for the improvement of lamb survival. Kilgour RJ, et al. **Anim Reprod Sci** 1997 Mar; 46(1-2):97-108

Reproductive behaviour and natural selection for the sickle gene in the Baiga tribe of central India: the role of social parenting. Reddy PH, et al. **Ann Hum Genet** 1996 May; 60 (Pt 3):231-6

Heterogeneous effects of natural selection on the Italian newborns. Zonta LA, et al. **Ann Hum Genet** 1997 Mar;61 (Pt 2):137-42

In vivo selection of Klebsiella pneumoniae strains with enhanced quinolone resistance during fluoroquinolone treatment of urinary tract infections. Deguchi T, et al.
Antimicrob Agents Chemother 1997 Jul;41(7):1609-11

Beef carcase characteristics that may be of value in selecting for genetic merit. Johnson ER. **Aust Vet J** 1996 Jun; 73(6):233-40 (65 ref.)

Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Belknap JK, et al.
Behav Genet 1997 Jan;27(1):55-66

Nesting and fitness: lifetime reproductive success in house mice bidirectionally selected for thermoregulatory nest-building behavior. Bult A, et al. **Behav Genet** 1997 May;27(3):231-40

Spurious associations in unreplicated selected lines. Henderson ND. **Behav Genet** 1997 Mar;27(2):145-54

Selective breeding for isolation-induced intermale aggression in mice: associated responses and environmental influences. Sandnabba NK. **Behav Genet** 1996 Sep;26(5):477-88 (100 ref.)

Studies on wild house mice. VII. Prenatal maternal environment and aggression. Sluyter F, et al.
Behav Genet 1996 Sep;26(5):513-8

tRNA-ribosome interactions. Ehrenberg M, et al.
Biochem Cell Biol 1995 Nov-Dec;73(11-12):1049-54 (35 ref.)

Self-organization in computer simulated selective systems. Atamas SP. **Biosystems** 1996;39(2):143-51

Developmental selection and self-organization. Frank SA.
Biosystems 1997;40(3):237-43

Long-bone biomechanics in mice selected for body conformation. Di Masso RJ, et al. **Bone** 1997 Jun; 20(6):539-45

Selection for egg shell strength in laying hens using shell membrane characteristics. Johansson K, et al.
Br Poult Sci 1996 Sep;37(4):757-63

Heterophil/lymphocyte ratio as a selection criterion for heat resistance in domestic fowls. al-Murrani WK, et al.
Br Poult Sci 1997 May;38(2):159-63

Response to long-term selection for egg production in laying hens. Poggenpoel DG, et al. **Br Poult Sci** 1996 Sep; 37(4):743-56

Susceptibility and resistance of rats to stress-induced decreases in swim-test activity: a selective breeding study. Scott PA, et al. **Brain Res** 1996 Jul 1;725(2):217-30

Ethanol-induced c-Fos expression in rat lines selected for low and high alcohol consumption. Thiele TE, et al.
Brain Res 1997 May 9;756(1-2):278-82

PCR analysis of half-seeds of cereal crops and its application in marker-assisted selection and breeding. Zhai W, et al.
Chin J Biotechnol 1996;12(4):249-55

The nature of selection on the major histocompatibility complex. Apanius V, et al. **Crit Rev Immunol** 1997; 17(2):179-224 (388 ref.)

Genetic redundancy: screening for selection in yeast. Brookfield JFY. **Curr Biol** 1997 Jun 1;7(6):R366-8 (6 ref.)

Seeing selection in S allele sequences. Charlesworth D, et al. **Curr Biol** 1997 Jan 1;7(1):R34-7

Rules for RNA recognition of GNRA tetraloops deduced by in vitro selection: comparison with in vivo evolution. Costa M, et al. **EMBO J** 1997 Jun 2;16(11):3289-302

A new transgenic mouse mutagenesis test system using Spi- and 6-thioguanine selections. Nohmi T, et al.
Environ Mol Mutagen 1996;28(4):465-70

Selection for maximum longevity in mice. Harrison DE, et al. **Exp Gerontol** 1997 Jan-Apr;32(1-2):65-78 (52 ref.)

A natural longer glycine-rich region in IKe filamentous phage confers no selective advantage. Bruno R, et al.

Gene 1997 Jan 3;184(1):121–3
Effects of leptin administration on long–term selected fat mice. Bünger L, et al. **Genet Res** 1997 Jun;69(3):215–25
Background selection and patterns of genetic diversity in Drosophila melanogaster. Charlesworth B. **Genet Res** 1996 Oct;68(2):131–49
Recombination load associated with selection for increased recombination. Charlesworth B, et al. **Genet Res** 1996 Feb; 67(1):27–41
Interactions of selection, linkage and drift in the dynamics of polygenic characters. Hospital F, et al. **Genet Res** 1996 Feb;67(1):77–87
Joint regulation of cell size and cell number in the wing blade of Drosophila melanogaster. McCabe J, et al. **Genet Res** 1997 Feb;69(1):61–8
Is group selection a factor modulating the virulence of RNA viruses? Miralles R, et al. **Genet Res** 1997 Jun;69(3):165–72
The use of selection experiments for detecting quantitative trait loci. Ollivier L, et al. **Genet Res** 1997 Jun;69(3):227–32
Natural selection and the frequency distributions of "silent" DNA polymorphism in Drosophila. Akashi H, et al. **Genetics** 1997 May;146(1):295–307
Dynamics of plant mitochondrial genome: model of a three–level selection process. Albert B, et al. **Genetics** 1996 Sep;144(1):369–82
Conditions for protected inversion polymorphism under supergene selection. Alvarez G, et al. **Genetics** 1997 Jun; 146(2):717–22
Altering developmental trajectories in mice by restricted index selection. Atchley WR, et al. **Genetics** 1997 Jun; 146(2):629–40
Effects of differential selection in the sexes on cytonuclear polymorphism and disequilibria. Babcock CS, et al. **Genetics** 1996 Oct;144(2):839–53
Ancestral polymorphism of Mhc class II genes in mice: implications for balancing selection and the mammalian molecular clock. Edwards SV, et al. **Genetics** 1997 Jun; 146(2):655–68
Selection on X–linked genes during speciation in the Drosophila athabasca complex. Ford MJ, et al. **Genetics** 1996 Oct;144(2):689–703
Multi–locus selection and the structure of variation at the white gene of Drosophila melanogaster. Kirby DA, et al. **Genetics** 1996 Oct;144(2):635–45
Genetic divergence and fitness convergence under uniform selection in experimental populations of bacteria. Korona R. **Genetics** 1996 Jun;143(2):637–44
Acclimation and selection for increased resistance to thermal stress in Drosophila buzzatii. Krebs RA, et al. **Genetics** 1996 Feb;142(2):471–9
A population genetics model of marker–assisted selection. Luo ZW, et al. **Genetics** 1997 Jul;146(3):1173–83
Polygenic mutation in Drosophila melanogaster: genetic interactions between selection lines and candidate quantitative trait loci. Mackay TF, et al. **Genetics** 1996 Oct; 144(2):671–88
The genealogy of samples in models with selection. Neuhauser C, et al. **Genetics** 1997 Feb;145(2):519–34
Mutation–selection balance at a modifier–of–imprinting locus. Spencer HG, et al. **Genetics** 1996 Sep;144(1):361–7
Large genetic change at small fitness cost in large populations of Drosophila melanogaster selected for wind tunnel flight: rethinking fitness surfaces. Weber KE. **Genetics** 1996 Sep; 144(1):205–13
Selection response in finite populations. Wei M, et al. **Genetics** 1996 Dec;144(4):1961–74
Genotype selection to rapidly breed congenic strains. Weil MM, et al. **Genetics** 1997 Jul;146(3):1061–9
A retroviral vector that allows efficient co–expression of two genes and the versatility of alternate selection markers. Saleh M. **Hum Gene Ther** 1997 May 20;8(8):979–83
Population genetic studies of HLA–E: evidence for selection. Grimsley C, et al. **Hum Immunol** 1997 Jan;52(1):33–40
Prospects for development of genetic markers for resistance to gastrointestinal parasite infection in sheep. Beh KJ, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):879–97 (149 ref.)
Fitness of parasites: pathology and selection. Combes C. **Int J Parasitol** 1997 Jan;27(1):1–10 (45 ref.)
Phenotypic markers for selection of nematode–resistant sheep. Douch PG, et al. **Int J Parasitol** 1996 Aug–Sep; 26(8–9):899–911 (44 ref.)
The value of circulating eosinophil count as a selection criteria for resistance of sheep to trichostrongyle parasites. Woolaston RR, et al. **Int J Parasitol** 1996 Jan;26(1):123–6
Prevalence and inheritance of and selection for hip dysplasia in seven breeds of dogs in Sweden and benefit: cost analysis of a screening and control program. Swenson L, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):207–14
Prevalence and inheritance of and selection for elbow arthrosis in Bernese mountain dogs and Rottweilers in Sweden and benefit: cost analysis of a screening and control program. Swenson L, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):215–21
Divergent selection for uterine capacity in rabbits. Argente MJ, et al. **J Anim Sci** 1997 Sep;75(9):2350–4
Effect of body composition at selection on reproductive development in large white gilts. Gaughan JB, et al. **J Anim Sci** 1997 Jul;75(7):1764–72
Effect of selection for lifetime production of lamb weaned on hormonal factors that affect growth in Targhee ewes and lambs. Head WA Jr, et al. **J Anim Sci** 1996 Sep; 74(9):2152–7
Influence of partitioning data by sex on genetic variance and covariance components for weaning weight in beef cattle. Lee C, et al. **J Anim Sci** 1997 Jan;75(1):61–7
Mass selection for 70–day body weight in rabbits. Lukefahr SD, et al. **J Anim Sci** 1996 Jul;74(7):1481–9
Maximizing the response of selection with a predefined rate of inbreeding. Meuwissen TH. **J Anim Sci** 1997 Apr; 75(4):934–40
Effects of selection for scrotal circumference in Limousin bulls on reproductive and growth traits of progeny. Moser DW, et al. **J Anim Sci** 1996 Sep;74(9):2052–7
Two–way selection for daily gain and feed conversion in a composite rabbit population. Moura AS, et al. **J Anim Sci** 1997 Sep;75(9):2344–9
Effect of total allelic relationship on accuracy of evaluation and response to selection. Nejati–Javaremi A, et al. **J Anim Sci** 1997 Jul;75(7):1738–45
Divergent selection for heat loss in mice: II. Correlated responses in feed intake, body mass, body composition, and number born through fifteen generations. Nielsen MK, et al. **J Anim Sci** 1997 Jun;75(6):1469–76
Divergent selection for heat loss in mice: I. Selection applied and direct response through fifteen generations. Nielsen MK, et al. **J Anim Sci** 1997 Jun;75(6):1461–8
A simulation model including ovulation rate, potential embryonic viability, and uterine capacity to explain litter size in mice: II. Responses to alternative criteria of selection. Ribeiro EL, et al. **J Anim Sci** 1997 Mar; 75(3):652–6
Genetic relationships among production traits and rebreeding performance. ten Napel J, et al. **J Anim Sci** 1997 Jan; 75(1):51–60
Does the use of antimicrobial agents in veterinary medicine and animal husbandry select antibiotic–resistant bacteria that infect man and compromise antimicrobial chemotherapy? [see comments] Piddock LJ. **J Antimicrob Chemother** 1996 Jul;38(1):1–3 (23 ref.). Comment in: J Antimicrob Chemother 1997 Feb;39(2):285–6. Comment in: J Antimicrob Chemother 1997 Mar;39(3):435.
Directed insertion of a selectable marker into a circular plasmid of Borrelia burgdorferi. Rosa P, et al. **J Bacteriol** 1996 Oct;178(20):5946–53
Markerless deletions of pil genes in Myxococcus xanthus generated by counterselection with the Bacillus subtilis sacB gene. Wu SS, et al. **J Bacteriol** 1996 Oct; 178(19):5817–21
Salivary glands and human selection: a hypothesis. Shields ED, et al. **J Craniofac Genet Dev Biol** 1996 Apr–Jun; 16(2):126–36
Role of the multiple T cell receptor (TCR)–zeta chain signaling motifs in selection of the T cell repertoire. Shores EW, et al. **J Exp Med** 1997 Mar 3;185(5):893–900
The Wilhelmine E. Key 1994 invitational Lecture. Plant genetic diversity and the struggle to measure selection. Clegg MT. **J Hered** 1997 Jan–Feb;88(1):1–7
Development of CD4–CD8– alpha beta TCR+NK1.1+ T lymphocytes: thymic selection by self antigen. Schulz RJ, et al. **J Immunol** 1996 Nov 15;157(10):4379–89
Some additional results about polymorphisms in models of an additive quantitative trait under stabilizing selection. Gimelfarb A. **J Math Biol** 1996 Nov;35(1):88–96
Multilocus dynamics under haploid selection. Kirzhner V, et al. **J Math Biol** 1997 Mar;35(4):391–408
The diffusion model for migration and selection in a dioecious population. Nagylaki T. **J Math Biol** 1996;34(3):334–60
Positive Darwinian selection on two homologous fertilization proteins: what is the selective pressure driving their divergence? Vacquier VD, et al. **J Mol Evol** 1997;44 Suppl 1:S15–22
Low synonymous site variation at the lacY locus in Escherichia coli suggests the action of positive selection. Wagner RR, et al. **J Mol Evol** 1996 Feb;42(2):79–84
Selection for growth does not affect apparent energetic efficiency of jejunal glucose uptake in mice. Fan YK, et al. **J Nutr** 1996 Nov;126(11):2851–60
Selection for body composition does not affect energetic efficiency of jejunal glucose uptake in mice. Fan YK, et al. **J Nutr** 1996 Nov;126(11):2861–6
Genetic selection and characterization of mouse lines for acute functional tolerance to ethanol. Erwin VG, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1310–7
The metabolic productivity of the cell factory. Cascante M, et al. **J Theor Biol** 1996 Oct 7;182(3):317–25
Exploiter–mediated coexistence and frequency–dependent selection in a numerical model of biodiversity. Harding SP, et al. **J Theor Biol** 1996 Sep 21;182(2):109–16
Compensatory nearly neutral mutations: selection without adaptation. Hartl DL, et al. **J Theor Biol** 1996 Oct 7; 182(3):303–9
Metabolic models of selection response. Keightley PD. **J Theor Biol** 1996 Oct 7;182(3):311–6
Steps on the path to the origin of species. Keynes RD. **J Theor Biol** 1997 Aug 21;187(4):461–71
A new approach for determination of the selectively favoured kinetic design of enzyme reactions. Pettersson G. **J Theor Biol** 1996 Nov 21;183(2):179–83
Effective population size for a sex–linked locus in populations under selection. Nomura T. **Math Biosci** 1997 Jun; 142(2):79–89
Epigenetic selection as a possible component of transdifferentiation. Further study of the commitment of hypertrophic chondrocytes to become osteocytes. Erenpreisa J, et al. **Mech Ageing Dev** 1996 Jun 25; 87(3):165–82
Differential survival, natural selection, and the manifestation of senescence. Riggs JE. **Mech Ageing Dev** 1996 Jun 7; 87(2):91–8
Differential survival and natural selection: their impact upon aging and cancer mortality. Riggs JE. **Mech Ageing Dev** 1996 Dec 20;92(2–3):111–20
What good is it to get old? Nusbaum NJ. **Med Hypotheses** 1996 Aug;47(2):77–9
Genetic selection in Escherichia coli for active human immunodeficiency virus reverse transcriptase mutants. Kim B. **Methods** 1997 Aug;12(4):318–24
Screening of phage antibody libraries. Harrison JL, et al. **Methods Enzymol** 1996;267:83–109
Selection for protease inhibitors using bacteriophage display. Markland W, et al. **Methods Enzymol** 1996;267:28–51
Screening of peptide libraries linked to lac repressor. Schatz PJ, et al. **Methods Enzymol** 1996;267:171–91
A simplified method of screening for isolation of recombination vaccinia virus. Chen H, et al. **Methods Mol Biol** 1997;62:199–206
Selection of transfected cells and coamplification of transfected genes. Kane SE. **Methods Mol Biol** 1997; 62:359–67
Selection of transfected cells. Magnetic affinity cell sorting. Padmanabhan R, et al. **Methods Mol Biol** 1997;62:343–58
Killer plaque technique for selecting hybrids and cybrids obtained by induced protoplast fusion. Palková Z, et al. **Methods Mol Biol** 1996;53:339–42 (2 ref.)
Application of killer toxins in stepwise selection of hybrids and cybrids obtained by induced protoplast fusion. Vondrejs V, et al. **Methods Mol Biol** 1996;53:331–8 (15 ref.)
In vitro selection of variants of herpes simplex virus type 1 which differ in cytopathic changes. Padilla J, et al. **Microbiol Immunol** 1997;41(3):203–7
Evolutionary divergence and salinity–mediated selection in halophilic archaea. Dennis PP, et al. **Microbiol Mol Biol Rev** 1997 Mar;61(1):90–104 (33 ref.)
Are bacterial biofilms constrained to Darwin's concept of evolution through natural selection? Caldwell DE, et al. **Microbiologia** 1996 Sep;12(3):347–58 (61 ref.)
In vitro selection of halofantrine resistance in Plasmodium falciparum is not associated with increased expression of Pgh1. Ritchie GY, et al. **Mol Biochem Parasitol** 1996 Dec 2;83(1):35–46
A likelihood method for the detection of selection and recombination using nucleotide sequences. Grassly NC, et al. **Mol Biol Evol** 1997 Mar;14(3):239–47
High nucleotide sequence variation in a region of low recombination in Drosophila simulans is consistent with the background selection model. Hamblin MT, et al. **Mol Biol Evol** 1996 Oct;13(8):1133–40
Low levels of sequence divergence in rock wallabies (Petrogale) suggest a lack of positive directional selection in SRY [letter] O'Neill RJ, et al. **Mol Biol Evol** 1997 Mar; 14(3):350–3
Different structures of selected and unselected araB–lacZ fusions. Maenhaut–Michel G, et al. **Mol Microbiol** 1997 Mar;23(6):1133–45
Evolution and selection of primate T cell antigen receptor BV8 gene subfamily. Funkhouser W, et al. **Mol Phylogenet Evol** 1997 Aug;8(1):51–64
Comparison of the molecular characteristics of lacZ transgenic mouse mutations detected by visual and positive selection. Jiao J, et al. **Mutat Res** 1996 Nov 11;372(1):141–5
Tissue–specific selection for different mtDNA genotypes in heteroplasmic mice. Jenuth JP, et al. **Nat Genet** 1997 May; 16(1):93–5
Malaria and human evolution. Sinha S. **Natl Med J India** 1996 Jul–Aug;9(4):176–7
Competition for brain space [news] Diamond JM. **Nature** 1996 Aug 29;382(6594):756–7
Neutrality or selection? [letter] Hedrick P. **Nature** 1997 May 8;387(6629):138
Evidence for a selectively favourable reduction in the mutation rate of the X chromosome. McVean GT, et al. **Nature** 1997 Mar 27;386(6623):388–92
Malaria. Protective selective pressure [news; comment] Miller LH. **Nature** 1996 Oct 10;383(6600):480–1. Comment on: Nature 1996 Oct 10;383(6600):522–5.
A positive screen for cloning PCR products. Keese P, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3474–5
Directed mutagenesis of YAC–cloned DNA using a rapid, PCR–based screening protocol. Tucker RM, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3467–8
Introduction of the negative selection marker into replacement vectors by a single ligation step. Tzimagiorgis G, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3476–7
Direct genetic selection of two classes of R17/MS2 coat proteins with altered capsid assembly properties and expanded RNA–binding activities. Wang S, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1649–57
Plasmodium falciparum: selection of parasite subpopulations with decreased sensitivity for antibody–mediated growth inhibition in vitro. Iqbal J, et al. **Parasitology** 1997 Apr;114 (Pt 4):317–24
Sex–related coping responses in mice selectively bred for aggression. Ewalds–Kvist SB, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):911–4

Density-dependent selection on horn phenotype in Soay sheep. Clutton-Brock TH, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jul 29; 352(1355):839-50

Elevated plus-maze behavior in adult offspring of selectively bred rats. Dichter GS, et al. **Physiol Behav** 1996 [illegible]; 60(1):299-304

Mice selected for low and high blood magnesium levels: a new model for stress studies. Henrotte JG, et al. **Physiol Behav** 1997 May;61(5):653-8

Thermal sensitivity of Drosophila melanogaster: evolutionary responses of adults and eggs to laboratory natural selection at different temperatures. Gilchrist GW, et al. **Physiol Zool** 1997 Jul-Aug;70(4):403-14

Short-term selection for four-week body weight in Japanese quail. Anthony NB, et al. **Poult Sci** 1996 Oct;75(10):1192-7 (17 ref.)

Group selection for adaptation to multiple-hen cages: behavioral responses. Craig JV, et al. **Poult Sci** 1996 Oct; 75(10):1145-55

Long-term divergent selection for eight-week body weight in white Plymouth rock chickens. Dunnington EA, et al. **Poult Sci** 1996 Oct;75(10):1168-79 (106 ref.)

Group selection for adaptation to multiple-hen cages: hematology and adrenal function. Hester PY, et al. **Poult Sci** 1996 Nov;75(11):1295-307

Group selection for adaptation to multiple-hen cages: production traits during heat and cold exposures. Hester PY, et al. **Poult Sci** 1996 Nov;75(11):1308-14

Group selection for adaptation to multiple-hen cages: humoral immune response. Hester PY, et al. **Poult Sci** 1996 Nov;75(11):1315-20

Effects of gonadal steroids and their antagonists on the humoral immune response of immune-selected broiler chicks. Leitner G, et al. **Poult Sci** 1996 Nov;75(11):1373-82

Long-term selection for body weight in Japanese quail under different environments. Marks HL. **Poult Sci** 1996 Oct; 75(10):1198-203

Associated effects of divergent selection for residual feed consumption on reproduction, sperm characteristics, and mitochondria of spermatozoa. Morisson M, et al. **Poult Sci** 1997 Mar;76(3):425-31

Divergent selection for body weight and yolk precursor in Coturnix coturnix japonica. 12. Heterosis in reciprocal crosses between divergently selected lines. Moritsu Y, et al. **Poult Sci** 1997 Mar;76(3):437-44

Direct and correlated responses to long-term selection for increased body weight and egg production in turkeys. Nestor KE, et al. **Poult Sci** 1996 Oct;75(10):1180-91 (54 ref.)

Influence of growth selection in turkeys on resistance to Pasteurella multocida. Nestor KE, et al. **Poult Sci** 1996 Oct;75(10):1161-3

Symposium: the effects of long-term selection on growth of poultry. Introduction. Reddy RP. **Poult Sci** 1996 Oct; 75(10):1164-7 (11 ref.)

Ease of capture in Japanese quail of two lines divergently selected for adrenocortical response to immobilization. Satterlee DG, et al. **Poult Sci** 1997 Mar;76(3):469-71

A demographic approach to selection. Anderson WW, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7742-7

Island colonization and evolution of the insular woody habit in Echium L. (Boraginaceae). Böhle UR, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11740-5

Transient and selectable transformation of the parasitic protist Trichomonas vaginalis. Delgadillo MG, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4716-20

DNA variation at the Sod locus of Drosophila melanogaster: an unfolding story of natural selection. Hudson RR, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7725-9

The strength of indirect selection on female mating preferences. Kirkpatrick M, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1282-6

The objects of selection. Mayr E. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2091-4 (19 ref.)

A positive genetic selection for disrupting protein-protein interactions: identification of CREB mutations that prevent association with the coactivator CBP. Shih HM, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13896-901

Abnormal T cell selection on nod thymic epithelium is sufficient to induce autoimmune manifestations in C57BL/6 athymic nude mice. Thomas-Vaslin V, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4598-603

A genetic system to identify DNA polymerase beta mutator mutants. Washington SL, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1321-6

Selection and fitness in bacteriocin-producing bacteria. Dykes GA, et al. **Proc R Soc Lond B Biol Sci** 1997 May 22;264(1382):683-7

Directed evolution of a type I antifreeze protein expressed in Escherichia coli with sodium chloride as selective pressure and its effect on antifreeze tolerance. Meijer PJ, et al. **Protein Eng** 1996 Nov;9(11):1051-4

Directing phage selections towards specific epitopes. Parsons HL, et al. **Protein Eng** 1996 Nov;9(11):1043-9

Selection of tRNA(Asp) amber suppressor mutants having alanine, arginine, glutamine, and lysine identity. Martin F, et al. **RNA** 1996 Sep;2(9):919-27

Familial risks and reproductive fitness in schizophrenia. Battaglia M, et al. **Schizophr Bull** 1996;22(2):191-5 (23 ref.)

Adaptive mutations: a challenge to neo-Darwinism? Savic DJ. **Sci Prog** 1997;80 (Pt 2):125-45 (53 ref.)

Mechanisms of punctuated evolution [letter; comment] [see comments] Coyne JA, et al. **Science** 1996 Dec 6; 274(5293):1748-50. Comment on: Science 1996 Jun 21;272(5269):1802-4. Comment in: Science 1997 Apr 18;276(5311):338-41.

On punctuated equilibria [letter; comment] Eldredge N, et al. **Science** 1997 Apr 18;276(5311):338-41. Comment on: Science 1996 Dec 6;274(5293):1748-50.

Human groups as units of selection. Wilson DS. **Science** 1997 Jun 20;276(5320):1816-7

Sex ratio at birth deviations in modern Venezuela: the Trivers-Willard effect. Chacon-Puignau GC, et al. **Soc Biol** 1996 Fall-Winter;43(3-4):257-70

Competition in a spatially heterogeneous environment: modelling the risk of spread of a genetically engineered population. Cruywagen GC, et al. **Theor Popul Biol** 1996 Feb;49(1):1-38

The evolution of genomic imprinting: two modifier-locus models. Spencer HG, et al. **Theor Popul Biol** 1997 Feb; 51(1):23-35

Variation and selection in neural function [letter; comment] Changeux JP. **Trends Neurosci** 1997 Jul;20(7):291-3 (20 ref.) . Comment on: Trends Neurosci 1996 Nov;19(11):460-4.

Variation and selection in neural function [letter; comment] Sporns O. **Trends Neurosci** 1997 Jul;20(7):291; discussion 293 (20 ref.). Comment on: Trends Neurosci 1996 Nov;19(11):460-4.

[The mutation and the selection of inactivating enzymes against antibiotic resistances] Inoue M, et al. **Nippon Rinsho** 1997 May;55(5):1161-6 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Feasibility of obtaining a highly active mutant of Streptomyces hygroscopicus SU-A5 using induced mutagenesis] Kenarova A, et al. **Antibiot Khimioter** 1996 May;41(5):3-5 (Eng. Abstr.) **(Rus)**

[Population genetic study of the Russian country: genealogical analysis, inbreeding, and indices of potential selection of two rural populations in the Yaroslavl region] Nazarova AF, et al. **Dokl Akad Nauk** 1996 Jul;349(1):133-7 **(Rus)**

[The physiological characteristics of genetic predisposition to catalepsy in rats depending on the stage of selection] Shul'ga VA, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov;82(10-11):77-83 (Eng. Abstr.) **(Rus)**

[A simple method of selecting Saccharomyces cerevisiae ade1 and ade2 mutants] Alenin VV, et al. **Genetika** 1997 Jun; 33(6):858-61 (Eng. Abstr.) **(Rus)**

[Frequency of chromosome aberrations induced by a single exposure to stress in rats selected for excitability of the nervous system] Diuzhiova NA, et al. **Genetika** 1996 Jun; 32(6):851-3 (Eng. Abstr.) **(Rus)**

[Change in sex ratio of a Drosophila population in relation to population size] Grechanyi GV, et al. **Genetika** 1996 Oct;32(10):1349-53 (Eng. Abstr.) **(Rus)**

[Increase in the effectiveness of using inbreeding in pedigree stocks of dairy cattle] Kalmykov AN. **Genetika** 1997 Jun; 33(6):810-6 (Eng. Abstr.) **(Rus)**

[Gradualism or punctualism: data on genetic differentiationof small mammals from the Holarctic region] Mezhzherin SV. **Genetika** 1997 Apr;33(4):518-23 (Eng. Abstr.) **(Rus)**

[Selection in "hybrid" cattle populations] Okhapkin SK, et al. **Genetika** 1996 Aug;32(8):1112-8 (Eng. Abstr.) **(Rus)**

[Selection of mice for brain weight] Popova NV, et al. **Genetika** 1997 Mar;33(3):413-6 (Eng. Abstr.) **(Rus)**

[Ultrastructural changes in the encapsulated nerve endings of the tibial nerve under the action of diethyl ether in 2 strains of rats selected for their threshold of nervous system excitability] Vshivtseva VV, et al. **Morfologiia** 1996; 109(3):22-6 (Eng. Abstr.) **(Rus)**

[The temperature dependence of selection efficiency and the expression of the genes controlling the rate of embryonic development in Drosophila melanogaster] Neifakh AA, et al. **Ontogenez** 1996 Nov-Dec;27(6):457-64 (Eng. Abstr.) **(Rus)**

[The effect of the selection of Mustela vison mink for behavior on their folliculogenesis and reproductive function] Klochkov DV, et al. **Zh Evol Biokhim Fiziol** 1996 Sep-Oct;32(5):620-8 (Eng. Abstr.) **(Rus)**

[The effect of emotional stress on the behavioral and endocrine indices of rats selected for their contrasting capacities for active avoidance] Galeeva AIu, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep-Oct; 46(5):929-36 (Eng. Abstr.) **(Rus)**

[An aversive olfactory signal during the Y-maze learning of mice selected for greater or lesser brain weight] Kholmanskikh SS, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May-Jun; 46(3):527-32 (Eng. Abstr.) **(Rus)**

[The pain sensitivity thresholds of rats genetically selected for their rate of active avoidance acquisition] Zhukov DA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan-Feb; 47(1):167-9 **(Rus)**

SELECTION BIAS

Optimal procedures for detecting analytic bias using patient samples. Smith FA, et al. **Am J Clin Pathol** 1997 Sep; 108(3):254-68

Assessment of weighting methodology for the National Comorbidity Survey. Little RJ, et al. **Am J Epidemiol** 1997 Sep 1;146(5):439-49

Correlates of compliance with measurement protocols in a Latino nutrition-intervention study. Frack SA, et al. **Am J Prev Med** 1997 Mar-Apr;13(2):131-6

Estimating nonparticipation bias in a longitudinal study of bereavement. Boyle FM, et al. **Aust N Z J Public Health** 1996 Oct;20(5):483-7

Face-to-face household interviews versus telephone interviews for health surveys [see comments] Donovan RJ, et al. **Aust N Z J Public Health** 1997 Apr;21(2):134-40. Comment in: Aust N Z J Public Health 1997 Apr;21(2):117-9.

Have you had your quota of nearest birthdays? [editorial; comment] O'Toole BI. **Aust N Z J Public Health** 1997 Apr;21(2):117-9. Comment on: Aust N Z J Public Health 1997 Apr;21(2):134-40.

Selection bias from sampling frames: telephone directory and electoral roll compared with door-to-door population census: results from the Blue Mountains Eye Study. Smith W, et al. **Aust N Z J Public Health** 1997 Apr;21(2):127-33

Sample size could limit the power of case-control studies for determining risk factors for community-acquired methicillin-resistant Staphylococcus aureus [letter; comment] Bloch KC, et al. **Clin Infect Dis** 1996 Oct; 23(4):851-2. Comment on: Clin Infect Dis 1995 Nov;21(5):1308-12.

Selection bias during recruitment of elderly subjects from the general population for psychiatric interviews. Heun R, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(2):87-92

Characteristics of non-participants and reasons for non-participation in a population survey in Kin-Hu, Kinmen. Chou P, et al. **Eur J Epidemiol** 1997 Feb; 13(2):195-200

Interpreting the term selection bias in medical research. Mark DH. **Fam Med** 1997 Feb;29(2):132-6

The lack of selection bias in a snowball sampled case-control study on drug abuse. Lopes CS, et al. **Int J Epidemiol** 1996 Dec;25(6):1267-70

Selection bias in thrombolytic trials [letter; comment] Sada MJ. **J Am Coll Cardiol** 1996 Nov 1;28(5):1434-5. Comment on: J Am Coll Cardiol 1996 May;27(6):1335-42.

An adjusted two one-sided t-test for the assessment of bioequivalence with multiple doses. Wang W, et al. **J Biopharm Stat** 1997 Mar;7(1):157-70

The importance of distinguishing "clinical judgement" in cancer management from "selection bias" in clinical trials [editorial] Markman M. **J Cancer Res Clin Oncol** 1996; 122(10):573-4

Assessing non-consent bias with parallel randomized and nonrandomized clinical trials. Marcus SM. **J Clin Epidemiol** 1997 Jul;50(7):823-8

Assessment of exposure misclassification bias in case-control studies using validation data. Marshall RJ. **J Clin Epidemiol** 1997 Jan;50(1):15-9

A question of bias [letter; comment] George J. **J Clin Gastroenterol** 1996 Jul;23(1):82-3. Comment on: J Clin Gastroenterol 1996 Jan;22(1):23-7.

Health economics with retrospective data: selection bias issues [letter; comment] Puder KL, et al. **J Int Med Res** 1997 Jan-Feb;25(1):45-51. Comment on: J Int Med Res 1995 Nov-Dec;23(6):395-412.

The silent ones: a review of sampling issues and biases pertinent to the area of pediatric oncology procedural pain. Williams HA. **J Pediatr Oncol Nurs** 1996 Jan;13(1):31-9 (76 ref.)

Assembling comparison groups to assess the effects of health care. Chalmers I. **J R Soc Med** 1997 Jul;90(7):379-86 (69 ref.)

How many subjects are needed in a research sample in palliative care? Faithfull S. **Palliat Med** 1996 Jul; 10(3):259-61

Not so blind, after all [news] Wallich P. **Sci Am** 1996 May; 274(5):20, 22

A bayesian strategy for evaluating treatments applicable only to a subset of patients. Atkinson EN. **Stat Med** 1997 Aug 30;16(16):1803-15

Handling missing data in survey research. Brick JM, et al. **Stat Methods Med Res** 1996 Sep;5(3):215-38 (96 ref.)

Complex surveys [editorial] Dunn G. **Stat Methods Med Res** 1996 Sep;5(3):213

Modelling the sampling design in the analysis of health surveys. Graubard BI, et al. **Stat Methods Med Res** 1996 Sep;5(3):263-81 (53 ref.)

Innovative strategies using SUDAAN for analysis of health surveys with complex samples. LaVange LM, et al. **Stat Methods Med Res** 1996 Sep;5(3):311-29

The use of sampling weights for survey data analysis. Pfeffermann D. **Stat Methods Med Res** 1996 Sep; 5(3):239-61 (42 ref.)

Variance estimation for complex surveys using replication techniques. Rust KF, et al. **Stat Methods Med Res** 1996 Sep;5(3):283-310 (52 ref.)

SELECTION CRITERIA see **PATIENT SELECTION**

SELEGILINE

ADMINISTRATION & DOSAGE

Selegiline and mortality in Parkinson's disease [see comments] Olanow CW, et al. **Ann Neurol** 1996 Dec;40(6):841-5 (36 ref.). Comment in: Ann Neurol 1997 Feb;41(2):282-3.

(-)Deprenyl (selegiline) in Parkinson's disease: a

pharmacologist's comment [letter] Knoll J. **Biomed Pharmacother** 1996;50(6-7):315-7 (29 ref.)

Selegiline in the treatment of hypersomnolence in myotonic dystrophy: a pilot study. Antonini G, et al. **J Neurol Sci** 1997 Apr 15;147(2):167-9

The effects of early selegiline therapy on long-term levodopa treatment and parkinsonian disability: an interim analysis of a Norwegian--Danish 5-year study. Norwegian-Danish Study Group. Larsen JP, et al. **Mov Disord** 1997 Mar; 12(2):175-82

The need for levodopa as an end point of Parkinson's disease progression in a clinical trial of selegiline and alpha-tocopherol. Parkinson Study Group. LeWitt P, et al. **Mov Disord** 1997 Mar;12(2):183-9

[Daily defined doses of parkinsonian drugs in Alcoi] Manzanares R, et al. **Rev Neurol** 1996 Apr;24(128):440-2 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Retrospective study of selegiline-antidepressant drug interactions and a review of the literature. Ritter JL, et al. **Ann Clin Psychiatry** 1997 Mar;9(1):7-13 (37 ref.)

Unexpected findings of study of selegiline have not been treated with caution its authors advised [letter; comment] Silva MT, et al. **BMJ** 1997 Aug 9;315(7104):370. Comment on: BMJ 1995 Dec 16;311(7020):1583-4. Comment on: BMJ 1997 Dec 16;311(7020):1602-7.

Deprenyl, excess mortality, and epidemiological traps. Riggs JE. **Clin Neuropharmacol** 1997 Jun;20(3):276-8

Mortality associated with selegiline in Parkinson's disease. What do the available data mean? Mizuno Y, et al. **Drug Saf** 1997 May;16(5):289-94

Venlafaxine, monoamine oxidase inhibitors, and the serotonin syndrome [letter] Gitlin MJ. **J Clin Psychopharmacol** 1997 Feb;17(1):66-7

Autonomic effects of selegiline: possible cardiovascular toxicity in Parkinson's disease. Churchyard A, et al. **J Neurol Neurosurg Psychiatry** 1997 Aug;63(2):228-34

Serotonin syndrome and the combined use of deprenyl and an antidepressant in Parkinson's disease. Parkinson Study Group. Richard IH, et al. **Neurology** 1997 Apr;48(4):1070-7

Monoamine oxidase inhibitors and cardiac anesthesia revisited. Noorily SH, et al. **South Med J** 1997 Aug; 90(8):836-8

ANALOGS & DERIVATIVES

Metabolism of (-)-deprenyl and PF-(-)-deprenyl in brain after central and peripheral administration. Lajtha A, et al. **Neurochem Res** 1996 Oct;21(10):1155-60

ISOLATION & PURIFICATION

Capillary electrophoretic enantioseparation of selegiline, methamphetamine and ephedrine using a neutral beta-cyclodextrin epichlorhydrin polymer. Ševčík J, et al. **J Pharm Biomed Anal** 1996 Jun;14(8-10):1089-94

METABOLISM

Metabolism of selegiline in humans. Identification, excretion, and stereochemistry of urine metabolites. Shin HS. **Drug Metab Dispos** 1997 Jun;25(6):657-62

Pharmacokinetics and bioequivalence of the main metabolites of selegiline: desmethylselegiline, methamphetamine and amphetamine after oral administration of selegiline. Mascher HJ, et al. **Int J Clin Pharmacol Ther** 1997 Jan; 35(1):9-13

Metabolism of (-)-deprenyl and PF-(-)-deprenyl in brain after central and peripheral administration. Lajtha A, et al. **Neurochem Res** 1996 Oct;21(10):1155-60

Modulation of gene expression rather than monoamine oxidase inhibition: (-)-deprenyl-related compounds in controlling neurodegeneration. Tatton WG, et al. **Neurology** 1996 Dec;47(6 Suppl 3):S171-83 (205 ref.)

Absorption and presystemic metabolism of selegiline hydrochloride at different regions in the gastrointestinal tract in healthy males. Barrett JS, et al. **Pharm Res** 1996 Oct;13(10):1535-40

Selegiline percutaneous absorption in various species and metabolism by human skin. Rohatagi S, et al. **Pharm Res** 1997 Jan;14(1):50-5

PHARMACOKINETICS

Bioavailability of two selegiline hydrochloride tablet products. Müller FO, et al. **Arzneimittelforschung** 1996 Nov;46(11):1037-40

Clinical pharmacokinetics and pharmacodynamics of selegiline. An update. Mahmood I. **Clin Pharmacokinet** 1997 Aug;33(2):91-102 (44 ref.)

Bioequivalence evaluation of two preparations containing the highly variable compound selegiline (L-deprenyl). Waitzinger J, et al. **Int J Clin Pharmacol Ther** 1996 Oct; 34(10):427-32

Pressor response to tyramine after single 24-hour application of a selegiline transdermal system in healthy males. Barrett JS, et al. **J Clin Pharmacol** 1997 Mar;37(3):238-47

Are metabolites of l-deprenyl (selegiline) useful or harmful? Indications from preclinical research. Yasar S, et al. **J Neural Transm Suppl** 1996;48:61-73 (50 ref.)

Selegiline for the delivery of small doses of amphetamine [letter] Schaller JL, et al. **J Neuropsychiatry Clin Neurosci** 1997 Spring;9(2):301-2

Absorption and presystemic metabolism of selegiline hydrochloride at different regions in the gastrointestinal tract in healthy males. Barrett JS, et al. **Pharm Res** 1996 Oct;13(10):1535-40

PHARMACOLOGY

Longevity treatment with (-)deprenyl in female rats: effect on copulatory activity and lifespan. Dalló J, et al. **Acta Physiol Hung** 1996;84(3):277-8

Influence of selegiline and lipoic acid on the life expectancy of immunosuppressed mice. Freisleben HJ, et al. **Arzneimittelforschung** 1997 Jun;47(6):776-80

Protection of the aged substantia nigra of the rat against oxidative damage by (-)-deprenyl. de la Cruz CP, et al. **Br J Pharmacol** 1996 Apr;117(8):1756-60

L-deprenyl (selegiline) limits the repetitive firing of action potentials in rat hippocampal CA1 neurons via a dopaminergic mechanism. Huang CC, et al. **Brain Res** 1997 Apr 4;753(1):27-35

Selegiline treatment after transient global ischemia in gerbils enhances the survival of CA1 pyramidal cells in the hippocampus. Lahtinen H, et al. **Brain Res** 1997 May 23; 757(2):260-7

L-deprenyl fails to protect mesencephalic dopamine neurons and PC12 cells from the neurotoxic effect of 1-methyl-4-phenylpyridinium ion. Vaglini F, et al. **Brain Res** 1996 Nov 25;741(1-2):68-74

Deprenyl induces the tyrosine hydroxylase enzyme in the rat dopaminergic nigrostriatal system. Rodríguez-Gómez JA, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):31-8

L-Deprenyl and MDL72974 do not improve the recovery of dopaminergic cells following systemic administration of MPTP in mouse. Thiffault C, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):238-44

Pharmacokinetic-pharmacodynamic interactions between two selective monoamine oxidase inhibitors: moclobemide and selegiline. Dingemanse J, et al. **Clin Neuropharmacol** 1996 Oct;19(5):399-414

Clinical pharmacokinetics and pharmacodynamics of selegiline. An update. Mahmood I. **Clin Pharmacokinet** 1997 Aug;33(2):91-102 (44 ref.)

Inactivation of cytochrome P4502B1 by the monoamine oxidase inhibitors R-(-)-deprenyl and clorgyline. Sharma U, et al. **Drug Metab Dispos** 1996 Jun;24(6):669-75

(-)-Deprenyl treatment restores serum insulin-like growth factor-I (IGF-I) levels in aged rats to young rat level. De la Cruz CP, et al. **Eur J Pharmacol** 1997 May 30; 327(2-3):215-20

Selegiline is neuroprotective in primary brain cultures treated with 1-methyl-4-phenylpyridinium. Koutsilieri E, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):181-6

Selegiline enhances NGF synthesis and protects central nervous system neurons from excitotoxic and ischemic damage. Semkova I, et al. **Eur J Pharmacol** 1996 Nov 7; 315(1):19-30

Hydroxyl and peroxyl radical trapping by the monoamine oxidase-B inhibitors deprenyl and MDL 72,974A: implications for protection of biological substrates. Thomas CE, et al. **Free Radic Biol Med** 1997;22(4):733-7

Inhibition of platelet monoamine oxidase type B by selegiline. Heinonen EH, et al. **J Clin Pharmacol** 1997 Jul; 37(7):597-601

Desmethylselegiline, a metabolite of selegiline, is an irreversible inhibitor of monoamine oxidase type B in humans. Heinonen EH, et al. **J Clin Pharmacol** 1997 Jul; 37(7):602-9

L-deprenyl treatment in aged mice slightly increases life spans, and greatly reduces fecundity by aged males. Archer JR, et al. **J Gerontol A Biol Sci Med Sci** 1996 Nov; 51(6):B448-53

The systemic administration of tacrine or selegiline facilitate spatial learning in aged fisher 344 rats. Yavich L, et al. **J Neural Transm Gen Sect** 1996;103(5):619-26

High dose selegiline augments striatal ubiquinol in mouse: an indication of decreased oxidative stress or of interference with mitochondrial respiration? A pilot study. Götz ME, et al. **J Neural Transm Suppl** 1995;46:149-56

The pharmacology of B-type selective monoamine oxidase inhibitors; milestones in (-)-deprenyl research. Magyar K, et al. **J Neural Transm Suppl** 1996;48:29-43 (65 ref.)

(-)-Deprenyl reduces neuronal apoptosis and facilitates neuronal outgrowth by altering protein synthesis without inhibiting monoamine oxidase. Tatton WG, et al. **J Neural Transm Suppl** 1996;48:45-59 (98 ref.)

Effect of long-term treatment with selective monoamine oxidase A and B inhibitors on dopamine release from rat striatum in vivo. Lamensdorf I, et al. **J Neurochem** 1996 Oct;67(4):1532-9

L-deprenyl protects mesencephalic dopamine neurons from glutamate receptor-mediated toxicity in vitro. Mytilineou C, et al. **J Neurochem** 1997 Jan;68(1):33-9

L-Deprenyl does not reduce brain damage in global forebrain ischemia in adult gerbils (Meriones ungiculatus). Ballabriga J, et al. **J Neurol Sci** 1997 May 1;148(1):1-5

L-deprenyl (selegiline) decreases excitatory synaptic transmission in the rat hippocampus via a dopaminergic mechanism. Hsu KS, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):740-7

Inhibition of bovine brain calmodulin-dependent cyclic nucleotide phosphodiesterase isozymes by deprenyl. Kakkar R, et al. **Life Sci** 1996;59(21):PL337-41

Treatment with L-deprenyl prolongs life in elderly dogs. Ruehl WW, et al. **Life Sci** 1997;61(11):1037-44

A dose-ranging study of selegiline in patients with Parkinson's disease: effect of platelet monoamine oxidase activity. Andreu N, et al. **Mov Disord** 1997 May;12(3):293-6

Long-term treatment of male F344 rats with deprenyl: assessment of effects on longevity, behavior, and brain function. Bickford PC, et al. **Neurobiol Aging** 1997 May-Jun;18(3):309-18

Chronic treatment of Syrian hamsters with low-dose selegiline increases life span in females but not males. Stoll S, et al. **Neurobiol Aging** 1997 Mar-Apr;18(2):205-11

Selegiline induces dopamine release through ATP-sensitive potassium channels in the rat caudate-putamen in vitro. Neusch C, et al. **Neurochem Int** 1997 Aug;31(2):307-11

Increased acetylcholinesterase activity in selected regions of rat brain after chronic (-)-deprenyl administration. Lakshmana MK, et al. **Neurochem Res** 1996 Oct; 21(10):1209-12

(-) deprenyl attenuates aluminium induced neurotoxicity in primary cortical cultures. Munirathinam S, et al. **Neurodegeneration** 1996 Jun;5(2):161-7

Striatal MPP+ levels do not necessarily correlate with striatal dopamine levels after MPTP treatment in mice. Vaglini F, et al. **Neurodegeneration** 1996 Jun;5(2):129-36

Deprenyl and pergolide rescue spinal motor neurons from axotomy-induced neuronal death in the neonatal rat. Iwasaki Y, et al. **Neurol Res** 1996 Apr;18(2):168-70

Pharmacology of selegiline. Gerlach M, et al. **Neurology** 1996 Dec;47(6 Suppl 3):S137-45 (83 ref.)

L-deprenyl potentiates cAMP-induced elevation of FGF-2 mRNA levels in rat cortical astrocytes. Riva MA, et al. **Neuroreport** 1997 Jul 7;8(9-10):2165-8

Selegiline stimulates biosynthesis of cytokines interleukin-1 beta and interleukin-6. Wilfried K, et al. **Neuroreport** 1996 Nov 25;7(18):2847-8

(-)Deprenyl reduces delayed neuronal death of hippocampal pyramidal cells. Paterson IA, et al. **Neurosci Biobehav Rev** 1997 Mar;21(2):181-6 (27 ref.)

(-)-Deprenyl protection of 1-methyl-4 phenylpyridium ion (MPP+)-induced apoptosis independent of MAO-B inhibition [published erratum appears in Neurosci Lett 1997 May 30;228(1):67] Le W, et al. **Neurosci Lett** 1997 Mar 21;224(3):197-200

Differences in some behavioural effects of deprenyl and amphetamine enantiomers in rats. Timár J, et al. **Physiol Behav** 1996 Aug;60(2):581-7

The effects of L-deprenyl on spatial short term memory in young and aged dogs. Head E, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Apr; 20(3):515-30

R(-)-deprenyl potentiates dopamine-induced cytotoxicity toward catecholaminergic neuroblastoma SH-SY5Y cells. Lai CT, et al. **Toxicol Appl Pharmacol** 1997 Jan; 142(1):186-91

THERAPEUTIC USE

Selegiline as the primary treatment of Parkinson's disease--a long-term double-blind study. Myllylä VV, et al. **Acta Neurol Scand** 1997 Apr;95(4):211-8

Monoamine oxidase B inhibitor selegiline protects young and aged rat peripheral sympathetic neurons against 6-hydroxydopamine-induced neurotoxicity. Salonen T, et al. **Acta Neuropathol (Berl)** 1996;91(5):466-74

Rationale and design of a multicenter study of selegiline and alpha-tocopherol in the treatment of Alzheimer disease using novel clinical outcomes. Alzheimer's Disease Cooperative Study. Sano M, et al. **Alzheimer Dis Assoc Disord** 1996 Fall;10(3):132-40

L-Deprenyl augmentation of fluoxetine in a patient with Huntington's disease. Patel SV, et al. **Ann Clin Psychiatry** 1996 Mar;8(1):23-6

Selegiline and mortality in Parkinson's disease: another view [letter; comment] Lees AJ, et al. **Ann Neurol** 1997 Feb; 41(2):282-3. Comment on: Ann Neurol 1996 Dec;40(6):841-5.

Study design problems of DATATOP study analysis [letter; comment] Mäki-Ikola O, et al. **Ann Neurol** 1996 Dec; 40(6):946-8. Comment on: Ann Neurol 1996 Jan;39(1):29-36. Comment on: Ann Neurol 1996 Jan;39(1):37-45.

Treatment of Parkinson's disease: disagreements [letter; comment] Schulzer M. **Ann Neurol** 1997 Jun;41(6):833-4. Comment on: Ann Neurol 1995 Nov;38(5):771-7. Comment on: Ann Neurol 1996 Aug;40(2):266-7. Comment on: Ann Neurol 1996 Aug;40(2):267-8. Comment on: Ann Neurol 1996 Aug;40(2):268-9.

Selegiline in treatment of behavioral and cognitive symptoms of Alzheimer disease. Tolbert SR, et al. **Ann Pharmacother** 1996 Oct;30(10):1122-9 (90 ref.)

Multi-centre trials: U-turns by bandwagons and the patient left by the wayside [editorial] Dobbs SM, et al. **Br J Clin Pharmacol** 1996 Aug;42(2):143-5

An add-on study of selegiline to Madopar in the treatment of parkinsonian patients with dose-related fluctuations: comparison between Jumexal and Parkryl. Shan DE, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Oct; 58(4):264-8

Tyramine pressor sensitivity in healthy subjects during combined treatment with moclobemide and selegiline. Korn A, et al. **Eur J Clin Pharmacol** 1996;49(4):273-8

Selegiline in the treatment of behavioural disturbance in Alzheimer's disease. Lawlor BA, et al.

Int J Geriatr Psychiatry 1997 Mar;12(3):319–22

Selegiline and vitamin E in Alzheimer's disease. Adelman A. **J Fam Pract** 1997 Aug;45(2):98–100

Deprenyl—past and future. Proceedings of a symposium. Lake Starnberg, Bavaria, 1995. **J Neural Transm Suppl** 1996;48:1–112

New horizons in molecular mechanisms underlying Parkinson's disease and in our understanding of the neuroprotective effects of selegiline. Gerlach M, et al. **J Neural Transm Suppl** 1996;48:7–21 (63 ref.)

The clinical potential of Deprenyl in neurologic and psychiatric disorders. Kuhn W, et al. **J Neural Transm Suppl** 1996;48:85–93 (51 ref.)

Deprenyl in the treatment of Parkinson's disease: clinical effects and speculations on mechanism of action. Olanow CW. **J Neural Transm Suppl** 1996;48:75–84 (60 ref.)

DATATOP-study: significance of its results in the treatment of Parkinson's disease. Schneider E. **J Neural Transm Suppl** 1995;46:391–7

Selegiline for the delivery of small doses of amphetamine [letter] Schaller JL, et al. **J Neuropsychiatry Clin Neurosci** 1997 Spring;9(2):301–2

Effect of treatment with L-deprenyl on age-dependent microanatomical changes in the rat kidney. Battisti A, et al. **Mech Ageing Dev** 1996 Jul 31;89(1):1–10

Simultaneous MAO-B and COMT inhibition in L-Dopa-treated patients with Parkinson's disease. Lyytinen J, et al. **Mov Disord** 1997 Jul;12(4):497–505

Treatment of Alzheimer's disease — searching for a breakthrough, settling for less [editorial; comment] Drachman DA, et al. **N Engl J Med** 1997 Apr 24; 336(17):1245–7. Comment on: N Engl J Med 1997 Apr 24;336(17):1216–22.

Alpha-tocopherol and Alzheimer's disease [letter; comment] Pincus MM. **N Engl J Med** 1997 Aug 21;337(8):572; discussion 573. Comment on: N Engl J Med 1997 Apr 24;336(17):1216–22.

A controlled trial of selegiline, alpha-tocopherol, or both as treatment for Alzheimer's disease. The Alzheimer's Disease Cooperative Study [see comments] Sano M, et al. **N Engl J Med** 1997 Apr 24;336(17):1216–22. Comment in: N Engl J Med 1997 Apr 24;336(17):1245–7. Comment in: N Engl J Med 1997 Aug 21;337(8):572; discussion 573. Comment in: N Engl J Med 1997 Aug 21;337(8):572–3.

A controlled trial of deprenyl in children with Tourette's syndrome and attention deficit hyperactivity disorder. Feigin A, et al. **Neurology** 1996 Apr;46(4):965–8

Selegiline monotherapy in the treatment of Parkinson's disease. Koller WC. **Neurology** 1996 Dec;47(6 Suppl 3):S196–9 (38 ref.)

Role of selegiline in combination therapy of Parkinson's disease. Myllylä VV, et al. **Neurology** 1996 Dec;47(6 Suppl 3):S200–9 (145 ref.)

Selegiline: current perspectives on issues related to neuroprotection and mortality. Olanow CW. **Neurology** 1996 Dec;47(6 Suppl 3):S210–6 (72 ref.)

Attempts to obtain neuroprotection in Parkinson's disease. Olanow CW. **Neurology** 1997 Jul;49(1 Suppl 1):S26–33 (87 ref.)

Selegiline diminishes cardiovascular autonomic responses in Parkinson's disease. Turkka J, et al. **Neurology** 1997 Mar; 48(3):662–7

Selegiline in ADHD adults: plasma monoamines and monoamine metabolites. Ernst M, et al. **Neuropsychopharmacology** 1997 Apr;16(4):276–84

Gallium-transferrin binding in treated and untreated Parkinson's disease. Winsper SJ, et al. **Neuroreport** 1997 Feb 10;8(3):709–11

Selegiline in adults with attention deficit hyperactivity disorder: clinical efficacy and safety. Ernst M, et al. **Psychopharmacol Bull** 1996;32(3):327–34

Management of canine pituitary-dependent hyperadrenocorticism with l-deprenyl (Anipryl). Bruyette DS, et al. **Vet Clin North Am Small Anim Pract** 1997 Mar; 27(2):273–86 (34 ref.)

[Somatosensory evoked potentials and symptomatic response to dopaminergic drugs in Parkinson's disease] Castillo JL, et al. **Rev Med Chil** 1996 Mar;124(3):301–6 (Eng. Abstr.) **(Spa)**

[Neuroprotective and neurorestorative therapy in Parkinson's disease] Jiménez-Jiménez FJ, et al. **Rev Neurol** 1997 Aug; 25 Suppl 2:S185–93 (207 ref.) (Eng. Abstr.) **(Spa)**

[Daily defined doses of parkinsonian drugs in Alcoi] Manzanares R, et al. **Rev Neurol** 1996 Apr;24(128):440–2 (Eng. Abstr.) **(Spa)**

TOXICITY

Toxicokinetic evaluation of a selegiline transdermal system in the dog. Barrett JS, et al. **Biopharm Drug Dispos** 1997 Mar;18(2):165–84

URINE

Urinary excretion of deprenyl metabolites. Lengyel J, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):321–6

SELENITE see **SODIUM SELENITE**

SELENIUM

Inhibition of selenite-catalyzed superoxide generation and formation of elemental selenium (Se(o)) by copper, zinc, and aurintricarboxylic acid (ATA). Davis RL, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1015–20

Selenium in health and disease: a review. Foster LH, et al. **Crit Rev Food Sci Nutr** 1997 Apr;37(3):211–28 (122 ref.)

Isolation of 75Se binding protein from hepatic tissues of chick embryos. Padmaja K, et al. **Indian J Exp Biol** 1996 Jul; 34(7):678–82

Deliberations and evaluations of the approaches, endpoints and paradigms for selenium and iodine dietary recommendations. Levander OA, et al. **J Nutr** 1996 Sep; 126(9 Suppl):2427S–2434S

Genes encoding the acetaminophen and selenium binding proteins map to mouse chromosome 3. Navarro CL, et al. **Mamm Genome** 1996 Dec;7(12):919–20

X-ray imaging with amorphous selenium: optimal spectra for digital mammography. Fahrig R, et al. **Med Phys** 1996 Apr;23(4):557–67

X-ray imaging with amorphous selenium: theoretical feasibility of the liquid crystal light valve for radiography. Rieppo PK, et al. **Med Phys** 1997 Aug;24(8):1279–91

Flat-panel digital radiology with amorphous selenium and active-matrix readout. Rowlands JA, et al. **Radiographics** 1997 May–Jun;17(3):753–60

[Description and preliminary clinical assessment of a digital chest radiographic system with selenium detector (Thoravision)] Sergiacomi GL, et al. **Radiol Med (Torino)** 1997 May;93(5):545–51 (Eng. Abstr.) **(Ita)**

[Level of selenium supply for inhabitants of the Northern economic area of Russia] Golubkina NA, et al. **Gig Sanit** 1997 May–Jun;(3):22–4 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Selenium supply and glutathione peroxidase activity in breastfed Polish infants. Trafikowska U, et al. **Acta Paediatr** 1996 Oct;85(10):1143–5

Dietary selenium intake and selenoproteins in rat plasma. Ciappellano S, et al. **Ann Nutr Metab** 1996;40(5):296–302

Effects of dose on the methylation of selenium to monomethylselenol and trimethylselenonium ion in rats. Itoh M, et al. **Arch Toxicol** 1997;71(7):461–6

The distribution of selenium and mortality owing to acquired immune deficiency syndrome in the continental United States. Cowgill UM. **Biol Trace Elem Res** 1997 Jan; 56(1):43–61

The protective role of selenium on the toxicity of cisplatin-contained chemotherapy regimen in cancer patients. Hu YJ, et al. **Biol Trace Elem Res** 1997 Mar; 56(3):331–41

Effect of selenium in soluble glass bolus on selenium content of milk and blood of goats. Serra AB, et al. **Biol Trace Elem Res** 1996 Oct–Nov;55(1–2):207–12

Protective role of selenium against hepatitis B virus and primary liver cancer in Qidong. Yu SY, et al. **Biol Trace Elem Res** 1997 Jan;56(1):117–24

The decrement of carcinogenesis by dietary selenium and expression of placental form of glutathione-S-transferase in rat glioma. Zhang Z, et al. **Biol Trace Elem Res** 1997 May;57(2):147–55

Dietary selenium: time to act [editorial] Rayman MP. **BMJ** 1997 Feb 8;314(7078):387–8

Prevention by selenium supplementation of cyclosporin-A-induced vascular toxicity. Berkenboom G, et al. **Cardiovasc Res** 1997 Mar;33(3):650–4

Determination of selenium levels in dairy products and drinks by hydride generation atomic absorption spectrometry: correlation with daily dietary intake. Díaz JP, et al. **Food Addit Contam** 1997 Feb–Mar;14(2):109–14

Modulation of ultraviolet light-induced oxidative stress in mice skin related to dietary vitamin A and selenium intake. Savouré N, et al. **Int J Vitam Nutr Res** 1996;66(4):306–15

Effect of selenium fertilization on selenium in feedstuffs and selenium, vitamin E, and beta-carotene concentrations in blood of cattle. Jukola E, et al. **J Dairy Sci** 1996 May; 79(5):831–7

Effect of vitamin E supplementation in diets with a low concentration of selenium on mammary gland health of dairy cows. Weiss WP, et al. **J Dairy Sci** 1997 Aug; 80(8):1728–37

Effect of selenium and iodine supplementation on growth rate and on thyroid and somatotropic function in dairy calves at pasture. Wichtel JJ, et al. **J Dairy Sci** 1996 Oct; 79(10):1865–72

The effect of dietary selenium on lead neurotoxicity. Nehru B, et al. **J Environ Pathol Toxicol Oncol** 1997;16(1):47–50

A compartmental model depicting short-term kinetic changes in selenium metabolism in ewes fed hay containing normal or inadequate levels of selenium. Krishnamurti CR, et al. **J Nutr** 1997 Jan;127(1):95–102

Influence of high dietary selenium intake on the thyroid hormone level in human serum. Brätter P, et al. **J Trace Elem Med Biol** 1996 Sep;10(3):163–6

Influence of selenium on glutathione and some associated enzymes in rats with mammary tumor induced by 7,12-dimethylbenz(a)anthracene. Chidambaram N, et al. **Mol Cell Biochem** 1996 Mar 23;156(2):101–7

Low selenium diet increases the dopamine turnover in prefrontal cortex of the rat. Castaño A, et al. **Neurochem Int** 1997 Jun;30(6):549–55

Dietary selenium repletion may reduce cancer incidence in people at high risk who live in areas with low soil selenium. Fleet JC. **Nutr Rev** 1997 Jul;55(7):277–9 (9 ref.)

Antioxidant status in patients on chronic hemodialysis therapy: impact of parenteral selenium supplementation [see comments] Koenig JS, et al. **Wien Klin Wochenschr** 1997 Jan 17;109(1):13–9. Comment in: Wien Klin Wochenschr 1997 Jan 17;109(1):3–6.

[Changes in urinary calcium and magnesium levels during supplementation with iodine and selenium] Simečková A, et al. **Vnitr Lek** 1996 Nov;42(11):743–6 (Eng. Abstr.) **(Cze)**

[Selenium—an essential trace element (editorial; comment)] Tiran B. **Wien Klin Wochenschr** 1997 Jan 17;109(1):3–6. Comment on: Wien Klin Wochenschr 1997 Jan 17;109(1):13–9. **(Ger)**

ADVERSE EFFECTS

Amyotrophic lateral sclerosis after long-term exposure to drinking water with high selenium content. Vinceti M, et al. **Epidemiology** 1996 Sep;7(5):529–32

Selenium as a risk factor for cardiovascular diseases. Nève J. **J Cardiovasc Risk** 1996 Feb;3(1):42–7 (63 ref.)

Selenium-induced thyroid dysfunction. Hofbauer LC, et al. **Postgrad Med J** 1997 Feb;73(856):103–4

Selenium-induced "blind staggers" and related myths. A commentary on the extent of historical livestock losses attributed to selenosis on western US rangelands. O'Toole D, et al. **Vet Pathol** 1996 Jan;33(1):109–16 (163 ref.)

ANALYSIS

Association between toenail selenium and risk of acute myocardial infarction in European men. The EURAMIC Study. European Antioxidant Myocardial Infarction and Breast Cancer. Kardinaal AF, et al. **Am J Epidemiol** 1997 Feb 15;145(4):373–9

High-performance liquid chromatographic-fluorescence determination of traces of selenium in biological materials. Hawkes WC, et al. **Anal Biochem** 1996 Oct 15;241(2):206–11

A rapid fluorescence bioassay for the determination of selenium on agar plates. Liu Z, et al. **Anal Biochem** 1997 Jan 1;244(1):40–4

Simultaneous spectrofluorimetric determination of selenium (IV) and (VI) by flow injection analysis. Ahmed MJ, et al. **Analyst** 1997 Mar;122(3):221–6

Improved molecular fluorescence method for the determination of selenium in biological samples. Harrison I, et al. **Analyst** 1996 Nov;121(11):1641–6

Spatial patterns in a bioindicator: heavy metal and selenium concentration in eggs of herring gulls (Larus argentatus) in the New York Bight. Gochfeld M. **Arch Environ Contam Toxicol** 1997 Jul;33(1):63–70

Identification of molybdopterins in molybdenum- and selenium-containing enzymes. Gladyshev VN, et al. **Biofactors** 1995–96;5(2):93–7

Newly found selenium-containing proteins in the tissues of the rat. Behne D, et al. **Biol Trace Elem Res** 1996 Oct–Nov; 55(1–2):99–110

A case-control study on selenium, zinc, and copper in plasma and hair of subjects affected by breast and lung cancer. Piccinini L, et al. **Biol Trace Elem Res** 1996 Jan;51(1):23–30

Determination of selenium in plasma, urine and tissues, of standard diet-fed rats and dogs by ETA-atomic absorption spectroscopy with Zeeman background correction. Giachetti C, et al. **Boll Chim Farm** 1996 Sep;135(8):494–501

Incorporation of selenium into egg proteins from dietary selenite. Davis RH, et al. **Br Poult Sci** 1996 Mar; 37(1):197–211

Selenium levels in wheat grains grown in Saudi Arabia. Al-Saleh IA, et al. **Bull Environ Contam Toxicol** 1997 Oct; 59(4):590–4

Environmental hazard of selenium in the Animals La Plata water development project. Lemly AD. **Ecotoxicol Environ Saf** 1997 Jun;37(1):92–6

Ecosystem recovery following selenium contamination in a freshwater reservoir. Lemly AD. **Ecotoxicol Environ Saf** 1997 Apr;36(3):275–81

A protocol for aquatic hazard assessment of selenium. Lemly AD. **Ecotoxicol Environ Saf** 1995 Dec;32(3):280–8 (149 ref.)

Changes in the electronic structure around Ni in oxidized and reduced selenium-containing hydrogenases from Methanococcus voltae. Sorgenfrei O, et al. **Eur J Biochem** 1997 Jul 15;247(2):681–7

Predictors of adipose tissue tocopherol and toenail selenium levels in nine countries: the EURAMIC study. European Multicentre Case-Control Study on Antioxidants, Myocardial Infarction, and Cancer of the Breast. Virtanen SM, et al. **Eur J Clin Nutr** 1996 Sep;50(9):599–606

Determination of selenium levels in dairy products and drinks by hydride generation atomic absorption spectrometry: correlation with daily dietary intake. Díaz JP, et al. **Food Addit Contam** 1997 Feb–Mar;14(2):109–14

Selenium status in the body and proliferative activity of malignant cells [letter; comment] Piccinini L, et al. **Haematologica** 1997 Jan–Feb;82(1):123–4. Comment on: Haematologica 1995 Nov–Dec;80(6):505–11.

Relations between the selenium status and the low T3 syndrome after major trauma. Berger MM, et al. **Intensive Care Med** 1996 Jun;22(6):575–81

The determination of mercury and selenium in maternal and neonatal scalp hair by inductively coupled plasma-mass spectrometry. Razagui IB, et al. **J Anal Toxicol** 1997 Mar-Apr;21(2):149–53

Effect of inorganic or organic selenium at two dietary levels

on reproductive performance and tissue selenium concentrations in first-parity gilts and their progeny. Mahan DC, et al. **J Anim Sci** 1996 Nov;74(11):2711–8

Determination of selenium in infant formula and enteral formula by dry ash graphite furnace atomic absorption spectrometry with deuterium background correction. Cook KK. **J AOAC Int** 1996 Sep-Oct;79(5):1162–6

Colorimetric determination of selenium in mineral premixes. Hurlbut JA, et al. **J AOAC Int** 1997 Jul-Aug;80(4):709–16

Determination of selenium in feeds and premixes: collaborative study. Palmer IS, et al. **J AOAC Int** 1997 May-Jun;80(3):469–80

Analysis of selenium in bovine liver by gas chromatography with mass-selective, electron-capture and nitrogen-phosphorus detection. Singh AK, et al. **J Chromatogr B Biomed Appl** 1997 Mar 7;690(1–2):327–31

Selenium levels in breast milk and cow's milk: a preliminary report from Saudi Arabia. al-Saleh I, et al. **J Environ Pathol Toxicol Oncol** 1997;16(1):41–6

Hair selenium as a monitoring tool for occupational exposures in relation to clinical profile. Srivastava AK, et al. **J Toxicol Environ Health** 1997 Aug 8;51(5):437–45

Protein-bound selenium in the seeds of coco de mono (Lecythis ollaria). Hammel C, et al. **J Trace Elem Med Biol** 1996 Jun;10(2):96–102

Influence on the selenium concentration and selenium intake of infants of infants of ingredients in Spanish homogenised infant beikosts. Ortuño J, et al. **J Trace Elem Med Biol** 1997 Apr;11(1):14–8

Investigation of the selenium status of aborted calves with cardiac failure and myocardial necrosis. Orr JP, et al. **J Vet Diagn Invest** 1997 Apr;9(2):172–9

Thyroid hormones and selenium status in breast cancer. Strain JJ, et al. **Nutr Cancer** 1997;27(1):48–52

Heparin-binding properties of selenium-containing thioredoxin reductase from HeLa cells and human lung adenocarcinoma cells. Liu SY, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6138–41

Hepatic retention of copper and selenium in primary sclerosing cholangitis. Aaseth J, et al. **Scand J Gastroenterol** 1995 Dec;30(12):1200–3

[Status and selenium intake as related to the thyroid gland in the population of Znojmo] Kvíčala J. **Vnitr Lek** 1996 Nov;42(11):738–42 (Eng. Abstr.) **(Cze)**

[Selenium in the hair as an informational index of its human body allowance] Golubkina NA, et al. **Vopr Pitan** 1996; (3):14–7 (Eng. Abstr.) **(Rus)**

[Selenium content in wheat and rye flow from Russia, cis nations and Baltic countries] Golubkina NA. **Vopr Pitan** 1997;(3):17–20 (Eng. Abstr.) **(Rus)**

[Selenium contents in human milk after term and preterm labor and in breast milk substitutes] Ladodo KS, et al. **Vopr Pitan** 1997;(2):22–4 (Eng. Abstr.) **(Rus)**

[Selenium status of healthy children under 1 year of age dependent on the type of feeding] Sorvacheva TN, et al. **Vopr Pitan** 1996;(4):24–7 (Eng. Abstr.) **(Rus)**

BLOOD

Serum selenium concentration in patients with liver cirrhosis and hepatocellular carcinoma. Buljevac M, et al. **Acta Med Croatica** 1996;50(1):11–4

Selenium status of preterm infants: the effect of postnatal age and method of feeding. Daniels L, et al. **Acta Paediatr** 1997 Mar;86(3):281–8

Selenate fortification of infant formulas improves the selenium status of preterm infants. Tyrala EE, et al. **Am J Clin Nutr** 1996 Dec;64(6):860–5

Decrease in selenium status in relation to coal dust exposure. Oryszczyn MP, et al. **Am J Ind Med** 1996 Sep;30(3):281–4

Selenium: an acute-phase reactant? Sattar N, et al. **Ann Clin Biochem** 1997 Jul;34 (Pt 4):437–9

The French interlaboratory quality assessment programme for copper, zinc and selenium in blood serum. Baruthio F, et al. **Ann Ist Super Sanita** 1996;32(2):233–9

Maternal selenium levels and sudden infant death syndrome (SIDS). McGlashan ND, et al. **Aust N Z J Med** 1996 Oct; 26(5):677–82

Bioavailability of selenium accumulated by selenite-reducing bacteria. Combs GF Jr, et al. **Biol Trace Elem Res** 1996 Jun;52(3):209–25

Selenium and antioxidant vitamin and lipidoperoxidation levels in preaging French population. EVA Study Group. Edude de vieillissement artériel. Coudray C, et al. **Biol Trace Elem Res** 1997 May;57(2):183–90

Selenium status is decreased in patients with intrinsic asthma. Kadrabová J, et al. **Biol Trace Elem Res** 1996 Jun; 52(3):241–8

Changed serum trace element profile in Down's syndrome. Kadrabová J, et al. **Biol Trace Elem Res** 1996 Sep; 54(3):201–6

Plasma selenium levels in rheumatoid arthritis. Köse K, et al. **Biol Trace Elem Res** 1996 Summer;53(1–3):51–6

Serum selenium versus lymphocyte subsets and markers of disease progression and inflammatory response in human immunodeficiency virus-1 infection. Look MP, et al. **Biol Trace Elem Res** 1997 Jan;56(1):31–41

Selenium status of healthy Turkish children. Mengübaş K, et al. **Biol Trace Elem Res** 1996 Aug;54(2):163–72

Thyroid function and plasma selenium in chronic uremic patients on hemodialysis treatment. Napolitano G, et al. **Biol Trace Elem Res** 1996 Dec;55(3):221–30

Selenium, zinc, and thyroid hormones in healthy subjects: low T3/T4 ratio in the elderly is related to impaired selenium status. Olivieri O, et al. **Biol Trace Elem Res** 1996 Jan;51(1):31–41

Comparison of selenium levels in pre-eclamptic and normal pregnancies. Rayman MP, et al. **Biol Trace Elem Res** 1996 Oct-Nov;55(1–2):9–20

Risk of squamous cell carcinoma of the skin in relation to plasma selenium, alpha-tocopherol, beta-carotene, and retinol: a nested case-control study. Karagas MR, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jan;6(1):25–9

Serum selenium in institutionalized elderly subjects and relation to other nutritional markers [letter] Gámez C, et al. **Clin Chem** 1997 Apr;43(4):693–4

Reduced platelet glutathione peroxidase activity and serum selenium concentration in atopic asthmatic patients. Misso NL, et al. **Clin Exp Allergy** 1996 Jul;26(7):838–47

Nutritional antioxidants, red cell membrane fluidity and blood viscosity in type 1 (insulin dependent) diabetes mellitus. Osterode W, et al. **Diabet Med** 1996 Dec; 13(12):1044–50

Pharmacokinetics of selol, a new agent containing selenium, in rats. Jastrzębski Z, et al. **Drugs Exp Clin Res** 1997; 23(1):7–11

The influence of atmospheric chromium on selenium content and glutathione peroxidase activity in blood of tannery workers. Gromadzińska J, et al. **Environ Health Perspect** 1996 Dec;104(12):1312–6

Use of selenium concentration in whole blood, serum, toenails, or urine as a surrogate measure of selenium intake. Longnecker MP, et al. **Epidemiology** 1996 Jul;7(4):384–90

Serum selenium, plasma glutathione (GSH) and erythrocyte glutathione peroxidase (GSH-Px)-levels in asymptomatic versus symptomatic human immunodeficiency virus-1 (HIV-1)-infection. Look MP, et al. **Eur J Clin Nutr** 1997 Apr;51(4):266–72

Selenium status of a group of Scottish adults. Shortt CT, et al. **Eur J Clin Nutr** 1997 Jun;51(6):400–4

Selenium status in infants and children with phenylketonuria and in maternal phenylketonuria. Lombeck I, et al. **Eur J Pediatr** 1996 Jul;155 Suppl 1:S140–4

Plasma selenium in healthy man before and after nutratherapy. Karlsson J, et al. **Int J Vitam Nutr Res** 1997; 67(1):27–33

Lead, cadmium, and selenium in the blood of patients with sporadic amyotrophic lateral sclerosis. Vinceti M, et al. **Ital J Neurol Sci** 1997 Apr;18(2):87–92

Analyzed dietary intakes, plasma concentrations of zinc, copper, and selenium, and related antioxidant enzyme activities in hospitalized elderly women. Schmuck A, et al. **J Am Coll Nutr** 1996 Oct;15(5):462–8

Blood selenium concentrations in cows and heifers on 253 cow-calf operations in 18 states. Dargatz DA, et al. **J Anim Sci** 1996 Dec;74(12):2891–5

Metabolism of selenite labelled with enriched stable isotope in the bloodstream. Suzuki KT, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):15–22

Effect of selenium fertilization on selenium in feedstuffs and selenium, vitamin E, and beta-carotene concentrations in blood of cattle. Jukola E, et al. **J Dairy Sci** 1996 May; 79(5):831–7

Blood selenium, vitamin E, vitamin A, and beta-carotene concentrations and udder health, fertility treatments, and fertility. Jukola E, et al. **J Dairy Sci** 1996 May;79(5):838–45

A simplified method for the estimation of glutathione peroxidase activity and selenium concentration in bovine blood. Kinoshita C, et al. **J Dairy Sci** 1996 Sep;79(9):1543–8

Plasma vitamin A, zinc and selenium concentrations in children with acute and persistent diarrhoea. Chaudhary S, et al. **J Diarrhoeal Dis Res** 1996 Sep;14(3):190–3

Lack of association between copper, zinc, selenium and blood pressure among healthy children. Taittonen L, et al. **J Hum Hypertens** 1997 Jul;11(7):429–33

Selenium and glutathione peroxidase reference values in whole blood and plasma of a reference population living in Valencia, Spain. Alegría A, et al. **J Trace Elem Med Biol** 1996 Dec;10(4):223–8

Reference values for serum selenium in various areas-evaluated according to the TRACY protocol. Alfthan G, et al. **J Trace Elem Med Biol** 1996 Jun; 10(2):77–87 (81 ref.)

Selenium status and plasma glutathione peroxidase in patients with IgA nephropathy. Bellisola G, et al. **J Trace Elem Med Biol** 1996 Sep;10(3):189–94

Selenium and glutathione peroxidase activity in Hungarian children. Cser MA, et al. **J Trace Elem Med Biol** 1996 Sep;10(3):167–73

Direct determination of selenium in human blood serum and plasma by electrothermal atomic absorption spectrometry. Gardiner PH, et al. **J Trace Elem Med Biol** 1995 Jul; 9(2):74–81

Determination of selenium in the serum of healthy Swiss adults and correlation to dietary intake. Haldimann M, et al. **J Trace Elem Med Biol** 1996 Apr;10(1):31–45

Human selenium supplementation as assessed by changes in blood selenium concentration and glutathione peroxidase activity. Nève J. **J Trace Elem Med Biol** 1995 Jul;9(2):65–73 (32 ref.)

Reference values for the trace elements copper, manganese, selenium, and zinc in the serum/plasma of children, adolescents, and adults. Rükgauer M, et al. **J Trace Elem Med Biol** 1997 Jun;11(2):92–8

Decreased selenium concentration and glutathione peroxidase activity in blood and increase of these parameters in malignant tissue of lung cancer patients. Zachara BA, et al. **Lung** 1997;175(5):321–32

Effect of doses of protected polyunsaturated fatty acids on indicators of selenium status of sheep. Smith GM, et al. **Res Vet Sci** 1997 Jan-Feb;62(1):81–2

Selenium status in pregnant women of a rural population (Zaire) in relationship to iodine deficiency. Ngo DB, et al. **Trop Med Int Health** 1997 Jun;2(6):572–81

[Study of relationship between level of serum selenium and syndrome differentiation and typing of traditional Chinese medicine in lung cancer] Mi YY, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Nov; 15(11):658–60 (Eng. Abstr.) **(Chi)**

[Selenium, glutathione peroxidase, peroxides and platelet functions] Vitoux D, et al. **Ann Biol Clin (Paris)** 1996; 54(5):181–7 (35 ref.) (Eng. Abstr.) **(Fre)**

[Development of a method for direct determination of selenium using electrothermal atomic absorption spectrometry in plasma, whole blood, erythrocytes, thrombocytes and leukocytes. Determination of reference values] Rükgauer M, et al. **Biomed Tech (Berl)** 1996 Sep; 41(9):236–41 **(Ger)**

[Serum selenium contents in cancer patients] Ujiie S, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(4):401–5 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Selenium status of different population groups of the Bashkortostan Republic] Golubkina NA, et al. **Vopr Pitan** 1996;(4):3–5 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Interactions of 77Se and 13CO with nickel in the active site of active F420-nonreducing hydrogenase from Methanococcus voltae. Sorgenfrei O, et al. **J Biol Chem** 1996 Sep 27;271(39):23799–806

Interaction between trace elements: selenium and cadmium ions. Badiello R, et al. **J Trace Elem Med Biol** 1996 Sep; 10(3):156–62

Memory artifact related to selenium-based digital radiography systems. Chotas HG, et al. **Radiology** 1997 Jun;203(3):881–3

[The selenium content of the body in experimental animals and its effect on the functional biochemical status of the liver in toxic injury] Shman'ko VV. **Fiziol Zh** 1996; 42(1–2):65–72 (Eng. Abstr.) **(Ukr)**

DEFICIENCY

Association between toenail selenium and risk of acute myocardial infarction in European men. The EURAMIC Study. European Antioxidant Myocardial Infarction and Breast Cancer. Kardinaal AF, et al. **Am J Epidemiol** 1997 Feb 15;145(4):373–9

Enhancement of SDZ ICT 322-induced cataracts and skin changes in rats following vitamin E- and selenium-deficient diet. Längle UW, et al. **Arch Toxicol** 1997;71(5):283–9

Effectiveness of alpha-tocopherol and selenium supplements in preventing lupinosis-associated myopathy in sheep. Smith GM, et al. **Aust Vet J** 1997 May;75(5):341–8

Thioredoxin reductase activity is decreased by selenium deficiency. Hill KE, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):293–5

Interacting nutritional and infectious etiologies of Keshan disease. Insights from coxsackie virus B-induced myocarditis in mice deficient in selenium or vitamin E. Levander OA, et al. **Biol Trace Elem Res** 1997 Jan; 56(1):5–21 (75 ref.)

Serum selenium versus lymphocyte subsets and markers of disease progression and inflammatory response in human immunodeficiency virus-1 infection. Look MP, et al. **Biol Trace Elem Res** 1997 Jan;56(1):31–41

Influence of selenium deficiency on the acute cardiotoxicity of adriamycin in rats. Matsuda A, et al. **Biol Trace Elem Res** 1997 May;57(2):157–67

Vegetarians and vegans may be most at risk from low selenium intakes [letter] Judd PA, et al. **BMJ** 1997 Jun 21;314(7097):1834

Diets deficient in selenium and vitamin E affect plasma lipoprotein and apolipoprotein concentrations in the rat. Mazur A, et al. **Br J Nutr** 1996 Dec;76(6):899–907

Effect of selenium deficiency on hepatic lipid and lipoprotein metabolism in the rat. Nassir F, et al. **Br J Nutr** 1997 Sep; 78(3):493–500

Antioxidant deficiency following clam enterocystoplasty. Barrington JW, et al. **Br J Urol** 1997 Aug;80(2):238–42

Detecting subclinical deficiency of essential trace elements in children with special reference to zinc and selenium. Salmenperä L. **Clin Biochem** 1997 Mar;30(2):115–20 (49 ref.)

Effects of selenium and iodine deficiency on thyroid hormone concentrations in the central nervous system of the rat. Campos-Barros A, et al. **Eur J Endocrinol** 1997 Mar; 136(3):316–23

Influence of zinc and selenium deficiency on parameters relating to thyroid hormone metabolism. Kralik A, et al. **Horm Metab Res** 1996 May;28(5):223–6

Selenoenzyme expression in thyroid and liver of second generation selenium- and iodine-deficient rats. Mitchell JH, et al. **J Mol Endocrinol** 1996 Jun;16(3):259–67

Increased virulence of coxsackievirus B3 in mice due to vitamin E or selenium deficiency. Beck MA. **J Nutr** 1997

May;127(5 Suppl):966S–970S (12 ref.)
Overexpression of cellular glutathione peroxidase does not affect expression of plasma glutathione peroxidase or phospholipid hydroperoxide glutathione peroxidase in mice offered diets adequate or deficient in selenium. Cheng WH, et al. **J Nutr** 1997 May;127(5):675–80
Cellular glutathione peroxidase knockout mice express normal levels of selenium–dependent plasma and phospholipid hydroperoxide glutathione peroxidases in various tissues. Cheng WH, et al. **J Nutr** 1997 Aug; 127(8):1445–50
Effects of starvation and of selenium deficiency on the urinary excretion of electrolytes, ketone bodies, creatinine, urea and uric acid. Olsson U, et al.
J Trace Elem Med Biol 1995 Jul;9(2):88–93
The metabolism of [75Se]selenite in patients with short bowel syndrome. Rannem T, et al.
JPEN J Parenter Enteral Nutr 1996 Nov–Dec;20(6):412–6
Landscapes of longevity: the calcium–selenium–mercury connection in cancer and heart disease. Foster HD.
Med Hypotheses 1997 Apr;48(4):355–60 (76 ref.)
Alzheimer's disease, Kuf's disease, tellurium and selenium. Larner AJ. **Med Hypotheses** 1996 Aug;47(2):73–5
Selenium deficiency and thyroid fibrosis. A key role for macrophages and transforming growth factor beta (TGF–beta). Contempre B, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):7–15
Muscle involvement in human immunodeficiency virus–infected patients is associated with marked selenium deficiency. Chariot P, et al. **Muscle Nerve** 1997 Mar; 20(3):386–9
Four cases of selenium deficiency in postoperative long–term enteral nutrition. Yagi M, et al. **Nutrition** 1996 Jan; 12(1):40–3
Selenium deficiency and thyroid function in acute renal failure. Makropoulos W, et al. **Ren Fail** 1997 Jan; 19(1):129–36
Assessment of selenium and vitamin E deficiencies in dairy herds and clinical disease in calves. Zust J, et al.
Vet Rec 1996 Oct 19;139(16):391–4
Copper–zinc superoxide dismutase (CuZnSOD) in antioxidant deficient pigs. de Gritz BG.
Zentralbl Veterinarmed A 1995 Nov;42(9):561–73
[A survey of moniliformin in rice and corn sampled from the areas with and without Keshan disease] Yu S, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1996 May; 30(3):144–7 (Eng. Abstr.) **(Chi)**
[Selenium deficiency associated with cardiac dysfunction in three patients with chronic respiratory failure] To Y, et al. **Nippon Kyobu Shikkan Gakksi Zasshi** 1996 Dec; 34(12):1406–10 (Eng. Abstr.) **(Jpn)**
[Selenium deficiency in patients with cardiovascular diseases and its correction with the drug "selena"] Lebedev PA. **Patol Fiziol Eksp Ter** 1996 Jul–Sep;(3):5–7 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

[Can digital selenium–based radiography in thoracic diagnosis replace the analog x–ray imaging technic?] Zähringer M, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1997 Jul;167(1):4–10 (Eng. Abstr.) **(Ger)**

METABOLISM

Effects of a low selenium state in patients with phenylketonuria. Jochum F, et al. **Acta Paediatr** 1997 Jul; 86(7):775–7
Selenophosphate synthetase: enzyme labeling studies with [gamma–32P]ATP, [beta–32P]ATP, [8–14C]ATP, and [75Se]selenide. Liu SY, et al. **Arch Biochem Biophys** 1997 May 15;341(2):353–9
Mechanisms of selenium methylation and toxicity in mice treated with selenocystine. Hasegawa T, et al.
Arch Toxicol 1996;71(1–2):31–8
Effects of dose on the methylation of selenium to monomethylselenol and trimethylselenonium ion in rats. Itoh M, et al. **Arch Toxicol** 1997;71(7):461–6
Equimolar Hg–Se complex binds to selenoprotein P. Yoneda S, et al. **Biochem Biophys Res Commun** 1997 Feb 3; 231(1):7–11
Regulation of selenoprotein gene expression and thyroid hormone metabolism. Arthur JR, et al.
Biochem Soc Trans 1996 May;24(2):384–8 (50 ref.)
Utilization of selenium from different chemical entities for selenoprotein biosynthesis by mammalian cell lines. Brigelius–Flohé R, et al. **Biofactors** 1995–96;5(3):125–31
Probing the presumed catalytic triad of selenium–containing peroxidases by mutational analysis of phospholipid hydroperoxide glutathione peroxidase (PHGPx). Maiorino M, et al. **Biol Chem Hoppe Seyler** 1995 Nov;376(11):651–60
Selenium metabolism and bioavailability. Daniels LA.
Biol Trace Elem Res 1996 Sep;54(3):185–99 (99 ref.)
Determination of selenium in the human brain by graphite furnace atomic absorption spectrometry. Ejima A, et al.
Biol Trace Elem Res 1996 Jul;54(1):9–21
Effect of supplementation with selenium on whole blood glutathione peroxidase activities and on plasma and tissue selenium concentrations in lambs. Molnár J, et al.
Biol Trace Elem Res 1996 Dec;55(3):253–62
The sizes of the exchangeable pools of selenium in elderly women and their relation to institutionalization. Ducros V, et al. **Br J Nutr** 1997 Sep;78(3):379–96
Tissue–specific modification of selenium concentration by acute and chronic dexamethasone administration in mice. Watanabe C, et al. **Br J Nutr** 1997 Sep;78(3):501–9
Selenium bioaccumulation and hazards in a fish community affected by coal fly ash effluent. Besser JM, et al.
Ecotoxicol Environ Saf 1996 Oct;35(1):7–15
Regional variation in As, Cu, Hg, and Se and interaction between them. Raie RM. **Ecotoxicol Environ Saf** 1996 Dec; 35(3):248–52
Bioextraction of selenium by forage and selected field legume species in selenium–laden soils under minimal field management conditions. Van Mantgem PJ, et al.
Ecotoxicol Environ Saf 1996 Aug;34(3):228–38
Selenium–dependent peroxidases suppress 5–lipoxygenase activity in B–lymphocytes and immature myeloid cells. The presence of peroxidase–insensitive 5–lipoxygenase activity in differentiated myeloid cells. Werz O, et al.
Eur J Biochem 1996 Nov 15;242(1):90–7
Increase in glutathione peroxidase activity in malaria parasite after selenium supplementation. Gamain B, et al.
Free Radic Biol Med 1996;21(4):559–65
Effects of diet and chemical form of selenium on selenium metabolism in sheep. Koenig KM, et al. **J Anim Sci** 1997 Mar;75(3):817–27
Evaluating the efficacy of selenium–enriched yeast and sodium selenite on tissue selenium retention and serum glutathione peroxidase activity in grower and finisher swine. Mahan DC, et al. **J Anim Sci** 1996 Dec; 74(12):2967–74
A compartmental model depicting short–term kinetic changes in selenium metabolism in ewes fed hay containing normal or inadequate levels of selenium. Krishnamurti CR, et al. **J Nutr** 1997 Jan;127(1):95–102
Information on the selenium status of several body compartments of rats from the selenium concentrations in blood fractions, hair and nails. Behne D, et al.
J Trace Elem Med Biol 1996 Sep;10(3):174–9
Correlation of mercury and selenium in the human kidney. Drasch G, et al. **J Trace Elem Med Biol** 1996 Dec; 10(4):251–4
Serum and tissue selenium contents related to renal disease and colon cancer as determined by electrothermal atomic absorption spectrometry. Marchante–Gayón JM, et al.
J Trace Elem Med Biol 1996 Dec;10(4):229–36
Influence on the selenium concentration and selenium intake of infants of infants of ingredients in Spanish homogenised infant beikosts. Ortuño J, et al. **J Trace Elem Med Biol** 1997 Apr;11(1):14–8
Sudden infant death syndrome and placental disorders: the thyroid–selenium link. Reid GM, et al. **Med Hypotheses** 1997 Apr;48(4):317–24 (66 ref.)
Preparation of selenomethionyl proteins for phase determination. Doublié S. **Methods Enzymol** 1997; 276:523–30
Serum and pleural fluid selenium, copper, zinc, and magnesium levels in malignant and nonmalignant pleural diseases. Tekşen F, et al. **Respiration** 1996;63(1):25–7
Hepatic retention of copper and selenium in primary sclerosing cholangitis. Aaseth J, et al.
Scand J Gastroenterol 1995 Dec;30(12):1200–3
Detoxification of mercury by selenium by binding of equimolar Hg–Se complex to a specific plasma protein. Yoneda S, et al. **Toxicol Appl Pharmacol** 1997 Apr; 143(2):274–80
Knowing when not to stop: selenocysteine incorporation in eukaryotes. Low SC, et al. **Trends Biochem Sci** 1996 Jun; 21(6):203–8
[Nutritional biochemical aspects of the significance, of the utilization, of metabolism and of the administration of vitamin E and of selenium in sheep (review)] Kolb E, et al. **Berl Munch Tierarztl Wochenschr** 1997 May; 110(5):178–84 (48 ref.) (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Metabolism of subtoxic levels of selenium in animals and humans. Whanger P, et al. **Ann Clin Lab Sci** 1996 Mar–Apr; 26(2):99–113 (33 ref.)
Selenium metabolism and bioavailability. Daniels LA.
Biol Trace Elem Res 1996 Sep;54(3):185–99 (99 ref.)
Effect of selenium in soluble glass bolus on selenium content of milk and blood of goats. Serra AB, et al.
Biol Trace Elem Res 1996 Oct–Nov;55(1–2):207–12
Selenium–enriched garlic inhibits the early stage but not the late stage of mammary carcinogenesis. Ip C, et al.
Carcinogenesis 1996 Sep;17(9):1979–82
Bioavailability of selenium. Fairweather–Tait SJ.
Eur J Clin Nutr 1997 Jan;51 Suppl 1:S20–3 (45 ref.)
Effects of maternal vitamin E and selenium status during the perinatal period on age–related changes in tissue concentration of vitamin E in rat pups. Pazak HE, et al.
Int J Vitam Nutr Res 1996;66(2):126–33
Effects of maternal vitamin E and selenium status during the perinatal period on age–related changes in heart, lung and liver microsomal lipid peroxidation in rat pups. Pazak HE, et al. **Int J Vitam Nutr Res** 1996;66(2):134–40
Changes in bioavailability and tissue distribution of selenium caused by magnesium deficiency in rats. Jiménez A, et al.
J Am Coll Nutr 1997 Apr;16(2):175–80
A compartmental model depicting short–term kinetic changes in selenium metabolism in ewes fed hay containing normal or inadequate levels of selenium. Krishnamurti CR, et al. **J Nutr** 1997 Jan;127(1):95–102
Selenium administration to a ten–year–old patient receiving long–term total parenteral nutrition (TPN)—changes in selenium concentration in the blood and hair. Terada A, et al. **J Trace Elem Med Biol** 1996 Apr;10(1):1–5
Uptake of 75–Selenium into the central nervous system of the rat. Pullen RG, et al. **Neurochem Res** 1995 Oct; 20(10):1141–6
Kinetics of selenium incorporation into tissues of female mallard ducks. Wilson DS, et al. **Toxicology** 1997 Sep 26; 122(1–2):51–60
[Biodistribution studies on selenium and mercury in mice using instrumental neutron activation analysis] Niesiobędzka K, et al. **Rocz Panstw Zakl Hig** 1996; 47(2):167–74 (Eng. Abstr.) **(Pol)**

PHARMACOLOGY

Physical, hematologic, biochemical, and immunologic effects of supranutritional supplementation with dietary selenium in Holstein cows. Ellis RG, et al. **Am J Vet Res** 1997 Jul; 58(7):760–4
Effects of selenium and vitamin E administration during a late stage of pregnancy on colostrum and milk production in dairy cows, and on passive immunity and growth of their offspring. Lacetera N, et al. **Am J Vet Res** 1996 Dec; 57(12):1776–80
Effect of selenium on cultured bovine luteal cells. Kamada H, et al. **Anim Reprod Sci** 1997 Apr;46(3–4):203–11
Selenium–mediated inhibition of transcription factor NF–kappa B and HIV–1 LTR promoter activity. Makropoulos V, et al. **Arch Toxicol** 1996;70(5):277–83
Inhibitory effects of selenium, vitamin A and butylated hydroxytoluene on growth of human maxillary cancer cells in vitro. Yamamoto Y, et al. **Auris Nasus Larynx** 1996; 23:91–7
Role of the 3' untranslated region in the regulation of cytosolic glutathione peroxidase and phospholipid–hydroperoxide glutathione peroxidase gene expression by selenium supply. Bermano G, et al.
Biochem J 1996 Dec 15;320 (Pt 3):891–5
A cell culture model to study regulation of selenoprotein gene expression of selenium. Bermano G, et al.
Biochem Soc Trans 1996 May;24(2):224S
Selenocysteine tRNA[Ser]Sec levels and selenium–dependent glutathione peroxidase activity in mouse embryonic stem cells heterozygous for a targeted mutation in the tRNA[Ser]Sec gene. Chittum HS, et al. **Biochemistry** 1997 Jul 15;36(28):8634–9
Selenium: potent stimulator of tyrosyl phosphorylation and activator of MAP kinase. Stapleton SR, et al.
Biochim Biophys Acta 1997 Mar 1;1355(3):259–69
The mutual sparing effects of selenium and vitamin E in animal nutrition may be further explained by the discovery that mammalian thioredoxin reductase is a selenoenzyme. Tamura T, et al. **Biofactors** 1995–96;5(2):99–102 (42 ref.)
Influences of intraperitoneally and dietary administered vitamin E and selenium on the lipid composition in reproductive organs of male animals. Yilmaz O, et al.
Biol Chem 1997 May;378(5):425–30
Studies on the effects of selenium on rumen microbial fermentation in vitro. Kim J, et al.
Biol Trace Elem Res 1997 Feb;56(2):203–13
Effects of selenium on colonic fermentation in the rat. Kim J, et al. **Biol Trace Elem Res** 1997 Feb;56(2):215–24
Supplementation with selenium augments the functions of natural killer and lymphokine–activated killer cells. Kiremidjian–Schumacher L, et al. **Biol Trace Elem Res** 1996 Jun;52(3):227–39
Selenium–vitamin E supplementation in infertile men. Effects on semen parameters and micronutrient levels and distribution. Vézina D, et al. **Biol Trace Elem Res** 1996 Summer;53(1–3):65–83
Effects of selenium and serum on selenoprotein W in cultured L8 muscle cells. Yeh JY, et al. **Biometals** 1997 Jan; 10(1):11–22
Protective effects of GSH, alpha–tocopherol, and selenium on lipid–peroxidation in liver and kidney of copper fed rats. Rana SV, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):152–8
Effects of selenium on gallbladder carcinogenesis induced by an intracholecystic 3–methylcholanthrene beeswax pellet in female Syrian golden hamsters. Nakadaira H, et al. **Cancer Lett** 1996 Sep 10;106(2):279–85
Selenium–enriched garlic inhibits the early stage but not the late stage of mammary carcinogenesis. Ip C, et al.
Carcinogenesis 1996 Sep;17(9):1979–82
Effect on an aqueous extract of selenium–enriched garlic on in vitro markers and in vivo efficacy in cancer prevention. Lu J, et al. **Carcinogenesis** 1996 Sep;17(9):1903–7
The effects of dietary selenium and vitamin E and their combination on the fatty acids of erythrocytes, bone marrow and spleen tissue lipids of lambs. Yilmaz O, et al.
Cell Biochem Funct 1997 Mar;15(1):1–7
Selenium protection against toxicity from cadmium and mercury studied at the cellular level. Lindh U, et al.
Cell Mol Biol (Noisy–le–grand) 1996 Feb;42(1):39–48
Inhibitory effects of selenium, vitamin A and butylated hydroxytoluene on in vitro growth of human tongue cancer cells. Inoue I, et al. **Eur Arch Otorhinolaryngol** 1995; 252(8):509–12
Mitochondria changes in human muscle after prolonged exercise, endurance training and selenium supplementation.

Zamora AJ, et al. **Eur J Appl Physiol** 1995;71(6):505–11

A new kinetic model for the mode of action of soluble and membrane-immobilized glutathione peroxidase from bovine erythrocytes--effects of selenium. Carsol MA, et al. **Eur J Biochem** 1997 Jul 1;247(1):248–55

Study of mercury–selenium (Hg–Se) interactions and their impact on Hg uptake by the radish (Raphanus sativus) plant. Shanker K, et al. **Food Chem Toxicol** 1996 Sep; 34(9):883–6

Increase in glutathione peroxidase activity in malaria parasite after selenium supplementation. Gamain B, et al. **Free Radic Biol Med** 1996;21(4):559–65

Effects of diet and chemical form of selenium on selenium metabolism in sheep. Koenig KM, et al. **J Anim Sci** 1997 Mar;75(3):817–27

Effect of inorganic or organic selenium at two dietary levels on reproductive performance and tissue selenium concentrations in first-parity gilts and their progeny. Mahan DC, et al. **J Anim Sci** 1996 Nov;74(11):2711–8

Evaluating the efficacy of selenium–enriched yeast and sodium selenite on tissue selenium retention and serum glutathione peroxidase activity in grower and finisher swine. Mahan DC, et al. **J Anim Sci** 1996 Dec; 74(12):2967–74

Dietary vitamin E and selenium affect mastitis and milk quality. Smith KL, et al. **J Anim Sci** 1997 Jun;75(6):1659–65 (54 ref.)

Expression of the type II iodothyronine deiodinase in cultured rat astrocytes is selenium-dependent. Pallud S, et al. **J Biol Chem** 1997 Jul 18;272(29):18104–10

Protective role of intraperitoneally administrated vitamin E and selenium on the levels of total lipid, total cholesterol, and fatty acid composition of muscle and liver tissues in rats. Yilmaz O, et al. **J Cell Biochem** 1997 Feb;64(2):233–41

The effect of dietary selenium on lead neurotoxicity. Nehru B, et al. **J Environ Pathol Toxicol Oncol** 1997;16(1):47–50

Inhibitory effect of selenium on enzymes involved in heme biosynthetic pathway in chick embryos. Padmaja K, et al. **J Enzyme Inhib** 1996 Aug;11(1):1–11

Selenium is required for normal upregulation of myelin genes in differentiating oligodendrocytes. Gu J, et al. **J Neurosci Res** 1997 Mar 15;47(6):626–35

Overexpression of cellular glutathione peroxidase does not affect expression of plasma glutathione peroxidase or phospholipid hydroperoxide glutathione peroxidase in mice offered diets adequate or deficient in selenium. Cheng WH, et al. **J Nutr** 1997 May;127(5):675–80

Dietary Iodine and selenium interact to affect thyroid hormone metabolism of rats. Hotz CS, et al. **J Nutr** 1997 Jun;127(6):1214–8

Selenium regulation of classical glutathione peroxidase expression requires the 3' untranslated region in Chinese hamster ovary cells. Weiss SL, et al. **J Nutr** 1997 Jul; 127(7):1304–10

The selenium requirement for glutathione peroxidase mRNA level is half of the selenium requirement for glutathione peroxidase activity in female rats. Weiss SL, et al. **J Nutr** 1996 Sep;126(9):2260–7

Selenium influences tissue levels of selenoprotein W in sheep. Yeh JY, et al. **J Nutr** 1997 Mar;127(3):394–402

Influence of dietary selenium on the disposition of arsenate in the female B6C3F1 mouse. Kenyon EM, et al. **J Toxicol Environ Health** 1997 Jun 27;51(3):279–99

Effect of selenium supplementation on biological constants and antioxidant status in rats. Coudray C, et al. **J Trace Elem Med Biol** 1996 Apr;10(1):12–9

Effects of endurance training on skeletal muscle oxidative capacities with and without selenium supplementation. Margaritis I, et al. **J Trace Elem Med Biol** 1997 Apr; 11(1):37–43

Enzymatic defenses of the rat heart against lipid peroxidation. Molina H, et al. **Mech Ageing Dev** 1997 Jul;97(1):1–7

The inhibition of radiation-induced mutagenesis by the combined effects of selenium and the aminothiol WR–1065. Diamond AM, et al. **Mutat Res** 1996 Sep 23;356(2):147–54

The effects of selenium on the antioxidant defense system in the liver of rats exposed to cadmium. Ognjanović B, et al. **Physiol Res** 1995;44(5):293–300

Inhibition of rabbit gastric glucosamine synthetase activity by Cu2+, Zn2+ and Se4+. Fujita T, et al. **Res Commun Mol Pathol Pharmacol** 1997 May;96(2):203–8

Dietary selenium increases cellular glutathione peroxidase activity and reduces the enhanced susceptibility to lipid peroxidation of plasma and low-density lipoprotein in kidney transplant recipients. Hussein O, et al. **Transplantation** 1997 Mar 15;63(5):679–85

Effects of in vitro supplementation with alpha-tocopherol and selenium on bovine neutrophil functions: implications for resistance to mastitis. Ndiweni N, et al. **Vet Immunol Immunopathol** 1996 May;51(1–2):67–78

An apparent effect of immunopotentiation during late gestation on the postpartum reproductive performance of Nili–Ravi buffaloes (Bubalus bubalis). Qureshi ZI, et al. **Vet Res Commun** 1997 Jul;21(5):375–80

[Effect of selenium and vitamin E on white cells, serum concentration of several minerals and trace elements as well as immunologic parameters in calves] Bednarek D, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Nov;103(11):457–9 (Eng. Abstr.) **(Ger)**

[The effect of treatment with superoxide dismutase and selenium on blood ferritin and transferrin level in patients with hemoblastosis] Kumerova AO, et al. **Eksp Klin Farmakol** 1997 May–Jun;60(3):48–50 (Eng. Abstr.) **(Rus)**

[The effect of selenium on the formation of carcinogenic N–nitrosamines] Deriagina VP, et al. **Vopr Pitan** 1996; (3):31–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A new route to thyrotoxicosis? Thomas G. **Hum Exp Toxicol** 1995 Dec;14(12):994–5

Aetiopathogenesis of peripartum cardiomyopathy: prolactin–selenium interaction? [letter] Kothari SS. **Int J Cardiol** 1997 Jun 27;60(1):111–4

Glutathione peroxidase: a role for selenium (Rotruck 1972). Ahrens RA. **J Nutr** 1997 May;127(5 Suppl):1052S–1053S

[Role of selenium in human pathophysiology] Andrzejak R, et al. **Postepy Hig Med Dosw** 1996;50(3):293–307 (84 ref.) (Eng. Abstr.) **(Pol)**

POISONING

Diagnostic criteria for selenium toxicosis in aquatic birds: dietary exposure, tissue concentrations, and macroscopic effects. Albers PH, et al. **J Wildl Dis** 1996 Jul;32(3):468–85

Self dosing with cobalt or selenium by farmers [letter] Farquhar SJ. **N Z Med J** 1997 Jun 27;110(1046):237

Selenium toxicosis with focal symmetrical poliomyelomalacia in postweaning pigs in South Africa. Penrith ML, et al. **Onderstepoort J Vet Res** 1996 Jun;63(2):171–9

Experimentally induced selenosis of adult mallard ducks: clinical signs, lesions, and toxicology. O'Toole D, et al. **Vet Pathol** 1997 Jul;34(4):330–40

THERAPEUTIC USE

The attributes of selenium–enriched garlic in cancer prevention. Ip C, et al. **Adv Exp Med Biol** 1996;401:179–87 (25 ref.)

Effect of micronutrient supplementation on infection in institutionalized elderly subjects: a controlled trial. Girodon F, et al. **Ann Nutr Metab** 1997;41(2):98–107

Inhibitory effect of selenium and change of glutathione peroxidase activity on rat glioma. Zhang ZH, et al. **Biol Trace Elem Res** 1996 Oct–Nov;55(1–2):31–8

Naturally occurring selenium compounds in cancer chemoprevention trials: a workshop summary. Patterson BH, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jan; 6(1):63–9

One-year antioxidant supplementation with beta-carotene or selenium for patients infected with human immunodeficiency virus: a pilot study. Constans J, et al. **Clin Infect Dis** 1996 Sep;23(3):654–6

Econazole 1% shampoo versus selenium in the treatment of tinea versicolor: a single-blind randomized clinical study. Katsambas A, et al. **Int J Dermatol** 1996 Sep;35(9):667–8

Effects of selenium supplementation for cancer prevention in patients with carcinoma of the skin. A randomized controlled trial. Nutritional Prevention of Cancer Study Group [see comments] [published erratum appears in JAMA 1997 May 21;277(19):1520] Clark LC, et al. **JAMA** 1996 Dec 25;276(24):1957–63. Comment in: JAMA 1996 Dec 25;276(24):1984–5. Comment in: JAMA 1997 Mar 19;277(11):880; discussion 881. Comment in: JAMA 1997 Mar 19;277(11):880–1; discussion 881.

Selenium and cancer prevention. Promising results indicate further trials required [editorial; comment] Colditz GA. **JAMA** 1996 Dec 25;276(24):1984–5. Comment on: JAMA 1996 Dec 25;276(24):1957–63.

Selenium supplementation and cancer rates [letter; comment] Herbert V. **JAMA** 1997 Mar 19;277(11):880; discussion 881 . Comment on: JAMA 1996 Dec 25;276(24):1957–63.

Selenium supplementation and cancer rates [letter; comment] Kuller LH. **JAMA** 1997 Mar 19;277(11):880; discussion 881 . Comment on: JAMA 1996 Dec 25;276(24):1957–63.

Selenium supplementation and cancer rates [letter; comment] Parker JS. **JAMA** 1997 Mar 19;277(11):880–1; discussion 881. Comment on: JAMA 1996 Dec 25;276(24):1957–63.

[Therapeutic effect of trace element on ulcerative colitis experimental study] Li F, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Oct;76(10):756–8 (Eng. Abstr.) **(Chi)**

[The relationship between selenium and immunity in large bowel cancer] Yu B, et al. **Chung Hua Wai Ko Tsa Chih** 1996 Jan;34(1):50–3 (Eng. Abstr.) **(Chi)**

[The effect of selenium on free-radical oxidation processes in the bone regenerate after a fracture] Kozlova MV, et al. **Patol Fiziol Eksp Ter** 1997 Apr–Jun;(2):35–7 (Eng. Abstr.) **(Rus)**

[Neuroprotective and neurorestorative therapy in Parkinson's disease] Jiménez-Jiménez FJ, et al. **Rev Neurol** 1997 Aug; 25 Suppl 2:S185–93 (207 ref.) (Eng. Abstr.) **(Spa)**

TOXICITY

Metabolism of subtoxic levels of selenium in animals and humans. Whanger P, et al. **Ann Clin Lab Sci** 1996 Mar–Apr; 26(2):99–113 (33 ref.)

Toxicity and oxidative stress of different forms of organic selenium and dietary protein in mallard ducklings. Hoffman DJ, et al. **Arch Environ Contam Toxicol** 1996 Jul; 31(1):120–7

Toxic levels of selenium in enzymes and selenium uptake in tissues of a marine fish. Tallandini L, et al. **Biol Trace Elem Res** 1996 Jan;51(1):97–106

Apoptosis induced by selenium in human glioma cell lines. Zhu Z, et al. **Biol Trace Elem Res** 1996 Aug;54(2):123–34

Inhibition of lipid peroxidation by selenium in chick embryos. Padmaja K, et al. **Drug Chem Toxicol** 1997 Feb–May; 20(1–2):79–98

Selenium-induced growth reduction in Brassica land races considered for phytoremediation. Bañuelos GS, et al. **Ecotoxicol Environ Saf** 1997 Apr;36(3):282–7

Evaluation of the hazard quotient method for risk assessment of selenium. Lemly AD. **Ecotoxicol Environ Saf** 1996 Nov; 35(2):156–62

Acute pulmonary toxicity of copper gallium diselenide, copper indium diselenide, and cadmium telluride intratracheally instilled into rats. Morgan DL, et al. **Environ Res** 1995 Oct;71(1):16–24

Comparative toxicity of selenium from seleno-DL-methionine, sodium selenate, and Astragalus bisulcatus in pigs. Panter KE, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):217–23

The effect of selenium on the central dopaminergic system: a microdialysis study. Rasekh HR, et al. **Life Sci** 1997; 61(11):1029–35

Selenium and cadmium induced pulmonary functional impairment and cytotoxicity. Bell RR, et al. **Toxicol Lett** 1997 Feb 7;90(2–3):107–14

Immunomodulative effects of aflatoxins and selenium on human peripheral blood lymphocytes. Methenitou G, et al. **Vet Hum Toxicol** 1996 Aug;38(4):274–7

[Selenium and oral cancer. Review of the literature] Carinci F, et al. **Minerva Stomatol** 1996 Jul–Aug;45(7–8):345–8 (12 ref.) (Eng. Abstr.) **(Ita)**

URINE

Urinary selenium excretion in infancy: comparison between term and preterm infants. Tsukahara H, et al. **Biol Neonate** 1996;70(1):35–40

Urinary selenium in healthy and diabetic Saudi Arabians. El-Yazigi A, et al. **Biol Trace Elem Res** 1996 Apr; 52(1):55–63

Long-term supplementation with selenate and selenomethionine: urinary excretion by New Zealand women. Robinson MF, et al. **Br J Nutr** 1997 Apr; 77(4):551–63

Use of selenium concentration in whole blood, serum, toenails, or urine as a surrogate measure of selenium intake. Longnecker MP, et al. **Epidemiology** 1996 Jul;7(4):384–90

Concentration of arsenic, selenium, zinc, iron and copper in the urine of blackfoot disease patients at different clinical stages. Wang CT. **Eur J Clin Chem Clin Biochem** 1996 Jun;34(6):493–7

Selenium status and skeletal tissue metabolism in young infants. Tsukahara H, et al. **Eur J Pediatr** 1996 Feb; 155(2):148–9

An evaluation of urinary measures of iodine and selenium status. Thomson CD, et al. **J Trace Elem Med Biol** 1996 Dec;10(4):214–22

Urinary concentrations of heavy metals in healthy Japanese under 20 years of age: a comparison between concentrations expressed in terms of creatinine and of selenium. Tsuda M, et al. **Tokai J Exp Clin Med** 1995 May; 20(1):53–64

SELENIUM COMPOUNDS

ADMINISTRATION & DOSAGE

Long-term supplementation with selenate and selenomethionine: urinary excretion by New Zealand women. Robinson MF, et al. **Br J Nutr** 1997 Apr; 77(4):551–63

The effect of selenium supplementation during the early post-mating period on embryonic survival in sheep. van Niekerk FE, et al. **J S Afr Vet Assoc** 1996 Dec;67(4):209–13

Human selenium supplementation as assessed by changes in blood selenium concentration and glutathione peroxidase activity. Nève J. **J Trace Elem Med Biol** 1995 Jul;9(2):65–73 (32 ref.)

Influence of combined use of selenious acid and SH compounds in parenteral preparations. Terada A, et al. **J Trace Elem Med Biol** 1997 Jun;11(2):105–9

ADVERSE EFFECTS

Acute hydrogen selenide gas poisoning admissions in one of the hospitals in Delhi, India: case report. Banerjee BD, et al. **Hum Exp Toxicol** 1997 May;16(5):276–8

Green hair discoloration due to selenium sulfide [letter] Fitzgerald EA, et al. **Int J Dermatol** 1997 Mar;36(3):238–9

Hyperpigmentation associated with selenium sulfide lotion [letter] Gillum RF. **J Natl Med Assoc** 1996 Sep;88(9):551 (4 ref.)

ANALYSIS

Colorimetric determination of selenium in mineral premixes. Hurlbut JA, et al. **J AOAC Int** 1997 Jul–Aug;80(4):709–16

CHEMISTRY

Gas–liquid chromatographic properties of positional isomers of methyl thia, selena, and tellura laurate analogs. Jie MS, et al. **Lipids** 1997 Jun;32(6):679–81

METABOLISM

Identification and metabolism of selenocysteine-glutathione selenenyl sulfide (CySeSG) in small intestine of mice orally exposed to selenocystine. Hasegawa T, et al. **Arch Toxicol** 1996;71(1-2):39-44

Effects of dose on the methylation of selenium to monomethylselenol and trimethylselenonium ion in rats. Itoh M, et al. **Arch Toxicol** 1997;71(7):461-6

PHARMACOKINETICS

Pharmacokinetics of selol, a new agent containing selenium, in rats. Jastrzębski Z, et al. **Drugs Exp Clin Res** 1997; 23(1):7-11

PHARMACOLOGY

Selenate fortification of infant formulas improves the selenium status of preterm infants. Tyrala EE, et al. **Am J Clin Nutr** 1996 Dec;64(6):860-5

The inhibitory effect of selenium on induction of tetraploidy by dimethylarsinic acid in Chinese hamster cells. Ueda H, et al. **Anticancer Res** 1997 May-Jun;17(3C):1939-43

Use of INAA to study the interaction between Se and Te in cells of Saccharomyces cerevisiae. Czauderna M, et al. **Appl Radiat Isot** 1996 Feb;47(2):153-7

Differential induction of growth arrest inducible genes by selenium compounds. Kaeck M, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):921-6

Insulin-like effects of vanadate and selenate on the expression of glucose-6-phosphate dehydrogenase and fatty acid synthase in diabetic rats. Berg EA, et al. **Biochimie** 1995; 77(12):919-24

Inhibition of colony formation of Hela cells by naturally occurring and synthetic agents. Abdullaev FI, et al. **Biofactors** 1995-96;5(3):133-8

Effect of selenite and selenate on plant uptake of cadmium by maize (Zea mays). Shanker K, et al. **Bull Environ Contam Toxicol** 1996 Mar;56(3):419-24

Selenite and selenate inhibit human lymphocyte growth via different mechanisms. Spyrou G, et al. **Cancer Res** 1996 Oct 1;56(19):4407-12

Insulin-like vs. non-insulin-like stimulation of glucose metabolism by vanadium, tungsten, and selenium compounds in rat muscle. Fürnsinn C, et al. **Life Sci** 1996; 59(23):1989-2000

POISONING

Experimentally induced selenosis of adult mallard ducks: clinical signs, lesions, and toxicology. O'Toole D, et al. **Vet Pathol** 1997 Jul;34(4):330-40

THERAPEUTIC USE

[Selenium deficiency in patients with cardiovascular diseases and its correction with the drug "selena"] Lebedev PA. **Patol Fiziol Eksp Ter** 1996 Jul-Sep;(3):5-7 (Eng. Abstr.) **(Rus)**

TOXICITY

Toxicity studies of a new selenium compound, Selol, in rats. Jastrzebski Z, et al. **Drugs Exp Clin Res** 1995;21(6):217-20

Comparative toxicity of selenium from seleno-DL-methionine, sodium selenate, and Astragalus bisulcatus in pigs. Panter KE, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):217-23

Selenium salts and chromosome damage. Biswas S, et al. **Mutat Res** 1997 May 23;390(3):201-5

Teratogenic effects of selenium compounds on cultured postimplantation rat embryos. Usami M, et al. **Teratog Carcinog Mutagen** 1996;16(1):27-36

SELENIUM RADIOISOTOPES

BLOOD

Ileal absorption of bile acids in patients with chronic cholestasis: SeHCAT test results and effect of ursodeoxycholic acid (UDCA). Chazouillères O, et al. **Dig Dis Sci** 1996 Dec;41(12):2417-22

CHEMISTRY

125I-labelling of an internally 75Se-labelled monoclonal antibody--biodistribution in tumour-bearing nude mice. Grétarsdóttir J, et al. **Nucl Med Biol** 1994 Nov; 21(8):1017-21

DIAGNOSTIC USE

Radiological bile acid absorption test 75SeHCAT in patients with diarrhoea of unknown cause. Rudberg U, et al. **Acta Radiol** 1996 Sep;37(5):672-5

SeHCAT tests for determination of bile acid malabsorption [letter; comment] Florin TH, et al. **Aust N Z J Med** 1997 Jun;27(3):344. Comment on: Aust N Z J Med 1996 Jun;26(3):368-71.

Performing the 75SeHCAT test using a collimated gamma camera [letter; comment] Martin-Comin J, et al. **Eur J Nucl Med** 1996 Jun;23(6):729. Comment on: Eur J Nucl Med 1994 Sep;21(9):988-90.

SELENOCYSTEINE

ANALOGS & DERIVATIVES

Comparative cytotoxicity of 14 novel selenocysteine se-conjugates in rat renal proximal tubular cells. Andreadou I, et al. **Toxicol Appl Pharmacol** 1996 Nov; 141(1):278-87

ANALYSIS

Structural model for the selenocysteine-specific elongation factor SelB. Hilgenfeld R, et al. **Biochimie** 1996; 78(11-12):971-8

Evidence for a functional relevance of the selenocysteine residue in mammalian thioredoxin reductase. Marcocci L, et al. **Biofactors** 1997;6(3):351-8

Heparin-binding properties of selenium-containing thioredoxin reductase from HeLa cells and human lung adenocarcinoma cells. Liu SY, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6138-41

BIOSYNTHESIS

Selenocysteine synthesis in mammalia: an identity switch from tRNA(Ser) to tRNA(Sec). Amberg R, et al. **J Mol Biol** 1996 Oct 18;263(1):8-19

CHEMISTRY

The mutual sparing effects of selenium and vitamin E in animal nutrition may be further explained by the discovery that mammalian thioredoxin reductase is a selenoenzyme. Tamura T, et al. **Biofactors** 1995-96;5(2):99-102 (42 ref.)

GENETICS

Selenium-regulated translation control of heterologous gene expression: normal function of selenocysteine-substituted gene products. Leonard JL, et al. **J Cell Biochem** 1996 Jun 1;61(3):410-9

An RNA-binding protein recognizes a mammalian selenocysteine insertion sequence element required for cotranslational incorporation of selenocysteine. Lesoon A, et al. **Mol Cell Biol** 1997 Apr;17(4):1977-85

Knowing when not to stop: selenocysteine incorporation in eukaryotes. Low SC, et al. **Trends Biochem Sci** 1996 Jun; 21(6):203-8

METABOLISM

Selenocysteine. Stadtman TC. **Annu Rev Biochem** 1996; 65:83-100 (85 ref.)

RNAs mediating cotranslational insertion of selenocysteine in eukaryotic selenoproteins. Hubert N, et al. **Biochimie** 1996;78(7):590-6 (40 ref.)

Barriers to heterologous expression of a selenoprotein gene in bacteria. Tormay P, et al. **J Bacteriol** 1997 Feb; 179(3):576-82

The oxidation of selenocysteine is involved in the inactivation of glutathione peroxidase by nitric oxide donor. Asahi M, et al. **J Biol Chem** 1997 Aug 1;272(31):19152-7

Selenoprotein synthesis in archaea: identification of an mRNA element of Methanococcus jannaschii probably directing selenocysteine insertion. Wilting R, et al. **J Mol Biol** 1997 Mar 7;266(4):637-41

An RNA-binding protein recognizes a mammalian selenocysteine insertion sequence element required for cotranslational incorporation of selenocysteine. Lesoon A, et al. **Mol Cell Biol** 1997 Apr;17(4):1977-85

Interaction of the Escherichia coli fdhF mRNA hairpin promoting selenocysteine incorporation with the ribosome. Hüttenhofer A, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):3903-10

Identification of a novel selD homolog from eukaryotes, bacteria, and archaea: is there an autoregulatory mechanism in selenocysteine metabolism? Guimarães MJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15086-91

THERAPEUTIC USE

Organic and inorganic selenium compounds inhibit mouse mammary cell growth in vitro by different cellular pathways. Sinha R, et al. **Cancer Lett** 1996 Oct 22; 107(2):277-84

TOXICITY

Mechanisms of selenium methylation and toxicity in mice treated with selenocystine. Hasegawa T, et al. **Arch Toxicol** 1996;71(1-2):31-8

Comparative cytotoxicity of 14 novel selenocysteine se-conjugates in rat renal proximal tubular cells. Andreadou I, et al. **Toxicol Appl Pharmacol** 1996 Nov; 141(1):278-87

SELENOMETHIONINE

ADMINISTRATION & DOSAGE

Long-term supplementation with selenate and selenomethionine: urinary excretion by New Zealand women. Robinson MF, et al. **Br J Nutr** 1997 Apr; 77(4):551-63

CHEMISTRY

Rapid oxidation of DL-selenomethionine by peroxynitrite. Padmaja S, et al. **Free Radic Biol Med** 1996;21(3):317-22

Expression, purification, characterization, and X-ray analysis of selenomethionine 215 variant of leukocyte collagenase. Pieper M, et al. **J Protein Chem** 1997 Aug;16(6):637-50

METABOLISM

Attenuation of oxidation and nitration reactions of peroxynitrite by selenomethionine, selenocystine and ebselen. Briviba K, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):13-5

Preparation of selenomethionyl proteins for phase determination. Doublié S. **Methods Enzymol** 1997; 276:523-30

PHARMACOLOGY

Chemical form of selenium greatly affects metal uptake and responses by cultured human lymphocytes. Borella P, et al. **Biol Trace Elem Res** 1996 Jan;51(1):43-54

In vitro and in vivo effects of selenium and selenium with vitamin E on platelet functions in diabetic rats relationship to platelet sorbitol and fatty acid distribution. Douillet C, et al. **Biol Trace Elem Res** 1996 Dec;55(3):263-77

Interactions between dietary selenium, copper and sodium nitroprusside, a source of cyanide in growing chicks and laying hens. Davis RH, et al. **Br Poult Sci** 1996 Mar; 37(1):87-94

Involvement of polyamines in selenomethionine induced apoptosis and mitotic alterations in human tumor cells. Redman C, et al. **Carcinogenesis** 1997 Jun;18(6):1195-202

POISONING

Experimentally induced selenosis of adult mallard ducks: clinical signs, lesions, and toxicology. O'Toole D, et al. **Vet Pathol** 1997 Jul;34(4):330-40

THERAPEUTIC USE

Biochemical basis of selenomethionine-mediated inhibition during 2-acetylaminofluorene-induced hepatocarcinogenesis in the rat. Mukherjee B, et al. **Eur J Cancer Prev** 1996 Dec;5(6):455-63

Clinical development plan: l-Selenomethionine. **J Cell Biochem Suppl** 1996;26:202-18

TOXICITY

Comparative toxicity of selenium from seleno-DL-methionine, sodium selenate, and Astragalus bisulcatus in pigs. Panter KE, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):217-23

SELENOMETHIONINE SE 75 see **SELENOMETHIONINE**

SELF see **EGO**

SELF ADMINISTRATION

Ethanol self-administration is genetically independent of locomotor stimulation in fast and slow mice. Sanchez FP, et al. **Alcohol** 1996 Jan-Feb;13(1):79-84

Dopamine receptors in the medial prefrontal cortex influence ethanol and sucrose-reinforced responding. Hodge CW, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1631-8

Effect of nucleus accumbens dopamine depletion on motivational aspects involved in initiation of cocaine and heroin self-administration in rats. Gerrits MA, et al. **Brain Res** 1996 Mar 25;713(1-2):114-24

Evidence for roles of kappa-opioid and NMDA receptors in the mechanism of action of ibogaine. Glick SD, et al. **Brain Res** 1997 Feb 28;749(2):340-3

Effects of remoxipride, an atypical antipsychotic, on cocaine self-administration in the rat using fixed- and progressive-ratio schedules of reinforcement. Bourland JA, et al. **Drug Alcohol Depend** 1995 Dec;40(2):111-4

A review of patient-controlled sedation. Dell R. **Eur J Anaesthesiol** 1996 Nov;13(6):547-52 (31 ref.)

The reinforcing properties of nicotine are associated with a specific patterning of c-fos expression in the rat brain. Pagliusi SR, et al. **Eur J Neurosci** 1996 Nov;8(11):2247-56

'Open-ended questions' and 'show-and-tell'--a way to improve pharmacist counselling and patients' handling of their medicines. Ekedahl A. **J Clin Pharm Ther** 1996 Apr; 21(2):95-9

Food and amphetamine self-administration by baboons: effects of alternatives. Foltin RW. **J Exp Anal Behav** 1997 Jul;68(1):47-66

Medication self-administration: an outcome-oriented, consumer-driven program. Visalli H, et al. **J Nurs Care Qual** 1997 Feb;11(3):16-22

Glucocorticoids and behavioral effects of psychostimulants. II: cocaine intravenous self-administration and reinstatement depend on glucocorticoid levels. Deroche V, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1401-7

The reinforcing and discriminative stimulus effects of the novel cocaine analog 2beta-propanoyl-3beta-(4-tolyl)-tropane in rhesus monkeys. Nader MA, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):541-50

Medication-taking behavior of the elderly. Huang LH.

Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1996 Jul; 12(7):423–33

Inhibition of nitric oxide synthesis reduces intravenous cocaine self-administration in the rat. Pulvirenti L, et al. **Neuropharmacology** 1996;35(12):1811–4

Neuronal spike activity in rat nucleus accumbens during cocaine self-administration under different fixed-ratio schedules. Chang JY, et al. **Neuroscience** 1996 Sep; 74(2):483–97

Medication noncompliance. Olfson M, et al. **New Dir Ment Health Serv** 1997 Spring;(73):39–49 (36 ref.)

A critique of fixed and progressive ratio schedules used to examine the neural substrates of drug reinforcement. Arnold JM, et al. **Pharmacol Biochem Behav** 1997 Jul; 57(3):441–7 (70 ref.)

Intravenous cocaine self-administration in mice lacking 5-HT1B receptors. Rocha BA, et al. **Pharmacol Biochem Behav** 1997 Jul;57(3):407–12

Sensitization and tolerance in psychostimulant self-administration. Schenk S, et al. **Pharmacol Biochem Behav** 1997 Jul;57(3):543–50 (42 ref.)

Dose-effect functions for cocaine self-administration: effects of schedule and dosing procedure. Sizemore GM, et al. **Pharmacol Biochem Behav** 1997 Jul;57(3):523–31

Smoked cocaine self-administration in females. Dudish SA, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):79–87

Nicotine self-administration in animals and humans: similarities and differences. Rose JE, et al. **Psychopharmacology (Berl)** 1997 Mar;130(1):28–40 (108 ref.)

[The effect of continuous epidural infusion of combination of buprenorphine and bupivacaine for postoperative pain relief using a portable 0.5 ml.h-1 type infuser with patient control module] Komatsu H, et al. **Masui** 1996 Jun; 45(6):735–40 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Should complex medication regimens be prescribed to people with a low probability of compliance? Benedict S, et al. **J Assoc Nurses AIDS Care** 1997 May-Jun;8(3):90–1

INSTRUMENTATION

Aids to compliance with medication. Corlett AJ. **BMJ** 1996 Oct 12;313(7062):926–9 (5 ref.)

Improving oral medication compliance with an electronic aid. Szeto AY, et al. **IEEE Eng Med Biol Mag** 1997 May-Jun;16(3):48–54, 58

METHODS

Continuous subcutaneous insulin injection for self-care of young patients with insulin-dependent diabetes mellitus. Kuno T, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):464–9

Comparison of guidelines and self-management plans in asthma. Meijer RJ, et al. **Eur Respir J** 1997 May; 10(5):1163–72 (45 ref.)

Progressive ratio schedules in drug self-administration studies in rats: a method to evaluate reinforcing efficacy. Richardson NR, et al. **J Neurosci Methods** 1996 May; 66(1):1–11 (60 ref.)

A method of drop administration. Morlet N, et al. **Ophthalmic Surg Lasers** 1997 Aug;28(8):687–9

NURSING

Teaching elderly patients how to use inhalers. A study to evaluate an education programme on inhaler technique, for elderly patients. Abley C. **J Adv Nurs** 1997 Apr; 25(4):699–708

PSYCHOLOGY

Medication instruction design: younger and older adult schemas for taking medication. Morrow DG, et al. **Hum Factors** 1996 Dec;38(4):556–73

Do programmes of medicine self-administration enhance patient knowledge, compliance and satisfaction? Furlong S. **J Adv Nurs** 1996 Jun;23(6):1254–62

Nicotine discrimination and self-administration in humans as a function of smoking status. Perkins KA, et al. **Psychopharmacology (Berl)** 1997 Jun;131(4):361–70

STANDARDS

Assessment of medication management skills in older outpatients. Ruscin JM, et al. **Ann Pharmacother** 1996 Oct; 30(10):1083–8

STATISTICS & NUMERICAL DATA

Comparing compliance patterns between randomized treatments. Vrijens B, et al. **Control Clin Trials** 1997 Jun; 18(3):187–203

SELF ASSESSMENT (PSYCHOLOGY)

How meaningful are scores on a take-home recertification examination? Norcini JJ, et al. **Acad Med** 1996 Oct;71(10 Suppl):S71–3

Measuring self-assessment skills: an innovative relative ranking model. Regehr G, et al. **Acad Med** 1996 Oct;71(10 Suppl):S52–4

The validity of children's self-reported exposure to traffic. Stevenson MR. **Accid Anal Prev** 1996 Sep;28(5):599–605

Determinants of self-assessed gingival health among adolescents. Kallio P, et al. **Acta Odontol Scand** 1997 Apr; 55(2):106–10

Early self-experienced neuropsychological deficits and subsequent schizophrenic diseases: an 8-year average follow-up prospective study. Klostarkötter J, et al. **Acta Psychiatr Scand** 1997 May;95(5):396–404

Parent, teacher and self-reports as predictors of signs of disturbance in adolescents: whose information carries the most weight? Verhulst FC, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):75–81

Illness severity and self-efficacy as course predictors of DSM-IV alcohol dependence in a multisite clinical sample. Langenbucher J, et al. **Addict Behav** 1996 Sep-Oct; 21(5):543–53

Contrasting methods of collecting data on injectors' risk behaviour. McKeganey N, et al. **AIDS Care** 1996 Oct; 8(5):557–63

A self-efficacy scale for HIV risk behaviors: development and evaluation. Smith KW, et al. **AIDS Educ Prev** 1996 Apr;8(2):97–105

Recognizing a heart attack: the process of determining illness. Scherck KA. **Am J Crit Care** 1997 Jul;6(4):267–73

Proxy reporting in five areas of functional status. Comparison with self-reports and observations of performance. Magaziner J, et al. **Am J Epidemiol** 1997 Sep 1; 146(5):418–28

Is self-reported pain an appropriate outcome measure in ergonomic-epidemiologic studies of work-related musculoskeletal disorders? Schierhout GH, et al. **Am J Ind Med** 1996 Jul;30(1):93–8 (45 ref.)

Phenomenology in psychiatry and psychoanalysis. Chessick RD. **Am J Psychoanal** 1997 Jun;57(2):117–38; discussion 138–9

Preoperative anxiety and fear: a comparison of assessments by patients and anesthesia and surgery residents. Shafer A, et al. **Anesth Analg** 1996 Dec;83(6):1285–91

Trial by self-assessment. Burnum JF. **Ann Intern Med** 1997 Jan 1;126(1):84–5

The roots of self-knowledge: perceiving self, it, and thou. Neisser U. **Ann N Y Acad Sci** 1997 Jun 18;818:18–33 (36 ref.)

The relationships between self-reported hearing disability and measures of auditory disability. Kramer SE, et al. **Audiology** 1996 Sep-Oct;35(5):277–87

The assessment of depression in the postnatal period: a comparison of four self-report questionnaires. Condon JT, et al. **Aust N Z J Psychiatry** 1997 Jun;31(3):353–9

Vietnamese and Arabic women's responses to the Diagnostic Interview Schedule (depression) and self-report questionnaires: cause for concern. Matthey S, et al. **Aust N Z J Psychiatry** 1997 Jun;31(3):360–9

Expectancy variables predicting tolerance and avoidance of pain in chronic pain patients. Cipher DJ, et al. **Behav Res Ther** 1997 May;35(5):437–44

The eating disorder belief questionnaire: preliminary development. Cooper M, et al. **Behav Res Ther** 1997 Apr; 35(4):381–8

Perfectionism in obsessive-compulsive disorder patients. Frost RO, et al. **Behav Res Ther** 1997 Apr;35(4):291–6

The effects of video feedback on the self-evaluation of performance in socially anxious subjects. Rapee RM, et al. **Behav Res Ther** 1996 Apr;34(4):315–22

Cognitive content specificity in selective attention across four domains of maladjustment. Westra HA, et al. **Behav Res Ther** 1997 Apr;35(4):349–65

Interactions between self and external reinforcement in predicting depressive symptoms. Wilkinson RB. **Behav Res Ther** 1997 Apr;35(4):281–9

Predicting stress in general practitioners: 10 year follow up postal survey. Firth-Cozens J. **BMJ** 1997 Jul 5; 315(7099):34–5

Pupils' self assessments of academic attainment at 7, 11 and 16 years: effects of sex and ethnic group. Blatchford P. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):169–84

Changes in control beliefs in Portuguese primary school pupils as a consequence of the employment of self-assessment strategies. Fernandes M, et al. **Br J Educ Psychol** 1996 Sep;66 (Pt 3):301–13

Illusory self-assessments--can they be reduced? McKenna FP, et al. **Br J Psychol** 1997 Feb;88 (Pt 1):39–51

Margaret Holroyd Prize Essay. A patient-centred approach to evaluation and treatment in rheumatoid arthritis: the development of a clinical tool to measure patient-perceived handicap. Carr AJ. **Br J Rheumatol** 1996 Oct;35(10):921–32 (114 ref.)

Awareness and perceptions of outcomes after traumatic brain injury. Hillier SL, et al. **Brain Inj** 1997 Jul;11(7):525–36

Impairment of self-representation in schizophrenia: the roles of boundary articulation and self-reflexivity. Auerbach JS, et al. **Bull Menninger Clin** 1997 Summer;61(3):297–316

A new self-administered questionnaire to monitor health-related quality of life in patients with COPD. Ambulatory Care Quality Improvement Project (ACQUIP) Investigators. Tu SP, et al. **Chest** 1997 Sep;112(3):614–22

Long-term psychological adjustment to witnessing interparental physical conflict during childhood. Henning K, et al. **Child Abuse Negl** 1997 Jun;21(6):501–15

Test-retest and inter-method reliability of the self-rating Barthel Index. Hachisuka K, et al. **Clin Rehabil** 1997 Feb; 11(1):28–35

Self-efficacy and consumer satisfaction with housing. Seilheimer TA, et al. **Community Ment Health J** 1996 Dec; 32(6):549–59

Insight and clinical correlates in schizophrenia. Kim Y, et al. **Compr Psychiatry** 1997 Mar-Apr;38(2):117–23

Self-report of cochlear implant use and satisfaction by prelingually deafened adults. Zwolan TA, et al. **Ear Hear** 1996 Jun;17(3):198–210

The effects of two doses of replacement growth hormone on the biochemical, body composition and psychological profiles of growth hormone-deficient adults. Carroll PV, et al. **Eur J Endocrinol** 1997 Aug;137(2):146–53

Shifting attention from objective risk factors to patients' self-assessed health resources: a clinical model for general practice. Hollnagel H, et al. **Fam Pract** 1995 Dec; 12(4):423–9 (50 ref.)

Negative affect relates to cross-sectional but not longitudinal symptom reporting: data from elderly adults. Diefenbach MA, et al. **Health Psychol** 1996 Jul;15(4):282–8

Evaluation of the validity of the condom use self-efficacy scale (CUSES) in young men using two behavioral simulations. Forsyth AD, et al. **Health Psychol** 1997 Mar; 16(2):175–8

Assessment of self-efficacy and coping with cancer: development and validation of the cancer behavior inventory. Merluzzi TV, et al. **Health Psychol** 1997 Mar; 16(2):163–70

Perceived smokeless tobacco addiction among adolescents. Riley WT, et al. **Health Psychol** 1996 Jul;15(4):289–92

Perspectives unifying symptom interpretation. Teel CS, et al. **Image J Nurs Sch** 1997;29(2):175–81 (47 ref.)

Predictors of change and continuity in home care for dementia patients. Vernooij-Dassen M, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):671–7

What depressive symptoms are reported in Alzheimer's patients? Weiner MF, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):648–52

Self-care behaviours initiated by chemotherapy patients in response to fatigue. Richardson A, et al. **Int J Nurs Stud** 1997 Feb;34(1):35–43

Personal constructs of nursing practice: a comparative analysis of three groups of Australian nurses. Wilson JM, et al. **Int J Nurs Stud** 1997 Feb;34(1):63–71

Phallus, penis and mental space. Birksted-Breen D. **Int J Psychoanal** 1996 Aug;77 (Pt 4):649–57

Sources of ethnic differences between Asian American and white American college students on measures of depression and social anxiety. Okazaki S. **J Abnorm Psychol** 1997 Feb; 106(1):52–60

Self-focused and somatic attention in patients with tinnitus. Newman CW, et al. **J Am Acad Audiol** 1997 Jun;8(3):143–9

Correspondence between adolescent report and parent report of psychiatric diagnostic data. Cantwell DP, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):610–9

Moral valuation: a third domain of conscience functioning. Stilwell BM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Feb;35(2):230–9

Caring for the psyche: classical origins and modern paradigms. Bemporad J. **J Am Acad Psychoanal** 1996 Summer;24(2):353–63

Self-report of difficulty in performing functional activities identifies a broad range of disability in old age. Langlois JA, et al. **J Am Geriatr Soc** 1996 Dec;44(12):1421–8

The Barthel activities of daily living index: self-reporting versus actual performance in the old-old (> or = 75 years). Sinoff G, et al. **J Am Geriatr Soc** 1997 Jul; 45(7):832–6

Psychological type: a 32-year follow-up. Bradway K, et al. **J Anal Psychol** 1996 Oct;41(4):553–74

A competency-based model of child depression: a longitudinal study of peer, parent, teacher, and self-evaluations. Cole DA, et al. **J Child Psychol Psychiatry** 1997 Jul;38(5):505–14

Discordance between patient self-reported visual analog scale pain scores and observed pain-related behavior in older children after surgery. Vetter TR, et al. **J Clin Anesth** 1996 Aug;8(5):371–5

The Adolescent Behavior Checklist: development and initial psychometric properties of a self-report measure for adolescents with ADHD. Adams CD, et al. **J Clin Child Psychol** 1997 Mar;26(1):77–86

Criterion validity of the Language Background Questionnaire: a self-assessment instrument. Metz DE, et al. **J Commun Disord** 1997 Jan-Feb;30(1):23–31; quiz 31–2

Information processing and affective distress in osteoarthritis patients. Calfas KJ, et al. **J Consult Clin Psychol** 1997 Aug; 65(4):576–81

Psychometric properties of family members' reports of parental physical aggression toward clinic-referred children. Jouriles EN, et al. **J Consult Clin Psychol** 1997 Apr;65(2):309–18

Adult attachment classification and self-reported psychiatric symptomatology as assessed by the Minnesota Multiphasic Personality Inventory--2. Pianta RC, et al. **J Consult Clin Psychol** 1996 Apr;64(2):273–81

Remember that? A comparison of real-time versus retrospective recall of smoking lapses. Shiffman S, et al. **J Consult Clin Psychol** 1997 Apr;65(2):292–300

Effort, interest, and recall: beliefs and behaviors of preschoolers. O'Sullivan JT. **J Exp Child Psychol** 1997 Apr; 65(1):43–67

How you know when you're stressed: self-evaluations of stress. Hinds H, et al. **J Gen Psychol** 1997 Jan;124(1):105–11

World understanding and well-being in a Hong Kong

Chinese marital context. Cheung CK. **J Genet Psychol** 1997 Mar;158(1):41–58

Predicting mortality from community surveys of older adults: the importance of self–rated functional ability. Bernard SL, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May; 52(3):S155–63

Self–reports on memory functioning in a longitudinal study of the oldest old: relation to current, prospective, and retrospective performance. Johansson B, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):P139–46

Subjective assessment of dental and psychosocial effects of orthodontic treatment. Birkeland K, et al. **J Orofac Orthop** 1997 Feb;58(1):44–61 **(Eng, Ger)**

Chronic illness perception in adolescence: implications for the doctor–patient relationship. Leung SS, et al. **J Paediatr Child Health** 1997 Apr;33(2):107–12

The development and validation of the Children's Hope Scale. Snyder CR, et al. **J Pediatr Psychol** 1997 Jun; 22(3):399–421

Mothers' beliefs about the causes of infant growth deficiency: is there attributional bias? Sturm LA, et al. **J Pediatr Psychol** 1997 Jun;22(3):329–44

Selective self–stereotyping. Biernat M, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1194–209

Gender and perceived pay entitlement: testing for effects of experience with income. Desmarais S, et al. **J Pers Soc Psychol** 1997 Jan;72(1):141–50

The "self digest": self–knowledge serving self–regulatory functions. Higgins ET. **J Pers Soc Psychol** 1996 Dec; 71(6):1062–83 (175 ref.)

Stability within the self: a longitudinal study of the structural implications of self–discrepancy theory. Strauman TJ. **J Pers Soc Psychol** 1996 Dec;71(6):1142–53

Self–definition, defensive processing, and influence: the normative impact of majority and minority groups. Wood W, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1181–93

Disgust as the source of false positive effects in the measurement of ophidiophobia. Klieger DM, et al. **J Psychol** 1997 Jul;131(4):371–82

Weight fluctuation, bulimic symptoms, and self–efficacy for control of eating. Toray T, et al. **J Psychol** 1997 Jul; 131(4):383–92

Hassles, appraisals, coping and distress: a closer look at the stress process. Lu L. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Aug; 13(8):503–10

Interviewing skills: self–evaluation by medical students. Farnill D, et al. **Med Educ** 1997 Mar;31(2):122–7

Videotaped interviewing of non–English speakers: training for medical students with volunteer clients. Farnill D, et al. **Med Educ** 1997 Mar;31(2):87–93

Factors associated with self–perceived excellent and very good health among Blacks—Kansas, 1995. **MMWR Morb Mortal Wkly Rep** 1996 Oct 25;45(42):906–11

Reactive effects of diary self–assessment in chronic pain patients. Cruise CE, et al. **Pain** 1996 Oct;67(2–3):253–8

Psychological mindedness. McCallum M, et al. **Psychiatry** 1996 Spring;59(1):48–64

The state component in self–reported worldviews and religious beliefs of older adults: the MacArthur Successful Aging Studies. Kim JE, et al. **Psychol Aging** 1996 Sep; 11(3):396–407

Insight, psychosis and ethnicity: a case–note study. Johnson S, et al. **Psychol Med** 1996 Sep;26(5):1081–4

Do cognitive complaints either predict future cognitive decline or reflect past cognitive decline? A longitudinal study of an elderly community sample. Jorm AF, et al. **Psychol Med** 1997 Jan;27(1):91–8

Cognitive performance and complaints of cognitive impairment in chronic fatigue syndrome (CFS). Wearden A, et al. **Psychol Med** 1997 Jan;27(1):81–90

Thurstonian and Brunswikian origins of uncertainty in judgment: a sampling model of confidence in sensory discrimination. Juslin P, et al. **Psychol Rev** 1997 Apr; 104(2):344–66

The effects of perceived stress, traits, mood states, and stressful daily events on salivary cortisol. van Eck M, et al. **Psychosom Med** 1996 Sep–Oct;58(5):447–58

Body–size estimation in eating disorders using video distortion on a life–size screen. Probst M, et al. **Psychother Psychosom** 1997;66(2):87–91

Psychometric properties of a brief self–report Type A questionnaire for use in primary health care. Karlberg L, et al. **Scand J Prim Health Care** 1997 Mar;15(1):52–6

Impact of patient with patient interaction on perceived rheumatoid arthritis overall disease status. Baker PR, et al. **Scand J Rheumatol** 1996;25(4):207–12

First person account: a voice from another closet. Wagner PS. **Schizophr Bull** 1996;22(2):399–401

Assessing rearing behaviour from the perspectives of the parents: a new form of the EMBU. Castro J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May;32(4):230–5

The menopause: women's psychology and health care. Defey D, et al. **Soc Sci Med** 1996 May;42(10):1447–56

Predictors of sense of competence in caregivers of demented persons. Vernooij–Dassen MJ, et al. **Soc Sci Med** 1996 Jul; 43(1):41–9

Withdrawal symptoms and previous attempts to quit smoking: associations with self–efficacy. Scholte RH, et al. **Subst Use Misuse** 1997 Jan;32(2):133–48

[To measure the measurable (see comments)] Mellergård M. **Ugeskr Laeger** 1996 Oct 14;158(42):5952–3. Comment in: Ugeskr Laeger 1997 Jan 6;159(2):188. **(Dan)**

[Self–assessed quality of mastication in relation to remaining teeth and self–assessed health status in elderly persons] Masamura K, et al. **Nippon Koshu Eisei Zasshi** 1996 Sep; 43(9):835–43 (Eng. Abstr.) **(Jpn)**

[Self–judgment of personality traits and cognitive dimensions of the self] Horiuchi T. **Shinrigaku Kenkyu** 1996 Dec; 67(5):390–5 (Eng. Abstr.) **(Jpn)**

[Self–evaluation on the ability to retrieve Kanji words: a comparison between an aphasiac and normal subjects] Tanigami A, et al. **Shinrigaku Kenkyu** 1997 Apr;68(1):17–24 (Eng. Abstr.) **(Jpn)**

[A method for the self–assessment of social adaptation in parkinsonism patients] Glozman ZhM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):35–9 (Eng. Abstr.) **(Rus)**

[Validity and reliability of the migraine self–questionnaire Alcoi–1995] Montiel I, et al. **Rev Neurol** 1997 Aug; 25(144):1173–7 (Eng. Abstr.) **(Spa)**

[Prevalence of migraine in a homogeneous population using the self–questionnaire 'Alcoi–1995'] Montiel I, et al. **Rev Neurol** 1997 Aug;25(144):1177–80 (Eng. Abstr.) **(Spa)**

SELF CARE

Self–care responses to illness of patients with various cancer diagnoses. Greimel ER, et al. **Acta Oncol** 1997;36(2):141–50

Approaches for incorporating ovulation detection devices and home kits into learning NFP—implications for service delivery. Kirkman RJ. **Adv Contracept** 1997 Jun–Sep; 13(2–3):269–72 (6 ref.)

Testing for HIV at home: what are the issues? [editorial] [see comments] Schopper D, et al. **AIDS** 1996 Nov; 10(13):1455–65 (97 ref.). Comment in: AIDS 1997 Jun;11(7):936–7.

Empowering patients by promoting self–care. O'Day JM Jr. **Am J Health Syst Pharm** 1996 Aug 15;53(16):1898, 1903

A randomized study comparing a patient–directed hypertension management strategy with usual office–based care. Zarnke KB, et al. **Am J Hypertens** 1997 Jan; 10(1):58–67

Adding an 'at home' path to your discharge plan. Wells S. **Am J Nurs** 1996 Oct;96(10):73–4

Therapists' perceptions of pediatric occupational therapy interventions in self–care. Swart SK, et al. **Am J Occup Ther** 1997 Apr;51(4):289–96

Influence on asthma morbidity of asthma education programs based on self–management plans following treatment optimization. Coté J, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1509–14

Asthma self care efficacy and morbidity in polyclinic outpatients. Lee KA, et al. **Ann Acad Med Singapore** 1995 Nov;24(6):846–50

Interventions to reduce the impact of chronic disease: community–based arthritis patient education. Goeppinger J, et al. **Annu Rev Nurs Res** 1997;15:101–22 (63 ref.)

Home screening kit for HIV approved [news] **AORN J** 1996 Oct;64(4):587

Computer networks: new tools for nursing practice [editorial] Brennan PF. **Appl Nurs Res** 1996 Nov;9(4):159–60

Inpatient self–management of bipolar disorder. Pollack LE. **Appl Nurs Res** 1996 May;9(2):71–9

The experience of fatigue and strategies of self–care among persons with multiple sclerosis. Stuifbergen AK, et al. **Appl Nurs Res** 1997 Feb;10(1):2–10

Anonymous HIV testing using home collection and telemedicine counseling. A multicenter evaluation [see comments] Frank AP, et al. **Arch Intern Med** 1997 Feb 10;157(3):309–14. Comment in: Arch Intern Med 1997 Feb 10;157(3):261–2.

Spinal cord injury rehabilitation. 3. Functional outcomes. Formal CS, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S59–64 (58 ref.)

Home exercise to improve strength and walking velocity after hip fracture: a randomized controlled trial. Sherrington C, et al. **Arch Phys Med Rehabil** 1997 Feb; 78(2):208–12

Application of an attribution–affect–action model of caregiving behavior. Fopma–Loy J, et al. **Arch Psychiatr Nurs** 1997 Aug;11(4):210–7

Instrument development: the Mental Health–Related Self–Care Agency Scale. West P, et al. **Arch Psychiatr Nurs** 1997 Jun;11(3):126–32

Effects of self–care education on the health status of inner–city patients with osteoarthritis of the knee [see comments] Mazzuca SA, et al. **Arthritis Rheum** 1997 Aug; 40(8):1466–74. Comment in: Arthritis Rheum 1997 Aug;40(8):1371–3.

No dominion. Colquhoun JP. **Aust Fam Physician** 1996 Feb; 25(2):224

Self care for general practitioners [news] Mulligan K. **Aust Fam Physician** 1997 Jul;26(7):787–9

Patients' perceptions of food–induced asthma. Woods RK, et al. **Aust N Z J Med** 1996 Aug;26(4):504–12

Effect of a public awareness campaign on the appropriateness of patient–initiated skin examination in general practice. Baade PD, et al. **Aust N Z J Public Health** 1996 Dec; 20(6):640–3

Controversy surrounds home monitoring and diagnosis [news] Roberts J. **BMJ** 1996 Nov 30;313(7069):1354

Who is responsible for good oral health? [see comments] Sarll DW. **Br Dent J** 1996 Mar 9;180(5):164–7. Comment in: Br Dent J 1996 Jun 22;180(12):447. Comment in: Br Dent J 1996 Jun 22;180(12):448.

The therapeutic effect of reactive self–monitoring on the reduction of inappropriate social and stereotypic behaviours. Pope ST, et al. **Br J Clin Psychol** 1996 Nov; 35 (Pt 4):585–94

Self–management in the treatment of ataxia: a case study in reducing ataxic tremor through relaxation and biofeedback. Guercio J, et al. **Brain Inj** 1997 May;11(5):353–62

Differential influences on asthma self–management knowledge and self–management behavior in acute severe asthma. Kolbe J, et al. **Chest** 1996 Dec;110(6):1463–8

A practical guide for peak expiratory flow monitoring in asthma patients. Jain P, et al. **Cleve Clin J Med** 1997 Apr; 64(4):195–202 (42 ref.)

Prevalence of hypertension and rate of blood pressure control as assessed by home blood pressure measurements in a rural Japanese community, Ohasama. Nagai K, et al. **Clin Exp Hypertens** 1996 Jul;18(5):713–28

Hypoglycaemic and self–care behaviour in IDDM adults in Bulgaria [letter] Cox DJ, et al. **Diabet Med** 1996 Oct; 13(10):916–7

Development of a questionnaire identifying factors responsible for successful self–management of insulin–treated diabetes. Day JL, et al. **Diabet Med** 1996 Jun;13(6):564–73

Possibilities and advantages with home sampling of HbA1c: eight years experience. Snellman K, et al. **Diabet Med** 1997 May;14(5):401–3

Self–monitoring of triglycerides by type 2 diabetic patients: variability in fasting and postprandial levels. Stewart MW, et al. **Diabet Med** 1996 Oct;13(10):894–7

Effects of a brief office–based intervention to facilitate diabetes dietary self–management. Glasgow RE, et al. **Diabetes Care** 1996 Aug;19(8):835–42

Personal–model beliefs and social–environmental barriers related to diabetes self–management. Glasgow RE, et al. **Diabetes Care** 1997 Apr;20(4):556–61

Quality of life and associated characteristics in a large national sample of adults with diabetes. Glasgow RE, et al. **Diabetes Care** 1997 Apr;20(4):562–7

The role of patient participation in the doctor visit. Implications for adherence to diabetes care. Golin CE, et al. **Diabetes Care** 1996 Oct;19(10):1153–64 (134 ref.)

Diabetes self–management. Self–reported recommendations and patterns in a large population. Ruggiero L, et al. **Diabetes Care** 1997 Apr;20(4):568–76

Assistance arrangements and use of services among persons with multiple sclerosis and their caregivers. Aronson KJ, et al. **Disabil Rehabil** 1996 Jul;18(7):354–61

Self management of oral anticoagulant therapy after heart valve replacement. Hasenkam JM, et al. **Eur J Cardiothorac Surg** 1997 May;11(5):935–42

Asthma in Greenwich, UK: impact of the disease and current management practices. Marks GB, et al. **Eur Respir J** 1997 Jun;10(6):1224–9

Should patients with sleep apnoea/hypopnoea syndrome be diagnosed and managed on the basis of home sleep studies? [see comments] Parra O, et al. **Eur Respir J** 1997 Aug; 10(8):1720–4. Comment in: Eur Respir J 1997 Aug;10(8):1699–700.

Asthma self–management programmes in a population of Italian children: a multicentric study. Italian Study Group on Asthma Self–Management Programmes. Ronchetti R, et al. **Eur Respir J** 1997 Jun;10(6):1248–53

Full polysomnography versus home sleep study: searching for the optimal procedure [editorial; comment] Teschler H, et al. **Eur Respir J** 1997 Aug;10(8):1699–700. Comment on: Eur Respir J 1997 Aug;10(8):1720–4.

Evaluation of a self–management plan for chronic obstructive pulmonary disease. Watson PB, et al. **Eur Respir J** 1997 Jun;10(6):1267–71

Home ovulation testing in a donor insemination service. Anderson RA, et al. **Hum Reprod** 1996 Aug;11(8):1674–7

Telephone–based guided self–help for binge eating disorder: a feasibility study. Wells AM, et al. **Int J Eat Disord** 1997 May;21(4):341–6

Effects of Orem–based nursing intervention on nutritional self–care of myocardial infarction patients. Aish AE, et al. **Int J Nurs Stud** 1996 Jun;33(3):259–70

Self–management of chronic illness: implications for nursing. Coates VE, et al. **Int J Nurs Stud** 1995 Dec;32(6):628–40

Diabetic adolescents' compliance with health regimens and associated factors. Hentinen M, et al. **Int J Nurs Stud** 1996 Jun;33(3):325–37

Self–care behaviours initiated by chemotherapy patients in response to fatigue. Richardson A, et al. **Int J Nurs Stud** 1997 Feb;34(1):35–43

Group and single–subject evaluation of a programme to promote self–care in elderly nursing home residents. Blair CE, et al. **J Adv Nurs** 1996 Dec;24(6):1207–13

The development of the Pain Management Inventory for patients with arthritis. Davis GC, et al. **J Adv Nurs** 1996 Aug;24(2):236–43

Surgical pearl: the self–removable suture. Smith SP 3rd, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1009–10

Using self–management procedures to improve the productivity of adults with developmental disabilities in a competitive employment setting. Christian L, et al. **J Appl Behav Anal** 1997 Spring;30(1):169–72

The Asthma Action Plan: at the fulcrum of individualized

asthma care [editorial; comment] Atkins FM. **J Asthma** 1997;34(1):1–3. Comment on: J Asthma 1997 ;34(1):5–14.
Assessing the family asthma management system. Klinnert MD, et al. **J Asthma** 1997;34(1):77–88
Validity of self–obtained vaginal specimens for diagnosis of trichomoniasis. Schwebke JR, et al. **J Clin Microbiol** 1997 Jun;35(6):1618–9
HIV testing in the home [news]
J Community Health Nurs 1997;14(1):67
Behavioral Self–Control Program for Windows: results of a controlled clinical trial. Hester RK, et al.
J Consult Clin Psychol 1997 Aug;65(4):686–93
Monitoring progress after lung transplantation from home–patient adherence. Finkelstein SM, et al.
J Med Eng Technol 1996 Nov–Dec;20(6):203–10
Childhood enuresis: application of Orem's Self–Care Practice Model to home visits in Turkey. Terakye G, et al.
J Pediatr Nurs 1997 Jun;12(3):193–7
Conceptual and methodologic issues in quantifying perceptual accuracy in childhood asthma. Fritz GK, et al.
J Pediatr Psychol 1996 Apr;21(2):153–73 (64 ref.)
Self–care behaviors in insulin–dependent diabetes: evaluative tools and their associations with glycemic control. Hanson CL, et al. **J Pediatr Psychol** 1996 Aug;21(4):467–82
Home test system for HIV approved by FDA [news]
J Psychosoc Nurs Ment Health Serv 1996 Aug;34(8):9
Inpatients with bipolar disorder: their quest to understand. Pollack LE. **J Psychosoc Nurs Ment Health Serv** 1996 Jun; 34(6):19–24
Glycosuric tests should not be employed in population screenings for NIDDM. Friderichsen B, et al.
J Public Health Med 1997 Mar;19(1):55–60
The use of continuous quality improvement methods to implement practice guidelines in asthma. Gibson PG, et al. **J Qual Clin Pract** 1996 Jun;16(2):87–102
A qualitative study of barriers to formal treatment among women who self–managed change in addictive behaviours. Copeland J. **J Subst Abuse Treat** 1997 Mar–Apr; 14(2):183–90
Initial experience with home therapeutic electrical stimulation for continence in the myelomeningocele population. Balcom AH, et al. **J Urol** 1997 Sep;158(3 Pt 2):1272–6
Adjuvant home urethral balloon dilation for the recalcitrant urethral stricture. Levine LA, et al. **J Urol** 1997 Sep;158(3 Pt 1):818–21
Home–use HIV test kits in Turkey [letter] Doğanci L.
Lancet 1997 May 10;349(9062):1401
Nursing implications of self–care in pregnancy. Hart MA.
MCN Am J Matern Child Nurs 1996 May–Jun;21(3):137–43
Educational video game for juvenile diabetes: results of a controlled trial. Brown SJ, et al. **Med Inf (Lond)** 1997 Jan–Mar;22(1):77–89
Telemedicine for diabetes care: the DIABTel approach towards diabetes telecare. Gómez EJ, et al.
Med Inf (Lond) 1996 Oct–Dec;21(4):283–95
Living with hypertension. Introduction to dealing with elevated blood pressure. Flack JM. **N C Med J** 1997 May–Jun;58(3):193–6
ADA takes stand on at–home bleaching products [news]
N Y State Dent J 1997 May;63(5):41
Increasing metamemory in older adults. Dellefield KS, et al. **Nurs Res** 1996 Sep–Oct;45(5):284–90
The effects of nursing care guided by self–regulation theory on coping with radiation therapy. Johnson JE, et al.
Oncol Nurs Forum 1997 Jul;24(6):1041–50
Patient information handouts: taking care of yourself––a self–help guide for patients with cancer. Whitman–Obert HH. **Oncol Nurs Forum** 1996 Oct;23(9):1443–5
Patient self–management skills influence the course of glaucoma [editorial] Spaeth GL. **Ophthalmology** 1997 Jul; 104(7):1065–6
Short–term compliance with peak flow monitoring: results from a study of inner city children with asthma. Redline S, et al. **Pediatr Pulmonol** 1996 Apr;21(4):203–10
Multicenter evaluation of a patient–administered test for blood cholesterol measurement. McNamara JR, et al.
Prev Med 1996 Sep–Oct;25(5):583–92
Relationships between self–care resources and the quality of life of persons with heart failure: a comparison of treatment groups. Baas LS, et al. **Prog Cardiovasc Nurs** 1997 Winter; 12(1):25–38
Prospective evaluation of psychosocial adaptation to stoma surgery: the role of self–efficacy. Bekkers MJ, et al.
Psychosom Med 1996 Mar–Apr;58(2):183–91
Effectiveness of two preventive interventions for coronary heart disease in primary care. Meland E, et al.
Scand J Prim Health Care 1997 Mar;15(1):57–64
Bandura's theory of self–efficacy: applications to oncology. Lev EL. **Sch Inq Nurs Pract** 1997 Spring;11(1):21–37; discussion 39–43 (62 ref.)
Patient education in the management of diabetes mellitus. Tan AS, et al. **Singapore Med J** 1997 Apr;38(4):156–60
Young doctors' health––II. Health and health behaviour. Baldwin PJ, et al. **Soc Sci Med** 1997 Jul;45(1):41–4
Paths to recovery from substance misuse: change of lifestyle and the role of treatment. Biomqvist J.
Subst Use Misuse 1996 Nov;31(13):1807–52 (109 ref.)
Preventing readmissions to hospital for asthma [editorial; comment] Mitchell EA. **Thorax** 1997 Mar;52(3):207–8. Comment on: Thorax 1997 Mar;52(3):223–8.
Health perceptions and self–care response to illness among users of medical and alternative health services in St Andrew, Jamaica. Williams SK. **West Indian Med J** 1996 Sep;45(3):78–81
Asthma management––a call for action [editorial; comment] Dales RE. **West J Med** 1996 Sep;165(3):157–9. Comment on: West J Med 1996 Sep;165(3):149–53.
Action plans in asthma management. Why, when, and how? [see comments] Janson S. **West J Med** 1996 Sep; 165(3):149–53. Comment in: West J Med 1996 Sep;165(3):157–9.
Treating one's own ailments. Ibrahim MI.
World Health Forum 1996;17(4):409–10
[Using self–efficacy in assessing self–care to the IDDM patients] Chang FT, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1997 Jun; 13(6):351–9 (Eng. Abstr.) **(Chi)**
[Helicobacter pylori––when and how do gastroenterologists treat themselves? A clinical and practical survey] Labenz J, et al. **Dtsch Med Wochenschr** 1997 May 16; 122(20):637–42 (Eng. Abstr.) **(Ger)**
[Self–monitoring of blood pressure] Weber F, et al.
Dtsch Med Wochenschr 1997 Mar 14;122(11):335–8 (46 ref.) **(Ger)**
[Self–monitoring of blood coagulation by patients. Principles, procedures and long–term outcome] Bernardo A.
Med Monatsschr Pharm 1997 Feb;20(2):30–5 **(Ger)**
[Blood coagulation self–control (editorial)] Heinzl S.
Med Monatsschr Pharm 1996 Oct;19(10):283 **(Ger)**
[Do–it–yourself tests––useful or dangerous?] Daae C, et al.
Tidsskr Nor Laegeforen 1997 Aug 10;117(18):2605 **(Nor)**
[Self care and primary care] Llauger MA, et al.
Aten Primaria 1997 Mar 31;19(5):267–70 **(Spa)**

ADVERSE EFFECTS

DIY dentures––a case report. Jagger DC, et al.
Br Dent J 1996 Mar 23;180(6):221–2
[Clinical and morphological analysis of long–term fasting as self–therapy with lethal outcome] Zhdanov GG, et al.
Klin Med (Mosk) 1996;74(8):71–2 **(Rus)**

ECONOMICS

Series on the quality of health care [letter; comment] Friedman SA. **N Engl J Med** 1997 Mar 13;336(11):805; discussion 807. Comment on: N Engl J Med 1996 Oct 17;335(16):1227–31.

HISTORY

The Holy Bible: insights into perinatal practice in ancient times. Dunn PM. **Arch Dis Child Fetal Neonatal Ed** 1996 Nov;75(3):F219–20
Self–care: ready or not! Dodd MJ. **Oncol Nurs Forum** 1997 Jul;24(6):983–90

INSTRUMENTATION

Devices for blood pressure self measurement: tested in comparison. Anlauf M, et al. **Z Kardiol** 1996;85 Suppl 3:20–5
Blood pressure self–measurement in upper arm and in wrist for treatment control of arterial hypertension compared to ABPM. Eckert S, et al. **Z Kardiol** 1996;85 Suppl 3:109–11
Devices for blood pressure self–measurement: present and future. Schmidt W. **Z Kardiol** 1996;85 Suppl 3:13–9
[Blood pressure self–monitoring: trust is good, control is better. Patient education and monitoring patient blood pressure monitors are necessary] Schweiger A.
Fortschr Med 1996 Nov 20;114(32):30 **(Ger)**

METHODS

Home access HIV testing. What took so long? [editorial; comment] Stryker J, et al. **Arch Intern Med** 1997 Feb 10; 157(3):261–2. Comment on: Arch Intern Med 1997 Feb 10;157(3):309–14.
Compliance with a self–care manual for bulimia nervosa: predictors and outcome. Troop N, et al.
Br J Clin Psychol 1996 Sep;35 (Pt 3):435–8
Self–management plans: uses and limitations. Partridge MR.
Br J Hosp Med 1996 Feb 7–20;55(3):120–2 (11 ref.)
Self–regulation of slow cortical potentials in epilepsy: a retrial with analysis of influencing factors. Kotchoubey B, et al.
Epilepsy Res 1996 Nov;25(3):269–76
Effects of a mass media behavioral treatment for chronic headache: a pilot study. de Bruijn–Kofman AT, et al.
Headache 1997 Jul–Aug;37(7):415–20
Take control of high–cost asthma [see comments] Flaum M, et al. **J Asthma** 1997;34(1):5–14 (18 ref.). Comment in: J Asthma 1997 ;34(1):1–3.
Nicotine patch and self–help video for cigarette smoking cessation. Killen JD, et al. **J Consult Clin Psychol** 1997 Aug;65(4):663–72
Obstetric first aid in the community––partners in safe motherhood. A strategy for reducing maternal mortality. Sibley L, et al. **J Nurse Midwifery** 1997 Mar–Apr; 42(2):117–21
An educational approach to successful management of childhood asthma as a chronic illness. Baldaia L.
J Pediatr Nurs 1996 Oct;11(5):335–6
Readiness to adopt a self–management approach to chronic pain: the Pain Stages of Change Questionnaire (PSOCQ). Kerns RD, et al. **Pain** 1997 Aug;72(1–2):227–34
Daily symptoms and responses in adults: a review. Burman ME. **Public Health Nurs** 1996 Aug;13(4):294–301 (57 ref.)
The use of sequential self–obtained vaginal smears for detecting changes in the vaginal flora. Schwebke JR, et al. **Sex Transm Dis** 1997 Apr;24(4):236–9
Impact of a nurse–led home management training programme in children admitted to hospital with acute asthma: a randomised controlled study [see comments] Madge P, et al. **Thorax** 1997 Mar;52(3):223–8. Comment in: Thorax 1997 Mar;52(3):207–8.

PSYCHOLOGY

Fostering self–change among problem drinkers: a proactive community intervention. Sobell LC, et al. **Addict Behav** 1996 Nov–Dec;21(6):817–33
End–of–treatment self–efficacy: a predictor of abstinence. Goldbeck R, et al. **Addiction** 1997 Mar;92(3):313–24
Competence thresholds for the use of inhalers in people with dementia. Allen SC. **Age Ageing** 1997 Mar;26(2):83–6
Self–help and life quality in persons with HIV disease. Grimes DE, et al. **AIDS Care** 1996 Dec;8(6):691–9
Home alone: the role of cognition in return to independent living. MacNeill SE, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):755–8
Older adults as a community resource: results from the National Survey of Self–Care and Aging. Kincade JE, et al. **Gerontologist** 1996 Aug;36(4):474–82
A self–help smoking cessation program for inner–city African Americans: results from the Harlem Health Connection Project. Resnicow K, et al. **Health Educ Behav** 1997 Apr; 24(2):201–17
Patients' experiences of long–term oxygen therapy. Ring L, et al. **J Adv Nurs** 1997 Aug;26(2):337–44
Commentary: self–care, the three–legged stool, and remembered wellness [see comments] Benson H.
J Cardiovasc Nurs 1996 Apr;10(3):1–3. Comment in: J Cardiovasc Nurs 1996 Apr;10(3):v–x.
Negative outcomes: what is the evidence on self–administered treatments? Scogin F, et al.
J Consult Clin Psychol 1996 Oct;64(5):1086–9
Perceived self–care information needs and information––seeking behaviors before and after elective spinal procedures. Holmes KL, et al. **J Neurosci Nurs** 1997 Apr;29(2):79–85
Family responses to children with diabetes and their influence on self–care. Faulkner MS. **J Pediatr Nurs** 1996 Apr; 11(2):82–93
An evaluation of the efficacy of supervised cognitive behavioral self–help bulimia nervosa. Cooper PJ, et al.
J Psychosom Res 1996 Mar;40(3):281–7
Drinking restraint and alcohol–related outcomes: exploring the contributions of beverage instructions, beverage content and self–monitoring. Collins RL, et al.
J Stud Alcohol 1996 Sep;57(5):563–71
Adjustment responses of children and their mothers to cancer: self–care and anxiety. Moore JB, et al.
Oncol Nurs Forum 1997 Apr;24(3):519–25
"With a little help from my friends I get by": self–help books and psychotherapy. Essay review. Apfel RJ. **Psychiatry** 1996 Winter;59(4):309–22
Generalization and maintenance of treatment gains using self–management procedures with behaviorally disordered adolescents. Gregory KM, et al. **Psychol Rep** 1997 Apr; 80(2):683–90
Consumerism, reflexivity and the medical encounter. Lupton D. **Soc Sci Med** 1997 Aug;45(3):373–81

STANDARDS

Posthospital setting, resource utilization, and self–care outcome in older women with hip fracture. Levi SJ.
Arch Phys Med Rehabil 1997 Sep;78(9):973–9
Compliance with a self–care manual for bulimia nervosa: predictors and outcome. Troop N, et al.
Br J Clin Psychol 1996 Sep;35 (Pt 3):435–8
Acupressure as an adjunct to a pulmonary rehabilitation program. Maa SH, et al. **J Cardiopulm Rehabil** 1997 Jul–Aug;17(4):268–76
Effects of group– versus home–based exercise in the treatment of obesity. Perri MG, et al.
J Consult Clin Psychol 1997 Apr;65(2):278–85
Electronic communication with patients. Evaluation of distance medicine technology. Balas EA, et al. **JAMA** 1997 Jul 9;278(2):152–9 (93 ref.)
Cost–effectiveness of smoking cessation modalities: comparing apples with oranges? Mudde AN, et al.
Prev Med 1996 Nov–Dec;25(6):708–16

STATISTICS & NUMERICAL DATA

Comparing compliance patterns between randomized treatments. Vrijens B, et al. **Control Clin Trials** 1997 Jun; 18(3):187–203

TRENDS

Over–the–counter antimicrobials: the hidden costs of resistance [letter; comment] Smith RD, et al.
J Antimicrob Chemother 1996 May;37(5):1031–2. Comment on: J Antimicrob Chemother 1995 Sep;36(3):577–9. Comment on: J Antimicrob Chemother 1995 Sep;36(3):579–84.

UTILIZATION

Reported use of asthma management plans in South Australia [see comments] Beilby JJ, et al. **Med J Aust** 1997 Mar 17; 166(6):298–301. Comment in: Med J Aust 1997 Mar 17;166(6):287–8.

SELF CARE (REHABILITATION) see **ACTIVITIES OF DAILY LIVING**

SELF CONCEPT

see related
BODY IMAGE

A conceptual and quantitative analysis of 178 historical cases of dysmorphophobia. Berrios GE, et al. **Acta Psychiatr Scand** 1996 Jul;94(1):1–7

Parental divorce and depression in young adulthood: adolescents' closeness to parents and self–esteem as mediating factor. Palosaari U, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):20–6

Confirmatory and disconfirmatory family communication as predictor of offspring socio–emotional functioning. A 10 to 14 year follow–up of children at risk. Wichstrom L, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):49–56

Objects, decision considerations and self–image in men's and women's impulse purchases. Dittmar H, et al. **Acta Psychol (Amst)** 1996 Sep;93(1–3):187–206

Subtypes within a sample of precontemplating smokers: a preliminary extension of the stages of change. Dijkstra A, et al. **Addict Behav** 1997 May–Jun;22(3):327–37

Self–directed hostility and family functioning in normal–weight bulimics and overweight binge eaters. Friedman MA, et al. **Addict Behav** 1997 May–Jun; 22(3):367–75

Psychometric evaluation of the Situational Confidence Questionnaire in adolescents: fitting a graded item response model. Kirisci L, et al. **Addict Behav** 1996 May–Jun; 21(3):303–17

Self–concept changes over time in cognitive–behavioral treatment for smoking cessation. Shadel WG, et al. **Addict Behav** 1996 Sep–Oct;21(5):659–63

Pregnancy smoking cessation: a case of mistaken identity. Stotts AL, et al. **Addict Behav** 1996 Jul–Aug;21(4):459–71

End–of–treatment self–efficacy: a predictor of abstinence. Goldbeck R, et al. **Addiction** 1997 Mar;92(3):313–24

Adolescent self–esteem and locus of control: a longitudinal study of gender and age differences. Chubb NH, et al. **Adolescence** 1997 Spring;32(125):113–29

Urban–rural differences in adolescent self–esteem, leisure boredom, and sensation–seeking as predictors of leisure–time usage and satisfaction. Gordon WR, et al. **Adolescence** 1996 Winter;31(124):883–901

The role of parental involvement in youth sport participation and performance. Hoyle RH, et al. **Adolescence** 1997 Spring;32(125):233–43

4–H Night at the Movies: a program for adolescents and their families. Jurich AP, et al. **Adolescence** 1996 Winter; 31(124):863–74

Social support and self–esteem in unemployed university graduates. Lacković–Grgin K, et al. **Adolescence** 1996 Fall; 31(123):701–7

The role of cultural norms in the self–esteem and drug use relationship. Moore S, et al. **Adolescence** 1996 Fall; 31(123):523–42

Attachment to parents and peers in late adolescence and their relationship with self–image. O'Koon J. **Adolescence** 1997 Summer;32(126):471–82

Big Brothers: impact on Little Brothers' self–concepts and behaviors. Turner S, et al. **Adolescence** 1996 Winter; 31(124):875–82

Locus of control, self–concept, and self–esteem among at–risk African–American adolescents. Wood PC, et al. **Adolescence** 1996 Fall;31(123):597–604

Body/self awareness and interpersonal communications: fundamental components of reproductive health awareness. Aumack–Yee K. **Adv Contracept** 1997 Jun–Sep; 13(2–3):319–23 (6 ref.)

A prospective study of self–esteem and alcohol use disorders in early adulthood: evidence for gender differences. Walitzer KS, et al. **Alcohol Clin Exp Res** 1996 Sep; 20(6):1118–24

Development of deaf bicultural identity. Holcomb TK. **Am Ann Deaf** 1997 Apr;142(2):89–93

Classroom dialogues and deaf identities. Mudgett–DeCaro P, et al. **Am Ann Deaf** 1997 Apr;142(2):96–9

Gurdjieff and ego–enhancement: a powerful alliance. Stanton HE. **Am J Clin Hypn** 1997 Jul;40(1):376–84

Patterns of adolescent involvement in problem behaviors: relationship to self–efficacy, social competence, and life events. Chung H, et al. **Am J Community Psychol** 1996 Dec;24(6):771–84

The impact of the transition to high school on the self–system and perceived social context of poor urban youth. Seidman E, et al. **Am J Community Psychol** 1996 Aug;24(4):489–515

Relationship between self–efficacy perceptions and in–treatment drug use among regular cocaine users. Rounds–Bryant JL, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):383–95

Self–enhancing effect of social feedback on cognitive task performance. Waldie KE, et al. **Am J Ment Retard** 1996 May;100(6):620–31

The Volitional Questionnaire: psychometric development and practical use. Chern JS, et al. **Am J Occup Ther** 1996 Jul–Aug;50(7):516–25

Competency beliefs and occupational role behavior among adolescents: explication of the personal causation construct. Henry AD, et al. **Am J Occup Ther** 1997 Apr;51(4):267–76 (80 ref.)

A therapist's guide to children's self–esteem. Willoughby C, et al. **Am J Occup Ther** 1996 Feb;50(2):124–32

Attachment, self–concept, and academic motivation in high–school students. Learner DG, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):485–92

Building relationships and resilience in the prevention of youth violence. Gabriel RM, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):48–55

The self in relation to others: cognitive and motivational underpinnings. Andersen SM, et al. **Ann N Y Acad Sci** 1997 Jun 18;818:233–75 (220 ref.)

On the rise and fall of self–conception in primates. Gallup GG Jr. **Ann N Y Acad Sci** 1997 Jun 18;818:72–82 (26 ref.)

Self–knowledge and self–awareness. Kihlstrom JF, et al. **Ann N Y Acad Sci** 1997 Jun 18;818:4–17 (30 ref.)

The development of a self. Comments on the paper of Neisser. Lewis M. **Ann N Y Acad Sci** 1997 Jun 18; 818:279–83

The self in self–conscious emotions. Lewis M. **Ann N Y Acad Sci** 1997 Jun 18;818:118–42 (49 ref.)

A comparison of the self–awareness and kinesthetic–visual matching theories of self–recognition: autistic children and others. Mitchell RW. **Ann N Y Acad Sci** 1997 Jun 18; 818:38–62 (111 ref.)

The roots of self–knowledge: perceiving self, it, and thou. Neisser U. **Ann N Y Acad Sci** 1997 Jun 18;818:18–33 (36 ref.)

Finding one's self in time. Nelson K. **Ann N Y Acad Sci** 1997 Jun 18;818:102–16 (31 ref.)

Suffering in people with rheumatoid arthritis. Dildy SP. **Appl Nurs Res** 1996 Nov;9(4):177–83

Suicidal adolescent perceptions after an art future image intervention. Walsh SM, et al. **Appl Nurs Res** 1997 Feb; 10(1):19–26

Self–esteem and health. Is the relationship real? [editorial; comment] Chapman RW. **Arch Fam Med** 1997 Jan–Feb; 6(1):71. Comment on: Arch Fam Med 1997 Jan–Feb;6(1):67–70.

The relationship of self–esteem to the health–related behaviors of the patients of a primary care clinic [see comments] Hurst DF, et al. **Arch Fam Med** 1997 Jan–Feb; 6(1):67–70. Comment in: Arch Fam Med 1997 Jan–Feb;6(1):71.

Children in the process of becoming [editorial; comment] Wilson JM, et al. **Arch Pediatr Adolesc Med** 1996 Dec; 150(12):1234–5. Comment on: Arch Pediatr Adolesc Med 1996 Dec;150(12):1238–45.

Serial self–portrait: a technique to monitor changes in self–concept. Glaister JA. **Arch Psychiatr Nurs** 1996 Oct; 10(5):311–8

Transcendence: the meaning of great–grandmothering. Reese CG, et al. **Arch Psychiatr Nurs** 1996 Aug;10(4):245–51

The self–schema model: a theoretical approach to the self–concept in eating disorders. Stein KF. **Arch Psychiatr Nurs** 1996 Apr;10(2):96–109 (114 ref.)

Psychophysiological stress in elite golfers during practice and competition. McKay JM, et al. **Aust J Sci Med Sport** 1997 Jun;29(2):55–61

The concept of "self". Gilhotra J. **Aust N Z J Psychiatry** 1995 Dec;29(4):598–603 (20 ref.)

Acculturation and its effects on self–esteem among immigrant Latina women. Flaskerud JH, et al. **Behav Med** 1996 Fall; 22(3):123–33

The relationship between self–esteem and deviant sexual arousal in nonfamilial child molesters. Marshall WL. **Behav Modif** 1997 Jan;21(1):86–96

Evaluating the role of physical, operant, cognitive, and affective factors in the pain behaviors of chronic pain patients. Turk DC, et al. **Behav Modif** 1997 Jul;21(3):259–80

Psychiatric symptomatology and the recall of positive and negative personality information. Furnham A, et al. **Behav Res Ther** 1996 Sep;34(9):731–3

Memory and confidence in memory judgements among individuals with obsessive compulsive disorder and non–clinical controls. MacDonald PA, et al. **Behav Res Ther** 1997 Jun;35(6):497–505

Self–focused attention in the treatment of social phobia. Woody SR, et al. **Behav Res Ther** 1997 Feb;35(2):117–29

The relationship between dimensional self–concept and juvenile gang involvement: implications for prevention, intervention, and court referred diversion programs. Herrmann DS, et al. **Behav Sci Law** 1997 Spring; 15(2):181–94

Pride. Wessely S. **BMJ** 1996 Dec 21–28;313(7072):1594–5

A prospective study of self–esteem in the prediction of eating problems in adolescent schoolgirls: questionnaire findings. Button EJ, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):193–203

Meaning in life: clinical relevance and predictive power. Debats DL. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):503–16

Changes in alcohol expectancies during treatment relate to subsequent abstinence survivorship. Jones BT, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):221–34

Significant others' contribution to early adolescents' perceptions of their competence. Trent LM, et al. **Br J Educ Psychol** 1996 Mar;66 (Pt 1):95–107

Epilepsy in general practice: patients' psychological symptoms and their perception of stigma. Ridsdale L, et al. **Br J Gen Pract** 1996 Jun;46(407):365–6

Reflective capacity and its significance to the attachment concept of the self. West ML. **Br J Med Psychol** 1997 Mar;70 (Pt 1):17–25 (45 ref.)

"The reason for hating myself": a patient's request for breast reduction. Green AR. **Br J Plast Surg** 1996 Oct; 49(7):439–41

Women's self–esteem: a community study of women who report and do not report childhood sexual abuse. Romans S, et al. **Br J Psychiatry** 1996 Dec;169(6):696–704

Body dysmorphic disorder. A survey of fifty cases [see comments] Veale D, et al. **Br J Psychiatry** 1996 Aug; 169(2):196–201. Comment in: Br J Psychiatry 1997 Jan;170:90.

Illusory self–assessments—can they be reduced? McKenna FP, et al. **Br J Psychol** 1997 Feb;88 (Pt 1):39–51

School attendance, health–risk behaviors, and self–esteem in adolescents applying for working papers. Suss AL, et al. **Bull N Y Acad Med** 1996 Winter;73(2):255–66

A study of self–monitoring processes and coping behaviour in burns victims. Fong J. **Burns** 1997 Mar;23 Suppl 1:S8–11

The antichrist delusion as a delusional misidentification syndrome of the self [letter] Silva JA, et al. **Can J Psychiatry** 1997 Feb;42(1):90

Are dependency and self–criticism risk factors for major depressive disorder? [see comments] Zaretsky AE, et al. **Can J Psychiatry** 1997 Apr;42(3):291–7. Comment in: Can J Psychiatry 1997 Apr;42(3):249–50.

Tolstoy, Chekhov, and self–knowledge [editorial] Gianakos D. **Chest** 1997 Sep;112(3):575–6

Stress reactivity and self–recognition. Lewis M, et al. **Child Dev** 1997 Aug;68(4):621–9

Toddlers' acquisition of self/other knowledge: ecological and interpersonal aspects of self and other. Pipp–Siegel S, et al. **Child Dev** 1997 Feb;68(1):69–79

Self–recognition in young children using delayed versus live feedback: evidence of a developmental asynchrony. Povinelli DJ, et al. **Child Dev** 1996 Aug;67(4):1540–54

Situating adolescent gender and self–esteem with personal memories. Thorne A, et al. **Child Dev** 1996 Aug; 67(4):1374–90

The internal working model of the self, attachment, and competence in five–year–olds. Verschueren K, et al. **Child Dev** 1996 Oct;67(5):2493–511

Openness in adoption and the level of child participation. Wrobel GM, et al. **Child Dev** 1996 Oct;67(5):2358–74

Rethinking the effects of homelessness on children: resiliency and competency. Douglass A. **Child Welfare** 1996 Nov–Dec;75(6):741–51 (16 ref.)

Satisfaction with facial appearance among subjects affected by a cleft. Thomas PT, et al. **Cleft Palate Craniofac J** 1997 May;34(3):226–31

The effect of treatment variables on mood and social adjustment in adult patients with pituitary disease. Peace KA, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):445–50

The CF carrier status is not associated with a diminished self–concept or increased anxiety: results of psychometric testing after at least 1 year. Denayer L, et al. **Clin Genet** 1996 May;49(5):232–6

Bodyfat analysis and perception of body image. Sisson BA, et al. **Clin Pediatr (Phila)** 1997 Jul;36(7):415–8

Quality of life and self–esteem in working and nonworking persons with mental illness. Van Dongen CJ. **Community Ment Health J** 1996 Dec;32(6):535–48

Gender differences in recalled parental childrearing behaviors and adult self–esteem. Conte HR, et al. **Compr Psychiatry** 1996 May–Jun;37(3):157–66

Subjective experience and related symptoms in schizophrenia. Kim Y, et al. **Compr Psychiatry** 1997 Jan–Feb;38(1):49–55

Factors influencing health perceptions in patients with panic disorder. Schmidt NB, et al. **Compr Psychiatry** 1996 Jul–Aug;37(4):253–60

A general model for the adaptive function of self–knowledge in animals and humans. Parker ST. **Conscious Cogn** 1997 Mar;6(1):75–86

Exile and professional identity: on going back to Cuba. Shapiro ER. **Cult Divers Ment Health** 1996;2(1):21–33

Peer experiences and social self–perceptions: a sequential model. Boivin M, et al. **Dev Psychol** 1997 Jan;33(1):135–45

A positive view of self: risk or protection for aggressive children? Hughes JN, et al. **Dev Psychopathol** 1997 Winter; 9(1):75–94

Racism and the mental health of African Americans: the role of self and system blame. Neighbors HW, et al. **Ethn Dis** 1996 Winter–Spring;6(1–2):167–75 (53 ref.)

Comparison of Nottingham Health Profile (NHP) scores with exercise duration and measures of ischaemia during treadmill exercise testing in patients with coronary artery disease [see comments] Skinner JS, et al. **Eur Heart J** 1995 Nov;16(11):1561–5. Comment in: Eur Heart J 1995 Nov;16(11):1461–2.

Self–reported physical activity, subjective health, and cognitive performance in older adults. van Boxtel MP, et al. **Exp Aging Res** 1996 Oct–Dec;22(4):363–79

Measuring general practitioner psychology: the personal construct perspective. Bower P, et al. **Fam Pract** 1997 Apr; 14(2):142–7

A comparison of general self–efficacy with self–esteem. Stanley KD, et al. **Genet Soc Gen Psychol Monogr** 1997

Feb;123(1):81–99
Age, socioeconomic status, and exercise self–efficacy [see comments] Clark DO. **Gerontologist** 1996 Apr;36(2):157–64 (53 ref.). Comment in: Gerontologist 1996 Apr;36(2):145–6. Comment in: Gerontologist 1996 Apr;36(2):174–7.
Welfare participation and self–esteem in later life. Krause N. **Gerontologist** 1996 Oct;36(5):665–73
Does retirement hurt well–being? Factors influencing self–esteem and depression among retirees and workers. Reitzes DC, et al. **Gerontologist** 1996 Oct;36(5):649–56
Using an interactive computer game to increase skill and self–efficacy regarding safer sex negotiation: field test results. Thomas R, et al. **Health Educ Behav** 1997 Feb; 24(1):71–86
Role of the self–image and smoker stereotype in smoking onset during early adolescence: a longitudinal study. Aloise–Young PA, et al. **Health Psychol** 1996 Nov; 15(6):494–7
Coping self–efficacy buffers psychological and physiological disturbances in HIV–infected men following a natural disaster. Benight CC, et al. **Health Psychol** 1997 May; 16(3):248–55
Weight, self–esteem, ethnicity, and depressive symptomatology during pregnancy among inner–city women. Cameron RP, et al. **Health Psychol** 1996 Jul; 15(4):293–7
Self–esteem and the relation between risk behavior and perceptions of vulnerability to unplanned pregnancy in college women. Smith GE, et al. **Health Psychol** 1997 Mar; 16(2):137–46
Self–concept before and after two years of growth hormone treatment in intrauterine growth–retarded children. van der Reijden–Lakeman I, et al. **Horm Res** 1996;46(2):88–94
Self–concepts of low–income older women: not old or poor, but fortunate and blessed. Barusch AS. **Int J Aging Hum Dev** 1997;44(4):269–82
The relationship of aging to self–esteem: the relative effects of maturation and role accumulation. Dietz BE. **Int J Aging Hum Dev** 1996;43(3):249–66
Understanding the influence of gender role identity on the assumption of family caregiving roles by men. Hirsch C. **Int J Aging Hum Dev** 1996;42(2):103–21
Youthful and older biases as special cases of a self–age optimization bias. Staats S. **Int J Aging Hum Dev** 1996; 43(4):267–76
Is body focus restricted to self–evaluation? Body focus in the evaluation of self and others. Beebe DW, et al. **Int J Eat Disord** 1996 Dec;20(4):415–22
Self–esteem, eating problems, and psychological well–being in a cohort of schoolgirls aged 15–16: a questionnaire and interview study. Button EJ, et al. **Int J Eat Disord** 1997 Jan;21(1):39–47
Relationship of weight, body dissatisfaction, and self–esteem in African American and white female dieters. Caldwell MB, et al. **Int J Eat Disord** 1997 Sep;22(2):127–30
Global self–esteem as contingent on body satisfaction among patients with bulimia nervosa: lack of diagnostic specificity? Joiner TE Jr, et al. **Int J Eat Disord** 1997 Jan;21(1):67–76
Testing a dual–process family model in understanding the development of eating pathology: a structural equation modeling analysis. Leung F, et al. **Int J Eat Disord** 1996 Dec;20(4):367–75
Body figure perceptions and eating attitudes among Australian schoolchildren aged 8 to 12 years. Rolland K, et al. **Int J Eat Disord** 1997 Apr;21(3):273–8
Disordered eating patterns, body image, self–esteem, and physical activity in preadolescent school children. Sands R, et al. **Int J Eat Disord** 1997 Mar;21(2):159–66
Are obese adolescent boys ignoring an important health risk? Steen SN, et al. **Int J Eat Disord** 1996 Nov;20(3):281–6
Body dissatisfaction and sexuality among women with bulimia nervosa. Wiederman MW, et al. **Int J Eat Disord** 1997 May;21(4):361–5
Enhancing Latin American women's self–concept: a group intervention. Guanipa C, et al. **Int J Group Psychother** 1997 Jul;47(3):355–72
Perceptions of the body interior by children with asthma and children with no known chronic disease. Clarke F, et al. **Int J Nurs Stud** 1997 Jun;34(3):183–91
Perception of self in the intensive care unit after cardiac surgery among adult Taiwanese and American–Chinese patients. Shih FJ. **Int J Nurs Stud** 1997 Feb;34(1):17–26
The social biofeedback theory of parental affect–mirroring: the development of emotional self–awareness and self–control in infancy. Gergely G, et al. **Int J Psychoanal** 1996 Dec;77 (Pt 6):1181–212
Young women's sexual risk taking behaviour: re–visiting the influences of sexual self–efficacy and sexual self–esteem. Seal A, et al. **Int J STD AIDS** 1997 Mar;8(3):159–65
Discrepancies among mother, child, and teacher reports: examining the contributions of maternal depression and anxiety. Briggs–Gowan MJ, et al. **J Abnorm Child Psychol** 1996 Dec;24(6):749–65
Reactive and proactive aggression in school children and psychiatrically impaired chronically assaultive youth. Dodge KA, et al. **J Abnorm Psychol** 1997 Feb;106(1):37–51
Relation of depressive symptoms to the structure of self–knowledge in childhood. Jordan A, et al. **J Abnorm Psychol** 1996 Nov;105(4):530–40
Is self–organized criticality relevant to alcoholism? Campbell WG. **J Addict Dis** 1997;16(1):41–50
Ego identity status and reported alcohol consumption: a study of first–year college students. Bishop DI, et al. **J Adolesc** 1997 Apr;20(2):209–18
Sexual self–concept and sexual risk–taking. Breakwell GM, et al. **J Adolesc** 1997 Feb;20(1):29–41
Peer relations in adolescents: effects of parenting and adolescents' self–concept. Deković M, et al. **J Adolesc** 1997 Apr;20(2):163–76
Long–term unemployment amongst adolescents: a longitudinal study. Meân Patterson LJ. **J Adolesc** 1997 Jun; 20(3):261–80
Effect of underemployment on school–leavers' self–esteem. Prause JA, et al. **J Adolesc** 1997 Jun;20(3):243–60
Differences in depression and self–esteem reported by learning disabled and behavior disordered middle school students. Stanley PD, et al. **J Adolesc** 1997 Apr; 20(2):219–22
Self–concept, family functioning and problem type: a replication and extension of a study of clinic and non–clinic adolescents. Bowles TV, et al. **J Adolesc Health** 1996 Jul; 19(1):62–7
Adolescents' perceptions of relative weight and self–reported weight–loss activities: analysis of 1990 YRBS (Youth Risk behavior Survey) national data. Felts WM, et al. **J Adolesc Health** 1996 Jan;18(1):20–6
Through the looking glass: self–esteem in adolescents [editorial] Litt IF. **J Adolesc Health** 1996 Jul;19(1):1
Abnormalities in weight status, eating attitudes, and eating behaviors among urban high school students: correlations with self–esteem and anxiety. Pastore DR, et al. **J Adolesc Health** 1996 May;18(5):312–9
The effects of peer ridicule on depression and self–image among adolescent females with Turner syndrome. Rickert VI, et al. **J Adolesc Health** 1996 Jul;19(1):34–8
Ethnicity and body dissatisfaction: are Hispanic and Asian girls at increased risk for eating disorders? [see comments] Robinson TN, et al. **J Adolesc Health** 1996 Dec; 19(6):384–93. Comment in: J Adolesc Health 1997 Jul;21(1):1.
Adherence: a matter of self–efficacy and power. Buchmann WF. **J Adv Nurs** 1997 Jul;26(1):132–7 (11 ref.)
Professional identity: values embedded in meaningful nursing practice. Fagermoen MS. **J Adv Nurs** 1997 Mar; 25(3):434–41
Culture and the self: implications for the perception of depression by Australian and Vietnamese nursing students. Fry AJ, et al. **J Adv Nurs** 1996 Jun;23(6):1147–54
Towards further clarification of the concept 'dignity'. Haddock J. **J Adv Nurs** 1996 Nov;24(5):924–31 (49 ref.)
Dementia and personhood: a focus for care? Jenkins D, et al. **J Adv Nurs** 1996 Jul;24(1):84–90 (26 ref.)
Cognitive behaviour therapy territory model: effective disputing approach. Lam D. **J Adv Nurs** 1997 Jun; 25(6):1205–9 (8 ref.)
A comparison study of children with sickle cell disease and their non–diseased siblings on hopelessness, depression, and perceived competence. Lee EJ, et al. **J Adv Nurs** 1997 Jan;25(1):79–86
The influence of bilateral orchiectomy on self–concept: a pilot study. Montgomery P, et al. **J Adv Nurs** 1996 Dec; 24(6):1249–56
Illness careers: the chronic illness experience. Price B. **J Adv Nurs** 1996 Aug;24(2):275–9
The relationship of self–perception of illness and compliance with health care regimens. Wichowski HC, et al. **J Adv Nurs** 1997 Mar;25(3):548–53
Can negative self–schemes in depressives be altered through sleep deprivation? Baving L, et al. **J Affect Disord** 1997 Feb;42(2–3):93–101
Relationship of perceived competencies, perceived social support, and gender to substance use in young adolescents. Lifrak PD, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):933–40
On teenagers and tattoos. Martin A. **J Am Acad Child Adolesc Psychiatry** 1997 Jun;36(6):860–1
Psychoanalysis is self–centered. Rubin JB. **J Am Acad Psychoanal** 1996 Winter;24(4):633–48 (50 ref.)
Dead babies and the birth of desire: maternal erotic transferences and countertransferences. Wrye HK. **J Am Acad Psychoanal** 1996 Spring;24(1):75–94 (14 ref.)
Concern regarding bodyweight and energy balance in a group of female university students from Madrid: differences with respect to body mass index. Ortega RM, et al. **J Am Coll Nutr** 1997 Jun;16(3):244–51
Attitudes of registered dietitians toward personal overweight and overweight clients. McArthur LH, et al. **J Am Diet Assoc** 1997 Jan;97(1):63–6
Social expectancies and self–perceptions in anxiety–disordered children. Chansky TE, et al. **J Anxiety Disord** 1997 Jul–Aug;11(4):347–63
Managerial self–awareness in high–performing individuals in organizations. Church AH. **J Appl Psychol** 1997 Apr; 82(2):281–92
Does self–regulation require cognitive resources? Evaluation of resource allocation models of goal setting. DeShon RP, et al. **J Appl Psychol** 1996 Oct;81(5):595–608
Prevalence and prediction of positive discrepancy creation: examining a discrepancy between two self–regulation theories. Phillips JM, et al. **J Appl Psychol** 1996 Oct; 81(5):498–511
Reaction time and assessments of cognitive effort as predictors of eyewitness memory accuracy and confidence. Robinson MD, et al. **J Appl Psychol** 1997 Jun;82(3):416–25
Illness self–schemas in depressed and nondepressed rheumatoid arthritis patients. Clemmey PA, et al. **J Behav Med** 1997 Jun;20(3):273–90
Exercise and self–esteem in middle–aged adults: multidimensional relationships and physical fitness and self–efficacy influences. McAuley E, et al. **J Behav Med** 1997 Feb;20(1):67–83
The burn camp experience: variables that influence the enhancement of self–esteem. Biggs KS, et al. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 1):93–8; discussion 92–3
Self–esteem, behavior, and concerns surrounding epilepsy in siblings of children with epilepsy. Mims J. **J Child Neurol** 1997 Apr;12(3):187–92
A competency–based model of child depression: a longitudinal study of peer, parent, teacher, and self–evaluations. Cole DA, et al. **J Child Psychol Psychiatry** 1997 Jul;38(5):505–14
Self–perceptions of adolescents with and without mood disorder: content and structure. Evans DW, et al. **J Child Psychol Psychiatry** 1995 Nov;36(8):1337–51
How local is the impact of a specific learning difficulty on premature children's evaluation of their own competence? Jongmans M, et al. **J Child Psychol Psychiatry** 1996 Jul; 37(5):563–8
Self–concept and behavior in adolescent girls with Turner syndrome: potential estrogen effects. Ross JL, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):926–31
Self–concept and dental health behaviours in adolescents. Macgregor ID, et al. **J Clin Periodontol** 1997 May; 24(5):335–9
Self–esteem, optimism, and postpartum depression. Fontaine KR, et al. **J Clin Psychol** 1997 Jan;53(1):59–63
Functional infertility and femininity: a comparison of infertile women and their mothers. Kipper DA, et al. **J Clin Psychol** 1996 Jul;52(4):375–82
Relationships among child abuse, date abuse, and psychological problems. Sappington AA, et al. **J Clin Psychol** 1997 Jun;53(4):319–29
Identity and Introject in dissociative disorders. Alpher VS. **J Consult Clin Psychol** 1996 Dec;64(6):1238–44
Sexual self–schema and sexual morbidity among gynecologic cancer survivors. Andersen BL, et al. **J Consult Clin Psychol** 1997 Apr;65(2):221–9
Articulating subtype differences in self and relational experience among alcoholic men using structural analysis of social behavior. Ichiyama MA, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1245–54
Patterns of relatedness, depressive symptomatology, and perceived competence in maltreated children. Toth SL, et al. **J Consult Clin Psychol** 1996 Feb;64(1):32–41
Self–talk in youth with anxiety disorders: states of mind, content specificity, and treatment outcome. Treadwell KR, et al. **J Consult Clin Psychol** 1996 Oct;64(5):941–50
Relationship of social perceptions and self–concept in bulimia nervosa. Wonderlich S, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1231–7
Alumni self–perception of competence at time of dental school graduation. Holmes DC, et al. **J Dent Educ** 1997 Jun;61(6):465–72
Self rated health as a predictor of coronary heart disease in Copenhagen, Denmark. Møller L, et al. **J Epidemiol Community Health** 1996 Aug;50(4):423–8
Race and self assessed health status: the role of socioeconomic factors in the USA. Ren XS, et al. **J Epidemiol Community Health** 1996 Jun;50(3):269–73
The role of self–esteem in typical and atypical changes in expectations. Abel MH. **J Gen Psychol** 1997 Jan; 124(1):113–27
The relation of nonverbal processing ability of faces and voices and children's feelings of depression and competence. Nowicki S Jr, et al. **J Genet Psychol** 1997 Sep;158(3):357–63
Parental conflict and self–esteem: the rest of the story. Pawlak JL, et al. **J Genet Psychol** 1997 Sep;158(3):303–13
Gender differences in the comparison of self–reported disability and performance measures. Merrill SS, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jan;52(1):M19–26
The interactive effect of perceived control and functional status on health and mortality among young–old and old–old adults. Menec VH, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):P118–26
Age, subjective life expectancy, and the sense of control: the horizon hypothesis. Mirowsky J. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):S125–34
Self–esteem and subjective responses to work among mature workers: similarities and differences by gender. Mutran EJ, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Mar; 52(2):S89–96
On stigma and its consequences: evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. Link BG, et al. **J Health Soc Behav** 1997 Jun;38(2):177–90
Assessing homosexual stress. Burke TB. **J Homosex** 1997; 33(2):83–99
Heterosexual bias in the identity self–portraits of gay men, lesbians, and bisexuals. Massey SG, et al. **J Homosex** 1996; 32(1):57–76
Appearance and self–presentation research in gay consumer cultures: issues and impact. Rudd NA. **J Homosex** 1996; 31(1–2):109–34
Relationship between self–perceived stress and blood

pressure. Suter PM, et al. **J Hum Hypertens** 1997 Mar; 11(3):171–6

Covert versus overt self–recognition in late stage Alzheimer's disease. Bologna SM, et al. **J Int Neuropsychol Soc** 1997 Mar;3(2):195–8

Brain transplantation, personal identity and medical ethics [editorial; comment] Gillon R. **J Med Ethics** 1996 Jun; 22(3):131–2. Comment on: J Med Ethics 1996 Jun;22(3):174–80.

Do brain tissue transplants alter personal identity? Inadequacies of some "standard" arguments [see comments] Northoff G. **J Med Ethics** 1996 Jun;22(3):174–80 (30 ref.) . Comment in: J Med Ethics 1996 Jun;22(3):131–2.

Degrees of personhood. Perring C. **J Med Philos** 1997 Apr; 22(2):173–97

Possible selves in major depression. Allen LA, et al. **J Nerv Ment Dis** 1996 Dec;184(12):739–45

Optic flow processing in monkey STS: a theoretical and experimental approach. Lappe M, et al. **J Neurosci** 1996 Oct 1;16(19):6265–85

The effect of a clinical practicum on undergraduate nursing students' self–efficacy for community–based family nursing practice. Ford–Gilboe M, et al. **J Nurs Educ** 1997 May; 36(5):212–9

Applying the Cantril methodology to study self–esteem: psychometrics of the Self–Anchoring Self–Esteem Scale. Carpenter JS. **J Nurs Meas** 1996 Winter;4(2):171–89

Translation and reassessment of the Adolescent Self–Perception Profile for a rural, Mexican–American population. Dimmitt JH. **J Nurs Meas** 1996 Summer; 4(1):5–18

How nurse–midwives define themselves in relation to nursing, medicine, and midwifery. Scoggin J. **J Nurse Midwifery** 1996 Jan–Feb;41(1):36–42

Self–perceptions of preschool children with spina bifida [letter; comment] Hazlett RA. **J Pediatr Nurs** 1997 Apr; 12(2):130–1. Comment on: J Pediatr Nurs 1996 Aug;11(4):217–24.

Ethnic differences in adolescents' perceived health status: preliminary findings. Rew L. **J Pediatr Nurs** 1997 Aug; 12(4):223–7

Sense of self in children with cancer and in childhood cancer survivors: a critical review. Woodgate R, et al. **J Pediatr Oncol Nurs** 1997 Jul;14(3):137–55 (62 ref.)

Psychological aspects of childhood obesity: a controlled study in a clinical and nonclinical sample. Braet C, et al. **J Pediatr Psychol** 1997 Feb;22(1):59–71

The five–factor model, conscientiousness, and driving accident involvement. Arthur W Jr, et al. **J Pers** 1996 Sep; 64(3):593–618

Activity, passivity, self–denigration, and self–promotion: toward an interactionist model of interpersonal dependency. Bornstein RF, et al. **J Pers** 1996 Sep; 64(3):637–73

Vulnerability to stress: self–criticism and stress–induced changes in biochemistry. Gruen RJ, et al. **J Pers** 1997 Mar; 65(1):33–47

Representations of self and other: a semantic space model. Hart D, et al. **J Pers** 1997 Mar;65(1):77–105

The display of masculinity, femininity, and gender diagnosticity in self–descriptive photo essays. Lippa R. **J Pers** 1997 Mar;65(1):137–69

Autophotographic identities of young adults: with special reference to alcohol, athletics, achievement, religion, and work. Dollinger SJ. **J Pers Assess** 1996 Oct;67(2):384–98

Parental representations, self–view, and interpersonal functioning of older adolescents. Drodge EN. **J Pers Assess** 1997 Feb;68(1):152–64

Test–taker and close–other selection of personality inventory feedback. Word S. **J Pers Assess** 1996 Apr;66(2):402–13

Self–esteem and "if . . . then" contingencies of interpersonal acceptance. Baldwin MW, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1130–41

Simultaneous assimilation and contrast effects in judgments of self and others. Biernat M, et al. **J Pers Soc Psychol** 1997 Aug;73(2):254–69

The moderating roles of self–esteem and self–construal in reaction to a threat to the self: evidence from the People's Republic of China and the United States. Brockner J, et al. **J Pers Soc Psychol** 1996 Sep;71(3):603–15

On the structure of social self–concept for pre–, early, and late adolescents: a test of the Shavelson, Hubner, and Stanton (1976) model. Byrne BM, et al. **J Pers Soc Psychol** 1996 Mar;70(3):599–613

Self–interest and fairness in problems of resource allocation: allocators versus recipients. Diekmann KA, et al. **J Pers Soc Psychol** 1997 May;72(5):1061–74

Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and moderated by gender. Gaines SO Jr, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1460–76

Cognitive reactions to smoking relapse: the reciprocal relation between dissonance and self–esteem. Gibbons FX, et al. **J Pers Soc Psychol** 1997 Jan;72(1):184–95

The self as a mediator between personality and adjustment. Graziano WG, et al. **J Pers Soc Psychol** 1997 Aug; 73(2):392–404

Terror management theory and self–esteem: evidence that increased self–esteem reduces mortality salience effects. Harmon–Jones E, et al. **J Pers Soc Psychol** 1997 Jan; 72(1):24–36

The cultural construction of self–enhancement: an examination of group–serving biases. Heine SJ, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1268–83

The "self digest": self–knowledge serving self–regulatory functions. Higgins ET. **J Pers Soc Psychol** 1996 Dec; 71(6):1062–83 (175 ref.)

The working self–concept in transference: significant–other activation and self change. Hinkley K, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1279–95

Intergroup norms and intergroup discrimination: distinctive self–categorization and social identity effects. Jetten J, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1222–33

On the nature of self–monitoring: construct explication with Q–sort ratings. John OP, et al. **J Pers Soc Psychol** 1996 Oct;71(4):763–76

Individual and collective processes in the construction of the self: self–enhancement in the United States and self–criticism in Japan. Kitayama S, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1245–67

Objective standards are not enough: affective, self–evaluative, and behavioral responses to social comparison information. Klein WM. **J Pers Soc Psychol** 1997 Apr;72(4):763–74

Meta–accuracy among acquainted individuals: a social relations analysis of interpersonal perception and metaperception. Levesque MJ. **J Pers Soc Psychol** 1997 Jan;72(1):66–74

Improving memory in old age through implicit self–stereotyping. Levy B. **J Pers Soc Psychol** 1996 Dec; 71(6):1092–107

Discriminant validity of well–being measures. Lucas RE, et al. **J Pers Soc Psychol** 1996 Sep;71(3):616–28

In search of the powerful self–fulfilling prophecy. Madon S, et al. **J Pers Soc Psychol** 1997 Apr;72(4):791–809

Why minority group members perceive or do not perceive the discrimination that confronts them: the role of self–esteem and perceived control. Ruggiero KM, et al. **J Pers Soc Psychol** 1997 Feb;72(2):373–89

Big fish in small ponds: a social hierarchy analysis of intergroup bias. Seta JJ, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1210–21

Organization of self–knowledge: implications for recovery from sad mood. Showers CJ, et al. **J Pers Soc Psychol** 1996 Mar;70(3):578–90

When self–categorization makes sense: the role of meaningful social categorization in minority and majority members' self–perception. Simon B, et al. **J Pers Soc Psychol** 1997 Aug;73(2):310–20

Terror management and cognitive–experiential self–theory: evidence that terror management occurs in the experiential system. Simon L, et al. **J Pers Soc Psychol** 1997 May; 72(5):1132–46

When exemplification fails: hypocrisy and the motive for self–integrity. Stone J, et al. **J Pers Soc Psychol** 1997 Jan; 72(1):54–65

Stability within the self: a longitudinal study of the structural implications of self–discrepancy theory. Strauman TJ. **J Pers Soc Psychol** 1996 Dec;71(6):1142–53

Self–determination and persistence in a real–life setting: toward a motivational model of high school dropout. Vallerand RJ, et al. **J Pers Soc Psychol** 1997 May; 72(5):1161–76

Failure to recognize the effect of implicit social influence on the presentation of self. Vorauer JD, et al. **J Pers Soc Psychol** 1997 Aug;73(2):281–95

Ability analysis of gender relevance and sex differences in cardiovascular response to behavioral challenge. Wright RA, et al. **J Pers Soc Psychol** 1997 Aug;73(2):405–17

Stealing a nurse's human dignity [editorial] Copp LA. **J Prof Nurs** 1997 Mar–Apr;13(2):63–4

Risk behaviors, self–efficacy, and AIDS prevention among adolescents. Goh DS, et al. **J Psychol** 1996 Sep; 130(5):537–46

Student expectancies and academic self–concept as predictors of science achievement. House JD. **J Psychol** 1996 Nov; 130(6):679–81

Masculinity, femininity, and Hispanic professional men's self–esteem and self–acceptance. Long VO, et al. **J Psychol** 1997 Sep;131(5):481–8

Self–efficacy as a component of active coping: effects on cardiovascular reactivity. Gerin W, et al. **J Psychosom Res** 1996 May;40(5):485–93

A structure of self–conceptions and illness conceptions in rheumatoid arthritis (RA). Persson LO, et al. **J Psychosom Res** 1996 May;40(5):535–49

Changing conceptions of self and world through the spectrum of HIV disease. Implications for psychotherapy. Farber EW, et al. **J Psychother Pract Res** 1997 Winter; 6(1):36–44

Screening for psychiatric distress and low self–esteem in patients presenting for excimer laser surgery for myopia. Kidd B, et al. **J Refract Surg** 1997 Jan–Feb;13(1):40–4

Body image perception in female Mexican–American adolescents. Guinn B, et al. **J Sch Health** 1997 Mar; 67(3):112–5

Self–concept and self–esteem: a clarification of terms. King KA. **J Sch Health** 1997 Feb;67(2):68–70

Role play: staff–developed posters––an avenue to enhance nurses' self–worth. Mohr L. **J Soc Pediatr Nurs** 1997 Jan–Mar;2(1):47–8

Acculturation mode, identity variation, and psychosocial adjustment. Damji T, et al. **J Soc Psychol** 1996 Aug; 136(4):493–500

Prayer and self–esteem among 8– to 11–year–olds in the United Kingdom. Francis LJ, et al. **J Soc Psychol** 1996 Dec;136(6):791–3

Coopersmith's model of self–esteem: bias toward the stable extravert? Francis LJ. **J Soc Psychol** 1997 Feb; 137(1):139–42

Social roles, social norms, and self–presentation in the quiz effect of Ross, Amabile, and Steinmetz. Gibbins K, et al. **J Soc Psychol** 1996 Oct;136(5):625–34

Testing the self–efficacy–performance linkage of social–cognitive theory. Harrison AW, et al. **J Soc Psychol** 1997 Feb;137(1):79–87

The relationship between psychological reactance and self–esteem. Hellman CM, et al. **J Soc Psychol** 1997 Feb; 137(1):135–8

Ratings of interpersonal conduct in small groups by aggregated peers and self: replicated factor analyses. Hurley JR. **J Soc Psychol** 1996 Oct;136(5):597–611

Explanatory style, family expressiveness, and self–esteem among Asian American and European American college students. Kao EM, et al. **J Soc Psychol** 1997 Aug; 137(4):435–44

Self–esteem and academic streaming in Hong Kong. Kemp S, et al. **J Soc Psychol** 1996 Oct;136(5):651–3

Multifactorial self–concept and delinquency in Australian adolescents. Levy KS. **J Soc Psychol** 1997 Jun; 137(3):277–83

Awareness of interpersonal style and self–evaluation. Van Buren A, et al. **J Soc Psychol** 1997 Aug;137(4):429–34

Culture and spontaneous self–concept among Filipino college students. Watkins D, et al. **J Soc Psychol** 1997 Aug; 137(4):480–8

Age and gender differences in the self–esteem of Chinese children. Watkins D, et al. **J Soc Psychol** 1997 Jun; 137(3):374–9

Personal construct psychotherapy of addictions. Klion RE, et al. **J Subst Abuse Treat** 1997 Jan–Feb;14(1):37–43 (26 ref.)

Posttraumatic stress disorder, self– and interpersonal dysfunction among sexually retraumatized women. Cloitre M, et al. **J Trauma Stress** 1997 Jul;10(3):437–52

Themes of power and betrayal in sexual abuse survivors' characterizations of interpersonal relationships. Liem JH, et al. **J Trauma Stress** 1996 Oct;9(4):745–61

The Posttraumatic Growth Inventory: measuring the positive legacy of trauma. Tedeschi RG, et al. **J Trauma Stress** 1996 Jul;9(3):455–71

Education, self–esteem, and prizes [letter; comment] Shiwach RS. **Lancet** 1997 Mar 22;349(9055):885. Comment on: Lancet 1996 Nov 30;348(9040):1497.

Adolescent mothers: what produces positive mother–infant interaction? Diehl K. **MCN Am J Matern Child Nurs** 1997 Mar–Apr;22(2):89–95

Seminal truth: a modern science of male celibacy in north India. Alter JS. **Med Anthropol Q** 1997 Sep;11(3):275–98; discussion 299–301 (110 ref.)

Semen, irony, and the atom bomb. Cohen L. **Med Anthropol Q** 1997 Sep;11(3):301–3; discussion 303–5

Personhood and illness among the Kulina [see comments] Pollock D. **Med Anthropol Q** 1996 Sep;10(3):319–41. Comment in: Med Anthropol Q 1996 Sep;10(3):342–6. Comment in: Med Anthropol Q 1996 Sep;10(3):373–5; discussion 378–80.

Of selves and souls, bodies and persons, individuals and societies: a commentary on Donald Pollock's "Personhood and illness among the Kulina" [see comments] Roseman M. **Med Anthropol Q** 1996 Sep;10(3):342–6; discussion 376–8. Comment in: Med Anthropol Q 1996 Sep;10(3):319–41.

Life adjustment correlates of physical self–concepts. Sonstroem RJ, et al. **Med Sci Sports Exerc** 1996 May; 28(5):619–25

Self–perception of health and survival. A 10–year follow–up among Italians aged over sixty. Inchingolo GM. **Minerva Med** 1997 Jan–Feb;88(1–2):15–23

Physical and emotional problems of elite female gymnasts [letter; comment] Dresler CM. **N Engl J Med** 1997 Jan 9;336(2):140; discussion 141. Comment on: N Engl J Med 1996 Jul 25;335(4):281–3.

What language reveals about children's categories of personhood. Budwig N, et al. **New Dir Child Dev** 1995 Fall;(69):21–32 (25 ref.)

Self in relation to other: preschoolers' verbal social comparisons within narrative discourse. Mintz J. **New Dir Child Dev** 1995 Fall;(69):61–73

Learning about self and other during requests. Smiley PA, et al. **New Dir Child Dev** 1995 Fall;(69):7–19

Young children's presentations of self in conversational narration. Sperry LL, et al. **New Dir Child Dev** 1995 Fall; (69):47–60

Explore very young children's conceptions of "self" and "other" [editorial] Sperry LL, et al. **New Dir Child Dev** 1995 Fall;(69):1–5

Naturalistic observation of children with autism: evidence for intersubjectivity. Toomey J, et al. **New Dir Child Dev** 1995 Fall;(69):75–89 (28 ref.)

Gay, lesbian, and bisexual adolescents: providing esteem–enhancing care to a battered population. Nelson JA. **Nurse Pract** 1997 Feb;22(2):94, 99, 103 passim (45 ref.)

Prenatal care among African–American women [letter] Walton–Moss B. **Nurse Pract** 1996 Nov;21(11):23, 148, 153

Psychosocial concerns and health–compromising behaviors among overweight and nonoverweight adolescents.

Neumark-Sztainer D, et al. **Obes Res** 1997 May;5(3):237-49
Italian version of the Perceived Physical Ability Scale. Bortoli L, et al. **Percept Mot Skills** 1997 Aug;85(1):187-92
Exploring psychosocial task resolution and self-concept among African-American adolescents. Brookins CC. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):803-10
Relationship between self-concept and classroom behavior among learning and nonlearning disabled students in regular classes. Cadieux A. **Percept Mot Skills** 1996 Jun; 82(3 Pt 1):1043-50
Physical self-perceptions, aerobic capacity and physical activity in male and female members of a corporate health and fitness club. Daley AJ, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1075-82
Type of physical activity, variables describing participation in physical activity, and self-perceived fitness. Drummond JL. **Percept Mot Skills** 1996 Oct;83(2):472-4
Brief aikido training versus karate and golf training and university students' scores on self-esteem, anxiety, and expression of anger. Foster YA. **Percept Mot Skills** 1997 Apr;84(2):609-10
Capacity for imagery and creative self-perceptions. González Fontao MP. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1251-5
Correlations among field dependence/independence, locus of control and self-monitoring. Leventhal G, et al. **Percept Mot Skills** 1996 Oct;83(2):604-6
A multidisciplinary investigation of the relation of state sport confidence with preference and velocity of swimming starts. Mills BD, et al. **Percept Mot Skills** 1996 Aug; 83(1):207-10
Dysphoria and the failure to perceive and use discounting information: implications for internalizing negative feedback. Pillow DR, et al. **Percept Mot Skills** 1996 Aug; 83(1):107-13
Principal components analysis of the Physical Self-Efficacy Scale for a black sample. Sumerlin JR, et al. **Percept Mot Skills** 1996 Aug;83(1):35-40
Evaluation of selected life-skill modules from the contemporary health series with students in grade. Young M, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):811-8
Disability and health: perceptions of a sample of elderly people. Partridge C, et al. **Physiother Res Int** 1996; 1(1):17-29
The influence of self-efficacy on exercise intensity, compliance rate and cardiac rehabilitation outcomes among coronary artery disease patients. Jeng C, et al. **Prog Cardiovasc Nurs** 1997 Winter;12(1):13-24
Change in object and self-representations in long-term, intensive, inpatient treatment of seriously disturbed adolescents and young adults. Blatt SJ, et al. **Psychiatry** 1996 Spring;59(1):82-107
Self as subject: a formulation and an assessment strategy. Fast I, et al. **Psychiatry** 1996 Spring;59(1):34-47
A replication and elaboration of the esteem-enhancement model. Vega WA, et al. **Psychiatry** 1996 Summer; 59(2):128-44
Somatization in adolescence with reference to dysmorphophobia. Ohya D, et al. **Psychiatry Clin Neurosci** 1996 Feb;50(1):31-4
Winnicott goes to the movies: the false self in Ordinary People. Newman KM. **Psychoanal Q** 1996 Oct; 65(4):787-807 (9 ref.)
The role of pathological selfobjects in the development of a form of defensive self. Segal BM. **Psychoanal Q** 1996 Oct;65(4):747-60
Mental imagery in the organization and transformation of the self. Suler J. **Psychoanal Rev** 1996 Oct;83(5):657-72
Symbols, dreams, and self-reflection: some cases from African suriname in Europe. van Wetering I. **Psychoanal Rev** 1997 Apr;84(2):189-216
More or less "me" in past, present, and future: perceived lifetime personality during adulthood. Fleeson W, et al. **Psychol Aging** 1997 Mar;12(1):125-36
Perceived continuity of self in very old age. Troll LE, et al. **Psychol Aging** 1997 Mar;12(1):162-9
A stitch in time: self-regulation and proactive coping. Aspinwall LG, et al. **Psychol Bull** 1997 May;121(3):417-36 (175 ref.)
What do men want? Gender differences and two spheres of belongingness: comment on Cross and Madson (1997) [comment] Baumeister RF, et al. **Psychol Bull** 1997 Jul; 122(1):38-44; discussion 51-5. Comment on: Psychol Bull 1997 Jul;122(1):5-37.
Models of the self: self-construals and gender [see comments] Cross SE, et al. **Psychol Bull** 1997 Jul;122(1):5-37 (475 ref.) . Comment in: Psychol Bull 1997 Jul;122(1):38-44; discussion 51-5. Comment in: Psychol Bull 1997 Jul;122(1):45-50; discussion 51-5.
A developmental perspective of self-construals and sex differences: comment on Cross and Madson (1997) [comment] Martin CL, et al. **Psychol Bull** 1997 Jul; 122(1):45-50; discussion 51-5. Comment on: Psychol Bull 1997 Jul;122(1):5-37.
The self-reference effect in memory: a meta-analysis. Symons CS, et al. **Psychol Bull** 1997 May;121(3):371-94
Depressive thinking: changes in schematic mental models of self and world. Sheppard LC, et al. **Psychol Med** 1996 Sep; 26(5):1043-51
Self-esteem moderator or mediator between perceived stress and expectancy of success. Abel MH. **Psychol Rep** 1996 Oct;79(2):635-41
Children's self-esteem and their parents' education. Blackmon TC, et al. **Psychol Rep** 1997 Feb;80(1):114
Children of divorce and its effect on their self-esteem. Bynum MK, et al. **Psychol Rep** 1996 Oct;79(2):447-50
The Professional Self-esteem of Physicians Scale, structure, properties, and the relationship to work outcomes and life satisfaction. Carmel S. **Psychol Rep** 1997 Apr;80(2):591-602
On the reliability of the youth self-report. DeFrancesco JJ, et al. **Psychol Rep** 1996 Aug;79(1):322
Temporal association of substance abuse and self-esteem. Hill TD, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):1058
Sexual assault and body esteem. Kulkoski K, et al. **Psychol Rep** 1997 Feb;80(1):347-50
Toward a system theory of the mind. Lester D. **Psychol Rep** 1997 Jun;80(3 Pt 2):1392-4
Scores on self-actualization for gifted junior high school students. Lewis JD. **Psychol Rep** 1996 Aug;79(1):59-64
Sex and mathematical background as predictors of anxiety and self-efficacy in mathematics. Lussier G. **Psychol Rep** 1996 Dec;79(3 Pt 1):827-33
Self-statements, self-esteem, and locus of control in discriminating college students' scores on the Beck Depression Inventory. Madonna S Jr, et al. **Psychol Rep** 1996 Apr;78(2):531-4
Self-concept and locus of control among South African adolescents. Mboya MM, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1235-8
Self-esteem and caregivers' attitudes toward elderly persons. Merrill JM, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1349-50
Personality correlates of the Five-Factor Model for a sample of business owners/managers: associations with scores on Self-Monitoring, Type A Behavior, Locus of Control, and Subjective Well-being. Morrison KA. **Psychol Rep** 1997 Feb;80(1):255-72
Rehearsal of positive self-statements and restructured negative self-statements to increase self-esteem and decrease depression. Philpot VD, et al. **Psychol Rep** 1996 Aug;79(1):83-91
Increasing a sense of self-efficacy during a psychiatric nursing placement. Sadow D, et al. **Psychol Rep** 1996 Feb; 78(1):221-2
Self-defeating personality, argumentativeness, and assertive self-statements. Schill T. **Psychol Rep** 1996 Dec;79(3 Pt 2):1103-6
Does self-concept depend on body image? A gender analysis. Stowers DA, et al. **Psychol Rep** 1996 Apr;78(2):643-6
Discriminant analyses of willingness to talk with a counselor and most difficult issues in the experience of unsheltered homeless men: self-actualization, loneliness, and depression. Sumerlin JR. **Psychol Rep** 1996 Apr;78(2):659-72
Does self-esteem predict suicidality after controls for depression? Vella ML, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1178
Response set of social desirability in relation to the Mental, Physical and Spiritual Well-Being Scale. Vella-Brodrick DA, et al. **Psychol Rep** 1997 Aug;81(1):127-30
Psychological well-being: meaning, measurement, and implications for psychotherapy research. Ryff CD, et al. **Psychother Psychosom** 1996;65(1):14-23 (56 ref.)
Validity of the children and youth physical self-perception profile: a confirmatory factor analysis. Eklund RC, et al. **Res Q Exerc Sport** 1997 Sep;68(3):249-56
Physical Self Description Questionnaire: stability and discriminant validity. Marsh HW. **Res Q Exerc Sport** 1996 Sep;67(3):249-64
The concept of status incongruence revisited: a 22-year follow-up of mortality for middle-aged men. Faresjö T, et al. **Scand J Soc Med** 1997 Mar;25(1):28-32
Self-esteem before and after treatment in children with nocturnal enuresis and urinary incontinence. Hägglöf B, et al. **Scand J Urol Nephrol Suppl** 1997;183:79-82
Nocturnal enuresis: economic impacts and self-esteem preliminary research results. Pugner K, et al. **Scand J Urol Nephrol Suppl** 1997;183:65-9
Some interesting perturbations of the self in neurology. Feinberg TE. **Semin Neurol** 1997 Jun;17(2):129-35 (66 ref.)
Community and self: concepts for rural physician integration and retention. Cutchin MP. **Soc Sci Med** 1997 Jun; 44(11):1661-74
Women physicians in Quebec. De Koninck M, et al. **Soc Sci Med** 1997 Jun;44(12):1825-32
Some conceptual considerations on the sense of coherence. Geyer S. **Soc Sci Med** 1997 Jun;44(12):1771-9 (59 ref.)
The (dis)embodied self in anorexia nervosa. Lester RJ. **Soc Sci Med** 1997 Feb;44(4):479-89 (56 ref.)
Temporomandibular and cervical spine disorders. Self-reported signs and symptoms. de Wijer A, et al. **Spine** 1996 Jul 15;21(14):1638-46
Stroke patients' knowledge of stroke. Influence on time to presentation. Williams LS, et al. **Stroke** 1997 May; 28(5):912-5
Self-esteem and trait anxiety in relation to drug misuse in Kuwait. al-Najjar M, et al. **Subst Use Misuse** 1996 May; 31(7):937-43
Changes in self-concept and body image during alopecia induced cancer chemotherapy. Münstedt K, et al. **Support Care Cancer** 1997 Mar;5(2):139-43
Health perceptions and treatment adherence in adults with cystic fibrosis. Abbott J, et al. **Thorax** 1996 Dec; 51(12):1233-8
Risk and resilience among children exposed to family violence. Kolbo JR. **Violence Vict** 1996 Summer; 11(2):113-28
The meanings of home in the stories of older women. Moloney MF. **West J Nurs Res** 1997 Apr;19(2):166-76
Women, the body and brand extension in medicine: cosmetic surgery and the paradox of choice. Gillespie R. **Women Health** 1996;24(4):69-85
Psychological effects of weight retained after pregnancy. Jenkin W, et al. **Women Health** 1997;25(1):89-98
[To measure the measurable (see comments)] Mellergård M. **Ugeskr Laeger** 1996 Oct 14;158(42):5952-3. Comment in: Ugeskr Laeger 1997 Jan 6;159(2):188. **(Dan)**
[Sex differences in perceived health (see comments)] Gijsbers van Wijk CM, et al. **Ned Tijdschr Geneeskd** 1997 Feb 8; 141(6):283-7 (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1997 Apr 19;141(16):794. **(Dut)**
[Behavior regarding therapeutic drugs and self concept of elderly persons with chronic diseases] Ankri J, et al. **Soc Sci Med** 1997 Feb;44(3):337-45 (Eng. Abstr.) **(Fre)**
[Self and informant perception of clinical manifestations of Alzheimer dementia: results of a structured interview (CAMDEX)] Förstl H, et al. **Fortschr Neurol Psychiatr** 1996 Jun;64(6):228-33 (Eng. Abstr.) **(Ger)**
[New approaches for understanding borderline personality disorder] Frommer J, et al. **Fortschr Neurol Psychiatr** 1997 Jan;65(1):34-40 (70 ref.) (Eng. Abstr.) **(Ger)**
[Psychosocial aspects in total external ear reconstruction in patients with severe microtia] Siegert R, et al. **Laryngorhinootologie** 1997 Mar;76(3):155-61 (Eng. Abstr.) **(Ger)**
[Are negative cognitions symptoms of depression or also an expression of personality traits?] Leucht S, et al. **Nervenarzt** 1997 Jul;68(7):563-8 (Eng. Abstr.) **(Ger)**
[Management of violent acts within the scope of a pedagogic concept of self and social development—or: talking with school children about violence] Gebauer K. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):182-94 (Eng. Abstr.) **(Ger)**
["Gentle psychiatry—metamorphosis of violence?" (letter; comment)] Steinert T. **Psychiatr Prax** 1997 Mar;24(2):106 . Comment on: Psychiatr Prax 1996 Sep;23(5):209-12. **(Ger)**
[The ideal image and sex role norms in the Giessen Test] Beckmann D, et al. **Psychother Psychosom Med Psychol** 1997 Feb;47(2):52-7 (Eng. Abstr.) **(Ger)**
[Self concept and object relations in patients with monopolar and neurotic depression: a clinical study with the Giessen Test] Böker H, et al. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):260-8 (Eng. Abstr.) **(Ger)**
[Significance of membership in new religious movements for regulation of self concept exemplified by the Hare Krischna movement] Kraus D, et al. **Psychother Psychosom Med Psychol** 1997 Jan;47(1):21-6 (Eng. Abstr.) **(Ger)**
[Changes in the self-concept of alcohol dependent women and men during inpatient psychotherapy] Mann K, et al. **Psychother Psychosom Med Psychol** 1996 Sep-Oct; 46(9-10):350-5 (Eng. Abstr.) **(Ger)**
[Psychopathology, self concept and developmental delay in healthy and chronically ill adolescents. Results of a 4 1/2 year longitudinal study] Boeger A, et al. **Z Kinder Jugenpsychiatr** 1996 Dec;24(4):231-9 (Eng. Abstr.) **(Ger)**
[A study in cognitive complexity of the self: an evaluation of the Linville's index] Hayashi F, et al. **Shinrigaku Kenkyu** 1997 Feb;67(6):452-7 (Eng. Abstr.) **(Jpn)**
[Self-judgment of personality traits and cognitive dimensions of the self] Horiuchi T. **Shinrigaku Kenkyu** 1996 Dec; 67(5):390-5 (Eng. Abstr.) **(Jpn)**
[The relationship between self-esteem and self-disclosure of negative information] Katayama M. **Shinrigaku Kenkyu** 1996 Dec;67(5):351-8 (Eng. Abstr.) **(Jpn)**
[Self-esteem experience in everyday life: an examination from the viewpoint of "locus of reality"] Kawamoto I. **Shinrigaku Kenkyu** 1996 Jun;67(2):102-9 (Eng. Abstr.) **(Jpn)**
[The individual difference of response to the negative side of self-enhancing presentation] Sakai K. **Shinrigaku Kenkyu** 1996 Oct;67(4):314-20 (Eng. Abstr.) **(Jpn)**
[The effects of self-awareness on the internal and external viewpoint for self-imagery] Sugiura T. **Shinrigaku Kenkyu** 1996 Feb;66(6):418-24 (Eng. Abstr.) **(Jpn)**
[A study of time perspective in relation to time-referent self-images] Sugiyama S. **Shinrigaku Kenkyu** 1995 Oct; 66(4):283-7 (Eng. Abstr.) **(Jpn)**
[Mood-congruency effects in self-relevant words] Tsutsui M. **Shinrigaku Kenkyu** 1997 Apr;68(1):25-32 (Eng. Abstr.) **(Jpn)**
[Self-acceptance as adaptively resigning the self to low self-evaluation] Ueda T. **Shinrigaku Kenkyu** 1996 Oct; 67(4):327-32 (Eng. Abstr.) **(Jpn)**
[The effect of interdependency on the levels of self and other perception] Yuge Y. **Shinrigaku Kenkyu** 1996 Aug; 67(3):177-85 (Eng. Abstr.) **(Jpn)**
[Self-reported chronic muscle pain among women in Oslo] Abusdal UG, et al. **Tidsskr Nor Laegeforen** 1997 Apr 30; 117(11):1606-10 (Eng. Abstr.) **(Nor)**
[Assessment of one's own functional status. COOP-WONCA questionnaire charts in clinical practice and research] Bentsen BG, et al. **Tidsskr Nor Laegeforen** 1997 May 10;

117(12):1790–3 (Eng. Abstr.) **(Nor)**
[Patients' evaluation of clinical practice and research—their subjective views tell us all] Maeland JG. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1732 **(Nor)**
[Chronic morbidity and self-perception of health in the elderly of a rural community] Fernández Merino MC, et al. **Aten Primaria** 1996 Feb 15;17(2):108–112 (Eng. Abstr.) **(Spa)**
[The self-perception of their professional role of the primary care physicians of Estonia and Finland] Virjo IO, et al. **Aten Primaria** 1997 May 15;19(8):407–11 (Eng. Abstr.) **(Spa)**

SELF-DESTRUCTIVE BEHAVIOR see **SELF-INJURIOUS BEHAVIOR**

SELF DETERMINATION see **FREEDOM**

SELF DISCLOSURE

Life situation, self reported health and coping ability of 35-year old twins and controls—a follow-up of a longitudinal Swedish twin study at adolescence. Lange AL, et al. **Acta Genet Med Gemellol (Roma)** 1996;45(4):405–16
Effects of alcohol and expectancy on self-disclosure and anxiety in male and female social drinkers. Schippers GM, et al. **Addict Behav** 1997 May–Jun;22(3):305–14
The accuracy of self-report of smoking status in pregnant women. Walsh RA, et al. **Addict Behav** 1996 Sep–Oct; 21(5):675–9
Prevalence, reliability and bias of adolescents' reports of smoking and quitting. Stanton WR, et al. **Addiction** 1996 Nov;91(11):1705–14
Searching for the Magic Johnson effect: AIDS, adolescents, and celebrity disclosure. Brown BR Jr, et al. **Adolescence** 1996 Summer;31(122):253–64
Factors associated with client-reported HIV infection among clients entering methadone treatment. MacGowan RJ, et al. **AIDS Educ Prev** 1997 Jun;9(3):205–17
Request for disclosure of financial interest [letter; comment] Aguirre GD. **Am J Vet Res** 1997 Jun;58(6):568–9. Comment on: Am J Vet Res 1997 Jan;58(1):23–7.
Comparison of methods to assess dog owners' therapeutic compliance [see comments] Barter LS, et al. **Aust Vet J** 1996 Dec;74(6):443–6. Comment in: Aust Vet J 1996 Dec;74(6):442.
Reports of dieting among children: effects of interview style and approach to information collection. Huon GF, et al. **Br J Clin Psychol** 1997 Feb;36 (Pt 1):33–40
Re: Dr Penney Page's letter [letter] Myers MF. **Can J Psychiatry** 1996 Oct;41(8):536
How do children tell? The disclosure process in child sexual abuse [see comments] Bradley AR, et al. **Child Abuse Negl** 1996 Sep;20(9):881–91. Comment in: Child Abuse Negl 1996 Sep;20(9):879–80.
Gradual disclosure by sexual assault victims—a sacred cow? [editorial; comment] Jones DP. **Child Abuse Negl** 1996 Sep; 20(9):879–80. Comment on: Child Abuse Negl 1996 Sep;20(9):881–91.
Children's emotional and behavioral reactions following the disclosure of extrafamilial sexual abuse: initial effects. Ligezinska M, et al. **Child Abuse Negl** 1996 Feb; 20(2):111–25
Disclosure patterns of sexual abuse and psychological functioning at a 1-year follow-up. Nagel DE, et al. **Child Abuse Negl** 1997 Feb;21(2):137–47
Sibship size and self-reported inhalant allergy among adult women. ALSPAC Study Team. Strachan DP, et al. **Clin Exp Allergy** 1997 Feb;27(2):151–5
Detection of alcohol problems in primary care outpatients under different conditions. Chan AW, et al. **Drug Alcohol Depend** 1996 Jun;41(2):151–5
Self-reported physical activity, subjective health, and cognitive performance in older adults. van Boxtel MP, et al. **Exp Aging Res** 1996 Oct–Dec;22(4):363–79
Elevated physical health risk among gay men who conceal their homosexual identity. Cole SW, et al. **Health Psychol** 1996 Jul;15(4):243–51
Health effects of emotional disclosure in rheumatoid arthritis patients. Kelley JE, et al. **Health Psychol** 1997 Jul; 16(4):331–40
Intimacy, loneliness, and openness to feelings in adult children of alcoholics. Martin JI. **Health Soc Work** 1995 Feb;20(1):52–9
Self-disclosure and marital satisfaction in mid-life and late-life remarriages. Bograd R, et al. **Int J Aging Hum Dev** 1996;42(3):161–72
Socioeconomic differentials in misclassification of height, weight and body mass index based on questionnaire data. Boström G, et al. **Int J Epidemiol** 1997 Aug;26(4):860–6
Self-reported alcohol intake using two different question formats in southeastern New England. Parker DR, et al. **Int J Epidemiol** 1996 Aug;25(4):770–4
Determinants and nature of dietary underreporting in a free-living population: the Fleurbaix Laventie Ville Santé (FLVS) Study. Lafay L, et al. **Int J Obes Relat Metab Disord** 1997 Jul;21(7):567–73
Sex, lies, and genitourinary medicine [letter] Hudson CP. **Int J STD AIDS** 1996 Jul;7(4):304–6
Adolescents' perceptions of their parents' disclosure to them. Dolgin KG, et al. **J Adolesc** 1997 Aug;20(4):431–41
Are adolescents accurate in self-report of frequencies of sexually transmitted diseases and pregnancies? Clark LR, et al. **J Adolesc Health** 1997 Aug;21(2):91–6
Improving detection of violence among pregnant adolescents. Covington DL, et al. **J Adolesc Health** 1997 Jul;21(1):18–24
Perceived professional support and the use of blocking behaviours by hospice nurses. Booth K, et al. **J Adv Nurs** 1996 Sep;24(3):522–7
"Reality" and countertransference in the treatment of sexual abuse patients: the false memory controversy. Perlman SD. **J Am Acad Psychoanal** 1996 Spring;24(1):115–35 (32 ref.)
Personality and self-reported delinquency: a longitudinal analysis. Heaven PC. **J Child Psychol Psychiatry** 1996 Sep; 37(6):747–51
Reliability and validity of self-report CD4 counts-in persons hospitalized with HIV disease. Cunningham WE, et al. **J Clin Epidemiol** 1997 Jul;50(7):829–35
Self-reports and general practitioner information on the presence of chronic diseases in community dwelling elderly. A study on the accuracy of patients' self-reports and on determinants of inaccuracy. Kriegsman DM, et al. **J Clin Epidemiol** 1996 Dec;49(12):1407–17
Faking the MMPI-2: utility of the Subtle-Obvious scales. Brems C, et al. **J Clin Psychol** 1996 Sep;52(5):525–33
Smoking during pregnancy: how reliable are maternal self reports in New Zealand? Ford RP, et al. **J Epidemiol Community Health** 1997 Jun;51(3):246–51
Effect of labour market conditions on reporting of limiting long-term illness and permanent sickness in England and Wales. Haynes R, et al. **J Epidemiol Community Health** 1997 Jun;51(3):283–8
Validity of self-report in identifying anabolic steroid use among weightlifters. Ferenchick GS. **J Gen Intern Med** 1996 Sep;11(9):554–6
Self-report versus state records for identifying crashes among older drivers. Marottoli RA, et al. **J Gerontol A Biol Sci Med Sci** 1997 May;52(3):M184–7
Correlation between self-reported cocaine use and urine toxicology in an inner-city prenatal population. Lindsay MK, et al. **J Natl Med Assoc** 1997 Jan;89(1):57–60
Emotional expression and physical health: revising traumatic memories or fostering self-regulation? Greenberg MA, et al. **J Pers Soc Psychol** 1996 Sep;71(3):588–602
Consumers as faculty: experts on their own lives. Chapman V. **J Psychosoc Nurs Ment Health Serv** 1996 Aug; 34(8):47–9
Self-disclosure experience of people with HIV infection in dedicated and mainstreamed dental facilities. Barnes DB, et al. **J Public Health Dent** 1996 Summer;56(4):223–5
Agreement in alcohol consumption levels as measured by two different questionnaires. Witte JS, et al. **J Stud Alcohol** 1996 Jul;57(4):406–9
Quality of treatment data. Reliability over time of self-reports given by clients in treatment for substance abuse. Adair EB, et al. **J Subst Abuse Treat** 1996 Mar–Apr;13(2):145–9
HIV risk assessment: a video doctor seeks patient disclosure. Gerbert B, et al. **MD Comput** 1997 Jul–Aug;14(4):288–94
Investigation of the validity of facilitated communication through the disclosure of unknown information. Sheehan CM, et al. **Ment Retard** 1996 Apr;34(2):94–107
Gays, lesbians, HIV infection, and admission to medical school. A physicians' roundtable [see comments] Fortney JT, et al. **N C Med J** 1997 Mar–Apr;58(2):126–8. Comment in: N C Med J 1997 May–Jun;58(3):166.
Homophobia and heterosexism. Out of the medical school closet. Wallick MM. **N C Med J** 1997 Mar–Apr;58(2):123–5
Privacy effects on self-reported drug use: interactions with survey mode and respondent characteristics. Aquilino WS. **NIDA Res Monogr** 1997;167:383–415
Repeated measures estimation of measurement bias for self-reported drug use with applications to the National Household Survey on Drug Abuse. Biemer PP, et al. **NIDA Res Monogr** 1997;167:439–76
Assessing drug use in the workplace: a comparison of self-report, urinalysis, and hair analysis. Cook RF, et al. **NIDA Res Monogr** 1997;167:247–72
Studies of nonresponse and measurement error in the national household survey on drug abuse. Gfroerer J, et al. **NIDA Res Monogr** 1997;167:273–95 (15 ref.)
Self-reported drug use: results of selected empirical investigations of validity. Hser YI. **NIDA Res Monogr** 1997; 167:320–43 (27 ref.)
Mode of interview and reporting of sensitive issues: design and implementation of audio computer-assisted self-interviewing. Lessler JT, et al. **NIDA Res Monogr** 1997;167:366–82 (27 ref.)
The validity of self-reported cocaine use in two high-risk populations. Magura S, et al. **NIDA Res Monogr** 1997; 167:227–46
Comparison of self-reported drug use with quantitative and qualitative urinalysis for assessment of drug use in treatment studies. Preston KL, et al. **NIDA Res Monogr** 1997; 167:130–45
The use of the psychological laboratory to study sensitive survey topics. Willis GB. **NIDA Res Monogr** 1997; 167:416–38 (55 ref.)
Self reported rate of occupational asthma in Sweden 1990–2. Torén K. **Occup Environ Med** 1996 Nov;53(11):757–61
Race, self-disclosure, and "forbidden talk": race and ethnicity in contemporary clinical practice. Leary K. **Psychoanal Q** 1997 Apr;66(2):163–89
When the analyst is ill: dimensions of self-disclosure. Pizer B. **Psychoanal Q** 1997 Jul;66(3):450–69
Effect of verbal self-disclosure on natural killer cell activity: moderating influence of cynical hostility. Christensen AJ, et al. **Psychosom Med** 1996 Mar–Apr;58(2):150–5
Accelerated course of human immunodeficiency virus infection in gay men who conceal their homosexual identity [see comments] Cole SW, et al. **Psychosom Med** 1996 May–Jun;58(3):219–31. Comment in: Psychosom Med 1996 May–Jun;58(3):232–3.
Openness to discuss cancer in the nuclear family: scale, development, and validation. Mesters I, et al. **Psychosom Med** 1997 May–Jun;59(3):269–79
The search for the elusive psychosocial modulators of human immunodeficiency virus disease progression [editorial; comment] Ostrow DG. **Psychosom Med** 1996 May–Jun; 58(3):232–3. Comment on: Psychosom Med 1996 May–Jun;58(3):219–31.
Validity of self-reported sexual behaviors in adolescent women using biomarker outcomes. Orr DP, et al. **Sex Transm Dis** 1997 May;24(5):261–6
Life stories and shared experience. Steffen V. **Soc Sci Med** 1997 Jul;45(1):99–111
Pattern reliability of narcotics addicts' self-reported data: a confirmatory assessment of construct validity and consistency. Chou CP, et al. **Subst Use Misuse** 1996 Jul; 31(9):1189–216
Self-reported drug use among recently admitted jail inmates: estimating prevalence and treatment needs. Farabee D, et al. **Subst Use Misuse** 1996 Mar;31(4):423–35
Validity of self-reported drug use in high risk populations: a meta-analytical review. Magura S, et al. **Subst Use Misuse** 1996 Jul;31(9):1131–53
[Is TLFB method applicable to Japanese drinking population?: a methodological study on measurement of alcohol consumption] Shimizu S, et al. **Nihon Arukoru Yakubutsu Igakkai Zasshi** 1997 Jun; 32(3):163–81 (Eng. Abstr.) **(Jpn)**
[The relationship between self-esteem and self-disclosure of negative information] Katayama M. **Shinrigaku Kenkyu** 1996 Dec;67(5):351–8 (Eng. Abstr.) **(Jpn)**
[The individual difference of response to the negative side of self-enhancing presentation] Sakai K. **Shinrigaku Kenkyu** 1996 Oct;67(4):314–20 (Eng. Abstr.) **(Jpn)**

SELF ESTEEM see **SELF CONCEPT**

SELF-EVALUATION PROGRAMS

Self learning/self assessment [letter] Mader ME. **J Can Dent Assoc** 1997 May;63(5):320
[Initial experience with the PCDiary: software for physicians for documenting and evaluating individual learning] Parboosingh J, et al. **Z Arztl Fortbild (Jena)** 1996 Aug; 90(5):382–4 (Eng. Abstr.) **(Ger)**

METHODS

An examination of the use of reflection in the assessment of practice for undergraduate nursing students. Getliffe KA. **Int J Nurs Stud** 1996 Aug;33(4):361–74
Reflective learning: a teaching strategy for critical thinking. Baker CR. **J Nurs Educ** 1996 Jan;35(1):19–22 (14 ref.)

SELF-EXAMINATION

Recommendations for the use of home (self) and ambulatory blood pressure monitoring. American Society of Hypertension Ad Hoc Panel. Pickering T. **Am J Hypertens** 1996 Jan;9(1):1–11
Examination of the ability of people to identify early changes of melanoma in computer-altered pigmented skin lesions. Hanrahan PF, et al. **Arch Dermatol** 1997 Mar;133(3):301–11
Breast self examination [letter] Brett TD. **Aust Fam Physician** 1997 Jun;26(6):762
Patient's self-interpretation of tuberculin skin tests. Colp C, et al. **Chest** 1996 Nov;110(5):1275–7
Summer woes [editorial] McCarthy JT. **Cutis** 1996 Jul; 58(1):21
Melanoma: stop the epidemic [editorial] McCarthy JT. **Cutis** 1997 Jun;59(6):300
The accuracy of skin self-examination for atypical nevi. Titus-Ernstoff L, et al. **Epidemiology** 1996 Nov;7(6):619–23
Community perceptions about the important signs of early melanoma. Baade PD, et al. **J Am Acad Dermatol** 1997 Jan;36(1):33–9
Accuracy of self-measurement of waist and hip circumference in men and women. Roberts CA, et al. **J Am Diet Assoc** 1997 May;97(5):534–6
Testicular cancer: to screen or not to screen? [see comments] Buetow SA. **J Med Screen** 1996;3(1):3–6. Comment in: J Med Screen 1996;3(3):165.
Should testicular self examination be recommended? [editorial] [see comments] Morris JK. **J Med Screen** 1996; 3(1):2. Comment in: J Med Screen 1996;3(3):165.
Testicular cancer. Screening, self examination, and evidence-based medicine [letter; comment] Wardle J. **J Med Screen** 1996;3(3):165. Comment on: J Med Screen 1996;3(1):2. Comment on: J Med Screen 1996;3(1):3–6.
The validity of self-reported diagnosis of rheumatoid arthritis: results from a population survey followed by clinical examinations. Kvien TK, et al. **J Rheumatol** 1996 Nov;23(11):1866–71
Validity of self-reported rheumatoid arthritis in elderly

women. Star VL, et al. **J Rheumatol** 1996 Nov; 23(11):1862–5

Teachers' beliefs concerning teaching about testicular cancer and testicular self-examination. Wohl RE, et al. **J Sch Health** 1997 Mar;67(3):106–11

Knowledge of testicular self-exam. Schaffner RJ. **Nurse Pract** 1995 Aug;20(8):10–2

Excessive breast self-examination among first-degree relatives of newly diagnosed breast cancer patients. High-Risk Breast Cancer Consortium. Epstein SA, et al. **Psychosomatics** 1997 May–Jun;38(3):253–61

Skin self-examination for melanoma—another golden rule. Howell JB. **Semin Cutan Med Surg** 1997 Jun;16(2):174–8 (19 ref.)

[Self-assessment of peak expiratory flow] Tsukioka K. **Nippon Rinsho** 1997 Apr;55 Suppl 2:31–4 (7 ref.) **(Jpn)**

[Do-it-yourself tests—useful or dangerous?] Daae C, et al. **Tidsskr Nor Laegeforen** 1997 Aug 10;117(18):2605 **(Nor)**

[Home blood pressure measurement in general practice patients] Sandvik E, et al. **Tidsskr Nor Laegeforen** 1996 Sep 10;116(21):2566–9 (Eng. Abstr.) **(Nor)**

METHODS

Evaluation of a new self-screening chart for cytomegalovirus retinitis in patients with AIDS. Teich SA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 1;13(4):336–42

[Self-test of morning urine with urinary dipsticks for 7 consecutive days for asymptomatic microscopic hematuria] Kamoi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Jul; 87(7):992–6 (Eng. Abstr.) **(Jpn)**

STATISTICS & NUMERICAL DATA

The association between clinical findings on physical examination and self-reported severity in back pain. Results of a population-based study. Michel A, et al. **Spine** 1997 Feb 1;22(3):296–303; discussion 303–4

SELF-EXAMINATION, BREAST see **BREAST SELF-EXAMINATION**

SELF-HELP DEVICES

The use and effectiveness of assistive devices in an elderly urban population. Sonn U, et al. **Aging (Milano)** 1996 Jun; 8(3):176–83

Educational participation of children with spinal cord injury. Dudgeon BJ, et al. **Am J Occup Ther** 1997 Jul–Aug; 51(7):553–61

The use of environmental control units by occupational therapists in spinal cord injury and disease services. Holme SA, et al. **Am J Occup Ther** 1997 Jan;51(1):42–8

Fortnightly review. Environmental control systems for people with a disability: an update. Wellings DJ, et al. **BMJ** 1997 Aug 16;315(7105):409–12 (33 ref.)

Outcomes of assistive technology use on quality of life. Scherer MJ. **Disabil Rehabil** 1996 Sep;18(9):439–48

A comparison of two control-display gain measures for head-controlled computer input devices. Schaab JA, et al. **Hum Factors** 1996 Sep;38(3):390–403

Assistive technology selection: a study of participation of users with rheumatoid arthritis. Hass U, et al. **IEEE Trans Rehabil Eng** 1997 Sep;5(3):263–75

Application of hydrogen absorbing alloys to medical and rehabilitation equipment. Wakisaka Y, et al. **IEEE Trans Rehabil Eng** 1997 Jun;5(2):148–57

A review of seven support surfaces with emphasis on their protection of the spinally injured [see comments] Main PW, et al. **J Accid Emerg Med** 1996 Jan;13(1):34–7. Comment in: J Accid Emerg Med 1996 Jul;13(4):302. Comment in: J Accid Emerg Med 1996 Nov;13(6):433. Comment in: J Accid Emerg Med 1997 Mar;14(2):131.

A self-help approach for high-risk drinking: effect of an initial assessment. Sanchez-Craig M, et al. **J Consult Clin Psychol** 1996 Aug;64(4):694–700

Accidental hypothermia: a potential life-threatening hazard of automobile platform lifts. Woods JA, et al. **J Emerg Med** 1997 Jan–Feb;15(1):45–8

Multi-adjustable chairs for children with disabilities. Pain H, et al. **J Med Eng Technol** 1996 Jul–Oct;20(4–5):151–6

Chair rise strategy in the functionally impaired elderly. Hughes MA, et al. **J Rehabil Res Dev** 1996 Oct; 33(4):409–12

Development of instrumentation and protocol to measure the dynamic environment of a modified van. Linden M, et al. **J Rehabil Res Dev** 1996 Feb;33(1):23–9

The development of the Port-a-Bidet: a portable bidet for people with minimal hand function. Burkitt J, et al. **Med Eng Phys** 1996 Sep;18(6):515–8

Providing rehabilitation integrated systems using existing rehabilitation technology. Cherry AD, et al. **Med Eng Phys** 1996 Apr;18(3):187–92

From SAW to Comspec. Colven D, et al. **Med Eng Phys** 1996 Apr;18(3):181–6

[Aids in general daily activities can hardly replace professional home care. Results of a study among single 75-year-olds or older] de Klerk MM, et al. **Tijdschr Gerontol Geriatr** 1997 Feb;28(1):27–33 (Eng. Abstr.) **(Dut)**

[Experience in applying legal conditions according to the nursing insurance regulation--ambulatory rehabilitation, nursing aids and nursing care eligibility] Lucke M, et al. **Gesundheitswesen** 1997 Mar;59(3):168–73 (Eng. Abstr.) **(Ger)**

ECONOMICS

A low-cost instrumented glove for monitoring forces during object manipulation. Castro MC, et al. **IEEE Trans Rehabil Eng** 1997 Jun;5(2):140–7

STANDARDS

Effect of a walking aid on disability, oxygenation, and breathlessness in patients with chronic airflow limitation. Honeyman P, et al. **J Cardiopulm Rehabil** 1996 Jan–Feb; 16(1):63–7

STATISTICS & NUMERICAL DATA

Interrater reliability of the Technology Team Assessment Process. Embleton AJ, et al. **Am J Occup Ther** 1997 Apr; 51(4):297–302

SUPPLY & DISTRIBUTION

Provision of environmental control systems in the north west of England. McDonald P, et al. **J Public Health Med** 1996 Dec;18(4):443–8

TRENDS

Integrating assistive technologies: current practices and future possibilities. Nisbet P. **Med Eng Phys** 1996 Apr; 18(3):193–202

UTILIZATION

Relationship between use of technology and employment rates for people with physical disabilities in Australia: implications for education and training programmes. Pell SD, et al. **Disabil Rehabil** 1997 Aug;19(8):332–8

The use of technical aids by elderly persons in The Netherlands: an application of the Andersen and Newman model. de Klerk MM, et al. **Gerontologist** 1997 Jun; 37(3):365–73

SELF-HELP GROUPS

In search of effective programs to address students' emotional distress and behavioral problems part III: student assessment of school-based support groups. Wassef A, et al. **Adolescence** 1996 Spring;31(121):1–16

People living with HIV infection who attend and do not attend support groups: a pilot study of needs, characteristics and experiences. Kalichman SC, et al. **AIDS Care** 1996 Oct;8(5):589–99

Characteristics of participants in secular organizations for sobriety (SOS). Connors GJ, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):281–95

Pathways to self-help among women for sobriety. Kaskutas LA. **Am J Drug Alcohol Abuse** 1996 May;22(2):259–80

Benefits of support groups for families of adults with severe mental illness. Heller T, et al. **Am J Orthopsychiatry** 1997 Apr;67(2):187–98

Family psychoeducational support groups in Spain: parents' distress and burden at none-month follow-up. Cañive JM, et al. **Ann Clin Psychiatry** 1996 Jun;8(2):71–9

Intersubjectivity, social microcosm, and the here-and-now in a support group for nurses. Brandman W. **Arch Psychiatr Nurs** 1996 Dec;10(6):374–8 (8 ref.)

Patients' associations and the control of leishmaniasis in Peru. Guthmann JP, et al. **Bull World Health Organ** 1997; 75(1):39–44

Three years of an adult burns support group: an analysis. Cooper R, et al. **Burns** 1996 Feb;22(1):65–8

Parent and family support groups with African American families: the process of family and community empowerment. Boyd-Franklin N, et al. **Cult Divers Ment Health** 1997;3(2):83–92

Self-help activities in cocaine dependent patients entering treatment: results from NIDA collaborative cocaine treatment study. Weiss RD, et al. **Drug Alcohol Depend** 1996 Dec 2;43(1–2):79–86

Gays and Lesbians Older and Wiser (GLOW): a support group for older gay people. Slusher MP, et al. **Gerontologist** 1996 Feb;36(1):118–23

Empowerment education: a case study of the Resource Sisters/Compañeras Program. Lugo NR. **Health Educ Q** 1996 Aug;23(3):281–9; discussion 290–2

A support group intervention to facilitate young adults' adjustment to cancer. Roberts CS, et al. **Health Soc Work** 1997 May;22(2):133–41

Obsessive-compulsive disorder: adding value to treatment through patient support groups. Broatch JW. **Int Clin Psychopharmacol** 1996 Dec;11 Suppl 5:89–94 (21 ref.)

World view change in adult children of Alcoholics/Al-Anon self-help groups: reconstructing the alcoholic family. Humphreys K. **Int J Group Psychother** 1996 Apr; 46(2):255–63

Change mechanisms of support groups for caregivers of dementia patients. Cuijpers P, et al. **Int Psychogeriatr** 1996 Winter;8(4):575–87 (45 ref.)

Support groups for professional caregivers: a role for the contemporary psychoanalyst. Merlino JP. **J Am Acad Psychoanal** 1997 Spring;25(1):111–22

A psychoeducational bereavement-support group for families provided in an outpatient cancer center. Goldstein J, et al. **J Cancer Educ** 1996 Winter;11(4):233–7

Support group membership and perceptions of control over health in HIV+ men. Fontaine KR, et al. **J Clin Psychol** 1997 Apr;53(3):249–52

Medical information on the Internet: a study of an electronic bulletin board [see comments] Culver JD, et al. **J Gen Intern Med** 1997 Aug;12(8):466–70. Comment in: J Gen Intern Med 1997 Aug;12(8):511–2.

Online, health-related discussion groups: what we should know and do [editorial; comment] Osheroff JA. **J Gen Intern Med** 1997 Aug;12(8):511–2. Comment on: J Gen Intern Med 1997 Aug;12(8):466–70.

The clubhouse model as exemplar. Merging psychiatric nursing and psychosocial rehabilitation. Farrell SP, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jan;35(1):27–34

Guilt and shame in recovering addicts. A personal account. Merritt P. **J Psychosoc Nurs Ment Health Serv** 1997 Jul; 35(7):46–9

Outcomes of a nursing intervention for siblings of chronically ill children: a pilot study. Williams PD, et al. **J Soc Pediatr Nurs** 1997 Jul–Sep;2(3):127–37

Online support group helps patients live with, learn more about the rare skin cancer CTCL-MF [news] Lamberg L. **JAMA** 1997 May 14;277(18):1422–3

A family intervention to delay nursing home placement of patients with Alzheimer disease. A randomized controlled trial [see comments] Mittelman MS, et al. **JAMA** 1996 Dec 4;276(21):1725–31. Comment in: JAMA 1996 Dec 4;276(21):1756–7. Comment in: JAMA 1997 Apr 2;277(13):1035. Comment in: ACP J Club 1997 May–Jun;126(3):67.

Calibrating the physician. Personal awareness and effective patient care. Working Group on Promoting Physician Personal Awareness, American Academy on Physician and Patient. Novack DH, et al. **JAMA** 1997 Aug 13; 278(6):502–9

The effect of monetary incentives and peer support groups on repeat adolescent pregnancies. A randomized trial of the Dollar-a-Day Program. Stevens-Simon C, et al. **JAMA** 1997 Mar 26;277(12):977–82

Support groups in cyberspace. Scolamiero SJ. **MD Comput** 1997 Jan–Feb;14(1):12–4, 17

How self-advocates can support national and local organizations. Amado AN. **Ment Retard** 1996 Aug; 34(4):254–5

Seeking a closer partnership with the self-advocacy movement. Dudley JR. **Ment Retard** 1996 Aug;34(4):255–6

Online health and healing [news] Veggeberg S. **Mol Med Today** 1996 Aug;2(8):315

A model of the dissemination of self-help in public mental health systems. Knight EL. **New Dir Ment Health Serv** 1997 Summer;(74):43–51

Cancer resources in the United States. **Oncol Nurs Forum** 1996 Oct;23(9):1459–71

A hospital-based domestic violence group. Norton IM, et al. **Psychiatr Serv** 1997 Sep;48(9):1186–90

A psychosocial intervention for patients with soft tissue sarcoma. Payne DK, et al. **Psychooncology** 1997 Mar; 6(1):65–71

Effect of support groups with coaching on adaptation to early stage breast cancer. Samarel N, et al. **Res Nurs Health** 1997 Feb;20(1):15–26

Social network associations with contraceptive use among Cameroonian women in voluntary associations. Valente TW, et al. **Soc Sci Med** 1997 Sep;45(5):677–87

Coming-out issues for adult lesbians: a group intervention. Morrow DF. **Soc Work** 1996 Nov;41(6):647–56

Searching for information, understanding, and self-value: the utilization of peer support groups by gay men with HIV/AIDS. Sandstrom KL. **Soc Work Health Care** 1996; 23(4):51–74

Recovery: with and without self-help. Godlaski TM, et al. **Subst Use Misuse** 1997 Apr;32(5):621–7

Measuring affiliation with 12-step groups. Kingree JB. **Subst Use Misuse** 1997 Jan;32(2):181–94

Service providers' perceptions of substance use self-help groups. Woff I, et al. **Subst Use Misuse** 1996 Aug; 31(10):1241–58

Perspectives on prostate cancer treatment: awareness, attitudes, and relationships. Porterfield HA. **Urology** 1997 Mar;49(3A Suppl):102–3

[Role of associations in bipolar patients] Attar-Lévy D, et al. **Encephale** 1997 Jan;23 Spec No 1:42–8 (16 ref.) (Eng. Abstr.) **(Fre)**

[Self-management by psychiatrically experienced persons] Buck D. **Gesundheitswesen** 1996 Jul;58(1 Suppl):100–1 (Eng. Abstr.) **(Ger)**

[Work with relatives from the viewpoint of the relatives] Walter K. **Gesundheitswesen** 1996 Jul;58(1 Suppl):98–9 (Eng. Abstr.) **(Ger)**

[Changes in the structure of an Alzheimer family group] Wormstall H, et al. **Psychiatr Prax** 1997 May;24(3):117–9 (Eng. Abstr.) **(Ger)**

[Nursing care aspects for relatives from the viewpoint of a self-help group] Pammer E. **Wien Med Wochenschr** 1996; 146(21–22):569–73 (Eng. Abstr.) **(Ger)**

ECONOMICS

Recovery, Inc., as an adjunct to treatment in an era of managed care. Murray P. **Psychiatr Serv** 1996 Dec;

47(12):1378–81

ORGANIZATION & ADMINISTRATION

The influence of posttreatment mutual help group participation on the friendship networks of substance abuse patients. Humphreys K, et al.
Am J Community Psychol 1997 Feb;25(1):1–16

"What will happen to my child when I'm gone?" A support and education group for aging parents as caregivers. Mengel MH, et al. **Gerontologist** 1996 Dec;36(6):816–20

Connecting group members through telephone and computer groups. Galinsky MJ, et al. **Health Soc Work** 1997 Aug; 22(3):181–8

Evaluation of a peer-led drug abuse risk reduction project for runaway/homeless youths. Fors SW, et al.
J Drug Educ 1995;25(4):321–33

Participation in teleconference support groups: application to drug-using pregnant patients. Alemi F, et al.
J Med Syst 1997 Apr;21(2):119–25

Interviews with men with prostate cancer about their self-help group experience. Gray RE, et al.
J Palliat Care 1997 Spring;13(1):15–21

'Free to be' peer group supports patients with MPD/DD. Dallam S, et al. **J Psychosoc Nurs Ment Health Serv** 1997 May;35(5):22–7

Self-help groups and health care reform. Scanlan T, et al. **Kans Med** 1996 Summer–Fall;97(2):33–4

Electronic self-help and support groups. Alemi F, et al. **Med Care** 1996 Oct;34(10 Suppl):OS32–44

Brain tumor support group: content themes and mechanisms of support. Leavitt MB, et al. **Oncol Nurs Forum** 1996 Sep; 23(8):1247–56

The MICA therapeutic community: challenges for residents and staff. Silberstein CH, et al. **Psychiatr Q** 1996 Winter; 67(4):263–72

Girl Talk: development of an intervention for prevention of HIV/AIDS and other sexually transmitted diseases in adolescent females. Guthrie BJ, et al.
Public Health Nurs 1996 Oct;13(5):318–30

How to treat coexistent mental illness and substance abuse. Velasco J, et al. **South Med J** 1997 Feb;90(2):180–3

Tak Tent. Studies conducted in a cancer support group. Montazeri A, et al. **Support Care Cancer** 1997 Mar; 5(2):118–25

[Support groups and the family physician (editorial)] de Serdio Romero E. **Aten Primaria** 1996 Sep 30;18(5):209–10 **(Spa)**

STANDARDS

A community support group for HIV-seropositive drug users: is attendance associated with reductions in risk behaviour? [published erratum appears in AIDS Care 1996 Dec;8(6):716] Greenberg JB, et al. **AIDS Care** 1996 Oct; 8(5):529–40

Twelve-step and cognitive--behavioral treatment for substance abuse: a comparison of treatment effectiveness. Ouimette PC, et al. **J Consult Clin Psychol** 1997 Apr; 65(2):230–40

Cost-effectiveness of smoking cessation modalities: comparing apples with oranges? Mudde AN, et al.
Prev Med 1996 Nov–Dec;25(6):708–16

STATISTICS & NUMERICAL DATA

CHARGE association looking at the future--the voice of a family support group. Blake KD, et al.
Child Care Health Dev 1993 Nov–Dec;19(6):395–409

TRENDS

The online patient meeting. Feenberg AL, et al.
J Neurol Sci 1996 Aug;139 Suppl:129–31 (20 ref.)

National clearinghouse serves mental health consumer movement. Rogers S.
J Psychosoc Nurs Ment Health Serv 1996 Sep;34(9):22–5

[Counseling concepts and services of health-associated self-help initiatives] Bachl A, et al. **Gesundheitswesen** 1996 Sep;58 Suppl 2:120–4 (Eng. Abstr.) **(Ger)**

UTILIZATION

An exploratory study of male recovering substance abusers living in a self-help, self-governed setting. Jason LA, et al. **J Ment Health Adm** 1997 Summer;24(3):332–9

SELF-INJURIOUS BEHAVIOR

Lethal defibrillator mishap [letter] Montauk L.
Ann Emerg Med 1997 Jun;29(6):825

Ring the fire brigade. Kore RN, et al. **Br J Urol** 1996 Dec; 78(6):948

Treating dermatitis artefacta [letter] Lent B, et al.
Can Fam Physician 1997 Jul;43:1204–5

Deliberate self harm [letter; comment] Gilbody S.
J Accid Emerg Med 1996 Nov;13(6):432. Comment on: J Accid Emerg Med 1996 Jan;13(1);31–3.

Oesophageal "cross"—a sinister foreign body. Losanoff JE, et al. **J Accid Emerg Med** 1997 Jan;14(1):54–5

Insulin dependent diabetes mellitus and deliberate self-harm. Ryan J, et al. **J Accid Emerg Med** 1995 Dec;12(4):296–7

Anubis and the feather of truth: judging transplant candidates who engage in self-damaging behavior [comment] Atterbury CE. **J Clin Ethics** 1996 Fall;7(3):268–76. Comment on: J Clin Ethics 1996 Fall;7(3):257–67.

Changing patterns of self-poisoning in a UK health district. Bialas MC, et al. **QJM** 1996 Dec;89(12):893–901

Self-poisoning and the general hospital [editorial] Hawton K. **QJM** 1996 Dec;89(12):879–80

Multiple cigarette burn wounds in a chronic paranoid schizophrenic [letter; comment] Assin WD.
S Afr Med J 1996 Nov;86(11):1437. Comment on: S Afr Med J 1996 May;86(5):572.

[Comparison of retinal breaks between patients with atopic dermatitis and mentally retarded patients with self-inflicted ocular injury] Suzuki J, et al.
Nippon Ganka Gakkai Zasshi 1997 May;101(5):446–9 (Eng. Abstr.) **(Jpn)**

[Appearance of cytoplasmic processes of megakaryocytes in the peripheral blood in a Munchausen syndrome with factitious anemia] Komeno T, et al. **Rinsho Ketsueki** 1996 Sep;37(9):848–52 (Eng. Abstr.) **(Jpn)**

BLOOD

Serotonergic function and self-injurious behavior in personality disorder patients. New AS, et al.
Psychiatry Res 1997 Mar 3;69(1):17–26

CHEMICALLY INDUCED

Clonidine side effect [letter] McCracken JT, et al.
J Am Acad Child Adolesc Psychiatry 1997 Feb;36(2):160–1

COMPLICATIONS

Characteristics of children and adolescents with mental retardation and frequent outwardly directed aggressive behavior. Davidson PW, et al. **Am J Ment Retard** 1996 Nov;101(3):244–55

Self-injury in trauma survivors: 1. functions and meanings. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):197–206 (50 ref.)

Self-injury in trauma survivors: 2. levels of clinical response. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):207–16 (34 ref.)

Self-trephination of the skull with an electric power drill. Wadley JP, et al. **Br J Neurosurg** 1997 Apr;11(2):156–8

Serotonergic function and self-injurious behavior in personality disorder patients. New AS, et al.
Psychiatry Res 1997 Mar 3;69(1):17–26

DIAGNOSIS

Oral self-injurious behavior in the developmentally disabled: review and a case. Saemundsson SR, et al.
ASDC J Dent Child 1997 May–Jun;64(3):205–9, 228 (42 ref.)

Obstetric factitious disorder: is it more common than we think? Guthrie EA, et al. **Br J Clin Pract** 1996 Mar; 50(2):113–4

Clinical assessment of self-injurious behavior. Brasic JR, et al. **Psychol Rep** 1997 Feb;80(1):155–60

DRUG THERAPY

Sertraline: lack of therapeutic efficacy in patients with delusions of parasitosis and dermatitis artefacta [letter] Kalivas J, et al. **Int J Dermatol** 1997 Jun;36(6):477

The effect of clozapine on self-injurious behavior. Hammock RG, et al. **J Autism Dev Disord** 1995 Dec;25(6):611–26

The use of buspirone with aggressive behavior [letter] Hillbrand M, et al. **J Autism Dev Disord** 1995 Dec; 25(6):663–4

Brief report: risperidone for severely disturbed behavior and tardive dyskinesia in developmentally disabled adults. Khan BU. **J Autism Dev Disord** 1997 Aug;27(4):479–89

Brief report: reliability and validity of instruments for assessing psychotropic medication effects on self-injurious behavior in mental retardation. Schroeder SR, et al.
J Autism Dev Disord 1997 Feb;27(1):89–102

Open trial lamotrigine in the treatment of self-injurious behavior in an adolescent with profound mental retardation. Davanzo PA, et al.
J Child Adolesc Psychopharmacol 1996 Winter;6(4):273–9

Naltrexone and self-injurious behavior: a retrospective population study. Casner JA, et al.
J Clin Psychopharmacol 1996 Oct;16(5):389–94

Trazodone for aggression in an adolescent with hydrocephalus. Mashiko H, et al.
Psychiatry Clin Neurosci 1996 Jun;50(3):133–6 (16 ref.)

EPIDEMIOLOGY

Deliberate self-poisoning and self-injury in children and adolescents under 16 years of age in Oxford, 1976–1993. Hawton K, et al. **Br J Psychiatry** 1996 Aug;169(2):202–8

Impulsivity or comorbidity in bulimia nervosa. A controlled study of deliberate self-harm and alcohol and drug misuse in a community sample. Welch SL, et al.
Br J Psychiatry 1996 Oct;169(4):451–8

Comorbid self-injurious behaviors in 71 female hair-pullers: a survey study. Simeon D, et al. **J Nerv Ment Dis** 1997 Feb;185(2):117–9

The early repetition of deliberate self harm. Gilbody S, et al. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):171–2

Adolescent suicidal behaviours: a population-based study of risk. Patton GC, et al. **Psychol Med** 1997 May;27(3):715–24

ETHNOLOGY

A bewitching case of factitious disorder in Zimbabwe. Linde PR. **Gen Hosp Psychiatry** 1996 Nov;18(6):440–3

ETIOLOGY

Self-restraint and self-injury: occurrence and motivational significance. Powell SB, et al. **Am J Ment Retard** 1996 Jul;101(1):41–8

Voluntary scapulothoracic subluxation: a case report. Kushwaha VP, et al. **Am J Orthop** 1997 Jul;26(7):499–501

The sound of scratching: an unusual cause of neurotic excoriations [letter] Parsad D, et al. **Dermatology** 1997; 195(1):74

Two faces of nocturnal tongue biting. Vasiknanonte P, et al. **J Med Assoc Thai** 1997 Aug;80(8):500–7

Deliberate self harm and the Probation Service; an overlooked public health problem? Wessely S, et al.
J Public Health Med 1996 Jun;18(2):129–32

Role of medical conditions in the exacerbation of self-injurious behavior: an exploratory study. Bosch J, et al. **Ment Retard** 1997 Apr;35(2):124–30

Self-inflicted oral injury [letter] Melamed Y, et al.
Psychiatr Serv 1997 Mar;48(3):402–3

GENETICS

Behaviour disorder in an adolescent with terminal deletion of chromosome 3. Davies JL, et al.
J Intellect Disabil Res 1997 Jun;41 (Pt 3):278–80

Association of short alleles of a VNTR of the serotonin transporter gene with anxiety symptoms in patients presenting after deliberate self harm. Evans J, et al.
Neuropharmacology 1997 Apr–May;36(4–5):439–43

MORTALITY

Suicide in the 18 years after deliberate self-harm a prospective study. De Moore GM, et al.
Br J Psychiatry 1996 Oct;169(4):489–94

Mortality and avoidable death in people with severe self-injurious behaviour: results of a Dutch study. Nissen JM, et al. **J Intellect Disabil Res** 1997 Jun;41 (Pt 3):252–7

NURSING

Building therapeutic staff: client relationships with women who self-harm. Rea K, et al. **Womens Health Issues** 1997 Mar–Apr;7(2):121–5

PREVENTION & CONTROL

Clomipramine treatment for self-injurious behavior of individuals with mental retardation: a double-blind comparison with placebo. Lewis MH, et al.
Am J Ment Retard 1996 May;100(6):654–65

Direct and collateral effects of restraints and restraint fading. Fisher WW, et al. **J Appl Behav Anal** 1997 Spring; 30(1):105–19; quiz 120

Noncontingent reinforcement as treatment for severe problem behavior: some procedural variations. Lalli JS, et al. **J Appl Behav Anal** 1997 Spring;30(1):127–36; quiz 136–7

Functional analysis and treatment of eye poking with response blocking. Lalli JS, et al. **J Appl Behav Anal** 1996 Spring;29(1):129–32

Does functional communication training compete with ongoing contingencies of reinforcement? An analysis during response acquisition and maintenance. Shirley MJ, et al. **J Appl Behav Anal** 1997 Spring;30(1):93–104

An analysis of reinforcer substitutability using object manipulation and self-injury as competing responses. Shore BA, et al. **J Appl Behav Anal** 1997 Spring;30(1):21–41

An inventory method for assessing the degree of restraint imposed by others. Duker PC, et al.
J Behav Ther Exp Psychiatry 1997 Jun;28(2):113–21

Long-term use of electrical aversion treatment with self-injurious behavior. Duker PC, et al.
Res Dev Disabil 1996 Jul–Aug;17(4):293–301

Stimulus control and resistance to extinction in attention-maintained SIB. Hanley GP, et al.
Res Dev Disabil 1997 Jul–Aug;18(4):251–60

Analysis and intervention with two topographies of challenging behavior exhibited by a young woman with autism. Kern L, et al. **Res Dev Disabil** 1997 Jul–Aug; 18(4):275–87

Assessment and treatment of episodic self-injury: a case study. O'Reilly MF. **Res Dev Disabil** 1996 Sep–Oct; 17(5):349–61

The effect of noncontingent sensory reinforcement, contingent sensory reinforcement, and response interruption on stereotypical and self-injurious behavior. Sprague J, et al. **Res Dev Disabil** 1997 Jan–Feb;18(1):61–77

PSYCHOLOGY

Suicide by self-incineration. Leth P, et al.
Am J Forensic Med Pathol 1997 Jun;18(2):113–8

Self-restraint and self-injury: occurrence and motivational significance. Powell SB, et al. **Am J Ment Retard** 1996 Jul;101(1):41–8

Self-injury in trauma survivors: 1. functions and meanings. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):197–206 (50 ref.)

Ethology and self-injury [letter; comment] Goldney RD, et

al. **Br J Psychiatry** 1997 Feb;170:192–3. Comment on: Br J Psychiatry 1996 Sep;169(3):263–7.

An ethological approach to self–injury [editorial] [see comments] Jones IH, et al. **Br J Psychiatry** 1996 Sep; 169(3):263–7 (21 ref.). Comment in: Br J Psychiatry 1997 Feb;170:192–3.

Childhood antecedents of self–destructiveness in borderline personality disorder. Dubo ED, et al. **Can J Psychiatry** 1997 Feb;42(1):63–9

Prediction of self–destructive behaviour among Makerere University students. Ovuga EB, et al. **East Afr Med J** 1996 Jul;73(7):448–52

Profiles and treatment of attempted suicide by self–immolation. Antonowicz JL, et al.
Gen Hosp Psychiatry 1997 Jan;19(1):51–5

Serious overdosers admitted to a general hospital: comparison with nonoverdose self–injuries and medically ill patients with suicidal ideation. Gupta B, et al.
Gen Hosp Psychiatry 1997 May;19(3):209–15

Experience with risk–taking adolescents [letter; comment] Kay P. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1423–4. Comment on: J Am Acad Child Adolesc Psychiatry 1995 Dec;34(12):1682–3.

The effects of contingent and noncontingent attention on self–injury and self–restraint [see comments] Derby KM, et al. **J Appl Behav Anal** 1996 Spring;29(1):107–10. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.

Further analysis of the relationship between self–injury and self–restraint [see comments] Fisher WW, et al.
J Appl Behav Anal 1996 Spring;29(1):103–6. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.

On the function of self–restraint and its relationship to self–injury [comment] Fisher WW, et al.
J Appl Behav Anal 1996 Spring;29(1):93–8. Comment on: J Appl Behav Anal 1996 Spring;29(1):99–102. Comment on: J Appl Behav Anal 1996 Spring;29(1):103–6. Comment on: J Appl Behav Anal 1996 Spring;29(1):107–10.

Sleep deprivation, allergy symptoms, and negatively reinforced problem behavior. Kennedy CH, et al.
J Appl Behav Anal 1996 Spring;29(1):133–5

Effects of intermittent punishment on self–injurious behavior: an evaluation of schedule thinning. Lerman DC, et al.
J Appl Behav Anal 1997 Summer;30(2):187–201

Functional analysis of episodic self–injury correlated with recurrent otitis media. O'Reilly MF. **J Appl Behav Anal** 1997 Spring;30(1):165–7

Self–restraint as positive reinforcement for self–injurious behavior [see comments] Smith RG, et al.
J Appl Behav Anal 1996 Spring;29(1):99–102. Comment in: J Appl Behav Anal 1996 Spring;29(1):93–8.

The impact of childhood maltreatment on young mothers' violent behavior toward themselves and others. Koniak–Griffin D, et al. **J Pediatr Nurs** 1996 Oct; 11(5):300–8

Why do bad moods increase self–defeating behavior? Emotion, risk taking, and self–regulation. Leith KP, et al.
J Pers Soc Psychol 1996 Dec;71(6):1250–67

Self–injurious behavior and mood regulation in borderline patients. Kemperman I, et al. **J Personal Disord** 1997 Summer;11(2):146–57

Psychopathologic risk factors for intentional and nonintentional injury. Poole GV, et al. **J Trauma** 1997 Apr; 42(4):711–5

Association of short alleles of a VNTR of the serotonin transporter gene with anxiety symptoms in patients presenting after deliberate self harm. Evans J, et al.
Neuropharmacology 1997 Apr–May;36(4–5):439–43

Compulsive targeted self–injurious behaviour in humans with neuropathic pain: a counterpart of animal autotomy? Four case reports and literature review. Mailis A. **Pain** 1996 Mar; 64(3):569–78

Numbing scale scores in female psychiatric inpatients diagnosed with self–injurious behavior, dissociative identity disorder, and major depression. Glover H, et al.
Psychiatry Res 1997 May 5;70(2):115–23

Pain assessment in self–injurious patients with borderline personality disorder using signal detection theory. Kemperman I, et al. **Psychiatry Res** 1997 May 30; 70(3):175–83

Pain and self–injury in borderline patients: sensory decision theory, coping strategies, and locus of control. Russ MJ, et al. **Psychiatry Res** 1996 Jun 26;63(1):57–65

[Self–injury behavior] Hönigl D, et al.
Acta Med Austriaca 1997;24(1):19–22 (16 ref.) (Eng. Abstr.) **(Ger)**

[Genital self–injury behavior––phenomenologic and differential diagnosis considerations from the psychiatric viewpoint] Becker H, et al. **Fortschr Neurol Psychiatr** 1997 Feb;65(2):71–8 (Eng. Abstr.) **(Ger)**

[Symptom complex, prevalence of trauma and body image of psychiatric patients with self–injury behavior] Tameling A, et al. **Psychother Psychosom Med Psychol** 1996 Feb; 46(2):61–7 (Eng. Abstr.) **(Ger)**

[Open self–injury behavior with special reference to child and adolescent psychiatry. A review of the literature and first study findings] Wewetzer G, et al.
Z Kinder Jugenpsychiatr 1997 May;25(2):95–105 (57 ref.) (Eng. Abstr.) **(Ger)**

REHABILITATION

The effects of meal schedule and quantity on problematic behavior. Wacker DP, et al. **J Appl Behav Anal** 1996 Spring;29(1):79–87

A practical strategy to increase participation and reduce challenging behavior during leisure skills programming. Sigafoos J, et al. **Ment Retard** 1997 Jun;35(3):198–208

THERAPY

Social implications of behavioral interventions for persons with mental retardation. Bihm EM, et al.
Am J Ment Retard 1997 May;101(6):567–78

Self–injury in trauma survivors: 2. levels of clinical response. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):207–16 (34 ref.)

Managing self–harm: the legal issues. **Drug Ther Bull** 1997 Jun;35(6):41–3 (25 ref.)

On the relation of mands and the function of destructive behavior. Bowman LG, et al. **J Appl Behav Anal** 1997 Summer;30(2):251–64; quiz 264–5

Noncontingent delivery of arbitrary reinforcers as treatment for self–injurious behavior. Fischer SM, et al.
J Appl Behav Anal 1997 Summer;30(2):239–49

Evaluation of the "control over reinforcement" component in functional communication training. Kahng S, et al.
J Appl Behav Anal 1997 Summer;30(2):267–76; quiz 277

Multimodal cognitive–behavior therapy for borderline personality disorder with self–injurious behavior. Kern RS, et al. **Psychiatr Serv** 1997 Sep;48(9):1131–3

SELF-INSTRUCTION PROGRAMS see **PROGRAMMED INSTRUCTION**

SELF-INSTRUCTION PROGRAMS, COMPUTERIZED see **COMPUTER-ASSISTED INSTRUCTION**

SELF MEDICATION

"Smart drugs"? [letter] Carson WH, et al.
Ann Clin Psychiatry 1996 Mar;8(1):41–2

Self–medication of a single headache episode with ketoprofen, ibuprofen or placebo, home–monitored with an electronic patient diary. van Gerven JM, et al.
Br J Clin Pharmacol 1996 Oct;42(4):475–81

Nicotine, caffeine and alcohol use in high– and low–dose benzodiazepine users. Lekka NP, et al.
Drug Alcohol Depend 1997 May 2;45(3):207–12

Analgesic drug taking: beliefs and behavior among headache patients. Ferrari A, et al. **Headache** 1997 Feb;37(2):88–94

Medical use of recreational drugs by AIDS patients. Dansak DA. **J Addict Dis** 1997;16(3):25–30

Insomnia, alcohol, and over–the–counter drug use in old–old urban women. Johnson JE. **J Community Health Nurs** 1997; 14(3):181–8

Neuroleptic dysphoria may be the missing link between schizophrenia and substance abuse. Voruganti LN, et al.
J Nerv Ment Dis 1997 Jul;185(7):463–5

Self dosing with cobalt or selenium by farmers [letter] Farquhar SJ. **N Z Med J** 1997 Jun 27;110(1046):237

Anabolic steroids in sport [letter] [see comments] Moriarty HJ. **N Z Med J** 1997 Feb 14;110(1037):42. Comment in: N Z Med J 1997 Apr 25;110(1042):154–5.

Self–treatment patterns among clients attending sexually transmitted disease clinics and the effects of self–treatment on STD symptom duration. The Study Group. Irwin DE, et al. **Sex Transm Dis** 1997 Jul;24(6):372–7

Self–medication and STD prevention [editorial; comment] Nichter M. **Sex Transm Dis** 1996 Sep–Oct;23(5):353–6 (2 ref.). Comment on: Sex Transm Dis 1996 Sep–Oct;23(5):407–12.

Treatment seeking for malaria: a review of recent research. McCombie SC. **Soc Sci Med** 1996 Sep;43(6):933–45 (90 ref.)

Treating one's own ailments. Ibrahim MI.
World Health Forum 1996;17(4):409–10

[The "self–treatment concept" and the nonprescription sale of drugs] Mashkovskiĭ MD. **Klin Med (Mosk)** 1996; 74(2):73–4 **(Rus)**

[Surreptitious intake of diuretics as the cause of pseudo–Bartter's syndrome: apropos of a case and differential diagnosis] Olveira Fuster G, et al.
An Med Interna 1996 Oct;13(10):496–9 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Topical anesthetic abuse ring keratitis: report of four cases. Varga JH, et al. **Cornea** 1997 Jul;16(4):424–9

Antimicrobial self medication in patients attending a sexually transmitted diseases clinic. Adu–Sarkodie YA.
Int J STD AIDS 1997 Jul;8(7):456–8

Keratitis from corneal anesthetic abuse after photorefractive keratectomy. Kim JY, et al. **J Cataract Refract Surg** 1997 Apr;23(3):447–9

A spot of tea [editorial] McIntyre RV.
J Okla State Med Assoc 1996 Sep;89(9):311

Quinine––acute self–poisoning and ocular toxicity. Mackie MA, et al. **Scott Med J** 1997 Feb;42(1):8–9

Lay injection practices among migrant farmworkers in the age of AIDS: evolution of a biomedical folk practice. McVea KL. **Soc Sci Med** 1997 Jul;45(1):91–8

Medication use in seniors: challenges and solutions. Tamblyn R. **Therapie** 1996 May–Jun;51(3):269–82 (186 ref.)

[Pharmacovigilance of self–medication] Montastruc JL, et al. **Therapie** 1997 Mar–Apr;52(2):105–10 (26 ref.) (Eng. Abstr.) **(Fre)**

METHODS

Use of medication by adolescents for the management of menstrual discomfort. Campbell MA, et al.
Arch Pediatr Adolesc Med 1997 Sep;151(9):905–13

Human immunodeficiency virus infection and self–treatment for sexually transmitted diseases among northern Thai men [see comments] Khamboonruang C, et al.
Sex Transm Dis 1996 Jul–Aug;23(4):264–9. Comment in: Sex Transm Dis 1996 Jul–Aug;23(4):262–3.

PSYCHOLOGY

Generalized use of over–the–counter analgesics: relationship to premenstrual symptoms. Hart KE, et al.
J Clin Psychol 1997 Apr;53(3):197–200

STANDARDS

Explicit criteria for determining potentially inappropriate medication use by the elderly. An update. Beers MH.
Arch Intern Med 1997 Jul 28;157(14):1531–6 (29 ref.)

"Grow dumb along with me". Misuse of DHEA (dehydroepiandrosterone). Mack RB. **N C Med J** 1997 Mar–Apr;58(2):144–6

STATISTICS & NUMERICAL DATA

Self–administration of over–the–counter medication for pain among adolescents. Chambers CT, et al.
Arch Pediatr Adolesc Med 1997 May;151(5):449–55

Multicenter study on self–medication and self–prescription in six Latin American countries. Drug Utilization Research Group, Latin America. **Clin Pharmacol Ther** 1997 Apr; 61(4):488–93

Use of dietary supplements by patients in a family practice clinic [see comments] Eliason BC, et al.
J Am Board Fam Pract 1996 Jul–Aug;9(4):249–53. Comment in: J Am Board Fam Pract 1996 Nov–Dec;9(6):466.

Over–the–counter availability of antimicrobial agents, self–medication and patterns of resistance in Karachi, Pakistan. Sturm AW, et al. **J Antimicrob Chemother** 1997 Apr;39(4):543–7

Unapproved use of high–dose combined pills in Japan: a community study on prevalence and health characteristics of the users. Nagata C, et al. **Prev Med** 1997 Jul–Aug; 26(4):565–9

Antibiotic prophylaxis among commercial sex workers in Cebu City, Philippines. Patterns of use and perceptions of efficacy [see comments] Abellanosa I, et al.
Sex Transm Dis 1996 Sep–Oct;23(5):407–12. Comment in: Sex Transm Dis 1996 Sep–Oct;23(5):353–6.

Use of analgesics in Sweden––the importance of sociodemographic factors, physical fitness, health and health–related factors, and working conditions. Antonov K, et al. **Soc Sci Med** 1996 Jun;42(11):1473–81

TRENDS

Evaluation of sources and trends in pediatric medication including self medication. Anand NK, et al.
Indian Pediatr 1996 Nov;33(11):947–8

Self medication or self care: implication for primary health care strategies. Haider S, et al.
JPMA J Pak Med Assoc 1995 Nov;45(11):297–8

Changing patterns of pharmaceutical practice in the United States. Vuckovic N, et al. **Soc Sci Med** 1997 May; 44(9):1285–302 (126 ref.)

UTILIZATION

Self–medication of dyspepsia: how appropriate is it? Sihvo S, et al. **Scand J Gastroenterol** 1997 Sep;32(9):855–61

SELF-MONITORING, BLOOD GLUCOSE see **BLOOD GLUCOSE SELF-MONITORING**

SELF MUTILATION

Self–mutilating intraocular injection of metallic mercury [letter] Auer C, et al. **Arch Ophthalmol** 1997 Apr; 115(4):556–7

Genital self–mutilation: sub–preputial space––the final frontier? Schorn H, et al. **Br J Urol** 1996 Dec;78(6):949–50

Self–inflicted injuries. Challenging knowledge, skill, and compassion. Haswell DE, et al. **Can Fam Physician** 1996 Sep;42:1756–8, 1761–4 (11 ref.)

'Naevophobia'. Allan SJ, et al. **Clin Exp Dermatol** 1995 Nov; 20(6):499–501

Body piercing involving oral sites. Price SS, et al.
J Am Dent Assoc 1997 Jul;128(7):1017–20

Self–injurious behavior and dopaminergic neuron system in neonatal 6–hydroxydopamine–lesioned rat: 2. Intracerebral microinjection of dopamine agonists and antagonists. Okamura H, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):1031–7

Self–injurious behavior and dopaminergic neuron system in neonatal 6–hydroxydopamine–lesioned rat: 1. Dopaminergic neurons and receptors. Yokoyama C, et al.
J Pharmacol Exp Ther 1997 Feb;280(2):1016–30

Household objects as a cause of self–inflicted orbital apex syndrome. Lasky JB, et al. **J Trauma** 1997 Mar;42(3):555–8

Self–mutilation with needles. Peschel O, et al.
Med Sci Law 1997 Apr;37(2):175–8

Self–mutilation and malingering among Cuban migrants

detained at Guantanamo Bay [see comments] Andrews TC, et al. **N Engl J Med** 1997 Apr 24;336(17):1251–3. Comment in: N Engl J Med 1997 Apr 24;336(17):1248–50. Comment in: N Engl J Med 1997 Aug 28;337(9):642–3; discussion 644.

CHEMICALLY INDUCED

Self–mutilation and severe self–injurious behavior associated with amphetamine psychosis. Kratofil PH, et al. **Gen Hosp Psychiatry** 1996 Mar;18(2):117–20

COMPLICATIONS

Oral conditions related to use of the lip plug (ndonya) among the Makonde tribe in Tanzania. Aanestad S, et al. **Acta Odontol Scand** 1996 Dec;54(6):362–4

A complication of tongue piercing. Perkins CS, et al. **Br Dent J** 1997 Feb 22;182(4):147–8

Self–induced cicatricial conjunctivitis with symblephara. Kovarik GG, et al. **Cornea** 1997 Jul;16(4):495–7

Reflex sympathetic dystrophy with mutilating ulcerations suspicious of a factitial origin. Lipp KE, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):843–5

Acute tibial compartment syndrome secondary to psychosomatic disorder. Eskander MB, et al. **J R Army Med Corps** 1994 Jun;140(2):97–8 (5 ref.)

Sarcoid–like foreign body reaction in body piercing: a report of two cases. Ng KH, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):28–31 (11 ref.)

Accidental ocular perforation from self–inflicted facial palsy. O'Halloran HS, et al. **Retina** 1997;17(2):164–6

DIAGNOSIS

Dermacase. Neurotic excoriation. Enta T. **Can Fam Physician** 1996 Sep;42:1682, 1688

Pediatric psychocutaneous disorders. Hansen RC. **Curr Opin Pediatr** 1997 Aug;9(4):367–71 (14 ref.)

Self–mutilation and suicide attempt: distinguishing features in prisoners. Fulwiler C, et al. **J Am Acad Psychiatry Law** 1997;25(1):69–77

The identification and management of self–mutilating patients in primary care. Dallam SJ. **Nurse Pract** 1997 May; 22(5):151–3, 159–65 (34 ref.)

Opioid–induced rigidity after intravenous fentanyl. Viscomi CM, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):822–4

On background factors of male genital self–mutilation. Nakaya M. **Psychopathology** 1996;29(4):242–8

[Voluntary mercury poisoning: biological consequences and psychiatric significance (published erratum appears in Schweiz Rundsch Med Prax 1997 Jul 2;86(27–28):1123)] Jornod P, et al. **Schweiz Rundsch Med Prax** 1997 May 28; 86(22):946–51 (51 ref.) (Eng. Abstr.) **(Fre)**

[Self–induced illness in ENT medical practice. Artefacts as a contribution to differential diagnosis of unusual illness courses] Ebeling O, et al. **HNO** 1996 Sep;44(9):526–31 (Eng. Abstr.) **(Ger)**

[Artificially–induced disorders and dissociation] Freyberger HJ, et al. **Med Klin** 1997 Jan 15;92(1):46–8 (11 ref.) **(Ger)**

DRUG THERAPY

Carbamazepine trial for Lesch–Nyhan self–mutilation. Roach ES, et al. **J Child Neurol** 1996 Nov;11(6):476–8

Remission of self–mutilation in a patient with borderline personality during risperidone therapy. Khouzam HR, et al. **J Nerv Ment Dis** 1997 May;185(5):348–9

Risperidone antagonism of self–mutilation in a Lesch–Nyhan patient. Allen SM, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jul; 20(5):793–800

EPIDEMIOLOGY

The early repetition of deliberate self harm [letter] Cohen SI. **J R Coll Physicians Lond** 1997 Jul–Aug;31(4):468

ETIOLOGY

Monosymptomatic hypochondriacal psychosis complicated by self–inflicted skin ulceration, skull defect and brain abscess. Wang CK, et al. **Br J Dermatol** 1997 Aug; 137(2):299–302

Oral and maxillofacial manifestations of hereditary sensory neuropathy. Narayanan V. **Br J Oral Maxillofac Surg** 1996 Oct;34(5):446–9 (16 ref.)

The role of spinal cord activation before neurectomy in the development of autotomy. Asada H, et al. **Pain** 1996 Jan; 64(1):161–7

NURSING

Management of self–destructive behaviors in an open inpatient setting. Bonnivier JF. **J Psychosoc Nurs Ment Health Serv** 1996 Feb;34(2):38–42

Patient self–mutilation: when nursing becomes a nightmare. Loughrey L, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Apr;35(4):30–4

PHYSIOPATHOLOGY

Relation of abnormal burst activity of spinal neurons to the recurrence of autotomy in rats. Asada H, et al. **Neurosci Lett** 1996 Aug 2;213(2):99–102

PREVENTION & CONTROL

Comments on Luo and Wiesenfeld–Hallin (Pain 63 (1995) 173–179) [letter; comment] Katz J. **Pain** 1996 Sep; 67(1):212–4. Comment on: Pain 1995 Nov;63(2):173–9.

Successful treatment of self–inflicted oral mutilation using an acrylic splint retained by a head gear. Chen LR, et al. **Pediatr Dent** 1996 Sep–Oct;18(5):408–10

PSYCHOLOGY

Oedipism. Aung T, et al. **Aust N Z J Ophthalmol** 1996 May; 24(2):153–7 (34 ref.)

Allergic contact dermatitis to adhesive tape and contrived disease. Dwyer P, et al. **Australas J Dermatol** 1997 Aug; 38(3):141–4

The first case of autocastration from east Asia [letter] Tang WN. **Can J Psychiatry** 1996 Nov;41(9):607–8

Lethal suicidal intoxication with propafenone, after a history of self–inflicted injuries. Maxeiner H, et al. **Forensic Sci Int** 1997 Sep 19;89(1–2):27–32 (12 ref.)

Cessation of self–mutilation in a patient with borderline personality disorder treated with naltrexone [letter] McGee MD. **J Clin Psychiatry** 1997 Jan;58(1):32–3

Coping and problem solving of self–mutilators. Haines J, et al. **J Clin Psychol** 1997 Feb;53(2):177–86

Sciatic nerve section induces mechanical hyperalgesia in skin adjacent to the deafferented region in rats: lack of correlation with autotomy behavior. Kauppila T, et al. **Neurosci Lett** 1996 Jun 14;211(1):65–7

Effects of cerebral cortical and striatal lesions on autotomy following peripheral neurectomy in rats. Saadé NE, et al. **Physiol Behav** 1996 Aug;60(2):559–66

Self–mutilation in adolescence as addictive behaviour. Karwautz A, et al. **Wien Klin Wochenschr** 1996;108(3):82–4

[Genital self–injury behavior––phenomenologic and differential diagnosis considerations from the psychiatric viewpoint] Becker H, et al. **Fortschr Neurol Psychiatr** 1997 Feb;65(2):71–8 (Eng. Abstr.) **(Ger)**

[Open self–injury behavior with special reference to child and adolescent psychiatry. A review of the literature and first study findings] Wewetzer G, et al. **Z Kinder Jugenpsychiatr** 1997 May;25(2):95–105 (57 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

[Self–induced injuries––surgical aspects] Katzer A, et al. **Unfallchirurgie** 1997 Jun;23(3):105–13 (48 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Managing patients with deliberate self harm admitted to an accident and emergency observation ward [see comments] Ryan J, et al. **J Accid Emerg Med** 1996 Jan;13(1):31–3. Comment in: J Accid Emerg Med 1996 Nov;13(6):432.

Lesch–Nyan syndrome in an Alzheimer's disease patient: a case report [letter] Shua–Haim JR, et al. **J Am Geriatr Soc** 1997 Aug;45(8):1034

The identification and management of self–mutilating patients in primary care. Dallam SJ. **Nurse Pract** 1997 May; 22(5):151–3, 159–65 (34 ref.)

SELF PERCEPTION see **SELF CONCEPT**

SELF PSYCHOLOGY

see related
NARCISSISM

Adolescent sexual offenders: a self–psychological perspective. Chorn R, et al. **Am J Psychother** 1997 Spring; 51(2):210–28

The concept of resistance in self psychology. Rowe CE Jr. **Am J Psychother** 1996 Winter;50(1):66–74

A process view of the self. DeWaele M. **Br J Med Psychol** 1996 Dec;69 (Pt 4):299–311 (66 ref.)

Impairment of self–representation in schizophrenia: the roles of boundary articulation and self–reflexivity. Auerbach JS, et al. **Bull Menninger Clin** 1997 Summer;61(3):297–316

Self–psychology: its application to understanding patients with Alzheimer's disease. Lazarus LW, et al. **Int Psychogeriatr** 1996;8 Suppl 3:253–8

Panic disorder: a bioself–psychological perspective. Miliora MT, et al. **J Am Acad Psychoanal** 1996 Summer; 24(2):217–56 (106 ref.)

General principles of self psychology: a position statement. Lichtenberg JD, et al. **J Am Psychoanal Assoc** 1997; 45(2):531–43

Self–reference effect in perceptual judgments by individuals and groups. Bovasso G, et al. **Percept Mot Skills** 1997 Feb; 84(1):95–8

Contributions of Erik Erikson. Eagle M. **Psychoanal Rev** 1997 Jun;84(3):337–47

Arthur Miller's drama from the standpoint of self psychology. Schneiderman L. **Psychoanal Rev** 1997 Jun;84(3):417–35 (29 ref.)

Erik Erikson's work: clinical implications and applications. Steingart I. **Psychoanal Rev** 1997 Jun;84(3):349–62

SELF–REFERRAL, PHYSICIAN see **PHYSICIAN SELF–REFERRAL**

SELF STIMULATION

Brief report: the effects of exercise on the self–stimulatory behaviors and positive responding of adolescents with autism. Rosenthal–Malek A, et al. **J Autism Dev Disord** 1997 Apr;27(2):193–202

Facilitation of a distributed shuttle–box conditioning with posttraining intracranial self–stimulation in old rats. Aldavert–Vera L, et al. **Neurobiol Learn Mem** 1997 May; 67(3):254–8

The differential and temporal effects of antecedent exercise on the self–stimulatory behavior of a child with autism. Celiberti DA, et al. **Res Dev Disabil** 1997 Mar–Apr; 18(2):139–50

A comparison of the characteristics of self–stimulatory behaviors in "normal" children and children with developmental delays. Smith EA, et al. **Res Dev Disabil** 1996 Jul–Aug;17(4):253–68

The effects of implementing program consequences with a group of individuals who engaged in sensory maintained hand mouthing. Turner WD, et al. **Res Dev Disabil** 1996 Jul–Aug;17(4):311–30

DRUG EFFECTS

The effects of gonadal steroids on brain stimulation reward in female rats. Bless EP, et al. **Behav Brain Res** 1997 Jan; 82(2):235–44

Effect of pimozide on self–stimulation threshold under a continuous and fixed–interval schedule of reinforcement. Boye SM, et al. **Behav Brain Res** 1996 Aug;78(2):243–5

Bicuculline microinjections into the ventral tegmental area of the rat: alteration of self–stimulation thresholds and of cytochrome oxidase activity in the brain. Sandner G, et al. **Behav Brain Res** 1996 Sep;79(1–2):145–51

Self–infusion of GABA(A) antagonists directly into the ventral tegmental area and adjacent regions. Ikemoto S, et al. **Behav Neurosci** 1997 Apr;111(2):369–80

Neonatal exposure to cocaine enhances the reward–potentiating properties of the drug in young adult animals. Lin D, et al. **Behav Neurosci** 1996 Aug; 110(4):791–801

Dopaminergic basis for the facilitation of brain stimulation reward by the NMDA receptor antagonist, MK–801. Olds ME. **Eur J Pharmacol** 1996 Jun 13;306(1–3):23–32

Dose–response functions of apomorphine, SKF 38393, LY 171555, haloperidol and clonidine on the self–stimulation evoked from lateral hypothalamus and ventral tegmentum. Singh J, et al. **Indian J Physiol Pharmacol** 1996 Jan; 40(1):15–22

Peptidase inhibitors potentiate the effects of neurotensin and neuromedin N on self–stimulation of the medial prefrontal cortex. Fernández R, et al. **Neuroreport** 1996 Feb 29; 7(3):798–800

Measurement issues in curve–shift analysis of apomorphine effects on rewarding brain stimulation. Hall FS, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):417–23

Low–dose apomorphine attenuates morphine–induced enhancement of brain stimulation reward. Knapp CM, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):87–91

Naltrindole, a delta–opioid antagonist, blocks MDMA's ability to enhance pressing for rewarding brain stimulation. Reid LD, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):477–80

Neurochemical mediators of anxiety have inconsistent effects on hypothalamic self–stimulation in rats. Borisenko SA, et al. **Pharmacol Toxicol** 1996 May;78(5):354–60

Cholinergic and GABAergic modulation of self–stimulation of lateral hypothalamus and ventral tegmentum: effects of carbachol, atropine, bicuculline, and picrotoxin. Singh J, et al. **Physiol Behav** 1997 Mar;61(3):411–8

Neuropharmacological evidence for the role of dopamine in ventral pallidum self–stimulation. Panagis G, et al. **Psychopharmacology (Berl)** 1996 Feb;123(3):280–8

[A comparison of the effects of dopamine agonists on self–stimulation of the hypothalamus with destruction of the mesolimbic brain structures in rats raised under conditions of social isolation] Panchenko GN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep–Oct; 46(5):937–43 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Intermittent rewards raise self–stimulation thresholds. Fouriezos G, et al. **Behav Brain Res** 1996 Jan;74(1–2):57–64

Dopamine receptor sub–types involvement in nucleus accumbens and ventral tegmentum but not in medial prefrontal cortex: on self–stimulation of lateral hypothalamus and ventral mesencephalon. Singh J, et al. **Behav Brain Res** 1997 Jul;86(2):171–9

Destruction of the medial forebrain bundle caudal to the site of stimulation reduces rewarding efficacy but destruction rostrally does not. Gallistel CR, et al. **Behav Neurosci** 1996 Aug;110(4):766–90

Increased ipsilateral expression of Fos following lateral hypothalamic self–stimulation. Arvanitogiannis A, et al. **Brain Res** 1996 May 13;720(1–2):148–54

Comparison of intracranial self–stimulation evoked from lateral hypothalamus and ventral tegmentum: analysis based on stimulation parameters and behavioural response characteristics. Singh J, et al. **Brain Res Bull** 1996; 41(6):399–408

Intracranial self–stimulation in female and male rats: no sex

SELF STIMULATION

differences using a rate–independent procedure. Stratmann JA, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):31–40
Ventral pallidum self–stimulation induces stimulus dependent increase in c–fos expression in reward–related brain regions. Panagis G, et al. **Neuroscience** 1997 Mar;77(1):175–86
Both nicotinic and muscarinic receptors in ventral tegmental area contribute to brain–stimulation reward. Yeomans J, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):915–21
Rewarding electrical brain stimulation: similar thresholds for Flinders Sensitive Line Hypercholinergic and Flinders Resistant Line Hypocholinergic rats. Matthews K, et al. **Physiol Behav** 1996 Jun;59(6):1155–62
A simple design for a small fixed four–electrode brain stimulation array. Richterich L, et al. **Physiol Behav** 1997 Aug;62(2):427–9
[Biochemical mechanism of reinforcement: findings in the studics of self–stimulation] Nakajima S. **Shinrigaku Kenkyu** 1996 Feb;66(6):449–56 (57 ref.) (Eng. Abstr.) **(Jpn)**

SELF TOLERANCE

see related
AUTOIMMUNE DISEASES
CLONAL ANERGY
CLONAL DELETION
Balancing immunity, autoimmunity, and self–tolerance. Goodnow CC. **Ann N Y Acad Sci** 1997 Apr 5;815:55–66 (27 ref.)
Multiple levels of regulation for self–tolerance in beef insulin transgenic mice. Teng YT, et al. **Cell Immunol** 1996 Nov 1;173(2):183–91
Interleukin–2 is indispensable for development of immunological self–tolerance. Klebb G, et al. **Clin Immunol Immunopathol** 1996 Dec;81(3):282–6
Autoimmunity: when self–tolerance breaks down. Mueller DL, et al. **Curr Biol** 1997 Apr 1;7(4):R255–7 (10 ref.)
Tolerance: a case of self/not–self discrimination maintained by clonal deletion? Lafferty KJ, et al. **Hum Immunol** 1997 Feb;52(2):119–26 (45 ref.)
Receptor editing, immune diversification, and self–tolerance. Radic MZ, et al. **Immunity** 1996 Dec;5(6):505–11 (50 ref.)
Signal minus 1: a key factor in immunological tolerance to tissue–specific self antigens? Parish CR. **Immunol Cell Biol** 1996 Jun;74(3):278–85 (50 ref.)
The significance of immune suppression in normal self tolerance. McCullagh P. **Immunol Rev** 1996 Feb;149:127–53 (63 ref.)
Immune deviation––the third dimension of nondeletional T cell tolerance. Röcken M, et al. **Immunol Rev** 1996 Feb; 149:175–94 (104 ref.)
(Altered) self peptides and the regulation of self reactivity in the peripheral T cell pool. Van Eden W, et al. **Immunol Rev** 1996 Feb;149:55–73 (44 ref.)
Autologous anti–idiotypic antibody response is regulated by the level of circulating complementary idiotype. Borghesi C, et al. **Immunology** 1996 Oct;89(2):172–7
The thymus and self–tolerance: co–existence of encephalitogenic S100 beta–specific T cells and their nominal autoantigen in the normal adult rat thymus. Kojima K, et al. **Int Immunol** 1997 Jun;9(6):897–904
Outer periarteriolar lymphoid sheath arrest and subsequent differentiation of both naive and tolerant immunoglobulin transgenic B cells is determined by B cell receptor occupancy. Cook MC, et al. **J Exp Med** 1997 Aug 29; 186(5):631–43
Sites of B lymphocyte selection, activation, and tolerance in spleen. Liu YJ. **J Exp Med** 1997 Aug 29;186(5):625–9 (42 ref.)
Terra firma: a retreat from "danger". Langman RE, et al. **J Immunol** 1996 Nov 15;157(10):4273–6 (15 ref.)
Coexpression of B7–1 and antigen blocks tolerance induction to antigen presented by resting B cells. Yuschenkoff VN, et al. **J Immunol** 1996 Sep 1;157(5):1987–95
The post–activation refractory phase: a mechanism to measure antigenic complexity and ensure self–tolerance among mature peripheral T lymphocytes. Mannie MD. **Med Hypotheses** 1996 Dec;47(6):467–70 (37 ref.)
[Immunosuppressive substances induced by liver grafting] Kobayashi E. **Tanpakushitsu Kakusan Koso** 1997 Jul; 42(9):1420–6 (40 ref.) **(Jpn)**

DRUG EFFECTS

Self–reactive forbidden clones are confined to pathways of intermediate T–cell receptor cell differentiation even under immunosuppressive conditions. Moroda T, et al. **Immunology** 1997 May;91(1):88–94

GENETICS

CD3 antibody–induced dominant self tolerance in overtly diabetic NOD mice. Chatenoud L, et al. **J Immunol** 1997 Mar 15;158(6):2947–54

IMMUNOLOGY

Initiation of autoimmunity to self–proteins complexed with viral antigens. Reeves WH, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:139–54 (51 ref.)
Mechanisms of tolerance to self. Miller JF, et al. **Curr Opin Immunol** 1996 Dec;8(6):815–21 (67 ref.)
The avian model in the study of tolerance to self. Corbel C. **Curr Top Microbiol Immunol** 1996;212:95–106 (44 ref.)
Premature ovarian failure and ovarian autoimmunity. Hoek A, et al. **Endocr Rev** 1997 Feb;18(1):107–34 (318 ref.)
Interleukin–2 deficient mice: a new model to study autoimmunity and self–tolerance. Horak I, et al. **Immunol Rev** 1995 Dec;148:35–44 (29 ref.)
Immunological tolerance in germinal centres. Pulendran B, et al. **Immunol Today** 1997 Jan;18(1):27–32 (65 ref.)
Mouse models of autoimmune disease suggest that self–tolerance is maintained by unresponsive autoreactive T cells. Taguchi O, et al. **Immunology** 1996 Sep;89(1):13–9
The penetration of autoantibodies into cells may induce tolerance to self by apoptosis of autoreactive lymphocytes and cause autoimmune disease by dysregulation and/or cell damage. Alarcón–Segovia D, et al. **J Autoimmun** 1996 Apr; 9(2):295–300
T cell–mediated maintenance of natural self–tolerance: its breakdown as a possible cause of various autoimmune diseases. Sakaguchi S, et al. **J Autoimmun** 1996 Apr; 9(2):211–20 (58 ref.)
Dysregulation of potentially pathogenic self reactivity is crucial for the manifestation of clinical autoimmunity. Kumar V, et al. **J Neurosci Res** 1996 Aug 15;45(4):334–9 (26 ref.)
Viral decoy vetoes killer cell [news; comment] Kärre K, et al. **Nature** 1997 Apr 3;386(6624):446–7. Comment on: Nature 1997 Apr 3;386(6624):510–4. Comment on: Nature 1997 Apr 3;386(6624):514–7.
Expression of a second receptor rescues self–specific T cells from thymic deletion and allows activation of autoreactive effector function. Zal T, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9102–7
Do we need integrity? [comment] Dembic Z. **Scand J Immunol** 1996 Dec;44(6):549–50. Comment on: Scand J Immunol 1996 Dec;44(6):544–8.
A short history of time and space in immune discrimination [see comments] Langman RE, et al. **Scand J Immunol** 1996 Dec;44(6):544–8 (10 ref.). Comment in: Scand J Immunol 1996 Dec;44(6):549–50.
[Clonal deletion and clonal anergy as the mechanism of self–tolerance induction] Ota H, et al. **Nippon Rinsho** 1997 Jun;55(6):1331–6 (20 ref.) (Eng. Abstr.) **(Jpn)**

SELLA TURCICA

see related
EMPTY SELLA SYNDROME
Intrasellar mixed gangliocytoma–adenoma [letter] Castillo M, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1199–200
Primary sellar haemorrhagic melanoma: case report and review of the literature. Aubin MJ, et al. **Br J Neurosurg** 1997 Feb;11(1):80–3 (12 ref.)
Sarcoidosis of the sella turcica in association with bilateral sarcoidosis of the lacrimal glands. Khalil MK, et al. **Can J Ophthalmol** 1996 Feb;31(1):32–5
Choroidal folds associated with a sellar mass. Söylev MF, et al. **Int Ophthalmol** 1996–97;20(5):259–61
Intrasellar and suprasellar germinoma. Lin CL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jul; 13(7):462–6
Relapse of intracranial germinoma 23 years postirradiation in a patient given growth hormone replacement. Kiltie AE, et al. **Med Pediatr Oncol** 1997 Jul;29(1):41–4
Intrasellar paraganglioma: report of a case in a sibship of von Hippel–Lindau disease. Scheithauer BW, et al. **Neurosurgery** 1996 Feb;38(2):395–9 (26 ref.)
Proton spectroscopy of suprasellar tumors in pediatric patients. Sutton LN, et al. **Neurosurgery** 1997 Aug; 41(2):388–94; discussion 394–5
Panhypopituitarism as a consequence of metastase of breast cancer in sella turcica. Ruiz Hernández G, et al. **Nuklearmedizin** 1996 Aug;35(4):143–5
Intrasellar meningioma: case report and review of the literature. Nozaki K, et al. **Surg Neurol** 1997 May; 47(5):447–52; discussion 452–4 (14 ref.)
Acute loss of vision during pregnancy due to a suprasellar mass [clinical conference] Kerrison JB, et al. **Surv Ophthalmol** 1997 Mar–Apr;41(5):402–8
[Intra–sellar non–adenomatous expansive process] Rohmer V, et al. **Ann Endocrinol (Paris)** 1997;58(1):11–9 (70 ref.) (Eng. Abstr.) **(Fre)**
[Characteristics of visual impairment complicated with planum sphenoidale and tuberculum sellae meningiomas and their surgical results] Uede T, et al. **No Shinkei Geka** 1996 Dec;24(12):1093–8 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

CT and MRI of sellar spine with upward extension of the pituitary gland: case report. Matsumoto K, et al. **Eur Radiol** 1997;7(2):287–8

BLOOD SUPPLY

Intrasellar vascular malformation mimicking a pituitary macroadenoma. Gould TJ, et al. **J Neuroophthalmol** 1996 Sep;16(3):199–203
The increase in the cardiodepressant activity and vasopressin concentration in the sella turcica venous blood during vagal afferents stimulation or after angiotensin II infusion. Gorąca A, et al. **J Physiol Pharmacol** 1996 Jun;47(2):257–67

INJURIES

Traumatic chiasmal syndrome: a feature photograph. Goh KY, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):614–5

PATHOLOGY

Sellar tuberculoma: report of two cases. Ashkan K, et al. **Acta Neurochir (Wien)** 1997;139(6):523–5
Salivary gland–like tumors of the sellar region. Hampton TA, et al. **Am J Surg Pathol** 1997 Apr;21(4):424–34
Unusual causes of sellar/parasellar masses in a large transsphenoidal surgical series. Freda PU, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3455–9
Coexistence of primary empty sella and silent corticotrophic adenoma. Ho KL. **Mod Pathol** 1996 May;9(5):521–5
Contrast–enhanced MRI of intrasellar arachnoid cysts: relationship between the pituitary gland and cyst. Nomura M, et al. **Neuroradiology** 1996 Aug;38(6):566–8
Sphenoid and sellar tumors. Isaacs RS, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1191–229 (77 ref.)
An intrasellar cystic mass and hypopituitarism. Iida S, et al. **Postgrad Med J** 1996 Jul;72(849):441–2
[Hypophysis compression syndrome in the sella turcica: mechanisms of development, pathology] Medvedev IuA, et al. **Arkh Patol** 1997 May–Jun;59(3):32–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Hypothalamic disease: neurosecretory dysfunction and parasellar lesions. Bercu BB. **Curr Ther Endocrinol Metab** 1997;6:21–6 (14 ref.)

RADIOGRAPHY

Incidental finding of an enlarged sella turcica on a lateral cephalogram. Friedland B, et al. **Am J Orthod Dentofacial Orthop** 1996 Nov;110(5):508–12
[Radiographic changes in the sella turcica in female patients on chronic hemodialysis] Dimitrijević Z, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:119–20 (Eng. Abstr.) **(Scc)**

SURGERY

Meningiomas involving the parasellar region. Samii M, et al. **Acta Neurochir Suppl (Wien)** 1996;65:63–5
Surgical treatment of anterior basal meningiomas. DeMonte F. **J Neurooncol** 1996 Sep;29(3):239–48 (31 ref.)
Sphenoid and sellar tumors. Isaacs RS, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1191–229 (77 ref.)

SEMANTIC DIFFERENTIAL

The representation of semantic categories in aging. Brosseau J, et al. **Exp Aging Res** 1996 Oct–Dec;22(4):381–91

SEMANTICS

Frontal lobe activation during word generation studied by functional MRI. Pujol J, et al. **Acta Neurol Scand** 1996 Jun;93(6):403–10
Tradeoff of semantic relatedness and degree of overlearning: differential effects on metamemory and on long–term retention. Carroll M, et al. **Acta Psychol (Amst)** 1997 Apr; 95(3):239–53
Response bias in color priming. Di Pace E, et al. **Acta Psychol (Amst)** 1997 Jan;95(1):3–14
Adding new word associations to semantic memory: evidence for two interactive learning components. Schrijnemakers JM, et al. **Acta Psychol (Amst)** 1997 Jun;96(1–2):103–32
Aberrant semantic activation in schizophrenia: a neurophysiological study. Nestor PG, et al. **Am J Psychiatry** 1997 May;154(5):640–6
Medicalization of race [letter; comment] Parker DL. **Ann Intern Med** 1997 Apr 15;126(8):669–70. Comment on: Ann Intern Med 1996 Oct 15;125(8):675–9.
"Sensitivity" and "specificity" reconsidered: the meaning of these terms in analytical and diagnostic settings. Saah AJ, et al. **Ann Intern Med** 1997 Jan 1;126(1):91–4
Language acquisition: the acquisition of linguistic structure in normal and special populations. McDonald JL. **Annu Rev Psychol** 1997;48:215–41 (105 ref.)
Event related brain potentials to semantically incongruent words in children of different ages. González–Garrido AA, et al. **Arch Med Res** 1997 Spring;28(1):109–13
Sexual content–induced delay with double–entendre words. Geer JH, et al. **Arch Sex Behav** 1997 Jun;26(3):295–316
Suppression of the emotional Stroop effect by increased anxiety in patients with social phobia. Amir N, et al. **Behav Res Ther** 1996 Nov–Dec;34(11–12):945–8
Evidence for attention to threatening stimuli in depression. Mathews A, et al. **Behav Res Ther** 1996 Sep;34(9):695–705
Information processing in spider phobics: the Stroop colour naming task may indicate strategic but not automatic attentional bias. Thorpe SJ, et al. **Behav Res Ther** 1997 Feb;35(2):131–44
Semantic matching of pictures in schizophrenia: a cross–cultural ERP study. Bobes MA, et al. **Biol Psychiatry** 1996 Aug 1;40(3):189–202
A brain imaging (single photon emission computerized tomography) study of semantic and affective processing

in psychopaths. Intrator J, et al. **Biol Psychiatry** 1997 Jul 15;42(2):96–103

Molecular semantics and the origin of life. Matsuno K. **Biosystems** 1997;42(2–3):129–39 (43 ref.)

Selective processing of three types of stimuli in eating disorders. Cooper M, et al. **Br J Clin Psychol** 1997 May; 36 (Pt 2):279–81

Pain patients' bias in the interpretation of ambiguous homophones. Pincus T, et al. **Br J Med Psychol** 1996 Sep; 69 (Pt 3):259–66

Missed abortion versus delayed miscarriage [letter] Hutchon DJ. **Br J Obstet Gynaecol** 1997 Jun;104(6):753

Impulsivity and negative priming: evidence for diminished cognitive inhibition in impulsive children. Visser M, et al. **Br J Psychol** 1996 Feb;87 (Pt 1):131–40

Semantic, phonological, and perceptual changes following left and right intracarotid injection (Wada) with a low amytal dosage. Fedio P, et al. **Brain Cogn** 1997 Feb; 33(1):98–117

Semantic memory impairments following non–progressive brain injury: a study of four cases. Wilson BA. **Brain Inj** 1997 Apr;11(4):259–69

Phrase repetition in Alzheimer's disease: effect of meaning and length. Bayles KA, et al. **Brain Lang** 1996 Aug; 54(2):246–61

Dissociated identity and semantic priming in Broca's aphasia: how controlled processing produces inhibitory semantic priming. Bushell CM. **Brain Lang** 1996 Nov;55(2):264–88

Brain functional profiles in formal and semantic fluency tasks: a SPECT study in normals. Cardebat D, et al. **Brain Lang** 1996 Feb;52(2):305–13

Finding the locus of semantic satiation: an electrophysiological attempt. Frenck–Mestre C, et al. **Brain Lang** 1997 May;57(3):406–22

The production of specific and generic associates of living and nonliving, high– and low–familiarity stimuli in Alzheimer's disease. Gainotti G, et al. **Brain Lang** 1996 Aug;54(2):262–74

Semantic memory impairment does not impact on phonological and orthographic processing in a case of developmental hyperlexia. Glosser G, et al. **Brain Lang** 1997 Feb 1;56(2):234–47

Adynamic aphasia: a transcortical motor aphasia with defective semantic strategy formation. Gold M, et al. **Brain Lang** 1997 May;57(3):374–93

Double dissociation of semantic categories in Alzheimer's disease. Gonnerman LM, et al. **Brain Lang** 1997 Apr; 57(2):254–79

Anomaly judgments of subject–predicate relations in Alzheimer's disease. Grossman M, et al. **Brain Lang** 1996 Aug;54(2):216–32

Competitive inhibition models of lexical–semantic processing: experimental evidence. Gurd JM, et al. **Brain Lang** 1996 Sep;54(3):414–33

Introduction. The investigation of lexical semantic representation in Alzheimer's disease. Henderson VW. **Brain Lang** 1996 Aug;54(2):179–83 (13 ref.)

Naming and knowing in dementia of Alzheimer's type. Hodges JR, et al. **Brain Lang** 1996 Aug;54(2):302–25

Activation of the phonological lexicon for reading and object naming in deep dyslexia. Katz RB, et al. **Brain Lang** 1997 Jun 1;58(1):46–60

Judgments of semantic anomaly in agrammatic patients: argument movement, syntactic complexity, and the use of heuristics. Kolk H, et al. **Brain Lang** 1996 Jul;54(1):86–135

Lexical retrieval deficit in picture naming: implications for word production models. Laine M, et al. **Brain Lang** 1996 Jun;53(3):283–314

The use of contextual information by right brain–damaged individuals in the resolution of ambiguous pronouns. Leonard CL, et al. **Brain Lang** 1997 May;57(3):309–42

Preserved semantic priming effect in alexia. Mimura M, et al. **Brain Lang** 1996 Sep;54(3):434–46

Sentence context influences the interpretation of word meaning by Alzheimer patients. Nebes RD, et al. **Brain Lang** 1996 Aug;54(2):233–45

On the nature of naming errors in aging and dementia: a study of semantic relatedness. Nicholas M, et al. **Brain Lang** 1996 Aug;54(2):184–95

Semantic category imprecision: a connectionist study of the boundaries of word meanings. Small SL. **Brain Lang** 1997 Apr;57(2):181–94 (31 ref.)

The gradual deterioration of syntax and semantics in a patient with progressive aphasia. Tyler LK, et al. **Brain Lang** 1997 Feb 15;56(3):426–76

Remediating production of tense morphology improves verb retrieval in chronic aphasia. Weinrich M, et al. **Brain Lang** 1997 Jun 1;58(1):23–45

Medical problem attributes and information–seeking questions. Stavri PZ. **Bull Med Libr Assoc** 1996 Jul; 84(3):367–74

Immediate serial recall, word frequency, item identity and item position. Poirier M, et al. **Can J Exp Psychol** 1996 Dec;50(4):408–12

Choosing category or complementary relations: prior tendencies modulate instructional effects. Skwarchuk SL, et al. **Can J Exp Psychol** 1996 Dec;50(4):356–70

Unattended words need to be primed to be recognized. White M. **Can J Exp Psychol** 1995 Sep;49(3):273–86

Attention and semantic priming: a review of prime task effects. Maxfield L. **Conscious Cogn** 1997 Jun–Sep; 6(2–3):204–18 (32 ref.)

Forgetting from long–term memory in severe closed–head injury patients: effect of retrieval conditions and semantic organization. Carlesimo GA, et al. **Cortex** 1997 Mar; 33(1):131–42

Knowledge of concept meanings in Alzheimer's disease. Laatu S, et al. **Cortex** 1997 Mar;33(1):27–45

Semantic memory following pediatric head injury: relationship to age, severity of injury, and MRI. Levin HS, et al. **Cortex** 1996 Sep;32(3):461–78

Morphological spelling strategies: developmental stages and processes. Nunes T, et al. **Dev Psychol** 1997 Jul; 33(4):637–49

Conversations with mothers and siblings: young children's semantic and conceptual development. Pérez–Granados DR, et al. **Dev Psychol** 1997 Jan;33(1):120–34

Task dependence in color–naming latency among dieters. Huon GF, et al. **Int J Eat Disord** 1996 May;19(4):405–10

Effects of short–term food deprivation and chronic dietary restraint on the selective processing of appetitive–related cues. Stewart SH, et al. **Int J Eat Disord** 1997 Mar; 21(2):129–35

Event–related desynchronization (ERD) and the Dm effect: does alpha desynchronization during encoding predict later recall performance? Klimesch W, et al. **Int J Psychophysiol** 1996 Nov;24(1–2):47–60

Semantic amnesia without dementia: documentation of a case. Rusconi ML, et al. **Ital J Neurol Sci** 1997 Jun;18(3):167–71

Semantic priming in schizophrenia: an examination of spreading activation using word pronunciation and multiple SOAs. Barch DM, et al. **J Abnorm Psychol** 1996 Nov; 105(4):592–601

Behavioral and neurophysiological evidence for altered processing of anxiety–related words in panic disorder. Pauli P, et al. **J Abnorm Psychol** 1997 May;106(2):213–20

Comprehension of time–compressed speech: effects of age and speech complexity. Letowski T, et al. **J Am Acad Audiol** 1996 Dec;7(6):447–57

How words mean in analytic psychotherapy: a neo–Horneyan contribution. Ingram DH. **J Am Acad Psychoanal** 1996 Fall;24(3):527–43

Evolution of oral and written confrontation naming errors in aphasia. A retrospective study on vascular patients. Basso A, et al. **J Clin Exp Neuropsychol** 1996 Feb;18(1):77–87

Late cognitive brain potentials, phonological and semantic classification of spoken words, and reading ability in children. Lovrich D, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):161–77

Impaired set–shifting in Parkinson's disease: new evidence from a lexical decision task. McDonald C, et al. **J Clin Exp Neuropsychol** 1996 Dec;18(6):793–809

Automatic semantic facilitation in Alzheimer's disease. Silveri MC, et al. **J Clin Exp Neuropsychol** 1996 Jun;18(3):371–82

Ideational and semantic contributions to narrative production in adults with dementia of the Alzheimer's type . Ehrlich JS, et al. **J Commun Disord** 1997 Mar–Apr;30(2):79–98; quiz 98–9

Picture naming by young children: norms for name agreement, familiarity, and visual complexity. Cycowicz YM, et al. **J Exp Child Psychol** 1997 May;65(2):171–237

Attention factors mediating syntactic deficiency in reading–disabled children. Deutsch A, et al. **J Exp Child Psychol** 1996 Nov;63(2):386–415

Serial recall of poor readers in two presentation modalities: combined effects of phonological similarity and word length. Irausquin RS, et al. **J Exp Child Psychol** 1997 Jun; 65(3):342–69

Young two–year–olds' tendency to map novel verbs onto novel actions. Merriman WE, et al. **J Exp Child Psychol** 1996 Dec;63(3):466–98

Segmentation, not rhyming, predicts early progress in learning to read. Muter V, et al. **J Exp Child Psychol** 1997 Jun;65(3):370–96

On the nature and scope of featural representations of word meaning. McRae K, et al. **J Exp Psychol Gen** 1997 Jun; 126(2):99–130

Semantic and spatial components of selective attention. Dark VJ, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb; 22(1):63–81

Selection by color and form in vision. Humphreys GW, et al. **J Exp Psychol Hum Percept Perform** 1997 Feb; 23(1):136–53

Exogenous orienting does not reflect an encapsulated set of processes. Stolz JA. **J Exp Psychol Hum Percept Perform** 1996 Feb; 22(1):187–201

Long–term semantic priming: a computational account and empirical evidence. Becker S, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1059–82

The role of component function in visual recognition of Chinese characters. Feldman LB, et al. **J Exp Psychol Learn Mem Cogn** 1997 May;23(3):776–81

Conjuctions of visually based categories: overextension and compensation. Hampton JA. **J Exp Psychol Learn Mem Cogn** 1996 Mar;22(2):378–96

Word–frequency effects on short–term memory tasks: evidence for a redintegration process in immediate serial recall. Hulme C, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1217–32

The long and short of semantic priming effects in lexical decision. Joordens S, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1083–105

Semantic versus perceptual influences of color in object recognition. Joseph JE, et al. **J Exp Psychol Learn Mem Cogn** 1996 Mar;22(2):407–29

Conjoint and dissociable effects of syntactic and semantic context. O'Seaghdha PG. **J Exp Psychol Learn Mem Cogn** 1997 Jul;23(4):807–28

Reverse–interference effect in free recall. Thapar A. **J Exp Psychol Learn Mem Cogn** 1996 Mar;22(2):430–7

Visual and semantic support for paired–associates recall in young and older adults. Sharps MJ, et al. **J Genet Psychol** 1997 Sep;158(3):347–55

Semantic priming impairment in HIV. Nielsen–Bohlman L, et al. **J Int Neuropsychol Soc** 1997 Jul;3(4):348–58

Disorders of semantic memory [editorial] Garrard P, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):431–5 (52 ref.)

Constraints on the cerebral basis for semantic processing from neuroimaging studies of Alzheimer's disease. Grossman M, et al. **J Neurol Neurosurg Psychiatry** 1997 Aug;63(2):152–8

Representations of self and other: a semantic space model. Hart D, et al. **J Pers** 1997 Mar;65(1):77–105

Implications of the people = male theory for the interpretation of the Draw–A–Person Test. Merritt RD, et al. **J Pers Assess** 1997 Feb;68(1):211–4

Facilitation and interference of selective attention in schizophrenia. Taylor SF, et al. **J Psychiatr Res** 1996 Jul–Aug;30(4):251–9

The resolution of the dative NP ambiguity in Korean. Koh S. **J Psycholinguist Res** 1997 Mar;26(2):265–73

Effects and limitations of prosodic and semantic biases on syntactic disambiguation. Misono Y, et al. **J Psycholinguist Res** 1997 Mar;26(2):229–45

Comprehension of idiomatic expressions in Japanese—auditory and visual presentations. Miura I. **J Psycholinguist Res** 1996 Nov;25(6):659–76

Transparency of one–handed Amer–Ind hand signals to nonfamiliar viewers. Campbell CR, et al. **J Speech Hear Res** 1995 Dec;38(6):1284–9

Proverb explanation through the lifespan: a developmental study of adolescents and adults. Nippold MA, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):245–53

Sensitivity to the frequency of parts and kinds: two principles of organisation in semantic memory. Chaffin R, et al. **Memory** 1996 Sep;4(5):487–513

Natural language processing, lexicon and semantics. Wehrli E, et al. **Methods Inf Med** 1995 Mar;34(1–2):68–74

Semantic category priming in the left cerebral hemisphere. Abernethy M, et al. **Neuropsychologia** 1996 May; 34(5):339–50

Living/non–living dissociation in a case of semantic dementia: a SPECT activation study. Cardebat D, et al. **Neuropsychologia** 1996 Dec;34(12):1175–9

The deterioration of semantic networks in patients with Alzheimer's disease: a cross–sectional study. Chan AS, et al. **Neuropsychologia** 1997 Mar;35(3):241–8

The influence of semantic encoding on recognition memory in Alzheimer's disease. Dalla Barba G, et al. **Neuropsychologia** 1996 Dec;34(12):1181–6

Dopaminergic modulation of semantic network activation. Kischka U, et al. **Neuropsychologia** 1996 Nov; 34(11):1107–13

Time course of semantic activation in the cerebral hemispheres. Koivisto M. **Neuropsychologia** 1997 Apr; 35(4):497–504

Preserved semantic access in neglect dyslexia. Làdavas E, et al. **Neuropsychologia** 1997 Mar;35(3):257–70

Lexical decision after left, right and bilateral presentation of function words, content words and non–words: evidence for interhemispheric interaction. Mohr B, et al. **Neuropsychologia** 1994 Jan;32(1):105–24

Influence of perceptual and semantic conflicts between the two halves of chimeric stimuli on the expression of visuo–spatial neglect. Peru A, et al. **Neuropsychologia** 1997 May;35(5):583–9

Short–term memory in children with Williams syndrome: a reduced contribution of lexical—semantic knowledge to word span. Vicari S, et al. **Neuropsychologia** 1996 Sep; 34(9):919–25

Clustering and switching as two components of verbal fluency: evidence from younger and older healthy adults. Troyer AK, et al. **Neuropsychology** 1997 Jan;11(1):138–46

Generality of connotative meaning across methods and subjects. Anderson CW, et al. **Percept Mot Skills** 1996 Jun; 82(3 Pt 1):739–43

Effect of language dominance on cognitive processes in a Stroop task. Bahri T, et al. **Percept Mot Skills** 1997 Jun; 84(3 Pt 1):979–88

Proofreaders' decreased Stroop interference. Borzoni S, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1104–6

A problem in measuring the Stroop facilitation and interference effects: implications for measuring performance change in general. Chen JY. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1059–70

Syntactic abilities of neurologically normal and suspect preterm children. Holdgrafer G. **Percept Mot Skills** 1996 Oct;83(2):615–8

Inhibition in picture naming and word reading. Ikeda S. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1319–29

Gender differences during processing of the Stroop task. Mekarski JE, et al. **Percept Mot Skills** 1996 Oct;83(2):563–8

Eyeblink activity in a word–naming task as a function of semantic priming and cognitive load. Ohira H. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):835–42

SEMANTICS

Semantic and visual factors affecting the representation of map information. Rossano MJ, et al. **Perception** 1996; 25(6):677–700

Semantic-free scaling of odor quality. Stevens DA, et al. **Physiol Behav** 1996 Jul;60(1):211–5

Cultural universals: measuring the semantic structure of emotion terms in English and Japanese. Romney AK, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5489–94

A survey of preferred terms for users of mental health services. Mueser KT, et al. **Psychiatr Serv** 1996 Jul; 47(7):760–1

Impairment of the semantic network in schizophrenia. Paulsen JS, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):109–21

Age-related equivalence of identity suppression in the Stroop color-word task. Kieley JM, et al. **Psychol Aging** 1997 Mar; 12(1):22–9

Methodological control of semantic priming in Alzheimer's disease. Shenaut GK, et al. **Psychol Aging** 1996 Sep; 11(3):443–8

Sentence comprehension in Alzheimer's disease: effects of grammatical complexity, speech rate, and repetition. Small JA, et al. **Psychol Aging** 1997 Mar;12(1):3–11

Are backward words special for older adults? Weir C, et al. **Psychol Aging** 1997 Mar;12(1):145–9

Effects of affective-semantic mode of item presentation in balanced self-report scales: biased construct validity of the Zung Self-rating Depression Scale. Schotte CK, et al. **Psychol Med** 1996 Nov;26(6):1161–8

Chronometrics of attentional processes in anxiety disorders. Horenstein M, et al. **Psychopathology** 1997;30(1):25–35

Is an apple a fruit? Semantic relatedness as reflected by psychophysiological responsivity. Ben-Shakhar G, et al. **Psychophysiology** 1996 Nov;33(6):671–9

Cortical correlates of semantic classical conditioning. Montoya P, et al. **Psychophysiology** 1996 Nov;33(6):644–9

Grammatical priming of visual word recognition in fourth-grade children. Bowey JA. **Q J Exp Psychol A** 1996 Nov;49(4):1005–23

On the mental representation of conditional sentences. Evans JS, et al. **Q J Exp Psychol A** 1996 Nov;49(4):1086–114

Case-marking in the parsing of complement sentences: evidence from eye movements. Traxler MJ, et al. **Q J Exp Psychol A** 1996 Nov;49(4):991–1004

Memory effects to be considered in the design of measurements of the influence of context on speech perception. Theodoridis GC, et al. **Scand Audiol** 1996; 25(3):193–9

Semantic distance and single cue use in category search. Saariluoma P, et al. **Scand J Psychol** 1996 Sep;37(3):317–28

The Stroop effect in schizophrenic patients. Hepp HH, et al. **Schizophr Res** 1996 Dec 15;22(3):187–95

A new approach to discourse analysis in psychiatry, applied to a schizophrenic patient's speech. Noël-Jorand MC, et al. **Schizophr Res** 1997 Jun 20;25(3):183–98

Stroop interference and facilitation in the cerebral hemispheres in schizophrenia. Phillips ML, et al. **Schizophr Res** 1996 May;20(1–2):57–68

Interaction, language and the "narrative turn" in psychotherapy and psychiatry. Brown B, et al. **Soc Sci Med** 1996 Dec;43(11):1569–78 (83 ref.)

Meanings in policy: a textual analysis of Canada's "Achieving Health For All" document. Iannantuono A, et al. **Soc Sci Med** 1997 Jun;44(11):1611–21 (46 ref.)

[Derivational morphology and lexical access: prefixed and pseudo-prefixed verbs] Babin JP. **Can J Exp Psychol** 1996 Dec;50(4):371–85 (Eng. Abstr.) **(Fre)**

[Deficit in selective attention and its evolution in depression] Thomas J, et al. **Encephale** 1997 Mar–Apr;23(2):108–12 (Eng. Abstr.) **(Fre)**

[Event-related potentials in semantic speech processing by schizophrenic patients] Spitzer M, et al. **Nervenarzt** 1997 Mar;68(3):212–25 (Eng. Abstr.) **(Ger)**

[The semantic transformations of Greek and Latin words in the process of creating anatomical names] Krakovetskaia GA. **Arkh Anat Gistol Embriol** 1981 Dec;81(12):89–92 **(Rus)**

[Brain processing of visually presented verbal stimuli at different levels of their integration. I. Semantic and motor aspects] Medvedev SV, et al. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):5–13 **(Rus)**

[Individualization of retrograde amnesias. On the basis of autobiographical and semantic forms] Barraquer-Bordas LL. **Rev Neurol** 1997 Jul;25(143):1134 **(Spa)**

SEMEN

see related
SPERM BANKS
SPERMATOZOA

Andrological study of two young identical twin bulls. Galli A, et al. **Andrologia** 1997 Mar–Apr;29(2):115–6

Selenium-vitamin E supplementation in infertile men. Effects on semen parameters and micronutrient levels and distribution. Vézina D, et al. **Biol Trace Elem Res** 1996 Summer;53(1–3):65–83

Haemospermia and nodular lung metastases without bone involvement: an unusual presentation of prostate carcinoma. Allen FJ, et al. **Br J Urol** 1996 Nov;78(5):801–3

Abnormal prostatic cells in ejaculates from men with prostatic cancer—a preliminary report. Gardiner RA, et al. **Br J Urol** 1996 Sep;78(3):414–8

Cryopreservation of semen from Japanese white rabbits for use in teratological studies. Moriya T. **Exp Anim** 1996 Oct; 45(4):403–4

Field trial of a diluent for the transportation of human semen at ambient temperatures [see comments] Allan IW, et al. **Fertil Steril** 1997 Feb;67(2):348–54. Comment in: Fertil Steril 1997 Jul;68(1):180–1.

Smoking—good or bad for semen? [letter] Cope GF, et al. **Fertil Steril** 1997 Sep;68(3):565–6

A technique for standardization and quality control of subjective sperm motility assessments in semen analysis. Yeung CH, et al. **Fertil Steril** 1997 Jun;67(6):1156–8

Milt and endocrine responses of mature male Atlantic salmon (Salmo salar L.) parr to water-borne testosterone, 17,20 beta-dihydroxy-4-pregnen-3-one 20-sulfate, and the urines from adult female and male salmon. Waring CP, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):142–9

Human semen analysis. Comhaire F, et al. **Hum Reprod Update** 1995 Jul;1(4):343–62 (59 ref.)

Relationship between semen quality improvement after varicocelectomy and preoperative levels of hypophyseal and gonadal hormones. Bablok L, et al. **Int Urol Nephrol** 1997;29(3):345–9

Senile seminal vesicle amyloidosis associated with hematospermia: demonstration by endorectal MRI. Botash RJ, et al. **J Comput Assist Tomogr** 1997 Sep–Oct; 21(5):748–9

Procuring gametes for research and therapy: the argument for unisex altruism—a response to Donald Evans [comment] [see comments] Dickenson DL. **J Med Ethics** 1997 Apr;23(2):93–5. Comment on: J Med Ethics 1995 Oct;21(5):261–4. Comment in: J Med Ethics 1997 Apr;23(2):67–8.

Semen of smokers and cervical cancer risk [letter] [see comments] Tokudome S. **J Natl Cancer Inst** 1997 Jan 1; 89(1):96–7. Comment in: J Natl Cancer Inst 1997 Apr 2;89(7):520.

LH profile and advancement of ovulation after transcervical infusion of seminal plasma at different stages of oestrus in gilts. Waberski D, et al. **J Reprod Fertil** 1997 Jan; 109(1):29–34

Semen, irony, and the atom bomb. Cohen L. **Med Anthropol Q** 1997 Sep;11(3):301–3; discussion 303–5

Optimization of a continuous real-time computerized semen analysis system for ram sperm motility assessment, and evaluation of four methods of semen preparation. Holt WV, et al. **Reprod Fertil Dev** 1996;8(2):219–30

Donor insemination: the gifting and selling of semen. Daniels KR, et al. **Soc Sci Med** 1996 Jun;42(11):1521–36 (96 ref.)

Conservative and surgical semen retrieval in patients with spinal cord injury. Löchner-Ernst D, et al. **Spinal Cord** 1997 Jul;35(7):463–8

Verification of the identity of bovine semen using DNA microsatellite markers. Williams JL, et al. **Vet Rec** 1997 Apr 26;140(17):446–9

[Allergy to human semen] Dijkstra AT, et al. **Ned Tijdschr Geneeskd** 1997 Apr 5;141(14):690–2 (Eng. Abstr.) **(Dut)**

[Effect of quality markers of ejaculates of beagle dogs after frequent semen collection] Schäfer S, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Jan;104(1):26–9 (Eng. Abstr.) **(Ger)**

[Seminal obstructions of the inflammatory origin] Mantovani F, et al. **Arch Ital Urol Androl** 1996 Dec;68(5):347–52 (Eng. Abstr.) **(Ita)**

[Seminal and biochemical features in a subject with male phenotype and 46, XX genotype] Mazzilli F, et al. **Arch Ital Urol Androl** 1997 Feb;69(1):55–9 (Eng. Abstr.) **(Ita)**

[Hemospermia: role of transrectal echography] Nicolai M, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):129–32 (Eng. Abstr.) **(Ita)**

[Obstructive azoospermia and malformations of seminal tract] Terrone C, et al. **Arch Ital Urol Androl** 1996 Dec; 68(5):353–7 (Eng. Abstr.) **(Ita)**

[Retrospective study of 107 patients with hematospermia] Jinza S, et al. **Hinyokika Kiyo** 1997 Feb;43(2):103–7 (Eng. Abstr.) **(Jpn)**

[Is the quality of semen decreasing? (editorial)] García JA, et al. **Med Clin (Barc)** 1996 Sep 21;107(9):336–7 **(Spa)**

CHEMISTRY

Shedding of HIV-1 in the genital tract [editorial] Mostad SB, et al. **AIDS** 1996 Oct;10(12):1305–15 (74 ref.)

Bayesian evaluation of the modified zinc test and the acid phosphatase spot test for forensic semen investigation. Hooft PJ, et al. **Am J Forensic Med Pathol** 1997 Mar; 18(1):45–9

Dioxins and dioxin-like chemicals in blood and semen of American Vietnam veterans from the state of Michigan [published erratum appears in Am J Ind Med 1997 Mar;31(3):370–1] Schecter A, et al. **Am J Ind Med** 1996 Dec;30(6):647–54

T-helper 2 type cytokine and soluble interleukin-2 receptor levels in seminal plasma of infertile men. Paradisi R, et al. **Am J Reprod Immunol** 1997 Aug;38(2):94–9

Quantitative assessment of cytokines (GRO alpha and IL-10) in human seminal plasma during genitourinary inflammation. Rajasekaran M, et al. **Am J Reprod Immunol** 1996 Aug;36(2):90–5

A 20-kDa protein in human seminal plasma that is identical to gross cystic disease fluid protein 15 and prolactin-inducible protein. Osawa M, et al. **Arch Androl** 1996 Jan–Feb;36(1):29–39

Fibrinogen-like substance and thrombin-like enzyme in seminal plasma: coagulation system of human semen. Park JY, et al. **Arch Androl** 1997 Jan–Feb;38(1):29–36

Effect of boar seminal immunosuppressive fraction on B lymphocytes and on primary antibody response. Veselský L, et al. **Biol Reprod** 1996 Jul;55(1):194–9

Constituents of seminal plasma and blood serum of the ram. Zedda MT, et al. **Boll Soc Ital Biol Sper** 1996 Jul–Aug; 72(7–8):227–30

Characterization of glycoconjugates in the epididymal epithelium and luminal fluid during postnatal development of the mouse. Bendahmane M, et al. **Cell Tissue Res** 1997 Mar;287(3):611–9

The application of the differential pH method to the biochemical evaluation of seminal plasma. Rossi T, et al. **Clin Biochem** 1997 Mar;30(2):143–8

Surface plasmon resonance analysis of gp17, a natural CD4 ligand from human seminal plasma inhibiting human immunodeficiency virus type-1 gp120-mediated syncytium formation. Autiero M, et al. **Eur J Biochem** 1997 Apr 1; 245(1):208–13

Primary structure of stallion seminal plasma protein HSP-7, a zona-pellucida-binding protein of the spermadhesin family. Reinert M, et al. **Eur J Biochem** 1996 Dec 15; 242(3):636–40

Isolation and characterization of heparin- and phosphorylcholine-binding proteins of boar and stallion seminal plasma. Primary structure of porcine pB1. Calvete JJ, et al. **FEBS Lett** 1997 Apr 28;407(2):201–6

Nonenzymatic antioxidant activity of human seminal plasma. Jóźwik M, et al. **Fertil Steril** 1997 Jul;68(1):154–7

Comparison of individual antioxidants of sperm and seminal plasma in fertile and infertile men. Lewis SE, et al. **Fertil Steril** 1997 Jan;67(1):142–7

Fractionation and characterization of boar seminal plasma spermadhesion PSP-II glycoforms reveal the presence of uncommon N-acetylgalactosamine-containing N-linked oligosaccharides. Solis D, et al. **Glycoconj J** 1997 Feb; 14(2):275–80

Seminal cytokine concentrations (IL-1beta, IL-2, IL-6, sR IL-2, sR IL-6), semen parameters and blood hormonal status in male infertility. Dousset B, et al. **Hum Reprod** 1997 Jul;12(7):1476–9

The 60 kDa heat shock protein in human semen: relationship with antibodies to spermatozoa and Chlamydia trachomatis. Munoz MG, et al. **Hum Reprod** 1996 Dec;11(12):2600–3

Cytokine levels in the seminal plasma of infertile males. Gruschwitz MS, et al. **J Androl** 1996 Mar–Apr;17(2):158–63

Relationship between anticomplement in seminal plasma and complement in follicular fluid associated with outcome in an in vitro fertilization program. Zabludovsky N, et al. **J Assist Reprod Genet** 1996 Jul;13(6):472–6

Low level determination of a novel 4-azasteroid and its carboxylic acid metabolite in human plasma and semen using high-performance liquid chromatography with atmospheric pressure chemical ionization tandem mass spectrometry. Constanzer ML, et al. **J Chromatogr B Biomed Appl** 1997 May 23;693(1):117–29

Reversion of thermic-shock effect on ram spermatozoa by adsorption of seminal plasma proteins revealed by partition in aqueous two-phase systems. García-López N, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):137–43

DNA typing of azoospermic semen at the D1S80 locus. Skinker DM, et al. **J Forensic Sci** 1997 Jul;42(4):718–20

Detection of herpes simplex DNA in semen and menstrual blood of individuals attending an infertility clinic. el Borai N, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):17–24

Purification, sequence determination and synthesis of seminal plasma peptides and synthesis of some of their analogues. Francescato P, et al. **J Pept Sci** 1997 Jan–Feb;3(1):54–64

The relationship between the dietary provision of alpha-tocopherol and the concentration of this vitamin in the semen of chicken: effects on lipid composition and susceptibility to peroxidation. Surai PF, et al. **J Reprod Fertil** 1997 May;110(1):47–51

Glycodelin from seminal plasma is a differentially glycosylated form of contraceptive glycodelin-A. Koistinen H, et al. **Mol Hum Reprod** 1996 Oct;2(10):759–65

alpha-Tocopherol in human spermatozoa and seminal plasma: relationships with motility, antioxidant enzymes and leukocytes. Thérond P, et al. **Mol Hum Reprod** 1996 Oct;2(10):739–44

Fertilization-promoting peptide in reproductive tissues and semen of the male marmoset (Callithrix jacchus). Kennedy AM, et al. **Mol Reprod Dev** 1997 May;47(1):113–9

Prostaglandins in primate semen: biasing the immune system to benefit spermatozoa and virus? Kelly RW. **Prostaglandins Leukot Essent Fatty Acids** 1997 Aug; 57(2):113–8 (71 ref.)

Lignans and isoflavonoids in plasma and prostatic fluid in men: samples from Portugal, Hong Kong, and the United Kingdom. Morton MS, et al. **Prostate** 1997 Jul 1; 32(2):122–8

Prostasomes are neuroendocrine-like vesicles in human semen. Stridsberg M, et al. **Prostate** 1996 Nov;29(5):287–95

A new scalable purification procedure for prostatic secretory protein (PSP94) from human seminal plasma. Baijal-Gupta M, et al. **Protein Expr Purif** 1996 Dec;8(4):483–8

Crystallization and preliminary X-ray diffraction studies of aSFP, a bovine seminal plasma protein with a single CUB domain architecture. Dias JM, et al. **Protein Sci** 1997 Mar;

6(3):725–7
Crystallization and preliminary X-ray diffraction analysis of bovine seminal plasma PDC-109, a protein composed of two fibronectin type II domains. Romero A, et al. **Proteins** 1997 Jul;28(3):454–6
Viability and membrane integrity of spermatozoa after dilution and flow cytometric sorting in the presence or absence of seminal plasma. Maxwell WM, et al. **Reprod Fertil Dev** 1996;8(8):1165–78
Reproductive hazards of lead exposure among urban Egyptian men. El-Zohairy EA, et al. **Reprod Toxicol** 1996 Mar-Apr;10(2):145–51
Mercury in urine and ejaculate in husbands of barren couples. Hanf V, et al. **Toxicol Lett** 1996 Nov;88(1-3):227–31
[In vivo neutralization of physiological cervicovaginal acidity by sperm nitrogen bases] Tevi-Bénissan C, et al. **Bull Soc Pathol Exot** 1997;90(1):39–43 (Eng. Abstr.) **(Fre)**
[Fibronectin and hyaluronic acid in seminal fluid: relationship with sperm count and percentage of typical forms] Laudat A, et al. **Pathol Biol (Paris)** 1997 Jun;45(6):462–6 (Eng. Abstr.) **(Fre)**
[Cytokines in human semen. A new approach to male fertility] Dousset B, et al. **Presse Med** 1997 Jan 18–25; 26(1):24–9 (Eng. Abstr.) **(Fre)**
[The effect of the season and sexual stress on the concentration of testosterone and estradiol-17beta in the seminal plasma of stallions] Braun J, et al. **Tierarztl Prax** 1996 Dec;24(6):577–80 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Sperm head morphometry analysis of ejaculate and dismount stallion semen samples. Gravance CG, et al. **Anim Reprod Sci** 1997 May;47(1-2):149–55
Comparison of motility characteristics and normal sperm morphology of human semen samples separated by percoll density gradient centrifugation. Claassens OE, et al. **Arch Androl** 1996 Mar-Apr;36(2):127–32
Nonsperm cells in human semen: with special reference to seminal leukocytes and their possible influence on fertility. Fedder J. **Arch Androl** 1996 Jan-Feb;36(1):41–65 (94 ref.)
Leucocyte identification and analysis in human semen. Maietta G, et al. **Arch Androl** 1997 Mar-Apr;38(2):99–105
Comparison between swim-up and glass wool column filtration of human semen in a gamete intrafallopian transfer program. Sanchez Sarmiento CA, et al. **Arch Androl** 1996 Mar-Apr;36(2):155–60
The use of iodixanol as a density gradient material for separating human sperm from semen. Smith TT, et al. **Arch Androl** 1997 May-Jun;38(3):223–30
Sperm count in ejaculates and after sperm selection with discontinuous percoll gradient centrifugation technique, as a prognostic index of IVF outcome. Hammadeh ME, et al. **Arch Gynecol Obstet** 1997;259(3):125–31
Effect of repeated collection on semen characteristics of alpacas. Bravo PW, et al. **Biol Reprod** 1997 Sep;57(3):520–4
The influence of staining procedure on differential round cell analysis in stained smears of human semen. Williams MA, et al. **Biotech Histochem** 1996 May;71(3):118–22
Lymphocyte immunoregulatory cells present in semen from human immunodeficiency virus (HIV)-infected individuals: a report from the HIV Heterosexual Transmission Study. Denny TN, et al. **Cytometry** 1996 Mar 15;26(1):47–51
Intraindividual variability and redundancy of semen parameters. Tielemans E, et al. **Epidemiology** 1997 Jan; 8(1):99–103
The endurance training on hormone and semen profiles in marathon runners [letter; comment] Miller BE, et al. **Fertil Steril** 1997 Mar;67(3):585–6; discussion 586–7. Comment on: Fertil Steril 1995 Dec;64(6):1189–96.
Is leukocytospermia clinically relevant? Yanushpolsky EH, et al. **Fertil Steril** 1996 Nov;66(5):822–5
Evidence for regional differences of semen quality among fertile French men. Fédération Francaise des Centres d'Etude et de Conservation des Oeufs et du Sperme humains. Auger J, et al. **Hum Reprod** 1997 Apr;12(4):740–5
Glass wool column filtration, an advantageous way of preparing semen samples for intracytoplasmic sperm injection: an auto-controlled randomized study. Van den Bergh M, et al. **Hum Reprod** 1997 Mar;12(3):509–13
Semen parameters as predictors of in-vitro fertilization: the importance of strict criteria sperm morphology. Vawda AI, et al. **Hum Reprod** 1996 Jul;11(7):1445–50
The significance of computer-assisted semen analysis (CASA) for diagnosis in andrology and fertility prognosis. Krause W. **Int J Androl** 1995 Dec;18 Suppl 2:32–5 (14 ref.)
Enlarged spectrum of seminological diagnoses using the resazurin colour reaction; a spectrophotometric application. Rahman NA, et al. **Int J Androl** 1997 Feb;20(1):17–22
NMR spectroscopy in andrology: research uses and possible clinical applications. Rohr G, et al. **Int J Androl** 1995 Dec; 18 Suppl 2:12–9 (41 ref.)
There is no relationship between concentration, motility and vacuolated cells. Aktaş S, et al. **Int Urol Nephrol** 1996; 28(6):819–29
The influence of semen analysis parameters on the fertility potential of infertile couples. Ayala C, et al. **J Androl** 1996 Nov-Dec;17(6):718–25
Seminal plasma lactoferrin concentrations in normal and abnormal semen samples. Buckett WM, et al. **J Androl** 1997 May-Jun;18(3):302–4
Effect of semen dilution on bovine sperm viability as determined by dual-DNA staining and flow cytometry. Garner DL, et al. **J Androl** 1997 May-Jun;18(3):324–31
Seminal fluid findings in men with nonbacterial prostatitis and prostatodynia. Krieger JN, et al. **J Androl** 1996 May-Jun;17(3):310–8
Evaluation of computer-assisted semen analysis (CASA) with IDENT stain to determine sperm concentration. Zinaman MJ, et al. **J Androl** 1996 May-Jun;17(3):288–92
Pregnancy rates after intracytoplasmic sperm injection in relation to sperm recovery techniques. Egbase PE, et al. **J Assist Reprod Genet** 1997 Jul;14(6):317–20
Prognostic value of objective semen parameters in an in vitro fertilization program. Wittemer C, et al. **J Assist Reprod Genet** 1997 Jul;14(6):321–7
Micromachined analytical devices: microchips for semen testing. Kricka LJ, et al. **J Pharm Biomed Anal** 1997 Jun; 15(9-10):1443–7
Ultrastructural identification of Sertoli cells in the semen of subfertile men. About four cases. Mansat A, et al. **J Submicrosc Cytol Pathol** 1997 Apr;29(2):197–9
Para-chloroamphetamine (PCA)-induced ejaculation in aged rats, semen analysis and artificial insemination. Saito TR, et al. **Lab Anim** 1996 Oct;30(4):332–6
Collection of seasonally spermatozoa-rich semen by electroejaculation of laboratory woodchucks (Marmota monax), with and without removal of bulbourethral glands. Concannon P, et al. **Lab Anim Sci** 1996 Dec;46(6):667–75
Immunohistochemistry of prostasomes from human semen. Renneberg H, et al. **Prostate** 1997 Feb 1;30(2):98–106
Effect of lipid peroxidation on cryopreserved semen quality in patients with testicular or nontesticular cancer. Wang Y, et al. **Urology** 1997 Sep;50(3):414–7
Effect of cryopreservation and sperm concentration on lipid peroxidation in human semen. Wang Y, et al. **Urology** 1997 Sep;50(3):409–13
Use of semen as biopsy material for assessment of health status of the stallion reproductive tract. Veeramachaneni DN, et al. **Vet Clin North Am Equine Pract** 1996 Apr; 12(1):101–10 (6 ref.)
[Usefulness of counting leukocytes and round cells in determination of bacterial infection of semen in infertile men] Jędrzejczak P, et al. **Ginekol Pol** 1996 Nov; 67(11):569–73 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Effect of 19-norandrostenololylaurate on semen characteristics of colts. Koskinen E, et al. **Acta Vet Scand** 1997;38(1):41–50
Scavenging effect of N-acetyl-L-cysteine against reactive oxygen species in human semen: a possible therapeutic modality for male factor infertility? Oeda T, et al. **Andrologia** 1997 May-Jun;29(3):125–31
A steroidal pheromone and spawning stimuli act via different neuroendocrine mechanisms to increase gonadotropin and milt volume in male goldfish Carassius auratus. Zheng W, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):228–38
Semen parameters in workers exposed to trichloroethylene. Chia SE, et al. **Reprod Toxicol** 1996 Jul-Aug;10(4):295–9
Semen analysis of military personnel associated with military duty assignments. Weyandt TB, et al. **Reprod Toxicol** 1996 Nov-Dec;10(6):521–8
Reproductive hazards of lead exposure among urban Egyptian men. El-Zohairy EA, et al. **Reprod Toxicol** 1996 Mar-Apr;10(2):145–51
[Effects of captopril on the male reproductive organs and various semen parameters of rabbits] Köhler-Samouilidis G, et al. **Berl Munch Tierarztl Wochenschr** 1997 Jun; 110(6):201–5 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Severe antioxidase deficiency in human semen samples with pathological spermiogram parameters. Miesel R, et al. **Andrologia** 1997 Mar-Apr;29(2):77–83
Granulocyte elastase indicates silent male genital tract inflammation and appropriate anti-inflammatory treatment. Reinhardt A, et al. **Andrologia** 1997 Jul-Aug;29(4):187–92
Sperm angiotensin-converting enzyme activity in Chernobyl victims and patients with chronic prostatitis. Sakharov IYu, et al. **Andrologia** 1996 Sep-Oct;28(5):259–60
The isolation from human seminal plasma of a new form of soluble 5'-nucleotidase. Minelli A, et al. **Biochem Mol Med** 1996 Aug;58(2):168–75
Human seminal plasma soluble 5'-nucleotidase: regulatory aspects of the dephosphorylation of nucleoside 5'-monophosphates. Minelli A, et al. **Biochem Mol Med** 1997 Jun;61(1):95–101
Transfer of aminopeptidase activity from prostasomes to sperm. Arienti G, et al. **Biochim Biophys Acta** 1997 Aug 29;1336(2):269–74
Purification of enzymatically active kallikrein hK2 from human seminal plasma. Frenette G, et al. **Biochim Biophys Acta** 1997 Feb 11;1334(1):109–15
A prediction of DPP IV/CD26 domain structure from a physico-chemical investigation of dipeptidyl peptidase IV (CD26) from human seminal plasma. Lambeir AM, et al. **Biochim Biophys Acta** 1997 Jul 18;1340(2):215–26
A further study of seminal plasma: lactate dehydrogenase and lactate dehydrogenase-X activities and diluted semen absorbance. Aydin S, et al. **Eur J Clin Chem Clin Biochem** 1997 Apr;35(4):261–4
Immunosuppressive activity of bovine seminal ribonuclease and its mode of action. Souček J, et al. **Immunobiology** 1996 Aug;195(3):271–85
Purification of a novel phospholipase A2 from bovine seminal plasma. Soubeyrand S, et al. **J Biol Chem** 1997 Jan 3; 272(1):222–7
Acid-activated insulin-like growth factor binding protein protease activity of cathepsin D in normal and malignant prostatic epithelial cells and seminal plasma. Nunn SE, et al. **J Cell Physiol** 1997 May;171(2):196–204
High levels of alpha-amylase in seminal fluid may represent a simple artifact in the collection process [letter] Hochmeister MN, et al. **J Forensic Sci** 1997 May; 42(3):535–6
Preliminary studies on the role of plasminogen activator in seminal plasma of human and rhesus monkey. Liu K, et al. **Mol Hum Reprod** 1996 Feb;2(2):99–104
Isoelectric focusing differences in the mobility of blood and semen PGM1 bands--the role of hemoglobin as a cause. Takayama T, et al. **Nippon Hoigaku Zasshi** 1996 Oct; 50(5):331–5
Is seminal prostatic acid phosphatase a reliable marker for male infertility? Singh G, et al. **Singapore Med J** 1996 Dec; 37(6):598–9
Presence of 11 beta-hydroxysteroid dehydrogenase in human semen: evidence of correlation with semen characteristics. Nacharaju VL, et al. **Steroids** 1997 Mar;62(3):311–4
[Seminal lactate dehydrogenase isoenzyme C4 and abnormal acrosomes] Laudat A, et al. **Ann Biol Clin (Paris)** 1997 Jul-Aug;55(4):341–2 **(Fre)**

IMMUNOLOGY

Thirteen cases of allergy to human seminal plasma. Drouet M, et al. **Allergy** 1997 Jan;52(1):112–4
Anti-seminal plasma antibodies associated with infertility: II. Comparative investigation of human antibody binding to normo-, astheno-, and azoospermic seminal plasma antigens. Fichorova R, et al. **Am J Reprod Immunol** 1996 Oct;36(4):204–10
Anti-seminal plasma antibodies associated with infertility: I. Serum antibodies against normozoospermic seminal plasma in patients with unexplained infertility. Fichorova RN, et al. **Am J Reprod Immunol** 1996 Oct;36(4):198–203
Distinct expression of cytokines and mitogenic inhibitory factors in semen of fertile and infertile men. Huleihel M, et al. **Am J Reprod Immunol** 1997 Apr;37(4):304–9
Human sperm coating antigen from seminal plasma origin. Iborra A, et al. **Am J Reprod Immunol** 1996 Aug; 36(2):118–25
Cytokines of the human reproductive tract. Srivastava MD, et al. **Am J Reprod Immunol** 1996 Sep;36(3):157–66
Effect of boar seminal immunosuppressive component on humoral immune response in mice. Veselský L, et al. **Am J Reprod Immunol** 1997 Aug;38(2):106–13
CD 45/67 immunobead preparation of human semen activates granulocytes. Ochsendorf FR, et al. **Andrologia** 1997 Jul-Aug;29(4):193–9
Prevalence of human seminal plasma hypersensitivity among symptomatic women. Bernstein JA, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):54–8
Changes in various antioxidant levels in human seminal plasma related to immunoinfertility. Palan P, et al. **Arch Androl** 1996 Mar-Apr;36(2):139–43
Characterization of human sperm antigens reacting with sperm antibodies from autologous serum and seminal plasma in an infertile population. Paradisi R, et al. **Biol Reprod** 1996 Jul;55(1):54–61
Antibodies to chlamydia trachomatis in semen and relationship with parameters of male fertility. Eggert-Kruse W, et al. **Hum Reprod** 1996 Jul;11(7):1408–17
The indirect immunobead test for seminal antisperm antibodies and fertilization rates at in-vitro fertilization. Ford WC, et al. **Hum Reprod** 1996 Jul;11(7):1418–22
Immunosuppressive activities in the seminal plasma of infertile men: relationship to sperm antibodies and autoimmunity. Imade GE, et al. **Hum Reprod** 1997 Feb; 12(2):256–62
A cytokine switch induced by human seminal plasma: an immune modulation with implications for sexually transmitted disease. Kelly RW, et al. **Hum Reprod** 1997 Apr;12(4):677–81
Circulating antibodies to Chlamydia trachomatis in women: relationship to antisperm and antichlamydial antibodies in semen of male partners. Witkin SS. **Hum Reprod** 1996 Aug; 11(8):1635–7
Evaluation of beta-endorphin and interleukin-6 in seminal plasma of patients with certain andrological diseases. Zalata A, et al. **Hum Reprod** 1995 Dec;10(12):3161–5
Immunosuppressive activity of bovine seminal ribonuclease and its mode of action. Souček J, et al. **Immunobiology** 1996 Aug;195(3):271–85
Detection and enrichment of carcinoma-in-situ cells in semen by an immunomagnetic method using monoclonal antibody M2A. Meng FJ, et al. **Int J Androl** 1996 Dec;19(6):365–70
Characterization of human sperm antigens reacting with antisperm antibodies from autologous sera and seminal plasma: comparison among infertile subpopulations. Paradisi R, et al. **Int J Androl** 1996 Dec;19(6):345–52
Quantitation of HIV-1-specific IgG, IgA, and IgM antibodies in human genital tract secretions. Haimovici F, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jul 1;15(3):185–91

Concurrent sensitization to natural rubber latex and human seminal fluid [letter] Yocum MW, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 1):1135–6

Bispecific rabbit Fab'-bovine serum albumin conjugate used in hemagglutination immunoassay for beta-microseminoprotein. Yukawa N, et al. **J Immunoassay** 1997 Aug;18(3):215–33

Soluble CD46 (membrane cofactor protein, MCP) in human reproductive tract fluids. McLaughlin PJ, et al. **J Reprod Immunol** 1996 Oct;31(3):209–19

METABOLISM

Distinct expression of cytokines and mitogenic inhibitory factors in semen of fertile and infertile men. Huleihel M, et al. **Am J Reprod Immunol** 1997 Apr;37(4):304–9

Elevated nitric oxide concentration in the seminal plasma of infertile males: nitric oxide inhibits sperm motility. Nobunaga T, et al. **Am J Reprod Immunol** 1996 Oct; 36(4):193–7

Effect of rotation on the generation of reactive oxygen species in human semen. de Jager C, et al. **Andrologia** 1996 Sep-Oct;28(5):291–3

Evaluation of ascorbate and urate antioxidant capacity in human semen. Gavella M, et al. **Andrologia** 1997 Jan–Feb; 29(1):29–35

CD 45/67 immunobead preparation of human semen activates granulocytes. Ochsendorf FR, et al. **Andrologia** 1997 Jul–Aug;29(4):193–9

Fluorescence spectra from human semen and their relationship with sperm parameters. Amano T, et al. **Arch Androl** 1996 Jan–Feb;36(1):9–15

Free radical–induced liquefaction of ejaculated human semen: a new dimension in semen biochemistry. Chatterjee S, et al. **Arch Androl** 1997 Mar–Apr;38(2):107–11

Complement–inhibiting activity of human seminal plasma and semen quality. Chowdhury NA, et al. **Arch Androl** 1996 Mar–Apr;36(2):109–18

Effect of dietary fat on the fatty acid composition and fertilizing ability of fowl semen. Blesbois E, et al. **Biol Reprod** 1997 May;56(5):1216–20

Effects of dietary crude protein content and food intake on the production of semen in two lines of broiler breeder males. Hocking PM, et al. **Br Poult Sci** 1997 May; 38(2):199–202

BRCA1 tumor suppressor gene product shares immunoreactive epitopes with a protein present in seminal plasma. Lianidou ES, et al. **Clin Biochem** 1997 Jul; 30(5):425–32

Alpha-2-HS-glycoprotein (AHSG) polymorphism in semen and saliva. Yasuda T, et al. **Electrophoresis** 1996 Apr; 17(4):793–6

Transfer of CD26/dipeptidyl peptidase IV (E.C. 3.5.4.4) from prostasomes to sperm. Arienti G, et al. **FEBS Lett** 1997 Jun 30;410(2–3):343–6

The primary structure of BSP-30K, a major lipid-, gelatin-, and heparin-binding glycoprotein of bovine seminal plasma. Calvete JJ, et al. **FEBS Lett** 1996 Dec 9; 399(1–2):147–52

Distinct expression levels of cytokines and soluble cytokine receptors in seminal plasma of fertile and infertile men. Huleihel M, et al. **Fertil Steril** 1996 Jul;66(1):135–9

The presence of müllerian inhibiting substance in human seminal plasma. Fallat ME, et al. **Hum Reprod** 1996 Oct; 11(10):2165–9

Insulin-like growth factor-I and alpha 2-macroglobulin in seminal plasma correlate with semen quality. Glander HJ, et al. **Hum Reprod** 1996 Nov;11(11):2454–60

Effects of sperm activity on zinc and fructose concentrations in seminal plasma. Lewis-Jones DI, et al. **Hum Reprod** 1996 Nov;11(11):2465–7

The possible meaning of transferrin and its soluble receptors in seminal plasma as markers of the seminiferous epithelium. Zalata A, et al. **Hum Reprod** 1996 Apr;11(4):761–4

Evaluation of beta-endorphin and interleukin-6 in seminal plasma of patients with certain andrological diseases. Zalata A, et al. **Hum Reprod** 1995 Dec;10(12):3161–5

Kinin-induced stimulation of bovine sperm motility and its relation to seminal plasma tissue kallikrein. Somlev B, et al. **Immunopharmacology** 1996 Jun;33(1–3):137–9

Superoxide anion scavenging capacity of human seminal plasma. Gavella M, et al. **Int J Androl** 1996 Apr;19(2):82–90

Metenkephalin in seminal plasma of infertile men. Fujisawa M, et al. **Int J Urol** 1996 Jul;3(4):297–300

Cocaine excretion in the semen of drug users [letter] Cone EJ, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):139–40

Seminal plasma lactoferrin concentrations in normal and abnormal semen samples. Buckett WM, et al. **J Androl** 1997 May–Jun;18(3):302–4

Prolactin involvement with the increase in seminal volume after sexual stimulation in stallions. Thomson CH, et al. **J Anim Sci** 1996 Oct;74(10):2468–72

MK-386, an inhibitor of 5alpha-reductase type 1, reduces dihydrotestosterone concentrations in serum and sebum without affecting dihydrotestosterone concentrations in semen. Schwartz JI, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1373–7

Fusion of human sperm to prostasomes at acidic pH. Arienti G, et al. **J Membr Biol** 1997 Jan 1;155(1):89–94

Fate and distribution of seminal plasma proteins in the genital tract of the female rat after natural mating. Carballada R, et al. **J Reprod Fertil** 1997 Mar;109(2):325–35

Lipid and antioxidant changes in spermatozoa and seminal plasma throughout the reproductive period of bulls. Kelso KA, et al. **J Reprod Fertil** 1997 Jan;109(1):1–6

Soluble CD46 (membrane cofactor protein, MCP) in human reproductive tract fluids. McLaughlin PJ, et al. **J Reprod Immunol** 1996 Oct;31(3):209–19

Reactive oxygen species production by the spermatozoa of patients with idiopathic infertility: relationship to seminal plasma antioxidants. Alkan I, et al. **J Urol** 1997 Jan; 157(1):140–3

Effect of total and ionized calcium levels of seminal fluid on sperm motility. Kiliç S, et al. **Urol Int** 1996;56(4):215–8

Reactive oxygen species generation by seminal cells during cryopreservation. Wang AW, et al. **Urology** 1997 Jun; 49(6):921–5

Effect of lipid peroxidation on cryopreserved semen quality in patients with testicular or nontesticular cancer. Wang Y, et al. **Urology** 1997 Sep;50(3):414–7

MICROBIOLOGY

Pyospermia and preterm, prelabor, rupture of membranes. Kjaergaard N, et al. **Acta Obstet Gynecol Scand** 1997 Jul; 76(6):528–31

Microbiology of semen specimens from males attending a fertility clinic. Kjaergaard N, et al. **APMIS** 1997 Jul; 105(7):566–70

Viability of Borrelia burgdorferi in stored semen. Kumi-Diaka J, et al. **Br Vet J** 1995 Mar–Apr;151(2):221–4

A polymerase chain reaction assay for the detection of Leptospira spp. in bovine semen. Masri SA, et al. **Can J Vet Res** 1997 Jan;61(1):15–20

Microbial contamination in an in vitro fertilization–embryo transfer system. Cottell E, et al. **Fertil Steril** 1996 Nov; 66(5):776–80

Processing of semen in an antibiotic-rich culture medium to minimize microbial presence during in vitro fertilization. Cottell E, et al. **Fertil Steril** 1997 Jan;67(1):98–103

The effect of positive semen bacterial and Ureaplasma cultures on in-vitro fertilization success. Shalika S, et al. **Hum Reprod** 1996 Dec;11(12):2789–92

Anaerobes in ejaculates of subfertile men. Eggert-Kruse W, et al. **Hum Reprod Update** 1995 Sep;1(5):462–78

Chlamydial antibodies in semen: search for "silent" chlamydial infections in asymptomatic andrological patients. Weidner W, et al. **Infection** 1996 Jul–Aug;24(4):309–13

The bacterial flora of the genitourinary tract in healthy fertile men. Willén M, et al. **Scand J Urol Nephrol** 1996 Oct; 30(5):387–93

Comparison of polymerase chain reaction, direct immunofluorescence, cell culture and enzyme immunoassay for the detection of Chlamydia psittaci in bull semen. Domeika M, et al. **Vet Microbiol** 1994 Dec;42(4):273–80

[The dynamics of the species composition and antilysozymal activity of ejaculate microflora under the action of local hyperthermia] Ivanov IuB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):86–8 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Altered seminal ejaculate consistency due to schistosomiasis. Lewis DA, et al. **Br J Urol** 1996 Dec;78(6):956–7

PHYSIOLOGY

Is male reproductive health at risk? Longitudinal semen analysis studies. Paulsen CA, et al. **Adv Contracept** 1997 Jun–Sep;13(2–3):119–21 (15 ref.)

Incidence and implications of altered semen quality on family planning. Zinaman MJ, et al. **Adv Contracept** 1997 Jun–Sep; 13(2–3):123–8

Semen quality and fertility of men employed in a South African lead acid battery plant. Robins TG, et al. **Am J Ind Med** 1997 Oct;32(4):369–76

Is semen quality declining? Toppari J. **Andrologia** 1996 Nov–Dec;28(6):307–8

Changes in plasma luteinizing hormone, testosterone and estradiol-17 beta levels and semen quality after injections of gonadotropin releasing hormone agonist and human chorionic gonadotropin in three dogs with oligozoospermia and two dogs with azoospermia. Kawakami E, et al. **Anim Reprod Sci** 1997 May;47(1–2):157–67

Variation between ejaculates in the fertility of frozen ram semen used for cervical insemination of Merino ewes. Windsor DP. **Anim Reprod Sci** 1997 May;47(1–2):21–9

Prostasome fraction of human seminal plasma prevents sperm from becoming acrosomally responsive to the agonist progesterone. Cross NL, et al. **Arch Androl** 1997 Jul–Aug; 39(1):39–44

Assessment of the relationship of sperm morphology with seminal and other clinical conditions of semen donors. Hossain AM, et al. **Arch Androl** 1997 Sep–Oct;39(2):111–7

The value of motile density, strict morphology, and the hypoosmotic swelling test in in vitro fertilization–embryo transfer. Kiefer D, et al. **Arch Androl** 1996 Jul–Aug; 37(1):57–60

Viscosity of human seminal fluid: role of lysozyme. Mendeluk GR, et al. **Arch Androl** 1997 Jan–Feb;38(1):7–11

Chronobiological fluctuations in semen parameters with a constant abstinence period. Ombelet W, et al. **Arch Androl** 1996 Sep–Oct;37(2):91–6

A comparative study using prepared and unprepared frozen semen for donor insemination. Pistorius LR, et al. **Arch Androl** 1996 Jan–Feb;36(1):81–6

Human seminal plasma prevents sperm from becoming acrosomally responsive to the agonist, progesterone: cholesterol is the major inhibitor. Cross NL. **Biol Reprod** 1996 Jan;54(1):138–45

Potent blood coagulant activity of human semen due to prostasome-bound tissue factor. Fernández JA, et al. **Biol Reprod** 1997 Mar;56(3):757–63

[3H]heparin binding in boar spermatozoa: characterization and correlation with routine semen quality parameters. Sánchez-Prieto J, et al. **Biol Reprod** 1996 Oct;55(4):860–7

Seasonal rhythm of semen characteristics of a Brazilian breed ("Mangalarga") stallion. Araujo JF, et al. **Chronobiol Int** 1996 Dec;13(6):477–85

In vivo semen-associated pH neutralization of cervicovaginal secretions. Tevi-Bénissan C, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):367–74

Peritoneal fluid from women with moderate or severe endometriosis inhibits sperm motility: the role of seminal fluid components. Oral E, et al. **Fertil Steril** 1996 Nov; 66(5):787–92

Seminal reactive oxygen species and sperm motility and morphology in men with spinal cord injury. Padron OF, et al. **Fertil Steril** 1997 Jun;67(6):1115–20

Seminal volume and total sperm number trends in men attending subfertility clinics in the greater Athens area during the period 1977–1993. Adamopoulos DA, et al. **Hum Reprod** 1996 Sep;11(9):1936–41

The influence of sera, follicular fluids and seminal plasma on human sperm-zona pellucida binding. Huyser C, et al. **Hum Reprod** 1997 Apr;12(4):792–9

Constitution of semen samples from XYY and XXY males as analysed by in-situ hybridization. Martini E, et al. **Hum Reprod** 1996 Aug;11(8):1638–43

Total antioxidant capacity of human seminal plasma. Smith R, et al. **Hum Reprod** 1996 Aug;11(8):1655–60

Seminal plasma effect on ram spermatozoa studied by partitioning in an aqueous two-phase system. Ollero M, et al. **Int J Dev Biol** 1996;Suppl 1:205S–206S

Effects of psychological stress on human semen quality. Fenster L, et al. **J Androl** 1997 Mar–Apr;18(2):194–202

Influence of semen collection method on ejaculate characteristics in the common marmoset, Callithrix jacchus. Morrell JM, et al. **J Androl** 1996 Mar–Apr;17(2):164–72

Effects of dietary energy on scrotal surface temperature, seminal quality, and sperm production in young beef bulls. Coulter GH, et al. **J Anim Sci** 1997 Apr;75(4):1048–52

Computer-assisted sperm analysis for assessing initial semen quality and changes during storage at 5 degrees C. Tardif AL, et al. **J Dairy Sci** 1997 Aug;80(8):1606–12

Effect of homologous and heterologous seminal plasma on the fertilizing ability of ejaculated bull spermatozoa assessed by penetration of zona-free bovine oocytes. Henault MA, et al. **J Reprod Fertil** 1996 Nov; 108(2):199–204

Characteristics of koala (Phascolarctos cinereus adustus) semen collected by artificial vagina. Johnston SD, et al. **J Reprod Fertil** 1997 Mar;109(2):319–23

Effect of immunization of rams against bovine inhibin alpha 1–26 on semen characteristics, scrotal size, FSH, LH and testosterone concentrations. McKeown RM, et al. **J Reprod Fertil** 1997 Mar;109(2):237–45

Role of high molecular weight seminal vesicle proteins in eliciting the uterine inflammatory response to semen in mice. Robertson SA, et al. **J Reprod Fertil** 1996 Jul; 107(2):265–77

The effects of human seminal plasma and PGE2 on mitogen induced proliferation and cytokine production of human splenic lymphocytes and peripheral blood mononuclear cells. Miao D, et al. **J Reprod Immunol** 1996 May; 30(2–3):97–114

Single vs. multiple semen specimens in screening for male infertility factors. A comparison. Opsahl MS, et al. **J Reprod Med** 1996 May;41(5):313–5

Poor semen quality in Irish wolfhounds: a clinical, hormonal and spermatological study. Dahlbom M, et al. **J Small Anim Pract** 1995 Dec;36(12):547–52

Collection of semen from marmoset monkeys (Callithrix jacchus) for experimental use by vaginal washing. Kuederling I, et al. **Lab Anim** 1996 Jul;30(3):260–6

Effect of added spermiophages in pooled turkey semen on fertility, embryonic mortality, and hatchability. Barnes DA, et al. **Poult Sci** 1996 Jul;75(7):943–8

Cryopreservation of rooster semen in thirteen and sixteen percent glycerol. Gill SP, et al. **Poult Sci** 1996 Feb; 75(2):254–6

Semen production by the emu (Dromaius novaehollandiae). 2. Effect of collection frequency on the production of semen and spermatozoa. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):622–6

Semen production by the emu (Dromaius novaehollandiae). 1. Methods for collection of semen. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):615–21

Characterisation of proteins in the seminal plasma of stallions, geldings and supplemented with testosterone. McDowell KJ, et al. **Res Vet Sci** 1996 Jul;61(1):33–7

Presence of 11 beta-hydroxysteroid dehydrogenase in human semen: evidence of correlation with semen characteristics. Nacharaju VL, et al. **Steroids** 1997 Mar;62(3):311–4

Analysis of stallion semen and its relation to fertility. Graham JK. **Vet Clin North Am Equine Pract** 1996 Apr;12(1):119–30 (39 ref.)

[In vivo neutralization of physiological cervicovaginal acidity

by sperm nitrogen bases] Tevi-Bénissan C, et al. **Bull Soc Pathol Exot** 1997;90(1):39–43 (Eng. Abstr.) **(Fre)**

[Evaluation of fertilizing ability of sperm in vitro] Parinaud J, et al. **Contracept Fertil Sex** 1997 Mar;25(3):234–8 (Eng. Abstr.) **(Fre)**

[Modification of the quality indicators of the ejaculate of beagle dogs due to frequent collections over time] Schäfer S, et al. **Tierarztl Prax** 1996 Aug;24(4):385–90 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Semen analysis of military personnel associated with military duty assignments. Weyandt TB, et al. **Reprod Toxicol** 1996 Nov–Dec;10(6):521–8

VIROLOGY

Human herpesvirus 8 in semen and prostate [editorial; comment] Blackbourn DJ, et al. **AIDS** 1997 Feb; 11(2):249–50. Comment on: AIDS 1997 Feb;11(2):F15–9.

Shedding of HIV–1 in semen during primary infection [letter] Dyer JR, et al. **AIDS** 1997 Mar 15;11(4):543–5

Detection of Kaposi's sarcoma herpesvirus DNA in semen of homosexual men with Kaposi's sarcoma [letter] Gupta P, et al. **AIDS** 1996 Nov;10(13):1596–8

Detection of human herpesvirus 8 DNA in semen from HIV–infected individuals but not healthy semen donors [see comments] Howard MR, et al. **AIDS** 1997 Feb; 11(2):F15–9. Comment in: AIDS 1997 Feb;11(2):249–50.

Analysis of HIV–1 load in blood, semen and saliva: evidence for different viral compartments in a cross–sectional and longitudinal study [see comments] Liuzzi G, et al. **AIDS** 1996 Dec;10(14):F51–6. Comment in: AIDS 1997 Jul;11(8):1058–9.

Effect of antiviral treatment on the shedding of HIV–1 in semen. Vernazza PL, et al. **AIDS** 1997 Aug;11(10):1249–54

Quantification of HIV in semen: correlation with antiviral treatment and immune status. Vernazza PL, et al. **AIDS** 1997 Jul;11(8):987–93

HIV–1 viral load in blood, semen and saliva [letter; comment] Vernazza PL, et al. **AIDS** 1997 Jul;11(8):1058–9. Comment on: AIDS 1996 Dec;10(14):F51–6.

Detection of the herpesvirus–like DNA sequences in matched specimens of semen and blood from patients with AIDS–related Kaposi's sarcoma by polymerase chain reaction in situ hybridization. Huang YQ, et al. **Am J Pathol** 1997 Jan;150(1):147–53

Intratesticular inoculation of avian leukosis virus (ALV) in chickens—production of neutralizing antibodies and lack of virus shedding into semen. Afanassieff M, et al. **Avian Dis** 1996 Oct–Dec;40(4):841–52

Effects of reverse transcriptase inhibitor therapy on the HIV–1 viral burden in semen. Gilliam BL, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):54–60

Detection of equine arteritis virus in the semen of carrier stallions by using a sensitive nested PCR assay. Gilbert SA, et al. **J Clin Microbiol** 1997 Aug;35(8):2181–3

Absence of detectable human herpesvirus 8 in the semen of human immunodeficiency virus–infected men without Kaposi's sarcoma. Diamond C, et al. **J Infect Dis** 1997 Sep; 176(3):775–7

Shedding of HIV–1 subtype E in semen and cervico–vaginal fluid. Sutthent R, et al. **J Med Assoc Thai** 1997 Jun; 80(6):348–57

High viral load in semen of human immunodeficiency virus type 1–infected men at all stages of disease and its reduction by therapy with protease and nonnucleoside reverse transcriptase inhibitors. Gupta P, et al. **J Virol** 1997 Aug; 71(8):6271–5

Transmission of feline immunodeficiency virus in domestic cats via artificial insemination. Jordan HL, et al. **J Virol** 1996 Nov;70(11):8224–8

Quantitation of human immunodeficiency virus type 1 RNA in cell free seminal plasma: comparison of NASBA with Amplicor reverse transcription–PCR amplification and correlation with quantitative culture. Dyer JR, et al. **J Virol Methods** 1996 Jul;60(2):161–70

Reduction of concentration of HIV–1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV–1. AIDSCAP Malawi Research Group. Cohen MS, et al. **Lancet** 1997 Jun 28; 349(9069):1868–73

Absence of HHV–8 in prostate and semen [letter; comment] Corbellino M, et al. **N Engl J Med** 1996 Oct 17; 335(16):1237; discussion 1238–9. Comment on: N Engl J Med 1996 May 2;334(18):1168–72.

Absence of HHV–8 in prostate and semen [letter; comment] Tasaka T, et al. **N Engl J Med** 1996 Oct 17;335(16):1237–8; discussion 1238–9. Comment on: N Engl J Med 1996 May 2;334(18):1168–72.

Prostaglandins in primate semen: biasing the immune system to benefit spermatozoa and virus? Kelly RW. **Prostaglandins Leukot Essent Fatty Acids** 1997 Aug; 57(2):113–8 (71 ref.)

The use of a polymerase chain reaction assay for the detection of bovine herpesvirus 1 in semen during a natural outbreak of infectious bovine rhinotracheitis. de Gee AL, et al. **Vet Microbiol** 1996 Nov;53(1–2):163–8

Examination of virus shedding in semen from vaccinated and from previously infected boars after experimental challenge with porcine reproductive and respiratory syndrome virus. Nielsen TL, et al. **Vet Microbiol** 1997 Feb;54(2):101–12

Monitoring of porcine reproductive and respiratory syndrome virus infection in boars. Shin J, et al. **Vet Microbiol** 1997 Apr;55(1–4):337–46

Porcine reproductive and respiratory syndrome virus: seminal transmission. Gradil C, et al. **Vet Rec** 1996 May 25;138(21):521–2

Insemination of cattle with semen from a bull transiently infected with pestivirus. Kirkland PD, et al. **Vet Rec** 1997 Feb 1;140(5):124–7

A polymerase chain reaction (PCR) assay for the detection of bovine herpesvirus 1 (BHV1) in selectively digested whole bovine semen. Wagter LH, et al. **Vet Res Commun** 1996;20(4):401–8

SEMEN PRESERVATION

see related

SPERM BANKS

Comparative study of functional and biochemical parameters in frozen bovine sperm. Beorlegui N, et al. **Andrologia** 1997 Jan–Feb;29(1):37–42

Effect of fluctuations in temperature encountered during handling and shipment of human cryopreserved semen. Carrell DT, et al. **Andrologia** 1996 Nov–Dec;28(6):315–9

Acrosin activity in pelleted frozen sperm does not correlate with in vitro fertilization of oocytes. Yie SM, et al. **Andrologia** 1996 Nov–Dec;28(6):349–52

A comparative study using prepared and unprepared frozen semen for donor insemination. Pistorius LR, et al. **Arch Androl** 1996 Jan–Feb;36(1):81–6

Birth of live mice resulting from oocytes fertilized in vitro with cryopreserved spermatozoa. Songsasen N, et al. **Biol Reprod** 1997 Jan;56(1):143–52

Fluorometric assessments of acrosomal integrity and viability in cryopreserved bovine spermatozoa. Thomas CA, et al. **Biol Reprod** 1997 Apr;56(4):991–8

Storage of sperm and embryos. Storage facility exists for sperm from patients positive for antibody to hepatitis C virus [letter] Massey EJ, et al. **BMJ** 1996 Oct 26; 313(7064):1078

Preservation of reproductive function before therapy for cancer: new options involving sperm and ovary cryopreservation [editorial] Opsahl MS, et al. **Cancer J Sci Am** 1997 Jul–Aug;3(4):189–91 (12 ref.)

TEST yolk buffer and antisperm antibodies—interaction? [letter; comment] Katsoff D, et al. **Fertil Steril** 1997 Mar; 67(3):590–1. Comment on: Fertil Steril 1996 Sep;66(3):454–8.

Antibiotics: effect on cryopreserved–thawed human sperm motility in vitro. King K, et al. **Fertil Steril** 1997 Jun; 67(6):1146–51

Intrauterine insemination with frozen sperm increases pregnancy rates in donor insemination cycles under gonadotropin stimulation. Matorras R, et al. **Fertil Steril** 1996 Mar;65(3):620–5

Seasonality and freezability vs routine parameters in stallion semen. Rodriguez H, et al. **Histol Histopathol** 1996 Apr; 11(2):427–30

Posthumous assisted reproduction. Posthumous assisted reproduction (PAR): cancer patients, potential cases, counselling and consent. Bahadur G. **Hum Reprod** 1996 Dec;11(12):2573–5

Pregnancy achieved by intracytoplasmic sperm injection using cryopreserved semen from a man with testicular cancer. Chen SU, et al. **Hum Reprod** 1996 Dec; 11(12):2645–7

Cryopreservation of spermatozoa: a 1996 review. Royere D, et al. **Hum Reprod Update** 1996 Nov–Dec;2(6):553–9 (72 ref.)

The addition of fructose or sodium citrate does not improve recovery rates of cryopreserved human spermatozoa. Silva AL, et al. **Int J Fertil Menopausal Stud** 1996 May–Jun; 41(3):304–9

Computerized imaging and scanning electron microscope (SEM) analysis of co–cultured fresh and frozen bovine sperm. Suzuki H, et al. **J Androl** 1997 Mar–Apr; 18(2):217–26

Effect of artificial stimulants on cryopreserved spermatozoa from cancer patients. Sharma RK, et al. **J Urol** 1997 Feb; 157(2):521–4

Cryopreservation of semen from adolescent patients with malignancies [letter; comment] Ried HL, et al. **Med Pediatr Oncol** 1997 Apr;28(4):322–3. Comment on: Med Pediatr Oncol 1996 Jan;26(1):20–7.

Chlortetracycline analysis of boar spermatozoa after incubation, flow cytometric sorting, cooling, or cryopreservation. Maxwell WM, et al. **Mol Reprod Dev** 1997 Mar;46(3):408–18

Effect of indole–3–acetic acid (plant auxin) on the preservation at 15 degrees C of boar semen for artificial insemination. Toniolli R, et al. **Reprod Nutr Dev** 1996; 36(5):503–11

A sucrose–DMSO extender for freezing rabbit semen. Vicente JS, et al. **Reprod Nutr Dev** 1996;36(5):485–92

What are the chances of infertility and should sperm be banked? Ohl DA, et al. **Semin Urol Oncol** 1996 Feb; 14(1):36–44 (80 ref.)

[Cryopreservation of sperm in cancer treatment–induced infertility] Suominen J, et al. **Duodecim** 1995;111(18):1773–7 **(Fin)**

[Triplet pregnancy after intracytoplasmatic sperm injection of cryopreserved testicular sperm] Würfel W, et al. **Gynakol Geburtshilfliche Rundsch** 1996;36(4):208–11 (Eng. Abstr.) **(Ger)**

[Pregnancies after in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) of testicular spermatozoa (TESE) from frozen semen] Würfel W, et al. **Zentralbl Gynakol** 1996;118(12):665–8 (Eng. Abstr.) **(Ger)**

METHODS

Human sperm cryopreservation and reactive oxygen species (ROS) production. Mazzilli F, et al. **Acta Eur Fertil** 1995 Jul–Aug;26(4):145–8

A method for preparation, storage, and activation of large populations of immotile sea urchin sperm. Bracho GE, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):59–62

Motility of cryopreserved mouse spermatozoa affected by temperature of collection and rate of thawing. Sztein JM, et al. **Cryobiology** 1997 Aug;35(1):46–52

Quail egg yolk: a novel cryoprotectant for the freeze preservation of Poitou jackass sperm. Trimeche A, et al. **Cryobiology** 1997 Jun;34(4):385–93

Effects of trehalose and sucrose, osmolality of the freezing medium, and cooling rate on viability and intactness of bull sperm after freezing and thawing. Woelders H, et al. **Cryobiology** 1997 Sep;35(2):93–105

An intrauterine insemination–ready cryopreservation method compared with sperm recovery after conventional freezing and post–thaw processing. Larson JM, et al. **Fertil Steril** 1997 Jul;68(1):143–8

Temperature change in cryo–containers during short exposure to ambient temperatures. Tyler JP, et al. **Hum Reprod** 1996 Jul;11(7):1510–2

Investigation of some biochemical and functional effects of cryopreservation of human spermatozoa using an automated freezing–quick–thawing method. Morshedi M, et al. **Int J Androl** 1995 Dec;18(6):279–86

Improved preservation of ultrastructural morphology in human spermatozoa using betaine in the primary fixative. Swan MA. **Int J Androl** 1997 Feb;20(1):45–54

Continuous assessment of human spermatozoa viability during cryopreservation. Mohammad SN, et al. **J Androl** 1997 Jan–Feb;18(1):43–50

Cryopreservation of human spermatozoa: comparison of two cryoprotectants and two freezing methods. Julavijitphong S, et al. **J Med Assoc Thai** 1997 Feb;80(2):109–15

Liquid storage of ram semen in the absence or presence of some antioxidants. Maxwell WM, et al. **Reprod Fertil Dev** 1996;8(6):1013–20

[Treatments of testicular cancer and protection of spermatogenesis] Bujan L, et al. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):596–602 (34 ref.) (Eng. Abstr.) **(Fre)**

[Evaluation of methods of sperm preparation for human in vitro fertilization] Mawissa D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(6):577–81 (Eng. Abstr.) **(Fre)**

STANDARDS

Has traditional sperm analysis lost its clinical relevance? [letter; comment] Moutel G, et al. **Fertil Steril** 1997 Mar; 67(3):583–4; discussion 584–5. Comment on: Fertil Steril 1996 May;65(5):899–908.

The effect of twenty–four hour in vitro storage on sperm hydrolysis through the perivitelline layer of ovipositioned turkey eggs. Donoghue AM. **Poult Sci** 1996 Aug; 75(8):1035–8

STATISTICS & NUMERICAL DATA

[Evolution of the practice of sperm cryopreservation and fate of the preserved specimens : retrospective study of testicular cancer] Moutel G, et al. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):589–95 (Eng. Abstr.) **(Fre)**

VETERINARY

A sperm midpiece defect in a Hereford bull with variable semen quality and freezability. Andersen Berg K, et al. **Acta Vet Scand** 1996;37(3):367–73

Influence of sperm number per straw on the post–thaw sperm viability and fertility of Swedish red and white A.I. bulls. Januskauskas A, et al. **Acta Vet Scand** 1996;37(4):461–70

Effect of timing of frozen semen insemination on pregnancy rate in mares. Katila T, et al. **Acta Vet Scand** 1996; 37(3):361–5

Changes in sperm–bound amidase activity suggest subtle damage to ram sperm acrosomes by freezing/thawing, not detected by light microscopy. de las Heras MA, et al. **Anim Reprod Sci** 1996 Dec 2;45(1–2):81–9

Variation between ejaculates in the fertility of frozen ram semen used for cervical insemination of Merino ewes. Windsor DP. **Anim Reprod Sci** 1997 May;47(1–2):21–9

Surface changes associated with ram sperm cryopreservation revealed by counter–current distribution in an aqueous two–phase system. Effect of different cryoprotectants. Ollero M, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):157–64

In vitro fertilization of follicular oocytes by frozen–thawed spermatozoa in Japanese monkeys (Macaca fuscata). Sankai T, et al. **Lab Anim Sci** 1997 Feb;47(1):58–62

Cryopreservation of rooster semen in thirteen and sixteen

percent glycerol. Gill SP, et al. **Poult Sci** 1996 Feb; 75(2):254–6

Semen production by the emu (Dromaius novaehollandiae). 1. Methods for collection of semen. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):615–21

Cryopreservation of rooster sperm using methyl cellulose. Phillips JJ, et al. **Poult Sci** 1996 Jul;75(7):915–23

Alternative strategies for the long-term preservation of spermatozoa. Holt WV. **Reprod Fertil Dev** 1997;9(3):309–19 (89 ref.)

Oestrous synchronization, semen preservation and artificial insemination in the Mohor gazelle (Gazella dama mhorr) for the establishment of a genome resource bank programme. Holt WV, et al. **Reprod Fertil Dev** 1996; 8(8):1215–22

Evaluation of sperm damage and techniques for sperm clean-up. Rodriguez-Martinez H, et al. **Reprod Fertil Dev** 1997;9(3):297–308 (87 ref.)

Cryopreservation of stallion spermatozoa. Graham JK. **Vet Clin North Am Equine Pract** 1996 Apr;12(1):131–47 (39 ref.)

Artificial insemination of horses [letter] [see comments] Drnec K. **Vet Rec** 1997 Jan 11;140(2):52. Comment in: Vet Rec 1997 Jan 25;140(4):103.

Estimation of sperm viability in frozen-thawed semen from Swedish A.I. bulls. Januskauskas A, et al. **Zentralbl Veterinarmed A** 1996 Jul;43(5):281–7

[Cooling of boar spermatozoa prior to freezing and post thaw quality and evaluation of membrane state using chlortetracycline (CTC) staining] Kotzias-Bandeira E, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug; 104(8):302–6 (Eng. Abstr.) **(Ger)**

SEMIASPARTATE ALDEHYDE DEHYDROGENASE see **ASPARTATE-SEMIALDEHYDE DEHYDROGENASE**

SEMICARBAZIDES

CHEMISTRY

Biological activity of 4-(4-bromophenyl)-thiosemicarbazide. Seth S, et al. **Acta Crystallogr C** 1996 Sep 15;52 (Pt 9):2377–9

PHARMACOLOGY

Biological activity of 4-(4-bromophenyl)-thiosemicarbazide. Seth S, et al. **Acta Crystallogr C** 1996 Sep 15;52 (Pt 9):2377–9

Evidence of semicarbazide-sensitive amine oxidase activity in guinea pig tissues. Puliti M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Oct; 115(2):159–65

Structure-activity studies on monoamine oxidase inhibitors by calorimetric and quantum mechanical calculations. Cambria A, et al. **J Enzyme Inhib** 1996;10(4):215–229

TOXICITY

'Dynamic' QSAR for semicarbazide-induced mortality in frog embryos. Mekenyan OG, et al. **J Appl Toxicol** 1996 Jul-Aug;16(4):355–63

SEMICARBAZONES

CHEMICAL SYNTHESIS

(Aryloxy)aryl semicarbazones and related compounds: a novel class of anticonvulsant agents possessing high activity in the maximal electroshock screen. Dimmock JR, et al. **J Med Chem** 1996 Sep 27;39(20):3984–97

SEMICIRCULAR CANALS

ABNORMALITIES

Absence of the common crus in Goldenhar syndrome. Manfré L, et al. **AJNR Am J Neuroradiol** 1997 Apr; 18(4):773–5

Imaging quiz case 2. Vestibular dysgenesis with semicircular canal aplasia. Bhatti NI, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):1011, 1013–4

ANATOMY & HISTOLOGY

Spatial orientation of semicircular canals and afferent sensitivity vectors in pigeons. Dickman JD. **Exp Brain Res** 1996 Sep;111(1):8–20

CHEMISTRY

Distribution of endothelin-1-like activity in the vestibule of normal guinea pigs. Jinnouchi K, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Jan-Feb;58(1):4–8

DRUG EFFECTS

Effects of clofilium, a K channel blocker, on electrogenic K secretion and afferent discharge at the frog semicircular canal. A preliminary report. Rossi ML, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):277–9

EMBRYOLOGY

Mutations affecting development of the zebrafish inner ear and lateral line. Whitfield TT, et al. **Development** 1996 Dec; 123:241–54

ENZYMOLOGY

Histochemical demonstration of 11 beta-hydroxysteroid dehydrogenase in ampullae of semicircular canals. Pitovski DZ. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):737–40

Purine and pyrimidine nucleotide-sensitive phosphoinositidase C in ampulla from frog semicircular canal. Butlen D, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R51–8

INNERVATION

Surgical anatomy of the singular nerve. Leuwer RM, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):576–80

Differential central projections of physiologically characterized horizontal semicircular canal vestibular nerve afferents in the toadfish, Opsanus tau. Mensinger AF, et al. **J Comp Neurol** 1997 Jul 21;384(1):71–85

The vestibular nerve: its course to the anterior and lateral ampullae. Kudo Y, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Jul-Aug; 58(4):208–12

METABOLISM

The effect of clofilium, a K-channel blocker, on the electrogenic K secretion and the sensory discharge at the frog semicircular canal. Rossi ML, et al. **Brain Res** 1996 May 20;721(1-2):174–80

PATHOLOGY

Basophilic deposits on the cupula: preliminary findings describing the problems involved in studies regarding the incidence of basophilic deposits on the cupula. Naganuma H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;524:9–15

Treatment of horizontal semicircular canal benign paroxysmal positional vertigo. Vannucchi P, et al. **J Vestib Res** 1997 Jan-Feb;7(1):1–6

Particulate matter in the posterior semicircular canal. Welling DB, et al. **Laryngoscope** 1997 Jan;107(1):90–4

[Wegener granulomatosis: a clinical case with parossistic positional vertigo due to involvement of the lateral semicircular canal] Pagano M, et al. **Acta Otorhinolaryngol Ital** 1996 Oct;16(5):438–40 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Contributions of single semicircular canals to caloric nystagmus as revealed by canal plugging in rhesus monkeys. Böhmer A, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):513–20

A study on temperature dependent vestibular potential: effect of long lasting thermal stimulus and aminoglycoside agent. Suzuki M, et al. **Acta Otolaryngol (Stockh)** 1997 Mar; 117(2):219–21

The contribution of the vertical semicircular canals to high-velocity horizontal vestibulo-ocular reflex (VOR) in normal subjects and patients with unilateral vestibular nerve section. Tusa RJ, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):507–12

Canal and otolith vestibulo-ocular reflexes to vertical and off vertical axis rotations in children learning to walk. Wiener-Vacher SR, et al. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):657–65

Effect of intravenously applied canrenoate on ampullar endolymphatic potential. Yura K, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):648–52

Position and velocity responses from the otoliths and the canals: results from ESA's parabolic flights. Probst T, et al. **Aviat Space Environ Med** 1996 Jul;67(7):633–9

Preferred axis of rotation of floccular Purkinje cells in the decerebrate cat. Powell KD, et al. **Brain Res** 1996 Feb 26;710(1-2):281–6

Canal-otolith interactions driving vertical and horizontal eye movements in the squirrel monkey. Telford L, et al. **Exp Brain Res** 1996 Jun;109(3):407–18

Adaptation of primate vestibuloocular reflex to altered peripheral vestibular inputs. I. Frequency-specific recovery of horizontal VOR after inactivation of the lateral semicircular canals. Angelaki DE, et al. **J Neurophysiol** 1996 Nov;76(5):2941–53

Behavior of eye-movement-related cells in the vestibular nuclei during combined rotational and translational stimuli. McConville KM, et al. **J Neurophysiol** 1996 Nov; 76(5):3136–48

Electrical filtering in gerbil isolated type I semicircular canal hair cells. Rennie KJ, et al. **J Neurophysiol** 1996 May; 75(5):2117–23

Input patterns and pathways from the six semicircular canals to motoneurons of neck muscles. II. The longissimus and semispinalis muscle groups. Shinoda Y, et al. **J Neurophysiol** 1997 Mar;77(3):1234–58

The contribution of otoliths and semicircular canals to the perception of two-dimensional passive whole-body motion in humans. Ivanenko YP, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):223–33

Influence of otolith organs, semicircular canals, and neck afferents on post-rotatory nystagmus. Koizuka I, et al. **J Vestib Res** 1996 Sep-Oct;6(5):319–29

Inactivation of delayed rectifier K+ current in semicircular canal hair cells. Russo G, et al. **Neuroreport** 1996 Sep 2; 7(13):2143–6

Skew deviation of the eyes in normal human subjects induced by semicircular canal stimulation. Jauregui-Renaud K, et al. **Neurosci Lett** 1996 Feb 23;205(2):135–7

[Crista ampullaris mechanics and possibilities of regulation of the semi-circular canal] Njeugna E, et al. **Ann Otolaryngol Chir Cervicofac** 1996;113(7-8):408–11 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Unilateral peripheral semicircular canal lesion and off-vertical axis rotation. Denise P, et al. **Acta Otolaryngol (Stockh)** 1996 May;116(3):361–7

Experimental model of vertigo induced by detached otoconia. Suzuki M, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):269–72

Mechanical versus CO2 laser occlusion of the posterior semicircular canal in humans. Antonelli PJ, et al. **Am J Otol** 1996 May;17(3):416–20

Posterior semicircular canal occlusion for benign paroxysmal positional vertigo. Zappia JJ. **Am J Otol** 1996 Sep; 17(5):749–54

Horizontal canal benign paroxysmal positioning vertigo (h-BPPV): transition of canalolithiasis to cupulolithiasis. Steddin S, et al. **Ann Neurol** 1996 Dec;40(6):918–22

Benign paroxysmal positional vertigo of posterior semicircular canal: results in 160 cases treated with Semont's maneuver. Serafini G, et al. **Ann Otol Rhinol Laryngol** 1996 Oct;105(10):770–5

Three-dimensional vector analysis of the human vestibuloocular reflex in response to high-acceleration head rotations. II. responses in subjects with unilateral vestibular loss and selective semicircular canal occlusion. Aw ST, et al. **J Neurophysiol** 1996 Dec;76(6):4021–30

Benign paroxysmal positional vertigo of the horizontal canal: a form of canalolithiasis with variable clinical features. Nuti D, et al. **J Vestib Res** 1996 May-Jun;6(3):173–84

Functional model of benign paroxysmal positional vertigo using an isolated frog semicircular canal. Suzuki M, et al. **J Vestib Res** 1996 Mar-Apr;6(2):121–5

Three hundred sixty-degree rotation of the posterior semicircular canal for treatment of benign positional vertigo: a placebo-controlled trial. Lempert T, et al. **Neurology** 1997 Sep;49(3):729–33

[Benign postural vertigo and nystagmus of the horizontal semicircular canal] Waespe W. **Schweiz Med Wochenschr** 1997 Feb 22;127(8):287–95 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Argon laser irradiation to the semicircular canal. Sugio Y, et al. **Laryngoscope** 1997 Aug;107(8):1107–11

RADIOGRAPHY

Image-interactive orientation in the middle cranial fossa approach to the internal auditory canal: an experimental study. Vrionis FD, et al. **Comput Aided Surg** 1997; 2(1):34–41

SURGERY

Mechanical versus CO2 laser occlusion of the posterior semicircular canal in humans. Antonelli PJ, et al. **Am J Otol** 1996 May;17(3):416–20

Triple semicircular canal occlusion versus labyrinthectomy in the cat. Gianoli GJ, et al. **Am J Otol** 1997 Jan;18(1):74–8

Posterior semicircular canal occlusion for benign paroxysmal positional vertigo. Zappia JJ. **Am J Otol** 1996 Sep; 17(5):749–54

Ablation of posterior semicircular canal for benign paroxysmal positional vertigo. Pulec JL. **Ear Nose Throat J** 1997 Jan;76(1):17–22, 24

Update on posterior canal occlusion for benign paroxysmal positional vertigo. Parnes LS. **Otolaryngol Clin North Am** 1996 Apr;29(2):333–42 (28 ref.)

ULTRASTRUCTURE

Anionic sites of charge barrier in the guinea pig crista ampullaris. Suzuka Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;528:15–8

SEMICONDUCTORS

Self-organization in semiconductor physics. Parisi J. **Biosystems** 1997;42(2-3):145–52

Sematech: purpose and performance. Irwin DA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12739–42

Entrance and exit dose measurements with semiconductors and thermoluminescent dosemeters: a comparison of methods and in vivo results. Loncol T, et al. **Radiother Oncol** 1996 Nov;41(2):179–87

Molecular manipulation of microstructures: biomaterials, ceramics, and semiconductors. Stupp SI, et al. **Science** 1997 Aug 29;277(5330):1242–8 (64 ref.)

Coating of cardiovascular stents with a semiconductor to improve their hemocompatibility. Bolz A, et al. **Tex Heart Inst J** 1996;23(2):162–6

SEMILUNAR BONE

Kienböck disease in a child who has cerebral palsy. A case report. Greene WB. **J Bone Joint Surg Am** 1996 Oct; 78(10):1568–73

Radial recession osteotomy for Kienböck's disease. Quenzer DE, et al. **J Hand Surg [Am]** 1997 May;22(3):386–95

Lunatomalacia associated with congenital shortening of the ulna in Langer–Giedion syndrome: a case report. Schuind FA, et al. **J Hand Surg [Am]** 1997 May;22(3):404–7

Concomitant perilunate dislocation of the wrist with posterior radial head subluxation: case report [letter; comment] McKee MD. **J Trauma** 1997 Apr;42(4):756. Comment on: J Trauma 1995 Jun;38(6):941–3.

ABNORMALITIES

Symptomatic lunate–triquetral coalition. Marburger R, et al. **J South Orthop Assoc** 1995 Winter;4(4):307–10

BLOOD SUPPLY

Sheet plastination of the vascularity of the lunate bone—a morphological study. Schiltenwolf M, et al. **Acta Anat (Basel)** 1997;158(1):68–73

Vascular bundle implantation into bone for aseptic necrosis of the lunate. Guo J. **Ann Plast Surg** 1996 Feb;36(2):133–8

INJURIES

Open reduction of chronic lunate and perilunate dislocations. Takami H, et al. **Arch Orthop Trauma Surg** 1996; 115(2):104–7

Extrinsic radiocarpal ligaments: magnetic resonance imaging of normal wrists and scapholunate dissociation. Adler BD, et al. **Can Assoc Radiol J** 1996 Dec;47(6):417–22

Lunate and perilunate dislocation. Su CJ, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Nov; 58(5):348–54

Perilunate fracture–dislocation: a continually missed injury. Sochart DH, et al. **J Accid Emerg Med** 1996 May; 13(3):213–6

Scapholunate ligament disruption in a skeletally immature patient: a case report. Cook PA, et al. **J Hand Surg [Am]** 1997 Jan;22(1):83–5

Trispiral tomographic staging of Kienböck's disease. Quenzer DE, et al. **J Hand Surg [Am]** 1997 May;22(3):396–403

Arthroscopic management of partial scapholunate and lunotriquetral injuries of the wrist. Ruch DS, et al. **J Hand Surg [Am]** 1996 May;21(3):412–7

Perilunate dislocation and fracture dislocation: a critical analysis of the volar–dorsal approach. Sotereanos DG, et al. **J Hand Surg [Am]** 1997 Jan;22(1):49–56

Bilateral transscapholunate dislocations. Barros JW, et al. **J Hand Surg [Br]** 1997 Apr;22(2):169–72

[Perilunate dislocation and dislocation fractures—results of surgical management] Gabl M, et al. **Unfallchirurg** 1996 Sep;99(9):650–5 (Eng. Abstr.) **(Ger)**

[Scapholunar ligament injuries in acute wrist trauma. Arthroscopic diagnosis and minimally invasive surgery] Peicha G, et al. **Unfallchirurg** 1997 Jun;100(6):430–7 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Chondral lesions of the midcarpal joint. Dautel G, et al. **Arthroscopy** 1997 Feb;13(1):97–102

Further investigations of the intraosseous pressure characteristics in necrotic lunates (Kienböck's disease). Schiltenwolf M, et al. **J Hand Surg [Am]** 1996 Sep; 21(5):754–8

PHYSIOPATHOLOGY

[Significance of intraosseous pressure for pathogenesis of Kienböck disease] Schiltenwolf M, et al. **Handchir Mikrochir Plast Chir** 1996 Jul;28(4):215–9 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Scapholunate distance in children. Leicht P, et al. **Acta Radiol** 1996 Sep;37(5):625–6

Lateral lunate morphology: an x-ray study. Watson HK, et al. **J Hand Surg [Am]** 1996 Sep;21(5):759–63

Scapholunate dissociation in the skeletally immature carpus. Dautel G, et al. **J Hand Surg [Br]** 1997 Apr;22(2):173–4

SURGERY

External fixation and cancellous bone grafting for Kienböck's disease: a preliminary report. Zelouf DS, et al. **J Hand Surg [Am]** 1996 Sep;21(5):746–53

[Results of surgical management of lunate malacia. A retrospective clinical study] Staudenmaier R, et al. **Handchir Mikrochir Plast Chir** 1997 Mar;29(2):88–95 (Eng. Abstr.) **(Ger)**

[Callus distraction for progressive lengthening of the capitate bone after resection of the lunate bone in stage III lunate malacia. Surgical technique and 1 year results] Wilhelm K, et al. **Handchir Mikrochir Plast Chir** 1997 Jan;29(1):10–9 (Eng. Abstr.) **(Ger)**

[Vascular pedicled transposition of the pisiform bone for treatment of lunate malacia] Wüstner-Hofmann MC, et al. **Handchir Mikrochir Plast Chir** 1997 Jul;29(4):171–7 (Eng. Abstr.) **(Ger)**

SEMILUNAR CARTILAGES see **MENISCI, TIBIAL**

SEMILUNAR GANGLION see **TRIGEMINAL GANGLION**

SEMINAL PLASMA see **SEMEN**

SEMINAL VESICLES

Small-cell carcinoma of the seminal vesicle responding to chemotherapy [letter] Hoppin EC, et al. **Ann Oncol** 1997 May;8(5):503

Direct effect of low-intensity pulsed ultrasound on pubertal rat seminal vesicle. Haddad S, et al. **Arch Physiol Biochem** 1996;104(3):357–9

Recurrent epididymo-orchitis in a child secondary to a stone in the seminal vesicle. Carachi R, et al. **Br J Urol** 1997 Jun;79(6):997

Indications for excluding the seminal vesicles when treating clinically localized prostatic adenocarcinoma with radiotherapy alone. Katcher J, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 1;37(4):871–6

Correlation of pretherapy prostate cancer characteristics with seminal vesicle invasion in radical prostatectomy specimens. Pisansky TM, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):585–91

Idiopathic hypoparathyroidism with fungal seminal vesiculitis. Matsuyama W, et al. **Intern Med** 1997 Feb; 36(2):113–7

Painful ejaculation due to seminal vesicle calculi. Corriere JN Jr. **J Urol** 1997 Feb;157(2):626

Idiopathic dense calcification of the seminal vesicles. Schned AR, et al. **J Urol** 1997 Jun;157(6):2263

Leiomyoma of the seminal vesicle. Ahmadzadeh M, et al. **Urol Int** 1996;57(4):252–4

Use of endorectal surface coil magnetic resonance imaging for diagnosis of a multicystic seminal vesicle with ipsilateral renal agenesis. Friedrichs R, et al. **Urol Int** 1996;57(2):115–8

Surgical treatment of bilateral large seminal vesicle cysts associated with unilateral renoureteral agenesis. Selli C, et al. **Urol Int** 1997;58(1):66–8

Anal tenesmus caused by seminal vesicle cyst. Callewaert P, et al. **Urology** 1997 Jan;49(1):139–41

Bovine seminal vesiculitis. A review and update. Cavalieri J, et al. **Vet Clin North Am Food Anim Pract** 1997 Jul; 13(2):233–41 (30 ref.)

[Seminal vesicle cyst associated with homolateral renal agenesis and megaureter. Apropos of a case] Rabii R, et al. **Ann Urol (Paris)** 1997;31(2):97–100 (Eng. Abstr.) **(Fre)**

[Indication for surgery of pediatric testicular and funicular hydroceles in view of natural course] Yamaguchi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Nov;87(11):1243–9 (Eng. Abstr.) **(Jpn)**

[Atypical fibrous histiocytoma of the seminal vesicle] Noel Mederos Curbelo O, et al. **Arch Esp Urol** 1996 Oct; 49(8):872–5 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Enteric type adenocarcinoma of the upper tract urothelium associated with ectopic ureter and renal dysplasia: an oncological rationale for complete extirpation of this aberrant developmental anomaly. Rao DS, et al. **J Urol** 1996 Oct;156(4):1272–4

Congenital anomalies of the vas deferens, epididymis, and seminal vesicles. Vohra S, et al. **Urology** 1997 Mar; 49(3):313–21 (42 ref.)

[Malformations of Wolffian duct derived male genital organs (epididymis, vas deferens, seminal vesicules, ejaculatory ducts)] Mege JL, et al. **Prog Urol** 1997 Apr;7(2):262–9 (Eng. Abstr.) **(Fre)**

[Seminal vesicle cyst and ipsilateral kidney failure. Report of 2 cases and review of the literature] Zurkirchen MA, et al. **Urologe A** 1996 Nov;35(6):490–4 (15 ref.) (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Unusual nature and possible evolutionary implications of the male vesicular gland secretion in the tree shrew, Tupaia glis. Bedford JM. **Anat Rec** 1997 Feb;247(2):199–205

CHEMISTRY

Isolation from a human seminal vesicle library of the cDNA for gp17, a CD4 binding factor. Autiero M, et al. **Immunogenetics** 1997;46(4):345–8

Pigment in prostatic epithelium and adenocarcinoma: a potential source of diagnostic confusion with seminal vesicular epithelium. Amin MB, et al. **Mod Pathol** 1996 Jul;9(7):791–5

Lectin-like receptor for alpha 1-acid glycoprotein in the epithelium of the rat prostate gland and seminal vesicles. Andersen UO, et al. **Prostate** 1996 Dec;29(6):356–61

Structural heterogeneity, post-translational modifications, and biological activities of SV-IV, a major protein secreted from the rat seminal vesicle epithelium. Ferranti P, et al. **Rapid Commun Mass Spectrom** 1997;11(9):1007–14

CYTOLOGY

m-Calpain activation/depletion is associated with androgen-induced reduction of protein kinase C and proliferation of male accessory sex organ smooth muscle cells. Gebrosky N, et al. **J Urol** 1997 Feb;157(2):662–8

Urothelial transformation into functional glandular tissue in situ by instructive mesenchymal induction. Lipschutz JH, et al. **Kidney Int** 1996 Jan;49(1):59–66

DRUG EFFECTS

Induction of micronuclei with ochratoxin A in ovine seminal vesicle cell cultures. Degen GH, et al. **Arch Toxicol** 1997; 71(6):365–71

Functional responses of the rat isolated seminal vesicle to electrical field stimulation: a pharmacological analysis. Gokhale SD, et al. **Clin Exp Pharmacol Physiol** 1996 Jan; 23(1):22–9

Morphological changes of the accessory male sexual glands of rats treated with estrogens during neonatal period. Otulakowski B, et al. **Folia Morphol (Warsz)** 1996; 55(4):408–10

Toxicity of chronic ethanol ingestion and superoxide radical formation on seminal vesicle of rats. Novelli EL, et al. **Food Chem Toxicol** 1996 Oct;34(10):1003–7

Endocrine mechanisms of suppressive effect of low dose estrogen–antiandrogen treatment on androgen-dependent organs of male rats. Reznikov AG, et al. **J Endocrinol Invest** 1996 Nov;19(10):654–8

Effect of sex hormones on the tissue localization of nuclear estrogen receptor positively stained cells in the seminal vesicle of immature castrated rats. Yuasa H, et al. **Tohoku J Exp Med** 1997 Feb;181(2):297–309

EMBRYOLOGY

Epithelial development in the rat ventral prostate, anterior prostate and seminal vesicle. Hayward SW, et al. **Acta Anat (Basel)** 1996;155(2):81–93

Stromal development in the ventral prostate, anterior prostate and seminal vesicle of the rat. Hayward SW, et al. **Acta Anat (Basel)** 1996;155(2):94–103

Change in morphological and functional cytodifferentiation induced by seminal vesicle mesenchyme in cell suspensions of rat Dunning prostatic adenocarcinoma cells. Hayashi N, et al. **Int J Cancer** 1996 Dec 11;68(6):788–94

ENZYMOLOGY

Immunocytochemical evidence for differential subcellular localization of 5 alpha-reductase isoenzymes in human tissues. Aumüller G, et al. **Acta Anat (Basel)** 1996; 156(4):241–52

Isolation and characterization of an enzyme from sheep seminal vesicles that catalyzes the glutathione-dependent reduction of prostaglandin H2 to prostaglandin F2 alpha. Burgess JR, et al. **Biochem Mol Biol Int** 1997 Feb; 41(2):217–26

Telomerase is activated in the prostate and seminal vesicles of the castrated rat. Meeker AK, et al. **Endocrinology** 1996 Dec;137(12):5743–6

Potential involvement of kallikrein hK2 in the hydrolysis of the human seminal vesicle proteins after ejaculation. Deperthes D, et al. **J Androl** 1996 Nov–Dec;17(6):659–65

Polyamine levels in testes and seminal vesicles from adult golden hamsters during gonadal regression–recrudescence. Frungieri MB, et al. **J Androl** 1996 Nov–Dec;17(6):683–91

GROWTH & DEVELOPMENT

Epithelial development in the rat ventral prostate, anterior prostate and seminal vesicle. Hayward SW, et al. **Acta Anat (Basel)** 1996;155(2):81–93

Stromal development in the ventral prostate, anterior prostate and seminal vesicle of the rat. Hayward SW, et al. **Acta Anat (Basel)** 1996;155(2):94–103

Analysis of growth factor and receptor mRNA levels during development of the rat seminal vesicle and prostate. Thomson AA, et al. **Development** 1997 Jun;124(12):2431–9

IMMUNOLOGY

Effect of boar seminal immunosuppressive component on humoral immune response in mice. Veselský L, et al. **Am J Reprod Immunol** 1997 Aug;38(2):106–13

A 20-kDa protein in human seminal plasma that is identical to gross cystic disease fluid protein 15 and prolactin-inducible protein. Osawa M, et al. **Arch Androl** 1996 Jan–Feb;36(1):29–39

Localized amyloidosis of the seminal vesicle: identification of lactoferrin immunoreactivity in the amyloid material. Tsutsumi Y, et al. **Pathol Int** 1996 Jul;46(7):491–7

INNERVATION

Co-localization of nitric oxide synthase, neuropeptides and tyrosine hydroxylase in nerves supplying the human post-natal vas deferens and seminal vesicle. Jen PY, et al. **Br J Urol** 1997 Aug;80(2):291–9

Effect of castration on the VIPergic innervation and 125I-labelled vasoactive intestinal peptide (VIP) binding sites in the hamster seminal vesicle. A quantitative immunohistochemical and receptor autoradiographic study. Pinho MS, et al. **Regul Pept** 1996 Oct 22;66(3):169–77

METABOLISM

Growth hormone (GH) therapy markedly increases the motility of spermatozoa and the concentration of

insulin-like growth factor-I in seminal vesicle fluid in the male GH-deficient dwarf rat. Breier BH, et al. **Endocrinology** 1996 Sep;137(9):4061-4

Androgen modulation of the messenger ribonucleic acid of retinoic acid receptors in the prostate, seminal vesicles, and kidney in the rat. Huang HF, et al. **Endocrinology** 1997 Feb;138(2):553-9

SV-IV, a major protein secreted from rat seminal vesicle epithelium, promotes lymphocyte cytotoxic activity against the lymphoblastoid Raji cell line in human peripheral blood mononuclear cells. Peluso G, et al. **Int J Cancer** 1997 Jul 17;72(2):321-8

Protease nexin I (PNI) in mouse brain is expressed from the same gene as in seminal vesicle. Citron BA, et al. **J Mol Neurosci** 1996 Fall;7(3):183-91

m-Calpain activation/depletion is associated with androgen-induced reduction of protein kinase C and proliferation of male accessory sex organ smooth muscle cells. Gebrosky N, et al. **J Urol** 1997 Feb;157(2):662-8

Calcitonin gene-related peptide in the hamster seminal vesicle and coagulating gland: an immunohistochemical, autoradiographical, and pharmacological study. Afonso F, et al. **Peptides** 1996;17(7):1189-95

Effect of sex hormones on the tissue localization of nuclear estrogen receptor positively stained cells in the seminal vesicle of immature castrated rats. Yuasa H, et al. **Tohoku J Exp Med** 1997 Feb;181(2):297-309

PARASITOLOGY

Hydatid cysts of the kidney, seminal vesicle and gluteus muscle. Pasaoglu E, et al. **Australas Radiol** 1997 Aug; 41(3):297-9 (12 ref.)

Schistosomiasis of the male genital tract: transrectal sonographic findings. Vilana R, et al. **J Urol** 1997 Oct; 158(4):1491-3

PATHOLOGY

MR imaging of male infertility with an endorectal surface coil. Kim MJ, et al. **Abdom Imaging** 1997 May-Jun; 22(3):348-53

The route of seminal vesicle involvement in adenocarcinoma of prostate: lymphaticovascular or local extension? Chuang YC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Feb; 59(2):95-8

Amyloidosis of the seminal vesicles simulating tumor invasion of prostatic carcinoma on endorectal MR images. Jager GJ, et al. **Eur Radiol** 1997;7(4):552-4

MRI, CT, and TRUS imaging of seminal vesicle metastasis. Larsson P, et al. **Eur Radiol** 1997;7(4):555-6

Indications for preoperative seminal vesicle biopsies in staging of clinically localized prostatic cancer. Guillonneau B, et al. **Eur Urol** 1997;32(2):160-5

Senile seminal vesicle amyloidosis associated with hematospermia: demonstration by endorectal MRI. Botash RJ, et al. **J Comput Assist Tomogr** 1997 Sep-Oct; 21(5):748-9

Magnetic resonance imaging in hemospermia. Cho IR, et al. **J Urol** 1997 Jan;157(1):258-62

Ex vivo ultrathin endoscopy of the seminal vesicles. Shimada M, et al. **J Urol** 1996 Oct;156(4):1388-90

Routine transition zone and seminal vesicle biopsies in all patients undergoing transrectal ultrasound guided prostate biopsies are not indicated [see comments] Terris MK, et al. **J Urol** 1997 Jan;157(1):204-6. Comment in: J Urol 1997 Jan;157(1):207-8.

MR imaging of the prostate and seminal vesicles. David V. **Magn Reson Imaging Clin N Am** 1996 Aug;4(3):497-518 (67 ref.)

Localized amyloidosis of the seminal vesicle: identification of lactoferrin immunoreactivity in the amyloid material. Tsutsumi Y, et al. **Pathol Int** 1996 Jul;46(7):491-7

Bilateral primary seminal vesicle carcinoma. Ormsby AH, et al. **Pathology** 1996 May;28(2):196-200

Seminal vesicle biopsy: accuracy and implications for staging of prostate cancer. Linzer DG, et al. **Urology** 1996 Nov; 48(5):757-61

The Turner biopsy needle facilitates seminal vesicle aspiration. Werthman P, et al. **Urology** 1997 Aug; 50(2):277-8

High incidence and histogenesis of seminal vesicle adenocarcinoma and lower incidence of prostate carcinomas in the Lobund-Wistar prostate cancer rat model using N-nitrosomethylurea and testosterone. Tamano S, et al. **Vet Pathol** 1996 Sep;33(5):557-67

[Diagnosis and treatment of obstructive seminal vesicle pathology] Coppens L. **Acta Urol Belg** 1997 Jun;65(2):11-9 (55 ref.) (Eng. Abstr.) **(Fre)**

[Biopsy of the seminal vesicles in the staging of localized cancer of the prostate: technic and results] Vallancien G, et al. **Prog Urol** 1997 Feb;7(1):42-7 (Eng. Abstr.) **(Fre)**

[Renal agenesis and homolateral seminal vesicle cyst. Case report] Casetta G, et al. **Minerva Urol Nefrol** 1996 Dec; 48(4):189-91 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Induction of seminal vesicle morphogenesis from dog epididymal epithelium. Chan TW, et al. **Anat Embryol (Berl)** 1996 Oct;194(4):391-8

Neuropeptides in the seminal vesicles: locations, binding sites and functional implications. Pinho MS, et al. **Histol Histopathol** 1997 Apr;12(2):503-12 (86 ref.)

The androgen-dependent mouse seminal vesicle secretory protein of 99 amino acids (MSVSP99): regulation of the mRNA and preliminary characterization of the promoter. Simon AM, et al. **J Steroid Biochem Mol Biol** 1997 Apr; 61(1-2):87-95

An experimental model to evaluate the in vivo response of rat seminal vesicle to electrical stimulation. Hsieh JT, et al. **Neurosci Lett** 1996 Feb 9;204(3):215-7

Increased secondary sex ratios in golden hamster litters sired by males without coagulating glands and seminal vesicles. Chow PH, et al. **Reprod Fertil Dev** 1996;8(2):297-300

PHYSIOPATHOLOGY

cAMP- but not Ca(2+)-regulated Cl- conductance is lacking in cystic fibrosis mice epididymides and seminal vesicles. Leung AY, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C188-93

RADIOGRAPHY

Transrectal US-guided seminal vesiculography. Jones TR, et al. **Radiology** 1997 Oct;205(1):276-8

SECRETION

Unusual nature and possible evolutionary implications of the male vesicular gland secretion in the tree shrew, Tupaia glis. Bedford JM. **Anat Rec** 1997 Feb;247(2):199-205

Purification and characterization of the active precursor of a human sperm motility inhibitor secreted by the seminal vesicles: identity with semenogelin. Robert M, et al. **Biol Reprod** 1996 Oct;55(4):813-21

Role of high molecular weight seminal vesicle proteins in eliciting the uterine inflammatory response to semen in mice. Robertson SA, et al. **J Reprod Fertil** 1996 Jul; 107(2):265-77

ULTRASONOGRAPHY

Magnetic resonance imaging in hemospermia. Cho IR, et al. **J Urol** 1997 Jan;157(1):258-62

Schistosomiasis of the male genital tract: transrectal sonographic findings. Vilana R, et al. **J Urol** 1997 Oct; 158(4):1491-3

[Role of transrectal echography in the evaluation of obstructive seminal vesicle pathology in prostatitis syndrome] Nicolai M, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):101-4 (Eng. Abstr.) **(Ita)**

SEMINIFEROUS EPITHELIUM

CYTOLOGY

Stage-specific apoptosis in the rat seminiferous epithelium: quantification of irradiation effects. Henriksén K, et al. **J Androl** 1996 Jul-Aug;17(4):394-402

Expression of apolipoprotein E mRNA in the epithelium and interstitium of the testis and the epididymis. Law GL, et al. **J Androl** 1997 Jan-Feb;18(1):32-42

GROWTH & DEVELOPMENT

Changes in the distribution of intermediate filaments in rat Sertoli cells during the seminiferous epithelium cycle and postnatal development. Zhu LJ, et al. **Anat Rec** 1997 Jul; 248(3):391-405

METABOLISM

Low density lipoprotein receptor-related protein-2 expression in efferent duct and epididymal epithelia: evidence in rats for its in vivo role in endocytosis of apolipoprotein J/clusterin. Morales CR, et al. **Biol Reprod** 1996 Sep;55(3):676-83

Variation in expression of hsp27 messenger ribonucleic acid during the cycle of the seminiferous epithelium and co-localization of hsp27 and microfilaments in Sertoli cells of the rat. Welsh MJ, et al. **Biol Reprod** 1996 Jul; 55(1):141-51

The possible meaning of transferrin and its soluble receptors in seminal plasma as markers of the seminiferous epithelium. Zalata A, et al. **Hum Reprod** 1996 Apr;11(4):761-4

Stage-specific expression of the FSH receptor gene in the prepubertal and adult rat seminiferous epithelium. Rannikko A, et al. **J Endocrinol** 1996 Oct;151(1):29-35

PHYSIOLOGY

Testosterone withdrawal promotes stage-specific detachment of round spermatids from the rat seminiferous epithelium. O'Donnell L, et al. **Biol Reprod** 1996 Oct;55(4):895-901

Estimation of the duration of the cycle of the seminiferous epithelium in the non-human primate Macaca mulatta using the 5-bromodeoxyuridine technique. Rosiepen G, et al. **Cell Tissue Res** 1997 May;288(2):365-9

ULTRASTRUCTURE

An ultrastructural and lectin-histochemical study on the seminiferous epithelium of the common tree shrew (Tupaia glis). Kurohmaru M, et al. **J Anat** 1996 Aug;189 (Pt 1):87-95

SEMINIFEROUS TUBULES

ANATOMY & HISTOLOGY

Seminiferous tubule stages in the prairie dog (Cynomys ludovicianus) during the annual breeding cycle. Foreman D. **Anat Rec** 1997 Mar;247(3):355-67

Histological study of the seminiferous epithelium in the Japanese rat snake, Elaphe climacophora: identification of spermatogonium. Hondo E, et al. **J Vet Med Sci** 1997 Jan; 59(1):23-9

BLOOD SUPPLY

Capillaries in the lamina propria of human seminiferous tubules are partly fenestrated. Ergün S, et al. **Cell Tissue Res** 1996 Oct;286(1):93-102

Comparative study of the intratesticular vascular rete in men and certain animals. Jędrzejewski KS, et al. **Folia Morphol (Warsz)** 1996;55(4):303-5

CHEMISTRY

Cytoplasmic localization of cyclin D3 in seminiferous tubules during testicular development. Kang MJ, et al. **Exp Cell Res** 1997 Jul 10;234(1):27-36

Evaluation of the binding patterns of eleven FITC-conjugated lectins in Fischer 344 rat testes. Wine RN, et al. **J Androl** 1997 Jan-Feb;18(1):71-9

CYTOLOGY

Myofibroblasts in the lamina propria of human semi-niferous tubules are dynamic structures of heterogeneous phenotype. Holstein AF, et al. **Arch Histol Cytol** 1996 May; 59(2):109-25

On stage single cell identification of rat spermatogenic cells. Reyes JG, et al. **Biol Cell** 1997 Mar;89(1):53-66

Discriminative analysis of rat Sertoli and peritubular cells and their proliferation in vitro: evidence for follicle-stimulating hormone-mediated contact inhibition of Sertoli cell mitosis. Schlatt S, et al. **Biol Reprod** 1996 Aug;55(2):227-35

Seminiferous tubule basement membrane. Composition and organization of type IV collagen chains, and the linkage of alpha3(IV) and alpha5(IV) chains. Kahsai TZ, et al. **J Biol Chem** 1997 Jul 4;272(27):17023-32

Immunocytochemical and quantitative study of actin, desmin and vimentin in the peritubular cells of the testes from elderly men. Arenas MI, et al. **J Reprod Fertil** 1997 May; 110(1):183-93

Classification of the cycle of the seminiferous epithelium in the common tree shrew (Tupaia glis). Maeda S, et al. **J Vet Med Sci** 1996 May;58(5):481-4

DRUG EFFECTS

Endothelin-1 stimulates deoxyribonucleic acid synthesis and contraction in testicular peritubular myoid cells. Santiemma V, et al. **Biol Reprod** 1996 Mar;54(3):583-90

Induction of apoptotic cell death in the seminiferous tubule of the adult rat testis: assessment of the germ cell types that exhibit the ability to enter apoptosis after hormone suppression by oestradiol treatment. Blanco-Rodríguez J, et al. **Int J Androl** 1996 Aug;19(4):237-47

Testosterone regulates apoptosis in adult human seminiferous tubules in vitro. Erkkilä K, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2314-21

Rat peritubular cell secretory activity: modulation by vitamin A. Galdieri M, et al. **J Submicrosc Cytol Pathol** 1996 Oct; 28(4):559-64

Protection against methoxyacetic-acid-induced spermatocyte apoptosis with calcium channel blockers in cultured rat seminiferous tubules: possible mechanisms. Li LH, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):105-19

ENZYMOLOGY

Differentiation-dependent enhanced expression of protein phosphatase 2Cbeta in germ cells of mouse seminiferous tubules. Kato S, et al. **FEBS Lett** 1996 Nov 4; 396(2-3):293-7

Ultrastructural demonstration of the NADPH-diaphorase activity in peritubular myoid cells and fibroblasts of the lamina propria of the mouse seminiferous tubules. Ruffoli R, et al. **In Vivo** 1997 Jul-Aug;11(4):319-24

Gelatinase A secretion and its control in peritubular and Sertoli cell cultures: effects of hormones, second messengers and inducers of cytokine production. Hoeben E, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1-2):37-46

GROWTH & DEVELOPMENT

Seminiferous tubule stages in the prairie dog (Cynomys ludovicianus) during the annual breeding cycle. Foreman D. **Anat Rec** 1997 Mar;247(3):355-67

Cytoplasmic localization of cyclin D3 in seminiferous tubules during testicular development. Kang MJ, et al. **Exp Cell Res** 1997 Jul 10;234(1):27-36

IMMUNOLOGY

Autoantigenicity of the basal compartment of seminiferous tubules in the rat. Saari T, et al. **J Reprod Immunol** 1996 Aug;31(1-2):65-79

METABOLISM

Distinct changes in the laminin composition of basement membranes in human seminiferous tubules during development and degeneration. Virtanen I, et al. **Am J Pathol** 1997 Apr;150(4):1421–31

Differential expression of placental (P)-cadherin in sertoli cells and peritubular myoid cells during postnatal development of the mouse testis. Lin LH, et al. **Anat Rec** 1996 Feb;244(2):155–64

Immunocytochemistry of extracellular matrix components in the rat seminiferous tubule: electron microscopic localization with improved methodology. Yazama F, et al. **Anat Rec** 1997 May;248(1):51–62

Transferrin–mediated uptake of plutonium by spermatogenic tubules. Hoyes KP, et al. **Int J Radiat Biol** 1996 Oct; 70(4):467–71

Is Leydig cell steroidogenic function affected by the germ cell content of the seminiferous tubules? Sprando RL, et al. **J Androl** 1997 Jul–Aug;18(4):424–30

Protein synthesis and secretion by the rat seminiferous tubule in vivo not affected by experimental varicocele. Turner TT, et al. **J Urol** 1996 Nov;156(5):1881–7

PATHOLOGY

Distinct changes in the laminin composition of basement membranes in human seminiferous tubules during development and degeneration. Virtanen I, et al. **Am J Pathol** 1997 Apr;150(4):1421–31

Evaluation of seminiferous tubule scores obtained through testicular biopsy examinations of nonobstructive azoospermic men. Yoshida A, et al. **Fertil Steril** 1997 Sep; 68(3):514–8

The prepubertal testis (prenatal and postnatal): its relationship to intratubular germ cell neoplasia: a combined Pediatric Oncology Group and Children's Cancer Study Group. Hawkins E, et al. **Hum Pathol** 1997 Apr;28(4):404–10

Prevention of seminiferous tubular atrophy in a naturally cryptorchid rat model by early surgical intervention. Lugg JA, et al. **J Androl** 1996 Nov–Dec;17(6):726–32

A fetus with Down syndrome and intratubular germ cell neoplasia. Satgé D, et al. **Pediatr Pathol Lab Med** 1996 Jan–Feb;16(1):107–12

Testicular efferent ductule cyst of a dog. Wakui S, et al. **Vet Pathol** 1997 May;34(3):230–2

[Seminiferous tubule cytological pattern in infertile, azoospermic men in diagnosis and therapy] Weiss DB, et al. **Harefuah** 1997 May 1;132(9):614–8, 680 (Eng. Abstr.) **(Heb)**

PHYSIOLOGY

Endothelin–1 stimulates deoxyribonucleic acid synthesis and contraction in testicular peritubular myoid cells. Santiemma V, et al. **Biol Reprod** 1996 Mar;54(3):583–90

Direct visualization of rat peritubular myoid cell contraction in response to endothelin. Tripiciano A, et al. **Biol Reprod** 1996 Jul;55(1):25–31

Voltage–dependent modulation of T–type calcium channels by protein tyrosine phosphorylation. Arnoult C, et al. **EMBO J** 1997 Apr 1;16(7):1593–9

Change of karyoskeleton during mammalian spermatogenesis: expression pattern of nuclear lamin C2 and its regulation. Alsheimer M, et al. **Exp Cell Res** 1996 Nov 1;228(2):181–8

Dual control of seminiferous tubule contractility mediated by ETA and ETB endothelin receptor subtypes. Tripiciano A, et al. **FASEB J** 1997 Mar;11(4):276–86

Male germ cell transplantation in rats: apparent synchronization of spermatogenesis between host and donor seminiferous epithelia. Jiang FX, et al. **Int J Androl** 1995 Dec;18(6):326–30

Classification of the cycle of the seminiferous epithelium in the common tree shrew (Tupaia glis). Maeda S, et al. **J Vet Med Sci** 1996 May;58(5):481–4

SECRETION

Testosterone and spermatogenesis: evidence that androgens regulate cellular secretory mechanisms in stage VI–VIII seminiferous tubules from adult rats. McKinnell C, et al. **J Androl** 1995 Nov–Dec;16(6):499–509

Detection of germ cell–derived proteins in testicular interstitial fluid: potential for monitoring spermatogenesis in vivo. Turner KJ, et al. **J Androl** 1996 Mar–Apr; 17(2):127–36

Rat peritubular cell secretory activity: modulation by vitamin A. Galdieri M, et al. **J Submicrosc Cytol Pathol** 1996 Oct; 28(4):559–64

Protein synthesis and secretion by the rat seminiferous tubule in vivo not affected by experimental varicocele. Turner TT, et al. **J Urol** 1996 Nov;156(5):1881–7

SURGERY

Prevention of seminiferous tubular atrophy in a naturally cryptorchid rat model by early surgical intervention. Lugg JA, et al. **J Androl** 1996 Nov–Dec;17(6):726–32

TRANSPLANTATION

Reinitiation of spermatogonial mitotic differentiation in inactive old BDF1 mouse seminiferous tubules transplanted to W/Wv mouse testis. Tanemura K, et al. **Biol Reprod** 1996 Dec;55(6):1237–42

Male germ cell transplantation in rats: apparent synchronization of spermatogenesis between host and donor seminiferous epithelia. Jiang FX, et al. **Int J Androl** 1995 Dec;18(6):326–30

ULTRASTRUCTURE

Immunocytochemistry of extracellular matrix components in the rat seminiferous tubule: electron microscopic localization with improved methodology. Yazama F, et al. **Anat Rec** 1997 May;248(1):51–62

Flat plastic embedding and precise longitudinal sectioning of isolated testicular seminiferous tubules. Miething A. **Andrologia** 1996 Nov–Dec;28(6):343–7

The inter–Sertoli cell tight junctions in germ cell–free seminiferous tubules from prenatally irradiated rats: a freeze–fracture study. Ribeiro AF, et al. **Cell Biol Int** 1996 Jul;20(7):513–22

Ultrastructural evidence of adrenergic, as well as cholinergic, nerve varicosities in relation to the lamina propria of the human seminiferous tubules during childhood. Prince FP. **Tissue Cell** 1996 Oct;28(5):507–13

SEMINOMA

Attempted preservation of one gonad in patients with bilateral germ cell tumours. Gomes PJ, et al. **Clin Oncol (R Coll Radiol)** 1996;8(6):397–9

Pregnancy achieved by intracytoplasmic sperm injection using cryopreserved semen from a man with testicular cancer. Chen SU, et al. **Hum Reprod** 1996 Dec; 11(12):2645–7

BLOOD

Elevated human chorionic gonadotropin concentrations in the testicular vein and in peripheral venous blood in seminoma patients. An analysis of various parameters. Hartmann M, et al. **Eur Urol** 1997;31(4):408–13

The value of tumor markers in testicular seminomas. Results of a prospective multicenter study. Weissbach L, et al. **Eur Urol** 1997;32(1):16–22

CHEMICALLY INDUCED

Testicular neoplasm in patient treated with growth hormone [letter] Sakai Y, et al. **Lancet** 1996 Sep 21;348(9030):832

CHEMISTRY

The expression of CD44 adhesion molecules on seminoma cells. A new marker for early detection of the tumor [letter; comment] Rajpert–De Meyts E, et al. **Cancer** 1996 Dec 1;78(11):2443–5. Comment on: Cancer 1996 Feb 1;77(3):429–30.

Primary mediastinal and testicular seminomas: a comparison of K–ras–2 gene sequence and p53 immunoperoxidase analysis of 26 cases. Przygodzki RM, et al. **Hum Pathol** 1996 Sep;27(9):975–9

COMPLICATIONS

Seminoma in an undescended testis presenting with frank haematuria. Walker R, et al. **Br J Urol** 1997 Feb;79(2):290–1

Seminoma arising in corrected and uncorrected inguinal cryptorchidism: treatment and prognosis in 66 patients. Li YX, et al. **Int J Radiat Oncol Biol Phys** 1997 May 1; 38(2):343–50

Clinical characteristics, prognosis, and treatment of pelvic cryptorchid seminoma. Li YX, et al. **Int J Radiat Oncol Biol Phys** 1997 May 1;38(2):351–7

Testicular microlithiasis associated with seminoma: Gray–scale and color Doppler ultrasound findings. Yagci C, et al. **Urol Int** 1996;57(4):255–8

Diffuse testicular microlithiasis associated with intratubular germ cell neoplasia and seminoma. Kaveggia FF, et al. **Urology** 1996 Nov;48(5):794–6

[Seminoma and HIV: a casual association? (letter)] Nieto A, et al. **An Med Interna** 1995 Nov;12(11):567 **(Spa)**

DIAGNOSIS

99Tcm tetrofosmin uptake in mediastinal tumours. Ishibashi M, et al. **Br J Radiol** 1996 Dec;69(828):1134–8

Serum and tissue levels of manganese superoxide dismutase in testicular germ cell tumors. Koshida K, et al. **Eur Urol** 1996;29(4):487–90

Simultaneous presentation of pineal germinoma and testicular seminoma [letter] Chan TK, et al. **Eye** 1996;10 (Pt 5):637–9

Fine needle aspiration cytology in the diagnosis of mediastinal seminomas. Mondal A, et al. **Indian J Pathol Microbiol** 1997 Jan;40(1):59–60

Metastatic seminoma simulating malignant lymphoma in an HIV infected hemophiliac. Diaz JI, et al. **Leuk Lymphoma** 1996 Sep;23(1–2):165–71

[Intra–abdominal torsion of the testis with seminoma (see comments)] Andreasen DA, et al. **Ugeskr Laeger** 1997 Mar 31;159(14):2103–4 (Eng. Abstr.). Comment in: Ugeskr Laeger 1997 Jun 30;159(27):4281–2. **(Dan)**

[Prognostic factors in patients with disseminated germ cell tumors] Daugaard KG, et al. **Ugeskr Laeger** 1997 Sep 15; 159(38):5676–7 **(Dan)**

[MRI in testicular diagnosis: differentiation of seminoma, teratoma and inflammation using a statistical score] Menzner A, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):514–21 (Eng. Abstr.) **(Ger)**

[An interdisciplinary consensus conference on the diagnosis and therapy of testicular tumors] Bamberg M, et al. **Strahlenther Onkol** 1997 Aug;173(8):397–406 (28 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Treatment of advanced seminoma with cyclophosphamide, vincristine and carboplatin on an outpatient basis. Sleijfer S, et al. **Br J Cancer** 1996 Sep;74(6):947–50

Laparoscopic post–chemotherapy retroperitoneal dissection of residual mass. Bales GT, et al. **Br J Urol** 1997 Aug; 80(2):349–50

Radiotherapy after chemotherapy for metastatic seminoma--a diminishing role. MRC Testicular Tumour Working Party. Duchesne GM, et al. **Eur J Cancer** 1997 May;33(6):829–35

Current status of chemotherapy in advanced seminoma [editorial] Fossâ SD, et al. **Eur J Cancer** 1997 Feb; 33(2):181–3

Seizures associated with cisplatin administration. Brauers A, et al. **Eur Urol** 1997;32(1):118–20

Phase II study: adjuvant single–agent carboplatin therapy for clinical stage I seminoma. Krege S, et al. **Eur Urol** 1997;31(4):405–7

Salvage chemotherapy with vinblastine, ifosfamide, and cisplatin in recurrent seminoma. Miller KD, et al. **J Clin Oncol** 1997 Apr;15(4):1427–31

Cisplatin–based chemotherapy in advanced seminoma: experience of the Northern Israel Oncology Center: 1981–1994. Stein ME, et al. **J Surg Oncol** 1997 Apr; 64(4):331–5

Successful treatment on an out–patient basis of a patient with Down's syndrome and disseminated testicular seminoma. Sleijfer S, et al. **Neth J Med** 1996 Mar;48(3):89–91

Chemotherapy in advanced seminoma and the role of postcytostatic retroperitoneal lymph node dissection. Hofmockel G, et al. **Urol Int** 1996;57(1):38–42

ECONOMICS

Adjuvant radiation versus observation: a cost analysis of alternate management schemes in early–stage testicular seminoma. Sharda NN, et al. **J Clin Oncol** 1996 Nov; 14(11):2933–9

EPIDEMIOLOGY

Occupational exposure to magnetic fields in relation to male breast cancer and testicular cancer: a Swedish case–control study. Stenlund C, et al. **Cancer Causes Control** 1997 Mar; 8(2):184–91

ETIOLOGY

Beware the undescended testis and abdominal mass. Koh KB. **Aust N Z J Surg** 1996 Dec;66(12):851–3

Occupation and risk of germ cell testicular cancer by histologic type in Ontario. Knight JA, et al. **J Occup Environ Med** 1996 Sep;38(9):884–90

[Intra–abdominal undescended testis with seminoma (letter; comment)] Agger P. **Ugeskr Laeger** 1997 Jun 30; 159(27):4281–2. Comment on: Ugeskr Laeger 1997 Mar 31;159(14):2103–4. **(Dan)**

GENETICS

Primary testicular seminoma: prognostic significance of nuclear DNA ploidy pattern. Nativ O, et al. **Eur Urol** 1997; 31(4):401–4

Primary mediastinal and testicular seminomas: a comparison of K–ras–2 gene sequence and p53 immunoperoxidase analysis of 26 cases. Przygodzki RM, et al. **Hum Pathol** 1996 Sep;27(9):975–9

Familial testicular cancer and developmental anomalies. Ondruš D, et al. **Neoplasma** 1997;44(1):59–61

IMMUNOLOGY

HLA class I antigens are expressed by Sertoli cells of intratubular germ cell neoplasia. Braendstrup O. **APMIS** 1996 Jul–Aug;104(7–8):579–82

Immunohistochemical analysis of the nm23 gene products in testicular seminoma. Hori K, et al. **Pathol Int** 1997 May; 47(5):288–92

METABOLISM

Cytokeratin positivity in seminoma [letter; comment] Chen KT. **Diagn Cytopathol** 1996 Aug;15(2):182–3. Comment on: Diagn Cytopathol 1995 May;12(3):223–9.

Nuclear lamin expression in normal testis and testicular germ cell tumours of adolescents and adults. Machiels BM, et al. **J Pathol** 1997 Jun;182(2):197–204

PATHOLOGY

Cytology of fine needle aspirates of primary extragonadal germ cell tumors. Chao TY, et al. **Acta Cytol** 1997 Mar–Apr;41(2):497–503

Mitotic frequency in different early stages of testicular seminoma. Höfken K, et al. **Andrologia** 1996 Nov–Dec; 28(6):335–41

Residual mass following chemotherapy of seminoma. Horwich A, et al. **Ann Oncol** 1997 Jan;8(1):37–40

Primary germ cell tumors of the mediastinum: II. Mediastinal

seminomas--a clinicopathologic and immunohistochemical study of 120 cases. Moran CA, et al. **Cancer** 1997 Aug 15;80(4):691-8
Spermatocytic seminoma: a clinicopathological review of ten patients. Pendlebury S, et al.
Clin Oncol (R Coll Radiol) 1996;8(5):316-8
Direct invasion of the renal vein by metastatic testicular cancer. Effert PJ, et al. **Eur Urol** 1997;31(1):119-21
CD30 expression in seminoma. Hittmair A, et al.
Hum Pathol 1996 Nov;27(11):1166-71
Contribution of cell proliferative activity to malignancy potential in testicular seminoma. Hori K, et al.
Pathol Int 1997 May;47(5):282-7
Combined malignant testicular tumor and splenogonadal fusion. A case story. Thomsen BM, et al.
Scand J Urol Nephrol 1997 Aug;31(4):393-5
[Spermatocytic seminoma. Apropos of 4 cases] Caty A, et al. **Bull Cancer** 1997 Feb;84(2):212-4 (Eng. Abstr.) **(Fre)**
[Occult extragonadal seminoma in a thymic cyst] Hess U, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1996 Oct;165(4):418-20 **(Ger)**
[Follow-up of testicular tumors in the metastatic diffusion phase. Current orientation] Mirone V, et al.
Minerva Urol Nefrol 1997 Jun;49(2):91-4 (13 ref.) (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Testicular cancer and spermatogenesis. Botchan A, et al.
Hum Reprod 1997 Apr;12(4):755-8

PREVENTION & CONTROL

Laparoscopic removal of gonads containing on occult seminoma in a woman with complete androgen resistance. Chantilis SJ, et al. **J Am Assoc Gynecol Laparosc** 1994 May; 1(3):277-82 (35 ref.)

RADIOGRAPHY

Thymic seminoma with prominent cystic changes [letter] Kurosaki Y, et al. **AJR Am J Roentgenol** 1996 Nov; 167(5):1345-6
Problem in diagnostic imaging. Dubowitz DJ. **Clin Anat** 1997;10(4):279-82
Problem in diagnostic imaging: behind the left renal vein. Pilcher JM, et al. **Clin Anat** 1997;10(5):349-52

RADIOTHERAPY

Postradiation lower motor neuron syndrome--a case report and brief literature review. Tallaksen CM, et al.
Acta Oncol 1997;36(3):345-7 (40 ref.)
Long-term evaluation of postorchiectomy radiotherapy for stage II seminoma. Whipple GL, et al.
Am J Clin Oncol 1997 Apr;20(2):196-201
Testicular seminoma--the results of treatment by radiotherapy in Singapore. Tan TW, et al.
Ann Acad Med Singapore 1996 May;25(3):363-6
Management of seminoma of the testis: recommendations based on treatment results. Morgan G, et al.
Aust N Z J Surg 1997 Jan;67(1):15-20 (26 ref.)
Radiotherapy after chemotherapy for metastatic seminoma--a diminishing role. MRC Testicular Tumour Working Party. Duchesne GM, et al. **Eur J Cancer** 1997 May;33(6):829-35
A study of reproductive function in patients with seminoma treated with radiotherapy and orchidectomy: (SWOG-8711). Southwest Oncology Group. Gordon W Jr, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1; 38(1):83-94
External beam abdominal radiotherapy in patients with seminoma stage I: field type, testicular dose, and spermatogenesis. Jacobsen KD, et al.
Int J Radiat Oncol Biol Phys 1997 Apr 1;38(1):95-102
Response to editorial by Dr. Gillian M. Thomas on IJROBP 35(2):293-298; 1996 [letter; comment] Kiricuta IC.
Int J Radiat Oncol Biol Phys 1996 Oct 1;36(3):758-9. Comment on: Int J Radiat Oncol Biol Phys 1996 May 1;35(2):413-4.
Radiotherapy in stage IIA and IIB testicular seminoma with reduced portals: a prospective multicenter study. Schmidberger H, et al. **Int J Radiat Oncol Biol Phys** 1997 Sep 1;39(2):321-6 (39 ref.)
Regarding Chao et al. IJROBP 33(4):831-835; 1995 [letter; comment] Warde P. **Int J Radiat Oncol Biol Phys** 1997 Jun 1;38(3):673-4. Comment on: Int J Radiat Oncol Biol Phys 1995 Nov 1;33(4):831-5.
Adjuvant radiation versus observation: a cost analysis of alternate management schemes in early-stage testicular seminoma. Sharda NN, et al. **J Clin Oncol** 1996 Nov; 14(11):2933-9
T2 relaxation times of irradiated vertebral bone marrow in patients with seminoma. Argiris A, et al.
Magn Reson Imaging 1997;15(3):335-40
Endocrine profiles after radiotherapy in stage I seminoma: impact of two different radiation treatment modalities. Joos H, et al. **Radiother Oncol** 1997 May;43(2):159-62
Low-dose radiotherapy for stage I seminoma: early results [letter; comment] [see comments] Kiricuta IC, et al.
Radiother Oncol 1996 Oct;41(1):96-7. Comment on: Radiother Oncol 1995 Nov;37(2):164-6. Comment in: Radiother Oncol 1997 Apr;43(1):110.
Low-dose radiotherapy for stage I seminoma: early results [letter; comment] Niewald M, et al. **Radiother Oncol** 1997 Apr;43(1):110. Comment on: Radiother Oncol 1996 Oct;41(1):96-7.
Radiotherapy for stage I and II testicular seminoma after orchidectomy. Malas S, et al. **S Afr J Surg** 1996 May; 34(2):95-8
Relapses in early-stage testicular seminoma: radiation therapy versus retroperitoneal lymphadenectomy. Warszawski N, et al. **Scand J Urol Nephrol** 1997 Aug;31(4):355-9
Radiation-induced sarcoma following curative radiotherapy for testicular seminoma: case report and brief review of the literature. Stein ME, et al. **Tumori** 1997 May-Jun; 83(3):721-3 (14 ref.)

SECONDARY

Case report: seminoma metastatic to the scrotum. Carey BM, et al. **Clin Radiol** 1997 Mar;52(3):240-1
Radiotherapy after chemotherapy for metastatic seminoma--a diminishing role. MRC Testicular Tumour Working Party. Duchesne GM, et al. **Eur J Cancer** 1997 May;33(6):829-35
MRI, CT, and TRUS imaging of seminal vesicle metastasis. Larsson P, et al. **Eur Radiol** 1997;7(4):555-6
Paraneoplastic syndrome simulating encephalitis in the course of testicular seminoma. Kałuża J, et al.
Folia Neuropathol 1997;35(1):24-8
Late recurrence of seminoma. Blanke CD, et al.
South Med J 1997 Jun;90(6):653-5

SURGERY

Management of seminoma of the testis: recommendations based on treatment results. Morgan G, et al.
Aust N Z J Surg 1997 Jan;67(1):15-20 (26 ref.)
A study of reproductive function in patients with seminoma treated with radiotherapy and orchidectomy: (SWOG-8711). Southwest Oncology Group. Gordon W Jr, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1; 38(1):83-94
Optimal management of residual mass after chemotherapy in advanced seminoma: there is time for everything [letter; comment] Culine S, et al. **J Clin Oncol** 1996 Oct; 14(10):2884-5. Comment on: J Clin Oncol 1996 Feb;14(2):454-60.
Erotomania following an orchiectomy: a case report. Mazeh D, et al. **J Sex Marital Ther** 1997 Summer;23(2):154-5
Surgery for a post-chemotherapy residual mass in seminoma. Herr HW, et al. **J Urol** 1997 Mar;157(3):860-2 (15 ref.)
Relapses in early-stage testicular seminoma: radiation therapy versus retroperitoneal lymphadenectomy. Warszawski N, et al. **Scand J Urol Nephrol** 1997 Aug;31(4):355-9
Extragonadal germ cell tumor followed by metachronous testicular tumor. A case report. Hayashi T, et al.
Urol Int 1996;57(3):194-6
Chemotherapy in advanced seminoma and the role of postcytostatic retroperitoneal lymph node dissection. Hofmockel G, et al. **Urol Int** 1996;57(1):38-42
[Therapeutic considerations on a case of mixed teratoma of the testis with seminomatous component] Inferrera A, et al. **Arch Ital Urol Androl** 1997 Feb;69(1):61-4 (Eng. Abstr.) **(Ita)**

THERAPY

Treatment of advanced seminoma: an update. Sleijfer DT, et al. **Anticancer Drugs** 1997 Feb;8(2):107-12 (56 ref.)
Primary mediastinal seminoma [letter] Oliveira A, et al.
Eur J Cancer 1997 Mar;33(3):509-10
Fear of risks of cure in the treatment of a giant germ cell tumour. A case report. Pannek J, et al.
Int Urol Nephrol 1996;28(4):553-7
Development of a malignant peripheral nerve sheath tumor following treatment for testicular seminoma. West DA, et al. **Urology** 1997 Aug;50(2):292-4
[Metallothionein expression as a marker of therapeutic sensitivity in the early stages of testicular cancer] Eid H, et al. **Orv Hetil** 1997 Jan 19;138(3):135-9 (28 ref.) (Eng. Abstr.) **(Hun)**

ULTRASONOGRAPHY

Spermatocytic seminoma: sonographic appearance. Varela JR, et al. **J Ultrasound Med** 1996 Aug;15(8):607-9

SEMIOCHEMICALS see **PHEROMONES**

SEMI-PERMEABLE CHAMBERS see **DIFFUSION CHAMBERS, CULTURE**

SEMI-PRIVATE ROOMS see **PATIENTS' ROOMS**

SEMISYNTHETIC VACCINES see **VACCINES, SYNTHETIC**

SEMLIKI FOREST VIRUS

High level expression of the human 5-HT1D alpha serotonin receptor using the Semliki Forest Virus expression system. Stables J, et al. **Ann N Y Acad Sci** 1997 May 30;812:229-30
Blood-brain barrier breakdown and increased intercellular adhesion molecule (ICAM-1/CD54) expression after Semliki Forest (A7) virus infection facilitates the development of experimental allergic encephalomyelitis. Erälinna JP, et al. **J Neuroimmunol** 1996 May; 66(1-2):103-14
Production and role of cytokines in the CNS of mice with acute viral encephalomyelitis. Mokhtarian F, et al.
J Neuroimmunol 1996 May;66(1-2):11-22
Characterization of the cellular and cytokine response in the central nervous system following Semliki Forest virus infection. Morris MM, et al. **J Neuroimmunol** 1997 Apr; 74(1-2):185-97
Expression of ligand-gated ion channels with the Semliki Forest virus expression system. Lundstrom K, et al.
J Recept Signal Transduct Res 1997 Jan-May; 17(1-3):115-26
Long-term effects of Semliki Forest virus infection in the mouse central nervous system. Donnelly SM, et al.
Neuropathol Appl Neurobiol 1997 Jun;23(3):235-41
Production of infectious recombinant Moloney murine leukemia virus particles in BHK cells using Semliki Forest virus-derived RNA expression vectors. Li KJ, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11658-63

DRUG EFFECTS

Photodynamic inactivation of enveloped viruses by buckminsterfullerene. Käsermann F, et al. **Antiviral Res** 1997 Mar;34(1):65-70

ENZYMOLOGY

Critical residues of Semliki Forest virus RNA capping enzyme involved in methyltransferase and guanylyltransferase-like activities. Ahola T, et al.
J Virol 1997 Jan;71(1):392-7

GENETICS

Cloning of human IL-12 p40 and p35 DNA into the Semliki Forest virus vector: expression of IL-12 in human tumor cells. Zhang J, et al. **Gene Ther** 1997 Apr;4(4):367-74
The effects of palmitoylation on membrane association of Semliki forest virus RNA capping enzyme. Laakkonen P, et al. **J Biol Chem** 1996 Nov 8;271(45):28567-71
Sequence analysis of the avirulent, demyelinating A7 strain of Semliki Forest virus. Tarbatt CJ, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1551-7
Infectious particles derived from Semliki Forest virus vectors encoding murine leukemia virus envelopes. Lebedeva I, et al. **J Virol** 1997 Sep;71(9):7061-7
Manipulation of the Semliki Forest virus genome and its potential for vaccine construction. Atkins GJ, et al.
Mol Biotechnol 1996 Feb;5(1):33-8 (29 ref.)
Expression of the GB virus C E2 glycoprotein using the Semliki Forest virus vector system and its utility as a serologic marker. Pilot-Matias TJ, et al. **Virology** 1996 Nov 15;225(2):282-92

GROWTH & DEVELOPMENT

SFV infection in CHO cells: cell-type specific restrictions to productive virus entry at the cell surface. Marsh M, et al. **J Cell Sci** 1997 Jan;110 (Pt 1):95-103
Cholesterol-depleted cells that are relatively permissive for Semliki Forest virus infection. Marquardt MT, et al.
Virology 1996 Oct 1;224(1):198-205

IMMUNOLOGY

Monoclonal antibodies specific for Semliki Forest virus replicase protein nsP2. Kujala P, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):343-51

PATHOGENICITY

Death mechanisms in cultured cells infected by Semliki Forest virus. Glasgow GM, et al. **J Gen Virol** 1997 Jul; 78 (Pt 7):1559-63
Susceptibility to a neurotropic virus and its changing distribution in the developing brain is a function of CNS maturity. Oliver KR, et al. **J Neurovirol** 1997 Feb; 3(1):38-48
Morphology of oligodendrocytes during demyelination in optic nerves of mice infected with Semliki Forest virus. Butt AM, et al. **Neuropathol Appl Neurobiol** 1996 Dec; 22(6):540-7

PHYSIOLOGY

The fragmentation of incoming Semliki Forest virus nucleocapsids in mosquito (Aedes albopictus) cells might be coupled to virion uncoating. Mrkic B, et al.
Arch Virol 1996;141(10):1805-21
Preformed cytoplasmic nucleocapsids are not necessary for alphavirus budding. Forsell K, et al. **EMBO J** 1996 Dec 2;15(23):6495-505
Low pH-induced pore formation by spike proteins of enveloped viruses. Käsermann F, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3025-32
The nucleocapsid-binding spike subunit E2 of Semliki Forest virus requires complex formation with the E1 subunit for activity. Barth BU, et al. **J Virol** 1997 Oct;71(10):7857-65
bcl-2 acts early to restrict Semliki Forest virus replication and delays virus-induced programmed cell death. Scallan MF, et al. **J Virol** 1997 Feb;71(2):1583-90
Efficient multiplication of a Semliki Forest virus chimera containing Sindbis virus spikes. Smyth J, et al. **J Virol** 1997

Jan;71(1):818–23
Altered IL-1 beta and IL-2 mRNA expression in murine splenic cells after concomitant stimulation by Semliki Forest virus and lipopolysaccharide. Yang J, et al. **Scand J Immunol** 1997 Apr;45(4):349–53
Virus inactivation by pepsin treatment at pH 4 of IgG solutions: factors affecting the rate of virus inactivation. Omar A, et al. **Transfusion** 1996 Oct;36(10):866–72
Entry of Semliki forest virus into cells: effects of concanamycin A and nigericin on viral membrane fusion and infection. Irurzun A, et al. **Virology** 1997 Jan 20; 227(2):488–92
Multiple mechanisms for the inhibition of entry and uncoating of superinfecting Semliki Forest virus. Singh IR, et al. **Virology** 1997 Apr 28;231(1):59–71

SENDAI VIRUS see **PARAMYXOVIRUS**

SENECIO

see related
PYRROLIZIDINE ALKALOIDS

CHEMISTRY

Recombinagenic activity of integerrimine, a pyrrolizidine alkaloid from Senecio brasiliensis, in somatic cells of Drosophila melanogaster. Campesato VR, et al. **Environ Mol Mutagen** 1997;29(1):91–7

METABOLISM

The glossy1 locus of maize and an epidermis-specific cDNA from Kleinia odora define a class of receptor-like proteins required for the normal accumulation of cuticular waxes. Hansen JD, et al. **Plant Physiol** 1997 Apr;113(4):1091–100

SENECIO ALKALOIDS see **PYRROLIZIDINE ALKALOIDS**

SENESCENCE see **AGING**

SENESCENCE, CELLULAR see **CELL AGING**

SENILE OSTEOPOROSIS see **OSTEOPOROSIS**

SENNA

NG-nitro-L-arginine methyl ester reduces senna- and cascara-induced diarrhoea and fluid secretion in the rat. Izzo AA, et al. **Eur J Pharmacol** 1996 Apr 22; 301(1–3):137–42
Experimental mitochondrial myopathy induced by chronic intoxication by Senna occidentalis seeds. Calore EE, et al. **J Neurol Sci** 1997 Feb 27;146(1):1–6
[Use of sennosides A + B in the preparation of the colon for endoscopy (letter)] Nisa ME, et al. **Rev Esp Enferm Dig** 1996 Apr;88(4):303–4 **(Spa)**

CHEMISTRY

Assessment of the genotoxic risk from laxative senna products. Brusick D, et al. **Environ Mol Mutagen** 1997; 29(1):1–9 (33 ref.)

PHARMACOLOGY

Assessment of the genotoxic risk from laxative senna products. Brusick D, et al. **Environ Mol Mutagen** 1997; 29(1):1–9 (33 ref.)

TOXICITY

Mitochondrial myopathy in Senna occidentalis-seed-fed chicken. Cavaliere MJ, et al. **Ecotoxicol Environ Saf** 1997 Jul;37(2):181–5
The role of constitutive and inducible nitric oxide synthase in senna- and cascara-induced diarrhoea in the rat. Izzo AA, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):93–7

SENSATION

see related
PERCEPTION
Urban-rural differences in adolescent self-esteem, leisure boredom, and sensation-seeking as predictors of leisure-time usage and satisfaction. Gordon WR, et al. **Adolescence** 1996 Winter;31(124):883–901
Sensory processing in the postinstitutionalized child. Cermak SA, et al. **Am J Occup Ther** 1997 Jul-Aug;51(7):500–7
A comparison of the performance of children with and without autism on the Sensory Profile. Kientz MA, et al. **Am J Occup Ther** 1997 Jul-Aug;51(7):530–7
Differential sensory block after spinal bupivacaine in volunteers. Liu SS, et al. **Anesth Analg** 1997 Jan;84(1):115–9
The psychobiology of traumatic memory. Clinical implications of neuroimaging studies. Van Der Kolk BA, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:99–113 (58 ref.)
Physiological and psychological effects associated with high carbon dioxide levels in healthy men. Maresh CM, et al. **Aviat Space Environ Med** 1997 Jan;68(1):41–5
A clinical and neurophysiological study of a patient with an extensive transection of the spinal cord sparing only a part of one anterolateral quadrant. Danziger N, et al. **Brain** 1996 Dec;119 (Pt 6):1835–48
The sensory biology of the living jawless fishes: a phylogenetic assessment. Braun CB. **Brain Behav Evol** 1996; 48(5):262–76 (181 ref.)
Vegetative state and responses to sensory stimulation: an analysis of 24 cases. Wilson SL, et al. **Brain Inj** 1996 Nov; 10(11):807–18
The importance of a consideration of qualia to imagery and cognition [see comments] Hubbard TL. **Conscious Cogn** 1996 Sep;5(3):327–58 (100 ref.). Comment in: Conscious Cogn 1996 Sep;5(3):359–67. Comment in: Conscious Cogn 1996 Sep;5(3):368–80.
Improvement of corneal sensation and tear dynamics in diabetic patients by oral aldose reductase inhibitor, ONO-2235: a preliminary study. Fujishima H, et al. **Cornea** 1996 Jul;15(4):368–75
Aqueous tear production in patients with neurotrophic keratitis. Heigle TJ, et al. **Cornea** 1996 Mar;15(2):135–8
The Jamaican body's role in emotional experience and sense perception: feelings, hearts, minds, and nerves. Sobo EJ. **Cult Med Psychiatry** 1996 Sep;20(3):313–42
Bibliography. Current world literature. Sensory systems. **Curr Opin Neurobiol** 1997 Aug;7(4):569–92
Modification of visceral sensitivity and pain in irritable bowel syndrome by 5-HT3 antagonism (ondansetron). Goldberg PA, et al. **Digestion** 1996 Nov-Dec;57(6):478–83
Rectal mucosal electrosensitivity – what is being tested? Meagher AP, et al. **Int J Colorectal Dis** 1996;11(1):29–33
Self-sensuality in fantasy: reflections on early development based on a case history. Tizón JL. **Int J Psychoanal** 1997 Apr;78 (Pt 2):307–25
Do patients presenting to accident and emergency departments with the sensation of a foreign body in the eye (gritty eye) have significant ocular disease? Jayamanne DG. **J Accid Emerg Med** 1995 Dec;12(4):286–7
Using multi-sensory environments with older people with dementia. Hope K. **J Adv Nurs** 1997 Apr;25(4):780–5
Comparison of corneal sensation following photorefractive keratectomy and laser in situ keratomileusis. Kanellopoulos AJ, et al. **J Cataract Refract Surg** 1997 Jan-Feb;23(1):34–8
Case study of a five-stage sensory reeducation program. Nakada M, et al. **J Hand Ther** 1997 Jul-Sep;10(3):232–9
A controlled study of sensory tics in Gilles de la Tourette syndrome and obsessive-compulsive disorder using a structured interview. Chee KY, et al. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):188–92
Electric shock-like sensations in 42 cancer patients: clinical characteristics and distinct etiologies. Lossos A, et al. **J Neurooncol** 1996 Aug;29(2):175–81
Lhermitte's sign as a presenting symptom of primary spinal cord tumor. Newton HB, et al. **J Neurooncol** 1996 Aug; 29(2):183–8
Anomalous superficial radial sensory innervation of the ulnar dorsum of the hand: a cause of "paradoxical" preservation of ulnar sensory function. McCluskey LF. **Muscle Nerve** 1996 Jul;19(7):923–5
Serotonin and dopamine as mediators of sensation seeking behavior. Netter P, et al. **Neuropsychobiology** 1996; 34(3):155–65
Recent developments in an animal model of visual evoked potential augmenting/reducing and sensation seeking behavior. Siegel J, et al. **Neuropsychobiology** 1996; 34(3):130–5 (38 ref.)
Corneal sensitivity in health and disease. Lawrenson JG. **Ophthalmic Physiol Opt** 1997 Mar;17 Suppl 1:S17–22 (27 ref.)
A parsimonious set of verbal descriptors of pain sensation derived from the McGill Pain Questionnaire [published erratum appears in Pain 1996 Dec;68(2–3):437] Fernandez E, et al. **Pain** 1996 Jul;66(1):31–7
Misconceptions about classical psychophysics and the measurement of response bias. Gardner RM. **Percept Mot Skills** 1997 Apr;84(2):587–94 (19 ref.)
An explanation for inconsistency between psychophysical functions derived from different scaling methods on a prothetic continuum. Nakajima Y, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1209–10
Earliest memories and recall by modality usually involve recollections of different memories: memories are not amodal. Westman AS, et al. **Percept Mot Skills** 1996 Jun; 82(3 Pt 2):1131–5
Peculiar qualia [editorial] Gregory R. **Perception** 1996; 25(7):755–6
Palm sensation [letter] Peled IJ. **Plast Reconstr Surg** 1996 Dec;98(7):1321–2
Effects of willful ventilatory control on respiratory sensation during hypercapnia. Oku Y, et al. **Respiration** 1996; 63(3):137–43
Changes in physical capacity and sensory/psychomotor functions from 75 to 80 years of age and from 80 to 85 years of age--a longitudinal study. Era P, et al. **Scand J Soc Med Suppl** 1997;53:25–43
Pure or predominant sensory stroke due to brain stem lesion. Kim JS, et al. **Stroke** 1997 Sep;28(9):1761–4
[An improved technique for preserving the nipple sensation in McKissock reduction mammaplasty] Xu J, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 Jul;11(4):244–7 (Eng. Abstr.) **(Chi)**
[The process and effect of heaviness exercise in autogenic training: factor analytical study of subjective response induced by the concentration upon and formal language of the sense of heaviness in the arm] Ikezuki M, et al. **Shinrigaku Kenkyu** 1996 Feb;66(6):443–8 (Eng. Abstr.) **(Jpn)**
[The restoration of the sensitive function of the nerves in replanted upper extremities] Rezkov GI. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):29–32 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Intrathecal sufentanil for labor analgesia: do sensory changes predict better analgesia and greater hypotension? Riley ET, et al. **Anesth Analg** 1997 Feb;84(2):346–51
Detection of inspiratory resistive loads after anaesthesia for minor surgery. Drummond GB, et al. **Br J Anaesth** 1997 Mar;78(3):308–10
Integration in human eye irritation. Hempel-Jorgensen A, et al. **Int Arch Occup Environ Health** 1997;69(4):289–94
Effects of topical ketorolac and diclofenac on normal corneal sensation. Sun R, et al. **J Refract Surg** 1997 Mar-Apr; 13(2):158–61
Sensory and cognitive effects of developmental methylmercury exposure in monkeys, and a comparison to effects in rodents. Rice DC. **Neurotoxicology** 1996 Spring;17(1):139–54 (58 ref.)

GENETICS

Lingual deficits in BDNF and NT3 mutant mice leading to gustatory and somatosensory disturbances, respectively. Nosrat CA, et al. **Development** 1997 Apr;124(7):1333–42

PHYSIOLOGY

Development of sensory information processing—the ontogenesis of opioid binding sites in nociceptive afferents and their significance in the clinical setting. Freye E. **Acta Anaesthesiol Scand Suppl** 1996;109:98–101
Vestibular function and sensory interaction in altered gravity. Kornilova LN. **Adv Space Biol Med** 1997;6:275–313 (73 ref.)
Characterization of afferent mechanisms in ileoanal pouches [published erratum appears in Am J Gastroenterol 19997 Aug;92(8):1409] Bernstein CN, et al. **Am J Gastroenterol** 1997 Jan;92(1):103–8
The sensory profile: the performance of a national sample of children without disabilities. Dunn W, et al. **Am J Occup Ther** 1997 Jan;51(1):25–34
Factor analysis on the Sensory Profile from a national sample of children without disabilities. Dunn W, et al. **Am J Occup Ther** 1997 Jul-Aug;51(7):490–5; discussion 496–9
Interactions between postprandial thermogenesis, sensory stimulation of feeding, and hunger. LeBlanc J, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R936–40
Effects of chemical sympathectomy and sensory nerve ablation on experimental colitis in the rat. McCafferty DM, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G272–80
The sensorineural specializations of the trunk tip (finger) of the Asian elephant, Elephas maximus. Rasmussen LE, et al. **Anat Rec** 1996 Sep;246(1):127–34
The effects of preceded fatiguing on the relations between monopolar surface electromyogram and fatigue sensation. Ohashi J. **Appl Human Sci** 1997 Jan;16(1):19–27
Evidence of sensory conflict and recovery in carp exposed to prolonged weightlessness. Mori S, et al. **Aviat Space Environ Med** 1996 Mar;67(3):256–61
Effects of chemical defense clothing and individual equipment on ventilatory function and subjective reactions. Muza SR, et al. **Aviat Space Environ Med** 1996 Dec; 67(12):1190–7
Reorganizational and perceptional changes after amputation. Knecht S, et al. **Brain** 1996 Aug;119 (Pt 4):1213–9
The generation and subtraction of sensory expectations within cerebellum-like structures. Bell C, et al. **Brain Behav Evol** 1997;50 Suppl 1:17–31 (60 ref.)
Ultrastructure, number, distribution and innervation of electroreceptors and mechanoreceptors in the bill skin of the platypus, Ornithorhynchus anatinus. Manger PR, et al. **Brain Behav Evol** 1996;48(1):27–54
Phospholipases and arachidonic acid contribute independently to sensory transduction and associative neuronal facilitation in Hermissenda type B photoreceptors. Talk AC, et al. **Brain Res** 1997 Mar 21;751(2):196–205
Sensorimotor impairments in rats with cerebral infarction, induced by unilateral occlusion of the left middle cerebral artery: strain differences and effects of the occlusion site. van der Staay FJ, et al. **Brain Res** 1996 Oct 7;735(2):271–84
Central actions of corticotropin releasing factor on sensori-autonomic processing in normotensive and hypertensive rats. Youngblood K, et al. **Brain Res** 1996 Sep 23;734(1–2):175–85
Integration of somatosensory and vestibular inputs in perceiving the direction of passive whole-body motion. Ivanenko YP, et al. **Brain Res Cogn Brain Res** 1997 Jun; 5(4):323–7
In the medical literature, physiologists, neuromorphologists, and neurologists frequently refer to peripheral or distal parts of sensory neurons as "receptors," "sensory terminals," or "sensory nerve endings" [letter] Malinovsky L, et al. **Clin Anat** 1996;9(5):356
Sensation of nasal airflow compared with nasal airway resistance in patients with rhinitis. Simola M, et al. **Clin Otolaryngol** 1997 Jun;22(3):260–2
Effect of sustained inspiratory loading on respiratory sensation and CO2 responsiveness in normal humans. Clague JE, et al. **Clin Sci (Colch)** 1996 Oct;91(4):513–8

SENSATION

Changes in the period of no respiratory sensation and total breath-holding time in successive breath-holding trials. Nishino T, et al. **Clin Sci (Colch)** 1996 Dec;91(6):755–61

Mach and Hering's physiology of the senses. Janko J. **Clio Med** 1995;33:89–96

Effect of amniotic fluid in corneal sensitivity and nerve regeneration after excimer laser ablation. Lee HS, et al. **Cornea** 1996 Sep;15(5):517–24

Sensory systems. **Curr Opin Neurobiol** 1996 Aug;6(4):549–72

Sensory signaling in Caenorhabditis elegans. Kaplan JM. **Curr Opin Neurobiol** 1996 Aug;6(4):494–9 (34 ref.)

Sensory hyperacuity in the jamming avoidance response of weakly electric fish. Kawasaki M. **Curr Opin Neurobiol** 1997 Aug;7(4):473–9 (51 ref.)

Synchronous oscillatory activity in sensory systems: new vistas on mechanisms. Ritz R, et al. **Curr Opin Neurobiol** 1997 Aug;7(4):536–46 (93 ref.)

Sensory systems. Editorial overview. Singer W, et al. **Curr Opin Neurobiol** 1997 Aug;7(4):469–72

Anal sensitivity test: what does it measure and do we need it? Cause or derivative of anorectal complaints. Felt-Bersma RJ, et al. **Dis Colon Rectum** 1997 Jul; 40(7):811–6

Physiology of rectal sensations: a mathematic approach. Rao GN, et al. **Dis Colon Rectum** 1997 Mar;40(3):298–306

Oral sensory discrimination of fluid viscosity. Smith CH, et al. **Dysphagia** 1997 Spring;12(2):68–73

Sensory processing during early and late nocturnal sleep. Plihal W, et al. **Electroencephalogr Clin Neurophysiol** 1996 Sep;99(3):247–56

Suppression of spatial localization of a cutaneous stimulus following transcranial magnetic pulse stimulation of the sensorimotor cortex. Seyal M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb;105(1):24–8

SEF-MEG localization of somatosensory cortex as a method for presurgical assessment of functional brain area. Ganslandt O, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;46:209–13

In vivo effects of insulin-like growth factor-I on the development of sensory pathways: analysis of the primary somatic sensory cortex (S1) of transgenic mice. Gutiérrez-Ospina G, et al. **Endocrinology** 1996 Dec; 137(12):5484–92

Modulation of sensory and excitatory amino acid responses by nitric oxide donors and glutathione in the ventrobasal thalamus of the rat. Shaw PJ, et al. **Eur J Neurosci** 1997 Jul;9(7):1507–13

Sensory strategies in human postural control before and after unilateral vestibular neurotomy. Lacour M, et al. **Exp Brain Res** 1997 Jun;115(2):300–10

Somatosensory and movement-related properties of red nucleus: a single unit study in the turtle. Sarrafizadeh R, et al. **Exp Brain Res** 1996 Feb;108(1):1–17

Mediators and pharmacology of visceral sensitivity: from basic to clinical investigations. Bueno L, et al. **Gastroenterology** 1997 May;112(5):1714–43 (329 ref.)

Graded corneal sensitivity for screening of diabetic retinopathy. Saini JS, et al. **Indian J Ophthalmol** 1996 Dec; 44(4):219–23

Developmental and sex differences in sensory and motor functioning. Arceneaux JM, et al. **Int J Neurosci** 1997 Feb; 89(3–4):253–63

Age differences in hemispheric activation to sensory condition. Shapiro DM, et al. **Int J Neurosci** 1996 Nov; 87(3–4):249–56

A possible role of evoked alpha in primary sensory processing: common properties of cat intracranial recordings and human EEG and MEG. Schürmann M, et al. **Int J Psychophysiol** 1997 Jun;26(1–3):149–70

Age-associated changes in detrusor sensory function in women with lower urinary tract symptoms. Collas DM, et al. **Int Urogynecol J Pelvic Floor Dysfunct** 1996;7(1):24–9

Quantification of intensity of sensations during muscular work by normal subjects. Hamilton AL, et al. **J Appl Physiol** 1996 Sep;81(3):1156–61

A role for GABAergic inhibition in electrosensory processing and common mode rejection in the dorsal nucleus of the little skate, Raja erinacea. Duman CH, et al. **J Comp Physiol [A]** 1996 Dec;179(6):797–807

Neural circuitry underlying linear representation of wind information in a nonspiking local interneuron of the cockroach. Okuma J, et al. **J Comp Physiol [A]** 1996 Dec; 179(6):725–40

Misinterpretation of body sensations in panic disorder. Clark DM, et al. **J Consult Clin Psychol** 1997 Apr;65(2):203–13

Body vigilance in panic disorder: evaluating attention to bodily perturbations. Schmidt NB, et al. **J Consult Clin Psychol** 1997 Apr;65(2):214–20

Differential effects of noxious conditioning stimulation of the cheek by capsaicin on human sensory and inhibitory masseter reflex responses evoked by tooth pulp stimulation. Kemppainen P, et al. **J Dent Res** 1997 Sep;76(9):1561–8

Effects of food texture and sample thickness on mandibular movement and hardness assessment during biting in man. Peyron MA, et al. **J Dent Res** 1997 Mar;76(3):789–95

Male-male courtship behavior induced by ectopic expression of the Drosophila white gene: role of sensory function and age. Hing AL, et al. **J Neurobiol** 1996 Aug;30(4):454–64

Plasticity in an electrosensory system. I. General features of a dynamic sensory filter. Bastian J. **J Neurophysiol** 1996 Oct;76(4):2483–96

Plasticity in an electrosensory system. II. Postsynaptic events associated with a dynamic sensory filter. Bastian J. **J Neurophysiol** 1996 Oct;76(4):2497–507

Thalamic stimulation-evoked sensations in chronic pain patients and in nonpain (movement disorder) patients. Davis KD, et al. **J Neurophysiol** 1996 Mar;75(3):1026–37

Motor intention activity in the macaque's lateral intraparietal area. I. Dissociation of motor plan from sensory memory. Mazzoni P, et al. **J Neurophysiol** 1996 Sep;76(3):1439–56

Neural correlates of a spatial sensory-to-motor transformation in primary motor cortex. Shen L, et al. **J Neurophysiol** 1997 Mar;77(3):1171–94

Characteristics of temporal summation of second pain sensations elicited by brief contact of glabrous skin by a preheated thermode. Vierck CJ Jr, et al. **J Neurophysiol** 1997 Aug;78(2):992–1002

Cellular organization of an antennal mechanosensory pathway in the cockroach, Periplaneta americana. Burdohan JA, et al. **J Neurosci** 1996 Sep 15;16(18):5830–43

Correspondence of escape-turning behavior with activity of descending mechanosensory interneurons in the cockroach, Periplaneta americana. Ye S, et al. **J Neurosci** 1996 Sep 15;16(18):5844–53

Long term chronic recordings from peripheral sensory fibers using a sieve electrode array. Bradley RM, et al. **J Neurosci Methods** 1997 May 16;73(2):177–86

Supplemental stimulation of premature infants: a treatment model. Dieter JN, et al. **J Pediatr Psychol** 1997 Jun; 22(3):281–95 (77 ref.)

Restoration of lower-lip sensation: neurotization of the mental nerve with the supraclavicular nerve. Mucci SJ, et al. **J Reconstr Microsurg** 1997 Apr;13(3):151–5

Re: Penile sensitivity in patients with primary premature ejaculation [letter; comment] Rowland DL, et al. **J Urol** 1997 Jul;158(1):187–8. Comment on: J Urol 1996 Sep;156(3):979–81.

Laryngopharyngeal sensory testing with modified barium swallow as predictors of aspiration pneumonia after stroke. Aviv JE, et al. **Laryngoscope** 1997 Sep;107(9):1254–60

How do memories leave their mark? [news; comment] Bear MF. **Nature** 1997 Feb 6;385(6616):481–2. Comment on: Nature 1997 Feb 6;385(6616):533–6.

Parameter extraction from population codes: a critical assessment. Snippe HP. **Neural Comput** 1996 Apr 1; 8(3):511–29

Neurotrophins cause a new sensation. Snider WD, et al. **Neuron** 1996 Feb;16(2):229–32 (26 ref.)

Novelty-seeking in rats--biobehavioral characteristics and possible relationship with the sensation-seeking trait in man. Dellu F, et al. **Neuropsychobiology** 1996;34(3):136–45 (50 ref.)

The psychobiological model for impulsive unsocialized sensation seeking: a comparative approach. Zuckerman M. **Neuropsychobiology** 1996;34(3):125–9 (32 ref.)

Sensory information--the major factor of ontogeny. Raevsky VV, et al. **Neurosci Behav Physiol** 1997 Jul-Aug; 27(4):455–61 (30 ref.)

Trigeminal primary projection to the rat brain stem sensory trigeminal nuclear complex and surrounding structures revealed by anterograde transport of cholera toxin B subunit-conjugated and Bandeiraea simplicifolia isolectin B4-conjugated horseradish peroxidase. Sugimoto T, et al. **Neurosci Res** 1997 Aug;28(4):361–71

Influence of age and anti-nerve growth factor treatment on the sympathetic and sensory innervation of the rat iris. Gavazzi I, et al. **Neuroscience** 1996 Aug;73(4):1069–79

Laser-evoked cerebral potentials and sensory function in patients with central pain. Casey KL, et al. **Pain** 1996 Mar; 64(3):485–91

Attention and somatic awareness in chronic pain. Eccleston C, et al. **Pain** 1997 Aug;72(1–2):209–15

A longitudinal study of somesthetic perceptual disorders in an individual with a unilateral thalamic lesion. Greenspan JD, et al. **Pain** 1997 Aug;72(1–2):13–25

Synaesthesia in the normal limb. Mon-Williams M, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22;264(1384):1007–10

An international comparison of characteristics of the sensation of nasal obstruction between Canadian and Japanese patients. Naito K, et al. **Rhinology** 1996 Jun; 34(2):97–100

Mutant mice and worms help solve mysteries of olfaction [news] Barinaga M. **Science** 1996 Oct 25;274(5287):500–1

Historical perspective Brown-Sequard and his work on the spinal cord. Aminoff MJ. **Spine** 1996 Jan 1;21(1):133–40

Identification of the location, extent, and pathway of sensory neurologic feedback after mechanical stimulation of a lateral spinal ligament in chickens. Jiang H, et al. **Spine** 1997 Jan 1;22(1):17–25

Immunohistochemical demonstration of sensory and autonomic nerve terminals in herniated lumbar disc tissue. Palmgren T, et al. **Spine** 1996 Jun 1;21(11):1301–6

[Effects of mental adaptation on vegetative, hormonal and sensory reactions in preoperative period] Sergeenko NI, et al. **Anesteziol Reanimatol** 1997 Mar-Apr;(2):37–40 (Eng. Abstr.) **(Rus)**

[Analysis of EEG resonance reactions in evaluation of the effectiveness of sensory stimulation] Fedotchev AI. **Fiziol Cheloveka** 1997 Jul-Aug;23(4):117–23 (67 ref.) **(Rus)**

[The nonspecific mechanisms of CNS adaptation to intermittent stimuli, EEG spectral structure and the optimal parameters of rhythmic sensory actions] Fedotchev AI, et al. **Usp Fiziol Nauk** 1996 Oct-Dec;27(4):44–62 (173 ref.) (Eng. Abstr.) **(Rus)**

[Intersensory correlations in diabetic neuropathy during adaptation to intervalic normobaric hypoxia] Starkova NT, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(3):40–4 (Eng. Abstr.) **(Rus)**

[Sensory information--an important factor in ontogeny] Raevskiĭ VV, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar-Apr; 47(2):299–307 (30 ref.) (Eng. Abstr.) **(Rus)**

SENSATION DISORDERS

Head extension and age-dependent posturographic instability in normal subjects. Jackson RT, et al. **J Rehabil Res Dev** 1996 Feb;33(1):1–5

Are deficits in the equilibrium system relevant to the clinical investigation of solvent-induced neurotoxicity? Niklasson M, et al. **Scand J Work Environ Health** 1997 Jun; 23(3):206–13

[A case of Dyke-Davidoff-Masson syndrome with total hemiatrophy] Hozumi A, et al. **Rinsho Shinkeigaku** 1996 Oct;36(10):1143–9 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Buccofacial dysesthesias] Lucas Tomás M. **An R Acad Nac Med (Madr)** 1996;113(3):725–37; discussion 738–41 **(Spa)**

CHEMICALLY INDUCED

Integration in human eye irritation. Hempel-Jorgensen A, et al. **Int Arch Occup Environ Health** 1997;69(4):289–94

Methanol-induced health disturbance in a worker engaged in antimold spraying. Kudo Y, et al. **Int Arch Occup Environ Health** 1996;68(6):513–5

More on melatonin [letter] Balentine J, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug;36(8):1013

Neurotrophin-3 administration attenuates deficits of pyridoxine-induced large-fiber sensory neuropathy. Helgren ME, et al. **J Neurosci** 1997 Jan 1;17(1):372–82

Low-dose zalcitabine-related toxic neuropathy: frequency, natural history, and risk factors. Blum AS, et al. **Neurology** 1996 Apr;46(4):999–1003

COMPLICATIONS

Primary hyperoxaluria in an adult with renal failure, livedo reticularis, retinopathy, and peripheral neuropathy. Farreli J, et al. **Am J Kidney Dis** 1997 Jun;29(6):947–52

The predictive value of sensation testing in the development of neuropathic ulceration on the hands of leprosy patients. Kuipers M, et al. **Lepr Rev** 1994 Sep;65(3):253–61

HIV-1 associated sensory neuropathy: a patient with peripheral nerve vasculitis [letter] Younger DS, et al. **Muscle Nerve** 1996 Oct;19(10):1364–6

Hereditary ataxia with sensory neuronopathy: Biemond's ataxia. Nachmanoff DB, et al. **Neurology** 1997 Jan; 48(1):273–5

DIAGNOSIS

Radiologic-clinical correlation. One-and-a-half syndrome associated with cheirooral syndrome. Shintani S, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1482–4

Olfactory identification deficits in schizophrenia: correlation with duration of illness. Moberg PJ, et al. **Am J Psychiatry** 1997 Jul;154(7):1016–8

Spectral characteristics of postural control in elderly individuals. Williams HG, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):737–44

Differential diagnosis of gait disorders in older adults. Alexander NB. **Clin Geriatr Med** 1996 Nov;12(4):689–703 (74 ref.)

Using technology-based techniques to assess postural control and gait in older adults. Alexander NB. **Clin Geriatr Med** 1996 Nov;12(4):725–44 (135 ref.)

Functional assessment of balance and gait. Berg K, et al. **Clin Geriatr Med** 1996 Nov;12(4):705–23 (68 ref.)

Clinical overview of instability in the elderly. Studenski S, et al. **Clin Geriatr Med** 1996 Nov;12(4):679–88 (16 ref.)

Botulism with sensory symptoms diagnosed by neuromuscular transmission studies associated with edrophonium responsiveness. Kuruoğlu R, et al. **Electromyogr Clin Neurophysiol** 1996 Dec;36(8):477–80

Sensory-perceptual abnormalities in autism: a case for more research? O'Neill M, et al. **J Autism Dev Disord** 1997 Jun; 27(3):283–93 (35 ref.)

Utility of square-wave gratings to assess perioral spatial acuity. Patel J, et al. **J Oral Maxillofac Surg** 1997 Jun; 55(6):593–601

AAEM case report #31: paraneoplastic sensory neuronopathy. Pourmand R, et al. **Muscle Nerve** 1996 Dec; 19(12):1517–22

Acquired demyelinating polyneuropathy presenting as a pure clinical sensory syndrome. Simmons Z, et al. **Muscle Nerve** 1996 Sep;19(9):1174–6

Decreased corneal sensation as an initial feature of Acanthamoeba keratitis. Perry HD, et al. **Ophthalmology** 1995 Oct;102(10):1565–8

Evaluation of postural stability in children: current theories and assessment tools. Westcott SL, et al. **Phys Ther** 1997 Jun;77(6):629–45 (117 ref.)

Motor and sensory dysfunctions in children with mental retardation and epilepsy. Beckung E, et al. **Seizure** 1997 Feb;6(1):43–50

Vertigo of cerebrovascular origin proven by CT scan or

MRI: pitfalls in clinical differentiation from vertigo of aural origin. Kim GW, et al. **Yonsei Med J** 1996 Feb;37(1):47–51

[The psychopathological differentiation of pathological body sensations] Burenina NI.
Zh Nevropatol Psikhiatr Im S S Korsakova 1997;97(5):22–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Successful treatment of persistent migraine aura with divalproex sodium. Rothrock JF. **Neurology** 1997 Jan; 48(1):261–2

Topical acetylsalicylate attenuates capsaicin induced pain, flare and allodynia but not thermal hyperalgesia. Schmelz M, et al. **Neurosci Lett** 1996 Aug 16;214(1):72–4

Effect of intravenous sodium amytal on cutaneous sensory abnormalities, spontaneous pain and algometric pain pressure thresholds in neuropathic pain patients: a placebo–controlled study. II. Mailis A, et al. **Pain** 1997 Mar;70(1):69–81

ETIOLOGY

Sensory loss of the distal phalanx caused by pulse oximeter probe [letter] Clark M, et al. **Anaesthesia** 1997 May; 52(5):508–9

Acute pulmonary edema and trigeminal nerve blockade after retrobulbar block. Kwinten FA, et al. **Anesth Analg** 1996 Dec;83(6):1322–4

Olfactory dysfunction in patients with head trauma. Doty RL, et al. **Arch Neurol** 1997 Sep;54(9):1131–40

Patients' perception of sensory disturbances of the mental nerve before and after implant surgery: a prospective study of 110 patients. Wismeijer D, et al.
Br J Oral Maxillofac Surg 1997 Aug;35(4):254–9

Differential diagnosis of gait disorders in older adults. Alexander NB. **Clin Geriatr Med** 1996 Nov;12(4):689–703 (74 ref.)

Disorders of posture, balance, and gait in Parkinson's disease. Rogers MW. **Clin Geriatr Med** 1996 Nov;12(4):825–45 (85 ref.)

Chronic compulsive foot rubbing. Breningstall GN, et al. **Clin Pediatr (Phila)** 1996 Aug;35(8):411–3

Postural stability of diabetic patients with and without cutaneous sensory deficit in the foot. Simmons RW, et al. **Diabetes Res Clin Pract** 1997 Jun;36(3):153–60

Low–grade non–Hodgkin B–cell lymphoma presenting as sensory neuropathy. Gemignani F, et al. **Eur Neurol** 1996; 36(3):138–41

Hemiataxia -hypesthesia in thalamic hemorrhage. Significance of sensory deficit patterns and presence or absence of weakness. Heo JH, et al. **Eur Neurol** 1996; 36(4):243–4

Cervical radiculopathy: pain, muscle weakness and sensory loss in patients with cervical radiculopathy treated with surgery, physiotherapy or cervical collar. A prospective, controlled study. Persson LC, et al. **Eur Spine J** 1997; 6(4):256–66

The natural history of cold intolerance of the hand. Nancarrow JD, et al. **Injury** 1996 Nov;27(9):607–11

Rectal hypersensitivity in the irritable bowel syndrome. Slater BJ, et al. **Int J Colorectal Dis** 1997;12(1):29–32

Endosseous implant placement in conjunction with inferior alveolar nerve transposition: an evaluation of neurosensory disturbance. Kan JY, et al.
Int J Oral Maxillofac Implants 1997 Jul–Aug;12(4):463–71

Sensory nerve disturbance following Le Fort I osteotomy. Al–Din OF, et al. **Int J Oral Maxillofac Surg** 1996 Feb; 25(1):13–9

Neurological disturbances and hyperdynamic shock in a patient with esophagocoloplasty. Campos L, et al.
Intensive Care Med 1997 May;23(5):590–2

Morbidity of the infraorbital nerve following orbitozygomatic complex fractures. Vriens JP, et al.
J Craniomaxillofac Surg 1995 Dec;23(6):363–8

Pure sensory deficit with crossed orocrural topography after pontine haemorrhage [letter] Combarros O, et al.
J Neurol Neurosurg Psychiatry 1996 Nov;61(5):534–5

High cervical myelopathy presenting with the numb clumsy hand syndrome. Romano JG, et al. **J Neurol Sci** 1996 Sep 1;140(1–2):137–40

The case of the phantom bladder. Fonseca R, et al.
J Urol 1997 Apr;157(4):1354

Olfactory dysfunction in multiple sclerosis [letter] [published erratum appears in N Engl J Med 1997 Apr 14;337(7):507] Doty RL, et al. **N Engl J Med** 1997 Jun 26;336(26):1918–9

Meeting badge neuropathy. Preston DC, et al. **Neurology** 1997 Jan;48(1):289–90

Successful treatment of persistent migraine aura with divalproex sodium. Rothrock JF. **Neurology** 1997 Jan; 48(1):261–2

Both motor and sensory abnormalities contribute to changes in foot posture in an experimental rat neuropathic model. Na HS, et al. **Pain** 1996 Sep;67(1):173–8

Acephalgic migraines of childhood. Shevell MI.
Pediatr Neurol 1996 Apr;14(3):211–5

Evaluation of postural stability in children: current theories and assessment tools. Westcott SL, et al. **Phys Ther** 1997 Jun;77(6):629–45 (117 ref.)

Metastatic large cell lung cancer presenting with numb chin syndrome. Marinella MA. **Respir Med** 1997 Apr; 91(4):235–6

Short–term effect of hand–arm vibration exposure on tactile sensitivity and manual skill. Thonnard JL, et al.
Scand J Work Environ Health 1997 Jun;23(3):193–8

Spontaneous and evoked dysesthesias observed in the rat after spinal cordotomies. Ovelmen–Levitt J, et al.
Stereotact Funct Neurosurg 1995;65(1–4):157–60

Consistency of cortical sensory impairment [letter; comment] Bohannon RW. **Stroke** 1996 Sep;27(9):1696–7. Comment on: Stroke 1996 Apr;27(4):677–82.

Disorders of smell, taste, and food intake in a patient with a dorsomedial thalamic infarct. Rousseaux M, et al.
Stroke 1996 Dec;27(12):2328–30

Intranasal anaesthesia in lepromatous leprosy. Soni NK.
Trop Doct 1997 Apr;27(2):89–90

[Association between abnormal sensation and increased microneurographic muscle sympathetic nerve activity of the peroneal nerve in patients with lumbar spinal problems] Kaneda K. **Nippon Ika Daigaku Zasshi** 1996 Aug; 63(4):286–93 (Eng. Abstr.) **(Jpn)**

[Brain stem glioma presenting with contralateral sensory impairment of ascending nature] Ikeda T, et al.
No To Shinkei 1997 Jun;49(6):547–51 (Eng. Abstr.) **(Jpn)**

[A case of medial medullary infarction with prominent deep sensory impairment] Yoshii F, et al. **No To Shinkei** 1996 Oct;48(10):937–41 (Eng. Abstr.) **(Jpn)**

[Tactile extinction following the cerebral sinus thrombosis. A study using event–related potentials] Fujikane M, et al.
Rinsho Shinkeigaku 1996 May;36(5):687–91 (Eng. Abstr.) **(Jpn)**

[Myelopathy due to vitamin B12 deficiency presenting only sensory disturbances in upper extremities: a case report] Imaiso Y, et al. **Rinsho Shinkeigaku** 1997 Feb;37(2):135–8 (Eng. Abstr.) **(Jpn)**

[Pseudoradicular sensory impairment caused by parietal lesions: report of two cases] Ishii K, et al.
Rinsho Shinkeigaku 1996 Aug;36(8):951–6 (Eng. Abstr.) **(Jpn)**

[Pure sensory syndrome due to a lacunar infarct in the protuberance (letter)] Marcos Toledano MM, et al.
Med Clin (Barc) 1997 Feb 15;108(6):236 (9 ref.) **(Spa)**

GENETICS

Abnormalities of sensory and memory functions in mice lacking Bsg gene. Naruhashi K, et al.
Biochem Biophys Res Commun 1997 Jul 30;236(3):733–7

Odor perception phenotypes: multiple, specific hyperosmias to musks. Gilbert AN, et al. **Chem Senses** 1996 Aug; 21(4):411–6

Intronic GAA triplet repeat expansion in Friedreich's ataxia presenting with pure sensory ataxia [letter] Berciano J, et al. **J Neurol** 1997 Jun;244(6):390–1

IMMUNOLOGY

Autoantibody–associated sensory neuronopathy and intestinal pseudo–obstruction without detectable neoplasia. Briellmann RS, et al. **Eur Neurol** 1996;36(6):369–73 (26 ref.)

Cholinergic neuron–specific ganglioside GQ1b alpha a possible target molecule for serum IgM antibodies in some patients with sensory ataxia. Tagawa Y, et al.
J Neuroimmunol 1997 May;75(1–2):196–9

Indications for an immune–mediated etiology of idiopathic sensory neuronopathy. van Dijk GW, et al.
J Neuroimmunol 1997 Apr;74(1–2):165–72

High–titer immunoglobulin M antibody to nerve–specific class III beta–tubulin in the serum of a patient with sensory demyelinating polyneuropathy [letter] Stubbs EB Jr, et al.
Muscle Nerve 1996 Dec;19(12):1638–9

PATHOLOGY

Paranodal structure in diabetic sensory polyneuropathy. Thomas PK, et al. **Acta Neuropathol (Berl)** 1996 Dec; 92(6):614–20

Hereditary ataxia with sensory neuronopathy: Biemond's ataxia. Nachmanoff DB, et al. **Neurology** 1997 Jan; 48(1):273–5

PHYSIOPATHOLOGY

Sensory perception in Parkinson disease. Jobst EE, et al.
Arch Neurol 1997 Apr;54(4):450–4

Aviation spatial orientation in relationship to head position and attitude interpretation. Patterson FR, et al.
Aviat Space Environ Med 1997 Jun;68(6):463–71

Aviation spatial orientation in relationship to head position, altitude interpretation, and control. Smith DR, et al.
Aviat Space Environ Med 1997 Jun;68(6):472–8

Collateral sprouting of cutaneous nerves in man. Healy C, et al. **Brain** 1996 Dec;119 (Pt 6):2063–72

Cutaneous sensory disorder. Koo J, et al. **Dermatol Clin** 1996 Jul;14(3):497–502 (23 ref.)

Limited joint mobility of the ankle in diabetic patients with cutaneous sensory deficit. Simmons RW, et al.
Diabetes Res Clin Pract 1997 Aug;37(2):137–43

Effect of prostaglandin E1 on the rat inner ear microvascular thrombosis. Umemura K, et al. **Gen Pharmacol** 1997 Feb; 28(2):221–4

Neurotrophin–3 administration attenuates deficits of pyridoxine–induced large–fiber sensory neuropathy. Helgren ME, et al. **J Neurosci** 1997 Jan 1;17(1):372–82

Ignoring left and far: an investigation of tactile neglect. Beschin N, et al. **Neuropsychologia** 1996 Jan;34(1):41–9

Phantom face: conscious correlate of neural reorganization after removal of primary sensory neurones. Clarke S, et al. **Neuroreport** 1996 Nov 25;7(18):2853–7

Possible involvement of neuropeptidergic sensory nerves in alopecia areata. Rossi R, et al. **Neuroreport** 1997 Mar 24; 8(5):1135–8

Effect of intravenous sodium amytal on cutaneous sensory abnormalities, spontaneous pain and algometric pain pressure thresholds in neuropathic pain patients: a placebo–controlled study. II. Mailis A, et al. **Pain** 1997 Mar;70(1):69–81

Postural perturbations: new insights for treatment of balance disorders. Horak FB, et al. **Phys Ther** 1997 May; 77(5):517–33 (84 ref.)

[A case of central pain observed in medical medullary infarction] Hashimoto Y, et al. **Rinsho Shinkeigaku** 1996 Sep;36(9):1079–82 (Eng. Abstr.) **(Jpn)**

[Changes in the somatosensory evoked potentials in patients with amputated limbs with and without phantom pain syndrome] Reshetniak VK, et al. **Anesteziol Reanimatol** 1996 Jul–Aug;(4):4–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Protection of the lingual nerve during operations on the mandibular third molar: a simple method. Appiah–Anane S, et al. **Br J Oral Maxillofac Surg** 1997 Jun;35(3):170–2

Clinical overview of instability in the elderly. Studenski S, et al. **Clin Geriatr Med** 1996 Nov;12(4):679–88 (16 ref.)

Effects of acyclovir on sensory axonal neuropathy, segmental motor paresis and postherpetic neuralgia in herpes zoster patients. Mondelli M, et al. **Eur Neurol** 1996;36(5):288–92

PSYCHOLOGY

The relationship between psychosomatic factors and orthostatic dysregulation in young men. Nozawa I, et al.
Clin Otolaryngol 1997 Apr;22(2):135–8

RADIOGRAPHY

CT imaging of mental nerve neuropathy: the numb chin syndrome. Bar–Ziv J, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):371–6

REHABILITATION

Persistent mechanical allodynia following injury of the hand. Treatment through mobilization of the nervous system. Sweeney J, et al. **J Hand Ther** 1996 Oct–Dec;9(4):328–38

Test–retest reliability of the Chattecx Balance System in the patient with hemiplegia. Levine D, et al.
J Rehabil Res Dev 1996 Feb;33(1):36–44

Rehabilitation of balance in two patients with cerebellar dysfunction. Gill–Body KM, et al. **Phys Ther** 1997 May; 77(5):534–52

SURGERY

Pectinatoplasty: a technique for treatment of sensory fecal incontinence. Shafik A. **J Pediatr Surg** 1996 Nov; 31(11):1520–3

THERAPY

Acupuncture treatment for balance disorders following whiplash injury. Fattori B, et al.
Acupunct Electrother Res 1996 Jul–Dec;21(3–4):207–17

[A significant increase in superficial sensation, a number of years after a peripheral neurologic lesion, using transcutaneous vibratory stimulation] Spicher C, et al.
Ann Chir Main Memb Super 1997;16(2):124–9 (Eng. Abstr.) **(Fre)**

[The use of prisms in postural equilibrium] Preoteasa D.
Oftalmologia 1996 Oct–Dec;40(4):331–9 (12 ref.) (Eng. Abstr.) **(Rum)**

SENSE ORGANS

see related

RECEPTORS, SENSORY

[The five senses and pediatric cardiology! (editorial)] Rey C. **Arch Mal Coeur Vaiss** 1997 May;90(5):603–4 **(Fre)**

ANATOMY & HISTOLOGY

The sensory biology of the living jawless fishes: a phylogenetic assessment. Braun CB. **Brain Behav Evol** 1996; 48(5):262–76 (181 ref.)

Sensilla associated with the rostrum of eight species of triatominae. Catalá S. **J Morphol** 1996 May;228(2):195–201

Structural diversity of the ordinary and specialized lateral line organs. Cernuda–Cernuda R, et al.
Microsc Res Tech 1996 Jul 1;34(4):302–12 (60 ref.)

CYTOLOGY

Influence of receptor axons on the formation of olfactory glomeruli in a hemimetabolous insect, the cockroach Periplaneta americana. Salecker I, et al. **J Comp Neurol** 1996 Jun 24;370(2):262–79

Control of daughter cell fates during asymmetric division: interaction of Numb and Notch. Guo M, et al. **Neuron** 1996 Jul;17(1):27–41 (84 ref.)

SENSE ORGANS

EMBRYOLOGY

Requirement for EGF receptor signalling in neural recruitment during formation of Drosophila chordotonal sense organ clusters [see comments] Lage P, et al. **Curr Biol** 1997 Mar 1;7(3):166–75. Comment in: Curr Biol 1997 Mar 1;7(3):132–5.

A prepattern for sensory organs. Drosophila development. Simpson P. **Curr Biol** 1996 Aug 1;6(8):948–50

Cell fate determination in Drosophila. Vervoort M, et al. **Curr Opin Neurobiol** 1997 Feb;7(1):21–8 (66 ref.)

Development of the Drosophila olfactory sense organs utilizes cell–cell interactions as well as lineage. Reddy GV, et al. **Development** 1997 Feb;124(3):703–12

Mutations affecting development of the zebrafish inner ear and lateral line. Whitfield TT, et al. **Development** 1996 Dec; 123:241–54

Fetal sensory competencies. Lecanuet JP, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Sep;68(1–2):1–23 (249 ref.)

Polychaetoid is required to restrict segregation of sensory organ precursors from proneural clusters in Drosophila. Chen CM, et al. **Mech Dev** 1996 Jul;57(2):215–27

Ontogeny of the cutaneous sensory organs. Saxod R. **Microsc Res Tech** 1996 Jul 1;34(4):313–33 (100 ref.)

GROWTH & DEVELOPMENT

Distinct mechanisms of action of the Lozenge locus in Drosophila eye and antennal development are suggested by the analysis of dominant enhancers. Gupta BP, et al. **J Neurogenet** 1995 Dec;10(3):137–51

Ontogeny of the cutaneous sensory organs. Saxod R. **Microsc Res Tech** 1996 Jul 1;34(4):313–33 (100 ref.)

INNERVATION

Efferent neurons of the lateral line system and their innervation of lateral line branches in a euteleost and an osteoglossomorph. Wagner T, et al. **Anat Embryol (Berl)** 1996 Sep;194(3):271–8

Antennal lobe neurons of the honey bee, Apis mellifera, express a D2–like dopamine receptor in vitro. Kirchhof BS, et al. **J Comp Neurol** 1997 Jun 30;383(2):189–98

Synaptic organization of the uniglomerular projection neurons of the antennal lobe of the moth Manduca sexta: a laser scanning confocal and electron microscopic study. Sun XJ, et al. **J Comp Neurol** 1997 Mar 3;379(1):2–20

Structural diversity of the ordinary and specialized lateral line organs. Cernuda–Cernuda R, et al. **Microsc Res Tech** 1996 Jul 1;34(4):302–12 (60 ref.)

METABOLISM

Drosophila melanogaster NADPH–cytochrome P450 oxidoreductase: pronounced expression in antennae may be related to odorant clearance. Hovemann BT, et al. **Gene** 1997 Apr 21;189(2):213–9

Atonal is a proneural gene for a subset of olfactory sense organs in Drosophila. Gupta BP, et al. **Genes Cells** 1997 Mar;2(3):225–33

Antennal lobe neurons of the honey bee, Apis mellifera, express a D2–like dopamine receptor in vitro. Kirchhof BS, et al. **J Comp Neurol** 1997 Jun 30;383(2):189–98

PHYSIOLOGY

Are odorant–binding proteins involved in odorant discrimination? Steinbrecht RA. **Chem Senses** 1996 Dec; 21(6):719–27

Assessing sensory capacity of animals using operant technology. Arave CW. **J Anim Sci** 1996 Aug; 74(8):1996–2009 (65 ref.)

Synaptic connections between identified neuron types in the antennal lobe glomeruli of the cockroach, Periplaneta americana: I. Uniglomerular projection neurons. Distler PG, et al. **J Comp Neurol** 1997 Feb 17;378(3):307–19

Projection neurons of the mormyrid electrosensory lateral line lobe: morphology, immunohistochemistry, and synaptology. Grant K, et al. **J Comp Neurol** 1996 Nov 4; 375(1):18–42

Interneurons of the ganglionic layer in the mormyrid electrosensory lateral line lobe: morphology, immunohistochemistry, and synaptology. Meek J, et al. **J Comp Neurol** 1996 Nov 4;375(1):43–65

Distinct calcium signaling within neuronal growth cones and filopodia. Davenport RW, et al. **J Neurobiol** 1996 Sep; 31(1):1–15

Multiple factors shape development of olfactory glomeruli: insights from an insect model system. Oland LA, et al. **J Neurobiol** 1996 May;30(1):92–109 (136 ref.)

Spatial determinants of multisensory integration in cat superior colliculus neurons. Meredith MA, et al. **J Neurophysiol** 1996 May;75(5):1843–57

Cellular organization of an antennal mechanosensory pathway in the cockroach, Periplaneta americana. Burdohan JA, et al. **J Neurosci** 1996 Sep 15;16(18):5830–43

Electrophysiological responses of three chemosensory systems in the carp to pesticides. Ishida Y, et al. **Physiol Behav** 1996 Aug;60(2):633–8

ULTRASTRUCTURE

Organization of the antennal motor system in the sphinx moth Manduca sexta. Kloppenburg P, et al. **Cell Tissue Res** 1997 Feb;287(2):425–33

Ultrastructure of the Eimer's organ of the star–nosed mole. Catania KC. **J Comp Neurol** 1996 Feb 12;365(3):343–54

Structural plasticity of identified glomeruli in the antennal lobes of the adult worker honey bee. Winnington AP, et al. **J Comp Neurol** 1996 Feb 12;365(3):479–90

SENSITIVITY AND SPECIFICITY

Statistical methodology: I. Incorporating the prevalence of disease into the sample size calculation for sensitivity and specificity [see comments] Buderer NM. **Acad Emerg Med** 1996 Sep;3(9):895–900 (5 ref.). Comment in: Acad Emerg Med 1996 Sep;3(9):824.

"Sensitivity" and "specificity" reconsidered: the meaning of these terms in analytical and diagnostic settings. Saah AJ, et al. **Ann Intern Med** 1997 Jan 1;126(1):91–4

Domain specificity of the subtests of the Mini–Mental State Examination. Tierney MC, et al. **Arch Neurol** 1997 Jun; 54(6):713–6

The relationships among performance measures in the selection of diagnostic tests. Einstein AJ, et al. **Arch Pathol Lab Med** 1997 Feb;121(2):110–7

Comparing the sensitivities and specificities of two diagnostic procedures performed on the same group of patients. Hawass NE. **Br J Radiol** 1997 Apr;70:360–6

What does "functional sensitivity" mean? [letter; comment] Sadler WA, et al. **Clin Chem** 1996 Dec;42(12):2051–2. Comment on: Clin Chem 1996 Jan;42(1):140–5.

Relative sensitivity of three endangered fishes, Colorado squawfish, bonytail, and razorback sucker, to selected metal pollutants. Buhl KJ. **Ecotoxicol Environ Saf** 1997 Jul; 37(2):186–92

High concentration of ciprofloxacin in urine invalidates EMIT results. Lora–Tamayo C, et al. **J Anal Toxicol** 1996 Sep;20(5):334

Statistical methods for the estimation of sensitivity and specificity of site–specific diagnostic tests. Ahn C. **J Periodontal Res** 1997 May;32(4):351–4

Selectivity or specificity? Validation of analytical methods from the perspective of an analytical chemist in the pharmaceutical industry. Vessman J. **J Pharm Biomed Anal** 1996 Jun;14(8–10):867–9

Validity, reliability, and sensitivity to change of a French version of the arthritis impact measurement scales 2 (AIMS2) in patients with rheumatoid arthritis treated with methotrexate. Pouchot J, et al. **J Rheumatol** 1996 Jan; 23(1):52–60

Effects of uncertain results on sensitivity and specificity of diagnostic tests [letter] Garcia–Romero H, et al. **Lancet** 1996 Dec 21–28;348(9043):1745–6

Discrepant analysis––or behaviour? Hilden J. **Lancet** 1997 Sep 27;350(9082):902

Apparent change in caseness in longitudinal studies. Selzer R, et al. **Psychol Med** 1997 Jan;27(1):237–40

Sensitivity to mechanical stimuli and the role of general sensory and perceptual processes in heartbeat detection. Knapp K, et al. **Psychophysiology** 1997 Jul;34(4):467–73

How independent are multiple 'independent' diagnostic classifications? Brenner H. **Stat Med** 1996 Jul 15; 15(13):1377–86

SENSITIVITY, CONTACT see **DERMATITIS, CONTACT**

SENSITIVITY TRAINING GROUPS

The geriatric obstacle course: a training session designed to help prehospital personnel recognize geriatric stereotypes and misconceptions [see comments] Fleisher FI, et al. **J Emerg Med** 1996 Jul–Aug;14(4):439–44. Comment in: J Emerg Med 1996 Jul–Aug;14(4):499–500.

Brief reactive psychosis induced by sensitivity training: similarities between sensitivity training and brainwashing situations. Satoh S, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):261–5

ORGANIZATION & ADMINISTRATION

Consciousness–raising groups as a multicultural awareness approach: an experience with counselor trainees. Leonard PJ. **Cult Divers Ment Health** 1996;2(2):89–98

SENSITIZATION, IMMUNOLOGIC see **IMMUNIZATION**

SENSORY AIDS

Virtual reality: an assistive technology in neurological rehabilitation. Rose FD, et al. **Curr Opin Neurol** 1996 Dec; 9(6):461–7 (53 ref.)

Work environment of blind computer specialists in Japan. Nagaoka H, et al. **Disabil Rehabil** 1997 Jul;19(7):293–6

Reading with magnifiers. Den Brinker BP, et al. **Ergonomics** 1996 Oct;39(10):1231–48 (90 ref.)

A system for converting print into braille. Blenkhorn P. **IEEE Trans Rehabil Eng** 1997 Jun;5(2):121–9

A system for enabling blind people to identify landmarks: the sound buoy. Blenkhorn P, et al. **IEEE Trans Rehabil Eng** 1997 Sep;5(3):276–8

Automatic visual to tactile translation––Part I: Human factors, access methods, and image manipulation. Way TP, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):81–94 (90 ref.)

Automatic visual to tactile translation––Part II: Evaluation of the TACTile Image Creation System. Way TP, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):95–105

Use of an acoustic orientation system by two adolescents with blindness and mental retardation: a 12–month follow–up. Lancioni GE, et al. **Int J Rehabil Res** 1997 Jun; 20(2):217–20

Low vision and surfing. Owen J, et al. **Optom Vis Sci** 1996 Aug;73(8):558–61

National survey of the impact of low vision device use among veterans [see comments] Watson GR, et al. **Optom Vis Sci** 1997 May;74(5):249–59. Comment in: Optom Vis Sci 1997 May;74(5):237–8.

Veterans' use of low vision devices for reading [see comments] Watson GR, et al. **Optom Vis Sci** 1997 May; 74(5):260–5. Comment in: Optom Vis Sci 1997 May;74(5):237–8.

A visual orientation system for promoting indoor travel in persons with profound developmental disabilities and visual impairment. Lancioni GE, et al. **Percept Mot Skills** 1996 Oct;83(2):619–26

Psychophysics of reading––XIV. The page navigation problem in using magnifiers. Beckmann PJ, et al. **Vision Res** 1996 Nov;36(22):3723–33

[Use of a new optoelectronic vision aid for highly visually handicapped patients] Rohrschneider K, et al. **Klin Monatsbl Augenheilkd** 1997 Feb;210(2):105–10 (Eng. Abstr.) **(Ger)**

STANDARDS

Effects of overlay symbology in night vision goggles on accommodation and attention shift. Schor CM, et al. **Aviat Space Environ Med** 1996 Nov;67(11):1039–47

The necessary field of view to read with an optimal stand magnifier. Fine EM, et al. **J Am Optom Assoc** 1996 Jul; 67(7):382–9

Visually impaired observers require a larger window than normally sighted observers to read from a scroll display. Fine EM, et al. **J Am Optom Assoc** 1996 Jul;67(7):390–6

STATISTICS & NUMERICAL DATA

Iowa's pediatric low vision services. Wilkinson ME, et al. **J Am Optom Assoc** 1996 Jul;67(7):397–402

SENSORY AND AUTONOMIC NEUROPATHIES, HEREDITARY see **NEUROPATHIES, HEREDITARY SENSORY AND AUTONOMIC**

SENSORY DEPRIVATION

Morphology of the recovery from form deprivation myopia in the chick. Liang H, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):41–4

Deprivation of form vision suppresses diurnal cycling of retinal levels of leu–enkephalin. McKenzie C, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S79–81

Dopaminergic behaviour in chicken retina and the effect of form deprivation. Megaw PL, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S76–8

Atropine penalisation versus occlusion as the primary treatment for amblyopia. Foley–Nolan A, et al. **Br J Ophthalmol** 1997 Jan;81(1):54–7

NGF prevents the changes induced by monocular deprivation during the critical period in rats. Yan HQ, et al. **Brain Res** 1996 Jan 15;706(2):318–22

Synaptophysin–like immunoreactivity in the rat olfactory bulb during postnatal development and after restricted early olfactory experience. Johnson BA, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):24–30

Results of occlusion therapy in anisomyopic amblyopia with myelinated nerve fibers. Käsmann B, et al. **Ger J Ophthalmol** 1996 Jul;5(4):241–5

Retinal function with lens–induced myopia compared with form–deprivation myopia in chicks. Fujikado T, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 May;235(5):320–4

Development of 5'–nucleotidase staining in the olfactory bulbs of normal and naris–occluded rats. Clemow DB, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):901–11

Regulation of c–Fos mRNA and fos protein expression in olfactory bulbs from unilaterally odor–deprived adult mice. Jin BK, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):971–82

Activity blockade does not prevent the construction of olfactory glomeruli in the moth Manduca sexta. Oland LA, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):983–96

Retinal control on the axial length mediated by transforming growth factor–beta in chick eye. Honda S, et al. **Invest Ophthalmol Vis Sci** 1996 Nov;37(12):2519–26

Treatment for amblyopia: results using occlusive contact lens. Eustis HS, et al. **J Pediatr Ophthalmol Strabismus** 1996 Nov–Dec;33(6):319–22

Visual deprivation myopia with translucent and black goggles. Yoshino Y, et al. **Ophthalmologica** 1997;211(1):4–7

The optokinetic response differences between congenital profound and nonprofound unilateral visual deprivation. Shawkat FS, et al. **Ophthalmology** 1995 Nov; 102(11):1615–22

Temporal aspects of contrast visual evoked potentials in the pigmented rat: effect of dark rearing. Pizzorusso T, et al. **Vision Res** 1997 Feb;37(4):389–95

PHYSIOLOGY

The effect of form deprivation on retinal leu-enkephalin levels is mediated by a rod-driven pathway. Megaw P, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):58-60

The effects of early vestibular deprivation on the motor development in the rat. Geisler HC, et al. **Behav Brain Res** 1997 Jun;86(1):89-96

The forebrain of the blind cave fish Astyanax hubbsi (Characidae). I. General anatomy of the telencephalon. Riedel G. **Brain Behav Evol** 1997;49(1):20-38

The forebrain of the blind cave fish Astyanax hubbsi (Characidae). II. Projections of the olfactory bulb. Riedel G, et al. **Brain Behav Evol** 1997;49(1):39-52

The contribution of NMDA receptors to the visual response in animals that have been partially monocularly deprived. Czepita D, et al. **Brain Res** 1996 Jul 22;728(1):7-12

The c-Fos transcription factor in the auditory pathway of the juvenile rat: effects of acoustic deprivation and repetitive stimulation. Keilmann A, et al. **Brain Res** 1997 Apr 11;753(2):291-8

Attenuation of Mg2(+)-block of synaptic N-methyl-D-aspartate receptors in the visual cortex of rats raised under optic nerve blockade. Yoshimura H, et al. **Brain Res** 1996 Sep 9;733(1):108-12

Sensory regulation of immediate-early gene expression in mammalian visual cortex: implications for functional mapping and neural plasticity. Kaczmarek L, et al. **Brain Res Brain Res Rev** 1997 Apr;23(3):237-56 (169 ref.)

Different effects of visual deprivation on vasoactive intestinal polypeptide (VIP)-containing cells in the retinas of juvenile and adult rats. Herbst H, et al. **Exp Brain Res** 1996 Oct; 111(3):345-55

Visual deprivation at the critical period modulates photic evoked responses. Yan HQ, et al. **Int J Neurosci** 1995 Dec; 83(3-4):241-52

Growth of the two layers of the chick sclera is modulated reciprocally by visual conditions. Marzani D, et al. **Invest Ophthalmol Vis Sci** 1997 Aug;38(9):1726-39

Plasticity of geniculocortical afferents following brief or prolonged monocular occlusion in the cat. Antonini A, et al. **J Comp Neurol** 1996 May 20;369(1):64-82

Temporary sensory deprivation changes calcium-binding proteins levels in the auditory brainstem. Caicedo A, et al. **J Comp Neurol** 1997 Feb 3;378(1):1-15

Metabolic and neurochemical plasticity of gamma-aminobutyric acid-immunoreactive neurons in the adult macaque striate cortex following monocular impulse blockade: quantitative electron microscopic analysis. Nie F, et al. **J Comp Neurol** 1996 Jul 1;370(3):350-66

Somatosensory assessment: can seeing produce feeling? Halligan PW, et al. **J Neurol** 1997 Mar;244(3):199-203

Spatial memory and path integration studied by self-driven passive linear displacement. I. Basic properties. Israël I, et al. **J Neurophysiol** 1997 Jun;77(6):3180-92

Blockade of GABAergic inhibition reveals reordered cortical somatotopic maps in rats that sustained neonatal forelimb removal. Lane RD, et al. **J Neurophysiol** 1997 May; 77(5):2723-35

Olfactory bulb recovery after early sensory deprivation. Cummings DM, et al. **J Neurosci** 1997 Oct 1;17(19):7433-40

A discussion of activity-dependent forms of synaptic weakening and their possible role in ocular dominance plasticity. Dudek SM. **J Physiol Paris** 1996;90(3-4):167-70 (38 ref.)

Visual detection in monkeys with blindsight. Cowey A, et al. **Neuropsychologia** 1997 Jul;35(7):929-39

Early song-deprivation affects the expression of protein kinase C in the song control nuclei of the zebra finch during a sensitive period of song learning. Sakaguchi H, et al. **Neuroreport** 1997 Aug 18;8(12):2645-50

Auditory deprivation modifies sleep in the guinea-pig. Pedemonte M, et al. **Neurosci Lett** 1997 Feb 14;223(1):1-4

Focal brain stimulation in healthy humans: motor maps changes following partial hand sensory deprivation. Rossini PM, et al. **Neurosci Lett** 1996 Aug 23;214(2-3):191-5

Deafferentation of the olfactory bulbs of male rats reduces erection to remote cues from females. Edwards DA, et al. **Physiol Behav** 1997 Jul;62(1):145-9

Differential effects of peripheral manipulations on vibrissae-related patterns in the trigeminal brainstem. Chiaia NL, et al. **Somatosens Mot Res** 1996;13(2):81-93

Structure-function relationships in rat brainstem subnucleus interpolaris: XII. neonatal deafferentation effects on cell morphology. Jacquin MF, et al. **Somatosens Mot Res** 1995; 12(3-4):209-33

Widespread activation of barrel cortex by small numbers of neonatally spared whiskers. Maier DL, et al. **Somatosens Mot Res** 1996;13(3-4):245-53

The immediate effects of peripheral deafferentation on neurons of the cuneate nucleus in raccoons. Northgrave SA, et al. **Somatosens Mot Res** 1996;13(2):103-13

Sensory deprivation in spinal cord injury--an essay. Crossman MW. **Spinal Cord** 1996 Oct;34(10):573-7 (28 ref.)

Selective expression and rapid regulation of GABAA receptor subunits in geniculocortical neurons of macaque dorsal lateral geniculate nucleus. Hendry SH, et al. **Vis Neurosci** 1996 Mar-Apr;13(2):223-35

Concentrations of biogenic amines in fundal layers in chickens with normal visual experience, deprivation, and after reserpine application. Ohngemach S, et al. **Vis Neurosci** 1997 May-Jun;14(3):493-505

Functional architecture of area 17 in normal and monocularly deprived marmosets (Callithrix jacchus). Sengpiel F, et al. **Vis Neurosci** 1996 Jan-Feb;13(1):145-60

The effect of an interrupted daily period of normal visual stimulation on form deprivation myopia in chicks. Napper GA, et al. **Vision Res** 1997 Jun;37(12):1557-64

[Form deprivation myopia caused by keratitis scrophulosa] Meyer C, et al. **Ophthalmologe** 1996 Aug;93(4):361-6 (Eng. Abstr.) **(Ger)**

[Role of perceptive training in overcoming the sequelae of visual deprivation in children with low vision] Grigor'eva LP. **Fiziol Cheloveka** 1996 Sep-Oct;22(5):85-91 **(Rus)**

[Effect of early visual deprivation on the response to new environmental stimuli in early human ontogeny] Stroganova TA, et al. **Fiziol Cheloveka** 1996 Sep-Oct; 22(5):20-9 **(Rus)**

[The effect of anterior lesions to the medial forebrain bundle on the motor activity evoked by a sensory deficit (sensory drive) in rats] Owczarek K, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May-Jun; 46(3):504-12 (Eng. Abstr.) **(Rus)**

SENSORY GANGLIA see **GANGLIA, SENSORY**

SENSORY MOTOR PERFORMANCE see **PSYCHOMOTOR PERFORMANCE**

SENSORY NEUROPATHY, HEREDITARY see **NEUROPATHIES, HEREDITARY SENSORY AND AUTONOMIC**

SENSORY THRESHOLDS

Digital sensory nerve conduction velocity and vibration perception threshold in peripheral neurological test for hand-arm vibration syndrome. Sakakibara H, et al. **Am J Ind Med** 1996 Aug;30(2):219-24

Computer-assisted quantitative sensorimotor testing in patients with carpal and cubital tunnel syndromes. Dellon AL, et al. **Ann Plast Surg** 1997 May;38(5):493-502

Validation of cutaneous pressure threshold measurements for the evaluation of hand function. Dellon ES, et al. **Ann Plast Surg** 1997 May;38(5):485-92

Thresholds of microwave-evoked warmth sensations in human skin. Blick DW, et al. **Bioelectromagnetics** 1997; 18(6):403-9

Supraspinal influence on hindlimb withdrawal thresholds and mustard oil-induced secondary allodynia in rats. Mansikka H, et al. **Brain Res Bull** 1997;42(5):359-65

Odor perception and beliefs about risk. Dalton P. **Chem Senses** 1996 Aug;21(4):447-58

Some basic psychophysics of calcium salt solutions. Tordoff MG. **Chem Senses** 1996 Aug;21(4):417-24

Construction of a quantitative three-dimensional model for odor quality using comparative molecular field analysis (CoMFA). Yoshii F, et al. **Chem Senses** 1996 Apr; 21(2):201-10

Impaired vibration perception threshold and long-term mean HbA1c in patients with type 1 diabetes mellitus. Kullberg CE, et al. **Diabet Med** 1996 Dec;13(12):1027-32

Reproducibility of Michigan Neuropathy Screening Instrument (MNSI). A comparison with tests using the vibratory and thermal perception thresholds. Bax G, et al. **Diabetes Care** 1996 Aug;19(8):904-5

The tactile circumferential discriminator. A new, simple screening device to identify diabetic patients at risk of foot ulceration. Vileikyte L, et al. **Diabetes Care** 1997 Apr; 20(4):623-6

Standardization of barostat procedures for testing smooth muscle tone and sensory thresholds in the gastrointestinal tract. The Working Team of Glaxo-Wellcome Research, UK. Whitehead WE, et al. **Dig Dis Sci** 1997 Feb; 42(2):223-41

Integration of a sensory component into the accommodation model reveals differences between emmetropia and late-onset myopia. Jiang BC. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1511-6

Dark-adapted thresholds in children with histories of mild retinopathy of prematurity. Reisner DS, et al. **Invest Ophthalmol Vis Sci** 1997 May;38(6):1175-83

The joint action of two mixed stimuli with a bivariate threshold. Fu CY, et al. **J Biopharm Stat** 1996 Jul; 6(3):271-81

Prospective study of paclitaxel-induced peripheral neuropathy with quantitative sensory testing. Forsyth PA, et al. **J Neurooncol** 1997 Oct;35(1):47-53

Utility of square-wave gratings to assess perioral spatial acuity. Patel J, et al. **J Oral Maxillofac Surg** 1997 Jun; 55(6):593-601

Cry threshold predicts regulatory disorder in newborn infants. Zeskind PS, et al. **J Pediatr Psychol** 1996 Dec; 21(6):803-19

Comparison in young healthy volunteers of 3 different parameters of constant current stimulation used to determine sensory thresholds in the lower urinary tract. Wyndaele JJ, et al. **J Urol** 1996 Oct;156(4):1415-7

The predictive value of sensation testing in the development of neuropathic ulceration on the hands of leprosy patients. Kuipers M, et al. **Lepr Rev** 1994 Sep;65(3):253-61

Functional sensibility of the hand in leprosy patients. van Brakel WH, et al. **Lepr Rev** 1997 Mar;68(1):25-37

Sensory discrimination in the larynx and hypopharynx. Aviv JE. **Otolaryngol Head Neck Surg** 1997 Mar;116(3):331-4

Relationship between thresholds to thermally and to mechanically induced pain in patients with eating disorders and healthy subjects. de Zwaan M, et al. **Pain** 1996 Oct; 67(2-3):511-2

Vibrotactile threshold is elevated in temporomandibular disorders. Hollins M, et al. **Pain** 1996 Sep;67(1):89-96

Measurement of mechanical thresholds, plasma cortisol and catecholamines in control and lame cattle: a preliminary study. Ley SJ, et al. **Res Vet Sci** 1996 Sep;61(2):172-3

Vibrotactile perception thresholds as determined by two different devices in a working population. Wenemark M, et al. **Scand J Work Environ Health** 1996 Jun;22(3):204-10

Spatial acuity of touch: ubiquitous decline with aging revealed by repeated threshold testing. Stevens JC, et al. **Somatosens Mot Res** 1996;13(1):1-10

Sensory thresholds and neurophysiological correlates of human perceptual learning. Skrandies W, et al. **Spat Vis** 1996;9(4):475-89

[Evaluation of the views of 189 mothers on the sensory capacities of their newborn infants. Can the information be a tool for prevention?] Berthier M, et al. **Arch Pediatr** 1996 Oct;3(10):954-8 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Concentration-effect relations for intravenous lidocaine infusions in human volunteers: effects on acute sensory thresholds and capsaicin-evoked hyperpathia. Wallace MS, et al. **Anesthesiology** 1997 Jun;86(6):1262-72

MK-801 differentially affects dopamine D1 and D2 receptor agonist-induced behavioral tolerance and desensitization. Asin KE, et al. **Brain Res** 1996 Jun 24;725(1):67-74

Serotonergic modulation of 3,4-methylenedioxymethamphetamine (MDMA)-elicited reduction of response rate but not rewarding threshold in accumbal self-stimulation. Lin HQ, et al. **Brain Res** 1997 Jan 9;744(2):351-7

Effects of intrathecally administered nociceptin, an opioid receptor-like1 (ORL1) receptor agonist, on the thermal hyperalgesia induced by carageenan injection into the rat paw. Yamamoto T, et al. **Brain Res** 1997 Apr 18; 754(1-2):329-32

The antinociceptive effect of fluvoxamine. Schreiber S, et al. **Eur Neuropsychopharmacol** 1996 Nov;6(4):281-4

Threshold changes in auditory brainstem response (ABR) due to the administration of kanamycin in dogs. Uzuka Y, et al. **Exp Anim** 1996 Oct;45(4):325-31

Intradermal recombinant human nerve growth factor induces pressure allodynia and lowered heat-pain threshold in humans. Dyck PJ, et al. **Neurology** 1997 Feb;48(2):501-5

Role of spinal cyclooxygenase (COX)-2 on thermal hyperalgesia evoked by carageenan injection in the rat. Yamamoto T, et al. **Neuroreport** 1997 Jul 7;8(9-10):2179-82

Lidocaine in the rostroventromedial medulla and the periaqueductal gray attenuates allodynia in neuropathic rats. Pertovaara A, et al. **Neurosci Lett** 1996 Nov 1; 218(2):127-30

Oxytocin increases nociceptive thresholds in a long-term perspective in female and male rats. Petersson M, et al. **Neurosci Lett** 1996 Jul 12;212(2):87-90

Effects of NMDA antagonists on seizure thresholds induced by intrahippocampal microdialysis of picrotoxin in freely moving rats. Sierra-Paredes G, et al. **Neurosci Lett** 1996 Oct 25;218(1):62-6

Evidence for delayed neurotoxicity produced by methylmercury. Rice DC. **Neurotoxicology** 1996 Fall-Winter;17(3-4):583-96 (31 ref.)

Tactile allodynia and formalin hyperalgesia in streptozotocin-diabetic rats: effects of insulin, aldose reductase inhibition and lidocaine. Calcutt NA, et al. **Pain** 1996 Dec;68(2-3):293-9

Neuronal model of tactile allodynia produced by spinal strychnine: effects of excitatory amino acid receptor antagonists and a mu-opiate receptor agonist. Sorkin LS, et al. **Pain** 1996 Dec;68(2-3):283-92

Single intrathecal injections of dynorphin A or des-Tyr-dynorphins produce long-lasting allodynia in rats: blockade by MK-801 but not naloxone. Vanderah TW, et al. **Pain** 1996 Dec;68(2-3):275-81

PHYSIOLOGY

Acid infusion does not affect intraesophageal balloon distention-induced sensory and pain thresholds [see comments] DeVault KR. **Am J Gastroenterol** 1997 Jun; 92(6):947-9. Comment in: Am J Gastroenterol 1997 Jun;92(6):919-20.

Low pain sensitivity and stability of physical aggression in boys. Séguin JR, et al. **Ann N Y Acad Sci** 1996 Sep 20; 794:408-10

A pilot study to determine the potential application of the pressure specified sensory device in the maxillofacial region. Grime PD. **Br J Oral Maxillofac Surg** 1996 Dec; 34(6):500-3

Paradoxical heat sensation in patients with multiple sclerosis. Evidence for a supraspinal integration of temperature sensation. Hansen C, et al. **Brain** 1996 Oct;119 (Pt 5):1729-36

Behavioral sensitivity of the European blind cave salamander, Proteus anguinus, and a Pyrenean newt, Euproctus asper, to electrical fields in water. Schlegel PA. **Brain Behav Evol** 1997;49(3):121-31

The effects of muscle conditioning on movement detection

thresholds at the human forearm. Wise AK, et al. **Brain Res** 1996 Sep 30;735(1):125–30

Thresholds for detection of motion direction during passive lateral whole-body acceleration in normal subjects and patients with bilateral loss of labyrinthine function. Gianna C, et al. **Brain Res Bull** 1996;40(5–6):443–7; discussion 448–9

Detection thresholds for object motion and self-motion during vestibular and visuo-oculomotor stimulation. Kolev O, et al. **Brain Res Bull** 1996;40(5–6):451–7; discussion 457–8

Suprathreshold auditory cortex activation visualized by intrinsic signal optical imaging. Bakin JS, et al. **Cereb Cortex** 1996 Mar–Apr;6(2):120–30

Comparison of models of odor interaction. Cain WS, et al. **Chem Senses** 1995 Dec;20(6):625–37

A study of the test–retest reliability of ten olfactory tests. Doty RL, et al. **Chem Senses** 1995 Dec;20(6):645–56

Diurnal rhythmicity for visual sensitivity in humans? Tassi P, et al. **Chronobiol Int** 1997 Jan;14(1):35–48

A cross-sectional study comparing two quantitative sensory testing devices in individuals with diabetes. Maser RE, et al. **Diabetes Care** 1997 Feb;20(2):179–81

Barostat review [letter] Roelofs JM, et al. **Dig Dis Sci** 1997 Sep;42(9):1957–8

Intense exercise increases the post-exercise threshold for sweating. Kenny GP, et al. **Eur J Appl Physiol** 1997; 76(2):116–21

Contrast-dependent dissociation of visual recognition and detection fields. Strasburger H, et al. **Eur J Neurosci** 1996 Aug;8(8):1787–91

Sensory conduction velocity of dorsal nerve of the penis during pharmacoerection: a more physiological technique? Herbaut AG, et al. **Eur Urol** 1996;30(1):60–4

Limitation of sensitization to injured parts of receptive fields in human skin C-nociceptors. Schmelz M, et al. **Exp Brain Res** 1996 Apr;109(1):141–7

Colour contrast thresholds are normal in functional amblyopia. Mangelschots E, et al. **Eye** 1996;10 (Pt 4):479–84

Temporary threshold shift of vibratory sensation induced by a vibrating handle and its gripping force. Nishiyama K, et al. **Int Arch Occup Environ Health** 1996;69(1):45–52

Rectal hypersensitivity in the irritable bowel syndrome. Slater BJ, et al. **Int J Colorectal Dis** 1997;12(1):29–32

Temperature effects on vibrotactile sensitivity threshold measurements: implications for carpal tunnel screening tests. Klinenberg E, et al. **J Hand Surg [Am]** 1996 Jan; 21(1):132–7

Physiology of the aged Fischer 344 rat inferior colliculus: responses to contralateral monaural stimuli. Palombi PS, et al. **J Neurophysiol** 1996 Nov;76(5):3114–25

Low-threshold mechanoreceptive afferents in the human lingual nerve. Trulsson M, et al. **J Neurophysiol** 1997 Feb; 77(2):737–48

Classifying illusory contours: edges defined by "pacman" and monocular tokens. Westheimer G, et al. **J Neurophysiol** 1997 Feb;77(2):731–6

Assessment of vibrotactile sensitivity in patients with carpal tunnel syndrome. Checkosky CM, et al. **J Occup Environ Med** 1996 Jun;38(6):593–601

Reference values for touch sensibility thresholds in healthy Nepalese volunteers. Kets CM, et al. **Lepr Rev** 1996 Mar; 67(1):28–38

Corticomotor threshold to magnetic stimulation: normal values and repeatability. Mills KR, et al. **Muscle Nerve** 1997 May;20(5):570–6

Quantitative sensory testing. Yarnitsky D. **Muscle Nerve** 1997 Feb;20(2):198–204 (66 ref.)

Olfactory dysfunction in Down's Syndrome. Murphy C, et al. **Neurobiol Aging** 1996 Jul–Aug;17(4):631–7

The detection and discrimination of categorical yellow. Sharanjeet-Kaur, et al. **Ophthalmic Physiol Opt** 1997 Jan; 17(1):32–7

Olfactory threshold after nasal allergen challenge. Hinriksdóttir I, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan–Feb; 59(1):36–8

Sensory dysfunction in fibromyalgia patients with implications for pathogenic mechanisms. Kosek E, et al. **Pain** 1996 Dec;68(2–3):375–83

Influence of sympathetic activity, temperature, ischemia and diazepam on thermal and vibration thresholds. Meh D, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R305–6

Negative correlation of reaction times and the auditory P50 in a Go, No-Go paradigm. Ninomiya H, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):171–3

Pain perception and cardiovascular responses in men with positive parental history for hypertension. al'Absi M, et al. **Psychophysiology** 1996 Nov;33(6):655–61

Exteroceptive suppression of temporalis and masseter muscle activity is enhanced in offspring of hypertensives. France CR, et al. **Psychophysiology** 1996 Sep;33(5):601–4

Sensitivity to mechanical stimuli and the role of general sensory and perceptual processes in heartbeat detection. Knapp K, et al. **Psychophysiology** 1997 Jul;34(4):467–73

Attentional modulation of the cardiac defense response in humans. Vila J, et al. **Psychophysiology** 1997 Jul;34(4):482–7

The effects of aging on information-processing channels in the sense of touch: III. Differential sensitivity to changes in stimulus intensity. Gescheider GA, et al. **Somatosens Mot Res** 1996;13(1):73–80

Sensitivity to full-field visual movement compatible with head rotation: variations with eye-in-head position. Harris LR, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):277–82

Comparison of contrast-normalization and threshold models of the responses of simple cells in cat striate cortex. Tolhurst DJ, et al. **Vis Neurosci** 1997 Mar–Apr; 14(2):293–309

Perimetric motion thresholds are elevated in glaucoma suspects and glaucoma patients. Bosworth CF, et al. **Vision Res** 1997 Jul;37(14):1989–97

Metric analysis of threshold spectral sensitivity in the honeybee. Brandt R, et al. **Vision Res** 1997 Feb; 37(4):425–39

Principles of an adaptive method for measuring the slope of the psychometric function. King-Smith PE, et al. **Vision Res** 1997 Jun;37(12):1595–604

Changes in human infants' sensitivity to slow displacements over the first 6 months. Roessler JS, et al. **Vision Res** 1997 Feb;37(4):417–23

Psychophysical evidence for losses in rod sensitivity in the aging visual system. Sturr JF, et al. **Vision Res** 1997 Feb; 37(4):475–81

SENTINEL HEALTH EVENT see **SENTINEL SURVEILLANCE**

SENTINEL SURVEILLANCE

Epidemiological and molecular characteristics of HIV infection in Gabon, 1986–1994. Delaporte E, et al. **AIDS** 1996 Jul;10(8):903–10

Prevalence of abnormal median nerve conduction in applicants for industrial jobs. Bingham RC, et al. **Am J Ind Med** 1996 Sep;30(3):355–61

Lead poisoning in telephone cable strippers: a new setting for an old problem. Lax MB, et al. **Am J Ind Med** 1996 Sep;30(3):351–4

Communicable diseases surveillance. **Commun Dis Intell** 1997 Jun 12;21(12):166–72 (0 ref.)

Developing a standard enhanced surveillance system for food poisoning. **Commun Dis Rep CDR Wkly** 1997 Jun 13; 7(24):207, 210

A method for timely assessment of influenza-associated mortality in the United States. Simonsen L, et al. **Epidemiology** 1997 Jul;8(4):390–5

Control of enterohaemorrhagic Escherichia coli infection: the need for a network involving microbiological laboratories and clinical and public health institutions [editorial] Karch H. **Eur J Clin Microbiol Infect Dis** 1996 Apr;15(4):276–80

Surveillance of infections in hospital: agents and antibiotic-resistance. Riccardi F, et al. **Eur J Epidemiol** 1997 Feb;13(2):217–21

Sentinel surveillance of Chlamydia trachomatis infection in women terminating pregnancy. Skjeldestad FE, et al. **Genitourin Med** 1997 Feb;73(1):29–32

An international registry for toxic inhalation and pulmonary edema: notes from work in progress. Guidotti TL. **Int Arch Occup Environ Health** 1996;68(6):380–6 (28 ref.)

Experience of European collaboration in influenza surveillance in the winter of 1993–1994. Fleming DM, et al. **J Public Health Med** 1996 Jun;18(2):133–42

Sentinel centres for global health security [letter; comment] Rosenberg BH, et al. **Lancet** 1997 Mar 8;349(9053):734–5 . Comment on: Lancet 1996 Dec 14;348(9042):1599.

Establishment of a work-related diseases surveillance system in Taiwan, Republic of China. Wu TN, et al. **Prev Med** 1996 Nov–Dec;25(6):725–9

Surveillance of disease and health with particular reference to infectious disease in Israel. Yarrow A. **Public Health Rev** 1996;24(1):1–16

[The Association of Computerized Medical Records Users in Perinatology, Obstetrics and Gynecology Sentinel Network for maternity hospitals. I. Perinatal health indicators in 1994] Mamelle N, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(6):568–76 (Eng. Abstr.) **(Fre)**

[Evaluation of the Ivory Coast sentinel surveillance system for antimalarial drug sensitivity] Diawara B, et al. **Med Trop (Mars)** 1996;56(4):352–6 (Eng. Abstr.) **(Fre)**

VETERINARY

Spatial analysis of seroconversion of sentinel cattle to bluetongue viruses in Queensland. Ward MP, et al. **Aust Vet J** 1996 Aug;74(2):128–31

International disease surveillance: summary for 1995. **Vet Rec** 1996 May 25;138(21):509–10

SEOUL VIRUS see **HANTAVIRUS**

SEPHAROSE

Three-dimensional culture of canine articular chondrocytes on multiple transplantable substrates. Cook JL, et al. **Am J Vet Res** 1997 Apr;58(4):419–24

The use of Ni-nitrilotriacetic acid agarose for estimation of affinities of hexahistidine-tagged Fab to single-stranded DNA. Komissarov AA, et al. **Anal Biochem** 1997 Apr 5; 247(1):123–9

Mesoscopic gels at low agarose concentration: perturbation effects of ethanol. Bulone D, et al. **Biophys J** 1997 Jan; 72(1):388–94

Method for preparation of epidermal imprints using agarose. Mathur J, et al. **Biotechniques** 1997 Feb;22(2):280–2

Agarose-based system for separation of short tandem repeat loci. White HW, et al. **Biotechniques** 1997 May;22(5):976–80

Resolution of apolipoprotein B repeat unit position variants on agarose, denaturing, and native polyacrylamide gels. Prinz M, et al. **Electrophoresis** 1996 Jul;17(7):1190–3

Dosimetry of 60Co and 192Ir gamma-irradiated agarose gels by proton relaxation time measurement and NMR imaging, in a 0–100 Gy dose range. Chalansonnet A, et al. **Health Phys** 1997 May;72(5):708–12

Frequency dependence of acoustic backscatter from 5 to 65 MHz ($0.06 < ka < 4.0$) of polystyrene beads in agarose. Bridal SL, et al. **J Acoust Soc Am** 1996 Sep;100(3):1841–8

The effects of quinolones on the adherence of type-1 fimbriated Escherichia coli to mannosylated agarose beads. Breines DM, et al. **J Antimicrob Chemother** 1995 Dec; 36(6):911–25

Peptide synthesis on Sepharose beads. Tegge W, et al. **J Pept Res** 1997 Apr;49(4):355–62

Evaluation of angiogenic inhibitors with an in vivo quantitative angiogenesis method using agarose microencapsulation and mouse hemoglobin enzyme-linked immunosorbent assay. Okada N, et al. **Jpn J Cancer Res** 1996 Sep;87(9):952–7

Purification of PCR products from agarose gels for direct sequencing. Brosius FC 3rd, et al. **Methods Mol Biol** 1996; 65:11–21

High molecular mass agarose matrix supports growth of bloodstream forms of pleomorphic Trypanosoma brucei strains in axenic culture. Vassella E, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):91–105

ANALOGS & DERIVATIVES

Intercomparison of DNA sizing ladders in electrophoretic separation matrices and their potential for accurate typing of the D1S80 locus. Kline MC, et al. **Appl Theor Electrophor** 1996;6(1):33–41

Serum cortisol binding capacity measured with Concanavalin A–Sepharose in patients with a recent inflammatory response. Bladon PT, et al. **Clin Chim Acta** 1996 Sep 30; 253(1–2):9–20

Use of thiopropyl sepharose for the synthesis of an adsorbent for the affinity chromatography of glutathione S-transferase. Glatz Z, et al. **J Chromatogr B Biomed Appl** 1997 Jan 24;688(2):239–43

Tissue culture adaptation of foot-and-mouth disease virus selects viruses that bind to heparin and are attenuated in cattle. Sa-Carvalho D, et al. **J Virol** 1997 Jul;71(7):5115–23

A novel method for the non-chromatographic purification of technetium-99m-labeled monoclonal antibodies: a study with B72.3 monoclonal antibody. Rosenzweig HS, et al. **Nucl Med Biol** 1994 Feb;21(2):171–8

CHEMISTRY

Cell adhesion mechanisms: modeling using derivatized beads and sea urchin cell systems. Roque RL, et al. **Acta Histochem** 1996 Nov;98(4):441–51

Eliciting macroporosity in polyacrylamide and agarose gels with polyethylene glycol. Charlionet R, et al. **Electrophoresis** 1996 Jan;17(1):58–66

Pore size of agarose gels by atomic force microscopy. Pernodet N, et al. **Electrophoresis** 1997 Jan;18(1):55–8

Use of excluded volume to increase the heterogeneity of pore size in agarose gels. Serwer P, et al. **Electrophoresis** 1996 Jun;17(6):971–6

Polyol-promoted adsorption of serum proteins to amphiphilic agarose-based adsorbents. Berna N, et al. **J Chromatogr A** 1997 Mar 14;764(2):193–200

Analysis of affinity supports by 13C CP/MAS NMR spectroscopy: application to carbonyldiimidazole- and novel tresyl chloride-synthesized agarose and silica gels. Zumbrink T, et al. **J Mol Recognit** 1995 Nov–Dec; 8(6):363–73

Diffusion of solutes in agarose and alginate gels: 1H and 23Na PFGSE and 23Na TQF NMR studies. Lundberg P, et al. **Magn Reson Med** 1997 Jan;37(1):44–52

METABOLISM

An immuno-isolative membrane capable of consuming cytolytic complement proteins. Morikawa N, et al. **J Biomater Sci Polym Ed** 1996;8(3):225–36

SEPSIS

From the bench to the bedside: the future of sepsis research. Executive summary of an American College of Chest Physicians, National Institute of Allergy and Infectious Disease, and National Heart, Lung, and Blood Institute Workshop. **Chest** 1997 Mar;111(3):744–53

Current understanding of sepsis. Wenzel RP, et al. **Clin Infect Dis** 1996 Mar;22(3):407–12 (44 ref.)

Epidemiology, diagnosis, and therapy of fungal infections in surgery. Giamarellou H, et al. **Infect Control Hosp Epidemiol** 1996 Aug;17(8):558–64 (64 ref.)

The cytokine response to critical illness. Foëx BA, et al. **J Accid Emerg Med** 1996 May;13(3):154–62 (58 ref.)

Sepsis [editorial; comment] Kapadia F. **J Assoc Physicians India** 1996 Jun;44(6):371–4. Comment on: J Assoc Physicians India 1996 Jun;44(6):407–14.

Sepsis in neonates and children: definitions, epidemiology, and outcome. Martinot A, et al. **Pediatr Emerg Care** 1997 Aug;13(4):277–81 (45 ref.)

Sepsis, septicaemia, sepsis syndrome, and septic shock: the correct definition and use [editorial] Odeh M. **Postgrad Med J** 1996 Feb;72(844):66

Proceedings of a meeting on sepsis and septic complications. North York, Ontario, Canada, October 12–13, 1995. **Shock** 1996;6 Suppl 1:S1–74

The adrenal response to sepsis [editorial] Remick DG. **Shock** 1997 Aug;8(2):146

[Sepsis caused by Candida in the neonatal period] Padovani EM, et al. **Pediatr Med Chir** 1997 Mar–Apr;19(2):83–8 (Eng. Abstr.) **(Ita)**

[Urosepsis] Moen H, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10;117(7):959–62 (13 ref.) (Eng. Abstr.) **(Nor)**

[Current concepts in sepsis] Vasilescu C. **Chirurgia (Bucur)** 1996 Jul–Aug;45(4):159–69 (42 ref.) **(Rum)**

[Sepsis: a pending subject for the 21st century (letter; comment)] Torrabadella de Reynoso P, et al. **Med Clin (Barc)** 1996 Jun 29;107(5):198–9. Comment on: Med Clin (Barc) 1995 Sep 16;105(8):304–7. **(Spa)**

BLOOD

Thrombocytopenia in the sepsis syndrome: role of hemophagocytosis and macrophage colony–stimulating factor. François B, et al. **Am J Med** 1997 Aug;103(2):114–20

Soluble E–selectin levels in sepsis and critical illness. Correlation with infection and hemodynamic dysfunction. Cummings CJ, et al. **Am J Respir Crit Care Med** 1997 Aug; 156(2 Pt 1):431–7

Nitric oxide synthase inhibition negates septic–induced alterations in cytoplasmic calcium homeostasis and membrane dynamics. Ismail NH, et al. **Am Surg** 1997 Jan; 63(1):20–3

Effect of carnitine on decrease of branched chain amino acids and glutamine in serum of septic rats. Hayashi N, et al. **Biol Pharm Bull** 1996 Jan;19(1):157–9

Activation of the contact system in patients with sepsis and with septic shock [letter; comment] Wuillemin WA, et al. **Blood** 1997 May 15;89(10):3893–4. Comment on: Blood 1996 Aug 1;88(3):881–6.

Activated platelets and impaired platelet function in intensive care patients analyzed by flow cytometry. Lundahl TH, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):218–20

Circulating complement proteins in patients with sepsis or systemic inflammatory response syndrome. Stöve S, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):175–83

Endothelial cell activity varies in patients at risk for the adult respiratory distress syndrome. Moss M, et al. **Crit Care Med** 1996 Nov;24(11):1782–6

Relation between pro– and anti–inflammatory cytokines and the production of nitric oxide (NO) in severe sepsis. Groeneveld PH, et al. **Cytokine** 1997 Feb;9(2):138–42

Lymphotoxin–alpha (TNF–beta) during sepsis. Sriskandan S, et al. **Cytokine** 1996 Dec;8(12):933–7

The cytokine–mediated imbalance between coagulant and anticoagulant mechanisms in sepsis and endotoxaemia. Levi M, et al. **Eur J Clin Invest** 1997 Jan;27(1):3–9 (56 ref.)

Serum erythropoietin levels in patients with sepsis and septic shock. Abel J, et al. **Eur J Haematol** 1996 Nov;57(5):359–63

Serum concentration of granulocyte colony stimulating factor in term and preterm infants. Chirico G, et al. **Eur J Pediatr** 1997 Apr;156(4):269–71

Correlations between endotoxin, interferon–gamma, biopterin and serum phospholipase A2–activities during lethal gram negative sepsis in rats. Hunsicker A, et al. **Eur J Surg** 1997 May;163(5):379–85

Electrolyte disturbances due to ouabain sensitive sodium potassium pump in erythrocytes of children with sepsis. Suri M, et al. **Indian J Med Res** 1997 Feb;105:67–71

Circulating adhesion molecules in the critically ill: a comparison between trauma and sepsis patients. Boldt J, et al. **Intensive Care Med** 1996 Feb;22(2):122–8

Serum MIP–1 alpha and IL–8 in septic patients. Fujishima S, et al. **Intensive Care Med** 1996 Nov;22(11):1169–75

Cytokine removal and cardiovascular hemodynamics in septic patients with continuous venovenous hemofiltration. Heering P, et al. **Intensive Care Med** 1997 Mar;23(3):288–96

Cleavage of plasma high molecular weight kininogen in surgical ICU patients. Karlsrud TS, et al. **Intensive Care Med** 1996 Aug;22(8):760–5

C–type natriuretic peptide in sepsis [letter] Mitaka C, et al. **Intensive Care Med** 1997 Mar;23(3):354–5

Nocturnal hypoxemia and oxygen desaturation events in neutropenic patients with sepsis or pneumonia [letter] von Eiff M, et al. **Intensive Care Med** 1996 Feb;22(2):174

Reciprocal changes in circulating interleukin–6 and its soluble receptor during evolving sepsis in leukocytopenic patients. Ostermann H, et al. **J Infect Dis** 1997 Sep;176(3):825–8

Antiinflammatory cytokine responses during clinical sepsis and experimental endotoxemia: sequential measurements of plasma soluble interleukin (IL)–1 receptor type II, IL–10, and IL–13. van der Poll T, et al. **J Infect Dis** 1997 Jan; 175(1):118–22

Red blood cell aggregation in experimental sepsis. Baskurt OK, et al. **J Lab Clin Med** 1997 Aug;130(2):183–90

Elevated selectin levels after severe trauma: a marker for sepsis and organ failure and a potential target for immunomodulatory therapy. Simons RK, et al. **J Trauma** 1996 Oct;41(4):653–62

Prediction of neonatal sepsis by thromboelastography. Grant HW, et al. **Pediatr Surg Int** 1997 Apr;12(4):289–92

Effect of crystalloid and colloid solutions on blood rheology in sepsis. Castro VJ, et al. **Shock** 1997 Aug;8(2):104–7

Hemostatic parameters in sepsis patients treated with anti–TNF alpha–monoclonal antibodies. Salat C, et al. **Shock** 1996 Oct;6(4):233–7

Steroid hormone alterations following induction of chronic intraperitoneal sepsis in male rats. Sharma AC, et al. **Shock** 1996 Aug;6(2):150–4

Plasminogen: an important hemostatic parameter in septic patients. Duboscq C, et al. **Thromb Haemost** 1997 Jun; 77(6):1090–5

Discrepancy between latex and ELISA D–dimer values in sepsis may be caused by human neutrophil elastase. Bach–Gansmo ET, et al. **Thromb Res** 1997 Apr 15; 86(2):141–52

[The circulating adhesion molecules sICAM–1 and sP–selectin in patients with sepsis] Egerer K, et al. **Anaesthesist** 1997 Jul;46(7):592–8 (Eng. Abstr.) **(Ger)**

[Diagnostic value of C–reactive protein levels in children with bone marrow transplantation] Pintér E, et al. **Orv Hetil** 1996 Jun 9;137(23):1259–62 (Eng. Abstr.) **(Hun)**

[Ultrastructural characteristics in neutrophilic leukocytes in patients with sepsis] Galankin VN, et al. **Patol Fiziol Eksp Ter** 1996 Jul–Sep;(3):13–8 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Morphine induces sepsis in mice. Hilburger ME, et al. **J Infect Dis** 1997 Jul;176(1):183–8

CLASSIFICATION

Introducing Critical Appraisal to studies of animal models investigating novel therapies in sepsis. Piper RD, et al. **Crit Care Med** 1996 Dec;24(12):2059–70 (111 ref.)

Transformation in our understanding of sepsis by emphasizing the pathogenetic role of the host's inflammatory reaction [letter; comment] Gramm HJ, et al. **Intensive Care Med** 1996 Jun;22(6):615–6. Comment on: Intensive Care Med 1995 Apr;21(4):302–9.

Clinical trials in sepsis: where do we stand? [see comments] Vincent JL. **J Crit Care** 1997 Mar;12(1):3–6 (17 ref.). Comment in: J Crit Care 1997 Mar;12(1):1–2.

COMPLICATIONS

Thrombocytopenia in the sepsis syndrome: role of hemophagocytosis and macrophage colony–stimulating factor. François B, et al. **Am J Med** 1997 Aug;103(2):114–20

The regional production of cytokines and lactate in sepsis–related multiple organ failure. Douzinas EE, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):53–9

Excess pyruvate and lactate production occurs in sepsis and is not caused by anaerobic glycolysis [letter; comment] Hunt TK. **Ann Surg** 1997 Jul;226(1):108–9. Comment on: Ann Surg 1996 Jul;224(1):97–102.

Predominant involvement of motor fibres in patients with critical illness polyneuropathy. Hund E, et al. **Br J Anaesth** 1997 Mar;78(3):274–8

Severe complications of perianal sepsis in patients with human immunodeficiency virus [letter] Sarela AI. **Br J Surg** 1996 Nov;83(11):1655–6

Plasma cytokine levels in patients with severe burn injury—with reference to the relationship between infection and prognosis. Yamada Y, et al. **Burns** 1996 Dec; 22(8):587–93

Septic thrombophlebitis of the portal vein [letter] Joly V, et al. **Clin Infect Dis** 1996 Aug;23(2):417–8

Pyridoxalated hemoglobin polyoxyethylene conjugate does not restore hypoxic pulmonary vasoconstriction in ovine sepsis. Fischer SR, et al. **Crit Care Med** 1997 Sep; 25(9):1551–9

Endothelial cell activity varies in patients at risk for the adult respiratory distress syndrome. Moss M, et al. **Crit Care Med** 1996 Nov;24(11):1782–6

The in vivo effect of recombinant human granulocyte–colony stimulating factor in neutropenic neonates with sepsis. Barak Y, et al. **Eur J Pediatr** 1997 Aug;156(8):643–6

Sepsis–associated cholestasis [editorial; comment] Moseley RH. **Gastroenterology** 1997 Jan;112(1):302–6. Comment on: Gastroenterology 1997 Jan;112(1):214–25.

Acquired isolated factor VII deficiency during sepsis. Biron C, et al. **Haemostasis** 1997 Mar–Apr;27(2):51–6

A prospective randomized trial of ceftazidime versus netilmicin plus mezlocillin in the empirical therapy of presumed sepsis in cirrhotic patients. McCormick PA, et al. **Hepatology** 1997 Apr;25(4):833–6

Polyneuropathies in critically ill patients: a prospective evaluation [see comments] Berek K, et al. **Intensive Care Med** 1996 Sep;22(9):849–55. Comment in: Intensive Care Med 1996 Sep;22(9):841–3.

Lactic acidosis in sepsis: a commentary [see comments] Gutierrez G, et al. **Intensive Care Med** 1996 Jan;22(1):6–16 (86 ref.). Comment in: Intensive Care Med 1996 Jan;22(1):3–5.

Myopathy and ventilatory failure in severe sepsis [letter] Iapichino G, et al. **Intensive Care Med** 1997 Jan;23(1):128

The SOFA (Sepsis–related Organ Failure Assessment) score to describe organ dysfunction/failure. On behalf of the Working Group on Sepsis–Related Problems of the European Society of Intensive Care Medicine. Vincent JL, et al. **Intensive Care Med** 1996 Jul;22(7):707–10

A selective pulmonary thrombosis associated with sepsis–induced disseminated intravascular coagulation. Aihara M, et al. **Intern Med** 1997 Feb;36(2):97–101

Fulminant pneumonia and sepsis due to Aeromonas hydrophila in an alcohol abuser. Takano Y, et al. **Intern Med** 1996 May;35(5):410–2

Pulmonary lactate release in patients with sepsis and the adult respiratory distress syndrome. Brown SD, et al. **J Crit Care** 1996 Mar;11(1):2–8

Liver injury during sepsis. Pastor CM, et al. **J Crit Care** 1995 Dec;10(4):183–97 (141 ref.)

Acute papillary muscle rupture in a patient with clostridial sepsis. Schulz R, et al. **J Intern Med** 1997 Mar;241(3):253–5

Hemofiltration in multiorgan failure syndrome secondary to sepsis: a critical analysis of heterogeneity [editorial] Gotloib L. **Nephron** 1996;73(2):125–30 (86 ref.)

A simple prognostic index for patients with acute renal failure requiring dialysis. French Multicentric Prospective Study on Furosemide in Acute Renal Failure Requiring Dialysis. Cantarovich F, et al. **Ren Fail** 1996 Jul;18(4):585–92

VA/Q abnormalities during gram negative sepsis. Huang YC, et al. **Respir Physiol** 1996 Aug;105(1–2):109–21

Enhanced (cytomegalovirus) viral replication associated with septic bacterial complications in liver transplant recipients. Mutimer D, et al. **Transplantation** 1997 May 27; 63(10):1411–5

[Respiratory failure caused by myopathy in severe sepsis] Veschi G, et al. **Minerva Anestesiol** 1996 Mar;62(3):89–92 (Eng. Abstr.) **(Ita)**

[Mechanisms and evaluation of multiple organ and system failure after trauma] Fontes B, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 Mar–Apr; 51(2):72–7 (Eng. Abstr.) **(Por)**

[Respiratory distress syndrome in adults with trauma or some other diseases] Gembitskiĭ EV, et al. **Klin Med (Mosk)** 1997; 75(6):8–12 (18 ref.) **(Rus)**

[Involutional ophthalmic endotoxicosis as the cause of the involutional vitroretinal syndrome] Vodovozov AM. **Vestn Oftalmol** 1996 Apr–Jun;112(2):35–8 (Eng. Abstr.) **(Rus)**

[The effect of septic complications on recovery in acute renal insufficiency in patients with multiple injuries] Oštrić V, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:135–7 (Eng. Abstr.) **(Scc)**

[Acute kidney failure in patients with and without sepsis: prognosis and clinical course] Vega J, et al. **Rev Med Chil** 1996 Aug;124(8):938–46 (Eng. Abstr.) **(Spa)**

CONGENITAL

Intra–amniotic infection and premature rupture of the membranes. Belady PH, et al. **Clin Perinatol** 1997 Mar; 24(1):43–57 (104 ref.)

Group B streptococcus and pregnancy. Mercer BM, et al. **Pediatr Ann** 1996 Apr;25(4):206–14 (93 ref.)

DIAGNOSIS

Immunologic parameters in cord blood indicating early–onset sepsis. Lehrnbecher T, et al. **Biol Neonate** 1996; 70(4):206–12

Immunohistochemistry with monoclonal antibody against Candida albicans mannan antigen demonstrates cutaneous Candida granulomas as evidence of Candida sepsis in an immunosuppressed host. Breier F, et al. **Dermatology** 1997; 194(3):293–6

Catalase–negative Listeria monocytogenes causing lethal sepsis and meningitis in an adult hematologic patient [letter] Elsner HA, et al. **Eur J Clin Microbiol Infect Dis** 1996 Dec;15(12):965–7

Central venous catheter–related sepsis in a cohort of 366 hospitalised patients. Tacconelli E, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):203–9

Splenic abscess with Clostridium novyi bacteraemia and sepsis. Vleminckx WG, et al. **Eur J Gastroenterol Hepatol** 1997 Mar;9(3):303–5

Diagnosis of intravascular device related sepsis by a continuous monitoring blood culture system [letter] Bernard D, et al. **Intensive Care Med** 1996 Aug; 22(8):829–30

Evaluation of a novel endoluminal brush method for in situ diagnosis of catheter related sepsis. Kite P, et al. **J Clin Pathol** 1997 Apr;50(4):278–82

The appropriateness of early discharge of hospitalized children with suspected sepsis. Durongpisitkul K, et al. **J Fam Pract** 1997 Jan;44(1):91–6

Routine microbiological testing in sudden and unexpected infant death. Carmichael EM, et al. **J Paediatr Child Health** 1996 Oct;32(5):412–5

Usefulness of soluble interleukin–2 receptor specificity [letter; comment] Wyman ML, et al. **J Pediatr** 1996 Mar; 128(3):445–6. Comment on: J Pediatr 1995 Jun;126(6):982–5.

Molecular genetic diagnosis of infectious diseases. McCabe KM, et al. **Pediatr Ann** 1997 Sep;26(9):547–52

Febrile infants without obvious fever source [letter] Elzoobi K, et al. **Pediatr Emerg Care** 1997 Feb;13(1):85–6

Sepsis, septic shock, acute abdomen? The ability of cardiac disease to mimic other medical illness. Mahle WT, et al. **Pediatr Emerg Care** 1996 Aug;12(4):317–24

Genomic fingerprinting by pulsed field gel electrophoresis to identify the source of Pasteurella multocida sepsis. Blackwood RA, et al. **Pediatr Infect Dis J** 1996 Sep; 15(9):831–3

Identification of febrile neonates unlikely to have bacterial infections. Chiu CH, et al. **Pediatr Infect Dis J** 1997 Jan; 16(1):59–63

Interleukin 6 in neonates with early and late onset infection. Panero A, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):370–5

Francisella philomiragia sepsis in chronic granulomatous disease. Sicherer SH, et al. **Pediatr Infect Dis J** 1997 Apr; 16(4):420–2

Usefulness of C-reactive protein in the diagnosis of neonatal sepsis. Chan DK, et al. **Singapore Med J** 1997 Jun; 38(6):252–5

Case report and review of Chromobacterium sepsis—a gram-negative sepsis mimicking melioidosis. Chong CY, et al. **Singapore Med J** 1997 Jun;38(6):263–5 (19 ref.)

[Septic myocardial aneurysm in mitral valve endocarditis. Clinical and pathological-anatomical findings] Omran H, et al. **Dtsch Med Wochenschr** 1997 Feb 7;122(6):156–60 (Eng. Abstr.) **(Ger)**

[Concentration of blood ICAM-1s in the newborn at risk of infection. A prospective study in the first 2 weeks of life] Distefano G, et al. **Pediatr Med Chir** 1997 Jan–Feb; 19(1):27–30 (Eng. Abstr.) **(Ita)**

[Sepsis—a generalized infection. Etiopathogenetic, diagnostic and clinical problems in adults based on personal experiences] Olejnik Z, et al. **Pol Tyg Lek** 1996 Jun; 51(23–26):318–20,323 (Eng. Abstr.) **(Pol)**

[Assessment of the severity of patient status in sepsis and septic shock] Rudnov VA, et al. **Anesteziol Reanimatol** 1995 Nov–Dec;(6):9–11 (Eng. Abstr.) **(Rus)**

[The prognosis of the course of surgical sepsis in newborn infants] Moskalenko VZ, et al. **Klin Khir** 1995;(3):31–3 **(Rus)**

[The clinico-laboratory characteristics and diagnosis of acute stomatogenic sepsis] El'kova NL, et al. **Stomatologiia (Mosk)** 1996;75(2):37–9 (Eng. Abstr.) **(Rus)**

[The diagnosis and treatment of complications in acute odontogenic infection] Gubin MA, et al. **Stomatologiia (Mosk)** 1996;Spec No:39–40 **(Rus)**

[Deep vein thrombosis in a child with chicken pox as a clinical manifestation of streptococcal sepsis] Márquez Rivas FJ, et al. **An Esp Pediatr** 1997 Mar;46(3):280–2 **(Spa)**

DRUG THERAPY

Prudent selection of antimicrobials for neonatal sepsis. McManus MC. **Am J Health Syst Pharm** 1996 Aug 15; 53(16):1956–60 (52 ref.)

Prophylaxis with the immunomodulator PGG glucan enhances antibiotic efficacy in rats infected with antibiotic-resistant bacteria. Tzianabos AO, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:285–7

Acute myopathy of intensive care: clinical, electromyographic, and pathological aspects [see comments] Lacomis D, et al. **Ann Neurol** 1996 Oct; 40(4):645–54. Comment in: Ann Neurol 1997 Jul;42(1):131–2.

Evaluation of a sparse sampling strategy for determining vancomycin pharmacokinetics in preterm neonates: application of optimal sampling theory. Burstein AH, et al. **Ann Pharmacother** 1997 Sep;31(9):980–3

Pharmacotherapy of sepsis. Weikert LF, et al. **Clin Chest Med** 1996 Jun;17(2):289–305 (157 ref.)

Chronic granulomatous disease presenting as severe sepsis due to Burkholderia gladioli [letter] Hoare S, et al. **Clin Infect Dis** 1996 Aug;23(2):411

Antibiotic-lock technique for the treatment of central venous catheter infections [letter; comment] [see comments] Kentos A, et al. **Clin Infect Dis** 1996 Aug;23(2):418–9. Comment on: Clin Infect Dis 1995 Nov;21(5):1286–8. Comment in: Clin Infect Dis 1997 Apr;24(4):743–4.

Effects of pentoxifylline on hemodynamics and oxygenation in septic and nonseptic patients. Bacher A, et al. **Crit Care Med** 1997 May;25(5):795–800

Dobutamine increases cerebral blood flow velocity and jugular bulb hemoglobin saturation in septic patients. Berré J, et al. **Crit Care Med** 1997 Mar;25(3):392–8

Effect of ciprofloxacin on the accumulation of interleukin-6, interleukin-8, and nitrite from a human endothelial cell model of sepsis [see comments] Galley HF, et al. **Crit Care Med** 1997 Aug;25(8):1392–5. Comment in: Crit Care Med 1997 Aug;25(8):1270–1.

Arginine, glutamine, and dehydroepiandrosterone reverse the immunosuppressive effect of prednisone during gut-derived sepsis [see comments] Gennari R, et al. **Crit Care Med** 1997 Jul;25(7):1207–14. Comment in: Crit Care Med 1997 Jul;25(7):1110–1.

The atrial natriuretic peptide receptor antagonist HS 142-1 improves cardiovascular filling and mean arterial pressure in a hyperdynamic ovine model of sepsis. Hinder F, et al. **Crit Care Med** 1997 May;25(5):820–6

Relationship between hemodynamic and vital support measures and pharmacokinetic variability of amikacin in critically ill patients with sepsis. Lugo G, et al. **Crit Care Med** 1997 May;25(5):806–11

Confirmatory interleukin-1 receptor antagonist trial in severe sepsis: a phase III, randomized, double-blind, placebo-controlled, multicenter trial. The Interleukin-1 Receptor Antagonist Sepsis Investigator Group [see comments] Opal SM, et al. **Crit Care Med** 1997 Jul; 25(7):1115–24. Comment in: Crit Care Med 1997 Jul;25(7):1095–100.

Anti-inflammatory therapies to treat sepsis and septic shock: a reassessment [editorial; comment] Zeni F, et al. **Crit Care Med** 1997 Jul;25(7):1095–100 (38 ref.). Comment on: Crit Care Med 1997 Jul;25(7):1115–24.

Effects of prolactin and metoclopramide on macrophage cytokine gene expression in late sepsis. Zhu XH, et al. **Cytokine** 1997 Jun;9(6):437–46

Rational use of antibiotics in neonatal infections. Musoke RN. **East Afr Med J** 1997 Mar;74(3):147–50 (23 ref.)

The in vivo effect of recombinant human granulocyte-colony stimulating factor in neutropenic neonates with sepsis. Barak Y, et al. **Eur J Pediatr** 1997 Aug;156(8):643–6

Quinine inhibits release of tumor necrosis factor, apoptosis, necrosis and mortality in a murine model of septic liver failure. Gantner F, et al. **Eur J Pharmacol** 1995 Dec 27; 294(1):353–5

Local production of oxygen free radicals and nitric oxide in rat diaphragm during sepsis: effects of pentoxifylline and somatostatin. Arias-Díaz J, et al. **Eur J Surg** 1997 Aug; 163(8):619–25

A prospective randomized trial of ceftazidime versus netilmicin plus mezlocillin in the empirical therapy of presumed sepsis in cirrhotic patients. McCormick PA, et al. **Hepatology** 1997 Apr;25(4):833–6

Antimicrobial use in patients with positive intravascular catheter cultures: a six-month prospective survey in a teaching hospital. Rello J, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):668–9

Fluconazole in Candida albicans sepsis during pregnancy: case report and review of the literature. Wiesinger EC, et al. **Infection** 1996 May-Jun;24(3):263–6

Does long-term continuous administration of pentoxifylline affect platelet function in the critically ill patient? Boldt J, et al. **Intensive Care Med** 1996 Jul;22(7):644–50

Safety of a low-dosage Filgrastim (rhG-CSF) treatment in non-neutropenic surgical intensive care patients with an inflammatory process [see comments] Gross-Weege W, et al. **Intensive Care Med** 1997 Jan;23(1):16–22. Comment in: Intensive Care Med 1997 Jan;23(1):1–2.

Splanchnic blood flow is greater in septic shock treated with norepinephrine than in severe sepsis. Meier-Hellmann A, et al. **Intensive Care Med** 1996 Dec;22(12):1354–9

Volume distribution of amikacin [letter; comment] Sleigh JW. **Intensive Care Med** 1997 Feb;23(2):236–7. Comment on: Intensive Care Med 1996 May;22(5):443–6.

Dobutamine and the oxygen uptake/supply relationship in sepsis: from global to regional—nothing is simple and easy [comment] Vogt J, et al. **Intensive Care Med** 1997 Jul; 23(7):715–7 (33 ref.). Comment on: Intensive Care Med 1997 Jul;23(7):732–7.

The minimum inhibitory concentration of seventeen antimicrobials for Salmonella isolates from septic patients. Dobardzic R, et al. **J Chemother** 1996 Oct;8(5):369–74

Triple anti-TNF-alpha therapy in early sepsis: a preliminary report. Schattner A, et al. **J Int Med Res** 1997 Mar–Apr; 25(2):112–6

Effect of thyroid hormone (T3)-responsive changes in surfactant apoproteins on surfactant function during sepsis. Raafat AM, et al. **J Trauma** 1997 May;42(5):803–8; discussion 808–9

Growth hormone impaired compensation of hemorrhagic shock after trauma and sepsis in swine. Unneberg K, et al. **J Trauma** 1996 Nov;41(5):775–80

p55 Tumor necrosis factor receptor fusion protein in the treatment of patients with severe sepsis and septic shock. A randomized controlled multicenter trial. Ro 45-2081 Study Group. Abraham E, et al. **JAMA** 1997 May 21; 277(19):1531–8

Treatment of PermCath-related sepsis in uremic patients. Chang JM, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Mar; 13(3):155–61

The effects of ibuprofen on the physiology and survival of patients with sepsis. The Ibuprofen in Sepsis Study Group [see comments] Bernard GR, et al. **N Engl J Med** 1997 Mar 27;336(13):912–8. Comment in: N Engl J Med 1997 Mar 27;336(13):952–3. Comment in: N Engl J Med 1997 Sep 4;337(10):710.

Strategies for the treatment of sepsis [editorial; comment] Warren HS. **N Engl J Med** 1997 Mar 27;336(13):952–3. Comment on: N Engl J Med 1997 Mar 27;336(13): 912–8.

Ibuprofen in patients with sepsis [letter; comment] Zimmerli W, et al. **N Engl J Med** 1997 Sep 4;337(10):710. Comment on: N Engl J Med 1997 Mar 27;336(13):912–8.

Monocyte deactivation in septic patients: restoration by IFN-gamma treatment. Döcke WD, et al. **Nat Med** 1997 Jun;3(6):678–81

Presumptive antibiotic therapy for hospitalized children with sepsis and meningitis: cost-effective analysis and antibiotic restriction guidelines. Jacobs RF, et al. **Pediatr Ann** 1996 Nov;25(11):631–8

Randomized, placebo-controlled, double blinded trial of dexamethasone in African children with sepsis. Slusher T, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):579–83

Antibiotics, cytokines, and endotoxin: a complex and evolving relationship in gram-negative sepsis. Horn DL, et al. **Scand J Infect Dis Suppl** 1996;101:9–13 (48 ref.)

Evidence for antibiotic-mediated endotoxin release as a contributing factor to lethality in experimental gram-negative sepsis. Morrison DC, et al. **Scand J Infect Dis Suppl** 1996;101:3–8 (25 ref.)

Nitric oxide synthase inhibition versus norepinephrine in ovine sepsis: effects on regional blood flow. Booke M, et al. **Shock** 1996 May;5(5):362–70

Hemostatic parameters in sepsis patients treated with anti-TNF alpha-monoclonal antibodies. Salat C, et al. **Shock** 1996 Oct;6(4):233–7

Free radical scavenging by lazaroids improves renal blood flow during sepsis. Krysztopik RJ, et al. **Surgery** 1996 Oct; 120(4):657–62

Initial management of sepsis. Etsinger C, et al. **Wis Med J** 1997 Feb;96(2):49–50

[The therapeutic approach in puerperal sepsis] Pranchev N. **Akush Ginekol (Sofiia)** 1996;35(1–2):57–8 (Eng. Abstr.) **(Bul)**

[Therapeutic use of monoclonal antibodies] Baron D. **Naturwissenschaften** 1997 May;84(5):189–98 (7 ref.) (Eng. Abstr.) **(Ger)**

[General and local antibiotic treatment with ceftriaxone of suppurative-septic diseases and complications] Mariutin PV, et al. **Anesteziol Reanimatol** 1997 May-Jun;(3):14–8 (Eng. Abstr.) **(Rus)**

[Field of use recombinant interleukin-1 beta in treatment of immunodeficient patients with trauma and sepsis] Simbirtsev AS, et al. **Anesteziol Reanimatol** 1996 Jul-Aug; (4):76–8 **(Rus)**

[Piperacillin/tazobactam in the treatment of abdominal sepsis in patients with peritonitis] Gel'fand BR, et al. **Antibiot Khimioter** 1997;42(2):17–20 (Eng. Abstr.) **(Rus)**

[A trial of the clinical use of thienam in treating severe and life-threatening suppurative-septic complications] Grinev MV, et al. **Vestn Khir Im I I Grek** 1996;155(4):54–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Nitric oxide synthase inhibition negates septic-induced alterations in cytoplasmic calcium homeostasis and membrane dynamics. Ismail NH, et al. **Am Surg** 1997 Jan; 63(1):20–3

Sepsis-induced regulation of lipoprotein lipase expression in rat adipose tissue and soleus muscle. Lanza-Jacoby S, et al. **J Lipid Res** 1997 Apr;38(4):701–10

Differential activation of protein kinase A in various regions of myocardium during sepsis. Hsu C, et al. **J Surg Res** 1997 Aug;71(2):161–5

Inhibition of nitric oxide synthase does not affect survival in a rat model of abdominal sepsis. Strand OA, et al. **Scand J Clin Lab Invest** 1997 Apr;57(2):105–9

Ca2(+)-dependent and Ca2(+)-independent proteinase contents in the skeletal muscle in septic rats. Ahmad S, et al. **Shock** 1996 Apr;5(4):247–50

Sepsis-induced alterations in pyruvate dehydrogenase complex activity in rat skeletal muscle: effects on plasma lactate. Vary TC. **Shock** 1996 Aug;6(2):89–94

Protein kinase a activity is increased in rat heart during late hypodynamic phase of sepsis. Yang SL, et al. **Shock** 1997 Jul;8(1):68–72

EPIDEMIOLOGY

Central venous catheter-related sepsis in a cohort of 366 hospitalised patients. Tacconelli E, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):203–9

Septic complications after biliary tract stone surgery: a review and report of the European prospective study. Cainzos M, et al. **Hepatogastroenterology** 1997 Jul–Aug; 44(16):959–67

Systemic inflammatory response syndrome (SIRS) and sepsis in surgical patients [letter; comment] Menger MD, et al. **Intensive Care Med** 1996 Jun;22(6):616–7. Comment on: Intensive Care Med 1995 Apr;21(4):302–9.

Late-onset infections of infants in neonatal units. Isaacs D, et al. **J Paediatr Child Health** 1996 Apr;32(2):158–61

Early-onset sepsis in very low birth weight neonates: a report from the National Institute of Child Health and Human Development Neonatal Research Network. Stoll BJ, et al. **J Pediatr** 1996 Jul;129(1):72–80

Late-onset sepsis in very low birth weight neonates: a report from the National Institute of Child Health and Human Development Neonatal Research Network. Stoll BJ, et al. **J Pediatr** 1996 Jul;129(1):63–71

A case control study of neonatal sepsis: experience from Saudi Arabia. Dawodu A, et al. **J Trop Pediatr** 1997 Apr; 43(2):84–8

Important new findings in sepsis [editorial; comment] Bone RC. **JAMA** 1997 Jul 16;278(3):249. Comment on: JAMA 1997 Jul 16;278(3):234–40.

A prospective study of neonatal sepsis and meningitis in southern Israel. Greenberg D, et al. **Pediatr Infect Dis J** 1997 Aug;16(8):768–73

Hand and foot sepsis in Libyan diabetic patients [see comments] Bosseri S, et al. **Trop Doct** 1997 Oct;27(4):232–3. Comment in: Trop Doct 1997 Oct;27(4):194–5. Comment in: Trop Doct 1997 Oct;27(4):195.

Hand and foot sepsis in Libyan diabetic patients [editorial; comment] Lester FT. **Trop Doct** 1997 Oct;27(4):195. Comment on: Trop Doct 1997 Oct;27(4):232–3.

[Sepsis in the very low-birth-weight newborn infant] Costa A, et al. **Acta Med Port** 1996 Oct-Dec;9(10–12):331–4 (Eng. Abstr.) **(Por)**

ETIOLOGY

Catheter-related sepsis [letter; comment] Brocklehurst IC. **Anaesth Intensive Care** 1996 Dec;24(6):726. Comment on: Anaesth Intensive Care 1996 Jun;24(3):330-3.

Central venous line sepsis [letter; comment] Bernau F, et al. **Anaesthesia** 1997 Jul;52(7):712. Comment on: Anaesthesia 1997 Mar;52(3):286-7.

Central venous line sepsis [letter] [published erratum appears in Anaesthesia 1997 May;52(5):512] [see comments] Ryan DW, et al. **Anaesthesia** 1997 Mar;52(3):286-7. Comment in: Anaesthesia 1997 Jul;52(7):712. Comment in: Anaesthesia 1997 Jul;52(7):712-3.

An endoluminal brush to detect the infected central venous catheter in situ: a pilot study. Tighe MJ, et al. **BMJ** 1996 Dec 14;313(7071):1528-9

Sepsis: a new hypothesis for pathogenesis of the disease process. Bone RC, et al. **Chest** 1997 Jul;112(1):235-43 (57 ref.)

Sepsis-enhancing effect of cobalt-60 irradiation in mice infected with virulent Yersinia pestis on the same day or seven days later. Wake A, et al.
Contrib Microbiol Immunol 1995;13:273-6

Elevated serum neopterin level: its relation to endotoxaemia and sepsis in patients with major burns. Yao YM, et al. **Eur J Clin Invest** 1996 Mar;26(3):224-30

Biliary sepsis: an ascending infection. Bapat RD, et al.
Indian J Gastroenterol 1996 Oct;15(4):126-8

Insightful comments on clinical trials in sepsis [editorial; comment] Gutierrez G. **J Crit Care** 1997 Mar;12(1):1-2. Comment on: J Crit Care 1997 Mar;12(1):3-6.

Early-onset sepsis in children with acute lymphoblastic leukemia. Hung IJ, et al. **J Formos Med Assoc** 1996 Oct; 95(10):746-53

Counting the cost: hospital versus home central venous catheter survival. Melville CA, et al. **J Hosp Infect** 1997 Mar;35(3):197-205

Sepsis outcomes in infants and children with central venous catheters: percutaneous versus surgical insertion. Chathas MK, et al. **J Obstet Gynecol Neonatal Nurs** 1996 Jul-Aug; 25(6):500-6 (39 ref.)

Femoral venous access is safe in burned children: an analysis of 224 catheters. Goldstein AM, et al. **J Pediatr** 1997 Mar; 130(3):442-6

Recurrent Streptococcus pneumoniae sepsis in children with sickle cell disease [see comments] Hongeng S, et al.
J Pediatr 1997 May;130(5):814-6. Comment in: J Pediatr 1997 May;130(5):693-4.

Hypertonic saline resuscitation decreases susceptibility to sepsis after hemorrhagic shock. Coimbra R, et al.
J Trauma 1997 Apr;42(4):602-6; discussion 606-7

Effect of subcutaneous tunneling on internal jugular catheter-related sepsis in critically ill patients: a prospective randomized multicenter study [see comments] Timsit JF, et al. **JAMA** 1996 Nov 6;276(17):1416-20. Comment in: ACP J Club 1997 Mar-Apr;126(2):42.

Defining intravascular catheter-related infections: a plea for uniformity. Mermel LA. **Nutrition** 1997 Apr;13(4 Suppl):2S-4S (27 ref.)

Vibrio vulnificus sepsis in a child with Diamond-Blackfan syndrome. Albanyan EA, et al. **Pediatr Infect Dis J** 1997 Aug;16(8):818-20

Epidural analgesia, intrapartum fever, and neonatal sepsis evaluation. Lieberman E, et al. **Pediatrics** 1997 Mar; 99(3):415-9

Risks of regional anesthesia--infectious, septic. Wedel DJ, et al. **Reg Anesth** 1996 Nov-Dec;21(6 Suppl):57-61 (30 ref.)

Neonatal sepsis: pathogenesis and supportive therapy. Wolach B. **Semin Perinatol** 1997 Feb;21(1):28-38 (91 ref.)

Complicated anorectal sepsis. Gilliland R, et al.
Surg Clin North Am 1997 Feb;77(1):115-53 (205 ref.)

Surgical management and treatment of sepsis associated with gastrointestinal fistulas. Rolandelli R, et al.
Surg Clin North Am 1996 Oct;76(5):1111-22 (19 ref.)

[Fatal sepsis due to long-term use of intrauterine device] Novák L. **Orv Hetil** 1997 Jul 27;138(30):1909-10 (Eng. Abstr.) **(Hun)**

[Sepsis due to Pasteurella multocida in an HIV-positive patient (letter)] Garavelli PL. **Recenti Prog Med** 1997 May; 88(5):226 **(Ita)**

[Perioperative catheter sepsis] Takasaki H, et al.
Nippon Ika Daigaku Zasshi 1996 Apr;63(2):161-4 **(Jpn)**

[Nitric oxide and sepsis] Knobel E. **Arq Bras Cardiol** 1996 Oct;67(4):263-6 (13 ref.) **(Por)**

[Severe sepsis and multiple organ failure in surgical patients in intensive care unit of oncological profile] Gorobets ES, et al. **Anesteziol Reanimatol** 1997 May-Jun;(3):30-3 (Eng. Abstr.) **(Rus)**

[The diagnosis and treatment of complications in acute odontogenic infection] Gubin MA, et al.
Stomatologiia (Mosk) 1996;Spec No:39-40 **(Rus)**

[Pseudomembranous colitis and "intestinal sepsis" as a consequence of dysbacteriosis due to antibiotics] Eriukhin IA, et al. **Vestn Khir Im I I Grek** 1997;156(2):108-11 (Eng. Abstr.) **(Rus)**

[Role of bacterial lipopolysaccharides in human diseases: evolution of outlook] Malov VA, et al.
Vestn Ross Akad Med Nauk 1997;(8):33-8 (36 ref.) (Eng. Abstr.) **(Rus)**

[Sepsis caused bt Leuconostoc cremoris, neutropenia and human immunodeficiency virus infection (letter)] del Nozal-Nalda M, et al. **Med Clin (Barc)** 1997 May 24; 108(20):799 **(Spa)**

[Infection and sepsis in resuscitation] Rodrigo-Casanova P, et al. **Rev Esp Anestesiol Reanim** 1997 Jun-Jul;44(6):230-43 (101 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

-308 tumor necrosis factor (TNF) polymorphism is not associated with survival in severe sepsis and is unrelated to lipopolysaccharide inducibility of the human TNF promoter [see comments] Stuber F, et al. **J Inflamm** 1995-96;46(1):42-50. Comment in: J Inflamm 1995-96 ;46(1):iii-vi.

IMMUNOLOGY

Serum levels of CD14 in neonatal sepsis by Gram-positive and Gram-negative bacteria. Blanco A, et al.
Acta Paediatr 1996 Jun;85(6):728-32

The release of interleukin-12 in Escherichia coli-induced lethal and sublethal primate sepsis. Jansen PM, et al.
Ann N Y Acad Sci 1996 Oct 31;795:351-3

Mechanism of hepatocellular dysfunction during early sepsis. Key role of increased gene expression and release of proinflammatory cytokines tumor necrosis factor and interleukin-6. Wang P, et al. **Arch Surg** 1997 Apr; 132(4):364-9; discussion 369-70

Immunologic parameters in cord blood indicating early-onset sepsis. Lehrnbecher T, et al. **Biol Neonate** 1996; 70(4):206-12

Immunological responses to thermal injury. Sparkes BG.
Burns 1997 Mar;23(2):106-13 (83 ref.)

Current concepts of sepsis and acute lung injury. Sessler CN, et al. **Clin Chest Med** 1996 Jun;17(2):213-35 (151 ref.)

Circulating complement proteins in patients with sepsis or systemic inflammatory response syndrome. Stöve S, et al.
Clin Diagn Lab Immunol 1996 Mar;3(2):175-83

Sepsis and endotoxaemia in mice stimulate the expression of interleukin-I and interleukin-6 in the central nervous system. Meyer TA, et al. **Clin Sci (Colch)** 1997 May; 92(5):519-25

Lymphoid apoptosis during sepsis: now that we've found it, what do we do with it? [editorial; comment] Ayala A. **Crit Care Med** 1997 Aug;25(8):1261-2. Comment on: Crit Care Med 1997 Aug;25(8):1298-1307.

Sepsis and serum cytokine concentrations. Damas P, et al.
Crit Care Med 1997 Mar;25(3):405-12

Effect of ciprofloxacin on the accumulation of interleukin-6, interleukin-8, and nitrite from a human endothelial cell model of sepsis [see comments] Galley HF, et al.
Crit Care Med 1997 Aug;25(8):1392-5. Comment in: Crit Care Med 1997 Aug;25(8):1270-1.

Apoptosis in lymphoid and parenchymal cells during sepsis: findings in normal and T- and B-cell-deficient mice [see comments] Hotchkiss RS, et al. **Crit Care Med** 1997 Aug; 25(8):1298-307. Comment in: Crit Care Med 1997 Aug;25(8):1261-2.

Females in proestrus state maintain splenic immune functions and tolerate sepsis better than males. Zellweger R, et al.
Crit Care Med 1997 Jan;25(1):106-10

Kinetics of circulating TNF-alpha and TNF soluble receptors following surgery in a clinical model of sepsis. Neilson D, et al. **Cytokine** 1996 Dec;8(12):938-43

Effects of prolactin and metoclopramide on macrophage cytokine gene expression in late sepsis. Zhu XH, et al.
Cytokine 1997 Jun;9(6):437-46

Modulation of the biological activities of meningococcal endotoxins by association with outer membrane proteins is not inevitably linked to toxicity. Quakyi EK, et al.
Infect Immun 1997 May;65(5):1972-9

Balance of inflammatory cytokines related to severity and mortality of murine sepsis. Walley KR, et al.
Infect Immun 1996 Nov;64(11):4733-8

Procalcitonin in patients with and without immunosuppression and sepsis. al-Nawas B, et al.
Infection 1996 Nov-Dec;24(6):434-6

Tumor necrosis factor alpha (TNF-alpha) and sepsis: evidence for a role in host defense. Rigato O, et al.
Infection 1996 Jul-Aug;24(4):314-8

Hemostatic abnormalities and the severity of illness in patients at the onset of clinically defined sepsis. Possible indication of the degree of endothelial cell activation? Leithäuser B, et al. **Intensive Care Med** 1996 Jul;22(7):631-6

A controlled study of leukocyte activation in septic patients. Pascual C, et al. **Intensive Care Med** 1997 Jul;23(7):743-8

Intra-abdominal sepsis: an immunocytochemical study of the small intestine mucosa. Coutinho HB, et al.
J Clin Pathol 1997 Apr;50(4):294-8

Applied molecular biology of sepsis. Remick DG.
J Crit Care 1995 Dec;10(4):198-212 (85 ref.)

Cytokine production and its manipulation by vasoactive drugs. Pastores SM, et al. **New Horiz** 1996 May;4(2):252-64 (104 ref.)

The administration of complement component C9 enhances the survival of neonatal rats with Escherichia coli sepsis. Lassiter HA, et al. **Pediatr Res** 1997 Jul;42(1):128-36

Cytokine networks with infection: mycobacterial infections, leishmaniasis, human immunodeficiency virus infection, and sepsis. DiPiro JT. **Pharmacotherapy** 1997 Mar-Apr; 17(2):205-23 (175 ref.)

4th International Congress on the Immune Consequences of Trauma, Shock and Sepsis--Mechanisms and Therapeutic Approaches. Munich, Germany, March 4-8, 1997. Abstracts. **Shock** 1997;7 Suppl:i-xiv, 1-177

Alterations in mucosal immune cell distribution in septic rats. Osterberg J, et al. **Shock** 1997 Mar;7(3):182-5

[Cytokine-mediated biological response to severe infections in surgical patients] Aikawa N, et al.
Nippon Geka Gakkai Zasshi 1996 Dec;97(12):1054-9 (36 ref.) (Eng. Abstr.) **(Jpn)**

[Field of use recombinant interleukin-1 beta in treatment of immunodeficient patients with trauma and sepsis] Simbirtsev AS, et al. **Anesteziol Reanimatol** 1996 Jul-Aug; (4):76-8 **(Rus)**

METABOLISM

Comparison of gastric intramucosal pH measurements with oxygen supply, oxygen consumption and arterial lactate in patients with severe sepsis. Esen F, et al.
Adv Exp Med Biol 1996;388:521-31

Reduced in vivo plasma fibronectin content of lung matrix during postoperative sepsis. Rebres RA, et al.
Am J Physiol 1996 Sep;271(3 Pt 1):L409-18

Regulation of peptide-chain initiation in muscle during sepsis by interleukin-1 receptor antagonist. Vary TC, et al.
Am J Physiol 1996 Sep;271(3 Pt 1):E513-20

Effects of the stress response in septic rats and LPS-stimulated alveolar macrophages: evidence for TNF-alpha posttranslational regulation. Ribeiro SP, et al.
Am J Respir Crit Care Med 1996 Dec;154(6 Pt 1):1843-50

Increased glutamine consumption in small intestine epithelial cells during sepsis in rats. Noguchi Y, et al.
Am J Surg 1997 Mar;173(3):199-205

Gastric intramucosal pH and blood lactate in severe sepsis. Joynt GM, et al. **Anaesthesia** 1997 Aug;52(8):726-32

The ubiquitin-proteasome pathway: review of a novel intracellular mechanism of muscle protein breakdown during sepsis and other catabolic conditions. Hasselgren PO, et al. **Ann Surg** 1997 Mar;225(3):307-16 (59 ref.)

Pharmacokinetics of vancomycin in critically ill infants undergoing extracorporeal membrane oxygenation. Amaker RD, et al. **Antimicrob Agents Chemother** 1996 May; 40(5):1139-42

Oxidative metabolism in rat hepatocytes and mitochondria during sepsis. Kantrow SP, et al.
Arch Biochem Biophys 1997 Sep 15;345(2):278-88

Sepsis increases oxidatively damaged proteins in skeletal muscle. Fagan JM, et al. **Arch Surg** 1996 Dec; 131(12):1326-31; discussion 1331-2

Glucocorticoid receptor antagonism by mifepristone alters phosphocreatine breakdown during sepsis. Mitsuo T, et al.
Arch Surg 1996 Nov;131(11):1179-85

Endothelial nitric oxide synthase is downregulated during hyperdynamic sepsis. Zhou M, et al.
Biochim Biophys Acta 1997 Apr 17;1335(1-2):182-90

Effects of selective phosphodiesterase 3 inhibition in the perfused liver of the rat after endotoxin treatment. Weidenbach H, et al. **Br J Pharmacol** 1996 Jun;118(3):790-6

Sepsis and fat metabolism. Samra JS, et al. **Br J Surg** 1996 Sep;83(9):1186-96 (234 ref.)

Oxygen delivery and consumption during sepsis. Chittock DR, et al. **Clin Chest Med** 1996 Jun;17(2):263-78 (109 ref.)

Metabolic consequences of sepsis. Correlation with altered intracellular calcium homeostasis. Crouser ED, et al.
Clin Chest Med 1996 Jun;17(2):249-61 (101 ref.)

The evidence of oxidative stress in cardiac surgery and septic patients: a comparative study. Starkopf J, et al.
Clin Chim Acta 1997 Jun 27;262(1-2):77-88

Neutrophil adhesion molecule expression and response to stimulation with bacterial wall products in humans is unaffected by parenteral nutrition. Plusa SM, et al.
Clin Sci (Colch) 1996 Sep;91(3):371-4

Sepsis-related alterations in non-immune cell-signaling. Ahmad S. **Compr Ther** 1995 Dec;21(12):737-40 (28 ref.)

Acute-phase gene expression correlates with intrahepatic tumor necrosis factor-alpha abundance but not with plasma tumor necrosis factor concentrations during sepsis/systemic inflammatory response syndrome in the rat. Andrejko KM, et al. **Crit Care Med** 1996 Dec;24(12):1947-52

Effects of pentoxifylline on hemodynamics and oxygenation in septic and nonseptic patients. Bacher A, et al.
Crit Care Med 1997 May;25(5):795-800

Oxygen delivery, oxygen consumption, and gastric intramucosal pH are not improved by a computer-controlled, closed-loop, vecuronium infusion in severe sepsis and septic shock. Freebairn RC, et al.
Crit Care Med 1997 Jan;25(1):72-7

Parenteral administration of different amounts of branch-chain amino acids in septic patients: clinical and metabolic aspects. García-de-Lorenzo A, et al.
Crit Care Med 1997 Mar;25(3):418-24

Impaired oxygen extraction in sepsis: is supranormal oxygen delivery helpful? [editorial; comment] Haupt MT.
Crit Care Med 1997 Jun;25(6):904-5. Comment on: Crit Care Med 1997 Jun;25(6):926-36.

Histamine release in sepsis: a prospective, controlled, clinical study. Neugebauer E, et al. **Crit Care Med** 1996 Oct; 24(10):1670-7

Nitric oxide does not mediate lipopolysaccharide-induced myocardial depression in guinea pigs. Toth I, et al.
Crit Care Med 1997 Apr;25(4):684-8

The potential biological and clinical significance of the soluble tumor necrosis factor receptors. Aderka D.
Cytokine Growth Factor Rev 1996 Oct;7(3):231-40 (106 ref.)

Acute-phase proteins in perinatal human plasma. Liberatori S, et al. **Electrophoresis** 1997 Mar-Apr;18(3-4):520-6

Effects of methyl palmitate on cytokine release, liver injury and survival in mice with sepsis. Villa P, et al. **Eur Cytokine Netw** 1996 Dec;7(4):765–9

Expression of beta 2–integrins and L–selectin on polymorphonuclear leukocytes in septic patients. Thiel M, et al. **Eur Surg Res** 1997;29(3):160–75

Ascorbyl radical formation in patients with sepsis: effect of ascorbate loading. Galley HF, et al. **Free Radic Biol Med** 1996;20(1):139–43

The role of nitric oxide in experimental murine sepsis due to pyrogenic exotoxin A–producing Streptococcus pyogenes. Sriskandan S, et al. **Infect Immun** 1997 May; 65(5):1767–72

Secretory non–pancreatic phopholipase A2 in severe sepsis: relation to endotoxin, cytokines and thromboxane B2. Guidet B, et al. **Infection** 1996 Mar–Apr;24(2):103–8

A controlled study of leukocyte activation in septic patients. Pascual C, et al. **Intensive Care Med** 1997 Jul;23(7):743–8

Dobutamine and the oxygen uptake/supply relationship in sepsis: from global to regional––nothing is simple and easy [comment] Vogt J, et al. **Intensive Care Med** 1997 Jul; 23(7):715–7 (33 ref.). Comment on: Intensive Care Med 1997 Jul;23(7):732–7.

Sepsis increases skeletal muscle sodium, potassium–adenosinetriphosphatase activity without affecting messenger RNA or protein levels. O'Brien WJ, et al. **J Am Coll Surg** 1996 Nov;183(5):471–9

Sepsis is associated with increased mRNAs of the ubiquitin–proteasome proteolytic pathway in human skeletal muscle. Tiao G, et al. **J Clin Invest** 1997 Jan 15; 99(2):163–8

Sepsis alters myocardial and plasma concentrations of endothelin and nitric oxide in rats. Sharma AC, et al. **J Mol Cell Cardiol** 1997 May;29(5):1469–77

Heme oxygenase–dependent carbon monoxide production is a hepatic adaptive response to sepsis. Downard PJ, et al. **J Surg Res** 1997 Jul 15;71(1):7–12

Kinetics of splenocyte interleukin–4 production after injury and lethal endotoxin challenge. Napolitano LM, et al. **J Surg Res** 1997 Jan;67(1):33–9

Sequential changes in insulin–like growth factor 1, plasma proteins, and total body protein in severe sepsis and multiple injury. Clark MA, et al. **JPEN J Parenter Enteral Nutr** 1996 Sep–Oct;20(5):363–70

Metabolic response to injury and sepsis: changes in protein metabolism. Biolo G, et al. **Nutrition** 1997 Sep;13(9 Suppl):52S–57S (52 ref.)

Energy metabolism in sepsis and injury. Chioléro R, et al. **Nutrition** 1997 Sep;13(9 Suppl):45S–51S (78 ref.)

Effects of naloxone on beta–endorphin and cortisol release in sepsis. Okur H, et al. **Res Exp Med (Berl)** 1996; 196(4):247–50

Regulation of skeletal muscle protein turnover during sepsis: mechanisms and mediators. Cooney RN, et al. **Shock** 1997 Jan;7(1):1–16 (170 ref.)

Ca2+, a regulator of the inflammatory response––the good, the bad, and the possibilities [editorial; comment] Hotchkiss RS, et al. **Shock** 1997 Apr;7(4):308–10 (15 ref.). Comment on: Shock 1997 Apr;7(4):304–7.

IGF–I stimulates muscle glucose uptake during sepsis. Lang CH. **Shock** 1996 Jan;5(1):22–7

Induction of muscle glutamine synthetase gene expression during endotoxemia is adrenal gland dependent. Lukaszewicz GC, et al. **Shock** 1997 May;7(5):332–8

Platelet–activating factor (PAF) in experimental and clinical sepsis. Mathiak G, et al. **Shock** 1997 Jun;7(6):391–404 (147 ref.)

Sepsis increases putrescine concentration and protein synthesis in mucosa of small intestine in rats. Noguchi Y, et al. **Shock** 1996 May;5(5):333–40

Superoxide radical scavenging prevents cellular calcium dysregulation during intraabdominal sepsis. Rose S, et al. **Shock** 1997 Apr;7(4):263–8

Glucocorticoid regulation of hepatic TNF production following cecal ligation and puncture sepsis. Zawacki JK, et al. **Shock** 1997 Aug;8(2):141–5

Regionally different elevation of intracellular free calcium in hippocampus of septic rat brain. Zhan RZ, et al. **Shock** 1996 Oct;6(4):293–7

Changes of adenosine triphosphate–dependent calcium uptake in microsomal fractions of rat liver during sepsis. Hwang TL, et al. **Surgery** 1997 Jun;121(6):662–7

Amikacin Bayesian forecasting in critically ill patients with sepsis and cirrhosis. Lugo G, et al. **Ther Drug Monit** 1997 Jun;19(3):271–6

[Characteristics of amino acid metabolism in patients with severe sepsis and septic shock] Leiderman IN, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):45–8 (Eng. Abstr.) **(Rus)**

[Hypoxic changes in metabolism and effectiveness of therapy of surgical sepsis in children] Mironov PI, et al. **Anesteziol Reanimatol** 1996 Nov–Dec;(6):59–60 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Morganella morganii: a newly reported, rare cause of neonatal sepsis. Salen PN, et al. **Acad Emerg Med** 1997 Jul;4(7):711–4

Septic sternoclavicular arthritis caused by group B Streptococcus: case report and review. Carrascosa M, et al. **Clin Infect Dis** 1996 Mar;22(3):579–80 (9 ref.)

Capnocytophaga canimorsus sepsis complicated by myocardial infarction in two patients with normal coronary arteries. Ehrbar HU, et al. **Clin Infect Dis** 1996 Aug; 23(2):335–6

Septic bone and joint infections. Hedström SA. **Curr Opin Rheumatol** 1996 Jul;8(4):322–6 (14 ref.)

Sepsis due to multiply resistant Corynebacterium amycolatum [letter] de Miguel–Martinez I, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):617–8

Modulation of the biological activities of meningococcal endotoxins by association with outer membrane proteins is not inevitably linked to toxicity. Quakyi EK, et al. **Infect Immun** 1997 May;65(5):1972–9

Clostridium difficile infection as a cause of severe sepsis [see comments] Lowenkron SE, et al. **Intensive Care Med** 1996 Sep;22(9):990–4. Comment in: Intensive Care Med 1997 May;23(5):601.

Serious Clostridium difficile sepsis [letter; comment] Mohammedi I, et al. **Intensive Care Med** 1997 May; 23(5):601. Comment on: Intensive Care Med 1996 Sep;22(9):990–4.

Fatal sepsis caused by Corynebacterium amycolatum in a premature infant. Berner R, et al. **J Clin Microbiol** 1997 Apr;35(4):1011–2

Enterobacter sepsis in the newborn––a growing problem in Karachi. Bhutta ZA. **J Hosp Infect** 1996 Nov;34(3):211–6

Study of burn sepsis with special reference to Pseudomonas aeruginosa. Nagesha CN, et al. **J Indian Med Assoc** 1996 Jun;94(6):230–3

Acute papillary muscle rupture in a patient with clostridial sepsis. Schulz R, et al. **J Intern Med** 1997 Mar;241(3):253–5

Trauma, shock, and gut translocation. Deitch EA, et al. **New Horiz** 1996 May;4(2):289–99 (61 ref.)

High protein diets are associated with increased bacterial translocation in septic guinea pigs. Nelson JL, et al. **Nutrition** 1996 Mar;12(3):195–9

Francisella philomiragia sepsis in chronic granulomatous disease. Sicherer SH, et al. **Pediatr Infect Dis J** 1997 Apr; 16(4):420–2

Effects of treatment with pentoxifylline on the cardiovascular manifestations of group B streptococcal sepsis in the piglet. Del Moral T, et al. **Pediatr Res** 1996 Sep;40(3):469–74

Effects of granulocyte colony–stimulating factor on bacterial translocation due to burn wound sepsis. Yalçin O, et al. **Surg Today** 1997;27(2):154–8

[Modified method of inoculation of hemocultures from patients with suppurative–septic diseases and typhoid–paratyphoid fever] Iskhakova KhI, et al. **Klin Lab Diagn** 1996 Sep–Oct;(5):41–3 (Eng. Abstr.) **(Rus)**

[The causative agent of wound infection and sepsis in burn patients] Pal'tsyn AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):84–6 (Eng. Abstr.) **(Rus)**

[Deep vein thrombosis in a child with chicken pox as a clinical manifestation of streptococcal sepsis] Márquez Rivas FJ, et al. **An Esp Pediatr** 1997 Mar;46(3):280–2 **(Spa)**

[Treatment with NSAID can delay the diagnosis in GAS–sepsis (letter)] Bäcklund U, et al. **Lakartidningen** 1997 Feb 19;94(8):602 **(Swe)**

[The HSAN focused on missed bacterial culture (letter)] Engkvist O. **Lakartidningen** 1996 Dec 18;93(51–52):4712 **(Swe)**

MORTALITY

Multiparameter models for the prediction of sepsis outcome. Warner A, et al. **Ann Clin Lab Sci** 1996 Nov–Dec; 26(6):471–9

Parenteral administration of different amounts of branch–chain amino acids in septic patients: clinical and metabolic aspects. García–de–Lorenzo A, et al. **Crit Care Med** 1997 Mar;25(3):418–24

Evaluation of risk factors for fatal neonatal sepsis. Mathur NB, et al. **Indian Pediatr** 1996 Oct;33(10):817–22

Role of NFkappaB in the mortality of sepsis. Böhrer H, et al. **J Clin Invest** 1997 Sep 1;100(5):972–85

Neonatal sepsis in Karachi: factors determining outcome and mortality. Bhutta ZA, et al. **J Trop Pediatr** 1997 Apr; 43(2):65–70

Magnitude and duration of the effect of sepsis on survival. Department of Veterans Affairs Systemic Sepsis Cooperative Studies Group. Quartin AA, et al. **JAMA** 1997 Apr 2;277(13):1058–63

Plasma nitric oxide in posttrauma critical illness: a function of "sepsis" and the physiologic state severity classification quantifying the probability of death [published erratum appears in Shock 1997 Feb;7(2):156] Rixen D, et al. **Shock** 1997 Jan;7(1):17–28

Glycerol–induced augmentation of sensitivity to endotoxin in rats. Zurovsky Y, et al. **Toxicon** 1994 Jan;32(1):17–26

[Prognostic significance of postoperative septic complications in surgery of rectal carcinoma] Pérez Ruiz L, et al. **Minerva Chir** 1996 Jun;51(6):447–50 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Extensive tyrosine nitration in human myocardial inflammation: evidence for the presence of peroxynitrite. Kooy NW, et al. **Crit Care Med** 1997 May;25(5):812–9

Myocardial collagen changes and edema in rats with hyperdynamic sepsis. Yu P, et al. **Crit Care Med** 1997 Apr; 25(4):657–62

Fatal hand sepsis in Tanzanian diabetic patients. Archibald LK, et al. **Diabet Med** 1997 Jul;14(7):607–10

Inducible macrophage apoptosis following sepsis is mediated by cysteine protease activation and nitric oxide release. Williams TE, et al. **J Surg Res** 1997 Jul 1;70(2):113–8

Ultrastructural changes in skeletal muscle mitochondria in gram–negative sepsis. Welty–Wolf KE, et al. **Shock** 1996 May;5(5):378–84

[Tuberculous sepsis in expert practice] Naumov VN, et al. **Sud Med Ekspert** 1997 Apr–Jun;40(2):44–5 **(Rus)**

PHYSIOPATHOLOGY

Effects of dopamine, dopexamine and dobutamine on renal excretory function during experimental sepsis in conscious rats. Pålsson J, et al. **Acta Anaesthesiol Scand** 1997 Mar; 41(3):392–8

Cytopathic hypoxia in sepsis. Fink M. **Acta Anaesthesiol Scand Suppl** 1997;110:87–95 (100 ref.)

Sepsis and nitric oxide. Avontuur JA, et al. **Adv Exp Med Biol** 1996;388:551–67 (128 ref.)

The contrasting effects of dobutamine and dopamine on gastric mucosal perfusion in septic patients. Nevière R, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1684–8

Microcirculatory changes in rat skeletal muscle in sepsis. Piper RD, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):931–7

Nitric oxide synthase inhibition restores vasopressor effects of norepinephrine in ovine hyperdynamic sepsis. Meyer J, et al. **Anesth Analg** 1996 Nov;83(5):1009–13

Multiple organ failure, multiple organ dysfunction syndrome, and systemic inflammatory response syndrome. Why no magic bullets? Baue AE. **Arch Surg** 1997 Jul;132(7):703–7 (42 ref.)

Delayed administration of inhaled nitric oxide preserves alveolar–capillary membrane integrity in porcine gram–negative sepsis. Bloomfield GL, et al. **Arch Surg** 1997 Jan;132(1):65–75

Measuring cardiac output in critically Ill patients: disagreement between thermodilution–, calculated–, expired gas–, and oxygen consumption–based methods. Sherman MS, et al. **Cardiology** 1997 Jan–Feb;88(1):19–25

The effect of sepsis on breathing pattern and weaning outcomes in patients recovering from respiratory failure. Amoateng–Adjepong Y, et al. **Chest** 1997 Aug;112(2):472–7

Nitric oxide in sepsis. Payen D, et al. **Clin Chest Med** 1996 Jun;17(2):333–50 (169 ref.)

Oxalated pyridoxalated hemoglobin polyoxyethylene conjugate normalizes the hyperdynamic circulation in septic sheep. Bone HG, et al. **Crit Care Med** 1997 Jun; 25(6):1010–8

Inotropic treatment and intestinal mucosal tissue oxygenation in a model of porcine endotoxemia [editorial; comment] Goldfarb RD. **Crit Care Med** 1997 Jul;25(7):1108–9. Comment on: Crit Care Med 1997 Jul;25(7):1191–7.

Impaired microvascular vasoconstrictive responses to vasopressin in septic rats. Hollenberg SM, et al. **Crit Care Med** 1997 May;25(5):869–73

Nitric oxide does not mediate lipopolysaccharide–induced myocardial depression in guinea pigs. Toth I, et al. **Crit Care Med** 1997 Apr;25(4):684–8

A dose–response study of phenylephrine in critically ill, septic surgical patients. Flancbaum L, et al. **Eur J Clin Pharmacol** 1997;51(6):461–5

Platelet activating factor antagonism improves cardiovascular function in non–hypotensive sepsis in pigs. Abu–Zidan FM, et al. **Eur J Surg** 1996 Jun;162(6):499–504

Adrenal functions in patients with sepsis. Aygen B, et al. **Exp Clin Endocrinol Diabetes** 1997;105(3):182–6

Role of interleukin 12 in experimental neonatal sepsis caused by group B streptococci. Mancuso G, et al. **Infect Immun** 1997 Sep;65(9):3731–5

The role of nitric oxide in sepsis and ARDS: synopsis of a roundtable conference held in Brussels on 18–20 March 1995. Fink MP, et al. **Intensive Care Med** 1996 Feb; 22(2):158–65 (103 ref.)

Heart rate variability correlates negatively with cardiac index in patients with sepsis [letter] Tang GJ, et al. **Intensive Care Med** 1996 May;22(5):514

Circulatory sequelae of administering CPAP in hyperdynamic sepsis are time dependent. Fox GA, et al. **J Appl Physiol** 1996 Aug;81(2):976–84

Hyperdynamic sepsis depresses circulatory compensation to normovolemic anemia in conscious rats. Morisaki H, et al. **J Appl Physiol** 1996 Feb;80(2):656–64

Cyclooxygenase inhibition and vascular reactivity in a rat model of hyperdynamic sepsis. Fox GA, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):30–5

Circuit factors in the high cardiac output of sepsis [see comments] Magder S, et al. **J Crit Care** 1996 Dec; 11(4):155–66. Comment in: J Crit Care 1996 Dec;11(4):151–4.

Effects of hydroxyethyl starch–deferoxamine on arachidonic acid metabolism and small bowel wall perfusion in early sepsis. Schröppel B, et al. **J Invest Surg** 1997 Jul–Aug; 10(4):173–82

Monocyte response to bacterial toxins, expression of cell surface receptors, and release of anti–inflammatory cytokines during sepsis. Astiz M, et al. **J Lab Clin Med** 1996 Dec;128(6):594–600

Interleukin–10 prevents early cytokine release in severe intraabdominal infection and sepsis. Rongione AJ, et al. **J Surg Res** 1997 Jul 1;70(2):107–12

Physiologic stability and physiologic state. Buchman TG. **J Trauma** 1996 Oct;41(4):599–605

Tumor necrosis factor mediates impaired wound healing in chronic abdominal sepsis. Cooney R, et al. **J Trauma** 1997 Mar;42(3):415–20

Assessment of involuntary muscle function in patients after critical injury or severe sepsis. Finn PJ, et al. **JPEN J Parenter Enteral Nutr** 1996 Sep–Oct;20(5):332–7

Elucidating molecular mechanisms of septic cardiomyopathy—the cardiomyocyte model. Werdan K, et al. **Mol Cell Biochem** 1996 Oct–Nov;163–164:291–303 (73 ref.)

Platelet activating factor and its role in trauma, shock, and sepsis. Ayala A, et al. **New Horiz** 1996 May;4(2):265–75 (91 ref.)

Hypoxic alterations in cellular signal transduction in shock and sepsis. West MA, et al. **New Horiz** 1996 May; 4(2):168–78 (89 ref.)

Group B streptococcal sepsis impairs cerebral vascular reactivity to acute hypercarbia in piglets. Rudinsky BF, et al. **Pediatr Res** 1996 Jan;39(1):55–63

Sepsis and septic shock. Zanetti G, et al. **Schweiz Med Wochenschr** 1997 Mar 22;127(12):489–99 (77 ref.)

Evidence that adenosine contributes to maintenance of hepatosplanchnic blood flow during peritoneal sepsis in rats. Motew SJ, et al. **Shock** 1997 Jun;7(6):439–46

[Similarity and synergy of trauma and sepsis: role of tumor necrosis factor–alpha and interleukin–6 (see comments)] Tang GJ. **Acta Anaesthesiol Sin** 1996 Sep;34(3):141–9 (46 ref.) (Eng. Abstr.). Comment in: Acta Anaesthesiol Sin 1996 Sep;34(3):i. **(Chi)**

[Hyperdynamic hemodynamics following high–dose interleukin 2–interferon alpha therapy in patients with metastatic renal cell carcinoma. Immunotherapy as a clinical sepsis model?] Finck–Seelen, et al. **Anaesthesist** 1996 Dec;45(12):1171–8 (Eng. Abstr.) **(Ger)**

[Sepsis and cytokines] Glauser MP. **Kansenshogaku Zasshi** 1996 Oct;70(10):1054–61 (0 ref.) **(Jpn)**

[Homeostatic disorders and their correction in a program of combined treatment in odontogenic sepsis] Kharitonov IuM, et al. **Stomatologiia (Mosk)** 1996;Spec No:86–7 **(Rus)**

[The effect of endogenous intoxication on liver function in patients with phlegmons of the face and neck] Zabelin AS, et al. **Stomatologiia (Mosk)** 1997;76(2):33–5 (Eng. Abstr.) **(Rus)**

[Sepsis. I. [Definition of the concept and comments on pathophysiology] Makovický P, et al. **Cas Lek Cesk** 1996 Sep 18;135(18):580–3 (34 ref.) (Eng. Abstr.) **(Slo)**

PREVENTION & CONTROL

Teicoplanin pharmacology in prophylaxis for coagulase–negative staphylococcal sepsis of very low birthweight infants [letter] Möller JC, et al. **Acta Paediatr** 1996 May;85(5):638–9

Central venous line sepsis [letter; comment] Cyna AM, et al. **Anaesthesia** 1997 Jul;52(7):712–3. Comment on: Anaesthesia 1997 Mar;52(3):286–7.

Central venous line sepsis in the intensive care unit. A study comparing antibiotic coated catheters with plain catheters [published erratum appears in Anaesthesia 1997 Feb;52(2):192] Thornton J, et al. **Anaesthesia** 1996 Nov; 51(11):1018–20

A randomized trial of isonitrogenous enteral diets after severe trauma. An immune–enhancing diet reduces septic complications. Kudsk KA, et al. **Ann Surg** 1996 Oct; 224(4):531–40; discussion 540–3

Preferences of pregnant women and physicians for 2 strategies for prevention of early–onset group B streptococcal sepsis in neonates. Peralta–Carcelen M, et al. **Arch Pediatr Adolesc Med** 1997 Jul;151(7):712–8

Endogenous interleukin–11 (IL–11) expression is increased and prophylactic use of exogenous IL–11 enhances platelet recovery and improves survival during thrombocytopenia associated with experimental group B streptococcal sepsis in neonatal rats. Chang M, et al. **Blood Cells Mol Dis** 1996; 22(1):57–67

Commentary: summary statistics of poor quality studies must be treated cautiously [comment] Berlin JA. **BMJ** 1997 Feb 1;314(7077):337. Comment on: BMJ 1997 Feb 1;314(7077):334–6.

Meta–analysis of trials of prophylactic antibiotics for children with measles: inadequate evidence [see comments] Shann F. **BMJ** 1997 Feb 1;314(7077):334–6. Comment in: BMJ 1997 Feb 1;314(7077):337.

Relevance of performing a 'sepsis screen' in a surgical neonate. Kataria R, et al. **Indian Pediatr** 1997 Mar; 34(3):238–41

Preventing endoscopic retrograde cholangiopancreatography related sepsis: a randomized controlled trial comparing two antibiotic regimes. Smith BC, et al. **J Gastroenterol Hepatol** 1996 Oct;11(10):938–41

Prevention of sepsis in total joint arthroplasty. An YH, et al. **J Hosp Infect** 1996 Jun;33(2):93–108 (135 ref.)

Dimethylthiourea protects rats against gram–negative sepsis and decreases tumor necrosis factor and nuclear factor kappaB activity. Sprong RC, et al. **J Lab Clin Med** 1997 Apr;129(4):470–81

Prevention of early onset group B streptococcal sepsis in the newborn. Vigneswaran R, et al. **J Paediatr Child Health** 1995 Dec;31(6):493–4 (13 ref.)

Stephen L. Gans Visiting Guest Lecture: central venous catheters for parenteral nutrition: a double–edged sword. Lloyd DA. **J Pediatr Surg** 1997 Jul;32(7):943–8 (11 ref.)

Use of human milk in the intensive care nursery decreases the incidence of nosocomial sepsis. el–Mohandes AE, et al. **J Perinatol** 1997 Mar–Apr;17(2):130–4

Prevention of post splenectomy sepsis: a population based approach. Sarangi J, et al. **J Public Health Med** 1997 Jun; 19(2):208–12

Immunization with antibodies that mimic LPS protects against gram negative bacterial sepsis. Klaerner HG, et al. **J Surg Res** 1997 May;69(2):249–54

Bacterial and fungal infection in acute liver failure. Rolando N, et al. **Semin Liver Dis** 1996 Nov;16(4):389–402 (89 ref.)

Effects of the angiotensin converting enzyme inhibitor enalapril on bacterial translocation after thermal injury and bacterial challenge. Gennari R, et al. **Shock** 1996 Aug; 6(2):95–100

The potential for bacterial testing of blood products [editorial] Wagner SJ. **Zentralbl Bakteriol** 1996 Mar; 283(3):253–7

[Protective effect of lipid A monoclonal antibody against burn sepsis in rats] Xiao H, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):167–70 (Eng. Abstr.) **(Chi)**

[Prevention and treatment of postoperative septic MOF and DIC and efficacy of blood purification] Hirasawa H, et al. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1079–84 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Recent advances and treatment of sepsis] Hirata K. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1072–8 (8 ref.) (Eng. Abstr.) **(Jpn)**

[New possibilities in prevention and correction of postoperative suppurative–septic complications and multiple organ failure in oncological surgery] Edeleva NV, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):36–41 (Eng. Abstr.) **(Rus)**

[Use of immunomodulator polyoxydony in treatment and prevention of septic conditions in surgical patients] Khaitov RM, et al. **Khirurgiia (Mosk)** 1997;(1):49–54 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

[Artificially induced suppurative diseases] Svetukhin AM, et al. **Khirurgiia (Mosk)** 1996;(6):69–72 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Occult sepsis: fate or challenge? [editorial] Locher JT. **Intensive Care Med** 1996 Sep;22(9):844–6 (10 ref.)

The clinical use of 99m–Tc–labeled WBC scintigraphy in critically ill surgical and trauma patients with occult sepsis. Minoja G, et al. **Intensive Care Med** 1996 Sep;22(9):867–71

SURGERY

Does reoperation for abdominal sepsis enhance the inflammatory host response? Sautner T, et al. **Arch Surg** 1997 Mar;132(3):250–5

Laparotomy for abdominal sepsis in the critically ill [letter; comment] Koperna T, et al. **Br J Surg** 1996 Sep; 83(9):1300–1. Comment on: Br J Surg 1996 Apr;83(4):535–9.

Kinetics of circulating TNF–alpha and TNF soluble receptors following surgery in a clinical model of sepsis. Neilson D, et al. **Cytokine** 1996 Dec;8(12):938–43

Complicated anorectal sepsis. Gilliland R, et al. **Surg Clin North Am** 1997 Feb;77(1):115–53 (205 ref.)

[Ways to improve the care of patients with suppurative surgical diseases] Kazarezov MV, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):92–3 **(Rus)**

THERAPY

Markers of oxidative stress before and after exchange transfusion for neonatal sepsis. Kokk T, et al. **Acta Paediatr** 1996 Oct;85(10):1244–6

Continuous arteriovenous hemofiltration attenuates polymorphonuclear leukocyte phagocytosis in porcine intra–abdominal sepsis. DiScipio AW, et al. **Am J Surg** 1997 Mar;173(3):174–80

G–CSF stimulated donor granulocyte collections for prophylaxis and therapy of neutropenic sepsis. Grigg A, et al. **Aust N Z J Med** 1996 Dec;26(6):813–8

Comparison of early IgM–enriched immunoglobulin vs polyvalent IgG administration in score–identified postcardiac surgical patients at high risk for sepsis. Pilz G, et al. **Chest** 1997 Feb;111(2):419–26

Granulocyte colony–stimulating factor and modulation of inflammatory cells in sepsis. Nelson S, et al. **Clin Chest Med** 1996 Jun;17(2):319–32 (122 ref.)

Hemodynamic support during sepsis. Ognibene FP. **Clin Chest Med** 1996 Jun;17(2):279–87 (22 ref.)

Immunotherapy for sepsis. Ralston DR, et al. **Clin Chest Med** 1996 Jun;17(2):307–17 (104 ref.)

Novel approaches to the prevention and therapy of neonatal bacterial sepsis. Perez EM, et al. **Clin Perinatol** 1997 Mar; 24(1):213–29 (119 ref.)

Oxygen delivery, oxygen consumption, and gastric intramucosal pH are not improved by a computer–controlled, closed–loop, vecuronium infusion in severe sepsis and septic shock. Freebairn RC, et al. **Crit Care Med** 1997 Jan;25(1):72–7

Parenteral administration of different amounts of branch–chain amino acids in septic patients: clinical and metabolic aspects. García–de–Lorenzo A, et al. **Crit Care Med** 1997 Mar;25(3):418–24

Introducing Critical Appraisal to studies of animal models investigating novel therapies in sepsis. Piper RD, et al. **Crit Care Med** 1996 Dec;24(12):2059–70 (111 ref.)

Influence of alterations in foregoing life–sustaining treatment practices on a clinical sepsis trial. The HA–1A Sepsis Study Group [published erratum appears in Crit Care Med 1997 Jun;25(6):1092] Sprung CL, et al. **Crit Care Med** 1997 Mar; 25(3):383–7

A comparison of bactericidal/permeability–increasing protein variant versus recombinant endotoxin–neutralizing protein for the treatment of Escherichia coli sepsis in rats [published erratum appears in Crit Care Med 1997 Mar;25(3):558] Stack AM, et al. **Crit Care Med** 1997 Jan; 25(1):101–5

Immune modulation and sepsis. Karzai W, et al. **Int J Clin Pract** 1997 Jun;51(4):232–7 (62 ref.)

Influence of different volume therapies on platelet function in the critically ill. Boldt J, et al. **Intensive Care Med** 1996 Oct;22(10):1075–81

Effect of hemofiltration on hemodynamics and systemic concentrations of anaphylatoxins and cytokines in human sepsis. Hoffmann JN, et al. **Intensive Care Med** 1996 Dec; 22(12):1360–7

Monocyte deactivation—rationale for a new therapeutic strategy in sepsis. Volk HD, et al. **Intensive Care Med** 1996 Oct;22 Suppl 4:S474–81 (24 ref.)

Sepsis and polyspecific intravenous immunoglobulins. Nydegger UE. **J Clin Apheresis** 1997;12(2):93–9 (41 ref.)

Meta–analysis of clinical studies of the efficacy of granulocyte transfusions in the treatment of bacterial sepsis. Vamvakas EC, et al. **J Clin Apheresis** 1996;11(1):1–9

Insightful comments on clinical trials in sepsis [editorial; comment] Gutierrez G. **J Crit Care** 1997 Mar;12(1):1–2. Comment on: J Crit Care 1997 Mar;12(1):3–6.

Clinical trials in sepsis: where do we stand? [see comments] Vincent JL. **J Crit Care** 1997 Mar;12(1):3–6 (17 ref.). Comment in: J Crit Care 1997 Mar;12(1):1–2.

Intravenous immunoglobulin in the treatment of full–term and premature newborns with sepsis. Chen JY. **J Formos Med Assoc** 1996 Nov;95(11):839–44

Beneficial effects of enteral fat administration on liver dysfunction, liver lipid accumulation, and protein metabolism in septic rats. Hayashi N, et al. **J Nutr Sci Vitaminol (Tokyo)** 1995 Dec;41(6):657–69

Why sepsis trials fail [letter; comment] Denham W, et al. **JAMA** 1996 Dec 4;276(21):1723. Comment on: JAMA 1996 Aug 21;276(7):565–6.

Sepsis therapy still shocking [news] **Nat Biotechnol** 1997 Jul; 15(7):601

High protein diets are associated with increased bacterial translocation in septic guinea pigs. Nelson JL, et al. **Nutrition** 1996 Mar;12(3):195–9

Advances in the therapy for sepsis in children. Anderson MR, et al. **Pediatr Clin North Am** 1997 Feb;44(1):179–205 (67 ref.)

The administration of complement component C9 enhances the survival of neonatal rats with Escherichia coli sepsis. Lassiter HA, et al. **Pediatr Res** 1997 Jul;42(1):128–36

Can hemodialysis technique modify the hypercatabolic state? Sunder–Plassmann G, et al. **Ren Fail** 1996 May; 18(3):395–404 (70 ref.)

Novel approaches to the treatment of sepsis: lessons learned and future directions. Cross A. **Shock** 1996;6 Suppl 1:S71–4 (19 ref.)

Effect of immunoglobulin G on the hepatic microvascular inflammatory response during sepsis. McCuskey RS, et al. **Shock** 1996 Jan;5(1):28–33

Therapies for sepsis. Emerging therapies for sepsis and septic shock. Abraham E. **West J Med** 1997 Mar;166(3):195–200

[Treatment of meningococcal sepsis] Kasal E, et al. **Cas Lek Cesk** 1997 May 7;136(9):286–8 (Eng. Abstr.) **(Cze)**

[Nutritional support in sepsis] Saito H. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1085–90 (32 ref.) (Eng. Abstr.) **(Jpn)**

[Sepsis—generalized infection. The treatment of adults based on personal observations (editorial)] Olejnik Z, et al. **Pol Tyg Lek** 1996 Jun;51(23–26):314–7 (Eng. Abstr.) **(Pol)**

[Hypoxic changes in metabolism and effectiveness of therapy of surgical sepsis in children] Mironov PI, et al. **Anesteziol Reanimatol** 1996 Nov–Dec;(6):59–60 (Eng. Abstr.) **(Rus)**

[Plasma contents of cytokines (TNF–alpha, IL–1 beta, IL–6) and their clearance during continuous hemofiltration in patients with sepsis and multiple organ failure] Timokhov VS, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):59–62 (Eng. Abstr.) **(Rus)**

[Immunotherapy of sepsis: myth or reality?] Vinnitskii LI, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):89–97 (143 ref.) **(Rus)**

[Experience in the treatment of severe forms of sepsis by extracorporeal therapy and hyperbaric oxygenation] Zhidkov KP, et al. **Anesteziol Reanimatol** 1997 May–Jun; (3):49–51 (Eng. Abstr.) **(Rus)**

[Immunotherapy of surgical sepsis] Malinovskii NN, et al. **Khirurgiia (Mosk)** 1997;(1):4–8 (Eng. Abstr.) **(Rus)**

[Hemodynamic disorders and their correction in the

treatment of patients with suppurative septic diseases of the face and neck] Ermolenko SV, et al. **Stomatologiia (Mosk)** 1996;Spec No:54–5 **(Rus)**

[Sepsis. II. Complications and treatment of sepsis] Makovický P, et al. **Cas Lek Cesk** 1996 Oct 9;135(19):614–6 (34 ref.) (Eng. Abstr.) **(Slo)**

[The effect of the composition of the enteral nutrition on infection in the critical patient (see comments)] Rodrigo Casanova MP, et al. **Nutr Hosp** 1997 Mar–Apr;12(2):80–4 (Eng. Abstr.). Comment in: Nutr Hosp 1997 Mar–Apr;12(2):61–2. **(Spa)**

[Endotoxicosis in the pathogenesis of severe forms of psoriasis and its correction by combined therapy using sillard P and plant species] Trunina TI. **Lik Sprava** 1997 Mar–Apr;(2):126–30 **(Ukr)**

URINE

Known bacterial virulence factors do not explain the variation in urinary cytokine levels in patients with urosepsis. Prins JM, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31;16(3–4):283–9

VETERINARY

What is your diagnosis? Chronic sepsis of the distal interphalangeal joint and distal portion of the sesamoid bursa. Johnson R, et al. **J Am Vet Med Assoc** 1997 May 15;210(10):1421–2

Septic tenosynovitis and focal osteomyelitis of the lateral proximal sesamoid bone in a thoroughbred gelding. Chan CC, et al. **Vet Rec** 1997 Aug 9;141(6):147–50

VIROLOGY

Enhanced (cytomegalovirus) viral replication associated with septic bacterial complications in liver transplant recipients. Mutimer D, et al. **Transplantation** 1997 May 27; 63(10):1411–5

SEPSIS SYNDROME

see related

RESPIRATORY DISTRESS SYNDROME, ADULT

Endothelial cell injury in cardiovascular surgery: the systemic inflammatory response. Boyle EM Jr, et al. **Ann Thorac Surg** 1997 Jan;63(1):277–84 (62 ref.)

Systemic inflammatory response syndrome. Davies MG, et al. **Br J Surg** 1997 Jul;84(7):920–35 (165 ref.)

The sepsis syndrome. Definition and general approach to management. Bone RC. **Clin Chest Med** 1996 Jun; 17(2):175–81 (8 ref.)

Proceedings of a meeting on sepsis and septic complications. North York, Ontario, Canada, October 12–13, 1995. **Shock** 1996;6 Suppl 1:S1–74

MODS/SIRS conditions [letter; comment] Hunt TK. **World J Surg** 1997 Mar–Apr;21(3):344. Comment on: World J Surg 1996 May;20(4):418–21.

[Systemic inflammatory response syndrome] Huang Y. **Chung Hua I Hsueh Tsa Chih** 1996 Aug;76(8):629–31 (16 ref.) **(Chi)**

[Sepsis: a pending subject for the 21st century (letter; comment)] Torrabadella de Reynoso P, et al. **Med Clin (Barc)** 1996 Jun 29;107(5):198–9. Comment on: Med Clin (Barc) 1995 Sep 16;105(8):304–7. **(Spa)**

BLOOD

Pilot study of cytokines in emergency department patients with systemic inflammatory response syndrome. Terregino CA, et al. **Acad Emerg Med** 1997 Jul;4(7):684–8

Unopposed interleukin-1 is necessary for increased plasma cytokine and eicosanoid levels to develop in severe sepsis. Slotman GJ, et al. **Ann Surg** 1997 Jul;226(1):77–84

Interaction of NO, endothelin and oxalate in patients with systemic inflammatory response syndrome (SIRS). Albrecht S, et al. **Biomed Chromatogr** 1997 Mar–Apr; 11(2):77–8

The level of lipopolysaccharide-binding protein is significantly increased in plasma in patients with the systemic inflammatory response syndrome. Myc A, et al. **Clin Diagn Lab Immunol** 1997 Mar;4(2):113–6

Circulating complement proteins in patients with sepsis or systemic inflammatory response syndrome. Stöve S, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):175–83

Decreased neutrophil L-selectin expression in patients with systemic inflammatory response syndrome. Ahmed NA, et al. **Clin Invest Med** 1996 Dec;19(6):427–34

Plasma proinflammatory cytokine concentrations, Acute Physiology and Chronic Health Evaluation (APACHE) III scores and survival in patients in an intensive care unit [see comments] Friedland JS, et al. **Crit Care Med** 1996 Nov;24(11):1775–81. Comment in: Crit Care Med 1996 Nov;24(11):1769–71.

Measurements of total plasma nitrite and nitrate in pediatric patients with the systemic inflammatory response syndrome. Spack L, et al. **Crit Care Med** 1997 Jun; 25(6):1071–8

Endothelin production in sepsis and the adult respiratory distress syndrome. Sanai L, et al. **Intensive Care Med** 1996 Jan;22(1):52–6

Is bleomycin-detectable iron present in the plasma of patients with sepsis syndrome? [editorial; comment] Weinberg ED. **Intensive Care Med** 1997 Jun;23(6):613–4. Comment on: Intensive Care Med 1997 Jun;23(6):635–9.

Impact of continuous hemofiltration on cytokines and cytokine inhibitors in oliguric patients suffering from systemic inflammatory response syndrome. van Bommel EF, et al. **Ren Fail** 1997 May;19(3):443–54

Evaluation of enzyme-linked immunosorbent assays for quantitation of eicosanoid mediators of sepsis syndrome. Quinn JV, et al. **Shock** 1996 Aug;6(2):142–9

CLASSIFICATION

"Sepsis/SIRS," physiologic classification, severity stratification, relation to cytokine elaboration and outcome prediction in posttrauma critical illness. Rixen D, et al. **J Trauma** 1996 Oct;41(4):581–98

[History and definition of sepsis--do we need new terminology?] Kreymann G, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Feb; 31(1):9–14 (18 ref.) (Eng. Abstr.) **(Ger)**

[The systemic inflammatory response syndrome: its classification, physiopathology and treatment strategies (editorial)] Baltodano A. **An Esp Pediatr** 1996 May; 44(5):414–21 (54 ref.) **(Spa)**

COMPLICATIONS

Infections and the inflammatory response in acute respiratory distress syndrome. Headley AS, et al. **Chest** 1997 May; 111(5):1306–21

Hyperacute pneumonitis in a patient with overwhelming Strongyloides stercoralis infection. Casati A, et al. **Eur J Anaesthesiol** 1996 Sep;13(5):498–501

Chronic relapsing cervicofacial necrotizing fasciitis: case report. Richardson D, et al. **J Oral Maxillofac Surg** 1997 Apr;55(4):403–8

[Microcirculatory disturbances after surgical insults--important role of inflammatory cytokines] Wakabayashi G, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):759–64 (14 ref.) (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Pilot study of cytokines in emergency department patients with systemic inflammatory response syndrome. Terregino CA, et al. **Acad Emerg Med** 1997 Jul;4(7):684–8

Acute phase proteins, C-reactive protein and serum amyloid A protein, as prognostic markers in the elderly inpatient. Hogarth MB, et al. **Age Ageing** 1997 Mar;26(2):153–8

Early detection and markers of sepsis. Parsons PE, et al. **Clin Chest Med** 1996 Jun;17(2):199–212 (125 ref.)

Dear SIRS, I'm sorry to say that I don't like you... Vincent JL. **Crit Care Med** 1997 Feb;25(2):372–4

Plasma levels of immunoinhibitory cytokines interleukin-10 and transforming growth factor-beta in patients undergoing coronary artery bypass grafting. Sablotzki A, et al. **Eur J Cardiothorac Surg** 1997 Apr;11(4):763–8

[Systemic inflammatory reactions to extracorporeal therapy measures (I): Hemodialysis and hemofiltration] Schlee H, et al. **Wien Klin Wochenschr** 1997 May 9;109(9):301–11 (78 ref.) (Eng. Abstr.) **(Ger)**

[Endogenous intoxication syndrome in critical states in infants. New diagnostic and prognostic possibilities] Kuznetsov NN, et al. **Anesteziol Reanimatol** 1996 Nov–Dec;(6):21–4 (Eng. Abstr.) **(Rus)**

[The endogenous intoxication syndrome in sepsis] Makarova NP, et al. **Anesteziol Reanimatol** 1995 Nov–Dec;(6):4–8 (44 ref.) **(Rus)**

DRUG THERAPY

Avoiding the rush [editorial; comment] Deutschman CS. **Crit Care Med** 1997 Jul;25(7):1110–1. Comment on: Crit Care Med 1997 Jul;25(7):1207–14.

Administration of human recombinant insulin-like growth factor-I in critically ill patients. Yarwood GD, et al. **Crit Care Med** 1997 Aug;25(8):1352–61

Effects of aminoguanidine on systemic inflammatory response syndrome induced by platelet activating factor and by lipopolysaccharide in rats. Takano H, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):107–10

Safety of a low-dosage Filgrastim (rhG-CSF) treatment in non-neutropenic surgical intensive care patients with an inflammatory process [see comments] Gross-Weege W, et al. **Intensive Care Med** 1997 Jan;23(1):16–22. Comment in: Intensive Care Med 1997 Jan;23(1):1–2.

Treatment of severe systemic inflammatory response syndrome and sepsis with a novel bradykinin antagonist, deltibant (CP-0127). Results of a randomized, double-blind, placebo-controlled trial. CP-0127 SIRS and Sepsis Study Group. Fein AM, et al. **JAMA** 1997 Feb 12; 277(6):482–7

Treatment with the platelet-activating factor antagonist TCV-309 in patients with severe systemic inflammatory response syndrome: a prospective, multi-center, double-blind, randomized phase II trial. Froon AM, et al. **Shock** 1996 May;5(5):313–9

[Microcirculation and hemostasis in inflammatory processes. Modulation by administration of physiologic protease inhibitors as a therapeutic approach] Leithäuser B, et al. **Med Klin** 1997 Jul 15;92(7):426–31 (40 ref.) (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Systemic inflammatory response syndrome (SIRS) and sepsis in surgical patients [letter; comment] Menger MD, et al. **Intensive Care Med** 1996 Jun;22(6):616–7. Comment on: Intensive Care Med 1995 Apr;21(4):302–9.

Epidemiology of sepsis syndrome in 8 academic medical centers. Academic Medical Center Consortium Sepsis Project Working Group [see comments] Sands KE, et al. **JAMA** 1997 Jul 16;278(3):234–40. Comment in: JAMA 1997 Jul 16;278(3):249.

Septic syndrome and septic shock in the wounded treated at the Split Clinical Hospital Intensive Care Unit. Bačić A, et al. **Mil Med** 1997 May;162(5):363–5

MOF/MODS, SIRS: an update. Baue AE. **Shock** 1996;6 Suppl 1:S1–5 (45 ref.)

[Decrease of the incidence of sepsis syndrome after early enteral nutrition of patients with severe burns] Pereira JL, et al. **Nutr Hosp** 1996 Sep–Oct;11(5):274–8 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Sepsis: a new hypothesis for pathogenesis of the disease process. Bone RC, et al. **Chest** 1997 Jul;112(1):235–43 (57 ref.)

Inflammatory response to cardiopulmonary bypass: mechanisms involved and possible therapeutic strategies. Wan S, et al. **Chest** 1997 Sep;112(3):676–92 (235 ref.)

Systemic inflammatory response syndrome in intravascular lymphomatosis. Ip M, et al. **Intensive Care Med** 1997 Jul; 23(7):783–6

The role of the vascular endothelium in inflammatory syndromes, atherogenesis, and the propagation of disease. Hill GE, et al. **J Cardiothorac Vasc Anesth** 1997 May; 11(3):316–21 (76 ref.)

Cardiopulmonary bypass and the inflammatory response: a role for serine protease inhibitors? Murkin JM. **J Cardiothorac Vasc Anesth** 1997 Apr;11(2 Suppl 1):19–23; discussion 24–5 (35 ref.)

GENETICS

[NF-kB activation--a central mediator of sepsis] Zimmermann T, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:363–7 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Impaired neutrophil adherence as an early marker of systemic inflammatory response syndrome and severe sepsis. Terregino CA, et al. **Ann Emerg Med** 1997 Mar;29(3):400–3

Cytokine responses to cardiopulmonary bypass: lessons learned from cardiac transplantation. Wan S, et al. **Ann Thorac Surg** 1997 Jan;63(1):269–76 (71 ref.)

Relative contribution of endothelial cell and polymorphonuclear neutrophil activation in their interactions in systemic inflammatory response syndrome. Chen X, et al. **Arch Surg** 1996 Nov;131(11):1148–53; discussion 1153–4

Shedding of L-selectin as a mechanism for reduced polymorphonuclear neutrophil exudation in patients with the systemic inflammatory response syndrome. McGill SN, et al. **Arch Surg** 1996 Nov;131(11):1141–6; discussion 1147

The pathogenesis of sepsis. Factors that modulate the response to gram-negative bacterial infection. Marsh CB, et al. **Clin Chest Med** 1996 Jun;17(2):183–97 (203 ref.)

Circulating complement proteins in patients with sepsis or systemic inflammatory response syndrome. Stöve S, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):175–83

Selective cytokine release induced by serum and separated plasma from septic patients. Haupt W, et al. **Eur J Surg** 1996 Oct;162(10):769–76

Presence of high levels of leukocyte-associated interleukin-8 upon cell activation and in patients with sepsis syndrome. Marie C, et al. **Infect Immun** 1997 Mar;65(3):865–71

Mechanism of splenic immunosuppression during sepsis: key role of Kupffer cell mediators. Ayala A, et al. **J Trauma** 1997 May;42(5):882–8

Indicators of the posttraumatic inflammatory response correlate with organ failure in patients with multiple injuries. Nast-Kolb D, et al. **J Trauma** 1997 Mar; 42(3):446–54; discussion 454–5

Altered monocyte calcium dynamics in sepsis. Shin H, et al. **J Trauma** 1997 May;42(5):889–93; discussion 893–4

Systemic inflammatory response syndrome in envenoming [letter; comment] Barraviera B. **Toxicon** 1997 Jan; 35(1):13–4. Comment on: Toxicon 1996 Mar;34(3):389–92.

[Pro-inflammatory cytokines regulate apoptosis of granulocytes during systemic inflammation] Ertel W, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:627–9 (Eng. Abstr.) **(Ger)**

[Anti-inflammatory mediators induced deactivation of macrophages with reduced secretion of proinflammatory cytokines] Neidhardt R, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:351–3 (Eng. Abstr.) **(Ger)**

[Early perioperative suppression of inducible leukocytic cytokine gene expression after electric abdominal aortic aneurysm repair] Ziegenfuss T, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:691–4 (Eng. Abstr.) **(Ger)**

[Cytokines and heart diseases. Attempt at an update] Werdan K. **Med Klin** 1997 Jul 15;92(7):432–8 (29 ref.) (Eng. Abstr.) **(Ger)**

[Systemic inflammatory reactions to extracorporeal therapy

measures (II): Cardiopulmonary bypass] Prondzinsky R, et al. **Wien Klin Wochenschr** 1997 May 23;109(10):346–53 (56 ref.) (Eng. Abstr.) **(Ger)**

[The immunobiochemical mechanisms of the intoxication syndrome in acute diffuse peritonitis] Kelina NIu. **Anesteziol Reanimatol** 1996 Sep–Oct;(5):24–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Administration of low–dose dopamine to nonoliguric patients with sepsis syndrome does not raise intramucosal gastric pH nor improve creatinine clearance. Olson D, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1664–70

Activation of the L–arginine nitric oxide pathway in severe sepsis. Duke T, et al. **Arch Dis Child** 1997 Mar;76(3):203–9

Xanthine oxidase activity and free radical generation in patients with sepsis syndrome. Galley HF, et al. **Crit Care Med** 1996 Oct;24(10):1649–53

Oxygen transport patterns in patients with sepsis syndrome or septic shock: influence of treatment and relationship to outcome [see comments] Hayes MA, et al. **Crit Care Med** 1997 Jun;25(6):926–36. Comment in: Crit Care Med 1997 Jun;25(6):904–5.

In vivo endotoxin tolerance: impaired LPS–stimulated TNF release of monocytes from patients with sepsis, but not SIRS. Wilson CS, et al. **J Surg Res** 1997 Apr;69(1):101–6

MICROBIOLOGY

Duration of antibiotic treatment in surgical infections of the abdomen. At what point is infection cured but inflammation persists? Pollock AV. **Eur J Surg Suppl** 1996;(576):13–5

Haemophilus influenzae sepsis resulting from pneumonia. Marinella MA. **Heart Lung** 1997 Jan–Feb;26(1):80–2

Sepsis syndrome induced by tuberculous perforation of the esophagus. Schröder J, et al. **Infection** 1996 Mar–Apr; 24(2):162–3

Ehrlichiosis with systemic sepsis syndrome. Jackson RT, et al. **Tenn Med** 1997 May;90(5):185–6

MORTALITY

Predictors of mortality and multiple organ failure in children with sepsis. Duke TD, et al. **Intensive Care Med** 1997 Jun; 23(6):684–92

PATHOLOGY

[Effect of laparotomy and laparoscopy with CO2 or helium on bacterial translocation in the rat model] Jacobi CA, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:247–51 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Posttraumatic multiple–organ dysfunction syndrome: role of mediators in systemic inflammation and subsequent organ failure. Pastores SM, et al. **Acad Emerg Med** 1996 Jun; 3(6):611–22 (150 ref.)

Alterations of the endogenous surfactant system in septic adult rats. Malloy J, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):617–23

Dear SIRS, I'm sorry to say that I don't like you... Vincent JL. **Crit Care Med** 1997 Feb;25(2):372–4

Blockade of transdiaphragmatic lymphatic absorption reduced systemic inflammatory response syndrome during experimental peritonitis: evaluation with body oxygen kinetics in rats. Gürleyik E, et al. **Eur J Surg** 1996 Sep; 162(9):729–34

Neonatal sepsis. Mathur NB. **Indian Pediatr** 1996 Aug; 33(8):663–74 (77 ref.)

The role of cytokines in cardiac surgery. Tønnesen E, et al. **Int J Cardiol** 1996 Apr 26;53 Suppl:S1–10 (77 ref.)

Platelet function in septic multiple organ dysfunction syndrome [see comments] Gawaz M, et al. **Intensive Care Med** 1997 Apr;23(4):379–85. Comment in: Intensive Care Med 1997 Apr;23(4):366–8.

Platelet–neutrophil interactions in sepsis—platelet guilt by association? [editorial; comment] Heffner JE. **Intensive Care Med** 1997 Apr;23(4):366–8. Comment on: Intensive Care Med 1997 Apr;23(4):379–85.

Inhibition of constitutive nitric oxide synthase (NOS) by nitric oxide generated by inducible NOS after lipopolysaccharide administration provokes renal dysfunction in rats. Schwartz D, et al. **J Clin Invest** 1997 Jul 15;100(2):439–48

Cell surface adrenergic receptor stimulation modifies the endothelial response to SIRS. Systemic Inflammatory Response Syndrome. Tighe D, et al. **New Horiz** 1996 Nov; 4(4):426–42 (104 ref.)

Systemic inflammatory response syndrome: interactions between immune cells and the endothelium. Ahmed N, et al. **Shock** 1996;6 Suppl 1:S39–42 (16 ref.)

The systemic inflammatory response: perspective of human endotoxemia. Santos AA, et al. **Shock** 1996;6 Suppl 1:S50–6

Dehydroepiandrosterone, an endogenous immune modulator, after traumatic shock. Schurr MJ, et al. **Shock** 1997 Jan; 7(1):55–9

[Endothelin (editorial; comment)] Knothe C, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):397–8. Comment on: Anasthesiol Intensivmed Notfallmed Schmer 1997 Jul;32(7):401–8. **(Ger)**

[Surgical metabolism] Jauch KW. **Chirurg** 1997 Jun; 68(6):551–8 (27 ref.) (Eng. Abstr.) **(Ger)**

[Comparison of local and systemic inflammation after laparotomy or laparoscopy in the rat sepsis model] Jacobi CA, et al. **Langenbecks Arch Chir** 1997;382(4 Suppl 1):S9–13 (Eng. Abstr.) **(Ger)**

[Characterization of postoperative barrier disorders of intestinal mucosa in relation to severity of surgical trauma using an oral permeability test] Isbert C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:355–8 (Eng. Abstr.) **(Ger)**

[The significance of neurological manifestations from the aspect of aggressology] Aruga T. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):733–8 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Immune response induced by surgical trauma] Hirota M, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):721–5 (12 ref.) (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

The effect of pentoxifylline on the lung during cardiopulmonary bypass. Türköz R, et al. **Eur J Cardiothorac Surg** 1996;10(5):339–46

The effect of antibody against TNF alpha on cytokine response in Jarisch–Herxheimer reactions of louse–borne relapsing fever. Coxon RE, et al. **QJM** 1997 Mar; 90(3):213–21

[Enteral administration of bovine colostrum reduces perioperative endotoxinemia—a controlled randomized study] Bölke E, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:667–71 (Eng. Abstr.) **(Ger)**

THERAPY

Unopposed interleukin–1 is necessary for increased plasma cytokine and eicosanoid levels to develop in severe sepsis. Slotman GJ, et al. **Ann Surg** 1997 Jul;226(1):77–84

Results of extracorporeal membrane oxygenation in children with sepsis. The Extracorporeal Life Support Organization. Meyer DM, et al. **Ann Thorac Surg** 1997 Mar;63(3):756–61

Hemodynamic effects of plasma exchange in septic patients: preliminary report. Berlot G, et al. **Blood Purif** 1997; 15(1):45–53

Septic shock: current concepts [editorial] Brampton WJ. **Br J Hosp Med** 1997 Feb 19–Mar 4;57(4):127–9

SIRS, MODS and tertiary peritonitis. Reemst PH, et al. **Eur J Surg Suppl** 1996;(576):47–8; discussion 49

Masking of the symptoms of esophageal and bowel perforation by combination treatment of sepsis with polyvalent immunoglobulins and low–dose hydrocortisone. Böhrer H, et al. **Hepatogastroenterology** 1996 May–Jun; 43(9):515–8

Organ–specific therapy in critical illness: interfacing molecular mechanisms with physiological interventions. Pinsky MR. **J Crit Care** 1996 Jun;11(2):95–107 (75 ref.)

[Is there a reliable immunotherapy in infection?] Grimminger F, et al. **Internist (Berl)** 1997 Jun;38(6):541–52 (40 ref.) **(Ger)**

[Monitoring critically ill intensive care patients by semi–invasive COLD (Cardiac–Output–Liver–Diseases) monitoring instead of pulmonary artery catheterization] Töns C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:349–52 (Eng. Abstr.) **(Ger)**

[Pathogenesis and intensive care of infants with toxic–dystrophic syndrome] Aizenberg VL, et al. **Anesteziol Reanimatol** 1996 Nov–Dec;(6):17–20 (Eng. Abstr.) **(Rus)**

[The endogenous intoxication syndrome and the procedure for detoxication therapy in the treatment of suppurative diseases of the face and neck] Gubin MA, et al. **Stomatologiia (Mosk)** 1996;75(4):23–7 (Eng. Abstr.) **(Rus)**

[The principle of cytokine therapy in the sepsis syndrome (a preliminary report)] Shliapnikov SA, et al. **Vestn Khir Im I I Grek** 1997;156(2):51–4 (Eng. Abstr.) **(Rus)**

[The multimodal therapy of surgical sepsis] Briusov PG, et al. **Voen Med Zh** 1997 Mar;318(3):28–34, 80 (Eng. Abstr.) **(Rus)**

URINE

Urinary nitrite excretion in low birth weight neonates with systemic inflammatory response syndrome. Uzuner N, et al. **Biol Neonate** 1997;71(6):362–6

SEPTAL NUCLEI

ANATOMY & HISTOLOGY

Anatomy and pathology of the septal region. Cavazos JE, et al. **Neuroimaging Clin N Am** 1997 Feb;7(1):67–78 (20 ref.)

CHEMISTRY

Medial septal benzodiazepine receptors modulate hippocampal evoked responses and long–term potentiation. Stackman RW, et al. **Brain Res** 1996 Apr 22;717(1–2):12–21

CYTOLOGY

Projections from the lateral part of the central amygdalar nucleus to the postulated fear conditioning circuit. Petrovich GD, et al. **Brain Res** 1997 Jul 25;763(2):247–54

Piriform cortex efferents to the entorhinal cortex in vivo: kindling–induced potentiation and the enhancement of long–term potentiation by low–frequency piriform cortex or medial septal stimulation. Chapman A, et al. **Hippocampus** 1997;7(3):257–70

Septal complex of the telencephalon of the lizard Podarcis hispanica. II. Afferent connections. Font C, et al. **J Comp Neurol** 1997 Jul 14;383(4):489–511

Experimental immune–mediated damage of septal cholinergic neurons. Kálmán J, et al. **J Neuroimmunol** 1997 Jul; 77(1):63–74

Neurotrophin effects on survival and expression of cholinergic properties in cultured rat septal neurons under normal and stress conditions. Nonner D, et al. **J Neurosci** 1996 Nov 1;16(21):6665–75

Disinhibition of rat hippocampal pyramidal cells by GABAergic afferents from the septum. Tóth K, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):463–74

DRUG EFFECTS

Electrophysiological actions of GABAB agonists and antagonists in rat dorso–lateral septal neurones in vitro. Bon C, et al. **Br J Pharmacol** 1996 Jun;118(4):961–7

Lack of correlation between the molecular size and the efficacy of lanthanides for potentiating GABAA currents in rat septal cholinergic neurons in culture. Kumamoto E, et al. **Brain Res** 1996 Jun 3;723(1–2):235–7

Transforming growth factor alpha differentially affects GABAergic and cholinergic neurons in rat medial septal cell cultures. Mazzoni IE, et al. **Brain Res** 1996 Jan 22; 707(1):88–99

Medial septal injection of naloxone elevates acetylcholine release in the hippocampus and induces behavioral seizures in rats. Mizuno T, et al. **Brain Res** 1996 Mar 25;713(1–2):1–7

Intraseptal infusion of selective and competitive glutamate receptor agonist NMDA and antagonist D–2–amino–5–phosphonopentanoic acid spectral implications for the physostigmine–induced hippocampal theta rhythm in urethane–anesthetized rats. Puma C, et al. **Exp Brain Res** 1996 Jun;109(3):384–92

Muscarine activates a nonselective cation current through a M3 muscarinic receptor subtype in rat dorsolateral septal nucleus neurons. Hasuo H, et al. **J Neurophysiol** 1996 Oct; 76(4):2221–30

Chronic cocaine enhances gamma–aminobutyric acid and glutamate release by altering presynaptic and not postsynaptic gamma–aminobutyric acidB receptors within the rat dorsolateral septal nucleus. Shoji S, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):129–37

Noradrenaline induces IPSCs in rat medial septal/diagonal band neurons: involvement of septohippocampal GABAergic neurons. Alreja M, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):201–15

Intraseptal flumazenil enhances, while diazepam binding inhibitor impairs, performance in a working memory task. Herzog CD, et al. **Neurobiol Learn Mem** 1996 Nov; 66(3):341–52

Intraseptal infusions of muscimol impair spontaneous alternation performance: infusions of glucose into the hippocampus, but not the medial septum, reverse the deficit. Parent MB, et al. **Neurobiol Learn Mem** 1997 Jul; 68(1):75–85

Ibotenic acid in the medial septum increased brain–derived neurotrophic factor mRNA levels in the dorsal rat hippocampal formation. Mahy N, et al. **Neurosci Lett** 1996 Aug 9;213(3):169–72

Administration of amyloid beta–peptides in the rat medial septum causes memory deficits: reversal by SR 57746A, a non–peptide neurotrophic compound. Terranova JP, et al. **Neurosci Lett** 1996 Aug 2;213(2):79–82

Developmental age–dependent upregulation of choline acetyltransferase and vesicular acetylcholine transporter mRNA expression in neonatal rat septum by nerve growth factor. Tian X, et al. **Neurosci Lett** 1996 May 10; 209(2):134–6

Consequences of selective blockade of septal noradrenergic afferents on anxiety and spatial working memory performance in mice. Belotti M, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):541–7

Effects of RU 52583, an alpha 2–antagonist, on memory in rats with excitotoxic damage to the septal area. M'Harzi M, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):649–55

Depletion of glucose causes presynaptic inhibition of neuronal transmission in the rat dorsolateral septal nucleus. Akasu T, et al. **Synapse** 1996 Oct;24(2):125–34

Interleukin–2 increases choline acetyltransferase activity in septal–cell cultures. Mennicken F, et al. **Synapse** 1997 Jun; 26(2):175–83

ENZYMOLOGY

The human immunodeficiency virus type 1 (HIV–1) glycoprotein gp120 reduces the expression of neuronal nitric oxide synthase in the hippocampus but not in the cerebral cortex and medial septal nucleus of rat. Bagetta G, et al. **Neurosci Lett** 1997 Mar 14;224(2):75–8

Activity of choline acetyltransferase in the rat medial septal nucleus following fimbria–fornix transection or selective immunolesioning with 192 IgG–saporin. Hage B, et al. **Neurosci Lett** 1996 Feb 23;205(2):119–22

Brain–derived neurotrophic factor induced stimulation of septal choline acetyltransferase activity in ethylcholine mustard aziridinium treated rats. Willson CA, et al.

SEPTAL NUCLEI

Neurosci Lett 1997 Jul 4;229(3):149–52

GROWTH & DEVELOPMENT

Development of cholinergic and GABAergic neurons in the rat medial septum: different onset of choline acetyltransferase and glutamate decarboxylase mRNA expression. Bender R, et al. **J Comp Neurol** 1996 Aug 19; 372(2):204–14

METABOLISM

Medial septal cholinergic neurons express c-Jun but do not undergo DNA fragmentation after fornix-fimbria transections. Butterworth NJ, et al.
Brain Res Mol Brain Res 1996 Dec 31;43(1–2):1–12

Transient up-regulation of ciliary neurotrophic factor receptor-alpha mRNA in axotomized rat septal neurons. Lee MY, et al. **Eur J Neurosci** 1997 Mar;9(3):622–6

Properties of ligand-gated potassium channels in neurons of rat dorsolateral septal nucleus. Goto M, et al.
Kurume Med J 1997;44(2):125–33

ret receptor tyrosine kinase immunoreactivity is altered in glial cell line-derived neurotrophic factor-responsive neurons following lesions of the nigrostriatal and septohippocampal pathways. Araujo DM, et al.
Neuroscience 1997 Sep;80(1):9–16

Serotonin1A receptors are expressed by a subpopulation of cholinergic neurons in the rat medial septum and diagonal band of Broca--a double immunocytochemical study. Kia HK, et al. **Neuroscience** 1996 Sep;74(1):143–54

Difference in testosterone sensitivity in male spontaneously hypertensive (SHR) and Wistar-Kyoto rats (WKY). Magnusson K, et al. **Physiol Behav** 1996 Sep;60(3):907–12

PATHOLOGY

Fluid percussion injury causes disruption of the septohippocampal pathway in the rat. Leonard JR, et al. **Exp Neurol** 1997 Feb;143(2):177–87

Analysis of neuronal death in the central nervous system using a new apoptosis model. Okura Y, et al.
Neurosci Res 1996 Nov;26(3):279–88

PHYSIOLOGY

The septohippocampal system is involved in prepulse inhibition of the acoustic startle response in rats. Koch M.
Behav Neurosci 1996 Jun;110(3):468–77

Differential effects of selective immunotoxic lesions of medial septal cholinergic cells on spatial working and reference memory. Shen J, et al. **Behav Neurosci** 1996 Oct; 110(5):1181–6

Innate differences in medial septal area burst firing neurons and the hippocampal theta rhythm during ambulation in selectively bred rat lines. Breen TE, et al. **Brain Res** 1996 Apr 1;714(1–2):156–64

Polysynaptic potentiation in the lateral septum following stimulation of the fimbria in anesthetized rats. Garcia R, et al. **Brain Res** 1996 Oct 21;737(1–2):169–74

Enhanced sympathetic neurite outgrowth on rat hippocampal tissue sections following septal lesions. Tian X, et al.
Brain Res 1996 Jun 24;725(1):111–4

Insights into the role of the cholinergic component of the septohippocampal pathway: what have we learned from experimental lesion studies? Hörtnagl H, et al.
Brain Res Bull 1997;43(3):245–55 (187 ref.)

Cardiovascular effects of injection of argipressin into lateral septal nuclei in rats. Gao L, et al.
Chung Kuo Yao Li Hsueh Pao 1996 Jan;17(1):49–52

Evidence for a specific information processing deficit in monkeys with lesions of the septo-hippocampal system. Ridley RM, et al. **Cortex** 1997 Mar;33(1):167–76

Differential lateral septal vasopressin in wild-type rats: correlation with aggression. Everts HG, et al.
Horm Behav 1997 Apr;31(2):136–44

Enhancement of behavioral and electroencephalographic indices of waking following stimulation of noradrenergic beta-receptors within the medial septal region of the basal forebrain. Berridge CW, et al. **J Neurosci** 1996 Nov 1; 16(21):6999–7009

Modulation of forebrain electroencephalographic activity in halothane-anesthetized rat via actions of noradrenergic beta-receptors within the medial septal region. Berridge CW, et al. **J Neurosci** 1996 Nov 1;16(21):7010–20

Role of the septum in the excitatory effect of corticotropin-releasing hormone on the acoustic startle reflex. Lee Y, et al. **J Neurosci** 1997 Aug 15;17(16):6424–33

Role of the hippocampus, the bed nucleus of the stria terminalis, and the amygdala in the excitatory effect of corticotropin-releasing hormone on the acoustic startle reflex. Lee Y, et al. **J Neurosci** 1997 Aug 15;17(16):6434–46

Effects of coculture with the septum on the expression of long-term potentiation in organotypic hippocampal slice cultures. Yoshida M, et al. **Neurosci Res** 1996 Dec; 26(4):377–85

Behavioral correlates of single units in the medial septal area: the effect of ethanol. Givens B. **Neuroscience** 1996 Mar; 71(2):417–27

Rhythmic firing of medial septum non-cholinergic neurons. Serafin M, et al. **Neuroscience** 1996 Dec;75(3):671–5

An animal model for type 2 alcoholism? Alcohol consumption and aggressive behavior following lesions in the raphe nuclei, medial hypothalamus, or ventral striatum-septal area. Bergvall AH, et al. **Physiol Behav** 1996 Oct;60(4):1125–35

Lateral and medial septal lesions reduce anxiety in the plus-maze and probe-burying tests. Menard J, et al.
Physiol Behav 1996 Sep;60(3):845–53

Septal lesions impair rats' Morris test performance but facilitate left-right response differentiation. Noonan M, et al. **Physiol Behav** 1996 Sep;60(3):895–900

Lordosis-inhibiting effect of progesterone in female rats with lesions in septum, preoptic area, or dorsal raphe nucleus. Satou M, et al. **Physiol Behav** 1996 Sep;60(3):1027–31

[An analysis of the seasonal differences in the reaction of the hypothalamo-hypophyseal-ovarian system to the light regimen of the housing of animals after destruction of the lateral septal nucleus] Slavetna OV, et al. **Fiziol Zh** 1997; 43(1–2):23–30 (Eng. Abstr.) **(Ukr)**

PHYSIOPATHOLOGY

Lesions in the bed nucleus of the stria terminalis, but not in the lateral septum, inhibit short-photoperiod-induced testicular regression in Syrian hamsters. Raitiere MN, et al. **Brain Res** 1995 Dec 24;705(1–2):159–67

SURGERY

Modulation of hippocampal acetylcholine release after fimbria-fornix lesions and septal transplantation in rats. Erb C, et al. **Neurosci Lett** 1997 Aug 1;231(1):5–8

ULTRASTRUCTURE

Serotonin1A receptors are expressed by a subpopulation of cholinergic neurons in the rat medial septum and diagonal band of Broca--a double immunocytochemical study. Kia HK, et al. **Neuroscience** 1996 Sep;74(1):143–54

SEPTICEMIA

see related

ENDOTOXEMIA

Specific problems of arterial, Swan-Ganz, and hemodialysis catheters. Rello J, et al. **Nutrition** 1997 Apr;13(4 Suppl):36S–41S (55 ref.)

[Study on septicaemia in infants and children in the past 20 years. Part 2. An analysis of factors that prescribe for the prognosis] Sato T, et al. **Kansenshogaku Zasshi** 1996 Aug; 70(8):784–91 (Eng. Abstr.) **(Jpn)**

BLOOD

Infections in neonates delivered at term are associated with increased serum levels of ICAM-1 and E-selectin. Austgulen R, et al. **Acta Paediatr** 1997 Mar;86(3):274–80

Increase of plasminogen activator inhibitor levels predicts outcome of leukocytopenic patients with sepsis. Mesters RM, et al. **Thromb Haemost** 1996 Jun;75(6):902–7

APC resistance in neonates and infants: adjustment of the APTT-based method. Nowak-Göttl U, et al.
Thromb Res 1996 Mar 15;81(6):665–70

[Changes in the activation markers of blood coagulation and fibrinolysis in the neonatal period] Ries M, et al.
Klin Padiatr 1996 Nov-Dec;208(6):350–4 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

[History and definition of sepsis--do we need new terminology?] Kreymann G, et al.
Anasthesiol Intensivmed Notfallmed Schmerzther 1996 Feb; 31(1):9–14 (18 ref.) (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Pseudomonas stutzeri septicaemia in association with a bullous skin eruption. Priestley GS, et al.
Anaesth Intensive Care 1996 Dec;24(6):710–3

Ocular manifestations of disseminated intravascular coagulation in a patient with the acquired immunodeficiency syndrome [letter] Lertsumitkul S, et al.
Arch Ophthalmol 1997 May;115(5):676–7

Erysipelothrix rhusiopathiae septicemia in systemic lupus erythematosus. Totemchokchyakarn K, et al.
Int J Dermatol 1996 Nov;35(11):818–20

Syndrome of inappropriate secretion of antidiuretic hormone in elderly patients with rheumatoid arthritis associated with infections: report of two cases. Furuta E, et al.
Intern Med 1996 Jun;35(6):478–81

Septicemia causing compartment syndrome [see comments] Paley KJ, et al. **Orthopedics** 1996 Feb;19(2):163–6. Comment in: Orthopedics 1996 Jul;19(7):567.

Compartment syndrome [letter; comment] Schnall SB.
Orthopedics 1996 Jul;19(7):567. Comment on: Orthopedics 1996 Feb;19(2):163–6.

Suppurative thrombophlebitis in children: a ten-year experience. Khan EA, et al. **Pediatr Infect Dis J** 1997 Jan; 16(1):63–7

[Infection: impaired consciousness as the initial symptom. Clinical and pathophysiologic aspects of septic encephalopathy] Schwarz S, et al. **Nervenarzt** 1997 Apr; 68(4):292–7 (Eng. Abstr.) **(Ger)**

[What is your diagnosis? Septic pulmonary embolism, right-sided pleural effusion] Braunschweig M.
Schweiz Rundsch Med Prax 1997 Apr 2;86(14):549–50 **(Ger)**

[Septicemia associated with hematopoietic disorders and its features according to respective primary disorders] Yokota T, et al. **Kansenshogaku Zasshi** 1996 Feb;70(2):108–15 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Meningococcal septicaemia [letter] Barry B, et al.
Br J Hosp Med 1997 May 21–Jun 3;57(10):531

Abdominal pain and massive intravascular hemolysis in a 47-year-old man. Pun KC, et al. **Chest** 1996 Nov; 110(5):1353–5

Necrotizing bowel lesions complicated by Pseudomonas septicaemia in previously healthy infants. Tsai MJ, et al.
Eur J Pediatr 1996 Mar;155(3):216–8

Clinical comparison of BACTEC 9240 plus aerobic/F resin bottles and the isolator aerobic culture system for detection of bloodstream infections. Cockerill FR 3rd, et al.
J Clin Microbiol 1997 Jun;35(6):1469–72

Two rules for early prediction of bacteremia: testing in a university and a community hospital. Yehezkelli Y, et al.
J Gen Intern Med 1996 Feb;11(2):98–103

Rapid diagnosis of catheter-related sepsis using the acridine orange leukocyte cytospin test and an endoluminal brush. Tighe MJ, et al. **JPEN J Parenter Enteral Nutr** 1996 May-Jun;20(3):215–8

[Myopericarditis and auricular fibrillation disclosing septicemic leptospirosis (letter; comment)] Lucht F, et al.
Presse Med 1996 Nov 23;25(36):1805. Comment on: Presse Med 1996 Mar 30;25(11):555. **(Fre)**

[Sepsis score in surgical intensive care medicine] Reist K, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Nov;31(9):556–62 (Eng. Abstr.) **(Ger)**

[A young man with sore throat and infection] Egger M, et al. **Schweiz Med Wochenschr** 1997 May 17;127(20):861–3 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Effect of recombinant human granulocyte colony-stimulating factor on combination therapy with aztreonam and clindamycin for infections in neutropenic patients with hematologic diseases. Toyama K, et al.
Kansenshogaku Zasshi 1996 Dec;70(12):1242–53

Thrombocytopenia induced by vancomycin-dependent platelet antibody. Mizon P, et al. **Vox Sang** 1997;73(1):49–51

[Methyl thionine (methylene blue) in the treatment of sepsis] Bindels AJ, et al. **Ned Tijdschr Geneeskd** 1996 Dec 7; 140(49):2447–50 (2 ref.) **(Dut)**

[Septicemia with gram-negative bacilli. The possibilities and limits of an etiological therapy] Grigore L.
Bacteriol Virusol Parazitol Epidemiol 1996 Jul-Dec; 41(3–4):151–60 (31 ref.) **(Rum)**

[The rapid microbiological control of the efficacy of the antibacterial therapy of bacteremia and septicemia] Kotliarova GA, et al. **Urol Nefrol (Mosk)** 1997 May-Jun; (3):8–13 (Eng. Abstr.) **(Rus)**

[Monitoring of gentamycin serum concentration in neonates. Usefulness in adjustment of dosage] García-Delgado R, et al. **An Esp Pediatr** 1997 Jan;46(1):47–52 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Group II phospholipase A2 gene expression is transcriptionally regulated in rat liver during sepsis. Dong LW, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G706–12

Efficacy of anti-tumor necrosis factor polyclonal antibody on phosphoenolpyruvate carboxykinase expression in septic and endotoxemic rats. Chang CK, et al. **Shock** 1996 Jul; 6(1):57–60

[Disruption of the structural-metabolic organization of liver asinuses in systemic endotoksinemia] Shchegolev AI, et al.
Biull Eksp Biol Med 1995 Dec;120(12):643–6 **(Rus)**

EPIDEMIOLOGY

Bacterial changes in neonatal intensive care unit. Endo A, et al. **Acta Paediatr Jpn** 1996 Feb;38(1):12–6

National surveillance of dialysis associated diseases in the United States, 1993. Tokars JI, et al. **ASAIO J** 1996 May-Jun;42(3):219–29

Tunnelled central venous catheters yield a low incidence of septicaemia in interleukin-2-treated patients. Goey SH, et al. **Cancer Immunol Immunother** 1997 Jul;44(5):301–4

Pseudo-outbreak of septicemia due to rapidly growing mycobacteria associated with extrinsic contamination of culture supplement. Ashford DA, et al.
J Clin Microbiol 1997 Aug;35(8):2040–2

Outbreak of septicaemia in neonates caused by Acinetobacter junii investigated by amplified ribosomal DNA restriction analysis (ARDRA) and four typing methods. Bernards AT, et al. **J Hosp Infect** 1997 Feb;35(2):129–40

Outbreak of gram-negative septicaemia caused by contaminated continuous infusions prepared in a non-clinical area. Koerner RJ, et al. **J Hosp Infect** 1997 Aug;36(4):285–9

From the Centers for Disease Control and Prevention. Red blood cell transfusions contaminated with Yersinia enterocolitica--United States, 1991–1996, and initiation of a national study to detect bacteria-associated transfusion reactions. **JAMA** 1997 Jul 16;278(3):196–7

Red blood cell transfusions contaminated with Yersinia enterocolitica--United States, 1991–1996, and initiation of

a national study to detect bacteria-associated transfusion reactions. **MMWR Morb Mortal Wkly Rep** 1997 Jun 20; 46(24):553-5

Sepsis and septic complications in the surgical patient: who is at risk? Cheadle WG, et al. **Shock** 1996;6 Suppl 1:S6-9 (42 ref.)

[Hospital infections in gynecology and obstetrics. An inclusive prevalence study in Germany] Hauer T, et al. **Geburtshilfe Frauenheilkd** 1996 Oct;56(10):546-9 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Localized argyria caused by silver earrings [letter; comment] White MI. **Br J Dermatol** 1997 Jun;136(6):980. Comment on: Br J Dermatol 1996 Sep;135(3):484-5.

Recurrent septicaemia in a neutropenic patient with typhlitis. Sadullah S, et al. **Clin Lab Haematol** 1996 Sep;18(3):215-7

Septicemia and suppuration in a Vietnam veteran. Chodimella U, et al. **Hosp Pract (Off Ed)** 1997 May 15;32(5):219-21

Fulminant septicaemia [letter] Mazdai G, et al. **Ir Med J** 1996 Nov-Dec;89(6):228

Central venous catheter-related septicaemia in paediatric cancer patients. Das I, et al. **J Hosp Infect** 1997 May; 36(1):67-76

Central venous line infections in AIDS. Moore DA, et al. **J Infect** 1997 Jan;34(1):35-40

Bloodstream infections in home infusion patients: the influence of race and needleless intravascular access devices. Kellerman S, et al. **J Pediatr** 1996 Nov; 129(5):711-7

Risk factors for developing neonatal septicaemia at a Malaysian hospital. Wong NA, et al. **J Trop Pediatr** 1997 Feb;43(1):54-8

Infection occurring in percutaneously placed endovascular devices [letter; comment] Millward SF. **J Vasc Interv Radiol** 1997 Mar-Apr;8(2):302. Comment on: J Vasc Interv Radiol 1996 Sep-Oct;7(5):669-72.

A young woman with a sore throat, septicaemia, and respiratory failure. Vohra A, et al. **Lancet** 1997 Sep 27; 350(9082):928

Neonatal septicemia in a neonatal intensive care unit. Results of four years. Samanci N, et al. **Turk J Pediatr** 1997 Apr-Jun;39(2):185-93

IMMUNOLOGY

Inflammatory and immunological markers in preterm infants: correlation with disease. Jurges ES, et al. **Clin Exp Immunol** 1996 Sep;105(3):551-5

Immune dysfunction in murine polymicrobial sepsis: mediators, macrophages, lymphocytes and apoptosis. Ayala A, et al. **Shock** 1996;6 Suppl 1:S27-38 (134 ref.)

Cytokine production precedes the expansion of CD14+CD16+ monocytes in human sepsis: a case report of a patient with self-induced septicemia. Blumenstein M, et al. **Shock** 1997 Jul;8(1):73-5

Low HLA-DR expression on monocytes as a prognostic marker for bacterial sepsis after liver transplantation. van den Berk JM, et al. **Transplantation** 1997 Jun 27; 63(12):1846-8

[Effects of various feeding regimens in multiple trauma patients on septic complications and immune parameters] Engel JM, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr; 32(4):234-9 (Eng. Abstr.) **(Ger)**

[PCR method for detection of K1 antigen and serotypes of Escherichia coli isolated from extraintestinal infection] Tsukamoto T. **Kansenshogaku Zasshi** 1997 Feb;71(2):125-9 (Eng. Abstr.) **(Jpn)**

METABOLISM

Comparison between conventional hemodynamic monitoring and polarographic tissue pO2-monitoring of the liver in early septicemia of the pig. Wagner K, et al. **Adv Exp Med Biol** 1996;388:85-92

Intracellular regulation of protein degradation during sepsis is different in fast- and slow-twitch muscle. Tiao G, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R849-56

Bradykinin generation triggered by Pseudomonas proteases facilitates invasion of the systemic circulation by Pseudomonas aeruginosa. Sakata Y, et al. **Microbiol Immunol** 1996;40(6):415-23

MICROBIOLOGY

A case of congenital Listeria septicemia associated with high levels of inflammatory cytokines. Suda H, et al. **Acta Paediatr Jpn** 1997 Jun;39(3):382-4

Pathogenic analysis of Aeromonas hydrophila septicemia. Chang CY, et al. **Ann Clin Lab Sci** 1997 Jul-Aug; 27(4):254-9

Virulence patterns from septicemic Escherichia coli O78 strains. Babai R, et al. **FEMS Microbiol Lett** 1997 Apr 1; 149(1):99-105

Expression of P, S, and F1C adhesins by cytotoxic necrotizing factor 1-producing Escherichia coli from septicemic and diarrheic pigs. Dozois CM, et al. **FEMS Microbiol Lett** 1997 Jul 15;152(2):307-12

Nosocomial Salmonella bareilly septicemia: a nursery outbreak. Gupta P, et al. **Indian Pediatr** 1997 Feb; 34(2):144-6

Outbreak of septicaemia in neonates caused by Acinetobacter junii investigated by amplified ribosomal DNA restriction analysis (ARDRA) and four typing methods. Bernards AT, et al. **J Hosp Infect** 1997 Feb;35(2):129-40

Bacterial colonization of indwelling vascular catheters in newborn infants. Narendran V, et al. **J Paediatr Child Health** 1996 Oct;32(5):391-6

Infectious diseases casebook. Pasteurella multocida early onset septicemia in newborns. Challapalli M, et al. **J Perinatol** 1997 May-Jun;17(3):248-9

Anaerobes in neonatal septicaemia: a cause for concern. Mitra S, et al. **J Trop Pediatr** 1997 Jun;43(3):153-5

Multifactorial pathogenic mechanisms of Burkholderia pseudomallei as suggested from comparison with Burkholderia cepacia. Wongwanich S, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):111-8

[Candida folliculitis: superficial dermatitis or septicemia?] Piérard GE, et al. **Rev Med Liege** 1996 Sep;51(9):565 **(Fre)**

[Study on septicaemia in infants and children in the past 20 years. Part 1. An analysis of causal organisms] Sato T, et al. **Kansenshogaku Zasshi** 1996 Aug;70(8):775-83 (Eng. Abstr.) **(Jpn)**

[The rapid microbiological control of the efficacy of the antibacterial therapy of bacteremia and septicemia] Kotliarova GA, et al. **Urol Nefrol (Mosk)** 1997 May-Jun; (3):8-13 (Eng. Abstr.) **(Rus)**

[Early onset of neonatal sepsis due to Streptococcus agalactiae: study of ten years (1985-1994) and the utility of intrapartum prophylaxis] Bosch Mestres J, et al. **An Esp Pediatr** 1997 Mar;46(3):272-6 (Eng. Abstr.) **(Spa)**

[Usefulness of body surface cultures in newborns with early infection risk. Study of 735 neonates] Gasser Laguna I, et al. **An Esp Pediatr** 1996 Oct;45(4):409-14 (Eng. Abstr.) **(Spa)**

MORTALITY

[Prognostic analysis of sepsis in patients with lung cancer] Mori K, et al. **Kansenshogaku Zasshi** 1997 Jun;71(6):501-6 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Pathogenic analysis of Aeromonas hydrophila septicemia. Chang CY, et al. **Ann Clin Lab Sci** 1997 Jul-Aug; 27(4):254-9

Differential effects of prolonged septicemia on isolated pulmonary arteries and veins from sheep. Nelson SH, et al. **Shock** 1996 Jun;5(6):440-5

[Disruption of the structural-metabolic organization of liver asinuses in systemic endotoksinemia] Shchegolev AI, et al. **Biull Eksp Biol Med** 1995 Dec;120(12):643-6 **(Rus)**

PHYSIOPATHOLOGY

Nitric oxide synthase inhibition reverses arteriolar hyporesponsiveness to endothelin-1 in septic rats. Hollenberg SM, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R969-74

The gut in critical illness: evidence from human studies. Marshall JC, et al. **Shock** 1996;6 Suppl 1:S10-6 (92 ref.)

A novel nonanticoagulant heparin prevents vascular endothelial cell dysfunction during hyperdynamic sepsis. Morrison AM, et al. **Shock** 1996 Jul;6(1):46-51

[Cooperation of proinflammatory interleukins in a cytokine rete in patients with septic syndrome] Modzelewski B. **Pol Merkuriusz Lek** 1996 Oct;1(4):284-6 (35 ref.) **(Pol)**

PREVENTION & CONTROL

Prevention of central venous catheter-related bloodstream infection by use of an antiseptic-impregnated catheter. A randomized, controlled trial [see comments] Maki DG, et al. **Ann Intern Med** 1997 Aug 15;127(4):257-66. Comment in: Ann Intern Med 1997 Aug 15;127(4):304-6.

Reducing the risk for catheter-related infections: a new strategy [editorial; comment] Pearson ML, et al. **Ann Intern Med** 1997 Aug 15;127(4):304-6. Comment on: Ann Intern Med 1997 Aug 15;127(4):257-60. Comment on: Ann Intern Med 1997 Aug 15;127(4):267-74.

Central venous catheters coated with minocycline and rifampin for the prevention of catheter-related colonization and bloodstream infections. A randomized, double-blind trial. The Texas Medical Center Catheter Study Group [see comments] Raad I, et al. **Ann Intern Med** 1997 Aug 15;127(4):267-74. Comment in: Ann Intern Med 1997 Aug 15;127(4):304-6.

Filgrastim (RHG-CSF) related modulation of the inflammatory response in patients at risk of sepsis or with sepsis. Weiss M, et al. **Cytokine** 1996 Mar;8(3):260-5

An audit of peripheral catheter care in a teaching hospital [letter; comment] Elliott TS, et al. **J Hosp Infect** 1996 Nov; 34(3):234-5. Comment on: J Hosp Infect 1996 Jun;33(2):156-7.

Melatonin administration following hemorrhagic shock decreases mortality from subsequent septic challenge. Wichmann MW, et al. **J Surg Res** 1996 Oct;65(2):109-14

Prevention of catheter-related infections: the skin. Darouiche RO, et al. **Nutrition** 1997 Apr;13(4 Suppl):26S-29S (33 ref.)

Prevention of catheter sepsis: the hub. Sitges-Serra A, et al. **Nutrition** 1997 Apr;13(4 Suppl):30S-35S

[Early onset of neonatal sepsis due to Streptococcus agalactiae: study of ten years (1985-1994) and the utility of intrapartum prophylaxis] Bosch Mestres J, et al. **An Esp Pediatr** 1997 Mar;46(3):272-6 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

[Artificially induced suppurative diseases] Svetukhin AM, et al. **Khirurgiia (Mosk)** 1996;(6):69-72 (Eng. Abstr.) **(Rus)**

THERAPY

Applications of molecular biology and biotechnology: antibody therapy of sepsis. Wheeler AP, et al. **J Crit Care** 1996 Jun;11(2):77-94 (102 ref.)

[German-Austrian Society of Neonatology and Pediatric Intensive Care Medicine] Marcinkowski M, et al. **Z Geburtshilfe Neonatol** 1997 Mar-Apr;201(2):65-70 **(Ger)**

TRANSMISSION

Early onset neonatal septicemia caused by Aeromonas hydrophilia [letter] Gupta P, et al. **Indian Pediatr** 1996 Aug; 33(8):703-4

Nosocomial infections by Listeria monocytogenes: analysis of a cluster of septicemias in immunocompromised patients. Elsner HA, et al. **Infection** 1997 May-Jun;25(3):135-9

VETERINARY

Immunization with bacterial antigens: edwardsiellosis. Thune RL, et al. **Dev Biol Stand** 1997;90:125-34 (46 ref.)

VIROLOGY

Nucleotide sequence of the glycoprotein gene of viral haemorrhagic septicaemia (VHS) viruses from different geographical areas: a link between VHS in farmed fish species and viruses isolated from North Sea cod (Gadus morhua L.). Stone DM, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1319-26

SEPTICEMIA, HEMORRHAGIC see **HEMORRHAGIC BACTEREMIA**

SEPTUM PELLUCIDUM

Subependymoma of the septum pellucidum: characterization by PET. Mineura K, et al. **J Neurooncol** 1997 Apr; 32(2):143-7

Expanding cyst of the septum pellucidum. Case report. Lancon JA, et al. **J Neurosurg** 1996 Dec;85(6):1127-34 (47 ref.)

ABNORMALITIES

Sudden death in septo-optic dysplasia. Report of 5 cases. Brodsky MC, et al. **Arch Ophthalmol** 1997 Jan;115(1):66-70

Unreported anatomical variation of septum pellucidum. Aldur MM, et al. **Clin Anat** 1997;10(4):245-9

Two male siblings with cavum septum pellucidum, cavum vergae, macrocephaly, seizures and mental retardation. A new hereditary syndrome? Sánchez O, et al. **Clin Dysmorphol** 1997 Apr;6(2):129-32

Familial dyslexia associated with cavum vergae. Lampl Y, et al. **Clin Neurol Neurosurg** 1997 May;99(2):142-7

A 2.5-month-old girl with hyperbilirubinemia, hypoglycemia, and blindness. Shusterman S, et al. **Curr Opin Pediatr** 1996 Aug;8(4):411-6

Endocrine disorders in septo-optic dysplasia (De Morsier syndrome)--evaluation and follow up of 18 patients. Willnow S, et al. **Eur J Pediatr** 1996 Mar;155(3):179-84

Pattern of brain morphology in patients with schizophrenia and large cavum septi pellucidi. Nopoulos P, et al. **J Neuropsychiatry Clin Neurosci** 1996 Spring;8(2):147-52

Septo-optic dysplasia (de Morsier's syndrome) associated with total callosal absence. A new type of the anomaly. Nuri Sener R. **J Neuroradiol** 1996 Sep;23(2):79-81

Septo-optic dysplasia associated with cerebral cortical dysplasia (cortico-septo-optic dysplasia). Nuri Sener R. **J Neuroradiol** 1996 Dec;23(4):245-7

Sotos syndrome with septo-optic dysplasia. Büyükgebiz A, et al. **J Pediatr Endocrinol Metab** 1996 Jul-Aug;9(4):497-9

Septo-optic dysplasia associated with bilateral complex microphthalmos. Gündüz K, et al. **Ophthalmic Genet** 1996 Sep;17(3):109-13

Role of cavum septum pellucidum in akinetic mutism of hydrocephalic children. Lin KL, et al. **Pediatr Neurol** 1997 Feb;16(2):156-9

Normal MR appearances of the posterior pituitary in central diabetes insipidus associated with septo-optic dysplasia. Abernethy LJ, et al. **Pediatr Radiol** 1997 Jan;27(1):45-7

Cavum septum pellucidum in schizophrenia: a magnetic resonance imaging study. Fukuzako T, et al. **Psychiatry Clin Neurosci** 1996 Jun;50(3):125-8

[Septo-optic dysplasia (de Morsier syndrome)] Liptai Z, et al. **Orv Hetil** 1996 Aug 4;137(31):1705-9 (Eng. Abstr.) **(Hun)**

[Septo-optic dysplasia: report of 6 patients studied with MR and discussion on its pathogenesis] Ramos Fernández JM, et al. **An Esp Pediatr** 1996 Dec;45(6):614-8 (Eng. Abstr.) **(Spa)**

SEPTUM PELLUCIDUM

ANATOMY & HISTOLOGY

Cavum septi pellucidi in normals and patients with schizophrenia as detected by magnetic resonance imaging. Nopoulos P, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1102–8

Branched connections to the septum and to the entorhinal cortex from the hippocampus, amygdala, and diencephalon in the rat. Calderazzo L, et al. **Brain Res Bull** 1996; 40(4):245–51

The septointerpeduncular projection in the rat: tracing with the carbocyanine dye DiI. Villani L. **Brain Res Bull** 1996; 40(4):279–82

Septal innervation of mossy cells in the hilus of the rat dentate gyrus: an anterograde tracing and intracellular labeling study. Lübke J, et al. **Exp Brain Res** 1997 May; 114(3):423–32

CHEMISTRY

Parvalbumin–containing cells of the angular portion of the vertical limb terminate on calbindin–immunoreactive neurons located at the border between the lateral and medial septum of the rat. Kiss J, et al. **Exp Brain Res** 1997 Jan;113(1):48–56

Neurochemical characterization of AMPA receptor–containing neurons in the mediolateral septal area of the rat. Varoqueaux F, et al. **Exp Brain Res** 1997 May; 114(3):454–60

Distribution of NADPHdiaphorase and calbindin–D28k neurons in the lateral septal area of the guinea pig, with special reference to the enkephalinergic hypothalamo–septal tract. Doutrelant–Viltart O, et al. **J Chem Neuroanat** 1996 Sep;11(3):199–207

Development of cholinergic and GABAergic neurons in the rat medial septum: effect of target removal in early postnatal development. Plaschke M, et al. **J Comp Neurol** 1997 Mar 24;379(4):467–81

Expression of m1–m4 muscarinic acetylcholine receptor immunoreactivity in septohippocampal neurons and other identified hippocampal afferents. Rouse ST, et al. **J Comp Neurol** 1996 Nov 18;375(3):406–16

CYTOLOGY

Genetic variation in the morphology of the septo–hippocampal cholinergic and GABAergic system in mice. I. Cholinergic and GABAergic markers. Schwegler H, et al. **Hippocampus** 1996;6(2):136–48

[Morphological study of Organum cavum pre–lamina terminalis (OCPLT), implicated in thirst in rats] Ronsin E, et al. **C R Acad Sci III** 1997 Jun;320(6):487–95 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Effects of prenatal ethanol exposure on parvalbumin–expressing GABAergic neurons in the adult rat medial septum. Moore DB, et al. **Alcohol Clin Exp Res** 1997 Aug;21(5):849–56

Cultured postnatal rat medial septal neurons respond to acute ethanol treatment and nerve growth factor by changing intracellular calcium levels. Webb B, et al. **Alcohol Clin Exp Res** 1996 Nov;20(8):1385–94

Effects of ethanol on nonspatial working memory and attention in rats. Givens B, et al. **Behav Neurosci** 1997 Apr; 111(2):275–82

Injection of IgG 192–saporin into the medial septum produces cholinergic hypofunction and dose–dependent working memory deficits. Walsh TJ, et al. **Brain Res** 1996 Jul 8; 726(1–2):69–79

Gonadal steroids target AMPA glutamate receptor–containing neurons in the rat hypothalamus, septum and amygdala: a morphological and biochemical study. Diano S, et al. **Endocrinology** 1997 Feb;138(2):778–89

Glycine current in rat septal cholinergic neuron in culture: monophasic positive modulation by Zn2+. Kumamoto E, et al. **J Neurophysiol** 1996 Jul;76(1):227–41

NGF and BDNF increase the immunoreactivity of vesicular acetylcholine transporter in cultured neurons from the embryonic rat septum. Takei N, et al. **Neurosci Lett** 1997 May 2;226(3):207–9

Age–dependent effect of AF64A on cholinergic activity in the septo–hippocampal pathway of the rat brain: decreased responsiveness in aged rats. El Tamer A, et al. **Neurosci Lett** 1996 Jan 19;203(2):123–6

Ethanol inhibition of reduced frequency–dependent rundown of calcium currents in acutely dissociated MS/nDB neurons from chronic in vivo lead–exposed adult rats. Grover CA, et al. **Neurotoxicology** 1997;18(1):179–90

Reduction of choline acetyltransferase mRNA in the septum of developing rat exposed to inorganic lead. Sun X, et al. **Neurotoxicology** 1997;18(1):201–7

Effects of a single intraseptal injection of NGF on spatial learning in the water maze. Janis LS, et al. **Physiol Behav** 1997 Jul;62(1):69–76

EMBRYOLOGY

Extensive reinnervation of the hippocampus by embryonic basal forebrain cholinergic neurons grafted into the septum of neonatal rats with selective cholinergic lesions. Leanza G, et al. **J Comp Neurol** 1996 Sep 23;373(3):355–7

Microglia from the developing rat medial septal area can affect cholinergic and GABAergic neuronal differentiation in vitro. Mazzoni IE, et al. **Neuroscience** 1997 Jan; 76(1):147–57

Regulation of topographic projection in the brain: Elf–1 in the hippocamposeptal system. Gao PP, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11161–6

METABOLISM

In vivo microdialysis study on changes in septal dynorphin and beta–endorphin activities in active and hibernating Columbian ground squirrels. Cui Y, et al. **Brain Res** 1996 Feb 26;710(1–2):271–4

Brief potassium depolarization decreases levels of neurofilament proteins in CNS culture. Whitson JS, et al. **Brain Res** 1995 Oct 2;694(1–2):213–22

Recovery of ChAT immunoreactivity in axotomized rat cholinergic septal neurons despite reduced NGF receptor expression. Naumann T, et al. **Eur J Neurosci** 1997 Jul; 9(7):1340–9

The effect of some peptides from the hibernating brain on Ca2+ current in cardiac cells and on the activity of septal neurons. Kokoz YM, et al. **FEBS Lett** 1997 Jul 7; 411(1):71–6

Activation of a metabotropic excitatory amino acid receptor potentiates spike–driven calcium increases in neurons of the dorsolateral septum. Zheng F, et al. **J Neurosci** 1996 Oct 1;16(19):6079–88

Axotomized septal cholinergic neurons rescued by nerve growth factor or neurotrophin–4/5 fail to express the inducible transcription factor c–Jun. Hughes PE, et al. **Neuroscience** 1997 Jun;78(4):1037–49

PATHOLOGY

Morphology and immunohistochemistry of a symptomatic septum pellucidum cavum Vergae cyst in man. Ronsin E, et al. **Acta Neurochir (Wien)** 1997;139(4):366–71; discussion 372

Septo–optic dysplasia with cerebellar hypoplasia in Cornelia de Lange syndrome. Hayashi M, et al. **Acta Neuropathol (Berl)** 1996 Dec;92(6):625–30

Hypothesis: septo–optic dysplasia is a vascular disruption sequence. Lubinsky MS. **Am J Med Genet** 1997 Mar 31; 69(3):235–6

Unilateral neonatal hippocampal lesion alters septal innervation and trophism of the entorhinal cortex. van Praag H, et al. **Exp Neurol** 1996 Sep;141(1):130–40

Abnormal septum pellucidum morphology in Tourette's syndrome [letter] Sieg KG. **J Neuropsychiatry Clin Neurosci** 1996 Fall;8(4):474

Cavum septum pellucidum cysts [letter] Behrens PF, et al. **J Neurosurg** 1997 Aug;87(2):336–7; discussion 338

Cavum septum pellucidum cysts [letter] Krauss JK, et al. **J Neurosurg** 1997 Aug;87(2):337–8; discussion 338

Giant cyst of the cavum septi pellucidi and cavum Vergae with posterior cranial fossa extension: case report. Bayar MA, et al. **Neuroradiology** 1996 May;38 Suppl 1:S187–9

Increased vulnerability of septal cholinergic neurons to partial loss of target neurons in aged rats. Cooper JD, et al. **Neuroscience** 1996 Nov;75(1):29–35

Hemorrhage in the cavum septi pellucidi in a full–term neonate. Boutemy R, et al. **Pediatr Radiol** 1997 Feb; 27(2):144–6

[Septo–optic dysplasia: report of 6 patients studied with MR and discussion on its pathogenesis] Ramos Fernández JM, et al. **An Esp Pediatr** 1996 Dec;45(6):614–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Possible involvement of the serotonergic system in intraseptal opioid–induced hypothermia in ground squirrels. Cui Y, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:192–6

Lack of septal serotonergic involvement in thermal challenges in the rat. Lee TF, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:187–91

Chlordiazepoxide improves the performance of septal lesioned but not hippocampal lesioned animals in a Morris maze. Farber HT. **Brain Res** 1996 Jul 1;725(2):257–62

Intraseptal administration of (1S,3R)–1–aminocyclopentane–1,3–dicarboxylic acid induces immediate early gene expression in lateral septal neurons. Kaatz KW, et al. **Brain Res** 1996 Feb 19; 709(2):205–14

The neuroanatomical specificity of the anxiolytic effects of intra–septal infusions of midazolam. Pesold C, et al. **Brain Res** 1996 Feb 26;710(1–2):161–8

Effects of reversible inactivations of the medial septal area on reference and working memory versions of the Morris water maze. Rashidy–Pour A, et al. **Brain Res** 1996 Feb 12;709(1):131–40

Effects of reversible inactivation of the medial septal area on long–term potentiation and recurrent inhibition of hippocampal population spikes in rats. Rashidy–Pour A, et al. **Brain Res** 1996 Sep 23;734(1–2):43–8

Galanin microinjected into the medial septum inhibits scopolamine–induced acetylcholine overflow in the rat ventral hippocampus. Robinson JK, et al. **Brain Res** 1996 Feb 12;709(1):81–7

Saccadic eye movements, even in darkness, generate event–related potentials recorded in medial sputum and medial temporal cortex. Sobotka S, et al. **Brain Res** 1997 May 9;756(1–2):168–73

Effects of lesions of different parts of the septo–hippocampal system in primates on learning and retention of information acquired before or after surgery. Ridley RM, et al. **Brain Res Bull** 1996;40(1):21–32

Changes in synaptic excitability in the lateral septum associated with contextual and auditory fear conditioning in mice. Garcia R, et al. **Eur J Neurosci** 1996 Apr; 8(4):809–15

Intracellular recordings from medial septal neurons during hippocampal theta rhythm. Brazhnik ES, et al. **Exp Brain Res** 1997 May;114(3):442–53

Selective expression of the immediate early gene c–jun in axotomized rat medial septal neurons is not related to neuronal degeneration. Haas CA, et al. **J Neurosci** 1996 Mar 1;16(5):1894–903

A population of supramammillary area calretinin neurons terminating on medial septal area cholinergic and lateral septal area calbindin–containing cells are aspartate/glutamatergic. Leranth C, et al. **J Neurosci** 1996 Dec 1;16(23):7699–710

Intraseptal procaine abolishes hypothalamic stimulation–induced wheel–running and hippocampal theta field activity in rats. Oddie SD, et al. **J Neurosci** 1996 Mar 1;16(5):1948–56

Does tolerance develop to the anxiolytic effects of septal lesions? Menard J, et al. **Physiol Behav** 1996 Feb; 59(2):311–18

Hypothalamo–septal enkephalinergic fibers terminate on AMPA receptor–containing neurons in the rat lateral septal area. Varoqueaux F, et al. **Synapse** 1997 Mar;25(3):263–71

PHYSIOPATHOLOGY

Effects of alcohol exposure and artificial rearing during development on septal and hippocampal neurotransmitters in adult rats. Kelly SJ. **Alcohol Clin Exp Res** 1996 Jun; 20(4):670–6

Dissociations among the anxiolytic effects of septal, hippocampal, and amygdaloid lesions. Treit D, et al. **Behav Neurosci** 1997 Jun;111(3):653–8

Changes in dopaminergic neurons of the mesocorticolimbic system in Parkinson's disease. Dymecki J, et al. **Folia Neuropathol** 1996;34(2):102–6

Pattern of brain morphology in patients with schizophrenia and large cavum septi pellucidi. Nopoulos P, et al. **J Neuropsychiatry Clin Neurosci** 1996 Spring;8(2):147–52

Intraseptal injections of NGF attenuates edema formation following septal lesions in the rat. Janis LS, et al. **Neurosci Lett** 1996 Aug 16;214(1):21–4

TRANSPLANTATION

A comparison of behavioural effects and morphological features of grafts rich in cholinergic neurons placed in two sites of the denervated rat hippocampus. Hofferer E, et al. **Exp Brain Res** 1996 Sep;111(2):187–207

Behavioral effects of GM1 ganglioside treatment and intrahippocampal septal grafts in rats with fimbria–fornix lesions. Roeser C, et al. **Exp Brain Res** 1997 Jul; 115(3):520–30

SEQUENCE ALIGNMENT

A model for alignment of Env V1 and V2 hypervariable domains from human and simian immunodeficiency viruses. Lamers SL, et al. **AIDS Res Hum Retroviruses** 1996 Aug 10;12(12):1169–78

Catalytic center quest: comparison of transposases belonging to the Tn3 family reveals an invariant triad of acidic amino acid residues. Yurieva O, et al. **Biochem Mol Biol Int** 1996 Feb;38(1):15–20

Insight into cystic fibrosis by structural modelling of CFTR first nucleotide binding fold (NBF1). Annereau JP, et al. **C R Acad Sci III** 1997 Feb;320(2):113–21

Applicability of the multiple alignment algorithm for detection of weak patterns: periodically distributed DNA pattern as a study case. Bolshoy A, et al. **Comput Appl Biosci** 1996 Oct;12(5):383–9

Sequences and topology. **Curr Opin Struct Biol** 1996 Jun; 6(3):416–27

The RING finger domain: a recent example of a sequence–structure family. Borden KL, et al. **Curr Opin Struct Biol** 1996 Jun;6(3):395–401 (46 ref.)

Protein sequence motifs. Bork P, et al. **Curr Opin Struct Biol** 1996 Jun;6(3):366–76 (78 ref.)

Sequences and topology challenges for algorithms and experts [editorial] Brutlag DL, et al. **Curr Opin Struct Biol** 1996 Jun;6(3):343–5 (11 ref.)

Hidden Markov models. Eddy SR. **Curr Opin Struct Biol** 1996 Jun;6(3):361–5 (33 ref.)

Scores for sequence searches and alignments. Henikoff S. **Curr Opin Struct Biol** 1996 Jun;6(3):353–60 (64 ref.)

Near–optimal sequence alignment. Vingron M. **Curr Opin Struct Biol** 1996 Jun;6(3):346–52 (51 ref.)

Conservation of amino acids in multiple alignments: aspartic acid has unexpected conservation. Fiser A, et al. **FEBS Lett** 1996 Nov 18;397(2–3):225–9

Using iterative dynamic programming to obtain accurate pairwise and multiple alignments of protein structures. Gerstein M, et al. **Ismb** 1996;4:59–67

Inferring relatedness of a macromolecule to a sequence database without sequencing. Kim J, et al. **Ismb** 1996; 4:125–33

Parameterization studies for the SAM and HMMER methods of hidden Markov model generation. McClure MA, et al.

Ismb 1996;4:155–64
Towards integration of multiple alignment and phylogenetic tree construction. Vingron M, et al. **J Comput Biol** 1997 Spring;4(1):23–34
Nucleosome DNA sequence pattern revealed by multiple alignment of experimentally mapped sequences. Ioshikhes I, et al. **J Mol Biol** 1996 Sep 20;262(2):129–39 (42 ref.)
MEGALIGN. The multiple alignment module of LASERGENE. Clewley JP, et al. **Methods Mol Biol** 1997; 70:119–29
Sequence Navigator. Multiple sequence alignment software. Parker SR. **Methods Mol Biol** 1997;70:145–54
GeneAssist. Smith–Waterman and other database similarity searches and identification of motifs. Shpaer EG. **Methods Mol Biol** 1997;70:173–87
SEQMAN. Contig assembly. Swindell SR, et al. **Methods Mol Biol** 1997;70:75–89
GeneJockeyII. DNA sequencing and fragment assembly. Taylor P. **Methods Mol Biol** 1997;70:91–106
GeneJockeyII. Pairwise sequence comparison. Taylor P. **Methods Mol Biol** 1997;70:131–6
GeneJockeyII. Multiple alignment of homologous sequences. Taylor P. **Methods Mol Biol** 1997;70:137–43
Gapped BLAST and PSI-BLAST: a new generation of protein database search programs. Altschul SF, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3389–402 (90 ref.)
Extracting protein alignment models from the sequence database. Neuwald AF, et al. **Nucleic Acids Res** 1997 May 1;25(9):1665–77
The HSSP database of protein structure–sequence alignments. Schneider R, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):226–30
Sequence alignments of the H(+)-dependent oligopeptide transporter family PTR: inferences on structure and function of the intestinal PET1 transporter. Graul RC, et al. **Pharm Res** 1997 Apr;14(4):388–400
Likelihood-mapping: a simple method to visualize phylogenetic content of a sequence alignment. Strimmer K, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):6815–9
Analysis of amino acid indices and mutation matrices for sequence comparison and structure prediction of proteins. Tomii K, et al. **Protein Eng** 1996 Jan;9(1):27–36
Embedding strategies for effective use of information from multiple sequence alignments. Henikoff S, et al. **Protein Sci** 1997 Mar;6(3):698–705
Ligand-based protein alignment and isozyme specificity of glutathione S-transferase inhibitors. Koehler RT, et al. **Proteins** 1997 Jun;28(2):202–16
Pfam: a comprehensive database of protein domain families based on seed alignments. Sonnhammer EL, et al. **Proteins** 1997 Jul;28(3):405–20
Molecular modelling of CYP1A subfamily members based on an alignment with CYP102: rationalization of CYP1A substrate specificity in terms of active site amino acid residues. Lewis DF, et al. **Xenobiotica** 1996 Jul;26(7):723–53

METHODS

A new computational method for detection of chimeric 16S rRNA artifacts generated by PCR amplification from mixed bacterial populations. Komatsoulis GA, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2338–46
Approaches to detection of distantly related proteins by database searches. Cattell K, et al. **Biotechniques** 1996 Dec; 21(6):1118–22, 1124–5
Database searches with multiple oligopeptides containing ambiguous residues. Vodkin MH, et al. **Biotechniques** 1996 Dec;21(6):1116–7
Rapid protein fragment search using hash functions based on the Fourier transform. Akutsu T, et al. **Comput Appl Biosci** 1997 Aug;13(4):357–64
Scoring hidden Markov models. Barrett C, et al. **Comput Appl Biosci** 1997 Apr;13(2):191–9
A tool for aligning very similar DNA sequences. Chao KM, et al. **Comput Appl Biosci** 1997 Feb;13(1):75–80
Correlating patterns in alignments of polymorphic sequences with experimental assays. Chelvanayagam G, et al. **Comput Appl Biosci** 1997 Feb;13(1):13–22
A probabilistic algorithm for interactive huge genome comparison. Courtois PR, et al. **Comput Appl Biosci** 1995 Dec;11(6):657–65
Match-Box—server: a multiple sequence alignment tool placing emphasis on reliability. Depiereux E, et al. **Comput Appl Biosci** 1997 Jun;13(3):249–56
A new index to find regions showing an unexpected variability or conservation in sequence alignments. Dopazo J. **Comput Appl Biosci** 1997 Jun;13(3):313–7
Visual BLAST and visual FASTA: graphic workbenches for interactive analysis of full BLAST and FASTA outputs under MICROSOFT WINDOWS 95/NT. Durand P, et al. **Comput Appl Biosci** 1997 Aug;13(4):407–13
LALNVIEW: a graphical viewer for pairwise sequence alignments. Duret L, et al. **Comput Appl Biosci** 1996 Dec; 12(6):507–10
FastAlert--an automatic search system to alert about new entries in biological sequence databanks. Eggenberger F, et al. **Comput Appl Biosci** 1996 Apr;12(2):129–33
ProMSED: protein multiple sequence editor for Windows 3.11/95. Frolov AS, et al. **Comput Appl Biosci** 1997 Jun; 13(3):243–8
SEAVIEW and PHYLO—WIN: two graphic tools for sequence alignment and molecular phylogeny. Galtier N, et al. **Comput Appl Biosci** 1996 Dec;12(6):543–8
SOPMA: significant improvements in protein secondary structure prediction by consensus prediction from multiple alignments. Geourjon C, et al. **Comput Appl Biosci** 1995 Dec;11(6):681–4
LASSAP, a LArge Scale Sequence compArison Package. Glémet E, et al. **Comput Appl Biosci** 1997 Apr;13(2):137–43
Reduced space sequence alignment. Grice JA, et al. **Comput Appl Biosci** 1997 Feb;13(1):45–53
LITTLE KEVIN: a program for the estimation of protein homology by analysing the amino acid compositions and sequences. Grillasca JP, et al. **Comput Appl Biosci** 1996 Aug;12(4):347–51
Using substitution probabilities to improve position-specific scoring matrices. Henikoff JG, et al. **Comput Appl Biosci** 1996 Apr;12(2):135–43
CONRAD: a method for identification of variable and conserved regions within proteins by scale-space filtering. Herrmann G, et al. **Comput Appl Biosci** 1996 Jun; 12(3):197–203
Methods for comparing a DNA sequence with a protein sequence. Huang X, et al. **Comput Appl Biosci** 1996 Dec; 12(6):497–506
Parallel hardware for sequence comparison and alignment. Hughey R. **Comput Appl Biosci** 1996 Dec;12(6):473–9
Alignment of possible secondary structures in multiple RNA sequences using simulated annealing. Kim J, et al. **Comput Appl Biosci** 1996 Aug;12(4):259–67
MulBlast 1.0: a multiple alignment of BLAST output to boost protein sequence similarity analysis. Labesse G. **Comput Appl Biosci** 1996 Dec;12(6):463–7
Post-processing of BLAST results using databases of clustered sequences. Miller GS, et al. **Comput Appl Biosci** 1997 Feb;13(1):81–7
EST—GENOME: a program to align spliced DNA sequences to unspliced genomic DNA. Mott R. **Comput Appl Biosci** 1997 Aug;13(4):477–8
Improved tools for DNA comparison and clustering. Parsons JD. **Comput Appl Biosci** 1995 Dec;11(6):603–13
Miropeats: graphical DNA sequence comparisons. Parsons JD. **Comput Appl Biosci** 1995 Dec;11(6):615–9
Identifying distantly related protein sequences. Pearson WR. **Comput Appl Biosci** 1997 Aug;13(4):325–32 (14 ref.)
Gene structure prediction using information on homologous protein sequence. Rogozin IB, et al. **Comput Appl Biosci** 1996 Jun;12(3):161–70
DISTREE: a tool for estimating genetic distances between aligned DNA sequences. Schäfer J, et al. **Comput Appl Biosci** 1997 Aug;13(4):445–51
BioSCAN: a network sharable computational resource for searching biosequence databases. Singh RK, et al. **Comput Appl Biosci** 1996 Jun;12(3):191–6
Dirichlet mixtures: a method for improved detection of weak but significant protein sequence homology. Sjölander K, et al. **Comput Appl Biosci** 1996 Aug;12(4):327–45
Introduction of a distance cut-off into structural alignment by the double dynamic programming algorithm. Toh H. **Comput Appl Biosci** 1997 Aug;13(4):387–96
Protein secondary structure prediction by the analysis of variation and conservation in multiple alignments. Tuckwell DS, et al. **Comput Appl Biosci** 1995 Dec; 11(6):627–32
Using video-oriented instructions to speed up sequence comparison. Wozniak A. **Comput Appl Biosci** 1997 Apr; 13(2):145–50
Motif identification neural design for rapid and sensitive protein family search. Wu CH, et al. **Comput Appl Biosci** 1996 Apr;12(2):109–18
A polynomial-time algorithm for a class of protein threading problems. Xu Y, et al. **Comput Appl Biosci** 1996 Dec; 12(6):511–7
Identification of potential ferric binding residues in the iron-binding protein of pathogenic Neisseria meningitidis through structure-based multiple sequence alignments. Gorinsky B, et al. **FEBS Lett** 1997 Aug 18;413(2):364–70
BEAUTY: an enhanced BLAST-based search tool that integrates multiple biological information resources into sequence similarity search results. Worley KC, et al. **Genome Res** 1995 Sep;5(2):173–84
Large-scale concatenation cDNA sequencing [letter] Yu W, et al. **Genome Res** 1997 Apr;7(4):353–8
Sequence alignment and fold recognition of fucosyltransferases [letter] Breton C, et al. **Glycobiology** 1996 Oct;6(7):vii–xii
A sequence similarity search algorithm based on a probabilistic interpretation of an alignment scoring system. Bucher P, et al. **Ismb** 1996;4:44–51 (25 ref.)
ReAligner: a program for refining DNA sequence multi-alignments. Anson EL, et al. **J Comput Biol** 1997 Fall;4(3):369–83
Hidden Markov Models of the G-protein-coupled receptor family. Baldi P, et al. **J Comput Biol** 1994 Winter; 1(4):311–36
Sequence alignment with tandem duplication. Benson G. **J Comput Biol** 1997 Fall;4(3):351–67
Recent developments in linear-space alignment methods: a survey. Chao KM, et al. **J Comput Biol** 1994 Winter; 1(4):271–91
Progressive multiple alignment with constraints. Myers G, et al. **J Comput Biol** 1996 Winter;3(4):563–72
On near-optimal alignments of biological sequences. Naor D, et al. **J Comput Biol** 1994 Winter;1(4):349–66
The deferred path heuristic for the generalized tree alignment problem. Schwikowski B, et al. **J Comput Biol** 1997 Fall; 4(3):415–31
New flexible approaches for multiple sequence alignment. Shibuya T, et al. **J Comput Biol** 1997 Fall;4(3):385–413
Motif-biased protein sequence alignment. Taylor WR. **J Comput Biol** 1994 Winter;1(4):297–310
On the complexity of multiple sequence alignment. Wang L, et al. **J Comput Biol** 1994 Winter;1(4):337–48
Aligning a DNA sequence with a protein sequence. Zhang Z, et al. **J Comput Biol** 1997 Fall;4(3):339–49
Significant improvement in accuracy of multiple protein sequence alignments by iterative refinement as assessed by reference to structural alignments. Gotoh O. **J Mol Biol** 1996 Dec 13;264(4):823–38
A 3D–1D substitution matrix for protein fold recognition that includes predicted secondary structure of the sequence. Rice DW, et al. **J Mol Biol** 1997 Apr 11;267(4):1026–38
Protein fold recognition by prediction-based threading. Rost B, et al. **J Mol Biol** 1997 Jul 18;270(3):471–80
Protein secondary structure prediction using local alignments. Salamov AA, et al. **J Mol Biol** 1997 Apr 25; 268(1):31–6
Multiple sequence threading: an analysis of alignment quality and stability. Taylor WR. **J Mol Biol** 1997 Jun 27; 269(5):902–43
Analysis of the distribution of binding sites for a tissue-specific transcription factor in the vertebrate genome. Tronche F, et al. **J Mol Biol** 1997 Feb 21; 266(2):231–45
Comparison of protein structures using 3D profile alignment. Suyama M, et al. **J Mol Evol** 1997;44 Suppl 1:S163–73
Modeling residue usage in aligned protein sequences via maximum likelihood. Bruno WJ. **Mol Biol Evol** 1996 Dec; 13(10):1368–74
The partition matrix: exploring variable phylogenetic signals along nucleotide sequence alignments. Jakobsen IB, et al. **Mol Biol Evol** 1997 May;14(5):474–84
Novel developments with the PRINTS protein fingerprint database. Attwood TK, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):212–7
Enhancement of the nucleosomal pattern in sequences of lower complexity. Bolshoy A, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3248–54
Recent enhancements to the Blocks Database servers. Henikoff JG, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):222–5
Gene recognition via spliced sequence alignment. Gelfand MS, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9061–6
Multiple DNA and protein sequence alignment based on segment-to-segment comparison. Morgenstern B, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12098–103
Detection of non-topological motifs in protein structures. Alesker V, et al. **Protein Eng** 1996 Dec;9(12):1103–19
Prediction of transmembrane alpha-helices in prokaryotic membrane proteins: the dense alignment surface method. Cserzö M, et al. **Protein Eng** 1997 Jun;10(6):673–6
Pairwise iterative superposition of distantly related proteins and assessment of the significance of 3-D structural similarity. May AC. **Protein Eng** 1996 Dec;9(12):1093–101
Quantifying the local reliability of a sequence alignment. Mevissen HT, et al. **Protein Eng** 1996 Feb;9(2):127–32
A reliable sequence alignment method based on probabilities of residue correspondences. Miyazawa S. **Protein Eng** 1995 Oct;8(10):999–1009
The prediction of protein contacts from multiple sequence alignments. Thomas DJ, et al. **Protein Eng** 1996 Nov; 9(11):941–8
Self-consistently optimized statistical mechanical energy functions for sequence structure alignment. Koretke KK, et al. **Protein Sci** 1996 Jun;5(6):1043–59
Statistical significance of hierarchical multi-body potentials based on Delaunay tessellation and their application in sequence-structure alignment. Munson PJ, et al. **Protein Sci** 1997 Jul;6(7):1467–81
Seventy-five percent accuracy in protein secondary structure prediction. Frishman D, et al. **Proteins** 1997 Mar; 27(3):329–35
Defining a similarity threshold for a functional protein sequence pattern: the signal peptide cleavage site. Nielsen H, et al. **Proteins** 1996 Feb;24(2):165–77
The alpha and omega of G-protein coupled receptors: a novel method for classification. Part 1. Moereels H, et al. **Receptors Channels** 1996;4(1):19–30
Sequence alignment through pictures. Searls DB. **Trends Genet** 1996 Jan;12(1):35–7

STATISTICS & NUMERICAL DATA

Biases in amino acid replacement matrices and alignment scores due to rate heterogeneity. Kelly C, et al. **J Comput Biol** 1996 Summer;3(2):307–18

VETERINARY

Mapping homology between human and black and white colobine monkey chromosomes by fluorescent in situ hybridization. Bigoni F, et al. **Am J Primatol** 1997; 42(4):289–98

SEQUENCE ANALYSIS

Electroblotting of proteins to Teflon tape and membranes

for N- and C-terminal sequence analysis. Burkhart WA, et al. **Anal Biochem** 1996 May 1;236(2):364–7
cDNA and deduced polypeptide sequence of a mouse selenoprotein P. Steinert P, et al. **Biofactors** 1997;6(3):311–9
Deciphering isozyme function: exploring cell biology with chemistry in the post-genomic era. Crews CM. **Chem Biol** 1996 Dec;3(12):961–5 (31 ref.)
Microheterogeneity of odorant-binding proteins in the porcupine revealed by N-terminal sequencing and mass spectrometry. Ganni M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):287–91
GenomeInspector: a new approach to detect correlation patterns of elements on genomic sequences. Quandt K, et al. **Comput Appl Biosci** 1996 Oct;12(5):405–13
A flexible motif search technique based on generalized profiles. Bucher P, et al. **Comput Chem** 1996 Mar;20(1):3–23
Sequencing and analysis of bacterial genomes. Koonin EV, et al. **Curr Biol** 1996 Apr 1;6(4):404–16 (80 ref.)
Exploiting the complete yeast genome sequence. Bassett DE Jr, et al. **Curr Opin Genet Dev** 1996 Dec;6(6):763–6 (20 ref.)
Complete genome sequences of cellular life forms: glimpses of theoretical evolutionary genomics. Koonin EV, et al. **Curr Opin Genet Dev** 1996 Dec;6(6):757–62 (39 ref.)
Proceedings of the 1st Chromosome 6 Sequencing Meeting. Hinxton, England, March 20, 1996. **DNA Seq** 1996; 7(1):1–62
Experiment files and their application during large-scale sequencing projects. Bonfield JK, et al. **DNA Seq** 1996; 6(2):109–17
Construction of a directory of tobacco plasma membrane proteins by combined two-dimensional gel electrophoresis and protein sequencing. Rouquié D, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):654–60
Sequence of Escherichia coli D-serine dehydratase. Location of the pyridoxal-phosphate binding site. Schiltz E, et al. **FEBS Lett** 1981 Nov 2;134(1):57–62
Sequence analysis of eukaryotic developmental proteins: ancient and novel domains. Mushegian AR, et al. **Genetics** 1996 Oct;144(2):817–28
Assessing dissimilarity of genes by comparing their RNAse A mismatch cleavage patterns. Rzhetsky A, et al. **Genetics** 1996 Dec;144(4):1975–83
A graph theoretic approach to the analysis of DNA sequencing data. Berno AJ. **Genome Res** 1996 Feb; 6(2):80–91
Cloning and sequencing of complete thyrotropin receptor transcripts in pretibial fibroblast culture cells. Wu SL, et al. **J Endocrinol Invest** 1996 Jun;19(6):365–70
Using evolutionary trees in protein secondary structure prediction and other comparative sequence analyses. Goldman N, et al. **J Mol Biol** 1996 Oct 25;263(2):196–208
GENEMAN of LASERGENE. Clewley JP. **Methods Mol Biol** 1997;70:189–96
The Genetic Data Environment. A user modifiable and expandable multiple sequence analysis package. Eisen JA. **Methods Mol Biol** 1997;70:13–38
PROTEAN. Protein sequence analysis and prediction. Plasterer TN. **Methods Mol Biol** 1997;70:227–39
GeneJockeyII. Database searching. Taylor P. **Methods Mol Biol** 1997;70:197–212
The unique endometrial expression and genomic organization of the porcine IGFBP-2 gene. Song S, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):193–202
Finding the most significant common sequence and structure motifs in a set of RNA sequences. Gorodkin J, et al. **Nucleic Acids Res** 1997 Sep 15;25(18):3724–32
Comparative amino acid sequence analysis of the C6 zinc cluster family of transcriptional regulators. Schjerling P, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4599–607
Whole genome analysis: experimental access to all genome sequenced segments through larger-scale efficient oligonucleotide synthesis and PCR. Lashkari DA, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):8945–7
Analysis of amino acid indices and mutation matrices for sequence comparison and structure prediction of proteins. Tomii K, et al. **Protein Eng** 1996 Jan;9(1):27–36

HISTORY

First steps in peptide science. Schwyzer R. **Protein Sci** 1996 Nov;5(11):2358–63

INSTRUMENTATION

Automated methods for C-terminal protein sequencing. Bailey JM, et al. **Methods Mol Biol** 1997;64:259–69
Protein sequencer maintenance and troubleshooting. Dunbar B. **Methods Mol Biol** 1997;64:217–33
Identification of PTH-amino acids by high-performance liquid chromatography. Grant GA, et al. **Methods Mol Biol** 1997;64:197–215

METHODS

A method for preparation of amino acid thiohydantoins from free amino acids activated by acetyl chloride for development of protein C-terminal sequencing. Mo B, et al. **Anal Biochem** 1997 Jul 1;249(2):207–11
A picomole-scale method for charge derivatization of peptides for sequence analysis by mass spectrometry. Huang ZH, et al. **Anal Chem** 1997 Jan 15;69(2):137–44
Proton: a major factor for the racemization and the dehydration at the cyclization/cleavage stage in the Edman sequencing method. Matsunaga H, et al. **Anal Chem** 1996 Sep 1;68(17):2850–6
Small peptide libraries: combinatorial split-mix synthesis followed by combinatorial amino acid analysis of selected variants. Weinberger H, et al. **Arch Pharm (Weinheim)** 1997 Apr;330(4):109–11
Hidden Markov model analysis of motifs in steroid dehydrogenases and their homologs. Grundy WN, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):760–6
A contact scoring matrix for qualitative prediction of change in folding of alpha-helices in globular proteins caused by a mutation. Lin TH, et al. **Biochim Biophys Acta** 1997 Jan 4;1337(1):17–26
Fully automated genome analysis that reflects user needs and preferences. A detailed introduction to the MAGPIE system architecture. Gaasterland T, et al. **Biochimie** 1996; 78(5):302–10
A computer aided system for systematic production and revision of sequence patterns. Ripoche H, et al. **Biochimie** 1996;78(5):370–5
Compression and genetic sequence analysis. Rivals E, et al. **Biochimie** 1996;78(5):315–22
Exon prediction in eucaryotic genomes. Vignal L, et al. **Biochimie** 1996;78(5):327–34
Boron trifluoride-etherate (Lewis acid) as an efficient acid at cyclization/cleavage reaction of D/L-amino acids affording the retention of their original configuration in the Edman sequencing method of peptides. Matsunaga H, et al. **Biomed Chromatogr** 1996 Mar–Apr;10(2):95–6
Method for simultaneous RNA and DNA isolation from biopsy material, culture cells, plants and bacteria. Döbbeling U, et al. **Biotechniques** 1997 Jan;22(1):88–90
Sequence analysis of the Methanococcus jannaschii genome and the prediction of protein function. Andrade M, et al. **Comput Appl Biosci** 1997 Aug;13(4):481–3
An algorithm to analyse the hydrolysis pathway of peptides and proteins by sequence analyses of unfractionated digestion mixtures. Caporale C, et al. **Comput Appl Biosci** 1996 Apr;12(2):81–8
Kohonen map as a visualization tool for the analysis of protein sequences: multiple alignments, domains and segments of secondary structures. Hanke J, et al. **Comput Appl Biosci** 1996 Dec;12(6):447–54
Hidden Markov models for sequence analysis: extension and analysis of the basic method. Hughey R, et al. **Comput Appl Biosci** 1996 Apr;12(2):95–107
GEOMETRY: a software package for nucleotide sequence analysis using statistical geometry in sequence space. Kuznetsov I, et al. **Comput Appl Biosci** 1996 Aug; 12(4):297–301
Linguistic approaches to biological sequences. Searls DB. **Comput Appl Biosci** 1997 Aug;13(4):333–44 (49 ref.)
Object-oriented sequence analysis: SCL—a C++ class library. Vahrson W, et al. **Comput Appl Biosci** 1996 Apr; 12(2):119–27
Searching for regulatory elements in human noncoding sequences. Duret L, et al. **Curr Opin Struct Biol** 1997 Jun; 7(3):399–406 (48 ref.)
New horizons in sequence analysis. Hubbard TJ. **Curr Opin Struct Biol** 1997 Apr;7(2):190–3 (33 ref.)
Identification of cytokine-regulated proteins in normal and malignant cells by the combination of two-dimensional polyacrylamide gel electrophoresis, mass spectrometry, Edman degradation and immunoblotting and approaches to the analysis of their functional roles. Epstein LB, et al. **Electrophoresis** 1996 Nov;17(11):1655–70 (75 ref.)
Prothymosin alpha: efficient sequence determination by experimental and theoretical capillary electrophoretic support. Weiler A, et al. **Electrophoresis** 1997 May; 18(5):757–61
Computational method to predict mitochondrially imported proteins and their targeting sequences. Claros MG, et al. **Eur J Biochem** 1996 Nov 1;241(3):779–86
C-terminal ladder sequencing by an approach combining chemical degradation with analysis by matrix-assisted-laser-desorption ionization mass spectrometry. Thiede B, et al. **Eur J Biochem** 1997 Mar 15;244(3):750–4
Structure and organisation of the pyrimidine biosynthesis pathway genes in Lactobacillus plantarum: a PCR strategy for sequencing without cloning. Elagöz A, et al. **Gene** 1996 Dec 5;182(1–2):37–43
Lane tracking software for four-color fluorescence-based electrophoretic gel images. Cooper ML, et al. **Genome Res** 1996 Nov;6(11):1110–7
Octamer-primed cycle sequencing: design of an optimized primer library. Hardin SH, et al. **Genome Res** 1996 Jun; 6(6):545–50
End sequence determination from large insert clones using energy transfer fluorescent primers. Marra M, et al. **Genome Res** 1996 Nov;6(11):1118–22
Systematic peptide fragmentation of polyvinylidene difluoride(PVDF)-immobilized proteins prior to microsequencing. Iwamatsu A, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):29–34
Rapid approach for sequencing neutral oligosaccharides by exoglycosidase digestion and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. Küster B, et al. **J Mass Spectrom** 1996 Oct;31(10):1131–40
Global self-organization of all known protein sequences reveals inherent biological signatures. Linial M, et al. **J Mol Biol** 1997 May 2;268(2):539–56
Recognition of analogous and homologous protein folds: analysis of sequence and structure conservation. Russell RB, et al. **J Mol Biol** 1997 Jun 13;269(3):423–39
Autoantibodies in sera of patients with myocarditis: characterization of the corresponding proteins by isoelectric focusing and N-terminal sequence analysis. Pankuweit S, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):77–84
Determination of the primary structure of homologous proteins by sequence analysis of peptide mixtures. Caporale C, et al. **J Protein Chem** 1996 May;15(4):405–12
Computational sequence analysis of the tissue inhibitor of metalloproteinase family. Douglas DA, et al. **J Protein Chem** 1997 May;16(4):237–55 (88 ref.)
Double coupling Edman chemistry for high-sensitivity automated protein sequencing. Ireland ID, et al. **J Protein Chem** 1997 Jul;16(5):491–3
A novel geometry mass spectrometer, the Q-TOF, for low-femtomole/attomole-range biopolymer sequencing. Morris HR, et al. **J Protein Chem** 1997 Jul;16(5):469–79
Analysis of sites of protein phosphorylation. Aitken A, et al. **Methods Mol Biol** 1997;64:293–306
Identifying the carboxy terminal amino acid of a protein. Akiyama TH, et al. **Methods Mol Biol** 1997;64:235–42
Selective isolation of the carboxy terminal peptide from a protein. Akiyama TH, et al. **Methods Mol Biol** 1997;64:81–3
Selective isolation of the amino-terminal peptide from alpha-amino blocked protein. Akiyama TH, et al. **Methods Mol Biol** 1997;64:85–9
Chemical modification of proteins for sequence analysis. Carne AF, et al. **Methods Mol Biol** 1997;64:271–84
Enzymatic and chemical methods for manual C-terminal peptide sequencing. Casagranda F, et al. **Methods Mol Biol** 1997;64:243–57
On-membrane deblocking of proteins. Hirano H, et al. **Methods Mol Biol** 1997;64:285–92
Amino acid sequencing of neuropeptides. Li KW, et al. **Methods Mol Biol** 1997;73:17–25
Strategies for handling polypeptides on a microscale. Smith BJ, et al. **Methods Mol Biol** 1997;64:1–16
Identification of sites of glycosylation. Sutton CW, et al. **Methods Mol Biol** 1997;64:307–15
The Dansyl-Edman method for manual peptide sequencing. Walker JM. **Methods Mol Biol** 1997;64:183–7
N-terminal protein ladder sequencing. Wang R, et al. **Methods Mol Biol** 1997;64:175–82
Can three incongruence tests predict when data should be combined? Cunningham CW. **Mol Biol Evol** 1997 Jul; 14(7):733–40
BIONJ: an improved version of the NJ algorithm based on a simple model of sequence data. Gascuel O. **Mol Biol Evol** 1997 Jul;14(7):685–95
Bayesian phylogenetic inference using DNA sequences: a Markov Chain Monte Carlo Method. Yang Z, et al. **Mol Biol Evol** 1997 Jul;14(7):717–24
Sensitive peptide sequence analysis: a faster weigh-in for biomolecules [news] Bradley D. **Mol Med Today** 1997 Jan; 3(1):2
Oligosaccharide sequencing technology. Rudd PM, et al. **Nature** 1997 Jul 10;388(6638):205–7 (27 ref.)
Enhancement of the nucleosomal pattern in sequences of lower complexity. Bolshoy A, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3248–54
Ordered shotgun sequencing of a 135 kb Xq25 YAC containing ANT2 and four possible genes, including three confirmed by EST matches. Chen CN, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4034–41
Mass spectrometric sequencing of synthetic peptides containing alpha, alpha-dialkylated amino acid residues by MALDI post-source decay analysis. Wenschuh H, et al. **Pept Res** 1996 May–Jun;9(3):122–6
Direct atomic force microscope imaging of EcoRI endonuclease site specifically bound to plasmid DNA molecules. Allison DP, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8826–9
A 3D model of the delta opioid receptor and ligand-receptor complexes. Alkorta I, et al. **Protein Eng** 1996 Jul; 9(7):573–83
An analysis of structural instances of low complexity sequence segments. Saqi M. **Protein Eng** 1995 Nov; 8(11):1069–73
Searching for common sequence patterns among distantly related proteins. Suyama M, et al. **Protein Eng** 1995 Nov; 8(11):1075–80
A new method for analyzing protein sequence relationships based on Sammon maps. Agrafiotis DK. **Protein Sci** 1997 Feb;6(2):287–93
Derivation of 3D coordinate templates for searching structural databases: application to Ser-His-Asp catalytic triads in the serine proteinases and lipases. Wallace AC, et al. **Protein Sci** 1996 Jun;5(6):1001–13
Rapid sequencing protocol using microconcentrators. Petroni D, et al. **Trends Genet** 1996 May;12(5):167–8

STATISTICS & NUMERICAL DATA

Selection of amino acid parameters for Fourier transform-based analysis of proteins. Lazović J. **Comput Appl Biosci** 1996 Dec;12(6):553–62

SEQUENCE ANALYSIS, DNA

Identification of a microsatellite region composed of a long

homopurine/homopyrimidine tract surrounded by AT-rich sequences upstream of the rat stress-inducible hsp 70.1 gene. Lisowska K, et al. **Acta Biochim Pol** 1997; 44(1):147-52

RNA and DNA sequence analysis of the nef gene of HIV type 1 strains from the first HIV type 1-infected long-term nonprogressing mother-child pair. Saksena NK, et al. **AIDS Res Hum Retroviruses** 1997 May 20;13(8):729-32

Sequence analyses of the reverse transcriptase region of HIV type 1 isolates from Sydney, Australia. Zheng NN, et al. **AIDS Res Hum Retroviruses** 1996 Dec 10;12(18):1731-2

Fluorescence-based sequencing of double-stranded DNA by hexamer string priming. Johnson AF, et al. **Anal Biochem** 1996 Oct 15;241(2):228-37

Nonradioactive single-strand conformation polymorphism analysis with application for mutation detection in a mixed population of cells. Law JC, et al. **Anal Biochem** 1996 May 1;236(2):373-5

Sequence analysis of the CAG triplet repeats region in the Huntington disease gene (IT15) in several mammalian species. Pêcheux C, et al. **Ann Genet** 1996;39(2):81-6

Structural characterization of the Entamoeba histolytica enolase gene promoter. Hidalgo ME, et al. **Arch Med Res** 1997;28 Spec No:46-8

The sequence of a highly homologous gene to hgl2* of Entamoeba histolytica that is present and expressed in E.dispar. Pillai DR, et al. **Arch Med Res** 1997;28 Spec No:19-20

Reverse transcription-polymerase chain reaction detection and sequence analysis of small round-structured viruses in Japan. Yamazaki K, et al. **Arch Virol Suppl** 1996;12:271-6

Comparative diagnoses of twin zygosity by SSLP variant analysis, questionnaire, and dermatoglyphic analysis. Spitz E, et al. **Behav Genet** 1996 Jan;26(1):55-63

Analysis of expressed sequence tags (ESTs) of the parasitic protozoa Entamoeba histolytica. Tanaka T, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):611-5

cDNA sequence analysis of cardiotoxin variants from Taiwan cobra. Chang LS, et al. **Biochem Mol Biol Int** 1997 Jun; 42(1):85-92

Cloning and sequencing of novel genes from Vibrio alginolyticus that support the growth of K+ uptake-deficient mutant of Escherichia coli. Nakamura T, et al. **Biochim Biophys Acta** 1996 Dec 18;1277(3):201-8

Relaxin-like factor gene is highly expressed in the bovine ovary of the cycle and pregnancy: sequence and messenger ribonucleic acid analysis [published erratum appears in Biol Reprod 1997 Mar;56(3):788] Bathgate R, et al. **Biol Reprod** 1996 Dec;55(6):1452-7

The modular structure of informational sequences. Schmitt AO, et al. **Biosystems** 1996;37(3):199-210

DNA sequencing of a moderately difficult template: evaluation of results from a Thermus thermophilus unknown test sample. Association of Bromolecular Resource Facilities (ABRF) DNA Sequence Committee. **Biotechniques** 1996 Oct;21(4):678

Combination of direct DNA sequencing with degenerate primer-mediated PCR and 5'-/3'-RACE to screen novel cDNA sequences. Fang C, et al. **Biotechniques** 1997 Jul; 23(1):52, 54, 56, 58

Partial CviJI digestion as an alternative approach to generate cosmid sublibraries for large-scale sequencing projects. Gingrich JC, et al. **Biotechniques** 1996 Jul;21(1):99-104

Methylation analysis using bisulfite genomic sequencing: application to small numbers of intact cells. McDonald LE, et al. **Biotechniques** 1997 Feb;22(2):272-4

Rescuing corrupted gel files from Model 377 and 373 DNA Sequencers. O'Brien KM, et al. **Biotechniques** 1997 Jun; 22(6):1162-3

AmpliTaq DNA polymerase, FS dye-terminator sequencing: analysis of peak height patterns. Parker LT, et al. **Biotechniques** 1996 Oct;21(4):694-9

Cytosine methylation: quantitation by automated genomic sequencing and GENESCAN analysis. Paul CL, et al. **Biotechniques** 1996 Jul;21(1):126-33

Multi-facility survey of oligonucleotide synthesis and an examination of the performance of unpurified primers in automated DNA sequencing. Pon RT, et al. **Biotechniques** 1996 Oct;21(4):680-5

Construction of a library for sequencing long regions of malarial genomic DNA. Werner E, et al. **Biotechniques** 1997 Jul;23(1):20, 22, 24

Use of a DNA sequencing gel apparatus for analysis of polypeptides. Whelan KF, et al. **Biotechniques** 1996 Nov; 21(5):805-8

Preparation of miniprep-DNA for automated non-radioactive sequencing. Zimmermann R, et al. **Biotechniques** 1996 Nov;21(5):824, 826

Restoration of the CCAAT box or insertion of the CACCC motif activate delta-globin gene expression. Tang DC, et al. **Blood** 1997 Jul 1;90(1):421-7

Recurrent DNA copy number changes in 1q, 4q, 6q, 9p, 13q, 14q and 22q detected by comparative genomic hybridization in malignant mesothelioma. Björkqvist AM, et al. **Br J Cancer** 1997;75(4):523-7

Amplification methods in the molecular diagnosis of genetic diseases. Ben-Ezra JM. **Clin Lab Med** 1995 Dec; 15(4):795-815 (44 ref.)

Sequence-based diagnosis of hemoglobinopathies in the clinical laboratory. Reddy PL, et al. **Clin Lab Med** 1997 Mar;17(1):85-96 (16 ref.)

Cloning and sequencing of a full-length sea bream (Sparus aurata) beta-actin cDNA. Santos CR, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):185-9

Three sets of Macintosh AppleScripts for the automatic submission of sequence data to the Internet BLAST server. Osborne BI. **Comput Appl Biosci** 1996 Jun;12(3):257-8

A reference cross DNA panel for zebrafish (Danio rerio) anchored with simple sequence length polymorphisms. Knapik EW, et al. **Development** 1996 Dec;123:451-60

Detection of p53 gene abnormality by sequence analysis of archival paraffin tissue. A comparison with fresh-frozen specimens. Nadji M, et al. **Diagn Mol Pathol** 1996 Dec; 5(4):279-83

Synthetic DNA-based genetic markers reveal intra- and inter-species DNA sequence variability in the Bubalus bubalis and related genomes. John MV, et al. **DNA Cell Biol** 1997 Mar;16(3):369-78

Identification of a specific DNA region required for enhanced transcription of HER2/neu in the MDA-MB453 breast cancer cell line. Miller SJ, et al. **DNA Cell Biol** 1996 Sep;15(9):749-57

A 570-kb DNA sequence of the Escherichia coli K-12 genome corresponding to the 28.0-40.1 min region on the linkage map. Aiba H, et al. **DNA Res** 1996 Dec 31; 3(6):363-77

A 460-kb DNA sequence of the Escherichia coli K-12 genome corresponding to the 40.1-50.0 min region on the linkage map. Itoh T, et al. **DNA Res** 1996 Dec 31; 3(6):379-92

Sequence analysis of the 36-kb region between gntZ and trnY genes of Bacillus subtilis genome. Kasahara Y, et al. **DNA Res** 1997 Apr 28;4(2):155-9

Construction of a contiguous 874-kb sequence of the Escherichia coli K-12 genome corresponding to the 50.0-68.8 min on the linkage map and analysis of its sequence features (supplement). Yamamoto Y, et al. **DNA Res** 1997 Apr 28;4(2):169-78

Construction of a contiguous 874-kb sequence of the Escherichia coli -K12 genome corresponding to 50.0-68.8 min on the linkage map and analysis of its sequence features. Yamamoto Y, et al. **DNA Res** 1997 Apr 28;4(2):91-113

Sequencing 39,350 bp of Saccharomyces cerevisiae chromosome XII utilizing ordered shotgun libraries. Scholler P, et al. **DNA Seq** 1996;6(5):257-62

Genomic structure of a 200kb region between HLA-C and TNF: implications for transplantation, autoimmune disease and evolution. Townend DC, et al. **DNA Seq** 1996;7(1):55-9

Sequencing in nanofabricated arrays: a feasibility study. Duke T, et al. **Electrophoresis** 1997 Jan;18(1):17-22 (23 ref.)

A numerical study of persistence length effects on DNA conformation in sequencing electrophoresis. Guerry E, et al. **Electrophoresis** 1996 Sep;17(9):1420-4

Flowable networks as DNA sequencing media in capillary columns. Menchen S, et al. **Electrophoresis** 1996 Sep; 17(9):1451-9

Temperature profile of buffer-filled electrophoresis capillaries using air convection cooling. Nishikawa T, et al. **Electrophoresis** 1996 Jun;17(6):1115-20

Polyacrylamide solutions for DNA sequencing by capillary electrophoresis: mesh sizes, separation and dispersion. Wu C, et al. **Electrophoresis** 1996 Jun;17(6):1103-9

Automatic matrix determination in four dye fluorescence-based DNA sequencing. Yin Z, et al. **Electrophoresis** 1996 Jun;17(6):1143-50

Sequence of the 11 beta-hydroxylase gene from the Cape baboon (Papio ursinus). Hampf M, et al. **Endocr Res** 1996 Nov;22(4):495-9

Bov-B long interspersed repeated DNA (LINE) sequences are present in Vipera ammodytes phospholipase A2 genes and in genomes of Viperidae snakes. Kordiš D, et al. **Eur J Biochem** 1997 Jun 15;246(3):772-9

Molecular analysis of the IT15 gene in patients with apparently 'sporadic' Huntington's disease. Mandich P, et al. **Eur Neurol** 1996;36(6):348-52

The Arabidopsis thaliana cDNA sequencing projects. Delseny M, et al. **FEBS Lett** 1997 Mar 24;405(2):129-32 (30 ref.)

The Arabidopsis thaliana cDNA sequencing projects. Delseny M, et al. **FEBS Lett** 1997 Feb 24;403(3):221-4 (30 ref.)

Cloning and sequence analysis of a cDNA for the beta subunit of chicken thyroid-stimulating hormone. Gregory CC, et al. **Gen Comp Endocrinol** 1997 Aug;107(2):182-90

Genomic organization of the fungus Phycomyces. Avalos J, et al. **Gene** 1996 Sep 26;174(1):43-50

Sequence analysis by hybridization with oligonucleotide microchip: identification of beta-thalassemia mutations. Drobyshev A, et al. **Gene** 1997 Mar 25;188(1):45-52

Structure of the human kappa-casein gene. Edlund A, et al. **Gene** 1996 Sep 26;174(1):65-9

Sequence analysis of the omp2 region of Chlamydia psittaci strain GPIC: structural and functional implications. Hsia RC, et al. **Gene** 1996 Oct 17;176(1-2):155-62

Sequence analysis of gene 3, gene 4 and gene 5 of avian infectious bronchitis virus strain CU-T2. Jia W, et al. **Gene** 1997 Apr 21;189(2):189-93

Sequence analysis and tissue expression of a non-Bohr beta-globin cDNA from Atlantic salmon. McMorrow T, et al. **Gene** 1997 Apr 21;189(2):183-8

The nucleotide sequence of the bovine interleukin-5-encoding cDNA. Mertens B, et al. **Gene** 1996 Oct 17;176(1-2):273-4

Fragment walking for long DNA sequencing by using a library as small as 16 primers. Okano K, et al. **Gene** 1996 Oct 17;176(1-2):231-5

Cloning, sequence analysis, and expression of the genes encoding lytic functions of Bacteriophage phi g1e. Oki M, et al. **Gene** 1996 Oct 17;176(1-2):215-23

Demethylation of repetitive DNA sequences in neuroblastoma. Thoraval D, et al. **Genes Chromosomes Cancer** 1996 Dec;17(4):234-44

Effects of character weighting and species sampling on phylogeny reconstruction: a case study based on DNA sequence data in cetaceans. Milinkovitch MC, et al. **Genetics** 1996 Dec;144(4):1817-33

Mitochondrial intronic open reading frames in Podospora: mobility and consecutive exonic sequence variations. Sellem CH, et al. **Genetics** 1996 Jun;143(2):777-88

Stock structure and homing fidelity in Gulf of Mexico sturgeon (Acipenser oxyrinchus desotoi) based on restriction fragment length polymorphism and sequence analyses of mitochondrial DNA. Stabile J, et al. **Genetics** 1996 Oct;144(2):767-75

Multiplex sequencing of 1.5 Mb of the Mycobacterium leprae genome. Smith DR, et al. **Genome Res** 1997 Aug; 7(8):802-19

Human microtubule-associated protein 1a (MAP1A) gene: genomic organization, cDNA sequence, and developmental- and tissue-specific expression. Fink JK, et al. **Genomics** 1996 Aug 1;35(3):577-85

Physical mapping 220 kb centromeric of the human MHC and DNA sequence analysis of the 43-kb segment including the RING1, HKE6, and HKE4 genes. Kikuti YY, et al. **Genomics** 1997 Jun 15;42(3):422-35

PRIMO: A primer design program that applies base quality statistics for automated large-scale DNA sequencing. Li P, et al. **Genomics** 1997 Mar 15;40(3):476-85

Sequence, organization, and transcription of the Dlx-1 and Dlx-2 locus. McGuinness T, et al. **Genomics** 1996 Aug 1; 35(3):473-85

GenomeInspector: basic software tools for analysis of spatial correlations between genomic structures within megabase sequences. Quandt K, et al. **Genomics** 1996 Apr 15; 33(2):301-4

Discrimination of HLA-B27 alleles by group-specific amplification followed by solid-phase sequencing. Blasczyk R, et al. **Hum Immunol** 1996 Feb;45(2):117-23

Sequencing support system: a robotic system for processing DNA samples. Brignac S. **IEEE Eng Med Biol Mag** 1997 Mar-Apr;16(2):92-3

CpG-rich sequences close to the site of duplication within the human IGH constant region. Sadhu A, et al. **Immunogenetics** 1997;45(6):365-70

The precursor protein of the structural apolipoproteins of lipophorin: cDNA and deduced amino acid sequence. Sundermeyer K, et al. **Insect Biochem Mol Biol** 1996 Sep-Oct;26(8-9):735-8

Sequence and secondary structure of the rDNA second internal transcribed spacer in the sibling species Culex pipiens L. and Cx. quinquefasciatus Say (Diptera: Culicidae). Severini C, et al. **Insect Mol Biol** 1996 Aug; 5(3):181-6

New rabbit sequences [letter; comment] Smith JB. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2533. Comment on: Invest Ophthalmol Vis Sci 1996 Sep;37(10):2120-8.

The production, binding characteristics and sequence analysis of four human IgG monoclonal antiphospholipid antibodies. Menon S, et al. **J Autoimmun** 1997 Feb; 10(1):43-57

Purification and sequence analysis of a novel NADP(H)-dependent type III alcohol dehydrogenase from Thermococcus strain AN1. Li D, et al. **J Bacteriol** 1997 Jul;179(13):4433-7

Selectively 13C-enriched DNA: evidence from 13C1' relaxation rate measurements of an internal dynamics sequence effect in the lac operator. Paquet F, et al. **J Biomol NMR** 1996 Oct;8(3):252-60

Generating programs for predicting the activity of functional sites. Ponomarenko MP, et al. **J Comput Biol** 1997 Spring; 4(1):83-90

Sequence analysis of domestic dog mitochondrial DNA for forensic use. Savolainen P, et al. **J Forensic Sci** 1997 Jul; 42(4):593-600

Nucleotide sequence analysis of a major antigenic domain of the E1 glycoprotein of 22 rubella virus isolates. Bosma TJ, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2523-30

Sequence analysis and transcriptional activity of the LTR of OLV-CU1, a North American ovine lentivirus. Campbell BJ, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):2999-3004

Sequence analysis of the nucleocapsid gene of measles virus isolates from South Africa identifies a new genotype. Kreis S, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1581-7

Complete DNA sequence of canine adenovirus type 1. Morrison MD, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):873-8

Nucleotide sequence of the gene encoding the viral polymerase of avian pneumovirus. Randhawa JS, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3047-51

Sequence analysis of the avirulent, demyelinating A7 strain of Semliki Forest virus. Tarbatt CJ, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1551-7

Isolation of Cryptococcus neoformans chromosome-specific probes using expressed sequence tags. Spitzer SG, et al. **J Med Vet Mycol** 1997 Jul-Aug;35(4):257-61

SEQUENCE ANALYSIS, DNA

Detection and sequence analysis of the major immediate early and PP150 gene of latent human cytomegalovirus in spleen, liver, and kidney tissues of trauma victims. Hendrix MG, et al. **J Med Virol** 1996 Oct;50(2):193–7

Molecular analysis of the adenomatous polyposis coli gene in sarcomas, hematological malignancies and noncolonic, neoplastic tissues. Wada M, et al. **J Mol Med** 1997 Feb; 75(2):139–44

Triplet correlation in DNA sequences and stability of heteroduplexes [letter] Dodin G, et al. **J Theor Biol** 1996 Dec 7;183(3):341–3

Complete nucleotide sequence of the new simian T-lymphotropic virus, STLV-PH969 from a Hamadryas baboon, and unusual features of its long terminal repeat. Van Brüssel M, et al. **J Virol** 1997 Jul;71(7):5464–72

Molecular characterization of avian reoviruses using nested PCR and nucleotide sequence analysis. Liu HJ, et al. **J Virol Methods** 1997 May;65(2):159–67

Comparable gene structure of the immunoglobulin heavy chain variable region between multiple myeloma and normal bone marrow lymphocytes. Kiyoi H, et al. **Leukemia** 1996 Nov;10(11):1804–12

Comparison of the 5' end of the rat and mouse cystathionine beta-synthase genes. Roper MD, et al. **Mamm Genome** 1996 Oct;7(10):754–7

Hormone-sensitive lipase (Lipe): sequence analysis of the 129Sv mouse Lipe gene. Sztrolovics R, et al. **Mamm Genome** 1997 Feb;8(2):86–9

From ABI sequence data to LASERGENE's EDITSEQ. Arnold C, et al. **Methods Mol Biol** 1997;70:65–74

ABI analysis. Manipulation of sequence data from the ABI DNA sequencer. Hagemann TL, et al. **Methods Mol Biol** 1997;70:39–54

SeqEd. Manipulation of sequence data and chromatograms from the ABI DNA sequencer analysis files. Hagemann TL, et al. **Methods Mol Biol** 1997;70:55–63

AutoAssembler sequence assembly software. Parker SR. **Methods Mol Biol** 1997;70:107–17

MAPDRAW. Restriction mapping and analysis. Plasterer TN. **Methods Mol Biol** 1997;70:241–56

GeneJockeyII. DNA sequencing and fragment assembly. Taylor P. **Methods Mol Biol** 1997;70:91–106

GeneJockeyII. Entering and Editing sequences. Taylor P. **Methods Mol Biol** 1997;70:1–11

Preparation and analysis of DNA sequencing gels. Theophilus BD. **Methods Mol Biol** 1996;65:1–9

The Gene Construction Kit. DNA sequence analysis and presentation. Troen BR. **Methods Mol Biol** 1997;70:257–72

Cloning PCR products for sequencing in M13 vectors. Walsh D. **Methods Mol Biol** 1996;65:177–84

Nucleotide sequence and analysis of the phoB-rrnE-groESL region of the Bacillus subtilis chromosome. Sadaie Y, et al. **Microbiology** 1997 Jun;143 (Pt 6):1861–6

Isolation and identification of sex-specific cDNA clones from the Syrian hamster harderian gland. Domínguez P, et al. **Microsc Res Tech** 1996 Jun 1;34(2):111–7

Genomic sequencing by ligation-mediated PCR. Pfeifer GP, et al. **Mol Biotechnol** 1996 Jun;5(3):281–8

Thermal cycle dideoxy DNA sequencing. Slatko BE. **Mol Biotechnol** 1996 Dec;6(3):311–22

Human uterine NK cells have a similar repertoire of killer inhibitory and activatory receptors to those found in blood, as demonstrated by RT-PCR and sequencing. Hiby SE, et al. **Mol Immunol** 1997 Apr;34(5):419–30

DNA sequencing of formalin-fixed crustaceans from archival research collections. France SC, et al. **Mol Mar Biol Biotechnol** 1996 Dec;5(4):304–13

Identification and sequence of a nifJ-like gene in Rhodospirillum rubrum: partial characterization of a mutant unaffected in nitrogen fixation. Lindblad A, et al. **Mol Microbiol** 1996 May;20(3):559–68

Energy laboratories to open joint DNA sequence 'factory' [news] Lehrman S. **Nature** 1997 Aug 7;388(6642):507

Sequencing double-stranded DNA by strand displacement. Fu DJ, et al. **Nucleic Acids Res** 1997 Feb 1;25(3):677–9

Further characterisation of the p53 responsive element--identification of new candidate genes for trans-activation by p53. Bourdon JC, et al. **Oncogene** 1997 Jan 9;14(1):85–94

Sequence analysis of the V1-V2 hypervariable region of the HIV-1 envelope gene from pediatric patients. Ramos Martinez SL, et al. **P R Health Sci J** 1996 Sep;15(3):211–8

Removal of polymerase-produced mutant sequences from PCR products. Smith J, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6847–50

Gene identification and DNA sequence analysis in the GC-poor 20 megabase region of human chromosome 21. Yu J, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):6862–7

DNA sequencing. Rees WD. **Proc Nutr Soc** 1996 Mar; 55(1B):605–12 (7 ref.)

Purification, cDNA sequence, and tissue distribution of rat uroguanylin. Li Z, et al. **Regul Pept** 1997 Jan 15;68(1):45–56

Cloning and sequencing of a cDNA encoding an ovine oestrus-associated oviducal protein. Marshall JT, et al. **Reprod Fertil Dev** 1996;8(2):305–10

Corn genome initiative [letter; comment] Bevan MW. **Science** 1997 Aug 15;277(5328):885–6. Comment on: Science 1997 Jun 27;276(5321):1960–2.

The complete genome sequence of Escherichia coli K-12 [comment] Blattner FR, et al. **Science** 1997 Sep 5; 277(5331):1453–74. Comment on: Science 1997 Sep 5;277(5331):1432–4.

Funding sequencing efforts [letter; comment] Bond E, et al. **Science** 1997 Feb 21;275(5303):1051–2. Comment on: Science 1996 Oct 25;274(5287):546, 563–7.

The human gene hunt scales up [news] [see comments] Marshall E. **Science** 1996 Nov 29;274(5292):1456. Comment in: Science 1997 Jan 31;275(5300):601–2.

Laboratory workhorse decoded [news; comment] Pennisi E. **Science** 1997 Sep 5;277(5331):1432–4. Comment on: Science 1997 Sep 5;27(5331):1453–74.

Gram-positive bacterium sequenced [news] Williams N. **Science** 1997 Jul 25;277(5325):478

Rice cDNAs as a model for expressed genes of plants. Sasaki T. **Symp Soc Exp Biol** 1996;50:11–5

Detection of polymorphisms in the human urokinase-type plasminogen activator gene. Conne B, et al. **Thromb Haemost** 1997 Mar;77(3):434–5

Phototyping: comprehensive DNA typing for HLA-A, B, C, DRB1, DRB3, DRB4, DRB5 & DQB1 by PCR with 144 primer mixes utilizing sequence-specific primers (PCR-SSP). Bunce M, et al. **Tissue Antigens** 1995 Nov; 46(5):355–67

Molecular analysis of six dog leukocyte antigen class I sequences including three complete genes, two truncated genes and one full-length processed gene. Burnett RC, et al. **Tissue Antigens** 1997 May;49(5):484–95

Identification of a new DRB1 allele (DRB1*1325) by PCR-SSP and DNA sequencing. Poli F, et al. **Tissue Antigens** 1996 Dec;48(6):714–6

Identification of HLA-C alleles using PCR-single-strand-conformation polymorphism and direct sequencing. Wang H, et al. **Tissue Antigens** 1997 Feb; 49(2):134–40

Sequence of DRB1*1601. White JM, et al. **Tissue Antigens** 1997 Feb;49(2):192–3

The yeast genome project: what did we learn? Dujon B. **Trends Genet** 1996 Jul;12(7):263–70 (42 ref.)

Bonsai genomics: sequencing the smallest eukaryotic genomes. McFadden GI, et al. **Trends Genet** 1997 Feb; 13(2):46–9 (16 ref.)

The Saccharomyces cerevisiae genome on the World Wide Web. Walsh S, et al. **Trends Genet** 1996 Jul;12(7):276–7

Why sequence the genome of Mycobacterium tuberculosis? Cole ST. **Tuber Lung Dis** 1996 Dec;77(6):486–90 (46 ref.)

The sequence of the Orgyia pseudotsugata multinucleocapsid nuclear polyhedrosis virus genome. Ahrens CH, et al. **Virology** 1997 Mar 17;229(2):381–99

Sequence analysis of a Molluscum contagiosum virus DNA region which includes the gene encoding protein kinase 2 and other genes with unique organization. Martín-Gallardo A, et al. **Virus Genes** 1996;13(1):19–29

Cloning and sequence analysis of a Marek's disease virus origin binding protein (OBP) reveals strict conservation of structural motifs among OBPs of divergent alphaherpesviruses. Wu TF, et al. **Virus Genes** 1996; 13(2):143–57

Sequence of the nucleocapsid protein gene of subgroup A and B avian pneumoviruses. Li J, et al. **Virus Res** 1996 Apr;41(2):185–91

Molecular cloning and nucleotide sequence determination of three envelope genes of classical swine fever virus Taiwan isolate p97. Shiu JS, et al. **Virus Res** 1996 Apr;41(2):173–8

A Candida albicans gene encoding a DNA ligase. Andaluz E, et al. **Yeast** 1996 Jul;12(9):893–8

Sequence and analysis of a 26.9 kb fragment from chromosome XV of the yeast Saccharomyces cerevisiae. Boyer J, et al. **Yeast** 1996 Dec;12(15):1575–86

Sequence of a 39,411 bp DNA fragment covering the left end of chromosome VII of Saccharomyces cerevisiae. Coissac E, et al. **Yeast** 1996 Dec;12(15):1555–62

Analysis of a 23 kb region on the left arm of yeast chromosome IV. Delaveau T, et al. **Yeast** 1996 Dec; 12(15):1587–92

Sequence analysis of a 14.6 kb DNA fragment of Saccharomyces cerevisiae chromosome VII reveals SEC27, SSM1b, a putative S-adenosylmethionine-dependent enzyme and six new open reading frames. Escribano V, et al. **Yeast** 1996 Jul; 12(9):887–92

Sequence and analysis of a 33 kb fragment from the right arm of chromosome XV of the yeast Saccharomyces cerevisiae. Galisson F, et al. **Yeast** 1996 Jul;12(9):877–85

Analysis of a 62 kb DNA sequence of chromosome X reveals 36 open reading frames and a gene cluster with a counterpart on chromosome XI. Huang ME, et al. **Yeast** 1996 Jul;12(9):869–75

Analysis of a 22,956 bp region on the right arm of Saccharomyces cerevisiae chromosome XV. Madania A, et al. **Yeast** 1996 Dec;12(15):1563–73

Applications of the long and accurate polymerase chain reaction method in yeast molecular biology: direct sequencing of the amplified DNA and its introduction into yeast. Takita Y, et al. **Yeast** 1997 Jun 30;13(8):763–8

Sequence analysis of Candida albicans phosphoribosyl-aminoimidazole carboxylase (ADE2) gene. Tsang WK, et al. **Yeast** 1997 Jun 15;13(7):673–6

DNA sequencing and analysis of 130 kb from yeast chromosome XV. Voss H, et al. **Yeast** 1997 Jun 15; 13(7):655–72

Analysis of a 26,756 bp segment from the left arm of yeast chromosome IV. Wölfl S, et al. **Yeast** 1996 Dec; 12(15):1549–54

Elucidation of an HIV-1 transmission from mother to child in west Africa by sequence analysis. Kasper P, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):307–17

Biological testing versus sequence analysis for determination of drug resistance of human immunodeficiency virus. Wichers M, et al. **Zentralbl Bakteriol** 1996 Jul; 284(2–3):457–65

[Complementarity of microscopies in the structural analysis of DNA minicircles associated to protein MC1] Larquet E, et al. **C R Acad Sci III** 1996 Jun;319(6):461–71 (Eng. Abstr.) **(Fre)**

[Genetic information database] Minoshima S, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2464–77 (9 ref.) **(Jpn)**

[What we can learn from the whole genome sequence of an archaeon Methanococcus jannaschii] Yamagishi A, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(2):174–7 (14 ref.) **(Jpn)**

[Fourier analysis of nucleotide sequences. Periodicity in E. coli promoter sequences] Kutuzova GI, et al. **Biofizika** 1997 Mar-Apr;42(2):354–62 (Eng. Abstr.) **(Rus)**

[MtDNA-like sequences and the coordination of the functioning of mammalian nuclear and mitochondrial genomes] Maliarchuk BA. **Tsitol Genet** 1997 Mar-Apr; 31(2):53–61 (51 ref.) (Eng. Abstr.) **(Rus)**

ECONOMICS

Against a whole-genome shotgun. Green P. **Genome Res** 1997 May;7(5):410–7

A cost effective base-matching assay with low backgrounds. Su X, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4596–7

INSTRUMENTATION

Manual manufacturing of oligonucleotide, DNA, and protein microchips. Guschin D, et al. **Anal Biochem** 1997 Aug 1; 250(2):203–11

Automated laser-induced fluorescence DNA sequencing: equalizing signal-to-noise ratios significantly enhances overall performance. Lario A, et al. **Anal Biochem** 1997 Apr 5;247(1):30–3

Counting basic sites in oligopeptides via gas-phase ion chemistry. Stephenson JL Jr, et al. **Anal Chem** 1997 Feb 1;69(3):281–5

Use of an automated sequencer to determine the sequence specificity of DNA damage. Hardman LC, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):349–59

Evaluation of the ALF DNA sequencer for high-speed sizing of short tandem repeat alleles. Decorte R, et al. **Electrophoresis** 1996 Oct;17(10):1542–9

Validation of the Applied Biosystems Prism 377 automated sequencer for the forensic short tandem repeat analysis. Frazier RR, et al. **Electrophoresis** 1996 Oct;17(10):1550–2

DNA sequencing using a four-color confocal fluorescence capillary array scanner. Kheterpal I, et al. **Electrophoresis** 1996 Dec;17(12):1852–9

High resolution slab gel electrophoresis of 8-amino-1,3, 6-pyrenetrisulfonic acid (APTS) tagged oligosaccharides using a DNA sequencer. O'Shea MG, et al. **Electrophoresis** 1996 Apr;17(4):681–6

Multiple capillary DNA sequencer that uses fiber-optic illumination and detection. Quesada MA, et al. **Electrophoresis** 1996 Dec;17(12):1841–51

Microfabrication and array technologies for DNA sequencing and diagnostics. O'Donnell-Maloney MJ, et al. **Genet Anal** 1996 Dec;13(6):151–7

Direct blotting electrophoresis for sequencing and genotyping hepatitis C virus. Castelain S, et al. **J Virol Methods** 1997 May;65(2):237–43

A magnetic attraction to high-throughput genomics. Hawkins TL, et al. **Science** 1997 Jun 20;276(5320):1887–9

[High-throughput of DNA sequencing by automated machines] Hattori M. **Nippon Rinsho** 1996 Apr;54(4):923–7 (0 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnosis of genetic mutations using oligonucleotide microchips] Ivanov IB, et al. **Mol Biol (Mosk)** 1997 Jan-Feb;31(1):159–67 **(Rus)**

METHODS

High mitochondrial sequence diversity in linguistic isolates of the Alps. Stenico M, et al. **Am J Hum Genet** 1996 Dec; 59(6):1363–75

In vitro generation of competitor DNA segments for the quantitation of any nucleic acid of known sequence by competitive polymerase chain reaction. Carrasco C, et al. **Anal Biochem** 1997 Jan 15;244(2):406–7

Automated laser-induced fluorescence DNA sequencing: equalizing signal-to-noise ratios significantly enhances overall performance. Lario A, et al. **Anal Biochem** 1997 Apr 5;247(1):30–3

A powerful approach for generating and sequencing DNA deletions: sequencing from the outside in. Ren Z, et al. **Anal Biochem** 1997 Feb 1;245(1):112–4

Real-time DNA sequencing using detection of pyrophosphate release. Ronaghi M, et al. **Anal Biochem** 1996 Nov 1;242(1):84–9

Characteristics of DNA-tagged liposomes allowing their use in capillary-migration, sandwich-hybridization assays. Rule GS, et al. **Anal Biochem** 1997 Jan 15;244(2):260–69

Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry for the detection of polymerase chain reaction products containing 7-deazapurine moieties.

Siegert CW, et al. **Anal Biochem** 1996 Dec 1;243(1):55–65

Multiplexed DNA sequencing and diagnostics by hybridization with enriched stable isotope labels. Arlinghaus HF, et al. **Anal Chem** 1997 Apr 15;69(8):1510–7

Oligonucleotide sequence and composition determined by matrix-assisted laser desorption/ionization. Bentzley CM, et al. **Anal Chem** 1996 Jul 1;68(13):2141–6

Rapid DNA sequencing of more than 1000 bases per run by capillary electrophoresis using replaceable linear polyacrylamide solutions. Carrilho E, et al. **Anal Chem** 1996 Oct 1;68(19):3305–13

High-resolution MALDI Fourier transform mass spectrometry of oligonucleotides. Li Y, et al. **Anal Chem** 1996 Jul 1;68(13):2090–6

Characterization of visible dyes for four-decay fluorescence detection in DNA sequencing. Nunnally BK, et al. **Anal Chem** 1997 Jul 1;69(13):2392–7

Electrophore mass tag dideoxy DNA sequencing. Xu L, et al. **Anal Chem** 1997 Sep 1;69(17):3595–602

Assays for microbial contamination and DNA analysis based on electrorotation. Burt JP, et al. **Ann Biol Clin (Paris)** 1996;54(6):253–7

Use of an automated sequencer to determine the sequence specificity of DNA damage. Hardman LC, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):349–59

A method to detect transmembrane helical segments at the nucleotide level. Lesnik T, et al. **Biochem Mol Biol Int** 1996 Apr;38(5):937–55

DNA sequence analysis by matrix-assisted laser desorption ionization MS. Haff LA, et al. **Biochem Soc Trans** 1996 Aug;24(3):901–4

Direct exponential amplification and sequencing (DEXAS) of genomic DNA. Kilger C, et al. **Biol Chem** 1997 Feb; 378(2):99–105

Method for 96-well M13 DNA template preparations for large-scale sequencing. Andersson B, et al. **Biotechniques** 1996 Jun;20(6):1022–7

Cerium oxide removes background fluorescent contaminants, "green smears", from glass plates used for automated fluorescence-based DNA sequencing. Bunville J, et al. **Biotechniques** 1997 Feb;22(2):236–8

Automated DNA sequencing requiring no DNA template purification. Chen Q, et al. **Biotechniques** 1996 Sep; 21(3):453–7

Universal primers for sequencing DNA restriction fragments. Chen YJ, et al. **Biotechniques** 1997 Jan;22(1):44–6

Evaluation of DNA sequencing ambiguities using tetramethylammonium chloride hybridization conditions. Connors TD, et al. **Biotechniques** 1997 Jun;22(6):1088–90

DNA sequencing with [alpha-33P]-labeled ddNTP terminators: a new approach to DNA sequencing with Thermo Sequenase DNA polymerase. Fan J, et al. **Biotechniques** 1996 Dec;21(6):1132–7

Easy gene walking. Harrison RW, et al. **Biotechniques** 1997 Apr;22(4):650–3

Direct sequencing of PCR-amplified 23S rDNA. Ibrahim A, et al. **Biotechniques** 1997 Aug;23(2):216–8, 220

Substrate properties of fluorescent ribonucleotides in the terminal transferase-catalyzed labeling of DNA sequencing primers. Igloi GL. **Biotechniques** 1996 Dec;21(6):1084–92

An iterative and regenerative method for DNA sequencing. Jones DH. **Biotechniques** 1997 May;22(5):938–46

"Colony sequencing": direct sequencing of plasmid DNA from bacterial colonies. Kilger C, et al. **Biotechniques** 1997 Mar;22(3):412–4, 416, 418

Elimination of sequence ambiguities by a single-step modification of a solid-phase, single-stranded sequencing protocol. Lawson VA, et al. **Biotechniques** 1996 Sep; 21(3):356–8

Identification of differentially expressed genes using minute amounts of RNA. Leygue ER, et al. **Biotechniques** 1996 Dec;21(6):1008–10, 1012

Long-range and highly sensitive DNase I footprinting by an automated infrared DNA sequencer. Machida M, et al. **Biotechniques** 1997 Aug;23(2):300–3

Cycle sequencing protocol using deep VentR (exo-) DNA polymerase and reduced dNTP and [alpha-35S]dATP concentrations. Mariamé B. **Biotechniques** 1996 Jul; 21(1):18–9

Fast plasmid DNA sequencing using a thermal cycler and high temperature alkali denaturation. Martsen EO, et al. **Biotechniques** 1997 Mar;22(3):420–2

One-step, one-lane chemical DNA sequencing by N-methylformamide in the presence of metal ions. Negri R, et al. **Biotechniques** 1996 Nov;21(5):910–7

Automated fluorescent DNA sequencing by a simplified solid-phase chemical sequencing method. Ohara R, et al. **Biotechniques** 1997 Apr;22(4):653–6

Cycle sequencing of filamentous phage DNA using a biotinylated primer and delta Taq DNA polymerase. Qiu J, et al. **Biotechniques** 1997 Jul;23(1):125–7

DNA sequencing by capillary electrophoresis using short oligonucleotide primer libraries. Ruiz-Martinez MC, et al. **Biotechniques** 1996 Jun;20(6):1058–64, 1066–9

Alternative method for isolation of double-stranded template for DNA sequencing. Sadiev S, et al. **Biotechniques** 1996 Aug;21(2):233–5

Automated differential display using a fluorescently labeled universal primer. Smith NR, et al. **Biotechniques** 1997 Aug; 23(2):274–9

Thermo Sequenase DNA polymerase and T. acidophilum pyrophosphatase: new thermostable enzymes for DNA sequencing. Vander Horn PB, et al. **Biotechniques** 1997 Apr;22(4):758–62, 764–5

Automated cycle sequencing with Taquenase: protocols for internal labeling, dye primer and "doublex" simultaneous sequencing. Voss H, et al. **Biotechniques** 1997 Aug; 23(2):312–8

Recovery of unlabeled PCR product from polyacrylamide gel for sequencing. Wu SM, et al. **Biotechniques** 1996 Sep; 21(3):358–60, 362

Simple strategy for sequencing cDNA clones. Zeng LW, et al. **Biotechniques** 1996 Sep;21(3):446–52

An efficient cost-effective protocol for automated fluorescent-DNA sequencing. Beg OU, et al. **Biotechnol Appl Biochem** 1997 Aug;26 (Pt 1):27–30

DNA sequencing. Power D. **Br J Hosp Med** 1997 Feb 5–18; 57(3):110–1

Identification of a breast cancer-specific gene, BCSG1, by direct differential cDNA sequencing. Ji H, et al. **Cancer Res** 1997 Feb 15;57(4):759–64

Development of a direct DNA sequencing method for detecting heterozygous mutations of the human lipoprotein lipase gene. Mori A, et al. **Clin Biochem** 1997 Jun; 30(4):315–24

Nonisotopic method for precise detection of (CAG)n repeats [letter; comment] Melegh B, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1096–7. Comment on: Clin Chem 1996 Oct;42(10):1601–3.

Enzymatic and molecular diagnosis of Gaucher disease. Barranger JA, et al. **Clin Lab Med** 1995 Dec;15(4):899–913 (59 ref.)

Perspectives and molecular diagnosis of the fragile X syndrome. Brown WT. **Clin Lab Med** 1995 Dec; 15(4):859–75 (74 ref.)

Molecular diagnosis of cystic fibrosis. Kant JA, et al. **Clin Lab Med** 1995 Dec;15(4):877–98 (87 ref.)

Software for DNA sequencing by hybridization. Belyi I, et al. **Comput Appl Biosci** 1997 Apr;13(2):205–10

PARODS--a study of parallel algorithms for ordering DNA sequences. Bhandarkar SM, et al. **Comput Appl Biosci** 1996 Aug;12(4):269–80

Sequential and parallel algorithms for DNA sequencing. Blazewicz J, et al. **Comput Appl Biosci** 1997 Apr; 13(2):151–8

Software for the analysis of DNA sequence elements of transcription. Frech K, et al. **Comput Appl Biosci** 1997 Feb; 13(1):89–97

SIGNAL SCAN 4.0: additional databases and sequence formats. Prestridge DS. **Comput Appl Biosci** 1996 Apr; 12(2):157–60

Object-oriented data handler for sequence analysis software development. Ptitsyn AA, et al. **Comput Appl Biosci** 1995 Dec;11(6):583–9

DnaSP, DNA sequence polymorphism: an interactive program for estimating population genetics parameters from DNA sequence data. Rozas J, et al. **Comput Appl Biosci** 1995 Dec;11(6):621–5

Hopper: software for automating data tracking and flow in DNA sequencing. Smith TM, et al. **Comput Appl Biosci** 1997 Apr;13(2):175–82

Replaceable polymers in DNA sequencing by capillary electrophoresis. Quesada MA. **Curr Opin Biotechnol** 1997 Feb;8(1):82–93 (65 ref.)

High-speed DNA sequencing in ultrathin slab gels. Yager TD, et al. **Curr Opin Biotechnol** 1997 Feb;8(1):107–13 (58 ref.)

Application of N-terminally truncated DNA polymerase from Thermus thermophilus (delta Tth polymerase) to DNA sequencing and polymerase chain reactions: comparative study of delta Tth and wild-type Tth polymerases. Arakawa T, et al. **DNA Res** 1996 Apr 30; 3(2):87–92

A non-radioactive DNA sequencing method using biotinylated dideoxynucleoside triphosphates and delta Tth DNA polymerase. Ikeda K, et al. **DNA Res** 1995 Oct 31; 2(5):225–7

Nested deletions from a fixed site as an aid to nucleotide sequencing: an in vitro system using Tn3 transposase. Morita M, et al. **DNA Res** 1996 Dec 31;3(6):431–3

Identification of sequence motifs causing band compressions on human cDNA sequencing. Yamakawa H, et al. **DNA Res** 1996 Apr 30;3(2):81–6

Simultaneous shotgun sequencing of multiple cDNA clones. Andersson B, et al. **DNA Seq** 1997;7(2):63–70

Direct cycle sequencing with delta Taq DNA polymerase. Fan J, et al. **DNA Seq** 1997;7(5):285–8

Physical mapping of chromosome 6: a strategy for the rapid generation of sequence-ready contigs. Mungall AJ, et al. **DNA Seq** 1996;7(1):47–9

A method to direct sequence cosmid LAWRIST16 clones. Repetto M, et al. **DNA Seq** 1997;7(3–4):229–33

Strategies for whole microbial genome sequencing and analysis. Fraser CM, et al. **Electrophoresis** 1997 Aug; 18(8):1207–16 (55 ref.)

A method to determine the filter matrix in four-dye fluorescence-based DNA sequencing. Huang W, et al. **Electrophoresis** 1997 Jan;18(1):23–5

The use of elevated column temperature to extend DNA sequencing read lengths in capillary electrophoresis with replaceable polymer matrices. Klepárnik K, et al. **Electrophoresis** 1996 Dec;17(12):1860–6

An efficient laboratory protocol for the sequencing of large numbers of lacI mutants recovered from Big Blue transgenic animals. Erfle HL, et al. **Environ Mol Mutagen** 1996;28(4):393–6

Molecular epidemiology: applications of nucleic acid amplification and sequence analysis. McDade JE, et al. **Epidemiol Rev** 1996;18(1):90–7 (46 ref.)

Multiple fluorescence and reflectance simultaneous detection by confocal microscopy of HaeIII digested DNA sequences. Neri LM, et al. **Eur J Cell Biol** 1996 Sep; 71(1):120–8

Use of an automatic DNA sequencer for S1 mapping: transcriptional analysis of the Streptomyces coelicolor A3(2) dnaK operon. Brans A, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):189–94

DNA recommendations--further report of the DNA Commission of the ISFH regarding the use of short tandem repeat systems. Lincoln PJ. **Forensic Sci Int** 1997 Jun 23; 87(3):181–4 (4 ref.)

The use of an improved transposon mutagenesis system for DNA sequencing leads to the characterization of a new insertion sequence of Streptomyces lividans 66. Fischer J, et al. **Gene** 1996 Nov 21;180(1–2):81–9

Co-operativity of hexamer ligation. Kaczorowski T, et al. **Gene** 1996 Nov 7;179(1):189–93

Automated four-color DNA sequencing using primers assembled by hexamer ligation. Kaczorowski T, et al. **Gene** 1996 Nov 7;179(1):195–8

A broad-host-range in vivo pop-out and amplification system for generating large quantities of 50- to 100-kb genomic fragments for direct DNA sequencing. Wild J, et al. **Gene** 1996 Nov 7;179(1):181–8

Large-scale sequencing in human chromosome 12p13: experimental and computational gene structure determination. Ansari-Lari MA, et al. **Genome Res** 1997 Mar;7(3):268–80

Analysis of the 1.1-Mb human alpha/delta T-cell receptor locus with bacterial artificial chromosome clones. Boysen C, et al. **Genome Res** 1997 Apr;7(4):330–8

A transposon-based strategy for sequencing repetitive DNA in eukaryotic genomes. Devine SE, et al. **Genome Res** 1997 May;7(5):551–63

Sequencing the 500-kb GC-rich symbiotic replicon of Rhizobium sp. NGR234 using dye terminators and a thermostable "sequenase": a beginning. Freiberg C, et al. **Genome Res** 1996 Jul;6(7):590–600

Against a whole-genome shotgun. Green P. **Genome Res** 1997 May;7(5):410–7

Large-scale comparative sequence analysis of the human and murine Bruton's tyrosine kinase loci reveals conserved regulatory domains. Oeltjen JC, et al. **Genome Res** 1997 Apr;7(4):315–29

Minisequencing: a specific tool for DNA analysis and diagnostics on oligonucleotide arrays. Pastinen T, et al. **Genome Res** 1997 Jun;7(6):606–14

Random subcloning. Roach JC. **Genome Res** 1995 Dec; 5(5):464–73

Sequence mapping by electronic PCR. Schuler GD. **Genome Res** 1997 May;7(5):541–50

A new approach using multiplex long accurate PCR and yeast artificial chromosomes for bacterial chromosome mapping and sequencing. Sorokin A, et al. **Genome Res** 1996 May;6(5):448–53

Human whole-genome shotgun sequencing. Weber JL, et al. **Genome Res** 1997 May;7(5):401–9

A method for accurate determination of terminal sequences of viral genomic RNA. Weng Z, et al. **Genome Res** 1995 Sep;5(2):202–7

Large-scale concatenation cDNA sequencing [letter] Yu W, et al. **Genome Res** 1997 Apr;7(4):353–8

PowerBLAST: a new network BLAST application for interactive or automated sequence analysis and annotation. Zhang J, et al. **Genome Res** 1997 Jun;7(6):649–56

Rapid detection of mitochondrial sequence polymorphisms using multiplex solid-phase fluorescent minisequencing. Tully G, et al. **Genomics** 1996 May 15;34(1):107–13

Efficient detection of mutations in Wilson disease by manifold sequencing. Waldenström E, et al. **Genomics** 1996 Nov 1; 37(3):303–9

Multivariant confirmation of sickle cell disease using a non-radioactive minisequencing reaction. Tuuminen T, et al. **Hemoglobin** 1997 Jan;21(1):71–89

Oligonucleotide micro-arrays for identification of unknown mutations: how far from reality? Ginot F. **Hum Mutat** 1997; 10(1):1–10 (50 ref.)

Improving the quality of automatic DNA sequence assembly using fluorescent trace-data classifications. Allex CF, et al. **Ismb** 1996;4:3–14 (16 ref.)

The mathematical model of subtractive hybridization and its practical application. Ermolaeva OD, et al. **Ismb** 1996; 4:52–8

GeneFisher--software support for the detection of postulated genes. Giegerich R, et al. **Ismb** 1996;4:68–77

Applications of GeneMark in multispecies environments. McIninch JD, et al. **Ismb** 1996;4:165–75

Genome-scale DNA sequence recognition by hybridization to short oligomers. Milosavljević A, et al. **Ismb** 1996; 4:176–81

Finding genes in DNA using decision trees and dynamic programming. Salzberg S, et al. **Ismb** 1996;4:201–10

Compact encoding strategies for DNA sequence similarity search. States DJ, et al. **Ismb** 1996;4:211–7

Sequence verification by hybridisation with fluorescent octanucleotides as a first step to a fluorescent sequencing

by hybridisation protocol. Eickhoff H, et al. **J Biochem Biophys Methods** 1996 Apr;32(1):59–68

Pseudo-coulometric loading in capillary electrophoresis DNA sequencing. Figeys D, et al. **J Chromatogr A** 1996 Sep 13;744(1–2):325–31

DNA sequence analysis of Prinker-modified restriction fragments after collection from capillary electrophoresis with replaceable matrices. Muth J, et al. **J Chromatogr A** 1996 Sep 13;744(1–2):303–10

Poisson process approximation for sequence repeats, and sequencing by hybridization. Arratia R, et al. **J Comput Biol** 1996 Fall;3(3):425–63

Interpretation of pooling experiments using the Markov chain Monte Carlo method. Knill E, et al. **J Comput Biol** 1996 Fall;3(3):395–406

A learning method of hidden Markov models for sequence discrimination. Mamitsuka H. **J Comput Biol** 1996 Fall; 3(3):361–73

On distinguishing unique combinations in biological sequences. Salamon H, et al. **J Comput Biol** 1996 Fall; 3(3):407–23

A segment-based dynamic programming algorithm for predicting gene structure. Wu TD. **J Comput Biol** 1996 Fall;3(3):375–94

An iterative algorithm for correcting sequencing errors in DNA coding regions. Xu Y, et al. **J Comput Biol** 1996 Fall;3(3):333–44

DNA sequencing by mass spectrometry. Murray KK. **J Mass Spectrom** 1996 Nov;31(11):1203–15 (87 ref.)

Direct blotting electrophoresis for sequencing and genotyping hepatitis C virus. Castelain S, et al. **J Virol Methods** 1997 May;65(2):237–43

High-speed automated DNA sequencing in ultrathin slab gels. Smith LM, et al. **Methods Enzymol** 1996;271:219–37 (26 ref.)

Direct sequencing of PCR products using chemiluminescent detection. Atchison BA, et al. **Methods Mol Biol** 1996; 65:49–55

Sequencing PCR products cloned into M13 vectors. Brewis N. **Methods Mol Biol** 1996;65:185–91

Purification of PCR products from agarose gels for direct sequencing. Brosius FC 3rd, et al. **Methods Mol Biol** 1996; 65:11–21

Direct sequencing of double-stranded PCR products with the sequenase kit and [alpha-35S] dATP. Casanova JL. **Methods Mol Biol** 1996;65:29–34

Preparation and direct automated cycle sequencing of PCR products. Daniels SE. **Methods Mol Biol** 1996;65:155–61

Sequencing of (dA:dT) cloned mixed PCR products from microbial populations. Hales BA, et al. **Methods Mol Biol** 1996;65:209–18

Enzymatic fluorescence and biotin labeling of primers for PCR sequencing. Igloi GL. **Methods Mol Biol** 1996;65:23–8

Efficient PCR production of single-stranded DNA sequencing templates. Kaltenboeck B, et al. **Methods Mol Biol** 1996;65:149–53

Nonradioactive PCR sequencing using digoxigenin. Kösel S, et al. **Methods Mol Biol** 1996;65:81–9

Genomic amplification with transcript sequencing (GAWTS). Lind T, et al. **Methods Mol Biol** 1996; 65:193–200

Direct DNA sequencing of PCR products using magnetic beads. Lundeberg J, et al. **Methods Mol Biol** 1996;65:57–66

Rapid sequencing of cDNA clones. Direct sequencing using sequential linear/asymmetric PCR. Mason IJ. **Methods Mol Biol** 1996;65:41–7

Direct sequencing by thermal asymmetric PCR. Mazars GR, et al. **Methods Mol Biol** 1996;65:35–40

Solid-phase automated sequencing of PCR-amplified genomic DNA. Murphy MI, et al. **Methods Mol Biol** 1996; 65:163–76

PCR sequencing with the aid of detergents. Petry H, et al. **Methods Mol Biol** 1996;65:105–9

DNA sequencing by the chemical method. Pichersky E. **Methods Mol Biol** 1996;65:133–6

Determination of unknown genomic sequences without cloning. Quivy JP, et al. **Methods Mol Biol** 1996;65:119–31

Direct sequencing of PCR products with DNA-binding proteins. Rapley R. **Methods Mol Biol** 1996;65:101–4

Direct sequencing with highly degenerate and inosine-containing primers. Shen Z, et al. **Methods Mol Biol** 1996;65:111–8

Analysis of nucleotide sequence variations by solid-phase minisequencing. Suomalainen A, et al. **Methods Mol Biol** 1996;65:73–9

Affinity capture and solid-phase sequencing of biotinylated PCR products. Suomatainen A, et al. **Methods Mol Biol** 1996;65:67–72

Silver Sequencing. Nonradioactive cycle sequencing of dsDNA. Wade-Evans A. **Methods Mol Biol** 1996;65:91–100

Direct sequencing of differential display PCR products. Wang X, et al. **Methods Mol Biol** 1997;85:69–76

Direct PCR sequencing with denaturants (formamide). Zhang W, et al. **Methods Mol Biol** 1996;65:137–47

A survey of the Trypanosoma brucei rhodesiense genome using shotgun sequencing. el-Sayed NM, et al. **Mol Biochem Parasitol** 1997 Feb;84(2):167–78

Phylogenetic inference: how much evolutionary history is knowable? Lake JA. **Mol Biol Evol** 1997 Mar;14(3):213–9

Sequencing of double-stranded PCR products. Gal S. **Mol Biotechnol** 1996 Apr;5(2):159–64

Rapid removal of unincorporated label and proteins from DNA sequencing reactions. Kaczorowski T, et al. **Mol Biotechnol** 1996 Apr;5(2):177–80

Base excision sequence scanning. Hawkins GA, et al. **Nat Biotechnol** 1997 Aug;15(8):803–4

Simultaneous loading of 200 sample lanes for DNA sequencing on vertical and horizontal, standard and ultrathin gels. Erfle H, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2229–30

Ligation mediated fluorescent labeling of DNA sequencing primers. Jang GY, et al. **Nucleic Acids Res** 1997 Feb 15; 25(4):922–3

New energy transfer dyes for DNA sequencing. Lee LG, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2816–22

A new method of synthesis of fluorescently labelled oligonucleotides and their application in DNA sequencing. Markiewicz WT, et al. **Nucleic Acids Res** 1997 Sep 15; 25(18):3672–80

PolyPhred: automating the detection and genotyping of single nucleotide substitutions using fluorescence-based resequencing. Nickerson DA, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2745–51

DNA sequencing using differential extension with nucleotide subsets (DENS). Raja MC, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):800–5

Strategies for direct sequencing of PCR-amplified DNA. Rao VB. **PCR Methods Appl** 1994 Aug;4(1):S15–23 (19 ref.)

Identification of members of gene families in Arabidopsis thaliana by contig construction from partial cDNA sequences: 106 genes encoding 50 cytoplasmic ribosomal proteins. Cooke R, et al. **Plant J** 1997 May;11(5):1127–40

Large-scale EST sequencing in rice. Yamamoto K, et al. **Plant Mol Biol** 1997 Sep;35(1–2):135–44 (39 ref.)

Identification of protein coding regions in the human genome by quadratic discriminant analysis [published erratum appears in Proc Natl Acad Sci U S A 1997 May 13;94(10):5495] Zhang MQ. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):565–8

Affinity methods for purification of DNA sequencing reaction products for mass spectrometric analysis. Chou CW, et al. **Rapid Commun Mass Spectrom** 1996; 10(11):1410–4

Analyzing sequencing reactions from bacteriophage M13 by matrix-assisted laser desorption/ionization mass spectrometry. Mouradian S, et al. **Rapid Commun Mass Spectrom** 1996;10(12):1475–8

Matrix-assisted laser desorption/ionization for sequencing single-stranded and double-stranded DNA. Taranenko NI, et al. **Rapid Commun Mass Spectrom** 1997;11(4):386–92

Mutagenesis and comparative sequence analysis of a base triple joining the two domains of group I ribozymes. Tanner MA, et al. **RNA** 1997 Sep;3(9):1037–51

A magnetic attraction to high-throughput genomics. Hawkins TL, et al. **Science** 1997 Jun 20;276(5320):1887–9

Description of a modified sequencing strategy and the molecular characterization of HLA-B*8201. Ellexson M, et al. **Tissue Antigens** 1996 May;47(5):438–41

Analysis on allelic variation of the HLA-DMB gene in Japanese by PCR-RFLP as well as direct DNA sequencing and identification of a new DMB allele, DMB*0105. Naruse TK, et al. **Tissue Antigens** 1996 Jun;47(6):530–7

Methods and reagents. Pouring sequencing gels the old-fashioned way. Hengen PN. **Trends Biochem Sci** 1996 Jul;21(7):273–4

A network approach to the systematic analysis of yeast gene function. Oliver S. **Trends Genet** 1996 Jul;12(7):241–2

[Analysis system of microsatellite polymorphism using automated laser fluorescent DNA sequencer] Tanaka H, et al. **Nippon Rinsho** 1996 Feb;54(2):322–8 (4 ref.) (Eng. Abstr.) **(Jpn)**

[The improvement of a direct DNA sequencing method by devising the primer design: detection of lipoprotein lipase gene aberrations] Mori A, et al. **Rinsho Byori** 1996 Oct; 44(10):983–90 (Eng. Abstr.) **(Jpn)**

[Detection of nucleotide mutation by direct sequencing method using non-radio isotopic marker] Takenaka M, et al. **Rinsho Byori** 1997 Jul;45(7):667–71 (Eng. Abstr.) **(Jpn)**

[Large-scale sequencing by nested deletions] Hattori M. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2450–7 (4 ref.) **(Jpn)**

[Shotgun sequencing] Kawasaki K, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(15 Suppl):2458–63 (9 ref.) **(Jpn)**

[Development of analytical technologies for human genomic DNA using capillary electrophoresis and their applications] Baba Y. **Yakugaku Zasshi** 1997 May;117(5):265–81 (42 ref.) (Eng. Abstr.) **(Jpn)**

[Tetranucleotides and ther phenazine derivatives as compound primers for DNA sequencing using Sanger method] Knorre DG, et al. **Dokl Akad Nauk** 1996 Sep; 350(1):119–20 **(Rus)**

[Criterion quality and estimation of the expected sample size in sequential analysis of linkage] Aksenovich TI, et al. **Genetika** 1996 May;32(5):709–15 (Eng. Abstr.) **(Rus)**

[Molecular biology in medicine. IV. Medical implications of DNA sequencing] Martínez F, et al. **Rev Invest Clin** 1996 Jul-Aug;48(4):321–5 (5 ref.) **(Spa)**

STANDARDS

Forensic DNA analysis and the United States Government. Shapiro ED, et al. **Med Sci Law** 1996 Jan;36(1):43–51

STATISTICS & NUMERICAL DATA

Neural network method to analyze data compression in DNA and RNA sequences. Alvager T, et al. **J Chem Inf Comput Sci** 1997 Mar-Apr;37(2):335–7

SEQUENCE ANALYSIS, RNA

Rapid sequence analysis of gene trap integrations to generate a resource of insertional mutations in mice. Townley DJ, et al. **Genome Res** 1997 Mar;7(3):293–8

Nucleotide sequence analysis of the large (L) genes of phocine distemper virus and canine distemper virus (corrected sequence) [comment] McIlhatton MA, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):571–6. Comment on: Virology 1993 Mar;193(1):50–65.

Proviral organization and sequence analysis of feline immunodeficiency virus isolated from a Pallas' cat. Barr MC, et al. **Virology** 1997 Feb 3;228(1):84–91

Sequence comparison of the Ty1 and Ty2 elements of the yeast genome supports the structural model of the tRNAiMet-Ty1 RNA reverse transcription initiation complex. Friant S, et al. **Yeast** 1997 Jun 15;13(7):639–45

Genetic divergence of Asiatic Bdellocephala (Turbellaria, Tricladida, Paludicola) as revealed by partial 18S rRNA gene sequence comparisons. Kuznedelov KD, et al. **Zh Obshch Biol** 1997 May-Jun;58(3):85–93

[Determination of the taxonomic position of bacteria from Lake Baikal using sequence analysis of 16S rRNA fragments] Belikov SI, et al. **Mikrobiologiia** 1996 Nov-Dec; 65(6):855–64 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Manual manufacturing of oligonucleotide, DNA, and protein microchips. Guschin D, et al. **Anal Biochem** 1997 Aug 1; 250(2):203–11

METHODS

Design of hammerhead ribozymes to distinguish single base changes in substrate RNA. Singh KK, et al. **Antisense Nucleic Acid Drug Dev** 1996 Fall;6(3):165–8

Molecular epidemiology: applications of nucleic acid amplification and sequence analysis. McDade JE, et al. **Epidemiol Rev** 1996;18(1):90–7 (46 ref.)

A fluorescence-labeling method for sequencing small RNA on polyacrylamide gel. Wu TP, et al. **Nucleic Acids Res** 1996 Sep 1;24(17):3472–3

STATISTICS & NUMERICAL DATA

Neural network method to analyze data compression in DNA and RNA sequences. Alvager T, et al. **J Chem Inf Comput Sci** 1997 Mar-Apr;37(2):335–7

SEQUENCE DATA, MOLECULAR see **MOLECULAR SEQUENCE DATA**

SEQUENCE DELETION

Human peroxisome assembly factor-2 (PAF-2): a gene responsible for group C peroxisome biogenesis disorder in humans. Fukuda S, et al. **Am J Hum Genet** 1996 Dec; 59(6):1210–20

Molecular characterization of a 130-kb terminal microdeletion at 22q in a child with mild mental retardation. Wong AC, et al. **Am J Hum Genet** 1997 Jan; 60(1):113–20

Molecular analysis of deletion (17)(p11.2p11.2) in a family segregating a 17p paracentric inversion: implications for carriers of paracentric inversions. Yang SP, et al. **Am J Hum Genet** 1997 May;60(5):1184–93

The fragile X phenotype in a mosaic male with a deletion showing expression of the FMR1 protein in 28% of the cells. de Graaff E, et al. **Am J Med Genet** 1996 Aug 9; 64(2):302–8

Deletion in the FMR1 gene in a fragile-X male. Mannermaa A, et al. **Am J Med Genet** 1996 Aug 9;64(2):293–5

Multiple mitochondrial DNA deletions and persistent hyperthermia in a patient with Brachmann-de Lange phenotype. Melegh B, et al. **Am J Med Genet** 1996 Oct 2;65(1):82–8

Interstitial deletion of chromosome 1q [del(1)(q24q25.3)] identified by fluorescence in situ hybridization and gene dosage analysis of apolipoprotein A-II, coagulation factor V, and antithrombin III. Takano T, et al. **Am J Med Genet** 1997 Jan 20;68(2):207–10

55-base pair deletion in certain patients with Gaucher disease complicates screening for common Gaucher alleles. Tayebi N, et al. **Am J Med Genet** 1996 Dec 18;66(3):316–9

Full-length amyloid-beta (1-42(43)) and amino-terminally modified and truncated amyloid-beta 42(43) deposit in diffuse plaques. Iwatsubo T, et al. **Am J Pathol** 1996 Dec; 149(6):1823–30

Allelic deletions of the VHL gene detected in multiple microscopic clear cell renal lesions in von Hippel-Lindau disease patients. Lubensky IA, et al. **Am J Pathol** 1996 Dec;149(6):2089–94

Age-related 4,977 bp deletion in human lung mitochondrial DNA. Fahn HJ, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1141–5

Targeted deletion of a GA tract by S1 nuclease. Barbeau B, et al. **Anal Biochem** 1997 May 1;247(2):445–7

A powerful approach for generating and sequencing DNA

deletions: sequencing from the outside in. Ren Z, et al. **Anal Biochem** 1997 Feb 1;245(1):112–4

Detection of a common BoLA-DRB3 deletion by sequence-specific oligonucleotide typing. Sitte K, et al. **Anim Genet** 1996 Aug;27(4):271–3

Association of myopathy with large-scale mitochondrial DNA duplications and deletions: which is pathogenic? Manfredi G, et al. **Ann Neurol** 1997 Aug;42(2):180–8

Clonal expansion of mitochondrial DNA with multiple deletions in autosomal dominant progressive external ophthalmoplegia [see comments] Moslemi AR, et al. **Ann Neurol** 1996 Nov;40(5):707–13. Comment in: Ann Neurol 1996 Nov;40(5):693–4.

A somatic mutation of the p21(Waf1/Cip1) gene in a human adrenocortical adenoma. Iida S, et al. **Anticancer Res** 1997 Jan-Feb;17(1B):633–6

Deletions in the carboxyl-terminal region of Streptococcus gordonii glucosyltransferase affect cell-associated enzyme activity and sucrose-associated accumulation of growing cells. Vickerman MM, et al. **Appl Environ Microbiol** 1997 May;63(5):1667–73

Non-random deletions in human foamy virus long terminal repeat during viral infection. De Celis-Kosmas J, et al. **Arch Virol** 1997;142(6):1237–46

Abnormal regulation of the LDL-R and HMG CoA reductase genes in subjects with familial hypercholesterolemia with the "French Canadian mutation". Yu L, et al. **Atherosclerosis** 1996 Jul; 124(1):103–17

Quantification of wild-type mitochondrial DNA and its 4.8-kb deletion in rat organs. Filser N, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):102–7

Wild-type, but not mutant-type, p53 enhances nuclear accumulation of the NS3 protein of hepatitis C virus. Ishido S, et al. **Biochem Biophys Res Commun** 1997 Jan 13; 230(2):431–6

Identification of novel exon-deleted progesterone receptor variant mRNAs in human breast tissue. Leygue E, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):63–8

Insulin internalization in the absence of the insulin receptor tyrosine kinase domain is insufficient for mediating intracellular biological effects. Schranz DB, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):600–7

Contribution of regions 3' and 5' to the hIL-5 gene on the expression of rhIL-5 in CHO-cells. van der Westhuizen FH, et al. **Biochem Biophys Res Commun** 1996 Oct 14; 227(2):576–80

Gross mosaic pattern of mitochondrial DNA deletions in skeletal muscle tissues of an individual adult human subject. Zhang C, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):56–60

Varied prevalence of age-associated mitochondrial DNA deletions in different species and tissues: a comparison between human and rat. Zhang C, et al. **Biochem Biophys Res Commun** 1997 Jan 23;230(3):630–5

The unusual structures of the hot-regions flanking large-scale deletions in human mitochondrial DNA. Hou JH, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):1065–70

Deletion of 24 amino acids from the C-terminus of phosphatidylinositol transfer protein causes loss of phospholipase C-mediated inositol lipid signalling. Prosser S, et al. **Biochem J** 1997 May 15;324 (Pt 1):19–23

Mutations within the propeptide, the primary cleavage site or the catalytic site, or deletion of C-terminal sequences, prevents secretion of proPC2 from transfected COS-7 cells. Taylor NA, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):367–73

Kinetic and thermodynamic consequences of the removal of the Cys-77-Cys-123 disulphide bond for the folding of TEM-1 beta-lactamase. Vanhove M, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):413–7

Ageing-associated large-scale deletions of mitochondrial DNA in human hair follicles. Kao SH, et al. **Biochem Mol Biol Int** 1997 Jun;42(2):285–98

Successful early copper therapy in menkes disease associated with a mutant transcript containing a small In-frame deletion. Kaler SG, et al. **Biochem Mol Med** 1996 Feb; 57(1):37–46

Detection and analysis of mitochondrial DNA deletions by whole genome PCR. Tengan CH, et al. **Biochem Mol Med** 1996 Jun;58(1):130–4

p53 mutations in squamous cell carcinomas from renal transplant recipients. Bennett MA, et al. **Biochem Soc Trans** 1997 Feb;25(1):342–5

The inheritance of a novel mutation in glycogen storage disease type 1a. Hinds CJ, et al. **Biochem Soc Trans** 1996 May;24(2):232S

Sequence analysis of spontaneously-arising mutations at the aprt locus in wild-type and thymidine kinase-deficient Friend cells: evidence for strand slippage-misalignment mechanism in formation of deletions. Hyland PL, et al. **Biochem Soc Trans** 1997 Feb;25(1):127S

Identification of amplifications, deletions and methylation changes in cancer by means of two-dimensional analysis of genomic digests: application to neuroblastoma. Wimmer K, et al. **Biochem Soc Trans** 1997 Feb;25(1):262–7

Interaction of deletion mutants of troponins I and T: COOH-terminal truncation of troponin T abolishes troponin I binding and reduces Ca2+ sensitivity of the reconstituted regulatory system. Jha PK, et al. **Biochemistry** 1996 Dec 24;35(51):16573–80

Endothelial nitric oxide synthase: modulations of the distal heme site produced by progressive N-terminal deletions. Rodríguez-Crespo I, et al. **Biochemistry** 1997 Jul 15; 36(28):8530–8

Quantitative analysis of leukocyte mitochondrial DNA deletion in affective disorders. Kato T, et al. **Biol Psychiatry** 1997 Sep 1;42(5):311–6

Human epithelial cystic fibrosis transmembrane conductance regulator without exon 5 maintains partial chloride channel function in intracellular membranes. Xie J, et al. **Biophys J** 1996 Dec;71(6):3148–56

Familial erythrocytosis associated with a short deletion in the erythropoietin receptor gene. Arcasoy MO, et al. **Blood** 1997 Jun 15;89(12):4628–35

Frequent deletion in the methylthioadenosine phosphorylase gene in T-cell acute lymphoblastic leukemia: strategies for enzyme-targeted therapy. Batova A, et al. **Blood** 1996 Oct 15;88(8):3083–90

Minimal region of loss at 13q14 in B-cell chronic lymphocytic leukemia. Bullrich F, et al. **Blood** 1996 Oct 15;88(8):3109–15

Wide variety of point mutations in the H gene of Bombay and para-Bombay individuals that inactivate H enzyme. Kaneko M, et al. **Blood** 1997 Jul 15;90(2):839–49

Type 2M:Milwaukee-1 von Willebrand disease: an in-frame deletion in the Cys509-Cys695 loop of the von Willebrand factor A1 domain causes deficient binding of von Willebrand factor to platelets. Mancuso DJ, et al. **Blood** 1996 Oct 1;88(7):2559–68

A three amino acid deletion in glycoprotein IIIa is responsible for type I Glanzmann's thrombasthenia: importance of residues Ile325Pro326Gly327 for beta3 integrin subunit association. Morel-Kopp MC, et al. **Blood** 1997 Jul 15; 90(2):669–77

Glanzmann thrombasthenia caused by an 11.2-kb deletion in the glycoprotein IIIa (beta3) is a second mutation in Iraqi Jews that stemmed from a distinct founder. Rosenberg N, et al. **Blood** 1997 May 15;89(10):3654–62

A dinucleotide deletion in exon 4 of the PlA2 allelic form of glycoprotein IIIa: implications for the correlation of serologic versus genotypic analysis of human platelet alloantigens. Skogen B, et al. **Blood** 1996 Nov 15; 88(10):3831–6

Recurrent DNA copy number changes in 1q, 4q, 6q, 9p, 13q, 14q and 22q detected by comparative genomic hybridization in malignant mesothelioma. Björkqvist AM, et al. **Br J Cancer** 1997;75(4):523–7

Haemoglobin Lleida: a new alpha 2-globin variant (12 bp deletion) with mild thalassaemic phenotype. Ayala S, et al. **Br J Haematol** 1996 Sep;94(4):639–44

Molecular analysis of the Turkish form of deletion-inversion (delta beta)(0) thalassaemia. Oner C, et al. **Br J Haematol** 1997 Feb;96(2):229–34

Beta-thalassaemia due to a seventeen basepair deletion [letter; comment] Waye JS, et al. **Br J Haematol** 1997 May; 97(2):504. Comment on: Br J Haematol 1996 Sep;94(3):476–82.

Allelic imbalance and microsatellite instability in prostatic adenocarcinoma. Cunningham JM, et al. **Cancer Res** 1996 Oct 1;56(19):4475–82

FHIT and FRA3B 3p14.2 allele loss are common in lung cancer and preneoplastic bronchial lesions and are associated with cancer-related FHIT cDNA splicing aberrations. Fong KM, et al. **Cancer Res** 1997 Jun 1; 57(11):2256–67

Allelotype analysis of esophageal adenocarcinomas: evidence for the involvement of sequences on the long arm of chromosome 4. Hammoud ZT, et al. **Cancer Res** 1996 Oct 1;56(19):4499–502

Transforming function of the HOX11/TCL3 homeobox gene. Hawley RG, et al. **Cancer Res** 1997 Jan 15;57(2):337–45

Loss of heterozygosity at chromosome 16q in prostate adenocarcinoma: identification of three independent regions. Latil A, et al. **Cancer Res** 1997 Mar 15; 57(6):1058–62

Loss of heterozygosity analysis defines a critical region in chromosome 1p22 commonly deleted in human malignant mesothelioma. Lee WC, et al. **Cancer Res** 1996 Oct 1; 56(19):4297–301

Identification of novel germline hMLH1 mutations including a 22 kb Alu-mediated deletion in patients with familial colorectal cancer. Mauillon JL, et al. **Cancer Res** 1996 Dec 15;56(24):5728–33

A naturally occurring mutant human epidermal growth factor receptor as a target for peptide vaccine immunotherapy of tumors. Moscatello DK, et al. **Cancer Res** 1997 Apr 15;57(8):1419–24

Novel variants of voltage-operated calcium channel alpha 1-subunit transcripts in a rat liver-derived cell line: deletion in the IVS4 voltage sensing region. Brereton HM, et al. **Cell Calcium** 1997 Jul;22(1):39–52

Missing pieces: myosin binding protein C truncations in familial hypertrophic cardiomyopathy [editorial; comment] Frenkel PA, et al. **Circ Res** 1997 Mar;80(3):435–6. Comment on: Circ Res 1997 Mar;80(3):427–34.

A deletion in the angiotensin converting enzyme (ACE) gene is common among African Americans with essential hypertension. Asamoah A, et al. **Clin Chim Acta** 1996 Oct 15;254(1):41–6

Detection of dystrophin deletion carriers using FISH analysis. Calvano S, et al. **Clin Genet** 1997 Jul;52(1):17–22

Insertion/deletion polymorphism in the angiotensin-converting-enzyme gene and blood pressure during ergometry in normal males. Friedl W, et al. **Clin Genet** 1996 Dec;50(6):541–4

Size of 22q deletions in four previously reported patients with conotruncal anomaly face syndrome. Pierpont JW, et al. **Clin Genet** 1996 Dec;50(6):545–7

Pearson marrow pancreas syndrome: a molecular study and clinical management. Seneca S, et al. **Clin Genet** 1997 May; 51(5):338–42

Deletion analysis of promoter elements of the Aspergillus oryzae agdA gene encoding alpha-glucosidase. Minetoki T, et al. **Curr Genet** 1996 Nov;30(5):432–8

A novel multicolor hybridization scheme applied to localization of a transcribed sequence (D10S170/H4) and deletion mapping in the thyroid cancer cell line TPC-1. Jossart GH, et al. **Cytogenet Cell Genet** 1996;75(4):254–7

Cloning and characterization of the murine homolog of the sno proto-oncogene reveals a novel splice variant. Pelzer T, et al. **Dev Dyn** 1996 Feb;205(2):114–25

Mitochondrial gene abnormalities and alpha- and beta-cell dysfunction [letter; comment] Odawara M, et al. **Diabetes Care** 1996 Oct;19(10):1166–7. Comment on: Diabetes Care 1995 Nov;18(11):1507–9.

Deletions at stalled replication forks occur by two different pathways. Bierne H, et al. **EMBO J** 1997 Jun 2; 16(11):3332–40

Mutation in Escherichia coli under starvation conditions: a new pathway leading to small deletions in strains defective in mismatch correction. Bridges BA, et al. **EMBO J** 1997 Jun 2;16(11):3349–56

Quantification of hprt gene deletions mediated by illegitimate V(D)J recombination in peripheral blood cells of humans. Fuscoe JC, et al. **Environ Mol Mutagen** 1997;29(1):28–35

An in-frame triplet deletion within the gp91-phox gene in an adult X-linked chronic granulomatous disease patient with residual NADPH-oxidase activity. Jendrossek V, et al. **Eur J Haematol** 1997 Feb;58(2):78–85

Cloning and expression of a novel type (III) of human gamma-glutamyltransferase truncated mRNA. Leh H, et al. **FEBS Lett** 1996 Oct 7;394(3):258–62

Deletions of the N-terminal regions of the human melanocortin receptors. Schiöth HB, et al. **FEBS Lett** 1997 Jun 30;410(2-3):223–8

Instability of expressed Cu/Zn superoxide dismutase with 2 bp deletion found in familial amyotrophic lateral sclerosis. Watanabe Y, et al. **FEBS Lett** 1997 Jan 2;400(1):108–12

Separate domains of MBP-1 involved in c-myc promoter binding and growth suppressive activity. Ray RB, et al. **Gene** 1997 Feb 28;186(2):175–80

A nested set of C-terminal deletions of the alpha subunit of Escherichia coli RNA polymerase define regions concerned with assembly, proteolysis, stabilization and transcriptional activation in vivo [published erratum appears in Genes Cells 1997 Apr;2(4):289] Zou C, et al. **Genes Cells** 1997 Jan;2(1):81–94

Novel mitochondrial DNA deletion found in a renal cell carcinoma. Horton TM, et al. **Genes Chromosomes Cancer** 1996 Feb;15(2):95–101

Three distinct commonly deleted regions of chromosome arm 16q in human primary and metastatic prostate cancers. Suzuki H, et al. **Genes Chromosomes Cancer** 1996 Dec; 17(4):225–33

Retrofitting high molecular weight DNA cloned in P1: introduction of reporter genes, markers selectable in mammalian cells and generation of nested deletions. Chatterjee PK, et al. **Genet Anal** 1996 Jul;13(2):33–42

Enhanced deletion formation by aberrant DNA replication in Escherichia coli. Saveson CJ, et al. **Genetics** 1997 Jun; 146(2):457–70

Deletion of the leader peptide of the mitochondrially encoded precursor of Saccharomyces cerevisiae cytochrome c oxidase subunit II. Torello AT, et al. **Genetics** 1997 Apr; 145(4):903–10

The prevention of repeat-associated deletions in Saccharomyces cerevisiae by mismatch repair depends on size and origin of deletions. Tran HT, et al. **Genetics** 1996 Aug;143(4):1579–87

Analysis of a hotspot for deletion formation within the intron of the chloroplast trnI gene. Johnson DA, et al. **Genome** 1996 Oct;39(5):999–1005

Detection of deletion 1154–1156 hypophosphatasia mutation using TNSALP exon amplification. Orimo H, et al. **Genomics** 1997 Jun 1;42(2):364–6

Delineation of 7q11.2 deletions associated with Williams-Beuren syndrome and mapping of a repetitive sequence to within and to either side of the common deletion. Robinson WP, et al. **Genomics** 1996 May 15; 34(1):17–23

Long-range physical map and deletion characterization of the 1100-kb NotI restriction fragment harboring the APC gene. Thliveris A, et al. **Genomics** 1996 Jun 1;34(2):268–70

Inactivation of the mouse HPRT locus by a 203-bp retroposon insertion and a 55-kb gene-targeted deletion: establishment of new HPRT-deficient mouse embryonic stem cell lines. Tsuda H, et al. **Genomics** 1997 Jun 15; 42(3):413–21

A naturally occurring 46-amino acid deletion of cytidine monophospho-N-acetylneuraminic acid hydroxylase leads to a change in the intracellular distribution of the protein. Koyama S, et al. **Glycoconj J** 1996 Jun;13(3):353–8

Defects of the respiratory chain in the normal human liver and in cirrhosis during aging. Müller-Höcker J, et al. **Hepatology** 1997 Sep;26(3):709–19

A novel two-nucleotide deletion in the ornithine

transcarbamylase gene causing fatal hyperammonia in early pregnancy. Schimanski U, et al. **Hepatology** 1996 Dec; 24(6):1413–5

A female sterile embryonic lethal in the maternally haplo–insufficient 21 B8.C1–21 C8.D1 genomic region of Drosophila melanogaster. Chandrashekaran S. **Hereditas** 1995;123(2):121–6

Two partial deletion mutations involving the same Alu sequence within intron 8 of the LDL receptor gene in Korean patients with familial hypercholesterolemia. Chae JJ, et al. **Hum Genet** 1997 Feb;99(2):155–63

A 25–kb deletion in the 5' region of the cytochrome b558 heavy chain gene (CYBB) in a patient with X–linked chronic granulomatous disease. Faizunnessa NN, et al. **Hum Genet** 1997 Apr;99(4):469–73

An unusual combined insertion/deletion polymorphism in intron 10 of the human complement C6 gene. Fernie BA, et al. **Hum Genet** 1997 Jul;100(1):104–8

Polymorphisms in the PMP–22 gene region (17p11.2–12) are crucial for simplified diagnosis of duplications/deletions. Haupt A, et al. **Hum Genet** 1997 May;99(5):688–91

Molecular cloning of the breakpoints of the hereditary persistence of fetal hemoglobin type–6 (HPFH–6) deletion and sequence analysis of the novel juxtaposed region from the 3' end of the beta–globin gene cluster. Kosteas T, et al. **Hum Genet** 1997 Sep;100(3–4):441–5

A small intraexonic deletion within the dystrophin gene suggests a possible mechanism of mutagenesis. Robinson DO, et al. **Hum Genet** 1997 May;99(5):658–62

Quantification by flow cytometry of chromosome–17 deletions in Smith–Magenis syndrome patients. Trask BJ, et al. **Hum Genet** 1996 Dec;98(6):710–8

Identification of a four–base deletion (delTCAT296–299) in the dihydropyrimidine dehydrogenase gene with variable clinical expression. Vreken P, et al. **Hum Genet** 1997 Aug; 100(2):263–5

Mild congenital muscular dystrophy in two patients with an internally deleted laminin alpha2–chain. Allamand V, et al. **Hum Mol Genet** 1997 May;6(5):747–52

Molecular basis of the brindled mouse mutant (Mo(br)): a murine model of Menkes disease. Grimes A, et al. **Hum Mol Genet** 1997 Jul;6(7):1037–42

A 27 base–pair deletion of the anti–müllerian type II receptor gene is the most common cause of the persistent müllerian duct syndrome. Imbeaud S, et al. **Hum Mol Genet** 1996 Sep;5(9):1269–77

Large homozygous deletions of the 2q13 region are a major cause of juvenile nephronophthisis. Konrad M, et al. **Hum Mol Genet** 1996 Mar;5(3):367–71

Novel and unusual deletion–insertion thalassemic mutation in exon 1 of the beta–globin gene. Badens C, et al. **Hum Mutat** 1996;8(1):89–92

A novel deletion/inversion mutation in the low–density lipoprotein receptor gene as a cause of heterozygous familial hypercholesterolemia. Koivisto UM, et al. **Hum Mutat** 1996;8(4):326–32

24 bp deletion and Ala1278 to Val mutation of the ATP7B gene in a Sardinian family with Wilson disease. Orrù S, et al. **Hum Mutat** 1997;10(1):84–5

A 14–bp deletion (codon 554 del AAGgtaacagagtg) at exon 14/intron N junction of the coagulation factor XI gene disrupts splicing and causes severe factor XI deficiency. Peretz H, et al. **Hum Mutat** 1996;8(1):77–8

A familial deletion in the Prader–Willi syndrome region including the imprinting control region. Schuffenhauer S, et al. **Hum Mutat** 1996;8(3):288–92

A 3–base pair in–frame deletion in exon 8 (delGlu272/273) of the ornithine transcarbamylase gene in late–onset hyperammonemic coma. Ségues B, et al. **Hum Mutat** 1996; 8(4):373–4

Crouzon syndrome: previously unrecognized deletion, duplication, and point mutation within FGFR2 gene. Steinberger D, et al. **Hum Mutat** 1996;8(4):386–90

Functional characterization of naturally occurring mutants of human papillomavirus type 16 with large deletions in the non–coding region [letter] Grassmann K, et al. **Int J Cancer** 1996 Oct 9;68(2):265–9

p53 mutation spectrum in Japanese Bowen's disease suggests a role for mutagens other than ultraviolet light. Takata M, et al. **Int J Cancer** 1997 May 2;71(3):370–2

The deletion polymorphism of the angiotensin I–converting enzyme gene is associated with target organ damage in essential hypertension. Pontremoli R, et al. **J Am Soc Nephrol** 1996 Dec;7(12):2550–8

Identification of two apolipoprotein variants, A–I Kaho (Asp 51––>Val) and A–I Lys 107 deletion. Moriyama K, et al. **J Atheroscler Thromb** 1996;3(1):12–6

Occurrence of deletions, associated with genetic instability in Streptomyces ambofaciens, is independent of the linearity of the chromosomal DNA. Fischer G, et al. **J Bacteriol** 1997 Jul;179(14):4553–8

Isolation of mitochondrial DNA–less mouse cell lines and their application for trapping mouse synaptosomal mitochondrial DNA with deletion mutations. Inoue K, et al. **J Biol Chem** 1997 Jun 13;272(24):15510–5

The critical role of tissue angiotensin–converting enzyme as revealed by gene targeting in mice. Esther CR, et al. **J Clin Invest** 1997 May 15;99(10):2375–85

Identification and expression of acid beta–glucosidase mutations causing severe type 1 and neurologic type 2 Gaucher disease in non–Jewish patients. Grace ME, et al. **J Clin Invest** 1997 May 15;99(10):2530–7

Identification of two mutations in human xanthine dehydrogenase gene responsible for classical type I xanthinuria. Ichida K, et al. **J Clin Invest** 1997 May 15; 99(10):2391–7

Expression and functional assessment of a truncated cardiac troponin T that causes hypertrophic cardiomyopathy. Evidence for a dominant negative action [see comments] Watkins H, et al. **J Clin Invest** 1996 Dec 1;98(11):2456–61 . Comment in: J Clin Invest 1996 Dec 1;98(11):2433–4.

Fas ligand mutation in a patient with systemic lupus erythematosus and lymphoproliferative disease. Wu J, et al. **J Clin Invest** 1996 Sep 1;98(5):1107–13

Multiple hepatic mitochondrial DNA deletions suggest premature oxidative aging in alcoholic patients. Mansouri A, et al. **J Hepatol** 1997 Jul;27(1):96–102

Detection of mitochondrial DNA deletions in human skin fibroblasts of patients with Pearson's syndrome by two–color fluorescence in situ hybridization. van de Corput MP, et al. **J Histochem Cytochem** 1997 Jan;45(1):55–61

Genetic bases of human complement C7 deficiency. Nishizaka H, et al. **J Immunol** 1996 Nov 1;157(9):4239–43

Preferential rearrangements of the T cell receptor–delta–deleting elements in human T cells. Verschuren MC, et al. **J Immunol** 1997 Feb 1; 158(3):1208–16

Partial deletion of the gene encoding sterol 27–hydroxylase in a subject with cerebrotendinous xanthomatosis. Garuti R, et al. **J Lipid Res** 1996 Mar;37(3):662–72

Rapid diagnostic test for the major mutation underlying Batten disease. Järvelä I, et al. **J Med Genet** 1996 Dec; 33(12):1041–2

Large scale deletions in the GPC3 gene may account for a minority of cases of Simpson–Golabi–Behmel syndrome. Lindsay S, et al. **J Med Genet** 1997 Jun;34(6):480–3

Clinical features in 27 patients with Angelman syndrome resulting from DNA deletion. Smith A, et al. **J Med Genet** 1996 Feb;33(2):107–12 (42 ref.)

Decreased muscle cell proliferation in chicks with a deletion in the GH receptor gene. Goddard C, et al. **J Mol Endocrinol** 1996 Aug;17(1):67–78

Deletion of the S component inverted repeat sequence c' and the nonessential genes U(S)1 through U(S)5 from the herpes simplex virus type 1 genome substantially impairs productive viral infection in cell culture and pathogenesis in the rat central nervous system. Rasty S, et al. **J Neurovirol** 1997 Aug;3(4):247–64

A pseudorabies virus mutant with deletions in the latency and early protein O genes: replication, virulence, and immunity in neonatal piglets. Wesley RD, et al. **J Vet Diagn Invest** 1996 Jan;8(1):21–4

Variation from cytopathogenic biotype to non–cytopathogenic biotype is correlated with the deletion of cellular sequence from bovine viral diarrhea viruses. Nakamura S, et al. **J Vet Med Sci** 1997 May;59(5):361–70

Potential transforming–ability by internal deletion of the bovine c–myb gene. Ohozono T, et al. **J Vet Med Sci** 1996 Apr;58(4):305–10

Three–dimensional structural analysis of recombinant rotavirus–like particles with intact and amino–terminal–deleted VP2: implications for the architecture of the VP2 capsid layer. Lawton JA, et al. **J Virol** 1997 Oct;71(10):7353–60

CD4 deletion mutants evaluated for human immunodeficiency virus type 1 infectivity in a highly efficient system of expression and detection based on LTR–dependent reporter gene activation. Moir S, et al. **J Virol Methods** 1997 May;65(2):209–17

The commonly deleted region at 9p21–22 in lymphoblastic leukemias spans at least 400 kb and includes p16 but not p15 or the IFN gene cluster. Aguiar RC, et al. **Leukemia** 1997 Feb;11(2):233–8

Delineation of a 6 cM commonly deleted region in childhood acute lymphoblastic leukemia on the 6q chromosomal arm. Gérard B, et al. **Leukemia** 1997 Feb;11(2):228–32

Cyclin–dependent kinase inhibitors in human neoplasms. Miller CW, et al. **Leukemia** 1997 Apr;11 Suppl 3:370–1

Detection and quantification of mitochondrial DNA deletions. Soong NW, et al. **Methods Enzymol** 1996; 264:421–31

Ordered deletions using exonuclease III. Clark D, et al. **Methods Mol Biol** 1996;57:139–47 (7 ref.)

Creation of chimeric junctions, deletions, and insertions by PCR. Pont–Kingdon G. **Methods Mol Biol** 1997;67:167–72

PCR–assisted mutagenesis for site–directed insertion/deletion of large DNA segments. Tessier DC, et al. **Methods Mol Biol** 1996;57:229–37 (17 ref.)

A simple method to introduce internal deletions or mutations into any position of a target DNA sequence. Tomic–Canic M, et al. **Methods Mol Biol** 1996;57:249–57 (7 ref.)

A universal nested deletion method using an arbitrary primer and elimination of a unique restriction site. Zhu L, et al. **Methods Mol Biol** 1996;57:119–37 (14 ref.)

Alterations of the p16INK4A gene in human ovarian cancers. Kanuma T, et al. **Mol Carcinog** 1997 Mar;18(3):134–41

A deletion polymorphism due to Alu–Alu recombination in intron 2 of the retinoblastoma gene: association with human gliomas. Rothberg PG, et al. **Mol Carcinog** 1997 Jun; 19(2):69–73

Large deletions at the HPRT locus associated with the mutator phenotype in a Bloom's syndrome lymphoblastoid cell line. Tachibana A, et al. **Mol Carcinog** 1996 Sep; 17(1):41–7

Efficient repression of endogenous major histocompatibility complex class II expression through dominant negative CIITA mutants isolated by a functional selection strategy. Bontron S, et al. **Mol Cell Biol** 1997 Aug;17(8):4249–58

Deletion of the carboxyl–terminal transactivation domain of MGF–Stat5 results in sustained DNA binding and a dominant negative phenotype. Moriggl R, et al. **Mol Cell Biol** 1996 Oct;16(10):5691–700

Accumulation of mitochondrial DNA deletions in myotubes cultured from muscles of patients with mitochondrial myopathies. Collombet JM, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):182–8

Transcription–induced deletions in plasmid vectors: M13 DNA replication as a source of instability. Vilette D, et al. **Mol Gen Genet** 1996 Sep 25;252(4):398–403

Double–strand breaks increase the incidence of genetic deletion associated with intermolecular recombination in bacteriophage T7. Yang Y, et al. **Mol Gen Genet** 1997 Jul; 255(3):277–84

Polymerase chain reaction screening for Y chromosome microdeletions: a first step towards the diagnosis of genetically–determined spermatogenic failure in men. Qureshi SJ, et al. **Mol Hum Reprod** 1996 Oct;2(10):775–9

Deletion mutagenesis of Tn 10 Tet repressor—localization of regions important for dimerization and inducibility in vivo. Berens C, et al. **Mol Microbiol** 1995 Nov;18(3):437–48

Gene disruptions indicate an essential function for the LmmCRK1 cdc2–related kinase of Leishmania mexicana. Mottram JC, et al. **Mol Microbiol** 1996 Nov;22(3):573–83

Large deletions partially external to the human hprt gene result in chimeric transcripts. Lippert MJ, et al. **Mutagenesis** 1997 May;12(3):185–90

Sequence analysis of deletion mutations at the HPRT locus of human T–lymphocytes: association of a palindromic structure with a breakpoint cluster in exon 2. Osterholm AM, et al. **Mutagenesis** 1996 Sep;11(5):511–7

Large deletion detected with the Big Blue transgenic mouse mutagenesis assay [letter] Buettner VL, et al. **Mutat Res** 1996 Dec 12;361(2–3):187–9

Molecular evidence for the induction of large interstitial deletions on mouse chromosome 8 by ionizing radiation. Turker MS, et al. **Mutat Res** 1997 Mar 21;374(2):201–8

A deletion in the bovine myostatin gene causes the double–muscled phenotype in cattle [see comments] Grobet L, et al. **Nat Genet** 1997 Sep;17(1):71–4. Comment in: Nat Genet 1997 Sep;17(1):4–5.

Reverse genetics by chemical mutagenesis in Caenorhabditis elegans. Jansen G, et al. **Nat Genet** 1997 Sep;17(1):119–21

Deletion of the promoter region in the Atp7a gene of the mottled dappled mouse [letter] Levinson B, et al. **Nat Genet** 1997 Jul;16(3):224–5

Global distribution of the CCR5 gene 32–basepair deletion. Martinson JJ, et al. **Nat Genet** 1997 May;16(1):100–3

A novel mutation in the potassium channel gene KVLQT1 causes the Jervell and Lange–Nielsen cardioauditory syndrome [see comments] Neyroud N, et al. **Nat Genet** 1997 Feb;15(2):186–9. Comment in: Nat Genet 1997 Feb;15(2):113–5.

Quantitative phenotypic analysis of yeast deletion mutants using a highly parallel molecular bar–coding strategy [see comments] Shoemaker DD, et al. **Nat Genet** 1996 Dec; 14(4):450–6. Comment in: Nat Genet 1996 Dec;14(4):367–70.

From mighty mice to mighty cows [news; comment] Westhusin M. **Nat Genet** 1997 Sep;17(1):4–5. Comment on: Nat Genet 1997 Sep;17(1):71–4.

The role of a mutant CCR5 allele in HIV–1 transmission and disease progression [see comments] Huang Y, et al. **Nat Med** 1996 Nov;2(11):1240–3. Comment in: Nat Med 1997 Mar;3(3):252–3.

High intrinsic rate of DNA loss in Drosophila [see comments] Petrov DA, et al. **Nature** 1996 Nov 28;384(6607):346–9. Comment in: Nature 1996 Nov 28;384(6607):315–6.

Allelic functional variation of serotonin transporter expression is a susceptibility factor for late onset Alzheimer's disease. Li T, et al. **Neuroreport** 1997 Feb 10; 8(3):683–6

Transcription increases the deletion frequency of long CTG.CAG triplet repeats from plasmids in Escherichia coli. Bowater RP, et al. **Nucleic Acids Res** 1997 Jul 15; 25(14):2861–8

Deletion endpoint allele–specificity in the developmentally regulated elimination of an internal sequence (IES) in Paramecium. Dubrana K, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2448–54

Brief expression of a GFP cre fusion gene in embryonic stem cells allows rapid retrieval of site–specific genomic deletions. Gagneten S, et al. **Nucleic Acids Res** 1997 Aug 15;25(16):3326–31

A novel method for making nested deletions and its application for sequencing of a 300 kb region of human APP locus. Hattori M, et al. **Nucleic Acids Res** 1997 May 1;25(9):1802–8

A novel system for the rapid generation of precise DNA deletions. McCaffery I, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):5048–50

Construction of a deletion library using a mixture of 5'–truncated primers for inverse PCR (IPCR). Pues H, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1303–4

Single–well genotyping of diallelic sequence variations by a two–color ELISA–based oligonucleotide ligation assay. Tobe VO, et al. **Nucleic Acids Res** 1996 Oct 1;

24(19):3728–32
A complex nine base pair deletion in RET exon 11 common in sporadic medullary thyroid carcinoma. Alemi M, et al. **Oncogene** 1997 May 1;14(17):2041–5
Somatic in frame deletions not involving juxtamembranous cysteine residues strongly activate the RET proto-oncogene. Ceccherini I, et al. **Oncogene** 1997 May 29;14(21):2609–12
Inhibition of p185neu kinase activity and cellular transformation by co-expression of a truncated neu protein. Qian X, et al. **Oncogene** 1996 Nov 21;13(10):2149–57
Natural 30 base pair and 69 base pair deletion variants of the LMP1 oncogene do stimulate NF-kappaB-mediated transcription. Rothenberger S, et al. **Oncogene** 1997 May 1;14(17):2123–6
Deletion of c-myb exon 9 induced by insertion of repeats. Shinagawa T, et al. **Oncogene** 1997 Jun 12;14(23):2775–83
An 80 Kb P1 clone from chromosome 3p21.3 suppresses tumor growth in vivo. Todd MC, et al. **Oncogene** 1996 Dec 5;13(11):2387–96
Field cancerisation and polyclonal p53 mutation in the upper aero-digestive tract. Waridel F, et al. **Oncogene** 1997 Jan 16;14(2):163–9
A novel antithrombin gene mutation: slippage and mispairing as a mechanism of genetic disease. Fitches AC, et al. **Pathology** 1996 Nov;28(4):339–42
Modulation of Na+ channel inactivation by the beta 1 subunit: a deletion analysis. Chen C, et al. **Pflugers Arch** 1995 Dec;431(2):186–95
Inactivation of the flax rust resistance gene M associated with loss of a repeated unit within the leucine-rich repeat coding region. Anderson PA, et al. **Plant Cell** 1997 Apr;9(4):641–51
Steroidogenic acute regulatory protein (StAR) retains activity in the absence of its mitochondrial import sequence: implications for the mechanism of StAR action [see comments] Arakane F, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13731–6. Comment in: Proc Natl Acad Sci U S A 1996 Nov 26;93(24):13592–4.
Importance of acidic, proline/serine/threonine-rich, and GTP-binding regions in the major histocompatibility complex class II transactivator: generation of transdominant-negative mutants. Chin KC, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2501–6
Ligand-activated site-specific recombination in mice. Feil R, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10887–90
Constitutive receptor activation by Crouzon syndrome mutations in fibroblast growth factor receptor (FGFR)2 and FGFR2/Neu chimeras. Galvin BD, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7894–9
Removal of a cryptic intron and subcellular localization of green fluorescent protein are required to mark transgenic Arabidopsis plants brightly. Haseloff J, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2122–7
Detection of heterozygous truncating mutations in the BRCA1 and APC genes by using a rapid screening assay in yeast. Ishioka C, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2449–53
In vivo activation of the cystic fibrosis transmembrane conductance regulator mutant deltaF508 in murine nasal epithelium. Kelley TJ, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2604–8
Identification of a novel negative retinoic acid responsive element in the promoter of the human matrix Gla protein gene. Kirfel J, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2227–32
A deletion mutant in the human cytomegalovirus gene encoding IE1(491aa) is replication defective due to a failure in autoregulation. Mocarski ES, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11321–6
Mutations in the small subunit of the Drosophila U2AF splicing factor cause lethality and developmental defects. Rudner DZ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10333–7
Minimal definition of the imprinting center and fixation of chromosome 15q11-q13 epigenotype by imprinting mutations. Saitoh S, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7811–5
An alpha-E-catenin gene trap mutation defines its function in preimplantation development. Torres M, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):901–6
Microsatellite instability in childhood rhabdomyosarcoma is locus specific and correlates with fractional allelic loss. Visser M, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9172–6
Identification of a novel p53 functional domain that is necessary for efficient growth suppression. Walker KK, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15335–40
Molecular delineation of the smallest commonly deleted region of chromosome 5 in malignant myeloid diseases to 1-1.5 Mb and preparation of a PAC-based physical map. Zhao N, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):6948–53
Developmental genome reorganization in ciliated protozoa: the transposon link. Klobutcher LA, et al. **Prog Nucleic Acid Res Mol Biol** 1997;56:1–62 (153 ref.)
Association study of a null mutation in the dopamine D4 receptor gene in Italian patients with obsessive-compulsive disorder, bipolar mood disorder and schizophrenia. Di Bella D, et al. **Psychiatr Genet** 1996 Fall;6(3):119–21
Increase in Ca2+ channel expression by deletions at the amino terminus of the cardiac alpha 1C subunit. Wei X, et al. **Receptors Channels** 1996;4(4):205–15
A group I plant intron accumulates as circular RNA forms with extensive 5' deletions in vivo. Daròs JA, et al. **RNA** 1996 Sep;2(9):928–36
Construction, expression and characterization of tissue-type plasminogen activator mutants. Liu S, et al. **Sci China B** 1995 Nov;38(11):1341–8
Gene mutation provides more meat on the hoof [news] Dickman S. **Science** 1997 Sep 26;277(5334):1922–3
Isolation of DNA markers for the rat Sai 1 gene for suppression of anchorage independence by using representational difference analysis. Lü XC, et al. **Somat Cell Mol Genet** 1997 Jan;23(1):63–74
von Willebrand factor without the A2 domain is resistant to proteolysis. Lankhof H, et al. **Thromb Haemost** 1997 May;77(5):1008–13
Promoter/leader deletion analysis and plant expression vectors with the figwort mosaic virus (FMV) full length transcript (FLt) promoter containing single or double enhancer domains. Maiti IB, et al. **Transgenic Res** 1997 Mar;6(2):143–56
The regulation of membrane cofactor protein (CD46) expression in transgenic mice: the importance of the first 125 BP of the 3' untranslated region. Miyagawa S, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):941–2
Rapid PCR-mediated bidirectional deletions. Kaluz S, et al. **Trends Genet** 1996 Nov;12(11):453–4
Rapid mapping of mitochondrial dna deletions by large-fragment PCR. Paul R, et al. **Trends Genet** 1996 Apr; 12(4):131–2
Programmed DNA deletions in Tetrahymena: mechanisms and implications. Yao MC. **Trends Genet** 1996 Jan; 12(1):26–30 (28 ref.)
Targeted deletion of neuronal nitric oxide: a step closer to understanding its functional significance? Good M. **Trends Neurosci** 1996 Mar;19(3):83–4 (11 ref.)
In vivo repair of 3'-end deletions in a TCV satellite RNA may involve two abortive synthesis and priming events. Carpenter CD, et al. **Virology** 1996 Dec 15;226(2):153–60
Defects in concatemer processing of bacteriophage T7 DNA deleted in the M-hairpin region. Kim JS, et al. **Virology** 1997 Sep 15;236(1):37–46
Complementation of and interference with Sindbis virus replication by full-length and deleted forms of the nonstructural protein, nsP1, expressed in stable transfectants of Hela cells. Li ML, et al. **Virology** 1997 Jan 20;227(2):361–9
R7, a spontaneous mutant of Moloney murine sarcoma virus 124 with three direct repeats and an in-frame truncated gag-mos gene, induces brain lesions. Yuen PH, et al. **Virology** 1997 Sep 15;236(1):213–8
[The sequences of intron 50 and 51 of DMD gene and the deletion mechanism of 51st exon] Sheng W, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Nov;76(11):852–4 (Eng. Abstr.) **(Chi)**
[Importance of the DIRVISH technique for detecting microdeletions] Maarek O, et al. **Ann Genet** 1996; 39(3):173–5 (Eng. Abstr.) **(Fre)**
[Phenotypic expression of a 100-pair nucleotide deletion in the regulatory region of the Bacillus subtilis riboflavin operon] Kreneva RA, et al. **Genetika** 1997 May; 33(5):599–603 (Eng. Abstr.) **(Rus)**
[Cosmid contig and cDNA map of the 13q14 region is frequently deleted in human B-cell chronic lymphocytic leukemia] Kapanadze BI, et al. **Mol Biol (Mosk)** 1997 May-Jun;31(3):515–9 **(Rus)**
[Use of CA repeat polymorphism in direct and indirect diagnosis of Duchenne and Becker muscular dystrophy] Mušová Z, et al. **Cas Lek Cesk** 1997 Feb 5;136(3):90–4 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

Large deletions induced in the white gene of Drosophila melanogaster by the antitumoral drug cis-dichlorodiammineplatinum(II): influence of non-homologous recombination. Cizeau J, et al. **Mutat Res** 1996 Sep 23;356(2):197–202
Targeted base substitutions and small deletions induced by neocarzinostatin at the APRT locus in plateau-phase CHO cells. Wang P, et al. **Mutat Res** 1997 Jan 3;373(1):17–29

GENETICS

Deletion of RB exons 24 and 25 causes low-penetrance retinoblastoma. Bremner R, et al. **Am J Hum Genet** 1997 Sep;61(3):556–70
Are there ethnic differences in deletions in the dystrophin gene? Banerjee M, et al. **Am J Med Genet** 1997 Jan 20; 68(2):152–7
Limb defects in homozygous alpha-thalassemia: report of three cases. Chitayat D, et al. **Am J Med Genet** 1997 Jan 20;68(2):162–7
Clinical application of the molecular diagnosis of spinal muscular atrophy: deletions of neuronal apoptosis inhibitor protein and survival motor neuron genes. Somerville MJ, et al. **Am J Med Genet** 1997 Mar 17;69(2):159–65
A novel deletion in the RET proto-oncogene found in sporadic medullary thyroid carcinoma. Alemi M, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2619–22
Glycogen-storage disease type II (acid maltase deficiency): identification of a novel small deletion (delCC482+483) in French patients. Nicolino M, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):138–41
Specific detection of deleted mitochondrial DNA by in situ hybridization using a chimera probe. Nakamura N, et al. **Biochim Biophys Acta** 1996 Sep 11;1308(3):215–21
Presence of exon 5-deleted oestrogen receptor in human breast cancer: functional analysis and clinical significance. Desai AJ, et al. **Br J Cancer** 1997;75(8):1173–84
Molecular deletion patterns in Turkish Duchenne and Becker muscular dystrophy patients. Dinçer P, et al. **Brain Dev** 1996 Mar-Apr;18(2):91–4
Disproportionate micromelia (Dmm) in mice caused by a mutation in the C-propeptide coding region of Col2a1. Pace JM, et al. **Dev Dyn** 1997 Jan;208(1):25–33
Deletion in the Z-line region of the titin gene in a baby hamster kidney cell line, BHK-21-Bi. Jäckel M, et al. **FEBS Lett** 1997 May 12;408(1):21–4
Deletion formation between the two Salmonella typhimurium flagellin genes encoded on the mini F plasmid: Escherichia coli ssb alleles enhance deletion rates and change hot-spot preference for deletion endpoints. Mukaihara T, et al. **Genetics** 1997 Mar;145(3):563–72
Two distinct deletions in the IDS gene and the gene W: a novel type of mutation associated with the Hunter syndrome. Karsten SL, et al. **Genomics** 1997 Jul 15; 43(2):123–9
Novel trinucleotide deletion in Fabry's disease. Cariolou MA, et al. **Hum Genet** 1996 Apr;97(4):468–70
A repeated element in the regulatory region of the MNK gene and its deletion in a patient with occipital horn syndrome. Levinson B, et al. **Hum Mol Genet** 1996 Nov; 5(11):1737–42
A splice-junction mutation in the region of COL5A1 that codes for the carboxyl propeptide of pro alpha 1(V) chains results in the gravis form of the Ehlers-Danlos syndrome (type I). Wenstrup RJ, et al. **Hum Mol Genet** 1996 Nov; 5(11):1733–6
Mutations in the XPD gene leading to xeroderma pigmentosum symptoms. Kobayashi T, et al. **Hum Mutat** 1997;9(4):322–31
Immunologic characterization and functional properties of murine antibodies raised against deleted mutants of human beta 2-glycoprotein I. George J, et al. **Int Immunol** 1997 Jun;9(6):913–21
The deletion of six amino acids at the C-terminus of the alpha 1 (II) chain causes overmodification of type II and type XI collagen: further evidence for the association between small deletions in COL2A1 and Kniest dysplasia. Winterpacht A, et al. **J Med Genet** 1996 Aug;33(8):649–54
Deletion of twenty seven nucleotides within exon 11 of the band 3 gene identified in ovalocytosis in Lombok Island, Indonesia. Alimsardjono H, et al. **Jpn J Hum Genet** 1997 Mar;42(1):233–6
The carrier frequency of the BRCA2 6174delT mutation among Ashkenazi Jewish individuals is approximately 1%. Oddoux C, et al. **Nat Genet** 1996 Oct;14(2):188–90
Ashkenazi Jewish population frequencies for common mutations in BRCA1 and BRCA2. Roa BB, et al. **Nat Genet** 1996 Oct;14(2):185–7
A 1.8 kb alternative transcript from the human epidermal growth factor receptor gene encodes a truncated form of the receptor. Reiter JL, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4050–6
High prevalence of a 30-base pair deletion and single-base mutations within the carboxy terminal end of the LMP-1 oncogene of Epstein-Barr virus in the Japanese population. Itakura O, et al. **Oncogene** 1996 Oct 3;13(7):1549–53
Deletions in the 3' untranslated region of cowpea chlorotic mottle virus transgene reduce recovery of recombinant viruses in transgenic plants. Greene AE, et al. **Virology** 1996 Nov 1;225(1):231–4

IMMUNOLOGY

Immunologic characterization and functional properties of murine antibodies raised against deleted mutants of human beta 2-glycoprotein I. George J, et al. **Int Immunol** 1997 Jun;9(6):913–21
Elimination of N-linked glycosylation sites from the human IgA1 constant region: effects on structure and function. Chuang PD, et al. **J Immunol** 1997 Jan 15;158(2):724–32

PHYSIOLOGY

Role of the ninaC proteins in photoreceptor cell structure: ultrastructure of ninaC deletion mutants and binding to actin filaments. Hicks JL, et al. **Cell Motil Cytoskeleton** 1996;35(4):367–79
Analysis of non-polar deletion mutations in the genes of the spo0K (opp) operon of Bacillus subtilis. LeDeaux JR, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):63–9
The pathogenesis of ED71, a defined deletion mutant of equine herpesvirus-1, in a murine intranasal infection model for equine abortion. Fitzmaurice T, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2167–9

RADIATION EFFECTS

Hprt- mutation spectrum in a closely related pair of human bladder tumour cell lines after gamma-irradiation at different dose-rates. Edwards SM, et al. **Int J Radiat Biol** 1997 Feb;71(2):177–84

SEQUENCE DETERMINATION

SEQUENCE DETERMINATION see **SEQUENCE ANALYSIS**

SEQUENCE DETERMINATION, DNA see **SEQUENCE ANALYSIS, DNA**

SEQUENCE DETERMINATION, RNA see **SEQUENCE ANALYSIS, RNA**

SEQUENCE HOMOLOGY

Thrombin stimulates association of src homology domain containing adaptor protein Nck with pp125FAK. Choudhury GG, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):F295–300

Inducible nitric oxide synthase expression in human vein grafts. Dattilo JB, et al. **Am J Surg** 1997 Aug;174(2):177–80

Novel SnoRNAs from Naja naja atra (Taiwan cobra) and Bungarus multicinctus (Taiwan banded krait), form extended sequence complementarity to 5S rRNA. Chang L, et al. **Biochem Biophys Res Commun** 1997 Jul 30; 236(3):782–4

M-spondin, a novel ECM protein highly homologous to vertebrate F-spondin, is localized at the muscle attachment sites in the Drosophila embryo. Umemiya T, et al. **Dev Biol** 1997 Jun 15;186(2):165–76

Sequence of keratinocyte growth factor and keratinocyte growth factor receptor orthologs [monkey, pig, rabbit] [letter] Doyle MP, et al. **In Vitro Cell Dev Biol Anim** 1996 Jun;32(6):318–20

A cloned chicken lymphokine homologous to both mammalian IL-2 and IL-15. Sundick RS, et al. **J Immunol** 1997 Jul 15;159(2):720–5

A quantitative and specific method for measuring transcript levels of highly homologous genes. Lombardo AJ, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4812–6

Comparative amino acid sequence analysis of the C6 zinc cluster family of transcriptional regulators. Schjerling P, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4599–607

Members of the immunoglobulin superfamily in bacteria. Bateman A, et al. **Protein Sci** 1996 Sep;5(9):1939–41

Homology modeling of human methylmalonyl-CoA mutase: a structural basis for point mutations causing methylmalonic aciduria. Thomä NH, et al. **Protein Sci** 1996 Sep;5(9):1922–7

SEQUENCE HOMOLOGY, AMINO ACID

Isolation and classification of a family of cyclin gene homologues in Lupinus luteus. Deckert J, et al. **Acta Biochim Pol** 1997;44(1):37–42

Identification of an N-capping box that affects the alpha 6-helix propensity in glutathione S-transferase superfamily proteins: a role for an invariant aspartic residue. Aceto A, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):229–34

A human cDNA sequence with homology to non-mammalian lysophosphatidic acid acyltransferases. Stamps AC, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):455–61

Glutathione synthetase: similarities of the proteins from Schizosaccharomyces pombe and Arabidopsis thaliana. Wang CL, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):563–6

Human cationic amino acid transporters hCAT-1, hCAT-2A, and hCAT-2B: three related carriers with distinct transport properties. Closs EI, et al. **Biochemistry** 1997 May 27;36(21):6462–8

Structure and assembly of the catalytic region of human complement protease C1r: a three-dimensional model based on chemical cross-linking and homology modeling. Lacroix M, et al. **Biochemistry** 1997 May 27;36(21):6270–82

A site of interaction between pleckstrin's PH domains and G beta gamma. Abrams CS, et al. **Biochim Biophys Acta** 1996 Dec 12;1314(3):233–8

Cloning of the cDNA for a rat intestinal Na+/dicarboxylate cotransporter reveals partial sequence homology with a rat intestinal mucin. Khatri IA, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):58–62

A tick homologue of the human Ki nuclear autoantigen. Paesen GC, et al. **Biochim Biophys Acta** 1996 Nov 11; 1309(1–2):9–13

Primary sequences of rat mu-calpain large and small subunits are, respectively, moderately and highly similar to those of human. Sorimachi H, et al. **Biochim Biophys Acta** 1996 Nov 11;1309(1–2):37–41

Searching for a family of orphan sequences with SAMBA, a parallel hardware dedicated to biological applications. Guerdoux-Jamet P, et al. **Biochimie** 1996;78(5):311–4

The extracellular region of granulocyte colony-stimulating factor receptor in solution has multiple oligomerization states without ligand. Hiraoka O, et al. **Biomed Pharmacother** 1996;50(6–7):309–14

Matching among multiple random sequences. Naus JI, et al. **Bull Math Biol** 1997 May;59(3):483–96

A homology model for rat mu class glutathione S-transferase 4-4. de Groot MJ, et al. **Chem Res Toxicol** 1996 Jan–Feb; 9(1):28–40

The conserved HR domain of the Drosophila suppressor 2 of zeste [Su(z)2] and murine bmi-1 proteins constitutes a locus-specific chromosome binding domain. Sharp EJ, et al. **Chromosoma** 1997 Jul;106(2):70–80

A frizzled homolog functions in a vertebrate Wnt signaling pathway. Yang-Snyder J, et al. **Curr Biol** 1996 Oct 1; 6(10):1302–6

MutS homologs in mammalian cells. Fishel R, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):105–13 (84 ref.)

Identification of a 97-kDa heat shock protein from S. franciscanus ovaries with 94% amino acid identity to the S. purpuratus egg surface receptor for sperm. Mauk R, et al. **Dev Biol** 1997 Apr 1;184(1):31–7

Cloning and characterization of the murine homolog of the sno proto-oncogene reveals a novel splice variant. Pelzer T, et al. **Dev Dyn** 1996 Feb;205(2):114–25

Differential expression of mammalian Numb, Numblike and Notch1 suggests distinct roles during mouse cortical neurogenesis. Zhong W, et al. **Development** 1997 May; 124(10):1887–97

A cDNA encodes the Drosophila homolog of yeast 60S ribosomal protein YL43. Fox MG, et al. **DNA Seq** 1997; 7(2):123–5

mof, a putative acetyl transferase gene related to the Tip60 and MOZ human genes and to the SAS genes of yeast, is required for dosage compensation in Drosophila. Hilfiker A, et al. **EMBO J** 1997 Apr 15;16(8):2054–60

A new translational regulator with homology to eukaryotic translation initiation factor 4G. Imataka H, et al. **EMBO J** 1997 Feb 17;16(4):817–25

Characterization of mouse ALCAM (CD166): the CD6-binding domain is conserved in different homologs and mediates cross-species binding. Bowen MA, et al. **Eur J Immunol** 1997 Jun;27(6):1469–78

Activation of the exchange factor Ras-GRF by calcium requires an intact Dbl homology domain. Freshney NW, et al. **FEBS Lett** 1997 Apr 21;407(1):111–5

Cloning and characterization of subtracted cDNAs from a human ciliary body library encoding TIGR, a protein involved in juvenile open angle glaucoma with homology to myosin and olfactomedin. Ortego J, et al. **FEBS Lett** 1997 Aug 18;413(2):349–53

Molecular characterization of a novel human PDZ domain protein with homology to INAD from Drosophila melanogaster. Philipp S, et al. **FEBS Lett** 1997 Aug 18; 413(2):243–8

Missense mutations affecting a conserved cysteine pair in the TH domain of Btk. Vihinen M, et al. **FEBS Lett** 1997 Aug 18;413(2):205–10

Crossreactions and sequence homologies between recombinant polypeptides from Leishmania aethiopica and human IgG and IgM. Osland A, et al. **FEMS Immunol Med Microbiol** 1997 Jan;17(1):11–9

Homology modelling by distance geometry. Aszódi A, et al. **Fold Des** 1996;1(5):325–34

Isolation of a cDNA encoding the chicken homologue of the human calcium-modulating cyclophilin ligand. Bram RJ. **Gene** 1996 Oct 3;174(2):307–9

Cloning and sequencing of a cDNA encoding bovine intercellular adhesion molecule 3 (ICAM-3). Lee EK, et al. **Gene** 1996 Oct 3;174(2):311–3

A new Bacillus subtilis gene with homology to Escherichia coli prc. Marasco R, et al. **Gene** 1996 Dec 12; 183(1–2):149–52

Identification of two Xenopus laevis genes, xMCM2 and xCDC46, with sequence homology to MCM genes involved in DNA replication. Miyake S, et al. **Gene** 1996 Oct 10;175(1–2):71–5

Mammalian homologues of yeast vacuolar protein sorting (vps) genes implicated in Golgi-to-lysosome trafficking. Pevsner J, et al. **Gene** 1996 Dec 12;183(1–2):7–14

The structure of the human multiple exostoses 2 gene and characterization of homologs in mouse and Caenorhabditis elegans [letter] Clines GA, et al. **Genome Res** 1997 Apr; 7(4):359–67

Cloning, characterization, and copy number of the murine survival motor neuron gene: homolog of the spinal muscular atrophy-determining gene. DiDonato CJ, et al. **Genome Res** 1997 Apr;7(4):339–52

Homology of partial primary sequences between alpha-enolase and a suppressive lymphokine from human T cells. Watanabe S, et al. **Immunol Invest** 1996 Sep–Nov; 25(5–6):397–404

Human homolog of Drosophila heterochromatin-associated protein 1 (HP1) is a DNA-binding protein which possesses a DNA-binding motif with weak similarity to that of human centromere protein C (CENP-C). Sugimoto K, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):153–9

Human tyrosyl-tRNA synthetase shares amino acid sequence homology with a putative cytokine. Kleeman TA, et al. **J Biol Chem** 1997 May 30;272(22):14420–5

Pleckstrin associates with plasma membranes and induces the formation of membrane projections: requirements for phosphorylation and the NH2-terminal PH domain. Ma AD, et al. **J Cell Biol** 1997 Mar 10;136(5):1071–9

Regulated membrane localization of Tiam1, mediated by the NH2-terminal pleckstrin homology domain, is required for Rac-dependent membrane ruffling and C-Jun NH2-terminal kinase activation. Michiels F, et al. **J Cell Biol** 1997 Apr 21;137(2):387–98

A Drosophila Tpr protein homolog is localized both in the extrachromosomal channel network and to nuclear pore complexes. Zimowska G, et al. **J Cell Sci** 1997 Apr;110 (Pt 8):927–44

Antisense homology boxes in C5a receptor and C5a anaphylatoxin: a new method for identification of potentially active peptides. Baranyi L, et al. **J Immunol** 1996 Nov 15;157(10):4591–601

Molecular mimicry between an immunodominant amino acid motif on the 47-kDa lipoprotein of Treponema pallidum (Tpp47) and multiple repeats of analogous sequences in fibronectin. Baughn RE, et al. **J Immunol** 1996 Jul 15; 157(2):720–31

Prediction of protein side-chain rotamers from a backbone-dependent rotamer library: a new homology modeling tool. Bower MJ, et al. **J Mol Biol** 1997 Apr 18; 267(5):1268–82

Protein evolution viewed through Escherichia coli protein sequences: introducing the notion of a structural segment of homology, the module. Riley M, et al. **J Mol Biol** 1997 May 23;268(5):857–68

Recognition of analogous and homologous protein folds: analysis of sequence and structure conservation. Russell RB, et al. **J Mol Biol** 1997 Jun 13;269(3):423–39

Evolutionary motif and its biological and structural significance. Tateno Y, et al. **J Mol Evol** 1997;44 Suppl 1:S38–43

Some reflections on the early days of sequence searching. Doolittle RF. **J Mol Med** 1997 Apr;75(4):239–41

Cell cycle and apoptosis: possible roles of Gadd45 and MyD118 proteins inferred from their homology to ribosomal proteins. Koonin EV. **J Mol Med** 1997 Apr; 75(4):236–8

Bacterial 3alpha-hydroxysteroid dehydrogenase is homologous to a fusion of bacterial ribosomal L10 and L7/12 genes. Baker ME. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):365–6

Sequence and chromosomal mapping of the mouse homolog (Madh4) of the human DPC4/MADH4 gene. Anna CH, et al. **Mamm Genome** 1997 Jun;8(6):443–4

The mouse homolog of FRG1, a candidate gene for FSHD, maps proximal to the myodystrophy mutation on chromosome 8. Grewal PK, et al. **Mamm Genome** 1997 Jun;8(6):394–8

The porcine gene TBP10 encodes a protein homologous to the human tat-binding protein/26S protease subunit family. Leeb T, et al. **Mamm Genome** 1996 Mar;7(3):180–5

Multiple comparison of primary structure of the osmoregulatory Na+/myo-inositol cotransporter from bovine, human, and canine species. Mallee JJ, et al. **Mamm Genome** 1996 Mar;7(3):252

Homolog scanning. Wang LF. **Methods Mol Biol** 1996; 66:207–20

Isolation of Borrelia burgdorferi genes encoding homologues of DNA-binding protein HU and ribosomal protein S20. Tilly K, et al. **Microbiology** 1996 Sep;142 (Pt 9):2471–9

Interspecies relationships among ADP-ribosylation factors (ARFs): evidence of evolutionary pressure to maintain individual identities. Price SR, et al. **Mol Cell Biochem** 1996 Jun 7;159(1):15–23

Self-association of the single-KH-domain family members Sam68, GRP33, GLD-1, and Qk1: role of the KH domain. Chen T, et al. **Mol Cell Biol** 1997 Oct;17(10):5707–18

The product of the murine homolog of the Drosophila extra sex combs gene displays transcriptional repressor activity. Denisenko ON, et al. **Mol Cell Biol** 1997 Aug;17(8):4707–17

A specific product of phosphatidylinositol 3-kinase directly activates the protein kinase Akt through its pleckstrin homology domain. Klippel A, et al. **Mol Cell Biol** 1997 Jan;17(1):338–44

The mammalian homolog of yeast Sec13p is enriched in the intermediate compartment and is essential for protein transport from the endoplasmic reticulum to the Golgi apparatus. Tang BL, et al. **Mol Cell Biol** 1997 Jan; 17(1):256–66

Of four murine, anti-Shigella dysenteriae type 1 O-polysaccharide antibodies, three employ V-genes that differ extensively from those of the fourth. Miller CE, et al. **Mol Immunol** 1996 Nov;33(16):1217–22

Sequence analysis of an exceptionally conserved operon suggests enzymes for a new link between histidine and purine biosynthesis [letter] Galperin MY, et al. **Mol Microbiol** 1997 Apr;24(2):443–5

Cross-species homology of the CLN3 gene. Taschner PE, et al. **Neuropediatrics** 1997 Feb;28(1):18–20

Searching databases of conserved sequence regions by aligning protein multiple-alignments [published erratum appears in Nucleic Acids Res 1996 Nov 1;24(21):4372] Pietrokovski S. **Nucleic Acids Res** 1996 Oct 1; 24(19):3836–45

The HSSP database of protein structure-sequence alignments. Schneider R, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):226–30

Identification of a p130 domain mediating interactions with cyclin A/cdk 2 and cyclin E/cdk 2 complexes. Lacy S, et al. **Oncogene** 1997 May 22;14(20):2395–406

Cloning and expression in Escherichia coli of the obtusifoliol 14 alpha-demethylase of Sorghum bicolor (L.) Moench, a cytochrome P450 orthologous to the sterol 14 alpha-demethylases (CYP51) from fungi and mammals. Bak S, et al. **Plant J** 1997 Feb;11(2):191–201

Cloning and characterisation of a carrot cDNA coding for a WD repeat protein homologous to Drosophila fizzy, human p55CDC and yeast CDC20 proteins [published erratum appears in Plant Mol Biol 1997 Aug;34(6):973] Luo M, et al. **Plant Mol Biol** 1997 May;34(2):325–30

A secreted Salmonella protein with homology to an avirulence determinant of plant pathogenic bacteria. Hardt WD, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9887–92

Activation of the human homologue of the Drosophila sina gene in apoptosis and tumor suppression. Nemani M, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9039–42

MLN64 contains a domain with homology to the steroidogenic acute regulatory protein (StAR) that stimulates steroidogenesis. Watari H, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8462–7

Structural comparison of major histocompatibility complex class I molecules and homology modelling of five distinct human leukocyte antigen–A alleles. Chelvanayagam G, et al. **Protein Eng** 1996 Dec;9(12):1151–64

Homology modeling study of the human interleukin–7 receptor complex. Kroemer RT, et al. **Protein Eng** 1996 Dec;9(12):1135–42

Homology modelling of rat kallikrein rK9, a member of the tissue kallikrein family: implications for substrate specificity and inhibitor binding. Moreau T, et al. **Protein Eng** 1996 Nov;9(11):987–95

A novel family of phospholipase D homologues that includes phospholipid synthases and putative endonucleases: identification of duplicated repeats and potential active site residues. Ponting CP, et al. **Protein Sci** 1996 May; 5(5):914–22

Automated multiple analysis of protein structures: application to homology modeling of cytochromes P450. Jean P, et al. **Proteins** 1997 Jul;28(3):388–404

Defining a similarity threshold for a functional protein sequence pattern: the signal peptide cleavage site. Nielsen H, et al. **Proteins** 1996 Feb;24(2):165–77

A structural explanation for the twilight zone of protein sequence homology. Chung SY, et al. **Structure** 1996 Oct 15;4(10):1123–7 (26 ref.)

The translation initiation factor eIF4A from Schizosaccharomyces pombe is closely related to its mammalian counterpart. Fischli A, et al. **Yeast** 1996 Aug; 12(10):977–81

Subtelomeric duplications in Saccharomyces cerevisiae chromosomes III and XI: topology, arrangements, corrections of sequence and strain–specific polymorphism. Gromadka R, et al. **Yeast** 1996 May;12(6):583–91

[Structure and ligand recognition of pleckstrin homology domain] Terasawa H, et al. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):996–1003 (49 ref.) **(Jpn)**

[The homology of the primary structure of the third cytoplasmic domains in rhodopsin–type receptors and of the cytoplasmic tail in the beta–subunit of the insulin receptor] Shpakov AO. **Tsitologiia** 1996;38(11):1179–90 (Eng. Abstr.) **(Rus)**

SEQUENCE HOMOLOGY DETERMINATION see **SEQUENCE ALIGNMENT**

SEQUENCE HOMOLOGY, NUCLEIC ACID

see related
SEQUENCE ALIGNMENT

Sequence comparison of mitochondrial tRNA genes and origin of light strand replication in Bos taurus and Nellore (Bos indicus) breeds. Pegoraro L, et al. **Anim Genet** 1996 Apr;27(2):91–4

Nucleotide homologies in genes encoding members of the S100 protein family. Zimmer DB, et al. **Biochim Biophys Acta** 1996 Oct 11;1313(3):229–38

Single–tube chemical cleavage of mismatch: successive treatment with hydroxylamine and osmium tetroxide. Ramus SJ, et al. **Biotechniques** 1996 Aug;21(2):216–8, 220

Matching among multiple random sequences. Naus JI, et al. **Bull Math Biol** 1997 May;59(3):483–96

Partial sequence of the shrimp Penaeus notialis mitochondrial genome. Garcia–Machado E, et al. **C R Acad Sci III** 1996 Jun;319(6):473–86

Turn to the worm! Ahringer J. **Curr Opin Genet Dev** 1997 Jun;7(3):410–5 (42 ref.)

Enlarged similarity of nucleic acid sequences. Korotkov EV, et al. **DNA Res** 1996 Jun 30;3(3):157–64

Characterization of the Lancefield group C streptococcus 16S–23S RNA gene intergenic spacer and its potential for identification and sub–specific typing. Chanter N, et al. **Epidemiol Infect** 1997 Apr;118(2):125–35

Homologues of the 24–kDa flagellar Ca(2+)–binding protein gene of Trypanosoma cruzi are present in other members of the Trypanosomatidae family. Maldonado RA, et al. **Exp Parasitol** 1997 Jul;86(3):200–5

Human genetic diseases: a cross–talk between man and yeast. Foury F. **Gene** 1997 Aug 11;195(1):1–10 (58 ref.)

The rpoH gene encoding sigma 32 homolog of Vibrio cholerae. Sahu GK, et al. **Gene** 1997 Apr 21;189(2):203–7

Large–scale comparative sequence analysis of the human and murine Bruton's tyrosine kinase loci reveals conserved regulatory domains. Oeltjen JC, et al. **Genome Res** 1997 Apr;7(4):315–29

SMT3A, a human homologue of the S. cerevisiae SMT3 gene, maps to chromosome 21qter and defines a novel gene family. Lapenta V, et al. **Genomics** 1997 Mar 1;40(2):362–6

A computerized method to predict the discriminatory properties for class II sequencing based typing. Rozemuller EH, et al. **Hum Immunol** 1996 Mar;46(1):27–34

Positional cloning of the gene for X–linked retinitis pigmentosa 3: homology with the guanine–nucleotide–exchange factor RCC1. Roepman R, et al. **Hum Mol Genet** 1996 Jul;5(7):1035–41

Compact encoding strategies for DNA sequence similarity search. States DJ, et al. **Ismb** 1996;4:211–7

Homology throughout the multiple 32–kilobase circular plasmids present in Lyme disease spirochetes. Casjens S, et al. **J Bacteriol** 1997 Jan;179(1):217–27

A new type of illegitimate recombination is dependent on restriction and homologous interaction. Kusano K, et al. **J Bacteriol** 1997 Sep;179(17):5380–90

Plasmid–homologous sequences in the chromosome of plasmidless Coxiella burnetii Scurry Q217. Willems H, et al. **J Bacteriol** 1997 May;179(10):3293–7

Elevated homologous recombination activity in fanconi anemia fibroblasts. Thyagarajan B, et al. **J Biol Chem** 1997 Sep 12;272(37):23328–33

IS6110 homologs are present in multiple copies in mycobacteria other than tuberculosis–causing mycobacteria. McHugh TD, et al. **J Clin Microbiol** 1997 Jul;35(7):1769–71

Virtually identical enhancers containing a segment of homology to murine 3'IgH–E(hs1,2) lie downstream of human Ig C alpha 1 and C alpha 2 genes. Chen C, et al. **J Immunol** 1997 Aug 1;159(3):1310–8

Molecular cloning of the complementary DNA for an additional member of the family of aortic aneurysm antigenic proteins. Hirose H, et al. **J Vasc Surg** 1997 Aug; 26(2):313–8

Expression of the endogenous Marek's disease virus ICP4 homolog (MDV ICP4) gene is enhanced in latently infected cells by transient transfection with the recombinant MDV ICP4 gene. Endoh D, et al. **Jpn J Vet Res** 1995 Dec; 43(3–4):109–24

Enhancement of gene expression by Marek's disease virus homologue of the herpes simplex virus–1 ICP4. Endoh D. **Jpn J Vet Res** 1996 Aug;44(2):136–7

Gene homologs on human chromosome 15q21–q26 and a chicken microchromosome identify a new conserved segment. Jones CT, et al. **Mamm Genome** 1997 Jun; 8(6):436–40

Alanyl–tRNA synthetase gene of the extreme acidophilic chemolithoautotrophic Thiobacillus ferrooxidans is highly homologous to alaS genes from all living kingdoms but cannot be transcribed from its promoter in Escherichia coli. Guiliani N, et al. **Microbiology** 1997 Jul;143 (Pt 7):2179–87

Targeting of exogenous DNA into Trypanosoma brucei requires a high degree of homology between donor and target DNA. Blundell PA, et al. **Mol Biochem Parasitol** 1996 Feb–Mar;76(1–2):215–29

Interspecies relationships among ADP–ribosylation factors (ARFs): evidence of evolutionary pressure to maintain individual identities. Price SR, et al. **Mol Cell Biochem** 1996 Jun 7;159(1):15–23

Efficient gap repair in Drosophila melanogaster requires a maximum of 31 nucleotides of homologous sequence at the searching ends. Keeler KJ, et al. **Mol Cell Biol** 1997 Feb; 17(2):627–34

Homology of AFLP products in three mapping populations of barley. Waugh R, et al. **Mol Gen Genet** 1997 Jul; 255(3):311–21

Positional cloning of the Drosophila melanogaster mei–9 gene, the putative homolog of the Saccharomyces cerevisiae RAD1 gene. Araj H, et al. **Mutat Res** 1996 Dec 2;364(3):209–15

The human homologue of the weaver mouse gene in familial and sporadic Parkinson's disease. Bandmann O, et al. **Neuroscience** 1996 Jun;72(4):877–9

Self–incompatibility in the grasses: evolutionary relationship of the S gene from Phalaris coerulescens to homologous sequences in other grasses. Li X, et al. **Plant Mol Biol** 1997 May;34(2):223–32

PCR–identification of a Nicotiana plumbaginifolia cDNA homologous to the high–affinity nitrate transporters of the crnA family. Quesada A, et al. **Plant Mol Biol** 1997 May; 34(2):265–74

Statistics for microsatellite variation based on coalescence. Pritchard JK, et al. **Theor Popul Biol** 1996 Dec;50(3):325–44

Non–orthologous gene displacement [letter] Koonin EV, et al. **Trends Genet** 1996 Sep;12(9):334–6

[Comparison of mitochondrial DNA sequences of T.N. Kulikovskiĭ–Romanov, the nephew of Tsar Nikolaĭ II Romanov, with DNA from the putative remains of the Tsar] Rogaev EI, et al. **Genetika** 1996 Dec;32(12):1690–2 (Eng. Abstr.) **(Rus)**

[Analysis of phylogenetic interactions of Baikal endemic amphipods (Crustacea, Amphipoda) based on comparing nucleotide sequences of parts of the mitochondrial gene for cytochrome oxidase subunit III] Ogarkov OB, et al. **Mol Biol (Mosk)** 1997 Jan–Feb;31(1):32–7 **(Rus)**

SEQUENCE TAGGED SITES

Four sequence tagged sites derived from a bovine chromosome 18 enriched library. Jørgensen CB, et al. **Anim Genet** 1996 Oct;27(5):377

Characterisation of a human chromosome 1 somatic cell hybrid mapping panel and regional assignment of 6 novel STS. Roberts T, et al. **Ann Hum Genet** 1996 May;60 (Pt 3):213–20

Gene–specific universal mammalian sequence–tagged sites: application to the canine genome. Venta PJ, et al. **Biochem Genet** 1996 Aug;34(7–8):321–41

Human chromosome 3: high–resolution fluorescence in situ hybridization mapping of 40 unique NotI linking clones homologous to genes and cDNAs. Protopopov AI, et al. **Chromosome Res** 1996 Sep;4(6):443–7

Generation and mapping of human chromosome 2 microdissection clone–derived STSs. Gingrich JC, et al. **Cytogenet Cell Genet** 1996;74(4):272–6

Assessment of human gene diversity and expression patterns using expressed sequence tags. Kirkness EF. **Essays Biochem** 1996;31:1–9 (12 ref.)

ESTs reveal a multigene family for plant defensins in Arabidopsis thaliana. Epple P, et al. **FEBS Lett** 1997 Jan 3;400(2):168–72

Expressed STSs and transcription of human Xq28. Esposito T, et al. **Gene** 1997 Mar 18;187(2):185–91

Minilibraries constructed from cDNA generated by arbitrarily primed RT–PCR: an alternative to normalized libraries for the generation of ESTs from nanogram quantities of mRNA. Neto ED, et al. **Gene** 1997 Feb 20; 186(1):135–42

Cosmid–derived transcripts and sequence tags mapped to three subregions of human chromosome 22. Pusch C, et al. **Gene** 1996 Dec 12;183(1–2):29–33

Generation of expressed sequence tags and sequence–tagged sites as physical landmarks in the mosquito, Aedes aegypti, genome. Severson DW, et al. **Genome** 1996 Feb;39(1):224–9

Toward the development of a gene index to the human genome: an assessment of the nature of high–throughput EST sequence data. Aaronson JS, et al. **Genome Res** 1996 Sep;6(9):829–45

Mapping expressed sequence tag sites on yeast artificial chromosome clones of Arabidopsis thaliana DNA. Agyare FD, et al. **Genome Res** 1997 Jan;7(1):1–9

A collection of 1814 human chromosome 7–specific STSs [letter] Bouffard GG, et al. **Genome Res** 1997 Jan;7(1):59–64

A high–resolution physical and transcript map of the Cri du chat region of human chromosome 5p. Church DM, et al. **Genome Res** 1997 Aug;7(8):787–801

Isolation of chromosome–specific ESTs by microdissection–mediated cDNA capture. Gracia E, et al. **Genome Res** 1997 Feb;7(2):100–7

Generation and analysis of 280,000 human expressed sequence tags. Hillier LD, et al. **Genome Res** 1996 Sep; 6(9):807–28

Clone–contig and STS maps of the hereditary hemochromatosis region on human chromosome 6p21.3–p22. Lauer P, et al. **Genome Res** 1997 May; 7(5):457–70

Sequence mapping by electronic PCR. Schuler GD. **Genome Res** 1997 May;7(5):541–50

An STS–based radiation hybrid map of the human genome. Stewart EA, et al. **Genome Res** 1997 May;7(5):422–33

Human whole–genome shotgun sequencing. Weber JL, et al. **Genome Res** 1997 May;7(5):401–9

Computer gene mapping by EagI–based STSs. Frattini A, et al. **Genomics** 1996 Nov 15;38(1):87–91

A high–density STS map based on a single contig of YAC and P1 clones in the chromosome 8p12–p21 region. Mitsuda N, et al. **Genomics** 1997 Apr 1;41(1):49–55

Regional localization of 192 genic markers on human chromosome 1. Roberts T, et al. **Genomics** 1996 Sep 1; 36(2):337–40

Mapping human telomere regions with YAC and P1 clones: chromosome–specific markers for 27 telomeres including 149 STSs and 24 polymorphisms for 14 proterminal regions. Vocero–Akbani A, et al. **Genomics** 1996 Sep 15; 36(3):492–506

Identification by STS PCR screening of a microdeletion in Xp21.3–22.1 associated with non–specific mental retardation. Billuart P, et al. **Hum Mol Genet** 1996 Jul; 5(7):977–9

A concordance of nucleotide substitutions in the first and second hypervariable segments of the human mtDNA control region. Miller KW, et al. **Int J Legal Med** 1996; 109(3):107–13

A survey of genes expressed in mouse embryonal carcinoma F9 cells: characterization of expressed sequence tags matching no known genes. Nomura M, et al. **J Biochem (Tokyo)** 1997 Jul;122(1):129–47

High density of an SAR–associated motif differentiates heterochromatin from euchromatin. Strausbaugh LD, et al. **J Theor Biol** 1996 Nov 21;183(2):159–67

Monitoring the efficacy of hybrid selection during positional cloning: the search for BRCA1. Hattier T, et al. **Mamm Genome** 1995 Dec;6(12):873–9

Regional assignment of human ESTs by whole–genome radiation hybrid mapping. Hayes PD, et al. **Mamm Genome** 1996 Jun;7(6):446–50

Mapping of 22 expressed sequence tags isolated from a porcine small intestine cDNA library. Jorgensen CB, et al. **Mamm Genome** 1997 Jun;8(6):423–7

Physical mapping of the beige critical region on mouse chromosome 13. Kingsmore SF, et al. **Mamm Genome** 1996 Oct;7(10):773–5

A radiation hybrid map spanning the entire human X chromosome integrating YACs, genes, and STS markers. Kumlien J, et al. **Mamm Genome** 1996 Oct;7(10):758–66

Isolation and mapping of three STSs on mouse chromosome 19. Rotomondo F, et al. **Mamm Genome** 1996 Jun;7(6):464

HOSEpipe—a WWW–hosted data management and analysis system for STS content mapping projects. Strivens MA, et al. **Mamm Genome** 1997 Jul;8(7):467–71

The schistosome genome project: RNA arbitrarily primed

SEQUENCE TAGGED SITES

PCR allows the accelerated generation of expressed sequence tags. Dias Neto E, et al. **Mem Inst Oswaldo Cruz** 1996 Sep-Oct;91(5):655-7

Cloning (CAG/GTC)n STSs by an Alu-(CAG/GTC)n PCR method: an approach to human chromosome 12 and spinocerebellar ataxia 2 (SCA2). Pujana MA, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3651-2

A comparison of expressed sequence tags (ESTs) to human genomic sequences. Wolfsberg TG, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1626-32

A shortcut to interesting human genes: peptide sequence tags, expressed-sequence tags and computers. Mann M. **Trends Biochem Sci** 1996 Dec;21(12):494-5

[Immunocytochemistry with epitope tagging] Iida H. **Nippon Rinsho** 1996 Mar;54(3):731-6 (7 ref.) (Eng. Abstr.) **(Jpn)**

SEQUENTIAL HEMIBODY IRRADIATION see **HEMIBODY IRRADIATION**

SERAZIDE see **BENSERAZIDE**

SERGENTOMYIA see **PSYCHODIDAE**

SERIAL DILUTION END-POINT TITRATION see **SKIN TEST END-POINT TITRATION**

SERIAL EXTRACTION

Extraction of maxillary second molars in the treatment of Class II malocclusion. Basdra EK, et al. **Angle Orthod** 1996; 66(4):287-92

The effect of premolar extractions on the soft-tissue profile in adult African American females [published erratum appears in Angle Orthod 1997;67(3):240] Caplan MJ, et al. **Angle Orthod** 1997;67(2):129-36

Is general anaesthesia for orthodontic extractions in children necessary? [letter; comment] [published erratum appears in Br Dent J 1996 Oct 19;181(8):283] [see comments] Jack WA, et al. **Br Dent J** 1996 Sep 7;181(5):165. Comment on: Br Dent J 1996 Jul 6;181(1):6-7. Comment in: Br Dent J 1996 Nov 9;181(9):319.

Comparison of the changes in facial profile after orthodontic treatment, with and without extractions. Bravo LA, et al. **Br J Orthod** 1997 Feb;24(1):25-34

The effects of extracting upper second permanent molars [letter; comment] Pearson MH. **Br J Orthod** 1996 Nov; 23(4):378-9. Comment on: Br J Orthod 1996 May;23(2):109-14.

Premolar child-to-parent grafting within the framework of orthodontic serial extraction. Harzer W. **J Orofac Orthop** 1997;58(4):214-23 **(Eng, Ger)**

Influence of facial growth pattern on outcome of extraction therapy. Hirschfelder U, et al. **J Orofac Orthop** 1997; 58(3):154-64 **(Eng, Ger)**

The role of extraction in stability of orthodontic treatment. Kahl-Nieke B. **J Orofac Orthop** 1996 Oct;57(5):272-87 (54 ref.) **(Eng, Ger)**

STATISTICS & NUMERICAL DATA

Consistency of orthodontic extraction decisions. Ribarevski R, et al. **Eur J Orthod** 1996 Feb;18(1):77-80

SERIAL LEARNING

Self-instructional intervention for teaching generalized problem-solving within a functional task sequence. Hughes C, et al. **Am J Ment Retard** 1996 May;100(6):565-79

The item-order distinction and the generation effect: the importance of order information in long-term memory. Burns DJ. **Am J Psychol** 1996 Winter;109(4):567-80

A note of caution for clinicians using the Paced Auditory Serial Addition Task. Ward T. **Br J Clin Psychol** 1997 May; 36 (Pt 2):303-7

Immediate serial recall, word frequency, item identity and item position. Poirier M, et al. **Can J Exp Psychol** 1996 Dec;50(4):408-12

Children's memory of an occurrence of a repeated event: effects of age, repetition, and retention interval across three question types. Powell MB, et al. **Child Dev** 1996 Oct; 67(5):1988-2004

Seriation, conservation, and theory of mind abilities in individuals with autism, individuals with mental retardation, and normally developing children. Yirmiya N, et al. **Child Dev** 1996 Oct;67(5):2045-59

Two forms of sequential implicit learning. Seger CA. **Conscious Cogn** 1997 Mar;6(1):108-31

The method of stimulated serial repetitions of gymnastic exercises in therapy of autistic children [letter] Szot Z. **J Autism Dev Disord** 1997 Jun;27(3):341-2

The discrimination of relative frequency by pigeons. Machado A, et al. **J Exp Anal Behav** 1997 Jan;67(1):11-41

Serial recall of poor readers in two presentation modalities: combined effects of phonological similarity and word length. Irausquin RS, et al. **J Exp Child Psychol** 1997 Jun; 65(3):342-69

Reinforced variability decreases with approach to reinforcers. Cherot C, et al. **J Exp Psychol Anim Behav Process** 1996 Oct;22(4):497-508

Retroactive interference effects of surprising reward omission on serial spatial memory. Terry WS. **J Exp Psychol Anim Behav Process** 1996 Oct;22(4):472-9

Perceptual repetition blindness effects. Hochhaus L, et al. **J Exp Psychol Hum Percept Perform** 1996 Apr;22(2):355-66

Detection of Kanji words in a rapid serial visual presentation task. Kikuchi T. **J Exp Psychol Hum Percept Perform** 1996 Apr;22(2):332-41

Word-frequency effects on short-term memory tasks: evidence for a redintegration process in immediate serial recall. Hulme C, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1217-32

Irrelevant speech and irrelevant tones: the relative importance of speech to the irrelevant speech effect. LeCompte DC, et al. **J Exp Psychol Learn Mem Cogn** 1997 Mar;23(2):472-83

Irrelevant speech, serial rehearsal, and temporal distinctiveness: a new approach to the irrelevant speech effect. LeCompte DC. **J Exp Psychol Learn Mem Cogn** 1996 Sep;22(5):1154-65

Spatial attention and implicit sequence learning: evidence for independent learning of spatial and nonspatial sequences. Mayr U. **J Exp Psychol Learn Mem Cogn** 1996 Mar; 22(2):350-64

On the generality of the revelation effect. Westerman DL, et al. **J Exp Psychol Learn Mem Cogn** 1996 Sep; 22(5):1147-53

Memories out of order: thought suppression and the disturbance of sequence memory. Wegner DM, et al. **J Pers Soc Psychol** 1996 Oct;71(4):680-91

Transfer to changed serial position in a task of tracking a sequence of light stimuli. Inui N. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):799-802

Simple reaction time and perception of temporal order: dissociations and hypotheses. Jaśkowski P. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):707-30 (110 ref.)

Auditory and visual recall of forward and backward digit spans. Powell DH, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1099-103

Evaluation of a simulation of human performance on random-digit generation: measures of concept and redundancy. Spatt J. **Percept Mot Skills** 1996 Aug; 83(1):319-22

Ganzfeld perceptual field and gender effects on short-term memory as a function of rate of digit presentation. Vitulli WF, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1331-40

The moderating influence of physical fitness on age gradients in vigilance and serial choice responding tasks. Bunce DJ, et al. **Psychol Aging** 1996 Dec;11(4):671-82

Secondary-task effects on sequence learning. Heuer H, et al. **Psychol Res** 1996;59(2):119-33

Language production and serial order: a functional analysis and a model. Dell GS, et al. **Psychol Rev** 1997 Jan; 104(1):123-47

Direction of report in spatial and verbal serial short-term memory. Farrand P, et al. **Q J Exp Psychol A** 1996 Feb; 49(1):140-58

Serial order in spatial immediate memory. Smyth MM, et al. **Q J Exp Psychol A** 1996 Feb;49(1):159-77

Serial position effects in visual short-term memory for words and abstract spatial patterns. Korsnes MS, et al. **Scand J Psychol** 1996 Mar;37(1):62-73

DRUG EFFECTS

Dissociable effects of AMPA-induced lesions of the vertical limb diagonal band of Broca on performance of the 5-choice serial reaction time task and on acquisition of a conditional visual discrimination. Muir JL, et al. **Behav Brain Res** 1996 Dec;82(1):31-44

Primacy and recency effects in rhesus monkeys (Macaca mulatta) using a serial probe recognition task: II. Effects of atropine sulfate. Castro CA. **Behav Neurosci** 1997 Aug; 111(4):676-82

Auditory event-related potentials, auditory digit span, and clinical symptoms in chronic schizophrenic men on neuroleptic medication. Stefánsson SB, et al. **Biol Psychiatry** 1996 Jul 1;40(1):19-27

PHYSIOLOGY

The serial organisation of behaviour by non-human primates; an evaluation of experimental paradigms. De Lillio C. **Behav Brain Res** 1996 Nov;81(1-2):1-17 (65 ref.)

Dissociable effects of AMPA-induced lesions of the vertical limb diagonal band of Broca on performance of the 5-choice serial reaction time task and on acquisition of a conditional visual discrimination. Muir JL, et al. **Behav Brain Res** 1996 Dec;82(1):31-44

Role of the striatum, cerebellum, and frontal lobes in the learning of a visuomotor sequence. Doyon J, et al. **Brain Cogn** 1997 Jul;34(2):218-45

Serial learning in the pigeon in a free correction procedure: role of reinforcing values. Castéras V, et al. **C R Acad Sci III** 1997 May;320(5):375-84

The effects of human hippocampal resection on the serial position curve. Hermann BP, et al. **Cortex** 1996 Jun; 32(2):323-34

Analogical transfer is effective in a serial reaction time task in Parkinson's disease: evidence for a dissociable form of sequence learning. Dominey PF, et al. **Neuropsychologia** 1997 Jan;35(1):1-9

Simple reaction times and timing of serial reactions of middle-aged and old men. Inui N. **Percept Mot Skills** 1997 Feb;84(1):219-25

SERINE

Dopamine DRD2/Cys311 is not associated with chronic schizophrenia. Crawford F, et al. **Am J Med Genet** 1996 Sep 20;67(5):483-4

No evidence for association of dopamine D2 receptor variant (Ser311/Cys311) with major psychosis. Sasaki T, et al. **Am J Med Genet** 1996 Jul 26;67(4):415-7

In vitro phosphorylation of human immunodeficiency virus type 1 Tat protein by protein kinase C: evidence for the phosphorylation of amino acid residue serine-46. Holmes AM. **Arch Biochem Biophys** 1996 Nov 1;335(1):8-12

Asp-49 is not an absolute prerequisite for the enzymic activity of low-M(r) phospholipases A2: purification, characterization and computer modelling of an enzymically active Ser-49 phospholipase A2, ecarpholin S, from the venom of Echis carinatus sochureki (saw-scaled viper). Polgár J, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):961-8

Functional analysis of phosphorylation at serine 532 of human c-Myb by MAP kinase. Vorbrueggen G, et al. **Biol Chem** 1996 Nov;377(11):721-30

Interleukin-2 (IL-2) upregulates BAG-1 gene expression through serine-rich region within IL-2 receptor beta c chain. Adachi M, et al. **Blood** 1996 Dec 1;88(11):4118-23

Mitosis-specific phosphorylation of smooth muscle regulatory light chain of myosin II at Ser-1 and/or -2 and Thr-9 in sea urchin egg extract. Totsukawa G, et al. **Cell Struct Funct** 1996 Dec;21(6):475-82

Osteogenesis imperfecta phenotypes resulting from serine for glycine substitutions in the alpha2(I) collagen chain. Nuytinck L, et al. **Eur J Hum Genet** 1997 May-Jun; 5(3):161-7

Ser644 is important for catalytic activity but is not involved in cAMP-dependent phosphorylation of yeast 6-phosphofructo-2-kinase. Kessler R, et al. **FEBS Lett** 1996 Oct 21;395(2-3):225-7

Absence of association between the Gly40-->Ser mutation in the human glucagon receptor and Japanese patients with non-insulin-dependent diabetes mellitus or impaired glucose tolerance. Odawara M, et al. **Hum Genet** 1996 Dec; 98(6):636-9

Ser72Pro active-site disease mutation in human lysosomal aspartylglucosaminidase: abnormal intracellular processing and evidence for extracellular activation. Peltola M, et al. **Hum Mol Genet** 1996 Jun;5(6):737-43

epr, which encodes glycylglycine endopeptidase resistance, is homologous to femAB and affects serine content of peptidoglycan cross bridges in Staphylococcus capitis and Staphylococcus aureus. Sugai M, et al. **J Bacteriol** 1997 Jul;179(13):4311-8

Structure-function relationships among wild-type variants of Staphylococcus aureus beta-lactamase: importance of amino acids 128 and 216. Voladri RK, et al. **J Bacteriol** 1996 Dec;178(24):7248-53

Substitutions of Ser for Asn-163 and Pro for Leu-264 are important for stabilization of lipase from Pseudomonas aeruginosa. Shinkai A, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):915-21

Evidence that Ser775 in the alpha subunit of the Na,K-ATPase is a residue in the cation binding pocket. Blostein R, et al. **J Biol Chem** 1997 Oct 3;272(40):24987-93

Phosphorylation of protein kinase C-alpha on serine 657 controls the accumulation of active enzyme and contributes to its phosphatase-resistant state [published erratum appears in J Biol Chem 1997 May 16;272(20):13458] Bornancin F, et al. **J Biol Chem** 1997 Feb 7;272(6):3544-9

Sequential modification of serines 621 and 624 in the Raf-1 carboxyl terminus produces alterations in its electrophoretic mobility. Ferrier AF, et al. **J Biol Chem** 1997 Jan 24;272(4):2136-42

Phosphorylation of serine 256 is required for cAMP-dependent regulatory exocytosis of the aquaporin-2 water channel. Fushimi K, et al. **J Biol Chem** 1997 Jun 6;272(23):14800-4

The conserved serine-tyrosine dipeptide in Leishmania donovani hypoxanthine-guanine phosphoribosyltransferase is essential for catalytic activity. Jardim A, et al. **J Biol Chem** 1997 Apr 4;272(14):8967-73

The type II transforming growth factor-beta receptor autophosphorylates not only on serine and threonine but also on tyrosine residues. Lawler S, et al. **J Biol Chem** 1997 Jun 6;272(23):14850-9

Conversion of serine to aspartate imitates phosphorylation-induced changes in the structure and function of microtubule-associated protein tau. Léger J, et al. **J Biol Chem** 1997 Mar 28;272(13):8441-6

Site-directed mutagenesis of nm23-H1. Mutation of proline 96 or serine 120 abrogates its motility inhibitory activity upon transfection into human breast carcinoma cells. MacDonald NJ, et al. **J Biol Chem** 1996 Oct 11; 271(41):25107-16

Phosphorylation of protein-tyrosine phosphatase PTP-1B on identical sites suggests activation of a common signaling pathway during mitosis and stress response in mammalian cells. Shifrin VI, et al. **J Biol Chem** 1997 Jan 31; 272(5):2957-62

Varicella-zoster virus Fc receptor gE glycoprotein: serine/threonine and tyrosine phosphorylation of monomeric and dimeric forms. Olson JK, et al. **J Virol** 1997 Jan;71(1):110-9

A single amino acid change in the glycoprotein of lymphocytic choriomeningitis virus is associated with the

ability to cause growth hormone deficiency syndrome. Teng MN, et al. **J Virol** 1996 Dec;70(12):8438–43

Negative regulation of Raf–1 by phosphorylation of serine 621. Mischak H, et al. **Mol Cell Biol** 1996 Oct; 16(10):5409–18

Phosphorylation of human progesterone receptor by cyclin–dependent kinase 2 on three sites that are authentic basal phosphorylation sites in vivo. Zhang Y, et al. **Mol Endocrinol** 1997 Jun;11(6):823–32

Clozapine response and the 5HT2C Cys23Ser polymorphism. Malhotra AK, et al. **Neuroreport** 1996 Sep 2;7(13):2100–2

A serine/arginine–rich nuclear matrix cyclophilin interacts with the C–terminal domain of RNA polymerase II. Bourquin JP, et al. **Nucleic Acids Res** 1997 Jun 1; 25(11):2055–61

Importance of acidic, proline/serine/threonine–rich, and GTP–binding regions in the major histocompatibility complex class II transactivator: generation of transdominant–negative mutants. Chin KC, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2501–6

Transgenic mice carrying the dominant rhodopsin mutation P347S: evidence for defective vectorial transport of rhodopsin to the outer segments. Li T, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14176–81

PEST sequences and regulation by proteolysis. Rechsteiner M, et al. **Trends Biochem Sci** 1996 Jul;21(7):267–71 (48 ref.)

Phosphorylation of the herpes simplex virus type 1 tegument protein VP22. Elliott G, et al. **Virology** 1996 Dec 1; 226(1):140–5

[Endogenous free D–aspartate and D–serine in mammals] Hashimoto A, et al. **Seikagaku** 1996 Aug;68(8):1458–62 (17 ref.) **(Jpn)**

ANALOGS & DERIVATIVES

Modulation by conagenin of inflammatory mediator productions in mice given 5–fluorouracil. Kawatsu M, et al. **Anticancer Res** 1997 Mar–Apr;17(2A):917–22

Improvement of intestinal toxicity of 5–fluorouracil by conagenin, a low molecular immunomodulator. Kawatsu M, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2937–41

The mechanism of high–yielding chiral syntheses catalysed by wild–type and mutant forms of aspartate aminotransferase. Contestabile R, et al. **Eur J Biochem** 1996 Aug 15;240(1):150–5

Synthesis of a novel glycosaminoglycan pentasaccharide serine having an N–acetylgalactosamine residue alpha–linked to the core linkage tetrasaccharide. Neumann KW, et al. **Glycoconj J** 1996 Dec;13(6):933–6

Novel actin depolymerizing macrolide aplyronine A. Saito S, et al. **J Biochem (Tokyo)** 1996 Sep;120(3):552–5

Characterization of a novel iodocyanopindolol and SM–11044 binding protein, which may mediate relaxation of depolarized rat colon tonus. Sugasawa T, et al. **J Biol Chem** 1997 Aug 22;272(34):21244–52

Epopromycins, novel cell wall synthesis inhibitors of plant protoplast produced by Streptomyces sp. NK04000. Tsuchiya K, et al. **Jpn J Antibiot** 1997 Mar;50(3):261–3

alpha–Methyl derivatives of serine–O–phosphate as novel, selective competitive metabotropic glutamate receptor antagonists. Thomas NK, et al. **Neuropharmacology** 1996 Jun;35(6):637–42

BIOSYNTHESIS

Glucose contribution to nucleic acid base synthesis in proliferating hepatoma cells: a glycine–biosynthesis–mediated pathway. Bismut H, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):761–7

Serine isotopmer analysis by 13C–NMR defines glycine–serine interconversion in situ in the renal proximal tubule. Cowin GJ, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):32–40

Modulation of glycine–serine interconversion by TCA and glycolytic intermediates in normoxic and hypoxic proximal tubules. Cowin GJ, et al. **Biochim Biophys Acta** 1997 Jan 10;1310(1):41–7

Methionine and serine formation in control and mutant human cultured fibroblasts: evidence for methyl trapping and characterization of remethylation defects. Fowler B, et al. **Pediatr Res** 1997 Jan;41(1):145–51

BLOOD

Serine–578 is a major phosphorylation locus in human plasma plasminogen. Wang H, et al. **Biochemistry** 1997 Jul 1; 36(26):8100–6

Comparison of leucine, serine and glycine transport across the ovine placenta. Geddie G, et al. **Placenta** 1996 Nov; 17(8):619–27

Eicosanoid and amino acid metabolism in transient acute psychoses with psychedelic symptoms. Fekkes D, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Apr; 54(4):261–4

CHEMISTRY

Structural changes leading to increased enzymatic activity in an engineered variant of Bacillus lentus subtilisin. Bott R, et al. **Adv Exp Med Biol** 1996;379:277–83

Ser–27, Tyr–10 and Tyr–7 in the alpha–chain of pig stomach H+,K(+)–ATPase as Ca(2+)–dependent phosphorylatable sites by intrinsic and extrinsic protein kinases. Togawa K, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):810–5

Serine–578 is a major phosphorylation locus in human plasma plasminogen. Wang H, et al. **Biochemistry** 1997 Jul 1; 36(26):8100–6

Solid–state REDOR NMR distance measurements at the ligand site of a bacterial chemotaxis membrane receptor. Wang J, et al. **Biochemistry** 1997 Feb 18;36(7):1699–703

Combined Fmoc–Alloc strategy for a general SPPS of phosphoserine peptides; preparation of phosphorylation–dependent tau antisera. Shapiro G, et al. **Bioorg Med Chem** 1997 Jan;5(1):147–56

Synthesis and 31P chemical shift identification of tripeptide active site models that represent human serum acetylcholinesterase covalently modified at serine by certain organophosphates. Thompson CM, et al. **Chem Res Toxicol** 1996 Dec;9(8):1325–32

Rarity of the Asn291Ser mutation of lipoprotein lipase gene in Japanese NIDDM patients. Arai K, et al. **Diabetes Res Clin Pract** 1997 Jan;34(3):181–2

Synthesis of a novel glycosaminoglycan pentasaccharide serine having an N–acetylgalactosamine residue alpha–linked to the core linkage tetrasaccharide. Neumann KW, et al. **Glycoconj J** 1996 Dec;13(6):933–6

Backbone—side–chain interactions in serine. Synthesis, crystal structure and solution conformation of a linear model peptide N–Boc–L–Ser–L–Phe–OCH3. Dey S, et al. **Int J Pept Protein Res** 1996 Sep;48(3):299–303

Bond–specific chemical cleavages of peptides and proteins with perfluoric acid vapors: novel peptide bond cleavages of glycyl–threonine, the amino side of serine residues and the carboxyl side of aspartic acid residues. Kawakami T, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):68–76

Functional mapping of the cytoplasmic region of intercellular adhesion molecule–3 reveals important roles for serine residues. Hayflick JS, et al. **J Biol Chem** 1997 Aug 29; 272(35):22207–14

Phosphorylation of CREB in ovine pars tuberalis is regulated both by cyclic AMP–dependent and cyclic AMP–independent mechanisms. McNulty S, et al. **J Neuroendocrinol** 1996 Aug;8(8):635–45

Monoclonal antibody PHF–9 recognizes phosphorylated serine 404 of tau protein and labels paired helical filaments. Zemlan FP, et al. **J Neurosci Res** 1996 Oct 1;46(1):90–7

Effects of grinding and humidification on the transformation of conglomerate to racemic compound in optically active drugs. Piyarom S, et al. **J Pharm Pharmacol** 1997 Apr; 49(4):384–9

The magnitude of the backbone conformational entropy change in protein folding. D'Aquino JA, et al. **Proteins** 1996 Jun;25(2):143–56

Substitution of serine or threonine at position 473 of tissue–type plasminogen activator increases its stability in plasma. Alibhai M, et al. **Thromb Haemost** 1996 Jan; 75(1):107–12

GENETICS

Effect of 347–serine mutation in apoprotein A–IV on plasma LDL cholesterol response to dietary fat. Jansen S, et al. **Arterioscler Thromb Vasc Biol** 1997 Aug;17(8):1532–8

Antagonist binding characteristics of the Ser311—>Cys variant of human dopamine D2 receptor in vivo and in vitro. Pohjalainen T, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):143–6

Mutational analysis of 26 residues of vaccinia DNA topoisomerase identifies Ser–204 as important for DNA binding and cleavage. Wang LK, et al. **Biochemistry** 1997 Jul 1;36(26):7944–50

A cysteine–3 to serine mutation of the G–protein Gi1 alpha abrogates functional activation by the alpha 2A–adrenoceptor but not interactions with the beta gamma complex. Wise A, et al. **Biochemistry** 1997 Sep 2; 36(35):10620–9

A phenylalanine–55 to serine amino–acid substitution in the human glycoprotein IX leucine–rich repeat is associated with Bernard–Soulier syndrome. Noris P, et al. **Br J Haematol** 1997 May;97(2):312–20

Hypothesis: glucagon receptor glycine to serine missense mutation contributes to one in 20 cases of essential hypertension. Morris BJ, et al. **Clin Exp Pharmacol Physiol** 1996 Dec;23(12):1035–7

Skeletal development in transgenic mice expressing a mutation at Gly574Ser of type II collagen. Maddox BK, et al. **Dev Dyn** 1997 Feb;208(2):170–7

Mutagenesis of two N–terminal Thr and five Ser residues in HslV, the proteolytic component of the ATP–dependent HslVU protease. Yoo SJ, et al. **FEBS Lett** 1997 Jul 21; 412(1):57–60

Suppression analysis reveals a functional difference between the serines in positions two and five in the consensus sequence of the C–terminal domain of yeast RNA polymerase II. Yuryev A, et al. **Genetics** 1996 Jun; 143(2):661–71

A glycine (415)–to–serine substitution results in impaired secretion and decreased thermal stability of type III procollagen in a patient with Ehlers–Danlos syndrome type IV. Anderson DW, et al. **Hum Mutat** 1997;9(1):62–3

Serine for glycine substitutions in the C–terminal third of the alpha 1(I) chain of collagen I in five patients with nonlethal osteogenesis imperfecta. Lund AM, et al. **Hum Mutat** 1997;9(4):378–82

Complete deficiency of plasma lecithin–cholesterol acyltransferase (LCAT) activity due to a novel homozygous mutation (Gly–30–Ser) in the LCAT gene. Owen JS, et al. **Hum Mutat** 1996;8(1):79–82

Serine–27–phenylalanine mutation within the peripherin/RDS gene in a family with cone dystrophy. Fishman GA, et al. **Ophthalmology** 1997 Feb; 104(2):299–306

A single serine residue controls the cation dependence of substrate transport by the rat serotonin transporter. Sur C, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7639–44

Negative effect of sequential serine codons on expression of foreign genes in Escherichia coli. Bula C, et al. **Protein Expr Purif** 1996 Feb;7(1):92–103

Dopamine D3 receptor Gly9/Ser9 polymorphism and schizophrenia: no increased frequency of homozygosity in German familial cases. Rietschel M, et al. **Schizophr Res** 1996 May;20(1–2):181–6

METABOLISM

The origin and turnover of D–serine in brain. Dunlop DS, et al. **Biochem Biophys Res Commun** 1997 Jun 9; 235(1):26–30

Depletion of cerebral D–serine in non–ketotic hyperglycinemia: possible involvement of glycine cleavage system in control of endogenous D–serine. Iwama H, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):793–6

Identification of serine 380 as the major site of autophosphorylation of Xenopus pp90rsk. Vik TA, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):398–402

Roles of the conserved serines of metallothionein in cadmium binding. Emoto T, et al. **Biochem Genet** 1996 Jun; 34(5–6):239–51

Phospholipid metabolism of serine in Plasmodium–infected erythrocytes involves phosphatidylserine and direct serine decarboxylation. Elabbadi N, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):435–45

Multiple C–terminal serine phosphorylation accompanies both protein kinase C–dependent and –independent activation of cytosolic 85 kDa phospholipase A2 in macrophages. Wijkander J, et al. **Biochem J** 1997 Jul 15; 325 (Pt 2):405–10

Metabolic control analysis of purine biosynthesis from serine in Molt–4 cells. Bolton MC, et al. **Biochem Soc Trans** 1996 Aug;24(3):483S

Partial activation of muscle phosphorylase by replacement of serine 14 with acidic residues at the site of regulatory phosphorylation. Buchbinder JL, et al. **Biochemistry** 1997 Jul 1;36(26):8039–44

Peptide, disulfide, and glycosylation mapping of recombinant human thrombopoietin from ser1 to Arg246. Hoffman RC, et al. **Biochemistry** 1996 Nov 26;35(47):14849–61

Posttranslational modification of oat phytochrome A: phosphorylation of a specific serine in a multiple serine cluster. Lapko VN, et al. **Biochemistry** 1997 Aug 26; 36(34):10595–9

Phosphorylation of serine 392 stabilizes the tetramer formation of tumor suppressor protein p53. Sakaguchi K, et al. **Biochemistry** 1997 Aug 19;36(33):10117–24

Mutational analysis of 26 residues of vaccinia DNA topoisomerase identifies Ser–204 as important for DNA binding and cleavage. Wang LK, et al. **Biochemistry** 1997 Jul 1;36(26):7944–50

Mapping of a regulatory important site for protein kinase C phosphorylation in the N–terminal domain of annexin II. Jost M, et al. **Biochim Biophys Acta** 1996 Oct 11; 1313(3):283–9

The inhibitory effect of staurosporine on insulin action is prevented by okadaic acid. Evidence for an important role of serine/threonine phosphorylation in eliciting insulin–like effects. Rondinone CM, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):49–56

Differential contribution of two serine residues of wild type and constitutively active beta2–adrenoceptors to the interaction with beta2–selective agonists. Kikkawa H, et al. **Br J Pharmacol** 1997 Jul;121(6):1059–64

Serine/threonine protein phosphatases and a protein phosphatase 1 inhibitor from Neurospora crassa. Zapella PD, et al. **Braz J Med Biol Res** 1996 May;29(5):599–604

Positive and negative regulation of type II TGF–beta receptor signal transduction by autophosphorylation on multiple serine residues. Luo K, et al. **EMBO J** 1997 Apr 15;16(8):1970–81

A single serine residue at position 375 of VP16 is critical for complex assembly with Oct–1 and HCF and is a target of phosphorylation by casein kinase II. O'Reilly D, et al. **EMBO J** 1997 May 1;16(9):2420–30

The 'polysemous' codon—a codon with multiple amino acid assignment caused by dual specificity of tRNA identity. Suzuki T, et al. **EMBO J** 1997 Mar 3;16(5):1122–34

Signal transducer and activator of transcription–3 serine phosphorylation by insulin is mediated by a Ras/Raf/MEK–dependent pathway. Ceresa BP, et al. **Endocrinology** 1997 Oct;138(10):4131–7

The role of serine/threonine phosphorylation in hematopoietic cytokine receptor signal transduction. Mufson RA. **FASEB J** 1997 Jan;11(1):37–44 (56 ref.)

Drosophila alcohol dehydrogenase: evaluation of Ser139 site–directed mutants. Cols N, et al. **FEBS Lett** 1997 Aug 18;413(2):191–3

Identification of Ser–1275 and Ser–1309 as autophosphorylation sites of the insulin receptor. Al–Hasani H, et al. **FEBS Lett** 1997 Jan 2;400(1):65–70

Casein kinase II phosphorylates Ser468 in the PEST domain

of the Drosophila IkappaB homologue cactus. Packman LC, et al. **FEBS Lett** 1997 Jan 2;400(1):45–50

p42 MAPK phosphorylates 80 kDa MARCKS at Ser–113. Schönwasser DC, et al. **FEBS Lett** 1996 Oct 14;395(1):1–5

Identification of Raf–1 Ser621 kinase activity from NIH 3T3 cells as AMP–activated protein kinase. Sprenkle AB, et al. **FEBS Lett** 1997 Feb 24;403(3):254–8

Cha4p of Saccharomyces cerevisiae activates transcription via serine/threonine response elements. Holmberg S, et al. **Genetics** 1996 Oct;144(2):467–78

Comparison of the biological activity of synthetic N–acylated asparagine or serine linked monosaccharide lipid A analogs. Shimizu T, et al. **Immunobiology** 1996;196(4):321–31

SRPK1 and Clk/Sty protein kinases show distinct substrate specificities for serine/arginine–rich splicing factors. Colwill K, et al. **J Biol Chem** 1996 Oct 4;271(40):24569–75

Phosphorylation of Na_3K–ATPase by protein kinase C at Ser18 occurs in intact cells but does not result in direct inhibition of ATP hydrolysis. Feschenko MS, et al. **J Biol Chem** 1997 Jul 11;272(28):17726–33

Serine phosphorylation within a concise amino–terminal domain in nuclear respiratory factor 1 enhances DNA binding. Gugneja S, et al. **J Biol Chem** 1997 Jul 25; 272(30):18732–9

The protein kinase CK2 site (Ser111/112) enhances recognition of the simian virus 40 large T–antigen nuclear localization sequence by importin. Hübner S, et al. **J Biol Chem** 1997 Jul 4;272(27):17191–5

Identification of serine 643 of protein kinase C–delta as an important autophosphorylation site for its enzymatic activity. Li W, et al. **J Biol Chem** 1997 Sep 26; 272(39):24550–5

Stress, apoptosis, and mitosis induce phosphorylation of human keratin 8 at Ser–73 in tissues and cultured cells. Liao J, et al. **J Biol Chem** 1997 Jul 11;272(28):17565–73

Brain–derived neurotrophic factor binding to the p75 neurotrophin receptor reduces TrkA signaling while increasing serine phosphorylation in the TrkA intracellular domain. MacPhee IJ, et al. **J Biol Chem** 1997 Sep 19; 272(38):23547–51

Ligand–induced desensitization of the human CXC chemokine receptor–2 is modulated by multiple serine residues in the carboxyl–terminal domain of the receptor. Mueller SG, et al. **J Biol Chem** 1997 Mar 28; 272(13):8207–14

Phosphorylation of serine residues 3, 6, 10, and 13 distinguishes membrane anchored from soluble glutamic acid decarboxylase 65 and is restricted to glutamic acid decarboxylase 65alpha [published erratum appears in J Biol Chem 1997 Jul 4;272(27):17246] Namchuk M, et al. **J Biol Chem** 1997 Jan 17;272(3):1548–57

Dephosphorylation of serine 3 regulates nuclear translocation of cofilin. Nebl G, et al. **J Biol Chem** 1996 Oct 18; 271(42):26276–80

The regulatory Ser262 of microtubule–associated protein tau is phosphorylated by phosphorylase kinase. Paudel HK. **J Biol Chem** 1997 Jan 17;272(3):1777–85

Target–dependent effect of phosphorylation on the DNA binding activity of the TAL1/SCL oncoprotein. Prasad KS, et al. **J Biol Chem** 1997 Apr 25;272(17):11457–62

The involvement of serine 175 and alanine 185 of cytochrome b of Rhodobacter sphaeroides cytochrome bc1 complex in interaction with iron–sulfur protein. Tian H, et al. **J Biol Chem** 1997 Sep 19;272(38):23722–8

SV40 large tumor antigen nuclear import is regulated by the double–stranded DNA–dependent protein kinase site (serine 120) flanking the nuclear localization sequence. Xiao CY, et al. **J Biol Chem** 1997 Aug 29;272(35):22191–8

CDC2–related kinase PITALRE phosphorylates pRb exclusively on serine and is widely expressed in human tissues. De Luca A, et al. **J Cell Physiol** 1997 Aug; 172(2):265–73

Proliferation of hepatic stellate cells is inhibited by phosphorylation of CREB on serine 133. Houglum K, et al. **J Clin Invest** 1997 Mar 15;99(6):1322–8

Human lysosomal acid lipase/cholesteryl ester hydrolase and human gastric lipase: identification of the catalytically active serine, aspartic acid, and histidine residues. Lohse P, et al. **J Lipid Res** 1997 May;38(5):892–903

Mutagenesis of ser41 to ala inhibits the association of GAP–43 with the membrane skeleton of GAP–43–deficient PC12B cells: effects on cell adhesion and the composition of neurite cytoskeleton and membrane. Meiri KF, et al. **J Neurobiol** 1996 Feb;29(2):213–32

In vivo evidence for the link between L– and D–serine metabolism in rat cerebral cortex. Takahashi K, et al. **J Neurochem** 1997 Sep;69(3):1286–90

Formation of D–serine from L–phosphoserine in brain synaptosomes. Wood PL, et al. **J Neurochem** 1996 Oct; 67(4):1485–90

Modulation of actin filament behavior by GAP–43 (neuromodulin) is dependent on the phosphorylation status of serine 41, the protein kinase C site. He Q, et al. **J Neurosci** 1997 May 15;17(10):3515–24

The N–terminal region of hepatitis C virus–encoded NS5A is important for NS4A–dependent phosphorylation. Asabe SI, et al. **J Virol** 1997 Jan;71(1):790–6

The human cytomegalovirus UL97 protein is a protein kinase that autophosphorylates on serines and threonines. He Z, et al. **J Virol** 1997 Jan;71(1):405–11

Importance of the Ser–132 phosphorylation site in cell transformation and apoptosis induced by the adenovirus type 5 E1A protein. Whalen SG, et al. **J Virol** 1996 Aug; 70(8):5373–83

Studies on phospholipid biosynthesis in hepatocytes from alcoholic rats by using radiolabeled exogenous precursors. Carrasco MP, et al. **Lipids** 1996 Apr;31(4):393–7

Phosphorylation of Raf–1 serine 338–serine 339 is an essential regulatory event for Ras–dependent activation and biological signaling. Diaz B, et al. **Mol Cell Biol** 1997 Aug; 17(8):4509–16

The cytoplasmic domain of Alzheimer's amyloid precursor protein is phosphorylated at Thr654, Ser655, and Thr668 in adult rat brain and cultured cells. Oishi M, et al. **Mol Med** 1997 Feb;3(2):111–23

Ethanol potentiates the uptake of [14C]serine into phosphatidylserine by base–exchange reaction in NG 108–15 cells. Rodríguez FD, et al. **Neurochem Res** 1996 Mar;21(3):305–11

Electroconvulsive shock increases the phosphorylation of cyclic AMP response element binding protein at Ser–133 in rat hippocampus but not in cerebellum. Jeon SH, et al. **Neuropharmacology** 1997 Mar;36(3):411–4

The neural adhesion molecule L1 is phosphorylated on tyrosine and serine residues. Heiland PC, et al. **Neuroreport** 1996 Nov 4;7(15–17):2675–8

Mapping of Stat3 serine phosphorylation to a single residue (727) and evidence that serine phosphorylation has no influence on DNA binding of Stat1 and Stat3. Wen Z, et al. **Nucleic Acids Res** 1997 Jun 1;25(11):2062–7

Monoclonal antibodies specific for underphosphorylated retinoblastoma protein identify a cell cycle regulated phosphorylation site targeted by CDKs. Zarkowska T, et al. **Oncogene** 1997 Jan 16;14(2):249–54

Serine and glycine metabolism in hepatocytes from mid gestation fetal lambs. Narkewicz MR, et al. **Pediatr Res** 1996 Jun;39(6):1085–90

Phosphorylation of serine–15 of maize leaf sucrose synthase. Occurrence in vivo and possible regulatory significance. Huber SC, et al. **Plant Physiol** 1996 Oct;112(2):793–802

Phosphorylation by protein kinase C of serine–23 of the alpha–1 subunit of rat Na+,K(+)–ATPase affects its conformational equilibrium. Logvinenko NS, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9132–7

Free D–aspartate and D–serine in the mammalian brain and periphery. Hashimoto A, et al. **Prog Neurobiol** 1997 Jul; 52(4):325–53 (351 ref.)

Design of a leucine zipper coiled coil stabilized 1.4 kcal mol–1 by phosphorylation of a serine in the e position. Szilák L, et al. **Protein Sci** 1997 Jun;6(6):1273–83

Serine/threonine dephosphorylation may be involved in tyrosine phosphorylation: a new mode of signal transduction in platelets. Artçanuthurry V, et al. **Semin Thromb Hemost** 1996;22(4):317–26

Yeast protein serine/threonine phosphatases: multiple roles and diverse regulation. Stark MJ. **Yeast** 1996 Dec; 12(16):1647–75 (200 ref.)

PHARMACOLOGY

Serine phosphorylation of Cbl induced by phorbol ester enhances its association with 14–3–3 proteins in T cells via a novel serine–rich 14–3–3–binding motif. Liu YC, et al. **J Biol Chem** 1997 Apr 11;272(15):9979–85

Characterization of 5,7–dichlorokynurenate–insensitive D–[3H]serine binding to synaptosomal fraction isolated from rat brain tissues. Matoba M, et al. **J Neurochem** 1997 Jul;69(1):399–405

D–serine modulates the NMDA receptor/nitric oxide/cGMP pathway in the rat cerebellum during in vivo microdialysis. Fedele E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan;355(1):43–7

Inhibition of AMPA receptor–stimulated 57Co2+ influx by D– and L–2–amino–4–phosphonobutanoic acid (D– and L–AP4) and L–serine–O–phosphate (L–SOP) in cultured cerebellar granule cells. Toms NJ, et al. **Neuropharmacology** 1997 Mar;36(3):335–43

Altered responsiveness of medullary depressor neurones to L–glutamate and D–serine in SHR rats. Kapoor V, et al. **Neuroreport** 1996 May 31;7(8):1409–12

The antiepileptic agent gabapentin (Neurontin) possesses anxiolytic–like and antinociceptive actions that are reversed by D–serine. Singh L, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):1–9

PHYSIOLOGY

Mechanistic roles of tyrosine 149 and serine 124 in UDP–galactose 4–epimerase from Escherichia coli. Liu Y, et al. **Biochemistry** 1997 Sep 2;36(35):10675–84

Roles of aspartic acid–181 and serine–222 in intermediate formation and hydrolysis of the mammalian protein–tyrosine–phosphatase PTP1. Lohse DL, et al. **Biochemistry** 1997 Apr 15;36(15):4568–75

Serine 752 in the cytoplasmic domain of the beta 3 integrin subunit is not required for alpha v beta 3 postreceptor signaling events. Kieffer N, et al. **Cell Adhes Commun** 1996 Jul;4(1):25–39

A single serine residue confers tetrodotoxin insensitivity on the rat sensory–neuron–specific sodium channel SNS. Sivilotti L, et al. **FEBS Lett** 1997 Jun 2;409(1):49–52

Determination of the active sites serine of the poly (3–hydroxybutyrate) depolymerases of Pseudomonas lemoignei (PhaZ5) and of Alcaligenes faecalis. Shinohe T, et al. **FEMS Microbiol Lett** 1996 Jul 15;141(1):103–9

Functional role of amino–terminal serine16 and serine27 of G alphaZ in receptor and effector coupling. Ho MK, et al. **J Neurochem** 1997 Jun;68(6):2514–22

D–serine as a neuromodulator: regional and developmental localizations in rat brain glia resemble NMDA receptors. Schell MJ, et al. **J Neurosci** 1997 Mar 1;17(5):1604–15

Alteration of a single serine in the basic domain of the Epstein–Barr virus ZEBRA protein separates its functions of transcriptional activation and disruption of latency. Francis AL, et al. **J Virol** 1997 Apr;71(4):3054–61

THERAPEUTIC USE

Light–dependent oxygen consumption in bacteriochlorophyll–serine–treated melanoma tumors: on–line determination using a tissue–inserted oxygen microsensor. Zilberstein J, et al. **Photochem Photobiol** 1997 Jun;65(6):1012–9

Serine–enhanced restoration of 2–methoxyethanol–induced dysmorphogenesis in the rat embryo and near–term fetus. Sleet RB, et al. **Toxicol Appl Pharmacol** 1997 Aug; 145(2):415–24

SERINE ALDOLASE see **SERINE HYDROXYMETHYLTRANSFERASE**

SERINE DEAMINASE see **SERINE DEHYDRATASE**

SERINE DEHYDRATASE

BIOSYNTHESIS

Effects of insulin, epinephrine, and glucose on regulation of transcription of the serine dehydratase gene in newborn dogs. Feng BC, et al. **Biochem Mol Med** 1996 Apr; 57(2):91–6

Recovery of mRNA expression of tryptophan 2,3–dioxygenase and serine dehydratase in long–term cultures of primary rat hepatocytes. Mizuguchi T, et al. **J Biochem (Tokyo)** 1996 Sep;120(3):511–7

CHEMISTRY

Sequence of Escherichia coli D–serine dehydratase. Location of the pyridoxal–phosphate binding site. Schiltz E, et al. **FEBS Lett** 1981 Nov 2;134(1):57–62

GENETICS

Cloning and expression of the two genes coding for L–serine dehydratase from Peptostreptococcus asaccharolyticus: relationship of the iron–sulfur protein to both L–serine dehydratases from Escherichia coli. Hofmeister AE, et al. **J Bacteriol** 1997 Aug;179(15):4937–41

SERINE HYDROXYMETHYLASE see **SERINE HYDROXYMETHYLTRANSFERASE**

SERINE HYDROXYMETHYLTRANSFERASE

BIOSYNTHESIS

Isolation and characterisation of human genomic sequences encoding cytosolic serine hydroxymethyltransferase. Chave KJ, et al. **Biochem Soc Trans** 1997 Feb;25(1):53S

MetR–mediated repression of the glyA gene in Escherichia coli. Lorenz E, et al. **FEMS Microbiol Lett** 1996 Nov 1; 144(2–3):229–33

CHEMISTRY

Importance of the amino terminus in maintenance of oligomeric structure of sheep liver cytosolic serine hydroxymethyltransferase. Jagath JR, et al. **Eur J Biochem** 1997 Jul 1;247(1):372–9

Structural studies on folding intermediates of serine hydroxymethyltransferase using fluorescence resonance energy transfer. Cai K, et al. **J Biol Chem** 1996 Nov 1; 271(44):27311–20

GENETICS

Isolation and characterisation of human genomic sequences encoding cytosolic serine hydroxymethyltransferase. Chave KJ, et al. **Biochem Soc Trans** 1997 Feb;25(1):53S

The GLY1 gene of Saccharomyces cerevisiae encodes a low–specific L–threonine aldolase that catalyzes cleavage of L–allo–threonine and L–threonine to glycine––expression of the gene in Escherichia coli and purification and characterization of the enzyme. Liu JQ, et al. **Eur J Biochem** 1997 Apr 15;245(2):289–93

Cooperative MetR binding in the Escherichia coli glyA control region. Lorenz E, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):147–52

Nucleotide sequence, chromosome localization, and evolutionary conservation of a serine hydroxymethyltransferase–processed pseudogene. Devor EJ, et al. **Hum Hered** 1997 May–Jun;47(3):125–30

L–allo–threonine aldolase from Aeromonas jandaei DK–39: gene cloning, nucleotide sequencing, and identification of the pyridoxal 5'–phosphate–binding lysine residue by site–directed mutagenesis. Liu JQ, et al. **J Bacteriol** 1997 Jun;179(11):3555–60

Molecular cloning, characterization, and regulation of the

human mitochondrial serine hydroxymethyltransferase gene. Stover PJ, et al. **J Biol Chem** 1997 Jan 17; 272(3):1842–8

Site-directed mutagenesis techniques in the study of Escherichia coli serine hydroxymethyltransferase. Iurescia S, et al. **Protein Expr Purif** 1996 May;7(3):323–8

ISOLATION & PURIFICATION

Purification and characterization of L-allo-threonine aldolase from Aeromonas jandaei DK-39. Kataoka M, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):245–8

Purification of folate-dependent enzymes from rabbit liver. Schirch V. **Methods Enzymol** 1997;281:146–61

METABOLISM

Role of cytosolic serine hydroxymethyltransferase in one-carbon metabolism in Neurospora crassa. Jeong SS, et al. **Arch Biochem Biophys** 1996 Nov 15;335(2):333–41

The GLY1 gene of Saccharomyces cerevisiae encodes a low-specific L-threonine aldolase that catalyzes cleavage of L-allo-threonine and L-threonine to glycine—expression of the gene in Escherichia coli and purification and characterization of the enzyme. Liu JQ, et al. **Eur J Biochem** 1997 Apr 15;245(2):289–93

Identification of Saccharomyces cerevisiae GLY1 as a threonine aldolase: a key enzyme in glycine biosynthesis. Monschau N, et al. **FEMS Microbiol Lett** 1997 May 1; 150(1):55–60

Structural studies on folding intermediates of serine hydroxymethyltransferase using fluorescence resonance energy transfer. Cai K, et al. **J Biol Chem** 1996 Nov 1; 271(44):27311–20

The role of His-134, -147, and -150 residues in subunit assembly, cofactor binding, and catalysis of sheep liver cytosolic serine hydroxymethyltransferase. Jagath JR, et al. **J Biol Chem** 1997 Sep 26;272(39):24355–62

13C nuclear magnetic resonance detection of interactions of serine hydroxymethyltransferase with C1-tetrahydrofolate synthase and glycine decarboxylase complex activities in Arabidopsis. Prabhu V, et al. **Plant Physiol** 1996 Sep; 112(1):207–16

SERINE PHOSPHATE see **PHOSPHOSERINE**

SERINE PHOSPHOGLYCERIDES see **PHOSPHATIDYLSERINES**

SERINE PROTEASE INHIBITORS see **SERINE PROTEINASE INHIBITORS**

SERINE PROTEASES see **SERINE PROTEINASES**

SERINE PROTEINASE ANTAGONISTS see **SERINE PROTEINASE INHIBITORS**

SERINE PROTEINASE INHIBITORS

see related
SERPINS

Alpha-1-proteinase inhibitor prolongs small intestinal graft preservation and survival. Yang R, et al. **J Pediatr Surg** 1996 Aug;31(8):1052–5

Immunochemical and functional properties of biliary alpha-1-antitrypsin. Janciauskiene S, et al. **Scand J Clin Lab Invest** 1996 Nov;56(7):597–608

Anti-thrombotic effect of a PAI-1 inhibitor in rats given endotoxin. Abrahamsson T, et al. **Thromb Haemost** 1996 Jan;75(1):118–26

ADMINISTRATION & DOSAGE

High dose of intravenous antithrombin III without heparin in the treatment of disseminated intravascular coagulation and organ failure in four children. Fuse S, et al. **Am J Hematol** 1996 Sep;53(1):18–21

Novel recombinant serpin, LEX-032, attenuates myocardial reperfusion injury in cats. Delyani JA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H881–7

Influence of the route of allergen administration and genetic background on the murine allergic pulmonary response. Zhang Y, et al. **Am J Respir Crit Care Med** 1997 Feb; 155(2):661–9

Inhibition of coronary restenosis by antithrombin III in atherosclerotic swine. Ali MN, et al. **Coron Artery Dis** 1996 Nov;7(11):851–61

Transient interruption of arterial thrombosis by inhibition of factor Xa results in long-term antithrombotic effects in baboons. Kotzé HF, et al. **Thromb Haemost** 1997 Jun; 77(6):1137–42

Effects of a highly selective synthetic inhibitor of plasma kallikrein on disseminated intravascular coagulation in rats. Katsuura Y, et al. **Thromb Res** 1996 May 15;82(4):361–8

[Clinical effectiveness of aprotinin aerosol in influenza and parainfluenza] Zhirnov OP, et al. **Vestn Ross Akad Med Nauk** 1996;(5):26–31 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Panniculitis with eosinophilic infiltration due to gabexate mesilate (FOY): possibility of allergic reaction. Nakayama F. **J Dermatol** 1997 Apr;24(4):235–42

[A case of broncho-constriction induced by gabexate mesilate] Nomura M, et al. **Arerugi** 1996 Oct;45(10):1133–6 **(Jpn)**

ANALYSIS

Cellular association of antiproteases in lavages from ventilated preterm human neonates. Griese M, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):2064–71

Extremely low levels of epidermal skin-derived antileucoproteinase/elafin in a patient with impetigo herpetiformis. Kuijpers AL, et al. **Br J Dermatol** 1997 Jul; 137(1):123–9

Immunohistochemical localization of tissue factor pathway inhibitor-1 (TFPI-1), a Kunitz proteinase inhibitor, in Alzheimer's disease. Hollister RD, et al. **Brain Res** 1996 Jul 22;728(1):13–9

Plasminogen activator inhibitor-1 in neointima of vein grafts: its role in reduced fibrinolytic potential and graft failure. Kauhanen P, et al. **Circulation** 1997 Sep 16;96(6):1783–9

Biotinylated trypsin and its application as a sensitive, versatile probe for the detection and characterisation of an ovine chondrocyte serine proteinase inhibitor using Western blotting. Rodgers KJ, et al. **Electrophoresis** 1996 Jan; 17(1):213–8

Thrombin-antithrombin III complexes and antithrombin III in amniotic fluid. Uszyński M, et al. **Gynecol Obstet Invest** 1997;43(1):29–33

Bauhinia serine proteinase inhibitors: effect on factor X, factor XII and plasma kallikrein. Oliva ML, et al. **Immunopharmacology** 1996 May;32(1-3):85–7

A sensitive and robust assay for urokinase and tissue-type plasminogen activators (uPA and tPA) and their inhibitor type I (PAI-1) in breast tumor cytosols. Grebenschikov N, et al. **Int J Biol Markers** 1997 Jan-Mar;12(1):6–14

Presence in bovine milk of two protease inhibitors of the plasmin system. Precetti AS, et al. **J Dairy Sci** 1997 Aug; 80(8):1490–6

Increased elafin expression in cystic, dysplastic and neoplastic oral tissues. Robinson PA, et al. **J Oral Pathol Med** 1996 Mar;25(3):135–9

Active and alpha-1 proteinase inhibitor complexed leukocyte elastase levels in crevicular fluid from patients with periodontal diseases. Meyer J, et al. **J Periodontol** 1997 Mar;68(3):256–61

Serum alpha 1 antitrypsin and pulmonary emphysema. Shahid A, et al. **JPMA J Pak Med Assoc** 1996 May;46(5):102–4

Levels of plasminogen activator inhibitor type 1 and urokinase plasminogen activator receptor in non-small cell lung cancer as measured by quantitative ELISA and semiquantitative immunohistochemistry. Pappot H, et al. **Lung Cancer** 1997 Jul;17(2-3):197–209

Micro-methods for serial determinations of elastin metabolism parameters in blood plasma and serum. Bizbiz L, et al. **Pathol Biol (Paris)** 1996 Oct;44(8):694–700

[Expression of proteinase inhibitors in the human trabecular meshwork] Fukuchi T, et al. **Nippon Ganka Gakkai Zasshi** 1997 Mar;101(3):265–71 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Extracellular matrix-associated serine protease inhibitors (Mr 33,000, 31,000, and 27,000) are single-gene products with differential glycosylation: cDNA cloning of the 33-kDa inhibitor reveals its identity to tissue factor pathway inhibitor-2. Rao CN, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):82–92

Expression of SKALP/elafin during wound healing in human skin. van Bergen BH, et al. **Arch Dermatol Res** 1996 Jul; 288(8):458–62

Secretory leukocyte protease inhibitor: a macrophage product induced by and antagonistic to bacterial lipopolysaccharide. Jin FY, et al. **Cell** 1997 Feb 7; 88(3):417–26

Protease nexin-1 is expressed at the mouse met-/mesencephalic junction and FGF signaling regulates its promoter activity in primary met-/mesencephalic cells. Küry P, et al. **Development** 1997 Mar;124(6):1251–62

Biosynthesis of alpha1-proteinase inhibitor by human lung-derived epithelial cells. Cichy J, et al. **J Biol Chem** 1997 Mar 28;272(13):8250–5

Identification and cloning of human placental bikunin, a novel serine protease inhibitor containing two Kunitz domains. Marlor CW, et al. **J Biol Chem** 1997 May 2; 272(18):12202–8

Neural thrombin and protease nexin I kinetics after murine peripheral nerve injury. Smirnova IV, et al. **J Neurochem** 1996 Nov;67(5):2188–99

Synthesis and inhibition of human leucocyte elastase by functionalized N-aryl azetidin-2-ones: effect of different substituents on the aromatic ring. Joyeau R, et al. **J Pharm Pharmacol** 1996 Dec;48(12):1218–30

Production of plasminogen activator inhibitor-1 by human saphenous vein endothelial cells seeded onto endarterectomy surfaces in vitro. Smyth JV, et al. **J Vasc Surg** 1997 Apr;25(4):722–5

Characterization of engineered hepatitis C virus NS3 protease inhibitors affinity selected from human pancreatic secretory trypsin inhibitor and minibody repertoires. Dimasi N, et al. **J Virol** 1997 Oct;71(10):7461–9

Efficient production of the C-terminal domain of secretory leukoprotease inhibitor as a thrombin-cleavable fusion protein in Escherichia coli. Masuda K, et al. **Protein Eng** 1996 Jan;9(1):101–6

Tissue factor and plasminogen activator inhibitor type 2 expression in human stimulated monocytes is inhibited by heparin. Pepe G, et al. **Semin Thromb Hemost** 1997; 23(2):135–41

BLOOD

Serine proteinase inhibitors from insect hemolymph. Polanowski A, et al. **Acta Biochim Pol** 1996;43(3):445–53 (42 ref.)

The effect of chemical anti-inhibitors on fibrinolytic enzymes and inhibitors. Sidelmann J, et al. **Clin Chim Acta** 1997 May 6;261(1):43–56

Relationship between plasminogen activator inhibitor type-1 plasma levels and the lipoprotein(a) concentrations in non-insulin-dependent diabetes mellitus. Testa R, et al. **Diabetes Res Clin Pract** 1996 Jul;33(2):111–8

Secretory leukocyte proteinase inhibitor is a major leukocyte elastase inhibitor in human neutrophils. Sallenave JM, et al. **J Leukoc Biol** 1997 Jun;61(6):695–702

Plasma levels of granulocyte elastase-alpha-proteinase inhibitor complex in patients with rheumatoid arthritis: measurements with a system free from rheumatoid factor interference [letter] Fujimori J, et al. **J Rheumatol** 1996 Mar;23(3):571

Neutrophil elastase/alpha 1-proteinase inhibitor complex levels decrease in plasma of cystic fibrosis patients during long-term oral beta-carotene supplementation. Winklhofer-Roob BM, et al. **Pediatr Res** 1996 Jul; 40(1):130–4

[Hemostasis in patients with diabetes mellitus. II. Tissue factor and the extrinsic blood coagulation inhibitor] Galajda P, et al. **Vnitr Lek** 1996 Nov;42(11):776–8 (Eng. Abstr.) **(Slo)**

CHEMICAL SYNTHESIS

Synthesis and kinetic studies of diphenyl 1-(N-peptidylamino)alkanephosphonate esters and their biotinylated derivatives as inhibitors of serine proteases and probes for lymphocyte granzymes. Abuelyaman AS, et al. **Arch Biochem Biophys** 1997 Aug 15;344(2):271–80

Syntheses and selective inhibitory activities of terphenyl-bisamidines for serine proteases. von der Saal W, et al. **Arch Pharm (Weinheim)** 1996 Feb;329(2):73–82

Highly potent irreversible inhibitors of neutrophil elastase generated by selection from a randomized DNA-valine phosphonate library. Charlton J, et al. **Biochemistry** 1997 Mar 11;36(10):3018–26

Structure-based design of a general class of mechanism-based inhibitors of the serine proteinases employing a novel amino acid-derived heterocyclic scaffold. Groutas WC, et al. **Biochemistry** 1997 Apr 22;36(16):4739–50

Tripeptide methylketones: synthesis and antiplasmin activity. Midura-Nowaczek K, et al. **Farmaco** 1997 Jan;52(1):35–7

Peptide boronic acids. Versatile synthetic ligands for affinity chromatography of serine proteinases. Zembower DE, et al. **Int J Pept Protein Res** 1996 May;47(5):405–13

Structure-based design of a potent chimeric thrombin inhibitor. Morenweiser R, et al. **J Biol Chem** 1997 Aug 8;272(32):19938–42

Substituted 3-(phenylsulfonyl)-1-phenylimidazolidine-2,4-dione derivatives as novel nonpeptide inhibitors of human heart chymase. Niwata S, et al. **J Med Chem** 1997 Jul 4; 40(14):2156–63

Affinity selection of a camelized V(H) domain antibody inhibitor of hepatitis C virus NS3 protease. Martin F, et al. **Protein Eng** 1997 May;10(5):607–14

CHEMISTRY

Squash inhibitor family of serine proteinases. Otlewski J, et al. **Acta Biochim Pol** 1996;43(3):431–44 (81 ref.)

Active site binding loop stabilization in the subtilisin inhibitor eglin c: structural and functional studies on specifically designed mutants in complex with subtilisin and the uncomplexed inhibitor. Hipler K, et al. **Adv Exp Med Biol** 1996;379:43–7

Inhibition of proteinase K by mercury. Müller A, et al. **Adv Exp Med Biol** 1996;379:183–9

Structure and function of subtilisin BPN' as studied through crystallographic studies on a series of its complexes with genetically engineered proteinaceous inhibitor SSI. Nonaka T, et al. **Adv Exp Med Biol** 1996;379:21–7 (24 ref.)

Three dimensional structure of the antibiotic bacitracin A complexed to two different subtilisin proteases: novel mode of enzyme inhibition. Pfeffer-Hennig S, et al. **Adv Exp Med Biol** 1996;379:29–41

Spectroscopic characterization of the growing polypeptide chain of the barley chymotrypsin inhibitor-2. de Prat Gay G. **Arch Biochem Biophys** 1996 Nov 1;335(1):1–7

1H-NMR relaxometric study of pancreatic serine (pro)enzyme inhibition by a Gd(III) chelate bearing boronic functionalities. Aime S, et al. **Biochem Mol Biol Int** 1996 Jul;39(4):741–6

Probing intermolecular main chain hydrogen bonding in serine proteinase-protein inhibitor complexes: chemical synthesis of backbone-engineered turkey ovomucoid third domain. Lu W, et al. **Biochemistry** 1997 Jan 28;36(4):673–9

Molecular design and characterization of an alpha-thrombin inhibitor containing a novel P1 moiety. Malikayil JA, et

al. **Biochemistry** 1997 Feb 4;36(5):1034–40

Primary structure and specificity of a serine proteinase inhibitor from paprika (Capsicum annuum) seeds. Antcheva N, et al. **Biochim Biophys Acta** 1996 Nov 14;1298(1):95–101

Purification and characterization of pig inter-alpha-inhibitor and its constitutive heavy chains. Carrette O, et al. **Biochim Biophys Acta** 1997 Mar 7;1338(1):21–30

Purification of enzymatically active kallikrein hK2 from human seminal plasma. Frenette G, et al. **Biochim Biophys Acta** 1997 Feb 11;1334(1):109–15

Non-peptidic inhibitors of human neutrophil elastase: the design and synthesis of sulfonanilide-containing inhibitors. Imaki K, et al. **Bioorg Med Chem** 1996 Dec;4(12):2115–34

Commercial plasma alpha1-antitrypsin (Prolastin) contains a conformationally inactive, latent component. Lomas DA, et al. **Eur Respir J** 1997 Mar;10(3):672–5

Intrinsic specificity of the reactive site loop of alpha1-antitrypsin, alpha1-antichymotrypsin, antithrombin III, and protease nexin I. Djie MZ, et al. **J Biol Chem** 1997 Jun 27;272(26):16268–73

Apparent formation of sodium dodecyl sulfate-stable complexes between serpins and 3,4-dichloroisocoumarin-inactivated proteinases is due to regeneration of active proteinase from the inactivated enzyme. Olson ST, et al. **J Biol Chem** 1997 May 16; 272(20):13338–42

Hepatocyte growth factor activator inhibitor, a novel Kunitz-type serine protease inhibitor. Shimomura T, et al. **J Biol Chem** 1997 Mar 7;272(10):6370–6

A cysteine-rich serine protease inhibitor (Guamerin II) from the non-blood sucking leech Whitmania edentula: biochemical characterization and amino acid sequence analysis. Kim DR, et al. **J Enzyme Inhib** 1996;10(2):81–91

Titration properties and thermodynamics of the transition state for folding: comparison of two-state and multi-state folding pathways. Tan YJ, et al. **J Mol Biol** 1996 Nov 29;264(2):377–89

The rate of isomerisation of peptidyl-proline bonds as a probe for interactions in the physiological denatured state of chymotrypsin inhibitor 2. Tan YJ, et al. **J Mol Biol** 1997 Jun 20;269(4):611–22

Molecular phylogenetic characterization of Streptomyces protease inhibitor family. Taguchi S, et al. **J Mol Evol** 1997 May;44(5):542–51

Taxonomy of nuclear receptors and SERPINS by multivariate analysis of amino-acid composition. Ojasoo T, et al. **J Steroid Biochem Mol Biol** 1996 May;58(2):167–81

Characterization of engineered hepatitis C virus NS3 protease inhibitors affinity selected from human pancreatic secretory trypsin inhibitor and minibody repertoires. Dimasi N, et al. **J Virol** 1997 Oct;71(10):7461–9

The serpin-proteinase complex revealed [news] Lawrence DA. **Nat Struct Biol** 1997 May;4(5):339–41

Structural insights into serpin-protease complexes reveal the inhibitory mechanism of serpins [letter] Wilczynska M, et al. **Nat Struct Biol** 1997 May;4(5):354–7

Regioselective formation of the three disulfide bonds of a 35-residue insect peptide. Kellenberger C, et al. **Pept Res** 1995 Nov–Dec;8(6):321–7

Functional implications of the modeled structure of maspin. Fitzpatrick PA, et al. **Protein Eng** 1996 Jul;9(7):585–9

Investigation of the solution structure of chymotrypsin inhibitor 2 using molecular dynamics: comparison to x-ray crystallographic and NMR data. Li A, et al. **Protein Eng** 1995 Nov;8(11):1117–28

Crystal structure of two new bifunctional nonsubstrate type thrombin inhibitors complexed with human alpha-thrombin. Féthière J, et al. **Protein Sci** 1996 Jun; 5(6):1174–83

Structural investigation of the alpha-1-antichymotrypsin: prostate-specific antigen complex by comparative model building. Villoutreix BO, et al. **Protein Sci** 1996 May; 5(5):836–51

Structure of a ternary complex of proteinase K, mercury, and a substrate-analogue hexa-peptide at 2.2 A resolution. Saxena AK, et al. **Proteins** 1996 Jun;25(2):195–201

Enzyme flexibility, solvent and 'weak' interactions characterize thrombin-ligand interactions: implications for drug design. Engh RA, et al. **Structure** 1996 Nov 15; 4(11):1353–62

The native strains in the hydrophobic core and flexible reactive loop of a serine protease inhibitor: crystal structure of an uncleaved alpha1-antitrypsin at 2.7 A. Ryu SE, et al. **Structure** 1996 Oct 15;4(10):1181–92

Quantification of circulating activated protein C in human plasma by immunoassays—enzyme levels are proportional to total protein C levels. Espana F, et al. **Thromb Haemost** 1996 Jan;75(1):56–61

DEFICIENCY

Alpha 1-antitrypsin deficiency in a child with X-linked lymphoproliferative disease. Skoda-Smith S, et al. **Arch Pathol Lab Med** 1997 Sep;121(9):996–9

Serine protease inhibitors in patients with chronic viral hepatitis. Elzouki AN, et al. **J Hepatol** 1997 Jul;27(1):42–8

Long-term augmentation therapy in twenty patients with severe alpha-1-antitrypsin deficiency—three-year follow-up. Schwaiblmair M, et al. **Respiration** 1997; 64(1):10–5

Antithrombin: molecular basis of deficiency. Bayston TA, et al. **Thromb Haemost** 1997 Jul;78(1):339–43 (35 ref.)

DIAGNOSTIC USE

Determination of activable proacrosin/acrosin in bovine sperm using an irreversible isocoumarin serine protease inhibitor. Palencia DD, et al. **Biol Reprod** 1996 Sep; 55(3):536–42

GENETICS

Cis-acting region associated with lung cell-specific expression of the secretory leukoprotease inhibitor gene. Kikuchi T, et al. **Am J Respir Cell Mol Biol** 1997 Sep; 17(3):361–7

Yeast artificial chromosome cloning and chromosomal localization of the abundant odontogenic keratocyst protein elafin. Robinson PA, et al. **Arch Oral Biol** 1996 May; 41(5):445–52

The cloning and characterization of a murine secretory leukocyte protease inhibitor cDNA. Zitnik RJ, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):687–97

Internalization of oligodeoxynucleotide antisense to type-1 plasminogen activator inhibitor mRNA in endothelial cells: a three-dimensional reconstruction by confocal microscopy. Wyroba E, et al. **Biol Cell** 1996;87(1–2):37–43

Human neuroserpin (PI12): cDNA cloning and chromosomal localization to 3q26. Schrimpf SP, et al. **Genomics** 1997 Feb 15;40(1):55–62

Adenovirus-mediated delivery of human kallistatin gene reduces blood pressure of spontaneously hypertensive rats. Chen LM, et al. **Hum Gene Ther** 1997 Feb 10;8(3):341–7

Cathepsin G, acid phosphatase, and alpha 1-proteinase inhibitor messenger RNA levels in keratoconus corneas. Whitelock RB, et al. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):529–34

Renaturation, purification, and characterization of human plasminogen activator inhibitor type 2 (PAI-2) accumulated at high level in Escherichia coli. Zhou A, et al. **J Biochem (Tokyo)** 1997 May;121(5):930–4

Limulus intracellular coagulation inhibitor type 3. Purification, characterization, cDNA cloning, and tissue localization. Agarwala KL, et al. **J Biol Chem** 1996 Sep 27;271(39):23768–74

The exon 3 encoded sequence of the intracellular serine proteinase inhibitor plasminogen activator inhibitor 2 is a protein binding domain. Jensen PH, et al. **J Biol Chem** 1996 Oct 25;271(43):26892–9

Organization of serpin gene-1 from Manduca sexta. Evolution of a family of alternate exons encoding the reactive site loop. Jiang H, et al. **J Biol Chem** 1996 Nov 8;271(45):28017–23

Message of nexin 1, a serine protease inhibitor, is accumulated in the follicular papilla during anagen of the hair cycle. Yu DW, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3867–74

Protease nexin 1 in the murine kidney: glomerular localization and up-regulation in glomerulopathies. Moll S, et al. **Kidney Int** 1996 Dec;50(6):1936–45

A Krox binding site regulates protease nexin-1 promoter activity in embryonic heart, cartilage and parts of the nervous system. Ernø H, et al. **Mech Dev** 1996 Dec; 60(2):139–50

Selection for protease inhibitors using bacteriophage display. Markland W, et al. **Methods Enzymol** 1996;267:28–51

Ancylostoma caninum anticoagulant peptide: cloning by PCR and expression of soluble, active protein in E. coli. Cappello M, et al. **Mol Biochem Parasitol** 1996 Sep; 80(1):113–7

Specificity of transcription enhancement via the STAT responsive element in the serine protease inhibitor 2.1 promoter. Wood TJ, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1–2):69–81

A novel growth hormone response element unrelated to STAT (signal transducer and activator of transcription)-binding sites is a bifunctional enhancer. Legraverend C, et al. **Mol Endocrinol** 1996 Dec; 10(12):1507–18

[Regulation of secretory leukoprotease inhibitor gene expression] Kikuchi T, et al. **Nippon Rinsho** 1996 Feb; 54(2):405–10 (20 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Strong crossreaction of human anti-aprotinin antibodies from heart transplant patient with [Arg15]aprotinin. Brinkmann T, et al. **Immunopharmacology** 1997 Jan;35(3):221–8

The inhibitory effect of anti-adhesion molecule antibodies on eosinophil infiltration in cutaneous late phase response in Balb/c mice sensitized with ovalbumin (OVA). Hakugawa J, et al. **J Dermatol** 1997 Feb;24(2):73–9

Synergistic inhibition of human cell-mediated cytotoxicity by complement component antisera indicates that target cell lysis may result from an enzymatic cascade involving granzymes and perforin. Brahmi Z, et al. **Nat Immun** 1995 Sep;14(5–6):271–85

Murine strain differences in allergic airway inflammation and immunoglobulin production by a combination of antigen and diesel exhaust particles. Ichinose T, et al. **Toxicology** 1997 Oct 19;122(3):183–92

ISOLATION & PURIFICATION

Isolation and amino-acid sequence of two inhibitors of serine proteinases, members of the squash inhibitor family, from Echinocystis lobata seeds. Stachowiak D, et al. **Acta Biochim Pol** 1996;43(3):507–13

Purification and characterisation of 6 and 58 kDa forms of the endogenous serine proteinase inhibitory proteins of ovine articular cartilage. Rodgers KJ, et al. **Biol Chem** 1996 Dec;377(12):837–45

Purification, characterization and biological evaluation of recombinant leech-derived tryptase inhibitor (rLDTI) expressed at high level in the yeast Saccharomyces cerevisiae. Pohlig G, et al. **Eur J Biochem** 1996 Oct 15; 241(2):619–26

Isolation and characterization of americanin, a specific inhibitor of thrombin, from the salivary glands of the lone star tick Amblyomma americanum (L.). Zhu K, et al. **Exp Parasitol** 1997 Sep;87(1):30–8

Renaturation, purification, and characterization of human plasminogen activator inhibitor type 2 (PAI-2) accumulated at high level in Escherichia coli. Zhou A, et al. **J Biochem (Tokyo)** 1997 May;121(5):930–4

Obtaining a family of high-affinity, high-specificity protein inhibitors of plasmin and plasma kallikrein. Ley AC, et al. **Mol Divers** 1996 Oct;2(1–2):119–24

METABOLISM

Inhibition of cysteine and serine proteinases by the cowpox virus serpin CRMA. Komiyama T, et al. **Adv Exp Med Biol** 1996;389:173–6 (39 ref.)

Thermitase - kinetic differentiation to the subtilisins. Peters K, et al. **Adv Exp Med Biol** 1996;379:133–40

Elafin/elastase-specific inhibitor in bronchoalveolar lavage of normal subjects and farmer's lung. Tremblay GM, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1092–8

Skin-derived antileukoproteinase (SKALP) is decreased in pustular forms of psoriasis. A clue to the pathogenesis of pustule formation? Kuijpers AL, et al. **Arch Dermatol Res** 1996 Oct;288(11):641–7

First-pass metabolism of ONO-5046 (N-[2-[4-(2,2-dimethylpropionyloxy) phenylsulfonylamino]benzoyl]aminoacetic acid), a novel elastase inhibitor, in rats. Watanabe F, et al. **Biol Pharm Bull** 1997 Apr;20(4):392–6

New serine protease inhibitors with leukotriene B4 (LTB4) receptor binding affinity. Nakayama Y, et al. **Bioorg Med Chem** 1997 May;5(5):971–85

Characterization of angiotensin II formation in human isolated bladder by selective inhibitors of ACE and human chymase: a functional and biochemical study. Waldeck K, et al. **Br J Pharmacol** 1997 Jul;121(6):1081–6

Cloning of a serine proteinase inhibitor from bovine brain: expression in the brain and characterization of its target proteinases. Nakaya N, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):293–300

Expression of plasminogen activators and plasminogen activator inhibitor 1 in dedifferentiated chondrosarcoma. Häckel C, et al. **Cancer** 1997 Jan 1;79(1):53–8

Reductive metabolism of 4-nitrobiphenyl by rat liver fraction. Ning S, et al. **Carcinogenesis** 1997 Jun; 18(6):1233–40

Kallistatin in human ocular tissues: reduced levels in vitreous fluids from patients with diabetic retinopathy. Ma JX, et al. **Curr Eye Res** 1996 Nov;15(11):1117–23

Variation in intervertebral disc serine proteinase inhibitory proteins with ageing in a chondrodystrophoid (beagle) and a non-chondrodystrophoid (greyhound) canine breed. Melrose J, et al. **Gerontology** 1996;42(6):322–9

Protein C inhibitor (PCI). Geiger M, et al. **Immunopharmacology** 1996 May;32(1–3):53–6 (18 ref.)

Hydrophobic interactions are involved in the inhibition of human leukocyte elastase by alkyltrimethylammonium salts. Kouadri-Boudjelthia A, et al. **Int J Biochem Cell Biol** 1997 Feb;29(2):353–9

Identification of a binding site in protease nexin I (PN1) required for the receptor mediated internalization of PN1-thrombin complexes. Knauer MF, et al. **J Biol Chem** 1997 May 9;272(19):12261–4

Secretion of protease nexin-1 by C6 glioma cells is under the control of a heterotrimeric G protein, Go1. Lagriffoul A, et al. **J Biol Chem** 1996 Dec 6;271(49):31508–16

The three-dimensional structure of recombinant leech-derived tryptase inhibitor in complex with trypsin. Implications for the structure of human mast cell tryptase and its inhibition. Stubbs MT, et al. **J Biol Chem** 1997 Aug 8;272(32):19931–7

Binding of urokinase to plasminogen activator inhibitor type-1 mediates cell adhesion and spreading. Planus E, et al. **J Cell Sci** 1997 May;110 (Pt 9):1091–8

Localization of immunoreactive secretory leukocyte protease inhibitor (SLPI) in intestinal mucosa. Bergenfeldt M, et al. **J Gastroenterol** 1996 Feb;31(1):18–23

Analysis of serpin inhibitory function by mutagenesis of ovalbumin and generation of chimeric ovalbumin/PAI-2 fusion proteins. McCarthy BJ, et al. **J Mol Biol** 1997 Apr 4;267(3):561–9

The serine proteinase inhibitor antileukoproteinase specifically accumulates in normal but not in arthritic cartilage. Burkhardt H, et al. **J Rheumatol** 1997 Jun; 24(6):1145–54

A novel growth hormone response element unrelated to STAT (signal transducer and activator of transcription)-binding sites is a bifunctional enhancer. Legraverend C, et al. **Mol Endocrinol** 1996 Dec; 10(12):1507–18

Differential inhibition of the Fas- and granule-mediated cytolysis pathways by the orthopoxvirus cytokine response

modifier A/SPI-2 and SPI-1 protein. Macen JL, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9108-13

The elimination of secretory leukocyte protease inhibitor (SLPI) from the gastrointestinal tract in man. Nyström M, et al. **Scand J Clin Lab Invest** 1997 Apr;57(2):119-25

Recombinant human tissue factor pathway inhibitor as a possible anticoagulant targeting hepatic sinusoidal walls. Yamanobe F, et al. **Thromb Res** 1997 Mar 15;85(6):493-501

[Trypsin and microbial serine proteinase inhibitors isolated from Yersinia pseudotuberculosis] Burftseva TI, et al. **Biokhimiia** 1996 Oct;61(10):1883-91 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Pharmacokinetic study of alpha1-antitrypsin infusion in alpha1-antitrypsin deficiency. Barker AF, et al. **Chest** 1997 Sep;112(3):607-13

Biodistribution and pharmacokinetics of 131I-labeled LEX 032, a recombinant hybrid of antichymotrypsin. Sands H, et al. **Drug Metab Dispos** 1997 May;25(5):631-6

Pharmacology and pharmacokinetics of LEX 032, a bioengineered serpin: the first of a potential new class of drugs. Sands H, et al. **Drug Metab Rev** 1997 Feb-May; 29(1-2):309-28 (68 ref.)

Bioavailability of 1-deamino-8-D-arginine vasopressin with an enzyme inhibitor (aprotinin) from the small intestine in healthy volunteers. Fjellestad-Paulsen A, et al. **Eur J Clin Pharmacol** 1996;50(6):491-5

PHARMACOLOGY

Glycosaminoglycans regulate elastase inhibition by oxidized secretory leukoprotease inhibitor. Ying QL, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):L533-41

Lactoferrin, a potent tryptase inhibitor, abolishes late-phase airway responses in allergic sheep. Elrod KC, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):375-81

Effects of neutrophil elastase inhibitor on bleomycin-induced pulmonary fibrosis in mice. Taooka Y, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):260-5

Effect of nafamostat mesilate on pulmonary vascular injury induced by lipopolysaccharide in rats. Uchiba M, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):711-8

Increases in the effects of albendazole on Echinococcus multilocularis metacestodes by the dipeptide methyl ester (Phe-Phe-OMe). Sarciron ME, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):226-30

Aprotinin but not tranexamic acid inhibits cytokine-induced inducible nitric oxide synthase expression. Hill GE, et al. **Anesth Analg** 1997 Jun;84(6):1198-202

Neutrophil elastase inhibitor, ONO-5046, modulates acid-induced lung and systemic injury in rabbits. Kaneko K, et al. **Anesthesiology** 1997 Sep;87(3):635-41

Proteolytic activity in amyotrophic lateral sclerosis IgG preparations [see comments] Nyormoi O. **Ann Neurol** 1996 Nov;40(5):701-6. Comment in: Ann Neurol 1996 Nov;40(5):691-3.

Differing effects of aprotinin and epsilon-aminocaproic acid on cytokine-induced inducible nitric oxide synthase expression. Hill GE, et al. **Ann Thorac Surg** 1997 Jan; 63(1):74-7

Herpesvirus proteases: targets for novel antiviral drugs. Holwerda BC. **Antiviral Res** 1997 Jun;35(1):1-21 (89 ref.)

Establishment of an in vitro assay system for screening hepatitis C virus protease inhibitors using high performance liquid chromatography. Sudo K, et al. **Antiviral Res** 1996 Aug;32(1):9-18

Human immunodeficiency virus type-1 (HIV-1) replication is unaffected by human secretory leukocyte protease inhibitor. Turpin JA, et al. **Antiviral Res** 1996 Mar; 29(2-3):269-77

Amino acid-derived phthalimide and saccharin derivatives as inhibitors of human leukocyte elastase, cathepsin G, and proteinase 3. Groutas WC, et al. **Arch Biochem Biophys** 1996 Aug 15;332(2):335-40

Calpain inhibitors and serine protease inhibitors can produce apoptosis in HL-60 cells. Lu Q, et al. **Arch Biochem Biophys** 1996 Oct 1;334(1):175-81

Soybean Bowman-Birk protease inhibitor is a highly effective inhibitor of human mast cell chymase. Ware JH, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):133-8

Inhibitory effect of pulmonary surfactant on Sendai virus infection in rat lungs. Tashiro M, et al. **Arch Virol** 1996; 141(8):1571-7

Sustained inhibition of whole-blood clot procoagulant activity by inhibition of thrombus-associated factor Xa. McKenzie CR, et al. **Arterioscler Thromb Vasc Biol** 1996 Oct;16(10):1285-91

N-alpha-tosyl-L-lysine chloromethylketone prevents expression of iNOS in vascular smooth muscle by blocking activation of NF-kappa B. Schini-Kerth VB, et al. **Arterioscler Thromb Vasc Biol** 1997 Apr;17(4):672-9

Z-321, a prolyl endopeptidase inhibitor, augments the potentiation of synaptic transmission in rat hippocampal slices. Miura N, et al. **Behav Brain Res** 1997 Feb; 83(1-2):213-6

Inhibition of human leukocyte proteinase 3 by a novel recombinant serine proteinase inhibitor (LEX032). Groutas WC, et al. **Biochem Biophys Res Commun** 1997 Apr 28; 233(3):697-9

Competitive inhibition of nitric oxide synthase by p-aminobenzamidine, a serine proteinase inhibitor. Venturini G, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):88-90

Prothrombinase is protected from inactivation by tissue factor pathway inhibitor: competition between prothrombin and inhibitor. Franssen J, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):33-7

Peptidyl inverse esters of p-methoxybenzoic acid: a novel class of potent inactivator of the serine proteases. Lynas J, et al. **Biochem J** 1997 Aug 1;325 (Pt 3):609-16

Kinetics of human thrombin inhibition by two novel peptide inhibitors (Hirunorm IV and Hirunorm V). Cappiello M, et al. **Biochem Pharmacol** 1996 Oct 25;52(8):1141-6

Serine protease inhibition and mitochondrial dysfunction associated with cisplatin resistance in human tumor cell lines: targets for therapy. Dong Y, et al. **Biochem Pharmacol** 1997 Jun 1;53(11):1673-82

Highly potent irreversible inhibitors of neutrophil elastase generated by selection from a randomized DNA-valine phosphonate library. Charlton J, et al. **Biochemistry** 1997 Mar 11;36(10):3018-26

An evolutionarily conserved binding site for serine proteinase inhibitors in large conductance calcium-activated potassium channels. Moss GW, et al. **Biochemistry** 1996 Dec 17;35(50):16024-35

Progress curve analysis of the kinetics with which blood coagulation factor XIa is inhibited by protease nexin-2. Scandura JM, et al. **Biochemistry** 1997 Jan 14;36(2):412-20

Inhibition of alpha-lytic protease by pro region C-terminal steric occlusion of the active site. Sohl JL, et al. **Biochemistry** 1997 Apr 1;36(13):3894-902

Primary structure and specificity of a serine proteinase inhibitor from paprika (Capsicum annuum) seeds. Antcheva N, et al. **Biochim Biophys Acta** 1996 Nov 14;1298(1):95-101

Inhibition of human serine proteases by SPAAT, the C-terminal 44-residue peptide from alpha1-antitrypsin. Niemann MA, et al. **Biochim Biophys Acta** 1997 Jun 20; 1340(1):123-30

The inhibition of human factor Xa by plasminogen activator inhibitor type 1 in the presence of calcium ion, and its enhancement by heparin and vitronectin. Urano T, et al. **Biochim Biophys Acta** 1996 Dec 5;1298(2):199-208

Non-peptidic inhibitors of human neutrophil elastase: the design and synthesis of sulfonanilide-containing inhibitors. Imaki K, et al. **Bioorg Med Chem** 1996 Dec;4(12):2115-34

New serine protease inhibitors with leukotriene B4 (LTB4) receptor binding affinity. Nakayama Y, et al. **Bioorg Med Chem** 1997 May;5(5):971-85

Ligand-induced receptor dimerization may be critical for signal transduction by choriogonadotropin. Grewal N, et al. **Biophys J** 1997 Sep;73(3):1190-7

The effect of heparin on the regulation of factor VIIa-tissue factor activity by tissue factor pathway inhibitor. Hamamoto T, et al. **Blood Coagul Fibrinolysis** 1996 Jun; 7(4):470-6

Secretory leukocyte protease inhibitor: a macrophage product induced by and antagonistic to bacterial lipopolysaccharide. Jin FY, et al. **Cell** 1997 Feb 7; 88(3):417-26

Virus-encoded serine proteinase inhibitor SERP-1 inhibits atherosclerotic plaque development after balloon angioplasty [see comments] Lucas A, et al. **Circulation** 1996 Dec 1;94(11):2890-900. Comment in: Circulation 1996 Dec 1;94(11):2694-5.

Inhibition of Prevotella and Capnocytophaga immunoglobulin A1 proteases by human serum. Frandsen EV, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):458-64

Role of granulocyte elastase in ischemia/reperfusion injury of rat liver. Kushimoto S, et al. **Crit Care Med** 1996 Nov; 24(11):1908-12

Effect of aprotinin on insulin sensitivity in non-insulin-dependent diabetes mellitus. Laurenti O, et al. **Diabet Med** 1996 Jul;13(7):642-5

Proprotein-processing endoprotease furin controls growth of pancreatic beta-cells. Kayo T, et al. **Diabetes** 1997 Aug; 48(8):1296-304

Pharmacology and pharmacokinetics of LEX 032, a bioengineered serpin: the first of a potential new class of drugs. Sands H, et al. **Drug Metab Rev** 1997 Feb-May; 29(1-2):309-28 (68 ref.)

Dose dependent effect of aprotinin on rate of clot formation. De Hert SG, et al. **Eur J Anaesthesiol** 1996 Sep;13(5):463-7

Serpins inhibit the toxicity of amyloid peptides. Schubert D. **Eur J Neurosci** 1997 Apr;9(4):770-7

T-686, a novel inhibitor of plasminogen activator inhibitor-1, inhibits thrombosis without impairment of hemostasis in rats. Ohtani A, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2-3):151-6

Serine protease inhibitors block neutral sphingomyelinase activation, ceramide generation, and apoptosis triggered by daunorubicin. Mansat V, et al. **FASEB J** 1997 Jul; 11(8):695-702

Inhibition of coagulation factors by recombinant barley serpin BSZx. Dahl SW, et al. **FEBS Lett** 1996 Sep 30; 394(2):165-8

Human recombinant tissue-factor pathway inhibitor prevents the proliferation of cultured human neonatal aortic smooth muscle cells. Kamikubo Y, et al. **FEBS Lett** 1997 Apr 21; 407(1):116-20

Neutrophil elastase inhibitor reduces neutrophil chemoattractant production after ischemia-reperfusion in rat liver. Yamaguchi Y, et al. **Gastroenterology** 1997 Feb; 112(2):551-60

Bauhinia serine proteinase inhibitors: effect on factor X, factor XII and plasma kallikrein. Oliva ML, et al. **Immunopharmacology** 1996 May;32(1-3):85-7

Plant serine proteinase inhibitors. Structure and biochemical applications on plasma kallikrein and related enzymes. Sampaio CA, et al. **Immunopharmacology** 1996 May; 32(1-3):62-6

Effect of a serine proteinase inhibitor from Leucaena leucocephala on plasma kallikrein and plasmin. Souza-Pinto JC, et al. **Immunopharmacology** 1996 Jun; 33(1-3):330-2

Effect of protein C inhibitor (PCI) on in vitro fertilization. Zheng X, et al. **Immunopharmacology** 1996 Jun; 33(1-3):140-2

Antibacterial activity of antileukoprotease. Hiemstra PS, et al. **Infect Immun** 1996 Nov;64(11):4520-4

Suppression of arthritis by the inhibitors of dipeptidyl peptidase IV. Tanaka S, et al. **Int J Immunopharmacol** 1997 Jan;19(1):15-24

Protective effect of nafamostat mesilate in early wound healing. Tsutamoto Y, et al. **J Am Coll Surg** 1997 Jun; 184(6):637-44

Isolation and structure elucidation of five new asterriquinones from Aspergillus, Humicola and Botryotrichum species. Mocek U, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):854-9

Inhibitory effect of a synthetic protease inhibitor (gabexate mesilate) on the respiratory burst oxidase in human neutrophils. Ohashi I, et al. **J Biochem (Tokyo)** 1995 Nov; 118(5):1001-6

Inhibition of neutrophil serine proteinases by suramin. Cadène M, et al. **J Biol Chem** 1997 Apr 11;272(15):9950-5

The serine protease inhibitors, tosylphenylalanine chloromethyl ketone and tosyllysine chloromethyl ketone, potently inhibit pp70s6k activation. Grammer TC, et al. **J Biol Chem** 1996 Sep 27;271(39):23650-2

Optimal subsite occupancy and design of a selective inhibitor of urokinase. Ke SH, et al. **J Biol Chem** 1997 Aug 15; 272(33):20456-62

Diverse effects of pH on the inhibition of human chymase by serpins. Schechter NM, et al. **J Biol Chem** 1997 Sep 26;272(39):24499-507

Secretory leukocyte protease inhibitor suppresses the production of monocyte prostaglandin H synthase-2, prostaglandin E2, and matrix metalloproteinases. Zhang Y, et al. **J Clin Invest** 1997 Mar 1;99(5):894-900

Piperastatin B: a new selective serine carboxypeptidase inhibitor from Streptomyces lavendofoliae MJ908-WF13. Murakami S, et al. **J Enzyme Inhib** 1996 Aug;11(1):51-66

Inhibition of dipeptidyl peptidase IV (CD26) by peptide boronic acid dipeptides. Pargellis CA, et al. **J Enzyme Inhib** 1997 Jan;11(3):151-69

Effect of YM-47141, a new inhibitor produced by Flexibactor sp. Q17897, on elastase. Teramura K, et al. **J Enzyme Inhib** 1996 Aug;11(1):33-8

Anticryptosporidial potential of alpha-1-antitrypsin. Forney JR, et al. **J Eukaryot Microbiol** 1996 Sep-Oct;43(5):63S

Colony growth of human hematopoietic progenitor cells in the absence of serum is supported by a proteinase inhibitor identified as antileukoproteinase. Goselink HM, et al. **J Exp Med** 1996 Oct 1;184(4):1305-12

Gabexate mesilate improves pancreatic microcirculation and reduces lung edema in a rat model of acute pancreatitis. Chen HM, et al. **J Formos Med Assoc** 1997 Sep;96(9):704-9

Human tryptase fibrinogenolysis is optimal at acidic pH and generates anticoagulant fragments in the presence of the anti-tryptase monoclonal antibody B12. Ren S, et al. **J Immunol** 1997 Oct 1;159(7):3540-8

Antileukoprotease: an endogenous protein in the innate mucosal defense against fungi. Tomee JF, et al. **J Infect Dis** 1997 Sep;176(3):740-7

Antagonistic effect of human alpha-1-antitrypsin on excystation of Cryptosporidium parvum oocysts. Forney JR, et al. **J Parasitol** 1997 Aug;83(4):771-4

Effect of a chymotrypsin-like inhibitor, TPCK, on histamine release from cultured human mast cells. Yanagida M, et al. **J Pharm Pharmacol** 1997 May;49(5):537-41

Effect of aprotinin on smooth muscle cell proliferation, migration, and extracellular matrix synthesis. Horodyski J, et al. **J Surg Res** 1996 Dec;66(2):115-8

Effect of aprotinin on vascular reactivity of coronary bypass grafts. Allen S, et al. **J Thorac Cardiovasc Surg** 1997 Feb; 113(2):319-26

Camptothecin-induced apoptosis in p53-null human leukemia HL60 cells and their isolated nuclei: effects of the protease inhibitors Z-VAD-fmk and dichloroisocoumarin suggest an involvement of both caspases and serine proteases. Shimizu T, et al. **Leukemia** 1997 Aug;11(8):1238-44

Ancylostoma caninum anticoagulant peptide: cloning by PCR and expression of soluble, active protein in E. coli. Cappello M, et al. **Mol Biochem Parasitol** 1996 Sep; 80(1):113-7

Synergistic inhibition of human cell-mediated cytotoxicity by complement component antisera indicates that target cell lysis may result from an enzymatic cascade involving granzymes and perforin. Brahmi Z, et al. **Nat Immun** 1995 Sep;14(5-6):271-85

Alzheimer A beta neurotoxicity: promotion by antichymotrypsin, ApoE4; inhibition by A beta-related peptides. Ma J, et al. **Neurobiol Aging** 1996 Sep-Oct; 17(5):773-80

Inhibition of amyloid beta-protein production in neural cells by the serine protease inhibitor AEBSF. Citron M, et al. **Neuron** 1996 Jul;17(1):171-9

SERINE PROTEINASE INHIBITORS

Alpha 1-antichymotrypsin interaction with A beta (1-42) does not inhibit fibril formation but attenuates the peptide toxicity. Aksenov MY, et al. **Neurosci Lett** 1996 Oct 18; 217(2-3):117-20

alpha-1-antichymotrypsin interaction with A beta (1-40) inhibits fibril formation but does not affect the peptide toxicity. Aksenova MV, et al. **Neurosci Lett** 1996 Jun 14; 211(1):45-8

ONO-1603, a potential antidementia drug, shows neuroprotective effects and increases m3-muscarinic receptor mRNA levels in differentiating rat cerebellar granule neurons. Katsube N, et al. **Neurosci Lett** 1996 Aug 23;214(2-3):151-4

The serine protease inhibitors TLCK and TPCK inhibit the in vitro immortalization of primary human keratinocytes by HPV-18 DNA. Stöppler H, et al. **Oncogene** 1996 Oct 3;13(7):1545-8

Effects of inhibitors of serine protease, phenoloxidase and dopa decarboxylase on the melanization of Dirofilaria immitis microfilariae with Armigeres subalbatus haemolymph in vitro. Liu CT, et al. **Parasitology** 1997 Jul; 115 (Pt 1):57-68

Effects of native and oxidation-resistant secretory leukoprotease inhibitor on cystic fibrosis sputum: inhibition of neutrophil elastase activity and of sputum-induced secretion from porcine tracheal submucosal glands. Schuster A, et al. **Pediatr Res** 1996 Nov;40(5):732-7

ZTTA, a postproline cleaving enzyme inhibitor, improves cerebral ischemia-induced deficits in a three-panel runway task in rats. Shishido Y, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):333-8

Effect of a novel prolyl endopeptidase inhibitor, JTP-4819, on spatial memory and central cholinergic neurons in aged rats. Toide K, et al. **Pharmacol Biochem Behav** 1997 Mar; 56(3):427-34

Comparison of the structures of the cyclotheonamide A complexes of human alpha-thrombin and bovine beta-trypsin. Ganesh V, et al. **Protein Sci** 1996 May; 5(5):825-35

Effect of ovalbumin challenge on endothelial reactivity of pulmonary arteries from sensitized guinea-pigs. Uydeş-Doğan BS, et al. **Pulm Pharmacol** 1995 Apr-Jun; 8(2-3):115-22

Protection of rat lung from elastase-induced elastic fiber degradation in vitro and from emphysema in vivo by a trifluoroacetylpeptide anilide inhibitor. Amour A, et al. **Respiration** 1996;63(5):277-82

Low density lipoprotein catabolism is enhanced by the cleaved form of alpha-1-antitrypsin. Janciauskiene S, et al. **Scand J Clin Lab Invest** 1997 Jul;57(4):325-35

The effect of tamol on human mast cell chymase and plasmin. Wiedow O, et al. **Skin Pharmacol** 1997;10(2):90-6

Human umbilical vein smooth muscle cells as a model to study thrombin generation and function: effect of thrombin inhibitors. Catalioto RM, et al. **Thromb Haemost** 1996 Oct; 76(4):603-9

Synergistic effects of nafamostat mesilate rinse and Kupffer cell blockade for rat liver preservation. Ohdan H, et al. **Transpl Int** 1996;9 Suppl 1:S447-51

Protective effects of antithrombin III supplementation on warm ischemia and reperfusion injury in rat liver. Okano K, et al. **World J Surg** 1996 Oct;20(8):1069-75

PHYSIOLOGY

Regulation and regulatory role of proteinase inhibitors. Roberts RM, et al. **Crit Rev Eukaryot Gene Expr** 1995; 5(3-4):385-436 (404 ref.)

Protein C inhibitor (PCI). Geiger M, et al. **Immunopharmacology** 1996 May;32(1-3):53-6 (18 ref.)

Function of a rare variant of alpha-1-antitrypsin, phenotype P(i) EFranklin S, a poor inhibitor of human neutrophil elastase. Cook L, et al. **Res Exp Med (Berl)** 1997; 196(6):355-62

Thrombin-inhibitor complexes in the blood during and after delivery. Andersson T, et al. **Thromb Res** 1996 Apr 15; 82(2):109-17

SECRETION

Prevention of activity-dependent neuronal death: vasoactive intestinal polypeptide stimulates astrocytes to secrete the thrombin-inhibiting neurotrophic serpin, protease nexin I. Festoff BW, et al. **J Neurobiol** 1996 Jun;30(2):255-66

THERAPEUTIC USE

Coagulation in cardiac surgery. Royston D. **Adv Card Surg** 1996;8:19-45 (125 ref.)

Protease inhibitors for prevention of ERCP pancreatitis: can we afford the price of success? Ziebert JJ, et al. **Am J Gastroenterol** 1997 Jun;92(6):1067-8

Randomized blinded study of aprotinin infusion for liver crush injuries in the pig model. Thomae KR, et al. **Am Surg** 1997 Feb;63(2):113-20

Effect of aprotinin on plasma fibronectin levels during cardiopulmonary bypass. al Khudhairi DM, et al. **Ann Thorac Surg** 1997 Jan;63(1):64-7

Preoperative platelet dysfunction increases the benefit of aprotinin in cardiopulmonary bypass. Ray MJ, et al. **Ann Thorac Surg** 1997 Jan;63(1):57-63

Aprotinin improves outcome of single-ventricle palliation. Tweddell JS, et al. **Ann Thorac Surg** 1996 Nov; 62(5):1329-35; discussion 1335-6

Nafamostat mesilate reduces blood-foreign surface reactions similar to biocompatible materials. Usui A, et al. **Ann Thorac Surg** 1996 Nov;62(5):1404-11

Elective surgery in an anaemic Jehovah's Witness. Cooper R, et al. **Br J Hosp Med** 1996 Jul 10-Aug 20;56(2-3):107-8

Prospective randomized placebo-controlled trial of aprotinin for elective aortic reconstruction. Ranaboldo CJ, et al. **Br J Surg** 1997 Aug;84(8):1110-3

Is there a need for antithrombin III substitution early after burn injury? Danielsson P, et al. **Burns** 1997 Jun;23(4):300-5

Use of secretory leukoprotease inhibitor to augment lung antineutrophil elastase activity. Vogelmeier C, et al. **Chest** 1996 Dec;110(6 Suppl):261S-266S (58 ref.)

Gabexate mesilate, a synthetic protease inhibitor, prevents compression-induced spinal cord injury by inhibiting activation of leukocytes in rats [see comments] Taoka Y, et al. **Crit Care Med** 1997 May;25(5):874-9. Comment in: Crit Care Med 1997 May;25(5):725.

Gabexate mesilate prevents compression-induced spinal cord injury [editorial; comment] Young W. **Crit Care Med** 1997 May;25(5):725. Comment on: Crit Care Med 1997 May;25(5):874-9.

Prevention of ERCP-induced pancreatitis: success at last. Pasricha P. **Gastroenterology** 1997 Apr;112(4):1415-7

Gabexate for the prevention of pancreatic damage related to endoscopic retrograde cholangiopancreatography. Schneider J, et al. **Gastrointest Endosc** 1997 May; 45(5):447-8

Aprotinin diminishes inflammatory processes. Soeparwata R, et al. **Int J Cardiol** 1996 Apr 26;53 Suppl:S55-63

Intravenous alpha-1-antitrypsin replacement therapy: case report after one year of treatment. Ward AC, et al. **Ir J Med Sci** 1997 Jan-Mar;166(1):7-9 (10 ref.)

Human mucus protease inhibitor in airway fluids is a potential defensive compound against infection with influenza A and Sendai viruses. Beppu Y, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):309-16

Cardiopulmonary bypass and the inflammatory response: a role for serine protease inhibitors? Murkin JM. **J Cardiothorac Vasc Anesth** 1997 Apr;11(2 Suppl 1):19-23; discussion 24-5 (35 ref.)

Gabexate mesilate, a new synthetic serine protease inhibitor: a pilot clinical trial in valvular heart surgery [see comments] Parodi F, et al. **J Cardiothorac Vasc Anesth** 1996 Feb;10(2):235-7. Comment in: J Cardiothorac Vasc Anesth 1996 Oct;10(6):832-3.

Serine protease inhibition prevents both cellular and humoral responses to cardiopulmonary bypass. Royston D. **J Cardiovasc Pharmacol** 1996;27 Suppl 1:S42-9 (60 ref.)

A blinded trial of local recombinant tissue factor pathway inhibitor versus either local or systemic heparin in a vein bypass model. Rapp JH, et al. **J Vasc Surg** 1997 Apr; 25(4):726-9

Long-term augmentation therapy in twenty patients with severe alpha-1-antitrypsin deficiency--three-year follow-up. Schwaiblmair M, et al. **Respiration** 1997; 64(1):10-5

Antithrombotic effect of human recombinant tissue factor pathway inhibitor on endotoxin-induced intravascular coagulation in rats: concerted effect with antithrombin. Kamikubo Y, et al. **Thromb Haemost** 1996 Oct;76(4):621-6

[Antithrombin III in the treatment of disseminated intravascular coagulation (see comments)] Nordgaard-Andersen I, et al. **Ugeskr Laeger** 1997 Feb 3; 159(6):730-1. Comment in: Ugeskr Laeger 1997 May 19;159(21):3189-90. **(Dan)**

TOXICITY

Enhancement of plasma fibrinolysis in vitro by jararhagin, the main haemorrhagic metalloproteinase in Bothrops jararaca venom. Sugiki M, et al. **Toxicon** 1995 Dec; 33(12):1605-17

URINE

Acid-stable serine proteinase inhibitors in the urine of Alzheimer disease subjects. Sparro G, et al. **Dis Markers** 1996 Aug;13(1):31-41

SERINE PROTEINASE INHIBITORS, ENDOGENOUS see **SERINE PROTEINASE INHIBITORS**

SERINE PROTEINASE INHIBITORS, EXOGENOUS see **SERINE PROTEINASE INHIBITORS**

SERINE PROTEINASES

Lactoferrin, a potent tryptase inhibitor, abolishes late-phase airway responses in allergic sheep. Elrod KC, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):375-81

Purification, characterization and biological evaluation of recombinant leech-derived tryptase inhibitor (rLDTI) expressed at high level in the yeast Saccharomyces cerevisiae. Pohlig G, et al. **Eur J Biochem** 1996 Oct 15; 241(2):619-26

[Virus propagation and proteases: with special emphasis on the newly discovered serine protease in human herpes virus] Maeda H. **Tanpakushitsu Kakusan Koso** 1997 May; 42(6):875-9 (25 ref.) **(Jpn)**

ADVERSE EFFECTS

Hypersensitivity reactions and specific antibodies in workers exposed to industrial enzymes at a biotechnology plant. Biagini RE, et al. **J Appl Toxicol** 1996 Mar-Apr; 16(2):139-45

ANALYSIS

Tear tryptase levels and allergic conjunctivitis. Margrini L, et al. **Allergy** 1996 Aug;51(8):577-81

Intraepithelial lymphocytes in normal human intestine do not express proteins associated with cytolytic function. Chott A, et al. **Am J Pathol** 1997 Aug;151(2):435-42

Active-site titration of serine proteases using a fluoride ion selective electrode and sulfonyl fluoride inhibitors. Hsia CY, et al. **Anal Biochem** 1996 Nov 15;242(2):221-7

An enzyme-linked immunosorbent assay for detecting proteolytic activity of hepatitis C virus proteinase. Takeshita N, et al. **Anal Biochem** 1997 May 1;247(2):242-6

A continuous assay of hepatitis C virus protease based on resonance energy transfer depsipeptide substrates. Taliani M, et al. **Anal Biochem** 1996 Aug 15;240(1):60-7

Tryptase concentration in skin blister fluid from patients with bullous skin conditions. Brockow K, et al. **Arch Dermatol Res** 1996 Nov;288(12):771-3

A comparison of cysteine and serine proteinases in human gingival crevicular fluid with tissue, saliva and bacterial enzymes by analytical isoelectric focusing. Gazi MI, et al. **Arch Oral Biol** 1996 May;41(5):393-400

Salivary levels of alpha 2-macroglobulin, alpha 1-antitrypsin, C-reactive protein, cathepsin G and elastase in humans with or without destructive periodontal disease. Pederson ED, et al. **Arch Oral Biol** 1995 Dec;40(12):1151-5

Psoriasis patients have highly increased numbers of tryptase-positive mast cells in the duodenal stroma. Michaëlsson G, et al. **Br J Dermatol** 1997 Jun;136(6):866-70

Hepsin, a cell surface serine protease identified in hepatoma cells, is overexpressed in ovarian cancer. Tanimoto H, et al. **Cancer Res** 1997 Jul 15;57(14):2884-7

Intranasal capsaicin is efficacious in non-allergic, non-infectious perennial rhinitis. A placebo-controlled study. Blom HM, et al. **Clin Exp Allergy** 1997 Jul; 27(7):796-801

Identification, isolation, and characterization of a 41-kilodalton protein from rat germ cell-conditioned medium exhibiting concentration-dependent dual biological activities. Aravindan GR, et al. **Endocrinology** 1997 Aug;138(8):3259-68

Aerosolized rhDNase in cystic fibrosis: effect on leucocyte proteases in sputum. Rochat T, et al. **Eur Respir J** 1996 Nov;9(11):2200-6

LasA, alkaline protease and elastase in clinical strains of Pseudomonas aeruginosa: quantification by immunochemical methods. Coin D, et al. **FEMS Immunol Med Microbiol** 1997 Jul;18(3):175-84

Immunohistochemical localization of oviductin in the endometrial lining of the golden hamster (Mesocricetus auratus) during the estrous cycle and early gestation. Martoglio AM, et al. **Histochem J** 1996 Jun;28(6):449-59

Human T-lymphocyte serine proteases (granzymes) 1, 2, and 3 mediated DNA fragmentation in susceptible target cells. Hameed A, et al. **Hum Immunol** 1996 Aug;49(1):13-21

Histamine and tryptase in bronchoalveolar lavage fluid samples from asthmatic children. Turner G, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S69-70

Quantitative analysis of tryptase and chymase containing mast cells in benign and malignant breast lesions. Kankkunen JP, et al. **Int J Cancer** 1997 Jul 29;72(3):385-8

Mast cells that reside at different locations in the jejunum of mice infected with Trichinella spiralis exhibit sequential changes in their granule ultrastructure and chymase phenotype. Friend DS, et al. **J Cell Biol** 1996 Oct; 135(1):279-90

Cathepsin G in gingival tissue and crevicular fluid in adult periodontitis. Tervahartiala T, et al. **J Clin Periodontol** 1996 Feb;23(2):68-75

Immunocytochemical detection of granzymes A and B in peripheral blood lymphocytes from healthy individuals after non-enzymatic antigen retrieval [letter] Wever PC, et al. **J Histochem Cytochem** 1997 Mar;45(3):467-9

Mast cell-derived tryptase in odontogenic cysts. Teronen O, et al. **J Oral Pathol Med** 1996 Aug;25(7):376-81

Immunohistochemical study of cathepsin G and medullasin in inflamed gingival tissues from periodontal patients. Kunimatsu K, et al. **J Periodontal Res** 1997 Feb; 32(2):264-70

Immunohistochemical characterization of mast cell disease in paraffin sections using tryptase, CD68, myeloperoxidase, lysozyme, and CD20 antibodies. Li WV, et al. **Mod Pathol** 1996 Oct;9(10):982-8

Analysis and characteristics of mast cell tryptase and eosinophilic cationic protein from human gut mucosa in gastrointestinal allergy. Raithel M, et al. **Monogr Allergy** 1996;32:143-56

Synergistic inhibition of human cell-mediated cytotoxicity by complement component antisera indicates that target cell lysis may result from an enzymatic cascade involving granzymes and perforin. Brahmi Z, et al. **Nat Immun** 1995 Sep;14(5-6):271-85

Stem cell factor dependent hyperplasia of mucosal-type mast cells but not eosinophils in Schistosoma mansoni-infected rats. Newlands GF, et al. **Parasite Immunol** 1995 Nov; 17(11):595-8

Biologically active polypeptides in the venom of the jellyfish Rhopilema nomadica. Gusmani L, et al. **Toxicon** 1997 May;

35(5):637–48

[Tryptase--an sign of mastocyte activation] Wrzyszcz M, et al. **Pneumonol Alergol Pol** 1996;64(5–6):366–70 (30 ref.) **(Pol)**

[Tryptase: a diagnostic marker in allergic diseases] Martínez Infante E, et al. **Rev Alerg Mex** 1996 May–Jun;43(3):75–6 (58 ref.) (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS see SERINE PROTEINASE INHIBITORS

BIOSYNTHESIS

Expression of mast-cell-specific proteases in tissues of mice studied by in situ hybridization. Jippo T, et al. **Am J Pathol** 1997 Apr;150(4):1373–82

Mast cell heterogeneity in the gastrointestinal tract: variable expression of mouse mast cell protease-1 (mMCP-1) in intraepithelial mucosal mast cells in nematode-infected and normal BALB/c mice. Scudamore CL, et al. **Am J Pathol** 1997 May;150(5):1661–72

Molecular cloning of a novel trypsin-like serine protease (neurosin) preferentially expressed in brain. Yamashiro K, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):11–4

Production of active recombinant human chymase from a construct containing the enterokinase cleavage site of trypsinogen in place of the native propeptide sequence. Wang ZM, et al. **Biol Chem Hoppe Seyler** 1995 Nov; 376(11):681–4

Anaplastic large-cell lymphomas of T-cell and null-cell phenotype express cytotoxic molecules. Foss HD, et al. **Blood** 1996 Nov 15;88(10):4005–11

Regulation of mouse mast cell protease 6 gene expression by transcription factor encoded by the mi locus. Morii E, et al. **Blood** 1996 Oct 1;88(7):2488–94

Comparative analysis of expression of the proprotein convertases furin, PACE4, PC1 and PC2 in human lung tumours. Mbikay M, et al. **Br J Cancer** 1997;75(10):1509–14

Production of an extracellular trypsin-like protease by the fungal plant pathogen Verticillium dahliae. Dobinson KF, et al. **Can J Microbiol** 1997 Mar;43(3):227–33

The developmental expression in the rat CNS and peripheral tissues of proteases PC5 and PACE4 mRNAs: comparison with other proprotein processing enzymes. Zheng M, et al. **Dev Biol** 1997 Jan 15;181(2):268–83

Production and activation of hepatocyte growth factor during the healing of rat gastric ulcers. Kinoshita Y, et al. **Digestion** 1997;58(3):225–31

Production of crystallizable human chymase from a Bacillus subtilis system. McGrath ME, et al. **FEBS Lett** 1997 Aug 25;413(3):486–8

Increase in degranulation of mucosal mast cells in rats sensitized with milk whey protein hydrolysates compared with native proteins. Ju HR, et al. **Food Chem Toxicol** 1997 Jul;35(7):663–8

Conditioned media obtained from a human mastocytosis cell strain induce mast cells expressing chymase but not tryptase from human progenitors. Li L, et al. **Int Arch Allergy Immunol** 1997 May–Jul;113(1–3):289–90

Pentoxifylline inhibits granzyme B and perforin expression following T-lymphocyte activation by anti-CD3 antibody. Hoskin DW, et al. **Int J Immunopharmacol** 1996 Nov; 18(11):623–31

Selective reporter expression in mast cells using a chymase promoter. Liao Y, et al. **J Biol Chem** 1997 Jan 31; 272(5):2969–76

Zyme, a novel and potentially amyloidogenic enzyme cDNA isolated from Alzheimer's disease brain. Little SP, et al. **J Biol Chem** 1997 Oct 3;272(40):25135–42

Secretory granule proteases in rat mast cells. Cloning of 10 different serine proteases and a carboxypeptidase A from various rat mast cell populations. Lützelschwab C, et al. **J Exp Med** 1997 Jan 6;185(1):13–29

Effect of recombinant human IL-4 on tryptase, chymase, and Fc epsilon receptor type I expression in recombinant human stem cell factor-dependent fetal liver-derived human mast cells. Xia HZ, et al. **J Immunol** 1997 Sep 15; 159(6):2911–21

Anti-CD3-activated killer T cells: interferon-gamma and interleukin-10 cross-regulate granzyme B expression and the induction of major histocompatibility complex-unrestricted cytotoxicity. Fitzpatrick L, et al. **J Interferon Cytokine Res** 1996 Jul;16(7):537–46

Characterization of the processing and granular targeting of human proteinase 3 after transfection to the rat RBL or the murine 32D leukemic cell lines. Garwicz D, et al. **J Leukoc Biol** 1997 Jan;61(1):113–23

Neural thrombin and protease nexin I kinetics after murine peripheral nerve injury. Smirnova IV, et al. **J Neurochem** 1996 Nov;67(5):2188–99

Getting more from the two-hybrid system: N-terminal fusions to LexA are efficient and sensitive baits for two-hybrid studies. Béranger F, et al. **Nucleic Acids Res** 1997 May 15;25(10):2035–6

Immunohistochemical study of necrotizing lymphadenitis: a possible mechanism for apoptosis involving perforin and granzyme-producing cytotoxic T cells. Mori N, et al. **Pathol Int** 1997 Jan;47(1):31–7

Regulation of adipsin and body composition in the monosodium glutamate (MSG)-treated mouse. Spurlock ME, et al. **Physiol Behav** 1996 Nov;60(5):1217–21

Ancient origin of the complement lectin pathway revealed by molecular cloning of mannan binding protein-associated serine protease from a urochordate, the Japanese ascidian, Halocynthia roretzi. Ji X, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6340–5

Isolation of the human PC6 gene encoding the putative host protease for HIV-1 gp160 processing in CD4+ T lymphocytes. Miranda L, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7695–700

Protection afforded by pyruvate during acute rejection of small-bowel allografts is mediated by inhibition of oxygen-free radicals and cytolytic activity (perforin and granzyme-B mRNA expression) in activated leukocytes. Cicalese L, et al. **Transplant Proc** 1997 Feb-Mar; 29(1–2):704

Intrarenal display of cytotoxic attack molecules during rejection. Sharma VK, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):1090–1

Molecular executors of cell death--differential intrarenal expression of Fas ligand, Fas, granzyme B, and perforin during acute and/or chronic rejection of human renal allografts. Sharma VK, et al. **Transplantation** 1996 Dec 27; 62(12):1860–6

[The immunochemical detection of the site of duodenase synthesis and secretion: its functional role in the proteolytic carrier system] Morozov IA, et al. **Fiziol Zh Im I M Sechenova** 1996 May–Jun;82(5–6):114–20 (Eng. Abstr.) **(Rus)**

BLOOD

Tryptase--at last a useful diagnostic marker for anaphylactic death. Edston E, et al. **Allergy** 1996 Jun;51(6):443–5

Serum tryptase measurement in diagnosis of intraoperative anaphylaxis caused by hydatid cyst. Blanco I, et al. **Anaesth Intensive Care** 1996 Aug;24(4):489–91

Effect of body weight and caloric restriction on serum complement proteins, including Factor D/adipsin: studies in anorexia nervosa and obesity. Pomeroy C, et al. **Clin Exp Immunol** 1997 Jun;108(3):507–15

Identification and initial characterisation of a N-benzyloxycarbonyl-prolyl-prolinal (Z-Pro-prolinal)-insensitive 7-(N-benzyloxycarbonyl-glycyl-prolyl-amido)-4-methylcoumarin (Z-Gly-Pro-NH-Mec)-hydrolysing peptidase in bovine serum. Cunningham DF, et al. **Eur J Biochem** 1997 Mar 15;244(3):900–3

Serum mast cell proteinase responses of sheep to challenge with Trichostrongylus colubriformis and the effect of dexamethasone treatment. Douch PG, et al. **Int J Parasitol** 1996 Jan;26(1):91–5

A simple method to evaluate basophil tryptase after allergen challenge in vitro. Monasterolo G, et al. **J Allergy Clin Immunol** 1997 Apr;99(4):575–6

Evaluation of the initiation phase of blood coagulation using ultrasensitive assays for serine proteases. Butenas S, et al. **J Biol Chem** 1997 Aug 22;272(34):21527–33

Anaphylaxis and coronary disease [letter] Roth A. **N Engl J Med** 1996 Dec 19;335(25):1925

Regulation of alternative pathway activation and C3a production by adipose cells. Choy LN, et al. **Obes Res** 1996 Nov;4(6):521–32

Cardiopulmonary bypass causes release of leukocyte proteinase-3. Jönsson P. **Scand J Clin Lab Invest** 1996 Dec; 56(8):721–3

Quantitative comparison of fibrin degradation with plasmin, miniplasmin, neurophil leukocyte elastase and cathepsin G. Kolev K, et al. **Thromb Haemost** 1996 Jan;75(1):140–6

Blood-interaction performance of differently sulphated hyaluronic acids. Magnani A, et al. **Thromb Res** 1996 Feb 1;81(3):383–95

[Importance of plasma (histamine and tryptase) and urinary (methylhistamine) in peri-anesthetic anaphylactic and/or anaphylactoid reactions] Cottineau C, et al. **Allerg Immunol (Paris)** 1996 Oct;28(8):270, 273–6 (Eng. Abstr.) **(Fre)**

[Cisatracurium--is the stereoisomer an "ideal" relaxant? Histamine liberation and tryptase determination after bolus administration of cistracurium: a comparison with vecuronium] Soukup J, et al. **Anaesthesist** 1997 Jun; 46(6):486–91 (Eng. Abstr.) **(Ger)**

CHEMICAL SYNTHESIS

Liquid-phase combinatorial synthesis: in search of small-molecule enzyme mimics. Vandersteen AM, et al. **Mol Divers** 1996 Oct;2(1–2):89–96

CHEMISTRY

Crystal structures of the alkaline proteases savinase and esperase from Bacillus lentus. Betzel C, et al. **Adv Exp Med Biol** 1996;379:49–61

The complex between mesentericopeptidase and eglin-C. Dauter Z, et al. **Adv Exp Med Biol** 1996;379:1–4

Engineering surface charges in a subtilisin. Egmond MR, et al. **Adv Exp Med Biol** 1996;379:219–28

Fluorescence decay of tryptophans in serine proteinases from microorganisms: relation to X-ray models. Genov N, et al. **Adv Exp Med Biol** 1996;379:141–5

Roles of the N- and C- terminal pro-sequences of aqualysin I precursor in the processing and extracellular secretion of the enzyme. Lee YC, et al. **Adv Exp Med Biol** 1996; 379:155–7

An investigation of the savinase water channel: implications of cavity mutations. Olsen OH, et al. **Adv Exp Med Biol** 1996;379:235–41

Three dimensional structure of the antibiotic bacitracin A complexed to two different subtilisin proteases: novel mode of enzyme inhibition. Pfeffer-Hennig S, et al. **Adv Exp Med Biol** 1996;379:29–41

Modelling and engineering of enzyme/substrate interactions in subtilisin-like enzymes of unknown 3-dimensional structure. Siezen RJ. **Adv Exp Med Biol** 1996;379:63–73

Subtilases: subtilisin-like serine proteases. Siezen RJ. **Adv Exp Med Biol** 1996;379:75–93

Studies on the structure and function of subtilisin E by protein engineering. Takagi H, et al. **Adv Exp Med Biol** 1996; 379:269–75

Herpesvirus proteases: targets for novel antiviral drugs. Holwerda BC. **Antiviral Res** 1997 Jun;35(1):1–21 (89 ref.)

Molecular biology and vaccine aspects of bacterial immunoglobulin A1 proteases. Lomholt H. **APMIS Suppl** 1996;62:5–28 (125 ref.)

Lung "surfactant convertase" is a member of the carboxylesterase family. Krishnasamy S, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):180–4

Benzyloxycarbonylprolylprolinal, a transition-state analogue for prolyl oligopeptidase, forms a tetrahedral adduct with catalytic serine, not a reactive cysteine. Kahyaoglu A, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):839–43

PACE4: a subtilisin-like endoprotease with unique properties. Mains RE, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):587–93

Enzyme-substrate interaction in the catalytic triad of serine proteases: increase in the pKa of Asp102 [letter] Neuvonen H. **Biochem J** 1997 Feb 15;322 (Pt 1):351–2

Complex formation between the hepatitis C virus serine protease and a synthetic NS4A cofactor peptide. Bianchi E, et al. **Biochemistry** 1997 Jun 24;36(25):7890–7

A zinc binding site in viral serine proteinases. De Francesco R, et al. **Biochemistry** 1996 Oct 15;35(41):13282–7

A site-directed mutagenesis of pro-urokinase which substantially reduces its intrinsic activity. Liu JN, et al. **Biochemistry** 1996 Nov 12;35(45):14070–6

Probing intermolecular main chain hydrogen bonding in serine proteinase-protein inhibitor complexes: chemical synthesis of backbone-engineered turkey ovomucoid third domain. Lu W, et al. **Biochemistry** 1997 Jan 28;36(4):673–9

Interscaffolding additivity. Association of P1 variants of eglin c and of turkey ovomucoid third domain with serine proteinases. Qasim MA, et al. **Biochemistry** 1997 Feb 18; 36(7):1598–607

Structural basis for the broad substrate specificity of fiddler crab collagenolytic serine protease 1. Tsu CA, et al. **Biochemistry** 1997 May 6;36(18):5393–401

Human mast cells expressing recombinant proteinase 3 (PR3) as substrate for clinical testing for anti-neutrophil cytoplasmic antibodies (ANCA). Specks U, et al. **Clin Exp Immunol** 1997 Aug;109(2):286–95

The 1.8 A crystal structure of human cathepsin G in complex with Suc-Val-Pro-PheP-(OPh)2: a Janus-faced proteinase with two opposite specificities. Hof P, et al. **EMBO J** 1996 Oct 15;15(20):5481–91

Anionic phospholipids are determinants of membrane protein topology. van Klompenburg W, et al. **EMBO J** 1997 Jul 16;16(14):4261–6

Identification and activation of profollipsin, a latent precursor form of porcine follipsin. Kihara T, et al. **Eur J Biochem** 1997 Apr 15;245(2):392–7

Glutamyl endopeptidase of Bacillus intermedius, strain 3-19. Leshchinskaya IB, et al. **FEBS Lett** 1997 Mar 10; 404(2-3):241–4

Primary structure of a putative serine protease specific for IGF-binding proteins. Zumbrunn J, et al. **FEBS Lett** 1996 Dec 2;398(2-3):187–92

Purification and characterisation of a novel 34,000-Mr cell-associated proteinase from the dermatophyte Trichophyton rubrum. Lambkin I, et al. **FEMS Immunol Med Microbiol** 1996 Feb;13(2):131–40

Conserved features in the active site of nonhomologous serine proteases. Bagley SC, et al. **Fold Des** 1996;1(5):371–9

Redesigning the substrate specificity of the hepatitis C virus NS3 protease. Failla CM, et al. **Fold Des** 1996;1(1):35–42

Targeting the Achilles' heel of hepatitis C virus. Lemon SM. **Hepatology** 1997 Apr;25(4):1035–7 (10 ref.)

The major component of Na-CBZ-L-lysine thiobenzyl ester (BLT)-specific proteases in cytoplasmic granules of murine intraepithelial lymphocytes is granzyme A. Kato Y, et al. **Immunobiology** 1996–97;196(5):465–74

Purification and molecular cloning of calobin, a thrombin-like enzyme from Agkistrodon caliginosus (Korean viper). Hahn BS, et al. **J Biochem (Tokyo)** 1996 May;119(5):835–43

Purification and characterization of a novel serine proteinase from the microsomal fraction of bovine pancreas. Tsuji A, et al. **J Biochem (Tokyo)** 1996 Jan;119(1):100–5

Identification of the reactive histidine of cucumisin, a plant serine protease: modification with peptidyl chloromethyl ketone derivative of peptide substrate. Yonezawa H, et al. **J Biochem (Tokyo)** 1995 Nov;118(5):917–20

Bacterial protease Lon is a site-specific DNA-binding protein. Fu GK, et al. **J Biol Chem** 1997 Jan 3;272(1):534–8

Identification of an unusual intein in chloroplast ClpP protease of Chlamydomonas eugametos. Wang S, et al. **J Biol Chem** 1997 May 2;272(18):11869–73

Substituted 3-(phenylsulfonyl)-1-phenylimidazolidine-2,4-dione

derivatives as novel nonpeptide inhibitors of human heart chymase. Niwata S, et al. **J Med Chem** 1997 Jul 4; 40(14):2156–63

Binding of amino acid side-chains to S1 cavities of serine proteinases. Lu W, et al. **J Mol Biol** 1997 Feb 21; 266(2):441–61

Molecular symmetry of the ClpP component of the ATP-dependent Clp protease, an Escherichia coli homolog of 20 S proteasome. Shin DH, et al. **J Mol Biol** 1996 Sep 20;262(2):71–6

Inhibitory mechanism of serpins. Identification of steps involving the active-site serine residue of the protease. Stone SR, et al. **J Mol Biol** 1997 Jan 24;265(3):344–62

Interaction of human leukocyte elastase with a N-aryl azetidinone suicide substrate: Conformational analyses based on the mechanism of action of serine proteinases. Vergely I, et al. **J Mol Graph** 1996 Jun;14(3):158–67, 145

New fluorogenic substrates for the study of secondary specificity of prolyl oligopeptidase. Noula C, et al. **J Pept Res** 1997 Jan;49(1):46–51

Crystallization and preliminary X-ray analysis of neuropsin, a serine protease expressed in the limbic system of mouse brain. Kishi T, et al. **J Struct Biol** 1997 Apr;118(3):248–51

The NS3 proteinase domain of hepatitis C virus is a zinc-containing enzyme. Stempniak M, et al. **J Virol** 1997 Apr;71(4):2881–6

Structure of HBP, a multifunctional protein with a serine proteinase fold [letter] Iversen LF, et al. **Nat Struct Biol** 1997 Apr;4(4):265–8

The serpin-proteinase complex revealed [news] Lawrence DA. **Nat Struct Biol** 1997 May;4(5):339–41

Structural insights into serpin-protease complexes reveal the inhibitory mechanism of serpins [letter] Wilczynska M, et al. **Nat Struct Biol** 1997 May;4(5):354–7

Comparative study of kallikrein-like serine proteinases from rat submandibular glands. Bedi GS. **Prep Biochem Biotechnol** 1996 May;26(2):85–104

Crystal structure of varicella-zoster virus protease. Qiu X, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2874–9

Mutant LexA proteins with specific defects in autodigestion. Shepley DP, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11528–33

Novel features of serine protease active sites and specificity pockets: sequence analysis and modelling studies of glutamate-specific endopeptidases and epidermolytic toxins. Barbosa JA, et al. **Protein Eng** 1996 Jul;9(7):591–601

Conformational substates in enzyme mechanism: the 120 K structure of alpha-lytic protease at 1.5 A resolution. Rader SD, et al. **Protein Sci** 1997 Jul;6(7):1375–86

Derivation of 3D coordinate templates for searching structural databases: application to Ser-His-Asp catalytic triads in the serine proteinases and lipases. Wallace AC, et al. **Protein Sci** 1996 Jun;5(6):1001–13

A potential processing enzyme in prokaryotes: oligopeptidase B, a new type of serine peptidase. Polgár L. **Proteins** 1997 Jul;28(3):375–9

Modeling of serpin-protease complexes: antithrombin-thrombin, alpha 1-antitrypsin (358Met-->Arg)-thrombin, alpha 1-antitrypsin (358Met-->Arg)-trypsin, and antitrypsin-elastase. Whisstock J, et al. **Proteins** 1996 Nov;26(3):288–303

Comparative analysis of haemostatic proteinases: structural aspects of thrombin, factor Xa, factor IXa and protein C. Bode W, et al. **Thromb Haemost** 1997 Jul;78(1):501–11 (97 ref.)

Catalytic hydroxyl/amine dyads within serine proteases. Paetzel M, et al. **Trends Biochem Sci** 1997 Jan;22(1):28–31 (33 ref.)

On the role of effector site in serine proteinases hydrophobic chromatography. Kolodzeyskaya MV, et al. **Ukr Biokhim Zh** 1996 Nov-Dec;68(6):109–12

CLASSIFICATION

Classification of serine proteases derived from steric comparisons of their active sites, part II: "Ser, His, Asp arrangements in proteolytic and nonproteolytic proteins". Barth A, et al. **Drug Des Discov** 1994 Nov;12(2):89–111

Differentiation of human Capnocytophaga species by multilocus enzyme electrophoretic analysis and serotyping of immunoglobulin A1 proteases. Frandsen EV, et al. **Microbiology** 1996 Feb;142 (Pt 2):441–8

DEFICIENCY

Residual cytotoxicity and granzyme K expression in granzyme A-deficient cytotoxic lymphocytes. Shresta S, et al. **J Biol Chem** 1997 Aug 8;272(32):20236–44

Impaired fertility in mice deficient for the testicular germ-cell protease PC4. Mbikay M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6842–6

DRUG EFFECTS

Characterization of angiotensin II formation in human isolated bladder by selective inhibitors of ACE and human chymase: a functional and biochemical study. Waldeck K, et al. **Br J Pharmacol** 1997 Jul;121(6):1081–6

Inhibitors of bacterial signal peptidase: a series of 6-(substituted oxyethyl)penems. Allsop A, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):921–8

Lipohexin, a new inhibitor of prolyl endopeptidase from Moeszia lindtneri (HKI-0054) and Paecilomyces sp. (HKI-0055; HKI-0096). II. Inhibitory activities and specificity. Christner C, et al. **J Antibiot (Tokyo)** 1997 May; 50(5):384–9

Lipohexin, a new inhibitor of prolyl endopeptidase from Moeszia lindtneri (HKI-0054) and Paecilomyces sp. (HKI-0055; HKI-0096). I. Screening, isolation and structure elucidation. Heinze S, et al. **J Antibiot (Tokyo)** 1997 May;50(5):379–83

Propeptin, a new inhibitor of prolyl endopeptidase produced by Microbispora. I. Fermentation, isolation and biological properties. Kimura K, et al. **J Antibiot (Tokyo)** 1997 May; 50(5):373–8

Poststatin, a new inhibitor of prolyl endopeptidase. VI. Endopeptidase inhibitory activity of poststatin analogues containing pyrrolidine ring. Tsuda M, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):900–8

Poststatin, a new inhibitor of prolyl endopeptidase. VII. N-cycloalkylamide analogues. Tsuda M, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):909–20

Poststatin, a new inhibitor of prolyl endopeptidase. V. Endopeptidase inhibitory activity of poststatin analogues. Tsuda M, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):890–9

Poststatin, a new inhibitor of prolyl endopeptidase. VIII. Endopeptidase inhibitory activity of non-peptidyl poststatin analogues. Tsuda M, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1022–30

Diverse effects of pH on the inhibition of human chymase by serpins. Schechter NM, et al. **J Biol Chem** 1997 Sep 26;272(39):24499–507

Squamous cell carcinoma antigen 2 is a novel serpin that inhibits the chymotrypsin-like proteinases cathepsin G and mast cell chymase. Schick C, et al. **J Biol Chem** 1997 Jan 17;272(3):1849–55

Inhibition of tryptase TL2 from human T4+ lymphocytes and inhibition of HIV-1 replication in H9 cells by recombinant aprotinin and bikunin homologues. Brinkmann T, et al. **J Protein Chem** 1997 Aug;16(6):651–60

Effect of a novel prolyl endopeptidase inhibitor, JTP-4819, on spatial memory and central cholinergic neurons in aged rats. Toide K, et al. **Pharmacol Biochem Behav** 1997 Mar; 56(3):427–34

The effect of tamol on human mast cell chymase and plasmin. Wiedow O, et al. **Skin Pharmacol** 1997;10(2):90–6

GENETICS

pH dependence of the catalytic activity of a subtilisin-like proteinase. Lange G, et al. **Adv Exp Med Biol** 1996; 379:229–33

Specific inhibition of beta-tryptase expression in a human mast cell line by granulocyte-macrophage colony-stimulating factor produced by airways structural cells. Finotto S, et al. **Am J Respir Cell Mol Biol** 1996 Sep;15(3):355–60

Cloning, sequencing, and expression of a Thermomonospora fusca protease gene in Streptomyces lividans. Lao G, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4256–9

Gene from tropical Bacillus sphaericus encoding a protease closely related to subtilisins from Antarctic bacilli. Wati MR, et al. **Biochim Biophys Acta** 1997 May 2;1352(1):56–62

A regulatory switch involving a Clp ATPase. Lazazzera BA, et al. **Bioessays** 1997 Jun;19(6):455–8 (38 ref.)

Kindling induces neuropsin mRNA in the mouse brain. Okabe A, et al. **Brain Res** 1996 Jul 22;728(1):116–20

Astroglial expression of hepatocyte growth factor and hepatocyte growth factor activator in human brain tissues. Yamada T, et al. **Brain Res** 1997 Jul 11;762(1-2):251–5

Isolation and characterization of a gene encoding a chymotrypsin-like serine protease from Streptomyces lividans 66. Binnie C, et al. **Can J Microbiol** 1996 Mar; 42(3):284–8

A PCR-based strategy for the construction of a defined Yersinia enterocolitica O:8 htrA mutant. Wren BW, et al. **Contrib Microbiol Immunol** 1995;13:290–3

Pattern formation: The link between ovary and embryo. Stein D. **Curr Biol** 1995 Dec 1;5(12):1360–3 (16 ref.)

Improved biocontrol activity of Trichoderma harzianum by over-expression of the proteinase-encoding gene prb1. Flores A, et al. **Curr Genet** 1997 Jan;31(1):30–7

Carbon regulation of the cuticle-degrading enzyme PR1 from Metarhizium anisopliae may involve a trans-acting DNA-binding protein CRR1, a functional equivalent of the Aspergillus nidulans CREA protein. Screen S, et al. **Curr Genet** 1997 Jun;31(6):511–8

Subregional mapping of the human lymphocyte prolyl oligopeptidase gene (PREP) to human chromosome 6q22. Goossens FJ, et al. **Cytogenet Cell Genet** 1996; 74(1-2):99–101

Assignment of the human proprotein convertase gene PCSK5 to chromosome 9q21.3. van de Loo JW, et al. **Cytogenet Cell Genet** 1996;75(4):227–9

Induction of a putative serine protease transcript in immune challenged Drosophila. Coustau C, et al. **Dev Comp Immunol** 1996 Jul-Aug;20(4):265–72

Expression of natural and synthetic genes encoding herpes simplex virus 1 protease in Escherichia coli and purification of the protein. Apeler H, et al. **Eur J Biochem** 1997 Aug 1;247(3):890–5

Accelerated evolution of crotalinae snake venom gland serine proteases. Deshimaru M, et al. **FEBS Lett** 1996 Nov 11; 397(1):83–8

Cloning, expression and sequence analysis of the Bartonella henselae gene encoding the HtrA stress-response protein. Anderson B, et al. **Gene** 1996 Oct 31;178(1-2):35–8

Cloning and expression of the Borrelia burgdorferi lon gene. Cloud JL, et al. **Gene** 1997 Jul 18;194(1):137–41

Analysis of a Streptococcus pneumoniae gene encoding signal peptidase I and overproduction of the enzyme. Zhang YB, et al. **Gene** 1997 Jul 31;194(2):249–55

Esterase polymorphism in insecticide susceptible populations of the mosquito Culex pipiens. Raymond M, et al. **Genet Res** 1996 Feb;67(1):19–26

Structure and chromosomal localization of the human prostasin (PRSS8) gene. Yu JX, et al. **Genomics** 1996 Mar 15;32(3):334–40

Induction of hepatocyte growth factor activator messenger RNA in the liver following tissue injury and acute inflammation. Okajima A, et al. **Hepatology** 1997 Jan; 25(1):97–102

Coamplification of esterase A and B genes as a single unit in Culex pipiens mosquitoes. Rooker S, et al. **Heredity** 1996 Nov;77 (Pt 5):555–61

Characterization of cDNA clones encoding mouse proteinase 3 (myeloblastine) and cathepsin G. Aveskogh M, et al. **Immunogenetics** 1997;46(3):181–91

cDNA cloning of granzyme J. Ewoldt GR, et al. **Immunogenetics** 1997;45(6):452–4

Characterization of the Streptococcus pneumoniae immunoglobulin A1 protease gene (iga) and its translation product. Poulsen K, et al. **Infect Immun** 1996 Oct; 64(10):3957–66

Salmonella typhimurium aroA, htrA, and aroD htrA mutants cause progressive infections in athymic (nu/nu) BALB/c mice. Sinha K, et al. **Infect Immun** 1997 Apr;65(4):1566–9

Safety of live oral Salmonella typhi vaccine strains with deletions in htrA and aroC aroD and immune response in humans. Tacket CO, et al. **Infect Immun** 1997 Feb; 65(2):452–6

Identification, cloning, and sequencing of the immunoglobulin A1 protease gene of Streptococcus pneumoniae. Wani JH, et al. **Infect Immun** 1996 Oct; 64(10):3967–74

Molecular cloning of cDNA for Sarcophaga prolyl endopeptidase and characterization of the recombinant enzyme produced by an E. coli expression system. Ohtsuki S, et al. **Insect Biochem Mol Biol** 1997 Apr;27(4):337–43

Exon structure of the gene encoding the human mannose-binding protein-associated serine protease light chain: comparison with complement C1r and C1s genes. Endo Y, et al. **Int Immunol** 1996 Sep;8(9):1355–8

Pro-protein convertase gene expression in human breast cancer. Cheng M, et al. **Int J Cancer** 1997 Jun 11; 71(6):966–71

Cathepsin G, acid phosphatase, and alpha 1-proteinase inhibitor messenger RNA levels in keratoconus corneas. Whitelock RB, et al. **Invest Ophthalmol Vis Sci** 1997 Feb; 38(2):529–34

Levels of tryptase, chymase, and Fc epsilon RI alpha messenger RNA in human skin are unchanged after IgE-dependent stimulation of cutaneous mast cells in vivo. Xia HZ, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):224–6

Unconventional organization of amplified esterase B gene in insecticide-resistant mosquitoes of the Culex pipiens complex. Heyse D, et al. **J Am Mosq Control Assoc** 1996 Jun;12(2 Pt 1):199–205

Molecular cloning and expression of the spsB gene encoding an essential type I signal peptidase from Staphylococcus aureus. Cregg KM, et al. **J Bacteriol** 1996 Oct; 178(19):5712–8

Overexpression and characterization of a prolyl endopeptidase from the hyperthermophilic archaeon Pyrococcus furiosus. Harwood VJ, et al. **J Bacteriol** 1997 Jun;179(11):3613–8

Regulation of the proteinase B structural gene PRB1 in Saccharomyces cerevisiae. Naik RR, et al. **J Bacteriol** 1997 Mar;179(5):1469–74

The lonS gene regulates swarmer cell differentiation of Vibrio parahaemolyticus. Stewart BJ, et al. **J Bacteriol** 1997 Jan;179(1):107–14

A novel human PACE4 isoform, PACE4E is an active processing protease containing a hydrophobic cluster at the carboxy terminus. Mori K, et al. **J Biochem (Tokyo)** 1997 May;121(5):941–8

Two genes encoding serine protease homologues in Serratia marcescens and characterization of their products in Escherichia coli. Ohnishi Y, et al. **J Biochem (Tokyo)** 1997 May;121(5):902–13

Mutational analysis of the murine granzyme B gene promoter in primary T cells and a T cell clone. Babichuk CK, et al. **J Biol Chem** 1997 Jul 25;272(30):18564–71

Selective reporter expression in mast cells using a chymase promoter. Liao Y, et al. **J Biol Chem** 1997 Jan 31; 272(5):2969–76

Zyme, a novel and potentially amyloidogenic enzyme cDNA isolated from Alzheimer's disease brain. Little SP, et al. **J Biol Chem** 1997 Oct 3;272(40):25135–42

The yeast SPC22/23 homolog Spc3p is essential for signal peptidase activity. Meyer HA, et al. **J Biol Chem** 1997 May 16;272(20):13159–64

The bacillus subtilis dinR gene codes for the analogue of Escherichia coli LexA. Purification and characterization of the DinR protein. Miller MC, et al. **J Biol Chem** 1996 Dec 27;271(52):33502–8

A novel protease in the pupal yellow body of Sarcophaga peregrina (flesh fly). Its purification and cDNA cloning. Nakajima Y, et al. **J Biol Chem** 1997 Sep 19;

272(38):23805–10

A novel human chymotrypsin-like digestive enzyme. Reseland JE, et al. **J Biol Chem** 1997 Mar 21; 272(12):8099–104

Human proteinase-3 expression is regulated by PU.1 in conjunction with a cytidine-rich element. Sturrock A, et al. **J Biol Chem** 1996 Dec 13;271(50):32392–402

Hypothesis for a serine proteinase-like domain at the COOH terminus of Slowpoke calcium-activated potassium channels. Moss GW, et al. **J Gen Physiol** 1996 Dec; 108(6):473–84 (82 ref.)

P-4 and RNKP-7, new granzyme-like serine proteases expressed in activated rat lymphocytes. Ewoldt GR, et al. **J Immunol** 1997 May 15;158(10):4574–83

Granzymes: a variety of serine protease specificities encoded by genetically distinct subfamilies. Smyth MJ, et al. **J Leukoc Biol** 1996 Nov;60(5):555–62 (107 ref.)

Mechanisms of lysis by activated cytotoxic cells expressing perforin and granzyme-B genes and the protein TIA-1 in muscle biopsies of myositis. Cherin P, et al. **J Rheumatol** 1996 Jul;23(7):1135–42

Protease-deficient herpes simplex virus protects mice from lethal herpesvirus infection. Hippenmeyer PJ, et al. **J Virol** 1997 Feb;71(2):988–95

The protease and the assembly protein of Kaposi's sarcoma-associated herpesvirus (human herpesvirus 8). Unal A, et al. **J Virol** 1997 Sep;71(9):7030–8

In situ PCR amplification of intracellular mRNA. Chen RH, et al. **Methods Mol Biol** 1997;71:123–32 (20 ref.)

Characterization of Mycobacterium tuberculosis LexA: recognition of a Cheo (Bacillus-type SOS) box. Movahedzadeh F, et al. **Microbiology** 1997 Mar;143 (Pt 3):929–36

Genetic analysis of regulatory mutants affecting synthesis of extracellular proteinases in the yeast Yarrowia lipolytica: identification of a RIM101/pacC homolog. Lambert M, et al. **Mol Cell Biol** 1997 Jul;17(7):3966–76

SOM 1, a small new gene required for mitochondrial inner membrane peptidase function in Saccharomyces cerevisiae. Esser K, et al. **Mol Gen Genet** 1996 Sep 25;252(4):437–45

A novel homologue of the prokaryotic htrA gene is differentially expressed in the alga Haematococcus pluvialis following stress. Hershkovits G, et al. **Mol Gen Genet** 1997 Apr 28;254(4):345–50

Identification, sequence analysis, and expression of the lepB gene for a leader peptidase in Rhodobacter capsulatus. Klug G, et al. **Mol Gen Genet** 1997 Feb 27;253(6):666–73

A novel protease homolog differentially expressed in breast and ovarian cancer. Anisowicz A, et al. **Mol Med** 1996 Sep;2(5):624–36

Bacillus subtilis can modulate its capacity and specificity for protein secretion through temporally controlled expression of the sipS gene for signal peptidase I. Bolhuis A, et al. **Mol Microbiol** 1996 Nov;22(4):605–18

EspP, a novel extracellular serine protease of enterohaemorrhagic Escherichia coli O157:H7 cleaves human coagulation factor V. Brunder W, et al. **Mol Microbiol** 1997 May;24(4):767–78

Degradation by proteases Lon, Clp and HtrA, of Escherichia coli proteins aggregated in vivo by heat shock; HtrA protease action in vivo and in vitro. Laskowska E, et al. **Mol Microbiol** 1996 Nov;22(3):555–71

A TnphoA insertion within the Bradyrhizobium japonicum sipS gene, homologous to prokaryotic signal peptidases, results in extensive changes in the expression of PBM-specific nodulins of infected soybean (Glycine max) cells. Müller P, et al. **Mol Microbiol** 1995 Dec;18(5):831–40

Echinococcus granulosus antigen 5 may be a serine proteinase [letter] Willis AC, et al. **Parasite Immunol** 1997 Aug; 19(8):385

Isolation of the human PC6 gene encoding the putative host protease for HIV-1 gp160 processing in CD4+ T lymphocytes. Miranda L, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7695–700

Long-range disruption of gene expression by a selectable marker cassette. Pham CT, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13090–5

Expression and purification of recombinant human tryptase in a baculovirus system. Sakai K, et al. **Protein Expr Purif** 1996 Feb;7(1):67–73

Gene structure of ANCA target antigens: implications for the pathogenesis of vasculitis. Jenne DE. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Oct;13(3):209–13 (49 ref.)

Generation of a novel poliovirus with a requirement of hepatitis C virus protease NS3 activity. Hahm B, et al. **Virology** 1996 Dec 15;226(2):318–26

IMMUNOLOGY

Fixation with Carnoy's fluid reduces the number of chymase-positive mast cells: not all chymase-positive mast cells are also positive for tryptase. KleinJan A, et al. **Allergy** 1996 Sep;51(9):614–20

Prevalence of antineutrophil cytoplasmic antibodies in a large inception cohort of patients with connective tissue disease. Merkel PA, et al. **Ann Intern Med** 1997 Jun 1; 126(11):866–73

Molecular biology and vaccine aspects of bacterial immunoglobulin A1 proteases. Lomholt H. **APMIS Suppl** 1996;62:5–28 (125 ref.)

Incidence and disease associations of a proteinase 3-antineutrophil cytoplasmic antibody idiotype (5/7 Id) whose antiidiotype inhibits proteinase 3-antineutrophil cytoplasmic antibody antigen binding activity. Strunz HP, et al. **Arthritis Rheum** 1997 Jan;40(1):135–42

Targeted T-cell therapy for human leukemia: cytotoxic T lymphocytes specific for a peptide derived from proteinase 3 preferentially lyse human myeloid leukemia cells. Molldrem J, et al. **Blood** 1996 Oct 1;88(7):2450–7

Mechanisms responsible for granzyme B-independent cytotoxicity. Shresta S, et al. **Blood** 1997 Jun 1; 89(11):4085–91

Antibodies to proteinase-3 mediate expression of intercellular adhesion molecule-1 (ICAM-1, CD 54). De Bandt M, et al. **Br J Rheumatol** 1997 Aug;36(8):839–46

Inhibition of Prevotella and Capnocytophaga immunoglobulin A1 proteases by human serum. Frandsen EV, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):458–64

Heterogeneous proteolytic specificity and activity of the house dust mite proteinase allergen Der p I. Hewitt CR, et al. **Clin Exp Allergy** 1997 Feb;27(2):201–7

Characterization of the 33-kilodalton major allergen of Penicillium citrinum by using MoAbs and N-terminal amino acid sequencing. Shen HD, et al. **Clin Exp Allergy** 1997 Jan;27(1):79–86

Human autoimmune anti-proteinase 3 scFv from a phage display library. Finnern R, et al. **Clin Exp Immunol** 1997 Feb;107(2):269–81

Serum antibody concentrations of cytotoxin, exotoxin, A, lipopolysaccharide, protease, and elastase and survival of patients with Pseudomonas aeruginosa bacteremia. Baltch AL, et al. **Clin Infect Dis** 1996 Nov;23(5):1109–16

Cloning and functional expression of the murine homologue of proteinase 3: implications for the design of murine models of vasculitis. Jenne DE, et al. **FEBS Lett** 1997 May 19;408(2):187–90

Antineutrophil cytoplasm autoantibodies against bactericidal/permeability-increasing protein in inflammatory bowel disease. Walmsley RS, et al. **Gut** 1997 Jan;40(1):105–9

Monoclonal antibody WGM1 directed against proteinase 3: an immunohistochemical marker for naphthol ASD chloroacetate. Braun MG, et al. **Hematol Oncol** 1996 Jun; 14(2):83–90

The course of Mycobacterium tuberculosis infection in the lungs of mice lacking expression of either perforin- or granzyme-mediated cytolytic mechanisms. Cooper AM, et al. **Infect Immun** 1997 Apr;65(4):1317–20

Diffuse alveolar hemorrhage associated with proteinase 3-specific anti-neutrophil cytoplasmic antibodies. Kikawada M, et al. **Intern Med** 1997 Jun;36(6):430–4

The isolation and characterization of a novel collagenolytic serine protease allergen (Der p 9) from the dust mite Dermatophagoides pteronyssinus. King C, et al. **J Allergy Clin Immunol** 1996 Oct;98(4):739–47

Neutrophil activation by anti-proteinase 3 antibodies in Wegener's granulomatosis: role of exogenous arachidonic acid and leukotriene B4 generation. Grimminger F, et al. **J Exp Med** 1996 Oct 1;184(4):1567–72

Case report: anti-proteinase 3 antibody activity in a patient with primary sclerosing cholangitis: clinical remission following ursodeoxycholic acid therapy. Wong SS, et al. **J Gastroenterol Hepatol** 1996 Dec;11(12):1161–3

Structural analysis of human antibodies to proteinase 3 from patients with Wegener granulomatosis. Sibilia J, et al. **J Immunol** 1997 Jul 15;159(2):712–9

A simple high yield procedure for purification of human proteinase 3, the main molecular target of cANCA. Stummann L, et al. **J Immunol Methods** 1997 Aug 7; 206(1-2):35–42

Human renal tubular epithelial cells as target cells for antibodies to proteinase 3 (c-ANCA). Schwarting A, et al. **Nephrol Dial Transplant** 1997 May;12(5):916–23

Persistence of antibodies to meningococcal IgA1 protease versus decay of antibodies to group A polysaccharide and Opc protein. Thiesen B, et al. **Vaccine** 1997 Feb; 15(2):209–19

ISOLATION & PURIFICATION

Purification and characterization of a secreted T cell beta-endorphin endopeptidase. Safavi A, et al. **Adv Exp Med Biol** 1996;402:71–9

Purification, characterization, and localization of a novel trypsin-like protease found in the human airway. Yasuoka S, et al. **Am J Respir Cell Mol Biol** 1997 Mar;16(3):300–8

A serine alkaline protease from the fungus Conidiobolus coronatus with a distinctly different structure than the serine protease subtilisin Carlsberg. Phadtare S, et al. **Arch Microbiol** 1996 Dec;166(6):414–7

Purification of a novel, heat-stable serine protease inhibitor protein from ovaries of the desert locust, Schistocerca gregaria. Hamdaoui A, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):357–60

Purification and characterization of serine proteinase of the Glu,Asp-specific enzyme family from Thermoactinomyces species. Demidyuk IV, et al. **Biochemistry (Mosc)** 1997 Feb; 62(2):171–5

Purification and characterization of hepsin from rat liver microsomes. Zhukov A, et al. **Biochim Biophys Acta** 1997 Jan 4;1337(1):85–95

Production of an extracellular trypsin-like protease by the fungal plant pathogen Verticillium dahliae. Dobinson KF, et al. **Can J Microbiol** 1997 Mar;43(3):227–33

Purification and characterization of myofibril-bound serine proteinase from carp Cyprinus carpio ordinary muscle. Osatomi K, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Feb; 116(2):183–90

Cerastotin, a serine protease from Cerastes cerastes venom, with platelet-aggregating and agglutinating properties. Marrakchi N, et al. **Eur J Biochem** 1997 Jul 1;247(1):121–8

Purification and characterisation of a novel 34,000-Mr cell-associated proteinase from the dermatophyte Trichophyton rubrum. Lambkin I, et al. **FEMS Immunol Med Microbiol** 1996 Feb;13(2):131–40

Human T-lymphocyte serine proteases (granzymes) 1, 2, and 3 mediated DNA fragmentation in susceptible target cells. Hameed A, et al. **Hum Immunol** 1996 Aug;49(1):13–21

Prohormone convertase PC5 is a candidate processing enzyme for prorenin in the human adrenal cortex. Mercure C, et al. **Hypertension** 1996 Nov;28(5):840–6

Serine proteinase from rice bean. Basu PS, et al. **Indian J Biochem Biophys** 1996 Dec;33(6):491–7

Geotrichum candidum P-5 produces an intracellular serine protease resembling chymotrypsin. Litthauer D, et al. **Int J Biochem Cell Biol** 1996 Oct;28(10):1123–30

Purification and characterization of a novel membrane-bound form of prolyl endopeptidase from bovine brain. O'Leary RM, et al. **Int J Biochem Cell Biol** 1996 Apr;28(4):441–9

Purification and characterization of a novel isoform of mast cell tryptase from rat tongue. Okumura Y, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):856–64

A simple high yield procedure for purification of human proteinase 3, the main molecular target of cANCA. Stummann L, et al. **J Immunol Methods** 1997 Aug 7; 206(1-2):35–42

A comprehensive method to purify three major ANCA antigens: proteinase 3, myeloperoxidase and bactericidal/permeability-increasing protein from human neutrophil granule acid extract. Zhao MH, et al. **J Immunol Methods** 1996 Oct 16;197(1-2):121–30

Expression and purification of recombinant human tryptase in a baculovirus system. Sakai K, et al. **Protein Expr Purif** 1996 Feb;7(1):67–73

[Isolation and properties of serine proteinase PC from the Kamchatka crab, Paralithodes camtschatica--a proteolytic enzyme with broad specificity] Rudenskaia GN, et al. **Biokhimiia** 1996 Jun;61(6):1119–32 (Eng. Abstr.) **(Rus)**

METABOLISM

Formation of active IL-1 beta from pro-IL-1 beta catalyzed by stratum corneum chymotryptic enzyme in vitro. Nylander-Lundqvist E, et al. **Acta Derm Venereol** 1997 May;77(3):203–6

Association between expression of stratum corneum chymotryptic enzyme and pathological keratinization in human oral mucosa. Sondell B, et al. **Acta Derm Venereol** 1996 May;76(3):177–81

Cellular proteases involved in the pathogenicity of enveloped animal viruses, human immunodeficiency virus, influenza virus A and Sendai virus. Kido H, et al. **Adv Enzyme Regul** 1996;36:325–47

Granzyme B-induced apoptosis. Greenberg AH. **Adv Exp Med Biol** 1996;406:219–28 (69 ref.)

Serine proteinases from cold-adapted organisms. Kristjánsson MM, et al. **Adv Exp Med Biol** 1997;415:27–46 (93 ref.)

Horseshoe crab factor G: a new heterodimeric serine protease zymogen sensitive to (1 —> 3)-beta-D-glucan. Muta T, et al. **Adv Exp Med Biol** 1996;389:79–85 (28 ref.)

Thermitase - kinetic differentiation to the subtilisins. Peters K, et al. **Adv Exp Med Biol** 1996;379:133–40

Crystallographic study of eglin-C binding to thermitase. Teplyakov A, et al. **Adv Exp Med Biol** 1996;379:5–9 (20 ref.)

Activity of granzyme A, a serine protease in the killing granules of cytotoxic T lymphocytes, is reduced in cells from HIV-infected hemophiliacs. Chiang CF, et al. **AIDS Res Hum Retroviruses** 1996 Feb 10;12(3):235–9

Expression of granzyme B by cytotoxic T lymphocytes in the lymph nodes of HIV-infected patients. Koopman G, et al. **AIDS Res Hum Retroviruses** 1997 Feb 10;13(3):227–33

Amniotic fluid embolism, anaphylaxis, and tryptase. Benson MD, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):737 (5 ref.)

Fibronectinase activity in cultured human trophoblasts is mediated by urokinase-type plasminogen activator. Monzón-Bordonaba F, et al. **Am J Obstet Gynecol** 1997 Jan;176(1 Pt 1):58–65

Acute stress causes mucin release from rat colon: role of corticotropin releasing factor and mast cells. Castagliuolo I, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G884–92

Classical second messengers are not involved in proteinase-induced degranulation of airway gland cells. Sommerhoff CP, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L796–803

Purification, characterization, and localization of a novel trypsin-like protease found in the human airway. Yasuoka S, et al. **Am J Respir Cell Mol Biol** 1997 Mar;16(3):300–8

Milk-clotting activity of cucumisin, a plant serine protease from melon fruit. Uchikoba T, et al. **Appl Biochem Biotechnol** 1996 Mar;56(3):325–30

Synthesis and kinetic studies of diphenyl 1-(N-peptidylamino)alkanephosphonate esters and their biotinylated derivatives as inhibitors of serine proteases and probes for lymphocyte granzymes. Abuelyaman AS, et al. **Arch Biochem Biophys** 1997 Aug 15;344(2):271–80

SERINE PROTEINASES

Amino acid-derived phthalimide and saccharin derivatives as inhibitors of human leukocyte elastase, cathepsin G, and proteinase 3. Groutas WC, et al. **Arch Biochem Biophys** 1996 Aug 15;332(2):335–40

Soybean Bowman–Birk protease inhibitor is a highly effective inhibitor of human mast cell chymase. Ware JH, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):133–8

Inhibitory effect of pulmonary surfactant on Sendai virus infection in rat lungs. Tashiro M, et al. **Arch Virol** 1996; 141(8):1571–7

Z-321, a prolyl endopeptidase inhibitor, augments the potentiation of synaptic transmission in rat hippocampal slices. Miura N, et al. **Behav Brain Res** 1997 Feb; 83(1–2):213–6

A novel prolyl endopeptidase inhibitor, JTP-4819, with potential for treating Alzheimer's disease. Toide K, et al. **Behav Brain Res** 1997 Feb;83(1–2):147–51

Granzyme B/perforin-mediated apoptosis of Jurkat cells results in cleavage of poly(ADP-ribose) polymerase to the 89-kDa apoptotic fragment and less abundant 64-kDa fragment. Froelich CJ, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):658–65

Inhibition of human leukocyte proteinase 3 by a novel recombinant serine proteinase inhibitor (LEX032). Groutas WC, et al. **Biochem Biophys Res Commun** 1997 Apr 28; 233(3):697–9

Specific inhibitor for prolyl endopeptidase suppresses the generation of amyloid beta protein in NG108–15 cells. Shinoda M, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):641–5

Identification of a novel proteinase (ameloprotease-I) responsible for the complete degradation of amelogenin during enamel maturation. Moradian-Oldak J, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):1015–21

Lactoferrin regulates the activity of heparin proteoglycan-bound mast cell chymase: characterization of the binding of heparin to lactoferrin. Pejler G. **Biochem J** 1996 Dec 15;320 (Pt 3):897–903

Sheep mast cell proteinase-1: characterization as a member of a new class of dual-specific ruminant chymases. Pemberton AD, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):665–70

Improvements on the purification of mannan-binding lectin and demonstration of its Ca(2+)-independent association with a C1s-like serine protease. Tan SM, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):329–32

Activation of pro-caspase-7 by serine proteases includes a non-canonical specificity. Zhou Q, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):361–4

Activation of the intracellular Ca(2+)-dependent serine protease ISP1 of bacillus megaterium by purification or by high Ca2+ concentrations. Váchová L. **Biochem Mol Biol Int** 1996 Nov;40(5):947–54

The effect of mutagenesis of the human IgA1 hinge residue Thr228 on cleavage by IgA1-specific proteases. Batten MR, et al. **Biochem Soc Trans** 1997 May;25(2):329S

Some effects of fluoride on the IgA protease of the oral bacterium Streptococcus sanguis. Duguid R, et al. **Biochem Soc Trans** 1996 May;24(2):312S

Inactivation of human lung tryptase: evidence for a re-activatable tetrameric intermediate and active monomers. Addington AK, et al. **Biochemistry** 1996 Oct 22;35(42):13511–8

A zinc binding site in viral serine proteinases. De Francesco R, et al. **Biochemistry** 1996 Oct 15;35(41):13282–7

Mechanistic role of an NS4A peptide cofactor with the truncated NS3 protease of hepatitis C virus: elucidation of the NS4A stimulatory effect via kinetic analysis and inhibitor mapping. Landro JA, et al. **Biochemistry** 1997 Aug 5;36(31):9340–8

Preferential interactions of the Escherichia coli LexA repressor with anions and protons are coupled to binding the recA operator. Relan NK, et al. **Biochemistry** 1997 Feb 4;36(5):1077–84

Inhibition of alpha-lytic protease by pro region C-terminal steric occlusion of the active site. Sohl JL, et al. **Biochemistry** 1997 Apr 1;36(13):3894–902

Structural basis for the broad substrate specificity of fiddler crab collagenolytic serine protease 1. Tsu CA, et al. **Biochemistry** 1997 May 6;36(18):5393–401

Enzymatic properties of thiol-dependent serine proteinase of Bacillus intermedius 3-19. Itskovich EL, et al. **Biochemistry (Mosc)** 1997 Jan;62(1):49–53

Protease Ti (Clp), a multi-component ATP-dependent protease in Escherichia coli. Chung CH, et al. **Biol Chem** 1996 Sep;377(9):549–54 (37 ref.)

Human myeloblastin (leukocyte proteinase 3): reactions with substrates, inactivators and activators in comparison with leukocyte elastase. Früh H, et al. **Biol Chem** 1996 Sep; 377(9):579–86

Design, synthesis, and in vitro inhibitory activity toward human leukocyte elastase, cathepsin G, and proteinase 3 of saccharin-derived sulfones and congeners. Groutas WC, et al. **Bioorg Med Chem** 1996 Sep;4(9):1393–400

Specific inhibition of thrombin-induced cell activation by the neutrophil proteinases elastase, cathepsin G, and proteinase 3: evidence for distinct cleavage sites within the aminoterminal domain of the thrombin receptor. Renesto P, et al. **Blood** 1997 Mar 15;89(6):1944–53

Role of neutrophil membrane proteases in fibrin degradation. Adams SA, et al. **Blood Coagul Fibrinolysis** 1995 Dec; 6(8):693–702

Angiotensin-converting enzyme-independent pathways of angiotensin II formation in human tissues and cardiovascular diseases. Urata H, et al. **Blood Press Suppl** 1996;2:22–8 (49 ref.)

Quantitative analysis of tryptase- and chymase-containing mast cells in atopic dermatitis and nummular eczema. Järvikallio A, et al. **Br J Dermatol** 1997 Jun;136(6):871–7

High levels of human chymase expression in the pineal and pituitary glands. Baltatu O, et al. **Brain Res** 1997 Mar 28; 752(1–2):269–78

Homocysteine induces synthesis of a serine elastase in arterial smooth muscle cells from multi-organ donors. Jourdheuil-Rahmani D, et al. **Cardiovasc Res** 1997 Jun; 34(3):597–602

Association of serine protease with the rise of intracellular calcium in cytotoxic T lymphocytes. Koo GC, et al. **Cell Immunol** 1996 Dec 15;174(2):107–15

Regulation of local angiotensin II formation in the human heart in the presence of interstitial fluid. Inhibition of chymase by protease inhibitors of interstitial fluid and of angiotensin-converting enzyme by Ang-(1–9) formed by heart carboxypeptidase A-like activity. Kokkonen JO, et al. **Circulation** 1997 Mar 18;95(6):1455–63

Comparison of proline endopeptidase activity in brain tissue from normal cases and cases with Alzheimer's disease, Lewy body dementia, Parkinson's disease and Huntington's disease. Mantle D, et al. **Clin Chim Acta** 1996 May 30; 249(1–2):129–39

Heterogeneous proteolytic specificity and activity of the house dust mite proteinase allergen Der p I. Hewitt CR, et al. **Clin Exp Allergy** 1997 Feb;27(2):201–7

Significance of serine proteinase and matrix metalloproteinase systems in the destruction of human articular cartilage. Kikuchi H, et al. **Clin Exp Pharmacol Physiol** 1996 Oct–Nov;23(10–11):885–9

Angiotensin II-generating system in dog and monkey ocular tissues. Shiota N, et al. **Clin Exp Pharmacol Physiol** 1997 Mar–Apr;24(3–4):243–8

Elastase from polymorphonuclear leukocyte in articular cartilage and synovial fluids of patients with rheumatoid arthritis. Momohara S, et al. **Clin Rheumatol** 1997 Mar; 16(2):133–40

Cathepsin G and elastase in synovial fluid and peripheral blood in reactive and rheumatoid arthritis. Nordstrom D, et al. **Clin Rheumatol** 1996 Jan;15(1):35–41

Phenotypic and quantitative changes in mast cells after syngeneic unilateral lung transplantation in the rat. Buvry A, et al. **Clin Sci (Colch)** 1996 Sep;91(3):319–27

Cytotoxic T-cell-derived granzyme B activates the apoptotic protease ICE-LAP3. Chinnaiyan AM, et al. **Curr Biol** 1996 Jul 1;6(7):897–9

Changes in rat corneal matrix metalloproteinases and serine proteinases under vitamin A deficiency. Twining SS, et al. **Curr Eye Res** 1997 Feb;16(2):158–65

Carbon regulation of the cuticle-degrading enzyme PR1 from Metarhizium anisopliae may involve a trans-acting DNA-binding protein CRR1, a functional equivalent of the Aspergillus nidulans CREA protein. Screen S, et al. **Curr Genet** 1997 Jun;31(6):511–8

Protease activity in a hapten-induced model of ulcerative colitis in rats. Hawkins JV, et al. **Dig Dis Sci** 1997 Sep; 42(9):1969–80

Rapid mass spectrometric identification of proteins from two-dimensional polyacrylamide gels after in gel proteolytic digestion. Li G, et al. **Electrophoresis** 1997 Mar-Apr;18(3–4):391–402

Preformed cytoplasmic nucleocapsids are not necessary for alphavirus budding. Forsell K, et al. **EMBO J** 1996 Dec 2;15(23):6495–505

A protease complex in the Escherichia coli plasma membrane: HflKC (HflA) forms a complex with FtsH (HflB), regulating its proteolytic activity against SecY. Kihara A, et al. **EMBO J** 1996 Nov 15;15(22):6122–31

Identification and activation of profollipsin, a latent precursor form of porcine follipsin. Kihara T, et al. **Eur J Biochem** 1997 Apr 15;245(2):392–7

Probing substrate backbone function in prolyl oligopeptidase catalysis—large positional effects of peptide bond monothioxylation. Schutkowski M, et al. **Eur J Biochem** 1997 Apr 15;245(2):381–5

Translocation to the periplasm and signal sequence cleavage of preapocytochrome c depend on sec and lep, but not on the ccm gene products. Thöny-Meyer L, et al. **Eur J Biochem** 1997 Jun 15;246(3):794–9

Selection of RNA aptamers that bind specifically to the NS3 protease of hepatitis C virus. Urvil PT, et al. **Eur J Biochem** 1997 Aug 15;248(1):130–8

Characterization of new vacuolar segregation mutants, isolated by screening for loss of proteinase B self-activation. Gomes de Mesquita DS, et al. **Eur J Cell Biol** 1996 Nov;71(3):237–47

Complexes between proteinase 3, alpha 1-antitrypsin and proteinase 3 anti-neutrophil cytoplasm autoantibodies: a comparison between alpha 1-antitrypsin PiZ allele carriers and non-carriers with Wegener's granulomatosis. Baslund B, et al. **Eur J Clin Invest** 1996 Sep;26(9):786–92

Cleavage of caspase family members by granzyme B: a comparative study in vitro. Van de Craen M, et al. **Eur J Immunol** 1997 May;27(5):1296–9

Antiproteases attenuate the release of neutrophil chemotactic activity from bronchial epithelial cells induced by smoke. Koyama S, et al. **Exp Lung Res** 1996 Jan–Feb;22(1):1–19

Calnexin can interact with N-linked glycans located close to the endoplasmic reticulum membrane. Andersson H, et al. **FEBS Lett** 1996 Nov 18;397(2–3):321–4

Assembly of a cytoplasmic membrane protein in Escherichia coli is dependent on the signal recognition particle. de Gier JW, et al. **FEBS Lett** 1996 Dec 16;399(3):307–9

pH dependence of bovine mast cell tryptase catalytic activity and of its inhibition by 4',6-diamidino-2-phenylindole. Fiorucci L, et al. **FEBS Lett** 1997 May 12;408(1):85–8

The lysosomal/phagosomal membrane protein h-lamp-1 is a target of the IgA1 protease of Neisseria gonorrhoeae. Hauck CR, et al. **FEBS Lett** 1997 Mar 17;405(1):86–90

Glutamyl endopeptidase of Bacillus intermedius, strain 3-19. Leshchinskaya IB, et al. **FEBS Lett** 1997 Mar 10; 404(2–3):241–4

Mast cell chymase in complex with heparin proteoglycan is regulated by protamine. Pejler G. **FEBS Lett** 1996 Apr 1;383(3):170–4

Co-elevation of brain natriuretic peptide and proprotein-processing endoprotease furin after myocardial infarction in rats. Sawada Y, et al. **FEBS Lett** 1997 Jan 3;400(2):177–82

Chymase is activated in the hamster heart following ventricular fibrosis during the chronic stage of hypertension. Shiota N, et al. **FEBS Lett** 1997 Apr 14; 406(3):301–4

Induction of chymase that forms angiotensin II in the monkey atherosclerotic aorta. Takai S, et al. **FEBS Lett** 1997 Jul 21;412(1):86–90

Functional analysis of human PACE4-A and PACE4-C isoforms: identification of a new PACE4-CS isoform. Zhong M, et al. **FEBS Lett** 1996 Oct 28;396(1):31–6

In vivo production of A-protein, lipopolysaccharide, iron-regulated outer membrane proteins and 70-kDa serine protease by Aeromonas salmonicida subsp. salmonicida. Ellis AE, et al. **FEMS Microbiol Lett** 1997 Apr 15; 149(2):157–63

Redesigning the substrate specificity of the hepatitis C virus NS3 protease. Failla CM, et al. **Fold Des** 1996;1(1):35–42

Absence of periplasmic DsbA oxidoreductase facilitates export of cysteine-containing passenger proteins to the Escherichia coli cell surface via the Iga beta autotransporter pathway. Jose J, et al. **Gene** 1996 Oct 31; 178(1–2):107–10

Processing of the Nedd2 precursor by ICE-like proteases and granzyme B. Harvey NL, et al. **Genes Cells** 1996 Jul; 1(7):673–85

Signals from lymphocytes in colon cancer [comment] Kiessling R. **Gut** 1997 Jan;40(1):153–4. Comment on: Gut 1997 Jan;40(1):113–9.

T cell receptor-zeta and granzyme B expression in mononuclear cell infiltrates in normal colon mucosa and colon carcinoma [see comments] Mulder WM, et al. **Gut** 1997 Jan;40(1):113–9. Comment in: Gut 1997 Jan;40(1):153–4.

Constitutive expression of mouse mast cell protease-1 in normal BALB/c mice and its up-regulation during intestinal nematode infection. Wastling JM, et al. **Immunology** 1997 Feb;90(2):308–13

Serine proteinase from rice bean. Basu PS, et al. **Indian J Biochem Biophys** 1996 Dec;33(6):491–7

The HtrA stress response protease contributes to resistance of Brucella abortus to killing by murine phagocytes. Elzer PH, et al. **Infect Immun** 1996 Nov;64(11):4838–41

Modification of the Staphylococcus aureus fibronectin binding phenotype by V8 protease. McGavin MJ, et al. **Infect Immun** 1997 Jul;65(7):2621–8

Existence of c-kit receptor-positive, tryptase-negative, IgE-negative cells in human allergic nasal mucosa: a candidate for mast cell progenitor. Kawabori S, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):36–43

GM-CSF downregulates expression of tryptase, Fc epsilon RI and histamine in HMC-1 mast cells. Welker P, et al. **Int Arch Allergy Immunol** 1997 May-Jul;113(1–3):284–6

It all begins with EVE (endogenous vascular elastase). Rabinovitch M. **Isr J Med Sci** 1996 Oct;32(10):803–8; discussion 809–10 (18 ref.)

Generation of anaphylatoxins through proteolytic processing of C3 and C5 by house dust mite protease. Maruo K, et al. **J Allergy Clin Immunol** 1997 Aug;100(2):253–60

sfi-independent filamentation in Escherichia coli Is lexA dependent and requires DNA damage for induction. Hill TM, et al. **J Bacteriol** 1997 Mar;179(6):1931–9

The DegP and DegQ periplasmic endoproteases of Escherichia coli: specificity for cleavage sites and substrate conformation. Kolmar H, et al. **J Bacteriol** 1996 Oct; 178(20):5925–9

Human mucus protease inhibitor in airway fluids is a potential defensive compound against infection with influenza A and Sendai viruses. Beppu Y, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):309–16

Substrate specificity of a novel serine protease from soybean [Glycine max (L.) Merrill] Morita S, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1094–9

Purification and characterization of a novel serine proteinase from the microsomal fraction of bovine pancreas. Tsuji A, et al. **J Biochem (Tokyo)** 1996 Jan;119(1):100–5

Activation-dependent exposure of the inter-EGF sequence Leu83-Leu88 in factor Xa mediates ligand binding to effector cell protease receptor-1. Ambrosini G, et al. **J Biol Chem** 1997 Mar 28;272(13):8340–5

Effector cell protease receptor-1, a platelet

activation-dependent membrane protein, regulates prothrombinase-catalyzed thrombin generation. Bouchard BA, et al. **J Biol Chem** 1997 Apr 4;272(14):9244-51

Inhibition of neutrophil serine proteinases by suramin. Cadène M, et al. **J Biol Chem** 1997 Apr 11;272(15):9950-5

Identification of the paired basic convertases implicated in HIV gp160 processing based on in vitro assays and expression in CD4(+) cell lines [published erratum appears in J Biol Chem 1997 Mar 28;272(13):8836] Decroly E, et al. **J Biol Chem** 1996 Nov 29;271(48):30442-50

Processing of wild-type and mutant proinsulin-like growth factor-IA by subtilisin-related proprotein convertases. Duguay SJ, et al. **J Biol Chem** 1997 Mar 7;272(10):6663-70

In addition to SEC11, a newly identified gene, SPC3, is essential for signal peptidase activity in the yeast endoplasmic reticulum. Fang H, et al. **J Biol Chem** 1997 May 16;272(20):13152-8

New paradigm for lymphocyte granule-mediated cytotoxicity. Target cells bind and internalize granzyme B, but an endosomolytic agent is necessary for cytosolic delivery and subsequent apoptosis. Froelich CJ, et al. **J Biol Chem** 1996 Nov 15;271(46):29073-9

Endoprotease activities other than furin and PACE4 with a role in processing of HIV-I gp160 glycoproteins in CHO-K1 cells. Inocencio NM, et al. **J Biol Chem** 1997 Jan 10;272(2):1344-8

Nuclear transport of granzyme B (fragmentin-2). Dependence of perforin in vivo and cytosolic factors in vitro. Jans DA, et al. **J Biol Chem** 1996 Nov 29; 271(48):30781-9

Role of the heat shock protein DnaJ in the lon-dependent degradation of naturally unstable proteins. Jubete Y, et al. **J Biol Chem** 1996 Nov 29;271(48):30798-803

Cleavage of type I procollagen by human mast cell chymase initiates collagen fibril formation and generates a unique carboxyl-terminal propeptide. Kofford MW, et al. **J Biol Chem** 1997 Mar 14;272(11):7127-31

Interactions of mast cell tryptase with thrombin receptors and PAR-2. Molino M, et al. **J Biol Chem** 1997 Feb 14; 272(7):4043-9

Structurally related Spc1p and Spc2p of yeast signal peptidase complex are functionally distinct. Mullins C, et al. **J Biol Chem** 1996 Nov 15;271(46):29094-9

Effector cell protease receptor-1 is a vascular receptor for coagulation factor Xa. Nicholson AC, et al. **J Biol Chem** 1996 Nov 8;271(45):28407-13

Proteinase-mediated insect resistance to Bacillus thuringiensis toxins. Oppert B, et al. **J Biol Chem** 1997 Sep 19;272(38):23473-6

Use of site-directed chemical modification to study an essential lysine in Escherichia coli leader peptidase. Paetzel M, et al. **J Biol Chem** 1997 Apr 11;272(15):9994-10003

Identification of the 170-kDa melanoma membrane-bound gelatinase (seprase) as a serine integral membrane protease. Piñeiro-Sánchez ML, et al. **J Biol Chem** 1997 Mar 21; 272(12):7595-601

A steady-state and pre-steady-state kinetic analysis of the NTPase activity associated with the hepatitis C virus NS3 helicase domain. Preugschat F, et al. **J Biol Chem** 1996 Oct 4;271(40):24449-57

Interaction of Escherichia coli RecA protein with LexA repressor. I. LexA repressor cleavage is competitive with binding of a secondary DNA molecule. Rehrauer WM, et al. **J Biol Chem** 1996 Sep 27;271(39):23865-73

Distinct multisite synergistic interactions determine substrate specificities of human chymase and rat chymase-1 for angiotensin II formation and degradation. Sanker S, et al. **J Biol Chem** 1997 Jan 31;272(5):2963-8

Dimerization and activation of the herpes simplex virus type 1 protease. Schmidt U, et al. **J Biol Chem** 1997 Mar 21; 272(12):7732-5

Hepatocyte growth factor activator inhibitor, a novel Kunitz-type serine protease inhibitor. Shimomura T, et al. **J Biol Chem** 1997 Mar 7;272(10):6370-6

Residual cytotoxicity and granzyme K expression in granzyme A-deficient cytotoxic lymphocytes. Shresta S, et al. **J Biol Chem** 1997 Aug 8;272(32):20236-44

HtrA heat shock protease interacts with phospholipid membranes and undergoes conformational changes. Skórko-Glonek J, et al. **J Biol Chem** 1997 Apr 4; 272(14):8974-82

The three-dimensional structure of recombinant leech-derived tryptase inhibitor in complex with trypsin. Implications for the structure of human mast cell tryptase and its inhibition. Stubbs MT, et al. **J Biol Chem** 1997 Aug 8;272(32):19931-7

A cytosolic granzyme B inhibitor related to the viral apoptotic regulator cytokine response modifier A is present in cytotoxic lymphocytes. Sun J, et al. **J Biol Chem** 1996 Nov 1;271(44):27802-9

A combinatorial approach defines specificities of members of the caspase family and granzyme B. Functional relationships established for key mediators of apoptosis. Thornberry NA, et al. **J Biol Chem** 1997 Jul 18; 272(29):17907-11

Substrate specificity of the hepatitis C virus serine protease NS3. Urbani A, et al. **J Biol Chem** 1997 Apr 4; 272(14):9204-9

ATP-dependent degradation of CcdA by Lon protease. Effects of secondary structure and heterologous subunit interactions. Van Melderen L, et al. **J Biol Chem** 1996 Nov 1;271(44):27730-8

Nucleophile labeling of cysteine and serine protease substrates. Wang Y, et al. **J Biol Chem** 1996 Nov 8; 271(45):28399-406

Low-molecular-weight variants of osteopontin generated by serine proteinases in urine of patients with kidney stones. Bautista DS, et al. **J Cell Biochem** 1996 Jun 1;61(3):402-9

A cytosolic serine endopeptidase from Trypanosoma cruzi is required for the generation of Ca2+ signaling in mammalian cells. Burleigh BA, et al. **J Cell Biol** 1997 Feb 10;136(3):609-20

The isoforms of proprotein convertase PC5 are sorted to different subcellular compartments. De Bie I, et al. **J Cell Biol** 1996 Dec;135(5):1261-75

Release and activation of human neutrophil matrix metallo- and serine proteinases during phagocytosis of Fusobacterium nucleatum, Porphyromonas gingivalis and Treponema denticola. Ding Y, et al. **J Clin Periodontol** 1997 Apr;24(4):237-48

30-kDa trypsin-like proteases in the plantar stratum corneum. Chang-Yi C, et al. **J Dermatol** 1997 Aug; 24(8):504-9

Mastocytosis: new understandings in cutaneous pathophysiology. Lazarus GS. **J Dermatol** 1996 Nov; 23(11):769-72 (15 ref.)

Fate of two mast cell tryptases in V3 mastocytosis and normal BALB/c mice undergoing passive systemic anaphylaxis: prolonged retention of exocytosed mMCP-6 in connective tissues, and rapid accumulation of enzymatically active mMCP-7 in the blood. Ghildyal N, et al. **J Exp Med** 1996 Sep 1;184(3):1061-73

Granzyme B (GraB) autonomously crosses the cell membrane and perforin initiates apoptosis and GraB nuclear localization. Shi L, et al. **J Exp Med** 1997 Mar 3; 185(5):855-66

Identification of the protease domain in NS3 of hepatitis C virus. Han DS, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):985-93

Characterization of the proteinase specified by varicella-zoster virus gene 33. McMillan DJ, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2153-7

Efficient herpes simplex virus type 1 (HSV-1) capsid formation directed by the varicella-zoster virus scaffolding protein requires the carboxy-terminal sequences from the HSV-1 homologue. Preston VG, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1633-46

Processing and intracellular localization of the herpes simplex virus type 1 proteinase. Stevenson AJ, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):671-5

Immunocytochemical localization of chymase to cytoplasmic vesicles after rat peritoneal mast cell stimulation by compound 48/80. Login GR, et al. **J Histochem Cytochem** 1997 Oct;45(10):1379-91

Activation of angiotensin II-forming chymase in the cardiomyopathic hamster heart. Shiota N, et al. **J Hypertens** 1997 Apr;15(4):431-40

Serine protease angiotensin II systems. Arakawa K. **J Hypertens Suppl** 1996 Dec;14(5):S3-7 (44 ref.)

Glucocorticoids inhibit the cytokine-induced proliferation of mast cells, the high affinity IgE receptor-mediated expression of TNF-alpha, and the IL-10-induced expression of chymases. Eklund KK, et al. **J Immunol** 1997 May 1;158(9):4373-80

Human tryptase fibrinogenolysis is optimal at acidic pH and generates anticoagulant fragments in the presence of the anti-tryptase monoclonal antibody B12. Ren S, et al. **J Immunol** 1997 Oct 1;159(7):3540-8

Effect of neutrophil serine proteinases and defensins on lung epithelial cells: modulation of cytotoxicity and IL-8 production. Van Wetering S, et al. **J Leukoc Biol** 1997 Aug;62(2):217-26

Development, significance, and heterogeneity of mast cells with particular regard to the mast cell-specific proteases chymase and tryptase. Welle M. **J Leukoc Biol** 1997 Mar; 61(3):233-45 (177 ref.)

Substituted 3-(phenylsulfonyl)-1-phenylimidazolidine-2,4-dione derivatives as novel nonpeptide inhibitors of human heart chymase. Niwata S, et al. **J Med Chem** 1997 Jul 4; 40(14):2156-63

Binding of amino acid side-chains to S1 cavities of serine proteinases. Lu W, et al. **J Mol Biol** 1997 Feb 21; 266(2):441-61

Inhibitory mechanism of serpins. Identification of steps involving the active-site serine residue of the protease. Stone SR, et al. **J Mol Biol** 1997 Jan 24;265(3):344-62

Communication of ClpXP protease hypersensitivity to bacteriophage Mu repressor isoforms. Welty DJ, et al. **J Mol Biol** 1997 Sep 12;272(1):31-41

Binding of Escherichia coli LexA repressor to the RecA operator. Shaner SL, et al. **J Mol Recognit** 1996 Sep-Dec; 9(5-6):468-73

Inhibition of prolyl oligopeptidase by Fmoc-aminoacylpyrrolidine-2-nitriles. Li J, et al. **J Neurochem** 1996 May;66(5):2105-12

Alterations in mast cell proteinases and protease inhibitors in the progress of cutaneous herpes zoster infection. Kaminska R, et al. **J Pathol** 1996 Dec;180(4):434-40

Initial characterization of autoprocessing and active-center mutants of CMV proteinase. Snyder SW, et al. **J Protein Chem** 1996 Nov;15(8):763-74

Characterization of engineered hepatitis C virus NS3 protease inhibitors affinity selected from human pancreatic secretory trypsin inhibitor and minibody repertoires. Dimasi N, et al. **J Virol** 1997 Oct;71(10):7461-9

A 45,000-M(r) glycoprotein in the Sendai virus envelope triggers virus-cell fusion. Kumar M, et al. **J Virol** 1997 Sep;71(9):6398-406

GB virus B and hepatitis C virus NS3 serine proteases share substrate specificity. Scarselli E, et al. **J Virol** 1997 Jul; 71(7):4985-9

Serine protease of pestiviruses: determination of cleavage sites. Tautz N, et al. **J Virol** 1997 Jul;71(7):5415-22

Probing the substrate specificity of hepatitis C virus NS3 serine protease by using synthetic peptides. Zhang R, et al. **J Virol** 1997 Aug;71(8):6208-13

Prorenin activation and prohormone convertases in the mouse As4.1 cell line. Laframboise M, et al. **Kidney Int** 1997 Jan;51(1):104-9

Angiotensin I converting enzyme and chymase in cardiovascular tissues. Nishimura H, et al. **Kidney Int Suppl** 1996 Jun;55:S18-23 (63 ref.)

Type VI collagen is phagocytosed by fibroblasts and digested in the lysosomal apparatus: involvement of collagenase, serine proteinases and lysosomal enzymes. Everts V, et al. **Matrix Biol** 1995 Oct;14(8):665-76

Esterases A5-B5 in organophosphate-resistant Culex pipiens from Italy. Severini C, et al. **Med Vet Entomol** 1997 Apr; 11(2):123-6

Markers of mast cell degranulation. Hogan AD, et al. **Methods** 1997 Sep;13(1):43-52

The lectin pathway of the complement system. Matsushita M. **Microbiol Immunol** 1996;40(12):887-93 (67 ref.)

A role for erythrocyte band 3 degradation by the parasite gp76 serine protease in the formation of the parasitophorous vacuole during invasion of erythrocytes by Plasmodium falciparum. Roggwiller E, et al. **Mol Biochem Parasitol** 1996 Nov 12;82(1):13-24

Functional dissection of a cell-division inhibitor, SulA, of Escherichia coli and its negative regulation by Lon. Higashitani A, et al. **Mol Gen Genet** 1997 Apr 28; 254(4):351-7

EspP, a novel extracellular serine protease of enterohaemorrhagic Escherichia coli O157:H7 cleaves human coagulation factor V. Brunder W, et al. **Mol Microbiol** 1997 May;24(4):767-78

A 38 kDa precursor protein of aqualysin I (a thermophilic subtilisin-type protease) with a C-terminal extended sequence: its purification and in vitro processing. Kurosaka K, et al. **Mol Microbiol** 1996 Apr;20(2):385-9

Degradation by proteases Lon, Clp and HtrA, of Escherichia coli proteins aggregated in vivo by heat shock; HtrA protease action in vivo and in vitro. Laskowska E, et al. **Mol Microbiol** 1996 Nov;22(3):555-71

The Neisseria type 2 IgA1 protease cleaves LAMP1 and promotes survival of bacteria within epithelial cells. Lin L, et al. **Mol Microbiol** 1997 Jun;24(5):1083-94

Fate of hamster oviductin in the oviduct and uterus during early gestation. Roux E, et al. **Mol Reprod Dev** 1997 Mar; 46(3):306-17

Substrate specificity of ascidian sperm trypsin-like proteases, spermosin and acrosin. Sawada H, et al. **Mol Reprod Dev** 1996 Oct;45(2):240-3

A second serine protease associated with mannan-binding lectin that activates complement. Thiel S, et al. **Nature** 1997 Apr 3;386(6624):506-10

ONO-1603, a potential antidementia drug, shows neuroprotective effects and increases m3-muscarinic receptor mRNA levels in differentiating rat cerebellar granule neurons. Katsube N, et al. **Neurosci Lett** 1996 Aug 23;214(2-3):151-4

Enhanced aggregation of beta-amyloid-containing peptides by extracellular matrix and their degradation by the 68 kDa serine protease prepared from human brain. Matsumoto A, et al. **Neurosci Lett** 1996 Dec 20; 220(3):159-62

A serine proteinase in the penetration glands of the hexacanths of Hymenolepis diminuta (Cestoda, Cyclophyllidea). Moczon T. **Parasitol Res** 1996;82(1):67-71

A serine proteinase in the penetration glands of the cercariae of Plagiorchis elegans (Trematoda, Plagiorchiidae). Moczon T. **Parasitol Res** 1996;82(1):72-6

The effect of proteases and iodination on the adherent behaviour of Plasmodium falciparum-infected erythrocytes. Crandall I, et al. **Parasitology** 1996 Oct;113 (Pt 4):317-22

Characterization of intestinally active proteinases of cyst-nematodes. Lilley CJ, et al. **Parasitology** 1996 Oct;113 (Pt 4):415-24

ZTTA, a postproline cleaving enzyme inhibitor, improves cerebral ischemia-induced deficits in a three-panel runway task in rats. Shishido Y, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):333-8

Modest release of adipsin/factor D by liposuction when using the superwet or tumescent technique. Samdal F, et al. **Plast Reconstr Surg** 1997 May;99(6):1591-4; discussion 1595-6

Recombinant human granzyme A binds to two putative HLA-associated proteins and cleaves one of them. Beresford PJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9285-90

Residue 225 determines the Na(+)-induced allosteric regulation of catalytic activity in serine proteases. Dang QD, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10653-6

Host regulation of lysogenic decision in bacteriophage

lambda: transmembrane modulation of FtsH (HflB), the cII degrading protease, by HflKC (HflA). Kihara A, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5544–9

Chymase cleavage of stem cell factor yields a bioactive, soluble product. Longley BJ, et al.
Proc Natl Acad Sci U S A 1997 Aug 19;94(17):9017–21

Mechanism of protein remodeling by ClpA chaperone. Pak M, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):4901–6

Mutant LexA proteins with specific defects in autodigestion. Shepley DP, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11528–33

Affinity selection of a camelized V(H) domain antibody inhibitor of hepatitis C virus NS3 protease. Martin F, et al. **Protein Eng** 1997 May;10(5):607–14

The chemistry and enzymology of the type I signal peptidases. Dalbey RE, et al. **Protein Sci** 1997 Jun; 6(6):1129–38 (100 ref.)

Subtilases: the superfamily of subtilisin-like serine proteases. Siezen RJ, et al. **Protein Sci** 1997 Mar;6(3):501–23 (77 ref.)

Hydrolysis of big endothelin-1 by a serine protease in the membrane fraction of human lung. Hanson GC, et al.
Regul Pept 1997 Jan 15;68(1):63–9

The effect of tamol on human mast cell chymase and plasmin. Wiedow O, et al. **Skin Pharmacol** 1997;10(2):90–6

Capillary permeability-increasing enzyme-2 from the venom of Agkistrodon caliginosus (kankoku-mamushi): activity resulting from the release of peptides from fibrinogen. Shimokawa K, et al. **Toxicon** 1997 Apr;35(4):597–605

Assemblin homolog of herpes simplex virus type 1 retains proteolytic activity when expressed as a recombinant two-chain enzyme. Hall MRT, et al. **Virology** 1997 Jan 6;227(1):160–7

Hepatitis C virus core protein: carboxy-terminal boundaries of two processed species suggest cleavage by a signal peptide peptidase. Hüssy P, et al. **Virology** 1996 Oct 1; 224(1):93–104

The adipsin-acylation-stimulating protein pathway and microenvironmental metabolic regulation. Sniderman AD, et al. **World Rev Nutr Diet** 1997;80:44–81 (121 ref.)

[Prognostic role of cisteine and serin proteases in gastriC cancer] Herszényi L, et al. **Orv Hetil** 1996 Jul 28; 137(30):1637–41 (47 ref.) (Eng. Abstr.) **(Hun)**

[Fibrinogenolytic activity of a novel trypsin-like enzyme found in human airways] Tsuchihashi S, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1997 Jan;35(1):49–55 (Eng. Abstr.) **(Jpn)**

[Function of proline-rich regions in proteins and proline specific peptidases] Maruyama S.
Tanpakushitsu Kakusan Koso 1997 May;42(6):857–64 (56 ref.) **(Jpn)**

PHARMACOLOGY

Submandibular enzymatic vasoconstrictor increases DNA and phosphoinositol synthesis by mesenchymal cells. Carbini LA, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1578–85

Sheep mast cell proteinase-1, a serine proteinase with both tryptase- and chymase-like properties, is inhibited by plasma proteinase inhibitors and is mitogenic for bovine pulmonary artery fibroblasts. Pemberton AD, et al.
Biochem J 1997 May 1;323 (Pt 3):719–25

The structure of the superantigen exfoliative toxin A suggests a novel regulation as a serine protease. Vath GM, et al.
Biochemistry 1997 Feb 18;36(7):1559–66

Generation of antigenic peptides by lymphocyte granule serine proteases (granzymes). Carter CR, et al.
Cell Immunol 1996 Sep 15;172(2):235–45

Extracellular activities of human granzymes. I. Granzyme A induces IL6 and IL8 production in fibroblast and epithelial cell lines. Sower LE, et al. **Cell Immunol** 1996 Jul 10;171(1):159–63

Mast cell tryptase potentiates histamine-induced contraction in human sensitized bronchus. Johnson PR, et al.
Eur Respir J 1997 Jan;10(1):38–43

Human T-lymphocyte serine proteases (granzymes) 1, 2, and 3 mediated DNA fragmentation in susceptible target cells. Hameed A, et al. **Hum Immunol** 1996 Aug;49(1):13–21

Cleavage of the third component of complement (C3) by mannose-binding protein-associated serine protease (MASP) with subsequent complement activation. Matsushita M, et al. **Immunobiology** 1995 Nov; 194(4–5):443–48

Proteinase 3, the major autoantigen of Wegener's granulomatosis, enhances IL-8 production by endothelial cells in vitro. Berger SP, et al. **J Am Soc Nephrol** 1996 May;7(5):694–701

Defective export in Escherichia coli caused by DsbA'-PhoA hybrid proteins whose DsbA' domain cannot fold into a conformation resistant to periplasmic proteases. Guigueno A, et al. **J Bacteriol** 1997 May;179(10):3260–9

An arginine-213 to glycine mutation in human extracellular-superoxide dismutase reduces susceptibility to trypsin-like proteinases. Adachi T, et al.
J Biochem (Tokyo) 1996 Jul;120(1):184–8

Mast cell tryptase stimulates the synthesis of type I collagen in human lung fibroblasts. Cairns JA, et al.
J Clin Invest 1997 Mar 15;99(6):1313–21

In vitro cleavage of hepatitis C virus polyprotein substrates by purified recombinant NS3 protease. D'Souza ED, et al. **J Gen Virol** 1995 Jul;76 (Pt 7):1729–36

Selective conversion of big endothelins to tracheal smooth muscle-constricting 31-amino acid-length endothelins by chymase from human mast cells. Nakano A, et al.
J Immunol 1997 Aug 15;159(4):1987–92

Granzyme B induces apoptosis and cyclin A-associated cyclin-dependent kinase activity in all stages of the cell cycle. Shi L, et al. **J Immunol** 1996 Sep 15;157(6):2381–5

Bcl-2 prevents apoptosis induced by perforin and granzyme B, but not that mediated by whole cytotoxic lymphocytes. Sutton VR, et al. **J Immunol** 1997 Jun 15;158(12):5783–90

Construction of hepatitis C-SIN virus recombinants with replicative dependency on hepatitis C virus serine protease activity. Cho YG, et al. **J Virol Methods** 1997 May; 65(2):201–7

Bradykinin generation triggered by Pseudomonas proteases facilitates invasion of the systemic circulation by Pseudomonas aeruginosa. Sakata Y, et al.
Microbiol Immunol 1996;40(6):415–23

Enzymatic effect of hypodermin A, a parasite protease, on bovine lymphocyte membrane antigens. Moiré N, et al.
Parasite Immunol 1997 Jan;19(1):21–7

Habutobin splits the Arg16-Gly17 bond in the A alpha chain of rabbit fibrinogen. Kinjoh K, et al. **Thromb Haemost** 1997 Jun;77(6):1127–8

Proteolytic activation of a putative receptor leading to vasoconstriction and platelet aggregation. Carbini LA, et al. **Thromb Res** 1997 Jan 1;85(1):33–44

[Thrombin-like enzyme derived from the venom of Trimeresurus flavoviridis (Habutobin) releases plasminogen activator from bovine pulmonary artery endothelial cells] Sunagawa M, et al. **Rinsho Byori** 1997 Feb;Suppl 104:143–9 **(Jpn)**

PHYSIOLOGY

Roles of kringle domain-containing serine proteases in epithelial-mesenchymal transitions during embryonic development. Théry C, et al. **Acta Anat (Basel)** 1996; 156(3):162–72 (101 ref.)

Neutral proteinases and their inhibitors in the loosening of total hip prostheses. Takagi M.
Acta Orthop Scand Suppl 1996 Oct;271:3–29 (198 ref.)

Cellular proteases involved in the pathogenicity of human immunodeficiency and influenza viruses. Kido H, et al.
Adv Exp Med Biol 1996;389:233–40 (24 ref.)

Of mites and men: trypsin-like proteases in the lungs. Caughey GH. **Am J Respir Cell Mol Biol** 1997 Jun; 16(6):621–8 (69 ref.)

Role of serine proteases in aneurysm development. Rao SK, et al. **Ann N Y Acad Sci** 1996 Nov 18;800:131–7 (35 ref.)

New knowledge about T-cell cytotoxicity. Cerottini JC, et al. **Ann Oncol** 1997;8 Suppl 2:75–8 (20 ref.)

Possible roles of medullasin in nifedipine-induced human gingival overgrowth. Kunimatsu K, et al.
Arch Oral Biol 1996 Jan;41(1):111–5

Molecular basis of proteolytic activation of Sendai virus infection and the defensive compounds for infection. Kido H, et al. **Biol Chem** 1997 Mar-Apr;378(3-4):255–63

Role of perforin, granzymes and the proliferative state of the target cells in apoptosis and necrosis mediated by bispecific-antibody-activated cytotoxic T cells. Renner C, et al. **Cancer Immunol Immunother** 1997 Apr;44(2):70–6

Human prostate carcinoma cells express enzymatic activity that converts human plasminogen to the angiogenesis inhibitor, angiostatin. Gately S, et al. **Cancer Res** 1996 Nov 1;56(21):4887–90

A role for PACE4 in the proteolytic activation of anthrax toxin protective antigen. Gordon VM, et al.
Infect Immun 1997 Aug;65(8):3370–5

Interaction of Escherichia coli RecA protein with LexA repressor. II. Inhibition of DNA strand exchange by the uncleavable LexA S119A repressor argues that recombination and SOS induction are competitive processes. Harmon FG, et al. **J Biol Chem** 1996 Sep 27; 271(39):23874–83

Human mast cells stimulate vascular tube formation. Tryptase is a novel, potent angiogenic factor. Blair RJ, et al.
J Clin Invest 1997 Jun 1;99(11):2691–700

Perforin/granzyme-dependent and independent mechanisms are both important for the development of graft-versus-host disease after murine bone marrow transplantation. Graubert TA, et al. **J Clin Invest** 1997 Aug 15;100(4):904–11

Human mast cells activate fibroblasts: tryptase is a fibrogenic factor stimulating collagen messenger ribonucleic acid synthesis and fibroblast chemotaxis. Gruber BL, et al.
J Immunol 1997 Mar 1;158(5):2310–7

Functional roles for granzymes in murine epidermal gamma(delta) T-cell-mediated killing of tumor targets. Mohamadzadeh M, et al. **J Invest Dermatol** 1996 Nov; 107(5):738–42

The complement-activating protease P100 is expressed by hepatocytes and is induced by IL-6 in vitro and during the acute phase reaction in vivo. Knittel T, et al.
Lab Invest 1997 Sep;77(3):221–30

Activation of an interleukin 1 converting enzyme-dependent apoptosis pathway by granzyme B. Shi L, et al.
Proc Natl Acad Sci U S A 1996 Oct 1;93(20):11002–7

Do CTL kill target cells by inducing apoptosis? Henkart PA, et al. **Semin Immunol** 1997 Apr;9(2):135–44 (57 ref.)

The role of granzyme B cluster proteases in cell-mediated cytotoxicity. Pham CT, et al. **Semin Immunol** 1997 Apr; 9(2):127–33 (55 ref.)

[The mechanism of apoptosis induced by anticancer agents in human leukemia HL-60 cells] Yoshida A, et al.
Rinsho Ketsueki 1996 Jul;37(7):552–7 (Eng. Abstr.) **(Jpn)**

[Adipsin system--acylation-stimulation protein (ASP) and hyperapo-B] Rato Q, et al. **Rev Port Cardiol** 1996 May; 15(5):433–8, 366 (39 ref.) (Eng. Abstr.) **(Por)**

RADIATION EFFECTS

[The effect of electromagnetic field on the biosynthesis and various properties of extracellular proteinase and lectin from Bacillus subtilis 316 M] Kudria VA, et al.
Prikl Biokhim Mikrobiol 1996 Nov-Dec;32(6):646–9 (Eng. Abstr.) **(Rus)**

SECRETION

A carboxy-terminal pro-sequence of aqualysin I prevents proper folding of the protease domain on its secretion by Saccharomyces cerevisiae. Kim DW, et al.
Biochem Biophys Res Commun 1997 Feb 24;231(3):535–9

Neutrophils in beige mice secrete normal amounts of cathepsin G and a 46 kDa latent form of elastase that can be activated extracellularly by proteolytic activity. Cavarra E, et al. **Biol Chem** 1997 May;378(5):417–23

Regulation of intestinal mast cells and luminal protein release by cerebral thyrotropin-releasing hormone in rats. Santos J, et al. **Gastroenterology** 1996 Dec;111(6):1465–73

Membrane components of Treponema denticola trigger proteinase release from human polymorphonuclear leukocytes. Ding Y, et al. **J Dent Res** 1996 Dec; 75(12):1986–93

Endotoxin-inducible granulocyte-mediated hepatocytotoxicity requires adhesion and serine protease release. Sauer A, et al. **J Leukoc Biol** 1996 Nov; 60(5):633–43

THERAPEUTIC USE

[Clinical study of the efficacy of and tolerance to seaprose S in inflammatory venous disease. Controlled study versus serratio-peptidase] Bracale G, et al.
Minerva Cardioangiol 1996 Oct;44(10):515–24 (Eng. Abstr.) **(Ita)**

TOXICITY

Apoptosis of endothelial cells induced by the neutrophil serine proteases proteinase 3 and elastase. Yang JJ, et al.
Am J Pathol 1996 Nov;149(5):1617–26

Inhibition of CPP32-like proteases prevents granzyme B- and Fas-, but not granzyme A-based cytotoxicity exerted by CTL clones. Anel A, et al. **J Immunol** 1997 Mar 1; 158(5):1999–2006

Alpha 2-macroglobulin of rabbits inhibits the habutobin activity. Oka U, et al. **Toxicon** 1996 Aug;34(8):903–12

Habutobin releases plasminogen activator (U-PA) from bovine pulmonary artery endothelial cells. Sunagawa M, et al. **Toxicon** 1996 Jun;34(6):691–9

SERINE-SPECIFIC TRNA see **RNA, TRANSFER, SER**

SERINE SULFHYDRASE see **CYSTATHIONINE BETA-SYNTHASE**

SERINE-THREONINE PROTEIN KINASES see **PROTEIN-SERINE-THREONINE KINASES**

SERINE TRANSHYDROXYMETHYLASE see **SERINE HYDROXYMETHYLTRANSFERASE**

SERMORELIN

ADMINISTRATION & DOSAGE

Treatment of radiation-induced growth hormone deficiency with growth hormone-releasing hormone. Ogilvy-Stuart AL, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):571–8

ANALOGS & DERIVATIVES

Inhibition of in vivo proliferation of androgen-independent prostate cancers by an antagonist of growth hormone-releasing hormone. Jungwirth A, et al.
Br J Cancer 1997;75(11):1585–92

Effects of acute and chronic administration of a new potent antagonist of growth hormone-releasing hormone in rats: mechanisms of action. Kovacs M, et al. **Endocrinology** 1996 Dec;137(12):5364–9

Endocrine and metabolic effects of long-term administration of [Nle27]growth hormone-releasing hormone-(1-29)-NH2 in age-advanced men and women. Khorram O, et al. **J Clin Endocrinol Metab** 1997 May; 82(5):1472–9

Inhibition of GH release of rats by new potent antagonists of growth hormone-releasing hormone (GH-RH). Kovács M, et al. **Peptides** 1997;18(3):431–8

Growth hormone-releasing hormone antagonist MZ-4-71 inhibits in vivo proliferation of Caki-I renal adenocarcinoma. Jungwirth A, et al.
Proc Natl Acad Sci U S A 1997 May 27;94(11):5810–3

PHARMACOLOGY

Evaluation of growth hormone (GH) responses to pulsed GH-releasing hormone administration using the MTT-ESTA bioassay. Dattani MT, et al.

Eur J Endocrinol 1996 Jul;135(1):87–95

Impairment of growth hormone responsiveness to growth hormone releasing hormone and pyridostigmine in patients affected by Prader–Labhardt–Willi syndrome. Beccaria L, et al. **J Endocrinol Invest** 1996 Nov;19(10):687–92

SERODIAGNOSIS

Chlamydial serology and histerosalpingography in predicting tubal disease in infertility patients. Fiçicioğlu C, et al. **Acta Eur Fertil** 1995 May–Jun;26(3):109–12

Prevalence of HTLV type I infection in Iran: a serological and genetic study. Safai B, et al. **AIDS Res Hum Retroviruses** 1996 Aug 10;12(12):1185–90

Helicobacter pylori infection in Eastern Europe: seroprevalence in the Polish population of Lower Silesia. Matysiak–Budnik T, et al. **Am J Gastroenterol** 1996 Dec; 91(12):2513–5

Amebiasis in León, Nicaragua: Entamoebae in stool examination and identification of amebic liver abscess cases by serology and PCR. Linder E, et al. **Arch Med Res** 1997; 28 Spec No:314–6

Comparative evaluation of three ELISA techniques and an indirect immunofluorescence assay for the serological diagnosis of Epstein–Barr virus infection. Debyser Z, et al. **Clin Diagn Virol** 1997 May;8(1):71–81

Crohn's disease associated with seropositive rheumatoid arthritis. Toussirot E, et al. **Clin Exp Rheumatol** 1997 May–Jun;15(3):307–11

Situation of the blood banks in the region of the Americas, 1994–1995. **Epidemiol Bull** 1997 Mar;18(1):11–2

Comparison of the indirect immunofluorescent antibody test and the direct agglutination test for serodiagnosis of visceral leishmaniasis in HIV–infected subjects. Nigro L, et al. **Eur J Clin Microbiol Infect Dis** 1996 Oct;15(10):832–5

Evaluation of a polymerase chain reaction diagnostic method and risk factors for cytomegalovirus pneumonia. Fujishita T, et al. **In Vivo** 1996 May–Jun;10(3):293–6

Serodiagnosis of tuberculosis. Gupta S, et al. **J Commun Dis** 1995 Dec;27(4):208–14 (41 ref.)

Sero–positivity of domestic animals against Japanese encephalitis in Bareilly area, U.P. Mall MP, et al. **J Commun Dis** 1995 Dec;27(4):242–6

Full or partial seroreversion in patients infected by hepatitis C virus. Lefrère JJ, et al. **J Infect Dis** 1997 Feb; 175(2):316–22

Trypanosoma cruzi defined antigens in the serological evaluation of an outbreak of acute Chagas disease in Brazil (Catolé do Rocha, Paraíba). Umezawa ES, et al. **Mem Inst Oswaldo Cruz** 1996 Jan–Feb;91(1):87–93

Are cardiac troponins reliable serodiagnositic markers of cardiac ischaemia in end–stage renal disease? [editorial] Haller C, et al. **Nephrol Dial Transplant** 1996 Jun; 11(6):941–4 (16 ref.)

Serodiagnosis of tuberculosis: detection of mycobacterial antibodies and antigens. Khomenko AG, et al. **Tuber Lung Dis** 1996 Dec;77(6):510–5

Expression of the GB virus C E2 glycoprotein using the Semliki Forest virus vector system and its utility as a serologic marker. Pilot–Matias TJ, et al. **Virology** 1996 Nov 15;225(2):282–92

[Serodiagnosis of human pathogenic Yersinia infections] Benoit C, et al. **Presse Med** 1996 Nov 9;25(34):1627–30 (Eng. Abstr.) **(Fre)**

[Clinical evaluation of immuno–serological laboratory data] Kasukawa R, et al. **Rinsho Byori** 1996 Dec;44(12):1157–63 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Serological diagnosis for cryptococcosis by the detection of beta–glucan and capsular polysaccharide] Kohno S. **Rinsho Byori** 1996 Jun;44(6):524–7 (6 ref.) (Eng. Abstr.) **(Jpn)**

ECONOMICS

Interpreting serologic tests for hepatitis C virus infection: balancing cost and clarity. Long GS, et al. **Cleve Clin J Med** 1996 Sep;63(5):264–8 (25 ref.)

Immediate endoscopy or initial Helicobacter pylori serological testing for suspected peptic ulcer disease: estimating cost–effectiveness using decision analysis. Fendrick AM, et al. **Yale J Biol Med** 1996 Mar–Apr; 69(2):187–95

INSTRUMENTATION

Faulty washers and soiled micropipettors may generate false positive serological results. Parry JV, et al. **Clin Diagn Virol** 1997 Feb;7(3):173–81

[Hepatitis C: screening tools] Pham BN, et al. **Gastroenterol Clin Biol** 1997;21(1 Pt 2):S130–9 (70 ref.) **(Fre)**

[Serodiagnosis of tuberculosis by detection of antituberculous glycolipid antigen (TBGL antigen) antibodies in serum using enzyme–linked immunosorbent assay: clinical evaluation of anti–TBGL antibodies assay kit] Toyoda T, et al. **Kekkaku** 1996 Dec;71(12):655–61 (Eng. Abstr.) **(Jpn)**

[The comparative characteristics of test systems for the diagnosis of viral hepatitis D] Ivaniushina VA, et al. **Klin Lab Diagn** 1996 Nov–Dec;(6):41–2 (Eng. Abstr.) **(Rus)**

METHODS

Overexpression and purification of a recombinant chimeric HIV type 2/HIV type 1 envelope peptide and application in an accelerated immunobased HIV type 1/2 antibody detection system (AIBS): a new rapid serological screening assay. Ecker B, et al. **AIDS Res Hum Retroviruses** 1996 Aug 10;12(12):1081–91

PCR and sero–diagnosis of chronic Chagas' disease. Biotechnological advances. Gomes YM. **Appl Biochem Biotechnol** 1997 May;66(2):107–19 (44 ref.)

Viral serology and detection. Greer S, et al. **Baillieres Clin Gastroenterol** 1995 Dec;9(4):689–721 (110 ref.)

Immunoblot analysis for serodiagnosis of tuberculosis using a 45/47–kilodalton antigen complex of Mycobacterium tuberculosis. Diagbouga S, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):334–8

Near patient testing for Helicobacter pylori: a detailed evaluation of the Cortecs Helisal Rapid Blood test. Stone MA, et al. **Eur J Gastroenterol Hepatol** 1997 Mar; 9(3):257–60

Enzyme–linked immunosorbent assay (ELISA) using a glycolipid antigen for the serodiagnosis of melioidosis. Phung LV, et al. **FEMS Immunol Med Microbiol** 1995 Dec; 12(3–4):259–64

Evaluation of seven commercially available ELISA kits for serodiagnosis of acute toxoplasmosis. Singh S, et al. **Indian J Med Res** 1997 Mar;105:103–7

Bicentric evaluation of Access Toxo immunoglobulin M (IgM) and IgG assays and IMx toxo IgM and IgG assays and comparison with Platelia Toxo IgM and IgG assays. Decoster A, et al. **J Clin Microbiol** 1996 Jul;34(7):1606–9

Serodiagnosis of listeriosis based upon detection of antibodies against recombinant truncated forms of listeriolysin O. Gholizadeh Y, et al. **J Clin Microbiol** 1996 Jun;34(6):1391–5

Rapid method for detection of Coxiella burnetii antibodies using high–density particle agglutination. Nguyen SV, et al. **J Clin Microbiol** 1996 Dec;34(12):2947–51

Serodiagnosis of Lyme borreliosis by Borrelia burgdorferi sensu stricto, B. garinii, and B. afzelii western blots (immunoblots). Norman GL, et al. **J Clin Microbiol** 1996 Jul;34(7):1732–8

ACP Broadsheet No 149: September 1996. Serological diagnosis of gluten sensitive enteropathy. Unsworth DJ. **J Clin Pathol** 1996 Sep;49(9):704–11

Laboratory investigation of immune thrombocytopenia. Warner M, et al. **J Clin Pathol** 1997 Jan;50(1):5–12

False–positive legionella titres in routine clinical serology testing detected by absorption with campylobacter: implications for the serological diagnosis of legionnaires' disease. Boswell TC, et al. **J Infect** 1996 Jan;32(1):23–6

Development of enzyme–linked immunosorbent assays using recombinant borrelial antigens for serodiagnosis of Borrelia burgdorferi infection. Burkert S, et al. **Med Microbiol Immunol (Berl)** 1996 May;185(1):49–57

Are IgG antibody avidity assays useful in the diagnosis of infectious diseases? A review. Gutiérrez J, et al. **Microbios** 1996;87(351):113–21 (40 ref.)

Serological and molecular biology screening techniques for HVC infection. De Lamballerie X. **Nephrol Dial Transplant** 1996;11 Suppl 4:9–11 (17 ref.)

Serological diagnosis of HTLV–I/II infections in France. Lemaire JM, et al. **Nucl Med Biol** 1994 Apr;21(3):433–9

Comparison of adult somatic and excretory–secretory antigens in enzyme–linked immunosorbent assay for serodiagnosis of human infection with Fasciola gigantica. Maleewong W, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):566–9

Allelic frequencies of the HLA–B17 antigen group: comparative analysis by serology, IEF and PCR–SSOP typing. Levine JE, et al. **Tissue Antigens** 1995 Nov; 46(5):368–73

Frequency of partial D phenotypes in the south western region of France. Roubinet F, et al. **Transfus Clin Biol** 1996;3(4):247–55

Joint United Nations Programme on HIV/AIDS (UNAIDS)–WHO. Revised recommendations for the selection and use of HIV antibody tests. **Wkly Epidemiol Rec** 1997 Mar 21;72(12):81–7 **(Eng, Fre)**

[Limits of immunoserologic and molecular diagnosis of hepatitis C] Trepo C, et al. **Nucl Med Biol** 1994 Apr; 21(3):419–31 (Eng. Abstr.) **(Fre)**

[Serological assay for diagnosis of verotoxin–producing Escherichia coli (VTEC) infection in the patients with diarrhea] Kobayashi K, et al. **Kansenshogaku Zasshi** 1996 Jan;70(1):80–6 (Eng. Abstr.) **(Jpn)**

[Serodiagnosis with trehalose–6,6'–dimycolate of pulmonary tuberculosis] Wada M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan;35(1):43–8 (Eng. Abstr.) **(Jpn)**

[Immunodiagnosis and blood biochemical diagnosis of visceral candidiasis and the cutoff limits of positive] Kume H, et al. **Rinsho Byori** 1996 Jun;44(6):505–11 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Sero–diagnosis for pulmonary aspergillosis—its utility in early diagnosis] Niki Y. **Rinsho Byori** 1996 Jun;44(6):518–23 (Eng. Abstr.) **(Jpn)**

[Evaluation of the usefulness of the peripheral test for determination of rabies vaccine potency] Wysokińska T, et al. **Med Dosw Mikrobiol** 1996;48(3–4):211–3 (Eng. Abstr.) **(Pol)**

[Use of the ISAGA method in detection of specific IgM, IgA, IgE antibodies in acquired and congenital toxoplasmosis] Paul M. **Wiad Parazytol** 1997;43(1):39–51 (Eng. Abstr.) **(Pol)**

[The value of serological examination in detecting the etiological agents involved in causing reactive arthritis] Constantiniu S, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun; 41(1–2):75–9 **(Rum)**

STANDARDS

Interlaboratory comparison of test results for detection of Lyme disease by 516 participants in the Wisconsin State Laboratory of Hygiene/College of American Pathologists Proficiency Testing Program. Bakken LL, et al. **J Clin Microbiol** 1997 Mar;35(3):537–43

New laboratory guidelines for serologic diagnosis of Lyme disease: evaluation of the two–test protocol. Ledue TB, et al. **J Clin Microbiol** 1996 Oct;34(10):2343–50

Difficulties with the serologic diagnosis of infectious mononucleosis: a review of the RCPA quality assurance programs. Field PR, et al. **Pathology** 1996 Aug;28(3):270–6

[The direct antiglobulin and elution tests: evaluation of quality control in Blood Transfusion Centers] Devignes J, et al. **Transfus Clin Biol** 1996;3(4):241–6 (Eng. Abstr.) **(Fre)**

[False–positive reactions in laboratory diagnosis of Lassa, Marburg, and Ebola viral hemorrhagic fevers and AIDS] Vladyko AS, et al. **Vopr Virusol** 1997 Mar–Apr;42(2):66–70 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Effectiveness of meningococcal vaccine in Brazil [letter; comment] Costa EA. **Int J Epidemiol** 1997 Jun;26(3):681–4 . Comment on: Int J Epidemiol 1995 Oct;24(5):1050–7.

Analysis of serological surveys using mixture models: application to a survey of parvovirus B19. Gay NJ. **Stat Med** 1996 Jul 30;15(14):1567–73

TRENDS

Clinical, bacteriological, and serological aspects of Klebsiella infections and their spondylarthropathic sequelae. Sahly H, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):393–9 (104 ref.)

VETERINARY

Serological diagnosis of bovine neosporosis by Neospora caninum monoclonal antibody–based competitive inhibition enzyme–linked immunosorbent assay. Baszler TV, et al. **J Clin Microbiol** 1996 Jun;34(6):1423–8

Serological diagnosis of ovine enzootic abortion by comparative inclusion immunofluorescence assay, recombinant lipopolysaccharide enzyme–linked immunosorbent assay, and complement fixation test. Griffiths PC, et al. **J Clin Microbiol** 1996 Jun;34(6):1512–8

Development and evaluation of a recombinant antigen, monoclonal antibody–based competitive ELISA for heartwater serodiagnosis. Katz JB, et al. **J Vet Diagn Invest** 1997 Apr;9(2):130–5

Immunoblot assay as a confirmatory test of competitive ELISA for serodiagnosis of bluetongue. Zhou EM, et al. **J Vet Diagn Invest** 1996 Jul;8(3):365–7

Validity of using serological tests for diagnosis of diseases in wild animals. Gardner IA, et al. **Rev Sci Tech** 1996 Mar; 15(1):323–35 (20 ref.)

FIV, FeLV, and FIPV: interpretation and misinterpretation of serological test results. Barr MC. **Semin Vet Med Surg (Small Anim)** 1996 Aug;11(3):144–53 (34 ref.)

Diagnosis of leptospirosis: a reemerging disease of companion animals. Bolin CA. **Semin Vet Med Surg (Small Anim)** 1996 Aug;11(3):166–71 (33 ref.)

Canine brucellosis: a diagnostician's dilemma. Carmichael LE, et al. **Semin Vet Med Surg (Small Anim)** 1996 Aug; 11(3):161–5 (22 ref.)

When viral serological testing is not enough: diagnosing disease in vaccinated animals. Dubovi EJ. **Semin Vet Med Surg (Small Anim)** 1996 Aug;11(3):183–6

Lyme disease: laboratory diagnosis of infected and vaccinated symptomatic dogs. Jacobson RH, et al. **Semin Vet Med Surg (Small Anim)** 1996 Aug;11(3):172–82 (37 ref.)

Assessing the validity of serodiagnostic test results. Jacobson RH, et al. **Semin Vet Med Surg (Small Anim)** 1996 Aug; 11(3):135–43

SEROEPIDEMIOLOGIC METHODS

Are serological responses to acellular pertussis antigens sufficient criteria to ensure that new combination vaccines are effective for prevention of disease? Granoff DM, et al. **Dev Biol Stand** 1997;89:379–89 (39 ref.)

Methods for estimating serological correlates of protection. Siber GR. **Dev Biol Stand** 1997;89:283–96 (16 ref.)

Serological examination of human and animal sera from six countries of three continents for the presence of rickettsial antibodies. Kováčová E, et al. **Eur J Epidemiol** 1996 Feb; 12(1):85–9

How to select and interpret molecular strain typing methods for epidemiological studies of bacterial infections: a review

for healthcare epidemiologists. Molecular Typing Working Group of the Society for Healthcare Epidemiology of America. Tenover FC, et al. **Infect Control Hosp Epidemiol** 1997 Jun;18(6):426–39 (75 ref.)

Comparison of parasitological and serological data in evaluating malaria. Roy A, et al. **J Commun Dis** 1997 Mar; 29(1):63–5

[Utilization of serum banks for veterinary seroepidemiological research serving the Dutch livestock industry] Elbers AR. **Tijdschr Diergeneeskd** 1996 Dec 1; 121(23):676–8 (Eng. Abstr.) **(Dut)**

SEROLOGY

Report on section 2A antibodies: ABH and other glycoconjugates—serology. Beck ML, et al. **Transfus Clin Biol** 1997;4(1):29–34

Coordinator's report: ABH and other glycoconjugates—serology. Beck ML. **Transfus Clin Biol** 1997;4(1):13–6

Report on section 2A antibodies: ABH and other glycoconjugates—serology. Harrison D, et al. **Transfus Clin Biol** 1997;4(1):23–7

Report of section 2A serology: anti-A, anti-B and anti-A,B reagents. Hartman KP, et al. **Transfus Clin Biol** 1997; 4(1):19–22

Report on section 2A antibodies: ABH and other glycoconjugates—serology. Janus G, et al. **Transfus Clin Biol** 1997;4(1):35–40

Summary of serological test results on the monoclonal antibodies to non-specific erythrocytes antigens. Lukasavage T, et al. **Transfus Clin Biol** 1997;4(1):147–8

Report on section 2A antibodies: ABH and other glycoconjugates—serology. Williams M, et al. **Transfus Clin Biol** 1997;4(1):17–8

HISTORY

Three decades of reference serology. Giles CM. **Transfus Med** 1991 Sep;1(3):145–53

METHODS

Following the disease course in systemic lupus erythematosus: are serologic variables of any use? [editorial; comment] Swaak AJ, et al. **J Rheumatol** 1996 Nov; 23(11):1842–4 (12 ref.). Comment on: J Rheumatol 1996 Nov;23(11):1891–6.

Phage-displayed peptides as tools for characterization of human sera. Felici F, et al. **Methods Enzymol** 1996; 267:116–29

Evaluation of a solid phase red cell adherence technique for platelet antibody screening. Lown JA, et al. **Transfus Med** 1991 Sep;1(3):163–7

STANDARDS

Validity of statistical techniques in assessing conclusions drawn from serologic tests [editorial; comment] Case J. **Transfusion** 1997 Aug;37(8):773–4. Comment on: Transfusion 1997 Aug;37(8):816–22. Comment on: Transfusion 1997 Aug;37(8):877.

STATISTICS & NUMERICAL DATA

Validity of statistical techniques in assessing conclusions drawn from serologic tests [editorial; comment] Case J. **Transfusion** 1997 Aug;37(8):773–4. Comment on: Transfusion 1997 Aug;37(8):816–22. Comment on: Transfusion 1997 Aug;37(8):877.

SEROMUCOID see **OROSOMUCOID**

SEROSITIS

CHEMICALLY INDUCED

Clozapine induced polyserositis. Catalano G, et al. **Clin Neuropharmacol** 1997 Aug;20(4):352–6

DIAGNOSIS

A syndrome of fibrosing pleuritis, pericarditis, and synovitis with infantile contractures of fingers and toes in 2 sisters: "familial fibrosing serositis". Verma UN, et al. **J Rheumatol** 1995 Dec;22(12):2349–55

[Polyserositis in a female patient with hypothyroidism] Stepanenko OS, et al. **Lik Sprava** 1997 Jan–Feb;(1):108–11 (9 ref.) (Eng. Abstr.) **(Ukr)**

ETIOLOGY

Henoch-Schönlein purpura with hemorrhagic ascites and intestinal serositis. Santiago J, et al. **Gastrointest Endosc** 1996 Nov;44(5):624–5

[Mixed connective tissue disease: progress in diagnosis and treatment. III. Treatment. 3. Clinical aspects of specific conditions and treatment. 3) Interstitial pulmonary lesions and serositis] Hirakata M, et al. **Nippon Naika Gakkai Zasshi** 1996 Aug 10;85(8):1248–53 (6 ref.) **(Jpn)**

MICROBIOLOGY

[Extensive serositis caused by Listeria monocytogenes (letter)] Vay C, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):402 **(Spa)**

SEROTHERAPY see **IMMUNIZATION, PASSIVE**

SEROTONIN

see related
RECEPTORS, SEROTONIN
SEROTONIN AGENTS

Serotonin. Proceedings of the 3rd IUPHAR satellite meeting on serotonin. Chicago, Illinois, July 30–August 3, 1994. **Behav Brain Res** 1996;73(1–2):v, 1–394

Expression of mRNA coding for the serotonin transporter in aged vs. young rat brain: differential effects of glucocorticoids. Fumagalli F, et al. **Brain Res** 1996 May 6;719(1–2):225–8

Gene structure and 5'-flanking regulatory region of the murine serotonin transporter. Bengel D, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):286–92

Demonstration of clomipramine and venlafaxine occupation at serotonin reuptake sites in man in vivo. Malizia AL, et al. **J Psychopharmacol (Oxf)** 1997;11(3):279–81

The serotonin transporter gene and peer-rated neuroticism. Ball D, et al. **Neuroreport** 1997 Mar 24;8(5):1301–4

ADMINISTRATION & DOSAGE

Evidence for the involvement of 5-HT4 receptors in the 5-hydroxytryptamine-induced pattern of migrating myoelectric complex in sheep. Plaza MA, et al. **Br J Pharmacol** 1997 Mar;120(6):1144–50

ANP enhances bradycardic reflexes in normotensive but not spontaneously hypertensive rats. Thomas CJ, et al. **Hypertension** 1997 May;29(5):1126–32

Radioprotective efficacy of HT + AET in encapsulated form. Upadhyay SN, et al. **Indian J Exp Biol** 1996 May; 34(5):403–7

ADVERSE EFFECTS

5-Hydroxytryptamine-induced vasoconstriction after cerebral hematoma in piglets. Yakubu MA, et al. **Pediatr Res** 1997 Mar;41(3):317–20

Effect of the inhalation of nitric oxide on 5-hydroxytryptamine-induced pulmonary hypertension in calves. Sustronck B, et al. **Zentralbl Veterinarmed A** 1996 Nov;43(9):513–20

[Serotonin syndrome: critical review of the literature] Baubet T, et al. **Rev Med Interne** 1997;18(5):380–7 (60 ref.) (Eng. Abstr.) **(Fre)**

AGONISTS see SEROTONIN AGONISTS

ANALOGS & DERIVATIVES

The effects of peripheral serotonin2 receptor agonist on food intake of rats. Yamada J, et al. **Adv Exp Med Biol** 1996; 398:555–7

Effects of 5-HT3 receptor agonists on voluntary ethanol intake in rats maintained on a limited access procedure. Dyr W, et al. **Alcohol Alcohol** 1997 Jul–Aug;32(4):455–62

Autoradiographic analysis of 5-HT receptor subtypes labeled by [3H]5-CT ([3H]5-carboxamidotryptamine). Palacios JM, et al. **Behav Brain Res** 1996;73(1–2):239–43

Inhibition of lipid peroxidation by N-acetylserotonin and its role in retinal physiology. Longoni B, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):778–80

The effects of peripheral serotonin2 (5-HT2) and serotonin3 (5-HT3) receptor agonists on blood glucose levels in rats. Sugimoto Y, et al. **Biol Pharm Bull** 1996 Oct;19(10):1384–6

Characterization of putative 5-ht7 receptors mediating direct relaxation in Cynomolgus monkey isolated jugular vein. Leung E, et al. **Br J Pharmacol** 1996 Mar;117(5):926–30

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: increase in Na+, K(+)-ATPase activity in renal proximal tubules via activation of 5-HT1A receptors. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar;117(6):1199–203

Antinociceptive effects of intrathecally administered 2-methylserotonin in developing rats. Giordano J. **Brain Res Dev Brain Res** 1997 Jan 2;98(1):142–4

Binding profile of the novel 5-HT1B/1D receptor antagonist, [3H]GR 125,743, in guinea-pig brain: a comparison with [3H]5-carboxamidotryptamine. Audinot V, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):247–56

Contribution of peripheral alpha 1A-adrenoceptors to pain induced by formalin or by alpha-methyl-5-hydroxytryptamine plus noradrenaline. Hong Y, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):41–8

Effects of peripheral 5-HT2 and 5-HT3 receptor agonists on food intake in food-deprived and 2-deoxy-D-glucose-treated rats. Sugimoto Y, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):15–21

Serotonin and N-acetylserotonin effects on pigment cells of the toad Bufo ictericus: pharmacological characterization of melatonin receptors. Filadelfi AM, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):192–9

Tetrahydrobiopterin synthesis inhibitors induce nitric oxide synthesis in rat aorta. Joly GA, et al. **Gen Pharmacol** 1997 Mar;28(3):475–80

Microinjection of a serotonin3 receptor agonist into the NTS of unanesthetized rats inhibits the bradycardia evoked by activation of the baro- and chemoreflexes. Callera JC, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):127–36

Hydroxyindole-O-methyltransferase activity assay using high-performance liquid chromatography with fluorometric detection: determination of melatonin enzymatically formed from N-acetylserotonin and S-adenosyl-L-methionine. Itoh MT, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):217–21

Changes in pineal indoleamines in rats after single melatonin injections: evidence for a diurnal sensitivity to melatonin. Míguez JM, et al. **J Neuroendocrinol** 1996 Aug;8(8):611–6

In-vivo microdialysis measurement of 5-hydroxytryptamine and its metabolites, 5-hydroxyindoleacetic acid and N-acetyl 5-hydroxytryptamine, in rat blood: effects of histamine-receptor antagonists. Sakurai E, et al. **J Pharm Pharmacol** 1996 Sep;48(9):911–3

The 5-HT1D receptor antagonist GR-127,935 prevents inhibitory effects of sumatriptan but not CP-122,288 and 5-CT on neurogenic plasma extravasation within guinea pig dura mater. Yu XJ, et al. **Neuropharmacology** 1997 Jan; 36(1):83–91

Variability in the effects of 5-HT-related compounds in experimental models of anxiety: evidence for multiple mechanisms of 5-HT in anxiety or never ending story? Griebel G. **Pol J Pharmacol** 1996 Mar–Apr;48(2):129–36 (40 ref.)

Mechanisms of 5-hydroxytryptamine-induced contraction of isolated rat intrapulmonary bronchi. Szarek JL, et al. **Pulm Pharmacol** 1995 Dec;8(6):273–81

ANALYSIS

An isocratic assay for norepinephrine, dopamine, and 5-hydroxytryptamine using their native fluorescence by high-performance liquid chromatography with fluorescence detection in discrete brain areas of rat. Lakshmana MK, et al. **Anal Biochem** 1997 Mar 15; 246(2):166–70

Neuroendocrine markers; chromogranin, pancreastatin and serotonin in the management of patients with advanced renal cell carcinoma. Edgren M, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3871–4

Long-term effects of chronic social stress on serotonergic indices in the prefrontal cortex of adult male cynomolgus macaques. Fontenot MB, et al. **Brain Res** 1995 Dec 24; 705(1–2):105–8

Presence of catecholamines and serotonin in the rat vestibule. Gil-Loyzaga P, et al. **Brain Res** 1997 Jan 23;746(1–2):265–8

Serotonergic afferents of the pigeon accessory optic nucleus. Toledo CA, et al. **Brain Res** 1995 Dec 24;705(1–2):341–4

The serotonin innervation of the basal forebrain shows a transient phase during development. Dinopoulos A, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):38–52

Coexistence of tyrosine hydroxylase and serotonin in the raphe nucleus of the laboratory shrew (Suncus murinus) during postnatal life. Karasawa N, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):121–5

Morphological and morphometric analysis of serotonin-containing neurons in primary dissociated cultures of human rhombencephalon: a study of development. Levallois C, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):243–52

Amines and peptides in the brain of the American lobster: immunocytochemical localization patterns and implications for brain function. Langworthy K, et al. **Cell Tissue Res** 1997 Apr;288(1):191–206

Effects of 5-HT1A receptor antagonists on hippocampal 5-hydroxytryptamine levels: (S)-WAY100135, but not WAY100635, has partial agonist properties. Assié MB, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):15–21

5-Hydroxytryptamine immunoreactivity is detectable in sympathetic nerve fibres in rat oral tissues. Norevall LI, et al. **Histochem J** 1996 Jul;28(7):485–93

Subordination induced decrease in 5-hydroxytryptamine and dopamine levels in the frontal cortex--a study using worker-parasite relationship in rats as a model. Dhingra NK, et al. **Indian J Physiol Pharmacol** 1996 Jul;40(3):213–9

Cholinergic, serotoninergic and peptidergic components of the nervous system of Haematoloechus medioplexus (Trematoda, Digenea), characterised by cytochemistry. Humphries JE, et al. **Int J Parasitol** 1997 May;27(5):517–25

Regional distribution of the 5-HT innervation in the brain of normal and lurcher mice as revealed by [3H]citalopram quantitative autoradiography. Strazielle C, et al. **J Chem Neuroanat** 1996 Apr;10(2):157–71

New dual electrochemical detector for microbore liquid chromatography. Determination of dopamine and serotonin in rat striatum dialysates. Cheng FC, et al. **J Chromatogr B Biomed Appl** 1996 Jul 12;682(2):195–200

Simultaneous measurement of serotonin and paroxetine in rat brain microdialysate by a single-pump column-switching technique. Ramaiya A, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):119–29

New antioxidant mixture for long term stability of serotonin, dopamine and their metabolites in automated microbore liquid chromatography with dual electrochemical detection. Thorré K, et al. **J Chromatogr B Biomed Appl** 1997 Jul 4;694(2):297–303

Immunocytochemical studies of the 5-HT(1A) receptor in ventral medullaryneurons that project to the intermediolateral cell column and contain serotonin or tyrosine hydroxylase immunoreactivity. Helke CJ, et al. **J Comp Neurol** 1997 Mar 10;379(2):261–70

Development of serotonin-like immunoreactivity in the

embryos and larvae of nudibranch mollusks with emphasis on the structure and possible function of the apical sensory organ. Kempf SC, et al. **J Comp Neurol** 1997 Sep 29; 386(3):507–28

Ontogeny of serotonergic neurons in Aplysia californica. Marois R, et al. **J Comp Neurol** 1997 Sep 29;386(3):477–90

Projection patterns and target tissues of the serotonergic cells in larval Aplysia californica. Marois R, et al. **J Comp Neurol** 1997 Sep 29;386(3):491–506

Serotonin-immunoreactivity in peripheral tissues of the opisthobranch molluscs Pleurobranchaea californica and Tritonia diomedea. Moroz LL, et al. **J Comp Neurol** 1997 Jun 2;382(2):176–88

Serotonergic dorsal raphe nucleus projections to the cholinergic and noncholinergic neurons of the pedunculopontine tegmental region: a light and electron microscopic anterograde tracing and immunohistochemical study. Steininger TL, et al. **J Comp Neurol** 1997 Jun 9; 382(3):302–22

Single pump column switching technique employing a flow gradient and wavelength programmed fluorescence for simultaneous monitoring of serotonin, fluoxetine and norfluoxetine in rat brain microdialysate. Ramaiya A, et al. **J Pharm Biomed Anal** 1997 Mar;15(6):729–38

Effect of prenatal fluoxetine (Prozac) exposure on brain serotonin neurons in prepubescent and adult male rat offspring. Cabrera-Vera TM, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):138–45

In vitro and in vivo effects of the anorectic agent dexfenfluramine on the central serotoninergic neuronal systems of non-human primates. A comparison with the rat. Mennini T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):641–7

Risperidone dose-dependently increases extracellular concentrations of serotonin in the rat frontal cortex: role of alpha 2-adrenoceptor antagonism. Hertel P, et al. **Neuropsychopharmacology** 1997 Jul;17(1):44–55

Ultrastructural relationships of the pro-opiomelanocortin axons with the serotoninergic neurons in the dorsal raphe nucleus of the rat. Léger L, et al. **Neurosci Lett** 1997 Feb 7;222(3):155–8

Effects of nimodipine and nifedipine upon behavior and regional brain monoamines in the rat. Viveros MP, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):123–32

Endocrine cells in rectal biopsy specimens from patients with familial amyloidotic polyneuropathy. El-Salhy M, et al. **Scand J Gastroenterol** 1996 Jan;31(1):68–73

Measuring serotonin distribution in live cells with three-photon excitation [see comments] Maiti S, et al. **Science** 1997 Jan 24;275(5299):530–2. Comment in: Science 1997 Jan 24;275(5299):480–1.

Photons add up to better microscopy [news; comment] Pennisi E. **Science** 1997 Jan 24;275(5299):480–1. Comment on: Science 1997 Jan 24;275(5299):530–6.

Immunohistochemical localization of serotonin, galanin, cholecystokinin, and methionine-enkephalin in adrenal medullary cells of the chicken. Ohmori Y, et al. **Tissue Cell** 1997 Apr;29(2):199–205

Serotonin (5-HT): an enteroendocrine marker of rejection after small bowel allotransplantation in the pig. Galmarini D, et al. **Transplant Proc** 1997 May;29(3):1830–2

Serotonin (5-HT): an enteroendocrine marker of reperfusion injury after liver-small bowel allotransplantation in the pig. Galmarini D, et al. **Transplant Proc** 1997 May;29(3):1833–5

Serotonin is a good parameter of preservation injury in small-bowel transplantation. Kaihara S, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):703

[Neuronal circuit formation of serotonin neuron system] Ueda S. **Kaibogaku Zasshi** 1997 Jun;72(3):187–90 (24 ref.) **(Jpn)**

[Effect of lithium oxybutyrate on the circadian rhythm of brain level of serotonin and plasma level of corticosteroids in mice treated with reserpine] Zamoshchina TA, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):101–5 **(Rus)**

[The histamine and serotonin content in the kidneys of patients with hemorrhagic fever with renal syndrome] Sidel'nikov IuN, et al. **Urol Nefrol (Mosk)** 1996 Jul-Aug; (4):19–21 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS see SEROTONIN ANTAGONISTS

BIOSYNTHESIS

5-Hydroxy-3-indole acetic acid levels in infantile colic: is serotoninergic tonus responsible for this problem? Kurtoglu S, et al. **Acta Paediatr** 1997 Jul;86(7):764–5

gamma-L-glutamyl-5-hydroxy-L-tryptophan, but not gamma-L-glutamyl-L-tryptophan, causes sodium retention in normal man. Li Kam Wa TC, et al. **Br J Clin Pharmacol** 1996 Sep;42(3):365–70

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: effects of amine precursors on the cell inward transfer and decarboxylation. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar;117(6):1187–92

DL-fenfluramine increases the 5-HT synthesis rate in the terminals while decreasing it in the cell bodies of the rat brain. Mück-Seler D, et al. **Brain Res** 1996 Oct 21; 737(1-2):45–50

Renal and intestinal autocrine monoaminergic systems: dopamine versus 5-hydroxytryptamine. Vieira-Coelho MA, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):43–58 (22 ref.)

Production and metabolism of serotonin (5-HT) by the human adrenal gland. Lefebvre H, et al. **Endocr Res** 1996 Nov;22(4):851–3

Medroxyprogesterone acetate reduces the in vitro production of cytokines and serotonin involved in anorexia/cachexia and emesis by peripheral blood mononuclear cells of cancer patients. Mantovani G, et al. **Eur J Cancer** 1997 Apr; 33(4):602–7

Nutritional recovery does not reverse the activation of brain serotonin synthesis in the ontogenetically malnourished rat. Manjarrez GG, et al. **Int J Dev Neurosci** 1996 Aug; 14(5):641–8

Analysis of [C-11]alpha-methyl-tryptophan kinetics for the estimation of serotonin synthesis rate in vivo. Muzik O, et al. **J Cereb Blood Flow Metab** 1997 Jun;17(6):659–69

Ex vivo inhibitory effect of the 5-HT uptake blocker citalopram on 5-HT synthesis. Moret C, et al. **J Neural Transm** 1997;104(2-3):147–60

Influence of fluoxetine on regional serotonin synthesis in the rat brain. Mück-Seler D, et al. **J Neurochem** 1996 Dec; 67(6):2434–42

Effects of acute physical exercise on central serotonergic systems. Chaouloff F. **Med Sci Sports Exerc** 1997 Jan; 29(1):58–62 (39 ref.)

Alpha 2-autoreceptors and alpha 2-heteroreceptors modulating tyrosine and tryptophan hydroxylase activity in the rat brain in vivo: an investigation into the alpha 2-adrenoceptor subtypes. Esteban S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Mar; 353(4):391–9

Melatonin effects on serotonin synthesis and metabolism in the striatum, nucleus accumbens, and dorsal and median raphe nuclei of rats. Míguez JM, et al. **Neurochem Res** 1997 Jan;22(1):87–92

Serotonin synthesis increased in terminals four days after reserpine treatment: an autoradiographic study in rat brain. Mück-Seler D, et al. **Neurochem Res** 1997 Jan;22(1):11–6

Differences between males and females in rates of serotonin synthesis in human brain [see comments] Nishizawa S, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5308–13 . Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):4823–4.

[L-tryptophan. An essential amino acid for structural and functional metabolism] Loew D. **Fortschr Med** 1997 Jan 30;115(3):40–2 (Eng. Abstr.) **(Ger)**

[The importance of vitamin B 6 for development of the infant. Human medical and animal experiment studies] Gerster H. **Z Ernahrungswiss** 1996 Dec;35(4):309–17 (50 ref.) (Eng. Abstr.) **(Ger)**

[Development of the serotoninergic system in the mouse midbrain, and the role of serotonin in this process] Sapronova AIa, et al. **Biull Eksp Biol Med** 1996 Aug; 122(8):167–9 **(Rus)**

BLOOD

Cancer cachexia and depressive states: a neuro-endocrine-immunological disease? Iwagaki H, et al. **Acta Med Okayama** 1997 Aug;51(4):233–6

Suicidality, circadian activity rhythms and platelet serotonergic measures in patients with recurrent suicidal behaviour. Verkes RJ, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):27–34

Platelet serotonin acts as a locally releasable antioxidant. Huether G, et al. **Adv Exp Med Biol** 1996;398:299–306 (37 ref.)

The possible role of tryptophan in migraine. Salmon S, et al. **Adv Exp Med Biol** 1996;398:97–100

Circadian release of serotonin across the coronary bed in patients with endothelial dysfunction. Murakami Y, et al. **Am J Cardiol** 1997 Jul 15;80(2):214–6

A case of coeliac disease detected via raised 5-hydroxytryptamine and 5-hydroxyindoleacetic acid. Cleare AJ, et al. **Ann Clin Biochem** 1997 Jul;34 (Pt 4):440–1

Reduced platelet serotonin content and release in familial hypercholesterolaemia. Smith CC, et al. **Atherosclerosis** 1997 Apr;130(1-2):87–92

Medroxyprogesterone acetate reduces the production of cytokines and serotonin involved in anorexia/cachexia and emesis by peripheral blood mononuclear cells of cancer patients. Mantovani G, et al. **Biochem Soc Trans** 1997 May; 25(2):296S

Effects of selective serotonin reuptake inhibitors on platelet serotonin parameters in major depressive disorder. Bakish D, et al. **Biol Psychiatry** 1997 Jan 15;41(2):184–90

Seasonal influence on platelet 5-HT levels in patients with recurrent major depression and schizophrenia. Jakovljević M, et al. **Biol Psychiatry** 1997 May 15;41(10):1028–34

Selective slow-wave sleep deprivation influences blood serotonin profiles and serum melatonin concentrations in healthy subjects. Rao ML, et al. **Biol Psychiatry** 1996 Oct 1;40(7):664–7

Hyperserotoninemia and serotonin receptor antibodies in children with autism but not mental retardation. Singh VK, et al. **Biol Psychiatry** 1997 Mar 15;41(6):753–5

Initial increase of plasma serotonin: a biological predictor for the antidepressant response to clomipramine? Spreux-Varoquaux O, et al. **Biol Psychiatry** 1996 Sep 15; 40(6):465–73

Hemorrheological indices, catecholamines, neuropeptide Y and serotonin in patients with essential hypertension. Berent H, et al. **Blood Press** 1997 Jul;6(4):203–8

Red wine-induced release of [14C]5-hydroxytryptamine from platelets of migraine patients and controls. Jarman J, et al. **Cephalalgia** 1996 Feb;16(1):41–3

Serotonin and analgesic-related headache [comment] Joseph R. **Cephalalgia** 1996 Oct;16(6):405. Comment on: Cephalalgia 1996 Oct;16(6):419–22. Comment on: Cephalalgia 1996 Oct;16(6):423–6.

Effect of quinapril therapy on blood pressure and serotonin change in patients with mild to moderate hypertension. Huang JL, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Nov;58(5):329–34

Increased serotonin release across the coronary bed during a nonischemic interval in patients with vasospastic angina. Murakami Y, et al. **Clin Cardiol** 1996 Jun;19(6):473–6

The serotonin system in autism. Cook EH, et al. **Curr Opin Pediatr** 1996 Aug;8(4):348–54 (81 ref.)

Reduced whole blood serotonin in major depression. Cleare AJ. **Depress Anxiety** 1997;5(2):108–11

Evidence that cisplatin induces serotonin release from human peripheral blood mononuclear cells and that methylprednisolone inhibits this effect. Mantovani G, et al. **Eur J Cancer** 1996 Oct;32A(11):1983–5

Age-related changes in nociception, behavior, and monoamine levels in rats. Goicoechea C, et al. **Gen Pharmacol** 1997 Feb;28(2):331–6

Evaluation of plasma serotonin concentration in acute appendicitis. Kalra U, et al. **Indian J Gastroenterol** 1997 Jan;16(1):18–9

Renal blood flow and serotonin metabolism in tacrolimus treated rats. Mugiya S, et al. **Int J Urol** 1996 May; 3(3):187–90

The effect of estrogen replacement therapy on plasma serotonin and catecholamines of postmenopausal women. Blum I, et al. **Isr J Med Sci** 1996 Dec;32(12):1158–62

Platelet 5-HT concentrations and suicidal behaviour in recurrent major depression. Mück-Seler D, et al. **J Affect Disord** 1996 Jun 20;39(1):73–80

Platelet serotonin transporter in children and adolescents with obsessive-compulsive disorder or Tourette's syndrome. Sallee FR, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1647–56

3,4-Dimethoxybenzylamine as a sensitive pre-column fluorescence derivatization reagent for the determination of serotonin in human platelet-poor plasma. Ishida J, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):31–6

Platelet serotonin (5-HT) content is decreased in patients with alcoholic liver cirrhosis, but elevated in Gilbert's syndrome [letter] Borcsiczky D, et al. **J Hepatol** 1996 Nov; 25(5):781–2

Contrasting effects of lipopolysaccharides (endotoxins) from oral black-pigmented bacteria and Enterobacteriaceae on platelets, a major source of serotonin, and on histamine-forming enzyme in mice. Endo Y, et al. **J Infect Dis** 1997 Jun;175(6):1404–12

In-vivo microdialysis measurement of 5-hydroxytryptamine and its metabolites, 5-hydroxyindoleacetic acid and N-acetyl 5-hydroxytryptamine, in rat blood: effects of histamine-receptor antagonists. Sakurai E, et al. **J Pharm Pharmacol** 1996 Sep;48(9):911–3

Enhanced calcium response to serotonin in platelets from patients with affective disorders. Yamawaki S, et al. **J Psychiatry Neurosci** 1996 Nov;21(5):321–4

Serotonin levels, pain threshold, and fibromyalgia symptoms in the general population. Wolfe F, et al. **J Rheumatol** 1997 Mar;24(3):555–9

Sertraline and breast-feeding [letter] Epperson CN, et al. **N Engl J Med** 1997 Apr 17;336(16):1189–90

Effects of thimerosal, an organic sulfhydryl modifying agent, on serotonin transport activity into rabbit blood platelets. Nishio H, et al. **Neurochem Int** 1996 Oct;29(4):391–6

Effect of age on platelet 5-HT concentrations in healthy controls, depressed and schizophrenic patients. Mück-Seler D, et al. **Neuropsychobiology** 1996;34(4):201–3

Platelet 5-HT levels and hypothalamic-pituitary-adrenal axis activity in schizophrenic patients with positive and negative symptoms. Pivac N, et al. **Neuropsychobiology** 1997; 36(1):19–21

Increased plasma serotonin following treatment with flavone-8-acetic acid, 5,6-dimethylxanthenone-4-acetic acid, vinblastine, and colchicine: relation to vascular effects. Baguley BC, et al. **Oncol Res** 1997;9(2):55–60

Increased turnover of serotonin in children with pulmonary hypertension secondary to congenital heart disease. Breuer J, et al. **Pediatr Cardiol** 1996 Jul-Aug;17(4):214–9

Comprehensive study on platelet function, hemostasis, fibrinolysis, peripheral serotonergic system and serum lipids in nephrotic syndrome. Malyszko J, et al. **Pol J Pharmacol** 1996 Mar-Apr;48(2):191–5

Comparison of changes in serotonergic measures in whole blood or plasma and brain in rats given nicotine and/or stresses. Takada A, et al. **Pol J Pharmacol** 1996 Mar-Apr; 48(2):173–7

Serotonin and autism: biochemical and molecular biology features. Hérault J, et al. **Psychiatry Res** 1996 Nov 1; 65(1):33–43

Whole-blood serotonin in children and adolescents with mood and behavior disorders. Hughes CW, et al. **Psychiatry Res** 1996 Nov 15;65(2):79–95

Autoantibody reactivity in serum of patients with Alzheimer's disease and other age-related dementias. Schott K, et al. **Psychiatry Res** 1996 Jan 31;59(3):251–4

SEROTONIN

Decreased serotonergic responsivity in platelets of drug-free patients with schizophrenia. Yao JK, et al. **Psychiatry Res** 1996 Jul 31;63(2-3):123-32

Plasma monoamine metabolites and spontaneous recurrence of methamphetamine-induced paranoid-hallucinatory psychosis: relation of noradrenergic activity to the occurrence of flashbacks. Yui K, et al. **Psychiatry Res** 1996 Jul 31;63(2-3):93-107

Abnormal ACTH and prolactin responses to fenfluramine in rats exposed to single and multiple doses of MDMA. Poland RE, et al. **Psychopharmacology (Berl)** 1997 Jun; 131(4):411-9

Platelet serotonin and [3H]paroxetine binding correlate with recurrence of suicidal behavior. Verkes RJ, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):89-94

Human intraplatelet 5-hydroxytryptamine is correlated with mean platelet survival time. Aranda E, et al. **Thromb Res** 1996 Oct 1;84(1):67-72

Hemostasis, platelet function and serotonin in acute and chronic renal failure. Malyszko J, et al. **Thromb Res** 1996 Sep 1;83(5):351-61

Effects of short-term treatment with mevalotin on platelet aggregation, fibrinolysis, peripheral serotonergic system and serum lipids in Japanese monkeys. Malyszko J, et al. **Thromb Res** 1996 Feb 1;81(3):397-402

The effect of tacrolimus (FK506) and cyclosporin A (CyA) on peripheral serotonergic mechanisms in uremic rats. Mysliwiec J, et al. **Thromb Res** 1996 Jul 15;83(2):175-81

Peripheral serotonergic system in uremia. Pawlak D, et al. **Thromb Res** 1996 Jul 15;83(2):189-94

The effect of a 5HT2 receptor antagonist sarpogrelate (MCI-9042) treatment on platelet function in Buerger's disease. Rydzewski A, et al. **Thromb Res** 1996 Dec 15; 84(6):445-52

[Circadian blood serotonin and melatonin level in anorexia nervosa patients in comparison with normally menstruating women] Hoffmann G, et al. **Geburtshilfe Frauenheilkd** 1996 Sep;56(9):485-90 (Eng. Abstr.) **(Ger)**

[A case of neuroendocrine carcinoma of uterine cervix with the elevated plasma level of serotonin] Akiba Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Oct; 48(10):897-900 **(Jpn)**

[Tension-type headache: 5-hydroxytryptamine and related substances] Shimomura T. **Rinsho Shinkeigaku** 1995 Dec; 35(12):1342-4 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Serotonin in diabetic retinopathy] Andrzejewska-Buczko J, et al. **Klin Oczna** 1996 Feb;98(2):101-4 (Eng. Abstr.) **(Pol)**

[Fibrinolytic and peripheral serotonergic system in patients with glomerulonephritis] Małyszko J, et al. **Przegl Lek** 1995;52(9):428-30 (Eng. Abstr.) **(Pol)**

[Common clinical manifestations of serotonin deficiency and intoxication syndromes] Simonenko AP, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):604-13 (22 ref.) **(Rus)**

[Relationship between opioid peptides and mediator systems in children] Panchenko NI, et al. **Klin Lab Diagn** 1993 May-Jun;(3):12-5 (Eng. Abstr.) **(Rus)**

[Serotonin concentration in the blood of patients with hemorrhagic fever with renal syndrome] Sidel'nikov IuN, et al. **Klin Lab Diagn** 1996 Sep-Oct;(5):21-2 (Eng. Abstr.) **(Rus)**

[The level of free histamine and free serotonin in the blood plasma in polycythemia vera] Vydyborets SV, et al. **Lik Sprava** 1995 Sep-Dec;(9-12):70-2 (Eng. Abstr.) **(Rus)**

[Platelet serotonin in endogenous depressive patients and normal controls] Spatz H, et al. **Acta Psiquiatr Psicol Am Lat** 1995 Sep;41(3):230-6 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Depression in Parkinson's disease: biogenic amines in CSF of "de novo" patients. Kuhn W, et al. **J Neural Transm** 1996;103(12):1441-5

Endogenous neuropeptides in patients with acute traumatic head injury. II: Changes in the levels of cerebrospinal fluid substance P, serotonin and lipid peroxidation products in patients with head trauma. Karaküçük EI, et al. **Neuropeptides** 1997 Jun;31(3):259-63

Subarachnoid bupivacaine increases human cerebrospinal fluid concentration of serotonin. Naesh O, et al. **Reg Anesth** 1996 Sep-Oct;21(5):446-50

CHEMISTRY

Photophysics of a neurotransmitter: ionization and spectroscopic properties of serotonin. Chattopadhyay A, et al. **Biophys J** 1996 Oct;71(4):1952-60

Molecular modeling of serotonin, ketanserin, ritanserin and their 5-HT2C receptor interactions. Kristiansen K, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):195-210

Threonine-for-leucine mutation within domain M2 of the neuronal alpha(7) nicotinic receptor converts 5-hydroxytryptamine from antagonist to agonist. Palma E, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11231-5

DEFICIENCY

Alterations in the postnatal development of striatal preprotachykinin but not preproenkephalin mRNA expression in the serotonin-depleted rat. Walker PD, et al. **Dev Neurosci** 1997;19(2):135-42

[Progress toward functional diagnosis in psychiatry. The serotonin deficiency syndrome] Pöldinger W, et al. **Ther Umsch** 1996 Mar;53(3):225-7 (Eng. Abstr.) **(Ger)**

[Common clinical manifestations of serotonin deficiency and intoxication syndromes] Simonenko AP, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):604-13 (22 ref.) **(Rus)**

[Is chronic serotonin deficiency the basis of diabetic and age-related angiopathy?] Simonenkov AP, et al. **Biull Eksp Biol Med** 1997 Jan;123(1):103-10 **(Rus)**

DIAGNOSTIC USE

Disparity between serotonin- and acetylcholine-provoked coronary artery spasm. Kanazawa K, et al. **Clin Cardiol** 1997 Feb;20(2):146-52

GENETICS

Association between 5-HT2A gene promoter polymorphism and anorexia nervosa [letter] Collier DA, et al. **Lancet** 1997 Aug 9;350(9075):412

The 5-HT hypothesis of depression revisited [news] Routledge C, et al. **Mol Psychiatry** 1996 Dec;1(6):437

HISTORY

The discovery of serotonin. Rapport MM. **Perspect Biol Med** 1997 Winter;40(2):260-73

IMMUNOLOGY

Histamine-potentiating activity in rat anaphylactic pleural fluid: role of serotonin. Lima MC, et al. **Braz J Med Biol Res** 1996 Aug;29(8):1049-56

Association of serotonin-like immunoreactive axons with nociceptive projection neurons in the caudal spinal trigeminal nucleus of the rat. Li JL, et al. **J Comp Neurol** 1997 Jul 21;384(1):127-41

Autoantibody reactivity in serum of patients with Alzheimer's disease and other age-related dementias. Schott K, et al. **Psychiatry Res** 1996 Jan 31;59(3):251-4

[Serotonin antibodies in fibromyalgia syndrome--expression of a neuroendocrinologic autoimmune disease?] Neeck G, et al. **Z Rheumatol** 1996 Jan-Feb;55(1):63-5; 63,66 disc 66-8 **(Ger)**

[Immunotherapy of experimental drug addiction with antibodies to serotonin and dopamine] Evseev VA, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):189-92 **(Rus)**

[The effect of serotonin antibodies on the development of a neuropathic pain syndrome] Igon'kina SI, et al. **Patol Fiziol Eksp Ter** 1997 Apr-Jun;(2):6-8 (Eng. Abstr.) **(Rus)**

METABOLISM

Immunogold localization of serotonin within synaptic terminals in the rat mesencephalic trigeminal nucleus. Liem RS, et al. **Acta Anat (Basel)** 1996;155(1):50-6

Transient expression of the serotonin transporter in the developing mouse thalamocortical system. Brüning G, et al. **Acta Histochem** 1997 Mar;99(1):117-21

Platelet serotonin transporter in coeliac disease. Chiaravalloti G, et al. **Acta Paediatr** 1997 Jul;86(7):696-9

Adaptative changes of the serotonergic system after antidepressant treatments. Artigas F, et al. **Adv Exp Med Biol** 1996;398:51-9

Tryptophan metabolism and disposition in relation to alcohol and alcoholism. Badawy AA. **Adv Exp Med Biol** 1996; 398:75-82 (28 ref.)

Neuropsychiatric implications of brain tryptophan perturbations appearing in hepatic encephalopathy. Bengtsson F, et al. **Adv Exp Med Biol** 1996;398:387-95 (73 ref.)

Tryptophan and 5-HT in psychiatric illness. Delgado PL, et al. **Adv Exp Med Biol** 1996;398:73

Tryptophan hydroxylase activity in serotonin producing mast cells. Dependence on intracellular iron concentration manipulated by permeable chelators. Hasegawa H, et al. **Adv Exp Med Biol** 1996;398:513-7

Eosinophilia myalgia syndrome. The role of contaminants, the role of serotonergic metabolism set up. Nicolodi M, et al. **Adv Exp Med Biol** 1996;398:351-7

The effects of induced kynurenine pathway on immunocytochemical changes in rat tissues following excessive L-tryptophan consumption. Ronen N, et al. **Adv Exp Med Biol** 1996;398:177-82

The effects of a selective inhibitor of tryptophan 2,3-dioxygenase and a combined inhibitor of tryptophan 2,3-dioxygenase and 5-HT reuptake on serotonergic function in the rat. Salter M, et al. **Adv Exp Med Biol** 1996; 398:61-5

Brain Serotonin, Carbohydrate-craving, obesity and depression. Wurtman RJ, et al. **Adv Exp Med Biol** 1996; 398:35-41 (33 ref.)

5-Hydroxytryptamine deficits in the caudate nucleus in AIDS [letter] Reynolds GP, et al. **AIDS** 1996 Sep; 10(11):1303-4

Craving for cocaine in addicted users. Role of serotonergic mechanisms. Buydens-Branchey L, et al. **Am J Addict** 1997 Winter;6(1):65-73

Systematic screening for mutations in the coding region of the human serotonin transporter (5-HTT) gene using PCR and DGGE. Di Bella D, et al. **Am J Med Genet** 1996 Nov 22;67(6):541-5

Novel appearance of placental nuclear monoamine oxidase: biochemical and histochemical evidence for hyperserotonomic state in preeclampsia-eclampsia. Gujrati VR, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1543-50

Increased histamine and 5-HT in portal vein plasma and mesenteric lymph during brief ischemia and reperfusion. Fu LW, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1135-41

Interleukin-1 induces changes in sleep, brain temperature, and serotonergic metabolism. Gemma C, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R601-6

NE inhibits cerebrovascular mast cell exocytosis induced by cholinergic and peptidergic agonists. Reynier-Rebuffel AM, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R845-50

Reduced serotonin responsivity in depression [letter; comment] Brown GM. **Am J Psychiatry** 1997 Mar; 154(3):442. Comment on: Am J Psychiatry 1996 Feb;153(2):174-82.

Distribution of serotonin-immunoreactivity in the brain of the pigeon (Columba livia). Challet E, et al. **Anat Embryol (Berl)** 1996 Mar;193(3):209-27

An immunohistochemical analysis of the ontogeny, distribution and coexistence of 12 regulatory peptides and serotonin in endocrine cells and nerve fibers of the digestive tract of the turbot, Scophthalmus maximus (Teleostei). Reinecke M, et al. **Anat Embryol (Berl)** 1997 Jan; 195(1):87-101

Propofol anesthesia increases dopamine and serotonin activities at the somatosensory cortex in rats: a microdialysis study. Shyr MH, et al. **Anesth Analg** 1997 Jun;84(6):1344-8

Alterations in electroencephalographic signals and monoamine concentrations in the rat brain following cocaine and methamphetamine treatment. Binienda Z, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:394-400

Stress hormones, genotype, and brain organization. Implications for aggression. De Kloet ER, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:179-91 (65 ref.)

Cholesterol, serotonin, and behavior in young monkeys. Fontenot MB, et al. **Ann N Y Acad Sci** 1996 Sep 20; 794:352-4

[3H]5-HT binding to 5-HT1nonA-nonB receptors in rat hypothalamus is not representative of 5-HT7 receptors. Gobbi M, et al. **Ann N Y Acad Sci** 1997 May 30;812:167-8

Social attachment, brain function, and aggression. Kraemer GW, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:121-35

Serotonergic modulations on acute or subchronic methamphetamine-induced striatal 3-methoxytyramine levels in mice. Morimasa T, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:384-7

Serotonergic and cardiac correlates of aggression in children. Pine DS, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:391-3

Using the 5-HT transporter dependency of p-chloroamphetamine-stimulated 5-HT release to determine the nature of fenfluramine-induced 5-HT transporter loss. Westphalen RI, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:168-73

Possible serotonin syndrome associated with tramadol and sertraline coadministration. Mason BJ, et al. **Ann Pharmacother** 1997 Feb;31(2):175-7

Hippocampal 5-HT1A receptor binding site densities, 5-HT1A receptor messenger ribonucleic acid abundance and serotonin levels parallel the activity of the hypothalamo-pituitary-adrenal axis in rats. Burnet PW, et al. **Behav Brain Res** 1996;73(1-2):365-68

Reduction of gastrointestinal serotonin in alloxan-diabetic rats: reversal by 5-hydroxytryptophan treatment. Cićin-Sain L, et al. **Behav Brain Res** 1996;73(1-2):285-8

Extracellular serotonin is decreased in the nucleus accumbens during withdrawal from cocaine self-administration. Parsons LH, et al. **Behav Brain Res** 1996;73(1-2):225-8

Species differences in 5-HT autoreceptors. Price GW, et al. **Behav Brain Res** 1996;73(1-2):79-82

Regulation of 5-HT release from enterochromaffin cells. Racké K, et al. **Behav Brain Res** 1996;73(1-2):83-7 (28 ref.)

Prevalence of high serotonin uptake in lymphocytes of abstinent alcoholics. Faraj BA, et al. **Biochem Pharmacol** 1997 Jan 10;53(1):53-7

5-HT1B/D antagonists potentiate paroxetine's effect on 5-HT efflux in the lateral geniculate nucleus: in vitro voltammetric data. Davidson C, et al. **Biochem Soc Trans** 1997 Feb;25(1):49S

External cysteine residues in the serotonin transporter. Chen JG, et al. **Biochemistry** 1997 Feb 11;36(6):1479-86

An extracellular loop region of the serotonin transporter may be involved in the translocation mechanism. Stephan MM, et al. **Biochemistry** 1997 Feb 11;36(6):1322-8

Effect of cisplatin on the disposition of endogenous serotonin and its main metabolite, 5-hydroxyindole-3-acetic acid, in rats and dogs. Nakajima Y, et al. **Biol Pharm Bull** 1996 Feb;19(2):318-22

Serotonergic, noradrenergic, and dopaminergic measures in suicide brains. Arranz B, et al. **Biol Psychiatry** 1997 May 15;41(10):1000-9

Serotonin transporter gene and manic depressive illness: an association study. Bellivier F, et al. **Biol Psychiatry** 1997 Mar 15;41(6):750-2

Synthesis of [11C]RPR-72840A and its evaluation as a radioligand for the serotonin reuptake site in positron emission tomography. Roeda D, et al. **Bioorg Med Chem** 1997 Feb;5(2):397-403

Kinetics of release of serotonin from isolated secretory granules. II. Ion exchange determines the diffusivity of

serotonin. Marszalek PE, et al. **Biophys J** 1997 Sep; 73(3):1169–83

Kinetics of release of serotonin from isolated secretory granules. I. Amperometric detection of serotonin from electroporated granules. Marszalek PE, et al. **Biophys J** 1997 Sep;73(3):1160–8

Increased brain serotonin function in men with chronic fatigue syndrome. Sharpe M, et al. **BMJ** 1997 Jul 19; 315(7101):164–5

Possible in vivo 5-HT reuptake blocking properties of 8-OH-DPAT assessed by measuring hippocampal extracellular 5-HT using microdialysis in rats. Assié MB, et al. **Br J Pharmacol** 1996 Nov;119(5):845–50

(+)-WAY 100135, a partial agonist, at native and recombinant 5-HT1B/1D receptors. Davidson C, et al. **Br J Pharmacol** 1997 Jun;121(4):737–42

Sequential onset of three 5-HT receptors during the 5-hydroxytryptaminergic differentiation of the murine 1C11 cell line. Kellermann O, et al. **Br J Pharmacol** 1996 Jul;118(5):1161–70

Functional characterization of 5-HT1D autoreceptors on the modulation of 5-HT release in guinea-pig mesencephalic raphe, hippocampus and frontal cortex. el Mansari M, et al. **Br J Pharmacol** 1996 Jun;118(3):681–9

Effect of a selective 5-HT reuptake inhibitor in combination with 5-HT1A and 5-HT1B receptor antagonists on extracellular 5-HT in rat frontal cortex in vivo. Sharp T, et al. **Br J Pharmacol** 1997 Jul;121(5):941–6

Differential regulation of 5-hydroxytryptamine release by GABAA and GABAB receptors in midbrain raphe nuclei and forebrain of rats. Tao R, et al. **Br J Pharmacol** 1996 Dec;119(7):1375–84

Agonistic interactions affect brain serotonergic activity in an acanthopterygiian fish: the bicolor damselfish (Pomacentrus partitus). Winberg S, et al. **Brain Behav Evol** 1996;48(4):213–20

Augmented release of serotonin by adenosine A2a receptor activation and desensitization by CGS 21680 in the rat nucleus tractus solitarius. Barraco RA, et al. **Brain Res** 1996 Sep 16;733(2):155–61

Changes in serotonin and norepinephrine uptake sites after chronic cocaine: pre- vs. post-withdrawal effects. Belej T, et al. **Brain Res** 1996 Oct 14;736(1–2):287–96

Thalamocortical afferents in rat transiently express high-affinity serotonin uptake sites. Bennett-Clarke CA, et al. **Brain Res** 1996 Sep 16;733(2):301–6

Modulatory role of catecholamines in the transsynaptic expression of c-fos in the rat medial prefrontal cortex induced by disinhibition of the mediodorsal thalamus: a study employing microdialysis and immunohistochemistry. Bubser M, et al. **Brain Res** 1997 Feb 28;749(2):214–25

Serotonin depletion exacerbates changes in striatal gene expression following quinolinic acid injection. Cummings TJ, et al. **Brain Res** 1996 Dec 16;743(1–2):240–8

Neurotensin inhibits the activation of midbrain serotonergic neurons produced by random inescapable sound. Dilts RP, et al. **Brain Res** 1996 Dec 2;742(1–2):294–8

Differential effects of kainic acid on dopamine and serotonin metabolism in ventral and dorsal striatal regions. Guevara BH, et al. **Brain Res** 1997 Feb 21;749(1):139–42

Effect of p-chlorophenylalanine (PCPA) on sleep and monoamines content in the brain of a lizard species. Huitrón-Reséndiz S, et al. **Brain Res** 1997 Jun 27; 761(1):19–24

Effects of tianeptine, sertraline and clomipramine on brain serotonin metabolism: a voltammetric approach in the rat. Marinesco S, et al. **Brain Res** 1996 Oct 14;736(1–2):82–90

Effects of tryptophan and/or acute running on extracellular 5-HT and 5-HIAA levels in the hippocampus of food-deprived rats. Meeusen R, et al. **Brain Res** 1996 Nov 18;740(1–2):245–52

Three-dimensional mapping of norepinephrine and serotonin in human thalamus. Oke AF, et al. **Brain Res** 1997 Jul 18; 763(1):69–78

The anticonvulsant action of fluoxetine in substantia nigra is dependent upon endogenous serotonin. Pasini A, et al. **Brain Res** 1996 Jun 10;724(1):84–8

Microdialysis monitoring of variations in extracellular levels of serotonin, GABA and excitatory amino acids in the frontal cortex of awake rats in response to a single peripheral or central administration of dexfenfluramine. Rocher C, et al. **Brain Res** 1996 Oct 21;737(1–2):221–30

A microdialysis examination of serotonin release in the rat forebrain induced by behavioral/environmental manipulations. Rueter LE, et al. **Brain Res** 1996 Nov 11; 739(1–2):57–69

Effect of ethanol on extracellular 5-HT and glutamate in the nucleus accumbens and prefrontal cortex: comparison between the Lewis and Fischer 344 rat strains. Selim M, et al. **Brain Res** 1996 Apr 15;716(1–2):157–64

The decrease of serotonin release induced by a tryptophan-free amino acid diet does not affect spatial and passive avoidance learning. Stancampiano R, et al. **Brain Res** 1997 Jul 11;762(1–2):269–74

Normal development of tyrosine hydroxylase and serotonin immunoreactive fibers innervating anterior cingulate cortex and visual cortex in rabbits exposed prenatally to cocaine. Wang XH, et al. **Brain Res** 1996 Apr 9;715(1–2):221–4

Synergism of 5-HT 1B/D antagonists with paroxetine on serotonin efflux in rat ventral lateral geniculate nucleus slices. Davidson C, et al. **Brain Res Bull** 1997;43(4):405–9

Changes in serotonergic measures in whole blood and various brain regions of rats administered with the 5-HT1A agonist tandospirone and/or exposed to electric foot-shock. Takada Y, et al. **Brain Res Bull** 1996;40(1):51–5

Deficiency of essential neurotrophic factors in conditioned media produced by ethanol-exposed cortical astrocytes. Kim JA, et al. **Brain Res Dev Brain Res** 1996 Oct 23; 96(1–2):1–10

Effects of neonatal serotonin depletion on the development of rat dentate granule cells. Yan W, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):177–84

Fenfluramine-induced activation of the immediate-early gene c-fos in the striatum: possible interaction between serotonin and dopamine. Rouillard C, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):105–15

Alterations in mRNA expression of systems that regulate neurotransmitter synaptic content in seizure-naive genetically epilepsy-prone rat (GEPR): transporter proteins and rate-limiting synthesizing enzymes for norepinephrine, dopamine and serotonin. Szot P, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):233–45

D-fenfluramine selectively releases 5-HT from dorsal raphe terminals. Viana MB, et al. **Braz J Med Biol Res** 1996 May; 29(5):639–42

The role of serotonin in the future of forensic psychiatry [see comments] Bradford JM. **Bull Am Acad Psychiatry Law** 1996;24(1):57–72 (87 ref.). Comment in: Bull Am Acad Psychiatry Law 1996;24(3):419–22.

Ca2+/calmodulin and protein kinase C regulation of serotonin transport in human K562 lymphocytes. Khan NA, et al. **Cell Immunol** 1996 Sep 15;172(2):269–74

5-Hydroxytryptamine and beta-adrenoceptors in rat isolated atria. Davy M, et al. **Cell Mol Life Sci** 1997 Mar;53(3):263–6

Prenatal development of the serotonin transporter in mouse brain. Brüning G, et al. **Cell Tissue Res** 1997 Aug; 289(2):211–21

Greater effects of fluoxetine and its combination with (-)-pindolol in elevating hypothalamic serotonin in rats during dark hours. Dreshfield LJ, et al. **Chin J Physiol** 1997 Jun 30;40(2):57–61

Serotonin in alcoholic violent offenders. Virkkunen M, et al. **Ciba Found Symp** 1996;194:168–77; discussion 177–82 (47 ref.)

Serotonin metabolism in patients undergoing hemodialysis. Kanai H, et al. **Clin Nephrol** 1996 Apr;45(4):244–9

The differentiation of the serotonergic neurons in the Drosophila ventral nerve cord depends on the combined function of the zinc finger proteins Eagle and Huckebein. Dittrich R, et al. **Development** 1997 Jul;124(13):2515–25

Effects of adrenalectomy on serotonin-, somatostatin-, and gastrin-immunoreactive cells in rat gastrointestinal tract. Glória H, et al. **Dig Dis Sci** 1997 Jun;42(6):1216–20

Prostaglandin E2 modulates serotonin- and gastrin/CCK-immunoreactive cells in the duodenal mucosa of the rat. Kapraali M, et al. **Digestion** 1997; 58(3):249–57

Effects of phentermine and cocaine on fenfluramine-induced depletion of serotonin in mouse brain. Baumann MH, et al. **Drug Alcohol Depend** 1996 May;41(1):71–4

Alterations in serotonin1B (5HT1B) receptor subtypes in the brain of ethanol-treated rats. Pandey SC, et al. **Drug Alcohol Depend** 1996 Jul;41(3):219–25

The serotonin syndrome. LoCurto MJ. **Emerg Med Clin North Am** 1997 Aug;15(3):665–75 (36 ref.)

The serotonergic innervation of the cerebral cortex in man and its changes in focal cortical dysplasia. Trottier S, et al. **Epilepsy Res** 1996 Oct;25(2):79–106

Serotonin syndrome and drug combinations: focus on MAOI and RIMA. Hilton SE, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):113–9 (49 ref.)

Organisation of the zebrafish spinal cord: distribution of motoneuron dendrites and 5-HT containing cells. Van Raamsdonk W, et al. **Eur J Morphol** 1996;34(2):65–77

Antidepressant drugs inhibit a glial 5-hydroxytryptamine transporter in rat brain. Bal N, et al. **Eur J Neurosci** 1997 Aug;9(8):1728–38

Release of serotonin in the rat locus coeruleus: effects of cardiovascular, stressful and noxious stimuli. Singewald N, et al. **Eur J Neurosci** 1997 Mar;9(3):556–62

Dissociations in hippocampal 5-hydroxytryptamine release in the rat following Pavlovian aversive conditioning to discrete and contextual stimuli. Wilkinson LS, et al. **Eur J Neurosci** 1996 Jul;8(7):1479–87

In vitro and in vivo characterisation of nor-beta-CIT: a potential radioligand for visualisation of the serotonin transporter in the brain. Bergström KA, et al. **Eur J Nucl Med** 1997 Jun;24(6):596–601

[3H]5-hydroxytryptamine labels the agonist high affinity state of the cloned rat 5-HT4 receptor. Adham N, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):231–5

Binding profile of the novel 5-HT1B/1D receptor antagonist, [3H]GR 125,743, in guinea-pig brain: a comparison with [3H]5-carboxamidotryptamine. Audinot V, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):247–56

Raphe 5-HT1A autoreceptors, but not postsynaptic 5-HT1A receptors or beta-adrenoceptors, restrain the citalopram-induced increase in extracellular 5-hydroxytryptamine in vivo. Hjorth S, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):43–7

(-)-Pindolol, but not buspirone, potentiates the citalopram-induced rise in extracellular 5-hydroxytryptamine. Hjorth S. **Eur J Pharmacol** 1996 May 15;303(3):183–6

[3H]8-OH-DPAT labels a 5-HT site coupled to inhibition of phosphoinositide hydrolysis in the dorsal raphe. Johnson RG, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):99–106

Valproate and its major metabolite E-2-en-valproate induce different effects on behaviour and brain monoamine metabolism in rats. Löscher W, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):61–7

Prolactin response to fenfluramine is independent of serotonin release. McCann UD, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):R1–2

Characterisation of a postjunctional 5-ht7-like and a prejunctional 5-HT3 receptor mediating contraction of rat isolated jejunum. McLean PG, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):215–25

5-HT1A receptor agonist effects of BMY-14802 on serotonin release in dorsal raphe and hippocampus. Matos FF, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):49–54

2,5-Bis-(glutathion-S-yl)-alpha-methyldopamine, a putative metabolite of (+/-)-3,4-methylenedioxyamphetamine, decreases brain serotonin concentrations. Miller RT, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):173–80

Effects of galanin on 8-OH-DPAT induced decrease in body temperature and brain 5-hydroxytryptamine metabolism in the mouse. Patel S, et al. **Eur J Pharmacol** 1996 Dec 19; 317(2–3):197–204

Role of serotonergic neurotransmission in the hypnotic response to dexmedetomidine, an alpha 2-adrenoceptor agonist. Rabin BC, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1–3):51–9

Depletion of serotonin, dopamine and noradrenaline in aged rats decreases the therapeutic effect of nicotine, but not of tetrahydroaminoacridine. Riekkinen M, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):243–50

The role of 5-HT(1B/1D) receptors in the modulation of 5-hydroxytryptamine levels in the frontal cortex of the conscious guinea pig. Roberts C, et al. **Eur J Pharmacol** 1997 May 12;326(1):23–30

Effects of co-administration of a monoamine oxidase inhibitor and a 5-HT1A receptor antagonist on 5-hydroxytryptamine cell firing and release. Sharp T, et al. **Eur J Pharmacol** 1997 Feb 5;320(1):15–9

Focal ethanol elevates extracellular dopamine and serotonin concentrations in the rat ventral tegmental area. Yan QS, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):49–57

Ammonium acetate challenge in experimental chronic hepatic encephalopathy induces a transient increase of brain 5-HT release in vivo. Bergqvist PB, et al. **Eur Neuropsychopharmacol** 1996 Nov;6(4):317–22

Effects of clomipramine on plasma amino acids and serotonergic parameters in panic disorder and depression. Fekkes D, et al. **Eur Neuropsychopharmacol** 1997 Aug; 7(3):235–9

Effect of idebenone on in vivo serotonin release and serotonergic receptors in young and aged rats. Scavini C, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):95–102

PET neuroimaging with [11C]venlafaxine: serotonin uptake inhibition, biodistribution and binding in living pig brain. Smith DF, et al. **Eur Neuropsychopharmacol** 1997 Aug; 7(3):195–200

Neocortical activation: modulation by multiple pathways acting on central cholinergic and serotonergic systems. Dringenberg HC, et al. **Exp Brain Res** 1997 Aug; 116(1):160–74

Recovery of locomotor activity in the adult chronic spinal rat after sublesional transplantation of embryonic nervous cells: specific role of serotonergic neurons. Feraboli-Lohnherr D, et al. **Exp Brain Res** 1997 Mar; 113(3):443–54

Effects of ion channel blockers on rapid postmortem changes in extracellular dopamine and serotonin levels in the rat nucleus accumbens. Yoshimoto K, et al. **Forensic Sci Int** 1997 Feb 7;85(1):29–39

Dopamine and serotonin in the trout (Oncorhynchus mykiss) pituitary: main metabolites and changes during gonadal recrudescence. Hernandez-Rauda R, et al. **Gen Comp Endocrinol** 1996 Jul;103(1):13–23

Effects of estradiol on the serotonin secretion and turnover in the hypothalamus of male tilapia, Oreochromis mossambicus, in vitro. Tsai CL, et al. **Gen Comp Endocrinol** 1997 May;106(2):175–80

Central serotonin level-dependent changes in body temperature following administration of tryptophan to pargyline- and harmaline-pretreated rats. Abdel-Fattah AF, et al. **Gen Pharmacol** 1997 Mar;28(3):405–9

Serotonin depletion after prolonged chlorpromazine treatment in a simpler model system. Croll RP, et al. **Gen Pharmacol** 1997 Jul;29(1):91–6

Effect of dotarizine on K(+)-stimulated [3H]-serotonin and [3H]-acetylcholine release from rat hippocampus. Hadjiivanova C, et al. **Gen Pharmacol** 1997 Jan; 28(1):129–32

The reduction of antinociceptive effect of morphine administered intraventricularly is correlated with the decrease of serotonin release from the spinal cord in streptozotocin-induced diabetic rats. Suh HW, et al. **Gen Pharmacol** 1996 Apr;27(3):445–50

Microglia in the pineal gland of the neonatal rat: characterization and effects on pinealocyte neurite length and serotonin content. Tsai SY, et al. **Glia** 1997 Jul; 20(3):243–53

Aging effects on monoamines in rat medial vestibular and cochlear nuclei. Cransac H, et al. **Hear Res** 1996 Oct; 100(1–2):150–6

Monoamines (noradrenaline, dopamine, serotonin) in the rat cochlear nuclei: endogenous levels and turnover. Cransac H, et al. **Hear Res** 1995 Oct;90(1–2):65–71

Distribution of serotonin–immunoreactive nerve cells and fibers in the rat gastrointestinal tract. Fujimiya M, et al. **Histochem Cell Biol** 1997 Feb;107(2):105–14

Changes in brain neurotransmitters in hypothalamus related to feeding behavior in LEC rat. Darwita RR. **Hokkaido Igaku Zasshi** 1996 May;71(3):377–89

Influence of norethisterone acetate and estradiol on the serotonin metabolism of postmenopausal women. Mueck AO, et al. **Horm Metab Res** 1997 Feb;29(2):80–3

Serotonin syndrome due to venlafaxine and maintenance tranylcypromine therapy. Hodgman MJ, et al. **Hum Exp Toxicol** 1997 Jan;16(1):14–7

The strain difference in the effect of mercuric chloride on antigen–triggered serotonin release from rat mast cells is not mediated via interferon–gamma. Hodson D, et al. **Immunology** 1996 Nov;89(3):463–7

Biphasic, organ–specific, and strain–specific accumulation of platelets induced in mice by a lipopolysaccharide from Escherichia coli and its possible involvement in shock. Shibazaki M, et al. **Infect Immun** 1996 Dec;64(12):5290–4

Adenosine A3 receptors promote degranulation of rat mast cells both in vitro and in vivo. Reeves JJ, et al. **Inflamm Res** 1997 May;46(5):180–4

Preclinical pharmacology of milnacipran. Briley M, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:9–14 (24 ref.)

Two actions are better than one: avoiding self–inhibition of serotonergic neurones enhances the effects of serotonin uptake inhibitors. Romero L, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:1–8 (50 ref.)

Serotonin uptake, storage and metabolism in megakaryoblasts. Yang M, et al. **Int J Hematol** 1996 Feb; 63(2):137–42

Further evidence on the interaction of muramyl dipeptide with the serotonergic system. Slánský J, et al. **Int J Immunopharmacol** 1996 Jan;18(1):23–9

Effect of stress on the behavior and 5–HT system in Sprague–Dawley and Wistar Kyoto rat strains. Paré WP, et al. **Integr Physiol Behav Sci** 1996 Apr–Jun;31(2):112–21

Serotonin syndrome due to an overdose of moclobemide and clomipramine. A potentially life–threatening association. François B, et al. **Intensive Care Med** 1997 Jan;23(1):122–4

Effect of long–term administration of stobadine on exploratory behaviour and on striatal levels of dopamine and serotonin in rats and their offspring. Dubovický M, et al. **J Appl Toxicol** 1997 Jan–Feb;17(1):63–70

Secretion and serotonin release in the isolated rat lacrimal gland: the effects of substance P and calcitonin gene–related peptide. Williams RM, et al. **J Auton Nerv Syst** 1996 Oct 7;61(1):37–42

The involvement of serotonin (5–hydroxytryptamine) in photosensitive epilepsy. Anyanwu E, et al. **J Basic Clin Physiol Pharmacol** 1994 Jul–Dec; 5(3–4):179–206 (55 ref.)

ATP is required in platelet serotonin exocytosis for protein phosphorylation and priming of secretory vesicles docked on the plasma membrane. Morimoto T, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):113–8

Expression of serotonin transporter mRNA in rat brain: presence in neuronal and non–neuronal cells and effect of paroxetine. Swan MC, et al. **J Chem Neuroanat** 1997 Jul; 13(2):71–6

Carcinoid tumor of the common bile duct producing gastrin and serotonin. Hao L, et al. **J Clin Gastroenterol** 1996 Jul; 23(1):63–5

Distribution and morphology of serotonin–immunoreactive neurons in the brainstem of the New Zealand white rabbit. Bjarkam CR, et al. **J Comp Neurol** 1997 Apr 21; 380(4):507–19

Specific potentialities of embryonic rat serotonergic neurons to innervate different periventricular targets in the adult brain. Didier–Bazes M, et al. **J Comp Neurol** 1997 May 26;382(1):29–45

Central innervation of the rat ependyma and subcommissural organ with special reference to ascending serotoninergic projections from the raphe nuclei. Mikkelsen JD, et al. **J Comp Neurol** 1997 Aug 11;384(4):556–68

Rostrocaudal distribution of 5–HT innervation in the lamprey spinal cord and differential effects of 5–HT on fictive locomotion. Zhang W, et al. **J Comp Neurol** 1996 Oct 14; 374(2):278–90

Bulbospinal sympatho–excitatory neurons in the rat caudal raphe. Pilowsky PM, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1618–23

Human platelets can initiate T cell–dependent contact sensitivity through local serotonin release mediated by IgE antibodies. Matsuda H, et al. **J Immunol** 1997 Mar 15; 158(6):2891–7

Effect of ascorbate and cysteine on the 3,4–methylenedioxymethamphetamine–induced depletion of brain serotonin. Gudelsky GA. **J Neural Transm** 1996; 103(12):1397–404

MDMA induced dopamine release in vivo: role of endogenous serotonin. Koch S, et al. **J Neural Transm** 1997; 104(2–3):135–46

Serotonin (5–HT) release in the dorsal raphé and ventral hippocampus: raphé control of somatodendritic and terminal 5–HT release. Matos FF, et al. **J Neural Transm** 1996;103(1–2):173–90

Neurotransmitters in CSF of idiopathic adult–onset dystonia: reduced 5–HIAA levels as evidence of impaired serotonergic metabolism. Naumann M, et al. **J Neural Transm** 1996;103(8–9):1083–91

Functional promoter and polyadenylation site mapping of the human serotonin (5–HT) transporter gene. Heils A, et al. **J Neural Transm Gen Sect** 1995;102(3):247–54

Differential effects of ipsapirone on 5–hydroxytryptamine release in the dorsal and median raphe neuronal pathways. Casanovas JM, et al. **J Neurochem** 1996 Nov;67(5):1945–52

Potentiation of the fluoxetine–induced increase in dialysate levels of serotonin (5–HT) in the frontal cortex of freely moving rats by combined blockade of 5–HT1A and 5–HT1B receptors with WAY 100,635 and GR 127,935. Gobert A, et al. **J Neurochem** 1997 Mar;68(3):1159–63

Effects of methylphenidate on extracellular dopamine, serotonin, and norepinephrine: comparison with amphetamine. Kuczenski R, et al. **J Neurochem** 1997 May; 68(5):2032–7

Functional mapping of dorsal and median raphe 5–hydroxytryptamine pathways in forebrain of the rat using microdialysis. McQuade R, et al. **J Neurochem** 1997 Aug; 69(2):791–6

Effects of milnacipran and pindolol on extracellular noradrenaline and serotonin levels in guinea pig hypothalamus. Moret C, et al. **J Neurochem** 1997 Aug; 69(2):815–22

Combined administration of a 5–hydroxytryptamine (5–HT)1D antagonist and a 5–HT reuptake inhibitor synergistically increases 5–HT release in guinea pig hypothalamus in vivo [see comments] Rollema H, et al. **J Neurochem** 1996 Nov;67(5):2204–7. Comment in: J Neurochem 1997 Jul;69(1):437–9.

Dopaminergic and serotonergic neurotransmission systems are differentially involved in auditory cortex learning: a long–term microdialysis study of metabolites. Stark H, et al. **J Neurochem** 1997 Feb;68(2):691–7

Differential effect of NMDA on extracellular serotonin in rat midbrain raphe and forebrain sites. Tao R, et al. **J Neurochem** 1996 Mar;66(3):1067–75

Effects of chronic ethanol consumption and aging on dopamine, serotonin, and metabolites. Woods JM, et al. **J Neurochem** 1996 May;66(5):2168–78

Blockade of corticosterone synthesis reduces serotonin turnover in the dorsal hippocampus of the rat as measured by microdialysis. Korte–Bouws GA, et al. **J Neuroendocrinol** 1996 Nov;8(11):877–81

Evidence for a regulatory role of melatonin on serotonin release and uptake in the pineal gland. Míguez JM, et al. **J Neuroendocrinol** 1995 Dec;7(12):949–56

Vasopressin/serotonin interactions in the anterior hypothalamus control aggressive behavior in golden hamsters. Ferris CF, et al. **J Neurosci** 1997 Jun 1; 17(11):4331–40

SEROTONERGIC pontomedullary neurons are not activated by antinociceptive stimulation in the periaqueductal gray. Gao K, et al. **J Neurosci** 1997 May 1;17(9):3285–92

Phencyclidine increases forebrain monoamine metabolism in rats and monkeys: modulation by the isomers of HA966. Jentsch JD, et al. **J Neurosci** 1997 Mar 1;17(5):1769–75

Quantitative microdialysis of serotonin and norepinephrine: pharmacological influences on in vivo extraction fraction. Cosford RJ, et al. **J Neurosci Methods** 1996 Sep;68(1):39–47

Electrically evoked 5–hydroxytryptamine efflux in rat hypothalamus studied using in vivo amperometry. Terreni L, et al. **J Neurosci Methods** 1996 Sep;68(1):71–9

Effect of brain microdialysis on aminergic transmitter levels in repeated cerebral global transient ischemia in rat. Thaminy S, et al. **J Neurosci Methods** 1996 Dec 28; 70(2):185–93

Extracellular release of serotonin following fluid–percussion brain injury in rats. Busto R, et al. **J Neurotrauma** 1997 Jan;14(1):35–42

Iodine–123–5–iodo–6–nitroquipazine: SPECT radiotracer to image the serotonin transporter. Jagust WJ, et al. **J Nucl Med** 1996 Jul;37(7):1207–14

Dopaminergic system mediation of stimulatory effect of melatonin on secretion of prolactin. Okada M. **J Obstet Gynaecol** 1995 Aug;21(4):411–7

Serum corticosterone increases reflect enhanced uptake inhibitor–induced elevation of extracellular 5–hydroxytryptamine in rat hypothalamus. Fuller RW, et al. **J Pharm Pharmacol** 1996 Jan;48(1):68–70

In vivo effects of the simultaneous blockade of serotonin and norepinephrine transporters on serotonergic function. Microdialysis studies. Bel N, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1064–72

Neurochemical effects of 3–[1–(phenylmethyl)–4–piperidinyl]–1–(2,3,4,5–tetrahydro–1H–1–b enzazepin–8–yl)–1–propanone fumarate (TAK–147), a novel acetylcholinesterase inhibitor, in rats. Hirai K, et al. **J Pharmacol Exp Ther** 1997 Mar; 280(3):1261–9

Interaction between the forced swimming test and fluoxetine treatment on extracellular 5–hydroxytryptamine and 5–hydroxyindoleacetic acid in the rat. Kirby LG, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):967–76

Naloxone–reversible antinociception by paracetamol in the rat. Pini LA, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):934–40

Nitric oxide and the neurotoxic effects of methamphetamine and 3,4–methylenedioxymethamphetamine. Taraska T, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):941–7

Twenty–four hour rhythms of serum prolactin, growth hormone and luteinizing hormone levels, and of medial basal hypothalamic corticotropin–releasing hormone levels and dopamine and serotonin metabolism in rats neonatally administered melatonin. Esquifino AI, et al. **J Pineal Res** 1997 Jan;22(1):52–8

Acute effect of 17 beta–estradiol and lithium on ovariectomized rat brain biogenic amines metabolism. Morissette M, et al. **J Psychiatr Res** 1996 Mar–Apr; 30(2):95–107

Sleep deprivation reduces the citalopram–induced inhibition of serotoninergic neuronal firing in the nucleus raphe dorsalis of the rat. Prévot E, et al. **J Sleep Res** 1996 Dec; 5(4):238–45

Treating the serotonin syndrome--antidote or support? [editorial; comment] Brubacher JR. **J Toxicol Clin Toxicol** 1997;35(2):213–4. Comment on: J Toxicol Clin Toxicol 1997 ;35(2):211–2.

Venlafaxine induced serotonin syndrome occurring after abstinence from phenelzine for more than two weeks [letter] [see comments] Kolecki P. **J Toxicol Clin Toxicol** 1997;35(2):211–2. Comment in: J Toxicol Clin Toxicol 1997 ;35(2):213–4.

Brain serotonin neurotoxicity and primary pulmonary hypertension from fenfluramine and dexfenfluramine. A systematic review of the evidence. McCann UD, et al. **JAMA** 1997 Aug 27;278(8):666–72 (107 ref.)

Functional interaction between serotonin and other neuronal systems: focus on in vivo microdialysis studies. Saito H, et al. **Jpn J Pharmacol** 1996 Mar;70(3):203–5 (221 ref.)

Regionally specific effects of diazepam on brain serotonin metabolism in rats: sustained effects following repeated administration. Haleem DJ, et al. **Life Sci** 1996; 59(15):PL239–46

Streptozotocin–induced diabetes provokes changes in serotonin concentration and on 5–HT1A and 5–HT2 receptors in the rat brain. Sandrini M, et al. **Life Sci** 1997; 60(16):1393–7

Serotonergic mediation of fenfluramine discriminative stimuli in fawn–hooded rats. Schechter MD. **Life Sci** 1997; 60(6):PL83–90

Acute interaction between ethanol and serotonin metabolism in the rat. Some M, et al. **Life Sci** 1997;61(5):577–83

Effect of 5,7–dihydroxytryptamine on audiogenic seizures in genetically epilepsy–prone rats. Statnick MA, et al. **Life Sci** 1996;59(21):1763–71

Serotonin metabolite excretion after postmenopausal estradiol therapy. Lippert TH, et al. **Maturitas** 1996 May; 24(1–2):37–41

Acute effects of L–tryptophan on brain extracellular 5–HT and 5–HIAA levels in chronic experimental portal–systemic encephalopathy. Bergqvist PB, et al. **Metab Brain Dis** 1996 Sep;11(3):269–78

Effect of interleukin–1 receptor antagonist (IL–1RA) on histamine and serotonin release by rat basophilic leukemia cells (RBL–2H3) and peritoneal mast cells. Conti P, et al. **Mol Cell Biochem** 1996 Feb 9;155(1):61–8

The engrailed and huckebein genes are essential for development of serotonin neurons in the Drosophila CNS. Lundell MJ, et al. **Mol Cell Neurosci** 1996 Jan;7(1):46–61

Transgenic mice with high levels of superoxide dismutase activity are protected from the neurotoxic effects of 2'–NH2–MPTP on serotonergic and noradrenergic nerve terminals. Andrews AM, et al. **Mol Pharmacol** 1996 Dec; 50(6):1511–9

The 5–HT hypothesis of depression revisited [news] Routledge C, et al. **Mol Psychiatry** 1996 Dec;1(6):437

Serotonin in the spotlight [letter] Penev PD, et al. **Nature** 1997 Jan 9;385(6612):123

The 5–HT1A receptor antagonist (S)–UH–301 augments the increase in extracellular concentrations of 5–HT in the frontal cortex produced by both acute and chronic treatment with citalopram. Arborelius L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):630–40

Effect of chronic administration of the selective serotonin (5–HT) uptake inhibitor citalopram on extracellular 5–HT and apparent autoreceptor sensitivity in rat forebrain in vivo. Auerbach SB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):597–606

The effects of a 5–HT1A receptor agonist and antagonist on the 5–hydroxytryptamine release in the central nucleus of the amygdala: a microdialysis study with flesinoxan and WAY 100635. Bosker F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):347–53

Involvement of 5–hydroxytryptamine and bradykinin in the hyperalgesia induced in rats by collagenase from Clostridium histolyticum. Damas J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):566–70

Effects of chronic treatment with fluoxetine and citalopram on 5–HT uptake, 5–HT1B autoreceptors, 5–HT3 and 5–HT4 receptors in rats. Gobbi M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):22–8

Chronic oral nicotine administration affects the circadian rhythm of dopamine and 5-hydroxytryptamine metabolism in the striata of mice. Pietila K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):110–5

Role of transglutaminase in [3H]5-HT release from synaptosomes and in the inhibitory effect of tetanus toxin. Gobbi M, et al. **Neurochem Int** 1996 Aug;29(2):129–34

AMPA receptors modulate extracellular 5-hydroxytryptamine concentration and metabolism in rat striatum in vivo. Maione S, et al. **Neurochem Int** 1997 Mar; 30(3):299–304

Changes in serotonin level and turnover in discrete hypothalamic nuclei after pinealectomy and melatonin administration to rats. Miguez JM, et al. **Neurochem Int** 1996 Dec;29(6):651–8

The serotonin transporter from human brain: purification and partial characterization. Rotondo A, et al. **Neurochem Int** 1996 Mar;28(3):299–307

Effects of a chronic lithium treatment on cortical serotonin uptake sites and 5-HT1A receptors. Carli M, et al. **Neurochem Res** 1997 Apr;22(4):427–35

Enhancement of fluoxetine-dependent increase of extracellular serotonin (5-HT) levels by (–)-pindolol, an antagonist at 5-HT1A receptors. Dreshfield LJ, et al. **Neurochem Res** 1996 May;21(5):557–62

Chronic administration of Oren-gedoku-to (TJ15) inhibits ischemia-induced changes in brain indoleamine metabolism and muscarinic receptor binding in the Mongolian gerbil. Kabuto H, et al. **Neurochem Res** 1997 Jan;22(1):33–6

Evaluation of monoaminergic neurotransmitters in the acute focal ischemic human brain model by intracerebral in vivo microdialysis. Kanthan R, et al. **Neurochem Res** 1996 May; 21(5):563–6

Synthesis of serotonin from 5-hydroxytryptophan in the post-crush retina: inhibition of in vitro outgrowth by the intraocular administration of the precursor. Lima L, et al. **Neurochem Res** 1996 Aug;21(8):939–46

Effects of pinealectomy and melatonin treatments on serotonin uptake and release from synaptosomes of rat hypothalamic regions. Miguez JM, et al. **Neurochem Res** 1995 Oct;20(10):1127–32

Serotonergic activity of HP 184: does spontaneous release have a role? Smith CP, et al. **Neurochem Res** 1996 May; 21(5):575–83

Repeated administration of escalating high doses of dexfenfluramine does not produce morphological evidence for neurotoxicity in the cortex of rats. Rose S, et al. **Neurodegeneration** 1996 Jun;5(2):145–52

Thyroxine replacement increases central 5-hydroxytryptamine activity and reduces depressive symptoms in hypothyroidism. Cleare AJ, et al. **Neuroendocrinology** 1996 Jul;64(1):65–9

Interactions of histaminergic and serotonergic neurons in the hypothalamic regulation of prolactin and ACTH secretion. Jørgensen H, et al. **Neuroendocrinology** 1996 Nov; 64(5):329–36

Serotonin syndrome and the combined use of deprenyl and an antidepressant in Parkinson's disease. Parkinson Study Group. Richard IH, et al. **Neurology** 1997 Apr;48(4):1070–7

Lack of barrels in the somatosensory cortex of monoamine oxidase A-deficient mice: role of a serotonin excess during the critical period. Cases O, et al. **Neuron** 1996 Feb; 16(2):297–307

Comparative study in the rat of the actions of different types of stress on the release of 5-HT in raphe nuclei and forebrain areas. Adell A, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):735–41

Action of harman (1-methyl-beta-carboline) on the brain: body temperature and in vivo efflux of 5-HT from hippocampus of the rat. Adell A, et al. **Neuropharmacology** 1996;35(8):1101–7

(-)-pindolol and (+/-)-tertatolol affect rat hippocampal 5-HT levels through mechanisms involving not only 5-HT1A, But also 5-HT1B receptors. Assie MB, et al. **Neuropharmacology** 1996 Feb;35(2):213–22

Carrier-mediated serotonin release induced by d-fenfluramine: studies with human neuroblastoma cells transfected with a rat serotonin transporter. Cinquanta M, et al. **Neuropharmacology** 1997 Jun;36(6):803–9

Effect of p-chlorophenylalanine at moderate dosage on 5-HT and 5-HIAA concentrations in brain regions of control and p-chloroamphetamine treated rats. Datla KP, et al. **Neuropharmacology** 1996 Mar;35(3):315–20

Serotonin efflux in the rat ventral lateral geniculate nucleus assessed by fast cyclic voltammetry is modulated by 5-HT1B and 5-HT1D autoreceptors. Davidson C, et al. **Neuropharmacology** 1996;35(11):1627–34

Association of short alleles of a VNTR of the serotonin transporter gene with anxiety symptoms in patients presenting after deliberate self harm. Evans J, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):439–43

Met-enkephalin inhibits 5-hydroxytryptamine release from the rat ventral spinal cord via delta opioid receptors. Franck J, et al. **Neuropharmacology** 1996 Jun;35(6):743–9

Autoreceptor antagonists enhance the effect of the reuptake inhibitor citalopram on extracellular 5-HT: this effect persists after repeated citalopram treatment. Gundlah C, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):475–82

Effect of 5-HT1A receptor antagonists on citalopram-induced increase in extracellular serotonin in the frontal cortex, striatum and dorsal hippocampus. Invernizzi R, et al. **Neuropharmacology** 1997 Apr-May; 36(4–5):467–73

Differential mechanisms involved in the effect of nicotinic agonists DMPP and lobeline to release [3H]5-HT from rat hippocampal slices. Lendvai B, et al. **Neuropharmacology** 1996;35(12):1769–77

The role of 5-HT1A autoreceptors and alpha 1-adrenoceptors in the inhibition of 5-HT release--II NAN-190 and SDZ 216-525. Sharp T, et al. **Neuropharmacology** 1996 Jun;35(6):735–41

Autoradiographic localization of 5-CT-insensitive 5-HT1-like recognition sites in guinea pig and rat brain. Stanton JA, et al. **Neuropharmacology** 1996 Feb;35(2):223–9

Elevated serotonin levels in autism: association with the major histocompatibility complex. Warren RP, et al. **Neuropsychobiology** 1996;34(2):72–5

Examining serotonin function: a modified technique for rapid tryptophan depletion. Krahn LE, et al. **Neuropsychopharmacology** 1996 Oct;15(4):325–8

Effect of pindolol on the function of pre- and postsynaptic 5-HT1A receptors: in vivo microdialysis and electrophysiological studies in the rat brain [published erratum appears in Neuropsychopharmacology 1997 Jan;16(1):91] Romero L, et al. **Neuropsychopharmacology** 1996 Oct;15(4):349–60

Sleep deprivation increases brain serotonin turnover in the rat. Asikainen M, et al. **Neuroreport** 1997 May 6; 8(7):1577–82

Food restriction decreases serotonin and its synthesis rate in the hypothalamus. Haleem DJ, et al. **Neuroreport** 1996 Apr 26;7(6):1153–6

Dependence of synaptic facilitation postsynaptically induced in snail neurones on season and serotonin level. Malyshev A, et al. **Neuroreport** 1997 Mar 24;8(5):1179–82

Changes in forebrain serotonin at the light-dark transition: correlation with behaviour. Rueter LE, et al. **Neuroreport** 1996 Apr 10;7(5):1107–11

Anticonvulsant doses of carbamazepine increase hippocampal extracellular serotonin in genetically epilepsy-prone rats: dose response relationships. Dailey JW, et al. **Neurosci Lett** 1997 May 9;227(1):13–6

Effects of repeated oral doses of dexnorfenfluramine on 5-HT levels and 5-HT uptake sites in rat brain. Gobbi M, et al. **Neurosci Lett** 1996 Nov 15;219(1):5–8

The effects of 5'-N-ethylcarboxamidoadenosine on evoked release of [3H]serotonin in the rat nucleus tractus solitarius. Helfman CC, et al. **Neurosci Lett** 1996 Jul 26;213(1):61–5

Effects of phencyclidine metabolites on serotonin uptake in rat brain. Hori T, et al. **Neurosci Lett** 1996 May 17; 209(3):153–6

Putrescine modulation of depolarization-induced [3H]serotonin release from fish brain synaptosomes. Khan NA, et al. **Neurosci Lett** 1996 Jul 5;212(1):45–8

The alpha 2-adrenoceptor antagonist idazoxan is an agonist at 5-HT1A autoreceptors modulating serotonin synthesis in the rat brain in vivo. Lladó J, et al. **Neurosci Lett** 1996 Nov 1;218(2):111–4

Conflict situation increases serotonin release in rat dorsal hippocampus: in vivo study with microdialysis and Vogel test. Matsuo M, et al. **Neurosci Lett** 1996 Sep 13; 215(3):197–200

Effects of L-thyroxine on brain monoamines during parr-smolt transformation of Atlantic salmon (Salmo salar L.). Morin PP, et al. **Neurosci Lett** 1997 Mar 21; 224(3):216–8

The effects of ozone exposure on the sleep-wake cycle and serotonin contents in the pons of the rat. Paz C, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):49–52

Cortical 5-HT-CCK interactions and anxiety-related behaviour of guinea-pigs: a microdialysis study. Rex A, et al. **Neurosci Lett** 1997 Jun 6;228(2):79–82

The 5-HT1A antagonist WAY-100635 selectively potentiates the presynaptic effects of serotonergic antidepressants in rat brain. Romero L, et al. **Neurosci Lett** 1996 Nov 22; 219(2):123–6

Pre/postnatal dopamine D1 receptor stimulation induces a differential reduction of serotonin levels in hippocampus and superior colliculus of puber rats. Sajnani GG, et al. **Neurosci Lett** 1997 Jul 18;230(2):121–4

Melatonin and 5-hydroxytryptamine phase-advance the rat circadian clock by activation of nitric oxide synthesis. Starkey SJ. **Neurosci Lett** 1996 Jun 28;211(3):199–202

The effects of clozapine and haloperidol on serotonin-1A, -2A and -2C receptor gene expression and serotonin metabolism in the rat forebrain. Burnet PW, et al. **Neuroscience** 1996 Jul;73(2):531–40

Morphological and biochemical adaptations to unilateral dopamine denervation of the neostriatum in newborn rats. Penit-Soria J, et al. **Neuroscience** 1997 Apr;77(3):753–66

Low-level cadmium exposure of lactating rats causes alterations in brain serotonin levels in the offspring. Andersson H, et al. **Neurotoxicol Teratol** 1997 Mar-Apr; 19(2):105–15

Perinatal methadone exposure affects dopamine, norepinephrine, and serotonin in the weanling rat. Robinson SE, et al. **Neurotoxicol Teratol** 1997 Jul-Aug; 19(4):295–303

Long-term alterations in regional brain serotonin metabolism following maternal polychlorinated biphenyl exposure in the rat. Morse DC, et al. **Neurotoxicology** 1996 Fall-Winter; 17(3–4):631–8

Brain serotonin content: physiological regulation by plasma neutral amino acids. 1971 [classical article] [see comments] Fernstrom JD, et al. **Obes Res** 1997 Jul;5(4);377–80. Comment in: Obes Res 1997 Jul;5(4):373–6.

Pain and synovial fluid concentration of serotonin in arthritic temporomandibular joints. Alstergren P, et al. **Pain** 1997 Aug;72(1–2):137–43

Release of serotonin from RBL-2H3 cells by the Escherichia coli peptide toxin STb. Harville BA, et al. **Peptides** 1996; 17(3):363–6

Calcium- and barium-dependent exocytosis from the rat insulinoma cell line RINm5F assayed using membrane capacitance measurements and serotonin release. Richmond JE, et al. **Pflugers Arch** 1996 Jun;432(2):258–69

Decreased hypothalamic serotonin levels in adult rats treated neonatally with clomipramine. Feenstra MG, et al. **Pharmacol Biochem Behav** 1996 Dec;55(4):647–52

Systemic and local cocaine increase extracellular serotonin in the nucleus accumbens. Teneud LM, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):747–52

Kainate microinjection into the dorsal raphe nucleus induces 5-HT release in the amygdala and periaqueductal gray. Viana MB, et al. **Pharmacol Biochem Behav** 1997 Sep; 58(1):167–72

Binding of pinoline on the 5-hydroxytryptamine transporter: competitive interaction with [3H] citalopram. Pähkla R, et al. **Pharmacol Toxicol** 1997 Mar;80(3):122–6

Effects of carbamazepine treatment on pain threshold values and brain serotonin levels in rats. Pinelli A, et al. **Pharmacology** 1997 Mar;54(3):113–7

Roxindole, a dopamine autoreceptor agonist with a potential antidepressant activity. II. Effects on the 5-hydroxytryptamine system. Maj J, et al. **Pharmacopsychiatry** 1997 Mar;30(2):55–61

Effects of a new oxazolidinone derivative AS-8 on serotonin metabolism in the brains of mouse, rat and chick. Chilmonczyk Z. **Pol J Pharmacol** 1995 Sep-Oct; 47(5):445–9

Lack of the specific influence of histamine and histamine H1, H2 and H3 receptor ligands on the serotonin uptake and release in rat blood platelets. Pawlak D, et al. **Pol J Pharmacol** 1996 Nov-Dec;48(6):615–20

A single serine residue controls the cation dependence of substrate transport by the rat serotonin transporter. Sur C, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7639–44

The distribution of noradrenaline, serotonin and gamma-aminobutyric acid in the monkey nucleus accumbens. Ikemoto K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Nov; 20(8):1403–12

Effects of acute and chronic administration of high-dose corticosterone and dexamethasone on regional brain dopamine and serotonin metabolism in rats. Inoue T, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jan; 20(1):147–56

Actions of methoxylated amphetamine hallucinogens on serotonergic neurons of the brain. Penington NJ. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Aug; 20(6):951–65

Serotonin-2 and dopamine-1 binding components of clozapine in frontal cortex and striatum in the human brain visualized by positron emission tomography. Lundberg T, et al. **Psychiatry Res** 1996 May 31;67(1):1–10

Effects of subchronic treatment with valproate on L-5-HTP-induced cortisol responses in mania: evidence for increased central serotonergic neurotransmission. Maes M, et al. **Psychiatry Res** 1997 Jul 4;71(2):67–76

Serotonergic function and self-injurious behavior in personality disorder patients. New AS, et al. **Psychiatry Res** 1997 Mar 3;69(1):17–26

Modulation of learned helplessness by 5-hydroxytryptamine2A receptor antisense oligodeoxynucleotides. Papolos DF, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):197–203

Role of serotonin3 receptors in prolactin release induced by electroconvulsive therapy: a study with ondansetron. Yatham LN, et al. **Psychiatry Res** 1996 Feb 28;60(1):33–9

Risperidone: regional effects in vivo on release and metabolism of dopamine and serotonin in the rat brain. Hertel P, et al. **Psychopharmacology (Berl)** 1996 Mar; 124(1–2):74–86

5-HT modulation of auditory and visual sensorimotor gating: I. Effects of 5-HT releasers on sound and light prepulse inhibition in Wistar rats. Kehne JH, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):95–106

Risperidone: a novel antipsychotic with many "atypical" properties? Stathis P, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):181–6

Serotonergic mechanisms involved in the discriminative stimulus, reinforcing and subjective effects of cocaine. Walsh SL, et al. **Psychopharmacology (Berl)** 1997 Mar; 130(1):41–58 (157 ref.)

Catecholamine and serotonin concentrations in fetal guinea-pig brain: relation to regional cerebral blood flow and oxygen delivery in the growth-restricted fetus. Jensen A, et al. **Reprod Fertil Dev** 1996;8(3):355–64

Effects of talipexole on emesis-related changes in abdominal afferent vagal activity and ileal serotonin metabolism in rats. Minami M, et al. **Res Commun Mol Pathol Pharmacol** 1997 Jan;95(1):67–82

High anxiety [comment] Goldman D. **Science** 1996 Nov 29; 274(5292):1483. Comment on: Science 1996 Nov 29;274(5292):1527–31.

Association of anxiety-related traits with a polymorphism in the serotonin transporter gene regulatory region [see comments] Lesch KP, et al. **Science** 1996 Nov 29; 274(5292):1527-31. Comment in: Science 1996 Nov 29;274(5292):1483.

The relationship between parameters of serotonin metabolism and emetogenic potential of platinum-based chemotherapy regimens. du Bois A, et al. **Support Care Cancer** 1997 May; 5(3):212-8

Opposite changes in striatal neuropeptide Y immunoreactivity after partial and complete serotonergic depletion in the rat. Compan V, et al. **Synapse** 1996 Sep; 24(1):87-96

Real-time measurement of stimulated 5-hydroxytryptamine release in rat substantia nigra pars reticulata brain slices. Iravani MM, et al. **Synapse** 1997 Jan;25(1):93-102

Combined phentermine/fenfluramine administration enhances depletion of serotonin from central terminal fields. Lew R, et al. **Synapse** 1997 May;26(1):36-45

Hyperbaric oxygen in chronic cluster headaches: influence on serotonergic pathways. Di Sabato F, et al. **Undersea Hyperb Med** 1997 Jun;24(2):117-22

[Serotonin syndrome in acute poisoning with antidepressive agents] Robert P, et al. **Ann Fr Anesth Reanim** 1996; 15(5):663-5 (Eng. Abstr.) **(Fre)**

[Changes in serotonin metabolism in pre-eclampsia] Schäfer CA, et al. **Geburtshilfe Frauenheilkd** 1996 Aug;56(8):418-22 (Eng. Abstr.) **(Ger)**

[The serotonin syndrome] Broude L, et al. **Harefuah** 1997 Jan 1;132(1):25-7, 71 (Eng. Abstr.) **(Heb)**

[Experimental study of methamphetamine psychosis--role of glutamate and nitric oxide in methamphetamine-induced dopaminergic and serotonergic neurotoxicity in the rat brain] Abekawa T. **Hokkaido Igaku Zasshi** 1997 Jan; 72(1):113-26 (Eng. Abstr.) **(Jpn)**

[The influence of chronic exposure to carbon disulfide on metabolism of catecholamines and serotonin in women] Kuligowski D. **Ann Acad Med Stetin** 1996;42:139-56 (Eng. Abstr.) **(Pol)**

[Biological mechanisms of drug-resistant depression] Suwalska A, et al. **Psychiatr Pol** 1996 Sep-Oct;30(5):713-29 (56 ref.) (Eng. Abstr.) **(Pol)**

[The effect of corticosteroids on the premedullary argirophilic cell of the thymus] Iurina NA, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):461-4 **(Rus)**

[Reaction of the serotoninergic system of the murine fetal mesencephalon and diencephalon upon exposure to x-rays and serotonin] Sapronova AIa, et al. **Dokl Akad Nauk** 1996 Jul;349(2):280-2 **(Rus)**

[Effect of domestication of the silver fox on the main enzymes of serotonin metabolism and serotonin receptors] Popova NK, et al. **Genetika** 1997 Mar;33(3):370-4 (Eng. Abstr.) **(Rus)**

[Histamine and serotonin contents in human tissues] Sidel'nikov IuN, et al. **Klin Lab Diagn** 1996 May-Jun; (3):19-21 (Eng. Abstr.) **(Rus)**

[Serotonin-reactive neurons of the neocortex] Otellin VA, et al. **Morfologiia** 1996;110(4):23-5 (Eng. Abstr.) **(Rus)**

[The effect of the blockade of the serotonin-modulating protein SMP-69 by antibodies on rat exploratory behavior] Mekhtiev AA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Mar-Apr; 46(2):386-8 **(Rus)**

[The characteristics of the brain serotonin system and anxiety in the C57BL and CBA mouse strains] Popova NK, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Mar-Apr; 46(2):348-54 (Eng. Abstr.) **(Rus)**

[Serotonin as a neurotrophic factor in the fetal brain: binding, capture and release in centers of axonal growth] Hernández Rodríguez J. **Gac Med Mex** 1994 Jul-Aug;130(4):246-52 (Eng. Abstr.) **(Spa)**

[Serotonin metabolism under the action of a low geomagnetic field] Babych VI. **Fiziol Zh** 1996;42(1-2):79-82 (Eng. Abstr.) **(Ukr)**

PHARMACOKINETICS

Possible involvement of calmodulin-dependent kinases in Ca(2+)-dependent enhancement of [3H]5-hydroxytryptamine uptake in rat cortex. Yura A, et al. **Brain Res** 1996 Oct 28;738(1):96-102

Effect of fluvoxamine on 5-hydroxytryptamine uptake, paroxetine binding sites and ketanserin binding sites in the Japanese monkey brain and platelets, in vivo and in vitro. Goto S, et al. **Jpn J Pharmacol** 1996 Aug;71(4):291-8

Conclusive evidence for distinct transporters for 5-hydroxytryptamine and noradrenaline in pulmonary endothelial cells of the rat. Paczkowski NJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Mar; 353(4):423-30

Transient uptake and storage of serotonin in developing thalamic neurons. Lebrand C, et al. **Neuron** 1996 Nov; 17(5):823-35

PHARMACOLOGY

Inhibitory effect of vasoactive intestinal polypeptide and ketanserin on established allergic contact dermatitis in man. Bondesson L, et al. **Acta Derm Venereol** 1996 Mar; 76(2):102-6

Respiratory effects of serotonin challenge to pulmonary and laryngeal circulation in anaesthetized cats. Szereda-Przestaszewska M, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(4):889-96

Interactions between vasoconstrictors in isolated human cerebral arteries. Hempelmann RG, et al. **Acta Neurochir (Wien)** 1997;139(6):574-81; discussion 581-2

Effect of ketanserin on 5-hydroxytryptamine-induced constriction in isolated, perfused canine basilar arteries exposed to blood. Tsuji T, et al. **Acta Neurochir (Wien)** 1996;138(9):1109-16; discussion 1116-7

Potentiating effect of hydrogen peroxide on the serotonin-induced vasocontraction in human umbilical artery. Watanabe K, et al. **Acta Obstet Gynecol Scand** 1996 Oct;75(9):783-9

5-Hydroxytryptamine, angiotensin and bradykinin transiently increase intracellular calcium concentrations and PKC-alpha activity, but do not induce mitogenesis in human vascular smooth muscle cells. Assender JW, et al. **Acta Physiol Scand** 1997 Jul;160(3):207-17

Effects of bradykinin, histamine and serotonin on pulmonary vascular resistance and permeability. Breil I, et al. **Acta Physiol Scand** 1997 Mar;159(3):189-98

Multiple actions of iontophoretically applied serotonin on motorneurones in the turtle spinal cord in vitro. Skydsgaard M, et al. **Acta Physiol Scand** 1996 Dec;158(4):301-10

The involvement of serotonin in the catecholamine release from the adrenal medulla. Sugimoto Y, et al. **Adv Exp Med Biol** 1996;398:561-3

Cardiovascular effects of serotonin and DP-5-CT in conscious Long-Evans and Brattleboro rats. Anderson IK, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R455-63

Role of calcium-activated potassium channels and cyclic nucleotides on pulmonary vasoreactivity to serotonin. Barman SA. **Am J Physiol** 1997 Jul;273(1 Pt 1):L142-7

Canine pulmonary vasoreactivity to serotonin: role of protein kinase C and tyrosine kinase. Barman SA, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H740-7

Cardiovascular effects of microinjection of low doses of serotonin into the NTS of unanesthetized rats. Callera JC, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1135-42

5-HT in DVC: disparate effects on TRH analogue-stimulated gastric acid secretion, motility, and cytoprotection. Chi J, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R368-72

CNS actions of serotonin on cardiovascular function: nonadrenergic, noncholinergic mechanisms. Dedeoğlu A, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R569-78

Treatment with 5-HT potentiates development of pulmonary hypertension in chronically hypoxic rats. Eddahibi S, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1173-81

5-HT-induced colonic contractions: enteric locus of action and receptor subtypes. Graf S, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G68-74

Response of native and stimulated collateral vessels to serotonin. Lamping KG. **Am J Physiol** 1997 May;272(5 Pt 2):H2409-15

Association of Tyr phosphorylation of GTPase-activating protein with mitogenic action of serotonin. Lee SL, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C223-30

Gastric antisecretory effect of serotonin: quantitation of release and site of action. Lepard KJ, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):E669-77

Norepinephrine and serotonin vasoconstriction in rat hindlimb control different vascular flow routes. Newman JM, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):E689-99

Role of serotonin3 receptors in the nucleus tractus solitarii on the carotid chemoreflex. Sévoz C, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1250-9

Effects of cAMP on serotonin evoked calcium transients in cultured rat airway smooth muscle cells. Tolloczko B, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L865-71

Nitric oxide inhibits serotonin-induced calcium release in pulmonary artery smooth muscle cells. Yuan XJ, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):L44-50

Serotonin diminishes aggression by suppressing the activity of the vasopressin system. Ferris CF. **Ann N Y Acad Sci** 1996 Sep 20;794:98-103

Effect of serotonin and nicotine on the growth of a human small cell lung cancer xenograft. Pratesi G, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3615-9

Genistein sensitivity of calcium transport pathways in serotonin-activated vascular smooth muscle cells. Nelson SR, et al. **Arch Biochem Biophys** 1997 Sep 1;345(1):65-72

Effect of 5-hydroxytryptamine on sodium- and potassium-dependent adenosine triphosphatase and its reactivity toward ouabain. Stepp LR, et al. **Arch Biochem Biophys** 1997 Jan 1;337(1):43-53

Species difference in the 5-hydroxytryptamine3 receptor associated with the von Bezold-Jarisch reflex. Yamano M, et al. **Arch Int Pharmacodyn Ther** 1995 Sep-Oct; 330(2):177-89

Influence of 5-hydroxytryptamine on the pressor responses induced by norepinephrine and electrical sympathetic stimulation in the pithed rat. Terrón JA, et al. **Arch Med Res** 1996 Autumn;27(3):291-7

Serotonin-induced constriction of ocular arteries in atherosclerotic monkeys. Implications for ischemic disorders of the retina and optic nerve head. Hayreh SS, et al. **Arch Ophthalmol** 1997 Feb;115(2):220-8

Serotonin (5-hydroxytryptamine, 5-HT) enhances migration of rat aortic smooth muscle cells through 5-HT2 receptors. Tamura K, et al. **Atherosclerosis** 1997 Jul 25;132(2):139-43

Re-examination for pharmacological properties of serotonin-induced tachycardia in isolated guinea-pig atrium. Nishio H, et al. **Behav Brain Res** 1996;73(1-2):301-4

Increases in vocalization and motor reflex thresholds generated by the intrathecal administration of serotonin or norepinephrine. Borszcz GS, et al. **Behav Neurosci** 1996 Aug;110(4):809-22

Cyclic GMP elevation by 5-hydroxytryptamine is due to nitric oxide derived from endogenous nitrosothiol in NG108-15 cells. Arima T, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):473-8

Serotonin activates electrolyte transport via 5-HT2A receptor in rat colonic crypt cells. Imada-Shirakata Y, et al. **Biochem Biophys Res Commun** 1997 Jan 13; 230(2):437-41

5-Hydroxytryptamine-induced calcium-channel gating in rainbow trout (Oncorhynchus mykiss) peripheral blood lymphocytes. Ferriere F, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):251-8

Locally formed 5-hydroxytryptamine stimulates phosphate transport in cultured opossum kidney cells and in rat kidney. Hafdi Z, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):615-21

Serotonin decreases cytoskeletal and cytosolic glycolytic enzymes and the levels of ATP and glucose 1,6-bisphosphate in skin, which is prevented by the calmodulin antagonists thioridazine and clotrimazole. Ashkenazy-Shahar M, et al. **Biochem Mol Med** 1997 Apr; 60(2):187-93

The effects of peripheral serotonin2 (5-HT2) and serotonin3 (5-HT3) receptor agonists on blood glucose levels in rats. Sugimoto Y, et al. **Biol Pharm Bull** 1996 Oct;19(10):1384-6

The serotonin-induced elevation of intracellular Ca2+ in human platelets is enhanced by total fasting. Sudo N, et al. **Biol Psychiatry** 1997 Mar 1;41(5):618-20

Single-channel currents produced by the serotonin transporter and analysis of a mutation affecting ion permeation. Lin F, et al. **Biophys J** 1996 Dec;71(6):3126-35

Serotonin stimulates megakaryocytopoiesis via the 5-HT2 receptor. Yang M, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):127-33

Arachidonate metabolites and serotonin contraction of femoral arteries from DOCA-salt hypertensive rats. Kanagy NL, et al. **Blood Press** 1996 Mar;5(2):113-20

5-HT spinal antinociception involves mu opioid receptors: cross tolerance and antagonist studies. Goodchild CS, et al. **Br J Anaesth** 1997 May;78(5):563-9

Forearm vascular responses to serotonin are not mediated by products of cyclooxygenase. Nugent AG, et al. **Br J Clin Pharmacol** 1996 Mar;41(3):241-3

The effect of 5-HT and selective 5-HT receptor agonists and antagonists on rat dorsal vagal preganglionic neurones in vitro. Albert AP, et al. **Br J Pharmacol** 1996 Oct; 119(3):519-26

Voltage-dependent block of NMDA responses by 5-HT agonists in ventral spinal cord neurones. Chesnoy-Marchais D, et al. **Br J Pharmacol** 1996 Jan;117(1):133-41

Inhibitory action of niflumic acid on noradrenaline- and 5-hydroxytryptamine-induced pressor responses in the isolated mesenteric vascular bed of the rat. Criddle DN, et al. **Br J Pharmacol** 1997 Mar;120(5):813-8

Mechanism of 5-hydroxytryptamine-induced coronary vasodilation assessed by direct detection of nitric oxide production in guinea-pig isolated heart. Ellwood AJ, et al. **Br J Pharmacol** 1996 Oct;119(4):721-9

Effect of cold storage in University of Wisconsin solution on the responses of porcine hepatic arteries to 5-hydroxytryptamine and bradykinin in vitro. Flanders S, et al. **Br J Pharmacol** 1996 Jan;117(1):142-6

Characterization of a 5-HT1B receptor on CHO cells: functional responses in the absence of radioligand binding. Giles H, et al. **Br J Pharmacol** 1996 Mar;117(6):1119-26

Ligand-gated ion channels opened by 5-HT in molluscan neurones. Green KA, et al. **Br J Pharmacol** 1996 Oct; 119(3):602-8

Investigation into the 5-hydroxytryptamine-induced atropine-resistant neurogenic contraction of guinea-pig proximal colon. Kojima S, et al. **Br J Pharmacol** 1996 Apr; 117(8):1613-8

Characterization of putative 5-ht7 receptors mediating direct relaxation in Cynomolgus monkey isolated jugular vein. Leung E, et al. **Br J Pharmacol** 1996 Mar;117(5):926-30

Further investigation into the signal transduction mechanism of the 5-HT4-like receptor in the circular smooth muscle of human colon. McLean PG, et al. **Br J Pharmacol** 1996 Jun;118(4):1058-64

Characterization of 5-hydroxytryptamine receptors mediating contractions in basilar arteries from stroke-prone spontaneously hypertensive rats. Nishimura Y. **Br J Pharmacol** 1996 Mar;117(6):1325-1333

Characterization of the contraction to 5-HT in the canine colon longitudinal muscle. Prins NH, et al. **Br J Pharmacol** 1997 Feb;120(4):714-20

Action of 5-hydroxytryptamine in facilitating N-methyl-D-aspartate depolarization of cortical neurones mimicked by calcimycin, cyclopiazonic acid and thapsigargin. Rahman S, et al. **Br J Pharmacol** 1996 Nov; 119(5):877-84

The effect of forskolin on 5-HT1-like and angiotensin II-induced vasoconstriction and cyclic AMP content of the rabbit isolated femoral artery. Randall VA, et al. **Br J Pharmacol** 1996 Jun;118(3):627-34

Role of nitric oxide in the contractile response to 5-hydroxytryptamine of the basilar artery from Wistar Kyoto and stroke-prone rats. Salomone S, et al.

Br J Pharmacol 1997 Jul;121(6):1051–8

Role of 5–ht7 receptors in the long–lasting hypotensive response induced by 5–hydroxytryptamine in the rat. Terrón JA. **Br J Pharmacol** 1997 Jun;121(3):563–71

5–HT3 and 5–HT4 receptor–mediated facilitation of the emptying phase of the peristaltic reflex in the marmoset isolated ileum. Tuladhar BR, et al. **Br J Pharmacol** 1996 Apr;117(8):1679–84

5–HT2B receptor–mediated calcium release from ryanodine–sensitive intracellular stores in human pulmonary artery endothelial cells. Ullmer C, et al. **Br J Pharmacol** 1996 Mar;117(6):1081–8

Participation of 5–HT1–like and 5–HT2A receptors in the contraction of human temporal artery by 5–hydroxytryptamine and related drugs. Verheggen R, et al. **Br J Pharmacol** 1996 Jan;117(2):283–9

Mediation of 5–HT–induced external carotid vasodilatation in GR 127935–pretreated vagosympathectomized dogs by the putative 5–HT7 receptor. Villalón CM, et al. **Br J Pharmacol** 1997 Apr;120(7):1319–27

Mediation by 5–HT3 receptors of an excitatory effect of 5–HT on dorsal vagal preganglionic neurones in anaesthetized rats: an ionophoretic study. Wang Y, et al. **Br J Pharmacol** 1996 Aug;118(7):1697–704

Selective and functional 5–hydroxytryptamine4 receptor antagonism by SB 207266. Wardle KA, et al. **Br J Pharmacol** 1996 Jun;118(3):665–70

Inhibition of 5–hydroxytryptamine–induced phosphoinositide hydrolysis and Ca2+ mobilization in canine cultured tracheal smooth muscle cells by phorbol ester. Yang CM, et al. **Br J Pharmacol** 1997 Jul;121(5):853–60

Effects of serotonin on different patterns of low Mg(2+)–induced epileptiform activity in the subiculum of rats studied in vitro. Behr J, et al. **Brain Res** 1996 Oct 21;737(1–2):331–4

Serotonergic effects on hypoglossal neural activity and reflex responses. Douse MA, et al. **Brain Res** 1996 Jul 8; 726(1–2):213–22

Identification of two phosphoproteins affected by serotonin in Aplysia sensory neurons. Homayouni R, et al. **Brain Res** 1997 Mar 7;750(1–2):87–94

Serotonin induces inward potassium and calcium currents in rat cortical astrocytes. Jalonen TO, et al. **Brain Res** 1997 May 30;758(1–2):69–82

Acute and chronic actions of ethanol on CA1 hippocampal responses to serotonin. Lau AH, et al. **Brain Res** 1996 Aug 26;731(1–2):12–20

Serotonergic modulation of 3,4–methylenedioxymethamphetamine (MDMA)–elicited reduction of response rate but not rewarding threshold in accumbal self–stimulation. Lin HQ, et al. **Brain Res** 1997 Jan 9;744(2):351–7

Anteroventral third ventricle lesions attenuate pressor responses to serotonin in anesthetized rats. Muntzel MS, et al. **Brain Res** 1996 Apr 1;714(1–2):104–10

Effects of serotonin on induced epileptiform activity in CA1 pyramidal neurons of genetically epilepsy prone rats. Salgado–Commissariat D, et al. **Brain Res** 1996 Dec 16; 743(1–2):212–6

Serotonin and 8–OH–DPAT reduce excitatory transmission in rat hippocampal area CA1 via reduction in presumed presynaptic Ca2+ entry. Schmitz D, et al. **Brain Res** 1995 Dec 1;701(1–2):249–54

Modulation by 5–hydroxytryptamine of the somatostatin receptor–effector system and somatostatin levels in rat brain. Muñoz–Acedo G, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1–2):259–66

Effect of serotonin on cytokine mRNA expression in rat hippocampal astrocytes. Pousset F, et al. **Brain Res Mol Brain Res** 1996 May;38(1):54–62

Facilitatory role of serotonin (5–HT) in the control of thyrotropin releasing hormone/thyrotropin (TRH/TSH) secretion in rats. Silva JD, et al. **Braz J Med Biol Res** 1996 May;29(5):677–83

Serotonergic vasomotor control in fish gills. Sundin L. **Braz J Med Biol Res** 1995 Nov–Dec;28(11–12):1217–21 (34 ref.)

Heart rate responses to intravenous serotonin in rats with acute chagasic myocarditis. Torres A, et al. **Braz J Med Biol Res** 1996 Jun;29(6):817–22

Droperidol inhibits tracheal contraction induced by serotonin, histamine or carbachol in guinea pigs. Sato T, et al. **Can J Anaesth** 1996 Feb;43(2):172–8

5–Hydroxytryptamine–induced endothelium–dependent and –independent relaxations in isolated dog anterior spinal small arteries. Wang JX, et al. **Can J Physiol Pharmacol** 1997 May;75(5):357–62

Effect of 5–HT on pain modulation of substance P in spinal cord of rats. Ruan HZ, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):512–6

Serotonin stimulates the expression of thrombin receptors in cultured vascular smooth muscle cells. Role of protein kinase C and protein tyrosine kinases. Schini–Kerth VB, et al. **Circulation** 1996 Jun 15;93(12):2170–7

5–Hydroxytryptamine inhibits Na absorption and stimulates Cl secretion across canine tracheal epithelial sheets. Tamaoki J, et al. **Clin Exp Allergy** 1997 Aug;27(8):972–7

Serotonin modulates immune function in T cells from HIV–seropositive subjects. Eugen–Olsen J, et al. **Clin Immunol Immunopathol** 1997 Aug;84(2):115–21

Change in intracellular Ca2+ is not involved in serotonin–induced meiosis reinitiation from the first prophase in oocytes of the marine bivalve Crassostrea gigas. Kyozuka K, et al. **Dev Biol** 1997 Feb 1;182(1):33–41

Characterization of the vasodilatatory response to serotonin in human umbilical arteries perfused in vitro. The influence of the endothelium. Haugen G, et al. **Early Hum Dev** 1997 Jan 20;47(2):185–93

The role of L–aromatic amino acid decarboxylase in serotonin–stimulated aldosterone secretion in response to salt intake. Burns N, et al. **Endocr Res** 1996 Nov;22(4):577–8

Serotonin (5–HT) stimulates thyrotropin–releasing hormone (TRH) gene transcription in rat embryonic cardiomyocytes. Shi ZX, et al. **Endocrine** 1997 Apr;6(2):153–8

The inhibition of serotonin evoked bovine coronary artery contraction by halothane, isoflurane and sevoflurane is endothelium–independent. Xiaoping Z, et al. **Eur J Anaesthesiol** 1996 Jul;13(4):352–8

Interactions between N–methyl–D–aspartate, nitric oxide and serotonin in the control of prolactin secretion in prepubertal male rats. Aguilar E, et al. **Eur J Endocrinol** 1997 Jul; 137(1):99–106

5–Hydroxytryptamine induces TIS8/egr–1 and c–fos expression in PC12 cells. Involvement of tyrosine protein phosphorylation. Humblot N, et al. **Eur J Neurosci** 1997 Jan;9(1):84–92

Modulation of responses of four types of feline ascending tract neurons by serotonin and noradrenaline. Jankowska E, et al. **Eur J Neurosci** 1997 Jul;9(7):1375–87

Pre– and post–synaptic actions of 5–hydroxytryptamine in the rat lumbar dorsal horn in vitro: implications for somatosensory transmission. Lopez–Garcia JA, et al. **Eur J Neurosci** 1996 Oct;8(10):2188–97

Characterization of the contractile response induced by 5–methoxytryptamine in rat stomach fundus strips. Amemiya N, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2–3):403–9

Nitric oxide counteracts 5–hydroxytryptamine– and cholera toxin–induced fluid secretion and enhances the effect of oral rehydration solution. Beubler E, et al. **Eur J Pharmacol** 1997 May 20;326(2–3):223–8

5–HT3 and 5–HT4 receptors and cholinergic and tachykininergic neurotransmission in the guinea–pig proximal colon. Briejer MR, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):173–80

5–Hydroxytryptamine–induced Cl– transport is mediated by 5–HT3 and 5–HT4 receptors in the rat distal colon. Budhoo MR, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):137–44

Post–synaptic 5–HT4 receptor modulation of tachykinergic excitation of rat oesophageal tunica muscularis mucosae. Goldhill J, et al. **Eur J Pharmacol** 1997 Apr 4; 323(2–3):229–33

Serotonergic modulation of central respiratory activity in the neonatal mouse: an in vitro study. Hilaire G, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):115–20

5–Hydroxytryptamine stimulates phosphoinositide hydrolysis and contraction in the ovine umbilical artery. Hu XQ, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):107–12

A role for protein kinase C in the attenuated response to 5–hydroxytryptamine in aortas from streptozotocin–diabetic rats. James GM, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):55–8

Renal vasoconstrictor response to 5–hydroxytryptamine in the in situ autoperfused rat kidney: involvement of angiotensin II and the 5–HT2 receptor activation. Morán A, et al. **Eur J Pharmacol** 1997 Jul 9;330(2–3):205–11

Effects of neuroamines and divalent cations on cloned and mutated ATP–gated channels. Nakazawa K, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):101–8

Dopamine and 5–hydroxytryptamine selectively potentiate neuronal type ATP receptor channels. Nakazawa K, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):119–22

S 15535 and WAY 100,635 antagonise 5–HT–stimulated [35S]GTP gamma S binding at cloned human 5–HT1A receptors. Newman–Tancredi A, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):107–11

Repeated cocaine exposure attenuates the ability of 5–hydroxytryptamine to release striatal dopamine in vivo. Norton CS, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2–3):323–6

Excessive serotonin release, not depletion, leads to memory impairments in rats. Santucci AC, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):7–17

Pharmacological characterization of 5–hydroxytryptamine–induced motor activity (in vitro) in the guinea pig gastric antrum and corpus. Tamura T, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):315–24

The alpha 1–adrenoceptor agonist, SDZ NVI–085, behaves as a potent, competitive antagonist of 5–hydroxytryptamine–induced contraction of rat aorta. Van der Graaf PH, et al. **Eur J Pharmacol** 1995 Dec 20; 287(3):309–12

Evidence for receptor subtype cross–talk in the mitogenic action of serotonin on human small–cell lung carcinoma cells. Vicentini LM, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2–3):497–504

Effect of intrathecal serotonin on nociception in rats: influence of the pain test used. Bardin L, et al. **Exp Brain Res** 1997 Jan;113(1):81–7

Development in neonatal rats of the sensory resetting of the locomotor rhythm induced by NMDA and 5–HT. Iizuka M, et al. **Exp Brain Res** 1997 Apr;114(2):193–204

Control of locomotion in the marine mollusc Clione limacina. XI. Effects of serotonin. Panchin YV, et al. **Exp Brain Res** 1996 May;109(2):361–5

Melatonin and serotonin regulate the release of insulin–like growth factor–I, oxytocin and progesterone by cultured human granulosa cells. Schaeffer HJ, et al. **Exp Clin Endocrinol Diabetes** 1997;105(2):109–12

Protein kinase C activation by serotonin potentiates agonist–induced stimulation of cAMP production in cultured rat retinal pigment epithelial cells. Nash MS, et al. **Exp Eye Res** 1997 Feb;64(2):249–55

5–Hydroxytryptamine induces forestomach hypomotility in sheep through 5–HT4 receptors. Plaza MA, et al. **Exp Physiol** 1996 Sep;81(5):781–90

Human serotonin 5–HT7 receptor: cloning and pharmacological characterisation of two receptor variants. Stam NJ, et al. **FEBS Lett** 1997 Aug 25;413(3):489–94

An implication to the role of testicular serotonergic innervation. An in vitro study on serotonin effects in the control of Leydig cell secretory function. Pieścikowska I, et al. **Folia Morphol (Warsz)** 1996;55(4):414–6

Tropisetron inhibits the antinociceptive effect of intrathecally administered paracetamol and serotonin. Alloui A, et al. **Fundam Clin Pharmacol** 1996;10(4):406–7

Effect of serotonin and calcium in normal and sensitized guinea pig isolated trachea. Perpiña M, et al. **Fundam Clin Pharmacol** 1996;10(1):33–7

Serotonin and N–acetylserotonin effects on pigment cells of the toad Bufo ictericus: pharmacological characterization of melatonin receptors. Filadelfi AM, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):192–9

Photoperiod mediates the ability of serotonin to release prolactin in the turkey. Pitts GR, et al. **Gen Comp Endocrinol** 1996 Dec;104(3):265–72

Hypoxia and response of human umbilical artery strips to 5–hydroxytryptamine: role of prostaglandin F2 alpha. De Moraes S, et al. **Gen Pharmacol** 1997 Jan;28(1):77–83

Pre– and postjunctional effects of 5–hydroxytryptamine in dog cephalic veins of neonates. Paiva MQ, et al. **Gen Pharmacol** 1996 Mar;27(2):325–8

Genes affecting sensitivity to serotonin in Caenorhabditis elegans. Schafer WR, et al. **Genetics** 1996 Jul; 143(3):1219–30

5–Hydroxytryptamine2A receptors on cultured rat Schwann cells. Yoder EJ, et al. **Glia** 1996 May;17(1):15–27

Diverse inotropic effects of 5–hydroxytryptamine in heart muscles of various mammalian species. Zaizen H, et al. **Heart Vessels** 1996;11(1):10–7

Effects of serotonin on the release of thyrotropin–releasing hormone from the rat retina in vitro. Mitsuma T, et al. **Horm Metab Res** 1996 May;28(5):220–2

5–Hydroxytryptamine contracts human uterine artery smooth muscle predominantly via 5–HT2 receptors. Karlsson C, et al. **Hum Reprod** 1997 Feb;12(2):361–7

Interaction of calcium channel blockers (CCBs) with histamine and 5–hydroxytryptamine in aorta from normal and diseased rats. Bhugra P, et al. **Indian J Physiol Pharmacol** 1996 Apr;40(2):120–6

Differing regulation of major histocompatibility class II and adhesion molecules on human umbilical vein endothelial cells by serotonin. Li F, et al. **Int Arch Allergy Immunol** 1997 Feb;112(2):145–51

Activation of an 85 kDa ribosomal S6 kinase during serotonin–induced oocyte maturation. Durocher Y, et al. **Int J Dev Biol** 1996 Jun;40(3):557–66

The effect of acute bilateral adrenalectomy on serotonin–induced inhibition of gastric acid secretion and acute gastric mucosal injury in rats. Gidener S, et al. **Int J Exp Pathol** 1996 Aug;77(4):163–6

Further evidence on the interaction of muramyl dipeptide with the serotonergic system. Slánský J, et al. **Int J Immunopharmacol** 1996 Jan;18(1):23–9

Specific response of mouse tumor–feeding arterioles to stimulation by 5–HT1 agonists. Stücker O, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1125–31

Pulmonary vasoreactivity to serotonin during hypoxia is modulated by ATP–sensitive potassium channels. Barman SA. **J Appl Physiol** 1997 Aug;83(2):569–74

5–Hydroxytryptamine depolarizes neurons of cat pancreatic ganglia. Ma RC, et al. **J Auton Nerv Syst** 1996 Feb 5; 57(1–2):78–86

Bezold–Jarisch reflex in myocardial infarcted rats. Meyrelles SS, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):144–52

Mechanism–based inactivation of dopa decarboxylase by serotonin. Bertoldi M, et al. **J Biol Chem** 1996 Sep 27; 271(39):23954–9

Effects of serotonin and melanin on in vitro HIV–1 infection. Sidibe S, et al. **J Biol Regul Homeost Agents** 1996 Jan–Mar; 10(1):19–24

Serotonin–induced vasoconstriction in rabbit femoral artery: mediation by both 5–HT2 serotonergic and alpha 1–adrenoceptors. Grandaw PP, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):854–60

5–HT1–like receptor–mediated contraction in the human internal mammary artery. Yildiz O, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):6–10

Rostrocaudal distribution of 5–HT innervation in the lamprey spinal cord and differential effects of 5–HT on fictive locomotion. Zhang W, et al. **J Comp Neurol** 1996 Oct 14; 374(2):278–90

Mediation of serotonin–induced hyperventilation via 5–HT3–receptor in European eel Anguilla anguilla. Janvier JJ, et al. **J Comp Physiol [B]** 1996;165(8):640–6

Changes in reactivity towards 5–hydroxytryptamine in the

renal vasculature of the diabetic spontaneously hypertensive rat. Boston PC, et al. **J Hypertens** 1997 Jul; 15(7):769–74

Serotonin stimulation of 5–HT4 receptors indirectly enhances in vivo dopamine release in the rat striatum. De Deurwaerdère P, et al. **J Neurochem** 1997 Jan; 68(1):195–203

Functional coupling of endogenous serotonin (5–HT1B) and calcitonin (C1a) receptors in CHO cells to a cyclic AMP–responsive luciferase reporter gene. George SE, et al. **J Neurochem** 1997 Sep;69(3):1278–85

5–Hydroxytryptamine–facilitated release of substance P from rat spinal cord slices is mediated by nitric oxide and cyclic GMP. Inoue A, et al. **J Neurochem** 1997 Jan;68(1):128–33

Mianserin–induced down–regulation of human 5–hydroxytryptamine2A and 5–hydroxytryptamine2C receptors stably expressed in the human neuroblastoma cell line SH–SY5Y. Newton RA, et al. **J Neurochem** 1997 Sep; 69(3):1031–8

Modulation of 5HT1A responsiveness in CA1 pyramidal neurons by in vivo activation of corticosteroid receptors. Hesen W, et al. **J Neuroendocrinol** 1996 Jun;8(6):433–8

Effects of serotonin on caudal raphe neurons: activation of an inwardly rectifying potassium conductance. Bayliss DA, et al. **J Neurophysiol** 1997 Mar;77(3):1349–61

Effects of serotonin on caudal raphe neurons: inhibition of N– and P/Q–type calcium channels and the afterhyperpolarization. Bayliss DA, et al. **J Neurophysiol** 1997 Mar;77(3):1362–74

Serotonin potentiates dopamine inhibition of ventral tegmental area neurons in vitro. Brodie MS, et al. **J Neurophysiol** 1996 Sep;76(3):2077–82

Modulation of spontaneous and reflex activity of crayfish leg motor neurons by octopamine and serotonin. Gill MD, et al. **J Neurophysiol** 1996 Nov;76(5):3535–49

Serotonergic modulation of evoked responses in turtle cerebellar Purkinje cells. Lu H, et al. **J Neurophysiol** 1996 Nov;76(5):3102–13

Differential effects of 4–aminopyridine, serotonin, and phorbol esters on facilitation of sensorimotor connections in Aplysia. Sugita S, et al. **J Neurophysiol** 1997 Jan; 77(1):177–85

Requirement for tyrosine phosphatase during serotonergic neuromodulation by protein kinase C. Catarsi S, et al. **J Neurosci** 1997 Aug 1;17(15):5792–7

Serotonin and the small cardioactive peptides differentially modulate two motor neurons that innervate the same muscle fibers in Aplysia. Fox LE, et al. **J Neurosci** 1997 Aug 15;17(16):6064–74

Drosophila serotonin transporters have voltage–dependent uptake coupled to a serotonin–gated ion channel. Galli A, et al. **J Neurosci** 1997 May 15;17(10):3401–11

Metabotropic glutamate receptor activation modulates kainate and serotonin calcium response in astrocytes. Haak LL, et al. **J Neurosci** 1997 Mar 1;17(5):1825–37

Serotonin at the laterodorsal tegmental nucleus suppresses rapid–eye–movement sleep in freely behaving rats. Horner RL, et al. **J Neurosci** 1997 Oct 1;17(19):7541–52

Serotonin promotes the differentiation of glutamate neurons in organotypic slice cultures of the developing cerebral cortex. Lavdas AA, et al. **J Neurosci** 1997 Oct 15; 17(20):7872–80

5–HT inhibits calcium current and synaptic transmission from sensory neurons in lamprey. El Manira A, et al. **J Neurosci** 1997 Mar 1;17(5):1786–94

Differential actions of serotonin, mediated by 5–HT1B and 5–HT2C receptors, on GABA–mediated synaptic input to rat substantia nigra pars reticulata neurons in vitro. Stanford IM, et al. **J Neurosci** 1996 Dec 1;16(23):7566–73

Serotonergic inhibition of the T–type and high voltage–activated Ca2+ currents in the primary sensory neurons of Xenopus larvae. Sun QQ, et al. **J Neurosci** 1997 Sep 15;17(18):6839–49

Site–specific and sensory neuron–dependent increases in postsynaptic glutamate sensitivity accompany serotonin–induced long–term facilitation at Aplysia sensorimotor synapses. Zhu H, et al. **J Neurosci** 1997 Jul 1;17(13):4976–86

A novel methodology for simultaneous assessment of the effects of 5–hydroxytryptamine on primary afferent polarisation and synaptic transmission in rat dorsal horn neurones in vitro. Lopez–Garcia JA, et al. **J Neurosci Methods** 1996 Sep;68(1):1–6

Serotonin 5–HT2 receptor activation potentiates N–methyl–D–aspartate receptor–mediated ion currents by a protein kinase C–dependent mechanism. Blank T, et al. **J Neurosci Res** 1996 Jul 15;45(2):153–60

Effects of serotonin on cerebral circulation after middle cerebral artery occlusion. Muhonen MG, et al. **J Neurosurg** 1997 Aug;87(2):301–6

Inhibitory effects of tetrandrine on intracellular free Ca2+ increase induced by glutamate, serotonin and histamine in dissociated retina cells. Xuan B, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):331–6

Neural involvement in 5–hydroxytryptamine–induced net electrogenic ion secretion in the rat intestine in–vivo. Franks CM, et al. **J Pharm Pharmacol** 1996 Apr;48(4):411–6

Serotonin activates the mitogen–activated protein kinase pathway in vascular smooth muscle: use of the mitogen–activated protein kinase kinase inhibitor PD098059. Watts SW. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1541–50

Sensitivity differences to 5–HT and carbachol in subsections of the isolated rat stomach fundus strip: an improved preparation. Riazi–Farzad B, et al. **J Pharmacol Toxicol Methods** 1996 Aug;35(4):217–21

Central effects of 5–HT on activity of respiratory and hypoglossally innervated muscles in newborn kittens. Khater–Boidin J, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):255–65

Aminergic modulation of glycine release in a spinal network controlling swimming in Xenopus laevis. McDearmid JR, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):111–7

Differing effects of histamine and serotonin on microvascular permeability in anaesthetized rats. Michel CC, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):657–62

Phospholipase A2 and protein kinase C contribute to myofilament sensitization to 5–HT in the rabbit mesenteric artery. Parsons SJ, et al. **J Physiol (Lond)** 1996 Mar 1;491 (Pt 2):447–53

Protein kinase C–mediated enhancement of glycine response in rat sacral dorsal commissural neurones by serotonin. Xu TL, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):491–501

Serotonin–induced intercellular calcium waves in salivary glands of the blowfly Calliphora erythrocephala. Zimmermann B, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):17–28

Characterization of the antioxidant effects of melatonin and related indoleamines in vitro. Chan TY, et al. **J Pineal Res** 1996 May;20(4):187–91

Autoradiographic localization of 5–HT1E and 5–HT1F binding sites in rat brain: effect of serotonergic lesioning. Fugelli A, et al. **J Recept Signal Transduct Res** 1997 Jul; 17(4):631–45

Alteration of contractile properties to serotonin in gastric fundus smooth muscle isolated from streptozotocin (STZ)–induced diabetic rats. Zhu BH, et al. **J Smooth Muscle Res** 1996 Aug;32(4):165–73

Species differences in the 5–hydroxytryptamine–induced contraction in the isolated distal ileum. Yamano M, et al. **Jpn J Pharmacol** 1997 Jul;74(3):267–74

Opposite paracrine effects of 5–HT and dopamine on Na(+)–Pi cotransport in opossum kidney cells. de Toledo FG, et al. **Kidney Int** 1997 Jul;52(1):152–6

5–hydroxytryptamine decreases somatostatin receptors and somatostatin–responsive adenylyl cyclase in rat pancreatic acinar membranes. Muñoz–Acedo G, et al. **Life Sci** 1997; 60(22):1965–76

Serotonin–induced changes in L–leucine transport across rabbit jejunum. Salvador MT, et al. **Life Sci** 1996; 59(15):1269–81

5–HT receptor subtypes involved in the serotonin–induced inhibition of L–leucine absorption in rabbit jejunum. Salvador MT, et al. **Life Sci** 1997;61(3):309–18

Chronic treatment with antidepressants, verapamil, or lithium inhibits the serotonin–induced intracellular calcium response in individual C6 rat glioma cells. Yamaji T, et al. **Life Sci** 1997;60(11):817–23

Serotonin regulation of gene expression in uterine extracellular matrix: reciprocal effects on collagens and collagenase. Passaretti TV, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):125–32

Modulation of cortical acetylcholine release by serotonin: the role of substance P interneurons. Feuerstein TJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):618–26

Mechanisms of serotonin–induced Ca2+ responses in mesangial cells. Goppelt–Struebe M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):240–7

Changes in sensitivity of 5–HT receptor mediated functional responses in the rat oesophagus, fundus and jejunum following chronic infusion with 5–hydroxytryptamine. McLean PG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):513–9

Reversal of relative thresholds for synaptic facilitation and increased excitability induced by serotonin and tail nerve stimulation in Aplysia sensory neurons. Bunge SA, et al. **Neurobiol Learn Mem** 1997 May;67(3):259–63

Modulation of antennal scanning in the honeybee by sucrose stimuli, serotonin, and octopamine: behavior and electrophysiology. Pribbenow B, et al. **Neurobiol Learn Mem** 1996 Sep;66(2):109–20

5–Hydroxytryptamine–evoked [Ca2+]i oscillations in rat C6 glioma cells. Cholewinski AJ, et al. **Neurochem Int** 1996 May–Jun;28(5–6):583–9

Effect of serotonin and neuropeptides on adenylate cyclase of the central nervous system and peripheral organs of the freshwater snail Planorbarius corneus. Ferretti ME, et al. **Neurochem Int** 1996 Apr;28(4):417–24

Activation of serotonergic 5–HT1A receptor reduces Ca(2+)– and glutamatergic receptor–evoked arachidonic acid and No/cGMP release in adult hippocampus. Strosznajder J, et al. **Neurochem Int** 1996 Apr;28(4):439–44

Serotonin induces excitatory postsynaptic potentials in apical dendrites of neocortical pyramidal cells. Aghajanian GK, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):589–99

Effects of clomipramine and verapamil on 5–HT–induced intracellular calcium changes in individual C6 rat glioma cells. Yamaji T, et al. **Neuropsychobiology** 1996;33(2):55–9

Effects of carbamazepine and sodium valproate on 5–HT–induced calcium increase in individual C6 rat glioma cells. Yamaji T, et al. **Neuropsychobiology** 1996;34(1):22–5

Free radical scavenging effects of melatonin and serotonin: possible mechanism. Daniels WM, et al. **Neuroreport** 1996 Jul 8;7(10):1593–6

Similarity of the effects of training and application of serotonin on the electrical activity of live hippocampal slices from rats. Folomkina AA, et al. **Neurosci Behav Physiol** 1997 Mar–Apr;27(2):111–6

I. Serotonin (5–HT) within dopamine reward circuits signals open–field behavior. II. Basis for 5–HT—DA interaction in cocaine dysfunctional behavior. Broderick PA, et al. **Neurosci Biobehav Rev** 1997 May;21(3):227–60 (343 ref.)

QEHA27, a peptide that binds to G–protein beta gamma–subunits, reduces the inhibitory effect of 5–HT on the Ca2+ current of rat dorsal raphe neurons. Chen Y, et al. **Neurosci Lett** 1997 Mar 14;224(2):87–90

Serotonergic inhibition of phrenic motoneuron activity: an in vitro study in neonatal rat. Di Pasquale E, et al. **Neurosci Lett** 1997 Jul 11;230(1):29–32

A 5–hydroxytryptamine lesion markedly reduces the incidence of burst–firing dorsal raphe neurones in the rat. Hajos M, et al. **Neurosci Lett** 1996 Feb 9;204(3):161–4

Role of nitric oxide and serotonin in modulation of the cardiovascular defence response evoked by stimulation in the periaqueductal grey matter in rats. Hamalainen MM, et al. **Neurosci Lett** 1997 Jun 27;229(2):105–8

Identification of central 5–HT and 5–HT1A receptors in the turtle brain (Chrysemys picta). Larson–Prior LJ, et al. **Neurosci Lett** 1996 Jul 12;212(2):79–82

Serotonin increases Na(+)–dependent Ca2+ efflux from bovine adrenal chromaffin cells in culture. Minakuchi K, et al. **Neurosci Lett** 1997 Feb 14;223(1):17–20

Effects of iontophoretically applied serotonin on three classes of physiologically characterized putative pain modulating neurons in the rostral ventromedial medulla of lightly anesthetized rats. Roychowdhury SM, et al. **Neurosci Lett** 1997 Apr 25;226(2):136–8

5–Hydroxytryptamine–induced Ca2+ –independent cGMP formation is mediated by nitric oxide in a nitric oxide synthase–independent manner in NG108–15 cells. Arima T, et al. **Neurosci Res** 1997 Mar;27(3):229–33

Dual effect of serotonin on formalin–induced nociception in the rat spinal cord. Oyama T, et al. **Neurosci Res** 1996 Jun;25(2):129–35

Renshaw cell responses to intra–arterial injection of muscle metabolites into cat calf muscles. Windhorst U, et al. **Neurosci Res** 1997 Mar;27(3):235–47

Effects of serotonin through serotonin1A and serotonin4 receptors on inhibition in the guinea–pig dentate gyrus in vitro. Bijak M, et al. **Neuroscience** 1997 Jun;78(4):1017–26

A subset of ventral tegmental area neurons is inhibited by dopamine, 5–hydroxytryptamine and opioids. Cameron DL, et al. **Neuroscience** 1997 Mar;77(1):155–66

Atypical antipsychotics block the excitatory effects of serotonin in septohippocampal neurons in the rat. Liu W, et al. **Neuroscience** 1997 Jul;79(2):369–82

Serotonergic regulation of circadian rhythms in Syrian hamsters. Mintz EM, et al. **Neuroscience** 1997 Jul; 79(2):563–9

Serotonin blocks different patterns of low Mg2+–induced epileptiform activity in rat entorhinal cortex, but not hippocampus. Schmitz D, et al. **Neuroscience** 1997 Jan; 76(2):449–58

Modulatory role of endothelial and nonendothelial nitric oxide in 5–hydroxytryptamine–induced contraction in cerebral arteries after subarachnoid hemorrhage. Miranda FJ, et al. **Neurosurgery** 1996 Nov;39(5):998–1003; discussion 1003–4

Cat pancreatic neurons: morphology, electrophysiological properties, and responses to 5–HT. Sha L, et al. **Pancreas** 1996 Aug;13(2):111–24

Regulation of 5–hydroxytryptamine–induced calcium mobilization by cAMP–elevating agents in cultured canine tracheal smooth muscle cells. Yang C, et al. **Pflugers Arch** 1996 Aug;432(4):708–16

Serotonergic and noradrenergic effects on respiratory neural discharge in the medullary slice preparation of neonatal rats. Al–Zubaidy ZA, et al. **Pflugers Arch** 1996 Apr; 431(6):942–9

Serotonin–induced short– and long–term sensitization in the crab Chasmagnathus. Aggio J, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):441–8

Role of dopamine in behavioral effects of serotonin microinjected into rat striatum. Yeghiayan SK, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):251–9

Hyperglycemia increased the responsiveness of isolated rabbit's pulmonary arterial rings to serotonin. el–Kashef H. **Pharmacology** 1996 Sep;53(3):151–9

Contractile responses to histamine, serotonin, and angiotensin II are impaired by 17 beta–estradiol in human internal mammary arteries in vitro. Mügge A, et al. **Pharmacology** 1997 Mar;54(3):162–8

Serotonin–induced vasoconstriction is mediated by thromboxane release and action in the human fetal–placental circulation. Cruz MA, et al. **Placenta** 1997 Mar–Apr;18(2–3):197–204

Influence of captopril on the serotonin–induced vasopressor effect in tail artery isolated from two–kidney, one–clip renal hypertensive rats. Morelowska–Spierzak D, et al. **Pol J Pharmacol** 1995 Sep–Oct;47(5):417–22

Serotonin and aggressive motivation in crustaceans: altering the decision to retreat. Huber R, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5939–42

Brain lipids that induce sleep are novel modulators of 5-hydroxytrypamine receptors. Huidobro-Toro JP, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8078-82

Neuronal nicotinic threonine-for-leucine 247 alpha7 mutant receptors show different gating kinetics when activated by acetylcholine or by the noncompetitive agonist 5-hydroxytryptamine. Palma E, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9915-9

Conserved and sexually dimorphic behavioral responses to biogenic amines in decapitated Drosophila. Yellman C, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4131-6

Contribution of NMDA and non-NMDA glutamate receptors to locomotor pattern generation in the neonatal rat spinal cord. Beato M, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):877-84

ATP modification of serotonin-induced contraction of the rat pulmonary artery. Soslau G, et al. **Proc Soc Exp Biol Med** 1997 Mar;214(3):233-41

The physiological effects of serotonin on spontaneous and amino acid-induced activation of cerebellar nuclear cells: an in vivo study in the cat. Kitzman PH, et al. **Prog Brain Res** 1997;114:209-23

Serotonin, norepinephrine and associated neuropeptides: effects on somatic motoneuron excitability. White SR, et al. **Prog Brain Res** 1996;107:183-99 (111 ref.)

Serotonin-mediated increase in cytosolic [Ca++] in platelets of risperidone-treated schizophrenia patients. Ereshefsky L, et al. **Psychopharmacol Bull** 1996;32(1):101-6

Pharmacological interactions between serotonin and dopamine on behavior in the squirrel monkey. Howell LL, et al. **Psychopharmacology (Berl)** 1997 May;131(1):40-8

Effect of destruction of the 5-hydroxytryptaminergic pathways on the acquisition of temporal discrimination and memory for duration in a delayed conditional discrimination task. Al-Zahrani SS, et al. **Psychopharmacology (Berl)** 1996 Jan;123(1):103-10

Mechanisms of 5-hydroxytryptamine-induced contraction of isolated rat intrapulmonary bronchi. Szarek JL, et al. **Pulm Pharmacol** 1995 Dec;8(6):273-81

Effect of 5-hydroxytryptamine on bioelectric properties of airway epithelial cells in culture. Tamaoki J, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jun;92(3):285-98

Interaction of serotonergic excitatory drive to hypoglossal motoneurons with carbachol-induced, REM sleep-like atonia. Kubin L, et al. **Sleep** 1996 Apr;19(3):187-95

Presynaptic inhibition by serotonin: a possible mechanism for switching motor output of the hypoglossal nucleus. Singer JH, et al. **Sleep** 1996 Dec;19(10 Suppl):S146-9 (28 ref.)

Differential behavioral responses to cocaethylene of Long-Evans and Sprague-Dawley rats: role of serotonin. Horowitz JM, et al. **Synapse** 1997 May;26(1):11-21

Regulation of serotonin-facilitated dopamine release in vivo: the role of protein kinase A activating transduction mechanisms. West AR, et al. **Synapse** 1996 May;23(1):20-7

Action of neurotransmitters: acetylcholine, adrenaline and serotonin on arterial thrombosis induced by a laser beam. Belougne E, et al. **Thromb Res** 1996 Nov 1;84(3):189-98

Defibrotide mediated inhibition of serotonin, endothelin-I, thromboxane, and serum induced contraction of canine femoral and pulmonary arterial rings. Yang LH, et al. **Thromb Res** 1996 Nov 1;84(3):167-77

[Serotonin's relaxation effect on the circular muscle of guinea pig stomach fundus] Onishi Y, et al. **J Smooth Muscle Res** 1995 Dec;31(6):484-7 **(Jpn)**

[Effect of exogenous serotonin on guinea pig gastric circular muscle strips] Tamura T, et al. **J Smooth Muscle Res** 1995 Dec;31(6):487-9 **(Jpn)**

[The effect of droperidol and sevoflurane on serotonin-induced bronchoconstriction in dog] Nakaoji T, et al. **Masui** 1996 Jun;45(6):698-706 (Eng. Abstr.) **(Jpn)**

[Thrombolytic and antithrombotic effects of low molecular weight heparin-serotonin complex] Kondashevskaia MV, et al. **Biull Eksp Biol Med** 1996 Nov;122(11):530-2 **(Rus)**

[Nimodipine, nifedipine and the cerebrovascular effects of serotonin] Semkina GA, et al. **Eksp Klin Farmakol** 1996 Nov-Dec;59(6):13-6 (Eng. Abstr.) **(Rus)**

[The positive effect of pretreatment with serotonin and gangliosides on the development of early mouse embryos after cryopreservation] Sakharova NIu, et al. **Ontogenez** 1997 Mar-Apr;28(2):125-31 (Eng. Abstr.) **(Rus)**

[Serotonin simulates the neuronal effects of nociceptive sensitization in the snail] Shevelkin AV, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):532-42 (Eng. Abstr.) **(Rus)**

[The effect of serotonin on the cross-correlation of neuronal activity in surviving cortical slices] Zhadin MN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May-Jun; 46(3):547-51 (Eng. Abstr.) **(Rus)**

[Amplification of contractile response by serotonin on noradrenaline in the human umbilical artery] Rothlin RP, et al. **Medicina (B Aires)** 1995;55(6):652-8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Influence of serotonergic neurons and of pineal gland on the development of the neonatal androgen sterilization syndrome in the rat. Ruzsás C, et al. **Acta Biol Hung** 1996; 47(1-4):385-91

Peripheral serotonergic mechanisms in the cardiovascular system of epidermoid lung cancer patients. Filipowski T, et al. **Acta Physiol Hung** 1996;84(3):285-6

Morphological evidence for effects of the aging on the serotoninergic neurons in the rat brainstem nuclei. Lolova IS. **Acta Physiol Pharmacol Bulg** 1996;22(1):17-25

Serotonergic function in mothers of opioid addicts: correlation with comorbid depression. Gerra G, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):36-42

Proceedings of the 8th International Meeting on Tryptophan Research. Padova, Italy, June 25-29, 1995. **Adv Exp Med Biol** 1996;398:1-766

Effect of valine on 5-HT neurotransmission and mood. Cowen PJ, et al. **Adv Exp Med Biol** 1996;398:67-71

Serotoninergic block in the ventromedial nucleus of hypothalamus improves food intake in anorectic tumor bearing rats. Laviano A, et al. **Adv Exp Med Biol** 1996; 398:551-3

Fibromyalgia and migraine, two faces of the same mechanism. Serotonin as the common clue for pathogenesis and therapy. Nicolodi M, et al. **Adv Exp Med Biol** 1996; 398:373-9

Endogenous kynurenine derivatives and pain. Weil-Fugazza J. **Adv Exp Med Biol** 1996;398:83-7 (27 ref.)

The effect of low brain serotonin on mood and aggression in humans. Influence of baseline mood and genetic factors. Young SN, et al. **Adv Exp Med Biol** 1996;398:45-50 (24 ref.)

Ethanol exposure alters the development of serotonergic neurons in chick spinal cord. Mendelson B, et al. **Alcohol** 1996 Sep-Oct;13(5):431-41

Use of serotonin (5-HT) and opiate-based drugs in the pharmacotherapy of alcohol dependence: an overview of the preclinical data. Lê AD, et al. **Alcohol Alcohol** 1996 Mar;31 Suppl 1:27-32 (55 ref.)

Persistence of defective serotonergic and GABAergic controls of growth hormone secretion in long-term abstinent alcoholics. Vescovi PP, et al. **Alcohol Alcohol** 1997 Jan-Feb;32(1):85-90

Distribution of catalase in rat brain: aminergic neurons as possible targets for ethanol effects. Zimatkin SM, et al. **Alcohol Alcohol** 1996 Mar;31(2):167-74

Hormonal, psychological, and alcohol craving changes after m-chlorophenylpiperazine administration in alcoholics. Buydens-Branchey L, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):220-6

Effects of 5,7-dihydroxytryptamine lesions of the prefrontal cortex on consumption of sucrose-ethanol solutions: relationship to prefrontal monoamines. Deckel AW, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):631-6

Central serotonergic lesions increase voluntary alcohol consumption in Sprague Dawley rats: moderation by long-term ethanol administration. Wang JY, et al. **Alcohol Clin Exp Res** 1996 Oct;20(7):1252-9

Serotonin modulates ethanol-induced depression in cerebellar Purkinje neurons. Wang Y, et al. **Alcohol Clin Exp Res** 1996 Oct;20(7):1229-36

Possibility of 5-HT3 receptor involvement in alcohol dependence: a microdialysis study of nucleus accumbens dopamine and serotonin release in rats with chronic alcohol consumption. Yoshimoto K, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9 Suppl):311A-319A

Forebrain angiotensin type 1 receptors and parabrachial serotonin in the control of NaCl and water intake. Colombari DS, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1470-6

Serotonergic afferents mediate activity-dependent entrainment of the mouse circadian clock. Edgar DM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R265-9

A new role for an old molecule: serotonin as a mitogen. Fanburg BL, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L795-806 (156 ref.)

5-HT released by mucosal stimuli initiates peristalsis by activating 5-HT4/5-HT1p receptors on sensory CGRP neurons. Grider JR, et al. **Am J Physiol** 1996 May;270(5 Pt 1):G778-82

Role of endogenous 5-hydroxytryptamine in the regulation of gastric contractions by motilin in dogs. Haga N, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G20-8

Hypothyroid-induced changes in autonomic control have a central serotonergic component. Henley WN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H894-903

Lateral parabrachial nucleus and serotonergic mechanisms in the control of salt appetite in rats. Menani JV, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R162-8

Role of serotonergic neurons in the maintenance of the 10-Hz rhythm in sympathetic nerve discharge. Orer HS, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R174-81

Aging alters the serotonergic modulation of light-induced phase advances in golden hamsters. Penev PD, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R509-13

Pulmonary serotonin 5-HT3-sensitive afferent fibers modulate renal sympathetic nerve activity in rats. Veelken R, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H979-86

Lack of relapse with tryptophan depletion following successful treatment with ECT. Cassidy F, et al. **Am J Psychiatry** 1997 Aug;154(8):1151-2

Central serotonin activity and aggression: inverse relationship with prolactin response to d-fenfluramine, but not CSF 5-HIAA concentration, in human subjects. Coccaro EF, et al. **Am J Psychiatry** 1997 Oct;154(10):1430-5

Blunted serotonin response to fenfluramine challenge in premenstrual dysphoric disorder. FitzGerald M, et al. **Am J Psychiatry** 1997 Apr;154(4):556-8

Rapid tryptophan depletion in drug-free depressed patients with seasonal affective disorder. Neumeister A, et al. **Am J Psychiatry** 1997 Aug;154(8):1153-5

Possible involvement of the serotonergic system in intraseptal opioid-induced hypothermia in ground squirrels. Cui Y, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:192-6

Fluoxetine effects on serotonin function and aggressive behavior. Fuller RW. **Ann N Y Acad Sci** 1996 Sep 20; 794:90-7

Persistent alterations in behavior and serotonin activity after recovery from anorexia and bulimia nervosa. Kaye WH. **Ann N Y Acad Sci** 1997 May 28;817:162-78 (139 ref.)

Effects of serotonin depletion on the play of juvenile rats. Knutson B, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:475-7

Heatstroke-induced cerebral ischemia and neuronal damage. Involvement of cytokines and monoamines. Lin MT. **Ann N Y Acad Sci** 1997 Mar 15;813:572-80 (54 ref.)

Nitroglycerin in the treatment of the serotonin syndrome [letter] Brown TM, et al. **Ann Pharmacother** 1996 Feb; 30(2):191-2

Positron emission tomography measurement of cerebral metabolic correlates of tryptophan depletion-induced depressive relapse. Bremner JD, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):364-74

Decreased serotonin function in bulimia nervosa. Jimerson DC, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):529-34

Clozapine withdrawal: serotonergic or dopaminergic mechanisms? [letter; comment] Meltzer HY. **Arch Gen Psychiatry** 1997 Aug;54(8):760-3. Comment on: Arch Gen Psychiatry 1995 Dec;52(12):1071-2.

Effects of tryptophan depletion on drug-free patients with seasonal affective disorder during a stable response to bright light therapy. Neumeister A, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):133-8

Effects of meta-chlorophenylpiperazine infusions in patients with seasonal affective disorder and healthy control subjects. Diurnal responses and nocturnal regulatory mechanisms. Schwartz PJ, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):375-85

Noradrenergic and serotonergic function in posttraumatic stress disorder. Southwick SM, et al. **Arch Gen Psychiatry** 1997 Aug;54(8):749-58

Immunohistochemical studies on protein gene product 9.5, serotonin and neuropeptides in vallate taste buds and related nerves of the guinea pig. Huang YJ, et al. **Arch Histol Cytol** 1996 Dec;59(5):433-41

Role of 5-hydroxytryptamine in platelet thrombus formation and mechanisms of inhibition of thrombus formation by 5-hydroxytryptamine2A antagonists in rabbits. Takano S. **Arch Int Pharmacodyn Ther** 1995 Nov-Dec;330(3):297-308

Amygdaloid control of alerting and behavioral arousal in rats: involvement of serotonergic mechanisms. Sanford LD, et al. **Arch Ital Biol** 1995 Dec;134(1):81-99

The effects of lesions in the mesencephalic raphe systems on male rat sexual behavior and locomotor activity. Albinsson A, et al. **Behav Brain Res** 1996 Oct;80(1-2):57-63

Mucosal protection through active intestinal secretion: neural and paracrine modulation by 5-hydroxytryptamine. Brown DR. **Behav Brain Res** 1996;73(1-2):193-7 (54 ref.)

The role of serotonin in the actions of psychostimulants: molecular and pharmacological analyses. Cunningham KA, et al. **Behav Brain Res** 1996;73(1-2):93-102 (66 ref.)

Serotonergic functions in arousal and motor activity. Geyer MA. **Behav Brain Res** 1996;73(1-2):31-5 (45 ref.)

Psychobiologic effects of 3,4-methylenedioxymethamphetamine in humans: methodological considerations and preliminary observations. Grob CS, et al. **Behav Brain Res** 1996; 73(1-2):103-7

Serotonergic regulation of associative learning. Harvey JA. **Behav Brain Res** 1996;73(1-2):47-50 (22 ref.)

Is nitric oxide involved in 5-HT-induced fluid secretion in the gut? Kadowaki M, et al. **Behav Brain Res** 1996; 73(1-2):293-6

5-HT3 and 5-HT4 receptors in terminal regions of the mesolimbic system. Kilpatrick GJ, et al. **Behav Brain Res** 1996;73(1-2):11-3 (23 ref.)

Neuroendocrine responses to serotonergic agonists as indices of the functional status of central serotonin neurotransmission in humans: a preliminary comparative analysis of neuroendocrine endpoints versus other endpoint measures. Murphy DL, et al. **Behav Brain Res** 1996; 73(1-2):209-14 (51 ref.)

Role of hippocampal serotonergic neurons in ischemic neuronal death. Nakata N, et al. **Behav Brain Res** 1997 Feb;83(1-2):217-20

Interactions of descending serotonergic systems with other neurotransmitters in the modulation of nociception. Sawynok J, et al. **Behav Brain Res** 1996;73(1-2):63-8 (42 ref.)

Serotonergic control of the organization of feeding and satiety. Simansky KJ. **Behav Brain Res** 1996;73(1-2):37-42 (61 ref.)

Serotonergic regulation of renin and prolactin secretion. Van de Kar LD, et al. **Behav Brain Res** 1996;73(1-2):203-8 (44 ref.)

Serotonin as a developmental signal. Whitaker-Azmitia PM, et al. **Behav Brain Res** 1996;73(1-2):19-29 (120 ref.)

Locally formed 5-hydroxytryptamine stimulates phosphate transport in cultured opossum kidney cells and in rat kidney. Hafdi Z, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):615-21

Manipulation of serotonergic status related to subjective and behavioral measures of aggression [letter; comment] Bond AJ, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1147. Comment on: Biol Psychiatry 1996 Aug 1;40(3):157–64.

Age–related changes in the association between serotonergic function and aggression in boys with ADHD. Halperin JM, et al. **Biol Psychiatry** 1997 Mar 15;41(6):682–9

Auditory–evoked potentials as indicator of brain serotonergic activity—first evidence in behaving cats. Juckel G, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1181–95

Heterogeneity of serotonergic response in treatment–refractory schizophrenia patients. Lindenmayer JP, et al. **Biol Psychiatry** 1997 Jul 1;42(1):6–12

Consideration of the relevance of ethological animal models for human repetitive behavioral spectrum disorders. Nurnberg HG, et al. **Biol Psychiatry** 1997 Jan 15; 41(2):226–9

Serotonergic modulation of behaviour: a phylogenetic overview. Weiger WA. **Biol Rev Camb Philos Soc** 1997 Feb;72(1):61–95 (172 ref.)

Adrenoceptor– and cholinoceptor–mediated mechanisms in the regulation of 5–hydroxytryptamine release from isolated tracheae of newborn rabbits. Freitag A, et al. **Br J Pharmacol** 1996 Sep;119(1):91–8

Modulation of the firing activity of noradrenergic neurones in the rat locus coeruleus by the 5–hydroxtryptamine system. Haddjeri N, et al. **Br J Pharmacol** 1997 Mar; 120(5):865–75

Persistence of nonphotic phase shifts in hamsters after serotonin depletion in the suprachiasmatic nucleus. Bobrzynska KJ, et al. **Brain Res** 1996 Nov 25; 741(1–2):205–14

Serotonergic innervation of the supraependymal neuronal complex of the golden hamster. Cloft HJ, et al. **Brain Res** 1997 Jul 4;761(2):210–6

A subgroup of dorsal raphe serotonergic neurons in the cat is strongly activated during oral–buccal movements. Fornal CA, et al. **Brain Res** 1996 Apr 15;716(1–2):123–33

Burst–firing activity of presumed 5–HT neurones of the rat dorsal raphe nucleus: electrophysiological analysis by antidromic stimulation. Hajós M, et al. **Brain Res** 1996 Nov 18;740(1–2):162–8

Intracellular recordings from burst–firing presumed serotonergic neurones in the rat dorsal raphe nucleus in vivo. Hajós M, et al. **Brain Res** 1996 Oct 21;737(1–2):308–12

The serotonergic projection from the median raphe nucleus to the suprachiasmatic nucleus modulates activity phase onset, but not other circadian rhythm parameters. Meyer–Bernstein EL, et al. **Brain Res** 1997 Apr 25; 755(1):112–20

Serotonergic lesioning differentially affects presynaptic and postsynaptic 5–HT1B receptor mRNA levels in rat brain. Neumaier JF, et al. **Brain Res** 1996 May 25;722(1–2):50–8

Preprotachykinin and preproenkephalin mRNA expression within striatal subregions in response to altered serotonin transmission. Walker PD, et al. **Brain Res** 1996 Sep 2; 732(1–2):25–35

5–HT7 receptors mediate serotonergic effects on light–sensitive suprachiasmatic nucleus neurons. Ying SW, et al. **Brain Res** 1997 May 2;755(2):246–54

The serotonergic and noradrenergic systems of the hippocampus: their interactions and the effects of antidepressant treatments. Mongeau R, et al. **Brain Res Brain Res Rev** 1997 Apr;23(3):145–95 (501 ref.)

Serotonin facilitates synaptic plasticity in kitten visual cortex: an in vitro study. Kojic L, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):299–304

5–HT1a receptors mediate the neurotrophic effect of serotonin on developing dentate granule cells. Yan W, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):185–90

Serotonergic neurons in the caudal raphe nuclei discharge in association with activity of masticatory muscles. Ribeiro–do–Valle LE. **Braz J Med Biol Res** 1997 Jan; 30(1):79–83

Neurobiology of impulse control disorders and paraphilia [letter; comment] Friedman EH. **Can J Psychiatry** 1996 Feb;41(1):61. Comment on: Can J Psychiatry 1995 Feb;40(1):4–5.

Differential effects of the serotonin receptors on cultured rat cerebral cortical neurons. Matsuoka T, et al. **Cell Mol Life Sci** 1997 Mar;53(3):233–6

Modulation of in vivo neuronal sprouting by serotonin in the adult CNS of the snail. Baker MW, et al. **Cell Mol Neurobiol** 1996 Oct;16(5):561–76 (50 ref.)

Modulation and selection of neurotransmitter responses during synapse formation between identified leech neurons. Catarsi S, et al. **Cell Mol Neurobiol** 1996 Dec;16(6):699–713

Estrogen control of central neurotransmission: effect on mood, mental state, and memory. Fink G, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):325–44 (87 ref.)

GABA uptake and phenotypic characteristics of the subcommissural ependymocytes of the semi–desertic rodent, Meriones shawi: correlation with serotoninergic innervation. Laalaoui A, et al. **Cell Tissue Res** 1996 Sep; 285(3):435–43

Platelet serotonin pathway in menstrual migraine [editorial; comment] de Belleroche J. **Cephalalgia** 1996 Oct;16(6):406 . Comment on: Cephalalgia 1996 Oct;16(6):427–30.

Platelet serotonin pathway in menstrual migraine [see comments] Fioroni L, et al. **Cephalalgia** 1996 Oct; 16(6):427–30. Comment in: Cephalalgia 1996 Oct;16(6):406.

Pain pressure threshold in cluster headache patients [editorial] Göbel H. **Cephalalgia** 1996 Feb;16(1):3–4

Reactions of the middle meningeal artery of the cat to neural and humoral stimulation [editorial] Keller JT. **Cephalalgia** 1996 Feb;16(1):3

Reactions of the middle meningeal artery of the cat to neural and humoral stimulation. Michalicek J, et al. **Cephalalgia** 1996 Feb;16(1):27–36

Painful vein overdistension in migraine patients: no relationship with serotoninergic parameters. Panconesi A, et al. **Cephalalgia** 1996 Feb;16(1):37–40

Clinical characteristics of migraine patients [editorial] Rasmussen BK. **Cephalalgia** 1996 Feb;16(1):4

Painful venous overdistension in migraine and serotonergic parameters [editorial] Saxena P. **Cephalalgia** 1996 Feb; 16(1):3

Platelet serotonin in patients with analgesic–induced headache [see comments] Srikiatkhachorn A, et al. **Cephalalgia** 1996 Oct;16(6):423–6. Comment in: Cephalalgia 1996 Oct;16(6):405.

Serotonin–induced cortisol release in CPAP–treated obstructive sleep apnea patients. Hudgel DW, et al. **Chest** 1997 Mar;111(3):632–8

p–Hydroxybenzyl alcohol attenuates learning deficits in the inhibitory avoidance task: involvement of serotonergic and dopaminergic systems. Wu CR, et al. **Chin J Physiol** 1996; 39(4):265–73

Serotonin, dopamine, and motor effects in Parkinson's disease. Miyawaki E, et al. **Clin Neuropharmacol** 1997 Aug; 20(4):300–10 (103 ref.)

Intact brain serotonin system in vascular dementia. Hansson G, et al. **Dementia** 1996 Jul–Aug;7(4):196–200

Serotonin modulation of lymphocyte proliferation via 5–HT1A receptors in rainbow trout (Oncorhynchus mykiss). Ferriere F, et al. **Dev Comp Immunol** 1996 Jul–Aug;20(4):273–83

5–HT2B receptor–mediated serotonin morphogenetic functions in mouse cranial neural crest and myocardiac cells. Choi DS, et al. **Development** 1997 May;124(9):1745–55

Serotonin–immune interactions in major depression: lower serum tryptophan as a marker of an immune–inflammatory response. Maes M, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):154–61

Neurotensin excitation of serotonergic neurons in the dorsal raphe nucleus of the rat in vitro. Jolas T, et al. **Eur J Neurosci** 1996 Jan;8(1):153–61

Serotonin regulates gap junction coupling in the developing rat somatosensory cortex. Rörig B, et al. **Eur J Neurosci** 1996 Aug;8(8):1685–95

Cyclobenzaprine, a centrally acting muscle relaxant, acts on descending serotonergic systems. Kobayashi H, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):29–35

Central antinociceptive effects of mitragynine in mice: contribution of descending noradrenergic and serotonergic systems. Matsumoto K, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):75–81

Effect of maternal delta 9–tetrahydrocannabinol on developing serotonergic system. Molina–Holgado F, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):39–42

Serotonergic modulation of the mudpuppy (Necturus maculatus) locomotor pattern in vitro. Jovanović K, et al. **Exp Brain Res** 1996 Sep;111(1):57–67

Laminar development of the mouse barrel cortex: effects of neurotoxins against monoamines. Osterheld–Haas MC, et al. **Exp Brain Res** 1996 Jul;110(2):183–95

Central serotonergic and histaminergic modulation of peripheral inflammation and nociception in rats. Dumka VK, et al. **Indian J Physiol Pharmacol** 1996 Apr;40(2):163–6

Serotonin syndrome attributed to tramadol addition to paroxetine therapy. Egberts AC, et al. **Int Clin Psychopharmacol** 1997 May;12(3):181–2

Combined serotonin syndrome and hyponatraemia caused by a citalopram–buspirone interaction. Spigset O, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):61–3

Citalopram as an adjuvant in schizophrenia: further evidence for a serotonergic dimension in schizophrenia. Taiminen TJ, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):31–5

The augmented platelet intracellular calcium response to serotonin in anorexia nervosa but not bulimia may be due to subsyndromal depression. Berk M, et al. **Int J Eat Disord** 1997 Jul;22(1):57–63

Serotonin—one possible link between oxygen metabolism and the regulation of blood flow in the brain? Gustafsson U, et al. **Int J Microcirc Clin Exp** 1996 May–Jun;16(3):143–6

Serotoninergic drug–induced weight loss in carbohydrate craving obese patients. Toornvliet AC, et al. **Int J Obes Relat Metab Disord** 1996 Oct;20(10):917–20

Interrelationship of age, depression, and central serotonergic function: evidence from fenfluramine challenge studies. Lerer B, et al. **Int Psychogeriatr** 1996 Spring;8(1):83–102

Predictive value of tryptophan/large neutral amino acids ratio to antidepressant response. Lucini V, et al. **J Affect Disord** 1996 Jan 22;36(3–4):129–33

Brain serotonin depletion attenuates heatstroke–induced cerebral ischemia and cell death in rats. Kao TY, et al. **J Appl Physiol** 1996 Feb;80(2):680–4

Airway and tissue behavior during early response in sensitized rats: role of 5–HT and LTD4. Nagase T, et al. **J Appl Physiol** 1996 Feb;80(2):583–90

Pharmacology of serotonin as related to anesthesia. Gyermek L. **J Clin Anesth** 1996 Aug;8(5):402–25 (232 ref.)

The biological basis of panic disorder. Krystal JH, et al. **J Clin Psychiatry** 1996;57 Suppl 10:23–31; discussion 32–3 (76 ref.)

Behavior therapy and serotonin dysregulation [letter] Taylor S. **J Clin Psychiatry** 1997 Jul;58(7):323–4

Increased serotonin in the developing superior colliculus does not alter the number or distribution of retinotectal ganglion cells. Crnko TA, et al. **J Comp Neurol** 1996 Jan 15; 364(3):414–24

Differential distribution of (GABA)A receptor subunits on bulbospinal serotonergic and nonserotonergic neurons of the ventromedial medulla of the rat. Hama AT, et al. **J Comp Neurol** 1997 Aug 4;384(3):337–48

Serotonergic axonal contacts on identified cat trigeminal motoneurons and their correlation with medullary raphe nucleus stimulation. Nagase Y, et al. **J Comp Neurol** 1997 Aug 4;384(3):443–55

Pre– and postsynaptic sites for serotonin modulation of GABA–containing neurons in the shell region of the rat nucleus accumbens. Van Bockstaele EJ, et al. **J Comp Neurol** 1996 Jul 15;371(1):116–28

Distribution, quantification, and morphological characteristics of serotonin–immunoreactive cells of the supralemniscal nucleus (B9) and pontomesencephalic reticular formation in the rat. Vertes RP, et al. **J Comp Neurol** 1997 Feb 17;378(3):411–24

Direct regulation of mammalian reproductive organs by serotonin and melatonin. Sirotkin AV, et al. **J Endocrinol** 1997 Jul;154(1):1–5 (60 ref.)

Excitation of identified serotonergic neurons by escape command neurons in lobsters. Hörner M, et al. **J Exp Biol** 1997 Jul;200 (Pt 14):2017–33

Cyclic AMP levels, adenylyl cyclase activity, and their stimulation by serotonin quantified in intact neurons. Sudlow LC, et al. **J Gen Physiol** 1997 Sep;110(3):243–55

Role of serotonin in nephrotoxic serum nephritis in WKY rats. Kanai H, et al. **J Lab Clin Med** 1997 May; 129(5):557–66

Rat strain differences in the vulnerability of serotonergic nerve endings to neurotoxic damage by p–chloroamphetamine. Zhou D, et al. **J Neural Transm** 1996;103(12):1381–95

Regional differences of serotonin–mediated synaptic plasticity in the chicken spinal cord with development and aging. Chen L, et al. **J Neural Transplant Plast** 1997 Jan–Mar;6(1):41–8

Serotonergic modulation of photically induced increase in melatonin receptor density and Fos immunoreactivity in the suprachiasmatic nuclei of the rat. Recio J, et al. **J Neuroendocrinol** 1996 Nov;8(11):839–45

Cytokines are increased in the rat hippocampus after serotonergic neuron degeneration and upregulate the expression of GDH, an enzyme involved in glutamate detoxification. Hardin–Pouzet H, et al. **J Neuroimmunol** 1996 Sep;69(1–2):117–22

Serotonergic neurotransmission in the spinal cord and motor cortex of patients with motor neuron disease and controls: quantitative autoradiography for 5–HT1a and 5–HT2 receptors. Forrest V, et al. **J Neurol Sci** 1996 Aug;139 Suppl:83–90

Ionic currents of isolated retinal pacemaker neurons: projected daily phase differences and selective enhancement by a phase–shifting neurotransmitter. Barnes S, et al. **J Neurophysiol** 1997 Jun;77(6):3075–84

Order of application determines the interaction between phorbol esters and GTP–gamma–S in dorsal raphe neurons: evidence that the effect of 5–HT is modified upstream of the G protein Ca channel interaction. Chen Y, et al. **J Neurophysiol** 1997 May;77(5):2697–703

Serotonin modulates voltage–dependent calcium current in Necturus taste cells. Delay RJ, et al. **J Neurophysiol** 1997 May;77(5):2515–24

Multiple effects of serotonin on membrane properties of trigeminal motoneurons in vitro. Hsiao CF, et al. **J Neurophysiol** 1997 Jun;77(6):2910–24

Serotonergic modulation of a voltage–gated calcium current in parapodial swim muscle from Aplysia brasiliana. Laurienti PJ, et al. **J Neurophysiol** 1997 Mar;77(3):1496–502

Physiological identification of pontomedullary serotonergic neurons in the rat. Mason P. **J Neurophysiol** 1997 Mar; 77(3):1087–98

Dual–component excitatory amino acid–mediated responses in trigeminal motoneurons and their modulation by serotonin in vitro. Trueblood PR, et al. **J Neurophysiol** 1996 Oct;76(4):2461–73

Central pattern generator interneurons are targets for the modulatory serotonergic cerebral giant cells in the feeding system of Lymnaea. Yeoman MS, et al. **J Neurophysiol** 1996 Jan;75(1):11–25

The role of serotonin in the pathophysiology and treatment of schizophrenia. Abi–Dargham A, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter;9(1):1–17 (243 ref.)

The neuroanatomy of 5–HT dysregulation and panic disorder. Grove G, et al. **J Neuropsychiatry Clin Neurosci** 1997 Spring;9(2):198–207 (62 ref.)

Impulsivity and serotonergic function in compulsive personality disorder. Stein DJ, et al. **J Neuropsychiatry Clin Neurosci** 1996 Fall;8(4):393–8

Both neuropeptide Y and serotonin are necessary for entrainment of circadian rhythms in mice by daily treadmill running schedules. Marchant EG, et al. **J Neurosci** 1997

Oct 15;17(20):7974–87
Mediation by protein kinases C and A of Go–linked slow responses of enteric neurons to 5–HT. Pan H, et al. **J Neurosci** 1997 Feb 1;17(3):1011–24
Postnatal development of serotonergic innervation, 5–HT1A receptor expression, and 5–HT responses in rat motoneurons. Talley EM, et al. **J Neurosci** 1997 Jun 1; 17(11):4473–85
Serotonergic receptors as targets for pharmacotherapy. Kirk EE, et al. **J Neurosci Nurs** 1997 Jun;29(3):191–7 (61 ref.)
Serotonergic function of aging hippocampal CA3 pyramidal neurons: electrophysiological assessment following administration of 5,7–dihydroxytryptamine in the fimbria–fornix and cingulum bundle. Dugar A, et al. **J Neurosci Res** 1997 Jan 1;47(1):58–67
Involvement of prostaglandins and 5–hydroxytryptamine in the contractile effect of platelet–activating factor in rat isolated gastric corpus. Martínez–Cuesta MA, et al. **J Pharm Pharmacol** 1996 Sep;48(9):955–8
Central serotonergic systems in the spontaneously hypertensive and Lewis rat strains that differ in the elevated plus–maze test of anxiety. Kulikov A, et al. **J Pharmacol Exp Ther** 1997 May;281(2):775–84
Monoaminergic substrates underlying cocaine–induced enhancement of somatosensory–evoked discharges in rat barrel field cortical neurons. Waterhouse BD, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):582–92
Differential effects of protein kinase C activation on 5–HT1A receptor coupling to Ca2+ and K+ currents in rat serotonergic neurones. Chen Y, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):129–37
Pharmacological dissociation of different forms of synaptic plasticity in the marine mollusc Aplysia. Emptage NJ, et al. **J Physiol Paris** 1996;90(5–6):385–6
Limbic circuits and monoamine receptors: dissecting the effects of antipsychotics from disease processes. Joyce JN, et al. **J Psychiatr Res** 1997 Mar–Apr;31(2):197–217 (70 ref.)
Perspectives on the role of serotonergic mechanisms in the pharmacology of schizophrenia [letter] Seibyl JP. **J Psychopharmacol (Oxf)** 1997;11(2):188–9
Contractility changes of the deep dorsal penile vein due to serotonin. Esen AA, et al. **J Urol** 1997 Jul;158(1):234–7
Facilitatory and inhibitory effects of harmaline on the tryptophan–induced 5–hydroxytryptamine syndrome and body temperature changes in pargyline–pretreated rats. Abdel–Fattah AF, et al. **Jpn J Pharmacol** 1996 Sep; 72(1):39–47
Autocrine/paracrine control of renal phosphate transport. Friedlander G, et al. **Kidney Int Suppl** 1996 Dec;57:S148–53 (73 ref.)
Relapse of depression after rapid depletion of tryptophan [see comments] Smith KA, et al. **Lancet** 1997 Mar 29; 349(9056):915–9. Comment in: Lancet 1997 May 24;349(9064):1553–4. Comment in: Lancet 1997 Jun 21;349(9068):1840–1.
Chronic alcoholism in the absence of Wernicke–Korsakoff syndrome and cirrhosis does not result in the loss of serotonergic neurons from the median raphe nucleus. Baker KG, et al. **Metab Brain Dis** 1996 Sep;11(3):217–27
CNTF induces raphe neuronal precursors to switch from a serotonergic to a cholinergic phenotype in vitro. Rudge JS, et al. **Mol Cell Neurosci** 1996 Mar;7(3):204–21
Thyroid parafollicular cells. An accessible model for the study of serotonergic neurons. Russo AF, et al. **Mol Neurobiol** 1996 Dec;13(3):257–76 (132 ref.)
5–hydroxytryptamine–moduline, a new endogenous cerebral peptide, controls the serotonergic activity via its specific interaction with 5–hydroxytryptamine1B/1D receptors. Massot O, et al. **Mol Pharmacol** 1996 Oct;50(4):752–62
Genetically engineered neural transmission. Son JH, et al. **Mol Psychiatry** 1997 Jan;2(1):26–31 (44 ref.)
Constitutive expression of calmodulin–binding phosphoprotein GAP–43 in rat serotonergic and noradrenergic cell groups which project to the spinal cord. Wotherspoon G, et al. **Neurochem Res** 1997 Aug; 22(8):985–93
Participation of opioid and serotoninergic systems in prolactin secretion induced by hypothalamic action of estradiol. Carón RW, et al. **Neuroendocrinology** 1996 Aug; 64(2):124–30
5–Hydroxytryptamine and functional bowel disorders. Sanger GJ. **Neurogastroenterol Motil** 1996 Dec;8(4):319–31 (145 ref.)
Myoglobinuria, malignant hyperthermia, neuroleptic malignant syndrome and serotonin syndrome. Bertorini TE. **Neurol Clin** 1997 Aug;15(3):649–71 (193 ref.)
Identification of 5–HT receptor sub–types in a homogeneous population of presumptive serotoninergic neurones. Jackson ZE, et al. **Neuropharmacology** 1997 Apr–May; 36(4–5):543–8
Modulation of IH by 5–HT in neonatal rat motoneurones in vitro: mediation through a phosphorylation independent action of cAMP. Larkman PM, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):721–33
The spin trap reagent PBN attenuates degeneration of 5–HT neurones in rat brain induced by p–chloroamphetamine but not fenfluramine. Murray TK, et al. **Neuropharmacology** 1996;35(11):1615–20
Serotonin modulates high–voltage–activated Ca2+ channels in rat ventromedial hypothalamic neurons. Rhee JS, et al. **Neuropharmacology** 1996;35(8):1093–100
Importance of h5–HT1B receptor selectivity for 5–HT terminal autoreceptor activity: an in vivo microdialysis study in the freely–moving guinea–pig. Roberts C, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):549–57
Serotonin and dopamine as mediators of sensation seeking behavior. Netter P, et al. **Neuropsychobiology** 1996; 34(3):155–65
Clarifications on the effects of 5–HT1A agonists and selective 5–HT reuptake inhibitors on the 5–HT system [letter; comment] Blier P, et al. **Neuropsychopharmacology** 1996 Aug;15(2):213–6. Comment on: Neuropsychopharmacology 1996 Jan;14(1):19–25.
Fetal raphe transplants reduce seizure severity in serotonin–depleted GEPRs. Clough R, et al. **Neuroreport** 1996 Dec 20;8(1):341–6
Neonatal serotonin depletion modifies development but not plasticity in rat barrel cortex. Turlejski K, et al. **Neuroreport** 1997 May 27;8(8):1823–8
Interactions between the serotoninergic and noradrenergic systems of the brain and their role in the regulation of animal behavior. Semenova TP, et al. **Neurosci Behav Physiol** 1997 May–Jun;27(3):280–2
Serotonergic mechanisms in neuroleptic–induced catalepsy in the rat. Wadenberg ML. **Neurosci Biobehav Rev** 1996 Summer;20(2):325–39 (135 ref.)
Serotonin and human information processing: fluvoxamine can improve reaction time performance. Hasbroucq T, et al. **Neurosci Lett** 1997 Jul 4;229(3):204–8
The dorsal facial area of the medulla in cats: inhibitory action of serotonin on glutamate release in regulating common carotid blood flow. Li HT, et al. **Neurosci Lett** 1996 Jun 7;210(3):193–6
Serotonin and acetylcholine are crucial to maintain hippocampal synapses and memory acquisition in rats. Matsukawa M, et al. **Neurosci Lett** 1997 Jul 11;230(1):13–6
Density ratio of dopaminergic versus serotonergic cells correlates with cone–to–rod ratio in teleost retinas. Negishi K, et al. **Neurosci Lett** 1997 Mar 28;225(1):37–40
Alteration of serotonergic innervation in the suprachiasmatic nucleus of the rat following removal of input fibers from retina and lateral geniculate nucleus. Ueda S, et al. **Neurosci Lett** 1996 Jun 21;211(2):97–100
Fos expression in serotonergic midbrain neurons projecting to the paraventricular nucleus of hypothalamus after noxious stimulation of the stomach: a triple labeling study in the rat. Dong YX, et al. **Neurosci Res** 1997 Feb; 27(2):155–60
Activation of serotonergic and noradrenergic neurotransmission in the rat hippocampus after peripheral administration of bacterial endotoxin: involvement of the cyclo–oxygenase pathway. Linthorst AC, et al. **Neuroscience** 1996 Jun;72(4):989–97
A confocal microscopic survey of serotoninergic axons in the lumbar spinal cord of the rat: co–localization with glutamate decarboxylase and neuropeptides. Maxwell L, et al. **Neuroscience** 1996 Nov;75(2):471–80
Quantitative and morphometric data indicate precise cellular interactions between serotonin terminals and postsynaptic targets in rat substantia nigra. Moukhles H, et al. **Neuroscience** 1997 Feb;76(4):1159–71
Developmental changes in the effects of serotonin and N–methyl–D–aspartate on intrinsic membrane properties of embryonic chick motoneurons. Muramoto T, et al. **Neuroscience** 1996 Nov;75(2):607–18
Methylenedioxymethamphetamine–induced inhibition of neuronal firing in the nucleus accumbens is mediated by both serotonin and dopamine. Obradovic T, et al. **Neuroscience** 1996 Sep;74(2):469–81
Evidence for serotonin sensitivity of adult rat spinal axons: studies using randomized double pulse stimulation. Saruhashi Y, et al. **Neuroscience** 1997 Sep;80(2):559–66
Single–unit responses of serotonergic dorsal raphe neurons to specific motor challenges in freely moving cats. Veasey SC, et al. **Neuroscience** 1997 Jul;79(1):161–9
Neurotransmission by neurons that use serotonin, noradrenaline, glutamate, glycine, and gamma–aminobutyric acid in the normal and injured spinal cord. Shapiro S. **Neurosurgery** 1997 Jan;40(1):168–76; discussion 177 (109 ref.)
Cracking the riddle of cancer anorexia. Laviano A, et al. **Nutrition** 1996 Oct;12(10):706–10 (54 ref.)
Lumbar transplants of immortalized serotonergic neurons alleviate chronic neuropathic pain. Eaton MJ, et al. **Pain** 1997 Aug;72(1–2):59–69
The histaminergic, but not the serotoninergic, system mediates amylin's anorectic effect. Lutz TA, et al. **Peptides** 1996;17(8):1317–22
alpha2–Adrenoceptor antagonists reverse the 5–HT2 receptor antagonist suppression of head–twitch behavior in mice. Matsumoto K, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):417–22
The behavioral effects of NMDA antagonists in serotonin depleted rats. Płaźnik A, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):159–66
Drug–drug discrimination: stimulus properties of drugs of abuse upon a serotonergic–dopaminergic continuum. Schechter MD. **Pharmacol Biochem Behav** 1997 Jan; 56(1):89–96
Cinitapride protects against ethanol–induced gastric mucosal injury in rats: role of 5–hydroxytryptamine, prostaglandins and sulfhydryl compounds. Alarcón–de–la–Lastra Romero C, et al. **Pharmacology** 1997 Apr;54(4):193–202
Serotonin and opiate involvement in the antinociceptive effect of acetylsalicylic acid. Pini LA, et al. **Pharmacology** 1997 Feb;54(2):84–91
Serotonin syndrome after lithium add–on medication to paroxetine. Sobanski T, et al. **Pharmacopsychiatry** 1997 May;30(3):106–7
Serotonergic stimulation and nonphotic phase–shifting in hamsters. Bobrzynska KJ, et al. **Physiol Behav** 1996 Feb; 59(2):221–30
Changes in responsiveness to serotonin on rat ventromedial hypothalamic neurons after food deprivation. Nishimura F, et al. **Physiol Behav** 1996 Jul;60(1):7–12
Cyclosporine A affects serotonergic mechanisms in uremic rats. Krygicz D, et al. **Pol J Pharmacol** 1996 May–Jun; 48(3):351–4
5–HT systems and anxiety: multiple mechanisms in the elevated X–maze. McCreary AC, et al. **Pol J Pharmacol** 1996 Jan–Feb;48(1):1–12 (87 ref.)
Serotonin, sex, and psychiatric illness [see comments] Heninger GR. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):4823–4 (26 ref.). Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):5308–13.
Serotonin modulates retinotectal and corticotectal convergence in the superior colliculus. Mooney RD, et al. **Prog Brain Res** 1996;112:57–69
Buspirone, a serotonergic 5–HT1A agonist, is active in cerebellar ataxia. A new fact in favor of the serotonergic theory of ataxia. Trouillas P, et al. **Prog Brain Res** 1997; 114:589–99
Serotonin in the regulation of brain microcirculation. Cohen Z, et al. **Prog Neurobiol** 1996 Nov;50(4):335–62 (160 ref.)
The effects of methylenedioxymethamphetamine (MDMA, "Ecstasy") on monoaminergic neurotransmission in the central nervous system. White SR, et al. **Prog Neurobiol** 1996 Aug;49(5):455–79 (136 ref.)
The effects of age, gender, and season on serotonergic function in healthy subjects. Golden RN, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Nov; 20(8):1315–23
Acetylcholine releases of mesopontine PGO–on cells in the lateral geniculate nucleus in sleep–waking cycle and serotonergic regulation. Kodama T, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1213–27
Studies of serotonin function in anorexia nervosa. Brewerton TD, et al. **Psychiatry Res** 1996 Apr 16;62(1):31–42
Does central serotonergic function correlate inversely with aggression? A study using D–fenfluramine in healthy subjects. Cleare AJ, et al. **Psychiatry Res** 1997 Mar 24; 69(2–3):89–95
Serotonergic ethanol effects and auditory evoked dipole activity in alcoholic and healthy subjects. Hegerl U, et al. **Psychiatry Res** 1996 Jun 26;63(1):47–55
Platelet serotonergic indices in major depression: up–regulation of 5–HT2A receptors unchanged by antidepressant treatment. Hrdina PD, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):73–85
Faulty cortisol/serotonin interplay. Psychopathological and biological characterisation of a new, hypothetical depression subtype (SeCA depression). van Praag HM. **Psychiatry Res** 1996 Dec 20;65(3):143–57 (175 ref.)
Serotonin function in panic disorder: intravenous administration of meta–chlorophenylpiperazine. Wetzler S, et al. **Psychiatry Res** 1996 Sep 27;64(2):77–82
Increased plasma concentrations of the 5–HT precursor amino acid tryptophan and other large neutral amino acids in violent criminals. Eriksson T, et al. **Psychol Med** 1997 Mar;27(2):477–81
Blunted serotonin–mediated activation of the hypothalamic–pituitary–adrenal axis in chronic fatigue syndrome. Dinan TG, et al. **Psychoneuroendocrinology** 1997 May;22(4):261–7
Inhibition of 5–HT cell firing in the DRN by non–selective 5–HT reuptake inhibitors: studies on the role of 5–HT1A autoreceptors and noradrenergic mechanisms. Gartside SE, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):261–8
Antidepressant treatment in helpless rats: effect on the electrophysiological activity of raphe dorsalis serotonergic neurons. Maudhuit C, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):269–75
Additive deficits in the choice accuracy of rats in the delayed non–matching to position task after cholinolytics and serotonergic lesions are non–mnemonic in nature. Ruotsalainen S, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(4):303–12
Effect of destruction of the 5–hydroxytryptaminergic pathways on temporal memory: quantitative analysis with a delayed interval bisection task. al–Zahrani SS, et al. **Psychopharmacology (Berl)** 1997 Jan;129(1):48–55
Serotonin in early–onset alcoholism. Virkkunen M, et al. **Recent Dev Alcohol** 1997;13:173–89 (117 ref.)
Hypoxia–induced long–term facilitation of respiratory activity is serotonin dependent. Bach KB, et al. **Respir Physiol** 1996 Jul;104(2–3):251–60
Serotonin, aging and cognitive functions of the hippocampus. Richter–Levin G, et al. **Rev Neurosci** 1996 Apr–Jun; 7(2):103–13 (96 ref.)
Aggressive behaviour and platelet 3H–paroxetine binding in schizophrenia. Maguire K, et al. **Schizophr Res** 1997 Jan 17;23(1):61–7
Contributions of raphe–cortical and thalamocortical axons to the transient somatotopic pattern of serotonin immunoreactivity in rat cortex. Bennett–Clarke CA, et al.

Somatosens Mot Res 1997;14(1):27–33

Role of serotonin for scoliotic deformity in pinealectomized chicken. Machida M, et al. **Spine** 1997 Jun 15; 22(12):1297–301

Excitatory actions of serotonin on GABAergic neurons of the medial septum and diagonal band of Broca. Alreja M. **Synapse** 1996 Jan;22(1):15–27

Serotonergic lesions alter cocaine-induced locomotor behavior and stress-activation of the mesocorticolimbic dopamine system. Morrow BA, et al. **Synapse** 1996 Jul; 23(3):174–81

Autoregulatory properties of dorsal raphe 5-HT neurons: possible role of electrotonic coupling and 5-HT1D receptors in the rat brain. Piñeyro G, et al. **Synapse** 1996 Jan;22(1):54–62

Characterization of substance P release from the intermediate area of rat thoracic spinal cord. Yang L, et al. **Synapse** 1996 Aug;23(4):265–73

5-HT neurones—bursting with information? [letter; comment] Hajós M, et al. **Trends Neurosci** 1997 Jun; 20(6):244. Comment on: Trends Neurosci 1997 Jan;20(1):38–43.

[Is it feasible to develop a 5-HT basis for the treatment of depression?] Hamon M. **Encephale** 1995 Dec;21 Spec No 4:27–32 (26 ref.) **(Fre)**

[Psychobiology of suicide] Linnoïla M. **Encephale** 1996 Dec; 22 Spec No 4:10–4 **(Fre)**

[Migraine and serotonin: mechanisms and treatments] Jacquy J. **J Pharm Belg** 1996 Jan–Feb;51(1):43–6 (0 ref.) **(Fre)**

[Depressive stupor—malignant neuroleptic syndrome—serotonin syndrome. A case contribution to a difficult differential diagnosis] König F, et al. **Nervenarzt** 1996 May;67(5):407–12 (Eng. Abstr.) **(Ger)**

[The tryptophan depletion test. Basic principles and clinical relevance] Neumeister A, et al. **Nervenarzt** 1997 Jul; 68(7):556–62 (45 ref.) (Eng. Abstr.) **(Ger)**

[The role of endogenous serotonin in interdigestive gastric contraction] Haga N, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):489–92 **(Jpn)**

[Role of serotonin in emesis] Minami M, et al. **Nippon Yakurigaku Zasshi** 1996 Nov;108(5):233–42 (50 ref.) (Eng. Abstr.) **(Jpn)**

[Serotonin—its significance in physiology and pathology of the eye] Andrzejewska-Buczko J, et al. **Klin Oczna** 1996 Feb;98(2):151–4 (42 ref.) (Eng. Abstr.) **(Pol)**

[The mechanisms of serotonin participation in the smooth-muscle reactions of the trachea] Fedin AN, et al. **Fiziol Zh Im I M Sechenova** 1996 Aug–Sep;82(8–9):80–6 (Eng. Abstr.) **(Rus)**

[The participation of the serotonin link in the neurochemical mechanism of transcranial electroanalgesia] Lebedev VP, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):36–43 (Eng. Abstr.) **(Rus)**

[The role of serotonin in the effects of cholecystokinin-8 on memory in rats] Semenova TP, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul;82(7):11–7 (Eng. Abstr.) **(Rus)**

[The effect of the serotonin level on the postsynaptically induced potentiation of neuronal responses in the snail] Malyshev AIu, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun; 47(3):553–62 (Eng. Abstr.) **(Rus)**

[Serotonin in genetically determined types of defensive behavior] Popova NK. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Mar–Apr; 47(2):350–7 (46 ref.) (Eng. Abstr.) **(Rus)**

[Serotonergic function in endogeneity of depression] González-Pinto A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1997 Mar–Apr;25(2):73–8 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Multiphoton-excited visible emission by serotonin solutions. Shear JB, et al. **Photochem Photobiol** 1997 Jun;65(6):931–6

SECRETION

Acute administration of a tryptophan-free amino acid mixture decreases 5-HT release in rat hippocampus in vivo. Stancampiano R, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R991–4

Real time electrochemical detection of 5-HT/insulin secretion from single pancreatic islets: effect of glucose and K+ depolarization. Barbosa RM, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):100–4

Adrenoceptor- and cholinoceptor-mediated mechanisms in the regulation of 5-hydroxytryptamine release from isolated tracheae of newborn rabbits. Freitag A, et al. **Br J Pharmacol** 1996 Sep;119(1):91–8

Immunocytochemical and morphometric studies of gastrin-, somatostatin- and serotonin-producing cells in the stomach and duodenum of patients with acid peptic disorders. Yacoub WR, et al. **Can J Gastroenterol** 1996 Oct; 10(6):395–400

5-hydroxytryptamine release into human jejunum by cholera toxin. Bearcroft CP, et al. **Gut** 1996 Oct;39(4):528–31

Exocytotic release of vasoative intestinal polypeptide and serotonin from mucosal nerve fibres and endocrine cells of the intestine of the goldfish (Carassius auratus) and the tilapia (Oreochromis mossambicus): an ultrastructural study. Kiliaan AJ, et al. **Histochem J** 1997 Jan;29(1):45–51

Comparison of histamine and serotonin release from rat peritoneal mast cells induced by nerve growth factor and compound 48/80. Ferjan I, et al. **Inflamm Res** 1997 Mar; 46 Suppl 1:S23–4

Effects of repeated administration of 3,4-methylenedioxymethamphetamine on 5-hydroxytryptamine neuronal activity and release in the rat brain in vivo. Gartside SE, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):277–83

The potassium channel blockers 4-aminopyridine and tetraethylammonium increase the spontaneous basal release of [3H]5-hydroxytryptamine in rat hippocampal slices. Schechter LE. **J Pharmacol Exp Ther** 1997 Jul; 282(1):262–70

Characterization of 5-hydroxytryptamine release from isolated rabbit and rat trachea: the role of neuroendocrine epithelia cells and mast cells. Freitag A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):55–63

Effects of long-term treatment with the alpha 2-adrenoceptor antagonist mirtazapine on 5-HT neurotransmission. Haddjeri N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan; 355(1):20–9

Functional regulation by dopamine receptors of serotonin release from the rat hippocampus: in vivo microdialysis study. Matsumoto M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):621–9

Somatosensory afferent inputs release 5-HT and NA from the spinal cord. Men D, et al. **Neurochem Res** 1996 Dec; 21(12):1515–9

Red wine, aspirin and platelet function [letter] Rotondo S, et al. **Thromb Haemost** 1996 Nov;76(5):818–9

Different requirement of intracellular calcium and protein kinase C for arachidonic acid release and serotonin secretion in cathepsin G-activated platelets. Rotondo S, et al. **Thromb Haemost** 1997 Aug;78(2):919–25

[The involvement of protein kinase C isozymes in activation of phospholipase D and secretion of serotonin in rat basophilic leukemia cells] Ojio K, et al. **Arerugi** 1995 Dec; 44(12):1410–7 (Eng. Abstr.) **(Jpn)**

[Serotonin-producing cells in the small intestine of hibernating animals during periods of hypothermia in the middle of winter and before spring awakening] Vinogradova MS, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):346–8 **(Rus)**

[A malignant serotonin-producing carcinoid of the pancreas] Gubergrits NB, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):174–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Eosinophilia myalgia syndrome. The role of contaminants, the role of serotonergic metabolism set up. Nicolodi M, et al. **Adv Exp Med Biol** 1996;398:351–7

Stimulatory effects of L-5-hydroxytryptophan on postdexamethasone beta-endorphin levels in major depression. Maes M, et al. **Neuropsychopharmacology** 1996 Oct;15(4):340–8

Issues in the monopharmacotherapy and polypharmacotherapy of obsessive-compulsive disorder. Laird LK. **Psychopharmacol Bull** 1996;32(4):569–78 (83 ref.)

Serotonin as a useful parameter for cold and warm ischemic injury in small bowel transplantation. Kaihara S, et al. **Transplantation** 1997 Aug 15;64(3):405–10

TOXICITY

Inhibitory effect of heparin on serotonin-induced hyperplasia and hypertrophy of smooth muscle cells. Lee SL, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):78–83

Basal and LH stimulated testosterone secretion by rat Leydig cells in primary culture under an influence of serotonin. Pieścikowska I, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:79–80

URINE

Hyperemesis gravidarum: is serotonin implicated? Borgeat A, et al. **Am J Obstet Gynecol** 1997 Feb;176(2):476–7

Effects of frusemide on the urinary excretion of dopamine and 5-hydroxytryptamine in normal man. Li Kam Wa TC, et al. **Br J Clin Pharmacol** 1996 Oct;42(4):522–4

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: endogenous 5-hydroxytryptamine, 5-HT1A receptors and antinatriuresis during high sodium intake. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar; 117(6):1193–8

Serotonin and autism: biochemical and molecular biology features. Hérault J, et al. **Psychiatry Res** 1996 Nov 1; 65(1):33–43

SEROTONIN ACETYLTRANSFERASE see **ARYLAMINE ACETYLTRANSFERASES**

SEROTONIN AGENTS

Serotonin. Proceedings of the 3rd IUPHAR satellite meeting on serotonin. Chicago, Illinois, July 30–August 3, 1994. **Behav Brain Res** 1996;73(1–2):v, 1–394

[Ecstasy: psychostimulant, hallucinogen and toxic substance] Burnat P, et al. **Presse Med** 1996 Sep 14;25(26):1208–12 (25 ref.) (Eng. Abstr.) **(Fre)**

ADMINISTRATION & DOSAGE

Repeated administration of 3,4-methylenedioxymethamphetamine augments cocaine's action on dopamine in the nucleus accumbens: a microdialysis study. Morgan AE, et al. **Eur J Pharmacol** 1997 Jul 16;331(1):R1–3

Drug craving and other negative reactions after abrupt substitution of nefazodone for other serotonergic agents [letter] Castañeda R, et al. **J Clin Psychiatry** 1996 Oct; 57(10):485–6

ADVERSE EFFECTS

The serotonin syndrome. LoCurto MJ. **Emerg Med Clin North Am** 1997 Aug;15(3):665–75 (36 ref.)

The serotonin syndrome and psychosis-like side-effects of fluvoxamine clinical use—an estimation of incidence. Ebert D, et al. **Eur Neuropsychopharmacol** 1997 Feb;7(1):71–4

CHEMICAL SYNTHESIS

Structure-affinity relationship studies on D-2/5-HT1A receptor ligands. 4-(2-Heteroarylethyl)-1-arylpiperazines. Dukić S, et al. **Arzneimittelforschung** 1997 Mar; 47(3):239–43

Synthesis and affinities for dopamine (D2) and 5-hydroxytryptamine (5-HT2A) receptors of 1-(benzoylpropyl)-4-(1-oxocycloalkyl-2-ethyl)-piperazines as cyclic butyrophenone derivatives. Raviña E, et al. **Chem Pharm Bull (Tokyo)** 1996 Mar;44(3):534–41

Application of a novel phenylpiperazine formation reaction to the radiosynthesis of a model fluorine-18-labeled radiopharmaceutical (18FTFMPP). Mishani E, et al. **Nucl Med Biol** 1997 Apr;24(3):269–73

Some derivatives of 3-amino-2-oxazolidinone influencing neurotransmission of dopamine and serotonin. Chilmonczyk Z, et al. **Pharmazie** 1997 Feb;52(2):152–7

CONTRAINDICATIONS

Potential hazard of serotonin syndrome associated with dexfenfluramine hydrochloride (Redux) [letter] Schenck CH, et al. **JAMA** 1996 Oct 16;276(15):1220–1

DIAGNOSTIC USE

Plasma prolactin response to d-fenfluramine in obsessive-compulsive patients before and after fluvoxamine treatment. Monteleone P, et al. **Biol Psychiatry** 1997 Aug 1;42(3):175–80

Radioligands for PET studies of central 5-HT receptors and re-uptake sites—current status. Pike VW. **Nucl Med Biol** 1995 Nov;22(8):1011–8 (38 ref.)

Evaluation of radioiodo-4-amino-N-[1-[3-(4-fluorophenoxy)-propyl]-4- methyl-4-piperidinyl]-5-iodo-2-methoxybenzamide as a potential 5HT2 receptor tracer for SPE(C)T. Terriere D, et al. **Nucl Med Biol** 1995 Nov;22(8):1005–5

PHARMACOLOGY

Detection of serotonergic and noradrenergic antidepressants in the rat forced swimming test: the effects of water depth. Detke MJ, et al. **Behav Brain Res** 1996;73(1–2):43–6 (20 ref.)

Effect of d-fenfluramine on the local immune response to the opportunistic microbial pathogen Candida albicans. Mathews HL, et al. **Behav Brain Res** 1996;73(1–2):369–74

Increased brain serotonin function in men with chronic fatigue syndrome. Sharpe M, et al. **BMJ** 1997 Jul 19; 315(7101):164–5

A study of the neurotoxic effect of MDMA ('ecstasy') on 5-HT neurones in the brains of mothers and neonates following administration of the drug during pregnancy. Colado MI, et al. **Br J Pharmacol** 1997 Jun;121(4):827–33

Characterization of 5-hydroxytryptamine receptors mediating contractions in basilar arteries from stroke-prone spontaneously hypertensive rats. Nishimura Y. **Br J Pharmacol** 1996 Mar;117(6):1325–1333

Characterization of the contraction to 5-HT in the canine colon longitudinal muscle. Prins NH, et al. **Br J Pharmacol** 1997 Feb;120(4):714–20

Ability of 5-HT4 receptor ligands to modulate rat striatal dopamine release in vitro and in vivo. Steward LJ, et al. **Br J Pharmacol** 1996 Jan;117(1):55–62

Multiple 5-HT receptors in the guinea-pig superior cervical ganglion. Watkins CJ, et al. **Br J Pharmacol** 1996 Jan; 117(1):21–8

Effect of p-chlorophenylalanine (PCPA) on sleep and monoamines content in the brain of a lizard species. Huitrón-Reséndiz S, et al. **Brain Res** 1997 Jun 27; 761(1):19–24

Brain somatostatin depletion by cysteamine attenuates the penile erection induced by serotonergic and dopaminergic, but not by cholinergic, activation in rats. Matsuoka N, et al. **Brain Res** 1996 Aug 5;729(1):132–6

Microdialysis monitoring of variations in extracellular levels of serotonin, GABA and excitatory amino acids in the frontal cortex of awake rats in response to a single peripheral or central administration of dexfenfluramine. Rocher C, et al. **Brain Res** 1996 Oct 21;737(1–2):221–30

Preprotachykinin and preproenkephalin mRNA expression within striatal subregions in response to altered serotonin transmission. Walker PD, et al. **Brain Res** 1996 Sep 2;

732(1-2):25-35
Effects of histamine and 5-hydroxytryptamine on the growth rate of xenografted human bronchogenic carcinomas. Sheehan PF, et al. **Clin Exp Pharmacol Physiol** 1996 Jun-Jul;23(6-7):465-71
Age-dependent differences in the rat's conditioned defensive burying behavior: effect of 5-HT1A compounds. Lopez-Rubalcava C, et al. **Dev Psychobiol** 1996 Mar; 29(2):157-69
Effects of 5-HT3 receptor-selective agents on locomotor activity in rats following injection into the nucleus accumbens and the ventral tegmental area. Gillies DM, et al. **Eur J Pharmacol** 1996 May 6;303(1-2):1-12
Effects of serotonergic agents on the up-regulation of dopamine D2 receptors induced by haloperidol in rat striatum. Ishikane T, et al. **Eur J Pharmacol** 1997 Feb 26; 321(2):163-9
The role of 5-HT(1B/1D) receptors in the modulation of 5-hydroxytryptamine levels in the frontal cortex of the conscious guinea pig. Roberts C, et al. **Eur J Pharmacol** 1997 May 12;326(1):23-30
MDMA induced dopamine release in vivo: role of endogenous serotonin. Koch S, et al. **J Neural Transm** 1997; 104(2-3):135-46
Differential regulation by methylenedioxymethamphetamine of 5-hydroxytryptamine1A receptor density and mRNA expression in rat hippocampus, frontal cortex, and brainstem: the role of corticosteroids. Aguirre N, et al. **J Neurochem** 1997 Mar;68(3):1099-105
Serotonergic function of aging hippocampal CA3 pyramidal neurons: electrophysiological assessment following administration of 5,7-dihydroxytryptamine in the fimbria-fornix and cingulum bundle. Dugar A, et al. **J Neurosci Res** 1997 Jan 1;47(1):58-67
Effects of repeated administration of 3,4-methylenedioxymethamphetamine on 5-hydroxytryptamine neuronal activity and release in the rat brain in vivo. Gartside SE, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):277-83
Potential hazard of serotonin syndrome associated with dexfenfluramine hydrochloride (Redux) [letter] Schenck CH, et al. **JAMA** 1996 Oct 16;276(15):1220-1
Serotonergic mediation of fenfluramine discriminative stimuli in fawn-hooded rats. Schechter MD. **Life Sci** 1997; 60(6):PL83-90
Effect of 5,7-dihydroxytryptamine on audiogenic seizures in genetically epilepsy-prone rats. Statnick MA, et al. **Life Sci** 1996;59(21):1763-71
Effects of theophylline in p-chlorophenylalanine-treated mice in a light/dark test. Imaizumi M, et al. **Methods Find Exp Clin Pharmacol** 1996 Oct;18(8):513-20
Effect of p-chlorophenylalanine at moderate dosage on 5-HT and 5-HIAA concentrations in brain regions of control and p-chloroamphetamine treated rats. Datla KP, et al. **Neuropharmacology** 1996 Mar;35(3):315-20
Hormonal responses to d- and d,l-fenfluramine in healthy human subjects. Coccaro EF, et al. **Neuropsychopharmacology** 1996 Dec;15(6):595-607
Effects of the selective 5-HT2A receptor antagonist MDL 100,907 on MDMA-induced locomotor stimulation in rats. Kehne JH, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):116-24
Phentermine/fenfluramine decreases cocaine self-administration in rhesus monkeys. Glowa JR, et al. **Neuroreport** 1997 Apr 14;8(6):1347-51
Changes in vasoactive intestinal peptide mRNA levels in the rat suprachiasmatic nucleus following p-chlorophenylalanine (PCPA) treatment under light/dark conditions. Kawakami F, et al. **Neurosci Lett** 1995 Nov 24;200(3):171-4
Site-specific regulation of corticosteroid and serotonin receptor subtype gene expression in the rat hippocampus following 3,4-methylenedioxymethamphetamine: role of corticosterone and serotonin. Yau JL, et al. **Neuroscience** 1997 May;78(1):111-21
The stimulus effects of serotonergic hallucinogens in animals. Winter JC. **NIDA Res Monogr** 1994;146:157-82 (73 ref.)
Effects of (+)-fenfluramine on 3,4-methylenedioxymethamphetamine (MDMA) discrimination in rats. Baker LE, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):455-61
Combined pCPA and muscarinic antagonist treatment produces a deficit in rat water maze acquisition. Harder JA, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):61-5
Behavioral and biochemical alterations in median and dorsal raphe nuclei lesioned cats. Koprowska M, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):529-40
Naltrindole, a delta-opioid antagonist, blocks MDMA's ability to enhance pressing for rewarding brain stimulation. Reid LD, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):477-80
Serotonin is involved in the ACTH-induced reversal of hemorrhagic shock in anesthetized rats. Bazzani C, et al. **Pharmacology** 1996 Apr;52(4):207-15
Effects of p-chlorophenylalanine on reflexive and noncontact penile erections in male rats. Matsumoto T, et al. **Physiol Behav** 1997 Feb;61(2):165-8
Influence of serotonergic drugs on restraint stress induced analgesia. Korzeniewska I, et al. **Pol J Pharmacol** 1995 Sep-Oct;47(5):381-5
5-HT neuroendocrine function in major depression: prolactin and cortisol responses to D-fenfluramine. Park SB, et al. **Psychol Med** 1996 Nov;26(6):1191-6
On the elevated plus-maze the anxiolytic-like effects of the 5-HT(1A) agonist, 8-OH-DPAT, but not the anxiogenic-like effects of the 5-HT(1A) partial agonist, buspirone, are blocked by the 5-HT1A antagonist, WAY 100635. Collinson N, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):35-43
5-HT modulation of auditory and visual sensorimotor gating: I. Effects of 5-HT releasers on sound and light prepulse inhibition in Wistar rats. Kehne JH, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):95-106
Abnormal ACTH and prolactin responses to fenfluramine in rats exposed to single and multiple doses of MDMA. Poland RE, et al. **Psychopharmacology (Berl)** 1997 Jun; 131(4):411-9
Effects of dopamine antagonists in a two-way active avoidance procedure in rats: interactions with 8-OH-DPAT, ritanserin, and prazosin. Prinssen EP, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):191-7
Serotonergic modulation of the discriminative-stimulus effects of cocaine in squirrel monkeys. Schama KF, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):27-34
Behavioural and neurochemical characteristics of phentermine and fenfluramine administered separately and as a mixture in rats. Shoaib M, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):296-306
Effect of destruction of the 5-hydroxytryptaminergic pathways on behavioural timing and "switching" in a free-operant psychophysical procedure. al-Zahrani SS, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):346-52
Role of opioidergic and serotonergic mechanisms in cough and antitussives. Kamei J. **Pulm Pharmacol** 1996 Oct-Dec; 9(5-6):349-56 (67 ref.)
Quantitative RT-PCR distribution of serotonin 5-HT6 receptor mRNA in the central nervous system of control or 5,7-dihydroxytryptamine-treated rats. Gérard C, et al. **Synapse** 1996 Jul;23(3):164-73
The depletion of brain serotonin levels by para-chlorophenylalanine administration significantly alters the activity of midbrain dopamine cells in rats: an extracellular single cell recording study. Minabe Y, et al. **Synapse** 1996 Jan;22(1):46-53
[Prevention of immunosuppression in the stressed mice by changing the activity of the neuromediator systems] Idova GV, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):22-4 **(Rus)**

POISONING

Ecstasy, serotonin syndrome and the treatment of hyperpyrexia [letter; comment] Gillman PK. **Med J Aust** 1997 Jul 21;167(2):109, 111. Comment on: Med J Aust 1996 Jun 3;164(11):700. Comment on: Med J Aust 1997 Feb 3;166(3):165-6.

THERAPEUTIC USE

Use of serotonin selective pharmacotherapy in the treatment of alcohol dependence. Pettinati HM. **Alcohol Clin Exp Res** 1996 Oct;20(7 Suppl):23A-29A (46 ref.)
Hypothalamic-pituitary-adrenal axis in abdominal obesity: effects of dexfenfluramine. Boushaki FZ, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):461-6
The pharmacology of antimyoclonic drugs. Pranzatelli MR. **Clin Neurosci** 1995-96;3(4):246-52 (60 ref.)
Neither intranigral fluoxetine nor 5,7-dihydroxytryptamine alter audiogenic seizures in genetically epilepsy-prone rats. Statnick M, et al. **Eur J Pharmacol** 1996 Mar 28; 299(1-3):93-102
Role of serotonin drugs in the treatment of social phobia. Tancer ME, et al. **J Clin Psychiatry** 1997;58 Suppl 5:50-4 (39 ref.)
The role of serotonin in the pathophysiology and treatment of schizophrenia. Abi-Dargham A, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter;9(1):1-17 (243 ref.)
Serotonergic receptors as targets for pharmacotherapy. Kirk EE, et al. **J Neurosci Nurs** 1997 Jun;29(3):191-7 (61 ref.)
The addition of dexfenfluramine to fluoxetine in the treatment of obesity: a randomized clinical trial. Pedrinola F, et al. **Obes Res** 1996 Nov;4(6):549-54
Effect of d-fenfluramine on human experimental anxiety. Hetem LA, et al. **Psychopharmacology (Berl)** 1996 Oct; 127(3):276-82
[Migraine and serotonin: mechanisms and treatments] Jacquy J. **J Pharm Belg** 1996 Jan-Feb;51(1):43-6 (0 ref.) **(Fre)**

TOXICITY

Increased 5-HT1A receptor immunoreactivity in the rat hippocampus following 5,7-dihydroxytryptamine lesions in the cingulum bundle and fimbria-fornix. Patel TD, et al. **Behav Brain Res** 1996;73(1-2):319-23
In vivo evidence for free radical involvement in the degeneration of rat brain 5-HT following administration of MDMA ('ecstasy') and p-chloroamphetamine but not the degeneration following fenfluramine. Colado MI, et al. **Br J Pharmacol** 1997 Jul;121(5):889-900
The effect of unilateral neurotoxic lesions to serotonin fibres in the medial forebrain bundle on the metabolism of [3H]DOPA in the telencephalon of the living rat. Cumming P, et al. **Brain Res** 1997 Jan 30;747(1):60-9
The effect of N-methylation on fenfluramine's neurotoxic and pharmacologic actions. Fasciano J, et al. **Brain Res** 1997 Jul 25;763(2):182-90
Ipsilateral alterations in tryptophan hydroxylase activity in rat brain after hypothalamic 5,7-di-hydroxytryptamine lesion. Ljubić-Thibal V, et al. **Brain Res** 1996 Jun 17; 724(2):222-31
2,5-Bis-(glutathion-S-yl)-alpha-methyldopamine, a putative metabolite of (+/-)-3,4-methylenedioxyamphetamine, decreases brain serotonin concentrations. Miller RT, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):173-80
The abused drug MDMA (Ecstasy) induces programmed death of human serotonergic cells. Simantov R, et al. **FASEB J** 1997 Feb;11(2):141-6
Plastic responses of neonatal 5-hydroxytryptamine1B receptors to 5,7-dihydroxytryptamine lesions mapped by quantitative autoradiography. Pranzatelli MR, et al. **Int J Dev Neurosci** 1996 Aug;14(5):621-9
Effect of ascorbate and cysteine on the 3,4-methylenedioxymethamphetamine-induced depletion of brain serotonin. Gudelsky GA. **J Neural Transm** 1996; 103(12):1397-404
Rat strain differences in the vulnerability of serotonergic nerve endings to neurotoxic damage by p-chloroamphetamine. Zhou D, et al. **J Neural Transm** 1996;103(12):1381-95
The effect of several putative cognition enhancers on a water maze acquisition deficit produced by pCPA + scopolamine combination treatment. Harder JA, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):657-61

SEROTONIN AGONISTS

The meta-chlorophenylpiperazine challenge test in cocaine addicts: hormonal and psychological responses. Buydens-Branchey L, et al. **Biol Psychiatry** 1997 Jun 1; 41(11):1071-86
Antagonism by the 5-HT2A/C receptor agonist DOI of raclopride-induced catalepsy in the rat. Wadenberg ML, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):247-51
[Horton disease, vascular pain of the face and sumatriptan (letter)] Alla P, et al. **Rev Med Interne** 1996;17(12):1041-2 **(Fre)**

ADMINISTRATION & DOSAGE

Would any acute treatment for migraine demonstrate recurrence? Dahlöf C. **Cephalalgia** 1997 Jun;17 Suppl 17:17-9; discussion 19-20
Sumatriptan in the acute treatment of migraine without aura: efficacy of 50-mg dose. Moschiano F, et al. **Headache** 1997 Jul-Aug;37(7):421-3
Intravenous chlorpromazine versus intramuscular sumatriptan for acute migraine. Kelly AM, et al. **J Accid Emerg Med** 1997 Jul;14(4):209-11
Treatment of palatal myoclonus with sumatriptan. Scott BL, et al. **Mov Disord** 1996 Nov;11(6):748-51
Similarities in the pharmacology of spontaneous and DOI-induced head-shakes suggest 5HT2A receptors are active under physiological conditions. Dursun SM, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):198-205
[Subcutaneous sumatriptan in cluster headache: impossible mission (letter)] Pascual J, et al. **Med Clin (Barc)** 1997 Feb 22;108(7):278-9 **(Spa)**

ADVERSE EFFECTS

Co-administration of fluoxetine and sumatriptan: the Canadian experience. Joffe RT, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):551-2
Sumatriptan and panic-like symptoms [letter] Loi V, et al. **Am J Psychiatry** 1996 Nov;153(11):1505
Prolonged marijuana-like dysphoria after subcutaneous sumatriptan [letter] Bakshi R, et al. **Ann Pharmacother** 1996 Jun;30(6):683
Clozapine treatment of persistent paroxysmal dyskinesia associated with concomitant paroxetine and sumatriptan use. Abraham JT, et al. **Biol Psychiatry** 1997 Jul 15; 42(2):144-6
Are 5-HT1A receptors involved in the control of reflex bradycardia induced by intracoronary injection of contrast medium in humans? Hatab SA, et al. **Braz J Med Biol Res** 1996 Jun;29(6):769-72
Safety, tolerability, and pharmacokinetics of sumatriptan suppositories following single and multiple doses in healthy volunteers. Kunka RL, et al. **Cephalalgia** 1997 Jun; 17(4):532-40
Serotonin syndrome complicating migraine pharmacotherapy. Mathew NT, et al. **Cephalalgia** 1996 Aug;16(5):323-7
Safety, tolerability, and pharmacokinetics of sumatriptan in healthy subjects following ascending single intranasal doses and multiple intranasal doses. Moore KH, et al. **Cephalalgia** 1997 Jun;17(4):541-50
Headache induced by serotonergic agonists--a key to the interpretation of migraine pathogenesis? Panconesi A, et al. **Cephalalgia** 1997 Feb;17(1):3-14 (147 ref.)
Chest symptoms after sumatriptan: a two-year clinical practice review in 735 consecutive migraine patients. Visser WH, et al. **Cephalalgia** 1996 Dec;16(8):554-9
Clinical safety of 311C90: aggregated data from patients and volunteers to date. Earl NL. **Eur Neurol** 1996;36 Suppl 2:8-12
Combined serotonin syndrome and hyponatraemia caused by

a citalopram–buspirone interaction. Spigset O, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):61–3

Sumatriptan–associated myocardial infarction: report of case with attention to potential risk factors. Abbrescia VD, et al. **J Am Osteopath Assoc** 1997 Mar;97(3):162–4

Akathisia and acute dystonia induced by sumatriptan [letter] López–Alemany M, et al. **J Neurol** 1997 Feb;244(2):131–2

ANALYSIS

In vitro and in vivo effects of the anorectic agent dexfenfluramine on the central serotoninergic neuronal systems of non–human primates. A comparison with the rat. Mennini T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):641–7

BLOOD

Determination of trazodone and its metabolite, 1–m–chlorophenyl–piperazine, in human plasma and red blood cell samples by HPLC. Vatassery GT, et al. **Clin Biochem** 1997 Mar;30(2):149–53

Quantitation of the 5HT1D agonists MK–462 and sumatriptan in plasma by liquid chromatography–atmospheric pressure chemical ionization mass spectrometry. McLoughlin DA, et al. **J Chromatogr A** 1996 Mar 1;726(1–2):115–24

Determination of sumatriptan succinate in human plasma by high–performance liquid chromatography with coulometric detection and utilization of solid–phase extraction. Franklin M, et al. **J Chromatogr B Biomed Appl** 1996 Jun 7;681(2):416–20

A method using a liquid chromatographic–electrospray–mass spectrometric assay for the determination of antimigraine compounds: preliminary pharmacokinetics of MDL 74,721, sumatriptan and naratriptan, in rabbit. Duléry BD, et al. **J Pharm Biomed Anal** 1997 Apr;15(7):1009–20

Stereospecific determinations of (+/–)–DU–124884 and its metabolites (+/–)–KC–9048 in human plasma by liquid chromatography. Naidong W, et al. **J Pharm Biomed Anal** 1996 Jan;14(3):325–37

Simultaneous quantitation of buspirone and its major metabolite 1–(2–pyrimidinyl)piperazine in human plasma by high–performance liquid chromatography with coulometric detection. Odontiadis J, et al. **J Pharm Biomed Anal** 1996 Jan;14(3):347–51

Determination of U–89968E, a 5HT1a agonist in rat plasma using solid–phase extraction, precolumn derivatization and reversed–phase high–performance liquid chromatography. Rees SA, et al. **J Pharm Biomed Anal** 1997 Mar; 15(6):739–48

Serotonin 5–HT2A receptor binding in platelets from healthy subjects as studied by [3H]–lysergic acid diethylamide ([3H]–LSD): intra– and interindividual variability. Spigset O, et al. **Neuropsychopharmacology** 1997 Apr;16(4):285–93

CHEMICAL SYNTHESIS

3–(omega–Aminoalkyl)–5,5–dialkyl(or spirocycloalkyl–1',5–)hydantoins as new 5–HT1A and 5–HT2A receptor ligands. Byrtus H, et al. **Arch Pharm (Weinheim)** 1996 Jun;329(6):283–90

Structure–activity relationship studies of CNS agents, Part 31: Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment—new 5–HT1A receptor ligands. Paluchowska MH, et al. **Arch Pharm (Weinheim)** 1996 Oct;329(10):451–6

Synthesis of thiophene carboxamide derivatives as serotonin 5–HT4 receptor agonists. Monge A, et al. **Farmaco** 1997 Feb;52(2):89–92

Novel agonists of 5HT2C receptors. Synthesis and biological evaluation of substituted 2–(indol–1–yl)–1–methylethylamines and 2–(indeno[1,2–b]pyrrol–1–yl)–1–methylethylamines. Improved therapeutics for obsessive compulsive disorder. Bös M, et al. **J Med Chem** 1997 Aug 15;40(17):2762–9

Synthesis and biological activities of (R)–5,6–dihydro–N,N–dimethyl–4H–imidazo[4,5,1–ij]quinolin–5–amine and its metabolites. Heier RF, et al. **J Med Chem** 1997 Feb 28;40(5):639–46

Novel and selective partial agonists of 5–HT3 receptors. 2. Synthesis and biological evaluation of piperazinopyridopyrrolopyrazines, piperazinopyrroloquinoxalines, and piperazinopyridopyrroloquinoxalines. Prunier H, et al. **J Med Chem** 1997 Jun 6;40(12):1808–19

5–HT1A and 5–HT2A receptor affinity and functional profile of some N–[3–(4–aryl–1–piperazinyl)propyl] derivatives of indolin–2(1H)–one, quinolin–2(1 H)–one and isoquinolin–1(2H)–one. Part 30: Structure–activity relationship studies of CNS agents. Mokrosz MJ, et al. **Pharmazie** 1997 Jun;52(6):423–8

CHEMISTRY

Stability of sumatriptan succinate in extemporaneously prepared oral liquids. Fish DN, et al. **Am J Health Syst Pharm** 1997 Jul 15;54(14):1619–22

Conformational flexibility of serotonin1A receptor ligands from crystallographic data. Updated model of the receptor pharmacophore. Chilmonczyk Z, et al. **Arch Pharm (Weinheim)** 1997 May;330(5):146–60

Stereoselective pharmacological effects of lysergic acid amides possessing chirality in the amide substituent. Nichols DE, et al. **Behav Brain Res** 1996;73(1–2):117–9 (9 ref.)

Synthesis and transporter binding properties of 3 beta–(4'–alkyl–, 4'–alkenyl–, and 4'–alkynylphenyl)nortropane–2 beta–carboxylic acid methyl esters: serotonin transporter selective analogs. Blough BE, et al. **J Med Chem** 1996 Sep 27;39(20):4027–35

Serotonin dimers: application of the bivalent ligand approach to the design of new potent and selective 5–HT(1B/1D) agonists. Halazy S, et al. **J Med Chem** 1996 Dec 6; 39(25):4920–7

Synthesis and structure–activity relationships of a new model of arylpiperazines. 1. 2–[[4–(o–methoxyphenyl)piperazin–1–yl]methyl]–1, 3–dioxoperhydroimidazo[1,5–alpha]pyridine: a selective 5–HT1A receptor agonist. López–Rodríguez ML, et al. **J Med Chem** 1996 Oct 25;39(22):4439–50

New esters of 4–amino–5–chloro–2–methoxybenzoic acid as potent agonists and antagonists for 5–HT4 receptors. Yang D, et al. **J Med Chem** 1997 Feb 14;40(4):608–21

DIAGNOSTIC USE

Hostility is associated with a low prolactin response to meta–chlorophenylpiperazine in abstinent alcoholics. Handelsman L, et al. **Alcohol Clin Exp Res** 1996 Aug; 20(5):824–9

Behavioral and neuroendocrine responses to m–chlorophenylpiperazine in subtypes of alcoholics and in healthy comparison subjects. George DT, et al. **Am J Psychiatry** 1997 Jan;154(1):81–7

Hormonal and subjective responses to intravenous meta–chlorophenylpiperazine in bulimia nervosa. Levitan RD, et al. **Arch Gen Psychiatry** 1997 Jun;54(6):521–7

Effects of meta–chlorophenylpiperazine infusions in patients with seasonal affective disorder and healthy control subjects. Diurnal responses and nocturnal regulatory mechanisms. Schwartz PJ, et al. **Arch Gen Psychiatry** 1997 Apr;54(4):375–85

Heterogeneity of serotonergic response in treatment–refractory schizophrenia patients. Lindenmayer JP, et al. **Biol Psychiatry** 1997 Jul 1;42(1):6–12

Autoradiography with [3H]8–OH–DPAT reveals increases in 5–HT(1A) receptors in ventral prefrontal cortex in schizophrenia. Simpson MD, et al. **Biol Psychiatry** 1996 Jun 1;39(11):919–28

m–Chlorophenylpiperazine challenge in borderline personality disorder: relationship of neuroendocrine response, behavioral response, and clinical measures. Stein DJ, et al. **Biol Psychiatry** 1996 Sep 15;40(6):508–13

Growth hormone response to sumatriptan (5–HT1D agonist) challenge in seasonal affective disorder: effects of light therapy. Yatham LN, et al. **Biol Psychiatry** 1997 Jul 1; 42(1):24–9

ACTH/cortisol involvement in the serotonergic disorder affecting the parkinsonian brain. Volpi R, et al. **Neuropsychobiology** 1997;35(2):73–8

Defective 5–HT 1–receptor–mediated neurotransmission in the control of growth hormone secretion in Parkinson's disease. Volpi R, et al. **Neuropsychobiology** 1997; 35(2):79–83

Studies of serotonin function in anorexia nervosa. Brewerton TD, et al. **Psychiatry Res** 1996 Apr 16;62(1):31–42

Hormonal responses to meta–chlorophenylpiperazine (m–CPP) are undiminished by acute m–CPP pretreatment. Coccaro EF, et al. **Psychiatry Res** 1996 May 17; 62(2):139–45

Effects of meta–chlorophenylpiperazine on neuroendocrine and behavioral responses in male schizophrenic patients and normal volunteers. Maes M, et al. **Psychiatry Res** 1996 Oct 16;64(3):147–59

ECONOMICS

Impact of sumatriptan on clinic utilization and costs of care in migraineurs. Litaker DG, et al. **Headache** 1996 Oct; 36(9):538–41

Cost benefit of sumatriptan to an employer. Legg RF, et al. **J Occup Environ Med** 1997 Jul;39(7):652–7

METABOLISM

Acylation differentiates two forms of agonist binding to rat 5–HT1A receptors. Palmitoylated G protein—agonist states? Dacquet C, et al. **Ann N Y Acad Sci** 1997 May 30;812:178

Altered G–protein coupling of a frontal cortical low affinity [3H]8–hydroxy–N,N–dipropyl–2–aminotetralin serotonergic binding site in Alzheimer's disease. Weinstein D, et al. **Behav Brain Res** 1996;73(1–2):325–9

Autoradiographic distribution of [3H]sumatriptan–binding sites in post–mortem human brain [see comments] Pascual J, et al. **Cephalalgia** 1996 Aug;16(5):317–22. Comment in: Cephalalgia 1996 Aug;16(5):287–8.

311C90 (Zolmitriptan), a novel centrally and peripheral acting oral 5–hydroxytryptamine–1D agonist: a comparison of its absorption during a migraine attack and in a migraine–free period. Thomsen LL, et al. **Cephalalgia** 1996 Jun;16(4):270–5

Binding profile of the novel 5–HT1B/1D receptor antagonist, [3H]GR 125,743, in guinea–pig brain: a comparison with [3H]5–carboxamidotryptamine. Audinot V, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):247–56

Binding thermodynamics of 5–HT1A receptor ligands. Dalpiaz A, et al. **Eur J Pharmacol** 1996 Sep 19; 312(1):107–14

Increased prolactin response to buspirone in chronic fatigue syndrome. Sharpe M, et al. **J Affect Disord** 1996 Nov 4; 41(1):71–6

Platelet 5–hydroxytryptamine (5–HT) transporter and 5–HT2A receptor binding after chronic hypercorticosteronemia, (+/–)–1–(2,5–dimethoxy–4–iodophenyl)–2–aminopropane administration or neurotoxin–induced depletion of central nervous system 5–HT in the rat. Owens MJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1040–9

Serotonergic binding in the rat dorsal raphe nucleus: critical role of MAO inhibition. Johnson RG, et al. **J Pharmacol Toxicol Methods** 1996 Oct;36(2):81–5

[3H]8–OH–DPAT binding and serotonin content in rat cerebral cortex after acute fluoxetine, desipramine, or pargyline. Carli M, et al. **J Psychiatry Neurosci** 1996 Mar; 21(2):114–22

Identification of conserved aromatic residues essential for agonist binding and second messenger production at 5–hydroxytryptamine2A receptors. Roth BL, et al. **Mol Pharmacol** 1997 Aug;52(2):259–66

The 5–HT1A receptor antagonist (S)–UH–301 augments the increase in extracellular concentrations of 5–HT in the frontal cortex produced by both acute and chronic treatment with citalopram. Arborelius L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):630–40

Further characterisation of [3H]8–hydroxy–2–(di–N–propylamino)tetralin binding sites in human brain postmortem [published erratum appears in Neurochem Int 1997 Apr–May;30(4–5):515] Palego L, et al. **Neurochem Int** 1997 Feb;30(2):149–57

[3H]RS 57639, a high affinity, selective 5–HT4 receptor partial agonist, specifically labels guinea–pig striatal and rat cloned (5–HT4S and 5–HT4L) receptors. Bonhaus DW, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):671–9

Differential distribution of [3H]sumatriptan binding sites (5–HT1B, 5–HT1D and 5–HT1F receptors) in human brain: focus on brainstem and spinal cord. Castro ME, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):535–42

PHARMACOKINETICS

Plasma levels of m–chlorophenylpiperazine following single oral dose administration of m–chlorophenylpiperazine and trazodone in human volunteers. Lawlor BA, et al. **Biol Psychiatry** 1997 Mar 15;41(6):756–7

off absorption, pharmacodynamics, metabolism and excretion of 14C–sumatriptan following intranasal administration to the beagle dog. Barrow A, et al. **Biopharm Drug Dispos** 1997 Jul;18(5):443–58

Pharmacokinetics and food interaction of MK–462 in healthy males. Cheng H, et al. **Biopharm Drug Dispos** 1996 Jan; 17(1):17–24

The pharmacokinetics and effects on blood pressure of multiple doses of the novel anti–migraine drug zolmitriptan (311C90) in healthy volunteers. Dixon R, et al. **Br J Clin Pharmacol** 1997 Mar;43(3):273–81

Initial human experience with MK–462 (rizatriptan): a novel 5–HT1D agonist [published erratum appears in Br J Clin Pharmacol 1997 Apr;43(4):450] Sciberras DG, et al. **Br J Clin Pharmacol** 1997 Jan;43(1):49–54

The tolerability and pharmacokinetics of the novel antimigraine compound 311C90 in healthy male volunteers. Seaber E, et al. **Br J Clin Pharmacol** 1996 Feb;41(2):141–7

The absolute bioavailability and metabolic disposition of the novel antimigraine compound zolmitriptan (311C90). Seaber E, et al. **Br J Clin Pharmacol** 1997 Jun;43(6):579–87

Distribution of [3H]–sumatriptan binding sites in human brain [editorial; comment] Connor HE. **Cephalalgia** 1996 Aug; 16(5):287–8. Comment on: Cephalalgia 1996 Aug;16(5):317–22.

Disposition of [14C]avitriptan in rats and humans. Marathe PH, et al. **Drug Metab Dispos** 1997 Jul;25(7):881–8

Pharmacokinetic and pharmacodynamic studies of (R)–8–hydroxy–2–(di–n–propylamino)tetralin in the rat. Yu H, et al. **Eur Neuropsychopharmacol** 1997 Aug;7(3):165–72

First pharmacokinetic–pharmacodynamic study in humans with a selective 5–hydroxytryptamine4 receptor agonist. Appel S, et al. **J Clin Pharmacol** 1997 Mar;37(3):229–37

A method using a liquid chromatographic–electrospray–mass spectrometric assay for the determination of antimigraine compounds: preliminary pharmacokinetics of MDL 74,721, sumatriptan and naratriptan, in rabbit. Duléry BD, et al. **J Pharm Biomed Anal** 1997 Apr;15(7):1009–20

Pharmacodynamic and pharmacokinetic studies in rats of S–8–(2–Furyl)– and R–8–phenyl–2–(di–n–propylamino) tetralin, two novel 5–HT1A receptor agonists in–vitro with different properties in–vivo. Yu H, et al. **J Pharm Pharmacol** 1997 Feb;49(2):169–77

Oral cavity absorption of (R)–8–hydroxy–2–(di–n–propylamino)tetralin and (S)–8–acetyl–2–(di–n–propylamino)tetralin in the rat. Yu H, et al. **J Pharm Pharmacol** 1996 Jan;48(1):41–5

Conclusive evidence for distinct transporters for 5–hydroxytryptamine and noradrenaline in pulmonary endothelial cells of the rat. Paczkowski NJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Mar; 353(4):423–30

The use of stable isotope labeling and liquid chromatography/tandem mass spectrometry techniques to

study the pharmacokinetics and bioavailability of the antimigraine drug, MK-0462 (rizatriptan) in dogs. Barrish A, et al. **Rapid Commun Mass Spectrom** 1996;10(9):1033-7

PHARMACOLOGY

Effects on nociception of the Ca2+ and 5-HT antagonist dotarizine and other 5-HT receptor agonists and antagonists. Belcheva S, et al. **Acta Physiol Pharmacol Bulg** 1995;21(4):93-8

The effects of peripheral serotonin2 receptor agonist on food intake of rats. Yamada J, et al. **Adv Exp Med Biol** 1996; 398:555-7

Differential efficacy of serotonergic drugs FG5974, FG5893, and amperozide in reducing alcohol drinking in P rats. Lankford MF, et al. **Alcohol** 1996 Jul-Aug;13(4):399-404

The 5-HT1A receptor agonist 8-OH-DPAT reduces ethanol intake and maintained behavior in female Sprague-Dawley rats. Wilson AW, et al. **Alcohol** 1996 Sep-Oct;13(5):407-13

Effects of 5-HT3 receptor agonists on voluntary ethanol intake in rats maintained on a limited access procedure. Dyr W, et al. **Alcohol Alcohol** 1997 Jul-Aug;32(4):455-62

Buspirone as an inhibitor of voluntary ethanol intake in male rats. Hedlund L, et al. **Alcohol Alcohol** 1996 Mar; 31(2):149-56

Hormonal, psychological, and alcohol craving changes after m-chlorophenylpiperazine administration in alcoholics. Buydens-Branchey L, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):220-6

Craving for cocaine in addicted users. Role of serotonergic mechanisms. Buydens-Branchey L, et al. **Am J Addict** 1997 Winter;6(1):65-73

Role of CRH in the effects of 5-HT-receptor agonists on food intake and metabolic rate. Bovetto S, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1231-8

Sumatriptan, a selective 5-HT1 receptor agonist, induces a lag phase for gastric emptying of liquids in humans. Coulie B, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G902-8

Somatosensory influences on renal sympathetic nerve activity in anesthetized Wistar and hypertensive rats. Zhang T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R982-90

Reduced serotonin responsivity in depression [letter; comment] Brown GM. **Am J Psychiatry** 1997 Mar; 154(3):442. Comment on: Am J Psychiatry 1996 Feb;153(2):174-82.

Effects of serotonergic1A and 1B agonists in androgenic versus estrogenic systems for aggression. Cologer-Clifford A, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:339-42

Structure-activity relationship studies of CNS agents, Part 31: Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment--new 5-HT1A receptor ligands. Paluchowska MH, et al. **Arch Pharm (Weinheim)** 1996 Oct;329(10):451-6

Novel discriminatory ligands for 5-HT2B receptors. Baxter GS. **Behav Brain Res** 1996;73(1-2):149-52 (19 ref.)

Regulation of 5-HT2A receptor mRNA in P11 cells. Ferry RC, et al. **Behav Brain Res** 1996;73(1-2):187-91 (26 ref.)

5-HT agonist-induced changes in peripheral immune cells in healthy volunteers: the impact of personality. Hennig J, et al. **Behav Brain Res** 1996;73(1-2):359-63

The anxiolytic serotonin 5-HT1A receptor agonists buspirone, ipsapirone and gepirone are inhibitors of tyrosine hydroxylation in rat striatum. Johnson EA, et al. **Behav Brain Res** 1996;73(1-2):331-5

Rapid and long duration tolerance to the vagal bradycardic effects of 5-HT1A receptor agonists. McCall RB, et al. **Behav Brain Res** 1996;73(1-2):297-300

Pro- and antinociceptive actions of serotonin (5-HT)1A agonists and antagonists in rodents: relationship to algesiometric paradigm. Millan MJ, et al. **Behav Brain Res** 1996;73(1-2):69-77

Neuroendocrine responses to serotonergic agonists as indices of the functional status of central serotonin neurotransmission in humans: a preliminary comparative analysis of neuroendocrine endpoints versus other endpoint measures. Murphy DL, et al. **Behav Brain Res** 1996; 73(1-2):209-14 (51 ref.)

Stereoselective pharmacological effects of lysergic acid amides possessing chirality in the amide substituent. Nichols DE, et al. **Behav Brain Res** 1996;73(1-2):117-9 (9 ref.)

Autoradiographic analysis of 5-HT receptor subtypes labeled by [3H]5-CT ([3H]5-carboxamidotryptamine). Palacios JM, et al. **Behav Brain Res** 1996;73(1-2):239-43

Contrasting effects of systemic and intracerebral infusions of the 5-HT1A receptor agonist 8-OH-DPAT on spatial short-term working memory in rats. Warburton EC, et al. **Behav Brain Res** 1997 Mar;84(1-2):247-58

L-DOPA and quipazine elicit air-stepping in neonatal rats with spinal cord transections. McEwen ML, et al. **Behav Neurosci** 1997 Aug;111(4):825-33

CP2289, a new 5-HT3 receptor ligand: agonistic activities on gastroenteric motility. Sato Y, et al. **Biol Pharm Bull** 1997 Jul;20(7):752-5

The effects of peripheral serotonin2 (5-HT2) and serotonin3 (5-HT3) receptor agonists on blood glucose levels in rats. Sugimoto Y, et al. **Biol Pharm Bull** 1996 Oct;19(10):1384-6

Seasonal effects in prolactin response to m-chlorophenylpiperazine challenge in obsessive-compulsive disorder. Grossman R, et al. **Biol Psychiatry** 1996 Jun 1;39(11):982-5

Auditory-evoked potentials as indicator of brain serotonergic activity--first evidence in behaving cats. Juckel G, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1181-95

Effect of serum cholesterol levels on meta-chlorophenylpiperazine-evoked neuroendocrine responses in healthy subjects. Terao T, et al. **Biol Psychiatry** 1997 May 1;41(9):974-8

The haemodynamic effects of subcutaneous sumatriptan, a 5HT1-receptor agonist. Hood S, et al. **Br J Clin Pharmacol** 1997 Mar;43(3):327-8

5-HT1D receptor agonists and human coronary artery reactivity in vitro: crossover comparisons of 5-HT and sumatriptan with rizatriptan and L-741,519. Longmore J, et al. **Br J Clin Pharmacol** 1996 Oct;42(4):431-41

Voltage-dependent block of NMDA responses by 5-HT agonists in ventral spinal cord neurones. Chesnoy-Marchais D, et al. **Br J Pharmacol** 1996 Jan;117(1):133-41

(+)-WAY 100135, a partial agonist, at native and recombinant 5-HT1B/1D receptors. Davidson C, et al. **Br J Pharmacol** 1997 Jun;121(4):737-42

Mechanism of actions of sumatriptan on coronary flow before and after endothelial dysfunction in guinea-pig isolated heart. Ellwood AJ, et al. **Br J Pharmacol** 1997 Mar; 120(6):1039-48

Stimulation of 5-HT1A receptors in the dorsal hippocampus and inhibition of limbic seizures induced by kainic acid in rats. Gariboldi M, et al. **Br J Pharmacol** 1996 Nov; 119(5):813-8

Investigation into the 5-hydroxytryptamine-induced atropine-resistant neurogenic contraction of guinea-pig proximal colon. Kojima S, et al. **Br J Pharmacol** 1996 Apr; 117(8):1613-8

Effect of dexfenfluramine on the transcriptional activation of CRF and its type 1 receptor within the paraventricular nucleus of the rat hypothalamus. Laflamme N, et al. **Br J Pharmacol** 1996 Mar;117(6):1021-34

Characterization of putative 5-ht7 receptors mediating direct relaxation in Cynomolgus monkey isolated jugular vein. Leung E, et al. **Br J Pharmacol** 1996 Mar;117(5):926-30

5-Hydroxytryptamine receptors mediating vasoconstriction in pulmonary arteries from control and pulmonary hypertensive rats. MacLean MR, et al. **Br J Pharmacol** 1996 Nov;119(5):917-30

Further investigation into the signal transduction mechanism of the 5-HT4-like receptor in the circular smooth muscle of human colon. McLean PG, et al. **Br J Pharmacol** 1996 Jun;118(4):1058-64

Receptor specificity and trigemino-vascular inhibitory actions of a novel 5-HT1B/1D receptor partial agonist, 311C90 (zolmitriptan). Martin GR, et al. **Br J Pharmacol** 1997 May;121(2):157-64

Inhibition of the constitutive activity of human 5-HT1A receptors by the inverse agonist, spiperone but not the neutral antagonist, WAY 100,635. Newman-Tancredi A, et al. **Br J Pharmacol** 1997 Mar;120(5):737-9

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: increase in Na+, K(+)-ATPase activity in renal proximal tubules via activation of 5-HT1A receptors. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar;117(6):1199-203

5-HT3 and 5-HT4 receptor-mediated facilitation of the emptying phase of the peristaltic reflex in the marmoset isolated ileum. Tuladhar BR, et al. **Br J Pharmacol** 1996 Apr;117(8):1679-84

Influence of the endothelium and nitric oxide on the contractile responses evoked by 5-HT1D receptor agonists in the rabbit isolated saphenous vein. Valentin JP, et al. **Br J Pharmacol** 1996 Sep;119(1):35-42

Selection of distinct conformational states of the 5-HT3 receptor by full and partial agonists. van Hooft JA, et al. **Br J Pharmacol** 1996 Mar;117(5):839-46

Participation of 5-HT1-like and 5-HT2A receptors in the contraction of human temporal artery by 5-hydroxytryptamine and related drugs. Verheggen R, et al. **Br J Pharmacol** 1996 Jan;117(2):283-9

Volatile general anaesthetic actions on recombinant nACh alpha 7, 5-HT3 and chimeric nACh alpha 7-5-HT3 receptors expressed in Xenopus oocytes. Zhang L, et al. **Br J Pharmacol** 1997 Feb;120(3):353-5

Estrogen increases the bradycardia elicited by central administration of the serotonin1A agonist 8-OH-DPAT in conscious rats. Alper RH, et al. **Brain Res** 1996 Apr 15;716(1-2):224-8

Activation of 5-HT1B receptors suppresses low but not high frequency synaptic transmission in the rat subicular cortex in vitro. Boeijinga PH, et al. **Brain Res** 1996 May 20; 721(1-2):59-65

Phase-shifting effects of a serotonin agonist in tau mutant hamsters. Colecchia EF, et al. **Brain Res** 1996 Aug 19; 730(1-2):227-31

5-Hydroxytryptamine (5-HT) agonists: effects on neocortical slow wave activity after combined muscarinic and serotonergic blockade. Dringenberg HC, et al. **Brain Res** 1996 Jul 29;728(2):181-7

5-HT3-like receptors in the rat medial prefrontal cortex: further pharmacological characterization. Edwards E, et al. **Brain Res** 1996 Sep 9;733(1):21-30

Demonstration of the facilitatory role of 8-OH-DPAT on cholinergic transmission in the rat hippocampus using in vivo microdialysis. Fujii T, et al. **Brain Res** 1997 Jul 4; 761(2):244-9

Serotonin1A receptor agonists induce Fos protein expression in the locus coeruleus of the conscious rat. Hamamura T, et al. **Brain Res** 1997 Jun 6;759(1):156-9

Effects of 8-OH-DPAT, a 5-HT1A receptor agonist, and DOI, a 5-HT2A/2C agonist, on monosynaptic transmission in spinalized rats. Hasegawa Y, et al. **Brain Res** 1996 Oct 28;738(1):158-61

Modulation of frog spinal cord interneuronal activity by activation of 5-HT3 receptors. Holohean AM, et al. **Brain Res** 1995 Dec 18;704(2):184-90

Serotonin agonists mimic the phase shifting effects of light on the melatonin rhythm in rats. Kennaway DJ, et al. **Brain Res** 1996 Oct 21;737(1-2):301-7

R(+)-8-OH-DPAT, a 5-HT1A receptor agonist, inhibits amphetamine-induced serotonin and dopamine release in rat medial prefrontal cortex. Kuroki T, et al. **Brain Res** 1996 Dec 16;743(1-2):357-61

Antinociception induced by opioid or 5-HT agonists microinjected into the anterior pretectal nucleus of the rat. Mamede Rosa ML, et al. **Brain Res** 1997 May 16; 757(1):133-8

5-HT1A agonists induce hippocampal theta activity in freely moving cats: role of presynaptic 5-HT1A receptors. Marrosu F, et al. **Brain Res** 1996 Nov 11;739(1-2):192-200

Circadian rhythm in the response to intracerebroventricular administration of 8-OH-DPAT. Nagayama H, et al. **Brain Res** 1997 May 9;756(1-2):92-5

Serotonin and 8-OH-DPAT reduce excitatory transmission in rat hippocampal area CA1 via reduction in presumed presynaptic Ca2+ entry. Schmitz D, et al. **Brain Res** 1995 Dec 1;701(1-2):249-54

Role of serotonin receptor subtypes in the development of amygdaloid kindling in rats. Wada Y, et al. **Brain Res** 1997 Feb 7;747(2):338-42

Sleep/waking effects following intrathecal administration of the 5-HT(1A) Agonist 8-OH-DPAT alone and in combination with the putative 5-HT(1A) antagonist NAN-190 in rats. Bjørkum AA, et al. **Brain Res Bull** 1996; 39(6):373-9

Changes in serotonergic measures in whole blood and various brain regions of rats administered with the 5-HT1A agonist tandospirone and/or exposed to electric foot-shock. Takada Y, et al. **Brain Res Bull** 1996;40(1):51-5

Protective effects of maternal buspirone treatment on serotonin reuptake sites in ethanol-exposed offspring. Kim JA, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):190-8

Direct evidence for central sites of action of zolmitriptan (311C90): an autoradiographic study in cat [see comments] Goadsby PJ, et al. **Cephalalgia** 1997 May;17(3):153-8. Comment in: Cephalalgia 1997 May;17(3):143.

Circadian rhythm in the hypothermic response to serotonin1A receptor agonist 8-OH-DPAT in rats. Lu JQ, et al. **Chronobiol Int** 1997 May;14(3):267-73

Effect of 5-methylurapidil, an alpha 1a-adrenergic antagonist and 5-hydroxytryptamine1a agonist, on aqueous humor dynamics in monkeys and rabbits. Wang RF, et al. **Curr Eye Res** 1997 Aug;16(8):769-75

Effects of metoclopramide and tropisetron on aldosterone secretion possibly due to agonism and antagonism at the 5-HT4 receptor. Sommers DK, et al. **Eur J Clin Pharmacol** 1996;50(5):371-3

5-HT1A receptor agonist flesinoxan enhances Fos immunoreactivity in rat central amygdala, bed nucleus of the stria terminalis and hypothalamus. Compaan JC, et al. **Eur J Neurosci** 1996 Nov;8(11):2340-7

EMD 68843, a serotonin reuptake inhibitor with selective presynaptic 5-HT1A receptor agonistic properties. Bartoszyk GD, et al. **Eur J Pharmacol** 1997 Mar 19; 322(2-3):147-53

Modulation of 5-HT receptor subtype-mediated behaviours by corticosterone. Berendsen HH, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):103-11

5-HT3 and 5-HT4 receptors and cholinergic and tachykininergic neurotransmission in the guinea-pig proximal colon. Briejer MR, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):173-80

The role of the 5-HT4 receptor in Cl- secretion in human jejunal mucosa. Budhoo MR, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):109-14

Influence of vascular tone on vasoconstrictor responses to the 5-HT 1-like receptor agonist sumatriptan in anaesthetised rabbits. Choppin A, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):87-92

Pretreatment with 5-HT1A receptor agonist flesinoxan attenuates Fos protein in rat hypothalamus. Compaan JC, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):161-8

Interaction of S 21007 with 5-HT3 receptors. In vitro and in vivo characterization. Delagrange P, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):195-203

Role of the 5-HT receptor in neurogenic inflammation in Fisher 344 rat airways. Germonpré PR, et al. **Eur J Pharmacol** 1997 Apr 18;324(2-3):249-55

Flesinoxan: a prosexual drug for male rats. Haensel SM, et al. **Eur J Pharmacol** 1997 Jul 2;330(1):1-9

Involvement of 5-HT2A receptors in the elevation of rat serum corticosterone concentrations by quipazine and MK-212. Hemrick-Luecke SK, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):207-11

(-)-Pindolol, but not buspirone, potentiates the citalopram-induced rise in extracellular 5-hydroxytryptamine. Hjorth S. **Eur J Pharmacol** 1996 May 15;303(3):183-6

Contribution of peripheral alpha 1A-adrenoceptors to pain induced by formalin or by alpha-methyl-5-hydroxytryptamine plus noradrenaline. Hong Y, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):41-8

Suppression of neocortical high-voltage spindles by nicotinic acetylcholine and 5-HT2 receptor stimulation. Jäkälä P, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):47-60

5-HT1A receptor agonist effects of BMY-14802 on serotonin release in dorsal raphe and hippocampus. Matos FF, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):49-54

NMDA receptor antagonists block development of tolerance to m-CPP-induced increases in ACTH concentrations in rats. Mazzola-Pomietto P, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):329-33

5-HT2C receptors mediate penile erections in rats: actions of novel and selective agonists and antagonists. Millan MJ, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):9-12

The putative 5-HT1A receptor antagonist DU125530 blocks the discriminative stimulus of the 5-HT1A receptor agonist flesinoxan in pigeons. Mos J, et al. **Eur J Pharmacol** 1997 May 1;325(2-3):145-53

Effect of a selective 5-HT3 receptor agonist on gastric motility in fasted and fed dogs. Nagakura Y, et al. **Eur J Pharmacol** 1997 May 30;327(2-3):189-93

Dopamine and 5-hydroxytryptamine selectively potentiate neuronal type ATP receptor channels. Nakazawa K, et al. **Eur J Pharmacol** 1996 Jan 18;296(1):119-22

S 15535 and WAY 100,635 antagonise 5-HT-stimulated [35S]GTP gamma S binding at cloned human 5-HT1A receptors. Newman-Tancredi A, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):107-11

Effects of galanin on 8-OH-DPAT induced decrease in body temperature and brain 5-hydroxytryptamine metabolism in the mouse. Patel S, et al. **Eur J Pharmacol** 1996 Dec 19; 317(2-3):197-204

8-OH-DPAT-induced mydriasis in mice: a pharmacological characterisation. Prow MR, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):21-8

Role of serotonergic neurotransmission in the hypnotic response to dexmedetomidine, an alpha 2-adrenoceptor agonist. Rabin BC, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1-3):51-9

The effects of cisapride on elemental content in neonatal mouse small intestine in vivo. Spencer AJ, et al. **Eur J Pharmacol** 1996 May 15;303(3):205-8

Effects of the 5-HT2C/2B receptor agonist 1-(3-chlorophenyl) piperazine on plasma glucose levels of rats. Sugimoto Y, et al. **Eur J Pharmacol** 1996 Jun 20; 307(1):75-80

Effects of peripheral 5-HT2 and 5-HT3 receptor agonists on food intake in food-deprived and 2-deoxy-D-glucose-treated rats. Sugimoto Y, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):15-21

RS-056812-198: partial agonist on native and antagonist on cloned 5-HT3 receptors. Van Hooft JA, et al. **Eur J Pharmacol** 1997 Mar 19;322(2-3):229-33

Antagonism by the 5-HT2A/C receptor agonist DOI of raclopride-induced catalepsy in the rat. Wadenberg ML, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):247-51

GR127935 acts as a partial agonist at recombinant human 5-HT1D alpha and 5-HT1D beta receptors. Watson JM, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):365-72

Ipsapirone enhances the dopamine outflow via 5-HT1A receptors in the rat prefrontal cortex. Wędzony K, et al. **Eur J Pharmacol** 1996 Jun 3;305(1-3):73-8

Effect of repeated ipsapirone treatment on hippocampal excitatory synaptic transmission in the freely behaving rat: role of 5-HT1A receptors and relationship to anxiolytic effect. Xu L, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):59-68

Effects of a nitric oxide synthase inhibitor on 5-HT1A receptor agonist 8-OH-DPAT-induced hyperphagia in rats. Yamada J, et al. **Eur J Pharmacol** 1996 Nov 28; 316(1):23-6

Hyperglycemia induced by the 5-HT receptor agonist, 5-methoxytryptamine, in rats: involvement of the peripheral 5-HT2A receptor. Yamada J, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):235-40

Differential serotoninergic and dopaminergic activities of the (R)- and the (S)-enantiomers of 2-(di-n-propylamino)tetralin. Yu H, et al. **Eur J Pharmacol** 1996 May 15;303(3):151-62

The effects of the 5-HT1A agonist flesinoxan, in three paradigms for assessing antidepressant potential in the rat. Cryan JF, et al. **Eur Neuropsychopharmacol** 1997 May; 7(2):109-14

5HT2C receptor agonists exhibit antidepressant-like properties in the anhedonia model of depression in rats. Moreau JL, et al. **Eur Neuropsychopharmacol** 1996 Aug; 6(3):169-75

Chronic treatment with eltoprazine does not lead to tolerance in its anti-aggressive action, in contrast to haloperidol. Mos J, et al. **Eur Neuropsychopharmacol** 1996 Mar;6(1):1-7

Pharmacokinetic and pharmacodynamic studies of (R)-8-hydroxy-2-(di-n-propylamino)tetralin in the rat. Yu H, et al. **Eur Neuropsychopharmacol** 1997 Aug;7(3):165-72

Cisapride prevents enteric bacterial overgrowth and translocation by improvement of intestinal motility in rats with acute liver failure. Wang XD, et al. **Eur Surg Res** 1996;28(6):402-12

Comparison of the vasoconstrictor properties of the 5-HT1D-receptor agonists rizatriptan (MK-462) and sumatriptan in human isolated coronary artery: outcome of two independent studies using different experimental protocols. Longmore J, et al. **Funct Neurol** 1997 Jan-Feb; 12(1):3-9

5-HTP induced diarrhea as a carcinoid syndrome model in mice? Bourin M, et al. **Fundam Clin Pharmacol** 1996; 10(5):450-7

Role of 5-HT1A autoreceptors in the mechanism of action of serotoninergic antidepressant drugs: recent findings from in vivo microdialysis studies. Gardier AM, et al. **Fundam Clin Pharmacol** 1996;10(1):16-27 (88 ref.)

The human 5-hydroxytryptamine 1A receptor differentially modulates phospholipase C and adenylyl cyclase activities. Fenrick R, et al. **Gen Pharmacol** 1996 Mar;27(2):263-8

Effect of the selective 5-HT receptor agonists 8-OHDPAT and DOI on behavior and brain biogenic amines of rats. Gaggi R, et al. **Gen Pharmacol** 1997 Apr;28(4):583-7

Effects of repeated doses of azapirones on rat brain 5-HT1A receptors and plasma corticosterone levels. Matheson GK, et al. **Gen Pharmacol** 1996 Mar;27(2):355-61

Pre- and postjunctional effects of 5-hydroxytryptamine in dog cephalic veins of neonates. Paiva MQ, et al. **Gen Pharmacol** 1996 Mar;27(2):325-8

Resolution of multiple affinity states of 5-hydroxytryptamine-1A receptors labelled by [3H]-8-hydroxy-2-(di-n-propilamino) tetralin in rat hippocampal membranes. Pesce G, et al. **Gen Pharmacol** 1996 Jun;27(4):723-9

Prior treatment with estrogen attenuates the effects of the 5-HT1A agonist, 8-OH-DPAT, on lordosis behavior. Jackson A, et al. **Horm Behav** 1996 Jun;30(2):145-52

Specific response of mouse tumor-feeding arterioles to stimulation by 5-HT1 agonists. Stücker O, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1125-31

Pharmacologic evidence for 5-HT1A receptors associated with human retinal pigment epithelial cells in culture. Nash MS, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):510-9

Microinjection of a serotonin3 receptor agonist into the NTS of unanesthetized rats inhibits the bradycardia evoked by activation of the baro- and chemoreflexes. Callera JC, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):127-36

Effects of 5-HT4-receptor agonists, cisapride, mosapride citrate, and zacopride, on cardiac action potentials in guinea pig isolated papillary muscles. Kii Y, et al. **J Cardiovasc Pharmacol** 1997 May;29(5):670-5

Comparison of the cardiovascular effects of the novel 5-HT(1B/1D) receptor agonist, SB 209509 (VML251), and sumatriptan in dogs. Parsons AA, et al. **J Cardiovasc Pharmacol** 1997 Jul;30(1):136-41

5-HT1-like receptor-mediated contraction in the human internal mammary artery. Yildiz O, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):6-10

Ritanserin attenuates the in vitro effects of the 5-HT2 receptor agonist DOI on skeletal muscles from malignant hyperthermia-susceptible patients. Wappler F, et al. **J Clin Anesth** 1997 Jun;9(4):306-11

Effect of menstrual cycle phase on neuroendocrine and behavioral responses to the serotonin agonist m-chlorophenylpiperazine in women with premenstrual syndrome and controls. Su TP, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1220-8

First pharmacokinetic-pharmacodynamic study in humans with a selective 5-hydroxytryptamine4 receptor agonist. Appel S, et al. **J Clin Pharmacol** 1997 Mar;37(3):229-37

New benzocycloalkylpiperazines, potent and selective 5-HT1A receptor ligands. el Ahmad Y, et al. **J Med Chem** 1997 Mar 14;40(6):952-60

5-HT1A-versus D2-receptor selectivity of flesinoxan and analogous N4-substituted N1-arylpiperazines. Kuipers W, et al. **J Med Chem** 1997 Jan 31;40(3):300-12

TJS-010, a new prescription of oriental medicine, enhances 8-OH-DPAT-induced effects in rats. Kagaya A, et al. **J Neural Transm** 1996;103(1-2):69-75

Effect of pindolol on hormone secretion and body temperature: partial agonist effects. Meltzer HY, et al. **J Neural Transm** 1996;103(1-2):77-88

Differential effects of ipsapirone on 5-hydroxytryptamine release in the dorsal and median raphe neuronal pathways. Casanovas JM, et al. **J Neurochem** 1996 Nov;67(5):1945-52

Functional coupling of endogenous serotonin (5-HT1B) and calcitonin (C1a) receptors in CHO cells to a cyclic AMP-responsive luciferase reporter gene. George SE, et al. **J Neurochem** 1997 Sep;69(3):1278-85

Buspirone enhances duloxetine- and fluoxetine-induced increases in dialysate levels of dopamine and noradrenaline, but not serotonin, in the frontal cortex of freely moving rats. Gobert A, et al. **J Neurochem** 1997 Mar;68(3):1326-9

Identification of an endogenous 5-hydroxytryptamine2A receptor in NIH-3T3 cells: agonist-induced down-regulation involves decreases in receptor RNA and number. Saucier C, et al. **J Neurochem** 1997 May; 68(5):1998-2011

Native serotonin 5-HT3 receptors expressed in Xenopus oocytes differ from homopentameric 5-HT3 receptors. van Hooft JA, et al. **J Neurochem** 1997 Sep;69(3):1318-21

Effects of m-chlorophenylpiperazine on regional brain glucose utilization: a positron emission tomographic comparison of alcoholic and control subjects. Hommer D, et al. **J Neurosci** 1997 Apr 15;17(8):2796-806

5HT1B receptor agonists inhibit light-induced phase shifts of behavioral circadian rhythms and expression of the immediate-early gene c-fos in the suprachiasmatic nucleus. Pickard GE, et al. **J Neurosci** 1996 Dec 15;16(24):8208-20

5-HT2A receptor-mediated regulation of brain-derived neurotrophic factor mRNA in the hippocampus and the neocortex. Vaidya VA, et al. **J Neurosci** 1997 Apr 15; 17(8):2785-95

Effect of a serotonin agonist (sumatriptan) on the peptidergic innervation of the rat cerebral dura mater and on the expression of c-fos in the caudal trigeminal nucleus in an experimental migraine model. Knyihár-Csillik E, et al. **J Neurosci Res** 1997 Jun 1;48(5):449-64

Neural involvement in 5-hydroxytryptamine-induced net electrogenic ion secretion in the rat intestine in-vivo. Franks CM, et al. **J Pharm Pharmacol** 1996 Apr;48(4):411-6

Synthesis of 3-amino-2-(3-indolyl)propanol and propanoate derivatives and preliminary cardiovascular evaluation in rats. Pérez-Alvarez V, et al. **J Pharm Pharmacol** 1997 Mar; 49(3):246-52

Effects of 5-hydroxytryptamine agonists on myoelectric activity of the forestomach and antroduodenal area in sheep. Plaza MA, et al. **J Pharm Pharmacol** 1996 Dec; 48(12):1302-8

Pharmacodynamic and pharmacokinetic studies in rats of S-8-(2-Furyl)- and R-8-phenyl-2-(di-n-propylamino) tetralin, two novel 5-HT1A receptor agonists in-vitro with different properties in-vivo. Yu H, et al. **J Pharm Pharmacol** 1997 Feb;49(2):169-77

The central cholinergic system has a role in the antinociception induced in rodents and guinea pigs by the antimigraine drug sumatriptan. Ghelardini C, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):884-90

Pharmacological characterization of in vivo properties of putative mixed 5-HT1A agonist/5-HT(2A/2C) antagonist anxiolytics. II. Drug discrimination and behavioral observation studies in rats. Kleven MS, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):747-59

Chronic fluoxetine induces a gradual desensitization of 5-HT1A receptors: reductions in hypothalamic and midbrain Gi and G(o) proteins and in neuroendocrine responses to a 5-HT1A agonist. Li Q, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):1035-42

LSD and the phenethylamine hallucinogen DOI are potent partial agonists at 5-HT2A receptors on interneurons in rat piriform cortex. Marek GJ, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1373-82

Repeated administration of meta-chlorophenylpiperazine or 1-(2,5-dimethoxy-4-iodophenyl)-2-aminopropane produces tolerance to its stimulatory effect on adrenocorticotropin hormone but not prolactin or corticosterone secretion in rats. Mazzola-Pomietto P, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):782-9

S 15535, a novel benzodioxopiperazine ligand of serotonin (5-HT)1A receptors: I. Interaction with cloned human (h)5-HT1A, dopamine hD2/hD3 and h alpha2A-adrenergic receptors in relation to modulation of cortical monoamine release and activity in models of potential antidepressant activity. Millan MJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):132-47

S 15535, a novel benzodioxopiperazine ligand of serotonin (5-HT)1A receptors: II. Modulation of hippocampal serotonin release in relation to potential anxiolytic properties. Millan MJ, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):148-61

SDZ HTF 919 stimulates canine colonic motility and transit in vivo. Nguyen A, et al. **J Pharmacol Exp Ther** 1997 Mar; 280(3):1270-6

High-affinity agonist binding is not sufficient for agonist efficacy at 5-hydroxytryptamine2A receptors: evidence in favor of a modified ternary complex model. Roth BL, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):576-83

Direct injection of 5-HT2A receptor agonists into the medial prefrontal cortex produces a head-twitch response in rats. Willins DL, et al. **J Pharmacol Exp Ther** 1997 Aug; 282(2):699-706

Induction and maintenance of ganglionic long-term potentiation require activation of 5-hydroxytryptamine (5-HT3) receptors. Alkad'ıi KA, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):479-89

Nocturnal plasma melatonin concentrations in healthy volunteers: effect of single doses of d-fenfluramine, paroxetine, and ipsapirone. Nathan PJ, et al. **J Pineal Res** 1996 Sep;21(2):55-8

Partial agonistic activity of R- and S-enantiomers of 8-OH-DPAT at 5-HT1A receptors. Hadrava V, et al. **J Psychiatry Neurosci** 1996 Mar;21(2):101-8

The effect of central and systemic injection of the 5-HT1A receptor agonist 8-OHDPAT and the 5-HT1A receptor antagonist WAY100635 on periaqueductal grey-induced defence behaviour. Beckett S, et al. **J Psychopharmacol (Oxf)** 1997;11(1):35-40

Full and partial agonists induce distinct desensitized states of the 5-HT3 receptor. van Hooft JA, et al. **J Recept Signal Transduct Res** 1997 Jan-May; 17(1-3):267-77

Interaction of orally administered 5-[3-[((2S)-1,4-benzodioxan-2-ylmethyl)amino]propoxy]-1,3-benzodioxole (MKC-242) with 5-HT1A receptors in rat brain. Asano S, et al. **Jpn J Pharmacol** 1997 May; 74(1):69-75

The selective 5-hydroxytryptamine (5-HT)4-receptor agonist RS67506 enhances lower intestinal propulsion in mice. Nagakura Y, et al. **Jpn J Pharmacol** 1997 Jun; 74(2):209-12

Discriminative stimulus properties of eltoprazine. Gommans J, et al. **Life Sci** 1997;61(1):11-9

Effects of buspirone on operant and nonoperant food intake in food deprived rats. Ebenezer IS.

Methods Find Exp Clin Pharmacol 1996 Sep;18(7):475–80

Alniditan, a new 5–hydroxytryptamine1D agonist and migraine–abortive agent: ligand–binding properties of human 5–hydroxytryptamine1D alpha, human 5–hydroxytryptamine1D beta, and calf 5–hydroxytryptamine1D receptors investigated with [3H]5–hydroxytryptamine and [3H]alniditan. Leysen JE, et al. **Mol Pharmacol** 1996 Dec;50(6):1567–80

Effect of chronic administration of the selective serotonin (5–HT) uptake inhibitor citalopram on extracellular 5–HT and apparent autoreceptor sensitivity in rat forebrain in vivo. Auerbach SB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):597–606

The effects of a 5–HT1A receptor agonist and antagonist on the 5–hydroxytryptamine release in the central nucleus of the amygdala: a microdialysis study with flesinoxan and WAY 100635. Bosker F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):347–53

Comparison of 5–HT4 receptors in guinea–pig colon and rat oesophagus: effects of novel agonists and antagonists. Leung E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):145–56

Simultaneous measurement of [3H]noradrenaline release and neurogenic contraction under identical conditions, to determine the prejunctional inhibitory effects of SKF 99101H and BRL 56905 in dog saphenous vein. Medhurst AD, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr;355(4):475–82

Agonist activity of antimigraine drugs at recombinant human 5–HT1A receptors: potential implications for prophylactic and acute therapy. Newman–Tancredi A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):682–8

Effects of avitriptan, a new 5–HT 1B/1D receptor agonist, in experimental models predictive of antimigraine activity and coronary side–effect potential. Saxena PR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):295–302

Operational characteristics of the 5–HT1–like receptors mediating external carotid vasoconstriction in vagosympathectomized dogs. Close resemblance to the 5–HT1D receptor subtype. Villalón CM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):550–6

The role of the hypothalamic–pituitary–adrenocortical axis in memory–related effects of anxiolytics. Korneyev AY. **Neurobiol Learn Mem** 1997 Jan;67(1):1–13 (162 ref.)

5HT1A receptor agonist differentially increases cyclic AMP concentration in intact and lesioned goldfish retina. In vitro inhibition of outgrowth by forskolin. Urbina M, et al. **Neurochem Int** 1996 Nov;29(5):453–60

Different effects of the serotonergic agonists buspirone and sumatriptan on the posterior pituitary hormonal responses to hypoglycemia in humans. Chiodera P, et al. **Neuropeptides** 1996 Apr;30(2):187–92

Chronic cocaine exposure potentiates prolactin and head shake responses to 5–HT2 receptor stimulation in rats. Baumann MH, et al. **Neuropharmacology** 1996 Mar; 35(3):295–301

Modulation of dopamine release in the nucleus accumbens by 5–HT1B agonists: involvement of the hippocampo–accumbens pathway. Boulenguez P, et al. **Neuropharmacology** 1996;35(11):1521–9

Modulation of the discriminative stimulus properties of cocaine: comparison of the effects of fluoxetine with 5–HT1A and 5–HT1B receptor agonists. Callahan PM, et al. **Neuropharmacology** 1997 Mar;36(3):373–81

5–HT1A receptor–mediated inhibition of acetylcholine release from guinea pig myenteric plexus: potential mechanisms. Dietrich C, et al. **Neuropharmacology** 1996 Apr;35(4):483–8

Activation of 5–HT2B receptors in the medial amygdala causes anxiolysis in the social interaction test in the rat. Duxon MS, et al. **Neuropharmacology** 1997 Apr–May; 36(4–5):601–8

WAY100635–induced augmentation of the 5–HT–elevating action of citalopram: relative importance of the dose of the 5–HT1A (auto)receptor blocker versus that of the 5–HT reuptake inhibitor. Hjorth S, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):461–5

Baclofen–induced catatonia: modification by serotonergic agents. Kasture SB, et al. **Neuropharmacology** 1996 May; 35(5):595–8

BW 723C86, a 5–HT2B receptor agonist, causes hyperphagia and reduced grooming in rats. Kennett GA, et al. **Neuropharmacology** 1997 Feb;36(2):233–9

BIMU1 increases associative memory in rats by activating 5–HT4 receptors. Marchetti–Gauthier E, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):697–706

Protective actions of the 5–HT2A/2C receptor agonist, DOI, on 5–HT1A receptor–mediated inhibition of lordosis behavior. Maswood S, et al. **Neuropharmacology** 1996 Apr; 35(4):497–501

8–OH–DPAT–induced spontaneous tail–flicks in the rat are facilitated by the selective serotonin (5–HT)2C agonist, RO 60–0175: blockade of its actions by the novel 5–HT2C receptor antagonist SB 206,553. Millan MJ, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):743–5

Chronic electroconvulsive shock enhances 5–HT2 receptor–mediated head shakes but not brain C–fos induction. Moorman JM, et al. **Neuropharmacology** 1996 Mar;35(3):303–13

Agonist and inverse agonist efficacy at human recombinant serotonin 5–HT1A receptors as a function of receptor:G–protein stoichiometry. Newman–Tancredi A, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):451–9

Regulation of plasma aldosterone levels by metoclopramide: a reappraisal of its mechanism from dopaminergic antagonism to serotonergic agonism. Rizzi CA, et al. **Neuropharmacology** 1997 Jun;36(6):763–8 (65 ref.)

The role of 5–HT1A autoreceptors and alpha 1–adrenoceptors in the inhibition of 5–HT release--II NAN–190 and SDZ 216–525. Sharp T, et al. **Neuropharmacology** 1996 Jun;35(6):735–41

Differential effects of 5–HT1B/1D receptor agonists on neurogenic dural plasma extravasation and vasodilation in anaesthetized rats. Shepherd SL, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):525–33

5–HT1A receptor antagonists and lordosis behavior. Uphouse L, et al. **Neuropharmacology** 1996 Apr;35(4):489–95

Effects of 5–HT agonists, selective for different receptor subtypes, on oxytocin, CCK, gastrin and somatostatin plasma levels in the rat. Uvnäs–Moberg K, et al. **Neuropharmacology** 1996;35(11):1635–40

In vivo effects of 5–hydroxytryptamine receptor activation on rat nucleus tractus solitarius neurones excited by vagal C–fibre afferents. Wang Y, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):489–98

Clarifications on the effects of 5–HT1A agonists and selective 5–HT reuptake inhibitors on the 5–HT system [letter; comment] Blier P, et al. **Neuropsychopharmacology** 1996 Aug;15(2):213–6. Comment on: Neuropsychopharmacology 1996 Jan;14(1):19–25.

Effects of sleep deprivation on serotonergic neuronal activity in the dorsal raphe nucleus of the freely moving cat. Gardner JP, et al. **Neuropsychopharmacology** 1997 Aug; 17(2):72–81

Ipsapirone, a 5–HT1A agonist, suppresses REM sleep equally in unmedicated depressed patients and normal controls. Gillin JC, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):109–15

The behavioral effect of m–chlorophenylpiperazine (mCPP) and methylphenidate in first–episode schizophrenia and normal controls. Koreen AR, et al. **Neuropsychopharmacology** 1997 Jan;16(1):61–8

Characterization of the disruptions of prepulse inhibition and habituation of startle induced by alpha–ethyltryptamine. Martinez DL, et al. **Neuropsychopharmacology** 1997 Mar; 16(3):246–55

Agonist–promoted down–regulation and functional desensitization in two naturally occurring variants of the human serotonin1A receptor. Rotondo A, et al. **Neuropsychopharmacology** 1997 Jul;17(1):18–26

Positron emission tomography and fluorodeoxyglucose studies of metabolic hyperfrontality and psychopathology in the psilocybin model of psychosis. Vollenweider FX, et al. **Neuropsychopharmacology** 1997 May;16(5):357–72

5–HT1E receptor agonists inhibit neurogenic dural inflammation in guinea pigs. Johnson KW, et al. **Neuroreport** 1997 Jul 7;8(9–10):2237–40

Medullary pathways of cardiovascular responses to 5–HT2 and 5–HT3 receptor stimulation in the rat nucleus tractus solitarius. Sévoz C, et al. **Neuroreport** 1996 Aug 12; 7(12):1965–9

The role of 5HT3 in nociceptive processing in the rat spinal cord: results from behavioural and electrophysiological studies. Ali Z, et al. **Neurosci Lett** 1996 Apr 26;208(3):203–7

Phase–shifting effect of 8–OH–DPAT, a 5–HT1A/5–HT7 receptor agonist, on locomotor activity in golden hamster in constant darkness. Cutrera RA, et al. **Neurosci Lett** 1996 May 24;210(1):1–4

The alpha 2–adrenoceptor antagonist idazoxan is an agonist at 5–HT1A autoreceptors modulating serotonin synthesis in the rat brain in vivo. Lladó J, et al. **Neurosci Lett** 1996 Nov 1;218(2):111–4

TFMPP, a 5HT1B receptor agonist, inhibits light–induced phase shifts of the circadian activity rhythm and c–Fos expression in the mouse suprachiasmatic nucleus. Pickard GE, et al. **Neurosci Lett** 1997 Aug 8;231(2):95–8

Administration of amyloid beta–peptides in the rat medial septum causes memory deficits: reversal by SR 57746A, a non–peptide neurotrophic compound. Terranova JP, et al. **Neurosci Lett** 1996 Aug 2;213(2):79–82

Effects of adrenodemedullation and adrenalectomy on the 5–HT2 receptor agonists DOI–and mCPP–induced hypophagia in rats. Yamada J, et al. **Neurosci Lett** 1996 May 10;209(2):113–6

Single–unit responses of serotonergic dorsal raphe neurons to specific motor challenges in freely moving cats. Veasey SC, et al. **Neuroscience** 1997 Jul;79(1):161–9

Exposure to threshold doses of nicotine in utero: III. Augmentation of the prolactin and ACTH response to 8–OH DPAT by desipramine treatment is compromised in adult male offspring. Poland RE, et al. **Neurotoxicology** 1996 Summer;17(2):351–8

Neurochemical evidence that hallucinogenic drugs are 5–HT1c receptor agonists: what next? Sanders–Bush E. **NIDA Res Monogr** 1994;146:203–13 (20 ref.)

Inhibition of trigeminal neurons by intravenous administration of the serotonin (5HT)1B/D receptor agonist zolmitriptan (311C90): are brain stem sites therapeutic target in migraine? Goadsby PJ, et al. **Pain** 1996 Oct;67(2–3):355–9

Age–related effects of cardiac sympathetic denervation on the responses to cardiopulmonary receptor stimulation in piglets. Tong S, et al. **Pediatr Res** 1997 Jan;41(1):72–7

Differential effects of the 5–HT 1B/2C receptor agonist mCPP and the 5–HT1A agonist flesinoxan on hypothalamic neuropeptide Y in the rat: evidence that NPY may mediate serotonin's effects on food intake. Dryden S, et al. **Peptides** 1996;17(6):943–9

Serotonin–induced short– and long–term sensitization in the crab Chasmagnathus. Aggio J, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):441–8

The 5–HT1A receptor antagonist p–MPPI blocks responses mediated by postsynaptic and presynaptic 5–HT1A receptors. Allen AR, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):301–7

An ethopharmacological analysis of selective activation of 5–HT1A receptors: the mouse 5–HT1A syndrome. Blanchard RJ, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):897–908

Ritanserin blocks DOI–altered embryonic motility and posthatch learning in the developing chicken. Bollweg G, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):397–403

Behavioural effects in mice of subchronic buspirone, ondansetron and tianeptine. I. Social interactions. Cutler MG, et al. **Pharmacol Biochem Behav** 1997 Feb; 56(2):287–93

Effect of third ventricle administration of L–694,247, a selective 5–HT1D receptor agonist, on water intake in rats. De Castro–e–Silva E, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):749–54

8–OH–DPAT and male rat sexual behavior: partial blockade by noradrenergic lesion and sexual exhaustion. Fernández–Guasti A, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):111–6

5–HT1A agonists induce central cholinergic antinociception. Galeotti N, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):835–41

Risk assessment behaviour: evaluation of utility in the study of 5–HT–related drugs in the rat elevated plus–maze test. Griebel G, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):817–27

The 5–HT2 receptor agonist MK–212 reduces food intake and increases resting but prevents the behavioural satiety sequence. Halford JC, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):41–6

Effects of the serotonin receptor agonists 8–OH–DPAT and TFMPP on learning as assessed using a novel water maze. Kant GJ, et al. **Pharmacol Biochem Behav** 1996 Feb; 53(2):385–90

Buspirone enhances immobility in the forced swim test in mice. Kitamura Y, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):445–51

Differential effects of activation of lumbar and thoracic 5–HT2A/2C receptors on nociception in rats. Kjørsvik A, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):523–7

Effects of 5–HT4 receptor agonists and antagonists in learning. Meneses A, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):347–51

GR 127935 blocks the locomotor and antidepressant–like effects of RU 24969 and the action of antidepressants in the mouse tail suspension test. O'Neill MF, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):535–9

Behavioural effects in mice of subchronic buspirone, ondansetron and tianeptine. II. The elevated plus–maze. Rodgers RJ, et al. **Pharmacol Biochem Behav** 1997 Feb; 56(2):295–303

Excessive stimulation of serotonin2 (5–HT2) receptors during late development of chicken embryos causes decreased embryonic motility, interferes with hatching, and induces herniated umbilici. Sparber SB, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):603–11

Effects of S20749, a close analogue of sumatriptan, on porcine carotid haemodynamics and human isolated coronary artery. Saxena PR, et al. **Pharmacol Toxicol** 1996 Oct; 79(4):199–204

Differential ontogenesis of three DOI–induced behaviors in mice. Darmani NA, et al. **Physiol Behav** 1996 Dec; 60(6):1495–500

Lack of interaction between devazepide and 8–OH–DPAT–induced hyperphagia in the rat. Francis J, et al. **Physiol Behav** 1996 Nov;60(5):1337–40

The 5–HT1B receptor agonist CP–94,253 reduces food intake and preserves the behavioural satiety sequence. Halford JC, et al. **Physiol Behav** 1996 Sep;60(3):933–9

Effects of MP–3022 on the 8–OH–DPAT–induced discriminative stimulus in rats. Filip M, et al. **Pol J Pharmacol** 1996 Jul–Aug;48(4):397–402

Influence of captopril on the serotonin–induced vasopressor effect in tail artery isolated from two–kidney, one–clip renal hypertensive rats. Morelowska–Spierzak D, et al. **Pol J Pharmacol** 1995 Sep–Oct;47(5):417–22

Antidepressant–induced adaptive changes in the effects of 5–HT, 5–HT1A and 5–HT4 agonists on the population spike recorded in hippocampal CA1 cells do not involve presynaptic effects on excitatory synaptic transmission. Tokarski K, et al. **Pol J Pharmacol** 1996 Nov–Dec; 48(6):565–73

Dopaminergic and serotonergic properties of fluoxetine. Simon B, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Jan; 21(1):169–81

Effect of chronic ipsapirone treatment on the density of 5-HT1A receptors and 5-HT1A receptor mRNA in discrete regions of the rat brain. Shiro Y, et al. **Psychiatry Clin Neurosci** 1996 Jun;50(3):141–6

Moderate dieting causes 5-HT2C receptor supersensitivity. Cowen PJ, et al. **Psychol Med** 1996 Nov;26(6):1155–9

The effect of chronic fluvoxamine on hormonal and psychological responses to buspirone in normal volunteers. Anderson IM, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(1):74–82

Effect of the 5-HT1A agonist, 8-OH-DPAT on instrumental performance in rats. Balleine BW, et al. **Psychopharmacology (Berl)** 1996 May;125(1):79–88

Pharmacological manipulation of ultrasound induced defence behaviour in the rat. Beckett SR, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):384–90

Daily administration of m-chlorophenylpiperazine to healthy human volunteers rapidly attenuates many of its behavioral, hormonal, cardiovascular and temperature effects. Benjamin J, et al. **Psychopharmacology (Berl)** 1996 Sep; 127(2):140–9

Sumatriptan decreases food intake and increases plasma growth hormone in healthy women. Boeles S, et al. **Psychopharmacology (Berl)** 1997 Jan;129(2):179–82

Behavioral, physiological and neuroendocrine responses in healthy volunteers to m-chlorophenylpiperazine (m-CPP) with and without ondansetron pretreatment. Broocks A, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):91–103

Flesinoxan pretreatment differentially affects corticosterone, prolactin and behavioural responses to a flesinoxan challenge. Groenink L, et al. **Psychopharmacology (Berl)** 1997 May;131(1):93–100

Activation of acetylcholine receptors and 5-HT2 receptors have additive effects in the suppression of neocortical high-voltage spindles in aged rats. Jäkälä P, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):270–80

Evidence of acoustic startle hyperreflexia in recently detoxified early onset male alcoholics: modulation by yohimbine and m-chlorophenylpiperazine (mCPP). Krystal JH, et al. **Psychopharmacology (Berl)** 1997 Jun; 131(3):207–15

CP-94, 253: a selective serotonin1B (5-HT1B) agonist that promotes satiety. Lee MD, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):264–70

CP-135,807, a selective 5-HT1D agonist: effects in drug discrimination and punishment procedures in the pigeon. Mansbach RS, et al. **Psychopharmacology (Berl)** 1996 Dec; 128(3):313–9

Evidence that m-chlorophenylpiperazine-induced hyperthermia in rats is mediated by stimulation of 5-HT2C receptors. Mazzola-Pomietto P, et al. **Psychopharmacology (Berl)** 1996 Feb;123(4):333–9

Circadian rhythm in the responsiveness of central 5-HT2A receptor to DOI in rats. Nagayama H, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):113–6

RU24969-induced behavioural syndrome requires activation of both 5HT1A and 5HT1B receptors. O'Neill MF, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):255–60

5-HT modulation of auditory and visual sensorimotor gating: II. Effects of the 5-HT2A antagonist MDL 100,907 on disruption of sound and light prepulse inhibition produced by 5-HT agonists in Wistar rats. Padich RA, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):107–16

Serotonin1b receptor stimulation enhances dopamine-mediated reinforcement. Parsons LH, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):150–60

Effect of paroxetine and nefazodone on 5-HT1A receptor sensitivity. Sargent P, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):296–302

Functional behavioral homology between rat 5-HT1B and guinea pig 5-HT1D receptors in the modulation of prepulse inhibition of startle. Sipes TE, et al. **Psychopharmacology (Berl)** 1996 Jun;125(3):231–7

Paroxetine treatment and the prolactin response to sumatriptan. Wing YK, et al. **Psychopharmacology (Berl)** 1996 Apr;124(4):377–9

Mechanisms of 5-hydroxytryptamine-induced contraction of isolated rat intrapulmonary bronchi. Szarek JL, et al. **Pulm Pharmacol** 1995 Dec;8(6):273–81

Effects of sumatriptan on growth hormone releasing hormone-stimulated growth hormone secretion in acromegaly. Cuttica CM, et al. **Recenti Prog Med** 1997 Jun;88(6):264–8

The oxytocin receptor antagonist 1-deamino-2-D-Tyr-(OEt)-4-Thr-8-Orn-oxytocin inhibits effects of the 5-HT1A receptor agonist 8-OH-DPAT on plasma levels of insulin, cholecystokinin and somatostatin. Björkstrand E, et al. **Regul Pept** 1996 May 7;63(1):47–52

Hypoglossal and phrenic motoneuron responses to serotonergic active agents in rats. Richmonds CR, et al. **Respir Physiol** 1996 Nov;106(2):153–60

The serotonin analogue buspirone increases the function of PBMC from HIV-infected individuals in vitro. Afzelius P, et al. **Scand J Infect Dis** 1997;29(2):117–20

Excitatory actions of serotonin on GABAergic neurons of the medial septum and diagonal band of Broca. Alreja M. **Synapse** 1996 Jan;22(1):15–27

Enhanced synaptophysin immunoreactivity in rat hippocampal culture by 5-HT 1A agonist, S100b, and corticosteroid receptor agonists. Nishi M, et al. **Synapse** 1996 May;23(1):1–9

Evidence that conditioned stress enhances outflow of dopamine in rat prefrontal cortex: a search for the influence of diazepam and 5-HT1A agonists. Wędzony K, et al. **Synapse** 1996 Nov;24(3):240–7

[A new approach to innovating selective anxiolytics: pharmacological profile of a novel 5-HT1A agonist (tandospirone)] Sasa M. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):53–9 (33 ref.) (Eng. Abstr.) **(Jpn)**

[The effect of 5-HT1 and 5-HT2 serotonin receptor agonists and antagonists on predator aggression in wild Norway rats] Popova NK, et al. **Biull Eksp Biol Med** 1996 Jun; 121(6):687–9 **(Rus)**

[Features of the antidepressive effect of O-beta-chloroethyl-para-N-dimethylaminophenylphosphinylacetic acid (amfazide)] Semina II, et al. **Biull Eksp Biol Med** 1996 May; 121(5):538–40 **(Rus)**

[Buspirone--a wide-spectrum preparation] Molodavkin GM, et al. **Eksp Klin Farmakol** 1997 Mar-Apr;60(2):3–6 (Eng. Abstr.) **(Rus)**

[Activity of ondansetron on the systemic vascular resistance and venous capacitance during cardiopulmonary bypass] Sánchez-Peña J, et al. **Rev Esp Anestesiol Reanim** 1996 Oct;43(8):269–71 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Craving for cocaine in addicted users. Role of serotonergic mechanisms. Buydens-Branchey L, et al. **Am J Addict** 1997 Winter;6(1):65–73

Alternative treatment for poststroke depression [letter] Mårtensson B, et al. **Am J Psychiatry** 1997 Apr; 154(4):583–4

The use of sumatriptan in the treatment of postdural puncture headache [letter] Hodgson C, et al. **Anaesthesia** 1997 Aug; 52(8):808

Sumatriptan: an alternative to epidural blood patch? [letter] Lhuissier C, et al. **Anaesthesia** 1996 Nov;51(11):1078

Buspirone, a 5-hydroxytryptamine1A agonist, is active in cerebellar ataxia. Results of a double-blind drug placebo study in patients with cerebellar cortical atrophy. Trouillas P, et al. **Arch Neurol** 1997 Jun;54(6):749–52

Rizatriptan vs sumatriptan in the acute treatment of migraine. A placebo-controlled, dose-ranging study. Dutch/US Rizatriptan Study Group. Visser WH, et al. **Arch Neurol** 1996 Nov;53(11):1132–7

Headache response to m-chlorophenylpiperazine in obsessive-compulsive disorder and normal controls. Wong CM, et al. **Biol Psychiatry** 1996 Sep 15;40(6):544–6

Use of sumatriptan in Denmark in 1994-5: an epidemiological analysis of nationwide prescription data. Gaist D, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):429–33

Single restraint stress sensitizes acute chewing movements induced by haloperidol, but not if the 5-HT1A agonist 8-OH-DPAT is given prior to stress. Fdez. Espejo E, et al. **Brain Res** 1997 May 2;755(2):351–5

Alniditan in the acute treatment of migraine attacks: a subcutaneous dose-finding study. Subcutaneous Alniditan Study Group. Goldstein J, et al. **Cephalalgia** 1996 Nov; 16(7):497–502

Sumatriptan and lost productivity time: a time series analysis of diary data. Miller DW, et al. **Clin Ther** 1996 Nov-Dec; 18(6):1263–75

Clinical presentation and treatment of migraine. Skaer TL. **Clin Ther** 1996 Mar-Apr;18(2):229–45; discussion 228 (71 ref.)

Acute migraine therapy: the newer drugs. Schoenen J. **Curr Opin Neurol** 1997 Jun;10(3):237–43 (38 ref.)

Is overuse of sumatriptan a problem? A population-based study [published erratum appears in Eur J Clin Pharmacol 1996;50(5):431] Gaist D, et al. **Eur J Clin Pharmacol** 1996; 50(3):161–5

Studies to assess if pizotifen prophylaxis improves migraine beyond the benefit offered by acute sumatriptan therapy alone. Cleland PG, et al. **Eur Neurol** 1997;38(1):31–8

Can oral 311C90, a novel 5-HT1D agonist, prevent migraine headache when taken during an aura? Dowson A. **Eur Neurol** 1996;36 Suppl 2:28–31

Extending therapeutic options? Prospects for the future. Edmeads JG. **Eur Neurol** 1996;36 Suppl 2:32–3

The clinical effectiveness of 311C90 in the acute treatment of migraine. Ferrari MD. **Eur Neurol** 1996;36 Suppl 2:4–7

Emerging preclinical and clinical profile of 311C90: a poster review and discussion. Ferrari MD. **Eur Neurol** 1996;36 Suppl 2:19–23 (23 ref.)

Evaluation of the long-term safety and efficacy of 311C90 in the treatment of migraine. Geraud GE. **Eur Neurol** 1996; 36 Suppl 2:24–7

Inhibition of the trigemino-vascular system with 5-HT1D agonist drugs: selectively targeting additional sites of action. Martin GR. **Eur Neurol** 1996;36 Suppl 2:13–8 (22 ref.)

Subcutaneous sumatriptan for the treatment of migraine: humanistic, economic, and clinical consequences [see comments] Cohen JA, et al. **Fam Med** 1996 Mar;28(3):171–7 . Comment in: Fam Med 1996 Jul-Aug;28(7):464–5.

Treatment of migraine with BMS180048: response at 2 hours. North American BMS180048 Study Group. Couch JR Jr, et al. **Headache** 1996 Oct;36(9):523–30

Prescribing practices for the management of headache in Newfoundland and Labrador. Furlong S, et al. **Headache** 1996 Oct;36(9):542–6

Sumatriptan prophylaxis for intractable migraine [letter] Gilbert GJ. **Headache** 1997 Feb;37(2):113–4

Sumatriptan relieves migrainelike headaches associated with carbon monoxide exposure. Lipton RB, et al. **Headache** 1997 Jun;37(6):392–5 (39 ref.)

Impact of sumatriptan on clinic utilization and costs of care in migraineurs. Litaker DG, et al. **Headache** 1996 Oct; 36(9):538–41

Impact of sumatriptan on workplace productivity, nonwork activities, and health-related quality of life among hospital employees with migraine. Mushet GR, et al. **Headache** 1996 Mar;36(3):137–43

Twenty-four-hour effectiveness of BMS 180048 in the acute treatment of migraine headaches. Ryan RE Jr, et al. **Headache** 1997 Apr;37(4):245–8

Diagnosis and symptomatic treatment of migraine. Saper JR. **Headache** 1997;37 Suppl 1:S1–14 (56 ref.)

Sumatriptan-nonresponders: a survey in 366 migraine patients. Visser WH, et al. **Headache** 1996 Sep;36(8):471–5

Improvement in cholestasis-associated fatigue with a serotonin receptor agonist using a novel rat model of fatigue assessment [see comments] Swain MG, et al. **Hepatology** 1997 Feb;25(2):291–4. Comment in: Hepatology 1997 Feb;25(2):492–4.

Oral treatments for erectile dysfunction. Riley A. **Int J STD AIDS** 1996;7 Suppl 3:16–8 (12 ref.)

Increased prolactin response to buspirone in chronic fatigue syndrome. Sharpe M, et al. **J Affect Disord** 1996 Nov 4; 41(1):71–6

The effect of buspirone on challenging behaviour in mentally retarded patients: an open prospective multiple-case study. Verhoeven WM, et al. **J Intellect Disabil Res** 1996 Dec; 40 (Pt 6):502–8

Cost benefit of sumatriptan to an employer. Legg RF, et al. **J Occup Environ Med** 1997 Jul;39(7):652–7

Oral imitrex for migraine relief. Burke SM. **MCN Am J Matern Child Nurs** 1996 Nov-Dec;21(6):316

Urapidil treatment decreases plasma fibrinogen concentration in essential hypertension. Haenni A, et al. **Metabolism** 1996 Oct;45(10):1221–9

Machado-Joseph disease/spinocerebellar ataxia 3 responsive to buspirone. Friedman JH. **Mov Disord** 1997 Jul; 12(4):613–4

Current concepts of the pathophysiology of migraine. Goadsby PJ. **Neurol Clin** 1997 Feb;15(1):27–42 (42 ref.)

Serotonin 1D (5-HT1D) agonists and other agents in acute migraine. Mathew NT. **Neurol Clin** 1997 Feb;15(1):61–83 (127 ref.)

311C90: patient profiles and typical case histories of migraine management. Dowson AJ. **Neurology** 1997 Mar;48(3 Suppl 3):S29–33

311C90: increasing the options for therapy with effective acute antimigraine 5HT1B/1D receptor agonists. Ferrari MD. **Neurology** 1997 Mar;48(3 Suppl 3):S21–4 (15 ref.)

Increasing the options for effective migraine management. Goadsby PJ, et al. **Neurology** 1997 Mar;48(3 Suppl 3):S1–3 (16 ref.)

311C90: long-term efficacy and tolerability profile for the acute treatment of migraine. International 311C90 Long-Term Study Group. Zagami AS. **Neurology** 1997 Mar;48(3 Suppl 3):S25–8

Buspirone, a serotonergic 5-HT1A agonist, is active in cerebellar ataxia. A new fact in favor of the serotonergic theory of ataxia. Trouillas P, et al. **Prog Brain Res** 1997; 114:589–99

Effects of the 5-HT1A receptor agonist flesinoxan in panic disorder. van Vliet IM, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):174–80

Buspirone in the management of disruptive behaviors due to Huntington's disease and other neurological disorders. Bhandary AN, et al. **Psychosomatics** 1997 Jul-Aug; 38(4):389–91

Buspirone is an effective augmenting agent of serotonin selective re-uptake inhibitors in severe treatment-refractory depression. Bouwer C, et al. **S Afr Med J** 1997 Apr;87(4 Suppl):534–7, 540

5-HT4 receptor agonists and bladder disorders [letter; comment] Tonini M, et al. **Trends Pharmacol Sci** 1996 Sep; 17(9):314–6. Comment on: Trends Pharmacol Sci 1996 Apr;17(4):161–5.

[Anxiety and depression. Highlights from the 149th Session of the American Psychiatric Association, New York 4–9 May 1996] **Fortschr Neurol Psychiatr** 1997 Apr;65(4 Suppl Angst Und):1–4 **(Ger)**

[The 5-HT1A receptor: a new effective principle in psychopharmacologic therapy?] Davids E, et al. **Fortschr Neurol Psychiatr** 1996 Nov;64(11):460–72 (135 ref.) (Eng. Abstr.) **(Ger)**

[Pharmacologic and clinical differentiation of prokinetic drugs] May B, et al. **Leber Magen Darm** 1996 Jul; 26(4):193–8 (52 ref.) (Eng. Abstr.) **(Ger)**

[Prevention of hypertensive crises in the perioperative period. Efficacy and safety of the use of urapidil] Mastronardi P, et al. **Minerva Chir** 1996 Apr;51(4):227–33 (Eng. Abstr.) **(Ita)**

[Sumatriptan in treatment of migraine and its efficacy and tolerance in self-assessment by patients] Prusiński A, et al. **Pol Tyg Lek** 1996 Mar;51(10–13):187–9 **(Pol)**

[Effects of buspirone on the development of an experimental depressive syndrome in rats, caused by systemic administration of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP)]

Krupina NA, et al. **Biull Eksp Biol Med** 1996 May; 121(5):489–94 **(Rus)**

[Use of ondansetron for prevention of postoperative nausea and vomiting in major ambulatory surgery (letter; comment)] García del Valle S, et al. **Rev Esp Anestesiol Reanim** 1996 Oct;43(8):300–1. Comment on: Rev Esp Anestesiol Reanim 1996 Apr;43(4):138–41. **(Spa)**

TOXICITY

Comparison of relative potencies of i.v. and i.c.v. administered 8-OH-DPAT gives evidence of different sites of action for hypothermia, lower lip retraction and tail flicks. Bagdy G, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):53–8

The preclinical toxicological evaluation of sumatriptan. Owen K, et al. **Hum Exp Toxicol** 1995 Dec;14(12):959–73

Effect of interferon-alpha on DOI-induced wet-dog shakes in rats. Kugaya A, et al. **J Neural Transm** 1996; 103(8–9):947–55

Effects found in a one-year oral toxicity study in Sprague-Dawley rats of a novel 5-HT1A receptor partial agonist for the treatment of anxiety in humans. Zwicker GM, et al. **Toxicol Pathol** 1996 Mar-Apr;24(2):207–13

SEROTONIN ANTAGONISTS

see related

SEROTONIN UPTAKE INHIBITORS

Inhibitory effect of heparin on serotonin-induced hyperplasia and hypertrophy of smooth muscle cells. Lee SL, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):78–83

Dolasetron. A review of its pharmacology and therapeutic potential in the management of nausea and vomiting induced by chemotherapy, radiotherapy or surgery. Balfour JA, et al. **Drugs** 1997 Aug;54(2):273–98 (86 ref.)

Molecular cloning and characterization of NESP55, a novel chromogranin-like precursor of a peptide with 5-HT1B receptor antagonist activity. Ischia R, et al. **J Biol Chem** 1997 Apr 25;272(17):11657–62

5-HT3-receptor antagonists: a review of pharmacology and clinical efficacy. Cunningham RS. **Oncol Nurs Forum** 1997 Aug;24(7 Suppl):33–40 (54 ref.)

[Mechanisms of cytotoxic drug-induced emesis and its prevention] Matsuki N. **Yakugaku Zasshi** 1996 Sep; 116(9):710–8 (32 ref.) (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Intravenous dolasetron mesilate ameliorates postoperative nausea and vomiting. Diemunsch P, et al. **Can J Anaesth** 1997 Feb;44(2):173–81

A double-blind, randomised comparison of the anti-emetic efficacy of two intravenous doses of dolasetron mesilate and granisetron in patients receiving high dose cisplatin chemotherapy. Audhuy B, et al. **Eur J Cancer** 1996 May; 32A(5):807–13

Efficacy of treatment with trazodone in combination with pindolol or fluoxetine in major depression. Maes M, et al. **J Affect Disord** 1996 Dec 16;41(3):201–10

Social phobia-related nausea relieved with adjunctive cisapride [letter] Bohn P, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):56–7

Pindolol augmentation of tranylcypromine in psychotic depression [letter] Kraus RP. **J Clin Psychopharmacol** 1997 Jun;17(3):225–6

Relatively low doses of cisapride in the treatment of nausea in patients treated with venlafaxine for treatment-refractory depression. Russell JL. **J Clin Psychopharmacol** 1996 Feb;16(1):35–7

Repeated administration of the 5-HT3 receptor antagonist granisetron reduces the incidence of delayed cisplatin-induced emesis in the piglet. Grélot L, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):255–61

Dose comparison of tropisetron (Navoban) 5 mg and 10 mg orally in the prophylaxis of dacarbazine-induced nausea and emesis. Garbe C, et al. **Semin Oncol** 1994 Oct;21(5 Suppl 9):12–6

The effect of a 5HT2 receptor antagonist sarpogrelate (MCI-9042) treatment on platelet function in Buerger's disease. Rydzewski A, et al. **Thromb Res** 1996 Dec 15; 84(6):445–52

[Effectiveness and tolerance of Navoban (5HT3-receptor antagonist tropisetron) in prevention of cytostatic drug-induced nausea and vomiting in patients with breast carcinomas and gynecological malignancies] Regidor PA, et al. **Zentralbl Gynakol** 1996;118(3):148–53 (Eng. Abstr.) **(Ger)**

[The 5HT3-receptor antagonist Zofran (ondansetron) as an agent for preventing nausea and vomiting during the cytostatic treatment of cancer patients] Perevodchikova NI, et al. **Ter Arkh** 1996;68(2):30–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Cisapride interaction with antidepressants [letter] Caley C. **Ann Pharmacother** 1996 Jun;30(6):684

Comment: delayed risperidone-induced neuroleptic malignant syndrome [letter] Sitarz WE. **Ann Pharmacother** 1996 Nov;30(11):1342–3

Pharmacokinetics and safety of single intravenous and oral doses of dolasetron mesylate in healthy women. Keung AC, et al. **Biopharm Drug Dispos** 1997 May;18(4):361–9

Effects of 'Seroquel' (quetiapine) on platelet serotonin-2 binding in schizophrenia [letter] Faustman WO, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):464–6

Ritanserin facilitates anxiety in a simulated public-speaking paradigm. Guimarães FS, et al. **J Psychopharmacol (Oxf)** 1997;11(3):225–31

Single-dose, placebo-controlled, phase I study of oral dolasetron. Dixon RM, et al. **Pharmacotherapy** 1996 Mar-Apr;16(2):245–52

Neuroleptic malignant syndrome with risperidone. Gleason PP, et al. **Pharmacotherapy** 1997 May-Jun;17(3):617–21

Multiple-dose, placebo-controlled, phase I study of oral dolasetron. Hunt TL, et al. **Pharmacotherapy** 1996 Mar-Apr;16(2):253–60

Acute severe depression following peri-operative ondansetron. Blaine EM. **S Afr Med J** 1997 Aug; 87(8):1013–4

[Acute postoperative pancreatitis, is it associated with the use of ondansetron? (letter)] Granados LM, et al. **Rev Esp Anestesiol Reanim** 1997 Feb;44(2):87 **(Spa)**

ANALYSIS

Simultaneous measurement of dolasetron and its major metabolite, MDL 74,156, in human plasma and urine. Huebert ND, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):291–7

BLOOD

Direct plasma liquid chromatographic-tandem mass spectrometric analysis of granisetron and its 7-hydroxy metabolite utilizing internal surface reversed-phase guard columns and automated column switching devices. Boppana VK, et al. **J Chromatogr B Biomed Appl** 1996 Apr 12;678(2):227–36

Automated high-performance liquid chromatographic method for the analysis of two novel ergoline compounds in human plasma. Brooks SA, et al. **J Chromatogr B Biomed Appl** 1997 Apr 11;691(2):383–8

High-resolution liquid chromatographic method using ultraviolet detection for determination of ondansetron in human plasma. Dépôt M, et al. **J Chromatogr B Biomed Appl** 1997 Jun 6;693(2):399–406

High-performance liquid chromatographic analysis of ondansetron enantiomers in human serum using a reversed-phase cellulose-based chiral stationary phase and solid-phase extraction. Liu J, et al. **J Chromatogr B Biomed Appl** 1997 Jun 20;694(1):179–84

Determination of alosetron in human plasma or serum by high-performance liquid chromatography with robotic sample preparation. Lloyd TL, et al. **J Chromatogr B Biomed Appl** 1996 Apr 12;678(2):261–7

Enantioselective determination of S-(+)- and R-(−)-ondansetron in human serum using derivatized cyclodextrin-modified capillary electrophoresis and solid-phase extraction. Siluveru M, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):217–22

Fully automated assay for the determination of sumatriptan in human serum using solid-phase extraction and high-performance liquid chromatography with electrochemical detection. Dunne M, et al. **J Pharm Biomed Anal** 1996 Apr;14(6):721–6

Validation of a reversed-phase HPLC method for directly quantifying the enantiomers of MDL 74,156, the primary metabolite of dolasetron mesylate, in human plasma. McElvain JS, et al. **J Pharm Biomed Anal** 1997 Jan; 15(4):513–21

Serotonin 5-HT2A receptor binding in platelets from healthy subjects as studied by [3H]-lysergic acid diethylamide ([3H]-LSD): intra- and interindividual variability. Spigset O, et al. **Neuropsychopharmacology** 1997 Apr;16(4):285–93

CHEMICAL SYNTHESIS

Structure-activity relationship studies of CNS agents, Part 31: Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment--new 5-HT1A receptor ligands. Paluchowska MH, et al. **Arch Pharm (Weinheim)** 1996 Oct;329(10):451–6

Synthesis, affinity at 5-HT2A, 5-HT2B and 5-HT2C serotonin receptors and structure-activity relationships of a series of cyproheptadine analogues. Honrubia MA, et al. **Chem Pharm Bull (Tokyo)** 1997 May;45(5):842–8

Benzoxazines. II. Synthesis, conformational analysis, and structure--activity relationships of 3,4-dihydro-2H-1,4-benzoxazine-8-carboxamide derivatives as potent and long-acting serotonin-3 (5-HT3) receptor antagonists. Kuroita T, et al. **Chem Pharm Bull (Tokyo)** 1996 Nov;44(11):2051–60

Novel 5-hydroxytryptamine (5-HT3) receptor antagonists. Synthesis and structure-activity relationships of 9-methyl-2,3,4,9-tetrahydrothiopyrano[2,3-b]indol-4-one derivatives. Suzuki T, et al. **Chem Pharm Bull (Tokyo)** 1997 Jan;45(1):101–6

Synthesis and pharmacology of the enantiomers of UH301: opposing interactions with 5-HT1A receptors. Hillver SE, et al. **Chirality** 1996;8(8):531–44

Serotonin 5-HT2 receptor, dopamine D2 receptor, and alpha 1 adrenoceptor antagonists. Conformationally flexible analogues of the atypical antipsychotic sertindole. Andersen K, et al. **J Med Chem** 1996 Sep 13;39(19):3723–38

5-HT1D receptor agonist properties of novel 2-[5-[[(trifluoromethyl)sulfonyl]oxy]indolyl]ethylamines and their use as synthetic intermediates. Barf TA, et al. **J Med Chem** 1996 Nov 22;39(24):4717–26

Synthesis, biological activity, and molecular modeling of selective 5-HT(2C/2B) receptor antagonists. Forbes IT, et al. **J Med Chem** 1996 Dec 6;39(25):4966–77

Derivatives of (R)- and (S)-5-fluoro-8-hydroxy-2-(dipropylamino)tetralin: synthesis and interactions with 5-HT1A receptors. Höök BB, et al. **J Med Chem** 1996 Sep 27;39(20):4036–43

New 2-piperazinylbenzimidazole derivatives as 5-HT3 antagonists. Synthesis and pharmacological evaluation. Orjales A, et al. **J Med Chem** 1997 Feb 14;40(4):586–93

N-[2-[(substituted chroman-8-yl)oxy]ethyl]-4-(4-methoxyphenyl) butylamines: synthesis and wide range of antagonism at the human 5-HT1A receptor. Yasunaga T, et al. **J Med Chem** 1997 Apr 11;40(8):1252–7

Preparation of 8-[3-(4-fluorobenzoyl)-propyl]-1-(4-[123I] iodobenzoyl)-1,3,8-triazaspiro[4,5]decan-4-one: a novel selective serotonin 5-HT2 receptor agent. Samnick S, et al. **Nucl Med Biol** 1997 May;24(4):295–303

[18F]fluoroalkyl analogues of the potent 5-HT1A antagonist WAY 100635: radiosyntheses and in vivo evaluation. Wilson AA, et al. **Nucl Med Biol** 1996 May;23(4):487–90

5-HT1A and 5-HT2A receptor affinity and functional profile of some N-[3-(4-aryl-1-piperazinyl)propyl] derivatives of indolin-2(1H)-one, quinolin-2(1 H)-one and isoquinolin-1(2H)-one. Part 30: Structure-activity relationship studies of CNS agents. Mokrosz MJ, et al. **Pharmazie** 1997 Jun;52(6):423–8

CHEMISTRY

Stability of granisetron hydrochloride in an extemporaneously prepared oral liquid. Quercia RA, et al. **Am J Health Syst Pharm** 1997 Jun 15;54(12):1404–6

Correction: chemical structures of serotonin and serotonin-receptor antagonists [letter; comment] Holder EP. **Ann Pharmacother** 1996 Sep;30(9):1043. Comment on: Ann Pharmacother 1995 Dec;29(12):1240–51.

Stereoselective pharmacological effects of lysergic acid amides possessing chirality in the amide substituent. Nichols DE, et al. **Behav Brain Res** 1996;73(1–2):117–9 (9 ref.)

Molecular structure and dynamics of some potent 5-HT3 receptor antagonists. Insight into the interaction with the receptor. Cappelli A, et al. **Bioorg Med Chem** 1996 Aug; 4(8):1255–69

Novel 5-hydroxytryptamine (5-HT3) receptor antagonists. IV. Synthesis and pharmacological evaluation of the oxidation products of (-)-(R)-5-[(1-methyl-1H-indol-3-yl)carbonyl] -4,5,6,7-tetrahydro-1H-benzimidazole hydrochloride (YM060: ramosetron). Ohta M, et al. **Chem Pharm Bull (Tokyo)** 1996 Sep;44(9):1717–22

Novel 5-hydroxytryptamine (5-HT3) receptor antagonists. III. Pharmacological evaluations and molecular modeling studies of optically active 4,5,6,7-tetrahydro-1H-benzimidazole derivatives. Ohta M, et al. **Chem Pharm Bull (Tokyo)** 1996 Sep;44(9):1707–16

Molecular modeling of serotonin, ketanserin, ritanserin and their 5-HT2C receptor interactions. Kristiansen K, et al. **Eur J Pharmacol** 1996 Jun 13;306(1–3):195–210

New esters of 4-amino-5-chloro-2-methoxybenzoic acid as potent agonists and antagonists for 5-HT4 receptors. Yang D, et al. **J Med Chem** 1997 Feb 14;40(4):608–21

Effect of pulverization on dehydration behavior of crystals of GK-128, a serotonin3 receptor antagonist. Ito S, et al. **J Pharm Sci** 1996 Oct;85(10):1117–22

DIAGNOSTIC USE

Positron emission tomography of 5-HT reuptake sites in the human brain with C-11 McN5652 extraction of characteristic images by artificial neural network analysis. Szabo Z, et al. **Behav Brain Res** 1996;73(1–2):221–4

Autoradiographic localization of 5-HT1A receptors in the post-mortem human brain using [3H]WAY-100635 and [11C]way-100635. Hall H, et al. **Brain Res** 1997 Jan 16; 745(1–2):96–108

Exquisite delineation of 5-HT1A receptors in human brain with PET and [carbonyl-11 C]WAY-100635. Pike VW, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):R5–7

Development of central 5-HT2A receptor radioligands for PET: comparison of [3H]RP 62203 and [3H]SR 46349B kinetics in rat brain. Ashworth S, et al. **Nucl Med Biol** 1996 Apr;23(3):245–50

Reliability of a simple non-invasive method for the evaluation of 5-HT2 receptors using [18F]-setoperone PET imaging. Kapur S, et al. **Nucl Med Commun** 1997 May;18(5):395–9

[An improved automated synthesis and in vivo evaluation of PET radioligand for serotonin re-uptake sites: [11C]McN5652X] Sasaki M, et al. **Kaku Igaku** 1996 Dec; 33(12):1319–27 (Eng. Abstr.) **(Jpn)**

ECONOMICS

Re: 'Cost-effectiveness of 5-hydroxytryptamin3 receptor antagonists: a retrospective comparison of ondansetron and granisetron' [letter; comment] Thwaites R, et al. **Anticancer Drugs** 1996 Jan;7(1):127–30. Comment on: Anticancer Drugs 1995 Apr;6(2):243–9.

SEROTONIN ANTAGONISTS

ISOLATION & PURIFICATION

Histaminergic and serotonergic receptor blocking substances from the medicinal plant Garcinia mangostana [letter] Chairungsrilerd N, et al. **Planta Med** 1996 Oct;62(5):471–2

METABOLISM

Binding affinity of sarpogrelate, a new antiplatelet agent, and its metabolite for serotonin receptor subtypes. Nishio H, et al. **Arch Int Pharmacodyn Ther** 1996 Mar–Apr; 331(2):189–202

Characterization of the cytochrome P450 enzymes involved in the in vitro metabolism of dolasetron. Comparison with other indole-containing 5-HT3 antagonists. Sanwald P, et al. **Drug Metab Dispos** 1996 May;24(5):602–9

Comparison of [3H]YM060 binding to native and cloned rat 5-HT3 receptors. Akuzawa S, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):227–30

Binding profile of the novel 5-HT1B/1D receptor antagonist, [3H]GR 125,743, in guinea-pig brain: a comparison with [3H]5-carboxamidotryptamine. Audinot V, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):247–56

Binding thermodynamics of 5-HT1A receptor ligands. Dalpiaz A, et al. **Eur J Pharmacol** 1996 Sep 19; 312(1):107–14

The naphtosultam derivative RP 62203 (fananserin) has high affinity for the dopamine D4 receptor. Heuillet E, et al. **Eur J Pharmacol** 1996 Oct 24;314(1–2):229–33

Simultaneous measurement of dolasetron and its major metabolite, MDL 74,156, in human plasma and urine. Huebert ND, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):291–7

Use of electrospray ionization liquid chromatography–mass spectrometry to study the role of CYP2D6 in the in vitro metabolism of 5-hydroxytryptamine receptor antagonists. Sanwald P, et al. **J Chromatogr B Biomed Appl** 1996 Mar 29;678(1):53–61

Autoradiographic distribution of [3H]-(S)-zacopride-labelled 5-HT3 receptors in human brain. Parker RM, et al. **J Neurol Sci** 1996 Dec; 144(1–2):119–27

High affinity binding of azasetron hydrochloride to 5-hydroxytryptamine3 receptors in the small intestine of rats. Katayama K, et al. **Jpn J Pharmacol** 1997 Apr; 73(4):357–60

Pharmacological characterization of recombinant human 5-hydroxytryptamine1A receptors using a novel antagonist radioligand, [3H]WAY-100635. Khawaja X, et al. **Life Sci** 1997;60(9):653–65

[3H]MDL 100,907: a novel selective 5-HT2A receptor ligand. Johnson MP, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):205–9

Inhibition of 5-HT3 receptor function by imidazolines in mouse neuroblastoma cells: potential involvement of sigma 2 binding sites. Molderings GJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):245–52

[3H]WAY-100635 for 5-HT1A receptor autoradiography in human brain: a comparison with [3H]8-OH-DPAT and demonstration of increased binding in the frontal cortex in schizophrenia. Burnet PW, et al. **Neurochem Int** 1997 Jun;30(6):565–74

In vivo binding of [18F]altanserin to rat brain 5HT2 receptors: a film and electronic autoradiographic study. Biver F, et al. **Nucl Med Biol** 1997 May;24(4):357–60

New 5-HT1A receptor antagonist: [3H]p-MPPF. Kung HF, et al. **Synapse** 1996 Aug;23(4):344–6

PHARMACOKINETICS

Characterization of [3H]GR 113808 binding to 5-HT4 receptors in brain tissues from patients with neurodegenerative disorders. Wong EH, et al. **Behav Brain Res** 1996;73(1–2):249–52

Absorption characteristics of azasetron from rectal and oral routes in rabbits. Moriyama Y, et al. **Biol Pharm Bull** 1997 Jun;20(6):701–3

Pharmacokinetics and safety of single intravenous and oral doses of dolasetron mesylate in healthy women. Keung AC, et al. **Biopharm Drug Dispos** 1997 May;18(4):361–9

Pharmacokinetics of the active metabolite (MDL 74,156) of dolasetron mesylate after oral or intravenous administration to anesthetized children. Lerman J, et al. **Clin Pharmacol Ther** 1996 Nov;60(5):485–92

Biotransformation of the antiemetic 5-HT3 antagonist tropisetron in liver and kidney slices of human, rat and dog with a comparison to in vivo. Vickers AE, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jan–Mar; 21(1):43–50

Clinical pharmacokinetics of ondansetron. A review. Simpson KH, et al. **J Pharm Pharmacol** 1996 Aug; 48(8):774–81 (60 ref.)

Comparison of the pharmacokinetics of dolasetron and its major active metabolite, reduced dolasetron, in dog. Dow J, et al. **J Pharm Sci** 1996 Jul;85(7):685–9

Specific in vivo binding in the rat brain of [18F]RP 62203: a selective 5-HT2A receptor radioligand for positron emission tomography. Besret L, et al. **Nucl Med Biol** 1996 Feb;23(2):169–71

[18F]fluoroalkyl analogues of the potent 5-HT1A antagonist WAY 100635: radiosyntheses and in vivo evaluation. Wilson AA, et al. **Nucl Med Biol** 1996 May;23(4):487–90

Serotonin-2 and dopamine-1 binding components of clozapine in frontal cortex and striatum in the human brain visualized by positron emission tomography. Lundberg T, et al. **Psychiatry Res** 1996 May 31;67(1):1–10

Visualisation of loss of 5-HT2A receptors with age in healthy volunteers using [18F]altanserin and positron emission tomographic imaging. Rosier A, et al. **Psychiatry Res** 1996 Nov 25;68(1):11–22

Prediction of the pharmacokinetic parameters of reduced-dolasetron in man using in vitro–in vivo and interspecies allometric scaling. Sanwald-Ducray P, et al. **Xenobiotica** 1997 Feb;27(2):189–201

PHARMACOLOGY

Inhibitory effect of vasoactive intestinal polypeptide and ketanserin on established allergic contact dermatitis in man. Bondesson L, et al. **Acta Derm Venereol** 1996 Mar; 76(2):102–6

Effect of ketanserin on 5-hydroxytryptamine-induced constriction in isolated, perfused canine basilar arteries exposed to blood. Tsuji T, et al. **Acta Neurochir (Wien)** 1996;138(9):1109–16; discussion 1116–7

Influence of MCI-9042, a novel 5-HT2 receptor blocker on blood vessels of the rat. Pawlak D, et al. **Acta Physiol Hung** 1996;84(3):323–4

Effect of DV-7028, a novel serotonin 5-HT2 receptor antagonist on the cardiovascular system in rats. Pawlak D, et al. **Acta Physiol Hung** 1996;84(3):325–6

Effects on nociception of the Ca2+ and 5-HT antagonist dotarizine and other 5-HT receptor agonists and antagonists. Belcheva S, et al. **Acta Physiol Pharmacol Bulg** 1995;21(4):93–8

Ritanserin-induced changes in sleep-waking phases in rats. Kirov R, et al. **Acta Physiol Pharmacol Bulg** 1995; 21(4):87–92

Serotoninergic block in the ventromedial nucleus of hypothalamus improves food intake in anorectic tumor bearing rats. Laviano A, et al. **Adv Exp Med Biol** 1996; 398:551–3

5-HT3 receptor antagonist, tropisetron, does not influence ethanol-induced conditioned taste aversion and conditioned place aversion. Bienkowski P, et al. **Alcohol** 1997 Jan–Feb;14(1):63–9

Differential efficacy of serotonergic drugs FG5974, FG5893, and amperozide in reducing alcohol drinking in P rats. Lankford MF, et al. **Alcohol** 1996 Jul–Aug;13(4):399–404

Interaction between opiate and 5-HT3 receptor antagonists in the regulation of alcohol intake. Le AD, et al. **Alcohol Alcohol Suppl** 1994;2:545–9

Ritanserin and alcohol abuse and dependence. Meert TF. **Alcohol Alcohol Suppl** 1994;2:523–30 (33 ref.)

Cisapride and erythromycin prokinetic effects in gastroparesis due to type 1 (insulin-dependent) diabetes mellitus. Annese V, et al. **Aliment Pharmacol Ther** 1997 Jun;11(3):599–603

Treatment with 5-HT potentiates development of pulmonary hypertension in chronically hypoxic rats. Eddahibi S, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1173–81

Ondansetron reduces nausea induced by gastroduodenal stimulation without changing gastric motility. Feinle C, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):G591–7

5-HT-induced colonic contractions: enteric locus of action and receptor subtypes. Graf S, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G68–74

Participation of 5-HT3, 5-HT4, and nicotinic receptors in the peristaltic reflex of guinea pig distal colon. Kadowaki M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G849–57

Cyproheptadine: a potent in vivo serotonin antagonist [letter] Kapur S, et al. **Am J Psychiatry** 1997 Jun;154(6):884

Effect of 5-hydroxytryptamine type-2 receptor blockade on pulmonary function in calves with experimentally induced Pasteurella haemolytica pneumonia. Hare JE, et al. **Am J Vet Res** 1996 Jul;57(7):1034–9

Regulation of gene expression in cultured embryonic mouse mandibular mesenchyme by serotonin antagonists. Moiseiwitsch JR, et al. **Anat Embryol (Berl)** 1997 Jan; 195(1):71–8

Ketanserin effects on thermoregulation in malarial and normal rats. Dascombe MJ, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:392–7

Apparent heterogeneity of 5-HT2A receptors observed in functional studies with antagonists may reflect species-related differences. Mylecharane EJ, et al. **Ann N Y Acad Sci** 1997 May 30;812:174–5

GR127935 antagonizes the 5-HT1-like receptor-mediated external carotid vasoconstriction in vagosympathectomized dogs. Villalón CM, et al. **Ann N Y Acad Sci** 1997 May 30;812:207–8

5-Hydroxytryptamine3 receptor and regulation of gastric emptying in rats. Ito C, et al. **Arch Int Pharmacodyn Ther** 1996 Mar–Apr;331(2):203–18

Role of 5-hydroxytryptamine in platelet thrombus formation and mechanisms of inhibition of thrombus formation by 5-hydroxytryptamine2A antagonists in rabbits. Takano S. **Arch Int Pharmacodyn Ther** 1995 Nov–Dec;330(3):297–308

Species difference in the 5-hydroxytryptamine3 receptor associated with the von Bezold-Jarisch reflex. Yamano M, et al. **Arch Int Pharmacodyn Ther** 1995 Sep–Oct; 330(2):177–89

Amygdaloid control of alerting and behavioral arousal in rats: involvement of serotonergic mechanisms. Sanford LD, et al. **Arch Ital Biol** 1995 Dec;134(1):81–99

Structure-activity relationship studies of CNS agents, Part 31: Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment—new 5-HT1A receptor ligands. Paluchowska MH, et al. **Arch Pharm (Weinheim)** 1996 Oct;329(10):451–6

Granisetron shows no pro-arrhythmic effect in normal subjects during or after exercise in a hot environment. Gray GW, et al. **Aviat Space Environ Med** 1996 Aug;67(8):759–61

Novel discriminatory ligands for 5-HT2B receptors. Baxter GS. **Behav Brain Res** 1996;73(1–2):149–52 (19 ref.)

Dose-related impairment of spatial learning by intrahippocampal scopolamine: antagonism by ondansetron, a 5-HT3 receptor antagonist. Carli M, et al. **Behav Brain Res** 1997 Jan;82(2):185–94

Electrophysiological, biochemical, neurohormonal and behavioural studies with WAY-100635, a potent, selective and silent 5-HT1A receptor antagonist. Fletcher A, et al. **Behav Brain Res** 1996;73(1–2):337–53

Pro- and antinociceptive actions of serotonin (5-HT)1A agonists and antagonists in rodents: relationship to algesiometric paradigm. Millan MJ, et al. **Behav Brain Res** 1996;73(1–2):69–77

Reversal of amphetamine-induced behaviours by MDL 100,907, a selective 5-HT2A antagonist. Moser PC, et al. **Behav Brain Res** 1996;73(1–2):163–7

Stereoselective pharmacological effects of lysergic acid amides possessing chirality in the amide substituent. Nichols DE, et al. **Behav Brain Res** 1996;73(1–2):117–9 (9 ref.)

Development of 5-HT1A receptor antagonists. Routledge C. **Behav Brain Res** 1996;73(1–2):153–6 (31 ref.)

GR127935: a potent and selective 5-HT1D receptor antagonist. Skingle M, et al. **Behav Brain Res** 1996; 73(1–2):157–61 (23 ref.)

5-HT1B/D antagonists potentiate paroxetine's effect on 5-HT efflux in the lateral geniculate nucleus: in vitro voltammetric data. Davidson C, et al. **Biochem Soc Trans** 1997 Feb;25(1):49S

Effect of the 5-HT3 receptor antagonist ondansetron on plasma AVP secretion: a study in cancer patients. Barreca T, et al. **Biomed Pharmacother** 1996;50(10):512–4

Granisetron in the prevention of vomiting induced by conditioning for stem cell transplantation: a prospective randomized study. Okamoto S, et al. **Bone Marrow Transplant** 1996 May;17(5):679–83

The effect of 5-HT and selective 5-HT receptor agonists and antagonists on rat dorsal vagal preganglionic neurones in vitro. Albert AP, et al. **Br J Pharmacol** 1996 Oct; 119(3):519–26

Neural 5-HT4 receptors in the human isolated detrusor muscle: effects of indole, benzimidazolone and substituted benzamide agonists and antagonists. Candura SM, et al. **Br J Pharmacol** 1996 Aug;118(8):1965–70

Potentiation of chloride responses to glycine by three 5-HT3 antagonists in rat spinal neurones. Chesnoy-Marchais D. **Br J Pharmacol** 1996 Aug;118(8):2115–25

(+)-WAY 100135, a partial agonist, at native and recombinant 5-HT1B/1D receptors. Davidson C, et al. **Br J Pharmacol** 1997 Jun;121(4):737–42

Prevention by the 5-HT3 receptor antagonist, ondansetron, of morphine-dependence and tolerance in the rat. Hui SC, et al. **Br J Pharmacol** 1996 Jun;118(4):1044–50

In vitro and in vivo profile of SB 206553, a potent 5-HT2C/5-HT2B receptor antagonist with anxiolytic-like properties. Kennett GA, et al. **Br J Pharmacol** 1996 Feb; 117(3):427–434

Investigation into the 5-hydroxytryptamine-induced atropine-resistant neurogenic contraction of guinea-pig proximal colon. Kojima S, et al. **Br J Pharmacol** 1996 Apr; 117(8):1613–8

Further investigation into the signal transduction mechanism of the 5-HT4-like receptor in the circular smooth muscle of human colon. McLean PG, et al. **Br J Pharmacol** 1996 Jun;118(4):1058–64

Inhibition of the constitutive activity of human 5-HT1A receptors by the inverse agonist, spiperone but not the neutral antagonist, WAY 100,635. Newman-Tancredi A, et al. **Br J Pharmacol** 1997 Mar;120(5):737–9

The atypical antipsychotic profile of NRA0045, a novel dopamine D4 and 5-hydroxytryptamine2A receptor antagonist, in rats. Okuyama S, et al. **Br J Pharmacol** 1997 Jun;121(3):515–25

Effect of a selective 5-HT reuptake inhibitor in combination with 5-HT1A and 5-HT1B receptor antagonists on extracellular 5-HT in rat frontal cortex in vivo. Sharp T, et al. **Br J Pharmacol** 1997 Jul;121(5):941–6

Combined administration of 5-HT2 and thromboxane A2 antagonists: effects on platelet aggregation and isolated cardiac muscle. Shaw LA, et al. **Br J Pharmacol** 1997 Jul; 121(5):875–82

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: endogenous 5-hydroxytryptamine, 5-HT1A receptors and antinatriuresis during high sodium intake. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar; 117(6):1193–8

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: increase in Na+, K(+)-ATPase activity in renal proximal tubules via activation of 5-HT1A receptors. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar;117(6):1199–203

5-HT3 and 5-HT4 receptor-mediated facilitation of the emptying phase of the peristaltic reflex in the marmoset isolated ileum. Tuladhar BR, et al. **Br J Pharmacol** 1996

Apr;117(8):1679–84
Mediation of 5-HT-induced external carotid vasodilatation in GR 127935-pretreated vagosympathectomized dogs by the putative 5-HT7 receptor. Villalón CM, et al. **Br J Pharmacol** 1997 Apr;120(7):1319–27
Selective and functional 5-hydroxytryptamine4 receptor antagonism by SB 207266. Wardle KA, et al. **Br J Pharmacol** 1996 Jun;118(3):665–70
Inhibition of 5-hydroxytryptamine-induced phosphoinositide hydrolysis and Ca2+ mobilization in canine cultured tracheal smooth muscle cells by phorbol ester. Yang CM, et al. **Br J Pharmacol** 1997 Jul;121(5):853–60
Increased feeding and neuropeptide Y (NPY) but not NPY mRNA levels in the hypothalamus of the rat following central administration of the serotonin synthesis inhibitor p-chlorophenylalanine. Dryden S, et al. **Brain Res** 1996 Jun 17;724(2):232–7
Distribution and characterisation of the [3H](S)-zacopride labelled 5-HT3 receptor in pig forebrain. Fletcher S, et al. **Brain Res** 1996 Aug 12;729(2):281–4
Differential effects of 5-HT3 receptor antagonism on working memory failure due to deficiency of hippocampal cholinergic and glutamatergic transmission in rats. Ohno M, et al. **Brain Res** 1997 Jul 11;762(1–2):211–5
Blockade of 5-HT1A receptors compensates loss of hippocampal cholinergic neurotransmission involved in working memory of rats. Ohno M, et al. **Brain Res** 1996 Oct 14;736(1–2):180–8
5-HT2 receptor regulation of acetylcholine release induced by dopaminergic stimulation in rat striatal slices. Ramírez MJ, et al. **Brain Res** 1997 May 16;757(1):17–23
Human sleep EEG following the 5-HT1A antagonist pindolol: possible disinhibition of raphe neuron activity. Seifritz E, et al. **Brain Res** 1997 Jun 6;759(1):84–91
Asymmetrical regulation of blood pressure in the rat medulla. Shiozaki T, et al. **Brain Res** 1997 Apr 25;755(1):170–4
Serotonergic antagonists impair arousal-induced phase shifts of the circadian system of the syrian hamster. Sumova A, et al. **Brain Res** 1996 Feb 12;709(1):88–96
Effects of mianserin and ketanserin on lordosis behavior after systemic treatment or infusion into the ventromedial nucleus of the hypothalamus. Uphouse L, et al. **Brain Res** 1996 Apr 29;718(1–2):46–52
Sleep/waking effects following intrathecal administration of the 5-HT(1A) Agonist 8-OH-DPAT alone and in combination with the putative 5-HT(1A) antagonist NAN-190 in rats. Bjørkum AA, et al. **Brain Res Bull** 1996; 39(6):373–9
Comparison of neurotensin responses to MDL 100,907, a selective 5HT2A antagonist, with clozapine and haloperidol. Hanson GR, et al. **Brain Res Bull** 1997; 42(3):211–9
Time-course of recovery of 5-HT1A receptors and changes in 5-HT1A receptor mRNA after irreversible inactivation with EEDQ. Raghupathi RK, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):233–42
Regional variability in changes in 5-HT2A receptor mRNA levels in rat brain following irreversible inactivation with EEDQ. Raghupathi RK, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):198–206
Hemodynamic responses to Pasteurella haemolytica inoculation in calves given type 2 serotonergic antagonist. Desmecht D, et al. **Can J Physiol Pharmacol** 1996 May; 74(5):572–9
Cardiorespiratory effects of a 5HT2 antagonist (R51703) in awake and anesthetized dogs. Doherty TJ, et al. **Can J Vet Res** 1996 Jul;60(3):172–8
The activity of dihydropyrimidine dehydrogenase from rat liver was not affected by any of five 5-hydroxytryptamine antagonists. Tateishi T, et al. **Cancer Lett** 1996 Nov 12; 108(1):1–5
How do the currently used prophylactic agents work in migraine? Goadsby PJ. **Cephalalgia** 1997 Apr;17(2):85–92 (91 ref.)
Synthesis and pharmacology of the enantiomers of UH301: opposing interactions with 5-HT1A receptors. Hillver SE, et al. **Chirality** 1996;8(8):531–44
Effects of 5HT2 receptor antagonists on responses to potassium depolarization in rat isolated aorta. Okoro EO, et al. **Clin Exp Pharmacol Physiol** 1997 Jan;24(1):34–9
Antiemetics revisited. Roila F, et al. **Curr Opin Oncol** 1997 Jul;9(4):321–6 (31 ref.)
In vitro effect of Ginkgo biloba extract (EGb 761) on the activity of presynaptic cholinergic nerve terminals in rat hippocampus. Krištofiková Z, et al. **Dement Geriatr Cogn Disord** 1997 Jan–Feb;8(1):43–8
5-HT2B receptor-mediated serotonin morphogenetic functions in mouse cranial neural crest and myocardiac cells. Choi DS, et al. **Development** 1997 May;124(9):1745–55
Ondansetron. A review of its pharmacology and preliminary clinical findings in novel applications. Wilde MI, et al. **Drugs** 1996 Nov;52(5):773–94 (185 ref.)
Effects of p-chlorophenylalanine on male sexual behavior in female rats with mesencephalic raphe nuclei lesions. Matsumoto T, et al. **Endocr J** 1997 Jun;44(3):383–8
The inhibition of serotonin evoked bovine coronary artery contraction by halothane, isoflurane and sevoflurane is endothelium-independent. Xiaoping Z, et al. **Eur J Anaesthesiol** 1996 Jul;13(4):352–8
Effect of cyproheptadine on episodic ACTH and cortisol secretion. Schürmeyer TH, et al. **Eur J Clin Invest** 1996 May;26(5):397–403
Lack of effect of the serotonin4 receptor agonist zacopride on ACTH secretion in normal men. Lefebvre H, et al. **Eur J Clin Pharmacol** 1996;51(1):49–51
Effects of metoclopramide and tropisetron on aldosterone secretion possibly due to agonism and antagonism at the 5-HT4 receptor. Sommers DK, et al. **Eur J Clin Pharmacol** 1996;50(5):371–3
Activation of meningeal 5-HT2B receptors: an early step in the generation of migraine headache? Schmuck K, et al. **Eur J Neurosci** 1996 May;8(5):959–67
Placental transfer and maternal and fetal hemodynamic effects of ketanserin in the pregnant ewe. Schneider TJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Sep; 68(1–2):179–84
Pharmacological comparison between [3H]GR 113808 binding sites and functional 5-HT4 receptors in neurons. Ansanay H, et al. **Eur J Pharmacol** 1996 Mar 7; 298(2):165–74
Effects of 5-HT1A receptor antagonists on hippocampal 5-hydroxytryptamine levels: (S)-WAY100135, but not WAY100635, has partial agonist properties. Assié MB, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):15–21
Increased defaecation caused by 5-HT4 receptor activation in the mouse. Banner SE, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):181–6
The role of the 5-HT4 receptor in Cl- secretion in human jejunal mucosa. Budhoo MR, et al. **Eur J Pharmacol** 1996 Oct 24;314(1–2):109–14
5-HT2A receptor antagonists inhibit potassium-stimulated gamma-aminobutyric acid release in rat frontal cortex. Cozzi NV, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):25–31
Normethylclozapine potentiates the action of quinpirole in the 6-hydroxydopamine lesioned rat. Fox S, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):27–30
Role of the 5-HT receptor in neurogenic inflammation in Fisher 344 rat airways. Germonpré PR, et al. **Eur J Pharmacol** 1997 Apr 18;324(2–3):249–55
Norepinephrine attenuates serotonin inhibition of pial venous tone. Ishine T, et al. **Eur J Pharmacol** 1996 Oct 10; 313(1–2):97–102
Effect of ramosetron on short-circuit current response in rat colonic mucosa. Kiso T, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):187–92
SDZ NVI 085, an alpha 1A-adrenoceptor agonist with 5-HT2A receptor antagonist properties. Lachnit WG, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):83–6
Response heterogeneity of 5-HT3 receptor antagonists in a rat visceral hypersensitivity model. Langlois A, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):141–4
5-HT2C receptors mediate penile erections in rats: actions of novel and selective agonists and antagonists. Millan MJ, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):9–12
Antiemetic effects of N-3389, a newly synthesized 5-HT3 and 5-HT4 receptor antagonist, in ferrets. Minami M, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):333–42
The putative 5-HT1A receptor antagonist DU125530 blocks the discriminative stimulus of the 5-HT1A receptor agonist flesinoxan in pigeons. Mos J, et al. **Eur J Pharmacol** 1997 May 1;325(2–3):145–53
Compounds possessing 5-HT3 receptor antagonistic activity inhibit intestinal propulsion in mice. Nagakura Y, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):67–72
S 15535 and WAY 100,635 antagonise 5-HT-stimulated [35S]GTP gamma S binding at cloned human 5-HT1A receptors. Newman-Tancredi A, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):107–11
Itasetron (DAU 6215) prevents age-related memory deficits in the rat in a multiple choice avoidance task. Pitsikas N, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):115–9
Role of serotonergic neurotransmission in the hypnotic response to dexmedetomidine, an alpha 2-adrenoceptor agonist. Rabin BC, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1–3):51–9
Effects of granisetron, a 5-HT3 receptor antagonist, on morphine-induced potentiation of brain stimulation reward. Rompré PP, et al. **Eur J Pharmacol** 1995 Dec 20; 287(3):263–9
Effects of co-administration of a monoamine oxidase inhibitor and a 5-HT1A receptor antagonist on 5-hydroxytryptamine cell firing and release. Sharp T, et al. **Eur J Pharmacol** 1997 Feb 5;320(1):15–9
Effects of 5-HT4 receptor antagonists on rat behaviour in the elevated plus-maze test. Silvestre JS, et al. **Eur J Pharmacol** 1996 Aug 15;309(3):219–22
Cardiovascular effects produced by R-(+)-8-hydroxy-2-(di-n-propylamino) tetralin in the preoptic area of conscious rats. Szabó A, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):187–94
Pharmacological studies on YM992, a novel antidepressant with selective serotonin re-uptake inhibitory and 5-HT2A receptor antagonistic activity. Takeuchi H, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):27–35
RS-056812-198: partial agonist on native and antagonist on cloned 5-HT3 receptors. Van Hooft JA, et al. **Eur J Pharmacol** 1997 Mar 19;322(2–3):229–33
Hyperglycemia induced by the 5-HT receptor agonist, 5-methoxytryptamine, in rats: involvement of the peripheral 5-HT2A receptor. Yamada J, et al. **Eur J Pharmacol** 1997 Apr 4;323(2–3):235–40
Differential effects of three 5-HT receptor antagonists on the performance of rats in attentional and working memory tasks. Ruotsalainen S, et al. **Eur Neuropsychopharmacol** 1997 May;7(2):99–108
Blockade of serotonin-2C receptors by mesulergine reduces ocular dominance plasticity in kitten visual cortex. Wang Y, et al. **Exp Brain Res** 1997 Apr;114(2):321–8
New benzamide-derived 5-HT3 receptor antagonists which prevent the effects of ethanol on extracellular dopamine, and fail to reduce voluntary alcohol intake in rats. Iusco G, et al. **Farmaco** 1997 Mar;52(3):141–6
Tropisetron inhibits the antinociceptive effect of intrathecally administered paracetamol and serotonin. Alloui A, et al. **Fundam Clin Pharmacol** 1996;10(4):406–7
5-HTP induced diarrhea as a carcinoid syndrome model in mice? Bourin M, et al. **Fundam Clin Pharmacol** 1996; 10(5):450–7
Behavorial responses to the 5-HT1A receptor antagonist NAN190 injected into rat CA1 hippocampal area. Belcheva I, et al. **Gen Pharmacol** 1997 Mar;28(3):435–41
Effect of dotarizine on K(+)-stimulated [3H]-serotonin and [3H]-acetylcholine release from rat hippocampus. Hadjiivanova C, et al. **Gen Pharmacol** 1997 Jan; 28(1):129–32
Effects of SM-9018, a novel 5-HT2 and D2 receptor antagonist, on electrically-evoked [3H]acetylcholine release from rat striatal slices. Ishida K, et al. **Gen Pharmacol** 1996 Oct;27(7):1203–7
5-HT3 receptor blocking properties of the antiparkinsonian agent, talipexole. Nishio H, et al. **Gen Pharmacol** 1996 Jul; 27(5):779–85
Serotonin--one possible link between oxygen metabolism and the regulation of blood flow in the brain? Gustafsson U, et al. **Int J Microcirc Clin Exp** 1996 May-Jun;16(3):143–6
Effects of Ginkgo biloba extract (EGb 761) on arteriolar spasm in a rat cremaster muscle preparation. Stücker O, et al. **Int J Microcirc Clin Exp** 1995 Mar-Apr;16(2):98–104
Pharmacologic evidence for 5-HT1A receptors associated with human retinal pigment epithelial cells in culture. Nash MS, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):510–9
A possible pharmacological treatment of baclofen overdose [letter] Broggi G, et al. **Ital J Neurol Sci** 1996 Apr; 17(2):179–80
Beneficial influence of ketanserin on autoregulation of blood flow in post-ischemic kidneys. Verbeke M, et al. **J Am Soc Nephrol** 1996 Apr;7(4):621–7
Luteinizing hormone and ovarian response of early postpartum Debouillet ewes treated with cyproheptadine and(or) melatonin. Kridli RT, et al. **J Anim Sci** 1997 Sep; 75(9):2535–40
Involvement of 5-hydroxytryptamine (5-HT)3 receptor mechanisms in regulation of basal pancreatic secretion in conscious rats. Masuda M, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):58–62
Single-blind study of the effects of intravenous dolasetron mesylate versus ondansetron on electrocardiographic parameters in normal volunteers. Benedict CR, et al. **J Cardiovasc Pharmacol** 1996 Jul;28(1):53–9
Ketanserin reduces graft arteriosclerosis after allogeneic aorta transplantation in rats. Geerling RA, et al. **J Cardiovasc Pharmacol** 1996 Mar;27(3):307–11
Ritanserin attenuates the in vitro effects of the 5-HT2 receptor agonist DOI on skeletal muscles from malignant hyperthermia-susceptible patients. Wappler F, et al. **J Clin Anesth** 1997 Jun;9(4):306–11
Effect of serotonergic blockade on calf pulmonary function after the intravenous administration of 3-methylindole. Linden A, et al. **J Comp Pathol** 1996 May;114(4):361–71
5-HT2 receptors are partially involved in the relationship between renin release and delta relative power. Brandenberger G, et al. **J Endocrinol Invest** 1996 Sep; 19(8):556–62
Effect of the appetite stimulant cyproheptadine on deoxynivalenol-induced reductions in feed consumption and weight gain in the mouse. Prelusky DB, et al. **J Environ Sci Health B** 1997 May;32(3):429–48
5-HT1D receptor agonist properties of novel 2-[5-[[(trifluoromethyl)sulfonyl]oxy]indolyl]ethylamines and their use as synthetic intermediates. Barf TA, et al. **J Med Chem** 1996 Nov 22;39(24):4717–26
A novel series of 2,5-substituted tryptamine derivatives as vascular 5HT1B/1D receptor antagonists. Moloney GP, et al. **J Med Chem** 1997 Jul 18;40(15):2347–62
Activity of Parthenolide at 5HT2A receptors. Weber JT, et al. **J Nat Prod** 1997 Jun;60(6):651–3
Anti-serotonergic effects of urethane and chloral hydrate may not be mediated by a blockade of 5-HT2 receptors. Short communication. Dringenberg HC, et al. **J Neural Transm Gen Sect** 1996;103(6):693–8
The 5-HT1A receptor antagonist (S)-UH-301 decreases dopamine release in the rat nucleus accumbens and striatum. Nomikos GG, et al. **J Neural Transm Gen Sect** 1996;103(5):541–54
Potentiation of the fluoxetine-induced increase in dialysate levels of serotonin (5-HT) in the frontal cortex of freely moving rats by combined blockade of 5-HT1A and 5-HT1B receptors with WAY 100,635 and GR 127,935. Gobert A, et al. **J Neurochem** 1997 Mar;68(3):1159–63
The forgotten 5-hydroxyindoleacetic acid [letter; comment] Ross SB, et al. **J Neurochem** 1997 Jul;69(1):437–9. Comment on: J Neurochem 1996 Nov;67(5):2204–7.
Blockade of corticosterone synthesis reduces serotonin turnover in the dorsal hippocampus of the rat as measured by microdialysis. Korte-Bouws GA, et al. **J Neuroendocrinol** 1996 Nov;8(11):877–81

Effects of 5-HT3 receptor antagonism on hippocampal cellular activity in the freely moving rat. Reznic J, et al. **J Neurophysiol** 1997 Jan;77(1):517-21

The effect of ketanserin on ICP and CBF in patients with normal-pressure hydrocephalus. Olsen KS, et al. **J Neurosurg Anesthesiol** 1996 Jul;8(3):216-9

Serum corticosterone increases reflect enhanced uptake inhibitor-induced elevation of extracellular 5-hydroxytryptamine in rat hypothalamus. Fuller RW, et al. **J Pharm Pharmacol** 1996 Jan;48(1):68-70

Positron emission tomographic analysis of central 5-hydroxytryptamine2 receptor occupancy in healthy volunteers treated with the novel antipsychotic agent, ziprasidone. Fischman AJ, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):939-47

Effect of GK-128 [2-[(2-methylimidazol-1-yl)methyl]-benzo[f]thiochromen-1-one monohydrochloride hemihydrate], a selective 5-hydroxytryptamine3 receptor antagonist, on colonic function in rats. Ito C, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):67-72

Pharmacological characterization of in vivo properties of putative mixed 5-HT1A agonist/5-HT(2A/2C) antagonist anxiolytics. II. Drug discrimination and behavioral observation studies in rats. Kleven MS, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):747-59

Combined blockade of 5-HT3- and 5-HT4-serotonin receptors inhibits colonic functions in conscious rats and mice. Nagakura Y, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):284-90

In vitro and in vivo characterization of the dopamine D4 receptor, serotonin 5-HT2A receptor and alpha-1 adrenoceptor antagonist (R)-(+)-2-amino-4-(4-fluorophenyl)-5-[1-[4-(4-fluorophenyl)-4-oxobutyl] pyrrolidin-3-yl]thiazole (NRA0045). Okuyama S, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):56-63

The effect of central and systemic injection of the 5-HT1A receptor agonist 8-OHDPAT and the 5-HT1A receptor antagonist WAY100635 on periaqueductal grey-induced defence behaviour. Beckett S, et al. **J Psychopharmacol (Oxf)** 1997;11(1):35-40

Evaluation of perospirone (SM-9018), a novel serotonin-2 and dopamine-2 receptor antagonist, and other antipsychotics in the conditioned fear stress-induced freezing behavior model in rats. Ishida-Tokuda K, et al. **Jpn J Pharmacol** 1996 Oct;72(2):119-26

Inhibitory effect of EGTA on serotonin transport into rabbit blood platelets: possible involvement of the glycoprotein IIb/IIIa complex. Nishio H, et al. **Jpn J Pharmacol** 1996 Nov;72(3):255-9

Effect of granisetron on cholera toxin-induced enteric secretion [letter] Turvill JL, et al. **Lancet** 1997 May 3; 349(9061):1293

A novel class of 5-HT2A receptor antagonists: aryl aminoguanidines. Bryant HU, et al. **Life Sci** 1996; 59(15):1259-68

Anti-mitogenic effects of sarpogrelate in cultured rat mesangial cells. Eto Y, et al. **Life Sci** 1997;60(11):PL193-9

Chronic treatment with antidepressants, verapamil, or lithium inhibits the serotonin-induced intracellular calcium response in individual C6 rat glioma cells. Yamaji T, et al. **Life Sci** 1997;60(11):817-23

Serotonin 5-HT3 and 5-HT4 receptor antagonists. Gaster LM, et al. **Med Res Rev** 1997 Mar;17(2):163-214 (311 ref.)

Anxiolytic effects of dotarizine, a possible antimigraine drug. Petkov VD, et al. **Methods Find Exp Clin Pharmacol** 1995 Dec;17(10):659-68

Prevention of morphine discontinuation phenomenon in mice by ondansetron, a selective 5-HT3 antagonist. Roychoudhury M, et al. **Methods Find Exp Clin Pharmacol** 1996 Dec;18(10):677-83

Antianxiety profile of ondansetron, a selective 5-HT3 antagonist, in a novel animal model. Roychoudhury M, et al. **Methods Find Exp Clin Pharmacol** 1997 Mar; 19(2):107-11

Which type of 5-hydroxytryptamine receptor mediates relaxation of the longitudinal muscle of guinea pig proximal colon in vitro? Sevcík J, et al. **Methods Find Exp Clin Pharmacol** 1996 Sep;18(7):421-30

Direct inhibition of 5-hydroxytryptamine3 receptors by antagonists of L-type Ca2+ channels. Hargreaves AC, et al. **Mol Pharmacol** 1996 Nov;50(5):1284-94

5-Hydroxytryptamine1B receptors modulate the effect of cocaine on c-fos expression: converging evidence using 5-hydroxytryptamine1B knockout mice and the 5-hydroxytryptamine1B/1D antagonist GR127935. Lucas JJ, et al. **Mol Pharmacol** 1997 May;51(5):755-63

The 5-HT1A receptor antagonist (S)-UH-301 augments the increase in extracellular concentrations of 5-HT in the frontal cortex produced by both acute and chronic treatment with citalopram. Arborelius L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):630-40

The effects of a 5-HT1A receptor agonist and antagonist on the 5-hydroxytryptamine release in the central nucleus of the amygdala: a microdialysis study with flesinoxan and WAY 100635. Bosker F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):347-53

Interactions of GR127935, a 5-HT(1B/D) receptor ligand, with functional 5-HT receptors. De Vries P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):423-30

Comparison of 5-HT4 receptors in guinea-pig colon and rat oesophagus: effects of novel agonists and antagonists. Leung E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):145-56

Regional differences in the effect of the combined treatment of WAY 100635 and fluoxetine: an in vivo microdialysis study. Malagié I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):785-90

Blockade of human and porcine myocardial 5-HT4 receptors by SB 203186. Parker SG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):28-35

Effects of the 5-HT2 receptor antagonist ritanserin on halothane-induced increase of inositol phosphates in porcine malignant hyperthermia. Richter A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):593-7

Presynaptic inhibitory serotonin autoreceptors in the human hippocampus. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):393-6

Operational characteristics of the 5-HT1-like receptors mediating external carotid vasoconstriction in vagosympathectomized dogs. Close resemblance to the 5-HT1D receptor subtype. Villalón CM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):550-6

The effects of 5-HT3 receptor antagonists on cognitive performance in aged monkeys. Arnsten AF, et al. **Neurobiol Aging** 1997 Jan-Feb;18(1):21-8

Motor function in young and aged hemiplegic rats: effects of a Ginkgo biloba extract. Brailowsky S, et al. **Neurobiol Aging** 1997 Mar-Apr;18(2):219-27

Enhancement of fluoxetine-dependent increase of extracellular serotonin (5-HT) levels by (-)-pindolol, an antagonist at 5-HT1A receptors. Dreshfield LJ, et al. **Neurochem Res** 1996 May;21(5):557-62

RS-102221: a novel high affinity and selective, 5-HT2C receptor antagonist. Bonhaus DW, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):621-9

Stereoselective effects of (R)- and (S)-zacopride on cognitive performance in a spatial navigation task in rats. Fontana DJ, et al. **Neuropharmacology** 1996 Mar;35(3):321-7

A comparative study of the effects of selective and non-selective 5-HT2 receptor subtype antagonists in rat and mouse models of anxiety. Griebel G, et al. **Neuropharmacology** 1997 Jun;36(6):793-802

Autoreceptor antagonists enhance the effect of the reuptake inhibitor citalopram on extracellular 5-HT: this effect persists after repeated citalopram treatment. Gundlah C, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):475-82

Biochemical profile of YM992, a novel selective serotonin reuptake inhibitor with 5-HT2A receptor antagonistic activity. Hatanaka K, et al. **Neuropharmacology** 1996; 35(11):1621-6

Effect of 5-HT1A receptor antagonists on citalopram-induced increase in extracellular serotonin in the frontal cortex, striatum and dorsal hippocampus. Invernizzi R, et al. **Neuropharmacology** 1997 Apr-May; 36(4-5):467-73

SB 242084, a selective and brain penetrant 5-HT2C receptor antagonist. Kennett GA, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):609-20

Anxiolytic-like actions of the selective 5-HT4 receptor antagonists SB 204070A and SB 207266A in rats. Kennett GA, et al. **Neuropharmacology** 1997 Apr-May; 36(4-5):707-12

8-OH-DPAT-induced spontaneous tail-flicks in the rat are facilitated by the selective serotonin (5-HT)2C agonist, RO 60-0175: blockade of its actions by the novel 5-HT2C receptor antagonist SB 206,553. Millan MJ, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):743-5

Effects of ketanserin on the discrimination of electrical stimulation of the dorsal raphé nucleus in rats. Mokler DJ, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):631-6

Agonist and inverse agonist efficacy at human recombinant serotonin 5-HT1A receptors as a function of receptor:G-protein stoichiometry. Newman-Tancredi A, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):451-9

Do 5-HT1B/1D autoreceptors modulate dorsal raphe cell firing? In vivo electrophysiological studies in guinea pigs with GR127935. Sprouse J, et al. **Neuropharmacology** 1997 Apr-May;36(4-5):559-67

5-HT1A receptor antagonists and lordosis behavior. Uphouse L, et al. **Neuropharmacology** 1996 Apr;35(4):489-95

The 5-HT1D receptor antagonist GR-127,935 prevents inhibitory effects of sumatriptan but not CP-122,288 and 5-CT on neurogenic plasma extravasation within guinea pig dura mater. Yu XJ, et al. **Neuropharmacology** 1997 Jan; 36(1):83-91

Effects of anxiety and memory of systemic and intra-amygdala injection of 5-HT3 receptor antagonist BRL 46470A. Gargiulo PA, et al. **Neuropsychobiology** 1996;33(4):189-95

Effects of the selective 5-HT2A receptor antagonist MDL 100,907 on MDMA-induced locomotor stimulation in rats. Kehne JH, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):116-24

Suppression of alcohol preference in high alcohol drinking rats: efficacy of amperozide versus naltrexone. Myers RD, et al. **Neuropsychopharmacology** 1996 Feb;14(2):139-49

Cognitive and behavioral effects of cholinergic, dopaminergic, and serotonergic blockade in humans. Vitiello B, et al. **Neuropsychopharmacology** 1997 Jan; 16(1):15-24

Region-specific serotonin1A receptor turnover following irreversible blockade with EEDQ. Keck BJ, et al. **Neuroreport** 1996 Nov 4;7(15-17):2717-21

The 5-HT3 receptor antagonist, RS-56812, enhances delayed matching performance in monkeys. Terry AV Jr, et al. **Neuroreport** 1996 Dec 20;8(1):49-54

m-Chlorophenylpiperazine (mCPP) is an antagonist at the cloned human 5-HT2B receptor. Thomas DR, et al. **Neuroreport** 1996 Jun 17;7(9):1457-60

The role of 5HT3 in nociceptive processing in the rat spinal cord: results from behavioural and electrophysiological studies. Ali Z, et al. **Neurosci Lett** 1996 Apr 26;208(3):203-7

The 5-HT1A antagonist WAY-100635 selectively potentiates the presynaptic effects of serotonergic antidepressants in rat brain. Romero L, et al. **Neurosci Lett** 1996 Nov 22; 219(2):123-6

Effects of ritanserin on haloperidol-induced dopamine (D2) receptor up-regulation in the rat. Szczepanik AM, et al. **Neurosci Lett** 1997 Aug 8;231(2):91-4

The effect of GABA and 5-HT receptor antagonists on rat dorsal root potentials. Thompson SW, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):153-6

Ketanserin selectively blocks acute stress-induced changes in NGFI-A and mineralocorticoid receptor gene expression in hippocampal neurons. Olsson T, et al. **Neuroscience** 1997 Jan;76(2):441-8

Regulation of 5-hydroxytryptamine-induced calcium mobilization by cAMP-elevating agents in cultured canine tracheal smooth muscle cells. Yang C, et al. **Pflugers Arch** 1996 Aug;432(4):708-16

The 5-HT1A receptor antagonist p-MPPI blocks responses mediated by postsynaptic and presynaptic 5-HT1A receptors. Allen AR, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):301-7

Ritanserin blocks DOI-altered embryonic motility and posthatch learning in the developing chicken. Bollweg G, et al. **Pharmacol Biochem Behav** 1996 Nov;55(3):397-403

5-HT3 receptor antagonists do not modify cocaine place conditioning or the rise in extracellular dopamine in the nucleus accumbens of rats. Cervo L, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):33-7

The mechanism by which the selective 5-HT1A receptor antagonist S-(-) UH 301 produces head-twitches in mice. Darmani NA, et al. **Pharmacol Biochem Behav** 1996 Sep; 55(1):1-10

Ketanserin effects on rat behavioral responses: modifications by the estrous cycle, ovariectomy and estradiol replacement. Díaz-Véliz G, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):687-92

Risk assessment behaviour: evaluation of utility in the study of 5-HT-related drugs in the rat elevated plus-maze test. Griebel G, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):817-27

Preclinical profile of the mixed 5-HT1A/5-HT2A receptor antagonist S 21,357. Griebel G, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):509-16

Effects of 5-HT3, D1 and D2 receptor antagonists on ethanol- and cocaine-induced locomotion. Lê AD, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):325-32

Suppressive effect of mitragynine on the 5-methoxy-N,N-dimethyltryptamine-induced head-twitch response in mice. Matsumoto K, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):319-23

alpha2-Adrenoceptor antagonists reverse the 5-HT2 receptor antagonist suppression of head-twitch behavior in mice. Matsumoto K, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):417-22

Effects of 5-HT4 receptor agonists and antagonists in learning. Meneses A, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):347-51

GR 127935 blocks the locomotor and antidepressant-like effects of RU 24969 and the action of antidepressants in the mouse tail suspension test. O'Neill MF, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):535-9

Different effects of tropisetron and ondansetron in learning and memory paradigms. Pitsikas N, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):571-6

Elicited PGO waves in rats: lack of 5-HT1A inhibition in putative pontine generator region. Sanford LD, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):323-7

GYKI-46 903, a non-competitive antagonist for 5-HT3 receptors. Csillik-Perczel V, et al. **Pharmacol Toxicol** 1996 Jul;79(1):32-9

5-HT3 receptor antagonist MDL 72222 dose-dependently attenuates cocaine- and amphetamine-induced elevations of extracellular dopamine in the nucleus accumbens and the dorsal striatum. Kankaanpää A, et al. **Pharmacol Toxicol** 1996 May;78(5):317-21

Cytotoxic effects of four antibiotics on endothelial cells. Lanbeck P, et al. **Pharmacol Toxicol** 1995 Dec;77(6):365-70

PCPA increases aggression in male firemouth cichlids. Adams CF, et al. **Pharmacology** 1996 Nov;53(5):328-30

Buspirone analogues as ligands of the 5-HT1A receptor. II: Capacity factors as chromatographic parameter of lipophilicity evaluation in a series of 5-HT1A and 5-HT2A receptor ligands. Chilmonczyk Z, et al. **Pharmazie** 1996 Dec;51(12):924-7

Naturally occurring clavines: antagonism/partial agonism at 5-HT2A receptors and antagonism at alpha 1-adrenoceptors in blood vessels. Pertz H. **Planta Med** 1996 Oct;62(5):387-92

Effects of MP-3022 on the 8-OH-DPAT-induced discriminative stimulus in rats. Filip M, et al. **Pol J Pharmacol** 1996 Jul-Aug;48(4):397-402

MP-3022, a new putative antagonist at pre- and postsynaptic 5-HT1A receptors. Przegaliński E, et al. **Pol J Pharmacol** 1996 Jan-Feb;48(1):13-22

Irreversible antagonism of 5HT2c receptors by N-ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline (EEDQ). Ni YG, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2715-8

Typical and atypical antipsychotic drugs are potent antagonists of the relaxant 5-hydroxytryptamine receptor in the smooth muscle of canine coronary artery. Terrón JA. **Proc West Pharmacol Soc** 1996;39:23-5

A pharmacological analysis of serotonergic receptors: effects of their activation of blockade in learning. Meneses A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Feb; 21(2):273-96 (121 ref.)

Molecular modelling of UH-301 and 5-HT(1a) receptor interactions. Sylte I, et al. **Protein Eng** 1996 Feb;9(2):149-60

Biological and behavioral responses to D-amphetamine, alone and in combination with the serotonin3 receptor antagonist ondansetron, in healthy volunteers. Grady TA, et al. **Psychiatry Res** 1996 Aug 30;64(1):1-10

Role of serotonin3 receptors in prolactin release induced by electroconvulsive therapy: a study with ondansetron. Yatham LN, et al. **Psychiatry Res** 1996 Feb 28;60(1):33-9

Behavioral, physiological and neuroendocrine responses in healthy volunteers to m-chlorophenylpiperazine (m-CPP) with and without ondansetron pretreatment. Broocks A, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):91-103

Neurochemical evidence for antagonism by olanzapine of dopamine, serotonin, alpha 1-adrenergic and muscarinic receptors in vivo in rats. Bymaster FP, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1-2):87-94

Anxiolytic-like profile of p-MPPI, a novel 5HT1A receptor antagonist, in the murine elevated plus-maze. Cao BJ, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):365-71

5-HT2a/2c receptor blockade by amesergide fully attenuates prolactin response to d-fenfluramine challenge in physically healthy human subjects. Coccaro EF, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):24-30

5-HT3 receptor antagonism by ondansetron does not attenuate prolactin response to d-fenfluramine challenge in healthy human subjects. Coccaro EF, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):108-12

Similarities in the pharmacology of spontaneous and DOI-induced head-shakes suggest 5HT2A receptors are active under physiological conditions. Dursun SM, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):198-205

Injection of 5-HT into the nucleus accumbens reduces the effects of d-amphetamine on responding for conditioned reward. Fletcher PJ. **Psychopharmacology (Berl)** 1996 Jul; 126(1):62-9

Blockade of phencyclidine-induced hyperlocomotion by olanzapine, clozapine and serotonin receptor subtype selective antagonists in mice. Gleason SD, et al. **Psychopharmacology (Berl)** 1997 Jan;129(1):79-84

The 5-HT1A antagonist, WAY 100635, ameliorates the cognitive impairment induced by fornix transection in the marmoset. Harder JA, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):245-54

Comparison of the effects of the 5-HT3 receptor antagonists WAY-100579 and ondansetron on spatial learning in the water maze in rats with excitotoxic lesions of the forebrain cholinergic projection system. Hodges H, et al. **Psychopharmacology (Berl)** 1996 May;125(2):146-61

5-HT2 antagonism and EPS benefits: is there a causal connection? Kapur S. **Psychopharmacology (Berl)** 1996 Mar; 124(1-2):35-9 (50 ref.)

Blockade of cocaine sensitization and tolerance by the co-administration of ondansetron, a 5-HT3 receptor antagonist, and cocaine. King GR, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):159-65

Functional subsensitivity of 5-HT2A and 5-HT2C receptors mediating hyperthermia following acute and chronic treatment with 5-HT2A/2C receptor antagonists. Mazzola-Pomietto P, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):144-51

Behavioural evidence that d-fenfluramine-induced anorexia in the rat is not mediated by the 5-HT1A receptor subtype. Vickers SP, et al. **Psychopharmacology (Berl)** 1996 May; 125(2):168-75

Randomised controlled trial of ondansetron in smoking cessation. West R, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):95-6

(-)Alprenolol potentiates the disrupting effects of dizocilpine on sensorimotor function in the rat. Zhang J, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):281-8

Role of opioidergic and serotonergic mechanisms in cough and antitussives. Kamei J. **Pulm Pharmacol** 1996 Oct-Dec; 9(5-6):349-56 (67 ref.)

Mechanisms of 5-hydroxytryptamine-induced contraction of isolated rat intrapulmonary bronchi. Szarek JL, et al. **Pulm Pharmacol** 1995 Dec;8(6):273-81

Effect of ondansetron and ICS 205-930 on radiation-induced hypothermia in rats. Kandasamy SB. **Radiat Res** 1997 Jun; 147(6):741-6

Hypoglossal and phrenic motoneuron responses to serotonergic active agents in rats. Richmonds CR, et al. **Respir Physiol** 1996 Nov;106(2):153-60

Immunological induction of flavour aversion in mice. II. Passive/adoptive transfer and pharmacological inhibition. Cara DC, et al. **Scand J Immunol** 1997 Jan;45(1):16-20

Local infusion of the serotonin antagonists ritanserin or ICS 205,930 increases in vivo dopamine release in the rat medial prefrontal cortex. Pehek EA. **Synapse** 1996 Sep;24(1):12-8

Serotonin-1A antagonists attenuate the effects of nicotine withdrawal on the auditory startle response. Rasmussen K, et al. **Synapse** 1997 Oct;27(2):145-52

Modulation of platelet function and vascular smooth muscle contractile actions by a novel, selective, highly potent 5-HT2 antagonist (SR46349). Yang LH, et al. **Thromb Res** 1996 Mar 1;81(5):555-67

Acceleration of the effect of selected antidepressant drugs in major depression by 5-HT1A antagonists. Artigas F, et al. **Trends Neurosci** 1996 Sep;19(9):378-83 (66 ref.)

Effect of 5-HT2 and 5-HT3 receptor antagonists on cholera toxin-induced fluid hypersecretion in the pig jejunum. Grondahi ML, et al. **Zentralbl Veterinarmed A** 1996 Nov; 43(9):543-52

[A new antiemetic ramosetron hydrochloride] Tsukagoshi S. **Gan To Kagaku Ryoho** 1997 Feb;24(3):371-80 (23 ref.) (Eng. Abstr.) **(Jpn)**

[The effect of droperidol and sevoflurane on serotonin-induced bronchoconstriction in dog] Nakaoji T, et al. **Masui** 1996 Jun;45(6):698-706 (Eng. Abstr.) **(Jpn)**

[The effect of naftidrofuryl on peroxidation of serum and erythrocyte membrane lipids in patients with insulin-dependent diabetes mellitus] Kubatiev AA, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):338-41 **(Rus)**

[The effect of 5-HT1 and 5-HT2 serotonin receptor agonists and antagonists on predator aggression in wild Norway rats] Popova NK, et al. **Biull Eksp Biol Med** 1996 Jun; 121(6):687-9 **(Rus)**

[Ritanserin prolongs the analgesic effect of morphine and slows the development of tolerance] Verbitskaia EV, et al. **Eksp Klin Farmakol** 1997 Mar-Apr;60(2):10-3 (Eng. Abstr.) **(Rus)**

POISONING

Acute risperidone overdose. Catalano G, et al. **Clin Neuropharmacol** 1997 Feb;20(1):82-5

THERAPEUTIC USE

Granisetron reduces incidence of nausea and vomiting after breast surgery. Fujii Y, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):746-9

Intravenous dolasetron and ondansetron in prevention of postoperative nausea and vomiting: a multicenter, double-blind, placebo-controlled study. Korttila K, et al. **Acta Anaesthesiol Scand** 1997 Aug;41(7):914-22

Comparison of efficacies of ondansetron and dixyrazine for prophylaxis of emesis during induction treatment in acute myelogenous leukemia. A pilot study. Sundström GM, et al. **Acta Oncol** 1997;36(2):229-30

Use of serotonin (5-HT) and opiate-based drugs in the pharmacotherapy of alcohol dependence: an overview of the preclinical data. Lê AD, et al. **Alcohol Alcohol** 1996 Mar;31 Suppl 1:27-32 (55 ref.)

Selective 5-hydroxytryptamine antagonism: a role in irritable bowel syndrome and functional dyspepsia? Maxton DG, et al. **Aliment Pharmacol Ther** 1996 Aug;10(4):595-9

Comparison of two dosing regimens of cisapride in the treatment of reflux oesophagitis. Schütze K, et al. **Aliment Pharmacol Ther** 1997 Jun;11(3):497-503

Ketanserin and erythropoiesis in hemodialysis patients with polycystic kidneys [letter] Borawski J, et al. **Am J Nephrol** 1996;16(5):451-2

5HT3 antagonists and radiotherapy [letter; comment] Mitchell G, et al. **Ann Oncol** 1997 Mar;8(3):302. Comment on: Ann Oncol 1996 Aug;7(6):553-4.

The role of the 5-HT3 antagonists ondansetron and dolasetron in the control of delayed onset nausea and vomiting in patients receiving moderately emetogenic chemotherapy. Pater JL, et al. **Ann Oncol** 1997 Feb; 8(2):181-5

Ethical issues regarding study designs used in serotonin-antagonist drug development [editorial] Holdsworth MT. **Ann Pharmacother** 1996 Oct; 30(10):1182-4

Randomized single-blind trial of topical ketanserin for healing acceleration of diabetic foot ulcers. Martínez-de Jesús FR, et al. **Arch Med Res** 1997 Spring;28(1):95-9

Ondansetron alters human alcohol intoxication. Swift RM, et al. **Biol Psychiatry** 1996 Sep 15;40(6):514-21

Endotoxaemia and postoperative hypermetabolism in coronary artery bypass surgery: the role of ketanserin. Oudemans-van Straaten HM, et al. **Br J Anaesth** 1996 Oct; 77(4):473-9

Suppression of reperfusion-induced arrhythmias with combined administration of 5-HT2 and thromboxane A2 antagonists [published erratum appears in Br J Pharmacol 1997 Mar;120(6):1186] Shaw LA, et al. **Br J Pharmacol** 1996 Mar;117(5):817-22

Antiemetic effects of granisetron on postoperative nausea and vomiting in patients with and without motion sickness. Fujii Y, et al. **Can J Anaesth** 1996 Feb;43(2):110-4

Granisetron reduces postoperative nausea and vomiting throughout menstrual cycle. Fujii Y, et al. **Can J Anaesth** 1997 May;44(5 Pt 1):489-93

Granisetron reduces the incidence and severity of nausea and vomiting after laparoscopic cholecystectomy. Fujii Y, et al. **Can J Anaesth** 1997 Apr;44(4):396-400

Controlling the toxicity of palliative radiotherapy: the role of 5-HT3 antagonists. Priestman TJ. **Can J Oncol** 1996 Feb;6 Suppl 1:17-22

Modification of visceral sensitivity and pain in irritable bowel syndrome by 5-HT3 antagonism (ondansetron). Goldberg PA, et al. **Digestion** 1996 Nov-Dec;57(6):478-83

Failure of ritanserin to block cocaine cue reactivity in humans. Ehrman RN, et al. **Drug Alcohol Depend** 1996 Nov;42(3):167-74

The non-antiemetic uses of serotonin 5-HT3 receptor antagonists. Clinical pharmacology and therapeutic applications. Greenshaw AJ, et al. **Drugs** 1997 Jan; 53(1):20-39 (188 ref.)

An overview of randomised studies comparing 5-HT3 receptor antagonists to conventional anti-emetics in the prophylaxis of acute chemotherapy-induced vomiting. Jantunen IT, et al. **Eur J Cancer** 1997 Jan;33(1):66-74

Modulation of hepatic encephalopathy in rats with thioacetamide-induced acute liver failure by serotonin antagonists. Yurdaydin C, et al. **Eur J Gastroenterol Hepatol** 1996 Jul;8(7):667-71

Ondansetron for pruritus in child with chronic cholestasis [letter] Trioche P, et al. **Eur J Pediatr** 1996 Nov;155(11):990

Studies to assess if pizotifen prophylaxis improves migraine beyond the benefit offered by acute sumatriptan therapy alone. Cleland PG, et al. **Eur Neurol** 1997;38(1):31-8

Lack of efficacy of 5-HT2A receptor antagonists to reduce brain damage after 3 minutes of transient global cerebral ischaemia in gerbils. Piera MJ, et al. **Fundam Clin Pharmacol** 1995;9(6):562-8

Ocular hypotensive effect of topical ketanserin in timolol users. Mastropasqua L, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Mar;235(3):130-5

Preliminary experience with use of a selective 5HT3 receptor antagonist (ondansetron) to prevent high dose chemotherapy induced emesis. Parikh PM, et al. **Indian J Cancer** 1996 Mar;33(1):17-20

Risperidone treatment of children and adolescents with pervasive developmental disorders: a prospective open-label study. McDougle CJ, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):685-93

Potent antifibrillatory effect of combined blockade of calcium channels and 5-HT2 receptors with nexopamil during myocardial ischemia and reperfusion in dogs: comparison to diltiazem. Nearing BD, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):777-87

Single 8 mg dose of oral ondansetron failed to prevent FAC chemotherapy-induced acute nausea and vomiting. Bosnjak SM, et al. **J Chemother** 1996 Aug;8(4):315-8

Prevention of delayed emesis by a single intravenous bolus dose of 5-HT3-receptor-antagonist in moderately emetogenic chemotherapy. Massidda B, et al. **J Chemother** 1996 Jun;8(3):237-42

Relatively low doses of cisapride in the treatment of nausea in patients treated with venlafaxine for treatment-refractory depression. Russell JL. **J Clin Psychopharmacol** 1996 Feb;16(1):35-7

Cyproheptadine treatment in Cushing's disease. Tanakol R, et al. **J Endocrinol Invest** 1996 Apr;19(4):242-7

Efficacy and safety of risperidone in psychotic patients: an open study. Daradkeh TK, et al. **J Int Med Res** 1996 May-Jun;24(3):291-5

Anti-emetic efficacy of tropisetron and metoclopramide. Yilmazlar A, et al. **J Int Med Res** 1996 May-Jun; 24(3):266-70

Fighting nausea in the '90s: more and better anti-emetics can help [news] Saphir A. **J Natl Cancer Inst** 1997 Sep 3;89(17):1252-5

Ondansetron, a 5-HT3 antagonist, improves cerebellar tremor. Rice GP, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):282-4

Use of ondansetron in palliative medicine. Currow DC, et al. **J Pain Symptom Manage** 1997 May;13(5):302-7

Treatment of apneustic respiratory disturbance with a serotonin-receptor agonist. Wilken B, et al. **J Pediatr** 1997 Jan;130(1):89-94

The relevance of serotonergic mechanisms in the treatment of schizophrenia has not been confirmed. Nyberg S, et al. **J Psychopharmacol (Oxf)** 1997;11(1):13-4

The 5-HT3 blockers in the treatment of the primary fibromyalgia syndrome: a 10-day open study with Tropisetron at a low dose. Samborski W, et al. **Mater Med Pol** 1996 Jan-Mar;28(1):17-9

Prophylactic administration of ondansetron in emergency intraabdominal operations. Ulusoy HO, et al. **Middle East J Anesthesiol** 1996 Jun;13(5):513-26

Therapeutic effect of sarpogrelate, a new 5-hydroxytryptamine receptor 2A antagonist, on diabetic nephropathy and neuropathy [letter] Ishimura E, et al. **Nephron** 1997;76(2):227-9

Use of dexamethasone with 5-HT3-receptor antagonists [letter] Perez EA. **Oncology (Huntingt)** 1996 Jan;10(1):14

5HT3 receptor antagonists and pruritus due to cholestasis [letter] Quigley C. **Palliat Med** 1996 Jan;10(1):54

Evaluation of the anti-oedematous effects of some H1-receptor antagonists and methysergide in rats. Blazsó

G, et al. **Pharmacol Res** 1997 Jan;35(1):65–71

Treatment of opioid-induced pruritus with ondansetron: report of four patients. Larijani GE, et al. **Pharmacotherapy** 1996 Sep–Oct;16(5):958–60

Mirtazapine: an antidepressant with noradrenergic and specific serotonergic effects. Stimmel GL, et al. **Pharmacotherapy** 1997 Jan–Feb;17(1):10–21 (60 ref.)

Treatment of hyperemesis gravidarum with the 5–HT3 antagonist ondansetron (Zofran). Tincello DG, et al. **Postgrad Med J** 1996 Nov;72(853):688–9

Role of serotonin3 receptors in prolactin release induced by electroconvulsive therapy: a study with ondansetron. Yatham LN, et al. **Psychiatry Res** 1996 Feb 28;60(1):33–9

The pharmacology of impulsive behaviour in rats: the effects of drugs on response choice with varying delays of reinforcement. Evenden JL, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):161–70

Ritanserin in the treatment of alcohol dependence--a multi-center clinical trial. Ritanserin Study Group. Johnson BA, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(2):206–15

Relapse following clozapine withdrawal: effect of neuroleptic drugs and cyproheptadine. Meltzer HY, et al. **Psychopharmacology (Berl)** 1996 Mar;124(1–2):176–87

Possible mechanism of action for the attenuation of ethanol intake induced by ritanserin in rats. Panocka I, et al. **Psychopharmacology (Berl)** 1996 Nov;128(2):181–90

Role of ketanserin in the treatment of the essential arterial hypertension associated with ischemic heart disease. Podoleanu D, et al. **Rom J Intern Med** 1996 Jan–Jun; 34(1–2):49–54

Tropisetron (Navoban): just another "setron"? Aapro MS. **Semin Oncol** 1994 Oct;21(5 Suppl 9):1–2

Prevention of chemotherapy-induced nausea and vomiting by tropisetron (Navoban) alone or in combination with other antiemetic agents. Bruntsch U, et al. **Semin Oncol** 1994 Oct;21(5 Suppl 9):7–11

A report comparing the use of tropisetron (Navoban), a 5–HT3 antagonist, with a standard antiemetic regimen of dexamethasone and metoclopramide in cisplatin-treated patients under conditions of severe emesis. Madej G, et al. **Semin Oncol** 1994 Oct;21(5 Suppl 9):3–6

Prevention of emesis by tropisetron (Navoban) in children receiving cytotoxic therapy for solid malignancies. Otten J, et al. **Semin Oncol** 1994 Oct;21(5 Suppl 9):17–9

Tropisetron (Navoban) alone and in combination with dexamethasone in the prevention of chemotherapy-induced emesis: the Nordic experience. Sorbe BG. **Semin Oncol** 1994 Oct;21(5 Suppl 9):20–6

Marijuana to prevent nausea and vomiting in cancer patients: a survey of clinical oncologists. Schwartz RH, et al. **South Med J** 1997 Feb;90(2):167–72

Ketanserin in the treatment of protamine-induced pulmonary hypertension. van der Starre PJ, et al. **Tex Heart Inst J** 1996;23(4):301–4

[Serotonin and treatment of mental disorders. Present status and future perspectives] Sevčík J, et al. **Cas Lek Cesk** 1997 Jul 14;136(14):431–3 (17 ref.) (Eng. Abstr.) **(Cze)**

[Olanzapin: a new perspective in the management of schizophrenia. X. Congress of the World Psychiatric Association, Madrid, August 1996] **Fortschr Neurol Psychiatr** 1996 Nov;64(11 Suppl Olanzapin):1–4 **(Ger)**

[Risperdal: a new hope for schizophrenic patients?] **Fortschr Neurol Psychiatr** 1994 May;62(5 Suppl):1–4 **(Ger)**

[Navoban--the new 5HT3-antagonist] **Internist (Berl)** 1994 May;35(5 Suppl):1–8 **(Ger)**

[The clinicopharmacological case (5). serotonin reuptake inhibitor and 5–HT3–receptor antagonists: are there clinically relevant interactions?] Kind B, et al. **Schweiz Rundsch Med Prax** 1996 Nov 12;85(46):1490–2 (Eng. Abstr.) **(Ger)**

[Recent improvements in antiemetic therapy] Roila F, et al. **Tumori** 1997;83(2 Suppl):S3–14 (63 ref.) (Eng. Abstr.) **(Ita)**

[Treatment of postoperative nausea and vomiting with ondansetron in patients administered anti-neoplastic agents] Morimoto Y, et al. **Masui** 1996 Sep;45(9):1096–9 (Eng. Abstr.) **(Jpn)**

[An experimental study of the effect of Zofran on the manifestations of a primary reaction to irradiation] Legeza VI, et al. **Eksp Klin Farmakol** 1996 Sep–Oct;59(5):49–52 (Eng. Abstr.) **(Rus)**

[The anti-arrhythmic effect of the selective sigma-receptor antagonist DuP 734 [1–(cyclopropylmethyl)–4–(2'–(4''–fluorophenyl)–2'–oxoethyl)piper idine HBr]] Maslov LN, et al. **Eksp Klin Farmakol** 1997 Mar–Apr;60(2):24–6 (Eng. Abstr.) **(Rus)**

[The effect of ritanserin on the formation and expression of an opiate abstinence syndrome] Verbitskaia EV, et al. **Eksp Klin Farmakol** 1997 Jan–Feb;60(1):19–21 (Eng. Abstr.) **(Rus)**

[The antagonist of type–II serotonin receptors naftidrofuryl in the treatment of patients with intermittent claudication] Komarov AL, et al. **Ter Arkh** 1996;68(2):49–53 (Eng. Abstr.) **(Rus)**

[Possibility of regulating platelet aggregation ability with the S2–receptor blocker, naftidrofuril, in patients with insulin–dependent diabetes mellitus] Balashova TS, et al. **Vopr Med Khim** 1996 Oct–Dec;42(4):337–43 (Eng. Abstr.) **(Rus)**

[Inactivation of serotonin in patients with hemorrhagic fever with kidney syndrome] Sidel'nikov IuN, et al. **Vopr Med Khim** 1996 Oct–Dec;42(4):319–21 (Eng. Abstr.) **(Rus)**

[Do 5HT–3 receptor antagonists ameliorate cholestatic pruritus? (letter)] Porcel JM, et al. **An Med Interna** 1995 Aug;12(8):411 **(Spa)**

TOXICITY

Enhancement of SDZ ICT 322–induced cataracts and skin changes in rats following vitamin E– and selenium–deficient diet. Längle UW, et al. **Arch Toxicol** 1997;71(5):283–9

Modulation of serotonin–induced currents by metals in mouse neuroblastoma cells. Uki M, et al. **Arch Toxicol** 1996; 70(10):652–60

Two–week oral mucosal irritation study with ramosetron orally disintegrating tablets in Syrian hamsters. Cummins HA, et al. **Arzneimittelforschung** 1996 Jul;46(7):673–6

Age–related assessment of central 5–HT1A receptors following irreversible inactivation by N–ethoxycarbonyl–2–ethoxy–1,2–dihydroquinoline (EEDQ). Keck J, et al. **Brain Res** 1996 Jul 22;728(1):130–4

Embryotoxic effects of B–193 in mouse. Anasiewicz A. **Folia Morphol (Warsz)** 1996;55(4):200–1

Effects of perospirone (SM–9018), a potential atypical neuroleptic, on dopamine D1 receptor–mediated vacuous chewing movement in rats: a role of 5–HT2 receptor blocking activity. Ohno Y, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):889–95

SEROTONIN BLOCKADERS see **SEROTONIN ANTAGONISTS**

SEROTONIN RECEPTOR AGONISTS see **SEROTONIN AGONISTS**

SEROTONIN RECEPTORS see **RECEPTORS, SEROTONIN**

SEROTONIN REUPTAKE INHIBITORS see **SEROTONIN UPTAKE INHIBITORS**

SEROTONIN UPTAKE INHIBITORS

see related
ADRENERGIC UPTAKE INHIBITORS
ANTIDEPRESSIVE AGENTS, SECOND–GENERATION

Concomitant use of anxiolytics and hypnotics with selective serotonin reuptake inhibitors. Gregor KJ, et al. **Clin Ther** 1996 May–Jun;18(3):521–7; discussion 520

Three new antidepressants. **Drug Ther Bull** 1996 Sep; 34(9):65–8

Antidepressant use in the elderly. Current status of nefazodone, venlafaxine and moclobemide. Goldberg RJ. **Drugs Aging** 1997 Aug;11(2):119–31 (86 ref.)

Regional distribution of the 5–HT innervation in the brain of normal and lurcher mice as revealed by [3H]citalopram quantitative autoradiography. Strazielle C, et al. **J Chem Neuroanat** 1996 Apr;10(2):157–71

Abuse of sertraline [letter] D'Urso P. **J Clin Pharm Ther** 1996 Oct;21(5):359–60

Correction: a note on the discovery of selective serotonin reuptake inhibitors. Carlsson A, et al. **Life Sci** 1997; 61(12):1203

[Fluoxetine] Gleiter CH, et al. **Dtsch Med Wochenschr** 1997 Apr 11;122(15):481–2 **(Ger)**

[Happy pills with a funny taste. Some reflections on a clinical paradox] Haakenaasen K. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1168–9 **(Nor)**

ADMINISTRATION & DOSAGE

Dexamethasone augmentation in treatment–resistant depression. Dinan TG, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):58–61

Citalopram as an adjuvant in chronic schizophrenia: a double–blind placebo–controlled study. Salokangas RK, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):175–80

A placebo–controlled, double–blind study of fluoxetine in severe alcohol dependence: adjunctive pharmacotherapy during and after inpatient treatment. Kabel DI, et al. **Alcohol Clin Exp Res** 1996 Jun;20(4):780–4

An open pilot study of citalopram for behavioral disturbances of dementia. Plasma levels and real–time observations. Pollock BG, et al. **Am J Geriatr Psychiatry** 1997 Winter; 5(1):70–8

Reassessment of nefazodone [letter; comment] Bryant SG. **Am J Health Syst Pharm** 1996 Oct 1;53(19):2339–40, 2343 . Comment on: Am J Health Syst Pharm 1995 Dec 15;52(24):2799–812.

Drug holidays to counter sexual dysfunction [letter] Balon R. **Am J Psychiatry** 1996 Oct;153(10):1370–1

The oral dose–effect relationship for fluvoxamine: a fixed–dose comparison against placebo in depressed outpatients. Walczak DD, et al. **Ann Clin Psychiatry** 1996 Sep;8(3):139–51

Intensive nutritional counselling in bulimia nervosa: a role for supplementation with fluoxetine? Beumont PJ, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):514–24

SSRI combination treatment for depression [letter] Hunchak J. **Can J Psychiatry** 1997 Jun;42(5):531–2

Safety and tolerability of combined treatment with moclobemide and SSRIs: a systematic study of 50 patients. Hawley CJ, et al. **Int Clin Psychopharmacol** 1996 Sep; 11(3):187–91

Paroxetine and pindolol: a randomized trial of serotonergic autoreceptor blockade in the reduction of antidepressant latency. Tome MB, et al. **Int Clin Psychopharmacol** 1997 Mar;12(2):81–9

Buspirone augmentation of selective serotonin reuptake inhibitors (SSRIs) in social phobia. Van Ameringen M, et al. **J Affect Disord** 1996 Jul 8;39(2):115–21

Fluoxetine treatment of children with selective mutism: an open trial. Dummit ES 3d, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May; 35(5):615–21

AIDS–related obsessive compulsive disorder: deconditioning based on fluoxetine–induced inhibition of anxiety. Kraus RP, et al. **J Behav Ther Exp Psychiatry** 1996 Mar;27(1):51–6

An investigation into the prescribing patterns of selective serotonin re–uptake inhibitors in South Africa. Truter I, et al. **J Clin Pharm Ther** 1996 Aug;21(4):237–42

SSRI optimal dose remains at issue [letter; comment] Rifkin A. **J Clin Psychiatry** 1997 Feb;58(2):87–8. Comment on: J Clin Psychiatry 1994 Dec;55 Suppl:3–15; discussion 16–7. Comment on: J Clin Psychiatry 1996 Jun;57(6):265; discussion 267–9. Comment on: J Clin Psychiatry 1996 Jun;57(6):265–7; discussion 267–9.

A double–blind, placebo–controlled study of citalopram with and without lithium in the treatment of therapy–resistant depressive patients: a clinical, pharmacokinetic, and pharmacogenetic investigation. Baumann P, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):307–14

Dose–response relationship with venlafaxine. Kelsey JE. **J Clin Psychopharmacol** 1996 Jun;16(3 Suppl 2):21S–26S; discussion 26S–28S (22 ref.)

Long–term pharmacotherapy of obsessive–compulsive disorder: a double–blind controlled study. Mundo E, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):4–10

Serotonin and human information processing: fluvoxamine can improve reaction time performance. Hasbroucq T, et al. **Neurosci Lett** 1997 Jul 4;229(3):204–8

Metabolic interaction between fluoxetine and clomipramine: a case report. Balant–Gorgia AE, et al. **Pharmacopsychiatry** 1996 Jan;29(1):38–41

Serotonin function in panic disorder: intravenous administration of meta–chlorophenylpiperazine. Wetzler S, et al. **Psychiatry Res** 1996 Sep 27;64(2):77–82

Severe pathological crying after left anterior choroidal artery infarct. Reversibility with paroxetine treatment. Derex L, et al. **Stroke** 1997 Jul;28(7):1464–6

[Hypericum perforatum in psychiatric practice (interview)] Kasper S. **Nervenarzt** 1997 Feb;68(2 Suppl):8 **(Ger)**

[Increased use of antidepressive agents. A correctly aimed development] Isacsson G, et al. **Lakartidningen** 1997 Apr 16;94(16):1484–6 (46 ref.) **(Swe)**

ADVERSE EFFECTS

Co–administration of fluoxetine and sumatriptan: the Canadian experience. Joffe RT, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):551–2

Sertraline, a selective serotonin reuptake inhibitor, unmasking carcinoid syndrome. Noyer CM, et al. **Am J Gastroenterol** 1997 Aug;92(8):1387–8

Syndrome of inappropriate antidiuretic hormone (SIADH) in an 80–year–old woman given clomipramine. Sommer BR. **Am J Geriatr Psychiatry** 1997 Summer;5(3):268–9

Lack of clinical evidence for potential interaction between isoniazid and selective serotonin–reuptake inhibitors [letter; comment] Stockley IH. **Am J Health Syst Pharm** 1996 Sep 15;53(18):2217. Comment on: Am J Health Syst Pharm 1995 Oct 1;52(19):2135–6.

How safe are serotonin reuptake inhibitors for depression in patients with coronary heart disease? Sheline YI, et al. **Am J Med** 1997 Jan;102(1):54–9 (74 ref.)

Withdrawal syndrome after discontinuation of venlafaxine [letter] Agelink MW, et al. **Am J Psychiatry** 1997 Oct; 154(10):1473–4

Drug holidays to counter sexual dysfunction [letter] Balon R. **Am J Psychiatry** 1996 Oct;153(10):1370–1

Recurrent hyponatremia associated with sertraline and lofepramine [letter] Bouman WP, et al. **Am J Psychiatry** 1997 Apr;154(4):580

Venlafaxine withdrawal reactions [letter] Louie AK, et al. **Am J Psychiatry** 1996 Dec;153(12):1652

Sertraline and psychotic symptoms: a case series. Popli AP, et al. **Ann Clin Psychiatry** 1997 Mar;9(1):15–7

Retrospective study of selegiline–antidepressant drug interactions and a review of the literature. Ritter JL, et al. **Ann Clin Psychiatry** 1997 Mar;9(1):7–13 (37 ref.)

Serotonin syndrome associated with nefazodone and paroxetine. John L, et al. **Ann Emerg Med** 1997 Feb; 29(2):287–9

Serotonin reuptake inhibitor unmasks a pheochromocytoma [letter] Seelen MA, et al. **Ann Intern Med** 1997 Feb 15; 126(4):333

Comment: Serotonin syndrome associated with combined sertraline–amitriptyline treatment [letter; comment] Alderman CP, et al. **Ann Pharmacother** 1996 Dec; 30(12):1499–500. Comment on: Ann Pharmacother 1996 May;30(5):527–33.

Effects of serotonin reuptake inhibitors on hemostasis. Alderman CP, et al. **Ann Pharmacother** 1996 Nov; 30(11):1232–4

Nitroglycerin in the treatment of the serotonin syndrome [letter] Brown TM, et al. **Ann Pharmacother** 1996 Feb; 30(2):191–2

Possible serotonin syndrome associated with tramadol and sertraline coadministration. Mason BJ, et al. **Ann Pharmacother** 1997 Feb;31(2):175–7

Bruising associated with the use of fluoxetine. Pai VB, et al. **Ann Pharmacother** 1996 Jul–Aug;30(7–8):786–8

SIADH—compulsive drinking or SSRI influence? [letter] Robinson D, et al. **Ann Pharmacother** 1996 Jul–Aug; 30(7–8):885

Possible paroxetine–induced bruxism. Romanelli F, et al. **Ann Pharmacother** 1996 Nov;30(11):1246–8

SIADH caused by paroxetine [letter] van Campen JP, et al. **Ann Pharmacother** 1996 Dec;30(12):1499

Association of SIADH with selective serotonin reuptake inhibitors. Woo MH, et al. **Ann Pharmacother** 1997 Jan; 31(1):108–10 (32 ref.)

Interaction of serotonin re–uptake inhibitors with perhexiline. Alderman CP, et al. **Aust N Z J Psychiatry** 1997 Aug; 31(4):601–3

Spontaneous orgasm with the combined use of bupropion and sertraline [letter] Grimes JB, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1184–5

Sertraline and akathisia: spontaneous resolution. Olivera AO. **Biol Psychiatry** 1997 Jan 15;41(2):241–2

Surgery, drugs, and the male orgasm [editorial] Dunsmuir WD, et al. **BMJ** 1997 Feb 1;314(7077):319–20

A comparison of the post–marketing safety of four selective serotonin re–uptake inhibitors including the investigation of symptoms occurring on withdrawal. Price JS, et al. **Br J Clin Pharmacol** 1996 Dec;42(6):757–63

SSRIs and hyponatraemia. Lane RM. **Br J Clin Pract** 1997 Apr–May;51(3):144–6 (39 ref.)

Bilateral acute angle closure glaucoma after administration of paroxetine [letter] Kirwan JF, et al. **Br J Ophthalmol** 1997 Mar;81(3):252

SSRI and sympathominetic interaction [letter] [see comments] Barrett J, et al. **Br J Psychiatry** 1996 Feb; 168(2):253. Comment in: Br J Psychiatry 1996 May;168(5):653.

More cases of paroxetine withdrawal syndrome [letter] Pacheco L, et al. **Br J Psychiatry** 1996 Sep;169(3):384

Inappropriate secretion of antidiuretic hormone and SSRIs [letter] [see comments] Voegeli J, et al. **Br J Psychiatry** 1996 Oct;169(4):524–5. Comment in: Br J Psychiatry 1997 Jan;170:88–9.

Paroxetine discontinuation syndrome in association with sertindole therapy [letter] Walker–Kinnear M, et al. **Br J Psychiatry** 1997 Apr;170:389

Speech dysfunction due to trazodone—fluoxetine combination in traumatic brain injury. Patterson DE, et al. **Brain Inj** 1997 Apr;11(4):287–91

Re: The use of selective serotonin reuptake inhibitors in the elderly [letter; comment] Flint AJ. **Can J Psychiatry** 1997 Apr;42(3):321–3. Comment on: Can J Psychiatry 1996 Oct;41(8):535–6.

Fluvoxamine–associated bleeding [letter] Leung M, et al. **Can J Psychiatry** 1996 Nov;41(9):604–5

Familial akathisia and depression treated with nefazodone [letter] Simpson JS. **Can J Psychiatry** 1996 Oct; 41(8):539–40

Mianserin, a 5–HT2a/2c and alpha 2 antagonist, in the treatment of sexual dysfunction induced by serotonin reuptake inhibitors. Aizenberg D, et al. **Clin Neuropharmacol** 1997 Jun;20(3):210–4

Emergence of kleptomania during treatment for depression with serotonin selective reuptake inhibitors. Kindler S, et al. **Clin Neuropharmacol** 1997 Apr;20(2):126–9

A new case of fluoxetine–induced mania in poststroke depression [letter] Kulisevsky J, et al. **Clin Neuropharmacol** 1997 Apr;20(2):180–1

Selective serotonin reuptake inhibitors in older patients. A tolerability perspective. Skerritt U, et al. **Drugs Aging** 1997 Mar;10(3):209–18 (74 ref.)

Serotonin syndrome attributed to tramadol addition to paroxetine therapy. Egberts AC, et al. **Int Clin Psychopharmacol** 1997 May;12(3):181–2

Antagonism of selective serotonin reuptake inhibitor–induced nausea by mirtazapine. Pedersen L, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):59–60

Antidepressant–induced hypomania in obsessive–compulsive disorder. Rihmer Z, et al. **Int Clin Psychopharmacol** 1996 Sep;11(3):203–5

Combined serotonin syndrome and hyponatraemia caused by a citalopram–buspirone interaction. Spigset O, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):61–3

Serotonin syndrome associated with trazodone [letter] Rao R. **Int J Geriatr Psychiatry** 1997 Jan;12(1):129–30

Adverse effects of clomipramine [letter] Brasić JR, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep;36(9):1165–6

SSRI and sexual functioning [letter] Carek DJ. **J Am Acad Child Adolesc Psychiatry** 1996 Sep;35(9):1106–7

Toward a rational prescribing practice [letter; comment] Friedman EH. **J Am Acad Child Adolesc Psychiatry** 1996 Oct;35(10):1258–9. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Jan;35(1):4.

SSRI–induced mania [letter; comment] Grubbs JH. **J Am Acad Child Adolesc Psychiatry** 1997 Apr;36(4):445 . Comment on: J Am Acad Child Adolesc Psychiatry 1996 Jan;35(1):4. Comment on: J Am Acad Child Adolesc Psychiatry 1996 Aug;35(8):975.

Paroxetine–induced mania [letter] Oldroyd J. **J Am Acad Child Adolesc Psychiatry** 1997 Jun;36(6):721–2

Is mycosis fungoides exacerbated by fluoxetine? Vermeer MH, et al. **J Am Acad Dermatol** 1996 Oct;35(4):635–6

Concerns about possible drug interactions [letter] Simpson BS, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1380–1

Mandibular dystonia associated with the combination of sertraline and metoclopramide [letter] Christensen RC, et al. **J Clin Psychiatry** 1996 Dec;57(12):596

Benztropine in the treatment of venlafaxine–induced sweating [letter] Garber A, et al. **J Clin Psychiatry** 1997 Apr; 58(4):176–7

Bupropion for SSRI–induced fatigue [letter] Green TR. **J Clin Psychiatry** 1997 Apr;58(4):174

Newer antidepressants and the discontinuation syndrome. Haddad P. **J Clin Psychiatry** 1997;58 Suppl 7:17–21; discussion 22 (367 ref.)

Movement disorders associated with the serotonin selective reuptake inhibitors. Leo RJ. **J Clin Psychiatry** 1996 Oct; 57(10):449–54 (86 ref.)

Paroxetine–induced angioedema and tongue swelling [letter] Mithani H, et al. **J Clin Psychiatry** 1996 Oct;57(10):486

Safety and tolerability of the new antidepressants. Nelson JC. **J Clin Psychiatry** 1997;58 Suppl 6:26–31 (30 ref.)

Inability to cry during SRI treatment [letter] Oleshansky MA, et al. **J Clin Psychiatry** 1996 Dec;57(12):593

Sertraline–induced anorgasmia treated with intermittent nefazodone [letter] Reynolds RD. **J Clin Psychiatry** 1997 Feb;58(2):89

Methylphenidate and SSRI–Induced sexual side effects [letter; comment] Roeloffs C, et al. **J Clin Psychiatry** 1996 Nov;57(11):548. Comment on: J Clin Psychiatry 1996 Feb;57(2):72–6.

Paroxetine–induced anorexia in a patient with bulimia nervosa [letter; comment] Sagduyu K. **J Clin Psychiatry** 1997 May;58(5):220–1. Comment on: J Clin Psychiatry 1994 Mar;55(3):118–9.

Possible biological mechanisms of the serotonin reuptake inhibitor discontinuation syndrome. Discontinuation Consensus Panel. Schatzberg AF, et al. **J Clin Psychiatry** 1997;58 Suppl 7:23–7 (29 ref.)

Serotonin reuptake inhibitor discontinuation syndrome: a hypothetical definition. Discontinuation Consensus panel. Schatzberg AF, et al. **J Clin Psychiatry** 1997;58 Suppl 7:5–10 (32 ref.)

Reversible parkinsonism in a 90–year–old man taking sertraline [letter] Schechter DS, et al. **J Clin Psychiatry** 1997 Jun;58(6):275

Mania associated with serotonin selective reuptake inhibitors [letter] Vesely C, et al. **J Clin Psychiatry** 1997 Feb;58(2):88

Discontinuation symptoms after treatment with serotonin reuptake inhibitors: a literature review. Zajecka J, et al. **J Clin Psychiatry** 1997 Jul;58(7):291–7 (36 ref.)

Paroxetine and tardive dyskinesia [letter] Botsaris SD, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):258–9

Worsening of psychosis with clozapine and selective serotonin reuptake inhibitor combination: two case reports [letter] Chong SA, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):68–9

Fluvoxamine and akathisia [letter] Chong SA, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):334–5

Serotonin reuptake inhibitor withdrawal. Coupland NJ, et al. **J Clin Psychopharmacol** 1996 Oct;16(5):356–62

Drug–drug interactions involving antidepressants: focus on venlafaxine. Ereshefsky L. **J Clin Psychopharmacol** 1996 Jun;16(3 Suppl 2):37S–50S; discussion 50S–53S (66 ref.)

Venlafaxine, monoamine oxidase inhibitors, and the serotonin syndrome [letter] Gitlin MJ. **J Clin Psychopharmacol** 1997 Feb;17(1):66–7

Venlafaxine–induced hyponatremia [letter] Gupta AK, et al. **J Clin Psychopharmacol** 1997 Jun;17(3):223–5

Sexual dysfunction associated with serotonin specific reuptake inhibitors [letter] Herrán A, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):67–8

Induction of mania with serotonin reuptake inhibitors. Howland RH. **J Clin Psychopharmacol** 1996 Dec; 16(6):425–7

Selective serotonin reuptake inhibitor–induced serotonin syndrome: review. Lane R, et al. **J Clin Psychopharmacol** 1997 Jun;17(3):208–21 (149 ref.)

Sertraline and galactorrhea [letter] Lesaca TG. **J Clin Psychopharmacol** 1996 Aug;16(4):333–4

Dystonia associated with trazodone and sertraline [letter] Lewis CF, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):64–5

Fluoxetine and suicidal ideation [letter] Ratan DA. **J Clin Psychopharmacol** 1997 Feb;17(1):61–2

Lhermitte's sign in paroxetine withdrawal [letter] Reeves RR, et al. **J Clin Psychopharmacol** 1996 Oct;16(5):411–2

The safety and tolerability of venlafaxine hydrochloride: analysis of the clinical trials database. Rudolph RL, et al. **J Clin Psychopharmacol** 1996 Jun;16(3 Suppl 2):54S–59S; discussion 59S–61S (13 ref.)

Suspected complication of treatment with venlafaxine [letter] Wilson R, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):323

SSRIs, bupropion, and sexual function. Edens N, et al. **J Fam Pract** 1997 Aug;45(2):101–2

Birth outcomes in pregnant women taking fluoxetine. Johnson GL. **J Fam Pract** 1997 Jan;44(1):32

Triphasic waves in serotonin syndrome [letter] Dike GL. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):200

Combined pharmacotherapy or polypharmacy? Levy F, et al. **J Paediatr Child Health** 1996 Jun;32(3):265–6

Antidepressant drugs and the cardiovascular system: a comparison of tricylics and selective serotonin reuptake inhibitors and their relevance for the treatment of psychiatric patients with cardiovascular problems. Coupland N, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):83–92 (117 ref.)

A critical review of selective serotonin reuptake inhibitor–related sexual dysfunction; incidence, possible aetiology and implications for management. Lane RM. **J Psychopharmacol (Oxf)** 1997;11(1):72–82 (126 ref.)

Intermittent amantadine for fluoxetine–induced anorgasmia. Balon R. **J Sex Marital Ther** 1996 Winter;22(4):290–2

Venlafaxine induced serotonin syndrome occurring after abstinence from phenelzine for more than two weeks [letter] [see comments] Kolecki P. **J Toxicol Clin Toxicol** 1997;35(2):211–2. Comment in: J Toxicol Clin Toxicol 1997 ;35(2):213–4.

Brain serotonin neurotoxicity and primary pulmonary hypertension from fenfluramine and dexfenfluramine. A systematic review of the evidence. McCann UD, et al. **JAMA** 1997 Aug 27;278(8):666–72 (107 ref.)

Dangers of fluoxetine [letter; comment] Judge R. **Lancet** 1997 Mar 15;349(9054):809. Comment on: Lancet 1997 Jan 18;349(9046):214.

Exacerbations of neurally mediated syncope associated with sertraline [letter] Tandan T, et al. **Lancet** 1997 Apr 19; 349(9059):1145–6

Successful treatment of serotonin syndrome with chlorpromazine [letter] [see comments] Gillman PK. **Med J Aust** 1996 Sep 16;165(6):345–6. Comment in: Med J Aust 1997 Feb 3;166(3):166–7.

Successful treatment of the toxic serotonin syndrome with chlorpromazine [letter; comment] Graham PM. **Med J Aust** 1997 Feb 3;166(3):166–7. Comment on: Med J Aust 1996 Sep 16;165(6):345–6.

Acute reversible myoclonic encephalopathy associated with fluoxetine therapy. Ghika–Schmid F, et al. **Mov Disord** 1997 Jul;12(4):622–3

Fluoxetine–induced movement disorders and deficient CYP2D6 enzyme activity [letter] Perucca E, et al. **Mov Disord** 1997 Jul;12(4):624–5

Birth outcomes in pregnant women taking fluoxetine [letter; comment] Cohen LS, et al. **N Engl J Med** 1997 Mar 20; 336(12):872; discussion 873. Comment on: N Engl J Med 1996 Oct 3;335(14):1010–5.

Birth outcomes in pregnant women taking fluoxetine [letter; comment] Goldstein DJ, et al. **N Engl J Med** 1997 Mar 20;336(12):872–3; discussion 873. Comment on: N Engl J Med 1996 Oct 3;335(14):1010–5.

Syndrome of inappropriate ADH secretion attributed to the serotonin re–uptake inhibitors, venlafaxine and paroxetine. Meynaar IA, et al. **Neth J Med** 1997 Jun;50(6):243–5

Effects of first–trimester fluoxetine exposure on the newborn. Goldstein DJ, et al. **Obstet Gynecol** 1997 May;89(5 Pt 1):713–8

d–fenfluramine anorexia: dissociation of ingestion rate, meal duration, and meal size effects. Kaplan JM, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):223–9

Serotonin syndrome with moclobemide–fluoxetine combination [letter] Benazzi F. **Pharmacopsychiatry** 1996 Jul;29(4):162

Paroxetine and galactorrhea. Bonin B, et al. **Pharmacopsychiatry** 1997 Jul;30(4):133–4

Fluoxetine and aggressive behaviour [letter] Friedman EH. **Pharmacopsychiatry** 1996 May;29(3):121

Orthostatic hypotension induced by sertraline withdrawal. Amsden GW, et al. **Pharmacotherapy** 1996 Jul–Aug; 16(4):684–6

Female sexual stimulation during antidepressant treatment. Elmore JL, et al. **Pharmacotherapy** 1997 May–Jun; 17(3):612–6

Tardive dyskinesia associated with fluoxetine. Dubovsky SL, et al. **Psychiatr Serv** 1996 Sep;47(9):991–3

Serotonin syndrome during clomipramine monotherapy: comparison of two diagnostic criteria. Kudo K, et al. **Psychiatry Clin Neurosci** 1997 Feb;51(1):43–6

Serotonin reuptake inhibitor–related extrapyramidal side effects in two patients with cerebral palsy [letter] Rone LA, et al. **Psychosomatics** 1996 Mar–Apr;37(2):165–6

Drug–induced pulmonary hypertension: must history repeat itself? [editorial] Voelkel NF. **Pulm Pharmacol** 1996 Apr; 9(2):67–8

The safety of fluoxetine during pregnancy and lactation. Nulman I, et al. **Teratology** 1996 May;53(5):304–8 (33 ref.)

Pharmacokinetics of fluoxetine [letter] Young AH, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):400

Serotonin syndrome from venlafaxine–tranylcypromine interaction. Brubacher JR, et al. **Vet Hum Toxicol** 1996 Oct;38(5):358–61

Paroxetine (Paxil) overdose: a pediatric focus. Myers LB, et al. **Vet Hum Toxicol** 1997 Apr;39(2):86–8

[Adverse effects of selective serotonin uptake inhibitors. Hyponatremia caused by Schwartz–Bartter syndrome] Christensen O, et al. **Ugeskr Laeger** 1996 Nov 25; 158(48):6920–2 (Eng. Abstr.) **(Dan)**

[Therapy and nursing (letter)] Iversen M. **Ugeskr Laeger** 1997 Feb 10;159(7):968 **(Dan)**

[Adverse effects of selective serotonin uptake inhibitors

SEROTONIN UPTAKE INHIBITORS

(editorial)] Schou JS. **Ugeskr Laeger** 1996 Nov 25; 158(48):6883 **(Dan)**

[Serotonin syndrome and malignant neuroleptic syndrome. A review based on the material from the National Board of Adverse Drug Reactions] von Halling Laier MG, et al. **Ugeskr Laeger** 1996 Nov 25;158(48):6933–7 (Eng. Abstr.) **(Dan)**

[Notification of potential side effects of selective serotonin reuptake inhibitors in Belgium and The Netherlands (letter; comment)] Ballering LA, et al. **Ned Tijdschr Geneeskd** 1996 Nov 23;140(47):2358–9. Comment on: Ned Tijdschr Geneeskd 1996 Sep 7;140(36):1817–20. **(Dut)**

[Reports of suspected side effects of selective serotonin reuptake inhibitors in Belgium and The Netherlands (see comments)] Van Ermen AM, et al. **Ned Tijdschr Geneeskd** 1996 Sep 7;140(36):1817–20 (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1996 Nov 23;140(47):2358–9. **(Dut)**

[Fluoxetine, akathisia and suicide] Lançon C, et al. **Encephale** 1997 May–Jun;23(3):218–23 (46 ref.) (Eng. Abstr.) **(Fre)**

[Depressive stupor—malignant neuroleptic syndrome—serotonin syndrome. A case contribution to a difficult differential diagnosis] König F, et al. **Nervenarzt** 1996 May;67(5):407–12 (Eng. Abstr.) **(Ger)**

[The serotonin syndrome] Broude L, et al. **Harefuah** 1997 Jan 1;132(1):25–7, 71 (Eng. Abstr.) **(Heb)**

[Seroxat combined with Meravean—increased risk of hemorrhage? (letter)] Haukeland JW. **Tidsskr Nor Laegeforen** 1996 Nov 30;116(29):3528–9 **(Nor)**

[Is overdose of selective serotonin uptake inhibitors dangerous? (letter)] Malt UF. **Tidsskr Nor Laegeforen** 1996 Nov 10;116(27):3270–1 **(Nor)**

[Sexual dysfunction secondary to SSRIs. A comparative analysis in 308 patients] Montejo AI, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Nov–Dec;24(6):311–21 (Eng. Abstr.) **(Spa)**

[Suggestive episodes of hypoglycemia related to fluoxetine (letter) (see comments)] Fernández López MI, et al. **Aten Primaria** 1996 Dec;18(10):581. Comment in: Aten Primaria 1997 May 15;19(8):442, 444–5. **(Spa)**

[Adverse reactions and drugs: the wrong title and content (letter; comment)] Palop Larrea V, et al. **Aten Primaria** 1997 May 15;19(8):442, 444–5. Comment on: Aten Primaria 1996 Dec;18(10):581. **(Spa)**

[Exacerbation of spasticity induced by serotonin reuptake inhibitors. Letter] del Real MA, et al. **Neurologia** 1996 Aug–Sep;11(7):272 **(Spa)**

[Suicide and SSRI preparations. Antidepressive agents without psychotherapy are more hazardous than beneficial] Cullberg J. **Lakartidningen** 1997 Apr 9;94(15):1409–11 **(Swe)**

ANALYSIS

Sertraline and desmethylsertraline in human breast milk and nursing infants. Stowe ZN, et al. **Am J Psychiatry** 1997 Sep;154(9):1255–60

Simultaneous measurement of serotonin and paroxetine in rat brain microdialysate by a single-pump column-switching technique. Ramaiya A, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):119–29

Sertraline and norsertraline levels in three breastfed infants. Mammen OK, et al. **J Clin Psychiatry** 1997 Mar;58(3):100–3

A rapid electron-capture gas chromatographic method for the quantification of fluvoxamine in brain tissue. Rotzinger S, et al. **J Pharmacol Toxicol Methods** 1997 Apr; 37(3):129–33

ANTAGONISTS & INHIBITORS

Autoreceptor antagonists enhance the effect of the reuptake inhibitor citalopram on extracellular 5-HT: this effect persists after repeated citalopram treatment. Gundlah C, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):475–82

BLOOD

HPLC of sertraline and norsertraline in plasma or serum. Patel J, et al. **Biomed Chromatogr** 1996 Nov–Dec; 10(6):351–4

Distribution of venlafaxine in three postmortem cases. Levine B, et al. **J Anal Toxicol** 1996 Oct;20(6):502–5

Analytical methods for the quantitative determination of selective serotonin reuptake inhibitors for therapeutic drug monitoring purposes in patients. Eap CB, et al. **J Chromatogr B Biomed Appl** 1996 Nov 8;686(1):51–63 (73 ref.)

Quantitative determination of paroxetine in plasma by high-performance liquid chromatography and ultraviolet detection. Foglia JP, et al. **J Chromatogr B Biomed Appl** 1997 May 23;693(1):147–51

Determination of citalopram enantiomers in human plasma by liquid chromatographic separation on a Chiral-AGP column. Haupt D. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):299–305

Monitoring serum concentrations of clomipramine and metabolites: fluorescence polarization immunoassay versus high performance liquid chromatography. Banger M, et al. **Pharmacopsychiatry** 1997 Jul;30(4):128–32

Plasma levels of citalopram enantiomers and metabolites in elderly patients. Foglia JP, et al. **Psychopharmacol Bull** 1997;33(1):109–12

CHEMICAL SYNTHESIS

Synthesis and 5HT modulating activity of stereoisomers of 3-phenoxymethyl-4-phenylpiperidines. Engelstoft M, et al. **Acta Chem Scand** 1996 Feb;50(2):164–9

Synthesis of [O-methyl-11C]fluvoxamine—a potential serotonin uptake site radioligand. Matarrese M, et al. **Appl Radiat Isot** 1997 Jun;48(6):749–54

Synthesis of [11C]RPR-72840A and its evaluation as a radioligand for the serotonin reuptake site in positron emission tomography. Roeda D, et al. **Bioorg Med Chem** 1997 Feb;5(2):397–403

Synthesis of [11C]dapoxetine.HCl, a serotonin re-uptake inhibitor: biodistribution in rat and preliminary PET imaging in the monkey. Livni E, et al. **Nucl Med Biol** 1994 May;21(4):669–75

CHEMISTRY

Structure-activity studies for a novel series of N-(arylethyl)-N-(1,2,3,4-tetrahydronaphthalen-1-ylmethyl)-N-methylamine s possessing dual 5-HT uptake inhibiting and alpha2-antagonistic activities. Meyer MD, et al. **J Med Chem** 1997 Mar 28;40(7):1049–62

[Chemical composition of Hypericum perforatum and its effects] **Nervenarzt** 1997 Feb;68(2 Suppl):3–4 **(Ger)**

DIAGNOSTIC USE

Pharmacological challenge test of the Tridimensional Personality Questionnaire in patients with social phobia and normal volunteers. Tancer ME, et al. **Anxiety** 1994–95; 1(5):224–6

Prolactin and cortisol responses to fenfluramine in Parkinson's disease. Kostić VS, et al. **Biol Psychiatry** 1996 Oct 15;40(8):769–75

Synthesis of [11C]RPR-72840A and its evaluation as a radioligand for the serotonin reuptake site in positron emission tomography. Roeda D, et al. **Bioorg Med Chem** 1997 Feb;5(2):397–403

Interrelationship of age, depression, and central serotonergic function: evidence from fenfluramine challenge studies. Lerer B, et al. **Int Psychogeriatr** 1996 Spring;8(1):83–102

The neuroendocrine response to d-fenfluramine in women with premenstrual depression. Bancroft J, et al. **J Affect Disord** 1995 Dec 24;36(1–2):57–64

Highly potent indanamine serotonin uptake blockers as radiotracers for imaging serotonin uptake sites. Suehiro M, et al. **Nucl Med Biol** 1994 Nov;21(8):1083–91

[The clomipramine test and subtypes of depression] González-Pinto A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Nov–Dec;24(6):303–9 (Eng. Abstr.) **(Spa)**

ECONOMICS

Study addresses question of preferred initial therapy for depression [news] **Am J Health Syst Pharm** 1996 Sep 1; 53(17):1994

'Number needed to treat' [letter; comment] Gilbody S, et al. **Br J Psychiatry** 1996 Jul;169(1):113. Comment on: Br J Psychiatry 1996 Apr;168(4):404–9.

Influences on cost effectiveness [letter; comment] Patel V. **Br J Psychiatry** 1996 Sep;169(3):381. Comment on: Br J Psychiatry 1996 Apr;168(4):404–9.

SSRIs versus tricyclics [letter; comment] Rubinsztien JS, et al. **Br J Psychiatry** 1996 Jul;169(1):113–4. Comment on: Br J Psychiatry 1996 Apr;168(4):404–9.

Cost-effectiveness of antidepressant treatment reassessed. Woods SW, et al. **Br J Psychiatry** 1997 Mar;170:257–63

Quality of life and pharmaco-economic aspects of obsessive-compulsive disorder. A South African survey. Stein DJ, et al. **S Afr Med J** 1996 Dec;86(12 Suppl):1579, 1582–5

METABOLISM

Antagonism by benzodiazepines of the effects of serotonin-, but not norepinephrine-, uptake blockers in the learned helplessness paradigm in rats. Martin P, et al. **Biol Psychiatry** 1996 May 15;39(10):882–90

Venlafaxine oxidation in vitro is catalysed by CYP2D6. Otton SV, et al. **Br J Clin Pharmacol** 1996 Feb;41(2):149–56

Determination of D-fenfluramine, D-norfenfluramine and fluoxetine in plasma, brain tissue and brain microdialysate using high-performance liquid chromatography after precolumn derivatization with dansyl chloride. Clausing P, et al. **J Chromatogr B Biomed Appl** 1997 May 9; 692(2):419–26

Cytochrome P450 enzymes: interpretation of their interactions with selective serotonin reuptake inhibitors. Part II. Harvey AT, et al. **J Clin Psychopharmacol** 1996 Oct;16(5):345–55 (107 ref.)

Cytochrome P450 enzymes: interpretation of their interactions with selective serotonin reuptake inhibitors. Part I. Harvey AT, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):273–85 (130 ref.)

Demonstration of clomipramine and venlafaxine occupation at serotonin reuptake sites in man in vivo. Malizia AL, et al. **J Psychopharmacol (Oxf)** 1997;11(3):279–81

In vitro adsorption study of fluoxetine onto activated charcoal at gastric and intestinal pH using high performance liquid chromatography with fluorescence detector. Tsitoura A, et al. **J Toxicol Clin Toxicol** 1997; 35(3):269–76

Binding of pinoline on the 5-hydroxytryptamine transporter: competitive interaction with [3H] citalopram. Pähkla R, et al. **Pharmacol Toxicol** 1997 Mar;80(3):122–6

PHARMACOKINETICS

Influence of liver cirrhosis on sertraline pharmacokinetics. Démolis JL, et al. **Br J Clin Pharmacol** 1996 Sep; 42(3):394–7

Pharmacokinetic-pharmacodynamic relationship of the selective serotonin reuptake inhibitors. Baumann P. **Clin Pharmacokinet** 1996 Dec;31(6):444–69 (191 ref.)

Clinically relevant pharmacology of selective serotonin reuptake inhibitors. An overview with emphasis on pharmacokinetics and effects on oxidative drug metabolism. Preskorn SH. **Clin Pharmacokinet** 1997;32 Suppl 1:1–21 (143 ref.)

Pharmacokinetics of sertraline and its N-demethyl metabolite in elderly and young male and female volunteers. Ronfeld RA, et al. **Clin Pharmacokinet** 1997;32 Suppl 1:22–30

Sertraline. Chronopharmacokinetics and the effect of coadministration with food. Ronfeld RA, et al. **Clin Pharmacokinet** 1997;32 Suppl 1:50–5

Disposition of fluvoxamine in humans is determined by the polymorphic CYP2D6 and also by the CYP1A2 activity. Carrillo JA, et al. **Clin Pharmacol Ther** 1996 Aug; 60(2):183–90

The disposition of fluoxetine but not sertraline is altered in poor metabolizers of debrisoquin. Hamelin BA, et al. **Clin Pharmacol Ther** 1996 Nov;60(5):512–21

PET neuroimaging with [11C]venlafaxine: serotonin uptake inhibition, biodistribution and binding in living pig brain. Smith DF, et al. **Eur Neuropsychopharmacol** 1997 Aug; 7(3):195–200

Pharmacokinetic drug interaction potential of selective serotonin reuptake inhibitors [published erratum appears in Int Clin Psychopharmacol 1997 Mar;12(2):126] Lane RM. **Int Clin Psychopharmacol** 1996 Dec;11 Suppl 5:31–61 (266 ref.)

Pharmacokinetics of milnacipran in comparison with other antidepressants. Puozzo C, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:15–27 (90 ref.)

The effect of co-administration of zolpidem with fluoxetine: pharmacokinetics and pharmacodynamics. Piergies AA, et al. **Int J Clin Pharmacol Ther** 1996 Apr;34(4):178–83

Pharmacokinetic interaction between multiple-dose venlafaxine and single-dose lithium. Troy SM, et al. **J Clin Pharmacol** 1996 Feb;36(2):175–81

Lack of change in fluoxetine and norfluoxetine kinetics when switching from fluoxetine to paroxetine. Dominguez RA, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):320–3

Grapefruit juice and clomipramine: shifting metabolitic ratios [letter] Oesterheld J, et al. **J Clin Psychopharmacol** 1997 Feb;17(1):62–3

Brain 5-hydroxytryptamine uptake sites labeled with [3H]paroxetine in antidepressant drug-treated depressed suicide victims and controls. Lawrence KM, et al. **J Psychiatry Neurosci** 1997 May;22(3):185–91

Pharmacokinetic drug interactions of new antidepressants: a review of the effects on the metabolism of other drugs. Richelson E. **Mayo Clin Proc** 1997 Sep;72(9):835–47 (105 ref.)

Decreased platelet 3H-paroxetine binding in obsessive-compulsive patients. Marazziti D, et al. **Neuropsychobiology** 1996;34(4):184–7

Synthesis of [11C]dapoxetine.HCl, a serotonin re-uptake inhibitor: biodistribution in rat and preliminary PET imaging in the monkey. Livni E, et al. **Nucl Med Biol** 1994 May;21(4):669–75

Radiosynthesis and PET imaging of [N-methyl-11C]LY257327 as a tracer for 5-HT transporters. Zea-Ponce Y, et al. **Nucl Med Biol** 1997 Apr; 24(3):251–4

Pharmacokinetics of selective serotonin reuptake inhibitors: clinical relevance. Catterson ML, et al. **Pharmacol Toxicol** 1996 Apr;78(4):203–8 (52 ref.)

Effects of age and gender on venlafaxine and O-desmethylvenlafaxine pharmacokinetics. Klamerus KJ, et al. **Pharmacotherapy** 1996 Sep–Oct;16(5):915–23

Aggressive behaviour and platelet 3H-paroxetine binding in schizophrenia. Maguire K, et al. **Schizophr Res** 1997 Jan 17;23(1):61–7

Pharmacokinetics of fluoxetine [letter] Young AH, et al. **Trends Pharmacol Sci** 1996 Nov;17(11):400

PHARMACOLOGY

Synthesis and 5HT modulating activity of stereoisomers of 3-phenoxymethyl-4-phenylpiperidines. Engelstoft M, et al. **Acta Chem Scand** 1996 Feb;50(2):164–9

Effects on nociception of the Ca2+ and 5-HT antagonist dotarizine and other 5-HT receptor agonists and antagonists. Belcheva S, et al. **Acta Physiol Pharmacol Bulg** 1995;21(4):93–8

Designing a new generation of antidepressant drugs. Pinder RM. **Acta Psychiatr Scand Suppl** 1997;391:7–13

The possible role of tryptophan in migraine. Salmon S, et al. **Adv Exp Med Biol** 1996;398:97–100

The effects of a selective inhibitor of tryptophan 2,3-dioxygenase and a combined inhibitor of tryptophan 2,3-dioxygenase and 5-HT reuptake on serotonergic function in the rat. Salter M, et al. **Adv Exp Med Biol** 1996;

398:61–5
Amphetamine and fenfluramine suppress ethanol intake in ethanol-dependent rats. Yu YL, et al. **Alcohol** 1997 Jan-Feb;14(1):45–8
Serotonergic modulation of dopamine measured with [11C]raclopride and PET in normal human subjects. Smith GS, et al. **Am J Psychiatry** 1997 Apr;154(4):490–6
Serotonergic intervention increases affiliative behavior in humans. Knutson B, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:492–3
Serotonergic modulation of learned helplessness. Petty F, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:538–41
Effect of fluoxetine on food intake of humans living in a residential laboratory. Foltin RW, et al. **Appetite** 1996 Oct; 27(2):165–81
Pharmacological profile of hypericum extract. Effect on serotonin uptake by postsynaptic receptors. Perovic S, et al. **Arzneimittelforschung** 1995 Nov;45(11):1145–8
SSRI antidepressants and SIADH [letter; comment] Ayonrinde OT, et al. **Aust N Z J Psychiatry** 1997 Apr; 31(2):306–7. Comment on: Aust N Z J Psychiatry 1996 Apr;30(2):295–8.
Subchronic and chronic exposure to d-fenfluramine dose-dependently enhances splenic immune functions in young and old male Fischer-344 rats. Clancy J Jr, et al. **Behav Brain Res** 1996;73(1–2):355–8
Behavioral changes in Anolis carolinensis following injection with fluoxetine. Deckel AW. **Behav Brain Res** 1996 Aug; 78(2):175–82
5-HT1A autoreceptors and the mode of action of selective serotonin reuptake inhibitors (SSRI). Hjorth S, et al. **Behav Brain Res** 1996;73(1–2):281–3
Protective effect of citalopram against the attenuation of the alpha 1-potentiation of cAMP formation in Fischer 344 strain rats. Izumi J, et al. **Behav Brain Res** 1997 Feb; 83(1–2):209–12
Citalopram: differential sleep/wake and EEG power spectrum effects after single dose and chronic administration. Neckelmann D, et al. **Behav Brain Res** 1996 Sep;79(1–2):183–92
Identification of hypothalamic transcripts upregulated by antidepressants. Wong ML, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):275–9
Effects of nebracetam on synaptosomal monoamine uptake of striatal and hippocampal regions in rats. Takeo S, et al. **Biol Pharm Bull** 1997 Apr;20(4):360–3
Fluoxetine treatment alters leukocyte trafficking in the intrathecal compartment of the young primate. Coe CL, et al. **Biol Psychiatry** 1996 Sep 1;40(5):361–7
Plasma tryptophan levels and prolactin response to fenfluramine in healthy volunteers. FitzGerald M, et al. **Biol Psychiatry** 1997 Sep 1;42(5):416–8
Reduced inhibitory potency of serotonin reuptake blockers on central serotoninergic neurons in rats selectively deprived of rapid eye movement sleep. Maudhuit C, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1000–7
Venlafaxine: in vitro inhibition of CYP2D6 dependent imipramine and desipramine metabolism; comparative studies with selected SSRIs, and effects on human hepatic CYP3A4, CYP2C9 and CYP1A2. Ball SE, et al. **Br J Clin Pharmacol** 1997 Jun;43(6):619–26
Possible in vivo 5-HT reuptake blocking properties of 8-OH-DPAT assessed by measuring hippocampal extracellular 5-HT using microdialysis in rats. Assié MB, et al. **Br J Pharmacol** 1996 Nov;119(5):845–50
Effect of a selective 5-HT reuptake inhibitor in combination with 5-HT1A and 5-HT1B receptor antagonists on extracellular 5-HT in rat frontal cortex in vivo. Sharp T, et al. **Br J Pharmacol** 1997 Jul;121(5):941–6
Down-regulation of rat brain 5-HT uptake carriers after treatment with high doses of D-fenfluramine. Gobbi M, et al. **Brain Res** 1996 Aug 19;730(1–2):165–72
DL-fenfluramine increases the 5-HT synthesis rate in the terminals while decreasing it in the cell bodies of the rat brain. Mück-Seler D, et al. **Brain Res** 1996 Oct 21; 737(1–2):45–50
The anticonvulsant action of fluoxetine in substantia nigra is dependent upon endogenous serotonin. Pasini A, et al. **Brain Res** 1996 Jun 10;724(1):84–8
Greater effects of fluoxetine and its combination with (-)-pindolol in elevating hypothalamic serotonin in rats during dark hours. Dreshfield LJ, et al. **Chin J Physiol** 1997 Jun 30;40(2):57–61
Effect of sertraline on protein binding of warfarin. Apseloff G, et al. **Clin Pharmacokinet** 1997;32 Suppl 1:37–42
Pharmacokinetic-pharmacodynamic relationship of the selective serotonin reuptake inhibitors. Baumann P. **Clin Pharmacokinet** 1996 Dec;31(6):444–69 (191 ref.)
Effect of sertraline on the pharmacokinetics and protein binding of diazepam in healthy volunteers. Gardner MJ, et al. **Clin Pharmacokinet** 1997;32 Suppl 1:43–9
A study of the potential effect of sertraline on the pharmacokinetics and protein binding of tolbutamide. Tremaine LM, et al. **Clin Pharmacokinet** 1997;32 Suppl 1:31–6
Influence of the CYP1A2 inhibitor fluvoxamine on tacrine pharmacokinetics in humans. Becquemont L, et al. **Clin Pharmacol Ther** 1997 Jun;61(6):619–27
The effect of sertraline on the pharmacokinetics of desipramine and imipramine. Kurtz DL, et al. **Clin Pharmacol Ther** 1997 Aug;62(2):145–56
Comparative sexual side effects of bupropion, fluoxetine, paroxetine, and sertraline. Modell JG, et al. **Clin Pharmacol Ther** 1997 Apr;61(4):476–87
Dose-dependent inhibition of CYP1A2, CYP2C19 and CYP2D6 by citalopram, fluoxetine, fluvoxamine and paroxetine. Jeppesen U, et al. **Eur J Clin Pharmacol** 1996; 51(1):73–8
Enhancement of [123I]beta-CIT binding in the striatum with clomipramine: is there a serotonin-dopamine interaction? Fujita M, et al. **Eur J Nucl Med** 1997 Apr;24(4):403–8
EMD 68843, a serotonin reuptake inhibitor with selective presynaptic 5-HT1A receptor agonistic properties. Bartoszyk GD, et al. **Eur J Pharmacol** 1997 Mar 19; 322(2–3):147–53
Regulation of glutamic acid decarboxylase mRNA expression in rat brain after sertraline treatment. Giardino L, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):183–7
(-)-Pindolol, but not buspirone, potentiates the citalopram-induced rise in extracellular 5-hydroxytryptamine. Hjorth S. **Eur J Pharmacol** 1996 May 15;303(3):183–6
Raphe 5-HT1A autoreceptors, but not postsynaptic 5-HT1A receptors or beta-adrenoceptors, restrain the citalopram-induced increase in extracellular 5-hydroxytryptamine in vivo. Hjorth S, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):43–7
Increased noradrenaline efflux induced by local infusion of fluoxetine in the rat frontal cortex. Hughes ZA, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):83–90
Effect of citalopram, a selective serotonin reuptake inhibitor, on the acquisition of conditioned freezing. Inoue T, et al. **Eur J Pharmacol** 1996 Sep 5;311(1):1–6
An investigation of the mechanism responsible for fluoxetine-induced hypophagia in rats. Lightowler S, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):137–43
Potentiation of fluoxetine-induced penile erections by combined blockade of 5-HT1A and 5-HT1B receptors. Millan MJ, et al. **Eur J Pharmacol** 1997 Mar 5;321(3):R11–3
Interactions of selective serotonin reuptake inhibitors with subtypes of sigma receptors in rat brain. Narita N, et al. **Eur J Pharmacol** 1996 Jun 20;307(1):117–9
Prophylactic effect of serotonin uptake inhibitors against motion sickness in Suncus murinus. Okada F, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):33–5
Electrophysiological effects of fluoxetine and duloxetine in the dorsal raphe nucleus and hippocampus. Smith JE, et al. **Eur J Pharmacol** 1997 Mar 26;323(1):69–73
Pharmacological studies on YM992, a novel antidepressant with selective serotonin re-uptake inhibitory and 5-HT2A receptor antagonistic activity. Takeuchi H, et al. **Eur J Pharmacol** 1997 Jun 18;329(1):27–35
PET neuroimaging with [11C]venlafaxine: serotonin uptake inhibition, biodistribution and binding in living pig brain. Smith DF, et al. **Eur Neuropsychopharmacol** 1997 Aug; 7(3):195–200
Role of 5-HT1A autoreceptors in the mechanism of action of serotoninergic antidepressant drugs: recent findings from in vivo microdialysis studies. Gardier AM, et al. **Fundam Clin Pharmacol** 1996;10(1):16–27 (88 ref.)
Effects of fluoxetine hydrochloride and fluvoxamine maleate on different preparations of isolated guinea pig and rat organ tissues. Velasco A, et al. **Gen Pharmacol** 1997 Apr; 28(4):509–12
Preclinical pharmacology of milnacipran. Briley M, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:9–14 (24 ref.)
The effects of D- and L-fenfluramine (and their interactions with D-amphetamine) on psychomotor function and mood. Feeney S, et al. **Int Clin Psychopharmacol** 1996 Jun; 11(2):89–99
Two actions are better than one: avoiding self-inhibition of serotonergic neurones enhances the effects of serotonin uptake inhibitors. Romero L, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:1–8 (50 ref.)
The effect of co-administration of zolpidem with fluoxetine: pharmacokinetics and pharmacodynamics. Piergies AA, et al. **Int J Clin Pharmacol Ther** 1996 Apr;34(4):178–83
Serotonergic autoreceptor blockade in the reduction of antidepressant latency: personality variables and response to paroxetine and pindolol. Tome MB, et al. **J Affect Disord** 1997 Jul;44(2–3):101–9
Pharmacology of the selective serotonin reuptake inhibitors in children and adolescents. Leonard HL, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jun;36(6):725–36 (109 ref.)
Questioning the efficacy of psychotropic drugs [letter; comment] Mobley TE. **J Am Vet Med Assoc** 1996 Dec 15;209(12):1995–6. Comment on: J Am Vet Med Assoc 1996 Oct 15;209(8):1470–4.
Expression of serotonin transporter mRNA in rat brain: presence in neuronal and non-neuronal cells and effect of paroxetine. Swan MC, et al. **J Chem Neuroanat** 1997 Jul; 13(2):71–6
Inhibition of human cytochrome P450-3A isoforms by fluoxetine and norfluoxetine: in vitro and in vivo studies. Greenblatt DJ, et al. **J Clin Pharmacol** 1996 Sep;36(9):792–8 (51 ref.)
Midazolam hydroxylation by human liver microsomes in vitro: inhibition by fluoxetine, norfluoxetine, and by azole antifungal agents. von Moltke LL, et al. **J Clin Pharmacol** 1996 Sep;36(9):783–91
Pharmacologic properties of venlafaxine [letter; comment] Smith MN. **J Clin Psychiatry** 1997 Apr;58(4):178–9. Comment on: J Clin Psychiatry 1996 May;57(5):184–9.
The clinician and drug interactions—an update [editorial] Shader RI, et al. **J Clin Psychopharmacol** 1996 Jun; 16(3):197–201 (38 ref.)
The synergistic effect of fluoxetine on the locomotor hyperactivity induced by MK-801, a non-competitive NMDA receptor antagonist. Maj J, et al. **J Neural Transm** 1996;103(1–2):131–46
Ex vivo inhibitory effect of the 5-HT uptake blocker citalopram on 5-HT synthesis. Moret C, et al. **J Neural Transm** 1997;104(2–3):147–60
Comparative pharmacodynamic studies with the novel serotonin uptake-enhancing tianeptine and -inhibiting fluvoxamine utilizing EEG mapping and psychometry. Saletu B, et al. **J Neural Transm** 1996;103(1–2):191–216
Changes in the serotonin transporter in the hippocampus of subjects with schizophrenia identified using [3H]paroxetine. Naylor L, et al. **J Neural Transm Gen Sect** 1996; 103(6):749–57
Potentiation of the fluoxetine-induced increase in dialysate levels of serotonin (5-HT) in the frontal cortex of freely moving rats by combined blockade of 5-HT1A and 5-HT1B receptors with WAY 100,635 and GR 127,935. Gobert A, et al. **J Neurochem** 1997 Mar;68(3):1159–63
Buspirone enhances duloxetine- and fluoxetine-induced increases in dialysate levels of dopamine and noradrenaline, but not serotonin, in the frontal cortex of freely moving rats. Gobert A, et al. **J Neurochem** 1997 Mar;68(3):1326–9
Influence of fluoxetine on regional serotonin synthesis in the rat brain. Mück-Seler D, et al. **J Neurochem** 1996 Dec; 67(6):2434–42
Acute and chronic treatments with citalopram lower somatostatin levels in rat brain striatum through different mechanisms. Prosperini E, et al. **J Neurochem** 1997 Jul; 69(1):206–13
Combined administration of a 5-hydroxytryptamine (5-HT)1D antagonist and a 5-HT reuptake inhibitor synergistically increases 5-HT release in guinea pig hypothalamus in vivo [see comments] Rollema H, et al. **J Neurochem** 1996 Nov;67(5):2204–7. Comment in: J Neurochem 1997 Jul;69(1):437–9.
Preferential potentiation of the effects of serotonin uptake inhibitors by 5-HT1A receptor antagonists in the dorsal raphe pathway: role of somatodendritic autoreceptors. Romero L, et al. **J Neurochem** 1997 Jun;68(6):2593–603
The forgotten 5-hydroxyindoleacetic acid [letter; comment] Ross SB, et al. **J Neurochem** 1997 Jul;69(1):437–9. Comment on: J Neurochem 1996 Nov;67(5):2204–7.
Serum corticosterone increases reflect enhanced uptake inhibitor-induced elevation of extracellular 5-hydroxytryptamine in rat hypothalamus. Fuller RW, et al. **J Pharm Pharmacol** 1996 Jan;48(1):68–70
On the in-vivo modulation of neostriatal dopamine release by fluoxetine and 5-hydroxy-L-tryptophan in conscious rats. Li XM, et al. **J Pharm Pharmacol** 1996 Aug; 48(8):825–8
Fluoxetine selectively alters 5-hydroxytryptamine1A and gamma-aminobutyric acidB receptor-mediated hyperpolarization in area CA1, but not area CA3, hippocampal pyramidal cells. Beck SG, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):115–22
Effect of prenatal fluoxetine (Prozac) exposure on brain serotonin neurons in prepubescent and adult male rat offspring. Cabrera-Vera TM, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):138–45
Interaction between the forced swimming test and fluoxetine treatment on extracellular 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in the rat. Kirby LG, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):967–76
A desensitization of hypothalamic 5-HT1A receptors by repeated injections of paroxetine: reduction in the levels of G(i) and G(o) proteins and neuroendocrine responses, but not in the density of 5-HT1A receptors. Li Q, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1581–90
Chronic fluoxetine induces a gradual desensitization of 5-HT1A receptors: reductions in hypothalamic and midbrain Gi and G(o) proteins and in neuroendocrine responses to a 5-HT1A agonist. Li Q, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):1035–42
Neuroendocrine pharmacology of three serotonin releasers: 1-(1,3-benzodioxol-5-yl)-2-(methylamino)butane (MBDB), 5-methoxy-6-methyl-2-aminoindan (MMAi) and p-methylthioamphetamine (MTA). Li Q, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1261–7
Selective serotonin reuptake inhibitors dissociate fenfluramine's anorectic and neurotoxic effects: importance of dose, species and drug. McCann UD, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1487–98
Platelet I1-imidazoline binding sites are decreased by two dissimilar antidepressant agents in depressed patients. Piletz JE, et al. **J Psychiatr Res** 1996 May-Jun;30(3):169–84
Influence of anxiolytic drugs on the effects of specific serotonin reuptake inhibitors in the forced swimming test in mice. Da-Rocha MA Jr, et al. **J Psychopharmacol (Oxf)** 1997;11(3):211–8
Behavioural effects of selective serotonin reuptake inhibitors following direct micro injection into the left red nucleus of the rat. Faherty CJ, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):53–8
Sexual side effects of antidepressants: a review. Margolese HC, et al. **J Sex Marital Ther** 1996 Fall;22(3):209–17 (68 ref.)

Sleep deprivation reduces the citalopram-induced inhibition of serotoninergic neuronal firing in the nucleus raphe dorsalis of the rat. Prévot E, et al. **J Sleep Res** 1996 Dec; 5(4):238–45

Effect of fluvoxamine on 5-hydroxytryptamine uptake, paroxetine binding sites and ketanserin binding sites in the Japanese monkey brain and platelets, in vivo and in vitro. Goto S, et al. **Jpn J Pharmacol** 1996 Aug;71(4):291–8

Differential potentiation of L-tryptophan-induced head-twitch response in mice by cocaine and sertraline. Darmani NA. **Life Sci** 1996;59(14):1109–19

Long-term blockade of serotonin reuptake affects synaptotagmin phosphorylation in the hippocampus. Popoli M, et al. **Mol Pharmacol** 1997 Jan;51(1):19–26

Sertraline and breast-feeding [letter] Epperson CN, et al. **N Engl J Med** 1997 Apr 17;336(16):1189–90

Neurodevelopment of children exposed in utero to antidepressant drugs. Nulman I, et al. **N Engl J Med** 1997 Jan 23;336(4):258–62

The 5-HT1A receptor antagonist (S)-UH-301 augments the increase in extracellular concentrations of 5-HT in the frontal cortex produced by both acute and chronic treatment with citalopram. Arborelius L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):630–40

Effect of chronic administration of the selective serotonin (5-HT) uptake inhibitor citalopram on extracellular 5-HT and apparent autoreceptor sensitivity in rat forebrain in vivo. Auerbach SB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):597–606

Effects of chronic treatment with fluoxetine and citalopram on 5-HT uptake, 5-HT1B autoreceptors, 5-HT3 and 5-HT4 receptors in rats. Gobbi M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):22–8

Regional differences in the effect of the combined treatment of WAY 100635 and fluoxetine: an in vivo microdialysis study. Malagié I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):785–90

Functional regulation by dopamine receptors of serotonin release from the rat hippocampus: in vivo microdialysis study. Matsumoto M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):621–9

Serotonergic activity of HP 184: does spontaneous release have a role? Smith CP, et al. **Neurochem Res** 1996 May; 21(5):575–83

RU 486 blocks and fluoxetine augments progesterone-induced prolactin secretion in monkeys. Pecins-Thompson M, et al. **Neuroendocrinology** 1997 May; 65(5):335–43

Carrier-mediated serotonin release induced by d-fenfluramine: studies with human neuroblastoma cells transfected with a rat serotonin transporter. Cinquanta M, et al. **Neuropharmacology** 1997 Jun;36(6):803–9

Biochemical profile of YM992, a novel selective serotonin reuptake inhibitor with 5-HT2A receptor antagonistic activity. Hatanaka K, et al. **Neuropharmacology** 1996; 35(11):1621–6

WAY100635-induced augmentation of the 5-HT-elevating action of citalopram: relative importance of the dose of the 5-HT1A (auto)receptor blocker versus that of the 5-HT reuptake inhibitor. Hjorth S, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):461–5

Effect of 5-HT1A receptor antagonists on citalopram-induced increase in extracellular serotonin in the frontal cortex, striatum and dorsal hippocampus. Invernizzi R, et al. **Neuropharmacology** 1997 Apr-May; 36(4–5):467–73

Clarifications on the effects of 5-HT1A agonists and selective 5-HT reuptake inhibitors on the 5-HT system [letter; comment] Blier P, et al. **Neuropsychopharmacology** 1996 Aug;15(2):213–6. Comment on: Neuropsychopharmacology 1996 Jan;14(1):19–25.

Selective activation of postsynaptic 5-HT1A receptors induces rapid antidepressant response. Blier P, et al. **Neuropsychopharmacology** 1997 May;16(5):333–8

Chronic administration of serotonergic antidepressants attenuates the subjective effects of LSD in humans. Bonson KR, et al. **Neuropsychopharmacology** 1996 Jun;14(6):425–36

The influence of fluoxetine on aggressive behavior [see comments] Fuller RW. **Neuropsychopharmacology** 1996 Feb;14(2):77–81 (36 ref.). Comment in: Neuropsychopharmacology 1997 May;16(5):373–4.

Chronic citalopram and fluoxetine treatments upregulate 5-HT2c receptors in the rat choroid plexus. Laakso A, et al. **Neuropsychopharmacology** 1996 Aug;15(2):143–51

Chronic fluoxetine reduces serotonin transporter mRNA and 5-HT1B mRNA in a sequential manner in the rat dorsal raphe nucleus. Neumaier JF, et al. **Neuropsychopharmacology** 1996 Nov;15(5):515–22

An analysis of the effects of acute and chronic fluoxetine on extracellular norepinephrine in the rat hippocampus during stress. Page ME, et al. **Neuropsychopharmacology** 1997 Jun;16(6):419–25

Comparison of the effects of sertraline and its metabolite desmethylsertraline on blockade of central 5-HT reuptake in vivo. Sprouse J, et al. **Neuropsychopharmacology** 1996 Apr;14(4):225–31

Effects of phencyclidine metabolites on serotonin uptake in rat brain. Hori T, et al. **Neurosci Lett** 1996 May 17; 209(3):153–6

Effects of adrenalectomy and corticosterone replacement on diurnal [3H]citalopram binding in rat midbrain. Kulikov A, et al. **Neurosci Lett** 1997 Jan 31;222(2):127–31

The degree of inhibition of dopaminergic neurons in the ventral tegmental area induced by selective serotonin reuptake inhibitors is a function of the density-power-spectrum of the interspike interval. Di Mascio M, et al. **Neuroscience** 1997 Aug;79(4):957–61

Modification of acoustic startle reactivity by cocaine administration during the postnatal period: comparison with a specific serotonin reuptake inhibitor. Dow-Edwards DL. **Neurotoxicol Teratol** 1996 May-Jun;18(3):289–96

A fluvoxamine–caffeine interaction study. Jeppesen U, et al. **Pharmacogenetics** 1996 Jun;6(3):213–22

Neuropharmacological effects of low and high doses of repeated oral dexfenfluramine in rats: a comparison with fluoxetine. Caccia S, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):851–6

Behavioural effects in mice of subchronic chlordiazepoxide, maprotiline, and fluvoxamine. I. Social interactions. Cutler MG, et al. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1–2):119–25

Risk assessment behaviour: evaluation of utility in the study of 5-HT-related drugs in the rat elevated plus-maze test. Griebel G, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):817–27

Fluoxetine alters the effects of cocaine on vigilance task performance of rats. Grilly DM, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):515–22

Behavioural effects in mice of subchronic chlordiazepoxide, maprotiline and fluvoxamine. II. The elevated plus-maze. Rodgers RJ, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1–2):127–36

NMDA receptor-mediated increase in cyclic GMP in the rat cerebellum in vivo is blocked by alaproclate and GEA-857. Hu PS, et al. **Pharmacol Toxicol** 1997 Feb; 80(2):97–102

Effect of fenfluramine on food intake, mood, and performance of humans living in a residential laboratory. Foltin RW, et al. **Physiol Behav** 1996 Feb;59(2):295–305

Conditioned taste aversion induced by fluoxetine. Prendergast MA, et al. **Physiol Behav** 1996 Jul;60(1):311–5

Blockage of 5HT2C serotonin receptors by fluoxetine (Prozac). Ni YG, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2036–40

Potentiation of fluoxetine by aminoglutethimide, an adrenal steroid suppressant, in obsessive-compulsive disorder resistant to SSRIs: a case report. Chouinard G, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Aug; 20(6):1067–79

Paroxetine shifts imipramine metabolism. Albers LJ, et al. **Psychiatry Res** 1996 Jan 31;59(3):189–96

Does central serotonergic function correlate inversely with aggression? A study using D-fenfluramine in healthy subjects. Cleare AJ, et al. **Psychiatry Res** 1997 Mar 24; 69(2–3):89–95

Long-term effects of antidepressants on balance, equilibrium, and postural reflexes. Li X, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):191–6

Neuroendocrine responses to fenfluramine challenge are influenced by exposure to chronic social stress in adult male cynomolgus macaques. Botchin MB, et al. **Psychoneuroendocrinology** 1994;19(1):1–11

The effect of chronic fluvoxamine on hormonal and psychological responses to buspirone in normal volunteers. Anderson IM, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(1):74–82

5-HT3 receptor antagonism by ondansetron does not attenuate prolactin response to d-fenfluramine challenge in healthy human subjects. Coccaro EF, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):108–12

5-HT2a/2c receptor blockade by amesergide fully attenuates prolactin response to d-fenfluramine challenge in physically healthy human subjects. Coccaro EF, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):24–30

Inhibition of 5-HT cell firing in the DRN by non-selective 5-HT reuptake inhibitors: studies on the role of 5-HT1A autoreceptors and noradrenergic mechanisms. Gartside SE, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):261–8

Contribution of caudal brainstem to d-fenfluramine anorexia. Grill HJ, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(4):375–81

Serotonin reuptake inhibitors reduce conditioned fear stress-induced freezing behavior in rats. Hashimoto S, et al. **Psychopharmacology (Berl)** 1996 Jan;123(2):182–6

Effects of desipramine and fluvoxamine on timing behavior investigated with the fixed-interval peak procedure and the interval bisection task. Ho MY, et al. **Psychopharmacology (Berl)** 1996 Jun;125(3):274–84

The effects of paroxetine given repeatedly on the 5-HT receptor subpopulations in the rat brain. Maj J, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):73–82

Antidepressant treatment in helpless rats: effect on the electrophysiological activity of raphe dorsalis serotonergic neurons. Maudhuit C, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):269–75

Effects of chronic treatment with zimelidine and REM sleep deprivation on the regulation of raphe neuronal activity in a rat model of depression. Maudhuit C, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):267–74

Substitution of the selective serotonin reuptake inhibitors fluoxetine and paroxetine for the discriminative stimulus effects of ethanol in rats. Maurel S, et al. **Psychopharmacology (Berl)** 1997 Apr;130(4):404–6

Interactions of selective serotonin reuptake inhibitors with the serotonin 5-HT2c receptor. Pälvimäki EP, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):234–40

Analysis of sleep EEG microstructure in subchronic paroxetine treatment of healthy subjects. Röschke J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):44–9

Effect of paroxetine and nefazodone on 5-HT1A receptor sensitivity. Sargent P, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):296–302

The effects of paroxetine and nefazodone on sleep: a placebo controlled trial. Sharpley AL, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):50–4

Behavioral stimulation without alteration of beta and 5-HT receptors and adenylate cyclase activity in rat brain after chronic sertraline administration. Tadokoro C, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):124–30

Serotonergic modulation of striatal D2 dopamine receptor binding in humans measured with positron emission tomography. Tiihonen J, et al. **Psychopharmacology (Berl)** 1996 Aug;126(4):277–80

Phenacetin O-deethylation by human liver microsomes in vitro: inhibition by chemical probes, SSRI antidepressants, nefazodone and venlafaxine. von Moltke LL, et al. **Psychopharmacology (Berl)** 1996 Dec;128(4):398–407

Paroxetine treatment and the prolactin response to sumatriptan. Wing YK, et al. **Psychopharmacology (Berl)** 1996 Apr;124(4):377–9

The neurobiology and pharmacology of depression. A comparative overview of serotonin selective antidepressants. Harvey BH. **S Afr Med J** 1997 Apr;87(4 Suppl):540–50, 552 (92 ref.)

A quantitative evaluation of the relationships between growth hormone secretion and delta wave electroencephalographic activity during normal sleep and after enrichment in delta waves. Gronfier C, et al. **Sleep** 1996 Dec;19(10):817–24

Effects of fluoxetine and maprotiline on functional recovery in poststroke hemiplegic patients undergoing rehabilitation therapy [letter; comment] Boyeson MG. **Stroke** 1996 Nov; 27(11):2145–6. Comment on: Stroke 1996 Jul;27(7):1211–4.

Fluoxetine-induced conditioned place preference: a preliminary study. Collu M, et al. **Synapse** 1997 Mar; 25(3):309–11

Griseofulvin and fluvoxamine interactions with the metabolism of theophylline. Rasmussen BB, et al. **Ther Drug Monit** 1997 Feb;19(1):56–62

An indirect action for fluoxetine on the dopamine neurotransmitter system [letter] Esposito E. **Trends Pharmacol Sci** 1996 Nov;17(11):400–2

Prozac: panacea or puzzle? Stanford SC. **Trends Pharmacol Sci** 1996 Apr;17(4):150–4 (33 ref.)

[Effects of co-administration of an antidepressant and an anxiolytic drug in the "learned helplessness" paradigm: importance of hydroxyzine] Martin P, et al. **Encephale** 1996 Jul-Aug;22(4):270–9 (Eng. Abstr.) **(Fre)**

[Biological mechanisms of drug-resistant depression] Suwalska A, et al. **Psychiatr Pol** 1996 Sep-Oct;30(5):713–29 (56 ref.) (Eng. Abstr.) **(Pol)**

[A comparative pharmacological study of the serotoninergic antidepressants tetrindole and fluoxetin] Andreeva NI, et al. **Eksp Klin Farmakol** 1996 Jul-Aug;59(4):5–7 (Eng. Abstr.) **(Rus)**

[The clomipramine test and subtypes of depression] González-Pinto A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Nov-Dec;24(6):303–9 (Eng. Abstr.) **(Spa)**

POISONING

Fluoxetine-induced cardiotoxicity with response to bicarbonate therapy. Graudins A, et al. **Am J Emerg Med** 1997 Sep;15(5):501–3

Serotonin syndrome. Martin TG. **Ann Emerg Med** 1996 Nov; 28(5):520–6 (100 ref.)

Serotonin syndrome due to venlafaxine and maintenance tranylcypromine therapy. Hodgman MJ, et al. **Hum Exp Toxicol** 1997 Jan;16(1):14–7

Serotonin syndrome due to an overdose of moclobemide and clomipramine. A potentially life-threatening association. François B, et al. **Intensive Care Med** 1997 Jan;23(1):122–4

Isolated venlafaxine-induced serotonin syndrome. Kolecki P. **J Emerg Med** 1997 Jul-Aug;15(4):491–3

Fluoxetine versus tricyclic antidepressants: a prospective multicenter study of antidepressant drug overdoses. The Antidepressant Study Group. Phillips S, et al. **J Emerg Med** 1997 Jul-Aug;15(4):439–45

Citalopram overdose—review of cases treated in Swedish hospitals. Personne M, et al. **J Toxicol Clin Toxicol** 1997; 35(3):237–40

Citalopram toxicity [letter] Glassman AH. **Lancet** 1997 Sep 13;350(9080):818

Symptoms and signs of severe citalopram overdose [letter] [see comments] Grundemar L, et al. **Lancet** 1997 May 31; 349(9065):1602. Comment in: Lancet 1997 Aug 16;350(9076):518–9.

Risks with citalopram in perspective [letter; comment] Isacsson G, et al. **Lancet** 1996 Oct 12;348(9033):1033. Comment on: Lancet 1996 Aug 3;348(9023):339–40.

[A case report. Fatal case of acute fluoxetine poisoning]

Druid H, et al. **Lakartidningen** 1996 Nov 13;93(46):4149–50 **(Swe)**

[Picture of poisoning in citalopram overdose. Convulsions and ECG symptoms can occur] Personne M, et al. **Lakartidningen** 1997 Apr 23;94(17):1603–4 **(Swe)**

THERAPEUTIC USE

Successful use of a selective serotonin reuptake inhibitor in a patient with multiple chemical sensitivities. Andiné P, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):82–3

Screening and treating depressed patients. A comparison of two controlled citalopram trials across treatment settings: hospitalized patients vs. patients treated by their family doctors. Danish University Antidepressant Group. Fuglum E, et al. **Acta Psychiatr Scand** 1996 Jul;94(1):18–25

A comparison of paroxetine, clomipramine and placebo in the treatment of panic disorder. Collaborative Paroxetine Panic Study Investigators. Lecrubier Y, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):145–52

Long-term evaluation of paroxetine, clomipramine and placebo in panic disorder. Collaborative Paroxetine Panic Study Investigators. Lecrubier Y, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):153–60

Predicting value of tryptophan/large neutral amino acids ratio on selective serotonin reuptake inhibitors. Lucini V, et al. **Adv Exp Med Biol** 1996;398:559

Tryptophan and epilepsy. Lunardi G, et al. **Adv Exp Med Biol** 1996;398:101–2

Use of serotonin (5-HT) and opiate-based drugs in the pharmacotherapy of alcohol dependence: an overview of the preclinical data. Lê AD, et al. **Alcohol Alcohol** 1996 Mar;31 Suppl 1:27–32 (55 ref.)

Use of serotonin (5-hydroxytryptamine) reuptake inhibitors in the treatment of alcoholism. Lejoyeux M. **Alcohol Alcohol** 1996 Mar;31 Suppl 1:69–75 (40 ref.)

Pharmacotherapy in alcoholism treatment: integrating and understanding the use of serotonin reuptake inhibitors. George FR. **Alcohol Alcohol Suppl** 1994;2:537–43 (38 ref.)

Clomipramine treatment for self-injurious behavior of individuals with mental retardation: a double-blind comparison with placebo. Lewis MH, et al. **Am J Ment Retard** 1996 May;100(6):654–65

Addition of desipramine to serotonin reuptake inhibitors in treatment-resistant obsessive-compulsive disorder. Barr LC, et al. **Am J Psychiatry** 1997 Sep;154(9):1293–5

Exacerbation of respiratory symptoms in patients with panic disorder [letter] Bouwer CD, et al. **Am J Psychiatry** 1997 May;154(5):712–3

Treatment of risperidone-induced obsessive-compulsive symptoms with sertraline [letter] Dodt JE, et al. **Am J Psychiatry** 1997 Apr;154(4):582

Placebo-controlled trial of fluoxetine and phenelzine for obsessive-compulsive disorder. Jenike MA, et al. **Am J Psychiatry** 1997 Sep;154(9):1261–4

Paroxetine for treatment of obsessive-compulsive disorder and comorbid stuttering [letter] Murray MG, et al. **Am J Psychiatry** 1997 Jul;154(7):1037

Paroxetine treatment of sexual disinhibition in dementia [letter] Stewart JT, et al. **Am J Psychiatry** 1997 Oct; 154(10):1474

Double-blind controlled trial of sertraline versus paroxetine in the treatment of delusional depression. Zanardi R, et al. **Am J Psychiatry** 1996 Dec;153(12):1631–3

Syncope: pathophysiology, diagnosis, and pharmacotherapy. Lazarus JC, et al. **Ann Pharmacother** 1996 Sep; 30(9):994–1005 (51 ref.)

Fluvoxamine for stereotypic behavior in patients with dementia. Trappler B, et al. **Ann Pharmacother** 1997 May; 31(5):578–81

Fluoxetine prescribing in a South African patient population [letter] Truter I, et al. **Ann Pharmacother** 1996 Nov; 30(11):1340

Efficacy of clomipramine in obsessive-compulsive disorder [letter] Howland RH. **Anxiety** 1996;2(1):56–7

Panic disorder and social phobia: possible implications of comorbid depression for drug therapy. Lydiard RB. **Anxiety** 1996;2(2):61–70 (90 ref.)

Sertraline in the treatment of patients with social phobia. Martins EA, et al. **Anxiety** 1994–95;1(6):291–7

Sertraline in social phobia. Munjack DJ, et al. **Anxiety** 1994–95;1(4):196–8

Comparison of fluvoxamine, imipramine, and placebo in the treatment of outpatients with panic disorder. Nair NP, et al. **Anxiety** 1996;2(4):192–8

A double-blind, placebo-controlled study of fluvoxamine in adults with autistic disorder [see comments] McDougle CJ, et al. **Arch Gen Psychiatry** 1996 Nov;53(11):1001–8. Comment in: Arch Gen Psychiatry 1996 Nov;53(11):980–3.

Fluoxetine is a safer alternative to fenfluramine in the medical treatment of obesity [letter] Anchors M. **Arch Intern Med** 1997 Jun 9;157(11):1270

Pathological crying and laughing: treatment with sertraline. Mukand J, et al. **Arch Phys Med Rehabil** 1996 Dec; 77(12):1309–11

A randomized, double-blind crossover trial of fluoxetine and amitriptyline in the treatment of fibromyalgia. Goldenberg D, et al. **Arthritis Rheum** 1996 Nov;39(11):1852–9

Fluoxetine: a treatment option for severe symptomatic postural hypotension in a diabetic haemodialysis patient [letter] Chin CK, et al. **Aust N Z J Med** 1996 Oct;26(5):714

Emotional incontinence: a dramatic response to paroxetine [letter] Tan I, et al. **Aust N Z J Med** 1996 Dec;26(6):844

Effects of selective serotonin reuptake inhibitors on platelet serotonin parameters in major depressive disorder. Bakish D, et al. **Biol Psychiatry** 1997 Jan 15;41(2):184–90

Plasma prolactin response to d-fenfluramine in obsessive-compulsive patients before and after fluvoxamine treatment. Monteleone P, et al. **Biol Psychiatry** 1997 Aug 1;42(3):175–80

Fluoxetine versus phenelzine in atypical depression. Pande AC, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1017–20

Melatonin secretion during fluvoxamine treatment in medicated chronic schizophrenic patients: evidence for the development of tolerance to selective serotonin re-uptake inhibitor. Silver H, et al. **Biol Psychiatry** 1996 Jul 1; 40(1):75–7

Cytokine production in obsessive-compulsive disorder. Weizman R, et al. **Biol Psychiatry** 1996 Nov 1;40(9):908–12

GPs' perceptions of tolerability of selective serotonin reuptake inhibitors and tricyclic antidepressants. Analysis should discriminate between newer and older tricyclic antidepressants [letter] Ali IM. **BMJ** 1997 Aug 30; 315(7107):547–8

GPs' perceptions of tolerability of selective serotonin reuptake inhibitors and tricyclic antidepressants. Research into long term use is needed [letter] Bhatti N, et al. **BMJ** 1997 Aug 30;315(7107):547; discussion 548

GPs' perceptions of tolerability of selective serotonin reuptake inhibitors and tricyclic antidepressants. Clinical assessments are liable to bias [letter] Grace J. **BMJ** 1997 Aug 30;315(7107):547; discussion 548

General practitioners' perceptions of the tolerability of antidepressant drugs: a comparison of selective serotonin reuptake inhibitors and tricyclic antidepressants. Martin RM, et al. **BMJ** 1997 Mar 1;314(7081):646–51

Which antidepressant? A commentary from general practice on evidence-based medicine and health economics [see comments] Kernick DP. **Br J Gen Pract** 1997 Feb; 47(415):95–8. Comment in: Br J Gen Pract 1997 May;47(418):327–8.

Global measures of outcome in a controlled comparison of pharmacological and psychological treatment of panic disorder and agoraphobia in primary care [see comments] Sharp DM, et al. **Br J Gen Pract** 1997 Mar;47(416):150–5 . Comment in: Br J Gen Pract 1997 Mar;47(416):136–7.

Alcohol and the brain. Scheepers BD. **Br J Hosp Med** 1997 Jun 4–17;57(11):548–51 (16 ref.)

Tricyclics and SSRIs [letter; comment] Bowskill RJ, et al. **Br J Psychiatry** 1996 Aug;169(2):250–1. Comment on: Br J Psychiatry 1996 May;168(5):529–32.

Discontinuation rates of SSRIs and tricyclic antidepressants: a meta-analysis and investigation of heterogeneity. Hotopf M, et al. **Br J Psychiatry** 1997 Feb;170:120–7

Paroxetine versus clomipramine in the treatment of obsessive-compulsive disorder. OCD Paroxetine Study Investigators. Zohar J, et al. **Br J Psychiatry** 1996 Oct; 169(4):468–74

Ejaculation-retarding properties of paroxetine in patients with primary premature ejaculation: a double-blind, randomized, dose-response study. Waldinger MD, et al. **Br J Urol** 1997 Apr;79(4):592–5

Advances in psychopharmacology: mood disorders and dementia. Cowen PJ. **Br Med Bull** 1996 Jul;52(3):539–55 (44 ref.)

A comparison of treatment of paraphilias with three serotonin reuptake inhibitors: a retrospective study. Greenberg DM, et al. **Bull Am Acad Psychiatry Law** 1996;24(4):525–32

Placebo response in the treatment of panic disorder. Hirschfeld RM. **Bull Menninger Clin** 1996 Spring;60(2 Suppl A):A76–86 (20 ref.)

The pharmacotherapy of panic disorder. Rosenbaum JF, et al. **Bull Menninger Clin** 1996 Spring;60(2 Suppl A):A54–75 (119 ref.)

The use of selective serotonin reuptake inhibitors in young children with pervasive developmental disorders: some clinical observations. Awad GA. **Can J Psychiatry** 1996 Aug;41(6):361–6

New antidepressants: more options for tailoring treatment. Muzina DJ, et al. **Cleve Clin J Med** 1996 Nov-Dec; 63(7):406–12; quiz 420 (20 ref.)

Pharmacologic treatment of emotional lability. Iannaccone S, et al. **Clin Neuropharmacol** 1996 Dec;19(6):532–5

Using fuzzy logic to predict response to citalopram in alcohol dependence. Naranjo CA, et al. **Clin Pharmacol Ther** 1997 Aug;62(2):209–24

Selective serotonin reuptake inhibitors in the treatment of mood disorders in primary care: depression and premenstrual syndrome. Allan TR, et al. **Conn Med** 1996 Apr;60(4):215–9

An open trial of sertraline for menopausal hot flushes: potential involvement of serotonin in vasomotor instability. Trott EA, et al. **Del Med J** 1997 Sep;69(9):481–2

Clomipramine augmentation in treatment-resistant depression. Amsterdam JD, et al. **Depress Anxiety** 1997; 5(2):84–90

Citalopram and panic disorder [letter] Bertani A, et al. **Depress Anxiety** 1996–97;4(5):253

Treatment of severe depression with the selective serotonin reuptake inhibitors. Schatzberg AF. **Depress Anxiety** 1996–97;4(4):182–9 (24 ref.)

Venlafaxine: a novel antidepressant that has a dual mechanism of action. Andrews JM, et al. **Depression** 1996; 4(2):48–56 (40 ref.)

A controlled trial of fluoxetine in crack cocaine dependence. Batki SL, et al. **Drug Alcohol Depend** 1996 Jun;41(2):137–42

Depression and myocardial infarction. Implications for medical prognosis and options for treatment. Cleophas TJ. **Drugs Aging** 1997 Aug;11(2):111–8 (64 ref.)

Fluoxetine in the treatment of premenstrual syndrome. Ozeren S, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jun;73(2):167–70

Do noradrenaline and serotonin differentially affect social motivation and behaviour? Dubini A, et al. **Eur Neuropsychopharmacol** 1997 Apr;7 Suppl 1:S49–55; discussion S71–3

Double-blind comparison of fluoxetine versus clomipramine in the treatment of obsessive compulsive disorder. López-Ibor JJ Jr, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):111–8

Is there a role for a pure noradrenergic drug in the treatment of depression? Montgomery SA. **Eur Neuropsychopharmacol** 1997 Apr;7 Suppl 1:S3–9; discussion S71–3 (40 ref.)

Successful treatment of salbutamol-induced panic disorder with citalopram. Rihmer Z. **Eur Neuropsychopharmacol** 1997 Aug;7(3):241–2

Selective serotonin reuptake inhibitor treatment of depression in symptomatic HIV infection and AIDS. Improvements in affective and somatic symptoms. Ferrando SJ, et al. **Gen Hosp Psychiatry** 1997 Mar;19(2):89–97

Depression: making the diagnosis and using SSRIs in the older patient. Reynolds CF 3rd. **Geriatrics** 1996 Oct; 51(10):28–34 (25 ref.)

Stopping the craving for cocaine [letter] Hitzig P. **Hosp Pract (Off Ed)** 1996 Aug 15;31(8):42

An open-label study of duloxetine hydrochloride, a mixed serotonin and noradrenaline reuptake inhibitor, in patients with DSM-III-R major depressive disorder. Lilly Duloxetine Depression Study Group. Berk M, et al. **Int Clin Psychopharmacol** 1997 May;12(3):137–40

Efficacy of venlafaxine and placebo during long-term treatment of depression: a pooled analysis of relapse rates. Entsuah AR, et al. **Int Clin Psychopharmacol** 1996 Jun; 11(2):137–45

Fluvoxamine versus imipramine and placebo: a double-blind comparison in depressed patients. Fabre L, et al. **Int Clin Psychopharmacol** 1996 Jun;11(2):119–27

Efficacy and tolerability of citalopram in comparison with fluvoxamine in depressed outpatients: a double-blind, multicentre study. The LUCIFER Group. Haffmans PM, et al. **Int Clin Psychopharmacol** 1996 Sep;11(3):157–64

Obsessive-compulsive disorder-related disorders: the role of selective serotonergic reuptake inhibitors. Hollander E. **Int Clin Psychopharmacol** 1996 Dec;11 Suppl 5:75–87 (61 ref.)

Effects of fluoxetine at antidepressant doses on short-term outcome of detoxified alcoholics. Janiri L, et al. **Int Clin Psychopharmacol** 1996 Jun;11(2):109–17

Risk of suicide in depression and its implication for psychopharmacological treatment. Kasper S, et al. **Int Clin Psychopharmacol** 1996 Jun;11(2):71–9 (100 ref.)

Comparative studies with milnacipran and tricyclic antidepressants in the treatment of patients with major depression: a summary of clinical trial results. Kasper S, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:35–9 (19 ref.)

Clinical efficacy of milnacipran: placebo-controlled trials. Lecrubier Y, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:29–33 (13 ref.)

Milnacipran and selective serotonin reuptake inhibitors in major depression. Lopez-Ibor J, et al. **Int Clin Psychopharmacol** 1996 Sep;11 Suppl 4:41–6 (32 ref.)

Selective serotonin reuptake inhibitors (SSRIs) in the treatment of elderly depressed patients: a qualitative analysis of the literature on their efficacy and side-effects. Menting JE, et al. **Int Clin Psychopharmacol** 1996 Sep; 11(3):165–75

Efficacy and tolerability of milnacipran: an overview. Montgomery SA, et al. **Int Clin Psychopharmacol** 1996 Sep; 11 Suppl 4:47–51 (24 ref.)

Long-term management of obsessive-compulsive disorder. Montgomery SA. **Int Clin Psychopharmacol** 1996 Dec;11 Suppl 5:23–9 (35 ref.)

Citalopram versus fluoxetine: a double-blind, controlled, multicentre, phase III trial in patients with unipolar major depression treated in general practice. Patris M, et al. **Int Clin Psychopharmacol** 1996 Jun;11(2):129–36

The pharmacotherapy of social phobia. Pollack MH, et al. **Int Clin Psychopharmacol** 1996 Jun;11 Suppl 3:71–5 (40 ref.)

Milnacipran, a new serotonin and noradrenaline reuptake inhibitor: an overview of its antidepressant activity and clinical tolerability. Puech A, et al. **Int Clin Psychopharmacol** 1997 Mar;12(2):99–108

Citalopram as an adjuvant in schizophrenia: further evidence for a serotonergic dimension in schizophrenia. Taiminen TJ, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):31–5

Sertraline: lack of therapeutic efficacy in patients with delusions of parasitosis and dermatitis artefacta [letter] Kalivas J, et al. **Int J Dermatol** 1997 Jun;36(6):477

Serotonergic agents in the treatment of hypothalamic obesity syndrome: a case report. Jordaan GP, et al. **Int J Eat Disord** 1996 Jul;20(1):111–3

The use of selective serotonin reuptake inhibitors for depression and psychosis complicating dementia. Burke

WJ, et al. **Int J Geriatr Psychiatry** 1997 May;12(5):519–25

Fluoxetine improves insulin sensitivity in obese patients with non-insulin-dependent diabetes mellitus independently of weight loss. Maheux P, et al.
Int J Obes Relat Metab Disord 1997 Feb;21(2):97–102

Measurement of liver fat by MRI and its reduction by dexfenfluramine in NIDDM. Marks SJ, et al.
Int J Obes Relat Metab Disord 1997 Apr;21(4):274–9

Behavioral symptoms in dementia: community-based research. Auer SR, et al. **Int Psychogeriatr** 1996;8 Suppl 3:363–6; discussion 381–2

Recurrent toxic delirium in a patient treated with SSRIs: is old age a risk factor? Amir I, et al.
Isr J Psychiatry Relat Sci 1997;34(2):119–21

Differential pharmacological treatment response in high angry hostile and low angry hostile depressed patients: a retrospective analysis. Bagby RM, et al.
J Affect Disord 1997 Sep;45(3):161–6

A comparison of the cost-effectiveness of sertraline versus tricyclic antidepressants in primary care. Forder J, et al.
J Affect Disord 1996 Jun 5;38(2–3):97–111

Predictive value of tryptophan/large neutral amino acids ratio to antidepressant response. Lucini V, et al.
J Affect Disord 1996 Jan 22;36(3–4):129–33

The failure of 'adult' interventions with adolescent depression: what does it mean for theory, research and practice? Mueller C, et al. **J Affect Disord** 1997 Jul; 44(2–3):203–15 (88 ref.)

Pharmacotherapy for major depression with melancholic features: relative efficacy of tricyclic versus selective serotonin reuptake inhibitor antidepressants. Perry PJ.
J Affect Disord 1996 Jun 20;39(1):1–6 (22 ref.)

Responders and non-responders to drug treatment in social phobia: differences at baseline and prediction of response. Slaap BR, et al. **J Affect Disord** 1996 Jun 20;39(1):13–9

Serotonergic autoreceptor blockade in the reduction of antidepressant latency: personality variables and response to paroxetine and pindolol. Tome MB, et al.
J Affect Disord 1997 Jul;44(2–3):101–9

Developments in the drug treatment of panic disorder: what is the place of the selective serotonin reuptake inhibitors? Westenberg HG. **J Affect Disord** 1996 Sep 9;40(1–2):85–93 (56 ref.)

SSRI for body dysmorphic disorder [letter] Heimann SW.
J Am Acad Child Adolesc Psychiatry 1997 Jul;36(7):868

SSRI and EPS with fluoxetine [letter] Jones-Fearing KB.
J Am Acad Child Adolesc Psychiatry 1996 Sep;35(9):1107–8

A pilot study of clomipramine in young autistic children. Sanchez LE, et al.
J Am Acad Child Adolesc Psychiatry 1996 Apr;35(4):537–44

Erythromelalgia: response to serotonin reuptake inhibitors. Rudikoff D, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):281–3

Use of fluoxetine to treat dominance aggression in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1996 Nov 1; 209(9):1585–7

A possible clonidine-trazodone-dextroamphetamine interaction in a 12-year-old boy. Bhatara VS, et al.
J Child Adolesc Psychopharmacol 1996 Fall;6(3):203–9

Effects of serotonin reuptake inhibitors on aggressive behavior in psychiatrically hospitalized adolescents: results of an open trial. Constantino JN, et al.
J Child Adolesc Psychopharmacol 1997 Spring;7(1):31–44

Open-label treatment of comorbid depression and attentional disorders with co-administration of serotonin reuptake inhibitors and psychostimulants in children, adolescents, and adults: a case series. Findling RL.
J Child Adolesc Psychopharmacol 1996 Fall;6(3):165–75

An open study of the effects of sertraline on adolescent major depression. McConville BJ, et al.
J Child Adolesc Psychopharmacol 1996 Spring;6(1):41–51

Combining serotonin reuptake inhibitors and bupropion in partial responders to antidepressant monotherapy. Bodkin JA, et al. **J Clin Psychiatry** 1997 Apr;58(4):137–45

A double-blind study of long-term treatment with sertraline or fluvoxamine for prevention of highly recurrent unipolar depression. Franchini L, et al. **J Clin Psychiatry** 1997 Mar; 58(3):104–7

Switching drug class after initial SSRI failure [letter; comment] Kelsey JE. **J Clin Psychiatry** 1997 Jul; 58(7):326–7. Comment on: J Clin Psychiatry 1996 Mar;57(3):114–5.

Safety and tolerability of the new antidepressants. Nelson JC. **J Clin Psychiatry** 1997;58 Suppl 6:26–31 (30 ref.)

Management of patients with depression associated with anxiety symptoms. Nutt D. **J Clin Psychiatry** 1997;58 Suppl 8:11–6 (67 ref.)

The role of SSRIs in panic disorder. Sheehan DV, et al.
J Clin Psychiatry 1996;57 Suppl 10:51–8; discussion 59–60 (65 ref.)

Risperidone augmentation of serotonin reuptake inhibitors in obsessive-compulsive and related disorders. Stein DJ, et al. **J Clin Psychiatry** 1997 Mar;58(3):119–22

Frontotemporal dementia: treatment response to serotonin selective reuptake inhibitors [published erratum appears in J Clin Psychiatry 1997 Jun;58(6):275] Swartz JR, et al.
J Clin Psychiatry 1997 May;58(5):212–6

Fluoxetine treatment of patients with major depressive disorder who failed initial treatment with sertraline. Thase ME, et al. **J Clin Psychiatry** 1997 Jan;58(1):16–21

Relationship between early side effects and therapeutic effects of clomipramine therapy in obsessive-compulsive disorder. Ackerman DL, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):324–8

Comments on "Effectiveness of pindolol with selected antidepressant drugs in the treatment of major depression" [letter; comment] Anderson GM.
J Clin Psychopharmacol 1996 Jun;16(3):256–7. Comment on: J Clin Psychopharmacol 1995 Jun;15(3):217–22.

A multicenter, double-blind comparison of the effects of nefazodone and fluoxetine on sleep architecture and quality of sleep in depressed outpatients. Armitage R, et al.
J Clin Psychopharmacol 1997 Jun;17(3):161–8

Clinical evaluation of venlafaxine. Ballenger JC.
J Clin Psychopharmacol 1996 Jun;16(3 Suppl 2):29S–35S; discussion 35S–36S (12 ref.)

Trial of trazodone for posttraumatic stress disorder using a multiple baseline group design. Hertzberg MA, et al.
J Clin Psychopharmacol 1996 Aug;16(4):294–8

Addition of d-fenfluramine to benzodiazepines produces a marked improvement in refractory panic disorder--a case report [letter] Hetem LA. **J Clin Psychopharmacol** 1996 Feb;16(1):77–8

Will pindolol augment the response to a serotonin reuptake inhibitor in obsessive-compulsive disorder? [letter] Koran LM, et al. **J Clin Psychopharmacol** 1996 Jun;16(3):253–4

An open clinical trial of fluoxetine in the treatment of premature ejaculation. Lee HS, et al.
J Clin Psychopharmacol 1996 Oct;16(5):379–82

Efficacy of fluvoxamine, paroxetine, and citalopram in the treatment of obsessive-compulsive disorder: a single-blind study. Mundo E, et al. **J Clin Psychopharmacol** 1997 Aug; 17(4):267–71

Modification of 35% carbon dioxide hypersensitivity across one week of treatment with clomipramine and fluvoxamine: a double-blind, randomized, placebo-controlled study. Perna G, et al. **J Clin Psychopharmacol** 1997 Jun; 17(3):173–8

Pathologic crying responsive to treatment with sertraline [letter] Peterson KA, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):333

A comparison of fluvoxamine and fluoxetine in the treatment of major depression. Rapaport M, et al.
J Clin Psychopharmacol 1996 Oct;16(5):373–8

Correlated reductions in cerebrospinal fluid 5-HIAA and MHPG concentrations after treatment with selective serotonin reuptake inhibitors. Sheline Y, et al.
J Clin Psychopharmacol 1997 Feb;17(1):11–4

Antidepressant options: venlafaxine in perspective. Thase ME. **J Clin Psychopharmacol** 1996 Jun;16(3 Suppl 2):10S–18S; discussion 18S–20S (70 ref.)

A double-blind comparative study of brofaromine and fluvoxamine in outpatients with panic disorder. van Vliet IM, et al. **J Clin Psychopharmacol** 1996 Aug;16(4):299–306

Effectiveness of psychological and pharmacological treatments for obsessive-compulsive disorder: a quantitative review. Abramowitz JS.
J Consult Clin Psychol 1997 Feb;65(1):44–52

Recent developments in the psychopharmacology of anxiety disorders. Lydiard RB, et al. **J Consult Clin Psychol** 1996 Aug;64(4):660–8 (85 ref.)

SSRI or tricyclics for depression? Bushell I, et al.
J Fam Pract 1996 Oct;43(4):345–6

Fluoxetine and amitriptyline in the treatment of fibromyalgia. Johnson SP. **J Fam Pract** 1997 Feb;44(2):128–30

The efficacy of selective serotonin reuptake inhibitors for the management of chronic pain. Jung AC, et al.
J Gen Intern Med 1997 Jun;12(6):384–9

Citalopram causes no significant alterations in plasma neuroleptic levels in schizophrenic patients. Syvälahti EK, et al. **J Int Med Res** 1997 Jan–Feb;25(1):24–32

Serotonergic drugs in trichotillomania: treatment results in 12 patients. Iancu I, et al. **J Nerv Ment Dis** 1996 Oct; 184(10):641–4

Sertraline in the treatment of severe aggressiveness in Huntington's disease. Ranen NG, et al.
J Neuropsychiatry Clin Neurosci 1996 Summer;8(3):338–40

Clomipramine and sexual function in men with premature ejaculation and controls. Haensel SM, et al. **J Urol** 1996 Oct;156(4):1310–5

The efficacy of fluoxetine in the treatment of premature ejaculation: a double-blind placebo controlled study [see comments] Kara H, et al. **J Urol** 1996 Nov;156(5):1631–2 . Comment in: J Urol 1996 Nov;156(5):1636.

Symptomatic improvement of premenstrual dysphoric disorder with sertraline treatment. A randomized controlled trial. Sertraline Premenstrual Dysphoric Collaborative Study Group [see comments] Yonkers KA, et al. **JAMA** 1997 Sep 24;278(12):983–8. Comment in: JAMA 1997 Sep 24;278(12):1024–5.

Selective serotonin reuptake inhibitors plus pindolol. The REEP [letter; comment] Bordet R, et al. **Lancet** 1997 Jul 26;350(9073):289. Comment on: Lancet 1997 May 31;349(9065):1594–7.

Selective serotonin reuptake inhibitors plus pindolol [letter; comment] Isaac MT, et al. **Lancet** 1997 Jul 26; 350(9073):288–9. Comment on: Lancet 1997 May 31;349(9065):1594–7.

Randomised, double-blind, placebo-controlled trial of pindolol in combination with fluoxetine antidepressant treatment [see comments] Pérez V, et al. **Lancet** 1997 May 31;349(9065):1594–7. Comment in: Lancet 1997 Jul 26;350(9073):288–9. Comment in: Lancet 1997 Jul 26;350(9073):289.

Selective serotonin reuptake inhibitors plus pindolol [letter; comment] Terao T. **Lancet** 1997 Jul 26;350(9073):289. Comment on: Lancet 1997 May 31;349(9065):1594–7.

Adult night terrors and paroxetine [letter] Wilson SJ, et al.
Lancet 1997 Jul 19;350(9072):185

Antidepressant co-prescribing--how often does it occur? [letter; comment] [see comments] Parkes AJ.
Med J Aust 1996 Sep 16;165(6):346. Comment on: Med J Aust 1996 Apr 15;164(8):509. Comment in: Med J Aust 1997 Feb 3;166(3):167.

Dexfentluramine in the treatment of juvenile obesity. Grugni G, et al. **Minerva Pediatr** 1997 Mar;49(3):109–17

Tourette syndrome. Medical and surgical treatment of obsessive-compulsive disorder. Rapoport JL, et al.
Neurol Clin 1997 May;15(2):421–8 (41 ref.)

Fluoxetine, but not tricyclic antidepressants, potentiates the 5-hydroxytryptophan-mediated increase in plasma cortisol and prolactin secretion in subjects with major depression or with obsessive compulsive disorder. Meltzer H, et al.
Neuropsychopharmacology 1997 Jul;17(1):1–11

The addition of dexfenfluramine to fluoxetine in the treatment of obesity: a randomized clinical trial. Pedrinola F, et al.
Obes Res 1996 Nov;4(6):549–54

Use of serotonin re-uptake inhibitors as primary therapy for carotid sinus hypersensitivity. Dan D, et al.
Pacing Clin Electrophysiol 1997 Jun;20(6):1633–5

Venlafaxine hydrochloride (Effexor) relieves thermal hyperalgesia in rats with an experimental mononeuropathy. Lang E, et al. **Pain** 1996 Nov;68(1):151–5

Are SSRIs true antidepressant drugs? A plea for the re-evaluation of their therapeutic potential and safety. Loonen AJ. **Pharm World Sci** 1997 Apr;19(2):70–2 (13 ref.)

Citalopram in the treatment of early-onset panic disorder and school phobia. Lepola U, et al. **Pharmacopsychiatry** 1996 Jan;29(1):30–2

Citalopram in the treatment of alcoholism: a double-blind placebo-controlled study. Tiihonen J, et al.
Pharmacopsychiatry 1996 Jan;29(1):27–9

Venlafaxine and nefazodone, two pharmacologically distinct antidepressants. Augustin BG, et al. **Pharmacotherapy** 1997 May–Jun;17(3):511–30 (91 ref.)

The place of selective serotonin reuptake inhibitors in the treatment of panic disorder. DeVane CL.
Pharmacotherapy 1997 Mar–Apr;17(2):282–92 (65 ref.)

Obsessive compulsive disorder and depression--first results of a prospective study on 74 patients. Demal U, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1996 Jul; 20(5):801–13

Psychopharmacologic treatment of pathologic aggression. Fava M. **Psychiatr Clin North Am** 1997 Jun;20(2):427–51 (176 ref.)

Trazodone for aggression in an adolescent with hydrocephalus. Mashiko H, et al.
Psychiatry Clin Neurosci 1996 Jun;50(3):133–6 (16 ref.)

Serotonin function in panic disorder: intravenous administration of meta-chlorophenylpiperazine. Wetzler S, et al. **Psychiatry Res** 1996 Sep 27;64(2):77–82

Sertraline in coexisting major depression and diabetes mellitus. Goodnick PJ, et al. **Psychopharmacol Bull** 1997; 33(2):261–4

Pharmacologic treatment of body dysmorphic disorder. Phillips KA. **Psychopharmacol Bull** 1996;32(4):597–605 (52 ref.)

An open study of buspirone augmentation of serotonin-reuptake inhibitors in body dysmorphic disorder. Phillips KA. **Psychopharmacol Bull** 1996;32(1):175–80

Drug treatment of obsessive-compulsive disorder (OCD): long-term trial with clomipramine and selective serotonin reuptake inhibitors (SSRIs). Ravizza L, et al.
Psychopharmacol Bull 1996;32(1):167–73

Non-response to citalopram in depressive patients: pharmacokinetic and clinical consequences of a fluvoxamine augmentation. Bondolfi G, et al.
Psychopharmacology (Berl) 1996 Dec;128(4):421–5

MHPG and heart rate as correlates of nonresponse to drug therapy in panic disorder patients. A preliminary report. Slaap BR, et al. **Psychopharmacology (Berl)** 1996 Oct; 127(4):353–8

Treatment of childhood obsessive-compulsive disorder with citalopram [letter] Maud C, et al. **S Afr Med J** 1996 Jun; 86(6 Suppl):746, 748

Venlafaxine hydrochloride and chronic pain. Taylor K, et al. **West J Med** 1996 Sep;165(3):147–8

[Meta-analysis of therapeutic trials: applications in psychiatry] Cucherat M, et al. **Encephale** 1996 Sep–Oct; 22(5):378–87 (Eng. Abstr.) **(Fre)**

[Is it feasible to develop a 5-HT basis for the treatment of depression?] Hamon M. **Encephale** 1995 Dec;21 Spec No 4:27–32 (26 ref.) **(Fre)**

[Therapy with selective serotonin reuptake inhibitors (SSRI). Indications, uses and risks] Ebert D. **Fortschr Med** 1996 Jul 1;114(18–19):243–7 (4 ref.) (Eng. Abstr.) **(Ger)**

[Panic and depression: early diagnosis of risk patients, early therapy with SSRI (Selective Serotonin Reabsorption Inhibition)] **Fortschr Neurol Psychiatr** 1997 Aug;65(8 Suppl):1–4 **(Ger)**

[Antidepressive effectiveness and good tolerance] **Nervenarzt** 1997 Feb;68(2 Suppl):5–7 **(Ger)**

[A plant extract with proven antidepressive effect] **Nervenarzt** 1997 Feb;68(2 Suppl):2 **(Ger)**

[Controlled long-term prevention of unipolar depression with antidepressive agents of the second generation (SSRI)]

Zimmermann U. **Psychiatr Prax** 1996 Sep;23(5):240–3 (29 ref.) (Eng. Abstr.) **(Ger)**
[The clinicopharmacological case (5). serotonin reuptake inhibitor and 5-HT3-receptor antagonists: are there clinically relevant interactions?] Kind B, et al. **Schweiz Rundsch Med Prax** 1996 Nov 12;85(46):1490–2 (Eng. Abstr.) **(Ger)**
[Selective serotonin reuptake inhibitors (SSRI) in childhood and adolescence] Stilke D. **Z Kinder Jugenpsychiatr** 1997 May;25(2):106–16 (60 ref.) **(Ger)**
[Paroxetine in the treatment of premature ejaculation] Giammusso B, et al. **Arch Ital Urol Androl** 1997 Feb; 69(1):11–3 (Eng. Abstr.) **(Ita)**
[Biological mechanisms of drug-resistant depression] Suwalska A, et al. **Psychiatr Pol** 1996 Sep–Oct;30(5):713–29 (56 ref.) (Eng. Abstr.) **(Pol)**
[Treatment of dysthymia with sertraline] Chinchilla A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1997 Jan–Feb;25(1):3–9 (Eng. Abstr.) **(Spa)**
[The treatment of the resistant obsessive-compulsive disorder: an update] Crespo Facorro B, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1997 Jan–Feb;25(1):61–9 (106 ref.) (Eng. Abstr.) **(Spa)**
[Evolution of antidepressive drug consumption in Spain. The impact of selective serotonin re-uptake inhibitors] Alonso MP, et al. **Med Clin (Barc)** 1997 Feb 8;108(5):161–6 (Eng. Abstr.) **(Spa)**
[Exacerbation of spasticity induced by serotonin reuptake inhibitors. Letter] del Real MA, et al. **Neurologia** 1996 Aug–Sep;11(7):272 **(Spa)**
[What anti-depressive agent is best? (letter)] Andréewitch S. **Lakartidningen** 1997 Jul 9;94(28–29):2529–30 **(Swe)**

TOXICITY

A murine model of adenomyosis: the effects of hyperprolactinemia induced by fluoxetine hydrochloride, a selective serotonin reuptake inhibitor, on adenomyosis induction in Wistar albino rats. Fiçicioğlu C, et al. **Acta Eur Fertil** 1995 Mar–Apr;26(2):75–9
Chronic fenfluramine treatment of rats with different ages: effects on brain oxidative stress-related parameters. D'Almeida V, et al. **J Biochem Toxicol** 1996;11(4):197–201
Development of an animal model of fluoxetine akathisia. Teicher MH, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1995 Dec; 19(8):1305–19
Fluoxetine hypophagia. Is there a role for serotonergic mechanisms in some circumstances? [letter; comment] Clifton PG, et al. **Trends Pharmacol Sci** 1997 Jun; 18(6):191–2 (4 ref.). Comment on: Trends Pharmacol Sci 1997 Jan;18(1):21–5.

URINE

False-positive toxicology screens [letter] Gear JL. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1571–2

SEROTYPING

Intertype specific epitopes on the hexons of adenovirus types 1, 2, 5 and 6. Adám E, et al. **Acta Microbiol Immunol Hung** 1996;43(1):75–82
Random amplified polymorphic DNA (RAPD) analysis of Escherichia coli strains: comparison of urinary and concomitant blood isolates of urosepsis patients. Kärkkäinen UM, et al. **APMIS** 1996 Jun;104(6):437–43
Subtyping of Neisseria meningitidis strains isolated in Quebec, Canada: correlation between deduced amino acid sequences and serosubtyping techniques. Arhin FF, et al. **Can J Microbiol** 1997 Mar;43(3):234–8
Papillomavirus and HPV typing. de Villiers EM. **Clin Dermatol** 1997 Mar–Apr;15(2):199–206 (83 ref.)
Enzyme electrophoresis combined with serogrouping for improved differentiation of Clostridium difficile strains. Bories PN, et al. **FEMS Immunol Med Microbiol** 1996 Jul; 14(4):187–93
Subtyping of human immunodeficiency virus type 1 strains by using antibodies specific for the third variable domain (V3) of gp120: results may be affected by divergent V3 sequences. Sherefa K, et al. **J Clin Microbiol** 1997 Sep; 35(9):2419–21
Evaluation and comparison of different hepatitis C virus genotyping and serotyping assays. Lee JH, et al. **J Hepatol** 1997 May;26(5):1001–9
Serological characterization of Trichosporon cutaneum and related species. Ikeda R, et al. **Microbiol Immunol** 1996; 40(11):813–9
Re-speciation of the original reference strains of serovars in the Citrobacter freundii (Bethesda-Ballerup group) antigenic scheme of West and edwards. Miki K, et al. **Microbiol Immunol** 1996;40(12):915–21

CLASSIFICATION

Serogroup-specific epidemiology of Streptococcus pneumoniae: associations with age, sex, and geography in 7,000 episodes of invasive disease. Scott JA, et al. **Clin Infect Dis** 1996 Jun;22(6):973–81
Development of a simple restriction fragment length polymorphism (RFLP) based assay for HCV genotyping and comparative analysis with genotyping and serotyping tests. Thiers V, et al. **J Virol Methods** 1997 Apr;65(1):9–17

METHODS

Detection and differentiation of 3 K88 serogroups using polymerase chain reaction techniques. K88 serogroup detection and differentiation. Franklin MA, et al. **Adv Exp Med Biol** 1997;412:77–9
Human immunodeficiency virus type 1 neutralizing antibody serotyping using serum pools and an infectivity reduction assay. Mascola JR, et al. **AIDS Res Hum Retroviruses** 1996 Sep 20;12(14):1319–28
Serotyping of Streptococcus pneumoniae by agglutination assays: a cost-effective technique for developing countries. Lalitha MK, et al. **Bull World Health Organ** 1996; 74(4):387–90
Evaluation of serological assays for identification of parvovirus B19 immunoglobulin M. Tolfvenstam T, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):147–50
A simplified antigenic scheme for serotyping of Yersinia pseudotuberculosis: phenotypic characterization of reference strains and preparation of O and H factor sera. Tsubokura M, et al. **Contrib Microbiol Immunol** 1995; 13:99–105
Comparison of an improved RAPD fingerprinting with different typing methods for discriminating clinical isolates of Staphylococcus spp. Damiani G, et al. **Eur J Epidemiol** 1996 Apr;12(2):163–9
A new method of antibiotyping yeasts for subspecies discrimination and distribution in human clinical specimens. Quindós G, et al. **Eur J Epidemiol** 1996 Feb;12(1):55–62
The influence of virus structure on antibody responses and virus serotype formation. Bachmann MF, et al. **Immunol Today** 1996 Dec;17(12):553–8 (48 ref.)
Immunochemical characterization of O polysaccharides composing the alpha-D-rhamnose backbone of lipopolysaccharide of Pseudomonas syringae and classification of bacteria into serogroups O1 and O2 with monoclonal antibodies. Ovod V, et al. **J Bacteriol** 1996 Nov;178(22):6459–65
Comparison of culture and the antigenemia assay for detection of cytomegalovirus in blood specimens submitted to a reference laboratory. Brumback BG, et al. **J Clin Microbiol** 1997 Jul;35(7):1819–21
Dot blot assay for the serotyping of pneumococci. Fenoll A, et al. **J Clin Microbiol** 1997 Mar;35(3):764–6
Analysis of hepatitis C virus isolates by serotyping and genotyping. van Doorn LJ, et al. **J Clin Microbiol** 1996 Jul;34(7):1784–7
Characterization of a specific Mycobacterium paratuberculosis recombinant clone expressing 35,000-molecular-weight antigen and reactivity with sera from animals with clinical and subclinical Johne's disease. El-Zaatari FA, et al. **J Clin Microbiol** 1997 Jul;35(7):1794–9
Identification by monoclonal antibodies of serotype D strains of Pasteurella multocida representing various geographic origins and host species. Vasfi Marandi M, et al. **J Med Microbiol** 1997 Jul;46(7):603–10
Serotyping and genotyping of hepatitis C virus (HCV) strains in chronic HCV infection. Commission Hepatologie du CREGG. Club de Reflexion des Cabinets de Groupes en GastroEnterologie. Halfon P, et al. **J Med Virol** 1997 Aug; 52(4):391–5
Comparative evaluation of five rapid methods for identifying subtype 1b and 2c hepatitis C virus isolates. Vatteroni M, et al. **J Virol Methods** 1997 Jul;66(2):187–94
Serological diagnosis of Trypanosoma rangeli infected patients. A comparison of different methods and its implications for the diagnosis of Chagas' disease. Vásquez JE, et al. **Scand J Immunol** 1997 Mar;45(3):322–30
The use of polymerase chain reaction (PCR) as a diagnostic tool for dengue virus. Thayan R, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):669–72
[Subserogrouping of 49 Legionella pneumophila serogroup 1 strains with monoclonal antibodies by slide latex agglutination method and its usefulness for epidemiologic study] Gondaira F, et al. **Kansenshogaku Zasshi** 1996 Jul; 70(7):673–80 (Eng. Abstr.) **(Jpn)**

VETERINARY

Serotyping of Actinobacillus pleuropneumoniae serotype 5 strains using a monoclonal-based polystyrene agglutination test. Dubreuil JD, et al. **Can J Vet Res** 1996 Jan;60(1):69–71
Comparison of polymerase chain reaction and monoclonal antibodies for G-typing of group A bovine rotavirus directly from fecal material. Hussein HA, et al. **Vet Microbiol** 1996 Jul;51(1–2):11–7

SEROUS MEMBRANE

Malignant vascular tumors of the serous membranes mimicking mesothelioma. A report of 14 cases. Lin BT, et al. **Am J Surg Pathol** 1996 Dec;20(12):1431–9

ENZYMOLOGY

Transcriptional regulation of the lysozyme gene in airway gland serous cells. Kai H, et al. **J Cell Biochem** 1996 Jun 1;61(3):350–62

METABOLISM

Carbachol, but not forskolin, increases mucosal-to-serosal transport of intact protein in rat ileum in vitro. Bijlsma PB, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G147–55

PATHOLOGY

Adenocarcinoma in females detected in serous effusions. Cytomorphologic aspects and immunocytochemical reactivity to cytokeratins 7 and 20. Longatto Filho A, et al. **Acta Cytol** 1997 Jul–Aug;41(4):961–71

VIROLOGY

Absence of Kaposi's sarcoma-associated herpesvirus-like DNA sequences in malignant vascular tumors of the serous membranes. Lin BT, et al. **Mod Pathol** 1996 Dec; 9(12):1143–6

SERPENTINE (MINERAL) see **ASBESTOS, SERPENTINE**

SERPENTINE ASBESTOS see **ASBESTOS, SERPENTINE**

SERPIN SUPERFAMILY see **SERPINS**

SERPINS

EI-1511-3, -5 and EI-1625-2, novel interleukin-1 beta converting enzyme inhibitors produced by Streptomyces sp. E-1511 and E-1625. II. Structure determination. Uosaki Y, et al. **J Antibiot (Tokyo)** 1996 Nov;49(11):1079–84
Interference in protein C activation assays from endogenous serpins in mammalian host cells. Newell AA, et al. **Thromb Res** 1996 Dec 1;84(5):373–7

ADMINISTRATION & DOSAGE

Novel recombinant serpin, LEX-032, attenuates myocardial reperfusion injury in cats. Delyani JA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H881–7

ANALYSIS

The 43 kDa papain-inhibiting protein in psoriatic epidermis is identical to squamous cell carcinoma antigen (SCC-antigen). Järvinen M, et al. **Adv Exp Med Biol** 1996; 389:87–93
Effect of hyperthermia on proliferation and deviation of carcinoembryonic antigen and squamous cell carcinoma-related antigen of human esophageal carcinoma cells in culture. Saito M, et al. **Hum Cell** 1996 Mar;9(1):63–8
A novel human leukocyte elastase inhibitor from duck egg white. Valueva TA, et al. **Immunopharmacology** 1996 May; 32(1–3):108–10

BIOSYNTHESIS

Gamma linolenic acid regulates expression of maspin and the motility of cancer cells. Jiang WG, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):639–44
Gene expression of the neurotrophic pigment epithelium-derived factor in the human ciliary epithelium. Synthesis and secretion into the aqueous humor. Ortego J, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2759–67
Tissue kallikrein-binding protein reduces blood pressure in transgenic mice. Chen LM, et al. **J Biol Chem** 1996 Nov 1;271(44):27590–4
Heterologous expression of three plant serpins with distinct inhibitory specificities. Dahl SW, et al. **J Biol Chem** 1996 Oct 11;271(41):25083–8
A cytosolic granzyme B inhibitor related to the viral apoptotic regulator cytokine response modifier A is present in cytotoxic lymphocytes. Sun J, et al. **J Biol Chem** 1996 Nov 1;271(44):27802–9
Maspin acts at the cell membrane to inhibit invasion and motility of mammary and prostatic cancer cells. Sheng S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11669–74
Expression of maspin in prostate cells is regulated by a positive ets element and a negative hormonal responsive element site recognized by androgen receptor. Zhang M, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5673–8

BLOOD

Serum level of squamous cell carcinoma antigen as a new indicator of disease activity in patients with psoriasis [letter] Hamanaka S, et al. **Arch Dermatol** 1997 Mar;133(3):393–5
Squamous cell carcinoma antigen levels in patients with different stages of laryngeal cancer. Namyslowski G, et al. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S154–6
A primary adenosquamous carcinoma of the liver with an elevated level of serum squamous cell carcinoma related antigen. Yamamoto K, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):658–62

CHEMICAL SYNTHESIS

Pyridazinodiazepines as a high-affinity, P2-P3 peptidomimetic class of interleukin-1 beta-converting enzyme inhibitor. Dolle RE, et al. **J Med Chem** 1997 Jun 20;40(13):1941–6

CHEMISTRY

The complex between mesentericopeptidase and eglin-C. Dauter Z, et al. **Adv Exp Med Biol** 1996;379:1–4
Active site binding loop stabilization in the subtilisin inhibitor eglin c: structural and functional studies on specifically designed mutants in complex with subtilisin and the

uncomplexed inhibitor. Hipler K, et al. **Adv Exp Med Biol** 1996;379:43–7

Serpin conformational change in ovalbumin. Enhanced reactive center loop insertion through hinge region mutations. Huntington JA, et al. **Biochemistry** 1997 May 6;36(18):5432–40

Interscaffolding additivity. Association of P1 variants of eglin c and of turkey ovomucoid third domain with serine proteinases. Qasim MA, et al. **Biochemistry** 1997 Feb 18; 36(7):1598–607

Primary structure of the plant serpin BSZ7 having the capacity of chymotrypsin inhibition. Rasmussen SK, et al. **Biochim Biophys Acta** 1996 Oct 17;1297(2):127–30

The biostructural pathology of the serpins: critical function of sheet opening mechanism. Carrell RW, et al. **Biol Chem Hoppe Seyler** 1996 Jan;377(1):1–17 (97 ref.)

Characterization and functional analysis of 12 naturally occurring reactive site variants of serpin-1 from Manduca sexta. Jiang H, et al. **J Biol Chem** 1997 Jan 10;272(2):1082–7

Apparent formation of sodium dodecyl sulfate-stable complexes between serpins and 3,4-dichloroisocoumarin-inactivated proteinases is due to regeneration of active proteinase from the inactivated enzyme. Olson ST, et al. **J Biol Chem** 1997 May 16; 272(20):13338–42

Inhibitory mechanism of serpins. Identification of steps involving the active-site serine residue of the protease. Stone SR, et al. **J Mol Biol** 1997 Jan 24;265(3):344–62

The serpin–proteinase complex revealed [news] Lawrence DA. **Nat Struct Biol** 1997 May;4(5):339–41

Arginine substitutions in the hinge region of antichymotrypsin affect serpin beta-sheet rearrangement. Lukacs CM, et al. **Nat Struct Biol** 1996 Oct;3(10):888–93

Structural insights into serpin–protease complexes reveal the inhibitory mechanism of serpins [letter] Wilczynska M, et al. **Nat Struct Biol** 1997 May;4(5):354–7

Pepsin-inhibitory activity of the uterine serpins. Mathialagan N, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13653–8

Major proteinase movement upon stable serpin–proteinase complex formation. Stratikos E, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):453–8

Functional implications of the modeled structure of maspin. Fitzpatrick PA, et al. **Protein Eng** 1996 Jul;9(7):585–9

Importance of the release of strand 1C to the polymerization mechanism of inhibitory serpins. Chang WS, et al. **Protein Sci** 1997 Jan;6(1):89–98

Modeling of serpin–protease complexes: antithrombin–thrombin, alpha 1-antitrypsin (358Met–>Arg)–thrombin, alpha 1-antitrypsin (358Met–>Arg)–trypsin, and antitrypsin–elastase. Whisstock J, et al. **Proteins** 1996 Nov;26(3):288–303

Inactivation of factor Xia in vivo: studies in chimpanzees and in humans. Wuillemin WA, et al. **Thromb Haemost** 1996 Oct;76(4):549–55

CLASSIFICATION

The intracellular serpin family. Korpula-Mastalerz R, et al. **Acta Biochim Pol** 1996;43(3):419–29 (52 ref.)

A new structural class of serine protease inhibitors revealed by the structure of the hirustasin-kallikrein complex [published erratum appears in Structure 1997 Apr 15;5(4):585] Mittl PR, et al. **Structure** 1997 Feb 15; 5(2):253–64

GENETICS

Sensitive detection of circulating breast cancer cells by reverse-transcriptase polymerase chain reaction of maspin gene. Luppi M, et al. **Ann Oncol** 1996 Aug;7(6):619–24

Expression and localization of human kallistatin in rat submandibular gland after intracapsular gene injection. Xiong W, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):494–8

Increased bax and interleukin-1beta-converting enzyme messenger ribonucleic acid levels coincide with apoptosis in the bovine corpus luteum during structural regression. Rueda BR, et al. **Biol Reprod** 1997 Jan;56(1):186–93

Transactivation through Ets and Ap1 transcription sites determines the expression of the tumor-suppressing gene maspin. Zhang M, et al. **Cell Growth Differ** 1997 Feb; 8(2):179–86

Proteinase inhibitor 8 Map position 18q21.3. Scott FL, et al. **Chromosome Res** 1997 Jun;5(4):279

A novel pancreas-specific serpin (ZG-46p) localizes to the soluble and membrane fraction of the Golgi complex and the zymogen granules of acinar cells. Chen CY, et al. **Eur J Cell Biol** 1997 Jul;73(3):205–14

Chromosomal mapping of the gene (PI9) encoding the intracellular serpin proteinase inhibitor 9 to 6p25 by fluorescence in situ hybridization. Eyre HJ, et al. **Genomics** 1996 Nov 1;37(3):406–8

Human neuroserpin (PI12): cDNA cloning and chromosomal localization to 3q26. Schrimpf SP, et al. **Genomics** 1997 Feb 15;40(1):55–62

Adenovirus-mediated delivery of human kallistatin gene reduces blood pressure of spontaneously hypertensive rats. Chen LM, et al. **Hum Gene Ther** 1997 Feb 10;8(3):341–7

Mutation analysis and loss of heterozygosity of PEDF in central nervous system primitive neuroectodermal tumors. Slavc I, et al. **Int J Cancer** 1997 Jul 17;72(2):277–82

Tissue kallikrein-binding protein reduces blood pressure in transgenic mice. Chen LM, et al. **J Biol Chem** 1996 Nov 1;271(44):27590–4

Organization of serpin gene-1 from Manduca sexta. Evolution of a family of alternate exons encoding the reactive site loop. Jiang H, et al. **J Biol Chem** 1996 Nov 8;271(45):28017–23

A new family of 10 murine ovalbumin serpins includes two homologs of proteinase inhibitor 8 and two homologs of the granzyme B inhibitor (proteinase inhibitor 9). Sun J, et al. **J Biol Chem** 1997 Jun 13;272(24):15434–41

Kallikrein binding protein (KBP) maps to rat chromosome 6 but does not cosegregate with blood pressure in a GH x BN cross. Chen A, et al. **Mamm Genome** 1997 Sep; 8(9):701–3

mMaspin: the mouse homolog of a human tumor suppressor gene inhibits mammary tumor invasion and motility. Zhang M, et al. **Mol Med** 1997 Jan;3(1):49–59

Bcl-2 and CrmA have different effects on transformation, apoptosis and the stability of I kappa B-alpha in chicken spleen cells transformed by temperature-sensitive v-Rel oncoproteins. White DW, et al. **Oncogene** 1996 Sep 5; 13(5):891–9

IMMUNOLOGY

Vaccinia virus serpin B13R (SPI-2) inhibits interleukin-1beta-converting enzyme and protects virus-infected cells from TNF- and Fas-mediated apoptosis, but does not prevent IL-1beta-induced fever. Kettle S, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):677–85

ISOLATION & PURIFICATION

Identification of a serpin specifically expressed in multipotent and bipotent hematopoietic progenitor cells and in activated T cells. Hampson IN, et al. **Blood** 1997 Jan 1; 89(1):108–18

EI-1511-3, -5 and EI-1625-2, novel interleukin-1 beta converting enzyme inhibitors produced by Streptomyces sp. E-1511 and E-1625. I. Taxonomy of producing strain, fermentation and isolation. Tanaka T, et al. **J Antibiot (Tokyo)** 1996 Nov;49(11):1073–8

Purification, cDNA cloning, and characterization of a new serpin with megakaryocyte maturation activity. Tsujimoto M, et al. **J Biol Chem** 1997 Jun 13;272(24):15373–80

METABOLISM

Interleukin 8 and granulocyte elastase alpha 1 proteinase inhibitor complex in the tracheobronchial aspirate of infants with chronic lung disease following respiratory distress syndrome. Takasaki J, et al. **Acta Paediatr Jpn** 1996 Oct; 38(5):434–9

Inhibition of cysteine and serine proteinases by the cowpox virus serpin CRMA. Komiyama T, et al. **Adv Exp Med Biol** 1996;389:173–6 (39 ref.)

Crystallographic study of eglin-C binding to thermitase. Teplyakov A, et al. **Adv Exp Med Biol** 1996;379:5–9 (20 ref.)

Role of oxidative mixed-disulfide formation in elastase-serine proteinase inhibitor (serpin) complex. Tyagi SC. **Biochem Cell Biol** 1996;74(3):391–401

Role of Leu99 of thrombin in determining the P2 specificity of serpins. Rezaie AR. **Biochemistry** 1997 Jun 17; 36(24):7437–46

Biochemistry, regulation and potential function of kallistatin. Chao J, et al. **Biol Chem Hoppe Seyler** 1995 Dec; 376(12):705–13 (69 ref.)

Rat and human maspins: structures, metastatic suppressor activity and mutation in prostate cancer cells. Umekita Y, et al. **Cancer Lett** 1997 Feb 26;113(1-2):87–93

Activation of apoptosis by Apo-2 ligand is independent of FADD but blocked by CrmA. Marsters SA, et al. **Curr Biol** 1996 Jun 1;6(6):750–2

Kallistatin in human ocular tissues: reduced levels in vitreous fluids from patients with diabetic retinopathy. Ma JX, et al. **Curr Eye Res** 1996 Nov;15(11):1117–23

Recycling of the urokinase receptor upon internalization of the uPA:serpin complexes. Nykjaer A, et al. **EMBO J** 1997 May 15;16(10):2610–20

Effect of anti-apoptotic genes and peptide inhibitors on cytoplasmic acidification during apoptosis. Pardhasaradhi BV, et al. **FEBS Lett** 1997 Jul 7;411(1):67–70

Kallikrein-binding protein levels are reduced in the retinas of streptozotocin-induced diabetic rats. Hatcher HC, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):658–64

Activation of a CrmA-insensitive, p35-sensitive pathway in ionizing radiation-induced apoptosis. Datta R, et al. **J Biol Chem** 1997 Jan 17;272(3):1965–9

Identification of a binding site in protease nexin I (PN1) required for the receptor mediated internalization of PN1-thrombin complexes. Knauer MF, et al. **J Biol Chem** 1997 May 9;272(19):12261–4

The kinetic mechanism of serpin–proteinase complex formation. An intermediate between the michaelis complex and the inhibited complex. O'Malley KM, et al. **J Biol Chem** 1997 Feb 21;272(8):5354–9

Bik and Bak induce apoptosis downstream of CrmA but upstream of inhibitor of apoptosis. Orth K, et al. **J Biol Chem** 1997 Apr 4;272(14):8841–4

Target protease specificity of the viral serpin CrmA. Analysis of five caspases. Zhou Q, et al. **J Biol Chem** 1997 Mar 21;272(12):7797–800

Intracellular distribution of heat-induced stress glycoproteins. Jethmalani SM, et al. **J Cell Biochem** 1997 Jul 1;66(1):98–111

Inhibitory mechanism of serpins. Identification of steps involving the active-site serine residue of the protease. Stone SR, et al. **J Mol Biol** 1997 Jan 24;265(3):344–62

Affinity purification of macrophage migration inhibitory factor/glycosylation inhibiting factor (MIF/GIF) from bovine brain by using a peptide ligand derived from a novel serpin. Nishibori M, et al. **Jpn J Pharmacol** 1996 Jul; 71(3):259–62

Beneficial effects of kallikrein-binding protein in transgenic mice during endotoxic shock. Chen LM, et al. **Life Sci** 1997;60(17):1431–5

Acute application of an interleukin-1 beta-converting enzyme-specific inhibitor delays axotomy-induced motoneurone death. de Bilbao F, et al. **Neuroreport** 1996 Nov 25;7(18):3051–4

Molecular ordering of the Fas-apoptotic pathway: the Fas/APO-1 protease Mch5 is a CrmA-inhibitable protease that activates multiple Ced-3/ICE-like cysteine proteases. Srinivasula SM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14486–91

Recombinant human pigment epithelium-derived factor (PEDF): characterization of PEDF overexpressed and secreted by eukaryotic cells. Stratikos E, et al. **Protein Sci** 1996 Dec;5(12):2575–82

PHARMACOKINETICS

Biodistribution and pharmacokinetics of 131I-labeled LEX 032, a recombinant hybrid of antichymotrypsin. Sands H, et al. **Drug Metab Dispos** 1997 May;25(5):631–6

Pharmacology and pharmacokinetics of LEX 032, a bioengineered serpin: the first of a potential new class of drugs. Sands H, et al. **Drug Metab Rev** 1997 Feb–May; 29(1-2):309–28 (68 ref.)

PHARMACOLOGY

Inhibition of granulocyte-derived proteases reduces the increase in plasma endothelin associated with myocardial ischemia in the pig. Tønnessen T, et al. **Basic Res Cardiol** 1996 Jul–Aug;91(4):289–95

Human proteinase inhibitor 9 (PI9) is a potent inhibitor of subtilisin A. Dahlen JR, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):329–33

Inhibition of human leukocyte proteinase 3 by a novel recombinant serine proteinase inhibitor (LEX032). Groutas WC, et al. **Biochem Biophys Res Commun** 1997 Apr 28; 233(3):697–9

Rat and human maspins: structures, metastatic suppressor activity and mutation in prostate cancer cells. Umekita Y, et al. **Cancer Lett** 1997 Feb 26;113(1-2):87–93

Virus-encoded serine proteinase inhibitor SERP-1 inhibits atherosclerotic plaque development after balloon angioplasty [see comments] Lucas A, et al. **Circulation** 1996 Dec 1;94(11):2890–900. Comment in: Circulation 1996 Dec 1;94(11):2694–5.

Pharmacology and pharmacokinetics of LEX 032, a bioengineered serpin: the first of a potential new class of drugs. Sands H, et al. **Drug Metab Rev** 1997 Feb–May; 29(1-2):309–28 (68 ref.)

Electrophoretic analysis of the "cross-class" interaction between novel inhibitory serpin, squamous cell carcinoma antigen-1 and cysteine proteinases. Nawata S, et al. **Electrophoresis** 1997 May;18(5):784–9

Serpins inhibit the toxicity of amyloid peptides. Schubert D. **Eur J Neurosci** 1997 Apr;9(4):770–7

Inhibition of coagulation factors by recombinant barley serpin BSZx. Dahl SW, et al. **FEBS Lett** 1996 Sep 30; 394(2):165–8

Eglin-c prevents monocrotaline-induced ventilatory dysfunction. Lai YL, et al. **J Appl Physiol** 1997 Jan; 82(1):324–8

Diverse effects of pH on the inhibition of human chymase by serpins. Schechter NM, et al. **J Biol Chem** 1997 Sep 26;272(39):24499–507

CrmA/SPI-2 inhibition of an endogenous ICE-related protease responsible for lamin A cleavage and apoptotic nuclear fragmentation. Takahashi A, et al. **J Biol Chem** 1996 Dec 20;271(51):32487–90

Kallistatin is a potent new vasodilator. Chao J, et al. **J Clin Invest** 1997 Jul 1;100(1):11–7

Pigment epithelium-derived factor protects cultured cerebellar granule cells against glutamate-induced neurotoxicity. Taniwaki T, et al. **J Neurochem** 1997 Jan; 68(1):26–32

Pepsin-inhibitory activity of the uterine serpins. Mathialagan N, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13653–8

Maspin acts at the cell membrane to inhibit invasion and motility of mammary and prostatic cancer cells. Sheng S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11669–74

PHYSIOLOGY

CrmA expression in T lymphocytes of transgenic mice inhibits CD95 (Fas/APO-1)-transduced apoptosis, but does not cause lymphadenopathy or autoimmune disease. Smith KG, et al. **EMBO J** 1996 Oct 1;15(19):5167–76

The interleukin 1beta-converting enzyme inhibitor CrmA prevents Apo1/Fas- but not glucocorticoid-induced poly(ADP-ribose) polymerase cleavage and apoptosis in

lymphoblastic leukemia cells. Geley S, et al. **FEBS Lett** 1997 Jan 27;402(1):36–40

Ceramides induce a form of apoptosis in human acute lymphoblastic leukemia cells that is inhibited by Bcl–2, but not by CrmA. Geley S, et al. **FEBS Lett** 1997 Jan 2; 400(1):15–8

A role for Jun–N–terminal kinase in anoikis; suppression by bcl–2 and crmA. Frisch SM, et al. **J Cell Biol** 1996 Dec; 135(5):1377–82

Cytokine response modifier A (CrmA) inhibits ceramide formation in response to tumor necrosis factor (TNF)–alpha: CrmA and Bcl–2 target distinct components in the apoptotic pathway. Dbaibo GS, et al. **J Exp Med** 1997 Feb 3;185(3):481–90

Inhibition of caspase proteases by CrmA enhances the resistance of human leukemic cells to multiple chemotherapeutic agents. Antoku K, et al. **Leukemia** 1997 Oct;11(10):1665–72

Suppression of interleukin–1beta converting enzyme (ICE)–induced apoptosis by SV40 large T antigen. Jung YK, et al. **Oncogene** 1997 Mar 13;14(10):1207–14

Thrombin, its receptor and protease nexin I, its potent serpin, in the nervous system. Festoff BW, et al. **Semin Thromb Hemost** 1996;22(3):267–71 (47 ref.)

SECRETION

Gene expression of the neurotrophic pigment epithelium–derived factor in the human ciliary epithelium. Synthesis and secretion into the aqueous humor. Ortego J, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2759–67

THERAPEUTIC USE

Can a viral serine proteinase inhibitor prevent postangioplasty restenosis? [editorial; comment] Haber E. **Circulation** 1996 Dec 1;94(11):2694–5. Comment on: Circulation 1996 Dec 1;94(11):2890–900.

SERPULA HYODYSENTERIAE see **SERPULINA HYODYSENTERIAE**

SERPULA INNOCENS see **SERPULINA**

SERPULINA

CLASSIFICATION

Phenotypic characteristics of Serpulina pilosicoli the agent of intestinal spirochaetosis. Trott DJ, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):209–14

Identification of Serpulina species associated with porcine colitis by biochemical analysis and PCR. Fellström C, et al. **J Clin Microbiol** 1997 Feb;35(2):462–7

Genetic and phenotypic characterization of intestinal spirochetes colonizing chickens and allocation of known pathogenic isolates to three distinct genetic groups. McLaren AJ, et al. **J Clin Microbiol** 1997 Feb;35(2):412–7

Identification and characterization of Serpulina pilosicoli isolates recovered from the blood of critically ill patients. Trott DJ, et al. **J Clin Microbiol** 1997 Feb;35(2):482–5

Laboratory identification and enteropathogenicity testing of Serpulina pilosicoli associated with porcine colonic spirochetosis. Muniappa N, et al. **J Vet Diagn Invest** 1997 Apr;9(2):165–71

Unification of the genera Serpulina and Brachyspira, and proposals of Brachyspira hyodysenteriae Comb. Nov., Brachyspira innocens Comb. Nov. and Brachyspira pilosicoli Comb. Nov. Ochiai S, et al. **Microbiol Immunol** 1997;41(6):445–52

Light microscopic and ultrastructural changes in the ceca of chicks inoculated with human and canine Serpulina pilosicoli. Muniappa N, et al. **Vet Pathol** 1996 Sep; 33(5):542–50

Rapid identification of porcine Serpulina species [letter; comment] Hampson D. **Vet Rec** 1997 Jan 11;140(2):51–2. Comment on: Vet Rec 1996 Nov 30;139(22):539–41.

GENETICS

Pulsed–field gel electrophoresis for sub–specific differentiation of Serpulina pilosicoli (formerly 'Anguillina coli'). Atyeo RF, et al. **FEMS Microbiol Lett** 1996 Jul 15; 141(1):77–81

Rapid identification of porcine Serpulina species by colony blot assay using a genus–specific monoclonal antibody [see comments] Achacha M, et al. **Vet Rec** 1996 Nov 30; 139(22):539–41. Comment in: Vet Rec 1997 Jan 11;140(2):51–2.

IMMUNOLOGY

Rapid identification of porcine Serpulina species by colony blot assay using a genus–specific monoclonal antibody [see comments] Achacha M, et al. **Vet Rec** 1996 Nov 30; 139(22):539–41. Comment in: Vet Rec 1997 Jan 11;140(2):51–2.

ISOLATION & PURIFICATION

The prevalence of intestinal spirochaetes in dogs. Lee JI, et al. **Aust Vet J** 1996 Dec;74(6):466–7

Immunoblot reactivity of polyclonal and monoclonal antibodies with periplasmic flagellar proteins FlaA1 and FlaB of porcine Serpulina species. Fisher LN, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):400–4

Development of selected faecal microfloras and of phagocytic and killing capacity of neutrophils in young pigs. Melin L, et al. **Vet Microbiol** 1997 Mar; 54(3–4):287–300

PATHOGENICITY

Pathogenicity of three strains of Serpulina pilosicoli in pigs with a naturally acquired intestinal flora. Thomson JR, et al. **Infect Immun** 1997 Sep;65(9):3693–700

Experimental infection of newly weaned pigs with human and porcine strains of Serpulina pilosicoli. Trott DJ, et al. **Infect Immun** 1996 Nov;64(11):4648–54

Light microscopic and ultrastructural changes in the ceca of chicks inoculated with human and canine Serpulina pilosicoli. Muniappa N, et al. **Vet Pathol** 1996 Sep; 33(5):542–50

SERPULINA HYODYSENTERIAE

Cases of spirochete–associated necrotizing typhlitis in captive common rheas (Rhea americana). Buckles EL, et al. **Avian Dis** 1997 Jan–Mar;41(1):144–8

[A case of hemorrhagic rectocolitis associated with the presence of intestinal spirochetes] Zerpa PR, et al. **Bull Soc Pathol Exot** 1996;89(4):287–90 (Eng. Abstr.) **(Fre)**

CHEMISTRY

Extracellular DNA from Serpulina hyodysenteriae consists of 6.5 kbp random fragments of chromosomal DNA. Turner AK, et al. **FEMS Microbiol Lett** 1997 May 1; 150(1):75–80

Purified outer membranes of Serpulina hyodysenteriae contain cholesterol. Plaza H, et al. **J Bacteriol** 1997 Sep; 179(17):5414–21

CLASSIFICATION

Characterization of Serpulina hyodysenteriae isolates of serotypes 8 and 9 by random amplification of polymorphic DNA analysis. Dugourd D, et al. **Vet Microbiol** 1996 Feb; 48(3–4):305–14

CYTOLOGY

Characterization of flaA– and flaB– mutants of Serpulina hyodysenteriae: both flagellin subunits, FlaA and FlaB, are necessary for full motility and intestinal colonization. Kennedy MJ, et al. **FEMS Microbiol Lett** 1997 Aug 1; 153(1):119–28

GENETICS

Differentiation of intestinal spirochaetes by multilocus enzyme electrophoresis analysis and 16S rRNA sequence comparisons. Stanton TB, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):181–6

Characterization of Serpulina hyodysenteriae isolates of serotypes 8 and 9 by random amplification of polymorphic DNA analysis. Dugourd D, et al. **Vet Microbiol** 1996 Feb; 48(3–4):305–14

IMMUNOLOGY

Production and characterisation of a monoclonal antibody to Serpulina hyodysenteriae. Lee BJ, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):193–7

ISOLATION & PURIFICATION

Enhanced isolation of Serpulina hyodysenteriae by using sliced agar media. Olson LD. **J Clin Microbiol** 1996 Dec; 34(12):2937–41

Multiplex polymerase chain reaction for simultaneous detection of Lawsonia intracellularis, Serpulina hyodysenteriae, and salmonellae in porcine intestinal specimens. Elder RO, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):281–6

Identification of the swine pathogen Serpulina hyodysenteriae in rheas (Rhea americana). Jensen NS, et al. **Vet Microbiol** 1996 Oct;52(3–4):259–69

PATHOGENICITY

Functional analysis of Serpulina hyodysenteriae hemolysin lytic activity. Hyatt DR, et al. **Adv Exp Med Biol** 1997; 412:259–62

Cell membrane permeability– and mitochondrial dysfunction–inducing activities in cell free supernatants from Serpulina hyodysenteriae serotypes 1 and 2. Witters NA, et al. **Adv Exp Med Biol** 1997;412:249–51

Development of an experimental model allowing discrimination between virulent and avirulent isolates of Serpulina (Treponema) hyodysenteriae. Achacha M, et al. **Can J Vet Res** 1996 Jan;60(1):45–9

Cell membrane permeability and mitochondrial dysfunction–inducing activities in cell–free supernatants from Serpulina hyodysenteriae serotypes 1 and 2. Witters NA, et al. **Comp Immunol Microbiol Infect Dis** 1996 Jun; 19(3):233–44

Characterization of flaA– and flaB– mutants of Serpulina hyodysenteriae: both flagellin subunits, FlaA and FlaB, are necessary for full motility and intestinal colonization. Kennedy MJ, et al. **FEMS Microbiol Lett** 1997 Aug 1; 153(1):119–28

Dual flaA1 flaB1 mutant of Serpulina hyodysenteriae expressing periplasmic flagella is severely attenuated in a murine model of swine dysentery. Rosey EL, et al. **Infect Immun** 1996 Oct;64(10):4154–62

Induction of interleukin (IL)–1beta and IL–8 mRNA expression in porcine macrophages by lipopolysaccharide from Serpulina hyodysenteriae. Sacco RE, et al. **Infect Immun** 1996 Oct;64(10):4369–72

Pathogenicity of Serpulina hyodysenteriae: in vivo induction of tumor necrosis factor and interleukin–6 by a serpulinal butanol/water extract (endotoxin). Nibbelink SK, et al. **Microb Pathog** 1997 Sep;23(3):181–7

PHYSIOLOGY

Cell membrane permeability and mitochondrial dysfunction–inducing activities in cell–free supernatants from Serpulina hyodysenteriae serotypes 1 and 2. Witters NA, et al. **Comp Immunol Microbiol Infect Dis** 1996 Jun; 19(3):233–44

Motility and chemotaxis in Serpulina hyodysenteriae. Kennedy MJ, et al. **Vet Microbiol** 1996 Mar;49(1–2):21–30

VIROLOGY

Purification and characterization of VSH–1, a generalized transducing bacteriophage of Serpulina hyodysenteriae. Humphrey SB, et al. **J Bacteriol** 1997 Jan;179(2):323–9

SERPULINA INNOCENS see **SERPULINA**

SERRATIA

ENZYMOLOGY

New occupational allergen in a pharmaceutical industry: serratial peptidase and lysozyme chloride. Park HS, et al. **Ann Allergy Asthma Immunol** 1997 Feb;78(2):225–9

Characterization and amino acid sequence analysis of a new oxyimino cephalosporin–hydrolyzing class A beta–lactamase from Serratia fonticola CUV. Péduzzi J, et al. **Biochim Biophys Acta** 1997 Aug 15;1341(1):58–70

Crystal structure of Serratia protease, a zinc–dependent proteinase from Serratia sp. E–15, containing a beta–sheet coil motif at 2.0 A resolution. Hamada K, et al. **J Biochem (Tokyo)** 1996 May;119(5):844–51

GROWTH & DEVELOPMENT

Strains of the genus Serratia as beneficial rhizobacteria of oilseed rape with antifungal properties. Kalbe C, et al. **Microbiol Res** 1996 Dec;151(4):433–9

METABOLISM

Serratia liquefaciens as a new host superior for overproduction and purification using the N–acetylneuraminate lyase gene of Escherichia coli. Yamamoto K, et al. **Anal Biochem** 1997 Mar 15; 246(2):171–5

PATHOGENICITY

Characterisation of virulence factors of Serratia strains isolated from foods. Singh BR, et al. **Int J Food Microbiol** 1997 Mar 3;34(3):259–66

PHYSIOLOGY

Eukaryotic interference with homoserine lactone–mediated prokaryotic signalling. Givskov M, et al. **J Bacteriol** 1996 Nov;178(22):6618–22

Involvement of N–acyl–L–hormoserine lactone autoinducers in controlling the multicellular behaviour of Serratia liquefaciens. Eberl L, et al. **Mol Microbiol** 1996 Apr; 20(1):127–36

SERRATIA INFECTIONS

Successful medical treatment of multiple Serratia marcescens brain abscesses in a neonate [letter] Kimpen JL, et al. **Eur J Pediatr** 1996 Oct;155(10):916

[Hematogenous osteomyelitis by Serratia marcescens in a patient with no risk factors (letter)] Atienza MP, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):117 **(Spa)**

COMPLICATIONS

Serratia marcescens granuloma [letter] Yanagi T, et al. **Br J Dermatol** 1997 Feb;136(2):289–90

[Serratia marcescens prosthetic mitral valve endocarditis associated with hemolytic anemia] Kochi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jun;45(6):860–4 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Disseminated papular eruption caused by Serratia marcescens: a new cutaneous manifestation in HIV–positive patients [letter] Muñoz–Pérez MA, et al. **AIDS** 1996 Sep; 10(10):1179–80

Serratia marcescens: a single pathogen in necrotizing fasciitis. Zipper RP, et al. **Clin Infect Dis** 1996 Sep;23(3):648–9

[Septic shock by Serratia plymuthica (letter)] Martínez J, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):114–5 **(Spa)**

SERRATIA INFECTIONS

DRUG THERAPY

In vivo antibacterial effects of simulated human serum profiles of once-daily versus thrice-daily dosing of amikacin in a Serratia marcescens endocarditis experimental model. Bugnon D, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1164-9

Limited systemic absorption of intraperitoneal ceftizoxime in a patient with Serratia marcescens peritonitis. Grabe DW, et al. **Perit Dial Int** 1997 Jul-Aug;17(4):395-7

EPIDEMIOLOGY

Containment of a multiresistant Serratia marcescens outbreak. Edgar P, et al. **Burns** 1997 Feb;23(1):15-8

Heterogeneous Serratia marcescens genotypes from a nosocomial pediatric outbreak. Cimolai N, et al. **Chest** 1997 Jan;111(1):194-7

Use of pulsed-field gel electrophoresis typing to study an outbreak of infection due to Serratia marcescens in a neonatal intensive care unit. Miranda G, et al. **J Clin Microbiol** 1996 Dec;34(12):3138-41

ETIOLOGY

The role of Serratia marcescens in soft contact lens associated ocular infections. A review. Parment PA. **Acta Ophthalmol Scand** 1997 Feb;75(1):67-71 (77 ref.)

Serratia marcescens nosocomial outbreak due to contamination of hexetidine solution. Bosi C, et al. **J Hosp Infect** 1996 Jul;33(3):217-24

Postoperative Serratia marcescens wound infections traced to an out-of-hospital source. Passaro DJ, et al. **J Infect Dis** 1997 Apr;175(4):992-5

Endophthalmitis caused by Serratia marcescens. Cohen SM, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):195-200

IMMUNOLOGY

Pre-treatment with Concanavalin-A increases resistance of mice to peritoneal infection by Serratia marcescens. Arraes SM, et al. **J Med Microbiol** 1997 Mar;46(3):251-5

MICROBIOLOGY

Use of pulsed-field gel electrophoresis typing to study an outbreak of infection due to Serratia marcescens in a neonatal intensive care unit. Miranda G, et al. **J Clin Microbiol** 1996 Dec;34(12):3138-41

Use of pulsed-field gel electrophoresis to investigate an outbreak of Serratia marcescens. Shi ZY, et al. **J Clin Microbiol** 1997 Jan;35(1):325-7

Typing of nosocomial strains of Serratia marcescens: comparison of restriction enzyme cleaved genomic DNA fragment (PFGE) analysis with bacteriocin typing, biochemical profiles and serotyping. Traub WH, et al. **Zentralbl Bakteriol** 1996 Jun;284(1):93-106

Phenotypic variation of clinical Serratia marcescens isolates repeatedly recovered from individual patients. Traub WH, et al. **Zentralbl Bakteriol** 1996 Jun;284(1):124-35

PREVENTION & CONTROL

Serratia marcescens infections in neonatal departments: description of an outbreak and review of the literature. van Ogtrop ML, et al. **J Hosp Infect** 1997 Jun;36(2):95-103 (22 ref.)

THERAPY

Spontaneous healing of a massive tibial cortical defect. Klein DM, et al. **J Orthop Trauma** 1997 Feb-Mar;11(2):133-5

VETERINARY

Serratia marcescens contamination of feline whole blood in a hospital blood bank. Hohenhaus AE, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):794-8

SERRATIA MARCESCENS

Serratia marcescens granuloma [letter] Yanagi T, et al. **Br J Dermatol** 1997 Feb;136(2):289-90

Serratia marcescens: a single pathogen in necrotizing fasciitis. Zipper RP, et al. **Clin Infect Dis** 1996 Sep;23(3):648-9

Successful medical treatment of multiple Serratia marcescens brain abscesses in a neonate [letter] Kimpen JL, et al. **Eur J Pediatr** 1996 Oct;155(10):916

Lipopolysaccharide induced acute red eye and corneal ulcers. Schultz CL, et al. **Exp Eye Res** 1997 Jan;64(1):3-9

Serratia marcescens contamination of feline whole blood in a hospital blood bank. Hohenhaus AE, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):794-8

Serratia marcescens nosocomial outbreak due to contamination of hexetidine solution. Bosi C, et al. **J Hosp Infect** 1996 Jul;33(3):217-24

Limited systemic absorption of intraperitoneal ceftizoxime in a patient with Serratia marcescens peritonitis. Grabe DW, et al. **Perit Dial Int** 1997 Jul-Aug;17(4):395-7

[Serratia marcescens prosthetic mitral valve endocarditis associated with hemolytic anemia] Kochi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jun;45(6):860-4 (Eng. Abstr.) **(Jpn)**

[Hematogenous osteomyelitis by Serratia marcescens in a patient with no risk factors (letter)] Atienza MP, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):117 **(Spa)**

CHEMISTRY

Optical configuration analysis of hydroxy fatty acids in bacterial lipids by chiral column high-performance liquid chromatography. Nakagawa Y, et al. **Microbiol Immunol** 1997;41(1):27-32

CLASSIFICATION

Heterogeneous Serratia marcescens genotypes from a nosocomial pediatric outbreak. Cimolai N, et al. **Chest** 1997 Jan;111(1):194-7

Use of pulsed-field gel electrophoresis typing to study an outbreak of infection due to Serratia marcescens in a neonatal intensive care unit. Miranda G, et al. **J Clin Microbiol** 1996 Dec;34(12):3138-41

Typing of nosocomial strains of Serratia marcescens: comparison of restriction enzyme cleaved genomic DNA fragment (PFGE) analysis with bacteriocin typing, biochemical profiles and serotyping. Traub WH, et al. **Zentralbl Bakteriol** 1996 Jun;284(1):93-106

Phenotypic variation of clinical Serratia marcescens isolates repeatedly recovered from individual patients. Traub WH, et al. **Zentralbl Bakteriol** 1996 Jun;284(1):124-35

DRUG EFFECTS

The efficacy of soft contact lens disinfection solutions against Serratia marcescens and Pseudomonas aeruginosa. Parment PA, et al. **Acta Ophthalmol Scand** 1996 Jun;74(3):235-7

In vivo antibacterial effects of simulated human serum profiles of once-daily versus thrice-daily dosing of amikacin in a Serratia marcescens endocarditis experimental model. Bugnon D, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1164-9

Differential distributions in tissues and efficacies of aztreonam and ceftazidime and in vivo bacterial morphological changes following treatment. Turcotte A, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):401-9

Timed killing kinetic studies of the interaction between ciprofloxacin and beta-lactams against gram-negative bacilli. Pohlman JK, et al. **Diagn Microbiol Infect Dis** 1996 Sep;26(1):29-33

Evaluation of high-level carbapenem resistance in atypical Serratia marcescens by a comparison with its revertants. Marumo K, et al. **J Antimicrob Chemother** 1996 Jul; 38(1):47-58

The synergic effects of quinolones and oral cephem antibiotics on Serratia marcescens. Otsuki M, et al. **J Antimicrob Chemother** 1996 Nov;38(5):771-6

ENZYMOLOGY

Structure-function studies on the chitinolytic enzymes of Serratia marcescens chitinase and chitobiase. Vorgias CE, et al. **Ann N Y Acad Sci** 1996 Oct 12;799:190-2

Conversion of the allosteric regulatory patterns of aspartate transcarbamoylase by exchange of a single beta-strand between diverged regulatory chains. Liu L, et al. **Biochemistry** 1997 Mar 18;36(11):3126-32

Occurrence of a novel L-2,4-diaminobutyrate decarboxylase activity in some species of Enterobacteriaceae, and purification and characterization of the enzymes of Enterobacter aerogenes and Serratia marcescens. Yamamoto S, et al. **Biol Pharm Bull** 1996 Oct; 19(10):1298-303

Simulation of electrostatic and hydrodynamic properties of Serratia endonuclease. Antosiewicz J, et al. **Biopolymers** 1997 Apr 5;41(4):443-50

Kinetic analysis of the cleavage of natural and synthetic substrates by the Serratia nuclease. Friedhoff P, et al. **Eur J Biochem** 1996 Oct 15;241(2):572-80

Spectroscopic studies of the C-terminal secretion signal of the Serratia marcescens haem acquisition protein (HasA) in various membrane-mimetic environments. Wolff N, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):400-7

Analysis of the reaction mechanism of the non-specific endonuclease of Serratia marcescens using an artificial minimal substrate. Kolmes B, et al. **FEBS Lett** 1996 Nov 18;397(2-3):343-6

Lipase secretion by bacterial hybrid ATP-binding cassette exporters: molecular recognition of the LipBCD, PrtDEF, and HasDEF exporters. Akatsuka H, et al. **J Bacteriol** 1997 Aug;179(15):4754-60

Two genes encoding serine protease homologues in Serratia marcescens and characterization of their products in Escherichia coli. Ohnishi Y, et al. **J Biochem (Tokyo)** 1997 May;121(5):902-13

Purification, crystallization, and preliminary X-Ray diffraction analysis of the carbapenem-hydrolyzing class A beta-lactamase Sme-1 from Serratia marcescens. Sougakoff W, et al. **J Struct Biol** 1996 Mar-Apr; 116(2):313-6

GENETICS

Heterogeneous Serratia marcescens genotypes from a nosocomial pediatric outbreak. Cimolai N, et al. **Chest** 1997 Jan;111(1):194-7

Isolation and characterization of the 54-kDa and 22-kDa chitinase genes of Serratia marcescens KCTC2172. Gal SW, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):197-204

Cloning and characterization of two Serratia marcescens genes involved in core lipopolysaccharide biosynthesis. Guasch JF, et al. **J Bacteriol** 1996 Oct;178(19):5741-7

Different restriction profiles of kappa prophage in Serratia marcescens K and HY. Steiger H, et al. **J Basic Microbiol** 1996;36(6):439-45

The effect of O-antigen on transformation efficiency in Serratia marcescens. Palomar J, et al. **Microbiologia** 1996 Sep;12(3):435-8

Molecular characterization of the Serratia marcescens OmpF porin, and analysis of S. marcescens OmpF and OmpC osmoregulation. Hutsul JA, et al. **Microbiology** 1997 Aug; 143 (Pt 8):2797-806

Complete sequence and organization of the Serratia marcescens biotin operon. Sakurai N, et al. **Microbiology** 1996 Nov;142 (Pt 11):3295-303

Cloning of the Serratia marcescens hasF gene encoding the Has ABC exporter outer membrane component: a TolC analogue. Binet R, et al. **Mol Microbiol** 1996 Oct; 22(2):265-73

IMMUNOLOGY

Identification of capsular antigens in Serratia marcescens. Aucken HM, et al. **J Clin Microbiol** 1997 Jan;35(1):59-63

Pre-treatment with Concanavalin-A increases resistance of mice to peritoneal infection by Serratia marcescens. Arraes SM, et al. **J Med Microbiol** 1997 Mar;46(3):251-5

ISOLATION & PURIFICATION

Identification of Serratia marcescens on the basis of polymerase chain reaction-amplified ribosomal DNA spacer polymorphisms. Kur J, et al. **Acta Microbiol Pol** 1995;44(3-4):219-25

Containment of a multiresistant Serratia marcescens outbreak. Edgar P, et al. **Burns** 1997 Feb;23(1):15-8

Use of pulsed-field gel electrophoresis to investigate an outbreak of Serratia marcescens. Shi ZY, et al. **J Clin Microbiol** 1997 Jan;35(1):325-7

Serratia marcescens infections in neonatal departments: description of an outbreak and review of the literature. van Ogtrop ML, et al. **J Hosp Infect** 1997 Jun;36(2):95-103 (22 ref.)

Postoperative Serratia marcescens wound infections traced to an out-of-hospital source. Passaro DJ, et al. **J Infect Dis** 1997 Apr;175(4):992-5

Epidemiological markers of Serratia marcescens isolates causing nosocomial infections in Spain (1981-1991). Boquete T, et al. **Microbiologia** 1996 Dec;12(4):607-12

Endophthalmitis caused by Serratia marcescens. Cohen SM, et al. **Ophthalmic Surg Lasers** 1997 Mar;28(3):195-200

METABOLISM

Culture conditions affect cytotoxin production by Serratia marcescens. Carbonell GV, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3-4):299-307

A new type of hemophore-dependent heme acquisition system of Serratia marcescens reconstituted in Escherichia coli. Ghigo JM, et al. **J Bacteriol** 1997 Jun;179(11):3572-9

Secretion of nuclease across the outer membrane of Serratia marcescens and its energy requirements. Suh Y, et al. **J Bacteriol** 1997 Feb;179(3):677-83

Complete sequence and organization of the Serratia marcescens biotin operon. Sakurai N, et al. **Microbiology** 1996 Nov;142 (Pt 11):3295-303

PHYSIOLOGY

The role of Serratia marcescens in soft contact lens associated ocular infections. A review. Parment PA. **Acta Ophthalmol Scand** 1997 Feb;75(1):67-71 (77 ref.)

Adhesion and growth of Serratia marcescens on artificial closed eye tears soaked hydrogel contact lenses. Hume EB, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S39-41

ULTRASTRUCTURE

New fimbrial adhesins of Serratia marcescens isolated from urinary tract infections: description and properties. Leranoz S, et al. **J Urol** 1997 Feb;157(2):694-8

VIROLOGY

Different restriction profiles of kappa prophage in Serratia marcescens K and HY. Steiger H, et al. **J Basic Microbiol** 1996;36(6):439-45

SERTOLI CELL TUMOR

[Sertoli cell tumor of the testis. Report of a case (see comments)] Díaz Calleja E, et al. **Arch Esp Urol** 1997 Mar; 50(2):193-5 (Eng. Abstr.). Comment in: Arch Esp Urol 1997 Apr;50(3):305. **(Spa)**

[Sertoli cell tumor. Report of a case (letter; comment)] Pellicé i Vilalta C. **Arch Esp Urol** 1997 Apr;50(3):305. Comment on: Arch Esp Urol 1997 Mar;50(2):193-5. **(Spa)**

COMPLICATIONS

Bilateral large cell calcifying Sertoli cell tumor of the testis in a 7-year-old boy. White MD, et al. **J Urol** 1997 Oct; 158(4):1547-8

PATHOLOGY

Mucinous elements in Sertoli-Leydig and granulosa cell tumours: a reevaluation. Doussis-Anagnostopoulou IA, et

al. **Histopathology** 1996 Apr;28(4):372–5
Malignant Sertoli cell tumor in a prepubescent boy. Kolon TF, et al. **J Urol** 1997 Aug;158(2):608–9
Malignant Sertoli cell tumor of the testicle in a black man. Zeitlin SI, et al. **J Urol** 1996 Dec;156(6):2006 (3 ref.)

SURGERY

Conservative management of Sertoli–Leydig cell tumor of the ovary. Hillemanns P, et al.
Acta Obstet Gynecol Scand 1997 Jul;76(6):604–5

THERAPY

Metastatic Sertoli cell carcinoma of the testis. Mene MP, et al. **J Am Osteopath Assoc** 1996 Oct;96(10):612–4 (7 ref.)

ULTRASONOGRAPHY

[Calcifying giant–cell Sertoli tumor: description of a case wtih atypical echographic presentation] Moro U, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):105–8 (19 ref.) (Eng. Abstr.) **(Ita)**

SERTOLI CELLS

Does the gonadotrophic axis play a role in the pathogenesis of Sertoli–cell–only syndrome? Leifke E, et al.
Int J Androl 1997 Feb;20(1):29–36
Is it Sertoli cell only syndrome? A case study and clinical caution. Driscoll GL, et al. **Pathology** 1996 Nov; 28(4):309–10

CHEMISTRY

Differential distribution of the tight–junction–associated protein ZO–1 isoforms alpha+ and alpha– in guinea pig Sertoli cells: a possible association with F–actin and G–actin. Pelletier RM, et al. **Biol Reprod** 1997 Aug; 57(2):367–76
Expression of apolipoprotein E mRNA in the epithelium and interstitium of the testis and the epididymis. Law GL, et al. **J Androl** 1997 Jan–Feb;18(1):32–42
Conserved structure, regulatory elements, and transcriptional regulation from the GATA–1 gene testis promoter. Onodera K, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):251–63
Purification and cellular localization of beta2–microglobulin in the testis. O'Bryan MK, et al. **Life Sci** 1997;61(5):487–94

CYTOLOGY

Sertoli cell–spermatid tubulobulbar complexes in the ram. Bielli A. **Anat Histol Embryol** 1997 Jun;26(2):151–5
Transcriptional regulation of sertoli cell differentiation by follicle–stimulating hormone at the level of the c–fos and transferrin promoters. Chaudhary J, et al. **Biol Reprod** 1996 Mar;54(3):692–9
Neonatal exposure of rats to recombinant follicle stimulating hormone increases adult Sertoli and spermatogenic cell numbers. Meachem SJ, et al. **Biol Reprod** 1996 Jan; 54(1):36–44
Discriminative analysis of rat Sertoli and peritubular cells and their proliferation in vitro: evidence for follicle–stimulating hormone–mediated contact inhibition of Sertoli cell mitosis. Schlatt S, et al. **Biol Reprod** 1996 Aug;55(2):227–35
Pre– and postmeiotic expression of male germ cell–specific genes throughout 2–week cocultures of rat germinal and Sertoli cells. Weiss M, et al. **Biol Reprod** 1997 Jul; 57(1):68–76
Post–thaw viability and functionality of cryopreserved rat fetal brain cells cocultured with Sertoli cells [see comments] Cameron DF, et al. **Cell Transplant** 1997 Mar–Apr;6(2):185–9. Comment in: Cell Transplant 1997 Mar–Apr;6(2):191–3.
The testis–derived cultured Sertoli cell as a natural Fas–L secreting cell for immunosuppressive cellular therapy [comment] Sanberg PR, et al. **Cell Transplant** 1997 Mar–Apr;6(2):191–3. Comment on: Cell Transplant 1997 Mar–Apr;6(2):185–9.
Sertoli cell–induced defects on functional and structural characteristics of isolated neonatal porcine islets. Selawry HP, et al. **Cell Transplant** 1996 Sep–Oct;5(5):517–24
Identification, isolation, and characterization of a 41–kilodalton protein from rat germ cell–conditioned medium exhibiting concentration–dependent dual biological activities. Aravindan GR, et al. **Endocrinology** 1997 Aug;138(8):3259–68
Role of basic–helix–loop–helix transcription factors in Sertoli cell differentiation: identification of an E–box response element in the transferrin promoter. Chaudhary J, et al. **Endocrinology** 1997 Feb;138(2):667–75
Development and characterization of a prepubertal rat Sertoli cell line, 93RS2. Jiang C, et al. **J Androl** 1997 Jul–Aug; 18(4):393–9
Alternative splicing of CREB and CREM mRNAs in an immortalized germ cell line. Sanborn BM, et al.
J Androl 1997 Jan–Feb;18(1):62–70
Recognition of phosphatidylserine on the surface of apoptotic spermatogenic cells and subsequent phagocytosis by Sertoli cells of the rat. Shiratsuchi A, et al. **J Biol Chem** 1997 Jan 24;272(4):2354–8
Different distributions of homologous chromosomes in adult human Sertoli cells and in lymphocytes signify nuclear differentiation. Chandley AC, et al. **J Cell Sci** 1996 Apr; 109 (Pt 4):773–6
Biochemical and 31P–NMR spectroscopic evaluation of immobilized perfused rat Sertoli cells. Farghali H, et al. **J Lab Clin Med** 1996 Oct;128(4):408–16
Characterization of nerve growth factor precursor protein expression in rat round spermatids and the trophic effects of nerve growth factor in the maintenance of Sertoli cell viability. Chen Y, et al. **Mol Cell Endocrinol** 1997 Mar 28; 127(2):129–36
Transplantation of testis–derived Sertoli cells into the mammalian brain. Sanberg PR, et al. **Transplant Proc** 1997 Jun;29(4):1926–8 (42 ref.)

DRUG EFFECTS

Follicle–stimulating hormone activates a cAMP–dependent chloride conductance in TM4 Sertoli cells. Jungwirth A, et al. **Biochem Biophys Res Commun** 1997 Apr 7; 233(1):203–6
Follicle–stimulating hormone (FSH) regulates the expression of FSH receptor messenger ribonucleic acid in cultured Sertoli cells and in hypophysectomized rat testis. Maguire SM, et al. **Biol Reprod** 1997 May;56(5):1106–11
Estrogens potentiate the stimulatory effects of follicle–stimulating hormone on N–cadherin messenger ribonucleic acid levels in cultured mouse Sertoli cells. MacCalman CD, et al. **Endocrinology** 1997 Jan;138(1):41–8
A time course study on the "in vitro" effects of T3 and testosterone on androgen and estrogen receptors in peripuberal primary rat Sertoli cells. Sisci D, et al.
Exp Clin Endocrinol Diabetes 1997;105(4):218–24
Effect of chloroquine on the formation of tight junctions in cultured immature rat Sertoli cells. Okanlawon A, et al. **J Androl** 1996 May–Jun;17(3):249–55
Sertoli cells in culture and mRNA differential display provide a sensitive early warning assay system to detect changes induced by xenobiotics. Syed V, et al. **J Androl** 1997 May–Jun;18(3):264–73
Neonatal administration of FSH increases Sertoli cell numbers and spermatogenesis in gonadotropin–deficient (hpg) mice. Singh J, et al. **J Endocrinol** 1996 Oct; 151(1):37–48
Sertoli cells as potential targets of prolactin action in the testis. Guillaumot P, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):199–206
Effect of gossypol on cultured TM3 Leydig and TM4 Sertoli cells: 31P and 23Na NMR study. Hansen LL, et al.
NMR Biomed 1996 Apr;9(2):72–8

ENZYMOLOGY

Cloning of cDNA for asparagine synthetase from rat Sertoli cell. Hongo S, et al. **Biochem Mol Biol Int** 1996 Feb; 38(1):189–96
Regulation of protein kinase A subunits by cyclic adenosine 3',5'–monophosphate in a mouse Sertoli cell line (MSC–1): induction of RII beta messenger ribonucleic acid is independent of continuous protein synthesis. Knutsen HK, et al. **Biol Reprod** 1996 Jul;55(1):5–10
Gelatinase A secretion and its control in peritubular and Sertoli cell cultures: effects of hormones, second messengers and inducers of cytokine production. Hoeben E, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):37–46
[In vitro gene expression of aromatase in rat testicular cells] Levallet J, et al. **C R Acad Sci III** 1997 Feb;320(2):123–9 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Sertoli cells, but not tumor cells, of seminoma in situ express ICAM–1. Braendstrup O, et al. **APMIS** 1996 Nov; 104(11):817–22
HLA class I antigens are expressed by Sertoli cells of intratubular germ cell neoplasia. Braendstrup O. **APMIS** 1996 Jul–Aug;104(7–8):579–82
Antigen–presenting function of murine gonadal epithelial cell lines. Housseau F, et al. **Cell Immunol** 1997 Apr 10; 177(1):93–101

METABOLISM

Differential expression of placental (P)–cadherin in sertoli cells and peritubular myoid cells during postnatal development of the mouse testis. Lin LH, et al.
Anat Rec 1996 Feb;244(2):155–64
Sertoli cell conditioned media modulate the androgen biosynthetic pathways in rat Leydig cell primary cultures. Herrera J, et al. **Arch Androl** 1996 Sep–Oct;37(2):127–33
Transfer of cholesterol between high density lipoproteins and cultured rat Sertoli cells. Fofana M, et al.
Biochem Cell Biol 1996;74(5):681–6
Voltage–dependent calcium current with properties of T–type current in Sertoli cells from immature rat testis in primary cultures. Lalevée N, et al. **Biol Reprod** 1997 Mar;56(3):680–7
Follicle–stimulating hormone (FSH) regulates the expression of FSH receptor messenger ribonucleic acid in cultured Sertoli cells and in hypophysectomized rat testis. Maguire SM, et al. **Biol Reprod** 1997 May;56(5):1106–11
Rat Sertoli cell calcium response to basement membrane and follicle–stimulating hormone. Ravindranath N, et al.
Biol Reprod 1996 Jan;54(1):130–7
Multiple fucosyltransferases and their carbohydrate ligands are involved in spermatogenic cell–Sertoli cell adhesion in vitro in rats. Raychoudhury SS, et al. **Biol Reprod** 1997 May;56(5):1268–73
Regulated assembly of connexin33 and connexin43 into rat Sertoli cell gap junctions. Tan IP, et al. **Biol Reprod** 1996 Jun;54(6):1300–10
Pre– and postmeiotic expression of male germ cell–specific genes throughout 2–week cocultures of rat germinal and Sertoli cells. Weiss M, et al. **Biol Reprod** 1997 Jul; 57(1):68–76
Influence of thyroid hormone on Sertoli cell protein metabolism in the prepubertal pig. Palmero S, et al.
Boll Soc Ital Biol Sper 1996 May–Jun;72(5–6):163–70
Pem: a testosterone– and LH–regulated homeobox gene expressed in mouse Sertoli cells and epididymis. Lindsey JS, et al. **Dev Biol** 1996 Nov 1;179(2):471–84
The nuclear receptor SF–1 mediates sexually dimorphic expression of Mullerian Inhibiting Substance, in vivo. Giuili G, et al. **Development** 1997 May;124(9):1799–807
Vectorial production of interleukin 1 and interleukin 6 by rat Sertoli cells cultured in a dual culture compartment system. Cudicini C, et al. **Endocrinology** 1997 Jul; 138(7):2863–70
Transcriptional regulation of Sertoli cell immediate early genes by interleukin–6 and interferon–gamma is mediated through phosphorylation of STAT–3 and STAT–1 proteins. Jenab S, et al. **Endocrinology** 1997 Jul; 138(7):2740–6
Differential activation of signal transducer and activator of transcription (STAT)–3 and STAT–1 transcription factors and c–fos messenger ribonucleic acid by interleukin–6 and interferon–gamma in Sertoli cells. Jenab S, et al.
Endocrinology 1996 Nov;137(11):4738–43
Tumor necrosis factor–alpha–stimulated lactate production is linked to lactate dehydrogenase A expression and activity increase in porcine cultured Sertoli cells. Nehar D, et al.
Endocrinology 1997 May;138(5):1964–71
Hormonal dependency of neural cadherin in the binding of round spermatids to Sertoli cells in vitro. Perryman KJ, et al. **Endocrinology** 1996 Sep;137(9):3877–83
Immunohistochemical analysis of androgen effects on androgen receptor expression in developing Leydig and Sertoli cells. Shan LX, et al. **Endocrinology** 1997 Mar; 138(3):1259–66
Kinesin localizes to the trans–Golgi network regardless of microtubule organization. Johnson KJ, et al.
Eur J Cell Biol 1996 Mar;69(3):276–87
Differential effects of heat shock on translation of normal mRNAs in primary spermatocytes, elongated spermatids, and Sertoli cells in seminiferous tubule culture. Cataldo L, et al. **Exp Cell Res** 1997 Feb 25;231(1):206–13
A time course study on the "in vitro" effects of T3 and testosterone on androgen and estrogen receptors in peripuberal primary rat Sertoli cells. Sisci D, et al.
Exp Clin Endocrinol Diabetes 1997;105(4):218–24
Comparative effects of diverse vertebrate gonadotropins on estradiol–17 beta formation in vitro in an immature rat Sertoli cell bioassay. Yu JY, et al.
Gen Comp Endocrinol 1996 Nov;104(2):253–61
Immunohistochemical detection of immature Sertoli cell markers in testicular tissue of infertile adult men: a preliminary study. Steger K, et al. **Int J Androl** 1996 Apr; 19(2):122–8
Expression of clusterin/sulfated glycoprotein–2 under conditions of heat stress in rat Sertoli cells and a mouse Sertoli cell line. Clark AM, et al. **J Androl** 1997 May–Jun; 18(3):257–63
Low density lipoprotein receptor–related protein–1 expression in the testis: regulated expression in Sertoli cells. Igdoura SA, et al. **J Androl** 1997 Jul–Aug;18(4):400–10
Enzymatic digestion of bradykinin by rat Sertoli cell cultures. Monsees TK, et al. **J Androl** 1996 Jul–Aug;17(4):375–81
Identification and characterization of espin, an actin–binding protein localized to the F–actin–rich junctional plaques of Sertoli cell ectoplasmic specializations. Bartles JR, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1229–39
Human Leydig cells and Sertoli cells are producers of interleukins–1 and –6. Cudicini C, et al.
J Clin Endocrinol Metab 1997 May;82(5):1426–33
Capacitative calcium entry in rat Sertoli cells. Rossato M, et al. **J Endocrinol Invest** 1996 Sep;19(8):516–23
Biochemical and 31P–NMR spectroscopic evaluation of immobilized perfused rat Sertoli cells. Farghali H, et al.
J Lab Clin Med 1996 Oct;128(4):408–16
The same sequence mediates activation of the human urokinase promoter by cAMP in mouse Sertoli cells and by SV40 large T antigen in COS cells. Grimaldi P, et al.
Mol Cell Endocrinol 1996 Mar 25;117(2):167–73
Characterization of the 5'–flanking region of the gene for the cAMP–inducible protein kinase A subunit, RIIbeta, in Sertoli cells. Knutsen HK, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):101–14
omega–Conotoxin–sensitive Ca2+ voltage–gated channels modulate protein secretion in cultured rat Sertoli cells. Taranta A, et al. **Mol Cell Endocrinol** 1997 Feb 7; 126(2):117–23
Hormonal and developmental regulation of DAX–1 expression in Sertoli cells. Tamai KT, et al.
Mol Endocrinol 1996 Dec;10(12):1561–9
Characterization of an intronic promoter of a cyclic adenosine 3',5'–monophosphate (cAMP)–specific phosphodiesterase gene that confers hormone and cAMP

inducibility. Vicini E, et al. **Mol Endocrinol** 1997 Jun; 11(7):839–50

Mammalian oocyte growth in vitro is stimulated by soluble factor(s) produced by preantral granulosa cells and by Sertoli cells. Cecconi S, et al. **Mol Reprod Dev** 1996 Aug; 44(4):540–6

Insulin–like growth factor (IGF–I) mRNA and IGF–I receptor in trout testis and in isolated spermatogenic and Sertoli cells. Le Gac F, et al. **Mol Reprod Dev** 1996 May; 44(1):23–35

Up–regulation and down–regulation of genes expressed in cocultures of rat Sertoli cells and germ cells. Syed V, et al. **Mol Reprod Dev** 1997 Aug;47(4):380–9

Effect of gossypol on cultured TM3 Leydig and TM4 Sertoli cells: 31P and 23Na NMR study. Hansen LL, et al. **NMR Biomed** 1996 Apr;9(2):72–8

Sertoli cells in culture release a pregnancy specific beta1 glycoprotein–like substance. Boockfor FR. **Proc Soc Exp Biol Med** 1997 Feb;214(2):139–45

Intermediate filaments in the Sertoli cells of the ageing human testis. de Miguel MP, et al. **Virchows Arch** 1997 Aug; 431(2):131–8

PATHOLOGY

Testicular juvenile granulosa cell and Sertoli cell tumours: a clinicopathological study of 29 cases from the Kiel Paediatric Tumour Registry. Harms D, et al. **Virchows Arch** 1997 Apr;430(4):301–9

PHYSIOLOGY

Puberty occurring either spontaneously or induced precociously in rhesus monkey (Macaca mulatta) is associated with a marked proliferation of Sertoli cells [published erratum appears in Biol Reprod 1996 Sep;55(3):728] Marshall GR, et al. **Biol Reprod** 1996 Jun; 54(6):1192–9

Role of NCAM, cadherins, and microfilaments in cell–cell contact formation in TM4 immature mouse sertoli cells. Sandig M, et al. **Cell Motil Cytoskeleton** 1997;36(2):149–63

Sertoli cell signaling by Desert hedgehog regulates the male germline. Bitgood MJ, et al. **Curr Biol** 1996 Mar 1; 6(3):298–304

Stage–specific signals in germ line differentiation: control of Sertoli cell phagocytic activity by spermatogenic cells. Grandjean V, et al. **Dev Biol** 1997 Apr 1;184(1):165–74

Human stem cell factor promoter deoxyribonucleic acid sequence and regulation by cyclic 3',5'–adenosine monophosphate in a Sertoli cell line. Taylor WE, et al. **Endocrinology** 1996 Dec;137(12):5407–14

Survival of rat and porcine Sertoli cell transplants in the rat striatum without cyclosporine–A immunosuppression. Saporta S, et al. **Exp Neurol** 1997 Aug;146(2):299–304

Paracrine control of human Leydig cell and Sertoli cell functions. Carreau S. **Folia Histochem Cytobiol** 1996; 34(3–4):111–9 (90 ref.)

Cloning and characterization of the 5' flanking region of the stem cell factor gene in rat Sertoli cells. Jiang C, et al. **Gene** 1997 Feb 7;185(2):285–90

DNA sequences and their binding proteins required for Sertoli cell–specific transcription of the rat androgen–binding protein gene. Fenstermacher DA, et al. **Mol Endocrinol** 1997 Aug;11(9):1387–400

SECRETION

Temperature and germ cell regulation of Leydig cell proliferation stimulated by Sertoli cell–secreted mitogenic factor: a possible role in cryptorchidism. Wu N, et al. **Andrologia** 1996 Sep–Oct;28(5):247–57

Hormonal modulation of riboflavin carrier protein secretion by immature rat Sertoli cells in culture. Subramanian S, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):41–50

TRANSPLANTATION

Survival of rat and porcine Sertoli cell transplants in the rat striatum without cyclosporine–A immunosuppression. Saporta S, et al. **Exp Neurol** 1997 Aug;146(2):299–304

ULTRASTRUCTURE

Changes in the distribution of intermediate filaments in rat Sertoli cells during the seminiferous epithelium cycle and postnatal development. Zhu LJ, et al. **Anat Rec** 1997 Jul; 248(3):391–405

Variation in expression of hsp27 messenger ribonucleic acid during the cycle of the seminiferous epithelium and co–localization of hsp27 and microfilaments in Sertoli cells of the rat. Welsh MJ, et al. **Biol Reprod** 1996 Jul; 55(1):141–51

The inter–Sertoli cell tight junctions in germ cell–free seminiferous tubules from prenatally irradiated rats: a freeze–fracture study. Ribeiro AF, et al. **Cell Biol Int** 1996 Jul;20(7):513–22

Stereological, ultrastructural analysis of Sertoli cells of male mouse embryos. Jankowska E, et al. **Folia Morphol (Warsz)** 1996;55(4):287–9

Variability of shape and ultrastructure of supporting cell nuclei (Sertoli cells) in the European bison. Matuszewska M, et al. **Folia Morphol (Warsz)** 1996;55(4):390–2

Sertoli cell barrier dysfunction and spermatogenetic cycle breakdown in the human testis: a lanthanum tracer investigation. Meyer JM, et al. **Int J Androl** 1996 Jun; 19(3):190–8

Ultrastructural identification of Sertoli cells in the semen of subfertile men. About four cases. Mansat A, et al. **J Submicrosc Cytol Pathol** 1997 Apr;29(2):197–9

Atypical cilia in testicular cells from normal rats. Ponzio R, et al. **J Submicrosc Cytol Pathol** 1997 Jul;29(3):313–6

VIROLOGY

Detection of viral RNA by electron microscopic in situ hybridization (ISH–EM) in the germinal epithelium of mice infected with encephalomyocarditis (EMC) virus. Ueno A, et al. **Exp Anim** 1997 Jan;46(1):79–81

SERTOLI–LEYDIG CELL TUMOR

BLOOD

Sertoli Leydig cell tumor with malignant heterologous elements and raised alpha–fetoprotein: a case report. Singh ZN, et al. **J Obstet Gynaecol Res** 1996 Dec;22(6):595–8

DIAGNOSIS

Ovarian Sertoli–Leydig cell tumor in an amenorrheic hirsute patient. Tsai CC, et al. **Chang Keng I Hsueh** 1996 Jun; 19(2):191–5

DRUG THERAPY

Platinum based chemotherapy to treat recurrent Sertoli–Leydig cell ovarian carcinoma during pregnancy. Tomlinson MW, et al. **Eur J Gynaecol Oncol** 1997; 18(1):44–6 (18 ref.)

ENZYMOLOGY

Presence of 17 beta–hydroxysteroid dehydrogenase type 3 messenger ribonucleic acid transcript in an ovarian Sertoli–Leydig cell tumor. Barbieri RL, et al. **Fertil Steril** 1997 Sep;68(3):534–7

PATHOLOGY

Sertoli Leydig cell tumor with malignant heterologous elements and raised alpha–fetoprotein: a case report. Singh ZN, et al. **J Obstet Gynaecol Res** 1996 Dec;22(6):595–8

SERUM A RELATED PROTEIN see **AMYLOID PROTEIN SAA**

SERUM ALBUMIN

see related
RECEPTORS, ALBUMIN

Correlates of hypoalbuminemia in community–dwelling older persons. Reuben DB, et al. **Am J Clin Nutr** 1997 Jul; 66(1):38–45

Chromatographic measurement of drug–protein interaction: determination of HIV protease inhibitor–serum albumin association. Koeplinger KA, et al. **Anal Biochem** 1996 Dec 1;243(1):66–73

Thyroid hormone–free albumin: charcoal treatment or resin treatment. Tanaka K, et al. **Ann Nucl Med** 1996 Aug; 10(3):357–9

Adsorption behaviour of amphiphilic polymers at hydrophobic surfaces: effects on protein adsorption. Freij–Larsson C, et al. **Biomaterials** 1996 Nov; 17(22):2199–207

Preparation of surface–modified albumin nanospheres. Lin W, et al. **Biomaterials** 1997 Apr;18(7):559–65

Effects of albumin coating of knitted Dacron grafts on transinterstitial blood loss and tissue ingrowth and incorporation. Kang SS, et al. **Cardiovasc Surg** 1997 Apr; 5(2):184–9

Reduced pregnancy rates following the transfer of human embryos frozen or thawed in culture media supplemented with normal serum albumin. Warnes GM, et al. **Hum Reprod** 1997 Jul;12(7):1525–30

Packed red blood cells and bovine serum albumin as a blood meal source for Anopheles farauti. Sianturi LJ, et al. **J Am Mosq Control Assoc** 1996 Dec;12(4):730–1

The effect of ultrasound frame rate on perfluorocarbon–exposed sonicated dextrose albumin microbubble size and concentration when insonifying at different flow rates, transducer frequencies, and acoustic outputs. Porter TR, et al. **J Am Soc Echocardiogr** 1997 Jul–Aug;10(6):593–601

Interaction of diagnostic ultrasound with synthetic oligonucleotide–labeled perfluorocarbon–exposed sonicated dextrose albumin microbubbles. Porter TR, et al. **J Ultrasound Med** 1996 Aug;15(8):577–84

Reduced renal clearance of furancarboxylic acid, a major albumin–bound organic acid, in undialyzed uremic patients. Sato M, et al. **Nephron** 1996;74(2):419–21

Particle size and its mathematical distribution in six human albumin macroaggregate (MAA) kits [letter] Mallol J, et al. **Nucl Med Commun** 1997 Jan;18(1):87–8

Viral infectivity of albumin and plasma protein fraction. Erstad BL. **Pharmacotherapy** 1996 Nov–Dec; 16(6):996–1001 (47 ref.)

Increased immunogenicity of human vertebral body marrow after processing in bovine versus human serum albumin. Linetsky E, et al. **Transplant Proc** 1997 Jun;29(4):1960

[Utilization of serum banks for veterinary seroepidemiological research serving the Dutch livestock industry] Elbers AR. **Tijdschr Diergeneeskd** 1996 Dec 1; 121(23):676–8 (Eng. Abstr.) **(Dut)**

[Bialbunemia and pancreatic ascites (letter)] Le Gall P, et al. **Gastroenterol Clin Biol** 1997;21(6–7):531–4 **(Fre)**

[In vitro cultivation of human chondrocytes using autologous human serum supplemented culture medium: minimizing possible risk of infection with pathogens of prion diseases] Gruber R, et al. **Laryngorhinootologie** 1996 Feb;75(2):105–8 (Eng. Abstr.) **(Ger)**

[Reality and clinical application of albumin preparation] Kikuchi S, et al. **Nippon Naika Gakkai Zasshi** 1996 Jun 10;85(6):818–23 (5 ref.) **(Jpn)**

[Mutagenic and antimutagenic activities of human whole blood, plasma and albumin] Semenov VV, et al. **Vestn Ross Akad Med Nauk** 1997;(7):33–5 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Albumin priming does not prolong hemofilter life. Reeves JH, et al. **ASAIO J** 1997 May–Jun;43(3):193–6

Randomized, double–blind study of intravenous human albumin in hypoalbuminemic patients receiving total parenteral nutrition. Rubin H, et al. **Crit Care Med** 1997 Feb;25(2):249–52

Effects of fluid resuscitation with recombinant human serum albumin solution on maintaining hepatic energy metabolism in hemorrhagic shock rabbits. Nakatani T, et al. **Res Exp Med (Berl)** 1996;196(5):317–25

Fluid resuscitation with Haemaccel vs. human albumin following coronary artery bypass grafting. Wahba A, et al. **Thorac Cardiovasc Surg** 1996 Aug;44(4):178–82

[Albumin as volume replacement: pro] Boldt J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep; 31(7):427–8 **(Ger)**

[Albumin as volume replacement: contra] von Bormann B. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep; 31(7):429–31 **(Ger)**

[Experimental substantiation of the use of ligand–free albumin in burn toxemia] Sakhno LA, et al. **Klin Khir** 1996;(5):39–41 **(Rus)**

ADVERSE EFFECTS

A safety study of Albumex 5, a human albumin solution produced by ion exchange chromatography. Wolf M, et al. **Vox Sang** 1996;70(4):198–202

ANALYSIS

Day–night differences in mucosal plasma proteins in common cold. Greiff L, et al. **Acta Otolaryngol (Stockh)** 1996 Jan; 116(1):85–90

Serum albumin is associated with skeletal muscle in elderly men and women. Baumgartner RN, et al. **Am J Clin Nutr** 1996 Oct;64(4):552–8

Peritoneal transport kinetics correlate with serum albumin but not with the overall nutritional status in CAPD patients. Cueto–Manzano AM, et al. **Am J Kidney Dis** 1997 Aug; 30(2):229–36

Albumin trend and mortality [letter; comment] Goldwasser P. **Am J Kidney Dis** 1997 Aug;30(2):308–9. Comment on: Am J Kidney Dis 1996 Nov;28(5):741–6.

Determinants of albumin concentration in hemodialysis patients. Kaysen GA, et al. **Am J Kidney Dis** 1997 May; 29(5):658–68

Serum albumin level at admission: mortality and clinical outcome in geriatric patients. D'Erasmo E, et al. **Am J Med Sci** 1997 Jul;314(1):17–20

Pulmonary epithelial cell injury and alveolar–capillary permeability in berylliosis. Inoue Y, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):109–15

Fluorometric determination for micro amounts of albumin and globulin fractions without separation by using alpha, beta, gamma, delta–tetra(4'–carboxyphenyl)porphin. Li N, et al. **Anal Biochem** 1996 Jan 15;233(2):151–5

Fluorometric detection of biological S–nitrosothiols. Park JK, et al. **Anal Biochem** 1997 Jun 15;249(1):61–6

A rapid polarographic immunoassay based on the anodic current of metal labeling. Qiu J, et al. **Anal Biochem** 1996 Aug 15;240(1):13–6

Fluorescence polarization immunoassay of a high–molecular–weight antigen using a long wavelength–absorbing and laser diode–excitable metal–ligand complex. Terpetschnig E, et al. **Anal Biochem** 1996 Aug 15;240(1):54–9

Adjustment of serum total calcium for albumin concentration: effects of non–linearity and of regression differences between laboratories. Barth JH, et al. **Ann Clin Biochem** 1996 Jan;33 (Pt 1):55–8

Age–related changes in albumin adjusted serum calcium in Hong Kong Chinese [letter] Ko GT, et al. **Ann Clin Biochem** 1997 Sep;34 (Pt 5):571–3

Adjustment of serum total calcium for albumin concentration: values change with age in women but not in men. Payne RB, et al. **Ann Clin Biochem** 1996 Jan;33 (Pt 1):59–62

Predicting unbound phenytoin concentrations in the critically ill neurosurgical patient [see comments] Mlynarek ME, et al. **Ann Pharmacother** 1996 Mar;30(3):219–23. Comment in: Ann Pharmacother 1996 Oct;30(10):1200–1.

The influence of hypoalbuminemia in the generation of nephrotic hyperlipidemia. Joven J, et al. **Atherosclerosis** 1996 Oct 25;126(2):243–52

High-performance liquid chromatographic determination of human serum albumin in plasma and urine by post-column fluorescence enhancement detection using 8-anilino-1-naphthalenesulfonic acid. Ishida J, et al. **Biol Pharm Bull** 1996 Nov;19(11):1391-5

Immunohistochemical studies on the distribution of albumin, fibrinogen, fibronectin, IgG and collagen around PTFE and titanium implants. Rosengren A, et al. **Biomaterials** 1996 Sep;17(18):1779-86

Laser system for measuring small changes in plasma tracer concentrations. Klaesner JW, et al. **Biomed Instrum Technol** 1996 Nov-Dec;30(6):507-16

Using 125I-albumin exclusively for blood volume examinations [letter] Najean Y. **Blood Cells Mol Dis** 1997; 23(1):C1-3

Aflatoxin-albumin adducts: a basis for comparative carcinogenesis between animals and humans. Wild CP, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Mar;5(3):179-89

Determination of albumin and hemoglobin adducts in workers exposed to styrene and styrene oxide. Yeowell-O'Connell K, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Mar;5(3):205-15

Maternal hematocrit and albumin as predictors of intrauterine growth retardation and preterm delivery. Forest JC, et al. **Clin Biochem** 1996 Dec;29(6):563-6

Heparin interference with sodium and albumin assays [letter] Karon BS, et al. **Clin Chem** 1997 Apr;43(4):697-8

Cytotoxicity of bilirubin for human fibroblasts and rat astrocytes in culture. Effect of the ratio of bilirubin to serum albumin. Chuniaud L, et al. **Clin Chim Acta** 1996 Dec 30;256(2):103-14

Serum and urine albumin: a progress report on their measurement and clinical significance. Doumas BT, et al. **Clin Chim Acta** 1997 Feb 3;258(1):3-20 (105 ref.)

Albumin standards and the measurement of serum albumin with bromcresol green. 1971 [classical article] Dumas BT, et al. **Clin Chim Acta** 1997 Feb 3;258(1):21-30

High sensitivity identification of proteins by electrospray ionization tandem mass spectrometry: initial comparison between an ion trap mass spectrometer and a triple quadrupole mass spectrometer. Figeys D, et al. **Electrophoresis** 1997 Mar-Apr;18(3-4):360-8

Preparative affinity membrane electrophoresis. Horvath ZS, et al. **Electrophoresis** 1996 Jan;17(1):224-6

Serum albumin, coronary heart disease risk, and mortality in an elderly cohort. Weijenberg MP, et al. **Epidemiology** 1997 Jan;8(1):87-92

Familial dysalbuminemic hyperthyroxinemia and thyroid hormone autoantibodies: interference in current free thyroid hormone assays. Sapin R, et al. **Horm Res** 1996; 45(3-5):139-41 (8 ref.)

Dialysis adequacy and nutrition determine prognosis in continuous ambulatory peritoneal dialysis patients. Fung L, et al. **J Am Soc Nephrol** 1996 May;7(5):737-44

The significance of oncometry for infusion therapy during pediatric heart surgery. Bartels C, et al. **J Cardiovasc Surg (Torino)** 1997 Jun;38(3):249-55

Synthesis and application of boronic acid-immobilized porous polymer particles: a novel packing for high-performance liquid affinity chromatography. Koyama T, et al. **J Chromatogr B Biomed Appl** 1996 Apr 26; 679(1-2):31-40

Albumin as a predictor of mortality in elderly patients [letter; comment] Rozzini R, et al. **J Clin Epidemiol** 1997 Jul; 50(7):865-7. Comment on: J Clin Epidemiol 1996 Sep;49(9):981-8.

Alpha feto-protein and albumin in ascitic fluid in hepatocellular carcinoma patients. Sadek A, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):455-64

Development of a specific fluoroimmunoassay for ovine albumin. Hreczuk-Hirst DH, et al. **J Immunoassay** 1997 Aug;18(3):203-13

A case of bisalbuminaemia with immunological studies on albumin variant. Kandle SK, et al. **J Indian Med Assoc** 1996 Jan;94(1):31,33

Quantitative comparison between serum components and somatic cells in bovine quarter milk. Nagatomo H, et al. **J Vet Med Sci** 1996 Nov;58(11):1121-3

Serum albumin is predictive of 30-day survival after percutaneous endoscopic gastrostomy [see comments] Friedenberg F, et al. **JPEN J Parenter Enteral Nutr** 1997 Mar-Apr;21(2):72-4. Comment in: JPEN J Parenter Enteral Nutr 1997 Mar-Apr;21(2):53-4.

Low serum albumin and increased risk of mortality after percutaneous endoscopic gastrostomy: surprised? [editorial; comment] Kirby DF. **JPEN J Parenter Enteral Nutr** 1997 Mar-Apr;21(2):53-4. Comment on: JPEN J Parenter Enteral Nutr 1997 Mar-Apr;21(2):72-4.

Clinical characteristics of preoperative hypoalbuminemia predict outcome of cardiovascular surgery. Rady MY, et al. **JPEN J Parenter Enteral Nutr** 1997 Mar-Apr; 21(2):81-90

Serum albumin in continuous peritoneal dialysis: its predictors and relationship to urea clearance. Malhotra D, et al. **Kidney Int** 1996 Jul;50(1):243-9

Assessment of nutritional status in CAPD patients: serum albumin is not a useful measure. Jones CH, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1406-13

Serum albumin and survival in CAPD patients: the implications of concentration trends over time. Jones CH, et al. **Nephrol Dial Transplant** 1997 Mar;12(3):554-8

Serum albumin for estimating creatinine clearance in the elderly with muscle atrophy. Sanaka M, et al. **Nephron** 1996;73(2):137-44

Serum albumin distribution in early treated anorexia nervosa [see comments] Smith G, et al. **Nutrition** 1996 Oct; 12(10):677-84. Comment in: Nutrition 1996 Oct;12(10):720-1.

Serum/ascites albumin gradient: its value as a rational approach to the differential diagnosis of ascites. Akriviadis EA, et al. **Scand J Gastroenterol** 1996 Aug;31(8):814-7

The exudate-transudate definition is dated [letter] Kyriacou E. **Scand J Gastroenterol** 1997 Jul;32(7):736

Milk N-acetyl-beta-D-glucosaminidase and serum albumin as indicators of subclinical mastitis in the camel. Abdurahman OA. **Zentralbl Veterinarmed A** 1995 Dec; 42(10):643-7

[Threshold values of colloid-osmotic pressure, serum albumin or protein during perioperative period] Baron JF, et al. **Ann Fr Anesth Reanim** 1996;15(4):447-55 (Eng. Abstr.) **(Fre)**

[Protein profile and iron deficiency: value of the study of the albumin-transferrin couple] Cacoub P, et al. **Rev Med Interne** 1996;17(8):627-34 (Eng. Abstr.) **(Fre)**

[The effect of the albumin concentration on the relation between the concentration of ionized calcium and total calcium in the blood of dogs] Mischke R, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Jun;103(6):199-204 (Eng. Abstr.) **(Ger)**

[Serum albumin level as a predictor of incidence of febrile episodes and mortality in hospitalized geriatric patients] Ikematsu H, et al. **Kansenshogaku Zasshi** 1996 Dec; 70(12):1259-65 (Eng. Abstr.) **(Jpn)**

[Diagnostic efficacy of albumin gradient in different causes of ascitis] Laudanno OM, et al. **Acta Gastroenterol Latinoam** 1995;25(5):285-90 (Eng. Abstr.) **(Spa)**

[Sero-ascitic gradient of albumin: usefulness and diagnostic limitations] Alba D, et al. **An Med Interna** 1995 Aug; 12(8):404-7 (51 ref.) (Eng. Abstr.) **(Spa)**

[Albumin is still administered on doubtful indications. The results are not better than those of common salt or colloid solutions (see comments)] Zetterström H. **Lakartidningen** 1997 Feb 26;94(9):711-3. Comment in: Lakartidningen 1997 Jun 18;94(25):2355. **(Swe)**

BIOSYNTHESIS

An alternative column chromatographic process for the production of human albumin. Tanaka K, et al. **Braz J Med Biol Res** 1996 Feb;29(2):185-91

Identification and characterization of promoter elements responsible for the induction of the albumin gene by heat shock in early embryonic rat liver. Swamynathan SK, et al. **DNA Cell Biol** 1996 Oct;15(10):897-905

The synthesis rates of total liver protein and plasma albumin determined simultaneously in vivo in humans. Barle H, et al. **Hepatology** 1997 Jan;25(1):154-8

Protein synthesis rates of skeletal muscle, lymphocytes, and albumin with stress hormone infusion in healthy man. McNurlan MA, et al. **Metabolism** 1996 Nov;45(11):1388-94

Simultaneous measurement of albumin and fibrinogen synthetic rates in normal fasted subjects. McMillan DC, et al. **Nutrition** 1996 Sep;12(9):602-7

Gene expression of isolated fetal hepatocytes transplanted into rat spleen. Sierra E, et al. **Transplant Proc** 1997 Jun; 29(4):2270-1

CHEMISTRY

Time-resolved fluorescence. An approach in protein analysis. Villari A, et al. **Adv Exp Med Biol** 1996;398:739-47

Characterization of the glycation of albumin in freeze-dried and frozen human serum. Bunk DM. **Anal Chem** 1997 Jul 1;69(13):2457-63

Complete determination of disulfide forms of purified recombinant human serum albumin, secreted by the yeast Pichia pastoris. Ikegaya K, et al. **Anal Chem** 1997 Jun 1; 69(11):1986-91

Accessibility of the fluorescent reporter group in native, silica-adsorbed, and covalently attached acrylodan-labeled serum albumins. Ingersoll CM, et al. **Anal Chem** 1996 Sep 15;68(18):3194-8

Reaction of ozone with protein tryptophans: band III, serum albumin, and cytochrome C. Mudd JB, et al. **Arch Biochem Biophys** 1997 Feb 15;338(2):143-9

Thermal stability of human serum albumin by sodium halide salts. Pico GA. **Biochem Mol Biol Int** 1996 Feb;38(1):1-6

Design of an artificial hemoprotein based on human serum albumin. Shumyantseva VV, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):503-10

Probing the cysteine 34 residue in human serum albumin using fluorescence techniques. Narazaki R, et al. **Biochim Biophys Acta** 1997 Apr 4;1338(2):275-81

Structure of pressure-induced denatured state of human serum albumin: a comparison with the intermediate in urea-induced denaturation. Tanaka N, et al. **Biochim Biophys Acta** 1997 Mar 7;1338(1):13-20

Characterization of protein-hapten conjugates. 2. Electrospray mass spectrometry of bovine serum albumin-hapten conjugates. Adamczyk M, et al. **Bioconjug Chem** 1996 Jul-Aug;7(4):475-81

High efficiency photolabeling of human serum albumin and human gamma-globulin with [14C]methyl 4-azido-2,3,5,6-tetrafluorobenzoate. Pandurangi RS, et al. **Bioconjug Chem** 1995 Sep-Oct;6(5):630-4

Structural determination of the conjugate of human serum albumin with a mitomycin C derivative, KW-2149, by matrix-assisted laser desorption/ionization mass spectrometry. Yasuzawa T, et al. **Bioconjug Chem** 1997 May-Jun;8(3):391-9

Effect of N-B transition on the microenvironment surrounding 34Cys in human serum albumin. Narazaki R, et al. **Biol Pharm Bull** 1997 Apr;20(4):452-4

Preparation of an intra-laboratory reference material--determination of the aluminum content of a pooled 5% albumin (human) solution by ETAAS, MFS and ICP-AES. Progar JJ, et al. **Biologicals** 1996 Jun; 24(2):87-93

Preparation of surface-modified albumin nanospheres. Lin W, et al. **Biomaterials** 1997 Apr;18(7):559-65

New polyurethane compositions able to bond high amounts of both albumin and heparin. II: Copolymers and polymer blends. Marconi W, et al. **Biomaterials** 1996 Sep; 17(18):1795-802

Structure and thermodynamics of nonideal solutions of colloidal particles: investigation of salt-free solutions of human serum albumin by using small-angle neutron scattering and Monte Carlo simulation. Sjöberg B, et al. **Biophys Chem** 1997 Mar 27;65(1):75-83

Determination of the secondary structure of isomeric forms of human serum albumin by a particular frequency deconvolution procedure applied to Fourier transform IR analysis. Bramanti E, et al. **Biopolymers** 1996 May; 38(5):639-53

Serum albumin as a vehicle for zinc phthalocyanine: photodynamic activities in solid tumour models. Larroque C, et al. **Br J Cancer** 1996 Dec;74(12):1886-90

Inclusion of trithia[5]heterohelicene by various serum albumins. An effective probe for chiral discrimination. Yamada K, et al. **Chem Pharm Bull (Tokyo)** 1997 May; 45(5):936-8

Immunochemical detection of covalently modified protein adducts in livers of rats treated with methyleugenol. Gardner I, et al. **Chem Res Toxicol** 1996 Jun;9(4):713-21

Enantioselective separation of chiral arylcarboxylic acids on an immobilized human serum albumin chiral stationary phase. Andrisano V, et al. **Chirality** 1997;9(2):178-83

Improved chromatographic performance of a modified human albumin based stationary phase. Bertucci C, et al. **Chirality** 1997;9(4):335-40

Reversible binding interactions between the tryptophan enantiomers and albumins of different animal species as determined by novel high performance liquid chromatographic methods: an attempt to localize the D- and L-tryptophan binding sites on the human serum albumin polypeptide chain by using protein fragments. Soltés L, et al. **Chirality** 1997;9(4):373-9

Alloalbuminaemia as a curious laboratory finding. Somos S. **Clin Chim Acta** 1996 Oct 15;254(1):73-6

Role of albumin glycation on the erythrocyte aggregation: an in vitro study. Candiloros H, et al. **Diabet Med** 1996 Jul;13(7):646-50

Structural transitions of human serum albumin: an investigation using electrophoretic techniques. Gianazza E, et al. **Electrophoresis** 1997 May;18(5):695-700

A quantitative relationship between capacity factor and selector concentration in capillary electrophoresis and high performance liquid chromatography: evidence from the enantioselective resolution of benzoin using human serum albumin as a chiral selector. Lloyd DK, et al. **Electrophoresis** 1997 Jun;18(6):958-64

S-phenylcysteine in albumin as a benzene biomarker. Bechtold WE, et al. **Environ Health Perspect** 1996 Dec;104 Suppl 6:1147-9

Prothrombin, albumin and immunoglobulin A form covalent complexes with alpha1-microglobulin in human plasma. Berggård T, et al. **Eur J Biochem** 1997 May 1;245(3):676-83

Heparin-induced structural modifications and oxidative cleavage of human serum albumin in the absence and presence of glucose--implications for transcapillary leakage of albumin in hyperglycaemia. Finotti P, et al. **Eur J Biochem** 1997 Aug 1;247(3):1000-8

Camptothecin-binding site in human serum albumin and protein transformations induced by drug binding. Fleury F, et al. **FEBS Lett** 1997 Jul 14;411(2-3):215-20

Interactions of lactone, carboxylate and self-aggregated forms of camptothecin with human and bovine serum albumins. Fleury F, et al. **FEBS Lett** 1997 Apr 7; 406(1-2):151-6

Time-resolved fluorescence studies on site-directed mutants of human serum albumin. Helms MK, et al. **FEBS Lett** 1997 May 12;408(1):67-70

Effect of creatine on glycation of albumin in vitro. Ročić B, et al. **Horm Metab Res** 1995 Nov;27(11):511-2

Destabilization of human serum albumin by polyethylene glycols studied by thermodynamical equilibrium and kinetic approaches. Farruggia B, et al. **Int J Biol Macromol** 1997 Feb;20(1):43-51

Thermodynamic features of the thermal unfolding of human serum albumin. Picó GA. **Int J Biol Macromol** 1997 Feb; 20(1):63-73

Effect of organic modifiers on retention and enantiomeric separations by capillary electrophoresis with human serum albumin as a chiral selector in solution. Ahmed A, et al. **J Chromatogr A** 1997 Apr 4;766(1-2):237-44

Comparative studies on the isothermal characteristics of

proteins adsorbed under batch equilibrium conditions to ion–exchange, immobilised metal ion affinity and dye affinity matrices with different ionic strength and temperature conditions. Finette GM, et al. **J Chromatogr A** 1997 Feb 28;763(1–2):71–90

Characterisation of human serum albumin heterogeneity by capillary zone electrophoresis and electrospray ionization mass spectrometry. Girard M, et al. **J Chromatogr A** 1997 Jun 6;772(1–2):235–42

Enantiomeric properties of human albumin immobilized on porous silica supports coated with polymethacryloyl chloride. Millot MC, et al. **J Chromatogr A** 1997 Jul 25; 776(1):37–44

Effect of mobile phase composition on the binding kinetics of chiral solutes on a protein–based high–performance liquid chromatography column: interactions of D– and L–tryptophan with immobilized human serum albumin. Yang J, et al. **J Chromatogr A** 1997 Apr 4;766(1–2):15–25

Human serum albumin as a probe for protein adsorption to nanoparticles: relevance to biodistribution. Armstrong TI, et al. **J Drug Target** 1997;4(6):389–98

The serum albumin–binding region of streptococcal protein G: a bacterial fusion partner with carrier–related properties. Sjölander A, et al. **J Immunol Methods** 1997 Feb 14; 201(1):115–23

Biological properties of two gold(III) complexes: AuCl3(Hpm) and AuCl2(pm). Calamai P, et al. **J Inorg Biochem** 1997 May 1;66(2):103–9

Studies on the interaction between human serum albumin and [Rh2(OAc)2(bpy)2(H2O)2](OAc)2. Trynda–Lemiesz L, et al. **J Inorg Biochem** 1997 May 15;66(3):187–92

Release of CuPTSM from human serum albumin after addition of fatty acids. Yuan H, et al. **J Inorg Biochem** 1996 Mar;61(4):251–9

Binding of ethyl oleate to low density lipoprotein, phospholipid vesicles, and albumin: a 13C NMR study. Bird DA, et al. **J Lipid Res** 1996 Jul;37(7):1449–58

Human low density lipoprotein and human serum albumin adsorption onto model surfaces studied by total internal reflection fluorescence and scanning force microscopy. Ho CH, et al. **J Mol Recognit** 1996 Sep–Dec;9(5–6):444–55

The effects of pasteurisation on albumin: an EPR binding assay for polymeric albumin. Gallez B, et al. **J Pharm Biomed Anal** 1995 Nov;13(12):1449–52

Interaction of small ligands with human serum albumin IIIA subdomain. How to determine the affinity constant using an easy steady state fluorescent method [letter] Bagatolli LA, et al. **J Pharm Sci** 1996 Oct;85(10):1131–2

High glomerular permeability of bikunin despite similarity in charge and hydrodynamic size to serum albumin. Lindström KE, et al. **Kidney Int** 1997 Apr;51(4):1053–8

Covalent binding between bucillamine derivatives and human serum albumin. Narazaki R, et al. **Pharm Res** 1996 Sep; 13(9):1317–21

Mode of interaction of loop diuretics with human serum albumin and characterization of binding site. Takamura N, et al. **Pharm Res** 1996 Jul;13(7):1015–9

Energy transfer to a proton–transfer fluorescence probe: tryptophan to a flavonol in human serum albumin. Sytnik A, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):12959–63

The influence of age on the thermal transition of serum albumine in rats. Petec G, et al. **Rom J Physiol** 1995 Jan–Dec;32(1–4):107–10

Biochemical characterization of procoagulant albumin. Liu L, et al. **Thromb Res** 1997 Mar 1;85(5):399–411

[Glycosylation of human serum albumin: characterization of structure and properties the chain with IR and CD spectroscopy] Bertucci C, et al. **Boll Chim Farm** 1997 Apr; 136(4):400–6 **(Ita)**

[Structural characterization with circular dichroism of native and modified human serum albumin] Viegi A, et al. **Boll Chim Farm** 1997 Apr;136(4):407–9 **(Ita)**

[Structure of recombinant human serum albumin from Pichia pastoris] Ohtani W, et al. **Yakugaku Zasshi** 1997 Apr; 117(4):220–32 (Eng. Abstr.) **(Jpn)**

[Modification of the ligand load and structure of human serum albumin with different methods of isolation] Ivanov AI, et al. **Biokhimiia** 1996 May;61(5):903–11 (Eng. Abstr.) **(Rus)**

[Model molybdenum–sulfur and molybdenum–iron–sulfur protein complexes] Belonogova OV, et al. **Bioorg Khim** 1996 Dec;22(12):907–10 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Lipoprotein kinetics in patients with analbuminemia. Evidence for the role of serum albumin in controlling lipoprotein metabolism. Maugeais C, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1369–75

Long–term correction of albumin levels in the Nagase analbuminemic rat: repopulation of the liver by transplanted normal hepatocytes under a regeneration response. Moscioni AD, et al. **Cell Transplant** 1996 Jul–Aug;5(4):499–503

Randomized, double–blind study of intravenous human albumin in hypoalbuminemic patients receiving total parenteral nutrition. Rubin H, et al. **Crit Care Med** 1997 Feb;25(2):249–52

Laxative induced hypoalbuminemia [letter] Jayaprakash DG, et al. **Indian Pediatr** 1995 Sep;32(9):1037–8

Albumin bolus administration versus continuous infusion in critically ill hypoalbuminemic pediatric patients. Greissman A, et al. **Intensive Care Med** 1996 May;22(5):495–9

Hypoalbuminemia, cardiac morbidity, and mortality in end–stage renal disease. Foley RN, et al. **J Am Soc Nephrol** 1996 May;7(5):728–36

Physiologic hypoalbuminemia is well tolerated by severely burned children. Sheridan RL, et al. **J Trauma** 1997 Sep; 43(3):448–52

The effect of hetastarch on serum colloid oncotic pressure in hypoalbuminemic dogs. Moore LE, et al. **J Vet Intern Med** 1996 Sep–Oct;10(5):300–3

Albumin kinetics in hypoalbuminemic patients receiving total parenteral nutrition. Spiess A, et al. **JPEN J Parenter Enteral Nutr** 1996 Nov–Dec;20(6):424–8

Low diastolic blood pressure, hypoalbuminemia, and risk of death in a cohort of chronic hemodialysis patients. Iseki K, et al. **Kidney Int** 1997 Apr;51(4):1212–7

Hypoalbuminemia causes high blood viscosity by increasing red cell lysophosphatidylcholine. Joles JA, et al. **Kidney Int** 1997 Sep;52(3):761–70

Hypoalbuminemia, oliguria and peripheral cyanosis in an infant with severe atopic dermatitis. Capulong MC, et al. **Pediatr Allergy Immunol** 1996 May;7(2):100–2

[Protein–losing enteropathy in childhood] Nuysink M, et al. **Ned Tijdschr Geneeskd** 1996 Sep 21;140(38):1885–7 **(Dut)**

DIAGNOSTIC USE

Infoson in vascular and renal sonography. Jakobsen JA, et al. **Acad Radiol** 1996 Aug;3 Suppl 2:S322–4

Thrombolytic enhancement with perfluorocarbon–exposed sonicated dextrose albumin microbubbles. Porter TR, et al. **Am Heart J** 1996 Nov;132(5):964–8

Transthoracic echocardiographic assessment of periprosthetic mitral regurgitation using intravenous injection of sonicated albumin. Rodrigues AG, et al. **Am J Cardiol** 1997 Mar 15;79(6):829–34

Reduction in left ventricular cavitary attenuation and improvement in posterior myocardial contrast with higher molecular weight intravenous perfluorocarbon–exposed sonicated dextrose albumin microbubbles. Porter TR, et al. **J Am Soc Echocardiogr** 1996 Jul–Aug;9(4):437–41

Detection of myocardial perfusion abnormalities during dobutamine and adenosine stress echocardiography with transient myocardial contrast imaging after minute quantities of intravenous perfluorocarbon–exposed sonicated dextrose albumin. Porter TR, et al. **J Am Soc Echocardiogr** 1996 Nov–Dec;9(6):779–86

Measurement of regional cerebral plasma pool and hematocrit with copper–62–labeled HSA–DTS. Okazawa H, et al. **J Nucl Med** 1996 Jul;37(7):1080–5

Evaluation of 99mTc–labeled modified serum albumin for tumor detection. Guerdoud LM, et al. **Nucl Med Biol** 1994 Nov;21(8):1101–8

DRUG EFFECTS

Effect of nitric oxide on the ligand–binding activity of albumin. Kashiba–Iwatsuki M, et al. **Arch Biochem Biophys** 1997 Sep 15;345(2):237–42

Effect of flavones on glucose–induced changes in human serum albumen. Coussons PJ, et al. **Biochem Soc Trans** 1996 Aug;24(3):397S

An investigation of multiple biomarkers among workers exposed to styrene and styrene–7,8–oxide. Rappaport SM, et al. **Cancer Res** 1996 Dec 1;56(23):5410–6

Induction of synthesis and secretion of interleukin 1 beta in the human monocytic THP–1 cells by human serum albumins modified with methylglyoxal and advanced glycation endproducts. Westwood ME, et al. **Immunol Lett** 1996 Apr;50(1–2):17–21

GENETICS

High–affinity binding of laurate to naturally occurring mutants of human serum albumin and proalbumin. Kragh–Hansen U, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):911–6

Clinical aspects and diagnosis of thyroid hormone transport protein anomalies. Langsteger W. **Curr Top Pathol** 1997; 91:129–61 (197 ref.)

Identification and characterization of promoter elements responsible for the induction of the albumin gene by heat shock in early embryonic rat liver. Swamynathan SK, et al. **DNA Cell Biol** 1996 Oct;15(10):897–905

Structural characterization of four genetic variants of human serum albumin associated with alloalbuminemia in Italy. Minchiotti L, et al. **Eur J Biochem** 1997 Jul 15; 247(2):476–82

Beta–lactoglobulin/human serum albumin fusion genes do not respond accurately to signals from the extracellular matrix in mammary epithelial cells from transgenic mice. Ilan N, et al. **Exp Cell Res** 1996 Oct 10;228(1):146–59

Time–resolved fluorescence studies on site–directed mutants of human serum albumin. Helms MK, et al. **FEBS Lett** 1997 May 12;408(1):67–70

Extinction of albumin gene expression in a panel of human chromosome 2 microcell hybrids. Cerosaletti KM, et al. **Genomics** 1996 Feb 1;31(3):348–58

Lack of specificity of albumin–mRNA–positive cells as a marker of circulating hepatoma cells. Müller C, et al. **Hepatology** 1997 Apr;25(4):896–9

Gene expression of albumin and liver–specific nuclear transcription factors in liver of protein–deprived rats. Ogawa A, et al. **J Nutr** 1997 Jul;127(7):1328–32

Detection of circulating albumin–mRNA by RT–PCR does not indicate metastasizing hepatocellular carcinoma. Leonhardt U, et al. **Langenbecks Arch Chir** 1997; 382(2):83–6

Determinants of plasma concentrations of insulin–like growth factor–I and albumin and their hepatic mRNAs: the role of dietary protein content and tumor necrosis factor in malnourished rats. Qu Z, et al. **Metabolism** 1996 Oct; 45(10):1273–8

Co–integration of beta–lactoglobulin/human serum albumin hybrid genes with the entire beta–lactoglobulin gene or the matrix attachment region element: repression of human serum albumin and beta–lactoglobulin expression in the mammary gland and dual regulation of the transgenes. Barash I, et al. **Mol Reprod Dev** 1996 Dec;45(4):421–30

Cleavage properties of an estrogen–regulated polysomal ribonuclease involved in the destabilization of albumin mRNA. Chernokalskaya E, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):735–42

Regulated nuclear polyadenylation of Xenopus albumin pre–mRNA. Rao MN, et al. **Nucleic Acids Res** 1996 Oct 15;24(20):4078–83

Complete structure of the human alpha–albumin gene, a new member of the serum albumin multigene family. Nishio H, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7557–61

HISTORY

Absorption of I125–labeled homologous albumin by rat kidney proximal tubule cells. A study of microperfused single proximal tubules by electron microscopic autoradiography and histochemistry. 1966 [classical article] Maunsbach AB. **J Am Soc Nephrol** 1997 Feb;8(2):323–51; discussion 327–31

IMMUNOLOGY

Allergic cross–reactions between cat and pig serum albumin. Study at the protein and DNA levels. Hilger C, et al. **Allergy** 1997 Feb;52(2):179–87

Frequency of clonal dominance in the specific antibody response to DNP–HSA in CBA and C57BL mice reflects their susceptibility to age–associated development of monoclonal gammopathies. van Arkel C, et al. **Clin Immunol Immunopathol** 1997 Jun;83(3):272–80

Human dendritic cells handling of binding, uptake and degradation of free and IgG–immune complexed dinitrophenylated human serum albumin in vitro. Larsson M, et al. **Immunology** 1997 Jan;90(1):138–46

Influx of immunoglobulins from the vascular compartment into a grafted cornea. Van der Veen G, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):876–83

Dot–blot analysis of the degree of covalent modification of proteins and antibodies at amino groups. Morçöl T, et al. **J Immunol Methods** 1997 Apr 11;203(1):45–53

Modification of antibody isoelectric point affects biodistribution of 111–indium–labeled antibody. Gangopadhyay A, et al. **Nucl Med Biol** 1996 Apr; 23(3):257–61

ISOLATION & PURIFICATION

Separation of proteins of nearly the same size but having different isoelectric points by convective electrophoresis. Kontturi AK, et al. **Acta Chem Scand** 1996 Feb;50(2):102–6

Sequential purification of human apolipoprotein B–100, albumin, and fibrinogen by immunoaffinity chromatography for measurement of protein synthesis. Fu AZ, et al. **Anal Biochem** 1997 May 1;247(2):228–36

Removal of albumin from multiple human serum samples. Rengarajan K, et al. **Biotechniques** 1996 Jan;20(1):30–2

Studies on the expansion characteristics of fluidised beds with silica–based adsorbents used in protein purification. Finette GM, et al. **J Chromatogr A** 1996 Aug 30;743(1):57–73

Modification of polystyrenic matrices for the purification of proteins. Effect of the adsorption of poly(vinyl alcohol) on the characteristics of poly(styrene–divinylbenzene) beads for use in affinity chromatography. Nash DC, et al. **J Chromatogr A** 1997 Jan 10;758(1):53–64

Role of binding capacity versus binding strength in the separation of chiral compounds on protein–based high–performance liquid chromatography columns. Interactions of D– and L–tryptophan with human serum albumin. Yang J, et al. **J Chromatogr A** 1996 Feb 23; 725(2):273–85

METABOLISM

Use of new biologic markers in the ovulation induction. Silvestri A, et al. **Acta Eur Fertil** 1995 Jul–Aug;26(4):137–9

Immunocytochemical evaluation of blood–brain barrier to endogenous albumin in scrapie–infected mice. Vorbrodt AW, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):341–8

PAF released by preimplantation embryos binds to albumin. Ammit AJ, et al. **Adv Exp Med Biol** 1996;416:263–7 (46 ref.)

Impact of acidosis on nutritional status in chronic peritoneal dialysis patients. Dumler F, et al. **Adv Perit Dial** 1996; 12:307–10

The effect of peritonitis on the peritoneal membrane transport properties in patients on CAPD. Goel S, et al. **Adv Perit Dial** 1996;12:181–4

Factors affecting low values of serum albumin in CAPD

patients. Han DS, et al. **Adv Perit Dial** 1996;12:288–92

Differences in the serum levels of acetaldehyde and cytotoxic acetaldehyde–albumin complexes after the consumption of red and white wine: in vitro effects of flavonoids, vitamin E, and other dietary antioxidants on cytotoxic complexes. Wickramasinghe SN, et al. **Alcohol Clin Exp Res** 1996 Aug; 20(5):799–803

Risk factors for kidney damage in the adult population of Wadena, Minnesota. A prospective study. Goetz FC, et al. **Am J Epidemiol** 1997 Jan 15;145(2):91–102

Vascular hypertrophy and albumin permeability in a rat model combining hypertension and diabetes mellitus. Effects of calcium antagonism, angiotensin converting enzyme inhibition, and angiotensin II–AT1–receptor blockade [published erratum appears in Am J Hypertens 1996 Oct;9(10 Pt 1):1054] Hulthén UL, et al. **Am J Hypertens** 1996 Sep;9(9):895–901

Effect of increasing serum albumin on serum lipoprotein(a) concentration in patients receiving CAPD. Yang WS, et al. **Am J Kidney Dis** 1997 Oct;30(4):507–13

Serum bicarbonate is an independent determinant of protein catabolic rate in chronic hemodialysis. Bastani B, et al. **Am J Nephrol** 1996;16(5):382–5

Albumin endocytosis is regulated by heterotrimeric GTP–binding protein G alpha i–3 in opossum kidney cells. Brunskill NJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F356–64

Assessment of protein permeability in normal human systemic circulation. Shanholtz C, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1049–57

Pulsed ultrafiltration mass spectrometry: a new method for screening combinatorial libraries. van Breemen RB, et al. **Anal Chem** 1997 Jun 1;69(11):2159–64

Intercellular barriers to and transcellular transfer of albumin in the fetal sheep brain. Balslev Y, et al. **Anat Embryol (Berl)** 1997 Mar;195(3):229–36

Revised Winter–Tozer equation for normalized phenytoin concentrations in trauma and elderly patients with hypoalbuminemia. Anderson GD, et al. **Ann Pharmacother** 1997 Mar;31(3):279–84

Competition between polyanions in glomerular binding and renal clearance. Burne MJ, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):257–64

Serum bilirubin pigments covalently linked to albumin. Gordon ER, et al. **Arch Pathol Lab Med** 1996 Jul; 120(7):648–53

Stereoselective binding of the enantiomers of four closely related N–methyl–barbiturates to human, bovine, and rat serum albumin. Büch HP, et al. **Arch Pharm (Weinheim)** 1996 Aug–Sep;329(8–9):399–402

Influence of non–steroidal anti–inflammatory drugs on the binding kinetics of dansylsarcosine to human serum albumin. Stereoselectivity, steric and inductive effects. Keita Y, et al. **Arzneimittelforschung** 1996 Feb;46(2):164–8

Modelling of indometacin and diclofenac sodium binding to the molecule of human serum albumin. Russeva V, et al. **Arzneimittelforschung** 1996 Mar;46(3):288–92

Rapid formation of advanced glycation end products by intermediate metabolites of glycolytic pathway and polyol pathway. Hamada Y, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):539–43

Hydroxyl radical mediates N epsilon–(carboxymethyl)lysine formation from Amadori product. Nagai R, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):167–72

High–affinity binding of laurate to naturally occurring mutants of human serum albumin and proalbumin. Kragh–Hansen U, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):911–6

Binding of [3H]bilirubin to albumin and plasma membrane vesicles [letter; comment] McDonagh AF. **Biochem J** 1997 Jan 1;321 (Pt 1):262–4. Comment on: Biochem J 1996 Jun 15;316 (Pt 3):999–1004.

A comparative study of the binding characteristics of ceftriaxone, cefoperazone and cefsulodin to human serum albumin. Nerli B, et al. **Biochem Mol Biol Int** 1996 Nov; 40(4):823–31

Effect of flavones on glucose–induced changes in human serum albumen. Coussons PJ, et al. **Biochem Soc Trans** 1996 Aug;24(3):397S

C repeats of teh streptococcal M1 protein achieve the human serum albumin binding ability by flanking regions which stabilize the coiled–coil conformation. Gubbe K, et al. **Biochemistry** 1997 Jul 1;36(26):8107–13

Mutagenesis studies of thyroxine binding to human serum albumin define an important structural characteristic of subdomain 2A. Petersen CE, et al. **Biochemistry** 1997 Jun 10;36(23):7012–7

Nucleolar protein B23 stimulates nuclear import of the HIV–1 Rev protein and NLS–conjugated albumin. Szebeni A, et al. **Biochemistry** 1997 Apr 1;36(13):3941–9

Crystal structure of a prolonged–acting insulin with albumin–binding properties. Whittingham JL, et al. **Biochemistry** 1997 Mar 11;36(10):2826–31

Properties of and oxygen binding by albumin–tetraphenylporphyrinatoiron(II) derivative complexes. Tsuchida E, et al. **Bioconjug Chem** 1997 Jul–Aug;8(4):534–8

Albumin adhesion on some biological and non–biological glasses and connection with their Z–potentials. Krajewski A, et al. **Biomaterials** 1996 Jan;17(1):53–60

Some aspect of the interactions of adriamycin with human serum albumin. Trynda–Lemiesz L, et al. **Bioorg Med Chem** 1996 Oct;4(10):1709–13

Determination of protein binding of troglitazone stereoisomers by fluorometric titration. Izumi T, et al. **Biopharm Drug Dispos** 1997 Apr;18(3):241–57

Binding characteristics of KNI–272 to plasma proteins, a new potent tripeptide HIV protease inhibitor. Kiriyama A, et al. **Biopharm Drug Dispos** 1996 Dec;17(9):739–51

Detection of protease activity using a fluorescence–enhancement globular substrate. Voss EW Jr, et al. **Biotechniques** 1996 Feb;20(2):286–91

Comparative studies of recombinant human albumin and human serum albumin derived by blood fractionation. Dodsworth N, et al. **Biotechnol Appl Biochem** 1996 Oct; 24 (Pt 2):171–6

Comparison of drug binding sites on rat and human serum albumins using immobilized–protein stationary phases as a tool for the selection of suitable animal models in pharmacological studies. Massolini G, et al. **Boll Chim Farm** 1996 Jun;135(6):382–6

The influence of moderate hypoalbuminaemia on the renal metabolism and dynamics of furosemide in the rabbit. Pichette V, et al. **Br J Pharmacol** 1996 Nov;119(5):885–90

Changes in the albumin binding of tryptophan during postoperative recovery: a possible link with central fatigue? Yamamoto T, et al. **Brain Res Bull** 1997;43(1):43–6

Plasma protein entry and retention in the vascular wall: possible factors in atherogenesis. Lever MJ, et al. **Can J Physiol Pharmacol** 1996 Jul;74(7):818–23

Comparative serum protein binding of anthracycline derivatives. Chassany O, et al. **Cancer Chemother Pharmacol** 1996;38(6):571–3

Higher in vivo protein binding of etoposide in children compared with adult cancer patients. Liliemark E, et al. **Cancer Lett** 1996 Aug 23;106(1):97–100

Use of confocal microscopy to localize the SHBG interaction with human breast cancer cell lines--a comparison with serum albumin interaction. Germain P, et al. **Cell Mol Biol (Noisy–le–grand)** 1997 Jun;43(4):501–8

Long–term correction of albumin levels in the Nagase analbuminemic rat: repopulation of the liver by transplanted normal hepatocytes under a regeneration response. Moscioni AD, et al. **Cell Transplant** 1996 Jul–Aug;5(4):499–503

Structural specificity requirements in the binding of beta lactam antibiotics to human serum albumin. Nerli B, et al. **Chem Biol Interact** 1997 May 2;104(2–3):179–202

Identification of subdomain IB in human serum albumin as a major binding site for polycyclic aromatic hydrocarbon epoxides. Brunmark P, et al. **Chem Res Toxicol** 1997 Aug; 10(8):880–6

Immunochemical detection of protein adducts in mice treated with trichloroethylene. Halmes NC, et al. **Chem Res Toxicol** 1996 Mar;9(2):451–6

Stereoselective binding of carbenicillin epimers to human serum albumin. Itoh T, et al. **Chirality** 1996;8(2):201–6

Inhibition of serum protein binding of thyroxine in a hypothyroid patient with familial dysalbuminemic hyperthyroxinemia. Premachandra BN, et al. **Clin Biochem** 1996 Feb;29(1):85–8

Gastrointestinal absorption, tissue retention, and urinary excretion of dietary aluminum in rats determined by using 26Al. Jouhanneau P, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1023–8

Changes in plasma alpha 1–acid glycoprotein and albumin concentrations during late pregnancy in rhesus monkeys. Golub MS, et al. **Clin Chim Acta** 1997 Jun 27; 262(1–2):29–37

Serum uremic toxins from patients with chronic renal failure displace the binding of L–tryptophan to human serum albumin. Mingrone G, et al. **Clin Chim Acta** 1997 Apr 4; 260(1):27–34

Formylcolchicine bound to lactosaminated serum albumin is a more active antifibrotic agent than free colchicine. Palmerini CA, et al. **Clin Chim Acta** 1996 Oct 29; 254(2):149–57

Thermostability of purified human pancreatic alpha–amylase is increased by the combination of Ca2+ and human serum albumin. Tessier AJ, et al. **Clin Chim Acta** 1996 Aug 15; 252(1):11–20

Endogenous nitric oxide production is augmented as the severity advances in patients with liver cirrhosis. Hori N, et al. **Clin Exp Pharmacol Physiol** 1996 Jan;23(1):30–5

Comparison of drug binding interactions on human, rat and rabbit serum albumin using high–performance displacement chromatography. Aubry AF, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1995 Nov;112(3):257–66

Plasma protein (albumin) catabolism by the tumor itself--implications for tumor metabolism and the genesis of cachexia. Stehle G, et al. **Crit Rev Oncol Hematol** 1997 Jul;26(2):77–100 (255 ref.)

Protein–lipid interaction on the surface of a hydrophilic contact lens in vitro. Bontempo AR, et al. **Curr Eye Res** 1997 Aug;16(8):776–81

Whole body capillary exchange of albumin. Alterations in diabetic microangiopathy. Bent–Hansen L. **Dan Med Bull** 1997 Feb;44(1):40–55 (164 ref.)

Raised blood albumin levels are associated with trait anxiety [letter] Stones A, et al. **Depress Anxiety** 1996–97;4(3):151–2

Acylation of human insulin with palmitic acid extends the time action of human insulin in diabetic dogs. Myers SR, et al. **Diabetes** 1997 Apr;46(4):637–42

Transcapillary escape rate of albumin in type II diabetic patients. The relationship with microalbuminuria and hypertension. Nannipieri M, et al. **Diabetes Care** 1997 Jun; 20(6):1019–26

Reversal of stereoselectivity in the hepatic availability of verapamil in isolated perfused rat livers. Role of protein binding. Mehvar R, et al. **Drug Metab Dispos** 1996 Oct; 24(10):1088–94

Stereoselective irreversible binding of ketoprofen glucuronides to albumin. Characterization of the site and the mechanism. Presle N, et al. **Drug Metab Dispos** 1996 Oct;24(10):1050–7

Interaction of human serum albumin with the electrophilic metabolite 1–O–gemfibrozil–beta–D–glucuronide. Sallustio BC, et al. **Drug Metab Dispos** 1997 Jan;25(1):55–60

Esterase–like activity of human serum albumin toward prodrug esters of nicotinic acid. Salvi A, et al. **Drug Metab Dispos** 1997 Apr;25(4):395–8

Relative binding affinity–serum modified access (RBA–SMA) assay predicts the relative in vivo bioactivity of the xenoestrogens bisphenol A and octylphenol. Nagel SC, et al. **Environ Health Perspect** 1997 Jan;105(1):70–6

An accurate method of plasma volume measurement by direct analysis of Evans blue spectra in plasma without dye extraction: origins of albumin–space variations during maximal exercise. Farjanel J, et al. **Eur J Appl Physiol** 1997; 75(1):75–82

Spectroscopic probes of the individual and combined effects of Triton X–100 and chloroform on serum albumins and serum–albumin.bilirubin complexes. Patra SK, et al. **Eur J Biochem** 1997 Jun 15;246(3):658–64

Pre–operative plasma levels of C–reactive protein, albumin and various plasma protease inhibitors for the pre–operative assessment of operability and recurrence in cancer surgery. Göransson J, et al. **Eur J Surg Oncol** 1996 Dec;22(6):607–17

Intravitreal sustained release of VEGF causes retinal neovascularization in rabbits and breakdown of the blood–retinal barrier in rabbits and primates. Ozaki H, et al. **Exp Eye Res** 1997 Apr;64(4):505–17

Camptothecin–binding site in human serum albumin and protein transformations induced by drug binding. Fleury F, et al. **FEBS Lett** 1997 Jul 14;411(2–3):215–20

Inhibition of oxidative modification of proteins by RU486. Carpenter SE, et al. **Fertil Steril** 1996 Jul;66(1):90–4

Glucose modification of human serum albumin: a structural study. Coussons PJ, et al. **Free Radic Biol Med** 1997; 22(7):1217–27

Unexpected dose response of copper concentration on lipoprotein oxidation in serum: discovery of a unique peroxidase–like activity of urate/albumin in the presence of high copper concentrations. Proudfoot JM, et al. **Free Radic Biol Med** 1997;23(5):699–705

Aminoguanidine and its pro–oxidant effects on an experimental model of protein glycation. Skamarauskas JT, et al. **Free Radic Biol Med** 1996;21(6):801–12

Endogenous endothelin modulates blood pressure, plasma volume, and albumin escape after systemic nitric oxide blockade. Filep JG. **Hypertension** 1997 Jul;30(1 Pt 1):22–8

Serum albumin in peritoneal dialysis: clinical significance and important influences on its levels [editorial] Malhotra D, et al. **Int J Artif Organs** 1997 May;20(5):251–4

Elevated plasma lipoprotein(a) levels and hypoalbuminemia in peritoneal dialysis patients. Ross EA, et al. **Int J Artif Organs** 1995 Dec;18(12):751–6

Mechanism of denaturation of bovine serum albumin by dodecyl trimethylammonium bromide. Moosavi–Movahedi AA, et al. **Int J Biochem Cell Biol** 1996 Sep;28(9):991–8

Thermodynamic features of the thermal unfolding of human serum albumin. Picó GA. **Int J Biol Macromol** 1997 Feb; 20(1):63–73

Serum calcium, phosphorus and albumin levels in relation to the angiographic severity of coronary artery disease. Narang R, et al. **Int J Cardiol** 1997 Jun 27;60(1):73–9

Heart failure in Nigerian hypertensive patients: the role of renal dysfunction. Obasohan AO, et al. **Int J Cardiol** 1995 Dec;52(3):251–5

Association of respiratory symptoms with serum protease inhibitors and albumin levels in Japanese children. Shima M, et al. **Int J Epidemiol** 1996 Dec;25(6):1213–9

Human serum albumin adsorption on hydrogel contact lenses in vitro. Garrett Q, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2594–602

A randomized double–blind placebo–controlled trial of cyclosporine in steroid–resistant idiopathic focal segmental glomerulosclerosis in children. Lieberman KV, et al. **J Am Soc Nephrol** 1996 Jan;7(1):56–63

Accumulation of albumin–linked and free–form pentosidine in the circulation of uremic patients with end–stage renal failure: renal implications in the pathophysiology of pentosidine. Miyata T, et al. **J Am Soc Nephrol** 1996 Aug; 7(8):1198–206

Transcapillary escape rate of albumin in humans during exercise–induced hypervolemia. Haskell A, et al. **J Appl Physiol** 1997 Aug;83(2):407–13

Studies of the nature of the binding by albumin of platelet–activating factor released from cells. Ammit AJ, et al. **J Biol Chem** 1997 Jul 25;272(30):18772–8

Amyloid beta–peptide is transported on lipoproteins and albumin in human plasma. Biere AL, et al. **J Biol Chem** 1996 Dec 20;271(51):32916–22

Binding of the volatile anesthetic chloroform to albumin demonstrated using tryptophan fluorescence quenching.

Johansson JS. **J Biol Chem** 1997 Jul 18;272(29):17961-5

Pulsatile albumin transport in large arteries: a numerical simulation study. Rappitsch G, et al. **J Biomech Eng** 1996 Nov;118(4):511-9

Study of the binding of antibiotics to human serum albumin by charge-transfer chromatography. Cserháti T, et al. **J Chromatogr A** 1997 Jul 25;776(1):31-6

Association of serum albumin and mortality risk. Goldwasser P, et al. **J Clin Epidemiol** 1997 Jun;50(6):693-703 (92 ref.)

Vascular dysfunction induced by elevated glucose levels in rats is mediated by vascular endothelial growth factor. Tilton RG, et al. **J Clin Invest** 1997 May 1;99(9):2192-202

Hepatocellular sulfobromophthalein uptake at physiologic albumin concentrations: kinetic evidence for a high affinity/low capacity sinusoidal membrane system. Sorrentino D, et al. **J Hepatol** 1996 Aug;25(2):178-82

Direct determination of serum glycyrrhetic acid by a monoclonal antibody-based inhibition ELISA using ibuprofen for releasing serum albumin-bound glycyrrhetic acid. Itoh K, et al. **J Immunoassay** 1996 Nov;17(4):343-52

Albumin nitrosylated by activated macrophages possesses antiparasitic effects neutralized by anti-NO-acetylated-cysteine antibodies. Mnaimneh S, et al. **J Immunol** 1997 Jan 1;158(1):308-14

Aggregation phenomena in the complexes of iron tetraphenylporphine sulfonate with bovine serum albumin. Tominaga TT, et al. **J Inorg Biochem** 1997 Mar; 65(4):235-44

Studies on the interaction between human serum albumin and [Rh2(OAc)2(bpy)2(H2O)2](OAc)2. Trynda-Lemiesz L, et al. **J Inorg Biochem** 1997 May 15;66(3):187-92

Synthesis, photophysical properties, in vivo photosensitizing efficacy, and human serum albumin binding properties of some novel bacteriochlorins. Pandey RK, et al. **J Med Chem** 1997 Aug 15;40(17):2770-9

Modulation of protein release from chitosan-alginate microcapsules using the pH-sensitive polymer hydroxypropyl methylcellulose acetate succinate. Okhamafe AO, et al. **J Microencapsul** 1996 Sep-Oct; 13(5):497-508

Solution structure of the albumin-binding GA module: a versatile bacterial protein domain. Johansson MU, et al. **J Mol Biol** 1997 Mar 14;266(5):859-65

Interaction of technetium-99m-N-NOET with blood elements: potential mechanism of myocardial redistribution. Johnson G 3rd, et al. **J Nucl Med** 1997 Jan;38(1):138-43

Palmitate and stearate binding to human serum albumin. Determination of relative binding constants. Vorum H, et al. **J Pept Res** 1997 Apr;49(4):347-54

A quantitative circular dichroic investigation of the binding of the enantiomers of ibuprofen and naproxen to human serum albumin. Cheruvallath VK, et al. **J Pharm Biomed Anal** 1997 Jul;15(11):1719-24

Determination of the binding of a beta 2-blocker drug, frusemide and ceftriaxone to serum proteins by capillary zone electrophoresis. Quaglia MG, et al. **J Pharm Biomed Anal** 1997 May;15(8):1033-9

Differential binding of warfarin to maternal, foetal and non-pregnant sera and its clinical implications. Bajoria R, et al. **J Pharm Pharmacol** 1996 May;48(5):486-91

In-vitro binding of propiverine hydrochloride and some of its metabolites to serum albumin in man. Meisel P, et al. **J Pharm Pharmacol** 1997 Mar;49(3):270-2

Influence of fatty acids on the binding of warfarin and phenprocoumon to human serum albumin with relation to anticoagulant therapy. Vorum H, et al. **J Pharm Pharmacol** 1996 Aug;48(8):870-5

Protein-binding high-performance frontal analysis of (R)- and (S)-warfarin on HSA with and without phenylbutazone. He J, et al. **J Pharm Sci** 1997 Jan; 86(1):120-5

Kinetic analysis of the covalent binding of captopril to human serum albumin. Narazaki R, et al. **J Pharm Sci** 1997 Feb; 86(2):215-9

Determination of the unbound concentration of hydrophobic drugs in albumin solutions by high-performance frontal analysis using a diol-silica column. Shibukawa A, et al. **J Pharm Sci** 1994 Jun;83(6):868-73

Stereoselective binding properties of naproxen glucuronide diastereomers to proteins. Bischer A, et al. **J Pharmacokinet Biopharm** 1995 Aug;23(4):379-95

Excited triplet state photophysics of the sulphonated aluminium phathalocyanines bound to human serum albumin. Foley MS, et al. **J Photochem Photobiol B** 1997 Mar;38(1):10-7

Binding of sulphamethazine to pig plasma proteins and albumin. Munsey T, et al. **J Vet Pharmacol Ther** 1996 Apr; 19(2):135-41

Contribution of alpha 1-acid glycoprotein to plasma protein binding of some basic antimicrobials in pigs. Son DS, et al. **J Vet Pharmacol Ther** 1996 Jun;19(3):176-83

High glomerular permeability of bikunin despite similarity in charge and hydrodynamic size to serum albumin. Lindström KE, et al. **Kidney Int** 1997 Apr;51(4):1053-8

Alternate repetition of short fore- and backfiltrations reduces convective albumin loss. Shinzato T, et al. **Kidney Int** 1996 Aug;50(2):432-5

Serum-ascitic fluid albumin gradient, portal hypertension, and ascites [letter; comment] Rubin E. **Mayo Clin Proc** 1997 May;72(5):487. Comment on: Mayo Clin Proc 1996 Sep;71(9):874-81.

Determinants of plasma concentrations of insulin-like growth factor-I and albumin and their hepatic mRNAs: the role of dietary protein content and tumor necrosis factor in malnourished rats. Qu Z, et al. **Metabolism** 1996 Oct; 45(10):1273-8

Vessel wall heparan sulfate and transcapillary passage of albumin in experimental diabetes in the rat. van den Born J, et al. **Nephrol Dial Transplant** 1997;12 Suppl 2:27-31

Effects of parathyroid hormone and 1,25(OH2)D3 on protein glycation in moderate uraemia. Lamb EJ, et al. **Nephron** 1996;74(2):295-300

Levels of plasma lipoprotein(a) in continuous ambulatory peritoneal dialysis are not related to peritoneal losses of albumin [letter; comment] Montenegro J, et al. **Nephron** 1997;76(2):239-41. Comment on: Nephron 1996;72(2):135-44.

On serum albumin in anorexia nervosa [editorial; comment] Waterlow JC. **Nutrition** 1996 Oct;12(10):720-1. Comment on: Nutrition 1996 Oct;12(10):677-84.

Fibrinogen and fibrinolytic activity in CAPD patients with atherosclerosis and its correlation with serum albumin. Kim KJ, et al. **Perit Dial Int** 1997 Mar-Apr;17(2):157-61

Covalent binding of a bucillamine derivative with albumin in sera from healthy subjects and patients with various diseases. Narazaki R, et al. **Pharm Res** 1997 Mar;14(3):351-3

Mode of interaction of loop diuretics with human serum albumin and characterization of binding site. Takamura N, et al. **Pharm Res** 1996 Jul;13(7):1015-9

Riboflavin-enhanced transport of serum albumin across the distal pulmonary epithelium. Wangensteen OD, et al. **Pharm Res** 1996 Dec;13(12):1861-4

Binding of methamphetamine to serum albumin in various species in vitro. Yanagisawa Y, et al. **Pharmacol Res** 1997 Feb;35(2):99-102

Association equilibrium of L-methamphetamine with serum albumin in various animal species. Yanagisawa Y, et al. **Pharmacol Res** 1997 Apr;35(4):341-5

Does ibuprofen affect bilirubin-albumin binding in newborn infant serum? Cooper-Peel C, et al. **Pharmacol Toxicol** 1996 Dec;79(6):297-9

Vancomycin-binding characteristics in patients with serious infections. Li L, et al. **Pharmacotherapy** 1996 Nov-Dec; 16(6):1024-9

Endocytosis of serum albumin in regenerating rat liver. Ryoo HY, et al. **Proc Soc Exp Biol Med** 1997 Jun;215(2):179-85

Interference of dexamethasone with leukocyte blood volume and albumin movements in lungs from endotoxemic guinea-pigs. de Castro CM, et al. **Pulm Pharmacol** 1995 Dec;8(6):289-97

Transvascular albumin transport and protein replenishment after haemorrhage in the chronically catheterized pregnant rabbit. Valenzuela GJ, et al. **Reprod Fertil Dev** 1996; 8(1):183-7

Microvessels of the chick chorioallantoic membrane uniformly restrict albumin extravasation during angiogenesis and endothelial cytodifferentiation. Cruz A, et al. **Tissue Cell** 1997 Jun;29(3):277-81

Post-thyroidectomy hypocalcemia: the role of calcitonin, parathormone and serum albumin. Cakmakli S, et al. **Tokai J Exp Clin Med** 1996 Jun;21(2):97-101

[Interaction of human serum albumin with berberine hydrochloride by fluorescence method] Tan Y, et al. **Chung Kuo Chung Yao Tsa Chih** 1996 Mar;21(3):175-7, 192 (Eng. Abstr.) **(Chi)**

[Metabolism of albumin] Lefèvre P, et al. **Ann Fr Anesth Reanim** 1996;15(4):464-9 (Eng. Abstr.) **(Fre)**

[Role of substitution albumin therapy in drugs, hormones, electrolytes and miscellanous substances transport] Ozier Y. **Ann Fr Anesth Reanim** 1996;15(4):532-42 (Eng. Abstr.) **(Fre)**

[Effect of human serum albumin on transport of drugs through human erythrocyte membranes] Sakurai M, et al. **Yakugaku Zasshi** 1996 Aug;116(8):630-8 (Eng. Abstr.) **(Jpn)**

[Ligand binding properties and esterase-like activity of recombinant human serum albumin] Takeshima K, et al. **Yakugaku Zasshi** 1996 Aug;116(8):622-9 (Eng. Abstr.) **(Jpn)**

[Binding ability of rat serum albumin during tetrachloromethane intoxication and administration of anti-oxidants, anti-hypoia agents, and actoprotectors] Dubovaia TK, et al. **Biull Eksp Biol Med** 1996 Dec; 122(12):635-7 **(Rus)**

[Interaction of proteins with platinum and palladium compounds with differing biological activities] Zhmareva EN, et al. **Ukr Biokhim Zh** 1996 May-Jun;68(3):74-9 (Eng. Abstr.) **(Rus)**

[Changes in the fatty acid composition of serum albumin in patients with lung and breast neoplasms] Tolkacheva NV, et al. **Vopr Med Khim** 1997 Jul-Aug;43(4):261-6 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Reabsorption of native and glycated albumin by renal proximal tubular epithelial cells. Bendayan M, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F261-8

Megalin/gp330 mediates uptake of albumin in renal proximal tubule. Cui S, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F900-7

Intercellular barriers to and transcellular transfer of albumin in the fetal sheep brain. Balslev Y, et al. **Anat Embryol (Berl)** 1997 Mar;195(3):229-36

Potent antithrombin activity and delayed clearance from the circulation characterize recombinant hirudin genetically fused to albumin. Syed S, et al. **Blood** 1997 May 1; 89(9):3243-52

Human biodistribution of an ultrasound contrast agent (Quantison) by radiolabelling and gamma scintigraphy. Perkins AC, et al. **Br J Radiol** 1997 Jun;70(834):603-11

Whole body capillary exchange of albumin. Alterations in diabetic microangiopathy. Bent-Hansen L. **Dan Med Bull** 1997 Feb;44(1):40-55 (164 ref.)

Human serum albumin as a probe for surface conditioning--a study of the ageing effect. Armstrong TI, et al. **J Drug Target** 1997;4(5):331-5

Comparative pharmacokinetic, immunologic and hematologic studies on the anti-HIV-1/2 compounds aconitylated and succinylated HSA. Swart PJ, et al. **J Drug Target** 1996;4(2):109-16

Influence of anti-inflammatory and antioxidant agents on endothelial permeability alterations induced by bradykinin. Deng X, et al. **J Invest Surg** 1996 Sep-Oct;9(5):337-49

Amyloid beta-peptide induces cell monolayer albumin permeability, impairs glucose transport, and induces apoptosis in vascular endothelial cells. Blanc EM, et al. **J Neurochem** 1997 May;68(5):1870-81

Hypoxia dramatically increases the nonspecific transport of blood-borne proteins to the brain. Plateel M, et al. **J Neurochem** 1997 Feb;68(2):874-7

99Tcm-dimercaptopropionyl-HSA prepared from a labelling kit: preliminary investigations as a blood pool agent. Cambier JP, et al. **Nucl Med Commun** 1997 Jan;18(1):31-7

PHARMACOLOGY

Potent inhibition of replication of primary HIV type 1 isolates in peripheral blood lymphocytes by negatively charged human serum albumins. Groenink M, et al. **AIDS Res Hum Retroviruses** 1997 Jan 20;13(2):179-85

Pharmacokinetics and anti-HIV-1 efficacy of negatively charged human serum albumins in mice. Kuipers ME, et al. **Antiviral Res** 1997 Jan;33(2):99-108

Inhibition of influenza virus fusion by polyanionic proteins. Schoen P, et al. **Biochem Pharmacol** 1997 Apr 4; 53(7):995-1003

Albumin prevents metabolism of 12-hydroxyeicosatetraenoic acid by leukocytes in vitro. Dadaian M, et al. **Biochim Biophys Acta** 1996 Sep 27;1303(2):154-60

Increased macrophage uptake of irreversibly glycated albumin modified-low density lipoproteins of normal and diabetic subjects is mediated by non-saturable mechanisms. Dobrian A, et al. **Biochim Biophys Acta** 1996 Oct 7; 1317(1):5-14

The effect of albumin on copper-induced LDL oxidation. Schnitzer E, et al. **Biochim Biophys Acta** 1997 Feb 18; 1344(3):300-11

Horseradish peroxidase and glycosylated BSA induce nitric oxide production in murine macrophages. Afroun-Talantikite S, et al. **C R Acad Sci III** 1996 Jun; 319(6):453-9

Albumin can reverse the release of potassium from human erythrocytes treated with the non-ionic detergent, Brij 58. Bogner P, et al. **Cell Biol Int** 1996 Nov;20(11):741-9

Induction of endotoxin tolerance in rat bone marrow cells by in vivo infusion of tumor necrosis factor. Ogle CK, et al. **Crit Care Med** 1997 May;25(5):827-33

Effect of hematocrit and albumin concentration on hepatic clearance of tacrolimus (FK506) during rabbit liver perfusion. Chow FS, et al. **Drug Metab Dispos** 1997 May; 25(5):610-6

Improved islet isolation by 10% albumin does not influence graft angiogenesis and vascularization. Vajkoczy P, et al. **Exp Clin Endocrinol Diabetes** 1997;105(3):152-5

Synthesis and secretion of macrophage colony stimulating factor by mature human monocytes and human monocytic THP-1 cells induced by human serum albumin derivatives modified with methylglyoxal and glucose-derived advanced glycation endproducts. Abordo EA, et al. **Immunol Lett** 1996 Oct;53(1):7-13

Induction of synthesis and secretion of interleukin 1 beta in the human monocytic THP-1 cells by human serum albumins modified with methylglyoxal and advanced glycation endproducts. Westwood ME, et al. **Immunol Lett** 1996 Apr;50(1-2):17-21

Voltage-dependent calcium channels and Gi regulatory protein mediate the human sperm acrosomal exocytosis induced by N-acetylglucosaminyl/mannosyl neoglycoproteins. Brandelli A, et al. **J Androl** 1996 Sep-Oct;17(5):522-9

Inhibition of LDL-associated phospholipase A activity in human plasma by albumin. Reisfeld N, et al. **J Basic Clin Physiol Pharmacol** 1994 Apr-Jun;5(2):107-15

Serum albumin is a specific inhibitor of apoptosis in human endothelial cells. Zoellner H, et al. **J Cell Sci** 1996 Oct; 109 (Pt 10):2571-80

Albumin nitrosylated by activated macrophages possesses antiparasitic effects neutralized by anti-NO-acetylated-cysteine antibodies. Mnaimneh S, et al. **J Immunol** 1997 Jan 1;158(1):308-14

Glycated serum albumin induces chemokine gene expression in human retinal pigment epithelial cells. Bian ZM, et al. **J Leukoc Biol** 1996 Sep;60(3):405-14

Prevention of bacterial adherence to implant surfaces with a crosslinked albumin coating in vitro. An YH, et al. **J Orthop Res** 1996 Sep;14(5):846-9

Human serum albumin shares the properties of estrocolyone-I, the inhibitor of the proliferation of estrogen-target cells. Sonnenschein C, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):147-54

Nonenzymatically glycated albumin (Amadori adducts) enhances nitric oxide synthase activity and gene expression in endothelial cells. Amore A, et al. **Kidney Int** 1997 Jan; 51(1):27-35

Effect of the addition of albumin to crystalloid cardioplegic solutions on myocardial metabolism in infants undergoing open heart surgery. Hisatomi K, et al. **Surg Today** 1996; 26(6):395-9

[The mechanisms of the interaction of contrast media with serum albumin and gamma-globulin studied by means of fluorescence extinction and equilibrium dialysis] Shabunin IV, et al. **Eksp Klin Farmakol** 1996 Sep-Oct;59(5):43-6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The human endogenous local anesthetic-like factor (ELLF) is functionally neutralized by serum albumin. Aulkemeyer P, et al. **Neurosci Lett** 1996 Sep 20;216(1):37-40

The influence of age on the thermal transition of serum albumine in rats. Petec G, et al. **Rom J Physiol** 1995 Jan-Dec;32(1-4):107-10

[Factors regulating the function of adhesion molecules] Tagawa S, et al. **Rinsho Byori** 1996 Sep;Suppl 102:60-8 (12 ref.) **(Jpn)**

SECRETION

Primary culture of chicken hepatocytes in serum-free medium (pH 7.8) secreted albumin and transferrin for a long period in free gas exchange with atmosphere. Fujii M, et al. **Int J Biochem Cell Biol** 1996 Dec;28(12):1381-91

THERAPEUTIC USE

The in vitro anti-HIV efficacy of negatively charged human serum albumin is antagonized by heparin. Swart PJ, et al. **AIDS Res Hum Retroviruses** 1997 May 20;13(8):677-83

Use of albumin in neonatal resuscitation. Roberton NR. **Eur J Pediatr** 1997 Jun;156(6):428-31 (38 ref.)

Albumin for ovarian hyperstimulation? [letter; comment] Mukherjee T, et al. **Fertil Steril** 1996 Jul;66(1):173-4. Comment on: Fertil Steril 1996 Jan;65(1):1-10.

Efficacy of serum albumin to prevent ovarian hyperstimulation syndrome? [letter; comment] Sabatini L, et al. **Fertil Steril** 1997 Mar;67(3):587-9. Comment on: Fertil Steril 1996 May;65(5):992-6.

Prophylactic intravenous albumin for the prevention of severe ovarian hyperstimulation syndrome [letter; comment] Orvieto R, et al. **Hum Reprod** 1996 Feb; 11(2):460-1. Comment on: Hum Reprod 1995 Apr;10(4):807-10.

Influence of different volume therapies on platelet function in the critically ill. Boldt J, et al. **Intensive Care Med** 1996 Oct;22(10):1075-81

Albumin as a sealant for a polyester vascular prosthesis: its impact on the healing sequence in humans. Chafke N, et al. **J Cardiovasc Surg (Torino)** 1996 Oct;37(5):431-40

Effect of delayed albumin hemodilution on infarction volume and brain edema after transient middle cerebral artery occlusion in rats. Belayev L, et al. **J Neurosurg** 1997 Oct; 87(4):595-601

[Clinical application of albumin: a closer look at indications] Smorenburg CH, et al. **Ned Tijdschr Geneeskd** 1997 Apr 12;141(15):719-23 (47 ref.) (Eng. Abstr.) **(Dut)**

[Human albumin solutions in the treatment of burned patients. Current indications] Carsin H. **Presse Med** 1997 Mar 29; 26(10):474-6 (15 ref.) (Eng. Abstr.) **(Fre)**

[The effect of the blood corrective agent Lactosorbal on liver functional activity in dogs with a model of severe hemorrhagic shock] Oborin AN, et al. **Lik Sprava** 1995 Mar-Apr;(3-4):152-4 (Eng. Abstr.) **(Rus)**

URINE

Effect of GH/IGF-I deficiency on long-term renal changes and urinary albumin excretion in diabetic dwarf rats. Grønbaek H, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E918-24

Changes in the urinary excretion of creatinine, albumin and N-acetyl-beta-D-glucosaminidase with increasing age and maturity in healthy schoolchildren. Skinner AM, et al. **Eur J Pediatr** 1996 Jul;155(7):596-602

Resistance to insulin-mediated glucose disposal in patients with noninsulin-dependent diabetes mellitus in the absence of obesity or microalbuminuria--a Clinical Research Center study. Sheu W, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1156-9

Detecting microalbuminuria by urinary albumin/creatinine concentration ratio. Jensen JS, et al. **Nephrol Dial Transplant** 1997;12 Suppl 2:6-9

SERUM ALBUMIN, BOVINE

Relief of amplification inhibition in PCR with bovine serum albumin or T4 gene 32 protein. Kreader CA. **Appl Environ Microbiol** 1996 Mar;62(3):1102-6

Controlled release of endothelial cell growth factor from chitosan-albumin microspheres for localized angiogenesis: in vitro and in vivo studies. Elçin YM, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 May; 24(3):257-71

Fabrication of microcapsules using poly(ethylene adipate) and a blend of poly(ethylene adipate) with poly(hydroxybutyrate-hydroxyvalerate): incorporation and release of bovine serum albumin. Atkins TW. **Biomaterials** 1997 Jan;18(2):173-80

Surface characterization of poly(alpha-hydroxy acid) microspheres prepared by a solvent evaporation/extraction process. Boury F, et al. **Biomaterials** 1997 Jan;18(2):125-36

Adsorption of bovine serum albumin on to titanium powder. Wassell DT, et al. **Biomaterials** 1996 May;17(9):859-64

An alternative to serum for cultivation of Plasmodium falciparum in vitro. Cranmer SL, et al. **Trans R Soc Trop Med Hyg** 1997 May-Jun;91(3):363-5

Increased immunogenicity of human vertebral body marrow after processing in bovine versus human serum albumin. Linetsky E, et al. **Transplant Proc** 1997 Jun;29(4):1960

ADMINISTRATION & DOSAGE

Progesterone and 3 alpha-androstanediol conjugated to bovine serum albumin affects estrous behavior when applied to the MBH and POA. Frye CA, et al. **Behav Neurosci** 1996 Jun;110(3):603-12

Controlled protein delivery from biodegradable tyrosine-containing poly(anhydride-co-imide) microspheres. Chiba M, et al. **Biomaterials** 1997 Jul; 18(13):893-901

The production of arthritis in beagles by an immunological reaction to bovine serum albumin. Ohashi F, et al. **Exp Anim** 1996 Oct;45(4):299-307

Effects of time of storage, albumin, and osmolality changes on outflow facility (C) of bovine anterior segment in vitro. Gual A, et al. **Invest Ophthalmol Vis Sci** 1997 Sep; 38(10):2165-71

In vivo properties of an IgG3-IL-2 fusion protein. A general strategy for immune potentiation. Harvill ET, et al. **J Immunol** 1996 Oct 1;157(7):3165-70

A novel biodegradable system based on gelatin nanoparticles and poly(lactic-co-glycolic acid) microspheres for protein and peptide drug delivery. Li JK, et al. **J Pharm Sci** 1997 Aug;86(8):891-5

ADVERSE EFFECTS

Cow's milk, bovine serum albumin, and IDDM: can we settle the controversies? Hammond-McKibben D, et al. **Diabetes Care** 1997 May;20(5):897-901 (59 ref.)

ANALYSIS

A mathematical model for the description of the Coomassie brilliant blue protein assay. Atherton BA, et al. **Anal Biochem** 1996 Jan 15;233(2):160-8

Rapid electrophoretic analysis of heterogeneity of bovine serum albumin using a linear polyacrylamide-coated capillary. Kubo K. **Anal Biochem** 1996 Oct 1;241(1):42-6

A 96-well plate protein assay for samples containing sodium dodecyl sulfate and reducing agent using the multiscreen nitrocellulose filtration plate with amido black. Mahoney CW, et al. **Anal Biochem** 1997 May 15;248(1):182-4

Linearization of the Bradford protein assay increases its sensitivity: theoretical and experimental studies. Zor T, et al. **Anal Biochem** 1996 May 1;236(2):302-8

Quantification of bovine albumin fraction V in cellular antigens of antileptospirosical Cuban vaccine vaxSpiral. Valdés González T, et al. **Arch Med Res** 1997 Autumn; 28(3):373-6

Detection by competitive enzyme-linked immunosorbent assay of a bovine serum albumin peptide (ABBOS) in infant formulas based on hydrolyzed cow's milk protein. van Beresteijn EC, et al. **Diabetes Care** 1996 Dec;19(12):1364-9

The role of pH and membrane porosity in preparative electrophoresis. Corthals GL, et al. **Electrophoresis** 1996 Apr;17(4):771-5

Pyrogallol red-molybdate: a reversible, metal chelate stain for detection of proteins immobilized on membrane supports. Shojaee N, et al. **Electrophoresis** 1996 Apr; 17(4):687-93

Primary sequence and glycation at lysine-548 of bovine serum albumin. Wada Y. **J Mass Spectrom** 1996 Mar; 31(3):263-6

Synthesis of a new tetradentate beta-diketonate-europium chelate and its application for time-resolved fluorimetry of albumin. Yuan J, et al. **J Pharm Biomed Anal** 1997 Jun; 15(9-10):1397-403

CHEMISTRY

Time-resolved fluorescence. An approach in protein analysis. Villari A, et al. **Adv Exp Med Biol** 1996;398:739-47

Solvent microextraction as a speciation tool: determination of free progesterone in a protein solution. Jeannot MA, et al. **Anal Chem** 1997 Aug 1;69(15):2935-40

Diminished susceptibility to proteolysis after protein modification by the lipid peroxidation product malondialdehyde: inhibitory role for crosslinked and noncrosslinked adducted proteins. Burcham PC, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):331-7

Comparative antioxidant and cardioprotective effects of ceruloplasmin, superoxide dismutase and albumin. Dumoulin MJ, et al. **Arzneimittelforschung** 1996 Sep; 46(9):855-61

Acid-stable fluorescent advanced glycation end products: vesperlysines A, B, and C are formed as crosslinked products in the Maillard reaction between lysine or proteins with glucose. Nakamura K, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):227-30

Covalent complexes between serum albumin and 7-hydroxycoumarin-4-acetic acid: synthesis and applications in the spectrophotometric detection of long-chain fatty acids. Demant EJ. **Biochim Biophys Acta** 1996 Nov 11;1304(1):43-55

Role of protein-bound carbonyl groups in the formation of advanced glycation endproducts. Liggins J, et al. **Biochim Biophys Acta** 1997 Aug 22;1361(2):123-30

Cyclopentadienyl iron dicarbonyl (eta 1-N-phthalimidato) complexes containing an isothiocyanate function: synthesis and application to protein side-chain selective labeling. Kazimierczak A, et al. **Bioconjug Chem** 1997 Jul-Aug; 8(4):489-94

Thermal unfolding of beta-lactoglobulin, alpha-lactalbumin, and bovine serum albumin. A thermodynamic approach. Relkin P. **Crit Rev Food Sci Nutr** 1996 Jul;36(6):565-601 (180 ref.)

Distribution of proteins in aqueous two-phase systems formed by dextran and polyethylene glycol. Influence of protein hydrophobicity. Hagarová D, et al. **Gen Physiol Biophys** 1995 Aug;14(4):277-91

DSC studies on bovine serum albumin denaturation. Effects of ionic strength and SDS concentration. Giancola C, et al. **Int J Biol Macromol** 1997 Jun;20(3):193-204

Viscosity of bovine serum albumin aqueous solutions as a function of temperature and concentration. Monkos K. **Int J Biol Macromol** 1996 Feb;18(1-2):61-8

The effects of ageing of amylopectin gels on the diffusion of BSA. Sun L, et al. **Int J Biol Macromol** 1997 Jun; 20(3):205-7

Differential scanning calorimetric studies on bovine serum albumin. IV. Effect of anionic surfactants with various lengths of hydrocarbon chain. Yamasaki M, et al. **Int J Biol Macromol** 1996 Dec;19(4):241-6

Temperature effects in cyanolysis using elemental sulfur. Lieske CN, et al. **J Appl Toxicol** 1996 Mar-Apr;16(2):171-5

Dynamic structure of proteins in solid state. 1H and 13C NMR relaxation study. Krushelnitsky AG, et al. **J Biomol Struct Dyn** 1996 Oct;14(2):211-24

Chiral resolution of pantoprazole sodium and related sulfoxides by complex formation with bovine serum albumin in capillary electrophoresis. Eberle D, et al. **J Chromatogr A** 1997 Jan 24;759(1-2):185-92

Enantioselectivity of bovine serum albumin-bonded columns produced with isolated protein fragments. II. Characterization of protein fragments and chiral binding sites. Haginaka J, et al. **J Chromatogr A** 1997 May 9; 769(2):215-23

Model discrimination and estimation of the intraparticle mass transfer parameters for the adsorption of bovine serum albumin onto porous adsorbent particles by the use of experimental frontal analysis data. Heeter GA, et al. **J Chromatogr A** 1997 Jul 25;776(1):3-13

Indirect photometric detection of inorganic anions in microcolumn ion chromatography using octadecylsilica immobilized with bovine serum albumin as stationary phase. Takeuchi T, et al. **J Chromatogr A** 1996 Nov 29; 755(1):37-42

Aqueous two-phase systems with a liquid protein (bovine serum albumin) phase for partitioning of enzymes. Johansson G. **J Chromatogr B Biomed Appl** 1996 May 17; 680(1-2):123-30

Surface changes associated with ram sperm cryopreservation revealed by counter-current distribution in an aqueous two-phase system. Effect of different cryoprotectants. Ollero M, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):157-64

Advanced glycation end product (AGE): characterization of the products from the reaction between D-glucose and serum albumin. Wu JT, et al. **J Clin Lab Anal** 1996; 10(1):21-34

Bispecific rabbit Fab'-bovine serum albumin conjugate used in hemagglutination immunoassay for beta-microseminoprotein. Yukawa N, et al. **J Immunoassay** 1997 Aug;18(3):215-33

Cu(2+)-mediated complex formation between polyacrylic acid (PAA) and bovine serum albumin. Mustafaev MI, et al. **J Immunol Methods** 1996 Oct 16;197(1-2):31-7

The incorporation and release of bovine serum albumin from poly-hydroxybutyrate-hydroxyvalerate microcapsules. Atkins TW, et al. **J Microencapsul** 1996 Nov-Dec; 13(6):709-17

Influence of formulation variables on the in-vitro release of albumin from biodegradable microparticulate systems. Igartua M, et al. **J Microencapsul** 1997 May-Jun; 14(3):349-56

Time-resolved fluoroimmunoassay for pituitary adenylate cyclase activating polypeptide 27 (PACAP27) using europium (III) ion chelate labeled streptavidin-biotin complex. Ito K, et al. **J Pharm Biomed Anal** 1997 Jun; 15(9-10):1489-95

Softening temperature of lyophilized bovine serum albumin and gamma-globulin as measured by spin-spin relaxation time of protein protons. Yoshioka S, et al. **J Pharm Sci** 1997 Apr;86(4):470-4

Dynamic and thermodynamic effects of glycerol on bovine serum albumin in aqueous solution: a tryptophan

phosphorescence study. Hogiu S, et al.
J Photochem Photobiol B 1997 Aug;40(1):55–60

A facile method for the labeling of proteins with zirconium isotopes. Meijs WE, et al. **Nucl Med Biol** 1996 May; 23(4):439–48

Determination of molecular mobility of lyophilized bovine serum albumin and gamma-globulin by solid-state 1H NMR and relation to aggregation-susceptibility. Yoshioka S, et al. **Pharm Res** 1996 Jun;13(6):926–30

Proton long-range migration along protein monolayers and its consequences on membrane coupling. Gabriel B, et al.
Proc Natl Acad Sci U S A 1996 Dec 10;93(25):14521–5

[Brownian dynamics of bovine serum albumin assessed by a proton relaxation method] Krushel'nitskii AG, et al.
Mol Biol (Mosk) 1997 Mar–Apr;31(2):293–9 **(Rus)**

[Structural transitions of serum proteins in solutions during high- and low-temperature dehydration] Darman'ian EB.
Prikl Biokhim Mikrobiol 1997 Mar–Apr;33(2):183–8 (Eng. Abstr.) **(Rus)**

[Kinetics of serum albumin adsorption on the macroporous glass MPS-250 GKH] Naumova LV, et al.
Prikl Biokhim Mikrobiol 1996 Sep–Oct;32(5):493–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Relationship between alcohol intake and immunoglobulin a immunoreactivity with acetaldehyde-modified bovine serum albumin. Worrall S, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):836–40

Inducible nitric oxide synthase mRNA and immunoreactivity in the lungs of rats eight hours after antigen challenge. Renzi PM, et al. **Am J Respir Cell Mol Biol** 1997 Jul; 17(1):36–40

Development of monoclonal antibodies for measurement of immunoglobulin G antibody responses in blue and gold macaws (Ara ararauna). Lung NP, et al. **Am J Vet Res** 1996 Aug;57(8):1157–61

Specific antigen/antibody interactions measured by force microscopy. Dammer U, et al. **Biophys J** 1996 May; 70(5):2437–41

Cow's milk, bovine serum albumin, and IDDM: can we settle the controversies? Hammond-McKibben D, et al.
Diabetes Care 1997 May;20(5):897–901 (59 ref.)

The prevalence of anti-bovine serum albumin antibodies in Japanese children with IDDM [letter] Sugihara S, et al.
Diabetes Care 1996 Nov;19(11):1308–10

Antibodies to bovine serum albumin (BSA) in type 1 diabetes and other autoimmune disorders [see comments] Füchtenbusch M, et al. **Exp Clin Endocrinol Diabetes** 1997; 105(2):86–91. Comment in: Exp Clin Endocrinol Diabetes 1997 ;105(2):83–5.

Infants diets and insulin-dependent diabetes: evaluating the "cows' milk hypothesis" and a role for anti-bovine serum albumin immunity. Atkinson MA, et al.
J Am Coll Nutr 1997 Aug;16(4):334–40 (56 ref.)

Immune response prevalence to formaldehyde-human serum albumin molecular adduct in a healthy population. Carraro E, et al. **J Environ Pathol Toxicol Oncol** 1997;16(2–3):215–8

Prolonged immune response evoked by a single subcutaneous injection of microcapsules having a monophasic antigen release. Sah H, et al. **J Pharm Pharmacol** 1996 Jan; 48(1):32–6

ISOLATION & PURIFICATION

Multichannel flow electrophoresis and its applications in purification of proteins, enzymes, and antibodies. Liu Z, et al. **Chin J Biotechnol** 1996;12(4):241–8

Study on bovine serum albumin recovery from reversed micellar solutions. Lu Q, et al. **Chin J Biotechnol** 1996; 12(2):111–8

Site accessibility and the pH dependence of the saturation capacity of a highly cross-linked matrix. Immobilized metal affinity chromatography of bovine serum albumin on chelating Superose. Patwardhan AV, et al.
J Chromatogr A 1997 Apr 11;767(1–2):11–23

Preparative desalting of bovine serum albumin by continuous annular chromatography. Reissner K, et al.
J Chromatogr A 1997 Feb 28;763(1–2):49–56

Mass transfer limitations in protein separations using ion-exchange membranes. Sarfert FT, et al.
J Chromatogr A 1997 Mar 7;764(1):3–20

Enantioselectivity properties of human serum albumin immobilized on anion-exchangers based on polyvinylimidazole-coated silica. Effect of protein loading on separation properties. Taleb NL, et al.
J Chromatogr A 1997 Jul 25;776(1):45–53

Analytical partitioning of poly(ethylene glycol)-modified proteins. Delgado C, et al.
J Chromatogr B Biomed Appl 1997 May 9;692(2):263–72

Evaluation and separation of steroid-bovine serum albumin conjugates by high-performance liquid chromatography. Hill M, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28; 691(1):187–91

Proinflammatory activity on rat carotid endothelium of albumins obtained by different procedures. Zúñiga A, et al. **Thromb Res** 1997 May 1;86(3):243–54

METABOLISM

Functional characterization of albumin binding to the apical membrane of OK cells. Gekle M, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F286–91

Factors influencing [3H]ryanodine binding to the skeletal muscle Ca2+ release channel. Needleman DH, et al.
Anal Biochem 1997 May 15;248(1):173–9

Comparison of the effect of different inhibitors of the non-enzymatic glycation of rat tail tendons and bovine serum albumin. Menzel EJ, et al. **Ann Clin Biochem** 1996 May;33 (Pt 3):241–8

Pharmacokinetic analysis of protein-conjugated doxorubicin (DXR) and its degraded adducts in DXR-sensitive and -resistant rat hepatoma cells. Takahashi N, et al.
Anticancer Drugs 1996 Aug;7(6):687–96

Rapid formation of advanced glycation end products by intermediate metabolites of glycolytic pathway and polyol pathway. Hamada Y, et al.
Biochem Biophys Res Commun 1996 Nov 12;228(2):539–43

Oxidative modification of tryptophan residues exposed to peroxynitrite. Kato Y, et al.
Biochem Biophys Res Commun 1997 May 8;234(1):82–4

Albumin adhesion on some biological and non-biological glasses and connection with their Z-potentials. Krajewski A, et al. **Biomaterials** 1996 Jan;17(1):53–60

Apatite deposition on titanium surfaces--the role of albumin adsorption. Serro AP, et al. **Biomaterials** 1997 Jul; 18(14):963–8

Titration calorimetry of anesthetic-protein interaction: negative enthalpy of binding and anesthetic potency. Ueda I, et al. **Biophys J** 1997 Apr;72(4):1812–7

Role of a copper (I)-dependent enzyme in the anti-platelet action of S-nitrosoglutathione. Gordge MP, et al.
Br J Pharmacol 1996 Oct;119(3):533–8

Transport of albumin into the intestinal lumen of the rat. Kimm MH, et al. **Can J Physiol Pharmacol** 1997 Mar; 75(3):193–8

Solid-state 13C-NMR spectroscopy of adduction products of 2,5-hexanedione with ribonuclease, albumin, and rat neurofilament protein. Yan B, et al. **Chem Biol Interact** 1996 Oct 21;102(2):101–16

Growth modulation of retinal microvascular cells by early and advanced glycation products. Ruggiero-Lopez D, et al. **Diabetes Res Clin Pract** 1997 Jan;34(3):135–42

Transcytosis of albumin in endothelial cells is brefeldin A--independent. Antohe F, et al. **Endothelium** 1997; 5(2):125–36

Protein modification by a Maillard reaction intermediate methylglyoxal. Immunochemical detection of fluorescent 5-methylimidazolone derivatives in vivo. Uchida K, et al.
FEBS Lett 1997 Jun 30;410(2–3):313–8

Influence of structure on the antioxidant activity of indolinic nitroxide radicals. Antosiewicz J, et al.
Free Radic Biol Med 1997;22(1–2):249–55

Role of ascorbate and protein thiols in the release of nitric oxide from S-nitroso-albumin and S-nitroso-glutathione in human plasma. Scorza G, et al.
Free Radic Biol Med 1997;22(4):633–42

Aminoguanidine and its pro-oxidant effects on an experimental model of protein glycation. Skamarauskas JT, et al. **Free Radic Biol Med** 1996;21(6):801–12

Photochemical conjugation of peptides to carrier proteins using 1,2,3-thiadiazole-4-carboxylic acid. Immunoreactivity of free C-terminal epitope with specific antibodies. Hansen PR, et al. **Int J Pept Protein Res** 1996 Jun;47(6):419–26

On the role of lysine residues in the bromophenol blue-albumin interaction. Trivedi VD. **Ital J Biochem** 1997 Jun;46(2):67–73

Binding of the volatile anesthetic chloroform to albumin demonstrated using tryptophan fluorescence quenching. Johansson JS. **J Biol Chem** 1997 Jul 18;272(29):17961–5

The incorporation and release of bovine serum albumin from poly(beta-hydroxybutyrate-hydroxyvalerate) microspheres. Atkins TW, et al.
J Biomater Sci Polym Ed 1996;7(12):1065–73

Surface studies of albumin immobilized onto PE and PVC films. de Queiroz AA, et al. **J Biomater Sci Polym Ed** 1997; 8(9):667–81

Adsorption of plasma proteins to DMAA hydrogels obtained by ionizing radiation and its relationship with blood compatibility. de Queiroz AA, et al.
J Biomater Sci Polym Ed 1997;8(5):335–47

Alkylated cellulosic membranes with enhanced albumin affinity: influence of competing proteins. Frautschi JR, et al. **J Biomater Sci Polym Ed** 1995;7(7):563–75

Evidence for hapten recognition in receptor-mediated intracellular uptake of a hapten-protein conjugate by murine macrophage. Cherukuri A, et al. **Mol Immunol** 1997 Jan;34(1):21–32

When vitreous enters the subretinal space. Implications for subretinal fluid protein. Takeuchi A, et al. **Retina** 1996; 16(5):426–30

PHARMACOKINETICS

Reabsorption of native and glycated albumin by renal proximal tubular epithelial cells. Bendayan M, et al.
Am J Physiol 1996 Aug;271(2 Pt 2):F261–8

Plasma ANP levels and protein extravasation during graded expansion with equilibrated whole blood. Tucker VL.
Am J Physiol 1996 Sep;271(3 Pt 2):R601–9

Suppressor activity in Leishmania donovani-infected hamster serum: reversion by delipidated bovine serum albumin and role in cell cycle events. Vasconcellos RC, et al.
Braz J Med Biol Res 1996 May;29(5):615–22

Internalization and biological effects of serum albumin in the breast cancer MCF-7 and MDA-MB 231 cells. Germain P, et al. **Cell Mol Biol (Noisy-le-grand)** 1995 Dec; 41(8):1119–29

Incomplete elimination of the ABBOS epitope of bovine serum albumin under simulated gastrointestinal conditions of infants. Alting AC, et al. **Diabetes Care** 1997 May; 20(5):875–80

Bidirectional small intestinal permeability changes to different-sized molecules after HCl-induced injury in the rat. Lundin PD, et al. **Dig Dis Sci** 1997 Mar;42(3):677–83

Absorption of hydrolysed bovine serum albumin from the human jejunum over a 6-hour period. Reicht G, et al.
Eur J Gastroenterol Hepatol 1997 Jan;9(1):81–5

Blood-brain barrier permeability during the development of experimental bacterial meningitis in the rat. Kim KS, et al. **Exp Neurol** 1997 May;145(1):253–7

Translocation of NLS-BSA conjugates into nuclei of permeabilized mammalian cells can be supported by protoplast extract. An experimental system for studying plant cytosolic factors involved in nuclear import. Broder YC, et al. **FEBS Lett** 1997 Aug 4;412(3):535–9

Comparison of tight junction permeability for albumin in iris pigment epithelium and retinal pigment epithelium in vitro. Rezai KA, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan;235(1):48–55

An in vitro model for endothelial permeability: assessment of monolayer integrity. Kazakoff PW, et al.
In Vitro Cell Dev Biol Anim 1995 Dec;31(11):846–52

Microvascular permeability of the isolated rat heart to various solutes in well-oxygenated and hypoxic conditions. al-Haboubi HA, et al. **Int J Microcirc Clin Exp** 1996 Nov-Dec;16(6):291–301

In situ observation of bovine serum albumin-adsorbed stearic acid monolayer by Brewster angle microscopy. Tanaka H, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):206–11

Comparison of albumin binding capacities of three different reactive dye-derivatized poly(ethylene glycol dimethacrylate-hydroxyethyl methacrylate) microbeads. Denizli A, et al. **J Biomater Sci Polym Ed** 1997;8(6):411–20

Ultrastructural study on the interaction of native and cationized albumin-gold complexes with mouse brain microvascular endothelium. Vorbrodt AW, et al.
J Neurocytol 1996 Nov;25(11):645–57

[Intracellular distribution of bovine serum albumin-conjugated doxorubicin and multidrug resistance] Takahashi N, et al. **Gan To Kagaku Ryoho** 1997 Jan; 24(1):87–92 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Effect of bovine serum albumin on the calcium release channel of sarcoplasmic reticulum from rabbit skeletal muscle. Catinot MP, et al. **Acta Physiol Scand** 1997 Jul; 160(3):199–205

Advanced glycation end products (AGEs) co-localize with AGE receptors in the retinal vasculature of diabetic and of AGE-infused rats. Stitt AW, et al. **Am J Pathol** 1997 Feb;150(2):523–31

Contribution of ANP to plasma protein escape during VE: effects of thiorphan and atrial appendectomy. Tucker VL.
Am J Physiol 1996 Sep;271(3 Pt 2):R610–8

Comparative antioxidant and cardioprotective effects of ceruloplasmin, superoxide dismutase and albumin. Dumoulin MJ, et al. **Arzneimittelforschung** 1996 Sep; 46(9):855–61

Treatment with GAD65 or BSA does not protect against diabetes in BB rats. Petersen JS, et al. **Autoimmunity** 1997; 25(3):129–38

Multivalent ganglioside and sphingosine conjugates modulate myelin protein kinases. Mahoney JA, et al.
Biochim Biophys Acta 1997 Aug 14;1328(1):30–40

Development of a culture medium (BECM-3) for porcine embryos: effects of bovine serum albumin and fetal bovine serum on embryo development. Dobrinsky JR, et al.
Biol Reprod 1996 Nov;55(5):1069–74

Adsorption of chondroitin-4-sulphate and heparin onto hydroxyapatite--effect of bovine serum albumin. Hughes Wassell DT, et al. **Biomaterials** 1997 Jul;18(14):1001–7

Effects of gelatin and BSA on the amplification reaction for generating RAPD. Stommel JR, et al. **Biotechniques** 1997 Jun;22(6):1064–6

Horseradish peroxidase and glycosylated BSA induce nitric oxide production in murine macrophages. Afroun-Talantikite S, et al. **C R Acad Sci III** 1996 Jun; 319(6):453–9

Internalization and biological effects of serum albumin in the breast cancer MCF-7 and MDA-MB 231 cells. Germain P, et al. **Cell Mol Biol (Noisy-le-grand)** 1995 Dec; 41(8):1119–29

Effects of albumin on the disposition of morphine and morphine-3-glucuronide in the rat isolated perfused liver. O'Brien JA, et al. **Clin Exp Pharmacol Physiol** 1997 Feb; 24(2):143–8

The receptor for advanced glycation end products mediates the chemotaxis of rabbit smooth muscle cells. Higashi T, et al. **Diabetes** 1997 Mar;46(3):463–72

Bovine serum albumin and lysophosphatidic acid stimulate calcium mobilization and reversal of cAMP-induced stellation in rat spinal cord astrocytes. Manning TJ Jr, et al. **Glia** 1997 Jun;20(2):163–72

Plasma albumin induces calcium waves in rat cortical astrocytes. Nadal A, et al. **Glia** 1997 Apr;19(4):343–51

Polyvinyl alcohol and amino acids as substitutes for bovine

serum albumin in culture media for mouse preimplantation embryos. Biggers JD, et al. **Hum Reprod Update** 1997 Mar–Apr;3(2):125–35

Enhancement of macrophage–mediated bactericidal activity by macrophage–mannose receptor–ligand interaction. Lefkowitz DL, et al. **Immunol Cell Biol** 1997 Apr; 75(2):136–41

The effect of serum albumin on the radiolysis of DNA studied by constant field electrophoresis and compared to alterations caused by low molecular weight OH. scavengers. Distel LV, et al. **Int J Radiat Biol** 1997 Apr; 71(4):401–12

Radiolysis of DNA in the presence of a protein studied by HPL–gel chromatography. Schuessler H, et al. **Int J Radiat Biol** 1997 May;71(5):543–53

Voltage–dependent calcium channels and Gi regulatory protein mediate the human sperm acrosomal exocytosis induced by N–acetylglucosaminyl/mannosyl neoglycoproteins. Brandelli A, et al. **J Androl** 1996 Sep–Oct;17(5):522–9

Modulation of central nervous system metabolism by macromolecules: effects of albumin and histones on glucose oxidation by synaptosomes. Tildon JT, et al. **J Assoc Acad Minor Phys** 1996;7(2):47–52

Effect of albumin on the estimation, in vitro, of phenytoin Vmax and Km values: implications for clinical correlation. Ludden LK, et al. **J Pharmacol Exp Ther** 1997 Jul; 282(1):391–6

Endothelin receptor antagonists: effect of serum albumin on potency and comparison of pharmacological characteristics. Wu–Wong JR, et al. **J Pharmacol Exp Ther** 1997 May;281(2):791–8

Endoproteinase activity of type A botulinum neurotoxin: substrate requirements and activation by serum albumin. Schmidt JJ, et al. **J Protein Chem** 1997 Jan;16(1):19–26

Inhibitory effect of albumin–derived advanced glycosylation products on PMA–induced superoxide anion production by rat macrophages. Ramírez R, et al. **Life Sci** 1997; 60(25):2279–89

Effects of advanced glycation end–products on the proliferation and differentiation of osteoblast–like cells. McCarthy AD, et al. **Mol Cell Biochem** 1997 May; 170(1–2):43–51

Effect of serum albumin on estrogen metabolism in human cancer cell lines. Bradlow HL, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):221–5

Delayed in vitro fertilization of zebrafish eggs in Hank's saline containing bovine serum albumin. Sakai N, et al. **Mol Mar Biol Biotechnol** 1997 Jun;6(2):84–7

Effect of follicle size and quality on the ability of follicular fluid to support cytoplasmic maturation of bovine oocytes. Carolan C, et al. **Mol Reprod Dev** 1996 Apr;43(4):477–83

Cholesterol and triglyceride content in lipoprotein fractions of rats treated with bovine serum albumin [letter] Pejović MD, et al. **Nephron** 1996;73(4):713

Digoxin transfer across the isolated placenta is influenced by maternal and fetal albumin concentrations. Schmolling J, et al. **Reprod Fertil Dev** 1996;8(6):969–74

No effect of albumin on the dermal absorption rate of hydrocortisone 21–butyrate, permethrin or diflunisal in the isolated, single–pass perfused rabbit ear. Bast GE, et al. **Skin Pharmacol** 1996;9(5):327–33

TOXICITY

Adoptive transfer of susceptibility to antigen–induced arthritis into severe combined immunodeficient (SCID) mice: role of CD4+ and CD8+ T cells. Petrow PK, et al. **Immunol Invest** 1996 Jul;25(4):341–53

Prevention of antigen–induced arthritis in rats by oral administration of the inducing antigen. Yoshino S. **Scand J Clin Lab Invest** 1996 Apr;56(2):111–5

Proinflammatory activity on rat carotid endothelium of albumins obtained by different procedures. Zúñiga A, et al. **Thromb Res** 1997 May 1;86(3):243–54

ULTRASTRUCTURE

Specific antigen/antibody interactions measured by force microscopy. Dammer U, et al. **Biophys J** 1996 May; 70(5):2437–41

SERUM ALBUMIN, RADIO–IODINATED

DIAGNOSTIC USE

Steroids conjugated to bovine serum albumin as tools to demonstrate specific steroid neuronal membrane binding sites. Zheng J, et al. **J Psychiatry Neurosci** 1996 May; 21(3):187–97

PHARMACOKINETICS

Transport of tracer albumin from peritoneum to plasma: role of diaphragmatic, visceral, and parietal lymphatics. Zakaria ER, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1549–56

Clearance of albumin by cortical bone and marrow. McCarthy ID. **Clin Orthop** 1997 Jan;(334):24–9

Accelerated clearance of albumin from the osteoarthritic knee: implications for interpretation of concentrations of "cartilage markers" in synovial fluid. Myers SL, et al. **J Rheumatol** 1996 Oct;23(10):1744–8

SERUM AMYLOID PROTEIN A see **AMYLOID PROTEIN SAA**

SERUM BACTERICIDAL TEST

Pharmacodynamic effects of amoxicillin versus cefotaxime against penicillin–susceptible and penicillin–resistant pneumococcal strains: a phase I study. Aguilar L, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1389–91

Serum bactericidal activity of ceftazidime administered as continuous infusion of 3 g over 24 h versus intermittent bolus infusion of 2 g against Pseudomonas aeruginosa in healthy volunteers [letter] Lemmen SW, et al. **J Antimicrob Chemother** 1997 Jun;39(6):841–2

Serum hemolytic and bactericidal activity in breast and formula–fed infants. Barriga C, et al. **Rev Esp Fisiol** 1995 Dec;51(4):213–8

[Serum bactericidal rate. Methodological proposal to predict the efficacy of antimicrobial therapy] Riera EB, et al. **Medicina (B Aires)** 1996;56(2):115–8 (Eng. Abstr.) **(Spa)**

STANDARDS

Use of serum bactericidal activity in assessing previous antibiotic therapy in acute lower respiratory tract infection in children. Vasudevan G, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):639–41

SERUM COMPLEMENT TITER see **COMPLEMENT HEMOLYTIC ACTIVITY ASSAY**

SERUM–FREE MEDIA see **CULTURE MEDIA, SERUM–FREE**

SERUM GLOBULINS

[Euglobulin lysis time] Sakuragawa N. **Nippon Rinsho** 1997 Mar;55 Suppl 1:139–44 (4 ref.) **(Jpn)**

ANALYSIS

Low molecular mass proteins and urinary enzymes in amniotic fluid of healthy pregnant women at progressive stages of gestation. Mussap M, et al. **Clin Biochem** 1996 Feb;29(1):51–6

Excessive urokinase–type plasminogen activator activity in the euglobulin fraction of patients with Alzheimer–type dementia. Alonso DF, et al. **J Neurol Sci** 1996 Jul; 139(1):83–8

Leukogram and serum globulin values in two dogs with systemic Xylohypha bantiana infection. Lobetti RG. **J S Afr Vet Assoc** 1996 Jun;67(2):91–2

CHEMISTRY

Structural characterization of bovine collectin–43. Rothmann AB, et al. **Eur J Biochem** 1997 Feb 1;243(3):630–5

GENETICS

Cloning and sequencing of cDNAs encoding plasma alpha–macroglobulin and murinoglobulin from guinea pig: implications for molecular evolution of alpha–macroglobulin family. Iwasaki H, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1167–75

METABOLISM

Protein S, von Willebrand factor, and euglobulin lysis time as markers of coronary heart disease [letter] Dart A, et al. **Ann Intern Med** 1997 Jan 1;126(1):89

Affinity and kinetic analysis of the bovine plasma C–type lectin collectin–43 (CL–43) interacting with mannan. Holmskov U, et al. **FEBS Lett** 1996 Sep 16;393(2–3):314–6

SERUM MARKERS see **BIOLOGICAL MARKERS**

SERUM PROTEINS see **BLOOD PROTEINS**

SERUM SIALOMUCIN see **OROSOMUCOID**

SERUM SICKNESS

CHEMICALLY INDUCED

Minocycline–induced serum sickness. Levenson T, et al. **Allergy Asthma Proc** 1996 Mar–Apr;17(2):79–81

Fluoxetine–induced serum sickness–like reaction [letter] Shapiro LE, et al. **Ann Pharmacother** 1997 Jul–Aug; 31(7–8):927

Cefaclor–associated serum sickness–like reaction. **Can Med Assoc J** 1996 Oct 1;155(7):913–4, 917–8 **(Eng, Fre)**

Serum sickness associated with 6–mercaptopurine in a patient with Crohn's disease. Andersen JM, et al. **Pharmacotherapy** 1997 Jan–Feb;17(1):173–6

[Cefaclor therapy followed by serum sickness–like symptoms] Szalai Z, et al. **Orv Hetil** 1997 Apr 6;138(14):855–8 (Eng. Abstr.) **(Hun)**

ETIOLOGY

Serum sickness–like illness following streptokinase therapy. A case report. Creamer JD, et al. **Clin Exp Dermatol** 1995 Nov;20(6):468–70

Serum sickness after wasp venom immunotherapy: clinical and biological study. De Bandt M, et al. **J Rheumatol** 1997 Jun;24(6):1195–7

METABOLISM

Glomerular sequence of events concerning monocyte/macrophage accumulation and ICAM–1 expression during experimental serum sickness nephritis in the rat. Yang X. **Pathol Int** 1997 Apr;47(4):238–49

PATHOLOGY

Glomerular proliferative activity and T lymphocyte infiltration in acute serum sickness. Borges GP, et al. **Clin Immunol Immunopathol** 1997 Mar;82(3):299–302

PHYSIOPATHOLOGY

Inducible osteonecrosis in a rabbit serum sickness model: deposition of immune complexes in bone marrow. Nakata K, et al. **Bone** 1996 Jun;18(6):609–15

Glomerular proliferative activity and T lymphocyte infiltration in acute serum sickness. Borges GP, et al. **Clin Immunol Immunopathol** 1997 Mar;82(3):299–302

SERUM THYMIC FACTOR see **THYMIC FACTOR, CIRCULATING**

SERVICE, SOCIAL see **SOCIAL WORK**

SERVICES, HOSPITAL ANCILLARY see **ANCILLARY SERVICES, HOSPITAL**

SERYL T RNA SYNTHETASE

CHEMISTRY

Protein dissection of the antiparallel coiled coil from Escherichia coli seryl tRNA synthetase. Oakley MG, et al. **Biochemistry** 1997 Mar 4;36(9):2544–9

Defining the active site of yeast seryl–tRNA synthetase. Mutations in motif 2 loop residues affect tRNA–dependent amino acid recognition. Lenhard B, et al. **J Biol Chem** 1997 Jan 10;272(2):1136–41

GENETICS

Seryl–tRNA synthetase from the extreme halophile Haloarcula marismortui—isolation, characterization and sequencing of the gene and its expression in Escherichia coli. Taupin CM, et al. **Eur J Biochem** 1997 Jan 15; 243(1–2):141–50

Characterization of a temperature–sensitive Escherichia coli mutant and revertants with altered seryl–tRNA synthetase activity. Ferri ML, et al. **J Bacteriol** 1997 Apr; 179(7):2446–8

METABOLISM

Selection of aminoacylated tRNAs from RNA libraries having randomized acceptor stem sequences: using old dogs to perform new tricks. Sampson JR, et al. **Methods Enzymol** 1996;267:384–410

SERYLTRIHYDROXYBENZYLHYDRAZINE see **BENSERAZIDE**

SESAME OIL

ADMINISTRATION & DOSAGE

Effect of sesame oil on serum and liver lipid profiles in the rat. Satchithanandam S, et al. **Int J Vitam Nutr Res** 1996; 66(4):386–92

CHEMISTRY

Effect of sesame seed proteins supplementation on the nutritional, physical, chemical and sensory properties of wheat flour bread. El–Adawy TA. **Plant Foods Hum Nutr** 1995 Dec;48(4):311–26

IMMUNOLOGY

Sesame seed and sesame seed oil contain masked allergens of growing importance. Kanny G, et al. **Allergy** 1996 Dec; 51(12):952–7 (23 ref.)

SESAMOID BONES

Pseudomonas osteomyelitis of the metatarsal sesamoid bones. Rahn KA, et al. **Am J Orthop** 1997 May;26(5):365–7

Symptomatic cyamella. Mishra AK, et al. **Arthroscopy** 1996 Jun;12(3):327–9

Sesamoid complex disorders. Oloff LM, et al. **Clin Podiatr Med Surg** 1996 Jul;13(3):497–513 (36 ref.)

Sesamoid bone interposition complicating reduction of a hallux joint dislocation. Ward SJ, et al. **J Accid Emerg Med** 1996 Jul;13(4):297–8

The hallucal interphalangeal sesamoid [see comments] Roukis TS, et al. **J Foot Ankle Surg** 1996 Jul–Aug;35(4):303–8; discussion 372 (17 ref.). Comment in: J Foot Ankle Surg 1997 Jan–Feb;36(1):76–7.

Avascular necrosis of an index sesamoid: a case report. Takei TR, et al. **J Hand Surg [Br]** 1996 Nov;21(6):1104–5

SESAMOID BONES

[Correction of high-grade sesamoid bone dislocation in hallux valgus using Austin's osteotomy with and without lateral soft tissue release] Trnka HJ, et al. **Z Orthop Ihre Grenzgeb** 1997 Mar-Apr;135(2):150-6 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

The hallucal interphalangeal sesamoid [letter; comment] Gosselin RE. **J Foot Ankle Surg** 1997 Jan-Feb;36(1):76-7 . Comment on: J Foot Ankle Surg 1996 Jul-Aug;35(4):303-8; discussion 372.

ANATOMY & HISTOLOGY

Functional anatomy of the radial sesamoid bone in the giant panda (Ailuropoda melanoleuca). Endo H, et al. **J Anat** 1996 Dec;189 (Pt 3):587-92

[The pisiform bone: sesamoid or carpal bone?] May O. **Ann Chir Main Memb Super** 1996;15(4):265-71 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

The arterial shift features in the equine proximal sesamoid bone. Cornelissen BP, et al. **Vet Q** 1996;18 Suppl 2:S110-6

INJURIES

Incarcerated subhallucal sesamoid of the great toe: irreducible dislocation of the interphalangeal joint of the great toe by an accessory sesamoid bone. Berger JL, et al. **Am J Orthop** 1997 Mar;26(3):226-8

Sesamoids opened earlier and easier by bone imaging. Choe W. **Clin Nucl Med** 1997 Jul;22(7):506-7

Autogenous bone grafting of hallux sesamoid nonunions. Anderson RB, et al. **Foot Ankle Int** 1997 May;18(5):293-6

Bilateral os peroneum fractures: comparison of conservative and surgical treatment and outcomes. MacDonald BD, et al. **J Foot Ankle Surg** 1997 May-Jun;36(3):220-5

INNERVATION

The diagnostic nerve block of the sesamoidean nerve: desensitized structures and possible clinical applications. Cornelissen BP, et al. **Vet Q** 1996;18 Suppl 2:S97-102

PATHOLOGY

Osteonecrosis of the tibial and fibular sesamoids in an aerobics instructor. Julsrud ME. **J Foot Ankle Surg** 1997 Jan-Feb; 36(1):31-5

Impingement of the flexor pollicis longus tendon by an enlarged radial sesamoid causing trigger thumb: a case report. Seybold EA, et al. **J Hand Surg [Am]** 1996 Jul; 21(4):619-20

RADIOGRAPHY

[Sesamoid bone complex and hallux valgus deformity. A retrospective analysis of 82 Mitchell osteotomies] Wetzel R, et al. **Z Orthop Ihre Grenzgeb** 1996 Nov-Dec; 134(6):524-32 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Sesamoids opened earlier and easier by bone imaging. Choe W. **Clin Nucl Med** 1997 Jul;22(7):506-7

SURGERY

The effect of hallux sesamoid excision on the flexor hallucis longus moment arm. Aper RL, et al. **Clin Orthop** 1996 Apr;(325):209-17

Hallux interphalangeal joint sesamoidectomy. Yu GV, et al. **J Am Podiatr Med Assoc** 1996 Mar;86(3):105-11

The hallucal interphalangeal sesamoid [letter; comment] Gosselin RE. **J Foot Ankle Surg** 1997 Jan-Feb;36(1):76-7 . Comment on: J Foot Ankle Surg 1996 Jul-Aug;35(4):303-8; discussion 372.

ULTRASONOGRAPHY

Ultrasonographic examination of the proximal scutum in the horse. Denoix JM, et al. **Equine Vet J** 1997 Mar; 29(2):136-41

SESQUITERPENES

Esoteric contact dermatitis. Part IV: Devastating contact dermatitis in India produced by American parthenium weed (the scourge of India). Fisher AA. **Cutis** 1996 May; 57(5):297-8

ADMINISTRATION & DOSAGE

Monotherapy with sodium artesunate for uncomplicated falciparum malaria in Thailand: a comparison of 5- and 7-day regimens. Looareesuwan S, et al. **Acta Trop** 1997 Sep 30;67(3):197-205

Open randomized trial of oral artemether alone and a sequential combination with mefloquine for acute uncomplicated falciparum malaria. Looareesuwan S, et al. **Am J Trop Med Hyg** 1997 Jun;56(6):613-7

A comparative clinical trial of sequential treatments of severe malaria with artesunate suppository followed by mefloquine in Thailand. Looareesuwan S, et al. **Am J Trop Med Hyg** 1997 Sep;57(3):348-53

Comparison of artemisinin suppositories, intramuscular artesunate and intravenous quinine for the treatment of severe childhood malaria. Cao XT, et al. **Trans R Soc Trop Med Hyg** 1997 May-Jun;91(3):335-42

[Antitumor effect of TNP-470 against tongue carcinoma model by intratumor administration] Ninomiya Y, et al. **Gan To Kagaku Ryoho** 1996 Dec;23(14):1993-6 **(Jpn)**

[Severe falciparum malaria among travellers to Thailand. Blood exchange and artemisinine treatment are therapeutic alternatives] Ekvall H, et al. **Lakartidningen** 1997 Apr 30; 94(18):1713-5 (15 ref.) **(Swe)**

ADVERSE EFFECTS

Occupational contact dermatitis toward sesquiterpene lactones in a florist. Bangha E, et al. **Am J Contact Dermat** 1996 Sep;7(3):188-90

Psoralen plus UVA protocol for Compositae photosensitivity. Burke DA, et al. **Am J Contact Dermat** 1996 Sep;7(3):171-6

A 6-year experience with compositae mix. Hausen BM. **Am J Contact Dermat** 1996 Jun;7(2):94-9

Sesquiterpene lactone allergy. Warshaw EM, et al. **Am J Contact Dermat** 1996 Mar;7(1):1-23 (97 ref.)

Increased growth and incidence of lymph node metastases due to the angiogenesis inhibitor AGM-1470. Hori K, et al. **Br J Cancer** 1997;75(12):1730-4

Artesunate and cerebellar dysfunction in falciparum malaria [letter] Davis TM, et al. **N Engl J Med** 1997 Sep 11; 337(11):792; discussion 793

Artesunate and cerebellar dysfunction in falciparum malaria [letter] Gachot B, et al. **N Engl J Med** 1997 Sep 11; 337(11):792-3

Ataxia and slurred speech after artesunate treatment for falciparum malaria [letter] Miller LG, et al. **N Engl J Med** 1997 May 1;336(18):1328

ANALYSIS

Solid phase microextraction for quantitative headspace sampling of apple volatiles. Matich AJ, et al. **Anal Chem** 1996 Dec 1;68(23):4114-8

BLOOD

Single dose pharmacokinetics of oral artemether in healthy Malaysian volunteers. Mordi MN, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):363-5

Determination of artemether and its major metabolite, dihydroartemisinin, in plasma using high-performance liquid chromatography with electrochemical detection. Karbwang J, et al. **J Chromatogr B Biomed Appl** 1997 Mar 7;690(1-2):259-65

Simultaneous determination of artesunic acid and dihydroartemisinin in blood plasma by high-performance liquid chromatography for application in clinical pharmacological studies. Navaratnam V, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):157-62

Determination of artemether and its metabolite, dihydroartemisinin, in plasma by high-performance liquid chromatography and electrochemical detection in the reductive mode. Sandrenan N, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):145-53

Chemical stability of artesunate injection and proposal for its administration by intravenous infusion. Batty KT, et al. **J Pharm Pharmacol** 1996 Jan;48(1):22-6

A high-performance liquid chromatography analysis of plasma artemisinin using a glassy carbon electrode for reductive electrochemical detection. Chan KL, et al. **Planta Med** 1997 Feb;63(1):66-9

The disposition of intramuscular artemether in children with cerebral malaria; a preliminary study. Murphy SA, et al. **Trans R Soc Trop Med Hyg** 1997 May-Jun;91(3):331-4

CHEMICAL SYNTHESIS

Structure-activity relationships of sandalwood odorants: synthesis and odour of methyl-beta-santalol. Buchbauer G, et al. **Arch Pharm (Weinheim)** 1997 Apr;330(4):112-4

Antimalarial activity of 1,4-epidioxy-bisabola-2,12-diene derivatives. Rücker G, et al. **Arch Pharm (Weinheim)** 1997 Jan-Feb;330(1-2):12-6

Simple approach to optically active drimane sesquiterpenes based on enzymatic resolution. Akita H, et al. **Chem Pharm Bull (Tokyo)** 1997 May;45(5):824-31

Synthesis of (+/-)-PF1092A, B, and C; new nonsteroidal progesterone receptor ligands. Kurihara K, et al. **J Antibiot (Tokyo)** 1997 Apr;50(4):360-2 1

Reaction between ferriprotoporphyrin IX and the antimalarial endoperoxide artesunate gives an intermediate species with enhanced redox catalytic activity. Adams PA, et al. **J Pharm Pharmacol** 1996 Feb;48(2):183-7

Chemical modification and structure-activity relationships of pyripyropenes. 3. Synthetic conversion of pyridine-pyrone moiety. Obata R, et al. **Jpn J Antibiot** 1997 Mar;50(3):229-36

Structural basis for cyclic terpene biosynthesis by tobacco 5-epi-aristolochene synthase [see comments] Starks CM, et al. **Science** 1997 Sep 19;277(5333):1815-20. Comment in: Science 1997 Sep 19;277(5333):1788-9.

[Reaction of 3-hydroxy-dihydrosantonin with TsOH. A formal synthesis of dihydrocotunolide] Kawamata T, et al. **Yakugaku Zasshi** 1996 Sep;116(9):748-52 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Structure-activity relationships of sandalwood odorants: synthesis and odour of methyl-beta-santalol. Buchbauer G, et al. **Arch Pharm (Weinheim)** 1997 Apr;330(4):112-4

Helenanolide-type sesquiterpene lactones--III. Rates and stereochemistry in the reaction of helenalin and related helenanolides with sulfhydryl containing biomolecules. Schmidt TJ. **Bioorg Med Chem** 1997 Apr;5(4):645-53

Sesquiterpenoids from Thapsia species and medicinal chemistry of the thapsigargins. Christensen SB, et al. **Fortschr Chem Org Naturst** 1997;71:129-67 (84 ref.)

PF1092A, B and C, new nonsteroidal progesterone receptor ligands produced by Penicillium oblatum. II. Physico-chemical properties and structure elucidation. Tabata Y, et al. **J Antibiot (Tokyo)** 1997 Apr;50(4):309-13

Chlovalicin, a new cytocidal antibiotic produced by Sporothrix sp. FO-4649. II. Physicochemical properties and structural elucidation. Takamatsu S, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):635-8

Mechanism-based design of parasite-targeted artemisinin derivatives: synthesis and antimalarial activity of benzylamino and alkylamino ether analogues of artemisinin. O'Neill PM, et al. **J Med Chem** 1996 Oct 25;39(22):4511-4

Molecular structure of terrecyclodiol: a derivative of the antifungal metabolite terrecyclic acid A from Aspergillus terreus. Almassi F, et al. **J Nat Prod** 1996 Jan;59(1):59-61

Stereochemistry-dependent cytotoxicity of some artemisinin derivatives. Beekman AC, et al. **J Nat Prod** 1997 Apr; 60(4):325-30

Macrocarpals H, I, and J from the Leaves of Eucalyptus globulus. Osawa K, et al. **J Nat Prod** 1996 Sep;59(9):823-7

Design and evaluation of two-phase partition-dissolution method and its use in evaluating artemisinin tablets. Hoa NT, et al. **J Pharm Sci** 1996 Oct;85(10):1060-3

Allergy to peanut [letter; comment] Barras N. **Lancet** 1996 Nov 30;348(9040):1523. Comment on: Lancet 1996 Sep 14;348(9029):759-60.

Structure of acetylcholinesterase complexed with the nootropic alkaloid, (-)-huperzine A. Raves ML, et al. **Nat Struct Biol** 1997 Jan;4(1):57-63

Sesquiterpenes from Lepechinia urbaniana. Ahmed AA, et al. **Planta Med** 1996 Aug;62(4):385-6

Konishiol, a new sesquiterpene, and bioactive components from Cunninghamia konishii. He K, et al. **Planta Med** 1997 Apr;63(2):158-60

(+)-10 alpha-Hydroxy-4-muurolen-3-one, a new inhibitor of leukotriene biosynthesis from a Favolaschia species. Comparison with other sesquiterpenes. Zapf S, et al. **Z Naturforsch [C]** 1996 Jul-Aug;51(7-8):487-91

ISOLATION & PURIFICATION

Bioactive constituents of Chinese natural medicines. I. New sesquiterpene ketones with vasorelaxant effect from Chinese moxa, the processed leaves of Artemisia argyi Levl. et Vant.: moxartenone and moxartenolide. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1996 Sep;44(9):1656-62

PF1092A, B and C, new nonsteroidal progesterone receptor ligands produced by Penicillium oblatum. I. Taxonomy of producing strain, fermentation, isolation and biological activities. Tabata Y, et al. **J Antibiot (Tokyo)** 1997 Apr; 50(4):304-8

Structure-cytotoxicity relationships of some helenanolide-type sesquiterpene lactones. Beekman AC, et al. **J Nat Prod** 1997 Mar;60(3):252-7

Illudinic acid, a novel illudane sesquiterpene antibiotic. Dufresne C, et al. **J Nat Prod** 1997 Feb;60(2):188-90

(Hydroxymethyl)acylfulvene: an illudin derivative with superior antitumor properties. McMorris TC, et al. **J Nat Prod** 1996 Sep;59(9):896-9

Caparratriene, an active sesquiterpene hydrocarbon from Ocotea caparrapi. Palomino E, et al. **J Nat Prod** 1996 Jan; 59(1):77-9

Syringin 4-O-beta-glucoside, a new phenylpropanoid glycoside, and costunolide, a nitric oxide synthase inhibitor, from the stem bark of Magnolia sieboldii. Park HJ, et al. **J Nat Prod** 1996 Dec;59(12):1128-30

Two new nitrogenous sesquiterpenes from the sponge Axinyssa aplysinoides. Patil AD, et al. **J Nat Prod** 1997 May;60(5):507-10

Isolation of guaianoid pigments from the gorgonian Calicogorgia granulosa. Seo Y, et al. **J Nat Prod** 1996 Oct; 59(10):985-6

Preliminary studies on the antiinflammatory, analgesic and diuretic activity of stagninol, a sesquiterpene isolated from Persicaria stagnina. Ahmed M, et al. **Pharmazie** 1997 Jun; 52(6):472-5

Minor components with smooth muscle relaxing properties from scented myrrh (Commiphora guidotti). Andersson M, et al. **Planta Med** 1997 Jun;63(3):251-4

METABOLISM

Hairy root culture of Artemisia annua L. by Ri plasmid transformation and biosynthesis of artemisinin. Cai G, et al. **Chin J Biotechnol** 1995;11(4):227-35

Interspecies variability of TNP-470 metabolism, using primary monkey, rat, and dog cultured hepatocytes. Placidi L, et al. **Drug Metab Dispos** 1997 Jan;25(1):94-9

In-vitro interaction of artemisinin with intact human erythrocytes, erythrocyte ghosts, haemoglobin and carbonic anhydrase. Bakhshi HB, et al. **J Pharm Pharmacol** 1997 Feb;49(2):223-6

State of the art of the production of the antimalarial compound artemisinin in plants. Van Geldre E, et al. **Plant Mol Biol** 1997 Jan;33(2):199–209 (101 ref.)

The anti-angiogenic agent fumagillin covalently binds and inhibits the methionine aminopeptidase, MetAP-2. Sin N, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6099–103

PHARMACOKINETICS

Pharmacokinetics of artemisinin and artesunate after oral administration in healthy volunteers. Benakis A, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):17–23

The pharmacokinetics of a single dose of artemisinin in patients with uncomplicated falciparum malaria. De Vries PJ, et al. **Am J Trop Med Hyg** 1997 May;56(5):503–7

Single-dose, comparative study of venous, capillary and salivary artemisinin concentrations in healthy, male adults. Sidhu JS, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):13–6

Effect of food intake on pharmacokinetics of oral artemisinin in healthy Vietnamese subjects. Dien TK, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1069–72

Single dose pharmacokinetics of oral artemether in healthy Malaysian volunteers. Mordi MN, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):363–5

Comparative bioavailability of oral, rectal, and intramuscular artemether in healthy subjects: use of simultaneous measurement by high performance liquid chromatography and bioassay. Teja-Isavadharm P, et al. **Br J Clin Pharmacol** 1996 Nov;42(5):599–604

Pharmacokinetics and bioavailability of oral and intramuscular artemether. Karbwang J, et al. **Eur J Clin Pharmacol** 1997;52(4):307–10

Chemical stability of artesunate injection and proposal for its administration by intravenous infusion. Batty KT, et al. **J Pharm Pharmacol** 1996 Jan;48(1):22–6

Identification of the glucuronides of the hydroxylated metabolites of the antimalarial arteether in rat plasma and urine by thermospray high-performance liquid chromatography/mass spectrometry. Ramu K, et al. **J Pharm Sci** 1997 Aug;86(8):915–20

The pharmacokinetics of TNP-470, a new angiogenesis inhibitor. Figg WD, et al. **Pharmacotherapy** 1997 Jan-Feb; 17(1):91–7

Pharmacokinetics of oral artesunate in children with moderately severe Plasmodium falciparum malaria. Bethell DB, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr; 91(2):195–8

Multiple dose pharmacokinetics of oral artemisinin and comparison of its efficacy with that of oral artesunate in falciparum malaria patients. Hassan Alin M, et al. **Trans R Soc Trop Med Hyg** 1996 Jan-Feb;90(1):61–5

PHARMACOLOGY

Repetitive dosing of artemisinin and quinine against Plasmodium falciparum in vitro: a simulation of the in vivo pharmacokinetics. Bwijo B, et al. **Acta Trop** 1997 Apr 30; 65(1):11–22

In vitro susceptibility of Plasmodium falciparum isolates in Vietnam to artemisinin derivatives and other antimalarials. Wongsrichanalai C, et al. **Acta Trop** 1997 Feb;63(2-3):151–8

Antimalarial activity of artemisinin (qinghaosu) and related trioxanes: mechanism(s) of action. Cumming JN, et al. **Adv Pharmacol** 1997;37:253–97 (257 ref.)

In vitro inhibition of endothelial cell growth by the antiangiogenic drug AGM-1470 (TNP-470) and the anti-endoglin antibody TEC-11. Maier JA, et al. **Anticancer Drugs** 1997 Mar;8(3):238–44

Angiogenesis inhibitor TNP-470 augments the effect of repeated arterial ischemia on growth but does not affect take in a rat liver tumor model. Möller PH, et al. **Anticancer Res** 1997 Jul-Aug;17(4A):2401–6

Ecdysone-modulated response of Drosophila cytosolic malate dehydrogenase to juvenile hormone. Farkaš R, et al. **Arch Insect Biochem Physiol** 1997;35(1-2):71–83

Effect of guaiazulene on some cytochrome P450 activities. Implication in the metabolic activation and hepatotoxicity of paracetamol. Kourounakis AP, et al. **Arch Pharm (Weinheim)** 1997 Jan-Feb;330(1-2):7–11

Antimalarial activity of 1,4-epidioxy-bisabola-2,12-diene derivatives. Rücker G, et al. **Arch Pharm (Weinheim)** 1997 Jan-Feb;330(1-2):12–6

Inhibition of the expression of inducible cyclooxygenase and proinflammatory cytokines by sesquiterpene lactones in macrophages correlates with the inhibition of MAP kinases. Hwang D, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):810–8

Inhibition of lymph node metastasis by an anti-angiogenic agent, TNP-470. Ohta Y, et al. **Br J Cancer** 1997; 75(4):512–5

Plausible novel therapeutic strategy of uterine endometrial cancer with reduction of basic fibroblast growth factor secretion by progestin and O-(chloroacetyl-carbamoyl) fumagillol (TNP-470; AGM-1470). Fujimoto J, et al. **Cancer Lett** 1997 Feb 26;113(1-2):187–94

Methionine aminopeptidase (type 2) is the common target for angiogenesis inhibitors AGM-1470 and ovalicin. Griffith EC, et al. **Chem Biol** 1997 Jun;4(6):461–71

Suberogorgin vs N-cyclohexyl suberogorgamide effects on urine, respiration, and blood pressure in rat and cat. Peng WD, et al. **Chung Kuo Yao Li Hsueh Pao** 1996 Jan; 17(1):58–60

The fumagillin analogue TNP-470 inhibits DNA synthesis of vascular smooth muscle cells stimulated by platelet-derived growth factor and insulin-like growth factor-I. Possible involvement of cyclin-dependent kinase 2. Koyama H, et al. **Circ Res** 1996 Oct;79(4):757–64

Effects of TNP-470, a potent angiogenesis inhibitor, on growth of hematopoietic progenitors [letter] Hasuike T, et al. **Eur J Haematol** 1997 Apr;58(4):293–4

A novel activity for a group of sesquiterpene lactones: inhibition of aromatase. Blanco JG, et al. **FEBS Lett** 1997 Jun 16;409(3):396–400

Sesquiterpene lactone containing Mexican Indian medicinal plants and pure sesquiterpene lactones as potent inhibitors of transcription factor NF-kappaB. Bork PM, et al. **FEBS Lett** 1997 Jan 27;402(1):85–90

Artemisinin enhances heme-catalysed oxidation of lipid membranes. Berman PA, et al. **Free Radic Biol Med** 1997; 22(7):1283–8

Pharmacokinetics of mefloquine, when given alone and in combination with artemether, in patients with uncomplicated falciparum malaria. Na-Bangchang K, et al. **Fundam Clin Pharmacol** 1995;9(6):576–82

The mode of action of the antimalarial artemisinin and its derivatives. Kamchonwongpaisan S, et al. **Gen Pharmacol** 1996 Jun;27(4):587–92 (85 ref.)

Laboratory evaluation of sensitivity of three keratinophilic fungi to some vicolides. Rai MK, et al. **Hindustan Antibiot Bull** 1995 Feb-Nov;37(1-4):48–50

In vitro stage-specific sensitivity of Plasmodium falciparum to quinine and artemisinin drugs. Skinner TS, et al. **Int J Parasitol** 1996 May;26(5):519–25

An antiangiogenic agent (TNP-470) inhibited reoxygenation during fractionated radiotherapy of murine mammary carcinoma. Murata R, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1107–13

Efficacy of HMAF (MGI-114) in the MV522 metastatic lung carcinoma xenograft model nonresponsive to traditional anticancer agents. Kelner MJ, et al. **Invest New Drugs** 1996; 14(2):161–7

In-vitro activity of macrolides alone and in combination with artemisin, atovaquone, dapsone, minocycline or pyrimethamine against Cryptosporidium parvum. Giacometti A, et al. **J Antimicrob Chemother** 1996 Sep; 38(3):399–408

The effect of artemisinin on granulocyte function assessed by flow cytometry. Wenisch C, et al. **J Antimicrob Chemother** 1997 Jan;39(1):99–101

Effect of caulerpenyne, a toxin extracted from Caulerpa taxifolia on mechanisms regulating intracellular pH in sea urchin eggs and sea bream hepatocytes. Galgani I, et al. **J Biochem Toxicol** 1996;11(5):243–50

Inhibitory effect of the angiogenesis inhibitor TNP-470 on tumor growth and metastasis in nude mice bearing human hepatocellular carcinoma. Xia JL, et al. **J Cancer Res Clin Oncol** 1997;123(7):383–7

Therapeutic effect of egualen sodium (KT1-32), a new antiulcer agent, on chronic gastritis induced by sodium taurocholate in rats. Mochizuki S, et al. **J Gastroenterol** 1996 Dec;31(6):785–92

Structure-activity relationships of the antimalarial agent artemisinin. 5. Analogs of 10-deoxoartemisinin substituted at C-3 and C-9. Avery MA, et al. **J Med Chem** 1996 Oct 11;39(21):4149–55

Antimalarial activity of new dihydroartemisinin derivatives. 7. 4-(p-substituted phenyl)-4(R or S)-[10(alpha or beta)-dihydroartemisininoxy]butyric acids. Lin AJ, et al. **J Med Chem** 1997 Apr 25;40(9):1396–400

Correlation of antimalarial activity of artemisinin derivatives with binding affinity with ferroprotoporphyrin IX. Paitayatat S, et al. **J Med Chem** 1997 Feb 28;40(5):633–8

Activity of Parthenolide at 5HT2A receptors. Weber JT, et al. **J Nat Prod** 1997 Jun;60(6):651–3

Pharmacological activity of feverfew (Tanacetum parthenium (L.) Schultz-Bip.): assessment by inhibition of human polymorphonuclear leukocyte chemiluminescence in-vitro. Brown AM, et al. **J Pharm Pharmacol** 1997 May; 49(5):558–61

Inhibition of lipid peroxidation by sesquiterpenoid in Heterotheca inuloides. Haraguchi H, et al. **J Pharm Pharmacol** 1996 Apr;48(4):441–3

Regulation of neuronal and recombinant GABA(A) receptor ion channels by xenovulene A, a natural product isolated from Acremonium strictum. Thomas P, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):513–20

The angiogenesis inhibitor TNP-470 (AGM-1470) improves long-term survival of rats with liver metastasis. Ahmed MH, et al. **J Surg Res** 1996 Jul 15;64(1):35–41

Inhibitory effects of dietary protocatechuic acid and costunolide on 7,12-dimethylbenz[a]anthracene-induced hamster cheek pouch carcinogenesis. Ohnishi M, et al. **Jpn J Cancer Res** 1997 Feb;88(2):111–9

Inhibition of liver metastasis of human gastric carcinoma by angiogenesis inhibitor TNP-470. Shishido T, et al. **Jpn J Cancer Res** 1996 Sep;87(9):958–62

Anti-angiogenic compound (TNP-470) inhibits mesangial cell proliferation in vitro and in vivo. Haraguchi M, et al. **Kidney Int** 1997 Jun;51(6):1838–46

An antibiotic, ascofuranone, specifically inhibits respiration and in vitro growth of long slender bloodstream forms of Trypanosoma brucei brucei [corrected and republished article originally printed in Mol Biochem Parasitol 1996 Oct 30;81(2):127–36] Minagawa N, et al. **Mol Biochem Parasitol** 1997 Feb;84(2):271–80

An antibiotic, ascofuranone, specifically inhibits respiration and in vitro growth of long slender bloodstream forms of Trypanosoma brucei brucei [corrected and republished in Mol Biochem Parasitol 1997 Feb;84(2):271–80] Minagawa N, et al. **Mol Biochem Parasitol** 1996 Oct 30;81(2):127–36

Critical components of the female reproductive pathway are suppressed by the angiogenesis inhibitor AGM-1470. Klauber N, et al. **Nat Med** 1997 Apr;3(4):443–6

Experimental studies of the antitumor effect of TNP-470 on malignant brain tumors. Antitumor effect of TNP-470 on a human medulloblastoma xenograft line. Isobe N, et al. **Neuropediatrics** 1996 Jun;27(3):136–42

Huperzine A, a novel promising acetylcholinesterase inhibitor. Cheng DH, et al. **Neuroreport** 1996 Dec 20; 8(1):97–101

Huperzine A, a potential therapeutic agent for dementia, reduces neuronal cell death caused by glutamate. Ved HS, et al. **Neuroreport** 1997 Mar 3;8(4):963–8

Polygodial induces inositol phosphate turnover in human neuroblastoma SH-SY5Y cells. Forsby A, et al. **Neurosci Lett** 1996 Oct 11;217(1):50–4

Interaction of artemisinin and tetracycline or erythromycin against Plasmodium falciparum in vitro. Ye Z, et al. **Parasite** 1994 Sep;1(3):211–8

In vitro susceptibility of Tanzanian wild isolates of Plasmodium falciparum to artemisinin, chloroquine, sulfadoxine/pyrimethamine and mefloquine. Alin MH. **Parasitology** 1997 Jun;114 (Pt 6):503–6

In vitro effect of avarone and avarol, a quinone/hydroquinone couple of marine origin, on platelet aggregation. Belisario MA, et al. **Pharmacol Toxicol** 1996 Dec;79(6):300–4

Minor components with smooth muscle relaxing properties from scented myrrh (Commiphora guidotti). Andersson M, et al. **Planta Med** 1997 Jun;63(3):251–4

Cytotoxic and antibacterial activities of sesquiterpene lactones isolated from Tanacetum praeteritum subsp. praeteritum. Gören N, et al. **Planta Med** 1996 Oct; 62(5):419–22

Cytotoxic and antioxidative sesquiterpenoids from Heterotheca inuloides. Kubo I, et al. **Planta Med** 1996 Oct; 62(5):427–30

Gastric cytoprotection of the non-steroidal anti-inflammatory sesquiterpene, beta-caryophyllene [letter] Tambe Y, et al. **Planta Med** 1996 Oct;62(5):469–70

The anti-angiogenic agent fumagillin covalently binds and inhibits the methionine aminopeptidase, MetAP-2. Sin N, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6099–103

The effect of MX-1 on survival of discordant cardiac xenografts from guinea pig to rat. Kaji H, et al. **Transpl Immunol** 1997 Mar;5(1):70–2

Effect of anticomplement agent K76 COOH on hamster-to-rat and guinea pig-to-rat heart xenotransplantation. Tanaka M, et al. **Transplantation** 1996 Sep 15;62(5):681–8

Efficacy of artemisinin and mefloquine combinations against Plasmodium falciparum. In vitro simulation of in vivo pharmacokinetics. Bwijo B, et al. **Trop Med Int Health** 1997 May;2(5):461–7

Lactarane type sesquiterpenoids as inhibitors of leukotriene biosynthesis and other, new metabolites from submerged cultures of Lentinellus cochleatus (Pers. ex Fr.) Karst. Wunder A, et al. **Z Naturforsch [C]** 1996 Jul-Aug; 51(7-8):493–9

[Inhibition of sodium artesunate on rat erythrocyte membrane Na(+)-K(+)-exchanging ATPase in vitro] Wang JY, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):524–6 (Eng. Abstr.) **(Chi)**

[Mechanism of regression of metastatic liver tumors in rats treated with angiogenesis inhibitor with special reference to apoptosis] Arai T, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:296–300 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Efficacy of artemether in severe falciparum malaria in African children. Sowunmi A, et al. **Acta Trop** 1996 Mar; 61(1):57–63

Efficacy and tolerance of artemisinin in short combination regimens for the treatment of uncomplicated falciparum malaria. Bich NN, et al. **Am J Trop Med Hyg** 1996 Oct; 55(4):438–43

Treatment of acute, uncomplicated, falciparum malaria with oral dihydroartemisinin. Looareesuwan S, et al. **Ann Trop Med Parasitol** 1996 Feb;90(1):21–28

The chemotherapy of rodent malaria. LV. Interactions between pyronaridine and artemisinin. Peters W, et al. **Ann Trop Med Parasitol** 1997 Mar;91(2):141–5

Inhibitory effect of atractylon on tert-butyl hydroperoxide induced DNA damage and hepatic toxicity in rat hepatocytes. Hwang JM, et al. **Arch Toxicol** 1996; 70(10):640–4

WHO's decision not to recommend use of artemether in Africa is unethical [letter] Ana JN, et al. **BMJ** 1996 Oct 26;313(7064):1085

Clinical efficacy and pharmacokinetics of artemisinin monotherapy and in combination with mefloquine in patients with falciparum malaria. Alin MH, et al. **Br J Clin Pharmacol** 1996 Jun;41(6):587–92

Compliance with a 2 day course of artemether-mefloquine in an area of highly multi-drug resistant Plasmodium falciparum malaria. Na-Bangchang K, et al. **Br J Clin Pharmacol** 1997 Jun;43(6):639–42

SESQUITERPENES

Angiogenesis inhibitor TNP-470 prevents implanted liver metastases after partial hepatectomy in an experimental model without impairing wound healing. Tanaka H, et al. **Br J Surg** 1996 Oct;83(10):1444-7

Preclinical antitumor activity of 6-hydroxymethylacylfulvene, a semisynthetic derivative of the mushroom toxin illudin S. MacDonald JR, et al. **Cancer Res** 1997 Jan 15;57(2):279-83

Studies on prophylactic effect of artesunate on schistosomiasis japonica. Li S, et al. **Chin Med J (Engl)** 1996 Nov;109(11):848-53

Chemotherapy of parasitic diseases. Current status and new directions. Liu Y. **Chin Med J (Engl)** 1996 Aug; 109(8):579-82 (28 ref.)

Clinical pharmacology and therapeutic potential of artemisinin and its derivatives in the treatment of malaria. de Vries PJ, et al. **Drugs** 1996 Dec;52(6):818-36 (116 ref.)

East meets west for improved antimalarials [news] **Environ Health Perspect** 1996 Mar;104(3):252-3

TNP-470 (AGM-1470): mechanisms of action and early clinical development. Castronovo V, et al. **Eur J Cancer** 1996 Dec;32A(14):2520-7 (55 ref.)

TNP-470/minocycline/cytotoxic therapy: a systems approach to cancer therapy. Teicher BA, et al. **Eur J Cancer** 1996 Dec;32A(14):2461-6 (52 ref.)

Effect of arteether alpha/beta on uncomplicated falciparum malaria cases in Upper Assam. Mohapatra PK, et al. **Indian J Med Res** 1996 Nov;104:284-7

Chemotherapy for cerebral malaria. Garg RK. **Indian Pediatr** 1996 Dec;33(12):1067-9

Inhibition by hydroxyachillin, sesquiterpene lactone from Tanacetum microphyllum, of PMA-induced mouse ear oedema. Silván AM, et al. **Inflamm Res** 1996 Jun; 45(6):289-92

Suppression of rhabdomyosarcoma growth by fumagillin analog TNP-470. Kalebic T, et al. **Int J Cancer** 1996 Nov 27;68(5):596-9

Effect of angiogenesis inhibitor TNP-470 on the progression of human gastric cancer xenotransplanted into nude mice. Kanai T, et al. **Int J Cancer** 1997 May 29;71(5):838-41

Inhibition of lymphatic metastasis in a syngeneic rat fibrosarcoma model by an angiogenesis inhibitor, AGM-1470. Futami H, et al. **Invasion Metastasis** 1996; 16(2):73-82

A comparative clinical trial of artemether and the sequential regimen of artemether-mefloquine in multidrug resistant falciparum malaria. Karbwang J, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1079-83

TNP-470 antiangiogenic therapy for advanced murine neuroblastoma. Nagabuchi E, et al. **J Pediatr Surg** 1997 Feb;32(2):287-93

Angiogenesis inhibitor TNP-470 suppresses tumorigenesis in rat urinary bladder. Tanaka Y, et al. **J Urol** 1997 Feb; 157(2):683-8

Old Chinese herbal medicine used for fever yields possible new Alzheimer disease therapy [news] Skolnick AA. **JAMA** 1997 Mar 12;277(10):776

Severe falciparum malaria with hyperparasitaemia treated with intravenous artesunate. Davis TM, et al. **Med J Aust** 1997 Apr 21;166(8):416-8

Evaluation of himachalol in murine invasive aspergillosis. Chowdhry L, et al. **Mycoses** 1996 Nov-Dec; 39(11-12):449-52

Artemether in severe malaria [letter; comment] Gachot B, et al. **N Engl J Med** 1996 Dec 19;335(25):1922; discussion 1923-4. Comment on: N Engl J Med 1996 Jul 11;335(2):69-75. Comment on: N Engl J Med 1996 Jul 11;335(2):76-83.

Artemether in severe malaria [letter] Newmark A. **N Engl J Med** 1996 Dec 19;335(25):1923; discussion 1923-4

The angiogenesis inhibitor TNP-470 reduces the growth rate of human neuroblastoma in nude rats. Wassberg E, et al. **Pediatr Res** 1997 Mar;41(3):327-33

Artemether-pyrimethamine in the treatment of pyrimethamine-resistant falciparum malaria. Na-Bangchang K, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):19-23

Activity of artemether-azithromycin versus artemether-doxycycline in the treatment of multiple drug resistant falciparum malaria. Na-Bangchang K, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):522-5

Artemether or artesunate followed by mefloquine as a possible treatment for multidrug resistant falciparum malaria. Bunnag D, et al. **Trans R Soc Trop Med Hyg** 1996 Jul-Aug;90(4):415-7

Single dose artemisinin-mefloquine versus mefloquine alone for uncomplicated falciparum malaria. Le NN, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr;91(2):191-4

alpha, beta-Arteether for the treatment of complicated falciparum malaria. Mohanty S, et al. **Trans R Soc Trop Med Hyg** 1997 May-Jun;91(3):328-30

An open randomized trial of artemether versus quinine in the treatment of cerebral malaria in African children. Murphy S, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun; 90(3):298-301

Artemether treatment of recrudescent Plasmodium falciparum malaria in children. Sowunmi A, et al. **Trop Med Int Health** 1997 Jul;2(7):631-4

[Experimental studies on the preventive effect of artemether against schistosomal infection] Xiao S, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1995;13(4):241-8 (Eng. Abstr.) **(Chi)**

[Use of artemether in the treatment of severe malaria, an alternative in an unusual situation (letter)] Nicolas X, et al. **Med Trop (Mars)** 1997;57(1):96-7 **(Fre)**

[Optimization of the Barron ligature treatment of 2nd and 3rd-degree hemorrhoids using a therapeutic troika] Förster CF, et al. **Schweiz Rundsch Med Prax** 1996 Nov 12; 85(46):1476-81 (Eng. Abstr.) **(Ger)**

[The evaluation of the efficacy of artesunate combined with tetracycline in the therapy of falciparum malaria] Salcedo JM, et al. **Rev Soc Bras Med Trop** 1997 May-Jun; 30(3):215-22 (Eng. Abstr.) **(Por)**

TOXICITY

Artemisinin neurotoxicity: neuropathology in rats and mechanistic studies in vitro. Kamchonwongpaisan S, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):7-12

Arteether: risks of two-week administration in Macaca mulatta. Petras JM, et al. **Am J Trop Med Hyg** 1997 Apr; 56(4):390-6

Enhanced in vitro neurotoxicity of artemisinin derivatives in the presence of haemin. Smith SL, et al. **Biochem Pharmacol** 1997 Jan 10;53(1):5-10

Lethal and sublethal effects of azulene and longifolene to Microtox(R), Ceriodaphnia dubia, Daphnia magna, and Pimephales promelas. Sweet LI, et al. **Bull Environ Contam Toxicol** 1997 Feb;58(2):268-74

Cytotoxic effects of repin, a principal sesquiterpene lactone of Russian knapweed. Robles M, et al. **J Neurosci Res** 1997 Jan 1;47(1):90-7

SET (PSYCHOLOGY)

Predicting onset of drinking in a community sample of adolescents: the role of expectancy and temperament. Killen JD, et al. **Addict Behav** 1996 Jul-Aug;21(4):473-80

Expectancies for drinking and excessive drinking among Mexican Americans and non-Hispanic whites. Marín G. **Addict Behav** 1996 Jul-Aug;21(4):491-507

Effects of alcohol and expectancy on self-disclosure and anxiety in male and female social drinkers. Schippers GM, et al. **Addict Behav** 1997 May-Jun;22(3):305-14

A comparison of positive and negative alcohol expectancy and value and their multiplicative composite as predictors of post-treatment abstinence survivorship. Jones BT, et al. **Addiction** 1996 Jan;91(1):89-99

Alcohol expectancies in a Native American population. Garcia-Andrade C, et al. **Alcohol Clin Exp Res** 1996 Nov; 20(8):1438-42

Alcohol expectancies and drinking characteristics in parents of children with attention deficit hyperactivity disorder. Molina BS, et al. **Alcohol Clin Exp Res** 1997 May; 21(3):557-66

The use of verbal expectancy in reducing pain associated with arteriotomies. Austan F, et al. **Am J Clin Hypn** 1997 Jan;39(3):182-6

Comparison of anxiety sensitivity in panic disorder and social phobia. Hazen AL, et al. **Anxiety** 1994-95;1(6):298-301

Danger expectancies and insight in spider phobia. Jones MK, et al. **Anxiety** 1996;2(4):179-85

Visual scanning and pilot expertise: the role of attentional flexibility and mental model development. Bellenkes AH, et al. **Aviat Space Environ Med** 1997 Jul;68(7):569-79

Do pain expectancies cause pain in chronic low back patients? A clinical investigation. Crombez G, et al. **Behav Res Ther** 1996 Nov-Dec;34(11-12):919-25

The expectancy bias model of selective associations: the relationship of judgements of CS dangerousness, CS-UCS similarity and prior fear to a priori and a posteriori covariation assessments. Davey GC, et al. **Behav Res Ther** 1996 Mar;34(3):235-52

Validation of the spanish version of the Anxiety Sensitivity Index in a clinical sample. Sandin B, et al. **Behav Res Ther** 1996 Mar;34(3):283-90

An event-related potential (ERP) study of transient and sustained visual attention to color and form. Eimer M. **Biol Psychol** 1997 Jan 31;44(3):143-60

An electrophysiological study of the selection of the color and shape of alphanumeric characters in response choice. Smid HG, et al. **Biol Psychol** 1997 Jan 31;44(3):161-85

Infant expectations and reaction time as predictors of childhood speed of processing and IQ. Dougherty TM, et al. **Dev Psychol** 1997 Jan;33(1):146-55

Changing a response set in normal development and in ADHD children with and without tics. van der Meere J, et al. **J Abnorm Child Psychol** 1996 Dec;24(6):767-86

Expectancy bias in trait anxiety. Chan CK, et al. **J Abnorm Psychol** 1996 Nov;105(4):637-47

Alcohol outcome expectancies and alcohol use: a latent variable cross-lagged panel study. Sher KJ, et al. **J Abnorm Psychol** 1996 Nov;105(4):561-74

Learned helplessness or expectancy-value? A psychological model for describing the experiences of different categories of unemployed people. García Rodríguez Y. **J Adolesc** 1997 Jun;20(3):321-32

Emotional priming in clinically depressed subjects. Power MJ, et al. **J Affect Disord** 1996 Apr 26;38(1):1-11

Social expectancies and self-perceptions in anxiety-disordered children. Chansky TE, et al. **J Anxiety Disord** 1997 Jul-Aug;11(4):347-63

Faking the MMPI-2: utility of the Subtle-Obvious scales. Brems C, et al. **J Clin Psychol** 1996 Sep;52(5):525-33

Predicting perfectionism: applying tests of rigidity. Ferrari JR, et al. **J Clin Psychol** 1997 Jan;53(1):1-6

A combined rationally-empirically developed Variable Response Scale for detecting the random response set in the Jesness Inventory. Pinsoneault TB. **J Clin Psychol** 1997 Aug;53(5):471-84

Pain expectancies, pain, and functional self-efficacy expectancies as determinants of disability in patients with chronic low back disorders. Lacker JM, et al. **J Consult Clin Psychol** 1996 Feb;64(1):212-20

Illustrating caffeine's pharmacological and expectancy effects utilizing a balanced placebo design. Lotshaw SC, et al. **J Drug Educ** 1996;26(1):13-24

Salience of alcohol expectancies and drinking outcomes. Reese FL. **J Drug Educ** 1997;27(1):43-51

Effects of advance questions on reading comprehension. Kreiner DS. **J Gen Psychol** 1996 Oct;123(4):352-64

Prediction of children's postoperative pain: the role of presurgical expectations and anticipatory emotions. Palermo TM, et al. **J Pediatr Psychol** 1996 Oct;21(5):683-98

Construing benefits from adversity: adaptational significance and dispositional underpinnings. Affleck G, et al. **J Pers** 1996 Dec;64(4):899-922 (85 ref.)

Resolving the apparent discrepancy between the incongruency effect and the expectancy-based illusory correlation effect: the TRAP model. Garcia-Marques L, et al. **J Pers Soc Psychol** 1996 Nov;71(5):845-60

When expectancy meets desire: motivational effects in reconstructive memory. McDonald HE, et al. **J Pers Soc Psychol** 1997 Jan;72(1):5-23

In search of the powerful self-fulfilling prophecy. Madon S, et al. **J Pers Soc Psychol** 1997 Apr;72(4):791-809

Student expectancies and academic self-concept as predictors of science achievement. House JD. **J Psychol** 1996 Nov; 130(6):679-81

A comparison of updating and explanation as causes of the incongruity effect on person memory. Trafimow D, et al. **J Soc Psychol** 1997 Aug;137(4):412-20

Evidence that expectancies mediate behavioral impairment under alcohol. Fillmore MT, et al. **J Stud Alcohol** 1996 Nov;57(6):598-603

The relationship between Self-Rating of the Effects of alcohol and alcohol challenge results in ninety-eight young men. Schuckit MA, et al. **J Stud Alcohol** 1997 Jul; 58(4):397-404

Effects on contingent negative variation of set created by anticipating variable foreperiods. Hiraku S, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1163-9

Perception of anxiety and expectations of performance. Wiggins MS, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1071-4

Effects of affective-semantic mode of item presentation in balanced self-report scales: biased construct validity of the Zung Self-rating Depression Scale. Schotte CK, et al. **Psychol Med** 1996 Nov;26(6):1161-8

Self-esteem moderator or mediator between perceived stress and expectancy of success. Abel MH. **Psychol Rep** 1996 Oct;79(2):635-41

The influence of personal expectations on cancer patients' reports of health-related quality of life. Wan GJ, et al. **Psychooncology** 1997 Mar;6(1):1-11

Human multiunit activity related to attention and preparatory set. Kropotov JD, et al. **Psychophysiology** 1997 Sep; 34(5):495-500

Experimenter expectancy in resistance to respiratory air flow. Wigal JK, et al. **Psychosom Med** 1997 May-Jun; 59(3):318-22

Liking, arousal potential, and the emotions expressed by music. North AC, et al. **Scand J Psychol** 1997 Mar; 38(1):45-53

Reasons for drinking versus outcome expectancies in the prediction of college student drinking. Cronin C. **Subst Use Misuse** 1997 Aug;32(10):1287-311

The self-generated alcohol expectancies of Puerto Rican drinkers and abstainers. Johnson PB, et al. **Subst Use Misuse** 1996 Jul;31(9):1155-65

The applicability of the theory of planned behavior to abusive men's cessation of violent behavior. Tolman RM, et al. **Violence Vict** 1996 Winter;11(4):341-54

[The spatial organization of cortical electrical activity during the formation of cognitive set] Cheremushkin EA. **Fiziol Cheloveka** 1997 May-Jun;23(3):5-10 **(Rus)**

[The regulatory role of set in the perception of verbal information] Kostandov EA. **Fiziol Cheloveka** 1997 Mar-Apr;23(2):5-11 **(Rus)**

[Changes in the cortical electrical activity during the formation of set in man] Cheremushkin EA. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov-Dec; 46(6):989-98 (Eng. Abstr.) **(Rus)**

[The effect of set on human cognitive activity] Kostandov EA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May-Jun;46(3):429-36 (Eng. Abstr.) **(Rus)**

SETARIA

CHEMISTRY

Necrosis of lung epithelial cells by filarial parasitic protein via an early induction of c-H-ras and TNF alpha expression. Maya A, et al. **Cell Biol Int** 1997 May; 21(5):273-80

GENETICS

Development of a diagnostic DNA probe to detect Setaria digitata: the causative parasite of cerebrospinal nematodiasis in goats, sheep and horses. Wijesundera WS, et al. **Br Vet J** 1996 Sep;152(5):561–71

GROWTH & DEVELOPMENT

Antibodies to diethylcarbamazine potentiate the antifilarial activity of the drug. Mukhopadhyay S, et al. **Parasite Immunol** 1997 Apr;19(4):191–5

IMMUNOLOGY

Analysis and potential of excretory–secretory antigens of Setaria cervi for immunodiagnosis of human filariasis. Mustafa H, et al. **Indian J Exp Biol** 1996 Jun;34(6):508–12

Glutathione-binding proteins of Setaria digitata: antibody responses in human infected with Wuchereria bancrofti. Bal M, et al. **Parasite Immunol** 1996 Sep;18(9):473–7

Setaria digitata microfilaraemia in Mastomys coucha: an animal model for chemotherapeutic and immunobiological studies. Mukhopadhyay S, et al. **Parasitology** 1996 Oct;113 (Pt 4):323–30

ISOLATION & PURIFICATION

Development of a rapid, nonradioactive, oligonucleotide-based assay for the detection of Setaria digitata. Wijesundera WS, et al. **Exp Parasitol** 1997 Jun; 86(2):161–2

Setaria marshalli infection in neonatal calves. Wee SH, et al. **Korean J Parasitol** 1996 Sep;34(3):207–10

ULTRASTRUCTURE

[Observations of Setaria equina (Nematoda: Setariidae) with the optical microscope and scanning electron microscope] Giannetto S, et al. **Parassitologia** 1996 Dec;38(3):525–9 (Eng. Abstr.) **(Ita)**

SETARIASIS

DIAGNOSIS

Development of a diagnostic DNA probe to detect Setaria digitata: the causative parasite of cerebrospinal nematodiasis in goats, sheep and horses. Wijesundera WS, et al. **Br Vet J** 1996 Sep;152(5):561–71

IMMUNOLOGY

Setaria digitata microfilaraemia in Mastomys coucha: an animal model for chemotherapeutic and immunobiological studies. Mukhopadhyay S, et al. **Parasitology** 1996 Oct;113 (Pt 4):323–30

PARASITOLOGY

Necrosis of lung epithelial cells by filarial parasitic protein via an early induction of c-H-ras and TNF alpha expression. Maya A, et al. **Cell Biol Int** 1997 May; 21(5):273–80

Setaria marshalli infection in neonatal calves. Wee SH, et al. **Korean J Parasitol** 1996 Sep;34(3):207–10

Antibodies to diethylcarbamazine potentiate the antifilarial activity of the drug. Mukhopadhyay S, et al. **Parasite Immunol** 1997 Apr;19(4):191–5

17TH CENT. HISTORY see **HISTORY OF MEDICINE, 17TH CENT.**

17TH CENT. HISTORY (MEDICINE) see **HISTORY OF MEDICINE, 17TH CENT.**

17TH CENT. MEDICINE see **HISTORY OF MEDICINE, 17TH CENT.**

SEVENTH-DAY ADVENTISTS see **CHRISTIANITY**

SEVERE COMBINED IMMUNODEFICIENCY

The role of sensitized T-cells in myocarditis and dilated cardiomyopathy. Schwimmbeck PL, et al. **Int J Cardiol** 1996 May;54(2):117–25 (27 ref.)

Severe combined immunodeficiency: a pediatric emergency [editorial; comment] Rosen FS. **J Pediatr** 1997 Mar; 130(3):345–6. Comment on: J Pediatr 1997 Mar;130(3):378–87.

Human renal allograft rejection in the SCID/rat radiation chimera. Dekel B, et al. **Transplant Proc** 1997 Jun; 29(4):2255–6

COMPLICATIONS

Congenital Alopecia and nail dystrophy associated with severe functional T-cell immunodeficiency in two sibs. Pignata C, et al. **Am J Med Genet** 1996 Oct 16;65(2):167–70

Disseminated BCG infection in severe combined immunodeficiency presenting with severe anaemia and associated with gross hypersplenism after bone marrow transplantation. Skinner R, et al. **Bone Marrow Transplant** 1996 May;17(5):877–80

Severe combined immunodeficiency with oligoclonal hypergammaglobulinemia and high positive ANA. Hostoffer R, et al. **Clin Pediatr (Phila)** 1996 Jan;35(1):43–6

Fatal respiratory syncytial virus pneumonia as the presenting feature of severe combined immunodeficiency disease. Schneider S, et al. **Clin Pediatr (Phila)** 1996 Mar; 35(3):147–9

What are the essential symptoms in the Hoyeraal–Hreidarsson syndrome? [letter; comment] Ohga S, et al. **Eur J Pediatr** 1997 Jan;156(1):80–1. Comment on: Eur J Pediatr 1995 Dec;154(12):998.

Gastroesophageal reflux and severe combined immunodeficiency. Boeck A, et al. **J Allergy Clin Immunol** 1997 Mar;99(3):420–4

Thrush and septic shock in a two-month-old. Fogarty L. **Pediatr Infect Dis J** 1996 Jun;15(6):553–4, 559–60

Cytomegalovirus retinitis and optic neuritis in a child with severe combined immunodeficiency syndrome. Perren BA, et al. **Retina** 1996;16(2):117–21

Gastrointestinal manifestations of primary immunodeficiency disorders. Lai Ping So A, et al. **Semin Gastrointest Dis** 1997 Jan;8(1):22–32 (75 ref.)

DIAGNOSIS

Malignant B-cell lymphoma in an infant with severe combined immunodeficiency with short-limbed skeletal dysplasia. van den Berg H, et al. **Acta Paediatr** 1997 Jul; 86(7):778–80 (10 ref.)

Fatal respiratory syncytial virus pneumonia as the presenting feature of severe combined immunodeficiency disease. Schneider S, et al. **Clin Pediatr (Phila)** 1996 Mar; 35(3):147–9

Omenn's syndrome. Nazzari G, et al. **Int J Dermatol** 1997 Feb;36(2):141–4

Missed clues and delayed diagnosis of immunodeficiency [letter; comment] Unsworth DJ, et al. **Lancet** 1997 Feb 8;349(9049):435. Comment on: Lancet 1996 Nov 30;348(9040):1518.

Thrush and septic shock in a two-month-old. Fogarty L. **Pediatr Infect Dis J** 1996 Jun;15(6):553–4, 559–60

Major histocompatibility complex class II deficiency needs an early diagnosis: report of a case. Canioni D, et al. **Pediatr Pathol Lab Med** 1997 Jul–Aug;17(4):645–51

DRUG THERAPY

The entrapment of polyethylene glycol-bound adenosine deaminase (Pegademase) in human carrier erythrocytes. Bax BE, et al. **Biochem Soc Trans** 1996 Aug;24(3):442S

Human tumor models in the severe combined immune deficient (scid) mouse. Paine-Murrieta GD, et al. **Cancer Chemother Pharmacol** 1997;40(3):209–14

ENZYMOLOGY

Two novel missense and frameshift mutations in exons 5 and 6 of the purine nucleoside phosphorylase (PNP) gene in a severe combined immunodeficiency (SCID) patient. Pannicke U, et al. **Hum Genet** 1996 Dec;98(6):706–9

SCID: the role of adenosine deaminase deficiency. Resta R, et al. **Immunol Today** 1997 Aug;18(8):371–4 (25 ref.)

Correction of the X-linked immunodeficiency phenotype by transgenic expression of human Bruton tyrosine kinase under the control of the class II major histocompatibility complex Ea locus control region. Drabek D, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):610–5

[Severe immunodeficiency due to Jak 3 kinase deficiency] Boku S, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Dec;19(6):631–6 **(Jpn)**

ETIOLOGY

IL2RGbase: a database of gamma c-chain defects causing human X-SCID. Puck JM. **Immunol Today** 1996 Nov; 17(11):507–11

Shared gamma(c) subunit within the human interleukin-7 receptor complex. A molecular basis for the pathogenesis of X-linked severe combined immunodeficiency. Lai SY, et al. **J Clin Invest** 1997 Jan 15;99(2):169–77

[Purine nucleoside phosphorylase (PNP) deficiency] Sakiyama T. **Nippon Rinsho** 1996 Dec;54(12):3328–32 (10 ref.) (Eng. Abstr.) **(Jpn)**

GENETICS

Major histocompatibility complex class II deficiency: a disease of gene regulation. Steimle V, et al. **Adv Immunol** 1996;61:327–40 (71 ref.)

Regulation of MHC class II genes: lessons from a disease. Mach B, et al. **Annu Rev Immunol** 1996;14:301–31 (138 ref.)

The interleukin-2 receptor gamma chain: its role in the multiple cytokine receptor complexes and T cell development in XSCID. Sugamura K, et al. **Annu Rev Immunol** 1996;14:179–205 (120 ref.)

Adenosine deaminase deficiency in adults. Ozsahin H, et al. **Blood** 1997 Apr 15;89(8):2849–55

Mutation analysis of IL2RG in human X-linked severe combined immunodeficiency. Puck JM, et al. **Blood** 1997 Mar 15;89(6):1968–77

Type III bare lymphocyte syndrome: lack of HLA class II gene expression and reduction in HLA class I gene expression. Sabatier C, et al. **C R Acad Sci III** 1996 Sep; 319(9):789–98

Selective gamma-chain T-cell receptor gene rearrangements in a patient with Omenn's syndrome: absence of V–II subgroup (V gamma 9) transcripts. Mathioudakis G, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):616–9

RFXAP, a novel subunit of the RFX DNA binding complex is mutated in MHC class II deficiency. Durand B, et al. **EMBO J** 1997 Mar 3;16(5):1045–55

Interleukin-2 receptor gamma-chain mutations in severe combined immunodeficiency with B-lymphocytes. Tsuge I, et al. **Eur J Pediatr** 1996 Dec;155(12):1018–24

Two novel mutations in the MHC class II transactivator CIITA in a second patient from MHC class II deficiency complementation group A. Bontron S, et al. **Hum Genet** 1997 Apr;99(4):541–6

B-cell-negative severe combined immunodeficiency associated with a common gamma chain mutation. Jones AM, et al. **Hum Genet** 1997 May;99(5):677–80

Carrier and prenatal diagnosis of X-linked severe combined immunodeficiency: mutation detection methods and utilization. Puck JM, et al. **Hum Genet** 1997 May; 99(5):628–33

IL2RGbase: a database of gamma c-chain defects causing human X-SCID. Puck JM. **Immunol Today** 1996 Nov; 17(11):507–11

The xid mutation plays an important role in delayed development of murine acquired immunodeficiency syndrome. Numata F, et al. **Int Immunol** 1997 Jan; 9(1):139–46

Maternal mosaicism for a novel interleukin-2 receptor gamma-chain mutation causing X-linked severe combined immunodeficiency in a Navajo kindred. O'Marcaigh AS, et al. **J Clin Immunol** 1997 Jan;17(1):29–33

Shared gamma(c) subunit within the human interleukin-7 receptor complex. A molecular basis for the pathogenesis of X-linked severe combined immunodeficiency. Lai SY, et al. **J Clin Invest** 1997 Jan 15;99(2):169–77

Correction of defective expression in MHC class II deficiency (bare lymphocyte syndrome) cells by retroviral transduction of CIITA. Bradley MB, et al. **J Immunol** 1997 Aug 1;159(3):1086–95

Regulatory factor X, a bare lymphocyte syndrome transcription factor, is a multimeric phosphoprotein complex. Moreno CS, et al. **J Immunol** 1997 Jun 15; 158(12):5841–8

A kinase-negative mutation of DNA-PK(CS) in equine SCID results in defective coding and signal joint formation. Shin EK, et al. **J Immunol** 1997 Apr 15;158(8):3565–9

Human severe combined immunodeficiency: genetic, phenotypic, and functional diversity in one hundred eight infants [see comments] Buckley RH, et al. **J Pediatr** 1997 Mar;130(3):378–87. Comment in: J Pediatr 1997 Mar;130(3):345–6.

Atypical X-linked severe combined immunodeficiency due to possible spontaneous reversion of the genetic defect in T cells. Stephan V, et al. **N Engl J Med** 1996 Nov 21; 335(21):1563–7

An ionizing radiation-sensitive CHO mutant cell line: irs-20. IV. Genetic complementation, V(D)J recombination and the scid phenotype. Lin JY, et al. **Radiat Res** 1997 Feb; 147(2):166–71

[Gene therapy for severe combined immunodeficiency linked to chromosome X] Fischer A. **Hematol Cell Ther** 1997 Apr; 39(2):97 (0 ref.) **(Fre)**

IMMUNOLOGY

Major histocompatibility complex class II deficiency: a disease of gene regulation. Steimle V, et al. **Adv Immunol** 1996;61:327–40 (71 ref.)

The interleukin-2 receptor gamma chain: its role in the multiple cytokine receptor complexes and T cell development in XSCID. Sugamura K, et al. **Annu Rev Immunol** 1996;14:179–205 (120 ref.)

Severe combined immunodeficiency with abnormalities in expression of the common leucocyte antigen, CD45. Cale CM, et al. **Arch Dis Child** 1997 Feb;76(2):163–4

Human peripheral blood lymphocyte-reconstituted, severe combined immunodeficient mice as a model for porcine islet xenograft rejection in humans. Shiroki R, et al. **Artif Organs** 1996 Aug;20(8):878–82

Differential maintenance of primitive human SCID-repopulating cells, clonogenic progenitors, and long-term culture-initiating cells after incubation on human bone marrow stromal cells. Gan OI, et al. **Blood** 1997 Jul 15;90(2):641–50

Regulation of human B cell growth and differentiation: lessons from the primary immunodeficiencies. Callard RE, et al. **Chem Immunol** 1997;67:114–32 (102 ref.)

Selective gamma-chain T-cell receptor gene rearrangements in a patient with Omenn's syndrome: absence of V–II subgroup (V gamma 9) transcripts. Mathioudakis G, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):616–9

Combined immunodeficiency phenotype associated with inappropriate spontaneous and activation-induced apoptosis. Pignata C, et al. **Clin Exp Immunol** 1997 Jun; 108(3):484–9

Immunodeficiency with hyper-immunoglobulin M in an infant who had cryptosporidiosis associated with interferon gamma deficiency [letter; comment] Pasic S. **Clin Infect Dis** 1996 Dec;23(6):1336–7. Comment on: Clin Infect Dis 1996 May;22(5):848–50.

CD70 expression on T-cell subpopulations: study of normal individuals and patients with chronic immune activation. Brugnoni D, et al. **Immunol Lett** 1997 Feb;55(2):99–104

Protective responses against skin-dwelling microfilariae of

Onchocerca lienalis in severe combined immunodeficient mice. Folkard SG, et al. **Infect Immun** 1997 Jul; 65(7):2846–51

Total and birch pollen–specific human IgE in mice with severe combined immunodeficiency transplanted with human peripheral blood lymphocytes: donor dependence, seasonal variation and in vivo half–life. Steinsvik TE, et al. **Int Arch Allergy Immunol** 1997 Feb;112(2):175–83

Effect of different Ig transgenes on B cell differentiation in scid mice. Chang Y, et al. **Int Immunol** 1997 Mar; 9(3):373–80

Interleukin–4 signaling in B lymphocytes from patients with X–linked severe combined immunodeficiency. Taylor N, et al. **J Biol Chem** 1997 Mar 14;272(11):7314–9

Oligoclonal expansion of CD45RO+ T lymphocytes in Omenn syndrome. Harville TO, et al. **J Clin Immunol** 1997 Jul;17(4):322–32

Abnormal in vitro thymocyte differentiation in a patient with severe combined immunodeficiency–Nezelof's syndrome. Knutsen AP, et al. **J Clin Immunol** 1996 May;16(3):151–8

Correction of defective expression in MHC class II deficiency (bare lymphocyte syndrome) cells by retroviral transduction of CIITA. Bradley MB, et al. **J Immunol** 1997 Aug 1;159(3):1086–95

Human cytotoxic CD8+ T–lymphocyte clones engraft in severe combined immunodeficient (SCID) mice but show diminished function. de Kroon JF, et al. **J Immunother** 1997 Mar;20(2):101–10

Primary human immune response to Neisseria meningitidis serogroup C in interleukin–12–treated severe combined immunodeficient mice engrafted with human peripheral blood lymphocytes. Westerink MA, et al. **J Infect Dis** 1997 Jan;175(1):84–90

Selective homing of human leukemic B–cell precursors to specific lymphohematopoietic microenvironments in SCID mice: a role for the beta 1 integrin family surface adhesion molecules VLA–4 and VLA–5. Messinger Y, et al. **Leuk Lymphoma** 1996 Sep;23(1–2):61–9

Major histocompatibility complex class II deficiency needs an early diagnosis: report of a case. Canioni D, et al. **Pediatr Pathol Lab Med** 1997 Jul–Aug;17(4):645–51

Purification of primitive human hematopoietic cells capable of repopulating immune–deficient mice. Bhatia M, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5320–5

Cellular radiosensitivity in human severe–combined–immunodeficiency (SCID) syndromes. Sproston AR, et al. **Radiother Oncol** 1997 Jan;42(1):53–7

Physiologic human T–cell responses to OKT3 in the human peripheral blood lymphocyte–severe combined immunodeficiency mouse model. Dessureault S, et al. **Transplantation** 1997 Sep 27;64(6):811–6

Low expression of T–cell receptor–CD3 complex: a case with a clinical presentation resembling humoral immunodeficiency. Sanal O, et al. **Turk J Pediatr** 1996 Jan–Mar;38(1):81–4

Murine AIDS, a key to understanding retrovirus–induced immunodeficiency. Liang B, et al. **Viral Immunol** 1996; 9(4):225–39 (122 ref.)

[Reconstitution of Hu–SCID mice transplanted with human tonsillar lymphocytes immunized with dengue virus–2 in vitro and its immune response] Zuo L, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Aug;76(8):597–9 (Eng. Abstr.) **(Chi)**

[Common gamma chains for cytokine receptors] Nakamura M. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Dec; 19(6):623–8 (30 ref.) **(Jpn)**

[The signal transduction mechanism of IL–4 in X–linked severe combined immunodeficiency patients] Izuhara K. **Rinsho Ketsueki** 1997 Mar;38(3):186–8 (8 ref.) **(Jpn)**

METABOLISM

Signaling via IL–2 and IL–4 in JAK3–deficient severe combined immunodeficiency lymphocytes: JAK3–dependent and independent pathways. Oakes SA, et al. **Immunity** 1996 Dec;5(6):605–15

Reconstitution of T cell receptor signaling in ZAP–70–deficient cells by retroviral transduction of the ZAP–70 gene. Taylor N, et al. **J Exp Med** 1996 Nov 1; 184(5):2031–6

MICROBIOLOGY

Epstein–Barr–virus–associated lymphoproliferative syndrome in severe combined immunodeficiency: establishment of a lymphoblastoid cell line as an in vitro model for biological and therapeutic studies. Simon M, et al. **Acta Haematol** 1996;96(3):170–7

PATHOLOGY

Kinetic evidence of the regeneration of multilineage hematopoiesis from primitive cells in normal human bone marrow transplanted into immunodeficient mice. Cashman JD, et al. **Blood** 1997 Jun 15;89(12):4307–16

Role of interleukin–2 (IL–2), IL–7, and IL–15 in natural killer cell differentiation from cord blood hematopoietic progenitor cells and from gamma c transduced severe combined immunodeficiency X1 bone marrow cells. Cavazzana–Calvo M, et al. **Blood** 1996 Nov 15; 88(10):3901–9

Detection of donor–derived Langerhans cells in MHC class II immunodeficient patients after allogeneic bone marrow transplantation. Emile JF, et al. **Br J Haematol** 1997 Aug; 98(2):480–4

Cardiac malignant lymphoma in severe combine immunodeficient mice. Aftabuddin M, et al. **Indian Heart J** 1996 Jul–Aug;48(4):368–70

Abnormal in vitro thymocyte differentiation in a patient with severe combined immunodeficiency–Nezelof's syndrome. Knutsen AP, et al. **J Clin Immunol** 1996 May;16(3):151–8

Innervation of the thymus in normal and bone marrow reconstituted severe combined immunodeficient (SCID) mice. Mitchell B, et al. **J Neuroimmunol** 1997 May; 75(1–2):19–27

Hepatic pathology resulting from mouse hepatitis virus S infection in severe combined immunodeficiency mice. Huang DS, et al. **Lab Anim Sci** 1996 Apr;46(2):167–73

PREVENTION & CONTROL

"Planned parenthood". Green RM, et al. **Camb Q Healthc Ethics** 1997 Winter;6(1):100–5

SURGERY

New immunodeficient (nude–scid, beige–scid) mice as excellent recipients of human skin grafts containing intraepidermal neoplasms. Takizawa Y, et al. **Arch Dermatol Res** 1997 Mar;289(4):213–8

Innervation of the thymus in normal and bone marrow reconstituted severe combined immunodeficient (SCID) mice. Mitchell B, et al. **J Neuroimmunol** 1997 May; 75(1–2):19–27

THERAPY

Haploidentical bone marrow transplants for two patients with reticular dysgenesis. De Santes KB, et al. **Bone Marrow Transplant** 1996 Jun;17(6):1171–3

In vitro T cell depletion using Campath 1M for mismatched BMT for severe combined immunodeficiency (SCID). Dickinson AM, et al. **Bone Marrow Transplant** 1997 Feb; 19(4):323–9

Bone marrow 'boosts' following T cell–depleted haploidentical bone marrow transplantation. Kline RM, et al. **Bone Marrow Transplant** 1996 Apr;17(4):543–8

Disseminated BCG infection in severe combined immunodeficiency presenting with severe anaemia and associated with gross hypersplenism after bone marrow transplantation. Skinner R, et al. **Bone Marrow Transplant** 1996 May;17(5):877–80

Hepatic GVHD after HLA–haploidentical bone marrow transplantation in children with severe combined immunodeficiency: the effect of ursodeoxycholic acid. Wulffraat NM, et al. **Br J Haematol** 1997 Mar;96(4):776–80

Bone marrow gene transfer in three patients with adenosine deaminase deficiency. Hoogerbrugge PM, et al. **Gene Ther** 1996 Feb;3(2):179–83

Preclinical investigations that subserve efforts to employ bone marrow transplantation for rheumatoid or autoimmune diseases. Good RA, et al. **J Rheumatol Suppl** 1997 May; 48:5–12 (73 ref.)

In–utero transplantation of parental CD34 haematopoietic progenitor cells in a patient with X–linked severe combined immunodeficiency (SCIDXI). Wengler GS, et al. **Lancet** 1996 Nov 30;348(9040):1484–7

Treatment of X–linked severe combined immunodeficiency by in utero transplantation of paternal bone marrow [see comments] Flake AW, et al. **N Engl J Med** 1996 Dec 12; 335(24):1806–10. Comment in: N Engl J Med 1996 Dec 12;335(24):1839–40.

The therapeutic potential of fetal and neonatal hematopoietic stem cells [editorial; comment] Gluckman E. **N Engl J Med** 1996 Dec 12;335(24):1839–40. Comment on: N Engl J Med 1996 Dec 12;335(24):1806–10. Comment on: N Engl J Med 1996 Dec 12;335(24):1811–4.

Bone marrow transplantation in severe combined immunodeficiency from a sibling who had received a paternal bone marrow transplant [see comments] Stiehm ER, et al. **N Engl J Med** 1996 Dec 12;335(24):1811–4. Comment in: N Engl J Med 1996 Dec 12;335(24):1839–40.

Cellular therapy. Flake AW, et al. **Obstet Gynecol Clin North Am** 1997 Mar;24(1):159–77 (20 ref.)

Transplantation of hemopoietic cells from the fetal liver to treat patients with congenital diseases postnatally or prenatally. Touraine JL, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):712–3

[Gene therapy for hereditary immunodeficiencies] Fischer A, et al. **C R Seances Soc Biol Fil** 1996;190(1):77–93 (54 ref.) (Eng. Abstr.) **(Fre)**

[Gene therapy for severe combined immunodeficiency linked to chromosome X] Fischer A. **Hematol Cell Ther** 1997 Apr; 39(2):97 (0 ref.) **(Fre)**

[The gene therapy for a patient with ADA deficiency; report of the first gene therapy trial in Japan] Ariga T, et al. **Nippon Rinsho** 1997 Jun;55(6):1572–9 (10 ref.) (Eng. Abstr.) **(Jpn)**

VIROLOGY

Characteristics of human EBV–specific cytotoxic T lymphocytes utilized for adoptive immunotherapy of EBV–induced lymphoproliferations in xenografted SCID mice. Lacerda JF, et al. **Ann Oncol** 1997;8 Suppl 2:137–40

Hepatic pathology resulting from mouse hepatitis virus S infection in severe combined immunodeficiency mice. Huang DS, et al. **Lab Anim Sci** 1996 Apr;46(2):167–73

SEVERE COMBINED IMMUNODEFICIENT MICE see **MICE, SCID**

SEVERITY OF ILLNESS INDEX

Surgical treatment for epilepsy: a retrospective Swedish multicenter study. C:son Silander H, et al. **Acta Neurol Scand** 1997 Jun;95(6):321–30

Sensitivity of the six–item Hamilton Depression Rating Scale. O'Sullivan RL, et al. **Acta Psychiatr Scand** 1997 May; 95(5):379–84

Illness severity and self–efficacy as course predictors of DSM–IV alcohol dependence in a multisite clinical sample. Langenbucher J, et al. **Addict Behav** 1996 Sep–Oct; 21(5):543–53

The irritable bowel severity scoring system: a simple method of monitoring irritable bowel syndrome and its progress. Francis CY, et al. **Aliment Pharmacol Ther** 1997 Apr; 11(2):395–402

Leukotriene E4 plasma levels in adult asthmatic patients with variable disease severity. Chavis C, et al. **Allergy** 1997 May; 52(5):589–92

Urinary eosinophil protein X in relation to disease activity in childhood asthma. Lugosi E, et al. **Allergy** 1997 May; 52(5):584–8

Significance of the Thrombolysis in Myocardial Infarction scoring system in assessing infarct–related artery reperfusion and mortality rates after acute myocardial infarction. Fath–Ordoubadi F, et al. **Am Heart J** 1997 Jul; 134(1):62–8

Generalizability of the type A/type B distinction across different psychoactive substances. Feingold A, et al. **Am J Drug Alcohol Abuse** 1996 Aug;22(3):449–62

A new index for early prediction of hospitalization in patients with acute asthma. Rodrigo G, et al. **Am J Emerg Med** 1997 Jan;15(1):8–13

Severity of illness scoring systems to adjust nosocomial infection rates: a review and commentary. Keita–Perse O, et al. **Am J Infect Control** 1996 Dec;24(6):429–34 (20 ref.)

Secondary diagnoses as predictive factors for survival or mortality in Medicare patients with acute pneumonia. White SR, et al. **Am J Med Qual** 1996 Winter;11(4):186–92

C–reactive protein levels determine the severity of soft–tissue injuries. Pritchett JW. **Am J Orthop** 1996 Nov; 25(11):759–61

Montgomery–Asberg severity gradations [letter] Mittmann N, et al. **Am J Psychiatry** 1997 Sep;154(9):1320–1

Judging hospitals by severity–adjusted mortality rates: the influence of the severity–adjustment method. Iezzoni LI, et al. **Am J Public Health** 1996 Oct;86(10):1379–87

Annotation: wanted—a simple and meaningful HIV staging system [comment] el–Sadr W, et al. **Am J Public Health** 1997 Apr;87(4):546–8. Comment on: Am J Public Health 1997 Apr;87(4):567–73.

The Boston AIDS Survival Score (BASS): a multidimensional AIDS severity instrument [see comments] Seage GR 3rd, et al. **Am J Public Health** 1997 Apr; 87(4):567–73. Comment in: Am J Public Health 1997 Apr;87(4):546–8.

Is the International Prognostic Index for aggressive lymphomas useful for low–grade lymphoma patients? Applicability to stage III–IV patients. The GOELAMS Group, France. Foussard C, et al. **Ann Oncol** 1997;8 Suppl 1:49–52

Can we improve upon the International Index? Shipp MA. **Ann Oncol** 1997;8 Suppl 1:43–7 (62 ref.)

A prospective evaluation of the modified Alvarado score for acute appendicitis in children. Macklin CP, et al. **Ann R Coll Surg Engl** 1997 May;79(3):203–5

Further validation of the B^2LAG disease activity index in patients with systemic lupus erythematosus. Stoll T, et al. **Ann Rheum Dis** 1996 Oct;55(10):756–60

POSSUM and APACHE II scores do not predict the outcome of ruptured infrarenal aortic aneurysms. Lazarides MK, et al. **Ann Vasc Surg** 1997 Mar;11(2):155–8

PRISM score evaluation to predict outcome in pediatric patients on admission at an emergency department. Maulen–Radovan I, et al. **Arch Med Res** 1996 Winter; 27(4):553–8

Parathyroid hormone suppression in spinal cord injury patients is associated with the degree of neurologic impairment and not the level of injury. Mechanick JI, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):692–6

The reliability of the Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index in patients with systemic lupus erythematosus. Gladman DD, et al. **Arthritis Rheum** 1997 May;40(5):809–13

Laboratory tests as predictors of disease exacerbations in systemic lupus erythematosus: comment on the article by Esdaile et al [letter; comment] Smeenk RJ, et al. **Arthritis Rheum** 1996 Dec;39(12):2083–5. Comment on: Arthritis Rheum 1996 Mar;39(3):370–8.

Health status and disease severity in fibromyalgia: results of a six–center longitudinal study [see comments] Wolfe F, et al. **Arthritis Rheum** 1997 Sep;40(9):1571–9. Comment in: Arthritis Rheum 1997 Sep;40(9):1553–5.

Doctors and patients don't agree: cross sectional study of patients' and doctors' perceptions and assessments of disability in multiple sclerosis. Rothwell PM, et al.

BMJ 1997 May 31;314(7094):1580–3
Six area, six sign atopic dermatitis (SASSAD) severity score: a simple system for monitoring disease activity in atopic dermatitis. Berth-Jones J. **Br J Dermatol** 1996 Sep;135 Suppl 48:25–30
Measurement of disease activity and outcome in atopic dermatitis. Finlay AY. **Br J Dermatol** 1996 Oct; 135(4):509–15 (51 ref.)
Comparative analysis of the impact of risk profile and of drug therapy on survival in CML using Sokal's index and a new score. German chronic myeloid leukaemia (CML)–Study Group. Hehlmann R, et al. **Br J Haematol** 1997 Apr;97(1):76–85
Measurement of the quality of life in rheumatic disorders using the EuroQol. Wolfe F, et al. **Br J Rheumatol** 1997 Jul;36(7):786–93
Severe illness in African children with diarrhoea: implications for case management strategies. Lee LA, et al. **Bull World Health Organ** 1995;73(6):779–85
An evaluation of clinical indicators for severe paediatric illness. Paxton LA, et al. **Bull World Health Organ** 1996; 74(6):613–8
Implications of using a prognostic index to select therapy for patients with aggressive histology lymphoma. Meyer RM, et al. **Can J Oncol** 1995 Mar;5(1):344–54
Airways remodeling is a distinctive feature of asthma and is related to severity of disease. Chetta A, et al. **Chest** 1997 Apr;111(4):852–7
Assessment of the prognosis of coronary patients: performance and customization of generic severity indexes. Sarmiento X, et al. **Chest** 1997 Jun;111(6):1666–71
A symptom-based measure of the severity of chronic lung disease: results from the Veterans Health Study. Selim AJ, et al. **Chest** 1997 Jun;111(6):1607–14
A comparison of severity of illness scoring systems for critically ill obstetric patients. el-Solh AA, et al. **Chest** 1996 Nov;110(5):1299–304
Evaluation of the severity of illness in infants by the Baby Check Score. Chen CK, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jan;59(1):15–20
Clinical activity score as a guide in the management of patients with Graves' ophthalmopathy [see comments] Mourits MP, et al. **Clin Endocrinol (Oxf)** 1997 Jul; 47(1):9–14. Comment in: Clin Endocrinol (Oxf) 1997 Jul;47(1):15.
Clinical activity score as a guide in the management of patients with Graves' orbitopathy [comment] Rose GE. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):15. Comment on: Clin Endocrinol (Oxf) 1997 Jul;47(1):9–14.
Incubation periods of experimental rhinovirus infection and illness. Harris JM 2nd, et al. **Clin Infect Dis** 1996 Dec; 23(6):1287–90
Infection with human immunodeficiency virus does not influence the clinical severity of scrub typhus. Kantipong P, et al. **Clin Infect Dis** 1996 Nov;23(5):1168–70
Association of plasma levels of tumor necrosis factor alpha with severity of disease and mortality among patients with leptospirosis. Tajiki H, et al. **Clin Infect Dis** 1996 Nov; 23(5):1177–8
A new clinical tool for gait evaluation in Parkinson's disease. Martínez-Martín P, et al. **Clin Neuropharmacol** 1997 Jun; 20(3):183–94
Neonatal severity of illness scoring systems: a comparison. Fleisher BE, et al. **Clin Pediatr (Phila)** 1997 Apr;36(4):223–7
Standardising joint assessment in rheumatoid arthritis. Scott DL, et al. **Clin Rheumatol** 1996 Nov;15(6):579–82
Is the Addiction Severity Index a reliable and valid assessment instrument among clients with severe and persistent mental illness and substance abuse disorders? Zanis DA, et al. **Community Ment Health J** 1997 Jun; 33(3):213–27
ICU scoring systems allow prediction of patient outcomes and comparison of ICU performance. Becker RB, et al. **Crit Care Clin** 1996 Jul;12(3):503–14 (53 ref.)
ICU scoring systems do not allow prediction of patient outcomes or comparison of ICU performance. Sherck JP, et al. **Crit Care Clin** 1996 Jul;12(3):515–23 (41 ref.)
Outcome of pediatric intensive care at six centers in Mexico and Ecuador [see comments] Earle M Jr, et al. **Crit Care Med** 1997 Sep;25(9):1462–7. Comment in: Crit Care Med 1997 Sep;25(9):1445–6.
BLEED: a classification tool to predict outcomes in patients with acute upper and lower gastrointestinal hemorrhage [see comments] Kollef MH, et al. **Crit Care Med** 1997 Jul; 25(7):1125–32. Comment in: Crit Care Med 1997 Jul;25(7):1101–2.
Effect of changing patient mix on the performance of an intensive care unit severity-of-illness model: how to distinguish a general from a specialty intensive care unit. Murphy-Filkins R, et al. **Crit Care Med** 1996 Dec; 24(12):1968–73
Periodontal probing. Hefti AF. **Crit Rev Oral Biol Med** 1997; 8(3):336–56 (113 ref.)
Severity of disturbance among Asian American outpatients. Durvasula R, et al. **Cult Divers Ment Health** 1996; 2(1):43–51
Lipoprotein(a) in cirrhosis. A new index of liver functions? Malaguarnera M, et al. **Curr Med Res Opin** 1996; 13(8):479–85
Predicting survival in the intensive care unit. Hunt JP, et al. **Curr Probl Surg** 1997 Jul;34(7):527–99 (188 ref.)
Clinical value of anorectal manometry index in neurogenic fecal incontinence. Meshkinpour H, et al. **Dis Colon Rectum** 1997 Apr;40(4):457–61
Determinants of handicap 1 and 3 years after a stroke. Harwood RH, et al. **Disabil Rehabil** 1997 May;19(5):205–11
Prevalence and severity of urinary schistosomiasis in Ibadan, Nigeria. Arinola OG. **East Afr Med J** 1995 Nov; 72(11):746–8
Severity of varicella infection in Saudis with diabetes mellitus: a possible role of acyclovir in treatment. Kubeyinje EP. **East Afr Med J** 1995 Nov;72(11):739–41
Seizure severity in children with epilepsy: a parent-completed scale compared with clinical data. Carpay JA, et al. **Epilepsia** 1997 Mar;38(3):346–52
Evaluation of inter-incisor distance as an objective criterion of the severity of oral submucous fibrosis in Karachi, Pakistan [letter] Maher R, et al. **Eur J Cancer B Oral Oncol** 1996 Sep;32B(5):362–4
Quantitative scale of oral mucositis associated with autologous bone marrow transplantation. Tardieu C, et al. **Eur J Cancer B Oral Oncol** 1996 Nov;32B(6):381–7
Is the Parsonnet's score a good predictive score of mortality in adult cardiac surgery: assessment by a French multicentre study. Gabrielle F, et al. **Eur J Cardiothorac Surg** 1997 Mar;11(3):406–14
Is the Glasgow Dyspepsia Severity Score a tool for the global measurement of dyspepsia? [letter; comment] Talley NJ, et al. **Eur J Gastroenterol Hepatol** 1997 Apr;9(4):413–4. Comment on: Eur J Gastroenterol Hepatol 1996 Oct;8(10):967–71.
How should multiple organ dysfunction syndrome be assessed? A review of the variations in current scoring systems. Bertleff MJ, et al. **Eur J Surg** 1997 Jun; 163(6):405–9; discussion 410 (36 ref.)
Critical and subcritical ischaemia. Wolfe JH, et al. **Eur J Vasc Endovasc Surg** 1997 Jun;13(6):578–82 (27 ref.)
Comparison of an expert system with other clinical scores for the evaluation of severity of asthma. Gautier V, et al. **Eur Respir J** 1996 Jan;9(1):58–64
Classification of severity of health problems in family/general practice: an international field trial. Parkerson GR Jr, et al. **Fam Pract** 1996 Jun;13(3):303–9
Foot and ankle severity scale (FASS). Manoli A 2nd, et al. **Foot Ankle Int** 1997 Sep;18(9):598–602
Physician recognition of hypochondriacal patients. Gerdes TT, et al. **Gen Hosp Psychiatry** 1996 Mar;18(2):106–12
The association of age and sexual history with the severity of the histological findings in women with cervical intraepithelial neoplasia. Reis FM, et al. **Gynecol Obstet Invest** 1996;42(4):258–60
Headache intensity and quality of life in adolescents. How are changes in headache intensity in adolescents related to changes in experienced quality of life? Langeveld JH, et al. **Headache** 1997 Jan;37(1):37–42
Patient classification system: an optimization approach. Walts LM, et al. **Health Care Manage Rev** 1996 Fall;21(4):75–82
Do severity measures explain differences in length of hospital stay? The case of hip fracture. Shwartz M, et al. **Health Serv Res** 1996 Oct;31(4):365–85
Symptom assessment. Ingham JM, et al. **Hematol Oncol Clin North Am** 1996 Feb;10(1):21–39 (89 ref.)
Prognostic indices in peritonitis. Ohmann C, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):937–46 (53 ref.)
Neural networks as predictors of outcomes in alcoholic patients with severe liver disease. Lapuerta P, et al. **Hepatology** 1997 Feb;25(2):302–6
Assessment of severity of haemolytic disease of newborn by monocyte monolayer assay. Dhingra-Kumar N, et al. **Indian J Med Res** 1995 Aug;102:71–6
Nosocomial infections in surgical patients: comparison of two measures of intrinsic patient risk [see comments] Delgado-Rodríguez M, et al. **Infect Control Hosp Epidemiol** 1997 Jan;18(1):19–23. Comment in: Infect Control Hosp Epidemiol 1997 Jan;18(1):6–8.
Basics of stratifying for severity of illness. Gross PA. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):675–86 (57 ref.)
"My patients are sicker": adjusting outcomes by severity of illness. Hopkins DS. **Int Anesthesiol Clin** 1995 Fall; 33(4):33–47 (15 ref.)
Correlates of severity in bulimia nervosa. Sullivan PF, et al. **Int J Eat Disord** 1996 Nov;20(3):239–51
Severity of childhood asthma by socioeconomic status. Mielck A, et al. **Int J Epidemiol** 1996 Apr;25(2):388–93 (33 ref.)
A population needs assessment profile for dementia. Gordon DS, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):642–7
On opening "black boxes" and looking inside [editorial] Iezzoni LI. **Int J Qual Health Care** 1996 Jun;8(3):209–10
A retrospective quality of life analysis using the Lung Cancer Symptom Scale in patients treated with palliative radiotherapy for advanced nonsmall cell lung cancer. Lutz ST, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 1; 37(1):117–22
Estimate criteria for diagnosis and severity in benign prostatic hyperplasia. Homma Y, et al. **Int J Urol** 1996 Jul;3(4):261–6
Risk prediction: judging the judges [editorial] Angus DC, et al. **Intensive Care Med** 1997 Apr;23(4):363–5
Dysautonomy in daily activities impair the prognosis of acutely ill adults admitted to hospital [letter] Bensousan TA, et al. **Intensive Care Med** 1997 May;23(5):593
Severity of illness scores and risk of complication during transfer [letter; comment] Britto J, et al. **Intensive Care Med** 1996 Oct;22(10):1130–1. Comment on: Intensive Care Med 1995 Oct;21(10):781–3.
Severe head injuries: an outcome prediction and survival analysis. Combes P, et al. **Intensive Care Med** 1996 Dec; 22(12):1391–5
Meningococcal disease: a comparison of eight severity scores in 125 children. Derkx HH, et al. **Intensive Care Med** 1996 Dec;22(12):1433–41
Hemostatic abnormalities and the severity of illness in patients at the onset of clinically defined sepsis. Possible indication of the degree of endothelial cell activation? Leithäuser B, et al. **Intensive Care Med** 1996 Jul;22(7):631–6
Severe community-acquired pneumonia in ICUs: prospective validation of a prognostic score [see comments] Leroy O, et al. **Intensive Care Med** 1996 Dec;22(12):1307–14. Comment in: Intensive Care Med 1996 Dec;22(12):1288–90.
Outcome prediction in intensive care: results of a prospective, multicentre, Portuguese study. Moreno R, et al. **Intensive Care Med** 1997 Feb;23(2):177–86
Validation of the simplified therapeutic intervention scoring system on an independent database. Moreno R, et al. **Intensive Care Med** 1997 Jun;23(6):640–4
Paediatric index of mortality (PIM): do we need another paediatric mortality prediction score? [editorial; comment] Randolph AG. **Intensive Care Med** 1997 Feb;23(2):141–2. Comment on: Intensive Care Med 1997 Feb;23(2):201–7.
Mortality discrimination in acute myocardial infarction: comparison between APACHE III and SAPS II prognosis systems. PAEEC Group. Reina A, et al. **Intensive Care Med** 1997 Mar;23(3):326–30
Nine equivalents of nursing manpower use score (NEMS). Reis Miranda D, et al. **Intensive Care Med** 1997 Jul; 23(7):760–5
The Therapeutic Intervention Scoring System: one single tool for the evaluation of workload, the work process and management? [editorial] Reis Miranda D. **Intensive Care Med** 1997 Jun;23(6):615–7
Paediatric index of mortality (PIM): a mortality prediction model for children in intensive care [see comments] Shann F, et al. **Intensive Care Med** 1997 Feb;23(2):201–7. Comment in: Intensive Care Med 1997 Feb;23(2):141–2.
The influence of length of stay in the ICU on power of discrimination of a multipurpose severity score (SAPS). ARCHIDIA. Sicignano A, et al. **Intensive Care Med** 1996 Oct;22(10):1048–51
The SOFA (Sepsis-related Organ Failure Assessment) score to describe organ dysfunction/failure. On behalf of the Working Group on Sepsis-Related Problems of the European Society of Intensive Care Medicine. Vincent JL, et al. **Intensive Care Med** 1996 Jul;22(7):707–10
Outcome prediction for patients with cirrhosis of the liver in a medical ICU: a comparison of the APACHE scores and liver-specific scoringsystems. Zauner CA, et al. **Intensive Care Med** 1996 Jun;22(6):559–63
A reappraisal of exercise electrocardiographic indexes of the severity of ischemic heart disease: angiographic and scintigraphic correlates. Bogaty P, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1497–504
Lessons from evaluating an automated patient severity index. Gibson RF, et al. **J Am Med Inform Assoc** 1996 Sep–Oct; 3(5):349–57
The association of nocturnal asthma with asthma severity. Fix A, et al. **J Asthma** 1997;34(4):329–36
Assessment of the severity of asthma in a family practice. Morris NV, et al. **J Asthma** 1996;33(6):425–39
Toward a simplified measure of asthma severity for applied research. Wahlgren DR, et al. **J Asthma** 1997;34(4):291–303
Evaluation of the Singh index for measuring osteoporosis. Koot VC, et al. **J Bone Joint Surg Br** 1996 Sep;78(5):831–4
Severity of medical and neurologic complications as a determinant of neurodevelopmental outcome at 6 and 12 months in very low birth weight infants. Anderson AE, et al. **J Child Neurol** 1996 May;11(3):215–9
Use of a brief assessment examination in a study of subacute sclerosing panencephalitis. Nester MJ. **J Child Neurol** 1996 May;11(3):173–80
Estimation of tissue hypothyroidism by a new clinical score: evaluation of patients with various grades of hypothyroidism and controls. Zulewski H, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):771–6
Measurement of morning stiffness in rheumatoid arthritis clinical trials. Vliet Vlieland TP, et al. **J Clin Epidemiol** 1997 Jul;50(7):757–63
Correlation of various Crohn's disease activity indexes in subgroups of patients with primarily inflammatory or fibrostenosing clinical characteristics. Papi C, et al. **J Clin Gastroenterol** 1996 Jul;23(1):40–3
Reliability and validity of the Functional Assessment of Cancer Therapy-Breast quality-of-life instrument. Brady MJ, et al. **J Clin Oncol** 1997 Mar;15(3):974–86
Performance of female college students and sexual abuse survivors on the Brief Symptom Inventory. Bennett SE, et al. **J Clin Psychol** 1996 Sep;52(5):535–41
Accuracy and reliability of assessment of severity of illness before and after an educational intervention. Shiels C, et al. **J Eval Clin Pract** 1996 Nov;2(4):265–71
Hyperglucagonaemia in cirrhotic patients and its relationship to the severity of cirrhosis and haemodynamic values. Lin

HC, et al. **J Gastroenterol Hepatol** 1996 May;11(5):422–8
Measuring prognosis and case mix in hospitalized elders. The importance of functional status [see comments] Covinsky KE, et al. **J Gen Intern Med** 1997 Apr;12(4):203–8. Comment in: J Gen Intern Med 1997 Apr;12(4):254–5.
How severity measures rate hospitalized patients. Hughes JS, et al. **J Gen Intern Med** 1996 May;11(5):303–11 (24 ref.)
"Credible clinical" findings as predictors of death [letter; comment] Nardone DA. **J Gen Intern Med** 1996 May; 11(5):315. Comment on: J Gen Intern Med 1996 Jan;11(1):23–31.
A regional evaluation of variation in low-severity hospital admissions. Rosenthal GE, et al. **J Gen Intern Med** 1997 Jul;12(7):416–22
Severity of optic nerve damage in eyes with POAG is correlated with changes in the trabecular meshwork. Gottanka J, et al. **J Glaucoma** 1997 Apr;6(2):123–32
Trispiral tomographic staging of Kienböck's disease. Quenzer DE, et al. **J Hand Surg [Am]** 1997 May;22(3):396–403
Influence of the severity of illness measured by the Simplified Acute Physiology Score (SAPS) on occurrence of nosocomial infections in ICU patients. Girou E, et al. **J Hosp Infect** 1996 Oct;34(2):131–7
Disease severity measures in a population of psoriasis patients: the symptoms of psoriasis correlate with self-administered psoriasis area severity index scores. Fleischer AB Jr, et al. **J Invest Dermatol** 1996 Jul;107(1):26–9
Endoscopic scoring system in patients with allergic rhinitis. Bavbek S, et al. **J Investig Allergol Clin Immunol** 1997 May–Jun;7(3):175–8
A clinical severity grading scale for Marfan syndrome. Gray JR, et al. **J Med Genet** 1996 Sep;33(9):758–9
Use of the Child and Adolescent Functional Assessment Scale to predict service utilization and cost. Hodges K, et al. **J Ment Health Adm** 1997 Summer;24(3):278–90
Measuring treatment outcome for adults and adolescents: reliability and validity of BASIS–32. Hoffmann FL, et al. **J Ment Health Adm** 1997 Summer;24(3):316–31
Assessing substance use in multiproblem patients: reliability and validity of the Addiction Severity Index in a mental hospital population. Appleby L, et al. **J Nerv Ment Dis** 1997 Mar;185(3):159–65
New objective classification system for nuclear opacification. Duncan DD, et al. **J Opt Soc Am A** 1997 Jun; 14(6):1197–204
Chronic illness perception in adolescence: implications for the doctor–patient relationship. Leung SS, et al. **J Paediatr Child Health** 1997 Apr;33(2):107–12
Palliative performance scale (PPS): a new tool. Anderson F, et al. **J Palliat Care** 1996 Spring;12(1):5–11
A circular diagram for representing symptom status in advanced cancer patients. Mercadante S, et al. **J Palliat Care** 1996 Spring;12(1):42–5
Neonatal lipid utilization increases with injury severity: recombinant human growth hormone versus placebo. Letton RW, et al. **J Pediatr Surg** 1996 Aug;31(8):1068–72; discussion 1072–4
Prognostic classification for esophageal atresia and tracheoesophageal fistula: Waterston versus Montreal. Teich S, et al. **J Pediatr Surg** 1997 Jul;32(7):1075–9; discussion 1079–80
Systemic Lupus International Collaborating Clinics conference on assessment of lupus flare and quality of life measures in SLE. Systemic Lupus International Collaborating Clinics Group. Gladman D, et al. **J Rheumatol** 1996 Nov;23(11):1953–5 (14 ref.)
A model to assess severity and impact of fibromyalgia. Goldenberg DL, et al. **J Rheumatol** 1995 Dec;22(12):2313–8
Validation of the revised and expanded version of the Arthritis Impact Measurement Scales for patients with psoriatic Arthritis. Husted J, et al. **J Rheumatol** 1996 Jun; 23(6):1015–9
Relationship of the Arthritis Impact Measurement Scales to changes in articular status and functional performance in patients with psoriatic arthritis. Husted J, et al. **J Rheumatol** 1996 Nov;23(11):1932–7
An update on the Bath Ankylosing Spondylitis Disease Activity and Functional Indices (BASDAI, BASFI): excellent Cronbach's alpha scores. Jones SD, et al. **J Rheumatol** 1996 Feb;23(2):407
Plasma tetranectin levels and disease activity in patients with rheumatoid arthritis. Kamper EF, et al. **J Rheumatol** 1997 Feb;24(2):262–8
The algofunctional indices for hip and knee osteoarthritis. Lequesne MG. **J Rheumatol** 1997 Apr;24(4):779–81
Validity, reliability, and sensitivity to change of a French version of the arthritis impact measurement scales 2 (AIMS2) in patients with rheumatoid arthritis treated with methotrexate. Pouchot J, et al. **J Rheumatol** 1996 Jan; 23(1):52–60
Association of the Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index with measures of disease activity and health status in patients with systemic lupus erythematosus. Stoll T, et al. **J Rheumatol** 1997 Feb;24(2):309–13
Serum levels of hyaluronic acid indicate the severity of joint symptoms in patients with systemic and polyarticular juvenile rheumatoid arthritis. Takei S, et al. **J Rheumatol** 1996 Nov;23(11):1956–62
The Juvenile Arthritis Functional Status Index (JASI): a validation study. Wright FV, et al. **J Rheumatol** 1996 Jun; 23(6):1066–79
Validation of the Addiction Severity Index in French-speaking alcoholic patients. Daeppen JB, et al. **J Stud Alcohol** 1996 Nov;57(6):585–90
The relationship between violence dimensions and symptom severity among homeless, mentally ill women. Goodman LA, et al. **J Trauma Stress** 1997 Jan;10(1):51–70
Development of a criteria set and a structured interview for disorders of extreme stress (SIDES). Pelcovitz D, et al. **J Trauma Stress** 1997 Jan;10(1):3–16
Surgical complication outcome (SCOUT) score: a new method to evaluate quality of care in vascular surgery. Pomposelli JJ, et al. **J Vasc Surg** 1997 Jun;25(6):1007–14; discussion 1014–5
Regarding "presidential address: vascular surgery—comparing outcomes" [letter; comment] Whiteley M, et al. **J Vasc Surg** 1996 Dec;24(6):1066. Comment on: J Vasc Surg 1996 Jan;23(1):5–17.
Age and platelet count: a simple index for predicting the presence of histological lesions in patients with antibodies to hepatitis C virus. METAVIR and CLINIVIR Cooperative Study Groups. Poynard T, et al. **J Viral Hepat** 1997 May;4(3):199–208
Lack of association between type of hepatitis C virus, serum load and severity of liver disease. Romeo R, et al. **J Viral Hepat** 1996 Jul;3(4):183–90
A morphological study of histological activity index (HAI) and scoring system in hepatitis-C. Mushtaq S, et al. **JPMA J Pak Med Assoc** 1997 Jun;47(6):162–5
Explaining "pain and suffering" awards: the role of injury characteristics and fault attributions. Wissler RL, et al. **Law Hum Behav** 1997 Apr;21(2):181–207
A damage index for lupus patients--where are we now? [editorial] Stoll T, et al. **Lupus** 1997;6(3):219–22
CD69 to CD3 ratio of peripheral blood mononuclear cells as a marker to monitor systemic lupus erythematosus disease activity. Su CC, et al. **Lupus** 1997;6(5):449–54
Comparison of four potential MR parameters for severe tissue destruction in multiple sclerosis lesions. van Waesberghe JH, et al. **Magn Reson Imaging** 1997;15(2):155–62
Technology assessment using the association between outcome measures and patterns of illness severity. Almeida RT, et al. **Med Biol Eng Comput** 1997 Jul;35(4):386–90
Measuring casemix, severity, and complexity in geriatric patients undergoing rehabilitation. Small Work Group I report. Leiter P. **Med Care** 1997 Jun;35(6 Suppl):JS113–7
Predicting psychiatric emergency admissions and hospital outcome. Lyons JS, et al. **Med Care** 1997 Aug; 35(8):792–800
Measuring casemix, severity, and complexity in geriatric patients undergoing rehabilitation. Small Work Group II report. Markello SJ. **Med Care** 1997 Jun;35(6 Suppl):JS118–20
Measuring casemix, severity, and complexity in geriatric patients undergoing rehabilitation. Stineman MG. **Med Care** 1997 Jun;35(6 Suppl):JS90–105; discussion JS106–12 (39 ref.)
Classifying rehabilitation inpatients by expected functional gain. Stineman MG, et al. **Med Care** 1997 Sep;35(9):963–73
Predicting in-hospital mortality for stroke patients: results differ across severity-measurement methods. Iezzoni LI, et al. **Med Decis Making** 1996 Oct–Dec;16(4):348–56
Estimating the risks of cardiac surgery [editorial; comment] Dobb GJ. **Med J Aust** 1997 Apr 21;166(8):397–8 (18 ref.) . Comment on: Med J Aust 1997 Apr 21;166(8):408–11.
Risk prediction in coronary artery surgery: a comparison of four risk scores [see comments] Weightman WM, et al. **Med J Aust** 1997 Apr 21;166(8):408–11. Comment in: Med J Aust 1997 Apr 21;166(8):397–8.
Scoring of severity in patients admitted to a respiratory intensive care unit. Nava S. **Monaldi Arch Chest Dis** 1997 Feb;52(1):71–2 (15 ref.)
The MS Impairment Scale: a pragmatic approach to the assessment of impairment in patients with multiple sclerosis. Ravnborg M, et al. **Mult Scler** 1997 Feb;3(1):31–42
CRASH syndrome: mutations in L1CAM correlate with severity of the disease. Yamasaki M, et al. **Neuropediatrics** 1997 Jun;28(3):175–8
Development of a symptom severity index and a symptom impact index for stress incontinence in women. Black N, et al. **Neurourol Urodyn** 1996;15(6):630–40
Scoring of atopic dermatitis by SCORAD using a training atlas by investigators from different disciplines. ETAC Study Group. Early Treatment of the Atopic Child. Oranje AP, et al. **Pediatr Allergy Immunol** 1997 Feb;8(1):28–34
Tension-time index of inspiratory muscles in children [editorial; comment] Gaultier C. **Pediatr Pulmonol** 1997 May;23(5):327–9 (18 ref.). Comment on: Pediatr Pulmonol 1997 May;23(5):336–43.
Determinants of the tension-time index of inspiratory muscles in children with cystic fibrosis [see comments] Hayot M, et al. **Pediatr Pulmonol** 1997 May;23(5):336–43. Comment in: Pediatr Pulmonol 1997 May;23(5):327–9.
Pediatric mortality probability estimated from pre-ICU severity of illness. Kanter RK, et al. **Pediatrics** 1997 Jan; 99(1):59–63
Quality of life in elderly patients with recurrent major depression: a factor analysis of the General Life Functioning Scale. Mazumdar S, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):183–90
Carotid artery stenosis: external validity of the North American Symptomatic Carotid Endarterectomy Trial measurement method. Eliasziw M, et al. **Radiology** 1997 Jul;204(1):229–33
Sensitivity to change of various techniques for measuring radiologic severity of hip osteoarthritis. Conrozier T, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):811–12
Validation of the French version of the arthritis impact measurement scales 2 and comparison with the french version of the Nottingham Health Profile. "Quality of Life in Rheumatology" Task Force. Pouchot J, et al. **Rev Rhum Engl Ed** 1996 Jun;63(6):389–404
Selection of paediatric patients for intensive care. Ballot DE, et al. **S Afr Med J** 1995 Nov;85(11 Suppl):1221–3, 1226
Self-rating Barthel index compatible with the original Barthel index and the Functional Independence Measure motor score. Hachisuka K, et al. **Sangyo Ika Daigaku Zasshi** 1997 Jun 1;19(2):107–21
Quantitative assessment of clinical disease status in primary Sjögren's syndrome. A cross-sectional study using a new classification model. Asmussen K, et al. **Scand J Rheumatol** 1997;26(3):197–205
Social inequalities in the experience of illness in Sweden: a "double suffering". Blank N, et al. **Scand J Soc Med** 1996 Jun;24(2):81–9
A membrane TNF-alpha/TNFR ratio correlates to MODS score and mortality. Pellegrini JD, et al. **Shock** 1996 Dec; 6(6):389–96
Plasma nitric oxide in posttrauma critical illness: a function of "sepsis" and the physiologic state severity classification quantifying the probability of death [published erratum appears in Shock 1997 Feb;7(2):156] Rixen D, et al. **Shock** 1997 Jan;7(1):17–28
Using self-reported questionnaire data to prioritize OSA patients for polysomnography. Pouliot Z, et al. **Sleep** 1997 Mar;20(3):232–6
Socioeconomic status and severity of illness on admission in acute myocardial infarction patients. Latour-Pérez J, et al. **Soc Sci Med** 1996 Sep;43(6):1025–9
A reappraisal of reliability and validity studies in stroke. D'Olhaberriague L, et al. **Stroke** 1996 Dec;27(12):2331–6 (83 ref.)
Reliability of the National Institutes of Health Stroke Scale. Extension to non-neurologists in the context of a clinical trial. Goldstein LB, et al. **Stroke** 1997 Feb;28(2):307–10
Retrospective assessment of initial stroke severity with the Canadian Neurological Scale. Goldstein LB, et al. **Stroke** 1997 Jun;28(6):1181–4
Variability of magnetic resonance angiography and computed tomography angiography in grading middle cerebral artery stenosis using the unweighted kappa statistic [letter; comment] Lavados P, et al. **Stroke** 1996 Dec;27(12):2340 . Comment on: Stroke 1996 Jun;27(6):1084–7.
Coma scales for children with severe falciparum malaria. Newton CR, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr;91(2):161–5
Donor kidney vasculopathy: impact on outcome in kidney transplantation. Minakawa R, et al. **Transpl Immunol** 1996 Dec;4(4):309–12
Neurologic decompression illness: a gravity score. Boussuges A, et al. **Undersea Hyperb Med** 1996 Sep;23(3):151–5
[Prediction of survival in a surgical intensive care unit] Roux LJ, et al. **S Afr Med J** 1996 Nov;86(11):1417–20 **(Afr)**
[Are prognostic scores useful (editorial)] Peter K, et al. **Anaesthesist** 1997 Jun;46(6):469–70 **(Ger)**
[Prognostic scores in intensive care] Unertl K, et al. **Anaesthesist** 1997 Jun;46(6):471–80 (64 ref.) (Eng. Abstr.) **(Ger)**
[Sepsis score in surgical intensive care medicine] Reist K, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Nov;31(9):556–62 (Eng. Abstr.) **(Ger)**
[Experiences with various scores in evaluating the prognosis of postoperative intensive care patients] Wahl W, et al. **Chirurg** 1996 Jul;67(7):710–7; discussion 718 (Eng. Abstr.) **(Ger)**
[The significance of score systems for predicting treatment outcome in intensive care] Schuster HP. **Internist (Berl)** 1996 Dec;37(12):1237–43 (25 ref.) **(Ger)**
[Possibilities and limits of scores. Theoretical considerations about scores] Giebel GD, et al. **Langenbecks Arch Chir** 1996;381(1):59–62 (Eng. Abstr.) **(Ger)**
[Value of score systems in heart surgery] Falk V, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:303–6 (18 ref.) (Eng. Abstr.) **(Ger)**
[Significance of scores for therapy planning and evaluation of individual intensive care patients from the viewpoint of general surgery] Linder MM, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:299–302 (Eng. Abstr.) **(Ger)**
[The value of scores for therapy planning and therapy evaluation in individual intensive care patients--basic principles] Neugebauer E, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:293–8 (13 ref.) (Eng. Abstr.) **(Ger)**
[Score systems: a possibility for quality control and improving cost effectiveness in intensive care medicine? (editorial; comment)] Lenz K. **Wien Klin Wochenschr** 1996; 108(15):451–3. Comment on: Wien Klin Wochenschr 1996;108(15):462–6. **(Ger)**
[Predictive value of score parameters of the Simplified Acute Physiology Score (SAPS)-II for the duration of treatment of intensive care patients (see comments)] Schuster HP, et al. **Wien Klin Wochenschr** 1996;108(15):462–6 (Eng. Abstr.). Comment in: Wien Klin Wochenschr 1996;108(15):451–3. **(Ger)**

[Clinical significance of peak body temperature, white blood cell count, and C-reactive protein level in febrile episodes among geriatric inpatients] Ikematsu H, et al. **Kansenshogaku Zasshi** 1997 Jun;71(6):527-33 (Eng. Abstr.) **(Jpn)**

[Analysis of clinical severity of tsutsugamushi disease according to the serotype of pathogenic rickettsia] Shiga K, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):299-306 (Eng. Abstr.) **(Jpn)**

[Severity and prognosis of congenital diaphragmatic hernia from the viewpoint of perioperative respiratory function] Nakae Y, et al. **Masui** 1997 Jun;46(6):827-34 (Eng. Abstr.) **(Jpn)**

[Relationship between severity of farmer's lung and the level of soluble interleukin 2 receptors in serum] Fukuzawa J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):978-82 (Eng. Abstr.) **(Jpn)**

[Evaluation of the severity of cardiogenic shock by monitoring of their hemodynamics] Matsuzaki M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):27-32 (5 ref.) **(Jpn)**

[Clinical symptoms of cardiogenic shock and important points in evaluating the severity] Saito M. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):21-6 (10 ref.) **(Jpn)**

[Prognostic evaluation of cardiogenic shock by the severity] Watanabe J, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):44-7 (6 ref.) **(Jpn)**

[Important points in clinical tests for evaluating the severity of patients with cardiogenic shock] Watanabe Y. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):33-7 (5 ref.) **(Jpn)**

[Comparison of asthma score and peak flow rate (PEF) monitoring] Okada C. **Nippon Rinsho** 1996 Nov; 54(11):2939-43 (5 ref.) (Eng. Abstr.) **(Jpn)**

[Correlation of carbamazepine levels in blood with clinical poisoning states, evaluated with the help of the APACHE II system and the Matthew coma scale] Feldman R, et al. **Przegl Lek** 1997;54(6):410-5 (Eng. Abstr.) **(Pol)**

[A comparison of 4 pregnancy assessment scales (CRIB, SNAP, SNAP-PE, NTISS) in premature newborns. Clinical Risk Index for Babies. Score for Neonatal Acute Physiology. Score for Neonatal Acute Physiology-Perinatal Extension. Neonatal Therapeutic Intervention Scoring System] Bastos G, et al. **Acta Med Port** 1997 Feb-Mar;10(2-3):161-5 (Eng. Abstr.) **(Por)**

[Inflammatory bowel disease activity index: clinical and laboratory indicators] Dichi I, et al. **Arq Gastroenterol** 1995 Jul-Sep;32(3):121-30 (75 ref.) (Eng. Abstr.) **(Por)**

[Computer program SAGE as a tool of standard assessment of patients on intensive care] Gol'dberg SI, et al. **Anesteziol Reanimatol** 1997 Jan-Feb;(1):11-5 **(Rus)**

[Assessment of the severity of patient status in sepsis and septic shock] Rudnov VA, et al. **Anesteziol Reanimatol** 1995 Nov-Dec;(6):9-11 (Eng. Abstr.) **(Rus)**

[Determination of indications for curative-diagnostic laparoscopy with the use of index of seriousness in patients with acute pancreatitis] Ivanov PA, et al. **Khirurgiia (Mosk)** 1997;(1):38-40 (Eng. Abstr.) **(Rus)**

[Methods for estimating the severity of the status of resuscitated surgical patients] Bubnova NA, et al. **Vestn Khir Im I I Grek** 1996;155(6):91-3 (Eng. Abstr.) **(Rus)**

[Evaluation of the Mannheim Peritonitis Index] Ermolov AS, et al. **Vestn Khir Im I I Grek** 1996;155(3):22-3 (Eng. Abstr.) **(Rus)**

[Acute hemorrhage: its classification and the determination of its size and severity (1)] Briusov PG. **Voen Med Zh** 1997 Jan;318(1):46-52 **(Rus)**

[The usefulness of a clinical scoring system and pulse oximetry (SaO2) in assessing the severity of asthmatic crises] Luaces Cubells C, et al. **An Esp Pediatr** 1996 May; 44(5):429-32 (Eng. Abstr.) **(Spa)**

[Construction and validation of a severity of illness index of patients hospitalized in clinical areas] Jiménez Paneque RE, et al. **Gac Sanit** 1997 May-Jun;11(3):122-30 (Eng. Abstr.) **(Spa)**

[Utilization of a post-anesthetic recovery index] Navas E, et al. **Rev Esp Anestesiol Reanim** 1996 Feb;43(2):53-8 (Eng. Abstr.) **(Spa)**

SEWAGE

Metabolism of micro-organisms responsible for enhanced biological phosphorus removal from wastewater. Use of dynamic enrichment cultures. van Loosdrecht MC, et al. **Antonie Van Leeuwenhoek** 1997 Feb;71(1-2):109-16 (34 ref.)

Group-specific small-subunit rRNA hybridization probes to characterize filamentous foaming in activated sludge systems. de los Reyes FL, et al. **Appl Environ Microbiol** 1997 Mar;63(3):1107-17

Effects of bacterial cell surface structures and hydrophobicity on attachment to activated sludge flocs. Zita A, et al. **Appl Environ Microbiol** 1997 Mar;63(3):1168-70

Impact of lead and sewage sludge on soil microbial biomass and carbon and nitrogen mineralization. Dar GH. **Bull Environ Contam Toxicol** 1997 Feb;58(2):234-40

Increase in epiphytic bacteria downstream of a sewage works outfall: monitoring using artificial hydrophytes. Kang J, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):166-70

"A really excellent scientific contribution": scientific creativity, scientific professionalism, and the Chicago Drainage Case, 1900-1906. Shapiro-Shapin CG. **Bull Hist Med** 1997 Fall;71(3):385-411

Induction of micronuclei in fish by polluted water and heavy metals. Poongothai K, et al. **Cytobios** 1996;86(344):17-22

Ecological effects assessment of industrial sludge for microarthropods and decomposition in a spruce plantation. Krogh PH, et al. **Ecotoxicol Environ Saf** 1997 Mar; 36(2):162-8

Vitellogenin induction and reduced serum testosterone concentrations in feral male carp (Cyprinus carpio) captured near a major metropolitan sewage treatment plant. Folmar LC, et al. **Environ Health Perspect** 1996 Oct; 104(10):1096-101

The beauty of biosolids. Tenenbaum D. **Environ Health Perspect** 1997 Jan;105(1):32-6

Seroprevalence of hepatitis A virus infection among sewage workers in the Parisian area, France. Cadilhac P, et al. **Eur J Epidemiol** 1996 Jun;12(3):237-40

Behavior of Na131I and meta(131I) iodobenzylguanidine (MIBG) in municipal sewerage. Fenner FD, et al. **Health Phys** 1997 Aug;73(2):333-9

Pathogenic micro-organisms in slaughterhouse sludge--a survey. Fransen NG, et al. **Int J Food Microbiol** 1996 Dec; 33(2-3):245-56

Postural stability assessment in sewer workers. Kuo W, et al. **J Occup Environ Med** 1996 Jan;38(1):27-34

Distribution and characterization of Enterococcus species in municipal sewages. Lauková A, et al. **Microbios** 1997; 89(359):73-80

Effect of treated sewage on the water quality and phytoplankton populations of Lake Manzala (Egypt) with emphasis on biological assessment of water quality. el-Naggar ME, et al. **New Microbiol** 1997 Jul;20(3):253-76

Hepatitis A among workers from a waste water treatment plant during a small community outbreak. De Serres G, et al. **Occup Environ Med** 1997 Jan;54(1):60-2

Episode of toxic gas exposure in sewer workers. Watt MM, et al. **Occup Environ Med** 1997 Apr;54(4):277-80

Prevalence of Helicobacter pylori infection among sewage workers. Friis L, et al. **Scand J Work Environ Health** 1996 Oct;22(5):364-8

Land application of sewage sludge in China. Wang MJ. **Sci Total Environ** 1997 Apr 30;197(1-3):149-60 (47 ref.)

[Use of hydrogen peroxide in the treatment of sewage in antibiotic production] Polunina EE, et al. **Antibiot Khimioter** 1996 Mar;41(3):15-9 (Eng. Abstr.) **(Rus)**

[The hygienic evaluation of a local unit for sewage treatment] Zholdakova ZI, et al. **Gig Sanit** 1997 Mar-Apr;(2):8-10 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Toxic effects of sewage sludges on freshwater edible fish Cirrhina mrigala. Pereira L, et al. **Bull Environ Contam Toxicol** 1996 Mar;56(3):467-74

Evaluation of the genotoxicity of municipal sewage effluent using the marine worm Platynereis dumerilii (Polychaeta: Nereidae). Jha AN, et al. **Mutat Res** 1997 Jul 14; 391(3):179-88

No increased DNA damage in peripheral lymphocytes of sewage workers as evaluated by alkaline single cell gel electrophoresis. Friis L, et al. **Occup Environ Med** 1997 Jul;54(7):494-8

ANALYSIS

Analytical assessment of two sequential extraction schemes for metal partitioning in sewage sludges. Pérez-Cid B, et al. **Analyst** 1996 Oct;121(10):1479-84

Alternative method for determination of the chemical oxygen demand for colloidal polymeric wastewater. Abuzaid NS, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):626-30

Determination of polycyclic aromatic compounds and heavy metals in sludges from biological sewage treatment plants. Bodzek D, et al. **J Chromatogr A** 1997 Jul 11; 774(1-2):177-92

Analysis of benzalkonium chloride in the effluent from European hospitals by solid-phase extraction and high-performance liquid chromatography with post-column ion-pairing and fluorescence detection. Kümmerer K, et al. **J Chromatogr A** 1997 Jul 11; 774(1-2):281-6

Utilization of fermented flocculated poultry sludge as a feed constituent for pigs. Fransen NG, et al. **Poult Sci** 1995 Dec; 74(12):1948-60

CHEMISTRY

Measurement and validation of kinetic parameter values for prediction of biodegradation rates in sewage treatment. Blok J, et al. **Ecotoxicol Environ Saf** 1996 Apr;33(3):217-27

Estimating the removal and biodegradation potential of radiolabeled organic chemicals in activated sludge. Shimp RJ, et al. **Ecotoxicol Environ Saf** 1996 Jun;34(1):85-93

Biological degradation of cyclophosphamide and its occurrence in sewage water. Steger-Hartmann T, et al. **Ecotoxicol Environ Saf** 1997 Mar;36(2):174-9

Radioactivity in municipal sewage and sludge. Martin JE, et al. **Public Health Rep** 1997 Jul-Aug;112(4):308-16; discussion 317-8

Scientists angle for answers [news] Kaiser J. **Science** 1996 Dec 13;274(5294):1837-8

LEGISLATION & JURISPRUDENCE

Evaluation of tax bill inserts as a public health strategy to influence septic tank pumping practice. Carr PA, et al. **Can J Public Health** 1996 Sep-Oct;87(5):343-4

MICROBIOLOGY

Isolation and identification of bacteria from activated sludge purifying petroleum wastewaters. Bieszkiewicz E, et al. **Acta Microbiol Pol** 1995;44(2):171-9

Characterization of microbial communities in anaerobic bioreactors using molecular probes. Raskin L, et al. **Antonie Van Leeuwenhoek** 1995 Nov;68(4):297-308

Granulation in thermophilic upflow anaerobic sludge blanket (UASB) reactors. Schmidt JE, et al. **Antonie Van Leeuwenhoek** 1995 Nov;68(4):339-44

Different types of sludge granules in UASB reactors treating acidified wastewaters. Thaveesri J, et al. **Antonie Van Leeuwenhoek** 1995 Nov;68(4):329-37

Phylogenetic analysis and in situ identification of bacteria in activated sludge. Snaidr J, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2884-96

Identification of a functionally important population in phenol-digesting activated sludge with antisera raised against isolated bacterial strains. Watanabe K, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3901-4

Prevalence of Salmonella in municipal sewage treatment plant effluents in southern California. Kinde H, et al. **Avian Dis** 1997 Apr-Jun;41(2):392-8

Sewage effluent: likely source of Salmonella enteritidis, phage type 4 infection in a commercial chicken layer flock in southern California. Kinde H, et al. **Avian Dis** 1996 Jul-Sep; 40(3):672-6

Acclimation and selection for methanesulfonic acid (MSA) degrading microbial population using continuous culture techniques. Magliette RJ, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):406-12

A growth inhibition test with sewage bacteria--results of an international ring test 1995. Strotmann UJ, et al. **Chemosphere** 1996 Mar;32(5):921-33

Determination of bacterial cell surface hydrophobicity of single cells in cultures and in wastewater in situ. Zita A, et al. **FEMS Microbiol Lett** 1997 Jul 15;152(2):299-306

Amaricoccus gen. nov., a gram-negative coccus occurring in regular packages or tetrads, isolated from activated sludge biomass, and descriptions of Amaricoccus veronensis sp. nov., Amaricoccus tamworthensis sp. nov., Amaricoccus macauensis sp. nov., and Amaricoccus kaplicensis sp. nov. Maszenan AM, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):727-34

Caloramator proteoclasticus sp. nov., a new moderately thermophilic anaerobic proteolytic bacterium. Tarlera S, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):651-6

Active surveillance for Vibrio cholerae O1 and vibriophages in sewage water as a potential tool to predict cholera outbreaks. Madico G, et al. **J Clin Microbiol** 1996 Dec; 34(12):2968-72

Larvicidal activity of Bacillus thuringiensis natural isolates; indigenous to Japan, against two nematoceran insect pests occurring in urban sewage environments. Saitoh H, et al. **Microbiol Res** 1996 Aug;151(3):263-71

Interactions between selected geophilic fungi and pathogenic dermatophytes. Ulfig K. **Rocz Panstw Zakl Hig** 1996; 47(2):137-42

[Enteric viruses in sludge at the domestic waste treatment plants] Aulicino FA, et al. **Ann Ig** 1996 Jul-Aug;8(4):459-67 (Eng. Abstr.) **(Ita)**

[The effect of various doses of zeolite on counts of salmonellae, coliform and fecal coliform microorganisms in pig slurry in laboratory conditions] Pačajová Z, et al. **Vet Med (Praha)** 1997 Jun;42(6):161-4 (Eng. Abstr.) **(Slo)**

[Use of hydrated lime for disinfection of sewage sludge containing Salmonella typhimurium and Ascaris suum as model pathogens] Plachý P, et al. **Vet Med (Praha)** 1996 Aug;41(8):255-9 (Eng. Abstr.) **(Slo)**

PARASITOLOGY

Effects of cadmium on growth and motility in Euplotes aediculatus isolated from activated sludge. Salvadó H, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):838-44

Ciliatological characterization of a biological reactor that eliminates nitrogen with intermitent aeration. Luna-Pabello VM, et al. **Rev Latinoam Microbiol** 1996 Apr-Jun; 38(2):89-96

[Use of hydrated lime for disinfection of sewage sludge containing Salmonella typhimurium and Ascaris suum as model pathogens] Plachý P, et al. **Vet Med (Praha)** 1996 Aug;41(8):255-9 (Eng. Abstr.) **(Slo)**

VIROLOGY

Molecular epidemiological survey of rotaviruses in sewage by reverse transcriptase seminested PCR and restriction fragment length polymorphism assay. Dubois E, et al. **Appl Environ Microbiol** 1997 May;63(5):1794-800

Active surveillance for Vibrio cholerae O1 and vibriophages in sewage water as a potential tool to predict cholera outbreaks. Madico G, et al. **J Clin Microbiol** 1996 Dec; 34(12):2968-72

SEWAGE

Enterovirus genomes in wastewater: concentration on glass wool and glass powder and detection by RT-PCR. Gantzer C, et al. **J Virol Methods** 1997 May;65(2):265-71

SEX

see related
LIBIDO
PSYCHOSEXUAL DEVELOPMENT
RELIGION AND SEX

Sex, meiosis and multicellularity. Ruvinsky A. **Acta Biotheor** 1997 Jun;45(2):127-41

Objects, decision considerations and self-image in men's and women's impulse purchases. Dittmar H, et al. **Acta Psychol (Amst)** 1996 Sep;93(1-3):187-206

The potential contribution of sexuality and gender awareness. Kopp Z. **Adv Contracept** 1997 Jun-Sep;13(2-3):325-9 (5 ref.)

A dialogue between the sexes. Vancouver Conference Review. Ankrah EM. **AIDS Care** 1997 Feb;9(1):123-5

Relation of gender to physician use of test results and to the prognostic value of stress technetium 99m sestamibi myocardial single-photon emission computed tomography scintigraphy. Travin MI, et al. **Am Heart J** 1997 Jul; 134(1):73-82

Common questions about sex and sexuality in elders. Mueller IW. **Am J Nurs** 1997 Jul;97(7):61-4

Why race and gender remain important in health services research. Martinez RM. **Am J Prev Med** 1996 Sep-Oct; 12(5):316-8

Sex differences in social behavior. Are the social role and evolutionary explanations compatible? Archer J. **Am Psychol** 1996 Sep;51(9):909-17

Gender differences in physician-patient communication. Evidence from pediatric visits. Bernzweig J, et al. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):586-91

Influences of gender and social class on adolescents' perceptions of health. Goodman E, et al. **Arch Pediatr Adolesc Med** 1997 Sep;151(9): 99-904

Physiologic parameters associated with sexual arousal in women with incomplete spinal cord injuries. Sipski ML, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):305-13

Gender differences in sexual interest. Baldwin JD, et al. **Arch Sex Behav** 1997 Apr;26(2):181-210 (122 ref.)

Gender as a moderator of the effects of the love motive and relational context on sexual experience. Taris TW, et al. **Arch Sex Behav** 1997 Apr;26(2):159-80

Sexual medicine. Integrated services for sexual health care are the way forward [letter; comment] Thomas M. **BMJ** 1997 Aug 16;315(7105):429. Comment on: BMJ 1997 May 17;314(7092):1432.

Sexual functioning after treatment for testicular cancer: comparison of treatment modalities. Jonker-Pool G, et al. **Cancer** 1997 Aug 1;80(3):454-64

The development of children's beliefs about social and biological aspects of gender differences. Taylor MG. **Child Dev** 1996 Aug;67(4):1555-71

The effects of age, gender, and fluid dynamics on the concentration of tear film epidermal growth factor. Nava A, et al. **Cornea** 1997 Jul;16(4):430-8

The influence of race and gender on depressive and substance abuse symptoms in high-risk adolescents. Pumariega AJ, et al. **Cult Divers Ment Health** 1996;2(2):115-23

Sexual function in menopause and postmenopause. Nachtigall LE. **Curr Ther Endocrinol Metab** 1997;6:632-6 (15 ref.)

Patients discharged from emergency care after acute myocardial infarction was ruled out: early follow-up in relation to gender. Karlson BW, et al. **Eur J Emerg Med** 1997 Jun;4(2):72-80

Social integration, sexual behavior and fertility in patients with bladder exstrophy--a long-term follow up. Stein R, et al. **Eur J Pediatr** 1996 Aug;155(8):678-83

Gender dilemmas and myth in the construction of marital bargains: issues for marital therapy. Knudson-Martin C, et al. **Fam Process** 1996 Jun;35(2):137-53

The structure of ethnic attitudes: the effects of target group, region, gender, and national identity. Verkuyten M. **Genet Soc Gen Psychol Monogr** 1997 Aug;123(3):261-84

Imperfect genes, Fisherian mutation and the evolution of sex. Peck JR, et al. **Genetics** 1997 Apr;145(4):1171-99

Sexual function in patients with advanced heart failure. Jaarsma T, et al. **Heart Lung** 1996 Jul-Aug;25(4):262-70

Sexual function and clinical features of patients with Klinefelter's syndrome with the chief complaint of male infertility. Yoshida A, et al. **Int J Androl** 1997 Apr; 20(2):80-5

A study of reproductive function in patients with seminoma treated with radiotherapy and orchidectomy: (SWOG-8711). Southwest Oncology Group. Gordon W Jr, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1; 38(1):83-94

Sex differences in ADHD: conference summary. Arnold LE. **J Abnorm Child Psychol** 1996 Oct;24(5):555-69 (55 ref.)

The relations of thematic and nonthematic childhood depression measures to defensiveness and gender. Joiner TE Jr. **J Abnorm Child Psychol** 1996 Dec;24(6):803-13

Age- and gender-specific reference ranges for hearing level and longitudinal changes in hearing level. Morrell CH, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):1949-67

Gender differences in Axis I comorbidity among depressed outpatients. Fava M, et al. **J Affect Disord** 1996 Jun 5; 38(2-3):129-33

Effects of gender, ethnicity, body composition, and fat distribution on serum leptin concentrations in children. Nagy TR, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2148-52

American physicians and sex research and expertise, 1900-1990. Bullough VL. **J Hist Med Allied Sci** 1997 Apr; 52(2):236-53

Wishes, gender, personality, and well-being. King LA, et al. **J Pers** 1997 Mar;65(1):49-76

The display of masculinity, femininity, and gender diagnosticity in self-descriptive photo essays. Lippa R. **J Pers** 1997 Mar;65(1):137-69

Gender- and race-based standards of competence: lower minimum standards but higher ability standards for devalued groups. Biernat M, et al. **J Pers Soc Psychol** 1997 Mar;72(3):544-57

Gender and hedging: from sex differences to situated practice. Dixon JA, et al. **J Psycholinguist Res** 1997 Jan; 26(1):89-107

The availability heuristic: effects of fame and gender on the estimated frequency of male and female names. McKelvie SJ. **J Soc Psychol** 1997 Feb;137(1):63-78

The effects of race, weight, and gender on evaluations of writing competence. Surmann AT. **J Soc Psychol** 1997 Apr; 137(2):173-80

Gender differences in children's intonational patterns. Ferrand CT, et al. **J Voice** 1996 Sep;10(3):284-91

Gender in medicine: the views of first and fifth year medical students. Field D, et al. **Med Educ** 1996 Jul;30(4):246-52

The advantage of sex in evolving yeast populations. Zeyl C, et al. **Nature** 1997 Jul 31;388(6641):465-8

Sex, age, height, and weight as predictors of selected physiologic outcomes. Brown JK, et al. **Nurs Res** 1997 Mar-Apr;46(2):101-4

Influence of preconception on body image. Brodie DA, et al. **Percept Mot Skills** 1996 Oct;83(2):571-7

Effects of age and gender on discrete and reciprocal aiming movements. Teeken JC, et al. **Psychol Aging** 1996 Jun; 11(2):195-8

Asian-American men's acculturation and gender-role conflict. Kim EJ, et al. **Psychol Rep** 1996 Aug;79(1):95-104

Mental representations of pregnant nulliparous women having no sex preference. Marleau JD, et al. **Psychol Rep** 1996 Oct;79(2):464-6

Mental representations concerning the sex of the baby of pregnant nulliparous women who wished a boy or a girl. Marleau JD, et al. **Psychol Rep** 1997 Feb;80(1):273-4

Technology for sex selection: current status and utilization. Steinbacher R, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):728-30

The use of stereotypical gender information in constructing a mental model: evidence from English and Spanish. Carreiras M, et al. **Q J Exp Psychol A** 1996 Aug; 49(3):639-63

Sex and gender [letter; comment] Carlin NF. **Science** 1996 Dec 6;274(5293):1595-6. Comment on: Science 1996 Oct 18;274(5286):328-9.

Of sex and gender [letter] [see comments] Pearson GA. **Science** 1996 Oct 18;274(5286):328-9. Comment in: Science 1996 Dec 6;274(5293):1595-6. Comment in: Science 1996 Dec 6;274(5293):1595-6.

Sex and gender [letter; comment] Tobach E. **Science** 1996 Dec 6;274(5293):1595. Comment on: Science 1996 Oct 18;274(5286):328-9.

Examining the gender gap in nutrition: an example from rural Mexico. Backstrand JR, et al. **Soc Sci Med** 1997 Jun; 44(11):1751-9

Health care allocation and selective neglect in rural Peru. Larme AC. **Soc Sci Med** 1997 Jun;44(11):1711-23

Intra-household allocation of food and health care: current findings and understandings--introduction. Messer E. **Soc Sci Med** 1997 Jun;44(11):1675-84 (46 ref.)

Social class, gender and intrahousehold food allocations to children in South Asia. Miller BD. **Soc Sci Med** 1997 Jun; 44(11):1685-95

Gender differences in attitudes toward alcohol, tobacco, and other drugs. Kauffman SE, et al. **Soc Work** 1997 May; 42(3):231-41 (67 ref.)

Sexuality and women with complete spinal cord injury. Whipple B, et al. **Spinal Cord** 1997 Mar;35(3):136-8 (22 ref.)

Son preference in Vietnam. Haughton J, et al. **Stud Fam Plann** 1995 Nov-Dec;26(6):325-7

[The significance of gender incompatibility in donors and recipients and the role of minor histocompatibility antigens in corneal transplantation] Hašková Z, et al. **Cesk Slov Oftalmol** 1997 May;53(2):128-35 (Eng. Abstr.) **(Cze)**

[Detailed evaluation of sexual function after radical prostatectomy: is patient satisfaction correlated with the quality of erections?] Lerner SE, et al. **Prog Urol** 1996 Aug-Sep;6(4):552-7 (Eng. Abstr.) **(Fre)**

[Andrological data on male sexuality in the elderly] Andrianne R. **Rev Med Liege** 1997 Apr;52(4):221-3 (0 ref.) **(Fre)**

[Physicians and patients: sexual beings] Schneider PB. **Rev Med Suisse Romande** 1997 Jan;117(1):41-6 **(Fre)**

[The Robert Koch Institute warns: the "AIDS after-pill" is not a practical method of prevention after sexual contact] **Pharm Unserer Zeit** 1997 May;26(3):162 **(Ger)**

[Visually-guided discrimination and preference of sexuality in female macaque monkeys] Mizuno M. **Fukuoka Igaku Zasshi** 1997 Apr;88(4):105-16 (Eng. Abstr.) **(Jpn)**

EDUCATION see SEX EDUCATION

SEX ATTRACTANTS

Radioimmunoassay of a newt sex pheromone, sodefrin, and the influence of hormones on its level in the abdominal gland. Yamamoto K, et al. **Gen Comp Endocrinol** 1996 Dec; 104(3):356-63

Simultaneous influence on male courtship of stimulatory and inhibitory pheromones produced by live sex-mosaic Drosophila melanogaster. Ferveur JF, et al. **Proc R Soc Lond B Biol Sci** 1996 Aug 22;263(1373):967-73

[The reaction of taiga ticks to an attractant. III. The use of attractant-acaricidal granules in a field experiment] Naumov RL, et al. **Med Parazitol (Mosk)** 1996 Jul-Sep; (3):22-4 (Eng. Abstr.) **(Rus)**

[The reaction of taiga ticks to an attractant. II. The rates of removing ticks from a population] Naumov RL, et al. **Med Parazitol (Mosk)** 1997 Jan-Mar;(1):41-4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Comparison of the sex-pheromone components of Lutzomyia longipalpis (Diptera:Psychodidae) from areas of visceral and atypical cutaneous leishmaniasis in Honduras and Cost Rica. Hamilton JG, et al. **Ann Trop Med Parasitol** 1996 Oct;90(5):533-41

World-wide variation in Drosophila melanogaster sex pheromone: behavioural effects, genetic bases and potential evolutionary consequences. Ferveur JF, et al. **Genetica** 1996 Jan;97(1):73-80

Neuroanatomy and immunocytochemistry of the median neuroendocrine cells of the subesophageal ganglion of the tobacco hawkmoth, Manduca sexta: immunoreactivities to PBAN and other neuropeptides. Davis NT, et al. **Microsc Res Tech** 1996 Oct 15;35(3):201-29

BIOSYNTHESIS

Direct inhibition of (Z)-9 desaturation of (E)-11-tetradecenoic acid by methylenehexadecenoic acids in the biosynthesis of Spodoptera littoralis sex pheromone. Fabrias G, et al. **J Lipid Res** 1996 Jul;37(7):1503-9

CHEMISTRY

Numerical simulation of environment modulation of chemical signal structure and odor dispersal in the open ocean. Baird RC, et al. **Chem Senses** 1996 Apr;21(2):121-34

The lurlenes, a new class of plastoquinone-related mating pheromones from Chlamydomonas allensworthii (Chlorophyceae). Jaenicke L, et al. **Eur J Biochem** 1996 Oct 15;241(2):581-5

Lipoconjugates: structure-activity studies for pheromone analogues of Ustilago maydis with varied lipophilicity. Koppitz M, et al. **Int J Pept Protein Res** 1996 Oct; 48(4):377-90

[Ethyl 4-methyloctanoate, major component of male pherome in Oryctes rhinoceros (L.) (Coleoptera, Dynastidae)] Morin JP, et al. **C R Acad Sci III** 1996 Jul; 319(7):595-602 (Eng. Abstr.) **(Fre)**

GENETICS

Genetic analysis of Drosophila virilis sex pheromone: genetic mapping of the locus producing Z-(11)-pentacosene. Doi M, et al. **Genet Res** 1996 Aug;68(1):17-21

Genetic variation in the strongly canalized sex pheromone communication system of the European corn borer, Ostrinia nubilalis Hübner (Lepidoptera; Pyralidae). Zhu J, et al. **Genetics** 1996 Oct;144(2):757-66

Regulation of transfer of the Enterococcus faecalis pheromone-responding plasmid pAD1: temperature-sensitive transfer mutants and identification of a new regulatory determinant, traD. de Freire Bastos MC, et al. **J Bacteriol** 1997 May;179(10):3250-9

ISOLATION & PURIFICATION

Medicinal alkaloid as a sex pheromone [letter] Leal WS, et al. **Nature** 1997 Jan 16;385(6613):213

METABOLISM

Structure-activity relationships in C-terminal fragment analogs of pheromone biosynthesis activating neuropeptide in Helicoverpa zea. Kochansky JP, et al. **Arch Insect Biochem Physiol** 1997;35(3):315-22

PHARMACOLOGY

Mating and sex peptide stimulate the accumulation of yolk in oocytes of Drosophila melanogaster. Soller M, et al. **Eur J Biochem** 1997 Feb 1;243(3):732-8

Conjugative mobilization of a vancomycin resistance plasmid by a putative Enterococcus faecium sex pheromone response plasmid. Heaton MP, et al. **Microb Drug Resist** 1995 Summer;1(2):177-83

[Ethyl 4-methyloctanoate, major component of male pherome in Oryctes rhinoceros (L.) (Coleoptera, Dynastidae)] Morin JP, et al. **C R Acad Sci III** 1996 Jul; 319(7):595-602 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Sensitivity and behavioral responses to the pheromone androstenone are not mediated by the vomeronasal organ in domestic pigs. Dorries KM, et al. **Brain Behav Evol** 1997; 49(1):53–62

Pheromone–induced spawning of Pacific herring. I. Behavioral characterization. Carolsfeld J, et al. **Horm Behav** 1997 Jun;31(3):256–68

Pheromone–induced spawning of Pacific herring. II. Plasma steroids distinctive to fish responsive to spawning pheromone. Carolsfeld J, et al. **Horm Behav** 1997 Jun; 31(3):269–76

Combined olfactory contact with the parent colony and direct contact with nonbreeding animals does not maintain suppression of ovulation in female naked mole–rats (Heterocephalus glaber). Smith TE, et al. **Horm Behav** 1997 Jun;31(3):277–88

Mating–induced expression of c–fos in the male Syrian hamster brain: role of experience, pheromones, and ejaculations. Kollack–Walker S, et al. **J Neurobiol** 1997 May;32(5):481–501

The pheromonal restoration of cyclic activity in young estrogenized persistent estrus female rats is a vomeronasal effect. Mora OA, et al. **Life Sci** 1997;60(7):493–8

Chemical signals in gram–positive bacteria: the sex–pheromone system in Enterococcus faecalis. Maqueda M, et al. **Microbiologia** 1997 Mar;13(1):23–36 (64 ref.)

Genetic feminization of pheromones and its behavioral consequences in Drosophila males. Ferveur JF, et al. **Science** 1997 Jun 6;276(5318):1555–8

[Hormones and male sexual behavior: physiological and physiopathological data] Buvat J. **Contracept Fertil Sex** 1996 Oct;24(10):767–78 (93 ref.) (Eng. Abstr.) **(Fre)**

URINE

Urine–derived compound evokes membrane responses in mouse vomeronasal receptor neurons. Moss RL, et al. **J Neurophysiol** 1997 May;77(5):2856–62

SEX BEHAVIOR

see related
SEXUAL PARTNERS

Casual sex, extramarital sex, condom use and alcohol intake among heterosexual patients attending an STD clinic in Norway. Tveit KS, et al. **Acta Derm Venereol** 1996 Mar; 76(2):150–3

Sexually transmitted diseases in Swedish women with experience of casual sex with men of foreign nationalities within Sweden [letter; comment] Gbolade BA. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):958–9. Comment on: Acta Obstet Gynecol Scand 1995 Nov;74(10):794–8.

Understanding gender differences in adolescent sexuality. De Gaston JF, et al. **Adolescence** 1996 Spring;31(121):217–31

Mother and adolescent knowledge of sexual development: the effects of gender, age, and sexual experience. Hockenberry–Eaton M, et al. **Adolescence** 1996 Spring; 31(121):35–47

Knowledge and attitudes toward sexuality in adolescents and their association with the family and other factors. Huerta–Franco R, et al. **Adolescence** 1996 Spring; 31(121):179–91

Issues related to the sexual decision–making of inner–city adolescent girls. Rosenthal SL, et al. **Adolescence** 1996 Fall; 31(123):731–9

Alternatives to vaginal intercourse practiced during the fertile time among calendar method users in Ireland. Bonnar J, et al. **Adv Contracept** 1997 Jun–Sep;13(2–3):173–7

Natural family planning with and without barrier method use in the fertile phase: efficacy in relation to sexual behavior: a German prospective long–term study. Frank–Herrmann P, et al. **Adv Contracept** 1997 Jun–Sep; 13(2–3):179–89

From biology to sexual behaviour—towards the prevention of mother–to–child transmission of HIV [editorial] Bulterys M, et al. **AIDS** 1996 Sep;10(11):1287–9

A review of national AIDS–related behavioral surveys. Catania JA, et al. **AIDS** 1996;10 Suppl A:S183–90 (33 ref.)

Sexual risk of HIV infection among expatriates posted in AIDS endemic areas. de Graaf R, et al. **AIDS** 1997 Jul 15;11(9):1173–81

Faithful but fearful: reducing HIV transmission in stable relationships. de Zoysa I, et al. **AIDS** 1996;10 Suppl A:S197–203 (95 ref.)

Behavioral interventions for reduction of sexually transmitted disease/HIV transmission among female commercial sex workers and clients in Bali, Indonesia. Ford K, et al. **AIDS** 1996 Feb;10(2):213–22

Social research on sexuality: contextual and interpersonal approaches. Giami A, et al. **AIDS** 1996;10 Suppl A:S191–6 (52 ref.)

Decreased incidence of sexually transmitted diseases among trucking company workers in Kenya: results of a behavioural risk–reduction programme. Jackson DJ, et al. **AIDS** 1997 Jun;11(7):903–9

Adolescents, sexual behaviour and HIV–1 in rural Rakai district, Uganda. Konde–Lule JK, et al. **AIDS** 1997 May; 11(6):791–9

Knowledge, attitudes and perception of AIDS in rural Senegal: relationship to sexual behaviour and behaviour change. Lagarde E, et al. **AIDS** 1996 Mar;10(3):327–34

Sex, drugs and HIV counseling and testing: a prospective study of behavior–change among methadone–maintenance clients in New England. MacGowan RJ, et al. **AIDS** 1997 Feb;11(2):229–35

Why do HIV–1 subtypes segregate among persons with different risk behaviors in South Africa and Thailand? [editorial; comment] Mastro TD, et al. **AIDS** 1997 Jan; 11(1):113–6. Comment on: AIDS 1997 Jan;11(1):81–7.

Heterosexual behavior during pregnancy and perinatal transmission of HIV–1. New York City Perinatal HIV Transmission Collaborative Study Group. Matheson PB, et al. **AIDS** 1996 Sep;10(11):1249–56

Concurrent partnerships and the spread of HIV [see comments] Morris M, et al. **AIDS** 1997 Apr;11(5):641–8. Comment in: AIDS 1997 Apr;11(5):681–3.

Changes in male sexual behaviour in response to the AIDS epidemic: evidence from a cohort study in urban Tanzania. Ng'weshemi JZ, et al. **AIDS** 1996 Oct;10(12):1415–20

Sexual behaviour patterns and other risk factors for HIV infection in rural Tanzania: a case–control study. Quigley M, et al. **AIDS** 1997 Feb;11(2):237–48

Condom use among HIV–infected patients in South Bronx, New York [letter] Sobel E, et al. **AIDS** 1996 Feb; 10(2):235–6

Potential heterosexual Kaposi's sarcoma–associated herpesvirus transmission in a couple with HIV–induced immunodepression and with Kaposi's sarcoma and multicentric Castleman's disease [letter] Tirelli U, et al. **AIDS** 1996 Sep;10(11):1291–2

Geographic variation in sexual behaviour in Britain: implications for sexually transmitted disease epidemiology and sexual health promotion. Wadsworth J, et al. **AIDS** 1996 Feb;10(2):193–9

An epidemic of apprehension: questions about HIV/AIDS to an east African newspaper health advice column. Asera R, et al. **AIDS Care** 1997 Feb;9(1):5–12

Maintaining safer sex behaviours in HIV–infected adolescents with haemophilia. The Hemophilia Behavioral Evaluative Intervention Project Committee. Forsberg AD, et al. **AIDS Care** 1996 Dec;8(6):629–40

Heterosexual behaviour and condom usage in an urban population of Delhi, India. Kumar A, et al. **AIDS Care** 1997 Jun;9(3):311–8

Sexual debut and predictors of condom use among secondary school students in Arusha, Tanzania. Lugoe WL, et al. **AIDS Care** 1996 Aug;8(4):443–52

Sex, drugs and escape: a psychological model of HIV–risk sexual behaviours. McKirnan DJ, et al. **AIDS Care** 1996 Dec;8(6):655–69 (93 ref.)

Lay perceptions of risk of HIV infection and the social construction of safer sex: some experiences from Kenya. Nzioka C. **AIDS Care** 1996 Oct;8(5):565–79

College students' perceptions of the prevalence of risky sexual behaviour. Seal DW, et al. **AIDS Care** 1996 Aug; 8(4):453–66

HIV risk behavior, street outreach, and condom use in eight high–risk populations. Anderson JE, et al. **AIDS Educ Prev** 1996 Jun;8(3):191–204

Male bisexual behavior and HIV risk in the United States: synthesis of research with implications for behavioral interventions. Doll LS, et al. **AIDS Educ Prev** 1996 Jun; 8(3):205–25 (95 ref.)

Evaluation of the HIV risk reduction intervention for women entering inpatient substance abuse treatment. Eldridge GD, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):62–76

Medical student knowledge levels and performance in doing HIV risk assessment. Farquhar LJ, et al. **AIDS Educ Prev** 1995 Dec;7(6):469–76

Risk contexts and risk behaviors in the Euregion Maas–Rhein: the Boule de Neige intervention for AIDS prevention among drug users. Franken IH, et al. **AIDS Educ Prev** 1997 Apr;9(2):161–80

Understanding why heterosexual adults do not practice safer sex: a comparison of two samples. Kusseling FS, et al. **AIDS Educ Prev** 1996 Jun;8(3):247–57

Examination of the relationship between African American adolescents' condom use at sexual onset and later sexual behavior: implications for condom distribution programs. Lawrence JS, et al. **AIDS Educ Prev** 1996 Jun;8(3):258–66

Behavioral risks for HIV infection associated with HIV–testing decisions. Miller KS, et al. **AIDS Educ Prev** 1996 Oct;8(5):394–402

Japanese risk behaviors and their HIV/AIDS–preventive behaviors. Munakata T, et al. **AIDS Educ Prev** 1996 Apr; 8(2):115–33

Activity and similarity on safe sex workshops led by peer educators. Reeder GD, et al. **AIDS Educ Prev** 1997 Feb; 9(1 Suppl):77–89

Characteristics of risk–taking behaviors, HIV and AIDS knowledge, and risk perception among young males in southwest China. Wu Z, et al. **AIDS Educ Prev** 1997 Apr; 9(2):147–60

Sexual knowledge, behavior and sources of information among deaf and hard of hearing college students. Joseph JM, et al. **Am Ann Deaf** 1995 Oct;140(4):338–45

Counseling adolescents about responsible sexual behavior [letter; comment] Buck L. **Am Fam Physician** 1997 Jun; 55(8):2606, 2609–10. Comment on: Am Fam Physician 1996 Sep 1;54(3):864, 867–70.

Sexual transmission of giardiasis [letter; comment] Higer DA. **Am Fam Physician** 1997 Feb 1;55(2):442, 444. Comment on: Am Fam Physician 1996 Jun;53(8):2507–18.

Retention in methadone maintenance is associated with reductions in different HIV risk behaviors for women and men. Wells EA, et al. **Am J Drug Alcohol Abuse** 1996 Nov; 22(4):509–21

Human immunodeficiency virus infection in Mexico City. Rectal bleeding and anal warts as risk factors among men reporting sex with men. Coplan PM, et al. **Am J Epidemiol** 1996 Nov 1;144(9):817–27

Risk of Kaposi's sarcoma and oroanal sexual contact. Grulich AE, et al. **Am J Epidemiol** 1997 Apr 15;145(8):673–9

Heterosexual transmission of human immunodeficiency virus (HIV) in northern California: results from a ten–year study. Padian NS, et al. **Am J Epidemiol** 1997 Aug 15;146(4):350–7

Sexual risk behavior and risk factors for HIV–1 seroconversion in homosexual men participating in the Tricontinental Seroconverter Study, 1982–1994. Page–Shafer K, et al. **Am J Epidemiol** 1997 Oct 1; 146(7):531–42

Anal sphincter structure and function in homosexual males engaging in anoreceptive intercourse. Chun AB, et al. **Am J Gastroenterol** 1997 Mar;92(3):465–8

HLA and mate selection in humans: commentary [editorial; comment] Beauchamp GK, et al. **Am J Hum Genet** 1997 Sep;61(3):494–6. Comment on: Am J Hum Genet 1997 Sep;61(3):497–504. Comment on: Am J Hum Genet 1997 Sep;61(3):505–11.

Epidemiology of acquired immunodeficiency syndrome: advancing to an endemic era. Graham NM. **Am J Med** 1997 Apr 1;102(4A):2–8 (34 ref.)

Sexual expression, genetics, and testosterone in Tourette syndrome [letter] James WH. **Am J Med Genet** 1995 Dec 18;60(6):593

Ultrasonographic observation of a female fetus' sexual behavior in utero [letter] Giorgi G, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):753

Ethically justified guidelines for defining sexual boundaries between obstetrician–gynecologists and their patients. McCullough LB, et al. **Am J Obstet Gynecol** 1996 Aug; 175(2):496–500

Improving sexual rehabilitation services: the patient's perspective. McAlonan S. **Am J Occup Ther** 1996 Nov–Dec;50(10):826–34

Risky sexual behavior among substance–abusing adolescents: psychosocial and contextual factors. Langer LM, et al. **Am J Orthopsychiatry** 1997 Apr;67(2):315–22

Lessons to be learned from the study of sexual boundary violations. Gabbard GO. **Am J Psychother** 1996 Summer; 50(3):311–22

Outercourse as a safe and sensible alternative to contraceptives [letter; comment] Cobb JC. **Am J Public Health** 1997 Aug;87(8):1380–1. Comment on: Am J Public Health 1996 Nov;86(11):1523–5. Comment on: Am J Public Health 1996 Nov;86(11):1570–6.

Condom–carrying behavior among college students [letter] Dahl DW, et al. **Am J Public Health** 1997 Jun;87(6):1059–60

Increased condom use without other major changes in sexual behavior among the general population in Switzerland. Dubois–Arber F, et al. **Am J Public Health** 1997 Apr; 87(4):558–66

Our view of adolescent sexuality—a focus on risk behavior without the developmental context [editorial; comment] [see comments] Ehrhardt AA. **Am J Public Health** 1996 Nov;86(11):1523–5. Comment on: Am J Public Health 1996 Nov;86(11):1570–6. Comment in: Am J Public Health 1997 Aug;87(8):1380–1.

Condom availability in New York City public high schools: relationships to condom use and sexual behavior. Guttmacher S, et al. **Am J Public Health** 1997 Sep; 87(9):1427–33

Preventing HIV/AIDS among high–risk urban women: the cost–effectiveness of a behavioral group intervention. Holtgrave DR, et al. **Am J Public Health** 1996 Oct; 86(10):1442–5

Condom breakage and slippage during heterosexual intercourse: a French national survey. French National Survey on Sexual Behavior Group (ACSF). Messiah A, et al. **Am J Public Health** 1997 Mar;87(3):421–4

Interpreting HIV prevalence and incidence among Americans: bridging data and public policy. Mills TC, et al. **Am J Public Health** 1997 May;87(5):864–6

Sexual identity vs sexual behavior [letter; comment] Rankow EJ. **Am J Public Health** 1996 Dec;86(12):1822–3. Comment on: Am J Public Health 1995 Oct;85(10):1366–71.

Annotation: HIV prevention challenges–realistic strategies and early detection programs. Rotheram–Borus MJ. **Am J Public Health** 1997 Apr;87(4):544–6

Characteristics of women 50 years of age or older with heterosexually acquired AIDS. Schable B, et al. **Am J Public Health** 1996 Nov;86(11):1616–8

Research and the Internet: an e–mail survey of sexual orientation [letter] Sell RL. **Am J Public Health** 1997 Feb; 87(2):297

Oral sex, crack smoking, and HIV infection among female sex workers who do not inject drugs [letter] Wallace JI, et al. **Am J Public Health** 1997 Mar;87(3):470

The effects of an abusive primary partner on the condom use and sexual negotiation practices of African–American women. Wingood GM, et al. **Am J Public Health** 1997 Jun;87(6):1016–8

Reproductive behaviour and natural selection for the sickle gene in the Baiga tribe of central India: the role of social

parenting. Reddy PH, et al. **Ann Hum Genet** 1996 May; 60 (Pt 3):231–6

Evolutionary perspectives on primate mating systems and behavior. Dixson AF. **Ann N Y Acad Sci** 1997 Jan 15; 807:42–61 (102 ref.)

Adolescent sexuality. Goldfarb AF. **Ann N Y Acad Sci** 1997 Jun 17;816:395–403 (08 ref.)

Female adolescent sexuality. The risks and management. Haka-Ikse K. **Ann N Y Acad Sci** 1997 Jun 17;816:466–70 (12 ref.)

Adolescent sexuality: an educational and counseling challenge. Ruusuvaara L. **Ann N Y Acad Sci** 1997 Jun 17; 816:411–3

Attachment representations and sexual behavior in humans. Turner R, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:583–6

Regulatory mechanisms of oxytocin-mediated sociosexual behavior. Witt DM. **Ann N Y Acad Sci** 1997 Jan 15; 807:287–301 (80 ref.)

Postcoital vaginal bleeding as a risk factor for transmission of the human immunodeficiency virus in a heterosexual partner study in Brazil. Rio de Janeiro Heterosexual Study Group. Guimarães MD, et al. **Arch Intern Med** 1997 Jun 23;157(12):1362–8

Sexual health contraceptive needs of adolescents with chronic conditions. Blum RW.
Arch Pediatr Adolesc Med 1997 Mar;151(3):290–7

Young adolescents' comfort with discussion about sexual problems with their physician [published erratum appears in Arch Pediatr Adolesc Med 1997 Feb;151(2):128] Boekeloo BO, et al. **Arch Pediatr Adolesc Med** 1996 Nov; 150(11):1146–52

Health risk behaviors among pregnant adolescents with older partners. Rickert VI, et al. **Arch Pediatr Adolesc Med** 1997 Mar;151(3):276–80

Cognitive and behavioral predictors of sexually transmitted disease risk behavior among sexually active adolescents. Sieving R, et al. **Arch Pediatr Adolesc Med** 1997 Mar; 151(3):243–51

Assessment of sexual beliefs and information in aging couples with sexual dysfunction. Adams SG Jr, et al.
Arch Sex Behav 1996 Jun;25(3):249–60

Psychological correlates of male child and adolescent sexual experiences with adults: a review of the nonclinical literature. Bauserman R, et al. **Arch Sex Behav** 1997 Apr; 26(2):105–41 (108 ref.)

Volunteer bias in human sexuality research: evidence for both sexuality and personality differences in males. Bogaert AF. **Arch Sex Behav** 1996 Apr;25(2):125–40

Continued lack of evidence for transmission of human immunodeficiency virus through vaginal intercourse: a reply to Carey and Kalichman [letter; comment] Brody S. **Arch Sex Behav** 1996 Jun;25(3):329–37. Comment on: Arch Sex Behav 1995 Dec;24(6):655–61.

Are transvestites necessarily heterosexual? Bullough B, et al. **Arch Sex Behav** 1997 Feb;26(1):1–12

Deceptive, verbally coercive college males: attitudinal predictors and lies told. Fischer GJ. **Arch Sex Behav** 1996 Oct;25(5):527–33

Sexual content-induced delay with double-entendre words. Geer JH, et al. **Arch Sex Behav** 1997 Jun;26(3):295–316

The relationships among ejaculatory control, ejaculatory latency, and attempts to prolong heterosexual intercourse. Grenier G, et al. **Arch Sex Behav** 1997 Feb;26(1):27–47

Sensation seeking as an explanation for the association between substance use and HIV-related risky sexual behavior. Kalichman SC, et al. **Arch Sex Behav** 1996 Apr; 25(2):141–54

Classical conditioning of female sexual arousal. Letourneau EJ, et al. **Arch Sex Behav** 1997 Feb;26(1):63–78

Partner-specific sexual practices among heterosexual men and women with multiple partners: results from the French national survey, ACSF. Analyse des Comportements Sexuel en France. Messiah A, et al. **Arch Sex Behav** 1996 Jun;25(3):233–47

Sexual risk behavior in women with cervical human papillomavirus infection. Sikström B, et al.
Arch Sex Behav 1996 Aug;25(4):361–72

Premarital sexual standards among U.S. college students: comparison with Russian and Japanese students. Sprecher S, et al. **Arch Sex Behav** 1996 Jun;25(3):261–88

Gender as a moderator of the effects of the love motive and relational context on sexual experience. Taris TW, et al. **Arch Sex Behav** 1997 Apr;26(2):159–80

The perception of sexual attractiveness: sex differences in variability. Townsend JM, et al. **Arch Sex Behav** 1997 Jun; 26(3):243–68

Sexual socialization and motives for intercourse among Norwegian adolescents. Traeen B, et al.
Arch Sex Behav 1996 Jun;25(3):289–302

Dimensions of AIDS knowledge and risky sexual practices: a study of northern Thai males. VanLandingham M, et al. **Arch Sex Behav** 1997 Jun;26(3):269–93

Female sexuality and historical time: a comparison of sexual biographies of German women born between 1895 and 1936. von Sydow K. **Arch Sex Behav** 1996 Oct;25(5):473–93

Sexual activities and attitudes of adolescent Koreans. Youn G. **Arch Sex Behav** 1996 Dec;25(6):629–43

Sex and the postmenopausal woman. Murkies A.
Aust Fam Physician 1996 Apr;25(4):509–17

Safe sex: does it exist? Savage J. **Aust Fam Physician** 1996 Apr;25(4):483–5

Barriers to sexual history taking in general practice. Temple-Smith M, et al. **Aust Fam Physician** 1996 Sep;25(9 Suppl 2):S71–4

Post-termination patient-therapist sexual contact [letter; comment] Adler R. **Aust N Z J Psychiatry** 1997 Feb; 31(1):149. Comment on: Aust N Z J Psychiatry 1996 Apr;30(2):171–7; discussion 177–8.

Origins and development of the injunction prohibiting sexual relationships with patients. Leggett A.
Aust N Z J Psychiatry 1995 Dec;29(4):586–90

Sleeping with the past: the ethics of post-termination patient-therapist sexual contact [see comments] Ryan CJ, et al. **Aust N Z J Psychiatry** 1996 Apr;30(2):171–7; discussion 177–8. Comment in: Aust N Z J Psychiatry 1997 Feb;31(1):149.

Viewing time as a measure of sexual interest among child molesters and normal heterosexual men. Harris GT, et al. **Behav Res Ther** 1996 Apr;34(4):389–94

Sexual and emotional variables influencing sexual response to erotica. Koukounas E, et al. **Behav Res Ther** 1997 Mar; 35(3):221–30

The inventory of dyadic heterosexual preferences: development and psychometric evaluation. Purnine DM, et al. **Behav Res Ther** 1996 Apr;34(4):375–87

Sexual health--a Health of the Nation failure [see comments] Adler MW. **BMJ** 1997 Jun 14;314(7096):1743–7. Comment in: BMJ 1997 Jun 14;314(7096):1703–4.

Should insurance companies have access to patients' medical records? Insurance practice inhibits GPs exploring the sexual behaviour of patients [letter; comment] Thornton P. **BMJ** 1996 Nov 16;313(7067):1261–2. Comment on: BMJ 1996 Aug 3;313(7052):287.

Urogenital ageing and its effect on sexual health in older British women. Barlow DH, et al.
Br J Obstet Gynaecol 1997 Jan;104(1):87–91

Sexual risk behaviour in women carriers of Mycoplasma hominis. Elshibly S, et al. **Br J Obstet Gynaecol** 1996 Nov; 103(11):1124–8

Sexual function after childbirth: women's experiences, persistent morbidity and lack of professional recognition [see comments] Glazener CM. **Br J Obstet Gynaecol** 1997 Mar;104(3):330–5. Comment in: Br J Obstet Gynaecol 1997 Mar;104(3):viii.

Sexual function after childbirth [editorial; comment] Grant JM. **Br J Obstet Gynaecol** 1997 Mar;104(3):viii. Comment on: Br J Obstet Gynaecol 1997 Mar;104(3):330–5.

The limitations of trust in intimate relationships: constructions of trust and sexual risk taking. Willig C.
Br J Soc Psychol 1997 Jun;36 (Pt 2):211–21

Fantasies and facts of the testes. van Basten JP, et al.
Br J Urol 1996 Nov;78(5):756–62 (63 ref.)

Sexual functioning following traumatic brain injury. Sandel ME, et al. **Brain Inj** 1996 Oct;10(10):719–28

Personality characteristics of mental health professionals who have engaged in sexualized dual relationships: a Rorschach investigation. Celenza A, et al. **Bull Menninger Clin** 1997 Winter;61(1):90–107

Understanding countertransference reactions in working with adolescent perpetrators of sexual abuse. Mintzer MB.
Bull Menninger Clin 1996 Spring;60(2):219–28

Important statistics missing [letter; comment] DuBois MJ. **Can Fam Physician** 1996 Dec;42:2341–2, 2344. Comment on: Can Fam Physician 1996 Sep;42:1734–40.

Re: AIDS knowledge and sexual behaviour in patients with schizophrenia [letter; comment] Buckley PF, et al.
Can J Psychiatry 1996 Nov;41(9):603. Comment on: Can J Psychiatry 1996 Jun;41(5):269–72.

Development of a policy on sexuality for hospitalized chronic psychiatric patients. Welch SJ, et al. **Can J Psychiatry** 1996 Jun;41(5):273–9

Sexual adjustment of patients undergoing gracilis myocutaneous flap vaginal reconstruction in conjunction with pelvic exenteration. Ratliff CR, et al. **Cancer** 1996 Nov 15;78(10):2229–35

Gender dynamics and the challenges for HIV prevention. Mbizvo MT. **Cent Afr J Med** 1996 Dec;42(12):351–4

Clinician's views on sexually aggressive children and their families: a theoretical exploration. Burton DL, et al.
Child Abuse Negl 1997 Feb;21(2):157–70

Sexual activity and contraceptive use among children entering out-of-home care. Risley-Curtiss C.
Child Welfare 1997 Jul–Aug;76(4):475–99

The influence of obesity in the sexual life of women in menopause. A case control study. Minozzi M, et al.
Clin Exp Obstet Gynecol 1996;23(4):209–13

Emergency physicians and sexual involvement with patients: an Ontario survey. Ovens HJ, et al. **CMAJ** 1997 Sep 15; 157(6):663–9

AIDS and HIV infection acquired heterosexually. Garrigle CM, et al. **Commun Dis Rep CDR Rev** 1997 Aug 22; 7(9):R125–8

Sex, sexual orientation and sex hormones influence human cognitive function. Kimura D. **Curr Opin Neurobiol** 1996 Apr;6(2):259–63 (43 ref.)

Primary care management of adolescent sexual behavior. Ellen JM, et al. **Curr Opin Pediatr** 1996 Oct;8(5):442–8 (47 ref.)

Lymphocyte immunoregulatory cells present in semen from human immunodeficiency virus (HIV)-infected individuals: a report from the HIV Heterosexual Transmission Study. Denny TN, et al. **Cytometry** 1996 Mar 15;26(1):47–51

Polygyny and reproductive behavior in sub-Saharan Africa: a contextual analysis. Ezeh AC. **Demography** 1997 Aug; 34(3):355–68

Education and the changing age pattern of American fertility: 1963–1989. Rindfuss RR, et al. **Demography** 1996 Aug; 33(3):277–90

Changes in HIV-related behaviors among heterosexual alcoholics following addiction treatment. Avins AL, et al.
Drug Alcohol Depend 1997 Jan 10;44(1):47–55

Substance use and risky sexual behavior in female adolescents. Castillo Mezzich A, et al.
Drug Alcohol Depend 1997 Mar 14;44(2–3):157–66

The relationship between risk networks' patterns of crack cocaine and alcohol consumption and HIV-related sexual behaviors among adult injection drug users: a prospective study. Latkin CA, et al. **Drug Alcohol Depend** 1996 Nov; 42(3):175–81

Relationship between sexual experience and non-sexual behaviours among secondary school students in Arusha, Tanzania. Lugoe WL, et al. **East Afr Med J** 1995 Oct; 72(10):635–40

Demographic and behavioral predictors of knowledge and HIV seropositivity: results of a survey conducted in three anonymous and free counselling and testing centers. Momas I, et al. **Eur J Epidemiol** 1997 Apr;13(3):255–60

The Oxford Laser Prostate Trial: sexual function data from a randomized controlled clinical trial of contact laser prostatectomy. Keoghane SR, et al. **Eur Urol** 1996; 30(4):424–8

Maternal correlates of adolescent sexual and contraceptive behavior. Jaccard J, et al. **Fam Plann Perspect** 1996 Jul–Aug;28(4):159–65, 185

The determinants of first sex by age 14 in a high-risk adolescent population. Mott FL, et al.
Fam Plann Perspect 1996 Jan–Feb;28(1):13–8

Men's behavior change following infection with a sexually transmitted disease. Payn B, et al. **Fam Plann Perspect** 1997 Jul–Aug;29(4):152–7

The association between substance use, condom use and sexual risk among low-income women. Sly DF, et al.
Fam Plann Perspect 1997 May–Jun;29(3):132–6

Patterns of sexual coercion in adult heterosexual relationships: an exploration of male victimization. Busby DM, et al. **Fam Process** 1997 Mar;36(1):81–94

Effect of sexual abstinence on the proportion of X-bearing sperm as assessed by multicolor fluorescent in situ hybridization. Hilsenrath RE, et al. **Fertil Steril** 1997 Sep; 68(3):510–3

Urinary symptoms, sexual intercourse and significant bacteriuria in male patients attending STD clinics [see comments] David LM, et al. **Genitourin Med** 1996 Aug; 72(4):266–8. Comment in: Genitourin Med 1997 Apr;73(2):149.

Seropositivity against HPV 16 capsids: a better marker of past sexual behaviour than presence of HPV DNA. Olsen AO, et al. **Genitourin Med** 1997 Apr;73(2):131–5

Sexual activity and satisfaction among very old adults: results from a community-dwelling Medicare population survey. Matthias RE, et al. **Gerontologist** 1997 Feb;37(1):6–14

The association of age and sexual history with the severity of the histological findings in women with cervical intraepithelial neoplasia. Reis FM, et al.
Gynecol Obstet Invest 1996;42(4):258–60

Using an interactive computer game to increase skill and self-efficacy regarding safer sex negotiation: field test results. Thomas R, et al. **Health Educ Behav** 1997 Feb; 24(1):71–86

Continued high-risk sex among HIV seropositive gay and bisexual men seeking HIV prevention services. Kalichman SC, et al. **Health Psychol** 1997 Jul;16(4):369–73

A two-sex model for treatment of HIV/AIDS and behaviour change in a population of varying size [published erratum appears in IMA J Math Appl Med Biol 1996 Dec;13(4):317] Hsieh YH. **IMA J Math Appl Med Biol** 1996 Sep; 13(3):151–73

Effects of treatment and prevalence-dependent recruitment on the dynamics of a fatal disease. Velasco-Hernández JX, et al. **IMA J Math Appl Med Biol** 1996 Sep;13(3):175–92

Sexual behaviour and increased anal cancer. Ablin RJ, et al. **Immunol Cell Biol** 1997 Apr;75(2):181–3

Sexual function and clinical features of patients with Klinefelter's syndrome with the chief complaint of male infertility. Yoshida A, et al. **Int J Androl** 1997 Apr; 20(2):80–5

Multi-impulsivity among women with bulimia nervosa. Wiederman MW, et al. **Int J Eat Disord** 1996 Dec; 20(4):359–65

The sexual experience of women diagnosed with anorexia nervosa or bulimia nervosa. Wiederman MW, et al.
Int J Eat Disord 1996 Mar;19(2):109–18

Number of sexual partners, condom use and risk of human immunodeficiency virus infection. Parazzini F, et al.
Int J Epidemiol 1995 Dec;24(6):1197–203

Sexual relationships in married dementia sufferers. Ballard CG, et al. **Int J Geriatr Psychiatry** 1997 Apr;12(4):447–51

Improving adolescent sexual behavior: a tool for better fertility outcome and safe motherhood. Creatsas G.
Int J Gynaecol Obstet 1997 Jul;58(1):85–92

Sexuality in the mental health system. Patients and practitioners. Gutheil TG, et al. **Int J Law Psychiatry** 1996 Spring;19(2):183–90 (15 ref.)

But is Paris really burning? Uncertainty anxieties and the normal chaos of love. Barale F, et al. **Int J Psychoanal** 1997 Apr;78 (Pt 2):373–8

Disavowal: structural effect and pathogenic dimension. Casas de Pereda M. **Int J Psychoanal** 1997 Apr;78 (Pt 2):379–84
Opening remarks to a discussion of sexuality in contemporary psychoanalysis. Green A. **Int J Psychoanal** 1997 Apr;78 (Pt 2):345–50
Has sexuality anything to do with psychoanalysis? [see comments] Green A. **Int J Psychoanal** 1995 Oct;76 (Pt 5):871–83. Comment in: Int J Psychoanal 1997 Jun;78 (Pt 3):577–8.
Review of the psychoanalytic theory of sexuality: comments on the assault against it. Spruiell V. **Int J Psychoanal** 1997 Apr;78 (Pt 2):357–61
Sexuality, femininity, and contemporary psychoanalysis. Tyson P. **Int J Psychoanal** 1997 Apr;78 (Pt 2):385–9
Two cases of oral-to-genital HIV-1 transmission. Bratt GA, et al. **Int J STD AIDS** 1997 Aug;8(8):522–5
The sexual behaviour of international travellers at two Glasgow GUM clinics. Glasgow genitourinary medicine. Carter S, et al. **Int J STD AIDS** 1997 May;8(5):336–8
STD/AIDS knowledge and risk behaviour among masseuses and bar hostesses in Singapore. Chan R, et al. **Int J STD AIDS** 1997 Jun;8(6):373–7
The psychosocial impact of human papillomavirus infection: implications for health care providers. Clarke P, et al. **Int J STD AIDS** 1996 May-Jun;7(3):197–200
Lack of behavioural risk factors for squamous intraepithelial lesions (SIL) in HIV-infected women. Heard I, et al. **Int J STD AIDS** 1997 Jun;8(6):388–92
AIDS in rural Africa: a paradigm for HIV-1 prevention [editorial] Hudson CP. **Int J STD AIDS** 1996 Jul; 7(4):236–43 (64 ref.)
Rectal sexual trauma including foreign bodies [editorial] Irizarry E, et al. **Int J STD AIDS** 1996 May-Jun;7(3):166–9 (21 ref.)
The associations between risk behaviour and reported history of sexually transmitted diseases, among young women: a population-based study. Jonsson M, et al. **Int J STD AIDS** 1997 Aug;8(8):501–5
Prevalence of sexual risk behaviour and substance use among runaway and homeless adolescents in San Francisco, Denver and New York City. Kral AH, et al. **Int J STD AIDS** 1997 Feb;8(2):109–17
Heterosexually transmitted HIV infection in the UK. Melzer M, et al. **Int J STD AIDS** 1997 Jul;8(7):464–5
Sex and travel: studies of sexual behaviour, disease and health promotion in international travellers—a global review [editorial] Mulhall BP. **Int J STD AIDS** 1996 Nov-Dec; 7(7):455–65 (108 ref.)
High HIV prevalence, low condom use and gender differences in sexual behaviour among patients with STD-related complaints at a Nairobi primary health care clinic. Ndinya-Achola JO, et al. **Int J STD AIDS** 1997 Aug;8(8):506–14
Sexual networks in Uganda: mixing patterns between a trading town, its rural hinterland and a nearby fishing village. Pickering H, et al. **Int J STD AIDS** 1997 Aug; 8(8):495–500
HIV seropositivity and the breakdown of heterosexual relationships in north west London [letter] Price G, et al. **Int J STD AIDS** 1996 Mar-Apr;7(2):146
Interventions for homeless men and women with mental illness: reducing sexual risk behaviours for HIV. Susser E, et al. **Int J STD AIDS** 1996;7 Suppl 2:66–70 (28 ref.)
Profile of patients attending a Dublin adolescent antenatal booking clinic. Fitzpatrick CC, et al. **Ir Med J** 1997 Apr-May;90(3):96–7
Reexamination of intergenerational linkage of HIV infection [letter] Barrett DC, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Aug 1;15(4):318–9
Oral sex and HIV transmission [letter] Berrey MM, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 15;14(5):475
Sexual behavior and injection drug use during pregnancy and vertical transmission of HIV-1. Bulterys M, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):76–82
A multisite study of sexual orientation and injection drug use as predictors of HIV serostatus in out-of-treatment male drug users. Deren S, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Aug 1;15(4):289–95
Non-Hodgkin's lymphoma in HIV-positive and HIV-negative homosexual men in the San Francisco Bay Area: allergies, prior medication use, and sexual practices. Holly EA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jul 1;15(3):211–22
Occasional condom use and HIV risk reduction. Pinkerton SD, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 15;13(5):456–60
Sexual self-concept and sexual risk-taking. Breakwell GM, et al. **J Adolesc** 1997 Feb;20(1):29–41
Impact of a school-based prevention programme on traditional and egalitarian adolescents' safer sex intentions. Buysse A, et al. **J Adolesc** 1997 Apr;20(2):177–88
The vernacular term interview: eliciting social knowledge related to sex among adolescents. Eyre SL. **J Adolesc** 1997 Feb;20(1):9–27
Noncoital sexual interactions and problem behaviour among young adolescents: the Norwegian Longitudinal Health Behaviour Study. Jakobsen R, et al. **J Adolesc** 1997 Feb; 20(1):71–83
The influence of puberty, family processes, and leisure activities on the timing of first sexual experience. Meschke LL, et al. **J Adolesc** 1997 Aug;20(4):403–18
Sexual behavior among adolescents reporting chronic conditions: a French national survey. Choquet M, et al. **J Adolesc Health** 1997 Jan;20(1):62–7
Are adolescents accurate in self-report of frequencies of sexually transmitted diseases and pregnancies? Clark LR, et al. **J Adolesc Health** 1997 Aug;21(2):91–6
Weekly and seasonal variation in sexual behaviors among adolescent women with sexually transmitted diseases. Fortenberry JD, et al. **J Adolesc Health** 1997 Jun; 20(6):420–5
Relationship of alcohol use and risky sexual behavior: a review and analysis of findings. Halpern-Felsher BL, et al. **J Adolesc Health** 1996 Nov;19(5):331–6 (42 ref.)
Adolescent heterosexual experience: a new typology. Miller KS, et al. **J Adolesc Health** 1997 Mar;20(3):179–86
Factors influencing the intention to use condoms in Quebec sexually-inactive male adolescents. Nguyen MN, et al. **J Adolesc Health** 1996 Jan;18(1):48–53
Counseling sexually active teenagers treated with potential human teratogens. Shilalukey K, et al. **J Adolesc Health** 1997 Sep;21(3):143–6
Gender and social differences in adolescent sexuality and reproduction in Nicaragua. Zelaya E, et al. **J Adolesc Health** 1997 Jul;21(1):39–46
Sexual health promotion and nursing. Irwin R. **J Adv Nurs** 1997 Jan;25(1):170–7 (110 ref.)
Age of onset of sexual abuse: relationship to sexually inappropriate behaviors. McClellan J, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Oct; 35(10):1375–83
Relationship between sexual abuse, gender, and sexually inappropriate behaviors in seriously mentally ill youths. McClellan J, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):959–65
Ethical aspects of competence for sexual relationships: a case of adult sibling incest. Feldman MJ, et al. **J Am Acad Psychiatry Law** 1997;25(2):217–22
Difficult decisions [editorial; comment] Lazebnik R. **J Am Board Fam Pract** 1997 Mar-Apr;10(2):170–2. Comment on: J Am Board Fam Pract 1997 Mar-Apr;10(2):96–103.
Identifying the social contexts of effective sex refusal. Hennessy M, et al. **J Am Coll Health** 1997 Jul;46(1):27–34
Testosterone and the aging male. Tenover JL. **J Androl** 1997 Mar-Apr;18(2):103–6 (14 ref.)
Sociosexual knowledge, experience, attitudes, and interests of individuals with autistic disorder and developmental delay. Konstantareas MM, et al. **J Autism Dev Disord** 1997 Aug;27(4):397–413
Sexual behavior in adults with autism. Van Bourgondien ME, et al. **J Autism Dev Disord** 1997 Apr;27(2):113–25
Does sexual coercion play a role in the high-risk sexual behavior of adolescent and young adult women? Biglan A, et al. **J Behav Med** 1995 Dec;18(6):549–68
Gay men's safer sex behavior: an integration of three models. Wulfert E, et al. **J Behav Med** 1996 Aug;19(4):345–66
The impact of paternal alcoholism and maternal social position on boys' school adjustment, pubertal maturation and sexual behavior: a test of two competing hypotheses. Malo J, et al. **J Child Psychol Psychiatry** 1997 Feb; 38(2):187–97
The relationship between sexual life and urinary condition in the French community. Macfarlane GJ, et al. **J Clin Epidemiol** 1996 Oct;49(10):1171–6
The relative contributions of psychiatric symptoms and AIDS knowledge to HIV risk behaviors among people with severe mental illness. McKinnon K, et al. **J Clin Psychiatry** 1996 Nov;57(11):506–13
Evaluation of a HIV/AIDS education program for adolescents. Morton M, et al. **J Community Health** 1996 Feb;21(1):23–35
Enhancing motivation to reduce the risk of HIV infection for economically disadvantaged urban women. Carey MP, et al. **J Consult Clin Psychol** 1997 Aug;65(4):531–41
Safer sex: social and psychological predictors of behavioral maintenance and change among heterosexual women. Morrill AC, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):819–28
Do sexual health questions alter the public's response to lifestyle questionnaires? Barker PJ, et al. **J Epidemiol Community Health** 1996 Dec;50(6):688
Does child abuse influence subsequent sexual behaviour and risk of AIDS? [letter] Meledandri G, et al. **J Epidemiol Community Health** 1997 Feb;51(1):103
Incidence of three sexually transmitted diseases during a safer sex promotion program for HIV-infected women. Kissinger P, et al. **J Gen Intern Med** 1996 Dec;11(12):750–2
An observational study of sexual behavior in demented male patients. Zeiss AM, et al. **J Gerontol A Biol Sci Med Sci** 1996 Nov;51(6):M325–9
Two views of risky sexual practices among northern Thai males: the Health Belief Model and the Theory of Reasoned Action. VanLandingham MJ, et al. **J Health Soc Behav** 1995 Jun;36(2):195–212
Research directions in male sex work. Browne J, et al. **J Homosex** 1996;31(4):29–56 (54 ref.)
Feasibility of human immunodeficiency virus vaccine trials in homosexual men in the United States: risk behavior, seroincidence, and willingness to participate. Buchbinder SP, et al. **J Infect Dis** 1996 Nov;174(5):954–61
Sexual behavior and partner characteristics are the predominant risk factors for genital human papillomavirus infection in young women. Burk RD, et al. **J Infect Dis** 1996 Oct;174(4):679–89
Sexually transmitted diseases and sexual behavior: insights from mathematical models. Garnett GP, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S150–61 (43 ref.)
Patient with primary tonsillar and gastric syphilis. Ishimaru T, et al. **J Laryngol Otol** 1997 Aug;111(8):766–8
Teen sex, AIDS, and contraception: Part three [editorial] Dawson G. **J Natl Med Assoc** 1996 Dec;88(12):768–72
A comparison of AIDS-related sexual risk behaviors among African-American college students. Taylor SE, et al. **J Natl Med Assoc** 1997 Jun;89(6):397–403
Tuboovarian abscess in the adolescent. Huang A, et al. **J Pediatr Adolesc Gynecol** 1997 May;10(2):73–7
Characteristics of men who aggress sexually and of men who imagine aggressing: risk and moderating variables. Dean KE, et al. **J Pers Soc Psychol** 1997 Feb;72(2):449–55
The effect of sexual experience on the attitudes of medical students to learning gynecological examinations. Abraham S. **J Psychosom Obstet Gynaecol** 1996 Mar;17(1):15–20
Personality differences between endometrial and cervical cancer patients in relation to sexual behavior. Lalos A, et al. **J Psychosom Obstet Gynaecol** 1997 Mar;18(1):53–8
Sexual behavior in pregnancy among Hong Kong Chinese women. Haines CJ, et al. **J Psychosom Res** 1996 Mar; 40(3):299–304
Psychosexual adjustment following sterilization: a prospective study on Chinese women. Tang CS, et al. **J Psychosom Res** 1997 Feb;42(2):187–96
How can psychological theory help to promote condom use in sub-Saharan African developing countries? Campbell T. **J R Soc Health** 1997 Jun;117(3):186–91 (47 ref.)
Safer Choices: a multicomponent school-based HIV/STD and pregnancy prevention program for adolescents. Coyle K, et al. **J Sch Health** 1996 Mar;66(3):89–94
Coping with controversy: the professional epidemic of the nineties. Spalt SW. **J Sch Health** 1996 Nov;66(9):339–40
Sexual risk-taking by Muscovite youth attending school. Westhoff WW, et al. **J Sch Health** 1996 Mar;66(3):102–5
College students' high-risk sexual behavior following alcohol consumption. Anderson PB, et al. **J Sex Marital Ther** 1996 Winter;22(4):259–64
Short-term cognitive-behavioral treatment of hypoactive sexual desire in an individual with a history of childhood sexual abuse. Bass BA. **J Sex Marital Ther** 1996 Winter; 22(4):284–9
A brief survey of the current sexual practices of a population admitted for inpatient treatment of drug dependence. Burke WM, et al. **J Sex Marital Ther** 1996 Fall;22(3):203–8
The effect of condoms in sexually explicit narratives on male sexual arousal. Gaither GA, et al. **J Sex Marital Ther** 1996 Summer;22(2):103–9
"Love" and the mental health professions: toward understanding adult love. Levine SB. **J Sex Marital Ther** 1996 Fall;22(3):191–202
Resolving the sexual intimacy paradox: a developmental model for the treatment of sexual desire disorders. Lobitz WC, et al. **J Sex Marital Ther** 1996 Summer;22(2):71–84
Identification of social cognitive variables as predictors of safer sex behavior and intent in heterosexual college students. Raj A. **J Sex Marital Ther** 1996 Winter; 22(4):247–58
Beliefs about the state, goals, and objects of sexual desire. Regan PC, et al. **J Sex Marital Ther** 1996 Summer; 22(2):110–20
Sexual behaviors and attitudes of geriatric residents in long-term care facilities. Spector IP, et al. **J Sex Marital Ther** 1996 Winter;22(4):235–46
The sexual desire inventory: development, factor structure, and evidence of reliability. Spector IP, et al. **J Sex Marital Ther** 1996 Fall;22(3):175–90
Perceived changes in sexual functioning and body image following weight loss in an obese female population: a pilot study. Werlinger K, et al. **J Sex Marital Ther** 1997 Spring; 23(1):74–8
Attitudes toward sexual behavior among unmarried Zambian secondary school females. Pillai VK, et al. **J Soc Psychol** 1996 Feb;136(1):111–2
Sexual satisfaction and dysfunction in marriages of male alcoholics: comparison with nonalcoholic maritally conflicted and nonconflicted couples. O'Farrell TJ, et al. **J Stud Alcohol** 1997 Jan;58(1):91–9
"About last night": the social ecology of sexual behavior relative to alcohol use among adolescents and young adults in substance abuse treatment. Tubman JG, et al. **J Subst Abuse** 1995;7(4):449–61
Reproductive understanding, sexual functioning and testosterone levels in men with spina bifida. Decter RM, et al. **J Urol** 1997 Apr;157(4):1466–8
Criteria for screening blood donors: science or politics? [letter; comment] Murphy JL. **JAMA** 1997 Jul 23–30; 278(4):289. Comment on: JAMA 1997 Mar 25;277(12):967–72.
Gender differences in sexual activity among mid-aged adults in Massachusetts. Johannes CB, et al. **Maturitas** 1997 Apr; 26(3):175–84
Interactive multimedia sexual risk assessment: using a video

doctor to screen patients. Gerbert B, et al. **MD Comput** 1996 Sep–Oct;13(5):416–22

Purity and passion: risk and morality in Latina immigrants' and physicians' beliefs about cervical cancer. Martinez RG, et al. **Med Anthropol** 1997 Jun;17(4):337–62

Verbal intercourse and sexual communication: impediments to STD prevention. Pliskin KL. **Med Anthropol Q** 1997 Mar;11(1):89–109 (76 ref.)

Inheritance of randomness. Afzelius BA. **Med Hypotheses** 1996 Jul;47(1):23–6

Understanding human sexuality—specifically homosexuality and the paraphilias—in terms of chaos theory and fetal development. Goodman RE. **Med Hypotheses** 1997 Mar; 48(3):237–43 (68 ref.)

Evolutionary sexology: the hypothesis of song and sex. Money J. **Med Hypotheses** 1997 May;48(5):399–402 (14 ref.)

Why do gentlemen prefer blondes? Ramachandran VS. **Med Hypotheses** 1997 Jan;48(1):19–20

A patient's guide to safer sex. Reducing the risk of HIV and other sexually transmitted diseases. Dodge RT, et al. **N C Med J** 1997 Mar–Apr;58(2):119–21

Aids prevention [letter] Gilson SB. **N Engl J Med** 1996 Oct 31;335(18):1398; discussion 1399

Aids prevention [letter; comment] Illingworth PM. **N Engl J Med** 1996 Oct 31;335(18):1398–9. Comment on: N Engl J Med 1996 Jun 6;334(23):1540–2.

Decline in HIV infections in Thailand [letter; comment] Lawless NP. **N Engl J Med** 1996 Dec 26;335(26):1998; discussion 1999. Comment on: N Engl J Med 1996 Aug 1;335(5):297–303.

Sexual transmission of HIV. Royce RA, et al. **N Engl J Med** 1997 Apr 10;336(15):1072–8 (97 ref.)

Sex and the doctor–patient relationship. Zelas K. **N Z Med J** 1997 Feb 28;110(1038):60–2

Sexual behaviour, drug use and hepatitis B infection in Chandigarh students [see comments] Kaur U, et al. **Natl Med J India** 1996 Jul–Aug;9(4):156–9. Comment in: Natl Med J India 1996 Jul–Aug;9(4):155.

Assessment of HIV risk outcomes in clinical trials for substance abuse pharmacology. **NIDA Res Monogr** 1996; 162:46–8

Design and results of the Women's Health Study. Tourangeau R, et al. **NIDA Res Monogr** 1997;167:344–65

Television viewing and adolescent sexuality [letter] Turner HA. **Nurse Pract** 1996 Nov;21(11):15, 18, 23 (11 ref.)

Orogenital contact: a cause of chorioamnionitis? Dixon NG, et al. **Obstet Gynecol** 1994 Oct;84(4 Pt 2):654–5

Capnocytophaga chorioamnionitis after oral sex. Hansen LM, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):731

Cervical cancer: behavioral changes could save most women [news] **Oncology (Huntingt)** 1996 Jun;10(6):862

Anticipatory guidance: developing a healthy sexuality. Wright K. **Pediatr Ann** 1997 Feb;26(2 Suppl):S142–5

Factors associated with HIV testing among sexually active adolescents: a Massachusetts survey. Samet JH, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):371–7

Sexual esteem, sexual depression, and sexual preoccupation in the exchange approach to sexuality. Thurman JM, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):908–10

AIDS-related attitudes and risk behaviors: a survey of a random sample of California heterosexuals. Bastani R, et al. **Prev Med** 1996 Mar–Apr;25(2):105–17

State hospitals' responses to the sexual behavior of psychiatric inpatients. Buckley PF, et al. **Psychiatr Serv** 1997 Mar; 48(3):398–9

Sexuality, pregnancy, and childrearing among women with schizophrenia–spectrum disorders. Miller LJ, et al. **Psychiatr Serv** 1996 May;47(5):502–6

Therapist–patient sexual contact. Ciardiello J. **Psychoanal Rev** 1996 Oct;83(5):761–75

Oedipal themes in latency. Analysis of the "farmer's daughter" joke. Clowes EK. **Psychoanal Study Child** 1996;51:436–54

On-line sexual addiction: a contemporary enigma. Bingham JE, et al. **Psychol Rep** 1996 Aug;79(1):257–8

Assessing variability of HIV transmission attitudes and behaviors at an urban northeastern university. Donnelly J, et al. **Psychol Rep** 1996 Apr;78(2):375–83

Self-reported sexual behaviors of high school juniors and seniors in North Dakota. Downey VW, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1357–8

High schoolers masturbatory practices: their relationship to sexual intercourse and personal characteristics. Smith AM, et al. **Psychol Rep** 1996 Oct;79(2):499–509

Non-gay-identifying men who have sex with men: formative research results from Seattle, Washington. Goldbaum G, et al. **Public Health Rep** 1996;111 Suppl 1:36–40

The Sexual Activity Questionnaire: a measure of women's sexual functioning. Thirlaway K, et al. **Qual Life Res** 1996 Feb;5(1):81–90

Infection by the human papillomavirus in teenagers sexually active: clinic and subclinic manifestations. Derchain S, et al. **Rev Paul Med** 1995 Jul–Aug;113(4):948–52

Predictive value of Drosophila [letter; comment] DeSalle Rob, et al. **Science** 1997 Mar 14;275(5306):1549–51. Comment on: Science 1996 Dec 13;274(5294):1836.

Comparison of development of serum antibodies to HPV16 and HPV33 and acquisition of cervical HPV DNA among sexually experienced and virginal young girls. A longitudinal cohort study. Andersson-Ellström A, et al. **Sex Transm Dis** 1996 May–Jun;23(3):234–8

Risky behavior in women with history of casual travel sex. Arvidson M, et al. **Sex Transm Dis** 1997 Aug;24(7):418–21

Sexual adventurism, high-risk behavior, and human immunodeficiency virus-1 seroconversion among the Chicago MACS-CCS cohort, 1984 to 1992. A case-control study. Difranceisco W, et al. **Sex Transm Dis** 1996 Nov–Dec;23(6):453–60

Sexual networks of African-American and Hispanic youth. Ford K, et al. **Sex Transm Dis** 1997 Jul;24(6):327–33

Sex, drugs, and infections among youth. Parenterally and sexually transmitted diseases in a high-risk neighborhood. Friedman SR, et al. **Sex Transm Dis** 1997 Jul;24(6):322–6

Risk factors for pelvic inflammatory disease. A case control study. Jossens MO, et al. **Sex Transm Dis** 1996 May–Jun; 23(3):239–47

The promise of integrated representative surveys about sexually transmitted diseases and behavior [see comments] Ku L, et al. **Sex Transm Dis** 1997 May;24(5):299–309 (47 ref.). Comment in: Sex Transm Dis 1997 May;24(5):310–1.

History of sexually transmitted diseases infection, drug-sex behaviors, and the use of condoms among midwestern users of injection drugs and crack cocaine. Siegal HA, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):277–82

Use and effectiveness of condoms during anal intercourse. A review. Silverman BG, et al. **Sex Transm Dis** 1997 Jan; 24(1):11–7 (37 ref.)

Patterns and trends of sexual behavior, HIV testing, and HIV prevalence among all sexually transmitted disease clinic attenders in Denmark. Smith E, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):97–102

Partner referral by patients with gonorrhea and chlamydial infection. Case-finding observations. van de Laar MJ, et al. **Sex Transm Dis** 1997 Jul;24(6):334–42

Genital herpes in a primary care clinic. Demographic and sexual correlates of herpes simplex type 2 infections. Wald A, et al. **Sex Transm Dis** 1997 Mar;24(3):149–55

Dry sex in Zimbabwe and implications for condom use. Civic D, et al. **Soc Sci Med** 1996 Jan;42(1):91–8

HIV prevention among Zambian adolescents: developing a value utilization/norm change model. Feldman DA, et al. **Soc Sci Med** 1997 Feb;44(4):455–68

Rethinking methods for the study of sexual behaviour. Huygens P, et al. **Soc Sci Med** 1996 Jan;42(2):221–31

Patterns of sexual behaviour in a rural population in north-western Tanzania. Munguti K, et al. **Soc Sci Med** 1997 May;44(10):1553–61

Perceived male sexual needs and male sexual behaviour in southwest Nigeria. Orubuloye IO, et al. **Soc Sci Med** 1997 Apr;44(8):1195–207

Factors associated with early sexual activity among urban adolescents. Smith CA. **Soc Work** 1997 Jul;42(4):334–46

A national survey of physicians' behaviors regarding sexual contact with patients. Bayer T, et al. **South Med J** 1996 Oct;89(10):977–82

High risk behavior related to HIV transmission among recently diagnosed TB patients in Jakarta. Sudaryo MD, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):443–8

The acquisition and maintenance of safer sexual behaviors among injection drug users. Posner SF, et al. **Subst Use Misuse** 1996 Dec;31(14):1995–2015

Sex, drugs, intervention, and research: from the individual to the social. Rhodes T, et al. **Subst Use Misuse** 1996 Feb; 31(3):375–407 (130 ref.)

Crossing a patient's sexual boundaries. Overlock ME, et al. **Tenn Med** 1996 Nov;89(11):403–4

Sex education, politics, and religious views don't mix. McIlhaney JS Jr, et al. **Tex Med** 1996 May;92(5):7

Differing values don't change facts of reproductive health. Simpson DM. **Tex Med** 1996 May;92(5):8

Effect of kidney transplantation and cyclosporine treatment on male sexual performance and hormonal profile: a prospective study. Burgos FJ, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):227–8

Adolescent contraception. Nelson AL. **West J Med** 1996 Dec;165(6):374–6

Self-reported factors influencing condom use among clinic attendees. Lieberthal KC, et al. **West J Nurs Res** 1997 Aug; 19(4):424–36; discussion 436–41

Gender-identity, body-experience, sexuality, and the wish for having children in DES-daughters. Bekker MH, et al. **Women Health** 1996;24(2):65–82

Women and the heterosexual transmission of HIV: risks and prevention strategies. Gavey N, et al. **Women Health** 1997; 25(2):41–64 (115 ref.)

[Sexual activity, contraception and abortions among teenagers in Bulgaria] Sirakov M, et al. **Akush Ginekol (Sofiia)** 1996;35(4):12–4 (Eng. Abstr.) **(Bul)**

[Sexuality and quality of life (letter; comment)] Graugaard C, et al. **Ugeskr Laeger** 1996 Oct 7;158(41):5799–801. Comment on: Ugeskr Laeger 1996 Jul 22;158(30):4299–304. **(Dan)**

[Sex behavior of patients attending a free, anonymous HIV screening center in Paris] Aynaud O. **Contracept Fertil Sex** 1997 Mar;25(3):242–50 (Eng. Abstr.) **(Fre)**

[What did hormonal contraception change for women?] Lachowsky M. **Contracept Fertil Sex** 1996 Nov; 24(11):816–8 (Eng. Abstr.) **(Fre)**

[Menopause and sexuality] Mimoun S. **Contracept Fertil Sex** 1996 Jan;24(1):62–6 (12 ref.) (Eng. Abstr.) **(Fre)**

[Student nurses' and nurse midwives' behavior concerning sexuality and prevention of sexually transmitted diseases in Cotonou (Benin)] Fourn L, et al. **Sante** 1997 May–Jun; 7(3):165–8 (Eng. Abstr.) **(Fre)**

[Sexuality in old age homes—a taboo zone (interview by Beatrice Wagner)] Landerer-Hock C. **Fortschr Med** 1997 May 30;115(15):36–7 **(Ger)**

[Bad fortune for elderly women. Demographic considerations complicate the search for new partners] Wagner B. **Fortschr Med** 1997 May 30;115(15):33–6 **(Ger)**

[Sexuality has its own language. Building the bridge between love and sexuality] Wagner B. **Fortschr Med** 1997 Jun 20; 115(17):52–3 **(Ger)**

[Department social climate on mixed sex and segregated acute psychiatric units. Results of a survey] Vieweg T, et al. **Psychiatr Prax** 1996 Nov;23(6):290–3 (Eng. Abstr.) **(Ger)**

[Sexual behavior of Italian youths in connection to AIDS risk] Signorelli C, et al. **Soz Praventivmed** 1996;41(6):359–65 (Eng. Abstr.) **(Ger)**

[Selected psychosocial factors and the sexual development of girls] Raboch J Jr, et al. **Zentralbl Gynakol** 1997; 119(6):273–7 (Eng. Abstr.) **(Ger)**

[Sexual relations between doctors and patients: state of the art] Witztum E, et al. **Harefuah** 1996 Oct;131(7–8):257–9 (18 ref.) **(Heb)**

[Sexual activity of infertile couples] Lökös M, et al. **Orv Hetil** 1996 Sep 1;137(35):1929–34 (Eng. Abstr.) **(Hun)**

[Neurovascular implications in total meso-rectal excisions. A prospective study of sexual function after surgery for rectal cancer] Prete F. **G Chir** 1996 Aug–Sep;17(8–9):393–8 (Eng. Abstr.) **(Ita)**

[Hormonal control of sexual behavior in males and endocrinologic causes of sexual dysfunction] Manieri C, et al. **Minerva Endocrinol** 1997 Jun;22(2):37–43 (Eng. Abstr.) **(Ita)**

[Sexual behavior of the adolescent and sexually transmitted diseases (STD). Observations on a symptomatic population] Franchini F, et al. **Pediatr Med Chir** 1996 Sep–Oct; 18(5):525–7 (Eng. Abstr.) **(Ita)**

[Adolescent sexual behavior and sexually transmitted diseases (STD). A preliminary study] Franchini F, et al. **Pediatr Med Chir** 1996 May–Jun;18(3):279–81 (Eng. Abstr.) **(Ita)**

[Medico-social aspects of sexual and reproductive behavior of young people] Konovalov OE. **Probl Sotsialnoi Gig Istor Med** 1997 Jan–Feb;(1):23–6 (Eng. Abstr.) **(Rus)**

[Transverse study on sex behavior associated with HIV transmission among homosexual men in Catalonia] Rodés A, et al. **Gac Sanit** 1997 Jan–Feb;11(1):16–23 (Eng. Abstr.) **(Spa)**

[Sexual behavior in adolescents and young subjects] Barrón de Carbonetti M, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1995;53 Suppl:37–44 (Eng. Abstr.) **(Spa)**

[Adolescents and young subjects facing contraception, pregnancy and abortion] Lesa AM, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1995;53 Suppl:45–53 (Eng. Abstr.) **(Spa)**

[Sexual subcultures and degree of risk for acquiring HIV in adolescents in a marginal neighborhood] Caballero-Hoyos R, et al. **Salud Publica Mex** 1996 Jul–Aug;38(4):276–9 (Eng. Abstr.) **(Spa)**

[Sexuality and STD infections among teenage girls. "Unprotected sex" is common in spite of sufficient knowledge about the risks] Andersson-Ellström A, et al. **Lakartidningen** 1997 Feb 19;94(8):619–21 (Eng. Abstr.) **(Swe)**

CLASSIFICATION

Sexual behaviors and risk factors for HIV infection among men who have sex with men in the Dominican Republic. Tabet SR, et al. **AIDS** 1996 Feb;10(2):201–6

DRUG EFFECTS

Yohimbine, erectile capacity, and sexual response in men. Rowland DL, et al. **Arch Sex Behav** 1997 Feb;26(1):49–62

Effect of testosterone administration on sexual behavior and mood in men with erectile dysfunction. Schiavi RC, et al. **Arch Sex Behav** 1997 Jun;26(3):231–41

Lithium and male sexual function in affective patients. Aizenberg D, et al. **Clin Neuropharmacol** 1996 Dec; 19(6):515–9

Comparative sexual side effects of bupropion, fluoxetine, paroxetine, and sertraline. Modell JG, et al. **Clin Pharmacol Ther** 1997 Apr;61(4):476–87

The effects of moclobemide on sexual desire and function in healthy volunteers. Kennedy SH, et al. **Eur Neuropsychopharmacol** 1996 Aug;6(3):177–81

Changes in the menstrual bleeding of users of a subdermal contraceptive implant of nomegestrol acetate (Uniplant) do not influence sexual frequency, sexual desire, or sexual enjoyment. Barnhart KT, et al. **Fertil Steril** 1997 Feb; 67(2):244–9

Treatment of antidepressant-induced sexual side effects. Assalian P, et al. **J Sex Marital Ther** 1996 Fall;22(3):218–24

Sexual side effects of antidepressants: a review. Margolese HC, et al. **J Sex Marital Ther** 1996 Fall;22(3):209–17 (68 ref.)

Differences in sexual risk-taking behavior with state of

inebriation in an aboriginal population in Ontario, Canada. Myers T, et al. **J Stud Alcohol** 1997 May;58(3):312–22

Effect on sexual life--a comparison between tibolone and a continuous estradiol-norethisterone acetate regimen. Nathorst-Böös J, et al. **Maturitas** 1997 Jan;26(1):15–20

Female sexual stimulation during antidepressant treatment. Elmore JL, et al. **Pharmacotherapy** 1997 May–Jun; 17(3):612–6

Substance use during sex and unsafe sexual behaviors among acute psychiatric inpatients. Menon AS, et al. **Psychiatr Serv** 1997 Aug;48(8):1070–2

Inhibition of subjective and physiological sexual arousal in women by clonidine. Meston CM, et al. **Psychosom Med** 1997 Jul–Aug;59(4):399–407

Intoxications, intentions, and disease preventions [editorial; comment] Des Jarlais DC. **Sex Transm Dis** 1997 Jul; 24(6):320–1. Comment on: Sex Transm Dis 1997 Jul;24(6):313–9.

Sex under the influence. A diary self-report study of substance use and sexual behavior among adolescent women [see comments] Fortenberry JD, et al. **Sex Transm Dis** 1997 Jul;24(6):313–9. Comment in: Sex Transm Dis 1997 Jul;24(6):320–1.

[Hormones and male sexual behavior: physiological and physiopathological data] Buvat J. **Contracept Fertil Sex** 1996 Oct;24(10):767–78 (93 ref.) (Eng. Abstr.) **(Fre)**

ETHNOLOGY

Predictors of African American adolescents' condom use and HIV risk behavior. Reitman D, et al. **AIDS Educ Prev** 1996 Dec;8(6):499–515

HIV risk behaviors: a comparison of U.S. Hispanic and Dominican Republic youth. Westhoff WW, et al. **AIDS Educ Prev** 1996 Apr;8(2):106–14

HIV risk behaviors and obstacles to condom use among Puerto Rican men in New York City who have sex with men. Carballo-Diéguez A, et al. **Am J Public Health** 1996 Nov;86(11):1619–22

Beliefs about sexual behavior and other predictors of Papanicolaou smear screening among Latinas and Anglo women. Hubbell FA, et al. **Arch Intern Med** 1996 Nov 11;156(20):2353–8

Assessing sexual dimensions in Hispanic women. Development of an instrument. Adams J, et al. **Cancer Nurs** 1997 Aug;20(4):251–9

Adolescent knowledge, values, and coping strategies: implications for health in sub-Saharan Africa. Balmer DH, et al. **J Adolesc Health** 1997 Jul;21(1):33–8

Human immunodeficiency virus risk behavior among white and Asian/Pacific Islander high school students in the United States: does culture make a difference? Hou SI, et al. **J Adolesc Health** 1997 Jan;20(1):68–74

Longitudinal stability and predictability of sexual perceptions, intentions, and behaviors among early adolescent African-Americans. Stanton BF, et al. **J Adolesc Health** 1996 Jan;18(1):10–9

Sexual behavior and vaginal colonization by group B streptococcus among minority women. Newton ER, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 1):577–82

Social vs biological: theories on the transmission of AIDS in Africa. Hunt CW. **Soc Sci Med** 1996 May;42(9):1283–96 (19 ref.)

Working women's sexual risk taking in Jamaica. Le Franc E, et al. **Soc Sci Med** 1996 May;42(10):1411–7

HISTORY

Why can't a woman be more like a man? A renaissance perspective on the biological basis for female inferiority. Walton MT, et al. **Women Health** 1996;24(4):87–95

PHYSIOLOGY

Sexual behavioral changes in Alzheimer disease. Derouesné C, et al. **Alzheimer Dis Assoc Disord** 1996 Summer; 10(2):86–92

Physically aggressive boys from age 6 to 12 years. Their biopsychosocial status at puberty. Tremblay RE, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:192–207

Effect of different types of textiles on male sexual activity. Shafik A. **Arch Androl** 1996 Sep–Oct;37(2):111–5

Gender differences in sexual interest. Baldwin JD, et al. **Arch Sex Behav** 1997 Apr;26(2):181–210 (122 ref.)

Sexual function after radiotherapy treatment for prostate cancer [letter; comment] Jordan KA, et al. **Br J Urol** 1996 Sep;78(3):478–9. Comment on: Br J Urol 1996 Jan;77(1):118–23.

Influence of donor insemination on sexual functions of recipients. Kremer J. **Eur J Obstet Gynecol Reprod Biol** 1996 Aug;67(2):185–9

Adolescent sexual health [letter; comment] Dezso J. **Health Educ Q** 1996 Nov;23(4):413–4. Comment on: Health Educ Q 1996 Feb;23(1):34–47.

Androgen-behavior correlations in hypogonadal men and eugonadal men. I. Mood and response to auditory sexual stimuli. Alexander GM, et al. **Horm Behav** 1997 Apr; 31(2):110–9

From fertilization to adult sexual behavior. Diamond M, et al. **Horm Behav** 1996 Dec;30(4):333–53

Frank A. Beach award. Homologies of animal and human sexual behaviors. Pfaus JG. **Horm Behav** 1996 Sep; 30(3):187–200 (86 ref.)

Sexual interest in postmenopausal women is related to 5alpha-reductase activity. Kennedy RG, et al. **Hum Reprod** 1997 Feb;12(2):209–13

Sexual behaviour and prevalence of HIV antibodies in transsexuals. Chew S, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):33–6

Assessment of sexual function in patients with rheumatic disorders: a critical appraisal. Quarersma MR, et al. **J Rheumatol** 1997 Sep;24(9):1673–6 (19 ref.)

False estrus in human females: sexual manipulation without conception. Thiessen D. **Percept Mot Skills** 1997 Apr; 84(2):385–6

Sexual arousability and the menstrual cycle. Slob AK, et al. **Psychoneuroendocrinology** 1996 Aug;21(6):545–58

Sexual development in patients treated for cryptorchidism. Taskinen S, et al. **Scand J Urol Nephrol** 1997 Aug; 31(4):361–4

[Female sexuality doesn't stop with aging. Physiological aging processes can generally be controlled] Wagner B. **Fortschr Med** 1997 May 30;115(15):31–3 **(Ger)**

PSYCHOLOGY

Counseling issues with gay and lesbian adolescents. Fontaine JH, et al. **Adolescence** 1996 Winter;31(124):817–30

Assessing participation bias in a sexual behaviour survey: implications for measuring HIV risk. Copas AJ, et al. **AIDS** 1997 May;11(6):783–90

Sexuality in Montreal women living with HIV. Hankins C, et al. **AIDS Care** 1997 Jun;9(3):261–71

Reasons for having sex and sexual risk-taking: a study of heterosexual male STD clinic patients. Hoffman V, et al. **AIDS Care** 1997 Jun;9(3):285–96

The heterosexual singles scene: putting danger into pleasure. Peart R, et al. **AIDS Care** 1996 Jun;8(3):341–9

An impact evaluation of project SNAPP: an AIDS and pregnancy prevention middle school program. Kirby D, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):44–61

Stress, coping, HIV status, psychosocial resources, and depressive mood in African American gay, bisexual, and heterosexual men. Peterson JL, et al. **Am J Community Psychol** 1996 Aug;24(4):461–87

The experience of head injury on the impairment of gender identity and gender role. Gutman SA, et al. **Am J Occup Ther** 1996 Jul–Aug;50(7):535–44

Characteristics of 36 subjects reporting compulsive sexual behavior. Black DW, et al. **Am J Psychiatry** 1997 Feb; 154(2):243–9

HIV risk behaviors and obstacles to condom use among Puerto Rican men in New York City who have sex with men. Carballo-Diéguez A, et al. **Am J Public Health** 1996 Nov;86(11):1619–22

Assessment of sexual functioning for Chinese college students. Tang CS, et al. **Arch Sex Behav** 1997 Feb; 26(1):79–90

The relationship between self-esteem and deviant sexual arousal in nonfamilial child molesters. Marshall WL. **Behav Modif** 1997 Jan;21(1):86–96

Obsessive-compulsive disorder, tattooing and bizarre sexual practices. Caplan R, et al. **Br J Psychiatry** 1996 Mar; 168(3):379–80

Transactions of the Topeka Psychoanalytic Society. Wilkinson SM. **Bull Menninger Clin** 1996 Fall;60(4):541–3

The relationship of sexual abuse and HIV risk behaviors among heterosexual adult female STD patients. Thompson NJ, et al. **Child Abuse Negl** 1997 Feb;21(2):149–56

Self-reported sexual function and sexual arousability in women with epilepsy. Morrell MJ, et al. **Epilepsia** 1996 Dec;37(12):1204–10

Evaluation of the validity of the condom use self-efficacy scale (CUSES) in young men using two behavioral simulations. Forsyth AD, et al. **Health Psychol** 1997 Mar; 16(2):175–8

Psoriasis and sex: a study of moderately to severely affected patients. Gupta MA, et al. **Int J Dermatol** 1997 Apr; 36(4):259–62

The influence of sexual orientation on body dissatisfaction in adult men and women. Beren SE, et al. **Int J Eat Disord** 1996 Sep;20(2):135–41

Participation bias in a sexuality survey: psychological and behavioural characteristics of responders and non-responders. Dunne MP, et al. **Int J Epidemiol** 1997 Aug;26(4):844–54

Sexual expression and dementia. Views of caregivers: A pilot study [editorial] Holmes D, et al. **Int J Geriatr Psychiatry** 1997 Jul;12(7):695–701

The umbilicus as sexual focus [letter; comment] Brown ES. **Int J Psychoanal** 1997 Jun;78 (Pt 3):577–8. Comment on: Int J Psychoanal 1995 Oct;76 (Pt 5):871–83.

Sexual behaviour and sex education in Irish school-going teenagers [published erratum appears in Int J STD AIDS 1997 Jun;8(6):412] MacHale E, et al. **Int J STD AIDS** 1997 Mar;8(3):196–200

Determinants of high-risk sexual behaviour and condom use among adults in the Arusha region, Tanzania. Mnyika KS, et al. **Int J STD AIDS** 1997 Mar;8(3):176–83

Young women's sexual risk taking behaviour: re-visiting the influences of sexual self-efficacy and sexual self-esteem. Seal A, et al. **Int J STD AIDS** 1997 Mar;8(3):159–65

A risk profile of street youth in northern California: implications for gender-specific human immunodeficiency virus prevention. Clements K, et al. **J Adolesc Health** 1997 May;20(5):343–53

Types of adolescent sexual relationships and associated perceptions about condom use. Ellen JM, et al. **J Adolesc Health** 1996 Jun;18(6):471–21

Adolescent sexual strategies. Eyre SL, et al. **J Adolesc Health** 1997 Apr;20(4):286–93

The association of sexual risk behaviors and problem drug behaviors in high school students. Shrier LA, et al. **J Adolesc Health** 1997 May;20(5):377–83

First coitus for adolescents: understanding why and when [see comments] Alexander E, et al. **J Am Board Fam Pract** 1997 Mar–Apr;10(2):96–103. Comment in: J Am Board Fam Pract 1997 Mar–Apr;10(2):170–2.

Nevermore: the hymen and the loss of virginity. Holtzman D, et al. **J Am Psychoanal Assoc** 1996;44 Suppl:303–32

Infect one, infect all: Zulu youth response to the AIDS epidemic in South Africa. Leclerc-Madlala S. **Med Anthropol** 1997 Jun;17(4):363–80

Semen, irony, and the atom bomb. Cohen L. **Med Anthropol Q** 1997 Sep;11(3):301–3; discussion 303–5

HIV-risk behaviors and mental health characteristics among homeless or drug-recovering women and their closest sources of social support. Nyamathi A, et al. **Nurs Res** 1997 May–Jun;46(3):133–7

The reliability of partner reports of sexual histories in a heterosexual STD clinic population [editorial; comment] Catania JA. **Sex Transm Dis** 1996 Nov–Dec;23(6):522. Comment on: Sex Transm Dis 1996 Nov–Dec;23(6):446–52.

Teenage sexual attitudes in China. Kaufman G, et al. **Soc Biol** 1996 Fall–Winter;43(3–4):141–54

STATISTICS & NUMERICAL DATA

Gender differences in HIV risk behaviour of injecting drug users in Edinburgh. Davies AG, et al. **AIDS Care** 1996 Oct;8(5):517–27

A community support group for HIV-seropositive drug users: is attendance associated with reductions in risk behaviour? [published erratum appears in AIDS Care 1996 Dec;8(6):716] Greenberg JB, et al. **AIDS Care** 1996 Oct; 8(5):529–40

Prevalence of anal sex among heterosexuals in California and its relationship to other AIDS risk behaviors. Erickson PI, et al. **AIDS Educ Prev** 1995 Dec;7(6):477–93

Frequency of sexual partner change in a Norwegian population. Data distribution and covariates. Stigum H, et al. **Am J Epidemiol** 1997 Apr 1;145(7):636–43

Effect of changing partnership formation rates on the spread of sexually transmitted diseases and human immunodeficiency virus. Stigum H, et al. **Am J Epidemiol** 1997 Apr 1;145(7):644–52

Large declines in sexual risk behavior with noncommercial partners among heterosexual injection drug users in Amsterdam, 1989–1995. van Ameijden EJ, et al. **Am J Epidemiol** 1996 Oct 15;144(8):772–81

Prevalence of high-risk sex among HIV-positive gay and bisexual men: a longitudinal analysis. Posner SF, et al. **Am J Prev Med** 1996 Nov–Dec;12(6):472–7

The sexual practices of adolescent virgins: genital sexual activities of high school students who have never had vaginal intercourse [see comments] Schuster MA, et al. **Am J Public Health** 1996 Nov;86(11):1570–6. Comment in: Am J Public Health 1996 Nov;86(11):1523–5. Comment in: Am J Public Health 1997 Aug;87(8):1380–1.

Safer sex behavior and alcohol consumption. Research Group of the Swiss HIV Prevention Study. Läuchli S, et al. **Ann Epidemiol** 1996 Jul;6(4):357–64

Sexual practice and understandings of safe sex: assessing change among 18- to 19-year-old Australian tertiary students, 1988 to 1994. Rodden P, et al. **Aust N Z J Public Health** 1996 Dec;20(6):643–9

Sex, alcohol and drugs? Young people's experience of Schoolies Week. Smith AM, et al. **Aust N Z J Public Health** 1997 Apr;21(2):175–80

Determinants of HIV-related high risk behaviours among young offenders: a window of opportunity. Rothon DA, et al. **Can J Public Health** 1997 Jan–Feb;88(1):14–7

Sexual behaviour and multiple infections in drug abusers. Coppola RC, et al. **Eur J Epidemiol** 1996 Oct;12(5):429–35

Does condom availability make a difference? An evaluation of Philadelphia's health resource centers. Furstenberg FF Jr, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):123–7

The impact of the Postponing Sexual Involvement curriculum among youths in California. Kirby D, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):100–8

Relationship of sexual mixing across age and ethnic groups to herpes simplex virus-2 among unmarried heterosexual adults with multiple sexual partners. Catania JA, et al. **Health Psychol** 1996 Sep;15(5):362–70

Sexual risk factors for cervical cancer among rural Indian women: a case-control study. Biswas LN, et al. **Int J Epidemiol** 1997 Jun;26(3):491–5

HIV infection and sexual behaviour among women with infertility in Tanzania: a hospital-based study. Favot I, et al. **Int J Epidemiol** 1997 Apr;26(2):414–9

Female adolescents and onset of sexual intercourse: a theory-based review of research from 1984 to 1994. Goodson P, et al. **J Adolesc Health** 1997 Sep;21(3):147–56 (75 ref.)

HIV risk behaviors among adolescents at a sexually transmitted disease clinic in New York City. Heffernan R, et al. **J Adolesc Health** 1996 Jun;18(6):429–34

Substance use, coping, and safer sex practices among

adolescents with hemophilia and human immunodeficiency virus. The Hemophilia Behavioral Intervention Evaluative Project Committee. King G, et al. **J Adolesc Health** 1996 Jun;18(6):435–41

Sexual behavior of adolescents with chronic disease and disability. Surís JC, et al. **J Adolesc Health** 1996 Aug; 19(2):124–31

First coitus for adolescents: understanding why and when [see comments] Alexander E, et al.
J Am Board Fam Pract 1997 Mar–Apr;10(2):96–103. Comment in: J Am Board Fam Pract 1997 Mar–Apr;10(2):170–2.

Sexual experience of the chronic peritoneal dialysis patient. Steele TE, et al. **J Am Soc Nephrol** 1996 Aug;7(8):1165–8

Survey of condom–related beliefs, behaviors, and perceived social norms in Mexican migrant laborers. Organista KC, et al. **J Community Health** 1997 Jun;22(3):185–98

The initiation of adolescent sexual and contraceptive behavior during changing times. Cooksey EC, et al.
J Health Soc Behav 1996 Mar;37(1):59–74

Sexuality and contraception in adolescents from Barcelona, Spain. Parera N, et al. **J Pediatr Adolesc Gynecol** 1997 Aug; 10(3):153–7

Knowledge and attitudes to HIV and AIDS and sexual practices among university students in Lusaka, Zambia and London, England: are they so different? Baggaley R, et al. **J R Soc Health** 1997 Apr;117(2):88–94

Patient sexual behaviors and sexual harassment: a national survey of physical therapists. deMayo RA. **Phys Ther** 1997 Jul;77(7):739–44

The Young Men's Survey: methods for estimating HIV seroprevalence and risk factors among young men who have sex with men. MacKellar D, et al.
Public Health Rep 1996;111 Suppl 1:138–44

HIV and hepatitis B infection and risk behavior in young gay and bisexual men. Seage GR 3rd, et al.
Public Health Rep 1997 Mar–Apr;112(2):158–67

Detection of Mycoplasma hominis and Ureaplasma urealyticum in women sexually active or not. Gil–Juárez C, et al. **Rev Latinoam Microbiol** 1996 Apr–Jun;38(2):81–8

Sexual mixing patterns of patients attending sexually transmitted diseases clinics. Garnett GP, et al.
Sex Transm Dis 1996 May–Jun;23(3):248–57

Sexually transmitted diseases in men who have sex with men. Acquisition of gonorrhea and nongonococcal urethritis by fellatio and implications for STD/HIV prevention. Lafferty WE, et al. **Sex Transm Dis** 1997 May;24(5):272–8

Sexual behavior risk factors associated with bacterial vaginosis and Chlamydia trachomatis infection. Nilsson U, et al. **Sex Transm Dis** 1997 May;24(5):241–6

Validity of self–reported sexual behaviors in adolescent women using biomarker outcomes. Orr DP, et al.
Sex Transm Dis 1997 May;24(5):261–6

Parametric models to assess tracking of categorical high–risk sexual behaviour for HIV infection. Gange SJ, et al.
Stat Med 1996 Nov 15–30;15(21–22):2323–36; discussion 2337–40

Estimating means and percentages in a complex sampling survey: application to a French national survey on sexual behaviour (ACSF). Analyse des Comportements Sexuels en France. Warszawski J, et al. **Stat Med** 1997 Feb 28; 16(4):397–423

SEX BEHAVIOR, ANIMAL

Sexual behavior in male and female rats after a tryptophan–free amino acid mixture. Moja EA, et al.
Adv Exp Med Biol 1996;398:89–91

Behavioral and social correlates of escape from suppression of ovulation in female common marmosets housed with the natal family. Saltzman W, et al. **Am J Primatol** 1997; 41(1):1–21

Circulating oxytocin in male guinea pigs affected by the female cohabitation and reproductive condition. Barth R, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:593–5

Peptides, steroids, and pair bonding. Carter CS, et al.
Ann N Y Acad Sci 1997 Jan 15;807:260–72 (33 ref.)

Evolutionary perspectives on primate mating systems and behavior. Dixson AF. **Ann N Y Acad Sci** 1997 Jan 15; 807:42–61 (102 ref.)

Neurobiology of avian social organization. Effects of lateral septum lesions in a territorial songbird, the field sparrow (Spizella pusilla), and a colonial songbird, the zebra finch (Taeniopygia guttata). Goodson JL, et al.
Ann N Y Acad Sci 1997 Jan 15;807:518–21

Heterosexual interactions promote oxytocin secretion in sexually naive, but not experienced, male Wistar rats. Hillegaart V, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:530–3

Molecular aspects of monogamy. Insel TR, et al.
Ann N Y Acad Sci 1997 Jan 15;807:302–16 (44 ref.)

Intra– and extra–pair behavior and initial clutch success in captive zebra finch colonies. Oliva–Purdy J, et al.
Ann N Y Acad Sci 1997 Jan 15;807:549–51

Female reproductive status and male pairmate behavior in cotton–top tamarins. Porter TA, et al.
Ann N Y Acad Sci 1997 Jan 15;807:556–8

Intraspecific variation and the presence of a father can influence the expression of monogamous and communal traits in prairie voles. Roberts RL, et al.
Ann N Y Acad Sci 1997 Jan 15;807:559–62

Escape from social suppression of sexual behavior and of ovulation in female common marmosets. Saltzman W, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:567–70

The role of contact calls in the social behavior of the budgerigar (Melopsittacus undulatus). Shea SD, et al.
Ann N Y Acad Sci 1997 Jan 15;807:571–3

Sexually initiated affiliation facilitates rhesus monkey integration. Tannenbaum PL, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:578–82

Hormonal modulation of sexual behavior and affiliation in rhesus monkeys. Wallen K, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:185–202

Postestrus anogenital swelling in female barbary macaques. The larger, the better? Wallner B, et al.
Ann N Y Acad Sci 1997 Jan 15;807:590–2

Relationship between oxytocin and the biphasic effects of progesterone in the control of hamster sexual receptivity. Whitman DC, et al. **Ann N Y Acad Sci** 1997 Jan 15; 807:596–8

Ecological constraints and the evolution of hormone–behavior interrelationships. Wingfield JC, et al.
Ann N Y Acad Sci 1997 Jan 15;807:22–41 (67 ref.)

Regulatory mechanisms of oxytocin–mediated sociosexual behavior. Witt DM. **Ann N Y Acad Sci** 1997 Jan 15; 807:287–301 (80 ref.)

The 5' flanking region of the monogamous prairie vole oxytocin receptor gene directs tissue–specific expression in transgenic mice. Young LJ, et al.
Ann N Y Acad Sci 1997 Jan 15;807:514–7

Genetic dissection of sexual behavior in Drosophila melanogaster. Yamamoto D, et al. **Annu Rev Entomol** 1997; 42:551–85 (216 ref.)

Selective breeding for isolation–induced intermale aggression in mice: associated responses and environmental influences. Sandnabba NK. **Behav Genet** 1996 Sep;26(5):477–88 (100 ref.)

Sexual behavior regulated (paced) by the female induces conditioned place preference. Paredes RG, et al.
Behav Neurosci 1997 Feb;111(1):123–8

Sexually dimorphic aspects of spontaneous activity in meadow voles (Microtus pennsylvanicus): effects of exposure to fox odor. Perrot–Sinal TS, et al.
Behav Neurosci 1996 Oct;110(5):1126–32

Signal processing in the vomeronasal system: modulation of sexual behavior in the female rat. Dudley CA, et al.
Crit Rev Neurobiol 1996;10(3–4):265–90 (158 ref.)

Sexual behaviour: secrets and flies. O'Dell KM, et al.
Curr Biol 1997 Jun 1;7(6):R345–7 (18 ref.)

Rebels with a cause. Pomiankowski A. **Curr Biol** 1997 Feb 1;7(2):R92–3 (13 ref.)

The fate of filial attachment in juvenile guinea pigs housed apart from the mother. Hennessy MB, et al.
Dev Psychobiol 1996 Dec;29(8):641–51

Estrogen receptors are essential for female sexual receptivity. Rissman EF, et al. **Endocrinology** 1997 Jan;138(1):507–10

Changes in thyroid activity during the annual sexual cycle of a wild avian species, the tree pie Dendrocitta vagabunda. Chaudhuri S, et al. **Eur J Morphol** 1996 Nov;34(4):321–4

Occurrence of an infanticide within a captive polygynous group of common marmosets, Callithrix jacchus. Kirkpatrick–Tanner M, et al. **Folia Primatol (Basel)** 1996; 67(1):52–8

Genetics of sexual isolation in male hybrids of Drosophila simulans and D. mauritiana. Coyne JA. **Genet Res** 1996 Dec;68(3):211–20

Polygenic control of a mating signal in Drosophila. Pugh AR, et al. **Heredity** 1996 Oct;77 (Pt 4):378–82

Theriogenology question of the month. Cryptorchidism. Burba DJ, et al. **J Am Vet Med Assoc** 1996 Nov 15; 209(10):1705–6

Chemical and behavioral stimulation from females accelerates recrudescence in male Syrian hamsters exposed to short days. Honrado GI, et al. **J Biol Rhythms** 1996 Jun; 11(2):103–12

Differences in the sexual conditioned behavior of male and female Japanese quail (Coturnix japonica). Gutiérrez G, et al. **J Comp Psychol** 1997 Jun;111(2):135–42

Social malleability in cowbirds: new measures reveal new evidence of plasticity in the eastern subspecies (Molothrus ater ater). West MJ, et al. **J Comp Psychol** 1996 Mar; 110(1):15–26

Pairing of Schistosoma mansoni males in infected Syrian hamsters. Rashed AA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):609–14

Mating behavior of Culicoides nubeculosus (Diptera:Ceratopogonidae). Mair J, et al.
J Med Entomol 1996 Sep;33(5):856–8

Changes in expression of neurohypophysial hormone genes during spawning migration in chum salmon, Oncorhynchus keta. Hiraoka S, et al. **J Mol Endocrinol** 1997 Feb; 18(1):49–55

Chronic social stress alters levels of corticotropin–releasing factor and arginine vasopressin mRNA in rat brain. Albeck DS, et al. **J Neurosci** 1997 Jun 15;17(12):4895–903

Inhibition of sexual behavior in male mice infected with Taenia crassiceps cysticerci. Morales J, et al.
J Parasitol 1996 Oct;82(5):689–93

Effect of different bedding materials on the reproductive performance of mice. Potgieter FJ, et al.
J S Afr Vet Assoc 1997 Mar;68(1):8–15

Evolutionary consequences of a trade–off between parental effort and mating effort. Dawson KJ. **J Theor Biol** 1996 Nov 21;183(2):139–58

Nonrandom mating in pikas Ochotona princeps: evidence for inbreeding between individuals of intermediate relatedness. Peacock MM, et al. **Mol Ecol** 1997 Sep;6(9):801–11

Specific involvement of central 5–HT1A receptors in the mediation of male rat ejaculatory behavior. Ahlenius S, et al. **Neurochem Res** 1997 Aug;22(8):1065–70 (34 ref.)

Genetic dissection of sexual orientation: behavioral, cellular, and molecular approaches in Drosophila melanogaster. Yamamoto D, et al. **Neurosci Res** 1996 Oct;26(2):95–107 (117 ref.)

Effects of short– and long–term REM sleep deprivation on sexual behavior in male rats. Velazquez–Moctezuma J, et al. **Physiol Behav** 1996 Feb;59(2):277–81

Freezing impairment of male reproductive behaviors of the freeze–tolerant wood frog, Rana sylvatica. Costanzo JP, et al. **Physiol Zool** 1997 Mar–Apr;70(2):158–66

Sex ratio adjustment in relation to paternal attractiveness in a wild bird population. Ellegren H, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11723–8

dissatisfaction, a gene involved in sex–specific behavior and neural development of Drosophila melanogaster. Finley KD, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):913–8

The strength of indirect selection on female mating preferences. Kirkpatrick M, et al.
Proc Natl Acad Sci U S A 1997 Feb 18;94(4):1282–6

Multiple paternity in two natural populations (orchard and vineyard) of Drosophila. Ochando MD, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11769–73

LH responses to single doses of exogenous GnRH by social Mashona mole–rats: a continuum of socially induced infertility in the family Bathyergidae. Bennett NC, et al.
Proc R Soc Lond B Biol Sci 1997 Jul 22;264(1384):1001–6

Reproductive suppression in subordinate, non–breeding female Damaraland mole–rats: two components to a lifetime of socially induced infertility. Bennett NC, et al.
Proc R Soc Lond B Biol Sci 1996 Nov 22; 263(1376):1599–603

Genetic and behavioural evidence of monogamy in a mammal, Kirk's dik–dik (Madoqua kirkii). Brotherton PN, et al. **Proc R Soc Lond B Biol Sci** 1997 May 22; 264(1382):675–81

Female–biased dispersal in the monogamous mammal Crocidura russula: evidence from field data and microsatellite patterns. Favre L, et al.
Proc R Soc Lond B Biol Sci 1997 Jan 22;264(1378):127–32

Simultaneous influence on male courtship of stimulatory and inhibitory pheromones produced by live sex–mosaic Drosophila melanogaster. Ferveur JF, et al.
Proc R Soc Lond B Biol Sci 1996 Aug 22;263(1373):967–73

The topography of sexually conditioned behaviour: effects of a trace interval. Akins CK, et al.
Q J Exp Psychol B 1996 Nov;49(4):346–56

Predictive value of Drosophila [letter; comment] DeSalle Rob, et al. **Science** 1997 Mar 14;275(5306):1549–51. Comment on: Science 1996 Dec 13;274(5294):1836.

Genetic feminization of pheromones and its behavioral consequences in Drosophila males. Ferveur JF, et al.
Science 1997 Jun 6;276(5318):1555–8

Fly sex drive traced to fru gene [news] [see comments] Roush W. **Science** 1996 Dec 13;274(5294):1836. Comment in: Science 1997 Mar 14;275(5306):1549–51.

Subtle, secret female chimpanzees [comment] Wrangham RW. **Science** 1997 Aug 8;277(5327):774–5. Comment on: Science 1997 Aug 8;277(5327):828–31.

Mating patterns and reproductive wastage in commercial lowland ewes in west Somerset. Smith KC, et al.
Vet Rec 1996 Dec 7;139(23):563–6

[Neuroethological approach to the vomeronasal function] Mori Y, et al. **Tanpakushitsu Kakusan Koso** 1996 Nov; 41(14):2084–92 (15 ref.) **(Jpn)**

DRUG EFFECTS

Longevity treatment with (–)deprenyl in female rats: effect on copulatory activity and lifespan. Dalló J, et al.
Acta Physiol Hung 1996;84(3):277–8

Benzpyrene treatment decreases the sexual activity of adult rats, what is reversed in neonatally allylestrenol treated animals. Karabélyos C, et al. **Acta Physiol Hung** 1996; 84(2):131–7

Effects of the fructose analog, 2,5–anhydro–D–mannitol, on food intake and estrous cyclicity in Syrian hamsters. Schneider JE. **Am J Physiol** 1997 Mar;272(3 Pt 2):R935–9

Leptin facilitates and inhibits sexual behavior in female hamsters. Wade GN, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1354–8

Development of VIP agonists and antagonists with tissue and receptor specificity: effects on behavioral maturation, sexual function, and the biologic clock. Gozes I, et al.
Ann N Y Acad Sci 1996 Dec 26;805:159–69; discussion 169–71 (60 ref.)

Behavioral effects of 3 alpha–androstanediol. I: Modulation of sexual receptivity and promotion of GABA–stimulated chloride flux. Frye CA, et al. **Behav Brain Res** 1996 Sep; 79(1–2):109–18

Behavioral effects of 3 alpha–androstanediol. II: Hypothalamic and preoptic area actions via a GABAergic mechanism. Frye CA, et al. **Behav Brain Res** 1996 Sep; 79(1–2):119–30

Aromatase inhibition blocks the activation and sexual differentiation of appetitive male sexual behavior in Japanese quail. Balthazart J, et al. **Behav Neurosci** 1997 Apr;111(2):381–97

Comparison of the effects of 17 alpha–methyltestosterone,

methandrostenolone, and nandrolone decanoate on the sexual behavior of castrated male rats. Clark AS, et al. **Behav Neurosci** 1996 Dec;110(6):1478–86

Differential behavioral response to dopamine D2 agonists by sexually naive, sexually active, and sexually inactive male rats. Giuliani D, et al. **Behav Neurosci** 1996 Aug; 110(4):802–8

Improvement of fatigue and acceleration of recovery from stress-induced deficient sexual behavior in mice following oral administration of soft-shelled turtle powder. Feng H, et al. **Biol Pharm Bull** 1996 Nov;19(11):1447–50

Inhibition of sexual behaviour and the luteinizing hormone surge by intracerebral progesterone implants in the female sheep. Blache D, et al. **Brain Res** 1996 Nov 25; 741(1–2):117–22

Concurrent androgenic stimulation of the ventral tegmental area and medial preoptic area: synergistic effects on male-typical reproductive behaviors in house mice. Sipos ML, et al. **Brain Res** 1996 Aug 5;729(1):29–44

Effects of mianserin and ketanserin on lordosis behavior after systemic treatment or infusion into the ventromedial nucleus of the hypothalamus. Uphouse L, et al. **Brain Res** 1996 Apr 29;718(1–2):46–52

Effects of the antiestrogen, RU 58668, on female sexual behavior in rats. Vagell ME, et al. **Brain Res Bull** 1996; 41(2):121–4

Effects of p-chlorophenylalanine on male sexual behavior in female rats with mesencephalic raphe nuclei lesions. Matsumoto T, et al. **Endocr J** 1997 Jun;44(3):383–8

Progesterone-independent activation of rat brain progestin receptors by reproductive stimuli. Auger AP, et al. **Endocrinology** 1997 Jan;138(1):511–4

Abnormal estrous cyclicity and behavioral hyporesponsiveness to ovarian hormones in genetically obese Zucker female rats. Bivens CL, et al. **Endocrinology** 1997 Jan;138(1):143–8

Effect of delequamine (RS15385) on female sexual behaviour in the rat. Gonzalez MI, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):1–6

Flesinoxan: a prosexual drug for male rats. Haensel SM, et al. **Eur J Pharmacol** 1997 Jul 2;330(1):1–9

Dopamine receptor antagonists attenuate conditioned place preference following sexual behavior in female Syrian hamsters. Meisel RL, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):21–4

Progesterone facilitation and inhibition of estradiol-induced sexual behavior in the female goat. Billings HJ, et al. **Horm Behav** 1997 Feb;31(1):47–53

Anabolic-androgenic steroid effects on the sexual behavior of intact male rats. Clark AS, et al. **Horm Behav** 1997 Feb; 31(1):35–46

The hormonal induction of mating behavior in female gray short-tailed opossums (Monodelphis domestica). Fadem BH, et al. **Horm Behav** 1996 Mar;30(1):44–9

Melatonin treatment affects the attractiveness of the anogenital area scent in meadow voles (Microtus pennsylvanicus). Ferkin MH, et al. **Horm Behav** 1996 Sep; 30(3):227–35

Effect of prolactin on the attractiveness of male odors to females in meadow voles: independent and additive effects with testosterone. Ferkin MH, et al. **Horm Behav** 1997 Feb; 31(1):55–63

Progestins can have a membrane-mediated action in rat midbrain for facilitation of sexual receptivity. Frye CA, et al. **Horm Behav** 1996 Dec;30(4):682–91

The effects of diethylstilbestrol (DES) before birth on the development of masculine behavior in juvenile female rhesus monkeys. Goy RW, et al. **Horm Behav** 1996 Dec; 30(4):379–86

Effects of androgens on male sexual behavior and secondary sex characters in the explosively breeding spadefoot toad, Scaphiopus couchii. Harvey LA, et al. **Horm Behav** 1997 Feb;31(1):89–96

Prior treatment with estrogen attenuates the effects of the 5-HT1A agonist, 8-OH-DPAT, on lordosis behavior. Jackson A, et al. **Horm Behav** 1996 Jun;30(2):145–52

Inhibition of male sexual behavior by intracranial implants of the protein synthesis inhibitor anisomycin into the medial preoptic area of the rat. McGinnis MY, et al. **Horm Behav** 1997 Feb;31(1):15–23

Actions of testosterone in prepubertal and postpubertal male hamsters: dissociation of effects on reproductive behavior and brain androgen receptor immunoreactivity. Meek LR, et al. **Horm Behav** 1997 Feb;31(1):75–88

Effects of testosterone and 7 alpha-methyl-19-nortestosterone (MENT) on sexual and aggressive behaviors in two inbred strains of male mice. Ogawa S, et al. **Horm Behav** 1996 Mar;30(1):74–84

Effects of 8-OH-DPAT on sexual behavior of male rats castrated at different ages. Rasia-Filho AA, et al. **Horm Behav** 1996 Sep;30(3):251–8

Perinatal steroid treatments alter alloparental and affiliative behavior in prairie voles. Roberts RL, et al. **Horm Behav** 1996 Dec;30(4):576–82

Testosterone control of male-type sexual behavior in the tammar wallaby (Macropus eugenii). Rudd CD, et al. **Horm Behav** 1996 Dec;30(4):446–54

Androgen induction of male sexual behaviors in female goldfish. Stacey N, et al. **Horm Behav** 1996 Dec; 30(4):434–45

Androgen exposure and reproductive behavior of an induced ovulator, the pine vole (Microtus pinetorum). Wekesa KS, et al. **Horm Behav** 1996 Dec;30(4):416–23

7 alpha-methyl-19-nortestosterone facilitates sexual behavior in the male Syrian hamster. Wood RI, et al. **Horm Behav** 1996 Jun;30(2):131–7

Effect of perinatal vitamin A or retinoic acid treatment (hormonal imprinting) on the sexual behavior of adult rats. Csaba G, et al. **Hum Exp Toxicol** 1997 Apr;16(4):193–7

Changes in sexual behavior of adult male and female rats neonatally treated with vitamin D3. Mirzahosseini S, et al. **Hum Exp Toxicol** 1996 Jul;15(7):573–6

Aphrodisiac property of Trichopus zeylanicus extract in male mice. Subramoniam A, et al. **J Ethnopharmacol** 1997 Jun; 57(1):21–7

Inhibitory role of opioid peptides in the regulation of aggressive and sexual behaviors in male Japanese quails. Kotegawa T, et al. **J Exp Zool** 1997 Feb 1;277(2):146–54

Progesterone receptor participates in the stimulatory effect of LHRH, prostaglandin E2, and cyclic AMP on lordosis and proceptive behaviours in rats. Beyer C, et al. **J Neuroendocrinol** 1997 Aug;9(8):609–14

Effect of vorozole, an aromatase enzyme inhibitor, on sexual behavior, aromatase activity and neural immunoreactivity. Rissman EF, et al. **J Neuroendocrinol** 1996 Mar; 8(3):199–210

Dopaminergic regulation of progesterone receptors: brain D5 dopamine receptors mediate induction of lordosis by D1-like agonists in rats. Apostolakis EM, et al. **J Neurosci** 1996 Aug 15;16(16):4823–34

Sociosexual behaviour and paternity in procarbazine-exposed rats with or without regional testicular circulatory isolation. Farr SA, et al. **J Reprod Fertil** 1997 May; 110(1):29–34

Effect of potassium channel modulators on male sexual behavior. Benelli A, et al. **Life Sci** 1997;60(4–5):263–7

Dopamine requires the unoccupied progesterone receptor to induce sexual behavior in mice [published erratum appears in Mol Endocrinol 1997 Apr;11(4):423] Mani SK, et al. **Mol Endocrinol** 1996 Dec;10(12):1728–37

Effect of N-cyclopropylmethyl-norazidodihydroisomorphine (CAM) on partner-seeking behavior and copulation in male rats. Dalló J, et al. **Neurobiology (Bp)** 1996;4(3):257–8

Behavioral effects induced by the dopamine D3 agonist 7-OH-DPAT in sexually-active and -inactive male rats. Ferrari F, et al. **Neuropharmacology** 1996 Mar;35(3):279–84

Involvement of dopamine D2 receptors in the effect of cocaine on sexual behaviour and stretching-yawning of male rats. Ferrari F, et al. **Neuropharmacology** 1997 Jun; 36(6):769–77

Protective actions of the 5-HT2A/2C receptor agonist, DOI, on 5-HT1A receptor-mediated inhibition of lordosis behavior. Maswood S, et al. **Neuropharmacology** 1996 Apr; 35(4):497–501

5-HT1A receptor antagonists and lordosis behavior. Uphouse L, et al. **Neuropharmacology** 1996 Apr;35(4):489–95

Male sexual behaviour not abolished after medial preoptic lesion in adult rats. Kumar VM, et al. **Neuroreport** 1996 Jun 17;7(9):1481–4

Neonatal inhibition of brain estrogen synthesis alters adult neural Fos responses to mating and pheromonal stimulation in the male rat. Bakker J, et al. **Neuroscience** 1996 Sep; 74(1):251–60

Neuropeptide Y stimulates feeding but inhibits sexual behavior in rats. 1985 [classical article] [see comments] Clark JT, et al. **Obes Res** 1997 May;5(3):275–83. Comment in: Obes Res 1997 May;5(3):271–4.

Ca2+/calmodulin system: participation in the progesterone-induced facilitation of lordosis behavior in the ovariectomized estrogen-primed rat. Canchola E, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):403–7

Differential sexual activity of isolated and group-housed male mice: lack of substantial influence of acute or chronic naloxone administration. deCatanzaro D, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):169–74

8-OH-DPAT and male rat sexual behavior: partial blockade by noradrenergic lesion and sexual exhaustion. Fernández-Guasti A, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):111–6

Perinatal exposure to morphine disrupts brain norepinephrine, ovarian cyclicity, and sexual receptivity in rats. Siddiqui A, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):243–8

Effects of acute or chronic administration of risperidone on motor and sexual behavior of male rats. Drago F, et al. **Pharmacol Res** 1997 Jan;35(1):17–25

Failure to demonstrate effects in the progeny of rats treated with gonadotropin prior to mating. Storeng R, et al. **Pharmacol Toxicol** 1996 Oct;79(4):211–3

Differential effects of D1 and D2 dopamine-receptor agonists and antagonists on appetitive and consummatory aspects of male sexual behavior in Japanese quail. Balthazart J, et al. **Physiol Behav** 1997 Sep;62(3):571–80

The effects of 17 alpha-methyltestosterone, methandrostenolone, and nandrolone decanoate on the rat estrous cycle. Blasberg ME, et al. **Physiol Behav** 1997 Feb; 61(2):265–72

Galanin microinjected into the medial preoptic nucleus facilitates female- and male-typical sexual behaviors in the female rat. Bloch GJ, et al. **Physiol Behav** 1996 Jun; 59(6):1147–54

Effect of sustained estradiol release in the intact male rat: correlation of estradiol serum levels with actions on body weight, serum testosterone, and peripheral androgen-dependent tissues. Brewster ME, et al. **Physiol Behav** 1997 Feb;61(2):225–9

Effects of estradiol on sexual receptivity, wheel-running behavior, and vaginal estrus in virgin prairie voles. Cushing BS, et al. **Physiol Behav** 1996 Sep;60(3):829–32

The effect of anabolic-androgenic steroids on sexual behavior and reproductive tissues in male rats. Feinberg MJ, et al. **Physiol Behav** 1997 Jul;62(1):23–30

Early postnatal treatment with transforming growth factor alpha does not alter nonreproductive behavior. Hilakivi-Clarke L, et al. **Physiol Behav** 1997 Jul; 62(1):207–11

Infusion of CCK-A receptor mRNA antisense oligodeoxynucleotides inhibits lordosis behavior. Holland KL, et al. **Physiol Behav** 1997 Sep;62(3):537–43

Inhibition of male sex behavior by androgen receptor blockade in preoptic area or hypothalamus, but not amygdala or septum. McGinnis MY, et al. **Physiol Behav** 1996 Sep;60(3):783–9

Sexually arousing events and relapse to heroin-seeking in sexually experienced male rats. Shaham Y, et al. **Physiol Behav** 1997 Feb;61(2):337–41

Central propranolol and pindolol, but not atenolol nor metoprolol, inhibit sexual behavior in male rats. Smith ER, et al. **Physiol Behav** 1996 Feb;59(2):241–6

Effects of progesterone on the sexual behavior of castrated, testosterone-treated male cynomolgus monkeys (Macaca fascicularis). Zumpe D, et al. **Physiol Behav** 1997 Jul; 62(1):61–7

Effects of paced and non-paced mating stimulation on plasma progesterone, 3 alpha-diol and corticosterone. Frye CA, et al. **Psychoneuroendocrinology** 1996 May;21(4):431–9

The inhibitory effects on sexual behavior and ambulatory activity of the mixed GABAA/GABAB agonist progabide are differentially blocked by GABA receptor antagonists. Agmo A, et al. **Psychopharmacology (Berl)** 1997 Jan; 129(1):27–34

GABAergic drugs and sexual motivation, receptivity and exploratory behaviors in the female rat. Agmo A, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):372–81

Reproductive effects of chronic administration of murine interferon-gamma. Bussiere JL, et al. **Reprod Toxicol** 1996 Sep–Oct;10(5):379–91

Chronic treatment with naloxone enhances libido in the male goat during anoestrus. Fuentes VO, et al. **Vet Rec** 1997 Jul 12;141(2):52

[Sexual behavior and alpha-2 adrenoreceptors in the neocortex of male rats after castration and testosterone administration] Shishkina GT, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun; 47(3):592–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The testis: the witness of the mating system, the site of mutation and the engine of desire. Short RV. **Acta Paediatr Suppl** 1997 Jul;422:3–7 (26 ref.)

Reproduction in free-ranging Propithecus verreauxi: estrus and the relationship between multiple partner matings and fertilization. Brockman DK, et al. **Am J Phys Anthropol** 1996 May;100(1):57–69

Behavioral and endocrine characteristics of the reproductive cycle in wild muriqui monkeys, Brachyteles arachnoides. Strier KB, et al. **Am J Primatol** 1997;42(4):299–310

Steroid excretion during the ovarian cycle in captive and wild muriquis, Brachyteles arachnoides. Ziegler TE, et al. **Am J Primatol** 1997;42(4):311–21

Oestrous behaviour of Holstein cows during cooler and hotter tropical seasons. Rodtian P, et al. **Anim Reprod Sci** 1996 Dec 2;45(1–2):47–58

The effects of lesions in the mesencephalic raphe systems on male rat sexual behavior and locomotor activity. Albinsson A, et al. **Behav Brain Res** 1996 Oct;80(1–2):57–63

beta-adrenergic modulation of male sexual behavior elicited from the medial preoptic area in rats. Mallick H, et al. **Behav Brain Res** 1996 Jan;74(1–2):181–7

The effect of early experience on MHC-based mate preferences in two B10.W strains of mice (Mus domesticus). Eklund A. **Behav Genet** 1997 May;27(3):223–9

Developmental isolation and subsequent adult behavior of Drosophila paulistorum. II. prior experience. Kim YK, et al. **Behav Genet** 1996 Jan;26(1):15–25

Developmental isolation and subsequent adult behavior of Drosophila paulistorum. III. Alternative rearing [published erratum appears in Behav Genet 1996 Sep;26(5):533] Kim YK, et al. **Behav Genet** 1996 Jan;26(1):27–37

Success in mating: a coordinated approach to fitness through genotypes incorporating genes for stress resistance and heterozygous advantage under stress. Parsons P. **Behav Genet** 1997 Jan;27(1):75–81

Genetic variation in "first" male effects on egg laying and remating by female Drosophila melanogaster. Service PM, et al. **Behav Genet** 1996 Jan;26(1):39–48

Species differences in V1a receptor gene expression in monogamous and nonmonogamous voles: behavioral consequences. Young LJ, et al. **Behav Neurosci** 1997 Jun; 111(3):599–605

Choreography of the squid's "nuptial dance". Sauer WH, et al. **Biol Bull** 1997 Apr;192(2):203–7

Endocrine correlates of partner preference behavior in rams. Resko JA, et al. **Biol Reprod** 1996 Jul;55(1):120–6

Variation in mate choice and mating preferences: a review

of causes and consequences. Jennions MD, et al. **Biol Rev Camb Philos Soc** 1997 May;72(2):283–327 (330 ref.)

Sensitivity and behavioral responses to the pheromone androstenone are not mediated by the vomeronasal organ in domestic pigs. Dorries KM, et al. **Brain Behav Evol** 1997; 49(1):53–62

Fos immunoreactivity in the rat brain following consummatory elements of sexual behavior: a sex comparison. Coolen LM, et al. **Brain Res** 1996 Oct 28; 738(1):67–82

Sociosexual stimuli affect ER- and PR-mRNA abundance in the hypothalamus of all-female whiptail lizards. Hartman V, et al. **Brain Res** 1996 Nov 25;741(1–2):344–7

In vitro electro-pharmacological and autoradiographic analyses of muscarinic receptor subtypes in rat hypothalamic ventromedial nucleus: implications for cholinergic regulation of lordosis. Kow LM, et al. **Brain Res** 1995 Oct 2;694(1–2):29–39

Gonadal steroids regulate behavioral responses to pheromones by actions on a subdivision of the medial preoptic nucleus. Swann JM. **Brain Res** 1997 Mar 7; 750(1–2):189–94

Sexual motivation: involvement of endogenous opioids in the ventral tegmental area. van Furth WR, et al. **Brain Res** 1996 Aug 5;729(1):20–8

Axon sparing lesions of the medial preoptic area block female sexual behavior. Veney SL, et al. **Brain Res** 1997 May 9; 756(1–2):273–7

Regulation of masculine sexual behavior: involvement of brain opioids and dopamine. van Furth WR, et al. **Brain Res Brain Res Rev** 1995 Sep;21(2):162–84 (312 ref.)

Sexual dimorphism of GABAA receptor levels in subcortical brain regions of a woodland rodent (Apodemus sylvaticus). Canonaco M, et al. **Brain Res Bull** 1996;40(3):187–94

Levels of estrogen receptor immunoreactivity are altered in behaviorally-relevant brain regions in female rats during pregnancy. Wagner CK, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):328–36

Control of male sexual behavior and sexual orientation in Drosophila by the fruitless gene. Ryner LC, et al. **Cell** 1996 Dec 13;87(6):1079–89

Choice of partners: sexual cell interactions in Dictyostelium discoideum. Urushihara H. **Cell Struct Funct** 1996 Aug; 21(4):231–6 (34 ref.)

Sperm competition: evolution and mechanisms. Birkhead TR. **Curr Top Dev Biol** 1996;33:103–58 (163 ref.)

Endocrine defects in mice carrying a null mutation for the progesterone receptor gene. Chappell PE, et al. **Endocrinology** 1997 Oct;138(10):4147–52

Mating and sex peptide stimulate the accumulation of yolk in oocytes of Drosophila melanogaster. Soller M, et al. **Eur J Biochem** 1997 Feb 1;243(3):732–8

Glycoconjugates during the annual sexual cycle in lizard epididymal ductuli efferentes: a histochemical study. Labate M, et al. **Eur J Histochem** 1997;41(1):47–56

Male faces and odours evoke differential patterns of neurochemical release in the mediobasal hypothalamus of the ewe during oestrus: an insight into sexual motivation? Fabre-Nys C, et al. **Eur J Neurosci** 1997 Aug;9(8):1666–77

The output of the hippocampus is inhibited during social behavior in the male rat. Garritano J, et al. **Exp Brain Res** 1996 Sep;111(1):35–40

Changes in bioactive prolactin-like activity in plasma and its relationship to incubation behavior in breeding ring doves. Buntin JD, et al. **Gen Comp Endocrinol** 1996 May; 102(2):221–32

Courtship behavior and plasma levels of androgens and corticosterone in male marbled salamanders, Ambystoma opacum (ambystomatidae). Houck LD, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):243–52

Involvement of endogenous prolactin in the expression of courtship behavior in the newt, Cynops pyrrhogaster. Toyoda F, et al. **Gen Comp Endocrinol** 1996 May; 102(2):191–6

The timing of thyroid-dependent programming in seasonally breeding male American tree sparrows (Spizella arborea). Wilson FE, et al. **Gen Comp Endocrinol** 1996 Jul; 103(1):82–92

World-wide variation in Drosophila melanogaster sex pheromone: behavioural effects, genetic bases and potential evolutionary consequences. Ferveur JF, et al. **Genetica** 1996 Jan;97(1):73–80

Evidence on hereditary occurrence of placental anastomoses in heterosexual twins in sheep. Szatkowska I, et al. **Hereditas** 1996;124(2):107–10

Do sex differences in the brain explain sex differences in the hormonal induction of reproductive behavior? What 25 years of research on the Japanese quail tells us. Balthazart J, et al. **Horm Behav** 1996 Dec;30(4):627–61 (135 ref.)

Pheromone-induced spawning of Pacific herring. I. Behavioral characterization. Carolsfeld J, et al. **Horm Behav** 1997 Jun;31(3):256–68

The socioendocrinology of adolescent development in male rhesus monkeys (Macaca mulatta). Dixson AF, et al. **Horm Behav** 1997 Apr;31(2):126–35

Behavioral dominance and corpus luteum function in red deer Cervus elaphus. Flint AP, et al. **Horm Behav** 1997 Jun; 31(3):296–304

Progesterone inhibits female-typical receptive behavior and decreases hypothalamic estrogen and progesterone receptor messenger ribonucleic acid levels in whiptail lizards (genus Cnemidophorus). Godwin J, et al. **Horm Behav** 1996 Jun; 30(2):138–44

Seasonal testicular function in male rhesus monkeys. Herndon JG, et al. **Horm Behav** 1996 Sep;30(3):266–71

Medial preoptic/anterior hypothalamic lesions induce a female-typical profile of sexual partner preference in male ferrets. Kindon HA, et al. **Horm Behav** 1996 Dec; 30(4):514–27

Odors providing sexual information in Djungarian hamsters: evidence for an across-odor code. Lai SC, et al. **Horm Behav** 1996 Mar;30(1):26–36

Progesterone receptor function from a behavioral perspective. Mani SK, et al. **Horm Behav** 1997 Jun; 31(3):244–55 (80 ref.)

Sexual partner preference in female zebra finches: the role of early hormones and social environment. Mansukhani V, et al. **Horm Behav** 1996 Dec;30(4):506–13

Effects of gonadal sex steroids on sexual behavior in the big brown bat, Eptesicus fuscus, upon arousal from hibernation. Mendonça MT, et al. **Horm Behav** 1996 Jun;30(2):153–61

Courting and noncourting male red-sided garter snakes, Thamnophis sirtalis parietalis: plasma melatonin levels and the effects of pinealectomy. Mendonça MT, et al. **Horm Behav** 1996 Jun;30(2):176–85

Testosterone induction of male-like vocalizations in female budgerigars (Melopsittacus undulatus). Nespor AA, et al. **Horm Behav** 1996 Jun;30(2):162–9

Reproductive functions illustrating direct and indirect effects of genes on behavior. Ogawa S, et al. **Horm Behav** 1996 Dec;30(4):487–94

Frank A. Beach award. Homologies of animal and human sexual behaviors. Pfaus JG. **Horm Behav** 1996 Sep; 30(3):187–200 (86 ref.)

Estrogen receptor function as revealed by knockout studies: neuroendocrine and behavioral aspects. Rissman EF, et al. **Horm Behav** 1997 Jun;31(3):232–43 (90 ref.)

The role of prostaglandin F2 alpha and oxytocin in the reproductive behavior of a marsupial, Bettongia gaimardi. Rose RW, et al. **Horm Behav** 1997 Apr;31(2):120–5

Social and developmental influences on reproductive function in female Wied's black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Horm Behav** 1997 Apr; 31(2):159–68

Combined olfactory contact with the parent colony and direct contact with nonbreeding animals does not maintain suppression of ovulation in female naked mole-rats (Heterocephalus glaber). Smith TE, et al. **Horm Behav** 1997 Jun;31(3):277–88

Testosterone levels and evoked vocal responses in a natural population of the frog Batrachyla taeniata. Solís R, et al. **Horm Behav** 1997 Apr;31(2):101–9

Effects of androgens and estrogens on sexual differentiation of sex behavior, scent marking, and the sexually dimorphic area of the gerbil hypothalamus. Ulibarri C, et al. **Horm Behav** 1996 Jun;30(2):107–30

Nature needs nurture: the interaction of hormonal and social influences on the development of behavioral sex differences in rhesus monkeys. Wallen K. **Horm Behav** 1996 Dec; 30(4):364–78

Heart rate in female rat in response to snout contact by normal, gonadectomised and testosterone--pretreated gonadectomised male. Kartha KN, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):335–9

Copulatory behavior and fertility in transgenic male mice expressing human placental growth hormone gene. Meliska CJ, et al. **J Androl** 1997 May-Jun;18(3):305–11

Effects of long-term psychological stress on sexual behavior and brain catecholamine levels. Sato Y, et al. **J Androl** 1996 Mar-Apr;17(2):83–90

An evaluation of three methods for assessing sexual behavior in boars. Levis DG, et al. **J Anim Sci** 1997 Feb;75(2):348–55

Relationship between scrotal infrared temperature patterns and natural-mating fertility in beef bulls. Lunstra DD, et al. **J Anim Sci** 1997 Mar;75(3):767–74

Prolactin involvement with the increase in seminal volume after sexual stimulation in stallions. Thomson CH, et al. **J Anim Sci** 1996 Oct;74(10):2468–72

Immunoreactivity of central vasopressin and oxytocin pathways in microtine rodents: a quantitative comparative study. Wang Z, et al. **J Comp Neurol** 1996 Mar 18; 366(4):726–37

Time of ovulation relative to mounting activity in dairy cattle. Walker WL, et al. **J Dairy Sci** 1996 Sep; 79(9):1555–61

Nonsequential developmental trajectories lead to dimorphic vocal circuitry for males with alternative reproductive tactics. Bass AH, et al. **J Neurobiol** 1996 Aug;30(4):493–504

Nitric oxide synthase in mating behavior circuitry of male Syrian hamster brain. Hadeishi Y, et al. **J Neurobiol** 1996 Aug;30(4):480–92

Male-male courtship behavior induced by ectopic expression of the Drosophila white gene: role of sensory function and age. Hing AL, et al. **J Neurobiol** 1996 Aug;30(4):454–64

FOS expression in grafted gonadotropin-releasing hormone neurons in hypogonadal mouse: mating and steroid induction. Wu TJ, et al. **J Neurobiol** 1996 Sep;31(1):67–76

The role of aromatization in the restoration of male rat reproductive behavior. Vagell ME, et al. **J Neuroendocrinol** 1997 Jun;9(6):415–21

The temporal pattern of mating-induced immediate-early gene product immunoreactivity in LHRH and non-LHRH neurons of the estrous ferret forebrain. Wersinger SR, et al. **J Neuroendocrinol** 1996 May;8(5):345–59

Temporally manipulated rescue of visual and courtship abnormalities caused by a nonA mutation in Drosophila. Rendahl KG, et al. **J Neurogenet** 1996 Sep;10(4):247–56

Sign stimulus activates a peptidergic neural system controlling reproductive behavior in Aplysia. Begnoche VL, et al. **J Neurophysiol** 1996 May;75(5):2161–6

Intrahypothalamic implantation of progesterone in castrated male whiptail lizards (Cnemidophorus inornatus) elicits courtship and copulatory behavior and affects androgen receptor- and progesterone receptor-mRNA expression in the brain. Crews D, et al. **J Neurosci** 1996 Nov 15; 16(22):7347–52

Dynamic changes in nucleus accumbens dopamine efflux during the Coolidge effect in male rats. Fiorino DF, et al. **J Neurosci** 1997 Jun 15;17(12):4849–55

Lesions in medial preoptic area and bed nucleus of stria terminalis: differential effects on copulatory behavior and noncontact erection in male rats. Liu YC, et al. **J Neurosci** 1997 Jul 1;17(13):5245–53

Estrogen induces axonal outgrowth in the nucleus retroambiguus-lumbosacral motoneuronal pathway in the adult female cat. VanderHorst VG, et al. **J Neurosci** 1997 Feb 1;17(3):1122–36

Testosterone secretion, musth behaviour and social dominance in captive male Asian elephants living near the equator. Lincoln GA, et al. **J Reprod Fertil** 1996 Sep; 108(1):107–13

Timing of preceptive and receptive behavior of female goats in relation to the preovulatory LH surge. Okada M, et al. **J Vet Med Sci** 1996 Nov;58(11):1085–9

Dopamine requires the unoccupied progesterone receptor to induce sexual behavior in mice [published erratum appears in Mol Endocrinol 1997 Apr;11(4):423] Mani SK, et al. **Mol Endocrinol** 1996 Dec;10(12):1728–37

Furtive mating in female chimpanzees [letter] Gagneux P, et al. **Nature** 1997 May 22;387(6631):358–9

Reversal of sex roles in genetic female mice by disruption of estrogen receptor gene. Ogawa S, et al. **Neuroendocrinology** 1996 Dec;64(6):467–70

Learning without performance in PKC-deficient Drosophila. Kane NS, et al. **Neuron** 1997 Feb;18(2):307–14

Behavioral effects induced by the dopamine D3 agonist 7-OH-DPAT in sexually-active and -inactive male rats. Ferrari F, et al. **Neuropharmacology** 1996 Mar;35(3):279–84

The rhinophores sense pheromones regulating multiple behaviors in Aplysia fasciata. Levy M, et al. **Neurosci Lett** 1997 Apr 4;225(2):113–6

Influence of opioid peptides on the priming action of estrogen on lordosis in ovariectomized rats. Torii M, et al. **Neurosci Lett** 1996 Jul 5;212(1):68–70

Distribution of Fos immunoreactivity following mating versus anogenital investigation in the male rat brain. Coolen LM, et al. **Neuroscience** 1997 Apr;77(4):1151–61

Diversity in cell specific co-expression of four neuropeptide genes involved in control of male copulation behaviour in Lymnaea stagnalis. De Lange RP, et al. **Neuroscience** 1997 May;78(1):289–99

c-Fos immunoreactivity in the sexually dimorphic area of the hypothalamus and related brain regions of male gerbils after exposure to sex-related stimuli or performance of specific sexual behaviors. Heeb MM, et al. **Neuroscience** 1996 Jun;72(4):1049–71

Vaginocervical stimulation suppresses the expression of c-fos induced by mating in thoracic, lumbar and sacral segments of the female rat. Lee JW, et al. **Neuroscience** 1996 Sep; 74(1):237–49

Sex hormones enhance the impact of male sensory cues on both primary and association cortical components of visual and olfactory processing pathways as well as in limbic and hypothalamic regions in female sheep. Ohkura S, et al. **Neuroscience** 1997 Sep;80(1):285–97

Integration of chemosensory and hormonal cues is essential for sexual behaviour in the male Syrian hamster: role of the medial amygdaloid nucleus. Wood RI, et al. **Neuroscience** 1997 Jun;78(4):1027–35

Dopamine and sexual behavior in the male rabbit. Agmo A, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):289–95

Cholinergic-androgenic interaction in the regulation of male sexual behavior in rats. Retana-Marquez S, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):373–8

Sexual differentiation of odor and partner preference in the rat. Bakker J, et al. **Physiol Behav** 1996 Aug;60(2):489–94

Sexual behavior in male rats after nitric oxide synthesis inhibition. Bialy M, et al. **Physiol Behav** 1996 Jul; 60(1):139–43

Lateralization of displays during aggressive and courtship behaviour in the Siamese fighting fish (Betta splendens). Cantalupo C, et al. **Physiol Behav** 1996 Jul;60(1):249–52

Lack of effect of bilateral removal of accessory sex glands on sexual behaviour in the male golden hamster (Mesocricetus auratus). Chow PH, et al. **Physiol Behav** 1996 Feb;59(2):393–6

Reproductive profiles of adult Mongolian gerbils gestated as the sole fetus in a uterine horn. Clark MM, et al. **Physiol Behav** 1997 Jan;61(1):77–81

Vagotomy blocks responses to vaginocervical stimulation after genitospinal neurectomy in rats. Cueva-Rolón R, et al. **Physiol Behav** 1996 Jul;60(1):19–24

Hyposmia for butanol and vanillin in mutant staggerer male mice. Deiss V, et al. **Physiol Behav** 1997 Feb;61(2):209–13

Neuroendocrine-associated behavioral patterns in the male

Asian elephant (Elephas maximus). Dickerman RD, et al. **Physiol Behav** 1997 May;61(5):771–3

Hypothalamic and olfactory control of sexual behavior and partner preference in male rats. Edwards DA, et al. **Physiol Behav** 1996 Nov;60(5):1347–54

Deafferentation of the olfactory bulbs of male rats reduces erection to remote cues from females. Edwards DA, et al. **Physiol Behav** 1997 Jul;62(1):145–9

Oil enriched diets and behavioral parameters in rats' recovery from early undernutrition. Fernandez S, et al. **Physiol Behav** 1997 Jul;62(1):113–9

Female sexual behavior is inhibited by short- and long-term food restriction. Gill CJ, et al. **Physiol Behav** 1997 Mar; 61(3):387–94

Subcortical multiple unit activity changes during rat male sexual behavior. Hernandez-Gonzalez M, et al. **Physiol Behav** 1997 Feb;61(2):285–91

Differential effects of intrathecal thyrotropin-releasing hormone (TRH) on perineal reflexes in male rats. Holmes GM, et al. **Physiol Behav** 1997 Jan;61(1):57–63

Antinociceptive action of vaginocervical stimulation in rat spinal cord: 2-DG analysis. Johnson BM, et al. **Physiol Behav** 1996 Sep;60(3):979–83

Running-induced testicular recrudescence in the meadow vole: role of the circadian system. Kerbeshian MC, et al. **Physiol Behav** 1996 Jul;60(1):165–70

Acute and repeated activation of male sexual behavior by tail pinch: opioid and dopaminergic mechanisms. Leyton M, et al. **Physiol Behav** 1996 Jul;60(1):77–85

Influence of early postnatal gonadal hormones on anxiety in adult male rats. Lucion AB, et al. **Physiol Behav** 1996 Dec;60(6):1419–23

Asymmetry in progestin receptor levels and sexual behavior in female rats. McCormick CM, et al. **Physiol Behav** 1996 Feb;59(2):349–54

Patterns of body temperature, activity, and reproductive behavior in a tropical murid rodent, Arvicanthis niloticus. McElhinny TL, et al. **Physiol Behav** 1997 Jul;62(1):91–6

Difference in testosterone sensitivity in male spontaneously hypertensive (SHR) and Wistar-Kyoto rats (WKY). Magnusson K, et al. **Physiol Behav** 1996 Sep;60(3):907–12

Early olfactory experience, novelty, and choice of sexual partner by male rats. Moore CL, et al. **Physiol Behav** 1996 Nov;60(5):1361–7

Exposure to male siblings facilitates the response to estradiol in sexually naive female prairie voles. Morgan LR, et al. **Physiol Behav** 1997 Jun;61(6):955–6

Penile erection: a reflection of sexual arousal and arousability in male chimpanzees. Nadler RD, et al. **Physiol Behav** 1997 Mar;61(3):425–32

Penile erection in response to remote cues from females: albino rats severely impaired relative to pigmented strains. Sachs BD. **Physiol Behav** 1996 Sep;60(3):803–8

Prenatal social stress masculinizes the females' behaviour in guinea pigs. Sachser N, et al. **Physiol Behav** 1996 Aug; 60(2):589–94

Seasonality in squirrel monkeys (Saimiri sciureus): social facilitation by females. Schiml PA, et al. **Physiol Behav** 1996 Oct;60(4):1105–13

Gonadotropin antagonist modulates courtship behavior in male red-sided garter snakes, Thamnophis sirtalis parietalis. Smith MT, et al. **Physiol Behav** 1997 Jan;61(1):137–43

Behavioral interactions increase pregnancy blocking by unfamiliar male meadow voles. Storey A. **Physiol Behav** 1996 Oct;60(4):1093–8

Appetitive sexual behavior in male rats: 1. The role of olfaction in level-changing behavior. Van Furth WR, et al. **Physiol Behav** 1996 Sep;60(3):999–1005

Appetitive sexual behavior in male rats: 2. sexual reward and level-changing behavior. Van Furth WR, et al. **Physiol Behav** 1996 Sep;60(3):1007–12

Nervus terminalis lesions: II. Enhancement of lordosis induced by tactile stimulation in the hamster. Wirsig-Wiechmann CR. **Physiol Behav** 1997 Jun; 61(6):867–71

Function of intromissions on intromission-return latency of female rats during paced sexual behavior. Yang LY, et al. **Physiol Behav** 1997 Jun;61(6):889–94

Relation of intromissions to the female's postejaculatory refractory period in rats. Yang LY, et al. **Physiol Behav** 1996 Dec;60(6):1505–11

Castration affects the emission of an ultrasonic vocalization in a nocturnal primate, the grey mouse lemur (Microcebus murinus). Zimmermann E. **Physiol Behav** 1996 Sep; 60(3):693–7

The role of sexually dimorphic medical preoptic area of the hypothalamus in the sexual behaviour of male and female rats. Kartha KN, et al. **Physiol Res** 1996;45(6):459–66

Semen production by the emu (Dromaius novaehollandiae). 1. Methods for collection of semen. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):615–21

Semen production by the emu (Dromaius novaehollandiae). 2. Effect of collection frequency on the production of semen and spermatozoa. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):622–6

Ultraviolet plumage colors predict mate preferences in starlings. Bennett ATD, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8618–21

Thyroid hormone and estrogen interact to regulate behavior. Dellovade TL, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12581–6

What initiates speciation in passion-vine butterflies? McMillan WO, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8628–33

Behavioural sex change in the absence of gonads in a coral reef fish. Godwin J, et al. **Proc R Soc Lond B Biol Sci** 1996 Dec 22;263(1377):1683–8

Olfaction and brainstem circuits of reproductive behavior in the rat. Shipley MT, et al. **Prog Brain Res** 1996; 107:355–77 (188 ref.)

A concept for the final common pathway of vocalization and lordosis behavior in the cat. VanderHorst VG, et al. **Prog Brain Res** 1996;107:327–42 (83 ref.)

Anti-sexual and anxiogenic behavioral consequences of corticotropin-releasing factor overexpression are centrally mediated. Heinrichs SC, et al. **Psychoneuroendocrinology** 1997 May;22(4):215–24

Dark-cycle video surveillance of sexual performances of normal and diabetic rats. Tong YC, et al. **Urol Int** 1996; 56(4):207–10

Sexual behavior problems in dogs and cats. Houpt KA. **Vet Clin North Am Small Anim Pract** 1997 May; 27(3):601–15 (18 ref.)

[Sexual behavior and alpha-2 adrenoreceptors in the neocortex of male rats after castration and testosterone administration] Shishkina GT, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):592–6 (Eng. Abstr.) **(Rus)**

SEX BIAS see **PREJUDICE**

SEX CHARACTERISTICS

Functional sexual differences in rat mammillary bodies: a quantitative Ag-NOR study. González-González S, et al. **Acta Anat (Basel)** 1996;157(3):205–9

Sex differences in the incidence of orofacial clefts and the question of primary prevention in families with genetic risk. Peterka M, et al. **Acta Chir Plast** 1996;38(2):57–60

Sex and strain differences of acoustic startle reaction development in adolescent albino Wistar and hooded rats. Błaszczyk J, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(4):919–25

Women and men—same eyes? Midelfart A. **Acta Ophthalmol Scand** 1996 Dec;74(6):589–92 (42 ref.)

Longevity treatment with (-)deprenyl in female rats: effect on copulatory activity and lifespan. Dalló J, et al. **Acta Physiol Hung** 1996;84(3):277–8

Gender-related differences in the regulatory influence of thyroid hormone on the expression of myosin isoforms in young and old rats. Larsson L, et al. **Acta Physiol Scand** 1997 Jan;159(1):81–9

Body composition of mice of different body condition score and sex. Fekete S, et al. **Acta Vet Hung** 1996;44(4):399–410

Gender, sexuality and communication issues that constitute barriers to the use of natural family planning and other fertility awareness-based methods. Diaz M. **Adv Contracept** 1997 Jun-Sep;13(2-3):303–9 (4 ref.)

Sex differences in endogenous retinoid release in the post-embryonic spinal cord of the western mosquitofish, Gambusia affinis affinis. Rosa-Molinar E, et al. **Adv Exp Med Biol** 1997;414:95–108

Gender difference in CD4+ cell counts persist after HIV-1 infection. SEROCO Study Group [letter] Delmas MC, et al. **AIDS** 1997 Jul;11(8):1071–3

Gender, ethnicity and transmission category variation in HIV disease progression. Hessol NA, et al. **AIDS** 1996;10 Suppl A:S69–74 (53 ref.)

Radiologic evidence of sex differences: is the patient a woman or a man? Kurihara Y, et al. **AJR Am J Roentgenol** 1996 Oct;167(4):1037–40

Gender and alcohol dosing: a procedure for producing comparable breath alcohol curves for men and women. Breslin FC, et al. **Alcohol Clin Exp Res** 1997 Aug; 21(5):928–30

Sex differences in alcohol preference and drinking patterns emerge during the early postpubertal period. Lancaster FE, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):1043–9

Gender-specific differences in the QT interval and the effect of autonomic tone and menstrual cycle in healthy adults. Burke JH, et al. **Am J Cardiol** 1997 Jan 15;79(2):178–81

Sex- and age-related antihypertensive effects of amlodipine [letter; comment] Spratt KA. **Am J Cardiol** 1997 Mar 15; 79(6):843–4. Comment on: Am J Cardiol 1996 Apr 1;77(9):713–22.

Gender dimorphism in cardiac adaptation to hypertension is unveiled by prior treatment and efficacy. Zabalgoitia M, et al. **Am J Cardiol** 1996 Oct 1;78(7):838–40

Age and sex effects on energy expenditure. Klausen B, et al. **Am J Clin Nutr** 1997 Apr;65(4):895–907

Prediction of body cell mass, fat-free mass, and total body water with bioelectrical impedance analysis: effects of race, sex, and disease. Kotler DP, et al. **Am J Clin Nutr** 1996 Sep;64(3 Suppl):489S–497S

Plasma total homocysteine in healthy subjects: sex-specific relation with biological traits [see comments] Lussier-Cacan S, et al. **Am J Clin Nutr** 1996 Oct; 64(4):587–93. Comment in: Am J Clin Nutr 1996 Oct;64(4):641–2.

Sex differences in the association between alcohol consumption and cognitive performance. EVA Study Group. Epidemiology of Vascular Aging. Dufouil C, et al. **Am J Epidemiol** 1997 Sep 1;146(5):405–12

Re: "Sex difference in high density lipoprotein cholesterol in six countries" [letter] Kesteloot H, et al. **Am J Epidemiol** 1997 Aug 15;146(4):365–6

Delayed gastric emptying and decreased antral contractility in normal premenopausal women compared with men. Knight LC, et al. **Am J Gastroenterol** 1997 Jun;92(6):968–75

Urinary N-acetyl-beta-D-glucosaminidase changes in relation to age, sex, race, and diastolic and systolic blood pressure in a young adult biracial population. The Bogalusa Heart Study. Agirbasli M, et al. **Am J Hypertens** 1996 Feb; 9(2):157–61

Gender considerations in hypertension pathophysiology and treatment. Hanes DS, et al. **Am J Med** 1996 Sep 30; 101(3A):10S–21S (90 ref.)

Nonfamiliality of the sex ratio in autism [letter] Jones MB, et al. **Am J Med Genet** 1996 Sep 20;67(5):499–500

Classifying sex biased congenital anomalies. Lubinsky MS. **Am J Med Genet** 1997 Mar 31;69(3):225–8

Posttreatment changes in male and female patients: a comparative study. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1996 Dec;110(6):624–9

Gender-related factors affecting primate social behavior: grooming, rank, age, and kinship in heterosexual and all-male groups of stumptail macaques. Butovskaya ML, et al. **Am J Phys Anthropol** 1996 Sep;101(1):39–54

Sex differences in mortality of Japanese macaques: twenty-one years of data from the Arashiyama West population. Fedigan LM, et al. **Am J Phys Anthropol** 1997 Feb;102(2):161–75

Sex differences in the sciatic notch of great apes and modern humans. Hager LD. **Am J Phys Anthropol** 1996 Feb; 99(2):287–300

Estimating sexual dimorphism by method-of-moments. Josephson SC, et al. **Am J Phys Anthropol** 1996 Jun; 100(2):191–206

Mandibular ramus flexure—indicator of sexual dimorphism? Koski K. **Am J Phys Anthropol** 1996 Dec;101(4):545–6

Chin morphology and sexual dimorphism in the fossil hominid mandible sample from Klasies River Mouth. Lam YM, et al. **Am J Phys Anthropol** 1996 Aug;100(4):545–57

Mandibular ramus flexure: a new morphologic indicator of sexual dimorphism in the human skeleton. Loth SR, et al. **Am J Phys Anthropol** 1996 Mar;99(3):473–85

Seasonal and sex variation in physical activity levels among agro-pastoralists in Nepal. Panter-Brick C. **Am J Phys Anthropol** 1996 May;100(1):7–21

Intrasexual competition and body weight dimorphism in anthropoid primates. Plavcan JM, et al. **Am J Phys Anthropol** 1997 May;103(1):37–68 (162 ref.)

Growth, development, and sexual dimorphism in vervet monkeys (Cercopithecus aethiops) at four sites in Kenya. Turner TR, et al. **Am J Phys Anthropol** 1997 May; 103(1):19–35 (53 ref.)

Sexual dimorphism in the pelvic midplane and its relationship to Neandertal reproductive patterns. Walrath DE, et al. **Am J Phys Anthropol** 1996 May;100(1):89–100

Daily exercise and gender influence arterial baroreflex regulation of heart rate and nerve activity. Chen CY, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1840–8

Influence of gender on vasomotor effects of oxidized low-density lipoprotein in porcine coronary arteries. Cox DA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2577–83

Interaction of corticosterone and gonadal steroids on lipid deposition in the female rat. Deshaies Y, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):E355–62

Progesterone-induced changes in sleep in male subjects. Friess E, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E885–91

Gender-dependent effects of exercise training on serum leptin levels in humans. Hickey MS, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E562–6

Feeding patterns of S. crassicaudata (Marsupialia:Dasyuridae): role of gender, photoperiod, and fat stores. Hope PJ, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R78–83

Gender difference in myogenic tone of rat arterioles is due to estrogen-induced, enhanced release of NO. Huang A, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1804–9

Dehydration natriuresis in male rats is mediated by oxytocin. Huang W, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R427–33

Female rats exhibit greater susceptibility to early alcohol-induced liver injury than males. Iimuro Y, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1186–94

Effects of epinephrine on regional free fatty acid and energy metabolism in men and women. Jensen MD, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E259–64

Gender differences in muscle sympathetic nerve activity: effect of body fat distribution. Jones PP, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E363–6

Gender does not influence sympathetic neural reactivity to stress in healthy humans. Jones PP, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H350–7

Sex differences in immunocompetence differ between two Peromyscus species. Klein SL, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R655–60

Gonadal and photoperiodic influences on body mass regulation in adult male and female prairie voles. Kriegsfeld LJ, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1013–8

Comparison of long-term feeding pattern between male and female Fischer 344 rats: influence of estrous cycle. Laviano A, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R413–9

Ovariectomy eliminates sex differences in rat tail artery response to adrenergic nerve stimulation. Li Z, et al.

Am J Physiol 1997 Apr;272(4 Pt 2):H1819–25

Estrogen modulates the dimensions of the lung's gas–exchange surface area and alveoli in female rats. Massaro GD, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):L110–4

Gender differences in energy expended during activities and in daily energy expenditure of elderly people. Morio B, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):E321–7

VIP decelerates non–REM–REM cycles and modulates hormone secretion during sleep in men. Murck H, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R905–11

Females secrete growth hormone with more process irregularity than males in both humans and rats. Pincus SM, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):E107–15

Abdominal adiposity rather than age and sex predicts mass and regularity of GH secretion in healthy adults. Vahl N, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E1108–16

Sexual dimorphism in regional blood flow responses to vasopressin in conscious rats. Wang YX, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1126–31

Sex differences in the cardiovascular and renal actions of vasopressin in conscious rats. Wang YX, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R370–6

Neuromuscular performance characteristics in elite female athletes. Huston LJ, et al. **Am J Sports Med** 1996 Jul–Aug; 24(4):427–36

Morphometric comparison between contralateral sciatic nerves in the male and female rabbit. Muglia U, et al. **Anat Histol Embryol** 1997 Jun;26(2):147–50

Origins of the sex difference in human urinary free cortisol excretion [letter; comment] [see comments] Makin HL. **Ann Clin Biochem** 1996 Sep;33 (Pt 5):471–2. Comment on: Ann Clin Biochem 1996 Mar;33 (Pt 2):174–5. Comment in: Ann Clin Biochem 1997 May;34 (Pt 3):326.

Autosomal folate sensitive fragile sites in an autistic Basque sample. Arrieta I, et al. **Ann Genet** 1996;39(2):69–74

The basis for gender effects in the connective tissue diseases. Lahita RG. **Ann Med Interne (Paris)** 1996;147(4):241–7 (96 ref.)

Apolipoprotein E genotype and gender influence response to tacrine therapy. Farlow MR, et al. **Ann N Y Acad Sci** 1996 Dec 16;802:101–10

Effects of gender on the immune system. Implications for neuropsychiatric systemic lupus erythematosus. Lahita RG. **Ann N Y Acad Sci** 1997 Aug 14;823:247–51

The anatomical substrate for a difference in surgical approach to rectal cancer in male and female patients. Verschueren RC, et al. **Anticancer Res** 1997 Jan–Feb;17(1B):637–41 (18 ref.)

Absence of age and gender effects on the pharmacokinetics of a single 500–milligram oral dose of levofloxacin in healthy subjects. Chien SC, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1562–5

Physiological responses of men and women during exercise in hot environments with equivalent WBGT. Keatisuwan W, et al. **Appl Human Sci** 1996 Nov;15(6):249–58

Sex differences in task performance associated with attention to ambient odor. Gilbert AN, et al. **Arch Environ Health** 1997 May–Jun;52(3):195–9

Language–associated cortical regions are proportionally larger in the female brain. Harasty J, et al. **Arch Neurol** 1997 Feb;54(2):171–6

Decreased corpus callosum size among alcoholic women. Hommer D, et al. **Arch Neurol** 1996 Apr;53(4):359–63

Normal masticatory performance in young adults and children. Julien KC, et al. **Arch Oral Biol** 1996 Jan; 41(1):69–75

Increased incidence of arthrosis in women could be related to femoral and pelvic shape. Kersnič B, et al. **Arch Orthop Trauma Surg** 1997;116(6–7):345–7

Male and female performance on the assessment of motor and process skills. Duran LJ, et al. **Arch Phys Med Rehabil** 1996 Oct;77(10):1019–24

Gender differences in blood ammonia response during exercise. Derave W, et al. **Arch Physiol Biochem** 1997 Apr; 105(2):203–9

The ethological method as a means for evaluating stress in children two to three years of age during a dental examination. Rousset C, et al. **ASDC J Dent Child** 1997 Mar–Apr;64(2):99–106

Women have a larger and less atherogenic low density lipoprotein particle size than men. Nikkilä M, et al. **Atherosclerosis** 1996 Jan 26;119(2):181–90

Gender differences and other determinants of the rise in plasma homocysteine after L–methionine loading. Silberberg J, et al. **Atherosclerosis** 1997 Aug;133(1):105–10

The role of insulin in age–related sex differences of cardiovascular risk profile and morbidity. Willeit J, et al. **Atherosclerosis** 1997 Apr;130(1–2):183–9

A longitudinal study of veterinary students and recent graduates. 4. Gender issues. Heath TJ, et al. **Aust Vet J** 1996 Oct;74(4):305–8

Male–female performance on U.S. Air Force pilot selection tests. Carretta TR. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):818–23

Pelvic blood pooling of men and women during lower body negative pressure. White DD, et al. **Aviat Space Environ Med** 1996 Jun;67(6):555–9

A large sex difference on a two–dimensional mental rotation task. Collins DW, et al. **Behav Neurosci** 1997 Aug; 111(4):845–9

A kinematic analysis of sex–typical movement patterns used during evasive dodging to protect a food item: the role of testicular hormones. Field EF, et al. **Behav Neurosci** 1997 Aug;111(4):808–15

Vernier and grating acuity in adult hooded rats: the influence of sex. Seymoure P, et al. **Behav Neurosci** 1997 Aug; 111(4):792–800

Gender differences in serum leptin levels in humans. Hickey MS, et al. **Biochem Mol Med** 1996 Oct;59(1):1–6

Sex differences in biotransformation of the xenobiotic p–nitroanisole in isolated rat hepatocyte under the influence of phenobarbital. Mazur SP, et al. **Biochemistry (Mosc)** 1997 Apr;62(4):362–3

Differential expression of hepatic stearoyl–CoA desaturase gene 1 in male and female mice. Lee KN, et al. **Biochim Biophys Acta** 1996 Nov 22;1304(2):85–8

Neither testicular androgens nor embryonic aromatase activity alters morphology of the neural song system in zebra finches. Wade J, et al. **Biol Reprod** 1996 Nov; 55(5):1126–32

Sexually dimorphic activation of midbrain tyrosine hydroxylase neurons after mating or exposure to chemosensory cues in the ferret. Wersinger SR, et al. **Biol Reprod** 1997 Jun;56(6):1407–14

Sexual dimorphism in interhemispheric relations: anatomical–behavioral convergence. Zaidel E, et al. **Biol Res** 1995;28(1):27–43 (78 ref.)

Adverse events associated with mefloquine. Women may be more susceptible to adverse events [letter; comment] Phillips M. **BMJ** 1996 Dec 14;313(7071):1552–3. Comment on: BMJ 1996 Aug 31;313(7056):525–8.

Sex differences in weight in infancy. Published centile charts for weights have been updated [letter; comment] Preece MA, et al. **BMJ** 1996 Dec 7;313(7070):1486. Comment on: BMJ 1996 Aug 31;313(7056):513–4.

Sex differences in weight in infancy. Data from Sheffield support authors' findings [letter; comment] Wales JK, et al. **BMJ** 1996 Dec 7;313(7070):1486. Comment on: BMJ 1996 Aug 31;313(7056):513–4.

Bone densitometry of proximal femur in Chinese subjects: gender differences in bone mass and bone areas. Tsai KS, et al. **Bone** 1997 Apr;20(4):365–9

In vivo trabecular microcracks in human vertebral bone. Wenzel TE, et al. **Bone** 1996 Aug;19(2):89–95

Sex differences in circulating P–selectin, E–selectin and thrombomodulin [letter; comment] Jilma B, et al. **Br J Haematol** 1996 Dec;95(3):575–6. Comment on: Br J Haematol 1996 Feb;92(2):498–500.

Epidemiology of coagulation factors, inhibitors and activation markers: the Third Glasgow MONICA Survey. I. Illustrative reference ranges by age, sex and hormone use. Lowe GD, et al. **Br J Haematol** 1997 Jun;97(4):775–84

Systemic sclerosis in men: clinical and immunological differences [letter] Simeón CP, et al. **Br J Rheumatol** 1996 Sep;35(9):910–1

Sexual dimorphism in the human corpus callosum? A comparison of methodologies. Constant D, et al. **Brain Res** 1996 Jul 15;727(1–2):99–106

Fos immunoreactivity in the rat brain following consummatory elements of sexual behavior: a sex comparison. Coolen LM, et al. **Brain Res** 1996 Oct 28; 738(1):67–82

Effects of age and sociosexual experience on the morphology and metabolic capacity of brain nuclei in the leopard gecko (Eublepharis macularius), a lizard with temperature–dependent sex determination. Crews D, et al. **Brain Res** 1997 May 30;758(1–2):169–79

The role of apoptosis in sexual differentiation of the rat sexually dimorphic nucleus of the preoptic area. Davis EC, et al. **Brain Res** 1996 Sep 23;734(1–2):10–8

Vasopressin receptors in the mouse (Mus musculus) brain: sex–related expression in the medial preoptic area and hypothalamus. Dubois–Dauphin M, et al. **Brain Res** 1996 Dec 16;743(1–2):32–9

Sex differences in paradoxical sleep: influences of estrus cycle and ovariectomy. Fang J, et al. **Brain Res** 1996 Sep 23; 734(1–2):275–85

Intrauterine position affects motoneuron number and muscle size in a sexually dimorphic neuromuscular system. Forger NG, et al. **Brain Res** 1996 Sep 30;735(1):119–24

The dopamine–depleting effects of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine in CD–1 mice are gender–dependent. Freyaldenhoven TE, et al. **Brain Res** 1996 Oct 7;735(2):232–8

The sexually dimorphic nucleus of the hypothalamus contains GABA neurons in rat and man. Gao B, et al. **Brain Res** 1996 Dec 2;742(1–2):163–71

Functional sexual dimorphism of the nucleolar organizer regions in the tuberomamillary nucleus. González–González S, et al. **Brain Res** 1996 Oct 14; 736(1–2):1–6

Stereological estimates of postnatal structural differentiation in a sexually dimorphic hypothalamic nucleus involved in vocal control. Holman SD, et al. **Brain Res** 1995 Oct 2; 694(1–2):167–76

Effects of prenatal testosterone treatment on sex differences in the EEG activity of the rat. Juárez J, et al. **Brain Res** 1995 Oct 2;694(1–2):21–8

Estrous and sex variations in vocalization thresholds to hindpaw and tail pressure stimulation in the rat. Kayser V, et al. **Brain Res** 1996 Dec 2;742(1–2):352–4

Enhanced oxidative stress in female rat brain after gonadectomy. Kume–Kick J, et al. **Brain Res** 1996 Oct 28;738(1):8–14

Brain microsomal metabolism of phencyclidine in male and female rats. Laurenzana EM, et al. **Brain Res** 1997 May 9;756(1–2):256–65

Central vasopressin blockade enhances its peripheral release in response to peripheral osmotic stimulation in conscious rats. Liu HW, et al. **Brain Res** 1996 May 6;719(1–2):14–22

The maturation of GABA(A) receptor–mediated control of luteinizing hormone secretion in immature male rats. Mitsushima D, et al. **Brain Res** 1997 Feb 14;748(1–2):258–62

Apparent absence of aging and gender effects on serotonin 1A receptors in human neocortex and hippocampus. Palego L, et al. **Brain Res** 1997 May 30;758(1–2):26–32

Sex differences in bicuculline–induced convulsions: interaction with stress and ligands of benzodiazepine binding sites. Perićić D, et al. **Brain Res** 1997 Mar 28; 752(1–2):279–84

Neonatal isolation alters LTP in freely moving juvenile rats: sex differences. Bronzino JD, et al. **Brain Res Bull** 1996; 41(3):175–83

Sexual dimorphism of GABAA receptor levels in subcortical brain regions of a woodland rodent (Apodemus sylvaticus). Canonaco M, et al. **Brain Res Bull** 1996;40(3):187–94

Interleukin–1 receptor type I mRNA levels in brain regions from male and female rats. Gayle D, et al. **Brain Res Bull** 1997;42(6):463–7

Dimorphic expression of calbindin–D28K in the medial basal hypothalamus from perinatal male and female rats. Lephart ED. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):281–4

Absence of postnatal testosterone fails to demasculinize the male rat's corpus callosum. Mack CM, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):252–5

Sexually dimorphic expression of calcitonin gene–related peptide (CGRP) mRNA in rat medial preoptic nucleus. Herbison AE, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):143–8

Creatine kinase–B mRNA levels in brain regions from male and female rats. Ilyin SE, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):50–6

Gonadal regulation of somatostatin receptor 1, 2 and 3 mRNA levels in the rat anterior pituitary. Señaris RM, et al. **Brain Res Mol Brain Res** 1996 May;38(1):171–5

Recreating the body: women's physical education and the science of sex differences in America, 1900–1940. Verbrugge MH. **Bull Hist Med** 1997 Summer;71(2):273–304

Transactions of the Topeka Psychoanalytic Society. Wilkinson SM. **Bull Menninger Clin** 1996 Fall;60(4):541–3

Gender differences in isometric contractile properties and fatigability in elderly human muscle. Hicks AL, et al. **Can J Appl Physiol** 1996 Dec;21(6):441–54

Smoking and diseases of the gastrointestinal system: an epidemiological review with special reference to sex differences. Ashley MJ. **Can J Gastroenterol** 1997 May–Jun; 11(4):345–52 (84 ref.)

How does the fairer sex fare after PTCA? [editorial; comment] Rabah MM, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):16. Comment on: Cathet Cardiovasc Diagn 1996 Sep;39(1):9–15.

Women fare no worse than men 10 years after attempted coronary angioplasty [see comments] Ruygrok PN, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):9–15. Comment in: Cathet Cardiovasc Diagn 1996 Sep;39(1):16.

A novel family of putative pheromone receptors in mammals with a topographically organized and sexually dimorphic distribution. Herrada G, et al. **Cell** 1997 Aug 22; 90(4):763–73

Sex steroid effects on the development and functioning of the growth hormone axis. Chowen JA, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):297–310 (31 ref.)

Action of steroid hormones on growth and differentiation of CNS and spinal cord organotypic cultures. Levy A, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):445–50

Steroid imprinting and modulation of sexual dimorphism in the luteinizing hormone–releasing hormone neuronal system. López FJ, et al. **Cell Mol Neurobiol** 1996 Apr; 16(2):129–41 (30 ref.)

Sexual dimorphism of arg–vasotocin gene expressing neurons in the telencephalon and dorsal diencephalon of the domestic fowl. An immunocytochemical and in situ hybridization study. Jurkevich A, et al. **Cell Tissue Res** 1997 Jan;287(1):69–77

Sexually dimorphic patterns of neural organization in the feeding appendages of fiddler crabs. Weissburg MJ, et al. **Cell Tissue Res** 1996 Oct;286(1):155–66

Bifurcation patterns in the human sylvian fissure: hemispheric and sex differences. Ide A, et al. **Cereb Cortex** 1996 Sep–Oct;6(5):717–25

Corpus callosum: sex or size? Leonard CM. **Cereb Cortex** 1997 Jan–Feb;7(1):2

Polymorphism of the nucleolus organizer region (NOR) on the putative sex chromosomes of Arctic char (Salvelinus alpinus) is not sex related. Reed KM, et al. **Chromosome Res** 1997 Jun;5(4):221–7

Gender differences in coronary artery diameter involve estrogen, nitric oxide, and Ca(2+)–dependent K+ channels. Wellman GC, et al. **Circ Res** 1996 Nov; 79(5):1024–30

Aortic regurgitation in women. Does the measuring stick need a change? [editorial; comment] Carabello BA. **Circulation** 1996 Nov 15;94(10):2355–7. Comment on: Circulation 1996 Nov 15;94(10):2472–8.

Effects of dietary L–arginine on atherosclerosis and

endothelium-dependent vasodilatation in the hypercholesterolemic rabbit. Response according to treatment duration, anatomic site, and sex. Jeremy RW, et al. **Circulation** 1996 Aug 1;94(3):498–506

Surgery for aortic regurgitation in Women. Contrasting indications and outcomes compared with men [see comments] Klodas E, et al. **Circulation** 1996 Nov 15; 94(10):2472–8. Comment in: Circulation 1996 Nov 15;94(10):2355–7.

Sex difference in risk of torsade de pointes with d,l-sotalol. Lehmann MH, et al. **Circulation** 1996 Nov 15; 94(10):2535–41

Sexually dimorphic response of the balloon-injured rat carotid artery to hormone treatment. Oparil S, et al. **Circulation** 1997 Mar 4;95(5):1301–7

Sex and test verification bias. Impact on the diagnostic value of exercise echocardiography [see comments] Roger VL, et al. **Circulation** 1997 Jan 21;95(2):405–10. Comment in: Circulation 1997 Jan 21;95(2):299–302.

Value of QT dispersion in the interpretation of exercise stress test in women. Stoletniy LN, et al. **Circulation** 1997 Aug 5;96(3):904–10

Lack of increased coronary atherosclerotic risk due to elevated lipoprotein(a) in women > or = 55 years of age. Sunayama S, et al. **Circulation** 1996 Sep 15;94(6):1263–8

Sandwich-type enzyme immunoassay for big endothelin-I in plasma: concentrations in healthy human subjects unaffected by sex or posture [see comments] Aubin P, et al. **Clin Chem** 1997 Jan;43(1):64–70. Comment in: Clin Chem 1997 Jan;43(1):9–10.

Physiology of the skin--differences between women and men. Tur E. **Clin Dermatol** 1997 Jan–Feb;15(1):5–16 (63 ref.)

Influence of gender on the level of pulse pressure: the role of large conduit arteries. Asmar R, et al. **Clin Exp Hypertens** 1997 Jul–Aug;19(5–6):793–811

Surface antigen expression in spleen cells of C57B1/6 mice during ageing: influence of sex and parity. Barrat F, et al. **Clin Exp Immunol** 1997 Mar;107(3):593–600

Detection of SRY in 45,X/47,XYY mosaicism leading to phenotypic female. Imai A, et al. **Clin Genet** 1997 Feb; 51(2):124–6 (15 ref.)

Gender differences in psychosocial adjustment to chronic pain and expenditures for health care services used. Weir R, et al. **Clin J Pain** 1996 Dec;12(4):277–90

Sexual development of the fetus and pubertal child. Malasanos TH. **Clin Obstet Gynecol** 1997 Mar;40(1):153–67 (17 ref.)

Differences in lung function and chest dimensions in school-age girls and boys. Kivastik J, et al. **Clin Physiol** 1997 Mar;17(2):149–57

Intraocular pressure: a comparative analysis in two sexes. Qureshi IA. **Clin Physiol** 1997 May;17(3):247–55

Using the DMF gender difference to assess the "major" role of fluoride toothpastes in the caries decline in industrialized countries: a meta-analysis [published erratum appears in Community Dent Oral Epidemiol 1997 Apr;25(2):192] Haugejorden O. **Community Dent Oral Epidemiol** 1996 Dec;24(6):369–75

Gender differences in characteristics, infection control practices, knowledge and attitudes related to HIV among Ontario dentists. McCarthy GM, et al. **Community Dent Oral Epidemiol** 1996 Dec;24(6):412–5

Serum testosterone, 5-alpha-dihydrotestosterone and different sex characteristics in male fallow deer (Cervus dama): a long-term experiment with accelerated photoperiods. Rolf HJ, et al. **Comp Biochem Physiol A Physiol** 1996 Nov;115(3):207–21

Characterization of lethal action of near-ultraviolet on retinal pigment epithelial cells in vitro. Liu X, et al. **Curr Eye Res** 1995 Dec;14(12):1087–93

Gender-associated diverse mitochondrial DNA molecules of the mussel Mytilus californianus. Beagley CT, et al. **Curr Genet** 1997 Apr;31(4):318–24

Lipid metabolism [editorial] Gaw A. **Curr Opin Lipidol** 1996 Apr;7(2):U49–56

Sex, sexual orientation and sex hormones influence human cognitive function. Kimura D. **Curr Opin Neurobiol** 1996 Apr;6(2):259–63 (43 ref.)

Age- and sex-related changes in lymphocyte subpopulations of healthy Asian subjects: from birth to adulthood. Lee BW, et al. **Cytometry** 1996 Mar 15;26(1):8–15

Metabolic consequences of a family history of NIDDM (the Botnia study): evidence for sex-specific parental effects. Groop L, et al. **Diabetes** 1996 Nov;45(11):1585–93

Depot- and sex-specific differences in human leptin mRNA expression: implications for the control of regional fat distribution. Montague CT, et al. **Diabetes** 1997 Mar; 46(3):342–7

Coronary heart disease in type 2 diabetic patients: common and different risk factors in men and women [letter] Lunetta M, et al. **Diabetes Metab** 1997 Jun;23(3):230–1

Differential ability of male and female rabbit fetal germ cell nuclei to be reprogrammed by nuclear transfer. Moens A, et al. **Differentiation** 1996 Sep;60(5):339–45

Gender-related differences in gastric emptying rate of solid meals. Hermansson G, et al. **Dig Dis Sci** 1996 Oct; 41(10):1994–8

Effect of spatial ability and sex on inter- and intrahemispheric correlation of EEG activity. Corsi-Cabrera M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan;102(1):5–11

Gender difference in pituitary growth hormone-releasing factor (GRF) receptor gene expression in the rat. Miki N, et al. **Endocr J** 1996 Oct;43 Suppl:S123–5

Sex differences in the human metabolism of cortisol. Raven PW, et al. **Endocr Res** 1996 Nov;22(4):751–5

Circadian variation in basal plasma corticosterone and adrenocorticotropin in the rat: sexual dimorphism and changes across the estrous cycle. Atkinson HC, et al. **Endocrinology** 1997 Sep;138(9):3842–8

Role of gonadal steroids in determining sexual differences in expression of Fos-related antigens in tyrosine hydroxylase-immunoreactive neurons in subdivisions of the hypothalamic arcuate nucleus. Cheung S, et al. **Endocrinology** 1997 Sep;138(9):3804–10

Insulin-like growth factor I of peripheral origin acts centrally to accelerate the initiation of female puberty. Hiney JK, et al. **Endocrinology** 1996 Sep;137(9):3717–28

Endocrine and metabolite responses to porcine growth hormone administered by sustained release implant for different lengths of time in male pigs. Klindt J, et al. **Endocrinology** 1996 Sep;137(9):3689–95

Sexual dimorphism of steroid hormone receptor messenger ribonucleic acid expression and hormonal regulation in rat vascular tissue. Knauthe R, et al. **Endocrinology** 1996 Aug; 137(8):3220–7

Hypokalemia decreases testosterone production in male mice by altering luteinizing hormone secretion. Sánchez-Capelo A, et al. **Endocrinology** 1996 Sep;137(9):3738–43

Sexually dimorphic processing of somatosensory and chemosensory inputs to forebrain luteinizing hormone-releasing hormone neurons in mated ferrets. Wersinger SR, et al. **Endocrinology** 1997 Mar;138(3):1121–9

Inhibin A and inhibin B are inversely correlated to follicle-stimulating hormone, yet are discordant during the follicular phase of the rat estrous cycle, and inhibin A is expressed in a sexually dimorphic manner. Woodruff TK, et al. **Endocrinology** 1996 Dec;137(12):5463–7

Male reproductive health and environmental xenoestrogens [see comments] Toppari J, et al. **Environ Health Perspect** 1996 Aug;104 Suppl 4:741–803 (323 ref.). Comment in: Environ Health Perspect 1997 Feb;105(2):162–3.

Risk factors and the sex differential in coronary artery disease. Price JF, et al. **Epidemiology** 1997 Sep;8(5):584–91 (94 ref.)

Comparison of age, sex, breed, history and management in 229 horses with colic. Morris DD, et al. **Equine Vet J Suppl** 1989 Jun;(7):129–32

Exercise training mode affects the hemodynamic responses to lower body negative pressure in women. Franke WD, et al. **Eur J Appl Physiol** 1996;73(1–2):169–74

Reduced performance of male and female athletes at 580 m altitude. Gore CJ, et al. **Eur J Appl Physiol** 1997; 75(2):136–43

Sex difference in force generation capacity during repeated maximal knee extensions. Kanehisa H, et al. **Eur J Appl Physiol** 1996;73(6):557–62

Variations in serum cholinesterase activity in different age and sex groups. Genç S, et al. **Eur J Clin Chem Clin Biochem** 1997 Mar;35(3):239–40

Human low-density lipoproteins: oxidative modification and its relation to age, gender, menopausal status and cholesterol concentrations. Mosinger BJ. **Eur J Clin Chem Clin Biochem** 1997 Mar;35(3):207–14

Gender differences in resting metabolic rate and noradrenaline kinetics in older individuals. Poehlman ET, et al. **Eur J Clin Invest** 1997 Jan;27(1):23–8

Parental gender effects on the insulin-gene-associated susceptibility to insulin-dependent diabetes mellitus [letter; comment] Pugliese A. **Eur J Clin Invest** 1997 May;27(5):359 . Comment on: Eur J Clin Invest 1996 Oct;26(10):847–52.

The relationship between arm-span measurement and height with special reference to gender and ethnicity. Reeves SL, et al. **Eur J Clin Nutr** 1996 Jun;50(6):398–400

Importance of estrogens in human males' fertility and bone pathophysiology. Asteria C. **Eur J Endocrinol** 1997 Aug; 137(2):120–1

Serum leptin in obesity is related to gender and body fat topography but does not predict successful weight loss. Niskanen LK, et al. **Eur J Endocrinol** 1997 Jul;137(1):61–7

Gender-specific changes in thyroid hormone-glucuronidating enzymes in rat liver during short-term fasting and long-term food restriction. Visser TJ, et al. **Eur J Endocrinol** 1996 Oct;135(4):489–97

Infraorbital glands of a male Formosan serow (Capricornis crispus swinhoei). Atoji Y, et al. **Eur J Morphol** 1996; 34(2):87–94

Gastric emptying of solids in humans: improved evaluation by Kaplan-Meier plots, with special reference to obesity and gender. Grybäck P, et al. **Eur J Nucl Med** 1996 Dec; 23(12):1562–7

Sex differences in the effects of 17 beta-estradiol on vascular adrenergic responses. García-Villalón AL, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):339–45

Asthma and respiratory symptoms in 6–7 yr old Italian children: gender, latitude, urbanization and socioeconomic factors. SIDRIA (Italian Studies on Respiratory Disorders in Childhood and the Environment). **Eur Respir J** 1997 Aug;10(8):1780–6

Role of age, education, and gender on cognitive performance in the Framingham Heart Study: community-based norms. Elias MF, et al. **Exp Aging Res** 1997 Jul–Sep;23(3):201–35

Genetic control of urinary deoxyribonuclease I (DNase I) activity levels in mice. Koizumi T. **Exp Anim** 1996 Jul; 45(3):245–50

IQI/Jic mice have thymic B cells. Saegusa J, et al. **Exp Anim** 1996 Oct;45(4):353–60

Sex differences in the developmental changes of GABAergic neurons in zebra finch song control nuclei. Sakaguchi H. **Exp Brain Res** 1996 Feb;108(1):62–8

Age and gender effects on 1,25-dihydroxyvitamin D3-regulated gene expression. Johnson JA, et al. **Exp Gerontol** 1995 Nov–Dec;30(6):631–43

Schistosoma mansoni: susceptibility differences between male and female mice can be mediated by testosterone during early infection. Nakazawa M, et al. **Exp Parasitol** 1997 Mar; 85(3):233–40

Synchronization of human finger movements: delays and sex differences with isotonic 'antiphase' motion. Walsh EG. **Exp Physiol** 1997 May;82(3):559–65

Sex dependent electrocardiogram (ECG) changes in anthracycline-treated mice. Nachbar A, et al. **Exp Toxicol Pathol** 1997 Feb;49(1–2):75–7

Gender and maturation affect glutathione status in human neonatal tissues. Lavoie JC, et al. **Free Radic Biol Med** 1997;23(4):648–57

Consequences of food restriction on short-term growth variation and on plasma circulating hormones in Oreochromis niloticus in relation to sex. Toguyeni A. et al. **Gen Comp Endocrinol** 1996 Aug;103(2):167–75

Family study of lipoprotein lipase gene polymorphisms and plasma triglyceride levels. Georges JL, et al. **Genet Epidemiol** 1996;13(2):179–92

Gender-specific nonrandom association between the alpha 1-antichymotrypsin and apolipoprotein E polymorphisms in the general population and its implication for the risk of Alzheimer's disease. Kamboh MI, et al. **Genet Epidemiol** 1997;14(2):169–80

Sex and meiosis in autotetraploid Pacific oyster, Crassostrea gigas (Thunberg). Guo X, et al. **Genome** 1997 Jun; 40(3):397–405

Sex differences in bone growth of broiler chickens. Rose N, et al. **Growth Dev Aging** 1996 Summer;60(2):49–59

Effect of gender on perinatal outcome in pregnancies complicated by diabetes. Bracero LA, et al. **Gynecol Obstet Invest** 1996;41(1):10–4

Genetically triggered sexual differentiation of brain and behavior. Arnold AP. **Horm Behav** 1996 Dec;30(4):495–505 (77 ref.)

Do sex differences in the brain explain sex differences in the hormonal induction of reproductive behavior? What 25 years of research on the Japanese quail tells us. Balthazart J, et al. **Horm Behav** 1996 Dec;30(4):627–61 (135 ref.)

Global sex differences in stress-induced activation of cerebral metabolism revealed by 2-deoxyglucose autoradiography. Brown LL, et al. **Horm Behav** 1996 Dec;30(4):611–7

Brain organization in a reptile lacking sex chromosomes: effects of gonadectomy and exogenous testosterone. Crews D, et al. **Horm Behav** 1996 Dec;30(4):474–86

Sex differences in glutamic acid decarboxylase mRNA in neonatal rat brain: implications for sexual differentiation. Davis AM, et al. **Horm Behav** 1996 Dec;30(4):538–52

Effects of androgens on male sexual behavior and secondary sex characters in the explosively breeding spadefoot toad, Scaphiopus couchii. Harvey LA, et al. **Horm Behav** 1997 Feb;31(1):89–96

Sexual differentiation of cognitive abilities in women exposed to diethylstilbestrol (DES) prenatally. Hines M, et al. **Horm Behav** 1996 Dec;30(4):354–63

Androgenic effects on hypothalamic asymmetry in a sexually differentiated nucleus related to vocal behavior in Mongolian gerbils. Holman SD, et al. **Horm Behav** 1996 Dec;30(4):662–72

Intracerebral sex differences in the vasotocin system in birds: possible implication in behavioral and autonomic functions. Jurkevich A, et al. **Horm Behav** 1996 Dec;30(4):673–81

Independent differentiation of sexual and social traits. Kendrick AM, et al. **Horm Behav** 1996 Dec;30(4):600–10

Gender change from female to male in classical congenital adrenal hyperplasia. Meyer-Bahlburg HF, et al. **Horm Behav** 1996 Dec;30(4):319–32

Evidence for sexual differentiation of glia in rat brain. Mong JA, et al. **Horm Behav** 1996 Dec;30(4):553–62

Sex differences in sensory and motor branches of the pudendal nerve of the rat. Moore CL, et al. **Horm Behav** 1996 Dec;30(4):590–9

Perinatal steroid treatments alter alloparental and affiliative behavior in prairie voles. Roberts RL, et al. **Horm Behav** 1996 Dec;30(4):576–82

Organizational-activational concept revisited: sexual differentiation in an atherinomorph teleost. Rosa-Molinar E, et al. **Horm Behav** 1996 Dec;30(4):563–75

Searching for sex differences in the vomeronasal pathway. Segovia S, et al. **Horm Behav** 1996 Dec;30(4):618–26

Effects of androgens and estrogens on sexual differentiation of sex behavior, scent marking, and the sexually dimorphic area of the gerbil hypothalamus. Ulibarri C, et al. **Horm Behav** 1996 Jun;30(2):107–30

Nature needs nurture: the interaction of hormonal and social influences on the development of behavioral sex differences in rhesus monkeys. Wallen K. **Horm Behav** 1996 Dec; 30(4):364–78

Critical periods of sensitivity of sexually dimorphic spinal nuclei to prenatal testosterone exposure in female rats. Ward OB, et al. **Horm Behav** 1996 Dec;30(4):407–15

Melatonin binding in the house sparrow song control system: sexual dimorphism and the effect of photoperiod. Whitfield-Rucker MG, et al. **Horm Behav** 1996 Dec; 30(4):528–37

Circulating tumor necrosis factor alpha is elevated in male but not in female patients with type II diabetes mellitus. Pfeiffer A, et al. **Horm Metab Res** 1997 Mar;29(3):111–4

Influence of gender on the correlation between plasma growth hormone profiles and urinary growth hormone excretion. Main KM, et al. **Horm Res** 1997;48(1):16–22

Distinct sexual dimorphism in the effect of hypothyroidism on the expression of the growth hormone receptor and growth hormone–binding protein gene in rat liver. Romero GS, et al. **Horm Res** 1996;45(6):273–8

Gender bender. Schwarz LR, et al. **Hum Exp Toxicol** 1995 Dec;14(12):993–4

Sex differences in mutational rate and mutational mechanism in the NF1 gene in neurofibromatosis type 1 patients. Lázaro C, et al. **Hum Genet** 1996 Dec;98(6):696–9

Annual patterns of luteinizing hormone, follicle stimulating hormone, testosterone and inhibin in normal men. Meriggiola MC, et al. **Hum Reprod** 1996 Feb;11(2):248–52

Gonadal hormones modulate deoxycorticosterone–salt hypertension in male and female rats. Crofton JT, et al. **Hypertension** 1997 Jan;29(1 Pt 2):494–9

Influence of lifestyle, coping, and job stress on blood pressure in men and women. Lindquist TL, et al. **Hypertension** 1997 Jan;29(1 Pt 1):1–7

A two-sex model for treatment of HIV/AIDS and behaviour change in a population of varying size [published erratum appears in IMA J Math Appl Med Biol 1996 Dec;13(4):317] Hsieh YH. **IMA J Math Appl Med Biol** 1996 Sep; 13(3):151–73

Sex related differences in the adhesion, migration, and growth of rat aortic smooth muscle cells in culture [letter] Bačáková L, et al. **In Vitro Cell Dev Biol Anim** 1997 Jun; 33(6):410–3

Gender differences in neutrophil function and cytokine-induced neutrophil chemoattractant generation in endotoxic rats. Spitzer JA, et al. **Inflammation** 1996 Oct; 20(5):485–98

Sex differences in the relationship of body fat distribution with psychosocial variables. Hoffman JM, et al. **Int J Eat Disord** 1997 Sep;22(2):139–45

Gender-specific physiology: how real is it? How important is it? Legato MJ. **Int J Fertil Womens Med** 1997 Jan–Feb; 42(1):19–29 (90 ref.)

Male–female differences in the relationship between obesity and lipids/lipoproteins. Margolis CF, et al. **Int J Obes Relat Metab Disord** 1996 Aug;20(8):784–90

Skinfold and near infrared body fat measurements have sex-specific differences, but may be useful in combination with BMI for determining relative risk factors on a large scale [letter] Rothacker DQ. **Int J Obes Relat Metab Disord** 1995 Dec;19(12):929

Relationship between physical activity related energy expenditure and body composition: a gender difference. Westerterp KR, et al. **Int J Obes Relat Metab Disord** 1997 Mar;21(3):184–8

Body mass index variations by age and sex, and prevalence of overweight in Japanese adults. Yanai M, et al. **Int J Obes Relat Metab Disord** 1997 Jun;21(6):484–8

Sex differences in parasite infections: patterns and processes. Zuk M, et al. **Int J Parasitol** 1996 Oct;26(10):1009–23 (133 ref.)

Race and sex differences in cardiovascular recovery from acute stress. Gillin JL, et al. **Int J Psychophysiol** 1996 Aug–Sep;23(1–2):83–90

Gender differences in adrenergic regulation of lipid mobilization during exercise. Hellström L, et al. **Int J Sports Med** 1996 Aug;17(6):439–47

High HIV prevalence, low condom use and gender differences in sexual behaviour among patients with STD-related complaints at a Nairobi primary health care clinic. Ndinya-Achola JO, et al. **Int J STD AIDS** 1997 Aug;8(8):506–14

Hospital mortality in women and men with acute cardiac ischemia: a prospective multicenter study. Coronado BE, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1490–6

Lower diagnostic accuracy of thallium-201 SPECT myocardial perfusion imaging in women: an effect of smaller chamber size. Hansen CL, et al. **J Am Coll Cardiol** 1996 Nov 1;28(5):1214–9

Variations in normal coronary vasodilatory reserve stratified by artery, gender, heart transplantation and coronary artery disease. Kern MJ, et al. **J Am Coll Cardiol** 1996 Nov 1; 28(5):1154–60

Impaired endocrine and exocrine pancreatic functions in copper-deficient rats: the effect of gender. Fields M, et al. **J Am Coll Nutr** 1997 Aug;16(4):346–51

Nature, nurture, and core gender identity. Robbins M. **J Am Psychoanal Assoc** 1996;44 Suppl:93–117 (107 ref.)

Believes women are better at raising calves [letter; comment] Jessup RV. **J Am Vet Med Assoc** 1996 Aug 15;209(4):721 . Comment on: J Am Vet Med Assoc 1996 Jun 15;208(12):2035–42. Comment on: J Am Vet Med Assoc 1996 Jun 15;208(12):2043–6.

Sexual dimorphism of circulating somatotropin, insulin-like growth factor I and II, insulin-like growth factor binding proteins, and insulin: relationships to growth rate and carcass characteristics in growing lambs. Gatford KL, et al. **J Anim Sci** 1996 Jun;74(6):1314–25

Growth performance and brain neurotransmitters in pigs as affected by tryptophan, protein, and sex. Henry Y, et al. **J Anim Sci** 1996 Nov;74(11):2700–10

Influence of partitioning data by sex on genetic variance and covariance components for weaning weight in beef cattle. Lee C, et al. **J Anim Sci** 1997 Jan;75(1):61–7

An evaluation of three methods for assessing sexual behavior in boars. Levis DG, et al. **J Anim Sci** 1997 Feb;75(2):348–55

The influence of genotype, sex, and dietary lysine on pork subprimal cut yields and carcass quality of pigs fed to either 104 or 127 kilograms. Unruh JA, et al. **J Anim Sci** 1996 Jun;74(6):1274–83

Gender-specific regional changes in genetic structure of muscularity in early adolescence. Loos R, et al. **J Appl Physiol** 1997 Jun;82(6):1802–10

Gender-specific effects of dexamethasone treatment on rat diaphragm structure and function. Prezant DJ, et al. **J Appl Physiol** 1997 Jan;82(1):125–33

Comparison of effects of sustained isocapnic hypoxia on ventilation in men and women. Sajkov D, et al. **J Appl Physiol** 1997 Aug;83(2):599–607

Age and gender interactions in physiological functional capacity: insight from swimming performance. Tanaka H, et al. **J Appl Physiol** 1997 Mar;82(3):846–51

Evidence for sexual differences in the preoptic area regulation of blood glucose in rats. Fóscolo RB, et al. **J Auton Nerv Syst** 1997 May 12;64(1):19–23

Dual-energy X-ray absorptiometry studies of bone mineral status in newborn infants. Koo WW, et al. **J Bone Miner Res** 1996 Jul;11(7):997–102

Influence of physical activity on vertebral deformity in men and women: results from the European Vertebral Osteoporosis Study. Silman AJ, et al. **J Bone Miner Res** 1997 May;12(5):813–9

Gender-related differences in androgen regulation of thromboxane A2 receptors in rat aortic smooth-muscle cells. Higashiura K, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):311–5

Sexual differences in 5'-deiodinase activity in the Harderian gland of Syrian hamsters and the effect of pinealectomy: regulation by androgens. Rubio A, et al. **J Cell Biochem** 1996 Sep 1;62(3):397–404

Localization of testosterone-sensitive and sexually dimorphic aromatase-immunoreactive cells in the quail preoptic area. Balthazart J, et al. **J Chem Neuroanat** 1996 Sep;11(3):147–71

Sexual dimorphism of galanin-like immunoreactivity in the brain and pituitary of goldfish, Carassius auratus. Rao PD, et al. **J Chem Neuroanat** 1996 Apr;10(2):119–35

Twenty-four-hour profiles of luteinizing hormone, follicle-stimulating hormone, testosterone, and estradiol levels: a semilongitudinal study throughout puberty in healthy boys. Albertsson-Wikland K, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):541–9

Clinical review 78: Aromatase deficiency in women and men: would you have predicted the phenotypes? Bulun SE. **J Clin Endocrinol Metab** 1996 Mar;81(3):867–71 (27 ref.)

Growth hormone (GH)-deficient men are more responsive to GH replacement therapy than women. Burman P, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):550–5

Healthy elderly French women living at home have secondary hyperparathyroidism and high bone turnover in winter. EPIDOS Study Group. Chapuy MC, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1129–33

Changes in quantitative bone histomorphometry in aging healthy men. Clarke BL, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2264–70

Serum leptin levels in normal children: relationship to age, gender, body mass index, pituitary-gonadal hormones, and pubertal stage. Garcia-Mayor RV, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2849–55

Differential effect of gender on the sizes of the bones in the axial and appendicular skeletons [published erratum appears in J Clin Endocrinol Metab 1997 Jul;82(7):2274] Gilsanz V, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1603–7

Sex-related C cell hyperplasia in the normal human thyroid: a quantitative autopsy study [see comments] Guyétant S, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):42–7. Comment in: J Clin Endocrinol Metab 1997 Jan;82(1):39–41.

The metabolic significance of leptin in humans: gender-based differences in relationship to adiposity, insulin sensitivity, and energy expenditure. Kennedy A, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1293–300

Circadian cortisol rhythms in healthy boys and girls: relationship with age, growth, body composition, and pubertal development. Knutsson U, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):536–40

Inhibin-B in the male rhesus monkey: impact of neonatal gonadotropin-releasing hormone antagonist treatment and sexual development. Mann DR, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1928–33

A longitudinal assessment of hormonal and physical alterations during normal puberty in boys. V. Rising leptin levels may signal the onset of puberty. Mantzoros CS, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1066–70

Serum leptin concentration in cord blood: relationship to birth weight and gender. Matsuda J, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1642–4

Sexual dimorphism in plasma leptin concentration. Saad MF, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):579–84

Association between vitamin D receptor gene polymorphism and sex-dependent growth during the first two years of life. Suarez F, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):2966–70

Sexual dimorphism of the human stress response may be due to estradiol-mediated stimulation of hypothalamic corticotropin-releasing hormone synthesis [letter; comment] Torpy DJ, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):982. Comment on: J Clin Endocrinol Metab 1996 Oct;81(10):3639–43.

Procollagen propeptide and pyridinium cross-links as markers of type I collagen turnover: sex- and age-related changes in healthy children. Zanze M, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2971–7

Handedness and its association with gender-related psychological and physiological characteristics. Nicholls ME, et al. **J Clin Exp Neuropsychol** 1996 Dec;18(6):905–10

Pharmacokinetic and pharmacodynamic evaluation of the topoisomerase inhibitor irinotecan in cancer patients. Gupta E, et al. **J Clin Oncol** 1997 Apr;15(4):1502–10

Sexual dimorphism of perineal muscles and motoneurons in spotted hyenas. Forger NG, et al. **J Comp Neurol** 1996 Nov 11;375(2):333–43

Projections of the sexually dimorphic anteroventral periventricular nucleus in the female rat. Gu GB, et al. **J Comp Neurol** 1997 Jul 21;384(1):142–64

Postnatal development of a sexually dimorphic, hypothalamic nucleus in gerbils: a stereological study of neuronal number and apoptosis. Holman SD, et al. **J Comp Neurol** 1996 Dec 9;376(2):315–25

Ontogeny of androgen receptor immunoreactivity in lumbar motoneurons and in the sexually dimorphic levator ani muscle of male rats. Jordan CL, et al. **J Comp Neurol** 1997 Mar 3;379(1):88–98

Divergent and parallel development in volume sizes of telencephalic song nuclei in male and female zebra finches. Nixdorf-Bergweiler BE. **J Comp Neurol** 1996 Nov 18; 375(3):445–56

Sexual dimorphism and species differences in the neurophysiology and morphology of the acoustic communication system of two neotropical hylids. McClelland BE, et al. **J Comp Physiol [A]** 1997 May; 180(5):451–62

Evidence of sex-specific differences in masticatory jaw movement patterns. Gerstner GE, et al. **J Dent Res** 1997 Mar;76(3):796–806

Mouse anococcygeus muscle: sexual dimorphism and responsiveness to sex hormones. Fukazawa Y, et al. **J Endocrinol** 1997 Feb;152(2):229–37

GH, GH-releasing factor and somatostatin in the growing lamb: sex differences and mechanisms for sex differences. Gatford KL, et al. **J Endocrinol** 1997 Jan;152(1):19–27

Hummingbird hovering performance in hyperoxic heliox: effects of body mass and sex. Chai P, et al. **J Exp Biol** 1996 Dec;199 (12):2745–55

Effects of embryonic estrogen on differentiation of the gonads and secondary sexual characteristics of male zebra finches. Wade J, et al. **J Exp Zool** 1997 Aug 15; 278(6):405–11

Influence of age, gender, and blood-alcohol concentration on the disappearance rate of alcohol from blood in drinking drivers. Jones AW, et al. **J Forensic Sci** 1996 Nov; 41(6):922–6

Attribution of foot bones to sex and population groups. Smith SL. **J Forensic Sci** 1997 Mar;42(2):186–95

Sexual determination of the femur using discriminant functions. Analysis of a Spanish population of known sex and age. Trancho GJ, et al. **J Forensic Sci** 1997 Mar; 42(2):181–5

Abilities to turn suddenly while walking: effects of age, gender, and available response time. Cao C, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):M88–93

Activation of immune function by dehydroepiandrosterone (DHEA) in age-advanced men. Khorram O, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jan;52(1):M1–7

Bone mineral density and biochemical markers of bone turnover in healthy elderly men and women. Krall EA, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):M61–7

Gender differences in the comparison of self-reported disability and performance measures. Merrill SS, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jan;52(1):M19–26

Aging impairs release of central and peripheral cholecystokinin (CCK) in male but not in female rats. Miyasaka K, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jan;52(1):M14–8

Same-sex and cross-sex relationships. Akiyama H, et al. **J Gerontol B Psychol Sci Soc Sci** 1996 Nov;51(6):P374–82

The retirement adjustment process: changes in the well-being of male retirees across time. Gall TL, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):P110–7

Expectations of nursing home use in the Health and Retirement Study: the role of gender, health, and family characteristics. Holden K, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Sep;52(5):S240–51

The role of bile salt composition in liver pathology of mdr2 (-/-) mice: differences between males and females. van Nieuwerk CM, et al. **J Hepatol** 1997 Jan;26(1):138–45

Gender-dependent regulation of glutamate dehydrogenase expression in periportal and pericentral zones of rat liver lobules. Geerts WJ, et al. **J Histochem Cytochem** 1996 Oct; 44(10):1153–9

Assessing the pelvis of AL 288-1: a reply to Wood and Quinney. Häusler M, et al. **J Hum Evol** 1997 Jan; 32(1):99–102

Interpreting hominid behavior on the basis of sexual dimorphism. Plavcan JM, et al. **J Hum Evol** 1997 Apr; 32(4):345–74

Measurement of blood pressure may be affected by an interaction between subject and observer based on gender. Millar JA, et al. **J Hum Hypertens** 1996 Jul;10(7):449–53

Ambulatory daytime blood pressure in relation to age and gender compared to previous population studies based on office blood pressure. The Danish Study Group on Ambulatory Blood Pressure. Nielsen PE, et al. **J Hum Hypertens** 1996 Sep;10 Suppl 3:S55–8

Differential rates of age of seizure onset between sexes and between hemispheres? Strauss E, et al. **J Int Neuropsychol Soc** 1997 Sep;3(5):428–34

Gender–specific correlation of platelet ionized magnesium and serum low–density–lipoprotein cholesterol concentrations in apparently healthy subjects. Niemela JE, et al. **J Lab Clin Med** 1997 Jan;129(1):89–96

Normal ranges of passive cervical motion for women and men 20–60 years old. Nilsson N, et al. **J Manipulative Physiol Ther** 1996 Jun;19(5):306–9

On the modification of recombination with sex–dependent fitnesses and linkage. Liberman U, et al. **J Math Biol** 1996; 34(3):230–52

Sex differences in mutation rate in higher primates estimated from AMG intron sequences. Huang W, et al. **J Mol Evol** 1997 Apr;44(4):463–5

Nonsequential developmental trajectories lead to dimorphic vocal circuitry for males with alternative reproductive tactics. Bass AH, et al. **J Neurobiol** 1996 Aug;30(4):493–504

Steroid accumulation in song nuclei of a sexually dimorphic duetting bird, the rufous and white wren. Brenowitz EA, et al. **J Neurobiol** 1996 Oct;31(2):235–44

Sex difference among nonneuronal cells precedes sexually dimorphic neuron growth and survival in an avian song control nucleus. Nordeen EJ, et al. **J Neurobiol** 1996 Aug; 30(4):531–42

Androgen receptor mRNA expression in Xenopus laevis CNS: sexual dimorphism and regulation in laryngeal motor nucleus. Pérez J, et al. **J Neurobiol** 1996 Aug;30(4):556–68

Norepinephrine is lateralized within the olfactory bulbs of male mice. Dluzen DE, et al. **J Neurochem** 1996 Mar; 66(3):1222–6

Heat shock induces rapid dephosphorylation of tau in both female and male rats followed by hyperphosphorylation only in female rats: implications for Alzheimer's disease. Papasozomenos SC. **J Neurochem** 1996 Mar;66(3):1140–9

Gender–specific induction of pituitary RNA by estrogen and its modification by thyroid hormone. Zhu YS, et al. **J Neuroendocrinol** 1997 May;9(5):395–403

Gender differences of inducible nitric oxide production in SJL/J mice with experimental autoimmune encephalomyelitis. Ding M, et al. **J Neuroimmunol** 1997 Jul;77(1):99–106

Early and later adoptions have different long–term effects on male rat offspring. Barbazanges A, et al. **J Neurosci** 1996 Dec 1;16(23):7783–90

Identification of a sex–specific quantitative trait locus mediating nonopioid stress–induced analgesia in female mice. Mogil JS, et al. **J Neurosci** 1997 Oct 15; 17(20):7995–8002

Comparison of left ventricular performance in healthy young women and men during exercise. Aksut SV, et al. **J Nucl Cardiol** 1996 Sep–Oct;3(5):415–21

Dietary fat and sex modify heterozygote effects of the rat fatty (fa) allele. Maher MA, et al. **J Nutr** 1996 Oct; 126(10):2487–93

Serum acetate:propionate ratio is related to serum cholesterol in men but not women. Wolever TM, et al. **J Nutr** 1996 Nov;126(11):2790–7

Sex difference of electromyogram of masticatory muscles and mandibular movement during chewing of food. Nagasawa T, et al. **J Oral Rehabil** 1997 Aug;24(8):605–9

A cross–sectional study of canine dimorphism in establishing sex identity: comparison of two statistical methods. Sherfudhin H, et al. **J Oral Rehabil** 1996 Sep;23(9):627–31

Male and female cord blood lipoprotein profile differences throughout the term–period. Bastida S, et al. **J Perinat Med** 1997;25(2):184–91

5–Methoxytryptophol and melatonin in children: differences due to age and sex. Molina–Carballo A, et al. **J Pineal Res** 1996 Sep;21(2):73–9

Gender–specific issues. Aulin KP. **J Sports Sci** 1995 Summer; 13 Spec No:S35–9 (42 ref.)

Sex–hormonal regulation of 20.5 and 24 kDa major male–specific proteins in Syrian hamster submandibular gland. De PK. **J Steroid Biochem Mol Biol** 1996 May; 58(2):183–7

Differential carcinogenicity of benzo[a]pyrene in male and female CD–1 mouse lung. Sharma R, et al. **J Toxicol Environ Health** 1997 Sep;52(1):45–62

Carotid endarterectomy in women versus men: patient characteristics and outcomes. Schneider JR, et al. **J Vasc Surg** 1997 May;25(5):890–6; discussion 897–8

Environmental, age, and sex effects on cotton rat (Sigmodon hispidus) hematology. Robel GL, et al. **J Wildl Dis** 1996 Apr;32(2):390–4

Congenital adrenal hyperplasia and adult sexual behavior [letter; comment] Johnson CJ. **JAMA** 1997 Aug 20; 278(7):549. Comment on: JAMA 1997 Apr 2;277(13):1077–9.

Testosterone does not eliminate the attenuating effect of estrogen on progressive glomerular injury in estrogen–treated hypercholesterolemic male Imai rats. Sakemi T, et al. **Kidney Blood Press Res** 1997;20(1):51–6

Gender differences in the generation of superoxide anions in the rat aorta. Brandes RP, et al. **Life Sci** 1997;60(6):391–6

The effect of age and sex on the expression of prolactin binding activity in the chicken bursa of Fabricius. Di Carlo R, et al. **Life Sci** 1996;59(21):1803–8

Sex–specific effects of growth hormone on hepatic 11beta–hydroxysteroid dehydrogenase activity and gene expression in hypothyroid rats. Liu YJ, et al. **Life Sci** 1997; 61(3):325–34

Gender–specific differences in activity and protein levels of cocaine carboxylesterase in rat tissues. Zhang J, et al. **Life Sci** 1996;59(14):1175–84

Cerebral volumes and spectroscopic proton metabolites on MR: is sex important? Wilkinson ID, et al. **Magn Reson Imaging** 1997;15(2):243–8

A sex–structured delayed recruitment model. Cruywagen GC. **Math Biosci** 1996 May;134(1):85–111

Female voice changes around and after the menopause—an initial investigation. Boulet MJ, et al. **Maturitas** 1996 Feb; 23(1):15–21

Influence of the age and sex on respiratory burst of human monocytes. Alvarez E, et al. **Mech Ageing Dev** 1996 Sep 18;90(2):157–61

Sexual dimorphism in the age changes of the pituitary lactotrophs in rats. Cónsole GM, et al. **Mech Ageing Dev** 1997 May;95(3):157–66

Age and gender differences in hepatic ascorbic acid concentrations and NADPH–dehydroascorbic acid reductase activity. Rikans LE, et al. **Mech Ageing Dev** 1996 Nov 13;91(3):165–9

A genetic basis for the sudden infant death syndrome sex ratio. Mage DT, et al. **Med Hypotheses** 1997 Feb; 48(2):137–42

Standardizing the technique of measurement of the collo–diaphyseal angle. Purkait R. **Med Sci Law** 1996 Oct; 36(4):290–4

Systemic lupus erythematosus in males. A study of 107 Latin American patients. Molina JF, et al. **Medicine (Baltimore)** 1996 May;75(3):124–30 (72 ref.)

Basal growth hormone levels are positively correlated with high–density lipoprotein cholesterol levels in women. Bänsch D, et al. **Metabolism** 1997 Sep;46(9):1039–43

Physiological role of the opioid–cholinergic interaction in growth hormone neuroregulation: effect of sex and food intake. De Marinis L, et al. **Metabolism** 1997 Jul;46(7):740–4

Metabolically active component of fat–free body mass: influences of age, adiposity, and gender. Gallagher D, et al. **Metabolism** 1996 Aug;45(8):992–7

Decreased glucose tolerance, not decreased insulin sensitivity, is a maturational abnormality in the male offspring of a parent with early coronary artery disease. Slyper AH, et al. **Metabolism** 1997 May;46(5):504–12

Sexual dimorphism in the harderian gland of the Syrian hamster is controlled and maintained by hormones, despite seasonal fluctuations in hormone levels: functional implications. Buzzell GR. **Microsc Res Tech** 1996 Jun 1; 34(2):133–8 (30 ref.)

Isolation and identification of sex–specific cDNA clones from the Syrian hamster harderian gland. Domínguez P, et al. **Microsc Res Tech** 1996 Jun 1;34(2):111–7

Sex dependent immune responses by allogenic LDH isozymes. Gupta GS, et al. **Mol Cell Biochem** 1996 May 24;158(2):115–9

Gender–related regional antioxidant profiles in the gastrointestinal tract of the rat. Moghadasian MH, et al. **Mol Cell Biochem** 1996 Feb 9;155(1):43–9

Ontogeny and sexual dimorphic expression of mouse type 2 11beta–hydroxysteroid dehydrogenase. Condon J, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):121–8

Sex– and tissue–specific expression of a cytochrome P450 2C2–luciferase transgene. Li H, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):77–83

Sex differences in response to exogenous corticosterone: a rat model of hypercortisolemia [see comments] Young EA. **Mol Psychiatry** 1996 Sep;1(4):313–9. Comment in: Mol Psychiatry 1996 Sep;1(4):300–1.

What leads to age and gender differences in balance maintenance and recovery? Schultz AB, et al. **Muscle Nerve Suppl** 1997;5:S60–4 (15 ref.)

Gastric emptying: gender differences [letter] Baschetti R. **N Z Med J** 1997 Jun 27;110(1046):238

Is chronic obstructive pulmonary disease different in women? [letter; comment] Poole P, et al. **N Z Med J** 1997 Feb 14;110(1037):41. Comment on: N Z Med J 1996 Nov 22;109(1034):439–42.

Sex, drugs and...[news; comment] Berkley KJ. **Nat Med** 1996 Nov;2(11):1184–5. Comment on: Nat Med 1996 Nov;2(11):1248–50.

Kappa–opioids produce significantly greater analgesia in women than in men [see comments] Gear RW, et al. **Nat Med** 1996 Nov;2(11):1248–50. Comment in: Nat Med 1996 Nov;2(11):1184–5.

Sex differences in cerebral language dominance in complex–partial epilepsy. Kurthen M, et al. **Naturwissenschaften** 1997 Mar;84(3):131–3

Structural sexual dimorphisms in the anteroventral periventricular nucleus of the rat hypothalamus are sensitive to gonadal steroids perinatally, but develop peripubertally. Davis EC, et al. **Neuroendocrinology** 1996 Feb;63(2):142–8

Sex differences in androgen responsiveness in the rat brain: regional differences in the induction of aromatase activity. Roselli CE, et al. **Neuroendocrinology** 1996 Aug; 64(2):139–45

Sex–related alterations in hypothalamic growth hormone–releasing hormone mRNA–but not somatostatin mRNA–expressing cells in genetically obese Zucker rats. Tannenbaum GS, et al. **Neuroendocrinology** 1996 Sep; 64(3):186–93

Effects of gender and gonadectomy on ACTH response to interleukin–1beta in the rat: comparison with the modulation of ACTH response to immobilization stress. Watanobe H, et al. **Neuroimmunomodulation** 1996 Jul–Aug; 3(4):254–8

Epidemiologic observations on Parkinson's disease: incidence and mortality in a prospective study of middle–aged men. Morens DM, et al. **Neurology** 1996 Apr;46(4):1044–50

Spinobulbar muscular atrophy can mimic ALS: the importance of genetic testing in male patients with atypical ALS. Parboosingh JS, et al. **Neurology** 1997 Aug; 49(2):568–72

Sex differences in dopamine receptor overproduction and elimination. Andersen SL, et al. **Neuroreport** 1997 Apr 14; 8(6):1495–8

Functional asymmetry of medial olivocochlear system in humans. Towards a peripheral auditory lateralization. Khalfa S, et al. **Neuroreport** 1996 Apr 10;7(5):993–6

Role of GABAA receptors in the organization of brain and behavioural sex differences. Segovia S, et al. **Neuroreport** 1996 Nov 4;7(15–17):2553–7

Sex differences in nitrite/nitrate levels and antioxidant defense in rat brain. Taskiran D, et al. **Neuroreport** 1997 Mar 3;8(4):881–4

Sexual dimorphism of the interhemispheric asymmetry dynamics during the processing of the transcallosal signal. Makarova IA, et al. **Neurosci Behav Physiol** 1996 Mar–Apr; 26(2):153–63

The dorsal locus coeruleus is larger in male than in female Sprague–Dawley rats. Babstock D, et al. **Neurosci Lett** 1997 Mar 21;224(3):157–60

Sex differences in estradiol–induced progestin receptor immunoreactivity in the guinea pig preoptic area and hypothalamus. Dufourny L, et al. **Neurosci Lett** 1997 Feb 21;223(2):109–12

Sex differences in benzodiazepine binding in the frontal cortex and amygdala of the rat 24 hours after restraint stress. Farabollini F, et al. **Neurosci Lett** 1996 Nov 8; 218(3):177–80

Gender difference in analgesic response to the kappa–opioid pentazocine. Gear RW, et al. **Neurosci Lett** 1996 Mar 1; 205(3):207–9

Evidence that glucose metabolism is decreased in the cerebrum of aged female senescence–accelerated mouse; possible involvement of a low hexokinase activity. Kurokawa T, et al. **Neurosci Lett** 1996 Aug 16;214(1):45–8

Development of cochlear active mechanisms in humans differs between gender. Morlet T, et al. **Neurosci Lett** 1996 Dec 6;220(1):49–52

c–Fos immunoreactivity in the sexually dimorphic area of the hypothalamus and related brain regions of male gerbils after exposure to sex–related stimuli or performance of specific sexual behaviors. Heeb MM, et al. **Neuroscience** 1996 Jun;72(4):1049–71

Endocrine disruptors and sexually dimorphic behaviors: a question of heads and tails. Weiss B. **Neurotoxicology** 1997; 18(2):581–6 (15 ref.)

Analysis of pressure/flow characteristics in the female rat and their pharmacologic modulation. Watanabe T, et al. **Neurourol Urodyn** 1996;15(5):513–27

Effects of postnatal cocaine on differentiation of the rat corpus callosum. Ojima K, et al. **Nippon Hoigaku Zasshi** 1996 Jun;50(3):156–62

Gender differences in the response of plasma leptin concentrations to weight loss in obese older individuals. Nicklas BJ, et al. **Obes Res** 1997 Jan;5(1):62–8

Stereological study of the sexual dimorphism in mouse submandibular glands. Pardini LC, et al. **Okajimas Folia Anat Jpn** 1996 Aug;73(2–3):119–24

Age and sex related changes in heart rate to ventilation coupling: implications for rate adaptive pacemaker algorithms. Rickli H, et al. **Pacing Clin Electrophysiol** 1997 Jan;20(1 Pt 1):104–11

Genetic sensitivity to hot–plate nociception in DBA/2J and C57BL/6J inbred mouse strains: possible sex–specific mediation by delta2–opioid receptors. Mogil JS, et al. **Pain** 1997 Apr;70(2–3):267–77

Gender variations in clinical pain experience. Unruh AM. **Pain** 1996 May–Jun;65(2–3):123–67 (235 ref.)

The lateralization of back pain is sex–related? [letter] Verenich SV. **Pain** 1996 Nov;68(1):183

Schistosoma mansoni: unisexual infections sensitized mice for granuloma formation around intravenously injected eggs. Cheever AW, et al. **Parasitol Res** 1997;83(1):57–9

Sex classification is better with three–dimensional head structure than with image intensity information. O'Toole AJ, et al. **Perception** 1997;26(1):75–84

Influence of gender and endogenous sex steroids on catecholaminergic structures involved in physiological adaptation to hypoxia. Pequignot JM, et al. **Pflugers Arch** 1997 Mar;433(5):580–6

Differences in alpha2–adrenoceptor modulation of calcium

channels in vascular smooth muscle cells of male and female rats. Song J, et al. **Pflugers Arch** 1996 Nov–Dec; 433(1–2):212–4

Calcium and magnesium transport in the cortical thick ascending limb of Henle's loop: influence of age and gender. Wittner M, et al. **Pflugers Arch** 1997 Aug; 434(4):451–6

Evidence for the effect of gender on activity of (S)–mephenytoin 4'–hydroxylase (CYP2C19) in a Chinese population. Xie HG, et al. **Pharmacogenetics** 1997 Apr; 7(2):115–9

Blood and plasma lipoprotein distribution and gender differences in the plasma pharmacokinetics of lipid–associated annamycin. Wasan KM, et al. **Pharmacol Toxicol** 1997 Jun;80(6):301–7

Sex differences and the development of social behavior in a marsupial, the gray short–tailed opossum (Monodelphis domestica). Fadem BH, et al. **Physiol Behav** 1997 Jun; 61(6):857–61

Influence of early postnatal gonadal hormones on anxiety in adult male rats. Lucion AB, et al. **Physiol Behav** 1996 Dec;60(6):1419–23

The circadian rhythm of salivary cortisol in growing pigs: effects of age, gender, and stress. Ruis MA, et al. **Physiol Behav** 1997 Sep;62(3):623–30

Naloxone microinjected into the arcuate nucleus has differential effects on ventilation in male and female rats. Schlenker EH, et al. **Physiol Behav** 1997 Sep;62(3):531–6

Differential gender response produced by meal and ad lib feedings of a high–fat diet in Osborne–Mendel rats. Uhley VE, et al. **Physiol Behav** 1997 Sep;62(3):617–22

Inhibitory effect of hydrocortisone on the blood flow and 45Ca and 3H–proline incorporation into bones of female rats. Kapitola J, et al. **Physiol Res** 1995;44(3):179–84

The role of sexually dimorphic medical preoptic area of the hypothalamus in the sexual behaviour of male and female rats. Kartha KN, et al. **Physiol Res** 1996;45(6):459–66

Corticosterone and the stress response in young western screech–owls: effects of captivity, gender, and activity period. Dufty AM Jr, et al. **Physiol Zool** 1997 Mar–Apr; 70(2):143–9

Gender–confirming facial surgery: considerations on the masculinity and femininity of faces. Hage JJ, et al. **Plast Reconstr Surg** 1997 Jun;99(7):1799–807

Effect of altering the early dietary protein level on males from two strains of commercial turkeys. Noble DO, et al. **Poult Sci** 1996 Nov;75(11):1334–44

Serotonin, sex, and psychiatric illness [see comments] Heninger GR. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):4823–4 (26 ref.). Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):5308–13.

Differences between males and females in rates of serotonin synthesis in human brain [see comments] Nishizawa S, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5308–13 . Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):4823–4.

Behavioral effects of estrogen receptor gene disruption in male mice. Ogawa S, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1476–81

MHC genotype and male ornamentation: genetic evidence for the Hamilton–Zuk model. von Schantz T, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):265–71

Season of birth and schizophrenia: sex difference. Dassa D, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Feb;20(2):243–51

Gender, estrogen, and schizophrenia. Lindamer LA, et al. **Psychopharmacol Bull** 1997;33(2):221–8 (67 ref.)

Gender differences in psychotropic drug metabolism. Pollock BG. **Psychopharmacol Bull** 1997;33(2):235–41 (80 ref.)

Age–related changes in the soluble and the membrane–bound Tyr–aminopeptidase activities in several areas of the male and female rat brain. de Gandarias JM, et al. **Reprod Fertil Dev** 1996;8(3):465–9

Gender differences in the mechanism of dioxin toxicity in rodents and in nonhuman primates. Enan E, et al. **Reprod Toxicol** 1996 Sep–Oct;10(5):401–11

Running economy: comparison of body mass adjustment methods. Davies MJ, et al. **Res Q Exerc Sport** 1997 Jun; 68(2):177–81

Effects of sex and age on the ossification of the collateral cartilages of the distal phalanx of the Finnhorse and the relationships between ossification and body size and type of horse. Ruohoniemi M, et al. **Res Vet Sci** 1997 Jan–Feb; 62(1):34–8

Ventilatory response to hypoxia in rats: gender differences. Mortola JP, et al. **Respir Physiol** 1996 Oct;106(1):21–34

Airways reactivity, atopy and bronchoalveolar lavage in male smokers with airflow obstruction. García–García JM, et al. **Respiration** 1996;63(4):199–204

Age and gender differences in perceived accident likelihood and driver competences. Glendon AI, et al. **Risk Anal** 1996 Dec;16(6):755–62

Effects of body size, body density, gender and growth on underwater torque. Zamparo P, et al. **Scand J Med Sci Sports** 1996 Oct;6(5):273–80

Sex differences in sickness absence in relation to parental status. Akerlind I, et al. **Scand J Soc Med** 1996 Mar; 24(1):27–35

Schizophrenia throughout life: sex differences in severity and profile of symptoms. Gur RE, et al. **Schizophr Res** 1996 Jul;21(1):1–12

Size variation in Middle Pleistocene humans. Arsuaga JL, et al. **Science** 1997 Aug 22;277(5329):1086–8

Males mutate more, bird study shows [news] Dickman S. **Science** 1997 Oct 3;278(5335):34

Genetic feminization of pheromones and its behavioral consequences in Drosophila males. Ferveur JF, et al. **Science** 1997 Jun 6;276(5318):1555–8

Coronary heart disease in women: 1996. Wenger NK. **Semin Reprod Endocrinol** 1996 Feb;14(1):5–14 (87 ref.)

Raynaud's syndrome in women. Landry GJ, et al. **Semin Vasc Surg** 1995 Dec;8(4):327–34 (63 ref.)

Narrowing sex differentials in life expectancy in the industrialized world: early 1970's to early 1990's. Trovato F, et al. **Soc Biol** 1996 Spring–Summer;43(1–2):20–37

Sex differences in coping and depression among young adults. Hänninen V, et al. **Soc Sci Med** 1996 Nov;43(10):1453–60

Gender differences in health: evidence from the Czech Republic. Hraba J, et al. **Soc Sci Med** 1996 Nov; 43(10):1443–51

Chameleon voices: interpreting for deaf parents. Preston P. **Soc Sci Med** 1996 Jun;42(12):1681–90

Gender differences in medical treatment: the case of physician–prescribed activity restrictions. Safran DG, et al. **Soc Sci Med** 1997 Sep;45(5):711–22

Projection of the thoracic pedicle and its morphometric analysis. Ebraheim NA, et al. **Spine** 1997 Feb 1;22(3):233–8

Sex–related differences in acetazolamide–induced cerebral vasomotor reactivity: a statistical misinterpretation? [letter; comment] Nirkko AC, et al. **Stroke** 1996 Sep;27(9):1700. Comment on: Stroke 1996 Jan;27(1):56–8.

Vasopressin and oxytocin immunoreactive neurons and fibers in the forebrain of male and female common marmosets (Callithrix jacchus). Wang Z, et al. **Synapse** 1997 Sep; 27(1):14–25

Gender differences in platelet GPIIb–IIIa activation. Faraday N, et al. **Thromb Haemost** 1997 Apr;77(4):748–54

Diet, gender, and plasma thrombomodulin. Marckmann P, et al. **Thromb Res** 1996 Jun 1;82(5):439–43

Influence of donor and recipient gender on the outcome of liver transplantation. Brooks BK, et al. **Transplantation** 1996 Dec 27;62(12):1784–7

Effect of age and sex of egg strain chickens and of two stocking densities of broilers on voluntary water intake and performance in a sub–humid environment. Balogun TF, et al. **Trop Anim Health Prod** 1997 May;29(2):117–23

Should sex identification be offered as part of the routine ultrasound examination? [comment] Chervenak FA, et al. **Ultrasound Obstet Gynecol** 1996 Nov;8(5):293–4. Comment on: Ultrasound Obstet Gynecol 1996 Nov;8(5):318–21. Comment on: Ultrasound Obstet Gynecol 1996 Nov;8(5):322–4.

Fetal sexing by ultrasound in the second trimester: maternal preference and professional ability [see comments] Harrington K, et al. **Ultrasound Obstet Gynecol** 1996 Nov; 8(5):318–21. Comment in: Ultrasound Obstet Gynecol 1996 Nov;8(5):293–4.

Early second–trimester determination of fetal gender by ultrasound [see comments] Meagher S, et al. **Ultrasound Obstet Gynecol** 1996 Nov;8(5):322–4. Comment in: Ultrasound Obstet Gynecol 1996 Nov;8(5):293–4.

Sex– and age–related composition of 10 617 calculi analyzed by infrared spectroscopy. Daudon M, et al. **Urol Res** 1995; 23(5):319–26

Reversibility of furazolidone–induced changes in testes and secondary sex characters of White Leghorn cockerels. Siddique M, et al. **Vet Hum Toxicol** 1996 Dec;38(6):413–7

Sex determination in ostriches [letter] Madeiros CA. **Vet Rec** 1997 Mar 8;140(10):264

Gender discrimination and prediction on the basis of facial metric information. Fellous JM. **Vision Res** 1997 Jul; 37(14):1961–73

Sex differences in the metabolism of (+)–S–145, a novel thromboxane A2 receptor antagonist in rat. Yamaguchi Y, et al. **Xenobiotica** 1996 Jun;26(6):613–26

[Sexual dimorphism of the human brain––a review of the literature] Supprian T, et al. **Fortschr Neurol Psychiatr** 1996 Oct;64(10):382–9 (61 ref.) (Eng. Abstr.) **(Ger)**

[Sex differences in neuromodulation of mucosal mast cells in the rat jejunum] Gottwald T, et al. **Langenbecks Arch Chir** 1997;382(3):157–63 (Eng. Abstr.) **(Ger)**

[Effect of sex on the increase of GH induced by galanin, alone or in combination with GHRH with or without pyridostigmine in pubescent subjects] Guzzaloni G, et al. **Minerva Endocrinol** 1996 Jun;21(2):53–7 (Eng. Abstr.) **(Ita)**

[Sexual features of acetylcholinesterase activity distribution in the dorsal vagal nucleus of newborn rats] Akmaev IG, et al. **Biull Eksp Biol Med** 1996 May;121(5):594–6 **(Rus)**

[Sex–dependent characteristics of vagal regulation of of corticosterone secretion in rats] Sergeev VG, et al. **Biull Eksp Biol Med** 1996 Nov;122(11):557–9 **(Rus)**

[Age–related and sex–related features of retention and memory of a visual–spatial image in children of preschool age] Anurova IA, et al. **Fiziol Cheloveka** 1996 Jan–Feb; 22(1):50–4 **(Rus)**

[EEG–study of perception of two–dimensional images of three–dimensional objects] Biiasheva ZG, et al. **Fiziol Cheloveka** 1996 Jan–Feb;22(1):46–9 **(Rus)**

[Sex differences in the structure of the laterality distribution in schoolchildren from Tuva] Leutin VP, et al. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):132–7 **(Rus)**

[The effect of age, sex and prenatal exposure to glucocorticoids on the corticosterone level of the blood in rats] Dygalo NN, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):83–8 (Eng. Abstr.) **(Rus)**

[The sexual dimorphism of the monoaminergic system of the brain: the effects of prenatal stress and neonatal androgenization in rats] Nosenko ND. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):46–53 (Eng. Abstr.) **(Rus)**

[The reaction of adult Roborovskii dwarf hamsters (Phodopus roborovskii) to the odor signals of individuals of their own and the opposite sex at different seasons of the year] Sokolov VE, et al. **Izv Akad Nauk Ser Biol** 1996 Sep–Oct;(5):578–82 (Eng. Abstr.) **(Rus)**

[The recognition by European lynxes (Lynx lynx, Felidae, Carnivora) through urinary odor signals of the species, sex and age of conspecific, familiar and unfamiliar individuals] Sokolov VE, et al. **Izv Akad Nauk Ser Biol** 1996 Sep–Oct; (5):571–7 (Eng. Abstr.) **(Rus)**

[The sexual dimorphism of the accessory olfactory system] Guillermón A, et al. **Ontogenez** 1996 Sep–Oct;27(5):341–8 (56 ref.) **(Rus)**

[Psychological features of new male and female cases of pulmonary tuberculosis and their social adaptation] Lomachenkov VD, et al. **Probl Tuberk** 1997;(3):9–11 (Eng. Abstr.) **(Rus)**

[The diagnosis of human sex and body height from fragmented bone remains (Methodological Recommendations No. 94/267 approved by the Ministry of Health and the Medical Industry of Russia 3 July 95)] Zviagin VN, et al. **Sud Med Ekspert** 1997 Jan–Mar; 40(1):24–31 **(Rus)**

[Lymphogranulomatosis: a systems analysis of the age– and sex–related characteristics of hemopoiesis and metabolism] Genkin AA, et al. **Ter Arkh** 1997;69(2):37–45 (Eng. Abstr.) **(Rus)**

[The effect of the repeated experience of victories and defeats in social conflicts on the function of the brain serotoninergic system in male mice] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov–Dec; 46(6):1088–96 (Eng. Abstr.) **(Rus)**

[Sex–dependent differences in the action of chronically administered beta–casomorphin–7 on the behavior of white rat pups] Maklakova AS, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):610–3 **(Rus)**

[Powerlessness and scientific theories. A comprehensive gender research is necessary] Dahlström A, et al. **Lakartidningen** 1997 Feb 5;94(6):446–8 **(Swe)**

[Sexual dimorphism in osteoarthrosis deformans] Neĭko IeM, et al. **Lik Sprava** 1996 Mar–Apr;(3–4):137–40 (Eng. Abstr.) **(Ukr)**

SEX CHROMATIN

see related
SEX DETERMINATION

GENETICS

Fluorescent in situ hybridization assessment of chromosome copy number in buccal mucosal cells. Mark HF, et al. **Cytobios** 1996;87(349):117–26

SEX CHROMOSOME ABNORMALITIES

A case with mosaic di–, tetra–, and octacentric ring Y chromosomes. Henegariu O, et al. **Am J Med Genet** 1997 Sep 5;71(4):426–9

Survey of the fragile X syndrome and the fragile X E syndrome in a special education needs population. Meadows KL, et al. **Am J Med Genet** 1996 Aug 9; 64(2):428–33

Telomeric fusion and chromosome instability in multiple tissues of a patient with mosaic Ullrich–Turner syndrome. Sawyer JR, et al. **Am J Med Genet** 1997 Apr 14;69(4):383–7

Chromosomal numerical aberrations in gastric carcinoma: analysis of eighteen cases using in situ hybridization. Han K, et al. **Cancer Genet Cytogenet** 1996 Dec;92(2):122–9

XYY male and hematologic malignancy. Oguma N, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):179–81 (22 ref.)

Fried syndrome is a distinct X linked mental retardation syndrome mapping to Xp22. Strain L, et al. **J Med Genet** 1997 Jul;34(7):535–40

Sex reversal in a child with duplication of sex reversing locus on the short arm of the X chromosome (Xp). Ito T, et al. **J Pediatr Endocrinol Metab** 1996 May–Jun;9(3):429–33

Development in a 46 XX boy with positive SRY gene. Rego A, et al. **J Pediatr Endocrinol Metab** 1996 Nov–Dec; 9(6):623–6

DNA exposure and condensation in the X and 21 chromosomes. Puck TT, et al. **Stem Cells** 1996 Sep; 14(5):548–57

DIAGNOSIS

Application of fluorescent in situ hybridization with X and Y chromosome specific probes to buccal smear analysis. Schad CR, et al. **Am J Med Genet** 1996 Dec 11;66(2):187–92

Report of an XX male with hypospadias and pubertal gynecomastia, SRY gene negative in blood leukocytes but SRY gene positive in testicular cells. Dardis A, et al. **Horm Res** 1997;47(2):85–8

Results of cytogenetic investigation in adolescent patients with primary or secondary amenorrhea. Temoçin K, et al. **J Pediatr Adolesc Gynecol** 1997 May;10(2):86–8

Cytogenetic survey of 1,007 infertile males. Yoshida A, et al. **Urol Int** 1997;58(3):166–76

[Study on the relationship between clinical phenotypes and X chromosome abnormalities] Shintaku Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Apr;48(4):281–4 **(Jpn)**

ETIOLOGY

Sex chromosomal anomalies in pregnancies conceived through intracytoplasmic sperm injection: a case for genetic counselling. Meschede D, et al. **Hum Reprod** 1997 Jun; 12(6):1125–7 (19 ref.)

GENETICS

A sex reversal infant with XX karyotype and complete male external genitalia. Nomura Y, et al. **Acta Paediatr Jpn** 1995 Dec;37(6):706–9

Involvement of the pontomedullary corticospinal tracts: a useful finding in the diagnosis of X-linked adrenoleukodystrophy. Barkovich AJ, et al. **AJNR Am J Neuroradiol** 1997 Jan;18(1):95–100

A gene for dominant nonspecific X-linked mental retardation is located in Xq28. des Portes V, et al. **Am J Hum Genet** 1997 Apr;60(4):903–9

A submicroscopic deletion in Xq26 associated with familial situs ambiguus. Ferrero GB, et al. **Am J Hum Genet** 1997 Aug;61(2):395–401

Identification of a duplication of Xq28 associated with bilateral periventricular nodular heterotopia. Fink JM, et al. **Am J Hum Genet** 1997 Aug;61(2):379–87

Linkage disequilibrium and physical mapping of X-linked juvenile retinoschisis. Huopaniemi L, et al. **Am J Hum Genet** 1997 May;60(5):1139–49

X-linked recessive panhypopituitarism associated with a regional duplication in Xq25–q26. Lagerström-Fermér M, et al. **Am J Hum Genet** 1997 Apr;60(4):910–6

FRAXE mutation analysis in three Spanish families. Carbonell P, et al. **Am J Med Genet** 1996 Aug 9; 64(2):434–40

Premutation for the Martin–Bell syndrome analyzed in a large Sardinian family: III. Molecular analysis with the StB12.3 probe. Grasso M, et al. **Am J Med Genet** 1996 Aug 9;64(2):283–6

Amplification of the Xq28 FRAXE repeats: extreme phenotype variability? Murgia A, et al. **Am J Med Genet** 1996 Aug 9;64(2):441–4

Fragile X mutation and FG syndrome–like phenotype. Piussan C, et al. **Am J Med Genet** 1996 Aug 9;64(2):395–8

Application of fluorescent in situ hybridization with X and Y chromosome specific probes to buccal smear analysis. Schad CR, et al. **Am J Med Genet** 1996 Dec 11;66(2):187–92

Molecular cytogenetic identification of four X chromosome duplications. Zhang A, et al. **Am J Med Genet** 1997 Jan 10;68(1):29–38 (38 ref.)

Intriguing association between disease associated unstable trinucleotide repeat and CpG island. Gourdon G, et al. **Ann Genet** 1997;40(2):73–7

A phenotypical male infant with 46,X,der(Y)t(X;Y)(?;p11) de novo. Govaerts LC, et al. **Ann Genet** 1997;40(1):41–4

Trisomy X: ACLF (Association des Cytogénéticiens de Langue Française) retrospective study. Guichet A, et al. **Ann Genet** 1996;39(3):117–22 (20 ref.)

Characterization of an isodicentric Y-chromosome for the long arm in a newborn with mixed gonadal dysgenesis. Kohn B, et al. **Ann Genet** 1997;40(1):10–3

Karyotype-phenotype correlation in females with X chromosome abnormalities. Kosmaidou-Aravidou Z. **Ann N Y Acad Sci** 1997 Jun 17;816:373–7 (27 ref.)

An XXYY male with schizophrenia. Lee JW. **Aust N Z J Psychiatry** 1996 Aug;30(4):553–6

X chromosome and infantile autism. Petit E, et al. **Biol Psychiatry** 1996 Sep 15;40(6):457–64

A new mutation of the L1CAM gene in an X-linked hydrocephalus family. Izumoto S, et al. **Childs Nerv Syst** 1996 Dec;12(12):742–7

Two brothers with multiple congenital anomalies and mental retardation due to disomy (X)(q12—>q13.3) inherited from the mother. Apacik C, et al. **Clin Genet** 1996 Aug; 50(2):63–73 (23 ref.)

A case of premature menopause in an ovulating 46,XY female patient. Harrington DJ, et al. **Curr Opin Obstet Gynecol** 1996 Dec;8(6):465–9

New mutations in the X-linked form of Charcot-Marie-Tooth disease. Latour P, et al. **Eur Neurol** 1997;37(1):38–42 (23 ref.)

Prevalence of the 45, X karyotype among Turner syndrome patients [letter] Beiguelman B, et al. **Genet Couns** 1996; 7(3):231–2

Kabuki syndrome in son and low grade mosaic 45,X/46,XX in mother. Van Hagen JM, et al. **Genet Couns** 1996; 7(3):201–6 (16 ref.)

Evidence of a third locus in X-linked recessive spastic paraplegia [letter] Steinmüller R, et al. **Hum Genet** 1997 Aug;100(2):287–9

Molecular studies in three patients with isodicentric Y chromosome. Stuppia L, et al. **Hum Genet** 1996 Dec; 98(6):691–5

Linkage and physical mapping of X-linked lissencephaly/SBH (XLIS): a gene causing neuronal migration defects in human brain. Ross ME, et al. **Hum Mol Genet** 1997 Apr;6(4):555–62

Cytogenetics of infertile men. Van Assche E, et al. **Hum Reprod** 1996 Dec;11 Suppl 4:1–24; discussion 25–6 (114 ref.)

Genetic aspects of human infertility. Vogt PH. **Int J Androl** 1995 Dec;18 Suppl 2:3–6 (12 ref.)

Atypical presentation of X-linked childhood adrenoleukodystrophy with an unusual magnetic resonance imaging pattern. Afifi AK, et al. **J Child Neurol** 1996 Nov; 11(6):497–9

Partial disomy of Xp and the presence of SRY in a phenotypic female. Bajalica S, et al. **J Med Genet** 1995 Dec;32(12):987–90

Dominant X linked subcortical laminar heterotopia and lissencephaly syndrome (XSCLH/LIS): evidence for the occurrence of mutation in males and mapping of a potential locus in Xq22. des Portes V, et al. **J Med Genet** 1997 Mar; 34(3):177–83

The Y specific growth gene(s): how does it promote stature? Ogata T, et al. **J Med Genet** 1997 Apr;34(4):323–5

A new X linked recessive syndrome of mental retardation and mild dysmorphism maps to Xq28. Pai GS, et al. **J Med Genet** 1997 Jul;34(7):529–34

A duplication of distal Xp associated with hypogonadotrophic hypogonadism, hypoplastic external genitalia, mental retardation, and multiple congenital abnormalities. Telvi L, et al. **J Med Genet** 1996 Sep; 33(9):767–71

A Japanese patient with X-linked alpha-thalassemia/mental retardation syndrome: an additional case report. Kurosawa K, et al. **Jpn J Hum Genet** 1996 Sep;41(3):329–32

Mutations in the kinase Rsk-2 associated with Coffin-Lowry syndrome. Trivier E, et al. **Nature** 1996 Dec 12; 384(6609):567–70

Two novel mutations in the Norrie disease gene associated with the classical ocular phenotype. Caballero M, et al. **Ophthalmic Genet** 1996 Dec;17(4):187–91

Ocular phenotypes associated with two mutations (R121W, C126X) in the Norrie disease gene. Kellner U, et al. **Ophthalmic Genet** 1996 Jun;17(2):67–74

Bilateral breast tumors, malignant phyllodes tumor and invasive lobular carcinoma in a 46,XX/46,XY mosaic female with family history of breast cancer. Kasami M, et al. **Pathol Int** 1997 Feb-Mar;47(2-3):147–54

Middle aortic syndrome in a boy with arteriohepatic dysplasia (Alagille syndrome). Shefler AG, et al. **Pediatr Cardiol** 1997 May-Jun;18(3):232–4

Arrested cerebral adrenoleukodystrophy: a clinical and proton magnetic resonance spectroscopy study in three patients. Korenke GC, et al. **Pediatr Neurol** 1996 Sep; 15(2):103–7

A linkage study of schizophrenia to markers within Xp11 near the MAOB gene. Dann J, et al. **Psychiatry Res** 1997 May 30;70(3):131–43

Failure to support a pseudoautosomal locus for schizophrenia. Ponnudurai R. **Psychiatry Res** 1996 Jun 1; 62(3):281–4

Azoospermia in a 46,XX/47,XXX phenotypic male. Cooper CS, et al. **Urology** 1996 Dec;48(6):947–8

[Angiokeratoma corporis diffusum universale (Fabry disease)] Frank J, et al. **Hautarzt** 1996 Oct;47(10):776–9 (Eng. Abstr.) **(Ger)**

[Incomplete congenital stationary night blindness (CSNB). An important differential diagnosis of congenital nystagmus] Lorenz B, et al. **Klin Monatsbl Augenheilkd** 1996 Jan;208(1):48–55 (Eng. Abstr.) **(Ger)**

[Dyskeratosis congenita. Genetic hematologic-immunologic systemic disease with pancytopenia] Sölder B, et al. **Klin Padiatr** 1996 Nov-Dec;208(6):344–9 (50 ref.) (Eng. Abstr.) **(Ger)**

[X chromosomal bulbospinal neuropathy (X-BSN, Kennedy syndrome): an illness with repetitive triplet sequences. Case report, differential diagnosis and molecular genetics aspects] Abel A, et al. **Nervenarzt** 1996 Dec;67(12):1011–9 (44 ref.) (Eng. Abstr.) **(Ger)**

[Albinism. Current clinical and molecular genetic aspects of an important differential congenital nystagmus diagnosis] Lorenz B. **Ophthalmologe** 1997 Jul;94(7):534–44 (46 ref.) **(Ger)**

[Genetic basis of Turner syndrome (published erratum appears in Pol Arch Med Wewn 1995 Aug;94(2):183)] Ślęzak R, et al. **Pol Arch Med Wewn** 1995 Oct;94(4):358–63 (39 ref.) **(Pol)**

PATHOLOGY

Histopathology and molecular cytogenetics of a corneal opacity associated with the trisomy 8 mosaic syndrome (46,XY/47,XY, +8). Scott JA, et al. **Cornea** 1997 Jan; 16(1):35–41

PSYCHOLOGY

X chromosome and infantile autism. Petit E, et al. **Biol Psychiatry** 1996 Sep 15;40(6):457–64

ULTRASONOGRAPHY

45,X/46,XY mosaicism: the role of ultrasound in prenatal diagnosis and counselling. Lazebnik N, et al. **Ultrasound Obstet Gynecol** 1996 Nov;8(5):325–8

VETERINARY

Detection of equine X chromosome abnormalities in equids using a horse X whole chromosome paint probe (WCPP). Breen M, et al. **Vet J** 1997 May;153(3):235–8

SEX CHROMOSOMES

Sex chromosome markers: characterization using fluorescence in situ hybridization and review of the literature. Schwartz S, et al. **Am J Med Genet** 1997 Jul 11;71(1):1–7 (62 ref.)

Phenotypical expression in XX males correlates with testicular response to exogenous choriogonadotropin in early infancy: does a variable degree of testicular failure determine the degree of genital ambiguity? Méndez JP, et al. **Arch Androl** 1996 Jul-Aug;37(1):19–26

Chocolate: a sex-linked recessive plumage colour mutant of the domestic fowl. Carefoot WC. **Br Poult Sci** 1996 Sep; 37(4):867–8

Histopathology and molecular cytogenetics of a corneal opacity associated with the trisomy 8 mosaic syndrome (46,XY/47,XY, +8). Scott JA, et al. **Cornea** 1997 Jan; 16(1):35–41

Simultaneous enumeration of chromosomes 13, 18, 21, X, and Y in interphase cells for preimplantation genetic diagnosis of aneuploidy. Munné S, et al. **Cytogenet Cell Genet** 1996;75(4):263–70

Identification of the sex of Oriental white stork, Ciconia boyciana, by the polymerase chain reaction based on its sex chromosome-specific DNA sequences. Itoh Y, et al. **Genes Genet Syst** 1997 Feb;72(1):51–6

Dosage compensation regulatory proteins and the evolution of sex chromosomes in Drosophila. Bone JR, et al. **Genetics** 1996 Oct;144(2):705–13

Combined immunophenotyping and FISH with sex chromosome-specific DNA probes for the detection of chimerism in epidermal Langerhans cells after sex-mismatched bone marrow transplantation. Hessel H, et al. **Histochem Cell Biol** 1996 Nov;106(5):481–5

Analysis of human sperm-derived pronuclei by three-colour fluorescent in-situ hybridization. Martínez-Pasarell O, et al. **Hum Reprod** 1997 Apr;12(4):641–5

Tension-sensitive kinetochore phosphorylation and the chromosome distribution checkpoint in praying mantid spermatocytes. Li X, et al. **J Cell Sci** 1997 Mar;110 (Pt 5):537–45

Analysis of the sex chromosomal equipment in spermatozoa of a 47,XYY male using two-colour fluorescence in-situ hybridization. Mercier S, et al. **Mol Hum Reprod** 1996 Jul; 2(7):485–8

Utilization of the sex-linked gene for imperfect albinism (S*ALS). 1. Effect of early weight loss on chick metabolism. Santos GA, et al. **Poult Sci** 1996 Nov; 75(11):1321–9

[Recent perceptions about chromosome pairing in meiosis] Nett P, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct; 103(10):375–7 (Eng. Abstr.) **(Ger)**

ABNORMALITIES see SEX CHROMOSOME ABNORMALITIES

CHEMISTRY

Heteromorphic sex chromosomes in Eupsophus insularis (Amphibia: Anura: Leptodactylidae). Cuevas CC, et al. **Chromosome Res** 1996 Sep;4(6):467–70

GENETICS

Xist RNA is associated with the transcriptionally inactive XY body in mammalian male meiosis. Ayoub N, et al. **Chromosoma** 1997 Jun;106(1):1–10

Structural differences between XX and ZW sex lampbrush chromosomes in Rana rugosa females (Anura: Ranidae). Miura I, et al. **Chromosoma** 1996 Oct;105(4):237–41

Cytogenetics of the genus Leporinus (Pisces, Anostomidae). 1. Karyotype analysis, heterochromatin distribution and sex chromosomes. Koehler MR, et al. **Chromosome Res** 1997 Feb;5(1):12–22

Polymorphism of the nucleolus organizer region (NOR) on the putative sex chromosomes of Arctic char (Salvelinus alpinus) is not sex related. Reed KM, et al. **Chromosome Res** 1997 Jun;5(4):221–7

Sex chromosome differentiation in some species of Lepidoptera (Insecta). Traut W, et al. **Chromosome Res** 1997 Aug;5(5):283–91

A case of premature menopause in an ovulating 46,XY female patient. Harrington DJ, et al. **Curr Opin Obstet Gynecol** 1996 Dec;8(6):465–9

Molecular characterization of the complex sex-chromosome heterochromatin in the rodent Microtus chrotorrhinus. Ivanov SV, et al. **Cytogenet Cell Genet** 1996;75(1):49–56

Evolution of the larval cuticle proteins coded by the secondary sex chromosome pair: X2 and neo-Y of Drosophila miranda: I. Comparison at the DNA sequence level. Steinemann M, et al. **J Mol Evol** 1996 Oct; 43(4):405–12

Evolution of the larval cuticle proteins coded by the secondary sex chromosome pair: X2 and neo-Y of Drosophila miranda: II. Comparison at the amino acid sequence level. Steinemann M, et al. **J Mol Evol** 1996 Oct; 43(4):413–7

Simultaneous chromosome 7 and 17 gain and sex

chromosome loss provide evidence that renal metanephric adenoma is related to papillary renal cell carcinoma. Brown JA, et al. **J Urol** 1997 Aug;158(2):370–4

Intersexual phenotypes and sex chromosome complements of five South American opossums (Monodelphis domestica). Robinson ES, et al. **Lab Anim Sci** 1996 Oct; 46(5):555–60

First gene on the avian W chromosome (CHD) provides a tag for universal sexing of non-ratite birds. Ellegren H. **Proc R Soc Lond B Biol Sci** 1996 Dec 22;263(1377):1635–41

Sex identification in birds using two CHD genes [published erratum appears in Proc R Soc Lond B Biol Sci 1997 Apr 22;264(1381):623] Griffiths R, et al. **Proc R Soc Lond B Biol Sci** 1996 Sep 22;263(1374):1251–6

Female chromosomes in cockerel ejaculates. Simkiss K, et al. **Proc R Soc Lond B Biol Sci** 1996 Sep 22; 263(1374):1245–9

Males mutate more, bird study shows [news] Dickman S. **Science** 1997 Oct 3;278(5335):34

[Study on the synaptonemal complexes in spermatocytes of the brown rat (Rattus norvegicus caraco). II. Study on the behavior and morphology of the sex chromosomes pairing] Liu JY, et al. **Shih Yen Sheng Wu Hsueh Pao** 1996 Mar;29(1):1–11 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Meiotic behaviour of sex chromosomes investigated by three-colour FISH on 35,142 sperm nuclei from two 47,XYY males. Chevret E, et al. **Hum Genet** 1997 Mar; 99(3):407–12

Sex chromosomes do not influence renal injury in borderline hypertensive rats. Van Liew JB, et al. **Nephron** 1996; 73(4):664–9

ULTRASTRUCTURE

Evaluating sex chromosome content of sorted human sperm samples with use of dual-color fluorescence in situ hybridization. Richards WE, et al. **Am J Obstet Gynecol** 1997 Jun;176(6):1172–8; discussion 1178–80

Evidence for two successive pericentric inversions in sex lampbrush chromosomes of Rana rugosa (Anura: Ranidae). Miura I, et al. **Chromosoma** 1997 Aug;106(3):178–82

SEX CORD-STROMAL TUMOR

COMPLICATIONS

Malignant stromal tumor: a rare cause of gastrointestinal bleeding discovered by Tc-99m labeled red cells. Hamlin J, et al. **Clin Nucl Med** 1996 Dec;21(12):1002–4

Hetero- and isosexual pseudoprecocity associated with testicular sex-cord tumors in an 8 year-old male. Diamond FB Jr, et al. **J Pediatr Endocrinol Metab** 1996 May-Jun; 9(3):407–14

DIAGNOSIS

Extraovarian sex cord-stromal tumor: case report and review of the literature. Keitoku M, et al. **Int J Gynecol Pathol** 1997 Apr;16(2):180–5 (29 ref.)

GENETICS

p53 expression, DNA content and cell proliferation in primary and synchronous metastatic lesions from ovarian surface epithelial-stromal tumours. Daidone MG, et al. **Eur J Cancer** 1996 Jul;32A(8):1388–93

Monosomy 22 in a mixed germ cell-sex cord-stromal tumor of the ovary. Speleman f, et al. **Genes Chromosomes Cancer** 1997 Jul;19(3):192–4

A mutation in the follicle-stimulating hormone receptor occurs frequently in human ovarian sex cord tumors. Kotlar TJ, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1020–6

METABOLISM

The site of inhibin production in ovarian neoplasms. Flemming P, et al. **Histopathology** 1996 Nov;29(5):465–8

Hyaline globules and progesterone receptors in an ovarian sclerosing stromal tumour. Lifschitz-Mercer B, et al. **Histopathology** 1995 Aug;27(2):195–7

Immunohistochemistry of unclassified sex cord-stromal tumors of the testis with a predominance of spindle cells. Renshaw AA, et al. **Mod Pathol** 1997 Jul;10(7):693–700

PATHOLOGY

Use of monoclonal antibody against human inhibin as a marker for sex cord-stromal tumors of the ovary. Rishi M, et al. **Am J Surg Pathol** 1997 May;21(5):583–9

Uterine tumor resembling sex-cord ovarian tumors: one more case of the pure type suggests a neoplasm with benign behavior. Miliaras D, et al. **Eur J Gynaecol Oncol** 1997; 18(2):133–5

Pelvic bone involvement in low-grade endometrial stromal sarcoma with ovarian sex cord-like differentiation [letter] Fukunaga M, et al. **Histopathology** 1996 Oct;29(4):391–3

Fusocellular gonadal stromal tumour of the testis with epithelial and myoid differentiation. Nistal M, et al. **Histopathology** 1996 Sep;29(3):259–64

Diagnostic value of inhibin immunoreactivity in ovarian gonadal stromal tumours and their histological mimics. Stewart CJ, et al. **Histopathology** 1997 Jul;31(1):67–74

An enormous testicular sex cord/gonadal stromal tumor. Miller MI, et al. **J Pediatr Surg** 1996 Jul;31(7):980–2

Endometrial low-grade stromal sarcoma with ovarian sex cord-like differentiation: report of two cases with an immunohistochemical and flow cytometric study. Fukunaga M, et al. **Pathol Int** 1997 Jun;47(6):412–5

Testicular sex cord-stromal tumors in children: clinicopathologic study of sixteen children with review of the literature. Goswitz JJ, et al. **Pediatr Pathol Lab Med** 1996 May-Jun;16(3):451–70 (40 ref.)

Mixed sex-cord stromal tumour of the testis. Allen DC, et al. **Ulster Med J** 1997 May;66(1):54–6

VETERINARY

Ovarian sex cord-stromal tumours in cattle, with particular reference to the lamination of basal laminae. Kotano Y, et al. **Zentralbl Veterinarmed A** 1996 Nov;43(9):531–41

SEX COUNSELING

Counseling adolescents about responsible sexual behavior [letter; comment] Buck L. **Am Fam Physician** 1997 Jun; 55(8):2606, 2609–10. Comment on: Am Fam Physician 1996 Sep 1;54(3):864, 867–70.

Counseling the infertile couple: when enough is enough [letter; comment] Hodges B. **Am Fam Physician** 1997 Jul; 56(1):50, 52. Comment on: Am Fam Physician 1996 Sep 1;54(3):1001–10.

Adolescent sexuality: an educational and counseling challenge. Ruusuvaara L. **Ann N Y Acad Sci** 1997 Jun 17; 816:411–3

Anticipatory guidance regarding sex: views of virginal female adolescents. Ford CA, et al. **J Adolesc Health** 1996 Sep; 19(3):179–83

[Sexual problems--possible counseling by the general physician] Loewit K. **Fortschr Med** 1996 Oct 30; 114(30):387–92 (9 ref.) (Eng. Abstr.) **(Ger)**

[Reports of the German Society of Psychiatry, Psychotherapy and Neurology] Weig W, et al. **Nervenarzt** 1996 Dec;67(12):1046–8 **(Ger)**

METHODS

Resolution of erectile dysfunction and inhibited male orgasm in a single homosexual male and transfer of inhibited male orgasm cure to his partner: a case report. Garippa PA, et al. **J Sex Marital Ther** 1997 Summer;23(2):126–30

A field trial of the effectiveness of behavioral treatment for sexual dysfunctions. Sarwer DB, et al. **J Sex Marital Ther** 1997 Summer;23(2):87–97

SEX DETERMINATION

A bird's eye view of human sex determination. Polani PE. **Acta Genet Med Gemellol (Roma)** 1996;45(1-2):137–41 (42 ref.)

The role of SRY in mammalian sex determination. Fechner PY. **Acta Paediatr Jpn** 1996 Aug;38(4):380–9 (112 ref.)

Fetal testis formation: a critical event for sex determination and differentiation. Matsuo N. **Acta Paediatr Jpn** 1996 Aug; 38(4):377–9 (19 ref.)

Sex determining gene on the X chromosome short arm: dosage sensitive sex reversal. Ogata T, et al. **Acta Paediatr Jpn** 1996 Aug;38(4):390–8 (40 ref.)

Sex ratio in normal and disomic sperm: evidence that the extra chromosome 21 preferentially segregates with the Y chromosome. Griffin DK, et al. **Am J Hum Genet** 1996 Nov;59(5):1108–13

Sex determination in humans. Schafer AJ, et al. **Bioessays** 1996 Dec;18(12):955–63 (80 ref.)

Porcine SRY gene locus and genital ridge expression. Daneau I, et al. **Biol Reprod** 1996 Jul;55(1):47–53

Gender verification: a concept whose time has come and passed? [editorial; comment] Puffer JC. **Br J Sports Med** 1996 Dec;30(4):278. Comment on: Br J Sports Med 1996 Dec;30(4):310–2.

Molecular analysis of sex determination in sex-reversed and true hermaphroditism. Copelli SB, et al. **Braz J Med Biol Res** 1996 Jun;29(6):743–8

Ethical aspects of CMJ articles [letter] de Silva D, et al. **Ceylon Med J** 1997 Jun;42(2):103

Early steps in mammalian sex determination. Ramkissoon Y, et al. **Curr Opin Genet Dev** 1996 Jun;6(3):316–21 (58 ref.)

The role of Sry in cellular events underlying mammalian sex determination. Capel B. **Curr Top Dev Biol** 1996;32:1–37 (159 ref.)

Twins raised from separated blastomeres develop into sexually mature Strongylocentrotus purpuratus [published erratum appears in Dev Biol 1997 Feb 1;182(1):204] Cameron RA, et al. **Dev Biol** 1996 Sep 15;178(2):514–9

The dominant white spotting oncogene allele Kit(W-42J) exacerbates XY(DOM) sex reversal. Nagamine CM, et al. **Development** 1996 Nov;122(11):3597–605

The ovary retains male potential after the thermosensitive period for sex determination in the turtle Emys orbicularis. Dorizzi M, et al. **Differentiation** 1996 Jul;60(4):193–201

The tra-3 sex determination gene of Caenorhabditis elegans encodes a member of the calpain regulatory protease family. Barnes TM, et al. **EMBO J** 1996 Sep 2; 15(17):4477–84

Evolution of sex determination in caenorhabditis: unusually high divergence of tra-1 and its functional consequences. de Bono M, et al. **Genetics** 1996 Oct;144(2):587–95

Interspecies comparison reveals evolution of control regions in the nematode sex-determining gene tra-2. Kuwabara PE. **Genetics** 1996 Oct;144(2):597–607

Regulation of the gene Sex-lethal: a comparative analysis of Drosophila melanogaster and Drosophila subobscura. Penalva LO, et al. **Genetics** 1996 Dec;144(4):1653–64

The mutation masculinizer (man) defines a sex-determining gene with maternal and zygotic functions in Musca domestica L. Schmidt R, et al. **Genetics** 1997 Jan; 145(1):173–83

Identification of the sex-determining region of the Ceratitis capitata Y chromosome by deletion mapping. Willhoeft U, et al. **Genetics** 1996 Oct;144(2):737–45

The candidate sex-reversing DAX1 gene is autosomal in marsupials: implications for the evolution of sex determination in mammals. Pask A, et al. **Genomics** 1997 May 1;41(3):422–6

Mutational analysis of the SOX9 gene in campomelic dysplasia and autosomal sex reversal: lack of genotype/phenotype correlations. Meyer J, et al. **Hum Mol Genet** 1997 Jan;6(1):91–8

Rapid genetic diagnosis at 7-9 weeks gestation: diagnosis of sex, single gene defects and DNA fingerprint from coelomic samples. Findlay I, et al. **Hum Reprod** 1996 Nov; 11(11):2548–53

Sex determination and the maternal dominance hypothesis. Grant VJ. **Hum Reprod** 1996 Nov;11(11):2371–5 (59 ref.)

Characterization of ovine SRY transcript and developmental expression of genes involved in sexual differentiation. Payen E, et al. **Int J Dev Biol** 1996 Jun;40(3):567–75

Use of a rat cDNA probe specific for the Y chromosome to detect male-derived cells. An J, et al. **J Androl** 1997 May-Jun;18(3):289–93

Gender verification at the centennial Olympic games. Elsas LJ, et al. **J Med Assoc Ga** 1997 Jan;86(1):50–4

Raising the sensitivity of fetal RhD typing and sex determination from maternal blood [letter] Hengstschläger M, et al. **J Med Genet** 1997 Apr;34(4):350–1

Mutation analysis of the 2 kb 5' to SRY in XY females and XY intersex subjects. Kwok C, et al. **J Med Genet** 1996 Jun;33(6):465–8

Evidence for multiple functional copies of the male sex-determining locus, Sry, in African murine rodents. Lundrigan BL, et al. **J Mol Evol** 1997 Jul;45(1):60–5

Development in a 46 XX boy with positive SRY gene. Rego A, et al. **J Pediatr Endocrinol Metab** 1996 Nov-Dec; 9(6):623–6

Expression of Sry-related genes in the developing genital ridge/mesonephros of the chick embryo. McBride D, et al. **J Reprod Fertil** 1997 Jan;109(1):59–63

Genetic mapping of the autosomal region involved in XX sex-reversal and horn development in goats. Vaiman D, et al. **Mamm Genome** 1996 Feb;7(2):133–7

Post-transcriptional regulation of sex determination in Caenorhabditis elegans: widespread expression of the sex-determining gene fem-1 in both sexes. Gaudet J, et al. **Mol Biol Cell** 1996 Jul;7(7):1107–21

Evolution of the Sry genes. Pamilo P, et al. **Mol Biol Evol** 1997 Jan;14(1):49–55

Cell recycling of a single human cell for preimplantation diagnosis of X-linked disease and dual sex determination. Thornhill AR, et al. **Mol Hum Reprod** 1996 Apr;2(4):285–9

Analysis of the role of Amh and Fra1 in the Sry regulatory pathway. Jeske YW, et al. **Mol Reprod Dev** 1996 Jun; 44(2):153–8

Rapid evolution of sex-related genes in Chlamydomonas. Ferris PJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8634–9

Sex identification in birds using two CHD genes [published erratum appears in Proc R Soc Lond B Biol Sci 1997 Apr 22;264(1381):623] Griffiths R, et al. **Proc R Soc Lond B Biol Sci** 1996 Sep 22;263(1374):1251–6

Female chromosomes in cockerel ejaculates. Simkiss K, et al. **Proc R Soc Lond B Biol Sci** 1996 Sep 22; 263(1374):1245–9

Molecular determinants of mammmalian sex. Werner MH, et al. **Trends Biochem Sci** 1996 Aug;21(8):302–8 (49 ref.)

Puzzling out the genetics of mammalian sex determination. Jiménez R, et al. **Trends Genet** 1996 May;12(5):164–6 (34 ref.)

Sex determination in ostriches [letter] Madeiros CA. **Vet Rec** 1997 Mar 8;140(10):264

[Sex determination and differentiation in man: from pathology to genes] Veitia R, et al. **Arch Pediatr** 1997;4(2 Suppl 2):118s–120s (18 ref.) **(Fre)**

[Sex determination and transgenesis] Delouis C, et al. **Contracept Fertil Sex** 1996 Sep;24(9):629–34 (Eng. Abstr.) **(Fre)**

[Awareness of ovulation time and sex determination in Biblical times] Ben-Noun L. **Harefuah** 1997 May 15; 132(10):726–7 (18 ref.) **(Heb)**

[Personal identification using DNA polymorphism--the identification of forensic biological materials] Shiono H. **Nippon Hoigaku Zasshi** 1996 Oct;50(5):320–30 (Eng. Abstr.) **(Jpn)**

[Development of molecular-genetic identified combined "sex/genotype" systems based on amelogenin and HLA-DQ1 loci and the Polymarker(TM) system] Ivanov PL, et al. **Mol Biol (Mosk)** 1997 May-Jun;31(3):557–63 **(Rus)**

METHODS

Sex determination of prehistoric human paleofeces. Sobolik KD, et al. **Am J Phys Anthropol** 1996 Oct;101(2):283–90

Sex determination of ancient human skeletons using DNA. Stone AC, et al. **Am J Phys Anthropol** 1996 Feb;99(2):231–8

Quantitative detection of male DNA by polymerase chain reaction using a single primer set: application to sex determination and counting of rare fetal cells. Larsen LA, et al. **Anal Biochem** 1996 Aug 15;240(1):148–50

Ovine–specific Y–chromosome RAPD–SCAR marker for embryo sexing. Gutiérrez–Adán A, et al. **Anim Genet** 1997 Apr;28(2):135–8

Efficiency of the OVATEC unit for estrus detection and calf sex control in beef cows. Wehner GR, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):27–34

Gender verification in sports by PCR amplification of SRY and DYZ1 Y chromosome specific sequences: presence of DYZ1 repeat in female athletes [see comments] Serrat A, et al. **Br J Sports Med** 1996 Dec;30(4):310–2. Comment in: Br J Sports Med 1996 Dec;30(4):278.

Fetal gender determination using ultrasound scanning. Sirisena J, et al. **Ceylon Med J** 1997 Mar;42(1):21–3

Molecular characterization and cytological mapping of a non–repetitive DNA sequence region from the W chromosome of chicken and its use as a universal probe for sexing carinatae birds. Ogawa A, et al. **Chromosome Res** 1997 Apr;5(2):93–101

SRY and mammalian sex determination. Greenfield A, et al. **Curr Top Dev Biol** 1996;34:1–23 (76 ref.)

Fluorescent in situ hybridization assessment of chromosome copy number in buccal mucosal cells. Mark HF, et al. **Cytobios** 1996;87(349):117–26

Schistosoma mansoni: sexing cercariae by PCR without DNA extraction. Grevelding CG, et al. **Exp Parasitol** 1997 Jan;85(1):99–100

Estimation of sex on the basis of radiographs of the calcaneus. Riepert T, et al. **Forensic Sci Int** 1996 Feb 9;77(3):133–40

Multiplex amplification of STR loci with gender alleles using infrared fluorescence detection. Steffens DL, et al. **Forensic Sci Int** 1997 Mar 14;85(3):225–32

Identification of the sex of Oriental white stork, Ciconia boyciana, by the polymerase chain reaction based on its sex chromosome–specific DNA sequences. Itoh Y, et al. **Genes Genet Syst** 1997 Feb;72(1):51–6

The predetermination of embryonic sex using flow cytometrically separated X and Y spermatozoa. Cran DG, et al. **Hum Reprod Update** 1996 Jul–Aug;2(4):355–63 (48 ref.)

Influence of mosaicism on sexing of human preembryos detected by the polymerase chain reaction [see comments] Katagiri Y, et al. **J Assist Reprod Genet** 1996 Aug; 13(7):586–91. Comment in: J Assist Reprod Genet 1996 Aug;13(7):592–3.

Sex determination by discriminant analysis of calcanei measurements. Introna F Jr, et al. **J Forensic Sci** 1997 Jul; 42(4):725–8

Gender identification of human hair using fluorescence in situ hybridization. Prahlow JA, et al. **J Forensic Sci** 1996 Nov;41(6):1035–7

Gender determination of forensic samples using PCR amplification of ZFX/ZFY gene sequences. Reynolds R, et al. **J Forensic Sci** 1996 Mar;41(2):279–86

Infrared fluorescent detection of PCR amplified gender identifying alleles. Roy R, et al. **J Forensic Sci** 1997 May; 42(3):452–60

Sex determination of dried blood stains using the polymerase chain reaction (PCR) with homologous X–Y primers of the zinc finger protein gene. Stacks B, et al. **J Forensic Sci** 1996 Mar;41(2):287–90

Coamplification of the ZFX and ZFY genes for sex identification in preimplantation embryos. Kuo PL, et al. **J Formos Med Assoc** 1996 Aug;95(8):612–6

Reliable sex determination of mouse preimplantation embryos by PCR amplification of male–specific genes in single blastomeres. Tangchaisin P, et al. **J Med Assoc Thai** 1996 Dec;79 Suppl 1:S78–87

A cross–sectional study of canine dimorphism in establishing sex identity: comparison of two statistical methods. Sherfudhin H, et al. **J Oral Rehabil** 1996 Sep;23(9):627–31

Antenatal fetal heart rate and "maternal intuition" as predictors of fetal sex. Genuis S, et al. **J Reprod Med** 1996 Jun;41(6):447–9

Gender determination of the Linne's two–toed sloth (Choloepus didactylus) using SRY amplified from hair. Murata K, et al. **J Vet Med Sci** 1996 Dec;58(12):1157–9

Estimation of sex and age by calcification pattern of costal cartilage in Japanese. Inoi T. **Nippon Hoigaku Zasshi** 1997 Apr;51(2):89–94

Detection of cells of fetal origin from transcervical irrigations. Daryani YP, et al. **Prenat Diagn** 1997 Mar; 17(3):243–8

Prenatal sexing of human fetuses and selective abortion [editorial; comment] Hsi BL, et al. **Prenat Diagn** 1997 Jan; 17(1):1–3. Comment on: Prenat Diagn 1997 Jan;17(1):77–80.

First gene on the avian W chromosome (CHD) provides a tag for universal sexing of non–ratite birds. Ellegren H. **Proc R Soc Lond B Biol Sci** 1996 Dec 22;263(1377):1635–41

[Gender control and Olympics events from Albertville to Atlanta or good practices in gene biochemistry] Dingeon B, et al. **Ann Pharm Fr** 1997;55(2):55–61 (Eng. Abstr.) **(Fre)**

[Determination of kinship by aDNA analysis] Hummel S, et al. **Anthropol Anz** 1997 Jun;55(2):217–23 (Eng. Abstr.) **(Ger)**

[Molecular sex determination in skeletal remains of premature and newborn infants of the Aegerten, Switzerland, burial field] Lassen C, et al. **Anthropol Anz** 1997 Jun;55(2):183–91 (Eng. Abstr.) **(Ger)**

[Molecular sex determination. Significance in the diagnosis of gonadal pathologies] Copelli S, et al. **Medicina (B Aires)** 1995;55(6):705–11 (Eng. Abstr.) **(Spa)**

SEX DEVIATIONS see **PARAPHILIAS**

SEX DIFFERENCES see **SEX CHARACTERISTICS**

SEX DIFFERENTIATION

Fetal testis formation: a critical event for sex determination and differentiation. Matsuo N. **Acta Paediatr Jpn** 1996 Aug; 38(4):377–9 (19 ref.)

Sexual differentiation of the urogenital system of the fetal and neonatal tammar wallaby, Macropus eugenii. Renfree MB, et al. **Anat Embryol (Berl)** 1996 Aug;194(2):111–34

Müllerian duct regression in a marsupial, the tammar wallaby. Whitworth DJ, et al. **Anat Embryol (Berl)** 1997 Jul; 196(1):39–46

Sex–dependent expression of placental (P)–cadherin during mouse gonadogenesis. Lin LH, et al. **Anat Rec** 1996 Dec; 246(4):535–44

Genital anomalies in human and animal models reveal the mechanisms and hormones governing testicular descent. Clarnette TD, et al. **Br J Urol** 1997 Jan;79(1):99–112

Sexual development of the fetus and pubertal child. Malasanos TH. **Clin Obstet Gynecol** 1997 Mar;40(1):153–67 (17 ref.)

Compartmental organization of the Drosophila genital imaginal discs. Chen EH, et al. **Development** 1997 Jan; 124(1):205–18

Yolk steroids decline during sexual differentiation in the alligator. Conley AJ, et al. **Gen Comp Endocrinol** 1997 Aug; 107(2):191–200

Abnormalities of sex differentiation. Nawata H, et al. **Horm Res** 1996;46 Suppl 1:15–9

Independent effects of incubation temperature and gonadal sex on the volume and metabolic capacity of brain nuclei in the leopard gecko (Eublepharis macularius), a lizard with temperature–dependent sex determination. Coomber P, et al. **J Comp Neurol** 1997 Apr 14;380(3):409–21

Evidence to exclude SOX9 as a candidate gene for XY sex reversal without skeletal malformation. Kwok C, et al. **J Med Genet** 1996 Sep;33(9):800–1

Sexual differentiation of the surge mode of gonadotropin secretion: prenatal androgens abolish the gonadotropin–releasing hormone surge in the sheep. Herbosa CG, et al. **J Neuroendocrinol** 1996 Aug;8(8):627–33

Glomerular capillary network of cortical nephrons is reduced in male but not in female aging rats. Francois V, et al. **Mech Ageing Dev** 1996 Oct 4;91(1):11–22

Protein phosphorylation during sexual differentiation in the malaria parasite Plasmodium falciparum. Kumar N. **Mol Biochem Parasitol** 1997 Aug;87(2):205–10

A human homologue of the Drosophila sex determination factor transformer–2 has conserved splicing regulatory functions. Dauwalder B, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9004–9

[Ad4BP/SF–1 and sex differentiation of the gonads] Morohashi K, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun; 41(8 Suppl):1033–41 (32 ref.) **(Jpn)**

DRUG EFFECTS

Aromatase inhibition blocks the activation and sexual differentiation of appetitive male sexual behavior in Japanese quail. Balthazart J, et al. **Behav Neurosci** 1997 Apr;111(2):381–97

Effects of sex and MK–801 on auditory–processing deficits associated with developmental microgyric lesions in rats. Fitch RH, et al. **Behav Neurosci** 1997 Apr;111(2):404–12

Synergistic responses of steroidal estrogens in vitro (yeast) and in vivo (turtles). Arnold SF, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):336–42

Synthetic estrogenic agents do not interfere with sex differentiation but do inhibit molting of the cladoceran Daphnia magna. Zou E, et al. **Bull Environ Contam Toxicol** 1997 Apr;58(4):596–602

Effects of aromatase inhibitor on sex differentiation and levels of P450 (17 alpha) and P450 arom messenger ribonucleic acid of gonads in chicken embryos. Abinawanto, et al. **Gen Comp Endocrinol** 1996 May;102(2):241–6

Endocrine sex reversal of gonads by the aromatase inhibitor Letrozole (CGS 20267) in Emys orbicularis, a turtle with temperature–dependent sex determination. Richard–Mercier N, et al. **Gen Comp Endocrinol** 1995 Dec; 100(3):314–26

Environmental antiandrogens: developmental effects, molecular mechanisms, and clinical implications. Kelce WR, et al. **J Mol Med** 1997 Mar;75(3):198–207 (110 ref.)

The influence of the anti–androgen flutamide on early sexual differentiation of the marsupial male. Lucas JC, et al. **J Reprod Fertil** 1997 Mar;109(2):205–12

Activation of androgen receptor in epidermal growth factor modulation of fetal mouse sexual differentiation. Gupta C, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):89–95

Prenatal exposure to drugs of abuse: methodological considerations and effects on sexual differentiation. McGivern RF, et al. **NIDA Res Monogr** 1996;164:78–124 (219 ref.)

Latent effects of pesticides and toxic substances on sexual differentiation of rodents. Gray LE Jr, et al. **Toxicol Ind Health** 1996 May–Aug;12(3–4):515–31 (38 ref.)

GENETICS

SF–1: a key regulator of development and function in the mammalian reproductive system. Ikeda Y. **Acta Paediatr Jpn** 1996 Aug;38(4):412–9 (45 ref.)

Sex determining gene on the X chromosome short arm: dosage sensitive sex reversal. Ogata T, et al. **Acta Paediatr Jpn** 1996 Aug;38(4):390–8 (40 ref.)

A broader perspective of sexual differentiation. Fiddler M, et al. **Am J Med Genet** 1997 Mar 31;69(3):229–31

Genotype–dependent sex differentiation of dopaminergic neurons in primary cultures of embryonic mouse brain. Sibug R, et al. **Brain Res Dev Brain Res** 1996 May 31; 93(1–2):136–42

Control of male sexual behavior and sexual orientation in Drosophila by the fruitless gene. Ryner LC, et al. **Cell** 1996 Dec 13;87(6):1079–89

Ribosomal DNA is frequently concentrated on only one X chromosome in permanently apomictic aphids, but this does not inhibit male determination. Blackman RL, et al. **Chromosome Res** 1996 Jun;4(4):314–20

Sex chromosome differentiation in some species of Lepidoptera (Insecta). Traut W, et al. **Chromosome Res** 1997 Aug;5(5):283–91

Genetic mechanisms of sex differentiation. Josso N, et al. **Curr Opin Pediatr** 1996 Aug;8(4):396–400 (50 ref.)

Endocrine and metabolism [editorial] Root A. **Curr Opin Pediatr** 1996 Aug;8(4):387–8

Mapping in pig of genes involved in sexual differentiation: AMH, WT1, FTZF1, SOX2, SOX9, AHC, and placental and embryonic CYP19. Lahbib–Mansais Y, et al. **Cytogenet Cell Genet** 1997;76(1–2):109–14

A male–specific role for SOX9 in vertebrate sex determination. Kent J, et al. **Development** 1996 Sep; 122(9):2813–22

Caenorhabditis elegans sex–determining protein FEM–2 is a protein phosphatase that promotes male development and interacts directly with FEM–3. Chin–Sang ID, et al. **Genes Dev** 1996 Sep 15;10(18):2314–25

Genetic analysis of the Müllerian–inhibiting substance signal transduction pathway in mammalian sexual differentiation. Mishina Y, et al. **Genes Dev** 1996 Oct 15;10(20):2577–87

Segregation analysis of the testis–determining autosomal trait, Tda, that differs between the C57Bl/6J and DBA/2J mouse strains suggests a multigenic threshold model. Eisner JR, et al. **Genome** 1996 Apr;39(2):322–35

A novel germ line mutation in SOX9 causes familial campomelic dysplasia and sex reversal. Cameron FJ, et al. **Hum Mol Genet** 1996 Oct;5(10):1625–30

Mutations in SRY and SOX9: testis–determining genes. Cameron FJ, et al. **Hum Mutat** 1997;9(5):388–95

Sry gene detection in gonads of intersex patients using FISH. Cho NH, et al. **J Korean Med Sci** 1997 Jun;12(3):204–9

Gonadal sex differentiation in chicken embryos: expression of estrogen receptor and aromatase genes. Smith CA, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):295–302

Molecular basis governing primary sex in mammals. Nagai K. **Jpn J Hum Genet** 1996 Dec;41(4):363–79 (57 ref.)

Sex–determining genes on mouse autosomes identified by linkage analysis of C57BL/6J–YPOS sex reversal. Eicher EM, et al. **Nat Genet** 1996 Oct;14(2):206–9

Two uses for old SOX [news; comment] Graves JA. **Nat Genet** 1997 Jun;16(2):114–5. Comment on: Nat Genet 1997 Jun;16(2):174–8.

X–chromosome–counting mechanisms that determine nematode sex. Nicoll M, et al. **Nature** 1997 Jul 10; 388(6638):200–4

Isolation and developmental expression of male reproductive organ–specific genes in a dioecious campion, Melandrium album (Silene latifolia). Matsunaga S, et al. **Plant J** 1996 Oct;10(4):679–89

Requirement of STAT5b for sexual dimorphism of body growth rates and liver gene expression. Udy GB, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7239–44

Molecular determinants of sexual differentiation. Wiener JS, et al. **World J Urol** 1996;14(5):278–94 (168 ref.)

[SRY gen—primary "switch" in human sex determination?] Michalczak–Janitz K, et al. **Postepy Biochem** 1995; 41(4):212–9 (74 ref.) **(Pol)**

[Molecular sex determination. Significance in the diagnosis of gonadal pathologies] Copelli S, et al. **Medicina (B Aires)** 1995;55(6):705–11 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

The role of SRY in mammalian sex determination. Fechner PY. **Acta Paediatr Jpn** 1996 Aug;38(4):380–9 (112 ref.)

Cognitive gender differences in very young children parallel biologically based cognitive gender differences in monkeys. Overman WH, et al. **Behav Neurosci** 1996 Aug; 110(4):673–84

The role of apoptosis in sexual differentiation of the rat sexually dimorphic nucleus of the preoptic area. Davis EC,

SEX DIFFERENTIATION

et al. **Brain Res** 1996 Sep 23;734(1–2):10–8

Developmental profile and regulation of estrogen receptor (ER) mRNA expression in the preoptic area of prenatal rats. DonCarlos LL. **Brain Res Dev Brain Res** 1996 Jul 20;94(2):224–33

Sexual differentiation of the brain in songbirds. Arnold AP, et al. **Dev Neurosci** 1996;18(1–2):124–36 (88 ref.)

Somatic sex–determining signals act on XX germ cells in Drosophila embryos. Staab S, et al. **Development** 1996 Dec; 122(12):4065–71

Gonadal sex reversal of the developing marsupial ovary in vivo and in vitro. Whitworth DJ, et al. **Development** 1996 Dec;122(12):4057–63

The role of growth hormone in fetal mouse reproductive tract differentiation. Nguyen AP, et al. **Endocrinology** 1996 Sep;137(9):3659–66

Sex differentiation of rat hippocampal GABAergic neurons. Reisert I, et al. **Eur J Neurosci** 1996 Aug;8(8):1718–24

Blastocyst development and conceptus sex selection in red deer Cervus elaphus: studies of a free–living population on the Isle of Rum. Flint AP, et al. **Gen Comp Endocrinol** 1997 Jun;106(3):374–83

Correlation among thermosensitive period, estradiol response, and gonad differentiation in the sea turtle Lepidochelys olivacea. Merchant–Larios H, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):373–85

Sexual bipotentiality of developing ovaries in the terrestrial isopod Armadillidium vulgare (Malacostraca, Crustacea). Suzuki S, et al. **Gen Comp Endocrinol** 1997 Jul; 107(1):136–46

Expression of P450(17 alpha) hydroxylase and P450 aromatase genes in the chicken gonad before and after sexual differentiation. Yoshida K, et al. **Gen Comp Endocrinol** 1996 May;102(2):233–40

Male gray short–tailed opossums (Monodelphis domestica) receive penile intromissions when treated with estrogen and progesterone in adulthood. Fadem BH, et al. **Horm Behav** 1997 Jun;31(3):289–95

Testosterone induction of male–like vocalizations in female budgerigars (Melopsittacus undulatus). Nespor AA, et al. **Horm Behav** 1996 Jun;30(2):162–9

Effects of androgens and estrogens on sexual differentiation of sex behavior, scent marking, and the sexually dimorphic area of the gerbil hypothalamus. Ulibarri C, et al. **Horm Behav** 1996 Jun;30(2):107–30

Sex differentiation and ovarian function. An overview. Tsutsumi O, et al. **Horm Res** 1996;46 Suppl 1:1–5 (66 ref.)

Molecular studies of soma–germ cell interactions using mussel gonad as an experimental model. Mikhailov A, et al. **Int J Dev Biol** 1996;Suppl 1:203S–204S

Towards a rational terminology in the study of the gubernaculum testis: arguments in support of the notion that the cremasteric sac should be considered the gubernaculum in postnatal rats and other mammals. van der Schoot P. **J Anat** 1996 Aug;189 (Pt 1):97–108

Molecular biology and function of the androgen receptor in genital development. Wiener JS, et al. **J Urol** 1997 Apr; 157(4):1377–86 (121 ref.)

Estrogen and apoptosis in the developing sexually dimorphic preoptic area in female rats. Arai Y, et al. **Neurosci Res** 1996 Aug;25(4):403–7

Sexual differentiation of odor and partner preference in the rat. Bakker J, et al. **Physiol Behav** 1996 Aug;60(2):489–94

Ferret mothers provide more anogenital licking to male offspring: possible contribution to psychosexual differentiation. Baum MJ, et al. **Physiol Behav** 1996 Aug; 60(2):353–9

Reproductive profiles of adult Mongolian gerbils gestated as the sole fetus in a uterine horn. Clark MM, et al. **Physiol Behav** 1997 Jan;61(1):77–81

Testosterone and sex role identification in lesbian couples. Pearcey SM, et al. **Physiol Behav** 1996 Sep;60(3):1033–5

Postnatal testicular secretions partially restore the disturbances in reproductive activity caused by prenatal hormonal manipulation. Vega Matuszczyk J, et al. **Physiol Behav** 1997 Jul;62(1):137–43

Physiology and molecular genetics of 17 beta–hydroxysteroid dehydrogenases. Andersson S, et al. **Steroids** 1997 Jan; 62(1):143–7 (36 ref.)

SEX DIFFERENTIATION DISORDERS

see related
TRANSSEXUALISM

Diagnostic evaluation and management of the child with ambiguous genitalia. Slaughenhoupt BL. **J Ky Med Assoc** 1997 Apr;95(4):134–41

Molecular biology and function of the androgen receptor in genital development. Wiener JS, et al. **J Urol** 1997 Apr; 157(4):1377–86 (121 ref.)

DIAGNOSIS

Clinical indications for the use of urinary steroid profiles in neonates and children. Honour JW, et al. **Ann Clin Biochem** 1997 Jan;34 (Pt 1):45–54 (37 ref.)

Sexual development of the fetus and pubertal child. Malasanos TH. **Clin Obstet Gynecol** 1997 Mar;40(1):153–67 (17 ref.)

DRUG THERAPY

Correlation of clinical, endocrine and molecular abnormalities with in vivo responses to high–dose testosterone in patients with partial androgen insensitivity syndrome. Tincello DG, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):497–506

EMBRYOLOGY

Intersex disorders: shedding light on male sexual differentiation beyond SRY. MacLean HE, et al. **Clin Endocrinol (Oxf)** 1997 Jan;46(1):101–8 (62 ref.)

ETIOLOGY

Sex reversal in an infant with Smith–Lemli–Opitz syndrome, type II: evidence for 5–alpha reductase deficiency. Salbert BA, et al. **J Pediatr Endocrinol Metab** 1996 Jan–Feb; 9(1):67–9

GENETICS

Germ–line and somatic mosaicism in the androgen insensitivity syndrome: implications for genetic counseling [letter] Boehmer AL, et al. **Am J Hum Genet** 1997 Apr; 60(4):1003–6

Intersex disorders: shedding light on male sexual differentiation beyond SRY. MacLean HE, et al. **Clin Endocrinol (Oxf)** 1997 Jan;46(1):101–8 (62 ref.)

Clinical and biochemical investigations and molecular analysis of subjects with mutations in the androgen receptor gene. Weidemann W, et al. **Clin Endocrinol (Oxf)** 1996 Dec; 45(6):733–9

Altered mRNA expression due to insertion or substitution of thymine at position +3 of two splice–donor sites in the androgen receptor gene. Trifiro MA, et al. **Eur J Hum Genet** 1997 Jan–Feb;5(1):50–8

Functional analysis of six androgen receptor mutations identified in patients with partial androgen insensitivity syndrome. Bevan CL, et al. **Hum Mol Genet** 1996 Feb; 5(2):265–73

Mutations of the androgen receptor gene in patients with complete androgen insensitivity. Jakubiczka S, et al. **Hum Mutat** 1997;9(1):57–61

Androgen insensitivity with mental retardation: a contiguous gene syndrome? Davies HR, et al. **J Med Genet** 1997 Feb; 34(2):158–60

Impaired male sex development in an infant with molecularly defined partial 9p monosomy: implication for a testis forming gene(s) on 9p. Ogata T, et al. **J Med Genet** 1997 Apr;34(4):331–4

Sex reversal in a child with duplication of sex reversing locus on the short arm of the X chromosome (Xp). Ito T, et al. **J Pediatr Endocrinol Metab** 1996 May–Jun;9(3):429–33

[Sex determination and differentiation in man: from pathology to genes] Veitia R, et al. **Arch Pediatr** 1997;4(2 Suppl 2):118s–120s (18 ref.) **(Fre)**

[Male XX syndrome: contribution of the caprine and porcine models] Cotinot C, et al. **Contracept Fertil Sex** 1996 Sep; 24(9):624–8 **(Fre)**

[Genetic disorders of the adult age] Salamanca–Gómez F, et al. **Gac Med Mex** 1996 Jul–Aug;132(4):377–408 **(Spa)**

METABOLISM

Wide variation in androgen receptor dysfunction in complete androgen insensitivity syndrome. Bevan CL, et al. **J Steroid Biochem Mol Biol** 1997 Apr;61(1–2):19–26

PATHOLOGY

Congenital bilateral anorchia: clinical, hormonal and imaging study in 12 cases. De Rosa M, et al. **Andrologia** 1996 Sep–Oct;28(5):281–5

PSYCHOLOGY

Editorial: to be male or female––that is the question. Elder JS. **J Urol** 1997 Oct;158(4):1635

SURGERY

Severe hypospadias with genital ambiguity: adult outcome after staged hypospadias repair. Miller MA, et al. **Br J Urol** 1997 Sep;80(3):485–8

Immediate reconstruction for penile agenesis [see comments] Bruch SW, et al. **J Pediatr Surg** 1996 Aug;31(8):1152–3; discussion 1154. Comment in: J Pediatr Surg 1997 Jun;32(6):938–9.

Immediate reconstruction for penile agenesis [letter; comment] Ozbey H, et al. **J Pediatr Surg** 1997 Jun; 32(6):938–9. Comment on: J Pediatr Surg 1996 Aug;31(8):1152–3; discussion 1154.

Prenatal predisposition and the clinical management of some pediatric conditions. Elder JS. **J Urol** 1997 Oct;158(4):1636

Evaluation of the infant who has ambiguous genitalia, and principles of operative management. Donahoe PK, et al. **Semin Pediatr Surg** 1996 Feb;5(1):30–40 (44 ref.)

Urogenital sinus and cloacal malformations. Hendren WH. **Semin Pediatr Surg** 1996 Feb;5(1):72–9

THERAPY

Androgen–resistance syndromes: considerations of gender assignment. Gooren LJ. **Curr Ther Endocrinol Metab** 1997; 6:380–4 (6 ref.)

The infant with ambiguous genitalia. Lee MM, et al. **Curr Ther Endocrinol Metab** 1997;6:216–23 (5 ref.)

ULTRASONOGRAPHY

[Utility of ultrasonography in patients with ambiguous external genitalia: a clinical case] Annese P, et al. **Arch Ital Urol Androl** 1996 Dec;68(5 Suppl):139–40 (Eng. Abstr.) **(Ita)**

VETERINARY

Pyovagina and stump pyometra in a neutered XX sex–reversed beagle: a case report. Williams J, et al. **J Am Anim Hosp Assoc** 1997 Jan–Feb;33(1):83–90

SEX DIMORPHISM see **SEX CHARACTERISTICS**

SEX DISORDERS

Sexual medicine [editorial] [see comments] Lewin J, et al. **BMJ** 1997 May 17;314(7092):1432. Comment in: BMJ 1997 Aug 16;315(7105):429.

ABC of mental health. Psychosexual problems. Watson JP, et al. **BMJ** 1997 Jul 26;315(7102):239–42 (4 ref.)

[Sexuality problems of disabled people are neglected. Health personnel is not educated in sexology] Silber M. **Lakartidningen** 1996 Oct 16;93(42):3703–4, 3706–8 **(Swe)**

CHEMICALLY INDUCED

Sexual dysfunction as an obstacle to compliance with antihypertensive therapy. Rosen RC. **Blood Press Suppl** 1997;1:47–51 (19 ref.)

Long–term effects on sexual function of five antihypertensive drugs and nutritional hygienic treatment in hypertensive men and women. Treatment of Mild Hypertension Study (TOMHS) [see comments] Grimm RH Jr, et al. **Hypertension** 1997 Jan;29(1 Pt 1):8–14. Comment in: ACP J Club 1997 Jul–Aug;127(1):6.

Sexual dysfunction in nonseminoma testicular cancer patients is related to chemotherapy–induced angiopathy. van Basten JP, et al. **J Clin Oncol** 1997 Jun;15(6):2442–8 (55 ref.)

SSRIs, bupropion, and sexual function. Edens N, et al. **J Fam Pract** 1997 Aug;45(2):101–2

Medications that may contribute to sexual disorders. A guide to assessment and treatment in family practice. Finger WW, et al. **J Fam Pract** 1997 Jan;44(1):33–43 (51 ref.)

COMPLICATIONS

Sexual experience of the chronic peritoneal dialysis patient. Steele TE, et al. **J Am Soc Nephrol** 1996 Aug;7(8):1165–8

DIAGNOSIS

[The background factors influencing loss of sexual intercourse after transurethral resection of the prostate (TUR–P)––A study using the Sapporo Medical University–Questionnaire] Shibuya A, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Apr;88(4):488–95 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Ejaculation–retarding properties of paroxetine in patients with primary premature ejaculation: a double–blind, randomized, dose–response study. Waldinger MD, et al. **Br J Urol** 1997 Apr;79(4):592–5

An open clinical trial of fluoxetine in the treatment of premature ejaculation. Lee HS, et al. **J Clin Psychopharmacol** 1996 Oct;16(5):379–82

[Drug treatment of sexual disorders in men (see comments)] Slob AK, et al. **Ned Tijdschr Geneeskd** 1996 Oct 12; 140(41):2029–32 (33 ref.). Comment in: Ned Tijdschr Geneeskd 1996 Dec 14;140(50):2528. **(Dut)**

[Drug treatment of sex disorders in men (letter; comment)] Zelissen PM. **Ned Tijdschr Geneeskd** 1996 Dec 14; 140(50):2528. Comment on: Ned Tijdschr Geneeskd 1996 Oct 12;140(41):2029–32. **(Dut)**

[The role of testosterone undecanoate in correcting disorders of the copulative function] Tiktinskiĭ OL, et al. **Urol Nefrol (Mosk)** 1996 Sep–Oct;(5):47–8 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Sexual dysfunction prior to high–dose chemotherapy and bone marrow transplantation. Marks DI, et al. **Bone Marrow Transplant** 1996 Apr;17(4):595–9

Retrograde ejaculation after anterior interbody lumbar fusion. Tiusanen H, et al. **Eur Spine J** 1995;4(6):339–42

Sexual difficulties, concerns, and satisfaction in homosexual men: an empirical study with implications for HIV prevention. Rosser BR, et al. **J Sex Marital Ther** 1997 Spring;23(1):61–73

ETIOLOGY

Sexual dysfunction in the diabetic BB/WOR rat: a role of central neuropathy. McVary KT, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R259–67

Sexual dysfunction in treated breast cancer patients [see comments] Barni S, et al. **Ann Oncol** 1997 Feb;8(2):149–53 . Comment in: Ann Oncol 1997 Feb;8(2):105–7. Comment in: Ann Oncol 1997 Jun;8(6):616–8.

Sexual functioning after breast cancer: a conceptual framework for future studies [editorial; comment] Ganz PA. **Ann Oncol** 1997 Feb;8(2):105–7. Comment on: Ann Oncol 1997 Feb;8(2):149–53.

Psychological and sexual aspects of the menopause and HRT. Pearce MJ, et al. **Baillieres Clin Obstet Gynaecol** 1996 Sep; 10(3):385–99 (66 ref.)

Surgery, drugs, and the male orgasm [editorial] Dunsmuir WD, et al. **BMJ** 1997 Feb 1;314(7077):319–20

A prospective study of the effects of high-dose chemotherapy and bone marrow transplantation on sexual function in the first year after transplant. Marks DI, et al. **Bone Marrow Transplant** 1997 Apr;19(8):819–22

Postnatal sexual health [letter; comment] Bruml S, et al. **Br J Gen Pract** 1996 Jul;46(408):438–9. Comment on: Br J Gen Pract 1996 Jan;46(402):47–8.

Posterior colporrhaphy: its effect on bowel and sexual function [letter; comment] Hogston P. **Br J Obstet Gynaecol** 1997 Aug;104(8):972–3. Comment on: Br J Obstet Gynaecol 1997 Jan;104(1):82–6.

Posterior colporrhaphy: its effects on bowel and sexual function [see comments] Kahn MA, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):82–6. Comment in: Br J Obstet Gynaecol 1997 Aug;104(8):972–3.

Bladder, bowel and sexual function after hysterectomy for benign conditions. Thakar R, et al. **Br J Obstet Gynaecol** 1997 Sep;104(9):983–7 (41 ref.)

Influence of transurethral resection on sexual dysfunction in patients with prostate cancer. Bieri S, et al. **Br J Urol** 1996 Oct;78(4):537–41

Head injury and sexual dysfunction [see comments] Elliott ML, et al. **Brain Inj** 1996 Oct;10(10):703–17 (111 ref.). Comment in: Brain Inj 1997 May;11(5):389–90.

Neurological and medico-social problems of spina bifida patients in adolescence and adulthood. Oi S, et al. **Childs Nerv Syst** 1996 Apr;12(4):181–7

Retrograde ejaculation after anterior interbody lumbar fusion. Tiusanen H, et al. **Eur Spine J** 1995;4(6):339–42

The effect of grandmultiparity on chronic pelvic pain and sexual discomfort. Gürel SA, et al. **Int J Gynaecol Obstet** 1997 May;57(2):133–8

Retrograde ejaculation after retroperitoneal lower lumbar interbody fusion. Christensen FB, et al. **Int Orthop** 1997; 21(3):176–80

Psychosexual morbidity following gynaecological malignancy [editorial] Casey C. **Ir Med J** 1996 Nov–Dec; 89(6):200, 202

Effect of trauma and pelvic fracture on female genitourinary, sexual, and reproductive function. Copeland CE, et al. **J Orthop Trauma** 1997 Feb–Mar;11(2):73–81

Preliminary evaluation of sexual problems in combat veterans with PTSD. Letourneau EJ, et al. **J Trauma Stress** 1997 Jan;10(1):125–32

Sexual dysfunction in Peyronie's disease: an analysis of 222 patients without previous local plaque therapy. Weidner W, et al. **J Urol** 1997 Jan;157(1):325–8

Homeostatic disruption and sexual disorders. Naisberg Y. **Med Hypotheses** 1996 Sep;47(3):243–7 (26 ref.)

Erythropoietin and sexual dysfunction. Lawrence IG, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):741–7

Dyspareunia: more than bad sex [editorial] Meana M, et al. **Pain** 1997 Jul;71(3):211–2

Sexual development in patients treated for cryptorchidism. Taskinen S, et al. **Scand J Urol Nephrol** 1997 Aug; 31(4):361–4

Bladder, bowel and sexual dysfunction in patients with multiple sclerosis--a cohort study. Bakke A, et al. **Scand J Urol Nephrol Suppl** 1996;179:61–6

Sexual function in patients with symptomatic benign prostatic hyperplasia. Schou J, et al. **Scand J Urol Nephrol Suppl** 1996;179:119–22

[Sexual problems and experiences with sexual and physical violence in gynecological patients] van Lankveld JJ, et al. **Ned Tijdschr Geneeskd** 1996 Sep 21;140(38):1903–6 (Eng. Abstr.) **(Dut)**

[Role of hormones in sexual dysfunctions, homosexuality, transsexualism and deviant sexual behavior: diagnostic and therapeutic consequences] Buvat J, et al. **Contracept Fertil Sex** 1996 Nov;24(11):834–46 (80 ref.) (Eng. Abstr.) **(Fre)**

[Menopause and sexuality] Mimoun S. **Contracept Fertil Sex** 1996 Jan;24(1):62–6 (12 ref.) (Eng. Abstr.) **(Fre)**

[Stress urinary incontinence and genito-sexual conditions. Study of 35 cases] Amarenco G, et al. **Prog Urol** 1996 Dec; 6(6):913–9 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Visual erotic and vibrotactile stimulation and intracavernous injection in screening men with erectile dysfunction: a 3 year experience with 406 cases. Incrocci L, et al. **Int J Impot Res** 1996 Dec;8(4):227–32

Vasculogenic female sexual dysfunction: the hemodynamic basis for vaginal engorgement insufficiency and clitoral erectile insufficiency. Park K, et al. **Int J Impot Res** 1997 Mar;9(1):27–37

Sexual function in multiple sclerosis. A 5-year follow-up study. Stenager E, et al. **Ital J Neurol Sci** 1996 Feb; 17(1):67–9

Somatosensory evoked potentials in patients with primary premature ejaculation. Xin ZC, et al. **J Urol** 1997 Aug; 158(2):451–5

Age-related increase in an advanced glycation end product in penile tissue. Jiaan DB, et al. **World J Urol** 1995; 13(6):369–75

[Sexual function in patients with disseminated sclerosis. A 5-year follow-up study] Stenager E, et al. **Ugeskr Laeger** 1997 Apr 28;159(18):2694–6 (Eng. Abstr.) **(Dan)**

[Hormones and male sexuality] Saltiel H. **Rev Med Interne** 1997;18 Suppl 1:14s–16s (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

The impact of breast cancer on sexuality. Kennedy BC, et al. **Nebr Med J** 1996 Mar;81(3):84–6

PSYCHOLOGY

The silent burden of sexual disability associated with lymphatic filariasis. Dreyer G, et al. **Acta Trop** 1997 Jan; 63(1):57–60

Premature ejaculation: a psychophysiological review. Metz ME, et al. **J Sex Marital Ther** 1997 Spring;23(1):3–23 (150 ref.)

SURGERY

Correction of congenital or acquired penile curvature through a simple corporoplication technique. Richter S, et al. **Int J Impot Res** 1996 Dec;8(4):255–8

THERAPY

Use of assisted reproductive techniques for treatment of ejaculatory disorders. Denil J, et al. **Andrologia** 1996;28 Suppl 1:43–51 (62 ref.)

The treatment of sexually dysfunctional men without partners: a controlled study of three behavioural group approaches. Stravynski A, et al. **Br J Psychiatry** 1997 Apr; 170:338–44

The Sexuality Project (Pro-Sex) of the Institute of Psychiatry of the HCFMUSP: first year of activities. de Oliveira SR, et al. **Rev Paul Med** 1996 Jul–Aug;114(4):1208–15

SEX DISTRIBUTION

Gender differences in patient preferences may underlie differential utilization of elective surgery. Karlson EW, et al. **Am J Med** 1997 Jun;102(6):524–30

Sex or gender? [letter; comment] Smith KL, et al. **CMAJ** 1997 Jun 15;156(12):1695. Comment on: Can Med Assoc J 1997 Jan 1;156(1):37–41.

Sex- and cell-specific expression of an estrogen receptor isoform in the pituitary gland. Demay F, et al. **Neuroendocrinology** 1996 Jun;63(6):522–9

Evaluating treatments when a gender by treatment interaction may exist. Russek-Cohen E, et al. **Stat Med** 1997 Feb 28;16(4):455–64

SEX EDUCATION

The source, accuracy, and impact of initial sexuality information on lifetime wellness. Ansuini CG, et al. **Adolescence** 1996 Summer;31(122):283–9

School-based sex education. Vancouver Conference Review. Wight D. **AIDS Care** 1997 Feb;9(1):66–9

Examination of the relationship between African American adolescents' condom use at sexual onset and later sexual behavior: implications for condom distribution programs. Lawrence JS, et al. **AIDS Educ Prev** 1996 Jun;8(3):258–66

Sexual knowledge, behavior and sources of information among deaf and hard of hearing college students. Joseph JM, et al. **Am Ann Deaf** 1995 Oct;140(4):338–45

Adolescent sexuality: an educational and counseling challenge. Ruusuvaara L. **Ann N Y Acad Sci** 1997 Jun 17; 816:411–3

Residents' self-assessed skills in providing sexuality-related care to teenagers. Wilson MD, et al. **Arch Pediatr Adolesc Med** 1997 Apr;151(4):418–22

Sexual behaviour in young people. Wellings K, et al. **Baillieres Clin Obstet Gynaecol** 1996 Apr;10(1):139–160 (58 ref.)

Development of a policy on sexuality for hospitalized chronic psychiatric patients. Welch SJ, et al. **Can J Psychiatry** 1996 Jun;41(5):273–9

Sexual health: are we targeting the right age groups? Sahai V, et al. **Can J Public Health** 1996 Jan–Feb;87(1):40–1

Trends in reproductive health knowledge following a health education intervention among adolescents in Zimbabwe. Rusakaniko S, et al. **Cent Afr J Med** 1997 Jan;43(1):1–6

Orgasm without organisms: science or propaganda? Genuis SJ, et al. **Clin Pediatr (Phila)** 1996 Jan;35(1):10–7 (105 ref.)

The effects of contraceptive education on method use at first intercourse. Mauldon J, et al. **Fam Plann Perspect** 1996 Jan–Feb;28(1):19–24

A reduction in the number of unwanted pregnancies among female army draftees through a controlled intervention. Malovizky D, et al. **Fertil Steril** 1997 Sep;68(3):435–8

Evaluation of an educational program to prevent adolescent pregnancy. Mitchell-DiCenso A, et al. **Health Educ Behav** 1997 Jun;24(3):300–12

The effect of sex education on adolescents' use of condoms: applying the Solomon four-group design [see comments] Kvalem IL, et al. **Health Educ Q** 1996 Feb;23(1):34–47. Comment in: Health Educ Q 1996 Nov;23(4):413–4.

Developing HIV-preventive behavioural interventions for young people in Scotland. Abraham C, et al. **Int J STD AIDS** 1996;7 Suppl 2:39–42 (27 ref.)

Sexual behaviour and sex education in Irish school-going teenagers [published erratum appears in Int J STD AIDS 1997 Jun;8(6):412] MacHale E, et al. **Int J STD AIDS** 1997 Mar;8(3):196–200

HIV behavioural interventions in young people in The Netherlands. Schaalma H, et al. **Int J STD AIDS** 1996;7 Suppl 2:43–6 (13 ref.)

Impact of a school-based prevention programme on traditional and egalitarian adolescents' safer sex intentions. Buysse A, et al. **J Adolesc** 1997 Apr;20(2):177–88

Anticipatory guidance regarding sex: views of virginal female adolescents. Ford CA, et al. **J Adolesc Health** 1996 Sep; 19(3):179–83

Counseling sexually active teenagers treated with potential human teratogens. Shilalukey K, et al. **J Adolesc Health** 1997 Sep;21(3):143–6

How peer education changed peer sexuality educators' self-esteem, personal development, and sexual behavior. Sawyer RG, et al. **J Am Coll Health** 1997 Mar;45(5):211–7

Nurses' role in the prevention of teen pregnancy. Ferguson SL. **J Pediatr Nurs** 1997 Jun;12(3):186–7

Gender representation in illustrations, text, and topic areas in sexuality education curricula. Beyer CE, et al. **J Sch Health** 1996 Dec;66(10):361–4

Discussions in the home about sex: different recollections by parents and children. King BM, et al. **J Sex Marital Ther** 1997 Spring;23(1):52–60

Sexual health and HIV infection [editorial; comment] Bingham JS. **Natl Med J India** 1996 Jul–Aug;9(4):155. Comment on: Natl Med J India 1996 Jul–Aug;9(4):156–9.

Rural sex education: assessment of programs and interagency collaboration. Polivka BJ. **Public Health Nurs** 1996 Dec; 13(6):425–33

Of HIV infection, condoms and sexuality education [letter; comment] Duncan ME. **S Afr Med J** 1996 Aug;86(8):985–6 . Comment on: S Afr Med J 1996 Jan;86(1):96–7.

Where Sarafina really failed [letter] Evian C. **S Afr Med J** 1996 Nov;86(11):1435

Lessons for life--past and present modes of sexuality education in Tanzanian society. Fuglesang M. **Soc Sci Med** 1997 Apr;44(8):1245–54

Religious crusade. School health is at center of battle for control of state's education system. Ortolon K. **Tex Med** 1996 Feb;92(2):30–3

Women and the heterosexual transmission of HIV: risks and prevention strategies. Gavey N, et al. **Women Health** 1997; 25(2):41–64 (115 ref.)

[The Adolescent Sexuality Hot-line--a 4-year study] Graugaard CL, et al. **Ugeskr Laeger** 1996 Sep 30; 158(40):5627–31 (Eng. Abstr.) **(Dan)**

[Questions regarding sex in the physician-patient relation] Noordenbos G. **Arch Gynecol Obstet** 1996;259 Suppl 1:S6–16 **(Ger)**

ECONOMICS

Cost-effectiveness of HIV-prevention skills training for men who have sex with men. Pinkerton SD, et al. **AIDS** 1997 Mar;11(3):347–57

HISTORY

Sex education in American nursing. A historical view. Bullough VL, et al. **Nurs Hist Rev** 1997;5:199–217

["Different from the others". Kraepelin's assessment of Hirschfeld's educational film. A contribution to the history of psychiatry of the Weimar Republic] Weber MM, et al. **Sudhoffs Arch Z Wissenschaftsgesch** 1997;81(1):1–20 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

State actions on reproductive health issues in 1996. Sollom T. **Fam Plann Perspect** 1997 Jan–Feb;29(1):35–40 (4 ref.)

METHODS

Tailoring STD/HIV prevention messages for young adolescents. Boekeloo BO, et al. **Acad Med** 1996 Oct;71(10 Suppl):S97–9

Evaluation of a knowledge- and cognitive-behavioral skills-building intervention to prevent STDs and HIV infection in high school students. Boyer CB, et al. **Adolescence** 1997 Spring;32(125):25–42

Activity and similarity on safe sex workshops led by peer educators. Reeder GD, et al. **AIDS Educ Prev** 1997 Feb; 9(1 Suppl):77–89

Our view of adolescent sexuality--a focus on risk behavior without the developmental context [editorial; comment] [see comments] Ehrhardt AA. **Am J Public Health** 1996 Nov;86(11):1523–5. Comment on: Am J Public Health 1996 Nov;86(11):1570–6. Comment in: Am J Public Health 1997 Aug;87(8):1380–1.

Education Now and Babies Later (ENABL): life history of a campaign to Postpone Sexual Involvement. Cagampang HH, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):109–14

Does condom availability make a difference? An evaluation of Philadelphia's health resource centers. Furstenberg FF Jr, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):123–7

The impact of the Postponing Sexual Involvement curriculum among youths in California. Kirby D, et al. **Fam Plann Perspect** 1997 May–Jun;29(3):100–8

Development and evaluation of a sexual decision-making and social skills program: "the choice is yours--preventing HIV/STDs". Noell J, et al. **Health Educ Behav** 1997 Feb;

SEX EDUCATION

24(1):87–101

Developing sexual health software incorporating user feedback: a British experience. Turner A, et al. **Health Educ Behav** 1997 Feb;24(1):102–20

Preventing teen pregnancy through persuasive communications: realities, myths, and the hard-fact truths. Witte K. **J Community Health** 1997 Apr;22(2):137–54

Integration of a sexuality counseling service into a reproductive health program for persons with mental retardation. Elkins TE, et al. **J Pediatr Adolesc Gynecol** 1997 Feb;10(1):24–7

Teen pregnancy: gateway to infertility [editorial] Sanfilippo JS. **J Pediatr Adolesc Gynecol** 1996 Nov;9(4):173–4

Jeopardy: using a familiar game to teach health. Wirth LA, et al. **J Sch Health** 1997 Feb;67(2):71–4

[Workshop on sexuality and its effectiveness as an alternative to sexual education directed to adolescents] Austin KL, et al. **Rev Med Panama** 1996 Sep;21(3):113–20 (Eng. Abstr.) **(Spa)**

ORGANIZATION & ADMINISTRATION

Effects of an institutional AIDS prevention intervention: moderation by gender. O'Leary A, et al. **AIDS Educ Prev** 1996 Dec;8(6):516–28

Coping with controversy: the professional epidemic of the nineties. Spalt SW. **J Sch Health** 1996 Nov;66(9):339–40

[Adolescent emergencies: the need for active prevention to the spread of STDs (sexually transmitted diseases)] Franchini F, et al. **Pediatr Med Chir** 1997 May–Jun; 19(3):193–5 (Eng. Abstr.) **(Ita)**

STANDARDS

An impact evaluation of project SNAPP: an AIDS and pregnancy prevention middle school program. Kirby D, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):44–61

Effects of a randomized health education intervention on aspects of reproductive health knowledge and reported behaviour among adolescents in Zimbabwe. Mbizvo MT, et al. **Soc Sci Med** 1997 Mar;44(5):573–7

SEX FACTOR, BACTERIAL see **F FACTOR**

SEX FACTOR F see **F FACTOR**

SEX FACTORS

Gender issues and generalism in medicine. Elks ML. **Acad Med** 1996 Dec;71(12):1281–4

Influence of gender on specialty choices in a Brazilian medical school. Figueiredo JF, et al. **Acad Med** 1997 Jan; 72(1):68–70

Men and women residents' experiences with women's health care in a family medicine center. Sabir S, et al. **Acad Med** 1997 Apr;72(4):293–5

Treatment of substance abusers: single or mixed gender programs? Hodgins DC, et al. **Addiction** 1997 Jul; 92(7):805–12 (60 ref.)

Sex difference in asthma prevalence. Berlier M, et al. **Allergy** 1997 Aug;52(8):871–2

Comparison of preoperative characteristics of men and women undergoing coronary artery bypass grafting (the Post Coronary Artery Bypass Graft [CABG] Biobehavioral Study). Czajkowski SM, et al. **Am J Cardiol** 1997 Apr 15; 79(8):1017–24

The effect of short-term fasting, apolipoprotein E gene polymorphism, and sex on plasma lipids. Lehtimäki T, et al. **Am J Clin Nutr** 1997 Sep;66(3):599–605

Gender, quality of life, and mental disorders in primary care: results from the PRIME-MD 1000 study. Linzer M, et al. **Am J Med** 1996 Nov;101(5):526–33

Role of sex in familial aggregation of blood pressure in young families [letter] Chen Y, et al. **Am J Med Genet** 1997 May 16;70(2):207–8

Sex difference in progression of adriamycin-induced nephropathy in rats. Sakemi T, et al. **Am J Nephrol** 1996; 16(6):540–7

Differential ventral septal vasopressin release is associated with sexual dimorphism in PGE2 fever. Chen X, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1664–9

Vive la différence: males vs females in flies vs worms. Cline TW, et al. **Annu Rev Genet** 1996;30:637–702 (241 ref.)

Are boys better than girls at building a tower or a bridge at 2 years of age? Labarthe JC. **Arch Dis Child** 1997 Aug; 77(2):140–4

Association of gender and survival in patients with acute myocardial infarction. Maynard C, et al. **Arch Intern Med** 1997 Jun 23;157(12):1379–84

Treatment and health outcomes of women and men in a cohort with coronary artery disease. Schwartz LM, et al. **Arch Intern Med** 1997 Jul 28;157(14):1545–51

Sex differences in visceral fat lipolysis and metabolic complications of obesity. Lönnqvist F, et al. **Arterioscler Thromb Vasc Biol** 1997 Jul;17(7):1472–80

Sex differences in constitutive level of renal lauric acid hydroxylase activities and CYP4A-related proteins in mice. Hiratsuka M, et al. **Biol Pharm Bull** 1996 Apr;19(4):512–7

Seasonal variability in blood platelet 3H-imipramine binding in healthy controls: age and gender effects. Soria PR, et al. **Biol Psychiatry** 1996 Nov 15;40(10):981–5

Tropical diseases and the gender approach. Dias JC. **Bull Pan Am Health Organ** 1996 Sep;30(3):242–60 (94 ref.)

Sex differences in coronary heart disease. Why are women so superior? The 1995 Ancel Keys Lecture. Barrett-Connor E. **Circulation** 1997 Jan 7;95(1):252–64

Sex and parity modulate cytokine production during murine ageing. Barrat F, et al. **Clin Exp Immunol** 1997 Sep; 109(3):562–8

Gender differences in mood and cardiovascular responses to socially stressful stimuli. Morris-Prather CE, et al. **Ethn Dis** 1996 Winter-Spring;6(1–2):123–31

Gender differences in irritable bowel symptoms. Thompson WG. **Eur J Gastroenterol Hepatol** 1997 Mar;9(3):299–302

Gender equality in gastroenterology: an achievable goal? [editorial; comment] Wolf JL. **Gastroenterology** 1997 Aug; 113(2):684–6. Comment on: Gastroenterology 1997 Aug;113(2):669–74.

Risk of alcoholism and parental history: gender differences and a possible reporting bias. Crum RM, et al. **Genet Epidemiol** 1996;13(4):329–41

Age, gender, and non-modulation. A sexual dimorphism in essential hypertension. Fisher ND, et al. **Hypertension** 1997 Apr;29(4):980–5

Syphilis in injecting drug users: clues for high-risk sexual behaviour in female IDUs. Muga R, et al. **Int J STD AIDS** 1997 Apr;8(4):225–8

Status of research on gender differences. Berg MJ. **J Am Pharm Assoc (Wash)** 1997 Jan–Feb;NS37(1):43–56 (70 ref.)

Sex-related difference in the growth of prolactinomas: a clinical and proliferation marker study. Delgrange E, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2102–7

Evaluation of sex differences in the pharmacokinetics of ranitidine in humans. Abad-Santos F, et al. **J Clin Pharmacol** 1996 Aug;36(8):748–51

Effect of diltiazem on intraarterial blood pressure and heart rate during stress testing in patients with angina: a gender comparison study. Klassen GA, et al. **J Clin Pharmacol** 1997 Apr;37(4):297–303

Acetylator phenotype in relation to age and gender in the Baltimore Longitudinal Study of Aging. Korrapati MR, et al. **J Clin Pharmacol** 1997 Feb;37(2):83–91

Gender and coronary disease [editorial; comment] Fiebach NH. **J Gen Intern Med** 1997 Feb;12(2):132–4. Comment on: J Gen Intern Med 1997 Feb;12(2):79–87.

Presentations of acute myocardial infarction in men and women [see comments] Zucker DR, et al. **J Gen Intern Med** 1997 Feb;12(2):79–87. Comment in: J Gen Intern Med 1997 Feb;12(2):132–4.

Effects of gender and menopausal status on plasma lipoprotein subspecies and particle sizes. Li Z, et al. **J Lipid Res** 1996 Sep;37(9):1886–96

Sex differences in opioid antinociception. Bartok RE, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):769–78

Sex-related differences in morphine's antinociceptive activity: relationship to serum and brain morphine concentrations. Cicero TJ, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):939–44

Gender differences in abdominal aortic aneurysm prevalence, treatment, and outcome. Katz DJ, et al. **J Vasc Surg** 1997 Mar;25(3):561–8

Strain- and sex-specific variations in hepatic glutamine synthetase activity and distribution in rats and mice. Sirma H, et al. **Liver** 1996 Jun;16(3):166–73

Effect of gender on angioplasty outcome: are we closer to the answer? [editorial; comment] Alexander KP, et al. **Mayo Clin Proc** 1997 Jan;72(1):89–91. Comment on: Mayo Clin Proc 1997 Jan;72(1):5–12.

Effect of age, gender, and platelet count on Sonoclot coagulation analysis in patients undergoing orthopedic operations. Horlocker TT, et al. **Mayo Clin Proc** 1997 Mar; 72(3):214–9

Comparison of alcohol consumption patterns and social problems between women and men drink-drivers. Rogers DM, et al. **Med J Aust** 1997 Apr 7;166(7):358–61

Serum levels of type I procollagen C-terminal propeptide, insulin-like growth factor-I (IGF-I), and IGF binding protein-3 in obese children and adolescents: relationship to gender, pubertal development, growth, insulin, and nutritional status. Falorni A, et al. **Metabolism** 1997 Aug; 46(8):862–71

The relationship in African-Americans of sex differences in insulin-mediated suppression of nonesterified fatty acids to sex differences in fasting triglyceride levels. Sumner AE, et al. **Metabolism** 1997 Apr;46(4):400–5

General characteristics of U.S. Air Force and U.S. Army rated male and female aircrew. Voge VM. **Mil Med** 1996 Nov;161(11):654–7

Women in combat: concerns of U.S. Air Force and U.S. Army rated male and female aircrew. Voge VM, et al. **Mil Med** 1997 Feb;162(2):79–81

Gender differences in psychotropic medications. Lewis-Hall F. **Mt Sinai J Med** 1996 Oct-Nov;63(5–6):326–9 (36 ref.)

Men, women, and health insurance [see comments] Miles S, et al. **N Engl J Med** 1997 Jan 16;336(3):218–21. Comment in: N Engl J Med 1997 Jun 19;336(25):1841.

Halothane hepatitis in a South African population--frequency and the influence of gender and ethnicity [see comments] Voigt MD, et al. **S Afr Med J** 1997 Jul;87(7):882–5. Comment in: S Afr Med J 1997 Jul;87(7):880–3.

After unification: gender and subjective health status in East and West Germany. Lüschen G, et al. **Soc Sci Med** 1997 May;44(9):1313–23

Drug treatment: explaining the gender paradox. Fiorentine R, et al. **Subst Use Misuse** 1997 May;32(6):653–78

Influence of donor and recipient gender on the outcome of liver transplantation. Brooks BK, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):475–6

[Effect of patients' gender on the course of chronic myeloid leukemia] Abdulkadyrov KM, et al. **Vopr Onkol** 1997; 43(3):290–4 (Eng. Abstr.) **(Rus)**

[Does patient's gender affect the quality of clinical histories in primary care?] Clúa i Espuny JL, et al. **Aten Primaria** 1997 Jun 30;20(2):75–81 (Eng. Abstr.) **(Spa)**

[Hospitalization of children and gender (letter; comment)] Segura A, et al. **Aten Primaria** 1997 Jun 30;20(2):108–10 . Comment on: Aten Primaria 1995 Sep 15;16(4):197–202. **(Spa)**

[Acute myocardial infarction in Chile: differences between men and women in its evolution and prognosis. Multicenter Study Group on Infarction] (GEMI)] Prieto JC, et al. **Rev Med Chil** 1996 Jul;124(7):785–92 (Eng. Abstr.) **(Spa)**

SEX HORMONE-BINDING GLOBULIN

ANALYSIS

Endocrine profiles of male workers with exposure to trichloroethylene. Chia SE, et al. **Am J Ind Med** 1997 Sep; 32(3):217–22

Associations of alcohol, height, and reproductive factors with serum hormone concentrations in postmenopausal Japanese women. Steroid hormones in Japanese postmenopausal women. Nagata C, et al. **Breast Cancer Res Treat** 1997 Jul;44(3):235–41

The pituitary-gonadal axis and health in elderly men: a study of men born in 1913. Tibblin G, et al. **Diabetes** 1996 Nov; 45(11):1605–9

Sex hormone-binding globulin and glucose tolerance in postmenopausal women. The Rancho Bernardo Study. Goodman-Gruen D, et al. **Diabetes Care** 1997 Apr; 20(4):645–9

Androgen activity as a risk factor for impaired glucose tolerance in postmenopausal women. Larsson H, et al. **Diabetes Care** 1996 Dec;19(12):1399–403

Clinical utility of sex hormone-binding globulin measurement. Pugeat M, et al. **Horm Res** 1996; 45(3–5):148–55 (68 ref.)

Achievement of near-normal body weight as the prerequisite to normalize sex hormone-binding globulin concentrations in massively obese men. Pasquali R, et al. **Int J Obes Relat Metab Disord** 1997 Jan;21(1):1–5

The relationships of testosterone, estradiol, dehydroepiandrosterone-sulfate and sex hormone-binding globulin to lipid and glucose metabolism in healthy men. Shono N, et al. **J Atheroscler Thromb** 1996;3(1):45–51

Testosterone concentrations in men on chronic glucocorticosteroid therapy. Fitzgerald RC, et al. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):168–70

Determinants of sex hormone-binding globulin blood concentrations in premenopausal and postmenopausal women with different estrogen status. Virgilio-Menopause-Health Group. Pasquali R, et al. **Metabolism** 1997 Jan;46(1):5–9

Glucocorticoids: their role on gonadal function and LH secretion. Contreras LN, et al. **Minerva Endocrinol** 1996 Jun;21(2):43–6

Ratios of plasma and salivary testosterone throughout puberty: production versus bioavailability. Rilling JK, et al. **Steroids** 1996 Jun;61(6):374–8

[Correlation between the clinical stage of larynx cancer in male and female and levels of steroid hormones in serum] Szmeja Z, et al. **Otolaryngol Pol** 1996;50(1):21–31 (Eng. Abstr.) **(Pol)**

[Changes in molecular forms of sex hormone binding globulin during menstrual cycle and menopause] Fonseca ME, et al. **Ginecol Obstet Mex** 1996 Nov;64:508–16 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

A study of serum androgen and cortisol levels in female patients with rheumatoid arthritis. Correlation with disease activity. Mirone L, et al. **Clin Rheumatol** 1996 Jan; 15(1):15–9

Expression of sex hormone-binding globulin mRNA in uterine cervical cancers. Misao R, et al. **Tumour Biol** 1997; 18(1):6–12

CHEMISTRY

Secondary structure and shape of plasma sex steroid-binding protein—comparison with domain G of laminin results in a structural model of plasma sex steroid-binding protein. Beck K, et al. **Eur J Biochem** 1997 Jul 1;247(1):339–47

Effects of gonadotropin-releasing hormone on bioactivity of follicle-stimulating hormone (FSH) and microstructure of FSH, luteinizing hormone and sex hormone-binding globulin in a testosterone-based contraceptive trial: evaluation of responders and non-responders. Simoni M, et al. **Eur J Endocrinol** 1996 Oct;135(4):433–9

Roles of gamma-carboxylation and a sex hormone-binding globulin-like domain in receptor-binding and in biological

activities of Gas6. Tanabe K, et al. **FEBS Lett** 1997 May 26;408(3):306–10

Direct evidence for the localization of the steroid–binding site of the plasma sex steroid–binding protein (SBP or SHBG) at the interface between the subunits. Sui LM, et al. **Protein Sci** 1996 Dec;5(12):2514–20

DRUG EFFECTS

Environmental xenobiotics may disrupt normal endocrine function by interfering with the binding of physiological ligands to steroid receptors and binding proteins. Danzo BJ. **Environ Health Perspect** 1997 Mar;105(3):294–301

GENETICS

Overexpression of androgen–binding protein/sex hormone–binding globulin in male transgenic mice: tissue distribution and phenotypic disorders. Joseph DR, et al. **Biol Reprod** 1997 Jan;56(1):21–32

Expression and distribution of androgen–binding protein/sex hormone–binding globulin in the female rodent reproductive system. Joseph DR, et al. **Biol Reprod** 1997 Jan;56(1):14–20

Localization of sex hormone–binding globulin mRNA expression in human uterine endometrium. Misao R, et al. **Gynecol Endocrinol** 1997 Feb;11(1):1–4

Sex hormone–binding globulin: gene organization and structure/function analyses. Hammond GL, et al. **Horm Res** 1996;45(3–5):197–201 (41 ref.)

Rabbit sex hormone binding globulin: primary structure, tissue expression, and structure/function analyses by expression in Escherichia coli. Lee WM, et al. **J Endocrinol** 1997 Jun;153(3):373–84

Sex hormone binding globulin mRNA in human breast cancer: detection in cell lines and tumor samples. Moore KH, et al. **J Steroid Biochem Mol Biol** 1996 Nov; 59(3–4):297–304

Quantitative genetics of serum sex hormone–binding globulin levels in participants in the San Antonio Family Heart Study. Jaquish CE, et al. **Metabolism** 1997 Sep;46(9):988–91

METABOLISM

Relationship between serum sex hormones and coronary artery disease in postmenopausal women. Phillips GB, et al. **Arterioscler Thromb Vasc Biol** 1997 Apr;17(4):695–701

Relationships between endogenous steroid hormone, sex hormone–binding globulin and lipoprotein levels in men: contribution of visceral obesity, insulin levels and other metabolic variables. Tchernof A, et al. **Atherosclerosis** 1997 Sep;133(2):235–44

Determinants of steroid hormone bioavailability. Hammond GL. **Biochem Soc Trans** 1997 May;25(2):577–82 (51 ref.)

Changes in plasma sex steroid–binding protein levels associated with ovarian recrudescence in the spotted seatrout (Cynoscion nebulosus). Laidley CW, et al. **Biol Reprod** 1997 Apr;56(4):931–7

Serum steroids in relation to prostate cancer risk in a case–control study (Greece). Signorello LB, et al. **Cancer Causes Control** 1997 Jul;8(4):632–6

Use of confocal microscopy to localize the SHBG interaction with human breast cancer cell lines—a comparison with serum albumin interaction. Germain P, et al. **Cell Mol Biol (Noisy–le–grand)** 1997 Jun;43(4):501–8

Twenty two weeks of transdermal estradiol increases sex hormone–binding globulin in surgical menopausal women. Başbuğ M, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jun;73(2):149–52

Functional assessment and clinical classification of androgen sensitivity in patients with mutations of the androgen receptor gene. German Collaborative Intersex Study Group. Sinnecker GH, et al. **Eur J Pediatr** 1997 Jan; 156(1):7–14

Optimal use of hormone determinations in the biochemical diagnosis of the polycystic ovary syndrome. Koskinen P, et al. **Fertil Steril** 1996 Mar;65(3):517–22

Factors related to sex hormone binding globulin concentrations in women with anorexia nervosa. Tomova A, et al. **Horm Metab Res** 1995 Nov;27(11):508–10

Sex steroid–binding protein and its membrane receptor in estrogen–dependent breast cancer: biological and pathophysiological impact. Fortunati N, et al. **Horm Res** 1996;45(3–5):202–6 (16 ref.)

Estradiol activates the prostate androgen receptor and prostate–specific antigen secretion through the intermediacy of sex hormone–binding globulin. Nakhla AM, et al. **J Biol Chem** 1997 Mar 14;272(11):6838–41

A prospective study of sex hormone–binding globulin and fatal cardiovascular disease in Rancho Bernardo men and women. Goodman–Gruen D, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2999–3003

Low levels of sex hormone–binding globulin and testosterone are associated with smaller, denser low density lipoprotein in normoglycemic men. Haffner SM, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3697–701

Effects of hormonal replacement therapy on plasma sex hormone–binding globulin, androgen and insulin–like growth factor–1 levels in postmenopausal women. Stomati M, et al. **J Endocrinol Invest** 1996 Sep;19(8):535–41

Predictive value of serum sex hormone binding globulin for the occurrence of hepatocellular carcinoma in male patients with cirrhosis. Ganne–Carrié N, et al. **J Hepatol** 1997 Jan; 26(1):96–102

Prospective study of sex hormone levels and risk of prostate cancer [letter; comment] Wolk A, et al. **J Natl Cancer Inst** 1997 Jun 4;89(11):820. Comment on: J Natl Cancer Inst 1996 Aug 21;88(16):1118–26.

Quantitative genetics of serum sex hormone–binding globulin levels in participants in the San Antonio Family Heart Study. Jaquish CE, et al. **Metabolism** 1997 Sep;46(9):988–91

Exercise increases serum testosterone and sex hormone–binding globulin levels in older men. Zmuda JM, et al. **Metabolism** 1996 Aug;45(8):935–9

Sex hormone responses in healthy men and male patients with chronic obstructive pulmonary disease during an oral glucose load. Hjalmarsen A, et al. **Scand J Clin Lab Invest** 1996 Nov;56(7):635–40

Distribution of immunoreactive androgen–binding protein/sex hormone–binding globulin in tissues of the fetal rat. Becchis M, et al. **Steroids** 1996 Jul;61(7):392–400

[Sex steroid–binding globulin, free serum testosterone, and androgen receptors in the skin during papulo–pustulosa and conglobate forms of acne vulgaris] Kushlinskiĭ NE, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):188–91 **(Rus)**

PHARMACOLOGY

Stimulation of prostate cancer growth by androgens and estrogens through the intermediacy of sex hormone–binding globulin. Nakhla AM, et al. **Endocrinology** 1996 Oct;137(10):4126–9

Growth response of adult germ cells to rat androgen–binding protein and human sex hormone–binding globulin. Gérard A, et al. **Horm Res** 1996;45(3–5):218–21

PHYSIOLOGY

Daily rhythmic and non–rhythmic variations of follitropin, lutropin, testosterone, and sex–hormone–binding globulin in men. Valero–Politi J, et al. **Eur J Clin Chem Clin Biochem** 1996 Jun;34(6):455–62

Sex hormone–binding protein, hyperinsulinemia, insulin resistance and noninsulin–dependent diabetes. Haffner SM. **Horm Res** 1996;45(3–5):233–7 (45 ref.)

Sex hormone–binding globulin: gene organization and structure/function analyses. Hammond GL, et al. **Horm Res** 1996;45(3–5):197–201 (41 ref.)

SECRETION

Biologically active steroid and thyroid hormones stimulate secretion of sex hormone–binding globulin by human term placenta in culture. Diaz L, et al. **Arch Med Res** 1997 Spring;28(1):29–36

Biochemical selection of prepubertal patients with androgen insensitivity syndrome by sex hormone–binding globulin response to the human chorionic gonadotropin test. Bertelloni S, et al. **Pediatr Res** 1997 Feb;41(2):266–71

SEX HORMONES

Increased carbohydrate–deficient transferrin during pregnancy and relation to sex hormones: %CDT will not yield false positive results [letter] Grimsrud K. **Alcohol Alcohol** 1997 Jul–Aug;32(4):537–8

Natural sex steroids and their xenobiotic analogs in animal production: growth, carcass quality, pharmacokinetics, metabolism, mode of action, residues, methods, and epidemiology. Lone KP. **Crit Rev Food Sci Nutr** 1997 Mar; 37(2):93–209 (1177 ref.)

Cellular receptors for sex steroids in human pituitary adenomas. Jaffrain–Rea ML, et al. **J Endocrinol** 1996 Nov; 151(2):175–84

Mitogen–activated protein kinase and mitogen–activated kinase phosphatase–1 expression in the Noble rat model of sex hormone–induced prostatic dysplasia and carcinoma. Leav I, et al. **Lab Invest** 1996 Sep;75(3):361–70

ADMINISTRATION & DOSAGE

Bioavailability of orally administered sex steroids used in oral contraception and hormone replacement therapy. Fotherby K. **Contraception** 1996 Aug;54(2):59–69 (52 ref.)

From basal luteinizing hormone (LH) concentrations to the pre–ovulatory LH surge: titration of the physiological effect of gonadotrophin surge–inhibiting/attenuating factor. van Dieten JA, et al. **Hum Reprod** 1995 Dec; 10(12):3110–6

ANALYSIS

Method for combined analysis of profiles of conjugated progesterone metabolites and bile acids in serum and urine of pregnant women. Meng LJ, et al. **J Chromatogr B Biomed Appl** 1997 Jan 10;688(1):11–26

Sonographically monitored ovarian stimulation for assisted reproduction: a prospective, blind study. Confino E, et al. **J Reprod Med** 1996 Jan;41(1):7–10

ANTAGONISTS & INHIBITORS

Role of hypoestrogenism or sex steroid antagonism in adhesion formation after myometrial surgery in primates. Grow DR, et al. **Fertil Steril** 1996 Jul;66(1):140–7

BIOSYNTHESIS

Autocrine–paracrine role of ovarian corticotropin–releasing hormone. Mastorakos G, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:27–41

Inhibin and activin have antagonistic paracrine effects on gonadal steroidogenesis during the development of the chicken embryo. Rombauts L, et al. **Biol Reprod** 1996 Jun; 54(6):1229–37

Effect of finasteride on human testicular steroidogenesis. Castro–Magana M, et al. **J Androl** 1996 Sep–Oct; 17(5):516–21

[Neovir, an interferon inductor, modifies expression of steroid hormone receptors in hormone–dependent tissues and restores sensitivity to tamoxifen in patients with inoperable breast cancer] Surkov KG, et al. **Vopr Onkol** 1996; 42(6):28–32 (Eng. Abstr.) **(Rus)**

BLOOD

Increased carbohydrate–deficient transferrin during pregnancy: relation to sex hormones. Stauber RE, et al. **Alcohol Alcohol** 1996 Jul;31(4):389–92

Congenital bilateral anorchia: clinical, hormonal and imaging study in 12 cases. De Rosa M, et al. **Andrologia** 1996 Sep–Oct;28(5):281–5

Genetic correlations between lipoprotein phenotypes and indicators of sex hormone levels in Mexican Americans. Jaquish CE, et al. **Atherosclerosis** 1996 Apr 26; 122(1):117–25

Changes in plasma gonadotropin II and sex steroid hormones, and sperm production of striped bass after treatment with controlled–release gonadotropin–releasing hormone agonist–delivery systems. Mylonas CC, et al. **Biol Reprod** 1997 Sep;57(3):669–75

Endocrine correlates of partner preference behavior in rams. Resko JA, et al. **Biol Reprod** 1996 Jul;55(1):120–6

Effects of a low–fat high–carbohydrate diet on plasma sex hormones in premenopausal women: results from a randomized controlled trial. Canadian Diet and Breast Cancer Prevention Study Group. Boyd NF, et al. **Br J Cancer** 1997;76(1):127–35

Testicular and adrenocortical function in men with prostatic cancer and in healthy age–matched controls. Carlström K, et al. **Br J Urol** 1997 Mar;79(3):427–31

Reproducibility studies and interlaboratory concordance for assays of serum hormone levels: estrone, estradiol, estrone sulfate, and progesterone. Gail MH, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Oct;5(10):835–44

Reliability and validity of serum sex hormone measurements. McShane LM, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Nov;5(11):923–8

Evidence for a primary abnormality of thecal cell steroidogenesis in the polycystic ovary syndrome. Gilling–Smith C, et al. **Clin Endocrinol (Oxf)** 1997 Jul; 47(1):93–9

Seasonal levels of reproductive hormones and their relationship to the antler cycle of male and female reindeer (Rangifer tarandus). Bubenik GA, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Feb; 116(2):269–77

Serum sex hormone levels are related to breast cancer risk in postmenopausal women. Dorgan JF, et al. **Environ Health Perspect** 1997 Apr;105 Suppl 3:583–5

The effect of repeated amphetamine and cocaine administration on adrenal, gonadal and thyroid hormone levels in the rat plasma. Budziszewska B, et al. **Exp Clin Endocrinol Diabetes** 1996;104(4):334–8

Intensive hormone monitoring in women with unexplained infertility: evidence for subtle abnormalities suggestive of diminished ovarian reserve. Leach RE, et al. **Fertil Steril** 1997 Sep;68(3):413–20

Stimulation of spermatogenesis or of sex reversal according to the dose of exogenous estradiol–17 beta in juvenile males of protandrous black porgy, Acanthopagrus schlegeli. Chang CF, et al. **Gen Comp Endocrinol** 1995 Dec; 100(3):355–67

Reproductive endocrinology of the explosively breeding desert spadefoot toad, Scaphiopus couchii. Harvey LA, et al. **Gen Comp Endocrinol** 1997 Jan;105(1):102–13

Hormonal patterns in postmenopausal women during gynecological surgery. Eriksson–Mjöberg M, et al. **Gynecol Obstet Invest** 1997;43(1):41–6

Pheromone–induced spawning of Pacific herring. II. Plasma steroids distinctive to fish responsive to spawning pheromone. Carolsfeld J, et al. **Horm Behav** 1997 Jun; 31(3):269–76

Sex hormone levels in the serum of patients with pancreatic adenocarcinoma. Fyssas I, et al. **Horm Metab Res** 1997 Mar;29(3):115–8

Sex hormones in postmenopausal women with breast cancer on tamoxifen. Kostoglou–Athanassiou I, et al. **Horm Res** 1997;47(3):116–20

Obesity as a protective factor for postmenopausal osteoporosis. Albala C, et al. **Int J Obes Relat Metab Disord** 1996 Nov;20(11):1027–32

Effects of a 110 kilometers ultra–marathon race on plasma hormone levels. Fournier PE, et al. **Int J Sports Med** 1997 May;18(4):252–6

Leptin concentrations, sex hormones, and cortisol in nondiabetic men. Haffner SM, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1807–9

Marked decline in serum concentrations of adrenal C19 sex steroid precursors and conjugated androgen metabolites during aging. Labrie F, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2396–402

Effects of age and sex hormones on transition and peripheral

zone volumes of prostate and benign prostatic hyperplasia in twins. Meikle AW, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):571–5

Hormonal profiles and prevalence of polycystic ovary syndrome in women with acne. Timpatanapong P, et al. **J Dermatol** 1997 Apr;24(4):223–9

Influence of menopause on blood cholesterol levels in women: the role of body composition, fat distribution and hormonal milieu. Virgilio Menopause Health Group. Pasquali R, et al. **J Intern Med** 1997 Mar;241(3):195–203

Interrelationships between weight loss, body fat distribution and sex hormones in pre- and postmenopausal obese women. Turcato E, et al. **J Intern Med** 1997 May; 241(5):363–72

Re: hormone levels during dietary changes in premenopausal African-American women [letter; comment] Hill P. **J Natl Cancer Inst** 1997 Apr 2;89(7):520–1. Comment on: J Natl Cancer Inst 1996 Oct 2;88(19):1369–74.

Does the timing of breast cancer surgery affect survival? [news] Randal J. **J Natl Cancer Inst** 1997 Apr 2;89(7):473–7

Effect of lithium maintenance treatment on hypothalamic pituitary gonadal axis in bipolar men. Kusalic M, et al. **J Psychiatry Neurosci** 1996 May;21(3):181–6

Transient alteration of the reproductive function in nephrotic rats. Menjivar M, et al. **Life Sci** 1997;61(12):1159–67

Sexuality, hormones and the menopausal transition. Dennerstein L, et al. **Maturitas** 1997 Mar;26(2):83–93

Mild adrenal and ovarian steroidogenic abnormalities in hirsute women without hyperandrogenemia: does idiopathic hirsutism exist? Escobar-Morreale HF, et al. **Metabolism** 1997 Aug;46(8):902–7

Nicotine and stress: effect on sex hormones and lipid profile in female rats. Abd el Mohsen MM, et al. **Pharmacol Res** 1997 Mar;35(3):181–7

Masculinizing and feminizing syndromes caused by functioning tumors. Masiakos PT, et al. **Semin Pediatr Surg** 1997 Aug;6(3):147–55 (64 ref.)

[Hormonal status of the woman and its effect on symptoms and progression of chronic polyarthritis] Siegmeth W, et al. **Acta Med Austriaca** 1996;23(4):124–8 (Eng. Abstr.) **(Ger)**

[Disorder of 17 beta-hydroxysteroid dehydrogenase as the cause of hypergonadotropic hypogonadism in 2 siblings with primary amenorrhea] Wieacker P, et al. **Geburtshilfe Frauenheilkd** 1996 Sep;56(9):491–3 (Eng. Abstr.) **(Ger)**

[Circadian changes in the levels of sex and glucocorticoid hormones in the peripheral blood plasma of female silver foxes] Osadchuk LV. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):70–7 (Eng. Abstr.) **(Rus)**

[Hypophyseal and sex hormones in Chernobyl' emergency team members with neurocirculatory dystonia] Kovalenko AN. **Klin Med (Mosk)** 1996;74(4):68–9 **(Rus)**

CHEMISTRY

Purification and characterization of the active precursor of a human sperm motility inhibitor secreted by the seminal vesicles: identity with semenogelin. Robert M, et al. **Biol Reprod** 1996 Oct;55(4):813–21

DEFICIENCY

The effects of male gender and female sex hormone deficiency on the vascular responses of the rat in vitro. Nevala R, et al. **J Physiol Pharmacol** 1996 Sep;47(3):425–32

Adrenal and gonadal steroid hormone deficiency in the pathogenesis of rheumatoid arthritis. Wilder RL. **J Rheumatol Suppl** 1996 Mar;44:10–2

GENETICS

Cloning of the semenogelin II gene of the rhesus monkey. Duplications of 360 bp extend the coding region in man, rhesus monkey and baboon. Ulvsbäck M, et al. **Eur J Biochem** 1997 Apr 1;245(1):25–31

Distribution and tissue expression of semenogelin I and II in man as demonstrated by in situ hybridization and immunocytochemistry. Bjartell A, et al. **J Androl** 1996 Jan-Feb;17(1):17–26

HISTORY

Menopause, only for women? The social construction of menopause as an exclusively female condition. Oudshoorn NE. **J Psychosom Obstet Gynaecol** 1997 Jun;18(2):137–44 (16 ref.)

IMMUNOLOGY

The sex ratio of AIDS-associated Kaposi's sarcoma does not provide evidence that sex hormones play a role in pathogenesis [letter] Grulich AE, et al. **AIDS** 1996 Nov; 10(13):1595–6

Role of sex hormones in autoimmune disease: comment on the article by Nelson [letter] Steinberg AD. **Arthritis Rheum** 1996 Oct;39(10):1766–7

Distribution and tissue expression of semenogelin I and II in man as demonstrated by in situ hybridization and immunocytochemistry. Bjartell A, et al. **J Androl** 1996 Jan-Feb;17(1):17–26

METABOLISM

Occurrence of sex steroid hormones and their binding proteins in Octopus vulgaris lam [published erratum appears in Biochem Biophys Res Commun 1996 Dec 4;229(1):361] D'Aniello A, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):782–8

Characterization of prostate-specific antigen proteolytic activity on its major physiological substrate, the sperm motility inhibitor precursor/semenogelin I. Robert M, et al. **Biochemistry** 1997 Apr 1;36(13):3811–9

Avian germinal disc region secretes factors that stimulate proliferation and inhibit progesterone production by granulosa cells. Tischkau SA, et al. **Biol Reprod** 1996 Apr; 54(4):865–70

In vitro effects of gamma-hexachlorocyclohexane on in vitro biosynthesis and metabolism of steroids in goldfish Carassius auratus. Kime DE, et al. **Ecotoxicol Environ Saf** 1996 Jul;34(2):165–73

Relationships among sex steroids, oxytocin, and their receptors in the rat uterus during late gestation and at parturition. Fang X, et al. **Endocrinology** 1996 Aug; 137(8):3213–9

Steroid hormones and cancer: (II) Lessons from experimental systems. Miller WR, et al. **Eur J Surg Oncol** 1997 Feb; 23(1):72–83 (160 ref.)

The effect of the aromatase inhibitor fadrozole and two polynuclear aromatic hydrocarbons on sex steroid secretion by ovarian follicles of coho salmon. Afonso LO, et al. **Gen Comp Endocrinol** 1997 May;106(2):169–74

Yolk steroids decline during sexual differentiation in the alligator. Conley AJ, et al. **Gen Comp Endocrinol** 1997 Aug; 107(2):191–200

Ovarian steroid levels in Salamandra salamandra infraimmaculata during the reproductive cycle. Degani G, et al. **Gen Comp Endocrinol** 1997 Jun;106(3):356–60

Seasonal changes in gonadal activity and the effects of stress on reproductive hormones in the common snapping turtle, Chelydra serpentina. Mahmoud IY, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):359–72

Relationship between tumour necrosis factor alpha and sex steroid concentrations in the follicular fluid of women with immunological infertility. Cianci A, et al. **Hum Reprod** 1996 Feb;11(2):265–8

Gonadal cell apoptosis: hormone-regulated cell demise. Billig H, et al. **Hum Reprod Update** 1996 Mar-Apr;2(2):103–17 (167 ref.)

Sex hormones and renal nitric oxide synthases. Neugarten J, et al. **J Am Soc Nephrol** 1997 Aug;8(8):1240–6

Reproductive function in male endurance athletes: sperm analysis and hormonal profile. Lucia A, et al. **J Appl Physiol** 1996 Dec;81(6):2627–36

How do cryptogenic and symptomatic infantile spasms differ? Review of biochemical studies in Finnish patients. Riikonen RS. **J Child Neurol** 1996 Sep;11(5):383–8

Independent effects of incubation temperature and gonadal sex on the volume and metabolic capacity of brain nuclei in the leopard gecko (Eublepharis macularius), a lizard with temperature-dependent sex determination. Coomber P, et al. **J Comp Neurol** 1997 Apr 14;380(3):409–21

Hormones and sexuality in postmenopausal women: a psychophysiological study. Laan E, et al. **J Psychosom Obstet Gynaecol** 1997 Jun;18(2):126–33

The key role of 17 beta-hydroxysteroid dehydrogenases in sex steroid biology. Labrie F, et al. **Steroids** 1997 Jan; 62(1):148–58

[Correlation of lymphocytic infiltration of tumor tissue with the hormonal and metabolic state in patients with breast cancer] Bershtein LM, et al. **Vopr Onkol** 1996;42(5):36–9 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Bioavailability of orally administered sex steroids used in oral contraception and hormone replacement therapy. Fotherby K. **Contraception** 1996 Aug;54(2):59–69 (52 ref.)

PHARMACOLOGY

Sex steroids regulate the expression of plasminogen activator inhibitor-1 and its mRNA in fibroblasts derived from uterine endometrium. Fujimoto J, et al. **Ann Clin Biochem** 1996 Nov;33 (Pt 6):545–50

Effects of gonadectomy and sex hormones on the induction of hepatic CYP4A by clofibrate in rats. Hiratsuka M, et al. **Biol Pharm Bull** 1996 Jan;19(1):34–8

Effects of 17 beta-estradiol and progesterone on growth-factor-induced proliferation and migration in human female aortic smooth muscle cells in vitro. Suzuki A, et al. **Cardiovasc Res** 1996 Sep;32(3):516–23

Paradoxical down-regulation and desensitization of beta2-adrenoceptors by exogenous progesterone in female asthmatics [see comments] Tan KS, et al. **Chest** 1997 Apr; 111(4):847–51. Comment in: Chest 1997 Apr;111(4):840–2.

Differential effects of sex hormones on autoantibody production and proteinuria in chronic graft-versus-host disease-induced experimental lupus nephritis. Van Griensven M, et al. **Clin Exp Immunol** 1997 Feb; 107(2):254–60

Effect of exogenous female sex-steroid hormones on beta 2-adrenoceptors in healthy males. Tan KS, et al. **Eur J Clin Pharmacol** 1997;52(4):281–3

Glutamic acid decarboxylase in rat olfactory bulb: effect of ovarian steroids or male pheromones. Navarro Becerra N, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):83–7

The role of gonadal hormones in gene expression of calbindin (Mr 28,000) in the laying hen. Bar A, et al. **Gen Comp Endocrinol** 1996 Jul;103(1):115–22

Effect of gonadal steroid hormones on plasma growth hormone concentraticns in sexually immature rainbow trout, Oncorhynchus mykiss. Holloway AC, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):246–54

Opposite effects of sex steroids on 11 beta-hydroxysteroid dehydrogenase activity in the normal and adrenalectomized rat testis. Nwe KH, et al. **Gen Pharmacol** 1997 May; 28(5):661–4

Secretion of interleukin-6 by human endometriotic cells and regulation by proinflammatory cytokines and sex steroids. Akoum A, et al. **Hum Reprod** 1996 Oct;11(10):2269–75

Sex hormones and renal nitric oxide synthases. Neugarten J, et al. **J Am Soc Nephrol** 1997 Aug;8(8):1240–6

Effect of gender and sex steroids on the contractile response of canine coronary and renal blood vessels. Karanian JW, et al. **J Cardiovasc Pharmacol** 1996 Mar;27(3):312–9

Interplay between sex steroids and melatonin in regulation of human benign prostate epithelial cell growth. Gilad E, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2535–41

Recombinant human insulin-like growth factor I, recombinant human growth hormone, and sex steroids: effects on markers of bone turnover in humans. Mauras N, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2222–6

The effect of one-year cross-sex hormonal treatment on bone metabolism and serum insulin-like growth factor-1 in transsexuals. van Kesteren P, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2227–32

The effects of steroidal and non-steroidal ovarian hormones on pituitary responsiveness to gonadotrophin surge-attenuating factor. Byrne B, et al. **J Endocrinol** 1996 Sep;150(3):413–22

Mouse anococcygeus muscle: sexual dimorphism and responsiveness to sex hormones. Fukazawa Y, et al. **J Endocrinol** 1997 Feb;152(2):229–37

Potent inhibitory effects of steroids in an in vitro model of angiogenesis. Jaggers DC, et al. **J Endocrinol** 1996 Sep; 150(3):457–64

Characterization of the ovine LH beta-subunit gene: the promoter is regulated by GnRH and gonadal steroids in transgenic mice. McNeilly JR, et al. **J Endocrinol** 1996 Dec; 151(3):481–9

Concentration of GnRH receptor and GnRH receptor mRNA in pituitary tissue of orchidectomized sheep: effect of oestradiol, progesterone, and progesterone withdrawal. Sakurai H, et al. **J Endocrinol** 1997 Jan;152(1):91–8

Modulation by neurosteroids of the in vivo (+)-[3H]SKF-10,047 binding to sigma 1 receptors in the mouse forebrain. Maurice T, et al. **J Neurosci Res** 1996 Dec 15;46(6):734–43

Effects of gonadal steroids on vascular function. Duckles SP, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):1–3

Regulation of epidermal growth factor receptor synthesis by ovarian steroids in human endometrial cells in culture. Watson H, et al. **J Reprod Fertil** 1996 Jul;107(2):199–205

Differential regulation of TGF-beta 2 by hormones in rat uterus and mammary gland. Schneider SL, et al. **J Reprod Immunol** 1996 Dec;32(2):125–44

Sex-hormonal regulation of 20.5 and 24 kDa major male-specific proteins in Syrian hamster submandibular gland. De PK. **J Steroid Biochem Mol Biol** 1996 May; 58(2):183–7

Sex steroids regulate the expression of plasminogen activator inhibitor-1 (PAI-1) and its mRNA in uterine endometrial cancer cell line Ishikawa. Fujimoto J, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):1–8

Effects of sex hormones on fluid and solute transport in Madin-Darby canine kidney cells. Sandhu S, et al. **Kidney Int** 1997 May;51(5):1535–9

Evidence for sex steroid inhibition of lipoprotein lipase in men: comparison of abdominal and femoral adipose tissue. Ramirez ME, et al. **Metabolism** 1997 Feb;46(2):179–85

Nocardia brasiliensis: in vitro and in vivo growth response to steroid sex hormones. Hernandez-Hernandez F, et al. **Mycopathologia** 1995 Nov;132(2):79–85

Structural sexual dimorphisms in the anteroventral periventricular nucleus of the rat hypothalamus are sensitive to gonadal steroids perinatally, but develop peripubertally. Davis EC, et al. **Neuroendocrinology** 1996 Feb;63(2):142–8

In vivo and in vitro regulation of pituitary transcription factor-1 (Pit-1) by changes in the hormone environment. González-Parra S, et al. **Neuroendocrinology** 1996 Jan; 63(1):3–15

Alterations in kappa opioid receptor mRNA levels in the paraventricular nucleus of the hypothalamus by stress and sex steroids. Yukhananov RY, et al. **Neuroreport** 1996 Jul 8;7(10):1690–4

Differential effects of ventilatory stimulation by sex hormones and almitrine on hypoxic erythrocytosis. Favier R, et al. **Pflugers Arch** 1997 May;434(1):97–103

Hormonal interventions with psychopharmacological potential: an overview. Halbreich U. **Psychopharmacol Bull** 1997;33(2):281–6 (69 ref.)

Effects of sex steroid hormones on lipoproteins, clotting, and the arterial wall. Knopp RH, et al. **Semin Reprod Endocrinol** 1996 Feb;14(1):15–27 (112 ref.)

Mast cell-Leydig cell relationships in the testis of the lizard Podarcis s. sicula Raf: thermal manipulation, ethane 1,2-dimethane sulphonate (EDS) and sex hormone treatment. Minucci S, et al. **Zygote** 1995 Aug;3(3):259–64

[Effect of sex hormones on the level of blood lipid peroxidation in vitro] Chukaev SA, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):73–6 **(Rus)**

PHYSIOLOGY

Interaction of corticosterone and gonadal steroids on lipid deposition in the female rat. Deshaies Y, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):E355–62

Sex hormones regulate CFTR in developing fetal rat lung epithelial cells. Sweezey NB, et al. **Am J Physiol** 1997 May; 272(5 Pt 1):L844–51

Neuropsychiatric lupus and hormones. Robinson T, et al. **Ann Med Interne (Paris)** 1996;147(4):276–80 (23 ref.)

Sports-related problems in reproductive function. Orley J. **Ann N Y Acad Sci** 1997 Jun 17;816:285–94 (15 ref.)

Do sex hormones modulate the synovial macrophages in rheumatoid arthritis? Cutolo M. **Ann Rheum Dis** 1997 May; 56(5):281–4

Sex hormones and the risk of osteoarthritis in women: epidemiological evidence. Nevitt MC, et al. **Ann Rheum Dis** 1996 Sep;55(9):673–6 (47 ref.)

Changes induced by sex steroids in the kinetic properties of hypothalamic GABA uptake. Etchegoyen GS, et al. **Arch Physiol Biochem** 1996;104(3):287–92

A PET study of Turner's syndrome: effects of sex steroids and the X chromosome on brain. Murphy DG, et al. **Biol Psychiatry** 1997 Feb 1;41(3):285–98

Effect of age, sex steroids, brain region, and genetic strain on brain inositol monophosphatase activity. Patishi Y, et al. **Biol Psychiatry** 1996 Oct 1;40(7):656–9

Re: The influence of gonadal hormones on periodicity of obsessive compulsive disorder [letter; comment] Warneke L. **Can J Psychiatry** 1996 Feb;41(1):60–1. Comment on: Can J Psychiatry 1995 May;40(4):205–7.

Gonadal steroid modulation of neuroendocrine transduction: a transynaptic view. Alonso-Solís R, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):357–82 (94 ref.)

Female sex hormones do not influence arterial wall properties during the normal menstrual cycle. Willekes C, et al. **Clin Sci (Colch)** 1997 May;92(5):487–91

The amygdala: corticotropin-releasing factor, steroids, and stress. Gray TS, et al. **Crit Rev Neurobiol** 1996;10(2):155–68 (109 ref.)

Sex, sexual orientation and sex hormones influence human cognitive function. Kimura D. **Curr Opin Neurobiol** 1996 Apr;6(2):259–63 (43 ref.)

Biological activity of hormones in preovulatory follicular fluid and serum of women undergoing ovarian stimulation. Andersen CY. **Dan Med Bull** 1997 Jun;44(3):257–73 (180 ref.)

Sexual differentiation of the brain in songbirds. Arnold AP, et al. **Dev Neurosci** 1996;18(1–2):124–36 (88 ref.)

Growth hormones and sex steroid interactions at puberty. Clark PA, et al. **Endocrinol Metab Clin North Am** 1996 Sep;25(3):665–81 (94 ref.)

Hormonal events during female puberty in relation to breast cancer risk. Apter D. **Eur J Cancer Prev** 1996 Dec; 5(6):476–82

Paracrine regulation of cellular interactions in the testis: factors in search of a function. Schlatt S, et al. **Eur J Endocrinol** 1997 Aug;137(2):107–17 (124 ref.)

Steroid hormones and cancer: (III) observations from human subjects. Miller WR, et al. **Eur J Surg Oncol** 1997 Apr; 23(2):163–77; quiz 177–8, 183 (228 ref.)

Membrane sex-steroid receptors in the brain. Ramirez VD, et al. **Front Neuroendocrinol** 1996 Oct;17(4):402–39 (200 ref.)

A natural experiment on the effects of ovarian hormones on cardiovascular risk factors and stress reactivity: bilateral salpingo oophorectomy versus hysterectomy only. Stoney CM, et al. **Health Psychol** 1997 Jul;16(4):349–58

Do sex differences in the brain explain sex differences in the hormonal induction of reproductive behavior? What 25 years of research on the Japanese quail tells us. Balthazart J, et al. **Horm Behav** 1996 Dec;30(4):627–61 (135 ref.)

Hormonal and experiential correlates of maternal responsiveness during pregnancy and the puerperium in human mothers. Fleming AS, et al. **Horm Behav** 1997 Apr; 31(2):145–58

Sexual partner preference in female zebra finches: the role of early hormones and social environment. Mansukhani V, et al. **Horm Behav** 1996 Dec;30(4):506–13

Social and developmental influences on reproductive function in female Wied's black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Horm Behav** 1997 Apr; 31(2):159–68

Nature needs nurture: the interaction of hormonal and social influences on the development of behavioral sex differences in rhesus monkeys. Wallen K. **Horm Behav** 1996 Dec; 30(4):364–78

Growth hormone, insulin-like growth factor-I and lipid metabolism: interactions with sex steroids. Björntorp P. **Horm Res** 1996;46(4–5):188–91 (12 ref.)

Interaction of the signalling pathways of insulin-like growth factor-I and sex steroids in the neuroendocrine hypothalamus. García-Segura LM, et al. **Horm Res** 1996; 46(4–5):160–4 (58 ref.)

Regulation of fetal allograft survival by a hormone-controlled Th1- and Th2-type cytokines. Piccinni MP, et al. **Immunol Res** 1996;15(2):141–50 (54 ref.)

Baldness and other correlates of sex hormones in relation to testicular cancer. Petridou E, et al. **Int J Cancer** 1997 Jun 11;71(6):982–5

Gender-specific physiology: how real is it? How important is it? Legato MJ. **Int J Fertil Womens Med** 1997 Jan–Feb; 42(1):19–29 (90 ref.)

Molecular aspects of steroid hormone action in the male reproductive axis. Shupnik MA, et al. **J Androl** 1997 Jul–Aug;18(4):341–4 (25 ref.)

Differential sex steroid negative feedback regulation of pulsatile follicle-stimulating hormone secretion in healthy older men: deconvolution analysis and steady-state sex-steroid hormone infusions in frequently sampled healthy older individuals. Veldhuis JD, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1248–54

Hormonal modulation of the vaginal bacterial flora in experimental polycystic ovarian disease. Singh KB, et al. **J Clin Lab Anal** 1996;10(5):233–8

The influence of female sex steroids on glucose metabolism and insulin action. Godsland IF. **J Intern Med Suppl** 1996; 738:1–60 (307 ref.)

A preliminary investigation of the relationship between ovarian steroids, LH, reproductive behaviour and vaginal changes in lesser bushbabies (Galago moholi). Lipschitz DL. **J Reprod Fertil** 1996 Jul;107(2):167–74

Sex hormones and Sjögren's syndrome. Sullivan DA. **J Rheumatol** 1997 Sep;24 Suppl 50:17–32 (249 ref.)

Hormones and bones. Rizzoli R, et al. **Lancet** 1997 Mar;349 Suppl 1:sI20–3 (32 ref.)

Ageing and ovarian hormones. Proceedings of the International Menopause Symposium. Tampere, Finland, 23–24 March 1995. **Maturitas** 1996 May;23 Suppl:S1–90

The neurobiology of gonadal hormones and cognitive decline in late life [editorial] Fillit H, et al. **Maturitas** 1997 Apr; 26(3):159–64

Mechanisms of action of sex steroid hormones: basic concepts and clinical correlations. Tuohimaa P, et al. **Maturitas** 1996 May;23 Suppl:S3–12 (75 ref.)

Lipids and lipoproteins in women. O'Brien T, et al. **Mayo Clin Proc** 1997 Mar;72(3):235–44 (106 ref.)

Regulation of the aminolevulinate synthase gene in the Syrian hamster Harderian gland: changes during development and circadian rhythm and role of some hormones. Rodriguez C, et al. **Microsc Res Tech** 1996 May 1;34(1):65–70 (50 ref.)

Menstruation, sex hormones, and migraine. MacGregor EA. **Neurol Clin** 1997 Feb;15(1):125–41 (75 ref.)

Sex hormones enhance the impact of male sensory cues on both primary and association cortical components of visual and olfactory processing pathways as well as in limbic and hypothalamic regions in female sheep. Ohkura S, et al. **Neuroscience** 1997 Sep;80(1):285–97

Integration of chemosensory and hormonal cues is essential for sexual behaviour in the male Syrian hamster: role of the medial amygdaloid nucleus. Wood RI, et al. **Neuroscience** 1997 Jun;78(4):1027–35

Promoter- and cell-specific responses to sex steroids. Milgrom E, et al. **Osteoporos Int** 1997;7 Suppl 1:S23–8 (40 ref.)

Influence of gender and endogenous sex steroids on catecholaminergic structures involved in physiological adaptation to hypoxia. Pequignot JM, et al. **Pflugers Arch** 1997 Mar;433(5):580–6

Photoperiod, sex, gonadal steroids, and housing density affect body fat in hamsters. Bartness TJ. **Physiol Behav** 1996 Aug; 60(2):517–29

Reproductive profiles of adult Mongolian gerbils gestated as the sole fetus in a uterine horn. Clark MM, et al. **Physiol Behav** 1997 Jan;61(1):77–81

Influence of early postnatal gonadal hormones on anxiety in adult male rats. Lucion AB, et al. **Physiol Behav** 1996 Dec;60(6):1419–23

Castration affects the emission of an ultrasonic vocalization in a nocturnal primate, the grey mouse lemur (Microcebus murinus). Zimmermann E. **Physiol Behav** 1996 Sep; 60(3):693–7

Steroid hormones, the menopause, sexuality and well-being of women. Cawood EH, et al. **Psychol Med** 1996 Sep; 26(5):925–36

The premenstrual phase and reactions to aversive events: a study of hormonal influences on emotionality. Van Goozen SH, et al. **Psychoneuroendocrinology** 1996 Jul;21(5):479–97

Neuroregulatory role of gonadal steroids in humans. Schmidt PJ, et al. **Psychopharmacol Bull** 1997;33(2):219–20

Combination oral contraceptives and cardiovascular disease. Darney PD. **Semin Reprod Endocrinol** 1996 Feb;14(1):51–61 (98 ref.)

[Hormones and apoptosis] Liu J, et al. **Chung Hua Nei Ko Tsa Chih** 1995 Oct;34(10):712–5 (18 ref.) **(Chi)**

[Role of hormones in sexual dysfunctions, homosexuality, transsexualism and deviant sexual behavior: diagnostic and therapeutic consequences] Buvat J, et al. **Contracept Fertil Sex** 1996 Nov;24(11):834–46 (80 ref.) (Eng. Abstr.) **(Fre)**

[Bone mineral density by ultrasonic measurement in pre- and postmenopausal women—relationship with sex hormones and nutritional states] Shono N, et al. **Nippon Eiseigaku Zasshi** 1997 Jan;51(4):755–62 (Eng. Abstr.) **(Jpn)**

[Premenstrual asthma: relation to hormones] Hernández Colin D, et al. **Rev Alerg Mex** 1997 Mar–Apr;44(2):35–8 (33 ref.) (Eng. Abstr.) **(Spa)**

SECRETION

Section III other hormonal causes. Sotos JF. **Clin Pediatr (Phila)** 1996 Dec;35(12):637–48 (35 ref.)

The pubertal spurt: effects of sex steroids on growth hormone and insulin-like growth factor I. Caufriez A. **Eur J Obstet Gynecol Reprod Biol** 1997 Feb;71(2):215–7

Follicular dynamics and ovarian steroid secretion in sheep during anoestrus. Souza CJ, et al. **J Reprod Fertil** 1996 Sep;108(1):101–6

Inhibition of steroid sex hormones release in rats by two Ca2+ channel blockers. Morad F, et al. **Pharmacol Res** 1997 Mar;35(3):177–80

THERAPEUTIC USE

Accuracy of final height prediction and effect of growth-reductive therapy in 362 constitutionally tall children. de Waal WJ, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1206–16

Sex hormones in systemic lupus erythematosus: a controversy for modern times [editorial; comment] Bruce IN, et al. **J Rheumatol** 1997 Aug;24(8):1461–3 (33 ref.). Comment on: J Rheumatol 1997 Aug;24(8):1639–40.

[The place of endocrinology in the management of transsexualism] Luton JP, et al. **Bull Acad Natl Med** 1996 Jun–Jul;180(6):1403–7 (Eng. Abstr.) **(Fre)**

[Treatment of pain in estrogen deficiency] Birkhäuser M. **Arch Gynecol Obstet** 1996;259 Suppl 1:S74–9 **(Ger)**

[The mixed gonadal dysgenesis. Diagnostic criteria and surgical treatment] Blanco JA, et al. **Cir Pediatr** 1997 Jan; 10(1):34–7 (Eng. Abstr.) **(Spa)**

TOXICITY

Effects of dehydroepiandrosterone and other sex steroid hormones on mammary carcinogenesis by direct injection of 7,12-dimethylbenz(a) anthracene (DMBA) in hyperprolactinemic female rats. Kohama T, et al. **Breast Cancer Res Treat** 1997 Apr;43(2):105–15

Involvement of transforming growth factor alpha (TGFalpha) and epidermal growth factor receptor (EGFR) in sex hormone-induced prostatic dysplasia and the growth of an androgen-independent transplantable carcinoma of the prostate. Kaplan PJ, et al. **Carcinogenesis** 1996 Dec; 17(12):2571–9

Studies for a genotoxic potential of some endogenous and exogenous sex steroids. II. Communication: examination for the induction of cytogenetic damage using the chromosomal aberration assay on human lymphocytes in vitro and the mouse bone marrow micronucleus test in vivo. Reimann R, et al. **Environ Mol Mutagen** 1996; 28(2):133–44

URINE

Urinary sex hormone excretions in premenopausal women and coronary heart disease risk: a nested case-referent study in the DOM-cohort. Gorgels WJ, et al. **J Clin Epidemiol** 1997 Mar;50(3):275–81

Lower sex hormones in men during anticipatory stress. Schulz P, et al. **Neuroreport** 1996 Nov 25;7(18):3101–4

SEX MATURATION

Self-assessment of sexual maturity by mid-adolescents based on a global question. Berg-Kelly K, et al. **Acta Paediatr** 1997 Jan;86(1):10–7

Secular trend in the sexual maturation of southern Chinese boys. Wong GW, et al. **Acta Paediatr** 1996 May;85(5):620–1

Examination of the relationship between African American adolescents' condom use at sexual onset and later sexual behavior: implications for condom distribution programs. Lawrence JS, et al. **AIDS Educ Prev** 1996 Jun;8(3):258–66

Growth, development, and sexual dimorphism in vervet monkeys (Cercopithecus aethiops) at four sites in Kenya. Turner TR, et al. **Am J Phys Anthropol** 1997 May; 103(1):19–35 (53 ref.)

Direct effect of low-intensity pulsed ultrasound on pubertal rat seminal vesicle. Haddad S, et al. **Arch Physiol Biochem** 1996;104(3):357–9

Age and hormonal dependence of acquisition of oocyte competence for embryogenesis in prepubertal calves. Presicce GA, et al. **Biol Reprod** 1997 Feb;56(2):386–92

Immunization against growth hormone releasing factor or chronic feed restriction initiated at 3.5 months of age reduces ovarian response to pulsatile administration of gonadotropin-releasing hormone at 6 months of age and delays onset of puberty in heifers. Schoppee PD, et al. **Biol Reprod** 1996 Jul;55(1):87–98

Photoperiod-induced changes in androgen receptor expression in testes and accessory sex glands of the bank vole, Clethrionomys glareolus. Tähkä KM, et al. **Biol Reprod** 1997 Apr;56(4):898–908

Pubertal growth, sexual maturation, and final height in children with IDDM. Effects of age at onset and metabolic control. Salerno M, et al. **Diabetes Care** 1997 May; 20(5):721–4

Leptin is a metabolic gate for the onset of puberty in the female rat. Cheung CC, et al. **Endocrinology** 1997 Feb; 138(2):855–8

Decreased cyclin A2 and increased cyclin G1 levels coincide with loss of proliferative capacity in rat Leydig cells during pubertal development. Ge RS, et al. **Endocrinology** 1997

Sep;138(9):3719–26

Interactions between N–methyl–D–aspartate, nitric oxide and serotonin in the control of prolactin secretion in prepubertal male rats. Aguilar E, et al. **Eur J Endocrinol** 1997 Jul; 137(1):99–106

Effects of N–methyl–D–aspartate and kainic acid on prolactin secretion in prepubertal female rats. Pinilla L, et al. **Eur J Endocrinol** 1996 Oct;135(4):464–8

Activation of salmon GnRH mRNA expression prior to differentiation of precocious males in Masu salmon. Amano M, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):365–71

The effect of food intake from two weeks of age to sexual maturity on plasma growth hormone, insulin–like growth factor–I, insulin–like growth factor–binding proteins, and thyroid hormones in female broiler breeder chickens. Bruggeman V, et al. **Gen Comp Endocrinol** 1997 Aug; 107(2):212–20

Developmental profile of plasma inhibin and gonadotropins from hatch to sexual maturity in male and female chickens. Johnson PA, et al. **Gen Comp Endocrinol** 1996 Apr; 102(1):56–60

Assessment of the need for follicle stimulating hormone in early preantral mouse follicle culture in vitro. Cortvrindt R, et al. **Hum Reprod** 1997 Apr;12(4):759–68

Testicular gamma–aminobutyric acid and circulating androgens in Syrian and Djungarian hamsters during sexual development. Frungieri MB, et al. **Int J Androl** 1996 Jun; 19(3):164–70

Elucidation of nucleus–cytoplasm interaction: change in ability of the nucleus to express sexuality according to clonal age in Paramecium. Haga N. **J Cell Sci** 1995 Dec; 108 (Pt 12):3671–6

Hyperinsuiinemia in postpubertal girls with a history of premature pubarche and functional ovarian hyperandrogenism. Ibanez L, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1237–43

Inhibin–B in the male rhesus monkey: impact of neonatal gonadotropin–releasing hormone antagonist treatment and sexual development. Mann DR, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1928–33

Distinct expression patterns and biological activities of two isoforms of the mouse orphan receptor TR2. Lee CH, et al. **J Endocrinol** 1997 Feb;152(2):245–55

Ethanol, growth hormone and testosterone in peripubertal rats. Tentler JJ, et al. **J Endocrinol** 1997 Mar;152(3):477–87

Administration of IGF–I affects the GH axis and adolescent growth in normal monkeys. Wilson ME. **J Endocrinol** 1997 May;153(2):327–35

Duality of glutamatergic and GABAergic control of pulsatile GnRH secretion by rat hypothalamic explants: II. Reduced NR2C– and GABAA–receptor–mediated inhibition at initiation of sexual maturation. Bourguignon JP, et al. **J Neuroendocrinol** 1997 Mar;9(3):193–9

Decline in basic fibroblast growth factor (FGF–2) mRNA expression in female rat hypothalamus at puberty. Smyth CE, et al. **J Neuroendocrinol** 1997 Feb;9(2):151–9

Brain and pituitary melatonin receptors in male rat during post–natal and pubertal development and the effect of pinealectomy and testosterone manipulation. Zitouni M, et al. **J Neuroendocrinol** 1996 Aug;8(8):571–7

Effects of oxytocin on sperm transport in the pubertal rat. Frayne J, et al. **J Reprod Fertil** 1996 Jul;107(2):299–306

Meiotic progression and developmental competence of oocytes collected from juvenile and adult ewes. Ledda S, et al. **J Reprod Fertil** 1997 Jan;109(1):73–8

Opioids regulate cell proliferation in the developing rat uterus: effects during the period of sexual maturation. Vértes Z, et al. **J Steroid Biochem Mol Biol** 1996 Oct; 59(2):173–8

Morphometric changes in the prepubertal female rat thyroid gland following acute exposure to 2,2',4,4'–tetrachlorobiphenyl and Aroclor 1242. Saeed A, et al. **J Toxicol Environ Health** 1997 Aug 8;51(5):503–13

Prediction of adult stature and noninvasive assessment of biological maturation. Beunen GP, et al. **Med Sci Sports Exerc** 1997 Feb;29(2):225–30

Male sexual behaviour not abolished after medial preoptic lesion in adult rats. Kumar VM, et al. **Neuroreport** 1996 Jun 17;7(9):1481–4

Lessons from practice–based clinical research [comment] Gennel M. **Pediatrics** 1997 Apr;99(4):597–8. Comment on: Pediatrics 1997 Apr;99(4):505–12.

Secondary sexual characteristics and menses in young girls seen in office practice: a study from the Pediatric Research in Office Settings network [see comments] Herman–Giddens ME, et al. **Pediatrics** 1997 Apr; 99(4):505–12. Comment in: Pediatrics 1997 Apr;99(4):597–8.

A maternal diet high in n – 6 polyunsaturated fats alters mammary gland development, puberty onset, and breast cancer risk among female rat offspring. Hilakivi–Clarke L, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19; 94(17):9372–7

Targeting transforming growth factor alpha expression to discrete loci of the neuroendocrine brain induces female sexual precocity. Rage F, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2735–40

Developmental capacity, energy metabolism and ultrastructure of mature oocytes from prepubertal and adult sheep. O'Brien JK, et al. **Reprod Fertil Dev** 1996; 8(7):1029–37

Skeletal age as a determinant of bone mass in preadolescent females. Ilich JZ, et al. **Skeletal Radiol** 1996 Jul;25(5):431–9

[Maturation and fertility in women with low birthweights] Beránková H. **Cas Lek Cesk** 1997 Jun 26;136(13):413–5 (Eng. Abstr.) **(Cze)**

[Andrology in adolescence: objectives and preventive measures (editorial)] Jacquin P. **Arch Pediatr** 1996 Oct; 3(10):947–50 (21 ref.) **(Fre)**

[Genomic heterozygosity, sexual maturation rate, and life expectancy] Altukhov IuP. **Dokl Akad Nauk** 1996 Jun; 348(6):842–5 **(Rus)**

[Heterospecific social factors influencing the rate of sexual maturation of Campbell's hamsters (Phodopus campbelli Thomas, 1905): the role of cross–rearing and secretion of the midventral gland of male Djungarian hamsters (Phodopus sungorus pallas, 1773)] Sokolov VE, et al. **Dokl Akad Nauk** 1996 Oct;350(4):571–4 **(Rus)**

[The formation of atherosclerotic prodromes in risk–group adolescents at stages in their sexual maturation] Bogmat LF. **Lik Sprava** 1997 Mar–Apr;(2):68–72 (Eng. Abstr.) **(Rus)**

[Geographic variability in the sexually mature phase of Ixodes persulcatus (Ixodidae). Experience in using databases on morphometry] Filippova NA, et al. **Parazitologiia** 1996 May–Jun;30(3):205–15 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Repeated postnatal phencyclidine administration in female juvenile rat delays onset of puberty but has no effect on pentylenetetrazol–induced seizure–susceptibility. Sircar R. **Brain Res** 1995 Oct 2;694(1–2):318–21

Masculinization of mosquitofish as an indicator of exposure to kraft mill effluent. Cody RP, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):429–36

Effects of metal–contaminated soils on the growth, sexual development, and early cocoon production of the earthworm Eisenia fetida, with particular reference to zinc. Spurgeon DJ, et al. **Ecotoxicol Environ Saf** 1996 Oct; 35(1):86–95

Effects of constant infusion with insulin–like growth factor–I (IGF–I) to immature female rats on body weight gain, tissue growth and sexual function. Evidence that such treatment does not affect sexual maturation of fertility. Gruaz NM, et al. **Endocrine** 1997 Feb;6(1):11–9

A synthetic peptide corresponding to amino acid residues 34 to 37 of human follicle–stimulating hormone beta–subunit accelerates the onset of puberty in male and female mice. Grasso P, et al. **Endocrinology** 1997 Oct; 138(10):4215–9

Diurnal sensitivity of the testes to exogenous testosterone propionate in sexually regressed whitethroated munia Lonchura malabarica. Maitra SK, et al. **Eur J Morphol** 1995 Nov;33(5):457–64

Role of testis exposure levels in the insensitivity of prepubertal rats to carbendazim–induced testicular toxicity. Lim J, et al. **Fundam Appl Toxicol** 1997 Jun;37(2):158–67

Actions of testosterone in prepubertal and postpubertal male hamsters: dissociation of effects on reproductive behavior and brain androgen receptor immunoreactivity. Meek LR, et al. **Horm Behav** 1997 Feb;31(1):75–88

Effects of bovine somatotropin treatment and intermittent growth pattern on mammary gland development in heifers. Carstens GE, et al. **J Anim Sci** 1997 Sep;75(9):2378–88

Leptin accelerates the onset of puberty in normal female mice. Ahima RS, et al. **J Clin Invest** 1997 Feb 1;99(3):391–5

Effect of chronic ethanol on reproductive and growth hormones in the peripubertal male rat. Steiner JC, et al. **J Endocrinol** 1997 Aug;154(2):363–70

Histopathological changes in the testes of prepubertal male rats after chronic administration of cocaine. Li H, et al. **J Environ Pathol Toxicol Oncol** 1997;16(1):67–71

Controlled–release melatonin implants delay puberty in rats without altering melatonin rhythmicity. Kennaway DJ, et al. **J Pineal Res** 1997 Apr;22(3):107–16

Cimicifuga and Melbrosia lack oestrogenic effects in mice and rats. Einer–Jensen N, et al. **Maturitas** 1996 Oct; 25(2):149–53

The effect of anabolic–androgenic steroids on sexual behavior and reproductive tissues in male rats. Feinberg MJ, et al. **Physiol Behav** 1997 Jul;62(1):23–30

Early onset of reproductive function in normal female mice treated with leptin. Chehab FF, et al. **Science** 1997 Jan 3;275(5296):88–90

GENETICS

Developmental isolation and subsequent adult behavior of Drosophila paulistorum. III. Alternative rearing [published erratum appears in Behav Genet 1996 Sep;26(5):533] Kim YK, et al. **Behav Genet** 1996 Jan;26(1):27–37

A mutation in the cAMP signaling pathway affects sexual development of Dictyostelium discoideum. Shimizu H, et al. **Dev Growth Differ** 1997 Apr;39(2):227–34

Estrogen receptor function as revealed by knockout studies: neuroendocrine and behavioral aspects. Rissman EF, et al. **Horm Behav** 1997 Jun;31(3):232–43 (90 ref.)

Selection for high and low threshold body weight at first egg in broiler strain females. 7. Effect of photoperiod on body weight and age at onset of mature semen production, in males of the selection lines, and in commercial broiler and layer males. Eitan Y, et al. **Poult Sci** 1996 Jul; 75(7):828–32

IMMUNOLOGY

Appearance of 'natural' antisperm autoantibodies after sexual maturation of normal Lewis rats. Flickinger CJ, et al. **J Reprod Immunol** 1997 Jun;33(2):127–45

Microvascular permeability to the F(ab')2 fragment of IgG in the male rat reproductive tract at puberty. Pöllänen P, et al. **J Reprod Immunol** 1997 Feb;32(3):221–40

PHYSIOLOGY

Sexual maturation in East German boys. Willers B, et al. **Acta Paediatr** 1996 Jul;85(7):785–8

Environmental factors and sexual maturation in rodents. Aubert ML, et al. **Acta Paediatr Suppl** 1996 Oct;417:86–8 (29 ref.)

Environmental factors and puberty in non–human primates. Plant TM. **Acta Paediatr Suppl** 1996 Oct;417:89–91 (14 ref.)

Age–related changes in scrotal circumference of Hungarian Simmental bulls in self–performance test. Tőzsér J, et al. **Acta Vet Hung** 1996;44(3):263–7

Sex differences in alcohol preference and drinking patterns emerge during the early postpubertal period. Lancaster FE, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):1043–9

Pubertal weight gain in female rhesus macaques. Blackwelder TL, et al. **Am J Phys Anthropol** 1996 Mar;99(3):449–54

A quantitative morphological study of age–related changes in the donkey testis in the period between puberty and senium. Nipken C, et al. **Andrologia** 1997 May–Jun; 29(3):149–61

Failure of melatonin implants to alter onset of puberty in gilts. Diekman MA, et al. **Anim Reprod Sci** 1997 Apr; 46(3–4):283–8

The effects of contact frequency and transport on the efficacy of the boar effect. Hughes PE, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):159–65

Secular changes in standing height, sitting height and sexual maturation of Chinese—the Hong Kong Growth Study, 1993. Leung SS, et al. **Ann Hum Biol** 1996 Jul–Aug; 23(4):297–306

Puberty occurring either spontaneously or induced precociously in rhesus monkey (Macaca mulatta) is associated with a marked proliferation of Sertoli cells [published erratum appears in Biol Reprod 1996 Sep;55(3):728] Marshall GR, et al. **Biol Reprod** 1996 Jun; 54(6):1192–9

Testis of prepubertal rhesus monkeys receives a dual catecholaminergic input provided by the extrinsic innervation and an intragonadal source of catecholamines. Mayerhofer A, et al. **Biol Reprod** 1996 Sep;55(3):509–18

Effects of medial preoptic area and septal lesions on puberty in female guinea pigs. Olster DH, et al. **Biol Reprod** 1997 Mar;56(3):731–8

Photoperiod control of the melatonin rhythm and reproductive maturation in the juvenile Djungarian hamster: 60–Hz magnetic field exposure effects. Truong H, et al. **Biol Reprod** 1996 Aug;55(2):455–60

Influence of thyroid hormone on Sertoli cell protein metabolism in the prepubertal pig. Palmero S, et al. **Boll Soc Ital Biol Sper** 1996 May–Jun;72(5–6):163–70

Photorefractory period of the Muscovy duck (Cairina moschata): endocrine and neuroendocrine responses to day length after a full reproductive cycle. Jacquet JM. **Br Poult Sci** 1997 May;38(2):209–16

Effect of constant and of changing photoperiods on age at first egg and related traits in pullets. Lewis PD, et al. **Br Poult Sci** 1996 Dec;37(5):885–94

Effect of social rank on brain monoaminergic activity in a cichlid fish. Winberg S, et al. **Brain Behav Evol** 1997; 49(4):230–6

Adolescent development influences functional responsiveness of noradrenergic projections to the hypothalamus in male rats. Choi S, et al. **Brain Res Dev Brain Res** 1996 Jul 20; 94(2):144–51

Decrease of (+)–3–[125I]MK–801 binding to NMDA brain receptors revealed at puberty in rats treated neonatally with monosodium glutamate. Otoya RE, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):149–56

The prepubertal ontogeny of luteinizing hormone releasing hormone–like immunoreactivity in the diencephalon and telencephalon of the male Meishan pig brain. Pearson PL, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):157–68

The prepubertal ontogeny of galanin–like immunoreactivity in the male Meishan pig brain. Pearson PL, et al. **Brain Res Dev Brain Res** 1996 Apr 30;92(2):125–39

Sexual development of hypernatriophilic male rats up to puberty. Almeida SA, et al. **Braz J Med Biol Res** 1996 Mar;29(3):395–8

Influence of follicular maturation on the susceptibility of chicken ovarian granulosa cells to free oxygen radicals. Nemecz G, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 May;117(1):25–30

Circulating leptin does not appear to provide a signal for triggering the initiation of puberty in the male rhesus monkey (Macaca mulatta). Plant TM, et al. **Endocrinology** 1997 Oct;138(10):4505–8

Elevated luteinizing hormone in prepubertal transgenic mice causes hyperandrogenemia, precocious puberty, and substantial ovarian pathology. Risma KA, et al. **Endocrinology** 1997 Aug;138(8):3540–7

Involvement of muscarinic receptors in the control of female puberty in the rat. Trkulja V, et al. **Eur J Pharmacol** 1996

Feb 15;297(1-2):93-6
Sources of the autonomic fibers to the mammary gland in pig. Boratyński Z, et al. **Folia Morphol (Warsz)** 1996; 55(4):219-21
Reproductive steroids during maturation in a primitive teleost, the Pacific herring (Clupea harengus pallasi). Carolsfeld J, et al. **Gen Comp Endocrinol** 1996 Sep; 103(3):331-48
In vitro synthesis of 17,20 beta,21-trihydroxy-4-pregnen-3-one by ovaries of turbot (Scophthalmus maximus L.) during oocyte maturation. Mugnier C, et al. **Gen Comp Endocrinol** 1997 Jul; 107(1):63-73
11-Ketotestosterone suppresses interrenal activity in rainbow trout (Oncorhynchus mykiss). Young G, et al. **Gen Comp Endocrinol** 1996 Sep;103(3):301-7
The socioendocrinology of adolescent development in male rhesus monkeys (Macaca mulatta). Dixson AF, et al. **Horm Behav** 1997 Apr;31(2):126-35
Male gray short-tailed opossums (Monodelphis domestica) receive penile intromissions when treated with estrogen and progesterone in adulthood. Fadem BH, et al. **Horm Behav** 1997 Jun;31(3):289-95
Progesterone receptor function from a behavioral perspective. Mani SK, et al. **Horm Behav** 1997 Jun; 31(3):244-55 (80 ref.)
Testosterone induction of male-like vocalizations in female budgerigars (Melopsittacus undulatus). Nespor AA, et al. **Horm Behav** 1996 Jun;30(2):162-9
Social and developmental influences on reproductive function in female Wied's black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Horm Behav** 1997 Apr; 31(2):159-68
Effects of androgens and estrogens on sexual differentiation of sex behavior, scent marking, and the sexually dimorphic area of the gerbil hypothalamus. Ulibarri C, et al. **Horm Behav** 1996 Jun;30(2):107-30
Isolation of highly purified type A spermatogonia from prepubertal rat testis. Morena AR, et al. **J Androl** 1996 Nov-Dec;17(6):708-17
Lack of a nocturnal rise in serum concentrations of melatonin as gilts attain puberty. Bollinger AL, et al. **J Anim Sci** 1997 Jul;75(7):1885-92
Follicular growth and maturation in hyperprolific and large white sows. Driancourt MA, et al. **J Anim Sci** 1996 Sep; 74(9):2231-8
Growth, carcass, and tenderness characteristics of virgin, spayed, and single-calf heifers. Field R, et al. **J Anim Sci** 1996 Sep;74(9):2178-86
Negative relationship between blood concentrations of follicle-stimulating hormone and testicular size in mature boars. Ford JJ, et al. **J Anim Sci** 1997 Mar;75(3):790-5
Effect of age and pattern of gain on induction of puberty with a progestin in beef heifers. Hall JB, et al. **J Anim Sci** 1997 Jun;75(6):1606-11
Incidence of precocious puberty in developing beef heifers. Wehrman ME, et al. **J Anim Sci** 1996 Oct;74(10):2462-7
An intact N terminus is required for the anabolic action of parathyroid hormone on adult female rats. Armamento-Villareal R, et al. **J Bone Miner Res** 1997 Mar; 12(3):384-92
The effect of systemically administered PDGF-BB on the rodent skeleton. Mitlak BH, et al. **J Bone Miner Res** 1996 Feb;11(2):238-47
Ultrastructural studies of neuronal correlates of the pubertal reaugmentation of hypothalamic gonadotropin-releasing hormone (GnRH) release in the rhesus monkey (Macaca mulatta). Perera AD, et al. **J Comp Neurol** 1997 Aug 18; 385(1):71-82
Auditory pathways of caudal telencephalon and their relation to the song system of adult male zebra finches. Vates GE, et al. **J Comp Neurol** 1996 Mar 18;366(4):613-42
Distribution and steroid hormone regulation of aromatase mRNA expression in the forebrain of adult male and female rats: a cellular-level analysis using in situ hybridization. Wagner CK, et al. **J Comp Neurol** 1996 Jun 17;370(1):71-84
Effects of energy and protein allowances in the diets of prepubertal heifers on growth and milk production. Pirlo G, et al. **J Dairy Sci** 1997 Apr;80(4):730-9
Stage-specific expression of the FSH receptor gene in the prepubertal and adult rat seminiferous epithelium. Rannikko A, et al. **J Endocrinol** 1996 Oct;151(1):29-35
Immunocytochemical localization of GnRH precursor in the hypothalamus of European starlings during sexual maturation and photorefractoriness. Parry DM, et al. **J Neuroendocrinol** 1997 Mar;9(3):235-43
Alteration of testicular response to long photoperiod by transient exposure to short photoperiod in collared lemmings (Dicrostonyx groenlandicus). Gower BA, et al. **J Reprod Fertil** 1997 Mar;109(2):257-62
Ligand specificity of uterine oestrogen and progesterone receptors in the subadult African elephant, Loxodonta africana. Greyling MD, et al. **J Reprod Fertil** 1997 Mar; 109(2):199-204
Uterine response to progesterone in prepubertal gilts. Groothuis PG, et al. **J Reprod Fertil** 1997 Jul;110(2):237-43
Expression of glutamate receptor subunit mRNAs in gonadotropin-releasing hormone neurons during the sexual maturation of the female rat. Eyigor O, et al. **Neuroendocrinology** 1997 Aug;66(2):122-9
The GABAergic control of gonadotropin-releasing hormone secretion in male rats during sexual maturation involves effects on hypothalamic excitatory and inhibitory amino acid systems. Feleder C, et al. **Neuroendocrinology** 1996 Oct;64(4):305-12
Estrogen and progesterone receptor expression in neuroendocrine and related neurons of the pubertal female monkey hypothalamus. Goldsmith PC, et al. **Neuroendocrinology** 1997 May;65(5):325-34
Expression of estrogen and progesterone receptors in glutamate and GABA neurons of the pubertal female monkey hypothalamus. Thind KK, et al. **Neuroendocrinology** 1997 May;65(5):314-24
Peripubertal refinement of the intrinsic and associational circuitry in monkey prefrontal cortex. Woo TU, et al. **Neuroscience** 1997 Oct;80(4):1149-58
Intracellular pathways of insulin-mediated glucose uptake before and after puberty in conscious rats. Raghavan S, et al. **Pediatr Res** 1997 Mar;41(3):340-5
Reproductive profiles of adult Mongolian gerbils gestated as the sole fetus in a uterine horn. Clark MM, et al. **Physiol Behav** 1997 Jan;61(1):77-81
Postnatal testicular secretions partially restore the disturbances in reproductive activity caused by prenatal hormonal manipulation. Vega Matuszczyk J, et al. **Physiol Behav** 1997 Jul;62(1):137-43
Selection for high and low threshold body weight at first egg in broiler strain females. 7. Effect of photoperiod on body weight and age at onset of mature semen production, in males of the selection lines, and in commercial broiler and layer males. Eitan Y, et al. **Poult Sci** 1996 Jul; 75(7):828-32
Changes in gonadal weights, serum lipids, and glucose during maturation in the juvenile northern bobwhite quail (Colinus virginianus). Peebles ED, et al. **Poult Sci** 1996 Nov; 75(11):1411-6
Influence of hyperthyroidism induced at prepuberty on the epididymal lipids, number and motility of spermatozoa in rats. Kumar PN, et al. **Reprod Fertil Dev** 1996;8(3):373-8
Alterations in the cell cycle of mouse cumulus granulosa cells during expansion and mucification in vivo and in vitro. Schuetz AW, et al. **Reprod Fertil Dev** 1996;8(6):935-43
Sexual development in patients treated for cryptorchidism. Taskinen S, et al. **Scand J Urol Nephrol** 1997 Aug; 31(4):361-4
Note on age and body weight at puberty in Mehraban Iranian fat-tailed ewe lambs. Bathaei SS, et al. **Trop Anim Health Prod** 1997 Feb;29(1):55-9
Doppler assessment of flow velocity in the uterine artery during pubertal maturation. Laursen EM, et al. **Ultrasound Obstet Gynecol** 1996 Nov;8(5):341-5
Studies on the age of puberty of male camels (Camelus dromedaries) in Saudi Arabia. Abdel Rahim SE. **Vet J** 1997 Jul;154(1):79-83
When to spay dogs and cats [letter] Gourley J. **Vet Rec** 1997 Jan 25;140(4):104
[Renal infantilism] Ito K. **Ryoikibetsu Shokogun Shirizu** 1997; (16 Pt 1):27-9 (3 ref.) **(Jpn)**
[Early chemical sympathectomy and the function of the hypophyseal-gonadal system in sexually immature and adult female rats] Savchenko ON, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):9-14 (Eng. Abstr.) **(Rus)**
[Effect of soybean products on the reproductive system of sexually mature female albino rats] Goncharova EN, et al. **Vopr Pitan** 1997;(1):17-20 (Eng. Abstr.) **(Rus)**

SEX OFFENSES

Sexual abuse history and associated multiple risk behavior in adolescent runaways. Rotheram-Borus MJ, et al. **Am J Orthopsychiatry** 1996 Jul;66(3):390-400
Victimization among substance-abusing women. Worse health outcomes. Liebschutz JM, et al. **Arch Intern Med** 1997 May 26;157(10):1093-7
Masturbation prohibition in sex offenders: a crossover study. Brown CM, et al. **Arch Sex Behav** 1996 Aug;25(4):397-408
Juvenile sexual offenders: assessment issues [editorial] Vizard E, et al. **Br J Psychiatry** 1996 Mar;168(3):259-62
Biofeedback for anismus in 15 sexually abused women. Leroi AM, et al. **Int J Colorectal Dis** 1996;11(4):187-90
Individual psychopathology relative to reports of unwanted sexual experiences as predictor of a bulimic eating pattern. Casper RC, et al. **Int J Eat Disord** 1997 Apr;21(3):229-36
Overt and covert sexual abuse: relationship to body image and eating disturbance. Weiner KE, et al. **Int J Eat Disord** 1997 Nov;22(3):273-84
History of sexual abuse among HIV-infected women. Bedimo AL, et al. **Int J STD AIDS** 1997 May;8(5):332-5
Effects of toluidine blue and destaining reagents used in sexual assault examinations on the ability to obtain DNA profiles from postcoital vaginal swabs. Hochmeister MN, et al. **J Forensic Sci** 1997 Mar;42(2):316-9
ABO genotyping of suspects from sperm DNA isolated from postcoital samples in sex crimes. Sasaki M, et al. **J Forensic Sci** 1996 Mar;41(2):275-8
Discrimination and abuse in internal medicine residency. The Internal Medicine Program Directors of Canada [see comments] vanIneveld CH, et al. **J Gen Intern Med** 1996 Jul;11(7):401-5. Comment in: J Gen Intern Med 1997 Feb;12(2):137.
Violence-related content in the nursing curriculum: a national study. Woodtli MA, et al. **J Nurs Educ** 1996 Nov; 35(8):367-74
Trauma and short-term outcome for women in detoxification. Hien D, et al. **J Subst Abuse Treat** 1996 May-Jun;13(3):227-31
Sexual assault on men in war. Carlson ES. **Lancet** 1997 Jan 11;349(9045):129
Sleep and sexual offending. Fenwick P. **Med Sci Law** 1996 Apr;36(2):122-34
The collection of data from findings in cases of sexual assault and the significance of spermatozoa on vaginal, anal and oral swabs. Allard JE. **Sci Justice** 1997 Apr-Jun; 37(2):99-108
Policy development for the control of sex-offending behavior. Cole CM, et al. **Tex Med** 1997 Mar;93(3):65-9
Sexual abuse in the health professions--who's counting? McPhedran M. **World Health Stat Q** 1996;49(2):154-7
[Phallioplethysmography findings in pedophilia and exhibitionism offenders] Tichý P. **Cas Lek Cesk** 1996 Aug 21;135(16):521-4 (Eng. Abstr.) **(Cze)**
[Medical examination of sexual assault victims] Wyler D, et al. **Ther Umsch** 1997 May;54(5):225-31 (Eng. Abstr.) **(Ger)**
[Sex offense and personality disorders: transnosographic evaluation in a pattern of patients recovering in Criminal Mental Hospital] Parlavecchio L, et al. **Minerva Psichiatr** 1996 Mar;37(1):13-9 (Eng. Abstr.) **(Ita)**
[46 forensic psychiatric problems in cases of sexual abuse. Sex crime hysteria or public health problem?] Schlaug R. **Lakartidningen** 1997 Mar 26;94(13):1211-2 **(Swe)**

LEGISLATION & JURISPRUDENCE

The relationship between nonenforcement of state pornography laws and rates of sex crime arrest. Winick C, et al. **Arch Sex Behav** 1996 Oct;25(5):439-53
France plans compulsory treatment of sex offenders [news] Dorozynski A. **BMJ** 1997 Feb 8;314(7078):398
Re: Freeman-Longo, R.E. (1996). Invited commentary: feel good legislation: prevention or calamity [letter; comment] Berliner L. **Child Abuse Negl** 1996 Nov;20(11):1133-5. Comment on: Child Abuse Negl 1996 Feb;20(2):95-101.
Feel good legislation: prevention or calamity [see comments] Freeman-Longo RE. **Child Abuse Negl** 1996 Feb; 20(2):95-101. Comment in: Child Abuse Negl 1996 Nov;20(11):1133-5.
Sexually inappropriate behaviors in seriously mentally ill children and adolescents [letter; comment] Johnson TC. **Child Abuse Negl** 1996 Feb;20(2):145-7. Comment on: Child Abuse Negl 1995 May;19(5):555-68.
Scientific status of the concept of continuing emotional propensity for sexually aberrant acts. Lanyon RI. **J Am Acad Psychiatry Law** 1997;25(1):59-67 (36 ref.)
Clear and present danger: a medical-legal dilemma. Elias EG, et al. **Md Med J** 1996 Feb;45(2):103-7
The limitations of intimate samples in sexual offences. Keating SM. **Med Law** 1995;14(5-6):387-95
Psychological trauma and its influence on genuine and false complaints of sexual assault. Adshead G. **Med Sci Law** 1996 Apr;36(2):95-9
Difficulties experienced in legal practice. Pitts A. **Med Sci Law** 1996 Apr;36(2):140-5
"Chemical castration" for sex offenders [letter] Berlin FS. **N Engl J Med** 1997 Apr 3;336(14):1030
U.S. Supreme Court upholds Kansas law allowing indefinite civil commitment of sexual offenders [news] **Psychiatr Serv** 1997 Aug;48(8):1093-4
[Sex offenders in legal treatment and their relatives: results of family therapy sessions] Eher R, et al. **Psychiatr Prax** 1997 Jul;24(4):190-5 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Prevention of sexual aggression: Sociocultural risk and protective factors. Hall GC, et al. **Am Psychol** 1997 Jan; 52(1):5-14 (70 ref.)
The effects of experience and sexual abuse training on the attitudes of learning disability staff. Hames A. **J Intellect Disabil Res** 1996 Dec;40 (Pt 6):544-9

PSYCHOLOGY

Adolescent sexual offenders: a self-psychological perspective. Chorn R, et al. **Am J Psychother** 1997 Spring; 51(2):210-28
Startle deficits in women with sexual assault-related PTSD. Morgan CA 3rd, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:486-90
A comparison of the childhood experiences of convicted male child molesters and men who were sexually abused in childhood and claimed to be nonoffenders. Briggs F, et al. **Child Abuse Negl** 1996 Mar;20(3):221-33
The attitudes of female and male residential care-workers to the perpetrators of sexual and physical assault. Harnett PH. **Child Abuse Negl** 1997 Sep;21(9):861-8
Psychological aspects of sexual functioning among cleric and noncleric alleged sex offenders. Haywood TW, et al. **Child Abuse Negl** 1996 Jun;20(6):527-36
Cycle of abuse and psychopathology in cleric and noncleric molesters of children and adolescents. Haywood TW, et al. **Child Abuse Negl** 1996 Dec;20(12):1233-43
Cognitive distortions in sex offenders: an integrative review. Ward T, et al. **Clin Psychol Rev** 1997;17(5):479-507 (160 ref.)
Mental health profiles, suicidal behavior, and community

sexual assault in 2112 Canadian adolescents. Bagley C, et al. **Crisis** 1995;16(3):126–31

Age of onset of sexual abuse: relationship to sexually inappropriate behaviors. McClellan J, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Oct; 35(10):1375–83

The Criminal Sentiments Scale: predictive validity in a sample of violent and sex offenders. Mills JF, et al. **J Clin Psychol** 1997 Jun;53(4):399–404

Relationships among child abuse, date abuse, and psychological problems. Sappington AA, et al. **J Clin Psychol** 1997 Jun;53(4):319–29

Serum testosterone in adult sex offenders: a comparison between Caucasians and North American Indians. Studer LH, et al. **J Clin Psychol** 1997 Jun;53(4):375–85

Psychological trauma and its influence on genuine and false complaints of sexual assault. Adshead G. **Med Sci Law** 1996 Apr;36(2):95–9

The psychosocial characteristics of juvenile sexual offenders referred to an adolescent forensic service in the UK. Dolan M, et al. **Med Sci Law** 1996 Oct;36(4):343–52

Juvenile male sex offenders: mean scores on the BASC Self-report of Personality. Dalton JE. **Psychol Rep** 1996 Oct;79(2):634

STATISTICS & NUMERICAL DATA

Sexual abuse in therapy: gender issues. Quadrio C. **Aust N Z J Psychiatry** 1996 Feb;30(1):124–31; discussion 131–3

Juvenile sexual offending: one-year period prevalence study within Oxfordshire. James AC, et al. **Child Abuse Negl** 1996 Jun;20(6):477–85

Sexual abuse perpetrated by men with intellectual disabilities: a comparative study. Brown H, et al. **J Intellect Disabil Res** 1997 Jun;41 (Pt 3):215–24

TRENDS

Sexual abuse is more frequently reported by IBS patients than by patients with organic digestive diseases or controls. Results of a multicentre inquiry. French Club of Digestive Motility [see comments] Delvaux M, et al. **Eur J Gastroenterol Hepatol** 1997 Apr;9(4):345–52. Comment in: Eur J Gastroenterol Hepatol 1997 Apr;9(4):327–30.

Irritable bowel syndrome and sexual/physical abuse history [comment] Drossman DA. **Eur J Gastroenterol Hepatol** 1997 Apr;9(4):327–30 (15 ref.). Comment on: Eur J Gastroenterol Hepatol 1997 Apr;9(4):345–52.

SEX PHEROMONES see **SEX ATTRACTANTS**

SEX PILI see **PILI, SEX**

SEX PREDETERMINATION see **SEX PRESELECTION**

SEX PREFERENCE see **SEX**

SEX PRESELECTION

Evaluating sex chromosome content of sorted human sperm samples with use of dual-color fluorescence in situ hybridization. Richards WE, et al. **Am J Obstet Gynecol** 1997 Jun;176(6):1172–8; discussion 1178–80

Gonadotropins and sex selection? [letter; comment] James WH. **Fertil Steril** 1997 Aug;68(2):380–1. Comment on: Fertil Steril 1996 Sep;66(3):343–50.

Ethics of sex selection for family balancing. Why balance families? Dawson K, et al. **Hum Reprod** 1996 Dec; 11(12):2577–8

Sex selection: the right way forward. Liu P, et al. **Hum Reprod** 1996 Nov;11(11):2343–5

Family balancing as a morally acceptable application of sex selection. Pennings G. **Hum Reprod** 1996 Nov; 11(11):2339–43

ACOG committee opinion. Sex selection. Number 177, November 1996. Committee on Ethics. American College of Obstetricians and Gynecologists. **Int J Gynaecol Obstet** 1997 Feb;56(2):199–202

Technology for sex selection: current status and utilization. Steinbacher R, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):728–30

Past sex prejudice and present sex ratios [letter] James WH. **Theor Popul Biol** 1996 Dec;50(3):394–5

METHODS

Failure of multitube sperm swim-up for sex preselection. De Jonge CJ, et al. **Fertil Steril** 1997 Jun;67(6):1109–14

X- and Y-chromosome-bearing sperm selection and detection methods. A review. Gawęcka-Szczygieł M, et al. **Folia Histochem Cytobiol** 1995;33(4):219–27 (55 ref.)

Sperm separation for gender preference: methods and efficacy. Botchan A, et al. **J Androl** 1997 Mar-Apr; 18(2):107–8 (20 ref.)

Application of modern molecular techniques to evaluate sperm sex selection methods. Flaherty SP, et al. **Mol Hum Reprod** 1996 Dec;2(12):937–42 (52 ref.)

Analysis of the flow cytometer stain Hoechst 33342 on human spermatozoa. Watkins AM, et al. **Mol Hum Reprod** 1996 Sep;2(9):709–12

Coital rates, sex-selective infanticide, and sex ratios at birth [letter] James WH. **Soc Biol** 1996 Spring-Summer; 43(1–2):132–3; discussion 134–5

Traditions and reproductive technology in an urbanizing north Indian village. Khanna SK. **Soc Sci Med** 1997 Jan; 44(2):171–80

[Methods of sex selection. A new method for preventing genetic diseases] Barrón-Vellejo J, et al. **Ginecol Obstet Mex** 1996 Dec;64:547–51 (Eng. Abstr.) **(Spa)**

VETERINARY

Gender preselection in mammals: an overview. Johnson LA. **DTW Dtsch Tierarztl Wochenschr** 1996 Aug-Sep; 103(8–9):288–91 (19 ref.)

SEX RATIO

Sex ratio in normal and disomic sperm: evidence that the extra chromosome 21 preferentially segregates with the Y chromosome. Griffin DK, et al. **Am J Hum Genet** 1996 Nov;59(5):1108–13

Paternal lead exposure, offspring birth weight, and sex ratio [letter; comment] James WH. **Am J Ind Med** 1997 Sep; 32(3):315–6. Comment on: Am J Ind Med 1996 Nov;30(5):569–78.

Sex ratios in fetuses and liveborn infants with autosomal aneuploidy. Huether CA, et al. **Am J Med Genet** 1996 Jun 14;63(3):492–500

The sex ratios of offspring and sibs of patients with cancer [letter; comment] James WH. **Br J Cancer** 1996 Sep; 74(6):989–90. Comment on: Br J Cancer 1995 Jun;71(6):1335–9.

Cancers related to contraceptive use [letter; comment] Rettig BA, et al. **Br J Cancer** 1996 Nov;74(9):1509–10. Comment on: Br J Cancer 1996 Mar;73(5):692–7.

Sex ratios: are there natural variations within the human population? Maconochie N, et al. **Br J Obstet Gynaecol** 1997 Sep;104(9):1050–3

Declining sex ratios in Canada [see comments] [published erratum appears in Can Med Assoc J 1997 Feb 1;156(3):348] Allan BB, et al. **Can Med Assoc J** 1997 Jan 1;156(1):37–41 . Comment in: Can Med Assoc J 1997 Jan 1;156(1):46–8. Comment in: CMAJ 1997 Jun 15;156(12):1695.

Is Canada's sex ratio in decline? [editorial; comment] Dodds L, et al. **Can Med Assoc J** 1997 Jan 1;156(1):46–8. Comment on: Can Med Assoc J 1997 Jan 1;156(1):37–41.

Sex or gender? [letter; comment] Smith KL, et al. **CMAJ** 1997 Jun 15;156(12):1695. Comment on: Can Med Assoc J 1997 Jan 1;156(1):37–41.

Sex-ratio distortion associated with the presence of a B chromosome in Astyanax scabripinnis (Teleostei, Characidae). Vicente VE, et al. **Cytogenet Cell Genet** 1996; 74(1–2):70–5

The effect of the sex composition of jobs on starting wages in an organization: findings from the NLSY. England P, et al. **Demography** 1996 Nov;33(4):511–21

Sex ratio characteristics in Ixodes rubicundus (Acari:Ixodidae), the Karoo paralysis tick. Fourie LJ, et al. **Exp Appl Acarol** 1996 Aug;20(8):477–81

A re-evaluation of factors influencing the sex ratio of spider monkey populations with new data from Maraca Island, Brazil. Nunes A, et al. **Folia Primatol (Basel)** 1997; 68(1):31–3

Sex ratio in Escazú, Costa Rica, 1851–1901. Madrigal L. **Hum Biol** 1996 Jun;68(3):427–36

Offspring sex ratio in women with android body fat distribution. Singh D, et al. **Hum Biol** 1997 Aug; 69(4):545–56

Early selection and sex composition in Italy: a study at the regional level. Zonta LA, et al. **Hum Biol** 1996 Jun; 68(3):415–26

Sharing at the major histocompatibility complex affects the secondary sex ratio in differing ways. Astolfi P, et al. **Hum Hered** 1996 May-Jun;46(3):155–65

Parental HLA genes, hormone levels and offspring sex ratios [letter] James WH. **Hum Hered** 1997 Jan-Feb;47(1):60

Sex selection experiments on man and other mammals [letter; comment] Bernstein ME. **Hum Reprod** 1996 Dec; 11(12):2806–7. Comment on: Hum Reprod 1995 Apr;10(4):761–2.

Length of the follicular phase, time of insemination, coital rate and the sex of offspring. Martin JF. **Hum Reprod** 1997 Mar;12(3):611–6 (39 ref.)

Time of insemination, time of conception, duration of gestation and offspring sex ratio [letter; comment] Martin JF. **Hum Reprod** 1996 Aug;11(8):1812–3. Comment on: Hum Reprod 1995 Oct;10(10):2529–31.

Reducing the time of spermatozoa-oocyte interaction in human IVF improves the implantation rate [letter; comment] Walters DE. **Hum Reprod** 1996 Aug; 11(8):1810–1; discussion 1811–2. Comment on: Hum Reprod 1996 Jan;11(1):166–71.

Sibling sex ratio of boys with gender identity disorder. Zucker KJ, et al. **J Child Psychol Psychiatry** 1997 Jul; 38(5):543–51 (131 ref.)

Body weight, body condition score, and wither height of prepartum Holstein cows and birth weight and sex of calves by parity: a database and summary. Kertz AF, et al. **J Dairy Sci** 1997 Mar;80(3):525–9

Decline in sex ratios at birth, England and Wales, 1973–90 [letter; comment] Dickinson HO, et al. **J Epidemiol Community Health** 1997 Feb;51(1):103. Comment on: J Epidemiol Community Health 1996 Dec;50(6):690–1.

The sex ratio of children in relation to paternal preconceptional radiation dose: a study in Cumbria, northern England [see comments] Dickinson HO, et al. **J Epidemiol Community Health** 1996 Dec;50(6):645–52. Comment in: J Epidemiol Community Health 1997 Jun;51(3):340–1.

The decline in sex ratios at birth, England and Wales, 1973–90 [letter; comment] [see comments] James WH. **J Epidemiol Community Health** 1996 Dec;50(6):690–1. Comment on: J Epidemiol Community Health 1996 Apr;50(2):227–8. Comment in: J Epidemiol Community Health 1997 Feb;51(1):103.

Ionizing radiation and offspring sex ratio [letter; comment] James WH. **J Epidemiol Community Health** 1997 Jun; 51(3):340–1. Comment on: J Epidemiol Community Health 1996 Dec;50(6):645–52.

Altered newborn gender distribution in patients with low mid-trimester maternal serum human chorionic gonadotropin (MShCG). Santolaya-Forgas J, et al. **J Matern Fetal Med** 1997 Mar-Apr;6(2):111–4

Chromosomal analysis in 894 induced abortuses from women of advanced maternal age in relation to gestational weeks and fetal sex ratio. Hoshi N, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):1–7

The effect of three distinct sex ratios at two Oesophagostomum dentatum worm population densities. Christensen CM. **J Parasitol** 1997 Aug;83(4):636–40

Effects of mating dynamics and crowding on sex ratio variance in mice. Krackow S. **J Reprod Fertil** 1997 May; 110(1):87–90

Sex ratio and litter size in the guinea-pig. Peaker M, et al. **J Reprod Fertil** 1996 Sep;108(1):63–7

Change in male proportion among newborn infants [letter; comment] Bromen K, et al. **Lancet** 1997 Mar 15; 349(9054):804–5. Comment on: Lancet 1996 Sep 21;348(9030):828–9. Comment on: Lancet 1997 Jan 4;349(9044):62.

Change in male:female ratio among newborn infants in Denmark [letter; comment] [see comments] Møller H. **Lancet** 1996 Sep 21;348(9030):828–9. Comment on: Lancet 1996 Mar 16;347(9003):773. Comment in: Lancet 1997 Jan 4;349(9044):62. Comment in: Lancet 1997 Mar 15;349(9054):804–5. Comment in: Lancet 1997 Mar 15;349(9054):805. Comment in: Lancet 1997 Mar 15;349(9054):805–6.

Change in male proportion among newborn infants [letter; comment] Parazzini F, et al. **Lancet** 1997 Mar 15; 349(9054):805–6. Comment on: Lancet 1996 Sep 21;348(9030):828–9. Comment on: Lancet 1997 Jan 4;349(9044):62.

Change in male proportion among newborn infants [letter; comment] van den Broek JM. **Lancet** 1997 Mar 15; 349(9054):805. Comment on: Lancet 1996 Sep 21;348(9030):828–9. Comment on: Lancet 1997 Jan 4;349(9044):62.

Change in male:female ratio among newborn babies in Netherlands [letter; comment] [see comments] van der Pal-de Bruin KM, et al. **Lancet** 1997 Jan 4;349(9044):62. Comment on: Lancet 1996 Sep 21;348(9030):828–9. Comment in: Lancet 1997 Mar 15;349(9054):804–5. Comment in: Lancet 1997 Mar 15;349(9054):805. Comment in: Lancet 1997 Mar 15;349(9054):805–6.

Parental age gap skews child sex ratio [letter] Manning JT, et al. **Nature** 1997 Sep 25;389(6649):344

Excess males in preterm birth: interactions with gestational age, race, and multiple birth [letter; comment] James WH. **Obstet Gynecol** 1997 Jan;89(1):156. Comment on: Obstet Gynecol 1996 Aug;88(2):189–93.

The sex ratios of offspring of people exposed to non-ionising radiation [letter] James WH. **Occup Environ Med** 1997 Aug; 54(8):622–3

Offspring sex ratios and reproductive hazards [letter; comment] James WH. **Occup Environ Med** 1997 Jan; 54(1):68. Comment on: Occup Environ Med 1996 Jul;53(7):503–4.

Increased secondary sex ratios in golden hamster litters sired by males without coagulating glands and seminal vesicles. Chow PH, et al. **Reprod Fertil Dev** 1996;8(2):297–300

Influence of sex ratio during multiple pregnancies on productive and reproductive parameters of lambs and ewes. Avdi M, et al. **Reprod Nutr Dev** 1997;37(1):21–7

Schistosoma mansoni: the sex ratios of worms in animals infected with cercariae from three species of Biomphalaria. de Souza CP, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar-Apr;38(2):141–5

The sex ratio of offspring sired by men exposed to wood preservatives contaminated by dioxin [letter; comment] James WH. **Scand J Work Environ Health** 1997 Feb; 23(1):69. Comment on: Scand J Work Environ Health 1996 Aug;22(4):267–73.

Sex ratio at birth deviations in modern Venezuela: the Trivers-Willard effect. Chacon-Puignau GC, et al. **Soc Biol** 1996 Fall-Winter;43(3–4):257–70

Coital rates, sex-selective infanticide, and sex ratios at birth [letter] James WH. **Soc Biol** 1996 Spring-Summer; 43(1–2):132–3; discussion 134–5

Female life expectancy, gender stratification, health status, and level of economic development: a cross-national study of less developed countries. Williamson JB, et al. **Soc Sci Med** 1997 Jul;45(2):305–17

Past sex prejudice and present sex ratios [letter] James WH. **Theor Popul Biol** 1996 Dec;50(3):394–5
Effect of gametocyte sex ratio on infectivity of Plasmodium falciparum to Anopheles gambiae. Robert V, et al. **Trans R Soc Trop Med Hyg** 1996 Nov–Dec;90(6):621–4
[Change in sex ratio of a Drosophila population in relation to population size] Grechanyi GV, et al. **Genetika** 1996 Oct;32(10):1349–53 (Eng. Abstr.) **(Rus)**

SEX REVERSAL, GONADAL

Mutations in SOX9 cause both autosomal sex reversal and campomelic dysplasia. Foster JW. **Acta Paediatr Jpn** 1996 Aug;38(4):405–11 (26 ref.)
Cytogenetic and molecular studies of a familial paracentric inversion of Y chromosome present in a patient with ambiguous genitalia. Liou JD, et al. **Am J Med Genet** 1997 May 16;70(2):134–7
Synergistic responses of steroidal estrogens in vitro (yeast) and in vivo (turtles). Arnold SF, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):336–42
Interactions between the oocyte and cumulus cells in the ovary of the B6.Y(TIR) sex-reversed female mouse. Vanderhyden BC, et al. **Biol Reprod** 1997 Sep;57(3):641–6
Molecular analysis of sex determination in sex-reversed and true hermaphroditism. Copelli SB, et al. **Braz J Med Biol Res** 1996 Jun;29(6):743–8
Sex reversal in a child with the karyotype 46,XY, dup (1) (p22.3p32.3). Wieacker P, et al. **Clin Genet** 1996 May; 49(5):271–3
Gonadal sex reversal of the developing marsupial ovary in vivo and in vitro. Whitworth DJ, et al. **Development** 1996 Dec;122(12):4057–63
The candidate sex-reversing DAX1 gene is autosomal in marsupials: implications for the evolution of sex determination in mammals. Pask A, et al. **Genomics** 1997 May 1;41(3):422–6
Deletions of distal 9p associated with 46,XY male to female sex reversal: definition of the breakpoints at 9p23.3–p24.1. Veitia R, et al. **Genomics** 1997 Apr 15;41(2):271–4
A novel germ line mutation in SOX9 causes familial campomelic dysplasia and sex reversal. Cameron FJ, et al. **Hum Mol Genet** 1996 Oct;5(10):1625–30
Mutational analysis of the SOX9 gene in campomelic dysplasia and autosomal sex reversal: lack of genotype/phenotype correlations. Meyer J, et al. **Hum Mol Genet** 1997 Jan;6(1):91–8
Clinical and genetic variability in XX sex-reversed patients. Manieri C, et al. **Int J Androl** 1996 Apr;19(2):77–81
Neuropeptide Y (NPY) induces gonad reversal in the protogynous bluehead wrasse, Thalassoma bifasciatum (Teleostei: Labridae). Kramer CR, et al. **J Exp Zool** 1997 Oct 1;279(2):133–44
Evidence to exclude SOX9 as a candidate gene for XY sex reversal without skeletal malformation. Kwok C, et al. **J Med Genet** 1996 Sep;33(9):800–1
Sex-determining genes on mouse autosomes identified by linkage analysis of C57BL/6J-YPOS sex reversal. Eicher EM, et al. **Nat Genet** 1996 Oct;14(2):206–9
Serial adult sex change involves rapid and reversible changes in forebrain neurochemistry. Grober MS, et al. **Neuroreport** 1996 Nov 25;7(18):2945–9
Behavioural sex change in the absence of gonads in a coral reef fish. Godwin J, et al. **Proc R Soc Lond B Biol Sci** 1996 Dec 22;263(1377):1683–8
Sex reversal in birds [letter] Allen E, et al. **Vet Rec** 1997 Jun 14;140(24):636

SEX ROLE see **GENDER IDENTITY**

SEX SELECTION see **SEX PRESELECTION**

SEX STEROID-BINDING PROTEIN see **SEX HORMONE-BINDING GLOBULIN**

SEXISM see **PREJUDICE**

SEXOLOGY see **SEX**

SEXUAL ABSTINENCE

Factors to address when periodic abstinence is offered by multi-method family planning programs. Huezo C. **Adv Contracept** 1997 Jun–Sep;13(2–3):261–7 (10 ref.)
Prevention of pregnancy and STDs [letter; comment] Jensen S. **J Obstet Gynecol Neonatal Nurs** 1997 Jan–Feb;26(1):16 . Comment on: J Obstet Gynecol Neonatal Nurs 1996 Jul–Aug;25(6):476–80.
Seminal truth: a modern science of male celibacy in north India. Alter JS. **Med Anthropol Q** 1997 Sep;11(3):275–98; discussion 299–301 (110 ref.)
[Prevention of human immunodeficiency virus infection: condoms or abstinence? (letter; comment)] Ruiz I, et al. **Med Clin (Barc)** 1996 Oct 19;107(13):516–7. Comment on: Med Clin (Barc) 1995 Oct 28;105(14):541–8. **(Spa)**

SEXUAL ABUSE, CHILD see **CHILD ABUSE, SEXUAL**

SEXUAL DYSFUNCTIONS, PSYCHOLOGICAL see **PSYCHOSEXUAL DYSFUNCTIONS**

SEXUAL HARASSMENT

Residents' and medical students' reports of sexual harassment and discrimination. Baldwin DC Jr, et al. **Acad Med** 1996 Oct;71(10 Suppl):S25–7
Does exposure to gender discrimination and sexual harassment impact medical students' specialty choices and residency program selections? Nora LM, et al. **Acad Med** 1996 Oct;71(10 Suppl):S22–4
Sexual harassment and hostile environments in the perioperative area. Kaye J. **AORN J** 1996 Feb;63(2):443–6, 448–9 (51 ref.)
Sexual harassment of Chinese college students. Tang CS, et al. **Arch Sex Behav** 1996 Apr;25(2):201–15
Sexual harassment of doctors [letter] Fordham S. **Br J Gen Pract** 1996 Nov;46(412):692
Sexual harassment of female physicians by patients. What is to be done? Phillips S. **Can Fam Physician** 1996 Jan; 42:73–8
Behaviour toward residents innocuous or intolerable? [letter; comment] Hershfield NB. **Can Med Assoc J** 1996 Oct 15; 155(8):1042; discussion 1042–3. Comment on: Can Med Assoc J 1996 Jun 1;154(11):1657–65.
Behaviour toward residents innocuous or intolerable? [letter; comment] Kravcik S. **Can Med Assoc J** 1996 Oct 15; 155(8):1042; discussion 1042–3. Comment on: Can Med Assoc J 1996 Jun 1;154(11):1657–65.
Sexual violence, post-traumatic stress disorder and dementia. McCartney JR, et al. **J Am Geriatr Soc** 1997 Jan;45(1):76–8
A model policy addressing mistreatment of medical students. Strong C, et al. **J Clin Ethics** 1996 Winter;7(4):341–6; discussion 347–8
Preventing and responding to sexual harassment and sexual assault [a resource guide for medical students] Hogan K, et al. **Med Health R I** 1996 Dec:79(12):422–5
Discrimination on the basis of gender. Luce EA. **Plast Reconstr Surg** 1997 Mar;99(3):910–2
[Is the Asta team a unique movement for the sexually abused? (letter) (see comments)] Aldén K, et al. **Lakartidningen** 1996 Sep 25;93(39):3341–2. Comment in: Lakartidningen 1996 Nov 20;93(47):4248. **(Swe)**

LEGISLATION & JURISPRUDENCE

Harassment issues should be dealt with before they become problems. Capen K. **Can Med Assoc J** 1997 Jun 1; 156(11):1577–9
Perceptions of sexual harassment: the effects of gender, legal standard, and ambivalent sexism. Wiener RL, et al. **Law Hum Behav** 1997 Feb;21(1):71–93
Sexual harassment. Work environment policies demand attention. Weber RD. **Mich Med** 1997 Jan;96(1):8, 43

PREVENTION & CONTROL

Sexual harassment in nursing. Robbins I, et al. **J Adv Nurs** 1997 Jan;25(1):163–9 (41 ref.)

PSYCHOLOGY

Sexual assault in school, mental health and suicidal behaviors in adolescent women in Canada. Bagley C, et al. **Adolescence** 1997 Summer;32(126):361–6
Factitious sexual harassment. Feldman-Schorrig S. **Bull Am Acad Psychiatry Law** 1996;24(3):387–92
Job-related and psychological effects of sexual harassment in the workplace: empirical evidence from two organizations. Schneider KT, et al. **J Appl Psychol** 1997 Jun;82(3):401–15
Stalking on campus: the prevalence and strategies for coping with stalking. Fremouw WJ, et al. **J Forensic Sci** 1997 Jul; 42(4):666–9
The relationship between age and gender in workers' attitudes toward sexual harassment. Ford CA, et al. **J Psychol** 1996 Nov;130(6):627–33
Perceptions of sexual harassment: the effects of gender, legal standard, and ambivalent sexism. Wiener RL, et al. **Law Hum Behav** 1997 Feb;21(1):71–93
Sexual harassment: the "reasonable person" vs "reasonable woman" standards have not been resolved. Woody WD, et al. **Psychol Rep** 1996 Feb;78(1):329–30
A qualitative study of sexual harassment of female doctors by patients. Schneider M, et al. **Soc Sci Med** 1997 Sep; 45(5):669–76

STATISTICS & NUMERICAL DATA

Assessing medical students' perceptions of mistreatment in their second and third years. Richardson DA, et al. **Acad Med** 1997 Aug;72(8):728–30
Evaluation of sexual misconduct complaints: the Oregon Board of Medical Examiners, 1991 to 1995. Enbom JA, et al. **Am J Obstet Gynecol** 1997 Jun;176(6):1340–6; discussion 1346–8
Harassment in medical profession--myth or reality in Pakistan. Shaikh MA. **JPMA J Pak Med Assoc** 1996 Jun; 46(6):131–2
Patient sexual behaviors and sexual harassment: a national survey of physical therapists. deMayo RA. **Phys Ther** 1997 Jul;77(7):739–44
The prevalence of sexual harassment among female family practice residents in the United States. Vukovich MC. **Violence Vict** 1996 Summer;11(2):175–80

SEXUAL INTERCOURSE see **COITUS**

SEXUAL ORIENTATION see **SEX BEHAVIOR**

SEXUAL PARTNERS

Sexually transmitted diseases in Swedish women with experience of casual sex with men of foreign nationalities within Sweden [letter; comment] Gbolade BA. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):958–9. Comment on: Acta Obstet Gynecol Scand 1995 Nov;74(10):794–8.
High risk of HIV disease progression after infection through a sexual partner with AIDS [see comments] Carré N, et al. **AIDS** 1996 Jan;10(1):77–80. Comment in: AIDS 1996 Sep;10(11):1292–3.
Oral transmission of Candida albicans between partners in HIV-infected couples could contribute to dissemination of fluconazole-resistant isolates. Dromer F, et al. **AIDS** 1997 Jul 15;11(9):1095–101
Sexual negotiation in the AIDS era: negotiated safety revisited. Kippax S, et al. **AIDS** 1997 Feb;11(2):191–7
Overall and cause-specific mortality in a cohort of homo-/bisexual men, injecting drug users, and female partners of HIV-infected men. Pulmonary Complications of Human Immunodeficiency Virus Infection Study Group. Poole WK, et al. **AIDS** 1996 Sep;10(11):1257–64
Sexual networks in Uganda: casual and commercial sex in a trading town. Pickering H, et al. **AIDS Care** 1997 Apr; 9(2):199–207
Multiple sexual partners and condom use among long-distance truck drivers in Thailand. Podhisita C, et al. **AIDS Educ Prev** 1996 Dec;8(6):490–8
Effect of changing partnership formation rates on the spread of sexually transmitted diseases and human immunodeficiency virus. Stigum H, et al. **Am J Epidemiol** 1997 Apr 1;145(7):644–52
Frequency of sexual partner change in a Norwegian population. Data distribution and covariates. Stigum H, et al. **Am J Epidemiol** 1997 Apr 1;145(7):636–43
Sexual behaviour in young people. Wellings K, et al. **Baillieres Clin Obstet Gynaecol** 1996 Apr;10(1):139–160 (58 ref.)
Why marry? Race and the transition to marriage among cohabitors. Manning WD, et al. **Demography** 1995 Nov; 32(4):509–20
Cohabiting partners' economic circumstances and marriage. Smock PJ, et al. **Demography** 1997 Aug;34(3):331–41
Dissolution of premarital cohabitation in Canada. Wu Z, et al. **Demography** 1995 Nov;32(4):521–32
Sexual transmission of hepatitis C virus infection. Scotto G, et al. **Eur J Epidemiol** 1996 Jun;12(3):241–4
Relationship of sexual mixing across age and ethnic groups to herpes simplex virus-2 among unmarried heterosexual adults with multiple sexual partners. Catania JA, et al. **Health Psychol** 1996 Sep;15(5):362–70
Number of sexual partners, condom use and risk of human immunodeficiency virus infection. Parazzini F, et al. **Int J Epidemiol** 1995 Dec;24(6):1197–203
AMS 700 CX inflatable penile implants for Peyronie's disease: functional results, morbidity and patient-partner satisfaction. Montorsi F, et al. **Int J Impot Res** 1996 Jun; 8(2):81–5; discussion 85–6
Differences in sexual behavior among HIV discordant and concordant gay men in primary relationships. Hoff CC, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jan 1;14(1):72–8
Intrafamily transmission of hepatitis C virus: sexual and non-sexual contacts. Diago M, et al. **J Hepatol** 1996 Aug; 25(2):125–8
Sexual partners of substance abuse clients: strategies for HIV/AIDS prevention. Wermuth L. **J Subst Abuse Treat** 1996 Nov–Dec;13(6):505–9 (16 ref.)
Natural conception in HIV-negative women with HIV-infected partners [letter] [see comments] Mandelbrot L, et al. **Lancet** 1997 Mar 22;349(9055):850–1. Comment in: Lancet 1997 May 10;349(9062):1401–2.
Verbal intercourse and sexual communication: impediments to STD prevention. Pliskin KL. **Med Anthropol Q** 1997 Mar;11(1):89–109 (76 ref.)
HIV heterosexual transmission to stable sexual partners of HIV-infected Brazilian hemophiliacs. Nicolau JE, et al. **Rev Paul Med** 1996 May–Jun;114(3):1186–9
The natural history of syphilis. Implications for the transmission dynamics and control of infection [see comments] Garnett GP, et al. **Sex Transm Dis** 1997 Apr; 24(4):185–200. Comment in: Sex Transm Dis 1997 Apr;24(4):201–3.
Sexual mixing patterns of patients attending sexually transmitted diseases clinics. Garnett GP, et al. **Sex Transm Dis** 1996 May–Jun;23(3):248–57
The role of sexual partnership networks in the epidemiology of gonorrhea. Ghani AC, et al. **Sex Transm Dis** 1997 Jan; 24(1):45–56
Low concordance of genital human papillomavirus (HPV) lesions and viral types in HPV-infected women and their male sexual partners. Hippeläinen MI, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):76–82
A national survey of physicians' behaviors regarding sexual contact with patients. Bayer T, et al. **South Med J** 1996 Oct;89(10):977–82
[Partner treatment in Bowen's papulosis?]

SEXUAL PARTNERS

Grussendorf-Conen EI. **Hautarzt** 1996 Oct;47(10):790 **(Ger)**

CLASSIFICATION

Types of adolescent sexual relationships and associated perceptions about condom use. Ellen JM, et al. **J Adolesc Health** 1996 Jun;18(6):471–21

PSYCHOLOGY

Ethnic differences in the association between behavior with a new partner: an event-based analysis. Graves KL, et al. **AIDS Educ Prev** 1997 Jun;9(3):219–37

Communication of HIV serostatus between potential sex partners in personal ads. Hamers FF, et al. **AIDS Educ Prev** 1997 Feb;9(1):42–8

Differences between gay men in primary relationships and single men: implications for prevention. Hoff CC, et al. **AIDS Educ Prev** 1996 Dec;8(6):546–59

The limitations of trust in intimate relationships: constructions of trust and sexual risk taking. Willig C. **Br J Soc Psychol** 1997 Jun;36 (Pt 2):211–21

Childhood parenting experiences, intimate partner conflict resolution, and adult risk for child physical abuse. Merrill LL, et al. **Child Abuse Negl** 1996 Nov;20(11):1049–65

Determinants of multiple sexual partners and condom use among sexually active Tanzanians. Kapiga SH. **East Afr Med J** 1996 Jul;73(7):435–42

HIV disease symptom management in the context of committed relationships. Powell-Cope GM. **J Assoc Nurses AIDS Care** 1996 May–Jun;7(3):19–28

The impact of social support on gay male couples. Smith RB, et al. **J Homosex** 1997;33(2):39–61

Resolution of erectile dysfunction and inhibited male orgasm in a single homosexual male and transfer of inhibited male orgasm cure to his partner: a case report. Garippa PA, et al. **J Sex Marital Ther** 1997 Summer;23(2):126–30

The Wheel Project. Women Helping to Empower and Enhance Lives. Ashery RS, et al. **J Subst Abuse Treat** 1997 Mar–Apr;14(2):113–21

Content analysis of gay male and lesbian personal advertisements. Hatala MN, et al. **Psychol Rep** 1996 Apr; 78(2):371–4

Satisfaction and trust in intimate relationships do lesbians and heterosexual women differ? Zak A, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):904–6

The cycle of trauma; relationship aggression in male Vietnam veterans with symptoms of posttraumatic stress disorder. Byrne CA, et al. **Violence Vict** 1996 Fall;11(3):213–25

The Dominance Scale: preliminary psychometric properties. Hamby SL. **Violence Vict** 1996 Fall;11(3):199–212

SEXUALITY

see related

PSYCHOSEXUAL DEVELOPMENT

The source, accuracy, and impact of initial sexuality information on lifetime wellness. Ansuini CG, et al. **Adolescence** 1996 Summer;31(122):283–9

Gender, sexuality and communication issues that constitute barriers to the use of natural family planning and other fertility awareness-based methods. Diaz M. **Adv Contracept** 1997 Jun–Sep;13(2–3):303–9 (4 ref.)

The potential contribution of sexuality and gender awareness. Kopp Z. **Adv Contracept** 1997 Jun–Sep;13(2–3):325–9 (5 ref.)

Adolescent sexuality: the gender gap. Moreau-Gruet F, et al. **AIDS Care** 1996 Dec;8(6):641–53

Cognitive and emotional assessments of perceived risk for HIV among unmarried heterosexuals. Dolcini MM, et al. **AIDS Educ Prev** 1996 Aug;8(4):294–307

Common questions about sex and sexuality in elders. Mueller IW. **Am J Nurs** 1997 Jul;97(7):61–4

Antibody testing and condom use among heterosexual African Americans at risk for HIV infection: the National AIDS Behavioral Surveys. Grinstead OA, et al. **Am J Public Health** 1997 May;87(5):857–9

Sexuality in women receiving chemotherapy for breast cancer [letter; comment] Valle J, et al. **Ann Oncol** 1997 Jun;8(6):616–8. Comment on: Ann Oncol 1997 Feb;8(2):149–53.

Sexuality of young women surviving leukaemia. Puukko LR, et al. **Arch Dis Child** 1997 Mar;76(3):197–202

Residents' self-assessed skills in providing sexuality-related care to teenagers. Wilson MD, et al. **Arch Pediatr Adolesc Med** 1997 Apr;151(4):418–22

Sexual adjustment and quality of relationship in spinal paraplegia: a controlled study. Kreuter M, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):541–8

Sexuality in head and neck cancer patients. Monga U, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):298–304

Kaposi's-sarcoma-associated herpesvirus is detected in peripheral blood mononuclear cells of HIV-infected homosexuals more often than in heterosexuals [see comments] Rizzieri DA, et al. **Cancer J Sci Am** 1997 May–Jun;3(3):153–6. Comment in: Cancer J Sci Am 1997 May–Jun;3(3):140–1.

Sexual equality: how enlightened have we become? Stephen I. **Disabil Rehabil** 1996 Dec;18(12):627–8

The program archive on sexuality, health & adolescence: promising "prevention programs in a box". Card JJ, et al. **Fam Plann Perspect** 1996 Sep–Oct;28(5):210–20

Men's perceptions of their roles and responsibilities regarding sex, contraception and childrearing. Grady WR, et al. **Fam Plann Perspect** 1996 Sep–Oct;28(5):221–6

Hepatitis B markers in heterosexual patients attending two genitourinary medicine clinics in the West Midlands. el-Dalil AA, et al. **Genitourin Med** 1997 Apr;73(2):127–30

Sexual health for the man at midlife: in-office workup. Koeneman KS, et al. **Geriatrics** 1997 Sep;52(9):76–8, 84–6; quiz 87

Body dissatisfaction and sexuality among women with bulimia nervosa. Wiederman MW, et al. **Int J Eat Disord** 1997 May;21(4):361–5

Heterosexual gonorrhoea at St Thomas'--II: Sexual behaviour and sources of infection. Daker-White G, et al. **Int J STD AIDS** 1997 Feb;8(2):102–8

Childhood sexuality—myths & dilemmas. **Ir Med J** 1997 Apr–May;90(3):94

Trends in heterosexually acquired AIDS in the United States, 1988 through 1995. Neal JJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 15;14(5):465–74

Probability of heterosexual transmission of HIV [letter; comment] Vernazza PL, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jan 1;14(1):85–6. Comment on: J Acquir Immune Defic Syndr Hum Retrovirol 1996 Apr 1;11(4):388–95.

Themes relating to sexuality that emerged from a discourse analysis of the Nursing Times during 1980–1990. Carr G. **J Adv Nurs** 1996 Jul;24(1):196–212 (129 ref.)

The politics of sex research and constructions of female sexuality: what relevance to sexual health work with young women? Few C. **J Adv Nurs** 1997 Mar;25(3):615–25 (95 ref.)

Is non-judgemental care possible in the context of nurses' attitudes to patients' sexuality? Hayter M. **J Adv Nurs** 1996 Oct;24(4):662–6 (39 ref.)

Sexuality after laparoscopic-assisted vaginal hysterectomy. Ewert B, et al. **J Am Assoc Gynecol Laparosc** 1995 Nov; 3(1):27–32

HIV/AIDS risk in heterosexual college students. A review of a decade of literature. Lewis JE, et al. **J Am Coll Health** 1997 Jan;45(4):147–58 (76 ref.)

Aspects of sexuality after burn injury: outcomes in men. Bianchi TL. **J Burn Care Rehabil** 1997 Mar–Apr; 18(2):183–6; discussion 182

Sexuality and fertility in long-term survivors of testicular cancer. Arai Y, et al. **J Clin Oncol** 1997 Apr;15(4):1444–8

Patients wrestle with anxiety and fear in treatment choices affecting sexuality [news] McIntosh H. **J Natl Cancer Inst** 1996 Nov 20;88(22):1618–20

Effects of hormone replacement therapy on sexuality in postmenopausal women in a mideast country. Omu AE, et al. **J Obstet Gynaecol Res** 1997 Apr;23(2):157–64

Issues in sexuality and gynecologic care of women with developmental disabilities. Sulpizi LK. **J Obstet Gynecol Neonatal Nurs** 1996 Sep;25(7):609–14 (24 ref.)

The middle years: women, sexuality, and the self. Wilmoth MC. **J Obstet Gynecol Neonatal Nurs** 1996 Sep; 25(7):615–21 (34 ref.)

Female adolescent sexuality. Sugar M. **J Pediatr Adolesc Gynecol** 1996 Nov;9(4):175–83 (73 ref.)

Hormones and sexuality in postmenopausal women: a psychophysiological study. Laan E, et al. **J Psychosom Obstet Gynaecol** 1997 Jun;18(2):126–33

Knowledge of New Zealand youth regarding sexuality and AIDS. Duncan D, et al. **J Sex Marital Ther** 1997 Spring; 23(1):47–51

Issues of sexuality in older women. Loehr J, et al. **J Womens Health** 1997 Aug;6(4):451–7

Factors associated with sexual functioning in women following spinal cord injury. Harrison J, et al. **Paraplegia** 1995 Dec;33(12):687–92

On the psychoanalytic concept of sexuality (1952) [classical article] Rubinstein BB. **Psychol Issues** 1997;(62–63):605–24

Independent epidemics of heterosexual and homosexual HIV infection in South Africa--survival differences. Maartens G, et al. **QJM** 1997 Jul;90(7):449–54

Cervicovaginal anti-HIV antibodies in index women from HIV-discordant, exclusively heterosexual, couples. Bélec L, et al. **Viral Immunol** 1996;9(3):155–8

Training in reproductive health and sexuality: the case of a regional program in Latin America. Ramos S, et al. **Womens Health Issues** 1997 Mar–Apr;7(2):109–12

[Sexuality and religions] Chaix-Durand G, et al. **Contracept Fertil Sex** 1997 Mar;25(3):I-XIII (26 ref.) **(Fre)**

[The HIV-epidemic in Norway 1996--mainly heterosexual transmission] Aavitsland P, et al. **Tidsskr Nor Laegeforen** 1996 Nov 30;116(29):3493–8 (Eng. Abstr.) **(Nor)**

[Height: healthy, strong and sexy?] Schioldborg P. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3593 **(Nor)**

[Cognitive reconceptualization in the perception of sex activity in the aged: structural neoformation of attitudes to sexuality in old age] Nazario Serrano JA, et al. **Bol Asoc Med P R** 1996 Oct-Dec;88(10–12):94–8 **(Spa)**

[Sexuality problems of disabled people are neglected. Health personnel is not educated in sexology] Silber M. **Lakartidningen** 1996 Oct 16;93(42):3703–4, 3706–8 **(Swe)**

[Generalization about promiscuity in the African culture (letter; comment)] Staugård F. **Lakartidningen** 1997 Apr 2;94(14):1261. Comment on: Lakartidningen 1997 Feb 12;94(7):547–8. **(Swe)**

DRUG EFFECTS

Melatonin: a wonder drug for jet lag, daytime sleep, better sex, & longer life? **Aviat Space Environ Med** 1996 Aug; 67(8):792

The effects of steroidal contraceptives on the well-being and sexuality of women: a double-blind, placebo-controlled, two-centre study of combined and progestogen-only methods. Graham CA, et al. **Contraception** 1995 Dec; 52(6):363–9

ETHNOLOGY

Lifestyle and risk of premature sexual activity in a high school population of Seventh-Day Adventists: Valuegenesis 1989. Weinbender ML, et al. **Adolescence** 1996 Summer;31(122):265–81

PHYSIOLOGY

Sexuality and the art of arousal in the geriatric woman. Barber HR. **Clin Obstet Gynecol** 1996 Dec;39(4):970–3 (9 ref.)

Relative importance of sexuality and quality of life in patients with prostatic symptoms. Results of an international study. Calais Da Silva F, et al. **Eur Urol** 1997;31(3):272–80

Factors associated with waning sexual function among elderly men and prostate cancer patients. Helgason AR, et al. **J Urol** 1997 Jul;158(1):155–9

Sexuality, hormones and the menopausal transition. Dennerstein L, et al. **Maturitas** 1997 Mar;26(2):83–93

Steroid hormones, the menopause, sexuality and well-being of women. Cawood EH, et al. **Psychol Med** 1996 Sep; 26(5):925–36

Some sexological characteristics of stress incontinent women. Berglund AL, et al. **Scand J Urol Nephrol** 1996 Jun; 30(3):207–12

PSYCHOLOGY

Hearing what cannot be seen: a psychoanalytic research group's inquiry into female sexuality. Basseches HI, et al. **J Am Psychoanal Assoc** 1996;44 Suppl:511–28

Unconscious representation of femininity. Birksted-Breen D. **J Am Psychoanal Assoc** 1996;44 Suppl:119–32

A reconsideration of object choice in women: phallus or fallacy. Frenkel RS. **J Am Psychoanal Assoc** 1996;44 Suppl:133–56

Freud and feminine subjectivity. Hoffman L. **J Am Psychoanal Assoc** 1996;44 Suppl:23–44

Freud and the repudiation of the feminine. Orgel S. **J Am Psychoanal Assoc** 1996;44 Suppl:45–67

From "nothing" to "something" to "everything": bisexuality and metaphors of the mind. Stimmel B. **J Am Psychoanal Assoc** 1996;44 Suppl:191–214

Identity, sexuality and the self in late adolescence. Feldman B, et al. **J Anal Psychol** 1996 Oct;41(4):491–507

The development of gender schemata about heterosexual and homosexual others during adolescence. Mallet P, et al. **J Gen Psychol** 1997 Jan;124(1):91–104

Guilt about first intercourse: an antecedent of sexual dissatisfaction among college women. Moore NB, et al. **J Sex Marital Ther** 1997 Spring;23(1):29–46

Seminal truth: a modern science of male celibacy in north India. Alter JS. **Med Anthropol Q** 1997 Sep;11(3):275–98; discussion 299–301 (110 ref.)

Steroid hormones, the menopause, sexuality and well-being of women. Cawood EH, et al. **Psychol Med** 1996 Sep; 26(5):925–36

SEXUALLY TRANSMITTED DISEASES

1920–1995, Volumes 1–75, subject index. **Acta Derm Venereol Suppl (Stockh)** 1996;194 (Pt 1):1–99

1920–1995, Volumes 1–75, author index. **Acta Derm Venereol Suppl (Stockh)** 1996;194 (Pt 2):1–269

STDs in women: what you need to know. Sharts-Hopko NC. **Am J Nurs** 1997 Apr;97(4):46–54; quiz 55 (22 ref.)

Health care seeking behaviors related to sexually transmitted diseases among adolescents. Fortenberry JD. **Am J Public Health** 1997 Mar;87(3):417–20

STD research grants available [news] **Can Med Assoc J** 1996 Nov 1;155(9):1301

Public health departments providing sexually transmitted disease services. Landry DJ, et al. **Fam Plann Perspect** 1996 Nov–Dec;28(6):261–6

Microsporidia: a new sexually transmissable cause of urethritis [letter] Birthistle K, et al. **Genitourin Med** 1996 Dec;72(6):445

Who goes to sexually transmitted diseases clinics? Results from a national population survey (Genitourin Med 1996; 72:197–202) [letter; comment] Scoular A, et al. **Genitourin Med** 1997 Apr;73(2):148–9. Comment on: Genitourin Med 1996 Jun;72(3):197–202.

Cervical cytology and colposcopy in clinics for sexually transmitted diseases--when are they appropriate? [editorial] Wilson JD. **Genitourin Med** 1996 Dec;72(6):396–7

Introducing technology into the public STD clinic. Conlon RT. **Health Educ Behav** 1997 Feb;24(1):12–9

Sexual and perinatal transmission of hepatitis C. Dienstag JL. **Hepatology** 1997 Sep;26(3 Suppl 1):66S–70S (41 ref.)

Sexually transmitted diseases: global importance. Sciarra JJ. **Int J Gynaecol Obstet** 1997 Jul;58(1):107–19

STD/AIDS knowledge and risk behaviour among masseuses and bar hostesses in Singapore. Chan R, et al. **Int J STD AIDS** 1997 Jun;8(6):373–7

Introduction of partner referral and treatment for control of sexually transmitted diseases in a poor Haitian community. Desormeaux J, et al. **Int J STD AIDS** 1996 Nov–Dec;7(7):502–6

Pelvic inflammatory disease. Mann SN, et al. **Int J STD AIDS** 1996 Aug–Sep;7(5):315–21 (58 ref.)

Sex and travel: studies of sexual behaviour, disease and health promotion in international travellers—a global review [editorial] Mulhall BP. **Int J STD AIDS** 1996 Nov–Dec; 7(7):455–65 (108 ref.)

The British Postgraduate Medical Federation course in GU medicine/STDs, HIV infection and sexual health. Thin RN. **Int J STD AIDS** 1996 Mar–Apr;7(2):137–8

The many faces of aphrodite. Aronson SM. **Med Health R I** 1996 Mar;79(3):89–90

Sexual health—reaching out [editorial; comment] [see comments] Fairley CK. **Med J Aust** 1997 Apr 7; 166(7):341–2. Comment on: Med J Aust 1997 Apr 7;166(7):348–52. Comment in: Med J Aust 1997 Jul 21;167(2):108.

Evaluation of sexual health services within Australia and New Zealand [see comments] Marks C, et al. **Med J Aust** 1997 Apr 7;166(7):348–52. Comment in: Med J Aust 1997 Apr 7;166(7):341–2.

Sexual mixing patterns of patients attending sexually transmitted diseases clinics. Garnett GP, et al. **Sex Transm Dis** 1996 May–Jun;23(3):248–57

Core groups by any other name? [letter] Potterat JJ, et al. **Sex Transm Dis** 1996 Mar–Apr;23(2):164–5

The difficulties of compiling a glossary of diseases associated with sexual intercourse in Chiawa, rural Zambia. Bond V, et al. **Soc Sci Med** 1997 Apr;44(8):1211–20

[Progresses in dermatology and venerology in China, 1996] Zhu T. **Chung Hua I Hsueh Tsa Chih** 1996 Dec; 76(12):932–3 (0 ref.) **(Chi)**

[Sexually transmitted diseases in men] Méria P, et al. **Prog Urol** 1996 Jun;6(3):447–54 (55 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

High prevalence of sexually transmitted diseases in women with urinary infections. Berg E, et al. **Acad Emerg Med** 1996 Nov;3(11):1030–4

A case–control study of hidradenitis suppurativa in an STD population. Jemec GB, et al. **Acta Derm Venereol** 1996 Nov; 76(6):482–3

Sexually transmitted diseases and risk of HIV infection. Parazzini F, et al. **Acta Derm Venereol** 1996 Mar; 76(2):147–9

Clinico–epidemiological patterns of HIV infection in STD patients in Ibadan. Ekweozor CC, et al. **Afr J Med Med Sci** 1995 Dec;24(4):321–7

Janus considers the HIV pandemic—harnessing recent advances to enhance AIDS prevention [editorial] St. Louis ME, et al. **Am J Public Health** 1997 Jan;87(1):10–2 (29 ref.)

Sexually transmitted diseases and adverse outcomes of pregnancy. Goldenberg RL, et al. **Clin Perinatol** 1997 Mar; 24(1):23–41 (123 ref.)

Genital ulcer infections in the female patient and the vaginitides. Fiumara NJ. **Dermatol Clin** 1997 Apr; 15(2):233–45 (10 ref.)

Association of sexually transmitted diseases and infection with the human immunodeficiency virus: biological cofactors and markers of behavioural interventions. Quinn TC. **Int J STD AIDS** 1996;7 Suppl 2:17–24 (81 ref.)

Musculoskeletal disorders: genitourinary medicine perspective [editorial] Tayal SC, et al. **Int J STD AIDS** 1996 Oct;7(6):396–9 (38 ref.)

A relationship exists between sexually transmitted disease (STD) and the human immunodeficiency syndrome (HIV) [editorial] **J Am Osteopath Assoc** 1997 Aug;97(8):447

Seroprevalence of cytomegalovirus antibodies in patients attending STD and antenatal clinics. Ray K, et al. **J Commun Dis** 1997 Jun;29(2):85–90

Hepatitis C virus infection, tuberculosis, and sexually transmitted diseases [letter; comment] Nishioka S de A. **J Hepatol** 1997 Feb;26(2):450. Comment on: J Hepatol 1996 Feb;24(2):129–34.

Teen pregnancy: gateway to infertility [editorial] Sanfilippo JS. **J Pediatr Adolesc Gynecol** 1996 Nov;9(4):173–4

Oculogenital syndromes. Notz RG. **Pa Med** 1996 Mar;99 Suppl:84–7 (30 ref.)

Hepatitis E virus infection in individuals at high risk of transmission of non–A, non–B hepatitis and sexually transmitted diseases. Psichogiou M, et al. **Scand J Infect Dis** 1996;28(5):443–5

HIV and syphilis seroprevalence among clients with sexually transmitted diseases attending a walk–in clinic at Cook County Hospital. Ansell DA, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):93–6 (9 ref.)

Human immunodeficiency virus transmission and the role of other sexually transmitted diseases. Measures of association and study design. Boily MC, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):312–32 (69 ref.)

Sexually transmitted diseases in patients attending a Baltimore tuberculosis clinic. Assessment of use of multiple categoric services. Peek M, et al. **Sex Transm Dis** 1997 Jan;24(1):8–10

Patterns and trends of sexual behavior, HIV testing, and HIV prevalence among all sexually transmitted disease clinic attenders in Denmark. Smith E, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):97–102

Tuberculosis screening in a sexually transmitted diseases clinic. Zuckerman RA, et al. **Sex Transm Dis** 1996 Jul–Aug; 23(4):299–303

Patterns and predictors of infertility among African women: a cross–national survey of twenty–seven nations. Ericksen K, et al. **Soc Sci Med** 1996 Jan;42(2):209–20

[Sexually transmitted diseases and female sterility at the University Hospital Center of Dakar: management and prevention] Cisse CT, et al. **Contracept Fertil Sex** 1997 Jan; 25(1):58–63 (Eng. Abstr.) **(Fre)**

[The role of sexually transmitted diseases in the childless marriage] Kalinina SN, et al. **Urol Nefrol (Mosk)** 1997 Jan–Feb;(1):37–9 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Rapid screening and treatment for sexually transmitted diseases in arrestees: a feasible control measure. Beltrami JF, et al. **Am J Public Health** 1997 Sep;87(9):1423–6

STD screening. Practical tips. Bourne C. **Aust Fam Physician** 1996 Apr;25(4):499–507

HIV and STDs. Oral manifestations. Quail G. **Aust Fam Physician** 1997 Jul;26(7):828–33

Self administered tampons can be used to diagnose sexually transmitted diseases [letter; comment] Bowden FJ, et al. **BMJ** 1997 Feb 8;314(7078):446. Comment on: BMJ 1996 Nov 9;313(7066):1186–9.

Multiplex polymerase chain reaction for the diagnosis of sexually transmitted diseases. Mahony JB. **Clin Lab Med** 1996 Mar;16(1):61–71 (32 ref.)

Sexually transmitted diseases in adolescents: screening & treatment. Saxena SB, et al. **Compr Ther** 1997 Feb; 23(2):108–15 (16 ref.)

The Harrison Lecture. STD awareness today. Bleker OP. **Genitourin Med** 1996 Dec;72(6):440–2

Access to genitourinary medicine services by women attending a family planning clinic. Gunneberg N, et al. **Int J STD AIDS** 1996 Mar–Apr;7(2):102–5

Characterizing patients with multiple sexually acquired infections: a multivariate analysis. Pakianathan MR, et al. **Int J STD AIDS** 1996 Aug–Sep;7(5):359–61

A self–administered technique for the detection of sexually transmitted diseases in remote communities. Tabrizi SN, et al. **J Infect Dis** 1997 Jul;176(1):289–92

The role of the microbiology laboratory in the investigation of child sexual abuse. Dyson C, et al. **J Med Microbiol** 1996 Nov;45(5):313–8 (51 ref.)

Sexually transmitted diseases in pregnancy: diagnosis, impact, and intervention. Ament LA, et al. **J Obstet Gynecol Neonatal Nurs** 1996 Oct;25(8):657–66 (29 ref.)

Routine pelvic examinations in asymptomatic young women [letter] Schachter J, et al. **N Engl J Med** 1996 Dec 12; 335(24):1847–8

Lymphogranuloma venereum: a case report in an Italian traveller. Monno R, et al. **New Microbiol** 1997 Jan; 20(1):83–6

Acute balanoposthitis in young boys. Schwartz RH, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):176–7

Laboratory diagnosis of sexually transmitted diseases in facilities within the United States. Results of a national survey. Beck–Sague CM, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):342–9

Association of Chlamydia trachomatis antibodies with genital contact disease in women in Benin City, Nigeria. Azenabor AA, et al. **Trop Med Int Health** 1997 Apr;2(4):389–92

[The use of diagnostic and therapeutic algorithms in the management of of sexually transmitted diseases in developing countries (news)] Lefait–Robin R. **Sante** 1996 Jul–Aug;6(4):260 **(Fre)**

[Diagnostic and therapeutic approach to sexually transmitted diseases] Madjar S, et al. **Harefuah** 1996 Jun 16; 130(12):811–4, 880, 879 (Eng. Abstr.) **(Heb)**

DRUG THERAPY

Sexually transmitted diseases in adolescents: screening & treatment. Saxena SB, et al. **Compr Ther** 1997 Feb; 23(2):108–15 (16 ref.)

Antimicrobial self medication in patients attending a sexually transmitted diseases clinic. Adu–Sarkodie YA. **Int J STD AIDS** 1997 Jul;8(7):456–8

Frequent genital herpes simplex virus 2 shedding in immunocompetent women. Effect of acyclovir treatment. Wald A, et al. **J Clin Invest** 1997 Mar 1;99(5):1092–7

Sexually transmitted diseases in pregnancy. Jackson SL, et al. **Obstet Gynecol Clin North Am** 1997 Sep;24(3):631–44 (41 ref.)

Self–treatment patterns among clients attending sexually transmitted disease clinics and the effects of self–treatment on STD symptom duration. The Study Group. Irwin DE, et al. **Sex Transm Dis** 1997 Jul;24(6):372–7

Human immunodeficiency virus infection and self–treatment for sexually transmitted diseases among northern Thai men [see comments] Khamboonruang C, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):264–9. Comment in: Sex Transm Dis 1996 Jul–Aug;23(4):262–3.

Treatment of sexually transmitted diseases and prevention of human immunodeficiency virus infection in developing countries [editorial; comment] Moses S. **Sex Transm Dis** 1996 Jul–Aug;23(4):262–3. Comment on: Sex Transm Dis 1996 Jul–Aug;23(4):264–9.

Treatment regimens of STD patients in Cameroon: a need for intervention. Trebucq A, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):124–6

ECONOMICS

Human immunodeficiency virus infection and other sexually transmitted diseases in developing countries: public health importance and priorities for resource allocation. Over M, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S162–75

EPIDEMIOLOGY

Sexually transmitted diseases in Swedish women with experience of casual sex with men of foreign nationalities within Sweden [letter; comment] Gbolade BA. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):958–9. Comment on: Acta Obstet Gynecol Scand 1995 Nov;74(10):794–8.

Epidemiology of sexually transmitted diseases in the Baltic countries. Lazdane G, et al. **Acta Obstet Gynecol Scand Suppl** 1997;164:128–31

STDs, AIDS and reproductive health. Johannisson E. **Adv Contracept** 1996 Dec;12(4):281–4 (0 ref.)

Decreased incidence of sexually transmitted diseases among trucking company workers in Kenya: results of a behavioural risk–reduction programme. Jackson DJ, et al. **AIDS** 1997 Jun;11(7):903–9

Reported condom use is not associated with incidence of sexually transmitted diseases in Malawi. Taha TE, et al. **AIDS** 1996 Feb;10(2):207–12

Geographic variation in sexual behaviour in Britain: implications for sexually transmitted disease epidemiology and sexual health promotion. Wadsworth J, et al. **AIDS** 1996 Feb;10(2):193–9

Low prevalences of HIV infection and sexually transmitted disease among female commercial sex workers in Mexico City. Uribe–Salas F, et al. **Am J Public Health** 1997 Jun; 87(6):1012–5

Sexually transmitted diseases and oral contraceptive use during adolescence. Creatsas G. **Ann N Y Acad Sci** 1997 Jun 17;816:404–10 (37 ref.)

Adolescent sexuality. Goldfarb AF. **Ann N Y Acad Sci** 1997 Jun 17;816:395–403 (08 ref.)

Cognitive and behavioral predictors of sexually transmitted disease risk behavior among sexually active adolescents. Sieving R, et al. **Arch Pediatr Adolesc Med** 1997 Mar; 151(3):243–51

Sexually transmitted disease and family planning counselling of psychiatric patients in New Zealand. Coverdale J, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):285–90

Sexual health—a Health of the Nation failure [see comments] Adler MW. **BMJ** 1997 Jun 14;314(7096):1743–7. Comment in: BMJ 1997 Jun 14;314(7096):1703–4.

Sexually transmitted diseases: incidence and distribution. Wang Q. **Chin Med Sci J** 1996 Mar;11(1):56–62 (27 ref.)

Bacterial vaginosis in lesbians: a sexually transmitted disease. Berger BJ, et al. **Clin Infect Dis** 1995 Dec;21(6):1402–5

Sexually transmitted diseases among foreigners in Italy. Migration Medicine Study Group. Suligoi B, et al. **Epidemiol Infect** 1997 Jun;118(3):235–41

Sexual transmission of hepatitis C virus infection. Scotto G, et al. **Eur J Epidemiol** 1996 Jun;12(3):241–4

HIV–1, HIV–2, HTLV–I/II and STD among female prostitutes in Buenos Aires, Argentina. Zapiola I, et al. **Eur J Epidemiol** 1996 Feb;12(1):27–31

Confronting a hidden epidemic: the Institute of Medicine's report on sexually transmitted diseases. Donovan P. **Fam Plann Perspect** 1997 Mar–Apr;29(2):87–9

Gender, race, class and self–reported sexually transmitted disease incidence. Tanfer K, et al. **Fam Plann Perspect** 1995 Sep–Oct;27(5):196–202

The role of epidemiology and surveillance systems in the control of sexually transmitted diseases. Catchpole MA. **Genitourin Med** 1996 Oct;72(5):321–9 (97 ref.)

Risk factors for sexually transmitted diseases among women attending family planning clinics in Dar–es–Salaam, Tanzania. Gertig DM, et al. **Genitourin Med** 1997 Feb; 73(1):39–43

Sexually transmitted diseases in mobile populations. Mabey D, et al. **Genitourin Med** 1997 Feb;73(1):18–22 (33 ref.)

STD rapid assessment in Rwandan refugee camps in Tanzania. Mayaud P, et al. **Genitourin Med** 1997 Feb; 73(1):33–8

Pattern of sexually transmitted diseases among pregnant women in Burkina Faso, west Africa: potential for a clinical management based on simple approaches. Meda N, et al. **Genitourin Med** 1997 Jun;73(3):188–93

A case–controlled study of the sexual health needs of lesbians. Skinner CJ, et al. **Genitourin Med** 1996 Aug;72(4):277–80

Trends in sexually transmitted diseases and condom use patterns among commercial sex workers in Fukuoka City, Japan 1990–93. Tanaka M, et al. **Genitourin Med** 1996 Oct; 72(5):358–61

A case–control study of risk factors for seropositivity to human T–lymphotropic virus type I (HTLV–I) in Jamaica. Murphy EL, et al. **Int J Epidemiol** 1996 Oct;25(5):1083–9

Proportion of HIV infections attributable to other sexually transmitted diseases in a rural Ugandan population:

simulation model estimates. Robinson NJ, et al. **Int J Epidemiol** 1997 Feb;26(1):180–9

Sexually transmitted diseases: a survey of case management in Malawi. Chilongozi DA, et al. **Int J STD AIDS** 1996 Jul;7(4):269–75

Forty years on—contact tracing in Wakefield. King D, et al. **Int J STD AIDS** 1996 Aug–Sep;7(5):362–4

High HIV prevalence, low condom use and gender differences in sexual behaviour among patients with STD–related complaints at a Nairobi primary health care clinic. Ndinya–Achola JO, et al. **Int J STD AIDS** 1997 Aug;8(8):506–14

Rise in sexually transmitted diseases during democratization and economic crisis in Mongolia. Purevdawa E, et al. **Int J STD AIDS** 1997 Jun;8(6):398–401

Demographic data on prostitutes from Bulgaria--a recruitment country for international (migratory) prostitutes. Tchoudomirova K, et al. **Int J STD AIDS** 1997 Mar;8(3):187–91

Genital warts, trichomoniasis and other concurrent STIs in Scotland [letter] Thompson C. **Int J STD AIDS** 1997 Jun; 8(6):412

Sexually transmitted diseases in Estonia: past and present. Uusküla A, et al. **Int J STD AIDS** 1997 Jul;8(7):446–50

HIV and reproductive tract infections in a total village population in rural Kilimanjaro, Tanzania: women at increased risk. Klouman E, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Feb 1;14(2):163–8

Trends in heterosexually acquired AIDS in the United States, 1988 through 1995. Neal JJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 15;14(5):465–74

Are adolescents accurate in self–report of frequencies of sexually transmitted diseases and pregnancies? Clark LR, et al. **J Adolesc Health** 1997 Aug;21(2):91–6

Weekly and seasonal variation in sexual behaviors among adolescent women with sexually transmitted diseases. Fortenberry JD, et al. **J Adolesc Health** 1997 Jun; 20(6):420–5

HIV risk behaviors among adolescents at a sexually transmitted disease clinic in New York City. Heffernan R, et al. **J Adolesc Health** 1996 Jun;18(6):429–34

Adolescent girls' perceived prevalence of sexually transmitted diseases and condom use. Rosenthal SL, et al. **J Dev Behav Pediatr** 1997 Jun;18(3):158–61

Meningococcal carriage: prevalence and sex–related risk factors. Tayal SC, et al. **J Infect** 1997 Mar;34(2):101–5

Overview: individual and population approaches to the epidemiology and prevention of sexually transmitted diseases and human immunodeficiency virus infection. Aral SO, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S127–33

Population– and individual–based approaches to the design and analysis of epidemiologic studies of sexually transmitted disease transmission. Shiboski S, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S188–200

The development and use of the concept of a sexually transmitted disease core. Thomas JC, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S134–43 (103 ref.)

The dynamic topology of sexually transmitted disease epidemics: implications for prevention strategies. Wasserheit JN, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S201–13

The effects of females' susceptibility on the coexistence of multiple pathogen strains of sexually transmitted diseases. Castillo–Chavez C, et al. **J Math Biol** 1997 May; 35(5):503–22

An analysis of knowledge of sexually transmitted disease among Georgia high school seniors. Baynham SA, et al. **J Med Assoc Ga** 1996 Sep;85(3):159–61

Sexually transmitted disease prevalence in brothel–based commercial sex workers in Chiang Mai, Thailand: impact of the condom use campaign. Rugpao S, et al. **J Med Assoc Thai** 1997 Jul;80(7):426–30

Sun, sex and responsibility. The Lumleian Lecture 1996. Adler MW. **J R Coll Physicians Lond** 1997 Jul–Aug; 31(4):425–33 (25 ref.)

Sexually transmitted diseases in disadvantaged Australian communities [letter] Fairley CK, et al. **JAMA** 1997 Jul 9; 278(2):117–8

Epidemics of syphilis in the Russian Federation [letter; comment] Waugh MA. **Lancet** 1997 Aug 23;350(9077):595 . Comment on: Lancet 1997 Jul 19;350(9072):210–3.

The epidemiology of dermatologic and venereologic disease in a deployed operational setting. Vidmar DA, et al. **Mil Med** 1996 Jul;161(7):382–6

Cervical abnormality and sexually transmitted disease screening in human immunodeficiency virus–positive women. Olaitan A, et al. **Obstet Gynecol** 1997 Jan; 89(1):71–5

From partner notification to partner treatment [letter] Harrison A, et al. **S Afr Med J** 1997 Aug;87(8 Suppl):1055

Epidemiologic risk factors for incident sexually transmitted diseases in young Thai men. Celentano DD, et al. **Sex Transm Dis** 1996 May–Jun;23(3):198–205

Clinical sexually transmitted diseases among human immunodeficiency virus–infected and noninfected drug–using prostitutes. Associated factors and interpretation of trends, 1986 to 1994. Fennema JS, et al. **Sex Transm Dis** 1997 Jul;24(6):363–71

Sex, drugs, and infections among youth. Parenterally and sexually transmitted diseases in a high–risk neighborhood. Friedman SR, et al. **Sex Transm Dis** 1997 Jul;24(6):322–6

The promise of integrated representative surveys about sexually transmitted diseases and behavior [see comments] Ku L, et al. **Sex Transm Dis** 1997 May;24(5):299–309 (47 ref.). Comment in: Sex Transm Dis 1997 May;24(5):310–1.

Sexually transmitted diseases in men who have sex with men. Acquisition of gonorrhea and nongonococcal urethritis by fellatio and implications for STD/HIV prevention. Lafferty WE, et al. **Sex Transm Dis** 1997 May;24(5):272–8

The incidence of genitourinary infections in a cohort of healthy women. McCormack WM Jr, et al. **Sex Transm Dis** 1994 Mar–Apr;21(2):63–4

Validity of self–reported sexual behaviors in adolescent women using biomarker outcomes. Orr DP, et al. **Sex Transm Dis** 1997 May;24(5):261–6

Model trains of thought [editorial; comment] Rothenberg R. **Sex Transm Dis** 1997 Apr;24(4):201–3 (20 ref.). Comment on: Sex Transm Dis 1997 Apr;24(4):185–200.

New paradigms for sexually transmitted diseases surveillance and field studies [editorial; comment] Zenilman JM. **Sex Transm Dis** 1997 May;24(5):310–1. Comment on: Sex Transm Dis 1997 May;24(5):299–309.

Prevalence of lower genital tract infections among Vietnamese women attending a maternal and child health center in Hanoi, Vietnam. Quy PV, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):193–5

Frequency and risk of HIV infection among men attending a clinic for STD in Chiang Mai, Thailand. Siraprapasiri T, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar;27(1):96–101

Surveillance of sexually transmitted diseases in Switzerland, 1973–1994: evidence of declining trends in gonorrhoea and syphilis. Paget WJ, et al. **Soz Praventivmed** 1997;42(1):30–6

Survey of patients with sexually transmitted diseases seen by private physicians in Jamaica. Brathwaite AR, et al. **West Indian Med J** 1997 Jun;46(2):43–6

Genital tract infections in sexually active women in Barbados. Levett PN, et al. **West Indian Med J** 1995 Dec;44(4):128–9

Sexual transmission of HIV to women in industrialized countries. Hankins C. **World Health Stat Q** 1996; 49(2):106–14 (102 ref.)

[Experiences of the "sexually transmitted disease counseling service" of the Recklinghausen district public health office] Rüter O. **Gesundheitswesen** 1996 Dec;58(12):699–702 **(Ger)**

[Screening of sexually transmitted diseases (Mycoplasma hominis, Ureaplasma urealyticum and Chlamydia trachomatis) in young women] Bihari A. **Orv Hetil** 1997 Mar 30;138(13):799–803 (27 ref.) (Eng. Abstr.) **(Hun)**

[Sexual behavior of the adolescent and sexually transmitted diseases (STD). Observations on a symptomatic population] Franchini F, et al. **Pediatr Med Chir** 1996 Sep–Oct; 18(5):525–7 (Eng. Abstr.) **(Ita)**

[Seroprevalence of various viruses and sociodemographic characteristics of women seeking HIV screening] Hernández–Girón C, et al. **Rev Invest Clin** 1997 Jan–Feb; 49(1):5–13 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

HIV and AIDS, other sexually transmitted diseases, and tuberculosis in ethnic minorities in United Kingdom: is surveillance serving its purpose? [see comments] De Cock KM, et al. **BMJ** 1997 Jun 14;314(7096):1747–51. Comment in: BMJ 1997 Jun 14;314(7096):1703–4.

ETIOLOGY

Penile implant as a risk factor for sexually acquired gonococcal and chlamydial urethritis in the elderly. Morgan DJ, et al. **Int J STD AIDS** 1996 Jul;7(4):292–4

The effects of females' susceptibility on the coexistence of multiple pathogen strains of sexually transmitted diseases. Castillo–Chavez C, et al. **J Math Biol** 1997 May; 35(5):503–22

Sexually transmitted diseases among women in Coventry. Opaneye AA. **J R Soc Health** 1997 Feb;117(1):37–40

Interactive multimedia sexual risk assessment: using a video doctor to screen patients. Gerbert B, et al. **MD Comput** 1996 Sep–Oct;13(5):416–22

Sexually transmitted diseases and unwanted pregnancies in chronically ill psychiatric patients [editorial] [see comments] Coverdale JH, et al. **Med J Aust** 1997 Mar 3; 166(5):231–2 (10 ref.). Comment in: Med J Aust 1997 Jun 16;166(12):665–6. Comment in: Med J Aust 1997 Jun 16;166(12):666. Comment in: Med J Aust 1997 Jun 16;166(12):666–7.

Risk factors for oral human papillomavirus in adults infected and not infected with human immunodeficiency virus. Coutlée F, et al. **Sex Transm Dis** 1997 Jan;24(1):23–31

History of sexually transmitted diseases infection, drug–sex behaviors, and the use of condoms among midwestern users of injection drugs and crack cocaine. Siegal HA, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):277–82

A risk index for sexually transmitted diseases. Stigum H, et al. **Sex Transm Dis** 1997 Feb;24(2):102–8

STDS in women attending family planning clinics: a case study in Addis Ababa. Duncan ME, et al. **Soc Sci Med** 1997 Feb;44(4):441–54 (101 ref.)

[Acquired scabies in Cuba: risks of "sexual tourism" (letter)] Ródenas López JM, et al. **Med Clin (Barc)** 1997 May 31; 109(1):39 **(Spa)**

HISTORY

Historical developments in gay health and medicine [editorial] Waugh M. **Int J STD AIDS** 1996 Mar–Apr; 7(2):71–6

Prevention versus treatment: an ongoing dilemma. Bradley–Springer L. **J Assoc Nurses AIDS Care** 1997 Mar–Apr;8(2):87–88, 94

Sexually transmitted disease control in the armed forces, past and present. Emerson LA. **Mil Med** 1997 Feb;162(2):87–91

Sex, science, and society. A look at sexually transmitted diseases. Handsfield HH. **Postgrad Med** 1997 May; 101(5):268–73, 277–8

[50 years Zwickau Dermatologic Clinic in the Heinrich–Braum Hospital] Otremba H, et al. **Hautarzt** 1997 Jun;48(6):425–7 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Unusually high seroprevalence of Borna disease virus in clade E human immunodeficiency virus type 1–infected patients with sexually transmitted diseases in Thailand. Auwanit W, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):590–3

Sexually–transmitted disease (STD) markers in multitransfused children in relation to human immunodeficiency virus type–1 (HIV–1) infection: impact of STD markers in blood donors. Chattopadhya D, et al. **J Trop Pediatr** 1997 Jun;43(3):178–81

Antibody to Haemophilus ducreyi among trucking company workers in Kenya. Rakwar J, et al. **Sex Transm Dis** 1997 May;24(5):267–71

MICROBIOLOGY

Prospective analysis of genital ulcer disease in Brooklyn, New York. Dillon SM, et al. **Clin Infect Dis** 1997 May; 24(5):945–50

High frequency of sexually transmitted diseases among pregnant women in Dar es Salaam, Tanzania: need for intervention. Mwakagile D, et al. **East Afr Med J** 1996 Oct;73(10):675–8

Do men become infertile after having sexually transmitted urethritis? An epidemiologic examination. Ness RB, et al. **Fertil Steril** 1997 Aug;68(2):205–13 (73 ref.)

Screening for chlamydia to prevent pelvic inflammatory disease [letter] Perez JA Jr, et al. **N Engl J Med** 1996 Nov 14;335(20):1532; discussion 1532–3

Association of Chlamydia trachomatis antibodies with genital contact disease in women in Benin City, Nigeria. Azenabor AA, et al. **Trop Med Int Health** 1997 Apr;2(4):389–92

MORTALITY

Mortality related to sexually transmitted diseases in US women, 1973 through 1992. Ebrahim SH, et al. **Am J Public Health** 1997 Jun;87(6):938–44

PREVENTION & CONTROL

Tailoring STD/HIV prevention messages for young adolescents. Boekeloo BO, et al. **Acad Med** 1996 Oct;71(10 Suppl):S97–9

Casual sex, extramarital sex, condom use and alcohol intake among heterosexual patients attending an STD clinic in Norway. Tveit KS, et al. **Acta Derm Venereol** 1996 Mar; 76(2):150–3

Providing accessible health care for adolescents with sexually transmitted disease. Brabin L. **Acta Trop** 1996 Dec 30; 62(4):209–16 (20 ref.)

Evaluation of a knowledge– and cognitive–behavioral skills–building intervention to prevent STDs and HIV infection in high school students. Boyer CB, et al. **Adolescence** 1997 Spring;32(125):25–42

Sexually transmitted disease (STD) and HIV risk in heterosexual adults attending a public STD - clinic: evaluation of a randomized controlled behavioral risk–reduction intervention trial. Boyer CB, et al. **AIDS** 1997 Mar;11(3):359–67

Behavioral interventions for reduction of sexually transmitted disease/HIV transmission among female commercial sex workers and clients in Bali, Indonesia. Ford K, et al. **AIDS** 1996 Feb;10(2):213–22

The efficacy of nonoxynol–9 from an in vivo point of view [letter] Wittkowski KM. **AIDS** 1997 Mar;11(3):392–4

Adolescent sexuality: the gender gap. Moreau–Gruet F, et al. **AIDS Care** 1996 Dec;8(6):641–53

STD/HIV prevention in Turkey: planning a sequence of interventions. Aral SO, et al. **AIDS Educ Prev** 1995 Dec; 7(6):544–53

Measurement of condom use self–efficacy and outcome expectancies in a geographically diverse group of STD patients. DiIorio C, et al. **AIDS Educ Prev** 1997 Feb; 9(1):1–13

Effects of a skill–based intervention to encourage condom use among high risk heterosexually active adolescents. Gillmore MR, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):22–43

Understanding why heterosexual adults do not practice safer sex: a comparison of two samples. Kusseling FS, et al. **AIDS Educ Prev** 1996 Jun;8(3):247–57

Reflections on the design and reporting of STD/HIV behavioral intervention research. O'Leary A, et al. **AIDS Educ Prev** 1997 Feb;9(1 Suppl):1–14

Activity and similarity on safe sex workshops led by peer educators. Reeder GD, et al. **AIDS Educ Prev** 1997 Feb;

9(1 Suppl):77–89
Primary care physicians' perceptions of adolescent pregnancy and STD prevention practices in a Nova Scotia county. Langille DB, et al. **Am J Prev Med** 1997 Jul–Aug; 13(4):324–30
Our view of adolescent sexuality—a focus on risk behavior without the developmental context [editorial; comment] [see comments] Ehrhardt AA. **Am J Public Health** 1996 Nov;86(11):1523–5. Comment on: Am J Public Health 1996 Nov;86(11):1570–6. Comment in: Am J Public Health 1997 Aug;87(8):1380–1.
Anti-STD vaginal contraceptive sponges. Hassan E, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:451–6 (35 ref.)
Client follow-up at the Adelaide sexually transmitted disease clinic. McColl M, et al. **Aust N Z J Public Health** 1996 Apr;20(2):161–4
Sexual health—a Health of the Nation failure [see comments] Adler MW. **BMJ** 1997 Jun 14;314(7096):1743–7. Comment in: BMJ 1997 Jun 14;314(7096):1703–4.
Race, ethnicity, and sexual health [editorial; comment] Fenton K, et al. **BMJ** 1997 Jun 14;314(7096):1703–4. Comment on: BMJ 1997 Jun 14;314(7096):1715–8. Comment on: BMJ 1997 Jun 14;314(7096):1719–23. Comment on: BMJ 1997 Jun 14;314(7096):1743–7. Comment on: BMJ 1997 Jun 14;314(7096):1747–51. Comment on: BMJ 1997 Jun 14;314(7096):1751–6.
Condoms and the prevention of sexually transmissible diseases. Donovan B. **Br J Hosp Med** 1995 Dec 13–1996 Jan 16;54(11):575–8 (18 ref.)
Condoms and STDs [letter; comment] Kelly J. **Br J Hosp Med** 1996 Oct 2–15;56(7):370. Comment on: Br J Hosp Med 1995 Dec 13–1996 Jan 16;54(11):575–8.
Request for research proposals. Division of STD Prevention and Control, bureau of HIV/AIDS and STD, Laboratory Centre for Disease Control. **Can Commun Dis Rep** 1996 Oct 15;22(20):173–4 **(Eng, Fre)**
Do women physicians do more STD prevention than men? Quebec study of recently trained family physicians. Maheux B, et al. **Can Fam Physician** 1997 Jun;43:1089–95
Sexual health: are we targeting the right age groups? Sahai V, et al. **Can J Public Health** 1996 Jan–Feb;87(1):40–1
Characteristics and sexual behaviour of individuals attending the sexually transmitted diseases clinic at Queen Elizabeth Central Hospital Blantyre, Malawi. Lule GS, et al. **Cent Afr J Med** 1997 Jan;43(1):6–11
The relationship of sexual abuse and HIV risk behaviors among heterosexual adult female STD patients. Thompson NJ, et al. **Child Abuse Negl** 1997 Feb;21(2):149–56
Orgasm without organisms: science or propaganda? Genuis SJ, et al. **Clin Pediatr (Phila)** 1996 Jan;35(1):10–7 (105 ref.)
Primary care management of adolescent sexual behavior. Ellen JM, et al. **Curr Opin Pediatr** 1996 Oct;8(5):442–8 (47 ref.)
Condom use for disease prevention among unmarried U.S. women. Anderson JE, et al. **Fam Plann Perspect** 1996 Jan–Feb;28(1):25–8
The program archive on sexuality, health & adolescence: promising "prevention programs in a box". Card JJ, et al. **Fam Plann Perspect** 1996 Sep–Oct;28(5):210–20
A risk-assessment tool for integrated reproductive health services. Cates W Jr. **Fam Plann Perspect** 1997 Jan–Feb; 29(1):41–3 (12 ref.)
Confronting a hidden epidemic: the Institute of Medicine's report on sexually transmitted diseases. Donovan P. **Fam Plann Perspect** 1997 Mar–Apr;29(2):87–9
Condom availability programs in U.S. schools. Kirby DB, et al. **Fam Plann Perspect** 1996 Sep–Oct;28(5):196–202
Consistency of condom use among users of injectable contraceptives. Sangi-Haghpeykar H, et al. **Fam Plann Perspect** 1997 Mar–Apr;29(2):67–9, 75
Control of sexually transmitted diseases in Ghana: the real issues! [letter] Bosu WK. **Genitourin Med** 1997 Jun; 73(3):228–9
The role of epidemiology and surveillance systems in the control of sexually transmitted diseases. Catchpole MA. **Genitourin Med** 1996 Oct;72(5):321–9 (97 ref.)
How can industry, academia, public health authorities and the Sexually Transmitted Diseases Diagnostics Initiative (SDI) work together to help control sexually transmitted diseases in developing countries? [editorial] Chernesky MA. **Genitourin Med** 1997 Feb;73(1):1–2
Health education and promotion for STD prevention: lessons for the next millennium. Darrow WW. **Genitourin Med** 1997 Apr;73(2):88–94 (86 ref.)
Sex workers and the control of sexually transmitted disease. Day S, et al. **Genitourin Med** 1997 Jun;73(3):161–8
Screening for sexually transmitted diseases in an HIV testing clinic; uptake and prevalence. Madge S, et al. **Genitourin Med** 1996 Oct;72(5):347–51
Projects for sex workers in Europe [editorial] Mak R. **Genitourin Med** 1997 Jun;73(3):155–6
Screening for sexually transmitted diseases in an HIV testing clinic: uptake and prevalence [letter] Smith NA, et al. **Genitourin Med** 1997 Jun;73(3):229–30
Development and evaluation of a sexual decision-making and social skills program: "the choice is yours—preventing HIV/STDs". Noell J, et al. **Health Educ Behav** 1997 Feb; 24(1):87–101
Computerized health assessment and education for adolescent HIV and STD prevention in health care settings and schools. Paperny DM. **Health Educ Behav** 1997 Feb; 24(1):54–70
Using the theory of reasoned action (TRA) to understand the decision to use condoms in an STD clinic population. Baker SA, et al. **Health Educ Q** 1996 Nov;23(4):528–42
Planned development and evaluation of AIDS/STD education for secondary school students in The Netherlands: short-term effects. Schaalma HP, et al. **Health Educ Q** 1996 Nov;23(4):469–87
Public health ... let's talk about s-e-x [news] **Hosp Health Netw** 1997 Jan 5;71(1):11
Measuring outcomes of behavioural interventions for STD/HIV prevention. Aral SO, et al. **Int J STD AIDS** 1996;7 Suppl 2:30–8 (27 ref.)
Contraceptive and sexually transmitted diseases protection among adult and adolescent women infected with human immunodeficiency virus. Clark RA, et al. **Int J STD AIDS** 1996 Oct;7(6):439–42
Heterosexual gonorrhoea at St Thomas'—I: Patient characteristics and implications for targeted STD and HIV prevention strategies. Daker-White G, et al. **Int J STD AIDS** 1997 Jan;8(1):32–5
University students' knowledge of STDs: labels, symptoms and transmission. Minichiello V, et al. **Int J STD AIDS** 1996 Aug–Sep;7(5):353–8
Multiple condom use and decreased condom breakage and slippage in Thailand. Rugpao S, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Feb 1;14(2):169–73
Delivery of STD/HIV preventive services to adolescents by primary care physicians. Millstein SG, et al. **J Adolesc Health** 1996 Oct;19(4):249–57
Domiciliary health counselling in patients with sexually transmitted diseases. Rathore AS, et al. **J Commun Dis** 1997 Mar;29(1):35–9
Successful eradication of sexually transmitted diseases in the People's Republic of China: implications for the 21st century. Cohen MS, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S223–9 (48 ref.)
Preventing sexually transmitted diseases through individual- and population-based public health approaches: social and political implications. Decosas J, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S248–52
Focused peer-mediated educational programs among female sex workers to reduce sexually transmitted disease and human immunodeficiency virus transmission in Kenya and Zimbabwe. Ngugi EN, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S240–7
International perspectives on individual and community approaches to the prevention of sexually transmitted disease and human immunodeficiency virus infection. O'Reilly KR, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S214–22 (51 ref.)
Human immunodeficiency virus infection and other sexually transmitted diseases in developing countries: public health importance and priorities for resource allocation. Over M, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S162–75
The dynamic topology of sexually transmitted disease epidemics: implications for prevention strategies. Wasserheit JN, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S201–13
Sexually transmitted disease prevalence in brothel-based commercial sex workers in Chiang Mai, Thailand: impact of the condom use campaign. Rugpao S, et al. **J Med Assoc Thai** 1997 Jul;80(7):426–30
Prevention of pregnancy and STDs [letter; comment] Jensen S. **J Obstet Gynecol Neonatal Nurs** 1997 Jan–Feb;26(1):16 . Comment on: J Obstet Gynecol Neonatal Nurs 1996 Jul–Aug;25(6):476–80.
Safer Choices: a multicomponent school-based HIV/STD and pregnancy prevention program for adolescents. Coyle K, et al. **J Sch Health** 1996 Mar;66(3):89–94
A 17-year-old mother seeking contraception [clinical conference] Grimes DA. **JAMA** 1996 Oct 9; 276(14):1163–70
It takes a community...to lower the STD rate [news] Marwick C. **JAMA** 1997 Jul 23–30;278(4):272–3
Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. AIDSCAP Malawi Research Group. Cohen MS, et al. **Lancet** 1997 Jun 28; 349(9069):1868–73
Sexual-health services for women in developing countries [letter; comment] Harry TC. **Lancet** 1997 Apr 19; 349(9059):1180. Comment on: Lancet 1997 Mar 1;349(9052):644–7.
US declares war on sexually transmitted diseases [news] Larkin M. **Lancet** 1996 Nov 30;348(9040):1503
Verbal intercourse and sexual communication: impediments to STD prevention. Pliskin KL. **Med Anthropol Q** 1997 Mar;11(1):89–109 (76 ref.)
Sexually transmitted diseases and unwanted pregnancies in chronically ill psychiatric patients [letter; comment] Martin HC. **Med J Aust** 1997 Jun 16;166(12):665–6. Comment on: Med J Aust 1997 Mar 3;166(5):231–2.
Sexually transmitted diseases: we must commit to contact tracing [letter; comment] Thompson SC, et al. **Med J Aust** 1997 Jul 21;167(2):108. Comment on: Med J Aust 1997 Apr 7;166(7):341–2.
Endemic STDs in remote communities: the challenge for STD control [editorial; comment] Waddell RG. **Med J Aust** 1997 May 5;166(9):456–7. Comment on: Med J Aust 1997 May 5;166(9):464–7. Comment on: Med J Aust 1997 May 5;166(9):468–71.
Sexually transmitted disease control in the armed forces, past and present. Emerson LA. **Mil Med** 1997 Feb;162(2):87–91
Contraceptive method and condom use among women at risk for HIV infection and other sexually transmitted diseases—selected U.S. sites, 1993–1994. **MMWR Morb Mortal Wkly Rep** 1996 Sep 27;45(38):820–3
A patient's guide to safer sex. Reducing the risk of HIV and other sexually transmitted diseases. Dodge RT, et al. **N C Med J** 1997 Mar–Apr;58(2):119–21
Sexual health and HIV infection [editorial; comment] Bingham JS. **Natl Med J India** 1996 Jul–Aug;9(4):155. Comment on: Natl Med J India 1996 Jul–Aug;9(4):156–9.
Women's health. Sexually transmitted diseases. Miller KE. **Prim Care** 1997 Mar;24(1):179–93 (34 ref.)
Girl Talk: development of an intervention for prevention of HIV/AIDS and other sexually transmitted diseases in adolescent females. Guthrie BJ, et al. **Public Health Nurs** 1996 Oct;13(5):318–30
Organotypic raft cultures for the in vitro evaluation of vaginal microbicidal agents. Microbicides have epithelium-specific effects when repeatedly added onto organotypic human keratinocyte cultures. Aebischer F, et al. **Sex Transm Dis** 1997 Feb;24(2):69–76
How can industry, academia, public health authorities, and the sexually transmitted diseases diagnostics initiative work together to help control sexually transmitted diseases in developing countries? [editorial] Chernesky MA. **Sex Transm Dis** 1997 Feb;24(2):61–3
Reliability of partner reports of sexual history in a heterosexual population at a sexually transmitted diseases clinic [see comments] Ellish NJ, et al. **Sex Transm Dis** 1996 Nov–Dec;23(6):446–52. Comment in: Sex Transm Dis 1996 Nov–Dec;23(6):522.
Factors influencing condom use among heterosexual users of injection drugs and crack cocaine. Falck RS, et al. **Sex Transm Dis** 1997 Apr;24(4):204–10
Use of spermicide and impact of prophylactic condom use among sex workers in Santa Fe de Bogota, Colombia. Farr G, et al. **Sex Transm Dis** 1996 May–Jun;23(3):206–12
Individual counseling of patients with sexually transmitted diseases. A way to improve partner notification in a Zambian setting? Faxelid E, et al. **Sex Transm Dis** 1996 Jul–Aug;23(4):289–92
Adolescent health care providers. Establishing a dialogue and assessing sexually transmitted disease prevention practices. Gunn RA, et al. **Sex Transm Dis** 1997 Feb;24(2):90–3
Profile of callers to the Centers for Disease Control and Prevention national sexually transmitted diseases hotline. Neumann MS. **Sex Transm Dis** 1996 Mar–Apr;23(2):131–7
Self-medication and STD prevention [editorial; comment] Nichter M. **Sex Transm Dis** 1996 Sep–Oct;23(5):353–6 (2 ref.). Comment on: Sex Transm Dis 1996 Sep–Oct;23(5):407–12.
Feasibility and yield of screening urine for Chlamydia trachomatis by polymerase chain reaction among high-risk male youth in field-based and other nonclinic settings. A new strategy for sexually transmitted disease control. Rietmeijer CA, et al. **Sex Transm Dis** 1997 Aug; 24(7):429–35
Health-seeking strategies and sexual health among female sex workers in urban India: implications for research and service provision. Evans C, et al. **Soc Sci Med** 1997 Jun; 44(12):1791–803
Prevention of sexually transmitted diseases in prostitutes in Nicaragua [letter; comment] Sandiford P, et al. **Trans R Soc Trop Med Hyg** 1996 Sep–Oct;90(5):587. Comment on: Trans R Soc Trop Med Hyg 1996 Mar–Apr;90(2):97–9.
The participation of African traditional healers in AIDS/STD prevention programmes. Green EC. **Trop Doct** 1997;27 Suppl 1:56–9
Health education and sexually transmitted diseases. Hubley J, et al. **Trop Doct** 1996 Jul;26(3):121–5 (13 ref.)
Commensal bacteria as vectors for mucosal vaccines against sexually transmitted diseases: vaginal colonization with recombinant streptococci induces local and systemic antibodies in mice. Medaglini D, et al. **Vaccine** 1997 Aug–Sep;15(12–13):1330–7
Reproductive tract infections—and associated difficulties. Kumar R, et al. **World Health Forum** 1997;18(1):80–2
[Knowledge, attitude and behavior among patients with Chlamydia. Perspectives for prevention] Fouchard JR, et al. **Ugeskr Laeger** 1997 Aug 18;159(34):5085–8 (Eng. Abstr.) **(Dan)**
[Advice after the fact is too late; prevention of sexually transmissible disorders and of HIV infection by the family physician] Wigersma L. **Ned Tijdschr Geneeskd** 1996 Aug 31;140(35):1749–51 **(Dut)**
[Andrology in adolescence: objectives and preventive measures (editorial)] Jacquin P. **Arch Pediatr** 1996 Oct; 3(10):947–50 (21 ref.) **(Fre)**
[Sex behavior of patients attending a free, anonymous HIV screening center in Paris] Aynaud O. **Contracept Fertil Sex** 1997 Mar;25(3):242–50 (Eng. Abstr.) **(Fre)**
[Human mobility and sexually transmitted diseases] Carosi G, et al. **Med Trop (Mars)** 1997;57(2):115–9 (28 ref.) **(Fre)**
[Student nurses' and nurse midwives' behavior concerning sexuality and prevention of sexually transmitted diseases in Cotonou (Benin)] Fourn L, et al. **Sante** 1997 May–Jun; 7(3):165–8 (Eng. Abstr.) **(Fre)**
[Health consciousness and risk behavior of prostitutes]

Stücker M, et al. **Hautarzt** 1997 Mar;48(3):166–70 (Eng. Abstr.) **(Ger)**

[Adolescent emergencies: the need for active prevention to the spread of STDs (sexually transmitted diseases)] Franchini F, et al. **Pediatr Med Chir** 1997 May–Jun; 19(3):193–5 (Eng. Abstr.) **(Ita)**

[Adolescent sexual behavior and sexually transmitted diseases (STD). A preliminary study] Franchini F, et al. **Pediatr Med Chir** 1996 May–Jun;18(3):279–81 (Eng. Abstr.) **(Ita)**

[Primary prevention actions in AIDS and sexually transmitted diseases in adolescents] Barrón de Carbonetti M, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1995;53 Suppl:55–63 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Reasons for HIV antibody test refusal in a heterosexual sexually transmitted disease clinic population. Simon PA, et al. **AIDS** 1996 Nov;10(13):1549–53

Men's behavior change following infection with a sexually transmitted disease. Payn B, et al. **Fam Plann Perspect** 1997 Jul–Aug;29(4):152–7

Effect of sexual motivation on men's risk perception for sexually transmitted disease: there must be 50 ways to justify a lover. Blanton H, et al. **Health Psychol** 1997 Jul; 16(4):374–9

Testing for HIV and other sexually transmitted diseases: implications for risk behavior in women. Wilson TE, et al. **Health Psychol** 1996 Jul;15(4):252–60

Knowledge of HIV infection and the fear of mixing socially with HIV-infected and AIDS-sick patients among STD patients in Bergen, Norway. Tveit KS, et al. **Scand J Soc Med** 1995 Dec;23(4):242–50

Antibiotic prophylaxis among commercial sex workers in Cebu City, Philippines. Patterns of use and perceptions of efficacy [see comments] Abellanosa I, et al. **Sex Transm Dis** 1996 Sep–Oct;23(5):407–12. Comment in: Sex Transm Dis 1996 Sep–Oct;23(5):353–6.

REHABILITATION

The spa and sexually transmitted diseases. Freedman D, et al. **Clin Dermatol** 1996 Nov–Dec;14(6):577–82 (34 ref.)

THERAPY

Providing accessible health care for adolescents with sexually transmitted disease. Brabin L. **Acta Trop** 1996 Dec 30; 62(4):209–16 (20 ref.)

Integrating HIV prevention, STD, and family planning services. A sexual and reproductive health approach in Latin America and the Caribbean [letter; comment] Becker J, et al. **Am J Public Health** 1997 Apr;87(4):692–3. Comment on: Am J Public Health 1996 Jun;86(6):783–4.

Integrating HIV prevention, STD, and family planning services. Comprehensive efforts in Philadelphia [letter; comment] Mann D. **Am J Public Health** 1997 Apr;87(4):692 . Comment on: Am J Public Health 1996 Jun;86(6):783–4.

Integrating HIV prevention, STD, and family planning services. The need for integrated government funding and services [letter; comment] Sable M. **Am J Public Health** 1997 Apr;87(4):693. Comment on: Am J Public Health 1996 Jun;86(6):783–4.

Management of vaginal discharge in women treated at a Jamaican sexually transmitted disease clinic: use of diagnostic algorithms versus laboratory testing. Behets FM, et al. **Clin Infect Dis** 1995 Dec;21(6):1450–5

Quality of care in sexually transmitted diseases in Zambia: patients' perspective. Ndulo J, et al. **East Afr Med J** 1995 Oct;72(10):641–4

Potential impact of restricting STD/HIV care for immigrants in Los Angeles County. Asch S, et al. **Int J STD AIDS** 1996 Nov–Dec;7(7):532–5

STD care in Zambia: an evaluation of the guidelines for case management through a syndromic approach. Hanson S, et al. **Int J STD AIDS** 1996 Aug–Sep;7(5):324–32

Case management and patient reactions: a study of STD care in a province in Zambia. Hanson S, et al. **Int J STD AIDS** 1997 May;8(5):320–8

Factors associated with appropriate physician management of sexually transmitted diseases in an urban Canadian center. Sellors JW, et al. **Sex Transm Dis** 1997 Aug; 24(7):393–7

[The use of diagnostic and therapeutic algorithms in the management of of sexually transmitted diseases in developing countries (news)] Lefait-Robin R. **Sante** 1996 Jul–Aug;6(4):260 **(Fre)**

[Diagnostic and therapeutic approach to sexually transmitted diseases] Madjar S, et al. **Harefuah** 1996 Jun 16; 130(12):811–4, 880, 879 (Eng. Abstr.) **(Heb)**

TRANSMISSION

Probabilities of sexual HIV–1 transmission. Mastro TD, et al. **AIDS** 1996;10 Suppl A:S75–82 (108 ref.)

Sexual transmission of giardiasis [letter; comment] Higer DA. **Am Fam Physician** 1997 Feb 1;55(2):442, 444. Comment on: Am Fam Physician 1996 Jun;53(8):2507–18.

Worth a careful look [letter] Joffe A. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):637

Zimbabwean teenagers' knowledge of AIDS and other sexually transmitted diseases. Kasule J, et al. **East Afr Med J** 1997 Feb;74(2):76–81

The role and effectiveness of partner notification in STD control: a review. Cowan FM, et al. **Genitourin Med** 1996 Aug;72(4):247–52 (52 ref.)

Imported syphilis and other sexually transmitted infections among UK travellers to Russia and Poland [letter] Sherrard J, et al. **Genitourin Med** 1997 Feb;73(1):75

Chlamydia spread equally between men and women [news] **Int J Fertil Womens Med** 1997 Jan–Feb;42(1):16–7

A case of acute hepatitis B occurring four months after multiple rape. Crowe C, et al. **Int J STD AIDS** 1996 Mar–Apr;7(2):133–4

The associations between risk behaviour and reported history of sexually transmitted diseases, among young women: a population–based study. Jonsson M, et al. **Int J STD AIDS** 1997 Aug;8(8):501–5

Probability of heterosexual transmission of HIV [letter; comment] Vernazza PL, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jan 1;14(1):85–6. Comment on: J Acquir Immune Defic Syndr Hum Retrovirol 1996 Apr 1;11(4):388–95.

Sexually transmitted diseases and sexual behavior: insights from mathematical models. Garnett GP, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S150–61 (43 ref.)

Population– and individual–based approaches to the design and analysis of epidemiologic studies of sexually transmitted disease transmission. Shiboski S, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S188–200

The development and use of the concept of a sexually transmitted disease core. Thomas JC, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S134–43 (103 ref.)

Attributable risk of exposures associated with sexually transmitted disease. Vittinghoff E, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S182–7

The effect of birth control methods on sexually transmitted disease/HIV risk [see comments] O'Connell ML. **J Obstet Gynecol Neonatal Nurs** 1996 Jul–Aug;25(6):476–80 (32 ref.). Comment in: J Obstet Gynecol Neonatal Nurs 1997 Jan–Feb;26(1):16.

Migrancy and HIV/STDs in South Africa--a rural perspective [letter; comment] Lurie M, et al. **S Afr Med J** 1997 Jul;87(7):908–9. Comment on: S Afr Med J 1996 Oct;86(10):1249–51.

Sexual intercourse during menstruation and self–reported sexually transmitted disease history among women. Tanfer K, et al. **Sex Transm Dis** 1996 Sep–Oct;23(5):395–401

Partner notification in context: Swedish and Zambian experiences. Faxelid EA, et al. **Soc Sci Med** 1997 Apr; 44(8):1239–43

Prostitutes, prostitution and STD/HIV transmission in mainland China. Gil VE, et al. **Soc Sci Med** 1996 Jan; 42(1):141–52

[Human mobility and sexually transmitted diseases] Carosi G, et al. **Med Trop (Mars)** 1997;57(2):115–9 (28 ref.) **(Fre)**

[Sexually transmitted diseases in HIV infection] Hartmann M, et al. **Hautarzt** 1997 Mar;48(3):206–13; quiz 213 (90 ref.) **(Ger)**

URINE

Urine–based diagnosis of sexually transmitted infections using amplified DNA techniques: a shift in paradigms? Orr DP. **J Adolesc Health** 1997 Jan;20(1):3–5 (7 ref.)

VETERINARY

Changes in lymphokine–activated killer activity in peripheral blood lymphocytes from canine transmissible venereal sarcoma models. Mizuno S, et al. **Exp Anim** 1996 Jul; 45(3):289–92

VIROLOGY

Sexual risk behavior in women with cervical human papillomavirus infection. Sikström B, et al. **Arch Sex Behav** 1996 Aug;25(4):361–72

Frequent genital herpes simplex virus 2 shedding in immunocompetent women. Effect of acyclovir treatment. Wald A, et al. **J Clin Invest** 1997 Mar 1;99(5):1092–7

Importance of sexual transmission of hepatitis C virus in seropositive pregnant women: a case–control study. Salleras L, et al. **J Med Virol** 1997 Jun;52(2):164–7

Prospective seroepidemiologic study of human papillomavirus infection as a risk factor for invasive cervical cancer. Dillner J, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1293–9

SEXUALLY TRANSMITTED DISEASES, BACTERIAL

DIAGNOSIS

Sexually transmitted diseases update. McDonald LL, et al. **Dermatol Clin** 1997 Apr;15(2):221–32 (106 ref.)

Detection of Neisseria gonorrhoeae and Chlamydia trachomatis in genitourinary specimens from men and women by a coamplification PCR assay. Crotchfelt KA, et al. **J Clin Microbiol** 1997 Jun;35(6):1536–40

Acceptability and usefulness of vaginal washes in premenarcheal girls as a diagnostic procedure for sexually transmitted diseases. The Child Protection Centre at the Winnipeg Children's Hospital. Embree JE, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):662–7

DRUG THERAPY

1–day azithromycin was as effective as 7–day doxycycline for nongonococcal urethritis syndrome in men [letter] Wendel TD. **ACP J Club** 1996 Nov–Dec;125(3):82

Pharmacologic management of sexually transmitted diseases. Roe VA, et al. **J Nurse Midwifery** 1997 May–Jun; 42(3):275–89 (110 ref.)

EPIDEMIOLOGY

Current situation of sexually transmitted Chlamydia trachomatis infections in China. Wang Q. **Chin Med J (Engl)** 1996 Dec;109(12):899–902 (16 ref.)

Mycoplasma hominis and Ureaplasma urealyticum in patients with sexually transmitted diseases. Koch A, et al. **Wien Klin Wochenschr** 1997 Aug 8;109(14–15):584–9

MICROBIOLOGY

Possible sexual transmission of Q fever among humans. Kruszewska D, et al. **Clin Infect Dis** 1996 Jun;22(6):1087–8

Pathogenic potential of Gardnerella vaginalis on the female urogenital system. Chaudhuri M, et al. **J Indian Med Assoc** 1996 Jan;94(1):11–3, 16

Transmission of uropathogens between sex partners. Foxman B, et al. **J Infect Dis** 1997 Apr;175(4):989–92

[Microbiological study of some microorganisms implicated in sexually transmitted diseases among the female prison population] Alonso–Sanz M, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):474–8 (Eng. Abstr.) **(Spa)**

THERAPY

Sexually transmitted diseases update. McDonald LL, et al. **Dermatol Clin** 1997 Apr;15(2):221–32 (106 ref.)

VETERINARY

Contagious equine metritis. Timoney PJ. **Comp Immunol Microbiol Infect Dis** 1996 Jun;19(3):199–204

Swabbing protocols in screening for contagious equine metritis. Watson ED. **Vet Rec** 1997 Mar 15;140(11):268–71

SEXUALLY TRANSMITTED DISEASES, VIRAL

Hepatitis C virus and sexual transmission [letter] Worm AM, et al. **Acta Derm Venereol** 1996 May;76(3):249–50

Transmission of hepatitis C virus between spouses: the important role of exposure duration [see comments] Kao JH, et al. **Am J Gastroenterol** 1996 Oct;91(10):2087–90. Comment in: Am J Gastroenterol 1996 Oct;91(10):2069–70.

Hepatitis C: sexually exposed? [editorial; comment] McCashland TM, et al. **Am J Gastroenterol** 1996 Oct; 91(10):2069–70. Comment on: Am J Gastroenterol 1996 Oct;91(10):2087–90.

Is hepatitis G virus transmitted sexually? [letter] Rubio A, et al. **JAMA** 1997 Feb 19;277(7):532–3

Sexual transmission of two different HCV types causing acute hepatitis C [letter] Sánchez–Beiza L, et al. **Vox Sang** 1996; 71(4):244–5

[Sexually transmitted HPV (Human Papillomavirus)] **Ugeskr Laeger** 1997 Sep 1;159(36):5395–6 **(Dan)**

[Sexual transmission of tick–borne encephalitis virus in laboratory mice] Gerlinskaia LA, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):327–8 **(Rus)**

[Sexuality and STD infections among teenage girls. "Unprotected sex" is common in spite of sufficient knowledge about the risks] Andersson–Ellström A, et al. **Lakartidningen** 1997 Feb 19;94(8):619–21 (Eng. Abstr.) **(Swe)**

BLOOD

Sexual transmission of hepatitis C virus to a repeat blood donor. Capelli C, et al. **Transfusion** 1997 Apr;37(4):436–40

DIAGNOSIS

Sexually transmitted diseases update. McDonald LL, et al. **Dermatol Clin** 1997 Apr;15(2):221–32 (106 ref.)

DRUG THERAPY

Pharmacologic management of sexually transmitted diseases. Roe VA, et al. **J Nurse Midwifery** 1997 May–Jun; 42(3):275–89 (110 ref.)

EPIDEMIOLOGY

Genital herpes infection: a review. Brugha R, et al. **Int J Epidemiol** 1997 Aug;26(4):698–709 (127 ref.)

IMMUNOLOGY

A cytokine switch induced by human seminal plasma: an immune modulation with implications for sexually transmitted disease. Kelly RW, et al. **Hum Reprod** 1997 Apr;12(4):677–81

Risk of primary cytomegalovirus infection during pregnancy according to maternal age [letter] Suárez M, et al. **J Adolesc Health** 1997 May;20(5):337–8

PATHOLOGY

Human papillomavirus identification and typing of both

sexual partners. Gomousa-Michael M, et al. **Acta Cytol** 1997 Mar-Apr;41(2):244-50

PREVENTION & CONTROL

Sexual transmission of the hepatitis C virus and efficacy of prophylaxis with intramuscular immune serum globulin. A randomized controlled trial. Piazza M, et al. **Arch Intern Med** 1997 Jul 28;157(14):1537-44

A sensitive method for evaluating condoms as virus barriers. Lytle CD, et al. **J AOAC Int** 1997 Mar-Apr;80(2):319-24

THERAPY

Sexually transmitted diseases update. McDonald LL, et al. **Dermatol Clin** 1997 Apr;15(2):221-32 (106 ref.)

TRANSMISSION

Shedding of HIV-1 subtype E in semen and cervico-vaginal fluid. Sutthent R, et al. **J Med Assoc Thai** 1997 Jun; 80(6):348-57

Encouraging teens to use Norplant is bad advice [letter] Griffin GC. **Pediatrics** 1996 Dec;98(6 Pt 1):1222

Sexual transmission of hepatitis B in Mwanza, Tanzania. Jacobs B, et al. **Sex Transm Dis** 1997 Mar;24(3):121-6

VETERINARY

Replication of equid herpesvirus-1 (EHV-1) in the testes and epididymides of ponies and venereal shedding of infectious virus. Tearle JP, et al. **J Comp Pathol** 1996 Nov; 115(4):385-97

Genital infection and transmission of pseudorabies virus in feral swine in Florida, USA. Romero CH, et al. **Vet Microbiol** 1997 Apr;55(1-4):131-9

Monitoring of porcine reproductive and respiratory syndrome virus infection in boars. Shin J, et al. **Vet Microbiol** 1997 Apr;55(1-4):337-46

VIROLOGY

Replication of equid herpesvirus-1 (EHV-1) in the testes and epididymides of ponies and venereal shedding of infectious virus. Tearle JP, et al. **J Comp Pathol** 1996 Nov; 115(4):385-97

Parenteral and sexual transmission of GB virus C and hepatitis C virus among human immunodeficiency virus-positive patients [letter] Fiordalisi G, et al. **J Infect Dis** 1997 Apr;175(4):1025-6

Evidence in Gabon for an intrafamilial clustering with mother-to-child and sexual transmission of a new molecular variant of human T-lymphotropic virus type-II subtype B. Tuppin P, et al. **J Med Virol** 1996 Jan; 48(1):22-32

High prevalence of adeno-associated virus (AAV) type 2 rep DNA in cervical materials: AAV may be sexually transmitted. Han L, et al. **Virus Genes** 1996;12(1):47-52

SEZARY SYNDROME

Mycosis fungoides and Sezary syndrome [see comments] Diamandidou E, et al. **Blood** 1996 Oct 1;88(7):2385-409 (296 ref.). Comment in: Blood 1997 Apr 15;89(8):3062-4.

COMPLICATIONS

Mesenteric vasculitis associated with Sézary syndrome. Ellis RD, et al. **Gut** 1996 Aug;39(2):334-5

[Sézary syndrome associated with small intestinal amyloidosis] Takimoto Y, et al. **Rinsho Ketsueki** 1996 Dec; 37(12):1422-4 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Sezary cell leukaemia: a distinct T cell disorder or a variant form of T prolymphocytic leukaemia? Pawson R, et al. **Leukemia** 1997 Jul;11(7):1009-13

DRUG THERAPY

2-Chlorodeoxyadenosine treatment in the Sezary syndrome [letter; comment] Zaucha JM, et al. **Blood** 1997 Feb 15; 89(4):1462-4. Comment on: Blood 1996 Feb 1;87(3):906-11.

Clinical experience with 2'-deoxycoformycin. Catovsky D. **Hematol Cell Ther** 1996 Dec;38 Suppl 2:S103-7 (25 ref.)

Extracorporeal photopheresis in Sézary syndrome [letter] Russell-Jones R, et al. **Lancet** 1997 Sep 20;350(9081):886

[Therapy of Sézary syndrome by extracorporeal photochemotherapy] Bohmeyer J, et al. **Hautarzt** 1996 Jan; 47(1):24-8 (Eng. Abstr.) **(Ger)**

GENETICS

Recurring structural chromosome abnormalities in peripheral blood lymphocytes of patients with mycosis fungoides/Sézary syndrome. Thangavelu M, et al. **Blood** 1997 May 1;89(9):3371-7

Relationship of T leukaemias with cerebriform nuclei to T-prolymphocytic leukaemia: a cytogenetic analysis with in situ hybridization. Brito-Babapulle V, et al. **Br J Haematol** 1997 Mar;96(4):724-32

IMMUNOLOGY

Failure of anti-T-cell receptor V beta antibodies to consistently identify a malignant T-cell clone in Sézary syndrome. Bigler RD, et al. **Am J Pathol** 1996 Nov; 149(5):1477-83

Demonstration of antibodies to human T-cell lymphotropic virus-I tax in patients with the cutaneous T-cell lymphoma, mycosis fungoides, who are seronegative for antibodies to the structural proteins of the virus. Pancake BA, et al. **Blood** 1996 Oct 15;88(8):3004-9

PATHOLOGY

Immunophenotypic identification of Sezary cells in peripheral blood. Bogen SA, et al. **Am J Clin Pathol** 1996 Dec;106(6):739-48

Idiopathic erythroderma: a follow-up study of 28 patients. Sigurdsson V, et al. **Dermatology** 1997;194(2):98-101

Prognostic factors and evaluation of mycosis fungoides and Sézary syndrome. Toro JR, et al. **J Am Acad Dermatol** 1997 Jul;37(1):58-67

T-cell lymphoma cell lines (HUT102 and HUT78) established at the National Cancer Institute: history and importance to understanding the biology, clinical features, and therapy of cutaneous T-cell lymphomas (CTCL) and adult T-cell leukemia-lymphomas (ATLL). Bunn PA Jr, et al. **J Cell Biochem Suppl** 1996;24:12-23 (125 ref.)

Histologic criteria for the diagnosis of erythrodermic mycosis fungoides and Sézary syndrome: a critical reappraisal. Kohler S, et al. **J Cutan Pathol** 1997 May;24(5):292-7

Cutaneous histopathology of Sézary syndrome: a study of 41 cases with a proven circulating T-cell clone. Trotter MJ, et al. **J Cutan Pathol** 1997 May;24(5):286-91

A case of Sézary syndrome associated with cutaneous transformation. Sakai H, et al. **J Dermatol** 1996 Oct; 23(10):697-702

Sezary lineage cells can be induced to proliferate via CD28-mediated costimulation. McCusker ME, et al. **J Immunol** 1997 May 15;158(10):4984-91

THERAPY

Clinical Trials Referral Resource: Mycosis Fungoides/Sézary Syndrome. Cheson BD, et al. **Oncology (Huntingt)** 1995 Jul;9(7):645-6

VIROLOGY

Increased anti-Epstein-Barr virus antibodies in epidermotropic cutaneous T-cell lymphoma: a study of 64 patients. Jumbou O, et al. **Br J Dermatol** 1997 Feb; 136(2):212-6

HTLV-associated diseases: human retroviral infection and cutaneous T-cell lymphomas. Fujihara K, et al. **Immunol Invest** 1997 Jan-Feb;26(1-2):231-42

SGOT see **ASPARTATE AMINOTRANSFERASE**

SGPT see **ALANINE AMINOTRANSFERASE**

SH DOMAINS see **SRC HOMOLOGY DOMAINS**

SH-REAGENTS see **SULFHYDRYL REAGENTS**

SHAMANISM

An assessment of contextual mediation in trance states of shamanic journeys. Houran J, et al. **Percept Mot Skills** 1997 Aug;85(1):59-65

SHAME

Conceptual and methodological issues in the assessment of shame and guilt. Tangney JP. **Behav Res Ther** 1996 Sep; 34(9):741-54 (85 ref.)

Bodily shame in relation to abuse in childhood and bulimia: a preliminary investigation. Andrews B. **Br J Clin Psychol** 1997 Feb;36 (Pt 1):41-9

The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy. Gilbert P. **Br J Med Psychol** 1997 Jun;70 (Pt 2):113-47 (140 ref.)

A process model for understanding adaptation to sexual abuse: the role of shame in defining stigmatization. Feiring C, et al. **Child Abuse Negl** 1996 Aug;20(8):767-82 (144 ref.)

Differences in pride and shame in maltreated and nonmaltreated preschoolers. Alessandri SM, et al. **Child Dev** 1996 Aug;67(4):1857-69

Temperament and parenting antecedents of individual differences in three-year-old boys' pride and shame reactions. Belsky J, et al. **Child Dev** 1997 Jun;68(3):456-66

Family environment and shame: is there a relationship? Pulakos J. **J Clin Psychol** 1996 Nov;52(6):617-23

System as metaphor in the psychology and biology of shame. Maunder R. **Psychiatry** 1996 Summer;59(2):196-205

Shame and suicide in Sophocles' Ajax. Lansky MR. **Psychoanal Q** 1996 Oct;65(4):761-86

Deboleza: culturally determined behaviour in Istria. Pavlovic E, et al. **Psychopathology** 1997;30(4):215-22

Violation in caring for the physically disabled. Lillestø B. **West J Nurs Res** 1997 Jun;19(3):282-96

[Thoughts on the correlation of hope, trust, responsibility and shame in the relationship between patients and their physicians] Hartmann F. **Med Klin** 1996 Oct 15; 91(10):660-4 **(Ger)**

[Sensitive delusion of reference--only of historical significance? A current case example] Richartz E, et al. **Nervenarzt** 1996 Jul;67(7):595-8 (Eng. Abstr.) **(Ger)**

[Disappearance of shame and puberty in girls] Kämmerer A, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Feb; 46(2):113-21 (35 ref.) (Eng. Abstr.) **(Ger)**

SHARED PARANOID DISORDER

DIAGNOSIS

Shared obsessive-compulsive disorder in a married couple: a new variant of folie à deux? [letter] Torch EM. **J Clin Psychiatry** 1996 Oct;57(10):489

[Folie à deux in depressive disorders] Gandor C. **Psychiatr Prax** 1997 May;24(3):152-3 **(Ger)**

GENETICS

Folie a Quatre in a large Nigerian sub-ship [letter] Mela M, et al. **Schizophr Res** 1997 Jan 17;23(1):91-3

PSYCHOLOGY

Folie-a-deux: report of two incidents. Lawal RA, et al. **East Afr Med J** 1997 Jan;74(1):56-8

Daughter-mother folie à deux: immigration as a trigger for role reversal and the development of folie à deux. Lerner V, et al. **Isr J Psychiatry Relat Sci** 1996;33(4):260-4

Antisocial personality by proxy: the Norton-Sims syndrome. Stawar TL. **J Psychol** 1997 Jan;131(1):5-19 (46 ref.)

[Unusual motivation in double suicide of a lesbian couple. Phenomenology, psychodynamics and influence of contemporary values] Grellner W, et al. **Arch Kriminol** 1996 Sep-Oct;198(3-4):65-72 (Eng. Abstr.) **(Ger)**

[Psychopathological concepts of induced insanity exemplified by folie a deux] Arenz D, et al. **Fortschr Neurol Psychiatr** 1996 Jan;64(1):13-9 (Eng. Abstr.) **(Ger)**

[Timing of occult practices-induced paranoid hallucinatory psychosis in 2 sisters] Metzger W, et al. **Psychiatr Prax** 1996 Jul;23(4):199-200 **(Ger)**

[A case of folie à trois] Tsukazaki N, et al. **Seishin Shinkeigaku Zasshi** 1997;99(1):35-44 (Eng. Abstr.) **(Jpn)**

SHARED PURCHASING see **GROUP PURCHASING**

SHARKS

Anti-inflammatory and analgesic activity of a water-soluble fraction from shark cartilage. Fontenele JB, et al. **Braz J Med Biol Res** 1996 May;29(5):643-6

Suntanning in hammerhead sharks [letter] Lowe C, et al. **Nature** 1996 Oct 24;383(6602):677

Infections after shark attacks in Australia. Royle JA, et al. **Pediatr Infect Dis J** 1997 May;16(5):531-2

Antiproliferative activity of shark cartilage with and without tumor necrosis factor-alpha in human umbilical vein endothelium. McGuire TR, et al. **Pharmacotherapy** 1996 Mar-Apr;16(2):237-44

[Collective poisoning of ciguateric type after ingestion of shark in Madagascar. Data collected by the Antananarivo medical team (letter)] Ramaliharisoa A, et al. **Presse Med** 1996 Oct 5;25(29):1350 **(Fre)**

BLOOD

Asymmetric hemoglobins, their thiol content, and blood glutathione of the scalloped hammerhead shark, Sphyrna lewini. Dafré AL, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Mar; 116(3):323-31

Serum concentrations of steroid hormones in the mature male bonnethead shark, Sphyrna tiburo. Manire CA, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):414-20

GENETICS

Chiloscyllium plagiosum low-density lipoprotein receptor: evolutionary conservation of five different functional domains. Mehta KD, et al. **J Mol Evol** 1996 Feb; 42(2):264-72

Sequence characterization of gamma-crystallins from lip shark (Chiloscyllium colax): existence of two cDNAs encoding gamma-crystallins of mammalian and teleostean classes. Chuang MH, et al. **J Protein Chem** 1997 May; 16(4):299-307

IMMUNOLOGY

Heavy-chain variable regions in carcharhine sharks: development of a comprehensive model for the evolution of VH domains among the gnathanstomes. Shen SX, et al. **Immunol Cell Biol** 1996 Aug;74(4):357-64

IgM-mediated opsonization and cytotoxicity in the shark. McKinney EC, et al. **J Leukoc Biol** 1997 Feb;61(2):141-6

Sharks and the origins of vertebrate immunity. Litman GW. **Sci Am** 1996 Nov;275(5):67-71

The immune system of ectothermic vertebrates. Flajnik MF. **Vet Immunol Immunopathol** 1996 Nov;54(1-4):145-50 (33 ref.)

METABOLISM

Accumulation pattern of butyltin compounds in dolphin, tuna, and shark collected from Italian coastal waters. Kannan K, et al. **Arch Environ Contam Toxicol** 1996 Jul; 31(1):19-23

Coplanar polychlorinated biphenyl congeners in shark livers

from the North-Western African Atlantic Ocean. Serrano R, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):150-7

CCK-X receptors in the endothermic mako shark (Isurus oxyrinchus). Oliver AS, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):61-73

Unsaturated glycerol monoethers as novel skin penetration enhancers. Loftsson T, et al. **Pharmazie** 1997 Jun; 52(6):463-5

PARASITOLOGY

Sheina orri (Myodocopa: Cypridinidae), an ostracod parasitic on the gills of the epaulette shark, Hemiscyllium ocellatum (Elasmobranchii: Hemiscyllidae). Bennett MB, et al. **Int J Parasitol** 1997 Mar;27(3):275-81

Analysis of Calliobothrium (Tetraphyllidea:Onchobothriidae) with descriptions of three new species and erection of a new genus. Nasin CS, et al. **J Parasitol** 1997 Aug; 83(4):714-33

Systematic resolution of Crossobothrium Linton, 1889, and taxonomic information on four species allocated to that genus. Ruhnke TR. **J Parasitol** 1996 Oct;82(5):793-800

PHYSIOLOGY

cAMP activates an ATP-conductive pathway in cultured shark rectal gland cells. Cantiello HF, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C466-75

Mechanisms of venous return and ventricular filling in elasmobranch fish. Lai NC, et al. **Am J Physiol** 1996 May; 270(5 Pt 2):H1766-71

Effects of endurance training in the leopard shark, Triakis semifasciata. Gruber SJ, et al. **Physiol Zool** 1997 Jul-Aug; 70(4):481-92

The unusual adrenergic-like excitatory action of acetylcholine on the ventricular cardiac muscle of the horned shark, Heterodontus portusjacksoni. Thompson AP, et al. **Physiol Zool** 1997 Mar-Apr;70(2):135-42

SHARP SYNDROME see **MIXED CONNECTIVE TISSUE DISEASE**

SHEEHAN'S SYNDROME see **HYPOPITUITARISM**

SHEEP

Ovine amniotic and allantoic epithelia across gestation. Shandley L, et al. **Anat Rec** 1997 Aug;248(4):542-53

An ovine model of acute myocardial infarction and chronic left ventricular dysfunction. Ikram H, et al. **Angiology** 1997 Aug;48(8):679-88

Depression of staple strength in weaner sheep supplemented with copper. Masters DG, et al. **Aust Vet J** 1997 May; 75(5):359-60

Expression of messenger ribonucleic acids of insulin-like growth factor binding protein-2, -4, and -5 in the ovine ovary: localization and changes during growth and atresia of antral follicles. Besnard N, et al. **Biol Reprod** 1996 Dec; 55(6):1356-67

Intravascular infusion of lipid into ewes stimulates production of progesterone and prostaglandin. Burke JM, et al. **Biol Reprod** 1996 Jul;55(1):169-75

Surface area and volume measurements for ram and human spermatozoa. Curry MR, et al. **Biol Reprod** 1996 Dec; 55(6):1325-32

Estrogen enhances endometrial estrogen receptor gene expression by a posttranscriptional mechanism in the ovariectomized ewe. Ing NH, et al. **Biol Reprod** 1996 Mar; 54(3):591-9

Effect of variants of interferon-tau with mutations near the carboxyl terminus on luteal life span in sheep. Niswender KD, et al. **Biol Reprod** 1997 Jan;56(1):214-20

Endocrine correlates of partner preference behavior in rams. Resko JA, et al. **Biol Reprod** 1996 Jul;55(1):120-6

Ontogeny and regulation of luteinizing hormone receptor messenger ribonucleic acid within the ovine corpus luteum. Smith GW, et al. **Biol Reprod** 1996 Jan;54(1):76-83

Effects of glucocorticoids on estrogen receptor messenger ribonucleic acid in the pregnant ovine myometrium in vivo and in vitro. Wu WX, et al. **Biol Reprod** 1996 Jan; 54(1):230-41

Trophoblast-specific processing and phosphorylation of pregnancy-associated glycoprotein-1 in day 15 to 25 sheep placenta. Xie S, et al. **Biol Reprod** 1996 Jan;54(1):122-9

Pattern of 11 beta-hydroxysteroid dehydrogenase type 1 messenger ribonucleic acid expression in the ovine uterus during the estrous cycle and pregnancy. Yang K, et al. **Biol Reprod** 1996 Dec;55(6):1231-6

Leptin receptor mRNA is expressed in ewe anterior pituitary and adipose tissues and is differentially expressed in hypothalamic regions of well-fed and feed-restricted ewes. Dyer CJ, et al. **Domest Anim Endocrinol** 1997 Mar; 14(2):119-28

Immunohistochemical analysis of AT1 receptor versus P450c17 and 3 beta HSD expression in ovine adrenals. Bird IM, et al. **Endocr Res** 1996 Nov;22(4):349-53

Fetal sheep pituitary proopiomelanocortin in late gestation: effect of bilateral lesions of the paraventricular nucleus on regional and cellular messenger ribonucleic acid levels. Bell ME, et al. **Endocrinology** 1997 Sep;138(9):3873-80

Double-label immunofluorescence study of glutamic acid decarboxylase in the fetal and adult ovine pancreas by light and confocal microscopy: evidence for predominant beta-cell coexpression. Reddy S, et al. **Gen Comp Endocrinol** 1997 Jun;106(3):301-9

Preparative-scale fractionation of bovine, caprine and ovine whey proteins by bel permeation chromatography. Felipe X, et al. **J Dairy Res** 1997 Aug;64(3):459-64

Odorous constituents of ovine milk in relationship to diet. Moio L, et al. **J Dairy Sci** 1996 Aug;79(8):1322-31

Elevation of lactoferrin gene expression in developing, ductal, resting, and regressing parenchymal epithelium of the ruminant mammary gland. Molenaar AJ, et al. **J Dairy Sci** 1996 Jul;79(7):1198-208

Hypothalamo-pituitary-adrenal axis response to coronary artery embolization: an ovine model of acute myocardial infarction. Charles CJ, et al. **J Endocrinol** 1997 Mar; 152(3):489-93

Ontogeny of FSH receptor messenger ribonucleic acid transcripts in relation to FSH secretion and testicular function in sheep. Yarney TA, et al. **J Mol Endocrinol** 1997 Apr;18(2):113-25

TGF-beta 1 forms functionally normal bone in a segmental sheep tibial diaphyseal defect. Moxham JP, et al. **J Otolaryngol** 1996 Dec;25(6):388-92

Mapping of the interferon gamma gene (IFNG) to chromosomes 3 in sheep and 5 in goat by FISH. Goldammer T, et al. **Mamm Genome** 1996 Jun;7(6):470-1

Hepatic and renal toxicity among patients ingesting sheep bile as an unconventional remedy for diabetes mellitus--Saudi Arabia, 1995. **MMWR Morb Mortal Wkly Rep** 1996 Nov 1;45(43):941-3

Nuclear transplantation. An udder way of making lambs [news] [see comments] Stewart C. **Nature** 1997 Feb 27; 385(6619):769, 771. Comment in: Nature 1997 Feb 27;385(6619):753.

Morphometric analysis of pulmonary development in the sheep following creation of fetal diaphragmatic hernia. Lipsett J, et al. **Pediatr Pathol Lab Med** 1997 Sep-Oct; 17(5):789-807

Chemical characterization of melanins in sheep wool and human hair. Ozeki H, et al. **Pigment Cell Res** 1996 Apr; 9(2):51-7

Advances in production of embryos in vitro from juvenile and prepubertal oocytes from the calf and lamb. Armstrong DT, et al. **Reprod Fertil Dev** 1997;9(3):333-9 (24 ref.)

Are ovine Leydig cells able to aromatize androgens? Bilińska B, et al. **Reprod Fertil Dev** 1997;9(2):193-9

Effect of maternal glucose infusion on brown adipose tissue and liver development in the neonatal lamb. Clarke L, et al. **Reprod Fertil Dev** 1996;8(7):1045-54

Optimization of a continuous real-time computerized semen analysis system for ram sperm motility assessment, and evaluation of four methods of semen preparation. Holt WV, et al. **Reprod Fertil Dev** 1996;8(2):219-30

Developmental capacity, energy metabolism and ultrastructure of mature oocytes from prepubertal and adult sheep. O'Brien JK, et al. **Reprod Fertil Dev** 1996; 8(7):1029-37

Regulation of mRNA encoding low density lipoprotein receptor and high density lipoprotein-binding protein in ovine corpora lutea. Tandeski TR, et al. **Reprod Fertil Dev** 1996;8(7):1107-14

Effect of a high sulfur diet on rumen microbial activity and rumen thiamine status in sheep receiving a semi-synthetic, thiamine-free diet. Alves de Oliveira L, et al. **Reprod Nutr Dev** 1996;36(1):31-42

Fertility of ram spermatozoa pellet-frozen in zwitterion-buffered diluents. Molinia FC, et al. **Reprod Nutr Dev** 1996;36(1):21-9

The ovarian secretion of androstenedione and oestradiol during late pregnancy and the early postpartum period in sheep with an autotransplanted ovary. Scaramuzzi RJ, et al. **Reprod Nutr Dev** 1996;36(5):531-43

Government proposes precautionary controls on ovine offals [news] **Vet Rec** 1996 Aug 3;139(5):102

Animal welfare: reducing mortality in lambs [news] [see comments] **Vet Rec** 1996 Nov 9;139(19):455-6. Comment in: Vet Rec 1997 Feb 1;140(5):136.

Birth of a male lamb derived from an in vitro matured oocyte fertilised by intracytoplasmic injection of a single presumptive male sperm. Catt SL, et al. **Vet Rec** 1996 Nov 16;139(20):494-5

Effects of fleece soiling and skinning method on the microbiology of sheep carcases. Hadley PJ, et al. **Vet Rec** 1997 May 31;140(22):570-4

Effects of feeding, watering and resting intervals on lambs transported by road and ferry to France. Knowles TG, et al. **Vet Rec** 1996 Oct 5;139(14):335-9

Mating patterns and reproductive wastage in commercial lowland ewes in west Somerset. Smith KC, et al. **Vet Rec** 1996 Dec 7;139(23):563-6

[In vitro oocyte maturation in domestic ruminants] Mermillod P, et al. **Contracept Fertil Sex** 1996 Jul-Aug;24(7-8):552-8 (36 ref.) (Eng. Abstr.) **(Fre)**

[Space required for sheep during transport] Buchenauer D. **DTW Dtsch Tierarztl Wochenschr** 1997 Apr;104(4):135-9 (Eng. Abstr.) **(Ger)**

[Extracorporeal membrane oxygenation (ECMO). II. The development of an experimental model in newborn lambs] Valls i Soler A, et al. **An Esp Pediatr** 1997 Mar;46(3):266-71 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Ovarian fusion in sheep. Smith KC, et al. **J Anat** 1996 Aug; 189 (Pt 1):199-204

The bent-leg syndrome in sheep. II. Association with genetic markers. Van Niekerk FE, et al. **J S Afr Vet Assoc** 1990 Dec;61(4):151-4

ANATOMY & HISTOLOGY

Sertoli cell-spermatid tubulobulbar complexes in the ram. Bielli A. **Anat Histol Embryol** 1997 Jun;26(2):151-5

Ultrastructural changes in the nerve fiber population of anastomosed vagal and spinal accessory nerves in the sheep. Delorme P, et al. **Anat Rec** 1997 May;248(1):129-36

Ultrastructural quantification of pulmonary intravascular macrophages in newborn and 2-week-old lambs. Longworth KE, et al. **Anat Rec** 1996 Oct;246(2):238-44

Morphological features of epithelial cells in the sheep isthmus oviduct during early pregnancy. Murray MK. **Anat Rec** 1997 Mar;247(3):368-78

Anatomy of the sheep spine and its comparison to the human spine. Wilke HJ, et al. **Anat Rec** 1997 Apr;247(4):542-55

The three-dimensional architecture of the myosalpinx in the sheep as revealed by scanning electron microscopy. Muglia U, et al. **Arch Histol Cytol** 1996 Oct;59(4):331-8

Angioarchitecture of the epididymis in men bull and ram. Cendrowska I, et al. **Folia Morphol (Warsz)** 1996; 55(4):227-8

Comparative morphology of the spinal ganglia in the different segments of the spinal cord in sheep. Hereć S, et al. **Folia Morphol (Warsz)** 1996;55(4):276-7

Comparative study of the intratesticular vascular rete in men and certain animals. Jędrzejewski KS, et al. **Folia Morphol (Warsz)** 1996;55(4):303-5

The intratesticular lymphatic network in men, bulls and rams. Okraszewska E, et al. **Folia Morphol (Warsz)** 1996; 55(4):401-2

Morphological changes in endothelial cells of uterine artery of cycling and ovariectomized-estradiol treated ewes. Zezula-Szpyra A, et al. **Folia Morphol (Warsz)** 1996; 55(4):469-71

Comparative anatomy of arterial vascularization of the rhinencephalon in man, cat and sheep. Sztamska E, et al. **Folia Neuropathol** 1997;35(1):60-8

Natriuretic peptide immunoreactivity in nerve structures and Purkinje fibres of human, pig and sheep hearts. Hansson M, et al. **Histochem J** 1997 Apr;29(4):329-36

Phenotypic characterization of rambouillet sheep expression the callipyge gene: III. Muscle weights and muscle weight distribution. Jackson SP, et al. **J Anim Sci** 1997 Jan; 75(1):133-8

Machine milking of Ostfriesian and Lacaune dairy sheep: udder anatomy, milk ejection and milking characteristics. Bruckmaier RM, et al. **J Dairy Res** 1997 May;64(2):163-72

Seasonal variation in the correlation of testicular and epididymal weight-dimensions in the red Sokoto goat and white Yankassa ram [published erratum appears in Kaibogaku Zasshi 1996 Apr;71(2):138] Nwoha PU. **Kaibogaku Zasshi** 1996 Feb;71(1):09-14

Morphological changes in the ewe uterine tube (oviduct) epithelium during puerperium. Cigánková V, et al. **Vet Med (Praha)** 1996 Nov;41(11):339-46

Possibility of blocking n. ischiadicus within foramen ischiadicum majus in sheep. Matičić D, et al. **Vet Med (Praha)** 1996 Sep;41(9):273-8

Histopathological changes in the reproductive organs of Manchego ewes grazing on lucerne. Cantero A, et al. **Zentralbl Veterinarmed A** 1996 Aug;43(6):325-30

[Morphometric comparisons of the left and right cerebral hemispheres in Karayak sheep (Ovis aries)] Bilgiç S, et al. **Morfologiia** 1996;110(5):23-5 (Eng. Abstr.) **(Rus)**

[The architectonics of the lymphatic networks in the sheep heart] Chumakov VIu. **Morfologiia** 1996;110(5):73-5 (Eng. Abstr.) **(Rus)**

[The effect of a low-protein diet on the epithelium of nephron segments in sheep] Kočišová J, et al. **Vet Med (Praha)** 1997 Apr;42(4):93-5 (Eng. Abstr.) **(Slo)**

BLOOD

Seasonal variation in the concentration of vitamins A and E in the blood plasma of fat-tailed sheep. Asadian A, et al. **Acta Vet Hung** 1995;43(4):453-61

Effect of vitamins A and E on blood plasma vitamin status and daily body mass gain of different fat-tailed sheep breeds. Asadian A, et al. **Acta Vet Hung** 1996;44(1):99-109

An investigation on plasma progesterone levels during pregnancy and at parturition in the Ivesi sheep. Kalkan C, et al. **Acta Vet Hung** 1996;44(3):335-40

Evaluation of blood lipid peroxidation parameters in carbon tetrachloride (CCl4) toxicity in sheep. Vajdovich P, et al. **Acta Vet Hung** 1995;43(4):423-9

Comparison and simulation of different levels of erythrocyte aggregation with pig, horse, sheep, calf, and normal human blood [published erratum appears in Biorheology 1996 Nov-Dec;33(6):509] Weng X, et al. **Biorheology** 1996 Jul-Oct;33(4-5):365-77

Constituents of seminal plasma and blood serum of the ram. Zedda MT, et al. **Boll Soc Ital Biol Sper** 1996 Jul-Aug; 72(7-8):227-30

The incidence of luteal activity, as determined by peripheral plasma progesterone concentration, before the onset of the breeding season in the Rasa Aragonesa breed of sheep. Abecia JA, et al. **Br Vet J** 1995 May;152(3):353-5

Comparative aspects of glucose tolerance in camels, sheep, and ponies. Elmahdi B, et al.
Comp Biochem Physiol A Physiol 1997 Sep;118(1):147–51
A comparative study on the functional properties of the wild European mouflon and domestic sheep hemoglobins. Corda M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jul;117(3):417–20
Characterization of phosphotyrosine phosphatase activity in sheep platelets: amphiphilic and hydrophilic forms. Hernández-Hernández A, et al.
Comp Biochem Physiol B Biochem Mol Biol 1997 Jul; 117(3):437–44
Plasma concentration of thyroid hormones in lambs fed poultry offal meal in replacement of soybean meal at two energy levels. Alshaikh MA, et al.
DTW Dtsch Tierarztl Wochenschr 1997 Jun;104(6):213–5
Sexual dimorphism of circulating somatotropin, insulin-like growth factor I and II, insulin-like growth factor binding proteins, and insulin: relationships to growth rate and carcass characteristics in growing lambs. Gatford KL, et al. **J Anim Sci** 1996 Jun;74(6):1314–25
Effects of the callipyge phenotype on serum creatinine, total cholesterol, low-density lipoproteins, very-low-density lipoproteins, high-density lipoproteins, and triacylglycerol in growing lambs. Meyer HH, et al. **J Anim Sci** 1996 Jul; 74(7):1548–52
Pharmacokinetic profile of plasma tocopherol following intramuscular administration of acetylated alpha-tocopherol to sheep. Hidiroglou M. **J Dairy Sci** 1996 Jun;79(6):1027–30
Effects of somatostatin-28 on circulating concentrations of insulin and gut hormones in sheep. Martin PA, et al.
J Endocrinol 1996 Oct;151(1):107–12
Effect of alteration of maternal plasma progesterone concentrations on fetal behavioural state during late gestation. Nicol MB, et al. **J Endocrinol** 1997 Mar; 152(3):379–86
Follistatin concentrations in male sheep increase following sham castration/castration or injection of interleukin-1 beta. Phillips DJ, et al. **J Endocrinol** 1996 Oct;151(1):119–24
Melatonin secretion in rams maintained in constant darkness depends on the timing of a single 1-hour light pulse given the previous night. Ravault JP, et al. **J Pineal Res** 1996 Nov;21(4):218–24
Gonadotrope responsiveness in orchidectomized sheep: effect of duration of a simulated follicular phase. Sakurai H, et al. **J Reprod Fertil** 1996 Nov;108(2):211–7
Pharmacokinetics of ceftiofur and metabolites after single intravenous and intramuscular administration and multiple intramuscular administrations of ceftiofur sodium to sheep. Craigmill AL, et al. **J Vet Pharmacol Ther** 1997 Apr; 20(2):139–44
Disposition of remoxipride in plasma and cerebrospinal fluid in sheep. Main DC, et al. **J Vet Pharmacol Ther** 1996 Oct; 19(5):402–4
Effect of doses of protected polyunsaturated fatty acids on indicators of selenium status of sheep. Smith GM, et al. **Res Vet Sci** 1997 Jan-Feb;62(1):81–2
Pharmacokinetics and toxicity of tolonium chloride in sheep. Cudd LA, et al. **Vet Hum Toxicol** 1996 Oct;38(5):329–32
Enhanced plasma availability of the metabolites of albendazole in fasted adult sheep. Lifschitz A, et al.
Vet Res Commun 1997 Apr;21(3):201–11
The effects of age and reproductive status on serum and blood parameters in merino breed sheep. Alonso AJ, et al. **Zentralbl Veterinarmed A** 1997 Jun;44(4):223–31
Infusion of various short chain fatty acids causes different changes in the blood glucose and insulin concentrations in growing lambs deprived of food overnight. Husveth F, et al. **Zentralbl Veterinarmed A** 1996 Sep;43(7):437–44

CLASSIFICATION

[Taxonomy of sheep (genus Ovis, Linnaeus, 1758)] Hermans WA. **Tijdschr Diergeneeskd** 1996 Sep 15;121(18):510–4 (Eng. Abstr.) **(Dut)**
[The European mouflon, Ovis musimon] Hermans WA. **Tijdschr Diergeneeskd** 1996 Sep 15;121(18):515–7 (Eng. Abstr.) **(Dut)**

EMBRYOLOGY

Effect of prolonged uterine blood flow reduction on fetal growth in sheep. Boyle DW, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 2):R246–53
Ovine fetal metabolism during norepinephrine infusion. Milley JR. **Am J Physiol** 1997 Aug;273(2 Pt 1):E336–47
Ontogeny of blood-brain barrier function in ovine fetuses, lambs, and adults. Stonestreet BS, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1594–601
Development of the genital peritoneal folds in sheep. Martin E, et al. **Anat Histol Embryol** 1996 Sep;25(3):187–95
Dietary excesses of urea influence the viability and metabolism of preimplantation sheep embryos and may affect fetal growth among survivors. McEvoy TG, et al.
Anim Reprod Sci 1997 May;47(1-2):71–90
Method of stimulating ovulation rate in Merino ewes may affect conception but not embryo survival. Wilkins JF.
Anim Reprod Sci 1997 May;47(1-2):31–42
Isolation of cells from ovine fetal long bone and characterization of their osteoblastic activities during in vitro mineralization. Collignon H, et al.
Arch Physiol Biochem 1997 Apr;105(2):158–66
Differences on post-thawing survival between ovine morulae and blastocysts cryopreserved with ethylene glycol or glycerol. Cocero MJ, et al. **Cryobiology** 1996 Oct; 33(5):502–7
Contractile activity of the uterus prior to labor alters the temporal organization of spontaneous motor activity in the fetal sheep. Robertson SS, et al. **Dev Psychobiol** 1996 Dec; 29(8):667–83
Effect of chronic infusion of placental lactogen on ovine fetal growth in late gestation. Schoknecht PA, et al.
Domest Anim Endocrinol 1996 Nov;13(6):519–28
Foetal endocrine maturation. Challis JR, et al.
Equine Vet J Suppl 1993 Apr;(14):35–40 (51 ref.)
Transcutaneous and arterial carbon dioxide tension during intermittent umbilical cord occlusion in fetal sheep. Bergmans MG, et al. **Gynecol Obstet Invest** 1997; 43(3):150–4
Comparative study of the ontogeny of mandibular cartilage (Meckel) in sheep (Ovis aries) and cat (Felis domestica). Rojas M, et al. **Int J Dev Biol** 1996;Suppl 1:243S–244S
Distribution and coexistence of neuropeptides in nerve fibres in the temporomandibular joint of late gestation fetal sheep. Tahmasebi-Sarvestani A, et al. **J Anat** 1997 Aug;191 (Pt 2):245–57
Developmental and regional differences in nitric oxide synthase activity and blood flow in the sheep brain. Northington FJ, et al. **J Cereb Blood Flow Metab** 1997 Jan;17(1):109–15
The effects of cortisol on the growth rate of the sheep fetus during late gestation. Fowden AL, et al. **J Endocrinol** 1996 Oct;151(1):97–105
Dopaminergic regulation of adrenocorticotrophic hormone, alpha-melanocyte-stimulating hormone and cortisol secretion in the ovine fetus. Hagan DM, et al.
J Endocrinol 1996 Dec;151(3):439–47
Dopaminergic regulation of pituitary function in the late-gestation fetal sheep. Matthews SG, et al.
J Endocrinol 1996 Aug;150(2):187–94
Ontogeny of anti-müllerian hormone, 3 beta-hydroxysteroid dehydrogenase and androgen receptor expression during ovine total gonadal development. Sweeney T, et al.
J Endocrinol 1997 Apr;153(1):27–32
Pituitary and gonadal responses to the long-term pulsatile administration of gonadotrophin-releasing hormone in fetal sheep. Thomas GB, et al. **J Endocrinol** 1997 Jun; 153(3):385–91
Regulation of gastrointestinal growth in fetal sheep by luminally administered insulin-like growth factor-I. Trahair JF, et al. **J Endocrinol** 1997 Jan;152(1):29–38
Estimation of transplacental and nonplacental diphenhydramine clearances in the fetal lamb: the impact of fetal first-pass hepatic drug uptake. Kumar S, et al.
J Pharmacol Exp Ther 1997 Aug;282(2):617–32
A combined immunohistochemical and electron microscopic study of the second cell type in the developing sheep pineal gland. Franco A, et al. **J Pineal Res** 1997 Apr;22(3):130–6
Ontogeny of angiotensin II receptors, types 1 and 2, in ovine mesonephros and metanephros. Butkus A, et al.
Kidney Int 1997 Sep;52(3):628–36
Nuclear transfer in sheep embryos: the effect of cell-cycle coordination between nucleus and cytoplasm and the use of in vitro matured oocytes. Liu L, et al.
Mol Reprod Dev 1997 Jul;47(3):255–64
Metacarpal growth and systemic markers of bone metabolism in the ovine fetus. Collignon H, et al.
Reprod Fertil Dev 1996;8(2):287–95
The development of the ovine fetal adrenal gland and its regulation. Naaman Répérant E, et al. **Reprod Nutr Dev** 1997;37(1):81–95 (106 ref.)
[Development, cytoarchitecture and ultrastructure of the mesencephalic trigeminal nucleus in domestic ruminants] Hummel G, et al. **Anat Histol Embryol** 1997 Jun; 26(2):99–106 (Eng. Abstr.) **(Ger)**
[Comparative ontogenic analysis of the epithelium of the non-glandular stomach compartments of merino sheep] Regodon S, et al. **Anat Histol Embryol** 1996 Dec; 25(4):233–41 (Eng. Abstr.) **(Spa)**

GENETICS

Physical mapping confirms that sheep chromosome 10 has extensive conserved synteny with cattle chromosome 12 and human chromosome 13. Broad TE, et al.
Anim Genet 1996 Aug;27(4):249–53
Ovine dinucleotide repeat polymorphism at seven anonymous loci. Davies KP, et al. **Anim Genet** 1996 Aug;27(4):287–8
Ovine dinucleotide repeat polymorphism at eight anonymous loci. Davies KP, et al. **Anim Genet** 1996 Oct;27(5):381–2
Ovine dinucleotide repeat polymorphisms at four anonymous loci. Davies KP, et al. **Anim Genet** 1996 Oct;27(5):382–3
Ovine anonymous dinucleotide repeat polymorphism at the CSRD264, CSRD269, CSRD270, CSRD287, CSRD2108, CSRD2138 and CSRD2164 loci. Drinkwater R, et al.
Anim Genet 1997 Feb;28(1):70–1
Polymorphism at the ovine major histocompatibility complex class II loci. Escayg AP, et al. **Anim Genet** 1996 Oct; 27(5):305–12
Ovine-specific Y-chromosome RAPD-SCAR marker for embryo sexing. Gutiérrez-Adán A, et al. **Anim Genet** 1997 Apr;28(2):135–8
Anonymous sheep microsatellite markers McM4, McM105, McM126, McM380, McM541 and McM554. Hulme DJ, et al. **Anim Genet** 1996 Dec;27(6):440–1
Denaturing gradient gel electrophoresis detection of polymorphism in a PCR fragment of sheep epidermal growth factor gene. Lanneluc I, et al. **Anim Genet** 1996 Apr;27(2):99–101
Genetic variation in Australian Merino sheep. Parsons YM, et al. **Anim Genet** 1996 Aug;27(4):223–8
Haplotypes of restriction polymorphisms as informative genetic markers at the ovine glutathione reductase (GSR) locus. Phua SH, et al. **Anim Genet** 1996 Apr;27(2):122–3
A high-frequency TaqI polymorphism at the ovine phenylalanine hydroxylase (PAH)locus. Phua SH, et al.
Anim Genet 1996 Apr;27(2):124
Identification of carriers of the Welsh CASA1 variant using an allele-specific PCR method. Ramunno L, et al.
Anim Genet 1997 Apr;28(2):154–5
A diallelic tetranucleotide repeat, (GT3)5 or 6, within intron 1 of the ovine interferon-gamma-gene. Schmidt P, et al.
Anim Genet 1996 Dec;27(6):437–8
A PvuII RFLP at the ovine placental lactogen CSH1 locus. Yossefi S, et al. **Anim Genet** 1996 Aug;27(4):285–6
Two polymorphic microsatellite markers in sheep. Zanotti M, et al. **Anim Genet** 1997 Feb;28(1):68–9
Alterations in follicular maturation associated with within-breed variation in ovulation rate in Chios sheep. Avdi M, et al. **Anim Reprod Sci** 1997 Apr;46(3–4):223–35
Writing and reading about Dolly. Keller EF, et al.
Bioessays 1997 Aug;19(8):740–2
Production of cloned lambs from an established embryonic cell line: a comparison between in vivo- and in vitro-matured cytoplasts. Wells DN, et al. **Biol Reprod** 1997 Aug;57(2):385–93
Effects of passive immunization against inhibin-peptide on secretion of follicle-stimulating hormone and ovulation rate in ewes carrying the Booroola fecundity gene. Wheaton JE, et al. **Biol Reprod** 1996 Dec;55(6):1351–5
The interbreeding of sheep and goats. Kelk DA, et al.
Can Vet J 1997 Apr;38(4):235–7
Isolation of chromosome-specific paints from high-resolution flow karyotypes of the sheep (Ovis aries). Burkin DJ, et al. **Chromosome Res** 1997 Apr;5(2):102–8
Comparative FISH-mapping of villin (VIL) gene in river buffalo, sheep and goat chromosomes. Iannuzzi L, et al.
Chromosome Res 1997 May;5(3):199–202
Conserved Y-chromosomal location of TSPY in Bovidae. Vogel T, et al. **Chromosome Res** 1997 May;5(3):182–5
Natural sex steroids and their xenobiotic analogs in animal production: growth, carcass quality, pharmacokinetics, metabolism, mode of action, residues, methods, and epidemiology. Lone KP. **Crit Rev Food Sci Nutr** 1997 Mar; 37(2):93–209 (1177 ref.)
Sheep fever [news] Dixon B. **Curr Biol** 1997 May 1;7(5):R272
High-resolution FISH mapping of beta-defensin genes to river buffalo and sheep chromosomes suggests a chromosome discrepancy in fttle standard karyotypes. Iannuzzi L, et al. **Cytogenet Cell Genet** 1996;75(1):10–3
Genetic and physical mapping of the ovine cystic fibrosis gene. Tebbutt SJ, et al. **Cytogenet Cell Genet** 1996; 74(4):245–7
The effects of a duplication in the ovine growth hormone (GH) gene on GH expression in the pituitaries of ram lambs from lean and fat-selected sheep lines. Fleming JS, et al.
Domest Anim Endocrinol 1997 Jan;14(1):17–24
Cloning of sheep: a possible technique for reprogramming ageing mechanisms. Gilbert C. **Eur J Cancer Prev** 1997 Jun;6(3):303–4
Cloning and sequencing of an equine insulin-like growth factor I cDNA and its expression in fetal and adult tissues. Otte K, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):11–5
Genetic variation of major histocompatibility complex and microsatellite loci: a comparison in bighorn sheep. Boyce WM, et al. **Genetics** 1997 Feb;145(2):421–33
Mutations in sheep microsatellites [letter] Crawford AM, et al. **Genome Res** 1996 Sep;6(9):876–9
A linkage map of the ovine X chromosome. Galloway SM, et al. **Genome Res** 1996 Aug;6(8):667–77
FISH mapping of three bovine cosmids to cattle, goat, sheep and buffalo X chromosomes. Prakash B, et al.
Hereditas 1997;126(2):115–9
Genomic organization of the sheep immunoglobulin JH segments and their contribution to heavy chain variable region diversity. Dufour V, et al. **Immunogenetics** 1997; 46(4):283–92
IgE, TNF alpha, IL1 beta, IL4 and IFN gamma gene polymorphisms in sheep selected for resistance to fleece rot and flystrike. Engwerda CR, et al. **Int J Parasitol** 1996 Jul;26(7):787–91
Detecting genetic differences between groups of sheep during parasite infection. Woolaston RR. **Int J Parasitol** 1997 Jul; 27(7):839–41
Clone sheds light on research, ethical questions [news] Inserro JC. **J Am Vet Med Assoc** 1997 May 1;210(9):1246–7, 1255
Improving tenderness of normal and callipyge lambs with calcium chloride. Clare TL, et al. **J Anim Sci** 1997 Feb; 75(2):377–85
Collagen crosslinks in longissimus muscle from lambs expressing the callipyge gene. Field RA, et al.
J Anim Sci 1996 Dec;74(12):2943–7
Serum and milk folates during the first two gestations and lactations in Romanov, Finnsheep, and Suffolk ewes. Girard CL, et al. **J Anim Sci** 1996 Jul;74(7):1711–5
Lifetime lamb and wool production of targhee or

Finn-Dorset-Targhee ewes managed as farm or range flock: I. Average annual ewe performance. Iman NY, et al. **J Anim Sci** 1996 Aug;74(8):1757–64

Lifetime lamb and wool production of targhee or Finn-Dorset-Targhee ewes managed as farm or range flock: II. Cumulative lamb and wool production. Iman NY, et al. **J Anim Sci** 1996 Aug;74(8):1765–9

Phenotypic characterization of rambouillet sheep expression the callipyge gene: III. Muscle weights and muscle weight distribution. Jackson SP, et al. **J Anim Sci** 1997 Jan; 75(1):133–8

Phenotypic characterization of rambouillet sheep expressing the callipyge gene: I. Inheritance of the condition and production characteristics. Jackson SP, et al. **J Anim Sci** 1997 Jan;75(1):14–8

Phenotypic characterization of Rambouillet sheep expressing the callipyge gene: II. Carcass characteristics and retail yield. Jackson SP, et al. **J Anim Sci** 1997 Jan;75(1):125–32

Genetic analysis of discrete reproductive traits in sheep using linear and nonlinear models: I. Estimation of genetic parameters. Matos CA, et al. **J Anim Sci** 1997 Jan; 75(1):76–87

Genetic analysis of discrete reproductive traits in sheep using linear and nonlinear models: II. Goodness of fit and predictive ability. Matos CA, et al. **J Anim Sci** 1997 Jan; 75(1):88–94

Genetic parameter estimates for growth and fleece characteristics in Targhee sheep. Notter DR, et al. **J Anim Sci** 1997 Jul;75(7):1729–37

Genetic variation and covariation for ewe reproduction, lamb growth, and lamb scrotal circumference in a fall-lambing sheep flock. al-Shorepy SA, et al. **J Anim Sci** 1996 Jul; 74(7):1490–8

Rapid communication: a restriction fragment length polymorphism in the ovine Prolactin gene. Vincent AL, et al. **J Anim Sci** 1997 Jun;75(6):1686

Hair sheep genetic resources and their contribution to diversified small ruminant production in the United States. Wildeus S. **J Anim Sci** 1997 Mar;75(3):630–40 (49 ref.)

Genetic parameters for linear udder traits of dairy ewes. Fernández G, et al. **J Dairy Sci** 1997 Mar;80(3):601–5

Genetic parameters and trends for milk production of blond-faced Latxa sheep using Bayesian analysis. Ugarte E, et al. **J Dairy Sci** 1996 Dec;79(12):2268–77

Characterization of the ovine LH beta-subunit gene: the promoter is regulated by GnRH and gonadal steroids in transgenic mice. McNeilly JR, et al. **J Endocrinol** 1996 Dec; 151(3):481–9

Mapping the Horns (Ho) locus in sheep: a further locus controlling horn development in domestic animals. Montgomery GW, et al. **J Hered** 1996 Sep–Oct; 87(5):358–63

Effects of the Booroola gene (FecB(B)) on bodymass, testis development and hormone concentrations during fetal life. Smith P, et al. **J Reprod Fertil** 1996 Nov;108(2):253–61

Scientists flock to hear cloner Wilmut at the NIH [news] Marwick C. **JAMA** 1997 Apr 9;277(14):1102–3

Threatened bans on human cloning research could hamper advances [news] Stephenson J. **JAMA** 1997 Apr 2; 277(13):1023, 1025–6

One lamb, much fuss [editorial] [see comments] **Lancet** 1997 Mar 8;349(9053):661. Comment in: Lancet 1997 May 10;349(9062):1401.

First Dolly the sheep, now multiple monkeys [news] Bradbury J. **Lancet** 1997 Mar 8;349(9053):705

Thirteen loci physically assigned to sheep chromosome 2 by cell hybrid analysis and in situ hybridization. Broad TE, et al. **Mamm Genome** 1995 Dec;6(12):862–6

Mapping of the interferon gamma gene (IFNG) to chromosomes 3 in sheep and 5 in goat by FISH. Goldammer T, et al. **Mamm Genome** 1996 Jun;7(6):470–1

STAT5A encoding gene maps to chromosome 19 in cattle and goat and to chromosome 11 in sheep. Goldammer T, et al. **Mamm Genome** 1997 Sep;8(9):705–6

Mapping the ovine genes encoding IL3, IL4, IL5, and CSF2 to sheep chromosome 5q13–q15 by FISH. Hawken RJ, et al. **Mamm Genome** 1996 Nov;7(11):858–9

Genetic mapping of the laminin gamma 2 gene on sheep chromosome 12. Jenkins ZA, et al. **Mamm Genome** 1996 Nov;7(11):868–9

Physical assignment of glucagon and nebulin in cattle, sheep, and goat. Lopez-Corrales NL, et al. **Mamm Genome** 1997 Jun;8(6):428–9

The sheep gene map database (SheepBase) is now available on the World Wide Web. Sise JA, et al. **Mamm Genome** 1996 Jan;7(1):1

Ovine stem cell factor gene is located within a syntenic group on chromosome 3 conserved across mammalian species. Tisdall DJ, et al. **Mamm Genome** 1996 Jun;7(6):472–3

Extensive alternate exon usage at the 5' end of the sheep tropoelastin gene. Mauch JC, et al. **Matrix Biol** 1995 Oct; 14(8):635–41

Microsatellite evolution—a reciprocal study of repeat lengths at homologous loci in cattle and sheep. Ellegren H, et al. **Mol Biol Evol** 1997 Aug;14(8):854–60

Cloned sheep rekindles ethical debate [news] O'Brien C. **Mol Med Today** 1997 Apr;3(4):140

The real implications of Dolly. MacQuitty JJ. **Nat Biotechnol** 1997 Apr;15(4):294

Caught napping by clones [editorial; comment] [see comments] **Nature** 1997 Feb 27;385(6619):753. Comment on: Nature 1997 Feb 27;385(6619):769, 771. Comment on: Nature 1997 Feb 27;385(6619):810–3. Comment in: Nature 1997 Apr 3;386(6624):431.

Advantage of knowing nature's secrets [letter; comment] [see comments] Fainzilber M. **Nature** 1997 Apr 3;386(6624):431 . Comment on: Nature 1997 Feb 27;385(6619):757. Comment in: Nature 1997 May 8;387(6629):119.

Advantage of knowing nature's secrets [letter; comment] [see comments] Galibert F, et al. **Nature** 1997 Apr 3; 386(6624):431. Comment on: Nature 1997 Feb 27;385(6619):810–3. Comment in: Nature 1997 May 8;387(6629):119.

Advantage of knowing nature's secrets [letter; comment] Shaw G, et al. **Nature** 1997 Apr 3;386(6624):431. Comment on: Nature 1997 Feb 27;385(6619):753.

Advantage of knowing nature's secrets [letter] Strickland S. **Nature** 1997 Apr 3;386(6624):431

Advantage of knowing nature's secrets [letter; comment] Taggart MJ. **Nature** 1997 Apr 3;386(6624):431. Comment on: Nature 1997 Feb 27;385(6619):810–3.

Viable offspring derived from fetal and adult mammalian cells [see comments] [published erratum appears in Nature 1997 Mar 13;386(6621):200] Wilmut I, et al. **Nature** 1997 Feb 27;385(6619):810–3. Comment in: Nature 1997 Feb 27;385(6619):753. Comment in: Nature 1997 Mar 6;385(6620):12. Comment in: Nature 1997 Mar 13;386(6621):119. Comment in: Nature 1997 Apr 3;386(6624):431. Comment in: Nature 1997 Jun 19;387(6635):754.

To clone or not to clone? [news] Jones JS. **S Afr Med J** 1997 May;87(5):572–3

The start of something big? Dolly has become a new icon for science [news] Beardsley T. **Sci Am** 1997 May; 276(5):15–6

Will Dolly send in the clones? [news] Pennisi E, et al. **Science** 1997 Mar 7;275(5305):1415–6

Transgenic lambs from cloning lab [news] Pennisi E. **Science** 1997 Aug 1;277(5326):631

PrP genetics in sheep and the applications for scrapie and BSE. Hunter N. **Trends Microbiol** 1997 Aug;5(8):331–4 (36 ref.)

Evidence for a major gene determining the resistance of Indonesian Thin Tail sheep against Fasciola gigantica. Roberts JA, et al. **Vet Parasitol** 1997 Mar;68(4):309–14

Peri-parturient rise in faecal strongyle egg counts of different genotypes of sheep in North Sumatra, Indonesia. Romjali E, et al. **Vet Parasitol** 1997 Jan;68(1–2):191–6

Comparison of resistance of four genotypes of rams to experimental infection with Haemonchus contortus. Romjali E, et al. **Vet Parasitol** 1996 Oct 15;65(1–2):127–37

Observations on the transmission of scrapie in experiments using embryo transfer. Foster JD, et al. **Vet Rec** 1996 Jun 8;138(23):559–62

[Cloning of sheep—and humans too? (editorial)] Hjorth JP. **Ugeskr Laeger** 1997 Jul 28;159(31):4741 **(Dan)**

[Hello Dolly, ewe're welcome (editorial)] Jeanteur P. **Bull Cancer** 1997 Apr;84(4):341–2 **(Fre)**

[Dolly or the best in the world—a prelude to human cloning?] Dubois M, et al. **Rev Med Liege** 1997 Mar;52(3):174–7 **(Fre)**

[Variability of pheomelanin content in wool of Karakul lambs and the problem of phenetics of color] Latypov IF, et al. **Genetika** 1997 Mar;33(3):365–9 (Eng. Abstr.) **(Rus)**

[The genetic differentiation of sheep with different types of wool] Glazko VI, et al. **Tsitol Genet** 1996 Nov-Dec; 30(6):55–62 (Eng. Abstr.) **(Rus)**

[The organ specificity of the expression of a number of genetic-biochemical systems in sheep] Makar IA, et al. **Tsitol Genet** 1996 May-Jun;30(3):52–7 (Eng. Abstr.) **(Rus)**

[To clone or not to clone] Palo J. **Nord Med** 1997 May; 112(5):178 **(Swe)**

GROWTH & DEVELOPMENT

Effect of rearing temperature on perirenal adipose tissue development and thermoregulation following methimazole treatment of postnatal lambs. Symonds ME, et al. **Exp Physiol** 1996 Nov;81(6):995–1006

Effects of dietary energy intake and protein concentration on performance and visceral organ mass in lambs. Fluharty FL, et al. **J Anim Sci** 1997 Mar;75(3):604–10

Effect of selection for lifetime production of lamb weaned on hormonal factors that affect growth in Targhee ewes and lambs. Head WA Jr, et al. **J Anim Sci** 1996 Sep; 74(9):2152–7

Phenotypic characterization of rambouillet sheep expressing the callipyge gene: I. Inheritance of the condition and production characteristics. Jackson SP, et al. **J Anim Sci** 1997 Jan;75(1):14–8

Evaluation of wet distillers composite for finishing ruminants. Lodge SL, et al. **J Anim Sci** 1997 Jan;75(1):44–50

Effect of salinomycin on giardiasis and coccidiosis in growing lambs. McAllister TA, et al. **J Anim Sci** 1996 Dec; 74(12):2896–903

Genetic parameter estimates for growth and fleece characteristics in Targhee sheep. Notter DR, et al. **J Anim Sci** 1997 Jul;75(7):1729–37

Intestinal effects of milkborne growth factors in neonates of agricultural importance. Odle J, et al. **J Anim Sci** 1996 Oct;74(10):2509–22 (120 ref.)

Performance of growing lambs fed two levels of concentrate with conventional or macerated timothy hay. Petit HV, et al. **J Anim Sci** 1997 Mar;75(3):598–603

Effect of volatile fatty acid infusion on development of the rumen epithelium in neonatal sheep. Lane MA, et al. **J Dairy Sci** 1997 Apr;80(4):740–6

Ontogeny of growth hormone, insulin-like growth factor-I, estradiol and cortisol in the growing lamb: effect of testosterone. Arnold AM, et al. **J Endocrinol** 1996 Sep; 150(3):391–9

GH, GH-releasing factor and somatostatin in the growing lamb: sex differences and mechanisms for sex differences. Gatford KL, et al. **J Endocrinol** 1997 Jan;152(1):19–27

Nutrient partitioning and fetal growth in rapidly growing adolescent ewes. Wallace JM, et al. **J Reprod Fertil** 1996 Jul;107(2):183–90

Pregnancy-specific protein B and progesterone concentrations in relation to nutritional regimen, placental mass and pregnancy outcome in growing adolescent ewes carrying singleton fetuses. Wallace JM, et al. **J Reprod Fertil** 1997 Jan;109(1):53–8

Note on age and body weight at puberty in Mehraban Iranian fat-tailed ewe lambs. Bathaei SS, et al. **Trop Anim Health Prod** 1997 Feb;29(1):55–9

Nutritional and economic benefits of Leucaena and Gliricidia as feed supplements for small ruminants in humid West Africa. Jabbar MA, et al. **Trop Anim Health Prod** 1997 Feb;29(1):35–47 (44 ref.)

Infusion of various short chain fatty acids causes different changes in the blood glucose and insulin concentrations in growing lambs deprived of food overnight. Husveth F, et al. **Zentralbl Veterinarmed A** 1996 Sep;43(7):437–44

IMMUNOLOGY

The effects of vaccination of Merino ewes with an attenuated Australian bluetongue virus serotype 23 at different stages of gestation. Flanagan M, et al. **Aust Vet J** 1995 Dec; 72(12):455–7

Phenotype, and migration properties of three major subsets of tissue homing T cells in sheep. Mackay CR, et al. **Eur J Immunol** 1996 Oct;26(10):2433–9

Serologically defined lymphocyte alloantigens in Spanish sheep. Garrido JJ, et al. **Exp Clin Immunogenet** 1995; 12(4):268–71

A monoclonal antibody to ruminant fibrinogen produced through immunization with ovine peripheral blood leukocytes. Pintado CO, et al. **Hybridoma** 1996 Feb; 15(1):87–90

Inflammation-induced changes in the phenotype and cytokine profile of cells migrating through skin and afferent lymph. Egan PJ, et al. **Immunology** 1996 Dec;89(4):539–46

Cyclosporin A abrogates the acquired immunity to cutaneous reinfection with the parapoxvirus orf virus. Haig DM, et al. **Immunology** 1996 Dec;89(4):524–31

Surface Ig on B lymphocytes from cattle and sheep. Naessens J. **Int Immunol** 1997 Mar;9(3):349–54

The genesis, tutelage and exodus of B cells in the ileal Peyer's patch of sheep. Reynolds J. **Int Rev Immunol** 1997; 15(3–4):265–99

Concentration of gonadotropin-releasing hormone receptor messenger ribonucleic acid in pituitary tissue of orchidectomized sheep: effect of passive immunization against gonadotropin-releasing hormone. Sakurai H, et al. **J Anim Sci** 1997 Jan;75(1):189–94

Immunomodulatory activities of whey fractions in efferent prefemoral lymph of sheep. Wong CW, et al. **J Dairy Res** 1996 May;63(2):257–67

Immunomodulative effects of bovine immunodeficiency-like virus (BIV)-infection and mixed infection of BIV and bovine leukemia virus on sheep. Hirai N, et al. **Jpn J Vet Res** 1996 Dec;44(3):153–63

Serological serum protein fraction and responses to Brucella melitensis in lambs fed aflatoxins. Fernandez A, et al. **Vet Hum Toxicol** 1997 Jun;39(3):137–40

Nitric oxide production following in vitro stimulation of ovine pulmonary alveolar macrophages. Bogdan JR, et al. **Vet Immunol Immunopathol** 1997 May;56(3–4):299–310

Identification of the sheep homologue of the monocyte cell surface molecule—CD14. Gupta VK, et al. **Vet Immunol Immunopathol** 1996 May;51(1–2):89–99

T cell subsets and Langerhans cells in the forestomach mucosa of adult sheep and sheep foetuses. Josefsen TD, et al. **Vet Immunol Immunopathol** 1996 May;51(1–2):101–11

Changes in T cell subpopulations of sheep due to age and dietary protein intake, association with protective immunity to Trichostrongylus colubriformis. Kambara T, et al. **Vet Immunol Immunopathol** 1996 May;51(1–2):127–35

Analysis of ovine IL-1 beta production in vivo and in vitro by enzyme immunoassay and immunohistochemistry. Rothel JS, et al. **Vet Immunol Immunopathol** 1997 Jul; 57(3–4):267–78

Quantification of total sheep IgE concentration using anti-ovine IgE monoclonal antibodies in an enzyme immunoassay. Shaw RJ, et al. **Vet Immunol Immunopathol** 1997 Jul;57(3–4):253–65

Production and characterisation of monoclonal antibodies recognising ovine IgE. Shaw RJ, et al. **Vet Immunol Immunopathol** 1996 Jun 1;51(3–4):235–51

INJURIES

Traumatic head injury in ruminant livestock. Finnie IW. **Aust Vet J** 1997 Mar;75(3):204–8 (29 ref.)

Bruising and biochemical measures of stress, dehydration and injury determined at slaughter in sheep transported from

farms or markets. Jarvis AM, et al. **Br Vet J** 1996 Nov; 152(6):719–22

METABOLISM

Effects of melatonin infused into the III ventricle on prolactin, beta-endorphin and luteotropin secretion in ewes during the different stages of the reproductive cycle. Misztal T, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(3):769–78 (32 ref.)

Pharmacokinetic considerations for the use of the ovine model in cocaine research [letter; comment] Morishima HO, et al. **Anesthesiology** 1997 Mar;86(3):746–7. Comment on: Anesthesiology 1996 Jul;85(1):91–5.

Level of nutrition modulates the dynamics of oestradiol feedback on plasma FSH in ovariectomized ewes. Adams NR, et al. **Anim Reprod Sci** 1997 May;47(1–2):59–70

Short-term studies of ovarian metabolism in the ewe. Rábiee AR, et al. **Anim Reprod Sci** 1997 May;47(1–2):43–58

Rumen dry matter and crude protein degradability of extracted or untreated oilseeds and Leucaena leucocephala leaves. Gralak MA, et al. **Arch Tierernahr** 1997; 50(2):173–85

Attempts to induce reductive acetogenesis into a sheep rumen. Immig I, et al. **Arch Tierernahr** 1996;49(4):363–70

The influence of the reproductive cycle on levels of some metabolism indices in ewes. Brzostowski H, et al. **Arch Vet Pol** 1995;35(1–2):53–62

Sheep mast cell proteinase-1, a serine proteinase with both tryptase- and chymase-like properties, is inhibited by plasma proteinase inhibitors and is mitogenic for bovine pulmonary artery fibroblasts. Pemberton AD, et al. **Biochem J** 1997 May 1;323 (Pt 3):719–25

Effect of supplementation with selenium on whole blood glutathione peroxidase activities and on plasma and tissue selenium concentrations in lambs. Molnár J, et al. **Biol Trace Elem Res** 1996 Dec;55(3):253–62

Uptake and metabolism of propionate in the liver isolated from sheep treated with glucagon. Ali AM, et al. **Br J Nutr** 1997 May;77(5):783–93

Protein utilization during energy undernutrition in sheep sustained by intragastric infusion: effects of protein infusion level, with or without sub-maintenance amounts of energy from volatile fatty acids, on energy and protein metabolism. Chowdhury SA, et al. **Br J Nutr** 1997 Apr;77(4):565–76

Protein utilization during energy undernutrition in sheep sustained by intragastric infusion. Effect of body fatness on the protein metabolism of energy-restricted sheep. Chowdhury SA, et al. **Br J Nutr** 1997 Aug;78(2):273–82

Hepatic protein synthesis in the sheep: effect of intake as monitored by use of stable-isotope-labelled glycine, leucine and phenylalanine. Connell A, et al. **Br J Nutr** 1997 Feb; 77(2):255–71

Net flux of nutrients across splanchnic tissues in wethers consuming grasses of different sources and physical forms ad libitum. Goetsch AL, et al. **Br J Nutr** 1997 May; 77(5):769–81

Food intake and diet selection in sheep: the effect of manipulating the rates of digestion of carbohydrates and protein of the foods offered as a choice. Kyriazakis I, et al. **Br J Nutr** 1997 Feb;77(2):243–54

The effect of condensed tannins in Lotus pedunculatus on the solubilization and degradation of ribulose-1,5-bisphosphate carboxylase (EC 4.1.1.39; Rubisco) protein in the rumen and the sites of Rubisco digestion. McNabb WC, et al. **Br J Nutr** 1996 Oct; 76(4):535–49

Excretion of benzoic acid derivatives in urine of sheep given intraruminal infusions of 3-phenylpropionic and cyclohexanecarboxylic acids. Pagella JH, et al. **Br J Nutr** 1997 Apr;77(4):577–92

The effect of a high dose of 3-hydroxy-3-methylbutyrate on protein metabolism in growing lambs. Papet I, et al. **Br J Nutr** 1997 Jun;77(6):885–96

The effects of condensed tannins from Desmodium intortum and Calliandra calothyrsus on protein and carbohydrate digestion in sheep and goats. Perez-Maldonado RA, et al. **Br J Nutr** 1996 Oct;76(4):515–33

Digestion of 14C-labelled condensed tannins from Desmodium intortum in sheep and goats. Perez-Maldonado RA, et al. **Br J Nutr** 1996 Oct;76(4):501–13

Pharmacokinetic study of ascorbic acid in sheep. Black WD, et al. **Can J Vet Res** 1996 Jul;60(3):216–21

The effects of a duplication in the ovine growth hormone (GH) gene on GH expression in the pituitaries of ram lambs from lean and fat-selected sheep lines. Fleming JS, et al. **Domest Anim Endocrinol** 1997 Jan;14(1):17–24

Tissue distribution and milk transfer of colchicine in a lactating sheep following a single dose intake. Panariti E. **DTW Dtsch Tierarztl Wochenschr** 1996 Apr;103(4):128–9

Does a short loop feedback mechanism for the control of luteinizing hormone secretion exist in the ewe? Skinner DC, et al. **Endocrinology** 1997 Oct;138(10):4220–6

Changes in heat shock protein-90 and -70 messenger ribonucleic acid in uterine tissues of the ewe in relation to parturition and regulation by estradiol and progesterone. Wu WX, et al. **Endocrinology** 1996 Dec;137(12):5685–93

Growth hormone does not affect non-insulin-mediated glucose uptake in sheep. Rose MT, et al. **Exp Physiol** 1997 Jul;82(4):749–60

Follicle-stimulating hormone in the brushtail possum (Trichosurus vulpecula): purification, characterization, and radioimmunoassay. Moore LG, et al. **Gen Comp Endocrinol** 1997 Apr;106(1):30–8

Effect of testosterone on differential muscle growth and on protein and nucleic acid concentrations in muscles of growing lambs. Arnold AM, et al. **J Anim Sci** 1997 Jun; 75(6):1495–503

Propionate modulation of ruminal ketogenesis. Baldwin RL 6th, et al. **J Anim Sci** 1996 Jul;74(7):1694–700

Intake, digestion, and nitrogen utilization by sheep fed tropical legumes with contrasting tannin concentration and astringency. Barahona R, et al. **J Anim Sci** 1997 Jun; 75(6):1633–40

The regulation of intestinal metabolism and its impact on whole animal energetics. Cant JP, et al. **J Anim Sci** 1996 Oct;74(10):2541–53 (98 ref.)

Methscopolamine bromide blocks hypothalamic-stimulated release of growth hormone in ewes. Daniel JA, et al. **J Anim Sci** 1997 May;75(5):1359–62

Serum and milk folates during the first two gestations and lactations in Romanov, Finnsheep, and Suffolk ewes. Girard CL, et al. **J Anim Sci** 1996 Jul;74(7):1711–5

Effect of selection for lifetime production of lamb weaned on hormonal factors that affect growth in Targhee ewes and lambs. Head WA Jr, et al. **J Anim Sci** 1996 Sep; 74(9):2152–7

Effects of diet and chemical form of selenium on selenium metabolism in sheep. Koenig KM, et al. **J Anim Sci** 1997 Mar;75(3):817–27

Protein requirements of sheep in late pregnancy: partitioning of nitrogen between gravid uterus and maternal tissues. McNeill DM, et al. **J Anim Sci** 1997 Mar;75(3):809–16

Demonstration and characterization of dipeptide transport system activity in sheep omasal epithelium by expression of mRNA in Xenopus laevis oocytes. Matthews JC, et al. **J Anim Sci** 1996 Jul;74(7):1720–7

Effects of ruminally degradable nitrogen intake and in vitro addition of ammonia and propionate on the metabolic fate of L-[1-14C]alanine and L-[15N]alanine in isolated sheep hepatocytes. Mutsvangwa T, et al. **J Anim Sci** 1997 Apr; 75(4):1149–59

Effect of glucose administration during the estrous cycle on serum hormone profiles, mRNA for steroidogenic enzymes, and breeding performance of ewes. Rubio JM, et al. **J Anim Sci** 1997 Mar;75(3):775–80

Concentration of gonadotropin-releasing hormone receptor messenger ribonucleic acid in pituitary tissue of orchidectomized sheep: effect of passive immunization against gonadotropin-releasing hormone. Sakurai H, et al. **J Anim Sci** 1997 Jan;75(1):189–94

Nitrogen metabolism of sheep and goats consuming Acacia brevispica and Sesbania sesban. Woodward A, et al. **J Anim Sci** 1997 Apr;75(4):1130–9

Absorption of short-chain fatty acids across ruminal epithelium of sheep. Kramer T, et al. **J Comp Physiol [B]** 1996;166(4):262–9

Distribution of the anthelmintic drug albendazole and its major metabolites in ovine milk and milk products after a single oral dose. De Liguoro M, et al. **J Dairy Res** 1996 Nov;63(4):533–42

Comparative effects of recombinant ovine placental lactogen and bovine growth hormone on galactopoiesis in ewes. Min SH, et al. **J Dairy Sci** 1997 Apr;80(4):640–5

Characterization of phosphate sites in native ovine, caprine, and bovine casein micelles and their caseinomacropeptides: a solid-state phosphorus-31 nuclear magnetic resonance and sequence and mass spectrometric study. Rasmussen LK, et al. **J Dairy Sci** 1997 Apr;80(4):607–14

Expression of prostaglandin G/H synthase-1 and -2 in ovine amnion and placenta following glucocorticoid-induced labour onset. McLaren WJ, et al. **J Endocrinol** 1996 Oct; 151(1):125–35

Expression of mRNAs for insulin-like growth factor binding proteins-2, -3 and -4 in the ovine ovary throughout the oestrous cycle. Perks CM, et al. **J Endocrinol** 1996 Nov; 151(2):241–9

Concentration of GnRH receptor and GnRH receptor mRNA in pituitary tissue of orchidectomized sheep: effect of oestradiol, progesterone, and progesterone withdrawal. Sakurai H, et al. **J Endocrinol** 1997 Jan;152(1):91–8

Regulation of oxytocin, oestradiol and progesterone receptor concentrations in different uterine regions by oestradiol, progesterone and oxytocin in ovariectomized ewes. Wathes DC, et al. **J Endocrinol** 1996 Dec;151(3):375–93

Effect of lactation on insulin signal transduction in sheep adipose tissue and skeletal muscle. Wilson LA, et al. **J Endocrinol** 1996 Dec;151(3):469–80

Production of a prolactin releasing factor by the ovine pars tuberalis. Hazlerigg DG, et al. **J Neuroendocrinol** 1996 Jul; 8(7):489–92

Selenium influences tissue levels of selenoprotein W in sheep. Yeh JY, et al. **J Nutr** 1997 Mar;127(3):394–402

Characterization and expression of vascular endothelial growth factor (VEGF) in the ovine corpus luteum. Redmer DA, et al. **J Reprod Fertil** 1996 Sep;108(1):157–65

Control of extracellular matrix remodelling within ovarian tissues: localization and regulation of gene expression of plasminogen activator inhibitor type-1 within the ovine corpus luteum. Smith GW, et al. **J Reprod Fertil** 1997 May; 110(1):107–14

Insulin-like growth factors and their binding proteins in the ovine oviduct during the oestrous cycle. Stevenson KR, et al. **J Reprod Fertil** 1996 Sep;108(1):31–40

The effect of level of feed intake on the pharmacokinetic disposition and efficacy of ivermectin in sheep. Ali DN, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):89–94

Changes in taurine levels in response to repeated administration of the beta 2-agonist salbutamol in lambs. Bastos ML, et al. **J Vet Pharmacol Ther** 1997 Feb;20(1):33–7

Influence of closure of the reticular groove on the bioavailability and disposition kinetics of meclofenamate in sheep. Encinas T, et al. **J Vet Pharmacol Ther** 1996 Feb; 19(1):15–21

The pharmacokinetics of a long-acting formulation of oxytetracycline in sheep and goats. Escudero E, et al. **J Vet Pharmacol Ther** 1996 Feb;19(1):75–7

Single dose pharmacokinetics of medetomidine in sheep. Muge DK, et al. **J Vet Pharmacol Ther** 1996 Apr; 19(2):109–12

Plasma fatty acids in sheep fed hydroxyethylsoyamide, a fatty acyl amide that resists biohydrogenation. Jenkins TC, et al. **Lipids** 1997 Feb;32(2):173–8

Detection of scrapie agent in the peripheral nervous system of a diseased sheep. Groschup MH, et al. **Neurobiol Dis** 1996;3(3):191–5

Aspects of calcium transport by the ovine placenta: studies based on the interplacentomal region of the chorion. Jones GV, et al. **Placenta** 1997 May;18(4):357–64

Transfer pathways across the sheep placenta [letter] [see comments] Stulc I. **Placenta** 1996 Jul-Aug;17(5–6):377–9. Comment in: Placenta 1997 May;18(4):375–6.

Use of the true absorption coefficient as a measure of bioavailability of radiocaesium in ruminants. Mayes RW, et al. **Radiat Environ Biophys** 1996 May;35(2):101–9

Ontogeny of gastrin and cholecystokinin in the colon and duodenum of sheep. Ciccotosto GD, et al. **Regul Pept** 1996 Apr 23;62(2–3):97–105

Interactions between nutrition, testosterone and inhibin in the control of gonadotrophin secretion in mature rams. Tjondronegoro S, et al. **Reprod Fertil Dev** 1996;8(5):855–62

129I concentrations of mammalian thyroids in Taiwan. Chao JH, et al. **Sci Total Environ** 1996 Dec 20;193(2):111–9

Modification of methane emission in sheep by cysteine and a microbial preparation. Takahashi J, et al. **Sci Total Environ** 1997 Sep 26;204(2):117–23

Development of a sandwich ELISA for ovine granulocyte/macrophage colony-stimulating factor. Entrican G, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1–2):105–15

Pharmacokinetics of ciprofloxacin in sheep after single intravenous or intramuscular administration. Muñoz MJ, et al. **Vet Q** 1996 Jun;18(2):45–8

Pharmacological basis for hepatic drug metabolism in sheep. Galtier P, et al. **Vet Res** 1996;27(4–5):363–72 (30 ref.)

Some pharmacokinetic parameters of oxfendazole in sheep. Soraci AL, et al. **Vet Res Commun** 1997 May;21(4):283–7

Characterization of Na+/H+ exchange in sheep rumen epithelial cells kept in primary culture. Gäbel G, et al. **Zentralbl Veterinarmed A** 1996 Aug;43(6):365–75

Effects of postoperative periods on glucose absorption and electrolyte secretion in the intestinal loop of sheep. Hyun HS, et al. **Zentralbl Veterinarmed A** 1995 Nov;42(9):601–10

Effect of cholera toxin on glucose absorption and net movements of water and electrolytes in the intestinal loop of sheep. Hyun HS, et al. **Zentralbl Veterinarmed A** 1996 Dec;43(10):611–8

Total and differential cell count by direct microscopic method on ewe milk. Morgante M, et al. **Zentralbl Veterinarmed A** 1996 Oct;43(8):451–8

[Dynamics of clinico-biochemical changes in sheep during magnesite loading] Bíreš J, et al. **Vet Med (Praha)** 1996 Oct;41(10):311–8 (Eng. Abstr.) **(Slo)**

[Uptake of amino acids in the rumen epithelium in sheep] Faixová Z, et al. **Vet Med (Praha)** 1997 Mar;42(3):61–5 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

Epidemiological relatedness and clonal types of natural populations of Escherichia coli strains producing Shiga toxins in separate populations of cattle and sheep. Beutin L, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2175–80

Influence of foliage from African multipurpose trees on activity of rumen protozoa and bacteria. Newbold CJ, et al. **Br J Nutr** 1997 Aug;78(2):237–49

Microbiological contamination of ovine carcasses associated with the presence of wool and faecal material. Biss ME, et al. **J Appl Bacteriol** 1996 Dec;81(6):594–600

Characterization of Escherichia coli O157:H7 and other Shiga toxin-producing E. coli serotypes isolated from sheep. Kudva IT, et al. **J Clin Microbiol** 1997 Apr; 35(4):892–9

The occurrence of Pseudomonas aeruginosa in fleece washings from sheep affected and unaffected with fleece rot. Kingsford NM, et al. **Vet Microbiol** 1997 Mar; 54(3–4):275–85

Sheep as a potential source of verocytotoxin-producing Escherichia coli O157 [letter] Chapman PA, et al. **Vet Rec** 1996 Jan 6;138(1):23–4

Bacterial identity and characteristics in healthy and unhealthy respiratory tracts of sheep and calves. Barbour EK, et al. **Vet Res Commun** 1997 Aug;21(6):421–30

PARASITOLOGY

Genetic variability in Italian sheep isolates of Echinococcus granulosus. Ortona E, et al. **Appl Parasitol** 1996 Sep;

37(3):205–8

Influence of foliage from African multipurpose trees on activity of rumen protozoa and bacteria. Newbold CJ, et al. **Br J Nutr** 1997 Aug;78(2):237–49

Partial purification and kinetic properties of cytoplasmic malate dehydrogenase from ovine liver Echinococcus granulosus protoscolices. Vessal M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Apr; 113(4):757–63

Reduction of Haemonchus contortus infective larvae by Harposporium anguillulae in sheep faecal cultures. Charles TP, et al. **Int J Parasitol** 1996 May;26(5):509–10

Studies on the host–parasite relationship between Trichostrongylus colubriformis and susceptible and resistant sheep. Wagland BM, et al. **Int J Parasitol** 1996 Nov;26(11):1279–86

Ostertagia nianqingtanggulaensis Kúng & Li, 1965 (Nematoda: Trichostrongyloidea) from sheep and goats at high altitudes in Nepal. Joshi BR, et al. **J Helminthol** 1997 Mar;71(1):21–7

The effect of host nutrition on itch mite, Psorergates ovis, populations and fleece derangement in sheep. Johnson PW. **Med Vet Entomol** 1996 Apr;10(2):121–8

Antibody-mediated inhibition of the growth of larvae from an insect causing cutaneous myiasis in a mammalian host. Casu R, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19; 94(17):8939–44

The repeatability of faecal egg counts in Polish Wrzosówka sheep. Doligalska M, et al. **Vet Parasitol** 1997 Jul 1; 70(4):241–6

Infestation of sheep dung by nematophagous fungi and implications for the control of free-living stages of gastro-intestinal nematodes. Hay FS, et al. **Vet Parasitol** 1997 Jul 1;70(4):247–54

Ticks of domestic animals in the Macedonia region of Greece. Papadopoulos B, et al. **Vet Parasitol** 1996 May; 63(1–2):25–40

Occurrence of anthelmintic resistant nematodes on sheep farms in England and goat farms in England and Wales. Hong C, et al. **Vet Rec** 1996 Jul 27;139(4):83–6

A survey of anthelmintic resistance by nematodes on three sheep and two goat farms in Hisar (India). Singh S, et al. **Vet Res Commun** 1997 Aug;21(6):447–51

[Occurrence of helminths in slaughtered sheep in Upper Bavaria. 2. Relationship between fecal egg count and worm burden] Rehbein S, et al. **Berl Munch Tierarztl Wochenschr** 1997 Apr;110(4):148–52 (Eng. Abstr.) **(Ger)**

[Helminth infection of slaughtered sheep in Upper Bavaria. 3. Distribution of colonization of nematodes in the large intestine of sheep] Rehbein S, et al. **Berl Munch Tierarztl Wochenschr** 1997 Jun;110(6):223–8 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Neural systems mediating the negative feedback actions of estradiol and progesterone in the ewe. Goodman RL. **Acta Neurobiol Exp (Warsz)** 1996;56(3):727–41 (85 ref.)

Stress and nutritional influences on GnRH and somatostatin neuronal systems in the ewe. Polkowska J. **Acta Neurobiol Exp (Warsz)** 1996;56(3):797–806 (38 ref.)

Responses in the hypothalamic monoaminergic system activity in ewes to beta-endorphin, CRF and their antagonists. Przekop F, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(3):807–17 (58 ref.)

Variations in the yield, composition and somatic cell count of ewe's milk during lactation. Bedö S, et al. **Acta Vet Hung** 1995;43(4):463–73

Reproductive seasonality of corriedale rams under extensive rearing conditions. Pérez R, et al. **Acta Vet Scand** 1997; 38(1):109–17

Dynamic sensitivity of carotid chemoreceptors to CO2 in the newborn lamb. Calder N, et al. **Adv Exp Med Biol** 1996;410:391–6

Acute hemodynamic, pituitary, and adrenocortical responses to alcohol in adult female sheep. Cudd TA, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1675–81

Alterations in myometrial stress during ovine pregnancy and the puerperium. Ipson MA, et al. **Am J Physiol** 1996 Aug; 271(2 Pt 2):R446–54

Pulmonary blood flow distribution in sheep: effects of anesthesia, mechanical ventilation, and change in posture. Walther SM, et al. **Anesthesiology** 1997 Aug;87(2):335–42

Alterations in follicular maturation associated with within-breed variation in ovulation rate in Chios sheep. Avdi M, et al. **Anim Reprod Sci** 1997 Apr;46(3–4):223–35

Effect of nutrition on the balance of production of ovarian and pituitary hormones in ewes. Boukhliq R, et al. **Anim Reprod Sci** 1996 Dec 2;45(1–2):59–70

The effects of neurotransmitter antagonists and glucose on luteinizing hormone secretion in growth-restricted wethers. Branum JC, et al. **Anim Reprod Sci** 1997 Jan; 45(4):263–72

Some effects of adding p-LH in defined amounts to purified p-FSH to modify FSH/LH ratios during the superovulatory treatment of anestrous ewes. D'Alessandro A, et al. **Anim Reprod Sci** 1997 May;47(1–2):91–8

Changes in sperm-bound amidase activity suggest subtle damage to ram sperm acrosomes by freezing/thawing, not detected by light microscopy. de las Heras MA, et al. **Anim Reprod Sci** 1996 Dec 2;45(1–2):81–9

Use of a GnRH antagonist in conjunction with low amplitude, high frequency LH pulses to induce follicular growth without an LH surge and ovulation in ewes. Dobson H, et al. **Anim Reprod Sci** 1997 Apr;46(3–4):213–22

Ovulation rate and the concentrations of LH, FSH, GH, prolactin and insulin in ewes infused with tryptophan, tyrosine or tyrosine plus phenylalanine during the luteal phase of the oestrous cycle. Downing JA, et al. **Anim Reprod Sci** 1997 Jan;45(4):283–97

A comparison of two methods of oestrous synchronisation of hair sheep in the tropics. Godfrey RW, et al. **Anim Reprod Sci** 1997 May;47(1–2):99–106

Influence of an antiprogestin (onapristone) on in vivo and in vitro fertilization. Gonçalves SC, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):55–67

Evidence that the conceptus contributes to the inhibition of follicular growth in the ewe. al-Gubory KH, et al. **Anim Reprod Sci** 1996 Dec 2;45(1–2):71–80

Effect of progesterone pre-treatment on steroid secretion rates and follicular fluid insulin-like growth factor-1 concentrations in seasonally anoestrous ewes treated with gonadotrophin releasing hormone. Khalid M, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):69–78

The arena test and cortisol response of sheep as indirect selection criteria for the improvement of lamb survival. Kilgour RJ, et al. **Anim Reprod Sci** 1997 Mar; 46(1–2):97–108

The circulating concentrations of FSH, LH and prolactin in the oestradiol-implanted ovariectomized ewe treated with caffeine. Scaramuzzi RJ, et al. **Anim Reprod Sci** 1997 Jan;45(4):273–82

Simultaneous detection of the acrosomal status and viability of incubated ram spermatozoa using fluorescent markers. Sukardi S, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):89–96

Effect of the rate of progesterone decline at luteolysis on the ovulatory follicles and subsequent estrous cycle length in ewes. Wiley TM, et al. **Anim Reprod Sci** 1997 Mar; 46(1–2):79–87

Method of stimulating ovulation rate in Merino ewes may affect conception but not embryo survival. Wilkins JF. **Anim Reprod Sci** 1997 May;47(1–2):31–42

Variation between ejaculates in the fertility of frozen ram semen used for cervical insemination of Merino ewes. Windsor DP. **Anim Reprod Sci** 1997 May;47(1–2):21–9

Oxygen consumption by splanchnic tissues in wethers consuming ad libitum different proportions of bermudagrass and ryegrass-wheat. Goetsch AL, et al. **Arch Tierernahr** 1997;50(1):1–11

The influence of chronic platinum electrode implantation upon the myoelectric activity and histology of the stomach, small intestine and gall-bladder in sheep. Romański KW, et al. **Arch Vet Pol** 1995;35(1–2):127–35

Behavioural and EEG changes in sheep in response to painful acute electrical stimuli. Ong RM, et al. **Aust Vet J** 1997 Mar;75(3):189–93

Negative feedback potency of estradiol is increased in orchidectomized sheep during chronic nutrient restriction. Beckett JL, et al. **Biol Reprod** 1997 Aug;57(2):408–14

Moderate and severe nutrient restriction has divergent effects on gonadotroph function in orchidectomized sheep. Beckett JL, et al. **Biol Reprod** 1997 Aug;57(2):415–9

Endocrine activity of induced persistent follicles in sheep. Dobson H, et al. **Biol Reprod** 1997 Jan;56(1):208–13

Extra- and intracellular effects of divergent selection for pituitary responsiveness to gonadotropin-releasing hormone in prepubertal ram lambs. Evans NP, et al. **Biol Reprod** 1997 Jul;57(1):128–33

Uterine growth, cell proliferation, and c-fos proto-oncogene expression throughout the estrous cycle in ewes. Johnson ML, et al. **Biol Reprod** 1997 Feb;56(2):393–401

Refractoriness to a static melatonin signal develops in the pituitary gland for the control of prolactin secretion in the ram. Lincoln GA, et al. **Biol Reprod** 1997 Aug;57(2):460–7

Time-course of thyroid hormone involvement in the development of anestrus in the ewe. Thrun LA, et al. **Biol Reprod** 1996 Oct;55(4):833–7

Effects of experimentally-impaired reticular contractions on digesta passage in sheep. Kaske M, et al. **Br J Nutr** 1997 Jul;78(1):97–110

Secretion and reabsorption of endogenous protein along the small intestine of sheep: estimates derived from 15N dilution of plasma non-protein-N. Van Bruchem J, et al. **Br J Nutr** 1997 Feb;77(2):273–86

The influence of ammonia, biogenic amines and gamma-aminobutyric acid on grass silage intake in sheep. Van Os M, et al. **Br J Nutr** 1996 Sep;76(3):347–58

Preference for wheat straw by lambs conditioned with intraruminal infusions of starch. Villalba JJ, et al. **Br J Nutr** 1997 Feb;77(2):287–97

Direct cardiac and vascular actions of adrenomedullin in conscious sheep. Parkes DG, et al. **Br J Pharmacol** 1997 Mar;120(6):1179–85

Evidence for the involvement of 5-HT4 receptors in the 5-hydroxytryptamine-induced pattern of migrating myoelectric complex in sheep. Plaza MA, et al. **Br J Pharmacol** 1997 Mar;120(6):1144–50

Olfactory memory and maternal behaviour-induced changes in c-fos and zif/268 mRNA expression in the sheep brain. Da Costa AP, et al. **Brain Res Mol Brain Res** 1997 Jun; 46(1–2):63–76

The interbreeding of sheep and goats. Kelk DA, et al. **Can Vet J** 1997 Apr;38(4):235–7

The sheep as an animal model for heart valve research. Ali ML, et al. **Cardiovasc Surg** 1996 Aug;4(4):543–9

Evidence against a central pressor mechanism for adrenocortical steroid hypertension in sheep. Tresham JJ, et al. **Clin Exp Hypertens** 1996 Aug;18(6):831–49

Dopaminergic A14/A15 neurons are activated during estradiol negative feedback in anestrous, but not breeding season, ewes. Lehman MN, et al. **Endocrinology** 1996 Oct; 137(10):4443–50

Pregnancy-specific alterations in the expression of the insulin-like growth factor system during early placental development in the ewe. Reynolds TS, et al. **Endocrinology** 1997 Mar;138(3):886–97

Hypothalamic sites of action for testosterone, dihydrotestosterone, and estrogen in the regulation of luteinizing hormone secretion in male sheep. Scott CJ, et al. **Endocrinology** 1997 Sep;138(9):3686–94

A critical period for thyroid hormone action on seasonal changes in reproductive neuroendocrine function in the ewe. Thrun LA, et al. **Endocrinology** 1997 Aug; 138(8):3402–9

Evidence for seasonal plasticity in the gonadotropin-releasing hormone (GnRH) system of the ewe: changes in synaptic inputs onto GnRH neurons. Xiong JJ, et al. **Endocrinology** 1997 Mar;138(3):1240–50

Another view of GH neuroregulation: lessons from the sheep. Dutour A, et al. **Eur J Endocrinol** 1997 Jun;136(6):553–65 (133 ref.)

Unilateral cooling in the region of locus coeruleus blocks the fall in respiratory output during hypoxia in anaesthetized neonatal sheep. Moore PJ, et al. **Exp Physiol** 1996 Nov;81(6):983–94

Involution of the sheep mammary gland. Tatarczuch L, et al. **J Anat** 1997 Apr;190 (Pt 3):405–16

Reducing milk production in ewes at weaning using restricted feeding and methscopolamine bromide. Aaron DK, et al. **J Anim Sci** 1997 Jun;75(6):1434–42

Assessment of lamb carcass composition from live animal measurement of bioelectrical impedance or ultrasonic tissue depths. Berg EP, et al. **J Anim Sci** 1996 Nov;74(11):2672–8

Delivery method and supplement consumption by grazing ruminants: a review. Bowman JG, et al. **J Anim Sci** 1997 Feb;75(2):543–50 (44 ref.)

The utilization of multidimensional scaling to identify forage characteristics associated with preference in sheep. Buntinx SE, et al. **J Anim Sci** 1997 Jun;75(6):1641–50

The effects of physical form of feed, carbohydrate source, and inclusion of sodium bicarbonate on the diet selections of sheep. Cooper SD, et al. **J Anim Sci** 1996 Jun; 74(6):1240–51

Oxygen consumption by and blood flow across the portal-drained viscera and liver of pregnant ewes. Freetly HC, et al. **J Anim Sci** 1997 Jul;75(7):1950–5

Effects of supplemental energy source and amount on forage intake and performance by steers and intake and diet digestibility by sheep. Garcés-Yépez P, et al. **J Anim Sci** 1997 Jul;75(7):1918–25

Physiological and hormonal responses of lambs repeatedly implanted with zeranol and provided two levels of feed intake. Hufstedler GD, et al. **J Anim Sci** 1996 Oct; 74(10):2376–84

Lifetime lamb and wool production of targhee or Finn-Dorset-Targhee ewes managed as farm or range flock: II. Cumulative lamb and wool production. Iman NY, et al. **J Anim Sci** 1996 Aug;74(8):1765–9

Lifetime lamb and wool production of targhee or Finn-Dorset-Targhee ewes managed as farm or range flock: I. Average annual ewe performance. Iman NY, et al. **J Anim Sci** 1996 Aug;74(8):1757–64

Phenotypic characterization of Rambouillet sheep expressing the callipyge gene: II. Carcass characteristics and retail yield. Jackson SP, et al. **J Anim Sci** 1997 Jan;75(1):125–32

Evidence for a mammogenic role of growth hormone in ewes: effects of growth hormone-releasing factor during artificial induction of lactation. Kann G. **J Anim Sci** 1997 Sep;75(9):2541–9

Meat toughening does not occur when rigor shortening is prevented. Koohmaraie M, et al. **J Anim Sci** 1996 Dec; 74(12):2935–42

Luteinizing hormone and ovarian response of early postpartum Debouillet ewes treated with cyproheptadine and(or) melatonin. Kridli RT, et al. **J Anim Sci** 1997 Sep; 75(9):2535–40

Relationships between nutrition and foraging behavior of free-ranging sheep and goats. Kronberg SL, et al. **J Anim Sci** 1997 Jul;75(7):1756–63

Ewe fertility in the STAR accelerated lambing system. Lewis RM, et al. **J Anim Sci** 1996 Jul;74(7):1511–22

Evaluation of corn and sorghum distillers byproducts. Lodge SL, et al. **J Anim Sci** 1997 Jan;75(1):37–43

Protein requirements of sheep in late pregnancy: partitioning of nitrogen between gravid uterus and maternal tissues. McNeill DM, et al. **J Anim Sci** 1997 Mar;75(3):809–16

Assessment of acute pain in farm animals using behavioral and physiological measurements. Molony V, et al. **J Anim Sci** 1997 Jan;75(1):266–72

Role of tumor necrosis factor-alpha in the ovulatory mechanism of ewes. Murdoch WJ, et al. **J Anim Sci** 1997 Jun;75(6):1601–5

Intestinal effects of milkborne growth factors in neonates of agricultural importance. Odle J, et al. **J Anim Sci** 1996 Oct;74(10):2509–22 (120 ref.)

Effects of vasoactive intestinal polypeptide on

electromyographic activity of the reticulo-omasal orifice in sheep at two levels of intake. Okine EK, et al. **J Anim Sci** 1996 Jul;74(7):1681-8

Effects of stage of gestation and uterine ligation on ovine placentome development and glycosaminoglycans. Ott TL, et al. **J Anim Sci** 1997 Apr;75(4):1053-62

Performance of growing lambs fed two levels of concentrate with conventional or macerated timothy hay. Petit HV, et al. **J Anim Sci** 1997 Mar;75(3):598-603

Operant analysis of chronic locoweed intoxication in sheep. Pfister JA, et al. **J Anim Sci** 1996 Nov;74(11):2622-32

Use of melengestrol acetate-based treatments to induce and synchronize estrus in seasonally anestrous ewes. Powell MR, et al. **J Anim Sci** 1996 Oct;74(10):2292-302

Preference of sheep for foods varying in flavors and nutrients. Provenza FD, et al. **J Anim Sci** 1996 Oct;74(10):2355-61

Regulation of uterine immune function during the estrous cycle and in response to infectious bacteria in sheep. Ramadan AA, et al. **J Anim Sci** 1997 Jun;75(6):1621-32

Development of a mechanistic model of intake and chewing activities of sheep. Sauvant D, et al. **J Anim Sci** 1996 Nov; 74(11):2785-802 (90 ref.)

Preference for flavored wheat straw by lambs conditioned with intraruminal administrations of sodium propionate. Villalba JJ, et al. **J Anim Sci** 1996 Oct;74(10):2362-8

Food preference and acceptance of novel foods by lambs depend on the composition of the basal diet. Wang J, et al. **J Anim Sci** 1996 Oct;74(10):2349-54

Luteal function in unilaterally hysterectomized ewes treated with gonadotropin-releasing hormone. Whitmore DL, et al. **J Anim Sci** 1996 Aug;74(8):1930-5

Prediction of live lamb chemical composition utilizing electromagnetic scanning (ToBEC). Wishmeyer DL, et al. **J Anim Sci** 1996 Aug;74(8):1864-72

Role of nitric oxide in the attenuated pressor responses of pregnant or sodium-deplete sheep. Tresham JJ, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):908-15

Temporal and spatial patterns of tenascin and laminin immunoreactivity suggest roles for extracellular matrix in development of gustatory papillae and taste buds. Mistretta CM, et al. **J Comp Neurol** 1996 Jan 15;364(3):535-555

In vitro studies on calcium absorption from the gastrointestinal tract in small ruminants. Schröder B, et al. **J Comp Physiol [B]** 1997 Jan;167(1):43-51

Machine milking of Ostfriesian and Lacaune dairy sheep: udder anatomy, milk ejection and milking characteristics. Bruckmaier RM, et al. **J Dairy Res** 1997 May;64(2):163-72

Oxytocin and prolactin suppress cortisol responses to acute stress in both lactating and non-lactating sheep. Cook CJ. **J Dairy Res** 1997 Aug;64(3):327-39

Influence of whey and purified whey proteins on neutrophil functions in sheep. Wong CW, et al. **J Dairy Res** 1997 May;64(2):281-8

Bovine somatotropin dose titration in lactating dairy ewes. 2. Dose determination and factors affecting the response. Fernandez N, et al. **J Dairy Sci** 1997 May;80(5):818-29

Correlation of acid detergent lignin and Klason lignin with digestibility of forage dry matter and neutral detergent fiber. Jung HG, et al. **J Dairy Sci** 1997 Aug;80(8):1622-8

Effect of chronic food restriction on pulsatile luteinizing hormone secretion and hypothalamic neuropeptide Y gene expression in castrate male sheep. Adam CL, et al. **J Endocrinol** 1997 Feb;152(2):329-37

Initiation of the oestradiol-induced inhibition of pulsatile LH secretion in ewes under long days: comparison of peripheral versus central treatment and neurochemical correlates. Gallegos-Sanchez J, et al. **J Endocrinol** 1996 Oct; 151(1):19-28

The effect of oxytocin and oestradiol on the action of conceptus secretory protein in progesterone-treated ovariectomized ewes. Mann GE, et al. **J Endocrinol** 1996 Sep;150(3):473-8

'Hamster-like' cycles in testicular size in the absence of gonadotrophin secretion in HPD rams exposed to long-term changes in photoperiod and treatment with melatonin. Lincoln GA, et al. **J Neuroendocrinol** 1996 Nov; 8(11):855-66

Photoperiodic modulation of monoamines and amino-acids involved in the control of prolactin and LH secretion in the ewe: evidence for a regulation of tyrosine hydroxylase activity. Viguié C, et al. **J Neuroendocrinol** 1996 Jun; 8(6):465-74

Characteristics of the plasma melatonin rhythm are not modified by steroids during the estrous cycle in IIe-de-France ewes. Zarazaga LA, et al. **J Pineal Res** 1996 Sep;21(2):114-20

Maternal pituitary gonadotroph function in relation to GnRH receptor and LH beta mRNA content during pregnancy in ewes. Fowler PA, et al. **J Reprod Fertil** 1997 Jul; 110(2):267-78

Embryo viability, duration of gestation and birth weight in sheep after transfer of in vitro matured and in vitro fertilized zygotes cultured in vitro or in vivo. Holm P, et al. **J Reprod Fertil** 1996 Jul;107(2):175-81

Effects of nutrition on testicular growth in mature Merino rams actively immunized against GnRH. Hötzel MJ, et al. **J Reprod Fertil** 1997 Jul;110(2):307-13

Contribution of the scrotum and testes to scrotal and testicular thermoregulation in bulls and rams. Kastelic JP, et al. **J Reprod Fertil** 1996 Sep;108(1):81-5

Meiotic progression and developmental competence of oocytes collected from juvenile and adult ewes. Ledda S, et al. **J Reprod Fertil** 1997 Jan;109(1):73-8

Comparative study between pony mares and ewes evaluating gonadotrophic response to administration of gonadotrophin-releasing hormone. Porter MB, et al. **J Reprod Fertil** 1997 Jul;110(2):219-29

Ovarian follicular dynamics in ewes during the transition from anoestrus to the breeding season. Ravindra JP, et al. **J Reprod Fertil** 1997 Jul;110(2):279-89

Follicular dynamics and ovarian steroid secretion in sheep during anoestrus. Souza CJ, et al. **J Reprod Fertil** 1996 Sep;108(1):101-6

Variation in the ability of a long day followed by a short day photoperiod signal to initiate reproductive activity in ewes at different times of the year. Sweeney T, et al. **J Reprod Fertil** 1997 Jan;109(1):121-7

Effects of supplementary treatment with bovine growth hormone on hormonal and ovulatory responses to inhibin immunization in ewes. Tannetta DS, et al. **J Reprod Fertil** 1997 Jul;110(2):255-62

Leukaemia inhibitory factor in endometrium during the oestrous cycle, early pregnancy and in ovariectomized steroid-treated ewes. Vogiagis D, et al. **J Reprod Fertil** 1997 Mar;109(2):279-88

The effect of treatment with a slow-releasing oxytocin preparation at the onset of oestrus on the ovulation rate of Merino ewes. King PR, et al. **J S Afr Vet Assoc** 1997 Mar;68(1):16-7

The effect of selenium supplementation during the early post-mating period on embryonic survival in sheep. van Niekerk FE, et al. **J S Afr Vet Assoc** 1996 Dec;67(4):209-13

Differential effects of betamethasone and dexamethasone fetal administration of parturition in sheep. Derks JB, et al. **J Soc Gynecol Investig** 1996 Nov-Dec;3(6):336-41

Excess dietary urea intake in ewes and its effect on ovulation rate and embryo development. Bishonga C, et al. **Jpn J Vet Res** 1996 Dec;44(3):139-51

Sheep refraction, correction and vision in Lewis Carroll's through the looking glass and what Alice found there (1871) [letter] Piggins D, et al. **Ophthalmic Physiol Opt** 1997 Jan;17(1):88-9

Locations and molecular forms of gastrin-releasing peptide-like immunoreactive entities in ovine pregnancy. Xiao Q, et al. **Peptides** 1996;17(3):489-95

Density-dependent selection on horn phenotype in Soay sheep. Clutton-Brock TH, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jul 29; 352(1355):839-50

Term ovine placental vasculature: comparison of sea level and high altitude conditions by corrosion cast and histomorphometry. Krebs C, et al. **Placenta** 1997 Jan; 18(1):43-51

tau-Interferon: pregnancy recognition signal in ruminants. Spencer TE, et al. **Proc Soc Exp Biol Med** 1996 Dec; 213(3):215-29 (110 ref.)

Effect of ewe and lamb genotype on gestation length, lambing ease and neonatal behaviour of lambs. Dwyer CM, et al. **Reprod Fertil Dev** 1996;8(8):1123-9

Relationships between follicle-stimulating hormone, follicle growth and ovulation rate in sheep. Fry RC, et al. **Reprod Fertil Dev** 1996;8(2):279-86

Effects of progesterone withdrawal on uterine secretion of prostaglandin F2 alpha in response to oxytocin in ewes. Kaminski MA, et al. **Reprod Fertil Dev** 1997;9(2):255-62

Mitochondrial function and ram sperm fertility. Windsor DP. **Reprod Fertil Dev** 1997;9(3):279-84

Influence of sex ratio during multiple pregnancies on productive and reproductive parameters of lambs and ewes. Avdi M, et al. **Reprod Nutr Dev** 1997;37(1):21-7

The characteristics of the melatonin secretory rhythm are not modified by the stage of pregnancy in ewes. Zarazaga LA, et al. **Reprod Nutr Dev** 1997;37(1):105-12

Radionuclide imaging of abomasal emptying in sheep. Nicholson T, et al. **Res Vet Sci** 1997 Jan-Feb;62(1):26-9

Prematurity alters hypoxic and hypercapnic ventilatory responses in developing lambs. Davey MG, et al. **Respir Physiol** 1996 Aug;105(1-2):57-67

Source of respiratory drive during periodic breathing in lambs. Wilkinson MH, et al. **Respir Physiol** 1996 Jul; 104(2-3):115-26

Note on age and body weight at puberty in Mehraban Iranian fat-tailed ewe lambs. Bathaei SS, et al. **Trop Anim Health Prod** 1997 Feb;29(1):55-9

Effects of four analgesic treatments on the behavioural and cortisol responses of 3-week-old lambs to tail docking. Graham MJ, et al. **Vet J** 1997 Jan;153(1):87-97

Required thermal thresholds during transport of animals. Schrama JW, et al. **Vet Q** 1996 Sep;18(3):90-5

Effect of cobalt supplementation on serum vitamin B12 levels, weight gain and survival rate in lambs grazing cobalt-deficient pastures. Vellema P, et al. **Vet Q** 1997 Mar; 19(1):1-5

Reducing perinatal mortality in lambs [letter; comment] [see comments] Lester WA. **Vet Rec** 1997 Feb 1;140(5):136. Comment on: Vet Rec 1996 Nov 9;139(19):455-6. Comment in: Vet Rec 1997 Mar 15;140(11):292.

Risk factors for perinatal and postnatal mortality in lambs. Nash ML, et al. **Vet Rec** 1996 Jul 20;139(3):64-7

Estimation of glomerular filtration rate in normal sheep by the disappearance of iohexol from serum. Nesje M, et al. **Vet Res Commun** 1997 Jan;21(1):29-35

Anesthesia in sheep with propofol or with xylazine-ketamine followed by halothane. Lin HC, et al. **Vet Surg** 1997 May-Jun;26(3):247-52

Experiences with morphine injected into the subarachnoid space in sheep. Wagner AE, et al. **Vet Surg** 1996 May-Jun; 25(3):256-60

The effects of age and reproductive status on serum and blood parameters in merino breed sheep. Alonso AJ, et al. **Zentralbl Veterinarmed A** 1997 Jun;44(4):223-31

Gut regulatory peptides in young cattle and sheep. Guilloteau P, et al. **Zentralbl Veterinarmed A** 1997 Mar;44(1):1-23 (122 ref.)

Effect of cholera toxin on glucose absorption and net movements of water and electrolytes in the intestinal loop of sheep. Hyun HS, et al. **Zentralbl Veterinarmed A** 1996 Dec;43(10):611-8

Stimulation of food intake by xylazine in sheep. Mohammad FK, et al. **Zentralbl Veterinarmed A** 1996 Sep;43(7):387-91

Increased airway pressure in response to xylazine is inhibited by both atipamezole and atropine in sheep. Papazoglou L, et al. **Zentralbl Veterinarmed A** 1994 Sep;41(7):568-72

[The effect of starch-rich single feed on the digestibility and the energy content of corn silage in cattle and sheep] Schwarz FJ, et al. **Arch Tierernahr** 1996;49(4):349-62 (Eng. Abstr.) **(Ger)**

[Nutritional biochemical aspects of the significance, of the utilization, of metabolism and of the administration of vitamin E and of selenium in sheep (review)] Kolb E, et al. **Berl Munch Tierarztl Wochenschr** 1997 May; 110(5):178-84 (48 ref.) (Eng. Abstr.) **(Ger)**

[Ultrasonic pregnancy diagnosis (B-mode) in sheep. 2. Comparative studies using transcutaneous and transrectal pregnancy diagnosis] Kaulfuss KH, et al. **Tierarztl Prax** 1996 Dec;24(6):559-66 (Eng. Abstr.) **(Ger)**

[Endocrine function of the testicle in the Mexican crossbred ram at different times of the year and its opioidergic control during anoestrus] Fuentes V, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):259-63 (Eng. Abstr.) **(Spa)**

SURGERY

Do sheep really have problems with cardiopulmonary bypass for total artificial heart implantation? Kim WG, et al. **Artif Organs** 1997 Feb;21(2):154-9

General anesthetic techniques in ruminants [published erratum appears in Vet Clin North Am Food Anim Pract 1997 Mar;13(1):XI] Carroll GL, et al. **Vet Clin North Am Food Anim Pract** 1996 Nov;12(3):627-61 (125 ref.)

URINE

Identification of endogenous 19-nortestosterone in pregnant ewes by gas chromatography-mass spectrometry. Clouet AS, et al. **Analyst** 1997 May;122(5):471-4

VIROLOGY

Sheep do not have a major role in bovine herpesvirus 1 transmission. Hage JJ, et al. **Vet Microbiol** 1997 Jun 30; 57(1):41-54

Effect of in vitro maedi-visna virus infection on adherence and phagocytosis of staphylococci by ovine cells. Monleón E, et al. **Vet Microbiol** 1997 Jun 30;57(1):13-28

Genetic characterization of ruminant pestiviruses: sequence analysis of viral genotypes isolated from sheep. Sullivan DG, et al. **Virus Res** 1997 Jan;47(1):19-29

SHEEP DISEASES

Diagnosis of ovine enzootic abortion, using a competitive ELISA based on monoclonal antibodies against variable segments 1 and 2 of the major outer membrane protein of Chlamydia psittaci serotype 1. Salti-Montesanto V, et al. **Am J Vet Res** 1997 Mar;58(3):228-35

Neurological symptoms associated with sarcocystosis in adult sheep. Henderson JM, et al. **Can Vet J** 1997 Mar; 38(3):168-70

Impaired pulmonary gas exchange in ewes naturally infected by small lungworms. Berrag B, et al. **Int J Parasitol** 1996 Dec;26(12):1397-400

Kinetic disposition of an aqueous formulation of alphacypermethrin applied to the dorsal mid-line of sheep with long wool and its effect on lice. Johnson PW, et al. **Int J Parasitol** 1996 Dec;26(12):1369-74

Detection of Trypanosoma brucei, T. congolense and T. vivax infections in cattle, sheep and goats using latex agglutination. Kayang BB, et al. **Int J Parasitol** 1997 Jan; 27(1):83-7

The use of ultrasound to study the prevalence of hydatid cysts in the right lung and liver of sheep and goats in Turkana, Kenya. Maxson AD, et al. **Int J Parasitol** 1996 Nov;26(11):1335-8

Eprinomectin: a novel avermectin for use as a topical endectocide for cattle. Shoop WL, et al. **Int J Parasitol** 1996 Nov;26(11):1237-42

Implications of nutrition for the ability of ruminants to withstand gastrointestinal nematode infections. van Houtert MF, et al. **Int J Parasitol** 1996 Nov;26(11):1151-67 (167 ref.)

Studies on the host-parasite relationship between Trichostrongylus colubriformis and susceptible and resistant sheep. Wagland BM, et al. **Int J Parasitol** 1996 Nov;26(11):1279-86

Udder orf infection and its role in ovine clinical mastitis

caused by Pasteurella haemolytica. Burriel AR. **J Trace Elem Med Biol** 1997 Apr;11(1):28–31

Lesions in lambs experimentally infected with ovine adenovirus serotype 6 and Pasteurella haemolytica. Cutlip RC, et al. **J Vet Diagn Invest** 1996 Jul;8(3):296–303

Water hemlock (Cicuta douglasii) toxicoses in sheep: pathologic description and prevention of lesions and death. Panter KE, et al. **J Vet Diagn Invest** 1996 Oct;8(4):474–80

Fusobacterium necrophorum septicemia in a lamb: pathologic and microbiologic characterization. Ramos-Vara JA, et al. **J Vet Diagn Invest** 1997 Jan;9(1):79–82

Rotaviruses associated with neonatal lamb diarrhea in two Wyoming shed-lambing operations. Theil KW, et al. **J Vet Diagn Invest** 1996 Apr;8(2):245–8

Brussels reshapes science panels after BSE criticism [news] Butler D. **Nature** 1997 Jun 19;387(6635):749

Echinococcus granulosus antigen B and seroreactivity in natural ovine hydatidosis. Ibrahem MM, et al. **Res Vet Sci** 1996 Sep;61(2):102–6

Effect of dietary protein on the regulation of populations of Nematodirus battus by lambs. Israf DA, et al. **Res Vet Sci** 1996 May;60(3):276–7

Fasciola hepatica infection in sheep: changes in liver metabolism. Lenton LM, et al. **Res Vet Sci** 1996 Sep; 61(2):152–6

Heartwater in Ghana: implications for control of ticks. Bell-Sakyi L, et al. **Trop Anim Health Prod** 1996 May;28(2 Suppl):59S–64S; discussion 74S–86S

Research on dermatophilosis in Africa. Oppong EN. **Trop Anim Health Prod** 1996 May;28(2 Suppl):9S–17S; discussion 74S–86S

Comparative efficacies of closantel, ivermectin, oxfendazole, thiophanate and levamisole against thiabendazole resistant Haemonchus contortus in sheep. Waruiru RM, et al. **Trop Anim Health Prod** 1996 Aug;28(3):216–20

Competitive enzyme-linked immunosorbent assay using monoclonal antibodies to the Brucella melitensis BP26 protein to evaluate antibody responses in infected and B. melitensis Rev.1 vaccinated sheep. Debbarh HS, et al. **Vet Microbiol** 1996 Dec;53(3–4):325–37

DNA fingerprinting of Campylobacter fetus using cloned constructs of ribosomal RNA and surface array protein genes. Denes AS, et al. **Vet Microbiol** 1997 Feb; 54(2):185–93

The occurrence of Pseudomonas aeruginosa in fleece washings from sheep affected and unaffected with fleece rot. Kingsford NM, et al. **Vet Microbiol** 1997 Mar; 54(3–4):275–85

Assessment of gelatin gel and elastase tests for detection of protease activity of Dichelobacter nodosus isolates from ovine footrot. Links IJ, et al. **Vet Microbiol** 1996 Aug; 51(3–4):305–18

Comparison of gene probe and conventional methods for the differentiation of ovine footrot isolates of Dichelobacter nodosus. Rood JI, et al. **Vet Microbiol** 1996 Sep; 52(1–2):127–41

Characterization of enzootic nasal tumor virus capsid antigen. Rosati S, et al. **Vet Microbiol** 1996 Dec;53(3–4):261–9

Detection of Mycoplasma agalactiae in sheep milk samples by polymerase chain reaction. Tola S, et al. **Vet Microbiol** 1997 Jan;54(1):17–22

Development and validation of an indirect enzyme immunoassay for detection of ovine antibody to Brucella ovis. Vigliocco AM, et al. **Vet Microbiol** 1997 Mar; 54(3–4):357–68

Diversity among abortion strains of Chlamydia psittaci demonstrated by inclusion morphology, polypeptide profiles and monoclonal antibodies. Vretou E, et al. **Vet Microbiol** 1996 Aug;51(3–4):275–89

Antigens for serological diagnosis of ovine footrot. Whittington RJ, et al. **Vet Microbiol** 1997 Mar; 54(3–4):255–74

Anthelmintic resistance of trichostrongylids in sheep in the highveld of Zimbabwe. Boersema JH, et al. **Vet Parasitol** 1997 Mar;68(4):383–8

Non-surgical transplantation of Oesophagostomum dentatum to recipient pigs via rectal intubation. Christensen CM, et al. **Vet Parasitol** 1996 Oct 15;65(1–2):139–45

Efficacy of moxidectin as a 1% injectable solution and a 0.1% oral drench against nasal bots, pulmonary and gastrointestinal nematodes in sheep. Dorchies P, et al. **Vet Parasitol** 1996 Oct 15;65(1–2):163–8

Strategies to reduce transmission of Toxoplasma gondii to animals and humans. Dubey JP. **Vet Parasitol** 1996 Aug; 64(1–2):65–70 (39 ref.)

Effects of three nematode anthelmintic treatment regimes on flock performance of sheep and goats under extensive management in semi-arid Kenya. Gatongi PM, et al. **Vet Parasitol** 1997 Mar;68(4):323–36

Anthelmintic resistance in India. Gill BS. **Vet Parasitol** 1996 May;63(1–2):173–6

Detection of circulating Fasciola gigantica antigen in experimental and natural infections of sheep with fasciolosis. Guobadia EE, et al. **Vet Parasitol** 1996 Oct 15; 65(1–2):29–39

The isolation of Fasciola gigantica-specific antigens and their use in the serodiagnosis of fasciolosis in sheep by the detection of circulating antigens. Guobadia EE, et al. **Vet Parasitol** 1997 Feb;68(3):269–82

The development of cockle, a sheep pelt defect, in relation to size of infestation and time of exposure to Bovicola ovis, the sheep-biting louse. Heath AC, et al. **Vet Parasitol** 1996 Dec 31;67(3–4):259–67

Pathophysiology of Trypanosoma congolense infection in two breeds of sheep, Scottish blackface and Finn Dorset. Katunguka-Rwakishaya E, et al. **Vet Parasitol** 1997 Feb; 68(3):215–25

The influence of dietary protein on some blood biochemical parameters in Scottish blackface sheep experimentally infected with Trypanosoma congolense. Katunguka-Rwakishaya E. **Vet Parasitol** 1997 Feb; 68(3):227–40

Interbreed differences in the efficacy of 1% deltamethrin pour-on to protect small livestock against infestation with Ixodes rubicundus (Acari:Ixodidae). Kok DJ, et al. **Vet Parasitol** 1996 May;63(1–2):109–17

The pathophysiology and development of immunity during long-term subclinical infection with Trichostrongylus colubriformis of sheep receiving different nutritional treatments. Kyriazakis I, et al. **Vet Parasitol** 1996 Oct 15; 65(1–2):41–54

Comparison of indirect immunofluorescent antibody test and modified direct agglutination test methods for detection of Toxoplasma gondii antibodies in adult sheep in Spain. Marca MC, et al. **Vet Parasitol** 1996 Dec 2;67(1–2):99–103

Giardia and Cryptosporidium in Canadian farm animals. Olson ME, et al. **Vet Parasitol** 1997 Mar;68(4):375–81

Piroplasms of domestic animals in the Macedonia region of Greece. 1. Serological cross-reactions. Papadopoulos B, et al. **Vet Parasitol** 1996 May;63(1–2):41–56

Piroplasms of domestic animals in the Macedonia region of Greece. 3. Piroplasms of small ruminants. Papadopoulos B, et al. **Vet Parasitol** 1996 May;63(1–2):67–74

Evidence for a major gene determining the resistance of Indonesian Thin Tail sheep against Fasciola gigantica. Roberts JA, et al. **Vet Parasitol** 1997 Mar;68(4):309–14

Resistance of Indonesian thin tail sheep against Fasciola gigantica and F. hepatica. Roberts JA, et al. **Vet Parasitol** 1997 Jan;68(1–2):69–78

Peri-parturient rise in faecal strongyle egg counts of different genotypes of sheep in North Sumatra, Indonesia. Romjali E, et al. **Vet Parasitol** 1997 Jan;68(1–2):191–6

Comparison of resistance of four genotypes of rams to experimental infection with Haemonchus contortus. Romjali E, et al. **Vet Parasitol** 1996 Oct 15;65(1–2):127–37

Immunisation of sheep by drug-abbreviated infections of Ostertagia circumcincta and Trichostrongylus colubriformis against field challenge of gastro-intestinal nematodes. Stankiewicz M, et al. **Vet Parasitol** 1996 Dec 2;67(1–2):121–32

Effect of passage of Babesia ovis in the gerbil (Acomys cahirinus) on the course of infection in splenectomized lambs. Yeruham I, et al. **Vet Parasitol** 1996 Oct 15; 65(1–2):157–61

Posterior paralysis in a lamb caused by a Coeneurus cerebralis cyst in the lumbar spinal cord. Bussell KM, et al. **Vet Rec** 1997 May 24;140(21):560

Pharmacological basis for hepatic drug metabolism in sheep. Galtier P, et al. **Vet Res** 1996;27(4–5):363–72 (30 ref.)

Recent acute and subacute mycotoxicoses recognized in France. Le Bars J, et al. **Vet Res** 1996;27(4–5):383–94 (36 ref.)

RT-PCR detection of lentiviruses in milk or mammary secretions of sheep or goats from infected flocks. Leroux C, et al. **Vet Res** 1997;28(2):115–21

Cytokine gene expression in sheep following experimental infection with various strains of Corynebacterium pseudotuberculosis differing in virulence. Pépin M, et al. **Vet Res** 1997;28(2):149–63

Bacterial identity and characteristics in healthy and unhealthy respiratory tracts of sheep and calves. Barbour EK, et al. **Vet Res Commun** 1997 Aug;21(6):421–30

The effects of a controlled-release albendazole capsule (Proftril-Captec) on parasitism in grazing Corriedale ewes in the Nyandarua district of Kenya [published erratum appears in Vet Res Commun 1997 Jul;21(5):324] Munyua WK, et al. **Vet Res Commun** 1997 Feb;21(2):85–99

A survey of anthelmintic resistance by nematodes on three sheep and two goat farms in Hisar (India). Singh S, et al. **Vet Res Commun** 1997 Aug;21(6):447–51

The efficacy of an albendazole-medicated block in controlling sheep nematodes in Xinjiang province, north-west China. Tan LX, et al. **Vet Res Commun** 1996; 20(5):427–35

[Therapy of liver damage in sheep] Fürll M. **Berl Munch Tierarztl Wochenschr** 1996 Oct;109(10):375–80 (Eng. Abstr.) **(Ger)**

[Helminth infection of slaughtered sheep in Upper Bavaria. 3. Distribution of colonization of nematodes in the large intestine of sheep] Rehbein S, et al. **Berl Munch Tierarztl Wochenschr** 1997 Jun;110(6):223–8 (Eng. Abstr.) **(Ger)**

[Occurrence of helminths in slaughtered sheep in Upper Bavaria. 2. Relationship between fecal egg count and worm burden] Rehbein S, et al. **Berl Munch Tierarztl Wochenschr** 1997 Apr;110(4):148–52 (Eng. Abstr.) **(Ger)**

[Significance of causes of infectious abortion in sheep flocks in northern Baden-Württemberg with special reference to Chlamydia psittaci] Sting R, et al. **Berl Munch Tierarztl Wochenschr** 1997 Jan;110(1):5–11 (Eng. Abstr.) **(Ger)**

[Yersinia enterocolitica serovar 2a, wb, 3:b,c biovar 5 in hares and sheep] Wuthe HH, et al. **Berl Munch Tierarztl Wochenschr** 1997 May;110(5):176–7 (Eng. Abstr.) **(Ger)**

[Serological investigations in the diagnosis of viral infections derived from cattle in sheep] Bechmann G. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug;104(8):321–4 (Eng. Abstr.) **(Ger)**

BLOOD

Influence of Trypanosoma congolense infection on some blood inorganic and protein constituents in sheep. Katunguka-Rwakishaya E. **Rev Elev Med Vet Pays Trop** 1996;49(4):311–4

Serum biochemistry and the diagnosis of Johne's disease (paratuberculosis) in sheep. Jones DG, et al. **Vet Rec** 1996 Nov 16;139(20):498–9

Watery mouth disease in lambs: biochemical parameters before and after treatment. Scott PR, et al. **Vet Rec** 1996 Aug 3;139(5):117–8

CHEMICALLY INDUCED

Do steroidal saponins have a role in hepatogenous photosensitization diseases of sheep? Flåøyen A. **Adv Exp Med Biol** 1996;405:395–403 (51 ref.)

Sheep deaths after accidental ingestion of gypsum fertiliser. Dent CH. **Aust Vet J** 1997 Jan;75(1):26–7

Copper toxicity in confinement-housed ram lambs. Lewis NJ, et al. **Can Vet J** 1997 Aug;38(8):496–8

Selenium-induced "blind staggers" and related myths. A commentary on the extent of historical livestock losses attributed to selenosis on western US rangelands. O'Toole D, et al. **Vet Pathol** 1996 Jan;33(1):109–16 (163 ref.)

Experiences with morphine injected into the subarachnoid space in sheep. Wagner AE, et al. **Vet Surg** 1996 May-Jun; 25(3):256–60

CLASSIFICATION

Description and classification of different types of lesion associated with natural paratuberculosis infection in sheep. Pérez V, et al. **J Comp Pathol** 1996 Feb;114(2):107–122

DIAGNOSIS

Identification of ovine herpesvirus-2 infection in sheep. Baxter SI, et al. **Arch Virol** 1997;142(4):823–31

Foetal anasarca in Awassi sheep. Hailat N, et al. **Aust Vet J** 1997 Apr;75(4):257–9

A pulmonary adenoma in an Australian sheep. Hooper PT, et al. **Aust Vet J** 1995 Dec;72(12):477

Dysfibrinogenemia or afibrinogenemia in a Border Leicester lamb. Fecteau G, et al. **Can Vet J** 1997 Jul;38(7):443–4

Eperythrozoonosis in sheep [news] Hoff B, et al. **Can Vet J** 1996 Dec;37(12):747–8

The relationship between abnormalities detected in live lambs on farms and those detected at post mortem meat inspection. Green LE, et al. **Epidemiol Infect** 1997 Jun; 118(3):267–73

Serological diagnosis of ovine enzootic abortion by comparative inclusion immunofluorescence assay, recombinant lipopolysaccharide enzyme-linked immunosorbent assay, and complement fixation test. Griffiths PC, et al. **J Clin Microbiol** 1996 Jun;34(6):1512–8

Diagnostic exercise: dysuria in an experimental lamb. Forman LA, et al. **Lab Anim Sci** 1997 Aug;47(4):419–22

Diagnostic exercise: sheep with enlarged lymph nodes. Rand MS. **Lab Anim Sci** 1996 Jun;46(3):335–7 (10 ref.)

Detection of Chlamydia psittaci in enteric subclinical infections in adult sheep, through cell culture isolation. Escalante-Ochoa C, et al. **Rev Latinoam Microbiol** 1996 Jan-Mar;38(1):17–23

Laboratory diagnostic tests for retrovirus infections of small ruminants. Knowles DP Jr. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):1–11 (64 ref.)

Isolation of faecal chlamydia from sheep in Britain and their characterization by cultural properties [see comments] Clarkson MJ, et al. **Vet J** 1997 May;153(3):307–10. Comment in: Vet J 1997 May;153(3):249–51.

Improved laboratory diagnosis of ovine footrot: an update. Liu D, et al. **Vet J** 1997 Jan;153(1):99–105 (39 ref.)

Production of a recombinant fusion protein of Sarcocystis tenella and evaluation of its diagnostic potential in an ELISA. Mertens CM, et al. **Vet Parasitol** 1996 Oct 25; 65(3–4):185–97

Detection of Mycoplasma ovipneumoniae and Pasteurella haemolytica antigens by an immunoperoxidase technique in pneumonic ovine lungs. Haziroglu R, et al. **Vet Pathol** 1996 Jan;33(1):74–6

Sheep as a potential source of verocytotoxin-producing Escherichia coli O157 [letter] Chapman PA, et al. **Vet Rec** 1996 Jan 6;138(1):23–4

Acute fascioliasis in sheep [letter] Clark AM, et al. **Vet Rec** 1996 Sep 21;139(12):299

Comparison of the absorbed ELISA and agar gel immunodiffusion test with clinicopathological findings in ovine clinical paratuberculosis. Clarke CJ, et al. **Vet Rec** 1996 Dec 21–28;139(25):618–21

Neurological condition in polled Dorset lambs [letter] David GP, et al. **Vet Rec** 1997 Jul 5;141(1):27

Intestinal torsion and red gut in sheep [letter] Gumbrell RC. **Vet Rec** 1996 Nov 2;139(18):452

Comparison of five tests for the detection of antibodies

against chlamydial (enzootic) abortion of ewes. Jones GE, et al. **Vet Rec** 1997 Aug 16;141(7):164–8
Virulent foot rot in sheep [letter] Lewis CJ, et al. **Vet Rec** 1997 Jul 26;141(4):107–8
Adrenal cortical carcinoma in a free–ranging mouflon (Ovis musimon). Marco–Sánchez I, et al. **Vet Rec** 1996 Sep 7; 139(10):236–7
Enzyme–linked immunoelectrotransfer blot assay for diagnosis of hydatidosis (Echinococcus granulosus) in sheep. Moro P, et al. **Vet Rec** 1997 Jun 7;140(23):605–6
[Detection methods for Salmonella abortus ovis and examinations in sheep flocks in northern Baden–Württemberg] Sting R, et al. **Zentralbl Veterinarmed [B]** 1997 Apr;44(2):87–98 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Duration of the persistent activity of moxidectin against Haemonchus contortus in sheep. Abbott KA, et al. **Aust Vet J** 1995 Nov;72(11):408–10
Naphthalophos combinations with benzimidazoles or levamisole as effective anthelmintics for sheep. Cooper NA, et al. **Aust Vet J** 1996 Sep;74(3):221–4
Factors associated with the effectiveness of antibiotic treatment for ovine virulent footrot. Jordan D, et al. **Aust Vet J** 1996 Jun;73(6):211–5
Settling of insecticide from dip wash mixed with dam water and zinc sulphate and used to control sheep lice (Bovicola ovis). Morcombe PW, et al. **Aust Vet J** 1995 Nov; 72(11):411–4
Efficacy of a novel copper–based footbath preparation for the treatment of ovine footrot during the spread period. Reed GA, et al. **Aust Vet J** 1996 Nov;74(5):375–82
Comparison of erythromycin and oxytetracycline for the treatment of virulent footrot in grazing sheep. Rendell DK, et al. **Aust Vet J** 1997 May;75(5):354
Efficacy of ivermectin controlled–release capsules for the control and prevention of nasal bot infestations in sheep. Rugg D, et al. **Aust Vet J** 1997 Jan;75(1):36–8
Field trials of a formulation containing moxidectin and 6 in 1 vaccines for sheep. Schwartzkoff CL, et al. **Aust Vet J** 1996 Sep;74(3):225–7
Efficacy of a single dose of erythromycin or penicillin/streptomycin for the treatment of ovine dermatophilosis. Scrivener CJ, et al. **Aust Vet J** 1995 Dec; 72(12):475–6
Physiology, pharmacology and parasitology. Hennessy DR. **Int J Parasitol** 1997 Feb;27(2):145–52
The death rate of Ostertagia circumcincta and Trichostrongylus colubriformis in lactating ewes: implications for anthelmintic resistance. Leathwick DM, et al. **Int J Parasitol** 1997 Apr;27(4):411–6
The effects of closantel treatment on the ultrastructure of Haemonchus contortus. Rothwell JT, et al. **Int J Parasitol** 1996 Jan;26(1):49–57
Effect of salinomycin on giardiasis and coccidiosis in growing lambs. McAllister TA, et al. **J Anim Sci** 1996 Dec; 74(12):2896–903
The effect of level of feed intake on the pharmacokinetic disposition and efficacy of ivermectin in sheep. Ali DN, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):89–94
Efficacy of ivermectin and moxidectin injection against larvae of Wohlfahrtia magnifica (Diptera: Sarcophagidae) in sheep. Farkas R, et al. **Parasitol Res** 1996;82(1):82–6
Management of post–partum cervical uterine or rectal prolapses in ewes using caudal epidural xylazine and lignocaine injection. Scott PR, et al. **Vet J** 1997 Jan; 153(1):115–6
Treatment and prophylaxis of psoroptic mange of sheep by a 10% w/w dip formulation of high CIS–cypermethrin. O'Brien DJ, et al. **Vet Parasitol** 1997 Apr;69(1–2):125–31
Resistance of the sheep scab mite Psoroptes ovis to propetamphos [letter] [see comments] Clark AM, et al. **Vet Rec** 1996 Nov 2;139(18):451. Comment in: Vet Rec 1996 Dec 7;139(23):576.
Resistance to levamisole [letter] Coles GC, et al. **Vet Rec** 1996 Aug 3;139(5):124
Management of anthelmintic resistance [letter] Coles GC. **Vet Rec** 1997 Jul 12;141(2):56
Preliminary study of the effect of iron dextran on a non–regenerative anaemia of housed lambs. Green LE, et al. **Vet Rec** 1997 Mar 1;140(9):219–22
Treatment and control of psoroptic mange (sheep scab) with moxidectin. O'Brien DJ, et al. **Vet Rec** 1996 Nov 2; 139(18):437–9
Occurrence of resistance to anthelmintics in sheep in Paraná State, Brazil. Soccol VT, et al. **Vet Rec** 1996 Oct 26; 139(17):421–2
[Control of gastrointestinal helminthiasis in pasture–reared lambs] Chroust K. **Vet Med (Praha)** 1997 Mar;42(3):67–70 (Eng. Abstr.) **(Cze)**
[Effect of flubendazole on Muellerius capillaris in mouflon] Lamka J, et al. **Vet Med (Praha)** 1996 Nov;41(11):347–50 (Eng. Abstr.) **(Cze)**
[The influence of treatment on the course of experimental Fasciola hepatica infection and weight gains in sheep] Ramisz G, et al. **Wiad Parazytol** 1997;43(1):69–77 (Eng. Abstr.) **(Pol)**
[The technology for manufacturing antiparasitic preparations. 8. The preparation rilanid and its use for treating fascioliasis and intestinal nematodiases] Mikhailitsyn FS, et al. **Med Parazitol (Mosk)** 1997 Jan–Mar;(1):28–30 (Eng. Abstr.) **(Rus)**
[The technology for manufacturing antiparasitic preparations. 7. Preparation G–1460 and its use for the treatment of monieziasis and intestinal nematodiases] Petrov IuF, et al. **Med Parazitol (Mosk)** 1996 Oct–Dec;(4):40–2 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Sheep deaths after accidental ingestion of gypsum fertiliser. Dent CH. **Aust Vet J** 1997 Jan;75(1):26–7
A survey of sheep flocks on Kangaroo Island for virulent footrot. McFarland IJ, et al. **Aust Vet J** 1996 Nov; 74(5):388–9
Pasteurella haemolytica septicaemia in sheep. Mackie JT, et al. **Aust Vet J** 1995 Dec;72(12):474
Verotoxin–producing Escherichia coli from the faeces of sheep, calves and pigs. Sidjabat–Tambunan H, et al. **Aust Vet J** 1997 Apr;75(4):292–3
High prevalence of Borna disease virus infection in healthy sheep in Japan. Hagiwara K, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):339–44
Transmission of hydatid disease to sheep from wild dogs in Victoria, Australia. Grainger HJ, et al. **Int J Parasitol** 1996 Nov;26(11):1263–70
The distribution of Dermacentor hunteri and Anaplasma sp. in desert bighorn sheep (Ovis canadensis). Crosbie PR, et al. **J Parasitol** 1997 Feb;83(1):31–7
The epidemiology and control of nematode parasites and Oestrus ovis in the winter rainfall area [letter; comment] Reinecke RK. **J S Afr Vet Assoc** 1990 Dec;61(4):148–9; discussion 149–50. Comment on: J S Afr Vet Assoc 1990 Sep;61(3):136–40.
Bluetongue virus seropositivity in sheep flocks in North West Frontier Province, Pakistan. Akhtar S, et al. **Prev Vet Med** 1997 Feb;29(4):293–8
Risk factors for seroprevalence of ovine lentivirus in breeding ewe flocks in Nebraska, USA. Keen JE, et al. **Prev Vet Med** 1997 May;30(2):81–94
Intra–cluster correlation coefficients of 20 infections calculated from the results of cluster–sample surveys. Otte MJ, et al. **Prev Vet Med** 1997 Jul;31(1–2):147–50
The prevalence of trypanosomosis in small ruminants and pigs in a sleeping sickness endemic area of Buikwe County, Mukono district, Uganda. Katunguka–Rwakishaya E. **Rev Elev Med Vet Pays Trop** 1996;49(1):56–8
Dermatophilosis in Ghana: effect on the livestock industry. Koney EB. **Trop Anim Health Prod** 1996 May;28(2 Suppl):3S–8S; discussion 74S–86S
Paratuberculosis in small ruminants, deer, and South American camelids. Stehman SM. **Vet Clin North Am Food Anim Pract** 1996 Jul;12(2):441–55 (56 ref.)
Serological survey of heartwater relative to the distribution of the vector Amblyomma variegatum and other tick species in north Cameroon. Awa DN. **Vet Parasitol** 1997 Jan;68(1–2):165–73
Aspects of animal giardiosis in Granada province (southern Spain). Díaz V, et al. **Vet Parasitol** 1996 Sep 2;64(3):171–6
Wound myiasis of sheep in Hungary. Farkas R, et al. **Vet Parasitol** 1997 Apr;69(1–2):133–44
Observations on the prevalence of trypanosomosis in small ruminants, equines and cattle, in relation to tsetse challenge, in The Gambia. Snow WF, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):1–11
The epidemiology of nematode infections in sheep in a cool tropical environment. Tembely S, et al. **Vet Parasitol** 1997 Jun;70(1–3):129–41
The influence of stocking rate on gastrointestinal nematode infections of sheep over a 2–year grazing period. Thamsborg SM, et al. **Vet Parasitol** 1996 Dec 31; 67(3–4):207–24
An epidemiological study into risk indicators for Pasteurella haemolytica related 'summer pneumonia' in lambs in the southern Netherlands. Dercksen DP, et al. **Vet Q** 1996 Sep; 18(3):100–1
E coli O157: lessons of the Scottish outbreak [news] **Vet Rec** 1997 Apr 12;140(15):382
Caseous lymphadenitis: an increasing cause for concern [letter; comment] Baird G. **Vet Rec** 1997 Jun 7;140(23):611 . Comment on: Vet Rec 1997 May 31;140(22):586–7.
Ovine psoroptic otoacariasis: an abattoir survey. Bates PG. **Vet Rec** 1996 Sep 7;139(10):235–6
Caseous lymphadenitis: an increasing cause for concern [letter] Coles GC. **Vet Rec** 1997 Jun 14;140(24):635
Ovine ostertagiosis in the spring [letter] Connan RM. **Vet Rec** 1997 Jun 7;140(23):612
Salmonella hindmarsh infection in sheep and ponies [letter] Daniel RG, et al. **Vet Rec** 1997 Aug 23;141(8):203
An outbreak of ovine white liver disease in south west England [published erratum appears in Vet Rec 1996 Nov 2;139(18):448] Dannatt L, et al. **Vet Rec** 1996 Oct 12; 139(15):371–3
Virulent foot rot in sheep [letter] Day CE. **Vet Rec** 1997 Jul 12;141(2):56
Role of neonatal and maternal risk factors in the faecal soiling of lambs. French NP, et al. **Vet Rec** 1996 Nov 9; 139(19):460–5
Virulent foot rot in sheep [letter] Grogono–Thomas R. **Vet Rec** 1997 Jul 5;141(1):26–7
Virulent foot rot in sheep [letter] Harwood DG, et al. **Vet Rec** 1997 Jun 28;140(26):687
Outbreak of staphylococcal dermatitis in housed lactating Suffolk ewes. Scott PR, et al. **Vet Rec** 1997 Jun 14; 140(24):631–2
Caseous lymphadenitis: an increasing cause for concern [letter] Smith IJ, et al. **Vet Rec** 1997 Jun 14;140(24):635
Ovarian hypoplasia in Lleyn ewes. Vaughan EK, et al. **Vet Rec** 1997 Jan 25;140(4):100–1
Virulent foot rot in sheep [letter] Winter A. **Vet Rec** 1997 Jul 5;141(1):27
Caseous lymphadenitis: an increasing cause for concern [letter; comment] Winter AC. **Vet Rec** 1997 Jun 7; 140(23):611. Comment on: Vet Rec 1997 May 31;140(22):586–7.
Paratuberculosis in sheep flocks in Morocco: a serological, microscopical and cultural survey. Benazzi S, et al. **Zentralbl Veterinarmed [B]** 1996 Jun;43(4):213–9
Prevalence of antibodies to Eperythrozoon ovis in Norwegian sheep. Brun–Hansen H, et al. **Zentralbl Veterinarmed [B]** 1997 Jul;44(5):307–8
Serologic survey for antibodies to Borrelia burgdorferi in sheep, goats and dogs in Cordillera Province, Bolivia. Ciceroni L, et al. **Zentralbl Veterinarmed [B]** 1997 May; 44(3):133–7
Prevalence of sarcocysts in livestock of northwest Ethiopia. Woldemeskel M, et al. **Zentralbl Veterinarmed [B]** 1996 Mar;43(1):55–8
[Fetal heart rate measurement and sonographic fetometry for determination of fetal age in sheep] Chavez Moreno J, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Nov; 103(11):478–80 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Sorghum spp neurotoxicity in sheep. Bourke C. **Aust Vet J** 1995 Dec;72(12):467
Studies on the early phase of the pathogenesis of ovine enzootic abortion in the non–pregnant ewe [see comments] Amin JD, et al. **Br Vet J** 1995 Mar–Apr;151(2):141–55. Comment in: Br Vet J 1995 Mar–Apr;151(2):115–8.
Comparative studies of border disease and closely related virus infections in experimental pigs and sheep. Edwards S, et al. **Br Vet J** 1995 Mar–Apr;151(2):181–7
Chlamydia psittaci: prevailing problems in pathogenesis [comment] Jones GE. **Br Vet J** 1995 Mar–Apr;151(2):115–8 . Comment on: Br Vet J 1995 Mar–Apr;151(2):141–55.
Toxoplasma gondii infection in sheep and cattle. Esteban–Redondo I, et al. **Comp Immunol Microbiol Infect Dis** 1997 Feb;20(2):191–6
PrP genotype contributes to determining survival times of sheep with natural scrapie. Bossers A, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2669–73
The possible role of manganese poisoning in enzootic geophagia and hepatitis of calves and lambs [letter] Neser JA, et al. **J S Afr Vet Assoc** 1997 Mar;68(1):4–6
The distribution, diagnoses and estimated economic impact of plant poisonings and mycotoxicoses in South Africa. Kellerman TS, et al. **Onderstepoort J Vet Res** 1996 Jun; 63(2):65–90
Experimental intoxication of sheep and cattle with Wedelia glauca. Collazo L, et al. **Vet Hum Toxicol** 1996 Jun; 38(3):200–3
Meadow saffron (Colchicum autumnale) intoxication in a nomadic Albanian sheep flock. Panariti E. **Vet Hum Toxicol** 1996 Jun;38(3):227–8
Travel sickness in pigs and sheep [letter] [see comments] Austin AR. **Vet Rec** 1996 Dec 7;139(23):575. Comment in: Vet Rec 1997 Jan 18;140(3):76.
Osteochondrosis as a cause of lameness in lambs [letter; comment] Johnson PJ. **Vet Rec** 1996 Oct 19;139(16):400. Comment on: Vet Rec 1996 Aug 17;139(7):165–7.
Osteochondrosis as a cause of lameness in purebred Suffolk lambs [see comments] Scott CA, et al. **Vet Rec** 1996 Aug 17;139(7):165–7. Comment in: Vet Rec 1996 Oct 19;139(16):400.
Metabolism of saponins from Narthecium ossifragum––a plant implicated in the aetiology of alveld, a hepatogenous photosensitization of sheep. Flåøyen A, et al. **Vet Res Commun** 1997 Jul;21(5):335–45
[Polycythemia caused by liver carcinoma in cattle and sheep] Braun U, et al. **Schweiz Arch Tierheilkd** 1997;139(4):165–71 (Eng. Abstr.) **(Ger)**

GENETICS

Genetic variability in Italian sheep isolates of Echinococcus granulosus. Ortona E, et al. **Appl Parasitol** 1996 Sep; 37(3):205–8
The immunogenetics of resistance to Trichostrongylus colubriformis and Haemonchus contortus parasites in sheep [see comments] Hohenhaus MA, et al. **Br Vet J** 1995 Mar–Apr;151(2):119–40 (65 ref.). Comment in: Br Vet J 1995 Mar–Apr;151(2):111–3.
Immunity and immunogenetics––new approaches to controlling worm infections in sheep [editorial; comment] Wakelin D. **Br Vet J** 1995 Mar–Apr;151(2):111–3. Comment on: Br Vet J 1995 Mar–Apr;151(2):119–40.
Detecting genetic differences between groups of sheep during parasite infection. Woolaston RR. **Int J Parasitol** 1997 Jul; 27(7):839–41
The ovine callipyge locus: a paradigm illustrating the importance of non–Mendelian genetics in livestock. Georges M, et al. **Reprod Nutr Dev** 1996;36(6):651–7 (21 ref.)
The genetic basis of resistance to Ostertagia circumcincta

in lambs. Stear MJ, et al. **Vet J** 1997 Sep;154(2):111–9 (65 ref.)

Immunolocalisation of the prion protein (PrP) in the brains of sheep with scrapie. Foster JD, et al. **Vet Rec** 1996 Nov 23;139(21):512–5

Ovarian hypoplasia in Lleyn ewes. Vaughan EK, et al. **Vet Rec** 1997 Jan 25;140(4):100–1

[Genetic aspects of sheep resistance to gastrointestinal nematode infections] Doligalska M. **Wiad Parazytol** 1995; 41(4):405–11 (42 ref.) (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Establishment of serial persistent infections with bovine viral diarrhoea virus in cattle and sheep and changes in epitope expression related to host species. Paton D, et al. **Arch Virol** 1997;142(5):929–38

Vaccines for bluetongue. Murray PK, et al. **Aust Vet J** 1996 Jun;73(6):207–10 (33 ref.)

Effects of interactions between Pasteurella haemolytica and Bordetella parapertussis on in vitro phagocytosis by lung macrophages. Hodgson JC, et al. **Biologicals** 1996 Dec; 24(4):325–8

The immunogenetics of resistance to Trichostrongylus colubriformis and Haemonchus contortus parasites in sheep [see comments] Hohenhaus MA, et al. **Br Vet J** 1995 Mar–Apr;151(2):119–40 (65 ref.). Comment in: Br Vet J 1995 Mar–Apr;151(2):111–3.

Immunity and immunogenetics—new approaches to controlling worm infections in sheep [editorial; comment] Wakelin D. **Br Vet J** 1995 Mar–Apr;151(2):111–3. Comment on: Br Vet J 1995 Mar–Apr;151(2):119–40.

Antigen-induced (Dumonde Glynn) arthritis in the sheep: a large joint animal model of arthritis. Highton J, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):25–31

Depletion of IFN-gamma, CD8+ or Tcr gamma delta+ cells in vivo during primary infection with an enteric parasite (Trichostrongylus colubriformis) enhances protective immunity. McClure SJ, et al. **Immunol Cell Biol** 1995 Dec;73(6):552–5

Prospects for development of genetic markers for resistance to gastrointestinal parasite infection in sheep. Beh KJ, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):879–97 (149 ref.)

Feasibility and implications of breeding sheep for resilience to nematode challenge. Bisset SA, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):857–68 (38 ref.)

Some relationships between age, immune responsiveness and resistance to parasites in ruminants. Colditz IG, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):869–77 (30 ref.)

Growth of Lucilia cuprina larvae following treatment of sheep divergently selected for fleece rot and fly strike with monoclonal antibodies to T lymphocyte subsets and interferon gamma. Colditz IG, et al. **Int J Parasitol** 1996 Jul;26(7):775–82

Serum mast cell proteinase responses of sheep to challenge with Trichostrongylus colubriformis and the effect of dexamethasone treatment. Douch PG, et al. **Int J Parasitol** 1996 Jan;26(1):91–5

Phenotypic markers for selection of nematode-resistant sheep. Douch PG, et al. **Int J Parasitol** 1996 Aug–Sep; 26(8–9):899–911 (44 ref.)

IgE, TNF alpha, IL1 beta, IL4 and IFN gamma gene polymorphisms in sheep selected for resistance to fleece rot and flystrike. Engwerda CR, et al. **Int J Parasitol** 1996 Jul;26(7):787–91

Integument ultrastructure of Oestrus ovis (L.) (Diptera:Oestridae) larvae: host immune response to various cuticular components. Innocenti L, et al. **Int J Parasitol** 1997 May;27(5):495–506

Sequential cellular and humoral responses in the abomasal mucosa and blood of Romney sheep dosed with Trichostrongylus axei. Pfeffer A, et al. **Int J Parasitol** 1996 Jul;26(7):765–73

Developmentally regulated expression of a Haemonchus contortus surface antigen. Raleigh JM, et al. **Int J Parasitol** 1996 Jun;26(6):673–5

Prospects of breeding small ruminants for resistance to internal parasites. Woolaston RR, et al. **Int J Parasitol** 1996 Aug–Sep;26(8–9):845–55 (63 ref.)

The value of circulating eosinophil count as a selection criteria for resistance of sheep to trichostrongyle parasites. Woolaston RR, et al. **Int J Parasitol** 1996 Jan;26(1):123–6

Regulation of uterine immune function during the estrous cycle and in response to infectious bacteria in sheep. Ramadan AA, et al. **J Anim Sci** 1997 Jun;75(6):1621–32

Trypanosoma congolense infection in sheep: cellular phenotypes in lymph and lymph nodes associated with skin reactions. Mwangi DM, et al. **J Comp Pathol** 1996 Jan; 114(1):51–61

Production and characterisation of monoclonal antibodies to Brucella melitensis cytosoluble proteins that are able to differentiate antibody responses of infected sheep from Rev. 1 vaccinated sheep. Cloeckaert A, et al. **J Med Microbiol** 1996 Sep;45(3):206–13

Susceptibility of bighorn sheep (Ovis canadensis) to experimentally-induced Fascioloides magna infections. Foreyt WJ. **J Wildl Dis** 1996 Jul;32(3):556–9

Immunomodulative effects of bovine immunodeficiency-like virus (BIV)-infection and mixed infection of BIV and bovine leukemia virus on sheep. Hirai N, et al. **Jpn J Vet Res** 1996 Dec;44(3):153–63

Regulation of egg production, worm burden, worm length and worm fecundity by host responses in sheep infected with Ostertagia circumcincta. Stear MJ, et al. **Parasite Immunol** 1995 Dec;17(12):643–52

Reduced egg counts in mixed infections with Oestrus ovis and Haemonchus contortus: influence of eosinophils? Dorchies P, et al. **Parasitol Res** 1997;83(7):727–30

Production of a monoclonal antibody specific for ovine immunoglobulin E and its application to monitor serum IgE responses to Haemonchus contortus infection. Kooyman FN, et al. **Parasitology** 1997 Apr;114 (Pt 4):395–406

Protective immunity to the blood-feeding nematode Haemonchus contortus induced by vaccination with parasite low molecular weight antigens. Schallig HD, et al. **Parasitology** 1997 Mar;114 (Pt 3):293–9

The serum immune response of young lambs to a primary infection with Nematodirus battus. Winter MD, et al. **Parasitology** 1996 Nov;113 (Pt 5):491–6

Immunology: resistance to paratuberculosis. Chiodini RJ. **Vet Clin North Am Food Anim Pract** 1996 Jul;12(2):313–43 (122 ref.)

Excretion of ammonia by Lucilia cuprina larvae suppresses immunity in sheep. Guerrini VH. **Vet Immunol Immunopathol** 1997 May;56(3–4):311–7

Detection of homocytotropic antibody in lambs infested with the louse, Bovicola ovis, using a basophil histamine-release assay. Pfeffer A, et al. **Vet Immunol Immunopathol** 1997 Jul;57(3–4):315–25

Cell-mediated immune responses of lambs to experimental infection with bovine respiratory syncytial virus. Sharma AK, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1–2):79–91

The use of listeriolysin O in an ELISA, a skin test and a lymphocyte blastogenesis assay on sheep experimentally infected with Listeria monocytogenes, Listeria ivanovii or Listeria innocua. Baetz AL, et al. **Vet Microbiol** 1996 Jul; 51(1–2):151–9

Susceptibility of Suffolk and Gulf Coast Native suckling lambs to naturally acquired strongylate nematode infection. Bahirathan M, et al. **Vet Parasitol** 1996 Oct 25; 65(3–4):259–68

The indirect fluorescent antibody test based on schizont antigen for study of the sheep parasite Theileria lestoquardi. Leemans I, et al. **Vet Parasitol** 1997 Apr;69(1–2):9–18

Serological diagnosis of toxoplasmosis in sheep following vaccination and challenge. Maley SW, et al. **Vet Rec** 1997 May 24;140(21):558–9

METABOLISM

Normal expression of adhalin and merosin in ovine congenital progressive muscular dystrophy. Johnsen RD, et al. **Aust Vet J** 1997 Mar;75(3):215–6

Maternal manipulation of brown adipose tissue and liver development in the ovine fetus during late gestation. Clarke L, et al. **Br J Nutr** 1997 Jun;77(6):871–83

Infection of sheep with adult and larval Ostertagia circumcincta: effects on abomasal pH and serum gastrin and pepsinogen. Lawton DE, et al. **Int J Parasitol** 1996 Oct;26(10):1063–74

Effects of adult and larval Haemonchus contortus on abomasal secretion. Simpson HV, et al. **Int J Parasitol** 1997 Jul;27(7):825–31

The use of a tympanic membrane thermometer for assessing hyperthermia in bighorn sheep. Drew ML. **J Wildl Dis** 1996 Jul;32(3):512–6

MICROBIOLOGY

Investigation of a listeriosis epizootic in sheep in New York state. Wiedmann M, et al. **Am J Vet Res** 1997 Jul; 58(7):733–7

Respiratory infections of sheep. Martin WB. **Comp Immunol Microbiol Infect Dis** 1996 Jun;19(3):171–9

Genetic analysis of Clavibacter toxicus, the agent of annual ryegrass toxicity. Johnston MS, et al. **Epidemiol Infect** 1996 Oct;117(2):393–400

Virulence regions and virulence factors of the ovine footrot pathogen, Dichelobacter nodosus. Billington SJ, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):147–56 (36 ref.)

Evolutionary genetics of Pasteurella haemolytica isolates recovered from cattle and sheep. Davies RL, et al. **Infect Immun** 1997 Sep;65(9):3585–93

Molecular characterization of Mycobacterium paratuberculosis isolates from sheep, goats, and cattle by hybridization with a DNA probe to insertion element IS900. Bauerfeind R, et al. **J Clin Microbiol** 1996 Jul; 34(7):1617–21

Pathogenesis of Chlamydia psittaci infection in sheep: detection of the organism in a serial study of the lymph node. Buxton D, et al. **J Comp Pathol** 1996 Apr; 114(3):221–30

Effects of the intravenous administration of Clostridium perfringens type D epsilon toxin on young goats and lambs. Uzal FA, et al. **J Comp Pathol** 1997 Jan;116(1):63–71

Genetic relationships among Pasteurella trehalosi isolates based on multilocus enzyme electrophoresis. Davies RL, et al. **Microbiology** 1997 Aug;143 (Pt 8):2841–9

Q fever outbreak—Germany, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Jan 17;46(2):29–32

Leptospira interrogans in the genital tract of sheep. Research on ewes and rams experimentally infected with serovar hardjo (hardjobovis). Farina R, et al. **New Microbiol** 1996 Jul;19(3):235–42

Electrophoretic and immunoblot analysis of Campylobacter fetus lipopolysaccharides. Brooks BW, et al. **Vet Microbiol** 1996 Jul;51(1–2):105–14

Rapid and specific detection of Mycoplasma agalactiae by polymerase chain reaction. Tola S, et al. **Vet Microbiol** 1996 Jul;51(1–2):77–84

Experimental infections of pregnant sows with ovine Chlamydia psittaci strains. Vazquez-Cisneros C, et al. **Vet Microbiol** 1994 Dec;42(4):383–7

Dynamics of intramammary infection in the sheep caused by coagulase-negative staphylococci and its influence on udder tissue and milk composition. Burriel AR. **Vet Rec** 1997 Apr 19;140(16):419–23

Thrombotic meningoencephalitis associated with Histophilus ovis infection in lambs in Europe. Cassidy JP, et al. **Vet Rec** 1997 Feb 22;140(8):193–5

Isolation of the causative agent of heartwater (Cowdria ruminantium) from three Amblyomma species in eight Districts of Kenya. Ngumi PN, et al. **Vet Rec** 1997 Jan 4;140(1):13–6

[A new Bordetella species in sheep?] Mitsching M, et al. **Zentralbl Veterinarmed [B]** 1997 Jun;44(4):207–11 (Eng. Abstr.) **(Ger)**

[Antibiotic resistance in Staphylococcus aureus mastitis in sheep, sheep milk and its products] Simko S, et al. **Vet Med (Praha)** 1996 Aug;41(8):241–4 (Eng. Abstr.) **(Slo)**

MORTALITY

PrP genotype contributes to determining survival times of sheep with natural scrapie. Bossers A, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2669–73

Albizia versicolor poisoning of sheep and goats in Malawi. Soldan AW, et al. **J S Afr Vet Assoc** 1996 Dec;67(4):217–21

Perinatal mortality in lambs in southern Brazil. Hancock RD, et al. **Trop Anim Health Prod** 1996 Nov;28(4):266–72

Livestock mortality in Afghanistan in districts with and without a veterinary programme. Schreuder BE, et al. **Trop Anim Health Prod** 1996 May;28(2):129–36

Selenium-induced "blind staggers" and related myths. A commentary on the extent of historical livestock losses attributed to selenosis on western US rangelands. O'Toole D, et al. **Vet Pathol** 1996 Jan;33(1):109–16 (163 ref.)

PARASITOLOGY

Cross-infections between fallow deer and domestic ruminants with large lungworms (Dictyocaulus spp.). Bienioschek S, et al. **Appl Parasitol** 1996 Dec;37(4):229–38

Development of a diagnostic DNA probe to detect Setaria digitata: the causative parasite of cerebrospinal nematodiasis in goats, sheep and horses. Wijesundera WS, et al. **Br Vet J** 1996 Sep;152(5):561–71

Cortisol as an indicator of severity of parasitic infections of Haemonchus contortus in lambs (Ovis aries). Fleming MW. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jan; 116(1):41–4

Cryptosporidium parvum: oocyst excretion and viability patterns in experimentally infected lambs. Bukhari Z, et al. **Epidemiol Infect** 1997 Aug;119(1):105–8

Prevalence and seasonal activity of Ixodes ricinus (Acari:Ixodidae) on domestic ruminants of the Basque country, Spain. Moreno JA, et al. **Exp Appl Acarol** 1997 Jan;21(1):41–8

The seasonal occurrence of ticks (Acari: Ixodidae) on sheep and in the field in the Judean area of Israel. Yeruham I, et al. **Exp Appl Acarol** 1996 Jan;20(1):47–56

Environmental and genetic effects on the asymmetry phenotype: Diazinon resistance in the Australian sheep blowfly, Lucilia cuprina. Freebairn K, et al. **Genetics** 1996 Sep;144(1):229–39

The effect of infection with the abomasal nematode, Haemonchus contortus, on the avoidance behaviour of sheep in a motivational-choice test. Adams DB, et al. **Int J Parasitol** 1997 Jun;27(6):665–73

The likelihood of detecting differences between groups of sheep following deliberate infection with Ostertagia circumcincta. Stear MJ, et al. **Int J Parasitol** 1996 Jun; 26(6):657–60

Sheep and goat lines of Teladorsagia circumcincta (Nematoda): from allozyme to morphological identification. Gasnier N, et al. **J Parasitol** 1997 Jun; 83(3):527–9

Ixodid ticks infesting rodents and sheep in diverse biotopes of southern India. Saxena VK. **J Parasitol** 1997 Aug; 83(4):766–7

Sarcocystis mihoensis n. sp. from sheep in Japan. Saito M, et al. **J Vet Med Sci** 1997 Feb;59(2):103–6

The effect of host nutrition on itch mite, Psorergates ovis, populations and fleece derangement in sheep. Johnson PW. **Med Vet Entomol** 1996 Apr;10(2):121–8

How hosts control worms [letter] Stear MJ, et al. **Nature** 1997 Sep 4;389(6646):27

Seasonal dynamics of the Karoo paralysis tick (Ixodes rubicundus): a comparative study on Merino and Dorper sheep. Fourie LJ, et al. **Onderstepoort J Vet Res** 1996 Dec; 63(4):273–6

Spatial and temporal variations in the commencement of seasonal activity in the Karoo paralysis tick, Ixodes rubicundis. Fourie LJ, et al. **Onderstepoort J Vet Res** 1996 Dec;63(4):305–8

Heterophile antibodies to chicken erythrocytes in sheep

infected with Trypanosoma congolense. Joshua RA, et al. **Onderstepoort J Vet Res** 1996 Sep;63(3):253–8

Local immune response to experimental Fasciola hepatica infection in sheep. Chauvin A, et al. **Parasite** 1996 Sep; 3(3):209–15

Regulation of egg production, worm burden, worm length and worm fecundity by host responses in sheep infected with Ostertagia circumcincta. Stear MJ, et al. **Parasite Immunol** 1995 Dec;17(12):643–52

Evidence for the existence of a sheep and a goat line of Teladorsagia circumcincta (Nematoda). Gasnier N, et al. **Parasitol Res** 1996;82(6):546–50

Differences in a ribosomal DNA sequence of lungworm species (Nematoda:Dictyocaulidae) from fallow deer, cattle, sheep and donkeys. Epe C, et al. **Res Vet Sci** 1997 Jan–Feb;62(1):17–21

Susceptibility and reactivity of sheep to Trichinella spiralis infection. Pajerský A, et al. **Vet Med (Praha)** 1996 Aug; 41(8):233–40

Epidemiology of nematodosis in Romney lambs selectively bred for resistance or susceptibility to nematode infection. Bisset SA, et al. **Vet Parasitol** 1997 Jul 1;70(4):255–69

The repeatability of faecal egg counts in Polish Wrzosówka sheep. Doligalska M, et al. **Vet Parasitol** 1997 Jul 1; 70(4):241–6

Infestation of sheep dung by nematophagous fungi and implications for the control of free-living stages of gastro–intestinal nematodes. Hay FS, et al. **Vet Parasitol** 1997 Jul 1;70(4):247–54

Persistence of immunity of Nematodirus battus infection in lambs. Israf DA, et al. **Vet Parasitol** 1997 Jul 15;71(1):39–52

How long before resistance makes it impossible to control some field strains of Haemonchus contortus in South Africa with any of the modern anthelmintics? van Wyk JA, et al. **Vet Parasitol** 1997 Jun;70(1–3):111–22

Insecticide resistance and EU policy [letter; comment] Coles GC. **Vet Rec** 1996 Dec 7;139(23):576. Comment on: Vet Rec 1996 Nov 2;139(18):451.

A case control study of blowfly strike in lambs. French NP, et al. **Vet Rec** 1996 Oct 19;139(16):384–8

[Mast cells and eosinophils of the respiratory mucosa of sheep with Oestrus ovis (Linné, 1761) infection] Nguyen VK, et al. **Parasite** 1996 Sep;3(3):217–21 (Eng. Abstr.) **(Fre)**

[Evaluation of the sensitivity of the Woo test for the detection of Trypanosoma vivax] Desquesnes M, et al. **Rev Elev Med Vet Pays Trop** 1996;49(4):315–21 (Eng. Abstr.) **(Fre)**

[Serological prevalence of Oestrus ovis infestation in Burkina Faso: evaluation using the ELISA technique] Ouattara L, et al. **Rev Elev Med Vet Pays Trop** 1996;49(3):219–21 (Eng. Abstr.) **(Fre)**

PATHOLOGY

The effects of allopurinol on the ultrastructure of ischaemic and reperfused large intestine of sheep. Ahmadinejad M, et al. **Aust Vet J** 1996 Aug;74(2):135–9

The pathology of ovine paratuberculosis: gross and histological changes in the intestine and other tissues. Clarke CJ, et al. **J Comp Pathol** 1996 May;114(4):419–37

Histopathological changes in the lymphoid tissues of sheep exposed to the bovine immunodeficiency-like virus. Jacobs RM, et al. **J Comp Pathol** 1996 Jan;114(1):23–30

Description and classification of different types of lesion associated with natural paratuberculosis infection in sheep. Pérez V, et al. **J Comp Pathol** 1996 Feb;114(2):107–122

Comparison of detergent and protease enzyme combinations for the detection of scrapie-associated fibrils from the central nervous system of sheep naturally affected with scrapie. Stack MJ, et al. **J Comp Pathol** 1997 Feb; 116(2):181–9

Skin tumours in cattle and sheep after freeze- or heat-branding. Yeruham I, et al. **J Comp Pathol** 1996 Jan; 114(1):101–6

Langerhans cells in the development of skin cancer: a qualitative and quantitative comparison of cell markers in normal, acanthotic and neoplastic ovine skin. Townsend WL, et al. **Pathology** 1997 Feb;29(1):42–50

Accumulation of leucocytes and cytokines in the lactating ovine udder during mastitis due to Staphylococcus aureus and Escherichia coli. Persson-Waller K, et al. **Res Vet Sci** 1997 Jan–Feb;62(1):63–6

A retrospective study of clinical and laboratory characteristics of ovine footrot. Liu D, et al. **Vet Microbiol** 1994 Dec;42(4):373–81

Experimental neosporosis in pregnant ewes and their offspring. McAllister MM, et al. **Vet Pathol** 1996 Nov; 33(6):647–55

Immunolocalisation of the prion protein (PrP) in the brains of sheep with scrapie. Foster JD, et al. **Vet Rec** 1996 Nov 23;139(21):512–5

Detection of BSE infectivity in brain and spleen of experimentally infected sheep. Foster JD, et al. **Vet Rec** 1996 Jun 1;138(22):546–8

Pathological study of experimentally induced bovine respiratory syncytial viral infection in lambs. Masot AJ, et al. **Zentralbl Veterinarmed [B]** 1996 Jun;43(4):233–43

[Etiologic and pathologic study of respiratory disease in lambs from intensive breeding facilities in southern Spain] Hervás J, et al. **Zentralbl Veterinarmed [B]** 1996 Jun; 43(4):221–31 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Assessment of acute pain in farm animals using behavioral and physiological measurements. Molony V, et al. **J Anim Sci** 1997 Jan;75(1):266–72

Operant analysis of chronic locoweed intoxication in sheep. Pfister JA, et al. **J Anim Sci** 1996 Nov;74(11):2622–32

Effect of ewe ovine lentivirus infection on ewe and lamb productivity. Keen JE, et al. **Prev Vet Med** 1997 May; 30(2):155–69

Effects of hypocalcaemia on blood flow to the ovaries of the sheep. Jonsson NN, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):281–7

[Comparative physiopathology of Oestrus ovis (Linne 1761) myiasis in man and animals] Dorchies P. **Bull Acad Natl Med** 1997 Apr;181(4):673–83; discussion 683–4 (28 ref.) (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Can Johne's disease be eradicated from sheep in Australia? de Lisle GW. **Aust Vet J** 1997 May;75(5):336

Vaccines for bluetongue. Murray PK, et al. **Aust Vet J** 1996 Jun;73(6):207–10 (33 ref.)

Effects of two pasture systems on faecal nematode egg counts in breeding ewes. Saul GR. **Aust Vet J** 1996 Aug; 74(2):154–5

Field trials of a formulation containing moxidectin and 6 in 1 vaccines for sheep. Schwartzkoff CL, et al. **Aust Vet J** 1996 Sep;74(3):225–7

Effectiveness of alpha-tocopherol and selenium supplements in preventing lupinosis-associated myopathy in sheep. Smith GM, et al. **Aust Vet J** 1997 May;75(5):341–8

Effect of adjuvants on antibody responses of sheep immunised with recombinant pili from Dichelobacter nodosus. Walduck AK, et al. **Aust Vet J** 1996 Dec;74(6):451–5

Nucleic acid vaccination of sheep: Use in combination with a conventional adjuvanted vaccine against Taenia ovis. Rothel JS, et al. **Immunol Cell Biol** 1997 Feb;75(1):41–6

The preventive effect of the fungus Duddingtonia flagrans on trichostrongyle infections of lambs on pasture. Githigia SM, et al. **Int J Parasitol** 1997 Aug;27(8):931–9

Controlling internal parasites in grazing ruminants without recourse to anthelmintics: approaches, experiences and prospects. Niezen JH, et al. **Int J Parasitol** 1996 Aug–Sep; 26(8–9):983–92 (35 ref.)

Drug-abbreviated infections and development of immunity against Trichostrongylus colubriformis in sheep. Stankiewicz M, et al. **Int J Parasitol** 1996 Jan;26(1):97–103

Control of blowfly strike in sheep: current strategies and future prospects. Tellam RL, et al. **Int J Parasitol** 1997 Mar;27(3):261–73 (99 ref.)

Vaccination schedules to raise antibody concentrations against epsilon-toxin of Clostridium perfringens in ewes and their triplet lambs. de la Rosa C, et al. **J Anim Sci** 1997 Sep;75(9):2328–34

Meat toughening does not occur when rigor shortening is prevented. Koohmaraie M, et al. **J Anim Sci** 1996 Dec; 74(12):2935–42

Overberg Research Projects. VIII. The productivity of Merino ewes subjected to different internal parasite control programmes in the winter rainfall region of South Africa. Louw JP, et al. **J S Afr Vet Assoc** 1990 Dec;61(4):163–7

The epidemiology and control of nematode parasites and Oestrus ovis in the winter rainfall area [letter; comment] Reinecke RK. **J S Afr Vet Assoc** 1990 Dec;61(4):148–9; discussion 149–50. Comment on: J S Afr Vet Assoc 1990 Sep;61(3):136–40.

Attempted protection of bighorn sheep (Ovis canadensis) from pneumonia using a nonlethal cytotoxic strain of Pasteurella haemolytica, biotype A, serotype. Foreyt WJ, et al. **J Wildl Dis** 1996 Apr;32(2):315–21

Immune responses associated with protection in sheep vaccinated with a recombinant antigen from Taenia ovis. Rothel JS, et al. **Parasite Immunol** 1996 Apr;18(4):201–8

Sequential nucleic acid and recombinant adenovirus vaccination induces host-protective immune responses against Taenia ovis infection in sheep. Rothel JS, et al. **Parasite Immunol** 1997 May;19(5):221–7

A review of the use of B. melitensis Rev 1 vaccine in adult sheep and goats. Blasco JM. **Prev Vet Med** 1997 Aug; 31(3–4):275–83 (37 ref.)

Metoclopramide and (or) cimetidine administration to sheep fed tall fescue. Rankins DL Jr. **Vet Hum Toxicol** 1996 Jun; 38(3):173–6

Worm control practices on sheep farms in Denmark and implications for the development of anthelmintic resistance. Maingi N, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):39–52

A novel dip formulation of a synthetic pyrethroid (SP) for the control of blowfly myiasis of sheep. O'Brien DJ, et al. **Vet Parasitol** 1997 Apr;69(1–2):145–50

Effect of tsetse control on trypanosome prevalence in livestock: problems of experimental design and statistical interpretation--a case study in northern Côte d'Ivoire. Rowlands GJ, et al. **Vet Parasitol** 1996 Jun;63(3–4):199–214

Effect of cobalt supplementation on serum vitamin B12 levels, weight gain and survival rate in lambs grazing cobalt-deficient pastures. Vellema P, et al. **Vet Q** 1997 Mar; 19(1):1–5

Use of a live chlamydial vaccine to prevent ovine enzootic abortion. Chalmers WS, et al. **Vet Rec** 1997 Jul 19; 141(3):63–7

Nematode control practices and anthelmintic resistance on British sheep farms. Coles GC. **Vet Rec** 1997 Jul 26; 141(4):91–3

Control of sheep scab [letter] Coles GC. **Vet Rec** 1997 Jul 5;141(1):26

Legislation on sheep scab [letter] Coles GC. **Vet Rec** 1997 Feb 1;140(5):135

Virulent foot rot in sheep [letter] Harwood DG, et al. **Vet Rec** 1997 Jul 19;141(3):83

Reducing perinatal mortality in lambs [letter; comment] [see comments] Lester WA. **Vet Rec** 1997 Feb 1;140(5):136. Comment on: Vet Rec 1996 Nov 9;139(19):455–6. Comment in: Vet Rec 1997 Mar 15;140(11):292.

Disease risk from "fox middens' [letter] Milne EM, et al. **Vet Rec** 1997 Feb 1;140(5):135–6

Caseous lymphadenitis: an increasing cause for concern [letter] [see comments] Rizvi S, et al. **Vet Rec** 1997 May 31;140(22):586–7. Comment in: Vet Rec 1997 Jun 7;140(23):611.

Control of sheep scab [letter] Taylor KC. **Vet Rec** 1997 Jul 5;141(1):26

Control of sheep scab (Psoroptes ovis) by a single prophylactic injection of moxidectin. Williams HG, et al. **Vet Rec** 1996 Dec 14;139(24):598–9

[Value of an antiparasitic treatment against Strongyloidea and Coccidia in Djallonke ewes at lambing] Hounzangbe-Adote MS, et al. **Rev Elev Med Vet Pays Trop** 1996;49(2):150–6 (Eng. Abstr.) **(Fre)**

[Genetic aspects of sheep resistance to gastrointestinal nematode infections] Doligalska M. **Wiad Parazytol** 1995; 41(4):405–11 (42 ref.) (Eng. Abstr.) **(Pol)**

RADIOGRAPHY

What is your diagnosis? Lumbrosacral luxation in a ram. Klapprich H, et al. **J Am Vet Med Assoc** 1997 Mar 1; 210(5):623–4

Computed tomography and treatment of chronic temporomandibular joint arthritis in a sheep. A case study. Warmerdam EP, et al. **Vet Q** 1996;18 Suppl 2:S94–6

SURGERY

Prepubic urethrostomy for relief of urethral obstruction in a sheep and a goat. Stone WC, et al. **J Am Vet Med Assoc** 1997 Apr 1;210(7):939–41

Evaluation of extradural xylazine injection for caesarean operation in ovine dystocia cases. Scott PR, et al. **Vet J** 1997 Jul;154(1):63–7

Computed tomography and treatment of chronic temporomandibular joint arthritis in a sheep. A case study. Warmerdam EP, et al. **Vet Q** 1996;18 Suppl 2:S94–6

THERAPY

Combating hypothermia, including recommendations for the use of oat bags. Dyson D, et al. **Can Vet J** 1997 Aug; 38(8):517–8

TRANSMISSION

Drainage a factor in anthrax outbreak [news] **Aust Vet J** 1997 May;75(5):319

Gestational psittacosis in a Montana sheep rancher. Jorgensen DM. **Emerg Infect Dis** 1997 Apr–Jun;3(2):191–4

BSE link prompts German vote on sheep [news] **Nature** 1996 Oct 31;383(6603):753

Transmission of paratuberculosis. Sweeney RW. **Vet Clin North Am Food Anim Pract** 1996 Jul;12(2):305–12 (35 ref.)

Transmission of Brucella melitensis from sheep to lambs. Grilló MJ, et al. **Vet Rec** 1997 Jun 7;140(23):602–5

Natural transmission of orf virus from clinically normal ewes to orf-naive sheep. Nettleton PF, et al. **Vet Rec** 1996 Oct 12;139(15):364–6

Eperythrozoon ovis infection in a commercial flock of sheep. Brun-Hansen H, et al. **Zentralbl Veterinarmed [B]** 1997 Jul; 44(5):295–9

VIROLOGY

Ovine fetal malformations induced by in utero inoculation with Main Drain, San Angelo, and LaCrosse viruses. Edwards JF, et al. **Am J Trop Med Hyg** 1997 Feb; 56(2):171–6

Variations in lentiviral gene expression in monocyte-derived macrophages from naturally infected sheep. Chebloune Y, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2037–51

PCR-based detection and partial characterization of a retrovirus associated with contagious intranasal tumors of sheep and goats. Cousens C, et al. **J Virol** 1996 Nov; 70(11):7580–3

Experimental infection of three Nigerian breeds of sheep with the Zinga strain of the Rift Valley Fever virus. Olaleye OD, et al. **Rev Elev Med Vet Pays Trop** 1996;49(1):6–16

Retrovirus-associated neoplasms of the respiratory system of sheep and goats. Ovine pulmonary carcinoma and enzootic nasal tumor. DeMartini JC, et al. **Vet Clin North Am Food Anim Pract** 1997 Mar;13(1):55–70 (73 ref.)

Antigens of bovine respiratory syncytial virus in peripheral blood lymphocytes of experimentally infected lambs. Sharma AK, et al. **Vet Immunol Immunopathol** 1996 Mar; 50(1–2):93–104

Detection of ovine herpesvirus 2 in Kenyan sheep by

SHEEP DISEASES

polymerase chain reaction. Mirangi PK, et al. **Vet Rec** 1997 Aug 16;141(7):176–7

SHEEPPOX VIRUS see **CAPRIPOXVIRUS**

SHELLFISH

see related
CLAMS
CRABS
CRAYFISH
LOBSTERS
MUSSELS
OYSTERS
SHRIMP

Capsaicin and cajun claw syndrome [letter] Dooley DP, et al. **Am Fam Physician** 1996 Nov 1;54(6):1890

The antithrombotic effects of recombinant human soluble thrombomodulin (rhsTM) on tissue factor–induced disseminated intravascular coagulation in crab–eating monkeys (Macaca fascicularis). Mohri M, et al. **Blood Coagul Fibrinolysis** 1997 Jul;8(5):274–83

Occupational protein contact dermatitis in a fishmonger. Garcia–Abujeta JL, et al. **Contact Dermatitis** 1997 Mar; 36(3):163

Production of chitinase from shellfish waste by Pseudomonas aeruginosa K–187. Wang SL, et al. **Proc Natl Sci Counc Repub China B** 1997 Apr;21(2):71–8

Quarantine of aquatic animals in Australia. Doyle KA, et al. **Rev Sci Tech** 1996 Jun;15(2):659–73 (25 ref.)

International trade in live molluscs: perspective from the Americas. Elston RA. **Rev Sci Tech** 1996 Jun;15(2):483–90 (6 ref.)

Preparation and applications of the International Aquatic Animal Health Code and Diagnostic Manual for Aquatic Animal Diseases of the Office International des Epizooties. Håstein T. **Rev Sci Tech** 1996 Jun;15(2):723–31 (4 ref.)

Importation of aquaculture seedlings to Japan. Wakabayashi H. **Rev Sci Tech** 1996 Jun;15(2):409–22 (17 ref.)

Raw shellfish consumption and warning labels: results from the 1993 Texas Behavioral Risk Factor Surveillance System (BRFSS) survey. Timbo BB, et al. **Tex Med** 1996 Nov; 92(11):52–6

Development and preliminary validation of a microtiter plate–based receptor binding assay for paralytic shellfish poisoning toxins. Doucette GJ, et al. **Toxicon** 1997 May; 35(5):625–36

[Some examples of introductions and transfers of mollusks] Grizel H. **Rev Sci Tech** 1996 Jun;15(2):401–8 (11 ref.) (Eng. Abstr.) **(Fre)**

[International trade in bivalve mollusks and the current situation in France and in Europe] Le Borgne Y. **Rev Sci Tech** 1996 Jun;15(2):491–8 (6 ref.) (Eng. Abstr.) **(Fre)**

[International trade in living penaeid shrimp between countries in the Pacific and the Atlantic areas and in Europe] Michel A. **Rev Sci Tech** 1996 Jun;15(2):499–515 (35 ref.) (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Failure of cooking to prevent shellfish–associated viral gastroenteritis. McDonnell S, et al. **Arch Intern Med** 1997 Jan 13;157(1):111–6

Contact urticaria from Loligo japonica. Valsecchi R, et al. **Contact Dermatitis** 1996 Dec;35(6):367–8

Exercise–induced anaphylaxis related to cuttlefish intake. Caffarelli C, et al. **Eur J Pediatr** 1996 Dec;155(12):1025–6

ANALYSIS

Analysis of metals in blue crabs, Callinectes sapidus, from two Connecticut estuaries. Jop KM, et al. **Bull Environ Contam Toxicol** 1997 Feb;58(2):311–7

Lipid, protein, and calorie content of different Atlantic and Mediterranean fish, shellfish, and molluscs commonly eaten in the south of Spain. Soriguer F, et al. **Eur J Epidemiol** 1997 Jun;13(4):451–63

Comparison of enzyme immunoassay and mouse bioassay for determining paralytic shellfish poisoning toxins in shellfish. Usleber E, et al. **Food Addit Contam** 1997 Feb–Mar; 14(2):193–8

Comparison of a protein phosphatase inhibition assay, HPLC assay and enzyme–linked immunosorbent assay with the mouse bioassay for the detection of diarrhetic shellfish poisoning toxins in European shellfish. Núñez PE, et al. **Int J Food Microbiol** 1997 Apr 29;36(1):39–48

TCDD residues in fish and shellfish from U.S. waterways. Firestone D, et al. **J AOAC Int** 1996 Sep–Oct;79(5):1174–83

Determination of decarbamoyl saxitoxin and its analogues in shellfish by prechromatographic oxidation and liquid chromatography with fluorescence detection. Lawrence JF, et al. **J AOAC Int** 1996 Sep–Oct;79(5):1111–5

Comparison of mouse bioassay and sodium channel cytotoxicity assay for detecting paralytic shellfish poisoning toxins in shellfish extracts. Truman P, et al. **J AOAC Int** 1996 Sep–Oct;79(5):1130–3

Fluorimetric determination of diarrhetic shellfish toxins in scallops and mussels by high–performance liquid chromatography. Akasaka K, et al. **J Chromatogr A** 1996 Apr 5;729(1–2):381–6

[Annual daily intakes of Hg, PCB and arsenic from fish and shellfish and comparative survey of their residue levels in fish by body weight] Ikarashi A, et al. **Eisei Shikenjo Hokoku** 1996;(114):43–7 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Distribution of Vibrio vulnificus phage in oyster tissues and other estuarine habitats. DePaola A, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2464–7

Evidence for production of paralytic shellfish toxins by bacteria associated with Alexandrium spp. (Dinophyta) in culture. Gallacher S, et al. **Appl Environ Microbiol** 1997 Jan;63(1):239–45

Incidence of Listeria spp. in tropical fish. Jeyasekaran G, et al. **Int J Food Microbiol** 1996 Aug;31(1–3):333–40

Evidence that mortality from Vibrio vulnificus infection results from single strains among heterogeneous populations in shellfish. Jackson JK, et al. **J Clin Microbiol** 1997 Aug;35(8):2098–101

Vibrio vulnificus infections associated with eating raw oysters--Los Angeles, 1996. **MMWR Morb Mortal Wkly Rep** 1996 Jul 26;45(29):621–4

[Epidemiology of toxic and infectious risk related to shellfish consumption] Desenclos JC. **Rev Epidemiol Sante Publique** 1996 Oct;44(5):437–54 (106 ref.) (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Evidence for production of paralytic shellfish toxins by bacteria associated with Alexandrium spp. (Dinophyta) in culture. Gallacher S, et al. **Appl Environ Microbiol** 1997 Jan;63(1):239–45

Occurrence of tetrodotoxin in Alexandrium tamarense, a causative dinoflagellate of paralytic shellfish poisoning. Kodama M, et al. **Toxicon** 1996 Oct;34(10):1101–5

[Endemic area of paragonimiasis in Vietnam] Queuche F, et al. **Sante** 1997 May–Jun;7(3):155–9 (Eng. Abstr.) **(Fre)**

POISONING

A fluorescent microplate assay for diarrheic shellfish toxins. Vieytes MR, et al. **Anal Biochem** 1997 Jun 1;248(2):258–64

Health effects associated with algal toxins from seafood. Aune T. **Arch Toxicol Suppl** 1997;19:389–97 (25 ref.)

An outbreak of diarrhetic shellfish poisoning. **Commun Dis Rep CDR Wkly** 1997 Jul 11;7(28):247

Poisonings: food, fish, shellfish. Mines D, et al. **Emerg Med Clin North Am** 1997 Feb;15(1):157–77 (65 ref.)

First European case of gastroenteritis and bacteremia due to Vibrio hollisae. Gras–Rouzet S, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):864–6 (13 ref.)

Development of a manganese dioxide solid–phase reactor for oxidation of toxins associated with paralytic shellfish poisoning. Lawrence JF, et al. **J Chromatogr A** 1996 Dec 6;755(2):227–33

Prevention of Vibrio vulnificus infections. Assessment of regulatory educational strategies. Mouzin E, et al. **JAMA** 1997 Aug 20;278(7):576–8

Simultaneous occurrence of diarrhetic and paralytic shellfish poisoning toxins in Spanish mussels in 1993. Gago–Martinez A, et al. **Nat Toxins** 1996;4(2):72–9

Paralytic and diarrhoetic shellfish poisoning from Spanish mussels. Roy DN. **Natl Med J India** 1997 Jan–Feb; 10(1):25–6

Development of a protein phosphatase–based assay for the detection of phosphatase inhibitors in crude whole cell and animal extracts. Honkanen RE, et al. **Toxicon** 1996 Nov–Dec;34(11–12):1385–92

Study on neurotoxic shellfish poisoning involving the oyster, Crassostrea gigas, in New Zealand. Ishida H, et al. **Toxicon** 1996 Sep;34(9):1050–3

Effect of cooking on the concentration of toxins associated with paralytic shellfish poison in lobster hepatopancreas. Lawrence JF, et al. **Toxicon** 1994 Jan;32(1):57–64

Suitability of the MTT–based cytotoxicity assay to detect okadaic acid contamination of mussels. Tubaro A, et al. **Toxicon** 1996 Sep;34(9):965–74

[Epidemiology of toxic and infectious risk related to shellfish consumption] Desenclos JC. **Rev Epidemiol Sante Publique** 1996 Oct;44(5):437–54 (106 ref.) (Eng. Abstr.) **(Fre)**

STANDARDS

The effect of using different levels of shrimp meal in broiler diets. Rosenfeld DJ, et al. **Poult Sci** 1997 Apr;76(4):581–7

TOXICITY

Toxin production of Alexandrium minutum (Dinophyceae) from the Bay of Plenty, New Zealand. Chang FH, et al. **Toxicon** 1997 Mar;35(3):393–409

VIROLOGY

Detection of hepatitis A virus RNA in oyster meat. Cromeans TL, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2460–3

Distribution of Vibrio vulnificus phage in oyster tissues and other estuarine habitats. DePaola A, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2464–7

Detection and analysis of a small round–structured virus strain in oysters implicated in an outbreak of acute gastroenteritis. Le Guyader F, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4268–72

Hepatitis A outbreak in New South Wales. **Commun Dis Intell** 1997 Feb 20;21(4):46

Identification of a new genogroup of aquareovirus by RNA–RNA hybridization. Subramanian K, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1385–8

New molecular methods for the detection of hepatitis A and Norwalk viruses in shellfish. Romalde JL. **Microbiologia** 1996 Dec;12(4):547–56 (39 ref.)

SHELTERED WORKSHOPS

see related
EMPLOYMENT, SUPPORTED

STANDARDS

Effectiveness of treatment elements in a residential–work therapy program for veterans with severe substance abuse. Rosenheck R, et al. **Psychiatr Serv** 1997 Jul;48(7):928–35

SHERMAN ANTITRUST ACT see **ANTITRUST LAWS**

SHIATSU see **ACUPRESSURE**

SHIATZU see **ACUPRESSURE**

SHIGELLA

see related
DYSENTERY, BACILLARY

The contribution of nitric oxide to endotoxin–induced ocular inflammation: interaction with sensory nerve fibres. Wang ZY, et al. **Br J Pharmacol** 1996 Jul;118(6):1537–43

Drug resistance and plasmid profile of Shigella organisms from different outbreaks in Trinidad and Tobago in 1994. Orrett FA. **East Afr Med J** 1997 Mar;74(3):143–6

Prevalence of shigellosis in the U.S.: consistency with dose–response information. Crockett CS, et al. **Int J Food Microbiol** 1996 Jun;30(1–2):87–99

Investigation of ribosome binding by the Shiga toxin A1 subunit, using competition and site–directed mutagenesis. Skinner LM, et al. **J Bacteriol** 1997 Feb;179(4):1368–74

Immunomagnetic separation and PCR detection show Shigellae to be common faecal agents in children from urban marginal communities of Costa Rica. Achí R, et al. **J Infect** 1996 May;32(3):211–8

An investigation into the possible links between shigellosis and hepatitis A and public water supply disconnections. Fewtrell L, et al. **Public Health** 1997 May;111(3):179–81

Attenuated bacteria as a DNA delivery vehicle for DNA–mediated immunization. Sizemore DR, et al. **Vaccine** 1997 Jun;15(8):804–7

CLASSIFICATION

Shigella serogroups identified from adult diarrhoeal out–patients in Addis Ababa, Ethiopia: antibiotic resistance and plasmid profile analysis. Mache A, et al. **East Afr Med J** 1997 Mar;74(3):179–82

DRUG EFFECTS

Antimicrobial resistance in fecal flora: longitudinal community–based surveillance of children from urban Mexico. Calva JJ, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1699–702

Antibiotic resistance of Shigella spp., Salmonella spp., and Yersinia spp. isolated in Quebec. Gaudreau C, et al. **Can Commun Dis Rep** 1997 Apr 15;23(8):57–9 **(Eng, Fre)**

Antibiotic resistance pattern of Vibrio cholerae and Shigella causing diarrhoea outbreaks in the eastern Africa region: 1994–1996 [see comments] Materu SF, et al. **East Afr Med J** 1997 Mar;74(3):193–7 (18 ref.). Comment in: East Afr Med J 1997 Mar;74(3):121–3.

Antibiotic resistance in Shigella and Salmonella in a region of Lithuania. Jensen G, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):872–6

Etiology of bloody diarrhea in Bolivian children: implications for empiric therapy. Bolivian Dysentery Study Group. Townes JM, et al. **J Infect Dis** 1997 Jun;175(6):1527–30

[The comparative aspects of the behavior of antimicrobial agents against 1299 Shigella strains isolated in the years 1977, 1986 and 1995] Lucinescu S, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan–Jun; 42(1–2):39–44 **(Rum)**

[The antibiotic and chemotherapeutic resistance of Shigella strains isolated in the Microbiology Laboratory of I.P.S.M.P. Neamț in 1991–1995] Păltineanu R, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan–Jun; 42(1–2):33–8 **(Rum)**

GENETICS

Cloning and characterization of the region III flagellar operons of the four Shigella subgroups: genetic defects that cause loss of flagella of Shigella boydii and Shigella sonnei. Al Mamun AA, et al. **J Bacteriol** 1997 Jul;179(14):4493–500

IMMUNOLOGY

Clinical trials of Shigella vaccines in Israel. Cohen D, et al. **Adv Exp Med Biol** 1996;397:159–67 (27 ref.)

Detection of antibodies to Shigella lipopolysaccharide in urine after natural Shigella infection or vaccination. Cohen D, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):451–5

Detection of virulent Shigella and enteroinvasive Escherichia coli by induction of the 43 kDa invasion plasmid antigen, ipaC. Shamlal R, et al. **FEMS Immunol Med Microbiol** 1997 Feb;17(2):73–8

Safety and immunogenicity of investigational Shigella conjugate vaccines in Israeli volunteers. Cohen D, et al. **Infect Immun** 1996 Oct;64(10):4074–7

A standard immunoglobulin preparation produced from bovine colostra shows antibody reactivity and neutralization activity against Shiga-like toxins and EHEC-hemolysin of Escherichia coli O157:H7. Lissner R, et al. **Infection** 1996 Sep–Oct;24(5):378–83

Shigellosis: from molecular pathogenesis of infection to protective immunity and vaccine development. Sansonetti P, et al. **Res Immunol** 1996 Oct–Dec;147(8–9):595–602 (61 ref.)

Mucosal immune responses to intestinal bacterial pathogens. Bloom PD, et al. **Semin Gastrointest Dis** 1996 Jul; 7(3):151–66 (125 ref.)

Vaccine research and development. New strategies for accelerating Shigella vaccine development. **Wkly Epidemiol Rec** 1997 Mar 14;72(11):73–9 **(Eng, Fre)**

ISOLATION & PURIFICATION

A simple polymerase chain reaction technique to detect and differentiate Shigella and enteroinvasive Escherichia coli in human feces. Houng HS, et al. **Diagn Microbiol Infect Dis** 1997 May;28(1):19–25

Shigella isolates in stool. Pearce P, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):173–5

Identification of enteroinvasive Escherichia coli and Shigella strains in pediatric patients by an IpaC-specific enzyme-linked immunosorbent assay. Pal T, et al. **J Clin Microbiol** 1997 Jul;35(7):1757–60

Detection of enterotoxigenic Escherichia coli, Shigella and Campylobacter spp. by multiplex PCR assay. Oyofo BA, et al. **J Diarrhoeal Dis Res** 1996 Sep;14(3):207–10

Etiology of bloody diarrhea in Bolivian children: implications for empiric therapy. Bolivian Dysentery Study Group. Townes JM, et al. **J Infect Dis** 1997 Jun;175(6):1527–30

Aetiology of acute diarrhoea in hospitalized children in Hong Kong. Biswas R, et al. **Trop Med Int Health** 1996 Oct; 1(5):679–83

[Molecular biology detection and antibiotic sensitivities of Shigella spp. and entero-invasive Escherichia coli (EIEC) in patients returning from the tropics] Altwegg M, et al. **Schweiz Rundsch Med Prax** 1997 Feb 25;86(9):348–51 (Eng. Abstr.) **(Ger)**

[Enterobacteria of the genera Salmonella, Shigella and Yersinia with an etiological role in acute diarrheal disease] Vaida T, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun;41(1–2):33–6 (Eng. Abstr.) **(Rum)**

METABOLISM

[Self-inhibiting N-glycosidase activity of shigella toxin] Polesskaia AN, et al. **Mol Biol (Mosk)** 1997 May–Jun; 31(3):528–35 **(Rus)**

PATHOGENICITY

Invasion and the pathogenesis of Shigella infections. Parsot C, et al. **Curr Top Microbiol Immunol** 1996;209:25–42 (113 ref.)

Shigellosis: from molecular pathogenesis of infection to protective immunity and vaccine development. Sansonetti P, et al. **Res Immunol** 1996 Oct–Dec;147(8–9):595–602 (61 ref.)

[The pathogenicity factors of Shigella studied as the bases for the design of diagnostic and prophylactic preparations] Bondarenko VM. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun;(3):29–34 (71 ref.) (Eng. Abstr.) **(Rus)**

[Molecular biology in the pathogenesis of Shigella sp. and enteroinvasive Escherichia coli] Rico-Martínez MG. **Rev Latinoam Microbiol** 1995 Oct–Dec;37(4):367–85 (125 ref.) (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Characterization of Shigella type 1 fimbriae: expression, FimA sequence, and phase variation. Snellings NJ, et al. **Infect Immun** 1997 Jun;65(6):2462–7

SHIGELLA BOYDII

[Water-borne disease outbreaks and investigation of epidemics (letter; comment)] Pac Sa MR, et al. **Enferm Infecc Microbiol Clin** 1997 Mar;15(3):167. Comment on: Enferm Infecc Microbiol Clin 1996 Mar;14(3):155–9. **(Spa)**

ENZYMOLOGY

Cloning, purification, and characterization of the Shigella boydii dGTP triphosphohydrolase. Quirk S, et al. **J Biol Chem** 1997 Jan 3;272(1):332–6

METABOLISM

Colicin U, a novel colicin produced by Shigella boydii. Smajs D, et al. **J Bacteriol** 1997 Aug;179(15):4919–28

SHIGELLA DYSENTERIAE

Epidemic dysentery caused by Shigella dysenteriae type 1: a sentinel site surveillance of antimicrobial resistance patterns in Burundi. Engels D, et al. **Bull World Health Organ** 1995;73(6):787–91

One-dose treatment with pefloxacin for infection due to multidrug-resistant Shigella dysenteriae type 1 in Burundi. Gendrel D, et al. **Clin Infect Dis** 1997 Jan;24(1):83

Shiga toxin induces medullary tubular injury in isolated perfused rat kidneys. Shibolet O, et al. **FEMS Immunol Med Microbiol** 1997 May;18(1):55–60

Reactive arthritis associated with Shigella dysenteriae type 1 infection. Mazumder RN, et al. **J Diarrhoeal Dis Res** 1997 Mar;15(1):21–4

An outbreak of Shiga bacillus dysentery in KwaZulu/Natal, South Africa. Pillay DG, et al. **J Infect** 1997 Mar; 34(2):107–11

Azithromycin prophylaxis prevents epidemic dysentery. Shanks GD, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):316

[Bacterial dysentery in 1995] Stypułkowska-Misiurewicz H, et al. **Przegl Epidemiol** 1997;51(1–2):89–95 **(Pol)**

CHEMISTRY

Purification of a cell-associated hemagglutinin from Shigella dysenteriae type 1. Guhathakurta B, et al. **FEMS Immunol Med Microbiol** 1996 Jun;14(2–3):63–6

CLASSIFICATION

[Shigella dysenteriae strains possessing a new serovar isolated from imported diarrheal cases in Japan] Matsushita S, et al. **Kansenshogaku Zasshi** 1997 May;71(5):412–6 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Emergence of nalidixic acid resistant Shigella dysenteriae type 1 in Thailand: an outbreak associated with consumption of a coconut milk dessert. Hoge CW, et al. **Int J Epidemiol** 1995 Dec;24(6):1228–32

Multiple drug-resistant Shigella dysenteriae type 1 in Rajbari district, Bangladesh. Jahan Y, et al. **J Diarrhoeal Dis Res** 1997 Mar;15(1):17–20

GENETICS

Assembly of a strong promoter following IS911 circularization and the role of circles in transposition. Ton-Hoang B, et al. **EMBO J** 1997 Jun 2;16(11):3357–71

Examination of diarrheagenicity of cytolethal distending toxin: suckling mouse response to the products of the cdtABC genes of Shigella dysenteriae. Okuda J, et al. **Infect Immun** 1997 Feb;65(2):428–33

Influence of different rol gene products on the chain length of Shigella dysenteriae type 1 lipopolysaccharide O antigen expressed by Shigella flexneri carrier strains. Klee SR, et al. **J Bacteriol** 1997 Apr;179(7):2421–5

The site-specific recombinase encoded by pinD in Shigella dysenteriae is due to the presence of a defective Mu prophage. Tominaga A. **Microbiology** 1997 Jun;143 (Pt 6):2057–63

Molecular typing of multi-drug resistant Shigella dysenteriae type 1 by plasmid analysis and pulsed-field gel electrophoresis. Kariuki S, et al. **Trans R Soc Trop Med Hyg** 1996 Nov–Dec;90(6):712–4

IMMUNOLOGY

Semiquantitative estimation of Shigella antigen-specific antibodies: correlation with disease severity during shigellosis. Islam D, et al. **APMIS** 1996 Jul–Aug; 104(7–8):563–74

Construction and characterization of a live attenuated vaccine candidate against Shigella dysenteriae type 1. Klee SR, et al. **Infect Immun** 1997 Jun;65(6):2112–8

Production, characterization and immunodiagnostic application of a monoclonal antibody to Shiga toxin. Qadri F, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):95–100

Construction and characterization of genetically-marked bivalent anti-Shigella dysenteriae 1 and anti-Shigella flexneri Y live vaccine candidates. Klee SR, et al. **Microb Pathog** 1997 Jun;22(6):363–76

Antibody mediated inhibition of adhesion of Shigella dysenteriae 1 to guinea pig colonic epithelial cells in vitro. Guhathakurta B, et al. **Microbios** 1996;87(353):249–56

Of four murine, anti-Shigella dysenteriae type 1 O-polysaccharide antibodies, three employ V-genes that differ extensively from those of the fourth. Miller CE, et al. **Mol Immunol** 1996 Nov;33(16):1217–22

ISOLATION & PURIFICATION

An outbreak of Shigella dysenteriae type 2 among laboratory workers due to intentional food contamination. Kolavic SA, et al. **JAMA** 1997 Aug 6;278(5):396–8

PATHOGENICITY

Lipopolysaccharide-specific antibodies in plasma and stools of children with Shigella-associated leukemoid reaction and hemolytic-uremic syndrome. Azim T, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):701–5

Murine splenocyte proliferation by porin of Shigella dysenteriae type 1 and inhibition of bacterial invasion of HeLa cell by anti-porin antibody. Roy S, et al. **FEMS Microbiol Lett** 1996 Jul 15;141(1):25–9

Absorption of macronutrients from a calorie-dense diet in malnourished children during acute shigellosis. Mazumder RN, et al. **J Pediatr Gastroenterol Nutr** 1996 Jul;23(1):24–8

[The role of Shigella dysenteriae toxin formation at different stages in the forming of the cellular immune response in experimental animals] Nikolaeva TN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Mar–Apr; (2):6–10 (Eng. Abstr.) **(Rus)**

SHIGELLA FLEXNERI

Association of self-limited cytomegalovirus colitis and shigellosis in an immunocompetent patient. Chau TN, et al. **Eur J Gastroenterol Hepatol** 1996 Aug;8(8):819–22

Human monocyte-derived macrophages infected with virulent Shigella flexneri in vitro undergo a rapid cytolytic event similar to oncosis but not apoptosis. Fernandez-Prada CM, et al. **Infect Immun** 1997 Apr;65(4):1486–96

In vivo apoptosis in Shigella flexneri infections. Zychlinsky A, et al. **Infect Immun** 1996 Dec;64(12):5357–65

[Fulminant encephalopathy due to Shigella flexneri] Dieu-Osika S, et al. **Arch Pediatr** 1996 Oct;3(10):993–6 (Eng. Abstr.) **(Fre)**

[Rhabdomyolysis during Shigella flexneri shigellosis (letter)] Paris JF, et al. **Med Trop (Mars)** 1996;56(4):411 **(Fre)**

[Bacterial dysentery in 1995] Stypułkowska-Misiurewicz H, et al. **Przegl Epidemiol** 1997;51(1–2):89–95 **(Pol)**

[Methodological approaches to the study and prevention of shigellosis among the troops] Perepelkin VS. **Voen Med Zh** 1997 Apr;318(4):42–6, 80 (Eng. Abstr.) **(Rus)**

[The pathogenetic and clinico-diagnostic significance of changes in leukocyte migration activity in patients with shigellosis and salmonellosis] Cherkasov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):34–7 (Eng. Abstr.) **(Rus)**

[The epidemiological characteristics of Sonne and Flexner dysentery in St. Petersburg in 1953–1994] Poplavskaia ZhV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):49–53 (Eng. Abstr.) **(Rus)**

[Shigellosis in Moscow: new trends in the epidemiological process and their social determinants] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jan–Feb; (1):31–5 (Eng. Abstr.) **(Rus)**

[The enterosorption treatment of patients with acute intestinal infections and chronic colitis with diarrhea] Andreichyn MA, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):147–51 (Eng. Abstr.) **(Ukr)**

CHEMISTRY

Actin and cell pathogenesis. Higley S, et al. **Curr Opin Cell Biol** 1997 Feb;9(1):62–9 (63 ref.)

Effect of shigella enterotoxin 1 (ShET1) on rabbit intestine in vitro and in vivo. Fasano A, et al. **Gut** 1997 Apr; 40(4):505–11

CLASSIFICATION

Cross-reactivity of Shigella flexneri serotype 2a O antigen antibodies following immunization or infection. Van De Verg LL, et al. **Vaccine** 1996 Aug;14(11):1062–8

CYTOLOGY

Vinculin proteolysis unmasks an ActA homolog for actin-based Shigella motility. Laine RO, et al. **J Cell Biol** 1997 Sep 22;138(6):1255–64

DRUG EFFECTS

A study of the optimum bacteriostatic action of a synthetic medicine on bacteria using a microcalorimetric method. Liu Y, et al. **Chin J Biotechnol** 1996;12(1):61–5

The molecular epidemiology of trimethoprim-sulphamethoxazole- resistance of Shigella flexneri in the Trakya region of Turkey. Otkun M, et al. **New Microbiol** 1997 Jul;20(3):227–31

Failure of cefotaxime therapy in a child with shigellosis. Hoffman JA, et al. **Pediatr Infect Dis J** 1996 Feb; 15(2):175–6

Development of resistance in Shigella flexneri isolates obtained in the past 20 years in eastern Romania. Poiata A, et al. **Roum Arch Microbiol Immunol** 1996 Jul–Sep; 55(3):253–61

ENZYMOLOGY

Transferable hyperproduction of TEM-1 beta-lactamase in Shigella flexneri due to a point mutation in the pribnow box. Siu LK, et al. **Antimicrob Agents Chemother** 1997 Feb; 41(2):468–70

Active site peptide of beta-lactamase from Shigella flexneri UCSF-129. Campos M, et al. **Microbios** 1997;90(362):17–22

GENETICS

Virulence gene deletion frequency is increased in Shigella flexneri following conjugation, transduction, and transformation. Porter ME, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):163–72

Evolutionary perspective on a composite Shigella flexneri 2a virulence plasmid-borne locus comprising three distinct

genetic elements. Rajakumar K, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):13–20

A Shigella flexneri invasion plasmid gene, ipgH, with homology to IS629 and sequences encoding bacterial sugar phosphate transport proteins. Venkatesan MM, et al. **Gene** 1996 Oct 10;175(1–2):23–7

Functional analysis of the Shigella flexneri IpaC invasin by insertional mutagenesis. Bârzu S, et al. **Infect Immun** 1997 May;65(5):1599–605

Expression of aerobactin genes by Shigella flexneri during extracellular and intracellular growth. Headley V, et al. **Infect Immun** 1997 Feb;65(2):818–21

Virulence plasmid instability in Shigella flexneri 2a is induced by virulence gene expression. Schuch R, et al. **Infect Immun** 1997 Sep;65(9):3686–92

The modified nucleoside 2-methylthio-N6-isopentenyladenosine in tRNA of Shigella flexneri is required for expression of virulence genes. Durand JM, et al. **J Bacteriol** 1997 Sep; 179(18):5777–82

Plasmid maintenance functions of the large virulence plasmid of Shigella flexneri. Radnedge L, et al. **J Bacteriol** 1997 Jun;179(11):3670–5

Identification of a Shigella flexneri criR gene increasing ipa genes expression: a novel member of response regulators of the two-component signal transduction family. Qi MS, et al. **Jpn J Med Sci Biol** 1996 Oct–Dec;49(5–6):219–39

Towards a vaccine candidate against Shigella dysenteriae 1: expression of the Shiga toxin B-subunit in an attenuated Shigella flexneri aroD carrier strain. Tzschaschel BD, et al. **Microb Pathog** 1996 Oct;21(4):277–88

The nadB gene of Salmonella typhimurium complements the nicotinic acid auxotrophy of Shigella flexneri. Mantis NJ, et al. **Mol Gen Genet** 1996 Oct 16;252(5):626–9

SopA, the outer membrane protease responsible for polar localization of IcsA in Shigella flexneri. Egile C, et al. **Mol Microbiol** 1997 Mar;23(5):1063–73

Effect of mutations in Shigella flexneri chromosomal and plasmid-encoded lipopolysaccharide genes on invasion and serum resistance. Hong M, et al. **Mol Microbiol** 1997 May; 24(4):779–91

Identification of sigma S-dependent genes associated with the stationary-phase acid-resistance phenotype of Shigella flexneri. Waterman SR, et al. **Mol Microbiol** 1996 Sep; 21(5):925–40

Presence of strA-strB gene within a streptomycin-resistance operon in a clinical isolate of Shigella flexneri. Shaw PC, et al. **Pathology** 1996 Nov;28(4):356–8

Identification of a chromosomal Shigella flexneri multi-antibiotic resistance locus which shares sequence and organizational similarity with the resistance region of the plasmid NR1. Rajakumar K, et al. **Plasmid** 1997; 37(3):159–68

Characterization of the stable maintenance of the Shigella flexneri plasmid pHS-2. Réhel N, et al. **Plasmid** 1996 Nov; 36(3):183–90

Construction and characterization of virG (icsA)-deleted Escherichia coli K12-Shigella flexneri hybrid vaccine strains. Alexander WA, et al. **Vaccine** 1996 Aug; 14(11):1053–61

GROWTH & DEVELOPMENT

Expression of aerobactin genes by Shigella flexneri during extracellular and intracellular growth. Headley V, et al. **Infect Immun** 1997 Feb;65(2):818–21

Secretion of Shigella flexneri Ipa invasins on contact with epithelial cells and subsequent entry of the bacterium into cells are growth stage dependent. Mounier J, et al. **Infect Immun** 1997 Feb;65(2):774–82

Computational neural networks for predictive microbiology. II. Application to microbial growth. Hajmeer MN, et al. **Int J Food Microbiol** 1997 Jan;34(1):51–66

Growth of Shigella flexneri in foods: comparison of observed and predicted growth kinetics parameters. Zaika LL, et al. **Int J Food Microbiol** 1996 Sep;32(1–2):91–102

Effect of Saccharomyces boulardii against experimental oral infection with Salmonella typhimurium and Shigella flexneri in conventional and gnotobiotic mice. Rodrigues AC, et al. **J Appl Bacteriol** 1996 Sep;81(3):251–6

IMMUNOLOGY

Semiquantitative estimation of Shigella antigen-specific antibodies: correlation with disease severity during shigellosis. Islam D, et al. **APMIS** 1996 Jul–Aug; 104(7–8):563–74

Specificity of monoclonal antibodies elicited by mucosal infection of BALB/c mice with virulent Shigella flexneri 2a. Hartman AB, et al. **Clin Diagn Lab Immunol** 1996 Sep; 3(5):584–9

Antibody response of monkeys to invasion plasmid antigen D after infection with Shigella spp. Oaks EV, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):242–5

Safety, immunogenicity, and transmissibility in humans of CVD 1203, a live oral Shigella flexneri 2a vaccine candidate attenuated by deletions in aroA and virG. Kotloff KL, et al. **Infect Immun** 1996 Nov;64(11):4542–8

Induction of tumor necrosis factor and nitric oxide by Shigella strains isolated from patients with or without neurologic manifestations. Mor M, et al. **Isr J Med Sci** 1996 Dec;32(12):1271–5

Characterization and quantitative analysis of serum IgG class and subclass response to Shigella sonnei and Shigella flexneri 2a lipopolysaccharide following natural Shigella infection. Robin G, et al. **J Infect Dis** 1997 May; 175(5):1128–33

Construction and characterization of genetically-marked bivalent anti-Shigella dysenteriae 1 and anti-Shigella flexneri Y live vaccine candidates. Klee SR, et al. **Microb Pathog** 1997 Jun;22(6):363–76

Serological identification of Shigella flexneri strains by the coagglutination reaction. Ciudin L, et al. **Roum Arch Microbiol Immunol** 1995 Oct–Dec; 54(4):295–311

Cross-reactivity of Shigella flexneri serotype 2a O antigen antibodies following immunization or infection. Van De Verg LL, et al. **Vaccine** 1996 Aug;14(11):1062–8

[Expression of S.sonnei form I antigen gene and V.cholerae toxin B subunit gene in S.flexneri 2a strain and investigation of their immunoprotective response in mice] Qian F, et al. **I Chuan Hsueh Pao** 1996;23(4):322–8 (Eng. Abstr.) **(Chi)**

[Bacterial antigenic structure of Shigella flexneri serotype 1B and its 3B serotype mutant and susceptibility to bacterial action of complement in normal bovine serum] Doroszkiewicz W, et al. **Postepy Hig Med Dosw** 1996; 50(5):519–23 (Eng. Abstr.) **(Pol)**

ISOLATION & PURIFICATION

Molecular epidemiology of multiply antibiotic-resistant Shigella flexneri in Fortaleza, Brazil. Lima AA, et al. **J Clin Microbiol** 1997 May;35(5):1061–5

Changing patterns of the prevalence of different Shigella species and their antibiotic susceptibilities in Ankara, Turkey. Ceyhan M, et al. **J Diarrhoeal Dis Res** 1996 Sep; 14(3):187–9

Shigella septicaemia in an infant. Usman J, et al. **JPMA J Pak Med Assoc** 1997 May;47(5):150–1

[Treatment of Flexner's dysentery with ofloxacin] Rakhmanova AG, et al. **Antibiot Khimioter** 1996;41(9):95 (Eng. Abstr.) **(Rus)**

[Morphologic characterization of the contemporary dysentery caused by Shigella flexneri 2A] Tsinzerling VA, et al. **Arkh Patol** 1997 Jan–Feb;59(1):41–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Purification of IpaC, a protein involved in entry of Shigella flexneri into epithelial cells and characterization of its interaction with lipid membranes. De Geyter C, et al. **FEBS Lett** 1997 Jan 3;400(2):149–54

Acid stress responses in enterobacteria. Bearson S, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):173–80 (39 ref.)

Secretion of Shigella flexneri Ipa invasins on contact with epithelial cells and subsequent entry of the bacterium into cells are growth stage dependent. Mounier J, et al. **Infect Immun** 1997 Feb;65(2):774–82

IpaB, a Shigella flexneri invasin, colocalizes with interleukin-1 beta-converting enzyme in the cytoplasm of macrophages. Thirumalai K, et al. **Infect Immun** 1997 Feb; 65(2):787–93

PATHOGENICITY

Construction of a stable and non-resistant bivalent vaccine candidate strain against Shigella flexneri 2a and Shigella sonnei. Rui X, et al. **Chin J Biotechnol** 1996;12(2):89–97

Actin and cell pathogenesis. Higley S, et al. **Curr Opin Cell Biol** 1997 Feb;9(1):62–9 (63 ref.)

Modulation of bacterial entry into epithelial cells by association between vinculin and the Shigella IpaA invasin. Tran Van Nhieu G, et al. **EMBO J** 1997 May 15; 16(10):2717–29

Treatment of HeLa cells with bacterial water extracts inhibits Shigella flexneri invasion. DiNovo BB, et al. **FEMS Immunol Med Microbiol** 1996 Sep;15(2–3):149–58

Virulence gene deletion frequency is increased in Shigella flexneri following conjugation, transduction, and transformation. Porter ME, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):163–72

Evolutionary perspective on a composite Shigella flexneri 2a virulence plasmid-borne locus comprising three distinct genetic elements. Rajakumar K, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):13–20

Functional analysis of the Shigella flexneri IpaC invasin by insertional mutagenesis. Bârzu S, et al. **Infect Immun** 1997 May;65(5):1599–605

Shigella flexneri is trapped in polymorphonuclear leukocyte vacuoles and efficiently killed. Mandic-Mulec I, et al. **Infect Immun** 1997 Jan;65(1):110–5

Virulence plasmid instability in Shigella flexneri 2a is induced by virulence gene expression. Schuch R, et al. **Infect Immun** 1997 Sep;65(9):3686–92

Clinical isolates of Shigella species induce apoptosis in macrophages. Guichon A, et al. **J Infect Dis** 1997 Feb; 175(2):470–3

Effect of O side-chain length and composition on the virulence of Shigella flexneri 2a. Sandlin RC, et al. **Mol Microbiol** 1996 Oct;22(1):63–73

Regulation of O-antigen chain length is required for Shigella flexneri virulence. Van den Bosch L, et al. **Mol Microbiol** 1997 Feb;23(4):765–75

Bacterial entry into epithelial cells: the paradigm of Shigella. Ménard R, et al. **Trends Microbiol** 1996 Jun;4(6):220–6 (50 ref.)

PHYSIOLOGY

Shigella actin-based motility in the absence of vinculin. Goldberg MB. **Cell Motil Cytoskeleton** 1997;37(1):44–53

Soluble invasion plasmid antigen C (IpaC) from Shigella flexneri elicits epithelial cell responses related to pathogen invasion. Marquart ME, et al. **Infect Immun** 1996 Oct; 64(10):4182–7

rho, a small GTP-binding protein, is essential for Shigella invasion of epithelial cells. Watarai M, et al. **J Exp Med** 1997 Jan 20;185(2):281–92

Disruption of IcsP, the major Shigella protease that cleaves IcsA, accelerates actin-based motility. Shere KD, et al. **Mol Microbiol** 1997 Aug;25(3):451–62

Regulation of O-antigen chain length is required for Shigella flexneri virulence. Van den Bosch L, et al. **Mol Microbiol** 1997 Feb;23(4):765–75

[The biological characteristics of Shigella flexneri strains circulating in Saint Petersburg in 1992–1994] Romanenkova NI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec;(6):3–6 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[Ultrastructure of bacterial fimbriae in E. coli and Sh. flexneri] Baroni A. **Boll Ist Sieroter Milan** 1966 May–Jun; 45(5–6):273–8 **(Ita)**

SHIGELLA INFECTIONS see **DYSENTERY, BACILLARY**

SHIGELLA SONNEI

Shigella-induced encephalopathy in an adult. Ferrera PC, et al. **Am J Emerg Med** 1996 Mar;14(2):173–5

An outbreak of Shigella sonnei infection associated with consumption of iceberg lettuce. Frost JA, et al. **Emerg Infect Dis** 1995 Jan–Mar;1(1):26–9

Double-blind vaccine-controlled randomised efficacy trial of an investigational Shigella sonnei conjugate vaccine in young adults. Cohen D, et al. **Lancet** 1997 Jan 18; 349(9046):155–9

[Methodological approaches to the study and prevention of shigellosis among the troops] Perepelkin VS. **Voen Med Zh** 1997 Apr;318(4):42–6, 80 (Eng. Abstr.) **(Rus)**

[The pathogenetic and clinico-diagnostic significance of changes in leukocyte migration activity in patients with shigellosis and salmonellosis] Cherkasov VL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):34–7 (Eng. Abstr.) **(Rus)**

[The action of lactoperoxidase, lactoferrin and lactoglobulin on Shigella sonnei in an in-vivo experiment] Denisova II, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb; (1):66–9 (Eng. Abstr.) **(Rus)**

[The epidemiological characteristics of Sonne and Flexner dysentery in St. Petersburg in 1953–1994] Poplavskaia ZhV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):49–53 (Eng. Abstr.) **(Rus)**

[An outbreak of Sonne dysentery in a children's health-promotion camp] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct; (5):122–3 **(Rus)**

[Epidemiological determinants of the irregular territorial spread of Sonne dysentery] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb;(1):34–7 (Eng. Abstr.) **(Rus)**

[An outbreak of acute intestinal infections in a nursery-kindergarten (2)] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jan–Feb; (1):111–2 **(Rus)**

[Shigellosis in Moscow: new trends in the epidemiological process and their social determinants] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jan–Feb; (1):31–5 (Eng. Abstr.) **(Rus)**

[The enterosorption treatment of patients with acute intestinal infections and chronic colitis with diarrhea] Andreichyn MA, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):147–51 (Eng. Abstr.) **(Ukr)**

[A new sorbent for the treatment of intestinal infections] Rudychenko VF, et al. **Lik Sprava** 1996 Jan–Feb; (1–2):98–100 (Eng. Abstr.) **(Ukr)**

DRUG EFFECTS

Antimicrobial effect of acidified nitrite on gut pathogens: importance of dietary nitrate in host defense. Dykhuizen RS, et al. **Antimicrob Agents Chemother** 1996 Jun; 40(6):1422–5

GENETICS

Characterization of endemic strains of Shigella sonnei by use of plasmid DNA analysis and pulsed-field gel electrophoresis to detect patterns of transmission. Litwin CM, et al. **J Infect Dis** 1997 Apr;175(4):864–70

GROWTH & DEVELOPMENT

[Multiple resistance and lipid peroxidation system of the thermostable Shigella sonnei strains] Shepelev AP, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):69–71 **(Rus)**

IMMUNOLOGY

Antibody response of monkeys to invasion plasmid antigen D after infection with Shigella spp. Oaks EV, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):242–5

Induction of tumor necrosis factor and nitric oxide by Shigella strains isolated from patients with or without neurologic manifestations. Mor M, et al. **Isr J Med Sci** 1996 Dec;32(12):1271–5

Characterization and quantitative analysis of serum IgG class and subclass response to Shigella sonnei and Shigella flexneri 2a lipopolysaccharide following natural Shigella infection. Robin G, et al. **J Infect Dis** 1997 May; 175(5):1128–33

[Expression of S.sonnei form I antigen gene and V.cholerae toxin B subunit gene in S.flexneri 2a strain and investigation of their immunoprotective response in mice] Qian F, et al. **I Chuan Hsueh Pao** 1996;23(4):322–8 (Eng. Abstr.) **(Chi)**

[The inductive immunosuppressive activity of the nonspecific lipopolysaccharide fraction of virulent Shigella sonnei] Borisova EV, et al. **Mikrobiol Z** 1997 Jan–Feb;59(1):77–81 (Eng. Abstr.) **(Rus)**

[The immuno-microbiological prediction of a protracted course in Sonne dysentery] Sboichakov VB, et al. **Voen Med Zh** 1997 Apr;318(4):47–50 **(Rus)**

ISOLATION & PURIFICATION

Changing patterns of the prevalence of different Shigella species and their antibiotic susceptibilities in Ankara, Turkey. Ceyhan M, et al. **J Diarrhoeal Dis Res** 1996 Sep; 14(3):187–9

[Sensitivity of XG medium for the isolation of Salmonella, Shigella, and Yersinia (letter)] García-Aguayo JM, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):400–1 **(Spa)**

PATHOGENICITY

Construction of a stable and non-resistant bivalent vaccine candidate strain against Shigella flexneri 2a and Shigella sonnei. Rui X, et al. **Chin J Biotechnol** 1996;12(2):89–97

Clinical isolates of Shigella species induce apoptosis in macrophages. Guichon A, et al. **J Infect Dis** 1997 Feb; 175(2):470–3

[Keratitis caused by Shigella sonnei: a case report. Letter] Pérez Hernández M, et al. **An Esp Pediatr** 1997 Mar; 46(3):311–2 **(Spa)**

SHIITAKE MUSHROOMS see **POLYPORACEAE**

SHIKIMIC ACID

ANALOGS & DERIVATIVES

Evidence for the shikimate-3-phosphate interacting site in the N-terminal domain of 5-enolpyruvyl shikimate-3-phosphate synthase of Bacillus subtilis. Selvapandiyan A, et al. **Biochem Mol Biol Int** 1996 Oct; 40(3):603–10

TOXICITY

Genotoxicity studies of quercetin and shikimate in vivo in the bone marrow of mice and gastric mucosal cells of rats. Ngomuo AJ, et al. **Vet Hum Toxicol** 1996 Jun;38(3):176–80

Cytotoxicity studies of quercetin, shikimate, cyclohexanecarboxylate and ptaquiloside. Ngomuo AJ, et al. **Vet Hum Toxicol** 1996 Feb;38(1):14–8

SHIKIMOL see **SAFROLE**

SHINGLES see **HERPES ZOSTER**

SHIPPING FEVER see **PASTEURELLOSIS, PNEUMONIC**

SHIPPING FEVER VIRUS see **PARAMYXOVIRUS**

SHIPS

A multiple discriminant analysis of vessel accidents. Le Blanc LA, et al. **Accid Anal Prev** 1996 Jul;28(4):501–10

Development of a vibratory white finger prevention program for shipyard workers: an exploratory study. Johnson KL, et al. **Am J Prev Med** 1996 Nov–Dec;12(6):478–81

A shipboard outbreak of tuberculosis in Mississippi and Louisiana, 1993 to 1994 [letter] Penman AD, et al. **Am J Public Health** 1997 Jul;87(7):1234

The incidence of injury in surfboat rowers. Moseley L. **Aust J Sci Med Sport** 1996 Dec;28(4):97–100

Women aboard a major combatant: the U.S.S. Dwight D. Eisenhower experience. Yacavone DW. **Aviat Space Environ Med** 1996 Jun;67(6):589–91

Attitudes towards emotional expression and post-traumatic stress in survivors of the Herald of Free Enterprise disaster. Joseph S, et al. **Br J Clin Psychol** 1997 Feb;36 (Pt 1):133–8

Psychological responses to a marine disaster during a recoil phase: experiences from the Estonia shipwreck. Taiminen TJ, et al. **Br J Med Psychol** 1996 Jun;69 (Pt 2):147–53

Early traumatic stress reactions among Swedish survivors of the m/s Estonia disaster. Eriksson NG, et al. **Br J Psychiatry** 1996 Dec;169(6):713–6

Some aspects of the safety of high speed catamarans. Grainger R. **Bull Inst Marit Trop Med Gdynia** 1996; 47(1–4):61–6

Free-time activities among seafarers on board Finnish cargo ships. Saarni H, et al. **Bull Inst Marit Trop Med Gdynia** 1996;47(1–4):33–43

An outbreak of influenza B among workers on an oil rig. Johnston F, et al. **Commun Dis Intell** 1997 Apr 17;21(8):106

An outbreak of viral gastroenteritis on a cruise ship. McEvoy M, et al. **Commun Dis Rep CDR Rev** 1996 Dec 6; 6(13):R188–92

Skin disorders in ship's engineers exposed to oils and solvents. Svendsen K, et al. **Contact Dermatitis** 1997 Apr; 36(4):216–20

Maritime medicine. Scott J, et al. **Emerg Med Clin North Am** 1997 Feb;15(1):241–9 (10 ref.)

Injuries sustained during major evacuation of the high-speed catamaran St Malo off Jersey. Lockey D, et al. **Injury** 1997 Apr;28(3):187–90

Symptoms, lung and liver function, blood counts, and genotoxic effects in coastal tanker crews. Nilsson R, et al. **Int Arch Occup Environ Health** 1997;69(6):392–8

Influence of occupational accidents and deaths related to lifestyle on mortality among merchant seafarers. Hansen HL, et al. **Int J Epidemiol** 1996 Dec;25(6):1237–43

Is vibration-induced white finger a reversible syndrome if vibration is stopped? Ostman F, et al. **J Hand Surg [Br]** 1996 Dec;21(6):750–2

Marine hitch hikers--the transport of pathogens in ballast water. Murrison AW. **J R Nav Med Serv** 1996 Spring; 82(1):40–3 (34 ref.)

Physical performance of elite New Zealand Olympic class sailors. Legg SJ, et al. **J Sports Med Phys Fitness** 1997 Mar;37(1):41–9

Shigellosis on an Italian cruise ship [letter] Gikas A, et al. **Lancet** 1996 Dec 7;348(9041):1593–4

A 20-yr longitudinal study of Olympic oarsmen. Hagerman FC, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1150–6

Injuries associated with personal watercraft. An emerging epidemic in need of legislative action. Tyler BC, et al. **N C Med J** 1997 Jul–Aug;58(4):284–7

[Complex biomedical studies of the body under conditions of extreme marine factors] Sachanska T. **Probl Khig** 1996; 21:67–73 (Eng. Abstr.) **(Bul)**

["Radiomedical advice service" (letter; comment)] Kirk U, et al. **Ugeskr Laeger** 1996 Nov 18;158(47):6784–5. Comment on: Ugeskr Laeger 1996 Sep 9;158(37):5166–8. **(Dan)**

[Noise exposure in a dry dock] Atzeri S, et al. **Med Lav** 1997 Jan–Feb;88(1):37–48 (Eng. Abstr.) **(Ita)**

[Service onboard MV Anastasis--an inspiring professional challenge] Pettersen B. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1946–8 **(Nor)**

[Allergic dermatoses caused by paint and varnish materials in water transport workers] Lobanovskiĭ GI, et al. **Med Tr Prom Ekol** 1996;(11):31–3 (Eng. Abstr.) **(Rus)**

[The information-search system on industrial ecology of transport] Shafran LM, et al. **Med Tr Prom Ekol** 1997; (1):19–23 (Eng. Abstr.) **(Rus)**

[Sociomedical aspects of injuries of the sailors of the fish fleet] Shapovalov KA. **Probl Sotsialnoi Gig Istor Med** 1995 Jul–Aug;(4):17–25 (Eng. Abstr.) **(Rus)**

[The Ersta hospital's help during the Estonia disaster must not be forgotten (letter)] Berglund L. **Lakartidningen** 1997 May 28;94(22):2069–70 **(Swe)**

[Medical efforts during the Estonian ship wreck] Kulling P, et al. **Lakartidningen** 1997 Mar 26;94(13):1189–91 **(Swe)**

HISTORY

Hospital ship doctrine in the United States Navy: the Halsey effect on scoop- and-sail tactics. Lane DA. **Mil Med** 1997 Jun;162(6):388–95

STANDARDS

Cruise ship accommodations for passengers with physical limitations due to disability or age. Gallagher JM, et al. **Am J Occup Ther** 1996 Sep;50(8):685–7

SHIVERING

The effects of warming intravenous fluids on intraoperative hypothermia and postoperative shivering during prolonged abdominal surgery. Camus Y, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):779–82

Effects of diabetes and food deprivation on shivering activity during progressive hypothermia in the rat. Kilgour RD, et al. **Comp Biochem Physiol A Physiol** 1996 Jun; 114(2):159–65

A young man with fever, chills, and abdominal pain. De Masi R, et al. **Hosp Pract (Off Ed)** 1997 Mar 15;32(3):51–2

High fever and shaking chills in a heroin addict. Fred HL, et al. **Hosp Pract (Off Ed)** 1997 Mar 15;32(3):224, 226

[The effect of vasodilator on the occurrence of postoperative shivering and the fall of core temperature] Kabutan K, et al. **Masui** 1997 May;46(5):669–73 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Tramadol in the treatment of postanesthetic shivering. de Witte J, et al. **Acta Anaesthesiol Scand** 1997 Apr; 41(4):506–10

The minimum effective doses of pethidine and doxapram in the treatment of post-anaesthetic shivering. Wrench IJ, et al. **Anaesthesia** 1997 Jan;52(1):32–6

Late intraoperative clonidine administration prevents postanesthetic shivering after total intravenous or volatile anesthesia. Horn EP, et al. **Anesth Analg** 1997 Mar; 84(3):613–7

Meperidine decreases the shivering threshold twice as much as the vasoconstriction threshold. Kurz A, et al. **Anesthesiology** 1997 May;86(5):1046–54

The effect of opioids on thermoregulatory responses in humans and the special antishivering action of meperidine. Ikeda T, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:792–8

Magnesium sulfate stops postanesthetic shivering. Kizilirmak S, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:799–806

Isoflurane produces marked and nonlinear decreases in the vasoconstriction and shivering thresholds. Kurz A, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:778–85

Efficacy of nefopam for the prevention and treatment of amphotericin B-induced shivering. Rosa G, et al. **Arch Intern Med** 1997 Jul 28;157(14):1589–92

A randomized, double-blind, placebo-controlled trial comparing pethidine to metamizol for treatment of post-anaesthetic shivering. Monsó A, et al. **Br J Clin Pharmacol** 1996 Sep;42(3):307–11

Clonidine at induction reduces shivering after general anaesthesia. Buggy D, et al. **Can J Anaesth** 1997 Mar; 44(3):263–7

Clonidine decreases vasoconstriction and shivering thresholds, without affecting the sweating threshold. Nicolaou G, et al. **Can J Anaesth** 1997 Jun;44(6):636–42

[Comparative study of pethidine and clonidine for prevention of postoperative shivering. A prospective, randomized, placebo-controlled double-blind study] Grundmann U, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jan;32(1):36–42 (Eng. Abstr.) **(Ger)**

GENETICS

Genetic studies of a new mutant strain showing shivering in the mouse. Guo X, et al. **Lab Anim** 1996 Oct;30(4):365–8

PHYSIOLOGY

Heat production during cold water immersion: the role of shivering and exercise in the development of hypothermia. Waag T, et al. **Arctic Med Res** 1995;54 Suppl 2:60–4

Ultrasonic analysis of tremorine and cold tremor activity in unanesthetized rats. Young CW, et al. **Chin J Physiol** 1997 Jun 30;40(2):85–90

Metabolic changes associated with sustained 48-hr shivering thermogenesis in the newborn pig. Berthon D, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Aug; 114(4):327–35

Substrate utilisation during exercise and shivering. Tipton MJ, et al. **Eur J Appl Physiol** 1997;76(1):103–8

The clinical significance of rigors in febrile children. Tal Y, et al. **Eur J Pediatr** 1997 Jun;156(6):457–9

The effects of forced-air warming on postbypass central and skin temperatures and shivering activity. Mort TC, et al. **J Clin Anesth** 1996 Aug;8(5):361–70

Electromyographic (EMG) study of cold shivering in the chronic spinal dog. Naito A, et al. **Jpn J Physiol** 1997 Feb; 47(1):81–6

[The initiation of cold shivering during the local heating of the rat hypothalamus under immersion hypothermia] Arokina NK, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct–Nov;82(10–11):108–14 (Eng. Abstr.) **(Rus)**

SHOCK

7th Congress of the European Shock Society. Manchester, United Kingdom, April 18–20, 1996. Abstracts. **Shock** 1996; 5 Suppl:1–24

19th annual conference on shock. Grand Traverse Village, Michigan, June 2–5, 1996. Abstracts. **Shock** 1996;5 Suppl 2:1–75

CHOQUE 96: 2nd Brazilian Shock Congress, SALT 7: 7th International Conference on Hypertonic Resuscitation. Sao Paulo, Brazil, 11–14 November 1996. Abstracts. **Shock** 1996;6 Suppl:1–38

[Guidelines for diagnosis and treatment of congestive heart failure and shock (DRG 127)] **Rev Esp Cardiol** 1997;50 Suppl 1:1–51 **(Spa)**

BLOOD

Circulatory resuscitation with left ventricular assist device support reduces interleukins 6 and 8 levels. Goldstein DJ, et al. **Ann Thorac Surg** 1997 Apr;63(4):971–4

Interleukin-6 and its soluble receptor during acute meningococcal infections: effect of plasma or whole blood exchange. Frieling JT, et al. **Crit Care Med** 1996 Nov; 24(11):1801–5

CHEMICALLY INDUCED

Role of leukocyte beta 2-integrin in PAF-induced shock and intestinal injury. Sun XM, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 1):G184–90

Role of nitric oxide in recombinant tumor necrosis factor-alpha-induced circulatory shock: a study in patients treated for cancer with isolated limb perfusion. Zwaveling JH, et al. **Crit Care Med** 1996 Nov;24(11):1806–10

An unusual cause for collapse in a patient with arthritis. Heath KJ, et al. **Intensive Care Med** 1996 Oct;22(10):1096–7

SHOCK

CLASSIFICATION

Duration of antibiotic treatment in surgical infections of the abdomen. The role of shock. Bergstein JM. **Eur J Surg Suppl** 1996;(576):16–8

COMPLICATIONS

"Black esophagus": a rare complication of shock. Haviv YS, et al. **Am J Gastroenterol** 1996 Nov;91(11):2432–4

Interleukin–6 and its soluble receptor during acute meningococcal infections: effect of plasma or whole blood exchange. Frieling JT, et al. **Crit Care Med** 1996 Nov; 24(11):1801–5

Operative laparoscopy for management of ectopic pregnancy in patients with hypovolemic shock. Soriano D, et al. **J Am Assoc Gynecol Laparosc** 1997 May;4(3):363–7

Influence of severe underlying pathology and hypovolemic shock on the development of acute pancreatitis in children. Berney T, et al. **J Pediatr Surg** 1996 Sep;31(9):1256–61

Irreversible shock revisited: mechanical support of the cardiovascular system: a case report and review. Lisagor P, et al. **J Trauma** 1997 Jun;42(6):1182–6 (28 ref.)

Hypoxic–ischaemic injury of the spinal cord in systemic shock: MRI. Liou RJ, et al. **Neuroradiology** 1996 May;38 Suppl 1:S181–3

Should continuous renal replacement therapy be used for 'non–renal' indications in critically ill patients with shock? van Bommel EF. **Resuscitation** 1997 Jan;33(3):257–70 (124 ref.)

[Post–shock optic neuropathy] Kesler A, et al. **Harefuah** 1996 Nov 1;131(9):305–7, 374 (Eng. Abstr.) **(Heb)**

[Shock in obstetrics. Institutional experience] Bonfante Ramírez E, et al. **Ginecol Obstet Mex** 1997 Apr;65:137–40 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Effect of alcohol on the utility of base deficit in trauma. Davis JW, et al. **J Trauma** 1997 Sep;43(3):507–10

[Emergency medicine for the practitioner: shock] Schaller MD, et al. **Rev Med Suisse Romande** 1997 Apr;117(4):321–4 **(Fre)**

[The clinical manifestations and treatment of shock in acute intestinal infections] Brodov LE, et al. **Ter Arkh** 1996; 68(11):27–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Significance of TNF in hemorrhage–related hemodynamic alterations, organ injury, and mortality in rats. Bahrami S, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2219–26

Anisodamine restores bowel circulation in burn shock. Sheng CY, et al. **Burns** 1997 Mar;23(2):142–6

Use of dopamine in the ICU. Hope, hype, belief and facts. Girbes AR, et al. **Clin Exp Hypertens** 1997 Jan–Feb; 19(1–2):191–9 (20 ref.)

Liposomal ATP protects the liver from injury during shock. Konno H, et al. **Eur Surg Res** 1996;28(2):140–5

The effect of methylprednisolone on myocardial beta–adrenergic receptors and cardiovascular function in shock patients. Saito T, et al. **Shock** 1996 Apr;5(4):241–6

ENZYMOLOGY

Effects of tyrphostins and genistein on the circulatory failure and organ dysfunction caused by endotoxin in the rat: a possible role for protein tyrosine kinase. Ruetten H, et al. **Br J Pharmacol** 1997 Sep;122(1):59–70

Circulatory failure induced by 35 GHz microwave heating: effects of chronic nitric oxide synthesis inhibition. Ryan KL, et al. **Shock** 1997 Jan;7(1):70–6

ETIOLOGY

Profound hypothermia [letter] Stoneham MD. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):112

Spontaneous rupture of a liver cell adenoma. Angunawela P, et al. **Ceylon Med J** 1997 Mar;42(1):42–3

Factors related to the failure of endoscopic injection therapy for bleeding gastric ulcer. Brullet E, et al. **Gut** 1996 Aug; 39(2):155–8

Neurological disturbances and hyperdynamic shock in a patient with esophagocoloplasty. Campos L, et al. **Intensive Care Med** 1997 May;23(5):590–2

Spontaneous splenic rupture: an unusual cause of hypovolaemia. Birkinshaw R, et al. **J Accid Emerg Med** 1996 Jul;13(4):289–91

Cardiovascular collapse during anesthesia in a patient with preoperatively discontinued chronic MAO inhibitor therapy. Sprung J, et al. **J Clin Anesth** 1996 Dec;8(8):662–5

Hemodynamic significance of pediatric femur fractures. Lynch JM, et al. **J Pediatr Surg** 1996 Oct;31(10):1358–61

Acute hypotension and shock in the hyperkalemic patient on maintenance haemodialysis [letter] Kes P, et al. **Nephron** 1996;72(3):484–6

Shock of unknown origin—think of mastocytosis! Gonera RK, et al. **Neth J Med** 1997 Apr;50(4):165–9

Adolescent female patient with shock unresponsive to usual resuscitative therapy. Ureta–Raroque SS, et al. **Pediatr Emerg Care** 1997 Aug;13(4):274–6

Catastrophic circulatory collapse following re–expansion pulmonary oedema. Gascoigne A, et al. **Resuscitation** 1996 Jun;31(3):265–9

[Pheochromocytoma with hemorrhagic necrosis and rupture with symptoms of acute abdomen and shock] Chlebus M, et al. **Pol Arch Med Wewn** 1996 Jul;96(1):58–61 (Eng. Abstr.) **(Pol)**

[Neuro–fibro–liposarcoma healed by partial surgical intervention complicated by post–transfusional shock] Kuś H, et al. **Pol Merkuriusz Lek** 1996 Nov;1(5):346–7 **(Pol)**

[Progressive abdominal distension and shock following cardiorespiratory arrest] Cabrera Zubizarreta A, et al. **Rev Clin Esp** 1996 Aug;196(8):563–4 **(Spa)**

[The role of the eicosanoids in the development of a postischemic shock reaction] Zhukova AV, et al. **Fiziol Zh** 1996;42(1–2):3–9 (Eng. Abstr.) **(Ukr)**

GENETICS

Heat shock response, heat shock transcription factor and cell aging. Lee YK, et al. **Biol Signals** 1996 May–Jun; 5(3):180–91

IMMUNOLOGY

Complement plays an essential role in shock following intestinal ischaemia in rats. Ikai M, et al. **Clin Exp Immunol** 1996 Oct;106(1):156–9

4th International Congress on the Immune Consequences of Trauma, Shock and Sepsis—Mechanisms and Therapeutic Approaches. Munich, Germany, March 4–8, 1997. Abstracts. **Shock** 1997;7 Suppl:i–xiv, 1–177

METABOLISM

Calcium homeostasis in cardiomyocytes isolated from heat–shocked rats. Cornelussen RN, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1938–46

Increased protein kinase C isoform gamma in the hippocampus of pentylenetetrazol–induced chemoshocked mouse. Chen CC, et al. **Brain Res** 1996 Jun 24;725(1):75–80

Oxygen transport and oxygen metabolism in shock and critical illness. Invasive and noninvasive monitoring of circulatory dysfunction and shock. Shoemaker WC. **Crit Care Clin** 1996 Oct;12(4):939–69 (55 ref.)

Immunocytochemical investigations of the thyroid gland of guinea pig in histamine shock. Danowski J. **Folia Histochem Cytobiol** 1997;35(2):105–6

Intensive venous sampling of adrenocorticotropic hormone in rats with sham or paraventricular nucleus lesions. Boyle LL, et al. **J Endocrinol** 1997 Apr;153(1):159–67

Heat shock induces rapid dephosphorylation of tau in both female and male rats followed by hyperphosphorylation only in female rats: implications for Alzheimer's disease. Papasozomenos SC. **J Neurochem** 1996 Mar;66(3):1140–9

MICROBIOLOGY

Trauma, shock, and gut translocation. Deitch EA, et al. **New Horiz** 1996 May;4(2):289–99 (61 ref.)

PATHOLOGY

The physiology and treatment of shock due to volume loss (trauma), sepsis, or myocardial damage. Lillehei RC, et al. **Clin Neurosurg** 1971;18:387–413

Monocytes and lymphocytes as active participants in the pathogenesis of experimental shock. Altavilla D, et al. **Inflamm Res** 1996 Aug;45(8):398–404

The effect of lesion volume on cerebral vasomotor tone after focal brain injury and shock. Schmoker JD, et al. **J Neurotrauma** 1996 Feb;13(2):67–78

Altered consciousness and shock in a malnourished child. Gingold MK, et al. **Semin Pediatr Neurol** 1996 Sep; 3(3):248–54

Zonal heterogeneity of hepatic injury following shock/resuscitation: relationship of xanthine oxidase activity to localization of neutrophil accumulation and central lobular necrosis. Mayumi T, et al. **Shock** 1996 May; 5(5):324–32

"Have you seen this?" Hypovolemic shock. Levin S, et al. **Toxicol Pathol** 1996 Jul–Aug;24(4):529

[Morphofunctional characteristics of alveolar macrophages in shock traumas] Kharin GM, et al. **Biull Eksp Biol Med** 1996 Nov;122(11):577–81 **(Rus)**

[Role of free radical oxidation in the pathogenesis of acute hepatic necrosis in visceral–ischemic shock] Shneĭvais VB, et al. **Patol Fiziol Eksp Ter** 1996 Apr–Jun;(2):39–43 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

P–selectin–deficient mice are protected from PAF–induced shock, intestinal injury, and lethality. Sun X, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G56–61

A rapid increase in foot tissue temperature predicts cardiovascular collapse during anaphylactic and anaphylactoid reactions. Kotani N, et al. **Anesthesiology** 1997 Sep;87(3):559–68

Effects of hypovolemia on aortic baroreflex control of heart rate in humans. Convertino VA, et al. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):838–43

Heat shock response, heat shock transcription factor and cell aging. Lee YK, et al. **Biol Signals** 1996 May–Jun; 5(3):180–91

Effects of S–ethylisothiourea, a potent inhibitor of nitric oxide synthase, alone or in combination with a nitric oxide donor in splanchnic artery occlusion shock. Squadrito F, et al. **Br J Pharmacol** 1996 Sep;119(1):23–8

Leukocyte integrin very late antigen–4/vascular cell adhesion molecule–1 adhesion pathway in splanchnic artery occlusion shock. Squadrito F, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):153–60

Role of platelet–activating factor on cardiovascular dysfunction in postischemic shock in pigs. Abu–Zidan FM, et al. **Eur Surg Res** 1997;29(2):133–41

Previous heat shock treatment attenuates bicuculline–induced convulsions in rats. Yang RC, et al. **Exp Brain Res** 1996 Feb;108(1):18–22

Comparison of commonly used clinical indicators of hypovolaemia with gastrointestinal tonometry. Hamilton–Davies C, et al. **Intensive Care Med** 1997 Mar; 23(3):276–81

Esophageal PCO2 as a monitor of perfusion failure during hemorrhagic shock. Sato Y, et al. **J Appl Physiol** 1997 Feb; 82(2):558–62

Cardiac preload, splanchnic perfusion, and their relationship during resuscitation in trauma patients. Chang MC, et al. **J Trauma** 1997 Apr;42(4):577–82; discussion 582–4

Diaspirin cross–linked hemoglobin resuscitation improves cerebral perfusion after head injury and shock. Chappell JE, et al. **J Trauma** 1996 Nov;41(5):781–8

Comparison of systemic and renal hemodynamics measured by Doppler ultrasonography in canine experimental hypovolemia. Miyamoto T, et al. **J Vet Med Sci** 1997 May; 59(5):347–52

Renal sodium handling in children with nephrotic relapse: relation to hypovolaemic symptoms. Van de Walle JG, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2202–8

Platelet activating factor and its role in trauma, shock, and sepsis. Ayala A, et al. **New Horiz** 1996 May;4(2):265–75 (91 ref.)

Cell damage after shock. Barber AE, et al. **New Horiz** 1996 May;4(2):161–7 (62 ref.)

Pulmonary capillary pressure and tissue perfusion: clinical implications during resuscitation from shock. Levy MM. **New Horiz** 1996 Nov;4(4):504–18

Endothelial changes after shock and injury. Maier RV, et al. **New Horiz** 1996 May;4(2):211–23 (77 ref.)

Temporal physiologic patterns of shock and circulatory dysfunction based on early descriptions by invasive and noninvasive monitoring. Shoemaker WC. **New Horiz** 1996 May;4(2):300–18

Early physiologic patterns in acute illness and accidents: toward a concept of circulatory dysfunction and shock based on invasive and noninvasive hemodynamic monitoring. Shoemaker WC, et al. **New Horiz** 1996 Nov; 4(4):395–412

What mediates tissue injury after shock? Waxman K. **New Horiz** 1996 May;4(2):151–2

Shock: ischemia, reperfusion, and inflammation. Waxman K. **New Horiz** 1996 May;4(2):153–60 (69 ref.)

Hypoxic alterations in cellular signal transduction in shock and sepsis. West MA, et al. **New Horiz** 1996 May; 4(2):168–78 (89 ref.)

Role of eicosanoids in the postischemic shock development. Zhukova AV, et al. **Pol J Pharmacol** 1996 Jan–Feb; 48(1):23–9

Subcutaneous oxygen and carbon dioxide tensions during head–up tilt–induced central hypovolaemia in humans. Larsen PN, et al. **Scand J Clin Lab Invest** 1996 Feb; 56(1):17–24

Role of nitric oxide in a nonseptic shock model induced by zymosan in the rat. Cuzzocrea S, et al. **Shock** 1997 May; 7(5):351–7

Inhalation injury increases the anastomotic bronchial blood flow in the pouch model of the left ovine lung. Hinder F, et al. **Shock** 1997 Aug;8(2):131–5

The pathophysiological role of peroxynitrite in shock, inflammation, and ischemia–reperfusion injury. Szabó C. **Shock** 1996 Aug;6(2):79–88 (162 ref.)

Absent tachycardia in hypovolaemic shock after cholecystectomy [letter] Khan T, et al. **Singapore Med J** 1996 Jun;37(3):328

[Effect of bombesin(6–14) on the arterial pressure in normal condition and during hypovolemic shock] Mar'ianovich AT, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):372–4 **(Rus)**

PREVENTION & CONTROL

Profound hypothermia [letter] Stoneham MD. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):112

Effects of tyrphostins and genistein on the circulatory failure and organ dysfunction caused by endotoxin in the rat: a possible role for protein tyrosine kinase. Ruetten H, et al. **Br J Pharmacol** 1997 Sep;122(1):59–70

Defective herpes simplex virus vectors expressing the rat brain stress–inducible heat shock protein 72 protect cultured neurons from severe heat shock. Fink SL, et al. **J Neurochem** 1997 Mar;68(3):961–9

PSYCHOLOGY

Memory and the effect of cold shock in the water maze in S100 beta transgenic mice. Roder JK, et al. **Physiol Behav** 1996 Aug;60(2):611–5

SURGERY

[Shock] Okada M. **Ryoikibetsu Shokogun Shirizu** 1996; (12):67–77 (15 ref.) **(Jpn)**

THERAPY

Oxygen desaturation after treatment with inhaled nitric oxide for obstructive shock due to massive pulmonary embolism [letter; comment] Tulleken JE, et al. **Chest** 1997 Jul; 112(1):296–8. Comment on: Chest 1996 Oct;110(4):1041–7.

The physiology and treatment of shock due to volume loss (trauma), sepsis, or myocardial damage. Lillehei RC, et al. **Clin Neurosurg** 1971;18:387–413

Penile intracorporeal infusion--possible access to the systemic circulation. Pressure flow studies in dogs and humans. Gofrit ON, et al. **Eur J Surg** 1997 Jun; 163(6):457–61

MAST 96. Chang AK, et al. **J Emerg Med** 1996 Jul–Aug; 14(4):419–24

Effect of hemodilution with diaspirin cross-linked hemoglobin on intracranial pressure, cerebral perfusion pressure, and fluid requirements after head injury and shock. Chappell JE, et al. **J Neurosurg** 1997 Jan;86(1):131–8

Hypertonic saline: A review of the literature and evaluation of its role in resuscitation of traumatic hypovolaemic shock. Heath KJ. **J R Army Med Corps** 1994 Feb;140(1):37–41 (29 ref.)

Cardiac preload, splanchnic perfusion, and their relationship during resuscitation in trauma patients. Chang MC, et al. **J Trauma** 1997 Apr;42(4):577–82; discussion 582–4

Diaspirin cross-linked hemoglobin resuscitation improves cerebral perfusion after head injury and shock. Chappell JE, et al. **J Trauma** 1996 Nov;41(5):781–8

Administration of recombinant erythropoietin determines increase of peripheral resistances in patients with hypovolemic shock [letter] Allegra A, et al. **Nephron** 1996; 74(2):431–2

Shock in children: the first 60 minutes. Tobias JD. **Pediatr Ann** 1996 Jun;25(6):330–8 (18 ref.)

Adolescent female patient with shock unresponsive to usual resuscitative therapy. Ureta-Raroque SS, et al. **Pediatr Emerg Care** 1997 Aug;13(4):274–6

Course of neurological recovery and cerebral prognostic signs during cardio-pulmonary resuscitation. Jørgensen EO. **Resuscitation** 1997 Aug;35(1):9–16

Prognostic factors to predict outcome following the administration of hypertonic/hyperoncotic solution in hypovolemic patients. Younes RN, et al. **Shock** 1997 Feb; 7(2):79–83

Cephalic vein cutdown: a new approach [letter] Chitkara N, et al. **Trop Doct** 1997 Jul;27(3):192

[Indications and role of albumin for vascular loading in trauma patients and during preoperative period] Sztark F. **Ann Fr Anesth Reanim** 1996;15(4):473–80 (34 ref.) (Eng. Abstr.) **(Fre)**

[Small-volume resuscitation for hypovolemic shock. Concept, experimental and clinical results] Kreimeier U, et al. **Anaesthesist** 1997 Apr;46(4):309–28 (124 ref.) (Eng. Abstr.) **(Ger)**

[Polytrauma management. Preclinical and shock room management] Nerlich M, et al. **Unfallchirurg** 1996 Aug; 99(8):595–606 **(Ger)**

[Shock room management of polytrauma] Frank J, et al. **Zentralbl Chir** 1996;121(11):943–9 (Eng. Abstr.) **(Ger)**

[Experimental study of the effect of the drug desferal and serum against tumor necrosis factor on the course of the infectious process in arenaviral hemorrhagic fever] Ignat'ev GM, et al. **Antibiot Khimioter** 1996 Feb;41(2):30–4 **(Rus)**

ULTRASONOGRAPHY

Diagnostic and therapeutic implications of transesophageal echocardiography in medical ICU patients with unexplained shock, hypoxemia, or suspected endocarditis. Slama MA, et al. **Intensive Care Med** 1996 Sep;22(9):916–22 (24 ref.)

Neonatal radiology casebook. Splenic hematoma as a cause of hypovolemic shock in a very low birth weight neonate. Opalach RM, et al. **J Perinatol** 1996 Jul–Aug;16(4):313–4

[Ultrasound in diagnosis of traumatic intra-abdominal lesions. Value in primary diagnosis in the shock unit] Partik B, et al. **Ultraschall Med** 1997 Feb;18(1):35–8 (Eng. Abstr.) **(Ger)**

VETERINARY

Use of hypertonic saline-dextran solution to resuscitate hypovolemic calves with diarrhea. Constable PD, et al. **Am J Vet Res** 1996 Jan;57(1):97–104

Evaluation of a hypertonic saline-dextran solution for treatment of dogs with shock induced by gastric dilatation-volvulus. Schertel ER, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):226–30

Hypovolaemic shock after anthelmintic treatment of canine angiostrongylosis. Søland J, et al. **J Small Anim Pract** 1996 Dec;37(12):594–6

SHOCK, ANAPHYLACTIC see **ANAPHYLAXIS**

SHOCK, CARDIOGENIC

[Reflections on external circulatory assistance. Apropos of 8 patients treated with the MEDOS system] Villemot JP, et al. **Chirurgie** 1997 Jan;121(9–10):690–5 (Eng. Abstr.) **(Fre)**

[Therapy of cardiogenic shock due to myocardial infarction] Nonogi H. **Nippon Naika Gakkai Zasshi** 1996 Jan 10; 85(1):54–9 (5 ref.) **(Jpn)**

[Definition and diagnostic criteria of cardiogenic shock] Okubo S, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10; 85(1):4–6 (6 ref.) **(Jpn)**

[Cardiogenic shock (editorial)] Sasayama S. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):1–3 **(Jpn)**

[Therapeutic countermeasures for cardiogenic shock in the aged] Yano K. **Nippon Naika Gakkai Zasshi** 1996 Jan 10; 85(1):78–81 (5 ref.) **(Jpn)**

[Cardiogenic shock] Motohara S, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):91–4 (17 ref.) **(Jpn)**

[Anatomo-clinical correlation. Case 3/96 (Instituto do Coração do Hospital das Clínicas-FMUSP)] **Arq Bras Cardiol** 1996 Jul;67(1):31–4 **(Por)**

[Guideline 6. Cardiogenic shock] Navarro-López F, et al. **Rev Esp Cardiol** 1997;50 Suppl 1:37–43 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Circulatory shock in the course of fatal poisoning by ingestion of formalin [letter] Hilbert G, et al. **Intensive Care Med** 1997 Jun;23(6):708

Azathioprine-induced multisystem organ failure and cardiogenic shock. Brown G, et al. **Pharmacotherapy** 1997 Jul–Aug;17(4):815–8

Cardiovascular collapse through non-cholinergic mechanism after intravenous injection of N-methylcarbamate insecticide in rabbits. Futagawa H, et al. **Toxicology** 1997 Feb 28;117(2–3):163–70

5-Fluorouracil-induced severe but reversible cardiogenic shock: a case report. Akhtar SS, et al. **Tumori** 1996 Sep–Oct;82(5):505–7

COMPLICATIONS

Use of c7E3 Fab in conjunction with primary coronary stenting for acute myocardial infarctions complicated by cardiogenic shock. Schultz RD, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):143–8

Does arterial hypotension due to cardiogenic shock in older patients lead to functional oliguria or to acute renal failure? Duraković Z. **Korean J Intern Med** 1997 Jan;12(1):39–44

DIAGNOSIS

[Evaluation of the severity of cardiogenic shock by monitoring of their hemodynamics] Matsuzaki M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):27–32 (5 ref.) **(Jpn)**

[Clinical symptoms of cardiogenic shock and important points in evaluating the severity] Saito M. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):21–6 (10 ref.) **(Jpn)**

[Prognostic evaluation of cardiogenic shock by the severity] Watanabe J, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):44–7 (6 ref.) **(Jpn)**

[Important points in clinical tests for evaluating the severity of patients with cardiogenic shock] Watanabe Y. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):33–7 (5 ref.) **(Jpn)**

[Heart failure in acute myocardial infarct and the importance of hemodynamic monitoring] Kohn R. **Bratisl Lek Listy** 1996 Aug;97(8):479–81 (Eng. Abstr.) **(Slo)**

DRUG THERAPY

Insulin improves heart function and metabolism during non-ischemic cardiogenic shock in awake canines. Kline JA, et al. **Cardiovasc Res** 1997 May;34(2):289–98

[Differential therapy of cardiogenic shock with dopamine/milrinone in comparison with dopamine/dobutamine] Meissner A, et al. **Z Kardiol** 1996 Nov;85(11):839–46 (Eng. Abstr.) **(Ger)**

[High-dose nitroglycerin in cardiogenic shock] Guglina MÉ. **Klin Med (Mosk)** 1997;75(6):27–30 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Remote cocaine use as a likely cause of cardiogenic shock after penetrating trauma. Weicht GT, et al. **Anesthesiology** 1996 Oct;85(4):933–5

Survival following cardiogenic shock caused by acute left main coronary artery total occlusion. A case report and review of the literature. Itoh T, et al. **Angiology** 1997 Feb; 48(2):163–71 (33 ref.)

Magnesium deficiency and cardiogenic shock after cardiopulmonary bypass. Storm W, et al. **Ann Thorac Surg** 1997 Aug;64(2):572–7 (60 ref.)

Mechanical circulatory support for post cardiotomy cardiogenic shock in infants. Ishino K, et al. **ASAIO J** 1996 Sep–Oct;42(5):M735–8

Coronary artery perforation with subepicardial hematoma. Furushima H, et al. **Cathet Cardiovasc Diagn** 1997 May; 41(1):59–61

Cardiac tamponade and cardiogenic shock as a manifestation of all-trans retinoic acid syndrome: an association not previously reported. Larrea L, et al. **Haematologica** 1997 Jul–Aug;82(4):463–4

Emergency aortic valve replacement for critical aortic stenosis. A lifesaving treatment for patients with cardiogenic shock and multiple organ failure. Christ G, et al. **Intensive Care Med** 1997 Mar;23(3):297–300

Preoperative cardiogenic shock related to dynamic obstruction of left ventricular outflow in a patient with acute aortic dissection: diagnosis by transesophageal echocardiography. Canivet JL, et al. **J Cardiothorac Vasc Anesth** 1996 Oct;10(6):781–4

A child with cardiogenic shock and supraventricular tachycardia presenting in normal sinus rhythm. Dharnidharka VR, et al. **Pediatr Emerg Care** 1996 Dec; 12(6):420–1

[Lactic acidosis shock. Report of a clinical case] Venturini E, et al. **Minerva Cardioangiol** 1996 Jul–Aug;44(7–8):365–7 (Eng. Abstr.) **(Ita)**

[Emergency coronary artery bypass in an 84-year-old patient with severe left main disease and cardiogenic shock] Tomioka H, et al. **Kyobu Geka** 1996 Sep;49(10):863–7 (Eng. Abstr.) **(Jpn)**

[Cardiogenic shock due to cardiac tamponade] Kinoshita M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):73–7 (5 ref.) **(Jpn)**

METABOLISM

Nitric oxide and shock. Kilbourn RG, et al. **Dis Mon** 1997 May;43(5):277–348 (317 ref.)

[Humoral and metabolic changes in cardiogenic shock] Ogawa H, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):12–5 (5 ref.) **(Jpn)**

MORTALITY

Impact of an aggressive invasive catheterization and revascularization strategy on mortality in patients with cardiogenic shock in the Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries (GUSTO-I) trial. An observational study. Berger PB, et al. **Circulation** 1997 Jul 1;96(1):122–7

Thrombolysis plus aortic counterpulsation: improved survival in patients who present to community hospitals with cardiogenic shock. Kovack PJ, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1454–8

NURSING

Clinical snapshot. Cardiogenic shock. De Jong MJ. **Am J Nurs** 1997 Jun;97(6):40–1

PATHOLOGY

[Case 6/95 (Instituto do Corac-ao do Hospital das Cl-inicas-FMUSP) (clinical conference)] **Arq Bras Cardiol** 1995 Dec;65(6):501–7 **(Por)**

PHYSIOPATHOLOGY

Biventricular bypass with oxygenation for postcardiotomy ventricular failure. Kodera K, et al. **Artif Organs** 1996 Jun; 20(6):724–7

The role of pulsatility in end-organ microcirculation after cardiogenic shock. Orime Y, et al. **ASAIO J** 1996 Sep–Oct; 42(5):M724–9

Vasopressin deficiency contributes to the vasodilation of septic shock [see comments] Landry DW, et al. **Circulation** 1997 Mar 4;95(5):1122–5. Comment in: Circulation 1997 Mar 4;95(5):1108–10.

Role of vasopressin deficiency in the vasodilation of septic shock [editorial; comment] Reid IA. **Circulation** 1997 Mar 4;95(5):1108–10 (21 ref.). Comment on: Circulation 1997 Mar 4;95(5):1122–5.

Hemodynamics of pancreatic ischemia in cardiogenic shock in pigs. Reilly PM, et al. **Gastroenterology** 1997 Sep; 113(3):938–45

Alteration in diaphragmatic function during cardiac insufficiency: potential pharmacology modulation. Aubier M. **J Mol Cell Cardiol** 1996 Nov;28(11):2293–302 (64 ref.)

A child with cardiogenic shock and supraventricular tachycardia presenting in normal sinus rhythm. Dharnidharka VR, et al. **Pediatr Emerg Care** 1996 Dec; 12(6):420–1

[Etiology and physiopathology of cardiogenic shock--mechanism of circulatory regulation and disturbance of the function] Sugimachi M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):7–11 (5 ref.) **(Jpn)**

SURGERY

Clinical experience of percutaneous cardiopulmonary support. Sasako Y, et al. **Artif Organs** 1996 Jun;20(6):733–6

Results of mechanical ventricular assistance for the treatment of post cardiotomy cardiogenic shock. Mehta SM, et al. **ASAIO J** 1996 May-Jun;42(3):211–8

Surgical treatment for life-threatening acute myocardial infarction: a prospective protocol. Donatelli F, et al. **Eur J Cardiothorac Surg** 1997 Feb;11(2):228–33

Mechanical circulatory support towards the permanent implantation. Loisance D, et al. **Eur J Cardiothorac Surg** 1997 Apr;11 Suppl:S25–8

Delayed reversal of impaired metabolic vasodilation in patients with end-stage heart failure during long-term circulatory support with a left ventricular assist device. Khan T, et al. **J Heart Lung Transplant** 1997 Apr; 16(4):449–53

[Wearable Baxter-Novacor mechanical ventricular assistance] Loisance D, et al. **Chirurgie** 1997 Jan; 121(9–10):696–701 (Eng. Abstr.) **(Fre)**

[Reflections on external circulatory assistance. Apropos of

8 patients treated with the MEDOS system] Villemot JP, et al. **Chirurgie** 1997 Jan;121(9–10):690–5 (Eng. Abstr.) **(Fre)**

[Use of the Palmaz–Schatz stent in the acute phase of myocardial infarction in a patient with cardiogenic shock] Viana AW, et al. **Arq Bras Cardiol** 1996 Nov;67(5):343–6 (Eng. Abstr.) **(Por)**

THERAPY

Usefulness of coronary stenting for cardiogenic shock. Webb JG, et al. **Am J Cardiol** 1997 Jan 1;79(1):81–4

Treating severe cardiogenic shock by large counterpulsation volumes. Stamatelopoulos SF, et al. **Ann Thorac Surg** 1996 Oct;62(4):1110–7

Coronary microcirculation during left heart bypass with a centrifugal pump. Hata M, et al. **Artif Organs** 1996 Jun; 20(6):678–80

Effect of pulsatile and nonpulsatile assist on heart and kidney microcirculation with cardiogenic shock. Nakata K, et al. **Artif Organs** 1996 Jun;20(6):681–4

Study of regional cerebral oxygen saturation during percutaneous cardiopulmonary support. Ninomiya J, et al. **Artif Organs** 1997 Jul;21(7):852–5

Experiences of postcardiotomy assist: pneumatic ventricular assist device or venoarterial bypass with percutaneous cardiopulmonary support. Orime Y, et al. **Artif Organs** 1996 Jun;20(6):721–3

Extracorporeal membrane oxygenation support for postcardiotomy cardiogenic shock. Wang SS, et al. **Artif Organs** 1996 Dec;20(12):1287–91

Mechanical circulatory support for post cardiotomy cardiogenic shock in infants. Ishino K, et al. **ASAIO J** 1996 Sep–Oct;42(5):M735–8

Adult placenta: the ECMO experience in patients with a coronary artery bypass graft and post cardiotomy cardiogenic shock. Magovern GJ Jr. **ASAIO J** 1996 Jan–Feb;42(1):19–23

The role of pulsatility in end–organ microcirculation after cardiogenic shock. Orime Y, et al. **ASAIO J** 1996 Sep–Oct; 42(5):M724–9

Analysis of clinical trends in a program of emergent ECLS for cardiovascular collapse. Willms DC, et al. **ASAIO J** 1997 Jan–Feb;43(1):65–8

Rescue PTCA for a totally occluded left main coronary artery in acute myocardial infarction with cardiogenic shock: technical success and long–term survival. La Vecchia L, et al. **Cardiology** 1997 Sep–Oct;88(5):482–5

Left main intervention revisited: early and late outcome of PTCA and stenting [see comments] Chauhan A, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):21–9. Comment in: Cathet Cardiovasc Diagn 1997 May;41(1):30–1.

Emergency percutaneous transluminal coronary angioplasty in acute myocardial infarction complicated with cardiogenic shock. Gao R, et al. **Chin Med J (Engl)** 1996 Aug;109(8):583–7

Circulatory support with paracorporeal pneumatic ventricular assist device (VAD) in infants and children. Ishino K, et al. **Eur J Cardiothorac Surg** 1997 May; 11(5):965–72

Emergency cardiopulmonary bypass support in patients with severe cardiogenic shock after acute myocardial infarction. Matsuwaka R, et al. **Heart Vessels** 1996;11(1):27–9

Use of intraaortic balloon counterpulsation in patients presenting with cardiogenic shock: observations from the GUSTO–I Study. Global Utilization of Streptokinase and TPA for Occluded Coronary Arteries. Anderson RD, et al. **J Am Coll Cardiol** 1997 Sep;30(3):708–15

Thrombolysis plus aortic counterpulsation: improved survival in patients who present to community hospitals with cardiogenic shock. Kovack PJ, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1454–8

Resources for cardiogenic shock [letter; comment] Barer D. **Lancet** 1997 Mar 29;349(9056):951; discussion 952. Comment on: Lancet 1997 Jan 11;349(9045):75–8.

Difference in countries' use of resources and clinical outcome for patients with cardiogenic shock after myocardial infarction: results from the GUSTO trial [see comments] Holmes DR Jr, et al. **Lancet** 1997 Jan 11;349(9045):75–8 . Comment in: Lancet 1997 Mar 29;349(9056):951; discussion 952. Comment in: Lancet 1997 Mar 29;349(9056):951–2; discussion 952.

Resources for cardiogenic shock [letter; comment] Sheridan DJ. **Lancet** 1997 Mar 29;349(9056):951; discussion 952. Comment on: Lancet 1997 Jan 11;349(9045):75–8.

Resources for cardiogenic shock [letter; comment] Tan LB. **Lancet** 1997 Mar 29;349(9056):951–2; discussion 952. Comment on: Lancet 1997 Jan 11;349(9045):75–8.

More resources, better survival? Troop P. **Lancet** 1997 Jan 11;349(9045):72

Percutaneous venoarterial extracorporeal membrane oxygenation for emergency mechanical circulatory support. Mair P, et al. **Resuscitation** 1996 Nov;33(1):29–34

Seven years of experience with the centrifugal pump in patients with cardiogenic shock. El–Banayosy A, et al. **Thorac Cardiovasc Surg** 1995 Dec;43(6):347–51

High stroke volume para–aortic counterpulsation device versus centrifugal pump in cardiogenic shock: experimental study. Nanas SN, et al. **World J Surg** 1997 Mar–Apr; 21(3):318–21; discussion 322

[Uni– or biventricular circulatory assist devices. Selection criteria and patients' follow–up, choice of device] Villemot JP, et al. **Arch Mal Coeur Vaiss** 1996 Nov;89 Spec No 6:55–63 (21 ref.) (Eng. Abstr.) **(Fre)**

[High risk PTCA: prevention and treatment of cardiogenic shock with mechanical assist systems] Figulla HR, et al. **Z Kardiol** 1996;85 Suppl 1:33–7 (12 ref.) (Eng. Abstr.) **(Ger)**

[Inflammatory mediators in patients with biventricular assist device systems] Hasper D, et al. **Z Kardiol** 1996 Nov; 85(11):820–7 (Eng. Abstr.) **(Ger)**

[Short and intermediate term clinical outcome in patients with cardiogenic shock treated with aortic counterpulsation] Fornaro G, et al. **G Ital Cardiol** 1996 Dec;26(12):1385–99 (Eng. Abstr.) **(Ita)**

[Isolated infarction of the right ventricle caused by occlusion of the non–dominant right coronary artery. Role of sequential atrioventricular stimulation] De Benedictis M, et al. **Minerva Cardioangiol** 1996 Oct;44(10):495–8 (Eng. Abstr.) **(Ita)**

[Emergency percutaneous cardiopulmonary support for patients with cardiac arrest or severe cardiogenic shock] Matsuwaka R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Nov;44(11):2006–10 (Eng. Abstr.) **(Jpn)**

[Therapy of cardiogenic shock due to arrhythmia] Abe H, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):60–5 (6 ref.) **(Jpn)**

[Emergency treatment of cardiogenic shock] Hasebe N, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):48–53 (5 ref.) **(Jpn)**

[Acute–phase therapy of cardiogenic shock and severe myocarditis using percutaneous cardiopulmonary support] Izumi T, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10; 85(1):66–72 (4 ref.) **(Jpn)**

[Clinical application and management of assisted circulation in the treatment of cardiogenic shock] Kodama K, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):82–7 (10 ref.) **(Jpn)**

[Reality of emergency treatment of cardiogenic shock] Takano T, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):16–20 (5 ref.) **(Jpn)**

[Countermeasures for patients with cardiogenic shock (discussion)] Yokoyama M, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):88–101 **(Jpn)**

ULTRASONOGRAPHY

Laboratory and sonographic findings of the pancreas during cardiogenic shock. Demarquay JF, et al. **Am J Gastroenterol** 1997 Mar;92(3):524–5

[Value of esophageal Doppler in prehospital care (letter)] Karoubi P, et al. **Presse Med** 1996 Sep 28;25(28):1302 **(Fre)**

[Important points in diagnostic imaging for evaluation of patients with cardiogenic shock] Kinusaki A, et al. **Nippon Naika Gakkai Zasshi** 1996 Jan 10;85(1):38–43 (5 ref.) **(Jpn)**

SHOCK, ENDOTOXIC see **SHOCK, SEPTIC**

SHOCK, HEMORRHAGIC

Haemorrhagic shock and encephalopathy syndrome [editorial; comment] Holmberg L. **Acta Paediatr** 1996 May; 85(5):535–6. Comment on: Acta Paediatr 1996 May;85(5):632–4.

BLOOD

Systemic and subcutaneous microvascular Po2 dissociation during 4–h hemorrhagic shock in conscious hamsters. Kerger H, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H827–36

Influence of ACTH–(1–24) on free radical levels in the blood of haemorrhage–shocked rats: direct ex vivo detection by electron spin resonance spectrometry. Guarini S, et al. **Br J Pharmacol** 1996 Sep;119(1):29–34

Spontaneous nitroblue–tetrazolium (NBT) reduction related to granulocyte priming and activation. Wikström T, et al. **Inflammation** 1996 Jun;20(3):281–92

Melatonin and a 21–aminosteroid attenuate shock after hemorrhage but differentially affect serum cytokines. Sullivan DJ, et al. **J Surg Res** 1996 Jul 15;64(1):13–8

Nafamostat mesilate, a synthetic protease inhibitor, attenuated hypercoagulability in a canine model of hemorrhagic shock. Koido Y, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb;64(1):9–15

Effect of hemorrhagic shock on endotoxin–inducing TNF production and intra–tissue lipopolysaccharide–binding protein mRNA expression and their relationship. Jiang JX, et al. **Shock** 1997 Mar;7(3):206–10

Physiologic and molecular characterization of the role of nitric oxide in hemorrhagic shock: evidence that type II nitric oxide synthase does not regulate vascular decompensation. Kelly E, et al. **Shock** 1997 Mar; 7(3):157–63

CHEMICALLY INDUCED

Hepatic bleeding and hemorrhagic shock following thrombolytic therapy in patients with acute myocardial infarction [letter] Gárcia–Jiménez A, et al. **Chest** 1997 Jun; 111(6):1787 (5 ref.)

Peripheral blood megakaryocytes in experimental hemorrhagic shock. Dzięcioł J, et al. **Exp Toxicol Pathol** 1996 Jun;48(4):269–73

COMPLICATIONS

Superoxide dismutase (SOD) prevents hypotension after hemorrhagic shock and aortic cross clamping. Simon HM, et al. **Am J Med Sci** 1996 Oct;312(4):155–9

Blocking L–selectin function attenuates reperfusion injury following hemorrhagic shock in rabbits. Ramamoorthy C, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1871–7

Utility of a bedside Doppler in tracking left ventricular dysfunction related to hemorrhagic shock. Chendrasekhar A, et al. **Am Surg** 1997 Aug;63(8):747–51

Role of polymorphonuclear leukocytes in cardiovascular depression and cellular injury in hemorrhagic shock and reinfusion. Kapoor R, et al. **Free Radic Biol Med** 1996; 21(5):609–18

Hypertonic saline resuscitation decreases susceptibility to sepsis after hemorrhagic shock. Coimbra R, et al. **J Trauma** 1997 Apr;42(4):602–6; discussion 606–7

Systemic sepsis following hemorrhagic shock: alleviation with oral interleukin–6. Rollwagen FM, et al. **Mil Med** 1997 May;162(5):366–70

[Deferoxamine–conjugated hydroxyethyl starch reduces reperfusion injury to the liver following hemorrhagic shock] Bauer C, et al. **Anaesthesist** 1997 Jan;46(1):53–6 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Toxic shock syndrome without rash in a young child: link with syndrome of hemorrhagic shock and encephalopathy? Van Lierde S, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):130–4

DRUG THERAPY

Anti–oxidant treatment for shock: vitamin E but not vitamin C improves survival. Daughters K, et al. **Am Surg** 1996 Oct;62(10):789–92

Resuscitation with increasing doses of diaspirin crosslinked hemoglobin in swine. Marchand G, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 Sep; 24(5):469–87

Diaspirin crosslinked hemoglobin (DCLHb): more effective than lactated Ringer's solution in restoring central venous oxygen saturation after hemorrhagic shock in rats. Powell CC, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 May;24(3):197–200

Effect of liposome encapsulated hemoglobin "neo red cells" on severe hemorrhagic shock. Usuba A, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jul; 25(4):379–92

Recombinant N–terminal fragment of bactericidal/permeability increasing protein (rBPI21) prevents shock–induced microcirculatory alterations in the liver. Bauer C, et al. **Crit Care Med** 1997 Aug;25(8):1283–8

Lisofylline decreases white cell adhesiveness and improves survival after experimental hemorrhagic shock. Waxman K, et al. **Crit Care Med** 1996 Oct;24(10):1724–8

Failure of dobutamine to improve liver oxygenation during resuscitation with a crystalloid solution after experimental haemorrhagic shock. Nordin AJ, et al. **Eur J Surg** 1996 Dec;162(12):973–9

Prolactin administration following hemorrhagic shock improves macrophage cytokine release capacity and decreases mortality from subsequent sepsis. Zellweger R, et al. **J Immunol** 1996 Dec 15;157(12):5748–54

Melatonin administration following hemorrhagic shock decreases mortality from subsequent septic challenge. Wichmann MW, et al. **J Surg Res** 1996 Oct;65(2):109–14

Sialyl Lewis(x) analog improves liver function by decreasing neutrophil migration after hemorrhagic shock. Rubio–Avilla J, et al. **J Trauma** 1997 Aug;43(2):313–8

Adenosine for reversal of hemorrhagic shock in rabbits. Abdel–Zaher AO, et al. **Jpn J Pharmacol** 1996 Nov; 72(3):247–54

Serotonin is involved in the ACTH–induced reversal of hemorrhagic shock in anesthetized rats. Bazzani C, et al. **Pharmacology** 1996 Apr;52(4):207–15

The reversal of experimental hemorrhagic shock induced by nicotine and dimethylphenylpiperazinium is adrenal–dependent. Bazzani C, et al. **Resuscitation** 1996 Apr;31(2):145–50

No evidence for a protective effect of ascorbic acid on free radical generation and liver injury after hemorrhagic shock in rats. Minor T, et al. **Shock** 1996 Apr;5(4):280–3

[Effect of peptidergic correction of hemorrhagic shock on rat behavior in the post–hemorrhage period] Bastrikova NA, et al. **Biull Eksp Biol Med** 1995 Dec;120(12):623–5 **(Rus)**

[Effect of lactin and thyroidin on systemic hemodynamics and oxygen regimen of the body in hemorrhagic shock] Dzhurko BI. **Patol Fiziol Eksp Ter** 1996 Oct–Dec;(4):23–5 (Eng. Abstr.) **(Rus)**

[The role of nitric oxide in the pathogenesis and therapy of hemorrhagic shock] Todorović Z, et al. **Vojnosanit Pregl** 1997 Mar–Apr;54(2):133–8 **(Scr)**

ENZYMOLOGY

[Intrahepatic antioxidative enzymes during hemorrhagic shock] Maruyama N. **Masui** 1996 Jan;45(1):59–65 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Vascular complications of lumbar disc surgery. Fruhwirth

J, et al. **Acta Neurochir (Wien)** 1996;138(8):912–6
Perforated duodenal ulcer presenting with shock in a child. Moon D, et al. **Am J Emerg Med** 1997 Mar;15(2):167–9
Hemorrhagic shock and encephalopathy syndrome. An unusual cause of sudden death in children. Little D, et al. **Am J Forensic Med Pathol** 1997 Mar;18(1):79–83 (35 ref.)
Possible aetiology of haemorrhagic shock and encephalopathy syndrome in the Negev area of Israel. Sofer S, et al. **Arch Dis Child** 1996 Oct;75(4):332–4
Lumbar artery hemorrhage: unusual cause of shock treated by angiographic embolization. Armstrong NN, et al. **J Trauma** 1997 Mar;42(3):544–5
[A case of leukocytosis after massive blood transfusion for postpartum hemorrhagic shock] Yamamoto T, et al. **Masui** 1997 Mar;46(3):379–83 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Mechanism of immunosuppression in males following trauma–hemorrhage. Critical role of testosterone. Wichmann MW, et al. **Arch Surg** 1996 Nov; 131(11):1186–91; discussion 1191–2
Enhanced immune responses in females, as opposed to decreased responses in males following haemorrhagic shock and resuscitation. Wichmann MW, et al. **Cytokine** 1996 Nov;8(11):853–63
Mechanism of intestinal mucosal immune dysfunction following trauma–hemorrhage: increased apoptosis associated with elevated Fas expression in Peyer's patches. Xu YX, et al. **J Surg Res** 1997 Jun;70(1):55–60
Sialyl Lewis(x) analog improves liver function by decreasing neutrophil migration after hemorrhagic shock. Rubio-Avilla J, et al. **J Trauma** 1997 Aug;43(2):313–8
Cytokine mRNA expression after transient and prolonged hypotension. Yamashita M, et al. **Surg Today** 1997; 27(2):159–62
[Production of G-CSF and IL-6 and activation of STAT proteins in mucosa and tunica muscularis of the jejunum in hemorrhagic shock] Hierholzer C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:579–83 (Eng. Abstr.) **(Ger)**
[Naloxone impairs cell–mediated immune function after hemorrhagic shock] Wichmann MW, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:585–8 (Eng. Abstr.) **(Ger)**

METABOLISM

Characterization of energy metabolism and blood flow distribution in myocardial ischemia in hemorrhagic shock. Miyazaki K, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H600–7
K(ATP)–channel inhibition improves hemodynamics and cellular energetics in hemorrhagic shock. Salzman AL, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H688–94
The effects of halothane and isoflurane on the phosphoenergetic state of the liver during hemorrhagic shock in rats: an in vivo 31P nuclear magnetic resonance spectroscopic study. Takahashi K, et al. **Anesth Analg** 1997 Aug;85(2):347–52
Effect of acute respiratory acidosis on the limits of oxygen extraction during hemorrhage. Ward ME. **Anesthesiology** 1996 Oct;85(4):817–22
Continuous assessment of gastric intramucosal PCO2 and pH in hemorrhagic shock using capnometric recirculating gas tonometry. Guzman JA, et al. **Crit Care Med** 1997 Mar; 25(3):533–7
Near–infrared spectroscopy: continuous measurement of cytochrome oxidation during hemorrhagic shock. Rhee P, et al. **Crit Care Med** 1997 Jan;25(1):166–70
Altered hepatocellular Ca2+ regulation during hemorrhagic shock and resuscitation. Rose S, et al. **Hepatology** 1997 Feb;25(2):379–84
Alveolar liquid clearance is increased by endogenous catecholamines in hemorrhagic shock in rats. Pittet JF, et al. **J Appl Physiol** 1996 Aug;81(2):830–7
Activation of pyruvate dehydrogenase improves heart function and metabolism after hemorrhagic shock. Kline JA, et al. **J Mol Cell Cardiol** 1997 Sep;29(9):2465–74
Changes in adenine nucleotides during hemorrhagic shock and reperfusion. Van Way CW, et al. **J Surg Res** 1996 Dec;66(2):159–66
Trauma–hemorrhage induces increased thymic apoptosis while decreasing IL-3 release and increasing GM-CSF. Xu YX, et al. **J Surg Res** 1997 Feb 15;68(1):24–30
Use of tissue oxygen tension measurements during resuscitation from hemorrhagic shock. Knudson MM, et al. **J Trauma** 1997 Apr;42(4):608–14; discussion 614–6
Myocardial O2 balance during fluid resuscitation in uncontrolled hemorrhage: computer model. Sheffer N, et al. **J Trauma** 1997 Apr;42(4):647–51
The effect of hypothermia on potassium and glucose changes in isobaric hemorrhagic shock in the rat. Johnson KB, et al. **Shock** 1996 Sep;6(3):223–9
Nitric oxide in the brain increases during a short period of hemorrhagic shock in the rabbit. Sato S, et al. **Shock** 1997 Aug;8(2):136–40
Intestinal alkaline phosphatase: role in the depressed gut lipid transport after trauma–hemorrhagic shock. Wang W, et al. **Shock** 1997 Jul;8(1):40–4
[Organ specific expression pattern of a carbon monoxide generating stress protein (hemoxygenase–1/heatshock protein 32) following hemorrhagic shock] Bauer M, et al. **Anaesthesist** 1997 Apr;46(4):339–42 (Eng. Abstr.) **(Ger)**
[Phospholipid composition of liver mitochondria during experimental hemorrhagic shock] Leskova GF, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):43–5 **(Rus)**
[Use of phosphatidylcholine liposomes for correction of phospholipid composition of mitochondria from medulla oblongata and frontal lobe during hemorrhagic shock in cats] Leskova GF, et al. **Biull Eksp Biol Med** 1997 Apr; 123(4):374–7 **(Rus)**
[Characteristic changes in the phospholipid composition of hepatocyte plasma membranes during hemorrhagic shock in cats] Leskova GF, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):261–3 **(Rus)**

MORTALITY

[Fatal hemorrhagic shock in a Jehovah's Witness] Schweitzer M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Oct; 31(8):504–6 **(Ger)**

PATHOLOGY

Peripheral blood megakaryocytes in experimental hemorrhagic shock. Dzięcioł J, et al. **Exp Toxicol Pathol** 1996 Jun;48(4):269–73
[Expression pattern of the carbon monoxide generating stress protein (HSP–32/HO–1) in parenchymatous and non–parenchymatous liver cells after hemorrhagic shock] Wanner GA, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:737–41 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

A new model of uncontrolled hemorrhage that allows correlation of blood pressure and hemorrhage. Silbergleit R, et al. **Acad Emerg Med** 1996 Oct;3(10):917–21
Orthostatic change in shock index: comparison with traditional tilt test definitions. Witting MD, et al. **Acad Emerg Med** 1996 Oct;3(10):926–31
Effects of dobutamine, epinephrine and norepinephrine on the hemodynamics of dogs during hemorrhagic shock. Luo X, et al. **Acta Anaesthesiol Sin** 1997 Jun;35(2):61–71
Evidence for a functional link between stress response and vascular control in hepatic portal circulation. Bauer M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G929–35
Salutary effects of ATP–MgCl2 on altered hepatocyte signal transduction after hemorrhagic shock. Mahmoud MS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1347–54
Characterization of energy metabolism and blood flow distribution in myocardial ischemia in hemorrhagic shock. Miyazaki K, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H600–7
Fluid compartments in hemorrhaged rats after hyperosmotic crystalloid and hyperoncotic colloid resuscitation. Moon PF, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F1–8
Regulation of hepatic blood flow during resuscitation from hemorrhagic shock: role of NO and endothelins. Pannen BH, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2736–45
K(ATP)–channel inhibition improves hemodynamics and cellular energetics in hemorrhagic shock. Salzman AL, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H688–94
Effects of nonanticoagulant heparin on cardiovascular and hepatocellular function after hemorrhagic shock. Wang P, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1294–302
Significance of NO in hemorrhage–induced hemodynamic alterations, organ injury, and mortality in rats. Yao YM, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1616–23
Granulocyte colony–stimulating factor (G–CSF) production in hemorrhagic shock requires both the ischemic and resuscitation phase. Hierholzer C, et al. **Arch Orthop Trauma Surg** 1997;116(3):173–6
Near–infrared spectroscopy: continuous measurement of cytochrome oxidation during hemorrhagic shock. Rhee P, et al. **Crit Care Med** 1997 Jan;25(1):166–70
Regional blood flow and hemorrhage. How far do the protective mechanisms go? [editorial; comment] Hemmer M. **Intensive Care Med** 1996 Oct;22(10):1006–8 (15 ref.). Comment on: Intensive Care Med 1996 Oct;22(10):1026–33.
Regional heterogeneity of cerebral blood flow response to graded volume–controlled hemorrhage [see comments] Waschke KF, et al. **Intensive Care Med** 1996 Oct; 22(10):1026–33. Comment in: Intensive Care Med 1996 Oct;22(10):1006–8.
Changes in stroke distance in response to haemorrhage in a swine model. Clancy MJ, et al. **J Accid Emerg Med** 1996 Sep;13(5):316–20
Effects of S–isopropyl isothiourea, a potent inhibitor of nitric oxide synthase, in severe hemorrhagic shock. Vromen A, et al. **J Appl Physiol** 1996 Aug;81(2):707–15
Chest wall and lung mechanics during acute hemorrhage in anesthetized dogs. Sprung J, et al. **J Cardiothorac Vasc Anesth** 1997 Aug;11(5):608–12
Xanthine oxidase inhibition prevents mesenteric blood flow deficits after resuscitated hemorrhagic shock by preserving endothelial function. Flynn WJ Jr, et al. **J Surg Res** 1997 Mar;68(2):175–80
Pentoxifylline restores the depressed cardiac performance after trauma–hemorrhage and resuscitation. Robinson DA, et al. **J Surg Res** 1996 Nov;66(1):51–6
Melatonin and a 21–aminosteroid attenuate shock after hemorrhage but differentially affect serum cytokines. Sullivan DJ, et al. **J Surg Res** 1996 Jul 15;64(1):13–8
Role of platelet–activating factor antagonism in posthemorrhage septic shock in pigs. Abu–Zidan FM, et al. **J Trauma** 1996 Oct;41(4):634–40
Improvement of survival from hemorrhagic shock by enterectomy in rats: finding to implicate the role of the gut for irreversibility of hemorrhagic shock. Chang TW. **J Trauma** 1997 Feb;42(2):223–30
Hemodynamic effects of aortic occlusion during hemorrhagic shock and cardiac arrest. Kralovich KA, et al. **J Trauma** 1997 Jun;42(6):1023–8
Hemorrhage lowers the threshold for intra–abdominal hypertension–induced pulmonary dysfunction. Simon RJ, et al. **J Trauma** 1997 Mar;42(3):398–403; discussion 404–5
Growth hormone impaired compensation of hemorrhagic shock after trauma and sepsis in swine. Unneberg K, et al. **J Trauma** 1996 Nov;41(5):775–80
Depressed osteoblast activity and increased osteocyte necrosis after closed bone fracture and hemorrhagic shock. Wichmann MW, et al. **J Trauma** 1996 Oct;41(4):628–33
Effects of fluid resuscitation with recombinant human serum albumin solution on maintaining hepatic energy metabolism in hemorrhagic shock rabbits. Nakatani T, et al. **Res Exp Med (Berl)** 1996;196(5):317–25
Increasing nitric oxide production improves survival in experimental hemorrhagic shock. Daughters K, et al. **Resuscitation** 1996 Apr;31(2):141–4
Cerebrocortical and medullary blood flow changes after general opiate receptor blockade during hemorrhagic shock in cats. Komjáti K, et al. **Shock** 1997 Apr;7(4):288–93
Fluid–percussion brain injury adversely affects control of vascular tone during hemorrhagic shock. Law MM, et al. **Shock** 1996 Sep;6(3):213–7
The importance of delta and kappa opioid receptors in the property of thyrotropin–releasing hormone against hemorrhagic shock. Liu LM, et al. **Shock** 1997 Jan; 7(1):60–4
Differential effects of acute hypoxia and endotoxin on the secretion and expression of bone marrow interleukin–1 and interleukin–6. Mohr AM, et al. **Shock** 1997 May;7(5):324–31
Progressive gastric intramucosal acidosis follows resuscitation from hemorrhagic shock. Oud L, et al. **Shock** 1996 Jul;6(1):61–5
Inhibition of ATP–activated potassium channels exerts pressor effects and improves survival in a rat model of severe hemorrhagic shock. Szabó C, et al. **Shock** 1996 Jun; 5(6):391–4
[Cardiac contractile dysfunction in response to surgical stress including trauma, hemorrhage, and infection] Suzuki K, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):745–51 (20 ref.) (Eng. Abstr.) **(Jpn)**
[Glucocorticoid receptor function in hemorrhagic shock and its treatment by calcium antagonist] Golikov PP, et al. **Vopr Med Khim** 1997 May–Jun;43(3):139–47 (Eng. Abstr.) **(Rus)**
[The role of nitric oxide in the pathogenesis and therapy of hemorrhagic shock] Todorović Z, et al. **Vojnosanit Pregl** 1997 Mar–Apr;54(2):133–8 **(Scr)**

PREVENTION & CONTROL

[Perioperative management of a patient with severe anemia caused by rare Jr (a–) blood] Ehata T, et al. **Masui** 1997 Apr;46(4):525–30 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Obtaining arterial access in trauma patients. Sclafani SJ. **J Vasc Interv Radiol** 1997 Jul–Aug;8(4):593–4 (0 ref.)
CT scan abnormalities in a series of patients with hemorrhagic shock and encephalopathy syndrome. Jardine DS, et al. **Pediatr Radiol** 1997 Jun;27(6):540–4

SURGERY

[Saving the extremity by massive transfusion in grade III open femoral fracture with vascular lesion. A case report] Fialka C, et al. **Unfallchirurg** 1997 Jul;100(7):587–90 (Eng. Abstr.) **(Ger)**

THERAPY

Effect of permissive hypotension in continuous uncontrolled intra–abdominal hemorrhage. Silbergleit R, et al. **Acad Emerg Med** 1996 Oct;3(10):922–6
Fluid resuscitation with O2 vs. non–O2 carriers after 2 h of hemorrhagic shock in conscious hamsters. Kerger H, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H525–37
Upregulation of alveolar liquid clearance after fluid resuscitation for hemorrhagic shock in rats. Modelska K, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):L305–14
Fluid compartments in hemorrhaged rats after hyperosmotic crystalloid and hyperoncotic colloid resuscitation. Moon PF, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F1–8
Hypertonic saline dextran (HSD) and intraosseous vascular access for the treatment of haemorrhagic hypotension in the far–forward combat arena. Dubick MA, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):64–9 (48 ref.)
Description of a project for the production and evaluation of oxygen–carrying hemosubstitutes. Briceño JC, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Sep; 25(5):473–9
Study of therapeutic efficiency of new blood substitutes in experimental hemorrhagic shock. Kochetygov NI, et al.

Artif Cells Blood Substit Immobil Biotechnol 1996 Nov; 24(6):685–91

Hypertonic acetate–alpha alpha hemoglobin for small volume resuscitation of hemorrhagic shock. Poli de Figueiredo LF, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1997 Jan–Mar;25(1–2):61–73

Monoclonal antibody to endotoxin attenuates hemorrhage–induced lung injury and mortality in rats. Bahrami S, et al. **Crit Care Med** 1997 Jun;25(6):1030–6

Dopexamine improves liver oxygenation during crystalloid resuscitation from experimental hemorrhagic shock. Nordin A, et al. **Crit Care Med** 1997 Apr;25(4):663–8

Effect of resuscitation on bacterial translocation in haemorrhagic shocked rats [see comments] Erbil Y, et al. **East Afr Med J** 1996 Nov;73(11):699–702. Comment in: East Afr Med J 1996 Nov;73(11):697–8.

ACOG educational bulletin. Hemorrhagic shock. Number 235, April 1997 (replaces no. 82, December 1984). American College of Obstetricians and Gynecologists. **Int J Gynaecol Obstet** 1997 May;57(2):219–26 (15 ref.)

Fluid resuscitation in traumatic haemorrhage [letter; comment] McNicholl B. **J Accid Emerg Med** 1996 Jul; 13(4):301. Comment on: J Accid Emerg Med 1995 Sep;12(3):165–72.

Xanthine oxidase inhibition prevents mesenteric blood flow deficits after resuscitated hemorrhagic shock by preserving endothelial function. Flynn WJ Jr, et al. **J Surg Res** 1997 Mar;68(2):175–80

Fluid resuscitation in a model of uncontrolled hemorrhage: too much too early, or too little too late? Leppäniemi A, et al. **J Surg Res** 1996 Jul 1;63(2):413–8

The effect of oxygen delivery–directed resuscitation on splanchnic and hepatic oxygen transport after hemorrhagic shock. Young JS, et al. **J Surg Res** 1997 Jul 15;71(1):87–92

Initial small–volume hypertonic resuscitation of shock and brain injury: short– and long–term effects. Anderson JT, et al. **J Trauma** 1997 Apr;42(4):592–600; discussion 600–1

Hypertonic saline resuscitation decreases susceptibility to sepsis after hemorrhagic shock. Coimbra R, et al. **J Trauma** 1997 Apr;42(4):602–6; discussion 606–7

Resuscitation from hemorrhagic shock with diaspirin cross–linked hemoglobin, blood, or hetastarch. DeAngeles DA, et al. **J Trauma** 1997 Mar;42(3):406–12; discussion 412–4

Pulmonary hypertension and systemic vasoconstriction may offset the benefits of acellular hemoglobin blood substitutes. de Figueiredo LF, et al. **J Trauma** 1997 May;42(5):847–54; discussion 854–6

Hypothermia and minimal fluid resuscitation increase survival after uncontrolled hemorrhagic shock in rats. Kim SH, et al. **J Trauma** 1997 Feb;42(2):213–22

Use of tissue oxygen tension measurements during resuscitation from hemorrhagic shock. Knudson MM, et al. **J Trauma** 1997 Apr;42(4):608–14; discussion 614–6

Myocardial O2 balance during fluid resuscitation in uncontrolled hemorrhage: computer model. Sheffer N, et al. **J Trauma** 1997 Apr;42(4):647–51

Use of recombinant hemoglobin solution in reversing lethal hemorrhagic hypovolemic oxygen debt shock. Siegel JH, et al. **J Trauma** 1997 Feb;42(2):199–212

Hypotensive resuscitation [editorial] [see comments] Dries DJ. **Shock** 1996 Nov;6(5):311–6 (41 ref.). Comment in: Shock 1996 Nov;6(5):317–8.

Judgment driven resuscitation—new acquaintance or old friend? [comment] Flint L. **Shock** 1996 Nov;6(5):317–8. Comment on: Shock 1996 Nov;6(5):311–6.

Effect of hypertonic saline/dextran on post–stenotic myocardial perfusion, metabolism, and function during resuscitation from hemorrhagic shock in anesthetized pigs. Welte M, et al. **Shock** 1997 Feb;7(2):119–30

[Contributions and prospects of hemoglobin derivatives] Remy B, et al. **Schweiz Med Wochenschr** 1997 Jun 21; 127(25):1088–96 (57 ref.) (Eng. Abstr.) **(Fre)**

[Differential volume substitution therapy] **Anaesthesist** 1996 Nov;45(11 Suppl):1–8 **(Ger)**

[Hemorrhagic shock] Marzi I. **Anaesthesist** 1996 Oct; 45(10):976–92 (10 ref.) **(Ger)**

[Hypertonic saline solutions in resuscitation in hemorrhagic shock. An experimental study] Chiara O, et al. **Minerva Chir** 1997 Jun;52(6):753–62 (Eng. Abstr.) **(Ita)**

[Damage of intestinal mucosal barrier function after fluid resuscitation during hemorrhagic shock] Shimada J. **Masui** 1996 Jan;45(1):49–58 (Eng. Abstr.) **(Jpn)**

[The effect of the blood corrective agent Lactosorbal on liver functional activity in dogs with a model of severe hemorrhagic shock] Oborin AN, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):152–4 (Eng. Abstr.) **(Rus)**

VETERINARY

Severe nasal hemorrhage in an anesthetized horse. Trim CM, et al. **J Am Vet Med Assoc** 1997 May 1;210(9):1324–7

The effects of hypertonic saline in healthy and diseased animals. Cambier C, et al. **Vet Res Commun** 1997 Jul; 21(5):303–16 (52 ref.)

VIROLOGY

Haemorrhagic shock and encephalopathy associated with rotavirus infection [see comments] Makino M, et al. **Acta Paediatr** 1996 May;85(5):632–4. Comment in: Acta Paediatr 1996 May;85(5):535–6.

Rotavirus–associated hemorrhagic shock and encephalopathy [letter; comment] Rotbart HA. **Clin Infect Dis** 1996 Dec; 23(6):1334. Comment on: Clin Infect Dis 1996 May;22(5):834–6.

SHOCK LUNG see **RESPIRATORY DISTRESS SYNDROME, ADULT**

SHOCK, SEPTIC

Septic shock. Carcillo JA, et al. **Crit Care Clin** 1997 Jul; 13(3):553–74 (127 ref.)

The toxic shock syndromes. Stevens DL. **Infect Dis Clin North Am** 1996 Dec;10(4):727–46 (128 ref.)

Puerperal group A beta–hemolytic streptococcal toxic shock–like syndrome. Noronha S, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):728

Invasive group A streptococcal infections in children with varicella in Southern California. Vugia DJ, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):146–50

BLOOD

Serum tumor necrosis factor–alpha in neonatal sepsis. Atici A, et al. **Am J Perinatol** 1997 Aug;14(7):401–4

Neutrophil rheologic changes in septic shock. Yodice PC, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):38–42

Effects of norepinephrine on regional blood flow and oxygen extraction capabilities during endotoxic shock. Zhang H, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1965–71

Use of jugular venous blood, compared with mixed venous blood, for measurement of venous oxygenation indices in a porcine model of endotoxic shock. Wohl JS, et al. **Am J Vet Res** 1997 Aug;58(8):910–4

Accuracy of pulse oximetry in patients with low systemic vascular resistance. Secker C, et al. **Anaesthesia** 1997 Feb; 52(2):127–30

Activation of the contact system in patients with sepsis and with septic shock [letter; comment] Wuillemin WA, et al. **Blood** 1997 May 15;89(10):3893–4. Comment on: Blood 1996 Aug 1;88(3):881–6.

Cytokines, nitrite/nitrate, soluble tumor necrosis factor receptors, and procalcitonin concentrations: comparisons in patients with septic shock, cardiogenic shock, and bacterial pneumonia. de Werra I, et al. **Crit Care Med** 1997 Apr;25(4):607–13

Increased plasma concentrations of adrenomedullin correlate with relaxation of vascular tone in patients with septic shock. Nishio K, et al. **Crit Care Med** 1997 Jun;25(6):953–7

Decreased plasma gelsolin concentrations in acute liver failure, myocardial infarction, septic shock, and myonecrosis. Suhler E, et al. **Crit Care Med** 1997 Apr; 25(4):594–8

Treatment with neutralizing antibodies specific for IL–1beta prevents cyclophosphamide–induced diabetes in nonobese diabetic mice. Cailleau C, et al. **Diabetes** 1997 Jun; 46(6):937–40

Serum erythropoietin levels in patients with sepsis and septic shock. Abel J, et al. **Eur J Haematol** 1996 Nov;57(5):359–63

Immunohistochemical detection of endotoxin in endotoxemic rats. Yasui M, et al. **Hepatogastroenterology** 1995 Sep–Oct; 42(5):683–90

Alpha–1–acid (AAG, orosomucoid) glycoprotein: interaction with bacterial lipopolysaccharide and protection from sepsis. Moore DF, et al. **Inflammation** 1997 Feb;21(1):69–82

Are endogenous glucocorticoid levels adequate in septic shock? [letter; comment] Annane D, et al. **Intensive Care Med** 1996 Jul;22(7):711–2. Comment on: Intensive Care Med 1995 Jan;21(1):57–62.

Blood pressure and arterial lactate level are early indicators of short–term survival in human septic shock [see comments] Bernardin G, et al. **Intensive Care Med** 1996 Jan;22(1):17–25. Comment in: Intensive Care Med 1996 Jan;22(1):3–5.

Increased lactate/pyruvate ratio with normal beta–hydroxybutyrate/acetoacetate ratio and lack of oxygen supply dependency in a patient with fatal septic shock. Gallet D, et al. **Intensive Care Med** 1997 Jan; 23(1):114–6

Nitric oxide (NO) production correlates with renal insufficiency and multiple organ dysfunction syndrome in severe sepsis. Groeneveld PH, et al. **Intensive Care Med** 1996 Nov;22(11):1197–202

Blood lactate levels are better prognostic indicators than TNF and IL–6 levels in patients with septic shock. Marecaux G, et al. **Intensive Care Med** 1996 May; 22(5):404–8

Is bleomycin–detectable iron present in the plasma of patients with septic shock? [see comments] Mumby S, et al. **Intensive Care Med** 1997 Jun;23(6):635–9. Comment in: Intensive Care Med 1997 Jun;23(6):613–4.

Comparison of endothelial activation during endotoxic and posttraumatic conditions by serum analysis of soluble E–selectin in nonhuman primates. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):515–9

The effect of prostacyclin and nitric oxide on deformability of red blood cells in septic shock in rats. Korbut R, et al. **J Physiol Pharmacol** 1996 Dec;47(4):591–9

Functional modification of vascular endothelial cells by cytokines during septic shock. Endo S, et al. **Res Commun Mol Pathol Pharmacol** 1996 Oct;94(1):23–38

High tumor necrosis factor serum level is associated with increased survival in patients with abdominal septic shock: a prospective study in 59 patients. Riché F, et al. **Surgery** 1996 Nov;120(5):801–7

Age–related differences in outcome and severity of DIC in children with septic shock and purpura. Hazelzet JA, et al. **Thromb Haemost** 1996 Dec;76(6):932–8

CHEMICALLY INDUCED

Effects of toxic shock syndrome toxin–1 and a site–directed mutant, H135A, in mice. Stiles BG, et al. **Adv Exp Med Biol** 1996;391:245–50

CLASSIFICATION

[History and definition of sepsis—do we need new terminology?] Kreymann G, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Feb; 31(1):9–14 (18 ref.) (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Prevention of endotoxin–induced mortality by antitissue factor immunization. Dackiw AP, et al. **Arch Surg** 1996 Dec;131(12):1273–8; discussion 1278–9

Bacterial superinfection in chickenpox....but it can occur at any age [letter; comment] Barnes AJ, et al. **BMJ** 1996 Nov 2;313(7065):1145. Comment on: BMJ 1996 Aug 3;313(7052):283–5.

Systemic lupus erythematosus following Escherichia coli sepsis in an elderly woman [letter] Uthman I, et al. **Br J Rheumatol** 1997 Jul;36(7):822–3

Severe recalcitrant erythematous desquamating disorder associated with fatal recurrent toxic shock syndrome in a patient without AIDS. Verbon A, et al. **Clin Infect Dis** 1997 Jun;24(6):1274–5

Effects of N omega–nitro–L–arginine methyl ester on the endotoxin–induced disseminated intravascular coagulation in porcine septic shock [published erratum appears in Crit Care Med 1997 Jul;25(7):1257] Jourdain M, et al. **Crit Care Med** 1997 Mar;25(3):452–9

Clinical evidence of peroxynitrite formation in chronic renal failure patients with septic shock. Fukuyama N, et al. **Free Radic Biol Med** 1997;22(5):771–4

A comparison of the adrenocortical response during septic shock and after complete recovery. Briegel J, et al. **Intensive Care Med** 1996 Sep;22(9):894–9

Nitric oxide (NO) production correlates with renal insufficiency and multiple organ dysfunction syndrome in severe sepsis. Groeneveld PH, et al. **Intensive Care Med** 1996 Nov;22(11):1197–202

Effects of epinephrine on right ventricular function in patients with severe septic shock and right ventricular failure: a preliminary descriptive study. Le Tulzo Y, et al. **Intensive Care Med** 1997 Jun;23(6):664–70

A 4–yr–old girl with cardiac arrest after a week of flulike symptoms. Brown DF, et al. **J Emerg Med** 1997 Mar–Apr; 15(2):231–4

Adrenal insufficiency [letter; comment] Pepper GM. **N Engl J Med** 1997 Apr 10;336(15):1106; discussion 1106–7 . Comment on: N Engl J Med 1996 Oct 17;335(16):1206–12.

Streptococcal preseptal cellulitis complicated by the toxic Streptococcus syndrome. Ingraham HJ, et al. **Ophthalmology** 1995 Aug;102(8):1223–6

Septicemia causing compartment syndrome [see comments] Paley KJ, et al. **Orthopedics** 1996 Feb;19(2):163–6. Comment in: Orthopedics 1996 Jul;19(7):567.

Simultaneous presentation of Kawasaki disease and toxic shock syndrome in an adolescent male [see comments] Davies HD, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1136–8 (14 ref.). Comment in: Pediatr Infect Dis J 1997 Jun;16(6):633–4.

Nonmenstrual toxic shock syndrome in a young child with human immunodeficiency virus infection. Shah A, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):639–41 (12 ref.)

[Prolonged apnea after suxamethonium administration during staphylococcal toxic shock] Blanloeil Y, et al. **Ann Fr Anesth Reanim** 1996;15(2):189–91 (Eng. Abstr.) **(Fre)**

[Cholangitis due to Clonorchis sinensis detected in Escherichia coli septic shock (letter)] Poinsignon Y, et al. **Med Trop (Mars)** 1996;56(2):203 **(Fre)**

[Effects of intravenous immunoglobulins in thrombopenia related to septic shock] Gaillat F, et al. **Presse Med** 1997 Jun 14;26(20):945–50 (Eng. Abstr.) **(Fre)**

[Digitalis poisoning in a patient with septic shock: value of plasma exchange (letter)] Lalanne B, et al. **Presse Med** 1996 Jul 6–13;25(24):1125 **(Fre)**

[A SLE case with toxic shock syndrome after delivery] Kadoya A, et al. **Kansenshogaku Zasshi** 1996 Dec; 70(12):1279–83 (Eng. Abstr.) **(Jpn)**

[A case of toxic shock syndrome (TSS) induced by methicillin–resistant staphylococcus aureus (MRSA) presenting as acute renal failure with disseminated intravascular coagulation] Fukuuchi F, et al. **Nippon Jinzo Gakkai Shi** 1996 Jan;38(1):27–32 (20 ref.) (Eng. Abstr.) **(Jpn)**

[A child with soft tissue inflammation and signs of systemic involvement] Frías Pérez MA, et al. **An Esp Pediatr** 1997 Jun;46(6):625–6 **(Spa)**

DIAGNOSIS

Pennyroyal metabolites in human poisoning [letter; comment] Carmichael PG. **Ann Intern Med** 1997 Feb 1;126(3):250–1 . Comment on: Ann Intern Med 1996 Apr 15;124(8):726–34.

Anaphylactoid reaction to ciprofloxacin versus toxic shock syndrome [letter] Salon EJ, et al. **Ann Pharmacother** 1997 Jan;31(1):119–20

Systemic lupus erythematosus following Escherichia coli sepsis in an elderly woman [letter] Uthman I, et al. **Br J Rheumatol** 1997 Jul;36(7):822–3

Cytokines, nitrite/nitrate, soluble tumor necrosis factor receptors, and procalcitonin concentrations: comparisons in patients with septic shock, cardiogenic shock, and bacterial pneumonia. de Werra I, et al. **Crit Care Med** 1997 Apr;25(4):607–13

Group A streptococcal meningitis and toxic shock syndrome caused by a protein M type 3 strain producing exotoxin C [letter] Guibert M, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):323–4

Group B streptococcal toxic shock–like syndrome with fulminant cellulitis. Thomas S, et al. **Heart Lung** 1996 Nov–Dec;25(6):497–9

Toxic shock syndrome without rash in a young child: link with syndrome of hemorrhagic shock and encephalopathy? Van Lierde S, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):130–4

Group A streptococcal toxic shock. Rehman N, et al. **JPMA J Pak Med Assoc** 1995 Nov;45(11):303–4

Phaeochromocytoma with adult respiratory distress syndrome mimicking septicaemic shock. Mok CC, et al. **Med J Aust** 1997 Jun 16;166(12):634–5

Sepsis, septic shock, acute abdomen? The ability of cardiac disease to mimic other medical illness. Mahle WT, et al. **Pediatr Emerg Care** 1996 Aug;12(4):317–24

Thrush and septic shock in a two-month-old. Fogarty L. **Pediatr Infect Dis J** 1996 Jun;15(6):553–4, 559–60

Index of suspicion. Case 3. Toxic shock syndrome. Pandit S. **Pediatr Rev** 1996 Sep;17(9):319, 321–2

[Critical peripheral ischemia in infection] Joseph U, et al. **Internist (Berl)** 1996 Oct;37(10):1049–52 **(Ger)**

[17-year-old patient with whole body erythema, fever, compensated renal failure, thrombocytopenia and increase creatine kinase. Toxic shock syndrome] Wieneke U, et al. **Internist (Berl)** 1997 Mar;38(3):251–4 **(Ger)**

[Differential acute graft rejection and infection diagnosis with procalcitonin and cytokines] Staehler M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:205–9 (Eng. Abstr.) **(Ger)**

[Assessment of the severity of patient status in sepsis and septic shock] Rudnov VA, et al. **Anesteziol Reanimatol** 1995 Nov–Dec;(6):9–11 (Eng. Abstr.) **(Rus)**

[The clinical manifestations and treatment of shock in acute intestinal infections] Brodov LE, et al. **Ter Arkh** 1996; 68(11):27–9 (Eng. Abstr.) **(Rus)**

[The possibilities for the prognostic assessment of toxic-septic shock in peritonitis] Kulibaba DM, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):102–5 **(Rus)**

DRUG THERAPY

Improved survival and antagonistic effect of sodium fusidate on tumor necrosis factor alpha in a neonatal mouse model of endotoxin shock. Genovese F, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1733–5

Synergistic effect of a recombinant N-terminal fragment of bactericidal/permeability-increasing protein and cefamandole in treatment of rabbit gram-negative sepsis. Lin Y, et al. **Antimicrob Agents Chemother** 1996 Jan; 40(1):65–9

Nitric oxide in critical care medicine. Cuthbertson BH, et al. **Br J Hosp Med** 1995 Dec 13–1996 Jan 16;54(11):579–82 (15 ref.)

Effects of pentoxifylline in patients with septic shock [letter; comment] Castanón-González JA, et al. **Crit Care Med** 1997 Jan;25(1):203. Comment on: Crit Care Med 1996 Feb;24(2):207–14.

Nitric oxide overproduction in septic shock--methemoglobin concentrations and blockade with diaspirin cross-linked hemoglobin [editorial; comment] Kilbourn RG. **Crit Care Med** 1997 Sep;25(9):1446–7. Comment on: Crit Care Med 1997 Sep;25(9):1588–93.

Vasopressin pressor hypersensitivity in vasodilatory septic shock. Landry DW, et al. **Crit Care Med** 1997 Aug; 25(8):1279–82

Fatal cardiac side effects of L-NMMA? [letter] Locker GJ, et al. **Crit Care Med** 1996 Nov;24(11):1930

Epinephrine impairs splanchnic perfusion in septic shock. Meier-Hellmann A, et al. **Crit Care Med** 1997 Mar; 25(3):399–404

Dobutamine improves gastrointestinal mucosal blood flow in a porcine model of endotoxic shock [see comments] Nevière R, et al. **Crit Care Med** 1997 Aug;25(8):1371–7. Comment in: Crit Care Med 1997 Aug;25(8):1266–7.

The endothelin receptor antagonist, bosentan, in combination with the cyclooxygenase inhibitor, diclofenac, counteracts pulmonary hypertension in porcine endotoxin shock. Wanecek M, et al. **Crit Care Med** 1997 May;25(5):848–57

Efficacy of a selective histamine H2 receptor agonist, dimaprit, in experimental models of endotoxin shock and hepatitis in mice. Nakamura T, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):83–9

FR167653, a dual inhibitor of interleukin-1 and tumor necrosis factor-alpha, ameliorates endotoxin-induced shock. Yamamoto N, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):169–74

The effects of intravenous antioxidants in patients with septic shock. Galley HF, et al. **Free Radic Biol Med** 1997; 23(5):768–74

Effect of combined B1 and B2 kinin receptor blockade in porcine endotoxin shock. Siebeck M, et al. **Immunopharmacology** 1996 Jun;33(1–3):81–4

Antiendotoxin activity of cationic peptide antimicrobial agents. Gough M, et al. **Infect Immun** 1996 Dec; 64(12):4922–7

Aerosolized prostacyclin and inhaled nitric oxide in septic shock--different effects on splanchnic oxygenation? Eichelbrönner O, et al. **Intensive Care Med** 1996 Sep; 22(9):880–7

Nitric oxide synthase inhibition by L-NAME in leukocytopenic patients with severe septic shock. Kiehl MG, et al. **Intensive Care Med** 1997 May;23(5):561–6

Comparison of norepinephrine and dobutamine to epinephrine for hemodynamics, lactate metabolism, and gastric tonometric variables in septic shock: a prospective, randomized study. Levy B, et al. **Intensive Care Med** 1997 Mar;23(3):282–7

The effects of low-dose dopamine on splanchnic blood flow and oxygen uptake in patients with septic shock. Meier-Hellmann A, et al. **Intensive Care Med** 1997 Jan; 23(1):31–7

Splanchnic blood flow is greater in septic shock treated with norepinephrine than in severe sepsis. Meier-Hellmann A, et al. **Intensive Care Med** 1996 Dec;22(12):1354–9

Influence of pentoxifylline on cytokine levels and inflammatory parameters in septic shock. Staudinger T, et al. **Intensive Care Med** 1996 Sep;22(9):888–93

Issues in the adjunct therapy of severe sepsis. Verhoef J, et al. **J Antimicrob Chemother** 1996 Aug;38(2):167–82 (90 ref.)

Polymerized hemoglobin restores cardiovascular and kidney function in endotoxin-induced shock in the rat. Heneka MT, et al. **J Clin Invest** 1997 Jan 1;99(1):47–54

A comparison between the acute effects of nitric oxide synthase inhibition and fluid resuscitation on myocardial function and metabolism in entotoxemic dogs. Cohen RI, et al. **J Crit Care** 1996 Mar;11(1):27–36

Injection time of interleukin-6 determines fatal outcome in experimental endotoxin shock. Yoshizawa K, et al. **J Interferon Cytokine Res** 1996 Dec;16(12):995–1000

Regional effects of dobutamine in endotoxic shock. De Backer D, et al. **J Surg Res** 1996 Oct;65(2):93–100

Differential effects of IL-1 beta and ibuprofen after endotoxic challenge in mice. Mansilla-Roselló A, et al. **J Surg Res** 1997 Feb 1;67(2):199–204

Systemic sepsis following hemorrhagic shock: alleviation with oral interleukin-6. Rollwagen FM, et al. **Mil Med** 1997 May;162(5):366–70

Continuous infusion of methylene blue for septic shock. Brown G, et al. **Postgrad Med J** 1996 Oct;72(852):612–4

Iron chelates bind nitric oxide and decrease mortality in an experimental model of septic shock. Kazmierski WM, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9138–41

Protective effects of a thromboxane synthetase inhibitor and continuous arteriovenous hemofiltration in rat endotoxic shock. Heidemann SM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 Jun; 56(6):473–8

Effects of L-canavanine, an inhibitor of inducible nitric oxide synthase, on endotoxin mediated shock in rats. Fatehi-Hassanabad Z, et al. **Shock** 1996 Sep;6(3):194–200

Beneficial versus detrimental effects of nitric oxide synthase inhibitors in circulatory shock: lessons learned from experimental and clinical studies. Kilbourn RG, et al. **Shock** 1997 Apr;7(4):235–46 (119 ref.)

A matrix metalloproteinase inhibitor prevents processing of tumor necrosis factor alpha (TNF alpha) and abrogates endotoxin-induced lethality. Solorzano CC, et al. **Shock** 1997 Jun;7(6):427–31

Cardiopulmonary dysfunction during porcine endotoxin shock is effectively counteracted by the endothelin receptor antagonist bosentan. Wanecek M, et al. **Shock** 1997 May; 7(5):364–70

Dibutyryl cAMP improves systemic vasoconstriction caused by endotoxin in dogs. Yanase T, et al. **Shock** 1996 Apr; 5(4):284–8

Protective effects of nicotinamide against nitric oxide-mediated delayed vascular failure in endotoxic shock: potential involvement of polyADP ribosyl synthetase. Zingarelli B, et al. **Shock** 1996 Apr;5(4):258–64

[Inhibition of nitric oxide synthase in septic shock. Therapeutic limits and perspectives] Endres S, et al. **Internist (Berl)** 1997 May;38(5):466–9 (17 ref.) **(Ger)**

[Antioxidant action of gabexate mesilate (Foy) in an experimental model of endotoxic shock] Novelli GP, et al. **Minerva Anestesiol** 1995 Dec;61(12):509–13 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Time course and cellular localization of lipopolysaccharide-induced inducible nitric oxide synthase messenger RNA expression in the rat in vivo. Liu SF, et al. **Crit Care Med** 1997 Mar;25(3):512–8

Regulation of rat liver S-adenosylmethionine synthetase during septic shock: role of nitric oxide. Avila MA, et al. **Hepatology** 1997 Feb;25(2):391–6

Absence of NO synthase type II expression in fetal liver from pregnant rats under septic shock conditions. Casado M, et al. **Hepatology** 1997 Jun;25(6):1406–11

Induction of heme oxygenase-1 expression in vascular smooth muscle cells. A link to endotoxic shock. Yet SF, et al. **J Biol Chem** 1997 Feb 14;272(7):4295–301

EPIDEMIOLOGY

Septic syndrome and septic shock in the wounded treated at the Split Clinical Hospital Intensive Care Unit. Bačić A, et al. **Mil Med** 1997 May;162(5):363–5

ETIOLOGY

Mycobacterial sepsis following intravesical instillation of bacillus Calmette-Guérin. Garyfallou GT. **Acad Emerg Med** 1996 Feb;3(2):157–60 (12 ref.)

Septic shock. Shenep JL. **Adv Pediatr Infect Dis** 1996; 12:209–41 (162 ref.)

Complications following butane inhalation and flash fire. Huston BM, et al. **Am J Forensic Med Pathol** 1997 Jun; 18(2):140–3

Septic shock in pregnancy associated with legionella pneumonia: case report. Tewari K, et al. **Am J Obstet Gynecol** 1997 Mar;176(3):706–7

The role of tumor necrosis factor in endotoxic shock. Heidemann SM, et al. **Ann Clin Lab Sci** 1996 Jan–Feb; 26(1):60–3

Toxic shock syndrome in the burned patient. Edwards-Jones V, et al. **Br J Biomed Sci** 1997 Jun;54(2):110–7 (87 ref.)

Superantigen and endotoxin synergize in the induction of lethal shock. Blank C, et al. **Eur J Immunol** 1997 Apr; 27(4):825–33

Potentiation of lethal endotoxin shock by streptococcal pyrogenic exotoxin in rabbits: possible relevance of hyperreactivity of macrophages to endotoxin. Murai T, et al. **FEMS Immunol Med Microbiol** 1996 Apr;13(4):269–72

Molecules and mechanisms operating in septic shock: lessons from knockout mice. Gutierrez-Ramos JC, et al. **Immunol Today** 1997 Jul;18(7):329–34 (48 ref.)

Further evidence of bradykinin involvement in septic shock: reduction of kinin production in vivo and improved survival in rats by use of polymer tailored SBTI with longer t1/2. Shin YH, et al. **Immunopharmacology** 1996 Jun; 33(1–3):369–73

Shock complicating severe falciparum malaria in European adults. Bruneel F, et al. **Intensive Care Med** 1997 Jun; 23(6):698–701

Respiratory distress syndrome and septic shock due to varicella in an HIV-infected adult [letter] Mofredj A, et al. **Intensive Care Med** 1996 Aug;22(8):835–6

Septic shock: pathogenesis and treatment [see comments] Bansal T, et al. **J Assoc Physicians India** 1996 Jun; 44(6):407–14 (51 ref.). Comment in: J Assoc Physicians India 1996 Jun;44(6):371–4.

Streptococcal toxic shock syndrome from a puncture wound to the foot. Miller JH, et al. **J Foot Ankle Surg** 1996 Nov–Dec;35(6):578–84

Streptococcal toxic shock syndrome complicating varicella in children. Yang YJ, et al. **J Formos Med Assoc** 1997 Sep; 96(9):749–53

Toxic shock syndrome and burns [letter; comment] Judkins K. **J R Soc Med** 1996 Sep;89(9):538–9. Comment on: J R Soc Med 1996 Feb;89(2):115P–6P. Comment on: J R Soc Med 1996 Jul;89(7):420.

A fas antigen receptor mutation allows development of toxic shock syndrome toxin-1-induced lethal shock in V beta 8.2 T-cell receptor transgenic mice. Cullen CM, et al. **Pathobiology** 1995;63(6):293–304

Toxic shock syndrome after explantation of breast implants: a case report and review of the literature. Walker LE, et al. **Plast Reconstr Surg** 1997 Mar;99(3):875–9 (19 ref.)

Interleukin (IL) 1beta, IL-1 receptor antagonist, IL-10, and IL-13 gene expression in the central nervous system and anterior pituitary during systemic inflammation: pathophysiological implications. Wong ML, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):227–32

Septic shock in bacteremic patients: risk factors, features and prognosis. Leibovici L, et al. **Scand J Infect Dis** 1997; 29(1):71–5

Toxic shock syndrome after burn injuries in children. Blomqvist L. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar;31(1):77–81

Low-level expression and limited role for the inducible isoform of nitric oxide synthase in the vascular hyporeactivity and mortality associated with cecal ligation and puncture in the rat. Vromen A, et al. **Shock** 1996 Oct; 6(4):248–53

Induction mechanism of small intestinal lesions caused by intravenous injection of endotoxin in rats. Shindo M, et al. **Surg Today** 1996;26(8):610–7

Bacterial translocation as a cause of septic shock in humans: a report of two cases. Tani T, et al. **Surg Today** 1997; 27(5):447–9

Open window thoracostomy in the treatment of esophageal or bronchopleural fistula with advanced mediastinitis and septic shock. Bauwens K, et al. **Thorac Cardiovasc Surg** 1996 Dec;44(6):308–10

[40-year-old patient without previous illness with acute shock symptoms and disseminated intravascular coagulation] König G, et al. **Internist (Berl)** 1996 Jan; 37(1):74–7 **(Ger)**

[Toxic shock syndrome] Fishman G, et al. **Harefuah** 1997 May 1;132(9):622–4, 679 (Eng. Abstr.) **(Heb)**

[Septic shock--a lesson to be learned from treatment trials] Naftali T, et al. **Harefuah** 1996 Dec 1;131(11):498–501 (28 ref.) **(Heb)**

[A case of toxic shock syndrome associated with atopic dermatitis] Kubo M, et al. **Arerugi** 1996 Nov;45(11):1185–9 **(Jpn)**

[Acute appendicitis complicated by destruction of the large intestine and septic shock] Kulibaba DM, et al. **Vestn Khir Im I I Grek** 1997;156(2):117–8 **(Rus)**

[The successful treatment of nodulation of the sigmoid and ileal intestines complicated by intestinal obstruction, intestinal necrosis, diffuse peritonitis and toxic–septic shock] Kulibaba DM, et al. **Vestn Khir Im I I Grek** 1997; 156(3):76–7 **(Rus)**

HISTORY

Toxic shock syndrome––United States. 1980 [classical article] **MMWR Morb Mortal Wkly Rep** 1997 Jun 6;46(22):492–3; discussion 494–5

IMMUNOLOGY

Ethanol suppresses endotoxin but not platelet activating factor–induced hypotension and nitric oxide. Greenberg SS, et al. **Alcohol Clin Exp Res** 1996 Oct;20(7):1260–8

Streptococcal toxic shock syndrome associated with marked gamma delta T cell expansion: case report. Arvand M, et al. **Clin Infect Dis** 1996 Feb;22(2):362–5

Levels of cytokines and cytokine inhibitors in the neutropenic patient with alpha–hemolytic streptococcus shock syndrome. Engel A, et al. **Clin Infect Dis** 1996 Oct; 23(4):785–9

Myocardial and vascular adrenergic alterations in a rat model of endotoxin shock: reversal by an anti–tumor necrosis factor–alpha monoclonal antibody. Boillot A, et al. **Crit Care Med** 1997 Mar;25(3):504–11

Macrophages sense pathogens via DNA motifs: induction of tumor necrosis factor–alpha–mediated shock. Sparwasser T, et al. **Eur J Immunol** 1997 Jul;27(7):1671–9

Coagulase–negative staphylococci isolated from two cases of toxic shock syndrome lack superantigenic activity, but induce cytokine production. Lina G, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):81–6

The role of macrophages in septic shock. Evans TJ. **Immunobiology** 1996 Oct;195(4–5):655–9 (16 ref.)

Gene knockout mice as investigative tools in pathophysiology. Ryffel B. **Int J Exp Pathol** 1996 Aug; 77(4):125–41 (98 ref.)

Impairment of bacterial clearance induced by norepinephrine infusion in rabbits. Koch T, et al. **Intensive Care Med** 1996 Jul;22(7):637–43

Influence of pentoxifylline on cytokine levels and inflammatory parameters in septic shock. Staudinger T, et al. **Intensive Care Med** 1996 Sep;22(9):888–93

Comparison of inflammatory cytokine concentration and physiologic parameters in septic shock. Liaw YS, et al. **J Formos Med Assoc** 1997 Sep;96(9):685–90

Increased susceptibility to endotoxin shock in complement C3– and C4–deficient mice is corrected by C1 inhibitor replacement. Fischer MB, et al. **J Immunol** 1997 Jul 15; 159(2):976–82

Endotoxin shock in antibody–deficient mice: unraveling the role of natural antibody and complement in the clearance of lipopolysaccharide. Reid RR, et al. **J Immunol** 1997 Jul 15;159(2):970–5

The interval between a septic stimulus and hypoxia/reoxygenation affects cytokine elaboration by murine peritoneal macrophages. Arya G, et al. **J Pediatr Surg** 1996 Nov;31(11):1469–74

Detection of circulating bacterial superantigen and lymphotoxin–alpha in patients with streptococcal toxic–shock syndrome [letter] Sriskandan S, et al. **Lancet** 1996 Nov 9;348(9037):1315–6

Immunization with meningococcal membrane–bound lipooligosaccharide accelerates granulocyte recovery and enhances lymphocyte proliferation in myelosuppressed mice. Quakyi EK, et al. **Pathobiology** 1997;65(1):26–38

Overactivation of the immune system by translocated bacteria and bacterial products. Hartung T, et al. **Scand J Gastroenterol Suppl** 1997;222:98–9

NO in septic shock: good, bad or ugly? Learning from iNOS knockouts. Gross SS, et al. **Trends Microbiol** 1996 Feb; 4(2):47–9

T–cell activation and proliferation in a case of recurrent menstrual toxic shock syndrome. Arvand M, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):164–9

[Effective prevention with rhG–CSF in abdominal infection: improved antimicrobial functions of granulocytes as a new mechanism in vivo] Bauhofer A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:593–6 (Eng. Abstr.) **(Ger)**

[Monocyte endotoxin elimination: what is the role of membrane–associated CD 14?] Hiki N, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:373–7 (Eng. Abstr.) **(Ger)**

[Effect of traumatic and septic shock on activation and signal transduction of circulating neutrophilic granulocytes] Rose S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:597–600 (Eng. Abstr.) **(Ger)**

[Early endotoxin tolerance––a preventive concept against infection] Staubach KH, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:360–3 (Eng. Abstr.) **(Ger)**

[Increased expression of apoptosis–inducing proteins Fas antigen and Fas ligand on mononuclear cells of septic patients] Ungethüm U, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:623–5 (Eng. Abstr.) **(Ger)**

[Effect of plasma separation on serum–induced granulocyte adhesion, Il–1beta and TNF–alpha level in septic patients] Vogel P, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:379–85 (Eng. Abstr.) **(Ger)**

[Cytokines and heart diseases. Attempt at an update] Werdan K. **Med Klin** 1997 Jul 15;92(7):432–8 (29 ref.) (Eng. Abstr.) **(Ger)**

METABOLISM

Renal gluconeogenesis and blood flow during endotoxic shock. Maitra SR, et al. **Acad Emerg Med** 1996 Nov; 3(11):1006–10

Gut ischemia and mesenteric synthesis of inflammatory cytokines after hemorrhagic or endotoxic shock. Tamion F, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G314–21

L–canavanine improves organ function and tissue adenosine triphosphate levels in rodent endotoxemia. Liaudet L, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1643–8

Effects of a dobutamine–induced increase in splanchnic blood flow on hepatic metabolic activity in patients with septic shock. Reinelt H, et al. **Anesthesiology** 1997 Apr; 86(4):818–24

Combination of flucloxacillin and gentamicin inhibits toxic shock syndrome toxin 1 production by Staphylococcus aureus in both logarithmic and stationary phases of growth. van Langevelde P, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1682–5

Activation of the L–arginine nitric oxide pathway in severe sepsis. Duke T, et al. **Arch Dis Child** 1997 Mar;76(3):203–9

Role of intracardiac angiotensin II in cardiac dysfunction of rat during septic shock. Ji Y, et al. **Chin Med J (Engl)** 1996 Nov;109(11):864–7

Oxygen delivery, oxygen consumption, and gastric intramucosal pH are not improved by a computer–controlled, closed–loop, vecuronium infusion in severe sepsis and septic shock. Freebairn RC, et al. **Crit Care Med** 1997 Jan;25(1):72–7

Oxygen transport patterns in patients with sepsis syndrome or septic shock: influence of treatment and relationship to outcome [see comments] Hayes MA, et al. **Crit Care Med** 1997 Jun;25(6):926–36. Comment in: Crit Care Med 1997 Jun;25(6):904–5.

Nitric oxide overproduction in septic shock––methemoglobin concentrations and blockade with diaspirin cross–linked hemoglobin [editorial; comment] Kilbourn RG. **Crit Care Med** 1997 Sep;25(9):1446–7. Comment on: Crit Care Med 1997 Sep;25(9):1588–93.

Circulating methemoglobin and nitrite/nitrate concentrations as indicators of nitric oxide overproduction in critically ill children with septic shock [see comments] Krafte–Jacobs B, et al. **Crit Care Med** 1997 Sep;25(9):1588–93. Comment in: Crit Care Med 1997 Sep;25(9):1446–7.

Could L–carnitine be an acute energy inducer in catabolic conditions? Keskin S, et al. **Dev Med Child Neurol** 1997 Mar;39(3):174–7

Tetrahydrobiopterin and GTP cyclohydrolase I in a rat model of endotoxic shock: relation to nitric oxide synthesis. Hattori Y, et al. **Exp Physiol** 1996 Jul;81(4):665–71

Clinical evidence of peroxynitrite formation in chronic renal failure patients with septic shock. Fukuyama N, et al. **Free Radic Biol Med** 1997;22(5):771–4

Nitric oxide and septic shock. Thiemermann C. **Gen Pharmacol** 1997 Aug;29(2):159–66 (55 ref.)

Molecules and mechanisms operating in septic shock: lessons from knockout mice. Gutierrez–Ramos JC, et al. **Immunol Today** 1997 Jul;18(7):329–34 (48 ref.)

PEEP and hepatic metabolic performance in septic shock [letter] Träger K, et al. **Intensive Care Med** 1996 Nov; 22(11):1274–5

Rapid Up–regulation of IkappaBbeta and abrogation of NF–kappaB activity in peritoneal macrophages stimulated with lipopolysaccharide. Velasco M, et al. **J Biol Chem** 1997 Sep 12;272(37):23025–30

Linkage of aerobic glycolysis to sodium–potassium transport in rat skeletal muscle. Implications for increased muscle lactate production in sepsis. James JH, et al. **J Clin Invest** 1996 Nov 15;98(10):2388–97

Exhaled nitric oxide as a marker for serum nitric oxide concentration in acute endotoxemia. Hussain SN, et al. **J Crit Care** 1996 Dec;11(4):167–75

Effects of eicosanoids on lipopolysaccharide–induced ornithine decarboxylase activity and polyamine metabolism in the mouse liver. Matsuzaki Y, et al. **J Hepatol** 1997 Jul; 27(1):193–200

Macrophage migration inhibitory factor: a counter–regulator of glucocorticoid action and critical mediator of septic shock. Calandra T, et al. **J Inflamm** 1995–96;47(1–2):39–51 (52 ref.)

Pharmacological profile of SB 203580, a selective inhibitor of cytokine suppressive binding protein/p38 kinase, in animal models of arthritis, bone resorption, endotoxin shock and immune function. Badger AM, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1453–61

Differential distribution of ecNOS and iNOS mRNA in rat heart after endotoxin administration. Ishiwata T, et al. **Jpn Heart J** 1997 May;38(3):445–55

Hepatic response to the oxidative stress induced by E. coli endotoxin: glutathione as an index of the acute phase during the endotoxic shock. Portolés MT, et al. **Mol Cell Biochem** 1996 Jun 21;159(2):115–21

Tissue glucose transport and glucose transporters in suckling rats with endotoxic shock. Battelino T, et al. **Shock** 1996 Oct;6(4):259–62

Perinatal nutrition enriched with omega–3 polyunsaturated fatty acids attenuates endotoxic shock in newborn rats. Farolan LR, et al. **Shock** 1996 Oct;6(4):263–6

Endotoxic shock leads to apoptosis in vivo and reduces Bcl–2. Haendeler J, et al. **Shock** 1996 Dec;6(6):405–9

The influence of heat shock protein 70 induction on hemodynamic variables in a porcine model of recurrent endotoxemia. Klosterhalfen B, et al. **Shock** 1997 May; 7(5):358–63

Partial hepatectomy reduces the endotoxin–induced peak circulating level of tumor necrosis factor in rats. Kumins NH, et al. **Shock** 1996 May;5(5):385–8

Hepatic release of tumor necrosis factor in the endotoxin–treated conscious dog. McGuinness OP, et al. **Shock** 1996 May;5(5):344–8

Splanchnic homeostasis during endotoxin challenge in the pig as assessed by microdialysis and tonometry. Oldner A, et al. **Shock** 1996 Sep;6(3):188–93

Calcium–activated potassium channel–mediated arteriolar relaxation during endotoxic shock. Price JM, et al. **Shock** 1997 Apr;7(4):294–9

Pteridine and nitrite/nitrate formation in experimental septic and traumatic shock. Strohmaier W, et al. **Shock** 1996 Oct; 6(4):254–8

[Characteristics of amino acid metabolism in patients with severe sepsis and septic shock] Leiderman IN, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):45–8 (Eng. Abstr.) **(Rus)**

[Inhibition of the nitric oxide pathway in refractory septic shock] Andresen M, et al. **Rev Med Chil** 1996 Apr; 124(4):442–7 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Pyomyositis with toxic shock syndrome presenting as back pain and fever: a case report and literature review. Wolfe MW, et al. **Am J Orthop** 1997 Feb;26(2):135–7 (26 ref.)

Necrotizing group A streptococcal infections associated with streptococcal toxic shock syndrome. Sellers BJ, et al. **Am J Surg** 1996 Nov;172(5):523–7; discussion 527–8

Acute meningococcaemia: recent advances in management (with particular reference to children). Kennedy NJ, et al. **Anaesth Intensive Care** 1996 Apr;24(2):197–216 (184 ref.)

Toxic shock–like syndrome caused by non–group A beta–hemolytic streptococci. Hirose Y, et al. **Arch Intern Med** 1997 Sep 8;157(16):1891–4

Toxic streptococcal syndrome. Stanford DG, et al. **Australas J Dermatol** 1997 Aug;38(3):158–60

Toxic shock syndrome: role of the environment, the host and the microorganism. Chance TD. **Br J Biomed Sci** 1996 Dec;53(4):284–9 (37 ref.)

Use of polymerase chain reaction to identify pneumococcal infection associated with hemorrhage and shock in two previously healthy young children. Messmer TO, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):930–5

Septic shock due to disseminated tuberculosis. George S, et al. **Clin Infect Dis** 1996 Jan;22(1):188–9

Fatal septic shock with multiple organ failure due to Campylobacter jejuni. Meyrieux V, et al. **Clin Infect Dis** 1996 Jan;22(1):183–4

Severe sepsis caused by Clostridium sordellii following liver biopsy in a liver transplant recipient. Mory F, et al. **Clin Infect Dis** 1995 Dec;21(6):1522–3

Gemella morbillorum as a cause of septic shock [see comments] Vasishtha S, et al. **Clin Infect Dis** 1996 Jun; 22(6):1084–6. Comment in: Clin Infect Dis 1997 Feb;24(2):284–5.

Acute group G streptococcal myositis associated with streptococcal toxic shock syndrome: case report and review. Wagner JG, et al. **Clin Infect Dis** 1996 Nov; 23(5):1159–61

The yeast to hyphal transition following hematogenous candidiasis induces shock and organ injury independent of circulating tumor necrosis factor–alpha. Matuschak GM, et al. **Crit Care Med** 1997 Jan;25(1):111–20

Streptococcal toxic–shock syndrome: spectrum of disease, pathogenesis, and new concepts in treatment. Stevens DL. **Emerg Infect Dis** 1995 Jul–Sep;1(3):69–78 (80 ref.)

Serotyping of Streptococcus pyogenes isolated from common and severe invasive infections in Japan, 1990–5: implication of the T3 serotype strain–expansion in TSLS. The Working Group for Group A Streptococci in Japan. Inagaki Y, et al. **Epidemiol Infect** 1997 Aug;119(1):41–8

Macrophages sense pathogens via DNA motifs: induction of tumor necrosis factor–alpha–mediated shock. Sparwasser T, et al. **Eur J Immunol** 1997 Jul;27(7):1671–9

Coagulase–negative staphylococci isolated from two cases of toxic shock syndrome lack superantigenic activity, but induce cytokine production. Lina G, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):81–6

Prevalence of the speA2 and speA3 alleles in Streptococcus pyogenes isolated from TSLS patients in Japan. Matsumoto M, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):233–7

Streptococcal toxic shock syndrome in a postpartum woman. Case report and review of the literature. Jorup–Rönström C, et al. **Infection** 1996 Mar–Apr;24(2):164–7 (68 ref.)

Fatal concomitant nosocomial Legionnaires' disease and cytomegalovirus pneumonitis after cardiac transplantation

[letter] Harbarth S, et al. **Intensive Care Med** 1996 Oct; 22(10):1133–4

Toxic shock syndrome due to group C streptococci. A case report. Natoli S, et al. **Intensive Care Med** 1996 Sep; 22(9):985–9

A fatal postpartum Clostridium sordellii associated toxic shock syndrome. Bitti A, et al. **J Clin Pathol** 1997 Mar; 50(3):259–60

Transmission of Streptococcus pyogenes causing toxic shock-like syndrome among family members and confirmation by DNA macrorestriction analysis. Ichiyama S, et al. **J Infect Dis** 1997 Mar;175(3):723–6

Severe community-acquired pneumonia, shock and multiorgan dysfunction syndrome caused by Chlamydia pneumoniae. Marik PE, et al. **J Intern Med** 1997 May; 241(5):441–4

Streptococcus suis toxic-shock syndrome and meningitis. Leelarasamee A, et al. **J Med Assoc Thai** 1997 Jan; 80(1):63–8

Dengue haemorrhagic fever and the dengue shock syndrome in India. Lall R, et al. **Natl Med J India** 1996 Jan–Feb; 9(1):20–3 (74 ref.)

Bacterial DNA causes septic shock [letter] Sparwasser T, et al. **Nature** 1997 Mar 27;386(6623):336–7

Haemophilus influenzae salpingitis and septicemia in an adult. Carmeci C, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):863

[Toxic shock-like syndrome caused by streptococci—treated with clindamycin] Nørgaard M. **Ugeskr Laeger** 1997 Apr 14;159(16):2396–7 (Eng. Abstr.) **(Dan)**

[Properties of extracellular products produced by group A streptococci isolated from patient with streptococcal toxic shock syndrome] Suzuki J, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):273–8 (Eng. Abstr.) **(Jpn)**

[A case of fluminant septic shock due to Streptococcus agalactiae in a patient with MPO-ANCA related glomerulonephritis] Tanaka A, et al. **Kansenshogaku Zasshi** 1996 Nov;70(11):1186–9 (Eng. Abstr.) **(Jpn)**

[A case of toxic shock syndrome induced by MRSA after sinus surgery] Nakayama M, et al. **Masui** 1996 Aug; 45(8):994–7 (Eng. Abstr.) **(Jpn)**

[The detection of Peptostreptococcus asaccharolyticus and Bacillus cereus in clinical materials from a child who died of sepsis with a fulminant clinical course] Beleva S, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec; (6):16–20 (11 ref.) (Eng. Abstr.) **(Rus)**

[Septic shock by Serratia plymuthica (letter)] Martínez J, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):114–5 **(Spa)**

[Streptococcal septic shock secondary to peritonitis (letter)] Merlo VE, et al. **Enferm Infecc Microbiol Clin** 1996 Nov; 14(9):574–5 **(Spa)**

[Severe infections caused by group A beta-hemolytic streptococcus: report of the latest 3 cases at the La Fe Hospital of Valencia] Bretón Martínez JR, et al. **Rev Clin Esp** 1997 Feb;197(2):104–7 **(Spa)**

MORTALITY

A diet containing glycine improves survival in endotoxin shock in the rat. Ikejima K, et al. **Am J Physiol** 1996 Jul; 271(1 Pt 1):G97–103

Multiparameter models for the prediction of sepsis outcome. Warner A, et al. **Ann Clin Lab Sci** 1996 Nov–Dec; 26(6):471–9

Septic shock as a predictor of mortality in bacteremia caused by coagulase-negative staphylococci. Topeli A, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):411–6

Prevention of endotoxin-induced lethality in neonatal mice by interleukin-13. Nicoletti F, et al. **Eur J Immunol** 1997 Jun;27(6):1580–3

Hemoglobin increases mortality from bacterial endotoxin. Su D, et al. **Infect Immun** 1997 Apr;65(4):1258–66

Predictors of mortality and multiple organ failure in children with sepsis. Duke TD, et al. **Intensive Care Med** 1997 Jun; 23(6):684–92

Tumor necrosis factor receptor: Fc fusion protein does not improve septic shock and may increase mortality in human [editorial] Atallah AN. **Rev Paul Med** 1996 May–Jun; 114(3):1151

Low-level expression and limited role for the inducible isoform of nitric oxide synthase in the vascular hyporeactivity and mortality associated with cecal ligation and puncture in the rat. Vromen A, et al. **Shock** 1996 Oct; 6(4):248–53

Anti-interleukin-8 monoclonal antibody reduces free radical production and improves hemodynamics and survival rate in endotoxic shock in rabbits. Carvalho GL, et al. **Surgery** 1997 Jul;122(1):60–8

[pHi value as a prognostic parameter in septic and polytrauma patients] Weitz J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:334–7 (Eng. Abstr.) **(Ger)**

PARASITOLOGY

Acute respiratory distress syndrome due to falciparum malaria in a pregnant woman. Baud M, et al. **Intensive Care Med** 1997 Jul;23(7):787–9

PATHOLOGY

DNA fragmentation in mouse organs during endotoxic shock. Bohlinger I, et al. **Am J Pathol** 1996 Oct;149(4):1381–93

Comparative in vivo and in vitro models to approach the cellular basis of endotoxic shock. The role of sinusoidal liver cells. Pagani R, et al. **Histol Histopathol** 1996 Jul; 11(3):597–606

Toxic shock syndrome in AIDS [letter] Klinker H, et al. **Int J Dermatol** 1997 Jun;36(6):472–3

Endotoxic shock leads to apoptosis in vivo and reduces Bcl-2. Haendeler J, et al. **Shock** 1996 Dec;6(6):405–9

Endothelial structural integrity is maintained during endotoxic shock in an interleukin-1 type 1 receptor knockout mouse. Sutton ET, et al. **Shock** 1997 Feb; 7(2):105–10

[The ultrastructural changes in type-2 pneumocytes in experimental heat and endotoxic shock] Angelov A. **Eksp Med Morfol** 1994;32(3–4):27–39 (Eng. Abstr.) **(Bul)**

[Gram-positive septic-toxic shock with bullae. Intraepidermal splitting as an indication of toxin effect] Buslau M, et al. **Hautarzt** 1996 Oct;47(10):783–9 (Eng. Abstr.) **(Ger)**

[Fulminant infection outcome after splenectomy] Rodriguez Gomez M, et al. **Pathologe** 1997 May;18(3):257–60 (Eng. Abstr.) **(Ger)**

[Structural-functional changes in liver and brain in endotoxic shock (ultrastructural study)] Bardakhch'ian EA, et al. **Patol Fiziol Eksp Ter** 1997 Jan–Mar;(1):17–21 (Eng. Abstr.) **(Rus)**

[Shock of rapidly catastrophic course in a chronically alcoholic and diabetic 49-year-old male (clinical conference)] Sabrià M, et al. **Med Clin (Barc)** 1997 May 3;108(17):669–76 **(Spa)**

PHYSIOPATHOLOGY

Pathogenesis and innovative treatment of septic shock. Ognibene FP. **Adv Intern Med** 1997;42:313–38 (89 ref.)

Septic shock. Shenep JL. **Adv Pediatr Infect Dis** 1996; 12:209–41 (162 ref.)

Endotoxin shock: thermoregulatory mechanisms. Romanovsky AA, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R693–703

Endothelin causes portal and pulmonary hypertension in porcine endotoxemic shock. Yamamoto S, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1239–49

Effects of norepinephrine on regional blood flow and oxygen extraction capabilities during endotoxic shock. Zhang H, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1965–71

Endotoxin shock-associated hypothermia. How and why does it occur? Romanovsky AA, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:733–7

Anaphylactoid reaction to ciprofloxacin versus toxic shock syndrome [letter] Salon EJ, et al. **Ann Pharmacother** 1997 Jan;31(1):119–20

The emerging role of MIF in septic shock and infection. Bernhagen J, et al. **Biotherapy** 1994;8(2):123–7 (35 ref.)

Involvement of nitric oxide in hyporeactivity of rat mesenteric vascular bed during endotoxic shock: effect of dexamethasone and endothelin-1. Mansi G, et al. **Boll Soc Ital Biol Sper** 1996 May–Jun;72(5–6):155–62

Nitric oxide in critical care medicine. Cuthbertson BH, et al. **Br J Hosp Med** 1995 Dec 13–1996 Jan 16;54(11):579–82 (15 ref.)

Role of nitric oxide in the circulatory failure and organ injury in a rodent model of gram-positive shock. Kengatharan KM, et al. **Br J Pharmacol** 1996 Dec;119(7):1411–21

Effect of calpain inhibitor I, and inhibitor of the proteolysis of I kappa B, on the circulatory failure and multiple organ dysfunction caused by endotoxin in the rat. Ruetten H, et al. **Br J Pharmacol** 1997 Jun;121(4):695–704

Bosentan-improved cardiopulmonary vascular performance and increased plasma levels of endothelin-1 in porcine endotoxin shock. Weitzberg E, et al. **Br J Pharmacol** 1996 Jun;118(3):617–26

The potential role of peroxynitrite in the vascular contractile and cellular energetic failure in endotoxic shock. Zingarelli B, et al. **Br J Pharmacol** 1997 Jan;120(2):259–67

The microcirculation during endotoxemia. McCuskey RS, et al. **Cardiovasc Res** 1996 Oct;32(4):752–63 (158 ref.)

Vasopressin deficiency contributes to the vasodilation of septic shock [see comments] Landry DW, et al. **Circulation** 1997 Mar 4;95(5):1122–5. Comment in: Circulation 1997 Mar 4;95(5):1108–10.

Role of vasopressin deficiency in the vasodilation of septic shock [editorial; comment] Reid IA. **Circulation** 1997 Mar 4;95(5):1108–10 (21 ref.). Comment on: Circulation 1997 Mar 4;95(5):1122–5.

Cardiac dysfunction during septic shock. Bunnell E, et al. **Clin Chest Med** 1996 Jun;17(2):237–48 (40 ref.)

Starling resistor effects on pulmonary artery occlusion pressure in endotoxin shock provide inaccuracies in left ventricular compliance assessments. Fang K, et al. **Crit Care Med** 1996 Oct;24(10):1618–25

Effects of carboxy-PTIO on systemic hemodynamics, liver energetics, and concentration of liver metabolites during endotoxic shock in rabbits: a 31P and 1H magnetic resonance spectroscopic study. Kaneda K, et al. **Crit Care Med** 1997 Jun;25(6):1019–29

Dobutamine improves gastrointestinal mucosal blood flow in a porcine model of endotoxic shock [see comments] Nevière R, et al. **Crit Care Med** 1997 Aug;25(8):1371–7. Comment in: Crit Care Med 1997 Aug;25(8):1266–7.

Increased plasma concentrations of adrenomedullin correlate with relaxation of vascular tone in patients with septic shock. Nishio K, et al. **Crit Care Med** 1997 Jun;25(6):953–7

Impact of knockout mice in toxicology. Ryffel B. **Crit Rev Toxicol** 1997 Mar;27(2):135–54 (120 ref.)

The inflammatory cytokines. New developments in the pathophysiology and treatment of septic shock. Glauser MP. **Drugs** 1996;52 Suppl 2:9–17 (35 ref.)

Evidence for tumor necrosis factor alpha as a mediator of the toxicity of a cyclooxygenase inhibitor in Gram-negative sepsis. Campanile F, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):191–9

Streptococcal toxic shock-like syndrome. Report of two cases from Italy. Girelli CM, et al. **Infection** 1996 Jan–Feb; 24(1):43–6

Blood pressure and arterial lactate level are early indicators of short-term survival in human septic shock [see comments] Bernardin G, et al. **Intensive Care Med** 1996 Jan;22(1):17–25. Comment in: Intensive Care Med 1996 Jan;22(1):3–5.

Does tissue acidosis in sepsis indicate tissue hypoperfusion? [editorial] Fink MP. **Intensive Care Med** 1996 Nov; 22(11):1144–6

Endothelial dysfunction in a rat model of endotoxic shock. Importance of the activation of poly (ADP-ribose) synthetase by peroxynitrite. Szabó C, et al. **J Clin Invest** 1997 Aug 1;100(3):723–35

Cardiovascular derangement in septic shock and nitric oxide [editorial; comment] Lodato RF. **J Crit Care** 1996 Dec; 11(4):151–4 (21 ref.). Comment on: J Crit Care 1996 Dec;11(4):155–66.

Transcriptional activation of vascular cell adhesion molecule-1 gene in vivo and its role in the pathophysiology of neutrophil-induced liver injury in murine endotoxin shock. Essani NA, et al. **J Immunol** 1997 Jun 15; 158(12):5941–8

Circadian time structure of septic shock: timing is everything [letter; comment] Hrushesky WJ, et al. **J Infect Dis** 1997 May;175(5):1283–4. Comment on: J Infect Dis 1996 Nov;174(5):1040–5.

Comparison of endothelial activation during endotoxic and posttraumatic conditions by serum analysis of soluble E-selectin in nonhuman primates. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):515–9

Role of platelet-activating factor antagonism in posthemorrhage septic shock in pigs. Abu-Zidan FM, et al. **J Trauma** 1996 Oct;41(4):634–40

Effect of pharmacological agonists on contractile responses in aortic rings derived from endotoxaemic rats. Donaldson LL, et al. **J Vet Pharmacol Ther** 1996 Oct;19(5):389–96

Role of platelet-activating factor and prostanoids in hemodynamic changes in rat experimental endotoxic shock. Ebara T, et al. **Jpn J Pharmacol** 1996 Jul;71(3):247–53

Transcranial Doppler and systemic hemodynamic studies in septic shock. Straver JS, et al. **Neurol Res** 1996 Aug; 18(4):313–8

Relationship between circulating levels of calcitonin gene-related peptide, nitric oxide metabolites and hemodynamic changes in human septic shock. Arnalich F, et al. **Regul Pept** 1996 Sep 9;65(2):115–21

Sepsis and septic shock. Zanetti G, et al. **Schweiz Med Wochenschr** 1997 Mar 22;127(12):489–99 (77 ref.)

A porcine model of peritonitis and bacteremia simulates human septic shock. Goldfarb RD, et al. **Shock** 1996 Dec; 6(6):442–51

Laparotomy and renal function during endotoxin shock in rats. Heemskerk AE, et al. **Shock** 1996 Dec;6(6):410–7

Gram-negative shock in rats depends on the presence of capsulated bacteria and is modified by laparotomy. Heemskerk AE, et al. **Shock** 1996 Dec;6(6):418–25

Attenuation of endotoxin-induced pathophysiology by a new potent PAF receptor antagonist. Kruse-Elliott KT, et al. **Shock** 1996 Apr;5(4):265–73

Molsidomine increases endotoxic survival and decreases cytokine production. Kumins NH, et al. **Shock** 1997 Mar; 7(3):200–5

Effects of phentolamine or yohimbine on naloxone's actions during endotoxin shock in rats. Law WR, et al. **Shock** 1997 Mar;7(3):217–24

Increase of calcitonin gene-related peptide (CGRP) release and mRNA levels in endotoxic rats. Tang Y, et al. **Shock** 1997 Mar;7(3):225–9

Hyper- and hypocardiodynamic states are associated with externalization and internalization, respectively, of alpha-adrenergic receptors in rat heart during sepsis. Wu LL, et al. **Shock** 1997 May;7(5):318–23

Anti-interleukin-8 monoclonal antibody reduces free radical production and improves hemodynamics and survival rate in endotoxic shock in rabbits. Carvalho GL, et al. **Surgery** 1997 Jul;122(1):60–8

Hemodynamic and metabolic effects of vasopressin blockade in endotoxin shock. Matsuoka T, et al. **Surgery** 1997 Feb; 121(2):162–73

[Nitric oxide—a basic mediator of vasodilation and septic shock] Vasilev D, et al. **Khirurgiia (Sofiia)** 1996;49(4):14–6 (35 ref.) (Eng. Abstr.) **(Bul)**

[The pathophysiological and intensive care-resuscitation aspects of septic shock] Vasilev D, et al. **Khirurgiia (Sofiia)** 1996;49(4):9–11 (24 ref.) (Eng. Abstr.) **(Bul)**

[Role of nitric oxide in hemodynamic and extravascular lung water in a dog endotoxin shock model] Wu X, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Oct;76(10):738–41 (Eng.

SHOCK, SEPTIC

Abstr.) **(Chi)**

[Physiopathology and new treatments of septic shock] Offenstadt G, et al. **Presse Med** 1996 Oct 19;25(31):1459–65 (24 ref.) (Eng. Abstr.) **(Fre)**

[Decreased transport of bile acids and organic anions as the etiology of cholestasis in endotoxinemia] Bolder U, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:571–7 (Eng. Abstr.) **(Ger)**

[Effect of intracellular iron homeostasis on formation of hydroxyl radicals and nitric oxide and their effects on cellular damage] Jung M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:619–22 (Eng. Abstr.) **(Ger)**

[Intestinal circulation in septic shock is independent of endotoxin-induced increase in systemic nitric oxide levels in the rat] Klemm K, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:589–92 (Eng. Abstr.) **(Ger)**

[The heart in infection and MODS (multiple organ dysfunction syndrome)] Müller-Werdan U, et al. **Wien Klin Wochenschr Suppl** 1997;1:3–24 (200 ref.) (Eng. Abstr.) **(Ger)**

[Active mediators in the pathogenesis of septic shock and the importance of their neutralization in the treatment of patients] Bojić I. **Vojnosanit Pregl** 1996 Nov–Dec; 53(6):511–8 (42 ref.) **(Scr)**

[Etiology and pathogenesis of septic shock] Krčméry V. **Vnitr Lek** 1996 Jul;42(7):467–9 (Eng. Abstr.) **(Slo)**

PREVENTION & CONTROL

A sublethal dose of LPS to pregnant rats induces TNF-alpha tolerance in their 0-day-old offspring. Goto M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1158–62

A novel submandibular gland peptide protects against endotoxic and anaphylactic shock. Mathison RD, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1017–23

The effects of post-treatment with lisofylline, a phosphatidic acid generation inhibitor, on sepsis-induced acute lung injury in pigs. Hasegawa N, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):928–36

Intraperitoneal injection of tetracyclines protects mice from lethal endotoxemia downregulating inducible nitric oxide synthase in various organs and cytokine and nitrate secretion in blood. Milano S, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):117–21

Effects of antitumor activity and protection of shock symptoms by a traditional Chinese medicine (sho-saiko-to) in recombinant human tumor necrosis factor administered mice. Sakaguchi S, et al. **Biol Pharm Bull** 1996 Nov; 19(11):1474–8

Effect of selective blockade of endothelin ETB receptors on the liver dysfunction and injury caused by endotoxaemia in the rat. Ruetten H, et al. **Br J Pharmacol** 1996 Oct; 119(3):479–86

Prevention of endotoxin-induced lethality in neonatal mice by interleukin-13. Nicoletti F, et al. **Eur J Immunol** 1997 Jun;27(6):1580–3

Intervention in endotoxin shock by sulfatide (I3SO3-GalCer) with a concomitant reduction in tumor necrosis factor alpha production. Higashi H, et al. **Infect Immun** 1997 Apr; 65(4):1223–7

Resistance to lipopolysaccharide mediated by the Yersinia pestis V antigen-polyhistidine fusion peptide: amplification of interleukin-10. Nedialkov YA, et al. **Infect Immun** 1997 Apr;65(4):1196–203

Protection against septic shock in mice with SJC13, an azaindolidine derivative that is a cell adhesion molecule inhibitor. Sakai A. **Inflamm Res** 1996 Sep;45(9):448–51

Alpha-1-acid (AAG, orosomucoid) glycoprotein: interaction with bacterial lipopolysaccharide and protection from sepsis. Moore DF, et al. **Inflammation** 1997 Feb;21(1):69–82

Antibodies against CD14 protect primates from endotoxin-induced shock. Leturcq DJ, et al. **J Clin Invest** 1996 Oct 1;98(7):1533–8

Enterotoxin septic shock protection and deficient T helper 2 cytokine production in growth hormone transgenic mice. Gonzalo JA, et al. **J Immunol** 1996 Oct 15;157(8):3298–304

Toxic shock syndrome toxin-1-induced death is prevented by CTLA4Ig. Saha B, et al. **J Immunol** 1996 Nov 1; 157(9):3869–75

CD28 ligation prevents bacterial toxin-induced septic shock in mice by inducing IL-10 expression. Wang R, et al. **J Immunol** 1997 Mar 15;158(6):2856–61

[Prevention of endotoxic shock in rats with hepatic stimulating substance] Zeng W, et al. **Chung Hua Nei Ko Tsa Chih** 1996 Feb;35(2):99–102 (Eng. Abstr.) **(Chi)**

[Facts and fancy in intensive care. A good example: septic shock (editorial)] Devictor D. **Arch Pediatr** 1996 Sep; 3(9):841–4 (23 ref.) **(Fre)**

[Clinical effectiveness of non-selective intestinal decontamination for prevention of infection in multiple trauma patients] Brune E, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:945–6 **(Ger)**

[Surgical prevention of post-traumatic infection by immediate necrectomy of burn wounds] Pallua N, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1144–8 (Eng. Abstr.) **(Ger)**

SURGERY

Treatment of thromboembolic complications of fulminant meningococcal septic shock. Mele JA 3rd, et al. **Ann Plast Surg** 1997 Mar;38(3):283–90 (29 ref.)

[Anaerobic surgical infection and septic shock] Iarŭmov N, et al. **Khirurgiia (Sofiia)** 1996;49(6):19–22 (Eng. Abstr.) **(Bul)**

[Streptococcal toxic shock-like syndrome" as a rare surgical disease picture] Willis S, et al. **Chirurg** 1997 Jan;68(1):40–4 (Eng. Abstr.) **(Ger)**

THERAPY

Pathogenesis and innovative treatment of septic shock. Ognibene FP. **Adv Intern Med** 1997;42:313–38 (89 ref.)

Adjunctive treatment of streptococcal toxic shock syndrome using intravenous immunoglobulin: case report and review. Perez CM, et al. **Am J Med** 1997 Jan;102(1):111–3 (15 ref.)

Septic shock: current concepts [editorial] Brampton WJ. **Br J Hosp Med** 1997 Feb 19–Mar 4;57(4):127–9

Septic shock. Baxter F. **Can J Anaesth** 1997 Jan;44(1):59–72 (102 ref.)

Myocardial and vascular adrenergic alterations in a rat model of endotoxin shock: reversal by an anti-tumor necrosis factor-alpha monoclonal antibody. Boillot A, et al. **Crit Care Med** 1997 Mar;25(3):504–11

Oxygen delivery, oxygen consumption, and gastric intramucosal pH are not improved by a computer-controlled, closed-loop, vecuronium infusion in severe sepsis and septic shock. Freebairn RC, et al. **Crit Care Med** 1997 Jan;25(1):72–7

Starling resistor effects on pulmonary artery occlusion pressure in endotoxin shock [letter] Her C. **Crit Care Med** 1997 Sep;25(9):1612–6

Effect of hemocarboperfusion on organ blood flow and survival in porcine endotoxic shock. Odnopozov VA, et al. **Crit Care Med** 1996 Dec;24(12):2021–6

New perspectives on the management of septic shock in the cancer patient. Toney JF, et al. **Infect Dis Clin North Am** 1996 Jun;10(2):239–53 (95 ref.)

Successful treatment of severe streptococcal toxic shock syndrome with a combination of intravenous immunoglobulin, dexamethasone and antibiotics [letter] Chiu CH, et al. **Infection** 1997 Jan-Feb;25(1):47–8

Polymyxin B-immobilized fiber improves hyperdynamic state in MRSA septic patients [letter] Kawamata T, et al. **Intensive Care Med** 1997 Jan;23(1):130–1

Anti-inflammatory therapies: application of molecular biology techniques in intensive care medicine. Liu M, et al. **Intensive Care Med** 1997 Jul;23(7):718–31 (127 ref.)

Septic shock: pathogenesis and treatment [see comments] Bansal T, et al. **J Assoc Physicians India** 1996 Jun; 44(6):407–14 (51 ref.). Comment in: J Assoc Physicians India 1996 Jun;44(6):371–4.

ECMO for refractory cardiorespiratory failure due to meningococcal disease [letter; comment] De Munter C, et al. **Lancet** 1997 May 10;349(9062):1398. Comment on: Lancet 1997 Feb 15;349(9050):466–9.

ECMO for refractory cardiorespiratory failure due to meningococcal disease [letter; comment] Leclerc F, et al. **Lancet** 1997 May 10;349(9062):1397; discussion 1397–8. Comment on: Lancet 1997 Feb 15;349(9050):466–9.

Tumor necrosis factor receptor: Fc fusion protein in septic shock [letter; comment] Glauser MP, et al. **N Engl J Med** 1996 Nov 21;335(21):1608; discussion 1608–9 . Comment on: N Engl J Med 1996 Jun 27;334(26):1697–702.

Tumor necrosis factor receptor: Fc fusion protein in septic shock [letter; comment] Whiteley MS. **N Engl J Med** 1996 Nov 21;335(21):1607–8; discussion 1608–9. Comment on: N Engl J Med 1996 Jun 27;334(26):1697–702.

Reduction of plasma nitric oxide in a patient with endotoxic shock by hemoadsorption therapy [letter] Shimada N, et al. **Nephron** 1997;75(1):115

Protective effects of a thromboxane synthetase inhibitor and continuous arteriovenous hemofiltration in rat endotoxic shock. Heidemann SM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 Jun; 56(6):473–8

Tumor necrosis factor receptor: Fc fusion protein does not improve septic shock and may increase mortality in human [editorial] Atallah AN. **Rev Paul Med** 1996 May-Jun; 114(3):1151

Effect of antileukocyte adhesion molecule antibodies, nitric oxide synthase inhibitor, and corticosteroids on endotoxin shock in mice. Maeda T, et al. **Surg Today** 1997;27(1):22–9

Therapies for sepsis. Emerging therapies for sepsis and septic shock. Abraham E. **West J Med** 1997 Mar;166(3):195–200

[The pathophysiological and intensive care-resuscitation aspects of septic shock] Vasilev D, et al. **Khirurgiia (Sofiia)** 1996;49(4):9–11 (24 ref.) (Eng. Abstr.) **(Bul)**

[Role of albumin in pulmonary edema and septic shock, plasma volume expansion excluded] Guidet B. **Ann Fr Anesth Reanim** 1996;15(4):525–31 (Eng. Abstr.) **(Fre)**

[Differential volume substitution therapy] **Anaesthesist** 1996 Nov;45(11 Suppl):1–8 **(Ger)**

[Kinetic therapy within the scope of treating septic surgical patients] Muhl E, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Apr; 32(4):249–52 **(Ger)**

[Is there a reliable immunotherapy in infection?] Grimminger F, et al. **Internist (Berl)** 1997 Jun;38(6):541–52 (40 ref.) **(Ger)**

[Outcomes research exemplified by infection] Witthaut R, et al. **Internist (Berl)** 1996 Dec;37(12):1249–59 (35 ref.) **(Ger)**

[The treatment of appendicular peritonitis complicated by septic shock in childhood] Gumerov AA, et al. **Vestn Khir Im I I Grek** 1997;156(1):91–3 (Eng. Abstr.) **(Rus)**

[Active mediators in the pathogenesis of septic shock and the importance of their neutralization in the treatment of patients] Bojić I. **Vojnosanit Pregl** 1996 Nov-Dec; 53(6):511–8 (42 ref.) **(Scr)**

[A killer bacteria caused fasciitis with sepsis. Prompt handling saved the patient's life] Brändström H, et al. **Lakartidningen** 1996 Oct 16;93(42):3687–9 (Eng. Abstr.) **(Swe)**

TRANSMISSION

A household cluster of fulminant group A streptococcus pneumonia associated with toxic shock syndrome-Quebec. **Can Commun Dis Rep** 1996 Mar 15;22(6):41–3 (6 ref.)

ULTRASONOGRAPHY

Left ventricular systolic and diastolic function in septic shock. Poelaert J, et al. **Intensive Care Med** 1997 May; 23(5):553–60

[Asymmetric hypertrophic cardiomyopathy in a septic patient--intraoperative preliminary diagnosis with transesophageal echocardiography] Greim CA, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):463–5 (Eng. Abstr.) **(Ger)**

VETERINARY

Effects of continuous venovenous hemofiltration on cardiopulmonary function in a porcine model of endotoxin-induced shock. Murphey ED, et al. **Am J Vet Res** 1997 Apr;58(4):408–13

Update on canine streptococcal toxic shock syndrome and necrotizing fasciitis. Prescott JF, et al. **Can Vet J** 1997 Apr; 38(4):241–2

Streptococcal toxic shock syndrome in dogs [see comments] Miller CW, et al. **J Am Vet Med Assoc** 1996 Oct 15; 209(8):1421–6. Comment in: J Am Vet Med Assoc 1996 Dec 15;209(12):1994–5.

Further evidence of streptococcal toxic shock syndrome in pets [letter; comment] White S. **J Am Vet Med Assoc** 1996 Dec 15;209(12):1994–5. Comment on: J Am Vet Med Assoc 1996 Oct 15;209(8):1421–6.

Evaluation of blood acid-base balance after experimental administration of endotoxin in adult cow. Ohtsuka H, et al. **J Vet Med Sci** 1997 Jun;59(6):483–5

Changes of serum cytokine activities and other parameters in dogs with experimentally induced endotoxic shock. Miyamoto T, et al. **Jpn J Vet Res** 1996 Aug;44(2):107–18

Progress in treating equine shock [news] **Vet Rec** 1996 Aug 3;139(5):104

Canine streptococcal toxic shock syndrome and necrotising fasciitis [letter] Prescott JF, et al. **Vet Rec** 1997 Mar 8; 140(10):263

The effects of hypertonic saline in healthy and diseased animals. Cambier C, et al. **Vet Res Commun** 1997 Jul; 21(5):303–16 (52 ref.)

VIROLOGY

Influenza B virus infection associated with shock in a two-month-old infant. Chang LY, et al. **J Formos Med Assoc** 1996 Sep;95(9):703–5

SHOCK, SURGICAL

ETIOLOGY

[Cardiovascular collapse after cemented prosthesis: bone cement or a massive embolism? (letter)] Figueira A, et al. **Rev Esp Anestesiol Reanim** 1996 Nov;43(9):339–40 **(Spa)**

IMMUNOLOGY

Immunoglobulin E in acute phase response to surgical stress. Szczeklik A, et al. **Clin Exp Allergy** 1996 Mar;26(3):303–7

VETERINARY

[Dorsal recumbency in dogs--a circulatory risk during surgical treatment?] Gärtner K, et al. **Tierarztl Prax** 1996 Dec;24(6):596–9 (Eng. Abstr.) **(Ger)**

SHOCK THERAPY see **CONVULSIVE THERAPY**

SHOCK THERAPY, ELECTRIC see **ELECTROCONVULSIVE THERAPY**

SHOCK THERAPY, INSULIN see **CONVULSIVE THERAPY**

SHOCK, TOXIC see **SHOCK, SEPTIC**

SHOCK, TRAUMATIC

[Computer simulation of post-traumatic emergency states]

Sokov LP, et al. **Med Tekh** 1997 Jan–Feb;(1):30–3 (Eng. Abstr.) **(Rus)**

BLOOD

Comparison of endothelial activation during endotoxic and posttraumatic conditions by serum analysis of soluble E-selectin in nonhuman primates. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):515–9

[The pathogenetic correction of disorders of blood oxygen transport in the postshock period of traumatic disease] Eriukhin IA, et al. **Vestn Khir Im I I Grek** 1996;(1):48–52 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Effect of small-volume resuscitation on intracranial pressure and related cerebral variables. Shackford SR. **J Trauma** 1997 May;42(5 Suppl):S48–53

[Prognosis of the course and outcome of shock in gunshot wounds] Polushin IuS, et al. **Anesteziol Reanimatol** 1996 May–Jun;(3):69–70 **(Rus)**

IMMUNOLOGY

Unexpected action of platelet activating factor antagonism after fluid resuscitation from traumatic shock. Schurr MJ, et al. **Surgery** 1997 May;121(5):493–500

[Effect of traumatic and septic shock on activation and signal transduction of circulating neutrophilic granulocytes] Rose S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:597–600 (Eng. Abstr.) **(Ger)**

[Anticardiolipin antibodies are released from the bound state during development of burn shock] Abakushin DN, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):425–6 **(Rus)**

[Relationship between changes in factors of nonspecific resistance during traumatic and burn shock] Kharin GM, et al. **Biull Eksp Biol Med** 1997 May;123(5):541–4 **(Rus)**

METABOLISM

Base deficit after major trauma directly relates to neutrophil CD11b expression: a proposed mechanism of shock-induced organ injury [see comments] Botha AJ, et al. **Intensive Care Med** 1997 May;23(5):504–9. Comment in: Intensive Care Med 1997 May;23(5):487–8.

Pteridine and nitrite/nitrate formation in experimental septic and traumatic shock. Strohmaier W, et al. **Shock** 1996 Oct; 6(4):254–8

[The injury of liver and kidney of rats sustaining delayed fluid resuscitation of burn shock] Lu W, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):745–8 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Shock index as a marker for significant injury in trauma patients. King RW, et al. **Acad Emerg Med** 1996 Nov; 3(11):1041–5

Comparison of endothelial activation during endotoxic and posttraumatic conditions by serum analysis of soluble E-selectin in nonhuman primates. Kneidinger R, et al. **J Lab Clin Med** 1996 Nov;128(5):515–9

Pentoxifylline restores the depressed cardiac performance after trauma-hemorrhage and resuscitation. Robinson DA, et al. **J Surg Res** 1996 Nov;66(1):51–6

Endothelial changes after shock and injury. Maier RV, et al. **New Horiz** 1996 May;4(2):211–23 (77 ref.)

Clinical application of ventricular end-systolic elastance and the ventricular pressure-volume diagram [see comments] Chang MC, et al. **Shock** 1997 Jun;7(6):413–9. Comment in: Shock 1997 Jun;7(6):420–1.

Clinical application of ventricular end-systolic elastance and the ventricular pressure-volume diagram [letter; comment] McNamee JE, et al. **Shock** 1997 Jun;7(6):420–1. Comment on: Shock 1997 Jun;7(6):413–9.

Time course of endothelial dysfunction and neutrophil adherence and infiltration during murine traumatic shock. Scalia R, et al. **Shock** 1996 Sep;6(3):177–82

RADIOGRAPHY

[Shock room diagnosis in polytrauma. Value of thoracic CT] Trupka A, et al. **Unfallchirurg** 1997 Jun;100(6):469–76 (Eng. Abstr.) **(Ger)**

THERAPY

Survival after trauma pneumonectomy: the pathophysiologic balance of shock resuscitation with right heart failure. Baumgartner F, et al. **Am Surg** 1996 Nov;62(11):967–72

Fluid resuscitation in traumatic haemorrhage [letter; comment] McNicholl B. **J Accid Emerg Med** 1996 Jul; 13(4):301. Comment on: J Accid Emerg Med 1995 Sep;12(3):165–72.

Initial management of burns [see comments] Monafo WW. **N Engl J Med** 1996 Nov 21;335(21):1581–6 (50 ref.). Comment in: N Engl J Med 1997 May 8;336(19):1392–3; discussion 1393. Comment in: N Engl J Med 1997 May 8;336(19):1393.

[Differential volume substitution therapy] **Anaesthesist** 1996 Nov;45(11 Suppl):1–8 **(Ger)**

SHOCK WAVES, HIGH-ENERGY see **HIGH-ENERGY SHOCK WAVES**

SHOCKWAVES, ULTRASONIC see **ULTRASONICS**

SHOES

A preliminary objective evaluation of leprosy footwear using in-shoe pressure measurement. Linge K. **Acta Orthop Belg** 1996;62 Suppl 1:18–22

Respiratory function in shoe manufacturing workers. Zuskin E, et al. **Am J Ind Med** 1997 Jan;31(1):50–5

What best protects the inverted weightbearing ankle against further inversion? Evertor muscle strength compares favorably with shoe height, athletic tape, and three orthoses. Ashton-Miller JA, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):800–9

Football cleat design and its effect on anterior cruciate ligament injuries [letter; comment] Garrick JG, et al. **Am J Sports Med** 1996 Sep–Oct;24(5):705–6. Comment on: Am J Sports Med 1996 Mar–Apr;24(2):155–9.

Differences in friction and torsional resistance in athletic shoe-turf surface interfaces. Heidt RS Jr, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):834–42

Football cleat design and its effect on anterior cruciate ligament injuries. A three-year prospective study [see comments] Lambson RB, et al. **Am J Sports Med** 1996 Mar–Apr;24(2):155–9. Comment in: Am J Sports Med 1996 Sep–Oct;24(5):705–6.

Balance and vertical impact in sports: role of shoe sole materials. Robbins S, et al. **Arch Phys Med Rehabil** 1997 May;78(5):463–7

Shoes and insoles for patients with rheumatoid foot disease. Grifka JK. **Clin Orthop** 1997 Jul;(340):18–25 (15 ref.)

Shoe therapy. Past and present treatments. Toenges F. **Clin Podiatr Med Surg** 1997 Jan;14(1):209–14

Footwear and stress fractures. Frey C. **Clin Sports Med** 1997 Apr;16(2):249–57 (31 ref.)

Occupational dermatitis in shoemakers. Mancuso G, et al. **Contact Dermatitis** 1996 Jan;34(1):17–22

Contact dermatitis due to rubber boots worn by Japanese farmers, with special attention to 6-ethoxy-2,2,4-trimethyl-1,2-dihydroquinoline (ETMDQ) sensitivity. Nishioka K, et al. **Contact Dermatitis** 1996 Oct; 35(4):241–5

Do people with diabetes wear their prescribed footwear? Knowles EA, et al. **Diabet Med** 1996 Dec;13(12):1064–8

Reducing dynamic foot pressures in high-risk diabetic subjects with foot ulcerations. A comparison of treatments. Lavery LA, et al. **Diabetes Care** 1996 Aug;19(8):818–21

Therapeutic footwear can reduce plantar pressures in patients with diabetes and transmetatarsal amputation. Mueller MJ, et al. **Diabetes Care** 1997 Apr;20(4):637–41

Longitudinal in-shoe foot pressure relief achieved by specially designed footwear in high risk diabetic patients. Donaghue VM, et al. **Diabetes Res Clin Pract** 1996 Mar; 31(1–3):109–14

The reduction and redistribution of plantar pressures using foot orthoses in diabetic patients. Kato H, et al. **Diabetes Res Clin Pract** 1996 Mar;31(1–3):115–8

A comparison study of plantar foot pressure in a standardized shoe, total contact cast, and prefabricated pneumatic walking brace. Baumhauer JF, et al. **Foot Ankle Int** 1997 Jan;18(1):26–33

A method for the investigation of the effects of outsole modifications in therapeutic footwear. Cavanagh PR, et al. **Foot Ankle Int** 1996 Nov;17(11):706–8

Footwear prescriptions. Janisse DJ. **Foot Ankle Int** 1997 Aug; 18(8):526–7

The effect of shoe gear on human tibial strains recorded during dynamic loading: a pilot study. Milgrom C, et al. **Foot Ankle Int** 1996 Nov;17(11):667–71

Treatment of plantar fasciitis with a night splint and shoe modification [see comments] Mizel MS, et al. **Foot Ankle Int** 1996 Dec;17(12):732–5. Comment in: Foot Ankle Int 1997 Jul;18(7):458.

Nonsurgical treatment of monarticular nontraumatic synovitis of the second metatarsophalangeal joint. Mizel MS, et al. **Foot Ankle Int** 1997 Jul;18(7):424–6

Successes and pitfalls in the healing of neuropathic forefoot ulcerations with the IPOS postoperative shoe. Needleman RL. **Foot Ankle Int** 1997 Jul;18(7):412–7

Treatment of plantar fasciitis with night splint and shoe modifications consisting of a steel shank and anterior rocker bottom [letter; comment] Ng A. **Foot Ankle Int** 1997 Jul; 18(7):458. Comment on: Foot Ankle Int 1996 Dec;17(12):732–5.

Plantar foot pressures during treadmill walking with high-heel and low-heel shoes. Nyska M, et al. **Foot Ankle Int** 1996 Nov;17(11):662–6

In-shoe plantar pressures during activities of daily living: implications for therapeutic footwear design. Rozema A, et al. **Foot Ankle Int** 1996 Jun;17(6):352–9

Use of leuco crystal violet to enhance shoe prints in blood. Bodziak WJ. **Forensic Sci Int** 1996 Sep 15;82(1):45–52

Footwear for children. Staheli LT. **Instr Course Lect** 1994; 43:193–7 (50 ref.)

Risk of spontaneous abortion and maternal exposure to organic solvents in the shoe industry. Agnesi R, et al. **Int Arch Occup Environ Health** 1997;69(5):311–6

Gait function in spastic hemiparetic patients walking barefoot, with firm shoes, and with ankle-foot orthosis. Hesse S, et al. **Int J Rehabil Res** 1996 Jun;19(2):133–41

Foot position awareness in younger and older men: the influence of footwear sole properties. Robbins S, et al. **J Am Geriatr Soc** 1997 Jan;45(1):61–6

Novel methodology to obtain salient biomechanical characteristics of insole materials. Lavery LA, et al. **J Am Podiatr Med Assoc** 1997 Jun;87(6):266–71

Therapeutic footwear helps protect the diabetic foot. Mueller MJ. **J Am Podiatr Med Assoc** 1997 Aug;87(8):360–4

Dominant role of interface over knee angle for cushioning impact loading and regulating initial leg stiffness. Lafortune MA, et al. **J Biomech** 1996 Dec;29(12):1523–9

The effect of insoles in therapeutic footwear—a finite element approach. Lemmon D, et al. **J Biomech** 1997 Jun; 30(6):615–20

A quantitative assessment of healing sandals and postoperative shoes in offloading the neuropathic diabetic foot. Giacalone VF, et al. **J Foot Ankle Surg** 1997 Jan–Feb; 36(1):28–30

Identification of a killer by a definitive sneaker pattern and his beating instruments by their distinctive patterns. Zugibe FT, et al. **J Forensic Sci** 1996 Mar;41(2):310–3

Design and pilot testing of the DVA/Seattle Footwear System for diabetic patients with foot insensitivity. Reiber GE, et al. **J Rehabil Res Dev** 1997 Jan;34(1):1–8

The shod foot and its implications for American women. Rudicel SA. **J South Orthop Assoc** 1994 Winter;3(4):268–72

Measurement of pressure walking in footwear used in leprosy. Birke JA, et al. **Lepr Rev** 1994 Sep;65(3):262–71

Cost-effective footwear for leprosy control programmes: a study in rural Ethiopia. Seboka G, et al. **Lepr Rev** 1996 Sep;67(3):208–16

In-shoe biaxial shear force measurement: the Kent shear system. Akhlaghi F, et al. **Med Biol Eng Comput** 1996 Jul; 34(4):315–7

Comparison of shoe insole materials by neural network analysis. Barton JG, et al. **Med Biol Eng Comput** 1996 Nov; 34(6):453–9

Lateral stability in sideward cutting movements. Stacoff A, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):350–8

Footwear alleviates aches, fatigue through better fit, shock absorption. Johnson J. **Occup Health Saf** 1994 Mar; 63(3):68–9

Educating workers on the need for a firm, safe footing. Johnson LF. **Occup Health Saf** 1997 Jul;66(7):20–7, 36 (0 ref.)

Safety footwear closes the gender gap. Laws J. **Occup Health Saf** 1997 Apr;66(4):50–2

Seasonal differences and the role of shoe-wearing in western Ethiopia [letter] Adish AA, et al. **Trop Doct** 1996 Oct; 26(4):196–7

[Possibilities and limits of functional conservative therapy of acute Achilles tendon ruptures] Richter J, et al. **Chirurg** 1997 May;68(5):517–24 (37 ref.) (Eng. Abstr.) **(Ger)**

[Effectiveness of outer stability aids on rotational stability of the ankle joints] Müller CC, et al. **Sportverletz Sportschaden** 1996 Dec;10(4):84–7 (Eng. Abstr.) **(Ger)**

[Early functional treatment of a 5th metatarsal fracture using an orthopedic boot] Gösele A, et al. **Swiss Surg** 1997; 3(2):81–4 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Footwear depigmentation. Bajaj AK, et al. **Contact Dermatitis** 1996 Aug;35(2):117–8

Shoe dermatitis. Freeman S. **Contact Dermatitis** 1997 May; 36(5):247–51

Allergic contact dermatitis and mercury exanthem due to mercury chloride in plastic boots. Koch P, et al. **Contact Dermatitis** 1996 Jun;34(6):405–9

Hand involvement in allergic contact dermatitis from mercaptobenzothiazole in shoes. Lear JT, et al. **Contact Dermatitis** 1996 Jun;34(6):432

Footwear contact dermatitis in children. Roul S, et al. **Contact Dermatitis** 1996 Dec;35(6):334–6

Toxic sock syndrome. Mueller KK, et al. **Cutis** 1996 Nov; 58(5):337–8

[Magnetic resonance contribution in a case of multiple tenosynovitis of the ankle caused by orthopedic shoe] Bianchi D, et al. **Radiol Med (Torino)** 1997 Mar;93(3):292–3 **(Ita)**

STANDARDS

Effect of workers' shoe wear on objective and subjective assessment of slipperiness. Chiou SY, et al. **Am Ind Hyg Assoc J** 1996 Sep;57(9):825–31

Therapeutic footwear: enhanced function in people with diabetes and transmetatarsal amputation. Mueller MJ, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):952–6

The role of footwear in the prevention of foot lesions in patients with NIDDM. Conventional wisdom or evidence-based practice? Litzelman DK, et al. **Diabetes Care** 1997 Feb;20(2):156–62

A comparison of trial shoe and shell shoe fitting techniques. Chen RC, et al. **Prosthet Orthot Int** 1995 Dec;19(3):181–7

SHOPE FIBROMA VIRUS see **FIBROMA VIRUS, RABBIT**

SHOPE PAPILLOMA VIRUS see **PAPILLOMAVIRUS, COTTONTAIL RABBIT**

SHORT BOWEL SYNDROME

Short-bowel syndrome. Stollman NH, et al. **Gastroenterologist** 1996 Jun;4(2):118–28 (62 ref.)

Nutrition in short-bowel syndrome. Ladefoged K, et al. **Scand J Gastroenterol Suppl** 1996;216:122–31 (76 ref.)

[Short bowel syndrome and blind loop syndrome] Hatakeyama K. **Nippon Naika Gakkai Zasshi** 1996 Jul 10; 85(7):1072–8 (5 ref.) **(Jpn)**

COMPLICATIONS

Staphylococcus epidermidis catheter-related infections in a short-bowel patient. Persistence of a single strain over a two-year period. Voss A, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):669–71

Prevention of liver failure in parenteral nutrition-dependent children with short bowel syndrome. Meehan JJ, et al. **J Pediatr Surg** 1997 Mar;32(3):473–5

Leuconostoc bacteremia in an infant with short-gut syndrome: case report and literature review. Dhodapkar KM, et al. **Mayo Clin Proc** 1996 Dec;71(12):1171–4 (24 ref.)

Leuconostoc spp. septicaemia in a child with short bowel syndrome. Monsen T, et al. **Scand J Infect Dis** 1997; 29(3):310–1

DIET THERAPY

Do patients with short-bowel syndrome need a lactose-free diet? [see comments] Marteau P, et al. **Nutrition** 1997 Jan; 13(1):13–6. Comment in: Nutrition 1997 Jan;13(1):53–4.

DRUG THERAPY

Low-dose recombinant human growth hormone increases body weight and lean body mass in patients with short bowel syndrome. Ellegård L, et al. **Ann Surg** 1997 Jan; 225(1):88–96

Trophic effects of interleukin-11 in rats with experimental short bowel syndrome. Liu Q, et al. **J Pediatr Surg** 1996 Aug;31(8):1047–50; discussion 1050–1

ETIOLOGY

[Short bowel syndrome. Still a current problem] Calomino N, et al. **G Chir** 1997 Jun-Jul;18(6-7):349–52 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Trophic effects of interleukin-11 in rats with experimental short bowel syndrome. Liu Q, et al. **J Pediatr Surg** 1996 Aug;31(8):1047–50; discussion 1050–1

METABOLISM

Carnitine depletion during total parenteral nutrition despite oral L-carnitine supplementation. Hirose S, et al. **Acta Paediatr Jpn** 1997 Apr;39(2):194–200

Lipid requirements in infants with digestive diseases with references to short bowel syndrome. Goulet O. **Eur J Med Res** 1997 Feb 21;2(2):79–83 (26 ref.)

Disorder of bile acid metabolism in children with short bowel syndrome. Ohkohchi N, et al. **J Gastroenterol** 1997 Aug; 32(4):472–9

Human growth hormone induces system B transport in short bowel syndrome. Iannoli P, et al. **J Surg Res** 1997 Apr; 69(1):150–8

The metabolism of [75Se]selenite in patients with short bowel syndrome. Rannem T, et al. **JPEN J Parenter Enteral Nutr** 1996 Nov-Dec;20(6):412–6

MICROBIOLOGY

Lactobacillus flora in short bowel syndrome [letter] Bongaerts GP, et al. **Dig Dis Sci** 1997 Aug;42(8):1611–2

Role of bacteria in the pathogenesis of short bowel syndrome-associated D-lactic acidemia. Bongaerts GP, et al. **Microb Pathog** 1997 May;22(5):285–93

MORTALITY

Rapid development of hyperbilirubinemia in infants with the short bowel syndrome as a correlate to mortality: possible indication for early small bowel transplantation. Teitelbaum DH, et al. **Transplant Proc** 1996 Oct;28(5):2699–700

PATHOLOGY

Indication for small bowel transplantation in children with gastrointestinal pathology on long-term parenteral nutrition. Gambarara M, et al. **Transplant Proc** 1996 Oct; 28(5):2706–7

PHYSIOPATHOLOGY

Short-bowel syndrome. Medical aspects and prospects of intestinal transplantation. Pirenne J. **Acta Chir Belg** 1996 Jul-Aug;96(4):150–4 (27 ref.)

Effect of growth hormone, glutamine, and diet on adaptation in short-bowel syndrome: a randomized, controlled study [see comments] Scolapio JS, et al. **Gastroenterology** 1997 Oct;113(4):1074–81. Comment in: Gastroenterology 1997 Oct;113(4):1402–5.

Can the intestine adapt to a changing environment? [editorial; comment] Thompson JS. **Gastroenterology** 1997 Oct; 113(4):1402–5 (32 ref.). Comment on: Gastroenterology 1997 Oct;113(4):1074–81.

Gastrointestinal hormones in short bowel syndrome. Peptide YY may be the 'colonic brake' to gastric emptying [see comments] Nightingale JM, et al. **Gut** 1996 Aug; 39(2):267–72. Comment in: Gut 1997 Jan;40(1):157.

Peptide YY and electrolyte homeostasis [letter; comment] Playford RJ, et al. **Gut** 1997 Jan;40(1):157. Comment on: Gut 1996 Aug;39(2):267–72.

Effect of intestinal resection on human small bowel motility. Schmidt T, et al. **Gut** 1996 Jun;38(6):859–63

Epidermal growth factor receptor expression following small bowel resection. Warner BW, et al. **J Surg Res** 1997 Jul 1;70(2):171–7

Intestinal adaptation in short bowel syndrome. Gambarara M, et al. **Transplant Proc** 1997 May;29(3):1862–3

Mechanisms for control of intestinal transit in short gut syndrome. Johnson CP, et al. **Transplant Proc** 1996 Oct; 28(5):2702–5

Liver failure in parenteral nutrition-dependent children with short bowel syndrome. Simmons MG, et al. **Transplant Proc** 1996 Oct;28(5):2701

[Short bowel syndrome] Greenberg R, et al. **Harefuah** 1997 May 1;132(9):661–5 (44 ref.) **(Heb)**

SURGERY

Short gut syndrome: treatment by neovascularization of the small intestine. Williams JK, et al. **Ann Plast Surg** 1996 Jul;37(1):84–9; discussion 89–90

Segmental reversal of the small bowel as an alternative to intestinal transplantation in patients with short bowel syndrome. Panis Y, et al. **Ann Surg** 1997 Apr;225(4):401–7

Transposition of the anorectum to the abdominal wall. Williams NS, et al. **Br J Surg** 1996 Dec;83(12):1739–40

Short bowel syndrome: new therapeutic approaches. Wilmore DW, et al. **Curr Probl Surg** 1997 May; 34(5):389–444 (154 ref.)

Small bowel lengthening by mechanical distraction. Printz H, et al. **Digestion** 1997;58(3):240–8

An animal model for short-bowel syndrome in piglets to assess the efficiency of bowel-lengthening procedures. Sacher P, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):207–11

Impact of intestinal lengthening on the nutritional outcome for children with short bowel syndrome. Figueroa-Colon R, et al. **J Pediatr Surg** 1996 Jul;31(7):912–6

Ileal nutritional function after one-stage orthotopic ileum transplantation in the growing pig: reversal of lethal short bowel syndrome. Pakarinen M, et al. **J Pediatr Surg** 1996 May;31(5):686–94

Treatment with an HLA-peptide and cyclosporine A prolongs rat small bowel allograft survival. Willetts IE, et al. **J Pediatr Surg** 1997 Mar;32(3):469–72

Longitudinal intestinal lengthening and tailoring: results in 20 children. Bianchi A. **J R Soc Med** 1997 Aug; 90(8):429–32

Intestinal transplantation: an early experience. Baliga P, et al. **Transplant Proc** 1996 Oct;28(5):2734–5

Intestinal transplantation: the University of Wisconsin experience. D'Alessandro AM, et al. **Transplant Proc** 1996 Oct;28(5):2740–1

Intestinal adaptation in short bowel syndrome. Gambarara M, et al. **Transplant Proc** 1997 May;29(3):1862–3

Intestinal transplantation in pediatric patients: the European experience. Goulet O, et al. **Transplant Proc** 1997 May; 29(3):1785–6

Rapid development of hyperbilirubinemia in infants with the short bowel syndrome as a correlate to mortality: possible indication for early small bowel transplantation. Teitelbaum DH, et al. **Transplant Proc** 1996 Oct;28(5):2699–700

[Small intestine graft in Switzerland: indications and potential recipients] Bühler L, et al. **Schweiz Med Wochenschr Suppl** 1997;89:46S-50S (Eng. Abstr.) **(Fre)**

[Indications for total parenteral nutrition or small intestine transplantation?--Prognostic factors in short bowel syndrome] Heeckt PF, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:389–93 (Eng. Abstr.) **(Ger)**

[Current status of surgical treatment of short bowel syndrome] Selzner M, et al. **Zentralbl Chir** 1996;121(1):1–7 (34 ref.) (Eng. Abstr.) **(Ger)**

[Intestinal autograft: creation of an isolated intestinal segment by entero-enteropexy] Arana J, et al. **Cir Pediatr** 1996 Apr; 9(2):69–72 (Eng. Abstr.) **(Spa)**

THERAPY

Nutritional hope or hype for short bowel syndrome? Weireiter L. **Am J Gastroenterol** 1996 Oct;91(10):2246–7

Effect of growth hormone, glutamine, and diet on adaptation in short-bowel syndrome: a randomized, controlled study [see comments] Scolapio JS, et al. **Gastroenterology** 1997 Oct;113(4):1074–81. Comment in: Gastroenterology 1997 Oct;113(4):1402–5.

Can the intestine adapt to a changing environment? [editorial; comment] Thompson JS. **Gastroenterology** 1997 Oct; 113(4):1402–5 (32 ref.). Comment on: Gastroenterology 1997 Oct;113(4):1074–81.

New treatment for patients with short-bowel syndrome: growth hormone, glutamine and a modified diet. Sax HC. **JPEN J Parenter Enteral Nutr** 1996 Sep-Oct;20(5):375–6

Continuous extracorporeal stool-transport system: a new and economical procedure for transitory short-bowel syndrome in prematures and newborns. Schäfer K, et al. **Pediatr Surg Int** 1997;12(1):73–5

Short-bowel syndrome: an update on the therapeutic approach. Sturm A, et al. **Scand J Gastroenterol** 1997 Apr; 32(4):289–96 (80 ref.)

Body composition changes measured by dual-energy X-ray absorptiometry in patients receiving home parenteral nutrition. Tjellesen L, et al. **Scand J Gastroenterol** 1997 Jul;32(7):686–90

Influence of glutamine-supplemented parenteral nutrition on intestinal amino acid metabolism in rats after small bowel resection. Chen K, et al. **Surg Today** 1996;26(8):618–23

Advances in the management of patients with intestinal failure. Byrne TA, et al. **Transplant Proc** 1996 Oct; 28(5):2683–90 (81 ref.)

Renal function in young patients on long-term cyclic parenteral nutrition. Colomb V, et al. **Transplant Proc** 1996 Oct;28(5):2785

Indication for small bowel transplantation in children with gastrointestinal pathology on long-term parenteral nutrition. Gambarara M, et al. **Transplant Proc** 1996 Oct; 28(5):2706–7

Liver failure in parenteral nutrition-dependent children with short bowel syndrome. Simmons MG, et al. **Transplant Proc** 1996 Oct;28(5):2701

[Pathophysiology, clinical aspects and therapy of short bowel syndrome] Krähenbühl L, et al. **Chirurg** 1997 Jun; 68(6):559–67 (50 ref.) (Eng. Abstr.) **(Ger)**

[Long-term parenteral nutrition in vascular-induced short bowel syndrome] Gawenda M, et al. **Langenbecks Arch Chir** 1996;381(1):42–5 (Eng. Abstr.) **(Ger)**

[Short bowel syndrome] Greenberg R, et al. **Harefuah** 1997 May 1;132(9):661–5 (44 ref.) **(Heb)**

[Superior vena cava occlusion syndrome in a patient receiving total parenteral nutrition for short bowel syndrome] Ripoll Orts F, et al. **Nutr Hosp** 1996 May-Jun; 11(3):204–7 (Eng. Abstr.) **(Spa)**

SHORT INCREMENT SENSITIVITY INDEX see **RECRUITMENT DETECTION (AUDIOLOGY)**

SHORT PR-NORMAL QRS COMPLEX SYNDROME see **LOWN-GANONG-LEVINE SYNDROME**

SHORT RIB-POLYDACTYLY SYNDROME

[Saldino-Noonan syndrome (short rib polydactyly syndrome type I)] Fujisawa K. **Ryoikibetsu Shokogun Shirizu** 1996; (15):297–9 (299 ref.) **(Jpn)**

CLASSIFICATION

A case of short-rib syndrome without polydactyly in a stillborn: a new type? Scarano G, et al. **Birth Defects Orig Artic Ser** 1996;30(1):95–101

PATHOLOGY

The atrioventricular canal defect is the congenital heart disease connecting short rib-polydactyly and oral-facial-digital syndromes [letter; comment] Digilio MC, et al. **Am J Med Genet** 1997 Jan 10;68(1):110–2. Comment on: Am J Med Genet 1994 Nov 20;59(3):365–8.

PHYSIOPATHOLOGY

Short rib-polydactyly syndrome in twins: Beemer-Langer type with polydactyly. Elçioğlu N, et al. **Clin Genet** 1996 Sep;50(3):159–63

RADIOGRAPHY

A case of short-rib syndrome without polydactyly in a stillborn: a new type? Scarano G, et al. **Birth Defects Orig Artic Ser** 1996;30(1):95–101

SHORT-TERM PSYCHOTHERAPY see **PSYCHOTHERAPY, BRIEF**

SHORT-WAVE THERAPY

Response to Moffett, Richardson, Frost and Osborn, PAIN, 67 (1996) 121–127 [letter; comment] Low J. **Pain** 1997 Jun; 71(2):207. Comment on: Pain 1996 Sep;67(1):121–7.

Short wave diathermy for small spontaneous pneumothorax. Ma Y, et al. **Thorax** 1997 Jun;52(6):561–6

METHODS

[Effectiveness of complex treatment in combination with short-wave therapy and protease inhibitors in first detected patients with pulmonary tuberculosis] Lomachenkov VD, et al. **Probl Tuberk** 1997;(1):42–4 (Eng. Abstr.) **(Rus)**

SHORT WAVES see **RADIO WAVES**

SHOTGUNS see **FIREARMS**

SHOULDER

Malignant bone and soft tissue tumors of the shoulder girdle. A retrospective analysis of 30 operated cases. Meller I, et al. **Acta Orthop Scand** 1997 Aug;68(4):374–80

Lack of concordance between the ICD-9 classification of soft tissue disorders of the neck and upper limb and chart review diagnosis: one steel mill's experience. Buchbinder R, et al. **Am J Ind Med** 1996 Feb;29(2):171–82

Upper extremity musculoskeletal symptoms among female office workers: associations with video display terminal use and occupational psychosocial stressors. Marcus M, et al. **Am J Ind Med** 1996 Feb;29(2):161–70

Catastrophic shoulder dystocia and emergency symphysiotomy. Goodwin TM, et al. **Am J Obstet Gynecol** 1997 Aug;177(2):463–4

"Head and shoulder" maneuver [letter] Welch RA. **Am J Obstet Gynecol** 1997 May;176(5):1118

Clinical findings in competitive swimmers with shoulder pain. Bak K, et al. **Am J Sports Med** 1997 Mar–Apr;25(2):254–60

Calcifying tendinitis. Uhthoff HK. **Ann Chir Gynaecol** 1996; 85(2):111–5 (24 ref.)

Accessory nerve palsy and serratus palsy. Vastamäki M. **Ann Chir Gynaecol** 1996;85(2):167–71 (14 ref.)

Prevalence of shoulder pain in the community: the influence of case definition. Pope DP, et al. **Ann Rheum Dis** 1997 May;56(5):308–12

Pathologist's shoulder [letter] Ross JW. **Arch Pathol Lab Med** 1997 Jun;121(6):557

Re: Shoulder dystocia [letter; comment] Schramm M. **Aust N Z J Obstet Gynaecol** 1996 Nov;36(4):497. Comment on: Aust N Z J Obstet Gynaecol 1995 Aug;35(3):271–6.

Management of common shoulder problems. Binder A. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):66–72 (22 ref.)

Clinical differential diagnosis of shoulder pain. Turner-Stokes L. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):73–7 (3 ref.)

Atrophy of the infraspinatus muscle caused by a suprascapular ganglion. Biedert RM. **Clin J Sport Med** 1996 Oct;6(4):262–3; discussion 264

Cystic hygroma of the shoulder region. A case report. Wever DJ, et al. **Clin Orthop** 1997 May;(338):215–8

Electrodiagnostic evidence for cervical radiculopathy and suprascapular neuropathy in shoulder pain. Date ES, et al. **Electromyogr Clin Neurophysiol** 1996 Sep;36(6):333–9

Influences of handgrip on shoulder muscle activity. Sporrong H, et al. **Eur J Appl Physiol** 1995;71(6):485–92

Headache and neck or shoulder pain—family learnt illnesses behaviour? The Bardu Muscoloskeletal Study, 1989–1990. Hasvold T, et al. **Fam Pract** 1996 Jun;13(3):242–6

Load pattern and pressure pain threshold in the upper trapezius muscle and psychosocial factors in medical secretaries with and without shoulder/neck disorders. Hägg GM, et al. **Int Arch Occup Environ Health** 1997; 69(6):423–32

Perinatal outcome and the type and number of maneuvers in shoulder dystocia. McFarland MB, et al. **Int J Gynaecol Obstet** 1996 Dec;55(3):219–24

Shoulder problems in high level swimmers—impingement, anterior instability, muscular imbalance? Rupp S, et al. **Int J Sports Med** 1995 Nov;16(8):557–62

Neck and shoulder symptoms of high school students and associated psychosocial factors. Niemi SM, et al. **J Adolesc Health** 1997 Mar;20(3):238–42

Suprascapular neuropathy. Results of non-operative treatment. Martin SD, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1159–65

Treating shoulder pain: a randomized trial. Graber MA. **J Fam Pract** 1997 Aug;45(2):103–4

Physical examination of the cervical spine and shoulder girdle in patients with shoulder complaints. Sobel JS, et al. **J Manipulative Physiol Ther** 1997 May;20(4):257–62

Shoulder dystocia and operative vaginal delivery. Bofill JA, et al. **J Matern Fetal Med** 1997 Jul–Aug;6(4):220–4

Peripheral selective neurotomy of the brachial plexus collateral branches for treatment of the spastic shoulder: anatomical study and clinical results in five patients. Decq P, et al. **J Neurosurg** 1997 Apr;86(4):648–53

The nurse's role in the identification of risks and treatment of shoulder dystocia. Hall SP. **J Obstet Gynecol Neonatal Nurs** 1997 Jan–Feb;26(1):25–32 (25 ref.)

Neck and shoulder symptoms and leisure time activities in high school students. Niemi S, et al. **J Orthop Sports Phys Ther** 1996 Jul;24(1):25–9

Isolated serratus anterior paralysis: a simple surgical procedure to reestablish scapulo-humeral dynamics. Vukov B, et al. **J Orthop Trauma** 1996;10(5):341–7

Giant calcification in soft tissue after shoulder corticosteroid injection. Toussirot E, et al. **J Rheumatol** 1996 Jan; 23(1):181–2

Respiratory dysfunction related to diaphragmatic shoulder pain after abdominal and pelvic laparoscopy. Di Massa A, et al. **Minerva Anestesiol** 1996 May;62(5):171–6

Utilization of intraoperative electroneurography to understand the innervation of the trapezius muscle. Nori S, et al. **Muscle Nerve** 1997 Mar;20(3):279–85

A prospective, quantitative study of the natural history of facioscapulohumeral muscular dystrophy (FSHD): implications for therapeutic trials. The FSH-DY Group. **Neurology** 1997 Jan;48(1):38–46

Autosomal dominant hyaline body myopathy presenting as scapuloperoneal syndrome: clinical features and muscle pathology. Masuzugawa S, et al. **Neurology** 1997 Jan; 48(1):253–7

A pilot trial of prednisone in facioscapulohumeral muscular dystrophy. FSH-DY Group. Tawil R, et al. **Neurology** 1997 Jan;48(1):46–9

Molecular genetics of facioscapulohumeral muscular dystrophy (FSHD). Fisher J, et al. **Neuromuscul Disord** 1997 Jan;7(1):55–62 (69 ref.)

Successful treatment of shoulder pain syndrome due to supraspinatus tendinitis with transdermal nitroglycerin. A double blind study. Berrazueta JR, et al. **Pain** 1996 Jul; 66(1):63–7

Malignant rhabdoid tumor presenting as a hemangioma. Albregts AE, et al. **Pediatr Dermatol** 1996 Nov–Dec; 13(6):468–71

Mobility in the cervico-thoracic motion segment: an indicative factor of musculo-skeletal neck-shoulder pain. Norlander S, et al. **Scand J Rehabil Med** 1996 Dec; 28(4):183–92

A shoulder pain score: a comprehensive questionnaire for assessing pain in patients with shoulder complaints. Winters JC, et al. **Scand J Rehabil Med** 1996 Sep;28(3):163–7

Has musculoskeletal pain become less prevalent? Manninen P, et al. **Scand J Rheumatol** 1996;25(1):37–41

Subjective symptoms among motorcycling traffic policemen. Mirbod SM, et al. **Scand J Work Environ Health** 1997 Feb; 23(1):60–3

Neck and shoulder pain after laminoplasty. A noticeable complication. Hosono N, et al. **Spine** 1996 Sep 1; 21(17):1969–73

Alternative management strategy [editorial; comment] Clegg D. **Trop Doct** 1996 Oct;26(4):146. Comment on: Trop Doct 1996 Oct;26(4):188–9.

An alternative management strategy for shoulder presentation [see comments] Duckett JR. **Trop Doct** 1996 Oct;26(4):188–9. Comment in: Trop Doct 1996 Oct;26(4):146.

[Recommendations of the Consensus Conference on Imaging of mechanical and degenerative pathology of a non-operated shoulder] Caroit M, et al. **J Radiol** 1997 Apr; 78(4):321–4 (0 ref.) **(Fre)**

[Deep muscular lipoma of the shoulder. Apropos of 4 cases] Le Huec JC, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(3):263–67 (Eng. Abstr.) **(Fre)**

[Shockwave treatment of therapy refractory soft tissue pain] Boxberg W, et al. **Chirurg** 1996 Nov;67(11):1174–8 (Eng. Abstr.) **(Ger)**

[Extracorporeal shockwave therapy in orthopedics. Positive results in tennis elbow and tendinosis calcarea of the shoulder] Rompe JD, et al. **Fortschr Med** 1997 Jun 30; 115(18):26, 29–33 (Eng. Abstr.) **(Ger)**

[Shoulder dystocia: the obstetrician's nightmare] Blickstein I. **Harefuah** 1997 Feb 2;132(3):204–11 (50 ref.) **(Heb)**

ABNORMALITIES

Modified Woodward procedure for Sprengel deformity of the shoulder: long-term results. Borges JL, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):508–13

ANATOMY & HISTOLOGY

Arthroscopic capsular release for the stiff shoulder. Description of technique and anatomic considerations. Zanotti RM, et al. **Am J Sports Med** 1997 May–Jun; 25(3):294–8

Topography of mechanoreceptors in the shoulder joint region—a computer-aided 3D reconstruction in the laboratory mouse. Backenköhler U, et al. **Anat Rec** 1997 Jul;248(3):433–41

Shoulder imaging. A review. Tallroth K. **Ann Chir Gynaecol** 1996;85(2):95–103 (12 ref.)

The anatomy of the anterior origin of the deltoid. Kumar VP, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):680–3

Distribution of motoneurons supplying feline neck muscles taking origin from the shoulder girdle. Liinamaa TL, et al. **J Comp Neurol** 1997 Jan 13;377(2):298–312

Practical guidelines to safe surgery about the subscapularis. Yung SW, et al. **J Shoulder Elbow Surg** 1996 Nov–Dec; 5(6):467–70

Sublabral recess of the superior glenoid labrum: study of cadavers with conventional nonenhanced MR imaging, MR arthrography, anatomic dissection, and limited histologic examination. Smith DK, et al. **Radiology** 1996 Oct; 201(1):251–6

INJURIES

A reassessment of Doppler pressure indices in the detection of arterial lesions in proximity penetrating injuries of extremities: a prospective study. Nassoura ZE, et al. **Am J Emerg Med** 1996 Mar;14(2):151–6

Shoulder strength and range of motion in symptomatic and pain-free elite swimmers. Bak K, et al. **Am J Sports Med** 1997 Jul–Aug;25(4):454–9

Shoulder injuries during alpine skiing. Kocher MS, et al. **Am J Sports Med** 1996 Sep–Oct;24(5):665–9

Diagnosis of glenoid labral tears: a comparison between magnetic resonance imaging and clinical examinations [letter; comment] Seeger LL, et al. **Am J Sports Med** 1997 Jan–Feb;25(1):141–4. Comment on: Am J Sports Med 1996 Mar–Apr;24(2):149–54.

Rehabilitation of the shoulder. Hawkins R, et al. **Ann Chir Gynaecol** 1996;85(2):173–84 (22 ref.)

The SLAP lesion: a cause of failure after distal clavicle resection. Berg EE, et al. **Arthroscopy** 1997 Feb;13(1):85–9

Spontaneous pneumothorax after shoulder arthroscopy: a report of four cases. Dietzel DP, et al. **Arthroscopy** 1996 Feb;12(1):99–102

Physiotherapy for patients with soft tissue shoulder disorders: a systematic review of randomised clinical trials. van der Heijden GJ, et al. **BMJ** 1997 Jul 5;315(7099):25–30 (45 ref.)

The management of shoulder pain [letter] Downie WA. **Br J Hosp Med** 1997 May 21–Jun 3;57(10):531

Advances in the understanding of throwing injuries of the shoulder. Hackney RG. **Br J Sports Med** 1996 Dec; 30(4):282–8 (28 ref.)

Occupational arm, shoulder, and neck syndrome affecting large animal practitioners. Ailsby RL. **Can Vet J** 1996 Jul; 37(7):411

Peri-articular injection of tenoxicam for painful shoulders: a double-blind, placebo controlled trial. Itzkowitch D, et al. **Clin Rheumatol** 1996 Nov;15(6):604–9

Shoulder pain in golf. Jobe FW, et al. **Clin Sports Med** 1996 Jan;15(1):55–63 (15 ref.)

Shoulder rehabilitation: clinical application, evaluation, and rehabilitation protocols. Kibler WB, et al. **Instr Course Lect** 1997;46:43–51 (11 ref.)

Sports ability after Bankart procedure in professional athletes. Pavlik A, et al. **Knee Surg Sports Traumatol Arthrosc** 1996; 4(2):116–20

Glenohumeral instability: evaluation with MR arthrography. Beltran J, et al. **Radiographics** 1997 May–Jun;17(3):657–73

Consensus conference recommendations regarding imaging studies in degenerative disease of the unoperated shoulder. Caroit M, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):148–52 (0 ref.)

Rehabilitation of injuries in competitive swimmers. Kenal KA, et al. **Sports Med** 1996 Nov;22(5):337–47 (28 ref.)

Swimming injuries. An overview. McMaster WC. **Sports Med** 1996 Nov;22(5):332–6 (26 ref.)

[Diagnostic imaging of the shoulder joint in impingement] Merl T, et al. **Rontgenpraxis** 1996 Jan;49(1):8–11 **(Ger)**

[Injuries during handball. A comparative, retrospective study between regional and upper league teams] Seil R, et al. **Sportverletz Sportschaden** 1997 Jun;11(2):58–62 (Eng. Abstr.) **(Ger)**

[Complete axonotmesis of the axillary nerve in relation to microtrauma] Guerrero AL, et al. **Rev Neurol** 1997 Apr; 25(140):554–6 (Eng. Abstr.) **(Spa)**

INNERVATION

Suprascapular nerve entrapment. Neurophysiological localization in 6 cases. Padua L, et al. **Acta Orthop Scand** 1996 Oct;67(5):482–4

Compression neuropathies about the shoulder. Goldberg RS, et al. **Ann Chir Gynaecol** 1996;85(2):159–65 (34 ref.)

Clinical and anatomic considerations in the use of a new anterior inferior subaxillary nerve arthroscopy portal. Burkhart SS, et al. **Arthroscopy** 1996 Oct;12(5):634–7

Denervation atrophy caused by suprascapular nerve injury: MR findings. Yu JS, et al. **J Comput Assist Tomogr** 1997 Mar–Apr;21(2):302–3

The low incidence of suprascapular nerve injury after primary repair of massive rotator cuff tears. Zanotti RM, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):258–64

Suprascapular nerve block [letter; comment] Alam S. **Reg Anesth** 1996 Jul–Aug;21(4):371–3. Comment on: Reg Anesth 1995 Jul–Aug;20(4):343–6.

Neurogenic lesions after posterolateral thoracotomy in young children. Emmel M, et al. **Thorac Cardiovasc Surg** 1996 Apr;44(2):86–91

[Cystic compression of the suprascapular nerve. Value of imaging. Apropos of 6 cases and review of the literature] Lévy P, et al. **J Radiol** 1997 Feb;78(2):123–30 (35 ref.) (Eng. Abstr.) **(Fre)**

[Complete axonotmesis of the axillary nerve in relation to microtrauma] Guerrero AL, et al. **Rev Neurol** 1997 Apr; 25(140):554–6 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Necrobiotic palisading suture granulomas involving bone and joint: report of two cases. Marcus VA, et al. **Am J Surg Pathol** 1997 May;21(5):563–5

The injured shoulder. Primary care assessment. Howard TM, et al. **Arch Fam Med** 1997 Jul–Aug;6(4):376–84 (23 ref.)

Muscular imbalance and shoulder pain in volleyball attackers. Kugler A, et al. **Br J Sports Med** 1996 Sep;30(3):256–9

MR imaging of rotator cuff impingement: correlation with full-thickness rotator cuff tear. Chen JD, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep; 58(3):198–204

MRI of the shoulder: a rational approach to the reporting of findings [letter] Shellock FG, et al. **J Magn Reson Imaging** 1996 Jan–Feb;6(1):268–70

Anteroinferior tears of the glenoid labrum: fat-suppressed fast spin-echo T2 versus gradient-recalled echo MR images. Tuite MJ, et al. **Skeletal Radiol** 1997 May; 26(5):293–7

PHYSIOLOGY

Hand grip increases shoulder muscle activity, An EMG analysis with static hand contractions in 9 subjects. Sporrong H, et al. **Acta Orthop Scand** 1996 Oct; 67(5):485–90

Validation of the lift-off test and analysis of subscapularis activity during maximal internal rotation. Greis PE, et al. **Am J Sports Med** 1996 Sep–Oct;24(5):589–93

SHOULDER

Shoulder muscle firing patterns during the windmill softball pitch. Maffet MW, et al. **Am J Sports Med** 1997 May–Jun; 25(3):369–74

An eccentric– and concentric–strength profile of shoulder external and internal rotator muscles in professional baseball pitchers. Sirota SC, et al. **Am J Sports Med** 1997 Jan–Feb;25(1):59–64

Shoulder rotator torque and wheelchair dependence differences of National Wheelchair Basketball Association players. Nyland J, et al. **Arch Phys Med Rehabil** 1997 Apr; 78(4):358–63

The organization of acromiodeltoid and spinodeltoid motor nuclei in rat spinal cord. Choi JY, et al. **Brain Res** 1996 Oct 28;738(1):146–9

Technical considerations for electromyographic research on the shoulder. Kelly BT, et al. **Clin Orthop** 1997 Feb; (335):140–51

Biceps activity during shoulder motion: an electromyographic analysis. Yamaguchi K, et al. **Clin Orthop** 1997 Mar;(336):122–9

Electromyographic validation of basic exercises for physical conditioning programmes. II. Analysis of the deltoid muscle (anterior portion) and pectoralis major muscle (clavicular portion) in rowing exercises with closed grip. Ferreira MI, et al. **Electromyogr Clin Neurophysiol** 1996 Mar;36(2):81–5

Electromyographic validation of basic exercises for physical conditioning programmes. III. Influence of the grip in the capacity of the rowing exercises in determining action potential levels for the deltoid and the pectoralis major muscle. Ferreira MI, et al. **Electromyogr Clin Neurophysiol** 1996 Mar;36(2):86–90

Sitting posture and neck and shoulder muscle activities at different screen height settings of the visual display terminal. Villanueva MB, et al. **Ind Health** 1997 Jul; 35(3):330–6

Current research on muscle activity about the shoulder. Kelly BT, et al. **Instr Course Lect** 1997;46:53–66 (98 ref.)

Quantifying work load in neck, shoulders and wrists in female dentists. Akesson I, et al. **Int Arch Occup Environ Health** 1997;69(6):461–74

The pressor response to submaximal cycle ergometry while using aerodynamic handlebars. Heil DP. **Int J Sports Med** 1997 Jan;18(1):1–7

Modelling the muscles of the scapula morphometric and coordinate data and functional implications. Johnson GR, et al. **J Biomech** 1996 Aug;29(8):1039–51

A static shoulder model based on a time–dependent criterion for load sharing between synergistic muscles. Niemi J, et al. **J Biomech** 1996 Apr;29(4):451–60

Moment arms and lengths of human upper limb muscles as functions of joint angles. Pigeon P, et al. **J Biomech** 1996 Oct;29(10):1365–70

Shoulder and forelimb orientations and loading in sitting cats: implications for head and shoulder movement. Runciman RJ, et al. **J Biomech** 1997 Sep;30(9):911–9

Quasi–static analysis of muscle forces in the shoulder mechanism during wheelchair propulsion. van der Helm FC, et al. **J Biomech** 1996 Jan;29(1):39–52

Kinematics of the glenohumeral joint: influences of muscle forces, ligamentous constraints, and articular geometry. Karduna AR, et al. **J Orthop Res** 1996 Nov;14(6):986–93

The effects of isokinetic vs. plyometric training on the shoulder internal rotators. Heiderscheit BC, et al. **J Orthop Sports Phys Ther** 1996 Feb;23(2):125–33

Investigation of the validity and reliability of four objective techniques for measuring forward shoulder posture. Peterson DE, et al. **J Orthop Sports Phys Ther** 1997 Jan; 25(1):34–42 (28 ref.)

The effect of age, speed, and arm dominance on shoulder function in untrained men. Gallagher MA, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb;5(1):25–31

Intrarater and interrater reliability of three isometric dynamometers in assessing shoulder strength [published erratum appears in J Shoulder Elbow Surg 1996 May–Jun;5(3):248] Leggin BG, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb;5(1):18–24

Strength after surgical repair of the rotator cuff. Rokito AS, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb;5(1):12–7

Quantification of muscular activity in the shoulder region during monotonous repetitive work. Capodaglio P, et al. **Med Lav** 1996 Jul–Aug;87(4):305–13

EMG analysis of shoulder positioning in testing and strengthening the supraspinatus. Malanga GA, et al. **Med Sci Sports Exerc** 1996 Jun;28(6):661–4

The effect of positioning on shoulder isokinetic measures in females. Tis LL, et al. **Med Sci Sports Exerc** 1996 Sep; 28(9):1188–92

Dynamics of the upper limb during performance of the tasks of everyday living—a review of the current knowledge base. Buckley MA, et al. **Proc Inst Mech Eng [H]** 1996; 210(4):241–7 (44 ref.)

Use of shoulder flexion to achieve isometric elbow extension in C6 tetraplegic patients during weight shift. Gefen JY, et al. **Spinal Cord** 1997 May;35(5):308–13

PHYSIOPATHOLOGY

Upper–arm elevation during office work. Fernström EA, et al. **Ergonomics** 1996 Oct;39(10):1221–30

Isokinetic shoulder of paraplegics: observation of global and specific muscle ratio. Bernard PL, et al. **Int J Rehabil Res** 1997 Mar;20(1):91–8

Isokinetic strength after tears of the supraspinatus tendon. Itoi E, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):77–82

A novel cause of a pressure palsy: mobile telephone user's shoulder droop. Hopkins A. **J Neurol Neurosurg Psychiatry** 1996 Oct;61(4):346

Assessment of shoulder function in rheumatoid arthritis. van Den Ende CH, et al. **J Rheumatol** 1996 Dec;23(12):2043–8

An arthroscopic and electromyographic study of painful shoulders in elite gymnasts. Caraffa A, et al. **Knee Surg Sports Traumatol Arthrosc** 1996;4(1):39–42

Is body powered operation of upper limb prostheses feasible for young limb deficient children? Shaperman J, et al. **Prosthet Orthot Int** 1995 Dec;19(3):165–75

Ambulatory electromyogram activity in the upper trapezius region: patients with muscle pain vs. pain–free control subjects. Carlson CR, et al. **Spine** 1996 Mar 1;21(5):595–9

[Painful shoulder syndrome with drooping after cervical lymphatic dissection] Campos A, et al. **Acta Otorrinolaringol Esp** 1996 Sep–Oct;47(5):387–92 (Eng. Abstr.) **(Spa)**

[Complete axonotmesis of the axillary nerve in relation to microtrauma] Guerrero AL, et al. **Rev Neurol** 1997 Apr; 25(140):554–6 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Site and size of rotator–cuff tear. Findings at ultrasound, double–contrast arthrography, and computed tomography arthrography with surgical correlation. Farin PU, et al. **Invest Radiol** 1996 Jul;31(7):387–94

[Clinicoradiologic anatomy of the shoulder region] Schmidt HM, et al. **Radiologe** 1996 Dec;36(12):933–43 (54 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Caudal trapezius composite island flap for extensive shoulder defects. Bhathena HM. **Acta Chir Plast** 1996;38(3):90–3

The anterior approach to the shoulder from the lateral position. Steingard MA. **Am J Orthop** 1996 Nov; 25(11):801–2

Intravascular absorption of glycine irrigating solution during shoulder arthroscopy: a case report and follow–up study. Ichai C, et al. **Anesthesiology** 1996 Dec;85(6):1481–5

Functional assessment, scoring and data collection for shoulder surgery. Bankes MJ, et al. **Ann Chir Gynaecol** 1996;85(2):186–90 (21 ref.)

Interscalene anesthesia for shoulder arthroscopy in a community–sized military hospital. Arciero RA, et al. **Arthroscopy** 1996 Dec;12(6):715–9

Fixation stability of olecranon osteotomies. Petraco DM, et al. **Clin Orthop** 1996 Dec;(333):181–5

Extraarticular pigmented villonodular synovitis of the shoulder: a case report. Sawmiller CJ, et al. **Clin Orthop** 1997 Feb;(335):262–7 (26 ref.)

Modified Woodward procedure for Sprengel deformity of the shoulder: long–term results. Borges JL, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):508–13

Shoulder and elbow surgery society meetings. 1995. Abstracts. **J Shoulder Elbow Surg** 1996 Mar–Apr;5(2 Pt 2):S1–136

Humeral bone density losses after shoulder surgery and immobilization. Marchetti ME, et al. **J Shoulder Elbow Surg** 1996 Nov–Dec;5(6):471–6

Practical guidelines to safe surgery about the subscapularis. Yung SW, et al. **J Shoulder Elbow Surg** 1996 Nov–Dec; 5(6):467–70

A reversed–flow latissimus dorsi musculocutaneous flap based on the serratus branch in primary shoulder reconstruction. Shigehara T, et al. **Plast Reconstr Surg** 1997 Feb;99(2):566–9

Low–volume interscalene brachial plexus block for perioperative shoulder pain [letter] Bruin G, et al. **Reg Anesth** 1996 Jul–Aug;21(4):371

Isolated subacromial decompression for the treatment of chronic shoulder pain with rotator cuff calcification. A review of twenty–seven shoulders, including eighteen evaluated by magnetic resonance imaging after surgery. Goutallier D, et al. **Rev Rhum Engl Ed** 1996 May; 63(5):349–57

Radical scapulectomy with limb salvage for shoulder girdle soft tissue sarcoma. Volpe CM, et al. **Surg Oncol** 1996 Feb; 5(1):43–8 (20 ref.)

ULTRASONOGRAPHY

Site and size of rotator–cuff tear. Findings at ultrasound, double–contrast arthrography, and computed tomography arthrography with surgical correlation. Farin PU, et al. **Invest Radiol** 1996 Jul;31(7):387–94

Sonographic anatomy of the supraspinatus tendon and adjacent structures. Turrin A, et al. **Skeletal Radiol** 1997 Feb;26(2):89–93

SHOULDER DISLOCATION

Recurrent anterior shoulder dislocation. A review. Vastamäki M. **Ann Chir Gynaecol** 1996;85(2):133–6 (18 ref.)

Traumatic posterior dislocation of the shoulder with fracture of the acromion in a child. Nakae H, et al. **Arch Orthop Trauma Surg** 1996;115(3–4):238–9

"Locked" shoulder. Mohtadi NG, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):314–7

[Report of the 2nd meeting of the Study Group of shoulder and elbow. Paris, 6 November 1995. Traumatic posterior dislocations of the shoulder] Duparc F, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(8):767–71 **(Fre)**

COMPLICATIONS

Shoulder pain and subluxation after stroke: correlation or coincidence? Zorowitz RD, et al. **Am J Occup Ther** 1996 Mar;50(3):194–201

Posterior shoulder laxity in asymptomatic athletes. McFarland EG, et al. **Am J Sports Med** 1996 Jul–Aug; 24(4):468–71

Brachial plexus injury in association with fracture–dislocation of the shoulder. Yip KM, et al. **Bull Hosp Jt Dis** 1996; 55(2):92–4 (8 ref.)

Posterior dislocation of the shoulder with ipsilateral humeral shaft fracture: a very rare injury. Naresh S, et al. **Injury** 1997 Mar;28(2):150–2

Pectoralis major rupture with simultaneous anterior dislocation of the shoulder. Arciero RA, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):318–20

Arterial injury of the axilla: an unusual case after blunt trauma of the shoulder. Adovasio R, et al. **J Trauma** 1996 Oct; 41(4):754–6

Humeral avulsion of the anterior shoulder stabilizing structures after anterior shoulder dislocation: demonstration by MRI and MR arthrography. Tirman PF, et al. **Skeletal Radiol** 1996 Nov;25(8):743–8

[Posttraumatic pseudoaneurysm of the axillary artery after anterior dislocation of the shoulder: a case report] Gaspar M, et al. **Chirurgia (Bucur)** 1996 Nov–Dec;45(6):317–20 (Eng. Abstr.) **(Rum)**

DIAGNOSIS

Missed bilateral anterior fracture dislocations of the shoulder. Thomas DP, et al. **Injury** 1996 Nov;27(9):661–2

Measurement of the anteroposterior translation of the humeral head using MRI. Kiss J, et al. **Int Orthop** 1997; 21(2):77–82

An objective measurement technique for posterior scapular displacement. Plafcan DM, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):336–41

Magnetic resonance arthrography in the assessment of anterior instability of the shoulder: comparison with double–contrast computed tomography arthrography. Sano H, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):280–5

Electromyographic and nerve block analysis of the subscapularis liftoff test. Stefko JM, et al. **J Shoulder Elbow Surg** 1997 Jul–Aug;6(4):347–55

Magnetic resonance imaging versus arthroscopy for the investigation of the osteochondral humeral defect in anterior shoulder instability. A double–blind prospective study. Denti M, et al. **Knee Surg Sports Traumatol Arthrosc** 1995;3(3):184–6

Glenohumeral instability: evaluation with MR arthrography. Beltran J, et al. **Radiographics** 1997 May–Jun;17(3):657–73

Humeral avulsion of the anterior shoulder stabilizing structures after anterior shoulder dislocation: demonstration by MRI and MR arthrography. Tirman PF, et al. **Skeletal Radiol** 1996 Nov;25(8):743–8

Anteroinferior tears of the glenoid labrum: fat–suppressed fast spin–echo T2 versus gradient–recalled echo MR images. Tuite MJ, et al. **Skeletal Radiol** 1997 May; 26(5):293–7

[Imaging methods in traumatology of the shoulder– and elbow joint] Heyer D. **Aktuelle Radiol** 1996 Sep;6(5):225–31 (50 ref.) (Eng. Abstr.) **(Ger)**

[Diagnostic imaging of instability of the shoulder joint] Funke M, et al. **Radiologe** 1996 Dec;36(12):951–9 (59 ref.) (Eng. Abstr.) **(Ger)**

[MRI arthrography—improved diagnosis of shoulder joint instability] Lill H, et al. **Unfallchirurg** 1997 Mar; 100(3):186–92 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Shoulder dislocation as a complication of CT scanning [letter] Corrigan NT, et al. **Br J Radiol** 1997 May;70(833):545

Bilateral locked posterior shoulder dislocation in a footballer. Ryan J, et al. **Br J Sports Med** 1997 Mar;31(1):74–5

Obstetric brachial plexus palsy with anterior dislocation of the shoulder. Flores M, et al. **Injury** 1997 Mar;28(2):148–9

Strength of the glenoid labrum and adjacent shoulder capsule. Hara H, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug; 5(4):263–8

Extensive shoulder capsule tearing as a main cause of recurrent anterior shoulder dislocation. Ogawa K, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb;6(1):1–5

Inferior subluxation of the humeral head after trauma or surgery. Pritchett JW. **J Shoulder Elbow Surg** 1997 Jul–Aug;6(4):356–9

Active and passive factors in inferior glenohumeral stabilization: a biomechanical model. Soslowsky LJ, et al. **J Shoulder Elbow Surg** 1997 Jul–Aug;6(4):371–9

[A case of recurrent bilateral shoulder dislocation in a patient with Felty's syndrome] Gaździk T. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):531–3 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Pathologic changes associated with shoulder dislocations.

Arthroscopic and physical examination findings in first-time, traumatic anterior dislocations. Taylor DC, et al. **Am J Sports Med** 1997 May-Jun;25(3):306-11

The BHAGL lesion: a new variant of anterior shoulder instability. Oberlander MA, et al. **Arthroscopy** 1996 Oct; 12(5):627-33

Bony changes of the glenoid as a consequence of shoulder instability [published erratum appears in J Shoulder Elbow Surg 1997 Jan-Feb;6(1):80] Edelson JG. **J Shoulder Elbow Surg** 1996 Jul-Aug;5(4):293-8

PHYSIOPATHOLOGY

Posterior glenohumeral subluxation: active and passive stabilization in a biomechanical model. Blasier RB, et al. **J Bone Joint Surg Am** 1997 Mar;79(3):433-40

Translation of the glenohumeral joint with the patient under anesthesia. Hawkins RJ, et al. **J Shoulder Elbow Surg** 1996 Jul-Aug;5(4):286-92

Active and passive factors in inferior glenohumeral stabilization: a biomechanical model. Soslowsky LJ, et al. **J Shoulder Elbow Surg** 1997 Jul-Aug;6(4):371-9

Reflex muscle contraction in anterior shoulder instability. Wallace DA, et al. **J Shoulder Elbow Surg** 1997 Mar-Apr; 6(2):150-5

[Biomechanics of the shoulder and therapeutic applications] Weinstabl R, et al. **Radiologe** 1996 Dec;36(12):981-90 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Locked posterior dislocation of the shoulder. Perrenoud A, et al. **Bull Hosp Jt Dis** 1996;54(3):165-8

Avulsion of the lesser tuberosity with intra-articular injury of the glenohumeral joint. Leslie A, et al. **Injury** 1996 Dec; 27(10):742-5

Inferior glenohumeral dislocation (luxatio erecta humeri). Padgham M, et al. **J Am Osteopath Assoc** 1996 Aug; 96(8):478-81

Glenoid osteotomy for recurrent posterior subluxation of the shoulder: assessment by computed axial tomography. Hawkins RH. **J Shoulder Elbow Surg** 1996 Sep-Oct; 5(5):393-400

Translation of the glenohumeral joint with the patient under anesthesia. Hawkins RJ, et al. **J Shoulder Elbow Surg** 1996 Jul-Aug;5(4):286-92

[Value of arthro-CT in decision for arthroscopic or open stabilization in ventral shoulder instability] Jürgensen I, et al. **Unfallchirurg** 1996 Dec;99(12):940-5 (Eng. Abstr.) **(Ger)**

[A case of posterior dislocation of the shoulder with fracture of the humeral neck] Kotela I. **Chir Narzadow Ruchu Ortop Pol** 1997;62(2):105-8 (Eng. Abstr.) **(Pol)**

REHABILITATION

[A new dimension--proprioceptive training of the upper extremities and trunk. Case report of a 13-year-old tennis player after shoulder dislocation] Stommel A. **Sportverletz Sportschaden** 1997 Mar;11(1):XV-XVII **(Ger)**

SURGERY

Osteoarthrosis following the Putti-Platt operation. Konig DP, et al. **Arch Orthop Trauma Surg** 1996;115(3-4):231-2

Follow-up results 20 years after surgical treatment of habitual ventral shoulder luxation using the Eden-Lange technique. Neusel E, et al. **Arch Orthop Trauma Surg** 1997; 116(4):217-20

Locked posterior dislocation of the shoulder: treatment using arthroscopic removal of a loose body. Alamo GG, et al. **Arthroscopy** 1996 Feb;12(1):109-11

Arthroscopic Bankart repair in a high demand patient population. Bacilla P, et al. **Arthroscopy** 1997 Feb; 13(1):51-60

Percutaneous tensioning of the glenohumeral ligaments during arthroscopic bankart repair. Post WR. **Arthroscopy** 1996 Feb;12(1):116-9

The antero-inferior (transmuscular) approach for arthroscopic repair of the Bankart lesion: an anatomic and clinical study. Resch H, et al. **Arthroscopy** 1996 Jun; 12(3):309-19; discussion 320-2

Arthroscopic extra-articular Bankart repair for the treatment of recurrent anterior shoulder dislocation. Resch H, et al. **Arthroscopy** 1997 Apr;13(2):188-200

Arthroscopic reconstruction of traumatic anterior instability of the shoulder: the Caspari technique. Savoie FH 3rd, et al. **Arthroscopy** 1997 Apr;13(2):201-9

A simple and secure anchoring system for Caspari's transglenoid multiple suture technique using a biodegradable poly-l-lactic acid button. Yoneda M, et al. **Arthroscopy** 1996 Jun;12(3):293-9

Anterior recurrent dislocation of shoulder treated by the Latarjet technique: our experience. Fontanesi G, et al. **Chir Organi Mov** 1996 Jan-Mar;81(1):1-9 **(Eng, Ita)**

Bankart-Delitala surgery in the treatment of recurrent anterior dislocation of the shoulder. Maiotti M, et al. **Chir Organi Mov** 1997 Jan-Mar;82(1):53-9 **(Eng, Ita)**

Results of arthroscopic versus open Bankart suture repair. Geiger DF, et al. **Clin Orthop** 1997 Apr;(337):111-7

Recurrent anterior dislocation of the shoulder. Gakuu LN. **East Afr Med J** 1997 Jan;74(1):12-3

Allogenic decalbone in glenoplasty for recurrent anterior dislocation of shoulder. Khare GN, et al. **Indian J Med Sci** 1995 Aug;49(8):181-3

Osteoarthritis and recurrences after Putti-Platt and Eden-Hybbinette operations for recurrent dislocation of the shoulder. König DP, et al. **Int Orthop** 1997;21(2):72-6

Fracture of the shaft of the humerus with a fracture-dislocation of the same shoulder. A case report. Maffulli N, et al. **Int Orthop** 1996;20(4):237-8

Acute ischemia of the upper limb fifteen years after anterior dislocation of the glenohumeral joint and a modified Bristow procedure. A case report. Cappello T, et al. **J Bone Joint Surg Am** 1996 Oct;78(10):1578-82

Anterior dislocation of the shoulder in elderly patients. Gumina S, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):540-3

Open inferior glenohumeral dislocation. Davison BL, et al. **J Orthop Trauma** 1996;10(7):504-6

Open anterior dislocation of the shoulder. Gregory PR Jr, et al. **J Orthop Trauma** 1996;10(2):128-30

Treatment of locked posterior fracture-dislocations of the shoulder by total shoulder arthroplasty. Cheng SL, et al. **J Shoulder Elbow Surg** 1997 Jan-Feb;6(1):11-7

Glenoid osteotomy for recurrent posterior subluxation of the shoulder: assessment by computed axial tomography. Hawkins RH. **J Shoulder Elbow Surg** 1996 Sep-Oct; 5(5):393-400

Arthroscopic repair of glenolabral injuries with an absorbable fixation device. Segmüller HE, et al. **J Shoulder Elbow Surg** 1997 Jul-Aug;6(4):383-92

Arthroscopic stabilization of acute initial anterior shoulder dislocation: the West Point experience. DeBerardino TM, et al. **J South Orthop Assoc** 1996 Winter;5(4):263-71

[Anterior instability of the shoulder in athletes: apropos of 51 cases of stabilization using the Latarjet-Patte intervention] Huguet D, et al. **Acta Orthop Belg** 1996 Dec; 62(4):200-6 (Eng. Abstr.) **(Fre)**

[A new method of osteosynthesis in proximal humeral fractures: a new internal fixation device. Apropos of 17 cases followed over more than 2 years] Doursounian L, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996; 82(8):743-52 (Eng. Abstr.) **(Fre)**

[Posterior dislocation fracture of the shoulder] Schweighofer F, et al. **Chirurg** 1996 Dec;67(12):1251-4 (Eng. Abstr.) **(Ger)**

[Results of a differentiated therapy concept for dislocated subcapital humeral fractures in elderly patients] Damanakis K, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:910-1 (Eng. Abstr.) **(Ger)**

[MR arthrography of the shoulder joint in a postoperative patient sample] Rand T, et al. **Radiologe** 1996 Dec; 36(12):966-70 (Eng. Abstr.) **(Ger)**

[Arthroscopic capsule-labrum refixation in anterior shoulder dislocation. Primary or secondary management?] Hehl G, et al. **Unfallchirurg** 1996 Nov;99(11):831-5 (Eng. Abstr.) **(Ger)**

[Bilateral luxatio erecta of the shoulder joint--a rare injury. Management and therapy in polytrauma patients] Lill H, et al. **Unfallchirurg** 1996 Oct;99(10):801-5 (Eng. Abstr.) **(Ger)**

[Sports and work capacity after stabilization of recurrent shoulder joint dislocations] Richter J, et al. **Unfallchirurg** 1997 Mar;100(3):198-204 (Eng. Abstr.) **(Ger)**

[Dislocated multiple fragment fractures of the head of the humerus. Does dislocation of the humeral head fragment signify a worse prognosis?] Trupka A, et al. **Unfallchirurg** 1997 Feb;100(2):105-10 (Eng. Abstr.) **(Ger)**

[Arthroscopic therapy of the unstable shoulder joint--acceptance and critical considerations] Jerosch J. **Z Orthop Ihre Grenzgeb** 1997 Jan-Feb;135(1):79-83 (40 ref.) (Eng. Abstr.) **(Ger)**

[Arthroscopic repair of the glenoid labrum using the 3-point knot technique. Early results with consideration to different postoperative immobilization time periods] Merk H, et al. **Z Orthop Ihre Grenzgeb** 1996 Nov-Dec;134(6):546-52 (Eng. Abstr.) **(Ger)**

[Arthroscopic trans-glenoid stabilization of post-traumatic anterior shoulder instability] Steinbeck J, et al. **Z Orthop Ihre Grenzgeb** 1997 May-Jun;135(3):228-32 (Eng. Abstr.) **(Ger)**

[Treatment of recurrent traumatic shoulder dislocations with coracoid transfer--Latarjet-Bristow operation] Pap G, et al. **Zentralbl Chir** 1997;122(5):321-6 (Eng. Abstr.) **(Ger)**

[Surgical treatment for recurrent dislocation and subluxation of the shoulder joint] Yamamoto R. **Nippon Seikeigeka Gakkai Zasshi** 1997 Feb;71(2):112-24 (30 ref.) **(Jpn)**

[Arthroscopic reconstruction of the capsule-ligament using Landsiedl's technique for treating recurrent anterior shoulder dislocation] Pawlas R, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):527-30 (Eng. Abstr.) **(Pol)**

THERAPY

Clinically significant abnormalities in postreduction radiographs after anterior shoulder dislocation. Hendey GW, et al. **Ann Emerg Med** 1996 Oct;28(4):399-402

Shoulder reduction without anesthesia [letter; comment] Kolb JC, et al. **Ann Emerg Med** 1996 Nov;28(5):581-2. Comment on: Ann Emerg Med 1996 Jan;27(1):92-4.

An irreducible superior dislocation of the glenohumeral joint. de Laat EA, et al. **Arch Orthop Trauma Surg** 1997; 116(4):249-50

Locked posterior dislocation of the shoulder. Perrenoud A, et al. **Bull Hosp Jt Dis** 1996;54(3):165-8

Comparison of intra-articular lignocaine and a suprascapular nerve block for acute anterior shoulder dislocation. Gleeson AP, et al. **Injury** 1997 Mar;28(2):141-2

Primary anterior dislocation of the shoulder in young patients. A ten-year prospective study. Hovelius L, et al. **J Bone Joint Surg Am** 1996 Nov;78(11):1677-84

A prospective controlled randomized study of arthroscopic lavage in acute primary anterior dislocation of the shoulder: one-year follow-up. Wintzell G, et al. **Knee Surg Sports Traumatol Arthrosc** 1996;4(1):43-7

Anterior shoulder dislocation reduction technique--revisited. Zahiri CA, et al. **Orthopedics** 1997 Jun;20(6):515-21 (25 ref.)

Analgesic brachial plexus block for reduction of shoulder dislocation [letter] Agostoni M, et al. **Reg Anesth** 1996 Jul-Aug;21(4):373

[Arthroscopy in trauma related anterior dislocation of the shoulder] Pawlas R, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(4):361-4 (Eng. Abstr.) **(Pol)**

[More flexible reposition with local analgesia. Intra-articular analgesia tested in shoulder dislocation] Gröndal L, et al. **Lakartidningen** 1997 May 21;94(21):1997-8 **(Swe)**

ULTRASONOGRAPHY

Sonographic detection of tears of the anterior portion of the rotator cuff (subscapularis tendon tears). Farin P, et al. **J Ultrasound Med** 1996 Mar;15(3):221-5

[Ultrasound diagnosis of the shoulder] Helweg G, et al. **Radiologe** 1996 Dec;36(12):971-80 (28 ref.) (Eng. Abstr.) **(Ger)**

[Ultrasound findings after shoulder dislocation] Weishaupt D, et al. **Ultraschall Med** 1997 Jun;18(3):129-33 (Eng. Abstr.) **(Ger)**

[Ultrasound imaging of the ventrocaudal labrum in ventral instability of the shoulder] Wittner B, et al. **Unfallchirurg** 1996 Jan;99(1):38-42 (Eng. Abstr.) **(Ger)**

VETERINARY

[Luxation of the shoulder joint in a horse. A case report] Rapp HJ, et al. **Tierarztl Prax** 1996 Feb;24(1):41-3 (Eng. Abstr.) **(Ger)**

SHOULDER FRACTURES

COMPLICATIONS

Late vascular complication after fracture of the proximal humerus. Hildingsson C, et al. **Arch Orthop Trauma Surg** 1996;115(6):357-8

Avascular necrosis of the proximal humeral epiphysis after physeal fracture. A case report. Martin RP, et al. **J Bone Joint Surg Am** 1997 May;79(5):760-2

DIAGNOSIS

Missed bilateral anterior fracture dislocations of the shoulder. Thomas DP, et al. **Injury** 1996 Nov;27(9):661-2

Salter-Harris type III fracture-dislocation of the proximal humerus. Wang P Jr, et al. **J Pediatr Orthop B** 1997 Jul; 6(3):219-22

Knee and shoulder fractures: association of fracture detection and marrow edema on MR images with mechanism of injury. Palmer WE, et al. **Radiology** 1997 Aug; 204(2):395-401

[Imaging methods in traumatology of the shoulder- and elbow joint] Heyer D. **Aktuelle Radiol** 1996 Sep;6(5):225-31 (50 ref.) (Eng. Abstr.) **(Ger)**

ETIOLOGY

Stress fracture of the proximal humeral epiphysis in an elite junior badminton player. Boyd KT, et al. **Br J Sports Med** 1997 Sep;31(3):252-3

Bilateral humeral head fractures following an electric shock. Saunders FM, et al. **J Accid Emerg Med** 1997 Jul;14(4):225

RADIOGRAPHY

Diagnosis of Hill-Sachs lesion of the shoulder. Comparison between ultrasonography and arthro-CT. Pancione L, et al. **Acta Radiol** 1997 Jul;38(4 Pt 1):523-6

A regional approach to the classic metaphyseal lesion in abused infants: the proximal humerus. Kleinman PK, et al. **AJR Am J Roentgenol** 1996 Dec;167(6):1399-403

Clinically significant abnormalities in postreduction radiographs after anterior shoulder dislocation. Hendey GW, et al. **Ann Emerg Med** 1996 Oct;28(4):399-402

Traumatic first rib fracture: is angiography necessary? A review of 730 cases. Gupta A, et al. **Cardiovasc Surg** 1997 Feb;5(1):48-53 (21 ref.)

Avulsion of the lesser tuberosity with intra-articular injury of the glenohumeral joint. Leslie A, et al. **Injury** 1996 Dec; 27(10):742-5

Fracture-dislocation of the proximal part of the humerus with retroperitoneal displacement of the humeral head. A case report. Wirth MA, et al. **J Bone Joint Surg Am** 1997 May;79(5):763-6

SHOULDER FRACTURES

SURGERY

Acute hemiarthroplasty after proximal humerus fracture in old patients. A retrospective evaluation of 18 patients followed for 2–7 years. Wretenberg P, et al. **Acta Orthop Scand** 1997 Apr;68(2):121–3

Arthroscopic subscapularis tenolysis: a technique for treating refractory glenohumeral stiffness following open reduction and internal fixation of a displaced three–part proximal humerus fracture. Burkhart SS. **Arthroscopy** 1996 Feb; 12(1):87–91

Biomechanical comparison of intramedullary and percutaneous pin fixation for proximal humeral fracture fixation. Wheeler DL, et al. **J Orthop Trauma** 1997 Jul; 11(5):363–7

The treatment of supracondylar fractures in children with an absent radial pulse. Garbuz DS, et al. **J Pediatr Orthop** 1996 Sep–Oct;16(5):594–6

Treatment of posttraumatic cubitus varus in the pediatric population with humeral osteotomy and external fixation. Levine MJ, et al. **J Pediatr Orthop** 1996 Sep–Oct; 16(5):597–601

Salter–Harris type III fracture–dislocation of the proximal humerus. Wang P Jr, et al. **J Pediatr Orthop B** 1997 Jul; 6(3):219–22

[Four part valgus impacted fractures of the upper extremity of humerus: ilium graft reconstruction. Apropos of 8 cases] Vandenbussche E, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(7):658–62 (Eng. Abstr.) **(Fre)**

[Fulminant air embolism in arthroscopy of the shoulder joint using CO2] Bauereis C, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Dec; 31(10):654–7 (Eng. Abstr.) **(Ger)**

[Posterior dislocation fracture of the shoulder] Schweighofer F, et al. **Chirurg** 1996 Dec;67(12):1251–4 (Eng. Abstr.) **(Ger)**

[Results of a differentiated therapy concept for dislocated subcapital humeral fractures in elderly patients] Damanakis K, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:910–1 (Eng. Abstr.) **(Ger)**

[Proximal humerus fracture in advanced age] Hessmann M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:907–9 (Eng. Abstr.) **(Ger)**

[Modified treatment concept in fractures of the humeral head in elderly patients] Damanakis K, et al. **Unfallchirurg** 1996 Aug;99(8):561–8 (Eng. Abstr.) **(Ger)**

[Subcapital humerus fracture with lesion of the axillary artery. 2 case reports and review of the literature] Marty B, et al. **Unfallchirurg** 1996 Feb;99(2):154–7 (19 ref.) (Eng. Abstr.) **(Ger)**

[4–fragment fractures of the proximal humerus. Alternative strategies for surgical treatment] Speck M, et al. **Unfallchirurg** 1997 May;100(5):349–53 (Eng. Abstr.) **(Ger)**

[Dislocated multiple fragment fractures of the head of the humerus. Does dislocation of the humeral head fragment signify a worse prognosis?] Trupka A, et al. **Unfallchirurg** 1997 Feb;100(2):105–10 (Eng. Abstr.) **(Ger)**

["Minimal osteosynthesis"--a new concept in the surgical treatment of humeral head and neck fractures] Volpin G, et al. **Harefuah** 1996 Sep;131(5–6):197–200 (29 ref.) **(Heb)**

[Hemi–arthroplasty--primary or secondary measure for 3– and 4–fragment fractures of the proximal humerus in the elderly?] Bosch U, et al. **Unfallchirurg** 1996 Sep; 99(9):656–64 (Eng. Abstr.) **(Pol)**

THERAPY

Long–term outcome of isolated lesser tuberosity fractures of the humerus. Ogawa K, et al. **J Trauma** 1997 May; 42(5):955–9

ULTRASONOGRAPHY

Diagnosis of Hill–Sachs lesion of the shoulder. Comparison between ultrasonography and arthro–CT. Pancione L, et al. **Acta Radiol** 1997 Jul;38(4 Pt 1):523–6

Hill–Sachs lesion: sonographic detection. Farin PU, et al. **Skeletal Radiol** 1996 Aug;25(6):559–62

SHOULDER–GIRDLE NEUROPATHY see **CERVICO–BRACHIAL NEURALGIA**

SHOULDER–HAND SYNDROME see **REFLEX SYMPATHETIC DYSTROPHY**

SHOULDER IMPINGEMENT SYNDROME

Subacromial shoulder impingement. Björkenheim JM. **Ann Chir Gynaecol** 1996;85(2):105–10 (35 ref.)

Development and use of an animal model for investigations on rotator cuff disease. Soslowsky LJ, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct;5(5):383–92

Nontraumatic glenohumeral instability and coracoacromial impingement in swimmers. Bak K. **Scand J Med Sci Sports** 1996 Jun;6(3):132–44 (76 ref.)

DIAGNOSIS

Isokinetic testing to evaluate patients submitted to surgery for the treatment of surgical lesion of the rotator cuff. Porcellini G, et al. **Chir Organi Mov** 1996 Jul–Sep; 81(3):295–302 **(Eng, Ita)**

MR imaging of rotator cuff impingement: correlation with full–thickness rotator cuff tear. Chen JD, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep; 58(3):198–204

Lateral down–sloping of the acromion: a useful MR sign? Yao L, et al. **Clin Radiol** 1996 Dec;51(12):869–72

Tendon problems in athletic individuals. Teitz CC, et al. **Instr Course Lect** 1997;46:569–82 (76 ref.)

Lag signs in the diagnosis of rotator cuff rupture. Hertel R, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):307–13

MR imaging of shoulder impingement and rotator cuff disease. Uri DS. **Radiol Clin North Am** 1997 Jan;35(1):77–96 (60 ref.)

Rotator cuff strain: a post–traumatic mimicker of tendonitis on MRI. Anzilotti KF Jr, et al. **Skeletal Radiol** 1996 Aug; 25(6):555–8

[Diagnosis of shoulder impingement syndrome] Hodler J. **Radiologe** 1996 Dec;36(12):944–50 (43 ref.) (Eng. Abstr.) **(Ger)**

[Indirect MR arthrography of the shoulder. An alternative to direct MR arthrography?] Vahlensieck M, et al. **Radiologe** 1996 Dec;36(12):960–5 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Local corticosteroid injections in the treatment of rotator cuff tendinitis (except for frozen shoulder and calcific tendinitis). Groupe Rhumatologique Français de l'Epaule (G.R.E.P.). Goupille P, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):561–6 (41 ref.)

Efficacy of injections of corticosteroids for subacromial impingement syndrome. Blair B, et al. **J Bone Joint Surg Am** 1996 Nov;78(11):1685–9

ETIOLOGY

"Bursal reactions" in rotator cuff tearing, the impingement syndrome, and calcifying tendinitis. Ishii H, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr;6(2):131–6

Relationship between calcifying tendinitis and subacromial impingement: a prospective radiography and magnetic resonance imaging study. Loew M, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):314–9

The os acromiale: another cause of impingement [published erratum appears in Med Sci Sports Exerc 1997 Apr;29(4):569] Swain RA, et al. **Med Sci Sports Exerc** 1996 Dec;28(12):1459–62

PATHOLOGY

Shoulder impingement syndrome: influence of shoulder position on rotator cuff impingement--an anatomic study. Brossmann J, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1511–5

PHYSIOPATHOLOGY

Superior glenoid impingement. Jobe CM. **Orthop Clin North Am** 1997 Apr;28(2):137–43

[A dynamic shoulder model for biomechanical measurements of shoulder specimen] Roetman B, et al. **Biomed Tech (Berl)** 1996 Dec;41(12):359–63 (Eng. Abstr.) **(Ger)**

REHABILITATION

The reliability of three active motor tests used in painful shoulder disorders. Presentation of a method of general applicability for the analysis of reliability in the presence of pain. Westerberg CE, et al. **Scand J Rehabil Med** 1996 May;28(2):63–70

[Long–term therapeutic effect of different intra–articular injection treatments of the painful shoulder--effect on pain, mobility and work capacity] Ströbel G. **Rehabilitation (Stuttg)** 1996 Aug;35(3):176–8 (Eng. Abstr.) **(Ger)**

SURGERY

MR imaging of the shoulder after surgery. Magee TH, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):925–8

Fibrosis in the subacromial bursa and outcome after acromioplasty. Kronberg M, et al. **Ann Chir Gynaecol** 1997; 86(1):45–9

Operative release of the impingement syndrome. Indication, technique, results. Hartwig CH, et al. **Arch Orthop Trauma Surg** 1996;115(5):249–54

Penetration of cryotherapy in treatment after shoulder arthroscopy. Levy AS, et al. **Arthroscopy** 1997 Aug; 13(4):461–4

Isokinetic testing to evaluate patients submitted to surgery for the treatment of surgical lesion of the rotator cuff. Porcellini G, et al. **Chir Organi Mov** 1996 Jul–Sep; 81(3):295–302 **(Eng, Ita)**

Functional assessment for shoulder impingement syndrome after anterior acromioplasty. Hsieh KH, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jun;59(6):354–8

Arthroscopic treatment of rotator cuff disorders. Peterson CA 2nd, et al. **Clin Sports Med** 1996 Oct;15(4):715–36 (78 ref.)

Treatment of chronic rotator–cuff impingement by arthroscopic subacromial decompression. Nutton RW, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):73–6

Arthroscopic decompression for subacromial impingement syndrome. Kim SJ, et al. **J Korean Med Sci** 1997 Apr; 12(2):123–7

Arthroscopic acromioplasty. Current status. Altchek DW, et al. **Orthop Clin North Am** 1997 Apr;28(2):157–68 (40 ref.)

Open versus arthroscopic subacromial decompression: analysis of one–year results. T'Jonck L, et al. **Physiother Res Int** 1997;2(2):46–61

The results of open acromioplasty in impingement syndrome--a retrospective study. Chui CH, et al. **Singapore Med J** 1997 Jan;38(1):22–4

[Arthroscopic subacromial decompression] Johannsen HV, et al. **Ugeskr Laeger** 1997 Jan 6;159(2):166–70 (Eng. Abstr.) **(Dan)**

[MR arthrography of the shoulder joint in a postoperative patient sample] Rand T, et al. **Radiologe** 1996 Dec; 36(12):966–70 (Eng. Abstr.) **(Ger)**

THERAPY

Non–operative treatment of subacromial impingement syndrome. Morrison DS, et al. **J Bone Joint Surg Am** 1997 May;79(5):732–7

Resolution of calcium deposits after therapeutic ultrasound of the shoulder [letter] Ebenbichler GR, et al. **J Rheumatol** 1997 Jan;24(1):235–6

Prognostic factors in patients with rotator tendinosis (stage II impingement syndrome) of the shoulder. Brox JI, et al. **Scand J Prim Health Care** 1996 Jun;14(2):100–5

ULTRASONOGRAPHY

[Ultrasound diagnosis of the shoulder] Helweg G, et al. **Radiologe** 1996 Dec;36(12):971–80 (28 ref.) (Eng. Abstr.) **(Ger)**

SHOULDER JOINT

Wear of a titanium–alloy shoulder prosthetic head. Simon JP, et al. **Acta Orthop Belg** 1997 Jun;63(2):126–7

Shoulder pain and subluxation after stroke: correlation or coincidence? Zorowitz RD, et al. **Am J Occup Ther** 1996 Mar;50(3):194–201

Posterior shoulder laxity in asymptomatic athletes. McFarland EG, et al. **Am J Sports Med** 1996 Jul–Aug; 24(4):468–71

Scoring systems for shoulder conditions. Romeo AA, et al. **Am J Sports Med** 1996 Jul–Aug;24(4):472–6

The future of shoulder arthroscopy. Ellman H. **Ann Chir Gynaecol** 1996;85(2):150–5 (5 ref.)

Atraumatic loose shoulder: the treatment by pectoralis major muscle transfer. Ito N, et al. **Ann Chir Gynaecol** 1996; 85(2):139–48

Pathomechanics and operative management of chronic frozen shoulder. Ozaki J. **Ann Chir Gynaecol** 1996;85(2):156–8

Frozen shoulder: unravelling the enigma. Bunker TD. **Ann R Coll Surg Engl** 1997 May;79(3):210–3 (22 ref.)

The posterior triangle and the painful shoulder: spinal accessory nerve injury. Williams WW, et al. **Ann R Coll Surg Engl** 1996 Nov;78(6):521–5

Shoulder capsulitis in type I and II diabetic patients: association with diabetic complications and related diseases. Arkkila PE, et al. **Ann Rheum Dis** 1996 Dec;55(12):907–14

Comparison of the accuracy of steroid placement with clinical outcome in patients with shoulder symptoms. Eustace JA, et al. **Ann Rheum Dis** 1997 Jan;56(1):59–63

The subjective shoulder rating system. Kohn D, et al. **Arch Orthop Trauma Surg** 1997;116(6–7):324–8

Septic conditions of the shoulder--an up–dating of treatment strategies. Pfeiffenberger J, et al. **Arch Orthop Trauma Surg** 1996;115(6):325–31

Contracture of the shoulder joint. Soren A, et al. **Arch Orthop Trauma Surg** 1996;115(5):270–2

Acetic acid iontophoresis and ultrasound for the treatment of calcifying tendinitis of the shoulder: a randomized control trial. Perron M, et al. **Arch Phys Med Rehabil** 1997 Apr;78(4):379–84

Clinical and anatomic considerations in the use of a new anterior inferior subaxillary nerve arthroscopy portal. Burkhart SS, et al. **Arthroscopy** 1996 Oct;12(5):634–7

The adduction distraction maneuver. O'Brien SJ, et al. **Arthroscopy** 1997 Aug;13(4):530–2

The bifurcate coracoacromial ligament: an arthroscopic variant. Williams A, et al. **Arthroscopy** 1997 Apr; 13(2):233–4

Sports medicine. Shoulder pain. Part 1: Clinical assessment. Brukner P. **Aust Fam Physician** 1996 Oct;25(10):1593–5, 1597

Comparison of physiotherapy, manipulation, and corticosteroid injection for treating shoulder complaints in general practice: randomised, single blind study. Winters JC, et al. **BMJ** 1997 May 3;314(7090):1320–5

Shoulder disorders in general practice: prognostic indicators of outcome. van der Windt DA, et al. **Br J Gen Pract** 1996 Sep;46(410):519–23

Management of common shoulder problems. Binder A. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):66–72 (22 ref.)

Clinical differential diagnosis of shoulder pain. Turner–Stokes L. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):73–7 (3 ref.)

The painful shoulder: can consultants agree? Bamji AN, et al. **Br J Rheumatol** 1996 Nov;35(11):1172–4

Arthritis of shoulder and spinal cord compression due to Brucella disc infection [clinical conference] Ibero I, et al. **Br J Rheumatol** 1997 Mar;36(3):377–81

The frequency of restricted range of movement in individuals with self-reported shoulder pain: results from a population-based survey. Pope DP, et al. **Br J Rheumatol** 1996 Nov;35(11):1137–41

Shoulder pain relieved by abduction. A sign of cervical radicular compression. Tandeter H, et al. **Can Fam Physician** 1997 Mar;43:511–2

Synovial chondromatosis of the shoulder. A review of the literature and description of a clinical case. Gasbarrini A, et al. **Chir Organi Mov** 1997 Jan–Mar;82(1):73–81 **(Eng, Ita)**

Anterior release test. A new test for occult shoulder instability. Gross ML, et al. **Clin Orthop** 1997 Jun; (339):105–8

Magnetic resonance imaging of the shoulder: assessment of effectiveness. Blanchard TK, et al. **Clin Radiol** 1997 May; 52(5):363–8

Neuroarthropathy of the shoulder of unexpected origin. Frankart L, et al. **Clin Rheumatol** 1997 Jun;16(4):413–6

Chronic calcifying tendinitis of the shoulder–therapy by percutaneous needle aspiration and lavage: a prospective open study of 62 shoulders. Pfister J, et al. **Clin Rheumatol** 1997 May;16(3):269–74

Shoulder arthroscopy. New concepts. Burkhart SS. **Clin Sports Med** 1996 Oct;15(4):635–53 (106 ref.)

Hemiplegic shoulder pain (HSP): natural history and investigation of associated features. Wanklyn P, et al. **Disabil Rehabil** 1996 Oct;18(10):497–501

Percutaneous drainage of septic glenohumoral arthritis. de Witte MT, et al. **Eur J Radiol** 1996 May;22(2):158–60

Axillary node clearance: who wants to immobilize the shoulder? Browse DJ, et al. **Eur J Surg Oncol** 1996 Dec; 22(6):569–70

Treatment of frozen shoulder by distension and manipulation under local anaesthesia. van Royen BJ, et al. **Int Orthop** 1996;20(4):207–10

An acrylic Judet hip prosthesis in a shoulder hemiarthroplasty for thirty-nine years--a case report. Zamudio L, et al. **Int Orthop** 1997;21(2):91–2

Failure of an implant after total shoulder arthroplasty. A case report. Kirk PG, et al. **J Bone Joint Surg Am** 1997 Apr;79(4):597–8

Fracture-dislocation of the proximal part of the humerus with retroperitoneal displacement of the humeral head. A case report. Wirth MA, et al. **J Bone Joint Surg Am** 1997 May;79(5):763–6

An evaluation of the Constant-Murley shoulder assessment [letter] Bankes MJ, et al. **J Bone Joint Surg Br** 1997 Jul; 79(4):696

An evaluation of the Constant-Murley shoulder assessment [letter; comment] Constant CR. **J Bone Joint Surg Br** 1997 Jul;79(4):695–6. Comment on: J Bone Joint Surg Br 1996 Mar;78(2):229–32.

Chronic anterior glenohumeral instability [letter; comment] Oznur A, et al. **J Bone Joint Surg Br** 1997 Mar;79(2):341–2 . Comment on: J Bone Joint Surg Br 1996 Jul;78(4):670–7.

Rehabilitation of neck/shoulder patients in primary health care clinics. Jordan A, et al. **J Manipulative Physiol Ther** 1996 Jan;19(1):32–5 (43 ref.)

Implementation of neck/shoulder rehabilitation in primary health care clinics. Jordan A, et al. **J Manipulative Physiol Ther** 1996 Jan;19(1):36–40 (25 ref.)

Glenoid version in children. Mintzer CM, et al. **J Pediatr Orthop** 1996 Sep–Oct;16(5):563–6

Tensile properties of the superior glenohumeral and coracohumeral ligaments. Boardman ND, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):249–54

Venous pseudoaneurysm as a complication of shoulder arthroscopy. Cameron SE. **J Shoulder Elbow Surg** 1996 Sep–Oct;5(5):404–6

Bony changes of the glenoid as a consequence of shoulder instability [published erratum appears in J Shoulder Elbow Surg 1997 Jan–Feb;6(1):80] Edelson JG. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):293–8

Glenoid osteotomy for recurrent posterior subluxation of the shoulder: assessment by computed axial tomography. Hawkins RH. **J Shoulder Elbow Surg** 1996 Sep–Oct; 5(5):393–400

Translation of the glenohumeral joint with the patient under anesthesia. Hawkins RJ, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):286–92

Use of an antibiotic-impregnated bone cement block in the revision of an infected shoulder arthroplasty. Ramsey ML, et al. **J Shoulder Elbow Surg** 1996 Nov–Dec;5(6):479–82

Inferior glenohumeral ligament: geometric and strain-rate dependent properties. Ticker JB, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):269–79

Acromioclavicular joint injury in competitive golfers. Mallon WJ, et al. **J South Orthop Assoc** 1995 Winter;4(4):277–82

Osteonecrosis of the humeral head in sickle cell disease. Wingate J, et al. **J South Orthop Assoc** 1996 Summer; 5(2):101–7

A painful shoulder. O'Reilly MA, et al. **Mil Med** 1996 May; 161(5):306–7

Occupational factors related to shoulder pain and disability. Pope DP, et al. **Occup Environ Med** 1997 May;54(5):316–21

Shoulder pain in the work place. Curtis AS, et al. **Orthop Clin North Am** 1996 Oct;27(4):763–81 (42 ref.)

Radiologic case study. Ganglion cyst. Fischer BW, et al. **Orthopedics** 1996 Dec;19(12):1064, 1059–60

Computed tomography scanning may be misleading in imaging of neuropathic joints. Markiewitz AD, et al. **Orthopedics** 1997 Mar;20(3):268–9

A randomized, controlled clinical trial of a treatment for shoulder pain. Ginn KA, et al. **Phys Ther** 1997 Aug; 77(8):802–9; discussion 810–1

The patient with shoulder problems. Carr A. **Practitioner** 1997 Mar;241(1572):158–60

Common disorders of the shoulder. Belzer JP, et al. **Prim Care** 1996 Jun;23(2):365–88 (26 ref.)

Tumoral calcinosis in hemodialysis patients. A review of three cases. Franco M, et al. **Rev Rhum Engl Ed** 1997 Jan; 64(1):59–62 (19 ref.)

Imaging of bursae around the shoulder joint. Bureau NJ, et al. **Skeletal Radiol** 1996 Aug;25(6):513–7 (16 ref.)

Development and prevention of frozen shoulder after acute aneurysm surgery. Tanishima T, et al. **Surg Neurol** 1997 Jul;48(1):19–22

Tumoural calcinosis. Franceschi F, et al. **Trop Doct** 1997 Oct;27(4):247

[Reconstruction of the shape of the shoulder after scapulothoracic amputation] Gounot N, et al. **Ann Chir Plast Esthet** 1996 Jun;41(3):295–8 (Eng. Abstr.) **(Fre)**

[Recommendations of the Consensus Conference on Imaging of mechanical and degenerative pathology of a non-operated shoulder] Caroit M, et al. **J Radiol** 1997 Apr; 78(4):321–4 (0 ref.) **(Fre)**

[Synovial chondromatosis and chondrosarcoma. A study of the relationship between these two diseases] Anract P, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996; 82(3):216–24 (Eng. Abstr.) **(Fre)**

[Arthrodesis of the shoulder for post-traumatic palsy of the brachial plexus. Analysis of a series of 18 cases] Chammas M, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996; 82(5):386–95 (Eng. Abstr.) **(Fre)**

[Arthroscopic aspects and chronologic outcome of lesions of the labro-ligament complex in post-traumatic antero-inferior instability of the shoulder. A prospective study of 91 cases] Gleyze P, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):288–98 (46 ref.) (Eng. Abstr.) **(Fre)**

[A study of the neurologic risk in tendino-muscular advancement of supra-spinatus and infra-spinatus in the repair of large rotator cuff rupture] Goutallier D, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):299–305 (Eng. Abstr.) **(Fre)**

[Ultrasonography in the diagnostic approach of septic arthritis] Mnif J, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(2):148–55 (Eng. Abstr.) **(Fre)**

[Arthroscopic treatment of chronic anterior instability of the shoulder by staple capsulorrhaphy. Apropos of a series of 55 patients with a minimum of 18 months follow-up] Nérisson D, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):275–87 (Eng. Abstr.) **(Fre)**

[Synovial cyst of the supracapsular notch of the shoulder with supracapsular nerve compression in a sportsman. Apropos of a case. Review of the literature] Rochwerger A, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996; 82(4):344–7 (12 ref.) (Eng. Abstr.) **(Fre)**

[Isolated rupture of the tendon of the supra spinatus muscle. Results of 49 surgical repair] Saragaglia D, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1995;81(7):575–80 (Eng. Abstr.) **(Fre)**

[Secondary osteosarcoma in Paget disease] Dieckmann C, et al. **Aktuelle Radiol** 1996 Jul;6(4):191–3 (Eng. Abstr.) **(Ger)**

["Primary" shoulder stiffness: illness duration and therapeutic comparison] Wallny T, et al. **Z Orthop Ihre Grenzgeb** 1997 May–Jun;135(3):222–7 (Eng. Abstr.) **(Ger)**

[Imaging techniques for the shoulder] Ovadia D, et al. **Harefuah** 1997 Mar 16;132(6):431–5 (21 ref.) **(Heb)**

[Localized pigmented villonodular synovitis of the biceps tendon: ultrasonographic study. Report of a case and review of the literature] Chiodi E, et al. **Radiol Med (Torino)** 1996 Jul–Aug;92(1–2):128–9 (10 ref.) **(Ita)**

[Septic arthritis caused by Erysipelothrix rhusiopathiae (letter)] Bianchi-Llave JL, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):452–3 **(Spa)**

ANATOMY & HISTOLOGY

Kinematic MR imaging of the shoulder: normal patterns. Sans N, et al. **AJR Am J Roentgenol** 1996 Dec;167(6):1517–22

Shoulder imaging. A review. Tallroth K. **Ann Chir Gynaecol** 1996;85(2):95–103 (12 ref.)

Coracoacromial ligament function: a phylomorphic analysis. Kummer FJ, et al. **Bull Hosp Jt Dis** 1996;55(2):72–4

Magnetic resonance imaging of the coraco-acromial ligament. Blanchard TK, et al. **Clin Anat** 1997;10(2):88–91

Magnetic resonance imaging of the musculoskeletal system. Part 6. The Shoulder. Oxner KG. **Clin Orthop** 1997 Jan; (334):354–73 (78 ref.)

Current concepts: the stabilizing structures of the glenohumeral joint. Wilk KE, et al. **J Orthop Sports Phys Ther** 1997 Jun;25(6):364–79 (119 ref.)

The physical examination of the glenohumeral joint: emphasis on the stabilizing structures. Wilk KE, et al. **J Orthop Sports Phys Ther** 1997 Jun;25(6):380–9 (42 ref.)

Subscapularis muscle enervation: the effect of arm position. Checchia SL, et al. **J Shoulder Elbow Surg** 1996 May–Jun; 5(3):214–8

Spinal accessory nerve in a trapezius-splitting surgical approach. Jobe CM, et al. **J Shoulder Elbow Surg** 1996 May–Jun;5(3):206–8

Anatomic variation of the coracoacromial ligament: a macroscopic and microscopic cadaveric study. Pieper HG, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):291–6

Relationship between pulse sequences and signal intensity of joint fluid in the gradient-echo MR imaging. Horii M, et al. **Magn Reson Imaging** 1997;15(5):597–603

Biomechanics and design of shoulder arthroplasty. McCullagh PJ. **Proc Inst Mech Eng [H]** 1995;209(4):207–13 (23 ref.)

Dual phased array coils for high-resolution MRI of the shoulder. Sashi R, et al. **Radiat Med** 1997 Jan–Feb; 15(1):13–5

MR arthrography of the glenohumeral joint. Stoller DW. **Radiol Clin North Am** 1997 Jan;35(1):97–116 (47 ref.)

Sublabral recess of the superior glenoid labrum: study of cadavers with conventional nonenhanced MR imaging, MR arthrography, anatomic dissection, and limited histologic examination. Smith DK, et al. **Radiology** 1996 Oct; 201(1):251–6

MR arthrography of the rotator cuff and labral-ligamentous complex. Palmer WE. **Semin Ultrasound CT MR** 1997 Aug; 18(4):278–90 (19 ref.)

Tendon of the normal supraspinatus muscle: correlations between MR imaging and histology. Gagey N, et al. **Surg Radiol Anat** 1995;17(4):329–34

[The acromio-humeral interval. A study of the factors influencing its height] Nové-Josserand L, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(5):379–85 (Eng. Abstr.) **(Fre)**

[Fundamentals, possibilities and limitations of sonography of osteofibrous tunnels in the shoulder area. 1] Moriggl B. **Anat Anz** 1997 Aug;179(4):355–73 (119 ref.) (Eng. Abstr.) **(Ger)**

[Fundamentals, possibilities and limitations of sonography of osteofibrous tunnels in the shoulder area. 2] Moriggl B. **Anat Anz** 1997 Aug;179(4):375–92 (Eng. Abstr.) **(Ger)**

[Discussion remarks and opinion on: N. Wülker, K. Thren, M. Korell and L. Kirsch: Measurements in the translation of the glenohumeral joint in a dynamic shoulder model. Z. Orthop. 133 (1996) 67–72 (letter; comment)] Nägerl H. **Z Orthop Ihre Grenzgeb** 1996 Nov–Dec;134(6):573–6. Comment on: Z Orthop Ihre Grenzgeb 1996 Jan–Feb;134(1):67–72. **(Ger)**

CYTOLOGY

The effect of thermal heating on the length and histologic properties of the glenohumeral joint capsule. Hayashi K, et al. **Am J Sports Med** 1997 Jan–Feb;25(1):107–12

DRUG EFFECTS

Shoulder injections for subacromial bursitis [letter] Bert J. **Minn Med** 1996 Sep;79(9):6

Can flunarizine induce frozen shoulder? [letter] Franck JL, et al. **Rev Rhum Engl Ed** 1996 Jun;63(6):457

INJURIES

Using abduction and external rotation of the shoulder to increase the sensitivity of MR arthrography in revealing tears of the anterior glenoid labrum. Cvitanic O, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):837–44

Pectoralis tendon avulsion in the skeletally immature [see comments] Simonian PT, et al. **Am J Orthop** 1996 Aug; 25(8):563–4. Comment in: Am J Orthop 1997 Feb;26(2):76, 165. Comment in: Am J Orthop 1997 May;26(5):318, 334.

Shoulder strength and range of motion in symptomatic and pain-free elite swimmers. Bak K, et al. **Am J Sports Med** 1997 Jul–Aug;25(4):454–9

Shoulder injuries during alpine skiing. Kocher MS, et al. **Am J Sports Med** 1996 Sep–Oct;24(5):665–9

Diagnosis of glenoid labral tears. A comparison between magnetic resonance imaging and clinical examinations [see comments] Liu SH, et al. **Am J Sports Med** 1996 Mar–Apr; 24(2):149–54. Comment in: Am J Sports Med 1997 Jan–Feb;25(1):141–4.

A prospective evaluation of a new physical examination in predicting glenoid labral tears. Liu SH, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):721–5

Rehabilitation of the shoulder. Hawkins R, et al. **Ann Chir Gynaecol** 1996;85(2):173–84 (22 ref.)

The injured shoulder. Primary care assessment. Howard TM, et al. **Arch Fam Med** 1997 Jul–Aug;6(4):376–84 (23 ref.)

The arthroscopic treatment of posterior shoulder instability: two-year results of a multiple suture technique. McIntyre LF, et al. **Arthroscopy** 1997 Aug;13(4):426–32

The arthroscopic treatment of multidirectional shoulder instability: two-year results of a multiple suture technique. McIntyre LF, et al. **Arthroscopy** 1997 Aug;13(4):418–25

The management of common dislocations in the upper limb. Bell S, et al. **Aust Fam Physician** 1996 Sep;25(9):1413–5, 1418–23, 1425, passim

Sports medicine. Shoulder pain. Part III: Shoulder instability. Brukner P. **Aust Fam Physician** 1996 Dec;25(12):1853–5

Comparison of glenohumeral joint laxity in elite and recreational swimmers. Zemek MJ, et al.

Clin J Sport Med 1996 Jan;6(1):40–7

Case report: sonographic diagnosis of biceps tendon dislocation. Prato N, et al. **Clin Radiol** 1996 Oct; 51(10):737–9

Rehabilitation of the athlete after shoulder arthroscopy. Buuck DA, et al. **Clin Sports Med** 1996 Oct;15(4):655–72 (29 ref.)

Shoulder arthroscopy in the throwing athlete. Craig EV. **Clin Sports Med** 1996 Oct;15(4):673–700 (13 ref.)

Arthroscopic decompression of the shoulder in athletes. Kolowich PA. **Clin Sports Med** 1996 Oct;15(4):701–13 (44 ref.)

Floating clavicle--simultaneous dislocation of both ends of the clavicle. Eni-Olotu DO, et al. **Injury** 1997 May; 28(4):319–20 (4 ref.)

Avulsion of the lesser tuberosity with intra-articular injury of the glenohumeral joint. Leslie A, et al. **Injury** 1996 Dec; 27(10):742–5

Pathophysiologic alterations in shoulder injury. Kibler WB, et al. **Instr Course Lect** 1997;46:3–6 (30 ref.)

Humeral and glenoid detachment of the anterior inferior glenohumeral ligament: a cause of anterior shoulder instability. Field LD, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb;6(1):6–10

Modular shoulder arthroplasty. Gartsman GM, et al. **J Shoulder Elbow Surg** 1997 Jul–Aug;6(4):333–9

Strength of the glenoid labrum and adjacent shoulder capsule. Hara H, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug; 5(4):263–8

Extensive shoulder capsule tearing as a main cause of recurrent anterior shoulder dislocation. Ogawa K, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb;6(1):1–5

Magnetic resonance arthrography in the assessment of anterior instability of the shoulder: comparison with double-contrast computed tomography arthrography. Sano H, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):280–5

Posterior dislocation of the shoulder associated with fracture of the humeral anatomic neck. Galanakis IA, et al. **J Trauma** 1997 Jun;42(6):1176–8

MRI examination of the glenohumeral joint after traumatic primary anterior dislocation. A descriptive evaluation of the acute lesion and at 6-month follow-up. Wintzell G, et al. **Knee Surg Sports Traumatol Arthrosc** 1996;4(4):232–6

Glenohumeral instability: evaluation with MR arthrography. Beltran J, et al. **Radiographics** 1997 May–Jun;17(3):657–73

Return to sport after a Bankart operation of the shoulder using the Mitek anchor system. Kjeldsen SR, et al. **Scand J Med Sci Sports** 1996 Dec;6(6):346–51

[Lesions to the axillary nerve] Alnot JY, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(7):579–89 (Eng. Abstr.) **(Fre)**

[Assessment of shoulder pain in athletes] Biasca N, et al. **Schweiz Rundsch Med Prax** 1996 Sep 10;85(37):1123–35 (27 ref.) (Eng. Abstr.) **(Ger)**

INNERVATION

Suprascapular nerve block for postoperative pain relief in arthroscopic shoulder surgery: a new modality? Ritchie ED, et al. **Anesth Analg** 1997 Jun;84(6):1306–12

Sensory nerve supply in the human subacromial bursa. Ide K, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct;5(5):371–82

[Proprioception of the shoulder joint in young tennis players] Jerosch J, et al. **Sportverletz Sportschaden** 1997 Mar; 11(1):1–9 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Pasteurella multocida arthritis of the shoulder associated with postsurgical lymphedema. Fellows L, et al. **J Rheumatol** 1996 Oct;23(10):1824–5

PATHOLOGY

Shoulder impingement syndrome: influence of shoulder position on rotator cuff impingement--an anatomic study. Brossmann J, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1511–5

Using abduction and external rotation of the shoulder to increase the sensitivity of MR arthrography in revealing tears of the anterior glenoid labrum. Cvitanic O, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):837–44

Palpation-directed (non-fluoroscopically guided) saline-enhanced MR arthrography of the shoulder. DeMouy EH, et al. **AJR Am J Roentgenol** 1997 Jul; 169(1):229–31

The rope ladder: an uncommon artifact and potential pitfall in MR arthrography of the shoulder. Gückel C, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):947–50

Sonographic guidance of needle position for MR arthrography of the shoulder. Valls R, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):845–7

Necrobiotic palisading suture granulomas involving bone and joint: report of two cases. Marcus VA, et al. **Am J Surg Pathol** 1997 May;21(5):563–5

The incidence of glenohumeral joint abnormalities associated with full-thickness, reparable rotator cuff tears. Gartsman GM, et al. **Arthroscopy** 1997 Aug;13(4):450–5

The BHAGL lesion: a new variant of anterior shoulder instability. Oberlander MA, et al. **Arthroscopy** 1996 Oct; 12(5):627–33

Histological analysis of the coracoacromial arch: correlation between age-related changes and rotator cuff tears. Panni AS, et al. **Arthroscopy** 1996 Oct;12(5):531–40

Muscular imbalance and shoulder pain in volleyball attackers. Kugler A, et al. **Br J Sports Med** 1996 Sep;30(3):256–9

Magnetic resonance imaging of the musculoskeletal system. Part 6. The Shoulder. Oxner KG. **Clin Orthop** 1997 Jan; (334):354–73 (78 ref.)

MRI of the pediatric shoulder: nontraumatic lesions. Harty MP, et al. **Eur Radiol** 1997;7(3):352–60

Contrast media in MR arthrography of the glenohumeral joint: intra-articular gadopentetate vs saline: preliminary results. Zanetti M, et al. **Eur Radiol** 1997;7(4):498–502

Magnetic resonance imaging studies of the shoulder: diagnosis of lesions of the rotator cuff. Recht MP, et al. **Instr Course Lect** 1994;43:483–92 (50 ref.)

MR finding of primary amyloid arthropathy associated with multiple myeloma. Shim JC, et al. **J Comput Assist Tomogr** 1997 Sep–Oct;21(5):800–2

MRI examination of the glenohumeral joint after traumatic primary anterior dislocation. A descriptive evaluation of the acute lesion and at 6-month follow-up. Wintzell G, et al. **Knee Surg Sports Traumatol Arthrosc** 1996;4(4):232–6

Ossification of the coracoacromial ligament: association with rotator cuff pathology of the shoulder. Reichmister JP, et al. **Md Med J** 1996 Oct;45(10):849–52

Glenohumeral instability: evaluation with MR arthrography. Beltran J, et ai. **Radiographics** 1997 May–Jun;17(3):657–73

MR imaging of shoulder impingement and rotator cuff disease. Uri DS. **Radiol Clin North Am** 1997 Jan;35(1):77–96 (60 ref.)

Magnetic resonance imaging of dialysis-related amyloidosis of the shoulder and hip. Escobedo EM, et al. **Skeletal Radiol** 1996 Jan;25(1):41–8

Magnetic resonance imaging features of chloroma of the shoulder. Gómez N, et al. **Skeletal Radiol** 1997 Jan; 26(1):70–2

Magnetic resonance imaging of osteonecrosis in divers: comparison with plain radiographs. Shinoda S, et al. **Skeletal Radiol** 1997 Jun;26(6):354–9

Os acromiale: evaluation of markers for identification on sagittal and coronal oblique MR images. Uri DS, et al. **Skeletal Radiol** 1997 Jan;26(1):31–4

[MRI-guided MRI arthrography of the shoulder] Trattnig S, et al. **Radiologe** 1996 Sep;36(9):709–12 (Eng. Abstr.) **(Ger)**

[MRI arthrography--improved diagnosis of shoulder joint instability] Lill H, et al. **Unfallchirurg** 1997 Mar; 100(3):186–92 (Eng. Abstr.) **(Ger)**

[Static functional study with magnetic resonance of anterior shoulder instability] Ragozzino A, et al. **Radiol Med (Torino)** 1997 May;93(5):510–3 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Intraoperative EMG response of the musculature after stimulation of the glenohumeral joint capsule. Jerosch J, et al. **Acta Orthop Belg** 1997 Mar;63(1):8–14

In vitro evaluation of shoulder external rotation after a Bankart reconstruction. Black KP, et al. **Am J Sports Med** 1997 Jul–Aug;25(4):449–53

Activation of the rotator cuff in generating isometric shoulder rotation torque. Jenp YN, et al. **Am J Sports Med** 1996 Jul–Aug;24(4):477–85

Glenohumeral translation in the asymptomatic athlete's shoulder and its relationship to other clinically measurable anthropometric variables. Lintner SA, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):716–20

Variations in the mechanical properties of cartilage from the canine scapulohumeral joint. Korvick D, et al. **Am J Vet Res** 1997 Sep;58(9):949–53

The control of stable postures in the multijoint arm. McIntyre J, et al. **Exp Brain Res** 1996 Jul;110(2):248–64

Kinematics of four methods of stabbing: a preliminary study. Miller SA, et al. **Forensic Sci Int** 1996 Sep 30;82(2):183–90

Normal shoulder mechanics and function. Kibler WB. **Instr Course Lect** 1997;46:39–42 (45 ref.)

Glenohumeral joint translations before and after total shoulder arthroplasty. A study in cadavera. Karduna AR, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1166–74

The influence of the mobility in the cervicothoracic spine and the upper ribs (shoulder girdle) on the mobility of the scapulohumeral joint. Sobel JS, et al. **J Manipulative Physiol Ther** 1996 Sep;19(7):469–74 (16 ref.)

Organizing principles for voluntary movement: extending single-joint rules. Almeida GL, et al. **J Neurophysiol** 1995 Oct;74(4):1374–81

Kinematics of the glenohumeral joint: influences of muscle forces, ligamentous constraints, and articular geometry. Karduna AR, et al. **J Orthop Res** 1996 Nov;14(6):986–93

Concentric and/or eccentric training-induced alterations in shoulder flexor and extensor strength. Amiridis IG, et al. **J Orthop Sports Phys Ther** 1997 Jan;25(1):26–33

Concentric isokinetic shoulder internal and external rotation strength in professional baseball pitchers. Ellenbecker TS, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):323–8

Glenohumeral joint internal and external rotation range of motion in elite junior tennis players. Ellenbecker TS, et al. **J Orthop Sports Phys Ther** 1996 Dec;24(6):336–41

Static and dynamic strength of the shoulder rotators in healthy, 45- to 75-year-old men and women. Kramer JF, et al. **J Orthop Sports Phys Ther** 1996 Jul;24(1):11–8

End range eccentric antagonist/concentric agonist strength ratios: a new perspective in shoulder strength assessment. Scoville CR, et al. **J Orthop Sports Phys Ther** 1997 Mar; 25(3):203–7

Electromyography of shoulder muscles in relation to force direction. Arwert HJ, et al. **J Shoulder Elbow Surg** 1997 Jul–Aug;6(4):360–70

The relation between the position of the glenohumeral joint and the intraarticular pressure: an experimental study. Inokuchi W, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr; 6(2):144–9

Biomechanical investigation of the glenohumeral joint. Itoi E, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct;5(5):407–24 (122 ref.)

Use of vertebral levels to measure presumed internal rotation at the shoulder: a radiographic analysis. Mallon WJ, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):299–306

Role of the long head of the biceps brachii in glenohumeral stability: a biomechanical study in cadavera. Pagnani MJ, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):255–62

Shoulder symptoms in healthy athletes: a comparison of outcome scoring systems. Soldatis JJ, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):265–71

Special considerations in the athletic throwing shoulder. Arroyo JS, et al. **Orthop Clin North Am** 1997 Jan; 28(1):69–78 (72 ref.)

Biomechanics and design of shoulder arthroplasty. McCullagh PJ. **Proc Inst Mech Eng [H]** 1995;209(4):207–13 (23 ref.)

Relative contributions to the net joint moment for a planar multijoint throwing skill: early and late in practice. Heise GD, et al. **Res Q Exerc Sport** 1997 Jun;68(2):116–24

[Vienna Shoulder Score (VSS) and Vienna Shoulder Formula (VSF) for follow-up and assessment of shoulder and shoulder girdle injuries] Gaebler C, et al. **Swiss Surg** 1997; 3(2):69–75 (Eng. Abstr.) **(Ger)**

[Proprioceptive functions of the shoulder girdle in healthy subjects] Jerosch J, et al. **Z Orthop Ihre Grenzgeb** 1996 Jul–Aug;134(4):360–5 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Prospective analysis of total shoulder arthroplasty biomechanics. Friedman RJ. **Am J Orthop** 1997 Apr; 26(4):265–70

Progressive scapulothoracic subluxation after fracture of the clavicle. Uhl RL, et al. **Am J Orthop** 1996 Sep;25(9):637–8; discussion 638–9

Delayed shoulder exercises in reducing seroma frequency after modified radical mastectomy: a prospective randomized study. Schultz I, et al. **Ann Surg Oncol** 1997 Jun;4(4):293–7

Captured shoulder: a complication of rotator cuff surgery. Mormino MA, et al. **Arthroscopy** 1996 Aug;12(4):457–61

Measurement of isometric elbow and shoulder moments: position-dependent strength of posterior deltoid-to-triceps muscle tendon transfer in tetraplegia. Kirsch RF, et al. **IEEE Trans Rehabil Eng** 1996 Dec;4(4):403–9 (10 ref.)

A self-administered questionnaire for assessment of symptoms and function of the shoulder. L'Insalata JC, et al. **J Bone Joint Surg Am** 1997 May;79(5):738–48

Proprioception during manual aiming in individuals with shoulder instability and controls. Forwell LA, et al. **J Orthop Sports Phys Ther** 1996 Feb;23(2):111–9

An objective measurement technique for posterior scapular displacement. Plafcan DM, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):336–41

Measures of shoulder protraction and thoracolumbar rotation. Schenkman M, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):329–35

The isokinetic torque curve of shoulder instability in high school baseball pitchers. Timm KE. **J Orthop Sports Phys Ther** 1997 Sep;26(3):150–4

Postoperative assessment of shoulder function: a prospective study of full-thickness rotator cuff tears. Iannotti JP, et al. **J Shoulder Elbow Surg** 1996 Nov–Dec;5(6):449–57

Shoulder function after surgical repair of rotator cuff tears. Kronberg M, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr; 6(2):125–30

The course of pain and the restriction of mobility in patients with shoulder complaints in general practice. Winters JC, et al. **Rheumatol Int** 1997;16(6):219–25

Influence of anthropometric and psychological variables pain and disability on isometric endurance of shoulder abduction in patients with rotator tendinosis of the shoulder. Brox JI, et al. **Scand J Rehabil Med** 1996 Dec;28(4):193–200

Reduced mobility in the cervico-thoracic motion segment--a risk factor for musculoskeletal neck-shoulder pain: a two-year prospective follow-up study. Norlander S, et al. **Scand J Rehabil Med** 1997 Sep;29(3):167–74

Evaluation of shoulder laxity. McFarland EG, et al. **Sports Med** 1996 Oct;22(4):264–72 (38 ref.)

[A dynamic shoulder model for biomechanical measurements of shoulder specimen] Roetman B, et al. **Biomed Tech (Berl)** 1996 Dec;41(12):359–63 (Eng. Abstr.) **(Ger)**

[Impingement syndrome] Mach J. **Dtsch Med Wochenschr** 1997 Sep 5;122(36):1096 **(Ger)**

RADIOGRAPHY

Clinically significant abnormalities in postreduction radiographs after anterior shoulder dislocation. Hendey GW, et al. **Ann Emerg Med** 1996 Oct;28(4):399–402

Radiologic measurement of superior displacement of the humeral head in the impingement syndrome. Deutsch A,

et al. **J Shoulder Elbow Surg** 1996 May–Jun;5(3):186–93
Use of vertebral levels to measure presumed internal rotation at the shoulder: a radiographic analysis. Mallon WJ, et al. **J Shoulder Elbow Surg** 1996 Jul–Aug;5(4):299–306
The vacuum arthrogram in the shoulder: correlation with rotator cuff disease. Reed SC, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct;5(5):368–70
Ossification of the coracoacromial ligament: association with rotator cuff pathology of the shoulder. Reichmister JP, et al. **Md Med J** 1996 Oct;45(10):849–52
A new radiographic projection for the posterolateral notch in cases of recurrent dislocation of the shoulder. Ito H, et al. **Nippon Ika Daigaku Zasshi** 1996 Dec;63(6):499–501
Glenoid hypoplasia and its relationship to instability. Trout TE, et al. **Skeletal Radiol** 1996 Jan;25(1):37–40
[Clinicoradiologic anatomy of the shoulder region] Schmidt HM, et al. **Radiologe** 1996 Dec;36(12):933–43 (54 ref.) (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Technetium–99m–MDP patterns in patients with painful shoulder lesions. Clunie G, et al. **J Nucl Med** 1997 Sep; 38(9):1491–5

SURGERY

Peroperative adenosine infusion reduces isoflurane concentrations during general anesthesia for shoulder surgery. Segerdahl M, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):792–7
Shoulder hemiarthroplasty in rheumatoid arthritis. 19 cases reexamined after 1–17 years. Koorevaar RC, et al. **Acta Orthop Scand** 1997 Jun;68(3):243–5
Pectoralis tendon avulsion in the skeletally immature [see comments] Simonian PT, et al. **Am J Orthop** 1996 Aug; 25(8):563–4. Comment in: Am J Orthop 1997 Feb;26(2):76, 165. Comment in: Am J Orthop 1997 May;26(5):318, 334.
Arthroscopic anterior labral reconstruction using a transglenoid suture technique: results in active–duty military patients [letter; comment] Fleiss DJ. **Am J Sports Med** 1996 Nov–Dec;24(6):866–7. Comment on: Am J Sports Med 1996 May–Jun;24(3):268–74.
Arthroscopic versus open reconstruction of the shoulder in patients with isolated Bankart lesions. Guanche CA, et al. **Am J Sports Med** 1996 Mar–Apr;24(2):144–8
Arthroscopic shoulder stabilization using transglenoid sutures. A four–year minimum followup. Pagnani MJ, et al. **Am J Sports Med** 1996 Jul–Aug;24(4):459–67
Interscalene patient–controlled analgesia [see comments] Lucas MA, et al. **Anaesthesia** 1997 Mar;52(3):263–4. Comment in: Anaesthesia 1997 Jul;52(7):715.
Suprascapular nerve block for postoperative pain relief in arthroscopic shoulder surgery: a new modality? Ritchie ED, et al. **Anesth Analg** 1997 Jun;84(6):1306–12
Idiopathic brachial plexitis after total shoulder replacement with interscalene brachial plexus block. Tetzlaff JE, et al. **Anesth Analg** 1997 Sep;85(3):644–6
Functional assessment, scoring and data collection for shoulder surgery. Bankes MJ, et al. **Ann Chir Gynaecol** 1996;85(2):186–90 (21 ref.)
Aquaflo pump vs FMS 4 pump for shoulder arthroscopic surgery. Ampat G, et al. **Ann R Coll Surg Engl** 1997 Sep; 79(5):341–4
Distal upper extremity function following proximal humeral resection and reconstruction for tumors: contralateral comparison. Damron TA, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):237–46
Total shoulder arthroplasty. Owens RA. **AORN J** 1997 May; 65(5):927–32
Arthroscopic Bankart repair in a high demand patient population. Bacilla P, et al. **Arthroscopy** 1997 Feb; 13(1):51–60
Pigmented villonodular synovitis of the shoulder after anterior capsulolabral reconstruction. Cheng JC, et al. **Arthroscopy** 1997 Apr;13(2):257–61
Arthroscopic management of refractory shoulder stiffness. Harryman DT 2nd, et al. **Arthroscopy** 1997 Apr; 13(2):133–47
Penetration of cryotherapy in treatment after shoulder arthroscopy. Levy AS, et al. **Arthroscopy** 1997 Aug; 13(4):461–4
The diabetic frozen shoulder: arthroscopic release. Ogilvie–Harris DJ, et al. **Arthroscopy** 1997 Feb;13(1):1–8
Arthroscopic reconstruction of traumatic anterior instability of the shoulder: the Caspari technique. Savoie FH 3rd, et al. **Arthroscopy** 1997 Apr;13(2):201–9
Completing arthroscopic knots with a broken suture limb. Tauro JC. **Arthroscopy** 1997 Apr;13(2):268–70
Infected suture anchors in the shoulder. Ticker JB, et al. **Arthroscopy** 1996 Oct;12(5):613–5
Rotator interval capsule closure: an arthroscopic technique. Treacy SH, et al. **Arthroscopy** 1997 Feb;13(1):103–6
Fatigue properties of suture anchors in anterior shoulder reconstructions: Mitek GII. Wetzler MJ, et al. **Arthroscopy** 1996 Dec;12(6):687–93
Correlation of MR imaging, CT arthrography, and arthroscopy of the shoulder. Imhoff AB, et al. **Bull Hosp Jt Dis** 1996;54(3):146–52
Osteochondral allografts with an intramedullary muscle flap in rabbits. Brown DM, et al. **Clin Orthop** 1997 Jan; (334):282–90
Shoulder fusion for paralyzed upper limb. Emmelot CH, et al. **Clin Orthop** 1997 Jul;(340):95–101
Arthroscopic Bankart repair using a degradable tack. A followup study using optimized indications. Laurencin CT, et al. **Clin Orthop** 1996 Nov;(332):132–7
Rehabilitation of the athlete after shoulder arthroscopy. Buuck DA, et al. **Clin Sports Med** 1996 Oct;15(4):655–72 (29 ref.)
Arthroscopic decompression of the shoulder in athletes. Kolowich PA. **Clin Sports Med** 1996 Oct;15(4):701–13 (44 ref.)
Arthroscopic Bankart repair. Shea KP. **Clin Sports Med** 1996 Oct;15(4):737–51 (37 ref.)
Complications of humeral head replacement for proximal humeral fractures. Muldoon MP, et al. **Instr Course Lect** 1997;46:15–24 (40 ref.)
Arthrolysis of the shoulder for ruptures of the rotator cuff. Bruns J, et al. **Int Orthop** 1997;21(3):157–60
The role of shoulder fusion in the era of arthroplasty. González–Díaz R, et al. **Int Orthop** 1997;21(3):204–9 (25 ref.)
Anterior acromioplasty. A comparison of two techniques. Ingvarsson T, et al. **Int Orthop** 1996;20(5):290–2
Bankart repair for anterior instability of the shoulder. Long–term outcome. Gill TJ, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):850–7
Treatment of complications of shoulder arthrodesis. Groh GI, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):881–7
An arthroscopic technique for anterior stabilization of the shoulder with a bioabsorbable tack. Speer KP, et al. **J Bone Joint Surg Am** 1996 Dec;78(12):1801–7
Arthroscopic release for chronic, refractory adhesive capsulitis of the shoulder. Warner JJ, et al. **J Bone Joint Surg Am** 1996 Dec;78(12):1808–16
Arthroscopic release of postoperative capsular contracture of the shoulder. Warner JJ, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1151–8
Total shoulder replacement in rheumatoid disease: 7– to 13–year follow–up of 37 joints. Stewart MP, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):68–72
Bipolar salvage shoulder arthroplasty. Follow–up in 14 patients. Watson M. **J Bone Joint Surg Br** 1996 Jan; 78(1):124–7
Postoperative eccentric and concentric isokinetic strength for the shoulder rotators in the scapular and neutral planes. Hartsell HD, et al. **J Orthop Sports Phys Ther** 1997 Jan; 25(1):19–25
Total shoulder arthroplasty. James WC 3rd, et al. **J S C Med Assoc** 1996 Oct;92(10):426–31 (15 ref.)
Mechanical strength of latissimus dorsi tendon transfer with Teflon felt augmentation. Aoki M, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr;6(2):137–43
Loosening of a biodegradable shoulder staple. Berg EE, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb;5(1):76–8
Dissociation of modular humeral head components: a biomechanical and implant retrieval study. Blevins FT, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr;6(2):113–24
Hemiarthroplasty of the shoulder for rotator cuff arthropathy. Field LD, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb;6(1):18–23
Closed wound drainage in shoulder surgery. Gartsman GM, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):288–90
Modular shoulder arthroplasty. Gartsman GM, et al. **J Shoulder Elbow Surg** 1997 Jul–Aug;6(4):333–9
Subscapularis tendon disruption after Bankart reconstruction for anterior instability. Greis PE, et al. **J Shoulder Elbow Surg** 1996 May–Jun;5(3):219–22
Spinal accessory nerve in a trapezius–splitting surgical approach. Jobe CM, et al. **J Shoulder Elbow Surg** 1996 May–Jun;5(3):206–8
Total shoulder arthroplasty in patients with Parkinson's disease. Koch LD, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb;6(1):24–8
Neurologic complications after total shoulder arthroplasty. Lynch NM, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb; 5(1):53–61
Holmium:YAG laser–assisted capsular shift in a canine model: intraarticular pressure and histologic observations. Pullin JG, et al. **J Shoulder Elbow Surg** 1997 May–Jun; 6(3):272–85
Indications for glenoid resurfacing in shoulder arthroplasty. Rodosky MW, et al. **J Shoulder Elbow Surg** 1996 May–Jun; 5(3):231–48 (107 ref.)
Release and reattachment of the coracoacromial ligament: a cadaveric study. Shaffer B, et al. **J Shoulder Elbow Surg** 1997 May–Jun;6(3):297–305
Total shoulder replacement in rheumatoid arthritis: proximal migration and loosening. Sneppen O, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb;5(1):47–52
The efficacy of cryotherapy in the postoperative shoulder. Speer KP, et al. **J Shoulder Elbow Surg** 1996 Jan–Feb; 5(1):62–8
Thoracoscapular fusion in facioscapulohumeral dystrophy: clinical review of a new surgical method. Twyman RS, et al. **J Shoulder Elbow Surg** 1996 May–Jun;5(3):201–5
Hemiarthroplasty in rotator cuff–deficient shoulders. Williams GR Jr, et al. **J Shoulder Elbow Surg** 1996 Sep–Oct; 5(5):362–7
Developments in Bankart repair for treatment of anterior instability of the shoulder. Horns HJ, et al. **Knee Surg Sports Traumatol Arthrosc** 1996;4(4):228–31
[Clinical experience in interscalene brachial plexus block combined with Ho's method of C3–4 block for shoulder and proximal upper extremity surgeries] Ho CS, et al. **Acta Anaesthesiol Sin** 1996 Sep;34(3):135–40 (Eng. Abstr.) **(Chi)**
[Gleno–humeral arthroscopic arthrolysis for shoulder stiffness. Apropos of 26 cases. Société Française d'Arthroscopie] Beaufils P, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(7):608–14 (Eng. Abstr.) **(Fre)**
[Shoulder arthrodesis in deltoid paralysis] Kohn D, et al. **Orthopade** 1997 Jul;26(7):630–3 (21 ref.) (Eng. Abstr.) **(Ger)**
[Fracture of the humerus after hemiarthroplasty of the shoulder] Kligman M, et al. **Harefuah** 1996 Nov 1; 131(9):307–9, 375 (Eng. Abstr.) **(Heb)**

ULTRASONOGRAPHY

Sonographic findings in patients with dialysis–related amyloidosis [letter; comment] Malghem J, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):844–5. Comment on: AJR Am J Roentgenol 1996 Jan;166(1):153–6.
MRI appearances of rice bodies in the subacromial/subdeltoid bursa [letter; comment] Harrison S, et al. **Clin Radiol** 1997 Feb;52(2):162. Comment on: Clin Radiol 1996 Jul;51(7):511–4.
Sonography of tendons: patterns of disease. van Holsbeeck M, et al. **Instr Course Lect** 1994;43:475–81 (20 ref.)

SHREWS

Colon carcinogenesis in shrews by intrarectal infusion of N–methyl–N–nitrosourea. Yang J, et al. **Cancer Lett** 1996 Dec 20;110(1–2):105–12
Effect of ethanol on esophageal cell proliferation and the development of N–methyl–N'–nitro–N–nitrosoguanidine induced–esophageal carcinoma in shrews. Shikata N, et al. **J Cancer Res Clin Oncol** 1996;122(10):613–8
Rates of rewarming, heart and respiratory rates and their significance for oxygen transport during arousal from torpor in the smallest mammal, the Etruscan shrew Suncus etruscus. Fons R, et al. **J Exp Biol** 1997 May;200 (Pt 10):1451–8
Novel sperm crypts and behavior of gametes in the fallopian tube of the white–toothed shrew, Crocidura russula monacha. Bedford JM, et al. **J Exp Zool** 1997 Feb 15; 277(3):262–73

ANATOMY & HISTOLOGY

Distribution of alpha– and beta–subunits of glycoprotein hormones in thyrogonadotroph in the anterior pituitary cells of the musk shrew (Suncus murinus). Hirano N, et al. **Acta Anat (Basel)** 1996;156(2):87–93
Blood supply to the retina in the laboratory shrew (Suncus murinus). Isomura G, et al. **Anat Anz** 1997 Jun; 179(3):237–43
Cardiac–like musculature of the intrapulmonary venous wall of the long–clawed shrew (Sorex unguiculatus), common tree shrew (Tupaia glis) and common marmoset (Callithrix jacchus). Endo H, et al. **Anat Rec** 1997 Jan;247(1):46–52
Anatomical study of the abdominal arterial system in soricids (Insectivora, Mammalia): functional and phylogenetic implications. López–Fuster MJ, et al. **Anat Rec** 1997 May; 248(1):142–7
Unusual ampullary sperm crypts, and behavior and role of the cumulus oophorus, in the oviduct of the least shrew, Cryptotis parva. Bedford JM, et al. **Biol Reprod** 1997 May; 56(5):1255–67
Comparative anatomical studies on the thyroid and thymic arteries. V. House musk shrew (Suncus murinus). Yamasaki M. **Okajimas Folia Anat Jpn** 1997 Mar;73(6):293–300

CLASSIFICATION

Molecular evolution of mammalian aquaporin–2: further evidence that elephant shrew and aardvark join the paenungulate clade. Madsen O, et al. **Mol Biol Evol** 1997 Apr;14(4):363–71

GENETICS

Chromosome location of sixteen genes in the common shrew, Sorex araneus L. (Mammalia, Insectivora). Matyakhina LD, et al. **Cytogenet Cell Genet** 1997;77(3–4):201–4
Robertsonian chromosomal rearrangements in the short–tailed shrew, Blarina carolinensis, in western Tennessee. Qumsiyeh MB, et al. **Cytogenet Cell Genet** 1997; 76(3–4):153–8
Chromosomal variation in the southern short–tailed shrew (Blarina carolinensis). Elrod DA, et al. **Genetica** 1996 Oct; 98(2):199–203
Robertsonian chromosomal variation in the house musk shrew (Suncus murinus, Insectivora:Soricidae) and the colonization history of the species. Rogatcheva MB, et al. **Genome** 1997 Feb;40(1):18–24
Chromosome localization of the gene for growth hormone in the common shrew (Sorex araneus). Malchenko SN, et al. **Hereditas** 1996;125(2–3):243–5
Novosibirsk revisited 24 years on: chromosome polymorphism in the Novosibirsk population of the common shrew Sorex araneus L. Polyakov AV, et al. **Heredity** 1997 Aug;79 (Pt 2):172–7
Characterization of microsatellite loci in the greater white–toothed shrew Crocidura russula. Favre L, et al.

SHREWS

Mol Ecol 1997 Jun;6(6):595–6
Isolation and characterization of simple sequence repeats in the genome of the common shrew. Wyttenbach A, et al. **Mol Ecol** 1997 Aug;6(8):797–800

IMMUNOLOGY

Pancreas of Aselli in some species of the shrews (Sorex araneusneomys fodiens) as an analogue of the bursa of Fabricius in birds. Tsiperson VP. **Cell Biol Int** 1997 Jun; 21(6):359–65

METABOLISM

Low activity of aldehyde dehydrogenase (ALDH) in liver of Suncus murinus: possible explanation for high sensitivity to alcohol. Itoh S, et al. **J Toxicol Sci** 1997 May;22(2):111–5

MICROBIOLOGY

Pneumocystis carinii of the common shrew, Sorex araneus, shows a discrete phenotype. Laakkonen J, et al.
J Eukaryot Microbiol 1997 Mar–Apr;44(2):117–21
[Shrews as a Borrelia reservoir in northwestern Russia] Grigor'eva LA. **Parazitologiia** 1996 Sep–Oct;30(5):458–60 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Description of cysticercoid of Coronacanthus vassilevi Genov, 1980 (Cestoda:Hymenolepididae). Tkach VV.
Parasite 1994 Jun;1(2):161–5
[A redescription of Hepatocestus hepaticus (Cestoda: Dilepididae) from shrews in western Siberia] Karpenko SV. **Parazitologiia** 1996 Sep–Oct;30(5):463–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The pharmacology of the emetic response to upper gastrointestinal tract stimulation in Suncus murinus. Andrews P, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):305–13
Hair growth and skin in the kinky-coat (kc) musk shrew, Suncus murinus. Ishikawa A, et al. **Exp Anim** 1996 Jul; 45(3):227–32
Superovulation induction in the house musk shrew (Suncus murinus). Matsuzaki T, et al. **Exp Anim** 1997 Jul;46(3):183–9
Heart and respiratory rates and their significance for convective oxygen transport rates in the smallest mammal, the Etruscan shrew Suncus etruscus. Jürgens KD, et al. **J Exp Biol** 1996 Dec;199 (12):2579–84
Effect of vorozole, an aromatase enzyme inhibitor, on sexual behavior, aromatase activity and neural immunoreactivity. Rissman EF, et al. **J Neuroendocrinol** 1996 Mar; 8(3):199–210
Ovulation induction and gamete transport in the female tract of the musk shrew, Suncus murinus. Bedford JM, et al. **J Reprod Fertil** 1997 May;110(1):115–25
The unusual state of the cumulus oophorus and of sperm behaviour within it, in the musk shrew, Suncus murinus. Bedford JM, et al. **J Reprod Fertil** 1997 May;110(1):127–34
Female sexual behavior is inhibited by short- and long-term food restriction. Gill CJ, et al. **Physiol Behav** 1997 Mar; 61(3):387–94
Female-biased dispersal in the monogamous mammal Crocidura russula: evidence from field data and microsatellite patterns. Favre L, et al.
Proc R Soc Lond B Biol Sci 1997 Jan 22;264(1378):127–32
The impact of chronic radioactive stress on the immuno-physiological condition of small mammals. Tsiperson VP, et al. **Sci Total Environ** 1997 Sep 6; 203(2):105–13
Significance of the localization of large granules in the thyrogonadotrophs of the musk shrew (Suncus murinus). Hirano N, et al. **Tissue Cell** 1997 Jun;29(3):375–81

SHREWS, TREE see **TUPAIIDAE**

SHRIMP

Occupational asthma to lobster and shrimp. Lemière C, et al. **Allergy** 1996 Apr;51(4):272–3
Purification, characterization, and hydrodynamic properties of arginine kinase from gulf shrimp (Penaeus aztecus). France RM, et al. **Arch Biochem Biophys** 1997 Sep 1; 345(1):73–8
Activity of insulin growth factors and shrimp neurosecretory organ extracts on a lepidopteran cell line. Hatt PJ, et al. **Arch Insect Biochem Physiol** 1997;34(3):313–28
Acute toxicity of selected pesticides to the estuarine shrimp Leander tenuicornis (Decapoda:Palaemonidae). Brown MD, et al. **J Am Mosq Control Assoc** 1996 Dec;12(4):721–4
Acute effects of Permanone 31–66 (permethrin–piperonyl butoxide) on nontarget minnows and grass shrimp. Tietze NS, et al. **J Am Mosq Control Assoc** 1995 Dec;11(4):476–9
The effect of using different levels of shrimp meal in broiler diets. Rosenfeld DJ, et al. **Poult Sci** 1997 Apr;76(4):581–7
Current status of trade in cultured shrimps. Chen SN.
Rev Sci Tech 1996 Jun;15(2):517–21 (8 ref.)
[International trade in living penaeid shrimp between countries in the Pacific and the Atlantic areas and in Europe] Michel A. **Rev Sci Tech** 1996 Jun;15(2):499–515 (35 ref.) (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Retinal anatomy of a new species of bresiliid shrimp from a hydrothermal vent field on the Mid-Atlantic Ridge. Nuckley DJ, et al. **Biol Bull** 1996 Feb;190(1):98–110
Morphology and physiology of digestive epithelia in Decapod crustaceans. Vogt G. **Pflugers Arch** 1996;431(6 Suppl 2):R239–40
The morphology of the dorsal eye of the hydrothermal vent shrimp, Rimicaris exoculata. O'Neill PJ, et al.
Vis Neurosci 1995 Sep–Oct;12(5):861–75

CHEMISTRY

Purification and comparison of beta-1,3-glucan binding protein from white shrimp (Penaeus vannamei). Vargas-Albores F, et al.
Comp Biochem Physiol B Biochem Mol Biol 1997 Apr; 116(4):453–8
A plasma protein isolated from brown shrimp (Penaeus californiensis) which enhances the activation of prophenoloxidase system by beta-1,3-glucan.
Vargas-Albores F, et al. **Dev Comp Immunol** 1996 Sep–Oct; 20(5):299–306
Isolation and characterisation of bioactive steroid from a prawn. Indap MM, et al. **Indian J Exp Biol** 1996 Jun; 34(6):588–9
Isolation and characterization of the high-density lipoproteins from the hemolymph and ovary of the penaeid shrimp Penaeus semisulcatus (de Haan): apoproteins and lipids. Lubzens E, et al. **J Exp Zool** 1997 Aug 15; 278(6):339–48

CYTOLOGY

Evidence for circulating hemocyte proliferation in the shrimp Penaeus japonicus. Sequeira T, et al.
Dev Comp Immunol 1996 Mar–Apr;20(2):97–104
Primary culture of prawn hepatocytes in serum free media [letter] Ghosh D, et al. **In Vitro Cell Dev Biol Anim** 1995 Dec;31(11):811–3

DRUG EFFECTS

Ionic imbalance as a source of toxicity in an estuarine effluent. Douglas WS, et al. **Arch Environ Contam Toxicol** 1996 Oct; 31(3):426–32
Acute and chronic toxicity of azinphos-methyl to two estuarine species, Mysidopsis bahia and Cyprinodon variegatus. Morton MG, et al.
Arch Environ Contam Toxicol 1997 May;32(4):436–41
Developmental toxicity of three carrier solvents using embryos of the grass shrimp, Palaemonetes pugio. Rayburn JR, et al. **Arch Environ Contam Toxicol** 1997 Aug; 33(2):217–21
Effect of hydrogen sulphide on two species of penaeid prawns Penaeus indicus (H. Milne Edwards) and Metapenaeus dobsoni (Miers). Gopakumar G, et al.
Bull Environ Contam Toxicol 1996 Nov;57(5):824–8
Toxicity of phenol on Macrobrachium rosenbergii (de Man) eggs, larvae, and post-larvae. Law AT, et al.
Bull Environ Contam Toxicol 1997 Mar;58(3):469–74
Toxicity of cyanide, iron-cyanide complexes, and a blast-furnace effluent to the banana prawn, Penaeus monodon. Pablo F, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):822–9
Residual pesticides and their toxicity to freshwater shrimp in the littoral and pelagic zones of Lake Kasumigaura, Japan. Nohara S, et al. **Chemosphere** 1996 Oct; 33(7):1417–24
Correlation between overall pesticide effects monitored by shrimp mortality test and change in macrobenthic fauna in a river. Hatakeyama S, et al. **Ecotoxicol Environ Saf** 1997 Mar;36(2):148–61
Toxic effects of blooms of marine species of Oscillatoriales on farmed prawns (Penaeus monodon, Penaeus japonicus) and brine shrimp (Artemia salina). Smith PT. **Toxicon** 1996 Aug;34(8):857–69

EMBRYOLOGY

Cell-cell association directed mitotic spindle orientation in the early development of the marine shrimp Sicyonia ingentis. Wang SW, et al. **Development** 1997 Feb; 124(4):773–80
Immunocytochemical detection of acetylated alpha-tubulin and Drosophila synapsin in the embryonic crustacean nervous system. Harzsch S, et al. **Int J Dev Biol** 1997 Jun; 41(3):477–84

ENZYMOLOGY

Unfolding and inactivation of Penaeus penicillatus acid phosphatase during denaturation by guanidine hydrochloride. Chen SL, et al. **Biochem Mol Biol Int** 1997 Jul;42(3):517–26
Modification of DNA topoisomerase I enzymatic activity with phosphotyrosyl protein phosphatase and alkaline phosphatase from the hepatopancreas of the shrimp Penaeus japonicus (Crustacea:Decapoda). Chuang NN, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Jun; 114(2):145–51

GENETICS

Partial sequence of the shrimp Penaeus notialis mitochondrial genome. Garcia-Machado E, et al. **C R Acad Sci III** 1996 Jun;319(6):473–86
Arthropod evolution: Brine shrimp add salt to the stew. Williams TA, et al. **Curr Biol** 1995 Dec 1;5(12):1330–3 (18 ref.)
Molecular cloning of hemocyanin cDNA from Penaeus vannamei (Crustacea, Decapoda): structure, evolution and physiological aspects. Sellos D, et al. **FEBS Lett** 1997 Apr 28;407(2):153–8
A novel satellite/microsatellite combination in the genome of the marine shrimp, Penaeus vannamei. Bagshaw JC, et al. **Gene** 1997 Jan 15;184(2):211–4
Cloning and expression of cathepsin L-like proteinases in the hepatopancreas of the shrimp Penaeus vannamei during the intermolt cycle. Le Boulay C, et al.
J Comp Physiol [B] 1996;166(5):310–8
Molecular analysis of a RAPD marker (B20) reveals two microsatellites and differential mRNA expression in Penaeus vannamei. Garcia DK, et al.
Mol Mar Biol Biotechnol 1996 Mar;5(1):71–83
Random amplified polymorphic DNA (RAPD) markers for determination of genetic variation in wild populations of the black tiger prawn (Penaeus monodon) in Thailand. Tassanakajon A, et al. **Mol Mar Biol Biotechnol** 1997 Jun; 6(2):110–5
Isolation of cDNA encoding a putative chitinase precursor in the kuruma prawn Penaeus japonicus. Watanabe T, et al. **Mol Mar Biol Biotechnol** 1996 Dec;5(4):299–303

IMMUNOLOGY

IgE and monoclonal antibody reactivities to the major shrimp allergen Pen a 1 (tropomyosin) and vertebrate tropomyosins. Reese G, et al. **Adv Exp Med Biol** 1996; 409:225–30
Glucan-induced disease resistance in tiger shrimp (Penaeus monodon). Song YL, et al. **Dev Biol Stand** 1997;90:413–21
Characterization of recombinant shrimp allergen Pen a 1 (tropomyosin). Reese G, et al.
Int Arch Allergy Immunol 1997 May–Jul;113(1–3):240–2
Quantification of the major brown shrimp allergen Pen a 1 (tropomyosin) by a monoclonal antibody-based sandwich ELISA. Jeoung BJ, et al. **J Allergy Clin Immunol** 1997 Aug;100(2):229–34
Identification of the first major allergen of a squid (Todarodes pacificus). Miyazawa H, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):948–53
[A case of food-dependent exercise-induced anaphylaxis induced by shrimp] Tokunaga H, et al. **Arerugi** 1995 Nov; 44(11):1297–304 (Eng. Abstr.) **(Jpn)**

METABOLISM

Effects of shrimp consumption on plasma lipoproteins. De Oliveira e Silva ER, et al. **Am J Clin Nutr** 1996 Nov; 64(5):712–7
Accumulation of trimethoprim, sulfamethoxazole, and N-acetylsulfamethoxazole in fish and shrimp fed medicated Artemia franciscana. Chair M, et al.
Antimicrob Agents Chemother 1996 Jul;40(7):1649–52
Fate of oil hydrocarbons in fish and shrimp after major oil spills in the Arabian Gulf. Fayad NM, et al.
Bull Environ Contam Toxicol 1996 Mar;56(3):475–82
Are the heavy metals cadmium and zinc regulated in freshwater prawns? Vijayram K, et al.
Ecotoxicol Environ Saf 1996 Jul;34(2):180–3
Determination and confirmation of identities of flumequine and nalidixic, oxolinic, and piromidic acids in salmon and shrimp. Pfenning AP, et al. **J AOAC Int** 1996 Sep–Oct; 79(5):1227–35
Cloning and sequence analysis of a cDNA encoding a crustacean hyperglycemic hormone from the Kuruma prawn Penaeus japonicus. Ohira T, et al.
Mol Mar Biol Biotechnol 1997 Mar;6(1):59–63

MICROBIOLOGY

Isolation and molecular identification of planctomycete bacteria from postlarvae of the giant tiger prawn, Penaeus monodon. Fuerst JA, et al. **Appl Environ Microbiol** 1997 Jan;63(1):254–62
Aeromonas species in fish, fish-eggs, shrimp and freshwater. Hänninen ML, et al. **Int J Food Microbiol** 1997 Jan; 34(1):17–26
Incidence and toxigenicity of Aeromonas hydrophila in seafood. Tsai GJ, et al. **Int J Food Microbiol** 1996 Aug; 31(1–3):121–31
Specific, nonradioactive detection of the NHP bacterium in Penaeus vannamei by in situ hybridization. Loy JK, et al. **J Vet Diagn Invest** 1996 Jul;8(3):324–31
Coiled bodies in hepatopancreas cells of shrimp infected with viruses and bacteria. Vogt G. **Naturwissenschaften** 1997 Jul; 84(7):315–7

PHYSIOLOGY

Acute toxicity and synergism of cadmium and zinc in white shrimp, Penaeus setiferus, juveniles. Vanegas C, et al.
Bull Environ Contam Toxicol 1997 Jan;58(1):87–92
Characterization of hyperglycemic and molt-inhibiting activity from sinus glands of the penaeid shrimp Penaeus vannamei. Sefiani M, et al. **Gen Comp Endocrinol** 1996 Jul; 103(1):41–53
Optimal conditions for rearing the tadpole shrimp, Triops

longicaudatus (Notostraca:Triopsidae), a biological control agent against mosquitoes. Fry-O'Brien LL, et al. **J Am Mosq Control Assoc** 1996 Sep;12(3 Pt 1):446–53

Fenestration in the myelin sheath of nerve fibers of the shrimp: a novel node of excitation for saltatory conduction. Hsu K, et al. **J Neurobiol** 1996 Jul;30(3):397–409

Neural factors influence the degeneration of muscle fibers in the chelae of snapping shrimps. Young RE, et al. **Mol Chem Neuropathol** 1996 May–Aug;28(1–3):295–300

Trypsin-like enzymes during fertilization in the shrimp Rhynchocinetes typus. Rios M, et al. **Mol Reprod Dev** 1997 Apr;46(4):581–6

Amino acid sequences and activities of multiple hyperglycemic hormones from the Kuruma prawn, Penaeus japonicus. Yang WJ, et al. **Peptides** 1997; 18(4):479–85

Morphology and physiology of digestive epithelia in Decapod crustaceans. Vogt G. **Pflugers Arch** 1996;431(6 Suppl 2):R239–40

[Nutrition of juvenile prawn Macrobrachium carcinus (Crustacea: Decapoda) with diets of vegetable and marine residues] Casas-Sánchez R, et al. **Rev Biol Trop** 1995 Apr–Dec;43(1–3):251–6 (Eng. Abstr.) **(Spa)**

VIROLOGY

Viral pathogens of the penaeid shrimp. Loh PC, et al. **Adv Virus Res** 1997;48:263–312 (150 ref.)

Taura syndrome of marine penaeid shrimp: characterization of the viral agent. Bonami JR, et al. **J Gen Virol** 1997 Feb; 78 (Pt 2):313–9

Characterization of hepatopancreatic parvo-like virus, a second unusual parvovirus pathogenic for penaeid shrimps. Bonami JR, et al. **J Gen Virol** 1995 Apr;76 (Pt 4):813–7

Cytopathology of Bay of Piran shrimp virus (BPSV), a new crustacean virus from the Mediterranean Sea. Vogt G. **J Invertebr Pathol** 1996 Nov;68(3):239–45

A new RNA-friendly fixative for the preservation of penaeid shrimp samples for virological detection using cDNA genomic probes. Hasson KW, et al. **J Virol Methods** 1997 Jul;66(2):227–36

Development of a non-radioactive gene probe by PCR for detection of white spot syndrome virus (WSSV). Nunan LM, et al. **J Virol Methods** 1997 Jan;63(1–2):193–201

Development of an in vitro quantal assay in primary cell cultures for a non-occluded baculo-like virus of penaeid shrimp. Tapay LM, et al. **J Virol Methods** 1997 Feb; 64(1):37–41

A simple and efficient method for purification of prawn baculovirus DNA. Yang F, et al. **J Virol Methods** 1997 Aug;67(1):1–4

Epizootiology, distribution and the impact on international trade of two penaeid shrimp viruses in the Americas. Lightner DV. **Rev Sci Tech** 1996 Jun;15(2):579–601 (80 ref.)

SHUT-INS see **HOMEBOUND PERSONS**

SHUTTLE VECTORS see **GENETIC VECTORS**

SHWARTZMAN PHENOMENON

Comparison of the reversed passive Arthus and local Shwartzman reactions of rabbit skin: effects of the long-acting PAF antagonist UK-74,505. Norman KE, et al. **Br J Pharmacol** 1997 Apr;120(7):1286–93

Expression of intercellular adhesion molecule-1 (ICAM-1) on vascular endothelial cells and renal tubular cells in the generalized Shwartzman reaction as an experimental disseminated intravascular coagulation model. Koide N, et al. **FEMS Immunol Med Microbiol** 1997 May;18(1):67–74

ETIOLOGY

Apoptotic cell death of vascular endothelial cells and renal tubular cells in the generalized Shwartzman reaction. Koide N, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3–4):205–11

IMMUNOLOGY

Effect of soluble P55 tumour-necrosis factor binding fusion protein on the local Shwartzman and Arthus reactions. Norman KE, et al. **Br J Pharmacol** 1996 Feb;117(3):471–478

Involvement of tumor necrosis factor-alpha, interleukin-1 beta, interleukin-8, and interleukin-1 receptor antagonist in acute lung injury caused by local Shwartzman reaction. Imamura S, et al. **Pathol Int** 1997 Jan;47(1):16–24

Immunomodulation of LPS ability to induce the local Shwartzman reaction. Aguillón JC, et al. **Scand J Immunol** 1996 Dec;44(6):551–5

METABOLISM

Effects of thalidomide on the local Shwartzman reaction in mice and rabbits. Geist C, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):165–74

PATHOLOGY

Effects of thalidomide on the local Shwartzman reaction in mice and rabbits. Geist C, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3–4):165–74

Involvement of tumor necrosis factor-alpha, interleukin-1 beta, interleukin-8, and interleukin-1 receptor antagonist in acute lung injury caused by local Shwartzman reaction. Imamura S, et al. **Pathol Int** 1997 Jan;47(1):16–24

SHY-DRAGER SYNDROME

A further fond farewell to shy and drager [letter; comment] Engel WK. **Ann Intern Med** 1997 Feb 15;126(4):334. Comment on: Ann Intern Med 1996 Jul 1;125(1):74–5.

[Shy-Drager syndrome and multiple system atrophy] Shinotoh H, et al. **Nippon Rinsho** 1997 Jan;55(1):131–4 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Shy-Drager syndrome] Nakamura Y, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):13–6 (8 ref.) **(Jpn)**

COMPLICATIONS

Limitation of vocal fold abduction only during sleep in a patient with Shy-Drager syndrome. Sadaoka T, et al. **Am J Otolaryngol** 1997 Mar–Apr;18(2):145–7

Autoimmune autonomic failure in a patient with myeloma-associated Shy-Drager syndrome. Goldstein DS, et al. **Clin Auton Res** 1996 Feb;6(1):17–21

Autonomic dysfunction and anemia in neurologic disorders. Ando Y, et al. **J Auton Nerv Syst** 1996 Nov 6;61(2):145–8

Abductor vocal fold palsy in the Shy-Drager syndrome presenting with snoring and sleep apnoea [letter; comment] Brown LK. **J Laryngol Otol** 1997 Jul;111(7):689–90. Comment on: J Laryngol Otol 1996 Jul;110(7):681–2.

Urodynamic and neurophysiological evaluation in Parkinson's disease and multiple system atrophy. Stocchi F, et al. **J Neurol Neurosurg Psychiatry** 1997 May; 62(5):507–11

[Vocal cord abductor paralysis in multiple system atrophy--paradoxical movement of vocal cords during sleep] Isozaki E, et al. **Rinsho Shinkeigaku** 1996 Apr; 36(4):529–33 (Eng. Abstr.) **(Jpn)**

[Monoamine imbalance of the central nervous system in a case of Shy-Drager syndrome with recurrent attacks of a neuroleptic malignant syndrome] Ueda M, et al. **Rinsho Shinkeigaku** 1996 May;36(5):696–8 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Urodynamic and neurophysiological evaluation in Parkinson's disease and multiple system atrophy. Stocchi F, et al. **J Neurol Neurosurg Psychiatry** 1997 May; 62(5):507–11

Facial myokymia in multiple system atrophy. Blunt SB, et al. **Mov Disord** 1997 Mar;12(2):235–8

METABOLISM

Glucose metabolism in the cortical and subcortical brain structures in multiple system atrophy and Parkinson's disease: a positron emission tomographic study. Otsuka M, et al. **J Neurol Sci** 1996 Dec;144(1–2):77–83

MORTALITY

Survival in multiple system atrophy: a study of prognostic factors in 59 cases. Testa D, et al. **J Neurol** 1996 May; 243(5):401–4

PATHOLOGY

Quantitative study of intermediolateral column cell counts in Machado-Joseph disease. Sakajiri K, et al. **J Neurol Sci** 1996 Dec;144(1–2):156–9

Multiple system atrophy: a review of 203 pathologically proven cases. Wenning GK, et al. **Mov Disord** 1997 Mar; 12(2):133–47

PHYSIOPATHOLOGY

QT interval and QT dispersion in multiple system atrophy (Shy-Drager syndrome). Frongillo D, et al. **Clin Auton Res** 1996 Apr;6(2):67–70

Consensus statement on the definition of orthostatic hypotension, pure autonomic failure and multiple system atrophy. Kaufmann H. **Clin Auton Res** 1996 Apr;6(2):125–6 (1 ref.)

Neurohumoral, peptidergic and biochemical responses to supine exercise in two groups with primary autonomic failure: Shy-Drager syndrome/multiple system atrophy and pure autonomic failure. Smith GD, et al. **Clin Auton Res** 1996 Oct;6(5):255–62

Gastrointestinal dysfunction in multiple system atrophy. Mathias CJ. **Semin Neurol** 1996 Sep;16(3):251–8 (44 ref.)

Sleep-related breathing disorders in patients with multiple system atrophy and vocal fold palsy. Sadaoka T, et al. **Sleep** 1996 Jul;19(6):479–84

SHY-MAGEE SYNDROME see **NEMALINE MYOPATHY**

SHYNESS

Elevation of plasma beta-endorphin levels of shy elderly in response to novel laboratory experiences. Bell IR, et al. **Behav Med** 1997 Winter;22(4):168–73

Explicit and implicit memory bias in social phobia. The role of subdiagnostic type. Lundh LG, et al. **Behav Res Ther** 1997 Apr;35(4):305–17

Subtypes of social withdrawal in early childhood: sociometric status and social-cognitive differences across four years. Harrist AW, et al. **Child Dev** 1997 Apr;68(2):278–94

Behavioral and neuroendocrine responses in shy children. Schmidt LA, et al. **Dev Psychobiol** 1997 Mar;30(2):127–40

Shyness and low social support as interactive diatheses, with loneliness as mediator: testing an interpersonal-personality view of vulnerability to depressive symptoms. Joiner TE Jr. **J Abnorm Psychol** 1997 Aug;106(3):386–94

Systematic assessment of 50 children with selective mutism. Dummit ES 3rd, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):653–60

Effect of concentration problems on the malleability of children's aggressive and shy behaviors. Rebok GW, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Feb; 35(2):193–203

A re-examination of the relationship between shyness, attributional style, and depression. Romney DM, et al. **J Genet Psychol** 1997 Sep;158(3):261–70

Perceptions of intelligence in leaderless groups: the dynamic effects of shyness and acquaintance. Paulhus DL, et al. **J Pers Soc Psychol** 1997 Mar;72(3):581–91

Mean MMPI profile of referrals to a shyness clinic. Henderson L. **Psychol Rep** 1997 Apr;80(2):695–702

Correlates of Portuguese college students' shyness and sociability. Neto F. **Psychol Rep** 1996 Feb;78(1):79–82

[A study on the relationship of shyness and gaze] Iizuka Y. **Shinrigaku Kenkyu** 1995 Oct;66(4):277–82 (Eng. Abstr.) **(Jpn)**

SH1 DOMAIN see **SRC HOMOLOGY DOMAINS**

SH2 DOMAIN see **SRC HOMOLOGY DOMAINS**

SH3 DOMAIN see **SRC HOMOLOGY DOMAINS**

SI UNITS see **INTERNATIONAL SYSTEM OF UNITS**

SIADH see **INAPPROPRIATE ADH SYNDROME**

SIALADENITIS

CHEMICALLY INDUCED

Sulfadiazine-induced sialadenitis. Añibarro B, et al. **Ann Pharmacother** 1997 Jan;31(1):59–60

[Sialadenitis caused by carbimazole (letter)] Gaudouen Y, et al. **Ann Med Interne (Paris)** 1996;147(6):462–4 **(Fre)**

CLASSIFICATION

Aetiological and histological classification of sialadenitis [editorial] Seifert G. **Pathologica** 1997 Feb;89(1):7–17 (113 ref.)

COMPLICATIONS

Massive salivary gland swelling due to primary cytomegalovirus infection in an AIDS patient. Smith NA, et al. **Int J STD AIDS** 1997 Aug;8(8):528–9

DIAGNOSIS

Severe CMV sialadenitis in adults is not always an opportunistic infection of AIDS. Guntinas-Lichius O, et al. **Int J STD AIDS** 1997 Mar;8(3):206–7

Cavernous hemangioma in the submandibular gland masquerading as sialadenitis: case report. McMenamin M, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Aug;84(2):146–8

[The differential diagnosis of lymphogranulomatosis (Hodgkin's disease) and sialoadenitis of the submandibular salivary gland] Afanas'ev VV, et al. **Stomatologiia (Mosk)** 1997;76(1):30–1 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Effects of sialadenitis after cellular transfer in autoimmune MRL/lpr mice. Skarstein K, et al. **Clin Immunol Immunopathol** 1997 Aug;84(2):177–84

Is hepatitis C virus a sialodacryoadenitis virus? Agnello V, et al. **Hepatology** 1997 Aug;26(2):509–10

Severe CMV sialadenitis in adults is not always an opportunistic infection of AIDS. Guntinas-Lichius O, et al. **Int J STD AIDS** 1997 Mar;8(3):206–7

Obstructive sialadenitis caused by intraparotid deposits of gold salts: a case report. Zuazua JS, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jun;81(6):649–51

Sialadenitis histologically resembling Sjogren syndrome in mice transgenic for hepatitis C virus envelope genes. Koike K, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):233–6

GENETICS

Analysis of immunoglobulin heavy chain gene rearrangement in myoepithelial sialadenitis by polymerase chain reaction. Hsi ED, et al. **Am J Clin Pathol** 1996 Oct;106(4):498–503

IMMUNOLOGY

Analysis of immunoglobulin heavy chain gene rearrangement in myoepithelial sialadenitis by polymerase chain reaction. Hsi ED, et al. **Am J Clin Pathol** 1996 Oct;106(4):498–503

Effector mechanism of experimental autoimmune sialadenitis in the mouse model for primary Sjögren's syndrome. Hayashi Y, et al. **Cell Immunol** 1996 Aug 1;171(2):217–25

SIALADENITIS

Expression of ductal Fas antigen in sialoadenitis of Sjögren's syndrome [see comments] Matsumura R, et al. **Clin Exp Rheumatol** 1996 May–Jun;14(3):309–11. Comment in: Clin Exp Rheumatol 1996 May–Jun;14(3):231–4.

Tumor-associated glycoprotein (TAG-72) in chronic submandibular sialadenitis and normal minor salivary glands defined by monoclonal antibody B72.3. Epivatianos A, et al. **Laryngoscope** 1997 Aug;107(8):1138–41

Detection of alterations in the levels of neuropeptides and salivary gland responses in the non-obese diabetic mouse model for autoimmune sialoadenitis. Yamamoto H, et al. **Scand J Immunol** 1997 Jan;45(1):55–61

METABOLISM

Indicators of salivary gland inflammation in primary Sjogren's syndrome. Cuida M, et al. **Eur J Oral Sci** 1997 Jun;105(3):228–33

PARASITOLOGY

Microfilaria in a fine needle aspirate from the salivary gland [letter] Sahu KK, et al. **Acta Cytol** 1997 May–Jun;41(3):954

PATHOLOGY

Lymphoid infiltrates of the salivary glands: pathology, biology and clinical significance. DiGiuseppe JA, et al. **Curr Opin Oncol** 1996 May;8(3):232–7 (36 ref.)

Chronic lymphocytic sialoadenitis in HCV-related chronic liver disease: comparison of Sjögren's syndrome. Scott CA, et al. **Histopathology** 1997 Jan;30(1):41–8

Immunohistological analysis of tumour growth factor beta 1 expression in normal and inflamed salivary glands. Kizu Y, et al. **J Clin Pathol** 1996 Sep;49(9):728–32

MALT lymphoma [letter; comment] Thejpal R, et al. **Lancet** 1997 Feb 8;349(9049):434–5. Comment on: Lancet 1996 Nov 30;348(9040):1526–7.

Fine needle aspiration cytodiagnosis of sialadenitis with crystalloid formation. Gupta RK. **Pathology** 1997 Feb; 29(1):102–3

[Formal pathogenesis of lymphoepithelial cysts in Sjogren's syndrome and HIV-associated sialadenitis] Ihrler S, et al. **Verh Dtsch Ges Pathol** 1996;80:327 **(Ger)**

SURGERY

Paresthesia of the cutaneous branch of the mylohyoid nerve after removal of a submandibular salivary gland [see comments] Marinho RO, et al. **J Oral Maxillofac Surg** 1997 Feb;55(2):170–1. Comment in: J Oral Maxillofac Surg 1997 Jul;55(7):788.

THERAPY

Interventional sialography: a single-center experience. Davies RP, et al. **Cardiovasc Intervent Radiol** 1997 Sep–Oct;20(5):331–6

[Immunocorrection in the combined treatment of patients with sialoadenitis] Pinelis IS, et al. **Stomatologiia (Mosk)** 1997;76(1):32–3 **(Rus)**

VIROLOGY

Severe acute cytomegalovirus sialadenitis in an immunocompetent adult: case report. Guntinas-Lichius O, et al. **Clin Infect Dis** 1996 Jun;22(6):1117–8

SIALIC ACID see N-ACETYLNEURAMINIC ACID

SIALIC ACIDS

[Recent advances in glycobiology on KDN-containing glycoconjugates] Kitajima K, et al. **Seikagaku** 1997 Jan; 69(1):44–51 (33 ref.) **(Jpn)**

ANALYSIS

New sialic acids from biological sources identified by a comprehensive and sensitive approach: liquid chromatography–electrospray ionization–mass spectrometry (LC–ESI–MS) of SIA quinoxalinones. Klein A, et al. **Glycobiology** 1997 Apr;7(3):421–32

CMP-NeuAc:(NeuAc alpha 2-->8)n (colominic acid) sialyltransferase activity in rat brain and in tumour cells that express polysialic acid on neural cell adhesion molecules. Easton EW, et al. **Glycoconj J** 1995 Dec; 12(6):829–37

Isolation and identification of novel sulfated and nonsulfated oligosialyl glycosphingolipids from sea urchin sperm. Ijuin T, et al. **Glycoconj J** 1996 Jun;13(3):401–13

The expression of CMP-NeuAc: Gal beta 1,4GlcNAc alpha 2,6 sialyltransferase [EC 2.4.99.1] and glycoproteins bearing alpha 2,6-linked sialic acids in human brain tumours. Yamamoto H, et al. **Glycoconj J** 1995 Dec;12(6):848–56

Altered carbohydrate composition in colorectal adenomas and carcinomas: histochemical characterization of N-acetylgalactosamine, L-fucose, and o-acetylated sialic acid. Iwakawa K, et al. **J Gastroenterol** 1996 Feb; 31(1):24–32

Anti-melanoma monoclonal antibody HMB-45 on enhanced chemiluminescence-western blotting recognizes a 30–35 kDa melanosome-associated sialated glycoprotein. Chiamenti AM, et al. **Melanoma Res** 1996 Aug;6(4):291–8

BIOSYNTHESIS

Sialic acid expression in normal and diseased human kidney. Babal P, et al. **Acta Histochem** 1996 Jan;98(1):71–7

Polysialylated NCAM expression on endocardial cells of the chick primary atrial septum. Gerety M, et al. **Anat Rec** 1997 Jan;247(1):71–84

Influence of nefiracetam on NGF-induced neuritogenesis and neural cell adhesion molecule polysialic acid expression: in vivo and in vitro comparisons. Odumeru O, et al. **Behav Brain Res** 1997 Feb;83(1–2):173–8

Differential expression of PSA-NCAM and HNK-1 epitopes in the developing cardiac conduction system of the chick. Chuck ET, et al. **Dev Dyn** 1997 Jun;209(2):182–95

PSA-NCAM and B-50/GAP-43 are coexpressed by specific neuronal systems of the adult rat mediobasal hypothalamus that exhibit remarkable capacities for morphological plasticity. Alonso G, et al. **J Comp Neurol** 1997 Jul 28; 384(2):181–99

Coating the surface: a model for expression of capsular polysialic acid in Escherichia coli K1. Bliss JM, et al. **Mol Microbiol** 1996 Jul;21(2):221–31 (68 ref.)

Capsule switching of Neisseria meningitidis. Swartley JS, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):271–6

Can malignancy in insulinoma be predicted by the expression patterns of beta 1,6 branching of asparagine-linked oligosaccharides and polysialic acid of the neural cell adhesion molecule? Li WP, et al. **Virchows Arch** 1996 Nov; 429(4–5):197–204

BLOOD

Sialic acid levels in serum and tissue from colorectal cancer patients. Feijoo C, et al. **Cancer Lett** 1997 Jan 30; 112(2):155–60

[Excitation of hypothalamic nucleus arcuatus neuron induced decrease of plasma sialic acid level in rats] Chen WF, et al. **Sheng Li Hsueh Pao** 1995 Dec;47(6):597–600 (Eng. Abstr.) **(Chi)**

[Metabolism of sialic compounds in pathogenesis of chronic osteomyelitis] Strelkov NS, et al. **Biull Eksp Biol Med** 1997 Jun;123(6):701–2 **(Rus)**

[Diagnostic significance of glycolipid sialic acids in hyperlipoproteinemias] Tvorogova MG, et al. **Klin Lab Diagn** 1997 Jul;(7):19–22 (Eng. Abstr.) **(Rus)**

[Total and lipid-bound sialic acids in the blood in primary and secondary hyperlipoproteinemias] Tvorogova MG, et al. **Ter Arkh** 1997;69(1):23–5 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Polysialylated asparaginase: preparation, activity and pharmacokinetics. Fernandes AI, et al. **Biochim Biophys Acta** 1997 Aug 15;1341(1):26–34

Studies on alpha-sialylation using sialyl donors with an auxiliary 3-thiophenyl group. Martichonok V, et al. **Carbohydr Res** 1997 Aug 7;302(3–4):123–9

CHEMISTRY

Chemical characterization of sialyl oligosaccharides isolated from goat (Capra hircus) milk. Viverge D, et al. **Biochim Biophys Acta** 1997 Aug 29;1336(2):157–64

Sialic acids
structure–analysis–metabolism–occurrence–recognition. Reuter G, et al. **Biol Chem Hoppe Seyler** 1996 Jun; 377(6):325–42 (315 ref.)

Effect of sialic acid residues of human alpha 1-acid glycoprotein on stereoselectivity in basic drug–protein binding. Shiono H, et al. **Chirality** 1997;9(3):291–6

Stereoselectivity of the Chinese hamster ovary cell sialidase: sialoside hydrolysis with overall retention of configuration. Kao YH, et al. **Glycobiology** 1997 Jun;7(4):559–63

Molecular dynamics-derived conformation and intramolecular interaction analysis of the N-acetyl-9-O-acetylneuraminic acid-containing ganglioside GD1a and NMR-based analysis of its binding to a human polyclonal immunoglobulin G fraction with selectivity for O-acetylated sialic acids. Siebert HC, et al. **Glycobiology** 1996 Sep;6(6):561–72

Enzymatic transfer of sialic acids modified at C-5 employing four different sialyltransferases. Gross HJ, et al. **Glycoconj J** 1995 Dec;12(6):739–46

Zona pellucida glycoprotein mZP3 bioactivity is not dependent on the extent of glycosylation of its polypeptide or on sulfation and sialylation of its oligosaccharides. Liu C, et al. **J Cell Sci** 1997 Mar;110 (Pt 6):745–52

Stabilization of sialic acids in N-linked oligosaccharides and gangliosides for analysis by positive ion matrix-assisted laser desorption/ionization mass spectrometry. Powell AK, et al. **Rapid Commun Mass Spectrom** 1996;10(9):1027–32

GENETICS

SAS is amplified predominantly in surface osteosarcoma. Noble-Topham SE, et al. **J Orthop Res** 1996 Sep; 14(5):700–5

IMMUNOLOGY

Binding diversity of monoclonal antibodies to alpha(2-->8) polysialic acid conjugated to outer membrane vesicle via adipic acid dihydrazide. Devi SJ, et al. **FEMS Immunol Med Microbiol** 1996 Jul;14(4):211–20

METABOLISM

Reduced sialylation of glycoproteins in nasal glands of patients with chronic sinusitis. Ueno K, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):420–3

Monovalent and polymeric 5N-thioacetamido sialosides as tightly-bound receptor analogs of influenza viruses. Tuzikov AB, et al. **Antiviral Res** 1997 Jan;33(2):129–34

Sialic acids
structure–analysis–metabolism–occurrence–recognition. Reuter G, et al. **Biol Chem Hoppe Seyler** 1996 Jun; 377(6):325–42 (315 ref.)

A Japanese case of infantile sialic acid storage disease. Nakano C, et al. **Brain Dev** 1996 Mar–Apr;18(2):153–6

Decrease in highly polysialylated neuronal cell adhesion molecules and in spatial learning during ageing are not correlated. Abrous DN, et al. **Brain Res** 1997 Jan 9; 744(2):285–92

Sialic acid levels in serum and tissue from colorectal cancer patients. Feijoo C, et al. **Cancer Lett** 1997 Jan 30; 112(2):155–60

Use of chimeric F3-NCAM molecules to explore the properties of VASE exon in modulating polysialylation and neurite outgrowth. Arce V, et al. **Cell Adhes Commun** 1996 Apr;3(6):541–54

Increased ventricular sialylation in patients with heart failure secondary to ischemic heart disease. Crook JR, et al. **Clin Cardiol** 1997 May;20(5):455–8

The lectin from the crustacean Liocarcinus depurator recognizes O-acetylsialic acids. Fragkiadakis GA, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Aug; 117(4):545–52

Polysialylation of NCAM by a single enzyme. Mühlenhoff M, et al. **Curr Biol** 1996 Sep 1;6(9):1188–91

Polysialic acid and the regulation of cell interactions. Rutishauser U. **Curr Opin Cell Biol** 1996 Oct;8(5):679–84 (46 ref.)

Salla disease--rare or underdiagnosed? Robinson RO, et al. **Dev Med Child Neurol** 1997 Mar;39(3):153–7

Autocatalytic polysialylation of polysialyltransferase-1. Mühlenhoff M, et al. **EMBO J** 1996 Dec 16;15(24):6943–50

Expression of PSA-N-CAM in human neuroblastoma cells induced to neuronal differentiation by retinoic acid. Cervello M, et al. **Eur J Cell Biol** 1997 Jul;73(3):270–5

Modulation of NCAM polysialylation is associated with morphofunctional modifications in the hypothalamo-neurohypophysial system during lactation. Nothias F, et al. **Eur J Neurosci** 1997 Aug;9(8):1553–65

Case of the month. A 3.5-year-old female with developmental delays, hepatomegaly, and coarse facies. Yano S, et al. **Eur J Pediatr** 1997 Aug;156(8):661–3

Sialic acids as ligands in recognition phenomena. Varki A. **FASEB J** 1997 Mar;11(4):248–55 (100 ref.)

Polysialic acid export in Escherichia coli K1: the role of KpsT, the ATP-binding component of an ABC transporter, in chain translocation. Bliss JM, et al. **Glycobiology** 1996 Jun;6(4):445–52

Stereoselectivity of the Chinese hamster ovary cell sialidase: sialoside hydrolysis with overall retention of configuration. Kao YH, et al. **Glycobiology** 1997 Jun;7(4):559–63

Selective ganglioside desialylation in the plasma membrane of human neuroblastoma cells. Kopitz J, et al. **Glycobiology** 1996 Apr;6(3):367–76

Molecular dynamics-derived conformation and intramolecular interaction analysis of the N-acetyl-9-O-acetylneuraminic acid-containing ganglioside GD1a and NMR-based analysis of its binding to a human polyclonal immunoglobulin G fraction with selectivity for O-acetylated sialic acids. Siebert HC, et al. **Glycobiology** 1996 Sep;6(6):561–72

Benzyl-N-acetyl-alpha-D-galactosaminide inhibits the sialylation and the secretion of mucins by a mucin secreting HT-29 cell subpopulation. Delannoy P, et al. **Glycoconj J** 1996 Oct;13(5):717–26

Binding specificity of influenza C-virus to variably O-acetylated glycoconjugates and its use for histochemical detection of N-acetyl-9-O-acetylneuraminic acid in mammalian tissues. Harms G, et al. **Glycoconj J** 1996 Aug; 13(4):621–30

Adhesion of Helicobacter pylori strains to alpha-2,3-linked sialic acids. Hirmo S, et al. **Glycoconj J** 1996 Dec; 13(6):1005–11

Expression of highly polysialylated NCAM (NCAM-H) in developing and adult chicken auditory organ. Kajikawa H, et al. **Hear Res** 1997 Jan;103(1–2):123–30

Histoenzymological detection of sialic acids in the rodent salivary glands. Accili D, et al. **Histol Histopathol** 1996 Jul;11(3):647–58

Identification of the N-acetylneuraminyllactose-specific laminin-binding protein of Helicobacter pylori. Valkonen KH, et al. **Infect Immun** 1997 Mar;65(3):916–23

Expression of isoforms of the neural cell adhesion molecule (NCAM) and polysialic acid during the development of the Bufo arenarum olfactory system. Paz DA, et al. **Int J Dev Biol** 1995 Dec;39(6):1005–13

Polysialic acid in the cochlea of the developing mouse. Whitlon DS, et al. **Int J Dev Neurosci** 1997 Jul; 15(4–5):657–69

Evidence that KpsT, the ATP-binding component of an ATP-binding cassette transporter, is exposed to the periplasm and associates with polymer during translocation of the polysialic acid capsule of Escherichia coli K1. Bliss JM, et al. **J Bacteriol** 1997 Feb;179(4):1400–3

Regulation of sialic acid 9-O-acetylation during the growth and differentiation of murine erythroleukemia cells. Shi WX, et al. **J Biol Chem** 1996 Dec 6;271(49):31517-25

Sialic acid 9-O-acetylation on murine erythroleukemia cells affects complement activation, binding to I-type lectins, and tissue homing. Shi WX, et al. **J Biol Chem** 1996 Dec 6;271(49):31526-32

Functional N-methyl-D-aspartate receptors in O-2A glial precursor cells: a critical role in regulating polysialic acid-neural cell adhesion molecule expression and cell migration. Wang C, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1565-81

9-O-Acetylation of sialomucins: a novel marker of murine CD4 T cells that is regulated during maturation and activation. Krishna M, et al. **J Exp Med** 1997 Jun 2; 185(11):1997-2013

Spatial learning activates neural cell adhesion molecule polysialylation in a corticohippocampal pathway within the medial temporal lobe. O'Connell AW, et al. **J Neurochem** 1997 Jun;68(6):2538-46

Spatially restricted increase in polysialic acid enhances corticospinal axon branching related to target recognition and innervation. Daston MM, et al. **J Neurosci** 1996 Sep 1;16(17):5488-97

The myelin-associated glycoprotein of the peripheral nervous system in trembler mutants contains increased alpha 2-3 sialic acid and galactose. Bartoszewicz ZP, et al. **J Neurosci Res** 1996 Mar 1;43(5):587-93

Uptake and incorporation of an epitope-tagged sialic acid donor into intact rat liver Golgi compartments. Functional localization of sialyltransferase overlaps with beta-galactosyltransferase but not with sialic acid O-acetyltransferase. Chammas R, et al. **Mol Biol Cell** 1996 Nov;7(11):1691-707

Determination of viral neuraminidase specificity for membrane-bound sialic acids by cell electrophoresis. Gimsa U, et al. **Mol Membr Biol** 1997 Apr-Jun;14(2):87-90

Molecular cloning of the cDNA encoding a murine sialic acid-specific 9-O-acetylesterase and RNA expression in cells of hematopoietic and non-hematopoietic origin. Stoddart A, et al. **Nucleic Acids Res** 1996 Oct 15; 24(20):4003-8

Sialic acid--marker of development and differentiation. Kraml J, et al. **Sb Lek** 1994;95(4):271-75 (33 ref.)

Transiently decreased sialylation of thyrotropin (TSH) in a patient with the euthyroid sick syndrome. Magner J, et al. **Thyroid** 1997 Feb;7(1):55-61

Specification of receptor-binding phenotypes of influenza virus isolates from different hosts using synthetic sialylglycopolymers: non-egg-adapted human H1 and H3 influenza A and influenza B viruses share a common high binding affinity for 6'-sialyl(N-acetyllactosamine). Gambaryan AS, et al. **Virology** 1997 Jun 9;232(2):345-50

[Effects of thermal injury on heart sialic acid content in rats] Huan J, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):174-6 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Generation and characterization of variants of NWS/G70C influenza virus after in vitro passage in 4-amino-Neu5Ac2en and 4-guanidino-Neu5Ac2en. McKimm-Breschkin JL, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):40-6

A novel synthetic reversible inhibitor of sialidase efficiently blocks secondary but not primary influenza virus infection of MDCK cells in culture. Barrère B, et al. **Arch Virol** 1997;142(7):1365-80

Synthesis and inhibitory properties of a thiomethylmercuric sialic acid with application to the X-ray structure determination of 9-O-acetylsialic acid esterase from influenza C virus. Fitz W, et al. **Bioorg Med Chem** 1996 Aug;4(8):1349-53

Selection of influenza A and B viruses for resistance to 4-guanidino-Neu5Ac2en in cell culture. Colacino JM, et al. **J Infect Dis** 1997 Aug;176 Suppl 1:S66-8

Catalytic and framework mutations in the neuraminidase active site of influenza viruses that are resistant to 4-guanidino-Neu5Ac2en. Gubareva LV, et al. **J Virol** 1997 May;71(5):3385-90

Mutation in the influenza virus neuraminidase gene resulting in decreased sensitivity to the neuraminidase inhibitor 4-guanidino-Neu5Ac2en leads to instability of the enzyme. McKimm-Breschkin JL, et al. **Virology** 1996 Nov 1; 225(1):240-2

PHYSIOLOGY

The role of polysialic acid and other carbohydrate polymers in neural structural plasticity. Fryer HJ, et al. **Curr Opin Neurobiol** 1996 Feb;6(1):113-8 (49 ref.)

Contribution of sialic acid to the voltage dependence of sodium channel gating. A possible electrostatic mechanism. Bennett E, et al. **J Gen Physiol** 1997 Mar;109(3):327-43

The polysialic acid modification of the neural cell adhesion molecule is involved in spatial learning and hippocampal long-term potentiation. Becker CG, et al. **J Neurosci Res** 1996 Jul 15;45(2):143-52

Role of polysialic acid in peripheral myelinated axons. Carratù MR, et al. **Microsc Res Tech** 1996 Aug 15; 34(6):489-91 (13 ref.)

Polysialic acid in the vertebrate nervous system: a promoter of plasticity in cell-cell interactions. Rutishauser U, et al. **Trends Neurosci** 1996 Oct;19(10):422-7 (63 ref.)

[Expression and function of neural cell adhesion molecule (NCAM) and its polysialic acid moiety in the nervous system] Oka S, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):535-41 (50 ref.) **(Jpn)**

THERAPEUTIC USE

A new antiviral agent for influenza--is there a clinical niche? [editorial; comment] Couch RB. **N Engl J Med** 1997 Sep 25;337(13):927-8. Comment on: N Engl J Med 1997 Sep 25;337(13):874-80.

Efficacy and safety of the neuraminidase inhibitor zanamivir in the treatment of influenzavirus infections. GG167 Influenza Study Group [see comments] Hayden FG, et al. **N Engl J Med** 1997 Sep 25;337(13):874-80. Comment in: N Engl J Med 1997 Sep 25;337(13):927-8.

URINE

Comparison of sialic acids excretion in spot urines and 24-hour-urines of children and adults. Fang-Kircher SG. **Eur J Clin Chem Clin Biochem** 1997 Jan;35(1):47-52

Determination of the novel sialic acid analog GG167 (GR121167X) in human urine by liquid chromatography: direct injection with column switching. Morris DM, et al. **J Pharm Biomed Anal** 1995 Dec;14(1-2):191-201

SIALIDASE see **NEURAMINIDASE**

SIALOGLYCOPEPTIDES see **SIALOGLYCOPROTEINS**

SIALOGLYCOPROTEINS

see related
ASIALOGLYCOPROTEINS

ANALYSIS

Should tri-sialo-transferrins be included when calculating carbohydrate-deficient transferrin for diagnosing elevated alcohol intake? Heggli DE, et al. **Alcohol Alcohol** 1996 Jul; 31(4):381-4

Increased concentrations of bone sialoprotein in joint fluid after knee injury. Lohmander LS, et al. **Ann Rheum Dis** 1996 Sep;55(9):622-6

Osteopontin and p53 expression are associated with tumor progression in a case of synchronous, bilateral, invasive mammary carcinomas. Tuck AB, et al. **Arch Pathol Lab Med** 1997 Jun;121(6):578-84

Detection of osteopontin in calcified human aortic valves. Mohler ER 3rd, et al. **Arterioscler Thromb Vasc Biol** 1997 Mar;17(3):547-52

Occurence of a sialylglycopeptide and free sialylglycans in hen's egg yolk. Seko A, et al. **Biochim Biophys Acta** 1997 Apr 17;1335(1-2):23-32

Expression of bone matrix proteins in human breast cancer: potential roles in microcalcification formation and in the genesis of bone metastases. Bellahcène A, et al. **Bull Cancer** 1997 Jan;84(1):17-24 (60 ref.)

Improved immunohistochemical staining of osteopontin (OPN) in paraffin-embedded archival bone specimens following antigen retrieval: anti-human OPN antibody recognizes multiple molecular forms. Devoll RE, et al. **Calcif Tissue Int** 1997 Apr;60(4):380-6

Interleukin-1 receptor antagonist in pleural effusion due to inflammatory and malignant lung disease. Yanagawa H, et al. **Eur Respir J** 1996 Jun;9(6):1211-6

Gut lavage IgG and interleukin 1 receptor antagonist:interleukin 1 beta ratio as markers of intestinal inflammation in children with inflammatory bowel disease. Troncone R, et al. **Gut** 1997 Jul;41(1):60-5

Single cell analysis of intracellular osteopontin in osteogenic cultures of fetal rat calvarial cells. Zohar R, et al. **J Cell Physiol** 1997 Jan;170(1):88-100

Characterization of an interleukin 1 receptor antagonist protein released from ultraviolet-irradiated epidermal sheet. Hirao T, et al. **J Dermatol Sci** 1997 Mar;14(3):189-98

Ultrastructural immunogold localization of osteopontin in human gastric mucosa. Qu-Hong, et al. **J Histochem Cytochem** 1997 Jan;45(1):21-33

Overexpression of c-Fos induces apoptosis of CD43+ pro-B cells. Hu L, et al. **J Immunol** 1996 Nov 1;157(9):3804-11

Presence of B cell progenitors in the thymus. Mori S, et al. **J Immunol** 1997 May 1;158(9):4193-9

Analysis of the inflammatory cytokine network among TNF alpha, IL-1 beta, IL-1 receptor antagonist, and IL-8 in LPS-induced rabbit arthritis. Matsukawa A, et al. **Lab Invest** 1997 May;76(5):629-38

Upregulated renal tubular CD44, hyaluronan, and osteopontin in kdkd mice with interstitial nephritis. Sibalic V, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1344-53

Low levels of IL-1ra versus IL-1 levels in prostatic fluid are not a cause of prolongation of prostatitis. Nishimura T, et al. **Nippon Ika Daigaku Zasshi** 1996 Dec;63(6):502-3

ANTAGONISTS & INHIBITORS

Intracellular IL-1 receptor antagonist promoter: cell type-specific and inducible regulatory regions. Jenkins JK, et al. **J Immunol** 1997 Jan 15;158(2):748-55

BIOSYNTHESIS

Expression of interleukin-1 receptor antagonist protein in post-mortem human brain tissues of Alzheimer's disease and control cases. Yasuhara O, et al. **Acta Neuropathol (Berl)** 1997 Apr;93(4):414-20

Osteopontin and bone sialoprotein expression in regenerating rat periodontal ligament and alveolar bone. Lekic P, et al. **Anat Rec** 1996 Jan;244(1):50-8

Differential induction of pro- and anti-inflammatory cytokines in whole blood by bacteria: effects of antibiotic treatment. Frieling JT, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1439-43

Stimulation of osteopontin mRNA expression in HL-60 cells is independent of differentiation. Atkins KB, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):157-63

Expression of bone sialoprotein mRNA by cells lining the mouse tooth root during cementogenesis. MacNeil RL, et al. **Arch Oral Biol** 1996 Aug-Sep;41(8-9):827-35

Osteopontin expression in platelet-derived growth factor-stimulated vascular smooth muscle cells and carotid artery after balloon angioplasty. Wang X, et al. **Arterioscler Thromb Vasc Biol** 1996 Nov;16(11):1365-72

Influence of dialysis membranes on interleukin-1 beta and interleukin-1 receptor antagonist production by peripheral blood mononuclear cells. Higuchi T, et al. **Artif Organs** 1997 Apr;21(4):265-71

Synthesis of tumor necrosis factor alpha and interleukin-1 receptor antagonist, but not interleukin-1, by human mononuclear cells is enhanced by exposure of whole blood to shear stress. Pomianek MJ, et al. **ASAIO J** 1996 Jan-Feb; 42(1):52-9

IgG for intravenous use, autologous serum and plasma induce comparable interleukin-1 receptor antagonist liberation from human mononuclear cells: an in vitro phenomenon depending upon plastic adherence. Andersen LS, et al. **Autoimmunity** 1995;22(2):127-33

Gene expression during cartilage differentiation in turkey tibial dyschondroplasia, evaluated by in situ hybridization. Knopov V, et al. **Avian Dis** 1997 Jan-Mar;41(1):62-72

Colon adenoma and cancer cells aberrantly express the leukocyte-associated sialoglycoprotein CD43. Sikut R, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):612-6

Gene transfer of interleukin-1 receptor antagonist into the renal glomerulus via a mesangial cell vector. Yokoo T, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):883-8

The pattern of interleukin-1beta (IL-1beta) and its modulating agents IL-1 receptor antagonist and IL-1 soluble receptor type II in acute meningococcal infections. van Deuren M, et al. **Blood** 1997 Aug 1;90(3):1101-8

Expression of bone sialoprotein in human lung cancer. Bellahcène A, et al. **Calcif Tissue Int** 1997 Sep;61(3):183-8

Skeletal casein kinase activity defect in the HYP mouse. Rifas L, et al. **Calcif Tissue Int** 1997 Sep;61(3):256-9

The expression of neural cell sialoglycoproteins following glucocorticoid regulation of sialyltransferase activity in vivo. Coughlan CM, et al. **Cell Mol Neurobiol** 1996 Jun; 16(3):433-8

Relationship of cellular proliferation to expression of osteopontin and bone sialoprotein in regenerating rat periodontium. Lekic P, et al. **Cell Tissue Res** 1996 Sep; 285(3):491-500

Anti-inflammatory properties of human serum IgA: induction of IL-1 receptor antagonist and Fc alpha R (CD89)-mediated down-regulation of tumour necrosis factor-alpha (TNF-alpha) and IL-6 in human monocytes. Wolf HM, et al. **Clin Exp Immunol** 1996 Sep;105(3):537-43

Elevation of serum soluble tumour necrosis factor (TNF) receptor and IL-1 receptor antagonist levels in bronchial asthma. Yoshida S, et al. **Clin Exp Immunol** 1996 Oct; 106(1):73-8

Adhesion of human myelomonocytic (HL-60) cells induced by 1,25-dihydroxyvitamin D3 and phorbol myristate acetate is dependent on osteopontin synthesis and the alpha v beta 3 integrin. Andersson G, et al. **Connect Tissue Res** 1996;35(1-4):163-71

The combination of endotoxin and dexamethasone induces type II interleukin 1 receptor (IL-1r II) in monocytes: a comparison to interleukin 1 beta (IL-1 beta) and interleukin 1 receptor antagonist (IL-1ra). Brown EA, et al. **Cytokine** 1996 Nov;8(11):828-36

Direct contact with stimulated T cells induces the expression of IL-1beta and IL-1 receptor antagonist in human monocytes. Involvement of serine/threonine phosphatases in differential regulation. Vey E, et al. **Cytokine** 1997 Jul; 9(7):480-7

Progesterone regulates osteopontin expression in human trophoblasts: a model of paracrine control in the placenta? Omigbodun A, et al. **Endocrinology** 1997 Oct; 138(10):4308-15

CD43 (leukosialin, sialophorin) expression is differentially regulated by retinoic acids. Babina M, et al. **Eur J Immunol** 1997 May;27(5):1147-51

Human Th1 cells preferentially induce interleukin (IL)-1beta while Th2 cells induce IL-1 receptor antagonist production upon cell/cell contact with monocytes. Chizzolini C, et al. **Eur J Immunol** 1997 Jan;27(1):171-7

CD43 expression in a B cell lymphoma, WEHI 231, reduces susceptibility to G1 arrest and extends survival in culture upon serum depletion. Misawa Y, et al. **Eur J Immunol** 1996 Nov;26(11):2573-81

The biochemical consequences of alpha2,6(N)

sialyltransferase induction by dexamethasone on sialoglycoprotein expression in the rat H411e hepatoma cell line. Coughlan CM, et al. **FEBS Lett** 1997 Aug 18; 413(2):389–93

The production and characterization of a modified recombinant interleukin–1 receptor antagonist. Chang DM, et al. **Immunol Invest** 1996 Jul;25(4):355–68

Post–translational fate of a mucin–like leukocyte sialoglycoprotein (CD43) aberrantly expressed in a colon carcinoma cell line. Baeckström D. **J Biol Chem** 1997 Apr 25;272(17):11503–9

Bone sialoprotein expression in primary human breast cancer is associated with bone metastases development. Bellahcene A, et al. **J Bone Miner Res** 1996 May;11(5):665–70

Low–molecular–weight variants of osteopontin generated by serine proteinases in urine of patients with kidney stones. Bautista DS, et al. **J Cell Biochem** 1996 Jun 1;61(3):402–9

Expression of bone matrix proteins during dexamethasone–induced mineralization of human bone marrow stromal cells. Cheng SL, et al. **J Cell Biochem** 1996 May;61(2):182–93

Mechanical stimulation of osteopontin mRNA expression and synthesis in bone cell cultures. Klein–Nulend J, et al. **J Cell Physiol** 1997 Feb;170(2):174–81

Osteopontin is produced by rat cardiac fibroblasts and mediates A(II)–induced DNA synthesis and collagen gel contraction. Ashizawa N, et al. **J Clin Invest** 1996 Nov 15;98(10):2218–27

Interleukin 1 receptor antagonist (IL–1Ra) is an acute–phase protein [see comments] Gabay C, et al. **J Clin Invest** 1997 Jun 15;99(12):2930–40. Comment in: J Clin Invest 1997 Jun 15;99(12):2813.

Lymphotactin is produced by NK cells and attracts both NK cells and T cells in vivo. Hedrick JA, et al. **J Immunol** 1997 Feb 15;158(4):1533–40

Intracellular IL–1 receptor antagonist promoter: cell type–specific and inducible regulatory regions. Jenkins JK, et al. **J Immunol** 1997 Jan 15;158(2):748–55

Interleukin–1 receptor antagonist: characterisation of its gene expression in rabbit tissues and large–scale expression in eucaryotic cells using a baculovirus expression system. Apostolopoulos J, et al. **J Immunol Methods** 1996 Nov 29; 199(1):27–35

Different pattern of interleukin–1 beta–(IL–1 beta), interleukin–1 receptor antagonist– (IL–1ra) and interleukin–1 receptor type I– (IL–1R tI) mRNA–expression in single preimplantation mouse embryos at various developmental stages. Kruessel JS, et al. **J Reprod Immunol** 1997 Sep;34(2):103–20

Hormonal regulation of serum and endometrial IL–1 alpha, IL–1 beta and IL–1ra: IL–1 endometrial microenvironment of the human embryo at the apposition phase under physiological and supraphysiological steroid level conditions. Simón C, et al. **J Reprod Immunol** 1996 Oct; 31(3):165–84

Renal cell osteopontin production is stimulated by calcium oxalate monohydrate crystals. Lieske JC, et al. **Kidney Int** 1997 Mar;51(3):679–86

Osteopontin is strongly expressed by histiocytes in granulomas of diverse etiology. Carlson I, et al. **Lab Invest** 1997 Jul;77(1):103–8

Osteopontin expression in lung cancer. Chambers AF, et al. **Lung Cancer** 1996 Nov;15(3):311–23

Interleukin 1 receptor antagonist gene expression in rat pituitary in the systemic inflammatory response syndrome: pathophysiological implications. Licinio J, et al. **Mol Psychiatry** 1997 Mar;2(2):99–103

Increased production of interleukin–1beta and interleukin–1 receptor antagonist by peripheral blood mononuclear cells in undialyzed chronic renal failure. Higuchi T, et al. **Nephron** 1997;76(1):26–31

Adenovirus–mediated over–expression of interleukin–1 receptor antagonist reduces susceptibility to excitotoxic brain injury in perinatal rats. Hagan P, et al. **Neuroscience** 1996 Dec;75(4):1033–45

A chemoattractant cytokine associated with granulomas in tuberculosis and silicosis. Nau GJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6414–9

Interleukin (IL) 1beta, IL–1 receptor antagonist, IL–10, and IL–13 gene expression in the central nervous system and anterior pituitary during systemic inflammation: pathophysiological implications. Wong ML, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):227–32

Purification of human recombinant interleukin 1 receptor antagonist proteins upon Bacillus subtilis sporulation. Maurizi G, et al. **Protein Expr Purif** 1997 Mar;9(2):219–27

Induction of interleukin–1 and interleukin–1 receptor antagonist. Dinarello CA. **Semin Oncol** 1997 Jun;24(3 Suppl 9):S9–81–S9–93 (117 ref.)

Interleukin–1 receptor and receptor antagonist gene expression after focal stroke in rats. Wang X, et al. **Stroke** 1997 Jan;28(1):155–61; discussion 161–2

In vivo activated rat monocytes up–regulate NKR–P1A and down–modulate CD4 and CD43. Scriba A, et al. **Transplant Proc** 1997 May;29(3):1748–9

BLOOD

Effect of data normalization for age on the correlations between corneometric values and serum molecule levels in plaque–type psoriatic patients. Carducci M, et al. **Acta Derm Venereol** 1997 Mar;77(2):110–4

Inflammatory cytokines and inhibitors in HIV infection: correlation between interleukin–1 receptor antagonist and weight loss. Rimaniol AC, et al. **AIDS** 1996 Oct; 10(12):1349–56

Blood serum interleukin–1 receptor antagonist in pars planitis and ocular Behçet disease. Benezra D, et al. **Am J Ophthalmol** 1997 May;123(5):593–8

Circulating IL–1ra and IL–10 levels are increased but do not predict the development of acute respiratory distress syndrome in at–risk patients. Parsons PE, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1469–73

Quantification of osteopontin in human plasma with an ELISA: basal levels in pre– and postmenopausal women. Bautista DS, et al. **Clin Biochem** 1996 Jun;29(3):231–9

Bone sialoprotein in serum of patients with malignant bone diseases. Withold W, et al. **Clin Chem** 1997 Jan;43(1):85–91

Relationship between immunoinflammatory proteins containing sialic acid and low–density lipoprotein serum concentrations. Sarría A, et al. **Clin Chim Acta** 1996 Aug 15;252(1):21–31

Elevation of serum soluble tumour necrosis factor (TNF) receptor and IL–1 receptor antagonist levels in bronchial asthma. Yoshida S, et al. **Clin Exp Immunol** 1996 Oct; 106(1):73–8

Interleukin–1 receptor antagonist in neonates, children and adults, and in patients with pauci– and polyarticular onset juvenile chronic arthritis. Müller K, et al. **Clin Exp Rheumatol** 1997 Jul–Aug;15(4):439–44

Interleukin 1 beta, tumour necrosis factor–alpha and interleukin 1 receptor antagonist in newly diagnosed insulin–dependent diabetes mellitus: comparison to long–standing diabetes and healthy individuals. Netea MG, et al. **Cytokine** 1997 Apr;9(4):284–7

Circulating serum levels of IL–1ra in patients with relapsing remitting multiple sclerosis are normal during remission phases but significantly increased either during exacerbations or in response to IFN–beta treatment. Nicoletti F, et al. **Cytokine** 1996 May;8(5):395–400

Circulating interleukin–1 receptor antagonist levels in neonates. Geiger R, et al. **Eur J Pediatr** 1996 Sep; 155(9):811–4

Interleukin–1 receptor antagonist in cord blood: effects of labor and fetal distress. Hata T, et al. **Gynecol Obstet Invest** 1996;42(1):21–3

Ovarian hyperstimulation syndrome: pre–ovulatory serum concentrations of interleukin–6, interleukin–1 receptor antagonist and tumour necrosis factor–alpha cannot predict its occurrence. Loret de Mola JR, et al. **Hum Reprod** 1996 Jul;11(7):1377–80

Production and characterization of the monoclonal antibody against SGP120, a novel serum protein. Basta M, et al. **Hybridoma** 1996 Feb;15(1):69–75

Increased serum interleukin–1–receptor–antagonist concentrations in major depression. Maes M, et al. **J Affect Disord** 1995 Dec 24;36(1–2):29–36

Circulating and ex vivo production of pyrogenic cytokines and interleukin–1 receptor antagonist in 123 patients with fever of unknown origin. The Netherlands Fever of Unknown Origin Study Group [published erratum appears in J Infect Dis 1997 Apr;175(4):1027] de Kleijn EM, et al. **J Infect Dis** 1997 Jan;175(1):191–5

Hormonal regulation of serum and endometrial IL–1 alpha, IL–1 beta and IL–1ra: IL–1 endometrial microenvironment of the human embryo at the apposition phase under physiological and supraphysiological steroid level conditions. Simón C, et al. **J Reprod Immunol** 1996 Oct; 31(3):165–84

Circulating levels of tumor necrosis factor soluble receptors in systemic lupus erythematosus are significantly higher than in other rheumatic diseases and correlate with disease activity. Gabay C, et al. **J Rheumatol** 1997 Feb;24(2):303–8

Interleukin–1 receptors and receptor antagonist in haemodialysis. Donati D, et al. **Nephrol Dial Transplant** 1997 Jan;12(1):111–8

Tumour necrosis factor soluble receptors I and II and interleukin–1 receptor antagonist in acute pyelonephritis in relation to bacterial virulence–associated traits and renal function. Jacobson SH, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2209–14

Interleukin–1 receptor antagonists and other markers in colorectal cancer patients. Iwagaki H, et al. **Scand J Gastroenterol** 1997 Jun;32(6):577–81

Lower plasma CC16, a natural anti–inflammatory protein, and increased plasma interleukin–1 receptor antagonist in schizophrenia: effects of antipsychotic drugs. Maes M, et al. **Schizophr Res** 1996 Jul;21(1):39–50

Endogenous interleukin 1 receptor antagonist during human bone marrow transplantation: increased levels during graft–versus–host disease, during infectious complications, and after immunoglobulin therapy. Schwaighofer H, et al. **Transplantation** 1997 Jan 15;63(1):52–6

[Blood serum glycoproteins in diphtheria in adults] Fedianin IuP. **Ter Arkh** 1996;68(11):12–4 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Cerebrospinal fluid interleukin–1 receptor antagonist and tumor necrosis factor–alpha following subarachnoid hemorrhage. Mathiesen T, et al. **J Neurosurg** 1997 Aug; 87(2):215–20

CHEMISTRY

Cell migration promoted by a potent GRGDS–containing thrombin–cleavage fragment of osteopontin. Senger DR, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):13–24

Isolation, biochemical and immunological characterisation of two sea urchin glycoproteins bearing sulphated poly(sialic acid) polysaccharides rich in N–glycolyl neuraminic acid. Karamanos NK, et al. **Biochimie** 1996;78(3):171–82

Formation of an active dimer during storage of interleukin–1 receptor antagonist in aqueous solution. Chang BS, et al. **Biophys J** 1996 Dec;71(6):3399–406

Extracellular matrix proteins of dentine. Butler WT, et al. **Ciba Found Symp** 1997;205:107–15; discussion 115–7 (28 ref.)

Determination of the hydroxyapatite–nucleating region of bone sialoprotein. Goldberg HA, et al. **Connect Tissue Res** 1996;35(1–4):385–92

Interleukin 1 receptor antagonist localization exclusively in non–parenchymal cells of the mouse liver. Rokita H, et al. **Cytokine** 1997 Apr;9(4):249–53

Occurrence of terminal alpha 2––>8–linked disialylated poly–N–acetyllactosamine chains with Le(X) and I antigenic glycotopes in tetraantennary arms of an N–linked glycoprotein isolated from rainbow trout ovarian fluid. Funakoshi Y, et al. **Glycobiology** 1997 Mar;7(2):195–205

Unique alpha 2, 8–polysialylated glycoproteins in breast cancer and leukemia cells. Martersteck CM, et al. **Glycobiology** 1996 Apr;6(3):289–301

Bone sialoprotein––a mucin in disguise? Midura RJ, et al. **Glycobiology** 1996 Oct;6(7):677–81 (30 ref.)

Osteopontin N–terminal domain contains a cryptic adhesive sequence recognized by alpha9beta1 integrin. Smith LL, et al. **J Biol Chem** 1996 Nov 8;271(45):28485–91

Attachment of osteoblastic cells to hydroxyapatite crystals by a synthetic peptide (Glu7–Pro–Arg–Gly–Asp–Thr) containing two functional sequences of bone sialoprotein. Fujisawa R, et al. **Matrix Biol** 1997 Apr;16(1):21–8

A new cytokine–receptor binding mode revealed by the crystal structure of the IL–1 receptor with an antagonist. Schreuder H, et al. **Nature** 1997 Mar 13;386(6621):194–200

Development of a stable freeze–dried formulation of recombinant human interleukin–1 receptor antagonist. Chang BS, et al. **Pharm Res** 1996 Feb;13(2):243–9

Matrix performance in matrix–assisted laser desorption/ionization for molecular weight determination in sialyl and non–sialyl oligosaccharide proteins. Sottani C, et al. **Rapid Commun Mass Spectrom** 1997;11(8):907–13

CLASSIFICATION

Chemokines: what chemokine is that? Mackay CR. **Curr Biol** 1997 Jun 1;7(6):R384–6 (14 ref.)

DIAGNOSTIC USE

Different behaviour of radioiodinated human recombinant interleukin–1 and its receptor antagonist in an animal model of infection. van der Laken CJ, et al. **Eur J Nucl Med** 1996 Nov;23(11):1531–5

DRUG EFFECTS

CD43 (leukosialin, sialophorin) expression is differentially regulated by retinoic acids. Babina M, et al. **Eur J Immunol** 1997 May;27(5):1147–51

GENETICS

Analysis of binding of the 1,25–dihydroxyvitamin D3 receptor to positive and negative vitamin D response elements. Darwish HM, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):223–34

Partial cDNA sequencing of mouse dentine sialoprotein and detection of its specific expression by odontoblasts. Ritchie HH, et al. **Arch Oral Biol** 1996 Jun;41(6):571–5

Prevention of murine collagen–induced arthritis in the knee and ipsilateral paw by local expression of human interleukin–1 receptor antagonist protein in the knee. Bakker AC, et al. **Arthritis Rheum** 1997 May;40(5):893–900

In vivo suppression of early experimental osteoarthritis by interleukin–1 receptor antagonist using gene therapy. Pelletier JP, et al. **Arthritis Rheum** 1997 Jun;40(6):1012–9

Interleukin–1 receptor antagonist gene polymorphism in Japanese patients with systemic lupus erythematosus. Suzuki H, et al. **Arthritis Rheum** 1997 Feb;40(2):389–90

Osteopontin gene expression and protein synthesis in cultured rat mesangial cells. Nagasaki T, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):81–5

A mammalian bicistronic transcript encoding two dentin–specific proteins. Ritchie H, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):425–8

Helix–loop–helix–type transcription factor (HES–1) is expressed in osteoblastic cells, suppressed by 1,25(OH)2 vitamin D3, and modulates 1,25(OH)2 vitamin D3 enhancement of osteopontin gene expression. Matsue M, et al. **Bone** 1997 Apr;20(4):329–34

Association between interleukin–1 receptor antagonist (IL–1ra) gene polymorphism and early and late–onset psoriasis [letter] Tarlow JK, et al. **Br J Dermatol** 1997 Jan; 136(1):147–8

The human bone sialoprotein gene contains an NF–E1/YY1 cis–acting sequence with putative regulatory activity. Kerr JM, et al. **Calcif Tissue Int** 1997 Mar;60(3):276–82

Regulation of bone sialoprotein and osteopontin mRNA expression by dexamethasone and 1,25–dihydroxyvitamin D3 in rat bone organ cultures. Chen J, et al.

Connect Tissue Res 1996;34(1):41–51
Dexamethasone stimulates luciferase gene expression through the rat bone sialoprotein gene promoter in transgenic mice. Chen J, et al. **Connect Tissue Res** 1996;35(1–4):33–9
Characterization of the bone sialoprotein (BSP) gene promoter. Sodek J, et al. **Connect Tissue Res** 1996; 35(1–4):23–31
Regulation of osteopontin expression by type I collagen in preosteoblastic UMR201 cells. Traianedes K, et al. **Connect Tissue Res** 1996;34(1):63–74
Five novel intragenic dimorphisms in the human interleukin–1 genes combine to high informativity. Guasch JF, et al. **Cytokine** 1996 Aug;8(8):598–602
Murine lymphotactin: gene structure, post–translational modification and inhibition of expression by CD28 costimulation. Hautamaa D, et al. **Cytokine** 1997 Jun; 9(6):375–82
Cloning and sequence analysis of the human MG160, a fibroblast growth factor and E–selectin binding membrane sialoglycoprotein of the Golgi apparatus. Mourelatos Z, et al. **DNA Cell Biol** 1996 Dec;15(12):1121–8
Progesterone regulates osteopontin expression in human trophoblasts: a model of paracrine control in the placenta? Omigbodun A, et al. **Endocrinology** 1997 Oct; 138(10):4308–15
Structure and expression of two highly related genes encoding SCM–1/human lymphotactin. Yoshida T, et al. **FEBS Lett** 1996 Oct 14;395(1):82–8
Lack of association between an interleukin–1 receptor antagonist gene polymorphism and ulcerative colitis. Hacker UT, et al. **Gut** 1997 May;40(5):623–7
Changes in osteopontin mRNA expression during phenotypic transition of rabbit arterial smooth muscle cells. Yamamoto M, et al. **Histochem Cell Biol** 1997 Apr;107(4):279–87
Clinical trial to assess the safety, feasibility, and efficacy of transferring a potentially anti–arthritic cytokine gene to human joints with rheumatoid arthritis. Evans CH, et al. **Hum Gene Ther** 1996 Jun 20;7(10):1261–80
The production and characterization of a modified recombinant interleukin–1 receptor antagonist. Chang DM, et al. **Immunol Invest** 1996 Jul;25(4):355–68
Molecular cloning and characterization of human podocalyxin–like protein. Orthologous relationship to rabbit PCLP1 and rat podocalyxin. Kershaw DB, et al. **J Biol Chem** 1997 Jun 20;272(25):15708–14
Stimulation of mouse osteopontin promoter by v–Src is mediated by a CCAAT box–binding factor. Tezuka Ki, et al. **J Biol Chem** 1996 Sep 13;271(37):22713–7
Signal transduction pathways mediating parathyroid hormone stimulation of bone sialoprotein gene expression in osteoblasts. Yang R, et al. **J Biol Chem** 1996 Nov 22; 271(47):29839–46
Expression of rat bone sialoprotein promoter in transgenic mice. Chen J, et al. **J Bone Miner Res** 1996 May; 11(5):654–64
Changes in biological activity of bone cells in ovariectomized rats revealed by in situ hybridization. Ikeda T, et al. **J Bone Miner Res** 1996 Jun;11(6):780–8
Transforming growth factor–beta 1 regulation of bone sialoprotein gene transcription: identification of a TGF–beta activation element in the rat BSP gene promoter. Ogata Y, et al. **J Cell Biochem** 1997 Jun 15; 65(4):501–12
Structural analysis and characterization of tissue and hormonal responsive expression of the avian bone sialoprotein (BSP) gene. Yang R, et al. **J Cell Biochem** 1997 Jan;64(1):77–93
Lack of an association between alleles of interleukin–1 alpha and interleukin–1 receptor antagonist genes and Graves' disease in a North American Caucasian population. Cuddihy RM, et al. **J Clin Endocrinol Metab** 1996 Dec; 81(12):4476–8
IL–4–induced expression of the IL–1 receptor antagonist gene is mediated by STAT6. Ohmori Y, et al. **J Immunol** 1996 Sep 1;157(5):2058–65
Lymphotactin gene expression in mast cells following Fc(epsilon) receptor I aggregation: modulation by TGF–beta, IL–4, dexamethasone, and cyclosporin A. Rumsaeng V, et al. **J Immunol** 1997 Feb 1;158(3):1353–60
Interleukin–1 receptor antagonist: characterisation of its gene expression in rabbit tissues and large–scale expression in eucaryotic cells using a baculovirus expression system. Apostolopoulos J, et al. **J Immunol Methods** 1996 Nov 29; 199(1):27–35
Characterization of densin–180, a new brain–specific synaptic protein of the O–sialoglycoprotein family. Apperson ML, et al. **J Neurosci** 1996 Nov 1;16(21):6839–52
Perifollicular transgenic expression of human interleukin–1 receptor antagonist protein following topical application of novel liposome–plasmid DNA formulations in vivo. Niemiec SM, et al. **J Pharm Sci** 1997 Jun;86(6):701–8
Mapping of the human and mouse bone sialoprotein and osteopontin loci. Crosby AH, et al. **Mamm Genome** 1996 Feb;7(2):149–51
AP–1 regulation of the rat bone sialoprotein gene transcription is mediated through a TPA response element within a glucocorticoid response unit in the gene promoter. Yamauchi M, et al. **Matrix Biol** 1996 Jul;15(2):119–30
Lipopolysaccharide and Raf–1 kinase regulate secretory interleukin–1 receptor antagonist gene expression by mutually antagonistic mechanisms. Guthridge CJ, et al. **Mol Cell Biol** 1997 Mar;17(3):1118–28
Distinct conformations of vitamin D receptor/retinoid X receptor–alpha heterodimers are specified by dinucleotide differences in the vitamin D–responsive elements of the osteocalcin and osteopontin genes. Staal A, et al. **Mol Endocrinol** 1996 Nov;10(11):1444–56
Isolation of and effector for metastasis–inducing DNAs from a human metastatic carcinoma cell line. Chen H, et al. **Oncogene** 1997 Apr 3;14(13):1581–8
Molecular cloning and functional expression of equine interleukin–1 receptor antagonist. Kato H, et al. **Vet Immunol Immunopathol** 1997 May;56(3–4):221–31
[Two kinds of cytokine gene expression in umbilical cord blood of premature and mature neonates] Tang J, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Aug;31(8):471–3 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Neutralizing antibodies directed against osteopontin inhibit rat carotid neointimal thickening after endothelial denudation. Liaw L, et al. **Arterioscler Thromb Vasc Biol** 1997 Jan;17(1):188–93
The IL–1 system in HIV infection: peripheral concentrations of IL–1beta, IL–1 receptor antagonist and soluble IL–1 receptor type II. Kreuzer KA, et al. **Clin Exp Immunol** 1997 Jul;109(1):54–8
The immunology of Eta–1/osteopontin. Weber GF, et al. **Cytokine Growth Factor Rev** 1996 Oct;7(3):241–8 (50 ref.)
Production and characterization of the monoclonal antibody against SGP120, a novel serum protein. Basta M, et al. **Hybridoma** 1996 Feb;15(1):69–75
Specificity analysis of murine monoclonal antibodies reactive with Tn, sialylated Tn, T, and monosialylated (2—>6) T antigens. O'Boyle KP, et al. **Hybridoma** 1996 Dec; 15(6):401–8
Identification and characterization of S fimbria–binding sialoglycoproteins on brain microvascular endothelial cells. Prasadarao NV, et al. **Infect Immun** 1997 Jul;65(7):2852–60
Effect of therapeutic immunization with recombinant gp160 HIV–1 vaccine on HIV–1 proviral DNA and plasma RNA: relationship to cellular immune responses. Kundu SK, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Aug 1;15(4):269–74
Leukosialin (CD43)–major histocompatibility class I molecule interactions involved in spontaneous T cell conjugate formation. Stöckl J, et al. **J Exp Med** 1996 Nov 1;184(5):1769–79
Antibodies against sialophorin (CD43) enhance the capacity of dendritic cells to cluster and activate T lymphocytes. Fanales–Belasio E, et al. **J Immunol** 1997 Sep 1; 159(5):2203–11
Expression of a biologically active recombinant mouse IL–1 receptor antagonist and its use in vivo to modulate aspects of the acute phase response. Grehan S, et al. **J Immunol** 1997 Jul 1;159(1):369–78
Disregulated expression of CD43 (leukosialin, sialophorin) in the B cell lineage leads to immunodeficiency. Ostberg JR, et al. **J Immunol** 1996 Dec 1;157(11):4876–84
Interaction between CD44 and osteopontin as a potential basis for metastasis formation. Weber GF, et al. **Proc Assoc Am Physicians** 1997 Jan;109(1):1–9 (67 ref.)

ISOLATION & PURIFICATION

Purification and characterization of Kurloff cell sialoglycoproteins with acid phosphatase activity. Taouji S, et al. **Glycoconj J** 1996 Aug;13(4):653–62
Identification and characterization of S fimbria–binding sialoglycoproteins on brain microvascular endothelial cells. Prasadarao NV, et al. **Infect Immun** 1997 Jul;65(7):2852–60
Protein kinases of cultured osteoblasts: selectivity for the extracellular matrix proteins of bone and their catalytic competence for osteopontin. Salih E, et al. **J Bone Miner Res** 1996 Oct;11(10):1461–73
Isolation and biological properties of osteopontin from bovine milk. Bayless KJ, et al. **Protein Expr Purif** 1997 Apr; 9(3):309–14
Purification of human recombinant interleukin 1 receptor antagonist proteins upon Bacillus subtilis sporulation. Maurizi G, et al. **Protein Expr Purif** 1997 Mar;9(2):219–27

METABOLISM

Interleukin–1 and interleukin–1 receptor antagonist in inflammatory bowel disease. Cominelli F, et al. **Aliment Pharmacol Ther** 1996;10 Suppl 2:49–53; discussion 54 (39 ref.)
Expression of interleukin–1 beta (IL–1beta) and interleukin–1 receptor antagonist (IL–1ra) on asthmatic bronchial epithelium. Sousa AR, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):1061–6
The Golgi sialoglycoprotein MG160, expressed in Pichia pastoris, does not require complex carbohydrates and sialic acid for secretion and basic fibroblast growth factor binding. Chen YJ, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):68–72
Latent transforming growth factor–beta complex in Chinese hamster ovary cells contains the multifunctional cysteine–rich fibroblast growth factor receptor, also termed E–selectin–ligand or MG–160. Olofsson A, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):427–34
Evidence of ectokinase–mediated phosphorylation of osteopontin and bone sialoprotein by osteoblasts during bone formation in vitro. Zhu X, et al. **Biochem J** 1997 May 1;323 (Pt 3):637–43
Altered sialylation of osteopontin prevents its receptor–mediated binding on the surface of oncogenically transformed tsB77 cells. Shanmugam V, et al. **Biochemistry** 1997 May 13;36(19):5729–38
Osteopontin is associated with bioprosthetic heart valve calcification in humans. Shen M, et al. **C R Acad Sci III** 1997 Jan;320(1):49–57
Transglycosylation of intact sialo complex–type oligosaccharides to the N–acetylglucosamine moieties of glycopeptides by Mucor hiemalis endo–beta–N–acetylglucosaminidase. Haneda K, et al. **Carbohydr Res** 1996 Oct 4;292:61–70
IL–1 receptor antagonist in saliva; characterization in normal saliva and reduced concentration in Sjögren's syndrome (SS). Dubost JJ, et al. **Clin Exp Immunol** 1996 Nov; 106(2):237–42
Osteopontin: an interfacial extracellular matrix protein in mineralized tissues. McKee MD, et al. **Connect Tissue Res** 1996;35(1–4):197–205 (30 ref.)
Posttranslational modification in rat bone osteopontin. Neame PJ, et al. **Connect Tissue Res** 1996;35(1–4):145–50
Protein kinases of cultured chicken osteoblasts that phosphorylate extracellular bone proteins. Salih E, et al. **Connect Tissue Res** 1996;35(1–4):207–13
Generation and use of recombinant human bone sialoprotein and osteopontin for hydroxyapatite studies. Stubbs JT 3rd. **Connect Tissue Res** 1996;35(1–4):393–9
Characterization and partial purification of microsomal casein kinase II from osteoblast–like cells: an enzyme that phosphorylates osteopontin and phosphophoryn. Wu CB, et al. **Connect Tissue Res** 1996;34(1):23–32
Diurnal variations in tear glycoproteins: evidence for an epithelial origin for the major non–reducible > or = 450 kDa sialoglycoprotein(s). Sack RA, et al. **Curr Eye Res** 1997 Jun;16(6):577–88
Murine lymphotactin: gene structure, post–translational modification and inhibition of expression by CD28 costimulation. Hautamaa D, et al. **Cytokine** 1997 Jun; 9(6):375–82
Interleukin 1 receptor antagonist localization exclusively in non–parenchymal cells of the mouse liver. Rokita H, et al. **Cytokine** 1997 Apr;9(4):249–53
Stimulation via the CD43 coreceptor augments T cell proliferation during the early phase of antigen–induced activation. Hamad M, et al. **Dev Comp Immunol** 1996 Jan–Feb;20(1):77–82
Differential regulation of IL–1 and IL–1 receptor antagonist in HaCaT keratinocytes by tumor necrosis factor–alpha and transforming growth factor–beta 1. Kang K, et al. **Exp Dermatol** 1996 Aug;5(4):218–26
Modification of CD43 and other lymphocyte O–glycoproteins by core 2 N–acetylglucosaminyltransferase. Barran P, et al. **Glycobiology** 1997 Feb;7(1):129–36
Increased interleukin–1 and interleukin–1 receptor antagonist levels in cervical mucus in the ovulatory phase in comparison with the follicular phase. Kanai T, et al. **Gynecol Obstet Invest** 1997;43(3):166–70
Histochemical localization of sialylated glycoconjugates with Tritrichomonas mobilensis lectin (TLM). Babál P, et al. **Histol Histopathol** 1996 Jul;11(3):621–31
Angiotensin II induction of osteopontin expression and DNA replication in rat arteries. deBlois D, et al. **Hypertension** 1996 Dec;28(6):1055–63
Leukosialin (CD43) is proteolytically cleaved from stimulated HMC–1 cells. Weber S, et al. **Immunobiology** 1997 Jun;197(1):82–96
Detection and modulation of interleukin–1 receptor antagonist messenger ribonucleic acid and immunoreactivity in Graves' orbital fibroblasts. Mühlberg T, et al. **Invest Ophthalmol Vis Sci** 1997 Apr;38(5):1018–28
Ultrastructural localization of osteopontin in the kidney: induction by lipopolysaccharide. Madsen KM, et al. **J Am Soc Nephrol** 1997 Jul;8(7):1043–53
Agonist–activated alphavbeta3 on platelets and lymphocytes binds to the matrix protein osteopontin. Bennett JS, et al. **J Biol Chem** 1997 Mar 28;272(13):8137–40
Transglutaminase–catalyzed cross–linking of osteopontin is inhibited by osteocalcin. Kaartinen MT, et al. **J Biol Chem** 1997 Sep 5;272(36):22736–41
Dentin phosphoprotein and dentin sialoprotein are cleavage products expressed from a single transcript coded by a gene on human chromosome 4. Dentin phosphoprotein DNA sequence determination. MacDougall M, et al. **J Biol Chem** 1997 Jan 10;272(2):835–42
Identification of the phosphorylated sites of metabolically 32P–labeled osteopontin from cultured chicken osteoblasts. Salih E, et al. **J Biol Chem** 1997 May 23;272(21):13966–73
Protein kinases of cultured osteoblasts: selectivity for the extracellular matrix proteins of bone and their catalytic competence for osteopontin. Salih E, et al. **J Bone Miner Res** 1996 Oct;11(10):1461–73
Non–RGD domains of osteopontin promote cell adhesion without involving alpha v integrins. Katagiri YU, et al. **J Cell Biochem** 1996 Jul;62(1):123–31
Differential processing of osteopontin characterizes the proliferative vascular smooth muscle cell phenotype induced by allylamine. Parrish AR, et al. **J Cell Biochem** 1997 May;65(2):267–75
Leukosialin (CD43, sialophorin) redistribution in uropods of polarized neutrophils is induced by CD43 cross–linking by

antibodies, by colchicine or by chemotactic peptides. Seveau S, et al. **J Cell Sci** 1997 Jul;110 (Pt 13):1465–75

Increased cellular expression of matrix proteins that regulate mineralization is associated with calcification of native human and porcine xenograft bioprosthetic heart valves. Srivatsa SS, et al. **J Clin Invest** 1997 Mar 1;99(5):996–1009

Characterization of an interleukin 1 receptor antagonist protein released from ultraviolet-irradiated epidermal sheet. Hirao T, et al. **J Dermatol Sci** 1997 Mar;14(3):189–98

Inhibitory activity of IL-1 receptor antagonist depends on the balance between binding capacity for IL-1 receptor type 1 and IL-1 receptor type II. Ruggiero P, et al. **J Immunol** 1997 Apr 15;158(8):3881–7

An endogenous sialoprotein and a bacterial B cell superantigen compete in their VH family-specific binding interactions with human Igs. Silverman GJ, et al. **J Immunol** 1996 Nov 15;157(10):4496–502

Dexamethasone antagonizes IL-4 and IL-10-induced release of IL-1RA by monocytes but augments IL-4-, IL-10-, and TGF-beta-induced suppression of TNF-alpha release. Joyce DA, et al. **J Interferon Cytokine Res** 1996 Jul; 16(7):511–7

Plasma levels of interleukin-1 receptor antagonist (IL-1ra) and severity of illness in patients with burns. Endo S, et al. **J Med** 1996;27(1–2):57–71

Expression of CD43 in human microglia and its downregulation in Alzheimer's disease. Matsuo A, et al. **J Neuroimmunol** 1996 Dec;71(1–2):81–6

In vitro modulation of cytokine, cytokine inhibitor, and prostaglandin E release from blood mononuclear cells and synovial fibroblasts by antirheumatic drugs. Seitz M, et al. **J Rheumatol** 1997 Aug;24(8):1471–6

Vitamin D receptor interactions with the murine osteopontin response element. Koszewski NJ, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5–6):377–88

Osteopontin regulation in cultured rat renal epithelial cells. Malyankar UM, et al. **Kidney Int** 1997 Jun;51(6):1766–73

Localization of tamm-horsfall protein and osteopontin in a rat nephrolithiasis model. Gokhale JA, et al. **Nephron** 1996; 73(3):456–61

Systemic chemotherapy alters interleukin-1 beta and its receptor antagonist production by human alveolar macrophages in lung cancer patients. Haku T, et al. **Oncol Res** 1996;8(12):519–26

Quantitative evaluation of the IL-1 beta and IL-1 receptor antagonist obtained from BALF macrophages in patients with interstitial lung diseases. Mikuniya T, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):39–45

Comparison of sialyl-Lewis a-carrying CD43 and MUC1 mucins secreted from a colon carcinoma cell line for E-selectin binding and inhibition of leukocyte adhesion. Zhang K, et al. **Tumour Biol** 1997;18(3):175–87

PHARMACOLOGY

Regulation of peptide-chain initiation in muscle during sepsis by interleukin-1 receptor antagonist. Vary TC, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E513–20

Chondroprotective effect of intraarticular injections of interleukin-1 receptor antagonist in experimental osteoarthritis. Suppression of collagenase-1 expression. Caron JP, et al. **Arthritis Rheum** 1996 Sep;39(9):1535–44

Suppression of Helicobacter pylori urease activity by sucralfate and sulglycotide. Slomiany BL, et al. **Biochem Mol Biol Int** 1997 Jun;42(1):155–61

CeReS-18, a novel cell surface sialoglycopeptide, induces cell cycle arrest and apoptosis in a calcium-sensitive manner. Betz NA, et al. **Breast Cancer Res Treat** 1997 Jan; 42(2):137–48

Inhibition of hormone and growth factor responsive and resistant human breast cancer cells by CeReS-18, a cell regulatory sialoglycopeptide. Fattaey HK, et al. **Breast Cancer Res Treat** 1997 Jan;42(2):125–36

Protective effect of interleukin-1 receptor antagonist on oleic acid-induced lung injury. Sun D, et al. **Chin Med J (Engl)** 1996 Jul;109(7):522–6

The effects of interleukin-1beta (IL-1beta) on human thyrocyte functions are counteracted by the IL-1 receptor antagonist. Rasmussen AK, et al. **Endocrinology** 1997 May; 138(5):2043–8

Migratory response of human natural killer cells to lymphotactin. Giancarlo B, et al. **Eur J Immunol** 1996 Dec; 26(12):3238–41

CD43 expression in a B cell lymphoma, WEHI 231, reduces susceptibility to G1 arrest and extends survival in culture upon serum depletion. Misawa Y, et al. **Eur J Immunol** 1996 Nov;26(11):2573–81

The effect of osteopontin on the adhesion of calcium oxalate crystals to Madin-Darby canine kidney cells. Yamate T, et al. **Eur Urol** 1996;30(3):388–93

Interferon-inducible protein-10 and lymphotactin induce the chemotaxis and mobilization of intracellular calcium in natural killer cells through pertussis toxin-sensitive and -insensitive heterotrimeric G-proteins. Maghazachi AA, et al. **FASEB J** 1997 Aug;11(10):765–74

The mechanism of altered neural function in a rat model of acute colitis. Jacobson K, et al. **Gastroenterology** 1997 Jan;112(1):156–62

Differential effects of osteopontin on the cytotoxic activity of macrophages from young and old mice. Rollo EE, et al. **Immunology** 1996 Aug;88(4):642–7

Evaluation of interleukin-1 receptor antagonist (IL-1RA) and tumor necrosis factor binding protein (TNF-BP) in a rodent abscess model of host resistance. Colagiovanni DB, et al. **Immunopharmacol Immunotoxicol** 1996 Aug; 18(3):397–419

Cortical protection by localized striatal injection of IL-1ra following cerebral ischemia in the rat. Stroemer RP, et al. **J Cereb Blood Flow Metab** 1997 Jun;17(6):597–604

Lymphotactin is produced by NK cells and attracts both NK cells and T cells in vivo. Hedrick JA, et al. **J Immunol** 1997 Feb 15;158(4):1533–40

Potential role of interleukin-1 in the development of bronchopulmonary dysplasia. Rindfleisch MS, et al. **J Interferon Cytokine Res** 1996 May;16(5):365–73

Elevated plasma levels of interleukin-1 receptor antagonist and interleukin-10 in patients with acute myocardial infarction. Shibata M, et al. **J Interferon Cytokine Res** 1997 Mar;17(3):145–50

Osteopontin inhibits nitric oxide production and cytotoxicity by activated RAW264.7 macrophages. Rollo EE, et al. **J Leukoc Biol** 1996 Sep;60(3):397–404

An ex vivo method for studying inflammation in cynomolgus monkeys: analysis of interleukin-1 receptor antagonist. Akeson A, et al. **J Pharmacol Toxicol Methods** 1996 Nov; 36(3):155–61

Osteopontin stimulates gelsolin-associated phosphoinositide levels and phosphatidylinositol triphosphate-hydroxyl kinase. Chellaiah M, et al. **Mol Biol Cell** 1996 May; 7(5):743–53

Effect of interleukin-1 receptor antagonist (IL-1RA) on histamine and serotonin release by rat basophilic leukemia cells (RBL-2H3) and peritoneal mast cells. Conti P, et al. **Mol Cell Biochem** 1996 Feb 9;155(1):61–8

Human recombinant interleukin-1 beta induces thromboxane A2 release in polymorphonuclear leukocytes, macrophages and platelets: effect of IL-1 receptor antagonist. Reale M, et al. **Mol Cell Biochem** 1996 Jun 21;159(2):163–8

Enhanced expression of interleukin (IL)-1 and IL-6 messenger RNA and bioactive protein after hypoxia-ischemia in neonatal rats. Hagberg H, et al. **Pediatr Res** 1996 Oct;40(4):603–9

Interleukin-1 receptor antagonism. Nikolic-Paterson DJ, et al. **Semin Nephrol** 1996 Nov;16(6):583–90 (38 ref.)

Sepsis inhibits synthesis of myofibrillar and sarcoplasmic proteins: modulation by interleukin-1 receptor antagonist. Vary TC, et al. **Shock** 1996 Jul;6(1):13–8

Interleukin-1 receptor blockade attenuates oxygen-derived free radical production and microcirculatory disturbances in ischemia/reperfusion injury in the liver. Shirasugi N, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):371–3

Topical interleukin 1 receptor antagonist promotes corneal transplant survival. Dana MR, et al. **Transplantation** 1997 May 27;63(10):1501–7

Interleukin 1 receptor blockade reduces tumor necrosis factor production, tissue injury, and mortality after hepatic ischemia-reperfusion in the rat. Shito M, et al. **Transplantation** 1997 Jan 15;63(1):143–8

PHYSIOLOGY

Metanephric osteopontin regulates nephrogenesis in vitro. Rogers SA, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F469–76

Endogenous interleukin-1 receptor antagonist is neuroprotective. Loddick SA, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):211–5

Quantification of osteopontin in human plasma with an ELISA: basal levels in pre- and postmenopausal women. Bautista DS, et al. **Clin Biochem** 1996 Jun;29(3):231–9

Detection and characterization of IL-1 receptor antagonist in tissues from healthy rabbits: IL-1 receptor antagonist is probably involved in health. Matsukawa A, et al. **Cytokine** 1997 May;9(5):307–15

Osteopontin expression by osteoclast and osteoblast progenitors in the murine bone marrow: demonstration of its requirement for osteoclastogenesis and its increase after ovariectomy. Yamate T, et al. **Endocrinology** 1997 Jul; 138(7):3047–55

Interleukin 1 (IL-1) and IL-1-receptor antagonist (IL-1-RA) in middle ear cholesteatoma: an analysis of protein production and biological activity. Bujía J, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):252–5

Swine influenza virus strains recognize sialylsugar chains containing the molecular species of sialic acid predominantly present in the swine tracheal epithelium. Suzuki T, et al. **FEBS Lett** 1997 Mar 10;404(2–3):192–6

Administration of neutralizing antibody against rabbit IL-1 receptor antagonist exacerbates lipopolysaccharide-induced arthritis in rabbits. Fukumoto T, et al. **Inflamm Res** 1996 Sep;45(9):479–85

Autocrine interleukin-1 receptor antagonist can support malignant growth of glioblastoma by blocking growth-inhibiting autocrine loop of interleukin-1. Oelmann E, et al. **Int J Cancer** 1997 Jun 11;71(6):1066–76

Characterization of a CD43/leukosialin-mediated pathway for inducing apoptosis in human T-lymphoblastoid cells. Brown TJ, et al. **J Biol Chem** 1996 Nov 1;271(44):27686–95

Osteopontin is produced by rat cardiac fibroblasts and mediates A(II)-induced DNA synthesis and collagen gel contraction. Ashizawa N, et al. **J Clin Invest** 1996 Nov 15;98(10):2218–27

Interleukin-1 receptor antagonist: a "novel" acute phase protein with antiinflammatory activities [editorial; comment] Cominelli F, et al. **J Clin Invest** 1997 Jun 15; 99(12):2813. Comment on: J Clin Invest 1997 Jun 15;99(12):2930–40.

Anti-CD43 inhibition of T cell homing. McEvoy LM, et al. **J Exp Med** 1997 Apr 21;185(8):1493–8

Combined chemokine and cytokine gene transfer enhances antitumor immunity [see comments] Dilloo D, et al. **Nat Med** 1996 Oct;2(10):1090–5. Comment in: Nat Med 1997 Feb;3(2):126.

Involvement of tumor necrosis factor-alpha, interleukin-1 beta, interleukin-8, and interleukin-1 receptor antagonist in acute lung injury caused by local Shwartzman reaction. Imamura S, et al. **Pathol Int** 1997 Jan;47(1):16–24

Functions of interleukin 1 receptor antagonist in gene knockout and overproducing mice. Hirsch E, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11008–13

Potential roles of osteopontin and alphaVbeta3 integrin in the development of coronary artery restenosis after angioplasty. Panda D, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9308–13

An endogenous superantigen in the rat gut lumen as a model to study the role of human protein-Fv. Guihard AI, et al. **Scand J Immunol** 1997 Jan;45(1):36–42

Identification of a macromolecular crystal growth inhibitor in human urine as osteopontin. Sørensen S, et al. **Urol Res** 1995;23(5):327–34

[Tubulointerstitial lesions in progressive renal diseases: potential role of osteopontine (news)] Baud L. **Nephrologie** 1996;17(2):137–8 **(Fre)**

SECRETION

The immunology of Eta-1/osteopontin. Weber GF, et al. **Cytokine Growth Factor Rev** 1996 Oct;7(3):241–8 (50 ref.)

Osteopontin deposition in remodeling bone: an osteoblast mediated event [letter; comment] McKee MD, et al. **J Bone Miner Res** 1995 Nov;10(11):1666–80. Comment on: J Bone Miner Res 1995 Jun;11(6):873–5.

Interleukin-1 beta, interleukin-1 receptor antagonist, and soluble interleukin-1 receptor type II secretion in chronic fatigue syndrome. Cannon JG, et al. **J Clin Immunol** 1997 May;17(3):253–61

Extracellular release of the type I intracellular IL-1 receptor antagonist from human airway epithelial cells: differential effects of IL-4, IL-13, IFN-gamma, and corticosteroids. Levine SJ, et al. **J Immunol** 1997 Jun 15;158(12):5949–57

Secretion of an anti-inflammatory, immunomodulatory factor by Schistosomulae of Schistosoma mansoni. Ramaswamy K, et al. **J Inflamm** 1995–96;46(1):13–22

Systemic liberation of interleukin-1 beta and interleukin-1 receptor antagonist in the perioperative phase of liver transplantation. Gerlach J, et al. **Transpl Int** 1996; 9(4):408–14

THERAPEUTIC USE

Unopposed interleukin-1 is necessary for increased plasma cytokine and eicosanoid levels to develop in severe sepsis. Slotman GJ, et al. **Ann Surg** 1997 Jul;226(1):77–84

IL-1 receptor antagonist inhibits recurrence of disease after syngeneic pancreatic islet transplantation to spontaneously diabetic non-obese diabetic (NOD) mice. Sandberg JO, et al. **Clin Exp Immunol** 1997 May;108(2):314–7

Confirmatory interleukin-1 receptor antagonist trial in severe sepsis: a phase III, randomized, double-blind, placebo-controlled, multicenter trial. The Interleukin-1 Receptor Antagonist Sepsis Investigator Group [see comments] Opal SM, et al. **Crit Care Med** 1997 Jul; 25(7):1115–24. Comment in: Crit Care Med 1997 Jul;25(7):1095–100.

Multiple sclerosis: longitudinal measurement of interleukin-1 receptor antagonist [letter] Voltz R, et al. **J Neurol Neurosurg Psychiatry** 1997 Feb;62(2):200–1

Treatment with the interleukin-I receptor antagonist and soluble tumor necrosis factor receptor Fc fusion protein does not prevent endotoxin-induced preterm parturition in mice. Fidel PL Jr, et al. **J Soc Gynecol Investig** 1997 Jan-Feb;4(1):22–6

The effects of interleukin-1 receptor antagonist protein (IRAP) infusion following spinal cord transection in rats. Gelderd JB, et al. **Mol Chem Neuropathol** 1996 Feb; 27(2):167–83

Increased survival in experimental rat heatstroke by continuous perfusion of interleukin-1 receptor antagonist. Chiu WT, et al. **Neurosci Res** 1996 Jan;24(2):159–63

Gastric mucosal cell cycle regulation with ulcer healing by sulglycotide. Slomiany BL, et al. **Scand J Gastroenterol** 1997 Sep;32(9):873–7

Neurophysiologic changes in lumbar nerve root inflammation in the rat after treatment with cytokine inhibitors. Evidence for a role of interleukin-1. Wehling P, et al. **Spine** 1996 Apr 15;21(8):931–5

URINE

Tumour necrosis factor soluble receptors I and II and interleukin-1 receptor antagonist in acute pyelonephritis in relation to bacterial virulence-associated traits and renal function. Jacobson SH, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2209–14

Identification of a macromolecular crystal growth inhibitor in human urine as osteopontin. Sørensen S, et al. **Urol Res** 1995;23(5):327–34

SIALOGRAPHY

Ultrafast computed tomography and three-dimensional image processing of CT sialography in patients with parotid masses poorly defined by magnetic resonance imaging. Szolar DH, et al. **Acta Otolaryngol (Stockh)** 1996 Jan; 116(1):112–8

Computerized tomographic and ultrasonographic features of Kimura's disease. Goldenberg D, et al. **J Laryngol Otol** 1997 Apr;111(4):389–91

[Ultrasonography: a complement to sialography in recurrent chronic childhood parotitis] Encina S, et al. **Rev Stomatol Chir Maxillofac** 1996 Oct;97(5):258–63 (Eng. Abstr.) **(Fre)**

[The imaging diagnosis of Sjögren's syndrome: echography, sialography and scintigraphy compared in the study of the salivary glands] Napoli V, et al. **Minerva Stomatol** 1996 Apr;45(4):141–8 (Eng. Abstr.) **(Ita)**

SIALOLITHIASIS see **SALIVARY GLAND CALCULI**

SIALOLITHIASIS, DUCTAL see **SALIVARY DUCT CALCULI**

SIALOMETAPLASIA, NECROTIZING

DIAGNOSIS

[Necrotizing sialometaplasia: apropos of a case and review of the literature] De Saint Aubain Somerhausen N, et al. **Acta Stomatol Belg** 1996 Jun;93(2):61–3 (13 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

Experimental study on necrotizing sialometaplasia of the palate in rats. Role of local anesthetic injections. Shigematsu H, et al. **Int J Oral Maxillofac Surg** 1996 Jun; 25(3):239–41

PATHOLOGY

[Necrotizing sialometaplasia. The clinico-pathological analysis of 6 cases] Favia G, et al. **Minerva Stomatol** 1996 Mar;45(3):121–7 (23 ref.) (Eng. Abstr.) **(Ita)**

SIALOPROTEINS see **SIALOGLYCOPROTEINS**

SIALORRHEA

CHEMICALLY INDUCED

Salivary flow-rate and composition in schizophrenic patients on clozapine: subjective reports and laboratory data. Ben-Aryeh H, et al. **Biol Psychiatry** 1996 Jun 1; 39(11):946–9

Clozapine-induced hypersalivation and the alpha-2 adrenoceptor [letter; comment] Szabadi E. **Br J Psychiatry** 1996 Sep;169(3):380–1. Comment on: Br J Psychiatry 1995 Sep;167(3):412.

Aspiration pneumonia possibly secondary to clozapine-induced sialorrhea [letter] Hinkes R, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):462–3

COMPLICATIONS

Treatment with weak electromagnetic fields controls drooling in Parkinson's disease. Sandyk R. **Int J Neurosci** 1996 Nov;88(1–2):71–4

Aspiration pneumonia possibly secondary to clozapine-induced sialorrhea [letter] Hinkes R, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):462–3

DRUG THERAPY

The control of oral secretions in bulbar ALS/MND. Newall AR, et al. **J Neurol Sci** 1996 Aug;139 Suppl:43–4

Preliminary study of glycopyrrolate in the management of drooling. Stern LM. **J Paediatr Child Health** 1997 Feb; 33(1):52–4

ETIOLOGY

Effect of antireflux medication on salivary drooling in children with cerebral palsy. Heine RG, et al. **Dev Med Child Neurol** 1996 Nov;38(11):1030–6

Dyslipidaemia in a boy with recurrent abdominal pain, hypersalivation and decreased lipoprotein lipase activity. Matern D, et al. **Eur J Pediatr** 1996 Aug;155(8):660–4

Case records of the Children's Hospital Medical Center of Akron: a 29-month-old boy with drooling [clinical conference] Knapp JF. **Pediatr Emerg Care** 1996 Oct; 12(5):378–81

PHYSIOPATHOLOGY

Sialorrhea in amyotrophic lateral sclerosis: a hypothesis of a new treatment--botulinum toxin A injections of the parotid glands. Bushara KO. **Med Hypotheses** 1997 Apr; 48(4):337–9

REHABILITATION

Treatment with weak electromagnetic fields controls drooling in Parkinson's disease. Sandyk R. **Int J Neurosci** 1996 Nov;88(1–2):71–4

SURGERY

The surgical management of drooling--a 15 year follow-up. O'Dwyer TP, et al. **Clin Otolaryngol** 1997 Jun;22(3):284–7

Diversion of salivary flow to treat drooling in patients with cerebral palsy. Becmeur F, et al. **J Pediatr Surg** 1996 Dec; 31(12):1629–33

SIALYL SSEA-1 see **ANTIGENS, CD15**

SIALYLLACTOSYLCERAMIDE see **G(M3) GANGLIOSIDE**

SIALYLTRANSFERASES

Molecular cloning and functional analysis of sialyltransferases. Tsuji S. **J Biochem (Tokyo)** 1996 Jul; 120(1):1–13 (80 ref.)

ANALYSIS

A radioactive assay for sialyltransferase activity using 96-well multiscreen filtration plates. Laroy W, et al. **Anal Biochem** 1997 Jun 15;249(1):108–11

CMP-NeuAc:(NeuAc alpha 2-->8)n (colominic acid) sialyltransferase activity in rat brain and in tumour cells that express polysialic acid on neural cell adhesion molecules. Easton EW, et al. **Glycoconj J** 1995 Dec; 12(6):829–37

ANTAGONISTS & INHIBITORS

Inhibition of Gal beta1, 4GlcNAc alpha2,6 sialyltransferase expression by antisense-oligodeoxynucleotides. Kemmner W, et al. **FEBS Lett** 1997 Jun 16;409(3):347–50

Studies on the inhibition of sialyl- and galactosyltransferases. Kleineidam RG, et al. **Glycoconj J** 1997 Jan;14(1):57–66

BIOSYNTHESIS

The expression of Gal beta 1,4GlcNAc alpha 2,6 sialyltransferase and alpha 2,6-linked sialoglycoconjugates in human brain tumors. Kaneko Y, et al. **Acta Neuropathol (Berl)** 1996;91(3):284–92

Molecular cloning and expression of human Gal beta 1,3GalNAc alpha 2,3-sialyltransferase (hST3Gal II). Kim YJ, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):324–7

Novel heterogeneity exists in the 5'-untranslated region of the beta-galactoside alpha 2,6-sialyltransferase mRNAs in the human B-lymphoblastoid cell line, loucikes. Lo NW, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):380–5

The biochemical consequences of alpha2,6(N) sialyltransferase induction by dexamethasone on sialoglycoprotein expression in the rat H411e hepatoma cell line. Coughlan CM, et al. **FEBS Lett** 1997 Aug 18; 413(2):389–93

Inhibition of Gal beta1, 4GlcNAc alpha2,6 sialyltransferase expression by antisense-oligodeoxynucleotides. Kemmner W, et al. **FEBS Lett** 1997 Jun 16;409(3):347–50

Murine hepatic beta-galactoside alpha 2,6-sialyltransferase gene expression involves usage of a novel upstream exon region. Hu YP, et al. **Glycoconj J** 1997 Apr;14(3):407–11

Site restricted and neuron dominant expression of alpha 2,8sialyltransferase gene in the adult mouse brain and retina. Yamamoto A, et al. **Glycoconj J** 1996 Jun;13(3):471–80

The expression of CMP-NeuAc: Gal beta 1,4GlcNAc alpha 2,6 sialyltransferase [EC 2.4.99.1] and glycoproteins bearing alpha 2,6-linked sialic acids in human brain tumours. Yamamoto H, et al. **Glycoconj J** 1995 Dec;12(6):848–56

Altered mRNA expression of specific molecular species of fucosyl- and sialyl-transferases in human colorectal cancer tissues. Ito H, et al. **Int J Cancer** 1997 May 16;71(4):556–64

Coordinate expression of beta-galactoside alpha 2,6-sialyltransferase mRNA and enzyme activity in suckling rat jejunum cultured in different media: transcriptional induction by dexamethasone. Kolínská J, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):289–97

BLOOD

Plasma sialyltransferase levels in psychiatric disorders as a possible indicator of HPA axis function. Maguire TM, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1131–6

Evidence for a correlation between ambient cholesterol levels and soluble plasma sialyltransferase enzyme activity. Maguire TM, et al. **Glycoconj J** 1996 Aug;13(4):525–8

Activity and characterization of sialyltransferase from serum of normal rats, of rats bearing Zajdela ascitic hepatoma, in normal host liver and in Zajdela hepatoma cells. Ivanov DG, et al. **Neoplasma** 1996;43(3):205–8

CHEMISTRY

Molecular cloning and expression of human Gal beta 1,3GalNAc alpha 2,3-sialyltransferase (hST3Gal II). Kim YJ, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):324–7

Porcine liver (2-->3)-alpha-sialyltransferase: substrate specificity studies and application of the immobilized enzyme to the synthesis of various sialylated oligosaccharide sequences. Lubineau A, et al. **Carbohydr Res** 1997 May 12;300(2):161–7

Cloning of the cDNA coding for rat brain CMP-NeuAc:GD3 alpha2-8 sialyltransferase. Zeng G, et al. **Gene** 1997 Mar 10;187(1):131–4

Enzymatic transfer of sialic acids modified at C-5 employing four different sialyltransferases. Gross HJ, et al. **Glycoconj J** 1995 Dec;12(6):739–46

CLASSIFICATION

Identification of two novel conserved amino acid residues in eukaryotic sialyltransferases: implications for their mechanism of action [letter] Geremia RA, et al. **Glycobiology** 1997 Mar;7(2):v–vii

Systematic nomenclature for sialyltransferases [letter] Tsuji S, et al. **Glycobiology** 1996 Oct;6(7):v–vii

DRUG EFFECTS

The hydrocortisone-induced transcriptional down-regulation of beta-galactoside alpha2,6-sialyltransferase in the small intestine of suckling rats is suppressed by mifepristone (RU-38.486). Hamr A, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1–2):59–66

GENETICS

Chronic ethanol downregulates Gal-beta-1,4GlcNAc alpha 2,6-sialyltransferase and Gal-beta-1,3GlcNAc alpha 2,3-sialyltransferase mRNAs in rat liver. Rao MN, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):348–51

Molecular cloning and expression of human alpha2,8-sialyltransferase (hST8Sia V). Kim YJ, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):327–30

Novel heterogeneity exists in the 5'-untranslated region of the beta-galactoside alpha 2,6-sialyltransferase mRNAs in the human B-lymphoblastoid cell line, loucikes. Lo NW, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):380–5

alpha2,3-sialyltransferase mRNA and alpha2,3-linked glycoprotein sialylation are increased in malignant gliomas. Yamamoto H, et al. **Brain Res** 1997 Apr 25;755(1):175–9

Non-culture diagnosis and serogroup determination of meningococcal B and C infection by a sialyltransferase (siaD) PCR ELISA. Borrow R, et al. **Epidemiol Infect** 1997 Apr;118(2):111–7

Cloning of the cDNA coding for rat brain CMP-NeuAc:GD3 alpha2-8 sialyltransferase. Zeng G, et al. **Gene** 1997 Mar 10;187(1):131–4

Expression of beta-galactoside alpha 2,6-sialyltransferase does not alter the susceptibility of human colon cancer cells to NK-mediated cell lysis. Dall'Olio F, et al. **Glycobiology** 1997 Jun;7(4):507–13

Transcription of the beta-galactoside alpha 2,6-sialyltransferase gene in B lymphocytes is directed by a separate and distinct promoter. Lo NW, et al. **Glycobiology** 1996 Apr;6(3):271–9

Unique genomic structure and expression of the mouse alpha 2,8-sialyltransferase (ST8Sia III) gene. Yoshida Y, et al. **Glycobiology** 1996 Sep;6(6):573–80

Large-scale expression of recombinant sialyltransferases and comparison of their kinetic properties with native enzymes. Williams MA, et al. **Glycoconj J** 1995 Dec;12(6):755–61

Expression of alpha 2,8-sialyltransferase (GD3 synthase) gene in human cancer cell lines: high level expression in melanomas and up-regulation in activated T lymphocytes. Yamashiro S, et al. **Glycoconj J** 1995 Dec;12(6):894–900

The molecular cloning and expression of alpha 2,8-sialyltransferase (GD3 synthase) in a rat brain. Watanabe Y, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):1020–7

Human STX polysialyltransferase forms the embryonic form of the neural cell adhesion molecule. Tissue-specific expression, neurite outgrowth, and chromosomal localization in comparison with another polysialyltransferase, PST. Angata K, et al. **J Biol Chem** 1997 Mar 14;272(11):7182–90

Cloning of the lipooligosaccharide alpha-2,3-sialyltransferase from the bacterial pathogens Neisseria meningitidis and Neisseria gonorrhoeae. Gilbert M, et al. **J Biol Chem** 1996 Nov 8;271(45):28271–6

Molecular cloning and expression of a fifth type of alpha2,8-sialyltransferase (ST8Sia V). Its substrate specificity is similar to that of SAT-V/III, which synthesize GD1c, GT1a, GQ1b and GT3. Kono M, et al. **J Biol Chem** 1996 Nov 15;271(46):29366–71

Genomic structure and promoter activity of the mouse polysialic acid synthase gene (mST8Sia II). Brain-specific expression from a TATA-less GC-rich sequence. Yoshida Y, et al. **J Biol Chem** 1996 Nov 22;271(47):30167–73

Polysialic acid synthase (ST8Sia II/STX) mRNA expression in the developing mouse central nervous system. Kurosawa N, et al. **J Neurochem** 1997 Aug;69(2):494–503

The gene encoding beta-galactoside alpha2,6-sialyltransferase maps to mouse chromosome 16. Kalcheva I, et al. **Mamm Genome** 1997 Aug;8(8):619–20

Localization of beta-galactoside alpha2,6-sialyltransferase gene on pig chromosome 13q4.1. Saint Oyant-Hibrand L, et al. **Mamm Genome** 1997 Apr;8(4):298–9

Capsule phase variation in Neisseria meningitidis serogroup B by slipped-strand mispairing in the polysialyltransferase gene (siaD): correlation with bacterial invasion and the outbreak of meningococcal disease. Hammerschmidt S, et al. **Mol Microbiol** 1996 Jun;20(6):1211–20

Capsule switching of Neisseria meningitidis. Swartley JS, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):271–6

SIALYLTRANSFERASES

ISOLATION & PURIFICATION

Modification of the cytoplasmic domain affects the subcellular localization of Golgi glycosyl-transferases. Yang W, et al. **Eur J Cell Biol** 1996 Sep;71(1):53-61

Purification and characterization of a marine bacterial beta-galactoside alpha 2,6-sialyltransferase from Photobacterium damsela JT0160. Yamamoto T, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):104-10

METABOLISM

Reduced sialylation of glycoproteins in nasal glands of patients with chronic sinusitis. Ueno K, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):420-3

alpha-2,3-Sialyltransferase type 3N and alpha-1,3-fucosyltransferase type VII are related to sialyl Lewis(x) synthesis and patient survival from lung carcinoma. Ogawa JI, et al. **Cancer** 1997 May 1; 79(9):1678-85

The expression of neural cell sialoglycoproteins following glucocorticoid regulation of sialyltransferase activity in vivo. Coughlan CM, et al. **Cell Mol Neurobiol** 1996 Jun; 16(3):433-8

Polysialylation of NCAM by a single enzyme. Mühlenhoff M, et al. **Curr Biol** 1996 Sep 1;6(9):1188-91

Autocatalytic polysialylation of polysialyltransferase-1. Mühlenhoff M, et al. **EMBO J** 1996 Dec 16;15(24):6943-50

Cloning and expression of cDNA for a human Gal(beta1-3)GalNAc alpha2,3-sialyltransferase from the CEM T-cell line. Giordanengo V, et al. **Eur J Biochem** 1997 Jul 15;247(2):558-66

Exploring the substrate specificities of alpha-2,6- and alpha-2,3-sialyltransferases using synthetic acceptor analogues. Van Dorst JA, et al. **Eur J Biochem** 1996 Dec 15;242(3):674-81

O-Glycosylation and cellular differentiation in a subpopulation of mucin-secreting HT-29 cell line. Hennebicq-Reig S, et al. **Exp Cell Res** 1997 Aug 25; 235(1):100-7

Dependence of rat liver CMP-N-acetylneuraminate:GM1 sialyltransferase (SAT IV) activity on the ceramide composition of GM1 ganglioside. Pitto M, et al. **FEBS Lett** 1996 Apr 1;383(3):223-6

Tissue-specific regulation of sialyltransferase activities in the rat by corticosteroids in vivo. Coughlan CM, et al. **Glycobiology** 1996 Jan;6(1):15-22

Mouse beta-galactoside alpha 2,3-sialyltransferases: comparison of in vitro substrate specificities and tissue specific expression. Kono M, et al. **Glycobiology** 1997 Jun; 7(4):469-79

Targeting of active rat alpha 2,3-sialyltransferase to the yeast cell wall by the aid of the hsp 150 delta-carrier: toward synthesis of sLe(x)-decorated L-selectin ligands. Mattila P, et al. **Glycobiology** 1996 Dec;6(8):851-9

Differential recognition of glycoprotein acceptors by terminal glycosyltransferases. Yeh J, et al. **Glycobiology** 1997 Mar;7(2):241-51

Biological and physicochemical characterization of recombinant human erythropoietins fractionated by Mono Q column chromatography and their modification with sialyltransferase. Morimoto K, et al. **Glycoconj J** 1996 Dec; 13(6):1013-20

Regulation of gonococcal sialyltransferase, lipooligosaccharide, and serum resistance by glucose, pyruvate, and lactate. McGee DJ, et al. **Infect Immun** 1996 Nov;64(11):4630-7

Specific stimulation of alpha 2-6 sialyltransferase activity by a novel cytosolic factor from rat colon. Nagpurkar A, et al. **Int J Biochem Cell Biol** 1996 Dec;28(12):1337-48

Colon carcinoma glycoproteins carrying alpha 2,6-linked sialic acid reactive with Sambucus nigra agglutinin are not constitutively expressed in normal human colon mucosa and are distinct from sialyl-Tn antigen. Murayama T, et al. **Int J Cancer** 1997 Mar 4;70(5):575-81

Purification and characterization of a marine bacterial beta-galactoside alpha 2,6-sialyltransferase from Photobacterium damsela JT0160. Yamamoto T, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):104-10

Two naturally occurring alpha2,6-sialyltransferase forms with a single amino acid change in the catalytic domain differ in their catalytic activity and proteolytic processing. Ma J, et al. **J Biol Chem** 1997 Jan 3;272(1):672-9

A transfected sialyltransferase that is elevated in breast cancer and localizes to the medial/trans-Golgi apparatus inhibits the development of core-2-based O-glycans. Whitehouse C, et al. **J Cell Biol** 1997 Jun 16;137(6):1229-41

alpha2,6-Sialyltransferase gene transfection into a human glioma cell line (U373 MG) results in decreased invasivity. Yamamoto H, et al. **J Neurochem** 1997 Jun;68(6):2566-76

Lactate enhancement of sialylation of gonococcal lipopolysaccharide and of induction of serum resistance by CMP-NANA is not due to direct activation of the sialyltransferase: metabolic events are involved. Parsons NJ, et al. **Microb Pathog** 1996 Sep;21(3):193-204

Neisseria sialyltransferases and their role in pathogenesis. Rest RF, et al. **Microb Pathog** 1995 Dec;19(6):379-90 (66 ref.)

Uptake and incorporation of an epitope-tagged sialic acid donor into intact rat liver Golgi compartments. Functional localization of sialyltransferase overlaps with beta-galactosyltransferase but not with sialic acid O-acetyltransferase. Chammas R, et al. **Mol Biol Cell** 1996 Nov;7(11):1691-707

PHARMACOKINETICS

[Kinetics of sialylation of Neisseria gonorrhoeae by radiolabelled cytidine 5'monophospho-N-acetyl neuraminic acid] Goldner M, et al. **Pathol Biol (Paris)** 1996 Apr;44(4):249-53 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Chronic ethanol induced impairment of hepatic glycosylation machinery in rat is independent of dietary carbohydrate. Ghosh P, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):76-81

Expression of sialyltransferase is not required for interaction of Neisseria gonorrhoeae with human epithelial cells and human neutrophils. McGee DJ, et al. **Infect Immun** 1996 Oct;64(10):4129-36

Activities of glycolipid glycosyltransferases and sialidases during the early development of Xenopus laevis. Gornati R, et al. **Mol Cell Biochem** 1997 Jan;166(1-2):117-24

SIAMANG see **HYLOBATES**

SIBERIAN HAMSTER see **PHODOPUS**

SIBLING RELATIONS

Sex-of-sibling effects: a review. Part II. Personality and mental and physical health. Wagner ME, et al. **Adv Child Dev Behav** 1996;26:137-79

Deaf and hearing parents' interactions with eldest hearing children. Jones EG, et al. **Am Ann Deaf** 1996 Oct; 141(4):278-83

Further evidence of an association between attention-deficit/hyperactivity disorder and cigarette smoking. Findings from a high-risk sample of siblings. Milberger S, et al. **Am J Addict** 1997 Summer;6(3):205-17

The next generation of research: views of a sibling-psychiatrist-researcher. Dixon L. **Am J Orthopsychiatry** 1997 Apr;67(2):242-8

Factors associated with subjective burden in siblings of adults with severe mental illness. Greenberg JS, et al. **Am J Orthopsychiatry** 1997 Apr;67(2):231-41

Young children's social relationships with siblings and friends. Volling BL, et al. **Am J Orthopsychiatry** 1997 Jan; 67(1):102-11

Additive effects of older brothers and homosexual brothers in the prediction of marriage and cohabitation. Blanchard R, et al. **Behav Genet** 1997 Jan;27(1):45-54

Crocodile talk: attributions of incestuously abused and nonabused sisters. Monahan K. **Child Abuse Negl** 1997 Jan; 21(1):19-34

The more the merrier? Effects of family size and sibling spacing on sibling relationships. Newman J. **Child Care Health Dev** 1996 Sep;22(5):285-302 (70 ref.)

Social influences on false belief access: specific sibling influences or general apprenticeship? Lewis C, et al. **Child Dev** 1996 Dec;67(6):2930-47

Sibling differences in problem behavior and parental treatment in nondivorced and remarried families. Mekos D, et al. **Child Dev** 1996 Oct;67(5):2148-65

Hay fever, asthma and number of older siblings--a twin study. Räsänen M, et al. **Clin Exp Allergy** 1997 May; 27(5):515-8

Sibling rivalry in the 1990s. Renshaw DC. **Compr Ther** 1996 Jul;22(7):415-9 (11 ref.)

The ontogeny of antipredator behavior in paradise fish larvae (Macropodus opercularis) IV. The effect of exposure to siblings. Miklósi A, et al. **Dev Psychobiol** 1997 May; 30(4):283-91

Conversations with mothers and siblings: young children's semantic and conceptual development. Pérez-Granados DR, et al. **Dev Psychol** 1997 Jan;33(1):120-34

Behavioural problems of children with chronic physical illness and their siblings. Stawski M, et al. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):20-5

Do adolescent pregnancy and childbearing affect younger siblings? East PL. **Fam Plann Perspect** 1996 Jul-Aug; 28(4):148-53

Anopheles subpictus complex: distribution of sibling species in Sri Lanka. Abhayawardana TA, et al. **Indian J Malariol** 1996 Jun;33(2):53-60

Cytotaxonomical examination for sibling species in the taxon Anopheles culicifacies Giles in Sri Lanka. Abhayawardana TA, et al. **Indian J Malariol** 1996 Jun;33(2):74-80

Sibling power: influence of older siblings' persuasive appeals on younger siblings' judgements about risk taking behaviours. Morrongiello BA, et al. **Inj Prev** 1997 Mar; 3(1):23-8

Anorexia nervosa and bulimia nervosa: sibling sex ratio and birth rank--a catchment area study. Britto DJ, et al. **Int J Eat Disord** 1997 May;21(4):335-40

The impact of a person's disability on his or her sibling. Scelles R. **Int J Rehabil Res** 1997 Jun;20(2):129-37

What do I say to my surviving children? DeMaso DR, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep; 36(9):1299-302

A prospective four-year follow-up study of children at risk for ADHD: psychiatric, neuropsychological, and psychosocial outcome. Faraone SV, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1449-59

Risk and protective factors affecting the adjustment of siblings of children with chronic disabilities. Fisman S, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1532-41

Ethical aspects of competence for sexual relationships: a case of adult sibling incest. Feldman MJ, et al. **J Am Acad Psychiatry Law** 1997;25(2):217-22

Self-esteem, behavior, and concerns surrounding epilepsy in siblings of children with epilepsy. Mims J. **J Child Neurol** 1997 Apr;12(3):187-92

Memories of childhood neglect and abuse: corroboration in a series of sisters. Bifulco A, et al. **J Child Psychol Psychiatry** 1997 Mar;38(3):365-74

Temperament and psychopathology amongst siblings of probands with depressive and anxiety disorders. Kelvin RG, et al. **J Child Psychol Psychiatry** 1996 Jul;37(5):543-50

Twin sibling differences in parental reports of ADHD, speech, reading and behaviour problems. Levy F, et al. **J Child Psychol Psychiatry** 1996 Jul;37(5):569-78

A new instrument to assess sibling relationships in antisocial youth: the social interaction between siblings (SIBS) interview: a research note. Slomkowski C, et al. **J Child Psychol Psychiatry** 1997 Feb;38(2):253-6

Risk factors in the adjustment of siblings of children with cancer. Sloper P, et al. **J Child Psychol Psychiatry** 1996 Jul;37(5):597-607

Sibling sex ratio of boys with gender identity disorder. Zucker KJ, et al. **J Child Psychol Psychiatry** 1997 Jul; 38(5):543-51 (131 ref.)

Pregnant and parenting adolescents and their younger sisters: the influence of relationship qualities for younger sister outcomes. East PL, et al. **J Dev Behav Pediatr** 1997 Apr; 18(2):84-90

Treatment characteristics of congenital heart disease and behaviour problems of patients and healthy siblings. Janus M, et al. **J Paediatr Child Health** 1997 Jun;33(3):219-25

Sibling abuse: another component of domestic violence. Johnstone HA, et al. **J Pediatr Nurs** 1997 Feb;12(1):51-4

Behavioral responses of healthy Chinese siblings to the stress of childhood cancer in the family: a longitudinal study. Wang RH, et al. **J Pediatr Nurs** 1996 Dec;11(6):383-91

Outcomes of a nursing intervention for siblings of chronically ill children: a pilot study. Williams PD, et al. **J Soc Pediatr Nurs** 1997 Jul-Sep;2(3):127-37

Binding ties: the roles of adult siblings of persons with mental retardation. Krauss MW, et al. **Ment Retard** 1996 Apr; 34(2):83-93

Determination of sibship by microsatellite typing in a deficiency case of disputed maternity. Kishida T, et al. **Nippon Hoigaku Zasshi** 1996 Oct;50(5):361-5

Sibling rivalry? Two physician brothers and the accident that changed their view of the profession. Federman DG, et al. **Postgrad Med** 1997 Jul;102(1):29-32

Twin closeness and co-twin risk for substance use disorders: assessing the impact of the equal environment assumption. LaBuda MC, et al. **Psychiatry Res** 1997 May 30; 70(3):155-64

Is there psychopathology in the coparents of schizophrenic adoptees' half-siblings? Ingraham LJ, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1296-8

[Elpenor's syndrome or somnambulistic murder?] Bornstein S, et al. **Ann Med Psychol (Paris)** 1996 Jun;154(3):195-200; discussion 201 **(Fre)**

[Psychopathological concepts of induced insanity exemplified by folie a deux] Arenz D, et al. **Fortschr Neurol Psychiatr** 1996 Jan;64(1):13-9 (Eng. Abstr.) **(Ger)**

[Siblings of chronically ill adolescents: does chronic illness have effects on their development potentials?] Boeger A, et al. **Prax Kinderpsychol Kinderpsychiatr** 1996 Dec; 45(10):356-62 (Eng. Abstr.) **(Ger)**

[Research on siblings of mentally ill and retarded persons. Review of literature] Namysłowska I. **Psychiatr Pol** 1996 Nov-Dec;30(6):907-18 (29 ref.) (Eng. Abstr.) **(Pol)**

SICCA SYNDROME see **SJOGREN'S SYNDROME**

SICK BUILDING SYNDROME

Achieving healthy indoor air. Report of the ATS Workshop: Santa Fe, New Mexico, November 16-19, 1995. **Am J Respir Crit Care Med** 1997 Sep;156(3 Pt 2):S31-64

Sick-building syndrome [letter; comment] Bernhard JD. **Lancet** 1997 Jun 28;349(9069):1913. Comment on: Lancet 1997 Apr 5;349(9057):1013-6.

Sick-building syndrome [letter; comment] Malik GM. **Lancet** 1997 Jun 28;349(9069):1913. Comment on: Lancet 1997 Apr 5;349(9057):1013-6.

Sick-building syndrome [letter; comment] Malloy CD, et al. **Lancet** 1997 Jun 28;349(9069):1913. Comment on: Lancet 1997 Apr 5;349(9057):1013-6.

Sick-building syndrome [see comments] Redlich CA, et al. **Lancet** 1997 Apr 5;349(9057):1013-6 (24 ref.). Comment in: Lancet 1997 Jun 28;349(9069):1913.

COMPLICATIONS

Nasal histamine provocation of tenants in a sick-building residential area. Ohm M, et al. **Am J Rhinol** 1997 Mar-Apr; 11(2):167-75

The natural history of concurrent sick building syndrome and chronic fatigue syndrome. Chester AC, et al. **J Psychiatr Res** 1997 Jan-Feb;31(1):51-7

DIAGNOSIS

Indoor pollution and sick building syndrome symptoms among workers in day-care centers. Li CS, et al. **Arch Environ Health** 1997 May-Jun;52(3):200-7

Building-related illness and sick building syndrome: from the specific to the vague. Horvath EP. **Cleve Clin J Med** 1997 Jun;64(6):303-9 (36 ref.)

Allergic alveolitis in a school environment. Thörn A, et al. **Scand J Work Environ Health** 1996 Aug;22(4):311-4

EPIDEMIOLOGY

Prevalence of the sick building syndrome symptoms in office workers before and six months and three years after being exposed to a building with an improved ventilation system. Bourbeau J, et al. **Occup Environ Med** 1997 Jan;54(1):49-53

ETIOLOGY

Exposure to varying levels of contaminants and symptoms among workers in two office buildings. Menzres D, et al. **Am J Public Health** 1996 Nov;86(11):1629-33

Microbial volatile organic compounds--what substances can be found in sick buildings? Wessén B, et al. **Analyst** 1996 Sep;121(9):1203-5

Dampness and respiratory symptoms among workers in daycare centers in a subtropical climate. Li CS, et al. **Arch Environ Health** 1997 Jan-Feb;52(1):68-71

Man-made mineral fibre boards in buildings--health risks caused by quality deficiencies. Thriene B, et al. **Toxicol Lett** 1996 Nov;88(1-3):299-303

[Sanitary impact of air conditioning: what is the relation to sick building syndrome?] Vincent D, et al. **Rev Med Interne** 1997;18(6):460-9 (37 ref.) (Eng. Abstr.) **(Fre)**

[Sick building syndrome] Brede-Weisflog B. **Versicherungsmedizin** 1996 Oct 1;48(5):170-4 (17 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Are fungi-specific IgE found in staff suffering from nonallergic sick building syndrome? Larsen FO, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S79-80

NURSING

Indoor air pollutants and sick building syndrome: a case study and implications for the community health nurse. Tsacoyianis R. **Public Health Nurs** 1997 Feb;14(1):58-75 (19 ref.)

PREVENTION & CONTROL

Inadequate air distribution and poor mixing cause IAQ problems. Moving partitions, walls, and furniture may change the air flow, often for the worse. Burton DJ. **Occup Health Saf** 1996 Mar;65(3):20-1

Sick of the system? Laird R. **Occup Health Saf** 1994 Sep; 63(9):65-8

PSYCHOLOGY

Sick building syndrome, work factors and occupational stress. Crawford JO, et al. **Scand J Work Environ Health** 1996 Aug;22(4):243-50 (71 ref.)

THERAPY

Building-related illness and sick building syndrome: from the specific to the vague. Horvath EP. **Cleve Clin J Med** 1997 Jun;64(6):303-9 (36 ref.)

SICK DAYS see SICK LEAVE

SICK LEAVE

Factors affecting first return to work following a compensable occupational back injury. Oleinick A, et al. **Am J Ind Med** 1996 Nov;30(5):540-55

A randomized prospective study of vocational outcome in rehabilitation of patients with non-specific musculoskeletal pain: a multidisciplinary approach to patients identified after 90 days of sick-leave. Lindh M, et al. **Scand J Rehabil Med** 1997 Jun;29(2):103-12

Effect of exercise on sick leave due to low back pain. A randomized, comparative, long-term study. Ljunggren AE, et al. **Spine** 1997 Jul 15;22(14):1610-6; discussion 1617

[Sick leave for pregnant women (editorial)] Jensen BT. **Ugeskr Laeger** 1996 Dec 2;158(49):7044 **(Dan)**

[Prolonged sick-leave: the role of general practitioner] Lous J, et al. **Ugeskr Laeger** 1997 Jun 30;159(27):4266-9 (Eng. Abstr.) **(Dan)**

[Sick leave for pregnant women in the municipality of Fjend 1987-1990] Rasmussen OB, et al. **Ugeskr Laeger** 1996 Dec 2;158(49):7069-73 (Eng. Abstr.) **(Dan)**

[Healthier population or stricter physicians? An analysis of reduced sick leave in a small community] Lappegard O, et al. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1447-50 (Eng. Abstr.) **(Nor)**

[Occupational injuries and prolonged sick listings during the period 1989-93] Lien L, et al. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1774-8 (Eng. Abstr.) **(Nor)**

[Sick leave II for backache--municipality of Kristiansand. A one-year follow up with and without an outpatient program] Strøm V, et al. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1440-4 (Eng. Abstr.) **(Nor)**

[Active sick-listing--an alternative to be used more often] Vigen T. **Tidsskr Nor Laegeforen** 1997 Apr 20;117(10):1439 **(Nor)**

[Finsam--a serious and well-functioning agreement (letter)] Arrelöv B. **Lakartidningen** 1996 Nov 13;93(46):4140 **(Swe)**

[Sick-listing rules a modern precipice (letter)] Hultman L. **Lakartidningen** 1997 May 14;94(20):1867 **(Swe)**

[Sick certificates? (letter)] Nilsson ME. **Lakartidningen** 1996 Oct 9;93(41):3554 **(Swe)**

[New rules on sick leave and disability pensions. An antiquated disease concept threatens our credibility] Thörn A. **Lakartidningen** 1997 Sep 3;94(36):3007-8 **(Swe)**

ECONOMICS

Economic consequences of sick-leave and early retirement in obese Swedish women. Narbro K, et al. **Int J Obes Relat Metab Disord** 1996 Oct;20(10):895-903

Replantation-revascularization and primary amputation in major hand injuries. Resources spent on treatment and the indirect costs of sick leave in Sweden. Holmberg J, et al. **J Hand Surg [Br]** 1996 Oct;21(5):576-80

The value of in-house physical therapy. Grayzel EF, et al. **J Occup Environ Med** 1997 Apr;39(4):344-6

Lost workdays and decreased work effectiveness associated with headache in the workplace. Schwartz BS, et al. **J Occup Environ Med** 1997 Apr;39(4):320-7

LEGISLATION & JURISPRUDENCE

Triple compliance: FMLA, ADA, and workers' comp. Campbell SL. **Occup Health Saf** 1996 Apr;65(4):46-7

STATISTICS & NUMERICAL DATA

The error of using returns-to-work to measure the outcomes of health care. Baldwin ML, et al. **Am J Ind Med** 1996 Jun;29(6):632-41

Sick-leave due to psychiatric disorder: higher incidence among women and longer duration for men. Hensing G, et al. **Br J Psychiatry** 1996 Dec;169(6):740-6

Female sickness absenteeism in Poland. Indulski JA, et al. **Int J Occup Med Environ Health** 1996;9(3):219-25

Frequency and duration of absence from work as functions of work force characteristics. Moll van Charante AW, et al. **J Occup Environ Med** 1997 Mar;39(3):248-57

Illness absence at an oil refinery and petrochemical plant. Tsai SP, et al. **J Occup Environ Med** 1997 May;39(5):455-62

Work and psychiatric disorder in the Whitehall II Study. Stansfeld SA, et al. **J Psychosom Res** 1997 Jul;43(1):73-81

Medical repatriations from Operation Resolute (Bosnia). Croft AM, et al. **J R Army Med Corps** 1997 Feb; 143(1):39-43

Short-term and long-term sick-leave in Sweden: relationships with social circumstances, working conditions and gender. Blank N, et al. **Scand J Soc Med** 1995 Dec; 23(4):265-72

National health insurance consumption and chronic symptoms following mild neck sprain injuries in car collisions. Borchgrevink GE, et al. **Scand J Soc Med** 1996 Dec;24(4):264-71

Sickness absence from back pain, psychosocial work characteristics and employment grade among office workers. Hemingway H, et al. **Scand J Work Environ Health** 1997 Apr;23(2):121-9

[Usefulness of the guide of standards for the duration of processes of transient work disability published by Insalud for the attending physician] Berriochoa Martínez de Pisón C, et al. **Aten Primaria** 1996 Sep 30;18(5):248-52 (Eng. Abstr.) **(Spa)**

SICK ROLE

Quality of life as a measure of rehabilitation outcome in patients with multiple sclerosis. Jønsson A, et al. **Acta Neurol Scand** 1996 Apr;93(4):229-35

Psychosocial problems of children and adolescents with a chronic disease: coping strategies. Milousheva J, et al. **Acta Paediatr Jpn** 1996 Feb;38(1):41-5

Emotional disorders in HIV infection [letter; comment] Bungener C, et al. **Acta Psychiatr Scand** 1996 Nov; 94(5):379-80. Comment on: Acta Psychiatr Scand 1995 Dec;92(6):429-35.

Schizophrenic patients' experiences of neuroleptic medication: a Q-methodological investigation. Day JC, et al. **Acta Psychiatr Scand** 1996 May;93(5):397-402

Ethnicity, social factors, illness and suicide: a follow-up study of a random sample of the Swedish population. Johansson LM, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):125-31

Subjective experience of treatment, side-effects, mental state and quality of life in chronic schizophrenic out-patients treated with depot neuroleptics. Larsen EB, et al. **Acta Psychiatr Scand** 1996 May;93(5):381-8

Coping strategies among the long-term mentally ill: categorization and clinical determinants. Middelboe T, et al. **Acta Psychiatr Scand** 1997 Sep;96(3):188-94

Personality traits and psychiatric and somatic morbidity among kleptomaniacs. Sarasalo E, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):358-64

Hypochondriacal fears and beliefs in obsessive-compulsive disorder. Savron G, et al. **Acta Psychiatr Scand** 1996 May; 93(5):345-8

Self-reported functioning and well-being in patients with Parkinson's disease: comparison of the Short-Form 36 and the Parkinson's Disease Questionnaire [letter; comment] Hobson P, et al. **Age Ageing** 1996 Jul;25(4):334-5. Comment on: Age Ageing 1995 Nov;24(6):505-9.

Screening for depression among acutely ill geriatric inpatients with a short Geriatric Depression Scale. Shah A, et al. **Age Ageing** 1997 May;26(3):217-21

The impact of illness disclosure and custody plans on adolescents whose parents live with AIDS. Rotheram-Borus MJ, et al. **AIDS** 1997 Jul 15;11(9):1159-64

Voice of the afflicted. Erickson CK. **Alcohol Clin Exp Res** 1996 Aug;20(5):877

Generalized anxiety and depression. Assessment over 2 years after stroke. Schultz SK, et al. **Am J Geriatr Psychiatry** 1997 Summer;5(3):229-37

Management of avoidance behaviors using direct and indirect psychological methods. Yuen HK. **Am J Occup Ther** 1996 Jul-Aug;50(7):578-82

A consumer perspective on the family agenda. Fox L. **Am J Orthopsychiatry** 1997 Apr;67(2):249-53

Sickness behavior in mice deficient in interleukin-6 during turpentine abscess and influenza pneumonitis. Kozak W, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R621-30

Treatment of depression following myocardial infarction with interpersonal psychotherapy. Stuart S, et al. **Ann Clin Psychiatry** 1996 Dec;8(4):203-6

Behavioral correlates of health and illness in youths with chronic illness. Frey M. **Appl Nurs Res** 1996 Nov; 9(4):167-76

Primary juvenile fibromyalgia: psychological adjustment, family functioning, coping, and functional disability. Reid GJ, et al. **Arthritis Rheum** 1997 Apr;40(4):752-60

Psychosocial stressors, physical illness and the spectrum of depression in elderly inpatients. Draper B, et al. **Aust N Z J Psychiatry** 1996 Oct;30(5):567-72

Depressive symptoms in patients with HIV infection. Judd FK, et al. **Aust N Z J Psychiatry** 1996 Feb;30(1):104-9

Assisted suicide and euthanasia: what about the clinical issues? [see comments] Kelly BJ, et al. **Aust N Z J Psychiatry** 1996 Feb;30(1):3-8 (34 ref.). Comment in: Aust N Z J Psychiatry 1996 Aug;30(4):557-8.

Post-stroke depression: outcome following rehabilitation. Loong CK, et al. **Aust N Z J Psychiatry** 1995 Dec; 29(4):609-14

Euthanasia legislation concern [letter] McMahon D, et al. **Aust N Z J Psychiatry** 1996 Oct;30(5):703-4

The delusion of infection with HIV. Nash L. **Aust N Z J Psychiatry** 1996 Aug;30(4):467-71

Suicide and attempted suicide occur in the context of terminal and severe medical illness [letter; comment] Parker M. **Aust N Z J Psychiatry** 1996 Aug;30(4):557-8. Comment on: Aust N Z J Psychiatry 1996 Feb;30(1):3-8.

Predicting completeness of symptom relief after major heart surgery. Jenkins CD, et al. **Behav Med** 1996 Summer; 22(2):45-57

Evaluating the role of physical, operant, cognitive, and affective factors in the pain behaviors of chronic pain patients. Turk DC, et al. **Behav Modif** 1997 Jul;21(3):259-80

Do pain expectancies cause pain in chronic low back patients? A clinical investigation. Crombez G, et al. **Behav Res Ther** 1996 Nov-Dec;34(11-12):919-25

Heart-focused and general illness fears in relation to parental medical history and separation experiences. Eifert GH, et al. **Behav Res Ther** 1996 Sep;34(9):735-9

Coping with hallucinations: exploring stress and coping framework. Farhall J, et al. **Br J Clin Psychol** 1997 May; 36 (Pt 2):259-61

Pharmacological treatment of depression in cancer patients. A placebo-controlled study of mianserin. van Heeringen K, et al. **Br J Psychiatry** 1996 Oct;169(4):440-3

Anxiety and depression in elderly patients receiving treatment for cerebral tumours. Kaplan CP, et al. **Brain Inj** 1997 Feb;11(2):129-35

Miserable minority: emotional risk factors that influence the outcome of a mild traumatic brain injury. Ruff RM, et al. **Brain Inj** 1996 Aug;10(8):551-65

Outcomes in traumatic brain injury: self-report versus report of significant others. Tepper S, et al. **Brain Inj** 1996 Aug; 10(8):575-81

Why traumatized borderline patients relapse. Appelbaum AH. **Bull Menninger Clin** 1996 Fall;60(4):449-63

Illness behavior and the biomedical model. Sigal LH. **Bull Rheum Dis** 1997 Feb;46(1):1-4

Psychiatric manifestations of multiple sclerosis: a review [see comments] Rodgers J, et al. **Can J Psychiatry** 1996 Sep; 41(7):441-5 (41 ref.). Comment in: Can J Psychiatry 1997 Apr;42(3):324-5.

Posttraumatic stress symptoms and medical procedures in children. Wintgens A, et al. **Can J Psychiatry** 1997 Aug; 42(6):611-6 (44 ref.)

Research into the lifeworld of physically disabled children. Mulderij KJ. **Child Care Health Dev** 1996 Sep;22(5):311-22

Abnormal illness behaviour in rehabilitation from stroke. Clark MS, et al. **Clin Rehabil** 1997 May;11(2):162-70

Should physicians discourage patients from playing the sick role? [editorial; comment] Laine C. **CMAJ** 1997 Aug 15; 157(4):393-4. Comment on: CMAJ 1997 Aug 15;157(4):383-9.

A role for the sick role. Patient preferences regarding information and participation in clinical decision-making [see comments] Stiggelbout AM, et al. **CMAJ** 1997 Aug

15;157(4):383-9. Comment in: CMAJ 1997 Aug 15;157(4):393-4.

Do behavior changes herald physical illness in adults with mental retardation? McDermott S, et al. **Community Ment Health J** 1997 Apr;33(2):85-97

Alcoholism, a contagious disease. A contribution towards an anthropological definition of contagion. Fainzang S. **Cult Med Psychiatry** 1996 Dec;20(4):473-87

Intracultural variation in causal accounts of diabetes: a comparison of three Canadian Anishinaabe (Ojibway) communities. Garro LC. **Cult Med Psychiatry** 1996 Dec; 20(4):381-420

Life stories and sickness experience: a performance perspective. Monks J. **Cult Med Psychiatry** 1995 Dec; 19(4):453-78

Vagina dentata revisited: gender and asymptomatic shedding of genital herpes. Pliskin KL. **Cult Med Psychiatry** 1995 Dec;19(4):479-501

Illness and morality in the Mombasa Swahili community: a metaphorical model in an Islamic culture. Swartz MJ. **Cult Med Psychiatry** 1997 Mar;21(1):89-114

Coping with psoriasis: a guide for counseling patients. Ginsburg IH. **Cutis** 1996 May;57(5):323-5

Differences in cognitions during chest pain of patients with panic disorder and ischemic heart disease. Fraenkel YM, et al. **Depress Anxiety** 1996-97;4(5):217-22

The illness behavior of patients with gastroesophageal reflux disease with and without endoscopic esophagitis. Tew S, et al. **Dis Esophagus** 1997 Jan;10(1):9-15

General principles in child liaison consultation service: a literature review. Ortiz P. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):1-6 (46 ref.)

Behavioural problems of children with chronic physical illness and their siblings. Stawski M, et al. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):20-5

Role of interactions between psychological and clinical factors in determining 6-month mortality among patients with acute myocardial infarction. Application of recursive partitioning techniques to the GISSI-2 database. Gruppo Italiano per lo Studio della Sopravvivenza nell' Infarto Miocardico. Carinci F, et al. **Eur Heart J** 1997 May; 18(5):835-45

Headache and neck or shoulder pain--family learnt illnesses behaviour? The Bardu Muscoloskeletal Study, 1989-1990. Hasvold T, et al. **Fam Pract** 1996 Jun;13(3):242-6

Selective serotonin reuptake inhibitor treatment of depression in symptomatic HIV infection and AIDS. Improvements in affective and somatic symptoms. Ferrando SJ, et al. **Gen Hosp Psychiatry** 1997 Mar;19(2):89-97

Serious overdosers admitted to a general hospital: comparison with nonoverdose self-injuries and medically ill patients with suicidal ideation. Gupta B, et al. **Gen Hosp Psychiatry** 1997 May;19(3):209-15

Health effects of emotional disclosure in rheumatoid arthritis patients. Kelley JE, et al. **Health Psychol** 1997 Jul; 16(4):331-40

Women living with HIV/AIDS: the dual challenge of being a patient and caregiver. Hackl KL, et al. **Health Soc Work** 1997 Feb;22(1):53-62

Adult adjustment to chronic illness: a review of the literature. Sidell NL. **Health Soc Work** 1997 Feb;22(1):5-11 (45 ref.)

The dilemmas of parents of adolescents and young adults with congenital heart disease. Sparacino PS, et al. **Heart Lung** 1997 May-Jun;26(3):187-95

Patients' influence on doctors' behavior: a case study of patient strategies in somatization. Salmon P, et al. **Int J Psychiatry Med** 1995;25(4):319-29

Coping with chronic low back pain: an idiographic exploration through focus groups. Strong J, et al. **Int J Psychiatry Med** 1995;25(4):371-87

Confusion of tongues [letter; comment] Hoffer PT. **Int J Psychoanal** 1995 Oct;76 (Pt 5):1046-7; discussion 1047-8. Comment on: Int J Psychoanal 1994 Dec;75 (Pt 5-6):871-82.

The biopsychosocial disease consequence model in rehabilitation: model development in the Finnish 'work hardening' programme for chronic pain. Talo S, et al. **Int J Rehabil Res** 1996 Jun;19(2):93-109 (35 ref.)

Assessment of quality of life: preservation of the self. Ronch JL. **Int Psychogeriatr** 1996 Summer;8(2):267-75 (35 ref.)

Hospitalism/institutionalization [letter] Rudnick A. **Isr J Psychiatry Relat Sci** 1996;33(3):212-3

The response styles theory of depression: tests and an extension of the theory. Just N, et al. **J Abnorm Psychol** 1997 May;106(2):221-9

Depression in fatiguing illness: comparing patients with chronic fatigue syndrome, multiple sclerosis and depression. Johnson SK, et al. **J Affect Disord** 1996 Jun 20;39(1):21-30

Psychotherapy of the medically ill: the role of object relations in body image and grief. Bronheim H. **J Am Acad Psychoanal** 1996 Fall;24(3):515-25

The history of the present illness as treatment: who's listening, and why does it matter? Adler HM. **J Am Board Fam Pract** 1997 Jan-Feb;10(1):28-35

Placebo response, sustained partnership, and emotional resilience in practice [editorial] Brody H. **J Am Board Fam Pract** 1997 Jan-Feb;10(1):72-4

Of healing and human suffering. Katon W, et al. **J Am Board Fam Pract** 1997 Jan-Feb;10(1):62-5

Illness behavior influences the outcome of laparoscopic antireflux surgery. Watson DI, et al. **J Am Coll Surg** 1997 Jan;184(1):44-8

Heart-focused anxiety, illness beliefs, and behavioral impairment: comparing healthy heart-anxious patients with cardiac and surgical inpatients. Eifert GH, et al. **J Behav Med** 1996 Aug;19(4):385-99

The relationship between daily life stress and gastrointestinal symptoms in women with irritable bowel syndrome. Levy RL, et al. **J Behav Med** 1997 Apr;20(2):177-93

Supportive and negative responses in the partner relationship: their association with psychological adjustment among individuals with cancer. Manne SL, et al. **J Behav Med** 1997 Apr;20(2):101-25

Coping with the physical and psychosocial sequelae of bone marrow transplantation among long-term survivors. Somerfield MR, et al. **J Behav Med** 1996 Apr;19(2):163-84

Casual dimensions of college students' perceptions of physical symptoms. Swartzman LC, et al. **J Behav Med** 1996 Apr; 19(2):95-110

Erectile dysfunction in men with chronic medical illness. Plaud JJ, et al. **J Behav Ther Exp Psychiatry** 1996 Mar; 27(1):11-9

The behavioural response to whiplash injury [see comments] Gargan M, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):523-6 . Comment in: J Bone Joint Surg Br 1997 Jul;79(4):517-9.

Risk factors in the adjustment of siblings of children with cancer. Sloper P, et al. **J Child Psychol Psychiatry** 1996 Jul;37(5):597-607

Generalized use of over-the-counter analgesics: relationship to premenstrual symptoms. Hart KE, et al. **J Clin Psychol** 1997 Apr;53(3):197-200

Psychological adjustment of adults with sickle cell anemia: stability over 20 months, correlates, and predictors. Thompson RJ Jr, et al. **J Clin Psychol** 1996 May; 52(3):253-61

Body consciousness, illness-related impairment, and patient adherence in hemodialysis. Christensen AJ, et al. **J Consult Clin Psychol** 1996 Feb;64(1):147-52

Pain expectancies, pain, and functional self-efficacy expectancies as determinants of disability in patients with chronic low back disorders. Lacker JM, et al. **J Consult Clin Psychol** 1996 Feb;64(1):212-20

Illness and the development of social competence. Parmelee AH Jr. **J Dev Behav Pediatr** 1997 Apr;18(2):120-4

Anticipatory nausea and vomiting in pediatric cancer patients: an analysis of conditioning and coping variables. Tyc VL, et al. **J Dev Behav Pediatr** 1997 Feb;18(1):27-33

Chronic pain and emotional distress in children and adolescents. Varni JW, et al. **J Dev Behav Pediatr** 1996 Jun;17(3):154-61

Psychological distress associated with algodystrophy. Field J, et al. **J Hand Surg [Br]** 1997 Feb;22(1):100-1

Doctors with cancer struggle to define split role [news] Keoun B. **J Natl Cancer Inst** 1996 Nov 20;88(22):1616-7

Hope and a health-promoting lifestyle in persons with Parkinson's disease. Fowler SB. **J Neurosci Nurs** 1997 Apr; 29(2):111-6

The effect of drug therapy on the perceived symptom and ADL experiences of narcoleptics. Schumacher A, et al. **J Neurosci Nurs** 1997 Feb;29(1):15-23

Stereotactic radiosurgery for malignant brain tumors: the patient's perspective. Ward-Smith P. **J Neurosci Nurs** 1997 Apr;29(2):117-22

Illness behaviour, personality traits, anxiety, and depression in patients with Menière's disease. Savastano M, et al. **J Otolaryngol** 1996 Oct;25(5):329-33 (12 ref.)

"They feel your needs in the air": experiences of supportive activities among adolescents with ulcerative colitis. Brydolf M, et al. **J Pediatr Nurs** 1996 Feb;11(1):71-8

A child with chronic illness and the process of family adaptation. Clawson JA. **J Pediatr Nurs** 1996 Feb; 11(1):52-61 (37 ref.)

Family responses to children with diabetes and their influence on self-care. Faulkner MS. **J Pediatr Nurs** 1996 Apr; 11(2):82-93

The Behavioral Approach-Avoidance and Distress Scale: an investigation of reliability and validity during painful medical procedures. Bachanas PJ, et al. **J Pediatr Psychol** 1996 Oct;21(5):671-81

Factors predicting distress among caregivers to children with chronic medical conditions. Canning RD, et al. **J Pediatr Psychol** 1996 Oct;21(5):735-49

Behavioral adjustment of children with surgically palliated complex congenital heart disease. Casey FA, et al. **J Pediatr Psychol** 1996 Jun;21(3):335-52

The child vulnerability scale: an instrument to measure parental perceptions of child vulnerability. Forsyth BW, et al. **J Pediatr Psychol** 1996 Feb;21(1):89-101

A social support intervention for parents of children with juvenile rheumatoid arthritis: results of a randomized trial. Ireys HT, et al. **J Pediatr Psychol** 1996 Oct;21(5):633-41

A randomized controlled prospective outcome study of a psychological and pharmacological intervention protocol for procedural distress in pediatric leukemia. Kazak AE, et al. **J Pediatr Psychol** 1996 Oct;21(5):615-31

Mental health of mothers of children with juvenile rheumatoid arthritis: appraisal as a mediator. Lustig JL, et al. **J Pediatr Psychol** 1996 Oct;21(5):719-33

Children's perceptions of peers with AIDS: assessing the impact of contagion information, perceived similarity, and illness conceptualization. Maieron MJ, et al. **J Pediatr Psychol** 1996 Jun;21(3):321-33

Psychosocial and family functioning in children with insulin-dependent diabetes at diagnosis and one year later. Northam E, et al. **J Pediatr Psychol** 1996 Oct;21(5):699-717

The influence of lung function information on self-reports of dyspnea by children with asthma. Rietveld S, et al. **J Pediatr Psychol** 1996 Jun;21(3):367-77

Somatic function, mental health, and psychosocial adjustment of adolescents with anorectal anomalies. Diseth TH, et al. **J Pediatr Surg** 1996 May;31(5):638-43

Construing benefits from adversity: adaptational significance and dispositional underpinnings. Affleck G, et al. **J Pers** 1996 Dec;64(4):899-922 (85 ref.)

Patient adherence in chronic illness: personality and coping in context. Wiebe JS, et al. **J Pers** 1996 Dec;64(4):815-35 (95 ref.)

Social identity and physical health: accelerated HIV progression in rejection-sensitive gay men. Cole SW, et al. **J Pers Soc Psychol** 1997 Feb;72(2):320-35

Social context, coping strategies, and depressive symptoms: an expanded model with cardiac patients. Holahan CJ, et al. **J Pers Soc Psychol** 1997 Apr;72(4):918-28

Social comparison and affiliation under threat: effects on recovery from major surgery. Kulik JA, et al. **J Pers Soc Psychol** 1996 Nov;71(5):967-79

Defensive pessimism, optimism, and simulating alternatives: some ups and downs of prefactual and counterfactual thinking. Sanna LJ. **J Pers Soc Psychol** 1996 Nov; 71(5):1020-36

The impact of dementia on the sufferer and available treatment interventions: an overview. Midence K, et al. **J Psychol** 1996 Nov;130(6):589-602 (70 ref.)

Depression in Parkinson's disease. Murray JB. **J Psychol** 1996 Nov;130(6):659-67 (52 ref.)

How not to miss a somatic needle in the haystack of chronic pain. Adler RH, et al. **J Psychosom Res** 1997 May; 42(5):499-505

Coping with illness-related problems and quality of life in adult individuals with muscular dystrophy. Ahlström G, et al. **J Psychosom Res** 1996 Oct;41(4):365-76

Tinnitus coping style and its relationship to tinnitus severity and emotional distress. Budd RJ, et al. **J Psychosom Res** 1996 Oct;41(4):327-35

Are coping strategies related to disease outcome in early breast cancer? Buddeberg C, et al. **J Psychosom Res** 1996 Mar;40(3):255-64

Women and HIV infection: investigation of its psychosocial consequences. Catalan J, et al. **J Psychosom Res** 1996 Jul; 41(1):39-47

Illness behavior, affective disturbance and intestinal transit time in idiopathic constipation. Chattat R, et al. **J Psychosom Res** 1997 Jan;42(1):95-100

Coping strategies and psychiatric morbidity in women attending breast assessment clinics. Chen CC, et al. **J Psychosom Res** 1996 Mar;40(3):265-70

Chronic fatigue syndrome: a qualitative investigation of patients' beliefs about the illness. Clements A, et al. **J Psychosom Res** 1997 Jun;42(6):615-24

Beliefs about mood moderate the relationship of stress to illness and symptom reporting. Goldman SL, et al. **J Psychosom Res** 1996 Aug;41(2):115-28

Cardiac Depression Scale: validation of a new depression scale for cardiac patients. Hare DL, et al. **J Psychosom Res** 1996 Apr;40(4):379-86

Reappraising reassurance--the role of investigations [editorial] Howard LM, et al. **J Psychosom Res** 1996 Oct; 41(4):307-11 (26 ref.)

Modification of smoking habits five months after myocardial infarction: relationship with personality characteristics. Huijbrechts IP, et al. **J Psychosom Res** 1996 Apr; 40(4):369-78

The relationship between severity of coronary artery disease and vital exhaustion. Kop WJ, et al. **J Psychosom Res** 1996 Apr;40(4):397-405

"Psychosomatic medicine" not "psychosomatic disorders" [editorial; comment] Lask B. **J Psychosom Res** 1996 May; 40(5):457-60. Comment on: J Psychosom Res 1995 Feb;39(2):115-8.

How are alexithymia and physical illness linked? A review and critique of pathways. Lumley MA, et al. **J Psychosom Res** 1996 Dec;41(6):505-18 (101 ref.)

Factors associated with depression in a heterogeneous HIV-infected sample. McClure JB, et al. **J Psychosom Res** 1996 Apr;40(4):407-15

Relationship between the use of unconventional therapies and disease-related concerns: a study of patients with inflammatory bowel disease. Moser G, et al. **J Psychosom Res** 1996 May;40(5):503-9

Psychological status among elderly people with chronic diseases: does type of disease play a part? Penninx BW, et al. **J Psychosom Res** 1996 May;40(5):521-34

A structure of self-conceptions and illness conceptions in rheumatoid arthritis (RA). Persson LO, et al. **J Psychosom Res** 1996 May;40(5):535-49

From conversion hysteria to somatisation to abnormal illness behaviour? [editorial] Pilowsky I. **J Psychosom Res** 1996 Apr;40(4):345-50

The factor structure of coping strategies in hemophilia. Santavirta N, et al. **J Psychosom Res** 1996 Jun;40(6):617-24

Concise assessment for depression (CAD): a brief screening approach to depression in the medically ill. Silverstone PH. **J Psychosom Res** 1996 Aug;41(2):161-70

Illness perceptions: a new paradigm for psychosomatics? [editorial] Weinman J, et al. **J Psychosom Res** 1997 Feb;

42(2):113–6
Psychosocial factors and physical illness in primary care: promoting the biopsychosocial model in medical practice [editorial] Zimmermann C, et al. **J Psychosom Res** 1996 Apr;40(4):351–8 (60 ref.)
"We become brave by doing brave acts": teaching moral courage through the theater of the oppressed. Brown KH, et al. **Lit Med** 1997 Spring;16(1):108–20
Metapathography: three unruly texts. Graham PW. **Lit Med** 1997 Spring;16(1):70–87
Reflections on Amazonian anthropologies of the body [comment] Conklin BA. **Med Anthropol Q** 1996 Sep; 10(3):373–5; discussion 378–80. Comment on: Med Anthropol Q 1996 Sep;10(3):319–41. Comment on: Med Anthropol Q 1996 Sep;10(3):347–72.
The body that knows: from Cashinahua epistemology to a medical anthropology of lowland South America [see comments] McCallum C. **Med Anthropol Q** 1996 Sep; 10(3):347–72. Comment in: Med Anthropol Q 1996 Sep;10(3):373–5; discussion 378–80.
Conceptions of tuberculosis and therapeutic choices in Highland Chiapas, Mexico. Menegoni L. **Med Anthropol Q** 1996 Sep;10(3):381–401
Personhood and illness among the Kulina [see comments] Pollock D. **Med Anthropol Q** 1996 Sep;10(3):319–41. Comment in: Med Anthropol Q 1996 Sep;10(3):342–6. Comment in: Med Anthropol Q 1996 Sep;10(3):373–5; discussion 378–80.
Of selves and souls, bodies and persons, individuals and societies: a commentary on Donald Pollock's "Personhood and illness among the Kulina" [see comments] Roseman M. **Med Anthropol Q** 1996 Sep;10(3):342–6; discussion 376–8. Comment in: Med Anthropol Q 1996 Sep;10(3):319–41.
To inform or not to inform--a decision with psychobiological implication. Rotenberg VS. **Med Law** 1997;16(1):49–52
Prognostic value of psychological testing in patients undergoing spinal cord stimulation: a prospective study [see comments] North RB, et al. **Neurosurgery** 1996 Aug; 39(2):301–10; discussion 310–1. Comment in: Neurosurgery 1997 Jun;40(6):1341.
School functioning for the child with leukemia in continuous first remission: screening high-risk children. Adamoli L, et al. **Pediatr Hematol Oncol** 1997 Mar–Apr;14(2):121–31
Are childhood misbehavior and physical illness factors in the development of self-defeating personality. Schill T, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):848–50
Fibromyalgia, chronic fatigue, and other iatrogenic diagnostic algorithms. Do some labels escalate illness in vulnerable patients? Hadler NM. **Postgrad Med** 1997 Aug; 102(2):161–2, 165–6, 171–2 passim (46 ref.)
Advances in comprehensive pain management. Koenig TW, et al. **Psychiatr Clin North Am** 1996 Sep;19(3):589–611 (165 ref.)
Use of stimulants in the medically ill. Masand PS, et al. **Psychiatr Clin North Am** 1996 Sep;19(3):515–47 (129 ref.)
Psychiatric aspects of rheumatology. Moran MG. **Psychiatr Clin North Am** 1996 Sep;19(3):575–87 (53 ref.)
Psychiatric interventions in the medically ill. Outcome and effectiveness research. Saravay SM. **Psychiatr Clin North Am** 1996 Sep;19(3):467–80 (66 ref.)
Psychiatric aspects of cardiovascular disease. Shapiro PA. **Psychiatr Clin North Am** 1996 Sep;19(3):613–29 (70 ref.)
Chronic fatigue syndrome. Sharpe M. **Psychiatr Clin North Am** 1996 Sep;19(3):549–73 (122 ref.)
New antidepressant drugs and the treatment of depression in the medically ill patient. Stoudemire A. **Psychiatr Clin North Am** 1996 Sep;19(3):495–514 (85 ref.)
Psychiatric sequelae in seriously ill children and their families. Stuber ML. **Psychiatr Clin North Am** 1996 Sep; 19(3):481–93 (71 ref.)
Personal accounts. Where do I fit in? Clevenger TD. **Psychiatr Serv** 1997 Aug;48(8):1007–8
Lack of insight among outpatients with schizophrenia. Dickerson FB, et al. **Psychiatr Serv** 1997 Feb;48(2):195–9
"It's a brain disease". Riffer NW. **Psychiatr Serv** 1997 Jun; 48(6):773–4
Application of the relaxation technique in general hospital psychiatry. Hosaka T, et al. **Psychiatry Clin Neurosci** 1995 Dec;49(5–6):259–62
Depression among cancer patients. Hosaka T, et al. **Psychiatry Clin Neurosci** 1996 Dec;50(6):309–12
Spousal similarity in subjective well-being: the Cardiovascular Health Study. Bookwala J, et al. **Psychol Aging** 1996 Dec;11(4):582–90
Relationship of physical disease and functional impairment to depression in older people. Zeiss AM, et al. **Psychol Aging** 1996 Dec;11(4):572–81
Patients who somatize in primary care: a longitudinal study of cognitive and social characteristics. Kirmayer LJ, et al. **Psychol Med** 1996 Sep;26(5):937–51
Social support and psychiatric sickness absence: a prospective study of British civil servants. Stansfeld SA, et al. **Psychol Med** 1997 Jan;27(1):35–48
Cattell's 16 PF and PSY inventory: relationship between personality traits and behavioral responses in patients with acute myocardial infarction. Bonaguidi F, et al. **Psychol Rep** 1996 Apr;78(2):691–702
Posttraumatic stress disorder and illness behaviour in HIV+ patients. Botha KF. **Psychol Rep** 1996 Dec;79(3 Pt 1):843–5
Subclinical depressive symptoms in HIV are related to avoidance coping responses: a comparison with end-stage renal failure and breast cancer. Fukunishi I, et al. **Psychol Rep** 1996 Apr;78(2):483–8
Women with high risk for breast cancer: psychological symptoms. Gilbar O. **Psychol Rep** 1997 Jun;80(3 Pt 1):800–2
Poststroke anxiety and its relationship to coping and stage of recovery. Gillespie DC. **Psychol Rep** 1997 Jun;80(3 Pt 2):1059–64
Diagnostic classification through the study of linguistic dimensions. Jacob W, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):951–9
Academic performance among children with sickle cell disease: setting minimum standards for comparison groups. Richard HW, et al. **Psychol Rep** 1997 Aug;81(1):27–34
Perceptions of parenting stress and family relations by fathers of children evaluated for organ transplantation. Rodrigue JR, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):723–7
Patterns of utilization of medical care and perceptions of the relationship between doctor and patient with chronic illness including chronic fatigue syndrome. Twemlow SW, et al. **Psychol Rep** 1997 Apr;80(2):643–58
Is the wish to participate in a cancer rehabilitation program an indicator of the need? Comparisons of participants and non-participants in a randomized study. Berglund G, et al. **Psychooncology** 1997 Mar;6(1):35–46
Consultations for 'maladaptive denial of illness' in patients with cancer: psychiatric disorders that result in noncompliance. Kunkel EJ, et al. **Psychooncology** 1997 Jun; 6(2):139–49
Fear of cancer recurrence--a literature review and proposed cognitive formulation to explain exacerbation of recurrence fears. Lee-Jones C, et al. **Psychooncology** 1997 Jun; 6(2):95–105 (41 ref.)
The influence of personal expectations on cancer patients' reports of health-related quality of life. Wan GJ, et al. **Psychooncology** 1997 Mar;6(1):1–11
Screening for abnormal illness behaviour. Chaturvedi SK, et al. **Psychopathology** 1996 Nov–Dec;29(6):325–30
Cynical hostility, powerful others control expectancies, and patient adherence in hemodialysis. Christensen AJ, et al. **Psychosom Med** 1997 May–Jun;59(3):307–12
Hypochondriacal concerns in depressed outpatients. Demopulos C, et al. **Psychosom Med** 1996 Jul–Aug; 58(4):314–20
Coping and psychosocial adaptation: longitudinal effects over time and stages in breast cancer. Heim E, et al. **Psychosom Med** 1997 Jul–Aug;59(4):408–18
Anxiety and complications associated with acute myocardial infarction [letter; comment] Kornfeld DS. **Psychosom Med** 1997 Mar–Apr;59(2):211. Comment on: Psychosom Med 1996 Sep–Oct;58(5):395–401.
Physical and mental problems attributed to dental amalgam fillings: a descriptive study of 99 self-referred patients compared with 272 controls. Malt UF, et al. **Psychosom Med** 1997 Jan–Feb;59(1):32–41
Determinants of perceived health in patients with left ventricular dysfunction: a structural modeling analysis. Rosen RC, et al. **Psychosom Med** 1997 Mar–Apr; 59(2):193–200
Improving perception of air flow obstruction in asthma patients. Stout C, et al. **Psychosom Med** 1997 Mar–Apr; 59(2):201–6
Learning to have psychosomatic complaints: conditioning of respiratory behavior and somatic complaints in psychosomatic patients. Van den Bergh O, et al. **Psychosom Med** 1997 Jan–Feb;59(1):13–23
Psychological sequelae of cancer diagnosis: a meta-analytical review of 58 studies after 1980. van't Spijker A, et al. **Psychosom Med** 1997 May–Jun;59(3):280–93
The role of psychological variables in a group of melanoma patients. An Israeli sample. Baider L, et al. **Psychosomatics** 1997 Jan–Feb;38(1):45–53
Psychological distress among adult patients being evaluated for bone marrow transplantation. Baker F, et al. **Psychosomatics** 1997 Jan–Feb;38(1):10–9
Avoidance coping behaviors and low social support are related to depressive symptoms in HIV-positive patients in Japan. Fukunishi I, et al. **Psychosomatics** 1997 Mar–Apr; 38(2):113–8
Impaired body image of young female survivors of childhood leukemia. Puukko LR, et al. **Psychosomatics** 1997 Jan–Feb; 38(1):54–62
The effect of behavioral intervention on the psychological distress of Holocaust survivors with cancer. Baider L, et al. **Psychother Psychosom** 1997;66(1):44–9
Hypochondriasis and symptom reporting--the effect of attention versus distraction. Haenen MA, et al. **Psychother Psychosom** 1996;65(1):43–48
The diagnosis of major depression in end-stage renal disease. O'Donnell K, et al. **Psychother Psychosom** 1997;66(1):38–43
Dental anxiety and illness behaviour. Portmann K, et al. **Psychother Psychosom** 1997;66(3):141–4
Psychosocial and cognitive factors associated with adherence to dietary and fluid restriction regimens by people on chronic haemodialysis. Sensky T, et al. **Psychother Psychosom** 1996;65(1):36–42
The notion of somatization: an artefact of the conceptualization of body and mind. van der Feltz-Cornelis CM, et al. **Psychother Psychosom** 1997; 66(3):117–27
Knowledge of HIV infection and the fear of mixing socially with HIV-infected and AIDS-sick patients among STD patients in Bergen, Norway. Tveit KS, et al. **Scand J Soc Med** 1995 Dec;23(4):242–50
First person account: the end of two roads. **Schizophr Bull** 1997;23(1):163–4
Common sense, insight, and neuropsychological test performance in schizophrenia patients. McEvoy JP, et al. **Schizophr Bull** 1996;22(4):635–41
Insight in first-admission psychotic patients. Fennig S, et al. **Schizophr Res** 1996 Dec 15;22(3):257–63
Benign familial neonatal convulsions; psychosocial adjustment to the threat of recurrent seizures. Psenka TM, et al. **Seizure** 1996 Sep;5(3):243–5
Medication, chronic illness and identity: the perspective of people with asthma. Adams S, et al. **Soc Sci Med** 1997 Jul;45(2):189–201
Quality of life: a dynamic construct. Allison PJ, et al. **Soc Sci Med** 1997 Jul;45(2):221–30 (60 ref.)
Young doctors' health--II. Health and health behaviour. Baldwin PJ, et al. **Soc Sci Med** 1997 Jul;45(1):41–4
Prediction of psychological adjustment to multiple sclerosis. Barnwell AM, et al. **Soc Sci Med** 1997 Aug;45(3):411–8
Patients' and professionals' understandings of the causes of chronic pain: blame, responsibility and identity protection. Eccleston C, et al. **Soc Sci Med** 1997 Sep;45(5):699–709
Psychosocial study of epilepsy in Africa. Jilek-Aall L, et al. **Soc Sci Med** 1997 Sep;45(5):783–95
Anxiety and patient participation in clinical decision-making: the case of patients with ureteral calculi. Margalith I, et al. **Soc Sci Med** 1997 Aug;45(3):419–27
Perceived social support, family environment and psychosocial recovery in bone marrow transplant long-term survivors. Molassiotis A, et al. **Soc Sci Med** 1997 Feb;44(3):317–25
Direct and buffer effects of social support and personal coping resources in individuals with arthritis. Penninx BW, et al. **Soc Sci Med** 1997 Feb;44(3):393–402
The children's sentinels: mothers and their relationships with health professionals in the context of Japanese health care. Saiki-Craighill S. **Soc Sci Med** 1997 Feb;44(3):291–300
Sex differences in physical symptoms: the contribution of symptom perception theory. van Wijk CM, et al. **Soc Sci Med** 1997 Jul;45(2):231–46 (100 ref.)
Symptoms and perceived severity of illness as predictive of treatment for diarrhea in six Asian and African sites. Yoder PS, et al. **Soc Sci Med** 1996 Aug;43(4):429–39
Health downturns and predictors of suicidal ideation: an application of the Baumeister model. Reich JW, et al. **Suicide Life Threat Behav** 1996 Fall;26(3):282–91
[Strategies for coping in schizophrenia] Lalonde P, et al. **Encephale** 1996 Jul–Aug;22(4):240–6 (Eng. Abstr.) **(Fre)**
[Behavior regarding therapeutic drugs and self concept of elderly persons with chronic diseases] Ankri J, et al. **Soc Sci Med** 1997 Feb;44(3):337–45 (Eng. Abstr.) **(Fre)**
[Intensive care (letter)] Lidlbauer M. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jun; 32(6):391 **(Ger)**
[Alzheimer disease: courage for diagnosis, courage for therapy] Kurz A. **Fortschr Med** 1997 May 10;115(13):50–2 **(Ger)**
[The "problem patient" in gynecologic consultation. From the "difficult patient personality" to dysfunctional patient-physician relations] Bitzer J. **Geburtshilfe Frauenheilkd** 1996 Jul;56(7):M95–9 **(Ger)**
[Psychology of patient management: evaluation and quality assurance of psychosocial management in pediatric oncology] Kusch M, et al. **Gesundheitswesen** 1997 Feb; 59(2):87–94 (Eng. Abstr.) **(Ger)**
[Medical consultation with curable cancer patients] de Maddalena H. **HNO** 1996 Nov;44(11):645–54 (17 ref.) **(Ger)**
[Research in psychosocial aspects of ENT tumor surgery (excluding laryngectomy): 4-part analysis of the literature. 3: Results of research] Kollbrunner J, et al. **HNO** 1997 Jul;45(7):523–32 (0 ref.) (Eng. Abstr.) **(Ger)**
[Quality of life of surgical patients during radiotherapy. A comparison with therapy expectations, subjective therapy outcome and attitude to the physician] Koller M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:657–61 (Eng. Abstr.) **(Ger)**
[Report of experiences from the viewpoint of patients. Weaning--an inescapable battle with respiratory insufficiency?] Brandt C. **Med Klin** 1997 Apr 28;92 Suppl 1:129–32 **(Ger)**
[Living and experiencing with compensated respiratory insufficiency. From ventilator dependence under water] Brandt I. **Med Klin** 1997 Apr 28;92 Suppl 1:133–6 **(Ger)**
[Physical complaints, stress and quality of life of oncologic patients. Effects and patient assessment in inpatient rehabilitation] Gärtner U, et al. **Med Klin** 1996 Aug 15; 91(8):501–8 (Eng. Abstr.) **(Ger)**
[Thoughts on the correlation of hope, trust, responsibility and shame in the relationship between patients and their physicians] Hartmann F. **Med Klin** 1996 Oct 15; 91(10):660–4 **(Ger)**
[Are self-perceivable neuropsychological deficits in patients with neuroses or personality disorder diagnoses indicative of later schizophrenia?] Klosterkötter J, et al. **Nervenarzt** 1997 Mar;68(3):196–204 (Eng. Abstr.) **(Ger)**
[Psychiatric problems in bone marrow transplantation patients during isolation] Schweigkofler H, et al. **Nervenarzt** 1996 Sep;67(9):799–804 (Eng. Abstr.) **(Ger)**
[Quality of life in patients with chronic obstructive lung

diseases: psychometric criteria of the German version of the Sickness Impact Profile and initial results of its application] Hütter BO, et al. **Pneumologie** 1997 Feb; 51(2):108–14 (Eng. Abstr.) **(Ger)**

[Psychosocial aspects of chronic respiratory tract diseases (COPD): relevance and consequences for pulmonary rehabilitation] Kaiser U, et al. **Pneumologie** 1997 Feb; 51(2):120–8 (Eng. Abstr.) **(Ger)**

[Quality of life and improving the quality of life of mucoviscidosis patients] Petermann F, et al. **Pneumologie** 1996 Dec;50 Suppl 3:822–7 **(Ger)**

[Psychosocial aspects of mucoviscidosis/cystic fibrosis in adulthood] Ullrich G. **Pneumologie** 1996 Dec;50 Suppl 3:817–21 **(Ger)**

[Siblings of chronically ill adolescents: does chronic illness have effects on their development potentials?] Boeger A, et al. **Prax Kinderpsychol Kinderpsychiatr** 1996 Dec; 45(10):356–62 (Eng. Abstr.) **(Ger)**

[General principles, methods and areas of application of quality of life research in children] Bullinger M, et al. **Prax Kinderpsychol Kinderpsychiatr** 1995 Dec;44(10):391–9 (Eng. Abstr.) **(Ger)**

[Family-oriented management of children and adolescents with cancer] Häberle H, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Jul–Aug; 46(6):405–19 (50 ref.) (Eng. Abstr.) **(Ger)**

[Psychological aspects of severe burn injuries in childhood and adolescence] Landolt M. **Prax Kinderpsychol Kinderpsychiatr** 1996 Feb;45(2):47–56 (125 ref.) (Eng. Abstr.) **(Ger)**

[Parent stress in complex craniofacial abnormalities] Sarimski K. **Prax Kinderpsychol Kinderpsychiatr** 1997 Jan;46(1):2–14 (Eng. Abstr.) **(Ger)**

[Steele–Richardson–Olszewski syndrome. Psychodynamic sequelae of diagnostic error] Hinnenthal IM, et al. **Psychiatr Prax** 1996 Jul;23(4):198–9 **(Ger)**

[Significance of concepts about illness attribution and treatment expectations in the initial treatment phase] Adler Y, et al. **Psychother Psychosom Med Psychol** 1996 Sep–Oct; 46(9–10):321–6 (Eng. Abstr.) **(Ger)**

[Needs and utilization of ambulatory psychosocial services by cancer patients—exemplified by the oncologic day clinic] Beutel M, et al. **Psychother Psychosom Med Psychol** 1996 Aug;46(8):304–11 (Eng. Abstr.) **(Ger)**

[Is inpatient rehabilitation of patients with chronic obstructive lung disease (COPD) useful? Results of a prospective 1-year follow-up study] Büchi S, et al. **Psychother Psychosom Med Psychol** 1996 Dec;46(12):423–9 (Eng. Abstr.) **(Ger)**

[Health related quality of life and subjective health. Overview of the status of research for new evaluation criteria in medicine] Bullinger M. **Psychother Psychosom Med Psychol** 1997 Mar–Apr; 47(3–4):76–91 (165 ref.) (Eng. Abstr.) **(Ger)**

[Do psychological factors modify survival of cancer patients? II: Results of an empirical study with bronchial carcinoma patients] Faller H, et al. **Psychother Psychosom Med Psychol** 1997 Jun;47(6):206–18 (Eng. Abstr.) **(Ger)**

[Do psychological factors modify survival of cancer patients? I: Review of the literature] Faller H. **Psychother Psychosom Med Psychol** 1997 May;47(5):163–9 (65 ref.) (Eng. Abstr.) **(Ger)**

[Function and structure of families with chronically ill children] Hauser E, et al. **Psychother Psychosom Med Psychol** 1996 Nov; 46(11):379–84 (Eng. Abstr.) **(Ger)**

[Inpatient psychosomatic treatment—patient markers and treatment success] Junge A, et al. **Psychother Psychosom Med Psychol** 1996 Dec;46(12):430–7 (Eng. Abstr.) **(Ger)**

[Coping with stress and self-awareness in idiopathic sudden deafness] Kröger F, et al. **Psychother Psychosom Med Psychol** 1996 Aug; 46(8):298–303 (Eng. Abstr.) **(Ger)**

[Confounding effects in social science studies and their control. The examples of personality, social support, psychiatric disease] Manz R. **Psychother Psychosom Med Psychol** 1997 Jun; 47(6):198–205 (Eng. Abstr.) **(Ger)**

[Sense of coherence and psychosomatic treatment outcome. An empirical study of salutogenesis] Sack M, et al. **Psychother Psychosom Med Psychol** 1997 May;47(5):149–55 (Eng. Abstr.) **(Ger)**

[Personal values and goal orientations of chronically ill adolescents and young adults] Schmitt GM. **Psychother Psychosom Med Psychol** 1997 Jun;47(6):189–97 (80 ref.) (Eng. Abstr.) **(Ger)**

[Quality of life and coping with illness in patients with acute myeloid leukemia] Schumacher A, et al. **Psychother Psychosom Med Psychol** 1996 Nov; 46(11):385–90 (Eng. Abstr.) **(Ger)**

[Age dependence of coping strategies in children and adolescents with diabetes mellitus] Zangerle M, et al. **Psychother Psychosom Med Psychol** 1997 Jul;47(7):240–8 (Eng. Abstr.) **(Ger)**

[Are there signs of hospitalism in the rehabilitation process?] Barolin GS. **Rehabilitation (Stuttg)** 1997 Feb;36(1):51–5 (Eng. Abstr.) **(Ger)**

[The Bern Coping Forms BEFO—an instrument for self- and observer rating of coping with illness] Heim E, et al. **Rehabilitation (Stuttg)** 1996 Nov;35(4):XXXI–XLI (60 ref.) (Eng. Abstr.) **(Ger)**

[Subjective disability caused by physical and psychological complaints in long-term follow-up after transient ischemic attacks or "minor stroke"] Schnider P, et al. **Rehabilitation (Stuttg)** 1996 Aug;35(3):143–9 (Eng. Abstr.) **(Ger)**

[German version of the Nottingham Health Profile (NHP): translation and psychometric validation] Kohlmann T, et al. **Soz Praventivmed** 1997;42(3):175–85 (Eng. Abstr.) **(Ger)**

[Determinants of the quality of life in chronic renal failure] Niechzial M, et al. **Soz Praventivmed** 1997;42(3):162–74 (Eng. Abstr.) **(Ger)**

[Mucopolysaccharidoses from the view point of mucopolysaccharidoses families—10 years' experiences of the "Austrian Society for Mucopolysaccharidoses"] Fang-Kircher S, et al. **Wien Klin Wochenschr** 1996; 108(2):29–32 (Eng. Abstr.) **(Ger)**

[The physically ill patient needs psychotherapy] Barolin GS. **Wien Med Wochenschr** 1996;146(12):245–52 (19 ref.) (Eng. Abstr.) **(Ger)**

[Rehabilitation hospitalism] Barolin GS. **Wien Med Wochenschr** 1996;146(17):472–7 (Eng. Abstr.) **(Ger)**

[Adjusting to illness and secondary prevention in unemployed patients from the medical psychology viewpoint] Dauer S, et al. **Wien Med Wochenschr** 1997;147(11):283–6 (Eng. Abstr.) **(Ger)**

[Patient education—support—help with decisions: ethical aspects in treatment of amyotrophic lateral sclerosis] Meran JG, et al. **Wien Med Wochenschr** 1996;146(9–10):190–4 (21 ref.) (Eng. Abstr.) **(Ger)**

[Innovative respiratory muscle training for patients with Duchenne muscular dystrophy—a psychological evaluation] Ungar D, et al. **Wien Med Wochenschr** 1996; 146(9–10):213–6 (Eng. Abstr.) **(Ger)**

[Psychosomatic treatment of backache] Eich W. **Z Arztl Fortbild (Jena)** 1997 Jan;90(8):693–7 (Eng. Abstr.) **(Ger)**

[Basic principles of psychological adjustment in the chronically ill child] Colditz K. **Z Arztl Fortbild Qualitatssich** 1997 Jun;91(3):203–12 (Eng. Abstr.) **(Ger)**

[A bio-psychosocial treatment concept improves coping with illness by geriatric patients] Schmeling-Kludas C. **Z Gerontol Geriatr** 1997 May–Jun;30(3):242–7 (Eng. Abstr.) **(Ger)**

[Psychopathology, self concept and developmental delay in healthy and chronically ill adolescents. Results of a 4 1/2 year longitudinal study] Boeger A, et al. **Z Kinder Jugenpsychiatr** 1996 Dec;24(4):231–9 (Eng. Abstr.) **(Ger)**

[Questionnaire to assess perception of chronic disease in couples. Perceptual pattern in coronary patients and their partners] Biskup J, et al. **Z Psychosom Med Psychoanal** 1996;42(1):56–70 (Eng. Abstr.) **(Ger)**

[Clinical dimensions of contemporary cultural psychiatry] Alarcón RD. **Acta Psiquiatr Psicol Am Lat** 1995 Dec; 41(4):265–74 (73 ref.) (Eng. Abstr.) **(Spa)**

SICK SINUS SYNDROME

[Sick sinus syndrome] Hiejima K. **Ryoikibetsu Shokogun Shirizu** 1996;(12):411–5 (10 ref.) **(Jpn)**

[Sinus pause, sinus arrest] Wakatsuki T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):407–10 (11 ref.) **(Jpn)**

CHEMICALLY INDUCED

Irreversible sinus node dysfunction induced by resumption of lithium therapy. Terao T, et al. **Acta Psychiatr Scand** 1996 May;93(5):407–8

COMPLICATIONS

Congenital defect of the left pericardium with sick sinus syndrome. Hano O, et al. **Am Heart J** 1996 Dec; 132(6):1293–5

Stroke in paced patients with sick sinus syndrome: relevance of atrial mechanical function, pacing mode and clinical characteristics. Mattioli AV, et al. **Cardiology** 1997 May–Jun;88(3):264–70

Sick sinus syndrome in association with malignant lymphoma [letter] Suzuki T, et al. **Eur Heart J** 1996 Jun;17(6):968 (5 ref.)

Stroke and atrial fibrillation in sick sinus syndrome [editorial] Alt E, et al. **Heart** 1997 Jun;77(6):495–7

An unusual association: sick sinus syndrome and congenital cataract in a 6-month-old girl [letter] Coşkun Y, et al. **Int J Cardiol** 1996 Aug;55(3):292–4

Blind atrial pacing for patients with sinus node disease who develop atrial fibrillation during permanent pacemaker implantation. Fyfe T, et al. **Int J Cardiol** 1997 Jan 31; 58(2):188–91

Association of sick sinus syndrome with hyperinsulinemia and insulin resistance in patients with non-insulin-dependent diabetes mellitus: report of four cases. Wasada T, et al. **Intern Med** 1995 Dec;34(12):1174–7

Transient sick sinus syndrome associated with immunoblastic lymphadenopathy. Moridaira K, et al. **J Med** 1997; 28(1–2):81–6

[Recurrent syncope in patients with sick sinus syndrome carrying a permanent pacemaker] Máñez RS, et al. **Rev Esp Cardiol** 1996 Feb;49(2):97–103 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Syncope in an elderly. Sick sinus syndrome. Ardian JS, et al. **Singapore Med J** 1996 Apr;37(2):205, 236–7

[Transesophageal electrostimulation of the heart in the diagnosis of sinus node dysfunction] Prikhod'ko NA, et al. **Voen Med Zh** 1996 Jun;317(6):72–3 **(Rus)**

DRUG THERAPY

[Effects of oral amezinium metilsulfate in patients with sick sinus syndrome] Noma K, et al. **J Cardiol** 1997 Jul; 30(1):29–35 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Hyperthyroidism complicated with sick sinus syndrome. Namura M, et al. **Jpn Circ J** 1995 Dec;59(12):824–8 (22 ref.)

GENETICS

[The constitutional and genetic characteristics of patients with the sick sinus syndrome] Nikulina SIu, et al. **Ter Arkh** 1997;69(4):34–7 **(Rus)**

MICROBIOLOGY

[Borrelia burgdorferi as a cause of sick sinus syndrome?] Bartuněk P, et al. **Cas Lek Cesk** 1996 Nov 20; 135(22):729–31 (Eng. Abstr.) **(Cze)**

PHYSIOPATHOLOGY

Effects of right ventricular pacing on ventriculoatrial conduction and systemic venous responses in sick sinus patients. Kong CW, et al. **Angiology** 1996 Oct;47(10):973–80

Sinus node dysfunction in acute inferior myocardial infarction. Role of sinus node artery and clinical course in patients with one-vessel coronary artery disease. Kyriakidis M, et al. **Cardiology** 1997 Mar–Apr;88(2):166–9

[An intrapatient comparison of adaptation to aerobic and anaerobic exertion during 3 types of physiological cardiac stimulation in chronotropic failure of the sinus node: DDD, VVIR and DDDR] Occhetta E, et al. **Cardiologia** 1997 Jan;42(1):51–7 (Eng. Abstr.) **(Ita)**

[Atrioventricular junctional rhythm] Sekiguchi A, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):505–8 (4 ref.) **(Jpn)**

[State of autonomic regulation in patients with mitral valve prolapse and dysfunction of sinus node] Nedostup AV, et al. **Klin Med (Mosk)** 1996;74(3):35–9 (Eng. Abstr.) **(Rus)**

THERAPY

ANP concentrations during interchanging DDD–VVI pacing modes in patients with retrograde ventriculoatrial conduction. Papadopoulos CL, et al. **Acta Cardiol** 1997; 52(1):37–47

Effectiveness and limitations of the fallback I algorithm for transient supraventricular tachyarrhythmias in DDD pacing. Mayumi H, et al. **Artif Organs** 1996 Jul;20(7):810–4

Effects of permanent pacemaker and oral theophylline in sick sinus syndrome the THEOPACE study: a randomized controlled trial. Alboni P, et al. **Circulation** 1997 Jul 1; 96(1):260–6

Advances in pacing for the patient with sick sinus syndrome. Alagona P Jr. **Curr Opin Cardiol** 1997 Jan;12(1):3–11 (114 ref.)

Erratic prolongation of the pacing spike interval with presyncope as the only manifestation of minute bipolar lead insulation failure. Gavaliatsis IP, et al. **Heart** 1997 Apr; 77(4):384–5

Left atrial appendage function during DDD and VVI pacing. Simantirakis EN, et al. **Heart** 1997 May;77(5):428–31

Transvenous right ventricular pacing through coronary sinus in the absence of right superior vena cava. Gambhir DS, et al. **Indian Heart J** 1996 Jul–Aug;48(4):401–2

Blind atrial pacing for patients with sinus node disease who develop atrial fibrillation during permanent pacemaker implantation. Fyfe T, et al. **Int J Cardiol** 1997 Jan 31; 58(2):188–91

Failure of automatic mode switching: recognition and management. Ellenbogen KA, et al. **Pacing Clin Electrophysiol** 1997 Feb;20(2 Pt 1):268–75

Acute changes in left atrial and left ventricular diameters after physiological pacing. Ishikawa T, et al. **Pacing Clin Electrophysiol** 1996 Feb;19(2):143–9

Use of automatic mode change between DDD and AAI to facilitate native atrioventricular conduction in patients with sick sinus syndrome or transient atrioventricular block. Mayumi H, et al. **Pacing Clin Electrophysiol** 1996 Nov; 19(11 Pt 2):1740–7

Reliability of a new algorithm for automatic mode switching from DDDR to DDIR pacing mode in sinus node disease patients with chronotropic incompetence and recurrent paroxysmal atrial fibrillation. Ricci R, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1719–23

AAIR versus DDDR pacing in patients with impaired sinus node chronotropy: an echocardiographic and

cardiopulmonary study. Vardas PE, et al.
Pacing Clin Electrophysiol 1997 Jul;20(7):1762–8
[Results of long–term permanent atrial stimulation in sick sinus disease] Goicolea de Oro A, et al.
Rev Esp Cardiol 1997 Jul;50(7):474–9 (Eng. Abstr.) **(Spa)**
[Auricular fibrillation and stroke in patients with sick sinus syndromeusing permanent pacemakers] Sanjuán Máñez R, et al. **Rev Esp Cardiol** 1996 Jul;49(7):492–500 (Eng. Abstr.) **(Spa)**

SICKLE CELL HEMOGLOBIN C DISEASE see **HEMOGLOBIN SC DISEASE**

SICKLE CELL TRAIT

Collapse & death associated with sickle cell trait [letter; comment] Lieberman J. **Mil Med** 1997 Mar;162(3):ii. Comment on: Mil Med 1996 Dec;161(12):766–7.

BLOOD

Hemoglobin A2 levels in healthy persons, sickle cell disease, sickle cell trait, and beta–thalassemia by capillary isoelectric focusing. Craver RD, et al.
Am J Clin Pathol 1997 Jan;107(1):88–91
The clinical manifestations of cerebral malaria among Nigerian children with the sickle cell trait. Olumese PE, et al. **Ann Trop Paediatr** 1997 Jun;17(2):141–5
Serum lipids, ABO blood group and sickle cell trait. Njoku OU, et al. **Indian J Physiol Pharmacol** 1996 Apr;40(2):171–4
Tumor necrosis factor alpha in children with sickle cell disease in stable condition. Kuvibidila S, et al.
J Natl Med Assoc 1997 Sep;89(9):609–15
Serum and urinary amino acid levels in sickle cell disease. VanderJagt DJ, et al. **J Trop Pediatr** 1997 Aug;43(4):220–5
Effects of gamma irradiation on red cells from donors with sickle cell trait. Jin YS, et al. **Transfusion** 1997 Aug; 37(8):804–8

COMPLICATIONS

Sudden exertional death and sickle cell trait [letter; comment] Evans P, et al. **Am Fam Physician** 1997 Feb 15;55(3):784 . Comment on: Am Fam Physician 1996 Jul;54(1):237–40.
Women with sickle cell trait are at increased risk for preeclampsia. Larrabee KD, et al.
Am J Obstet Gynecol 1997 Aug;177(2):425–8
Pain, quality of life, and coping in sickle cell disease. Fuggle P, et al. **Arch Dis Child** 1996 Sep;75(3):199–203
You're the flight surgeon: sickle cell trait and beta–thalassemia. Bendrick GA.
Aviat Space Environ Med 1997 Mar;68(3):244–5
Postural vasoconstriction and leg ulceration in homozygous sickle cell disease. Mohan JS, et al. **Clin Sci (Colch)** 1997 Feb;92(2):153–8
Priapism in sickle cell disease: the case for early implantation of the penile prosthesis. Monga M, et al. **Eur Urol** 1996; 30(1):54–9
Plasmodium falciparum: sickle–cell trait is associated with higher prevalence of multiple infections in Gabonese children with asymptomatic infections. Ntoumi F, et al. **Exp Parasitol** 1997 Sep;87(1):39–46
Renal papillary necrosis in a patient with sickle cell trait. Zadeii G, et al. **J Am Soc Nephrol** 1997 Jun;8(6):1034–9
Management of sickle cell disease and hyphema. Liebmann JM. **J Glaucoma** 1996 Aug;5(4):271–5
Renal medullary carcinoma and sickle cell trait. Friedrichs P, et al. **J Urol** 1997 Apr;157(4):1349
Sickle cell trait and sudden death in athletes [letter; comment] Kerle KK, et al. **JAMA** 1996 Nov 13;276(18):1472. Comment on: JAMA 1996 Jul 17;276(3):199–204.
Exertional collapse and sudden death associated with sickle cell trait [see comments] Kerle KK, et al. **Mil Med** 1996 Dec;161(12):766–7. Comment in: Mil Med 1997 Mar;162(3):ii.
In vitro lymphocyte blastogenic responses and cytokine production in sickle cell disease patients with acute pneumonia. Taylor SC, et al. **Pediatr Infect Dis J** 1996 Apr;15(4):340–4
Rhabdomyolysis and hemolysis associated with sickle cell trait and glucose–6–phosphate dehydrogenase deficiency. Kimmick G, et al. **South Med J** 1996 Nov;89(11):1097–8
Sickle cell disease and risk of peptic ulceration. Bates I, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):292
[Prevention and treatment of erectile disorders in sickle cell disease] Bachir D, et al. **Rev Med Interne** 1997;18 Suppl 1:46s–51s (17 ref.) (Eng. Abstr.) **(Fre)**
[A rare cause of hematuria: heterozygote sickle trait (letter)] Yeche S, et al. **Rev Med Interne** 1996;17(7):602 **(Fre)**
[Cardiac surgery using cardiopulmonary bypass in a patient with sickle–cell trait] Ohashi Y, et al. **Masui** 1996 Oct; 45(10):1269–71 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Proficiency testing of hemoglobinopathy techniques in Ontario laboratories. Lafferty J, et al.
Am J Clin Pathol 1997 May;107(5):567–75

EPIDEMIOLOGY

Benign clinical course in homozygous sickle cell disease: a search for predictors. Thomas PW, et al.
J Clin Epidemiol 1997 Feb;50(2):121–6
The prevalence of hemoglobin S and glucose–6–phosphate dehydrogenase deficiency in Jordanian newborn. Talafih K, et al. **J Obstet Gynaecol Res** 1996 Oct;22(5):417–20

GENETICS

DNA haplotypes in Africans and West Indians with sickle cell anaemia or SC disease. Konstantopoulos K, et al.
Gene Geogr 1996 Apr;10(1):19–24
Benign clinical course in homozygous sickle cell disease: a search for predictors. Thomas PW, et al.
J Clin Epidemiol 1997 Feb;50(2):121–6
Evidence of maternal segregation distortion in the sickle cell and beta thalassaemia traits [letter] Silva ID, et al.
J Med Genet 1996 Jun;33(6):525

PATHOLOGY

Sudden exertional death in a soldier with sickle cell trait. Murray MJ, et al. **Mil Med** 1996 May;161(5):303–5 (18 ref.)

PHYSIOPATHOLOGY

Spectral pulsed Doppler sonography of renal vascular resistance in sickle cell disease: clinical implications. Aikimbaev KS, et al. **Br J Radiol** 1996 Dec;69(828):1125–9
Anaerobic exercise components during the force–velocity test in sickle cell trait. Bilé A, et al. **Int J Sports Med** 1996 May;17(4):254–8
Exercise–induced death in sickle cell trait: role of aging, training, and deconditioning. Le Gallais D, et al.
Med Sci Sports Exerc 1996 May;28(5):541–4

URINE

Serum and urinary amino acid levels in sickle cell disease. VanderJagt DJ, et al. **J Trop Pediatr** 1997 Aug;43(4):220–5

SICKNESS IMPACT PROFILE

Health impact of peptic ulcer in the United States. Sonnenberg A, et al. **Am J Gastroenterol** 1997 Apr; 92(4):614–20
Direct assessment of functional status in older patients with schizophrenia. Klapow JC, et al. **Am J Psychiatry** 1997 Jul;154(7):1022–4
Factors affecting responses on Dermatology Life Quality Index items among vitiligo sufferers. Kent G, et al.
Clin Exp Dermatol 1996 Sep;21(5):330–3
Trends and fluctuations in the impact of oral conditions among older adults during a one year period. Slade GD, et al. **Community Dent Oral Epidemiol** 1996 Oct; 24(5):317–21
Quality of life of people with epilepsy: a European study. Baker GA, et al. **Epilepsia** 1997 Mar;38(3):353–62
Factors affecting quality of life of the Korean aged stroke patients. Yoon H. **Int J Aging Hum Dev** 1997;44(3):167–81
Long–term outcome after stroke: a disability–orientated approach. Hochstenbach J, et al. **Int J Rehabil Res** 1996 Sep;19(3):189–200
Evaluating changes in health status: reliability and responsiveness of five generic health status measures in workers with musculoskeletal disorders. Beaton DE, et al.
J Clin Epidemiol 1997 Jan;50(1):79–93
Assessing the responsiveness of a functional status measure: the Sickness Impact Profile versus the SIP68. de Bruin AF, et al. **J Clin Epidemiol** 1997 May;50(5):529–40 (38 ref.)
Item re–scaling of an Italian version of the sickness impact profile: effect of age and profession of the observers. Marchionni N, et al. **J Clin Epidemiol** 1997 Feb; 50(2):195–201
Comparison of a generic to disease–targeted health–related quality–of–life measures for multiple sclerosis. Vickrey BG, et al. **J Clin Epidemiol** 1997 May;50(5):557–69
Value of caregiver ratings in evaluating the quality of life of patients with cancer. Sneeuw KC, et al.
J Clin Oncol 1997 Mar;15(3):1206–17
Variations in the social impact of oral conditions among older adults in South Australia, Ontario, and North Carolina. Slade GD, et al. **J Dent Res** 1996 Jul;75(7):1439–50
Longitudinal assessment of quality of life in acute psychiatric inpatients: reliability and validity. Russo J, et al.
J Nerv Ment Dis 1997 Mar;185(3):166–75
Development of a symptom severity index and a symptom impact index for stress incontinence in women. Black N, et al. **Neurourol Urodyn** 1996;15(6):630–40
Dimensions of the impact of cancer pain in a four country sample: new information from multidimensional scaling. Cleeland CS, et al. **Pain** 1996 Oct;67(2–3):267–73
Health–related quality of life assessments in osteoarthritis during NSAID treatment. de Bock GH, et al.
Pharm World Sci 1996 Aug;18(4):130–6
Correlates of patients' global assessment of arthritis impact. A 2–year study of 216 patients with RA. Smedstad LM, et al. **Scand J Rheumatol** 1997;26(4):259–65
Assessing quality of life after stroke. The value and limitations of proxy ratings. Sneeuw KC, et al. **Stroke** 1997 Aug; 28(8):1541–9
[Assessment of the transcultural equivalence of the Spanish version of the profile of quality of life for chronic patients (PECVEC)] Fernández–López JA, et al.
Med Clin (Barc) 1997 Sep 6;109(7):245–50 (Eng. Abstr.) **(Spa)**

SIDEROPHILIN see **TRANSFERRIN**

SIDEROPHORES

ADMINISTRATION & DOSAGE

Evaluation of a new method of administration of the iron chelating agent deferoxamine. Borgna–Pignatti C, et al.
J Pediatr 1997 Jan;130(1):86–8

ADVERSE EFFECTS

Desferrioxamine ototoxicity in an adult transfusion–dependent population. Chiodo AA, et al.
J Otolaryngol 1997 Apr;26(2):116–22
Sensorimotor neurotoxicity associated with high–dose deferoxamine treatment. Levine JE, et al.
J Pediatr Hematol Oncol 1997 Mar–Apr;19(2):139–41
[Ocular side effects of deferoxamine therapy in aplastic anemia with transfusion–induced hemochromatosis] Spraul CW, et al. **Klin Monatsbl Augenheilkd** 1996 Jul;209(1):31–6 (Eng. Abstr.) **(Ger)**
[Retinopathy caused by desferrioxamine (letter)] Sánchez Dalmau BF, et al. **Med Clin (Barc)** 1996 Nov 9;107(16):636 **(Spa)**

BIOSYNTHESIS

Analysis of the alcABC operon encoding alcaligin biosynthesis enzymes in Bordetella bronchiseptica. Giardina PC, et al. **Gene** 1997 Jul 18;194(1):19–24
Characterisation of the pvdE gene which is required for pyoverdine synthesis in Pseudomonas aeruginosa. McMorran BJ, et al. **Gene** 1996 Oct 17;176(1–2):53–9
Ferric uptake regulator mutants of Pseudomonas aeruginosa with distinct alterations in the iron–dependent repression of exotoxin A and siderophores in aerobic and microaerobic environments. Barton HA, et al. **Mol Microbiol** 1996 Sep; 21(5):1001–17
A cytochrome c biogenesis gene involved in pyoverdine production in Pseudomonas fluorescens ATCC 17400. Gaballa A, et al. **Mol Microbiol** 1996 Aug;21(4):777–85

CHEMICAL SYNTHESIS

Synthesis of optically pure chrysobactin and immunoassay development. Lu C, et al. **Biometals** 1996 Oct;9(4):377–83
Specific photoaffinity labelling of a ferripyoverdin outer membrane receptor of Pseudomonas aeruginosa. Ocaktan A, et al. **FEBS Lett** 1996 Nov 4;396(2–3):243–7
Synthesis of fragments of the peptide component of pseudobactin. Okonya JF, et al. **J Pept Sci** 1996 May–Jun; 2(3):157–64

CHEMISTRY

6–L–alanineferrirubin, a ferrichrome–type siderophore from the fungus Aspergillus ochraceous. Hossain MB, et al.
Acta Crystallogr C 1997 Jun 15;53 (Pt 6):716–8
Chemical Determinants of antimalarial activity of reversed siderophores. Tsafack A, et al.
Antimicrob Agents Chemother 1996 Sep;40(9):2160–6
Structures and characteristics of novel siderophores from plant deleterious Pseudomonas fluorescens A225 and Pseudomonas putida ATCC 39167. Khalil–Rizvi S, et al.
Biochemistry 1997 Apr 8;36(14):4163–71
Physical and structural characterization of yersiniophore, a siderophore produced by clinical isolates of Yersinia enterocolitica. Chambers CE, et al. **Biometals** 1996 Apr; 9(2):157–67
Characterization of exochelins of Mycobacterium avium: evidence for saturated and unsaturated and for acid and ester forms. Wong DK, et al. **J Bacteriol** 1996 Nov; 178(21):6394–8
Synthesis of fragments of the peptide component of pseudobactin. Okonya JF, et al. **J Pept Sci** 1996 May–Jun; 2(3):157–64

CLASSIFICATION

Use of siderophores to type pseudomonads: the three Pseudomonas aeruginosa pyoverdine systems. Meyer JM, et al. **Microbiology** 1997 Jan;143 (Pt 1):35–43

ISOLATION & PURIFICATION

Purification, spectroscopic analysis and biological activity of the macrocyclic dihydroxamate siderophore alcaligin produced by Bordetella pertussis and Bordetella bronchiseptica. Brickman TJ, et al. **Biometals** 1996 Apr; 9(2):191–203

METABOLISM

Species selectivity of new siderophore–drug conjugates that use specific iron uptake for entry into bacteria. Diarra MS, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2610–7
Iron transport–mediated drug delivery using mixed–ligand siderophore–beta–lactam conjugates. Ghosh A, et al.
Chem Biol 1996 Dec;3(12):1011–9
The distal GATA sequences of the sid1 promoter of Ustilago maydis mediate iron repression of siderophore production and interact directly with Urbs1, a GATA family transcription factor. An Z, et al. **EMBO J** 1997 Apr 1; 16(7):1742–50
Oligomeric states and siderophore binding of the

ligand-gated FhuA protein that forms channels across Escherichia coli outer membranes. Locher KP, et al. **Eur J Biochem** 1997 Aug 1;247(3):770–5

Sequence and genetic organization of a Bacillus subtilis operon encoding 2,3-dihydroxybenzoate biosynthetic enzymes. Rowland BM, et al. **Gene** 1996 Oct 31; 178(1–2):119–23

Siderophore production by Staphylococcus aureus and identification of iron-regulated proteins. Courcol RJ, et al. **Infect Immun** 1997 May;65(5):1944–8

Siderophore-mediated iron uptake in Alcaligenes eutrophus CH34 and identification of aleB encoding the ferric iron-alcaligin E receptor. Gilis A, et al. **J Bacteriol** 1996 Sep;178(18):5499–507

Involvement of vulnibactin and exocellular protease in utilization of transferrin- and lactoferrin-bound iron by Vibrio vulnificus. Okujo N, et al. **Microbiol Immunol** 1996; 40(8):595–8

An iron-regulated outer-membrane protein specific to Bordetella bronchiseptica and homologous to ferric siderophore receptors. Beall B, et al. **Microbiology** 1997 Jan;143 (Pt 1):135–45

The AngR protein and the siderophore anguibactin positively regulate the expression of iron-transport genes in Vibrio anguillarum. Chen Q, et al. **Mol Microbiol** 1996 Oct; 22(1):127–34

Excited state properties of the siderophore pyochelin and its complex with zinc ions. Namiranian S, et al. **Photochem Photobiol** 1997 May;65(5):777–82

Double mutagenesis of a positive charge cluster in the ligand-binding site of the ferric enterobactin receptor, FepA. Newton SM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4560–5

[Staphylococcal utilization of siderophores produced by bacilli of the genus Bacillus] Szarapińska-Kwaszewska J, et al. **Med Dosw Mikrobiol** 1996;48(3–4):123–30 (Eng. Abstr.) **(Pol)**

PHARMACOLOGY

Effect of desferrioxamine cardioplegia on ischemia-reperfusion injury in isolated rat heart. Nicholson SC, et al. **Ann Thorac Surg** 1997 Apr;63(4):1003–11

Evaluation of growth promotion and inhibition from mycobactins and nonmycobacterial siderophores (Desferrioxamine and FR160) in Mycobacterium aurum. Bosne-David S, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1837–9

In vitro activities of novel catecholate siderophores against Plasmodium falciparum. Pradines B, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2094–8

Chemical Determinants of antimalarial activity of reversed siderophores. Tsafack A, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2160–6

Siderophore-mediated iron acquisition mechanisms in Vibrio vulnificus biotype 2. Biosca EG, et al. **Appl Environ Microbiol** 1996 Mar;62(3):928–35

Growth of Actinobacillus pleuropneumoniae is promoted by exogenous hydroxamate and catechol siderophores. Diarra MS, et al. **Appl Environ Microbiol** 1996 Mar;62(3):853–9

Effects of deferoxamine on H2O2-induced oxidative stress in isolated rat heart. Dulchavsky SA, et al. **Basic Res Cardiol** 1996 Nov-Dec;91(6):418–24

Iron uptake and intracellular metal transfer in mycobacteria mediated by xenosiderophores. Matzanke BF, et al. **Biometals** 1997 Jul;10(3):193–203

Aluminium-induced bone disease in uremic rats: effect of deferoxamine. Jablonski G, et al. **Biosci Rep** 1996 Feb; 16(1):49–63

Deferoxamine improves spatial memory performance following experimental brain injury in rats. Long DA, et al. **Brain Res** 1996 Apr 22;717(1–2):109–17

Regulation of the iron uptake genes in Pseudomonas fluorescens M114 by pseudobactin M114: the pbrA sigma factor gene does not mediate the siderophore regulatory response. Callanan M, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):61–6

Effect on an iron-chelator on ascorbate-induced cytotoxicity. Sakagami H, et al. **Free Radic Biol Med** 1997; 23(2):260–70

Effects of deferoxamine and sympathectomy on endothelin-1-induced contraction and acetylcholine-induced relaxation following subarachnoid hemorrhage in carotid artery. Sarioğlu Y, et al. **Gen Pharmacol** 1997 Jan;28(1):145–51

Neuroprotective effect of the iron chelator desferrioxamine against MPP+ toxicity on striatal dopaminergic terminals. Santiago M, et al. **J Neurochem** 1997 Feb;68(2):732–8

Inhibition of iron toxicity in human hepatocyte cultures by pyoverdins Pa A and Pf, the peptidic siderophores of Pseudomonas aeruginosa and fluorescens. Jégo P, et al. **Liver** 1997 Apr;17(2):70–5

Mimosine blocks cell cycle progression by chelating iron in asynchronous human breast cancer cells. Kulp KS, et al. **Toxicol Appl Pharmacol** 1996 Aug;139(2):356–64

Brucella abortus siderophore 2,3-dihydroxybenzoic acid protects brucellae from killing by macrophages. Leonard BA, et al. **Vet Res** 1997;28(1):87–92

PHYSIOLOGY

The interchangeability of siderophores in Staphylococci. Sobis-Glinkowska M, et al. **Acta Microbiol Pol** 1995; 44(2):127–34

Fungal siderophores in plant-microbe interactions. Riquelme M. **Microbiologia** 1996 Dec;12(4):537–46 (60 ref.)

THERAPEUTIC USE

Effect of hypothermia, dichloroacetate, and deferoxamine in the treatment for cortical edema and functional recovery after experimental cortical impact in the rat. Heegaard W, et al. **Acad Emerg Med** 1997 Jan;4(1):33–9

Use of desferrioxamine in the treatment of aceruloplasminemia. Miyajima H, et al. **Ann Neurol** 1997 Mar;41(3):404–7

Enhancement of photodynamic therapy in gastric cancer cells by removal of iron. Tan WC, et al. **Gut** 1997 Jul;41(1):14–8

Clinically achievable plasma deferoxamine concentrations eliminate Pneumocystis carinii trophozoites in a rat model. Merali S, et al. **J Eukaryot Microbiol** 1996 Sep-Oct; 43(5):52S

The prophylactic effects of superoxide dismutase, catalase, desferrioxamine, verapamil and disulfiram in experimental colitis. Köksoy FN, et al. **J R Coll Surg Edinb** 1997 Feb; 42(1):27–30

The use of deferoxamine infusions to enhance the response rate to interferon-alpha treatment of chronic viral hepatitis B. Bayraktar Y, et al. **J Viral Hepat** 1996 May;3(3):129–35

Effects of desferrioxamine therapy on chronic disease anemia associated with rheumatoid arthritis. Salvarani C, et al. **Rheumatol Int** 1996;16(2):45–8

Protective effect of desferrioxamin against TPA caused inflammation in CD-1 mouse skin. Soybir GR, et al. **Surg Oncol** 1996 Oct-Dec;5(5–6):253–8

[The causes, diagnosis and treatment of aluminum toxicity in patients with chronic renal failure undergoing dialysis] Wang G, et al. **Chung Hua Nei Ko Tsa Chih** 1996 Jan; 35(1):36–40 (Eng. Abstr.) **(Chi)**

TOXICITY

Siderophore activity of chemically synthesized dihydroxybenzoyl derivatives of spermidines and cystamide. Reissbrodt R, et al. **Biometals** 1997 Apr; 10(2):95–103

SIDEROSIS

see related

HEMOSIDEROSIS

Ocular siderosis. Diagnosis and management. Weiss MJ, et al. **Retina** 1997;17(2):105–8

COMPLICATIONS

Superficial siderosis of the central nervous system. O'Riordan JI, et al. **Ir J Med Sci** 1996 Jul-Sep;165(3):182–4

Superficial siderosis of the central nervous system: an underestimated cause of hearing loss. Castelli ML, et al. **J Laryngol Otol** 1997 Jan;111(1):60–2

Cochlear implantation in superficial siderosis. Irving RM, et al. **J Laryngol Otol** 1996 Dec;110(12):1151–3

Trochlear nerve palsy associated with superficial siderosis of the central nervous system. Shinmei Y, et al. **Jpn J Ophthalmol** 1997 Jan-Feb;41(1):19–22

Focal dystonia secondary to superficial siderosis. Cockerell OC, et al. **Mov Disord** 1996 Jul;11(4):452–3

DIAGNOSIS

Superficial siderosis of the central nervous system. Its MRI manifestations. Uchino A, et al. **Clin Imaging** 1997 Jul-Aug; 21(4):241–5

Superficial siderosis of the central nervous system: MRI findings and clinical significance. Offenbacher H, et al. **Neuroradiology** 1996 May;38 Suppl 1:S51–6 (20 ref.)

[Two cases of superficial siderosis of the central nervous system. Findings of the cerebrospinal fluid, magnetic resonance imaging and positron emission tomography] Yamazaki K, et al. **Rinsho Shinkeigaku** 1995 Oct; 35(10):1125–30 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Hepatocellular carcinoma and african iron overload [letter; comment] Walker AR, et al. **Gut** 1996 Jun;38(6):937–8. Comment on: Gut 1995 Nov;37(5):727–30.

ETIOLOGY

Surgical management of superficial siderosis following cervical nerve root avulsion. Tapscott SJ, et al. **Ann Neurol** 1996 Dec;40(6):936–40

Superficial siderosis and episodic fourth nerve paresis. Report of a case with clinical and magnetic resonance imaging findings. Hashimoto M, et al. **J Neuroophthalmol** 1996 Dec; 16(4):277–80

Rapid development of hepatocellular siderosis after liver transplantation for neonatal hemochromatosis. Egawa H, et al. **Transplantation** 1996 Nov 27;62(10):1511–3

["Central islands"--an early postoperative complication after photorefractive keratectomy] Schmidt-Petersen H, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):423–7 (Eng. Abstr.) **(Ger)**

PATHOLOGY

A reappraisal of hepatic siderosis in patients with end-stage cirrhosis: practical implications for the diagnosis of hemochromatosis. Deugnier Y, et al. **Am J Surg Pathol** 1997 Jun;21(6):669–75

Morphological and functional study of a case of superficial siderosis of the central nervous system. Maggioni F, et al. **Ital J Neurol Sci** 1997 Apr;18(2):113–8

Intra-alveolar pulmonary siderophages in sudden infant death: a marker for previous imposed suffocation. Becroft DM, et al. **Pathology** 1997 Feb;29(1):60–3 (19 ref.)

[Sidero-fibrosis of the lungs after decades of arc welding] Steurich F, et al. **Pneumologie** 1997 Jun;51(6):545–9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Superficial siderosis of the brain: roles for cerebrospinal fluid circulation, iron and the hydroxyl radical. Maurizi CP. **Med Hypotheses** 1996 Oct;47(4):261–4

SURGERY

Surgical management of superficial siderosis following cervical nerve root avulsion. Tapscott SJ, et al. **Ann Neurol** 1996 Dec;40(6):936–40

VETERINARY

How clean is a mini-pig?--Impressions and suggestions of a pathologist working in the field of toxicology. Rinke M. **Pharmacol Toxicol** 1997;80 Suppl 2:16–22

SIDS see **SUDDEN INFANT DEATH**

SIGA see **IGA, SECRETORY**

SIGMA ELEMENT see **SIGMA FACTOR**

SIGMA FACTOR

Towards a unified grammatical model of sigma 70 and sigma 54 bacterial promoters. Collado-Vides J. **Biochimie** 1996; 78(5):351–63

Molecular systematic studies of eubacteria, using sigma70-type sigma factors of group 1 and group 2. Gruber TM, et al. **J Bacteriol** 1997 Mar;179(5):1734–47

ANALYSIS

Identification of sigma factors for growth phase-related promoter selectivity of RNA polymerases from Streptomyces coelicolor A3(2). Kang JG, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2566–73

ANTAGONISTS & INHIBITORS

Reactivation of the Bacillus subtilis anti-sigma B antagonist, RsbV, by stress- or starvation-induced phosphatase activities. Voelker U, et al. **J Bacteriol** 1996 Sep; 178(18):5456–63

Mutational analysis of the early forespore/mother-cell signalling pathway in Bacillus subtilis. Londoño-Vallejo JA. **Microbiology** 1997 Aug;143 (Pt 8):2753–61

Two-stage regulation of an anti-sigma factor determines developmental fate during bacterial endospore formation. Kellner EM, et al. **Mol Microbiol** 1996 Sep;21(5):913–24

The C-terminal half of the anti-sigma factor, FlgM, becomes structured when bound to its target, sigma 28. Daughdrill GW, et al. **Nat Struct Biol** 1997 Apr;4(4):285–91

BIOSYNTHESIS

Mutations that increase expression of the rpoS gene and decrease its dependence on hfq function in Salmonella typhimurium. Brown L, et al. **J Bacteriol** 1997 Feb; 179(3):656–62

Regulation of RNA polymerase sigma subunit synthesis in Escherichia coli: intracellular levels of four species of sigma subunit under various growth conditions. Jishage M, et al. **J Bacteriol** 1996 Sep;178(18):5447–51

RNA polymerase beta mutations have reduced sigma70 synthesis leading to a hyper-temperature-sensitive phenotype of a sigma70 mutant. Zhou YN, et al. **J Bacteriol** 1997 Jul;179(13):4292–8

Increase in synthesis and stability of sigma 32 on treatment with inhibitors of DNA gyrase in Escherichia coli. Mizushima T, et al. **Mol Gen Genet** 1996 Dec 13; 253(3):297–302

CHEMISTRY

Epitope mapping using histidine-tagged protein fragments: application to Escherichia coli RNA polymerase sigma 70. Rao L, et al. **Anal Biochem** 1996 Oct 15;241(2):173–9

Crystal structure of a sigma 70 subunit fragment from E. coli RNA polymerase. Malhotra A, et al. **Cell** 1996 Oct 4;87(1):127–36

Identification of a prime suspect. Buc H. **Curr Biol** 1997 Feb 1;7(2):R97–9 (13 ref.)

Mutations in the 1.1 subdomain of Escherichia coli sigma factor sigma70 and disruption of its overall structure. Gopal V, et al. **Eur J Biochem** 1997 Mar 1;244(2):613–8

Identification of the epitope for a highly cross-reactive monoclonal antibody on the major sigma factor of bacterial RNA polymerase. Breyer MJ, et al. **J Bacteriol** 1997 Feb; 179(4):1404–8

DNA-binding determinants of sigma 54 as deduced from

libraries of mutations. Guo Y, et al. **J Bacteriol** 1997 Feb; 179(4):1239–45

Domain organization of the Escherichia coli RNA polymerase sigma 70 subunit. Severinova E, et al. **J Mol Biol** 1996 Nov 15;263(5):637–47

Analysis of the architecture of the transcription factor sigma N (sigma 54) and its domains by circular dichroism. Missailidis S, et al. **Mol Microbiol** 1997 May;24(3):653–64

The C-terminal half of the anti-sigma factor, FlgM, becomes structured when bound to its target, sigma 28. Daughdrill GW, et al. **Nat Struct Biol** 1997 Apr;4(4):285–91

Two domains within sigmaN (sigma54) cooperate for DNA binding. Cannon WV, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5006–11

Sigma domain structure: one down, one to go. Chan CL, et al. **Structure** 1996 Nov 15;4(11):1235–8 (34 ref.)

DRUG EFFECTS

Potassium permanganate susceptibility of sigma E-RNA polymerase-promoter complexes. Seyler RW Jr, et al. **Gene** 1996 Oct 24;177(1–2):129–32

GENETICS

The alternative sigma factor sigmaB in Staphylococcus aureus: regulation of the sigB operon in response to growth phase and heat shock. Kullik I, et al. **Arch Microbiol** 1997 Feb–Mar;167(2–3):151–9

Cloning, sequencing, and expression of the rpoD gene encoding the primary sigma factor of Xanthomonas campestris. Tseng YS, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):712–8

Comparative analysis of the interactions of Escherichia coli sigma S and sigma 70 RNA polymerase holoenzyme with the stationary-phase-specific bolAp1 promoter. Nguyen LH, et al. **Biochemistry** 1997 Feb 18;36(7):1748–54

Torsional constraints on the formation of open promoter complexes on DNA minicircles carrying sigma 54-dependent promoters. Qureshi M, et al. **Biochemistry** 1997 Oct 7;36(40):12303–16

A new sigma factor homolog in a cyanobacterium: cloning, sequencing, and light-responsive transcripts of rpoD2 from Microcystis aeruginosa K-81. Asayama M, et al. **Biochim Biophys Acta** 1997 Mar 20;1351(1–2):31–6

A novel genetic organization: the leuA-rpoD1 locus in the cyanobacterium Microcystis aeruginosa K-81. Asayama M, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):15–20

In vivo effect of DNA relaxation on the transcription of gene rpoH in Escherichia coli. López-Sánchez F, et al. **Biochim Biophys Acta** 1997 Jul 17;1353(1):79–83

Identification and analysis of the rpoS-dependent promoter of katE, encoding catalase HPII in Escherichia coli. Tanaka K, et al. **Biochim Biophys Acta** 1997 May 30;1352(2):161–6

Putative sigma-70-like promoters in a brown algal mitochondrial genome. Delaroque N, et al. **C R Acad Sci III** 1996 Sep;319(9):763–7

Mutations in the 1.1 subdomain of Escherichia coli sigma factor sigma70 and disruption of its overall structure. Gopal V, et al. **Eur J Biochem** 1997 Mar 1;244(2):613–8

Characterization of three cDNA species encoding plastid RNA polymerase sigma factors in Arabidopsis thaliana: evidence for the sigma factor heterogeneity in higher plant plastids. Tanaka K, et al. **FEBS Lett** 1997 Aug 18; 413(2):309–13

Impaired oxidative stress resistance of Bacillus subtilis sigB mutants and the role of katA and katE. Engelmann S, et al. **FEMS Microbiol Lett** 1996 Nov 15;145(1):63–9

Transcriptional analysis of the sigA and sigB genes of Brevibacterium lactofermentum. Oguiza JA, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):111–7

Sequence diversity of a gene encoding a putative primary sigma factor among Borrelia burgdorferi sensu lato strains. Pan MJ, et al. **FEMS Microbiol Lett** 1997 Mar 15; 148(2):153–8

Involvement of iclR and rpoS in the induction of acs, the gene for acetyl coenzyme A synthetase of Escherichia coli K-12. Shin S, et al. **FEMS Microbiol Lett** 1997 Jan 1; 146(1):103–8

Role of Escherichia coli rpoS and associated genes in defense against oxidative damage. Eisenstark A, et al. **Free Radic Biol Med** 1996;21(7):975–93 (130 ref.)

Role of rpoS regulon in resistance to oxidative stress and near-UV radiation in delta oxyR suppressor mutants of Escherichia coli. Ivanova AB, et al. **Free Radic Biol Med** 1997;23(4):627–36

Cloning, sequencing and characterization of the gene encoding a principal sigma factor homolog from the cyanobacterium Microcystis aeruginosa K-81. Asayama M, et al. **Gene** 1996 Nov 28;181(1–2):213–7

Isolation and sequence of a Mycobacterium tuberculosis sigma factor. Beggs ML, et al. **Gene** 1996 Oct 3; 174(2):285–7

Cloning, nucleotide sequence and characterization of the rpoD gene encoding the primary sigma factor of Rhodobacter capsulatus. Pasternak C, et al. **Gene** 1996 Oct 17;176(1–2):177–84

The rpoH gene encoding sigma 32 homolog of Vibrio cholerae. Sahu GK, et al. **Gene** 1997 Apr 21;189(2):203–7

Three sites of contact between the Bacillus subtilis transcription factor sigmaF and its antisigma factor SpoIIAB. Decatur AL, et al. **Genes Dev** 1996 Sep 15; 10(18):2348–58

Molecular cloning and functional analysis of an rpoS homologue gene from Vibrio cholerae N86. Hiratsu K, et al. **Genes Genet Syst** 1997 Apr;72(2):115–8

RNA polymerase sigma factors and cell-specific gene transcription in a simple developing organism. Losick R. **Harvey Lect** 1994–95;90:1–17 (44 ref.)

Expression of Salmonella typhimurium rpoS and rpoS-dependent genes in the intracellular environment of eukaryotic cells. Chen CY, et al. **Infect Immun** 1996 Nov; 64(11):4739–43

Avirulence of LT2 strains of Salmonella typhimurium results from a defective rpoS gene. Swords WE, et al. **Infect Immun** 1997 Jun;65(6):2451–3

An altered rpoS allele contributes to the avirulence of Salmonella typhimurium LT2. Wilmes-Riesenberg MR, et al. **Infect Immun** 1997 Jan;65(1):203–10

Dissection of the transcription machinery for housekeeping genes of Bradyrhizobium japonicum. Beck C, et al. **J Bacteriol** 1997 Jan;179(2):364–9

Mutations in the alpha and sigma-70 subunits of RNA polymerase affect expression of the mer operon. Caslake LF, et al. **J Bacteriol** 1997 Mar;179(5):1787–95

Molecular characterization of a large Borrelia burgdorferi motility operon which is initiated by a consensus sigma70 promoter. Ge Y, et al. **J Bacteriol** 1997 Apr;179(7):2289–99

The alternative sigma factor sigma28 of Legionella pneumophila restores flagellation and motility to an Escherichia coli fliA mutant. Heuner K, et al. **J Bacteriol** 1997 Jan;179(1):17–23

Transcriptional and mutational analyses of the rpoN operon in Caulobacter crescentus. Janakiraman RS, et al. **J Bacteriol** 1997 Aug;179(16):5138–47

Variation in RNA polymerase sigma subunit composition within different stocks of Escherichia coli W3110. Jishage M, et al. **J Bacteriol** 1997 Feb;179(3):959–63

Promoter selectivity of Escherichia coli RNA polymerase sigmaF holoenzyme involved in transcription of flagellar and chemotaxis genes. Kundu TK, et al. **J Bacteriol** 1997 Jul;179(13):4264–9

Cloning of the rpoD analog from Rhizobium etli: sigA of R. etli is growth phase regulated. Luka S, et al. **J Bacteriol** 1996 Dec;178(24):7138–43

A gene coding for a putative sigma 54 activator is developmentally regulated in Caulobacter crescentus. Marques MV, et al. **J Bacteriol** 1997 Sep;179(17):5502–10

The Bradyrhizobium japonicum rpoH1 gene encoding a sigma 32-like protein is part of a unique heat shock gene cluster together with groESL1 and three small heat shock genes. Narberhaus F, et al. **J Bacteriol** 1996 Sep; 178(18):5337–46

Disappearance of the sigma E transcription factor from the forespore and the SpoIIE phosphatase from the mother cell contributes to establishment of cell-specific gene expression during sporulation in Bacillus subtilis. Pogliano K, et al. **J Bacteriol** 1997 May;179(10):3331–41

Activation of the Bacillus subtilis spoIIG promoter requires interaction of Spo0A and the sigma subunit of RNA polymerase. Schyns G, et al. **J Bacteriol** 1997 Sep; 179(17):5605–8

The major sigma factor (RpoD) from Helicobacter pylori and other gram-negative bacteria shows an enhanced rate of divergence. Solnick JV, et al. **J Bacteriol** 1997 Oct; 179(19):6196–200

RpoS- and OxyR-independent induction of HPI catalase at stationary phase in Escherichia coli and identification of rpoS mutations in common laboratory strains. Visick JE, et al. **J Bacteriol** 1997 Jul;179(13):4158–63

Alterations within the activation domain of the sigma 54-dependent activator DctD that prevent transcriptional activation. Wang YK, et al. **J Bacteriol** 1997 Sep; 179(18):5812–9

The Caulobacter heat shock sigma factor gene rpoH is positively autoregulated from a sigma32-dependent promoter. Wu J, et al. **J Bacteriol** 1997 Jan;179(2):514–21

Sigma-B, a putative operon encoding alternate sigma factor of Staphylococcus aureus RNA polymerase: molecular cloning and DNA sequencing. Wu S, et al. **J Bacteriol** 1996 Oct;178(20):6036–42

Examination of the Tn5 transposase overproduction phenotype in Escherichia coli and localization of a suppressor of transposase overproduction killing that is an allele of rpoH. Yigit H, et al. **J Bacteriol** 1997 Mar; 179(5):1704–13

RNA polymerase beta mutations have reduced sigma70 synthesis leading to a hyper-temperature-sensitive phenotype of a sigma70 mutant. Zhou YN, et al. **J Bacteriol** 1997 Jul;179(13):4292–8

Molecular analysis of the rpoD gene of Enterococcus faecalis. Frère J, et al. **J Basic Microbiol** 1996;36(5):305–10

The rpoD1 gene product is a principal sigma factor of RNA polymerase in Microcystis aeruginosa K-81. Asayama M, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):752–8

Recognition of the -10 promoter sequence by a partial polypeptide of sigma70 in vitro. Dombroski AJ. **J Biol Chem** 1997 Feb 7;272(6):3487–94

Transcriptional activation via DNA-looping: visualization of intermediates in the activation pathway of E. coli RNA polymerase x sigma 54 holoenzyme by scanning force microscopy. Rippe K, et al. **J Mol Biol** 1997 Jul 11; 270(2):125–38

Rickettsia prowazekii sigma factor sigma 73 can be overexpressed in Escherichia coli and promotes RNA polymerase binding and transcription. Aniskovitch LP, et al. **Microbiology** 1996 Apr;142 (Pt 4):901–6

The sigA gene encoding the major sigma factor of RNA polymerase from the marine cyanobacterium Synechococcus sp. strain PCC 7002: cloning and characterization. Caslake LF, et al. **Microbiology** 1996 Feb; 142 (Pt 2):347–57

The temperature sensitivity of Bacillus subtilis DB1005 is due to insufficient activity, rather than insufficient concentration, of the mutant delta A factor. Chang BY, et al. **Microbiology** 1997 Apr;143 (Pt 4):1299–308

The flgK motility operon of Borrelia burgdorferi is initiated by a sigma 70-like promoter. Ge Y, et al. **Microbiology** 1997 May;143 (Pt 5):1681–90

Involvement of sigma 54 in exponential silencing of the Pseudomonas putida TOL plasmid Pu promoter. Cases I, et al. **Mol Microbiol** 1996 Jan;19(1):7–17

Virulence and vaccine potential of Salmonella typhimurium mutants deficient in the expression of the RpoS (sigma S) regulon. Coynault C, et al. **Mol Microbiol** 1996 Oct; 22(1):149–60

A missense mutation in rpoD results in an A-signalling defect in Myxococcus xanthus. Davis JM, et al. **Mol Microbiol** 1995 Dec;18(5):943–52

The sigmaE-mediated response to extracytoplasmic stress in Escherichia coli is transduced by RseA and RseB, two negative regulators of sigmaE. De Las Peñas A, et al. **Mol Microbiol** 1997 Apr;24(2):373–85

A consensus structure for sigma S-dependent promoters [letter] Espinosa-Urgel M, et al. **Mol Microbiol** 1996 Aug; 21(3):657–9

The LysR-like regulator LeuO in Escherichia coli is involved in the translational regulation of rpoS by affecting the expression of the small regulatory DsrA-RNA. Klauck E, et al. **Mol Microbiol** 1997 Aug;25(3):559–69

A hierarchical quorum-sensing cascade in Pseudomonas aeruginosa links the transcriptional activators LasR and RhlR (VsmR) to expression of the stationary-phase sigma factor RpoS. Latifi A, et al. **Mol Microbiol** 1996 Sep; 21(6):1137–46

Differential regulation of multiple overlapping promoters in flagellar class II operons in Escherichia coli. Liu X, et al. **Mol Microbiol** 1996 Aug;21(3):613–20

Modulation of the Escherichia coli sigmaE (RpoE) heat-shock transcription-factor activity by the RseA, RseB and RseC proteins. Missiakas D, et al. **Mol Microbiol** 1997 Apr;24(2):355–71

Three disparately regulated genes for sigma 32-like transcription factors in Bradyrhizobium japonicum. Narberhaus F, et al. **Mol Microbiol** 1997 Apr;24(1):93–104

Exotoxin A production in Pseudomonas aeruginosa requires the iron-regulated pvdS gene encoding an alternative sigma factor. Ochsner UA, et al. **Mol Microbiol** 1996 Sep; 21(5):1019–28

Microbial pathogenesis in cystic fibrosis: co-ordinate regulation of heat-shock response and conversion to mucoidy in Pseudomonas aeruginosa. Schurr MJ, et al. **Mol Microbiol** 1997 Apr;24(2):411–20

The Bordetella pertussis sigma subunit of RNA polymerase confers enhanced expression of fha in Escherichia coli. Steffen P, et al. **Mol Microbiol** 1997 Mar;23(5):945–54

Isolation and properties of enhancer-bypass mutants of sigma 54. Syed A, et al. **Mol Microbiol** 1997 Mar;23(5):987–95

The rpoN gene of Xanthomonas campestris pv. vesicatoria is not required for pathogenicity. Horns T, et al. **Mol Plant Microbe Interact** 1996 Dec;9(9):856–9

sigma factor mutations affecting the sequence-selective interaction of RNA polymerase with -10 region single-stranded DNA. Huang X, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2603–9

DNA bending and the initiation of transcription at sigma54-dependent bacterial promoters. Carmona M, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9568–72

Multiple pathways to bypass the enhancer requirement of sigma 54 RNA polymerase: roles for DNA and protein determinants. Wang JT, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9538–43

ISOLATION & PURIFICATION

Purification of overproduced Escherichia coli RNA polymerase sigma factors by solubilizing inclusion bodies and refolding from Sarkosyl. Burgess RR. **Methods Enzymol** 1996;273:145–9 (7 ref.)

Sigma factors: purification and DNA binding. Dombroski AJ. **Methods Enzymol** 1996;273:134–44 (25 ref.)

RNA polymerase sigma factors of Bacillus subtilis: purification and characterization. Tatti KM, et al. **Methods Enzymol** 1996;273:149–62 (20 ref.)

Purification and activities of the Rhodobacter capsulatus RpoN (sigma N) protein. Cannon W, et al. **Mol Microbiol** 1996 Jul;21(2):233–45

Overproduction and purification of sigmaS, the Escherichia coli stationary phase specific sigma transcription factor. Nguyen LH, et al. **Protein Expr Purif** 1996 Aug;8(1):17–22

METABOLISM

Identification of a prime suspect. Buc H. **Curr Biol** 1997 Feb 1;7(2):R97–9 (13 ref.)

Region 2.5 of the Escherichia coli RNA polymerase sigma70 subunit is responsible for the recognition of the 'extended-10' motif at promoters. Barne KA, et al.

EMBO J 1997 Jul 1;16(13):4034–40

Interaction of bacteriophage T4 AsiA protein with Escherichia coli sigma70 and its variant. Pahari S, et al. **FEBS Lett** 1997 Jul 7;411(1):60–2

Isolation and characterization of csbB, a gene controlled by Bacillus subtilis general stress transcription factor sigma B. Akbar S, et al. **Gene** 1996 Oct 24;177(1–2):123–8

Compartmentalized distribution of the proteins controlling the prespore-specific transcription factor sigmaF of Bacillus subtilis. Lewis PJ, et al. **Genes Cells** 1996 Oct; 1(10):881–94

The sigma(E) and the Cpx signal transduction systems control the synthesis of periplasmic protein–folding enzymes in Escherichia coli. Danese PN, et al. **Genes Dev** 1997 May 1;11(9):1183–93

Three sites of contact between the Bacillus subtilis transcription factor sigmaF and its antisigma factor SpoIIAB. Decatur AL, et al. **Genes Dev** 1996 Sep 15; 10(18):2348–58

Opposing pairs of serine protein kinases and phosphatases transmit signals of environmental stress to activate a bacterial transcription factor. Yang X, et al. **Genes Dev** 1996 Sep 15;10(18):2265–75

Molecular cloning and functional analysis of an rpoS homologue gene from Vibrio cholerae N86. Hiratsu K, et al. **Genes Genet Syst** 1997 Apr;72(2):115–8

Identification of sigma S–regulated genes in Salmonella typhimurium: complementary regulatory interactions between sigma S and cyclic AMP receptor protein. Fang FC, et al. **J Bacteriol** 1996 Sep;178(17):5112–20

FlgM is a primary regulator of sigmaD activity, and its absence restores motility to a sinR mutant. Fredrick K, et al. **J Bacteriol** 1996 Dec;178(23):7010–3

The TACAN4TGCA motif upstream from the -35 region in the sigma70–sigmaS–dependent Pm promoter of the TOL plasmid is the minimum DNA segment required for transcription stimulation by XylS regulators. Gallegos MT, et al. **J Bacteriol** 1996 Nov;178(22):6427–34

The Bacillus subtilis sigma(X) protein is an extracytoplasmic function sigma factor contributing to survival at high temperature. Huang X, et al. **J Bacteriol** 1997 May; 179(9):2915–21

Bacillus subtilis Pro–sigmaE fusion protein localizes to the forespore septum and fails to be processed when synthesized in the forespore. Ju J, et al. **J Bacteriol** 1997 Aug;179(15):4888–93

Stimulatory effect of trehalose on formation and activity of Escherichia coli RNA polymerase E sigma38 holoenzyme. Kusano S, et al. **J Bacteriol** 1997 Jun;179(11):3649–54

Protein conformational change and nucleotide binding involved in regulation of sigmaF in Bacillus subtilis. Lord M, et al. **J Bacteriol** 1996 Dec;178(23):6730–5

Heat shock regulation of sigmaS turnover: a role for DnaK and relationship between stress responses mediated by sigmaS and sigma32 in Escherichia coli. Muffler A, et al. **J Bacteriol** 1997 Jan;179(2):445–52

flaD (sinR) mutations affect SigD–dependent functions at multiple points in Bacillus subtilis. Rashid MH, et al. **J Bacteriol** 1996 Nov;178(22):6640–3

Activation of the Bacillus subtilis spoIIG promoter requires interaction of Spo0A and the sigma subunit of RNA polymerase. Schyns G, et al. **J Bacteriol** 1997 Sep; 179(17):5605–8

Transcription of the mutL repair, miaA tRNA modification, hfq pleiotropic regulator, and hflA region protease genes of Escherichia coli K–12 from clustered Esigma32–specific promoters during heat shock. Tsui HC, et al. **J Bacteriol** 1996 Oct;178(19):5719–31

The yeast two–hybrid system detects interactions between Bacillus subtilis sigmaB regulators. Voelker U, et al. **J Bacteriol** 1996 Dec;178(23):7020–3

Stress activation of Bacillus subtilis sigma B can occur in the absence of the sigma B negative regulator RsbX. Voelker U, et al. **J Bacteriol** 1997 Mar;179(6):1980–4

A feedback loop regulates the switch from one sigma factor to the next in the cascade controlling Bacillus subtilis mother cell gene expression. Zhang B, et al. **J Bacteriol** 1997 Oct;179(19):6138–44

Bacillus subtilis SpoIIID protein binds to two sites in the spoVD promoter and represses transcription by sigmaE RNA polymerase. Zhang B, et al. **J Bacteriol** 1997 Feb; 179(3):972–5

Recognition of promoter DNA by subdomain 4.2 of Escherichia coli sigma 70: a knowledge based model of -35 hexamer interaction with 4.2 helix–turn–helix motif. Reddy BV, et al. **J Biomol Struct Dyn** 1997 Feb; 14(4):407–19

Region 1 of sigma70 is required for efficient isomerization and initiation of transcription by Escherichia coli RNA polymerase. Wilson C, et al. **J Mol Biol** 1997 Mar 21; 267(1):60–74

Activation of RpoS–dependent proP P2 transcription by the Fis protein in vitro. Xu J, et al. **J Mol Biol** 1997 Jul 18; 270(3):346–59

Bacteriophage T4 middle transcription system: T4–modified RNA polymerase; AsiA, a sigma 70 binding protein; and transcriptional activator MotA. Hinton DM, et al. **Methods Enzymol** 1996;274:43–57

Rickettsia prowazekii sigma factor sigma 73 can be overexpressed in Escherichia coli and promotes RNA polymerase binding and transcription. Aniskovitch LP, et al. **Microbiology** 1996 Apr;142 (Pt 4):901–6

Expression of the Bacillus subtilis spoIVB gene is under dual sigma F/sigma G control. Gomez M, et al. **Microbiology** 1996 Dec;142 (Pt 12):3453–7

In vitro transcription of Myxococcus xanthus genes with RNA polymerase containing sigmaA, the major sigma factor in growing cells. Biran D, et al. **Mol Microbiol** 1997 Aug;25(3):463–72

The sigmaE–mediated response to extracytoplasmic stress in Escherichia coli is transduced by RseA and RseB, two negative regulators of sigmaE. De Las Peñas A, et al. **Mol Microbiol** 1997 Apr;24(2):373–85

Light–induced carotenogenesis in Myxococcus xanthus: light–dependent membrane sequestration of ECF sigma factor CarQ by anti–sigma factor CarR. Gorham HC, et al. **Mol Microbiol** 1996 Jan;19(1):171–86

Back to log phase: sigma S as a global regulator in the osmotic control of gene expression in Escherichia coli. Hengge–Aronis R. **Mol Microbiol** 1996 Sep;21(5):887–93 (65 ref.)

Altering the level and regulation of the major sigma subunit of RNA polymerase affects gene expression and development in Bacillus subtilis. Hicks KA, et al. **Mol Microbiol** 1996 Apr;20(1):201–12

Mode of promoter recognition by the Escherichia coli RNA polymerase holoenzyme containing the sigma S subunit: identification of the recognition sequence of the fic promoter. Hiratsu K, et al. **Mol Microbiol** 1995 Dec; 18(5):841–50

Sigma–E is required for the production of the antibiotic actinomycin in Streptomyces antibioticus. Jones GH, et al. **Mol Microbiol** 1997 Jan;23(1):169–78

Two–stage regulation of an anti–sigma factor determines developmental fate during bacterial endospore formation. Kellner EM, et al. **Mol Microbiol** 1996 Sep;21(5):913–24

Dual regulation of the paraquat–inducible gene pqi–5 by SoxS and RpoS in Escherichia coli. Koh YS, et al. **Mol Microbiol** 1996 Oct;22(1):53–61

The leucine–responsive regulatory protein (Lrp) acts as a specific repressor for sigma s–dependent transcription of the Escherichia coli aidB gene. Landini P, et al. **Mol Microbiol** 1996 Jun;20(5):947–55

Transcriptional activator of phage phi 29 late promoter: mapping of residues involved in interaction with RNA polymerase and in DNA bending. Mencía M, et al. **Mol Microbiol** 1996 Apr;20(2):273–82

Modulation of the Escherichia coli sigmaE (RpoE) heat–shock transcription–factor activity by the RseA, RseB and RseC proteins. Missiakas D, et al. **Mol Microbiol** 1997 Apr;24(2):355–71

Microbial pathogenesis in cystic fibrosis: co–ordinate regulation of heat–shock response and conversion to mucoidy in Pseudomonas aeruginosa. Schurr MJ, et al. **Mol Microbiol** 1997 Apr;24(2):411–20

The RpoN–box motif of the RNA polymerase sigma factor sigma N plays a role in promoter recognition. Taylor M, et al. **Mol Microbiol** 1996 Dec;22(5):1045–54

Bacillus subtilis operon under the dual control of the general stress transcription factor sigma B and the sporulation transcription factor sigma H. Varón D, et al. **Mol Microbiol** 1996 Apr;20(2):339–50

Identification of sigma S–dependent genes associated with the stationary–phase acid–resistance phenotype of Shigella flexneri. Waterman SR, et al. **Mol Microbiol** 1996 Sep; 21(5):925–40

The sigma S level in starving Escherichia coli cells increases solely as a result of its increased stability, despite decreased synthesis. Zgurskaya HI, et al. **Mol Microbiol** 1997 May; 24(3):643–51

Two domains within sigmaN (sigma54) cooperate for DNA binding. Cannon WV, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5006–11

The sigma subunit of Escherichia coli RNA polymerase senses promoter spacing. Dombroski AJ, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8858–62

RNA polymerase sigma factor determines start–site selection but is not required for upstream promoter element activation on heteroduplex (bubble) templates. Fredrick K, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4982–7

A sigma32 mutant with a single amino acid change in the highly conserved region 2.2 exhibits reduced core RNA polymerase affinity. Joo DM, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4907–12

Role of alternate sigma factors in starvation protein synthesis—novel mechanisms of catabolite repression. Matin A. **Res Microbiol** 1996 Jul–Sep;147(6–7):494–505 (73 ref.)

Promoter recognition as measured by binding of polymerase to nontemplate strand oligonucleotide. Marr MT, et al. **Science** 1997 May 23;276(5316):1258–60

RNA polymerase beta' subunit: a target of DNA binding–independent activation [see comments] Miller A, et al. **Science** 1997 Mar 14;275(5306):1655–7. Comment in: Science 1997 Mar 14;275(5306):1614–6.

Unusual oligomerization required for activity of NtrC, a bacterial enhancer–binding protein [see comments] Wyman C, et al. **Science** 1997 Mar 14;275(5306):1658–61. Comment in: Science 1997 Mar 14;275(5306):1614–6.

[Expression pattern of the carbon monoxide generating stress protein (HSP–32/HO–1) in parenchymatous and non–parenchymatous liver cells after hemorrhagic shock] Wanner GA, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:737–41 (Eng. Abstr.) **(Ger)**

[Regulation of the phosphorelay at the initiation of sporulation and activation of sporulation–specific sigma factors in Bacillus subtilis] Tochikubo K, et al. **Nippon Saikingaku Zasshi** 1996 Aug;51(3):789–801 (73 ref.) **(Jpn)**

PHYSIOLOGY

The NAD synthetase NadE (OutB) of Bacillus subtilis is a sigma B–dependent general stress protein. Antelmann H, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):405–9

Disruption of a sigma factor gene, sigF, affects an intermediate stage of spore pigment production in Streptomyces aureofaciens. Režuchová B, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):371–7

Identification of a new sigmaB–controlled gene, csbX, in Bacillus subtilis. Gomez M, et al. **Gene** 1997 Mar 25; 188(1):29–33

Differential expression of two sporulation specific sigma factors of Streptomyces aureofaciens correlates with the developmental stage. Kormanec J, et al. **Gene** 1996 Nov 28;181(1–2):19–27

Regulation and conservation of the heat–shock transcription factor sigma32. Yura T. **Genes Cells** 1996 Mar;1(3):277–84 (50 ref.)

The response to extracytoplasmic stress in Escherichia coli is controlled by partially overlapping pathways. Connolly L, et al. **Genes Dev** 1997 Aug 1;11(15):2012–21

Role of sigma factor RpoS in initial stages of Salmonella typhimurium infection. Nickerson CA, et al. **Infect Immun** 1997 May;65(5):1814–23

Effects of sigmaS and the transcriptional activator AppY on induction of the Escherichia coli hya and cbdAB–appA operons in response to carbon and phosphate starvation. Atlung T, et al. **J Bacteriol** 1997 Apr;179(7):2141–6

Plasmid virulence gene expression induced by short–chain fatty acids in Salmonella dublin: identification of rpoS–dependent and rpo–S–independent mechanisms. El–Gedaily A, et al. **J Bacteriol** 1997 Feb;179(4):1409–12

H–NS and RpoS regulate emergence of Lac Ara+ mutants of Escherichia coli MCS2. Gómez–Gómez JM, et al. **J Bacteriol** 1997 Jul;179(14):4620–2

The flgE gene of Campylobacter coli is under the control of the alternative sigma factor sigma54. Kinsella N, et al. **J Bacteriol** 1997 Aug;179(15):4647–53

Contribution of partner switching and SpoIIAA cycling to regulation of sigmaF activity in sporulating Bacillus subtilis. Magnin T, et al. **J Bacteriol** 1997 Jun;179(12):3922–7

Paraquat regulation of hmp (flavohemoglobin) gene expression in Escherichia coli K–12 is SoxRS independent but modulated by sigma S. Membrillo–Hernández J, et al. **J Bacteriol** 1997 May;179(10):3164–70

The RNA–binding protein HF–I plays a global regulatory role which is largely, but not exclusively, due to its role in expression of the sigmaS subunit of RNA polymerase in Escherichia coli. Muffler A, et al. **J Bacteriol** 1997 Jan; 179(1):297–300

A mycobacterial extracytoplasmic function sigma factor involved in survival following stress. Wu QL, et al. **J Bacteriol** 1997 May;179(9):2922–9

The transcription initiation pathway of sigma 54 mutants that bypass the enhancer protein requirement. Implications for the mechanism of activation. Wang JT, et al. **J Biol Chem** 1996 Dec 20;271(51):32707–13

Regulation of Escherichia coli topA gene transcription: involvement of a sigmaS–dependent promoter. Qi H, et al. **J Mol Biol** 1997 Apr 4;267(3):481–9

Control of Escherichia coli type 1 fimbrial gene expression in stationary phase: a negative role for RpoS. Dove SL, et al. **Mol Gen Genet** 1997 Mar 18;254(1):13–20

Roles of RpoS (sigmaS), IHF and ppGpp in the expression of the hmp gene encoding the flavohemoglobin (Hmp) of Escherichia coli K–12. Membrillo–Hernandez J, et al. **Mol Gen Genet** 1997 May 20;254(5):599–603

Role of sigma S in transcription from the positively controlled Pm promoter of the TOL plasmid of Pseudomonas putida. Marqués S, et al. **Mol Microbiol** 1995 Dec;18(5):851–7

SpoIVB has two distinct functions during spore formation in Bacillus subtilis. Oke V, et al. **Mol Microbiol** 1997 Jan; 23(2):223–30

Effect of the deletion of the sigma 32–dependent promoter (P1) of the Escherichia coli topoisomerase I gene on thermotolerance. Qi H, et al. **Mol Microbiol** 1996 Aug; 21(4):703–11

sigma54, a vital protein for Myxococcus xanthus. Keseler IM, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4; 94(5):1979–84

SIGMA INITIATION FACTOR see **SIGMA FACTOR**

SIGMA RECEPTORS see **RECEPTORS, SIGMA**

SIGMA SUBUNIT see **SIGMA FACTOR**

SIGMODON see **HESPEROMYINAE**

SIGMOID

see related
SIGMOIDOSCOPY

Bamboo skewer perforation of the bowel: computed

tomography appearances. Peh WC, et al. **Australas Radiol** 1997 Aug;41(3):308–10

Difficult sigmoid colon intubation: guide wire exchange technique [letter] Ness RM, et al. **Gastrointest Endosc** 1996 Jul;44(1):99–101

Endoscopic removal of an entrapped foreign body from the sigmoid colon using a needle knife. Ramirez FC, et al. **Gastrointest Endosc** 1996 Jul;44(1):84–5

Colonoscopic removal of chicken bones impacted in the sigmoid in two patients [letter] Rex DK, et al. **Gastrointest Endosc** 1997 Aug;46(2):193–5

Intestinal perforation due to an ingested foreign body: laparoscopic management. Hebra A, et al. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S95–8

Laparoscopic closure for perforation of the sigmoid colon by endoscopic linear stapler. Hayashi K, et al. **Surg Laparosc Endosc** 1996 Oct;6(5):411–3 (13 ref.)

[Intestinal foreign body with sigmoid perforation in an area of carcinomatous stenosis: incidental finding or etiology?] Stiefel D, et al. **Swiss Surg** 1997;3(3):100–3 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

Congenital fusion of two segments of the sigmoid colon. Goerg KJ, et al. **Endoscopy** 1996 Sep;28(7):639

Imperforate anus (anal agenesis) with rectal and sigmoid atresias in a newborn. Ein SH. **Pediatr Surg Int** 1997 Jul; 12(5–6):449–51

BLOOD SUPPLY

Ischemic proctosigmoiditis. Bharucha AE, et al. **Am J Gastroenterol** 1996 Nov;91(11):2305–9

Endoluminal pulse oximetry combined with tonometry to monitor the perfusion of the sigmoid during and after resection of abdominal aortic aneurysm. Vahl AC, et al. **Cardiovasc Surg** 1997 Feb;5(1):65–70

Sigmoidal ischaemia after aortic grafting, detected by endoluminal pulse oximetry. Vahl AC, et al. **Cardiovasc Surg** 1996 Jun;4(3):345–50

Effect of inferior mesenteric artery ligation on blood flow in the marginal artery–dependent sigmoid colon. Dworkin MJ, et al. **J Am Coll Surg** 1996 Oct;183(4):357–60

Ischemic stricture of the rectosigmoid colon caused by division of the superior rectal artery below Sudeck's point during sigmoidectomy: report of a case. Yamazaki T, et al. **Surg Today** 1997;27(3):254–6

Does laser Doppler flowmetry aid the prevention of ischemic colitis in abdominal aortic aneurysm surgery? Sakakibara Y, et al. **Thorac Cardiovasc Surg** 1997 Feb;45(1):32–4

CYTOLOGY

Geographic variations in eosinophil concentration in normal colonic mucosa. Pascal RR, et al. **Mod Pathol** 1997 Apr; 10(4):363–5

INJURIES

An unusual presentation of complicated diverticular disease. Awad Z, et al. **Ir Med J** 1996 Sep–Oct;89(5):190

Bowel injury by the suction–irrigator during operative laparoscopy. Wang CW, et al. **J Am Assoc Gynecol Laparosc** 1995 May;2(3):353–4

Perforation of the sigmoid colon by hydrostatic pressure of a public water fountain. Farbin S, et al. **J Emerg Med** 1996 Nov–Dec;14(6):703–6 (30 ref.)

The harmonic scalpel: an intraoperative complication. Awwad JT, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):718–20

Laparoscopic repair of a colonoscopic perforation. Velez MA, et al. **Surg Endosc** 1997 Apr;11(4):387–9

[Closed colonic perforation secondary to foreign body. Endoscopic diagnosis (letter)] Bourgeois F, et al. **Ann Chir** 1996;50(6):475 **(Fre)**

INNERVATION

Argyrophilia in the developing human myenteric plexus. Smith VV, et al. **Br J Biomed Sci** 1996 Dec;53(4):278–83

Sigmoid afferent mechanisms in patients with irritable bowel syndrome. Lembo T, et al. **Dig Dis Sci** 1997 Jun; 42(6):1112–20

Functional innervation of the aganglionic segment in Hirschsprung's disease—a comparison of the short– and long–segment type. Kamimura T, et al. **J Pediatr Surg** 1997 May;32(5):673–7

The hypertonic rectosigmoid junction: description of a new clinicopathologic entity causing constipation. Shafik A. **Surg Laparosc Endosc** 1997 Apr;7(2):116–20

METABOLISM

Sigmoid pH after aortoiliac surgery [letter; comment] Björck M, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):253–4 . Comment on: Eur J Vasc Endovasc Surg 1996 Apr;11(3):304–7.

PATHOLOGY

Histology of the mucosa in sigmoid colon specimens with diverticular disease: observations for the interpretation of sigmoid colonoscopic biopsy specimens. Goldstein NS, et al. **Am J Clin Pathol** 1997 Apr;107(4):438–44

Segmental colitis complicating diverticular disease. Van Rosendaal GM, et al. **Can J Gastroenterol** 1996 Oct; 10(6):361–4

A minute erosion representing leukemic infiltration in the colon. Matsushita M, et al. **Endoscopy** 1997 Jan;29(1):55–6

Colonoscopic red ring sign due to chronic lymphocytic leukemia. Stark ME, et al. **Gastrointest Endosc** 1997 Feb; 45(2):197–9

PHYSIOLOGY

Sigmoido–rectal junction reflex: role in the defecation mechanism. Shafik A. **Clin Anat** 1996;9(6):391–4

Existence of a high pressure zone at the rectosigmoid junction in normal Indian men. Wadhwa RP, et al. **Dis Colon Rectum** 1996 Oct;39(10):1122–5

PHYSIOPATHOLOGY

Repetitive sigmoid stimulation induces rectal hyperalgesia in patients with irritable bowel syndrome. Munakata J, et al. **Gastroenterology** 1997 Jan;112(1):55–63

RADIONUCLIDE IMAGING

False–positive WBC imaging secondary to a distended bladder and fecal retention. Meyerrose GE, et al. **Clin Nucl Med** 1997 Jun;22(6):422–4

SURGERY

Racial considerations in acoustic neuroma removal with hearing preservation via the retrosigmoid approach. Low WK, et al. **Acta Otolaryngol (Stockh)** 1995 Nov; 115(6):783–6

Re: Rectosigmoid neocolpopoiesis for male–to–female transsexuals: Amsterdam experience [letter; comment] [see comments] Laub DR Sr, et al. **Ann Plast Surg** 1996 Jun; 36(6):662–3. Comment on: Ann Plast Surg 1996 Apr;36(4):388–91. Comment in: Ann Plast Surg 1997 Feb;38(2):195–6.

Ureterosigmoidostomy: a useful procedure of internal urinary diversion in selected patients. Kisanga RE, et al. **Cent Afr J Med** 1996 Oct;42(10):288–90

Abdominoperineal resection and perineal colostomy for low rectal cancer. The Lazaro da Silva technique. Velitchkov NG, et al. **Dis Colon Rectum** 1997 May;40(5):530–3

To abandon or not abandon: antesigmoid craniotomy with retrolabyrinthine vestibular nerve section. Luetje CM, et al. **Ear Nose Throat J** 1996 Feb;75(2):90–3

Idiopathic non–familial rectal and colonic varices requiring sigmoidorectal resection and coloanal anastomosis. Detry RJ, et al. **Eur J Gastroenterol Hepatol** 1996 Oct; 8(10):1023–6 (32 ref.)

A prospective comparison of laparoscopic exposure techniques for rectal mobilization and sigmoid resection. Horvath KD, et al. **J Am Coll Surg** 1997 May;184(5):506–12

Endourologic management of ureterosigmoidostomy anastomotic stricture. McDougall EM, et al. **J Endourol** 1997 Apr;11(2):135–7

One–stage neonatal pull–through to treat Hirschsprung's disease. Wilcox DT, et al. **J Pediatr Surg** 1997 Feb; 32(2):243–5; discussion 245–7

Long–term results of ureterosigmoidostomy in children with bladder exstrophy. Koo HP, et al. **J Urol** 1996 Dec; 156(6):2037–40

Perineal cystoprostatectomy and ureterosigmoidostomy for invasive bladder cancer. Nishiya M, et al. **J Urol** 1997 Jun; 157(6):2227–9

Stomach versus sigmoid colon in children undergoing major reconstruction of the lower urinary tract. Di Benedetto V, et al. **Pediatr Surg Int** 1997 Jul;12(5–6):393–6

Laparoscopic–assisted abdominoperineal proctosigmoidectomy for rectal prolapse. A new technique. Allam M, et al. **Surg Endosc** 1997 Feb;11(2):150–1

Elective laparoscopic–assisted sigmoid resection for diverticular disease. Eijsbouts QA, et al. **Surg Endosc** 1997 Jul;11(7):750–3

Laparoscopically assisted colorectal anastomose post–Hartmann's procedure. Regadas FS, et al. **Surg Laparosc Endosc** 1996 Feb;6(1):1–4

[Colonic polyps at the level of the site of an ureterosigmoidostomy 11 years after conversion of a Coffey operation to a continent ileocecal bladder. A case] Benchekroun A, et al. **Prog Urol** 1996 Aug–Sep;6(4):590–3 (Eng. Abstr.) **(Fre)**

[Dilatation of benign colo–colonic and colo–rectal anastomotic stenosis with radiology–guided balloon catheter] Meloni GB, et al. **Radiol Med (Torino)** 1996 Jul–Aug;92(1–2):97–100 (Eng. Abstr.) **(Ita)**

[A two–year asymptomatic case with postoperative lung metastasis of sigmoid colon cancer responding to sequential methotrexate and 5–fluorouracil] Kitao Y, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):613–7 (Eng. Abstr.) **(Jpn)**

[Combined spinal and epidural anesthesia for laparotomy in a geriatric patient with severe obstructive lung disease] Yokoyama T, et al. **Masui** 1997 Mar;46(3):409–12 (Eng. Abstr.) **(Jpn)**

[Laparoscopically assisted colpopoesis using sigmoid colon] Ikuma K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Sep;48(9):845–8 **(Jpn)**

[Prevention of incompetence of sigmoidorectal anastomosis after anterior resection of the rectum in cancer] Briusov PG, et al. **Khirurgiia (Mosk)** 1996;(2):45–8 (Eng. Abstr.) **(Rus)**

[Abdomino–anal resection of the rectum with the bringing down of the demesenterized colon into the anal canal] Bondar' GV, et al. **Klin Khir** 1997;(1):31–3 (Eng. Abstr.) **(Rus)**

[Subcutaneous, pneumomediastinal, pneumopericardial emphysema and pneumothorax following retrosigmoid resection] de Frutos–López S, et al. **Rev Esp Anestesiol Reanim** 1997 Jun–Jul;44(6):244–6 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

Spontaneous bladder perforation in paraplegia as a late complication of augmentation enterocystoplasty: case report. Rogers CJ, et al. **Arch Phys Med Rehabil** 1996 Nov; 77(11):1198–200

Sigmoid colon vaginoplasty: a modified method. Franz RC. **Br J Obstet Gynaecol** 1996 Nov;103(11):1148–55

Laparoscopic reconstruction of vagina using sigmoid autograft. Ohashi S, et al. **Surg Endosc** 1996 Oct; 10(10):1019–21

Laparoscopic colpopoiesis using sigmoid colon. Ikuma K, et al. **Surg Laparosc Endosc** 1997 Feb;7(1):60–2

Sigmoid "tail" modification for bladder augmentation. Mathews R, et al. **Urology** 1997 Apr;49(4):609–11

[Distal detubularized sigmoidoplasty. Description of the technique] Isorna Martínez de la Riva S. **Arch Esp Urol** 1996 Sep;49(7):657–66 (44 ref.) (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

Time–course ultrasonographic observation of a mesenteric pseudocyst of the sigmoid colon: report of a case. Uchiyama S, et al. **Surg Today** 1997;27(3):257–60

VIROLOGY

Human immunodeficiency virus type 1 RNA populations in faeces with higher homology to intestinal populations than to blood populations. van der Hoek L, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2415–25

SIGMOID DISEASES

CHEMICALLY INDUCED

Sigmoid volvulus after medical management with subsequent operative laparoscopy of unruptured ectopic pregnancy. Lurie S, et al. **Gynecol Obstet Invest** 1997;43(3):204–5

COMPLICATIONS

Colovenous fistula complicating diverticulitis: CT and radiographic findings. Rossmann MD, et al. **Abdom Imaging** 1997 Sep–Oct;22(5):513–5

Infected abdominal aortic aneurysm associated with a psoas abscess, aorto–duodenal and sigmoid fistulas. Case report and review of the literature. Louagie YA, et al. **Acta Chir Belg** 1997 Jan–Feb;97(1):39–43 (22 ref.)

Septic thrombophlebitis of the inferior mesenteric vein complicating sigmoid diverticulitis: CT findings. Molitch HI. **AJR Am J Roentgenol** 1996 Oct;167(4):1014–6

Genital fistulas caused by diverticular disease of the sigmoid colon. Tancer ML, et al. **Am J Obstet Gynecol** 1996 May; 174(5):1547–50

Pneumatosis cystoides intestinalis in a case of sigmoid volvulus. Azimuddin K, et al. **Br J Hosp Med** 1997 May 7–20;57(9):468–9

Diverticulitis of the sigmoid colon complicated by vertebral osteomyelitis. Van Dam H, et al. **Eur J Surg** 1996 Aug; 162(8):661–3

Major acute inflammatory complications of diverticular disease of the colon: planning of surgical management. Tucci G, et al. **Hepatogastroenterology** 1996 Jul–Aug; 43(10):839–45

Plasmacytoma of the sigmoid colon associated with a diverticular stricture: case report and review of the literature. Holland AJ, et al. **J R Coll Surg Edinb** 1997 Feb;42(1):47–9 (24 ref.)

[Subcutaneous emphysema, pneumomediastinum, and pneumoretroperitoneum caused by perforation of sigmoid diverticulum. Report of a case studied with spiral computerized tomography] Mininel G, et al. **Radiol Med (Torino)** 1996 Nov;92(5):653–5 **(Ita)**

[Acute intestinal obstruction complicated by giant tumor of the uterus] Makeev AF, et al. **Klin Khir** 1996;(8):52–3 **(Rus)**

[The successful treatment of nodulation of the sigmoid and ileal intestines complicated by intestinal obstruction, intestinal necrosis, diffuse peritonitis and toxic–septic shock] Kulibaba DM, et al. **Vestn Khir Im I I Grek** 1997; 156(3):76–7 **(Rus)**

CONGENITAL

Hirschsprung's disease presenting as sigmoid volvulus in a newborn. Venugopal KS, et al. **Eur J Pediatr Surg** 1997 Jun;7(3):172–3

DIAGNOSIS

Diverticulitis of the sigmoid colon. A comparison of CT, colonic enema and laparoscopy. Stefánsson T, et al. **Acta Radiol** 1997 Mar;38(2):313–9

SIGMOID DISEASES

Diagnosis and assessment of sigmoidoceles. Fenner DE. **Am J Obstet Gynecol** 1996 Dec;175(6):1438–41; discussion 1441–2

Eosinophilic colitis presenting as a left-sided colocolonic intussusception with secondary large bowel obstruction: an uncommon entity with a rare presentation. Box JC, et al. **Am Surg** 1997 Aug;63(8):741–3 (16 ref.)

Image of the month. Congenital colonic duplication, sigmoid volvulus, Meckel's diverticulum, and emphysematous cystitis are considered in the differential diagnosis before surgery. Mehta S, et al. **Gastroenterology** 1997 May; 112(5):1436, 1778

Use of a pediatric colonoscope improves the success of total colonoscopy in selected adult patients. Marshall JB. **Gastrointest Endosc** 1996 Dec;44(6):675–8

Polypoid prolapsing mucosal folds associated with diverticular disease in the sigmoid colon: usefulness of colonoscopy and endoscopic ultrasonography for the diagnosis. Yoshida M, et al. **Gastrointest Endosc** 1996 Oct; 44(4):489–91

An unusual presentation of complicated diverticular disease. Awad Z, et al. **Ir Med J** 1996 Sep–Oct;89(5):190

Vermiform appendix sealing sigmoid colon perforation [letter] Adachi Y, et al. **J Clin Gastroenterol** 1996 Sep; 23(2):164

Amyloidosis localized in the sigmoid colon. Matsui H, et al. **J Gastroenterol** 1996 Aug;31(4):607–11 (15 ref.)

[Detection of an asymptomatic sigmoid carcinoma after extramural foreign body perforation (letter)] Wunsch M, et al. **Chirurg** 1996 Jul;67(7):766 **(Ger)**

[A case of retained surgical sponge penetrated into the sigmoid colon] Manabe T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Apr; 57(5):279–80 (Eng. Abstr.) **(Jpn)**

[Intestinal endometriosis] Higgs H, et al. **Acta Med Port** 1995 Nov;8(11):635–8 (19 ref.) (Eng. Abstr.) **(Por)**

ETIOLOGY

Colonic gallstone ileus. Foster DR. **Australas Radiol** 1997 Feb;41(1):76–7

Sigmoid intra-abdominal herniation and volvulus: a rare complication of percutaneous endoscopic gastrostomy tubes. Walker KG, et al. **Br J Surg** 1997 Feb;84(2):221

Segmental colitis complicating diverticular disease. Van Rosendaal GM, et al. **Can J Gastroenterol** 1996 Oct; 10(6):361–4

Sigmoid diverticular perforation relating to the migration of a polyethylene endoprosthesis. Baty V, et al. **Endoscopy** 1996 Nov;28(9):781

Sigmoid volvulus after diagnostic endoscopy. Brown SR, et al. **Endoscopy** 1997 Jan;29(1):50

Large-bowel obstruction: a complication of percutaneous endoscopic gastrostomy. Mönig SP, et al. **Endoscopy** 1996 Oct;28(8):728

Sigmoid perforation: a rare complication of a migrated biliary endoprosthesis. Schaafsma RJ, et al. **Endoscopy** 1996 Jun; 28(5):469–70

Volvulus of the sigmoid colon as a complication of segmental dilatation of the colon. Report of 2 cases. Ravasse P, et al. **Eur J Pediatr Surg** 1996 Dec;6(6):375–7

Stercoral perforation associated with parathyroid adenoma. Gul YA, et al. **Ir Med J** 1997 Jan–Feb;90(1):20

Fistula between the hip and the sigmoid colon after total hip arthroplasty. A case report. Levin JS, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1240–2

Successful endoscopic relief of large bowel obstruction in a case of a sigmoid colon gallstone ileus. Garcia-López S, et al. **J Clin Gastroenterol** 1997 Jun;24(4):291–2

Sigmoid diverticular perforation complicating lung transplantation. Fenton JJ, et al. **J Heart Lung Transplant** 1997 Jun;16(6):681–5

[Intestinal foreign body with sigmoid perforation in an area of carcinomatous stenosis: incidental finding or etiology?] Stiefel D, et al. **Swiss Surg** 1997;3(3):100–3 (Eng. Abstr.) **(Ger)**

[Vesicosigmoid fistula associated with bladder carcinoma: report of a case] Di Girolamo M, et al. **Radiol Med (Torino)** 1996 Dec;92(6):812–5 **(Ita)**

[Sigmoid-vesical fistula as a consequence of sigmoid tumor] Kazuka B, et al. **Pol Merkuriusz Lek** 1996 Sep;1(3):195–7 (Eng. Abstr.) **(Pol)**

[Perforation of the sigmoid colon by a coprolith] Stavitskii VV. **Klin Khir** 1995;(1):49 **(Rus)**

MICROBIOLOGY

Hemorrhagic proctosigmoiditis and Blastocystis hominis [letter; comment] Yarze JC. **Ann Intern Med** 1996 Nov 15;125(10):860–1. Comment on: Ann Intern Med 1996 Jan 15;124(2):278–9.

Actinomycosis of the large bowel: unusual presentations and their surgical treatment. Dayan K, et al. **Eur J Surg** 1996 Aug;162(8):657–60

PATHOLOGY

Colonic xanthelasma due to glyceride accumulation associated with an adenoma. Boruchowicz A, et al. **Am J Gastroenterol** 1997 Jan;92(1):159–61

Solitary "amyloid ulcer" localized in the sigmoid colon without evidence of systemic amyloidosis. Hirata K, et al. **Am J Gastroenterol** 1997 Feb;92(2):356–7 (11 ref.)

Xanthogranulomatous inflammation of the sigmoid colon: a case report. Lo CY, et al. **Aust N Z J Surg** 1996 Sep; 66(9):643–4

Dysplastic change in the solitary juvenile polyp. Dickey W, et al. **Endoscopy** 1996 Sep;28(7):641

Colonoscopic red ring sign due to chronic lymphocytic leukemia. Stark ME, et al. **Gastrointest Endosc** 1997 Feb; 45(2):197–9

Lethal complications in a case of sigmoid diverticulitis. A case report. Oehler U, et al. **Gen Diagn Pathol** 1997 Feb; 142(3–4):231–4 (11 ref.)

RADIOGRAPHY

Giant colonic diverticulum: presentation of one case and review of the literature. Roger T, et al. **Abdom Imaging** 1996 Nov–Dec;21(6):530–3 (17 ref.)

Gas-filled abdominal mass in an elderly patient. Gibson LH, et al. **Acad Radiol** 1997 Mar;4(3):235–7

Addition of methyl cellulose enema to double-contrast barium imaging of sigmoid diverticulosis. Olsson R, et al. **Acta Radiol** 1997 Jan;38(1):73–5

Computed tomography of the rectosigmoid region. Dixon AK. **Eur J Radiol** 1996 May;22(2):107–15 (39 ref.)

Image of the month. Appendiceal and sigmoid diverticulosis. Triadacilopoulos G. **Gastroenterology** 1997 Oct; 113(4):1062, 1424

[Acute intestinal obstruction in an elderly patient] Linthoudt H, et al. **Tijdschr Gerontol Geriatr** 1996 Dec;27(6):255–7 (Eng. Abstr.) **(Dut)**

[The computed tomographic finding of sigmoid-rectal invagination and the radiological-macropathological correlation] Rodekohr S, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):78–80 (10 ref.) **(Ger)**

[Report of a case. Giant diverticulum of the sigmoid colon] Goldinger M. **Lakartidningen** 1996 Sep 18;93(38):3244 **(Swe)**

SURGERY

Management of ileosigmoid knotting. Akgun Y. **Br J Surg** 1997 May;84(5):672–3

Technique of laparoscopically assisted on-table colonic irrigation. Chung CC, et al. **Br J Surg** 1997 Mar;84(3):384

Double stapled transabdominal anastomosis for one-stage resection of acute sigmoid volvulus [letter; comment] England R, et al. **Br J Surg** 1997 Jun;84(6):889. Comment on: Br J Surg 1997 Jan;84(1):83–4.

Double stapled transabdominal anastomosis for one-stage resection of acute sigmoid volvulus [see comments] Farouk R, et al. **Br J Surg** 1997 Jan;84(1):83–4. Comment in: Br J Surg 1997 Jun;84(6):889.

Management of ileosigmoid knotting [letter] Sulaiman-Shoab S. **Br J Surg** 1997 Sep;84(9):1322

Use of trephine stoma in sigmoid volvulus. Caruso DM, et al. **Dis Colon Rectum** 1996 Nov;39(11):1222–6

Colectomy for sigmoid volvulus. Chung RS. **Dis Colon Rectum** 1997 Mar;40(3):363–5

Surgical management of ileosigmoid fistulas in Crohn's disease. Young-Fadok TM, et al. **Dis Colon Rectum** 1997 May;40(5):558–61

Endoscopic transrectal drainage of a diverticular abscess. Baron TH, et al. **Gastrointest Endosc** 1997 Jan;45(1):84–7

Early detection of anastomotic leaks after colorectal surgery by measuring endotoxin in the drainage fluid. Junger W, et al. **Hepatogastroenterology** 1996 Nov–Dec;43(12):1523–9

Distal mucus fistula following resection for perforated sigmoid diverticular disease [see comments] Kumar P, et al. **J R Coll Surg Edinb** 1996 Oct;41(5):316–8. Comment in: J R Coll Surg Edinb 1997 Aug;42(4):286.

Distal mucus fistula following resection for perforated sigmoid diverticular disease [letter; comment] Roy MK, et al. **J R Coll Surg Edinb** 1997 Aug;42(4):286. Comment on: J R Coll Surg Edinb 1996 Oct;41(5):316–8.

Analysis of the variety in surgeons' decision strategies for the management of left colonic emergencies. Timmermans DR, et al. **Med Care** 1997 Jul;35(7):701–13

Elective laparoscopic-assisted sigmoid resection for diverticular disease. Eijsbouts QA, et al. **Surg Endosc** 1997 Jul;11(7):750–3

Retractile mesenteritis of the large bowel: report of a case and review of the literature. Ikoma A, et al. **Surg Today** 1996;26(6):435–8 (21 ref.)

Ischemic stricture of the rectosigmoid colon caused by division of the superior rectal artery below Sudeck's point during sigmoidectomy: report of a case. Yamazaki T, et al. **Surg Today** 1997;27(3):254–6

[2 cases of acute suppurative segmental sigmoiditis] Kiurkchiev G, et al. **Khirurgiia (Sofiia)** 1996;49(2):58–9 **(Bul)**

[Laparoscopic resection-anastomosis in diverticular sigmoiditis and its complications apropos of 65 cases] Cady J, et al. **Chirurgie** 1996;121(5):350–3; discussion 353–4 (Eng. Abstr.) **(Fre)**

[Operative mortality in diverticular sigmoiditis] Mariani P, et al. **Chirurgie** 1996;121(5):330–3; discussion 333–4 (Eng. Abstr.) **(Fre)**

[Surgical therapy of sigmoid diverticulitis in elderly patients.--What decides against early elective resection] Hansen O, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:470–3 (Eng. Abstr.) **(Ger)**

[Value of Hartmann's operation as an emergency intervention in sigmoid diverticulitis] Röthlin M, et al. **Swiss Surg** 1997; 3(3):107–11 (15 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Successful endoscopic relief of large bowel obstruction in a case of a sigmoid colon gallstone ileus. Garcia-López S, et al. **J Clin Gastroenterol** 1997 Jun;24(4):291–2

SIGMOID NEOPLASMS

Penile metastasis of sigmoid carcinoma: comparative analysis of different imaging modalities. Andresen R, et al. **Br J Urol** 1997 Mar;79(3):477–8

Self-expandable nitinol coil stent for management of colonic obstruction due to a malignant anastomotic stricture. Bashir RM, et al. **Gastrointest Endosc** 1996 Oct;44(4):497–501 (44 ref.)

[Plasma-cell granuloma of the sigmoid colon concomitant with adenocarcinoma of the cecum. Viewpoint for debate, literature review on pseudotumors, idiopathic colitis and cancer] De Monti M, et al. **Ann Ital Chir** 1997 Mar–Apr; 68(2):245–51 (55 ref.) (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Acute colonic obstruction caused by intussusception and extrusion of a sigmoid lipoma through the anus after barium enema. Kabaalioğlu A, et al. **Abdom Imaging** 1997 Jul–Aug; 22(4):389–91

Plasmacytoma of the sigmoid colon associated with a diverticular stricture: case report and review of the literature. Holland AJ, et al. **J R Coll Surg Edinb** 1997 Feb;42(1):47–9 (24 ref.)

Obstructive anuria and dermatomyositis: a unique association. Parulkar BG, et al. **Urology** 1997 Jul;50(1):135–7

[Intestinal foreign body with sigmoid perforation in an area of carcinomatous stenosis: incidental finding or etiology?] Stiefel D, et al. **Swiss Surg** 1997;3(3):100–3 (Eng. Abstr.) **(Ger)**

[Sigmoid-vesical fistula as a consequence of sigmoid tumor] Kazuka B, et al. **Pol Merkuriusz Lek** 1996 Sep;1(3):195–7 (Eng. Abstr.) **(Pol)**

[Incarcerated scrotal hernia containing a sigmoid colon carcinoma] Toncr I, et al. **Rozhl Chir** 1997 Jun;76(6):287–8 (Eng. Abstr.) **(Slo)**

[Adenocarcinoma of the sigmoid in incarcerated inguinoscrotal hernia (letter)] Alonso Poza A, et al. **Rev Esp Enferm Dig** 1996 Dec;88(12):883–4 **(Spa)**

[Gas gangrene secondary to carcinoma of the colon] Ruiz de Adana JC, et al. **Rev Esp Enferm Dig** 1997 Jun; 89(6):479–80 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

MRI of recurrent rectosigmoid carcinoma [see comments] Markus J, et al. **Abdom Imaging** 1997 May–Jun;22(3):338–42 . Comment in: Abdom Imaging 1997 May–Jun;22(3):343–5.

Carcinomatous perforation of the sigmoid colon presenting as a thigh mass. Lam TP, et al. **Bull Hosp Jt Dis** 1996; 55(2):83–5

[Detection of an asymptomatic sigmoid carcinoma after extramural foreign body perforation (letter)] Wunsch M, et al. **Chirurg** 1996 Jul;67(7):766 **(Ger)**

DRUG THERAPY

[A two-year asymptomatic case with postoperative lung metastasis of sigmoid colon cancer responding to sequential methotrexate and 5-fluorouracil] Kitao Y, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):613–7 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Distal hyperplastic polyps do not predict proximal adenomas: results from a multicentric study of colorectal adenomas. Sciallero S, et al. **Gastrointest Endosc** 1997 Aug; 46(2):124–30

ETIOLOGY

Body mass index and adenomas of the sigmoid colon in Japanese men [letter] Kono S, et al. **Eur J Epidemiol** 1996 Aug;12(4):425–6

[Colonic polyps at the level of the site of an ureterosigmoidostomy 11 years after conversion of a Coffey operation to a continent ileocecal bladder. A case] Benchekroun A, et al. **Prog Urol** 1996 Aug–Sep;6(4):590–3 (Eng. Abstr.) **(Fre)**

GENETICS

Using genetic information to make surgical decisions: report of a case of a 13-year-old boy with colon cancer. Madlensky L, et al. **Dis Colon Rectum** 1997 Feb;40(2):240–3

A very large villous adenoma with an adjacent cancer of the rectum: an informative case for testing the proposed molecular basis of colorectal tumorigenesis. Kanaoka S, et al. **Jpn J Clin Oncol** 1996 Oct;26(5):384–90

PATHOLOGY

Histology of the mucosa in sigmoid colon specimens with diverticular disease: observations for the interpretation of sigmoid colonoscopic biopsy specimens. Goldstein NS, et al. **Am J Clin Pathol** 1997 Apr;107(4):438–44

Colonic xanthelasma due to glyceride accumulation associated with an adenoma. Boruchowicz A, et al. **Am J Gastroenterol** 1997 Jan;92(1):159–61

Colorectal cancer after pelvic irradiation: case reports. Tsunoda A, et al. **Anticancer Res** 1997 Jan–Feb; 17(1B):729–32

Primary Hodgkin's disease of the sigmoid colon: a case report and review of the literature. Thomas DB, et al. **Arch Pathol Lab Med** 1997 May;121(5):528–32 (22 ref.)

Gastrointestinal hepatoid adenocarcinoma: venous permeation and mimicry of hepatocellular carcinoma, a report of four cases. Ishikura H, et al. **Histopathology** 1997 Jul;31(1):47–54 (28 ref.)

Synchronous adenocarcinoma and lymphoma of the colon. Wagle SD, et al. **Indian J Gastroenterol** 1997 Jan;16(1):28–9

Resected sigmoid carcinoma with 13-year metastasis-free interval. Sternal recurrence detected by immunoscintigraphy. Vasireddi SS, et al. **J Clin Gastroenterol** 1996 Sep;23(2):128–30

A case of liver metastasis from colon cancer masquerading as focal sparing in a fatty liver. Kato M, et al. **Jpn J Clin Oncol** 1997 Jun;27(3):189–92

Papillary adenocarcinoma of the sigmoid colon associated with psammoma bodies and hyaline globules: report of a case. Nakayama H, et al. **Jpn J Clin Oncol** 1997 Jun; 27(3):193–6

Isolated splenic metastases from colon cancer. Indudhara R, et al. **South Med J** 1997 Jun;90(6):633–6 (24 ref.)

Hemangiopericytoma of the sigmoid mesentery: report of a case with immunohistochemical findings. Nakagawa T, et al. **Surg Today** 1997;27(1):64–7

Cronkhite–Canada syndrome associated with carcinoma of the sigmoid colon: report of a case. Nakatsubo N, et al. **Surg Today** 1997;27(4):345–8 (28 ref.)

[Adenoma and neuroendocrine carcinoma: 2 adjacent intestinal neoplasias. Simple coincidence? Report of 2 cases] Salmeron M, et al. **Rev Med Suisse Romande** 1997 Feb; 117(2):143–6 **(Fre)**

[A two-year asymptomatic case with postoperative lung metastasis of sigmoid colon cancer responding to sequential methotrexate and 5-fluorouracil] Kitao Y, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):613–7 (Eng. Abstr.) **(Jpn)**

[Secondary hepatic resections in a case of sigmoid colon cancer with multiple liver metastasis (H3) after successful continuous hepatic artery infusion chemotherapy oriented by in vitro chemosensitivity test] Miura M, et al. **Gan To Kagaku Ryoho** 1997 Jun;24(8):1031–4 (Eng. Abstr.) **(Jpn)**

[Tumors originating in the muscularis mucosae of the recto-sigma] Martín Fernández J, et al. **Rev Esp Enferm Dig** 1996 Dec;88(12):868–72 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

The risk factor profile of recto-sigmoid adenomas: a prospective screening study of 665 patients in a clinical rehabilitation centre. Manus B, et al. **Eur J Cancer Prev** 1997 Feb;6(1):38–43

RADIOGRAPHY

Computed tomography of the rectosigmoid region. Dixon AK. **Eur J Radiol** 1996 May;22(2):107–15 (39 ref.)

RADIONUCLIDE IMAGING

Incidental 67Ga uptake into an appendiceal mucocele in a patient with sigmoid colon cancer. Ohta H, et al. **Ann Nucl Med** 1996 May;10(2):257–9

RADIOTHERAPY

Radiotherapy treatment for isolated loco-regional recurrence of rectosigmoid cancer following definitive surgery: Peter MacCallum Cancer Institute experience, 1981–1990. Guiney MJ, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15;38(5):1019–25

Treatment planning for adenocarcinoma of the rectum and sigmoid: a patterns of care study. PCS Committee. Kline RW, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15; 37(2):305–11 (3 ref.)

SURGERY

Laparoscopic-assisted resection of rectosigmoid carcinoma. Immediate and medium-term results. Leung KL, et al. **Arch Surg** 1997 Jul;132(7):761–4; discussion 765

Evaluation of a policy of total mesorectal excision for rectal and rectosigmoid cancers. Hainsworth PJ, et al. **Br J Surg** 1997 May;84(5):652–6

Isolated dural metastasis from colon cancer. Higuchi M, et al. **Clin Neurol Neurosurg** 1997 May;99(2):135–7

Interleukin-6 and stress hormone responses after uncomplicated gasless laparoscopic-assisted and open sigmoid colectomy. Fukushima R, et al. **Dis Colon Rectum** 1996 Oct;39(10 Suppl):S29–34

Early postoperative results of a prospective series of laparoscopic vs. Open anterior resections for rectosigmoid cancers. Goh YC, et al. **Dis Colon Rectum** 1997 Jul; 40(7):776–80

Using genetic information to make surgical decisions: report of a case of a 13-year-old boy with colon cancer. Madlensky L, et al. **Dis Colon Rectum** 1997 Feb;40(2):240–3

Tumor recurrence associated with use of a percutaneous bladder catheter after surgery for large bowel carcinoma. Strigård K. **Int J Colorectal Dis** 1996;11(3):122

Laparoscopic-assisted reversal of Hartmann's procedure: a simplified technique and audit of twelve cases. Macpherson SC, et al. **J Laparoendosc Surg** 1996 Oct;6(5):305–10

Laparoscopically assisted sigmoid colectomy in human immunodeficiency virus (HIV) patients: a good indication for laparoscopic surgery. Oliveira L, et al. **Surg Laparosc Endosc** 1996 Oct;6(5):414–6

[Temporary colostomies after sigmoid colon and rectum interventions—are they still justified?] Wahl W, et al. **Langenbecks Arch Chir** 1997;382(3):149–56 (Eng. Abstr.) **(Ger)**

[Coincidence of bone infarct and aggressive bone metastasis] Hüfner T, et al. **Unfallchirurg** 1997 Jan;100(1):69–72 (Eng. Abstr.) **(Ger)**

[Intestinal carcinoid. A propos of a case] Bajardi G, et al. **Minerva Chir** 1996 Dec;51(12):1117–20 (Eng. Abstr.) **(Ita)**

[Expended radical surgery of sigmoid cancer with spreading to the bladder] Dovlatian AA, et al. **Khirurgiia (Mosk)** 1997;(6):67–9 **(Rus)**

THERAPY

Palliation of large-bowel obstruction due to recurrent rectosigmoid tumor using self-expandable endoprostheses. Feretis C, et al. **Endoscopy** 1996 Mar;28(3):319–22

Self-expanding metal stent for obstructing adenocarcinoma of the sigmoid. Vandervoort J, et al. **Gastrointest Endosc** 1996 Dec;44(6):739–41

Application of rectal stents for palliation of obstructing rectosigmoid cancer. Dohmoto M, et al. **Surg Endosc** 1997 Jul;11(7):758–61

SIGMOIDOSCOPY

Randomized, controlled comparison of two forms of preparation for screening flexible sigmoidoscopy. Sharma VK, et al. **Am J Gastroenterol** 1997 May;92(5):809–11

Sigmoidoscopy. Graham P. **Aust Fam Physician** 1996 Sep; 25(9):1403–4

Sigmoidoscopic neurosurgery? Treatment of an unusual complication of ventriculoperitoneal shunting. Brown SR, et al. **Br J Neurosurg** 1996 Aug;10(4):419–20

Randomized trial of the addition of flexible sigmoidoscopy to faecal occult blood testing for colorectal neoplasia population screening. Berry DP, et al. **Br J Surg** 1997 Sep; 84(9):1274–6

Evidence of gender bias in patients undergoing flexible sigmoidoscopy. Herold AH, et al. **Cancer Detect Prev** 1997; 21(2):141–7

A study at 10 medical centers of the safety and efficacy of 48 flexible sigmoidoscopies and 8 colonoscopies during pregnancy with follow-up of fetal outcome and with comparison to control groups. Cappell MS, et al. **Dig Dis Sci** 1996 Dec;41(12):2353–61

Prevention of colon cancer [editorial] Hill MJ. **Eur J Cancer Prev** 1997 Apr;6(2):105–6

Endoscopic screening for colorectal cancer. Lieberman D. **Gastroenterol Clin North Am** 1997 Mar;26(1):71–83 (37 ref.)

Nitrous oxide inhalation as sedation for flexible sigmoidoscopy. Fich A, et al. **Gastrointest Endosc** 1997 Jan; 45(1):10–2

Colon cancer screening. Sigmoidoscopy or colonoscopy. Khullar SK, et al. **Gastrointest Endosc Clin N Am** 1997 Jul;7(3):365–86 (113 ref.)

Screening for colonic neoplastic lesions using flexible sigmoidoscopy in employees of a nuclear research center and members of collective settlements. Niv Y, et al. **Isr J Med Sci** 1996 Dec;32(12):1167–72

Best bowel prep for flexible sigmoidoscopy. Forsch R. **J Fam Pract** 1997 Aug;45(2):102–3

Screening for colorectal cancer by once only sigmoidoscopy: a feasibility study in Turin, Italy. Senore C, et al. **J Med Screen** 1996;3(2):72–8

Self-administered disposable micro-enemas before outpatient sigmoidoscopy. Marsh SK, et al. **J R Soc Med** 1996 Nov; 89(11):616–7

Prevention of colorectal cancer. Costs and effectiveness of sigmoidoscopy. Geul KW, et al. **Scand J Gastroenterol Suppl** 1997;223:79–87

[Rectal biopsies from HIV-infected patients] Matinez C, et al. **G E N** 1995 Oct–Dec;49(4):267–72 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Corneoscleral perforation following sigmoidoscopy [letter] Sherman MD, et al. **Am Fam Physician** 1997 Sep 15; 56(4):1062, 1064

Intrathoracic incarceration of the colon after endoscopy [letter] Knueppel DA, et al. **Am J Gastroenterol** 1996 Oct; 91(10):2256–7

Laparoscopic closure for perforation of the sigmoid colon by endoscopic linear stapler. Hayashi K, et al. **Surg Laparosc Endosc** 1996 Oct;6(5):411–3 (13 ref.)

ECONOMICS

Potential costs of flexible sigmoidoscopy-based colorectal cancer screening [editorial; comment] Evans RW. **Gastroenterology** 1996 Dec;111(6):1758–60. Comment on: Gastroenterology 1996 Dec;111(6):1411–7.

Colorectal cancer screening: is the gain worth the pain? [letter; comment] Lowenfels AB. **Gastroenterology** 1997 Jul;113(1):366. Comment on: Gastroenterology 1996 Dec;111(6):1411–7.

Potential costs of flexible sigmoidoscopy-based colorectal cancer screening [see comments] Marshall JR, et al. **Gastroenterology** 1996 Dec;111(6):1411–7. Comment in: Gastroenterology 1996 Dec;111(6):1758–60. Comment in: Gastroenterology 1997 Jul;113(1):366.

INSTRUMENTATION

Palliation of large-bowel obstruction due to recurrent rectosigmoid tumor using self-expandable endoprostheses. Feretis C, et al. **Endoscopy** 1996 Mar;28(3):319–22

A new method of obtaining rectal mucosal biopsy during rigid sigmoidoscopy. Oksüzoğlu G, et al. **Endoscopy** 1997 Jan;29(1):55

Use of a pediatric colonoscope improves the success of total colonoscopy in selected adult patients. Marshall JB. **Gastrointest Endosc** 1996 Dec;44(6):675–8

METHODS

The optimum bowel preparation for flexible sigmoidoscopy. Drew PJ, et al. **Eur J Surg Oncol** 1997 Aug;23(4):315–6

Prevalence of proximal colonic polyps in average-risk asymptomatic patients with negative fecal occult blood tests and flexible sigmoidoscopy [see comments] Kadakia SC, et al. **Gastrointest Endosc** 1996 Aug;44(2):112–7. Comment in: Gastroenterology 1996 Aug;44(2):203–4.

Rectal Dieulafoy's or angiodysplasia? [letter] Kalman DR, et al. **Gastrointest Endosc** 1997 Jul;46(1):91–2

Endoscopic removal of an entrapped foreign body from the sigmoid colon using a needle knife. Ramirez FC, et al. **Gastrointest Endosc** 1996 Jul;44(1):84–5

Office procedures. Flexible sigmoidoscopy. Harper MB, et al. **Prim Care** 1997 Jun;24(2):341–57 (25 ref.)

Flexible sigmoidoscopy. A reliable determinant of colonic ischemia following ruptured abdominal aortic aneurysm. Brandt CP, et al. **Surg Endosc** 1997 Feb;11(2):113–5

[Fibrosigmoidoscopy as a screening method for colorectal neoplasms in a population of patients hospitalized in the internal medicine department] Tomecki R, et al. **Pol Arch Med Wewn** 1996 Jun;95(6):549–54 (Eng. Abstr.) **(Pol)**

STANDARDS

Interobserver variability in endoscopic ultrasonography: a prospective evaluation. Roubein LD, et al. **Gastrointest Endosc** 1996 Nov;44(5):573–7

STATISTICS & NUMERICAL DATA

Alcohol and smoking in relation to the prevalence of adenomatous colorectal polyps detected at sigmoidoscopy. Longnecker MP, et al. **Epidemiology** 1996 May;7(3):275–80

UTILIZATION

Screening sigmoidoscopy. Factors associated with utilization [see comments] Lewis SF, et al. **J Gen Intern Med** 1996 Sep;11(9):542–4. Comment in: J Gen Intern Med 1996 Sep;11(9):563–4.

SIGN LANGUAGE

Words recognized as units; systematic signs. 1859 [classical article] Carlin J. **Am Ann Deaf** 1997 Jul;142(3):18–20

Is the sign-language used to excess in teaching deaf-mutes? 1871 [classical article] Gallaudet EM. **Am Ann Deaf** 1997 Jul;142(3):21–3

The value of the sign-language to the deaf. 1887 [classical article] Gallaudet EM. **Am Ann Deaf** 1997 Jul;142(3):27–30

Must the sign-language go? 1899 [classical article] Gallaudet EM. **Am Ann Deaf** 1997 Jul;142(3):31–4

On the natural language of signs; and its value and uses in the instruction of the deaf and dumb. 1848 [classical article] Gallaudet TH. **Am Ann Deaf** 1997 Jul;142(3):1–7

A history of seeing essential English (SEE I). Luetke-Stahlman B, et al. **Am Ann Deaf** 1996 Mar; 141(1):29–33

Whole language and deaf bilingual-bicultural education—naturally! Mason D, et al. **Am Ann Deaf** 1996 Oct;141(4):293–8

Notions of the deaf and dumb before instruction, especially in regard to religious subjects. 1855 [classical article] Peet HP. **Am Ann Deaf** 1997 Jul;142(3):8–17

Preschool deaf and hard of hearing students' interactions during ASL and English storytelling. Schick B, et al. **Am Ann Deaf** 1995 Oct;140(4):363–70

Aiming for consistency in the way teachers sign. Stewart DA, et al. **Am Ann Deaf** 1995 Oct;140(4):314–23

Bi-Bi to MCE? 1993 [classical article] Stewart DA. **Am Ann Deaf** 1997 Jul;142(3):106–12

Long-term progress in reading abilities in hearing-impaired children trained by the Kanazawa method. Notoya M, et al. **Auris Nasus Larynx** 1996;23:43–7

Enhanced image generation abilities in deaf signers: a right hemisphere effect. Emmorey K, et al. **Brain Cogn** 1996 Oct; 32(1):28–44

Early sign language acquisition and the development of hand preference in young children. Bonvillian JD, et al.

SIGN LANGUAGE

Brain Lang 1997 Jun 1;58(1):1–22
Neural systems mediating American sign language: effects of sensory experience and age of acquisition. Neville HJ, et al. **Brain Lang** 1997 May;57(3):285–308
From here and now to there and then: the development of displaced reference in homesign and English. Morford JP, et al. **Child Dev** 1997 Jun;68(3):420–35
Does functional communication training compete with ongoing contingencies of reinforcement? An analysis during response acquisition and maintenance. Shirley MJ, et al. **J Appl Behav Anal** 1997 Spring;30(1):93–104
Sign language and motor functioning in students with autistic disorder. Seal BC, et al. **J Autism Dev Disord** 1997 Aug; 27(4):437–66
Sign language for children with acquired aphasia [letter; comment] Woll B, et al. **J Child Neurol** 1996 Jul;11(4):347–9 . Comment on: J Child Neurol 1995 Jul;10(4):267–70.
Young children's acquisition of the location aspect of American Sign Language signs: parental report findings. Bonvillian JD, et al. **J Commun Disord** 1996 Jan–Feb; 29(1):13–35
Transparency of one-handed Amer-Ind hand signals to nonfamiliar viewers. Campbell CR, et al. **J Speech Hear Res** 1995 Dec;38(6):1284–9
Voice onset time in speech produced during simultaneous communication. Schiavetti N, et al. **J Speech Hear Res** 1996 Jun;39(3):565–72
Backwards signing and ASL syllable structure. Wilbur RB, et al. **Lang Speech** 1997 Jan–Mar;40 (Pt 1):63–90
Signed and spoken language perception studied by positron emission tomography. Söderfeldt B, et al. **Neurology** 1997 Jul;49(1):82–7
Hemispheric specialization for sign language. Grossi G, et al. **Neuropsychologia** 1996 Jul;34(7):737–40
A case of 'sign blindness' following left occipital damage in a deaf signer. Hickok G, et al. **Neuropsychologia** 1995 Dec;33(12):1597–606
Neural correlates of thinking in sign language. McGuire PK, et al. **Neuroreport** 1997 Feb 10;8(3):695–8
Word recall in deaf students: the effects of different coding strategies. Novack LL, et al. **Percept Mot Skills** 1996 Oct; 83(2):627–39
Chameleon voices: interpreting for deaf parents. Preston P. **Soc Sci Med** 1996 Jun;42(12):1681–90
[Combined verbal and sign language for promoting communication development in non-verbal or or pre-verbal children and adolescents with mental retardation] Wilken E. **Rehabilitation (Stuttg)** 1996 Nov; 35(4):228–32 (11 ref.) (Eng. Abstr.) **(Ger)**
[Study of workload and cervicobrachial disorder among sign language interpreters] Taoda K, et al. **Sangyo Eiseigaku Zasshi** 1997 Jul;39(4):116–25 (Eng. Abstr.) **(Jpn)**

SIGNAL DETECTION (PSYCHOLOGY)

Adaptive computational models of fast learning of motion direction discrimination. Sundareswaran V, et al. **Biol Cybern** 1996 Apr;74(4):319–29
Signal-detection, threshold, and dual-process models of recognition memory: ROCs and conscious recollection. Yonelinas AP, et al. **Conscious Cogn** 1996 Dec;5(4):418–41
Can we identify who will adhere to long-term physical activity? Signal detection methodology as a potential aid to clinical decision making. King AC, et al. **Health Psychol** 1997 Jul;16(4):380–9
CMR and factors influencing grouping: masker bands overlapping in frequency [letter] Buss E, et al. **J Acoust Soc Am** 1996 Sep;100(3):1897–900
Signal processing techniques for acoustic measurement of sperm whale body lengths. Goold JC. **J Acoust Soc Am** 1996 Nov;100(5):3431–41
Effects of masker gating for signal detection in unmodulated and modulated bandlimited noise. Hall JW 3rd, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2365–72
The relationship between localization and the Franssen effect. Yost WA, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2994–7
Effects of stimulus source and intensity on covert orientation to auditory stimuli. Buchtel HA, et al. **Neuropsychologia** 1996 Oct;34(10):979–85
Pain assessment in self-injurious patients with borderline personality disorder using signal detection theory. Kemperman I, et al. **Psychiatry Res** 1997 May 30; 70(3):175–83

PHYSIOLOGY

On the complex dynamics of intracellular ganglion cell light responses in the cat retina. Przybyszewski AW, et al. **Biol Cybern** 1996 Apr;74(4):299–308
Neuromodulation of transduction and signal processing in the end organs of taste. Nagai T, et al. **Chem Senses** 1996 Jun;21(3):353–65 (106 ref.)
Detection and discrimination of gliding tones as a function of frequency transition and center frequency. Madden JP, et al. **J Acoust Soc Am** 1996 Dec;100(6):3754–60
The assessment of intramuscular discrimination using signal detection theory: its potential contribution to chiropractic. Murphy BA, et al. **J Manipulative Physiol Ther** 1995 Nov–Dec;18(9):572–6
Processing visual evoked potentials based on matched filtering of single trial responses. Jobert M, et al. **Neuropsychobiology** 1996;34(3):166–74
Object-based visual attention in luminance increment detection? Stuart GW, et al. **Neuropsychologia** 1997 Jun; 35(6):843–53

SIGNAL INTERPRETATION, COMPUTER-ASSISTED see **SIGNAL PROCESSING, COMPUTER-ASSISTED**

SIGNAL PATHWAYS see **SIGNAL TRANSDUCTION**

SIGNAL PEPTIDES

Prediction of N-terminal protein sorting signals. Claros MG, et al. **Curr Opin Struct Biol** 1997 Jun;7(3):394–8 (41 ref.)
The mouse DNA binding protein Rc for the kappa B motif of transcription and for the V(D)J recombination signal sequences contains composite DNA-protein interaction domains and belongs to a new family of large transcriptional proteins. Wu LC, et al. **Genomics** 1996 Aug 1;35(3):415–24
Structural requirements for basolateral sorting of the human transferrin receptor in the biosynthetic and endocytic pathways of Madin-Darby canine kidney cells. Odorizzi G, et al. **J Cell Biol** 1997 Jun 16;137(6):1255–64
The human T-cell lymphotropic virus type 1 Tof protein contains a bipartite nuclear localization signal that is able to functionally replace the amino-terminal domain of Rex. D'Agostino DM, et al. **J Virol** 1997 Jan;71(1):75–83
[Characterization of topogenic sequences which regulate the integration and membrane topology of proteins in the endoplasmic reticulum membrane] Sakaguchi M. **Seikagaku** 1997 Jan;69(1):1–15 (90 ref.) **(Jpn)**
[Structure and function of a cell adhesive signal, Arg-Gly-Asp sequence] Yamada T. **Tanpakushitsu Kakusan Koso** 1997 Jan;42(1):31–41 (44 ref.) **(Jpn)**

ANALYSIS

Sequence requirement for nucleolar localization of rat ribosomal protein L31. Quaye IK, et al. **Eur J Cell Biol** 1996 Feb;69(2):151–5
An expressed sequence tag analysis of a full-length, spliced-leader cDNA library from Leishmania major promastigotes. Levick MP, et al. **Mol Biochem Parasitol** 1996 Feb–Mar;76(1–2):345–8

BIOSYNTHESIS

A single expression site with a conserved leader sequence regulates variation of expression of the Pneumocystis carinii family of major surface glycoprotein genes. Edman JC, et al. **DNA Cell Biol** 1996 Nov;15(11):989–99
Expression of cytokine genes or proteins and signaling molecules in lymphocytes associated with human ovarian carcinoma. Rabinowich H, et al. **Int J Cancer** 1996 Nov 4;68(3):276–84
Phosphatidylinositol-4-phosphate 5-kinase isozymes catalyze the synthesis of 3-phosphate-containing phosphatidylinositol signaling molecules. Zhang X, et al. **J Biol Chem** 1997 Jul 11;272(28):17756–61
Signal sequence trap. Expression cloning method for secreted proteins and type 1 membrane proteins. Tashiro K, et al. **Methods Mol Biol** 1997;69:203–19
Cloning and sequence analysis of a cDNA encoding a crustacean hyperglycemic hormone from the Kuruma prawn Penaeus japonicus. Ohira T, et al. **Mol Mar Biol Biotechnol** 1997 Mar;6(1):59–63

CHEMISTRY

Metabolic effects of altering redundant targeting signals for yeast mitochondrial malate dehydrogenase. Small WC, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):53–60
Fluorescence studies on the interaction of a synthetic signal peptide and its analog with liposomes. Wang Q, et al. **Biochim Biophys Acta** 1997 Feb 21;1324(1):69–75
Comparative mutagenesis of nuclear localization signals reveals the importance of neutral and acidic amino acids. Makkerh JPS, et al. **Curr Biol** 1996 Aug 1;6(8):1025–7
Unusual characteristics of amino-terminal and hydrophobic domains in nuclear-encoded thylakoid signal peptides. Brink S, et al. **Eur J Biochem** 1997 Apr 15;245(2):340–8
Spectroscopic studies of the C-terminal secretion signal of the Serratia marcescens haem acquisition protein (HasA) in various membrane-mimetic environments. Wolff N, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):400–7
Structural features of a close homologue of L1 (CHL1) in the mouse: a new member of the L1 family of neural recognition molecules. Holm J, et al. **Eur J Neurosci** 1996 Aug;8(8):1613–29
Cytochrome c(y) of Rhodobacter capsulatus is attached to the cytoplasmic membrane by an uncleaved signal sequence-like anchor. Myllykallio H, et al. **J Bacteriol** 1997 Apr;179(8):2623–31
The hydrophobic region of signal peptides is a determinant for SRP recognition and protein translocation across the ER membrane. Hatsuzawa K, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):270–7
Intracellular targeting of lysosomal cathepsin D in COS cells. Takeshima H, et al. **J Biochem (Tokyo)** 1995 Nov; 118(5):981–8
Efficient assembly of functional cytochrome P450 2C2 requires a spacer sequence between the N-terminal signal anchor and catalytic domains. Chen CD, et al. **J Biol Chem** 1997 Sep 5;272(36):22891–7
Multiple determinants direct the orientation of signal-anchor proteins: the topogenic role of the hydrophobic signal domain. Wahlberg JM, et al. **J Cell Biol** 1997 May 5; 137(3):555–62
The NPI-1/NPI-3 (karyopherin alpha) binding site on the influenza a virus nucleoprotein NP is a nonconventional nuclear localization signal. Wang P, et al. **J Virol** 1997 Mar;71(3):1850–6
A common export pathway for proteins binding complex redox cofactors? Berks BC. **Mol Microbiol** 1996 Nov; 22(3):393–404 (90 ref.)
Interaction of alpha s2- and beta-casein signal peptides with DMPC and DMPG liposomes. Creuzenet C, et al. **Peptides** 1997;18(4):463–72
Identification of the peroxisomal targeting signal for cottonseed catalase. Mullen RT, et al. **Plant J** 1997 Aug; 12(2):313–22
Identification of prokaryotic and eukaryotic signal peptides and prediction of their cleavage sites. Nielsen H, et al. **Protein Eng** 1997 Jan;10(1):1–6
Introduction of spacer peptides N-terminal to a cleavage recognition motif in recombinant fusion proteins can improve site-specific cleavage. Polyak SW, et al. **Protein Eng** 1997 Jun;10(6):615–9
Structure and dynamics of the M13 coat signal sequence in membranes by multidimensional high-resolution and solid-state NMR spectroscopy. Bechinger B. **Proteins** 1997 Apr;27(4):481–92
Defining a similarity threshold for a functional protein sequence pattern: the signal peptide cleavage site. Nielsen H, et al. **Proteins** 1996 Feb;24(2):165–77
[Analysis of the effect of replacing Lys(-20) in the alkaline phosphatase signal peptide on secretion of this enzyme] Karamysheva ZN, et al. **Biokhimiia** 1996 Apr;61(4):745–54 (Eng. Abstr.) **(Rus)**

GENETICS

The association between free fatty acid concentrations and triglyceride-rich lipoproteins in the post-prandial state is altered by a common deletion polymorphism of the apo B signal peptide. Byrne CD, et al. **Atherosclerosis** 1996 Nov 15;127(1):35–42
The effects of the apolipoprotein B signal peptide (ins/del) and XbaI polymorphisms on plasma lipid responses to dietary change. Pajukanta PE, et al. **Atherosclerosis** 1996 Apr 26;122(1):1–10
Gene structure for mouse glutathione reductase, including a putative mitochondrial targeting signal. Tamura T, et al. **Biochem Biophys Res Commun** 1997 Aug 18; 237(2):419–22
Signal sequences: the same yet different. Zheng N, et al. **Cell** 1996 Sep 20;86(6):849–52 (21 ref.)
Study of apoB gene signal peptide insertion/deletion polymorphism in a healthy Serbian population: no association with serum lipid levels. Glišić S, et al. **Clin Chim Acta** 1997 Jul 4;263(1):57–65
Frequencies of five genetic polymorphisms in coronarographed patients and effects on lipid levels in a supposedly healthy population. Régis-Bailly A, et al. **Clin Genet** 1996 Nov;50(5):339–47
Sequence requirements for the recognition of tyrosine-based endocytic signals by clathrin AP-2 complexes. Boll W, et al. **EMBO J** 1996 Nov 1;15(21):5789–95
The effects of orbital spaceflight on bone histomorphometry and messenger ribonucleic acid levels for bone matrix proteins and skeletal signaling peptides in ovariectomized growing rats. Cavolina JM, et al. **Endocrinology** 1997 Apr; 138(4):1567–76
Tissue-specific transcription start sites and alternative splicing of the parathyroid hormone (PTH)/PTH-related peptide (PTHrP) receptor gene: a new PTH/PTHrP receptor splice variant that lacks the signal peptide. Joun H, et al. **Endocrinology** 1997 Apr;138(4):1742–9
Conservation of mitochondrial targeting sequence function in mitochondrial and hydrogenosomal proteins from the early-branching eukaryotes Crithidia, Trypanosoma and Trichomonas. Häusler T, et al. **Eur J Cell Biol** 1997 Jul; 73(3):240–51
Trypanosomatidae: a spliced-leader-derived probe specific for the genus Phytomonas. Teixeira MM, et al. **Exp Parasitol** 1996 Dec;84(3):311–9
Deletion of the leader peptide of the mitochondrially encoded precursor of Saccharomyces cerevisiae cytochrome c oxidase subunit II. Torello AT, et al. **Genetics** 1997 Apr; 145(4):903–10
Deletion of an endosomal/lysosomal targeting signal promotes the secretion of Alzheimer's disease amyloid precursor protein (APP). Ono Y, et al. **J Biochem (Tokyo)** 1997 Mar;121(3):585–90
The neural cell adhesion molecule expresses a tyrosine-independent basolateral sorting signal. Le Gall AH, et al. **J Biol Chem** 1997 Feb 14;272(7):4559–67
Human MxB protein, an interferon-alpha-inducible GTPase, contains a nuclear targeting signal and is localized in the heterochromatin region beneath the nuclear envelope. Melén K, et al. **J Biol Chem** 1996 Sep 20;271(38):23478–86
Heterogeneity in clinical manifestation of autosomal dominant neurohypophyseal diabetes insipidus caused by a mutation encoding Ala-1-->Val in the signal peptide of the arginine vasopressin/neurophysin II/copeptin

precursor. Repaske DR, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):51–6

Comparative study on the effect of signal peptide codons and arginine codons on the expression of human interferon–alpha 1 gene in Escherichia coli. Saraffova A, et al. **J Interferon Cytokine Res** 1996 Sep;16(9):745–9

The role of sonic hedgehog in vertebrate development. Weed M, et al. **Matrix Biol** 1997 May;16(2):53–8 (53 ref.)

Pheromone cCF10 and plasmid pCF10–encoded regulatory molecules act post–transcriptionally to activate expression of downstream conjugation functions. Bensing BA, et al. **Mol Microbiol** 1997 Apr;24(2):285–94

Protein secretion by heterologous bacterial ABC–transporters: the C–terminus secretion signal of the secreted protein confers high recognition specificity. Duong F, et al. **Mol Microbiol** 1996 Aug;21(3):459–70

A bacterial signal peptide directs efficient secretion of eukaryotic proteins in the baculovirus expression system. Allet B, et al. **Protein Expr Purif** 1997 Feb;9(1):61–8

Amino–terminal charge affects the periplasmic accumulation of recombinant heregulin/EGF hybrids exported using the Escherichia coli alkaline phosphatase signal sequence. Campion SR, et al. **Protein Expr Purif** 1997 Aug; 10(3):331–9

Relationship between 3' end formation and SL2–specific trans–splicing in polycistronic Caenorhabditis elegans pre–mRNA processing. Kuersten S, et al. **RNA** 1997 Mar; 3(3):269–78

IMMUNOLOGY

Comparative study of DNA–based immunization vectors: effect of secretion signals on the antibody responses in mice. Haddad D, et al. **FEMS Immunol Med Microbiol** 1997 Jul; 18(3):193–202

The effect of the proteasome inhibitor lactacystin on the presentation of transporter associated with antigen processing (TAP)–dependent and TAP–independent peptide epitopes by class I molecules. Bai A, et al. **J Immunol** 1997 Sep 1;159(5):2139–46

Presentation of an influenza nucleoprotein epitope incorporated into the H–2Db signal sequence requires the transporter–associated with antigen presentation. Uger RA, et al. **J Immunol** 1997 Jan 15;158(2):685–92

Identification of a gag–encoded cytotoxic T–lymphocyte epitope from FBL–3 leukemia shared by Friend, Moloney, and Rauscher murine leukemia virus–induced tumors. Chen W, et al. **J Virol** 1996 Nov;70(11):7773–82

The signal sequence of lymphocytic choriomeningitis virus contains an immunodominant cytotoxic T cell epitope that is restricted by both H–2D(b) and H–2K(b) molecules. Hudrisier D, et al. **Virology** 1997 Jul 21;234(1):62–73

METABOLISM

Rhizobium lipo–chitooligosaccharide nodulation factors: signaling molecules mediating recognition and morphogenesis. Dénarié J, et al. **Annu Rev Biochem** 1996; 65:503–35 (185 ref.)

Location of N–acetylmuramyl–L–alanyl–D–glutamylmesodiaminopimelic acid, presumed signal molecule for beta–lactamase induction, in the bacterial cell. Dietz H, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2173–7

Import into mitochondria of phospholipid hydroperoxide glutathione peroxidase requires a leader sequence. Arai M, et al. **Biochem Biophys Res Commun** 1996 Oct 14; 227(2):433–9

Modification of the N–terminus of human factor IX by defective propeptide cleavage or acetylation results in a destabilized calcium–induced conformation: effects on phospholipid binding and activation by factor XIa. Wojcik EG, et al. **Biochem J** 1997 May 1;323 (Pt 3):629–36

Mutational analysis of the C–terminal signal peptide of bovine liver 5'–nucleotidase for GPI anchoring: a study on the significance of the hydrophilic spacer region. Furukawa Y, et al. **Biochim Biophys Acta** 1997 Sep 4;1328(2):185–96

The hydrophobic region of signal peptides is involved in the interaction with membrane–bound SecA. Mori H, et al. **Biochim Biophys Acta** 1997 May 22;1326(1):23–36

Pathway specificity for a delta pH–dependent precursor thylakoid lumen protein is governed by a 'Sec–avoidance' motif in the transfer peptide and a 'Sec–incompatible' mature protein. Bogsch E, et al. **EMBO J** 1997 Jul 1; 16(13):3851–9

Nuclear export of the E1B 55–kDa and E4 34–kDa adenoviral oncoproteins mediated by a rev–like signal sequence. Dobbelstein M, et al. **EMBO J** 1997 Jul 16; 16(14):4276–84

Regulatory interactions in the recognition of endocytic sorting signals by AP–2 complexes. Rapoport I, et al. **EMBO J** 1997 May 1;16(9):2240–50

Rat liver catalase is sorted to peroxisomes by its C–terminal tripeptide Ala–Asn–Leu, not by the internal Ser–Lys–Leu motif. Trelease RN, et al. **Eur J Cell Biol** 1996 Nov; 71(3):248–58

The human major histocompatibility complex class Ib molecule HLA–E binds signal sequence–derived peptides with primary anchor residues at positions 2 and 9. Braud V, et al. **Eur J Immunol** 1997 May;27(5):1164–9

Identification of nuclear localization signals within the zinc fingers of the WT1 tumor suppressor gene product. Bruening W, et al. **FEBS Lett** 1996 Sep 9;393(1):41–7

Positively charged lysine at the N–terminus of the signal peptide of the Escherichia coli alkaline phosphatase provides the secretion efficiency and is involved in the interaction with anionic phospholipids. Nesmeyanova MA, et al. **FEBS Lett** 1997 Feb 17;403(2):203–7

Production of the beta–subunit of human chorionic gonadotropin in Escherichia coli and its export mediated by the heat–labile enterotoxin chain–B signal sequence. Pillai D, et al. **Gene** 1996 Sep 16;173(2):271–4

The major pathways of protein translocation across membranes. Ito K. **Genes Cells** 1996 Apr;1(4):337–46 (64 ref.)

Nuclear entry, oligomerization, and DNA binding of the Drosophila heat shock transcription factor are regulated by a unique nuclear localization sequence. Zandi E, et al. **Genes Dev** 1997 May 15;11(10):1299–314

Signals and signal–transduction systems in the control of development in Hydra and Hydractinia. Hassel M, et al. **Int J Dev Biol** 1996 Feb;40(1):323–30 (49 ref.)

Tromp1, a putative rare outer membrane protein, is anchored by an uncleaved signal sequence to the Treponema pallidum cytoplasmic membrane. Akins DR, et al. **J Bacteriol** 1997 Aug;179(16):5076–86

Competition between functional signal peptides demonstrates variation in affinity for the secretion pathway. Chen H, et al. **J Bacteriol** 1996 Dec;178(23):6658–64

Escherichia coli SecB stimulates export without maintaining export competence of ribose–binding protein signal sequence mutants. Francetic O, et al. **J Bacteriol** 1996 Oct; 178(20):5954–9

Analysis of the carboxyl–terminal peroxisomal targeting signal 1 in a homologous context in Saccharomyces cerevisiae. Elgersma Y, et al. **J Biol Chem** 1996 Oct 18; 271(42):26375–82

N–terminal hydrophobic sorting signals of preproteins confer mitochondrial hsp70 independence for import into mitochondria. Gruhler A, et al. **J Biol Chem** 1997 Jul 11; 272(28):17410–5

The N–terminal domain of human GABA receptor rho1 subunits contains signals for homooligomeric and heterooligomeric interaction. Hackam AS, et al. **J Biol Chem** 1997 May 23;272(21):13750–7

Signal anchor sequence insertion into the outer mitochondrial membrane. Comparison with porin and the matrix protein targeting pathway. Millar DG, et al. **J Biol Chem** 1996 Oct 18;271(42):25823–9

Differential expression and sequence–specific interaction of karyopherin alpha with nuclear localization sequences. Nadler SG, et al. **J Biol Chem** 1997 Feb 14;272(7):4310–5

Structural determinants of interaction of tyrosine–based sorting signals with the adaptor medium chains. Ohno H, et al. **J Biol Chem** 1996 Nov 15;271(46):29009–15

In vitro interaction between a chloroplast transit peptide and chloroplast outer envelope lipids is sequence–specific and lipid class–dependent. Pinnaduwage P, et al. **J Biol Chem** 1996 Dec 20;271(51):32907–15

Leucine–responsive regulatory protein–DNA interactions in the leader region of the ilvGMEDA operon of Escherichia coli. Rhee KY, et al. **J Biol Chem** 1996 Oct 25; 271(43):26499–507

Peroxovanadate induces tyrosine phosphorylation of multiple signaling proteins in mouse liver and kidney. Ruff SJ, et al. **J Biol Chem** 1997 Jan 10;272(2):1263–7

Differential and multiple binding of signal transducing molecules to the ITAMs of the TCR–zeta chain. Zenner G, et al. **J Cell Biochem** 1996 Oct;63(1):94–103

Two separate signals act independently to localize a yeast late Golgi membrane protein through a combination of retrieval and retention. Bryant NJ, et al. **J Cell Biol** 1997 Jan 27;136(2):287–97

Transfer of endoplasmic reticulum and Golgi retention signals to human immunodeficiency virus type 1 gp160 inhibits intracellular transport and proteolytic processing of viral glycoprotein but does not influence the cellular site of virus particle budding. Pfeiffer T, et al. **J Gen Virol** 1997 Jul;78 (Pt 7):1745–53

Transport to endoplasmic reticulum by signal peptide, but not proteolytic processing, is required for formation of conformational epitopes of pemphigus vulgaris antigen (Dsg3). Amagai M, et al. **J Invest Dermatol** 1996 Oct; 107(4):539–42

Folding of the presequence of yeast pAPI into an amphipathic helix determines transport of the protein from the cytosol to the vacuole. Martinez E, et al. **J Mol Biol** 1997 Apr 18;267(5):1124–38

Expression of mammalian cytokines by Trypanosoma cruzi indicates unique signal sequence requirements and processing. La Flamme AC, et al. **Mol Biochem Parasitol** 1995 Dec;75(1):25–31

Regulation of gene expression by cyclic GMP–dependent protein kinase requires nuclear translocation of the kinase: identification of a nuclear localization signal. Gudi T, et al. **Mol Cell Biol** 1997 Sep;17(9):5244–54

Pheromone cCF10 and plasmid pCF10–encoded regulatory molecules act post–transcriptionally to activate expression of downstream conjugation functions. Bensing BA, et al. **Mol Microbiol** 1997 Apr;24(2):285–94

The leader peptide is essential for the post–translational modification of the DNA–gyrase inhibitor microcin B17. Madison LL, et al. **Mol Microbiol** 1997 Jan;23(1):161–8

Signal–regulated proteins and fibroblast growth factor receptors: comparative immunolocalization in rat retina. Blanquet PR, et al. **Neurosci Lett** 1996 Aug 23; 214(2–3):135–8

Leader peptides of inducible chloramphenicol resistance genes from gram–positive and gram–negative bacteria bind to yeast and Archaea large subunit rRNA. Harrod R, et al. **Nucleic Acids Res** 1997 May 1;25(9):1720–6

Changes in targeting efficiencies of proteins to plant microbodies caused by amino acid substitutions in the carboxy–terminal tripeptide. Hayashi M, et al. **Plant Cell Physiol** 1997 Jun;38(6):759–68

Castor bean isocitrate lyase lacking the putative peroxisomal targeting signal 1 ARM is imported into plant peroxisomes both in vitro and in vivo. Gao X, et al. **Plant Physiol** 1996 Dec;112(4):1457–64

A defective signal peptide tethers the floury–2 zein to the endoplasmic reticulum membrane. Gillikin JW, et al. **Plant Physiol** 1997 May;114(1):345–52

The vacuolar targeting signal of the 2S albumin from Brazil nut resides at the C terminus and involves the C–terminal propeptide as an essential element. Saalbach G, et al. **Plant Physiol** 1996 Nov;112(3):975–85

A di–acidic signal required for selective export from the endoplasmic reticulum. Nishimura N, et al. **Science** 1997 Jul 25;277(5325):556–8

Evidence for a role of CRM1 in signal–mediated nuclear protein export. Ossareh–Nazari B, et al. **Science** 1997 Oct 3;278(5335):141–4

Nuclear export and its significance in retroviral infection. Yoneda Y. **Trends Microbiol** 1996 Jan;4(1):1–2 (15 ref.)

Hepatitis C virus core protein: carboxy–terminal boundaries of two processed species suggest cleavage by a signal peptide peptidase. Hüssy P, et al. **Virology** 1996 Oct 1; 224(1):93–104

Acquired fusion activity of a murine coronavirus MHV–2 variant with mutations in the proteolytic cleavage site and the signal sequence of the S protein. Yamada YK, et al. **Virology** 1997 Jan 6;227(1):215–9

PHARMACOLOGY

A mitochondrial signal peptide from Neurospora crassa increases the permeability of isolated rat liver mitochondria. Sokolove PM, et al. **Arch Biochem Biophys** 1996 Dec 1;336(1):69–76

Effect of leader peptides on the permeability of mitochondria. Lu Y, et al. **J Biol Chem** 1997 May 23;272(21):13555–61

Regulation of IL–15 secretion via the leader peptide of two IL–15 isoforms. Onu A, et al. **J Immunol** 1997 Jan 1; 158(1):255–62

PHYSIOLOGY

Roles of the signal peptide and mature domains in the secretion and maturation of the neutral metalloprotease from Streptomyces cacaoi. Chang SC, et al. **Biochem J** 1997 Jan 1;321 (Pt 1):29–37

CRM1 is an export receptor for leucine–rich nuclear export signals [see comments] Fornerod M, et al. **Cell** 1997 Sep 19;90(6):1051–60. Comment in: Cell 1997 Sep 19;90(6):967–70.

Signal sequences: the same yet different. Zheng N, et al. **Cell** 1996 Sep 20;86(6):849–52 (21 ref.)

Sequence requirements for the recognition of tyrosine–based endocytic signals by clathrin AP–2 complexes. Boll W, et al. **EMBO J** 1996 Nov 1;15(21):5789–95

Targeting of signal sequenceless proteins for export in Escherichia coli with altered protein translocase. Prinz WA, et al. **EMBO J** 1996 Oct 1;15(19):5209–17

Expression of two interleukin–15 mRNA isoforms in human tumors does not correlate with secretion: role of different signal peptides. Meazza R, et al. **Eur J Immunol** 1997 May; 27(5):1049–54

Nematode spliced leaders––ubiquity, evolution and utility. Blaxter M, et al. **Int J Parasitol** 1996 Oct;26(10):1025–33 (51 ref.)

A role for the M9 transport signal of hnRNP A1 in mRNA nuclear export. Izaurralde E, et al. **J Cell Biol** 1997 Apr 7;137(1):27–35

The sequence NPFXD defines a new class of endocytosis signal in Saccharomyces cerevisiae. Tan PK, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1789–800

A nuclear localization signal targets proteins to the retrograde transport system, thereby evading uptake into organelles in aplysia axons. Schmied R, et al. **J Neurobiol** 1997 Aug;33(2):151–60

A common export pathway for proteins binding complex redox cofactors? Berks BC. **Mol Microbiol** 1996 Nov; 22(3):393–404 (90 ref.)

Double–glycine–type leader peptides direct secretion of bacteriocins by ABC transporters: colicin V secretion in Lactococcus lactis. van Belkum MJ, et al. **Mol Microbiol** 1997 Mar;23(6):1293–301

Signal peptide–induced sensory behavior in free ciliates: bioassays and cellular mechanisms. Leick V, et al. **Prog Mol Subcell Biol** 1996;17:61–79 (69 ref.)

The targeting of Bacillus subtilis levansucrase in yeast is correlated to both the hydrophobicity of the signal peptide and the net charge of the N–terminus mature part. Scotti PA, et al. **Yeast** 1996 Aug;12(10):953–63

SIGNAL PROCESSING, COMPUTER-ASSISTED

Power spectral analysis of arterial pressure signals: physiologic principles and clinical applications. Chan S. **Acta Anaesthesiol Scand Suppl** 1997;110:119–20

Computer controlled multisensor thermocouple apparatus for invasive measurement of temperature. Hanuš J, et al. **Acta Medica (Hradec Kralove)** 1996;39(3):117–21

Power spectrum analysis contribution to the detection of cardiovascular dysautonomia in multiple sclerosis. Frontoni M, et al. **Acta Neurol Scand** 1996 Apr;93(4):241–5

Asynchronous interleaved stimulation (AIS): a new speech coding strategy for cochlear implant. Ouayoun M, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):182–6

A new analysis method for the evaluation of transient evoked otoacoustic emissions. Rahko T, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:66–8

An introduction to computerised speech lab. Van Lierde K, et al. **Acta Otorhinolaryngol Belg** 1996;50(4):309–14

Recording non-nutritive sucking in the neonate. Description of an automatized system for analysis. Hafström M, et al. **Acta Paediatr** 1997 Jan;86(1):82–90

Developmental changes in electroencephalogram for term and preterm infants using an autoregressive model. Sawaguchi H, et al. **Acta Paediatr Jpn** 1996 Dec; 38(6):580–9

Characteristics of fasting and fed myoelectric activity in rat small intestine: evaluation by computer analysis. Bränström R, et al. **Acta Physiol Scand** 1996 Sep;158(1):53–62

Spectral analysis of heart rate variability in evaluation of sympathetic function in elderly subjects. Luutonen S, et al. **Age Ageing** 1994 Nov;23(6):473–7

CT angiography in the examination of patients with aneurysm clips. Vieco PT, et al. **AJNR Am J Neuroradiol** 1996 Mar; 17(3):455–7

Circadian fluctuations of late potentials detected by signal-averaged electrocardiogram. Goldhammer E, et al. **Am Heart J** 1996 Dec;132(6):1298–9

Cardiac transplant rejection is associated with a decrease in the high-frequency components of the high-resolution, signal-averaged electrocardiogram. Graceffo MA, et al. **Am Heart J** 1996 Oct;132(4):820–6

Spectral analysis of heart rate variability: the impact of R-wave measurement error [letter; comment] Hilton M, et al. **Am J Cardiol** 1997 Mar 15;79(6):844–5. Comment on: Am J Cardiol 1996 Jul 1;78(1):118–20.

Evaluation of five QT correction formulas using a software-assisted method of continuous QT measurement from 24-hour Holter recordings. Molnar J, et al. **Am J Cardiol** 1996 Oct 15;78(8):920–6

Validation of the EINTHOVEN model-based computerized electrocardiogram rhythm analysis system with three classes of clinical arrhythmias. Widman LE, et al. **Am J Cardiol** 1996 Oct 15;78(8):927–31

Usefulness of signal-averaged electrocardiography in evaluation of idiopathic-dilated cardiomyopathy in families. Yi G, et al. **Am J Cardiol** 1997 May 1;79(9):1203–7

Deriving respiration from pulse wave: a new signal-processing technique. De Meersman RE, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1672–5

Text processing by digital voice recognition. Meijer GA, et al. **Anal Quant Cytol Histol** 1996 Aug;18(4):261–6

The coherent frequency in the electroencephalogram as an objective measure of cognitive function during propofol sedation. Andrade J, et al. **Anesth Analg** 1996 Dec; 83(6):1279–84

Signal extraction technology: a better mousetrap? [letter; comment] Barker SJ. **Anesth Analg** 1997 Apr;84(4):938. Comment on: Anesth Analg 1996 Aug;83(2):213–4.

A method for producing the coherent frequency: a steady-state auditory evoked response in the electroencephalogram. Sapsford DJ, et al. **Anesth Analg** 1996 Dec;83(6):1273–8

Digital processing of the current noise evoked by kainate in cerebellar granule cells. Cavalcanti S, et al. **Ann Biomed Eng** 1997 May-Jun;25(3):452–9

Automatic discrimination of myoelectric signals via parallel cascade identification. Korenberg MJ, et al. **Ann Biomed Eng** 1997 Jul-Aug;25(4):708–12

Measurement of signal and noise characteristics in ongoing auditory brainstem response averaging. Ozdamar O, et al. **Ann Biomed Eng** 1996 Nov-Dec;24(6):702–15

A computer-controlled aortic and mitral valve occluder. Solomon SB, et al. **Ann Biomed Eng** 1997 Jan-Feb; 25(1):172–9

Fractal signature analysis measures cancellous bone organisation in macroradiographs of patients with knee osteoarthritis. Buckland-Wright JC, et al. **Ann Rheum Dis** 1996 Oct;55(10):749–55

Graphic analysis of pulmonary mechanics in neonates receiving assisted ventilation. Sinha SK, et al. **Arch Dis Child Fetal Neonatal Ed** 1996 Nov;75(3):F213–8

Systematic and random error in repeated measurements of temporal and distance parameters of gait after stroke. Evans MD, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):725–9

Computer-aided video analysis of vertebrofemoral motion during toe touching in healthy subjects. Tully EA, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):759–66

Spectral characteristics of postural control in elderly individuals. Williams HG, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):737–44

Field programmable gate array in a fast 256-channel data acquisition system. Li CY, et al. **Australas Phys Eng Sci Med** 1997 Mar;20(1):47–52

The fetal electrocardiogram. van Wijngaarden WJ, et al. **Baillieres Clin Obstet Gynaecol** 1996 Jun;10(2):273–94 (80 ref.)

Measurement of low frequency magnetic fields from digital cellular telephones. Linde T, et al. **Bioelectromagnetics** 1997;18(2):184–6

Receiver operating characteristic (ROC) analysis of neural code efficacies. II. Optic nerve action potentials and neural transmission. Cheng Z, et al. **Biol Cybern** 1996 Aug; 75(2):105–15

Receiver operating characteristic (ROC) analysis of neural code efficacies. I. Graded photoreceptor potentials and data quality. Cheng Z, et al. **Biol Cybern** 1996 Aug;75(2):93–103

Power spectral analysis of heart rate variability in posttraumatic stress disorder patients. Cohen H, et al. **Biol Psychiatry** 1997 Mar 1;41(5):627–9

Amplitude frequency characteristics of evoked potentials during sleep: an analysis of the brain's transfer properties in depression. Röschke J, et al. **Biol Psychiatry** 1996 Oct 15;40(8):736–43

Continuous wavelet transform of aortic pressure oscillations in anesthetized dogs: effects of 45 degrees tilting. Jiménez RF, et al. **Biol Res** 1997;30(2):53–64

Applying standardized electromagnetic compatibility testing methods for evaluating radiofrequency interference with ventilators. Casamento JP, et al. **Biomed Instrum Technol** 1996 Sep-Oct;30(5):418–25

In vitro testing of pacemakers for digital cellular phone electromagnetic interference. Ruggera PS, et al. **Biomed Instrum Technol** 1997 Jul-Aug;31(4):358–71

Quantitative densitometric analysis using a commercially available handheld CCD digital camera. Malek AM, et al. **Biotechniques** 1997 Jun;22(6):1150–3

On-line estimation of left ventricular stroke volume using transoesophageal echocardiography and acoustic quantification. Greim CA, et al. **Br J Anaesth** 1996 Sep; 77(3):365–9

QRS prolongation measured by a new computerized method: a sensitive marker for detecting exercise-induced ischemia. Cantor A, et al. **Cardiology** 1997 Sep-Oct;88(5):446–52

Physical activity influences heart rate variability and very-low-frequency components in Holter electrocardiograms. Bernardi L, et al. **Cardiovasc Res** 1996 Aug;32(2):234–7

Short- and long-term reproducibility of time and frequency domain heart rate variability measurements in normal subjects. Pitzalis MV, et al. **Cardiovasc Res** 1996 Aug; 32(2):226–33

Effect of age on long-term heart rate variability. Yeragani VK, et al. **Cardiovasc Res** 1997 Jul;35(1):35–42

Power spectrum analysis of EMG at different voluntary efforts in normal subjects. Chan RC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Jan;57(1):54–8

Lossy (15:1) JPEG compression of digital coronary angiograms does not limit detection of subtle morphological features. Baker WA, et al. **Circulation** 1997 Aug 19;96(4):1157–64

Is computer interpretation of the exercise electrocardiogram a reasonable surrogate for visual reading? Veterans Affairs ACME Investigators. Mickelson JK, et al. **Clin Cardiol** 1997 Apr;20(4):391–7

QEEG and neuropsychological profiles of patients after undergoing cardiopulmonary bypass surgical procedures. Chabot RJ, et al. **Clin Electroencephalogr** 1997 Apr; 28(2):98–105

QEEG and neuropsychological profiles of patients prior to undergoing cardiopulmonary bypass surgical procedures. Gugino LD, et al. **Clin Electroencephalogr** 1997 Apr; 28(2):87–97

Computerized scoring of abnormal human sleep: a validation. Sangal RB, et al. **Clin Electroencephalogr** 1997 Apr; 28(2):64–7

Quantitative pharmaco-EEG of sustained release valproate in epileptics. Wu X, et al. **Clin Electroencephalogr** 1997 Apr;28(2):117–20

The pathologist's workstation. Aller RD. **Clin Lab Med** 1997 Jun;17(2):201–28 (22 ref.)

Optical considerations in digital imaging. Balis UJ. **Clin Lab Med** 1997 Jun;17(2):189–200

Telemedicine and telepathology. Balis UJ. **Clin Lab Med** 1997 Jun;17(2):245–61 (34 ref.)

Digital imaging standards and system interoperability. Balis UJ. **Clin Lab Med** 1997 Jun;17(2):315–22

Imaging input technology. Balis UJ. **Clin Lab Med** 1997 Jun; 17(2):151–74 (27 ref.)

Image output technology. Balis UJ. **Clin Lab Med** 1997 Jun; 17(2):175–88

Digital image processing for microscopy. Ezzell R. **Clin Lab Med** 1997 Jun;17(2):285–97

Digital imaging as a teaching tool for pathologists. Weinberg DS. **Clin Lab Med** 1997 Jun;17(2):229–44 (23 ref.)

Repeatability of spectral components of short-term blood pressure and heart rate variability during acute sympathetic activation in healthy young male subjects. Cloarec-Blanchard L, et al. **Clin Sci (Colch)** 1997 Jul; 93(1):21–8

Heart rate variability in patients with daytime sleepiness suspected of having sleep apnoea syndrome: a receiver-operating characteristic analysis. Keyl C, et al. **Clin Sci (Colch)** 1997 Apr;92(4):335–43

An automated system for analysis and interpretation of epileptiform activity in the EEG. Benlamri R, et al. **Comput Biol Med** 1997 Mar;27(2):129–39

Evaluation of the tracking potential of a noninvasive estimator of cardiac output. Redling J, et al. **Comput Biol Med** 1996 Jul;26(4):281–95

Signal processing methods for pulse oximetry. Rusch TL, et al. **Comput Biol Med** 1996 Mar;26(2):143–59

A system for analysis of arterial blood pressure waveforms in humans. Karamanoglu M. **Comput Biomed Res** 1997 Jun; 30(3):244–55

Detecting chaos in HRV signals in human cardiac transplant recipients. Khadra LM, et al. **Comput Biomed Res** 1997 Jun;30(3):188–99

Evaluation of QRS morphological classifiers in the presence of noise. Morales RO, et al. **Comput Biomed Res** 1997 Jun; 30(3):200–10

A new DSP-based multichannel EMG acquisition and analysis system. Prasad GV, et al. **Comput Biomed Res** 1996 Oct;29(5):395–406

ECG compression by multirate processing of beats. Ramakrishnan AG, et al. **Comput Biomed Res** 1996 Oct; 29(5):407–17

The exponential distribution applied to nonequidistantly sampled cardiovascular time series. Van Steenis HG, et al. **Comput Biomed Res** 1996 Jun;29(3):174–93

DSP implementation of wavelet transform for real time ECG wave forms detection and heart rate analysis. Bahoura M, et al. **Comput Methods Programs Biomed** 1997 Jan; 52(1):35–44

Non-linear algorithms for processing biological signals. Cerutti S, et al. **Comput Methods Programs Biomed** 1996 Oct;51(1-2):51–73 (40 ref.)

Modelling techniques and their application for monitoring in high dependency environments--learning models. Gade J, et al. **Comput Methods Programs Biomed** 1996 Oct; 51(1-2):75–84

A software oscilloscope for DOS computers with an integrated remote control for a video tape recorder. The assignment of acoustic events to behavioural observations. Höller P. **Comput Methods Programs Biomed** 1995 Dec; 48(3):229–35

Linear multivariate models for physiological signal analysis: applications. Korhonen I, et al. **Comput Methods Programs Biomed** 1996 Oct; 51(1-2):121–30

Linear multivariate models for physiological signal analysis: theory. Korhonen I, et al. **Comput Methods Programs Biomed** 1996 Oct;51(1-2):85–94

Lossless ECG encoding. Koski A. **Comput Methods Programs Biomed** 1997 Jan;52(1):23–33

A computer program for comprehensive ST-segment depression/heart rate analysis of the exercise ECG test. Lehtinen R, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):63–71

The rationale and utility of neurophysiological investigations in clinical monitoring for brain and spinal cord ischaemia during surgery and intensive care. Prior P. **Comput Methods Programs Biomed** 1996 Oct;51(1-2):13–27 (101 ref.)

Detection of regularities in heart rate variations by linear and non-linear analysis: power spectrum versus approximate entropy. Sapoznikov D, et al. **Comput Methods Programs Biomed** 1995 Dec;48(3):201–9

Computer program for performing whole-cell voltage-clamp experiments. Shkodrov GB. **Comput Methods Programs Biomed** 1995 Dec;48(3):241–6

Voltage sum of filtered ECG signal—a sensitive parameter of ventricular activation. Slavkovsky P, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):1–11

Strength Symmetry Index: a measure of seizure adequacy in ECT. Gangadhar BN, et al. **Convuls Ther** 1997 Mar; 13(1):18–24

Monitoring interactions between spontaneous respiration and mechanical inflations in preterm neonates. Bignall S, et al. **Crit Care Med** 1997 Mar;25(3):545–53

Biological oscillators [letter; comment] Kleinman B. **Crit Care Med** 1997 Mar;25(3):555. Comment on: Crit Care Med 1996 Jul;24(7):1107–16. Comment on: Crit Care Med 1996 Jul;24(7):1117–24.

Digital signal processing of the phonocardiogram: review of the most recent advancements. Durand LG, et al. **Crit Rev Biomed Eng** 1995;23(3-4):163–219 (187 ref.)

Advances in time-frequency analysis of biomedical signals. Lin Z, et al. **Crit Rev Biomed Eng** 1996;24(1):1–72 (163 ref.)

New method of nuclear grading of tissue sections by means of digital image analysis with prognostic significance for node-negative breast cancer patients. Albert R, et al. **Cytometry** 1996 Jun 1;24(2):140–50

Automated particle classification based on digital acquisition and analysis of flow cytometric pulse waveforms. Godavarti M, et al. **Cytometry** 1996 Aug 1;24(4):330–9

A fluorescence digital image microscopy system for quantifying relative cell numbers in tissue culture plates. Proffitt RT, et al. **Cytometry** 1996 Jul 1;24(3):204–13

Bull sperm head morphometry related to abnormal chromatin structure and fertility. Sailer BL, et al. **Cytometry** 1996 Jun 1;24(2):167–73

Gait analysis by measuring ground reaction forces in children: changes to an adaptive gait pattern between the

ages of one and five years. Preis S, et al. **Dev Med Child Neurol** 1997 Apr;39(4):228–33

Assessment of baroreceptor–cardiac reflex sensitivity using time domain analysis in patients with IDDM and the relation to left ventricular mass index. Weston PJ, et al. **Diabetologia** 1996 Nov;39(11):1385–91

Recent developments in air–conduction hearing aids. Arlinger S. **Ear Nose Throat J** 1997 May;76(5):310–5 (7 ref.)

Investigating the effect of maternal alcohol intake on human fetal breathing rate using adaptive time–frequency analysis methods. Akay M, et al. **Early Hum Dev** 1996 Sep 20; 46(1–2):153–64

Extensible biosignal (EBS) file format: simple method for EEG data exchange. Hellmann G, et al. **Electroencephalogr Clin Neurophysiol** 1996 Nov; 99(5):426–31

Wavelets, adapted waveforms and de–noising. Coifman RR, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996; 45:57–78 (21 ref.)

Hidden Markov models for speech and signal recognition. Rose RC, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;45:137–52 (43 ref.)

Application EMGs spectral analysis method for the objective diagnosis of different clinical forms of Parkinson's disease. Andreeva YeA, et al. **Electromyogr Clin Neurophysiol** 1996 Apr–May;36(3):187–92

Aberdeen polygons: computer displays of physiological profiles for intensive care. Green CA, et al. **Ergonomics** 1996 Mar;39(3):412–28

The signal–averaged ECG becomes late potential–positive at low noise levels in healthy subjects. Christiansen EH, et al. **Eur Heart J** 1995 Nov;16(11):1731–5

Chaos theory and power spectrum analysis in computerized cardiotocography. Bozóki Z. **Eur J Obstet Gynecol Reprod Biol** 1997 Feb;71(2):163–8

Quantitative EEG and statistical mapping of wakefulness and REM sleep in the evaluation of mild to moderate Alzheimer's disease. Hassainia F, et al. **Eur Neurol** 1997; 37(4):219–24

Digital–image analysis of the rhomboid fossa surface. Gielecki J, et al. **Folia Morphol (Warsz)** 1996;55(4):240–2

Waveform estimation techniques for event–related bioelectric signals: a study of performance. Abou–Chadi FE. **Front Med Biol Eng** 1996;7(3):221–41

Validity of a random noise oscillation and body box system for the measurement of the respiratory impedance of small animals. Mishima M, et al. **Front Med Biol Eng** 1996; 7(3):163–75

Indirect measurement of tidal volume by multi–lead electrocardiograms: effect of filtering, deep breath, lead and posture. Noshiro M, et al. **Front Med Biol Eng** 1996; 7(3):207–19

High speed detection of R–R intervals for universal Holter recordings. Sekioka K, et al. **Front Med Biol Eng** 1997; 8(2):139–56

Effects of pentobarbital and etomidate on plasma catecholamine levels and spectral analysis of blood pressure and heart rate in dogs. Mazerolles M, et al. **Fundam Clin Pharmacol** 1996;10(3):298–303

Heart rate variability: why do spectral analysis? Karemaker JM. **Heart** 1997 Feb;77(2):99–101

Late ventricular potentials and heavy drinking. Pochmalicki G, et al. **Heart** 1997 Aug;78(2):163–5

QT interval dynamics and heart rate variability preceding a case of cardiac arrest. Singh JP, et al. **Heart** 1997 Apr; 77(4):375–7

Reproducibility of the signal averaged P wave: time and frequency domain analysis. Stafford PJ, et al. **Heart** 1997 May;77(5):412–6

Signal averaged P wave compared with standard electrocardiography or echocardiography for prediction of atrial fibrillation after coronary bypass grafting. Stafford PJ, et al. **Heart** 1997 May;77(5):417–22

Digital storage and retrieval: the future in echocardiography. Thomas JD. **Heart** 1997 Aug;78 Suppl 1:19–22 (12 ref.)

Heart rate variability in idiopathic dilated cardiomyopathy: relation to disease severity and prognosis. Yi G, et al. **Heart** 1997 Feb;77(2):108–14

The role of signal averaged P wave duration and serum magnesium as a combined predictor of atrial fibrillation after elective coronary artery bypass surgery. Zaman AG, et al. **Heart** 1997 Jun;77(6):527–31

Applying time–frequency analysis to seizure EEG activity. Blanco S, et al. **IEEE Eng Med Biol Mag** 1997 Jan–Feb; 16(1):64–71

Analysis of physiological time series using wavelet transforms. Figliola A, et al. **IEEE Eng Med Biol Mag** 1997 May–Jun;16(3):74–9

Bispectrum analysis of visually evoked potentials. Husar P, et al. **IEEE Eng Med Biol Mag** 1997 Jan–Feb;16(1):57–63

The Z–transform of the compound action potential. A method for deriving nerve–fiber density distribution. Pollak VA, et al. **IEEE Eng Med Biol Mag** 1997 May–Jun; 16(3):80–4, 86

Using wavelet transforms for ECG characterization. An on–line digital signal processing system. Sahambi JS, et al. **IEEE Eng Med Biol Mag** 1997 Jan–Feb;16(1):77–83

Analysis of pattern reversal visual evoked potentials (PRVEP's) by spline wavelets. Ademoglu A, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):881–90

Reduction of computational complexity in the butterfly search technique. Alam SK, et al. **IEEE Trans Biomed Eng** 1996 Jul;43(7):723–33

A novel family of compression algorithms for ECG and other semiperiodical, one–dimensional, biomedical signals. Barlas GD, et al. **IEEE Trans Biomed Eng** 1996 Aug;43(8):820–8

MSE behavior of biomedical event–related filters. Barros AK, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):848–55

Nonstationarity broadening reduction in pulsed Doppler spectrum measurements using time–frequency estimators. Cardoso JC, et al. **IEEE Trans Biomed Eng** 1996 Dec; 43(12):1176–86

Elimination of interference component in Wigner–Ville distribution for the signal with 1/f spectral characteristic. Chan HL, et al. **IEEE Trans Biomed Eng** 1997 Sep; 44(9):903–7

Detection, classification, and superposition resolution of action potentials in multiunit single–channel recordings by an on–line real–time neural network. Chandra R, et al. **IEEE Trans Biomed Eng** 1997 May;44(5):403–12

A robust sequential detection algorithm for cardiac arrhythmia classification. Chen SW, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1120–5

SIGIF: a digital signal interchange format with application in neurophysiology. Cunha MB, et al. **IEEE Trans Biomed Eng** 1997 May;44(5):413–8

The time–sequenced adaptive filter for analysis of cardiac arrhythmias in intraventricular electrograms. Finelli CJ. **IEEE Trans Biomed Eng** 1996 Aug;43(8):811–9

Dominant frequency analysis of EEG reveals brain's response during injury and recovery. Goel V, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1083–92

Analysis of abnormal signals within the QRS complex of the high–resolution electrocardiogram. Gomis P, et al. **IEEE Trans Biomed Eng** 1997 Aug;44(8):681–93

Wavelet and wavelet packet compression of electrocardiograms. Hilton ML. **IEEE Trans Biomed Eng** 1997 May;44(5):394–402

A patient–adaptable ECG beat classifier using a mixture of experts approach. Hu YH, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):891–900

A new method for myocardial activation imaging. Huiskamp G, et al. **IEEE Trans Biomed Eng** 1997 Jun;44(6):433–46

Multireference adaptive noise canceling applied to the EEG. James CJ, et al. **IEEE Trans Biomed Eng** 1997 Aug; 44(8):775–9

Selective discrete Fourier transform algorithm for time–frequency analysis: method and application on simulated and cardiovascular signals. Keselbrener L, et al. **IEEE Trans Biomed Eng** 1996 Aug;43(8):789–802

Segmentation of digital signals based on estimated compression ratio. Koski A, et al. **IEEE Trans Biomed Eng** 1996 Sep;43(9):928–38

Time–frequency plane Wiener filtering of the high–resolution ECG: background and time–frequency representations. Lander P, et al. **IEEE Trans Biomed Eng** 1997 Apr; 44(4):247–55

Time–frequency plane Wiener filtering of the high–resolution ECG: development and application. Lander P, et al. **IEEE Trans Biomed Eng** 1997 Apr;44(4):256–65

Noise reduction for NMR FID signals via Gabor expansion. Lu Y, et al. **IEEE Trans Biomed Eng** 1997 Jun;44(6):512–28

Spectral distortion properties of the integral pulse frequency modulation model. Nakao M, et al. **IEEE Trans Biomed Eng** 1997 May;44(5):419–26

A method of ultrasonic 3–D computed velocimetry. Ogura Y, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):823–30

Estimation of slowly changing components of physiological signals. Raifel M, et al. **IEEE Trans Biomed Eng** 1997 Mar; 44(3):215–20

Optimal head related transfer functions for hearing and monaural localization in elevation: a signal processing design perspective. Rao KR, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1093–105

A real–time microprocessor QRS detector system with a 1–ms timing accuracy for the measurement of ambulatory HRV. Ruha A, et al. **IEEE Trans Biomed Eng** 1997 Mar; 44(3):159–67

Identification and elimination of cardiac contribution in single–trial magnetoencephalographic signals. Samonas M, et al. **IEEE Trans Biomed Eng** 1997 May;44(5):386–93

Spectral composition of heart sounds before and after mechanical heart valve implantation using a modified forward–backward Prony's method. Sava HP, et al. **IEEE Trans Biomed Eng** 1996 Jul;43(7):734–42

Noise covariance incorporated MEG–MUSIC algorithm: a method for multiple–dipole estimation tolerant of the influence of background brain activity. Sekihara K, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):839–47

Spectral analysis of a thalamus–to–cortex seizure pathway. Sherman DL, et al. **IEEE Trans Biomed Eng** 1997 Aug; 44(8):657–64

A method for determining high–resolution activation time delays in unipolar cardiac mapping. Shors SM, et al. **IEEE Trans Biomed Eng** 1996 Dec;43(12):1192–6

Designing better adaptive sampling algorithms for ECG Holter systems. Tai SC, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):901–3

Localization of brain electrical activity via linearly constrained minimum variance spatial filtering. Van Veen BD, et al. **IEEE Trans Biomed Eng** 1997 Sep;44(9):867–80

Detection of seizures from small samples using nonlinear dynamic system theory. Yaylali I, et al. **IEEE Trans Biomed Eng** 1996 Jul;43(7):743–51

A fuzzy clustering approach to EP estimation. Zouridakis G, et al. **IEEE Trans Biomed Eng** 1997 Aug;44(8):673–80

Parametric analysis of heart rate variability during hemodialysis. Cavalcanti S, et al. **Int J Biomed Comput** 1996 Aug;42(3):215–24

Segmentation of auditory brainstem response signals. Tian J, et al. **Int J Biomed Comput** 1996 Dec;43(3):215–26

Nonlinear eye movement detection method for drowsiness studies. Värri A, et al. **Int J Biomed Comput** 1996 Dec; 43(3):227–42

How does computer–assisted digital wall motion analysis influence observer agreement and diagnostic accuracy during stress echocardiography? Bjørnstad K, et al. **Int J Card Imaging** 1997 Apr;13(2):105–14

Signal averaged electrocardiography in patients with acute myocarditis. Mestre JL, et al. **Int J Cardiol** 1996 Jan; 53(1):87–9

Detection of patients at risk for recurrence of atrial fibrillation after successful electrical cardioversion by signal–averaged P–wave ECG. Opolski G, et al. **Int J Cardiol** 1997 Jul 25;60(2):181–5

Spectral analysis of cyclic fluctuations in haemodynamic parameters in critically ill patients. Todorovic M, et al. **Int J Clin Monit Comput** 1996 Nov;13(4):253–60

Analysis of laser Doppler flux motion in man: comparison of autoregressive modelling and fast Fourier transformation. Weidenhagen R, et al. **Int J Microcirc Clin Exp** 1996 Mar–Apr;16(2):64–73

The early history of EEG data–processing at the Massachusetts Institute of Technology and the Massachusetts General Hospital. Barlow JS. **Int J Psychophysiol** 1997 Jun;26(1–3):443–54

Comparative effects of microcurrent stimulation on EEG spectrum and correlation dimension. Heffernan MS. **Integr Physiol Behav Sci** 1996 Jul–Sep;31(3):202–9

Spatial localization with modified Fourier series windows. Application to the transmural 13C–nuclear magnetic resonance analysis of the in vivo myocardium. Abduljalil AM, et al. **Invest Radiol** 1996 Oct;31(10):611–8

Detection of wire EMG activity in whiplash injuries using wavelets. Panagiotacopulos ND, et al. **Iowa Orthop J** 1997; 17:134–8

Right hemisphere abnormalities in major depression: quantitative electroencephalographic findings before and after treatment. Kwon JS, et al. **J Affect Disord** 1996 Oct 14;40(3):169–73

QT dispersion as a marker of risk in patients awaiting heart transplantation. Pinsky DJ, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1576–84

Culex annulirostris breeding sites in urban areas: using remote sensing and digital image analysis to develop a rapid predictor of potential breeding areas. Dale PE, et al. **J Am Mosq Control Assoc** 1996 Jun;12(2 Pt 1):316–20

Comparison of digital with videotape echocardiography in patients with chest pain in the emergency department. Mohler ER 3rd, et al. **J Am Soc Echocardiogr** 1996 Jul–Aug;9(4):501–7

Grading diabetic retinopathy from a computer screen. Leverton C. **J Audiov Media Med** 1996 Dec;19(4):176

A method of signal processing in motion analysis of the trotting horse. Peham C, et al. **J Biomech** 1996 Aug; 29(8):1111–4

Characterization of blood flow turbulence with pulsed–wave and power Doppler ultrasound imaging. Cloutier G, et al. **J Biomech Eng** 1996 Aug;118(3):318–25

Separation of arterial pressure waves into their forward and backward running components. Pythoud F, et al. **J Biomech Eng** 1996 Aug;118(3):295–301

Automated ST–segment analysis during cesarean delivery: effects of ECG filtering modality. Camann W, et al. **J Clin Anesth** 1996 Nov;8(7):564–7

Use of adaptive Hilbert transformation for EEG segmentation and calculation of instantaneous respiration rate in neonates. Arnold M, et al. **J Clin Monit** 1996 Jan; 12(1):43–60

Comparison of four methods of automated recording of physiologic data at one minute intervals. Gregorini P. **J Clin Monit** 1996 Jul;12(4):299–303

Spatial filtering of multichannel electroencephalographic recordings through principal component analysis by singular value decomposition. Lagerlund TD, et al. **J Clin Neurophysiol** 1997 Jan;14(1):73–82

Skinline detection in digitized mammograms. Abdel–Mottaleb M, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):224–5

A general technique for automatic left ventricle boundary validation: relation between gray scale cardioangiograms and observed boundary errors. Suri JS, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):212–7

Possibilities of using neural networks for ECG classification. Bortolan G, et al. **J Electrocardiol** 1996;29 Suppl:10–6

Effect of residual noise level on reproducibility of the signal–averaged ECG. Christiansen EH, et al. **J Electrocardiol** 1996 Jul;29(3):235–41

Stratification of time–frequency abnormalities in the signal–averaged high–resolution ECG in postinfarction patients with and without ventricular tachycardia and congenital long QT syndrome. Couderc JP, et al. **J Electrocardiol** 1996;29 Suppl:180–8

Increased prevalence of large bites in 12–lead

vectorcardiograms of diabetic patients. Edenbrandt L, et al. **J Electrocardiol** 1997 Apr;30(2):91–5

Interactive and dynamic ECG analysis. Is it just an IDEA or a clinically relevant approach? Fayn J, et al. **J Electrocardiol** 1996;29 Suppl:21–5

Automatic learning of rules. A practical example of using artificial intelligence to improve computer-based detection of myocardial infarction and left ventricular hypertrophy in the 12-lead ECG. Kaiser W, et al. **J Electrocardiol** 1996; 29 Suppl:17–20

Measuring spatial waves of repolarization in canine ventricles using high-resolution epicardial mapping. Lux RL, et al. **J Electrocardiol** 1996;29 Suppl:130–4

Computer versus manual measurement of ST-segment deviation [corrected and republished article originally printed in J Electrocardiol 1996; 29 Suppl:78–82] Pelter MM, et al. **J Electrocardiol** 1997 Apr;30(2):151–6

Effect of electrode positioning on ECG interpretation by computer. Schijvenaars BJ, et al. **J Electrocardiol** 1997 Jul; 30(3):247–56

Spectral analysis of electrograms during ventricular tachycardia in a canine model: relation with epicardial isochronal maps. Sierra G, et al. **J Electrocardiol** 1997 Jul; 30(3):225–37

Multiresolution decomposition of the signal-averaged ECG using the mallat approach for prediction of arrhythmic events after myocardial infarction. Sierra G, et al. **J Electrocardiol** 1996 Jul;29(3):223–34

New trends in computer ECG analysis. van Bemmel JH. **J Electrocardiol** 1996;29 Suppl:1–4 (23 ref.)

Computer-assisted study of ECG indices of the dispersion of ventricular repolarization. Zaidi M, et al. **J Electrocardiol** 1996 Jul;29(3):199–211

Multifrequency two-dimensional Fourier transform ESR: an X/Ku-band spectrometer. Borbat PP, et al. **J Magn Reson** 1997 Aug;127(2):155–67

Spinning sidebands in slow-magic-angle-spinning NMR spectra arising from tightly J-coupled spin pairs. Wu G, et al. **J Magn Reson** 1997 Feb;124(2):366–71

Multisite band-selective decoupling in proteins. Kupče E, et al. **J Magn Reson B** 1996 Mar;110(3):309–12

Application of genetic algorithms to spectral quantification. Metzger GJ, et al. **J Magn Reson B** 1996 Mar;110(3):316–20

Signal-to-noise analysis of cerebral blood volume maps from dynamic NMR imaging studies. Boxerman JL, et al. **J Magn Reson Imaging** 1997 May-Jun;7(3):528–37

Adaptive filtering for high resolution magnetic resonance images. Ying K, et al. **J Magn Reson Imaging** 1996 Mar-Apr;6(2):367–77

ECG data compression using Hebbian neural networks. al-Hujazi E, et al. **J Med Eng Technol** 1996 Nov-Dec; 20(6):211–8

The clinical utility of computer-assisted ambulatory 16 channel EEG. Morris GL. **J Med Eng Technol** 1997 Mar-Apr;21(2):47–52

Interference to medical equipment from mobile phones. Robinson MP, et al. **J Med Eng Technol** 1997 May-Aug; 21(3–4):141–6

Derivation of correlation coefficient formula for determination of Doppler angle using time domain correlation ultrasonic flowmeter. Güler I. **J Med Syst** 1997 Apr;21(2):75–86

A low-cost biotelemetry system for long time monitoring of physiological data. Güler I, et al. **J Med Syst** 1996 Jun; 20(3):151–6

Computerised brain electrical activity findings of parkinson patients suffering from hyperkinetic side effects (hypersensitive dopamine syndrome) and a review of possible sources. Fünfgeld EW. **J Neural Transm Suppl** 1995;46:351–65

Computerization of Fujimori's method of waveform recognition. A review and methodological considerations for its application to all-night sleep EEG. Uchida S, et al. **J Neurosci Methods** 1996 Jan;64(1):1–12 (60 ref.)

A new ultrasonic method for measuring minute motion activities of rats. Young CW, et al. **J Neurosci Methods** 1996 Dec;70(1):45–9

Development and evaluation of a new 3-D digitization and computer graphic system to study the anatomic tissue and restoration surfaces. Dastane A, et al. **J Oral Rehabil** 1996 Jan;23(1):25–34

Movement and signal analysis by means of a computer-assisted system. Hamborg R, et al. **J Oral Rehabil** 1996 Feb;23(2):121–8

Automated analysis of electromyographic (EMG) recordings during botulinum injections. Hunter DG, et al. **J Pediatr Ophthalmol Strabismus** 1996 Sep-Oct;33(5):241–6

Digital fluorescence imaging of elementary steps of neurosteroid synthesis in rat brain glial cells. Kimoto T, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1231–40

Computerized analysis of fetal heart rate changes after antepartum external cephalic version. Weiner Z, et al. **J Reprod Med** 1996 Sep;41(9):680–4

A portable digital imaging system in dermatology: diagnostic and educational applications. Lyon CC, et al. **J Telemed Telecare** 1997;3 Suppl 1:81–3

Approximate scaling properties of RNA free energy landscapes. Baskaran S, et al. **J Theor Biol** 1996 Aug 21; 181(4):299–310

An evaluation of serum troponin T and signal-averaged electrocardiography in predicting electrocardiographic abnormalities after blunt chest trauma. Fulda GJ, et al. **J Trauma** 1997 Aug;43(2):304–10; discussion 310–2

Measurement of QT interval and QT dispersion. Hill JA, et al. **Lancet** 1997 Mar 29;349(9056):894–5

Amplitude demodulation of the electrocardiogram signal (ECG) for respiration monitoring and compensation during MR examinations. Felblinger J, et al. **Magn Reson Med** 1997 Jul;38(1):129–36

Noise in MRI. Macovski A. **Magn Reson Med** 1996 Sep; 36(3):494–7

Fourier tracking of myocardial motion using cine-PC data. Zhu Y, et al. **Magn Reson Med** 1996 Apr;35(4):471–80

Evaluation of lossy compression techniques [letter; comment] Gell G. **MD Comput** 1996 Nov-Dec;13(6):472, 474. Comment on: MD Comput 1996 Mar-Apr;13(2):155–9, 172.

Computer-supported analysis of continuous ambulatory manometric recordings in the human small bowel. Andrioli A, et al. **Med Biol Eng Comput** 1996 Sep;34(5):336–43

Description and validation of a technique for the removal of ECG contamination from diaphragmatic EMG signal. Bartolo A, et al. **Med Biol Eng Comput** 1996 Jan;34(1):76–81

Time-frequency analysis of the first heart sound. Part 1: Simulation and analysis. Chen D, et al. **Med Biol Eng Comput** 1997 Jul;35(4):306–10

Time-frequency analysis of the first heart sound. Part 2: An appropriate time-frequency representation technique. Chen D, et al. **Med Biol Eng Comput** 1997 Jul;35(4):311–7

Spike detection in biomedical signals using midprediction filter. Dandapat S, et al. **Med Biol Eng Comput** 1997 Jul; 35(4):354–60

High-pass filtering of the electrogastrogram. Daskalov I, et al. **Med Biol Eng Comput** 1997 May;35(3):279–82

Information in magnetic resonance images: evaluation of signal, noise and contrast. De Wilde JP, et al. **Med Biol Eng Comput** 1997 May;35(3):259–65

Accuracy of 50 Hz interference subtraction from an electrocardiogram. Dotsinsky IA, et al. **Med Biol Eng Comput** 1996 Nov;34(6):489–94

Resolving superimposed motor unit action potentials. Etawil H, et al. **Med Biol Eng Comput** 1996 Jan;34(1):33–40

Enhanced period-peak analysis of electro-encephalograms using a fast sinc function. Ferdjallah M, et al. **Med Biol Eng Comput** 1996 Nov;34(6):431–5

Detection of fetal electrocardiogram signals using matched filters with adaptive normalisation. Gibson NM, et al. **Med Biol Eng Comput** 1997 May;35(3):216–22

Continuous and pulsed Doppler power spectral density in steady flow: an experimental investigation. Guiot C, et al. **Med Biol Eng Comput** 1997 Mar;35(2):146–50

High-resolution estimation of the heart rate variability signal. Harel T, et al. **Med Biol Eng Comput** 1997 Jan;35(1):61–5

Computer-assisted hand-held dynamometer: low-cost instrument for muscle function assessment in rehabilitation medicine. Harlaar J, et al. **Med Biol Eng Comput** 1996 Sep; 34(5):329–35

Optimisation algorithms for ECG data compression. Haugland D, et al. **Med Biol Eng Comput** 1997 Jul; 35(4):420–4

Characterisation of structural changes in the arterial elastic matrix by a new fractal feature: directional fractal curve. Jiang CF, et al. **Med Biol Eng Comput** 1997 May; 35(3):246–52

Computer-based lung sound simulation. Kompis M, et al. **Med Biol Eng Comput** 1997 May;35(3):231–8

Adaptive estimation of QRS complex wave features of ECG signal by the Hermite model. Laguna P, et al. **Med Biol Eng Comput** 1996 Jan;34(1):58–68

Classification of normal and abnormal electrogastrograms using multilayer feedforward neural networks. Lin Z, et al. **Med Biol Eng Comput** 1997 May;35(3):199–206

New technique for time series analysis combining the maximum entropy method and non-linear least squares method: its value in heart rate variability analysis. Sawada Y, et al. **Med Biol Eng Comput** 1997 Jul;35(4):318–22

Stimulus artefact in somatosensory evoked potential measurement. Scott RN, et al. **Med Biol Eng Comput** 1997 May;35(3):211–5

Laser reflectance imaging of human organs and comparison with perfusion images. Shanthi S, et al. **Med Biol Eng Comput** 1997 May;35(3):253–8

Matching of digitised brain atlas to magnetic resonance images. Sorlié C, et al. **Med Biol Eng Comput** 1997 May; 35(3):239–45

Adaptive motor unit action potential clustering using shape and temporal information. Stashuk D, et al. **Med Biol Eng Comput** 1996 Jan;34(1):41–9

Robust method for estimating motor unit firing-pattern statistics. Stashuk D, et al. **Med Biol Eng Comput** 1996 Jan;34(1):50–7

The impact of computer-assisted test interpretation on physician decision making: the case of electrocardiograms. Brailer DJ, et al. **Med Decis Making** 1997 Jan-Mar; 17(1):80–6

A new single-fibre laser Doppler flowmeter based on digital signal processing. Cai H, et al. **Med Eng Phys** 1996 Oct; 18(7):523–8

Parametric and non-parametric estimation of speech formants. application to infant cry. Fort A, et al. **Med Eng Phys** 1996 Dec;18(8):677–91

A trend-detection algorithm for intraoperative EEG monitoring. Hinrichs H, et al. **Med Eng Phys** 1996 Dec; 18(8):626–31

Vibration analysis in the detection of total hip prosthetic loosening. Li PL, et al. **Med Eng Phys** 1996 Oct; 18(7):596–600

A solution for linearity, stability and frequency bandwidth in PAM electrocutaneous stimulators' isolation interface. Nohama P, et al. **Med Eng Phys** 1996 Dec;18(8):692–5

A transputer-based physiological signal processing system. Part 2—System testing and investigation of flow through models of very small arterial stenoses. Robinson TM, et al. **Med Eng Phys** 1996 Jan;18(1):36–44

Autoregressive modeling with exogenous input of middle-latency auditory-evoked potentials to measure rapid changes in depth of anesthesia. Jensen EW, et al. **Methods Inf Med** 1996 Sep;35(3):256–60

Voice recognition: talking to your computer. Lerner EJ. **N J Med** 1997 Jun;94(6):57–8

Mean power spectra from pharmaco-electrocorticographic studies: relative baseline correction and log transformation for a proper analysis of variance to assess drug effects. Koopman PA, et al. **Neuropsychobiology** 1996;33(2):100–5

Evaluation of signal processing methods for the quantification of a multi-exponential signal: the glycogen 13C-1 NMR signal. Overloop K, et al. **NMR Biomed** 1996 Oct;9(7):315–21

Technique for the digital imaging of histopathologic preparations of eyes for research and publication. Montague PR, et al. **Ophthalmology** 1995 Aug; 102(8):1248–51

Autonomic effects on noise recorded during signal-averaged electrocardiography. Ahmed MW, et al. **Pacing Clin Electrophysiol** 1997 Jul;20(7):1796–9

Immediate and short-term reproducibility of the P wave signal-averaged electrocardiogram. Ehlert FA, et al. **Pacing Clin Electrophysiol** 1997 Jun;20(6):1636–45

"Pseudo" late potentials unmasked by spectrocardiography. Goldman DS, et al. **Pacing Clin Electrophysiol** 1996 Jul; 19(7):1126–9

A comparative analysis of signal processing methods for motion-based rate responsive pacing. Greenhut SE, et al. **Pacing Clin Electrophysiol** 1996 Aug;19(8):1230–47

Magnetic resonance imaging and signal-averaged electrocardiography in patients with repetitive monomorphic ventricular tachycardia and otherwise normal electrocardiogram. Grimm W, et al. **Pacing Clin Electrophysiol** 1997 Jul;20(7):1826–33

Value of time- and frequency-domain analysis of signal-averaged electrocardiography for arrhythmia risk prediction in idiopathic dilated cardiomyopathy. Grimm W, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1923–7

Analysis of the p wave in the signal-averaged electrocardiogram: normal values and reproducibility. Hofmann M, et al. **Pacing Clin Electrophysiol** 1996 Nov; 19(11 Pt 2):1928–32

If Dr. Bazett had had a computer.... Malik M. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 1):1635–9

Comparison of signal-averaged electrocardiograms with different levels of noise: time-domain, frequency-domain, and spectrotemporal analysis. Maounis TN, et al. **Pacing Clin Electrophysiol** 1997 Mar;20(3 Pt 1):671–82

Band-limited morphometric analysis of the intracardiac signal: implications for antitachycardia devices. Morris MM, et al. **Pacing Clin Electrophysiol** 1997 Jan;20(1 Pt 1):34–42

Improving accelerometer-based rate adaptive pacing by means of second-generation signal processing. Schmidt M, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1698–703

Improved recovery of high frequency P wave energy by selective P wave averaging. Stafford PJ, et al. **Pacing Clin Electrophysiol** 1996 Aug;19(8):1225–9

The formalin test in rat: validation of an automated system. Jett MF, et al. **Pain** 1996 Jan;64(1):19–25

Suitable analyzed signal duration and criteria for abnormal signal-averaged electrocardiogram on frequency-domain analysis in patients with Duchenne's muscular dystrophy. Kubo M, et al. **Pediatr Cardiol** 1996 Mar-Apr;17(2):91–6

Quantitative EEG in long-term survivors of acute lymphoblastic leukemia. Ueberall MA, et al. **Pediatr Neurol** 1996 Nov;15(4):293–8

A method of detecting the muscle pain threshold using an objective software-mediated technique. Edwards T, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):955–60

Correlation-based pattern recognition for implantable defibrillators. Wilkins J. **Proc AMIA Annu Fall Symp** 1996; :289–93

Use of an instrumented treadmill for real-time gait symmetry evaluation and feedback in normal and trans-tibial amputee subjects. Dingwell JB, et al. **Prosthet Orthot Int** 1996 Aug; 20(2):101–10

Power spectrum of the QRS complex in patients with panic disorder and normal controls. Yeragani VK, et al. **Psychiatry Res** 1997 Feb 7;66(2–3):167–74

Can relative contrast agent concentration be measured in vivo with color Doppler US? [letter; comment] Blomley MJ, et al. **Radiology** 1997 Jul;204(1):279–81. Comment on: Radiology 1996 Oct;201(1):119–23.

Thickness-equalization processing for mammographic images. Byng JW, et al. **Radiology** 1997 May;203(2):564–8

Automated detection of bolus arrival and initiation of data acquisition in fast, three-dimensional, gadolinium-enhanced MR angiography. Foo TK, et al. **Radiology** 1997 Apr;203(1):275–80

Digital photogrammetric quantification of surface area and volume on scanning electron micrographs of frozen hydrated lung tissue. Poinar HN, et al. **Scanning** 1996 Sep; 18(6):456–9

Change in quantified electroencephalography (QEEG) with medication and altered clinical state in the same subjects with schizophrenia [letter] Harris A, et al. **Schizophr Res** 1997 Jan 17;23(1):87–9

A convenient method for calibration of the pulse-length in high field-gradients using Hahn echo-trains. Randall EW. **Solid State Nucl Magn Reson** 1997 May;8(3):179–83

Differentiation of intramyocardial fluid pressure from fiber stress. Rabbany SY, et al. **Technol Health Care** 1997 Apr; 5(1–2):145–57

Analysis of temporal non-stationarities in EEG signals by means of parametric modelling. Tognola G, et al. **Technol Health Care** 1996 Aug;4(2):169–85

Improved monitoring of preterm infants by Fuzzy Logic. Wolf M, et al. **Technol Health Care** 1996 Aug;4(2):193–201

Autoregressive spectral estimation in ultrasonic scatterer size imaging. Chaturvedi P, et al. **Ultrason Imaging** 1996 Jan; 18(1):10–24

Variable density linear acoustic inverse problem. Moghaddam M, et al. **Ultrason Imaging** 1993 Jul; 15(3):255–66

Characterization of tissue microstructure scatterer distribution with spectral correlation. Varghese T, et al. **Ultrason Imaging** 1993 Jul;15(3):238–54

A generalized hermite pyramid for ultrasonic image analysis. I. Kidney and liver. Venkatesh YV. **Ultrason Imaging** 1996 Oct;18(4):261–304

A generalized hermite pyramid for ultrasonic image analysis. II. Gallstones. Venkatesh YV. **Ultrason Imaging** 1996 Oct; 18(4):305–27

Improvement of lesion detectability by speckle reduction filtering: a quantitative study. Verhoeven JT, et al. **Ultrason Imaging** 1993 Jul;15(3):181–204

Internal tissue displacement measurement based on ultrasonic wave Doppler signal digital detection and its application to fetal movement monitoring. Yamakoshi Y, et al. **Ultrasonics** 1996 Dec;34(8):769–75

Compensation for phase and amplitude imbalance in quadrature Doppler signals. Moraes R, et al. **Ultrasound Med Biol** 1996;22(1):129–37

Evaluation of an automated real-time spectral analysis technique. Rickey DW, et al. **Ultrasound Med Biol** 1996; 22(1):61–73

Computer-assisted interpretation of electromyograms of corpora cavernosa using fuzzy logic. Gorek M, et al. **World J Urol** 1997;15(1):65–70

[Manufacture of computer-based testing and analyzing system for measuring step-through performance] Liu X, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1995 Dec;17(6):466–9 (Eng. Abstr.) **(Chi)**

[Reliability of parameters of cognitive evoked P3 potentials] Minow F, et al. **Z Kinder Jugenpsychiatr** 1996 Dec; 24(4):265–71 (Eng. Abstr.) **(Ger)**

[Computer-assisted analysis of urethral pressure profiles in the woman] Wolters M, et al. **Zentralbl Gynakol** 1996; 118(8):462–7 (Eng. Abstr.) **(Ger)**

[Automatic analysis of the electrocardiogram as a possibility for cardiological screening in the military area] Fronzaroli F. **Riv Med Aeronaut Spaz** 1975 Jan–Mar;38(1):111–20 **(Ita)**

[Analysis of initial potential of signal-averaged QRS complex in patients with acute myocardial infarction] Kim EM, et al. **Nippon Ika Daigaku Zasshi** 1996 Feb;63(1):31–8 (Eng. Abstr.) **(Jpn)**

[Digital filing system for medical image data] Mitani M, et al. **Rinsho Byori** 1997 May;45(5):447–55 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Record and preservation of ultrasound images and computer-assistant analysis—estimation of digital filing system and texture analysis] Taniguchi N, et al. **Rinsho Byori** 1997 May;45(5):442–6 (5 ref.) (Eng. Abstr.) **(Jpn)**

[Visualization of neural excitation] Iijima T, et al. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):1100–5 (12 ref.) **(Jpn)**

[New electromyographic test in orthopedic diagnosis. Part I] Koczocik-Przedpelska J, et al. **Chir Narzadow Ruchu Ortop Pol** 1997;62(1):67–71 (Eng. Abstr.) **(Pol)**

[Spectral methods for automatic determination of artefacts in digital EEG systems] Alhasan A, et al. **Med Tekh** 1996 Jul–Aug;(4):5–7 (Eng. Abstr.) **(Rus)**

[A program system interpreting recording of long-latency evoked potentials] Ampilova NB, et al. **Med Tekh** 1996 Nov–Dec;(6):20–3 (Eng. Abstr.) **(Rus)**

[A digital radiographic device for medical diagnosis] Babichev EA, et al. **Med Tekh** 1997 Jan–Feb;(1):13–7 (Eng. Abstr.) **(Rus)**

[Pulse oximeter: a component of medical computer-aided monitoring] Bagrin SV, et al. **Med Tekh** 1996 Nov–Dec; (6):26–8 (Eng. Abstr.) **(Rus)**

[Choice and matching of parameters of input and interpolating filters at Kotelnikov's time slicing rate in biological signal amplifiers] Lebedev VV, et al. **Med Tekh** 1997 May–Jun;(3):26–30 (Eng. Abstr.) **(Rus)**

[Testing signal for checking measuring ECG algorithms in automatic systems] Lebedev VV, et al. **Med Tekh** 1997 May–Jun;(3):40–1 (Eng. Abstr.) **(Rus)**

[Use of spectral luminescent analysis for objective evaluation of the state of tissues in surgical and laser effects] Ovchinnikov IuM, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):27–30 (Eng. Abstr.) **(Rus)**

[Fundamentals of computer analysis of bioelectric signals] Ribić M, et al. **Vojnosanit Pregl** 1996 Sep–Oct;53(5):423–30 **(Scr)**

[Determination of infravesical obstruction in men with benign prostatic hyperplasia using pressure–flow measurement and analysis with the Dx/CLIM software program] Svihra J, et al. **Bratisl Lek Listy** 1997 Jan;98(1):28–31 (Eng. Abstr.) **(Slo)**

[Use of recording methods and sound analysis of cough in the study of sound phenomena associated with respiration] Vrabec M, et al. **Bratisl Lek Listy** 1997 Mar;98(3):141–5 (Eng. Abstr.) **(Slo)**

[Long-term electrocardiographic monitoring of patients after acute myocardial infarct] Murín J, et al. **Vnitr Lek** 1996 Oct;42(10):684–92 (Eng. Abstr.) **(Slo)**

INSTRUMENTATION

Functional neurosurgery aided by use of an electronic brain atlas. Yeo TT, et al. **Acta Neurochir Suppl (Wien)** 1997; 68:93–9

Acoustic detection of intracranial aneurysms: a decision analysis. van Bruggen AC, et al. **Acta Neurochir (Wien)** 1996;138(10):1148–56

Ambulatory monitoring of respiration in anxiety. Martinez JM, et al. **Anxiety** 1996;2(6):296–302

Audio–visual perception of compressed speech by profoundly hearing-impaired subjects. Drullman R, et al. **Audiology** 1997 May–Jun;36(3):165–77

Regional brain asymmetries in major depression with or without an anxiety disorder: a quantitative electroencephalographic study. Bruder GE, et al. **Biol Psychiatry** 1997 May 1;41(9):939–48

Gait initiation, development of a measuring device for use in a clinical environment. Dawson M, et al. **Biomed Tech (Berl)** 1996 Jul–Aug;41(7–8):213–7

Present state of development of neo–electroencephalography. Sorel L, et al. **Clin Electroencephalogr** 1996 Jul;27(3):132–44

Seizure adequacy: does EEG hold the key? [editorial] Kellner C, et al. **Convuls Ther** 1996 Dec;12(4):203–6

Gastroesophageal sphincter: a model. Korn O, et al. **Dis Esophagus** 1997 Apr;10(2):105–9

Muscle surface mechanical and electrical activities in myotonic dystrophy. Orizio C, et al. **Electromyogr Clin Neurophysiol** 1997 Jun–Jul;37(4):231–9

Prolonged recording of intravesical pressure (vesical "Holter") in the child with spina bifida. Di Rovasenda E, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:43–4

Evaluation of signal-averaged cardiokymography for the detection of ischaemic left ventricular dysfunction. Scherhag AW, et al. **Int J Cardiol** 1997 May 23; 59(3):305–12

Electro–encephalography spectral analysis of heroin addicts compared with abstainers and normal controls. Shufman E, et al. **Isr J Psychiatry Relat Sci** 1996;33(3):196–206

Technology and equipment review. Report generators and databases for electromyography. **J Clin Neurophysiol** 1996 Jan;13(1):93–103

Home assessment of sleep disorders by portable monitoring. Broughton R, et al. **J Clin Neurophysiol** 1996 Jul; 13(4):272–84 (75 ref.)

Past and future of computer-assisted sleep analysis and drowsiness assessment. Hasan J. **J Clin Neurophysiol** 1996 Jul;13(4):295–313 (190 ref.)

Physiology and interpretation of the electromyogram. Kamen G, et al. **J Clin Neurophysiol** 1996 Sep;13(5):366–84 (200 ref.)

The future of computer-assisted investigation of the polysomnogram: sleep microstructure. Kubicki S, et al. **J Clin Neurophysiol** 1996 Jul;13(4):285–94 (70 ref.)

Logarithmic distribution of amplitudes of compound muscle action potentials evoked by transcranial magnetic stimulation. Nielsen JF. **J Clin Neurophysiol** 1996 Sep; 13(5):423–34

The cyclic alternating pattern plays a gate-control on periodic limb movements during non-rapid eye movement sleep. Parrino L, et al. **J Clin Neurophysiol** 1996 Jul; 13(4):314–23

Analysis of the electromyographic interference pattern. Sanders DB, et al. **J Clin Neurophysiol** 1996 Sep; 13(5):385–400 (36 ref.)

Quantitative motor unit potential analysis. Stålberg E, et al. **J Clin Neurophysiol** 1996 Sep;13(5):401–22 (105 ref.)

Electroencephalographic and polygraphic features of 24-hour recordings in sleeping sickness and healthy African subjects. Tapie P, et al. **J Clin Neurophysiol** 1996 Jul; 13(4):339–44

Digital video image capture in establishing positive identification. Marks MK, et al. **J Forensic Sci** 1997 May; 42(3):492–5

Monitoring NMR spectrometer performance during data accumulation for macromolecular structure determination. Braun D, et al. **J Magn Reson B** 1996 Mar;110(3):313–5

Stereospecific assignments of Val and Leu methyl groups in a selectively 13C-labeled 18 kDa polypeptide using 3D CT-(H) CCH-COSY and 2d 1Jc-c edited heteronuclear correlation experiments. Hu W, et al. **J Magn Reson B** 1996 Oct;113(1):70–5

Single-shot spectroscopic imaging (SISSI) using a PEEP/BURST hybrid. Jakob PM, et al. **J Magn Reson B** 1996 Mar;110(3):278–83

Determination of backbone torsion angle epsilon of DNA duplexes in solution from 3JC4'P and 3JH3'P, using heteronuclear single-quantum-coherence spectroscopy. Lam SL, et al. **J Magn Reson B** 1996 Oct;113(1):59–64

Increased sensitivity in HNCA and HN(CO)CA experiments by selective C beta decoupling. Matsuo H, et al. **J Magn Reson B** 1996 Oct;113(1):91–6

Signal-to-noise and magnetic susceptibility trade-offs in solenoidal microcoils for NMR. Webb AG, et al. **J Magn Reson B** 1996 Oct;113(1):83–7

Real-time spike detection in EEG signals using the wavelet transform and a dedicated digital signal processor card. Clarençon D, et al. **J Neurosci Methods** 1996 Dec; 70(1):5–14

Peroperative (123)I-MIBG scan using a sterile probe for staging and resection of neuroblastoma in children. Aslam A, et al. **J Pediatr Surg** 1996 May;31(5):719–20

Dipole-modeling of the visual evoked P300. Goto Y, et al. **J Psychosom Res** 1996 Jul;41(1):71–9

A Holter-type, microprocessor-based, rehabilitation instrument for acquisition and storage of plantar pressure data. Abu-Faraj ZO, et al. **J Rehabil Res Dev** 1997 Apr; 34(2):187–94

A modular six-directional force sensor for prosthetic assessment: a technical note. Sanders JE, et al. **J Rehabil Res Dev** 1997 Apr;34(2):195–202

Simulation of a programmable pulser for phased array transducers. Tiedeu AB, et al. **Med Eng Phys** 1996 Dec; 18(8):696–700

Electric field plethysmography signals of the human thorax as determined by a 2-D FE-model. Nopp P, et al. **Med Prog Technol** 1995–96;21(3):135–45

Object-oriented analysis and design of an ECG storage and retrieval system integrated with an HIS. Wang C, et al. **Methods Inf Med** 1996 Mar;35(1):35–40

Computational analysis of open loop handwriting movements in Parkinson's disease: a rapid method to detect dopamimetic effects. Eichhorn TE, et al. **Mov Disord** 1996 May;11(3):289–97

Baseline electroencephalographic tracings in rabbits differ significantly according to 'acute' or 'chronic' preparation. A computerized study. Pèzzola A, et al. **Neuropsychobiology** 1997;36(1):49–52

Chewing-gum flavor affects measures of global complexity of multichannel EEG. Yagyu T, et al. **Neuropsychobiology** 1997;35(1):46–50

Transcranial cerebral oximetry in endovascular treatment of carotid-cavernous fistula. Misra M, et al. **Neuroradiology** 1996 Aug;38(6):590–4

Dynamic contrast-enhanced T2*-weighted MRI in patients with cerebrovascular disease. Reith W, et al. **Neuroradiology** 1997 Apr;39(4):250–7

Early effects of mannitol in patients with head injuries assessed using bedside multimodality monitoring. Kirkpatrick PJ, et al. **Neurosurgery** 1996 Oct;39(4):714–20; discussion 720–1

A new ventriculoperitoneal shunt with a telemetric intracranial pressure sensor: clinical experience in 94 patients with hydrocephalus. Miyake H, et al. **Neurosurgery** 1997 May;40(5):931–5

Effects of exercise on signal-averaged electrocardiogram. Beauregard LA, et al. **Pacing Clin Electrophysiol** 1996 Feb; 19(2):215–21

Biphasic defibrillation using a single capacitor with large capacitance: reduction of peak voltages and ICD device size [see comments] Block M, et al. **Pacing Clin Electrophysiol** 1996 Feb;19(2):207–14. Comment in: Pacing Clin Electrophysiol 1996 Aug;19(8):1271–2.

Evaluation of "inappropriate" ICD shocks in an asymptomatic patient following myocardial infarction. Ellenbogen KA, et al. **Pacing Clin Electrophysiol** 1996 Feb;19(2):254–5

Time-domain signal-averaged electrocardiogram in nonischemic ventricular tachycardia. Fauchier JP, et al. **Pacing Clin Electrophysiol** 1996 Feb;19(2):231–44 (87 ref.)

Identification of electrocardiographic patterns. Malik M, et al. **Pacing Clin Electrophysiol** 1996 Feb;19(2):245–51

Comparison of bipolar atrial electrogram amplitude in sinus rhythm, atrial fibrillation, and atrial flutter. Wood MA, et al. **Pacing Clin Electrophysiol** 1996 Feb;19(2):150–6

Postural stability by computerized posturography in minor head trauma [see comments] Lahat E, et al. **Pediatr Neurol** 1996 Nov;15(4):299–301. Comment in: Pediatr Neurol 1997 Apr;16(3):259.

Spectrum analysis, aliasing, and the perception of musical tones. Adelson RM, et al. **Perception** 1996;25(5):609–17

Computer support for experiments on isolated hearts. Kocijančič S, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R273–4

Detection of the erect position in the freely-moving human: sensor characteristics, reliability, and validity. Mucha RF, et al. **Physiol Behav** 1997 Feb;61(2):293–300

Assessing ECG signal quality on a coronary care unit. Allen J, et al. **Physiol Meas** 1996 Nov;17(4):249–58

Calculation of area of stabilometric signals using principal component analysis. Oliveira LF, et al. **Physiol Meas** 1996 Nov;17(4):305–12 (12 ref.)

Quantitative EEG correlates of panic disorder. Knott VJ, et al. **Psychiatry Res** 1996 Nov 25;68(1):31–9

Computerized system for assessing heart rate variability.

Frigy A, et al. **Rom J Intern Med** 1996 Jul-Dec; 34(3-4):253-62

Response of monkey glabrous skin mechanoreceptors to random noise sequences: III. Spectral analysis. Looft FJ. **Somatosens Mot Res** 1996;13(3-4):235-44

Imaging of the elastic properties of tissue--a review. Gao L, et al. **Ultrasound Med Biol** 1996;22(8):959-77 (65 ref.)

Devices for blood pressure self measurement: tested in comparison. Anlauf M, et al. **Z Kardiol** 1996;85 Suppl 3:20-5

Automated blood pressure measurement in special situations: patients with chronic atrial fibrillation or chronic aortic regurgitation. Eckert S, et al. **Z Kardiol** 1996;85 Suppl 3:92-8

Automated blood pressure measurement during ergometric stress testing: possibilities of Finapres. Imholz BP. **Z Kardiol** 1996;85 Suppl 3:76-80

Noninvasive continuous blood pressure control by pulse wave velocity. Lutter N, et al. **Z Kardiol** 1996;85 Suppl 3:124-6

Which requirements must be met by non-invasive blood pressure measuring devices bearing the CE-mark? Mieke S. **Z Kardiol** 1996;85 Suppl 3:8-12

Devices for blood pressure self-measurement: present and future. Schmidt W. **Z Kardiol** 1996;85 Suppl 3:13-9

Automated blood pressure measurement in children. Steiss JO, et al. **Z Kardiol** 1996;85 Suppl 3:81-4 (36 ref.)

Finger arterial pressure measurement with Finapres. Wesseling KH. **Z Kardiol** 1996;85 Suppl 3:38-44

Continuous monitoring of brain tissue PO2: a new tool to minimize the risk of ischemia caused by hyperventilation therapy. Dings J, et al. **Zentralbl Neurochir** 1996; 57(4):177-83

[A new cardiac pacemaker stimulation technology (autocapture) allows, with unchanged life expectancy, reduction of generator size by half] Antretter H, et al. **Acta Med Austriaca** 1996;23(5):159-64 (Eng. Abstr.) (Ger)

[Intraoperative EEG monitoring in hemihepatectomies] Goldmann R, et al. **Anaesthesiol Reanim** 1996;21(4):88-90 (Eng. Abstr.) (Ger)

[Modular development of a patient data management system for a surgical intensive care unit] Apin M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jun; 32(6):369-71 (Ger)

[Temperature measurement in the ear canal: comparison of an infrared thermometer with conventional temperature probes and evaluation of clinical factors on infrared measurement (see comments)] Rohrberg M, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):409-13 (Eng. Abstr.). Comment in: Anasthesiol Intensivmed Notfallmed Schmer 1997 Jul;32(7):399-400. (Ger)

[Measuring core body temperature--a methodological challenge? (editorial; comment)] Schulte am Esch J, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jul; 32(7):399-400. Comment on: Anasthesiol Intensivmed Notfallmed Schmer 1997 Jul;32(7):409-13. (Ger)

[Transponder ECG] Bedrich MR. **Biomed Tech (Berl)** 1997 Apr;42(4):90-2 (Eng. Abstr.) (Ger)

[Determination of respiratory frequency from respiratory sinus arrhythmia] Bettermann H, et al. **Biomed Tech (Berl)** 1996 Nov;41(11):319-23 (Eng. Abstr.) (Ger)

[Intraoperative EEG monitoring using a neural network] Eckert O, et al. **Biomed Tech (Berl)** 1997 Apr;42(4):78-84 (Eng. Abstr.) (Ger)

[Measuring pulmonary CO2 elimination--studies with the lung model using various mixed gases] Gehring H, et al. **Biomed Tech (Berl)** 1996 Nov;41(11):324-30 (Eng. Abstr.) (Ger)

[Electromyograms in erectile dysfunction and computer-assisted interpretation] Gorek M, et al. **Biomed Tech (Berl)** 1997 Mar;42(3):48-54 (Eng. Abstr.) (Ger)

[How relevant are calculations of mean intracompartmental pressure in functional compartment syndrome?] Jerosch J, et al. **Biomed Tech (Berl)** 1997 Mar;42(3):42-7 (12 ref.) (Eng. Abstr.) (Ger)

[Laser Doppler data analysis during interstitial laser thermotherapy with magnetic resonance control within the scope of an animal experiment study] Litscher G, et al. **Biomed Tech (Berl)** 1997 Apr;42(4):93-6 (Eng. Abstr.) (Ger)

[Burst suppression detection in pEEG] Litscher G, et al. **Biomed Tech (Berl)** 1997 Jan-Feb;42(1-2):12-5 (Eng. Abstr.) (Ger)

[A method for measuring QT and T duration and beat to beat variability] Neupert H, et al. **Biomed Tech (Berl)** 1997 Apr;42(4):85-9 (Eng. Abstr.) (Ger)

[Pruritometer 1: Portable measuring system for quantifying scratching as an objective measure of cholestatic pruritus] Stein H, et al. **Biomed Tech (Berl)** 1996 Sep;41(9):248-52 (Eng. Abstr.) (Ger)

[Color-coded sleep EEG power density spectra] Wallner F. **Biomed Tech (Berl)** 1996 Jan-Feb;41(1-2):18-22 (Eng. Abstr.) (Ger)

[Dynamic in vivo skin pressure measurement in quality control of compression stockings] Jünger M, et al. **Hautarzt** 1997 Jul;48(7):471-6 (Eng. Abstr.) (Ger)

[First comparisons with laser vibrometry measurements and computer simulation of ear ossicle movements (see comments)] Eiber A, et al. **HNO** 1997 Jul;45(7):538-44 (Eng. Abstr.). Comment in: HNO 1997 Jul;45(7):509-11. (Ger)

[A registration system for evaluating acusto-mechanical transmission of middle ear implants] Meister H, et al. **HNO** 1997 Feb;45(2):81-5 (Eng. Abstr.) (Ger)

[Computer-assisted 3D phonetography] Neuschaefer-Rube C, et al. **HNO** 1996 Oct;44(10):585-9 (Eng. Abstr.) (Ger)

[Value of smooth pursuit evaluation within the scope of clinical computerized nystagmography] Schmäl F, et al. **HNO** 1997 May;45(5):385-8 (Eng. Abstr.) (Ger)

[Laser Doppler flow signal frequency analysis in physiological and drug modified nasal flow motion] Siegert R, et al. **HNO** 1996 Sep;44(9):497-502 (Eng. Abstr.) (Ger)

[Diagnostic methods and standards in sleep medicine] Penzel T, et al. **Internist (Berl)** 1996 May;37(5):442-53 (45 ref.) (Ger)

[Relation between relative afferent pupillary defect and suprathreshold automated perimetry] Wilhelm H, et al. **Klin Monatsbl Augenheilkd** 1997 Jun;210(6):365-9 (Eng. Abstr.) (Ger)

[Monitoring critically ill intensive care patients by semi-invasive COLD (Cardiac-Output-Liver-Diseases) monitoring instead of pulmonary artery catheterization] Töns C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:349-52 (Eng. Abstr.) (Ger)

[Reproducibility of inspiratory mouth occlusion pressure with a mobile computer-assisted measuring system] Neumeister W, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:18-21 (Eng. Abstr.) (Ger)

[Pattern electroretinography in routine clinical diagnosis of open angle glaucoma] Breidenbach K, et al. **Ophthalmologe** 1996 Aug;93(4):451-5 (Eng. Abstr.) (Ger)

[Clinical calibration and in vitro evaluation of the validity of 2 microprocessor controlled tonometers] Deutsch C, et al. **Ophthalmologe** 1996 Oct;93(5):544-8 (Eng. Abstr.) (Ger)

[Variability of findings in light sense and ring perimetry] Littan T, et al. **Ophthalmologe** 1996 Aug;93(4):413-9 (Eng. Abstr.) (Ger)

[Effect of cataracts on contrast pattern reversal stimuli exemplified by the pattern electroretinogram] Mauck K, et al. **Ophthalmologe** 1996 Aug;93(4):463-6 (Eng. Abstr.) (Ger)

[Age-adjusted normal values with the Tübingen Automatic Perimeter TAP 2000 CC] Wohlrab TM, et al. **Ophthalmologe** 1996 Aug;93(4):428-32 (Eng. Abstr.) (Ger)

[Perimetry with normal Octopus technique and Weber 'dynamic' technique. Initial results with reference to reproducibility of measurements in glaucoma patients] Zulauf M, et al. **Ophthalmologe** 1996 Aug;93(4):420-7 (Eng. Abstr.) (Ger)

[Dynamic pedography for assessing functional ankle joint instability] Becker HP, et al. **Unfallchirurg** 1997 Feb; 100(2):133-9 (Eng. Abstr.) (Ger)

[Contribution of spontaneous EEG to understanding cognitive functions] Petsche H. **Wien Klin Wochenschr** 1997 May 9;109(9):327-41 (Eng. Abstr.) (Ger)

[Spectral analysis of blood pressure in patients with sleep related respiratory disorders] Penzel T, et al. **Wien Med Wochenschr** 1996;146(13-14):359-61 (Eng. Abstr.) (Ger)

[Computer-assisted analysis of sleep stages using the laboratory software package "Spike 2"] Schäfer T, et al. **Wien Med Wochenschr** 1996;146(13-14):377-8 (Eng. Abstr.) (Ger)

[Validity of telephone ECG multichannel transmission] Dirschedl P, et al. **Z Kardiol** 1996 Sep;85(9):677-83 (Eng. Abstr.) (Ger)

[Diagnostic value of auto-capture: detection of lead dislocation] Liebold A, et al. **Z Kardiol** 1997 Jul;86(7):521-3 (Eng. Abstr.) (Ger)

[Non-transmural anterior wall infarct: changes in myocardial energy metabolism in remaining vital myocardium] Moka D, et al. **Z Kardiol** 1997 Feb;86(2):113-20 (Eng. Abstr.) (Ger)

[Atrial sensing and atrioventricular synchrony in single lead VDD pacemakers. Can the appearance of atrial undersensing be predicted?] Wiegand UK, et al. **Z Kardiol** 1997 Feb;86(2):95-104 (Eng. Abstr.) (Ger)

[Anorectal pull-through and vector volume manometry] Freys SM, et al. **Zentralbl Chir** 1996;121(8):652-8 (Eng. Abstr.) (Ger)

SIGNAL PROCESSING, DIGITAL see **SIGNAL PROCESSING, COMPUTER-ASSISTED**

SIGNAL RECOGNITION PARTICLE

[Identification of eubacterial SRP RNA as a multifunctional molecule] Nakamura K, et al. **Seikagaku** 1997 Mar; 69(3):192-6 (15 ref.) (Jpn)

[Bacterial signal recognition particles (SRP): comparisons with mammalian SRP on their structure and function] Yamane K, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep; 41(11):1569-79 (57 ref.) (Jpn)

BIOSYNTHESIS

Expression and purification of the canine 54-kDa subunit of signal recognition particle as a his-tagged protein from Escherichia coli. Patel S, et al. **Protein Expr Purif** 1996 Nov;8(3):283-94

CHEMISTRY

The signal recognition particle receptor alpha subunit of the hyperthermophilic archaeon Acidianus ambivalens exhibits an intrinsic GTP-hydrolyzing activity. Moll R, et al. **Biochim Biophys Acta** 1997 Apr 17;1335(1-2):218-30

The crystal structure of the signal recognition particle Alu RNA binding heterodimer, SRP9/14. Birse DE, et al. **EMBO J** 1997 Jul 1;16(13):3757-66

Identification of an RNA-binding-loop in the N-terminal region of signal-recognition-particle protein SRP19. Black SD, et al. **Eur J Biochem** 1997 May 1;245(3):564-72

The N-domain of the signal recognition particle 54-kDa subunit promotes efficient signal sequence binding. Newitt JA, et al. **Eur J Biochem** 1997 May 1;245(3):720-9

Structure of a methionine-rich segment of Escherichia coli Ffh protein. Oh DB, et al. **FEBS Lett** 1996 Oct 21; 395(2-3):160-4

Comparative analysis of tertiary structure elements in signal recognition particle RNA. Zwieb C, et al. **Fold Des** 1996; 1(4):315-24

Structure of the conserved GTPase domain of the signal recognition particle. Freymann DM, et al. **Nature** 1997 Jan 23;385(6614):361-4

The SRP9/14 subunit of the human signal recognition particle binds to a variety of Alu-like RNAs and with higher affinity than its mouse homolog. Bovia F, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):318-26

A highly conserved nucleotide in the Alu domain of SRP RNA mediates translation arrest through high affinity binding to SRP9/14. Chang DY, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1117-22

Binding site of the M-domain of human protein SRP54 determined by systematic site-directed mutagenesis of signal recognition particle RNA. Gowda K, et al. **Nucleic Acids Res** 1997 Jan 15;25(2):388-94

Determinants of a protein-induced RNA switch in the large domain of signal recognition particle identified by systematic-site directed mutagenesis. Gowda K, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2835-40

Interaction of rice and human SRP19 polypeptides with signal recognition particle RNA. Chittenden K, et al. **Plant Mol Biol** 1997 Jun;34(3):507-15

Expression, crystallization and preliminary X-ray diffraction study of FtsY, the docking protein of the signal recognition particle of E. coli. Montoya G, et al. **Proteins** 1997 Jun; 28(2):285-8

NMR studies of the most conserved RNA domain of the mammalian signal recognition particle (SRP). Schmitz U, et al. **RNA** 1996 Dec;2(12):1213-27

GENETICS

A 13-kDa protein with a helix-turn-helix motif is encoded by bacterial operons related to the SRP pathway. Samuelsson T, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):839-43

Entamoeba histolytica contains a gene encoding a homologue to the 54 kDa subunit of the signal recognition particle. Ramos MA, et al. **Mol Biochem Parasitol** 1997 Sep; 88(1-2):225-35

The Signal Recognition Particle Database (SRPDB). Zwieb C, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):107-8

Mutational analysis of the protein subunits of the signal recognition particle Alu-domain. Bui N, et al. **RNA** 1997 Jul;3(7):748-63

The sequence of a 16,691 bp segment of Saccharomyces cerevisiae chromosome IV identifies the DUN1, PMT1, PMT5, SRP14 and DPR1 genes, and five new open reading frames. Boskovic J, et al. **Yeast** 1996 Oct;12(13):1377-84

[Selective transfection of animal cells by non viral vectors: polylysine carrying recognition signals] Monsigny M, et al. **C R Seances Soc Biol Fil** 1996;190(1):39-43 (14 ref.) (Eng. Abstr.) (Fre)

METABOLISM

Bacillus subtilis Ffh, a homologue of mammalian SRP54, can intrinsically bind to the precursors of secretory proteins. Bunai K, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):762-7

Empty site forms of the SRP54 and SR alpha GTPases mediate targeting of ribosome-nascent chain complexes to the endoplasmic reticulum [see comments] Rapiejko PJ, et al. **Cell** 1997 May 30;89(5):703-13. Comment in: Cell 1997 May 30;89(5):673-6.

The E. coli signal recognition particle is required for the insertion of a subset of inner membrane proteins. Ulbrandt ND, et al. **Cell** 1997 Jan 24;88(2):187-96

The nascent polypeptide-associated complex modulates interactions between the signal recognition particle and the ribosome. Powers T, et al. **Curr Biol** 1996 Mar 1;6(3):331-8

Co-translational protein targeting catalyzed by the Escherichia coli signal recognition particle and its receptor. Powers T, et al. **EMBO J** 1997 Aug 15;16(16):4880-6

Assembly of a cytoplasmic membrane protein in Escherichia coli is dependent on the signal recognition particle. de Gier JW, et al. **FEBS Lett** 1996 Dec 16;399(3):307-9

The E. coli SRP: preferences of a targeting factor. De Gier JW, et al. **FEBS Lett** 1997 May 12;408(1):1-4 (33 ref.)

A putative signal recognition particle receptor alpha subunit (SR alpha) homologue is expressed in the hyperthermophilic crenarchaeon Sulfolobus acidocaldarius. Moll R, et al. **FEMS Microbiol Lett** 1996 Mar 15; 137(1):51–6

Signal sequence recognition and protein targeting to the endoplasmic reticulum membrane. Walter P. **Harvey Lect** 1995–96;91:115–31 (28 ref.)

The hydrophobic region of signal peptides is a determinant for SRP recognition and protein translocation across the ER membrane. Hatsuzawa K, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):270–7

Formation of 2',3'-cyclic phosphates at the 3' end of human U6 small nuclear RNA in vitro. Identification of 2',3'-cyclic phosphates at the 3' ends of human signal recognition particle and mitochondrial RNA processing RNAs. Gu J, et al. **J Biol Chem** 1997 Aug 29; 272(35):21989–93

Chloroplast SRP54 interacts with a specific subset of thylakoid precursor proteins. High S, et al. **J Biol Chem** 1997 Apr 25;272(17):11622–8

Yarrowia lipolytica TSR1 gene product. A novel endoplasmic reticulum membrane component involved in the signal recognition particle-dependent translocation pathway. Mamoun CB, et al. **J Biol Chem** 1997 Sep 26; 272(39):24594–8

The signal recognition particle and related small cytoplasmic ribonucleoprotein particles. Bovia F, et al. **J Cell Sci** 1996 Nov;109 (Pt 11):2601–8 (64 ref.)

The decline in human Alu retroposition was accompanied by an asymmetric decrease in SRP9/14 binding to dimeric Alu RNA and increased expression of small cytoplasmic Alu RNA. Sarrowa J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1144–51

Ffh and FtsY in a Mycoplasma mycoides signal-recognition particle pathway: SRP RNA and M domain of Ffh are not required for stimulation of GTPase activity in vitro. Macao B, et al. **Mol Microbiol** 1997 May;24(3):523–34

Monomeric scAlu and nascent dimeric Alu RNAs induced by adenovirus are assembled into SRP9/14-containing RNPs in HeLa cells. Chang DY, et al. **Nucleic Acids Res** 1996 Nov 1;24(21):4165–70

A highly conserved nucleotide in the Alu domain of SRP RNA mediates translation arrest through high affinity binding to SRP9/14. Chang DY, et al. **Nucleic Acids Res** 1997 Mar 15;25(6):1117–22

A truncation in the 14 kDa protein of the signal recognition particle leads to tertiary structure changes in the RNA and abolishes the elongation arrest activity of the particle. Thomas Y, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1920–9

Interaction of rice and human SRP19 polypeptides with signal recognition particle RNA. Chittenden K, et al. **Plant Mol Biol** 1997 Jun;34(3):507–15

The NG domain of the prokaryotic signal recognition particle receptor, FtsY, is fully functional when fused to an unrelated integral membrane polypeptide. Zelazny A, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6025–9

Purification and biochemical characterization of the 19-kDa signal recognition particle RNA-binding protein expressed as a hexahistidine-tagged polypeptide in Escherichia coli. Henry KA, et al. **Protein Expr Purif** 1997 Feb;9(1):15–26

Mutational analysis of the protein subunits of the signal recognition particle Alu-domain. Bui N, et al. **RNA** 1997 Jul;3(7):748–63

Yarrowia lipolytica SRP54 homolog and translocation of Kar2p. Lee IH, et al. **Yeast** 1997 May;13(6):499–513

SIGNAL SEQUENCES see **SIGNAL PEPTIDES**

SIGNAL SEQUENCES, PEPTIDES see **SIGNAL PEPTIDES**

SIGNAL TRANSDUCTION

see related
ION CHANNELS

Nodulation genes in the Rhizobium--plant signal exchange. Lorkiewicz Z. **Acta Biochim Pol** 1997;44(1):1–12 (94 ref.)

Advances with phospholipid signalling as a target for anticancer drug development. Powis G, et al. **Acta Biochim Pol** 1995;42(4):395–403 (51 ref.)

Insulin receptor/IRS-1/PI 3-kinase signaling system in corticosteroid-induced insulin resistance. Folli F, et al. **Acta Diabetol** 1996 Sep;33(3):185–92 (82 ref.)

Neurotransmitters, signal transduction and second-messengers in Alzheimer's disease. Cowburn RF, et al. **Acta Neurol Scand Suppl** 1996;165:25–32 (63 ref.)

Signal transduction in human myometrial cells. Molnár M, et al. **Acta Physiol Hung** 1996;84(2):89–97

Phosphatidylcholine cycle: an intracellular signaling mechanism in the primordial human placenta. Tóth M. **Acta Physiol Hung** 1996;84(2):99–108

Ca(2+)-signalling in human T-lymphocytes. Potential roles for cyclic ADP-ribose and 2'-phospho-cyclic ADP-ribose. Guse AH, et al. **Adv Exp Med Biol** 1997; 419:431–6 (16 ref.)

Signal transduction via the CD38/NAD+ glycohydrolase. Kontani K, et al. **Adv Exp Med Biol** 1997;419:421–30

ADP-ribosyl cyclase and CD38. Multi-functional enzymes in Ca+2 signaling. Lee HC, et al. **Adv Exp Med Biol** 1997; 419:411–9 (29 ref.)

Signal transduction via GPI-anchored membrane proteins. Robinson PJ. **Adv Exp Med Biol** 1997;419:365–70 (22 ref.)

Intramolecular ADP-ribose transfer reactions and calcium signalling. Potential role of 2'-phospho-cyclic ADP-ribose in oxidative stress. Vu CQ, et al. **Adv Exp Med Biol** 1997; 419:381–8 (31 ref.)

Novel protein phosphatases that may participate in cell signaling. Cohen PT, et al. **Adv Pharmacol** 1996;36:67–89 (74 ref.)

Redox signaling and the control of cell growth and death. Powis G, et al. **Adv Pharmacol** 1997;38:329–59 (204 ref.)

Signal transductions of SH2/SH3: Ash/Grb-2 downstream signaling. Takenawa T, et al. **Adv Pharmacol** 1996; 36:139–53 (24 ref.)

Protein tyrosine phosphatases and the control of cellular signaling responses. Tonks NK. **Adv Pharmacol** 1996; 36:91–119 (104 ref.)

Influence of ethanol on insulin receptor substrate-1-mediated signal transduction during rat liver regeneration. Sasaki Y, et al. **Alcohol Alcohol** 1994;29 Suppl 1:99–106

Tyrosine phosphorylation and bradykinin-induced signaling in endothelial cells. Fleming I, et al. **Am J Cardiol** 1997 Aug 4;80(3A):102A–109A

Substrate signaling by insulin: a ketone bodies ratio mimics insulin action in heart. Kashiwaya Y, et al. **Am J Cardiol** 1997 Aug 4;80(3A):50A–64A

Multiple signaling pathways involved in the metabolic effects of insulin. Moule SK, et al. **Am J Cardiol** 1997 Aug 4; 80(3A):41A–49A (62 ref.)

Molecular mechanisms of contraction-induced translocation of GLUT4 in isolated cardiomyocytes. Till M, et al. **Am J Cardiol** 1997 Aug 4;80(3A):85A–89A

Autocrine activation of the IL-3/GM-CSF/IL-5 signaling pathway in leukemic cells. Paul CC, et al. **Am J Hematol** 1997 Oct;56(2):79–85

Signal transducer and activator of transcription 1 in human muscle: implications in inflammatory myopathies. Illa I, et al. **Am J Pathol** 1997 Jul;151(1):81–8

Coexpression of flt-3 ligand/flt-3 and SCF/c-kit signal transduction system in bile-duct-ligated SI and W mice. Omori M, et al. **Am J Pathol** 1997 Apr;150(4):1179–87

Increased PTHRP production by a tyrosine kinase oncogene, Tpr-Met: role of the Ras signaling pathway. Aklilu F, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E277–83

Cyclic ADP-ribose signaling in sea urchin gametes: metabolism in spermatozoa. Chini EN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C416–20

Role of tyrosine kinase pathways in ETB receptor activation of NHE3. Chu TS, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C763–71

Expression of inositol 1,4,5-trisphosphate receptors changes the Ca2+ signal of Xenopus oocytes. DeLisle S, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1255–61

Evidence for dual signaling pathways for V2 vasopressin receptor in rat inner medullary collecting duct. Ecelbarger CA, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):F623–33

Signals mediating stimulation of cardiomyocyte glucose transport by the alpha-adrenergic agonist phenylephrine. Fischer Y, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1211–20

Effects of exercise and insulin on mitogen-activated protein kinase signaling pathways in rat skeletal muscle. Goodyear LJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E403–8

Turning off the signal: mechanisms that attenuate signaling by G protein-coupled receptors. Grady EF, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G586–601 (132 ref.)

Mechanisms of homologous and heterologous desensitization of PTH/PTHrP receptor signaling in LLC-PK1 cells. Guo J, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):E383–93

Endothelin ETA receptor regulates signaling and ANF gene expression via multiple G protein-linked pathways. Hilal-Dandan R, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H130–7

Signal transduction, second messenger, and protein kinase responses during freezing exposures in wood frogs. Holden CP, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1205–11

Characterization of sphingosine 1-phosphate-induced actions and its signaling pathways in rat hepatocytes. Im DS, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1091–9

Extracellular ATP mediates Ca2+ signaling in cultured myenteric neurons via a PLC-dependent mechanism. Kimball BC, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):G587–93

Modulation of phospholipase C pathway and level of Gq alpha/G11 alpha in rat myometrium during gestation. Lajat S, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C895–904

Glucocorticoid receptor signaling in a bronchial epithelial cell line. LeVan TD, et al. **Am J Physiol** 1997 May;272(5 Pt 1):L838–43

Different contributions of L- and Q-type Ca2+ channels to Ca2+ signals and secretion in chromaffin cell subtypes. Lomax RB, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C476–84

Effect of magnesium on parathyroid cells: evidence for two sensing receptors or two intracellular pathways? Miki H, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):E1–6

Motilin is a biosignal controlling cyclic release of pancreatic polypeptide via the vagus in fasted dogs. Mochiki E, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G224–32

Characterization of PACAP receptors and signaling pathways in rabbit gastric muscle cells. Murthy KS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1391–9

Annexin VI modulates Ca2+ and K+ conductances of spinal cord and dorsal root ganglion neurons. Naciff JM, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C2004–15

Characterization and function of ATP receptors on hepatocytes from the little skate Raja erinacea. Nathanson MH, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R561–70

Characterization of cytosolic Ca2+ signaling in rat bile duct epithelia. Nathanson MH, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G86–96

Osmo-mechanically sensitive phosphatidylinositol signaling regulates a Ca2+ influx channel in renal epithelial cells. O'Neil RG, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):F120–8

Paracrine mediation of calcium signaling in human SK-N-MCIXC neuroepithelioma cells. Palmer RK, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C43–53

Diurnal and seasonal changes in sympathetic signal transduction in cardiac ventricles of European hamsters. Pleschka K, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R304–9

Signal transduction and glial cell modulation of cultured brain microvessel endothelial cell tight junctions. Raub TJ. **Am J Physiol** 1996 Aug;271(2 Pt 1):C495–503

Muscarinic signaling in ciliated tracheal epithelial cells: dual effects on Ca2+ and ciliary beating. Salathe M, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L301–10

Regional differentiation in the rat aorta for a novel signaling pathway: leucine to glutamate. Schachter D, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1484–92

Muscarinic-induced mucin secretion and intracellular signaling by hamster tracheal goblet cells. Steel DM, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):L230–7

Interleukin-15 signals T84 colonic epithelial cells in the absence of the interleukin-2 receptor beta-chain. Stevens AC, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1201–8

New perspectives in a gustatory physiology: transduction, development, and plasticity. Stewart RE, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C1–26 (203 ref.)

Protein tyrosine kinase signaling in cold-stimulated contraction of newborn lamb cerebral arteries. Wagerle LC, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H645–50

Muscarinic signaling pathway for calcium release and calcium-activated chloride current in smooth muscle. Wang YX, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C509–19

Dual signal transduction mechanisms modulate ciliary beat frequency in upper airway epithelium. Yang B, et al. **Am J Physiol** 1996 May;270(5 Pt 1):L745–51

Contraction-induced intracellular signals and their relationship to muscle GLUT-4 concentration. Yaspelkis BB 3rd, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):E118–25

Involvement of MAP kinase and c-fos signaling in the inhibition of cell growth by somatostatin. Yoshitomi H, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E769–74

Endothelin-activated calcium signaling in enteric glia derived from neonatal guinea pig. Zhang W, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1175–85

Localized cAMP-dependent signaling mediates beta 2-adrenergic modulation of cardiac excitation-contraction coupling. Zhou YY, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1611–8

Human endothelial cells synthesize ENA-78: relationship to IL-8 and to signaling of PMN adhesion. Imaizumi T, et al. **Am J Respir Cell Mol Biol** 1997 Aug;17(2):181–92

Stabilization of elastin mRNA by TGF-beta: initial characterization of signaling pathway [see comments] Kucich U, et al. **Am J Respir Cell Mol Biol** 1997 Jul; 17(1):10–6. Comment in: Am J Respir Cell Mol Biol 1997 Jul;17(1):1–2.

Signal sequence trap to clone cDNAs encoding secreted or membrane-associated plant proteins. Kristoffersen P, et al. **Anal Biochem** 1996 Dec 1;243(1):127–32

An optical method for evaluating ion selectivity for calcium signaling pathways in the cell. Ozawa T, et al. **Anal Chem** 1997 Aug 1;69(15):3081–5

Inhibition of lysophosphatidate signaling by lidocaine and bupivacaine. Nietgen GW, et al. **Anesthesiology** 1997 May; 86(5):1112–9

Stress-induced cardioadaptation reveals a code linking hormone receptors and spatial redistribution of PKC isoforms. Banerjee A, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:226–39

Preconditioning potentiates molecular signaling for myocardial adaptation to ischemia. Das DK, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:191–209

Integrins: role in cell adhesion and communication. Gille J, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:93–106 (87 ref.)

PACAP/VIP receptor subtypes, signal transducers, and effectors in pituitary cells. Hezareh M, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:315–27; discussion 327–8 (41 ref.)

Ion channels and calcium signaling in mast cells. Hoth M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:198–209 (49 ref.)

Enhancement of apoptosis in cerebral endothelial cells by selected inflammatory signals. Hsu CY, et al. **Ann N Y Acad Sci** 1997 Aug 14;823:148–53

Fluid shear stress-mediated signal transduction: how do endothelial cells transduce mechanical force into biological responses? Ishida T, et al. **Ann N Y Acad Sci** 1997 Apr 15;811:12–23; discussion 23–4 (53 ref.)

Ionic regulation and signal transduction system involved in the induction of gametogenesis in malaria parasites. Kawamoto F. **Ann N Y Acad Sci** 1993 Dec 20;707:431–4

SIGNAL TRANSDUCTION

Tumor necrosis factor alpha (TNF alpha)-induced ICAM-1 surface expression in airway epithelial cells in vitro: possible signal transduction mechanisms. Krunkosky TM, et al. **Ann N Y Acad Sci** 1996 Oct 31;796:30-7

Signal transduction of PACAP and GLP-1 in pancreatic beta cells. Leech CA, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:81-92; discussion 92-3 (44 ref.)

Thrombin activates NF-kappa B through thrombin receptor and results in proliferation of vascular smooth muscle cells: role of thrombin in atherosclerosis and restenosis. Maruyama I, et al. **Ann N Y Acad Sci** 1997 Apr 15; 811:429-36

The growth-hormone-releasing hormone receptor: signal transduction, gene expression, and physiological function in growth regulation. Mayo KE, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:184-203 (35 ref.)

Immunohistochemical analysis of signal transduction system in developing rat Purkinje cell by using antibodies for signaling molecules. Miyazawa A, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:533-5

Differential signaling and immediate-early gene activation by four splice variants of the human pituitary adenylate cyclase-activating polypeptide receptor (hPACAP-R). Pisegna JR, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:54-64; discussion 64-6

In vivo imaging of fatty acid incorporation into brain to examine signal transduction and neuroplasticity involving phospholipids. Rapoport SI, et al. **Ann N Y Acad Sci** 1997 May 30;820:56-73; discussion 73-4 (35 ref.)

Intracellular signal transduction in T cells in Takayasu's arteritis. Sharma BK, et al. **Ann N Y Acad Sci** 1996 Sep 30;793:453-5

Cerebellar long-term depression enabled by nitric oxide, a diffusible intercellular messenger. Shibuki K. **Ann N Y Acad Sci** 1993 Dec 20;707:521-3

Signal transduction for PDGF-induced chemotaxis of vascular smooth muscle cells. Shimokado K, et al. **Ann N Y Acad Sci** 1997 Apr 15;811:130-3 (14 ref.)

Bacterial adherence and mucosal cytokine responses. Receptors and transmembrane signaling. Svanborg C, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:177-90 (49 ref.)

Signal transduction in animal models of normotension and hypertension. Witte K, et al. **Ann N Y Acad Sci** 1996 Aug 15;783:71-83 (35 ref.)

Biophysical aspect of information flow from receptor to channel. Yoshioka T, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:328-37

Genetic dissection of signal transduction mechanisms underlying PACAP-like neuropeptide transmission in Drosophila: synergy of cAMP and Ras/Raf pathways. Zhong Y. **Ann N Y Acad Sci** 1996 Dec 26;805:67-79; discussion 79-80 (36 ref.)

Cell signaling and cancer treatment. Corda D, et al. **Ann Oncol** 1997 May;8(5):429-33

Signal transduction pathways in modulation of ciliary beat frequency by methacholine. Yang B, et al. **Ann Otol Rhinol Laryngol** 1997 Mar;106(3):230-6

A conserved signaling pathway: the Drosophila toll-dorsal pathway. Belvin MP, et al. **Ann Rev Cell Dev Biol** 1996; 12:393-416 (107 ref.)

Signaling by extracellular nucleotides. Brake AJ, et al. **Ann Rev Cell Dev Biol** 1996;12:519-41 (111 ref.)

Focal adhesions, contractility, and signaling. Burridge K, et al. **Ann Rev Cell Dev Biol** 1996;12:463-518 (385 ref.)

Cross-talk between bacterial pathogens and their host cells. Galán JE, et al. **Ann Rev Cell Dev Biol** 1996;12:221-55 (172 ref.)

Peroxisome proliferator-activated receptors: a nuclear receptor signaling pathway in lipid physiology. Lemberger T, et al. **Ann Rev Cell Dev Biol** 1996;12:335-63 (116 ref.)

Endocytosis and molecular sorting. Mellman I. **Ann Rev Cell Dev Biol** 1996;12:575-625 (297 ref.)

Fc receptors and their interactions with immunoglobulins. Raghavan M, et al. **Ann Rev Cell Dev Biol** 1996;12:181-220 (158 ref.)

RGD and other recognition sequences for integrins. Ruoslahti E. **Ann Rev Cell Dev Biol** 1996;12:697-715 (103 ref.)

Ah receptor signaling pathways. Schmidt JV, et al. **Ann Rev Cell Dev Biol** 1996;12:55-89 (142 ref.)

Signal-mediated sorting of membrane proteins between the endoplasmic reticulum and the golgi apparatus. Teasdale RD, et al. **Ann Rev Cell Dev Biol** 1996;12:27-54 (115 ref.)

Cytokine receptor signal transduction and the control of hematopoietic cell development. Watowich SS, et al. **Ann Rev Cell Dev Biol** 1996;12:91-128 (280 ref.)

Integrin stimulation regulates polymorphonuclear leukocytes inflammatory cytokine expression. Simms HH, et al. **Ann Surg** 1997 Jun;225(6):757-63; discussion 763-5.

The neurotrophins and CNTF: two families of collaborative neurotrophic factors. Ip NY, et al. **Annu Rev Neurosci** 1996; 19:491-515 (137 ref.)

Intracellular signaling pathways activated by neurotrophic factors. Segal RA, et al. **Annu Rev Neurosci** 1996;19:463-89 (208 ref.)

The role of the hsp90-based chaperone system in signal transduction by nuclear receptors and receptors signaling via MAP kinase. Pratt WB. **Annu Rev Pharmacol Toxicol** 1997;37:297-326 (183 ref.)

Spatial relationships in early signaling events of flow-mediated endothelial mechanotransduction. Davies PF, et al. **Annu Rev Physiol** 1997;59:527-49 (48 ref.)

Tensegrity: the architectural basis of cellular mechanotransduction. Ingber DE. **Annu Rev Physiol** 1997; 59:575-99 (80 ref.)

Molecular modeling of mechanotransduction in the nematode Caenorhabditis elegans. Tavernarakis N, et al. **Annu Rev Physiol** 1997;59:659-89 (93 ref.)

OB protein: A peripheral signal linking adiposity and central neural networks. Campfield LA, et al. **Appetite** 1996 Jun; 26(3):302

Crosstalk between the cAMP and inositol trisphosphate-signalling pathways in pancreatic beta-cells. Liu YJ, et al. **Arch Biochem Biophys** 1996 Oct 15; 334(2):295-302

Different signalling pathways involved in transforming growth factor-beta 1-induced morphological change and type IV collagen synthesis in simian virus-40-immortalized normal human salivary gland duct and myoepithelial cell clones. Azuma M, et al. **Arch Oral Biol** 1996 May; 41(5):413-24

Muscarinic signalling in submandibular salivary acinar cells of ageing rats. Seagrave J, et al. **Arch Oral Biol** 1996 May; 41(5):425-30

The immunohistochemical localization of signal-transduction pathway components Jak1, Jak2, Jak3, Tyk2 and STAT-1 during early enamel and dentine formation in rat molars. Tanase S, et al. **Arch Oral Biol** 1996 Oct;41(10):925-40

Early activation signals in endothelial cells. Stimulation by cytokines. Introna M, et al. **Arterioscler Thromb Vasc Biol** 1997 Mar;17(3):423-8 (76 ref.)

Growth hormone receptor signalling. Postel-Vinay MC, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):323-36 (79 ref.)

Autoimmune disease results from multiple interactive defects in apoptosis induction molecules and signaling pathways. Mountz JD, et al. **Behring Inst Mitt** 1996 Oct;(97):200-19 (116 ref.)

Exploring cell death mechanisms by analyzing signaling cascades of the TNF/NGF receptor family. Wallach D, et al. **Behring Inst Mitt** 1996 Oct;(97):144-55 (69 ref.)

Gene regulation by nuclear and cytoplasmic calcium signals. Bading H, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):541-3 (34 ref.)

LMW-PTP is a negative regulator of insulin-mediated mitotic and metabolic signalling. Chiarugi P, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):676-82

Novel pathway of insulin signaling involving Stat1alpha in Hep3B cells. Chuang LM, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):317-20

A 70-kDa protein facilitates interleukin-4 signal transduction in the absence of the common gamma receptor chain. Dawson CH, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):279-82

ERK and p38 MAP kinase pathways are mediators of intestinal epithelial wound-induced signal transduction. Dieckgraefe BK, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):389-94

Identification of signalling components in tyrosine kinase cascades using phosphopeptide affinity chromatography. Duménil G, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):748-53

Ceramide: a novel cell signaling mechanism for vasodilation. Johns DG, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):95-7

Role of Rho GTPase in the endothelin-1-induced nuclear signaling. Kim JH, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):223-6

Protein kinase C and c-myc gene activation pathways in thrombopoietin signal transduction. Kunitama M, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):290-4

Cooperation between the Fc epsilonR1 and formyl peptide receptor signaling pathways in RBL(FPR) cells: the contribution of receptor-specific Ca2+ mobilization responses. Lee RJ, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):812-9

Leukaemia inhibitory factor induces mitogenesis in Swiss 3T3 cells and selective enhancement via a variety of signalling events. Levy CS, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):814-8

Drosophila MAD, a member of the Smad family, translocates to the nucleus upon stimulation of the dpp pathway. Maduzia LL, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):595-8

Cloning and functional analysis of new members of STAT induced STAT inhibitor (SSI) family: SSI-2 and SSI-3. Minamoto S, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):79-83

Inhibition of caspase-3 by S-nitrosation and oxidation caused by nitric oxide. Mohr S, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):387-91

A short form of leptin receptor performs signal transduction. Murakami T, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):26-9

Citrulline-arginino succinate-arginine cycle coupled to Ca2+-signaling in rat pancreatic beta-cells. Nakata M, et al. **Biochem Biophys Res Commun** 1997 Jun 27; 235(3):619-24

A serum factor potentiates ACh and AMPA receptor currents via differential signal transduction pathways. Nishizaki T, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):565-8

SHP-2 is involved in neurotrophin signaling. Okada N, et al. **Biochem Biophys Res Commun** 1996 Dec 13; 229(2):607-11

Evidence supporting a signal transduction pathway leading to the radiation-resistant phenotype in human tumor cells. Pirollo KF, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):196-201

Inhibition of Raf/MAPK signaling in Xenopus oocyte extracts by Raf-1-specific peptides. Radziwill G, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):20-6

L-type Ca2+ channel-insulin-like growth factor-1 receptor signaling impairment in aging rat skeletal muscle. Renganathan M, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):784-9

Phosphoinositide signalling in nuclei of Friend cells: DMSO-induced differentiation reduces the association of phosphatidylinositol-transfer protein with the nucleus. Rubbini S, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):302-5

Phospholipase D involvement in the plant oxidative burst. Schroeder Taylor AT, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):10-5

Spatial and temporal Mg2+ signaling in single human tracheal gland cells. Sébille S, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):743-9

Fas-signaling and effects on receptor tyrosine kinase signal transduction in human breast epithelial cells. Shen K, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):89-93

Nuclear and cytosolic calcium signaling induced by extracellular ATP in rat kidney inner medullary collecting duct cells. Suko Y, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):224-9

Mitochondrial mutations impair signal transduction in Dictyostelium discoideum slugs. Wilczynska Z, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):39-43

Smad1 and smad5 act downstream of intracellular signalings of BMP-2 that inhibits myogenic differentiation and induces osteoblast differentiation in C2C12 myoblasts. Yamamoto N, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):574-80

Calreticulin-integrin bidirectional signaling complex. Zhu Q, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):354-8

The carboxyl terminus of mouse delta-opioid receptor is not required for agonist-dependent activation. Zhu X, et al. **Biochem Biophys Res Commun** 1997 Mar 17;232(2):513-6

Proceedings of the 6th Fisher Winternational Symposium of the Canadian Society of Biochemistry and Molecular and Cellular Biology. Signal transduction: from the membrane to the nucleus. Banff, Alberta, Canada. March 21-24, 1996. **Biochem Cell Biol** 1996;74(4):419-613

"Cross talk" between the bioactive glycerolipids and sphingolipids in signal transduction. Brindley DN, et al. **Biochem Cell Biol** 1996;74(4):469-76 (61 ref.)

Signal transduction and TGF-beta superfamily receptors. Kolodziejczyk SM, et al. **Biochem Cell Biol** 1996; 74(3):299-314 (133 ref.)

Palmitoylation: a post-translational modification that regulates signalling from G-protein coupled receptors. Morello JP, et al. **Biochem Cell Biol** 1996;74(4):449-57 (70 ref.)

Protein kinase C mediation of Ca(2+)-independent contractions of vascular smooth muscle. Walsh MP, et al. **Biochem Cell Biol** 1996;74(4):485-502 (214 ref.)

Receptor dimerization is not a factor in the signalling activity of a transforming variant epidermal growth factor receptor (EGFRvIII). Chu CT, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):855-61

Dual mechanism for cAMP-dependent modulation of Ca2+ signalling in articular chondrocytes. D'Andrea P, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):569-73

Activation of phospholipase D by growth factors and oncogenes in murine fibroblasts follow alternative but cross-talking pathways. del Peso L, et al. **Biochem J** 1997 Mar 1;322 (Pt 2):519-28

Role of long-chain fatty acyl-CoA esters in the regulation of metabolism and in cell signalling. Faergeman NJ, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):1-12 (185 ref.)

Mechanism of long-range Ca2+ signalling in the nucleus of isolated rat hepatocytes. Fox JL, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):491-5

Chemoattractant-induced respiratory burst: increases in cytosolic Ca2+ concentrations are essential and synergize with a kinetically distinct second signal. Foyouzi-Youssefi R, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):709-18

Interaction between the two signal transduction systems of the histamine H2 receptor: desensitizing and sensitizing effects of histamine stimulation on histamine-dependent cAMP production in Chinese hamster ovary cells. Fukushima Y, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):27-32

Interaction between cAMP-dependent and insulin-dependent signal pathways in tyrosine phosphorylation in primary cultures of rat hepatocytes. Ito Y, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):379-88

Nuclear signalling by rac GTPase: essential role of phospholipase A2. Kim BC, et al. **Biochem J** 1997 Sep 1; 326 (Pt 2):333-7

Signal transduction through epidermal growth factor receptor is altered in HeLa monolayer cells during mitosis. Klein S, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):937-46

Chemoattractants induce tyrosine phosphorylation of ERK2 in Dictyostelium discoideum by diverse signalling

pathways. Kosaka C, et al. **Biochem J** 1997 May 15;324 (Pt 1):347–52

Nitric oxide–induced apoptosis: p53–dependent and p53–independent signalling pathways. Messmer UK, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):299–305

Direct modulation of G–proteins by polyunsaturated fatty acids: a novel eicosanoid–independent regulatory mechanism in the developing lung. Mukhopadhyay S, et al. **Biochem J** 1997 Sep 15;326 (Pt 3):725–30

Deletion of 24 amino acids from the C–terminus of phosphatidylinositol transfer protein causes loss of phospholipase C–mediated inositol lipid signalling. Prosser S, et al. **Biochem J** 1997 May 15;324 (Pt 1):19–23

Evidence for glutathione involvement in platelet–derived growth–factor–mediated signal transduction. Rigacci S, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):791–6

Interaction of Ras with phosphoinositide 3–kinase gamma. Rubio I, et al. **Biochem J** 1997 Sep 15;326 (Pt 3):891–5

Logical analysis of timing–dependent receptor signalling specificity: application to the insulin receptor metabolic and mitogenic signalling pathways. Shymko RM, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):463–9 (51 ref.)

Evidence against an early signalling role for ceramide in Fas–mediated apoptosis. Sillence DJ, et al. **Biochem J** 1997 May 15;324 (Pt 1):29–32

Characterization of the intracellular signalling pathways that underlie growth–factor–stimulated glucose transport in Xenopus oocytes: evidence for ras– and rho–dependent pathways of phosphatidylinositol 3–kinase activation. Thomson FJ, et al. **Biochem J** 1997 Aug 1;325 (Pt 3):637–43

Mitogenic signalling by delta opioid receptors expressed in rat–1 fibroblasts involves activation of the p70s6k/p85s6k S6 kinase. Wilson MA, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):217–22

Stimulation of fibronectin synthesis through the protein kinase C signalling pathway in normal and transformed human lung fibroblasts. Lee BH, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):895–904

A comparison of epidermal growth factor receptor–mediated mitogenic signaling in response to transforming growth factor alpha and epidermal growth factor in cultured fetal rat hepatocytes. Lipeski LE, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):975–83

Regulation of the activity of M–phase promoting factor through protein kinase A–mediated pathway in LP1–1 cells. Oh WJ, et al. **Biochem Mol Biol Int** 1996 Aug; 39(5):991–9

Redox regulation of signal transduction in smooth muscle cells: protein kinase C inhibition by thiol agents. Taher MM, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):159–71

Binding properties of human immunodeficiency virus type–2 (HIV–2) RNA corresponding to the packaging signal to its nucleocapsid protein. Tsukahara T, et al. **Biochem Mol Biol Int** 1996 Sep;40(1):33–42

Role of subunit diversity in signaling by heterotrimeric G proteins. Hildebrandt JD. **Biochem Pharmacol** 1997 Aug 1;54(3):325–39 (229 ref.)

Mechanistic model of G–protein signal transduction. Determinants of efficacy and effect of precoupled receptors. Shea L, et al. **Biochem Pharmacol** 1997 Feb 21; 53(4):519–30

Retinoid signalling and retinoid receptors in amphibian limb regeneration. Brockes JP. **Biochem Soc Symp** 1996; 62:137–42 (22 ref.)

Hijacking host cell signal transduction mechanisms during infection with enteropathogenic Escherichia coli. Baldwin TJ, et al. **Biochem Soc Trans** 1996 May;24(2):552–8 (56 ref.)

CD28 co–receptor signal transduction in T–cell activation. Blair PJ, et al. **Biochem Soc Trans** 1997 May;25(2):651–7 (57 ref.)

Interleukin 4 and interleukin 13: same response, different receptors. Callard RE, et al. **Biochem Soc Trans** 1997 May; 25(2):451–5 (44 ref.)

Tyrosine phosphatases in T–cell development and signalling. Conroy LA, et al. **Biochem Soc Trans** 1997 May; 25(2):445–51 (41 ref.)

Regulation of the stress response by ceramide. Dbaibo GS. **Biochem Soc Trans** 1997 May;25(2):557–61 (45 ref.)

Signalling pathways which regulate eIF4E. Flynn A, et al. **Biochem Soc Trans** 1997 May;25(2):192S

Regulation of lipogenic enzyme expression by glucose in liver and adipose tissue: is glucose 6–phosphate the signalling metabolite? Foufelle F, et al. **Biochem Soc Trans** 1996 May; 24(2):372–8 (43 ref.)

The human high affinity IgG receptor (Fc gamma RI) signals through the immunoreceptor tyrosine–based activation motif (ITAM) of the gamma chain of Fc epsilon RI. Gillooly DJ, et al. **Biochem Soc Trans** 1997 May;25(2):215S

Stat4– and Stat6–deficient mice as models for manipulating T helper cell responses. Grusby MJ. **Biochem Soc Trans** 1997 May;25(2):359–60 (23 ref.)

Cell death signal transduction and Bcl–2 function. Herrmann JL, et al. **Biochem Soc Trans** 1996 Nov;24(4):1059–65 (64 ref.)

Novel components of mammalian stress–activated protein kinase cascades. Kiefer F, et al. **Biochem Soc Trans** 1997 May;25(2):491–8 (68 ref.)

The identification of Bruton's tyrosine kinase and Wiskott–Aldrich syndrome protein associated proteins and signalling pathways. Kinnon C, et al. **Biochem Soc Trans** 1997 May;25(2):648–50 (27 ref.)

Differentiation dependent switch in signalling pathways initiated by Fc gamma RI. Melendez A, et al. **Biochem Soc Trans** 1997 May;25(2):254S

Molecular mechanisms regulating B–cell negative selection. Monroe JG. **Biochem Soc Trans** 1997 May;25(2):643–7 (25 ref.)

Intracellular signalling pathways regulating initiation factor eIF4E phosphorylation during the activation of cell growth. Morley SJ. **Biochem Soc Trans** 1997 May; 25(2):503–9 (65 ref.)

Distinct mechanisms for rescue from apoptosis in Ramos human B cells by signalling through CD40 and interleukin–4 receptor: role for inhibition of an early response gene, Berg36. Ning ZQ, et al. **Biochem Soc Trans** 1997 May;25(2):306S

Steroid–independent activation of steroid receptors in mammalian and yeast cells and in breast cancer. Picard D, et al. **Biochem Soc Trans** 1997 May;25(2):597–602 (50 ref.)

cGMP signal termination. Pyne NJ, et al. **Biochem Soc Trans** 1996 Nov;24(4):1019–22 (23 ref.)

Sphingolipids as differential regulators of cellular signalling processes. Pyne S, et al. **Biochem Soc Trans** 1997 May; 25(2):549–56 (59 ref.)

CD40 signalling in B cell apoptosis and rescue. Reid SD, et al. **Biochem Soc Trans** 1997 May;25(2):299S

cAMP and 'death signals' in a myeloid leukaemia cell: from membrane receptors to nuclear responses: a review. Ruchaud S, et al. **Biochem Soc Trans** 1997 May;25(2):410–5 (56 ref.)

Lipid signalling in lymphocyte activation and cell death. Seatter SD, et al. **Biochem Soc Trans** 1997 May;25(2):300S

T–cell antigen receptor signal transduction in CD45–/– thymocytes. Stone JD, et al. **Biochem Soc Trans** 1997 May; 25(2):302S

Role of the double–stranded RNA–activated protein kinase (PKR) in cell regulation. Williams BR. **Biochem Soc Trans** 1997 May;25(2):509–13 (28 ref.)

Insulin signal transduction in adipocytes from lactating sheep. Wilson LA, et al. **Biochem Soc Trans** 1996 May;24(2):162S

Alpha 2A–adrenergic receptor stimulated calcium release is transduced by Gi–associated G(beta gamma)–mediated activation of phospholipase C. Dorn GW 2nd, et al. **Biochemistry** 1997 May 27;36(21):6415–23

Ca2+–signaling cycle of a membrane–docking C2 domain. Nalefski EA, et al. **Biochemistry** 1997 Oct 7;36(40):12011–8

Evidence supporting a role for microfilaments in regulating the coupling between poorly dissociable IgE–Fc epsilonRI aggregates downstream signaling pathways. Pierini L, et al. **Biochemistry** 1997 Jun 17;36(24):7447–56

G–protein–mediated signaling in cholesterol–enriched arterial smooth muscle cells. 2. Role of protein kinase C–delta in the regulation of eicosanoid production. Pomerantz KB, et al. **Biochemistry** 1997 Aug 5; 36(31):9532–9

G–protein–mediated signaling in cholesterol–enriched arterial smooth muscle cells. 1. Reduced membrane–associated G–protein content due to diminished isoprenylation of G–gamma subunits and p21ras. Pomerantz KB, et al. **Biochemistry** 1997 Aug 5;36(31):9523–31

Structural and functional significance of aspartic acid 89 of the troponin C central helix in Ca2+ signaling. Ramakrishnan S, et al. **Biochemistry** 1996 Dec 3; 35(48):15515–21

Kinetic characterization of phosphotransfer between CheA and CheY in the bacterial chemotaxis signal transduction pathway. Stewart RC. **Biochemistry** 1997 Feb 25; 36(8):2030–40

Wnt meeting 1996. Cadigan KM, et al. **Biochim Biophys Acta** 1997 Feb 22;1332(1):R1–5

Structure and function of proteins in G–protein–coupled signal transfer. Helmreich EJ, et al. **Biochim Biophys Acta** 1996 Oct 29;1286(3):285–322 (525 ref.)

Expression and signal transduction of the glucagon receptor in betaTC3 cells. Li J, et al. **Biochim Biophys Acta** 1997 Apr 24;1356(2):229–36

HDL3–signalling in HepG2 cells involves glycosyl–phosphatidylinositol–anchored proteins. Nazih–Sanderson F, et al. **Biochim Biophys Acta** 1997 May 17;1346(1):45–60

Atypical angiotensin II receptors coupled to phosphoinositide turnover/calcium signalling in catfish hepatocytes. Olivares–Reyes JA, et al. **Biochim Biophys Acta** 1997 Jun 27;1357(2):201–8

Controlling growth of the wing: vestigial integrates signals from the compartment boundaries. Cohen SM. **Bioessays** 1996 Nov;18(11):855–8 (42 ref.)

Signaling through focal adhesion kinase. Hanks SK, et al. **Bioessays** 1997 Feb;19(2):137–45 (70 ref.)

Wnt signalling goes nuclear. Kühl M, et al. **Bioessays** 1997 Feb;19(2):101–4 (29 ref.)

Mechanism of gene expression by the glucocorticoid receptor: role of protein–protein interactions. McEwan IJ, et al. **Bioessays** 1997 Feb;19(2):153–60 (70 ref.)

PDZ domains: targeting signalling molecules to sub–membranous sites. Ponting CP, et al. **Bioessays** 1997 Jun;19(6):469–79 (88 ref.)

Death substrates come alive. Porter AG, et al. **Bioessays** 1997 Jun;19(6):501–7 (60 ref.)

Calcium signals in helper T cells after interaction with antigen–specific and antigen–nonspecific B cells. Nagao Y, et al. **Biol Pharm Bull** 1996 May;19(5):697–700

GnRH signaling in goldfish pituitary cells. Chang JP, et al. **Biol Signals** 1996 Mar–Apr;5(2):70–80 (33 ref.)

Cyclic ADP–ribose and calcium signaling in eggs. Lee HC. **Biol Signals** 1996 Mar–Apr;5(2):101–10 (58 ref.)

Practical considerations in acquiring biological signals from confocal microscope. II. Laser–induced rise of fluorescence and effect of agonist droplet application. Lui PP, et al. **Biol Signals** 1997 Mar–Apr;6(2):45–51

Heterogeneity of signal transduction mechanisms in human basophils and human skin mast cells. II. Effects of 7–O–methyl–UCN–01, NPC 15437 and bryostatin 1 and 2, four protein kinase C–modulatory agents, on mediator release. Noll T, et al. **Biol Signals** 1997 Jan–Feb;6(1):1–10

Specific binding of inorganic mercury to Na(+)–K(+)–ATPase in rat liver plasma membrane and signal transduction. Bhattacharya S, et al. **Biometals** 1997 Jul;10(3):157–62

Synthetic inhibitors of regulatory proteins involved in the signaling pathway of the replication of human immunodeficiency virus 1. Otsuka M, et al. **Bioorg Med Chem** 1997 Jan;5(1):205–15

Ligand–induced receptor dimerization may be critical for signal transduction by choriogonadotropin. Grewal N, et al. **Biophys J** 1997 Sep;73(3):1190–7

Physical modulation of intracellular signaling processes by locational regulation. Haugh JM, et al. **Biophys J** 1997 May; 72(5):2014–31

Dynamics of analog–to–frequency transduction in sensory receptors. Menzinger M, et al. **Biosystems** 1997; 40(1–2):119–26

The structural and functional basis of cytokine receptor activation: lessons from the common beta subunit of the granulocyte–macrophage colony–stimulating factor, interleukin–3 (IL–3), and IL–5 receptors. Bagley CJ, et al. **Blood** 1997 Mar 1;89(5):1471–82 (87 ref.)

Role of A2a extracellular adenosine receptor–mediated signaling in adenosine–mediated inhibition of T–cell activation and expansion. Huang S, et al. **Blood** 1997 Aug 15;90(4):1600–10

Oncostatin M and leukemia inhibitory factor do not use the same functional receptor in mice. Ichihara M, et al. **Blood** 1997 Jul 1;90(1):165–73

Functional interactions between the thrombin receptor and the T–cell antigen receptor in human T–cell lines. Joyce DE, et al. **Blood** 1997 Sep 1;90(5):1893–901

The beta chain of the interleukin–3 receptor functionally associates with the erythropoietin receptor. Jubinsky PT, et al. **Blood** 1997 Sep 1;90(5):1867–73

Activation of A3 adenosine receptors on human eosinophils elevates intracellular calcium. Kohno Y, et al. **Blood** 1996 Nov 1;88(9):3569–74

CIS, a cytokine inducible SH2 protein, is a target of the JAK–STAT5 pathway and modulates STAT5 activation. Matsumoto A, et al. **Blood** 1997 May 1;89(9):3148–54

A novel degradation pathway of tissue factor pathway inhibitor: incorporation into fibrin clot and degradation by thrombin. Ohkura N, et al. **Blood** 1997 Sep 1;90(5):1883–92

Signaling pathways regulating CD44–dependent cytolysis in natural killer cells. Sconocchia G, et al. **Blood** 1997 Jul 15;90(2):716–25

Differential activation of the tyrosine kinases ZAP–70 and Syk after Fc gamma RI stimulation. Taylor N, et al. **Blood** 1997 Jan 15;89(2):388–96

Tumor dormancy and cell signaling. V. Regrowth of the BCL1 tumor after dormancy is established. Vitetta ES, et al. **Blood** 1997 Jun 15;89(12):4425–36

Distribution and signal transduction of angiotensin II AT1 and AT2 receptors. Capponi AM. **Blood Press Suppl** 1996; 2:41–6 (55 ref.)

Angiotensin–converting enzyme–independent pathways of angiotensin II formation in human tissues and cardiovascular diseases. Urata H, et al. **Blood Press Suppl** 1996;2:22–8 (49 ref.)

A possible role for mono (ADP–ribosyl) transferase in the signalling pathway mediating neutrophil chemotaxis. Allport JR, et al. **Br J Clin Pharmacol** 1996 Jul;42(1):99–106

Signalling pathways in bradykinin– and nitric oxide–induced hypotension in the normotensive rat; role of K+–channels. Berg T, et al. **Br J Pharmacol** 1997 Jul;121(6):1113–20

Further investigation into the signal transduction mechanism of the 5–HT4–like receptor in the circular smooth muscle of human colon. McLean PG, et al. **Br J Pharmacol** 1996 Jun;118(4):1058–64

Noradrenaline release and the effect of endogenous activation of the phospholipase C/protein kinase C signalling pathway in rat atria. Majewski H, et al. **Br J Pharmacol** 1997 Jul; 121(6):1196–202

Endothelin receptors and their cellular signal transduction mechanism in human cultured prostatic smooth muscle cells. Saita Y, et al. **Br J Pharmacol** 1997 Jun;121(4):687–94

Signal transduction for proliferation of glioma cells in vitro occurs predominantly through a protein kinase C–mediated pathway. Baltuch GH, et al. **Brain Res** 1996 Feb 26; 710(1–2):143–9

Alterations of central noradrenergic transmission in Ts65Dn mouse, a model for Down syndrome. Dierssen M, et al. **Brain Res** 1997 Feb 28;749(2):238–44

Mitogenic lectin concanavalin A induces calvarial bone formation in vivo via indomethacin–sensitive pathway. Izbicka E, et al. **Calcif Tissue Int** 1997 Feb;60(2):204–9

Compensatory modulation of GAP activity in response to

oncogenic stimulation. Trouba KJ, et al. **Cancer Lett** 1996 Dec 3;109(1-2):211-5

Involvement of the Fanconi's anemia protein FAC in a pathway that signals to the cyclin B/cdc2 kinase. Kruyt FA, et al. **Cancer Res** 1997 Jun 1;57(11):2244-51

No evidence for mediation of ischemic preconditioning by alpha 1-adrenergic signal transduction pathway or protein kinase C in the isolated rat heart. Moolman JA, et al. **Cardiovasc Drugs Ther** 1996 May;10(2):125-36

A tyrosine-based signal targets H/K-ATPase to a regulated compartment and is required for the cessation of gastric acid secretion. Courtois-Coutry N, et al. **Cell** 1997 Aug 8;90(3):501-10

Apoptosis meets signal transduction: elimination of a BAD influence [comment] Gajewski TF, et al. **Cell** 1996 Nov 15;87(4):589-92. Comment on: Cell 1996 Nov 15;87(4):619-28. Comment on: Cell 1996 Nov 15;87(4):629-38.

Gut reaction to Wnt signaling in worms [comment] Han M. **Cell** 1997 Aug 22;90(4):581-4 (16 ref.). Comment on: Cell 1997 Aug 22;90(4):695-705. Comment on: Cell 1997 Aug 22;90(4):707-16.

A lipid-anchored Grb2-binding protein that links FGF-receptor activation to the Ras/MAPK signaling pathway. Kouhara H, et al. **Cell** 1997 May 30;89(5):693-702

Uncoupling of Grb2 from the Met receptor in vivo reveals complex roles in muscle development. Maina F, et al. **Cell** 1996 Nov 1;87(3):531-42

Wnt signaling and an APC-related gene specify endoderm in early C. elegans embryos [see comments] Rocheleau CE, et al. **Cell** 1997 Aug 22;90(4):707-16. Comment in: Cell 1997 Aug 22;90(4):581-4.

Wnt signaling polarizes an early C. elegans blastomere to distinguish endoderm from mesoderm [see comments] Thorpe CJ, et al. **Cell** 1997 Aug 22;90(4):695-705. Comment in: Cell 1997 Aug 22;90(4):581-4.

The adaptor protein Shc couples a class of integrins to the control of cell cycle progression. Wary KK, et al. **Cell** 1996 Nov 15;87(4):733-43

Requirement for Rho in integrin signalling. Barry ST, et al. **Cell Adhes Commun** 1997 Mar;4(6):387-98

L-selectin crosslinking induces integrin-dependent adhesion: evidence for a signaling pathway involving PTK but not PKC. Sikorski MA, et al. **Cell Adhes Commun** 1996 Nov; 4(4-5):355-67

Coordinated effects of electromagnetic field exposure on erythropoietin-induced activities of phosphatidylinositol-phospholipase C and phosphatidylinositol 3-kinase. Clejan S, et al. **Cell Biochem Biophys** 1995;27(3):203-25

Microdomains and elemental events in calcium signalling. Berridge MJ. **Cell Calcium** 1996 Aug;20(2):95-6 (0 ref.)

Hormone-evoked subcellular Ca2+ signals in HeLa cells. Bootman MD. **Cell Calcium** 1996 Aug;20(2):97-104 (53 ref.)

Localized calcium signalling and neuronal integration in cerebellar Purkinje neurones. Eilers J, et al. **Cell Calcium** 1996 Aug;20(2):215-26 (65 ref.)

Temperature dependence of agonist-stimulated Ca2+ signaling in cultured endothelial cells. Paltauf-Doburzynska J, et al. **Cell Calcium** 1997 Jan; 21(1):43-51

Calcium, BOBs, QEDs, microdomains and a cellular decision: control of mitotic cell division in sand dollar blastomeres. Silver RB. **Cell Calcium** 1996 Aug;20(2):161-79 (99 ref.)

Spatial domains of Ca2+ signaling in secretory epithelial cells. Thorn P. **Cell Calcium** 1996 Aug;20(2):203-14 (85 ref.)

Enhancement of calcium signaling and proliferation responses in activated human T lymphocytes. Inhibitory effects of K+ channel block by charybdotoxin depend on the T cell activation state. Verheugen JA, et al. **Cell Calcium** 1997 Jan;21(1):1-17

The fps/fes tyrosine kinase is expressed in myeloid, vascular endothelial, epithelial, and neuronal cells and is localized in the trans-golgi network. Haigh J, et al. **Cell Growth Differ** 1996 Jul;7(7):931-44

Retinoic acid induces signal transducer and activator of transcription (STAT) 1, STAT2, and p48 expression in myeloid leukemia cells and enhances their responsiveness to interferons. Matikainen S, et al. **Cell Growth Differ** 1997 Jun;8(6):687-98

Distinct roles of the receptor tyrosine kinases c-ErbB and c-Kit in regulating the balance between erythroid cell proliferation and differentiation. Wessely O, et al. **Cell Growth Differ** 1997 May;8(5):481-93

Costimulation of the CD3 pathway by CD28 ligation in human intestinal lymphocytes. Ebert EC, et al. **Cell Immunol** 1996 Aug 1;171(2):211-6

Early calcium signaling and calcium requirements for the IL-2 receptor expression and IL-2 production in stimulated lymphocytes. Komada H, et al. **Cell Immunol** 1996 Nov 1;173(2):215-20

Naive (CD45RA+) T lymphocytes are more sensitive to oxidative stress-induced signals than memory (CD45RO+) cells. Lahdenpohja N, et al. **Cell Immunol** 1996 Nov 1; 173(2):282-6

Cyclic AMP analogue as a triggering signal for the induction of nitric oxide synthesis in murine peritoneal macrophages. Park YC, et al. **Cell Immunol** 1997 Jul 10;179(1):41-7

Native soluble CD5 delivers a costimulatory signal to resting human B lymphocytes. Van de Velde H, et al. **Cell Immunol** 1996 Aug 25;172(1):84-91

Beta 2-integrin-mediated signal up-regulates counterreceptor ICAM-1 expression on human monocytic cell line THP-1 through tyrosine phosphorylation. Yamada A, et al. **Cell Immunol** 1997 May 25;178(1):9-16

Signal transduction in the retina and inherited retinopathies. Shastry BS. **Cell Mol Life Sci** 1997 May;53(5):419-29 (160 ref.)

An evaluation of strategies available for the identification of GTP-binding proteins required in intracellular signalling pathways. Barritt GJ, et al. **Cell Signal** 1997 May-Jun; 9(3-4):207-18 (115 ref.)

Requirement for JAK2 in erythropoietin-induced signalling pathways. Bittorf T, et al. **Cell Signal** 1997 Jan;9(1):85-9

Signaling by the G12 class of G proteins. Dhanasekaran N, et al. **Cell Signal** 1996 Jun;8(4):235-45 (80 ref.)

Ionic signals in T47D human breast cancer cells. Gallagher JD, et al. **Cell Signal** 1996 Jun;8(4):279-84

Oncoprotein signalling and mitosis. Laird AD, et al. **Cell Signal** 1997 May-Jun;9(3-4):249-55 (126 ref.)

Glutamate receptors and gene induction: signalling from receptor to nucleus. Lerea LS. **Cell Signal** 1997 May-Jun; 9(3-4):219-26 (72 ref.)

Signal transduction in gastrointestinal smooth muscle. Makhlouf GM, et al. **Cell Signal** 1997 May-Jun; 9(3-4):269-76 (92 ref.)

Different sensitivities of neutrophil responses to a selective protein kinase C inhibitor Ro 31-8425; redundancy in signal transduction. Merritt JE, et al. **Cell Signal** 1997 Jan; 9(1):53-7

G proteins and opioid receptor-mediated signalling. Standifer KM, et al. **Cell Signal** 1997 May-Jun;9(3-4):237-48 (166 ref.)

Abnormality in the early signal transduction pathway is responsible for the impaired proliferative response and low K+ current in a T-cell clone by stimulation with anti-CD3 antibody. Zeng YX, et al. **Cell Signal** 1996 Jun;8(4):263-7

Activation of chicken gizzard myosin light chain kinase by Ca2+/calmodulin is inhibited by autophosphorylation. Abe M, et al. **Cell Struct Funct** 1996 Jun;21(3):183-8

Microtubule disruption induces the formation of actin stress fibers and focal adhesions in cultured cells: possible involvement of the rho signal cascade. Enomoto T. **Cell Struct Funct** 1996 Oct;21(5):317-26

Cooperativity and anti-cooperativity between ligand binding and the dimerization of ristocetin A: asymmetry of a homodimer complex and implications for signal transduction. Cho YR, et al. **Chem Biol** 1996 Mar; 3(3):207-15

Feeling force: mechanical transduction by vertebrates and invertebrates. Gillespie PG. **Chem Biol** 1996 Apr;3(4):223-7 (19 ref.)

Social senses: G-protein-coupled receptor signaling pathways in Dictyostelium discoideum. Kim JY, et al. **Chem Biol** 1996 Apr;3(4):239-43 (21 ref.)

Disruption of brain cell ion homeostasis in Alzheimer's disease by oxy radicals, and signaling pathways that protect therefrom. Mattson MP, et al. **Chem Res Toxicol** 1997 May; 10(5):507-17 (85 ref.)

Ultrastructural aspects of olfactory signaling. Menco BP. **Chem Senses** 1997 Jun;22(3):295-311 (128 ref.)

Functional implications of a newly characterized pathway of 11,12-epoxyeicosatrienoic acid metabolism in arterial smooth muscle. Fang X, et al. **Circ Res** 1996 Oct; 79(4):784-93

Fluid flow rapidly activates G proteins in human endothelial cells. Involvement of G proteins in mechanochemical signal transduction. Gudi SR, et al. **Circ Res** 1996 Oct;79(4):834-9

Calcium preconditioning elicits strong protection against ischemic injury via protein kinase C signaling pathway. Miyawaki H, et al. **Circ Res** 1996 Jul;79(1):137-46

Insulin signaling and its regulation of system A amino acid uptake in cultured rat vascular smooth muscle cells. Obata T, et al. **Circ Res** 1996 Dec;79(6):1167-76

Selectively enhanced cellular signaling by Gi proteins in essential hypertension. G alpha i2, G alpha i3, G beta 1, and G beta 2 are not mutated. Pietruck F, et al. **Circ Res** 1996 Nov;79(5):974-83

Chronic hypoxia increases beta 1-adrenergic receptor mRNA and density but not signaling in neonatal rat cardiac myocytes. Li HT, et al. **Circulation** 1996 Dec 15; 94(12):3303-10

Role of mesangial cells in macula densa to afferent arteriole information transfer. Goligorsky MS, et al. **Clin Exp Pharmacol Physiol** 1997 Jul;24(7):527-31 (44 ref.)

Signal processing in the vomeronasal system: modulation of sexual behavior in the female rat. Dudley CA, et al. **Crit Rev Neurobiol** 1996;10(3-4):265-90 (158 ref.)

Dopamine D2 receptors in signal transduction and behavior. Picetti R, et al. **Crit Rev Neurobiol** 1997;11(2-3):121-42 (130 ref.)

The VAV family of signal transduction molecules. Bustelo XR. **Crit Rev Oncog** 1996;7(1-2):65-88 (114 ref.)

Oncogene-initiated aberrant signaling engenders the metastatic phenotype: synergistic transcription factor interactions are targets for cancer therapy. Denhardt DT. **Crit Rev Oncog** 1996;7(3-4):261-91 (238 ref.)

Vav: Captain Hook for signal transduction? Katzav S. **Crit Rev Oncog** 1995;6(2):87-97 (82 ref.)

The growing family of MAP kinases: regulation and specificity. Kortenjann M, et al. **Crit Rev Oncog** 1995; 6(2):99-115 (188 ref.)

HIV-1: is Nef a PAK animal? Cullen BR. **Curr Biol** 1996 Dec 1;6(12):1557-9 (15 ref.)

Cell cycle: routine role for Ras. Downward J. **Curr Biol** 1997 Apr 1;7(4):R258-60 (26 ref.)

Rho is only ARF the story. Phospholipid signalling. Frohman MA, et al. **Curr Biol** 1996 Aug 1;6(8):945-7 (24 ref.)

Calcium signalling: setting store by calcium channels. Hardie RC. **Curr Biol** 1996 Nov 1;6(11):1371-3 (19 ref.)

Plant meristems: cell signalling keeps the balance. Hudson A, et al. **Curr Biol** 1997 Jul 1;7(7):R427-9 (10 ref.)

The aimless RasGEF is required for processing of chemotactic signals through G-protein-coupled receptors in Dictyostelium. Insall RH, et al. **Curr Biol** 1996 Jun 1; 6(6):719-29

Inositol phosphates - whither bound? Intracellular signalling. Irvine R, et al. **Curr Biol** 1996 May 1;6(5):537-40 (17 ref.)

First steps into the signalling maze. Irvine R. **Curr Biol** 1997 Aug 1;7(8):R457

Signal selection by cortical feedback. King AJ. **Curr Biol** 1997 Feb 1;7(2):R85-8 (21 ref.)

Signal transduction: clamping down on Src activity. Mayer BJ. **Curr Biol** 1997 May 1;7(5):R295-8 (13 ref.)

Protein phosphatase 2A regulates MPF activity and sister chromatid cohesion in budding yeast. Minshull J, et al. **Curr Biol** 1996 Dec 1;6(12):1609-20

Kinase connections on the cellular intranet. Signalling pathways. Pelech SL. **Curr Biol** 1996 May 1;6(5):551-4 (19 ref.)

Splicing together the unfolded-protein response. Shamu CE. **Curr Biol** 1997 Feb 1;7(2):R67-70 (15 ref.)

Cell cycle-dependent activation of Ras. Taylor SJ, et al. **Curr Biol** 1996 Dec 1;6(12):1621-7

Regulation of the mating pheromone and invasive growth responses in yeast by two MAP kinase substrates. Tedford K, et al. **Curr Biol** 1997 Apr 1;7(4):228-38

Calcium signals from intact rabbit ciliary epithelium observed with confocal microscopy. Suzuki Y, et al. **Curr Eye Res** 1997 Feb;16(2):166-75

Structural aspects of heterotrimeric G-protein signaling. Bohm A, et al. **Curr Opin Biotechnol** 1997 Aug;8(4):480-7 (52 ref.)

The state of the STATs: recent developments in the study of signal transduction to the nucleus. Horvath CM, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):233-9 (72 ref.)

Signal transduction by the neurotrophin receptors. Kaplan DR, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):213-21 (79 ref.)

Lysophosphatidic acid: G-protein signalling and cellular responses. Moolenaar WH, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):168-73

Reversible palmitoylation of signaling proteins. Mumby SM. **Curr Opin Cell Biol** 1997 Apr;9(2):148-54 (60 ref.)

Protein tyrosine phosphatases in signal transduction. Neel BG, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):193-204

Src family protein tyrosine kinases: cooperating with growth factor and adhesion signaling pathways. Parsons JT, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):187-92 (56 ref.)

T cell antigen receptor signal transduction. Qian D, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):205-12 (71 ref.)

The role of lipid signaling in constitutive membrane traffic. Roth MG, et al. **Curr Opin Cell Biol** 1997 Aug;9(4):519-26 (64 ref.)

Transducing signals of life and death. Yuan J. **Curr Opin Cell Biol** 1997 Apr;9(2):247-51 (31 ref.)

Pattern formation and developmental mechanisms [editorial] Anderson K, et al. **Curr Opin Genet Dev** 1997 Aug; 7(4):455-8

Interacting signaling pathways controlling multicellular development in Dictyostelium. Firtel RA. **Curr Opin Genet Dev** 1996 Oct;6(5):545-54 (64 ref.)

Responses to DNA damage and regulation of cell cycle checkpoints by the ATM protein kinase family. Hoekstra MF. **Curr Opin Genet Dev** 1997 Apr;7(2):170-5 (48 ref.)

Serine/threonine kinase receptors and ligands. Josso N, et al. **Curr Opin Genet Dev** 1997 Jun;7(3):371-7 (68 ref.)

Cell signaling in root development. Scheres B. **Curr Opin Genet Dev** 1997 Aug;7(4):501-6 (27 ref.)

Notch signalling in development: on equivalence groups and asymmetric developmental potential. Simpson P. **Curr Opin Genet Dev** 1997 Aug;7(4):537-42 (47 ref.)

Roles of the JAK-STAT system in signal transduction via cytokine receptors. Watanabe S, et al. **Curr Opin Genet Dev** 1996 Oct;6(5):587-96 (54 ref.)

Integrin-ligand interactions: scratching the surface. Kanazashi SI, et al. **Curr Opin Hematol** 1997 Jan;4(1):67-74 (86 ref.)

Erythrocyte signal transduction pathways and their possible functions. Minetti G, et al. **Curr Opin Hematol** 1997 Mar; 4(2):116-21 (90 ref.)

Volume regulation and ion transport in renal cells. Laprade R, et al. **Curr Opin Nephrol Hypertens** 1996 Sep;5(5):417-21

Signalling mechanisms. **Curr Opin Neurobiol** 1996 Jun; 6(3):407-36

Signalling mechanisms [editorial] Ascher P, et al. **Curr Opin Neurobiol** 1996 Jun;6(3):291-3

Hedgehog signaling in Drosophila eye and limb development - conserved machinery, divergent roles? Burke R, et al. **Curr Opin Neurobiol** 1997 Feb;7(1):55-61 (65 ref.)

Sensory signaling in Caenorhabditis elegans. Kaplan JM. **Curr Opin Neurobiol** 1996 Aug;6(4):494-9 (34 ref.)

Mechanisms of taste transduction. Kinnamon SC, et al. **Curr Opin Neurobiol** 1996 Aug;6(4):506-13 (76 ref.)

The Notch pathway: democracy and aristocracy in the

selection of cell fate. Kopan R, et al. **Curr Opin Neurobiol** 1996 Oct;6(5):594–601 (61 ref.)

Phototransduction in transgenic mice. Lem J, et al. **Curr Opin Neurobiol** 1996 Aug;6(4):453–8 (45 ref.)

Pheromone transduction in the vomeronasal organ. Liman ER. **Curr Opin Neurobiol** 1996 Aug;6(4):487–93 (63 ref.)

Rho family GTP-binding proteins in growth cone signalling. Luo L, et al. **Curr Opin Neurobiol** 1997 Feb;7(1):81–6 (43 ref.)

Signalling events elicited in plants by defined oligosaccharide structures. Promé JC. **Curr Opin Struct Biol** 1996 Oct; 6(5):671–8 (48 ref.)

The role of the two TNF receptors in proliferation, NF-kappa B activation and discrimination between TNF and LT alpha signalling in the human myeloma cell line OH-2. Börset M, et al. **Cytokine** 1996 Jun;8(6):430–8

Signal transduction in Th clones: target of differential modulation by PGE2 may reside downstream of the PKC-dependent pathway. Naito Y, et al. **Cytokine** 1996 May;8(5):346–56

Cytokines involving gp130 in signal transduction suppressed growth of a mouse hybridoma cell line and enhanced its antibody production. Terada S, et al. **Cytokine** 1996 Dec; 8(12):889–94

Signaling via the insulin-like growth factor-I receptor: does it differ from insulin receptor signaling? Blakesley VA, et al. **Cytokine Growth Factor Rev** 1996 Aug;7(2):153–9 (52 ref.)

The type-I interferon receptor. The long and short of it. Domanski P, et al. **Cytokine Growth Factor Rev** 1996 Aug; 7(2):143–51 (68 ref.)

Phospholipase C-gamma1: regulation of enzyme function and role in growth factor-dependent signal transduction. Kamat A, et al. **Cytokine Growth Factor Rev** 1997 Jun; 8(2):109–17 (86 ref.)

Altered neurotransmission and signal transduction: targets for nicergoline treatment. Winblad B. **Dement Geriatr Cogn Disord** 1997;8 Suppl 1:2–5

Activation of Siamois by the Wnt pathway. Brannon M, et al. **Dev Biol** 1996 Nov 25;180(1):344–7

Synergistic effects of Vg1 and Wnt signals in the specification of dorsal mesoderm and endoderm. Cui Y, et al. **Dev Biol** 1996 Nov 25;180(1):22–34

Cell contact-dependent signaling. Fagotto F, et al. **Dev Biol** 1996 Dec 15;180(2):445–54 (89 ref.)

Short-range cell-cell signals control ectodermal patterning in the oral region of the sea urchin embryo. Hardin J, et al. **Dev Biol** 1997 Feb 1;182(1):134–49

The nonreceptor protein tyrosine phosphatase corkscrew functions in multiple receptor tyrosine kinase pathways in Drosophila. Perkins LA, et al. **Dev Biol** 1996 Nov 25; 180(1):63–81

Analysis of cell movement and signalling during ring formation in an activated G alpha1 mutant of Dictyostelium discoideum that is defective in prestalk zone formation. Rietdorf J, et al. **Dev Biol** 1997 Jan 1;181(1):79–90

Adhesion-growth factor interactions during differentiation: an integrated biological response. Sastry SK, et al. **Dev Biol** 1996 Dec 15;180(2):455–67 (137 ref.)

Modulation of embryonic intracellular Ca2+ signaling by Wnt-5A. Slusarski DC, et al. **Dev Biol** 1997 Feb 1; 182(1):114–20

Initiation of retinoid signaling in primitive streak mouse embryos: spatiotemporal expression patterns of receptors and metabolic enzymes for ligand synthesis. Ang HL, et al. **Dev Dyn** 1997 Apr;208(4):536–43

Fibroblast growth factor signalling in the hair growth cycle: expression of the fibroblast growth factor receptor and ligand genes in the murine hair follicle. Rosenquist TA, et al. **Dev Dyn** 1996 Apr;205(4):379–86

Signaling pathways that regulate specification of neurons in developing cerebral cortex. Levitt P, et al. **Dev Neurosci** 1997;19(1):6–8 (39 ref.)

The patched signaling pathway mediates repression of gooseberry allowing neuroblast specification by wingless during Drosophila neurogenesis. Bhat KM. **Development** 1996 Sep;122(9):2921–32

Genetic evidence that heparin-like glycosaminoglycans are involved in wingless signaling. Binari RC, et al. **Development** 1997 Jul;124(13):2623–32

wingless signaling in the Drosophila eye and embryonic epidermis. Cadigan KM, et al. **Development** 1996 Sep; 122(9):2801–12

Conservation of the Notch signalling pathway in mammalian neurogenesis. de la Pompa JL, et al. **Development** 1997 Mar; 124(6):1139–48

Induction of the primary dorsalizing center in Xenopus by the Wnt/GSK/beta-catenin signaling pathway, but not by Vg1, Activin or Noggin. Fagotto F, et al. **Development** 1997 Jan;124(2):453–60

The neurogenic genes egghead and brainiac define a novel signaling pathway essential for epithelial morphogenesis during Drosophila oogenesis. Goode S, et al. **Development** 1996 Dec;122(12):3863–79

Evidence that FGF8 signalling from the midbrain-hindbrain junction regulates growth and polarity in the developing midbrain. Lee SM, et al. **Development** 1997 Mar; 124(5):959–69

Ligand-bound RXR can mediate retinoid signal transduction during embryogenesis. Lu HC, et al. **Development** 1997 Jan; 124(1):195–203

Notch signaling inhibits muscle cell differentiation through a CBF1-independent pathway. Shawber C, et al. **Development** 1996 Dec;122(12):3765–73

Somatic sex-determining signals act on XX germ cells in Drosophila embryos. Staab S, et al. **Development** 1996 Dec; 122(12):4065–71

Multiple signaling events specify ectoderm and pattern the oral-aboral axis in the sea urchin embryo. Wikramanayake AH, et al. **Development** 1997 Jan;124(1):13–20

Stimulation of glucose uptake by the natural coenzyme alpha-lipoic acid/thioctic acid: participation of elements of the insulin signaling pathway. Estrada DE, et al. **Diabetes** 1996 Dec;45(12):1798–804

The rat T-cell surface protein RT6 is associated with src family tyrosine kinases and generates an activation signal. Rigby MR, et al. **Diabetes** 1996 Oct;45(10):1419–26

Leptin receptor of Zucker fatty rat performs reduced signal transduction. Yamashita T, et al. **Diabetes** 1997 Jun; 46(6):1077–80

Impact of natural IRS-1 mutations on insulin signals: mutations of IRS-1 in the PTB domain and near SH2 protein binding sites result in impaired function at different steps of IRS-1 signaling. Yoshimura R, et al. **Diabetes** 1997 Jun;46(6):929–36

Defects in insulin signal transduction in liver and muscle of pregnant rats. Saad MJ, et al. **Diabetologia** 1997 Feb; 40(2):179–86

Protein kinase C signalling in pancreatic beta-cells: cellular and molecular approaches. Persaud SJ. **Digestion** 1997;58 Suppl 2:86–92 (32 ref.)

PACAP type I receptor activation promotes cerebellar neuron survival through the cAMP/PKA signaling pathway. Campard PK, et al. **DNA Cell Biol** 1997 Mar; 16(3):323–33

Cloning and expression of two human lysophosphatidic acid acyltransferase cDNAs that enhance cytokine-induced signaling responses in cells. West J, et al. **DNA Cell Biol** 1997 Jun;16(6):691–701

Cytochrome P4502E1- and cytochrome P4502B1/2B2-catalyzed carbon tetrachloride metabolism: effects on signal transduction as demonstrated by altered immediate-early (c-Fos and c-Jun) gene expression and nuclear AP-1 and NF-kappa B transcription factor levels. Gruebele A, et al. **Drug Metab Dispos** 1996 Jan;24(1):15–22

beta-catenin is a target for the ubiquitin-proteasome pathway. Aberle H, et al. **EMBO J** 1997 Jul 1; 16(13):3797–804

Wingless inactivates glycogen synthase kinase-3 via an intracellular signalling pathway which involves a protein kinase C. Cook D, et al. **EMBO J** 1996 Sep 2; 15(17):4526–36

The second immunoglobulin-like domain of the VEGF tyrosine kinase receptor Flt-1 determines ligand binding and may initiate a signal transduction cascade. Davis-Smyth T, et al. **EMBO J** 1996 Sep 16;15(18):4919–27

A kinase subdomain of transforming growth factor-beta (TGF-beta) type I receptor determines the TGF-beta intracellular signaling specificity. Feng XH, et al. **EMBO J** 1997 Jul 1;16(13):3912–23

Rapid Ca2+-mediated activation of Rap1 in human platelets. Franke B, et al. **EMBO J** 1997 Jan 15;16(2):252–9

ErbB-2, the preferred heterodimerization partner of all ErbB receptors, is a mediator of lateral signaling. Graus-Porta D, et al. **EMBO J** 1997 Apr 1;16(7):1647–55

The transient receptor potential protein (Trp), a putative store-operated Ca2+ channel essential for phosphoinositide-mediated photoreception, forms a signaling complex with NorpA, InaC and InaD. Huber A, et al. **EMBO J** 1996 Dec 16;15(24):7036–45

S-acylation of LCK protein tyrosine kinase is essential for its signalling function in T lymphocytes. Kabouridis PS, et al. **EMBO J** 1997 Aug 15;16(16):4983–98

Gi-mediated activation of the Ras/MAP kinase pathway involves a 100 kDa tyrosine-phosphorylated Grb2 SH3 binding protein, but not Src nor Shc. Kranenburg O, et al. **EMBO J** 1997 Jun 2;16(11):3097–105

Deficient cytokine signaling in mouse embryo fibroblasts with a targeted deletion in the PKR gene: role of IRF-1 and NF-kappaB. Kumar A, et al. **EMBO J** 1997 Jan 15; 16(2):406–16

The N-terminal globular domain of Eph receptors is sufficient for ligand binding and receptor signaling. Labrador JP, et al. **EMBO J** 1997 Jul 1;16(13):3889–97

Interleukin-4-specific signal transduction events are driven by homotypic interactions of the interleukin-4 receptor alpha subunit. Lai SY, et al. **EMBO J** 1996 Sep 2; 15(17):4506–14

White collar 2, a partner in blue-light signal transduction, controlling expression of light-regulated genes in Neurospora crassa. Linden H, et al. **EMBO J** 1997 Jan 2;16(1):98–109

Signaling by chimeric erythropoietin-TGF-beta receptors: homodimerization of the cytoplasmic domain of the type I TGF-beta receptor and heterodimerization with the type II receptor are both required for intracellular signal transduction. Luo K, et al. **EMBO J** 1996 Sep 2; 15(17):4485–96

Identification of intracellular and extracellular domains mediating signal transduction in the inhibitory glycine receptor chloride channel. Lynch JW, et al. **EMBO J** 1997 Jan 2;16(1):110–20

Signal transduction pathways in response to protein misfolding in the extracytoplasmic compartments of E. coli: role of two new phosphoprotein phosphatases PrpA and PrpB. Missiakas D, et al. **EMBO J** 1997 Apr 1; 16(7):1670–85

Roles of the RAM and ANK domains in signaling by the C. elegans GLP-1 receptor. Roehl H, et al. **EMBO J** 1996 Dec 16;15(24):7002–12

Genetic evidence for involvement of type 1, type 2 and type 3 inositol 1,4,5-trisphosphate receptors in signal transduction through the B-cell antigen receptor. Sugawara H, et al. **EMBO J** 1997 Jun 2;16(11):3078–88

Identification of a novel receptor/signal transduction pathway for IL-15/T in mast cells. Tagaya Y, et al. **EMBO J** 1996 Sep 16;15(18):4928–39

Ras signaling in tumor necrosis factor-induced apoptosis. Trent JC 2nd, et al. **EMBO J** 1996 Sep 2;15(17):4497–505

Bivalence of EGF-like ligands drives the ErbB signaling network. Tzahar E, et al. **EMBO J** 1997 Aug 15; 16(16):4938–50

Unique signal transduction of Eyk: constitutive stimulation of the JAK-STAT pathway by an oncogenic receptor-type tyrosine kinase. Zong C, et al. **EMBO J** 1996 Sep 2; 15(17):4515–25

Signalling pathway of GH. Carter-Su C, et al. **Endocr J** 1996 Oct;43 Suppl:S65–70 (33 ref.)

Signal transduction of GnRH receptor in the reproductive tract tumor. Imai A, et al. **Endocr J** 1996 Jun;43(3):249–60 (139 ref.)

Signal transduction mechanism of insulin and insulin-like growth factor-1. Kadowaki T, et al. **Endocr J** 1996 Oct; 43 Suppl:S33–41 (47 ref.)

Analysis of glucocorticoid and mineralocorticoid signalling by gene targeting. Berger S, et al. **Endocr Res** 1996 Nov; 22(4):641–52 (19 ref.)

The regulation of growth and intracellular signaling by integrins. Meredith JE Jr, et al. **Endocr Rev** 1996 Jun; 17(3):207–20 (199 ref.)

Mitogenic signaling via G protein-coupled receptors. van Biesen T, et al. **Endocr Rev** 1996 Dec;17(6):698–714 (272 ref.)

Intercellular communication: relative importance of cellular adhesion and paracrine signaling to hormonal gene expression. Abraham EJ, et al. **Endocrinology** 1996 Sep; 137(9):4050–3

Two signaling pathways, from the upper glycolytic flux and from the mitochondria, converge to potentiate insulin release. Asanuma N, et al. **Endocrinology** 1997 Feb; 138(2):751–5

The path less traveled by [editorial; comment] Baserga R. **Endocrinology** 1997 Jun;138(6):2217–8 (9 ref.). Comment on: Endocrinology 1997 Jun;138(6):2219–26.

Activation of the Janus kinase/STAT (signal transducer and activator of transcription) signal transduction pathway by interleukin-6-type cytokines promotes osteoblast differentiation. Bellido T, et al. **Endocrinology** 1997 Sep; 138(9):3666–76

Human calcitonin receptors exhibit agonist-independent (constitutive) signaling activity. Cohen DP, et al. **Endocrinology** 1997 Apr;138(4):1400–5

Adrenalectomy after weaning restores beta3-adrenergic receptor expression in white adipocytes from C57BL/6J-ob/ob mice. Gettys TW, et al. **Endocrinology** 1997 Jul;138(7):2697–704

The Mel1a melatonin receptor is coupled to parallel signal transduction pathways. Godson C, et al. **Endocrinology** 1997 Jan;138(1):397–404

Multiple extracellular signals promote osteoblast survival and apoptosis. Hill PA, et al. **Endocrinology** 1997 Sep; 138(9):3849–58

Constitutive activity of native thyrotropin-releasing hormone receptors revealed using a protein kinase C-responsive reporter gene. Jinsi-Parimoo A, et al. **Endocrinology** 1997 Apr;138(4):1471–5

Insulin stimulates the phosphorylation of the 66- and 52-kilodalton Shc isoforms by distinct pathways. Kao AW, et al. **Endocrinology** 1997 Jun;138(6):2474–80

Regulation of rat testis gonocyte proliferation by platelet-derived growth factor and estradiol: identification of signaling mechanisms involved. Li H, et al. **Endocrinology** 1997 Mar;138(3):1289–98

Differential expression of the erbB2 gene in the periimplantation mouse uterus: potential mediator of signaling by epidermal growth factor-like growth factors. Lim H, et al. **Endocrinology** 1997 Mar;138(3):1328–37

Melatonin action and signal transduction in the rat suprachiasmatic circadian clock: activation of protein kinase C at dusk and dawn. McArthur AJ, et al. **Endocrinology** 1997 Feb;138(2):627–34

Cell-specific signal transduction of parathyroid hormone (PTH)-related protein through stably expressed recombinant PTH/PTHrP receptors in vascular smooth muscle cells [see comments] Maeda S, et al. **Endocrinology** 1996 Aug;137(8):3154–62. Comment in: Endocrinology 1996 Aug;137(8):3151–3.

Cross-talk between cellular signaling pathways activated by substance P and vasoactive intestinal peptide in rat lactotroph-enriched pituitary cell cultures. Mau SE, et al. **Endocrinology** 1997 Apr;138(4):1704–11

Potential role for a regulator of G protein signaling (RGS3) in gonadotropin-releasing hormone (GnRH) stimulated desensitization. Neill JD, et al. **Endocrinology** 1997 Feb; 138(2):843–6

Functional STAT 1 and 3 signaling by the leptin receptor

(OB-R); reduced expression of the rat fatty leptin receptor in transfected cells. Rosenblum CI, et al. **Endocrinology** 1996 Nov;137(11):5178-81

Comparison of the insulin and insulin-like growth factor I mitogenic intracellular signaling pathways. Sasaoka T, et al. **Endocrinology** 1996 Oct;137(10):4427-34

Expression of ryanodine receptors in the pituitary gland: evidence for a role in gonadotropin-releasing hormone signaling. Sundaresan S, et al. **Endocrinology** 1997 May; 138(5):2056-65

Calcitonin-induced changes in the cytoskeleton are mediated by a signal pathway associated with protein kinase A in osteoclasts. Suzuki H, et al. **Endocrinology** 1996 Nov; 137(11):4685-90

Roles of insulin receptor substrate-1 and Shc on insulin-like growth factor I receptor signaling in early passages of cultured human fibroblasts. Takahashi Y, et al. **Endocrinology** 1997 Feb;138(2):741-50

Alternative signaling mechanism of leukemia inhibitory factor responsiveness in a differentiating embryonal carcinoma cell. Takeda T, et al. **Endocrinology** 1997 Jul; 138(7):2689-96

Endothelin-A receptor-mediated prostanoid secretion via autocrine and deoxyribonucleic acid synthesis via paracrine signaling in human bronchial epithelial cells. Takimoto M, et al. **Endocrinology** 1996 Nov;137(11):4542-50

Involvement of Raf-1 kinase and protein kinase C zeta in insulin-like growth factor I-induced brown adipocyte mitogenic signaling cascades: inhibition by cyclic adenosine 3',5'-monophosphate. Valverde AM, et al. **Endocrinology** 1996 Sep;137(9):3832-41

Prolactin and MA-10 Leydig cell steroidogenesis: biphasic effects of prolactin and signal transduction. Weiss-Messer E, et al. **Endocrinology** 1996 Dec;137(12):5509-18

Effects of pertussis toxin on signal transductions via P2-purinergic receptors in A-431 human epidermoidal carcinoma cells. Sugita K, et al. **Enzyme Protein** 1994-95; 48(4):222-8

Mediation of signal transduction in keratinocytes of human middle ear cholesteatoma by ras protein. Huang CC, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):385-9

The interleukin-1 receptor complex and interleukin-1 signal transduction. Martin MU, et al. **Eur Cytokine Netw** 1997 Mar;8(1):5-17 (65 ref.)

Cell signalling through guanine-nucleotide-binding regulatory proteins (G proteins) and phospholipases. Exton JH. **Eur J Biochem** 1997 Jan 15;243(1-2):10-20 (110 ref.)

Regulation of phosphorylation pathways by p21 GTPases. The p21 Ras-related Rho subfamily and its role in phosphorylation signalling pathways. Lim L, et al. **Eur J Biochem** 1996 Dec 1;242(2):171-85 (123 ref.)

The signal transducer gp130--bacterial expression, refolding and properties of the carboxy-terminal domain of the cytokine-binding module. Müller-Newen G, et al. **Eur J Biochem** 1997 Jul 1;247(1):425-31

The platelet antigens CD9, CD42 and integrin alpha IIb beta IIIa can be topographically associated and transduce functionally similar signals. Slupsky JR, et al. **Eur J Biochem** 1997 Feb 15;244(1):168-75

Defects of beta 2-adrenergic signal transduction in chronic lymphocytic leukaemia: relationship to disease progression. Kamp T, et al. **Eur J Clin Invest** 1997 Feb;27(2):121-7

Retinoid signalling during embryogenesis. Pijnappel WW, et al. **Eur J Clin Nutr** 1996 Jul;50 Suppl 3:S29-31 (20 ref.)

GnRH receptor signaling: cross-talk of Ca2+ and protein kinase C. Naor Z. **Eur J Endocrinol** 1997 Feb;136(2):123-7 (39 ref.)

Co-receptor-independent signal transduction in a mismatched CD8+ major histocompatibility complex class II-specific allogeneic cytotoxic T lymphocyte. Eshima K, et al. **Eur J Immunol** 1997 Jan;27(1):55-61

IgE receptor (Fc epsilon RI) and signal transduction. Kinet JP, et al. **Eur Respir J Suppl** 1996 Aug;22:116s-118s (31 ref.)

Studies on the mechanism for Cai-transients in sea urchin zygotes caused by refertilization and external application of sperm extract. Osawa M, et al. **Exp Cell Res** 1997 Feb 25;231(1):104-11

TGF-beta signaling in murine embryonic palate cells involves phosphorylation of the CREB transcription factor. Potchinsky MB, et al. **Exp Cell Res** 1997 Feb 25; 231(1):96-103

The role of LFA-1 (CD11a/CD18) cytoplasmic domains in binding to intercellular adhesion molecule-1 (CD54) and in postreceptor cell spreading. Pyszniak AM, et al. **Exp Cell Res** 1997 May 25;233(1):78-87

Sequential operation of ceramide synthesis and ICE cascade in CPT-11-initiated apoptotic death signaling. Suzuki A, et al. **Exp Cell Res** 1997 May 25;233(1):41-7

2-chloroadenosine stimulates granule exocytosis from mouse natural killer cells: evidence for signal transduction through a novel extracellular receptor. Williams BA, et al. **Exp Cell Res** 1997 May 25;233(1):187-97

Early events in erythropoietin-induced signaling. Damen JE, et al. **Exp Hematol** 1996 Nov;24(13):1455-9 (55 ref.)

Increased neutrophil respiratory burst in myeloproliferative disorders: selective enhancement of superoxide release triggered by receptor-mediated agonists and low responsiveness to in vitro cytokine stimulation. Iki S, et al. **Exp Hematol** 1997 Jan;25(1):26-33

Targets for gene therapy of Parkinson's disease: growth factors, signal transduction, and promoters. During MJ, et al. **Exp Neurol** 1997 Mar;144(1):74-81 (65 ref.)

Theileria parva sporozoite entry into bovine lymphocytes involves both parasite and host cell signal transduction processes. Shaw MK. **Exp Parasitol** 1996 Dec;84(3):344-54

Dysfunction of the endothelial nitric oxide signalling pathway in diabetes and hyperglycaemia. Sobrevia L, et al. **Exp Physiol** 1997 May;82(3):423-52 (188 ref.)

Na+/Ca2+ exchanger modulates kainate-triggered Ca2+ signaling in Bergmann glial cells in situ. Kirischuk S, et al. **FASEB J** 1997 Jun;11(7):566-72

Heritable diseases of the skeleton. Part I: Molecular insights into skeletal development-transcription factors and signaling pathways. Mundlos S, et al. **FASEB J** 1997 Feb; 11(2):125-32 (60 ref.)

Spatial and temporal aspects of cellular calcium signaling. Thomas AP, et al. **FASEB J** 1996 Nov;10(13):1505-17 (94 ref.)

Calmodulin-dependent protein kinase II mediates signal transduction in apoptosis. Wright SC, et al. **FASEB J** 1997 Sep;11(11):843-9

The ErbB signaling network in embryogenesis and oncogenesis: signal diversification through combinatorial ligand-receptor interactions. Alroy I, et al. **FEBS Lett** 1997 Jun 23;410(1):83-6 (47 ref.)

Stimulation of ouabain-sensitive 86Rb+ uptake and Na+,K+-ATPase alpha-subunit phosphorylation by a cAMP-dependent signalling pathway in intact cells from rat kidney cortex. Carranza ML, et al. **FEBS Lett** 1996 Nov 4;396(2-3):309-14

Vacuolating toxin from Helicobacter pylori activates cellular signaling and pepsinogen secretion in human gastric adenocarcinoma cells. Chan EC, et al. **FEBS Lett** 1996 Dec 9;399(1-2):127-30

Phosphatidylinositol transfer proteins: requirements in phospholipase C signaling and in regulated exocytosis. Cockcroft S. **FEBS Lett** 1997 Jun 23;410(1):44-8 (31 ref.)

PDK1, one of the missing links in insulin signal transduction? Cohen P, et al. **FEBS Lett** 1997 Jun 23;410(1):3-10 (71 ref.)

Cyclic AMP signalling and cellular proliferation: regulation of CREB and CREM. Della Fazia MA, et al. **FEBS Lett** 1997 Jun 23;410(1):22-4 (22 ref.)

Cloning and expression of an alternatively spliced mRNA encoding a soluble form of the human interleukin-6 signal transducer gp130. Diamant M, et al. **FEBS Lett** 1997 Jul 28;412(2):379-84

Simultaneous induction of stimulatory and inhibitory signals by PDGF. Heldin CH. **FEBS Lett** 1997 Jun 23;410(1):17-21 (47 ref.)

Quantification of information transfer via cellular signal transduction pathways. Kholodenko BN, et al. **FEBS Lett** 1997 Sep 8;414(2):430-4

Role of Rac GTPase in the nuclear signaling by EGF. Kim BC, et al. **FEBS Lett** 1997 Apr 21;407(1):7-12

Regulation of proliferation and apoptosis by Ras and Rho GTPases through specific phospholipid-dependent signaling. Lacal JC. **FEBS Lett** 1997 Jun 23;410(1):73-7 (59 ref.)

Vav is associated with signal transducing molecules gp130, Grb2 and Erk2, and is tyrosine phosphorylated in response to interleukin-6. Lee IS, et al. **FEBS Lett** 1997 Jan 20; 401(2-3):133-7

Association of phosphatidylinositol 3-kinase with the proto-oncogene product Cbl upon CD38 ligation by a specific monoclonal antibody in THP-1 cells. Matsuo T, et al. **FEBS Lett** 1996 Nov 11;397(1):113-6

Molecular diversity of sphingolipid signalling. Meyer zu Heringdorf D, et al. **FEBS Lett** 1997 Jun 23;410(1):34-8 (57 ref.)

Overexpression of G(s)alpha in NG108-15, neuroblastomaXglioma cells: effects on receptor regulation of the stimulatory adenylyl cyclase cascade. Mullaney I, et al. **FEBS Lett** 1996 Nov 18;397(2-3):325-30

Overlapping and distinct signals through leptin receptor (OB-R) and a closely related cytokine signal transducer, gp130. Nakashima K, et al. **FEBS Lett** 1997 Jan 13; 401(1):49-52

Communication between the extracellular environment, cytoplasmic signalling cascades and the nuclear cell-cycle machinery. Peeper DS, et al. **FEBS Lett** 1997 Jun 23; 410(1):11-6 (129 ref.)

Hepatocyte growth factor/scatter factor (HGF/SF) signals via the STAT3/APRF transcription factor in human hepatoma cells and hepatocytes. Schaper F, et al. **FEBS Lett** 1997 Mar 17;405(1):99-103

Advanced glycation endproducts stimulate the MAP-kinase pathway in tubulus cell line LLC-PK1. Simm A, et al. **FEBS Lett** 1997 Jun 30;410(2-3):481-4

Differential expression of tissue transglutaminase during in vivo apoptosis of thymocytes induced via distinct signalling pathways. Szondy Z, et al. **FEBS Lett** 1997 Mar 10; 404(2-3):307-13

Tyrosine phosphorylation is crucial for growth signaling by tissue inhibitors of metalloproteinases (TIMP-1 and TIMP-2). Yamashita K, et al. **FEBS Lett** 1996 Oct 28; 396(1):103-7

Endothelins as cell growth regulators. Sedo A, et al. **Folia Biol (Praha)** 1996;42(3):79-82 (43 ref.)

Redox modulation of tyrosine phosphorylation-dependent signal transduction pathways. Monteiro HP, et al. **Free Radic Biol Med** 1996;21(3):323-33 (106 ref.)

Expression and signal transduction pathways of endothelin receptors in neuroendocrine cells. Stojilkovic SS, et al. **Front Neuroendocrinol** 1996 Jul;17(3):327-69 (224 ref.)

Closing in on the signals of hepatic fibrosis [editorial; comment] Friedman SL. **Gastroenterology** 1997 Apr; 112(4):1406-9 (32 ref.). Comment on: Gastroenterology 1997 Apr;112(4):1297-306.

Intracellular and molecular aspects of Ca(2+)-mediated signal transduction in neuronal cells. Račay P, et al. **Gen Physiol Biophys** 1996 Aug;15(4):273-89 (89 ref.)

SH2 and SH3-containing adaptor proteins: redundant or independent mediators of intracellular signal transduction. Birge RB, et al. **Genes Cells** 1996 Jul;1(7):595-613 (198 ref.)

Signal transduction via the histidyl-aspartyl phosphorelay. Egger LA, et al. **Genes Cells** 1997 Mar;2(3):167-84 (148 ref.)

Coupling of Jun amino-terminal kinase and Decapentaplegic signaling pathways in Drosophila morphogenesis. Glise B, et al. **Genes Dev** 1997 Jul 1;11(13):1738-47

Drosophila Jun relays the Jun amino-terminal kinase signal transduction pathway to the Decapentaplegic signal transduction pathway in regulating epithelial cell sheet movement. Hou XS, et al. **Genes Dev** 1997 Jul 1; 11(13):1728-37

Cdc37 is a molecular chaperone with specific functions in signal transduction. Kimura Y, et al. **Genes Dev** 1997 Jul 15;11(14):1775-85

Jun in Drosophila development: redundant and nonredundant functions and regulation by two MAPK signal transduction pathways. Kockel L, et al. **Genes Dev** 1997 Jul 1; 11(13):1748-58

The signaling pathway mediated by the type IIB activin receptor controls axial patterning and lateral asymmetry in the mouse. Oh SP, et al. **Genes Dev** 1997 Jul 15; 11(14):1812-26

Propagation of traveling waves in excitable media. Sager BM. **Genes Dev** 1996 Sep 15;10(18):2237-50 (136 ref.)

A JNK signal transduction pathway that mediates morphogenesis and an immune response in Drosophila. Sluss HK, et al. **Genes Dev** 1996 Nov 1;10(21):2745-58

KSR modulates signal propagation within the MAPK cascade. Therrien M, et al. **Genes Dev** 1996 Nov 1; 10(21):2684-95

Rho GTPases and signaling networks. Van Aelst L, et al. **Genes Dev** 1997 Sep 15;11(18):2295-322 (295 ref.)

Molecules making waves in axon guidance. Varela-Echavarría A, et al. **Genes Dev** 1997 Mar 1; 11(5):545-57 (96 ref.)

Mutation in Sos1 dominantly enhances a weak allele of the EGFR, demonstrating a requirement for Sos1 in EGFR signaling and development. Wang DZ, et al. **Genes Dev** 1997 Feb 1;11(3):309-20

Opposing pairs of serine protein kinases and phosphatases transmit signals of environmental stress to activate a bacterial transcription factor. Yang X, et al. **Genes Dev** 1996 Sep 15;10(18):2265-75

Signal perception and transduction in plant defense responses. Yang Y, et al. **Genes Dev** 1997 Jul 1;11(13):1621-39 (239 ref.)

Ras1-mediated modulation of Drosophila homeotic function in cell and segment identity. Boube M, et al. **Genetics** 1997 Jun;146(2):619-28

Molecular lesions associated with alleles of decapentaplegic identify residues necessary for TGF-beta/BMP cell signaling in Drosophila melanogaster. Wharton K, et al. **Genetics** 1996 Feb;142(2):493-505

Characterization of novel secreted and membrane proteins isolated by the signal sequence trap method. Shirozu M, et al. **Genomics** 1996 Nov 1;37(3):273-80

Neuronal regulation of astrocyte morphology in vitro is mediated by GABAergic signaling. Matsutani S, et al. **Glia** 1997 May;20(1):1-9

The plasma membrane calcium pump: not just another pretty ion translocase. Brandt PC, et al. **Glycobiology** 1996 Oct; 6(7):665-8 (30 ref.)

Ganglioside GM3 inhibition of EGF receptor mediated signal transduction. Rebbaa A, et al. **Glycobiology** 1996 Jun; 6(4):399-406

Aberrant activation of JAK/STAT pathway components in response to G-CSF, interferon-alpha/beta and interferon-gamma in NFS-60 cells. Novak U, et al. **Growth Factors** 1996;13(3-4):251-60

Making waves: regulation of inositol trisphosphate receptors and propagation of calcium signals in the liver. Joseph SK. **Hepatology** 1997 Sep;26(3):799-801

Somatostatin and octreotide interfere with calcium signalling in pancreatic beta-cells but not in normal and pathological parathyroid cells. Ridefelt P, et al. **Horm Metab Res** 1996 Nov;28(11):588-91

Interaction of the signalling pathways of insulin-like growth factor-I and sex steroids in the neuroendocrine hypothalamus. García-Segura LM, et al. **Horm Res** 1996; 46(4-5):160-4 (58 ref.)

Signals and molecular pathways involved in apoptosis, with special emphasis on human endometrium. Tabibzadeh S. **Hum Reprod Update** 1995 Jul;1(4):303-23 (211 ref.)

Angiotensin II regulates vascular smooth muscle cell pH, contraction, and growth via tyrosine kinase-dependent signaling pathways. Touyz RM, et al. **Hypertension** 1997 Aug;30(2 Pt 1):222-9

Characterization of the B lymphocyte populations in Lyn-deficient mice and the role of Lyn in signal initiation and down-regulation. Chan VW, et al. **Immunity** 1997 Jul;

7(1):69–81
Fc gammaRIIB1 inhibition of BCR-mediated phosphoinositide hydrolysis and Ca2+ mobilization is integrated by CD19 dephosphorylation. Hippen KL, et al. **Immunity** 1997 Jul;7(1):49–58
Receptors for fibroblast growth factors. Coutts JC, et al. **Immunol Cell Biol** 1995 Dec;73(6):584–9 (64 ref.)
Altered calcium signal transduction in B-1 malignant cells. Dang AM, et al. **Immunol Cell Biol** 1995 Dec;73(6):511–20
Proceedings of the 9th Symposium on Signals and Signal Processing in the Immune System. Tihany, Hungary, September 8–12, 1996. **Immunol Lett** 1996 Dec; 54(2–3):65–226
Intracellular signaling and endosomal trafficking of immunoreceptors. Shared effectors underlying MHC class II-restricted antigen presentation. Bonnerot C, et al. **Immunol Lett** 1997 Jun 1;57(1–3):1–4 (35 ref.)
Defective depletion of CD45-null thymocytes by the Staphylococcus aureus enterotoxin B superantigen. Conroy LA, et al. **Immunol Lett** 1996 Dec;54(2–3):119–22
The SHIP phosphatase becomes associated with Fc gammaRIIB1 and is tyrosine phosphorylated during 'negative' signaling. D'Ambrosio D, et al. **Immunol Lett** 1996 Dec;54(2–3):77–82
Integration of activatory and inhibitory signals in human B-cells. Sármay G, et al. **Immunol Lett** 1996 Dec; 54(2–3):93–100
Fc gamma receptor type IIb induced recruitment of inositol and protein phosphatases to the signal transductory complex of human B-cell. Sarmay G, et al. **Immunol Lett** 1997 Jun 1;57(1–3):159–64
Molecular analysis of the fyn-complex: cloning of SKAP55 and SLAP-130, two novel adaptor proteins which associate with fyn and may participate in the regulation of T cell receptor-mediated signaling. Schraven B, et al. **Immunol Lett** 1997 Jun 1;57(1–3):165–9 (26 ref.)
Cross-reactivity of murine and hamster IL-2 mitogenic signal. Sobotková E, et al. **Immunol Lett** 1996 Apr; 50(1–2):115–7
The role of CTLA-4 in the regulation and initiation of T-cell responses. Chambers CA, et al. **Immunol Rev** 1996 Oct; 153:27–46 (90 ref.)
Signaling thresholds and interclonal competition in preimmune B-cell selection. Cyster JG. **Immunol Rev** 1997 Apr;156:87–101 (142 ref.)
Regulation of signalling through B-lymphocyte antigen receptors by cell-cell interaction molecules. Law CL, et al. **Immunol Rev** 1996 Oct;153:123–54 (200 ref.)
A third secreted protein that is encoded by the enteropathogenic Escherichia coli pathogenicity island is required for transduction of signals and for attaching and effacing activities in host cells. Lai LC, et al. **Infect Immun** 1997 Jun;65(6):2211–7
CD14-mediated signal pathway of Porphyromonas gingivalis lipopolysaccharide in human gingival fibroblasts. Watanabe A, et al. **Infect Immun** 1996 Nov;64(11):4488–94
Fc epsilon RI and the FcR-beta amplifier. Scharenberg AM, et al. **Int Arch Allergy Immunol** 1997 May-Jul; 113(1–3):42–4 (18 ref.)
Growth factor-dependent phosphoinositide signalling. Hsuan JJ, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):415–35 (204 ref.)
Regulation of cell spreading during differentiation in the muscarinic M5 receptor tumor-suppressor model. Spoonster JR, et al. **Int J Cancer** 1997 Jul 17;72(2):362–8
Lens induction in axolotls: comparison with inductive signaling mechanisms in Xenopus laevis. Servetnick MD, et al. **Int J Dev Biol** 1996 Aug;40(4):755–61 (36 ref.)
Interaction of BCR-ABL with the retinoblastoma protein in Philadelphia chromosome-positive cell lines. Miyamura T, et al. **Int J Hematol** 1997 Feb;65(2):115–21
TGF-beta receptors and signal transduction. Miyazono K. **Int J Hematol** 1997 Feb;65(2):97–104 (42 ref.)
Signal transduction in cell-matrix interactions. Guan JL, et al. **Int Rev Cytol** 1996;168:81–121 (244 ref.)
Insights into T cell development and signal transduction provided by TCR-zeta chain deficient mice. Shores EW, et al. **Int Rev Immunol** 1996;13(4):301–15 (97 ref.)
Fibroblast growth factor 2 uses distinct signaling pathways for cell proliferation and cell shape changes in corneal endothelial cells. Gu X, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2326–34
Confocal imaging of Ca2+ signaling in cultured rat retinal pigment epithelial cells during mechanical and pharmacologic stimulation. Stalmans P, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):176–87
Endothelin receptor-mediated Ca2+ signaling and isoform expression in bovine corneal epithelial cells. Tao W, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):130–41
Myocardial sympathetic denervation prevents chamber-specific alteration of beta-adrenergic transmembrane signaling in rabbits with heart failure. Anzai T, et al. **J Am Coll Cardiol** 1996 Nov 1;28(5):1314–22
Role of tumor necrosis factor-alpha on mesangial cell MCP-1 expression and monocyte migration: mechanisms mediated by signal transduction. Pai R, et al. **J Am Soc Nephrol** 1996 Jun;7(6):914–23
P2-purinoceptors utilize multiple signalling pathways in MDCK-D1 cells. Insel PA, et al. **J Auton Pharmacol** 1996 Dec;16(6):311–3
Pharmacological and second messenger signalling selectivities of cloned P2Y receptors. Nicholas RA, et al. **J Auton Pharmacol** 1996 Dec;16(6):319–23
Adenine dinucleotides: a novel class of signalling molecules. Ogilvie A, et al. **J Auton Pharmacol** 1996 Dec;16(6):325–8 (33 ref.)
Regulatory functions of protein kinase C isoenzymes in purinoceptor signalling in mesangial cells. Pfeilschifter J, et al. **J Auton Pharmacol** 1996 Dec;16(6):315–8
Endothelial P2-purinoceptors: subtypes and signal transduction. Pirotton S, et al. **J Auton Pharmacol** 1996 Dec;16(6):353–6 (26 ref.)
Extracellular nucleotides as signalling molecules for renal mesangial cells. Schulze-Lohoff E, et al. **J Auton Pharmacol** 1996 Dec;16(6):381–4 (16 ref.)
A signal transducer for aerotaxis in Escherichia coli. Bibikov SI, et al. **J Bacteriol** 1997 Jun;179(12):4075–9
The Myxococcus xanthus developmentally expressed asgB-dependent genes can be targets of the A signal-generating or A signal-responding pathway. Bowden MG, et al. **J Bacteriol** 1996 Nov;178(22):6628–31
Chemotactic signaling by the P1 phosphorylation domain liberated from the CheA histidine kinase of Escherichia coli. Garzón A, et al. **J Bacteriol** 1996 Dec;178(23):6752–8
Structure/function analysis of the PII signal transduction protein of Escherichia coli: genetic separation of interactions with protein receptors. Jiang P, et al. **J Bacteriol** 1997 Jul;179(13):4342–53
Probing interactions of the homotrimeric PII signal transduction protein with its receptors by use of PII heterotrimers formed in vitro from wild-type and mutant subunits. Jiang P, et al. **J Bacteriol** 1997 Jul;179(13):4354–60
New classes of mutants in complementary chromatic adaptation provide evidence for a novel four-step phosphorelay system. Kehoe DM, et al. **J Bacteriol** 1997 Jun;179(12):3914–21
The Cpx two-component signal transduction pathway is activated in Escherichia coli mutant strains lacking phosphatidylethanolamine. Mileykovskaya E, et al. **J Bacteriol** 1997 Feb;179(4):1029–34
Phosphorylation-independent bacterial chemoresponses correlate with changes in the cytoplasmic level of fumarate. Montrone M, et al. **J Bacteriol** 1996 Dec;178(23):6882–7
Intramembrane signaling mediated by hydrogen-bonding of water and carboxyl groups in bacteriorhodopsin and rhodopsin. Maeda A, et al. **J Biochem (Tokyo)** 1997 Mar; 121(3):399–406 (62 ref.)
Ca2+ signaling and intracellular Ca2+ binding proteins. Niki I, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):685–98 (221 ref.)
Ehrlich cell plasma membrane redox system is modulated through signal transduction pathways involving cGMP and Ca2+ as second messengers. del Castillo-Olivares A, et al. **J Bioenerg Biomembr** 1995 Dec;27(6):605–11
Regulation of connexin43 function by activated tyrosine protein kinases. Lau AF, et al. **J Bioenerg Biomembr** 1996 Aug;28(4):359–68 (47 ref.)
CC chemokine receptor 5-mediated signaling and HIV-1 Co-receptor activity share common structural determinants. Critical residues in the third extracellular loop support HIV-1 fusion. Alkhatib G, et al. **J Biol Chem** 1997 Aug 8;272(32):19771–6
Activation of multiple mitogen-activated protein kinase signal transduction pathways by the endothelin B receptor requires the cytoplasmic tail. Aquilla E, et al. **J Biol Chem** 1996 Dec 6;271(49):31572–9
Growth hormone, interferon-gamma, and leukemia inhibitory factor utilize insulin receptor substrate-2 in intracellular signaling. Argetsinger LS, et al. **J Biol Chem** 1996 Nov 15;271(46):29415–21
Evidence for a role of Rho-like GTPases and stress-activated protein kinase/c-Jun N-terminal kinase (SAPK/JNK) in transforming growth factor beta-mediated signaling. Atfi A, et al. **J Biol Chem** 1997 Jan 17;272(3):1429–32
Signaling of type II oncostatin M receptor. Auguste P, et al. **J Biol Chem** 1997 Jun 20;272(25):15760–4
Nuclear translocation of RhoA mediates the mitogen-induced activation of phospholipase D involved in nuclear envelope signal transduction. Baldassare JJ, et al. **J Biol Chem** 1997 Feb 21;272(8):4911–4
A single STAT recruitment module in a chimeric cytokine receptor complex is sufficient for STAT activation. Behrmann I, et al. **J Biol Chem** 1997 Feb 21;272(8):5269–74
Insulin signal transduction by a mutant human insulin receptor lacking the NPEY sequence. Evidence for an alternate mitogenic signaling pathway that is independent of Shc phosphorylation. Berhanu P, et al. **J Biol Chem** 1997 Sep 5;272(36):22884–90
Angiotensin II interferes with interleukin 6-induced Stat3 signaling by a pathway involving mitogen-activated protein kinase kinase 1. Bhat GJ, et al. **J Biol Chem** 1996 Sep 13;271(37):22447–52
Redox-regulated signaling by lactosylceramide in the proliferation of human aortic smooth muscle cells. Bhunia AK, et al. **J Biol Chem** 1997 Jun 20;272(25):15642–9
Annexin II is a novel player in insulin signal transduction. Possible association between annexin II phosphorylation and insulin receptor internalization. Biener Y, et al. **J Biol Chem** 1996 Nov 15;271(46):29489–96
The role of the Shc phosphotyrosine interaction/phosphotyrosine binding domain and tyrosine phosphorylation sites in polyoma middle T antigen-mediated cell transformation. Blaikie PA, et al. **J Biol Chem** 1997 Aug 15;272(33):20671–7
Phosducin, potential role in modulation of olfactory signaling. Boekhoff I, et al. **J Biol Chem** 1997 Feb 14; 272(7):4606–12
Multiple signaling pathways control the activation of the CEF-4/9E3 cytokine gene by pp60v-src. Bojović B, et al. **J Biol Chem** 1996 Sep 13;271(37):22528–37
SHP1 and SHP2 protein-tyrosine phosphatases associate with betac after interleukin-3-induced receptor tyrosine phosphorylation. Identification of potential binding sites and substrates. Bone H, et al. **J Biol Chem** 1997 May 30; 272(22):14470–6
The nuclear factor kappa-B signaling pathway participates in dysregulation of vascular smooth muscle cells in vitro and in human atherosclerosis. Bourcier T, et al. **J Biol Chem** 1997 Jun 20;272(25):15817–24
GHF-1/Pit-1 functions as a cell-specific integrator of Ras signaling by targeting the Ras pathway to a composite Ets-1/GHF-1 response element. Bradford AP, et al. **J Biol Chem** 1996 Oct 4;271(40):24639–48
Transduction of activation signal that follows HIV-1 binding to CD4 and CD4 dimerization involves the immunoglobulin CDR3-like region in domain 1 of CD4. Briant L, et al. **J Biol Chem** 1997 Aug 1;272(31):19441–50
Alteration of the sphingomyelin/ceramide pathway is associated with resistance of human breast carcinoma MCF7 cells to tumor necrosis factor-alpha-mediated cytotoxicity. Cai Z, et al. **J Biol Chem** 1997 Mar 14; 272(11):6918–26
Membrane localization of cAMP-dependent protein kinase amplifies cAMP signaling to the nucleus in PC12 cells. Cassano S, et al. **J Biol Chem** 1996 Nov 22;271(47):29870–5
The role of receptor dimerization domain residues in growth hormone signaling. Chen C, et al. **J Biol Chem** 1997 Feb 21;272(8):5133–40
Both overlapping and distinct signaling pathways for somatostatin receptor subtypes SSTR1 and SSTR2 in pituitary cells. Chen L, et al. **J Biol Chem** 1997 Jul 25; 272(30):18666–72
Apoptotic activity of REAPER is distinct from signaling by the tumor necrosis factor receptor 1 death domain. Chen P, et al. **J Biol Chem** 1996 Oct 18;271(42):25735–7
Alpha1-adrenergic receptor signaling via Gh is subtype specific and independent of its transglutaminase activity. Chen S, et al. **J Biol Chem** 1996 Dec 13;271(50):32385–91
Cytoplasmic domain of E-selectin contains a non-tyrosine endocytosis signal. Chuang PI, et al. **J Biol Chem** 1997 Oct 3;272(40):24813–8
The Ras-related protein Rheb is farnesylated and antagonizes Ras signaling and transformation. Clark GJ, et al. **J Biol Chem** 1997 Apr 18;272(16):10608–15
Evidence for endogenous ADP-ribosylation of GTP-binding proteins in neuronal cell nucleus. Possible induction by membrane depolarization. Cohen-Armon M, et al. **J Biol Chem** 1996 Oct 18;271(42):26200–8
Regulation of mitogen-activated protein kinase phosphatase-1 expression by extracellular signal-related kinase-dependent and Ca2+-dependent signal pathways in Rat-1 cells. Cook SJ, et al. **J Biol Chem** 1997 May 16; 272(20):13309–19
Autophosphorylation of activation loop tyrosines regulates signaling by the TRK nerve growth factor receptor. Cunningham ME, et al. **J Biol Chem** 1997 Apr 18; 272(16):10957–67
Protein kinase A anchoring. Dell'Acqua ML, et al. **J Biol Chem** 1997 May 16;272(20):12881–4 (59 ref.)
Phosphorylation and activation of heart 6-phosphofructo-2-kinase by protein kinase B and other protein kinases of the insulin signaling cascades. Deprez J, et al. **J Biol Chem** 1997 Jul 11;272(28):17269–75
Ciliary neurotrophic factor induces down-regulation of its receptor and desensitization of signal transduction pathways in vivo: non-equivalence with pharmacological activity. DiStefano PS, et al. **J Biol Chem** 1996 Sep 13; 271(37):22839–46
Gp130-mediated signal transduction in embryonic stem cells involves activation of Jak and Ras/mitogen-activated protein kinase pathways. Ernst M, et al. **J Biol Chem** 1996 Nov 22;271(47):30136–43
HIV-1 entry and macrophage inflammatory protein-1beta-mediated signaling are independent functions of the chemokine receptor CCR5. Farzan M, et al. **J Biol Chem** 1997 Mar 14;272(11):6854–7
Platelet-derived growth factor (PDGF)-induced Ca2+ signaling in the CG4 oligodendroglial cell line and in transformed oligodendrocytes expressing the beta-PDGF receptor. Fatatis A, et al. **J Biol Chem** 1997 Feb 14; 272(7):4351–8
The v-Ki-Ras oncogene alters cAMP nuclear signaling by regulating the location and the expression of cAMP-dependent protein kinase IIbeta. Feliciello A, et al. **J Biol Chem** 1996 Oct 11;271(41):25350–9
Oncogenic Ha-Ras-induced signaling activates NF-kappaB transcriptional activity, which is required for cellular transformation. Finco TS, et al. **J Biol Chem** 1997 Sep 26; 272(39):24113–6
Fcgamma receptor I activation triggers a novel Ca2+-activated current selective for monovalent cations in the human monocytic cell line, U937. Floto RA, et al. **J Biol Chem** 1997 Feb 21;272(8):4753–8
Specific triggering of the Fas signal transduction pathway in normal human keratinocytes. Freiberg RA, et al. **J Biol Chem** 1996 Dec 6;271(49):31666–9

Protein phosphatase 2C acts independently of stress-activated kinase cascade to regulate the stress response in fission yeast. Gaits F, et al. **J Biol Chem** 1997 Jul 11;272(28):17873–9

A murine interleukin-4 antagonistic mutant protein completely inhibits interleukin-4–induced cell proliferation, differentiation, and signal transduction. Grunewald SM, et al. **J Biol Chem** 1997 Jan 17;272(3):1480–3

Mapping of a cytoplasmic domain of the human growth hormone receptor that regulates rates of inactivation of Jak2 and Stat proteins. Hackett RH, et al. **J Biol Chem** 1997 Apr 25;272(17):11128–32

All-trans-retinoic acid increases transforming growth factor-beta2 and insulin-like growth factor binding protein-3 expression through a retinoic acid receptor-alpha-dependent signaling pathway. Han GR, et al. **J Biol Chem** 1997 May 23;272(21):13711–6

The first 5 amino acids of the carboxyl terminus of phosphatidylinositol transfer protein (PITP) alpha play a critical role in inositol lipid signaling. Transfer activity of PITP is essential but not sufficient for restoration of phospholipase C signaling. Hara S, et al. **J Biol Chem** 1997 Jun 6;272(23):14908–13

Altered transforming growth factor signaling in epithelial cells when ras activation is blocked. Hartsough MT, et al. **J Biol Chem** 1996 Sep 13;271(37):22368–75

Prolactin signaling in mammary gland development. Hennighausen L, et al. **J Biol Chem** 1997 Mar 21; 272(12):7567–9 (40 ref.)

Phosphatidylinositol 3-kinase-independent signal transduction pathway for platelet-derived growth factor-induced chemotaxis. Higaki M, et al. **J Biol Chem** 1996 Nov 15;271(46):29342–6

Signaling through intercellular adhesion molecule 1 (ICAM-1) in a B cell lymphoma line. The activation of Lyn tyrosine kinase and the mitogen-activated protein kinase pathway. Holland J, et al. **J Biol Chem** 1997 Apr 4;272(14):9108–12

The cytoplasmic tail of FcgammaRIIIAalpha is involved in signaling by the low affinity receptor for immunoglobulin G. Hou X, et al. **J Biol Chem** 1996 Sep 13;271(37):22815–22

ATAR, a novel tumor necrosis factor receptor family member, signals through TRAF2 and TRAF5. Hsu H, et al. **J Biol Chem** 1997 May 23;272(21):13471–4

The enhanced tumorigenic activity of a mutant epidermal growth factor receptor common in human cancers is mediated by threshold levels of constitutive tyrosine phosphorylation and unattenuated signaling. Huang HS, et al. **J Biol Chem** 1997 Jan 31;272(5):2927–35

The N-terminal region of the third intracellular loop of the parathyroid hormone (PTH)/PTH-related peptide receptor is critical for coupling to cAMP and inositol phosphate/Ca2+ signal transduction pathways. Huang Z, et al. **J Biol Chem** 1996 Dec 27;271(52):33382–9

Overexpression of N-acetylglucosaminyltransferase III disrupts the tyrosine phosphorylation of Trk with resultant signaling dysfunction in PC12 cells treated with nerve growth factor. Ihara Y, et al. **J Biol Chem** 1997 Apr 11; 272(15):9629–34

Interleukin-4 (IL-4) induces phosphatidylinositol 3-kinase (p85) dephosphorylation. Implications for the role of SHP-1 in the IL-4-induced signals in human B cells. Imani F, et al. **J Biol Chem** 1997 Mar 21;272(12):7927–31

Spatial patterns of Ca2+ signals define intracellular distribution of a signaling by Ca2+/Calmodulin-dependent protein kinase II. Inagaki N, et al. **J Biol Chem** 1997 Oct 3;272(40):25195–9

B cell antigen receptor signaling induces the formation of complexes containing the Crk adapter proteins. Ingham RJ, et al. **J Biol Chem** 1996 Dec 13;271(50):32306–14

The amino acid residues immediately carboxyl-terminal to the tyrosine phosphorylation site contribute to interleukin 6-specific activation of signal transducer and activator of transcription 3. Inoue M, et al. **J Biol Chem** 1997 Apr 4; 272(14):9550–5

Cytoskeleton reorganization induces the urokinase-type plasminogen activator gene via the Ras/extracellular signal-regulated kinase (ERK) signaling pathway. Irigoyen JP, et al. **J Biol Chem** 1997 Jan 17;272(3):1904–9

Identification of TRAF6, a novel tumor necrosis factor receptor-associated factor protein that mediates signaling from an amino-terminal domain of the CD40 cytoplasmic region. Ishida T, et al. **J Biol Chem** 1996 Nov 15; 271(46):28745–8

Uncoupling of ligand-binding affinity of the bacterial serine chemoreceptor from methylation- and temperature-modulated signaling states. Iwama T, et al. **J Biol Chem** 1997 May 23;272(21):13810–5

The protein-tyrosine phosphatase SHP-2 binds platelet/endothelial cell adhesion molecule-1 (PECAM-1) and forms a distinct signaling complex during platelet aggregation. Evidence for a mechanistic link between PECAM-1- and integrin-mediated cellular signaling. Jackson DE, et al. **J Biol Chem** 1997 Mar 14; 272(11):6986–93

The signal transduction function for oxidative phosphorylation is at least second order in ADP. Jeneson JAL, et al. **J Biol Chem** 1996 Nov 8;271(45):27995–8

Phosphorylation by protein kinase C is required for acute activation of cystic fibrosis transmembrane conductance regulator by protein kinase A. Jia Y, et al. **J Biol Chem** 1997 Feb 21;272(8):4978–84

Both p140(trk) and p75(NGFR) nerve growth factor receptors mediate nerve growth factor-stimulated calcium uptake. Jiang H, et al. **J Biol Chem** 1997 Mar 14; 272(11):6835–7

Differential effect of shear stress on extracellular signal-regulated kinase and N-terminal Jun kinase in endothelial cells. Gi2- and Gbeta/gamma-dependent signaling pathways. Jo H, et al. **J Biol Chem** 1997 Jan 10; 272(2):1395–401

Mitogenic signaling and inhibition of apoptosis via the erythropoietin receptor Box-1 domain. Joneja B, et al. **J Biol Chem** 1997 Apr 25;272(17):11176–84

Tumor necrosis factor receptors (Tnfr) in mouse fibroblasts deficient in Tnfr1 or Tnfr2 are signaling competent and activate the mitogen-activated protein kinase pathway with differential kinetics. Kalb A, et al. **J Biol Chem** 1996 Nov 8;271(45):28097–104

Differential signaling to glycogen synthesis by the intracellular domain of the insulin versus the insulin-like growth factor-1 receptor. Evidence from studies of TrkC-chimeras. Kalloo-Hosein HE, et al. **J Biol Chem** 1997 Sep 26;272(39):24325–32

Evidence for a direct interaction between insulin receptor substrate-1 and Shc. Kasus-Jacobi A, et al. **J Biol Chem** 1997 Jul 4;272(27):17166–70

Defective signaling through the B cell antigen receptor in Epstein-Barr virus-transformed ataxia-telangiectasia cells. Khanna KK, et al. **J Biol Chem** 1997 Apr 4;272(14):9489–95

Reconstitution of mitogen-activated protein kinase phosphorylation cascades in bacteria. Efficient synthesis of active protein kinases. Khokhlatchev A, et al. **J Biol Chem** 1997 Apr 25;272(17):11057–62

Co-ligation of the antigen and Fc receptors gives rise to the selective modulation of intracellular signaling in B cells. Regulation of the association of phosphatidylinositol 3-kinase and inositol 5'-phosphatase with the antigen receptor complex. Kiener PA, et al. **J Biol Chem** 1997 Feb 7;272(6):3838–44

A distinct function of STAT proteins in erythropoietin signal transduction. Kirito K, et al. **J Biol Chem** 1997 Jun 27; 272(26):16507–13

Gq-coupled receptors transmit the signal for GLUT4 translocation via an insulin-independent pathway. Kishi K, et al. **J Biol Chem** 1996 Oct 25;271(43):26561–8

A synthetic peptide derived from a COOH-terminal domain of the insulin receptor specifically enhances insulin receptor signaling. Kole HK, et al. **J Biol Chem** 1996 Dec 6; 271(49):31619–26

Modulation of interferon action by retinoids. Induction of murine STAT1 gene expression by retinoic acid [published erratum appears in J Biol Chem 1997 Jun 20;272(25):16068] Kolla V, et al. **J Biol Chem** 1997 Apr 11;272(15):9742–8

The mitogen-activated protein kinase and JAK-STAT signaling pathways are required for an oncostatin M-responsive element-mediated activation of matrix metalloproteinase 1 gene expression. Korzus E, et al. **J Biol Chem** 1997 Jan 10;272(2):1188–96

Regulation of a c-Jun amino-terminal kinase/stress-activated protein kinase cascade by a sodium-dependent signal transduction pathway. Kuroki DW, et al. **J Biol Chem** 1997 Sep 19;272(38):23905–11

Influence of subunit combinations on signaling by receptors for oncostatin M, leukemia inhibitory factor, and interleukin-6. Kuropatwinski KK, et al. **J Biol Chem** 1997 Jun 13;272(24):15135–44

Protein kinase C inhibits adenylyl cyclase type VI activity during desensitization of the A2a-adenosine receptor-mediated cAMP response. Lai HL, et al. **J Biol Chem** 1997 Feb 21;272(8):4970–7

Down-regulation of epidermal growth factor receptors by nerve growth factor in PC12 cells is p140(trk)-, Ras-, and Src-dependent. Lazarovici P, et al. **J Biol Chem** 1997 Apr 25;272(17):11026–34

Feedback regulation of ATP-induced Ca2+ signaling in HL-60 cells is mediated by protein kinase A- and C-mediated changes in capacitative Ca2+ entry. Lee H, et al. **J Biol Chem** 1997 Aug 29;272(35):21831–8

Signaling pathway involved in the activation of heart 6-phosphofructo-2-kinase by insulin. Lefebvre V, et al. **J Biol Chem** 1996 Sep 13;271(37):22289–92

Proteolytic activation of cholera toxin and Escherichia coli labile toxin by entry into host epithelial cells. Signal transduction by a protease-resistant toxin variant. Lencer WI, et al. **J Biol Chem** 1997 Jun 13;272(24):15562–8

A new member of the amphiphysin family connecting endocytosis and signal transduction pathways. Leprince C, et al. **J Biol Chem** 1997 Jun 13;272(24):15101–5

Uncoupling of membrane ruffling and pinocytosis during Ras signal transduction. Li G, et al. **J Biol Chem** 1997 Apr 18;272(16):10337–40

Cell anchorage permits efficient signal transduction between ras and its downstream kinases. Lin TH, et al. **J Biol Chem** 1997 Apr 4;272(14):8849–52

Organized endothelial cell surface signal transduction in caveolae distinct from glycosylphosphatidylinositol-anchored protein microdomains. Liu J, et al. **J Biol Chem** 1997 Mar 14; 272(11):7211–22

SH3 domain-dependent association of huntingtin with epidermal growth factor receptor signaling complexes. Liu YF, et al. **J Biol Chem** 1997 Mar 28;272(13):8121–4

The tyrosine phosphatase SHP-1 associates with the sst2 somatostatin receptor and is an essential component of sst2-mediated inhibitory growth signaling. Lopez F, et al. **J Biol Chem** 1997 Sep 26;272(39):24448–54

The guanylyl cyclase-deficient mouse defines differential pathways of natriuretic peptide signaling. Lopez MJ, et al. **J Biol Chem** 1997 Sep 12;272(37):23064–8

Retinoic acid-induced expression of apolipoprotein D and concomitant growth arrest in human breast cancer cells are mediated through a retinoic acid receptor RARalpha-dependent signaling pathway. López-Boado YS, et al. **J Biol Chem** 1996 Dec 13;271(50):32105–11

Importance of the dimer-dimer interface for allosteric signal transduction and AMP cooperativity of pig kidney fructose-1,6-bisphosphatase. Site-specific mutagenesis studies of Glu-192 and Asp-187 residues on the 190's loop. Lu G, et al. **J Biol Chem** 1997 Feb 21;272(8):5076–81

Tumor necrosis factor alpha enhances the expression of the interleukin (IL)-4 receptor alpha-chain on endothelial cells increasing IL-4 or IL-13-induced Stat6 activation. Lugli SM, et al. **J Biol Chem** 1997 Feb 28;272(9):5487–94

Identification of an adhesion site within the syndecan-4 extracellular protein domain. McFall AJ, et al. **J Biol Chem** 1997 May 16;272(20):12901–4

Brain-derived neurotrophic factor binding to the p75 neurotrophin receptor reduces TrkA signaling while increasing serine phosphorylation in the TrkA intracellular domain. MacPhee IJ, et al. **J Biol Chem** 1997 Sep 19; 272(38):23547–51

Integrin-dependent activation of the p70 ribosomal S6 kinase signaling pathway. Malik RK, et al. **J Biol Chem** 1996 Nov 22;271(47):29785–91

Involvement of p130(Cas) and p105(HEF1), a novel Cas-like docking protein, in a cytoskeleton-dependent signaling pathway initiated by ligation of integrin or antigen receptor on human B cells. Manié SN, et al. **J Biol Chem** 1997 Feb 14;272(7):4230–6

Factors determining the specificity of signal transduction by guanine nucleotide-binding protein-coupled receptors. Integration of stimulatory and inhibitory input to the effector adenylyl cyclase. Marjamaki A, et al. **J Biol Chem** 1997 Jun 27;272(26):16466–73

Rate and equilibrium constants for phosphoryltransfer between active site histidines of Escherichia coli HPr and the signal transducing protein IIIGlc. Meadow ND, et al. **J Biol Chem** 1996 Dec 27;271(52):33440–5

Conformational changes required in the human growth hormone receptor for growth hormone signaling. Mellado M, et al. **J Biol Chem** 1997 Apr 4;272(14):9189–96

Calponin and mitogen-activated protein kinase signaling in differentiated vascular smooth muscle. Menice CB, et al. **J Biol Chem** 1997 Oct 3;272(40):25157–61

Inhibition of peroxisome proliferator signaling pathways by thyroid hormone receptor. Competitive binding to the response element. Miyamoto T, et al. **J Biol Chem** 1997 Mar 21;272(12):7752–8

Cdc42Hs, but not Rac1, inhibits serum-stimulated cell cycle progression at G1/S through a mechanism requiring p38/RK. Molnár A, et al. **J Biol Chem** 1997 May 16; 272(20):13229–35

Involvement of stress-activated protein kinase and p38/RK mitogen-activated protein kinase signaling pathways in the enhanced phosphorylation of initiation factor 4E in NIH 3T3 cells. Morley SJ, et al. **J Biol Chem** 1997 Jul 11; 272(28):17887–93

Chimeric erythropoietin-interferon gamma receptors reveal differences in functional architecture of intracellular domains for signal transduction. Muthukumaran G, et al. **J Biol Chem** 1997 Feb 21;272(8):4993–9

Phosphocitrate inhibits a basic calcium phosphate and calcium pyrophosphate dihydrate crystal-induced mitogen-activated protein kinase cascade signal transduction pathway. Nair D, et al. **J Biol Chem** 1997 Jul 25;272(30):18920–5

Identification of Smad2, a human Mad-related protein in the transforming growth factor beta signaling pathway. Nakao A, et al. **J Biol Chem** 1997 Jan 31;272(5):2896–900

A kinase domain-truncated type I receptor blocks bone morphogenetic protein-2-induced signal transduction in C2C12 myoblasts. Namiki M, et al. **J Biol Chem** 1997 Aug 29;272(35):22046–52

Modulation of interleukin (IL)-13 binding and signaling by the gammac chain of the IL-2 receptor. Obiri NI, et al. **J Biol Chem** 1997 Aug 8;272(32):20251–8

A novel Drosophila receptor tyrosine kinase expressed specifically in the nervous system. Unique structural features and implication in developmental signaling. Oishi I, et al. **J Biol Chem** 1997 May 2;272(18):11916–23

The proto-oncogene product p120(cbl) links c-Src and phosphatidylinositol 3'-kinase to the integrin signaling pathway. Ojaniemi M, et al. **J Biol Chem** 1997 Feb 7; 272(6):3780–7

Suppression of prostaglandin E receptor signaling by the variant form of EP1 subtype. Okuda-Ashitaka E, et al. **J Biol Chem** 1996 Dec 6;271(49):31255–61

Interaction of a GRB-IR splice variant (a human GRB10 homolog) with the insulin and insulin-like growth factor I receptors. Evidence for a role in mitogenic signaling. O'Neill TJ, et al. **J Biol Chem** 1996 Sep 13;271(37):22506–13

An interleukin (IL)-13 receptor lacking the cytoplasmic domain fails to transduce IL-13-induced signals and inhibits responses to IL-4. Orchansky PL, et al. **J Biol Chem** 1997 Sep 5;272(36):22940–7

The inositol 5'-phosphatase SHIP binds to immunoreceptor signaling motifs and responds to high affinity IgE receptor aggregation. Osborne MA, et al. **J Biol Chem** 1996 Nov 15;271(46):29271-8

Two homologous phosphorylation domains differentially contribute to desensitization and internalization of the m2 muscarinic acetylcholine receptor. Pals-Rylaarsdam R, et al. **J Biol Chem** 1997 May 30;272(22):14152-8

A receptor-G protein coupling-independent step in the internalization of the thyrotropin-releasing hormone receptor. Petrou C, et al. **J Biol Chem** 1997 Jan 24; 272(4):2326-33

Enhanced tumorigenic behavior of glioblastoma cells expressing a truncated epidermal growth factor receptor is mediated through the Ras-Shc-Grb2 pathway. Prigent SA, et al. **J Biol Chem** 1996 Oct 11;271(41):25639-45

A tyrosine kinase signaling pathway accounts for the majority of phosphatidylinositol 3,4,5-trisphosphate formation in chemoattractant-stimulated human neutrophils. Ptasznik A, et al. **J Biol Chem** 1996 Oct 11;271(41):25204-7

Syk-dependent and -independent signaling cascades in B cells elicited by osmotic and oxidative stress. Qin S, et al. **J Biol Chem** 1997 Jan 24;272(4):2098-103

Isolation of a NCK-associated kinase, PRK2, an SH3-binding protein and potential effector of Rho protein signaling. Quilliam LA, et al. **J Biol Chem** 1996 Nov 15; 271(46):28772-6

Phosphatidylinositol 3-kinase activity is required for hepatocyte growth factor-induced mitogenic signals in epithelial cells. Rahimi N, et al. **J Biol Chem** 1996 Oct 4;271(40):24850-5

The MEKK-JNK pathway is stimulated by alpha1-adrenergic receptor and ras activation and is associated with in vitro and in vivo cardiac hypertrophy. Ramirez MT, et al. **J Biol Chem** 1997 May 30; 272(22):14057-61

Divergence in signal transduction pathways of platelet-derived growth factor (PDGF) and epidermal growth factor (EGF) receptors. Involvement of sphingosine 1-phosphate in PDGF but not EGF signaling. Rani CS, et al. **J Biol Chem** 1997 Apr 18;272(16):10777-83

Proteasome- and p53-dependent masking of signal transducer and activator of transcription (STAT) factors. Rayanade RJ, et al. **J Biol Chem** 1997 Feb 21; 272(8):4659-62

Phosphatidylinositol 3-kinase links the interleukin-2 receptor to protein kinase B and p70 S6 kinase. Reif K, et al. **J Biol Chem** 1997 May 30;272(22):14426-33

Functional roles of the Shc phosphotyrosine binding and Src homology 2 domains in insulin and epidermal growth factor signaling. Ricketts WA, et al. **J Biol Chem** 1996 Oct 18; 271(42):26165-9

Cross-talk between the platelet-derived growth factor and the insulin signaling pathways in 3T3-L1 adipocytes. Ricort JM, et al. **J Biol Chem** 1997 Aug 8;272(32):19814-8

A mutation changes ligand selectivity and transmembrane signaling preference of the neurokinin-1 receptor. Riitano D, et al. **J Biol Chem** 1997 Mar 21;272(12):7646-55

Signaling of the cardiotrophin-1 receptor. Evidence for a third receptor component. Robledo O, et al. **J Biol Chem** 1997 Feb 21;272(8):4855-63

Ultraviolet B radiation acts through the nitric oxide and cGMP signal transduction pathway to stimulate melanogenesis in human melanocytes. Roméro-Graillet C, et al. **J Biol Chem** 1996 Nov 8;271(45):28052-6

Rho is required for Galphaq and alpha1-adrenergic receptor signaling in cardiomyocytes. Dissociation of Ras and Rho pathways. Sah VP, et al. **J Biol Chem** 1996 Dec 6; 271(49):31185-90

The kinase domain of Jak2 mediates induction of bcl-2 and delays cell death in hematopoietic cells. Sakai I, et al. **J Biol Chem** 1997 May 9;272(19):12350-8

Heparin binding and oligomerization of hepatocyte growth factor/scatter factor isoforms. Heparan sulfate glycosaminoglycan requirement for Met binding and signaling. Sakata H, et al. **J Biol Chem** 1997 Apr 4; 272(14):9457-63

Differential signaling after beta1 integrin ligation is mediated through binding of CRKL to p120(CBL) and p110(HEF1). Sattler M, et al. **J Biol Chem** 1997 May 30;272(22):14320-6

Association of JAK2 and STAT5 with erythropoietin receptors. Role of receptor phosphorylation in erythropoietin signal transduction. Sawyer ST, et al. **J Biol Chem** 1996 Dec 13;271(50):32430-7

Differential signaling by the focal adhesion kinase and cell adhesion kinase beta. Schaller MD, et al. **J Biol Chem** 1997 Oct 3;272(40):25319-25

Focal adhesion kinase overexpression enhances ras-dependent integrin signaling to ERK2/mitogen-activated protein kinase through interactions with and activation of c-Src. Schlaepfer DD, et al. **J Biol Chem** 1997 May 16;272(20):13189-95

Interferon-gamma-dependent nuclear import of Stat1 is mediated by the GTPase activity of Ran/TC4. Sekimoto T, et al. **J Biol Chem** 1996 Dec 6;271(49):31017-20

Transcriptional silencing of a tRNA1Gly copy from within a multigene family is modulated by distal cis elements. Sharma S, et al. **J Biol Chem** 1996 Nov 8;271(45):28146-53

Insulin stimulates guanine nucleotide exchange on Rab4 via a wortmannin-sensitive signaling pathway in rat adipocytes. Shibata H, et al. **J Biol Chem** 1997 Jun 6; 272(23):14542-6

Phosphorylation of protein-tyrosine phosphatase PTP-1B on identical sites suggests activation of a common signaling pathway during mitosis and stress response in mammalian cells. Shifrin VI, et al. **J Biol Chem** 1997 Jan 31; 272(5):2957-62

Involvement of STAT3 in the granulocyte colony-stimulating factor-induced differentiation of myeloid cells. Shimozaki K, et al. **J Biol Chem** 1997 Oct 3;272(40):25184-9

Characterization of downstream Ras signals that induce alternative protease-dependent invasive phenotypes. Silberman S, et al. **J Biol Chem** 1997 Feb 28;272(9):5927-35

Changing J774A.1 cells to new medium perturbs multiple signaling pathways, including the modulation of protein kinase C by endogenous sphingoid bases. Smith ER, et al. **J Biol Chem** 1997 Feb 28;272(9):5640-6

The prolactin receptor and severely truncated erythropoietin receptors support differentiation of erythroid progenitors. Socolovsky M, et al. **J Biol Chem** 1997 May 30; 272(22):14009-12

Association of a p95 Vav-containing signaling complex with the FcepsilonRI gamma chain in the RBL-2H3 mast cell line. Evidence for a constitutive in vivo association of Vav with Grb2, Raf-1, and ERK2 in an active complex. Song JS, et al. **J Biol Chem** 1996 Oct 25;271(43):26962-70

Signal transduction pathways involved in the mitogenic activity of pleiotrophin. Implication of mitogen-activated protein kinase and phosphoinositide 3-kinase pathways. Souttou B, et al. **J Biol Chem** 1997 Aug 1;272(31):19588-93

Distinct roles for leukemia inhibitory factor receptor alpha-chain and gp130 in cell type-specific signal transduction. Starr R, et al. **J Biol Chem** 1997 Aug 8; 272(32):19982-6

Tumor necrosis factor-alpha-induced insulin resistance in 3T3-L1 adipocytes is accompanied by a loss of insulin receptor substrate-1 and GLUT4 expression without a loss of insulin receptor-mediated signal transduction. Stephens JM, et al. **J Biol Chem** 1997 Jan 10;272(2):971-6

Signal transduction via glycosyl phosphatidylinositol-anchored proteins in T cells is inhibited by lowering cellular cholesterol. Stulnig TM, et al. **J Biol Chem** 1997 Aug 1;272(31):19242-7

Association between receptor protein-tyrosine phosphatase RPTPalpha and the Grb2 adaptor. Dual Src homology (SH) 2/SH3 domain requirement and functional consequences. Su J, et al. **J Biol Chem** 1996 Nov 8; 271(45):28086-96

Identification of functional domains of the human thrombopoietin receptor required for growth and differentiation of megakaryocytic cells. Takatoku M, et al. **J Biol Chem** 1997 Mar 14;272(11):7259-63

A coiled-coil tetramerization domain of BCR-ABL is essential for the interactions of SH2-containing signal transduction molecules. Tauchi T, et al. **J Biol Chem** 1997 Jan 10;272(2):1389-94

Interleukin-4 signaling in B lymphocytes from patients with X-linked severe combined immunodeficiency. Taylor N, et al. **J Biol Chem** 1997 Mar 14;272(11):7314-9

Eps15 is constitutively oligomerized due to homophilic interaction of its coiled-coil region. Tebar F, et al. **J Biol Chem** 1997 Jun 13;272(24):15413-8

Signaling from the small GTP-binding proteins Rac1 and Cdc42 to the c-Jun N-terminal kinase/stress-activated protein kinase pathway. A role for mixed lineage kinase 3/protein-tyrosine kinase 1, a novel member of the mixed lineage kinase family. Teramoto H, et al. **J Biol Chem** 1996 Nov 1;271(44):27225-8

The small GTP-binding protein rho activates c-Jun N-terminal kinases/stress-activated protein kinases in human kidney 293T cells. Evidence for a Pak-independent signaling pathway. Teramoto H, et al. **J Biol Chem** 1996 Oct 18;271(42):25731-4

The role of a lymphoid-restricted, Grb2-like SH3-SH2-SH3 protein in T cell receptor signaling. Trüb T, et al. **J Biol Chem** 1997 Jan 10;272(2):894-902

Antisense repression of proto-oncogene c-Cbl enhances activation of the JAK-STAT pathway but not the ras pathway in epidermal growth factor receptor signaling. Ueno H, et al. **J Biol Chem** 1997 Mar 28;272(13):8739-43

p260/270 expressed in embryonic abdominal leg cells of Bombyx mori can transfer palmitate to peptides. Ueno K, et al. **J Biol Chem** 1997 May 23;272(21):13519-26

Central role of the BvgS receiver as a phosphorylated intermediate in a complex two-component phosphorelay. Uhl MA, et al. **J Biol Chem** 1996 Dec 27;271(52):33176-80

Epidermal growth factor induces ubiquitination of Eps15. van Delft S, et al. **J Biol Chem** 1997 May 30; 272(22):14013-6

Involvement of phosphatidylcholine-specific phospholipase C in platelet-derived growth factor-induced activation of the mitogen-activated protein kinase pathway in Rat-1 fibroblasts. van Dijk MC, et al. **J Biol Chem** 1997 Apr 25;272(17):11011-6

The thrombin receptor second cytoplasmic loop confers coupling to Gq-like G proteins in chimeric receptors. Additional evidence for a common transmembrane signaling and G protein coupling mechanism in G protein-coupled receptors. Verrall S, et al. **J Biol Chem** 1997 Mar 14;272(11):6898-902

Protein kinase A-anchoring inhibitor peptides arrest mammalian sperm motility. Vijayaraghavan S, et al. **J Biol Chem** 1997 Feb 21;272(8):4747-52

Activation of the hematopoietic progenitor kinase-1 (HPK1)-dependent, stress-activated c-Jun N-terminal kinase (JNK) pathway by transforming growth factor beta (TGF-beta)-activated kinase (TAK1), a kinase mediator of TGF beta signal transduction. Wang W, et al. **J Biol Chem** 1997 Sep 5;272(36):22771-5

The interleukin-1 receptor accessory protein (IL-1RAcP) is essential for IL-1-induced activation of interleukin-1 receptor-associated kinase (IRAK) and stress-activated protein kinases (SAP kinases). Wesche H, et al. **J Biol Chem** 1997 Mar 21;272(12):7727-31

Leptin receptor (OB-R) signaling. Cytoplasmic domain mutational analysis and evidence for receptor homo-oligomerization [published erratum appears in J Biol Chem 1997 May 2;272(18):12248] White DW, et al. **J Biol Chem** 1997 Feb 14;272(7):4065-71

The retinal specific protein RGS-r competes with the gamma subunit of cGMP phosphodiesterase for the alpha subunit of transducin and facilitates signal termination. Wieland T, et al. **J Biol Chem** 1997 Apr 4;272(14):8853-6

Pasteurella multocida toxin activates the inositol triphosphate signaling pathway in Xenopus oocytes via G(q)alpha-coupled phospholipase C-beta1. Wilson BA, et al. **J Biol Chem** 1997 Jan 10;272(2):1268-75

A single tyrosine residue in the membrane-proximal domain of the granulocyte-macrophage colony-stimulating factor, interleukin (IL)-3, and IL-5 receptor common beta-chain is necessary and sufficient for high affinity binding and signaling by all three ligands. Woodcock JM, et al. **J Biol Chem** 1996 Oct 18;271(42):25999-6006

Discrete steps in binding and signaling of interleukin-8 with its receptor. Wu L, et al. **J Biol Chem** 1996 Dec 6; 271(49):31202-9

First intracellular loop of the human cholecystokinin-A receptor is essential for cyclic AMP signaling in transfected HEK-293 cells. Wu V, et al. **J Biol Chem** 1997 Apr 4; 272(14):9037-42

Spacial compartmentalization of Ca2+ signaling complexes in pancreatic acini. Xu X, et al. **J Biol Chem** 1996 Oct 4;271(40):24684-90

Interaction of the adaptor protein Shc and the adhesion molecule cadherin. Xu Y, et al. **J Biol Chem** 1997 May 23;272(21):13463-6

Signal transduction pathways mediating parathyroid hormone stimulation of bone sialoprotein gene expression in osteoblasts. Yang R, et al. **J Biol Chem** 1996 Nov 22; 271(47):29839-46

Sphingosine 1-phosphate induces platelet activation through an extracellular action and shares a platelet surface receptor with lysophosphatidic acid. Yatomi Y, et al. **J Biol Chem** 1997 Feb 21;272(8):5291-7

Protein-tyrosine phosphatase SHP2 is positively linked to proteinase-activated receptor 2-mediated mitogenic pathway. Yu Z, et al. **J Biol Chem** 1997 Mar 14; 272(11):7519-24

Calpain regulation of cytoskeletal signaling complexes in von Willebrand factor-stimulated platelets. Distinct roles for glycoprotein Ib-V-IX and glycoprotein IIb-IIIa (integrin alphaIIbbeta3) in von Willebrand factor-induced signal transduction. Yuan Y, et al. **J Biol Chem** 1997 Aug 29; 272(35):21847-54

Protein kinase A (PKA)- and protein kinase C-phosphorylated glia maturation factor promotes the catalytic activity of PKA. Zaheer A, et al. **J Biol Chem** 1997 Feb 21;272(8):5183-6

Mutations of Ros differentially effecting signal transduction pathways leading to cell growth versus transformation. Zong CS, et al. **J Biol Chem** 1997 Jan 17;272(3):1500-6

Protein kinase C, but not tyrosine kinases or Ras, plays a critical role in angiotensin II-induced activation of Raf-1 kinase and extracellular signal-regulated protein kinases in cardiac myocytes. Zou Y, et al. **J Biol Chem** 1996 Dec 27;271(52):33592-7

Phosphorylation of the cytoplasmic tail of the PTH/PTHrP receptor. Blind E, et al. **J Bone Miner Res** 1996 May; 11(5):578-86

Altered signal transduction system in hypertrophied myocardium: angiotensin II stimulates collagen synthesis in hypertrophied hearts. Kawaguchi H, et al. **J Card Fail** 1996 Dec;2(4 Suppl):S13-9

Expression of human p140trk receptors in p140trk-deficient, PC12/endothelial cells results in nerve growth factor-induced signal transduction and DNA synthesis. Jiang H, et al. **J Cell Biochem** 1997 Aug 1;66(2):229-44

Mercuric chloride mediates a protein sulfhydryl modification-based pathway of signal transduction for activating Src kinase which is independent of the phosphorylation/dephosphorylation of a carboxyl terminal tyrosine. Pu MY, et al. **J Cell Biochem** 1996 Oct; 63(1):104-14

Proteases in Fas-mediated apoptosis. Zhivotovsky B, et al. **J Cell Biochem** 1997 Jan;64(1):43-9 (54 ref.)

Involvement of signal transduction pathways in lung cancer biology. Viallet J, et al. **J Cell Biochem Suppl** 1996; 24:228-36 (53 ref.)

Angiotensin II regulation of neuromodulation: downstream signaling mechanism from activation of mitogen-activated protein kinase. Lu D, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1609-17

Nuclear-cytoplasmic shuttling of the focal contact protein, zyxin: a potential mechanism for communication between sites of cell adhesion and the nucleus. Nix DA, et al.

J Cell Biol 1997 Sep 8;138(5):1139–47

Dynamics of ATP–induced calcium signaling in single mouse thymocytes. Ross PE, et al. **J Cell Biol** 1997 Sep 8; 138(5):987–98

Switches, latches, and amplifiers: common themes of G proteins and molecular motors. Vale RD. **J Cell Biol** 1996 Oct;135(2):291–302 (92 ref.)

Adenomatous polyposis coli tumor suppressor protein has signaling activity in Xenopus laevis embryos resulting in the induction of an ectopic dorsoanterior axis. Vleminckx K, et al. **J Cell Biol** 1997 Jan 27;136(2):411–20

Hormone–defined cell system for studying G–protein coupled receptor agonist–activated growth modulation: delta–opioid and serotonin–5HT2C receptor activation show opposite mitogenic effects. Agarwal D, et al. **J Cell Physiol** 1997 Apr;171(1):61–74

A–ring analogues of 1, 25–(OH)2D3 with low affinity for the vitamin D receptor modulate chondrocytes via membrane effects that are dependent on cell maturation. Greising DM, et al. **J Cell Physiol** 1997 Jun;171(3):357–67

Novel signal transduction and peptide specificity of glucagon–like peptide receptor in 3T3–L1 adipocytes. Montrose–Rafizadeh C, et al. **J Cell Physiol** 1997 Sep; 172(3):275–83

Interferon–gamma–induced JAK2 and STAT1 signalling in a human salivary gland cell line. Wu AJ, et al. **J Cell Physiol** 1997 Oct;173(1):110–4

Reversible tyrosine phosphorylation/dephosphorylation of proline–directed protein kinase FA/glycogen synthase kinase–3alpha in A431 cells. Yu JS, et al. **J Cell Physiol** 1997 Apr;171(1):95–103

Mechanisms for the coordination of intercellular calcium signaling in insulin–secreting cells. Cao D, et al. **J Cell Sci** 1997 Feb;110 (Pt 4):497–504

The Schizosaccharomyces pombe pyp1 protein tyrosine phosphatase negatively regulates nutrient monitoring pathways. Dal Santo P, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1919–25

Focal adhesion kinase: at the crossroads of signal transduction. Ilić D, et al. **J Cell Sci** 1997 Feb;110 (Pt 4):401–7 (72 ref.)

Fibroblast growth factor receptor signalling has a role in lobuloalveolar development of the mammary gland. Jackson D, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1261–8

v–Crk–induced cell transformation: changes in focal adhesion composition and signaling. Nievers MG, et al. **J Cell Sci** 1997 Feb;110 (Pt 3):389–99

Cell–type specific calcium signalling in a Drosophila epithelium. Rosay P, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1683–92

The checkpoint control for anaphase onset does not monitor excess numbers of spindle poles or bipolar spindle symmetry. Sluder G, et al. **J Cell Sci** 1997 Feb;110 (Pt 4):421–9

The wis1 signal transduction pathway is required for expression of cAMP–repressed genes in fission yeast. Stettler S, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1927–35

Multiple G proteins and phospholipase C isoforms in human myometrial cells: implication for oxytocin action. Phaneuf S, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2098–103

Phe576 plays an important role in the secondary structure and intracellular signaling of the human luteinizing hormone/chorionic gonadotropin receptor. Yano K, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2586–91

The inhibition of vascular smooth muscle cell migration by peptide and antibody antagonists of the alphavbeta3 integrin complex is reversed by activated calcium/calmodulin– dependent protein kinase II. Bilato C, et al. **J Clin Invest** 1997 Aug 1;100(3):693–704

Increased pressure on G protein–coupled receptor kinases [editorial; comment] Bouvier M. **J Clin Invest** 1997 May 1;99(9):2060–1. Comment on: J Clin Invest 1997 May 1;99(9):2087–93.

Yersinia proteins that target host cell signaling pathways. Fällman M, et al. **J Clin Invest** 1997 Mar 15;99(6):1153–7 (35 ref.)

EGF receptor activation stimulates endogenous gastrin gene expression in canine G cells and human gastric cell cultures. Ford MG, et al. **J Clin Invest** 1997 Jun 1;99(11):2762–71

The amino–terminal domain of the CCR2 chemokine receptor acts as coreceptor for HIV–1 infection. Frade JMR, et al. **J Clin Invest** 1997 Aug 1;100(3):497–502

Signals through gp130 upregulate bcl–x gene expression via STAT1–binding cis–element in cardiac myocytes. Fujio Y, et al. **J Clin Invest** 1997 Jun 15;99(12):2898–905

Selective activation of the mitogen–activated protein kinase subgroups c–Jun NH2 terminal kinase and p38 by IL–1 and TNF in human articular chondrocytes. Geng Y, et al. **J Clin Invest** 1996 Nov 15;98(10):2425–30

Signal transduction abnormalities in cancer mitogen–activated protein kinase regulation is altered in breast cancer [editorial; comment] Johnson GL. **J Clin Invest** 1997 Apr 1;99(7):1463–4. Comment on: J Clin Invest 1997 Apr 1;99(7):1478–83.

B cells from patients with systemic lupus erythematosus display abnormal antigen receptor–mediated early signal transduction events. Liossis SN, et al. **J Clin Invest** 1996 Dec 1;98(11):2549–57

The biology of PECAM–1. Newman PJ. **J Clin Invest** 1997 Jan 1;99(1):3–8 (49 ref.)

Common and distinct intracellular signaling pathways in human neutrophils utilized by platelet activating factor and FMLP. Nick JA, et al. **J Clin Invest** 1997 Mar 1; 99(5):975–86

Perspectives series: cell adhesion in vascular biology. Integrin signaling in vascular biology. Shattil SJ, et al. **J Clin Invest** 1997 Jul 1;100(1):1–5 (77 ref.)

Surface expression, polarization, and functional significance of CD73 in human intestinal epithelia. Strohmeier GR, et al. **J Clin Invest** 1997 Jun 1;99(11):2588–601

Stimulus coupling to transcription versus secretion in pheochromocytoma cells. Convergent and divergent signal transduction pathways and the crucial roles for route of cytosolic calcium entry and protein kinase C. Tang K, et al. **J Clin Invest** 1997 Sep 1:100(5):1180–92

Signal transduction in normal and neoplastic keratinocytes. Dlugosz AA. **J Dermatol** 1996 Nov;23(11):751–5 (40 ref.)

Inhibitors of the Ras signal transduction pathway as potential antitumour agents. Perrin D, et al. **J Enzyme Inhib** 1996 Oct;11(2):77–95 (103 ref.)

Distinct roles for signals relayed through the common cytokine receptor gamma chain and interleukin 7 receptor alpha chain in natural T cell development. Boesteanu A, et al. **J Exp Med** 1997 Jul 21;186(2):331–6

Limited role of CD28–mediated signals in T helper subset differentiation. Brown DR, et al. **J Exp Med** 1996 Sep 1; 184(3):803–10

RAFTK, a novel member of the focal adhesion kinase family, is phosphorylated and associates with signaling molecules upon activation of mature T lymphocytes. Ganju RK, et al. **J Exp Med** 1997 Mar 17;185(6):1055–63

Single cell analysis reveals regulated hierarchical T cell antigen receptor signaling thresholds and intraclonal heterogeneity for individual cytokine responses of CD4+ T cells. Itoh Y, et al. **J Exp Med** 1997 Aug 29;186(5):757–66

Signal transducer and activator of transcription–3 (STAT3) is constitutively activated in normal, self–renewing B–1 cells but only inducibly expressed in conventional B lymphocytes [see comments] Karras JG, et al. **J Exp Med** 1997 Mar 17;185(6):981–4.

Understanding the mechanisms of sustained signaling and T cell activation [comment] Lanzavecchia A. **J Exp Med** 1997 May 19;185(10):1717–9 (20 ref.). Comment on: J Exp Med 1997 May 19;185(10):1803–13. Comment on: J Exp Med 1997 May 19;185(10):1815–25. Comment on: J Exp Med 1997 May 19;185(10):1859–64.

TRAF–interacting protein (TRIP): a novel component of the tumor necrosis factor receptor (TNFR)– and CD30–TRAF signaling complexes that inhibits TRAF2–mediated NF–kappaB activation. Lee SY, et al. **J Exp Med** 1997 Apr 7;185(7):1275–85

Mouse Ly–49A interrupts early signaling events in natural killer cell cytotoxicity and functionally associates with the SHP–1 tyrosine phosphatase. Nakamura MC, et al. **J Exp Med** 1997 Feb 17;185(4):673–84

Signaling capacity of the T cell antigen receptor is negatively regulated by the PTP1C tyrosine phosphatase. Pani G, et al. **J Exp Med** 1996 Sep 1;184(3):839–52

Src homology 2 protein tyrosine phosphatase (SHPTP2)/Src homology 2 phosphatase 2 (SHP2) tyrosine phosphatase is a positive regulator of the interleukin 5 receptor signal transduction pathways leading to the prolongation of eosinophil survival. Pazdrak K, et al. **J Exp Med** 1997 Aug 18;186(4):561–8

Tyrosine phosphorylation of Pyk2 is selectively regulated by Fyn during TCR signaling. Qian D, et al. **J Exp Med** 1997 Apr 7;185(7):1253–9

Role of the multiple T cell receptor (TCR)–zeta chain signaling motifs in selection of the T cell repertoire. Shores EW, et al. **J Exp Med** 1997 Mar 3;185(5):893–900

Reconstitution of T cell receptor signaling in ZAP–70–deficient cells by retroviral transduction of the ZAP–70 gene. Taylor N, et al. **J Exp Med** 1996 Nov 1; 184(5):2031–6

Fc gamma R–dependent mitogen–activated protein kinase activation in leukocytes: a common signal transduction event necessary for expression of TNF–alpha and early activation genes. Trotta R, et al. **J Exp Med** 1996 Sep 1; 184(3):1027–35

The Vav binding site (Y315) in ZAP–70 is critical for antigen receptor–mediated signal transduction. Wu J, et al. **J Exp Med** 1997 May 19;185(10):1877–82

Kinetics and extent of T cell activation as measured with the calcium signal [see comments] Wülfing C, et al. **J Exp Med** 1997 May 19;185(10):1815–25. Comment in: J Exp Med 1997 May 19;185(10):1717–9.

Extracellular simian virus 40 induces an ERK/MAP kinase–independent signalling pathway that activates primary response genes and promotes virus entry. Dangoria NS, et al. **J Gen Virol** 1996 Sep;77 (Pt 9):2173–82

Modulation by food restriction of intracellular calcium signaling in parotid acinar cells of aging Fischer 344 rats. Olsen JG, et al. **J Gerontol A Biol Sci Med Sci** 1997 May; 52(3):B152–8

Effects of altered cardiac membrane fluidity on beta–adrenergic receptor signalling in rats with cirrhotic cardiomyopathy. Ma Z, et al. **J Hepatol** 1997 Apr; 26(4):904–12

Atrial natriuretic peptide–C receptor and membrane signalling in hypertension. Anand–Srivastava MB. **J Hypertens** 1997 Aug;15(8):815–26 (134 ref.)

Signal transduction in vascular smooth muscle. Alexander RW, et al. **J Hypertens Suppl** 1996 Dec;14(5):S51–4 (35 ref.)

Tyrosine kinase–dependent regulation of L–selectin expression through the Leu–13 signal transduction molecule: evidence for a protein kinase C–independent mechanism of L–selectin shedding. Frey M, et al. **J Immunol** 1997 Jun 1;158(11):5424–34

The IL–4 receptor alpha–chain cytoplasmic domain is sufficient for activation of JAK–1 and STAT6 and the induction of IL–4–specific gene expression. Reichel M, et al. **J Immunol** 1997 Jun 15;158(12):5860–7

Signaling by adhesion in human neutrophils: activation of the p72syk tyrosine kinase and formation of protein complexes containing p72syk and Src family kinases in neutrophils spreading over fibrinogen. Yan SR, et al. **J Immunol** 1997 Feb 15;158(4):1902–10

Identification of p55 tumor necrosis factor receptor–associated proteins that couple to signaling pathways not initiated by the death domain. Adam D, et al. **J Inflamm** 1995–96;47(1–2):61–6 (35 ref.)

Tumor necrosis factor (TNF) receptors in cellular signaling of soluble and membrane–expressed TNF. Grell M. **J Inflamm** 1995–96;47(1–2):8–17 (28 ref.)

Tumor necrosis factor receptor–1 signaling is required for differentiation of follicular dendritic cells, germinal center formation, and full antibody responses. Le Hir M, et al. **J Inflamm** 1995–96;47(1–2):76–80

Novel intracellular signaling function of prostaglandin H synthase–1 in NF–kappa B activation. Munroe DG, et al. **J Inflamm** 1995;45(4):260–8

Beta 2 (CD11/CD18) integrins can serve as signaling partners for other leukocyte receptors. Todd RF 3rd, et al. **J Lab Clin Med** 1997 May;129(5):492–8 (64 ref.)

Signaling by IL–2 and related cytokines: JAKs, STATs, and relationship to immunodeficiency. Johnston JA, et al. **J Leukoc Biol** 1996 Oct;60(4):441–52 (153 ref.)

Lipid messengers in the nervous system. Proceedings of a satellite symposium of the 15th meeting of the International Society for Neurochemistry. Tokyo, Japan, June 28–30, 1995. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):1–363

Protein kinase C isoforms and growth, differentiation and phosphatidylcholine turnover in human neuroblastoma cells. Cook HW, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):203–8

Receptor–mediated phosphoinositide metabolism in peripheral nerve and cultured Schwann cells. Eichberg J, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):187–95 (26 ref.)

Regulation of phospholipase D activity in neuroblastoma cells. Gustavsson L, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):229–35

Molecular aspects of the structures and functions of the prostaglandin E receptors. Ichikawa A, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):83–7

Ceramide: role in growth inhibitory cascades. Jayadev S, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):295–301 (30 ref.)

Effects of acid phospholipids on ARF activities: potential roles in membrane traffic. Kahn RA, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):209–14 (22 ref.)

Regulation of phospholipase D by low molecular weight GTP–binding proteins. Kanaho Y, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):223–7 (15 ref.)

Molecular properties of enzymes involved in diacylglycerol and phosphatidate metabolism. Kanoh H, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):245–50 (18 ref.)

Phospholipase D: role in signal transduction and membrane traffic. Liscovitch M. **J Lipid Mediat Cell Signal** 1996 Sep; 14(1–3):215–21 (38 ref.)

Phosphatidylcholine hydrolysis and protein kinase C activation for intracellular signaling network. Nakamura S. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):197–202 (16 ref.)

Inositol trisphosphate/Ca2+ as messengers of bradykinin B2 and muscarinic acetylcholine m1–m4 receptors in neuroblastoma–derived hybrid cells. Noda M, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):175–85 (44 ref.)

Intra– and intercellular calcium signaling in human neuroepithelioma cells. Palmer RK, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):169–74 (6 ref.)

Platelet–activating factor and somatostatin activate mitogen–activated protein kinase (MAP kinase) and arachidonate release. Shimizu T, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):103–8 (22 ref.)

Poly–phosphoinositide–mediated messengers in focal cerebral ischemia and reperfusion. Sun GY, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):137–45 (19 ref.)

New evidence for the occurrence of a glycolipid–mediated signal transduction system. Tsuji S, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):289–94 (9 ref.)

Acute regulation of the receptor–mediated phosphoinositide signal transduction pathway. Willars GB, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):157–68 (35 ref.)

Post–receptor signal transduction and regulation of 14(R),15(S)–epoxyeicosatrienoic acid (14,15–EET) binding in U–937 cells. Wong PY, et al. **J Lipid Mediat Cell Signal** 1997 Jul;16(3):155–69

Plasmalogen–selective phospholipase A2 and its role in signal transduction. Yang HC, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):9–13 (13 ref.)

Detection of intracellular signal transduction molecules in PBMC from rhesus macaques and sooty mangabeys. Brice GT, et al. **J Med Primatol** 1996 Jun;25(3):210–7

Ethanol activates maxi Ca2+-activated K+ channels of clonal pituitary (GH3) cells. Jakab M, et al. **J Membr Biol** 1997 Jun 1;157(3):237–45

G protein–mediated activation of a nonspecific cation current in cultured rat retinal pigment epithelial cells. Poyer JF, et al. **J Membr Biol** 1996 Sep;153(1):13–26

Targeting G protein–coupled receptor kinases to their receptor substrates. Stoffel RH 3rd, et al. **J Membr Biol** 1997 May 1;157(1):1–8 (49 ref.)

Allosteric regulation in a family of enterobacterial aspartate transcarbamylases: intramolecular transmission of regulatory signals in chimeric enzymes. Cunin R, et al. **J Mol Biol** 1996 Sep 20;262(2):258–69

Endothelin–1 and vasopressin activate Ca(2+)–permeable non–selective cation channels in aortic smooth muscle cells: mechanism of receptor–mediated Ca2+ influx. Nakajima T, et al. **J Mol Cell Cardiol** 1996 Apr;28(4):707–22

Beta–adrenoceptor–linked signal transduction in ischemic–reperfused heart and scavenging of oxyradicals. Persad S, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):545–58

Beta–adrenergic receptor signalling in stunned myocardium of conscious pigs. Sato S, et al. **J Mol Cell Cardiol** 1997 May;29(5):1387–400

Multiple signal transduction pathways regulate clusterin (gp 80) gene expression in MDCK cells. Gutacker C, et al. **J Mol Endocrinol** 1996 Oct;17(2):109–19

The role of phosphoinositide 3–kinase in insulin signalling. Shepherd PR, et al. **J Mol Endocrinol** 1996 Dec; 17(3):175–84 (92 ref.)

Protein kinase mediators of integrin signal transduction. Hannigan GE, et al. **J Mol Med** 1997 Jan;75(1):35–44 (116 ref.)

The role of tyrosine phosphorylation in angiotensin II mediated intracellular signaling and cell growth. Schieffer B, et al. **J Mol Med** 1996 Feb;74(2):85–91 (57 ref.)

STAT6: its role in interleukin 4–mediated biological functions. Takeda K, et al. **J Mol Med** 1997 May; 75(5):317–26 (120 ref.)

Cardiotrophin–1 and the role of gp130–dependent signaling pathways in cardiac growth and development. Wollert KC, et al. **J Mol Med** 1997 Jul;75(7):492–501 (98 ref.)

Abrogation of cisplatin–induced programmed cell death in human breast cancer cells by epidermal growth factor antisense RNA [see comments] Dixit M, et al. **J Natl Cancer Inst** 1997 Mar 5;89(5):365–73. Comment in: J Natl Cancer Inst 1997 Mar 5;89(5):341–3.

A phosphorylation cascade in the basal ganglia of the mammalian brain: regulation by the D–1 dopamine receptor. A mathematical model of known biochemical reactions. Kebabian JW. **J Neural Transm Suppl** 1997; 49:145–53 (14 ref.)

Signaling pathway downstream of GABAA receptor in the growth cone. Fukura H, et al. **J Neurochem** 1996 Oct; 67(4):1426–34

Two intracellular signaling pathways for the dopamine D3 receptor: opposite and synergistic interactions with cyclic AMP. Griffon N, et al. **J Neurochem** 1997 Jan;68(1):1–9

Oligodendroglial signal transduction systems are regulated by neuronal contact. He M, et al. **J Neurochem** 1996 Oct; 67(4):1491–9

Induction of a distinct morphology and signal transduction in TrkB/PC12 cells by nerve growth factor and brain–derived neurotrophic factor. Iwasaki Y, et al. **J Neurochem** 1997 Mar;68(3):927–34

Chronic activation of the cyclic AMP signaling pathway promotes development and long–term survival of mesencephalic dopaminergic neurons. Michel PP, et al. **J Neurochem** 1996 Oct;67(4):1633–42

Tyrosine phosphorylation of extracellular signal–regulated protein kinase 4 in response to growth factors. Peng X, et al. **J Neurochem** 1996 Mar;66(3):1191–7

The C terminal tail of the histamine H2 receptor contains positive and negative signals important for signal transduction and receptor down–regulation. Smit MJ, et al. **J Neurochem** 1996 Nov;67(5):1791–800

Role of extracellular signal–regulated protein kinases 1 and 2 in oligodendroglial process extension. Stariha RL, et al. **J Neurochem** 1997 Mar;68(3):945–53

Interleukin–6 induces expression of peripherin and cooperates with Trk receptor signaling to promote neuronal differentiation in PC12 cells. Sterneck E, et al. **J Neurochem** 1996 Oct;67(4):1365–74

Role of Na(+)–Ca2+ exchanger in agonist–induced Ca2+ signaling in cultured rat astrocytes. Takuma K, et al. **J Neurochem** 1996 Nov;67(5):1840–5

Intrinsic injury signals enhance growth, survival, and excitability of Aplysia neurons. Ambron RT, et al. **J Neurosci** 1996 Dec 1;16(23):7469–77

Signal transduction mediated by the truncated trkB receptor isoforms, trkB.T1 and trkB.T2. Baxter GT, et al. **J Neurosci** 1997 Apr 15;17(8):2683–90

Action potential–dependent regulation of gene expression: temporal specificity in ca2+, cAMP–responsive element binding proteins, and mitogen–activated protein kinase signaling. Fields RD, et al. **J Neurosci** 1997 Oct 1; 17(19):7252–66

Endocytosis of activated TrkA: evidence that nerve growth factor induces formation of signaling endosomes. Grimes ML, et al. **J Neurosci** 1996 Dec 15;16(24):7950–64

Expression and clustered distribution of an inwardly rectifying potassium channel, KAB–2/Kir4.1, on mammalian retinal Müller cell membrane: their regulation by insulin and laminin signals. Ishii M, et al. **J Neurosci** 1997 Oct 15;17(20):7725–35

GABA activity mediating cytosolic Ca2+ rises in developing neurons is modulated by cAMP–dependent signal transduction. Obrietan K, et al. **J Neurosci** 1997 Jun 15; 17(12):4785–99

Behavioral analysis of signals that guide learned changes in the amplitude and dynamics of the vestibulo–ocular reflex. Raymond JL, et al. **J Neurosci** 1996 Dec 1;16(23):7791–802

Unique postsynaptic signaling at the hair cell efferent synapse permits calcium to evoke changes on two time scales. Sridhar TS, et al. **J Neurosci** 1997 Jan 1;17(1):428–37

Postsynaptic calcineurin activity downregulates synaptic transmission by weakening intracellular Ca2+ signaling mechanisms in hippocampal CA1 neurons. Wang JH, et al. **J Neurosci** 1997 Jun 15;17(12):4600–11

Impact of cytoplasmic calcium buffering on the spatial and temporal characteristics of intercellular calcium signals in astrocytes. Wang Z, et al. **J Neurosci** 1997 Oct 1; 17(19):7359–71

Studies on the role of fibroblast growth factor signaling in neurogenesis using conjugated/aged animal caps and dorsal ectoderm–grafted embryos. Xu RH, et al. **J Neurosci** 1997 Sep 15;17(18):6892–8

Dopamine D1 receptor actions in layers V–VI rat prefrontal cortex neurons in vitro: modulation of dendritic–somatic signal integration. Yang CR, et al. **J Neurosci** 1996 Mar 1;16(5):1922–35

Neural cell adhesion molecule L1: signaling pathways and growth cone motility. Kamiguchi H, et al. **J Neurosci Res** 1997 Jul 1;49(1):1–8 (81 ref.)

Age–associated alterations in hippocampal and basal forebrain nuclear factor kappa B activity. Toliver–Kinsky T, et al. **J Neurosci Res** 1997 Jun 15;48(6):580–7

AP–1 mediates trans–synaptic induction of tyrosine hydroxylase gene expression in adrenal medulla but not in superior cervical ganglia. Trocmé C, et al. **J Neurosci Res** 1997 Jun 15;48(6):489–98

Signaling pathways in virus–induced CNS inflammation. Dietzschold B, et al. **J Neurovirol** 1997 May;3 Suppl 1:S58–9

Age–related deficits in the cerebellar beta adrenergic signal transduction cascade in Fischer 344 rats. Gould TJ, et al. **J Pharmacol Exp Ther** 1997 May;281(2):965–71

Signal transduction mechanism(s) involved in prostacyclin production elicited by acetylcholine in coronary endothelial cells of rabbit heart. Kan H, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):113–22

Biphasic alterations in cardiac beta–adrenoceptor signal transduction mechanism due to oxyradicals. Persad S, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1623–31

Proceedings of the scientific meetings of the Physiology Society. November 1996 and January 1997. Abstracts. **J Physiol (Lond)** 1997 Feb;499:1P–133P, 1S–22S

Imaging the hierarchical Ca2+ signalling system in HeLa cells. Bootman M, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):307–14

IL–1 beta transduces different signals than IL–1 alpha leading to class II antigen expression on beta–insulinoma RIN–5AH cells through specific receptors. Vassiliadis S, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):211–25

Estrogen receptor, growth factor receptor and protooncogene protein activities and possible signal transduction crosstalk in estrogen dependent and independent breast cancer cell lines. Mohamood AS, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):1–17

Overview: temporal and spatial relationships in shear stress–mediated endothelial signalling. Davies PF. **J Vasc Res** 1997 May–Jun;34(3):208–11 (21 ref.)

Signal transduction mechanisms mediating the vascular actions of endothelin. Douglas SA, et al. **J Vasc Res** 1997 May–Jun;34(3):152–64 (123 ref.)

Calcium signalling and autacoid production in endothelial cells are modulated by changes in tyrosine kinase and phosphatase activity. Fleming I, et al. **J Vasc Res** 1996 May–Jun;33(3):225–34

Cytochrome P450 metabolites of arachidonic acid as intracellular signaling molecules in vascular tissue. Harder DR, et al. **J Vasc Res** 1997 May–Jun;34(3):237–43 (35 ref.)

Potential cellular signaling mechanisms mediating upregulation of endothelial nitric oxide production by estrogen. Kauser K, et al. **J Vasc Res** 1997 May–Jun; 34(3):229–36 (72 ref.)

Mechanotransduction in endothelial cells: temporal signaling events in response to shear stress. Takahashi M, et al. **J Vasc Res** 1997 May–Jun;34(3):212–9 (55 ref.)

A Symposium on Signal Transduction in the Endothelium. Vancouver, September 9–11, 1996. van Breemen C, et al. **J Vasc Res** 1997 May–Jun;34(3):149–51

Cellular mechanisms of cyclic nucleotide–induced vasorelaxation. Brophy CM, et al. **J Vasc Surg** 1997 Feb; 25(2):390–7

Enhanced downregulation of Lck–mediated signal transduction by a Y114 mutation of herpesvirus Saimiri tip. Guo J, et al. **J Virol** 1997 Sep;71(9):7092–6

Restoration of interferon responses of adenovirus E1A–expressing HT1080 cell lines by overexpression of p48 protein. Leonard GT, et al. **J Virol** 1997 Jul; 71(7):5095–101

Murine coronavirus packaging signal confers packaging to nonviral RNA. Woo K, et al. **J Virol** 1997 Jan;71(1):824–7

Alterations of signal transduction system in heart failure. Kawaguchi H, et al. **Jpn Heart J** 1997 May;38(3):317–32 (48 ref.)

Humoral factors of ascites sarcoma 180 stimulate osteoblastic UMR 106–01 cell proliferation and bone resorption via signal transduction pathways, which are clearly different from those of parathyroid hormone. Suzuki K, et al. **Jpn J Pharmacol** 1996 Oct;72(2):149–59

Channels, Transport and Regulation of Metabolic State. Symposium proceedings. Okazaki, Japan, February 3–4, 1997. **Jpn J Physiol** 1997;47 Suppl 1:S1–64

Coordination in oscillatory Ca2+ signalling in endocrine and exocrine pancreas. Kanno T, et al. **Jpn J Physiol** 1997;47 Suppl 1:S16–7

Cellular approach to auditory signal transmission. Koyano K, et al. **Jpn J Physiol** 1996 Aug;46(4):289–310 (195 ref.)

GLP–1 (7–36) amide activates L–type Ca2+ channels of pancreatic B–cells through c–AMP signaling. Suga S, et al. **Jpn J Physiol** 1997;47 Suppl 1:S13–4

Involvement of the cyclin–dependent kinase inhibitor p27Kip1 in negative signaling through the antigen–receptor of B lymphocytes. Han H, et al. **Leukemia** 1997 Apr;11 Suppl 3:367–9

Regulation of IL–2 signaling. Higuchi M, et al. **Leukemia** 1997 Apr;11 Suppl 3:416–7

Cytokine regulation: an overview. Miyajima A. **Leukemia** 1997 Apr;11 Suppl 3:413–5 (5 ref.)

Signal transduction by the GM–CSF, IL–3 and IL–5 receptors. Miyajima A, et al. **Leukemia** 1997 Apr;11 Suppl 3:418–22 (16 ref.)

Regulation of megakaryocytopoiesis by thrombopoietin and stromal cells. Nagata Y, et al. **Leukemia** 1997 Apr;11 Suppl 3:435–8

The signal transduction through Grb2/Ash in hematopoietic cells. Odai H, et al. **Leukemia** 1997 Apr;11 Suppl 3:405–7

Bcl–2 and Bcl–xL block apoptosis as well as necrosis: possible involvement of common mediators in apoptotic and necrotic signal transduction pathways. Tsujimoto Y, et al. **Leukemia** 1997 Apr;11 Suppl 3:380–2

Roles of JAK kinase in human GM–CSF receptor signals. Watanabe S, et al. **Leukemia** 1997 Apr;11 Suppl 3:76–8

P210 Bcr–Abl interacts with the interleukin–3 beta c subunit and constitutively activates Jak2. Wilson–Rawls J, et al. **Leukemia** 1997 Apr;11 Suppl 3:428–31

Activation of the JAK1–STAT5 pathway by binding of the Friend virus gp55 glycoprotein to the erythropoietin receptor. Yamamura Y, et al. **Leukemia** 1997 Apr;11 Suppl 3:432–4

Emerging paradigms in granulocyte–macrophage colony–stimulating factor signaling. Gomez–Cambronero J, et al. **Life Sci** 1996;59(25–26):2099–111 (64 ref.)

CSK associates with the TCR zeta and epsilon chains via its SH2 domain; a mechanism for turning off TCR signaling. Catipović B. **Lijec Vjesn** 1996 Nov–Dec; 118(11–12):264–71

cAMP signaling mechanisms with aging in rats. Chin JH, et al. **Mech Ageing Dev** 1996 Jan 5;86(1):11–26

Impairment of signal transduction in T cells from old mice. Utsuyama M, et al. **Mech Ageing Dev** 1997 Feb; 93(1–3):131–44

The dynamics of neurogenic signalling underlying bristle development in Drosophila melanogaster. Parks AL, et al. **Mech Dev** 1997 Apr;63(1):61–74

The enamel knot as a signaling center in the developing mouse tooth. Vaahtokari A, et al. **Mech Dev** 1996 Jan; 54(1):39–43

Modeling signal transduction in normal and cancer cells using complex adaptive systems. Schwab ED, et al. **Med Hypotheses** 1997 Feb;48(2):111–23 (55 ref.)

Oscillatory Ca2+ signaling in somatostatin–producing cells from the human pancreas. Berts A, et al. **Metabolism** 1997 Apr;46(4):366–9

Somatostatin receptor subtypes: specific expression and signaling properties. Schonbrunn A, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):8–11 (24 ref.)

Increased intracellular calcium and altered phorbol dibutyrate binding to intact platelets in young subjects with insulin–dependent and non–insulin–dependent diabetes mellitus. Takaya J, et al. **Metabolism** 1997 Aug;46(8):949–53

Nitric oxide signaling in the nervous system. Brenman JE, et al. **Methods Enzymol** 1996;269:119–29 (78 ref.)

Nitric oxide–cyclic GMP signal transduction system. Hobbs AJ, et al. **Methods Enzymol** 1996;269:134–48 (13 ref.)

Nitric oxide–cyclic GMP pathway in brain slices. Southam E, et al. **Methods Enzymol** 1996;269:129–33 (13 ref.)

Use of L–arginine and its analogs to study nitric oxide pathway in humans. Vallance P. **Methods Enzymol** 1996; 269:453–9 (25 ref.)

Use of antisense–generating plasmids to probe the function of signal transduction proteins in primary neurons. Abogadie FC, et al. **Methods Mol Biol** 1997;83:217–25 (7 ref.)

Heterologous expression of receptors and signaling proteins in adult mammalian sympathetic neurons by microinjection. Ikeda SR. **Methods Mol Biol** 1997;83:191–202 (15 ref.)

Cytokine–independent proliferation of IL–2–nonproducing CTL clones in association with high TCR–signal transduction responses. Nagase F, et al. **Microbiol Immunol** 1996;40(7):505–11

Kinase cascades regulating entry into apoptosis. Anderson P. **Microbiol Mol Biol Rev** 1997 Mar;61(1):33–46 (189 ref.)

Signal transduction and virulence regulation in Bordetella

pertussis. Beier D, et al. **Microbiologia** 1996 Jun; 12(2):185–96 (60 ref.)

Microbial utilization of human signalling molecules. Virji M. **Microbiology** 1996 Dec;142 (Pt 12):3319–36 (107 ref.)

Direct regulation of the Na,K pump by signal transduction mechanisms. Middleton JP. **Miner Electrolyte Metab** 1996; 22(5–6):293–302 (84 ref.)

Positive and negative tissue–specific signaling by a nematode epidermal growth factor receptor. Lesa GM, et al. **Mol Biol Cell** 1997 May;8(5):779–93

c–kit receptor signaling through its phosphatidylinositide–3'–kinase–binding site and protein kinase C: role in mast cell enhancement of degranulation, adhesion, and membrane ruffling. Vosseller K, et al. **Mol Biol Cell** 1997 May;8(5):909–22

An essential role of the yeast pheromone–induced Ca2+ signal is to activate calcineurin. Withee JL, et al. **Mol Biol Cell** 1997 Feb;8(2):263–77

Identification of detergent–resistant plasma membrane microdomains in dictyostelium: enrichment of signal transduction proteins. Xiao Z, et al. **Mol Biol Cell** 1997 May;8(5):855–69

Receptor–'Ck' dependent signalling regulates the LDL–receptor gene transcription. Goel R, et al. **Mol Cell Biochem** 1997 Apr;169(1–2):79–83

Insulin–like actions of vanadate are mediated in an insulin–receptor–independent manner via non–receptor protein tyrosine kinases and protein phosphotyrosine phosphatases. Shechter Y, et al. **Mol Cell Biochem** 1995 Dec 6–20;153(1–2):39–47

Phosphorylation of tyrosine 720 in the platelet–derived growth factor alpha receptor is required for binding of Grb2 and SHP–2 but not for activation of Ras or cell proliferation. Bazenet CE, et al. **Mol Cell Biol** 1996 Dec; 16(12):6926–36

The signal response of IkappaB alpha is regulated by transferable N– and C–terminal domains. Brown K, et al. **Mol Cell Biol** 1997 Jun;17(6):3021–7

Activation of the STAT signaling pathway can cause expression of caspase 1 and apoptosis. Chin YE, et al. **Mol Cell Biol** 1997 Sep;17(9):5328–37

The DNA binding and activation domains of Gal4p are sufficient for conveying its regulatory signals. Ding WV, et al. **Mol Cell Biol** 1997 May;17(5):2538–49

Activation of Jak2 catalytic activity requires phosphorylation of Y1007 in the kinase activation loop. Feng J, et al. **Mol Cell Biol** 1997 May;17(5):2497–501

Functional interference between hypoxia and dioxin signal transduction pathways: competition for recruitment of the Arnt transcription factor. Gradin K, et al. **Mol Cell Biol** 1996 Oct;16(10):5221–31

Involvement of the protein tyrosine phosphatase SHP–1 in Ras–mediated activation of the mitogen–activated protein kinase pathway. Krautwald S, et al. **Mol Cell Biol** 1996 Nov;16(11):5955–63

The Ras–JNK pathway is involved in shear–induced gene expression. Li YS, et al. **Mol Cell Biol** 1996 Nov; 16(11):5947–54

3pK, a novel mitogen–activated protein (MAP) kinase–activated protein kinase, is targeted by three MAP kinase pathways. Ludwig S, et al. **Mol Cell Biol** 1996 Dec; 16(12):6687–97

Convergence of mitogenic signalling cascades from diverse classes of receptors at the cyclin D–cyclin–dependent kinase–pRb–controlled G1 checkpoint. Lukas J, et al. **Mol Cell Biol** 1996 Dec;16(12):6917–25

Stimulation of C2C12 myoblast growth by basic fibroblast growth factor and insulin–like growth factor 1 can occur via mitogen–activated protein kinase–dependent and –independent pathways. Milasincic DJ, et al. **Mol Cell Biol** 1996 Nov;16(11):5964–73

High–intensity Raf signal causes cell cycle arrest mediated by p21Cip1. Sewing A, et al. **Mol Cell Biol** 1997 Sep; 17(9):5588–97

A hierarchical network of interreceptor interactions determines signal transduction by Neu differentiation factor/neuregulin and epidermal growth factor. Tzahar E, et al. **Mol Cell Biol** 1996 Oct;16(10):5276–87

The insulin–induced signalling pathway leading to S6 and initiation factor 4E binding protein 1 phosphorylation bifurcates at a rapamycin–sensitive point immediately upstream of p70s6k. von Manteuffel SR, et al. **Mol Cell Biol** 1997 Sep;17(9):5426–36

Voltage–insensitive Ca2+ channels and Ca2+/calmodulin–dependent protein kinases propagate signals from endothelin–1 receptors to the c–fos promoter. Wang Y, et al. **Mol Cell Biol** 1996 Oct;16(10):5915–23

Heteromeric and homomeric interactions correlate with signaling activity and functional cooperativity of Smad3 and Smad4/DPC4. Wu RY, et al. **Mol Cell Biol** 1997 May; 17(5):2521–8

The kinase, SH3, and SH2 domains of Lck play critical roles in T–cell activation after ZAP–70 membrane localization. Yamasaki S, et al. **Mol Cell Biol** 1996 Dec;16(12):7151–60

Crosstalk during Ca2+–, cAMP–, and glucocorticoid–induced gene expression in lymphocytes. Dowd DR, et al. **Mol Cell Endocrinol** 1997 Apr 4; 128(1–2):29–37

A deficiency in prothoracicotropic hormone transduction pathway during the early last larval instar of Bombyx mori. Gu SH, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):99–105

hCG–receptor binding and transmembrane signaling. Puett D, et al. **Mol Cell Endocrinol** 1996 Dec 20;125(1–2):55–64 (61 ref.)

Effect of modification of all loop regions in the alpha– and beta–subunits of human choriogonadotropin on its signal transduction activity. Shao K, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):173–82

Target of cockroach allatostatin in the pathway of juvenile hormone biosynthesis. Sutherland TD, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):115–23

Insect adipokinetic hormone stimulates inositol phosphate metabolism: roles for both Ins(1,4,5)P3 and Ins(1,3,4,5)P4 in signal transduction? Van Marrewijk WJ, et al. **Mol Cell Endocrinol** 1996 Sep 18;122(2):141–50

Molecular and cellular responses to DNA damage in a murine pituitary adenoma cell line. Woloschak M, et al. **Mol Cell Endocrinol** 1996 May 17;119(1):61–8

Telling axons where to grow: a role for Eph receptor tyrosine kinases in guidance. Brambilla R, et al. **Mol Cell Neurosci** 1995 Dec;6(6):487–95 (65 ref.)

Notch signaling in vertebrate development and disease. Gridley T. **Mol Cell Neurosci** 1997;9(2):103–8 (43 ref.)

The ins and outs of notch signaling. Weinmaster G. **Mol Cell Neurosci** 1997;9(2):91–102 (118 ref.)

Modulation of glial cell signaling by adenosine and pharmacological reinforcement. A neuroprotective strategy? Schubert P, et al. **Mol Chem Neuropathol** 1996 May–Aug;28(1–3):185–90 (19 ref.)

Induction of promiscuous G protein coupling of the follicle–stimulating hormone (FSH) receptor: a novel mechanism for transducing pleiotropic actions of FSH isoforms. Arey BJ, et al. **Mol Endocrinol** 1997 May; 11(5):517–26

Inhibition of retinoid signaling in transgenic mice alters lipid processing and disrupts epidermal barrier function. Attar PS, et al. **Mol Endocrinol** 1997 Jun;11(6):792–800

The six N–linked carbohydrates of the lutropin/choriogonadotropin receptor are not absolutely required for correct folding, cell surface expression, hormone binding, or signal transduction. Davis DP, et al. **Mol Endocrinol** 1997 May;11(5):550–62

The leptin receptor activates janus kinase 2 and signals for proliferation in a factor–dependent cell line. Ghilardi N, et al. **Mol Endocrinol** 1997 Apr;11(4):393–9

Coupling specificity between somatostatin receptor sst2A and G proteins: isolation of the receptor–G protein complex with a receptor antibody. Gu YZ, et al. **Mol Endocrinol** 1997 May;11(5):527–37

Transcriptional repression of the alpha–subunit gene by androgen receptor occurs independently of DNA binding but requires the DNA–binding and ligand–binding domains of the receptor. Heckert LL, et al. **Mol Endocrinol** 1997 Sep;11(10):1497–506

Nuclear receptor coactivators and corepressors. Horwitz KB, et al. **Mol Endocrinol** 1996 Oct;10(10):1167–77 (87 ref.)

Expression of the parathyroid hormone–related peptide gene in retinoic acid–induced differentiation: involvement of ETS and Sp1. Karperien M, et al. **Mol Endocrinol** 1997 Sep;11(10):1435–48

Insulin–induced mitogen–activated protein (MAP) kinase phosphatase–1 (MKP–1) attenuates insulin–stimulated MAP kinase activity: a mechanism for the feedback inhibition of insulin signaling. Kusari AB, et al. **Mol Endocrinol** 1997 Sep;11(10):1532–43

The dynamics of the transcriptional response to cyclic adenosine 3',5'–monophosphate: recurrent inducibility and refractory phase. Lamas M, et al. **Mol Endocrinol** 1997 Sep; 11(10):1415–24

Evidence for ligand–dependent intramolecular folding of the AF–2 domain in vitamin D receptor–activated transcription and coactivator interaction. Masuyama H, et al. **Mol Endocrinol** 1997 Sep;11(10):1507–17

Fibroblast growth factor receptor signaling activates the human interstitial collagenase promoter via the bipartite Ets–AP1 element. Newberry EP, et al. **Mol Endocrinol** 1997 Jul;11(8):1129–44

Comparison of 6–s–cis– and 6–s–trans–locked analogs of 1alpha,25–dihydroxyvitamin D3 indicates that the 6–s–cis conformation is preferred for rapid nongenomic biological responses and that neither 6–s–cis– nor 6–s–trans–locked analogs are preferred for genomic biological responses. Norman AW, et al. **Mol Endocrinol** 1997 Sep; 11(10):1518–31

Dominant negative and cooperative effects of mutant forms of prolactin receptor. Perrot–Applanat M, et al. **Mol Endocrinol** 1997 Jul;11(8):1020–32

Mouse estrogen receptor beta forms estrogen response element–binding heterodimers with estrogen receptor alpha. Pettersson K, et al. **Mol Endocrinol** 1997 Sep; 11(10):1486–96

Luteinizing hormone/choriogonadotropin–dependent, cholera toxin–catalyzed adenosine 5'–diphosphate (ADP)–ribosylation of the long and short forms of Gs alpha and pertussis toxin–catalyzed ADP–ribosylation of Gi alpha•. Rajagopalan–Gupta RM, et al. **Mol Endocrinol** 1997 May;11(5):538–49

Determinants of subcellular distribution of the glucocorticoid receptor. Sackey FN, et al. **Mol Endocrinol** 1996 Oct; 10(10):1191–205

Phosphoinositide 3–kinase is required for insulin–induced but not for growth hormone– or hyperosmolarity–induced glucose uptake in 3T3–L1 adipocytes. Sakaue H, et al. **Mol Endocrinol** 1997 Sep;11(10):1552–62

The IRS–2 gene on murine chromosome 8 encodes a unique signaling adapter for insulin and cytokine action. Sun XJ, et al. **Mol Endocrinol** 1997 Feb;11(2):251–62

Inefficient secretion of human H27A–prolactin, a mutant that does not bind Zn2+. Sun Z, et al. **Mol Endocrinol** 1997 Sep;11(10):1544–51

Identification of growth hormone receptor (GHR) tyrosine residues required for GHR phosphorylation and JAK2 and STAT5 activation. Wang X, et al. **Mol Endocrinol** 1996 Oct;10(10):1249–60

Increased expression of Gs(alpha) enhances activation of the adenylyl cyclase signal transduction cascade. Yang X, et al. **Mol Endocrinol** 1997 Jul;11(8):1053–61

Conserved sequence motifs in the unorthodox BvgS two–component sensor protein of Bordetella pertussis. Beier D, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):169–76

Calcium influx pathways in human spermatozoa. Foresta C, et al. **Mol Hum Reprod** 1997 Jan;3(1):1–4 (38 ref.)

Alternative binding of p56lck and phosphatidylinositol 3–kinase in T cells by sulfhydryl oxidation: implication of aberrant signaling due to oxidative stress in T lymphocytes. Nakamura K, et al. **Mol Immunol** 1996 Jul;33(10):855–65

The critical role of p38 MAP kinase in T cell HIV–1 replication. Cohen PS, et al. **Mol Med** 1997 May; 3(5):339–46

Signal transduction–based strategies for the treatment of chronic myelogenous leukemia. Senechal K, et al. **Mol Med Today** 1996 Dec;2(12):503–9 (43 ref.)

Regulation of targeting signals in membrane proteins. [review] Stanley KK. **Mol Membr Biol** 1996 Jan–Mar; 13(1):19–27 (108 ref.)

Methylation segments are not required for chemotactic signalling by cytoplasmic fragments of Tsr, the methyl–accepting serine chemoreceptor of Escherichia coli. Ames P, et al. **Mol Microbiol** 1996 Feb;19(4):737–46

'Locked–on' and 'locked–off' signal transduction mutations in the periplasmic domain of the Escherichia coli NarQ and NarX sensors affect nitrate– and nitrite–dependent regulation by NarL and NarP. Chiang RC, et al. **Mol Microbiol** 1997 Jun;24(5):1049–60

Mutational activation of the Cpx signal transduction pathway of Escherichia coli suppresses the toxicity conferred by certain envelope–associated stresses. Cosma CL, et al. **Mol Microbiol** 1995 Nov;18(3):491–505

A missense mutation in rpoD results in an A–signalling defect in Myxococcus xanthus. Davis JM, et al. **Mol Microbiol** 1995 Dec;18(5):943–52

EspA, a protein secreted by enteropathogenic Escherichia coli, is required to induce signals in epithelial cells. Kenny B, et al. **Mol Microbiol** 1996 Apr;20(2):313–23

Quorum sensing by peptide pheromones and two–component signal–transduction systems in Gram–positive bacteria. Kleerebezem M, et al. **Mol Microbiol** 1997 Jun; 24(5):895–904 (38 ref.)

SpoIVB has two distinct functions during spore formation in Bacillus subtilis. Oke V, et al. **Mol Microbiol** 1997 Jan; 23(2):223–30

Phosphotransfer circuitry of the putative multi–signal transducer, ArcB, of Escherichia coli: in vitro studies with mutants. Tsuzuki M, et al. **Mol Microbiol** 1995 Dec; 18(5):953–62

Ste50p sustains mating pheromone–induced signal transduction in the yeast Saccharomyces cerevisiae. Xu G, et al. **Mol Microbiol** 1996 May;20(4):773–83

Multiple signalling pathways trigger the exquisite sensitivity of yeast gluconeogenic mRNAs to glucose. Yin Z, et al. **Mol Microbiol** 1996 May;20(4):751–64

Bacterial signalling involving eukaryotic–type protein kinases. Zhang CC. **Mol Microbiol** 1996 Apr;20(1):9–15 (32 ref.)

Role of Drosophila TRP in inositide–mediated Ca2+ entry. Minke B, et al. **Mol Neurobiol** 1996 Apr;12(2):163–80 (83 ref.)

Substitution of charged amino acid residues in transmembrane regions 6 and 7 affect ligand binding and signal transduction of the prostaglandin EP3 receptor. Audoly L, et al. **Mol Pharmacol** 1997 Jan;51(1):61–8

mu–Opioid receptor–stimulated guanosine–5'–O–(gamma–thio)–triphosphate binding in rat thalamus and cultured cell lines: signal transduction mechanisms underlying agonist efficacy. Selley DE, et al. **Mol Pharmacol** 1997 Jan;51(1):87–96

Colloquium on signaling and molecular structure in pharmacology (La Jolla, California, March 11–12, 1997). Taylor P, et al. **Mol Pharmacol** 1997 Jul;52(1):1–5

Role for Ca2+ channels in the signal transduction pathway leading to acrosomal exocytosis in human spermatozoa. O'Toole CM, et al. **Mol Reprod Dev** 1996 Oct;45(2):204–11

Raf revealed in life–or–death decisions [news; comment] Pritchard C, et al. **Nat Genet** 1997 Jul;16(3):214–5. Comment on: Nat Genet 1997 Jul;16(3):293–7.

beta–Catenin––one player, two games [news] Resnik E. **Nat Genet** 1997 May;16(1):9–11 (18 ref.)

Activation of cAMP–PKA signaling in vivo inhibits smooth muscle cell proliferation induced by vascular injury. Indolfi C, et al. **Nat Med** 1997 Jul;3(7):775–9

Drosophila CBP is a co–activator of cubitus interruptus in hedgehog signalling. Akimaru H, et al. **Nature** 1997 Apr 17;386(6626):735–8

The AM and FM of calcium signalling [news; comment] Berridge MJ. **Nature** 1997 Apr 24;386(6627):759–60. Comment on: Nature 1997 Apr 24;386(6627):855–8.

Mechanosensors in plants [letter] Bögre L, et al. **Nature** 1996 Oct 10;383(6600):489–90

pangolin encodes a Lef–1 homologue that acts downstream of Armadillo to transduce the Wingless signal in Drosophila. Brunner E, et al. **Nature** 1997 Feb 27; 385(6619):829–33

Signal transduction. Three paths to stress relief [news; comment] Canman CE, et al. **Nature** 1996 Nov 21; 384(6606):213–4. Comment on: Nature 1996 Nov 21;384(6606):273–6.

TRAF6 is a signal transducer for interleukin–1. Cao Z, et al. **Nature** 1996 Oct 3;383(6599):443–6

A transcriptional partner for MAD proteins in TGF–beta signalling [published erratum appears in Nature 1996 Dec 19–26;384(6610):648] Chen X, et al. **Nature** 1996 Oct 24; 383(6602):691–6

The octadecanoid signalling pathway in plants mediates a response to ultraviolet radiation [see comments] Conconi A, et al. **Nature** 1996 Oct 31;383(6603):826–9. Comment in: Nature 1996 Oct 31;383(6603):763–4.

Calreticulin is essential for integrin–mediated calcium signalling and cell adhesion. Coppolino MG, et al. **Nature** 1997 Apr 24;386(6627):843–7

Regulation of neuronal diversity in the Xenopus retina by Delta signalling. Dorsky RI, et al. **Nature** 1997 Jan 2; 385(6611):67–70

A new protein containing an SH2 domain that inhibits JAK kinases. Endo TA, et al. **Nature** 1997 Jun 26; 387(6636):921–4

Head induction by simultaneous repression of Bmp and Wnt signalling in Xenopus. Glinka A, et al. **Nature** 1997 Oct 2;389(6650):517–9

Olfactory adaptation. The nose leads the eye [news; comment] Gold GH, et al. **Nature** 1997 Feb 20; 385(6618):677, 679. Comment on: Nature 1997 Feb 20;385(6618):725–9.

Human Genetics. Notch, stroke and dementia [news; comment] Gridley T. **Nature** 1996 Oct 24;383(6602):673. Comment on: Nature 1996 Oct 24;383(6602):707–10.

Theoretical biology. A robust view of biochemical pathways [news; comment] Hartwell L. **Nature** 1997 Jun 26; 387(6636):855, 857. Comment on: Nature 1997 Jun 26;387(6636):913–7.

Spatio–temporal dynamics of cyclic AMP signals in an intact neural circuitm [see comments] Hempel CM, et al. **Nature** 1996 Nov 14;384(6605):166–9. Comment in: Nature 1996 Nov 14;384(6605):113–4.

K+ channel regulation of signal propagation in dendrites of hippocampal pyramidal neurons [see comments] Hoffman DA, et al. **Nature** 1997 Jun 26;387(6636):869–75 . Comment in: Nature 1997 Jun 26;387(6636):851, 853.

Bidirectional signalling through the EPH–family receptor Nuk and its transmembrane ligands. Holland SJ, et al. **Nature** 1996 Oct 24;383(6602):722–5

An oxysterol signalling pathway mediated by the nuclear receptor LXR alpha. Janowski BA, et al. **Nature** 1996 Oct 24;383(6602):728–31

Suppression of c–Myc–induced apoptosis by Ras signalling through PI(3)K and PKB. Kauffmann–Zeh A, et al. **Nature** 1997 Feb 6;385(6616):544–8

A family of proteins that inhibit signalling through tyrosine kinase receptors. Kharitonenkov A, et al. **Nature** 1997 Mar 13;386(6621):181–6

Mechanism of odorant adaptation in the olfactory receptor cell [see comments] Kurahashi T, et al. **Nature** 1997 Feb 20;385(6618):725–9. Comment in: Nature 1997 Feb 20;385(6618):677, 679.

Partnership between DPC4 and SMAD proteins in TGF–beta signalling pathways. Lagna G, et al. **Nature** 1996 Oct 31;383(6603):832–6

Three distinct signalling responses by murine fibroblasts to genotoxic stress [see comments] Liu ZG, et al. **Nature** 1996 Nov 21;384(6606):273–6. Comment in: Nature 1996 Nov 21;384(6606):213–4.

Nuclear import of the homeodomain protein extradenticle in response to Wg and Dpp signalling. Mann RS, et al. **Nature** 1996 Oct 17;383(6601):630–3

Nucleocytoplasmic transport: signals, mechanisms and regulation. Nigg EA. **Nature** 1997 Apr 24;386(6627):779–87 (137 ref.)

Ras signalling linked to the cell–cycle machinery by the retinoblastoma protein [published erratum appears in Nature 1997 Apr 3;386(6624):521] Peeper DS, et al. **Nature** 1997 Mar 13;386(6621):177–81

Uncoupling cadherin–based adhesion from wingless signalling in Drosophila. Sanson B, et al. **Nature** 1996 Oct 17;383(6601):627–30

Structure of ADP x AlF4(–)–stabilized nitrogenase complex and its implications for signal transduction. Schindelin H, et al. **Nature** 1997 May 22;387(6631):370–6

Suppression of signalling through transcription factor NF–AT by interactions between calcineurin and Bcl–2. Shibasaki F, et al. **Nature** 1997 Apr 17;386(6626):728–31

A diffusible coupling signal from the transplanted suprachiasmatic nucleus controlling circadian locomotor rhythms. Silver R, et al. **Nature** 1996 Aug 29; 382(6594):810–3

A family of cytokine–inducible inhibitors of signalling. Starr R, et al. **Nature** 1997 Jun 26;387(6636):917–21

The role of RhoA in tissue polarity and Frizzled signalling. Strutt DI, et al. **Nature** 1997 May 15;387(6630):292–5

c–Cbl is downstream of c–Src in a signalling pathway necessary for bone resorption. Tanaka S, et al. **Nature** 1996 Oct 10;383(6600):528–31

Rapid shuttling of NF–AT in discrimination of Ca2+ signals and immunosuppression. Timmerman LA, et al. **Nature** 1996 Oct 31;383(6603):837–40

A multivalent PDZ–domain protein assembles signalling complexes in a G–protein–coupled cascade. Tsunoda S, et al. **Nature** 1997 Jul 17;388(6639):243–9

AMPA receptor–mediated regulation of a Gi–protein in cortical neurons. Wang Y, et al. **Nature** 1997 Oct 2; 389(6650):502–4

Signal transduction. Mad about SMADs [news; comment] Wrana J, et al. **Nature** 1997 Jul 3;388(6637):28–9. Comment on: Nature 1997 Jul 3;388(6637):82–7. Comment on: Nature 1997 Jul 3;388(6637):87–93.

Signal transduction and protein kinases: the long way from the plasma membrane into the nucleus. Hucho F, et al. **Naturwissenschaften** 1997 Jul;84(7):281–90 (88 ref.)

Signal transduction molecules in the rat pineal organ: Ca2+, pCREB, and ICER. Korf HW, et al. **Naturwissenschaften** 1996 Dec;83(12):535–43 (44 ref.)

Gene activation pathways of nerve growth factor signaling: a minireview. Szeberényi J. **Neurobiology (Bp)** 1996; 4(1–2):1–11 (19 ref.)

Signal transduction from membrane to nucleus: the special case for neurons. Johanson SO, et al. **Neurochem Res** 1996 Jul;21(7):779–85 (38 ref.)

Signal transduction mechanism responsible for changes in axoplasmic transport caused by neurotransmitters. Takenaka T, et al. **Neurochem Res** 1996 May;21(5):553–6

Neurotransmitter receptor/G–protein mediated signal transduction in Alzheimer's disease brain. Cowburn RF, et al. **Neurodegeneration** 1996 Dec;5(4):483–8 (37 ref.)

Rapsyn is required for MuSK signaling and recruits synaptic components to a MuSK–containing scaffold. Apel ED, et al. **Neuron** 1997 Apr;18(4):623–35

Numb antagonizes Notch signaling to specify sibling neuron cell fates. Spana EP, et al. **Neuron** 1996 Jul;17(1):21–6

Impaired Ca–signaling in astrocytes from the Ts16 mouse model of Down syndrome. Müller W, et al. **Neurosci Lett** 1997 Feb 21;223(2):81–4

Hypoxic alterations in cellular signal transduction in shock and sepsis. West MA, et al. **New Horiz** 1996 May; 4(2):168–78 (89 ref.)

A simple luciferase assay for signal transduction activity detection of epidermal growth factor displayed on phage. Souriau C, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1585–90

Functional interactions between isolated SH2 domains and insulin/Ras signaling pathways of Xenopus oocytes: opposite effects of the carboxy– and amino–terminal SH2 domains of p85 PI 3–kinase. Aroca P, et al. **Oncogene** 1996 Nov 7;13(9):1839–46

Intracellular signaling of the Ufo/Axl receptor tyrosine kinase is mediated mainly by a multi–substrate docking–site. Braunger J, et al. **Oncogene** 1997 Jun 5;14(22):2619–31

PKC epsilon functions as an oncogene by enhancing activation of the Raf kinase. Cacace AM, et al. **Oncogene** 1996 Dec 19;13(12):2517–26

The BCR–ABL tyrosine kinase inhibits apoptosis by activating a Ras–dependent signaling pathway. Cortez D, et al. **Oncogene** 1996 Dec 19;13(12):2589–94

Critical role for the tyrosine kinase Syk in signalling through the high affinity IgE receptor of mast cells. Costello PS, et al. **Oncogene** 1996 Dec 19;13(12):2595–605

Signal transduction through atypical PKCs, but not the EGF receptor, is necessary for UVC–induced AP–1 activation in immortal murine cells. Huang C, et al. **Oncogene** 1997 Apr 24;14(16):1945–54

The ETS–related transcription factor ERM is a nuclear target of signaling cascades involving MAPK and PKA. Janknecht R, et al. **Oncogene** 1996 Oct 17;13(8):1745–54

Induction of p27Kip1 degradation and anchorage independence by Ras through the MAP kinase signaling pathway. Kawada M, et al. **Oncogene** 1997 Aug 7; 15(6):629–37

The Nck SH2/SH3 adaptor protein is present in the nucleus and associates with the nuclear protein SAM68. Lawe DC, et al. **Oncogene** 1997 Jan 16;14(2):223–31

Activation of the focal adhesion kinase signal transduction pathway in cervical carcinoma cell lines and human genital epithelial cells immortalized with human papillomavirus type 18. McCormack SJ, et al. **Oncogene** 1997 Jul 17; 15(3):265–74

Cyclic AMP signalling pathway and cellular proliferation: induction of CREM during liver regeneration. Servillo G, et al. **Oncogene** 1997 Apr 3;14(13):1601–6

A novel human ERK phosphatase regulates H–ras and v–raf signal transduction. Shin DY, et al. **Oncogene** 1997 Jun 5;14(22):2633–9

The 230 kDa mature form of KDR/Flk–1 (VEGF receptor–2) activates the PLC–gamma pathway and partially induces mitotic signals in NIH3T3 fibroblasts. Takahashi T, et al. **Oncogene** 1997 May 1;14(17):2079–89

Host defense within the urinary tract. II. Signal transducing events activate the uroepithelial defense. Mannhardt W, et al. **Pediatr Nephrol** 1996 Oct;10(5):573–7

Neuropeptide genes: targets of activity–dependent signal transduction. MacArthur L, et al. **Peptides** 1996;17(4):721–8 (109 ref.)

Signal transduction in vertebrate growth cones navigating in vivo. Chien CB, et al. **Perspect Dev Neurobiol** 1996; 4(2–3):253–66 (77 ref.)

Shared cell adhesion molecule (CAM) homology domains point to CAMs signalling via FGF receptors. Doherty P, et al. **Perspect Dev Neurobiol** 1996;4(2–3):157–68 (55 ref.)

Signal transduction pathways activated by ciliary neurotrophic factor and related cytokines. Frank DA, et al. **Perspect Dev Neurobiol** 1996;4(1):3–18 (108 ref.)

Extrinsic signals in the developing nervous system: the role of neurokines during neurogenesis. Heller S, et al. **Perspect Dev Neurobiol** 1996;4(1):19–34 (135 ref.)

Investigations of signaling pathways in axon growth and guidance. Klostermann S, et al. **Perspect Dev Neurobiol** 1996;4(2–3):237–52 (53 ref.)

Selective neural cell adhesion molecule signaling by Src family tyrosine kinases and tyrosine phosphatases. Maness PF, et al. **Perspect Dev Neurobiol** 1996;4(2–3):169–81 (169 ref.)

Functional compartmentalization of the neuronal growth cone: determining calcium's place in signaling cascades. Rehder V, et al. **Perspect Dev Neurobiol** 1996;4(2–3):215–26 (57 ref.)

Signal transduction during axon guidance: a genetic analysis in Drosophila. Vanberkum MF. **Perspect Dev Neurobiol** 1996;4(2–3):227–36 (89 ref.)

Intracellular pH and calcium signalling in rat pancreatic acinar cells. González A, et al. **Pflugers Arch** 1997 Sep; 434(5):609–14

Different endothelin receptor subtypes are involved in phospholipid signalling in the proximal tubule of rat kidney. Knotek M, et al. **Pflugers Arch** 1996 Jun;432(2):165–73

Evaluation of agonist efficacy and receptor reserve for alpha 2D–adrenergic receptor regulated G protein activation in PC12 cell membranes. Tian WN, et al. **Pharmacology** 1996 Apr;52(4):252–62

Selection by somatic signals: the advertisement of phenotypic state through costly intercellular signals. Krakauer DC, et al. **Philos Trans R Soc Lond B Biol Sci** 1996 May 29; 351(1340):647–58

The role of endothelin–1 in epidermal hyperpigmentation and signaling mechanisms of mitogenesis and melanogenesis. Imokawa G, et al. **Pigment Cell Res** 1997 Aug;10(4):218–28

Signal transduction by the oncogenic receptor tyrosine kinase Xmrk in melanoma formation of Xiphophorus. Wellbrock C, et al. **Pigment Cell Res** 1997 Feb–Apr;10(1–2):34–40 (60 ref.)

An octadecanoid pathway mutant (JL5) of tomato is compromised in signaling for defense against insect attack. Howe GA, et al. **Plant Cell** 1996 Nov;8(11):2067–77

The Arabidopsis ABSCISIC ACID–INSENSITIVE2 (ABI2) and ABI1 genes encode homologous protein phosphatases 2C involved in abscisic acid signal transduction. Leung J, et al. **Plant Cell** 1997 May; 9(5):759–71

Protein targeting and integration signal for the chloroplastic outer envelope membrane. Li HM, et al. **Plant Cell** 1996 Nov;8(11):2117–26

Salicylic acid potentiates an agonist–dependent gain control that amplifies pathogen signals in the activation of defense mechanisms. Shirasu K, et al. **Plant Cell** 1997 Feb; 9(2):261–70

Effects of synergistic signaling by phytochrome A and cryptochrome1 on circadian clock–regulated catalase expression. Zhong HH, et al. **Plant Cell** 1997 Jun; 9(6):947–55

The pef mutants of Arabidopsis thaliana define lesions early in the phytochrome signaling pathway. Ahmad M, et al. **Plant J** 1996 Dec;10(6):1103–10

fhy1 defines a branch point in phytochrome A signal transduction pathways for gene expression. Barnes SA, et al. **Plant J** 1996 Dec;10(6):1155–61

Interaction of the maize and Arabidopsis kinase interaction domains with a subset of receptor–like protein kinases: implications for transmembrane signaling in plants. Braun DM, et al. **Plant J** 1997 Jul;12(1):83–95

Cloning of a Ca(2+)–ATPase gene and the role of cytosolic Ca2+ in the gibberellin–dependent signaling pathway in aleurone cells. Chen X, et al. **Plant J** 1997 Mar;11(3):363–71

Isolation and analysis of the soybean SGA2 gene (cDNA), encoding a new member of the plant G–protein family of signal transducers. Gotor C, et al. **Plant Mol Biol** 1996 Dec;32(6):1227–34

Signal transduction in Rhizobium–induced nodule formation. Geurts R, et al. **Plant Physiol** 1996 Oct;112(2):447–53 (42 ref.)

Mutations of Arabidopsis in potential transduction and response components of the phototropic signaling pathway. Liscum E, et al. **Plant Physiol** 1996 Sep;112(1):291–6

Genetic analysis of abscisic acid signal transduction. Merlot S, et al. **Plant Physiol** 1997 Jul;114(3):751–7 (46 ref.)

An intracellular signal transduction pathway between the chloroplast and nucleus is involved in de–etiolation. Mochizuki N, et al. **Plant Physiol** 1996 Dec;112(4):1465–9

Immunological detection of potential signal–transduction proteins expressed during wheat somatic tissue culture. Nato A, et al. **Plant Physiol** 1997 Mar;113(3):801–7

Convergence of the abscisic acid, CO2, and extracellular calcium signal transduction pathways in stomatal guard cells. Webb AA, et al. **Plant Physiol** 1997 Aug; 114(4):1557–60

Principles of receptor–based inhibition of erbB family receptor kinases: prospects for new therapies for human cancers. O'Rourke DM, et al.

Proc Assoc Am Physicians 1997 May;109(3):209–19 (78 ref.)
Transduction of interleukin-2 antiapoptotic and proliferative signals via Akt protein kinase. Ahmed NN, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3627–32
Interleukin 10 is induced by recombinant HIV-1 Nef protein involving the calcium/calmodulin-dependent phosphodiesterase signal transduction pathway. Brigino E, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3178–82
The p53 tumor suppressor targets a novel regulator of G protein signaling. Buckbinder L, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7868–72
The TEL/platelet-derived growth factor beta receptor (PDGF beta R) fusion in chronic myelomonocytic leukemia is a transforming protein that self-associates and activates PDGF beta R kinase-dependent signaling pathways. Carroll M, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14845–50
A thyroid hormone receptor coactivator negatively regulated by the retinoblastoma protein. Chang KH, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9040–5
Physiological coupling of growth factor and steroid receptor signaling pathways: estrogen receptor knockout mice lack estrogen-like response to epidermal growth factor. Curtis SW, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12626–30
Novel form of crosstalk between G protein and tyrosine kinase pathways. Diversé-Pierluissi M, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5417–21
The rotavirus enterotoxin NSP4 mobilizes intracellular calcium in human intestinal cells by stimulating phospholipase C-mediated inositol 1,4,5-trisphosphate production. Dong Y, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3960–5
Eubacterial signal transduction by ligands of the mammalian peripheral benzodiazepine receptor complex [see comments] Donohue TJ. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4821–2 (18 ref.). Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):5101–6.
Differential utilization of CCR5 by macrophage and T cell tropic simian immunodeficiency virus strains. Edinger AL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4005–10
Platelet signal transduction defect with Galpha subunit dysfunction and diminished Galphaq in a patient with abnormal platelet responses. Gabbeta J, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8750–5
Mitogen-activated protein kinase-mediated Fas apoptotic signaling pathway. Goillot E, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3302–7
Molecular uncoupling of C-C chemokine receptor 5-induced chemotaxis and signal transduction from HIV-1 coreceptor activity. Gosling J, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5061–6
A signaling organelle containing the nerve growth factor-activated receptor tyrosine kinase, TrkA. Grimes ML, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2; 94(18):9909–14
Receptor-associated constitutive protein tyrosine phosphatase activity controls the kinase function of JAK1. Haque SJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5; 94(16):8563–8
Nuclear integration of JAK/STAT and Ras/AP-1 signaling by CBP and p300. Horvai AE, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1074–9
Thymineless death in colon carcinoma cells is mediated via fas signaling. Houghton JA, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8144–9
Attenuation of Gi- and Gq-mediated signaling by expression of RGS4 or GAIP in mammalian cells. Huang C, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6159–63
Ultrasensitivity in the mitogen-activated protein kinase cascade. Huang CY, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10078–83
A global two component signal transduction system that integrates the control of photosynthesis, carbon dioxide assimilation, and nitrogen fixation. Joshi HM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14515–20
A subset of olfactory neurons that selectively express cGMP-stimulated phosphodiesterase (PDE2) and guanylyl cyclase-D define a unique olfactory signal transduction pathway. Juilfs DM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3388–95
CrkII signals from epidermal growth factor receptor to Ras. Kizaka-Kondoh S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12177–82
Candida albicans strains heterozygous and homozygous for mutations in mitogen-activated protein kinase signaling components have defects in hyphal development. Köhler JR, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12; 93(23):13223–8
A substance P (neurokinin-1) receptor mutant carboxyl-terminally truncated to resemble a naturally occurring receptor isoform displays enhanced responsiveness and resistance to desensitization. Li H, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9475–80
FRAG1, a gene that potently activates fibroblast growth factor receptor by C-terminal fusion through chromosomal rearrangement. Lorenzi MV, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):8956–61
Two eukaryote-specific regions of Hsp82 are dispensable for its viability and signal transduction functions in yeast. Louvion JF, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13937–42
Signaling in plants. Mulligan RM, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2793–5
Two glucose transporters in Saccharomyces cerevisiae are glucose sensors that generate a signal for induction of gene expression. Ozcan S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12428–32
Direct interaction of gbetagamma with a C-terminal gbetagamma-binding domain of the Ca2+ channel alpha1 subunit is responsible for channel inhibition by G protein-coupled receptors. Qin N, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8866–71
Pharmacologic shifting of a balance between protein refolding and degradation mediated by Hsp90. Schneider C, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10; 93(25):14536–41
Induction of host signal transduction pathways by Helicobacter pylori. Segal ED, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7595–9
Developmental signal transduction pathways uncovered by genetic suppressors. Shaulsky G, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15260–5
Molecular ordering of the Fas-apoptotic pathway: the Fas/APO-1 protease Mch5 is a CrmA-inhibitable protease that activates multiple Ced-3/ICE-like cysteine proteases. Srinivasula SM, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14486–91
Downstream of Crk adaptor signaling pathway: activation of Jun kinase by v-Crk through the guanine nucleotide exchange protein C3G. Tanaka S, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2356–61
Cross-talk between the insulin and angiotensin signaling systems. Velloso LA, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12490–5
Dinor-oxo-phytodienoic acid: a new hexadecanoid signal in the jasmonate family. Weber H, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10473–8
Evidence for a preformed transducer complex organized by the B cell antigen receptor. Wienands J, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7865–70
A possible role for kinase-associated protein phosphatase in the Arabidopsis CLAVATA1 signaling pathway. Williams RW, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16; 94(19):10467–72
A novel alternate secretory pathway for the export of Plasmodium proteins into the host erythrocyte. Wiser MF, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9108–13
Activation of protein kinase A-independent pathways by Gs alpha in Drosophila. Wolfgang WJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14542–7
BAX-induced cell death may not require interleukin 1 beta-converting enzyme-like proteases. Xiang J, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14559–63
Dimerization of Ste5, a mitogen-activated protein kinase cascade scaffold protein, is required for signal transduction. Yablonski D, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13864–9
Two contact regions between Stat1 and CBP/p300 in interferon gamma signaling. Zhang JJ, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15092–6
Insulin-like growth factor II signaling through the insulin-like growth factor II/mannose-6-phosphate receptor promotes exocytosis in insulin-secreting cells. Zhang Q, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10; 94(12):6232–7
Dependence of intracellular signaling and neurosecretion on phospholipase D activation in immortalized gonadotropin-releasing hormone neurons. Zheng L, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1573–8
Nutrient-hormone signals regulating muscle protein turnover in pigs. Sève B, et al. **Proc Nutr Soc** 1997 Jul;56(2):565–80 (62 ref.)
Regulation of growth factor-induced signaling by protein-tyrosine-phosphatases. Byon JC, et al. **Proc Soc Exp Biol Med** 1997 Oct;216(1):1–20 (152 ref.)
Ras and its effectors. Herrmann C, et al. **Prog Biophys Mol Biol** 1996;66(1):1–41 (177 ref.)
Muscarinic receptors and cell signalling. Löffelholz K. **Prog Brain Res** 1996;109:191–4 (33 ref.)
Participation of small GTP-binding proteins in m3 muscarinic acetylcholine receptor signalling to phospholipase D and C. Rümenapp U, et al. **Prog Brain Res** 1996;109:209–16 (42 ref.)
Cellular fatty acid-binding proteins: their function and physiological significance. Glatz JF, et al. **Prog Lipid Res** 1996 Sep;35(3):243–82 (450 ref.)
The gamma-hydroxybutyrate signalling system in brain: organization and functional implications. Maitre M. **Prog Neurobiol** 1997 Feb;51(3):337–61 (236 ref.)
The nitric oxide system in insects. Müller U. **Prog Neurobiol** 1997 Feb;51(3):363–81 (146 ref.)
Cytokines which signal through the LIF receptor and their actions in the nervous system. Murphy M, et al. **Prog Neurobiol** 1997 Aug;52(5):355–78 (196 ref.)
Phosphoinositide signaling in human brain. Pacheco MA, et al. **Prog Neurobiol** 1996 Oct;50(2-3):255–73 (65 ref.)
Intracellular signal modulation: a pivotal role for protein kinase C [see comments] Casabona G. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 Apr; 21(3):407–25 (75 ref.). Comment in: Prog Neuropsychopharmacol Biol Psychiatry 1997 Apr;21(3):373–8.
Stimulation of kinase cascades by growth hormone: a paradigm for cytokine signaling. Wood TJ, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:73–94 (107 ref.)
Template-based docking of a prolactin receptor proline-rich motif octapeptide to FKBP12: implications for cytokine receptor signaling. Soman KV, et al. **Protein Sci** 1997 May; 6(5):999–1008
Interaction, signal generation, signal divergence, and signal transduction of LH/CG and the receptor. Ji TH, et al. **Recent Prog Horm Res** 1997;52:431–53; discussion 454 (78 ref.)
Estrogen: nontranscriptional signaling pathway. Moss RL, et al. **Recent Prog Horm Res** 1997;52:33–68; discussion 68–9 (219 ref.)
Signal transduction as target of gene therapy. Moelling K, et al. **Recent Results Cancer Res** 1996;142:63–71 (18 ref.)
Arachidonic acid-induced calcium signalling in human airway smooth muscle cells. Colliard-Rouiller C, et al. **Respir Physiol** 1997 Mar;107(3):263–73
Transduction dynamics of intrapulmonary CO2 receptors. Tallman RD Jr, et al. **Respir Physiol** 1996 Nov; 106(2):115–25
Calmodulin regulation of calcium stores in phototransduction of Drosophila. Arnon A, et al. **Science** 1997 Feb 21; 275(5303):1119–21
Signaling in plant-microbe interactions. Baker B, et al. **Science** 1997 May 2;276(5313):726–33 (133 ref.)
NGF signals ride a trolley to nucleus [news; comment] Barinaga M. **Science** 1997 Aug 22;277(5329):1037. Comment on: Science 1997 Aug 22;277(5329):1097–1100.
CD5-mediated negative regulation of antigen receptor-induced growth signals in B-1 B cells. Bikah G, et al. **Science** 1996 Dec 13;274(5294):1906–9
Signal transduction by DR3, a death domain-containing receptor related to TNFR-1 and CD95. Chinnaiyan AM, et al. **Science** 1996 Nov 8;274(5289):990–2
Associative learning disrupted by impaired Gs signaling in Drosophila mushroom bodies. Connolly JB, et al. **Science** 1996 Dec 20;274(5295):2104–7
STATs and gene regulation. Darnell JE Jr. **Science** 1997 Sep 12;277(5332):1630–5 (99 ref.)
A cytoplasmic inhibitor of the JNK signal transduction pathway. Dickens M, et al. **Science** 1997 Aug 1; 277(5326):693–6
Regulation of neuronal survival by the serine-threonine protein kinase Akt [see comments] Dudek H, et al. **Science** 1997 Jan 31;275(5300):661–5. Comment in: Science 1997 Jan 31;275(5300):628–30.
A cyclophilin function in Hsp90-dependent signal transduction [see comments] Duina AA, et al. **Science** 1996 Dec 6;274(5293):1713–5. Comment in: Science 1996 Dec 6;274(5293):1613–4.
The many faces of WAS protein [news] Featherstone C. **Science** 1997 Jan 3;275(5296):27–8
In situ activation pattern of Drosophila EGF receptor pathway during development. Gabay L, et al. **Science** 1997 Aug 22;277(5329):1103–6
Protein prenylation, et cetera: signal transduction in two dimensions [comment] Gelb MH. **Science** 1997 Mar 21; 275(5307):1750–1. Comment on: Science 1997 Mar 21;275(5307):1796–800. Comment on: Science 1997 Mar 21;275(5307):1800–4.
Force-carrying web pervades living cell [news] Glanz J. **Science** 1997 May 2;276(5313):678–9
Signaling vascular morphogenesis and maintenance [comment] Hanahan D. **Science** 1997 Jul 4;277(5322):48–50 . Comment on: Science 1997 Jul 4;277(5322):55–60.
Functions of ceramide in coordinating cellular responses to stress. Hannun YA. **Science** 1996 Dec 13;274(5294):1855–9 (55 ref.)
PH domains--a universal membrane adapter [see comments] Hemmings BA. **Science** 1997 Mar 28;275(5308):1899. Comment in: Science 1997 Mar 28;275(5308):1927–30.
Akt signaling: linking membrane events to life and death decisions [comment] Hemmings BA. **Science** 1997 Jan 31; 275(5300):628–30 (25 ref.). Comment on: Science 1997 Jan 31;275(5300):661–5. Comment on: Science 1997 Jan 31;275(5300):665–8.
Induction of apoptosis by ASK1, a mammalian MAPKKK that activates SAPK/JNK and p38 signaling pathways. Ichijo H, et al. **Science** 1997 Jan 3;275(5296):90–4
Ste5 RING-H2 domain: role in Ste4-promoted oligomerization for yeast pheromone signaling. Inouye C, et al. **Science** 1997 Oct 3;278(5335):103–6
There are GAPS and there are GAPS. Iyengar R. **Science** 1997 Jan 3;275(5296):42–3
CKI1, a histidine kinase homolog implicated in cytokinin signal transduction. Kakimoto T. **Science** 1996 Nov 8; 274(5289):982–5
Signaling by phosphoinositide-3,4,5-trisphosphate through proteins containing pleckstrin and Sec7 homology domains [see comments] Klarlund JK, et al. **Science** 1997 Mar 28; 275(5308):1927–30. Comment in: Science 1997 Mar 28;275(5308):1899.
Linkage of G protein-coupled receptors to the MAPK signaling pathway through PI 3-kinase gamma. Lopez-Ilasaca M, et al. **Science** 1997 Jan 17; 275(5298):394–7
Superoxides relay Ras protein's oncogenic message [news; comment] Pennisi E. **Science** 1997 Mar 14;275(5306):1567–8 . Comment on: Science 1997 Mar 14;275(5306):1649–52.
Ca2+-dependent protein kinases and stress signal transduction in plants. Sheen J. **Science** 1996 Dec 13;

274(5294):1900–2
Biological information processing: bits of progress. Spitzer NC, et al. **Science** 1997 Aug 22;277(5329):1060–1
Suppression of TNF–alpha–induced apoptosis by NF–kappaB [see comments] Van Antwerp DJ, et al. **Science** 1996 Nov 1;274(5288):787–9. Comment in: Science 1996 Nov 1;274(5288):724. Comment in: Science 1997 Apr 11;276(5310):185.
Control of EGF receptor signaling by clathrin–mediated endocytosis. Vieira AV, et al. **Science** 1996 Dec 20; 274(5295):2086–9
Portrait of an executioner: the molecular mechanism of FAS/APO–1–induced apoptosis. Chinnaiyan AM, et al. **Semin Immunol** 1997 Feb;9(1):69–76 (84 ref.)
The structure of MHC class II: a role for dimer of dimers. Schafer PH, et al. **Semin Immunol** 1995 Dec;7(6):389–98 (54 ref.)
Genes involved in T–cell receptor–mediated apoptosis of thymocytes and T–cell hybridomas. Winoto A. **Semin Immunol** 1997 Feb;9(1):51–8 (79 ref.)
Interacting pathways of interferon signaling. Williams BR, et al. **Semin Oncol** 1997 Jun;24(3 Suppl 9):S9–70–S9–77 (85 ref.)
Serine/threonine dephosphorylation may be involved in tyrosine phosphorylation: a new mode of signal transduction in platelets. Artçanuthurry V, et al. **Semin Thromb Hemost** 1996;22(4):317–26
Regulation of thrombin–mediated endothelial cell contraction and permeability. Garcia JG, et al. **Semin Thromb Hemost** 1996;22(4):309–15 (50 ref.)
Synergy and specificity in induction of gene activity by proinflammatory cytokines: potential therapeutic targets. Spink J, et al. **Shock** 1997 Jun;7(6):405–12 (77 ref.)
Function and signal transduction mediated by the interleukin 3 receptor system in hematopoiesis. Hara T, et al. **Stem Cells** 1996 Nov;14(6):605–18 (99 ref.)
Regulation of T cell apoptosis via T cell receptors and steroid receptors. Iwata M, et al. **Stem Cells** 1996 Nov;14(6):632–41 (66 ref.)
Signal transduction pathways in apoptosis. McConkey DJ, et al. **Stem Cells** 1996 Nov;14(6):619–31 (175 ref.)
Analysis of Fes kinase activity in myeloid cell growth and differentiation. Yates KE, et al. **Stem Cells** 1996 Nov; 14(6):714–24
Ca(2+)–dependent activation of the 33–kDa protein kinase transmits thrombin receptor signals in human platelets. Ido M, et al. **Thromb Haemost** 1996 Sep;76(3):439–43
Defective signal transduction through the thromboxane A2 receptor in a patient with a mild bleeding disorder: deficiency of the inositol 1,4,5–triphosphate formation despite normal G–protein activation. Mitsui T, et al. **Thromb Haemost** 1997 May;77(5):991–5
Endothelial eicosanoid metabolism and signal transduction during exposure to oxygen radicals injury. Weigel G, et al. **Thromb Res** 1997 Aug 15;87(4):363–75
An oligonucleotide blocks interferon–gamma signal transduction. Lee PP, et al. **Transplantation** 1996 Nov 15; 62(9):1297–301
Cytoplasmic signalling domains: the next generation. Bork P, et al. **Trends Biochem Sci** 1997 Aug;22(8):296–8 (20 ref.)
Plant transmembrane receptors: new pieces in the signaling puzzle. Braun DM, et al. **Trends Biochem Sci** 1996 Feb; 21(2):70–3
Why do protein kinase cascades have more than one level? [letter; comment] [see comments] Brown GC, et al. **Trends Biochem Sci** 1997 Aug;22(8):288. Comment on: Trends Biochem Sci 1996 Dec;21(12):460–6. Comment in: Trends Biochem Sci 1997 Aug;22(8):288–9.
Three–part inventions: intracellular signaling and induced proximity. Crabtree GR, et al. **Trends Biochem Sci** 1996 Nov;21(11):418–22 (46 ref.)
Evidence for a Ras/Ral signaling cascade. Feig LA, et al. **Trends Biochem Sci** 1996 Nov;21(11):438–41 (49 ref.)
Tripping the switch fantastic: how a protein kinase cascade can convert graded inputs into switch–like outputs [see comments] Ferrell JE Jr. **Trends Biochem Sci** 1996 Dec; 21(12):460–6 (32 ref.). Comment in: Trends Biochem Sci 1997 Aug;22(8):288.
The CARD domain: a new apoptotic signalling motif. Hofmann K, et al. **Trends Biochem Sci** 1997 May; 22(5):155–6
Distinct and specific functions of cGMP–dependent protein kinases. Lohmann SM, et al. **Trends Biochem Sci** 1997 Aug; 22(8):307–12 (50 ref.)
p70 S6 kinase: an enigma with variations. Proud CG. **Trends Biochem Sci** 1996 May;21(5):181–5 (49 ref.)
Iron–sulfur clusters as biosensors of oxidants and iron [published erratum appears in Trends Biochem Sci 1996 Jul;21(7):246] [see comments] Rouault TA, et al. **Trends Biochem Sci** 1996 May;21(5):174–7 (48 ref.). Comment in: Trends Biochem Sci 1996 Aug;21(8):282–3.
The WW module competes with the SH3 domain? Sudol M. **Trends Biochem Sci** 1996 May;21(5):161–3
Phosphoinositide 3–kinases: a conserved family of signal transducers. Vanhaesebroeck B, et al. **Trends Biochem Sci** 1997 Jul;22(7):267–72 (53 ref.)
Two–component signal transducers and MAPK cascades. Wurgler–Murphy SM, et al. **Trends Biochem Sci** 1997 May; 22(5):172–6 (38 ref.)
Olfaction in Drosophila: from odor to behavior. Carlson JR. **Trends Genet** 1996 May;12(5):175–80 (49 ref.)
Vulval development in Caenorhabditis elegans. Kornfeld K. **Trends Genet** 1997 Feb;13(2):55–61 (45 ref.)
The Eph receptor family: axonal guidance by contact repulsion. Orioli D, et al. **Trends Genet** 1997 Sep; 13(9):354–9 (49 ref.)
The GDNF–RET signalling partnership. Robertson K, et al. **Trends Genet** 1997 Jan;13(1):1–3 (36 ref.)
Creating conditional mutations in mammals. Spencer DM. **Trends Genet** 1996 May;12(5):181–7 (31 ref.)
MAD–related proteins in TGF–beta signalling. Wrana JL, et al. **Trends Genet** 1996 Dec;12(12):493–6
Intercellular communication and group behavior in bacteria. Gray KM. **Trends Microbiol** 1997 May;5(5):184–8 (30 ref.)
Signal transduction in the cell cycle regulation of Caulobacter differentiation. Ohta N, et al. **Trends Microbiol** 1996 Aug;4(8):326–32 (45 ref.)
The inner workings of a quorum sensing signal generator. Swift S, et al. **Trends Microbiol** 1996 Dec;4(12):463–5; discussion 465–6
HIV–1 coreceptor activity of CCR5 and its inhibition by chemokines: independence from G protein signaling and importance of coreceptor downmodulation. Alkhatib G, et al. **Virology** 1997 Aug 4;234(2):340–8
Signaling via the CD2 receptor enhances HTLV–1 replication in T lymphocytes. Guyot DJ, et al. **Virology** 1997 Jul 21;234(1):123–9
Effects of adenovirus E1A protein on interferon–signaling. Leonard GT, et al. **Virology** 1996 Oct 1;224(1):25–33
Signal transduction pathways combining peptide hormones and steroidogenesis. Waterman MR, et al. **Vitam Horm** 1996;52:129–48 (62 ref.)
The "syncytial tissue triad": a model for understanding how gap junctions participate in the local control of penile erection. Christ GJ. **World J Urol** 1997;15(1):36–44 (49 ref.)
Signal transduction in cavernous smooth muscle. Stief CG, et al. **World J Urol** 1997;15(1):27–31 (29 ref.)
[Signal transduction by Rac small G proteins in phagocytes] Dorseuil O, et al. **C R Seances Soc Biol Fil** 1997; 191(2):237–46 (49 ref.) (Eng. Abstr.) **(Fre)**
[Beta adrenergic signal transduction and heart adenyl cyclase] Mercadier JJ, et al. **C R Seances Soc Biol Fil** 1996; 190(2–3):207–18 (23 ref.) (Eng. Abstr.) **(Fre)**
[OB protein and its receptor: signal transduction between adipose tissue and central nervous system] Campfield LA, et al. **Journ Annu Diabetol Hotel Dieu** 1997;:131–48 (63 ref.) **(Fre)**
[Thyroid gland scintigraphy for in vivo presentation of the signal transduction cascade and beyond (editorial)] Kuwert T, et al. **Nuklearmedizin** 1996 Dec;35(6):3–4 **(Ger)**
[PO2–affinity of oxygen–sensitive intracellular signal cascades] Acker H. **Pneumologie** 1997 Apr;51 Suppl 2:403–5 (22 ref.) (Eng. Abstr.) **(Ger)**
[Cell signaling and CDDP resistance] Masumoto N, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(4):424–30 (36 ref.) (Eng. Abstr.) **(Jpn)**
[Signal transduction system in cardiac cells] Kaibara M, et al. **Nippon Rinsho** 1996 Aug;54(8):2041–4 (4 ref.) (Eng. Abstr.) **(Jpn)**
[Function of HS1 protein in B–cell antigen–receptor signaling and induction of apoptosis] Kitamura D. **Nippon Rinsho** 1996 Jul;54(7):1773–8 (23 ref.) (Eng. Abstr.) **(Jpn)**
[Ceramide: a lipid mediator of apoptotic signal transduction] Sawai H, et al. **Nippon Rinsho** 1996 Jul;54(7):1803–8 (21 ref.) (Eng. Abstr.) **(Jpn)**
[Adaptive responses and signal transduction in bacteria] Aiba H, et al. **Nippon Saikingaku Zasshi** 1996 Feb;51(2):549–57 (34 ref.) **(Jpn)**
[Signal–transduction therapy] Hidaka H, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):119–21 (0 ref.) **(Jpn)**
[ATP receptor and intracellular signaling] Katsuragi T, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):166–8 (0 ref.) **(Jpn)**
[Signal transduction in mechanism of opioid dependence formed in human body and the molecular study] Miki M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):111–2 (0 ref.) **(Jpn)**
[Cell adhesion molecules on lymphocytes and their role on signal transduction] Munakata Y. **Rinsho Byori** 1996 Dec; 44(12):1152–6 (0 ref.) (Eng. Abstr.) **(Jpn)**
[The signal transduction mechanism of IL–4 in X–linked severe combined immunodeficiency patients] Izuhara K. **Rinsho Ketsueki** 1997 Mar;38(3):186–8 (8 ref.) **(Jpn)**
[Signaling pathway of macrophage colony–stimulating factor receptor] Kimura F, et al. **Rinsho Ketsueki** 1997 Mar; 38(3):189–92 (10 ref.) **(Jpn)**
[Signal transduction through G–CSF receptors] Shimoda K, et al. **Rinsho Ketsueki** 1997 Mar;38(3):193–5 (10 ref.) **(Jpn)**
[Thrombopoietin signal transduction via its receptor encoded by c–mpl: its association with hematological diseases] Takatoku M, et al. **Rinsho Ketsueki** 1997 Mar;38(3):203–8 (13 ref.) **(Jpn)**
[Signal transduction of the erythropoietin receptor] Yoshimura A, et al. **Rinsho Ketsueki** 1997 Mar;38(3):196–9 (10 ref.) **(Jpn)**
[RalGDS mediates an intracellular signal–transduction system from a proto–oncogene product Ras] Koyama S, et al. **Seikagaku** 1996 Oct;68(10):1646–50 (20 ref.) **(Jpn)**
[MAP kinase cascade regulating TGF beta signaling pathway] Matsumoto K, et al. **Seikagaku** 1996 Dec; 68(12):1824–8 (8 ref.) **(Jpn)**
[Cell adhesion mediated by cadherin–catenin machinery and signal transduction] Shibamoto S. **Seikagaku** 1996 Oct; 68(10):1650–3 (14 ref.) **(Jpn)**
[Activin: diversity of functions and signal transduction] Sugino H, et al. **Seikagaku** 1996 Aug;68(8):1405–28 (110 ref.) **(Jpn)**
[Redox regulation of cellular signaling] Suzuki Y. **Seikagaku** 1997 Mar;69(3):187–91 (15 ref.) **(Jpn)**
[Transcription factors NF–IL6 and STAT3 involved in cytokine signal transductions] Akira S. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1237–48 (65 ref.) **(Jpn)**
[Cross–point of cAMP and Ca2+ signals to the transcription factors] Hagiwara M, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1282–7 (18 ref.) **(Jpn)**
[Calcineurin–mediated signalling important for growth regulation in yeast] Hirata D, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1695–703 (40 ref.) **(Jpn)**
[Cytoskeletons in the signal transduction] Hisanaga S. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):453–63 (72 ref.) **(Jpn)**
[Ca2+ signaling in budding yeast] Iida H. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1704–11 (19 ref.) **(Jpn)**
[Cytokinin signal transduction: implication of a two–component regulatory system] Kakimoto T. **Tanpakushitsu Kakusan Koso** 1997 Apr;42(5):727–35 (39 ref.) **(Jpn)**
[Alpha beta gamma–heterotrimeic GTP–binding proteins] Katada T. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):353–63 (70 ref.) **(Jpn)**
[Signal transduction pathways mediated by small GTPases and protein kinases] Kuroda S, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1258–64 (44 ref.) **(Jpn)**
[Signal transduction in the cells] Miyamoto E. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):349–52 (0 ref.) **(Jpn)**
[Visual review: signal transduction in T cells] Nakayama T. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):1092–9 (5 ref.) **(Jpn)**
["Inositol" signal transduction in yeast] Nikawa J. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(12 Suppl):1680–7 (36 ref.) **(Jpn)**
[Phosphoprotein phosphatases and signal transduction in plant cells] Oka A, et al. **Tanpakushitsu Kakusan Koso** 1997 Apr;42(5):736–43 (48 ref.) **(Jpn)**
[Protein kinase C in neuronal signaling] Suzuki A, et al. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):411–7 (35 ref.) **(Jpn)**
[Signal transduction of steroids and vitamins mediated by nuclear receptor proteins] Umesono K. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1265–72 (37 ref.) **(Jpn)**
[Cellular interactions which control differentiation and morphogenesis in dictyostelium] Yamada Y, et al. **Tanpakushitsu Kakusan Koso** 1996 Sep;41(11):1560–8 (44 ref.) **(Jpn)**
[The change of erythrocyte hydration environment under hormonal stimulation] Shchegoleva TIu, et al. **Biofizika** 1996 Sep–Oct;41(5):1082–6 (Eng. Abstr.) **(Rus)**
[Overview of the latest findings on nonclassical MHC antigens and activation pathways of T–lymphocytes] Buc M. **Bratisl Lek Listy** 1997 Feb;98(2):111–7 **(Slo)**
[Signal reception, protein kinesis and aging] García de Jalón P. **An R Acad Nac Med (Madr)** 1996;113(3):593–610; discussion 610–3 (41 ref.) **(Spa)**

DRUG EFFECTS

Cellular signalling as a target in cancer chemotherapy. Phospholipid analogues as inhibitors of mitogenic signal transduction. Grunicke HH, et al. **Adv Enzyme Regul** 1996; 36:385–407
Ether lipid metabolism, GPI anchor biosynthesis, and signal transduction are putative targets for anti–leishmanial alkyl phospholipid analogues. Lux H, et al. **Adv Exp Med Biol** 1996;416:201–11
A phospholipase C inhibitor impedes the hypoxic ventilatory response in the cat. Pokorski M, et al. **Adv Exp Med Biol** 1996;410:397–403
Immunoregulatory role of neurotransmitters. Qiu Y, et al. **Adv Neuroimmunol** 1996;6(3):223–31 (51 ref.)
Direct effects of ethanol on signaling proteins. Charness ME. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):157A–161A
Interaction of protein phosphatases and ethanol on phospholipase C–mediated intracellular signal transduction processes in rat hepatocytes: role of protein kinase A. Higashi K, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9 Suppl):320A–324A
Effect of chronic ethanol exposure on myocardial phosphoinositide turnover. Piano MR, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):721–7
Pituitary adenylate cyclase–activating polypeptide stimulates cholecystokinin secretion in STC–1 cells. Chang CH, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):G516–23
Neuropeptide stimulation of the nitric oxide signaling pathway in Drosophila melanogaster Malpighian tubules. Davies SA, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R823–7
Hyporesponsiveness to inhaled nitric oxide in isolated, perfused lungs from endotoxin–challenged rats. Holzmann

A, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):L981–6
Thrombin–induced vascular reactivity is modulated by ETB receptor–coupled nitric oxide release in rat aorta. Magazine HI, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C923–8
Salutary effects of ATP–MgCl2 on altered hepatocyte signal transduction after hemorrhagic shock. Mahmoud MS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1347–54
LIF and CNTF, which share the gp130 transduction system, stimulate hepatic lipid metabolism in rats. Nonogaki K, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E521–8
Lysophosphatidylcholine transduces Ca2+ signaling via the platelet–activating factor receptor in macrophages. Ogita T, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H17–24
Endothelin–1–evoked arachidonic acid release: a Ca(2+)–dependent pathway. Wu–Wong JR, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C869–77
Cholecystokinin peptides stimulate pancreatic secretion by multiple signal transduction pathways. Yoshida H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G735–47
Interactions between propofol and lipid mediator receptors: inhibition of lysophosphatidate signaling. Rossi MA, et al. **Anesth Analg** 1996 Nov;83(5):1090–6
Differential inhibition of lysophosphatidate signaling by volatile anesthetics. Chan CK, et al. **Anesthesiology** 1997 Mar;86(3):660–9
Synergistic inhibition of muscarinic signaling by ketamine stereoisomers and the preservative benzethonium chloride. Durieux ME, et al. **Anesthesiology** 1997 Jun;86(6):1326–33
Eicosapentaenoic acid and docosahexaenoic acid inhibit DNA synthesis through inhibiting cdk2 kinase in vascular smooth muscle cells. Terano T, et al. **Ann N Y Acad Sci** 1997 Apr 15;811:369–77
Inhibition of Ras prenylation: a signaling target for novel anti–cancer drug design. Lerner EC, et al. **Anticancer Drug Des** 1997 Jun;12(4):229–38 (55 ref.)
Antisense–protein kinase A: a single–gene–based therapeutic approach. Cho–Chung YS, et al. **Antisense Nucleic Acid Drug Dev** 1997 Jun;7(3):217–23 (20 ref.)
Protein kinase C as a target for cancer therapy. Glazer RI. **Antisense Nucleic Acid Drug Dev** 1997 Jun;7(3):235–8
Effect of calcitonin gene–related peptide on sodium absorption through isolated skin of Rana esculenta. Castronuovo G, et al. **Arch Physiol Biochem** 1996; 104(2):142–7
Oxidized LDL stimulates mitogen–activated protein kinases in smooth muscle cells and macrophages. Kusuhara M, et al. **Arterioscler Thromb Vasc Biol** 1997 Jan;17(1):141–8
Lysophosphatidic acid and intracellular signalling in vascular smooth muscle cells. Seewald S, et al. **Atherosclerosis** 1997 Apr;130(1–2):121–31
Induction of MAPK phosphorylation by prosaposin and prosaptide in PC12 cells. Campana WM, et al. **Biochem Biophys Res Commun** 1996 Dec 24;229(3):706–12
Fluoroaluminate induces pertussis toxin–sensitive protein phosphorylation: differences in MC3T3–E1 osteoblastic and NIH3T3 fibroblastic cells. Susa M, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):680–4
Signal–transduction–pathway–specific desensitization of expression of orphan nuclear receptor TIS1. Lim RW, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):785–9
Interleukin 1–induced calcium signalling in chondrocytes requires focal adhesions. Luo L, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):653–8
Cytoplasmic Ca2+ signalling and reduction of mitochondrial pyridine nucleotides in adrenal glomerulosa cells in response to K+, angiotensin II and vasopressin. Rohács T, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):785–92
Nicotinamide inhibits cyclic ADP–ribose–mediated calcium signalling in sea urchin eggs. Sethi JK, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):613–7
Lysophosphatidic acid–sensitive intracellular Ca2+ store does not regulate Ca2+ entry at plasma membrane in Jurkat human T–cells. Takemura H, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):393–7
Phorbol 12–myristate 13–acetate inhibits epidermal growth factor signalling in human keratinocytes, leading to decreased ornithine decarboxylase activity. Xue GZ, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):641–8
Gingko biloba extract EGb 761 is a suppresser of AP–1 transcription factor stimulated by phorbol 12–myristate 13–acetate. Mizuno M, et al. **Biochem Mol Biol Int** 1996 May;39(2):395–401
Second–generation antisense oligonucleotides: structure–activity relationships and the design of improved signal–transduction inhibitors. Altmann KH, et al. **Biochem Soc Trans** 1996 Aug;24(3):630–7 (46 ref.)
Antisense oligonucleotides as inhibitors of signal transduction: development from research tools to therapeutic agents. Dean NM, et al. **Biochem Soc Trans** 1996 Aug;24(3):623–9 (41 ref.)
Mutations in the carboxyl terminus of the agouti protein decrease agouti inhibition of ligand binding to the melanocortin receptors. Kiefer LL, et al. **Biochemistry** 1997 Feb 25;36(8):2084–90
Effects of U73122 and U73343 on human platelet calcium signalling and protein tyrosine phosphorylation. Heemskerk JW, et al. **Biochim Biophys Acta** 1997 Jan 10;1355(1):81–8
T cell antigen receptor dependent signalling in human lymphocytes: cholera toxin inhibits interleukin–2 receptor expression but not interleukin–2 synthesis by preventing activation of a protein kinase C isotype, PKC–alpha. Szamel M, et al. **Biochim Biophys Acta** 1997 Apr 24; 1356(2):237–48
Screening for bioactive compounds targeting the cellular signal transduction pathway using an RT–PCR–based bioassay system. Hakamatsuka T, et al. **Biol Pharm Bull** 1997 Apr;20(4):464–6
Signal transduction pathway on beta–glucans–triggered hydrogen peroxide production by murine peritoneal macrophages in vitro. Okazaki M, et al. **Biol Pharm Bull** 1996 Jan;19(1):18–23
Genistein analogues: effects on epidermal growth factor receptor tyrosine kinase and on stress–activated pathways. Croisy–Delcey M, et al. **Biomed Pharmacother** 1997; 51(6–7):286–94
Interleukin–2 (IL–2) upregulates BAG–1 gene expression through serine–rich region within IL–2 receptor beta c chain. Adachi M, et al. **Blood** 1996 Dec 1;88(11):4118–23
Erythropoietin activates Raf1 by an Shc–independent pathway in CTLL–EPO–R cells. Barber DL, et al. **Blood** 1997 Jan 1;89(1):55–64
Interferon–beta interrupts interleukin–6–dependent signaling events in myeloma cells. Berger LC, et al. **Blood** 1997 Jan 1;89(1):261–71
Interleukin–6 inhibits Fas–induced apoptosis and stress–activated protein kinase activation in multiple myeloma cells. Chauhan D, et al. **Blood** 1997 Jan 1; 89(1):227–34
Erythropoietin induces tyrosine phosphorylation of the interleukin–3 receptor beta subunit (betaIL3) and recruitment of Stat5 to possible Stat5–docking sites in betaIL3. Chin H, et al. **Blood** 1997 Jun 15;89(12):4327–36
Thrombopoietin signal transduction in purified murine megakaryocytes. Drachman JG, et al. **Blood** 1997 Jan 15; 89(2):483–92
Ectopic expression of the erythropoietin receptor in a murine interleukin–6–dependent plasmacytoma cell line (TEPC–2027) confers proliferative responsiveness to erythropoietin. Féger F, et al. **Blood** 1997 Jan 15; 89(2):435–45
Erythropoietin–induced activation of STAT5 is impaired in the myelodysplastic syndrome. Hoefsloot LH, et al. **Blood** 1997 Mar 1;89(5):1690–700
Thrombopoietin and thrombin induce tyrosine phosphorylation of Vav in human blood platelets. Miyakawa Y, et al. **Blood** 1997 Apr 15;89(8):2789–98
Activation of JNK signaling pathway by erythropoietin, thrombopoietin, and interleukin–3. Nagata Y, et al. **Blood** 1997 Apr 15;89(8):2664–9
Activation of p38 MAP kinase pathway by erythropoietin and interleukin–3. Nagata Y, et al. **Blood** 1997 Aug 1; 90(3):929–34
Homodimerization of erythropoietin receptor by a bivalent monoclonal antibody triggers cell proliferation and differentiation of erythroid precursors. Schneider H, et al. **Blood** 1997 Jan 15;89(2):473–82
Granulocyte–macrophage colony–stimulating factor–activated signaling pathways in human neutrophils. I. Tyrosine phosphorylation–dependent stimulation of phosphatidylinositol 3–kinase and inhibition by phorbol esters. al–Shami A, et al. **Blood** 1997 Feb 1;89(3):1035–44
Plasmin is a potent and specific chemoattractant for human peripheral monocytes acting via a cyclic guanosine monophosphate–dependent pathway. Syrovets T, et al. **Blood** 1997 Jun 15;89(12):4574–83
Steel factor enhances integrin–mediated tyrosine phosphorylation of focal adhesion kinase (pp125FAK) and paxillin. Takahira H, et al. **Blood** 1997 Mar 1;89(5):1574–84
Pertussis toxin shows distinct early signalling events in platelet–activating factor–, leukotriene B4–, and C5a–induced eosinophil homotypic aggregation in vitro and recruitment in vivo. Teixeira MM, et al. **Blood** 1997 Jun 15;89(12):4566–73
Multiple signaling pathways induced by granulocyte colony–stimulating factor involving activation of JAKs, STAT5, and/or STAT3 are required for regulation of three distinct classes of immediate early genes. Tian SS, et al. **Blood** 1996 Dec 15;88(12):4435–44
Regulation of cellular iron metabolism by erythropoietin: activation of iron–regulatory protein and upregulation of transferrin receptor expression in erythroid cells. Weiss G, et al. **Blood** 1997 Jan 15;89(2):680–7
Fc gammaRIII–mediated regulation of hematopoiesis in murine bone marrow cells by interleukin–3 and CD95 (Fas/Apo–1). Yoshikawa H, et al. **Blood** 1997 Sep 1; 90(5):1911–9
Signals elicited from human platelets by synthetic, triple helical, collagen–like peptides. Achison M, et al. **Blood Coagul Fibrinolysis** 1996 Mar;7(2):149–52
Intracellular signalling by binding sites for the antipsoriatic agent monomethylfumarate on human granulocytes. Nibbering PH, et al. **Br J Dermatol** 1997 Jul;137(1):65–75
The identification of DL–threo dihydrosphingosine and sphingosine as novel inhibitors of extracellular signal–regulated kinase signalling in airway smooth muscle. Tolan D, et al. **Br J Pharmacol** 1996 Sep;119(2):185–6
Effects of calcium on the electric coupling of carotid body glomus cells. Abudara V, et al. **Brain Res** 1996 Jun 24; 725(1):125–31
Neuroprotective sigma ligands attenuate NMDA and trans–ACPD–induced calcium signaling in rat primary neurons. Klette KL, et al. **Brain Res** 1997 May 9; 756(1–2):231–40
Effects of muscarinic receptor antagonism on the phosphatidylinositol bisphosphate signal transduction pathway after experimental brain injury. Lyeth BG, et al. **Brain Res** 1996 Dec 2;742(1–2):63–70
Alterations in phosphoinositide signaling and G–protein levels in depressed suicide brain. Pacheco MA, et al. **Brain Res** 1996 Jun 3;723(1–2):37–45
Epidermal growth factor receptor tyrosine kinase inhibitors as potential cancer chemopreventives. Kelloff GJ, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Aug;5(8):657–66 (108 ref.)
Tamoxifen inhibits prolactin signal transduction in ER – NOG–8 mammary epithelial cells. Das R, et al. **Cancer Lett** 1997 Jun 3;116(1):41–6
Carcinoembryonic antigen induces signal transduction in Kupffer cells. Gangopadhyay A, et al. **Cancer Lett** 1997 Sep 16;118(1):1–6
Activation of mitogenic signaling by endothelin 1 in ovarian carcinoma cells. Bagnato A, et al. **Cancer Res** 1997 Apr 1;57(7):1306–11
Drug–induced apoptosis is associated with enhanced Fas (Apo–1/CD95) ligand expression but occurs independently of Fas (Apo–1/CD95) signaling in human T–acute lymphatic leukemia cells. Villunger A, et al. **Cancer Res** 1997 Aug 15;57(16):3331–4
Asbestos causes stimulation of the extracellular signal–regulated kinase 1 mitogen–activated protein kinase cascade after phosphorylation of the epidermal growth factor receptor. Zanella CL, et al. **Cancer Res** 1996 Dec 1;56(23):5334–8
Activation of mitogen–activated protein kinases by green tea polyphenols: potential signaling pathways in the regulation of antioxidant–responsive element–mediated phase II enzyme gene expression. Yu R, et al. **Carcinogenesis** 1997 Feb;18(2):451–6
Glucose elevations alter bradykinin–stimulated intracellular calcium accumulation in cultured endothelial cells. Pieper GM, et al. **Cardiovasc Res** 1997 Apr;34(1):169–78
Cell death, survival and proliferation in Tetrahymena thermophila. Effects of insulin, sodium nitroprusside, 8–Bromo cyclic GMP, NG–methyl–L–arginine and methylene blue. Christensen ST, et al. **Cell Biol Int** 1996 Oct;20(10):653–66 (78 ref.)
Activation of the nitric oxide/cGMP pathway is required for refilling intracellular Ca2+ stores in a sympathetic neuron cell line. Harrington MA, et al. **Cell Calcium** 1996 May;19(5):399–407
Norepinephrine–mediated calcium signaling is altered in vascular smooth muscle of diabetic rat. Tam ES, et al. **Cell Calcium** 1997 Feb;21(2):143–50
p21WAF1/CIP1/SDI1 is elevated through a p53–independent pathway by mimosine. Alpan RS, et al. **Cell Growth Differ** 1996 Jul;7(7):893–901
Heregulin (HRG)–induced mitogenic signaling and cytotoxic activity of a HRG/PE40 ligand toxin in human breast cancer cells. Fiddes RJ, et al. **Cell Growth Differ** 1995 Dec; 6(12):1567–77
Hepatocyte growth factor/scatter factor–Met signaling induces proliferation, migration, and morphogenesis of pancreatic oval cells. Jeffers M, et al. **Cell Growth Differ** 1996 Dec;7(12):1805–13
Genistein inhibits both estrogen and growth factor–stimulated proliferation of human breast cancer cells. Peterson G, et al. **Cell Growth Differ** 1996 Oct; 7(10):1345–51
Biphasic and dose–dependent accumulation of INSP3 in Trypanosoma cruzi stimulated by a synthetic peptide carrying a chicken alpha D–globin fragment. Garrido MN, et al. **Cell Mol Biol (Noisy–le–grand)** 1996 Sep;42(6):859–64
Calcium controls second–messenger signalling in olfactory cilia. Boekhoff I, et al. **Cell Signal** 1996 Mar;8(3):167–71
Evidence for muscarinic 3 receptor mediated ion transport in HT29 cells studied by X–ray microanalysis. Zhang W, et al. **Cell Struct Funct** 1997 Jun;22(3):379–85
Effects of glial cell line–derived neurotrophic factor (GDNF) on dopaminergic neurons require concurrent activation of cAMP–dependent signaling pathways. Engele J, et al. **Cell Tissue Res** 1996 Nov;286(2):235–40
Targeting signal transduction in the discovery of antiproliferative drugs. Saltiel AR, et al. **Chem Biol** 1996 Nov;3(11):887–93 (29 ref.)
Carbon dioxide, an important messenger molecule for small cell lung cancer. Merryman JI, et al. **Chest** 1997 Sep; 112(3):779–84
Diverse effects of heparin on mitogen–activated protein kinase–dependent signal transduction in vascular smooth muscle cells. Daum G, et al. **Circ Res** 1997 Jul;81(1):17–23
The fumagillin analogue TNP–470 inhibits DNA synthesis of vascular smooth muscle cells stimulated by platelet–derived growth factor and insulin–like growth factor–I. Possible involvement of cyclin–dependent kinase 2. Koyama H, et al. **Circ Res** 1996 Oct;79(4):757–64
Angiotensin II activates phosphatidylinositol 3–kinase in vascular smooth muscle cells. Saward I, et al. **Circ Res** 1997 Aug;81(2):249–57
Angiotensin II stimulates p90rsk in vascular smooth muscle cells. A potential Na(+)–H+ exchanger kinase. Takahashi E, et al. **Circ Res** 1997 Aug;81(2):268–73
cGMP–elevating agents suppress proliferation of vascular smooth muscle cells by inhibiting the activation of epidermal growth factor signaling pathway [see comments] Yu SM, et al. **Circulation** 1997 Mar 4;95(5):1269–77.

Comment in: Circulation 1997 Mar 4;95(5):1101-3.
Gammalinolenic acid and dihomogammalinolenic acid suppress the CD3-mediated signal transduction pathway in human T cells. Vassilopoulos D, et al. **Clin Immunol Immunopathol** 1997 Jun;83(3):237-44
Oncogene products as therapeutic targets for cancer. Huang PS, et al. **Curr Opin Oncol** 1997 Jan;9(1):94-100 (83 ref.)
Induction of CD25 expression in human B lymphocytes by pharmacological activators of cellular signalling pathways. McKay CE, et al. **Cytokine** 1996 Apr;8(4):305-12
Activation of the Wnt signaling pathway: a molecular mechanism for lithium action. Hedgepeth CM, et al. **Dev Biol** 1997 May 1;185(1):82-91
Retinoid signaling is required for the establishment of a ZPA and for the expression of Hoxb-8, a mediator of ZPA formation. Lu HC, et al. **Development** 1997 May; 124(9):1643-51
High D-glucose-induced changes in endothelial Ca2+/EDRF signaling are due to generation of superoxide anions. Graier WF, et al. **Diabetes** 1996 Oct;45(10):1386-95
Erythropoietin-induced erythroid differentiation of the human erythroleukemia cell line TF-1 correlates with impaired STAT5 activation. Chrétien S, et al. **EMBO J** 1996 Aug 15;15(16):4174-81
Inhibin interferes with activin signaling at the level of the activin receptor complex in Chinese hamster ovary cells. Martens JW, et al. **Endocrinology** 1997 Jul;138(7):2928-36
Rapid membrane effects of steroids in neuroblastoma cells: effects of estrogen on mitogen activated protein kinase signalling cascade and c-fos immediate early gene transcription. Watters JJ, et al. **Endocrinology** 1997 Sep; 138(9):4030-3
Regulation of c-jun gene expression in endothelial cells by the protein kinase inhibitor staurosporine. Bandyopadhyay RS, et al. **Endothelium** 1997;5(2):95-105
Interleukin-1 induced signalling: biphasic activation of mitogen-activated protein kinase kinase and mitogen-activated protein kinases in HeLa cells. Involvement of phosphoprotein phosphatases. Appel A, et al. **Eur Cytokine Netw** 1996 Dec;7(4):775-84
The role of tyrosine phosphorylation and PTP-1C in CTLA-4 signal transduction. Chambers CA, et al. **Eur J Immunol** 1996 Dec;26(12):3224-9
Multiple intracellular signal transduction pathways mediating inward current produced by the neuropeptide, achatin-I. Emaduddin M, et al. **Eur J Pharmacol** 1996 Apr 29; 302(1-3):129-39
Effects of the anti-allergics astemizole and norastemizole on Fc epsilon RI receptor-mediated signal transduction processes. Fischer MJ, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):97-105
Thromboxane A2 induces cell signaling but requires platelet-derived growth factor to act as a mitogen. Grosser T, et al. **Eur J Pharmacol** 1997 Jan 29;319(2-3):327-32
Influence of the anti-allergic drug oxatomide on the signal transduction mechanism in a mast cell model. Paulussen JJ, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):121-30
Activation of G-proteins with AlF-4 induces LFA-1-mediated adhesion of T-cell hybridoma cells to ICAM-1 by signal pathways that differ from phorbol ester- and manganese-induced adhesion. Driessens MH, et al. **Exp Cell Res** 1997 Mar 15;231(2):242-50
All-trans-retinoic acid blocks cell cycle progression of human ovarian adenocarcinoma cells at late G1. Wu S, et al. **Exp Cell Res** 1997 May 1;232(2):277-86
Tyrosine phosphorylation of the product of the c-cbl protooncogene is [corrected] induced after integrin stimulation [published erratum appears in Exp Hematol 1997 Feb;25(2):177] Manié SN, et al. **Exp Hematol** 1997 Jan;25(1):45-50
An essential role for free radicals and derived species in signal transduction. Lander HM. **FASEB J** 1997 Feb;11(2):118-24 (90 ref.)
Effect of estradiol and progesterone on growth of porcine myometrial smooth muscle cells and phospholipase C and adenylate cyclase signalling systems in vitro. Kisielewska J, et al. **Folia Histochem Cytobiol** 1997;35(3):143-9
Oxidants as stimulators of signal transduction. Suzuki YJ, et al. **Free Radic Biol Med** 1997;22(1-2):269-85 (184 ref.)
Low salt intake down-regulates the guanylin signaling pathway in rat distal colon. Li Z, et al. **Gastroenterology** 1996 Dec;111(6):1714-21
Differential inhibition of epidermal growth factor signaling pathways in rat hepatocytes by long-term ethanol treatment. Saso K, et al. **Gastroenterology** 1997 Jun; 112(6):2073-88
The mechanisms of action of disease-modifying antirheumatic drugs: a review with emphasis on macrophage signal transduction and the induction of proinflammatory cytokines. Bondeson J. **Gen Pharmacol** 1997 Aug;29(2):127-50 (287 ref.)
Effects of tenidap on intracellular signal transduction and the induction of proinflammatory cytokines: a review. Bondeson J. **Gen Pharmacol** 1996 Sep;27(6):943-56 (68 ref.)
The human 5-hydroxytryptamine 1A receptor differentially modulates phospholipase C and adenylyl cyclase activities. Fenrick R, et al. **Gen Pharmacol** 1996 Mar;27(2):263-8
Schwann cell heparan sulfate proteoglycans play a critical role in glial growth factor/neuregulin signaling. Sudhalter J, et al. **Glia** 1996 May;17(1):28-38
Angiotensin II activates distinct signal transduction pathways in astrocytes isolated from neonatal rat brain. Tallant EA, et al. **Glia** 1997 Apr;19(4):333-42
Gadolinium blocks mechano-electric transducer current in chick cochlear hair cells. Kimitsuki T, et al. **Hear Res** 1996 Nov 1;101(1-2):75-80
Possible involvement of pertussis toxin-sensitive G protein in hepatocyte growth factor-induced signal transduction in cultured rat hepatocytes: pertussis toxin treatment inhibits activation of phospholipid signaling, calcium oscillation, and mitogen-activated protein kinase. Adachi T, et al. **Hepatology** 1997 Aug;26(2):295-300
The CD19-CD21 complex regulates signal transduction thresholds governing humoral immunity and autoimmunity. Tedder TF, et al. **Immunity** 1997 Feb;6(2):107-18 (94 ref.)
Transmembrane signaling through CD80 (B7-1) induces growth arrest and cell spreading of human B lymphocytes accompanied by protein tyrosine phosphorylation. Hirokawa M, et al. **Immunol Lett** 1996 Apr;50(1-2):95-8
Oncogene signal transduction inhibitors from medicinal plants. Chang CJ, et al. **In Vivo** 1996 Mar-Apr;10(2):185-90
Relation between effects of a set of anti-allergic drugs on calcium pathways and membrane structure in Fc epsilon RI activated signal transduction. Fischer MJ, et al. **Inflamm Res** 1996 Nov;45(11):564-73
Modulation of the receptor for urokinase-type plasminogen activator in macrophage-like U937 cells by inflammatory mediators. Yoshida E, et al. **Inflammation** 1996 Jun; 20(3):319-26
CD28-B7 interactions function to co-stimulate clonal deletion of double-positive thymocytes. Amsen D, et al. **Int Immunol** 1996 Dec;8(12):1927-36
IFN-gamma is a potent inducer of Ig secretion by sort-purified murine B cells activated through the mIg, but not the CD40, signaling pathway. Snapper CM, et al. **Int Immunol** 1996 Jun;8(6):877-85
Possible involvement of protein kinase C-epsilon in phorbol ester-induced growth inhibition of human lymphoblastic cells. Mihalik R, et al. **Int J Biochem Cell Biol** 1996 Aug; 28(8):925-33
Oxytocin inhibits the proliferation of MDA-MB231 human breast-cancer cells via cyclic adenosine monophosphate and protein kinase A. Cassoni P, et al. **Int J Cancer** 1997 Jul 17;72(2):340-4
Characterization of a cAMP-dependent protein kinase mutant resistant to cisplatin. Cvijic ME, et al. **Int J Cancer** 1997 Jul 17;72(2):345-50
Anti-interleukin-6 receptor antibody prevents muscle atrophy in colon-26 adenocarcinoma-bearing mice with modulation of lysosomal and ATP-ubiquitin-dependent proteolytic pathways. Fujita J, et al. **Int J Cancer** 1996 Nov 27;68(5):637-43
Human ovarian-carcinoma cell lines express IL-4 and IL-13 receptors: comparison between IL-4- and IL-13-induced signal transduction. Murata T, et al. **Int J Cancer** 1997 Jan 17;70(2):230-40
Detection of interleukin-1 signal transduction inhibitors: action of protein kinase inhibitors. Brown D, et al. **Int J Immunopharmacol** 1995 Nov;17(11):887-94
Induction of ileum muscarinic cholinoceptor signal transduction pathways by rat interferon-gamma. Sterin-Borda L, et al. **Int J Immunopharmacol** 1996 Jan; 18(1):17-22
Inhibition of B16 melanoma cell proliferation and alterations in p21 ras expression induced by interceptors of signal transduction pathways. Nordenberg J, et al. **Isr J Med Sci** 1996 Dec;32(12):1153-7
Negative signaling in B cells by surface immunoglobulins. Mayumi M, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S238-47 (102 ref.)
Inside-out signaling through integrins. Faull RJ, et al. **J Am Soc Nephrol** 1996 Aug;7(8):1091-7 (81 ref.)
Cyanide-stimulated inositol 1,4,5-trisphosphate formation: an intracellular neurotoxic signaling cascade. Yang CW, et al. **J Biochem Toxicol** 1996;11(5):251-6
Characterization of a novel mammalian RGS protein that binds to Galpha proteins and inhibits pheromone signaling in yeast. Chen C, et al. **J Biol Chem** 1997 Mar 28; 272(13):8679-85
Insulin-like growth factor-I rapidly activates multiple signal transduction pathways in cultured rat cardiac myocytes. Foncea R, et al. **J Biol Chem** 1997 Aug 1;272(31):19115-24
2-Aminopurine unravels a role for pRB in the regulation of gene expression by transforming growth factor beta. Giannini G, et al. **J Biol Chem** 1997 Feb 21;272(8):5313-9
Distinct signaling from stem cell factor and erythropoietin in HCD57 cells. Jacobs-Helber SM, et al. **J Biol Chem** 1997 Mar 14;272(11):6850-3
Prolactin stimulates serine/tyrosine phosphorylation and formation of heterocomplexes of multiple Stat5 isoforms in Nb2 lymphocytes. Kirken RA, et al. **J Biol Chem** 1997 May 30;272(22):14098-103
Inhibition of tumor necrosis factor signal transduction in endothelial cells by dimethylaminopurine. Marino MW, et al. **J Biol Chem** 1996 Nov 8;271(45):28624-9
Estradiol activates the prostate androgen receptor and prostate-specific antigen secretion through the intermediacy of sex hormone-binding globulin. Nakhla AM, et al. **J Biol Chem** 1997 Mar 14;272(11):6838-41
Interruption of Escherichia coli heat-stable enterotoxin-induced guanylyl cyclase signaling and associated chloride current in human intestinal cells by 2-chloroadenosine. Parkinson SJ, et al. **J Biol Chem** 1997 Jan 10;272(2):754-8
Platelet activation and signal transduction by convulxin, a C-type lectin from Crotalus durissus terrificus (tropical rattlesnake) venom via the p62/GPVI collagen receptor. Polgár J, et al. **J Biol Chem** 1997 May 23;272(21):13576-83
Peroxisome proliferators activate extracellular signal-regulated kinases in immortalized mouse liver cells. Rokos CL, et al. **J Biol Chem** 1997 May 16;272(20):13452-7
[D-Arg1,D-Trp5,7,9,Leu11]Substance P coordinately and reversibly inhibits bombesin- and vasopressin-induced signal transduction pathways in Swiss 3T3 cells. Seckl MJ, et al. **J Biol Chem** 1996 Nov 15;271(46):29453-60
Role of the vav proto-oncogene product (Vav) in erythropoietin-mediated cell proliferation and phosphatidylinositol 3-kinase activity. Shigematsu H, et al. **J Biol Chem** 1997 May 30;272(22):14334-40
Leptin induces mitogen-activated protein kinase-dependent proliferation of C3H10T1/2 cells. Takahashi Y, et al. **J Biol Chem** 1997 May 16;272(20):12897-900
Pasteurella multocida toxin activates the inositol triphosphate signaling pathway in Xenopus oocytes via G(q)alpha-coupled phospholipase C-beta1. Wilson BA, et al. **J Biol Chem** 1997 Jan 10;272(2):1268-75
Hepatocyte growth factor promotes motor neuron survival and synergizes with ciliary neurotrophic factor. Wong V, et al. **J Biol Chem** 1997 Feb 21;272(8):5187-91
Lck-independent triggering of T-cell antigen receptor signal transduction by staphylococcal enterotoxins. Yamasaki S, et al. **J Biol Chem** 1997 Jun 6;272(23):14787-91
Involvement of proteasomes in regulating Jak-STAT pathways upon interleukin-2 stimulation. Yu CL, et al. **J Biol Chem** 1997 May 30;272(22):14017-20
Bombesin, vasopressin, endothelin, bradykinin, and platelet-derived growth factor rapidly activate protein kinase D through a protein kinase C-dependent signal transduction pathway. Zugaza JL, et al. **J Biol Chem** 1997 Sep 19;272(38):23952-60
Evaluation of signal transduction mechanisms for the mitogenic effects of prostaglandin E2 in normal human bone cells in vitro. Baylink TM, et al. **J Bone Miner Res** 1996 Oct;11(10):1413-8
Signal transduction by basic fibroblast growth factor in rat osteoblastic Py1a cells. Hurley MM, et al. **J Bone Miner Res** 1996 Sep;11(9):1256-63
Anabolic effects of prostaglandins in cultured fetal rat calvariae: structure-activity relations and signal transduction pathway. Woodiel FN, et al. **J Bone Miner Res** 1996 Sep;11(9):1249-55
The development of alkylphosphocholines as signal transduction inhibitors: experimental and clinical challenges [letter] Hilgard P, et al. **J Cancer Res Clin Oncol** 1997; 123(5):286-7
Parathyroid hormone regulates the expression of rat osteoblast and osteosarcoma nuclear matrix proteins. Bidwell J, et al. **J Cell Biochem** 1996 Dec 1;63(3):374-83
Calcium-calmodulin plays a major role in bradykinin-induced arachidonic acid release by bovine aortic endothelial cells. Briand SI, et al. **J Cell Biochem** 1996 Dec 1;63(3):292-301
Role of phospholipase C and D signalling pathways in vasopressin-dependent myogenic differentiation. Naro F, et al. **J Cell Physiol** 1997 Apr;171(1):34-42
Thrombopoietin induces activation of the phosphatidylinositol-3' kinase pathway and formation of a complex containing p85PI3K and the protooncoprotein p120CBL. Sattler M, et al. **J Cell Physiol** 1997 Apr; 171(1):28-33
Effects of inhibitors of signal transduction pathways on transforming growth factor beta1 and osteogenic protein-1-induced insulinlike growth factor binding protein-3 expression in human bone cells. Srinivasan N, et al. **J Cell Physiol** 1997 Oct;173(1):28-35
Lung surfactant protein A (SP-A) activates a phosphoinositide/calcium signaling pathway in alveolar macrophages. Ohmer-Schröck D, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3695-702
Bacterial toxins that target Rho proteins. Aktories K. **J Clin Invest** 1997 Mar 1;99(5):827-9 (10 ref.)
G-protein alpha subunit Gi(alpha)2 mediates erythropoietin signal transduction in human erythroid precursors. Miller BA, et al. **J Clin Invest** 1996 Oct 15;98(8):1728-36
Phase I clinical and pharmacokinetic study of oral carboxyamidotriazole, a signal transduction inhibitor. Berlin J, et al. **J Clin Oncol** 1997 Feb;15(2):781-9
Regulation of signal transduction pathways by mood-stabilizing agents: implications for the delayed onset of therapeutic efficacy. Manji HK, et al. **J Clin Psychiatry** 1996;57 Suppl 13:34-46; discussion 47-8 (109 ref.)
G protein-mediated signal transduction as a target of antidepressant and antibipolar drug action: evidence from model systems. Rasenick MM, et al. **J Clin Psychiatry** 1996; 57 Suppl 13:49-55; discussion 56-8 (38 ref.)
Regulation of lipolysis by somatotropin: functional alteration of adrenergic and adenosine signaling in bovine adipose tissue. Houseknecht KL, et al. **J Endocrinol** 1997 Mar; 152(3):465-75
Influence on CD8 of TCR/CD3-generated signals in CTL clones and CTL precursor cells. Anel A, et al. **J Immunol** 1997 Jan 1;158(1):19-28
TGF-beta inhibits IL-2-induced tyrosine phosphorylation and activation of Jak-1 and Stat 5 in T lymphocytes. Bright JJ, et al. **J Immunol** 1997 Jul 1;159(1):175-83

Impaired signaling in alloantigen-specific CD8+ T cells tolerized in vivo: employing a model of Ld-specific TCR transgenic mice transplanted with allogenic hearts under the cover of a short-term rapamycin treatment. Chen H, et al. **J Immunol** 1996 Nov 15;157(10):4297-308

Costimulation of CD28- T lymphocytes by 4-1BB ligand. DeBenedette MA, et al. **J Immunol** 1997 Jan 15; 158(2):551-9

CD28-costimulation activates cyclic AMP-responsive element-binding protein in T lymphocytes. Hsueh YP, et al. **J Immunol** 1997 Jan 1;158(1):85-93

Outside-in signaling by lipopolysaccharide through a tailless integrin. Ingalls RR, et al. **J Immunol** 1997 Jul 1; 159(1):433-8

CD4 ligands inhibit the formation of multifunctional transduction complexes involved in T cell activation. Jabado N, et al. **J Immunol** 1997 Jan 1;158(1):94-103

Analysis of CD28 cytoplasmic tail tyrosine residues as regulators and substrates for the protein tyrosine kinases, EMT and LCK. King PD, et al. **J Immunol** 1997 Jan 15; 158(2):580-90

Interferons up-regulate STAT1, STAT2, and IRF family transcription factor gene expression in human peripheral blood mononuclear cells and macrophages. Lehtonen A, et al. **J Immunol** 1997 Jul 15;159(2):794-803

The CDK inhibitor, p27Kip1, is required for IL-4 regulation of astrocyte proliferation. Liu J, et al. **J Immunol** 1997 Jul 15;159(2):812-9

Human monocyte binding to fibronectin enhances IFN-gamma-induced early signaling events. McCarthy JB, et al. **J Immunol** 1997 Sep 1;159(5):2424-30

Human Thy-1 is cytokine-inducible on vascular endothelial cells and is a signaling molecule regulated by protein kinase C. Mason JC, et al. **J Immunol** 1996 Jul 15;157(2):874-83

IL-6 triggers cell growth via the Ras-dependent mitogen-activated protein kinase cascade. Ogata A, et al. **J Immunol** 1997 Sep 1;159(5):2212-21

IL-4 and IL-10 modulation of CD40-mediated signaling of monocyte IL-1beta synthesis and rescue from apoptosis. Poe JC, et al. **J Immunol** 1997 Jul 15;159(2):846-52

Cyclosporine-insensitive partial signaling and multiple roles of Ca2+ in Fas ligand-induced lysis. Rogers AM, et al. **J Immunol** 1997 Oct 1;159(7):3140-7

Effect of an ectokinase inhibitor, K252b, on degranulation and Ca2+ signals of RBL-2H3 cells and human basophils. Teshima R, et al. **J Immunol** 1997 Jul 15;159(2):964-9

TNF-alpha-mediated lung cytokine networking and eosinophil recruitment in pulmonary fibrosis. Zhang K, et al. **J Immunol** 1997 Jan 15;158(2):954-9

TNF-induced intracellular signaling leading to gene induction or to cytotoxicity by necrosis or by apoptosis. Fiers W, et al. **J Inflamm** 1995-96;47(1-2):67-75 (27 ref.)

Identification of phosphoproteins specific to granulocyte colony-stimulating factor-mediated signaling using 2D-SDS-PAGE. Csar XF, et al.
J Interferon Cytokine Res 1997 Feb;17(2):77-86

Activation of Raf-mitogen-activated protein kinase signaling pathway by 1,25-dihydroxyvitamin D3 in normal human keratinocytes. Gniadecki R. **J Invest Dermatol** 1996 Jun; 106(6):1212-7

Inhibitory effect of 3,4-dichloro-propionaniline on cytokine production by macrophages is associated with LPS-mediated signal transduction. Xie YC, et al.
J Leukoc Biol 1997 Jun;61(6):745-52

Effects of endothelin on phospholipases and generation of second messengers in cat iris sphincter and SV-CISM-2 cells. Abdel-Latif AA, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):147-55

Lysosphingomyelin-elicited Ca2+ mobilization from rat brain microsomes. Furuya S, et al.
J Lipid Mediat Cell Signal 1996 Sep;14(1-3):303-11

Inhibitory effect of wortmannin on phosphatidylinositol 3-kinase-mediated cellular events. Hazeki O, et al.
J Lipid Mediat Cell Signal 1996 Sep;14(1-3):259-61 (8 ref.)

Ganglioside effects on basic fibroblast and epidermal growth factor receptors in retinal glial cells. Meuillet E, et al.
J Lipid Mediat Cell Signal 1996 Sep;14(1-3):277-88

N-(4-hydroxyphenyl)retinamide activation of a distinct pathway signaling apoptosis [editorial; comment] Dmitrovsky E. **J Natl Cancer Inst** 1997 Aug 20; 89(16):1179-81. Comment on: J Natl Cancer Inst 1997 Aug 20;89(16):1191-8.

Epidermal growth factor receptor family and chemosensitization [editorial; comment] Mendelsohn J, et al. **J Natl Cancer Inst** 1997 Mar 5;89(5):341-3 (45 ref.). Comment on: J Natl Cancer Inst 1997 Mar 5;89(5):365-73.

4-Hydroxynonenal, an aldehydic product of lipid peroxidation, impairs signal transduction associated with muscarinic acetylcholine and metabotropic glutamate receptors: possible action on G alpha(q/11). Blanc EM, et al. **J Neurochem** 1997 Aug;69(2):570-80

Corticosteroid modulation of signal transduction in the CATH.a cell line. Bundey RA, et al. **J Neurochem** 1997 Jan;68(1):362-9

Ciliary neurotrophic factor activates JAK/Stat signal transduction cascade and induces transcriptional expression of glial fibrillary acidic protein in glial cells. Kahn MA, et al. **J Neurochem** 1997 Apr;68(4):1413-23

Neuroprotection of lubeluzole is mediated through the signal transduction pathways of nitric oxide. Maiese K, et al.
J Neurochem 1997 Feb;68(2):710-4

Cross talk between substance P and melittin-activated cellular signaling pathways in rat lactotroph-enriched cell cultures. Mau SE, et al. **J Neurochem** 1997 Aug; 69(2):762-72

Ganglioside GM1 activates the mitogen-activated protein kinase Erk2 and p70 S6 kinase in U-1242 MG human glioma cells. Van Brocklyn JR, et al. **J Neurochem** 1997 Jul;69(1):116-25

Altered mu-opiate receptor-G protein signal transduction following chronic morphine exposure. Wang L, et al.
J Neurochem 1997 Jan;68(1):248-54

Ex vivo expansion of tumor-draining lymph node cells using compounds which activate intracellular signal transduction. I. Characterization and in vivo anti-tumor activity of glioma-sensitized lymphocytes. Baldwin NG, et al.
J Neurooncol 1997 Mar;32(1):19-28

Ex vivo expansion of tumor-draining lymph node cells using compounds which activate intracellular signal transduction. II. Cytokine production and in vivo efficacy of glioma-sensitized lymphocytes. Rice CD, et al.
J Neurooncol 1997 Mar;32(1):29-38

Signaling effects of alpha-thrombin and SFLLRN in rat glioma C6 cells. Kaufmann R, et al. **J Neurosci Res** 1996 Dec 15;46(6):641-51

Neurotrophin activates signal transduction in oligodendroglial cells: expression of functional TrkC receptor isoforms. Kumar S, et al. **J Neurosci Res** 1996 Jun 1;44(5):490-8

Early signaling events by endotoxin in PC12 cells: involvement of tyrosine kinase, constitutive nitric oxide synthase, cGMP-dependent protein kinase, and Ca2+ channels. Simard JM, et al. **J Neurosci Res** 1996 Aug 1; 45(3):216-25

Inhibition of nuclear factor kappa B (NFkappaB) activity induces nerve growth factor-resistant apoptosis in PC12 cells. Taglialatela G, et al. **J Neurosci Res** 1997 Jan 15; 47(2):155-62

Splenocyte glutathione and CD3-mediated cell proliferation are reduced in mice fed a protein-deficient diet. Taylor CG, et al. **J Nutr** 1997 Jan;127(1):44-50

Sensitivity of vagal mucosal afferents to cholecystokinin and its role in afferent signal transduction in the rat. Richards W, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):473-81

Microvesicle-mediated exocytosis of glutamate is a novel paracrine-like chemical transduction mechanism and inhibits melatonin secretion in rat pinealocytes. Yamada H, et al. **J Pineal Res** 1996 Oct;21(3):175-91

Substance P receptor expression and cellular responses to substance P in prenatal rat spinal cord cells. St. John PA, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):569-83

3 beta-OH-5 beta-pregnan-20-one enhances [3H]GABA binding in developing chick optic lobe. Viapiano MS, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):585-97

The role of a cAMP-dependent pathway in the uterine relaxant action of relaxin in rats. Hughes SJ, et al.
J Reprod Fertil 1997 Mar;109(2):289-96

Modulation of macrophage activation by ammonium metavanadate. Vaddi K, et al. **J Toxicol Environ Health** 1996 Dec 27;49(6):631-45

The effect of immunosuppressive drugs on T cell signalling pathways: non-redundant steps in the T cell response. Halloran PF. **Kidney Blood Press Res** 1996;19(3-4):174-6 (19 ref.)

Arginine vasopressin and oxytocin increase intracellular calcium and cAMP in human glomerular epithelial cells in culture. Späth M, et al. **Kidney Blood Press Res** 1996; 19(2):81-6

Signal transduction of erythropoietin in endothelial cells. Haller H, et al. **Kidney Int** 1996 Aug;50(2):481-8

Cellular signaling and proliferative action of AVP in mesangium of SHR: effect of low density lipoprotein. Ishikawa S, et al. **Kidney Int** 1996 Nov;50(5):1506-14

Differential effects of phorbol ester on signaling and gene expression in human leukemia cells. Hass R, et al.
Leuk Res 1997 Jul;21(7):589-94

Potentiation of VD-induced monocytic leukemia cell differentiation by retinoids involves both RAR and RXR signaling pathways. Defacque H, et al. **Leukemia** 1997 Feb; 11(2):221-7

TGF-beta1 selectively suppresses PDGF receptor signaling pathways in MG-63 human osteosarcoma cell. Hung LM, et al. **Life Sci** 1997;61(7):685-93

Protein kinase Sck1 is involved in trehalase activation by glucose and nitrogen source in the fission yeast Schizosaccharomyces pombe. Soto T, et al.
Microbiology 1997 Jul;143 (Pt 7):2457-63

Reversal of defective G-proteins and adenylyl cyclase/cAMP signal transduction in diabetic rats by vanadyl sulphate therapy. Anand-Srivastava MB, et al.
Mol Cell Biochem 1995 Dec 6-20;153(1-2):113-9

Peroxovanadium compounds: biological actions and mechanism of insulin-mimesis. Bevan AP, et al.
Mol Cell Biochem 1995 Dec 6-20;153(1-2):49-58 (52 ref.)

Modulation of insulin action by vanadate: evidence of a role for phosphotyrosine phosphatase activity to alter cellular signaling. Fantus IG, et al. **Mol Cell Biochem** 1995 Dec 6-20;153(1-2):103-12 (76 ref.)

Cellular effects of phosphotyrosine-binding domain inhibitors on insulin receptor signaling and trafficking. Giorgetti-Peraldi S, et al. **Mol Cell Biol** 1997 Mar; 17(3):1180-8

Activation of different Stat5 isoforms contributes to cell-type-restricted signaling in response to interferons. Meinke A, et al. **Mol Cell Biol** 1996 Dec;16(12):6937-44

The level of intracellular glutathione is a key regulator for the induction of stress-activated signal transduction pathways including Jun N-terminal protein kinases and p38 kinase by alkylating agents. Wilhelm D, et al.
Mol Cell Biol 1997 Aug;17(8):4792-800

Involvement of juvenile hormone in regulation of prothoracicotropic hormone transduction during the early last larval instar of Bombyx mori. Gu SH, et al.
Mol Cell Endocrinol 1997 Mar 14;127(1):109-16

Changes in responsiveness of freshly isolated longitudinal muscle cells from rat uterus towards oxytocin during gestation: contractility and calcium signaling. Kawarabayashi T, et al. **Mol Cell Endocrinol** 1997 Apr 4; 128(1-2):77-84

Tumor necrosis factor-alpha induces interleukin-6 mRNA and protein in human granulosa luteinizing cells via protein tyrosine kinase without involving ceramide. Machelon V, et al. **Mol Cell Endocrinol** 1997 Feb 7;126(2):173-84

Prolactin up-regulates prostaglandin E2 production through increased expression of pancreatic-type phospholipase A2 (type I) and prostaglandin G/H synthase 2 in uterine cells. Prigent-Tessier A, et al. **Mol Cell Endocrinol** 1996 Aug 30;122(1):101-8

Effect of chronic growth hormone treatment on insulin signal transduction in rat tissues. Thirone AC, et al.
Mol Cell Endocrinol 1997 Jun 20;130(1-2):33-42

Dissociation of NGF induced signal transduction from neurite elongation by expression of a mutant adaptor protein v-Crk in PC12 cells. Teng KK, et al.
Mol Cell Neurosci 1996;8(2-3):157-70

Glucocorticoid inhibition of fibroblast proliferation and regulation of the cyclin kinase inhibitor p21Cip1. Ramalingam A, et al. **Mol Endocrinol** 1997 May; 11(5):577-86

Dexamethasone stimulation of rat insulin-like growth factor binding protein-1 promoter activity involves multiple cis-elements. Suh DS, et al. **Mol Endocrinol** 1996 Oct; 10(10):1227-37

Phosphatidylinositol 3-kinase is a requirement for insulin-like growth factor I-induced differentiation, but not for mitogenesis, in fetal brown adipocytes. Valverde AM, et al. **Mol Endocrinol** 1997 May;11(5):595-607

Gonadotrophin-releasing hormone and triptorelin inhibit the follicle stimulating hormone-induced response in human primary cultured granulosa-lutein cells. Furger C, et al.
Mol Hum Reprod 1996 Apr;2(4):259-64

Enhanced type 1alpha metabotropic glutamate receptor-stimulated phosphoinositide signaling after pertussis toxin treatment. Carruthers AM, et al.
Mol Pharmacol 1997 Sep;52(3):406-14

The role of the aspartate-arginine-tyrosine triad in the m1 muscarinic receptor: mutations of aspartate 122 and tyrosine 124 decrease receptor expression but do not abolish signaling. Lu ZL, et al. **Mol Pharmacol** 1997 Feb; 51(2):234-41

Inhibition by toxin B of inositol phosphate formation induced by G protein-coupled and tyrosine kinase receptors in N1E-115 neuroblastoma cells: involvement of Rho proteins. Zhang C, et al. **Mol Pharmacol** 1996 Oct; 50(4):864-9

Mechanism of amyloid beta-peptide (1-42) toxicity in PC12 cells. Fagarasan MO, et al. **Mol Psychiatry** 1996 Nov; 1(5):398-403

Molecular mechanisms of drug addiction: adaptations in signal transduction pathways. Nestler EJ, et al.
Mol Psychiatry 1996 Jul;1(3):190-9 (65 ref.)

Proliferation in the auditory receptor epithelium mediated by a cyclic AMP-dependent signaling pathway [see comments] Navaratnam DS, et al. **Nat Med** 1996 Oct; 2(10):1136-9. Comment in: Nat Med 1996 Oct;2(10):1082-3.

Stimulating hair cell regeneration: on a wing and a prayer [comment] Rubel EW, et al. **Nat Med** 1996 Oct; 2(10):1082-3. Comment on: Nat Med 1996 Oct;2(10):1136-9.

Signalling properties of lysophosphatidic acid in primary human skin fibroblasts: role of pertussis toxin-sensitive GTP-binding proteins. Pietruck F, et al.
Naunyn Schmiedebergs Arch Pharmacol 1997 Jan;355(1):1-7

Cellular proliferation and second messenger formation altered by dialysis membranes. Pacini S, et al.
Nephrol Dial Transplant 1997 Mar;12(3):500-4

Intracellular Ca2+ signals induced by ATP and thapsigargin in glioma C6 cells. Calcium pools sensitive to inositol 1,4,5-trisphosphate and thapsigargin. Sabała P, et al.
Neurochem Int 1997 Jul;31(1):55-64

Evidence for the involvement of docosahexaenoic acid in cholinergic stimulated signal transduction at the synapse. Jones CR, et al. **Neurochem Res** 1997 Jun;22(6):663-70

TrnR2, a novel receptor that mediates neurturin and GDNF signaling through Ret. Baloh RH, et al. **Neuron** 1997 May; 18(5):793-802

Molecular mechanisms underlying the regulation of proenkephalin gene expression in cultured spinal cord cells. Ha TS, et al. **Neuropeptides** 1996 Oct;30(5):506-13

Pheromone-induced second messenger signaling in the hamster vomeronasal organ. Kroner C, et al.
Neuroreport 1996 Nov 25;7(18):2989-92

Endothelin-induced calcium signaling in cultured mouse microglial cells is mediated through ETB receptors. Möller T, et al. **Neuroreport** 1997 Jul 7;8(9-10):2127-31

Anorexia induced by activators of the signal transducer gp

130. Plata-Salamán CR. **Neuroreport** 1996 Feb 29; 7(3):841–4

Role of Gq alpha in insulin-stimulated glucose uptake by C6 glioma cells. Singh SP, et al. **Neuroreport** 1997 Jul 7; 8(9–10):2359–63

Human interleukin-2 could bind to opioid receptor and induce corresponding signal transduction. Wang Y, et al. **Neuroreport** 1996 Dec 20;8(1):11–4

p21ras supports the survival of chick embryonic motor neurones. Weng G, et al. **Neuroreport** 1996 Apr 10; 7(5):1077–81

Neuroprotective signal transduction: relevance to stroke. Mattson MP. **Neurosci Biobehav Rev** 1997 Mar; 21(2):193–206 (127 ref.)

Regulation of stimulatory adenylyl cyclase signaling during forskolin-induced differentiation of mouse neuroblastoma x rat glioma (NG108-15) cells. Ammer H, et al. **Neurosci Lett** 1997 Jul 25;230(3):143–6

Involvement of sphingolipids in the endothelin-1 signal transduction mechanism in rat brain. Catalán RE, et al. **Neurosci Lett** 1996 Dec 13;220(2):121–4

Noradrenaline activates vasopressin neurons via alpha1-receptor-mediated Ca2+ signaling pathway. Shioda S, et al. **Neurosci Lett** 1997 May 2;226(3):210–2

Neuroligand-triggered calcium signalling in cultured human glioma cells. Weydt P, et al. **Neurosci Lett** 1997 Jun 6; 228(2):91–4

Opioid receptor signal transduction in narcotic tolerance and dependence. **NIDA Res Monogr** 1996;162:64–6

Effect of diuretics, channel modulators and signal interceptors on contractility of the trabecular meshwork. Wiederholt M, et al. **Ophthalmologica** 1997;211(3):153–60

Local anesthetics inhibit receptors coupled to phosphoinositide signaling in Xenopus oocytes. Tigyi J, et al. **Pflugers Arch** 1997 Feb;433(4):478–87

Chronic treatment with dexmedetomidine desensitizes alpha 2-adrenergic signal transduction. Reid K, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1–2):63–71

Cellular and molecular neuroscience of alcoholism. Diamond I, et al. **Physiol Rev** 1997 Jan;77(1):1–20 (375 ref.)

Sucrose control of phytochrome A signaling in Arabidopsis. Dijkwel PP, et al. **Plant Cell** 1997 Apr;9(4):583–95

Rapid suppression of free radical formation by nerve growth factor involves the mitogen-activated protein kinase pathway. Dugan LL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4086–91

Isolation and characterization of mutant cell lines defective in transforming growth factor beta signaling. Hocevar BA, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7655–60

Luminal trypsin may regulate enterocytes through proteinase-activated receptor 2. Kong W, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8884–9

p53-independent apoptosis induced by paclitaxel through an indirect mechanism. Lanni JS, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9679–83

Insulin-like growth factor II stimulates cell proliferation through the insulin receptor. Morrione A, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3777–82

Tumor necrosis factor (TNF)-mediated kinase cascades: bifurcation of nuclear factor-kappaB and c-jun N-terminal kinase (JNK/SAPK) pathways at TNF receptor-associated factor 2. Song HY, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9792–6

Calmodulin activates nuclear protein import: a link between signal transduction and nuclear transport. Sweitzer TD, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14574–9

Signal transduction in macrophages by glycosylphosphatidylinositols of Plasmodium, Trypanosoma, and Leishmania: activation of protein tyrosine kinases and protein kinase C by inositolglycan and diacylglycerol moieties. Tachado SD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4022–7

Individual and combined effects of ethanol and cocaine on intracellular signals and gene expression. Torres G, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 May; 20(4):561–96 (154 ref.)

Bombesin activation of phospholipase C beta 1 in rat acinar pancreatic cells involves the pertussis toxin-sensitive G alpha i3 protein. Pigeon C, et al. **Regul Pept** 1996 Apr 23;62(2–3):153–9

Pertussis toxin sensitive G-proteins are not involved in the mitogenic signaling pathway of insulin-like growth factor-I in normal rat kidney epithelial (NRKE) cells. Siebler T, et al. **Regul Pept** 1996 Apr 23;62(2–3):65–71

A new concept for risk assessment of the hazards of non-genotoxic chemicals--electronmicroscopic studies of the cell surface. Evidence for the action of lipophilic chemicals on the Ca2+ signaling system. Gartzke J, et al. **Sci Total Environ** 1997 Jun 20;199(1–2):213–26

Targeted therapy for prostate cancer: the Memorial Sloan-Kettering Cancer Center approach. Slovin SF, et al. **Semin Oncol** 1996 Dec;23(6 Suppl 14):41–8 (61 ref.)

Involvement of the actin network in insulin signalling. Tsakiridis T, et al. **Soc Gen Physiol Ser** 1997;52:257–71

Amphetamine-induced c-fos mRNA expression is altered in rats with neonatal ventral hippocampal damage. Lillrank SM, et al. **Synapse** 1996 Aug;23(4):292–301

Tumour dormancy and cell signalling--III: Role of hypercrosslinking of IgM and CD40 on the induction of cell cycle arrest and apoptosis in B lymphoma cells. Marches R, et al. **Ther Immunol** 1995 Jun;2(3):125–36

Angiotensin II increases plasminogen activator inhibitor-1 and tissue factor mRNA expression without changing that of tissue type plasminogen activator or tissue factor pathway inhibitor in cultured rat aortic endothelial cells. Nishimura H, et al. **Thromb Haemost** 1997 Jun; 77(6):1189–95

Epinephrine induces von Willebrand factor release from cultured endothelial cells: involvement of cyclic AMP-dependent signalling in exocytosis. Vischer UM, et al. **Thromb Haemost** 1997 Jun;77(6):1182–8

Signal transduction system in epinephrine stimulated platelets; comparison between epinephrine sensitive and insensitive platelets. Nakamura T, et al. **Thromb Res** 1997 Jan 15;85(2):83–93

Alterations in TNF-alpha signal transduction in resistant human papillary thyroid carcinoma cells. Pang XP, et al. **Thyroid** 1996 Aug;6(4):313–7

The inhibitory effects of gossypol on human sperm motility characteristics: possible modes of reversibility of those effects. Zavos PM, et al. **Tohoku J Exp Med** 1996 Jul; 179(3):167–75

Cadmium, gene regulation, and cellular signalling in mammalian cells. Beyersmann D, et al. **Toxicol Appl Pharmacol** 1997 Jun;144(2):247–61 (137 ref.)

Triethyltin interferes with Ca2+ signaling and potentiates norepinephrine release in PC12 cells. Viviani B, et al. **Toxicol Appl Pharmacol** 1996 Oct;140(2):289–95

Lead may affect glucocorticoid signal transduction in cultured hepatoma cells through inhibition of protein kinase C. Tonner LE, et al. **Toxicology** 1997 Apr 30;119(2):155–66

An oligonucleotide blocks interferon-gamma signal transduction. Lee PP, et al. **Transplantation** 1996 Nov 15; 62(9):1297–301

[The effects of single administration of kainic acid on cellular signal transmission pathway and susceptibility to seizure] Gao X, et al. **Sheng Li Hsueh Pao** 1995 Dec;47(6):589–96 (Eng. Abstr.) **(Chi)**

[Antidepressive agents and the cerebral signal transduction system--hippocampal neuromodulation and the action mechanism of antidepressants] Tajima O, et al. **Seishin Shinkeigaku Zasshi** 1996;98(11):909–15 (4 ref.) **(Jpn)**

[Dynamics of EGF-induced nuclear-cytoplasmic transport of transcription factor STAT1 in A431 cells] Vasilenko KP, et al. **Tsitologiia** 1997;39(2-3):150–8 (Eng. Abstr.) **(Rus)**

[The effects of neurochemical blockade of the processes of signal transfer and fixation in the olfactory bulb of rat pups] Kalzer OV. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep-Oct;46(5):949–52 **(Rus)**

GENETICS

Molecular genetics of signal transduction in Dictyostelium. Parent CA, et al. **Annu Rev Biochem** 1996;65:411–40 (173 ref.)

Genetic networks controlling the initiation of sporulation and the development of genetic competence in Bacillus subtilis. Grossman AD. **Annu Rev Genet** 1995;29:477–508 (121 ref.)

Signaling pathways that establish the dorsal-ventral pattern of the Drosophila embryo. Morisato D, et al. **Annu Rev Genet** 1995;29:371–99 (165 ref.)

Differential regulation of members of the family of signal transducers and activators of transcription during mammary gland development. Philp JA, et al. **Biochem Soc Trans** 1996 Aug;24(3):370S

Regulation of genomic instability in preneoplastic cells. Tlsty TD. **Cancer Surv** 1996;28:217–24 (14 ref.)

Redox signal transduction: mutations shifting [2Fe-2S] centers of the SoxR sensor-regulator to the oxidized form. Hidalgo E, et al. **Cell** 1997 Jan 10;88(1):121–9

A versatile transcriptional effector of Wingless signaling. Nusse R. **Cell** 1997 May 2;89(3):321–3 (21 ref.)

Characterization of a nuclear factor that binds juxtaposed with ATF3/Jun on a composite response element specifically mediating induced transcription in response to an epidermal growth factor/Ras/Raf signaling pathway. Nilsson M, et al. **Cell Growth Differ** 1997 Aug;8(8):913–20

FGF-1-induced platelet-derived growth factor-A chain gene expression in endothelial cells involves transcriptional activation by early growth response factor-1. Delbridge GJ, et al. **Circ Res** 1997 Aug;81(2):282–8

Molecular and genetic insights into ligand binding and signal transduction at the inhibitory glycine receptor. Schofield PR, et al. **Cold Spring Harb Symp Quant Biol** 1996; 61:333–42

Signals for activation of the GM-CSF promoter and enhancer in T cells. Shannon MF, et al. **Crit Rev Immunol** 1997;17(3–4):301–23 (161 ref.)

Plant pathology: many roads lead to resistance. Boyes DC, et al. **Curr Biol** 1996 Jun 1;6(6):634–7 (25 ref.)

Defining the regulatory networks for muscle development. Molkentin JD, et al. **Curr Opin Genet Dev** 1996 Aug; 6(4):445–53 (58 ref.)

Ataxia-telangiectasia: a multifaceted genetic disorder associated with defective signal transduction. Lavin MF, et al. **Curr Opin Immunol** 1996 Aug;8(4):459–64 (47 ref.)

The use of dominant-negative mutations to elucidate signal transduction pathways in lymphocytes. Perlmutter RM, et al. **Curr Opin Immunol** 1996 Apr;8(2):285–90 (48 ref.)

Xid and Xid-like immunodeficiencies from a signaling point of view. Tarakhovsky A. **Curr Opin Immunol** 1997 Jun; 9(3):319–23 (50 ref.)

Determination of Xenopus cell lineage by maternal factors and cell interactions. Moody SA, et al. **Curr Top Dev Biol** 1996;32:103–38 (160 ref.)

Surveillance and genome stability in budding yeast: implications for mammalian carcinogenesis. Spencer F. **Curr Top Microbiol Immunol** 1997;221:19–35 (98 ref.)

Regulation of paraxis expression and somite formation by ectoderm- and neural tube-derived signals. Sosić D, et al. **Dev Biol** 1997 May 15;185(2):229–43

Activin-like signal activates dorsal-specific maternal RNA between 8- and 16-cell stages of Xenopus. Hainski AM, et al. **Dev Genet** 1996;19(3):210–21

A mutation in the cAMP signaling pathway affects sexual development of Dictyostelium discoideum. Shimizu H, et al. **Dev Growth Differ** 1997 Apr;39(2):227–34

Defects in glucuronate biosynthesis disrupt Wingless signaling in Drosophila. Haerry TE, et al. **Development** 1997 Aug;124(16):3055–64

A family of mammalian Fringe genes implicated in boundary determination and the Notch pathway. Johnston SH, et al. **Development** 1997 Jun;124(11):2245–54

A Ras-mediated signal transduction pathway is involved in the control of sex myoblast migration in Caenorhabditis elegans. Sundaram M, et al. **Development** 1996 Sep; 122(9):2823–33

The Xenopus homolog of Drosophila Suppressor of Hairless mediates Notch signaling during primary neurogenesis. Wettstein DA, et al. **Development** 1997 Feb;124(3):693–702

Comparison of mRNA expression of two regulators of G-protein signaling, RGS1/BL34/1R20 and RGS2/G0S8, in cultured human blood mononuclear cells. Heximer SP, et al. **DNA Cell Biol** 1997 May;16(5):589–98

Compilation of all genes encoding two-component phosphotransfer signal transducers in the genome of Escherichia coli. Mizuno T. **DNA Res** 1997 Apr 28; 4(2):161–8

Compilation of all genes encoding bacterial two-component signal transducers in the genome of the cyanobacterium, Synechocystis sp. strain PCC 6803. Mizuno T, et al. **DNA Res** 1996 Dec 31;3(6):407–14

Redox-mediated regulation of p21(waf1/cip1) expression involves a post-transcriptional mechanism and activation of the mitogen-activated protein kinase pathway. Esposito F, et al. **Eur J Biochem** 1997 May 1;245(3):730–7

Transgene-encoded human CD2 acts in a dominant negative fashion to modify thymocyte selection signals in mice. Melton E, et al. **Eur J Immunol** 1996 Dec;26(12):2952–63

Adenoviral/retroviral vector chimeras: a novel strategy to achieve high-efficiency stable transduction in vivo. Bilbao G, et al. **FASEB J** 1997 Jul;11(8):624–34 (112 ref.)

Osmotic regulation of gene expression. Burg MB, et al. **FASEB J** 1996 Dec;10(14):1598–606 (39 ref.)

Molecular cloning of a novel gene involved in serotonin receptor-mediated signal transduction in rat stomach. Ohya S, et al. **FEBS Lett** 1997 Jan 20;401(2–3):252–8

The response to extracytoplasmic stress in Escherichia coli is controlled by partially overlapping pathways. Connolly L, et al. **Genes Dev** 1997 Aug 1;11(15):2012–21

Expression of Bcl-xL and loss of p53 can cooperate to overcome a cell cycle checkpoint induced by mitotic spindle damage. Minn AJ, et al. **Genes Dev** 1996 Oct 15; 10(20):2621–31

Genetic analysis of the Müllerian-inhibiting substance signal transduction pathway in mammalian sexual differentiation. Mishina Y, et al. **Genes Dev** 1996 Oct 15;10(20):2577–87

RAD9 and DNA polymerase epsilon form parallel sensory branches for transducing the DNA damage checkpoint signal in Saccharomyces cerevisiae. Navas TA, et al. **Genes Dev** 1996 Oct 15;10(20):2632–43

Multiple pathways for Steel regulation suggested by genomic and sequence analysis of the murine Steel gene. Bedell MA, et al. **Genetics** 1996 Mar;142(3):927–34

RAD9, RAD17, and RAD24 are required for S phase regulation in Saccharomyces cerevisiae in response to DNA damage. Paulovich AG, et al. **Genetics** 1997 Jan; 145(1):45–62

Characterization of maternal and zygotic D-raf proteins: dominant negative effects on Torso signal transduction. Radke K, et al. **Genetics** 1997 Jan;145(1):163–71

Requirement of mismatch repair genes MSH2 and MSH3 in the RAD1-RAD10 pathway of mitotic recombination in Saccharomyces cerevisiae. Saparbaev M, et al. **Genetics** 1996 Mar;142(3):727–36

Identification of two novel isoforms of the ZNF162 gene: a growing family of signal transduction and activator of RNA proteins. Caslini C, et al. **Genomics** 1997 Jun 1; 42(2):268–77

Abnormal transduction mechanisms in pituitary adenomas. Barlier A, et al. **Horm Res** 1997;47(4–6):227–34 (61 ref.)

Establishment and application of a novel T cell clonality analysis using single-strand conformation polymorphism of T cell receptor messenger signals. Yamamoto K, et al. **Hum Immunol** 1996 Jun-Jul;48(1–2):23–31

Evidence for a methyl-accepting chemotaxis protein gene (mcp1) that encodes a putative sensory transducer in virulent Treponema pallidum. Hagman KE, et al. **Infect Immun** 1997 May;65(5):1701–9

Role of the two-component signal transduction and the phosphoenolpyruvate: carbohydrate phosphotransferase systems in competence development of Haemophilus influenzae Rd [published erratum appears in J Bacteriol 1997 Jan;179(2):567] Gwinn ML, et al. **J Bacteriol** 1996 Nov;178(21):6366–8

Characterization of the pH signal transduction pathway gene palA of Aspergillus nidulans and identification of possible homologs. Negrete-Urtasun S, et al. **J Bacteriol** 1997 Mar; 179(5):1832–5

Characterization of the mitogen-activated protein kinase kinase 4 (MKK4)/c-Jun NH2-terminal kinase 1 and MKK3/p38 pathways regulated by MEK kinases 2 and 3. MEK kinase 3 activates MKK3 but does not cause activation of p38 kinase in vivo. Deacon K, et al. **J Biol Chem** 1997 May 30;272(22):14489–96

Activated alleles of yeast SLN1 increase Mcm1-dependent reporter gene expression and diminish signaling through the Hog1 osmosensing pathway. Fassler JS, et al. **J Biol Chem** 1997 May 16;272(20):13365–71

Mutations in the second cytoplasmic loop of the rat parathyroid hormone (PTH)/PTH-related protein receptor result in selective loss of PTH-stimulated phospholipase C activity. Iida-Klein A, et al. **J Biol Chem** 1997 Mar 14; 272(11):6882–9

Genetic evidence for a tyrosine kinase cascade preceding the mitogen-activated protein kinase cascade in vertebrate G protein signaling. Wan Y, et al. **J Biol Chem** 1997 Jul 4;272(27):17209–15

Defective regulation of phosphatidylcholine-specific phospholipases C and D in a kindred with Tangier disease. Evidence for the involvement of phosphatidylcholine breakdown in HDL-mediated cholesterol efflux mechanisms. Walter M, et al. **J Clin Invest** 1996 Nov 15; 98(10):2315–23

Alternative expression of platelet glycoprotein Ib(beta) mRNA from an adjacent 5' gene with an imperfect polyadenylation signal sequence. Zieger B, et al. **J Clin Invest** 1997 Feb 1;99(3):520–5

Functional effects of overexpression of protein kinase C-alpha, -beta, -delta, -epsilon, and -eta in the mast cell line RBL-2H3. Chang EY, et al. **J Immunol** 1997 Sep 15; 159(6):2624–32

Inborn errors of signal transduction: mutations in G proteins and G protein-coupled receptors as a cause of disease. Spiegel AM. **J Inherit Metab Dis** 1997 Jun;20(2):113–21 (20 ref.)

Effects of mutating leucine to threonine in the M2 segment of alpha1 and beta1 subunits of GABAA alpha1beta1 receptors. Tierney ML, et al. **J Membr Biol** 1996 Nov; 154(1):11–21

Molecular understanding of hematopoietin/cytokine receptor signaling defects in hematopoietic disorders. Soede-Bobok AA, et al. **J Mol Med** 1997 Jul;75(7):470–7 (80 ref.)

Calcium controls gene expression via three distinct pathways that can function independently of the Ras/mitogen-activated protein kinases (ERKs) signaling cascade. Johnson CM, et al. **J Neurosci** 1997 Aug 15; 17(16):6189–202

Cultured skin fibroblasts as a cell model for investigating schizophrenia. Mahadik SP, et al. **J Psychiatr Res** 1996 Nov-Dec;30(6):421–39 (160 ref.)

Identification by PCR of genes encoding multiple response regulators. Morel-Deville F, et al. **Microbiology** 1997 May; 143 (Pt 5):1513–20

A novel signal transduction pathway in Saccharomyces cerevisiae defined by Snf3-regulated expression of HXT6. Liang H, et al. **Mol Biol Cell** 1996 Dec;7(12):1953–66

Distinct retinoid X receptor-retinoic acid receptor heterodimers are differentially involved in the control of expression of retinoid target genes in F9 embryonal carcinoma cells. Chiba H, et al. **Mol Cell Biol** 1997 Jun; 17(6):3013–20

The osmoregulatory pathway represses mating pathway activity in Saccharomyces cerevisiae: isolation of a FUS3 mutant that is insensitive to the repression mechanism. Hall JP, et al. **Mol Cell Biol** 1996 Dec;16(12):6715–23

CD28 mediates a potent costimulatory signal for rapid degradation of IkappaBbeta which is associated with accelerated activation of various NF-kappaB/Rel heterodimers. Harhaj EW, et al. **Mol Cell Biol** 1996 Dec; 16(12):6736–43

Regulation of Drosophila heat shock factor trimerization: global sequence requirements and independence of nuclear localization. Orosz A, et al. **Mol Cell Biol** 1996 Dec; 16(12):7018–30

Two human cDNAs, including a homolog of Arabidopsis FUS6 (COP11), suppress G-protein- and mitogen-activated protein kinase-mediated signal transduction in yeast and mammalian cells. Spain BH, et al. **Mol Cell Biol** 1996 Dec;16(12):6698–706

The fission yeast pmk1+ gene encodes a novel mitogen-activated protein kinase homolog which regulates cell integrity and functions coordinately with the protein kinase C pathway. Toda T, et al. **Mol Cell Biol** 1996 Dec; 16(12):6752–64

Modification of thyroid hormone and 9-cis retinoic acid signaling by overexpression of their cognate receptors using adenoviral vector. Hayashi Y, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):59–66

Involvement of the transcription factor IID protein complex in gene activation by the N-terminal transactivation domain of the glucocorticoid receptor in vitro. Ford J, et al. **Mol Endocrinol** 1997 Sep;11(10):1467–75

Adenovirus-mediated gene transfer of dominant negative ras(asn17) in 3T3L1 adipocytes does not alter insulin-stimulated P13-kinase activity or glucose transport. Gnudi L, et al. **Mol Endocrinol** 1997 Jan;11(1):67–76

Point mutation in the ligand-binding domain of the progesterone receptor generates a transdominant negative phenotype. Gong W, et al. **Mol Endocrinol** 1997 Sep; 11(10):1476–85

Identification of a novel sonic hedgehog response element in the chicken ovalbumin upstream promoter-transcription factor II promoter. Krishnan V, et al. **Mol Endocrinol** 1997 Sep;11(10):1458–66

Evidence that the plastid signal and light operate via the same cis-acting elements in the promoters of nuclear genes for plastid proteins. Kusnetsov V, et al. **Mol Gen Genet** 1996 Oct 28;252(6):631–9

Genetic interactions indicate a role for Mdg1p and the SH3 domain protein Bem1p in linking the G-protein mediated yeast pheromone signalling pathway to regulators of cell polarity. Leberer E, et al. **Mol Gen Genet** 1996 Oct 16; 252(5):608–21

NUC-2, a component of the phosphate-regulated signal transduction pathway in Neurospora crassa, is an ankyrin repeat protein. Poleg Y, et al. **Mol Gen Genet** 1996 Oct 28;252(6):709–16

The effect of receptor rapid-internalization signals on diphtheria toxin endocytosis and cell sensitivity. Almond BD, et al. **Mol Microbiol** 1995 Nov;18(4):623–30

Countertranscript-driven attenuation system of the pAM beta 1 repE gene. Le Chatelier E, et al. **Mol Microbiol** 1996 Jun;20(5):1099–112

Identification and characterization of FrzZ, a novel response regulator necessary for swarming and fruiting-body formation in Myxococcus xanthus. Trudeau KG, et al. **Mol Microbiol** 1996 May;20(3):645–55

Cascade of gene expression induced by Ca2+ signals in neurons. Tsuda M. **Neurochem Int** 1996 Nov;29(5):443–51 (49 ref.)

The AT-rich flanks of the oocyte-type 5S RNA gene of Xenopus laevis act as a strong local signal for histone H1-mediated chromatin reorganization in vitro. Tomaszewski R, et al. **Nucleic Acids Res** 1997 Feb 1; 25(3):458–66

What's new in ras genes? Physiological role of ras genes in signal transduction and significance of ras gene activation in tumorigenesis. Waldmann V, et al. **Pathol Res Pract** 1996 Sep;192(9):883–91 (119 ref.)

Comparative aspects of Notch signaling in lower and higher eukaryotes. Blaumueller CM, et al. **Perspect Dev Neurobiol** 1997;4(4):325–43 (123 ref.)

Identification of mutants in metabolically regulated gene expression. Martin T, et al. **Plant J** 1997 Jan;11(1):53–62

Coordinated activation of as-1-type elements and a tobacco glutathione S-transferase gene by auxins, salicylic acid, methyl-jasmonate and hydrogen peroxide. Xiang C, et al. **Plant Mol Biol** 1996 Nov;32(3):415–26

Tumor suppressor genes and signal transduction in Drosophila. Woods DF, et al. **Princess Takamatsu Symp** 1994;24:1–13 (69 ref.)

Potentiation of beta-adrenergic signaling by gene transfer. Drazner MH, et al. **Proc Assoc Am Physicians** 1997 May; 109(3):220–7 (54 ref.)

Tumor induction by a transformation-defective polyoma virus mutant blocked in signaling through Shc. Bronson R, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):7954–8

Oncogenic mutation in the Kit receptor tyrosine kinase alters substrate specificity and induces degradation of the protein tyrosine phosphatase SHP-1. Piao X, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14665–9

Targeted disruption of the mouse Stat3 gene leads to early embryonic lethality. Takeda K, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3801–4

CD4 dependence of activation threshold and TCR signalling in mouse T lymphocytes. Feito MJ, et al. **Scand J Immunol** 1997 Feb;45(2):166–74

[Receptor mediated gene transfer in squamous epithelial carcinoma of the head-neck area] Wollenberg B, et al. **Laryngorhinootologie** 1997 Jul;76(7):411–4 (Eng. Abstr.) **(Ger)**

[Molecular biology, pharmacology and signal transduction of 5 cloned human somatostatin receptors] Fehmann HC, et al. **Z Gastroenterol** 1996 Nov;34(11):767–74 (53 ref.) (Eng. Abstr.) **(Ger)**

[Analysis of genes implicated in osteogenic signaling by osteogenic protein-1 (OP-1) using differential display method] Koyama H. **Kokubyo Gakkai Zasshi** 1997 Jun; 64(2):205–22 (Eng. Abstr.) **(Jpn)**

[Wingless/Wnt signal transduction mechanism] Yanagawa S. **Tanpakushitsu Kakusan Koso** 1997 Jan;42(1):22–30 (42 ref.) **(Jpn)**

[The Anders Jahres Prize. Intracellular signal transmission via dioxin receptors] Poellinger L. **Nord Med** 1996 Feb; 111(2):45–8 (15 ref.) (Eng. Abstr.) **(Swe)**

IMMUNOLOGY

Signal transduction and phagosome biogenesis in human macrophages during phagocytosis of Mycobacterium bovis BCG. Buchwalow IB, et al. **Acta Histochem** 1997 Mar; 99(1):63–70

Regulation of B cell apoptosis. Ashman RF, et al. **Adv Exp Med Biol** 1996;406:145–54 (21 ref.)

Signals for survival and apoptosis in normal and neoplastic B lymphocytes. Gordon J, et al. **Adv Exp Med Biol** 1996; 406:139–44 (10 ref.)

Regulation of interleukin-12 signalling during T helper phenotype development. Jacobson NG, et al. **Adv Exp Med Biol** 1996;409:61–73 (31 ref.)

The role of FasL and TNF in the homeostatic regulation of immune responses. Lynch DH. **Adv Exp Med Biol** 1996; 406:135–8 (23 ref.)

Autoimmunity due to defective Nur77, Fas, and TNF-RI apoptosis. Mountz JD, et al. **Adv Exp Med Biol** 1996; 406:241–62 (93 ref.)

Regulation of T cell activation by CD28 and CTLA4. Noel PJ, et al. **Adv Exp Med Biol** 1996;406:209–17 (27 ref.)

Inducible resistance to Fas-mediated apoptosis in primary B lymphocytes. Rothstein TL, et al. **Adv Exp Med Biol** 1996;406:177–89

The thymus and T cell death. Sprent J, et al. **Adv Exp Med Biol** 1996;406:191–8 (35 ref.)

Role of antibody signaling in inducing tumor dormancy. Uhr JW, et al. **Adv Exp Med Biol** 1996;406:69–74 (32 ref.)

Interleukin-2 receptor signaling mechanisms. Karnitz LM, et al. **Adv Immunol** 1996;61:147–99 (255 ref.)

CD40-CD40 ligand: a multifunctional receptor-ligand pair. Van Kooten C, et al. **Adv Immunol** 1996;61:1–77 (371 ref.)

Functional and molecular characterization of VIP receptors and signal transduction in human and rodent immune systems. Calvo JR, et al. **Adv Neuroimmunol** 1996; 6(1):39–47 (52 ref.)

Immunoregulatory role of neurotransmitters. Qiu Y, et al. **Adv Neuroimmunol** 1996;6(3):223–31 (51 ref.)

Unraveling the function of HIV type 1 Nef. Geleziunas R, et al. **AIDS Res Hum Retroviruses** 1996 Nov 20; 12(17):1579–82 (31 ref.)

Low-grade B cell lymphomas of mucosa-associated lymphoid tissue (MALT-type) require CD40-mediated signaling and Th2-type cytokines for in vitro growth and differentiation. Greiner A, et al. **Am J Pathol** 1997 May; 150(5):1583–93

Nucleosome-driven autoimmune response in lupus. Pathogenic T helper cell epitopes and costimulatory signals. Datta SK, et al. **Ann N Y Acad Sci** 1997 Apr 5; 815:155–70 (168 ref.)

T cell antigen receptor signal transduction pathways. Cantrell D. **Annu Rev Immunol** 1996;14:259–74 (91 ref.)

Orchestrated information transfer underlying leukocyte endothelial interactions. Ebnet K, et al. **Annu Rev Immunol** 1996;14:155–77 (132 ref.)

Abnormal signal transduction through CD4 leads to altered tyrosine phosphorylation in T cells derived from MRL-lpr/lpr mice. Duan JM, et al. **Autoimmunity** 1996; 23(4):231–43

Positive and negative signal co-operativity in the immune system: the BCR, Fc gamma RIIB, CR2 paradigm. Cambier JC. **Biochem Soc Trans** 1997 May;25(2):441–5 (21 ref.)

Oxidative signalling and gene expression during lymphocyte activation. Goldstone SD, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1-2):175–82

The protein product of the proto-oncogene c-cbl forms a complex with phosphatidylinositol 3-kinase p85 and CD19 in anti-IgM-stimulated human B-lymphoma cells. Beckwith M, et al. **Blood** 1996 Nov 1;88(9):3502–7

Characterization of interleukin-10 receptor expression on B-cell chronic lymphocytic leukemia cells. Jurlander J, et al. **Blood** 1997 Jun 1;89(11):4146–52

Antigen receptor signaling gives lymphocytes a long life [comment] Neuberger MS. **Cell** 1997 Sep 19;90(6):971–3 (8 ref.). Comment on: Cell 1997 Sep 19;90(6):1073–83.

Difference in signal transduction for IL-10 and IFN-gamma production in a CD8+ T cell clone. Minai Y, et al. **Cell Immunol** 1996 Sep 15;172(2):200–4

CD69-induced monocyte apoptosis involves multiple nonredundant signaling pathways. Ramírez R, et al. **Cell Immunol** 1996 Sep 15;172(2):192–9

HLA class II molecule signal transduction leads to either apoptosis or activation via two different pathways. Truman JP, et al. **Cell Immunol** 1996 Sep 15;172(2):149–57

T cell signalling through CD73. Resta R, et al. **Cell Signal** 1997 Feb;9(2):131–9 (92 ref.)

Signal transduction during NK cell activation. Bonnema JD, et al. **Chem Immunol** 1996;64:28–43 (102 ref.)

Recognition and signaling by mouse Ly-49 receptors. Seaman WE, et al. **Chem Immunol** 1996;64:19–27 (31 ref.)

Signal transduction in eosinophils. van der Bruggen T, et al. **Clin Exp Allergy** 1996 Aug;26(8):880–91 (142 ref.)

IL-2 signalling in T and natural killer (NK) cells associated with their class I-non-restricted killing activity. Yoneda K, et al. **Clin Exp Immunol** 1996 Oct;106(1):179–86

Protein tyrosine phosphatase roles in the regulation of lymphocyte signaling. Pani G, et al. **Clin Immunol Immunopathol** 1997 Jul;84(1):1–16 (110 ref.)

Gammalinolenic acid and dihomogammalinolenic acid suppress the CD3-mediated signal transduction pathway in human T cells. Vassilopoulos D, et al. **Clin Immunol Immunopathol** 1997 Jun;83(3):237–44

Lymphocyte activation in health and disease. Berridge MJ. **Crit Rev Immunol** 1997;17(2):155–78 (155 ref.)

Biochemistry of antigen receptor signaling in mature and developing B lymphocytes. Bireland ML, et al. **Crit Rev Immunol** 1997;17(3-4):353–85 (228 ref.)

Functions of IL-4 and control of its expression. Brown MA, et al. **Crit Rev Immunol** 1997;17(1):1–32 (257 ref.)

Accessory molecule and costimulation requirements for CD4 T cell response. Croft M, et al. **Crit Rev Immunol** 1997; 17(1):89–118 (159 ref.)

Genes responsible for quantitative regulation of antibody production. Puel A, et al. **Crit Rev Immunol** 1996;

16(3):223–50 (262 ref.)
Signals for activation of the GM–CSF promoter and enhancer in T cells. Shannon MF, et al. **Crit Rev Immunol** 1997;17(3–4):301–23 (161 ref.)
Structural aspects of signal transduction in B–cells. Vihinen M, et al. **Crit Rev Immunol** 1996;16(3):251–75 (254 ref.)
CD22 is a negative regulator of B–cell receptor signalling. Nitschke L, et al. **Curr Biol** 1997 Feb 1;7(2):133–43
Functional analysis of Fas signaling in vivo using synthetic inducers of dimerization. Spencer DM, et al. **Curr Biol** 1996 Jul 1;6(7):839–47
Hemidesmosomes: roles in adhesion, signaling and human diseases. Borradori L, et al. **Curr Opin Cell Biol** 1996 Oct; 8(5):647–56 (74 ref.)
Integrins and cancer. Varner JA, et al. **Curr Opin Cell Biol** 1996 Oct;8(5):724–30 (77 ref.)
Recent advances in tumor necrosis factor and CD40 signaling. Tewari M, et al. **Curr Opin Genet Dev** 1996 Feb; 6(1):39–44 (52 ref.)
Downstream signals initiated in mast cells by Fc epsilon RI and other receptors. Beaven MA, et al. **Curr Opin Immunol** 1996 Dec;8(6):766–72 (66 ref.)
Co–stimulation in T cell responses. Chambers CA, et al. **Curr Opin Immunol** 1997 Jun;9(3):396–404 (83 ref.)
Regulation of antigen receptor signal transduction by protein tyrosine kinases. Chan AC, et al. **Curr Opin Immunol** 1996 Jun;8(3):394–401 (61 ref.)
The complexity of signaling pathways activated by the BCR. DeFranco AL. **Curr Opin Immunol** 1997 Jun;9(3):296–308 (120 ref.)
Activation of B lymphocytes: integrating signals from CD19, CD22 and Fc gamma RIIb1. Doody GM, et al. **Curr Opin Immunol** 1996 Jun;8(3):378–82 (47 ref.)
Molecular mechanisms in B cell antigen receptor signaling. Kurosaki T. **Curr Opin Immunol** 1997 Jun;9(3):309–18 (84 ref.)
Natural killer cell receptors. Long EO, et al. **Curr Opin Immunol** 1997 Jun;9(3):344–50 (69 ref.)
Role of phosphatases in lymphocyte activation. Neel BG. **Curr Opin Immunol** 1997 Jun;9(3):405–20 (124 ref.)
Lymphocyte activation and effector functions. How signals are integrated in the immune system. Nussenzweig M, et al. **Curr Opin Immunol** 1997 Jun;9(3):293–5 (0 ref.)
Co–receptors of B lymphocytes. O'Rourke L, et al. **Curr Opin Immunol** 1997 Jun;9(3):324–9 (65 ref.)
Signalling in lymphocyte development. Owen MJ, et al. **Curr Opin Immunol** 1996 Apr;8(2):191–8 (64 ref.)
The use of dominant–negative mutations to elucidate signal transduction pathways in lymphocytes. Perlmutter RM, et al. **Curr Opin Immunol** 1996 Apr;8(2):285–90 (48 ref.)
Signals and susceptibility to programmed death in b cells. Rothstein TL. **Curr Opin Immunol** 1996 Jun;8(3):362–71 (133 ref.)
T cell clonal anergy. Schwartz RH. **Curr Opin Immunol** 1997 Jun;9(3):351–7 (44 ref.)
Signal transduction in plant immunity. Shirasu K, et al. **Curr Opin Immunol** 1996 Feb;8(1):3–7 (55 ref.)
TCR zeta chain in T cell development and selection. Shores EW, et al. **Curr Opin Immunol** 1997 Jun;9(3):380–9 (96 ref.)
Mitogen–activated protein kinase cascades and regulation of gene expression. Su B, et al. **Curr Opin Immunol** 1996 Jun; 8(3):402–11 (95 ref.)
Inhibitory receptors, ITIM sequences and phosphatases. Unkeless JC, et al. **Curr Opin Immunol** 1997 Jun;9(3):338–43 (42 ref.)
Functions of CD40 on B cells, dendritic cells and other cells. van Kooten C, et al. **Curr Opin Immunol** 1997 Jun; 9(3):330–7 (64 ref.)
Biophysical and structural studies of TCRs and ligands: implications for T cell signaling. Ward ES, et al. **Curr Opin Immunol** 1997 Feb;9(1):97–106 (59 ref.)
Pathways leading to cell death in T cells. Wong B, et al. **Curr Opin Immunol** 1997 Jun;9(3):358–64 (69 ref.)
Specific inhibition of IL–6 signalling with monoclonal antibodies against the gp130 receptor. Liautard J, et al. **Cytokine** 1997 Apr;9(4):233–41
Mouse macrophage development in the absence of the common gamma chain: defining receptor complexes responsible for IL–4 and IL–13 signaling. Andersson A, et al. **Eur J Immunol** 1997 Jul;27(7):1762–8
T cell receptor alpha–chain tail is required for protein kinase C–mediated down–regulation, but not for signaling. Bäckström BT, et al. **Eur J Immunol** 1997 Jun; 27(6):1433–41
Signals through CD8 or CD4 can induce commitment to the CD4 lineage in the thymus. Bommhardt U, et al. **Eur J Immunol** 1997 May;27(5):1152–63
CD40 signaling induces interleukin–4–independent IgE switching in vivo. Ferlin WG, et al. **Eur J Immunol** 1996 Dec;26(12):2911–5
Transgene–encoded human CD2 acts in a dominant negative fashion to modify thymocyte selection signals in mice. Melton E, et al. **Eur J Immunol** 1996 Dec;26(12):2952–63
Thymocytes and RelB–dependent medullary epithelial cells provide growth–promoting and organization signals, respectively, to thymic medullary stromal cells. Naspetti M, et al. **Eur J Immunol** 1997 Jun;27(6):1392–7
Resistance of cultured peripheral T cells towards activation–induced cell death involves a lack of recruitment of FLICE (MACH/caspase 8) to the CD95 death–inducing signaling complex. Peter ME, et al. **Eur J Immunol** 1997 May;27(5):1207–12
Activation of protein kinase C attenuates early signals in Fas–mediated apoptosis. Ruiz–Ruiz MC, et al. **Eur J Immunol** 1997 Jun;27(6):1442–50
Agonist antibody and Fas ligand mediate different sensitivity to death in the signaling pathways of Fas and cytoplasmic mutants. Thilenius AR, et al. **Eur J Immunol** 1997 May; 27(5):1108–14
Eosinophil priming by cytokines: from cellular signal to in vivo modulation. Koenderman L, et al. **Eur Respir J Suppl** 1996 Aug;22:119s–125s (83 ref.)
CD48 may serve as an accessory molecule for the activation of a subset of human gamma/delta T cells. Flament C, et al. **Hum Immunol** 1996 Apr;46(2):82–92
Surface molecules that drive T cell development in vitro in the absence of thymic epithelium and in the absence of lineage–specific signals. Cibotti R, et al. **Immunity** 1997 Mar;6(3):245–55
Tuning antigen receptor signaling by CD22: integrating cues from antigens and the microenvironment. Cyster JG, et al. **Immunity** 1997 May;6(5):509–17 (72 ref.)
Two signals are necessary for cell proliferation induced by a cytokine receptor gp130: involvement of STAT3 in anti–apoptosis. Fukada T, et al. **Immunity** 1996 Nov; 5(5):449–60
Different nuclear signals are activated by the B cell receptor during positive versus negative signaling. Healy JI, et al. **Immunity** 1997 Apr;6(4):419–28
Altered T cell receptor ligands trigger a subset of early T cell signals. Rabinowitz JD, et al. **Immunity** 1996 Aug; 5(2):125–35
STAM, signal transducing adaptor molecule, is associated with Janus kinases and involved in signaling for cell growth and c–myc induction. Takeshita T, et al. **Immunity** 1997 Apr;6(4):449–57
TNF–alpha–induced regulation and signalling in macrophages. Riches DW, et al. **Immunobiology** 1996 Oct; 195(4–5):477–90 (31 ref.)
Signal minus 1: a key factor in immunological tolerance to tissue–specific self antigens? Parish CR. **Immunol Cell Biol** 1996 Jun;74(3):278–85 (50 ref.)
Where the outside meets the inside: integrins as activators and targets of signal transduction cascades. Brown E, et al. **Immunol Lett** 1996 Dec;54(2–3):189–93 (35 ref.)
Granulocyte signal transduction and priming: cause without effect? Coffer PJ, et al. **Immunol Lett** 1997 Jun 1; 57(1–3):27–31 (58 ref.)
Activation of natural killer cells by heat–killed Listeria monocytogenes requires additional signals from lymphoid cells. Daugelat S, et al. **Immunol Lett** 1996 Apr; 50(1–2):81–5
Collaboration of TCR–, CD4– and CD28–mediated signalling in antigen–specific MHC class II–restricted T–cells. Gogolák P, et al. **Immunol Lett** 1996 Dec; 54(2–3):135–44
Expression of exogenous p59fyn modulates signaling in an immature B cell line, WEHI–231. Iwabuchi N, et al. **Immunol Lett** 1996 Jul;51(3):181–5
Membrane–bound ezrin is involved in B–cell receptor–mediated signaling: potential role of an ITAM–like ezrin motif. Rozsnyay Z, et al. **Immunol Lett** 1996 Dec;54(2–3):163–9
Different pathways of the release of cytotoxic proteins in LAK cells. Sashchenko LP, et al. **Immunol Lett** 1996 Oct; 53(1):25–9
ITIMs and ITAMs. The Yin and Yang of antigen and Fc receptor–linked signaling machinery. Isakov N. **Immunol Res** 1997 Feb;16(1):85–100 (112 ref.)
Regulation of cell signaling by the protein tyrosine phosphatases, CD45 and SHP–1. Ulyanova T, et al. **Immunol Res** 1997 Feb;16(1):101–13 (117 ref.)
Signal transduction by human NK cell MHC–recognizing receptors. Binstadt BA, et al. **Immunol Rev** 1997 Feb; 155:197–203 (70 ref.)
Role of the common cytokine receptor gamma chain in cytokine signaling and lymphoid development. Leonard WJ, et al. **Immunol Rev** 1995 Dec;148:97–114 (77 ref.)
Transduction of cytotoxic signals in natural killer cells: a general model of fine tuning between activatory and inhibitory pathways in lymphocytes. Renard V, et al. **Immunol Rev** 1997 Feb;155:205–21 (153 ref.)
Early T–cell development in CD3–deficient mice. Tanaka Y, et al. **Immunol Rev** 1995 Dec;148:171–99 (89 ref.)
Protein tyrosine phosphatases in T–cell development, apoptosis and signalling. Frearson JA, et al. **Immunol Today** 1996 Aug;17(8):385–91 (57 ref.)
TCR signaling regulates thymic organization: lessons from TCR–transgenic mice. Goverman J, et al. **Immunol Today** 1997 May;18(5):204–8 (22 ref.)
CSF–1 signal transduction: what is of functional significance? Hamilton JA. **Immunol Today** 1997 Jul;18(7):313–7 (34 ref.)
Alterations in T cells of cancer–bearers: whence specificity? Levey DL, et al. **Immunol Today** 1996 Aug;17(8):365–8 (39 ref.)
Chemical events in signal transduction [letter; comment] Nakashima I, et al. **Immunol Today** 1997 Jul;18(7):362. Comment on: Immunol Today 1996 Sep;17(9):436–41.
Integrins as promiscuous signal transduction devices. Petty HR, et al. **Immunol Today** 1996 May;17(5):209–12 (23 ref.)
Negative signaling in B cells: SHIP Grbs Shc. Tridandapani S, et al. **Immunol Today** 1997 Sep;18(9):424–7 (48 ref.)
Signal transduction through mu kappa B–cell receptors expressed on pre–B cells is different from that through B–cell receptors on mature B cells. Nakamura T, et al. **Immunology** 1996 Aug;88(4):593–9
Preferential requirement of CD3 zeta–mediated signals for development of immature rather than mature thymocytes. Aoe T, et al. **Int Immunol** 1996 Jul;8(7):1055–66
The interchain disulfide bond between TCR alpha beta heterodimers on human T cells is not required for TCR–CD3 membrane expression and signal transduction. Arnaud J, et al. **Int Immunol** 1997 Apr;9(4):615–26
CD28 co–stimulatory regimes differ in their dependence on phosphatidylinositol 3–kinase: common co–signals induced by CD80 and CD86. Cefai D, et al. **Int Immunol** 1996 Oct; 8(10):1609–16
Thiol–mediated inhibition of FAS and CD2 apoptotic signaling in activated human peripheral T cells. Deas O, et al. **Int Immunol** 1997 Jan;9(1):117–25
Regulation of CD40 ligand expression on naive CD4 T cells: a role for TCR but not co–stimulatory signals. Jaiswal AI, et al. **Int Immunol** 1996 Feb;8(2):275–85
CD2 signaling in T cells involves tyrosine phosphorylation and activation of the Tec family kinase, EMT/ITK/TSK. King PD, et al. **Int Immunol** 1996 Nov;8(11):1707–14
Targets of p56(lck) activity in immature thymoblasts: stimulation of the Ras/Raf/MAPK pathway. Lin K, et al. **Int Immunol** 1997 Feb;9(2):291–306
Antigen receptor–mediated B cell death is blocked by signaling via CD72 or treatment with dextran sulfate and is defective in autoimmunity–prone mice. Nomura T, et al. **Int Immunol** 1996 Jun;8(6):867–75
The differential role of CD86 and CD80 co–stimulatory molecules in the induction and the effector phases of contact hypersensitivity. Nuriya S, et al. **Int Immunol** 1996 Jun;8(6):917–26
The role of recombination signal sequences in the preferential joining by deletion in DH–JH recombination and in the ordered rearrangement of the IgH locus. Pan PY, et al. **Int Immunol** 1997 Apr;9(4):515–22
CD28 co–stimulatory signals induce IL–2 receptor expression on antigen–stimulated virgin T cells by an IL–2–independent mechanism. Toyooka K, et al. **Int Immunol** 1996 Feb;8(2):159–69
CD45–mediated signals can trigger shedding of lymphocyte L–selectin. Wroblewski M, et al. **Int Immunol** 1997 Apr; 9(4):555–62
Lck dependence of signaling pathways activated by gamma–irradiation and CD3 epsilon engagement in RAG–1(–/–)–immature thymocytes. Wu G, et al. **Int Immunol** 1996 Jul;8(7):1159–64
B cell antigen receptor signaling links biochemical changes in the class II peptide–loading compartment to enhanced processing. Xu X, et al. **Int Immunol** 1996 Dec; 8(12):1867–76
Development of Th 1– or Th 2–dominated immune responses: what about the polarizing signals? Romagnani S. **Int J Clin Lab Res** 1996;26(2):83–98 (176 ref.)
New Trends in Immunopharmacology 1995. Proceedings of a meeting. Tokyo, Japan, July 15, 1995. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S161–288
Negative signaling in B cells by surface immunoglobulins. Mayumi M, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S238–47 (102 ref.)
Roles of JAK kinases in human GM–CSF receptor signal transduction. Watanabe S, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 2):S183–91 (26 ref.)
Activation signals regulate heat shock transcription factor 1 in human B lymphocytes. Hardy L, et al. **J Cell Physiol** 1997 Mar;170(3):235–40
Predominant expression of type II vasoactive intestinal peptide receptors by human T lymphoblastoma cells: transduction of both Ca2+ and cyclic AMP signals. Xia M, et al. **J Clin Immunol** 1996 Jan;16(1):21–30
HIV infection––induced posttranslational modification of T cell signaling molecules associated with disease progression. Stefanová I, et al. **J Clin Invest** 1996 Sep 15; 98(6):1290–7
Negative signaling pathways of the killer cell inhibitory receptor and Fc gamma RIIb1 require distinct phosphatases. Gupta N, et al. **J Exp Med** 1997 Aug 4; 186(3):473–8
Replacement of pre–T cell receptor signaling functions by the CD4 coreceptor. Norment AM, et al. **J Exp Med** 1997 Jan 6;185(1):121–30
Commitment of immature CD4+8+ thymocytes to the CD4 lineage requires CD3 signaling but does not require expression of clonotypic T cell receptor (TCR) chains. Suzuki H, et al. **J Exp Med** 1997 Jul 7;186(1):17–23
Epstein–Barr virus binding to CD21, the virus receptor, activates resting B cells via an intracellular pathway that is linked to B cell infection. Roberts ML, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3077–85
Effects of extracellular ATP and adenosine on different thymocyte subsets: possible role of ATP–gated channels and G protein–coupled purinergic receptor. Apasov SG, et al. **J Immunol** 1997 Jun 1;158(11):5095–105
Stimulation of Fc gamma receptors in rat peritoneal macrophages induces the expression of nitric oxide synthase and chemokines by mechanisms showing different sensitivities to antioxidants and nitric oxide donors. Bayón Y, et al. **J Immunol** 1997 Jul 15;159(2):887–94
The CD5/CD72 receptor system is coexpressed with several functionally relevant counterstructures on human B cells and delivers a critical signaling activity. Cerutti A, et al.

J Immunol 1996 Sep 1;157(5):1854–62

Negative signaling in B lymphocytes induces tyrosine phosphorylation of the 145–kDa inositol polyphosphate 5–phosphatase, SHIP. Chacko GW, et al. **J Immunol** 1996 Sep 15;157(6):2234–8

CD7–mediated regulation of integrin adhesiveness on human T cells involves tyrosine phosphorylation–dependent activation of phosphatidylinositol 3–kinase. Chan AS, et al. **J Immunol** 1997 Jul 15;159(2):934–42

Impaired signaling in alloantigen–specific CD8+ T cells tolerized in vivo: employing a model of Ld–specific TCR transgenic mice transplanted with allogenic hearts under the cover of a short–term rapamycin treatment. Chen H, et al. **J Immunol** 1996 Nov 15;157(10):4297–308

Interaction of CTLA–4 with the clathrin–associated protein AP50 results in ligand–independent endocytosis that limits cell surface expression. Chuang E, et al. **J Immunol** 1997 Jul 1;159(1):144–51

Sequential development of structural and functional alterations in T cells from tumor–bearing mice. Correa MR, et al. **J Immunol** 1997 Jun 1;158(11):5292–6

Costimulation of CD28– T lymphocytes by 4–1BB ligand. DeBenedette MA, et al. **J Immunol** 1997 Jan 15; 158(2):551–9

CD44 activation and associated primary adhesion is inducible via T cell receptor stimulation. DeGrendele HC, et al. **J Immunol** 1997 Sep 15;159(6):2549–53

Tyrosine phosphorylation of Shc is not required for proliferation or viability signaling by granulocyte–macrophage colony–stimulating factor in hematopoietic cell lines. Durstin M, et al. **J Immunol** 1996 Jul 15;157(2):534–40

Mechanisms of stimulation of the respiratory burst by TNF in nonadherent neutrophils: its independence of lipidic transmembrane signaling and dependence on protein tyrosine phosphorylation and cytoskeleton. Dusi S, et al. **J Immunol** 1996 Nov 15;157(10):4615–23

Intracellular signaling for inducible antigen receptor–mediated Fas resistance in B cells. Foote LC, et al. **J Immunol** 1996 Sep 1;157(5):1878–85

Dissociation of T cell anergy from apoptosis by blockade of Fas/Apo–1 (CD95) signaling. Hargreaves RG, et al. **J Immunol** 1997 Apr 1;158(7):3099–107

CD28/B7 costimulation regulates autoimmune diabetes induced with multiple low doses of streptozotocin. Herold KC, et al. **J Immunol** 1997 Jan 15;158(2):984–91

Lack of IL–12 signaling in human allergen–specific Th2 cells. Hilkens CM, et al. **J Immunol** 1996 Nov 15;157(10):4316–21

Natural killer cell cytolytic activity is inhibited by NKG2–A and activated by NKG2–C. Houchins JP, et al. **J Immunol** 1997 Apr 15;158(8):3603–9

Signals through 4–1BB are costimulatory to previously activated splenic T cells and inhibit activation–induced cell death. Hurtado JC, et al. **J Immunol** 1997 Mar 15; 158(6):2600–9

Increased expression of signaling lymphocytic activation molecule in patients with rheumatoid arthritis and its role in the regulation of cytokine production in rheumatoid synovium. Isomäki P, et al. **J Immunol** 1997 Sep 15; 159(6):2986–93

CD154/CD40 and CD70/CD27 interactions have different and sequential functions in T cell–dependent B cell responses: enhancement of plasma cell differentiation by CD27 signaling. Jacquot S, et al. **J Immunol** 1997 Sep 15; 159(6):2652–7

Roles of CD9 molecules in survival and activation of human eosinophils. Kim JT, et al. **J Immunol** 1997 Jul 15; 159(2):926–33

CD38 ligation in human B cell progenitors triggers tyrosine phosphorylation of CD19 and association of CD19 with lyn and phosphatidylinositol 3–kinase. Kitanaka A, et al. **J Immunol** 1997 Jul 1;159(1):184–92

Tumor–induced suppression of T lymphocyte proliferation coincides with inhibition of Jak3 expression and IL–2 receptor signaling: role of soluble products from human renal cell carcinomas. Kolenko V, et al. **J Immunol** 1997 Sep 15;159(6):3057–67

Differential T cell signaling induced by antagonist peptide–MHC complexes and the associated phenotypic responses. La Face DM, et al. **J Immunol** 1997 Mar 1; 158(5):2057–64

TNF receptor–2–triggered apoptosis is associated with the down–regulation of Bcl–xL on activated T cells and can be prevented by CD28 costimulation. Lin RH, et al. **J Immunol** 1997 Jan 15;158(2):598–603

Identification of a STAT6 domain required for IL–4–induced activation of transcription. Lu B, et al. **J Immunol** 1997 Aug 1;159(3):1255–64

Proto–oncoprotein Vav interacts with c–Cbl in activated thymocytes and peripheral T cells. Marengère LE, et al. **J Immunol** 1997 Jul 1;159(1):70–6

Defective TCR–mediated signaling in synovial T cells in rheumatoid arthritis. Maurice MM, et al. **J Immunol** 1997 Sep 15;159(6):2973–8

Surface expression of hemopoietic cell phosphatase fails to complement CD45 deficiency and inhibits TCR–mediated signal transduction in a Jurkat T cell clone. Musci MA, et al. **J Immunol** 1997 Feb 15;158(4):1565–71

The role of protein kinase C in CD8+ T lymphocyte effector responses. Nesic D, et al. **J Immunol** 1997 Jul 15; 159(2):582–90

Phosphatidylinositol 3 kinase activity is not essential for B7–1–mediated costimulation of proliferation or development of cytotoxicity in murine T cells. Ni HT, et al. **J Immunol** 1996 Sep 15;157(6):2243–6

Selective induction of CD73 expression in human lymphocytes by CD38 ligation: a novel pathway linking signal transducers with ecto–enzyme activities. Peola S, et al. **J Immunol** 1996 Nov 15;157(10):4354–62

Cyclosporine–insensitive partial signaling and multiple roles of Ca2+ in Fas ligand–induced lysis. Rogers AM, et al. **J Immunol** 1997 Oct 1;159(7):3140–7

Activation of human monocytes and the acute monocytic leukemia cell line (THP–1) by lipoxins involves unique signaling pathways for lipoxin A4 versus lipoxin B4: evidence for differential Ca2+ mobilization. Romano M, et al. **J Immunol** 1996 Sep 1;157(5):2149–54

CD28 costimulation promotes the production of Th2 cytokines. Rulifson IC, et al. **J Immunol** 1997 Jan 15; 158(2):658–65

CD19 regulates B lymphocyte signaling thresholds critical for the development of B–1 lineage cells and autoimmunity. Sato S, et al. **J Immunol** 1996 Nov 15;157(10):4371–8

Mycobacterial lipoarabinomannan recognition requires a receptor that shares components of the endotoxin signaling system. Savedra R Jr, et al. **J Immunol** 1996 Sep 15; 157(6):2549–54

Cognate T cell help for CD40–deficient B cells induces c–myc RNA expression, but DNA synthesis requires an additional signal through surface Ig. Schrader CE, et al. **J Immunol** 1997 Jan 1;158(1):153–62

A novel mechanism of alternative pathway complement activation accounts for the deposition of C3 fragments on CR2–expressing homologous cells. Schwendinger MG, et al. **J Immunol** 1997 Jun 1;158(11):5455–63

Fc epsilonRI gamma can support T cell development and function in mice lacking endogenous TCR zeta–chain. Shores E, et al. **J Immunol** 1997 Jul 1;159(1):222–30

Selective loss of the calcium ion signaling pathway in T cells maturing toward a T helper 2 phenotype. Sloan–Lancaster J, et al. **J Immunol** 1997 Aug 1;159(3):1160–8

Ligation of L–selectin through conserved regions within the lectin domain activates signal transduction pathways and integrin function in human, mouse, and rat leukocytes. Steeber DA, et al. **J Immunol** 1997 Jul 15;159(2):952–63

A new 12–kilodalton dimer associated with pre–TCR complex and clonotype–independent CD3 complex on immature thymocytes. Takase K, et al. **J Immunol** 1997 Jul 15;159(2):741–7

Platelet–activating factor abrogates apoptosis induced by cross–linking of the surface IgM receptor in a human B lymphoblastoid cell line. Toledano BJ, et al. **J Immunol** 1997 Apr 15;158(8):3705–15

B cell antigen receptor desensitization: disruption of receptor coupling to tyrosine kinase activation. Vilen BJ, et al. **J Immunol** 1997 Jul 1;159(1):231–43

IL–5 receptor expression and Ig secretion from murine B lymphocytes requires coordinated signaling by membrane Ig, IL–4, and IL–5. Weber JD, et al. **J Immunol** 1996 Nov 15;157(10):4428–35

Integrin–mediated intracellular Ca2+ signaling in Jurkat T lymphocytes. Weismann M, et al. **J Immunol** 1997 Feb 15; 158(4):1618–27

Reverse signaling via CD30 ligand. Wiley SR, et al. **J Immunol** 1996 Oct 15;157(8):3635–9

Specific inhibition of T lymphocyte coactivation by triggering integrin beta 1 reveals convergence of beta 1, beta 2, and beta 7 signaling pathways. Woodside DG, et al. **J Immunol** 1996 Jul 15;157(2):700–6

A shift from negative to positive selection of autoreactive T cells by the reduced level of TCR signal in TCR–transgenic CD3 zeta–deficient mice. Yamazaki T, et al. **J Immunol** 1997 Feb 15;158(4):1634–40

Regulation of Ku expression in normal murine B cells by stimuli that promote switch recombination. Zelazowski P, et al. **J Immunol** 1997 Sep 15;159(6):2559–62

Protein tyrosine kinases Syk and ZAP–70 display distinct requirements for Src family kinases in immune response receptor signal transduction. Zoller KE, et al. **J Immunol** 1997 Feb 15;158(4):1650–9

CD38 ligation results in activation of the Raf–1/mitogen–activated protein kinase and the CD3–zeta/zeta–associated protein–70 signaling pathways in Jurkat T lymphocytes. Zubiaur M, et al. **J Immunol** 1997 Jul 1;159(1):193–205

Activated polymorphonuclear leukocytes induce constriction of canine coronary artery via Mac–1, but not LFA–1, and ICAM–1. Minamino T, et al. **J Mol Cell Cardiol** 1996 Jul; 28(7):1575–81

Partial activation of foreign antigen specific T lymphocytes by a self peptide: possible roles of altered peptide ligands in regulating T lymphocyte mediated immune response. Cao W, et al. **J Mol Med** 1996 Oct;74(10):573–82 (104 ref.)

IL–6 cytokine family and signal transduction: a model of the cytokine system. Hibi M, et al. **J Mol Med** 1996 Jan; 74(1):1–12 (168 ref.)

Signal perception and intracellular signal transduction in plant pathogen defense. Nürnberger T, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):127–36

Trans–dominant inhibition of integrin function. Díaz–González F, et al. **Mol Biol Cell** 1996 Dec; 7(12):1939–51

Regulation of T–cell antigen receptor signalling by Syk tyrosine protein kinase. Latour S, et al. **Mol Cell Biol** 1997 Aug;17(8):4434–41

Cytokine signal networks and a new era in biomedical research. Arai K, et al. **Mol Cells** 1997 Feb 28;7(1):1–12 (40 ref.)

Interleukin 8 as a novel target for intervention therapy in acute inflammatory diseases. Harada A, et al. **Mol Med Today** 1996 Nov;2(11):482–9 (30 ref.)

Viewpoint: signal transduction during natural killer cell activation. Leibson P. **Nat Immun** 1995;14(3):117–22 (38 ref.)

Interaction of natural killer cells with extracellular matrix induces early intracellular signalling events and enhances cytotoxic functions. Palmieri G, et al. **Nat Immun** 1996–97; 15(2–3):147–53 (50 ref.)

Divergent signal transduction pathways and effects on natural killer cell functions induced by interaction of Fc receptors with physiologic ligands or antireceptor antibodies. Sulica A, et al. **Nat Immun** 1995;14(3):123–33 (58 ref.)

The Syk and ZAP–70 SH2–containing tyrosine kinases are implicated in pre–T cell receptor signaling. Cheng AM, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9797–801

Antigen receptor engagement delivers a stop signal to migrating T lymphocytes. Dustin ML, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3909–13

Regulation of interleukin–12 signal transduction during T helper phenotype development. Jacobson NG, et al. **Res Immunol** 1995 Sep–Oct;146(7–8):446–56 (23 ref.)

The lectin pathway. Matsushita M, et al. **Res Immunol** 1996 Feb;147(2):115–8 (21 ref.)

NK receptors and signalling. Palmieri G, et al. **Res Immunol** 1997 Mar–Apr;148(3):184–90 (55 ref.)

The lectin pathway of complement activation. Turner MW. **Res Immunol** 1996 Feb;147(2):110–5 (33 ref.)

ICAM–2 provides a costimulatory signal for T cell stimulation by allogeneic class II MHC. Carpenito C, et al. **Scand J Immunol** 1997 Mar;45(3):248–54

A role for L–selectin in monocyte activation by Jurkat tumour cells. Putz EF, et al. **Scand J Immunol** 1996 Dec; 44(6):556–64

Expression and signal transduction of T–cell antigen receptor (TCR)/CD3 complexes on fresh or in vitro expanded T lymphocytes from patients with Hodgkin's and non–Hodgkin's lymphomas. Rubin B, et al. **Scand J Immunol** 1997 Jun;45(6):715–25

Intracellular signaling in neutrophil priming and activation. Downey GP, et al. **Semin Cell Biol** 1995 Dec;6(6):345–56 (61 ref.)

Signalling heterogeneity as a contributing factor in macrophage functional diversity. Riches DW. **Semin Cell Biol** 1995 Dec;6(6):377–84 (40 ref.)

Variant TCR ligands: new insights into the molecular basis of antigen–dependent signal transduction and T–cell activation. Madrenas J, et al. **Semin Immunol** 1996 Apr; 8(2):83–101 (99 ref.)

Immunosuppression in human tumor–host interaction: role of cytokines and alterations in signal–transducing molecules. Kiessling R, et al. **Springer Semin Immunopathol** 1996;18(2):227–42 (100 ref.)

Inhibition of the human allogeneic mixed lymphocyte response by cyclosporin A: relationship with the IL–12 pathway. Bonnotte B, et al. **Tissue Antigens** 1996 Oct;48(4 Pt 1):265–70

The renal cell carcinoma lysis by a specific cytotoxic T cell clone is independent of the Fas/Fas–L cytotoxic pathway. Caignard A, et al. **Tissue Antigens** 1996 Oct;48(4 Pt 1):295–300

Signal transduction properties of the T cell activation monoclonal antibody panel: ubiquitous increase in cellular substrate tyrosine phosphorylation in the absence of detectable calcium mobilization. Levine BL, et al. **Tissue Antigens** 1996 Oct;48(4 Pt 1):319–24

Human killer inhibitory receptors: specificity for HLA–class I molecules and mechanisms of signal transduction. Colonna M, et al. **Transplant Proc** 1996 Dec;28(6):3035

PHYSIOLOGY

The signal transduction of the glucagon–like peptide 1 receptor: fishing beyond the protein kinase level. Göke B, et al. **Acta Physiol Scand** 1996 Jul;157(3):321–8

Stimulation–induced calcium signalling and ion transport in rat pancreatic acini. Gromada J, et al. **Acta Physiol Scand** 1997 Jan;159(1):69–79

GIP receptors and signal–transduction mechanisms. McIntosh CH, et al. **Acta Physiol Scand** 1996 Jul; 157(3):361–5 (30 ref.)

Neuropeptide Y regulates rat renal tubular Na,K–ATPase through several signalling pathways. Ohtomo Y, et al. **Acta Physiol Scand** 1996 Sep;158(1):97–105

Signal transduction and desensitization of the glucagon–like peptide–1 receptor. Thorens B, et al. **Acta Physiol Scand** 1996 Jul;157(3):317–9

Transforming growth factor–beta system and its regulation by members of the steroid–thyroid hormone superfamily. Koli K, et al. **Adv Cancer Res** 1996;70:63–94 (133 ref.)

Phosphoinositide signalling in human neuroblastoma cells: biphasic effect of Li+ on the level of the inositolphosphate second messengers. Los GV, et al. **Adv Enzyme Regul** 1996; 36:245–64

Current issues in the regulation of signal transduction. Weber G, et al. **Adv Enzyme Regul** 1996;36:33–55

PO2 affinities, heme proteins, and reactive oxygen intermediates involved in intracellular signal cascades for sensing oxygen. Acker H. **Adv Exp Med Biol** 1996; 410:59–64 (36 ref.)
Cross-talk between ceramide and PKC activity in the control of apoptosis in WEHI-231. Chmura SJ, et al. **Adv Exp Med Biol** 1996;406:39–55
NO as a physiological signal molecule that triggers thymocyte apoptosis. Fehsel K, et al. **Adv Exp Med Biol** 1996;387:195–8
The presynaptic component of a cholinergic mechanism in the carotid body chemotransduction of hypoxia in the cat. Fitzgerald RS, et al. **Adv Exp Med Biol** 1996;410:245–52
Granzyme B-induced apoptosis. Greenberg AH. **Adv Exp Med Biol** 1996;406:219–28 (69 ref.)
The coupling between intracellular pH, ion transport, and chemosensory discharge. Iturriaga R, et al. **Adv Exp Med Biol** 1996;410:175–80
Fas splicing variants and their effect on apoptosis. Ruberti G, et al. **Adv Exp Med Biol** 1996;406:125–34 (67 ref.)
Cardiac effects of AII. AT1A receptor signaling, desensitization, and internalization. Thomas WG, et al. **Adv Exp Med Biol** 1996;396:59–69 (60 ref.)
Redox regulation of AP-1: a link between transcription factor signaling and DNA repair. Xanthoudakis S, et al. **Adv Exp Med Biol** 1996;387:69–75 (45 ref.)
Platelet-activating factor (PAF): signalling and adhesion in cell–cell interactions. Zimmerman GA, et al. **Adv Exp Med Biol** 1996;416:297–304 (34 ref.)
Intracellular signal transduction in the postischemic brain. Wieloch T, et al. **Adv Neurol** 1996;71:371–87; discussion 387–8 (147 ref.)
Dissection of protein kinase cascades that mediate cellular response to cytokines and cellular stress. Cohen P. **Adv Pharmacol** 1996;36:15–27 (29 ref.)
Sphingolipid-dependent protein kinases. Hakomori S. **Adv Pharmacol** 1996;36:155–71 (33 ref.)
Roles of the MAP kinase cascade in vertebrates. Moriguchi T, et al. **Adv Pharmacol** 1996;36:121–37 (124 ref.)
Protein tyrosine phosphatases and the control of cellular signaling responses. Tonks NK. **Adv Pharmacol** 1996; 36:91–119 (104 ref.)
Apoptosis: an overview of the process and its relevance in disease. Webb SJ, et al. **Adv Pharmacol** 1997;41:1–34 (174 ref.)
Interference of HIV-1 Nef in the sphingomyelin transduction pathway activated by tumour necrosis factor-alpha in human glial cells. Richard A, et al. **AIDS** 1997 Jan; 11(1):F1–7
Antigen receptor signalling. Monteseirín J, et al. **Allergol Immunopathol (Madr)** 1996 Sep–Oct;24(5):185–92 (9 ref.)
Protein families that mediate Ca2+ signaling in the cardiovascular system. Katz AM. **Am J Cardiol** 1996 Nov 7;78(9A):2–6 (49 ref.)
Signal transduction pathways via guanylin and uroguanylin in stomach and intestine. London RM, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G93–105
Mechanotransduction in bone: osteoblasts are more responsive to fluid forces than mechanical strain. Owan I, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C810–5
Poor fetal nutrition causes long-term changes in expression of insulin signaling components in adipocytes. Ozanne SE, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E46–51
Sphingosine prevents diacylglycerol signaling to mitogen-activated protein kinase in airway smooth muscle. Tolan D, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C928–36
Inhibition of ERK activation attenuates endothelin-stimulated airway smooth muscle cell proliferation. Whelchel A, et al. **Am J Respir Cell Mol Biol** 1997 May;16(5):589–96
Heterogeneity of allergic airway responses in sheep: differences in signal transduction? Ahmed T, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):843–9
A high-throughput STAT binding assay using fluorescence polarization. Wu P, et al. **Anal Biochem** 1997 Jun 15; 249(1):29–36
The signal transducer gp130 is shared by interleukin-6 family of haematopoietic and neurotrophic cytokines. Taga T. **Ann Med** 1997 Feb;29(1):63–72 (88 ref.)
Transduction is a major factor influencing receptor characterization. Spedding M, et al. **Ann N Y Acad Sci** 1997 May 30;812:29–40 (49 ref.)
Marked age-dependent neuroprotection by brain-derived neurotrophic factor against neonatal hypoxic-ischemic brain injury. Cheng Y, et al. **Ann Neurol** 1997 Apr; 41(4):521–9
Structural and biological features of the TNF receptor and TNF ligand superfamilies: interactive signals in the pathobiology of Hodgkin's disease. Gruss HJ, et al. **Ann Oncol** 1996;7 Suppl 4:19–26 (66 ref.)
Molecular mechanism of photosignaling by archaeal sensory rhodopsins. Hoff WD, et al. **Annu Rev Biophys Biomol Struct** 1997;26:223–58 (174 ref.)
Antigen-mediated IGE receptor aggregation and signaling: a window on cell surface structure and dynamics. Holowka D, et al. **Annu Rev Biophys Biomol Struct** 1996;25:79–112 (149 ref.)
Modular peptide recognition domains in eukaryotic signaling. Kuriyan J, et al. **Annu Rev Biophys Biomol Struct** 1997; 26:259–88 (102 ref.)
Functional and structural complexity of signal transduction via G-protein-coupled receptors. Gudermann T, et al. **Annu Rev Neurosci** 1997;20:399–427 (192 ref.)
Nuclear inositol lipid cycle: a new central intermediary in signal transduction. Manzoli L, et al. **Anticancer Res** 1996 Nov–Dec;16(6A):3283–6
Multiple use of a signal transduction pathway in tumor cell invasion. Timár J, et al. **Anticancer Res** 1996 Nov–Dec; 16(6A):3299–306
Increased signal transduction activity and down-regulation in human cancer cells. Weber G, et al. **Anticancer Res** 1996 Nov–Dec;16(6A):3271–82
Induction signals for vancomycin resistance encoded by the vanA gene cluster in Enterococcus faecium. Lai MH, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1645–8
Cytokine receptor signal transduction through Jak tyrosine kinases and Stat transcription factors. Silvennoinen O, et al. **APMIS** 1997 Jul;105(7):497–509 (67 ref.)
Protein tyrosine phosphorylation and signal transduction during capacitation-acrosome reaction and zona pellucida binding in human sperm. Naz RK. **Arch Androl** 1996 Jul–Aug;37(1):47–55 (48 ref.)
Signaling networks in barrier homeostasis. The mystery widens [editorial; comment] Elias PM, et al. **Arch Dermatol** 1996 Dec;132(12):1505–6. Comment on: Arch Dermatol 1996 Dec;132(12):1453–8.
Regulation of transmembrane signalling system during senescence of human epidermal keratinocytes. Koizumi H, et al. **Arch Dermatol Res** 1996 Sep;288(10):611–4
Retrograde transport of acidic fibroblast growth factor as a part of the growth factor signaling. Więdłocha A. **Arch Immunol Ther Exp (Warsz)** 1996;44(4):201–7 (64 ref.)
Ecdysone signaling cascade and regulation of Drosophila metamorphosis. Baehrecke EH. **Arch Insect Biochem Physiol** 1996;33(3–4):231–44 (69 ref.)
Multiple signaling pathways establish both the individuation and the polarity of the oocyte follicle in Drosophila. Morgan MM, et al. **Arch Insect Biochem Physiol** 1996; 33(3–4):211–30 (83 ref.)
Immunoreactivities for calcium signaling components and neural-like properties of a Colorado potato beetle cell line. Sheppard CA, et al. **Arch Insect Biochem Physiol** 1996; 33(3–4):197–209
Signal transduction mechanisms in Entamoeba histolytica trophozoites. Pérez E, et al. **Arch Med Res** 1997;28 Spec No:127–8
Partial characterization of G proteins and PLC as possible signal transduction elements during adhesion of Entamoeba histolytica to fibronectin. Soid Raggi LG, et al. **Arch Med Res** 1997;28 Spec No:132–3
The immunohistochemical localization of stat-2, -3, -4 and -5 during early enamel and dentine formation in rat molars. Tanase S, et al. **Arch Oral Biol** 1996 Dec;41(12):1149–60
Mechanisms of beta-adrenergic receptor desensitization: from molecular biology to heart failure. Lohse MJ, et al. **Basic Res Cardiol** 1996;91 Suppl 2:29–34 (62 ref.)
Angiotensin II type 1 receptor induced signal-transduction pathways as new targets for pharmacological treatment of the renin-angiotensin system. Schorb W, et al. **Basic Res Cardiol** 1996;91 Suppl 2:91–6 (35 ref.)
5-HT2B receptor signaling in the rat stomach fundus: dependence on calcium influx, calcium release and protein kinase C. Cox DA, et al. **Behav Brain Res** 1996; 73(1–2):289–92
Evidence for the involvement of LCK and MAP kinase (ERK-1) in the signal transduction mechanism of interleukin-15. Adunyah SE, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):754–8
Integrin beta4 is involved in apoptotic signal transduction in endothelial cells. Miao JY, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):182–6
The protein tyrosine phosphatase LAR has a major impact on insulin receptor dephosphorylation. Mooney RA, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):709–12
ATP- and EGF-stimulated phosphatidulinositol synthesis by two different pathways, phospholipase D and diacylglycerol kinase, in A-431 epidermoid carcinoma cells. Hosoi K, et al. **Biochem Cell Biol** 1996;74(2):197–209
Regulatory mechanisms that modulate signalling by G-protein-coupled receptors. Böhm SK, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):1–18 (237 ref.)
Signal-transducing protein phosphorylation cascades mediated by Ras/Rho proteins in the mammalian cell: the potential for multiplex signalling. Denhardt DT. **Biochem J** 1996 Sep 15;318 (Pt 3):729–47 (228 ref.)
Signalling functions and biochemical properties of pertussis toxin-resistant G-proteins. Fields TA, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):561–71 (242 ref.)
Insulin action in cultured human myoblasts: contribution of different signalling pathways to regulation of glycogen synthesis. Hurel SJ, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):871–7
Insulin regulation of mitogen-activated protein kinase kinase (MEK), mitogen-activated protein kinase and casein kinase in the cell nucleus: a possible role in the regulation of gene expression. Kim SJ, et al. **Biochem J** 1997 May 1;323 (Pt 3):621–7
Allosteric equilibrium model explains steady-state coupling of beta-adrenergic receptors to adenylate cyclase in turkey erythrocyte membranes. Ugur O, et al. **Biochem J** 1997 May 1;323 (Pt 3):765–76
Differential cholinoceptor subtype-dependent activation of signal transduction pathways in neonatal versus adult rat atria. Borda ES, et al. **Biochem Pharmacol** 1997 Apr 4; 53(7):959–67
Regulation of dorsal-ventral axis formation in Xenopus by intercellular and intracellular signalling. Kimelman D, et al. **Biochem Soc Symp** 1996;62:13–23 (57 ref.)
Activin receptors: cellular signalling by receptor serine kinases. Zimmerman CM, et al. **Biochem Soc Symp** 1996; 62:25–38 (47 ref.)
Regulation of 'signalling diacylglycerol' in cells: the importance of diacylglycerol kinase. Hodgkin MN, et al. **Biochem Soc Trans** 1996 Nov;24(4):991–4 (15 ref.)
Regulators of G-protein-mediated signalling. Lohse MJ, et al. **Biochem Soc Trans** 1996 Nov;24(4):975–80 (52 ref.)
Transduction of Ca2+ signals in plant cells and compartmentalization of the Ca2+ signal. Trewavas A, et al. **Biochem Soc Trans** 1996 Nov;24(4):971–4 (24 ref.)
Signalling and adhesive properties of the integrin leucocyte function-associated antigen 1 (LFA-1). van Kooyk Y, et al. **Biochem Soc Trans** 1997 May;25(2):515–20 (51 ref.)
Virocrine transformation. Drummond-Barbosa D, et al. **Biochim Biophys Acta** 1997 Feb 22;1332(1):M1–17 (148 ref.)
Activation-dependent and biphasic electromagnetic field effects: model based on cooperative enzyme kinetics in cellular signaling. Eichwald C, et al. **Bioelectromagnetics** 1996;17(6):427–35
Transforming growth factor-beta: the breaking open of a black box. Alevizopoulos A, et al. **Bioessays** 1997 Jul; 19(7):581–91 (93 ref.)
STATs and MAPKs: obligate or opportunistic partners in signaling. Ihle JN. **Bioessays** 1996 Feb;18(2):95–8 (13 ref.)
Cooperation between soluble factors and integrin-mediated cell anchorage in the control of cell growth and differentiation. Juliano R. **Bioessays** 1996 Nov;18(11):911–7 (77 ref.)
The phytochromes: a biochemical mechanism of signaling in sight? Quail PH. **Bioessays** 1997 Jul;19(7):571–9 (56 ref.)
The IRS-signalling system during insulin and cytokine action. Yenush L, et al. **Bioessays** 1997 Jun;19(6):491–500 (81 ref.)
Multiple myosin motors and mechanoelectrical transduction by hair cells. Gillespie PG. **Biol Bull** 1997 Feb; 192(1):186–90 (21 ref.)
The niacin challenge test: clinical manifestation of altered transmembrane signal transduction in schizophrenia? Hudson CJ, et al. **Biol Psychiatry** 1997 Mar 1;41(5):507–13
Platelet dense granule secretion in adolescents with conduct disorder and substance abuse: preliminary evidence for variation in signal transduction. Moss HB, et al. **Biol Psychiatry** 1996 Nov 1;40(9):892–8
Expression of the human p55 and p75 tumor necrosis factor receptors in primary villous trophoblasts and their role in cytotoxic signal transduction. Yui J, et al. **Biol Reprod** 1996 Aug;55(2):400–9
Trafficking of glucose transporters--signals and mechanisms. Baldwin SA, et al. **Biosci Rep** 1995 Dec;15(6):419–26
Endosomes, receptor tyrosine kinase internalization and signal transduction. Bergeron JJ, et al. **Biosci Rep** 1995 Dec;15(6):411–8 (41 ref.)
Late signals are required for the stimulation of DNA synthesis in rat mammary fibroblasts by growth factors. Chen HL, et al. **Biosci Rep** 1996 Jun;16(3):249–63
Signal transduction and motility of Dictyostelium. Newell PC. **Biosci Rep** 1995 Dec;15(6):445–62 (79 ref.)
Interferon signal transduction. Larner A, et al. **Biotherapy** 1996;8(3–4):175–81 (60 ref.)
Transfer of the interleukin-2 gene into human cancer cells induces specific antitumor recognition and restores the expression of CD3/T-cell receptor associated signal transduction molecules. Guarini A, et al. **Blood** 1997 Jan 1;89(1):212–8
Involvement of retinoic acid receptor-alpha-mediated signaling pathway in induction of CD38 cell-surface antigen. Mehta K, et al. **Blood** 1997 May 15;89(10):3607–14
Purification and molecular cloning of SH2- and SH3-containing inositol polyphosphate-5-phosphatase, which is involved in the signaling pathway of granulocyte-macrophage colony-stimulating factor, erythropoietin, and Bcr-Abl. Odai H, et al. **Blood** 1997 Apr 15;89(8):2745–56
Characterization of cis-acting sequences and trans-acting signals regulating early growth response 1 and c-fos promoters through the granulocyte-macrophage colony-stimulating factor receptor in BA/F3 cells. Watanabe S, et al. **Blood** 1997 Feb 15;89(4):1197–206
Bone morphogenetic proteins and C-FOS: early signals in endochondral bone formation. Kaplan FS, et al. **Bone** 1996 Jul;19(1 Suppl):13S–21S (69 ref.)
Osteocytes and bone lining cells: which are the best candidates for mechano-sensors in cancellous bone? Mullender MG, et al. **Bone** 1997 Jun;20(6):527–32
Superoxide, hydrogen peroxide and nitric oxide as signalling molecules: their production and role in disease. Hancock JT. **Br J Biomed Sci** 1997 Mar;54(1):38–46 (110 ref.)
Involvement of calyculin A inhibitable protein phosphatases in the cyclic AMP signal transduction pathway of mouse corticotroph tumour (AtT20) cells. Antaraki A, et al. **Br J Pharmacol** 1997 Jul;121(5):991–9
Modulation of agonist-induced phosphoinositide metabolism, Ca2+ signalling and contraction of airway smooth muscle by cyclic AMP-dependent mechanisms. Hoiting BH, et al. **Br J Pharmacol** 1996 Feb;117(3):419–426
The identification of DL-threo dihydrosphingosine and

sphingosine as novel inhibitors of extracellular signal-regulated kinase signalling in airway smooth muscle. Tolan D, et al. **Br J Pharmacol** 1996 Sep;119(2):185–6

Plasmalogens, phospholipases A2 and signal transduction. Farooqui AA, et al. **Brain Res Brain Res Rev** 1995 Sep; 21(2):152–61 (87 ref.)

Feedback signal from medial temporal lobe mediates visual associative mnemonic codes of inferotemporal neurons. Miyashita Y, et al. **Brain Res Cogn Brain Res** 1996 Dec; 5(1–2):81–6

Signaling pathways and survival effects of BDNF and NT-3 on cultured cerebellar granule cells. Nonomura T, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):42–50

Aging-related regulation of myo-inositol 1,4,5-trisphosphate signal transduction pathway in the rat striatum. Igwe OJ, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):39–53

Cellular signalling in vertebrate pigment cells. deOliveira AR, et al. **Braz J Med Biol Res** 1996 Dec;29(12):1743–9 (51 ref.)

Let there be light: signal transduction in a mammalian circadian system. Golombek DA, et al. **Braz J Med Biol Res** 1996 Jan;29(1):131–40 (77 ref.)

Mechanisms of increased endothelial permeability. Lum H, et al. **Can J Physiol Pharmacol** 1996 Jul;74(7):787–800 (80 ref.)

Pharmacology of pertussis toxin B-oligomer. Wong WS, et al. **Can J Physiol Pharmacol** 1996 May;74(5):559–64

The effect of unsaturated fatty acids on membrane composition and signal transduction in HT-29 human colon cancer cells. Awad AB, et al. **Cancer Lett** 1996 Nov 12; 108(1):25–33

The timing of insulin/c-Ras signal is critical for its effect upon the differentiation of C3H10T1/2-derived preadipocytes. Preston T, et al. **Cancer Lett** 1997 May 19; 115(2):165–71

The p16-cyclin D/Cdk4-pRb pathway as a functional unit frequently altered in melanoma pathogenesis. Bartkova J, et al. **Cancer Res** 1996 Dec 1;56(23):5475–83

Essential role for nuclear phospholipase C beta1 in insulin-like growth factor I-induced mitogenesis. Manzoli L, et al. **Cancer Res** 1997 Jun 1;57(11):2137–9

Germinal center-derived signals act with Bcl-2 to decrease apoptosis and increase clonogenicity of drug-treated human B lymphoma cells. Walker A, et al. **Cancer Res** 1997 May 15;57(10):1939–45

T cell antigen receptor signal transduction pathways. Cantrell DA. **Cancer Surv** 1996;27:165–75 (165 ref.)

The p70S6K signalling pathway: a novel signalling system involved in growth regulation. Grammer TC, et al. **Cancer Surv** 1996;27:271–92 (97 ref.)

Protein tyrosine kinase receptors. Heldin CH. **Cancer Surv** 1996;27:7–24 (82 ref.)

The control of inositol lipid hydrolysis. Katan M. **Cancer Surv** 1996;27:199–211 (67 ref.)

Control of the ERK MAP kinase cascade by Ras and Raf. Marais R, et al. **Cancer Surv** 1996;27:101–25 (125 ref.)

Serine/threonine kinase receptors: mediators of transforming growth factor beta family signals. Massagué J, et al. **Cancer Surv** 1996;27:41–64 (128 ref.)

Organization of transmembrane signalling by heterotrimeric G proteins. Offermanns S, et al. **Cancer Surv** 1996;27:177–98 (129 ref.)

The JAK/STAT pathway. Wilks AF, et al. **Cancer Surv** 1996;27:139–63 (113 ref.)

The stress activated protein kinase pathway. Woodgett JR, et al. **Cancer Surv** 1996;27:127–38 (41 ref.)

Actions of insulin on the mammalian heart: metabolism, pathology and biochemical mechanisms. Brownsey RW, et al. **Cardiovasc Res** 1997 Apr;34(1):3–24 (263 ref.)

Renal dopamine receptors: mechanisms of action and developmental aspects. Cheung PY, et al. **Cardiovasc Res** 1996 Jan;31(1):2–6 (54 ref.)

Regulation of contractile proteins in diabetic heart. Malhotra A, et al. **Cardiovasc Res** 1997 Apr;34(1):34–40 (72 ref.)

Coronary artery stenosis in rats affects beta-adrenergic receptor signaling in myocytes. Meggs LG, et al. **Cardiovasc Res** 1997 Jan;33(1):98–109

Signal transduction via the multi-step phosphorelay: not necessarily a road less traveled. Appleby JL, et al. **Cell** 1996 Sep 20;86(6):845–8 (18 ref.)

Recruitment of p300/CBP in p53-dependent signal pathways. Avantaggiati ML, et al. **Cell** 1997 Jun 27;89(7):1175–84

Dual roles for patched in sequestering and transducing Hedgehog. Chen Y, et al. **Cell** 1996 Nov 1;87(3):553–63

BRI-ghtening the pathway to steroid hormone signaling events in plants [comment] Ecker JR. **Cell** 1997 Sep 5; 90(5):825–7 (18 ref.). Comment on: Cell 1997 Sep 5;90(5):929–38.

The MAD-related protein Smad7 associates with the TGFbeta receptor and functions as an antagonist of TGFbeta signaling. Hayashi H, et al. **Cell** 1997 Jun 27; 89(7):1165–73

Mitochondria are excitable organelles capable of generating and conveying electrical and calcium signals. Ichas F, et al. **Cell** 1997 Jun 27;89(7):1145–53

SH2 signaling in a lower eukaryote: a STAT protein that regulates stalk cell differentiation in dictyostelium. Kawata T, et al. **Cell** 1997 Jun 13;89(6):909–16

Rac and Cdc42 induce actin polymerization and G1 cell cycle progression independently of p65PAK and the JNK/SAPK MAP kinase cascade. Lamarche N, et al. **Cell** 1996 Nov 1;87(3):519–29

A putative leucine-rich repeat receptor kinase involved in brassinosteroid signal transduction [see comments] Li J, et al. **Cell** 1997 Sep 5;90(5):929–38. Comment in: Cell 1997 Sep 5;90(5):825–7.

Dissection of TNF receptor 1 effector functions: JNK activation is not linked to apoptosis while NF-kappaB activation prevents cell death. Liu ZG, et al. **Cell** 1996 Nov 1;87(3):565–76

Antagonistic interactions between FGF and BMP signaling pathways: a mechanism for positioning the sites of tooth formation. Neubüser A, et al. **Cell** 1997 Jul 25;90(2):247–55

Deletion of SHIP or SHP-1 reveals two distinct pathways for inhibitory signaling. Ono M, et al. **Cell** 1997 Jul 25; 90(2):293–301

There must be 50 ways to rule the signal: the case of the Drosophila EGF receptor. Perrimon N, et al. **Cell** 1997 Apr 4;89(1):13–6 (18 ref.)

LEF-1, a nuclear factor coordinating signaling inputs from wingless and decapentaplegic. Riese J, et al. **Cell** 1997 Mar 21;88(6):777–87

Hedgehog elicits signal transduction by means of a large complex containing the kinesin-related protein costal2. Robbins DJ, et al. **Cell** 1997 Jul 25;90(2):225–34

14-3-3 proteins are essential for RAS/MAPK cascade signaling during pseudohyphal development in S. cerevisiae. Roberts RL, et al. **Cell** 1997 Jun 27; 89(7):1055–65

The emerging field of receptor-mediated inhibitory signaling: SHP or SHIP? Scharenberg AM, et al. **Cell** 1996 Dec 13; 87(6):961–4 (16 ref.)

Costal2, a novel kinesin-related protein in the Hedgehog signaling pathway. Sisson JC, et al. **Cell** 1997 Jul 25; 90(2):235–45

From form to function: signaling by protein tyrosine phosphatases [see comments] Tonks NK, et al. **Cell** 1996 Nov 1;87(3):365–8 (21 ref.). Comment in: Cell 1996 Nov 1;87(3):361–4.

Secreted fringe-like signaling molecules may be glycosyltransferases [letter] Yuan YP, et al. **Cell** 1997 Jan 10;88(1):9–11

Kinase suppressor of Ras is ceramide-activated protein kinase. Zhang Y, et al. **Cell** 1997 Apr 4;89(1):63–72

Review: a role for the FGF receptor in the axonal growth response stimulated by cell adhesion molecules? Hall H, et al. **Cell Adhes Commun** 1996 Apr;3(6):441–50 (97 ref.)

Serine 752 in the cytoplasmic domain of the beta 3 integrin subunit is not required for alpha v beta 3 postreceptor signaling events. Kieffer N, et al. **Cell Adhes Commun** 1996 Jul;4(1):25–39

Phospholipase D activity in the Tetrahymena pyriformis GL. Kovács P, et al. **Cell Biochem Funct** 1997 Mar;15(1):53–60

Gap junctions mediate intercellular calcium signalling in cultured articular chondrocytes. D'Andrea P, et al. **Cell Calcium** 1996 Nov;20(5):389–97

Bergmann glial cells in situ express endothelinB receptors linked to cytoplasmic calcium signals. Tuschick S, et al. **Cell Calcium** 1997 Jun;21(6):409–19

Characterization of the protein kinase C signal transduction pathway in cisplatin-sensitive and -resistant human small cell lung carcinoma cells. Basu A, et al. **Cell Growth Differ** 1996 Nov;7(11):1507–12

A comparative study of the hepatic mitogen-activated protein kinase and Jun-NH2-terminal kinase pathways in the late-gestation fetal rat. Boylan JM, et al. **Cell Growth Differ** 1996 Sep;7(9):1261–9

Signaling by ectopically expressed Drosophila Src64 requires the protein-tyrosine phosphatase corkscrew and the adapter downstream of receptor kinases. Cooper JA, et al. **Cell Growth Differ** 1996 Nov;7(11):1435–41

Differentiation induced by the c-Mpl cytokine receptor is blocked by mutant Shc adaptor protein. Hill RJ, et al. **Cell Growth Differ** 1996 Sep;7(9):1125–34

Transforming growth factor beta induces anchorage-independent growth of NRK fibroblasts via a connective tissue growth factor-dependent signaling pathway. Kothapalli D, et al. **Cell Growth Differ** 1997 Jan; 8(1):61–8

Receptor tyrosine kinase signaling in vascular development. Merenmies J, et al. **Cell Growth Differ** 1997 Jan;8(1):3–10 (93 ref.)

Tyrosine kinase signaling regulates Wiskott-Aldrich syndrome protein function, which is essential for megakaryocyte differentiation. Miki H, et al. **Cell Growth Differ** 1997 Feb;8(2):195–202

Tec protein tyrosine kinase is involved in the signaling mechanism of granulocyte colony-stimulating factor receptor. Miyazato A, et al. **Cell Growth Differ** 1996 Sep; 7(9):1135–9

Traction fibre: toward a "tensegral" model of the spindle. Pickett-Heaps JD, et al. **Cell Motil Cytoskeleton** 1997; 37(1):1–6 (32 ref.)

Signal transduction pathways in macroautophagy. Codogno P, et al. **Cell Signal** 1997 Feb;9(2):125–30 (102 ref.)

Phosphatidic acid: a lipid messenger involved in intracellular and extracellular signalling. English D. **Cell Signal** 1996 Aug;8(5):341–7 (98 ref.)

The role of prenylation in G-protein assembly and function. Higgins JB, et al. **Cell Signal** 1996 Sep;8(6):433–7 (50 ref.)

Signalling to the nucleus by members of the transforming growth factor-beta (TGF-beta) superfamily. Hill CS. **Cell Signal** 1996 Dec;8(8):533–44 (125 ref.)

Signal transduction pathways modulated by the D2 subfamily of dopamine receptors. Huff RM. **Cell Signal** 1996 Sep; 8(6):453–9 (91 ref.)

Involvement of phosphatidylinositol 3-kinase in the mediation of erythropoietin-induced activation of p70S6k. Jaster R, et al. **Cell Signal** 1997 Feb;9(2):175–9

Cellular signalling: the role of the peroxisome. Masters CJ. **Cell Signal** 1996 Mar;8(3):197–208 (42 ref.)

Emerging components of the Crk oncogene product: the first identified adaptor protein. Matsuda M, et al. **Cell Signal** 1996 Aug;8(5):335–40 (68 ref.)

Does subunit dissociation necessarily accompany the activation of all heterotrimeric G proteins? Rebois RV, et al. **Cell Signal** 1997 Feb;9(2):141–51 (154 ref.)

Regulation of cellular signalling by fatty acid acylation and prenylation of signal transduction proteins. Resh MD. **Cell Signal** 1996 Sep;8(6):403–12 (134 ref.)

Heterotrimeric G proteins in heart disease. Schnabel P, et al. **Cell Signal** 1996 Sep;8(6):413–23 (126 ref.)

Ras-GTPase activating protein (GAP): a putative effector for Ras. Tocque B, et al. **Cell Signal** 1997 Feb;9(2):153–8 (72 ref.)

Protein kinase modulation of mu opioid receptor signalling. Yu L. **Cell Signal** 1996 Aug;8(5):371–4 (36 ref.)

Signaling toward yeast 1,3-beta-glucan synthesis. Inoue SB, et al. **Cell Struct Funct** 1996 Oct;21(5):395–402 (58 ref.)

Signal transduction from the extracellular matrix—a role for the focal adhesion protein-tyrosine kinase FAK. Schlaepfer DD, et al. **Cell Struct Funct** 1996 Oct;21(5):445–50 (90 ref.)

Getting it together: signal transduction in G-protein coupled receptors by association of receptor domains. Underwood DJ, et al. **Chem Biol** 1997 Apr;4(4):239–48 (81 ref.)

GUST27 and closely related G-protein-coupled receptors are localized in taste buds together with Gi-protein alpha-subunit. Kusakabe Y, et al. **Chem Senses** 1996 Jun; 21(3):335–40

Neuromodulation of transduction and signal processing in the end organs of taste. Nagai T, et al. **Chem Senses** 1996 Jun;21(3):353–65 (106 ref.)

The molecular basis of cellular defense mechanisms. Symposium proceedings. Melbourne, 19–21 March 1996. **Ciba Found Symp** 1997;204:1–250

P2U purinoceptors: cDNA cloning, signal transduction mechanisms and structure-function analysis. Lustig KD, et al. **Ciba Found Symp** 1996;198:193–204; discussion 204–7 (28 ref.)

Trophic actions of extracellular ATP on astrocytes, synergistic interactions with fibroblast growth factors and underlying signal transduction mechanisms. Neary JT. **Ciba Found Symp** 1996;198:130–9; discussion 139–41 (31 ref.)

Transduction mechanisms of P2Z purinoceptors. Wiley JS, et al. **Ciba Found Symp** 1996;198:149–60; discussion 160–5 (52 ref.)

The multiple role of the pheromone-binding protein in olfactory transduction. Ziegelberger G. **Ciba Found Symp** 1996;200:267–75; discussion 275–80 (41 ref.)

Angiotensin II signal transduction in vascular smooth muscle: role of tyrosine kinases. Berk BC, et al. **Circ Res** 1997 May; 80(5):607–16 (19 ref.)

The adenylyl cyclases as integrators of transmembrane signal transduction. Ishikawa Y, et al. **Circ Res** 1997 Mar; 80(3):297–304 (89 ref.)

Dopamine-1 receptor G-protein coupling and the involvement of phospholipase A2 in dopamine-1 receptor mediated cellular signaling mechanisms in the proximal tubules of SHR. Hussain T, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):131–40 (31 ref.)

Short-term vs. sustained inhibition of proximal tubule Na,K-ATPase activity by dopamine: cellular mechanisms. Pinto-do-O PC, et al. **Clin Exp Hypertens** 1997 Jan-Feb; 19(1-2):73–86

Calcium and calcium-related signalling pathways in glomerular mesangial cells. Bonventre JV. **Clin Exp Pharmacol Physiol** 1996 Jan;23(1):65–70 (34 ref.)

Competition by second messenger systems for receptor interaction and activation: implications for tissue-specific responses and disease therapy. Crouch MF, et al. **Clin Exp Pharmacol Physiol** 1997 Aug;24(8):632–8 (22 ref.)

Imidazoline binding sites and signal transduction pathways. Musgrave IF, et al. **Clin Exp Pharmacol Physiol** 1996 Oct-Nov;23(10–11):990–4 (35 ref.)

Lipid mediators and protein kinase C for intracellular signalling. Nishizuka Y, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S202–3

Altered signalling in vascular smooth muscle from spontaneously hypertensive rats may link medial hypertrophy, vessel hyperinnervation and elevated nerve growth factor. Tuttle JB, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S117–9

Enhanced phosphoinositide turnover signalling stimulated by endothelin B-type receptor in endothelial cells from spontaneously hypertensive rats. Yokokawa K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S195–6

Visualizing signal transduction: receptors, G-proteins, and adenylate cyclases [published erratum appears in Clin Sci (Colch) 1997 Feb;92(2):223] Dessauer CW, et al. **Clin Sci (Colch)** 1996 Nov;91(5):527–37 (56 ref.)

Signalling pathways involved in the mitogenic effects of cAMP. Withers DJ. **Clin Sci (Colch)** 1997 May;92(5):445–51 (21 ref.)

A signaling endosome hypothesis to explain NGF actions:

potential implications for neurodegeneration. Beattie EC, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:389–406
Molecular and genetic insights into ligand binding and signal transduction at the inhibitory glycine receptor. Schofield PR, et al. **Cold Spring Harb Symp Quant Biol** 1996; 61:333–42
Biochemical and transgenic analysis of gustducin's role in bitter and sweet transduction. Wong GT, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:173–84
Oxygen sensing and signal transduction in metabolic defense against hypoxia: lessons from vertebrate facultative anaerobes. Hochachka PW, et al. **Comp Biochem Physiol A Physiol** 1997 Sep;118(1):23–9 (40 ref.)
Cell signalling by inositol phosphoglycans from different species. Varela-Nieto I, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Oct; 115(2):223–41 (204 ref.)
Sepsis-related alterations in non-immune cell-signaling. Ahmad S. **Compr Ther** 1995 Dec;21(12):737–40 (28 ref.)
Inositol 1,4,5-trisphosphate receptors and calcium signaling. Michikawa T, et al. **Crit Rev Neurobiol** 1996;10(1):39–55 (117 ref.)
Aryl hydrocarbon receptor-mediated signal transduction. Rowlands JC, et al. **Crit Rev Toxicol** 1997 Mar;27(2):109–34 (223 ref.)
Cell signalling: MAGUK magic. Anderson JM. **Curr Biol** 1996 Apr 1;6(4):382–4 (13 ref.)
Calcium signalling: sphingosine kinase versus phospholipase C? Beaven MA. **Curr Biol** 1996 Jul 1;6(7):798–801 (14 ref.)
Involvement of microtubules in the control of adhesion-dependent signal transduction. Bershadsky A, et al. **Curr Biol** 1996 Oct 1;6(10):1279–89
Subcellular Ca2+ signals underlying waves and graded responses in HeLa cells. Bootman MD, et al. **Curr Biol** 1996 Jul 1;6(7):855–65
Signalling enzymes: bursting with potential. Braselmann S, et al. **Curr Biol** 1997 Aug 1;7(8):R470–3 (22 ref.)
Signalling pathways: jack of all cascades. Cahill MA, et al. **Curr Biol** 1996 Jan 1;6(1):16–9 (17 ref.)
Intracellular signalling: more jobs for G beta gamma. Clapham DE. **Curr Biol** 1996 Jul 1;6(7):814–6 (12 ref.)
Phospholipase D2, a distinct phospholipase D isoform with novel regulatory properties that provokes cytoskeletal reorganization. Colley WC, et al. **Curr Biol** 1997 Mar 1; 7(3):191–201
Retinal development: on the crest of an exciting wave. Copenhagen DR. **Curr Biol** 1996 Nov 1;6(11):1368–70 (32 ref.)
Apoptosis: does stress kill? Cosulich S, et al. **Curr Biol** 1996 Dec 1;6(12):1586–8 (18 ref.)
Constitutive activation of protein kinase B and phosphorylation of p47phox by a membrane-targeted phosphoinositide 3-kinase. Didichenko SA, et al. **Curr Biol** 1996 Oct 1;6(10):1271–8
Mitosis: don't get mad, get even. Glotzer M. **Curr Biol** 1996 Dec 1;6(12):1592–4 (16 ref.)
Object recognition: the man who mistook his dog for a cat. Humphreys GW. **Curr Biol** 1996 Jul 1;6(7):821–4 (20 ref.)
Signalling by TGF-beta family members: short-range effects of Xnr-2 and BMP-4 contrast with the long-range effects of activin. Jones CM, et al. **Curr Biol** 1996 Nov 1; 6(11):1468–75
Requirement for EGF receptor signalling in neural recruitment during formation of Drosophila chordotonal sense organ clusters [see comments] Lage P, et al. **Curr Biol** 1997 Mar 1;7(3):166–75. Comment in: Curr Biol 1997 Mar 1;7(3):132–5.
Linear filtering precedes nonlinear processing in early vision. Langley K, et al. **Curr Biol** 1996 Jul 1;6(7):891–6
Chemoreception: tasting the sweet and the bitter. Lindemann B. **Curr Biol** 1996 Oct 1;6(10):1234–7 (20 ref.)
Neural patterning: A forward role for hedgehog. Lumsden A, et al. **Curr Biol** 1995 Dec 1;5(12):1347–50 (25 ref.)
Receptor signalling: to sevenless, a daughter. MacDougall LK, et al. **Curr Biol** 1996 Oct 1;6(10):1250–3 (12 ref.)
Neural induction: do fibroblast growth factors strike a cord? Mason I. **Curr Biol** 1996 Jun 1;6(6):672–5 (12 ref.)
Ras signalling is required for inactivation of the tumour suppressor pRb cell-cycle control protein. Mittnacht S, et al. **Curr Biol** 1997 Mar 1;7(3):219–21
Intracellular signalling: turning down G-protein signals. Neer EJ. **Curr Biol** 1997 Jan 1;7(1):R31–3
Visual attention: spotlights, highlights and visual awareness. Newsome WT. **Curr Biol** 1996 Apr 1;6(4):357–60 (19 ref.)
Protein kinase C: ports of anchor in the cell. Newton AC. **Curr Biol** 1996 Jul 1;6(7):806–9 (20 ref.)
Cell-cell signalling: Wingless lands at last. Orsulic S, et al. **Curr Biol** 1996 Nov 1;6(11):1363–7 (28 ref.)
Phosphatidylinositol 3-kinase signals activate a selective subset of Rac/Rho-dependent effector pathways. Reif K, et al. **Curr Biol** 1996 Nov 1;6(11):1445–55
Rho: theme and variations. Ridley AJ. **Curr Biol** 1996 Oct 1;6(10):1256–64 (73 ref.)
Neurophysiology: the changing face of inhibition. Singer W. **Curr Biol** 1996 Apr 1;6(4):395–7 (10 ref.)
Analysis of Dishevelled signalling pathways during Xenopus development. Sokol SY. **Curr Biol** 1996 Nov 1; 6(11):1456–67
Lithium inhibits glycogen synthase kinase-3 activity and mimics wingless signalling in intact cells [published erratum appears in Curr Biol 1997 Mar 1;7(3):196] Stambolic V, et al. **Curr Biol** 1996 Dec 1;6(12):1664–8
Neural coding: The enigma of the brain. Stevens CF, et al. **Curr Biol** 1995 Dec 1;5(12):1370–1 (10 ref.)
Receptor signaling: dimerization and beyond. Stock J. **Curr Biol** 1996 Jul 1;6(7):825–7 (18 ref.)
Axon guidance: motor-way madness. Stoker AW. **Curr Biol** 1996 Jul 1;6(7):794–7 (17 ref.)
Visual cortex: looking into a Klein bottle. Swindale NV. **Curr Biol** 1996 Jul 1;6(7):776–9 (11 ref.)
Working memory: trouble in mind. Tovée MJ, et al. **Curr Biol** 1996 Jan 1;6(1):13–5 (23 ref.)
Plant photomorphogenesis: a green light for cryptochrome research. Whitelam G. **Curr Biol** 1995 Dec 1;5(12):1351–3 (7 ref.)
Signalling pathways: a common theme in plants and animals? Wilson I, et al. **Curr Biol** 1997 Mar 1;7(3):R175–8 (10 ref.)
Intracellular signalling: putting JAKs on the kinase MAP. Winston LA, et al. **Curr Biol** 1996 Jun 1;6(6):668–71 (25 ref.)
A frizzled homolog functions in a vertebrate Wnt signaling pathway. Yang-Snyder J, et al. **Curr Biol** 1996 Oct 1; 6(10):1302–6
Cell-cell signalling: frog frizbees. Zorn AM. **Curr Biol** 1997 Aug 1;7(8):R501–4 (18 ref.)
Myosins on the move to signal transduction. Bähler M. **Curr Opin Cell Biol** 1996 Feb;8(1):18–22 (43 ref.)
Integrin cytoplasmic interactions and bidirectional transmembrane signalling. Dedhar S, et al. **Curr Opin Cell Biol** 1996 Oct;8(5):657–69 (86 ref.)
Cell-to-cell contact and extracellular matrix. A multifaceted approach emerging. Ekblom P, et al. **Curr Opin Cell Biol** 1996 Oct;8(5):599–601 (5 ref.)
Desmosomes: differentiation, development, dynamics and disease. Garrod D, et al. **Curr Opin Cell Biol** 1996 Oct; 8(5):670–8 (73 ref.)
Cadherins and catenins in development. Huber O, et al. **Curr Opin Cell Biol** 1996 Oct;8(5):685–91 (67 ref.)
Integrin activation: the link between ligand binding and signal transduction. Humphries MJ. **Curr Opin Cell Biol** 1996 Oct; 8(5):632–40 (59 ref.)
ERM (ezrin/radixin/moesin) family: from cytoskeleton to signal transduction. Tsukita S, et al. **Curr Opin Cell Biol** 1997 Feb;9(1):70–5 (42 ref.)
Cell adhesion molecules and neuronal regeneration. Walsh FS, et al. **Curr Opin Cell Biol** 1996 Oct;8(5):707–13 (53 ref.)
Signal transduction and actin filament organization. Zigmond SH. **Curr Opin Cell Biol** 1996 Feb;8(1):66–73 (90 ref.)
p53 in signaling checkpoint arrest or apoptosis. Bates S, et al. **Curr Opin Genet Dev** 1996 Feb;6(1):12–8 (68 ref.)
MEKKs, GCKs, MLKs, PAKs, TAKs, and tpls: upstream regulators of the c-Jun amino-terminal kinases? Fanger GR, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):67–74 (58 ref.)
The recognition of DNA damage. Jackson SP. **Curr Opin Genet Dev** 1996 Feb;6(1):19–25 (66 ref.)
Signal transduction from multiple Ras effectors. Katz ME, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):75–9 (50 ref.)
Pheromone signalling and polarized morphogenesis in yeast. Leberer E, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):59–66 (60 ref.)
From DNA damage to cell cycle arrest and suicide: a budding yeast perspective. Lydall D, et al. **Curr Opin Genet Dev** 1996 Feb;6(1):4–11 (62 ref.)
Novel mechanisms of RTK signal generation. Weiss FU, et al. **Curr Opin Genet Dev** 1997 Feb;7(1):80–6 (50 ref.)
Advances in understanding postreceptor signaling in response to granulocyte colony-stimulating factor. Tidow N, et al. **Curr Opin Hematol** 1997 May;4(3):171–5 (27 ref.)
Bibliography. Current world literature. Signalling mechanisms. **Curr Opin Neurobiol** 1997 Jun;7(3):431–60
Signalling mechanisms. Editorial overview. Betz H, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):307–9
Synaptic signaling by nitric oxide. Brenman JE, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):374–8 (43 ref.)
Web alert. Signalling mechanisms. Burke JF, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):305
Signalling through the neurotrophin receptor p75NTR. Dechant G, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):413–8 (58 ref.)
Dendritic signal integration. Eilers J, et al. **Curr Opin Neurobiol** 1997 Jun;7(3):385–90 (55 ref.)
The role of positive and negative signals in somite patterning. Lassar AB, et al. **Curr Opin Neurobiol** 1996 Feb;6(1):57–63 (64 ref.)
The InsP3 receptor and intracellular Ca2+ signaling. Mikoshiba K. **Curr Opin Neurobiol** 1997 Jun;7(3):339–45 (70 ref.)
Activation and inactivation steps in the visual transduction pathway. Palczewski K, et al. **Curr Opin Neurobiol** 1997 Aug;7(4):500–4 (40 ref.)
Tripartite signaling of pattern: interactions between Hedgehogs, BMPs and Wnts in the control of vertebrate development. Roelink H. **Curr Opin Neurobiol** 1996 Feb; 6(1):33–40 (78 ref.)
Oncogenic signaling. Jones CL, et al. **Curr Opin Oncol** 1996 Jan;8(1):54–9 (67 ref.)
Paradigms to study signal transduction pathways in Drosophila. Engstrom L, et al. **Curr Top Dev Biol** 1997; 35:229–61 (111 ref.)
beta-Catenin is a target for extracellular signals controlling cadherin function: the neurocan-GalNAcPTase connection. Lilien J, et al. **Curr Top Dev Biol** 1997; 35:161–89 (137 ref.)
Role of Tiam 1 in Rac-mediated signal transduction pathways. Collard JG, et al. **Curr Top Microbiol Immunol** 1996;213 (Pt 2):253–65 (73 ref.)
Regulation of signal transducer, GP130 and the LIF receptor in acute inflammation in vivo. Geisterfer M, et al. **Cytokine** 1996 Apr;8(4):283–7
ISGF3 gamma p48, a specificity switch for interferon activated transcription factors. Bluyssen AR, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):11–7 (54 ref.)
Cardiotrophin-1: a multifunctional cytokine that signals via LIF receptor-gp 130 dependent pathways. Pennica D, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):81–91 (63 ref.)
Interferons in 1995. Pfeffer LM. **Cytokine Growth Factor Rev** 1996 Jun;7(1):107–11
Cytokines in 1995. Vilček JT. **Cytokine Growth Factor Rev** 1996 Jun;7(1):103–6
Distinct signal/response mechanisms regulate pax1 and QmyoD activation in sclerotomal and myotomal lineages of quail somites. Borycki AG, et al. **Dev Biol** 1997 May 15;185(2):185–200
Localization of MAP kinase activity in early Xenopus embryos: implications for endogenous FGF signaling. LaBonne C, et al. **Dev Biol** 1997 Mar 1;183(1):9–20
Maturation of the acetylcholine receptor in skeletal muscle: regulation of the AChR gamma-to-epsilon switch. Missias AC, et al. **Dev Biol** 1996 Oct 10;179(1):223–38
Mouse Otlx2/RIEG expression in the odontogenic epithelium precedes tooth initiation and requires mesenchyme-derived signals for its maintenance. Mucchielli ML, et al. **Dev Biol** 1997 Sep 15;189(2):275–84
Epithelial cell wedging and neural trough formation are induced planarly in Xenopus, without persistent vertical interactions with mesoderm. Poznanski A, et al. **Dev Biol** 1997 Sep 15;189(2):256–69
The role of planar and early vertical signaling in patterning the expression of Hoxb-1 in Xenopus. Poznanski A, et al. **Dev Biol** 1997 Apr 15;184(2):351–66
Induction of endocardial cushion tissue in the avian heart is regulated, in part, by TGFbeta-3-mediated autocrine signaling. Ramsdell AF, et al. **Dev Biol** 1997 Aug 1; 188(1):64–74
The Drosophila secreted protein Argos regulates signal transduction in the Ras/MAPK pathway. Sawamoto K, et al. **Dev Biol** 1996 Aug 25;178(1):13–22
Signal transduction during exocytosis in Limulus polyphemus granulocytes. Solon E, et al. **Dev Comp Immunol** 1996 Sep-Oct;20(5):307–21
bFGF and LIF signaling activates STAT3 in proliferating myoblasts. Megeney LA, et al. **Dev Genet** 1996; 19(2):139–45
Requirement of fibroblast growth factor signaling for regeneration of epiphyseal morphology in rabbit full-thickness defects of articular cartilage. Otsuka Y, et al. **Dev Growth Differ** 1997 Apr;39(2):143–56
Signal transduction processes in the developing brain: perturbations of G protein alpha-subunit abundances by perinatal hypothyroidism. Leung FC, et al. **Dev Neurosci** 1996;18(3):153–61
The homeobox gene Siamois is a target of the Wnt dorsalisation pathway and triggers organiser activity in the absence of mesoderm. Carnac G, et al. **Development** 1996 Oct;122(10):3055–65
Notch signalling regulates veinlet expression and establishes boundaries between veins and interveins in the Drosophila wing. de Celis JF, et al. **Development** 1997 May; 124(10):1919–28
Antagonizing cAMP-dependent protein kinase A in the dorsal CNS activates a conserved Sonic hedgehog signaling pathway. Epstein DJ, et al. **Development** 1996 Sep; 122(9):2885–94
The role of segment polarity genes during early oogenesis in Drosophila. Forbes AJ, et al. **Development** 1996 Oct; 122(10):3283–94
Transgenic Xenopus embryos from sperm nuclear transplantations reveal FGF signaling requirements during gastrulation. Kroll KL, et al. **Development** 1996 Oct; 122(10):3173–83
A role for cadherins in tissue formation. Larue L, et al. **Development** 1996 Oct;122(10):3185–94
Mothers against dpp participates in a DDP/TGF-beta responsive serine-threonine kinase signal transduction cascade. Newfeld SJ, et al. **Development** 1997 Aug; 124(16):3167–76
The Xvent-2 homeobox gene is part of the BMP-4 signalling pathway controlling [correction of controling] dorsoventral patterning of Xenopus mesoderm [published erratum appears in Development 1997 Jan;124(1):preceding table of contents] Onichtchouk D, et al. **Development** 1996 Oct;122(10):3045–53
Negative regulation of Armadillo, a Wingless effector in Drosophila. Pai LM, et al. **Development** 1997 Jun; 124(11):2255–66
Timing of neuronal death in trkA, trkB and trkC mutant embryos reveals developmental changes in sensory neuron dependence on Trk signalling. Piñon LG, et al. **Development** 1996 Oct;122(10):3255–61
Hedgehog acts by distinct gradient and signal relay mechanisms to organise cell type and cell polarity in the

Drosophila abdomen. Struhl G, et al. **Development** 1997 Jun;124(11):2155–65

Antagonism between EGFR and Wingless signalling in the larval cuticle of Drosophila. Szüts D, et al. **Development** 1997 Aug;124(16):3209–19

Maternal beta-catenin establishes a 'dorsal signal' in early Xenopus embryos. Wylie C, et al. **Development** 1996 Oct; 122(10):2987–96

Cell volume signalling, osmolytes and liver function. Häussinger D, et al. **Digestion** 1997;58 Suppl 1:21–3 (17 ref.)

Heregulin-stimulated acetylcholine receptor gene expression in muscle: requirement for MAP kinase and evidence for a parallel inhibitory pathway independent of electrical activity. Altiok N, et al. **EMBO J** 1997 Feb 17;16(4):717–25

Mammalian Raf-1 is activated by mutations that restore Raf signaling in Drosophila. Cutler RE Jr, et al. **EMBO J** 1997 Apr 15;16(8):1953–60

A CREB-binding site as a target for decapentaplegic signalling during Drosophila endoderm induction. Eresh S, et al. **EMBO J** 1997 Apr 15;16(8):2014–22

Dephosphorylation of receptor tyrosine kinases as target of regulation by radiation, oxidants or alkylating agents. Knebel A, et al. **EMBO J** 1996 Oct 1;15(19):5314–25

Positive and negative regulation of type II TGF-beta receptor signal transduction by autophosphorylation on multiple serine residues. Luo K, et al. **EMBO J** 1997 Apr 15;16(8):1970–81

Opposite effects of the p52shc/p46shc and p66shc splicing isoforms on the EGF receptor–MAP kinase-fos signalling pathway. Migliaccio E, et al. **EMBO J** 1997 Feb 17; 16(4):706–16

G proteins in Ustilago maydis: transmission of multiple signals? Regenfelder E, et al. **EMBO J** 1997 Apr 15; 16(8):1934–42

MAP kinase links the fertilization signal transduction pathway to the G1/S-phase transition in starfish eggs. Tachibana K, et al. **EMBO J** 1997 Jul 16;16(14):4333–9

MAP kinase- and Rho-dependent signals interact to regulate gene expression but not actin morphology in cardiac muscle cells. Thorburn J, et al. **EMBO J** 1997 Apr 15; 16(8):1888–900

The heat shock protein 83 (Hsp83) is required for Raf-mediated signalling in Drosophila. van der Straten A, et al. **EMBO J** 1997 Apr 15;16(8):1961–9

The Aspergillus FlbA RGS domain protein antagonizes G protein signaling to block proliferation and allow development. Yu JH, et al. **EMBO J** 1996 Oct 1; 15(19):5184–90

Protein kinase D (PKD) activation in intact cells through a protein kinase C-dependent signal transduction pathway. Zugaza JL, et al. **EMBO J** 1996 Nov 15;15(22):6220–30

Multiple signal transduction systems regulate angiotensin II type 1 (AT1) receptor mRNA expression in bovine adrenocortical cells. Dell GC, et al. **Endocr Res** 1996 Nov; 22(4):363–8

Biological roles of fibroblast growth factor-2. Bikfalvi A, et al. **Endocr Rev** 1997 Feb;18(1):26–45 (340 ref.)

Growth hormone-induced reorganization of the actin cytoskeleton is not required for STAT5 (signal transducer and activator of transcription-5)-mediated transcription. Goh EL, et al. **Endocrinology** 1997 Aug;138(8):3207–15

Oscillatory signaling and insulin release in human pancreatic beta-cells exposed to strontium. Hellman B, et al. **Endocrinology** 1997 Aug;138(8):3161–5

Gonadotropin releasing hormone agonist provokes homologous receptor microaggregation: an early event in seven-transmembrane receptor mediated signaling. Janovick JA, et al. **Endocrinology** 1996 Aug;137(8):3602–5

Control of rat preadipocyte adipose conversion by ovarian status: regional specificity and possible involvement of the mitogen-activated protein kinase-dependent and c-fos signaling pathways. Lacasa D, et al. **Endocrinology** 1997 Jul;138(7):2729–34

Endothelins stimulate deoxyribonucleic acid synthesis and cell proliferation in rat adrenal zona glomerulosa, acting through an endothelin A receptor coupled with protein kinase C- and tyrosine kinase-dependent signaling pathways. Mazzocchi G, et al. **Endocrinology** 1997 Jun; 138(6):2333–7

Pituitary adenylate cyclase activating polypeptide stimulates rat Leydig cell steroidogenesis through a novel transduction pathway. Rossato M, et al. **Endocrinology** 1997 Aug;138(8):3228–35

The human V3 pituitary vasopressin receptor: ligand binding profile and density-dependent signaling pathways. Thibonnier M, et al. **Endocrinology** 1997 Oct; 138(10):4109–22

Alterations in the insulin signaling pathway induced by immortalization and H-ras transformation of brown adipocytes. Valverde AM, et al. **Endocrinology** 1997 Aug; 138(8):3195–206

Signaling molecules involved in coupling growth hormone receptor to mitogen-activated protein kinase activation. Vanderkuur JA, et al. **Endocrinology** 1997 Oct; 138(10):4301–7

Multiple pathways for the regulation of telomerase activity. Holt SE, et al. **Eur J Cancer** 1997 Apr;33(5):761–6 (52 ref.)

Proliferative lifespan checkpoints: cell-type specificity and influence on tumour biology. Wynford-Thomas D. **Eur J Cancer** 1997 Apr;33(5):716–26 (87 ref.)

Taking the message to the nucleus: MAD protein as a mediator of bone morphogenetic protein signaling. Hofbauer LC, et al. **Eur J Endocrinol** 1996 Dec; 135(6):654–5 (13 ref.)

Cytochemical evidence for nitric oxide/cyclic GMP signal transmission in the visual system of the locust. Bicker G, et al. **Eur J Neurosci** 1997 Jan;9(1):189–93

Connexins, gap junctions and cell–cell signalling in the nervous system. Bruzzone R, et al. **Eur J Neurosci** 1997 Jan;9(1):1–6 (24 ref.)

Calcium signalling in mouse Bergmann glial cells mediated by alpha1-adrenoreceptors and H1 histamine receptors. Kirischuk S, et al. **Eur J Neurosci** 1996 Jun;8(6):1198–208

Characteristic localization of gp130 (the signal-transducing receptor component used in common for IL-6/IL-11/CNTF/LIF/OSM) in the rat brain. Watanabe D, et al. **Eur J Neurosci** 1996 Aug;8(8):1630–40

Selective upregulation of cytokine receptor subchain and their intracellular signalling molecules after peripheral nerve injury. Yao GL, et al. **Eur J Neurosci** 1997 May; 9(5):1047–54

Involvement of G alpha q/11 in the contractile signal transduction pathway of muscarinic M3 receptors in caecal smooth muscle. Cuq P, et al. **Eur J Pharmacol** 1996 Nov 14;315(2):213–9

Bromocriptine stimulates Na+, K(+)-ATPase in renal proximal tubules via the cAMP pathway. Hussain T, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):259–63

Possible involvement of Janus kinase Jak2 in interferon-gamma induction of nitric oxide synthase in rat glial cells. Kitamura Y, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):297–306

Modulation of glutamate release by a nitric oxide/cyclic GMP-dependent pathway. Sistiaga A, et al. **Eur J Pharmacol** 1997 Feb 26;321(2):247–57

Nigrostriatal dopamine system may contribute to behavioral learning through providing reinforcement signals to the striatum. Kimura M, et al. **Eur Neurol** 1997;38 Suppl 1:11–7 (33 ref.)

Constitutively active BMP type I receptors transduce BMP-2 signals without the ligand in C2C12 myoblasts. Akiyama S, et al. **Exp Cell Res** 1997 Sep 15;235(2):362–9

Regulation of cellular tyrosine phosphorylation by stimulatory and inhibitory muscarinic acetylcholine receptors. Alessandro R, et al. **Exp Cell Res** 1997 Jul 10; 234(1):18–26

Propagation of mechanically induced intercellular calcium waves via gap junctions and ATP receptors in rat liver epithelial cells. Frame MK, et al. **Exp Cell Res** 1997 Feb 1;230(2):197–207

Regulation of lipid signaling pathways for cell survival and apoptosis by bcl-2 in prostate carcinoma cells. Herrmann JL, et al. **Exp Cell Res** 1997 Aug 1;234(2):442–51

CSF-1-induced and constitutive Il6 gene expression in mouse macrophages: evidence for PKC-dependent and -independent pathways. Kamdar SJ, et al. **Exp Cell Res** 1997 May 1;232(2):439–42

Modulation of Src homology 3 proteins by the proline-rich adaptor protein Shb. Karlsson T, et al. **Exp Cell Res** 1997 Mar 15;231(2):269–75

Activation of calcium signaling in isolated rat hepatocytes is accompanied by shape changes of microvilli. Lange J, et al. **Exp Cell Res** 1997 Aug 1;234(2):486–97

The nuclear location of annexin V in the human osteosarcoma cell line MG-63 depends on serum factors and tyrosine kinase signaling pathways. Mohiti J, et al. **Exp Cell Res** 1997 Jul 10;234(1):98–104

Constitutive expression of human ribosomal protein L7 arrests the cell cycle in G1 and induces apoptosis in Jurkat T-lymphoma cells. Neumann F, et al. **Exp Cell Res** 1997 Feb 1;230(2):252–61

2-Aminopurine induces spindle cell morphology in MM14 myoblasts in the absence of differentiation signals. Palmer DK, et al. **Exp Cell Res** 1997 Feb 1;230(2):262–74

The timing and magnitude of Ca2+ signaling by CD32 depends on its redistribution on the cell surface. Roberts GM, et al. **Exp Cell Res** 1997 Feb 1;230(2):303–9

A 100-kDa protein tyrosine phosphorylation is concurrent with beta 1 integrin-mediated morphological differentiation in neuroblastoma and small cell lung cancer cells. Tachibana I, et al. **Exp Cell Res** 1996 Sep 15;227(2):230–9

Induction of neurite outgrowth in PC12 cells by gamma-lactam-related compounds via Ras-MAP kinase signaling pathway independent mechanism. Yao R, et al. **Exp Cell Res** 1997 Aug 1;234(2):233–9

Dissociation of the Jak kinase pathway from G-CSF receptor signaling in neutrophils. Avalos BR, et al. **Exp Hematol** 1997 Feb;25(2):160–8

Ca2+ signalling in cultured smooth muscle cells from human bladder. Chambers P, et al. **Exp Physiol** 1996 Jul; 81(4):553–64

Disruption of vascular signalling by the reaction of nitric oxide with superoxide: implications for cardiovascular disease. Darley-Usmar V, et al. **Exp Physiol** 1997 Mar; 82(2):305–16 (85 ref.)

Intracellular signalling pathways that regulate vascular cell proliferation: effect of hypoxia. Scott PH, et al. **Exp Physiol** 1997 Mar;82(2):317–26 (29 ref.)

Signaling events controlling the molecular response to genotoxic stress. Holbrook NJ, et al. **EXS** 1996;77:273–88 (72 ref.)

Signal transduction mechanisms in the ischemic and reperfused myocardium. Ward CA, et al. **EXS** 1996; 76:191–207 (71 ref.)

Lipid biochemistry: functions of glycerolipids and sphingolipids in cellular signaling. Ghosh S, et al. **FASEB J** 1997 Jan;11(1):45–50 (55 ref.)

Regulation of STAT-dependent pathways by growth factors and cytokines. Leaman DW, et al. **FASEB J** 1996 Dec; 10(14):1578–88 (104 ref.)

The role of serine/threonine phosphorylation in hematopoietic cytokine receptor signal transduction. Mufson RA. **FASEB J** 1997 Jan;11(1):37–44 (56 ref.)

Inhibition of phorbol ester-stimulated phospholipase D activity by chronic tamoxifen treatment in breast cancer cells. Kiss Z, et al. **FEBS Lett** 1997 Jan 3;400(2):145–8

Osmosignalling in C6 glioma cells. Sinning R, et al. **FEBS Lett** 1997 Jan 3;400(2):163–7

Hypo-osmotic cell swelling activates the p38 MAP kinase signalling cascade. Tilly BC, et al. **FEBS Lett** 1996 Oct 21;395(2–3):133–6

Cell survival and multiplication. The overriding need for signals: from unicellular to multicellular systems. Rasmussen L, et al. **FEMS Microbiol Lett** 1996 Apr 1; 137(2–3):123–8 (41 ref.)

Signal transduction pathways associated with contraction during development of the feline gastric antrum. Hillemeier AC, et al. **Gastroenterology** 1997 Aug;113(2):507–13

The HGF receptor family: unconventional signal transducers for invasive cell growth. Comoglio PM, et al. **Genes Cells** 1996 Apr;1(4):347–54 (70 ref.)

An anteroposterior Dorsal gradient in the Drosophila embryo. Huang AM, et al. **Genes Dev** 1997 Aug 1; 11(15):1963–73

The TGF-beta family mediator Smad1 is phosphorylated directly and activated functionally by the BMP receptor kinase. Kretzschmar M, et al. **Genes Dev** 1997 Apr 15; 11(8):984–95

Signal transduction through beta-catenin and specification of cell fate during embryogenesis. Miller JR, et al. **Genes Dev** 1996 Oct 15;10(20):2527–39 (118 ref.)

The Mcs4 response regulator coordinately controls the stress-activated Wak1-Wis1-Sty1 MAP kinase pathway and fission yeast cell cycle. Shieh JC, et al. **Genes Dev** 1997 Apr 15;11(8):1008–22

eyelid antagonizes wingless signaling during Drosophila development and has homology to the Bright family of DNA-binding proteins. Treisman JE, et al. **Genes Dev** 1997 Aug 1;11(15):1949–62

Identification and characterization of FAR3, a gene required for pheromone-mediated G1 arrest in Saccharomyces cerevisiae. Horecka J, et al. **Genetics** 1996 Nov; 144(3):905–21

Alzheimer's, ageing and amyloid: an absurd allegory? Fowler CJ, et al. **Gerontology** 1997;43(1–2):132–42 (97 ref.)

Mechanotransducing ion channels in C6 glioma cells. Bowman CL, et al. **Glia** 1996 Nov;18(3):161–76

Platelet activation via trimeric GTP-binding proteins. Akkerman JW, et al. **Haemostasis** 1996 Oct;26 Suppl 4:199–209 (35 ref.)

The molecular basis of signaling by vitamin A and its metabolites. Evans RM. **Harvey Lect** 1994–95;90:105–17 (42 ref.)

Immunophilins, ligands, and the control of signal transduction. Schreiber SL, et al. **Harvey Lect** 1995–96; 91:99–114 (89 ref.)

Acoustic and electric forward-masking of the auditory nerve compound action potential: evidence for linearity of electro-mechanical transduction. McAnally KI, et al. **Hear Res** 1997 Apr;106(1–2):137–45

Estimating mechanical responses to pulsatile electrical stimulation of the cochlea. McAnally KI, et al. **Hear Res** 1997 Apr;106(1–2):146–53

Changes in cardiac signal transduction systems in chronic ethanol treatment preceding the development of alcoholic cardiomyopathy. Strasser RH, et al. **Herz** 1996 Aug; 21(4):232–40

Growth hormone signalling mechanisms: involvement of the tyrosine kinase JAK2. Argetsinger LS, et al. **Horm Res** 1996;45 Suppl 1:22–4 (19 ref.)

Role of NPY neurones in GH-dependent feedback signalling to the brain. Chan YY, et al. **Horm Res** 1996;45 Suppl 1:12–4 (10 ref.)

Integrins in cell adhesion and signaling. Akiyama SK. **Hum Cell** 1996 Sep;9(3):181–6 (51 ref.)

Beta 1 integrin-mediated signaling in human T cells. Morimoto C, et al. **Hum Cell** 1996 Sep;9(3):163–8 (34 ref.)

Tyrosine phosphorylation of p130Cas in cell adhesion and transformation. Nojima Y, et al. **Hum Cell** 1996 Sep; 9(3):169–74 (19 ref.)

Intracellular signaling pathways and the regulation of cell adhesion. Shimizu Y. **Hum Cell** 1996 Sep;9(3):175–80 (37 ref.)

A coiled-coil tetramerization domain of BCR-ABL is essential for the interactions of SH2-containing signal transduction molecules. Tauchi T, et al. **Hum Cell** 1996 Dec;9(4):333–6 (18 ref.)

Angiotensin II signaling in vascular smooth muscle. New concepts. Griendling KK, et al. **Hypertension** 1997 Jan;29(1 Pt 2):366–73

Jaks, STATs, cytokine signal transduction, and immunoregulation: are we there yet? O'Shea JJ. **Immunity** 1997 Jul;7(1):1–11 (126 ref.)

The roles of preB cell receptor in early B cell development and its signal transduction. Karasuyama H, et al.

Immunol Cell Biol 1997 Apr;75(2):209–16

The T-cell receptor associated zeta-chain is required but not sufficient for CD26 (dipeptidylpeptidase IV) mediated signaling. von Bonin A, et al. **Immunol Lett** 1997 Mar; 55(3):179–82

Identification of a novel antigenic structure of the human receptor for interleukin-6 involved in the interaction with the glycoprotein 130 chain. Gaillard JP, et al. **Immunology** 1996 Sep;89(1):135–41

Differential expression of inducible NO synthase in two murine macrophage cell lines. Le Page C, et al. **Immunology** 1996 Oct;89(2):274–80

Anchorage-dependent control of muscle-specific gene expression in C2C12 mouse myoblasts. Milasincic DJ, et al. **In Vitro Cell Dev Biol Anim** 1996 Feb;32(2):90–9

Intimin-dependent binding of enteropathogenic Escherichia coli to host cells triggers novel signaling events, including tyrosine phosphorylation of phospholipase C-gamma1. Kenny B, et al. **Infect Immun** 1997 Jul;65(7):2528–36

Activation of phospholipase D is an early event in integrin-mediated signalling leading to phagocytosis in human neutrophils. Serrander L, et al. **Inflammation** 1996 Aug;20(4):439–50

Intracellular signal transduction of PBAN action in the silkworm, Bombyx mori: involvement of acyl CoA reductase. Ozawa R, et al. **Insect Biochem Mol Biol** 1996 Mar;26(3):259–65

Activation of signaling pathways and prevention of apoptosis by cytokines in eosinophils. Yousefi S, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):9–12 (29 ref.)

Gamma 2b provides only some of the signals normally given via mu in B cell development. Kurtz BS, et al. **Int Immunol** 1997 Mar;9(3):415–26

Involvement of Ras in the expression of glycolipid sulfotransferase in human renal cancer cells. Yabunaka N, et al. **Int J Cancer** 1997 May 16;71(4):620–3

Long range signalling process in embryonic development. Gurdon JB, et al. **Int J Dev Biol** 1996;Suppl 1:57S–58S

Integrative erectile biology: the role of signal transduction and cell-to-cell communication in coordinating corporal smooth muscle tone and penile erection. Christ GJ, et al. **Int J Impot Res** 1997 Jun;9(2):69–84 (65 ref.)

Spontaneous signalling in small central neurons: mechanisms and roles of spike-amplitude and spike-interval fluctuations. Arhem P, et al. **Int J Neural Syst** 1996 Sep; 7(4):369–76 (39 ref.)

A dynamical model of the distributed interaction of intracellular signals. James A, et al. **Int J Neural Syst** 1996 Sep;7(4):333–41

Insulin internalization and other signaling pathways in the pleiotropic effects of insulin. Smith RM, et al. **Int Rev Cytol** 1997;173:243–80 (139 ref.)

Identification of vasoactive intestinal peptide receptor subtypes in the lacrimal gland and their signal-transducing components. Hodges RR, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):610–9

Signal transduction in cellular senescence. Obeid LM, et al. **J Am Geriatr Soc** 1997 Mar;45(3):361–6 (56 ref.)

In vitro phosphorylation study of the arc two-component signal transduction system of Escherichia coli. Georgellis D, et al. **J Bacteriol** 1997 Sep;179(17):5429–35

Signal transduction pathways for interleukin 4 and insulin in human hepatoma cells. Chuang LM, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):111–6

Ion channels in plasma membrane signal transduction. Catterall WA. **J Bioenerg Biomembr** 1996 Jun;28(3):217–8 (3 ref.)

Compartmentalization of cAMP signaling in mesangial cells by phosphodiesterase isozymes PDE3 and PDE4. Regulation of superoxidation and mitogenesis. Chini CC, et al. **J Biol Chem** 1997 Apr 11;272(15):9854–9

Co-expression of defective luteinizing hormone receptor fragments partially reconstitutes ligand-induced signal generation. Osuga Y, et al. **J Biol Chem** 1997 Oct 3; 272(40):25006–12

Analysis of signaling pathways used by parathyroid hormone to activate the c-fos gene in human SaOS2 osteoblast-like cells. Evans DB, et al. **J Bone Miner Res** 1996 Aug; 11(8):1066–74

Perturbation of BMP signaling in somitogenesis resulted in vertebral and rib malformations in the axial skeletal formation [see comments] Nifuji A, et al. **J Bone Miner Res** 1997 Mar;12(3):332–42. Comment in: J Bone Miner Res 1997 Mar;12(3):343–6.

Signal transduction into the nucleus: fifth colloquium on cellular signal transduction. Heidelberg, Germany, January 1996. Marks F, et al. **J Cancer Res Clin Oncol** 1996; 122(10):638–42

Roles of gp130 signaling pathways in cardiac myocytes: recent advances and implications for cardiovascular disease. Yamauchi-Takihara K, et al. **J Card Fail** 1996 Dec; 2(4 Suppl):S63–8 (44 ref.)

Characterization of signaling pathways of P2Y and P2U purinoceptors in bovine pulmonary artery endothelial cells. Chen BC, et al. **J Cardiovasc Pharmacol** 1996 Aug; 28(2):192–9

Differential signaling pathways in platelet-activating factor-induced proliferation and interleukin-6 production by rat vascular smooth muscle cells. Gaumond F, et al. **J Cardiovasc Pharmacol** 1997 Aug;30(2):169–75

Syndecans, signaling, and cell adhesion. Couchman JR, et al. **J Cell Biochem** 1996 Jun 15;61(4):578–84 (34 ref.)

HA receptors: regulators of signalling to the cytoskeleton. Entwistle J, et al. **J Cell Biochem** 1996 Jun 15;61(4):569–77 (51 ref.)

Integrin-dependent signal transduction. Lafrenie RM, et al. **J Cell Biochem** 1996 Jun 15;61(4):543–53 (69 ref.)

Structural and functional diversity of cadherin superfamily: are new members of cadherin superfamily involved in signal transduction pathway? Suzuki ST. **J Cell Biochem** 1996 Jun 15;61(4):531–42 (40 ref.)

Nuclear matrix as an anchor for protein kinase CK2 nuclear signalling. Tawfic S, et al. **J Cell Biochem** 1996 Aug; 62(2):165–71 (36 ref.)

Bcl-2 lies downstream of parathyroid hormone-related peptide in a signaling pathway that regulates chondrocyte maturation during skeletal development. Amling M, et al. **J Cell Biol** 1997 Jan 13;136(1):205–13

A cytosolic serine endopeptidase from Trypanosoma cruzi is required for the generation of Ca2+ signaling in mammalian cells. Burleigh BA, et al. **J Cell Biol** 1997 Feb 10;136(3):609–20

Regulation of cell motility by mitogen-activated protein kinase. Klemke RL, et al. **J Cell Biol** 1997 Apr 21; 137(2):481–92

Intracellular signaling is changed after clustering of the neural cell adhesion molecules axonin-1 and NgCAM during neurite fasciculation. Kunz S, et al. **J Cell Biol** 1996 Oct;135(1):253–67

Establishment of the dorso-ventral axis in Xenopus embryos is presaged by early asymmetries in beta-catenin that are modulated by the Wnt signaling pathway. Larabell CA, et al. **J Cell Biol** 1997 Mar 10;136(5):1123–36

Integrin-mediated activation of MAP kinase is independent of FAK: evidence for dual integrin signaling pathways in fibroblasts. Lin TH, et al. **J Cell Biol** 1997 Mar 24; 136(6):1385–95

A multistep, ATP-dependent pathway for assembly of human immunodeficiency virus capsids in a cell-free system. Lingappa JR, et al. **J Cell Biol** 1997 Feb 10;136(3):567–81

Fc epsilon RI-mediated association of 6-micron beads with RBL-2H3 mast cells results in exclusion of signaling proteins from the forming phagosome and abrogation of normal downstream signaling. Pierini L, et al. **J Cell Biol** 1996 Sep;134(6):1427–39

Glycosaminoglycans can modulate extracellular localization of the wingless protein and promote signal transduction. Reichsman F, et al. **J Cell Biol** 1996 Nov;135(3):819–27

Activation of an MAP kinase cascade leads to Sir3p hyperphosphorylation and strengthens transcriptional silencing. Stone EM, et al. **J Cell Biol** 1996 Nov; 135(3):571–83

An alpha-helical signal in the cytosolic domain of the interleukin 2 receptor beta chain mediates sorting towards degradation after endocytosis. Subtil A, et al. **J Cell Biol** 1997 Feb 10;136(3):583–95

The cell density factor CMF regulates the chemoattractant receptor cAR1 in Dictyostelium. Van Haastert PJ, et al. **J Cell Biol** 1996 Sep;134(6):1543–9

Axonal neuregulin signals cells of the oligodendrocyte lineage through activation of HER4 and Schwann cells through HER2 and HER3. Vartanian T, et al. **J Cell Biol** 1997 Apr 7;137(1):211–20

Local perinuclear calcium signals associated with mitosis-entry in early sea urchin embryos. Wilding M, et al. **J Cell Biol** 1996 Oct;135(1):191–9

Proteins containing non-native disulfide bonds generated by oxidative stress can act as signals for the induction of the heat shock response. McDuffee AT, et al. **J Cell Physiol** 1997 May;171(2):143–51

Strain activation of bovine aortic smooth muscle cell proliferation and alignment: study of strain dependency and the role of protein kinase A and C signaling pathways. Mills I, et al. **J Cell Physiol** 1997 Mar;170(3):228–34

Differential targeting of recombinant fibronectins in AtT-20 cells based on their efficiency of aggregation. Castle AM, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3827–37

Mechanical stimulation initiates cell-to-cell calcium signaling in ovine lens epithelial cells. Churchill GC, et al. **J Cell Sci** 1996 Feb;109 (Pt 2):355–65

Signal transduction by the alpha 6 beta 4 integrin: charting the path between laminin binding and nuclear events. Giancotti FG. **J Cell Sci** 1996 Jun;109 (Pt 6):1165–72 (84 ref.)

The hepatocyte growth factor/scatter factor (HGF/SF) receptor, met, transduces a morphogenetic signal in renal glomerular fibromuscular mesangial cells. Kolatsi-Joannou M, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3703–14

Integrin signaling: roles for the cytoplasmic tails of alpha IIb beta 3 in the tyrosine phosphorylation of pp125FAK. Leong L, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3817–25

Histidine kinases in signal transduction pathways of eukaryotes. Loomis WF, et al. **J Cell Sci** 1997 May;110 (Pt 10):1141–5 (26 ref.)

Cytosolic phospholipase A2 is activated by the hepatocyte growth factor receptor-kinase in Madin Darby canine kidney cells. Skouteris GG, et al. **J Cell Sci** 1997 Jul;110 (Pt 14):1655–63

Calcium ion dependency and the role of inositol phosphates in melatonin-induced encystment of dinoflagellates. Tsim ST, et al. **J Cell Sci** 1997 Jun;110 (Pt 12):1387–93

The mitogen-activated protein kinase pathway can mediate growth inhibition and proliferation in smooth muscle cells. Dependence on the availability of downstream targets. Bornfeldt KE, et al. **J Clin Invest** 1997 Aug 15; 100(4):875–85

The adapter protein Grb10 associates preferentially with the insulin receptor as compared with the IGF-I receptor in mouse fibroblasts. Laviola L, et al. **J Clin Invest** 1997 Mar 1;99(5):830–7

Cytosolic domain of the type I interleukin-1 receptor spontaneously recruits signaling molecules to activate a proinflammatory gene. Singh R, et al. **J Clin Invest** 1997 Jul 15;100(2):419–28

Defective regulation of phosphatidylcholine-specific phospholipases C and D in a kindred with Tangier disease. Evidence for the involvement of phosphatidylcholine breakdown in HDL-mediated cholesterol efflux mechanisms. Walter M, et al. **J Clin Invest** 1996 Nov 15; 98(10):2315–23

Thyroid hormone, vitamin D and retinoid receptor expression and signalling in primary cultures of rat osteoblastic and immortalised osteosarcoma cells. Bland R, et al. **J Endocrinol** 1997 Jul;154(1):63–74

Oestrogen formation in breast: clinical and biological importance. Dowsett M, et al. **J Endocrinol** 1996 Sep;150 Suppl:S59–63

Role of phosphoprotein phosphatases in the corpus luteum: I identification and characterisation of serine/threonine phosphoprotein phosphatases in isolated rat luteal cells. Ford SL, et al. **J Endocrinol** 1996 Aug;150(2):205–11

Estrogen biosynthesis in adipose tissue: regulation by paracrine and autocrine mechanisms. Simpson ER, et al. **J Endocrinol** 1996 Sep;150 Suppl:S51–7

Ligands for orphan receptors? Soontjens CD, et al. **J Endocrinol** 1996 Sep;150 Suppl:S241–57

Participation of JAK, STAT and unknown proteins in human placental lactogen-induced signaling: a unique signaling pathway different from prolactin and growth hormone. Takeda T, et al. **J Endocrinol** 1997 Apr;153(1):R1–3

Effect of lactation on insulin signal transduction in sheep adipose tissue and skeletal muscle. Wilson LA, et al. **J Endocrinol** 1996 Dec;151(3):469–80

Effector contributions to G beta gamma-mediated signaling as revealed by muscarinic potassium channel gating. Ivanova-Nikolova TT, et al. **J Gen Physiol** 1997 Feb; 109(2):245–53

Rapid degradation of CD4 in cells expressing human immunodeficiency virus type 1 Env and Vpu is blocked by proteasome inhibitors. Fujita K, et al. **J Gen Virol** 1997 Mar;78 (Pt 3):619–25

Intercellular adhesion molecule-1 (ICAM-1; CD54) expression in human hepatocytic cells depends on protein kinase C. Kvale D, et al. **J Hepatol** 1996 Nov;25(5):670–6

A role for phosphatidylinositol 3-kinase in generating T cell help for B cell growth and differentiation. Aagaard-Tillery KM, et al. **J Immunol** 1996 Oct 1;157(7):2769–78

Convergence of Schiff base costimulatory signaling and TCR signaling at the level of mitogen-activated protein kinase ERK2. Chen H, et al. **J Immunol** 1997 Sep 1;159(5):2274–81

Evidence that the Wiskott-Aldrich syndrome protein may be involved in lymphoid cell signaling pathways. Cory GO, et al. **J Immunol** 1996 Nov 1;157(9):3791–5

Tyrosines 113, 128, and 145 of SLP-76 are required for optimal augmentation of NFAT promoter activity. Fang N, et al. **J Immunol** 1996 Nov 1;157(9):3769–73 (16 ref.)

Activation of the Ras signaling pathway by the CD40 receptor. Gulbins E, et al. **J Immunol** 1996 Oct 1; 157(7):2844–50

Hydrogen peroxide-mediated transcriptional induction of macrophage colony-stimulating factor by TGF-beta1. Hong YH, et al. **J Immunol** 1997 Sep 1;159(5):2418–23

Isolation and characterization of murine fra-1: induction mediated by CD40 and surface Ig is protein kinase C dependent. Huo L, et al. **J Immunol** 1996 Nov 1; 157(9):3812–8

A novel complex, p40/42, is constitutively associated with the B cell antigen receptor and phosphorylated upon receptor stimulation. Lee YJ, et al. **J Immunol** 1996 Nov 1;157(9):3828–37

The Lck SH2 phosphotyrosine binding site is critical for efficient TCR-induced processive tyrosine phosphorylation of the zeta-chain and IL-2 production. Lewis LA, et al. **J Immunol** 1997 Sep 1;159(5):2292–300

The role of protein tyrosine phosphatase SHP-1 in the regulation of IFN-gamma signaling in neural cells. Massa PT, et al. **J Immunol** 1996 Dec 1;157(11):5139–44

Apoptosis signaling pathways in normal T cells: differential activity of Bcl-2 and IL-1beta-converting enzyme family protease inhibitors on glucocorticoid- and Fas-mediated cytotoxicity. Moreno MB, et al. **J Immunol** 1996 Nov 1; 157(9):3845–9

Protein kinase C alpha-mediated chronic signal transduction for immunosenescence. Ohkusu K, et al. **J Immunol** 1997 Sep 1;159(5):2082–4

CD28-induced cytokine production and proliferation by thymocytes are differentially regulated by the p59fyn tyrosine kinase. Ong CJ, et al. **J Immunol** 1997 Sep 1; 159(5):2169–76

Phosphatidylinositol-based glycolipid-anchored proteins enhance proximal TCR signaling events. Romagnoli P, et al. **J Immunol** 1997 Jun 15;158(12):5757–64

Dexamethasone downregulates lysosomal secretion in mouse macrophages: involvement of signaling through protein kinase C. Gewert K, et al. **J Inflamm** 1995–96;47(3):115–25

Disruption of cytokine signaling in lymphoid development:

unique contributions of the common cytokine gamma chain and the Jak3 kinase. Eynon EE, et al. **J Interferon Cytokine Res** 1996 Sep;16(9):677–84 (32 ref.)

Fas signal transduction triggers either proliferation or apoptosis in human fibroblasts. Freiberg RA, et al. **J Invest Dermatol** 1997 Feb;108(2):215–9

Phospholipase C-mediated signaling is altered during HaCaT cell proliferation and differentiation. Haase I, et al. **J Invest Dermatol** 1997 May;108(5):748–52

Regulation of signal transduction through the T cell antigen receptor. Zhao H, et al. **J Lab Clin Med** 1997 Aug; 130(2):126–31 (56 ref.)

Early events in TNF signaling: a story of associations and dissociations. Darnay BG, et al. **J Leukoc Biol** 1997 May; 61(5):559–66 (47 ref.)

Phospholipase D mediates Fc gamma receptor activation of neutrophils and provides specificity between high-valency immune complexes and fMLP signaling pathways. Gewirtz AT, et al. **J Leukoc Biol** 1997 Apr;61(4):522–8

Random migration of polymorphonuclear leukocytes induced by GM-CSF involving a signal transduction pathway different from that of fMLP. Harakawa N, et al. **J Leukoc Biol** 1997 Apr;61(4):500–6

Immunoreceptor tyrosine-based activation motif (ITAM), a unique module linking antigen and Fc receptors to their signaling cascades. Isakov N. **J Leukoc Biol** 1997 Jan; 61(1):6–16 (123 ref.)

Undifferentiated U937 cells transfected with chemoattractant receptors: a model system to investigate chemotactic mechanisms and receptor structure/function relationships. Kew RR, et al. **J Leukoc Biol** 1997 Mar;61(3):329–37

Signaling mechanisms and the activation of leukocyte integrins. Newton RA, et al. **J Leukoc Biol** 1997 Apr; 61(4):422–6 (54 ref.)

Integrin signaling in leukocytes: lessons from the alpha6beta1 integrin. Wei J, et al. **J Leukoc Biol** 1997 Apr;61(4):397–407 (119 ref.)

MCP-1-mediated chemotaxis requires activation of non-overlapping signal transduction pathways. Yen H, et al. **J Leukoc Biol** 1997 Apr;61(4):529–32

Membrane stretch augments the cardiac muscarinic K+ channel activity. Pleumsamran A, et al. **J Membr Biol** 1995 Dec;148(3):287–97

The cell nucleus: an Eldorado to future calcium research? Santella L. **J Membr Biol** 1996 Sep;153(2):83–92 (100 ref.)

Hyperpolarization- and depolarization-activated Ca2+ currents in Paramecium trigger behavioral changes and cGMP formation independently. Schultz JE, et al. **J Membr Biol** 1997 Apr 1;156(3):251–9

Transphosphorylation of the TorR response regulator requires the three phosphorylation sites of the TorS unorthodox sensor in Escherichia coli. Jourlin C, et al. **J Mol Biol** 1997 Apr 11;267(4):770–7

Molecular recognition in signal transduction: the interaction surfaces of the Spo0F response regulator with its cognate phosphorelay proteins revealed by alanine scanning mutagenesis. Tzeng YL, et al. **J Mol Biol** 1997 Sep 19; 272(2):200–12

Effects of IL-2 on the myocardium. Participation of the sympathetic system. Sterin-Borda L, et al. **J Mol Cell Cardiol** 1996 Dec;28(12):2457–65

Facilitative interactions between noradrenergic and purinergic signaling during preconditioning of the rat heart. Winter CB, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):163–73

Two distinct signaling pathways activated by activin A in glucose-responsive pancreatic beta-cell lines. Shibata H, et al. **J Mol Endocrinol** 1996 Jun;16(3):249–58

Control of T lymphocyte signal transduction through clonal anergy. Fields P, et al. **J Mol Med** 1996 Nov;74(11):673–83 (141 ref.)

Signaling by epidermal growth factor differentially affects integrin-mediated adhesion of tumor cells to extracellular matrix proteins. Genersch E, et al. **J Mol Med** 1996 Oct; 74(10):609–16

G-proteins and insulin signaling [comment] Luft FC. **J Mol Med** 1997 Apr;75(4):233–5. Comment on: J Mol Med 1997 Apr;75(4):283–9.

Molecular understanding of hematopoietin/cytokine receptor signaling defects in hematopoietic disorders. Soede-Bobok AA, et al. **J Mol Med** 1997 Jul;75(7):470–7 (80 ref.)

Transcription factor AP-1 regulation by mitogen-activated protein kinase signal transduction pathways. Whitmarsh AJ, et al. **J Mol Med** 1996 Oct;74(10):589–607 (234 ref.)

Distinct calcium signaling within neuronal growth cones and filopodia. Davenport RW, et al. **J Neurobiol** 1996 Sep; 31(1):1–15

Functional role of receptor neurons in encoding olfactory information. Trotier D, et al. **J Neurobiol** 1996 May; 30(1):58–66 (40 ref.)

Interactions of muscarinic receptors with the heterotrimeric G proteins Gq and G12: transduction of proliferative signals. Burstein ES, et al. **J Neurochem** 1997 Feb; 68(2):525–33

Lysophosphatidic acid-induced proliferation-related signals in astrocytes. Keller JN, et al. **J Neurochem** 1997 Sep; 69(3):1073–84

Pituitary adenylate cyclase-activating polypeptide triggers dual transduction signaling in CATH.a cells and transcriptionally activates tyrosine hydroxylase and c-fos expression. Muller A, et al. **J Neurochem** 1997 Apr; 68(4):1696–704

Binding of erythroagglutinating phytohemagglutinin lectin from Phaseolus vulgaris to the epidermal growth factor receptor inhibits receptor function in the human glioma cell line, U373 MG. Rebbaa A, et al. **J Neurochem** 1996 Dec;67(6):2265–72

Cyclic GMP-dependent protein kinase and cellular signaling in the nervous system. Wang X, et al. **J Neurochem** 1997 Feb;68(2):443–56 (120 ref.)

Signalling pathways mediating secretory and mitogenic responses to galanin and pituitary adenylate cyclase-activating polypeptide in the 235-1 clonal rat lactotroph cell line. Hammond PJ, et al. **J Neuroendocrinol** 1996 Jun;8(6):457–64

Measurement of early events in signal transduction beyond receptors involving G proteins function in mononuclear leucocytes. Avissar S, et al. **J Neuroimmunol** 1996 Oct; 70(1):81–6

Two parallel signaling pathways couple 5HT1A receptors to N- and L-type calcium channels in C-like rat dorsal root ganglion cells. Cardenas CG, et al. **J Neurophysiol** 1997 Jun;77(6):3284–96

Two forms of long-term potentiation in area CA1 activate different signal transduction cascades. Cavuş I, et al. **J Neurophysiol** 1996 Nov;76(5):3038–47

Electrophysiological evidence for two transduction pathways within a bitter-sensitive taste receptor. Glendinning JI, et al. **J Neurophysiol** 1997 Aug;78(2):734–45

Signaling of object approach by the DCMD neuron of the locust. Rind FC, et al. **J Neurophysiol** 1997 Feb; 77(2):1029–33

Intracellular characterization of neurons in the locust brain signaling impending collision. Rind FC. **J Neurophysiol** 1996 Mar;75(3):986–95

A mathematical model of the crustacean stretch receptor neuron. Biomechanics of the receptor muscle, mechanosensitive ion channels, and macrotransducer properties. Swerup C, et al. **J Neurophysiol** 1996 Oct; 76(4):2211–20

Mechanisms for signal transformation in lemniscal auditory thalamus. Tennigkeit F, et al. **J Neurophysiol** 1996 Dec; 76(6):3597–608

Regulation of synaptic facilitation by postsynaptic Ca2+/CaM pathways in hippocampal CA1 neurons. Wang JH, et al. **J Neurophysiol** 1996 Jul;76(1):276–86

TrkB signaling is required for postnatal survival of CNS neurons and protects hippocampal and motor neurons from axotomy-induced cell death. Alcántara S, et al. **J Neurosci** 1997 May 15;17(10):3623–33

Trk receptors function as rapid retrograde signal carriers in the adult nervous system. Bhattacharyya A, et al. **J Neurosci** 1997 Sep 15;17(18):7007–16

Insulin-like growth factor and potassium depolarization maintain neuronal survival by distinct pathways: possible involvement of PI 3-kinase in IGF-1 signaling. D'Mello SR, et al. **J Neurosci** 1997 Mar 1;17(5):1548–60

Estrogen modifies an electrocommunication signal by altering the electrocyte sodium current in an electric fish, Sternopygus. Dunlap KD, et al. **J Neurosci** 1997 Apr 15; 17(8):2869–75

Control of action potential-induced Ca2+ signaling in the soma of hippocampal neurons by Ca2+ release from intracellular stores. Jacobs JM, et al. **J Neurosci** 1997 Jun 1;17(11):4129–35

Optimal nerve growth factor trophic signals mediated by synergy of TrkA and p75 receptor-specific ligands. Maliartchouk S, et al. **J Neurosci** 1997 Aug 15; 17(16):6031–7

Bitter taste transduction of denatonium in the mudpuppy Necturus maculosus. Ogura T, et al. **J Neurosci** 1997 May 15;17(10):3580–7

Mechanism involved in initiation and propagation of receptor-induced intercellular calcium signaling in cultured rat astrocytes. Venance L, et al. **J Neurosci** 1997 Mar 15; 17(6):1981–92

Identification of a somatodendritic targeting signal in the cytoplasmic domain of the transferrin receptor. West AE, et al. **J Neurosci** 1997 Aug 15;17(16):6038–47

Involvement of MAP kinase in angiotensin II-induced phosphorylation and intracellular targeting of neuronal AT1 receptors. Yang H, et al. **J Neurosci** 1997 Mar 1; 17(5):1660–9

Receptor-mediated calcium signalling in glial cells from mouse corpus callosum slices. Bernstein M, et al. **J Neurosci Res** 1996 Oct 15;46(2):152–63

Neurotrophin signal transduction in medulloblastoma. Chou TT, et al. **J Neurosci Res** 1997 Sep 1;49(5):522–7 (51 ref.)

Regulatory volume decrease and associated osmolyte fluxes in cerebellar granule neurons are calcium independent. Morán J, et al. **J Neurosci Res** 1997 Jan 15;47(2):144–54

Altered gap junctional communication, intercellular signaling, and growth in cultured astrocytes deficient in connexin43. Naus CC, et al. **J Neurosci Res** 1997 Sep 1; 49(5):528–40

Signal pathways and ligament cell adhesiveness. Sung KL, et al. **J Orthop Res** 1996 Sep;14(5):729–35

Growth-hormone signal transduction. Campbell GS. **J Pediatr** 1997 Jul;131(1 Pt 2):S42–4 (22 ref.)

Phosphotyrosyl proteins in childhood rhabdomyosarcomas: phosphorylation of catenins and components of the insulin-like growth factor type I receptor signaling cascade. McManus MJ, et al. **J Pediatr Hematol Oncol** 1997 Jul-Aug;19(4):319–26

Dawn, diacylglycerol, calcium, and protein kinase C--the retinal wrecking crew. A signal transduction cascade for rhabdom shedding in the Limulus eye. Jinks RN, et al. **J Photochem Photobiol B** 1996 Aug;35(1–2):45–52

Limulus ventral photoreceptors contain two functionally dissimilar inositol triphosphate-induced calcium release mechanisms. Levy S, et al. **J Photochem Photobiol B** 1996 Aug;35(1–2):97–103

Retrograde signalling in depolarization-induced suppression of inhibition in rat hippocampal CA1 cells. Alger BE, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):197–209

Changes in IP3 and cytosolic Ca2+ in response to sugars and non-sugar sweeteners in transduction of sweet taste in the rat. Bernhardt SJ, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):325–36

Elementary and global aspects of calcium signalling. Berridge MJ. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):290–306 (117 ref.)

To quark or to spark, that is the question. Lipp P, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):1 (8 ref.)

Delayed autoregulation of the Ca2+ signals resulting from capacitative Ca2+ entry in bovine pulmonary artery endothelial cells. Madge L, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):351–69

The effects of calcium buffering and cyclic AMP on mechano-electrical transduction in turtle auditory hair cells. Ricci AJ, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):111–24

Ca2+ mobilization and interlayer signal transfer in the heterocellular bilayered epithelium of the rabbit ciliary body. Schütte M, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):25–37

Conducted depolarization in arteriole networks of the guinea-pig small intestine: effect of branching of signal dissipation. Segal SS, et al. **J Physiol (Lond)** 1996 Oct 1; 496 (Pt 1):229–44

Ca2+ release-induced inactivation of Ca2+ current in rat ventricular myocytes: evidence for local Ca2+ signalling. Sham JS. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):285–95

Small event Ca2+ release: a probable precursor of Ca2+ sparks in frog skeletal muscle. Shirokova N, et al. **J Physiol (Lond)** 1997 Jul 1;502 (Pt 1):3–11

Thrombin-dependent calcium signalling in single human erythroleukaemia cells. Somasundaram B, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):485–95

mGluR1 mutant mice as a tool to study calcium signalling and multiple innervation in the cerebellum. Daniel H, et al. **J Physiol Paris** 1996;90(3–4):171–2

Melatonin-sensitive, serum-stimulated signalling in ovine pars tuberalis. McNulty S, et al. **J Pineal Res** 1997 May; 22(4):221–31

Structure and sites of phosphorylation of 14–3–3 protein: role in coordinating signal transduction pathways. Dubois T, et al. **J Protein Chem** 1997 Jul;16(5):513–22

Indices of brain beta-adrenergic receptor signal transduction in the learned helplessness animal model of depression. Gurguis GN, et al. **J Psychiatr Res** 1996 Mar-Apr; 30(2):135–46

Science and medicine. Boulton RA, et al. **J R Coll Physicians Lond** 1996 Jul-Aug;30(4):376–80

Signal transduction by G proteins: 1994 edition. Birnbaumer L, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar; 15(1–4):213–52 (117 ref.)

Investigation of the role of inositol and the phosphatidylinositol signal transduction system in mouse embryonic stem cells. Duffy C, et al. **J Reprod Fertil** 1996 Sep;108(1):87–93

Effects of extracellular environment on the osmotic signal transduction involved in activation of motility of carp spermatozoa. Perchec Poupard G, et al. **J Reprod Fertil** 1997 Jul;110(2):315–27

Follicular development through preantral stages: signalling via growth factors. Roy SK, et al. **J Reprod Fertil Suppl** 1996;50:83–94

Stochastic events underlie Ca2+ signalling in neutrophils. Hallett MB, et al. **J Theor Biol** 1997 May 7;186(1):1–6

Accurate reading of morphogen concentrations by nuclear receptors: a formal model of complex transduction pathways. Kerszberg M. **J Theor Biol** 1996 Nov 7; 183(1):95–104

Signal-induced Ca2+ oscillations through the regulation of the inositol 1,4,5-trisphosphate-gated Ca2+ channel: an allosteric model. Laurent M, et al. **J Theor Biol** 1997 Jun 7;186(3):307–26

Synergetic mechanisms in energy and signal transduction: photo oscillating proton transport in bacteriorhodopsin. Tributsch H, et al. **J Theor Biol** 1996 Jan 7;178(1):17–28

Role of calcium in lipopolysaccharide-stimulated tumor necrosis factor and interleukin-1 signal transduction in naive and endotoxin-tolerant murine macrophages. West MA, et al. **J Trauma** 1996 Oct;41(4):647–52

Adenovirus infection stimulates the Raf/MAPK signaling pathway and induces interleukin-8 expression. Bruder JT, et al. **J Virol** 1997 Jan;71(1):398–404

Packaging signals in alphaviruses. Frolova E, et al. **J Virol** 1997 Jan;71(1):248–58

Human T-cell leukemia virus type 1 Tax releases cell cycle arrest induced by p16INK4a. Low KG, et al. **J Virol** 1997 Mar;71(3):1956–62

Epstein-Barr virus LMP1 induction of the epidermal growth factor receptor is mediated through a TRAF signaling pathway distinct from NF-kappaB activation. Miller WE, et al. **J Virol** 1997 Jan;71(1):586–94

STAT1 pathway is involved in activation of caprine arthritis-encephalitis virus long terminal repeat in monocytes. Sepp T, et al. **J Virol** 1997 Jan;71(1):771–7
Induction of cyclins E and A in response to mitogen removal: a basic alteration associated with the arrest of differentiation of C2 myoblasts transformed by simian virus 40 large T antigen. Tedesco D, et al. **J Virol** 1997 Mar; 71(3):2217–24
The 1996 Albert Lasker Medical Research Awards. Signal transduction using nitric oxide and cyclic guanosine monophosphate. Murad F. **JAMA** 1996 Oct 9; 276(14):1189–92
Protein tyrosine phosphatases as stimulators and inhibitors of insulin signalling: possible candidates for insulin resistance. Kashiwagi A, et al. **Jpn J Physiol** 1997;47 Suppl 1:S35–6
Signal transduction of cell-cycle regulation: its temporo-spacial architecture. Takuwa N, et al. **Jpn J Physiol** 1996 Dec;46(6):431–49 (204 ref.)
Angiotensin II signal transduction in vascular smooth muscle cells: role of tyrosine kinases. Ishida M, et al. **Keio J Med** 1997 Jun;46(2):61–8 (86 ref.)
Signaling molecules and neuroglial activation in the injured central nervous system. Raivich G, et al. **Keio J Med** 1996 Sep;45(3):239–47 (115 ref.)
Regulation of the intracellular calcium concentration in epithelial cells. Leipziger J, et al. **Kidney Blood Press Res** 1996;19(3–4):148–50 (21 ref.)
Signaling pathways in the biphasic effect of angiotensin II on apical Na/H antiport activity in proximal tubule. Houillier P, et al. **Kidney Int** 1996 Nov;50(5):1496–505
Signaling from the matrix to the cytoskeleton: role of cell surface proteoglycans in matrix assembly. Woods A, et al. **Kidney Int Suppl** 1996 May;54:S64–7 (33 ref.)
SHIP, a new player in cytokine-induced signalling. Liu L, et al. **Leukemia** 1997 Feb;11(2):181–4 (38 ref.)
Constitutive activation of Stat-related DNA-binding proteins in erythroid cells by the Friend spleen focus-forming virus. Ohashi T, et al. **Leukemia** 1997 Apr; 11 Suppl 3:251–4
Embryonic expression of eph signalling factors in Xenopus. Weinstein DC, et al. **Mech Dev** 1996 Jul;57(2):133–44
Signal transduction: specificity of growth factors explained by parallel distributed processing. Schamel WW, et al. **Med Hypotheses** 1996 Sep;47(3):249–55 (25 ref.)
The dominant negative effect of a kinase-defective insulin receptor on insulin-like growth factor-I-stimulated signaling in Rat-1 fibroblasts. Takata Y, et al. **Metabolism** 1996 Dec;45(12):1474–82
Analysis of two-component signal transduction systems involved in transcriptional regulation. Hakenbeck R, et al. **Methods Enzymol** 1996;273:281–300 (96 ref.)
Protein tyrosine phosphorylation modulates microvessel permeability in frog mesentery. Adamson RH. **Microcirculation** 1996 Jun;3(2):245–7 (13 ref.)
Altered beta-adrenergic receptor signaling in heart failure, in vivo gene transfer via adeno and adeno-associated virus. Ping P, et al. **Microcirculation** 1996 Jun;3(2):225–8
Histochemical detection of age- and injury-related changes in signal transduction in the superior cervical ganglion. Roivainen R, et al. **Microsc Res Tech** 1996 Sep 1; 35(1):20–31
Dissociation of mitogen-activated protein kinase activation from p125 focal adhesion kinase tyrosine phosphorylation in Swiss 3T3 cells stimulated by bombesin, lysophosphatidic acid, and platelet-derived growth factor. Seufferlein T, et al. **Mol Biol Cell** 1996 Dec;7(12):1865–75
Mechanisms of integrin-mediated calcium signaling in MDCK cells: regulation of adhesion by IP3- and store-independent calcium influx. Sjaastad MD, et al. **Mol Biol Cell** 1996 Jul;7(7):1025–41
Retinoic acid signaling cascade in differentiating murine epidermal keratinocytes: alterations in papilloma- and carcinoma-derived cell lines. Vettermann O, et al. **Mol Carcinog** 1997 Sep;20(1):58–67
Signal transduction in myocardial ischaemia and reperfusion. Lochner A, et al. **Mol Cell Biochem** 1996 Jul–Aug; 160–161:129–36
Differential signaling by insulin receptor substrate 1 (IRS-1) and IRS-2 in IRS-1-deficient cells. Brüning JC, et al. **Mol Cell Biol** 1997 Mar;17(3):1513–21
Role of diacylglycerol-regulated protein kinase C isotypes in growth factor activation of the Raf-1 protein kinase. Cai H, et al. **Mol Cell Biol** 1997 Feb;17(2):732–41
Phosphorylation of Raf-1 serine 338-serine 339 is an essential regulatory event for Ras-dependent activation and biological signaling. Diaz B, et al. **Mol Cell Biol** 1997 Aug; 17(8):4509–16
Induction of nuclear factor kappaB by the CD30 receptor is mediated by TRAF1 and TRAF2. Duckett CS, et al. **Mol Cell Biol** 1997 Mar;17(3):1535–42
Analysis of mutant platelet-derived growth factor receptors expressed in PC12 cells identifies signals governing sodium channel induction during neuronal differentiation. Fanger GR, et al. **Mol Cell Biol** 1997 Jan;17(1):89–99
Synergy between the Mos/mitogen-activated protein kinase pathway and loss of p53 function in transformation and chromosome instability. Fukasawa K, et al. **Mol Cell Biol** 1997 Jan;17(1):506–18
Requirement of phosphatidylinositol 3-kinase-dependent pathway and Src for Gas6-Axl mitogenic and survival activities in NIH 3T3 fibroblasts. Goruppi S, et al. **Mol Cell Biol** 1997 Aug;17(8):4442–53
Lck regulates Vav activation of members of the Rho family of GTPases. Han J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1346–53
Fas activation of the p38 mitogen-activated protein kinase signalling pathway requires ICE/CED-3 family proteases [published erratum appears in Mol Cell Biol 1997 Mar;17(3):1757] Juo P, et al. **Mol Cell Biol** 1997 Jan; 17(1):24–35
Phosphatidylinositol 3-kinase is required for integrin-stimulated AKT and Raf-1/mitogen-activated protein kinase pathway activation. King WG, et al. **Mol Cell Biol** 1997 Aug;17(8):4406–18
A specific product of phosphatidylinositol 3-kinase directly activates the protein kinase Akt through its pleckstrin homology domain. Klippel A, et al. **Mol Cell Biol** 1997 Jan;17(1):338–44
A JAK1/JAK2 chimera can sustain alpha and gamma interferon responses. Kohlhuber F, et al. **Mol Cell Biol** 1997 Feb;17(2):695–706
Antiapoptotic signalling by the insulin-like growth factor I receptor, phosphatidylinositol 3-kinase, and Akt. Kulik G, et al. **Mol Cell Biol** 1997 Mar;17(3):1595–606
Differentiation of central nervous system neuronal cells by fibroblast-derived growth factor requires at least two signaling pathways: roles for Ras and Src. Kuo WL, et al. **Mol Cell Biol** 1997 Aug;17(8):4633–43
Lack of a role for Jun kinase and AP-1 in Fas-induced apoptosis. Lenczowski JM, et al. **Mol Cell Biol** 1997 Jan; 17(1):170–81
Phosphatidylinositol 3-kinase mediates epidermal growth factor-induced activation of the c-Jun N-terminal kinase signaling pathway. Logan SK, et al. **Mol Cell Biol** 1997 Oct;17(10):5784–90
Mutation in the Jak kinase JH2 domain hyperactivates Drosophila and mammalian Jak-Stat pathways. Luo H, et al. **Mol Cell Biol** 1997 Mar;17(3):1562–71
Specific activation of p85-p110 phosphatidylinositol 3'-kinase stimulates DNA synthesis by ras- and p70 S6 kinase-dependent pathways. McIlroy J, et al. **Mol Cell Biol** 1997 Jan;17(1):248–55
Identification of domains of the insulin-like growth factor I receptor that are required for protection from apoptosis. O'Connor R, et al. **Mol Cell Biol** 1997 Jan;17(1):427–35
Novel dimeric Nur77 signaling mechanism in endocrine and lymphoid cells. Philips A, et al. **Mol Cell Biol** 1997 Oct; 17(10):5946–51
Tyrosine 763 of the murine granulocyte colony-stimulating factor receptor mediates Ras-dependent activation of the JNK/SAPK mitogen-activated protein kinase pathway. Rausch O, et al. **Mol Cell Biol** 1997 Mar;17(3):1170–9
Opposite effects of the acute promyelocytic leukemia PML-retinoic acid receptor alpha (RAR alpha) and PLZF-RAR alpha fusion proteins on retinoic acid signalling. Ruthardt M, et al. **Mol Cell Biol** 1997 Aug; 17(8):4859–69
Fibronectin-stimulated signaling from a focal adhesion kinase-c-Src complex: involvement of the Grb2, p130cas, and Nck adaptor proteins. Schlaepfer DD, et al. **Mol Cell Biol** 1997 Mar;17(3):1702–13
Destabilization of Raf-1 by geldanamycin leads to disruption of the Raf-1-MEK-mitogen-activated protein kinase signalling pathway. Schulte TW, et al. **Mol Cell Biol** 1996 Oct;16(10):5839–45
Rfc5, a replication factor C component, is required for regulation of Rad53 protein kinase in the yeast checkpoint pathway. Sugimoto K, et al. **Mol Cell Biol** 1997 Oct; 17(10):5905–14
Enhanced signaling and morphological transformation by a membrane-localized derivative of the fibroblast growth factor receptor 3 kinase domain. Webster MK, et al. **Mol Cell Biol** 1997 Oct;17(10):5739–47
Rheb interacts with Raf-1 kinase and may function to integrate growth factor- and protein kinase A-dependent signals. Yee WM, et al. **Mol Cell Biol** 1997 Feb;17(2):921–33
Synergism in estrogen-regulated gene expression. Arnold SF, et al. **Mol Cell Endocrinol** 1996 Oct 30;123(2):119–22 (14 ref.)
Protein kinase C pathway potentiates androgen-mediated gene expression of the mouse vas deferens specific aldose reductase-like protein (MVDP). Fabre S, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1–2):79–86
Prolactin signal transduction to milk protein genes: carboxy-terminal part of the prolactin receptor and its tyrosine phosphorylation are not obligatory for JAK2 and STAT5 activation. Goupille O, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):155–69
Identification of COUP-TFII as a peroxisome proliferator response element binding factor using genetic selection in yeast: COUP-TFII activates transcription in yeast but antagonizes PPAR signaling in mammalian cells. Marcus SL, et al. **Mol Cell Endocrinol** 1996 Jun 18;120(1):31–9
Epitope-tagged gonadotropin-releasing hormone receptors heterologously-expressed in mammalian (COS-1) and insect (Sf9) cells. Neill JD, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):143–54
Similarities and differences in the way transmembrane-type ligands interact with the Elk subclass of Eph receptors. Brambilla R, et al. **Mol Cell Neurosci** 1996;8(2–3):199–209
CAM-FGF receptor interactions: a model for axonal growth. Doherty P, et al. **Mol Cell Neurosci** 1996;8(2–3):99–111 (77 ref.)
Expression of Tiam-1 in the developing brain suggests a role for the Tiam-1-Rac signaling pathway in cell migration and neurite outgrowth. Ehler E, et al. **Mol Cell Neurosci** 1997 Jan;9(1):1–12
The short form of the prolactin (PRL) receptor silences PRL induction of the beta-casein gene promoter. Berlanga JJ, et al. **Mol Endocrinol** 1997 Sep;11(10):1449–57
Regulation of signal transducer and activator of transcription (STAT) 5b activation by the temporal pattern of growth hormone stimulation. Gebert CA, et al. **Mol Endocrinol** 1997 Apr;11(4):400–14
The signals and molecular pathways involved in human menstruation, a unique process of tissue destruction and remodelling. Tabibzadeh S. **Mol Hum Reprod** 1996 Feb; 2(2):77–92 (173 ref.)
Alternative pathways of acrosome reaction induction [letter] Tesarik J. **Mol Hum Reprod** 1996 Oct;2(10):813
Juvenile myelomonocytic leukemia: molecular understanding and prospects for therapy. Emanuel PD, et al. **Mol Med Today** 1996 Nov;2(11):468–75 (40 ref.)
Growth factors, signalling and cancer. Konstantopoulos N, et al. **Mol Med Today** 1997 Jul;3(7):284–5
Dynamin, endocytosis and intracellular signalling (review). McClure SJ, et al. **Mol Membr Biol** 1996 Oct-Dec; 13(4):189–215 (223 ref.)
YopH of Yersinia pseudotuberculosis interrupts early phosphotyrosine signalling associated with phagocytosis. Andersson K, et al. **Mol Microbiol** 1996 Jun;20(5):1057–69
Control of bacterial chemotaxis. Eisenbach M. **Mol Microbiol** 1996 Jun;20(5):903–10 (56 ref.)
Genetically probing the regions of ribose-binding protein involved in permease interaction. Eym Y, et al. **Mol Microbiol** 1996 Aug;21(4):695–702
Photobiology of microorganisms: how photosensors catch a photon to initialize signalling. Hellingwerf KJ, et al. **Mol Microbiol** 1996 Aug;21(4):683–93 (76 ref.)
Comparative analysis of the virulence control systems of Bordetella pertussis and Bordetella bronchiseptica. Martinez de Tejada G, et al. **Mol Microbiol** 1996 Dec; 22(5):895–908
Priming events and retrograde injury signals. A new perspective on the cellular and molecular biology of nerve regeneration. Ambron RT, et al. **Mol Neurobiol** 1996 Aug; 13(1):61–79 (98 ref.)
The early intracellular signaling pathway for the insulin/insulin-like growth factor receptor family in the mammalian central nervous system. Folli F, et al. **Mol Neurobiol** 1996 Oct;13(2):155–83 (162 ref.)
Enhanced type 1alpha metabotropic glutamate receptor-stimulated phosphoinositide signaling after pertussis toxin treatment. Carruthers AM, et al. **Mol Pharmacol** 1997 Sep;52(3):406–14
Mutagenesis of residues adjacent to transmembrane prolines alters D1 dopamine receptor binding and signal transduction. Cho W, et al. **Mol Pharmacol** 1996 Nov; 50(5):1338–45
Bombesin-like peptide receptor subtypes promote mitogenesis, which requires persistent receptor signaling. Feldman RI, et al. **Mol Pharmacol** 1996 Nov;50(5):1346–54
Opioid mu, delta, and kappa receptor-induced activation of phospholipase C-beta 3 and inhibition of adenylyl cyclase is mediated by Gi2 and G(o) in smooth muscle. Murthy KS, et al. **Mol Pharmacol** 1996 Oct;50(4):870–7
The growth-promoting effect of low-density lipoprotein may Be mediated by a pertussis toxin-sensitive mitogen-activated protein kinase pathway. Sachinidis A, et al. **Mol Pharmacol** 1997 Sep;52(3):389–97
m3 Muscarinic receptor-induced and Gi-mediated heterologous potentiation of phospholipase C stimulation: role of phosphoinositide synthesis. Schmidt M, et al. **Mol Pharmacol** 1996 Oct;50(4):1038–46
Coupling efficiencies of human alpha 1-adrenergic receptor subtypes: titration of receptor density and responsiveness with inducible and repressible expression vectors. Theroux TL, et al. **Mol Pharmacol** 1996 Nov;50(5):1376–87
2-Methoxyestradiol, an endogenous estrogen metabolite, induces apoptosis in endothelial cells and inhibits angiogenesis: possible role for stress-activated protein kinase signaling pathway and Fas expression. Yue TL, et al. **Mol Pharmacol** 1997 Jun;51(6):951–62
Functional consequences of divergence and convergence in physiological signaling pathways [news] Brezina V, et al. **Mol Psychiatry** 1997 Jan;2(1):9–11
Phosphatidylcholine signaling in response to CSF-1. Jackowski S, et al. **Mol Reprod Dev** 1997 Jan;46(1):24–30 (23 ref.)
Studies related to progesterone-induced hamster sperm acrosome reaction. Llanos MN, et al. **Mol Reprod Dev** 1996 Nov;45(3):313–9
Activation of mouse sperm phosphatidylinositol-4,5 bisphosphate-phospholipase C by zona pellucida is modulated by tyrosine phosphorylation. Tomes CN, et al. **Mol Reprod Dev** 1996 Feb;43(2):196–204
Reduced Gs protein function and G alpha s levels in leukocytes of patients with Parkinson's disease. Avissar S, et al. **Mov Disord** 1997 Mar;12(2):167–74
G proteins: out of the cytoskeletal closet. Rodbell M. **Mt Sinai J Med** 1996 Oct-Nov;63(5–6):381–6 (62 ref.)
Can cysteine direct tyrosine in signal transduction for environment-oriented gene control? Nakashima I. **Nagoya J Med Sci** 1996 Mar;59(1–2):1–10 (72 ref.)
Firing up the swallowing mechanism [news; comment]

Diamant NE. **Nat Med** 1996 Nov;2(11):1190–1. Comment on: Nat Med 1996 Nov;2(11):1217–24.

Estrogen receptor beta—getting in on the action? [news] Gustafsson JA. **Nat Med** 1997 May;3(5):493–4

Hedgehogs in the clinic [news] McMahon AP, et al. **Nat Med** 1996 Dec;2(12):1308–10

Structure of the Ras-binding domain of RalGEF and implications for Ras binding and signalling [letter] Geyer M, et al. **Nat Struct Biol** 1997 Sep;4(9):694–9

Cholinergic activation of phosphoinositide signaling is impaired in Alzheimer's disease brain. Jope RS, et al. **Neurobiol Aging** 1997 Jan–Feb;18(1):111–20

Cardiac alpha(1)-adrenoceptors that regulate contractile function: subtypes and subcellular signal transduction mechanisms. Endoh M. **Neurochem Res** 1996 Feb; 21(2):217–29 (100 ref.)

The LHRH-astroglial network of signals as a model to study neuroimmune interactions: assessment of messenger systems and transduction mechanisms at cellular and molecular levels. Marchetti B. **Neuroimmunomodulation** 1996 Jan–Feb;3(1):1–27 (179 ref.)

Tyrosine phosphorylation and [Ca2+]i elevation induced by hemolysate in bovine endothelial cells: implications for cerebral vasospasm. Marton LS, et al. **Neurol Res** 1996 Aug;18(4):349–53

Scentsational ion channels. Firestein S. **Neuron** 1996 Nov; 17(5):803–6 (20 ref.)

LTP of AMPA and NMDA receptor-mediated signals: evidence for presynaptic expression and extrasynaptic glutamate spill-over. Kullmann DM, et al. **Neuron** 1996 Sep;17(3):461–74

Opposing roles for endogenous BDNF and NT-3 in regulating cortical dendritic growth. McAllister AK, et al. **Neuron** 1997 May;18(5):767–78

(S)NO signals: translocation, regulation, and a consensus motif. Stamler JS, et al. **Neuron** 1997 May;18(5):691–6 (60 ref.)

Neutrophil signal transduction in Met-enkephalin modulated superoxide anion release. Haberstock H, et al. **Neuropeptides** 1996 Apr;30(2):193–201

5-HT1A receptor-mediated inhibition of acetylcholine release from guinea pig myenteric plexus: potential mechanisms. Dietrich C, et al. **Neuropharmacology** 1996 Apr;35(4):483–8

Isolation of IL-2 receptor-beta cDNA clones from AtT-20 pituitary cells: constitutive expression and role in signal transduction. Petitto JM, et al. **Neuropsychopharmacology** 1997 Aug;17(2):57–66

A regulator of G-protein signaling in olfactory receptor neurons. Bruch RC, et al. **Neuroreport** 1996 Nov 25; 7(18):2941–4

A simulated actuator driven by motor cortical signals. Lukashin AV, et al. **Neuroreport** 1996 Nov 4; 7(15–17):2597–601

Stat1 in developing and adult rat brain. Induction after transient focal ischemia. Planas AM, et al. **Neuroreport** 1997 Apr 14;8(6):1359–62

Role of the phosphoinositide signal system and methylation of phosphatidylethanolamine in the development of long-term post-tetanic potentiation in rats. Pavlinova LI, et al. **Neurosci Behav Physiol** 1997 May–Jun;27(3):234–9

Intracellular mechanisms of glutaminergic and cholinergic signal transduction in the cerebral cortex. Semenov DG, et al. **Neurosci Behav Physiol** 1997 May–Jun;27(3):240–4

Signal-regulated proteins and fibroblast growth factor receptors: comparative immunolocalization in rat retina. Blanquet PR, et al. **Neurosci Lett** 1996 Aug 23; 214(2–3):135–8

Conditioned changes in nucleus accumbens dopamine signal established by intravenous cocaine in rats. Kiyatkin EA, et al. **Neurosci Lett** 1996 Jun 21;211(2):73–6

Neuroligand-triggered calcium signalling in cultured human glioma cells. Weydt P, et al. **Neurosci Lett** 1997 Jun 6; 228(2):91–4

G-protein activation by metabotropic glutamate receptors reduces spike frequency adaptation in neocortical neurons. Burke JP, et al. **Neuroscience** 1996 Nov;75(1):123–31

Characterization of factor-independent variants derived from TF-1 hematopoietic progenitor cells: the role of the Raf/MAP kinase pathway in the anti-apoptotic effect of GM-CSF. Chao JR, et al. **Oncogene** 1997 Feb 13; 14(6):721–8

The role of Ataxia telangiectasia and the DNA-dependent protein kinase in the p53-mediated cellular response to ionising radiation. Jongmans W, et al. **Oncogene** 1996 Sep 19;13(6):1133–8

Inhibition of Raf-1 signaling by a monoclonal antibody, which interferes with Raf-1 activation and with Mek substrate binding. Kolch W, et al. **Oncogene** 1996 Sep 19; 13(6):1305–14

Elevated urokinase-type plasminogen activator receptor expression in a colon cancer cell line is due to a constitutively activated extracellular signal-regulated kinase-1-dependent signaling cascade. Lengyel E, et al. **Oncogene** 1997 May 29;14(21):2563–73

Differential control of cyclins D1 and D3 and the cdk inhibitor p27Kip1 by diverse signalling pathways in Swiss 3T3 cells. Mann DJ, et al. **Oncogene** 1997 Apr 17; 14(15):1759–66

N-Shc: a neural-specific adapter molecule that mediates signaling from neurotrophin/Trk to Ras/MAPK pathway. Nakamura T, et al. **Oncogene** 1996 Sep 19;13(6):1111–21

p210BCR/ABL, p190BCR/ABL, and TEL/ABL activate similar signal transduction pathways in hematopoietic cell lines. Okuda K, et al. **Oncogene** 1996 Sep 19;13(6):1147–52

Distinct signaling pathways regulate transformation and inhibition of skeletal muscle differentiation by oncogenic Ras. Weyman CM, et al. **Oncogene** 1997 Feb 13; 14(6):697–704

Regulation of cellular response to cisplatin-induced DNA damage and DNA repair in cells overexpressing p185(erbB-2) is dependent on the ras signaling pathway. Yen L, et al. **Oncogene** 1997 Apr 17;14(15):1827–35

Relationship of p215BRCA1 to tyrosine kinase signaling pathways and the cell cycle in normal and transformed cells. Zhang HT, et al. **Oncogene** 1997 Jun 19;14(24):2863–9

Molecular mechanisms of angiogenesis: experimental models define cellular trafficking of FGF-1. Hicks KK, et al. **P R Health Sci J** 1996 Sep;15(3):179–86 (46 ref.)

Postganglionic sympathetic discharge in neonatal swine. Sica AL, et al. **Pediatr Res** 1996 Jan;39(1):85–9

Role of suppressor of hairless in the delta-activated Notch signaling pathway. Lecourtois M, et al. **Perspect Dev Neurobiol** 1997;4(4):305–11 (50 ref.)

Notch signaling in development. Simpson P. **Perspect Dev Neurobiol** 1997;4(4):297–304 (67 ref.)

Molecular basis of signal recognition in olfaction. Breer H. **Pflugers Arch** 1996;431(6 Suppl 2):R311–2 (5 ref.)

Intracellular transducing mechanisms coupled to brain somatostatin receptors. Florio T, et al. **Pharmacol Res** 1996 Jun;33(6):297–305 (94 ref.)

RED1 is necessary for phytochrome B-mediated red light-specific signal transduction in Arabidopsis. Wagner D, et al. **Plant Cell** 1997 May;9(5):731–43

Signaling molecules that mediate the actions of FGF. Demo SD, et al. **Princess Takamatsu Symp** 1994;24:243–9 (23 ref.)

Insights into the physiology of TGF alpha and signaling through the EGF receptor revealed by gene targeting and acts of nature. Dunn AR, et al. **Princess Takamatsu Symp** 1994;24:276–89 (63 ref.)

A structural basis for bidirectional integrin signalling. Filardo EJ, et al. **Princess Takamatsu Symp** 1994;24:106–17 (54 ref.)

Integrin signals and tumor growth control. Juliano RL. **Princess Takamatsu Symp** 1994;24:118–24 (33 ref.)

Tyrosine kinase signalling pathways. Pawson T. **Princess Takamatsu Symp** 1994;24:303–22 (120 ref.)

Possible involvement of VEGF-FLT tyrosine kinase receptor system in normal and tumor angiogenesis. Shibuya M, et al. **Princess Takamatsu Symp** 1994;24:162–70 (23 ref.)

Mechanisms of signal-mediated protein sorting in the endocytic and secretory pathways. Bonifacino JS, et al. **Proc Assoc Am Physicians** 1996 Jul;108(4):285–95 (76 ref.)

Tyrosine kinase inhibitor-sensitive contractile action of ethanol in gastric smooth muscle: comparison with the action of epidermal growth factor. Zheng XL, et al. **Proc Assoc Am Physicians** 1997 Jan;109(1):78–83

Polypeptide signaling for plant defensive genes exhibits analogies to defense signaling in animals. Bergey DR, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12053–8 (44 ref.)

Involvement of hippocampal cAMP/cAMP-dependent protein kinase signaling pathways in a late memory consolidation phase of aversively motivated learning in rats. Bernabeu R, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):7041–6

Characterization of the antiproliferative signal mediated by the somatostatin receptor subtype sst5. Cordelier P, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9343–8

Identification of components of a phosphoinositide signaling pathway in retinal rod outer segments. Peng YW, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1995–2000

Intervention of carbohydrate recognition by proteins and nucleic acids. Sears P, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12086–93 (117 ref.)

The tumor necrosis factor receptor 2 signal transducers TRAF2 and c-IAP1 are components of the tumor necrosis factor receptor 1 signaling complex. Shu HB, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13973–8

Insulin-sensitive phospholipid signaling systems and glucose transport: an update. Farese RV. **Proc Soc Exp Biol Med** 1996 Oct;213(1):1–12 (103 ref.)

A hierarchical concept of cellular and subcellular Ca(2+)-signalling. Lipp P, et al. **Prog Biophys Mol Biol** 1996;65(3):265–96 (100 ref.)

Signal transduction in nociceptive afferent neurons in inflammatory conditions. Bevan S. **Prog Brain Res** 1996; 113:201–13 (54 ref.)

Developmental mechanisms for regulating signal amplification at excitatory synapses in the neocortex. Friedlander MJ, et al. **Prog Brain Res** 1996;108:245–62 (99 ref.)

Bradykinin B2 receptors and signal transduction analyzed in NG108-15 neuroblastoma x glioma hybrid cells, B2 receptor-transformed CHO cells and ras-transformed NIH/3T3 fibroblasts. Higashida H, et al. **Prog Brain Res** 1996;113:215–30 (82 ref.)

Light entrainment and activation of signal transduction pathways in the SCN. Kornhauser JM, et al. **Prog Brain Res** 1996;111:133–46 (80 ref.)

The polymodal receptor: bio-warning and defense system. Kumazawa T. **Prog Brain Res** 1996;113:3–18 (129 ref.)

Prostanoid receptors and signal transduction. Narumiya S. **Prog Brain Res** 1996;113:231–41 (70 ref.)

Phospholipase D: regulation by GTPases and protein kinase C and physiological relevance. Cockcroft S. **Prog Lipid Res** 1996 Dec;35(4):345–70 (270 ref.)

The neurotrophic action and signalling of epidermal growth factor. Yamada M, et al. **Prog Neurobiol** 1997 Jan; 51(1):19–37 (285 ref.)

The niacin challenge test in schizophrenia: past, present and future. Lin A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Aug; 55(1–2):17–9 (15 ref.)

New concepts in extracellular signaling for insulin action: the single gateway hypothesis. Bergman RN. **Recent Prog Horm Res** 1997;52:359–85; discussion 385–7 (68 ref.)

Coupling signalling pathways to transcriptional control: nuclear factors responsive to cAMP. Tamai KT, et al. **Recent Prog Horm Res** 1997;52:121–39; discussion 139–40 (93 ref.)

The carboxyl-terminal cytoplasmic domain of CD36 is required for oxidized low-density lipoprotein modulation of NF-kappaB activity by tumor necrosis factor-alpha. Lipsky RH, et al. **Recept Signal Transduct** 1997;7(1):1–11

NIEHS/EPA Workshops. Cellular migration. McClay DR, et al. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):321–9

Excitatory prejunctional beta 2-adrenoceptor distribution within equine airway cholinergic nerves. Zhang XY, et al. **Respir Physiol** 1996 Oct;106(1):81–90

Evidence that the receptor for soluble CD14:LPS complexes may not be the putative signal-transducing molecule associated with membrane-bound CD14. Haziot A, et al. **Scand J Immunol** 1997 Sep;46(3):242–5

Attractant signaling by an aspartate chemoreceptor dimer with a single cytoplasmic domain [see comments] Gardina PJ, et al. **Science** 1996 Oct 18;274(5286):425–6. Comment in: Science 1996 Oct 18;274(5286):370–1.

Signaling across membranes: a one and a two and a... [comment] Stock J. **Science** 1996 Oct 18;274(5286):370–1 (10 ref.). Comment on: Science 1996 Oct 18;274(5286):423–5. Comment on: Science 1996 Oct 18;274(5286):425–6.

Signaling by the Escherichia coli aspartate chemoreceptor Tar with a single cytoplasmic domain per dimer [see comments] Tatsuno I, et al. **Science** 1996 Oct 18; 274(5286):423–5. Comment in: Science 1996 Oct 18;274(5286):370–1.

Calcium signaling restitution prevents T-cell proliferative suppression by prostaglandin E2. Choudhry MA, et al. **Shock** 1996 Aug;6(2):101–5

Inositol (1,4,5)-trisphosphate receptors: functional properties, modulation, and role in calcium wave propagation. Bezprozvanny I. **Soc Gen Physiol Ser** 1996;51:75–86 (55 ref.)

Functional properties of inositol 1,4,5-trisphosphate receptor and Ca2+ signaling. Iino M. **Soc Gen Physiol Ser** 1996; 51:67–73 (29 ref.)

Mechanical transduction by ion channels: how forces reach the channel. Sachs F. **Soc Gen Physiol Ser** 1997;52:209–18 (52 ref.)

Signaling through the focal adhesion kinase. Schaller MD. **Soc Gen Physiol Ser** 1997;52:241–55 (106 ref.)

Dissection of protein kinase and phosphatase targeting interactions. Scott JD. **Soc Gen Physiol Ser** 1997;52:227–39 (36 ref.)

MscL: a mechanosensitive channel in Escherichia coli. Sukharev SI, et al. **Soc Gen Physiol Ser** 1996;51:133–41 (34 ref.)

Signaling mechanisms in growth factor-stimulated cell motility. Anand-Apte B, et al. **Stem Cells** 1997;15(4):259–67 (112 ref.)

Vav: function and regulation in hematopoietic cell signaling. Bonnefoy-Bérard N, et al. **Stem Cells** 1996 May; 14(3):250–68 (125 ref.)

Signaling molecules derived from the cholesterol biosynthetic pathway. Jackson SM, et al. **Subcell Biochem** 1997;28:1–21 (93 ref.)

PACAP-38 causes phospholipase C-dependent calcium signaling in rat acinar cell line. Barnhart DC, et al. **Surgery** 1997 Aug;122(2):465–74; discussion 474–5

Endotoxin-mediated synthesis of nitric oxide is dependent on Gq protein signal transduction. Kuo PC, et al. **Surgery** 1997 Aug;122(2):394–402; discussion 402–3

Signal transduction and gene expression in the eye: a contemporary view of the pro-inflammatory, anti-inflammatory and modulatory roles of prostaglandins and other bioactive lipids. Bazan NG, et al. **Surv Ophthalmol** 1997 Feb;41 Suppl 2:S23–34 (100 ref.)

Signaling through G proteins in platelets: to the integrins and beyond. Brass LF, et al. **Thromb Haemost** 1997 Jul; 78(1):581–9 (98 ref.)

Not just another pretty face: regulation of platelet function at the cytoplasmic face of integrin alpha IIb beta 3. Shattil SJ, et al. **Thromb Haemost** 1997 Jul;78(1):220–5 (61 ref.)

A conserved motif at the amino termini of MEKs might mediate high-affinity interaction with the cognate MAPKs. Bardwell L, et al. **Trends Biochem Sci** 1996 Oct; 21(10):373–4

Not all Shc's roads lead to Ras. Bonfini L, et al. **Trends Biochem Sci** 1996 Jul;21(7):257–61 (51 ref.)

The growing phospholipase A2 superfamily of signal transduction enzymes. Dennis EA. **Trends Biochem Sci** 1997 Jan;22(1):1–2 (26 ref.)

Tailoring cAMP-signalling responses through isoform

multiplicity. Houslay MD, et al. **Trends Biochem Sci** 1997 Jun;22(6):217–24 (49 ref.)
Pleckstrin's repeat performance: a novel domain in G-protein signaling? Ponting CP, et al. **Trends Biochem Sci** 1996 Jul; 21(7):245–6
Signaling through chemoattractant receptors in Dictyostelium. Chen MY, et al. **Trends Genet** 1996 Feb; 12(2):52–7 (43 ref.)
Protein aspartate phosphatases control the output of two-component signal transduction systems. Perego M, et al. **Trends Genet** 1996 Mar;12(3):97–101 (29 ref.)
Signalling from neurones to glial cells in invertebrates. Coles JA, et al. **Trends Neurosci** 1996 Aug;19(8):358–62 (35 ref.)
Calcium signalling in glial cells. Verkhratsky A, et al. **Trends Neurosci** 1996 Aug;19(8):346–52 (89 ref.)
Signal properties of brain gangliosides. Kalueff AV. **Ukr Biokhim Zh** 1996 Mar–Apr;68(2):15–9 (22 ref.)
Induction of apoptosis by calmodulin-dependent intracellular Ca2+ elevation in CD4+ cells expressing gp 160 of HIV. Sasaki M, et al. **Virology** 1996 Oct 1;224(1):18–24
An analysis of the cross-correlation between ganglion cells in the retina of goldfish. Levine MW. **Vis Neurosci** 1997 Jul–Aug;14(4):731–9
Effects of horizontal cell network architecture on signal spread in the turtle outer retina. Experiments and simulations. Ammermüller J, et al. **Vision Res** 1996 Dec; 36(24):4089–103
The roles of 14–3–3 proteins in signal transduction. Reuther GW, et al. **Vitam Horm** 1996;52:149–75 (97 ref.)
[Regulatory mechanisms of receptor-mediated signal transduction] Mysliveček J. **Cesk Fysiol** 1996 Dec; 45(4):190–202 (60 ref.) (Eng. Abstr.) **(Cze)**
[Effects of hyperglycemia in the transmission of the insulin message] Hauguel-de Mouzon S, et al. **Journ Annu Diabetol Hotel Dieu** 1996;:145–56 (85 ref.) **(Fre)**
[Cell membrane receptors and intracellular signalling. Characterization in cultivated, contractile and endothelial cells] Briner V. **Fortschr Med** 1996 Oct 20;114(29):384–6 (18 ref.) (Eng. Abstr.) **(Ger)**
[Production of G-CSF and IL-6 and activation of STAT proteins in mucosa and tunica muscularis of the jejunum in hemorrhagic shock] Hierholzer C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:579–83 (Eng. Abstr.) **(Ger)**
[Effect of traumatic and septic shock on activation and signal transduction of circulating neutrophilic granulocytes] Rose S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:597–600 (Eng. Abstr.) **(Ger)**
[The essential region of CD40 cytoplasmic domain for signal transduction in WEHI231 cells] Hara T. **Hokkaido Igaku Zasshi** 1997 May;72(3):309–17 (Eng. Abstr.) **(Jpn)**
[Analysis of the mechanism of antigen receptor transmission by gene targeting] Kitamura D. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Dec;19(6):637–9 **(Jpn)**
[The TRAF family protein-mediated B cell proliferation signal and the mechanism of LMP1-induced B cell transformation] Inoue J. **Nippon Rinsho** 1997 Feb; 55(2):299–304 (18 ref.) (Eng. Abstr.) **(Jpn)**
[The methods of analysis of signal transduction through adhesion molecules] Hamasaki K, et al. **Rinsho Byori** 1996 Sep;Suppl 102:147–52 (12 ref.) **(Jpn)**
[Signal transduction via adhesion molecules] Nojima Y. **Rinsho Byori** 1996 Sep;Suppl 102:90–6 (23 ref.) **(Jpn)**
[Cytokine and adhesion molecules] Tanaka Y. **Rinsho Byori** 1996 Sep;Suppl 102:69–77 (28 ref.) **(Jpn)**
[TGF-beta signal transduction and Smad] Miyazono K, et al. **Seikagaku** 1997 Jun;69(6):424–8 (16 ref.) **(Jpn)**
[Changes in cAMP signal transduction function and gene expression related to the onset of affective disturbance--the relationship between stress, antidepressants and expression of BDNF mRNA] Morinobu S, et al. **Seishin Shinkeigaku Zasshi** 1996;98(11):937–42; discussion 942–6 (7 ref.) **(Jpn)**
[Signal transduction in the cell. Phospholipids as messenger molecules] Barańska J, et al. **Postepy Biochem** 1996; 42(2):140–5 (43 ref.) **(Pol)**
[Sphingomyelin and its metabolites as an intermediate in cellular signal transduction] Dzik JM, et al. **Postepy Biochem** 1996;42(3):299–309 (109 ref.) **(Pol)**
[Eicosanoids--brain signal transducers] Lachowicz L, et al. **Postepy Biochem** 1996;42(4):363–8 (23 ref.) **(Pol)**
[Regulation of intracellular Ca2+ concentration in non excitable cells] Niewczas B. **Postepy Biochem** 1995; 41(4):283–9 (79 ref.) **(Pol)**
[Subunits gamma and zeta of Fc receptors. Structure and function] Mikulska J. **Postepy Hig Med Dosw** 1996; 50(4):351–61 (50 ref.) (Eng. Abstr.) **(Pol)**
[Humoral and metabolic regulation of pulmonary surfactant production] Serebrovskaia IA, et al. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):83–9 (88 ref.) **(Rus)**
[Temporal signal processing in the visual cortex] Shevelev IA. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):68–79 **(Rus)**
[Hydrogen peroxide as a signal molecule] Gamaleĭ IA, et al. **Tsitologiia** 1996;38(12):1233–47 (155 ref.) (Eng. Abstr.) **(Rus)**
[Nitric oxide and carbon monoxide--a new class of signal molecules] Markov KhM. **Usp Fiziol Nauk** 1996 Oct–Dec; 27(4):30–43 (107 ref.) (Eng. Abstr.) **(Rus)**
[The intracellular signal systems of the smooth muscles in the gastrointestinal tract] Medvedev MA, et al. **Vestn Ross Akad Med Nauk** 1996;(1):21–9 (33 ref.) (Eng. Abstr.) **(Rus)**
[Current achievements in the study of the signal mechanisms of the action of insulin and related peptides] Pertseva MN, et al. **Zh Evol Biokhim Fiziol** 1996 May–Jun;32(3):318–40 (109 ref.) **(Rus)**

RADIATION EFFECTS

The effect of ionizing radiation on signal transduction: antibodies to EGF receptor sensitize A431 cells to radiation. Balaban N, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):147–56
Intracellular calcium signaling by Jurkat T-lymphocytes exposed to a 60 Hz magnetic field. Lyle DB, et al. **Bioelectromagnetics** 1997;18(6):439–45
Endogenous melatonin signal does not mediate the effect of photoperiod on the rat suprachiasmatic nucleus. Sumová A, et al. **Brain Res** 1996 Jul 1;725(2):281–3
Free radicals generated by ionizing radiation signal nuclear translocation of p53. Martinez JD, et al. **Cell Growth Differ** 1997 Sep;8(9):941–9
Potential molecular targets for manipulating the radiation response. Maity A, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):639–53 (180 ref.)
Coordinated movements between autosomal half-bivalents in crane-fly spermatocytes: evidence that 'stop' signals are sent between partner half-bivalents. Yin B, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):155–63
Differential effects of a monoclonal antibody to cis-urocanic acid on the suppression of delayed and contact hypersensitivity following ultraviolet irradiation. Moodycliffe AM, et al. **J Immunol** 1996 Oct 1; 157(7):2891–9
UV-induced signal transduction. Bender K, et al. **J Photochem Photobiol B** 1997 Jan;37(1–2):1–17 (187 ref.)
Signal transduction mechanisms in photocarcinogenesis. Pentland AP. **Photochem Photobiol** 1996 Apr;63(4):379–80 (11 ref.)
Light signal transduction in plants. Staub JM, et al. **Photochem Photobiol** 1996 Dec;64(6):897–905 (109 ref.)
UV-B, UV-A, and blue light signal transduction pathways interact synergistically to regulate chalcone synthase gene expression in Arabidopsis. Fuglevand G, et al. **Plant Cell** 1996 Dec;8(12):2347–57
Occupational levels of radiation exposure induce surface expression of interleukin-2 receptors in stimulated human peripheral blood lymphocytes. Xu Y, et al. **Radiat Environ Biophys** 1996 May;35(2):89–93
Signals to green. Signaling in plant development, Cold Spring Harbor Laboratory, USA, 27 September–1 October 1995. Dean C. **Trends Genet** 1996 Feb;12(2):74–5

SIGNAL TRANSDUCTION, LIGHT see **PHOTOTRANSDUCTION**

SILAGE

Stimulation of conversion rates and bacterial activity in a silage-fed two-phase biogas process by initiating liquid recirculation. Jarvis A, et al. **Antonie Van Leeuwenhoek** 1995 Nov;68(4):317–27
Minimum versus optimum concentrations of fiber in dairy cow diets based on barley silage and concentrates of barley or corn. Beauchemin KA, et al. **J Dairy Sci** 1997 Aug; 80(8):1629–39
Chewing activities and milk production of dairy cows fed alfalfa as hay, silage, or dried cubes of hay or silage. Beauchemin KA, et al. **J Dairy Sci** 1997 Feb;80(2):324–33
Synthesis of microbial protein in ruminally cannulated cows fed alfalfa silage, alfalfa hay, or corn silage. Hristov AN, et al. **J Dairy Sci** 1996 Sep;79(9):1627–37
Yield, composition, and in vitro digestibility of temperate and tropical corn hybrids grown as silage crops planted in summer. Johnson JC Jr, et al. **J Dairy Sci** 1997 Mar; 80(3):550–7
Kinetics of cell-wall digestion of orchardgrass and alfalfa silages treated with cellulase and formic acid. Nadeau EM, et al. **J Dairy Sci** 1996 Dec;79(12):2207–16
An enzyme additive for corn silage: effects on silage composition and animal performance. Sheperd AC, et al. **J Dairy Sci** 1996 Oct;79(10):1760–66
Effects of an enzyme additive on composition of corn silage ensiled at various stages of maturity. Sheperd AC, et al. **J Dairy Sci** 1996 Oct;79(10):1767–73
Intake and nutritive value of florigraze rhizoma peanut silage for lactating dairy cows. Staples CR, et al. **J Dairy Sci** 1997 Mar;80(3):541–9
Components of growth in Holstein heifers fed either alfalfa or corn silage diets to produce two daily gains. Waldo DR, et al. **J Dairy Sci** 1997 Aug;80(8):1674–84
Evaluation of Alternaria and its mycotoxins during ensiling of sunflower seeds. Dacero AM, et al. **Nat Toxins** 1997; 5(1):20–3
[Effect of level and nature of degradable nitrogen on rumen digestion with a maize based silage diet in lactating cows] Peyraud JL, et al. **Reprod Nutr Dev** 1997 May–Jun; 37(3):313–28 (Eng. Abstr.) **(Fre)**
[The effect of starch-rich single feed on the digestibility and the energy content of corn silage in cattle and sheep] Schwarz FJ, et al. **Arch Tierernahr** 1996;49(4):349–62 (Eng. Abstr.) **(Ger)**
[Production of biological silage from fish scraps] Bello R, et al. **Arch Latinoam Nutr** 1994 Dec;44(4):264–269B (Eng. Abstr.) **(Spa)**
[Proteolytic activity control in fish silage] Tomé E, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):317–21 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Primary photosensitization related to ingestion of alfalfa silage by cattle. House JK, et al. **J Am Vet Med Assoc** 1996 Nov 1;209(9):1604–7
Late cut silage suspected of causing milk taint. **Vet Rec** 1996 Jan 6;138(1):4–6

MICROBIOLOGY

Malt-yeast extract-sucrose agar, a suitable medium for enumeration and isolation of fungi from silage. Skaar I, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3614–9
Formation and disappearance of mycophenolic acid, patulin, penicillic acid and PR toxin in maize silage inoculated with Penicillium roqueforti. Müller HM, et al. **Arch Tierernahr** 1997;50(3):213–25
Ocular disease associated with silage feeding and Listeria monocytogenes in fallow deer. Welchman D, et al. **Vet Rec** 1997 Jun 28;140(26):684–5

PARASITOLOGY

Survival of model helminth eggs and larvae (Ascaris suum, Oesophagostomum sp.) in the ensilaging process. Jurič P, et al. **Vet Med (Praha)** 1997 Jun;42(6):165–9

SILANES

Validated assay for the determination of celiprolol in plasma using high-performance liquid chromatography and a silanol deactivated reversed-phase support. Chiu FC, et al. **J Chromatogr B Biomed Appl** 1996 Dec 13;687(2):462–5
Lamotrigine analysis in plasma by gas chromatography–mass spectrometry after conversion to a tert.-butyldimethylsilyl derivative. Dasgupta A, et al. **J Chromatogr B Biomed Appl** 1997 May 23;693(1):101–7
General collection efficiency for liquid isooctane and tetramethylsilane used as sensitive media in a parallel-plate ionization chamber. Johansson B, et al. **Phys Med Biol** 1997 Jan;42(1):133–45
Patterning of functional antibodies and other proteins by photolithography of silane monolayers. Mooney JF, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12287–91
[Ion exchange interactions on silica gel in thin-layer chromatography. IV. Plate investigations by UV spectroscopy] Volford O, et al. **Acta Pharm Hung** 1996 May;66(3):133–40 (Eng. Abstr.) **(Hun)**

ADMINISTRATION & DOSAGE

Acute and subacute inhalation toxicity of dichlorosilane in male ICR mice. Nakashima H, et al. **Arch Toxicol** 1996; 70(3–4):218–23

BLOOD

High-performance liquid chromatographic method for the determination of RGH-5002 in human, rabbit and rat plasma. Gémesi L, et al. **J Pharm Biomed Anal** 1996 Jun; 14(8–10):1233–9

CHEMISTRY

Polymeric mercaptosilane-modified platinum electrodes for elimination of interferants in glucose biosensors. Jung SK, et al. **Anal Chem** 1996 Feb 15;68(4):591–6
The formation of a crosslinked carboxyhemoglobin membrane at an organic–aqueous interface. Eisman JM, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 May;24(3):185–96
Micrometer resolution silane-based patterning of hippocampal neurons: critical variables in photoresist and laser ablation processes for substrate fabrication. Corey JM, et al. **IEEE Trans Biomed Eng** 1996 Sep;43(9):944–55
Synthesis of silane coupling agents containing fluorocarbon chain and applications to dentistry: plaque-controlling surface modifiers. Yoshino N, et al. **J Biomater Sci Polym Ed** 1997;8(8):623–53 (38 ref.)
Characterization of silane-treated hydroxyapatite powders for use as filler in biodegradable composites. Dupraz AM, et al. **J Biomed Mater Res** 1996 Feb;30(2):231–8
Hydrolytically stable amino-silica glass coating material for manipulation of the electroosmotic flow in capillary electrophoresis. Guo Y, et al. **J Chromatogr A** 1996 Sep 13;744(1–2):17–29
In vitro wear of composite with varied cure, filler level, and filler treatment. Condon JR, et al. **J Dent Res** 1997 Jul; 76(7):1405–11
Effect of mixed silanes on the hydrolytic stability of composites. Craig RG, et al. **J Oral Rehabil** 1996 Nov; 23(11):751–6
Curing of a silane coupling agent and its effect on the transverse strength of autopolymerizing polymethylmethacrylate-glass fibre composite. Vallittu PK. **J Oral Rehabil** 1997 Feb;24(2):124–30
Solid state NMR study on the conformation and mobility of n-octadecyl chains in a silane coupling agent attached to the surface of colloidal silica. Cheng J, et al.

SILANES

Solid State Nucl Magn Reson 1996 Nov;7(2):135–40

DIAGNOSTIC USE

A novel technique for producing antibody–coated microprobes using a thiol–terminal silane and a heterobifunctional crosslinker. Routh VH, et al. **J Neurosci Methods** 1997 Feb;71(2):163–8

PHARMACOLOGY

Bis(7–amino–4–azaheptyl)dimethlysilane and bis(7–ethylamino–4–azaheptyl)dimethylsilane: inhibition of tumor cell growth in vitro and in vivo. Seiler N, et al. **Cancer Res** 1996 Dec 15;56(24):5624–30

Efficacy of a chlorhexidine and a chlorhexidine–fluoride varnish mixture to decrease interdental levels of mutans streptococci. Twetman S, et al. **Caries Res** 1997;31(5):361–5

THERAPEUTIC USE

Bis(7–amino–4–azaheptyl)dimethylsilane: a new tetramine with polyamine–like features. Effects on cell growth. Delcros JG, et al. **Anticancer Drug Des** 1997 Jan; 12(1):35–48

TOXICITY

Acute and subacute inhalation toxicity of dichlorosilane in male ICR mice. Nakashima H, et al. **Arch Toxicol** 1996; 70(3–4):218–23

SILIBININ see **SILYMARIN**

SILICA see **SILICON DIOXIDE**

SILICATE CEMENT

ADVERSE EFFECTS

[Lung cancer mortality in Casale Monferrato (Italy) and attributable risk to occupations in the asbestos–cement production] Magnani C, et al. **Epidemiol Prev** 1995 Dec; 19(65):338–41 (Eng. Abstr.) **(Ita)**

SILICATES

Biocompatibility of glass–crystalline materials obtained by the sol–gel method: effect on macrophage function. Turyna B, et al. **Biomaterials** 1996 Jul;17(14):1379–86

Clinical evaluation of compomer in primary teeth: 1–year results. Hse KM, et al. **J Am Dent Assoc** 1997 Aug; 128(8):1088–96

Adsorption of bacteriocins by ingestible silica compounds. Wan J, et al. **J Appl Bacteriol** 1996 Aug;81(2):167–73

Ectopic bone induction in porous apatite–wollastonite–containing glass ceramic combined with bone morphogenetic protein. Ijiri S, et al. **J Biomed Mater Res** 1997 Jun 15;35(4):421–32

Bone bonding behavior of titanium and its alloys when coated with titanium oxide (TiO2) and titanium silicate (Ti5Si3). Kitsugi T, et al. **J Biomed Mater Res** 1996 Oct;32(2):149–56

1H NMR study of the structure and dynamics of water confined between wetting solids. Delville A, et al. **Magn Reson Imaging** 1996;14(7–8):975–7

ADVERSE EFFECTS

Some silicates. **IARC Monogr Eval Carcinog Risks Hum** 1997; 68:243–333 (244 ref.)

IARC Working Group on the Evaluation of Carcinogenic Risks to Humans: Silica, Some Silicates, Coal Dust and Para–Aramid Fibrils. Lyon, 15–22 October 1996. **IARC Monogr Eval Carcinog Risks Hum** 1997;68:1–475

[The dust factor in the manufacture of basalt fibers] Gorban' LN, et al. **Lik Sprava** 1996 Mar–Apr;(3–4):94–8 (Eng. Abstr.) **(Rus)**

ANALYSIS

Silicate and metal dust in lungs of Greyhounds. Schoning P, et al. **Am J Vet Res** 1996 Jul;57(7):1006–9

Natural (Mg,Fe)SiO3–ilmenite and –perovskite in the Tenham meteorite. Tomioka N, et al. **Science** 1997 Aug 22;277(5329):1084–6

Pure silicate fragment in a recurrent stone former of calcium oxalate. Ichiyanagi O, et al. **Urol Int** 1997;58(3):192–6

CHEMISTRY

Radioactivity in zircon and building tiles. Deng W, et al. **Health Phys** 1997 Aug;73(2):369–72

Apatite–forming ability of silicate ion dissolved from silica gels. Cho SB, et al. **J Biomed Mater Res** 1996 Nov; 32(3):375–81

Shear bond strengths produced by composite and compomer light cured orthodontic adhesives. Rock WP, et al. **J Dent** 1997 May–Jul;25(3–4):243–9

Compomers--a new bracket bonding generation in orthodontics? Eberhard H, et al. **J Orofac Orthop** 1997 Feb;58(1):62–9 **(Eng, Ger)**

An in vitro comparison of four surface preparation techniques for veneering a compomer to stainless steel. Salama FS, et al. **Pediatr Dent** 1997 May–Jun;19(4):267–72

Surface chemistry and biological pathogenicity of silicates: an X–ray photoelectron spectroscopic study. Seal S, et al. **Proc R Soc Lond B Biol Sci** 1996 Aug 22;263(1373):943–51

1H, 29Si and 1H, 23Na heteronuclear shift correlation in octosilicate via cross–polarisation. Almond GG, et al. **Solid State Nucl Magn Reson** 1996 Feb;6(1):31–8

Effect of 1H–decoupling in two–dimensional multiple–quantum MAS NMR spectroscopy of 23Na in a hydrous layered silicate. Hanaya M, et al. **Solid State Nucl Magn Reson** 1997 May;8(3):147–51

IMMUNOLOGY

Silicate antibodies in women with silicone breast implants: development of an assay for detection of humoral immunity. Shen GQ, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):162–6

PHARMACOLOGY

Inhibition of erythrocyte aggregation by the silicates is reversed by masking the erythrocyte sulphydryl groups. Ramsohoye PV, et al. **Biochem Soc Trans** 1997 Feb;25(1):4S

A comparative bioavailability study to estimate the influence of an antacid on droxicam pharmacokinetics. Maya MT, et al. **Eur J Drug Metab Pharmacokinet** 1995 Oct–Dec; 20(4):275–9

Effects of hexafluorosilicate on the precipitate composition and dentine tubule occlusion by calcium phosphate. Kawasaki A, et al. **J Dent** 1996 Nov;24(6):429–34

POISONING

Fibrosis of the lung and pleura and long–term exposure to wollastonite. Koskinen HO, et al. **Scand J Work Environ Health** 1997 Feb;23(1):41–7

THERAPEUTIC USE

Effects of Fuller's Earth and activated charcoal on oral absorption of paraquat in rabbits. Idid SZ, et al. **Clin Exp Pharmacol Physiol** 1996 Aug;23(8):679–81

Using mineral trioxide aggregate as a pulp–capping material. Ford TR, et al. **J Am Dent Assoc** 1996 Oct;127(10):1491–4

Repair of furcal perforations with mineral trioxide aggregate: two case reports. Arens DE, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jul;82(1):84–8

Pure silicate fragment in a recurrent stone former of calcium oxalate. Ichiyanagi O, et al. **Urol Int** 1997;58(3):192–6

TOXICITY

Mesothelial cell proliferation and biopersistence of wollastonite and crocidolite asbestos fibers. Macdonald JL, et al. **Fundam Appl Toxicol** 1997 Aug;38(2):173–83

Lung inflammation after exposure to nonfibrous silicates increases with chelatable [Fe3+]. Ghio AJ, et al. **J Toxicol Environ Health** 1996 Sep;49(1):11–28

SILICIC ACID

ADMINISTRATION & DOSAGE

Colloidal silicic acid for the treatment of psoriatic skin lesions, arthropathy and onychopathy. A pilot study. Lassus A. **J Int Med Res** 1997 Jul–Aug;25(4):206–9

CHEMISTRY

Fluoridation of hydroxyapatite powder by ammonium hexafluorosilicate. Murata H, et al. **Caries Res** 1996; 30(6):465–70

PHARMACOLOGY

Supplementation of calves with stabilized orthosilicic acid. Effect on the Si, Ca, Mg, and P concentrations in serum and the collagen concentration in skin and cartilage. Calomme MR, et al. **Biol Trace Elem Res** 1997 Feb; 56(2):153–65

Effects of hexafluorosilicate on the precipitate composition and dentine tubule occlusion by calcium phosphate. Kawasaki A, et al. **J Dent** 1996 Nov;24(6):429–34

THERAPEUTIC USE

The effect of silicol gel compared with placebo on papulopustular acne and sebum production. A double–blind study. Lassus A. **J Int Med Res** 1996 Jul–Aug;24(4):340–4

SILICON

see related

ORGANOSILICON COMPOUNDS

Synthesis of kojitriose using silicon–tethered glycosidation. Bols M. **Acta Chem Scand** 1996 Oct;50(10):931–7

Rat sciatic nerve regeneration through a micromachined silicon chip. Zhao Q, et al. **Biomaterials** 1997 Jan; 18(1):75–80

Microculture in biphasic medium with silicone–coated slides for isolation of mycobacteria. Shibayama H, et al. **Bull Pan Am Health Organ** 1996 Sep;30(3):197–205

A silicon probe with integrated microheaters for thermal marking and monitoring of neural tissue. Chen J, et al. **IEEE Trans Biomed Eng** 1997 Aug;44(8):770–4

A silicon bidirectional flow sensor for measuring respiratory flow. van Putten MJ, et al. **IEEE Trans Biomed Eng** 1997 Feb;44(2):205–8

Fabrication and selective surface modification of 3–dimensionally textured biomedical polymers from etched silicon substrates. Kapur R, et al. **J Biomed Mater Res** 1996 Winter;33(4):205–16

Multi–unit recording from regenerated bullfrog eighth nerve using implantable silicon–substrate microelectrodes. Della Santina CC, et al. **J Neurosci Methods** 1997 Mar; 72(1):71–86

Using Bisico S4i for electrodes and peripheral nerve embedding. Zhang W, et al. **J Pharmacol Toxicol Methods** 1997 Mar;37(2):117–8

Advances in prevention of radiation damage to visceral and solid organs in patients requiring radiation therapy of the trunk. Ritter EF, et al. **J Surg Oncol** 1997 Feb;64(2):109–14

High–resolution 29Si solid–state NMR study of silicon functionality distribution on the surface of silicas. Luhmer M, et al. **Magn Reson Imaging** 1996;14(7–8):911–3

The effect of dose rate dependence of p–type silicon detectors on linac relative dosimetry. Wilkins D, et al. **Med Phys** 1997 Jun;24(6):879–81

An analog memory circuit for spiking silicon neurons. Elias JG, et al. **Neural Comput** 1997 Feb 15;9(2):419–40

Optimization of the performance of the polymerase chain reaction in silicon–based microstructures. Taylor TB, et al. **Nucleic Acids Res** 1997 Aug 1;25(15):3164–8

Brachytherapy for penile cancer using silicon mold. Akimoto T, et al. **Oncology** 1997 Jan–Feb;54(1):23–7

A subtler silicon cell for neural networks [news] Bains S. **Science** 1997 Sep 26;277(5334):1935

1H, 29Si and 1H, 23Na heteronuclear shift correlation in octosilicate via cross–polarisation. Almond GG, et al. **Solid State Nucl Magn Reson** 1996 Feb;6(1):31–8

[Development of a silicon–mediated [3 + 2] annulation and its application to the synthesis of natural products] Takeda K. **Yakugaku Zasshi** 1997 Jun;117(6):368–77 (27 ref.) (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Fluoride and silicon intake in normal and endemic fluorotic areas. Anasuya A, et al. **J Trace Elem Med Biol** 1996 Sep; 10(3):149–55

ADVERSE EFFECTS

Influence of wall shear rate on parameters of blood compatibility of intravascular catheters. Rhodes NP, et al. **Biomaterials** 1996 Oct;17(20):1995–2002

Pulmonary infiltration after exposure to home renovation dust [letter; comment] Corrin B. **Thorax** 1997 Apr;52(4):399 . Comment on: Thorax 1996 Jun;51(6):654–5; discussion 656–7.

ANALYSIS

Determination of silicon in breast and capsular tissue from patients with breast implants performed by inductively coupled plasma emission spectroscopy. Comparison with tissue histology. McConnell JP, et al. **Am J Clin Pathol** 1997 Feb;107(2):236–46

Acid leaching studies of chrysotile asbestos from mines in the Coalinga region of California and from Quebec and British Columbia. Morgan A. **Ann Occup Hyg** 1997 Jun; 41(3):249–68

Determination of silicon in serum and tissue by electrothermal atomic absorption spectrometry. Leung FY, et al. **Clin Biochem** 1997 Jul;30(5):399–403

Does the human cornea contain silicon? Schrage NF, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S106–9

Increased silicon levels in dialysis patients due to high silicon content in the drinking water, inadequate water treatment procedures, and concentrate contamination: a multicentre study [letter] Birchall D, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1188–9

Silicon tissue assay: a measurement of capsular levels from chemotherapeutic port–a–catheter devices. Evans GR, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1354–8; discussion 1359–61

Silicon analysis of breast and periprosthetic capsular tissue from patients with saline or silicone gel breast implants. Schnur PL, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):798–803

[Pharmacognostical studies on adiantum plants. V. Classification based on spore morphology and distributional patterns of silicon and calcium in the ultimate pinnules] Komatsu K, et al. **Yakugaku Zasshi** 1996 Feb;116(2):125–37 (Eng. Abstr.) **(Jpn)**

BLOOD

Supplementation of calves with stabilized orthosilicic acid. Effect on the Si, Ca, Mg, and P concentrations in serum and the collagen concentration in skin and cartilage. Calomme MR, et al. **Biol Trace Elem Res** 1997 Feb; 56(2):153–65

29Si NMR and blood silicon levels in silicone gel breast implant recipients [letter; comment] Taylor RB, et al. **Magn Reson Med** 1996 Sep;36(3):498–501. Comment on: Magn Reson Med 1993 Jun;29(6):839–43. Comment on: Magn Reson Med 1993 Nov;30(5):534–43. Comment on: Magn Reson Med 1994 Mar;31(3):328–30.

Increased silicon levels in dialysis patients due to high silicon content in the drinking water, inadequate water treatment

procedures, and concentrate contamination: a multicentre study [letter] Birchall D, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1188–9

CHEMISTRY

Pulsed-field electrophoresis in microlithographic arrays. Duke TA, et al. **Electrophoresis** 1996 Jun;17(6):1075–9

Molecular dynamics simulations of silicon–fluorine etching. Darcy A, et al. **J Mol Graph** 1996 Oct;14(5):260–71, 278

Immobilization of streptavidin for immunosensors on nanostructured surfaces. Kossek S, et al. **J Mol Recognit** 1996 Sep–Dec;9(5–6):485–7

Bioreactive self-assembled monolayers on hydrogen-passivated Si(111) as a new class of atomically flat substrates for biological scanning probe microscopy. Wagner P, et al. **J Struct Biol** 1997 Jul;119(2):189–201

METABOLISM

Bacterial evolution and silicon. Trevors JT. **Antonie Van Leeuwenhoek** 1997 Mar;71(3):271–6 (33 ref.)

Neural cell pattern formation on glass and oxidized silicon surfaces modified with poly(N-isopropylacrylamide). Bohanon T, et al. **J Biomater Sci Polym Ed** 1996;8(1):19–39

A gene family of silicon transporters [letter] Hildebrand M, et al. **Nature** 1997 Feb 20;385(6618):688–9

PHARMACOLOGY

Effects of silicon, citrate and the fasting state on the intestinal absorption of aluminium in rats. Drüeke TB, et al. **Clin Sci (Colch)** 1997 Jan;92(1):63–7

Calcium and silicon from bioactive glass concerned with formation of nodules in periodontal-ligament fibroblasts in vitro. Kubo K, et al. **J Oral Rehabil** 1997 Jan;24(1):70–5

Reported antiatherosclerotic activity of silicon may reflect increased endothelial synthesis of heparan sulfate proteoglycans. McCarty MF. **Med Hypotheses** 1997 Aug; 49(2):175–6

SILICON COMPOUNDS

Coronary implantation of silicone-carbide-coated Palmaz-Schatz stents in patients with high risk of stent thrombosis without oral anticoagulation. Ozbek C, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):71–8

Transformation of microalgae using silicon carbide whiskers. Dunahay TG, et al. **Methods Mol Biol** 1997;62:503–9

Mineralogical characteristics of silica polymorphs in relation to their biological activities. Guthrie GD Jr, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:5–8 (20 ref.)

ADVERSE EFFECTS

Relevant differences in pathogenicity of nuisance dusts; model investigations on samples of silicon carbide dusts. Bruch J, et al. **Exp Toxicol Pathol** 1996 Nov;48(6):477–80

Induction of mesothelioma after intrapleural inoculation of F344 rats with silicon carbide whiskers or continuous ceramic filaments. Johnson NF, et al. **Occup Environ Med** 1996 Dec;53(12):813–6

ANALYSIS

[Silicon carbide, occupational exposure, proposed MAC values] Woźniak H, et al. **Med Pr** 1997;48(2):129–37 (Eng. Abstr.) **(Pol)**

CHEMICAL SYNTHESIS

Expeditious syntheses of sugar-modified nucleosides and collections thereof exploiting furan-, pyrrole-, and thiophene-based siloxy dienes. Rassu G, et al. **J Med Chem** 1997 Jan 17;40(2):168–80

CHEMISTRY

Microbiosensors using electrodes made in Si-technology. Hintsche R, et al. **EXS** 1997;80:267–83

IMMUNOLOGY

Complement activation by IgG immobilized on methylated silicon. Tengvall P, et al. **J Biomed Mater Res** 1996 Jul; 31(3):305–12

PHARMACOLOGY

Human monocytes stimulation by particles of hydroxyapatite, silicon carbide and diamond: in vitro studies of new prosthesis coatings. Nordsletten L, et al. **Biomaterials** 1996 Aug;17(15):1521–7

THERAPEUTIC USE

Carborundum, a bulk similar to dietary fibers but chemically inert, does not decrease colon carcinogenesis. Corpet DE, et al. **Cancer Lett** 1997 Mar 19;114(1–2):35–8

TOXICITY

Toxicity in vitro of some silicon carbides and silicon nitrides: whiskers and powders. Svensson I, et al. **Am J Ind Med** 1997 Mar;31(3):335–43

[Effects of highly dispersed aerosol of silicon nitride modified by yttrium oxide] Baranov VI, et al. **Med Tr Prom Ekol** 1996;(7):41–3 **(Rus)**

SILICON DIOXIDE

Polymer- versus silica-based separation media: elimination of nonspecific interactions in the chiral recognition process through functional polymer design. Liu Y, et al. **Anal Chem** 1997 Jan 1;69(1):61–5

Positive interference in lithium determinations from clot activator in collection container. Sampson M, et al. **Clin Chem** 1997 Apr;43(4):675–9

IARC reevaluates silica and related substances. Wilbourn JD, et al. **Environ Health Perspect** 1997 Jul;105(7):756–9

Characterisation of a novel airway late phase model in the sensitized guinea pig which uses silica and Bordetella pertussis as adjuvant for sensitization. Heuer HO, et al. **Eur J Pharmacol** 1996 Dec 19;317(2–3):361–8

Diffusive transport of radon in a homogeneous column of dry sand. van der Spoel WH, et al. **Health Phys** 1997 May; 72(5):766–77; appendix 778

Sperm function and choice of preparation media: comparison of Percoll and Accudenz discontinuous density gradients. Sbracia M, et al. **J Androl** 1996 Jan–Feb;17(1):61–7

Adsorption of bacteriocins by ingestible silica compounds. Wan J, et al. **J Appl Bacteriol** 1996 Aug;81(2):167–73

Silane-coated silica particle colloid processing of human sperm. Perez SM, et al. **J Assist Reprod Genet** 1997 Aug; 14(7):388–93

Human monocyte morphology is affected by local substrate charge heterogeneity. Kapur R, et al. **J Biomed Mater Res** 1996 Sep;32(1):133–42

Platelet adhesion to novel phospholipid materials: modified phosphatidylcholine covalently immobilized to silica, polypropylene, and PTFE materials. Köhler AS, et al. **J Biomed Mater Res** 1996 Oct;32(2):237–42

Molecular orbital models of ring expansion mechanisms in the silica-carbon monoxide system. West JK, et al. **J Biomed Mater Res** 1997 Aug;36(2):209–15

The regulation of crystalline silica: an industry perspective. Elzea JM. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep; 7(3):377–84

Soil derived dust as a source of silica: aerosol properties, emissions, deposition, and transport. Gillette D. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):303–11

The link between silica dust levels, risk assessments, and regulations. Goldsmith DF. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):385–95 (58 ref.)

Effect of isolation protocol on eosinophil function: Percoll gradients versus immunomagnetic beads. Sedgwick JB, et al. **J Immunol Methods** 1996 Oct 30;198(1):15–24

Differentiated B104 neuroblastoma cells are a high-resolution assay for micropatterned substrates. Corey JM, et al. **J Neurosci Methods** 1997 Jul 18;75(1):91–7

Isolation of an enriched fraction of nerve terminals from fish brain using a discontinuous Percoll gradient. Nicholson RA, et al. **J Neurosci Methods** 1997 Feb;71(2):157–62

A new design of carbon fiber microelectrode for in vivo voltammetry using fused silica. Swiergiel AH, et al. **J Neurosci Methods** 1997 Apr 25;73(1):29–33

Sand aspiration: a case report. Choy IO, et al. **J Pediatr Surg** 1996 Oct;31(10):1448–50 (5 ref.)

Keratin immobilized on silica as a new stationary phase for chromatographic modelling of skin permeation. Turowski M, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1325–33

NMR responses to kaolinite in sand. Grøns T, et al. **Magn Reson Imaging** 1996;14(7–8):961–2

High-resolution 29Si solid-state NMR study of silicon functionality distribution on the surface of silicas. Luhmer M, et al. **Magn Reson Imaging** 1996;14(7–8):911–3

29Si MAS solid state and 129Xe NMR of porous silica. Oepen SB, et al. **Magn Reson Imaging** 1996;14(7–8):993–4

Surface NMR measurement of proton relaxation times in medium to coarse-grained sand aquifer. Shushakov OA. **Magn Reson Imaging** 1996;14(7–8):959–60

Possible selective elimination of red blood cells under the influence of colloidal silica. Gerashchenko BI, et al. **Med Hypotheses** 1996 Jul;47(1):69–70

Biogenic amorphous silica. Rabovsky J. **Scand J Work Environ Health** 1995;21 Suppl 2:108–10 (31 ref.)

T lymphocytes and silica-induced pulmonary inflammation and fibrosis in mice. Suzuki N, et al. **Thorax** 1996 Oct; 51(10):1036–42

[The activity of the lipid peroxidation processes in the mucosa of the rat small intestine and its morphofunctional state under acute irradiation and the administration of combined preparations created on a base of highly dispersed silica] Iakubovskiĭ MM, et al. **Radiats Biol Radioecol** 1997 May–Jun;37(3):366–71 (Eng. Abstr.) **(Rus)**

[Iridoplasty with silica-dried iris] Surkova VK, et al. **Vestn Oftalmol** 1996 Sep–Oct;112(4):8–9 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Neoplastic lung lesions in rat after chronic exposure to crystalline silica. Muhle H, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:27–9

[The immunocorrection with Aerosil-350 of the natural resistance of mice found under conditions of an elevated radiation background] Ganova LA, et al. **Radiats Biol Radioecol** 1997 Mar–Apr;37(2):228–32 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Dose-response associations of silica with nonmalignant respiratory disease and lung cancer mortality in the diatomaceous earth industry. Checkoway H, et al. **Am J Epidemiol** 1997 Apr 15;145(8):680–8

Risk of silicosis in a Colorado mining community. Kreiss K, et al. **Am J Ind Med** 1996 Nov;30(5):529–39

Respiratory impairments due to dust exposure: a comparative study among workers exposed to silica, asbestos, and coalmine dust. Wang X, et al. **Am J Ind Med** 1997 May; 31(5):495–502

Adverse effects of crystalline silica exposure. American Thoracic Society Committee of the Scientific Assembly on Environmental and Occupational Health. **Am J Respir Crit Care Med** 1997 Feb;155(2):761–8 (146 ref.)

Silicone? Silica? Scleroderma. A need to look further? [letter; comment] Englert M, et al. **Aust N Z J Med** 1996 Dec; 26(6):858. Comment on: Aust N Z J Med 1996 Jun;26(3):341–2.

ANCA-associated diseases and silica exposure. Gregorini G, et al. **Clin Rev Allergy Immunol** 1997 Spring;15(1):21–40 (80 ref.)

Silica and aluminum in drinking water and cognitive impairment in the elderly. Jacqmin-Gadda H, et al. **Epidemiology** 1996 May;7(3):281–5

Absence of skin sensitivity to oxides of aluminium, silicon, titanium or zirconium in patients with Crohn's disease [see comments] Lee JC, et al. **Gut** 1996 Aug;39(2):231–3. Comment in: Gut 1996 Aug;39(2):340–1.

IARC Working Group on the Evaluation of Carcinogenic Risks to Humans: Silica, Some Silicates, Coal Dust and Para-Aramid Fibrils. Lyon, 15–22 October 1996. **IARC Monogr Eval Carcinog Risks Hum** 1997;68:1–475

Silica. **IARC Monogr Eval Carcinog Risks Hum** 1997; 68:41–242 (539 ref.)

Silica-induced oxygen radical generation in alveolar macrophage. Lim Y, et al. **Ind Health** 1997 Jul;35(3):380–7

Correlates of peak expiratory flow rate: a study of sand stone quarry workers in desert. Mathur ML, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):340–4

Healthy worker effect in a longitudinal study of one-second forced expiratory volume (FEV1) and chronic exposure to granite dust. Eisen EA, et al. **Int J Epidemiol** 1995 Dec; 24(6):1154–61

Cancer risk assessment for crystalline silica. Collins JF, et al. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep; 7(3):359–65

Noncancer inhalation toxicology of crystalline silica: exposure–response assessment. Gift JS, et al. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):345–58 (42 ref.)

Criteria for conducting quantitative risk assessments for silica. Goldsmith DF, et al. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):367–75

Evidence for silica's neoplastic risk among workers and derivation of cancer risk assessment. Goldsmith DF. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):291–301 (46 ref.)

The epidemiology of scleroderma among women: assessment of risk from exposure to silicone and silica. Burns CJ, et al. **J Rheumatol** 1996 Nov;23(11):1904–11

Graves' disease after silica dust exposure [letter] Koeger AC, et al. **J Rheumatol** 1996 Jan;23(1):202

Epidemiology of scleroderma among women: assessment of risk from exposure to silicone and silica [letter] Koeger AC, et al. **J Rheumatol** 1997 Sep;24(9):1853–5

End-stage renal disease among silica-exposed gold miners. A new method for assessing incidence among epidemiologic cohorts [see comments] Calvert GM, et al. **JAMA** 1997 Apr 16;277(15):1219–23. Comment in: JAMA 1997 Aug 20;278(7):546–7.

Occupational exposure to silica and end-stage renal disease [letter; comment] Wilke RA. **JAMA** 1997 Aug 20; 278(7):546–7. Comment on: JAMA 1997 Apr 16;277(15):1219–23.

Silica-associated systemic erythematosus lupus or mineral dust lupus? Masson C, et al. **Lupus** 1997;6(1):1–3 (8 ref.)

Al Eskan disease: Persian Gulf syndrome [see comments] Korényi-Both AL, et al. **Mil Med** 1997 Jan;162(1):1–13 (75 ref.). Comment in: Mil Med 1997 Mar;162(3):ii.

Investigation of silicone oil and fumed silica in an adjuvant animal model. Picha GJ, et al. **Plast Reconstr Surg** 1997 Sep;100(3):643–52

Silicosis and lung cancer among workers in North Carolina dusty trades. Amandus HE, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:81–3

Cancer risk assessment for crystalline silica to implement California's hot spots act. Collins JF, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:99–103 (35 ref.)

Preliminary study of lung cancer mortality among Western Australian gold miners exposed to silica. de Klerk NH, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:66–8

Lung cancer among workers exposed to silica dust in Chinese refractory plants. Dong D, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:69–72

Comparative cancer potency for silica from extrapolations of human and animal findings. Goldsmith DF, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:104–7 (27 ref.)

Evaluation of crystalline silica as a threshold carcinogen.

Klein AK, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:95–8 (40 ref.)
Preliminary analysis of proportional mortality in a cohort of British pottery workers exposed to crystalline silica. McDonald JC, et al. **Scand J Work Environ Health** 1995; 21 Suppl 2:63–5
Neoplastic lung lesions in rat after chronic exposure to crystalline silica. Muhle H, et al.
Scand J Work Environ Health 1995;21 Suppl 2:27–9
Silica, silicosis and cancer in Finland. Partanen T, et al.
Scand J Work Environ Health 1995;21 Suppl 2:84–6
Lung cancer incidence among an Icelandic cohort exposed to diatomaceous earth and cristobalite. Rafnsson V, et al.
Scand J Work Environ Health 1997 Jun;23(3):187–92
Assessment of silicosis risk for occupational exposure to crystalline silica. Rice FL, et al.
Scand J Work Environ Health 1995;21 Suppl 2:87–90 (27 ref.)
Differential pulmonary responses in rats inhaling crystalline, colloidal or amorphous silica dusts. Warheit DB, et al.
Scand J Work Environ Health 1995;21 Suppl 2:19–21
Lung cancer in relation to exposure to silica dust, silicosis and uranium production in South African gold miners. Hnizdo E, et al. **Thorax** 1997 Mar;52(3):271–5
Silica exposure and risk of lung cancer [letter; comment] [see comments] Morgan WKC, et al. **Thorax** 1996 Jul;51(7):772 . Comment on: Thorax 1996 Jan;51(1):97–102. Comment in: Thorax 1997 Feb;52(2):203.
Silica exposure and risk of cancer [letter; comment] Seaton A. **Thorax** 1997 Feb;52(2):203. Comment on: Thorax 1996 Jul;51(7):772.
[Erasmus syndrome: clinical, tomographic, respiratory function and bronchoalveolar lavage characteristics] Cointrel C, et al. **Rev Mal Respir** 1997 Jan;14(1):21–6 (Eng. Abstr.) **(Fre)**

ANALYSIS

An evaluation of a local exhaust ventilation control system for a foundry casting–cleaning operation. Gressel MG.
Am Ind Hyg Assoc J 1997 May;58(5):354–8
Silica article clarification [letter] McCully R, et al.
Am Ind Hyg Assoc J 1996 Sep;57(9):860
Phytolith analysis on dental calculus, enamel surface, and burial soil: information about diet and paleoenvironment. Fox CL, et al. **Am J Phys Anthropol** 1996 Sep;101(1):101–13
Uranium isotopic distribution in the mineral phases of granitic fracture fillings by a sequential extraction procedure. Crespo MT, et al. **Appl Radiat Isot** 1996 Sep–Oct; 47(9–10):927–31
Bioactivity of 1.25CaO.SiO2 glass: an FTIR and X-ray study on powdered samples. Branda F, et al. **Biomaterials** 1996 Dec;17(23):2247–51
Industrial hygiene sampling and applications to ambient silica monitoring. Hearl FJ. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):279–89
Ambient PM10 emissions: contributions and impact on silica emissions. Ruble R, et al.
J Expo Anal Environ Epidemiol 1997 Jul–Sep;7(3):327–44 (54 ref.)
Confined space hazards and fiberglass exposure [letter; comment] Bender JR. **J Occup Environ Med** 1996 Jul; 38(7):658. Comment on: J Occup Environ Med 1995 Feb;37(2):185–8.
Non-fibrous inorganic particles in bronchoalveolar lavage fluid of pottery workers. Falchi M, et al.
Occup Environ Med 1996 Nov;53(11):762–6
Electron microscopic microanalysis of bronchoalveolar lavage: a way to identify exposure to silica and silicate dust. Monsó E, et al. **Occup Environ Med** 1997 Aug; 54(8):560–5
Historical total and respirable silica dust exposure levels in mines and pottery factories in China. Dosemeci M, et al.
Scand J Work Environ Health 1995;21 Suppl 2:39–43
Silica exposures in workplaces in the United States between 1980 and 1992. Freeman CS, et al.
Scand J Work Environ Health 1995;21 Suppl 2:47–9
Methods used by the United States National Institute for Occupational Safety and Health to monitor crystalline silica. Lorberau CD, et al.
Scand J Work Environ Health 1995;21 Suppl 2:35–8

CHEMISTRY

Temperature-responsive liquid chromatography. 2. Effects of hydrophobic groups in N-isopropylacrylamide copolymer-modified silica. Kanazawa H, et al.
Anal Chem 1997 Mar 1;69(5):823–30
Retention behavior of amino acids and peptides on protoporphyrin-silica stationary phases with varying metal ion centers. Xiao J, et al. **Anal Chem** 1996 Sep 1; 68(17):2818–25
Centrifugation on Percoll gradient enhances fluorescent lectin binding on human sperm: a flow cytometric analysis. De Maistre E, et al. **Arch Androl** 1996 Nov–Dec; 37(3):179–87
Fractions of Percoll eliminated sperm: increased sperm yield in percoll wash. Hossain AM, et al. **Arch Androl** 1996 Nov–Dec;37(3):189–95
Sperm kinetics and morphology before and after fractionation on discontinuous Percoll gradient for sex preselection: computerized analyses. Watkins AM, et al. **Arch Androl** 1996 Jul–Aug;37(1):1–5
Effect of the substitution of Y2O3 for CaO on the bioactivity of 2.5CaO.2SiO2 glass. Costantini A, et al. **Biomaterials** 1997 Mar;18(6):453–8
Determination of hydrophobicity parameters of antibiotics by reversed-phase chromatography. The effect of support. Cserháti T, et al. **Biomed Chromatogr** 1996 May–Jun; 10(3):117–21
Purification of trypsin by affinity chromatography with sulphamethoxazolum ligand. Wu X, et al.
Biomed Chromatogr 1996 Sep–Oct;10(5):228–32
Fossilization processes in siliceous thermal springs: trends in preservation along thermal gradients. Cady SL, et al.
Ciba Found Symp 1996;202:150–70; discussion 170–3 (23 ref.)
The Rhynie cherts: an early Devonian ecosystem preserved by hydrothermal activity. Trewin NH.
Ciba Found Symp 1996;202:131–45; discussion 145–9
Adsorption mechanisms of carbofuran on silica: structure, kinetics, and solubility influence. Mear AM, et al.
Ecotoxicol Environ Saf 1996 Nov;35(2):163–73
In vitro drug adsorption to charcoal, silicas, acrylate copolymer and silicone oil with charcoal and with acrylate copolymer. Cassidy SL, et al. **Hum Exp Toxicol** 1997 Jan; 16(1):25–7
Apatite formation on silica gel in simulated body fluid: its dependence on structures of silica gels prepared in different media. Cho SB, et al. **J Biomed Mater Res** 1996 Fall; 33(3):145–51
Apatite-forming ability of silicate ion dissolved from silica gels. Cho SB, et al. **J Biomed Mater Res** 1996 Nov; 32(3):375–81
Characterisation of silica-based heparin-affinity adsorbents through column chromatography of plasma fractions containing thrombin. Björklund M, et al.
J Chromatogr A 1996 Aug 30;743(1):145–62
Characterisation of silica-based heparin affinity sorbents from equilibrium binding studies on plasma fractions containing thrombin. Björklund M, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):113–33
Studies on the expansion characteristics of fluidised beds with silica-based adsorbents used in protein purification. Finette GM, et al. **J Chromatogr A** 1996 Aug 30;743(1):57–73
Hydrolytically stable amino-silica glass coating material for manipulation of the electroosmotic flow in capillary electrophoresis. Guo Y, et al. **J Chromatogr A** 1996 Sep 13;744(1–2):17–29
Separation of enantiomers on a chiral stationary phase based on ovoglycoprotein. I. Influences of the pore size of base silica materials and bound protein amounts on chiral resolution. Haginaka J, et al. **J Chromatogr A** 1997 Jun 27;773(1–2):85–91
Hybrid selection with cDNA-silica. Jarrett HW.
J Chromatogr A 1996 Aug 23;742(1–2):87–94
Synthesis and characterization of polymer-coated mixed-functional stationary phases with several different hydrophobic groups for direct analysis of biological samples by liquid chromatography. Kanda T, et al.
J Chromatogr A 1996 Jan 26;722(1–2):115–21
Stability of silica-based, endcapped columns with pH 7 and 11 mobile phases for reversed-phase high-performance liquid chromatography. Kirkland JJ, et al.
J Chromatogr A 1997 Feb 21;762(1–2):97–112
Effect of skeleton size on the performance of octadecylsilylated continuous porous silica columns in reversed-phase liquid chromatography. Minakuchi H, et al. **J Chromatogr A** 1997 Feb 21;762(1–2):135–46
Use of 3-(1,8-naphthalimido)propyl-modified silyl silica gel as a stationary phase for the high-performance liquid chromatographic separation of purine derivatives. Nakashima K, et al. **J Chromatogr A** 1996 Jan 26; 722(1–2):107–13
Study of protein binding to a silica support with a polymeric cation-exchange coating. Ratnayake CK, et al.
J Chromatogr A 1996 Aug 30;743(1):15–23
Lateral interaction between electrostatically adsorbed and covalently immobilized proteins on the surface of cation-exchange sorbents. Ratnayake CK, et al.
J Chromatogr A 1996 Aug 30;743(1):25–32
Purification of insulin-like growth factor-I and related proteins using underivatized silica. Reifsnyder DH, et al.
J Chromatogr A 1996 Nov 8;753(1):73–80
Fast, reproducible size-exclusion chromatography of biological macromolecules. Ricker RD, et al.
J Chromatogr A 1996 Aug 30;743(1):43–50
Development of a novel octadecyl-bonded silica column and evaluation of its reliability in chromatographic analysis. Tanaka H, et al. **J Chromatogr A** 1997 Feb 21; 762(1–2):89–96
Comparison of octadecylsilica and graphitized carbon black as materials for solid-phase extraction of fungicide and insecticide residues from fruit and vegetables. Torres CM, et al. **J Chromatogr A** 1997 Aug 22;778(1–2):127–37
Ion-pair chromatography of methotrexate in a column-switching system using an alkyl-diol silica precolumn for direct injection of plasma. Yu Z, et al.
J Chromatogr A 1996 Aug 23;742(1–2):113–20
Simultaneous determination of twelve benzodiazepines in human serum using a new reversed-phase chromatographic column on a 2-microns porous microspherical silica gel. Tanaka E, et al. **J Chromatogr B Biomed Appl** 1996 Jun 28;682(1):173–8
Simultaneous determination of carbamazepine and its metabolites in plasma from carbon tetrachloride-intoxicated rats using a new reversed-phase chromatographic column of 2-microns porous microspherical silica gel. Tanaka E.
J Chromatogr B Biomed Appl 1997 Jan 10;688(1):155–60
Poly(ethylene glycol) amphiphile adsorption and liposome partition. Van Alstine JM, et al.
J Chromatogr B Biomed Appl 1996 May 17;680(1–2):145–55
Fabrication of stable packed capillary reversed-phase columns for protein structural analysis. Tong D, et al.
J Protein Chem 1997 Jul;16(5):425–31
Physicochemical properties of crystalline silica dusts and their possible implication in various biological responses. Fubini B, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:9–14 (34 ref.)
1H MAS NMR spectroscopy of chemically modified silica gels: a fast method to characterize stationary interphases for chromatography. Brindle R, et al.
Solid State Nucl Magn Reson 1996 Jun;6(3):251–66
Solid state NMR study on the conformation and mobility of n-octadecyl chains in a silane coupling agent attached to the surface of colloidal silica. Cheng J, et al.
Solid State Nucl Magn Reson 1996 Nov;7(2):135–40
[Use of aerosol A-300 amd GF/F (GF/C) filters for purifying fragments of DNA, plasmid DNA, and RNA] Gribanov PG, et al. **Biokhimiia** 1996 Jun;61(6):1064–70 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

The changing risk assessments for crystalline silica. Goldsmith DF, et al. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):265–6
Differential pulmonary responses in rats inhaling crystalline, colloidal or amorphous silica dusts. Warheit DB, et al.
Scand J Work Environ Health 1995;21 Suppl 2:19–21

METABOLISM

Immune modulation associated with extracorporeal immunoadsorption treatments utilizing protein A/silica columns. Balint JP Jr. **Artif Organs** 1996 Aug;20(8):906–13
Celiac disease with cerebral calcium and silica deposits: x-ray spectroscopic findings, an autopsy study. Toti P, et al.
Neurology 1996 Apr;46(4):1088–92
Direct interaction between crystalline silica and DNA – a proposed model for silica carcinogenesis. Daniel LN, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:22–6

PHARMACOLOGY

Involvement of NF-kappaB in silica-induced cyclooxygenase II gene expression in rat alveolar macrophages. Chen F, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L779–86
Early increase in expression of surfactant protein A gene in type II cells from silica-treated rats. Viviano CJ, et al.
Am J Physiol 1997 Aug;273(2 Pt 1):L395–400
Calpain contributes to silica-induced I kappa B-alpha degradation and nuclear factor-kappa B activation. Chen F, et al. **Arch Biochem Biophys** 1997 Jun 15;342(2):383–8
Mouse in vitro fertilization, embryo development and viability, and human sperm motility in substances used for human sperm preparation for assisted reproduction. Scott L, et al. **Fertil Steril** 1997 Feb;67(2):372–81
Addition of kallikrein and/or human serum to a discontinuous Percoll gradient [letter; comment] Depoortere B, et al.
Hum Reprod 1996 Feb;11(2):457–8. Comment on: Hum Reprod 1995 Dec;10(12):3183–5.
The protective action of polyvinylpyrrolidone-Percoll during the cryopreservation of mouse 2-cell embryos and its effect on subsequent developmental potential post-thaw in vitro and in vivo. Titterington JL, et al.
Hum Reprod 1996 Dec;11(12):2697–702
Lymphocyte response to silica among offspring of silicone breast implant recipients. Smalley DL, et al.
Immunobiology 1996–97;196(5):567–74
Improved motile sperm recovery by a hyperosmotic Percoll gradient. Carbone DJ Jr, et al. **J Assist Reprod Genet** 1997 Aug;14(7):394–7
Antisense inhibition of silica-induced tumor necrosis factor in alveolar macrophages. Rojanasakul Y, et al.
J Biol Chem 1997 Feb 14;272(7):3910–4
Transforming growth factor beta1, ras and p53 in silica-induced fibrogenesis and carcinogenesis. Williams AO, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:30–4
[The analysis of peripheral blood lymphocytes of patients with silicosis and effects of silica in vitro] Yamaguchi M, et al. **Sangyo Eiseigaku Zasshi** 1996 Nov;38(6):253–7 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

[Endotoxicosis in the pathogenesis of severe forms of psoriasis and its correction by combined therapy using sillard P and plant species] Trunina TI. **Lik Sprava** 1997 Mar–Apr;(2):126–30 **(Ukr)**

TOXICITY

Selective hyperexpression of c-jun oncoprotein by glass fiber- and silica-transformed BALB/c-3T3 cells. Gao H, et al. **Cancer Lett** 1997 Jan 15;112(1):65–9
DNA strand breakage, thymine glycol production, and

hydroxyl radical generation induced by different samples of crystalline silica in vitro. Daniel LN, et al. **Environ Res** 1995 Oct;71(1):60–73

Heparin attenuates bleomycin but not silica-induced pulmonary fibrosis in mice: possible relationship with involvement of myofibroblasts in bleomycin, and fibroblasts in silica-induced fibrosis. Piguet PF, et al. **Int J Exp Pathol** 1996 Aug;77(4):155–61

Laboratory studies on silica induced toxicity and relationship to carcinogenicity. Rabovsky J. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):267–78 (51 ref.)

Initiating the risk assessment process for inhaled particulate materials: development of short term inhalation bioassays. Warheit DB, et al. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):313–25

Silica attenuates hypertension in Lyon hypertensive rats. Bataillard A, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1581–4

Exposure to crystalline silica or treatment with chlorphentermine increases vitamin E levels in rat alveolar lavage materials. Miles PR, et al. **J Toxicol Environ Health** 1996 Dec 6;49(5):511–23

Silica exposure increases expression of pulmonary intercellular adhesion molecule-1 (ICAM-1) in C57Bl/6 mice. Nario RC, et al. **J Toxicol Environ Health** 1996 Dec 27;49(6):599–617

Micronucleus formation in V79 cells treated with respirable silica dispersed in medium and in simulated pulmonary surfactant. Liu X, et al. **Mutat Res** 1996 Dec 12; 361(2–3):89–94

Studies on the relationship between treatment condition and micronucleus induction in V79 cells exposed to silica and glass fibers. Zhong BZ, et al. **Mutat Res** 1997 Jun 13; 391(1–2):111–6

Pneumotoxicity and pulmonary clearance of different welding fumes after intratracheal instillation in the rat. Antonini JM, et al. **Toxicol Appl Pharmacol** 1996 Sep; 140(1):188–99

Modulation of silica-induced pulmonary toxicity by dexamethasone-containing liposomes. DiMatteo M, et al. **Toxicol Appl Pharmacol** 1997 Feb;142(2):411–21

Silica-induced apoptosis mediated via scavenger receptor in human alveolar macrophages. Iyer R, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):84–92

SILICONE ELASTOMERS

Intraocular lens thickness and ocular growth in newborn rabbits. Kugelberg U, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):272–4

Reduction in the area of the anterior capsule opening after polymethylmethacrylate, silicone, and soft acrylic intraocular lens implantation. Hayashi K, et al. **Am J Ophthalmol** 1997 Apr;123(4):441–7

Surgical management of posteriorly dislocated silicone plate haptic intraocular lenses. Schneiderman TE, et al. **Am J Ophthalmol** 1997 May;123(5):629–35

Migration of silicone through the fibrous capsules of mammary prostheses. Beekman WH, et al. **Ann Plast Surg** 1997 May;38(5):441–5

Case report: upper extremity soft-tissue reconstruction by alloplastic implant: long-term result and follow-up. Bonnecarrere ER, et al. **Ann Plast Surg** 1997 Jan;38(1):74–6

Hemorrhage into an intraorbital pseudocyst [letter; comment] Coyle JT. **Arch Ophthalmol** 1997 Aug;115(8):1085. Comment on: Arch Ophthalmol 1996 Sep;114(9):1156–7.

The influence of silicone implantation on type II collagen-induced arthritis in mice. Schaefer CJ, et al. **Arthritis Rheum** 1997 Jun;40(6):1064–72

Adhesion of Lactobacillus species in urine and phosphate buffer to silicone rubber and glass under flow. Millsap KW, et al. **Biomaterials** 1997 Jan;18(1):87–91

Dynamic mechanical thermal analysis of denture soft lining materials. Waters M, et al. **Biomaterials** 1996 Aug; 17(16):1627–30

Patient satisfaction following insertion of silicone breast implants. Park AJ, et al. **Br J Plast Surg** 1996 Dec; 49(8):515–8

Silastic metacarpophalangeal joint arthroplasty in patients with rheumatoid arthritis. Gellman H, et al. **Clin Orthop** 1997 Sep;(342):16–21

Experience of total wrist arthroplasty with silastic implants plus grommets. Rossello MI, et al. **Clin Orthop** 1997 Sep; (342):64–70

Silicone rubber implants for replacement of arthritic or destroyed joints in the hand. 1968 [classical article] Swanson AB. **Clin Orthop** 1997 Sep;(342):4–10

Silastic catheters for home antibiotic therapy in patients with cystic fibrosis. Buck C, et al. **Eur J Pediatr** 1997 Mar; 156(3):209–11

Uropathogenic Escherichia coli adhere to urinary catheters without using fimbriae. Reid G, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3–4):159–62

Deposition of extracellular matrix on silicone intraocular lens implants in rabbits. Saika S, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Aug;235(8):517–22

An alternative treatment: Molloplast B. Ryan JE. **J Can Dent Assoc** 1997 Feb;63(2):122–4

Centration and fixation of silicone intraocular lenses: clinicopathological findings in human autopsy eyes. Auffarth GU, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1281–5

Clinical results of implanting a silicone haptic-anchor-plate intraocular lens. Colin J. **J Cataract Refract Surg** 1996;22 Suppl 2:1286–90

Advantage of plate lenses [letter] Cumming JS. **J Cataract Refract Surg** 1997 Jun;23(5):692–3

Prospective study of the SI-40NB foldable silicone intraocular lens. Egan CA, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1272–6

Corneal endothelial cell loss in phacoemulsification surgery with silicone intraocular lens implantation [see comments] Hayashi K, et al. **J Cataract Refract Surg** 1996 Jul–Aug; 22(6):743–7. Comment in: J Cataract Refract Surg 1997 Jan–Feb;23(1):6.

Lens bisector for silicone intraocular lens removal. Koch HR. **J Cataract Refract Surg** 1996;22 Suppl 2:1379–80

Visual function in pseudophakic eyes with poly(methyl methacrylate), silicone, and acrylic intraocular lenses. Kohnen S, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1303–7

Silicone versus poly(methyl methacrylate) lenses in combined phacoemulsification and trabeculectomy. Kosmin AS, et al. **J Cataract Refract Surg** 1997 Jan–Feb;23(1):97–105

Ocular growth in newborn rabbit eyes implanted with a poly(methyl methacrylate) or silicone intraocular lens. Kugelberg U, et al. **J Cataract Refract Surg** 1997;23 Suppl 1:629–34

Comparison of two plate-haptic intraocular lenses in a rabbit model. Mamalis N, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1291–5

Neodymium: YAG capsulotomy rates after phacoemulsification with silicone posterior chamber intraocular lenses. Mamalis N, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1296–302

Color vision in patients with a silicone intraocular lens. Mäntyjärvi M, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1308–12

Long-term follow-up of three-piece, looped, silicone intraocular lenses. Milazzo S, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1259–62

Visual properties of the foldable Array multifocal intraocular lens. Weghaupt H, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1313–7

Bacterial anterior chamber contamination with foldable silicone lens implantation using a forceps and an injector. Weindler J, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1263–6

Long-term histologic studies of the Baerveldt implant in a rabbit model. Lloyd MA, et al. **J Glaucoma** 1996 Oct; 5(5):334–9

Isolation and quantitation of debris particles around failed silicone orthopedic implants. Hirakawa K, et al. **J Hand Surg [Am]** 1996 Sep;21(5):819–27

Pre- and postimplantation dynamic mechanical properties of silastic HP-100 finger joints. Naidu SH, et al. **J Hand Surg [Am]** 1997 Mar;22(2):299–301

In vivo inflammatory response to silicone elastomer particulate debris. Naidu SH, et al. **J Hand Surg [Am]** 1996 May;21(3):496–500

Hand function following Silastic arthroplasty of the metacarpophalangeal joints in the rheumatoid hand. Rothwell AG, et al. **J Hand Surg [Br]** 1997 Feb;22(1):90–3

Silicone-rubber catheter fracture and embolization in a very low birth weight infant. Ochikubo CG, et al. **J Perinatol** 1996 Jan–Feb;16(1):50–2

Influences of 1-dodecylazacycloheptan-2-one on permeation of membranes by weak electrolytes. 1. Theoretical analysis of weak electrolyte diffusion through membranes and studies involving silicone rubber membranes. Hou SY, et al. **J Pharm Sci** 1997 Jan;86(1):85–91

Posterior chamber silicone phakic intraocular lens. Marinho A, et al. **J Refract Surg** 1997 May–Jun;13(3):219–22

Detachable self-sealing membrane system for the endoscopic treatment of incontinence. Yoo JJ, et al. **J Urol** 1997 Sep; 158(3 Pt 2):1045–8

Nonporous silicone polymer coating of expanded polytetrafluoroethylene grafts reduces graft neointimal hyperplasia in dog and baboon models. Lumsden AB, et al. **J Vasc Surg** 1996 Nov;24(5):825–33

Aspects of silicone rubber as encapsulant for neurological prostheses. Part 4: Two-part rubbers. Donaldson PE. **Med Biol Eng Comput** 1997 May;35(3):283–6

Silicone breast implants: implications for society and surgeons [letter; comment] Hodgkinson DJ. **Med J Aust** 1997 Jun 2;166(11):615–6. Comment on: Med J Aust 1996 Sep 16;165(6):338–41.

Adhesion of Pseudomonas aeruginosa to silicone rubber in a parallel plate flow chamber in the absence and presence of nutrient broth. Habash MB, et al. **Microbiology** 1997 Aug;143 (Pt 8):2569–74

Hemorrhagic complications in association with silastic dural substitute: pediatric and adult case reports with a review of the literature. Robertson SC, et al. **Neurosurgery** 1997 Jan;40(1):201–5; discussion 205–6 (28 ref.)

The effect of maturation on the ability to stimulate orbital growth using tissue expanders in the anophthalmic cat orbit. Heinz GW, et al. **Ophthal Plast Reconstr Surg** 1997 Jun;13(2):115–28

Transcanalicular removal of silastic nasolacrimal tubes [letter; comment] Patel BC, et al. **Ophthal Plast Reconstr Surg** 1997 Mar;13(1):74–5. Comment on: Ophthal Plast Reconstr Surg 1995 Sep;11(3):221–4.

An alternative method of closed silicone intubation of the lacrimal system. Henderson PN, et al. **Ophthalmic Surg Lasers** 1996 May;27(5):401–04

Silicone intubation with tissue glue anastomosis in the treatment of congenital nasolacrimal duct obstruction. Liao CL, et al. **Ophthalmic Surg Lasers** 1996 Mar;27(3):197–9

A prospective randomized study of medications after silicone intubation. Liu D. **Ophthalmic Surg Lasers** 1996 Jun; 27(6):434–7

Analysis of 100 explanted one-piece and three-piece silicone intraocular lenses. Auffarth GU, et al. **Ophthalmology** 1995 Aug;102(8):1144–50

IOL condensation [letter; comment] Avins LR. **Ophthalmology** 1997 Mar;104(3):343–4. Comment on: Ophthalmology 1996 Sep;103(9):1410–8.

Condensation on polymethylmethacrylate, acrylic polymer, and silicone intraocular lenses after fluid-air exchange in rabbits [see comments] Hainsworth DP, et al. **Ophthalmology** 1996 Sep;103(9):1410–8. Comment in: Ophthalmology 1997 Mar;104(3):343–4.

Decentration and tilt of polymethyl methacrylate, silicone, and acrylic soft intraocular lenses. Hayashi K, et al. **Ophthalmology** 1997 May;104(5):793–8

Comparative study of silicone versus acrylic foldable lens implantation in primary glaucoma triple procedure. Lemon LC, et al. **Ophthalmology** 1997 Oct;104(10):1708–13

Silicone frontalis slings for correction of blepharoptosis [letter; comment] Rama G, et al. **Ophthalmology** 1997 Jan; 104(1):1–2. Comment on: Ophthalmology 1996 Apr;103(4):623–30.

Labial incompetence: a marker for progressive bone resorption in Silastic chin augmentation [letter] Barnett MP. **Plast Reconstr Surg** 1997 Aug;100(2):553–4

Intraductal migration of silicone [letter; comment] Holten I. **Plast Reconstr Surg** 1996 Oct;98(5):903. Comment on: Plast Reconstr Surg 1995 Dec;96(7):1746–7.

Polyurethane versus silicone for endoprosthetic replacement of the metacarpophalangeal joints in rheumatoid arthritis. Sollerman CJ, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Jun; 30(2):145–50

[An analysis of complications after implantation of saline-filled silicone prosthesis for augmentation mammaplasty in 294 cases] Zhu H, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 Jul;11(4):248–50 (Eng. Abstr.) **(Chi)**

[Long-term complications of silicone implants used in the repair of fractures of the orbital floor] Pauzié F, et al. **Rev Stomatol Chir Maxillofac** 1997 Aug;98(2):109–15 (Eng. Abstr.) **(Fre)**

[Intraluminal expansion of a small intestine segment—animal experiment principles and possible clinical application] Broll R, et al. **Chirurg** 1996 Jan;67(1):53–8 (Eng. Abstr.) **(Ger)**

[Silastic arthroplasty of the great toe metatarsal joint] Neumann R, et al. **Orthopade** 1996 Aug;25(4):332–7 (Eng. Abstr.) **(Ger)**

[Surgical treatment of retinal detachment with multiple, giant and post-equatorial ruptures] Il'ńitskiĭ VV, et al. **Vestn Oftalmol** 1997 Mar–Apr;113(2):3–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Explantation of silicone breast implants. Thomas WO 3rd, et al. **Am Surg** 1997 May;63(5):421–9

Silicone punctal plug migration resulting in dacryocystitis and canaliculitis. Rumelt S, et al. **Cornea** 1997 May; 16(3):377–9

Contribution of vascular catheter material to the pathogenesis of infection: depletion of complement by silicone elastomer in vitro. Marosok R, et al. **J Biomed Mater Res** 1996 Feb; 30(2):245–50

Silicone gel and octamethylcyclotetrasiloxane (D4) enhances antibody production to bovine serum albumin in mice. Nicholson JJ 3rd, et al. **J Biomed Mater Res** 1996 Jul; 31(3):345–53

Capsular capture of silicone intraocular lenses. Hayashi K, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1267–71

Postoperative decentration of three-piece silicone intraocular lenses. Kimura W, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1277–80

Valve membrane adhesion as a cause of Ahmed glaucoma valve failure. Feldman RM, et al. **J Glaucoma** 1997 Feb; 6(1):10–2

Bilateral cataract after phakic posterior chamber top hat-style silicone intraocular lens. Wiechens B, et al. **J Refract Surg** 1997 Jul–Aug;13(4):392–7

Inguinal lymph node foreign body granulomas after placement of a silicone rubber (Silflex) implant of the first metatarsophalangeal joint. McNearney T, et al. **J Rheumatol** 1996 Aug;23(8):1449–52

Radiologic case study. Silicone synovitis. Tadikonda L, et al. **Orthopedics** 1997 Mar;20(3):277–80, 288

[Hashimoto's thyroiditis and silicone breast implants: 2 cases] Vayssairat M, et al. **J Mal Vasc** 1997 Jul;22(3):198–9 (Eng. Abstr.) **(Fre)**

[The value of sonography for the discovery of complications after the implantation of silicone gel prostheses for breast augmentation or reconstruction] Lorenz R, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Mar;166(3):233–7 (Eng. Abstr.) **(Ger)**

SILICONE ELASTOMERS

CHEMISTRY

Influence of additives on the water uptake of hydrosilanized silicone rubbers. Riggs PD, et al. **Biomaterials** 1997 May; 18(10):721–6

Effect of test method on the bond strength of a silicone resilient denture lining material. al–Athel MS, et al. **J Prosthet Dent** 1996 Nov;76(5):535–40

Comparison of the dimensional accuracy of one- and two-step techniques with the use of putty/wash addition silicone impression materials. Idris B, et al. **J Prosthet Dent** 1995 Nov;74(5):535–41

The effect of primers and surface characteristics on the adhesion–in–peel force of silicone elastomers bonded to resin materials. Taft RM, et al. **J Prosthet Dent** 1996 Nov; 76(5):515–8

Hydrothermally stable bonding of silicone rubber to titanium. Aylett BJ, et al. **Med Biol Eng Comput** 1996 Sep;34(5):394–5

A new method for diffusion measurement in polymeric films based on a stacked sheet concept. Sjöberg H, et al. **Pharm Res** 1996 Dec;13(12):1871–4

METABOLISM

Surface modification of silicone rubber membrane by plasma induced graft copolymerization as artificial cornea. Hsiue GH, et al. **Artif Organs** 1996 Nov;20(11):1196–207

Irreversible silicone oil adhesion to silicone intraocular lenses. A clinicopathologic analysis [see comments] Apple DJ, et al. **Ophthalmology** 1996 Oct;103(10):1555–61; discussion 1561–2. Comment in: Ophthalmology 1997 Jun;104(6):898–900.

Posterior surface condensation on silicone IOLs [letter; comment] Kutner BN. **Ophthalmology** 1995 Oct; 102(10):1412; discussion 1413. Comment on: Ophthalmology 1995 May;102(5):733–6.

Posterior surface condensation on silicone IOLs [letter; comment] Mein CE. **Ophthalmology** 1995 Oct; 102(10):1412–3. Comment on: Ophthalmology 1995 May;102(5):733–6.

PHARMACOLOGY

Lymphocyte response to silica among offspring of silicone breast implant recipients. Smalley DL, et al. **Immunobiology** 1996–97;196(5):567–74

RADIATION EFFECTS

Accelerated ultraviolet aging of intraocular lens optic materials: a 50 year simulation. Yang S, et al. **J Cataract Refract Surg** 1997 Jul–Aug;23(6):940–7

THERAPEUTIC USE

Disappointing long–term results of laparoscopic adjustable silicone gastric banding. Morino M, et al. **Br J Surg** 1997 Jun;84(6):868–9

Use of Doppler ultrasonography in the evaluation of liver blood flow during silo reduction of a giant omphalocele. Skarsgard ED, et al. **J Pediatr Surg** 1997 May;32(5):733–5

Preliminary design and experimental studies of a novel soft implant for correcting sagittal plane instability in the lumbar spine. Minns RJ, et al. **Spine** 1997 Aug 15; 22(16):1819–25; discussion 1826–7

SILICONE OILS

Management of retinal redetachment following silicone–oil removal. Bodanowitz S, et al. **Ger J Ophthalmol** 1996 Mar; 5(2):67–72

Silicone oil adhesion to intraocular lenses: an experimental study comparing various biomaterials [see comments] Apple DJ, et al. **J Cataract Refract Surg** 1997 May; 23(4):536–44. Comment in: J Cataract Refract Surg 1997 May;23(4):457.

Predicted and actual refraction after intraocular lens implantation in eyes with silicone oil. Grinbaum A, et al. **J Cataract Refract Surg** 1996 Jul–Aug;22(6):726–9

Silicone oil removal: a simple technique. Gopal L, et al. **Retina** 1997;17(3):266–7

[Objective determination of refractive changes in silicon oil filled eyes—effect of head position on refraction] Dick B, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):459–66 (Eng. Abstr.) **(Ger)**

[Clinical experiences after implantation of various lens types in silicon oil tamponade] Effert R, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):467–71 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Vitrectomy with silicone oil or long–acting gas in eyes with severe proliferative vitreoretinopathy: results of additional and long–term follow–up. Silicone Study report 11 [see comments] Abrams GW, et al. **Arch Ophthalmol** 1997 Mar; 115(3):335–44. Comment in: Arch Ophthalmol 1997 Mar;115(3):407–8.

The Silicone Study. A small piece of the PVR puzzle is put into place [editorial; comment] Campochiaro PA. **Arch Ophthalmol** 1997 Mar;115(3):407–8 (6 ref.). Comment on: Arch Ophthalmol 1997 Mar;115(3):335–44.

Ultrastructure of the anterior lens capsule after vitrectomy with silicone oil injection. Correlation of clinical and morphological features. Koch FH, et al. **Doc Ophthalmol** 1995–96;91(3):233–42

Silicone oil for complicated retinal detachment in the pediatric population. Biedner B, et al. **Eur J Ophthalmol** 1996 Oct–Dec;6(4):451–3

Long–term results of pars plana vitrectomy and silicone oil for giant tears. Karel I, et al. **Eur J Ophthalmol** 1996 Jul–Sep;6(3):315–21

Fluid vitreous substitutes in vitreo retinal surgery. Saxena S, et al. **Indian J Ophthalmol** 1996 Dec;44(4):191–206 (142 ref.)

Magnetic resonance imaging in the evaluation of eyes treated with silicone oil. Kaynak S, et al. **Ophthalmic Surg Lasers** 1996 Dec;27(12):1019–23

Removal of silicone oil and epimacular proliferation from eyes following vitrectomy. Sharma T, et al. **Ophthalmic Surg Lasers** 1996 Mar;27(3):192–6

Macular pucker after successful surgery for proliferative vitreoretinopathy. Silicone Study Report 8. Cox MS, et al. **Ophthalmology** 1995 Dec;102(12):1884–91

Silicone oil injection: using the LeVeen Inflator. Brucker AJ. **Retina** 1996;16(1):73

Severe ocular trauma managed with primary pars plana vitrectomy and silicone oil. Spiegel D, et al. **Retina** 1997; 17(4):275–85

The artificial iris diaphragm for vitreoretinal silicone oil surgery. Thumann G, et al. **Retina** 1997;17(4):330–7

A new type of intraocular prosthesis for dogs. Peña MT, et al. **Vet Rec** 1997 Jan 18;140(3):67–8

[Long–term results of pars plana vitrectomy and silicone oil in large retinal tears in children] Karel I, et al. **Cesk Slov Oftalmol** 1997 Jun;53(3):147–54 (Eng. Abstr.) **(Cze)**

[Biometry of the eye containing silicone oil] Korynta J. **Cesk Slov Oftalmol** 1997 Jun;53(3):195–203 **(Cze)**

[Rhegmatogenous retinal detachment in atrophia gyrata: pars plana vitrectomy with silicone oil instillation] Engelmann K, et al. **Klin Monatsbl Augenheilkd** 1996 Dec;209(6):373–5 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Cataract extraction following vitrectomy and silicone oil tamponade [letter; comment] Gray R, et al. **Eye** 1996;10 (Pt 1):151–2. Comment on: Eye 1995;9 (Pt 3):309–12.

Transmission electron microscopic analysis of trabecular meshwork in secondary glaucoma after intravitreal silicone oil injection. Cvenkel B, et al. **Int Ophthalmol** 1996–97; 20(1–3):43–7

Glaucoma after vitreo–retinal surgery with silicone oil injection: epidemiologic aspects. Montanari P, et al. **Int Ophthalmol** 1996–97;20(1–3):29–31

Investigation of silicone oil and fumed silica in an adjuvant animal model. Picha GJ, et al. **Plast Reconstr Surg** 1997 Sep;100(3):643–52

[Cataract after silicone oil tamponade and its surgical treatment] Zhang S, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Nov;31(6):430–2 (Eng. Abstr.) **(Chi)**

[Sudan staining of impression cytology retinal specimen] Meier P, et al. **Ophthalmologe** 1996 Dec;93(6):714–8 (Eng. Abstr.) **(Ger)**

CHEMISTRY

In vitro drug adsorption to charcoal, silicas, acrylate copolymer and silicone oil with charcoal and with acrylate copolymer. Cassidy SL, et al. **Hum Exp Toxicol** 1997 Jan; 16(1):25–7

Role of blood components in ocular silicone oil emulsification. Studies on an in vitro model. Savion N, et al. **Invest Ophthalmol Vis Sci** 1996 Dec;37(13):2694–9

METABOLISM

Irreversible silicone oil adhesion to silicone intraocular lenses. A clinicopathologic analysis [see comments] Apple DJ, et al. **Ophthalmology** 1996 Oct;103(10):1555–61; discussion 1561–2. Comment in: Ophthalmology 1997 Jun;104(6):898–900.

Irreversible silicone oil adhesion [letter; comment] Horgan SE, et al. **Ophthalmology** 1997 Jun;104(6):898–900. Comment on: Ophthalmology 1996 Oct;103(10):1555–61; discussion 1561–2.

Posterior surface condensation on silicone IOLs [letter; comment] Kutner BN. **Ophthalmology** 1995 Oct; 102(10):1412; discussion 1413. Comment on: Ophthalmology 1995 May;102(5):733–6.

Posterior surface condensation on silicone IOLs [letter; comment] Mein CE. **Ophthalmology** 1995 Oct; 102(10):1412–3. Comment on: Ophthalmology 1995 May;102(5):733–6.

RADIATION EFFECTS

Interaction between infrared radiation and vitreous substitutes. Azzolini C, et al. **Arch Ophthalmol** 1997 Jul; 115(7):899–903

THERAPEUTIC USE

Perfluorodecalin and silicone oil used to achieve retinal tamponade left in an eye for 6 months [letter] Geh VS, et al. **Br J Ophthalmol** 1997 Mar;81(3):252–3

Retinal detachment in AIDS: long–term results after repair with silicone oil [see comments] Irvine AR, et al. **Br J Ophthalmol** 1997 Mar;81(3):180–3. Comment in: Br J Ophthalmol 1997 Mar;81(3):177–8.

Temporary silicone oil tamponade and intraocular pressure: an 11–year retrospective study. Gonvers M, et al. **Eur J Ophthalmol** 1996 Jan–Mar;6(1):74–80

Silicone cream occlusive dressing in postoperative care of chemical peels [letter] Shariat S. **Int J Dermatol** 1997 Jun; 36(6):475

Ultrasound biomicroscopy following the intraocular use of silicone oil. Azzolini C, et al. **Int Ophthalmol** 1995–96; 19(3):191–5

Silicone oil for recurrent vitreous hemorrhage in previously vitrectomized diabetic eyes. Bodanowitz S, et al. **Ophthalmologica** 1997;211(4):219–22

[A comparison of attachment rates between SF6 and silicone oil tamponades following vitrectomy for treatment of complicated retinal detachment] Li x, et al. **Chung Hua Yen Ko Tsa Chih** 1995 Jul;31(4):250–4 (Eng. Abstr.) **(Chi)**

TOXICITY

Zinc is a possible toxic contaminant of silicone oil in microdrop cultures of preimplantation mouse embryos. Erbach GT, et al. **Hum Reprod** 1995 Dec;10(12):3248–54

SILICONE RUBBER see **SILICONE ELASTOMERS**

SILICONES

Pelvic silicone prosthesis for prevention of radiation enteritis: US and CT features. Nguyen BD, et al. **Abdom Imaging** 1997 Mar–Apr;22(2):175–7

Chest wall implants: their use for pectus excavatum, pectoralis muscle tears, Poland's syndrome, and muscular insufficiency. Hodgkinson DJ. **Aesthetic Plast Surg** 1997 Jan–Feb;21(1):7–15

Textured surface silicone breast implants: histology in the human. Lesesne CB. **Aesthetic Plast Surg** 1997 Mar–Apr; 21(2):93–6

Ruptured or intact: what can linear echoes within silicone breast implants tell us? Palmon LU, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1595–8

Clinical assessment of long–term safety and efficacy of a widely implanted silicone intraocular lens material. Steinert RF, et al. **Am J Ophthalmol** 1997 Jan;123(1):17–23

Epidemiology of silicone breast implants [letter; comment] Whysner J. **Ann Intern Med** 1997 Apr 15;126(8):667–8. Comment on: Ann Intern Med 1996 Apr 15;124(8):744–56.

Chemoprophylaxis of fungal deterioration of the Provox silicone tracheoesophageal prosthesis in postlaryngectomy patients. van Weissenbruch R, et al. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):329–37

Effectiveness of silicone sheets in the prevention of hypertrophic breast scars [see comments] Cruz–Korchin NI. **Ann Plast Surg** 1996 Oct;37(4):345–8. Comment in: Ann Plast Surg 1997 May;38(5):547.

Poland's deformity reconstructions with a customized, extrasoft silicone prosthesis. Gatti JE. **Ann Plast Surg** 1997 Aug;39(2):122–30

Candida albicans infection of bilateral polyurethane–coated silicone gel breast implants. Niazi ZB, et al. **Ann Plast Surg** 1996 Jul;37(1):91–3

Re: Effectiveness of silicone sheets in the prevention of hypertrophic breast scars [letter; comment] Niessen FB. **Ann Plast Surg** 1997 May;38(5):547. Comment on: Ann Plast Surg 1996 Oct;37(4):345–8.

An outcome analysis of 100 women after explantation of silicone gel breast implants. Peters W, et al. **Ann Plast Surg** 1997 Jul;39(1):9–19

Spontaneous autoinflation of saline mammary implants. Robinson OG Jr, et al. **Ann Plast Surg** 1997 Aug; 39(2):114–8; discussion 118–21

The American College of Rheumatology statement on silicone breast implants represents a consensus [letter] Rosenbaum J. **Arthritis Rheum** 1996 Oct;39(10):1765

Analytic review of the scientific literature on silicone immune responses: comment on the article by Marcus [letter] Smalley DL, et al. **Arthritis Rheum** 1997 Sep;40(9):1730–2

Development of an intravascular pumping oxygenator using a new silicone membrane. Sueda T, et al. **Artif Organs** 1997 Jan;21(1):75–8

Safety of silicone liquid in the postoperative management of Dupuytren's contracture. Thurston AJ. **Aust N Z J Surg** 1997 Jun;67(6):347–50

Two products for siliconizing glass plates used in gel electrophoresis. Elsom BL, et al. **Biotechniques** 1997 May; 22(5):866–8

A newly developed collagen/silicone bilayer membrane as a mucosal substitute: a preliminary report. Omura S, et al. **Br J Oral Maxillofac Surg** 1997 Apr;35(2):85–91

Textured or smooth implants for breast augmentation? Three year follow–up of a prospective randomised controlled trial. Malata CM, et al. **Br J Plast Surg** 1997 Feb; 50(2):99–105

Peripheral nerve regeneration through silicone chambers in streptozocin–induced diabetic rats. Tantuwaya VS, et al. **Brain Res** 1997 Jun 6;759(1):58–66

Silicone breast implants and renal contrast agent: iatrogenic sources of "increased" bone density. Karimeddini MK, et al. **Clin Nucl Med** 1996 Nov;21(11):889–90

Distal interphalangeal joint silicone interpositional arthroplasty of the hand. Wilgis EF. **Clin Orthop** 1997 Sep; (342):38–41

Silicone gel sheeting for the management of hypertrophic and keloid scars: the mechanism of its action [letter; comment] Beranek JT. **Dermatol Surg** 1997 May; 23(5):403–4. Comment on: Dermatol Surg 1995 Nov;21(11):947–51.

Cytokine mRNA changes during the treatment of hypertrophic scars with silicone and nonsilicone gel dressings. Ricketts CH, et al. **Dermatol Surg** 1996 Nov; 22(11):955–9

Arthrodesis of the first metatarsophalangeal joint to salvage failed silicone implant arthroplasty. Hecht PJ, et al. **Foot Ankle Int** 1997 Jul;18(7):383–90 (63 ref.)

Laparoscopic adjustable silicone gastric banding in the treatment of super obesity in the Jeddah area, Saudi Arabia. A preliminary report. Ashy AA, et al. **Int Surg** 1996 Jul–Sep;81(3):289–91 (16 ref.)

Efficacy of silicone punctal plugs as adjuncts to topical pharmacotherapy of glaucoma--a pilot study. Punctal Plugs in Glaucoma Study Group. Bartlett JD, et al. **J Am Optom Assoc** 1996 Nov;67(11):664–8

Adhesion to silicone rubber of yeasts and bacteria isolated from voice prostheses: influence of salivary conditioning films. Busscher HJ, et al. **J Biomed Mater Res** 1997 Feb; 34(2):201–9

Adhesion of staphylococci to polymers with and without immobilized heparin in cerebrospinal fluid. Nomura S, et al. **J Biomed Mater Res** 1997 Spring;38(1):35–42

Silicone suspension of external prostheses. A new era in artificial limb usage. Heim M, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):638–40

Silicone-covered forceps for rigid intraocular lens implantation. Kohnen T. **J Cataract Refract Surg** 1997 Jan–Feb;23(1):32–3

Autogenous fibular graft and silicone implant arthroplasty following resection of giant cell tumor of the metacarpal: a report of two cases. Athanasian EA, et al. **J Hand Surg [Am]** 1997 May;22(3):504–7

High implant fracture incidence with Sutter silicone metacarpophalangeal joint arthroplasty. Bass RL, et al. **J Hand Surg [Am]** 1996 Sep;21(5):813–8

Candida infection of a silicone metacarpophalangeal arthroplasty. Dunkley AB, et al. **J Hand Surg [Br]** 1997 Jun;22(3):423–4

A new type of "bioartificial" nerve graft for bridging extended defects in nerves. Lundborg G, et al. **J Hand Surg [Br]** 1997 Jun;22(3):299–303

Long-term follow-up of 50 Duke silicone prosthetic fingers. O'Farrell DA, et al. **J Hand Surg [Br]** 1996 Oct; 21(5):696–700

Silicone breast implants. Can emerging medical, legal, and scientific concepts be reconciled? Snyder JW. **J Leg Med** 1997 Jun;18(2):133–220 (421 ref.)

MR imaging of silicone breast implants: evaluation of prospective and retrospective interpretations and interobserver agreement. Quinn SF, et al. **J Magn Reson Imaging** 1996 Jan–Feb;6(1):213–8

Retention of Candida albicans on acrylic resin and silicone of different surface topography. Verran J, et al. **J Prosthet Dent** 1997 May;77(5):535–9

Silicone breast implants and breast feeding [letter; comment] Epstein WA. **J Rheumatol** 1997 May;24(5):1013–4; discussion 1014–5. Comment on: J Rheumatol 1996 Jun;23(6):1083–7.

Silicone breast implants and breast feeding [letter; comment] Hoshaw SJ, et al. **J Rheumatol** 1997 May;24(5):1014; discussion 1014–5. Comment on: J Rheumatol 1996 Jun;23(6):1083–7.

Silicone breast implants: implications for society and surgeons [see comments] Renwick SB. **Med J Aust** 1996 Sep 16; 165(6):338–41. Comment in: Med J Aust 1997 Jun 2;166(11):615–6.

Visualization of silicone gel in human breast tissue using new infrared imaging spectroscopy. Kidder LH, et al. **Nat Med** 1997 Feb;3(2):235–7

Silicone breast implants and neurologic disorders. Report of the Practice Committee of the American Academy of Neurology. Ferguson JH. **Neurology** 1997 Jun;48(6):1504–7 (16 ref.)

Use of a modified monocanalicular silicone stent in 33 eyelids. Mauriello JA Jr, et al. **Ophthalmic Surg Lasers** 1996 Nov; 27(11):929–34

Contrast sensitivity in patients with silicone intraocular lenses. Mäntyjärvi M, et al. **Ophthalmologica** 1997; 211(4):214–8

An in vitro study of silicone migration from intravenous fluid tubing. Dewan PA, et al. **Pediatr Surg Int** 1997;12(1):49–53

Microbial evaluation: 139 implants removed from symptomatic patients. Ahn CY, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1225–9

Breast implants [letter] Archer RR. **Plast Reconstr Surg** 1997 Aug;100(2):555

Silicone breast implants and drug-induced arthralgia [letter] Cadier MA, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1464

Assessment and longevity of the silicone gel breast implant. Cohen BE, et al. **Plast Reconstr Surg** 1997 May; 99(6):1597–601

Failed implant versus silicone bleed [letter; comment] Dowden R, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1323 . Comment on: Plast Reconstr Surg 1996 Jan;97(1):104–9.

Mechanical analysis of explanted silicone breast implants [letter; comment] Greenwald DP, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2117. Comment on: Plast Reconstr Surg 1996 Aug;98(2):269–72; discussion 273–5.

Unusual masses found within ruptured silicone gel breast prostheses. Hughes KC, et al. **Plast Reconstr Surg** 1997 Aug;100(2):525–8

Gel bleed and gel migration [editorial] Puckett CL. **Plast Reconstr Surg** 1997 Apr;99(5):1410

Outcome study of the psychological changes after silicone breast implant removal. Roberts C, et al. **Plast Reconstr Surg** 1997 Sep;100(3):595–9

Determining the safety of the silicone envelope: in search of a silicone antibody [letter] Rohrich RJ, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1472

T-cell-specific response to silicone gel [letter; comment] Smalley DL, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):915–6. Comment on: Plast Reconstr Surg 1995 Aug;96(2):371–80.

Transjugular intrahepatic portosystemic shunt with silicone-covered Wallstents: results in a swine model. Tanihata H, et al. **Radiology** 1997 Oct;205(1):181–4

Biocompatibility of latex and silicone T tubes in the porcine common bile duct: an experimental study. Koivusalo A, et al. **Res Exp Med (Berl)** 1996;196(1):53–66

Functional regeneration of C-fibres inside a silicone tube after sciatic neurotomy in rats. Hansson T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar; 31(1):7–11

Bioartificial nerve grafts. A prototype. Lundborg G, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Jun; 30(2):105–10

Bioartificial nerve grafts based on absorbable guiding filament structures--early observations. Terada N, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar;31(1):1–6

Patterned delivery of immunoglobulins to surfaces using microfluidic networks. Delamarche E, et al. **Science** 1997 May 2;276(5313):779–81

Lessons from litigation over silicone breast implants: a call for activism by scientists. Rosenbaum JT. **Science** 1997 Jun 6;276(5318):1524–5

Vacuum delivery at The Maternity Hospital Kuala Lumpur: a comparison of metal and silicone cups. Lee HY, et al. **Singapore Med J** 1996 Feb;37(1):55–60

Use of an intratracheal silicone prosthesis (Dumon type) for the treatment of tracheoesophageal fistula due to advanced lung cancer. Kawashima O, et al. **Surg Today** 1996; 26(11):915–8

[Femoral indwelling silicone catheter: experience of three hemodialysis centers] Montagnac R, et al. **Nephrologie** 1996;17(8):447–52 (Eng. Abstr.) **(Fre)**

[Contrast vision and contrast sensitivity after binocular implantation of multifocal or monofocal intraocular lenses] Breitkopf J, et al. **Ophthalmologe** 1997 Jul;94(7):519–22 (Eng. Abstr.) **(Ger)**

[Experimental experiences with balloon-shaped capsular sac implantation with reference to accommodation outcome in intraocular lenses] Hettlich HJ, et al. **Ophthalmologe** 1996 Feb;93(1):73–5 (Eng. Abstr.) **(Ger)**

[6 months results of a randomized multicenter study comparing 2 silicone intraocular lenses with a PMMA intraocular lens] Klemen UM. **Ophthalmologe** 1996 Feb; 93(1):29–32 (Eng. Abstr.) **(Ger)**

[Intascleral silicone prosthesis in the dog: a retrospective study of 22 cases] Ruoss E, et al. **Tierarztl Prax** 1997 Apr; 25(2):164–9 (Eng. Abstr.) **(Ger)**

[How objective is clinical determination of cervix consistency?] Machui O, et al. **Z Geburtshilfe Neonatol** 1996 Jul–Aug;200(4):155–60 (Eng. Abstr.) **(Ger)**

[Postintubation stenosis of the trachea treated by silicone stent implantation] Strausz J. **Orv Hetil** 1996 Jul 14; 137(28):1515–7 (Eng. Abstr.) **(Hun)**

[An experimental study of a newly developed silicone coated membrane oxygenator] Iida M. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May;45(5):700–10 (Eng. Abstr.) **(Jpn)**

[Use of silicone stents for tracheobronchial stenosis due to tumors] Nomori H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May;45(5):666–9 (Eng. Abstr.) **(Jpn)**

[Scrotal granuloma caused by oil migrating from the hip in 2 transsexual males (scrotal sclerosing lipogranuloma)] Fariña LA, et al. **Arch Esp Urol** 1997 Jan–Feb;50(1):51–3 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Controlling the capsular shape in lens refilling. Nishi O, et al. **Arch Ophthalmol** 1997 Apr;115(4):507–10

A comparison of Sil-K and Epiderm in scar management. Lee SM, et al. **Burns** 1996 Sep;22(6):483–7

Silicone cream occlusive dressing--a novel noninvasive regimen in the treatment of keloid. Wong TW, et al. **Dermatology** 1996;192(4):329–33

ADVERSE EFFECTS

Immediate reaugmentation of the breasts using bilaterally divided TRAM flaps after removing injected silicone gel and granulomas. Aoki R, et al. **Aesthetic Plast Surg** 1997 Jul–Aug;21(4):276–9

Inflammatory reaction and capsular contracture around smooth silicone implants. Carpaneda CA. **Aesthetic Plast Surg** 1997 Mar–Apr;21(2):110–4

Autoimmunity after silicone breast implants [editorial; comment] Claman HN. **Ann Allergy Asthma Immunol** 1997 Aug;79(2):89–90. Comment on: Ann Allergy Asthma Immunol 1997 Aug;79(2):151–4.

Cellular immune reactivities in women with silicone breast implants: a preliminary investigation [see comments] Ellis TM, et al. **Ann Allergy Asthma Immunol** 1997 Aug; 79(2):151–4. Comment in: Ann Allergy Asthma Immunol 1997 Aug;79(2):89–90.

Comparison of soft tissue response in rabbits following laryngeal implantation with hydroxylapatite, silicone rubber, and Teflon. Flint PW, et al. **Ann Otol Rhinol Laryngol** 1997 May;106(5):399–407

An analytical review of silicone immunology [see comments] Marcus DM. **Arthritis Rheum** 1996 Oct;39(10):1619–26 (75 ref.). Comment in: Arthritis Rheum 1996 Oct;39(10):1615–8.

The silicone breast implant controversy: the other courtroom [editorial; comment] [see comments] Rose NR. **Arthritis Rheum** 1996 Oct;39(10):1615–8. Comment on: Arthritis Rheum 1996 Oct;39(10):1619–26. Comment in: Arthritis Rheum 1997 Aug;40(8):1545.

Clinical experience with systemic illness in women with silicone breast implants: comment on the editorial by Rose [letter; comment] Vasey FB. **Arthritis Rheum** 1997 Aug; 40(8):1545. Comment on: Arthritis Rheum 1996 Oct;39(10):1615–8.

Scleroderma and silicone gel breast prostheses--the Sydney study revisited [see comments] Englert H, et al. **Aust N Z J Med** 1996 Jun;26(3):349–55. Comment in: Aust N Z J Med 1996 Jun;26(3):341–2.

Silicone? Silica? Scleroderma. A need to look further? [letter; comment] Englert M, et al. **Aust N Z J Med** 1996 Dec; 26(6):858. Comment on: Aust N Z J Med 1996 Jun;26(3):341–2.

Silicone breast implants--where have we been and where are we now? [editorial; comment] [see comments] Gatenby PA. **Aust N Z J Med** 1996 Jun;26(3):341–2. Comment on: Aust N Z J Med 1996 Jun;26(3):349–55. Comment in: Aust N Z J Med 1996 Dec;26(6):858.

Characterization of cellular response to silicone implants in rats: implications for foreign-body carcinogenesis. James SJ, et al. **Biomaterials** 1997 May;18(9):667–75

A review of the possible health implications of silicone breast implants. Noone RB. **Cancer** 1997 May 1;79(9):1747–56 (88 ref.)

Phenotype of lymphocytes associated with the inflammatory reaction to silicone gel breast implants. Katzin WE, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):156–61

Silicate antibodies in women with silicone breast implants: development of an assay for detection of humoral immunity. Shen GQ, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):162–6

Allergy to silicone: is it real? Finegold I. **Compr Ther** 1996 Jun;22(6):393–8 (36 ref.)

Necrobiosis lipoidica and silicotic granulomas on Muller's phlebectomy scars. Vion B, et al. **Dermatology** 1997; 194(1):55–8

The value of MRI in silicone granuloma of the breast. Helbich TH, et al. **Eur J Radiol** 1997 Feb;24(2):155–8

The silicone controversy [letter] Reed MJ. **Immunol Today** 1996 Mar;17(3):147

Morphea after silicone gel breast implantation for cosmetic reasons in an HLA-B8, DR3-positive woman. Di Lorenzo G, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):93–5

Silicone granuloma in acral skin in a patient with silicone-gel breast implants and systemic sclerosis. Anderson DR, et al. **Int J Dermatol** 1996 Jan;35(1):36–8

The epidemiology of scleroderma among women: assessment of risk from exposure to silicone and silica. Burns CJ, et al. **J Rheumatol** 1996 Nov;23(11):1904–11

Scuba diving: a new risk for lung fibrosis and connective tissue disease? [letter] Koeger AC, et al. **J Rheumatol** 1996 Nov;23(11):2010

Epidemiology of scleroderma among women: assessment of risk from exposure to silicone and silica [letter] Koeger AC, et al. **J Rheumatol** 1997 Sep;24(9):1853–5

Increased urinary NO3(-) + NO2- and neopterin excretion in children breast fed by mothers with silicone breast implants: evidence for macrophage activation [see comments] Levine JJ, et al. **J Rheumatol** 1996 Jun; 23(6):1083–7. Comment in: J Rheumatol 1997 May;24(5):1013–4; discussion 1014–5. Comment in: J Rheumatol 1997 May;24(5):1014; discussion 1014–5.

Development of polyarthritis after insertion of silicone breast implants followed by remission after implant removal in 2 HLA-identical sisters bearing rheumatoid arthritis susceptibility genes. Meier LG, et al. **J Rheumatol** 1997 Sep;24(9):1838–41

Position 26 of the first domain of the HLA-DQB1 allele in post-silicone implant scleroderma. Morse JH, et al. **J Rheumatol** 1995 Oct;22(10):1872–5

Characteristics of women with and without breast implants [letter] Stewart MW, et al. **JAMA** 1997 Sep 10; 278(10):818–9

Antipolymer antibodies, silicone breast implants, and fibromyalgia [letter; comment] Angell M. **Lancet** 1997 Apr 19;349(9059):1171–2; discussion 1172–3. Comment on: Lancet 1997 Feb 15;349(9050):449–54.

Antipolymer antibodies, silicone breast implants, and fibromyalgia [letter; comment] Edlavitch SA. **Lancet** 1997 Apr 19;349(9059):1170. Comment on: Lancet 1997 Feb 15;349(9050):449–54.

SILICONES

Antipolymer antibodies, silicone breast implants, and fibromyalgia [letter] Ellis TM, et al. **Lancet** 1997 Apr 19; 349(9059):1173

Antipolymer antibodies, silicone breast implants, and fibromyalgia [letter; comment] Everson MP, et al. **Lancet** 1997 Apr 19;349(9059):1171; discussion 1172–3. Comment on: Lancet 1997 Feb 15;349(9050):449–54.

Antipolymer antibodies, silicone breast implants, and fibromyalgia [letter; comment] Korn JH. **Lancet** 1997 Apr 19;349(9059):1171. Comment on: Lancet 1997 Feb 15;349(9050):449–54.

Antipolymer antibodies, silicone breast implants, and fibromyalgia [letter; comment] Lamm SH. **Lancet** 1997 Apr 19;349(9059):1170–1; discussion 1172–3. Comment on: Lancet 1997 Feb 15;349(9050):449–54.

Use of antipolymer antibody assay in recipients of silicone breast implants [see comments] [published erratum appears in Lancet 1997 May 24;349(9064):1558] Tenenbaum SA, et al. **Lancet** 1997 Feb 15;349(9050):449–54. Comment in: Lancet 1997 Apr 19;349(9059):1170. Comment in: Lancet 1997 Apr 19;349(9059):1170–1; discussion 1172–3. Comment in: Lancet 1997 Apr 19;349(9059):1171. Comment in: Lancet 1997 Apr 19;349(9059):1171; discussion 1172–3. Comment in: Lancet 1997 Apr 19;349(9059):1171–2; discussion 1172–3.

Neurosarcoidosis following augmentation mammoplasty with silicone. Yoshida T, et al. **Neurol Res** 1996 Aug; 18(4):319–20

Skin test for silicone implants [letter] Atabey A, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1316–7

Lack of evidence of systemic inflammatory rheumatic disorders in symptomatic women with breast implants. Blackburn WD Jr, et al. **Plast Reconstr Surg** 1997 Apr; 99(4):1054–60

Silicone-associated rheumatic disease: an unsupported myth. Blackburn WD Jr, et al. **Plast Reconstr Surg** 1997 Apr; 99(5):1362–7 (45 ref.)

Silicone gel and hypersensitivity [letter; comment] Everson MP, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1324–5. Comment on: Plast Reconstr Surg 1995 Aug;96(2):371–80.

Synovitis and silicone joint implants: a summary of reported cases. Foliart DE. **Plast Reconstr Surg** 1997 Jan; 99(1):245–52 (59 ref.)

Silicone breast implant safety: physical, chemical, and biologic problems [letter] Goldberg EP. **Plast Reconstr Surg** 1997 Jan;99(1):258–61

Internal mammary silicone lymphadenopathy mimicking recurrent breast cancer. Kao CC, et al. **Plast Reconstr Surg** 1997 Jan;99(1):225–9

Carcinogenic potential of silicone breast implants: a Connecticut statewide study. Kern KA, et al. **Plast Reconstr Surg** 1997 Sep;100(3):737–47; discussion 748–9

Labial incompetence: a marker for progressive bone resorption in silastic chin augmentation. Matarasso A, et al. **Plast Reconstr Surg** 1996 Nov;98(6):1007–14; discussion 1015

Silicone implants: aesthetic triumph or surgical disaster? [editorial] Melmed EP. **Plast Reconstr Surg** 1996 Nov; 98(6):1071–3

The absence of esophageal lesions in maternal progeny of silicone-injected rats [letter] Rasco DS, et al. **Plast Reconstr Surg** 1997 May;99(6):1784–5

Augmenting discord [news] Nemecek S. **Sci Am** 1996 Apr; 274(4):36, 38

Breast-implant ruling sends a message [news] Kaiser J. **Science** 1997 Jan 3;275(5296):21

Chest wall fibromatosis associated with silicone breast implants. Aaron AD, et al. **Surg Oncol** 1996 Apr;5(2):93–9

Silicone breast implants: pathology. Raso DS, et al. **Ultrastruct Pathol** 1997 May–Jun;21(3):263–71 (46 ref.)

Autoimmune reactions in patients with silicone breast implants [see comments] Zazgornik J, et al. **Wien Klin Wochenschr** 1996 Dec 27;108(24):781–7. Comment in: Wien Klin Wochenschr 1996 Dec 27;108(24):773–4.

[Silicone breast implants and breast cancer (see comments)] Kjøller KH, et al. **Ugeskr Laeger** 1997 Mar 17; 159(12):1744–8 (37 ref.) (Eng. Abstr.). Comment in: Ugeskr Laeger 1997 Jul 7;159(28):4410–1. **(Dan)**

[Silicone breast implants and connective tissue diseases (letter; comment)] Zachariae H. **Ugeskr Laeger** 1997 Jul 7; 159(28):4410–1. Comment on: Ugeskr Laeger 1997 Mar 17;159(12):1740–3. Comment on: Ugeskr Laeger 1997 Mar 17;159(12):1744–8. **(Dan)**

[Axillary silicon lymphadenopathy after breast augmentation] Falk S, et al. **Geburtshilfe Frauenheilkd** 1996 Jan;56(1):55–7 (Eng. Abstr.) **(Ger)**

[Once again the silicone dilemma: only a Cleopatra syndrome? (editorial; comment)] **Wien Klin Wochenschr** 1996 Dec 27;108(24):773–4. Comment on: Wien Klin Wochenschr 1996 Dec 27;108(24):781–7. **(Ger)**

[Physiologic and pathologic patterns of reaction to silicone breast implants] Friemann J, et al. **Zentralbl Chir** 1997; 122(7):551–64 (Eng. Abstr.) **(Ger)**

[Silicone and disease: myth or reality? (editorial)] Martínez Castejón R, et al. **Med Clin (Barc)** 1997 Jun 21;109(4):135–6 **(Spa)**

ANALYSIS

Multinuclear solid-state NMR spectroscopy of envelopes from virgin and explanted silicone breast prostheses: an exploratory study. Picard F, et al. **Magn Reson Med** 1997 Jan;37(1):11–7

Silicone gel-filled breast implants in women: findings at H-1 MR spectroscopy. Pfleiderer B, et al. **Radiology** 1996 Dec; 201(3):777–83

CHEMISTRY

Silicone rubber-hydrogel composites as polymeric biomaterials. IX. Composites containing powdery polyacrylamide hydrogel. Hron P, et al. **Biomaterials** 1997 Aug;18(15):1069–73

Physico-chemical properties of a rifampicin-releasing polydimethylsiloxane shunt. Schierholz JM. **Biomaterials** 1997 Apr;18(8):635–41

l-Menthol, oleic acid and lauricidin in absorption enhancement of free and sodium salt of diclofenac using ethanol treated silicone membrane as model for skin. Maitani Y, et al. **Chem Pharm Bull (Tokyo)** 1996 Feb; 44(2):403–8

Novel functional polymers: poly(dimethylsiloxane)-polyamide multiblock copolymer. V. The interaction between biomolecules and the surface of aramid-silicone resins. Furuzono T, et al. **J Biomater Sci Polym Ed** 1996;7(10):871–80

Theoretical analysis of hydrolysis of polydimethylsiloxane (PDMS). West JK. **J Biomed Mater Res** 1997 Jun 15; 35(4):505–11

Comparative studies on the interaction of proteins with a polydimethylsiloxane elastomer. I. Monolayer protein capture capacity (PCC) as a function of protein pl, buffer pH and buffer ionic strength. Butler JE, et al. **J Mol Recognit** 1997 Jan-Feb;10(1):36–51

Comparative studies on the interaction of proteins with a polydimethylsiloxane elastomer. II. The comparative antigenicity of primary and secondarily adsorbed IgG1 and IgG2a and their non-adsorbed counterparts. Butler JE, et al. **J Mol Recognit** 1997 Jan-Feb;10(1):52–62

Lased and sandblasted denture base surface preparations affecting resilient liner bonding. Jacobsen NL, et al. **J Prosthet Dent** 1997 Aug;78(2):153–8

The effect of a surface wetting agent on void formation in impressions. Millar BJ, et al. **J Prosthet Dent** 1997 Jan; 77(1):54–6

Antimicrobial activity and biocompatibility of polyurethane and silicone catheters containing low concentrations of silver: a new perspective in prevention of polymer-associated foreign-body-infections. Böswald M, et al. **Zentralbl Bakteriol** 1995 Dec;283(2):187–200

Drug delivery concepts for the efficacious prevention of foreign-body infections. Schierholz JM, et al. **Zentralbl Bakteriol** 1996 Jul;284(2-3):390–401

DIAGNOSTIC USE

The effects of bolus size and chewing rate on masticatory performance with artificial test foods. Buschang PH, et al. **J Oral Rehabil** 1997 Jul;24(7):522–6

METABOLISM

Biodegradation of dimethylsilanediol in soils. Sabourin CL, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4352–60

Thyroplasty type I with ceramic shim. Sakai N, et al. **Artif Organs** 1996 Aug;20(8):951–4

Comparative studies on the interaction of proteins with a polydimethylsiloxane elastomer. I. Monolayer protein capture capacity (PCC) as a function of protein pl, buffer pH and buffer ionic strength. Butler JE, et al. **J Mol Recognit** 1997 Jan-Feb;10(1):36–51

Comparative studies on the interaction of proteins with a polydimethylsiloxane elastomer. II. The comparative antigenicity of primary and secondarily adsorbed IgG1 and IgG2a and their non-adsorbed counterparts. Butler JE, et al. **J Mol Recognit** 1997 Jan-Feb;10(1):52–62

29Si NMR and blood silicon levels in silicone gel breast implant recipients [letter; comment] Taylor RB, et al. **Magn Reson Med** 1996 Sep;36(3):498–501. Comment on: Magn Reson Med 1993 Jun;29(6):839–43. Comment on: Magn Reson Med 1993 Nov;30(5):534–43. Comment on: Magn Reson Med 1994 Mar;31(3):328–30.

PHARMACOKINETICS

Silicon tissue assay: are there intracapsular variations? Evans GR, et al. **Ann Plast Surg** 1996 Dec;37(6):592–5

PHARMACOLOGY

Quantitative analysis of fibroblast morphology on microgrooved surfaces with various groove and ridge dimensions. den Braber ET, et al. **Biomaterials** 1996 Nov; 17(21):2037–44

Does silicone in any form have adjuvancy potential [letter] Brent J, et al. **Immunol Invest** 1997 Jun;26(4):505–8

Silicone does not potentiate development of the scleroderma-like syndrome in tight skin (TSK/+) mice. Frondoza C, et al. **J Autoimmun** 1996 Aug;9(4):473–83

THERAPEUTIC USE

Stress incontinence [letter; comment] Foley SJ, et al. **Br J Urol** 1997 Apr;79(4):661. Comment on: Br J Urol 1996 Nov;78(5):722–5; discussion 726–8.

Peri-urethral silicone microimplants (Macroplastique) for the treatment of genuine stress incontinence [see comments] Harriss DR, et al. **Br J Urol** 1996 Nov;78(5):722–5; discussion 726–8. Comment in: Br J Urol 1997 Apr;79(4):661.

A comparative study of silicone net dressing and paraffin gauze dressing in skin-grafted sites. Platt AJ, et al. **Burns** 1996 Nov;22(7):543–5

[Peri-ureteral injections for stress urinary incontinence] Haab F. **Prog Urol** 1997 Apr;7(2):293–6 (15 ref.) **(Fre)**

[The stabilizing effect of enterosgel on the structural bases of membrane digestion and absorption in the small intestine in severe thermal skin burns] Pasechka NV. **Fiziol Zh** 1996; 42(5-6):94–100 (Eng. Abstr.) **(Ukr)**

TOXICITY

Characterization of cellular response to silicone implants in rats: implications for foreign-body carcinogenesis. James SJ, et al. **Biomaterials** 1997 May;18(9):667–75

Tissue response to commercial silicone and polyurethane elastomers after different sterilization procedures. Zhang YZ, et al. **Biomaterials** 1996 Dec;17(23):2265–72

SILICOSIS

Silicosis in the 1990s, revisited [editorial; comment] Banks DE, et al. **Chest** 1997 Apr;111(4):837–8. Comment on: Chest 1997 Mar;111(3):779–86.

Asbestosis and silicosis. Wagner GR. **Lancet** 1997 May 3; 349(9061):1311–5 (36 ref.)

Silicosis and lung cancer among workers in North Carolina dusty trades. Amandus HE, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:81–3

Policy development for compensating workers exposed to crystalline silica in Ontario, Canada. Elinson L, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:111–4 (14 ref.)

Silicosis surveillance in Ontario from 1979 to 1992. Finkelstein MM. **Scand J Work Environ Health** 1995;21 Suppl 2:55–7

Future research needs in the silica, silicosis and cancer field. Goldsmith DF, et al. **Scand J Work Environ Health** 1995; 21 Suppl 2:115–7 (32 ref.)

COMPLICATIONS

Progressive massive fibrosis in the absence of lung nodulation. McCloskey M, et al. **Australas Radiol** 1997 Feb; 41(1):63–4

Cancer mortality among silicotics in China's metallurgical industry. Wang Z, et al. **Int J Epidemiol** 1996 Oct; 25(5):913–7

Graves' disease after silica dust exposure [letter] Koeger AC, et al. **J Rheumatol** 1996 Jan;23(1):202

Lupus-like autoimmune disease associated with silicosis. Wilke RA, et al. **Nephrol Dial Transplant** 1996 Sep; 11(9):1835–8

Systemic lupus erythematosus arising in a patient with chronic silicosis [letter] Ozoran K, et al. **Rheumatol Int** 1997;16(5):217–8

Evaluation of crystalline silica as a threshold carcinogen. Klein AK, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:95–8 (40 ref.)

Silicosis presenting as bilateral hilar lymphadenopathy. Baldwin DR, et al. **Thorax** 1996 Nov;51(11):1165–7

[Erasmus syndrome: clinical, tomographic, respiratory function and bronchoalveolar lavage characteristics] Cointrel C, et al. **Rev Mal Respir** 1997 Jan;14(1):21–6 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Cytotoxicity to macrophages of tetrandrine, an antisilicosis alkaloid, accompanied by an overproduction of prostaglandins [published erratum appears in Biochem Pharmacol 1997 Jun 15;53(12):1946] Pang L, et al. **Biochem Pharmacol** 1997 Mar 21;53(6):773–82

Subchronic pulmonary inflammation and fibrosis induced by silica in rats are attenuated by amiodarone. Blake TL, et al. **Exp Lung Res** 1996 Jan-Feb;22(1):113–31

EPIDEMIOLOGY

Silicosis among foundry workers. Implication for the need to revise the OSHA standard. Rosenman KD, et al. **Am J Epidemiol** 1996 Nov 1;144(9):890–900

Risk of silicosis in a Colorado mining community. Kreiss K, et al. **Am J Ind Med** 1996 Nov;30(5):529–39

Silicosis in the 1990s [see comments] Rosenman KD, et al. **Chest** 1997 Mar;111(3):779–86. Comment in: Chest 1997 Apr;111(4):837–8.

Healthy worker effect in a longitudinal study of one-second forced expiratory volume (FEV1) and chronic exposure to granite dust. Eisen EA, et al. **Int J Epidemiol** 1995 Dec; 24(6):1154–61

Silicosis and pulmonary tuberculosis in stone-grinding factories in Saraburi, Thailand. Aungkasuvapala N, et al. **J Med Assoc Thai** 1995 Dec;78(12):662–9

Surveillance for silicosis, 1993—Illinois, Michigan, New Jersey, North Carolina, Ohio, Texas, and Wisconsin. Maxfield R, et al. **MMWR CDC Surveill Summ** 1997 Jan 31;46(1):13–28

Incidence of silicosis among ceramic workers in central Italy. Cavariani F, et al. **Scand J Work Environ Health** 1995;21

Suppl 2:58–62
Silica, silicosis and cancer in Finland. Partanen T, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:84–6
Assessment of silicosis risk for occupational exposure to crystalline silica. Rice FL, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:87–90 (27 ref.)

ETIOLOGY

Sicca syndrome and silicoproteinosis in a dental technician. Orriols R, et al. **Eur Respir J** 1997 Mar;10(3):731–4
Connective tissue disease due to intentional inhalation of scouring powder. Vincent M, et al. **Eur Respir J** 1996 Dec; 9(12):2688–90
Does the human cornea contain silicon? Schrage NF, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S106–9
Healthy worker effect in a longitudinal study of one-second forced expiratory volume (FEV1) and chronic exposure to granite dust. Eisen EA, et al. **Int J Epidemiol** 1995 Dec; 24(6):1154–61
Al Eskan disease: Persian Gulf syndrome [see comments] Korényi-Both AL, et al. **Mil Med** 1997 Jan;162(1):1–13 (75 ref.). Comment in: Mil Med 1997 Mar;162(3):ii.
Mathematical model of phagocytosis and inflammation after the inhalation of quartz at different concentrations. Tran CL, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:50–4
Scleroderma secondary to silica exposure—a case report. Anandan S, et al. **Singapore Med J** 1995 Oct;36(5):559–61

GENETICS

[Role of genetic factors in the etiology of silicosis] Gorbatovskii IaA, et al. **Med Tr Prom Ekol** 1996;(7):13–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

T-lymphocyte activation in the enlarged thoracic lymph nodes of rats with silicosis. Garn H, et al. **Am J Respir Cell Mol Biol** 1997 Mar;16(3):309–16
Photosensitivity and autoantibodies to Sm, Ro, and La in a patient with silicosis [letter] Vidaller A, et al. **Int J Dermatol** 1996 Sep;35(9):679–80 (10 ref.)
A chemoattractant cytokine associated with granulomas in tuberculosis and silicosis. Nau GJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6414–9
Antineutrophil cytoplasm antibodies in patients with silicosis. Cojocaru M, et al. **Rom J Intern Med** 1996 Jul–Dec; 34(3–4):233–7
[The analysis of peripheral blood lymphocytes of patients with silicosis and effects of silica in vitro] Yamaguchi M, et al. **Sangyo Eiseigaku Zasshi** 1996 Nov;38(6):253–7 (Eng. Abstr.) **(Jpn)**

METABOLISM

Transforming growth factor-beta (TGF-beta) in silicosis. Jagirdar J, et al. **Am J Respir Crit Care Med** 1996 Oct; 154(4 Pt 1):1076–81
Increase of biosynthesis and degradation of collagen in normal lungs induced by soluble factors obtained from experimental pulmonary silicosis. Selman M, et al. **Arch Biol Med Exp (Santiago)** 1987;20(3–4):311–7
Fluorescence characterization of type I collagen from normal and silicotic rats and its quenching dynamics induced by hypocrellin B. Li YH, et al. **Biopolymers** 1997 Aug; 42(2):219–26
Oxidative stress in silicosis: evidence for the enhanced clearance of free radicals from whole lungs. Vallyathan V, et al. **Mol Cell Biochem** 1997 Mar;168(1–2):125–32

MORTALITY

Cancer incidence and mortality among Finnish asbestos sprayers and in asbestosis and silicosis patients. Oksa P, et al. **Am J Ind Med** 1997 Jun;31(6):693–8
Cancer risk and mortality patterns among silicotic men in Sweden and Denmark. Brown LM, et al. **J Occup Environ Med** 1997 Jul;39(7):633–8
Lung cancer among workers exposed to silica dust in Chinese refractory plants. Dong D, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:69–72
Mortality among silicotics in Genoa, Italy, from 1961 to 1987. Merlo F, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:77–80
Mortality among persons with silicosis reported to disease surveillance systems in Michigan and New Jersey in the United States. Rosenman KD, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:73–6
Potential years of life lost and work tenure lost when silicosis is compared with other pneumoconioses. Zhong Y, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:91–4

PATHOLOGY

Dynamic changes of constituents in bronchoalveolar lavage fluid in experimental silicotic rats. Zhang Q, et al. **Ind Health** 1996;34(4):379–88
Radiologic and pathologic characteristics of mixed dust pneumoconiosis. Shida H, et al. **Radiographics** 1996 May; 16(3):483–98

PHYSIOPATHOLOGY

Laboratory studies on silica induced toxicity and relationship to carcinogenicity. Rabovsky J. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):267–78 (51 ref.)

PREVENTION & CONTROL

Industrial hygiene sampling and applications to ambient silica monitoring. Hearl FJ. **J Expo Anal Environ Epidemiol** 1997 Jul–Sep;7(3):279–89
[Percutaneous effects of iodine inhibit the development of experimental silicosis] Plastinina IuV, et al. **Med Tr Prom Ekol** 1996;(7):16–20 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Technegas ventilation SPECT for evaluating silicosis in comparison with computed tomography. Zhang X, et al. **Ann Nucl Med** 1996 May;10(2):165–70
Comparison of inter-observer reproducibility between conventional chest radiography and AMBER in the evaluation of silicosis. Gambini G, et al. **Med Lav** 1996 Jul–Aug;87(4):323–9
Radiologic and pathologic characteristics of mixed dust pneumoconiosis. Shida H, et al. **Radiographics** 1996 May; 16(3):483–98

RADIONUCLIDE IMAGING

Technegas ventilation SPECT for evaluating silicosis in comparison with computed tomography. Zhang X, et al. **Ann Nucl Med** 1996 May;10(2):165–70

THERAPY

Suppressive effect of antisense DNA of platelet-derived growth factor on murine pulmonary fibrosis with silica particles. Ohta K, et al. **Chest** 1997 Jun;111(6 Suppl):105S
[The effect of anti basic fibroblast growth factor on the development of experimental silicosis bacillus] Liu K, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Dec; 18(6):351–3, 383 (Eng. Abstr.) **(Chi)**

SILICOTUBERCULOSIS

DIAGNOSIS

[The diagnostic potentials of the method for the intradermal administration of denatured gamma-globulin in coniotuberculosis of the intrathoracic lymph nodes] Chugaev IuP, et al. **Probl Tuberk** 1996;(4):16–7 (Eng. Abstr.) **(Rus)**

SILKWORMS

Detection of peptidoglycan and beta-glucan with silkworm larvae plasma test. Tsuchiya M, et al. **FEMS Immunol Med Microbiol** 1996 Sep;15(2–3):129–34

ANATOMY & HISTOLOGY

Application of NMR microscopy to the morphological study of the silkworm, Bombyx mori, during its metamorphosis. Mapelli M, et al. **Magn Reson Imaging** 1997;15(6):693–700

CHEMISTRY

Expression of cecropin CMIV fusion protein in E. coli under T7 promoter. Xie W, et al. **Biochem Mol Biol Int** 1996 Jun;39(3):487–92
Antiviral substance from silkworm faeces: purification and its chemical characterization. Hiraki A, et al. **Biol Pharm Bull** 1997 May;20(5):547–55
Binding proteins from the antennae of Bombyx mori. Krieger J, et al. **Insect Biochem Mol Biol** 1996 Mar;26(3):297–307
Bombyx EcR (BmEcR) and Bombyx USP (BmCF1) combine to form a functional ecdysone receptor. Swevers L, et al. **Insect Biochem Mol Biol** 1996 Mar;26(3):217–21
Presence in Pieris rapae of cytotoxic activity against human carcinoma cells. Koyama K, et al. **Jpn J Cancer Res** 1996 Dec;87(12):1259–62
Bombyx mori single repeat telomeric DNA sequence forms a G-quadruplex capped by base triads. Kettani A, et al. **Nat Struct Biol** 1997 May;4(5):382–9

DRUG EFFECTS

Involvement of juvenile hormone in regulation of prothoracicotropic hormone transduction during the early last larval instar of Bombyx mori. Gu SH, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):109–16

EMBRYOLOGY

Involvement of the Bombyx Scr gene in development of the embryonic silk gland. Kokubo H, et al. **Dev Biol** 1997 Jun 1;186(1):46–57
Molecular characterization of prothoracicotropic hormone (PTTH) from the giant silkmoth Antheraea pernyi: developmental appearance of PTTH-expressing cells and relationship to circadian clock cells in central brain. Sauman I, et al. **Dev Biol** 1996 Sep 15;178(2):418–29
[Developmental expression patterns and target assignment of the bombyx fork head and POU-M1 genes] Suzuki Y, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1083–7 (25 ref.) **(Jpn)**

ENZYMOLOGY

Autolytic activation mechanism of Bombyx acid cysteine protease (BCP). Takahashi SY, et al. **Biochem Mol Biol Int** 1997 Jul;42(3):591–600
Discovery of a new tetrahydrobiopterin-synthesizing enzyme in the lemon mutant of the silkworm Bombyx mori. Iino T, et al. **Biochim Biophys Acta** 1996 Oct 17;1297(2):191–9
Influence of thyroxine on different ion-dependent ATPase activities in fat body of tasar silkworm, Antheraea mylitta D. Reddy KD, et al. **Gen Comp Endocrinol** 1996 Oct; 104(1):20–8
Cloning of cDNAs encoding Bombyx homologues of Cdc2 and Cdc2-related kinase from eggs. Iwasaki H, et al. **Insect Mol Biol** 1997 May;6(2):131–41
Structure of the Bombyx sorbitol dehydrogenase gene: a possible alternative use of the promoter. Niimi T, et al. **Insect Mol Biol** 1996 Nov;5(4):269–80

GENETICS

Bombyxin gene expression in tissues other than brain detected by reverse transcription-polymerase chain reaction (RT-PCR) and in situ hybridization. Iwami M, et al. **Experientia** 1996 Sep 15;52(9):882–7
Two alternative promoters drive the expression of the cytoplasmic actin A4 gene of Bombyx mori. Mangé A, et al. **Gene** 1996 Dec 12;183(1–2):191–9
Expression of individual members of a tRNA(Gly)1 multigene family in vivo follows the same pattern as in vitro. Sharma S, et al. **Gene** 1997 Jul 31;194(2):257–66
Developmental expression of the Bombyx Antennapedia homologue and homeotic changes in the Nc mutant. Nagata T, et al. **Genes Cells** 1996 Jun;1(6):555–68
Enrichment of middle repetitive element Bm-1 transcripts in translationally active RNA fractions of the silkmoth, Bombyx mori. Gao GP, et al. **Genetica** 1996 Mar; 97(2):173–82
Structure and organization of the Bombyx mori sericin 1 gene and of the sericins 1 deduced from the sequence of the Ser 1B cDNA. Garel A, et al. **Insect Biochem Mol Biol** 1997 May;27(5):469–77
Bmmar1: a basal lineage of the mariner family of transposable elements in the silkworm moth, Bombyx mori. Robertson HM, et al. **Insect Biochem Mol Biol** 1996 Sep–Oct; 26(8–9):945–54
Cloning of biogenic amine receptors from moths (Bombyx mori and Heliothis virescens). von Nickisch-Rosenegk E, et al. **Insect Biochem Mol Biol** 1996 Sep–Oct; 26(8–9):817–27
Genes expressed during the differentiation of the pupal wings are also transiently expressed during the larval moult in Bombyx mori. Chareyre P, et al. **Insect Mol Biol** 1993; 2(4):239–46
A cytoplasmic actin gene from the silkworm Bombyx mori is expressed in tissues of endodermal origin and previtellogenic germ cells of transgenic Drosophila. Horard B, et al. **Insect Mol Biol** 1993;2(3):175–83
A strong inhibitory element down-regulates SRE-stimulated transcription of the A3 cytoplasmic actin gene of Bombyx mori. Mangé A, et al. **J Mol Biol** 1997 Jan 24;265(3):266–74
A major non-LTR retrotransposon of Bombyx mori, L1Bm. Ichimura S, et al. **J Mol Evol** 1997 Sep;45(3):253–64
Differential binding of the Bombyx silk gland-specific factor SGFB to its target DNA sequence drives posterior-cell-restricted expression. Horard B, et al. **Mol Cell Biol** 1997 Mar;17(3):1572–9
Linkage and evolutionary diversification of developmentally regulated multigene families: tandem arrays of the 401/18 chorion gene pair in silkmoths. Jones CW, et al. **Mol Cell Biol** 1981 Sep;1(9):814–28
A new family of site-specific retrotransposons, SART1, is inserted into telomeric repeats of the silkworm, Bombyx mori. Takahashi H, et al. **Nucleic Acids Res** 1997 Apr 15; 25(8):1578–84
Expression of human growth hormone in silkworm larvae through recombinant Bombyx mori nuclear polyhedrosis virus. Sumathy S, et al. **Protein Expr Purif** 1996 May; 7(3):262–8
[Cloning of the diapause hormone gene of the silkworm (Bombyx mori)] Xu W, et al. **I Chuan Hsueh Pao** 1995; 22(3):178–84 (Eng. Abstr.) **(Chi)**
[Developmental expression patterns and target assignment of the bombyx fork head and POU-M1 genes] Suzuki Y, et al. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1083–7 (25 ref.) **(Jpn)**

GROWTH & DEVELOPMENT

Lipid and fatty acid composition of muga silkworm, Antheraea assama, host plants in relation to silkworm growth. Unni BG, et al. **J Lipid Mediat Cell Signal** 1996 May;13(3):295–300

IMMUNOLOGY

IgE antibodies against midge and moth found in Japanese asthmatic subjects and comparison of allergenicity between these insects. Komase Y, et al. **Allergy** 1997 Jan;52(1):75–81
In vitro phagocytosis of Escherichia coli and release of lipopolysaccharide by adhering hemocytes of the silkworm, Bombyx mori. Taniai K, et al.

SILKWORMS

Biochem Biophys Res Commun 1997 Feb 24;231(3):623-7
Lipopolysaccharide-binding proteins and their involvement in the bacterial clearance from the hemolymph of the silkworm Bombyx mori. Koizumi N, et al. **Eur J Biochem** 1997 Aug 15;248(1):217-24

METABOLISM

Evidences for a stage-specific juvenile hormone binding protein in the hemolymph of the silkworm, Bombyx mori L.: identification and characterization by photoaffinity labeling and immunological analyses. Park CH, et al. **Arch Insect Biochem Physiol** 1996;33(2):83-98
Elicitors triggering the simultaneous gene expression of antibacterial proteins of the silkworm, Bombyx mori. Taniai K, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):783-90
Transcriptional regulatory elements in the upstream and intron of the fibroin gene bind three specific factors POU-M1, Bm Fkh and FMBP-1. Takiya S, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):645-53
Suppression of enveloped virus production with a substance from silkworm faeces. Hiraki A, et al. **Cell Struct Funct** 1996 Dec;21(6):501-14
G-protein activation, identification and immunolocalization in pheromone-sensitive sensilla trichodea of moths. Laue M, et al. **Cell Tissue Res** 1997 Apr;288(1):149-58
Changes in protein metabolism in hemolymph and fat body of the silkworm, Bombyx mori (Lepidoptera: Bombycidae) in response to organophosphorus insecticides toxicity. Nath BS, et al. **Ecotoxicol Environ Saf** 1997 Mar;36(2):169-73
Lipopolysaccharide-binding proteins and their involvement in the bacterial clearance from the hemolymph of the silkworm Bombyx mori. Koizumi N, et al. **Eur J Biochem** 1997 Aug 15;248(1):217-24
The role of 20-hydroxyecdysone in stimulating DNA synthesis in corpora allata of the silkworm, Bombyx mori. Chiang AS, et al. **Gen Comp Endocrinol** 1997 Jan; 105(1):134-40
Effects of fenoxycarb on the secretory activity of the prothoracic glands in the fifth instar of the silkworm, Bombyx mori. Dedos SG, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):213-24
Bombyx and Manduca prothoracicotropic hormones: an immunologic test for relatedness. Rybczynski R, et al. **Gen Comp Endocrinol** 1996 May;102(2):247-54
Heterologous promoter recognition leading to high-level expression of cloned foreign genes in Bombyx mori cell lines and larvae. Sriram S, et al. **Gene** 1997 Apr 29; 190(1):181-9
Identification of a Bombyx collagenous protein with multiple short domains of Gly-Xaa-Yaa repeats: cDNA characterization and regulation of expression. Chareyre P, et al. **Insect Biochem Mol Biol** 1996 Jul;26(7):677-85
Intracellular signal transduction of PBAN action in the silkworm, Bombyx mori: involvement of acyl CoA reductase. Ozawa R, et al. **Insect Biochem Mol Biol** 1996 Mar;26(3):259-65
A deficiency in prothoracicotropic hormone transduction pathway during the early last larval instar of Bombyx mori. Gu SH, et al. **Mol Cell Endocrinol** 1996 Jul 1;120(2):99-105
Detection of peptidoglycan and endotoxin in dialysate, using silkworm larvae plasma and limulus amebocyte lysate methods. Tsuchida K, et al. **Nephron** 1997;75(4):438-43
PER protein in silkmoths marches to different drummer [news] Barinaga M. **Science** 1996 Nov 22;274(5291):1306

PHYSIOLOGY

Identification of ecdysis-triggering hormone in the silkworm Bombyx mori. Adams ME, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):188-91
Purification and molecular cloning of an inducible gram-negative bacteria-binding protein from the silkworm, Bombyx mori. Lee WJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7888-93

VIROLOGY

Detection of replicative intermediate with closed terminus of Bombyx densonucleosis virus. Hayakawa T, et al. **Arch Virol** 1997;142(2):393-9
Sequencing of the putative DNA helicase-encoding gene of the Bombyx mori nuclear polyhedrosis virus and fine-mapping of a region involved in host range expansion. Kamita SG, et al. **Gene** 1997 Apr 29;190(1):173-9
The genes encoding the P39 and CG30 proteins of Bombyx mori nuclear polyhedrosis virus. Lu M, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3135-43
Induction of anti-malarial transmission blocking immunity with a recombinant ookinete surface antigen of Plasmodium berghei produced in silkworm larvae using the baculovirus expression vector system. Matsuoka H, et al. **Vaccine** 1996 Feb;14(2):120-6
Infection of a Spodoptera frugiperda cell line with Bombyx mori nucleopolyhedrovirus. Martin O, et al. **Virus Res** 1997 Feb;47(2):179-85

SILO FILLER'S DISEASE

DIAGNOSIS

[Accidental poisoning with silo gas] Jabłońska M, et al. **Pol Arch Med Wewn** 1997 Jan;97(1):52-5 (Eng. Abstr.) **(Pol)**

SILOXANES

Office hysteroscopic tubal occlusion with siloxane intratubal devices (the Ovabloc method). van der Leij G, et al. **Int J Gynaecol Obstet** 1996 Jun;53(3):253-60
Mixed self-assembled monolayers in chemical separations. Wirth MJ, et al. **Science** 1997 Jan 3;275(5296):44-7 (32 ref.)
[An analysis of the results and the clinical characteristics of the implantation of elastic polysiloxane IOLs] Chuprov AD. **Vestn Oftalmol** 1996 Apr-Jun;112(2):5-9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Silicone gel and octamethylcyclotetrasiloxane (D4) enhances antibody production to bovine serum albumin in mice. Nicholson JJ 3rd, et al. **J Biomed Mater Res** 1996 Jul; 31(3):345-53

CHEMISTRY

Using self-assembled monolayers to understand the interactions of man-made surfaces with proteins and cells. Mrksich M, et al. **Annu Rev Biophys Biomol Struct** 1996; 25:55-78 (87 ref.)
Comparison of the dimensional accuracy of one- and two-step techniques with the use of putty/wash addition silicone impression materials. Idris B, et al. **J Prosthet Dent** 1995 Nov;74(5):535-41
The effect of various base/core materials on the setting of a polyvinyl siloxane impression material. Moon MG, et al. **J Prosthet Dent** 1996 Dec;76(6):608-12

METABOLISM

Influence of marginal configuration and porcelain addition on the fit of In-Ceram crowns. Shearer B, et al. **Biomaterials** 1996 Oct;17(19):1891-5

THERAPEUTIC USE

Efficacy of barrier creams. Grunewald AM, et al. **Curr Probl Dermatol** 1995;23:187-97

SILURID see **CATFISH**

SILVER

Evaluation of healing and external tunnel histology of silver-coated peritoneal catheters in rats. Kathuria P, et al. **Adv Perit Dial** 1996;12:203-8
Colloidal silver staining of electroblotted proteins for high sensitivity peptide mapping by liquid chromatography-electrospray ionization tandem mass spectrometry. van Oostveen I, et al. **Anal Biochem** 1997 May 1;247(2):310-8
Effect of addition of palladium on properties of Ag2Hg3 (gamma 1) phase. Chern Lin JA, et al. **Biomaterials** 1997 Jul;18(13):939-46
An assessment of the ability of a silver-releasing device to prevent bacterial contamination of urethral catheter drainage systems. Stickler DJ, et al. **Br J Urol** 1996 Oct; 78(4):579-88
Using microcontact printing to pattern the attachment of mammalian cells to self-assembled monolayers of alkanethiolates on transparent films of gold and silver. Mrksich M, et al. **Exp Cell Res** 1997 Sep 15;235(2):305-13
Silverpoint drawing for scientific illustration. Hodge GP. **J Biocommun** 1996;23(3):18-21 (5 ref.)
Silver-coated catheters in peritoneal dialysis. Dasgupta MK. **Perit Dial Int** 1997;17 Suppl 2:S142-5 (17 ref.)
Biocompatibility of silver-coated peritoneal dialysis catheter in a porcine model. Fung LC, et al. **Perit Dial Int** 1996 Jul-Aug;16(4):398-405
[Clinical and preclinical efficacy of antimicrobial catheters] Schierholz JM, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 May; 32(5):298-305 (102 ref.) (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Argyria and convulsive seizures caused by ingestion of silver in a patient with schizophrenia. Ohbo Y, et al. **Psychiatry Clin Neurosci** 1996 Apr;50(2):89-90

ADVERSE EFFECTS

Passage of silver ions through membrane-mimetic materials, and its relevance to treatment of burn wounds with silver sulfadiazine cream. Tsipouras N, et al. **Clin Chem** 1997 Feb; 43(2):290-301
Argyria and convulsive seizures caused by ingestion of silver in a patient with schizophrenia. Ohbo Y, et al. **Psychiatry Clin Neurosci** 1996 Apr;50(2):89-90

ANALYSIS

Prognostic value of proliferative activity of ovarian carcinoma as revealed by PCNA and AgNOR analyses. Ghazizadeh M, et al. **Am J Clin Pathol** 1997 Apr; 107(4):451-8
Selective optical sensing of silver ions in drinking water. Lerchi M, et al. **Anal Chem** 1996 Sep 15;68(18):3210-4
Correlation of drug-related aluminum intake and dialysis treatment with deposition of argyrophilic aluminum-containing inclusions in CNS and in organ systems of patients with dialysis-associated encephalopathy. Reusche E, et al. **Clin Neuropathol** 1996 Nov-Dec;15(6):342-7

ANTAGONISTS & INHIBITORS

Gold ion inhibits silver ion induced contracture and activates ryanodine receptors in skeletal muscle. Nihonyanagi K, et al. **Eur J Pharmacol** 1996 Sep 12;311(2-3):271-6

CHEMISTRY

Selective precipitation separation and inductively coupled plasma mass spectrometric determination of trace metal impurities in high purity silver. Sun YC, et al. **Analyst** 1997 May;122(5):437-40
Partitioning and effects of silver in amended freshwater sediments. Rodgers JH Jr, et al. **Ecotoxicol Environ Saf** 1997 Jun;37(1):1-9
Silver and fluoride ion release from metal-reinforced glass-ionomer filling materials. Williams JA, et al. **J Oral Rehabil** 1997 May;24(5):369-75
The effects of tack welding and increasing surface area on the tensile strength of silver electric and flame soldered stainless steel joints. Gawlik JA, et al. **Pediatr Dent** 1996 May-Jun;18(3):215-8
Stability of nystatin in mouthrinses; effect of pH temperature, concentration and colloidal silver addition, studied using an in vitro antifungal activity. Vermerie N, et al. **Pharm World Sci** 1997 Aug;19(4):197-201
Prevention of catheter-related infections by silver coated central venous catheters in oncological patients. Goldschmidt H, et al. **Zentralbl Bakteriol** 1995 Dec; 283(2):215-23

DIAGNOSTIC USE

Quantitation of proliferation-associated markers Ag-NOR and Ki-67 does not contribute to the prediction of lymph node metastases in squamous cell carcinoma of the vulva. Emanuels AG, et al. **Hum Pathol** 1996 Aug;27(8):807-11
Prevalence and disease associations of argyrophilic grains of Braak. Martinez-Lage P, et al. **J Neuropathol Exp Neurol** 1997 Feb;56(2):157-64

METABOLISM

Elimination study of silver in a hemodialyzed burn patient treated with silver sulfadiazine cream. Iwasaki S, et al. **Am J Kidney Dis** 1997 Aug;30(2):287-90
111Cd NMR studies of the domain specificity of Ag+ and Cu+ binding to metallothionein. Li H, et al. **Biochemistry** 1996 Nov 5;35(44):13929-36
HPLC characterization of Ag+ and Cu+ metal exchange reactions with Zn- and Cd-metallothioneins. Li H, et al. **Biochemistry** 1996 Nov 5;35(44):13937-45
Passage of silver ions through membrane-mimetic materials, and its relevance to treatment of burn wounds with silver sulfadiazine cream. Tsipouras N, et al. **Clin Chem** 1997 Feb; 43(2):290-301
Silver-resistant mutants of Escherichia coli display active efflux of Ag+ and are deficient in porins. Li XZ, et al. **J Bacteriol** 1997 Oct;179(19):6127-32
Deposition profile of antibacterial anodic silver in root canal systems of teeth. Aydin M, et al. **J Biomed Mater Res** 1997 Spring;38(1):49-54
Silver concentrations in human tissues. their dependence on dental amalgam and other factors. Drasch G, et al. **J Trace Elem Med Biol** 1995 Jul;9(2):82-7
Bile secretion of cadmium, silver, zinc and copper in the rat. Involvement of various transport systems. Dijkstra M, et al. **Life Sci** 1996;59(15):1237-46
Silver-binding nucleolar organizer regions (AgNORs) in tumors of colon. Zaczek M, et al. **Pol J Pathol** 1996; 47(4):195-200

PHARMACOKINETICS

An in vitro study of the distribution of silver and fluoride following application of 40 per cent silver fluoride solution to dentine. Afonso F, et al. **Aust Dent J** 1996 Dec; 41(6):388-92

PHARMACOLOGY

The effect of silver administration on the biosynthesis and the molecular properties of rat ceruloplasmin. Hirasawa F, et al. **Biochim Biophys Acta** 1997 Aug 29;1336(2):195-201
Preparation and activity of complexes of transition metals and thiolic heterocyclic ligands. Certi Mazza MT, et al. **Boll Soc Ital Biol Sper** 1996 Mar-Apr;72(3-4):79-86
Silver-resistant mutants of Escherichia coli display active efflux of Ag+ and are deficient in porins. Li XZ, et al. **J Bacteriol** 1997 Oct;179(19):6127-32
Prolonged antimicrobial effect of tissue conditioners containing silver-zeolite. Matsuura T, et al. **J Dent** 1997 Sep;25(5):373-7
Antimicrobial activity of electrochemical silver ions in nonionic surfactant solutions and in model dispersions. Scalzo M, et al. **J Pharm Pharmacol** 1996 Jan;48(1):60-3
Stability of nystatin in mouthrinses; effect of pH temperature, concentration and colloidal silver addition, studied using an in vitro antifungal activity. Vermerie N, et al. **Pharm World Sci** 1997 Aug;19(4):197-201

POISONING see ARGYRIA

THERAPEUTIC USE

Dual use of silver for management of chronic bone infections and infected non-unions. Nand S, et al. **J Indian Med Assoc** 1996 Mar;94(3):91-5

TOXICITY

Renal function and amalgam mercury [letter] Vimy MJ, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1199-200

Comparative aqueous toxicity of silver compounds: laboratory studies with freshwater species. Rodgers JH Jr, et al. **Bull Environ Contam Toxicol** 1997 Jun;58(6):851-8

In vitro cytotoxicity of silver-impregnated collagen cuffs designed to decrease infection in tunneled catheters. Hemmerlein JB, et al. **Radiology** 1997 Aug;204(2):363-7

SILVER COMPOUNDS

Sensitive in situ hybridization with catalyzed reporter deposition, streptavidin-Nanogold, and silver acetate autometallography: detection of single-copy human papillomavirus. Zehbe I, et al. **Am J Pathol** 1997 May; 150(5):1553-61

A simplified silver diammine method for the staining of nucleic acids in polyacrylamide gels. Vari F, et al. **Electrophoresis** 1996 Jan;17(1):20-5

ADMINISTRATION & DOSAGE

Effects of a 2.5-mg silver acetate lozenge on initial and long-term smoking cessation. Hymowitz N, et al. **Prev Med** 1996 Sep-Oct;25(5):537-46

ADVERSE EFFECTS

Safety issues related to the use of silver fluoride in paediatric dentistry. Gotjamanos T. **Aust Dent J** 1997 Jun;42(3):166-8

CHEMISTRY

Unacceptably high levels of fluoride in commercial preparations of silver fluoride. Gotjamanos T, et al. **Aust Dent J** 1997 Feb;42(1):52-3

THERAPEUTIC USE

Silver fluoride use [letter; comment] Gotjamanos T. **Aust Dent J** 1997 Apr;42(2):138. Comment on: Aust Dent J 1997 Feb;42(1):66-7.

Pulp response in primary teeth with deep residual caries treated with silver fluoride and glass ionomer cement ('atraumatic' technique) [see comments] Gotjamanos T. **Aust Dent J** 1996 Oct;41(5):328-34. Comment in: Aust Dent J 1997 Feb;42(1):66-7.

[The use of "silver water" in treating surgical wounds] Kadyshev IuG, et al. **Klin Khir** 1995;(1):45 **(Rus)**

TOXICITY

Comparative aqueous toxicity of silver compounds: laboratory studies with freshwater species. Rodgers JH Jr, et al. **Bull Environ Contam Toxicol** 1997 Jun;58(6):851-8

SILVER NITRATE

ADMINISTRATION & DOSAGE

Comparison of topical silver nitrate and flunisolide treatment in patients with idiopathic non-allergic rhinitis. Erhan E, et al. **Tokai J Exp Clin Med** 1996 Jun;21(2):103-11

[Chemo-extirpation of Bartholin cysts and abscesses] Maral I, et al. **Zentralbl Gynakol** 1996;118(3):172-3 **(Ger)**

ADVERSE EFFECTS

Acute renal failure and renal papillary necrosis following instillation of silver nitrate for treatment of chyluria. Dash SC, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1841-2

An unusual, severe adverse reaction to silver nitrate cautery for epistaxis in an immunocompromised patient. Murthy P, et al. **Rhinology** 1996 Sep;34(3):186-7

CHEMISTRY

[Use of silver immunosalts for detecting HIV antibodies in microtiter plates] Poltavchenko AG, et al. **Vopr Virusol** 1997 May-Jun;42(3):120-3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Murine silver-induced autoimmunity: silver shares induction of antinucleolar antibodies with mercury, but causes less activation of the immune system. Johansson U, et al. **Int Arch Allergy Immunol** 1997 Aug;113(4):432-43

THERAPEUTIC USE

Advancing wave-like epitheliopathy. Clinical features and treatment. D'Aversa G, et al. **Ophthalmology** 1997 Jun; 104(6):962-9

TOXICITY

Comparative aqueous toxicity of silver compounds: laboratory studies with freshwater species. Rodgers JH Jr, et al. **Bull Environ Contam Toxicol** 1997 Jun;58(6):851-8

SILVER NITRATE STAINING see SILVER STAINING

SILVER STAINING

Functional sexual differences in rat mammillary bodies: a quantitative Ag-NOR study. González-González S, et al. **Acta Anat (Basel)** 1996;157(3):205-9

AgNORs in lung cancer: correlation with DNA ploidy and degree of differentiation. Lee YC, et al. **Anal Quant Cytol Histol** 1997 Jun;19(3):271-6

Silver staining and recovery of AFLP amplification products on large denaturing polyacrylamide gels. Chalhoub BA, et al. **Biotechniques** 1997 Feb;22(2):216-8, 220

Argyrophilia in the developing human myenteric plexus. Smith VV, et al. **Br J Biomed Sci** 1996 Dec;53(4):278-83

Assessment of cell proliferation by AgNOR scores and Ki-67 labeling indices and a comparison with potential doubling times. Dong H, et al. **Cytometry** 1997 Aug 1;28(4):280-8

Standardized AgNOR analysis: its usefulness in surgical oncology. Ofner D, et al. **Histochem Cell Biol** 1996 Aug; 106(2):193-6 (32 ref.)

Dot-immunogold-silver staining in the diagnosis of cysticercosis. Liu YS, et al. **Int J Parasitol** 1996 Jan; 26(1):127-9

A simple silver-gold intensification procedure for double DAB labeling studies in electron microscopy [letter] Teclemariam-Mesbah R, et al. **J Histochem Cytochem** 1997 Apr;45(4):619-21

Neuropathological diagnosis of progressive supranuclear palsy and related disorders [letter; comment] Ikeda K, et al. **J Neuropathol Exp Neurol** 1996 Dec;55(12):1278-9. Comment on: J Neuropathol Exp Neurol 1996 Jan;55(1):97-105.

Standardized AgNOR analysis of the invasive tumour front in oral squamous cell carcinomas. Piffkò J, et al. **J Pathol** 1997 Aug;182(4):450-6

Silver Sequencing. Nonradioactive cycle sequencing of dsDNA. Wade-Evans A. **Methods Mol Biol** 1996;65:91-100

Standardized demonstration of silver-stained nucleolar organizer regions-associated proteins in archival oral squamous cell carcinomas and adjacent non-neoplastic mucosa. Piffkò J, et al. **Mod Pathol** 1997 Feb;10(2):98-104

Comparison of NADPH diaphorase histochemistry, somatostatin immunohistochemistry, and silver impregnation in detecting structural and functional impairment in experimental status epilepticus. Kotti T, et al. **Neuroscience** 1997 Sep;80(1):105-17

Silver-stained nucleolar organizer regions in adenocarcinoma of the cervix--a light and electron microscopic study. Yokoyama Y, et al. **Pathol Res Pract** 1997;193(4):275-81

Quantitative and qualitative AgNORs rates of prostate cancer on needle core biopsies: a multicentric study. Botticelli AR, et al. **Pathologica** 1995 Dec;87(6):624-30

Topography of hypoxic injury proved by argyrophilia in postnatal rat brain. Muramatsu K, et al. **Pediatr Neurol** 1997 Feb;16(2):105-13

Rapid vertical agarose: silver stain detection of rotavirus. Giordano MO, et al. **Viral Immunol** 1997;10(1):59-64

[Silver staining of proteins separated by polyacrylamide gel electrophoresis: mathematical model] Okon EB, et al. **Biokhimiia** 1996 Dec;61(12):2082-91 (Eng. Abstr.) **(Rus)**

[Comparison of 2 dyes in the detection of Pneumocystis carinii] Casanova-Cardiel LJ, et al. **Rev Invest Clin** 1996 Nov-Dec;48(6):443-7 (Eng. Abstr.) **(Spa)**

METHODS

Usefulness of AgNOR score in differentiating benign from malignant pulmonary aspiration cytology. Chern JH, et al. **Acta Cytol** 1997 Mar-Apr;41(2):393-8

Detection of CAG repeats using silver staining in patients with Huntington disease in Hungary [letter] Tóth T, et al. **Am J Med Genet** 1997 Jun 27;70(4):448-9

A rapid silver staining and destaining technique for the nucleolus organizer region. Dhar PK, et al. **Biotech Histochem** 1995 Nov;70(6):302-3

Nonisotopic method for precise detection of (CAG)n repeats [letter; comment] Melegh B, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1096-7. Comment on: Clin Chem 1996 Oct;42(10):1601-3.

Silver staining method for nucleolar organizer regions in cervical smears. Calore EE, et al. **Diagn Cytopathol** 1997 Jun;16(6):497-9

BSD extent, an index for metal pollution screening based on the metal content within digestive cell lysosomes of mussels as determined by autometallography. Soto M, et al. **Ecotoxicol Environ Saf** 1997 Jul;37(2):141-51

A simplified silver diammine method for the staining of nucleic acids in polyacrylamide gels. Vari F, et al. **Electrophoresis** 1996 Jan;17(1):20-5

Usefulness of nucleolar organiser region staining (AgNORs) in the evaluation of follicular tumours of the thyroid. Dzięcioł J, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:35-6

Morphometric analysis of argyrophilia. Tosik D, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:33-4

Nucleolar organizer regions in exocrine pancreas in chronic pancreatitis and ductal adenocarcinoma. Diagnostic value and cytophysiologic correlate. Pollok A. **Gen Diagn Pathol** 1997 Feb;142(3-4):199-209

The autometallographic zinc-sulphide method. A new approach involving in vivo creation of nanometer-sized zinc sulphide crystal lattices in zinc-enriched synaptic and secretory vesicles. Danscher G. **Histochem J** 1996 May; 28(5):361-73

Rapid and highly sensitive colloidal silver staining on cellulose acetate membrane for analysis of urinary proteins. Hiratsuka N, et al. **J Clin Lab Anal** 1996;10(6):403-6

Silver intensification of immunocolloidal gold on ultrathin plastic sections applied to the study of the neuronal distribution of GABA and glycine. Juiz JM, et al. **J Hirnforsch** 1996;37(1):51-6

A reliable method for Golgi staining of retina and brain slices. Angulo A, et al. **J Neurosci Methods** 1996 May;66(1):55-9

The mechanism of Bodian's silver staining: effect of copper ion on silver impregnation. Kondo H, et al. **J Neurosci Methods** 1996 Oct;68(2):275-80

Cutaneous sensory nerve formations as studied with impregnation techniques: notes about a simple and reliable method. Tolivia Fernández D. **Microsc Res Tech** 1996 Jul 1;34(4):390-6

[The detection of nucleoli by using the silvering method in slices stained earlier by another procedure] Korzhevskiĭ DE. **Morfologiia** 1995;108(3):75-7 **(Rus)**

STATISTICS & NUMERICAL DATA

Observer variation in AgNOR counts in neoplastic breast lesions. Srivastava A, et al. **Anal Quant Cytol Histol** 1996 Jun;18(3):241-4

VETERINARY

Assessment of fibromyxoma cell proliferation in a tench (Tinca tinca L.) by the silver staining nucleolar organizer region (AgNOR) technique. Manera M, et al. **J Comp Pathol** 1997 Jan;116(1):107-12

Characterization of the proliferation state in canine mammary tumors by the standardized AgNOR method with postfixation and immunohistologic detection of Ki-67 and PCNA. Löhr CV, et al. **Vet Pathol** 1997 May;34(3):212-21

SILVER SULFADIAZINE

ADMINISTRATION & DOSAGE

[Clinical efficacy of silver sulfadiazine (AgSD: Geben cream) for ulcerative skin lesions infected with MRSA] Yoshida T, et al. **Jpn J Antibiot** 1997 Jan;50(1):39-44 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Direct evidence for uptake of intact liposomes encapsulating silver sulfadiazine by cultured human keratinocytes based on combined transmission electron microscopy and X-ray microanalysis. Schaller M, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):717-9

PHARMACOLOGY

Impact of chlorhexidine-silver sulfadiazine-impregnated central venous catheters on in vitro quantitation of catheter-associated bacteria [see comments] Schmitt SK, et al. **J Clin Microbiol** 1996 Mar;34(3):508-11. Comment in: J Clin Microbiol 1996 Oct;34(10):2640-1.

In vitro activity of climbazole, clotrimazole and silver-sulphadiazine against isolates of Malassezia pachydermatis. Schmidt A. **Zentralbl Veterinarmed [B]** 1997 Jun;44(4):193-7

THERAPEUTIC USE

Elimination study of silver in a hemodialyzed burn patient treated with silver sulfadiazine cream. Iwasaki S, et al. **Am J Kidney Dis** 1997 Aug;30(2):287-90

Prevention of central venous catheter-related bloodstream infection by use of an antiseptic-impregnated catheter. A randomized, controlled trial [see comments] Maki DG, et al. **Ann Intern Med** 1997 Aug 15;127(4):257-66. Comment in: Ann Intern Med 1997 Aug 15;127(4):304-6.

Passage of silver ions through membrane-mimetic materials, and its relevance to treatment of burn wounds with silver sulfadiazine cream. Tsipouras N, et al. **Clin Chem** 1997 Feb; 43(2):290-301

SILYBIN see SILYMARIN

SILYMARIN

ADMINISTRATION & DOSAGE

Silibinin protects against cisplatin-induced nephrotoxicity without compromising cisplatin or ifosfamide anti-tumour activity. Bokemeyer C, et al. **Br J Cancer** 1996 Dec; 74(12):2036-41

METABOLISM

Free radical scavenging and antioxidative properties of 'silibin' complexes on microsomal lipid peroxidation. Basaga H, et al. **Cell Biochem Funct** 1997 Mar;15(1):27-33

PHARMACOLOGY

Silybin and silydianin diminish the oxidative metabolism of human polymorphonuclear neutrophils. Ignatowicz E, et al. **Acta Biochim Pol** 1997;44(1):127-9

Effect of portal vein ligation and silymarin treatment on

SILYMARIN

aspirin metabolism and disposition in rats. Favari L, et al. **Biopharm Drug Dispos** 1997 Jan;18(1):53–64

Antiproliferative effect of silybin on gynaecological malignancies: synergism with cisplatin and doxorubicin. Scambia G, et al. **Eur J Cancer** 1996 May;32A(5):877–82

Silymarin retards collagen accumulation in early and advanced biliary fibrosis secondary to complete bile duct obliteration in rats. Boigk G, et al. **Hepatology** 1997 Sep; 26(3):643–9

Effect of silymarin on different acute inflammation models and on leukocyte migration. De La Puerta R, et al. **J Pharm Pharmacol** 1996 Sep;48(9):968–70

Effects of silibinin and antioxidants on high glucose-induced alterations of fibronectin turnover in human mesangial cell cultures. Wenzel S, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1520–6

Tissue injury by free radicals and the protective effects of flavonoids. de Groot H, et al. **Methods Find Exp Clin Pharmacol** 1996;18 Suppl B:23–5

Natural products with hepatoprotective action. Utrilla MP. **Methods Find Exp Clin Pharmacol** 1996;18 Suppl B:11–2

The effect of dietary flavonoids on DNA damage (strand breaks and oxidised pyrimdines) and growth in human cells. Duthie SJ, et al. **Mutat Res** 1997 Apr 24;390(1–2):141–51

POISONING

[Silibinin and acute poisoning with Amanita phalloides] Carducci R, et al. **Minerva Anestesiol** 1996 May; 62(5):187–93 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

Comparative effects of colchicine and silymarin on CCl4-chronic liver damage in rats. Favari L, et al. **Arch Med Res** 1997 Spring;28(1):11–7

Long-term (12 months) treatment with an anti-oxidant drug (silymarin) is effective on hyperinsulinemia, exogenous insulin need and malondialdehyde levels in cirrhotic diabetic patients. Velussi M, et al. **J Hepatol** 1997 Apr; 26(4):871–9

Protective effects of silymarin against photocarcinogenesis in a mouse skin model. Katiyar SK, et al. **J Natl Cancer Inst** 1997 Apr 16;89(8):556–66

SIMAZINE

METABOLISM

Movement of three s-triazine herbicides atrazine, simazine, and ametryn in subtropical soils. Wang Y, et al. **Bull Environ Contam Toxicol** 1996 Nov;57(5):743–50

PHARMACOLOGY

The inhibition of estrogen receptor-mediated responses by chloro-S-triazine-derived compounds is dependent on estradiol concentration in yeast. Tran DQ, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):140–6

Failure of chloro-S-triazine-derived compounds to induce estrogen receptor-mediated responses in vivo and in vitro. Connor K, et al. **Fundam Appl Toxicol** 1996 Mar; 30(1):93–101

TOXICITY

Assessing the estrogenic and dioxin-like activities of chemicals and complex mixtures using in vitro recombinant receptor-reporter gene assays. Balaguer P, et al. **Can J Physiol Pharmacol** 1996 Feb;74(2):216–22

SIMBU GROUP VIRUSES

[Outbreak of oropouche virus fever in Serra Pelada, municipality of Curionópolis, Pará, 1994] Rosa AP, et al. **Rev Soc Bras Med Trop** 1996 Nov-Dec;29(6):537–41 (Eng. Abstr.) **(Por)**

GENETICS

Antigenic and genetic comparisons of Japanese and Australian Simbu serogroup viruses: evidence for the recovery of natural virus reassortants. Akashi H, et al. **Virus Res** 1997 Aug;50(2):205–13

IMMUNOLOGY

Oropouche virus transmission in the Amazon River basin of Peru. Watts DM, et al. **Am J Trop Med Hyg** 1997 Feb; 56(2):148–52

Antigenic and genetic comparisons of Japanese and Australian Simbu serogroup viruses: evidence for the recovery of natural virus reassortants. Akashi H, et al. **Virus Res** 1997 Aug;50(2):205–13

ISOLATION & PURIFICATION

Rapid identification of Australian bunyavirus isolates belonging to the Simbu serogroup using indirect ELISA formats. Blacksell SD, et al. **J Virol Methods** 1997 Jun; 66(1):123–33

Hydranencephaly, cerebellar hypoplasia, and myopathy in chick embryos infected with aino virus. Kitano Y, et al. **Vet Pathol** 1996 Nov;33(6):672–81

SIMETHICONE

DIAGNOSTIC USE

Development of an oral contrast agent for sonography: clinical and economic considerations. LaFrance ND, et al. **Acad Radiol** 1996 Apr;3 Suppl 1:S160–1

Simethicone coated cellulose as an oral contrast agent for ultrasound of the upper abdomen. Harisinghani MG, et al. **Clin Radiol** 1997 Mar;52(3):224–6

SIMIAN ACQUIRED IMMUNODEFICIENCY SYNDROME

Opioid dependency and the progression of simian AIDS: opioid dependency and behavioral observations. Killam KF, et al. **Adv Exp Med Biol** 1996;402:43–51

Nonhuman Primate Models for AIDS VIII. Proceedings of a meeting. Monterey, California, November 5–8, 1995. **J Med Primatol** 1996 Jun;25(3):147–250

BLOOD

Cystine levels, cystine flux, and protein catabolism in cancer cachexia, HIV/SIV infection, and senescence. Hack V, et al. **FASEB J** 1997 Jan;11(1):84–92

CEREBROSPINAL FLUID

Quinolinic acid and lymphocyte subsets in the intrathecal compartment as biomarkers of SIV infection and simian AIDS. Coe CL, et al. **AIDS Res Hum Retroviruses** 1997 Jul 1;13(10):891–7

COMPLICATIONS

Disseminated granulomatous disease in a simian immunodeficiency virus- and bacille Calmette-Guèrin-infected rhesus monkey [letter] Chen ZW, et al. **AIDS** 1997 Feb;11(2):266–7

Detection of Epstein-Barr virus small RNAs EBER1 and EBER2 in lymphomas of SIV-infected rhesus monkeys by in situ hybridization. Pingel S, et al. **Int J Cancer** 1997 Jul 3;72(1):160–5

Simian immunodeficiency virus-inoculated macaques acquire Mycobacterium avium from potable water during AIDS. Mansfield KG, et al. **J Infect Dis** 1997 Jan;175(1):184–7

A case of pulmonary cestodiasis in a simian immunodeficiency virus-infected pigtailed macaque (Macaca nemestrina) in which virus-infected leukocytes are present within the lesion. Sasseville VG, et al. **J Med Primatol** 1996 Aug;25(4):251–6

Neuropathogenesis of simian immunodeficiency virus infection in macaque monkeys. Sasseville VG, et al. **J Neurovirol** 1997 Feb;3(1):1–9 (104 ref.)

DIAGNOSIS

Simultaneous detection of simian retrovirus type D serotypes 1, 2, and 3 by polymerase chain reaction. Liška V, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):433–7

DRUG THERAPY

9-[2-(Phosphonomethoxy)propyl]adenine therapy of established simian immunodeficiency virus infection in infant rhesus macaques. Van Rompay KK, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2586–91

Efficacy of 6-chloro-2',3'-dideoxyguanosine (6-Cl-ddG) on an ARC/AIDS rhesus macaque (Macaca mulatta) infected with simian immunodeficiency virus. Fujii Y, et al. **Exp Anim** 1997 Jan;46(1):83–7

Viral dynamics of primary viremia and antiretroviral therapy in simian immunodeficiency virus infection. Nowak MA, et al. **J Virol** 1997 Oct;71(10):7518–25

EPIDEMIOLOGY

Occurrence and frequency of transmission of naturally occurring simian retroviral infections (SIV, STLV, and SRV) at the CIRMF Primate Center, Gabon. Georges-Courbot MC, et al. **J Med Primatol** 1996 Oct; 25(5):313–26

SIVagm incidence over two decades in a natural population of Ethiopian grivet monkeys (Cercopithecus aethiops aethiops). Jolly CJoff, et al. **J Med Primatol** 1996 Apr; 25(2):78–83

ETIOLOGY

Immune strategies utilized by lentivirus infected chimpanzees to resist progression to AIDS. Heeney J, et al. **Immunol Lett** 1996 Jun;51(1–2):45–52

Weakened SIV vaccine still kills [news] Cohen J. **Science** 1997 Oct 3;278(5335):24–5

Simian immunodeficiency virus as a model of HIV pathogenesis. Norley S, et al. **Springer Semin Immunopathol** 1997;18(3):391–405 (72 ref.)

GENETICS

Macrophage inflammatory protein-1 alpha mRNA expression in mononuclear cells from different tissues during acute simian immunodeficiency virus strain mac251 infection of macaques [letter] Chéret A, et al. **AIDS** 1997 Feb;11(2):257–8

Identification of Mhc-Mamu-DQB1 allele combinations associated with rapid disease progression in rhesus macaques infected with simian immunodeficiency virus [letter] Sauermann U, et al. **AIDS** 1997 Jul 15;11(9):1196–8

Live attenuated SIV vaccines are not effective in a postexposure vaccination model. Linhart H, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):593–9

The role of major histocompatibility complex polymorphisms on SIV infection in rhesus macaques. Bontrop RE, et al. **Immunol Lett** 1996 Jun;51(1–2):35–8

IMMUNOLOGY

Control of initial viraemia coincides with neutralizing antibody response after SIVmac infection of rhesus macaques [letter] Beer B, et al. **AIDS** 1996 Jun;10(6):681–2

Characteristics of the CD8+ lymphocytosis during primary simian immunodeficiency virus infections. Rosenberg YJ, et al. **AIDS** 1997 Jul;11(8):959–68

Identification of Mhc-Mamu-DQB1 allele combinations associated with rapid disease progression in rhesus macaques infected with simian immunodeficiency virus [letter] Sauermann U, et al. **AIDS** 1997 Jul 15;11(9):1196–8

Interleukin 1 beta, interleukin 6, tumor necrosis factor alpha, and interleukin 10 responses in peripheral blood mononuclear cells of cynomolgus macaques during acute infection with SIVmac251. Benveniste O, et al. **AIDS Res Hum Retroviruses** 1996 Feb 10;12(3):241–50

Cytokine mRNA expression in mononuclear cells from different tissues during acute SIVmac251 infection of macaques. Chéret A, et al. **AIDS Res Hum Retroviruses** 1996 Sep 1;12(13):1263–72

The relationship between the interferon alpha response and viral burden in primary SIV infection. Khatissian E, et al. **AIDS Res Hum Retroviruses** 1996 Sep 1;12(13):1273–8

Live attenuated SIV vaccines are not effective in a postexposure vaccination model. Linhart H, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):593–9

The lymphocytosis-promoting agent pertussis toxin affects virus burden and lymphocyte distribution in the SIV-infected rhesus macaque. Pauza CD, et al. **AIDS Res Hum Retroviruses** 1997 Jan 1;13(1):87–95

Protection against mucosal SIVsm challenge in macaques infected with a chimeric SIV that expresses HIV type 1 envelope. Quesada-Rolander M, et al. **AIDS Res Hum Retroviruses** 1996 Jul 20;12(11):993–9

Comparison of peripheral blood phenotype in pathogenic and attenuated SIV infection. Lines JL, et al. **Biochem Soc Trans** 1997 May;25(2):284S

Cytokine profiling of simian immunodeficiency virus infection of cynomologus macaques. Pathogenic SIVmac251 pJ5C versus non-pathogenic attenuated SIVmac251 pC8C reveals divergence. Stabbings RJ, et al. **Biochem Soc Trans** 1997 May;25(2):285S

Similar abnormalities of idiotype and immunoglobulin light chain expression and of cell-mediated cytotoxicity in HIV-infected humans and simian immunodeficiency virus (SIV)-infected rhesus macaques. Grant MD, et al. **Immunol Cell Biol** 1996 Feb;74(1):38–44

Proceedings of the 1st International summit meeting on Immunological Correlates of Protection from HIV Infection and Disease. Mont Pelerin, Switzerland, 27–30 May 1995. **Immunol Lett** 1996 Jun;51(1–2):1–135

Immune strategies utilized by lentivirus infected chimpanzees to resist progression to AIDS. Heeney J, et al. **Immunol Lett** 1996 Jun;51(1–2):45–52

SIVagm infection of its natural African green monkey host. Norley SG. **Immunol Lett** 1996 Jun;51(1–2):53–8 (24 ref.)

Immunological and virological studies of natural SIV infection of disease-resistant nonhuman primates. Villinger F, et al. **Immunol Lett** 1996 Jun;51(1–2):59–68

CD4 and CD8 expressions in African green monkey helper T lymphocytes: implication for resistance to SIV infection. Murayama Y, et al. **Int Immunol** 1997 Jun;9(6):843–51

Virus-induced cytokines regulate circulating lymphocyte levels during primary SIV infections. Rosenberg YJ, et al. **Int Immunol** 1997 May;9(5):703–12

Cytomegalovirus and simian immunodeficiency virus coinfection: longitudinal study of antibody responses and disease progression. Baroncelli S, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):5–15

Two orphan seven-transmembrane segment receptors which are expressed in CD4-positive cells support simian immunodeficiency virus infection. Farzan M, et al. **J Exp Med** 1997 Aug 4;186(3):405–11

Upregulation of Fas ligand by simian immunodeficiency virus – a nef-arious mechanism of immune evasion? Johnson RP. **J Exp Med** 1997 Jul 7;186(1):1–5 (50 ref.)

Evasion of cytotoxic T lymphocyte (CTL) responses by nef-dependent induction of Fas ligand (CD95L) expression on simian immunodeficiency virus-infected cells. Xu XN, et al. **J Exp Med** 1997 Jul 7;186(1):7–16

Mechanisms of protection induced by attenuated simian immunodeficiency virus. I. Protection cannot be transferred with immune serum. Almond N, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1919–22

Long-term non-progressive human immunodeficiency virus infection: new insights from the simian immunodeficiency virus model. Dittmer U, et al. **J Gen Virol** 1997 May;78 (Pt 5):979–84 (55 ref.)

CD8+ cytotoxic T lymphocytes of a cynomolgus macaque infected with simian immunodeficiency virus (SIV)

mac32H-J5 recognize a nine amino acid epitope in SIV Gag p26. Geretti AM, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):821-4

Macaques infected with attenuated simian immunodeficiency virus resist superinfection with virulence-revertant virus. Sharpe SA, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1923-7

HIV-1 envelope-specific CD4+ T helper cells from simian/human immunodeficiency virus-infected rhesus monkeys recognize epitopes restricted by MHC class II DRB1*0406 and DRB*W201 molecules. Lekutis C, et al. **J Immunol** 1997 Aug 15;159(4):2049-57

Cyclosporin A modulation of early virologic and immunologic events during primary simian immunodeficiency virus infection in rhesus monkeys. Martin LN, et al. **J Infect Dis** 1997 Aug;176(2):374-83

Do cytotoxic T lymphocytes clear some HIV/SIV infections? Ada G. **J Med Primatol** 1996 Jun;25(3):158-62 (33 ref.)

Mechanisms of protection induced by attenuated simian immunodeficiency virus. IV. Protection against challenge with virus grown in autologous simian cells. Almond N, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):34-43

Detection of intracellular signal transduction molecules in PBMC from rhesus macaques and sooty mangabeys. Brice GT, et al. **J Med Primatol** 1996 Jun;25(3):210-7

Chemoattractant factors (IP-10, MIP-1alpha, IL-16) mRNA expression in mononuclear cells from different tissues during acute SIVmac251 infection of macaques. Chéret A, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):19-26

The immunopathogenesis of retroviral diseases: no immunophenotypic alterations in T, B, and NK cell subsets in SIVmac239-challenged rhesus macaques protected by SIV delta nef vaccination. Giorgi JV, et al. **J Med Primatol** 1996 Jun;25(3):186-91

Preclinical AIDS vaccine development: formal survey of global HIV, SIV, and SHIV in vivo challenge studies in vaccinated nonhuman primates. Warren JT, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):63-81

Neuroinvasion by simian immunodeficiency virus coincides with increased numbers of perivascular macrophages/microglia and intrathecal immune activation. Lane JH, et al. **J Neurovirol** 1996 Dec;2(6):423-32

Increased quinolinate immunoreactivity in the peripheral blood monocytes/macrophages from SIV-infected monkeys. Namboodiri AM, et al. **J Neurovirol** 1996 Dec; 2(6):433-8

Specific N-linked and O-linked glycosylation modifications in the envelope V1 domain of simian immunodeficiency virus variants that evolve in the host alter recognition by neutralizing antibodies. Chackerian B, et al. **J Virol** 1997 Oct;71(10):7719-27

Direct ex vivo simian immunodeficiency virus (SIV)-specific cytotoxic activity detected from small intestine intraepithelial lymphocytes of SIV-infected macaques at an advanced stage of infection. Couëdel-Courteille A, et al. **J Virol** 1997 Feb;71(2):1052-7

Simian immunodeficiency virus infection of CD8+ lymphocytes in vivo. Dean GA, et al. **J Virol** 1996 Aug; 70(8):5646-50

Construction, replication, and immunogenic properties of a simian immunodeficiency virus expressing interleukin-2. Gundlach BR, et al. **J Virol** 1997 Mar;71(3):2225-32

Induction of vigorous cytotoxic T-lymphocyte responses by live attenuated simian immunodeficiency virus. Johnson RP, et al. **J Virol** 1997 Oct;71(10):7711-8

Cytotoxic T-lymphocyte responses to cytomegalovirus in normal and simian immunodeficiency virus-infected rhesus macaques. Kaur A, et al. **J Virol** 1996 Nov;70(11):7725-33

Detection of simian immunodeficiency virus (SIV)-specific CD8+ T cells in macaques protected from SIV challenge by prior SIV subunit vaccination. Kent SJ, et al. **J Virol** 1996 Aug;70(8):4941-7

Study of the dynamics of neutralization escape mutants in a chimpanzee naturally infected with the simian immunodeficiency virus SIVcpz-ant. Nyambi PN, et al. **J Virol** 1997 Mar;71(3):2320-30

Definition of human immunodeficiency virus type 1 gp120 and gp41 cytotoxic T-lymphocyte epitopes and their restricting major histocompatibility complex class I alleles in simian-human immunodeficiency virus-infected rhesus monkeys. Voss G, et al. **J Virol** 1996 Oct;70(10):7335-40

Early cytokine and chemokine gene expression in lymph nodes of macaques infected with simian immunodeficiency virus is predictive of disease outcome and vaccine efficacy. Zou W, et al. **J Virol** 1997 Feb;71(2):1227-36

Temporal association of interferon-alpha and p27 core antigen levels in sera of simian immunodeficiency virus infected monkeys. Langford MP, et al. **Microb Pathog** 1996 Mar;20(3):171-8

Vaccine effect using a live attenuated nef-deficient simian immunodeficiency virus of African green monkeys in the absence of detectable vaccine virus replication in vivo. Beer B, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4062-7

Differential utilization of CCR5 by macrophage and T cell tropic simian immunodeficiency virus strains. Edinger AL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4005-10

Cytokine patterns and viral load in lymph nodes during the early stages of SIV infection. Khatissian E, et al. **Res Virol** 1996 Mar-Jun;147(2-3):181-9

Simian immunodeficiency virus (SIV)-specific CD8+ cytotoxic T lymphocyte responses of naive and vaccinated cynomolgus macaques infected with SIVmac32H(J5): quantitative analysis by in vitro antigenic stimulation. Geretti AM, et al. **Vaccine** 1997 Aug;15(11):1269-75

Impaired mitogen-driven proliferation and cytokine transcription of lymphocytes from macaques early after simian immunodeficiency virus (SIV) infection. Spring M, et al. **Viral Immunol** 1997;10(2):65-72

Plasmas from lymphocyte- and macrophage-tropic SIVmac-infected macaques have antibodies with a broader spectrum of virus neutralization activity in macrophage versus lymphocyte cultures. Zhuge W, et al. **Virology** 1997 Jan 6;227(1):24-33

METABOLISM

Elevated hepatic gamma-glutamylcysteine synthetase activity and abnormal sulfate levels in liver and muscle tissue may explain abnormal cysteine and glutathione levels in SIV-infected rhesus macaques. Gross A, et al. **AIDS Res Hum Retroviruses** 1996 Nov 20;12(17):1639-41

Chemokine expression in simian immunodeficiency virus-induced AIDS encephalitis. Sasseville VG, et al. **Am J Pathol** 1996 Nov;149(5):1459-67

Interferon-gamma expression in macaque lymph nodes during primary infection with simian immunodeficiency virus. Khatissian E, et al. **Cytokine** 1996 Nov;8(11):844-52

Two orphan seven-transmembrane segment receptors which are expressed in CD4-positive cells support simian immunodeficiency virus infection. Farzan M, et al. **J Exp Med** 1997 Aug 4;186(3):405-11

MICROBIOLOGY

A cell-free stock of simian-human immunodeficiency virus that causes AIDS in pig-tailed macaques has a limited number of amino acid substitutions in both SIVmac and HIV-1 regions of the genome and has offered cytotropism. Stephens EB, et al. **Virology** 1997 May 12;231(2):313-21

PARASITOLOGY

Transmission and establishment of a persistent infection of Enterocytozoon bieneusi, derived from a human with AIDS, in simian immunodeficiency virus-infected rhesus monkeys. Tzipori S, et al. **J Infect Dis** 1997 Apr; 175(4):1016-20

PATHOLOGY

Focal segmental glomerulosclerosis in primates infected with a simian immunodeficiency virus. Alpers CE, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):413-24

Identification of an Enterocytozoon bieneusi-like microsporidian parasite in simian-immunodeficiency-virus-inoculated macaques with hepatobiliary disease. Mansfield KG, et al. **Am J Pathol** 1997 Apr;150(4):1395-405

1H magnetic resonance spectroscopy reveals neuronal injury in a simian immunodeficiency virus macaque model. Tracey I, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):21-7

Texture analysis of cerebral white matter in SIV-infected macaque monkeys. Pope TW, et al. **J Neurosci Methods** 1997 Jun 6;74(1):53-64

Rhesus thymic/liver xenografts in severe combined immunodeficient mice: immunologic reconstitution and intrathymic infection with simian immunodeficiency virus. Binhazim AA, et al. **Lab Invest** 1996 Sep;75(3):339-48

Neurovirulent simian immunodeficiency virus infection induces neuronal, endothelial, and glial apoptosis. Adamson DC, et al. **Mol Med** 1996 Jul;2(4):417-28

Apoptosis correlates with immune activation in intestinal lymphoid tissue from macaques acutely infected by a highly enteropathic simian immunodeficiency virus, SIVsmmPBj14. Gummuluru S, et al. **Virology** 1996 Nov 1;225(1):21-32

PHYSIOPATHOLOGY

T cell apoptosis in human immunodeficiency virus type 2- and simian immunodeficiency virus-infected macaques. Dittmer U, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2433-6

Significance of macrophage tropism of SIV in the macaque model of HIV disease. Stephens EB, et al. **J Leukoc Biol** 1997 Jul;62(1):12-9

The history of simian AIDS. Gardner MB. **J Med Primatol** 1996 Jun;25(3):148-57 (91 ref.)

The value of primate models for studying human immunodeficiency virus pathogenesis. Levy JA. **J Med Primatol** 1996 Jun;25(3):163-74 (44 ref.)

Viral dynamics of primary viremia and antiretroviral therapy in simian immunodeficiency virus infection. Nowak MA, et al. **J Virol** 1997 Oct;71(10):7518-25

Microglia-passaged simian immunodeficiency virus induces neurophysiological abnormalities in monkeys. Prospéro-García O, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14158-63

PREVENTION & CONTROL

Prevention of simian immunodeficiency virus, SIVsm, or HIV-2 infection in cynomolgus monkeys by pre- and postexposure administration of BEA-005. Böttiger D, et al. **AIDS** 1997 Feb;11(2):157-62

Protection against human immunodeficiency virus type 2 and simian immunodeficiency virus in macaques vaccinated against human immunodeficiency virus type 2. Biberfeld G, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):443-6 (22 ref.)

Recombinant subunit vaccines against primate lentiviruses. Hu SL. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):451-3 (26 ref.)

Simian immunodeficiency virus live and inactivated experimental vaccines. Norley S, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):447-9 (41 ref.)

Anti-major histocompatibility complex antibody responses to simian B cells do not protect macaques against SIVmac infection. Polyanskaya N, et al. **AIDS Res Hum Retroviruses** 1997 Jul 20;13(11):923-31

Vaccination of cynomolgus monkeys with whole inactivated or live-attenuated simian immunodeficiency virus. Titti F, et al. **Antibiot Chemother** 1996;48:131-8

Attenuated SIV imparts immunity to challenge with pathogenic spleen-derived SIV but cannot prevent repair of the nef deletion. Stahl-Hennig C, et al. **Immunol Lett** 1996 Jun;51(1-2):129-35

Mechanisms of protection induced by attenuated simian immunodeficiency virus. I. Protection cannot be transferred with immune serum. Almond N, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1919-22

A recombinant human adenovirus expressing the simian immunodeficiency virus Gag antigen can induce long-lived immune responses in mice. Flanagan B, et al. **J Gen Virol** 1997 May;78 (Pt 5):991-7

Rapid development of vaccine protection in macaques by live-attenuated simian immunodeficiency virus. Stahl-Hennig C, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):2969-81

Evolution of envelope-specific antibody responses in monkeys experimentally infected or immunized with simian immunodeficiency virus and its association with the development of protective immunity. Cole KS, et al. **J Virol** 1997 Jul;71(7):5069-79

Rhesus macaques previously infected with simian/human immunodeficiency virus are protected from vaginal challenge with pathogenic SIVmac239. Miller CJ, et al. **J Virol** 1997 Mar;71(3):1911-21

SIV and HIV prophylaxis [letter; comment] Ada GL, et al. **Nat Med** 1996 Oct;2(10):1054-5. Comment on: Nat Med 1996 Jul;2(7):767-75.

SIV DNA vaccine trial in macaques: post-challenge necropsy in vaccine and control groups. Lu S, et al. **Vaccine** 1997 Jun;15(8):920-3

Fetal or neonatal infection with attenuated simian immunodeficiency virus results in protective immunity against oral challenge with pathogenic SIVmac251. Otsyula MG, et al. **Virology** 1996 Aug 1;222(1):275-8

PSYCHOLOGY

Microglia-passaged simian immunodeficiency virus induces neurophysiological abnormalities in monkeys. Prospéro-García O, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14158-63

THERAPY

The effect of recombinant human interferon alpha B/D compared to interferon alpha 2b on SIV infection in rhesus macaques. Schellekens H, et al. **Antiviral Res** 1996 Aug; 32(1):1-8

Passive immune globulin therapy in the SIV/macaque model: early intervention can alter disease profile. Haigwood NL, et al. **Immunol Lett** 1996 Jun;51(1-2):107-14

TRANSMISSION

Analysis of live, oral poliovirus vaccine monopools for human immunodeficiency virus type 1 and simian immunodeficiency virus [see comments] Khan AS, et al. **J Infect Dis** 1996 Dec;174(6):1185-90. Comment in: J Infect Dis 1997 Aug;176(2):545-6.

Genotypic analysis of infant macaques infected transplacentally and orally. Martin Amedee A, et al. **J Med Primatol** 1996 Jun;25(3):225-35

SIV/DeltaB670 transmission across oral, colonic, and vaginal mucosae in the macaque. Trichel AM, et al. **J Med Primatol** 1997 Feb-Apr;26(1-2):3-10

Animal model of mucosally transmitted human immunodeficiency virus type 1 disease: intravaginal and oral deposition of simian/human immunodeficiency virus in macaques results in systemic infection, elimination of CD4+ T cells, and AIDS. Joag SV, et al. **J Virol** 1997 May;71(5):4016-23

Intrarectal transmission of simian immunodeficiency virus in rhesus macaques: selective amplification and host responses to transient or persistent viremia. Trivedi P, et al. **J Virol** 1996 Oct;70(10):6876-83

Breaching barriers [comment] Kraehenbuhl JP, et al. **Nat Med** 1996 Oct;2(10):1080-2. Comment on: Nat Med 1996 Oct;2(10):1084-9.

Progesterone implants enhance SIV vaginal transmission and early virus load [see comments] Marx PA, et al. **Nat Med** 1996 Oct;2(10):1084-9. Comment in: Nat Med 1996 Oct;2(10):1080-2. Comment in: Nat Med 1997 Feb;3(2):124.

SIMIAN ACQUIRED IMMUNODEFICIENCY SYNDROME

VIROLOGY

Reverse transcriptase and corresponding activity-blocking antibody for monitoring SIVsm infection in macaques. Ekstrand DH, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):601-10

Early treatment with 9-(2-phosphonylmethoxyethyl)adenine reduces virus burdens for a prolonged period in SIV-infected rhesus macaques. Joag SV, et al. **AIDS Res Hum Retroviruses** 1997 Feb 10;13(3):241-6

Localization of simian immunodeficiency virus nucleic acid and antigen in brains of fetal macaques inoculated in utero. Lane JH, et al. **Am J Pathol** 1996 Oct;149(4):1097-104

Pathogenesis of SIV encephalitis. Selection and replication of neurovirulent SIV. Zink MC, et al. **Am J Pathol** 1997 Sep;151(3):793-803

A zidovudine-resistant simian immunodeficiency virus mutant with a Q151M mutation in reverse transcriptase causes AIDS in newborn macaques. Van Rompay KK, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):278-83

Restriction of viral population by intravaginal infection of simian immunodeficiency viruses in macaque monkeys. Enose Y, et al. **Arch Virol** 1997;142(1):37-51

Neuropathogenesis of chimeric simian/human immunodeficiency virus infection in pig-tailed and rhesus macaques. Raghavan R, et al. **Brain Pathol** 1997 Jul; 7(3):851-61

Expression of gamma interferon by simian immunodeficiency virus increases attenuation and reduces postchallenge virus load in vaccinated rhesus macaques. Giavedoni L, et al. **J Virol** 1997 Feb;71(2):866-72

A molecularly cloned, pathogenic, neutralization-resistant simian immunodeficiency virus, SIVsmE543-3. Hirsch V, et al. **J Virol** 1997 Feb;71(2):1608-20

Induction of AIDS by simian immunodeficiency virus lacking NF-kappaB and SP1 binding elements. Ilyinskii PO, et al. **J Virol** 1997 Mar;71(3):1880-7

Study of the dynamics of neutralization escape mutants in a chimpanzee naturally infected with the simian immunodeficiency virus SIVcpz-ant. Nyambi PN, et al. **J Virol** 1997 Mar;71(3):2320-30

Plasma viremia in macaques infected with simian immunodeficiency virus: plasma viral load early in infection predicts survival. Watson A, et al. **J Virol** 1997 Jan; 71(1):284-90

Increased enzyme-linked immunosorbent assay specificity with solubilized simian retrovirus 2-infected cell membranes. Thouless ME, et al. **Lab Anim Sci** 1996 Dec; 46(6):619-22

Temporal association of interferon-alpha and p27 core antigen levels in sera of simian immunodeficiency virus infected monkeys. Langford MP, et al. **Microb Pathog** 1996 Mar;20(3):171-8

A new approach to investigating the relationship between productive infection and cytopathicity in vivo. Reinhart TA, et al. **Nat Med** 1997 Feb;3(2):218-21

Impact of various simian immunodeficiency virus variants on induction and nature of neuropathology in macaques. Czub S, et al. **Res Virol** 1996 Mar-Jun;147(2-3):165-70

Cytokine patterns and viral load in lymph nodes during the early stages of SIV infection. Khatissian E, et al. **Res Virol** 1996 Mar-Jun;147(2-3):181-9

Loss of the SIVsmmPBj14 phenotype and nef genotype during long-term survival of macaques infected by mucosal routes. Schwiebert RS, et al. **Virology** 1997 Mar 31; 230(1):82-92

Infected macaques that controlled replication of SIVmac or nonpathogenic SHIV developed sterilizing resistance against pathogenic SHIV(KU-1). Stephens EB, et al. **Virology** 1997 Aug 4;234(2):328-39

SIMIAN ADENOVIRUSES see **ADENOVIRUSES, SIMIAN**

SIMIAN AIDS see **SIMIAN ACQUIRED IMMUNODEFICIENCY SYNDROME**

SIMIAN AIDS RETROVIRUS see **RETROVIRUSES TYPE D, SIMIAN**

SIMIAN AIDS VACCINES see **SAIDS VACCINES**

SIMIAN FOAMY VIRUSES see **SPUMAVIRUS**

SIMIAN HEMORRHAGIC FEVER VIRUS see **ARTERIVIRUS**

SIMIAN HERPESVIRUS see **HERPESVIRUS 1, CERCOPITHECINE**

SIMIAN IMMUNODEFICIENCY VIRUSES see **SIV**

SIMIAN LENTIVIRUSES see **SIV**

SIMIAN T-LYMPHOTROPIC VIRUS TYPE I see **STLV**

SIMIAN T-LYMPHOTROPIC VIRUS TYPE III see **SIV**

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SIMIAN SARCOMA VIRUS PROTEINS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

SIMIAN VIRUS 40 see **POLYOMAVIRUS MACACAE**

SIMMONDS' DISEASE see **HYPOPITUITARISM**

SIMPLE REPETITIVE SEQUENCE see **REPETITIVE SEQUENCES, NUCLEIC ACID**

SIMPLEXVIRUS

Cannabinoids and immunity to viruses. Specter S. **Adv Exp Med Biol** 1996;402:131-4 (11 ref.)

Asymptomatic shedding of HSV in patients with AIDS. Apgar B. **Am Fam Physician** 1997 Sep 1;56(3):910

Asymptomatic perianal shedding of herpes simplex virus in patients with acquired immunodeficiency syndrome. Pannuti CS, et al. **Arch Dermatol** 1997 Feb;133(2):180-3

Distribution of tumor necrosis factor receptor messenger RNA in normal and herpes simplex virus infected trigeminal ganglia in the mouse. Cunningham ET Jr, et al. **Brain Res** 1997 May 30;758(1-2):99-106

An HSVtk-mediated local and distant antitumor bystander effect in tumors of head and neck origin in athymic mice. Bi W, et al. **Cancer Gene Ther** 1997 Jul-Aug;4(4):246-52

Evaluation of the bystander effect in experimental brain tumors bearing herpes simplex virus-thymidine kinase gene by serial magnetic resonance imaging. Namba H, et al. **Hum Gene Ther** 1996 Oct 1;7(15):1847-52

Human interferon reduces surface expression but not total production of herpes simplex virus type 1 glycoproteins gC and gE in heterologous hamster cells. Holberg-Petersen M, et al. **J Interferon Cytokine Res** 1996 Sep;16(9):717-24

Preservation of the bystander cytocidal effect of irradiated herpes simplex virus thymidine kinase (HSV-tk) modified tumor cells. Vrionis FD, et al. **J Neurooncol** 1996 Dec; 30(3):225-36

Toxicity studies in thymidine kinase-deficient herpes simplex virus therapy for malignant astrocytoma. Jia WW, et al. **J Neurosurg** 1996 Oct;85(4):662-6

The roles of herpes simplex virus in neuroscience. Turner SL, et al. **J Neurovirol** 1997 Apr;3(2):110-25 (154 ref.)

Engineering herpes simplex virus vectors for gene transfer to neurons. Fink DJ, et al. **Nat Med** 1997 Mar;3(3):357-9

The application of genetically engineered herpes simplex viruses to the treatment of experimental brain tumors. Andreansky SS, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11313-8 (53 ref.)

Evaluation of a novel lipid prodrug for intraocular drug delivery: effect of acyclovir diphosphate dimyristoylglycerol in a rabbit model with herpes simplex virus-1 retinitis. Taskintuna I, et al. **Retina** 1997;17(1):57-64

[The syncytial effect of herpes virus.I--Action of UV-inactivated viruses on rabbit renal cell monolayers] Cocuzza G, et al. **Boll Ist Sieroter Milan** 1966 May-Jun; 45(5-6):228-35 **(Ita)**

[Effect of infection with herpes simplex and rubella virus of highly differentiated human and guinea pig astrocytes] Poleshchuk NN, et al. **Biull Eksp Biol Med** 1996 Oct; 122(10):413-7 **(Rus)**

CHEMISTRY

A novel ubiquitin-specific protease is dynamically associated with the PML nuclear domain and binds to a herpesvirus regulatory protein. Everett RD, et al. **EMBO J** 1997 Feb 3;16(3):566-77

Disulfide bond structure determination and biochemical analysis of glycoprotein C from herpes simplex virus. Rux AH, et al. **J Virol** 1996 Aug;70(8):5455-65

CLASSIFICATION

Detection and typing of herpes simplex viruses by using recombinant immunoglobulin fragments produced in bacteria. Cattani P, et al. **J Clin Microbiol** 1997 Jun; 35(6):1504-9

Rapid detection and typing of herpes simplex virus DNA in clinical specimens by the hybrid capture II signal amplification probe test. Cullen AP, et al. **J Clin Microbiol** 1997 Sep;35(9):2275-8

DRUG EFFECTS

Trifluorothymidine 0.5% ointment in the treatment of aciclovir-resistant mucocutaneous herpes simplex in AIDS [letter] Amin AR, et al. **AIDS** 1996 Aug;10(9):1051-3

A natural sulfated polysaccharide, calcium spirulan, isolated from Spirulina platensis: in vitro and ex vivo evaluation of anti-herpes simplex virus and anti-human immunodeficiency virus activities. Hayashi K, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1463-71

Acyclovir suppresses subclinical shedding of herpes simplex virus [letter; comment] Straus SE, et al. **Ann Intern Med** 1996 Nov 1;125(9):776-7. Comment on: Ann Intern Med 1996 Jan 1;124(1 Pt 1):8-15.

Mechanism of copper-mediated inactivation of herpes simplex virus. Sagripanti JL, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):812-7

In vitro inactivation of herpes simplex virus by a biological response modifier, PSK. Monma Y, et al. **Antiviral Res** 1997 Aug;35(3):131-8

A continuous intracerebral gene delivery system for in vivo liposome-mediated gene therapy. Zhu J, et al. **Gene Ther** 1996 Jun;3(6):472-6

Barrier and antiviral effect of a new cream formulation [letter] Spencer B, et al. **Infect Control Hosp Epidemiol** 1997 Mar;18(3):159-60

Generation of an anti-tumour immune response in a non-immunogenic tumour: HSVtk killing in vivo stimulates a mononuclear cell infiltrate and a Th1-like profile of intratumoural cytokine expression. Vile RG, et al. **Int J Cancer** 1997 Apr 10;71(2):267-74

Antiviral activities of medicinal plants of southern Nepal. Taylor RS, et al. **J Ethnopharmacol** 1996 Aug;53(2):97-104

Reactivation of herpes simplex virus from latently infected mice after administration of cadmium is mouse-strain-dependent. Fawl RL, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2781-6

Anti-herpes simplex virus activity of n-docosanol correlates with intracellular metabolic conversion of the drug. Pope LE, et al. **J Lipid Res** 1996 Oct;37(10):2167-78

Peptidomimetic inhibitors of herpes simplex virus ribonucleotide reductase with improved in vivo antiviral activity. Moss N, et al. **J Med Chem** 1996 Oct 11; 39(21):4173-80

Studies to show that with podophyllotoxin the early replicative stages of herpes simplex virus type 1 depend upon functional cytoplasmic microtubules. Hammonds TR, et al. **J Med Microbiol** 1996 Sep;45(3):167-72

Homopolymer mutational hot spots mediate herpes simplex virus resistance to acyclovir. Sasadeusz JJ, et al. **J Virol** 1997 May;71(5):3872-8

Analysis of resistance mutants of viral polymerases. Oxford JS, et al. **Methods Enzymol** 1996;275:555-600 (179 ref.)

[Combined activity of meliacin and foscarnet against different strains of herpes simplex virus type 1 using a three-dimensional model] Barquero AA, et al. **Rev Argent Microbiol** 1997 Jan-Mar;29(1):32-7 (Eng. Abstr.) **(Spa)**

[The course for a successor for acyclovir] Ramos JM, et al. **Rev Clin Esp** 1996 Nov;196(11):761-5 (66 ref.) **(Spa)**

ENZYMOLOGY

Expression of costimulatory molecules: B7 and ICAM up-regulation after treatment with a suicide gene. Ramesh R, et al. **Cancer Gene Ther** 1996 Nov-Dec;3(6):373-84

Herpes simplex virus thymidine kinase/ganciclovir-mediated killing of tumor cell induces tumor-specific cytotoxic T cells in mice. Yamamoto S, et al. **Cancer Gene Ther** 1997 Mar-Apr;4(2):91-6

Retrovirus-mediated transfer of the suicide gene into retinal pigment epithelial cells in vitro. Schubert CA, et al. **Curr Eye Res** 1997 Jul;16(7):656-62

Trypanosoma cruzi: use of herpes simplex virus-thymidine kinase as a negative selectable marker. Buckner FS, et al. **Exp Parasitol** 1997 Jul;86(3):171-80

Suicide genes and bystander killing: local and distant effects [editorial] Dilber MS, et al. **Gene Ther** 1997 Apr;4(4):273-4

Gene therapy of experimental malignant mesothelioma using adenovirus vectors encoding the HSVtk gene. Esandi MC, et al. **Gene Ther** 1997 Apr;4(4):280-7

Co-expression of the herpes simplex virus thymidine kinase gene potentiates methotrexate resistance conferred by transfer of a mutated dihydrofolate reductase gene. Mineishi S, et al. **Gene Ther** 1997 Jun;4(6):570-6

Neurotoxicity of intracerebral injection of a replication-defective adenoviral vector in a semipermissive species (cotton rat). Shine HD, et al. **Gene Ther** 1997 Apr; 4(4):275-9

The bystander effect exerted by tumor cells expressing the herpes simplex virus thymidine kinase (HSVtk) gene is dependent on connexin expression and cell communication via gap junctions. Vrionis FD, et al. **Gene Ther** 1997 Jun; 4(6):577-85

In vitro sensitization of the B16 murine melanoma cells to ganciclovir by different RNA and plasmid DNA constructions encoding HSVtk. Yarovoi SV, et al. **Gene Ther** 1996 Oct;3(10):913-8

Applying the herpes simplex virus thymidine kinase/ganciclovir approach to ovarian cancer: an effective in vitro drug-sensitization system. Al-Hendy A, et al. **Gynecol Obstet Invest** 1997;43(4):268-75

A phase I study of recombinant adenovirus vector-mediated intraperitoneal delivery of herpes simplex virus thymidine kinase (HSV-TK) gene and intravenous ganciclovir for previously treated ovarian and extraovarian cancer patients. Alvarez RD, et al. **Hum Gene Ther** 1997 Mar 20; 8(5):597-613

Gene therapy for peritoneal dissemination of pancreatic cancer by liposome-mediated transfer of herpes simplex virus thymidine kinase gene. Aoki K, et al. **Hum Gene Ther** 1997 Jun 10;8(9):1105-13

Limited efficacy of the HSV-TK/GCV system for gene therapy of malignant gliomas and perspectives for the combined transduction of the interleukin-4 gene. Benedetti S, et al. **Hum Gene Ther** 1997 Jul 20;8(11):1345-53

Retrovirus-mediated suicide gene transduction in the vitreous cavity of the eye: feasibility in prevention of proliferate vitreoretinopathy. Kimura H, et al. **Hum Gene Ther** 1996 May 1;7(7):799-808

Cure of mice with established metastatic friend leukemia cell tumors by a combined therapy with tumor cells expressing both interferon-alpha 1 and herpes simplex thymidine kinase followed by ganciclovir. Santodonato L, et al.

Hum Gene Ther 1996 Jan;7(1):1–10

Use of donor T-lymphocytes expressing herpes-simplex thymidine kinase in allogeneic bone marrow transplantation: a phase I–II study. Tiberghien P, et al. **Hum Gene Ther** 1997 Mar 20;8(5):615–24

Limitations of retrovirus-mediated HSV-tk gene transfer to pulmonary adenocarcinoma cells in vitro and in vivo. Zhang L, et al. **Hum Gene Ther** 1997 Mar 20;8(5):563–74

Adenovirus-mediated herpes simplex virus thymidine kinase gene and ganciclovir therapy leads to systemic activity against spontaneous and induced metastasis in an orthotopic mouse model of prostate cancer. Hall SJ, et al. **Int J Cancer** 1997 Jan 17;70(2):183–7

Adenoviral-mediated herpes simplex virus-thymidine kinase gene transfer in vivo for treatment of experimental human melanoma. Bonnekoh B, et al. **J Invest Dermatol** 1996 Jun; 106(6):1163–8

Understanding the binding of 5-substituted 2'-deoxyuridine substrates to thymidine kinase of herpes simplex virus type-1. De Winter H, et al. **J Med Chem** 1996 Nov 22; 39(24):4727–37

Design of nucleoside analog inhibitors of herpesvirus polymerases. Prisbe EJ, et al. **Methods Enzymol** 1996; 275:425–40

Preclinical testing of recombinant adenoviral herpes simplex virus-thymidine kinase gene therapy for central nervous system malignancies. Vincent AJ, et al. **Neurosurgery** 1997 Aug;41(2):442–51; discussion 451–2

Development and use of an in vitro HSV-tk forward mutation assay to study eukaryotic DNA polymerase processing of DNA alkyl lesions. Eckert KA, et al. **Nucleic Acids Res** 1997 Apr 1;25(7):1450–7

Effects of an upstream DNA curvature on the strength of HSV thymidine kinase promoter. Ohyama T, et al. **Nucleic Acids Symp Ser** 1995;(34):67–8

Adenoviral-mediated herpes simplex virus thymidine kinase gene transfer: regression of hepatic metastasis of pancreatic tumors. Block A, et al. **Pancreas** 1997 Jul;15(1):25–34

Adenoviral infection of thyroid cells: a rationale for gene therapy for metastatic thyroid carcinoma. Zeiger MA, et al. **Surgery** 1996 Dec;120(6):921–5

Purification and characterization of the protein kinase encoded by the UL13 gene of herpes simplex virus type 2. Daikoku T, et al. **Virology** 1997 Aug 18;235(1):82–93

[Virus propagation and proteases: with special emphasis on the newly discovered serine protease in human herpes virus] Maeda H. **Tanpakushitsu Kakusan Koso** 1997 May; 42(6):875–9 (25 ref.) **(Jpn)**

GENETICS

Herpes simplex virus-based vectors: problems and some solutions. Fink DJ, et al. **Adv Neurol** 1997;72:149–56 (17 ref.)

Engineering herpes simplex virus vectors for human gene therapy. Glorioso JC, et al. **Adv Pharmacol** 1997;40:103–36 (195 ref.)

Enhancement of gene therapy specificity for diffuse colon carcinoma liver metastases with recombinant herpes simplex virus. Carroll NM, et al. **Ann Surg** 1996 Sep; 224(3):323–9; discussion 329–30

Pancreatic carcinoma cell killing via adenoviral mediated delivery of the herpes simplex virus thymidine kinase gene. Rosenfeld ME, et al. **Ann Surg** 1997 May;225(5):609–18; discussion 618–20

Gene therapy of metastatic pancreas cancer with intraperitoneal injections of concentrated retroviral herpes simplex thymidine kinase vector supernatant and ganciclovir. Yang L, et al. **Ann Surg** 1996 Sep; 224(3):405–14; discussion 414–7

Evaluation of prodrugs ability to induce effective ablation of cells transduced with viral thymidine kinase gene. Kuriyama S, et al. **Anticancer Res** 1996 Sep–Oct; 16(5A):2623–8

Polymerase chain reaction reveals herpes simplex virus DNA in saliva of patients with Behçet's disease. Lee S, et al. **Arch Dermatol Res** 1996 Apr;288(4):179–83

Studies on the stability of HSV-1 temperature sensitive 28 degrees C clone. Litwińska B, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(5–6):379–83

Identification and transcriptional analysis of pseudorabies virus UL6 to UL12 genes. Dijkstra JM, et al. **Arch Virol** 1997;142(1):17–35

Sequence analysis of the bovine herpesvirus type 1 genes homologous to the DNA polymerase (UL30), the major DNA-binding protein (UL29) and ICP18.5 assembly protein (UL28) genes of herpes simplex virus. Meyer G, et al. **Arch Virol** 1997;142(1):89–102

Targeted gene therapy for cancer: herpes simplex virus thymidine kinase gene-mediated cell killing leads to anti-tumour immunity that can be augmented by co-expression of cytokines in the tumour cells. Vile RG, et al. **Biochem Soc Trans** 1997 May;25(2):717–22 (51 ref.)

Efficient long-PCR site-specific mutagenesis of a high GC template. Chouljenko V, et al. **Biotechniques** 1996 Sep; 21(3):472–4, 476–8, 480

A novel herpes vector for the high-efficiency transduction of normal and malignant human hematopoietic cells. Dilloo D, et al. **Blood** 1997 Jan 1;89(1):119–27

Potential use of herpes simplex virus (HSV) vectors for gene therapy of neurological disorders. Kennedy PG. **Brain** 1997 Jul;120 (Pt 7):1245–59 (80 ref.)

Inducible gene expression from defective herpes simplex virus vectors using the tetracycline-responsive promoter system. Ho DY, et al. **Brain Res Mol Brain Res** 1996 Sep 5; 41(1–2):200–9

Use of a "replication-restricted" herpes virus to treat experimental human malignant mesothelioma. Kucharczuk JC, et al. **Cancer Res** 1997 Feb 1;57(3):466–71

Quantitation of herpes simplex virus DNA in cerebrospinal fluid of patients with herpes simplex encephalitis by the polymerase chain reaction. Revello MG, et al. **Clin Diagn Virol** 1997 Feb;7(3):183–91

Advances in the development of herpes simplex virus-based gene transfer vectors for the nervous system. Fink DJ, et al. **Clin Neurosci** 1995–96;3(5):284–91 (41 ref.)

Use of viral vectors to promote neuroregeneration. Verhaagen J, et al. **Clin Neurosci** 1995–96;3(5):275–83 (59 ref.)

Stability of herpes simplex virus DNA in cerebrospinal fluid specimens. Wiedbrauk DL, et al. **Diagn Mol Pathol** 1996 Dec;5(4):249–52

Development of an HSV-based vector for the treatment of Parkinson's disease. Fink DJ, et al. **Exp Neurol** 1997 Mar; 144(1):103–21 (87 ref.)

Gene transfer in hepatocarcinoma cell lines: in vitro optimization of a virus-free system. Ghoumari AM, et al. **Gene Ther** 1996 Jun;3(6):483–90

Human malignant brain tumor response to herpes simplex thymidine kinase (HSVtk)/ganciclovir gene therapy. Izquierdo M, et al. **Gene Ther** 1996 Jun;3(6):491–5

Long-term expression of a foreign gene from a unique position in the latent herpes simplex virus genome. Carpenter DE, et al. **Hum Gene Ther** 1996 Aug 1; 7(12):1447–54

Treatment of advanced CNS malignancies with the recombinant adenovirus H5.010RSVTK: a phase I trial. Eck SL, et al. **Hum Gene Ther** 1996 Aug 1;7(12):1465–82

Herpes vector-mediated delivery of marker genes to disseminated central nervous system tumors. Kramm CM, et al. **Hum Gene Ther** 1996 Feb 10;7(3):291–300

Expression of the bcl-2 gene from a defective HSV-1 amplicon vector protects pancreatic beta-cells from apoptosis. Liu Y, et al. **Hum Gene Ther** 1996 Sep 10; 7(14):1719–26

A novel multiply-mutated HSV-1 strain for the treatment of human brain tumors. Pyles RB, et al. **Hum Gene Ther** 1997 Mar 20;8(5):533–44

Establishment of parameters for optimal transduction efficiency and antitumor effects with purified high-titer HSV-TK retroviral vector in established solid tumors. Smiley WR, et al. **Hum Gene Ther** 1997 May 20;8(8):965–77

Intracranial administration of adenovirus expressing HSV-TK in combination with ganciclovir produces a dose-dependent, self-limiting inflammatory response. Smith JG, et al. **Hum Gene Ther** 1997 May 20;8(8):943–54

Rapid production of interleukin-2-secreting tumor cells by herpes simplex virus-mediated gene transfer: implications for autologous vaccine production. Tung C, et al. **Hum Gene Ther** 1996 Dec 1;7(18):2217–24

Tissue-specific expression of HSV-tk gene can induce efficient antitumor effect and protective immunity to wild-type hepatocellular carcinoma. Kuriyama S, et al. **Int J Cancer** 1997 May 2;71(3):470–5

Effect of DNA-binding drugs on early growth response factor-1 and TATA box-binding protein complex formation with the herpes simplex virus latency promoter. Chiang SY, et al. **J Biol Chem** 1996 Sep 27; 271(39):23999–4004

Herpes simplex viral vectors expressing Bcl-2 are neuroprotective when delivered after a stroke. Lawrence MS, et al. **J Cereb Blood Flow Metab** 1997 Jul;17(7):740–4

Expression of herpes simplex virus DNA fragments located in epidermal keratinocytes and germinative cells is associated with the development of erythema multiforme lesions. Imafuku S, et al. **J Invest Dermatol** 1997 Oct; 109(4):550–6

Defective herpes simplex virus vectors expressing the rat brain stress-inducible heat shock protein 72 protect cultured neurons from severe heat shock. Fink SL, et al. **J Neurochem** 1997 Mar;68(3):961–9

Defective viral vectors as agents for gene transfer in the nervous system. Kaplitt MG, et al. **J Neurosci Methods** 1997 Jan;71(1):125–32 (87 ref.)

The molecular genetics of herpes simplex virus latency and pathogenesis: a puzzle with many pieces still missing [editorial; comment] Bennett JL, et al. **J Neurovirol** 1996 Aug;2(4):225–9 (51 ref.). Comment on: J Neurovirol 1996 Aug;2(4):268–78. Comment on: J Neurovirol 1996 Aug;2(4):279–88. Comment on: J Neurovirol 1996 Aug;2(4):289–95.

Multitracer studies during gene therapy of hepatoma cells with herpes simplex virus thymidine kinase and ganciclovir. Haberkorn U, et al. **J Nucl Med** 1997 Jul;38(7):1048–54

Monitoring gene therapy with herpes simplex virus thymidine kinase in hepatoma cells: uptake of specific substrates. Haberkorn U, et al. **J Nucl Med** 1997 Feb;38(2):287–94

Gene therapy for colon cancer with the herpes simplex thymidine kinase gene. Link CJ Jr, et al. **J Surg Oncol** 1997 Apr;64(4):289–94

The effect of ganciclovir on herpes simplex virus-mediated oncolysis. Carroll NM, et al. **J Surg Res** 1997 May; 69(2):413–7

Mutational analysis of the virion host shutoff gene (UL41) of herpes simplex virus (HSV): characterization of HSV type 1 (HSV-1)/HSV-2 chimeras. Everly DN Jr, et al. **J Virol** 1997 Oct;71(10):7157–66

Suppression of the phenotype of gamma(1)34.5- herpes simplex virus 1: failure of activated RNA-dependent protein kinase to shut off protein synthesis is associated with a deletion in the domain of the alpha47 gene. He B, et al. **J Virol** 1997 Aug;71(8):6049–54

Protease-deficient herpes simplex virus protects mice from lethal herpesvirus infection. Hippenmeyer PJ, et al. **J Virol** 1997 Feb;71(2):988–95

Association of herpes simplex virus regulatory protein ICP22 with transcriptional complexes containing EAP, ICP4, RNA polymerase II, and viral DNA requires posttranslational modification by the U(L)13 proteinkinase. Leopardi R, et al. **J Virol** 1997 Feb;71(2):1133–9

Assembly of herpes simplex virus capsids using the human cytomegalovirus scaffold protein: critical role of the C terminus. Oien NL, et al. **J Virol** 1997 Feb;71(2):1281–91

Nuclear sites of herpes simplex virus type 1 DNA replication and transcription colocalize at early times postinfection and are largely distinct from RNA processing factors. Phelan A, et al. **J Virol** 1997 Feb;71(2):1124–32

Repression of gene expression upon infection of cells with herpes simplex virus type 1 mutants impaired for immediate-early protein synthesis. Preston CM, et al. **J Virol** 1997 Oct;71(10):7807–13

The herpes simplex virus immediate-early protein ICP0 affects transcription from the viral genome and infected-cell survival in the absence of ICP4 and ICP27. Samaniego LA, et al. **J Virol** 1997 Jun;71(6):4614–25

The herpes simplex virus type 1 2.0-kilobase latency-associated transcript is a stable intron which branches at a guanosine. Zabolotny JM, et al. **J Virol** 1997 Jun;71(6):4199–208

In vivo retrovirus-mediated herpes simplex virus thymidine kinase gene therapy approach for adult T cell leukemia in a rat model. Murata K, et al. **Jpn J Cancer Res** 1997 May;88(5):492–500

Pathogenicity of glycoprotein C-deficient herpes simplex virus 1 strain TN-1 which encodes truncated glycoprotein C. Minagawa H, et al. **Microbiol Immunol** 1997; 41(7):545–51

High-frequency transfer of cloned herpes simplex virus type 1 sequences to mammalian cells by protoplast fusion. Sandri-Goldin RM, et al. **Mol Cell Biol** 1981 Aug; 1(8):743–52

Gene transfer to muscle using herpes simplex virus-based vectors. Huard J, et al. **Neuromuscul Disord** 1997 Jul; 7(5):299–313 (101 ref.)

Introduction of the glutamate receptor subunit 1 into motor neurons in vitro and in vivo using a recombinant herpes simplex virus. Neve RL, et al. **Neuroscience** 1997 Jul; 79(2):435–47

Preclinical testing of recombinant adenoviral herpes simplex virus-thymidine kinase gene therapy for central nervous system malignancies. Vincent AJ, et al. **Neurosurgery** 1997 Aug;41(2):442–51; discussion 451–2

In vivo 31P MRS evaluation of ganciclovir toxicity in C6 gliomas stably expressing the herpes simplex thymidine kinase gene. Stegman LD, et al. **NMR Biomed** 1996 Dec; 9(8):364–8

Herpes simplex virus: selection of origins of DNA replication. Hammarsten O, et al. **Nucleic Acids Res** 1997 May 1; 25(9):1753–60

The POU-domain factor Brn-3.0 recognizes characteristic sites in the herpes simplex virus genome. Turner EE, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2589–94

Effects of an upstream DNA curvature on the strength of HSV thymidine kinase promoter. Ohyama T, et al. **Nucleic Acids Symp Ser** 1995;(34):67–8

Alternatively spliced mRNAs predicted to yield frame-shift proteins and stable intron 1 RNAs of the herpes simplex virus 1 regulatory gene alpha 0 accumulate in the cytoplasm of infected cells. Carter KL, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12535–40

Replication-defective herpes simplex virus vectors for gene transfer in vivo. Marconi P, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11319–20 (13 ref.)

The function of herpes simplex virus genes: a primer for genetic engineering of novel vectors. Roizman B. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11307–12 (45 ref.)

Effect of gene therapy with the herpes simplex virus-thymidine kinase gene on hepatic metastasis in murine colon cancer. Hayashi S, et al. **Surg Today** 1997;27(1):40–3

Mutagenesis of a cAMP response element within the latency-associated transcript promoter of HSV-1 reduces adrenergic reactivation. Bloom DC, et al. **Virology** 1997 Sep 15;236(1):202–7

Partial substitution of the functions of the herpes simplex virus 1 U(L)13 gene by the human cytomegalovirus U(L)97 gene. Ng TI, et al. **Virology** 1996 Nov 15;225(2):347–58

Herpes simplex 1716--an ICP 34.5 mutant--is severely replication restricted in human skin xenografts in vivo. Randazzo BP, et al. **Virology** 1996 Sep 15;223(2):392–5

Expression and properties of feline herpesvirus type 1 gD (hemagglutinin) by a recombinant baculovirus. Maeda K, et al. **Virus Res** 1996 Dec;46(1–2):75–80

[Herpetic infection] Briazzhikova TS, et al. **Klin Med (Mosk)** 1996;74(7):7–9 (36 ref.) **(Rus)**

[Antigenic and genomic characterization of Herpes simplex

virus isolated from double genital infections] Martínez MJ, et al. **Rev Med Chil** 1996 Feb;124(2):153–9 (Eng. Abstr.) **(Spa)**

GROWTH & DEVELOPMENT

Herpes simplex virus seropositivity and reactivation at delivery among pregnant women infected with human immunodeficiency virus–1. Hitti J, et al. **Am J Obstet Gynecol** 1997 Aug;177(2):450–4

Modulation of Langerhans cell phenotype, migration and maturation by agents known to cause herpes simplex virus reactivation in a mouse model. Manickasingham SP, et al. **Clin Exp Immunol** 1996 Nov;106(2):304–11

Reactivation of caprine herpesvirus 1 in latently infected goats. Buonavoglia C, et al. **Comp Immunol Microbiol Infect Dis** 1996 Sep;19(4):275–81

Herpes simplex virus replication hits a nerve [editorial; comment] Block TM. **J Neurovirol** 1995 Jun;1(2):135–7. Comment on: J Neurovirol 1995 Jun;1(2):157–64. Comment on: J Neurovirol 1995 Jun;1(2):165–76.

Attempted modulation of herpes simplex virus (HSV) infection of neurons in culture by fibroblast growth factor. Kennedy PG, et al. **J Neurovirol** 1995 Dec;1(5–6):399–404

Mechanisms of herpes simplex virus type 1 reactivation. Halford WP, et al. **J Virol** 1996 Aug;70(8):5051–60

Reactivation of herpes simplex virus type 1 in cells of latently infected mouse trigeminal ganglia cultured in serum–free medium. Kimura S. **Microbiol Immunol** 1996;40(3):243–6

Herpes simplex 1716—an ICP 34.5 mutant—is severely replication restricted in human skin xenografts in vivo. Randazzo BP, et al. **Virology** 1996 Sep 15;223(2):392–5

IMMUNOLOGY

Monoclonal antibodies to the distinct antigenic sites on glycoproteins C and B and their protective abilities in herpes simplex virus infection. Bystrická M, et al. **Acta Virol** 1997 Feb;41(1):5–12

Molecular mimicry in human aortic aneurysmal diseases. Ozsvath KJ, et al. **Ann N Y Acad Sci** 1996 Nov 18; 800:288–93

Effect of anti–herpes specific transfer factor. Byston J, et al. **Biotherapy** 1996;9(1–3):73–5

Efficacy of transfer factor in treating patients with recurrent ocular herpes infections. Meduri R, et al. **Biotherapy** 1996; 9(1–3):61–6

Stress–induced effects on integral immune components involved in herpes simplex virus (HSV)–specific memory cytotoxic T lymphocyte activation. Bonneau RH. **Brain Behav Immun** 1996 Jun;10(2):139–63

The importance of MHC–I and MHC–II responses in vaccine efficacy against lethal herpes simplex virus type 1 challenge. Ghiasi H, et al. **Immunology** 1997 Jul;91(3):430–5

Herpes simplex hepatitis. Mantry P, et al. **Indian J Gastroenterol** 1997 Jan;16(1):33–4

Prevention of hepatic tumor metastases in rats with herpes viral vaccines and gamma–interferon. Karpoff HM, et al. **J Clin Invest** 1997 Feb 15;99(4):799–804

Cytokine expression by human peripheral blood dendritic cells stimulated in vitro with HIV–1 and herpes simplex virus. Ghanekar S, et al. **J Immunol** 1996 Nov 1; 157(9):4028–36

An outbreak of herpes rugbiorum managed by vaccination of players and sociosexual contacts. Skinner GR, et al. **J Infect** 1996 Nov;33(3):163–7

Role of interferon–gamma in immunity to herpes simplex virus. Yu Z, et al. **J Leukoc Biol** 1996 Oct;60(4):528–32

High interferon alpha levels in placenta, maternal, and cord blood suggest a protective effect against intrauterine herpes simplex virus infection. Zdravkovic M, et al. **J Med Virol** 1997 Mar;51(3):210–3

The impact of psychological stress on the efficacy of anti–viral adoptive immunotherapy in an immunocompromised host. Bonneau RH, et al. **J Neuroimmunol** 1997 Sep;78(1–2):19–33

Dual detection of antibody to both herpes simplex and varicella–zoster viruses in cerebrospinal fluid: cross reactivity or dual infection? [letter] Echevarría JM, et al. **J Neurol** 1996 Aug;243(8):618–9

Evaluation of a rapid enzyme immunoassay for the detection of herpes simplex virus antigen in children with herpetic gingivostomatitis. Amir J, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):627–9

Subversion of the MHC class I antigen–presentation pathway by adenoviruses and herpes simplex viruses. Burgert HG. **Trends Microbiol** 1996 Mar;4(3):107–12 (61 ref.)

[Herpes simplex virus and macrophages] Scieux C. **Pathol Biol (Paris)** 1997 Feb;45(2):159–64 (37 ref.) (Eng. Abstr.) **(Fre)**

[Antigenic and genomic characterization of Herpes simplex virus isolated from double genital infections] Martínez MJ, et al. **Rev Med Chil** 1996 Feb;124(2):153–9 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Comparison of nested polymerase chain reaction, virus isolation, and fluorescent antibody testing for identifying feline herpesvirus in cats with conjunctivitis. Stiles J, et al. **Am J Vet Res** 1997 Aug;58(8):804–7

Herpes simplex virus antibodies in the perilymph of patients with Menière disease [see comments] Arnold W, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jan;123(1):53–6. Comment in: Arch Otolaryngol Head Neck Surg 1997 Jul;123(7):768.

Comparison of MRC–5 and primary rabbit kidney cells for the detection of herpes simplex virus. McCarter YS, et al. **Arch Pathol Lab Med** 1997 Feb;121(2):122–4

Routine detection of herpes simplex virus and varicella zoster virus by polymerase chain reaction reveals that initial herpes zoster is frequently misdiagnosed as herpes simplex. Rübben A, et al. **Br J Dermatol** 1997 Aug;137(2):259–61

Absence of Kaposi's sarcoma associated herpesvirus–like DNA sequences (KSHV) in HIV–negative multicentric Castleman's disease complicated by KSHV–positive Kaposi's sarcoma [letter] Kwong YL, et al. **Br J Haematol** 1997 Mar;96(4):881–2

Detection of herpes simplex virus in exacerbated pemphigus vulgaris by polymerase chain reaction. Schlüpen EM, et al. **Dermatology** 1996;192(4):312–6

Rapid detection and typing of herpes simplex virus DNA in clinical specimens by the hybrid capture II signal amplification probe test. Cullen AP, et al. **J Clin Microbiol** 1997 Sep;35(9):2275–8

Differentiation of primary from nonprimary genital herpes infections by a herpes simplex virus–specific immunoglobulin G avidity assay. Hashido M, et al. **J Clin Microbiol** 1997 Jul;35(7):1766–8

Detection of herpes simplex virus in clinical specimens by cytospin–enhanced direct immunofluorescence. Landry ML, et al. **J Clin Microbiol** 1997 Jan;35(1):302–4

Retention of herpes simplex virus DNA sequences in the nuclei of mouse footpad keratinocytes after recovery from primary infection. Simmons A, et al. **J Gen Virol** 1997 Apr; 78 (Pt 4):867–71

Recovery of cytomegalovirus and herpes simplex virus from upper and lower genital tract specimens obtained from women with pelvic inflammatory disease. Clarke LM, et al. **J Infect Dis** 1997 Jul;176(1):286–8

Application of the polymerase chain reaction to the diagnosis and management of neonatal herpes simplex virus disease. National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group. Kimberlin DW, et al. **J Infect Dis** 1996 Dec;174(6):1162–7

Detection and differentiation of primate alpha–herpesviruses by PCR. Black DH, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):225–31

A system for isolation, transport and storage of herpes simplex viruses. Skinner GR, et al. **J Virol Methods** 1997 Apr;65(1):1–8

Granulomatous vasculitis associated with herpes virus: a persistent, painful, postherpetic papular eruption. Snow JL, et al. **Mayo Clin Proc** 1997 Sep;72(9):851–3

Herpes simplex virus and Alzheimer's disease [news] Jack DB. **Mol Med Today** 1996 Jul;2(7):270

Detection of feline herpesvirus 1 DNA by the nested polymerase chain reaction. Hara M, et al. **Vet Microbiol** 1996 Feb;48(3–4):345–52

[Detection of herpes viral genome in corneal buttons of quiescet herpes simplex keratitis with polymerase chain reaction] Liu Z, et al. **Yen Ko Hsueh Pao** 1995 Dec; 11(4):183–5 (Eng. Abstr.) **(Chi)**

[Detection of latent herpes simplex virus in human vestibular ganglia] Suzuki S. **Hokkaido Igaku Zasshi** 1996 Sep; 71(5):561–71 (Eng. Abstr.) **(Jpn)**

[Herpes simplex meningoencephalitis in an infant observed during an epidemic of enteroviral infections of the nervous system] Szychowska Z, et al. **Pediatr Pol** 1996 Aug; 71(8):721–5 (Eng. Abstr.) **(Pol)**

[Para–aminobenzoic acid in therapy of experimental keratitis caused by herpes simplex virus in rabbits: the therapeutic effect and decrease of infectious titer] Akberova SI, et al. **Vestn Oftalmol** 1996 Sep–Oct;112(4):23–6 (Eng. Abstr.) **(Rus)**

[Herpetic laryngeal involvement simulating neoplasm] Ferrandis Perepérez E, et al. **Acta Otorrinolaringol Esp** 1997 Jan–Feb;48(1):69–71 (Eng. Abstr.) **(Spa)**

METABOLISM

Co–expression of two gene products in the CNS using double–cassette defective herpes simplex virus vectors. New KC, et al. **Brain Res Mol Brain Res** 1996 Apr; 37(1–2):317–23

Expression of L1 in primary astrocytes via a defective herpes simplex virus vector promotes neurite outgrowth and neural cell migration. Yazaki T, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):311–20

Selective vulnerability of mouse CNS neurons to latent infection with a neuroattenuated herpes simplex virus–1. Kesari S, et al. **J Neurosci** 1996 Sep 15;16(18):5644–53

Properties of the novel herpes simplex virus type 1 origin binding protein, OBPC. Baradaran K, et al. **J Virol** 1996 Aug;70(8):5673–9

Herpes simplex virus type 1 protein IE63 affects the nuclear export of virus intron–containing transcripts. Phelan A, et al. **J Virol** 1996 Aug;70(8):5255–65

Repression of gene expression upon infection of cells with herpes simplex virus type 1 mutants impaired for immediate–early protein synthesis. Preston CM, et al. **J Virol** 1997 Oct;71(10):7807–13

Analysis of conserved domains of UL41 of herpes simplex virus type 1 in virion host shutoff and pathogenesis. Strelow LI, et al. **J Virol** 1996 Aug;70(8):5665–7

Overexpression of the herpes simplex virus type 1 immediate–early regulatory protein, ICP27, is responsible for the aberrant localization of ICP0 and mutant forms of ICP4 in ICP4 mutant virus–infected cells. Zhu Z, et al. **J Virol** 1996 Aug;70(8):5346–56

Interaction between acidic transcriptional activation domains of herpes simplex virus activator protein VP16 and transcriptional initiation factor IID. Greenblatt J, et al. **Methods Enzymol** 1996;274:120–33

Biochemical mechanism of transcriptional activation by GAL4–VP16. Tantin D, et al. **Methods Enzymol** 1996; 274:133–49

PATHOGENICITY

Recombinant bovine herpesvirus–1 (BHV–1) lacking transactivator protein BICPO entails lack of glycoprotein C and severely reduced infectivity. Köppel R, et al. **Biol Chem** 1996 Dec;377(12):787–95

Herpes virus infection of RPE and MDCK cells: polarity of infection. Topp KS, et al. **Exp Eye Res** 1997 Mar; 64(3):343–54

Immunomodulation by OK–432 and calcitonin gene–related peptide (CGRP) of nitric oxide synthase (NOS) and IL–1 beta gene expression and of HSV–1 pathogenicity in mouse skin Langerhans cells (LC). Berkowitz–Balshayi C, et al. **In Vivo** 1995 Sep–Oct;9(5):447–54

A mouse model of herpes simplex virus encephalitis: diagnostic brain imaging by magnetic resonance imaging. Lamadé UM, et al. **In Vivo** 1996 Nov–Dec;10(6):563–8

Suppression of herpes simplex virus type 1 (HSV–1)–induced pneumonia in mice by inhibition of inducible nitric oxide synthase (iNOS, NOS2). Adler H, et al. **J Exp Med** 1997 May 5;185(9):1533–40

The active site of ICP47, a herpes simplex virus–encoded inhibitor of the major histocompatibility complex (MHC)–encoded peptide transporter associated with antigen processing (TAP), maps to the NH2–terminal 35 residues. Galocha B, et al. **J Exp Med** 1997 May 5; 185(9):1565–72

Herpes simplex virus blocks intracellular transport of HLA–G in placentally derived human cells. Schust DJ, et al. **J Immunol** 1996 Oct 15;157(8):3375–80

The molecular genetics of herpes simplex virus latency and pathogenesis: a puzzle with many pieces still missing [editorial; comment] Bennett JL, et al. **J Neurovirol** 1996 Aug;2(4):225–9 (51 ref.). Comment on: J Neurovirol 1996 Aug;2(4):268–78. Comment on: J Neurovirol 1996 Aug;2(4):279–88. Comment on: J Neurovirol 1996 Aug;2(4):289–95.

Herpes simplex virus virulence: the functions of the gamma (1)34.5 gene. Roizman B, et al. **J Neurovirol** 1997 May;3 Suppl 1:S1–2

Pathogenicity of glycoprotein C–deficient herpes simplex virus 1 strain TN–1 which encodes truncated glycoprotein C. Minagawa H, et al. **Microbiol Immunol** 1997; 41(7):545–51

Herpes simplex virus and the cytoskeleton [letter] Falke D. **Trends Microbiol** 1997 Aug;5(8):306

PHYSIOLOGY

The herpes simplex virus–1 glycoprotein E (gE) mediates IgG binding and cell–to–cell spread through distinct gE domains. Weeks BS, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):31–5

Herpes simplex virus–1 entry into cells mediated by a novel member of the TNF/NGF receptor family. Montgomery RI, et al. **Cell** 1996 Nov 1;87(3):427–36

Experimental investigation of herpes simplex virus latency. Wagner EK, et al. **Clin Microbiol Rev** 1997 Jul;10(3):419–43 (332 ref.)

Effects of protein tyrosine kinase inhibitors on the replication of herpes simplex virus and the phosphorylation of viral proteins. Yura Y, et al. **Intervirology** 1997;40(1):7–14

Herpes simplex: evolving concepts. Pereira FA. **J Am Acad Dermatol** 1996 Oct;35(4):503–20; quiz 521–2 (182 ref.)

Herpes simplex virus type 2 synergizes with interferon–gamma in the induction of nitric oxide production in mouse macrophages through autocrine secretion of tumour necrosis factor–alpha. Baskin H, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):195–203

Anti–interleukin–6 antibodies inhibit herpes simplex virus reactivation. Kriesel JD, et al. **J Infect Dis** 1997 Apr; 175(4):821–7

Herpes simplex virus induces appearance of interferon–alpha/beta–producing cells and partially interferon–alpha/beta–dependent accumulation of leukocytes in murine regional lymph nodes. Riffault S, et al. **J Interferon Cytokine Res** 1996 Dec;16(12):1007–14

Therapy of a murine model of pediatric brain tumors using a herpes simplex virus type–1 ICP34.5 mutant and demonstration of viral replication within the CNS. Lasner TM, et al. **J Neuropathol Exp Neurol** 1996 Dec; 55(12):1259–69

Herpes simplex virus vectors for gene transfer to the nervous system. Goins WF, et al. **J Neurovirol** 1997 May;3 Suppl 1:S80–8 (91 ref.)

Herpes simplex virus virulence: the functions of the gamma (1)34.5 gene. Roizman B, et al. **J Neurovirol** 1997 May;3 Suppl 1:S1–2

Differences in resistance to herpes simplex virus type 1 (HSV–1) among oligodendroglia derived from different strains of mice are determined after viral adsorption but

prior to the expression of immediate early (IE) genes. Thomas EE, et al. **J Neurovirol** 1997 Jun;3(3):197–205
Equimolar generation of the four possible arrangements of adjacent L components in herpes simplex virus type 1 replicative intermediates. Bataille D, et al. **J Virol** 1997 Oct;71(10):7736–43
A viral function represses accumulation of transcripts from productive-cycle genes in mouse ganglia latently infected with herpes simplex virus. Chen SH, et al. **J Virol** 1997 Aug;71(8):5878–84
Study of herpes simplex virus maturation during a synchronous wave of assembly. Church GA, et al. **J Virol** 1997 May;71(5):3603–12
Effects of mutations in the Exo III motif of the herpes simplex virus DNA polymerase gene on enzyme activities, viral replication, and replication fidelity. Hwang YT, et al. **J Virol** 1997 Oct;71(10):7791–8
Biosynthesis of glycoproteins E and I of feline herpesvirus: gE-gI interaction is required for intracellular transport. Mijnes JD, et al. **J Virol** 1996 Aug;70(8):5466–75
Herpes simplex virus gene expression in neurons: viral DNA synthesis is a critical regulatory event in the branch point between the lytic and latent pathways. Nichol PF, et al. **J Virol** 1996 Aug;70(8):5476–86
cis-acting elements involved in transcriptional regulation of the herpes simplex virus type 1 latency-associated promoter 1 (LAP1) in vitro and in vivo. Soares K, et al. **J Virol** 1996 Aug;70(8):5384–94
Anterograde, transneuronal transport of herpes simplex virus type 1 strain H129 in the murine visual system. Sun N, et al. **J Virol** 1996 Aug;70(8):5405–13
Infection of sympathetic and sensory neurones with herpes simplex virus does not elicit a shut-off of cellular protein synthesis: implications for viral latency and herpes vectors. Nichol PF, et al. **Neurobiol Dis** 1994 Nov;1(1-2):83–94
Attenuation of the natural course of herpes simplex virus infection in human oral epithelial cell cultures by smokeless tobacco extracts suggests the possibility of a synergistic mechanism for carcinogenesis. Murrah VA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):63–9
Effect of laser irradiation on latency of herpes simplex virus in a mouse model. Perrin D, et al. **Pathol Biol (Paris)** 1997 Jan;45(1):24–7
Virus entry: two receptors are better than one. Tufaro F. **Trends Microbiol** 1997 Jul;5(7):257–8; discussion 258–9
[The syncytial effect of herpes virus.I--Action of UV-inactivated viruses on rabbit renal cell monolayers] Cocuzza G, et al. **Boll Ist Sieroter Milan** 1966 May-Jun; 45(5-6):228–35 **(Ita)**

RADIATION EFFECTS

[The syncytial effect of herpes virus.I--Action of UV-inactivated viruses on rabbit renal cell monolayers] Cocuzza G, et al. **Boll Ist Sieroter Milan** 1966 May-Jun; 45(5-6):228–35 **(Ita)**

SIMS see **SPECTROMETRY, MASS, SECONDARY ION**

SIMS MICROSCOPY see **SPECTROMETRY, MASS, SECONDARY ION**

SIMULIIDAE

Required duration of combined annual ivermectin treatment and vector control in the Onchocerciasis Control Programme in west Africa. Plaisier AP, et al. **Bull World Health Organ** 1997;75(3):237–45
Economic impact of black flies (Diptera:Simuliidae) in South Carolina and development of a localized suppression program. Gray EW, et al. **J Am Mosq Control Assoc** 1996 Dec;12(4):676–8
Use of stream width for determining the dosage rates of Bacillus thuringiensis var. israelensis for larval black fly (Diptera: Simuliidae) control. Undeen AH, et al. **J Am Mosq Control Assoc** 1996 Jun;12(2 Pt 1):312–5
Black fly (Diptera:Simuliidae) salivary secretions: importance in vector competence and disease. Cupp EW, et al. **J Med Entomol** 1997 Mar;34(2):87–94 (76 ref.)
Humans vary in their ability to elicit biting responses from Simulium venustum (Diptera:Simuliidae). Schofield S, et al. **J Med Entomol** 1997 Jan;34(1):64–7
Human individuals vary in attractiveness for host-seeking black flies (Diptera: Simuliidae) based on exhaled carbon dioxide. Schofield SW, et al. **J Med Entomol** 1996 Jan; 33(1):102–8
Control of pest blackflies (Diptera:Simuliidae) along the Orange River, South Africa: 1990–1995. Palmer RW, et al. **Onderstepoort J Vet Res** 1996 Dec;63(4):289–304
Density-dependent processes in the transmission of human onchocerciasis: relationship between microfilarial intake and mortality of the simuliid vector. Basáñez MG, et al. **Parasitology** 1996 Oct;113 (Pt 4):331–55
Cycles in daily catches of members of the Simulium damnosum species complex. Cheke RA. **Trop Med Parasitol** 1995 Dec;46(4):247–52
[The necessity of conducting to the end the activities of vector control in the onchocerciasis control program in west Africa: recall of the stakes and proposal of a minimum budget for the period 1998-2002] Hougard JM, et al. **Parasite** 1994 Dec;1(4):295–303 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Morphological differentiation of adult females of the Simulium damnosum complex from Nigeria. Mafuyai HB, et al. **Med Vet Entomol** 1996 Apr;10(2):190–2
[Variability of the morphological traits in the blood-sucking black fly Odagmia caucasica (Diptera: Simuliidae)] Kachvorian EA, et al. **Parazitologiia** 1995 Nov-Dec; 29(6):470–9 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Novel anticoagulant from salivary glands of Simulium vittatum (Diptera: Simuliidae) inhibits activity of coagulation factor V. Abebe M, et al. **J Med Entomol** 1996 Jan;33(1):173–6

CLASSIFICATION

Four new cytotypes of the onchocerciasis vector blackfly Simulium guianense in Brazil. Charalambous M, et al. **Med Vet Entomol** 1996 Apr;10(2):111–20
First sibling species identifications of Nigerian onchocerciasis vectors. Mafuyai HB, et al. **Trans R Soc Trop Med Hyg** 1997 Jan-Feb;91(1):90–1
Cytotaxonomic identifications of the Simulium damnosum complex (Diptera:Simuliidae) from Nigeria. Mafuyai HB, et al. **Trop Med Int Health** 1996 Dec;1(6):779–85
[Synonymy of generic and homonymy of species names for palearctic black flies (Diptera: Simuliidae)] Iankovskiĭ AV. **Parazitologiia** 1996 Mar-Apr;30(2):113–6 (Eng. Abstr.) **(Rus)**
[A new species of black flies in the genus Montisimulium (Diptera: Simuliidae) from the environs of Alma-Ata] Ismagulov AG, et al. **Parazitologiia** 1996 Jan-Feb; 30(1):81–4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Simulium damnosum s.l.: isolation and identification of prophenoloxidase following an infection with Onchocerca spp. using targeted differential display. Hagen HE, et al. **Exp Parasitol** 1997 Jul;86(3):213–8

GENETICS

Molecular phylogeny and typing of blackflies (Diptera: Simuliidae) that serve as vectors of human or bovine onchocerciasis. Tang J, et al. **Med Vet Entomol** 1996 Jul; 10(3):228–34
[The morpho-karyotypic traits of 4 species of black flies (Diptera: Simuliidae)] Chubareva LA, et al. **Parazitologiia** 1996 Jan-Feb;30(1):3–12 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Cellular hemolymph response of Simulium vittatum (Diptera:Simuliidae) to intrathoracic injection of Onchocerca lienalis (Filarioidea:Onchocercidae) microfilariae. Cupp MS, et al. **J Med Entomol** 1997 Jan; 34(1):56–63

ISOLATION & PURIFICATION

Cytotaxonomic identifications of the Simulium damnosum complex (Diptera:Simuliidae) from Nigeria. Mafuyai HB, et al. **Trop Med Int Health** 1996 Dec;1(6):779–85

PARASITOLOGY

Simulium damnosum s.l.: isolation and identification of prophenoloxidase following an infection with Onchocerca spp. using targeted differential display. Hagen HE, et al. **Exp Parasitol** 1997 Jul;86(3):213–8
Ultrastructure of infective larvae (L3) of Onchocerca volvulus (Nematoda: Filarioidea) developed in Simulium yahense in Liberia. Endo BY, et al. **J Parasitol** 1997 Jun; 83(3):344–62
Vector-parasite transmission complexes for onchocerciasis in West Africa. Toé L, et al. **Lancet** 1997 Jan 18; 349(9046):163–6
Anthropophilic blackflies (Diptera: Simuliidae) and onchocerciasis transmission in southwest Ethiopia. Gebre-Michael T, et al. **Med Vet Entomol** 1996 Jan; 10(1):44–52
Vector competence of the Simulium damnosum complex in Cameroon for Onchocerca spp. from cattle. Wahl G. **Med Vet Entomol** 1996 Apr;10(2):200–2
Development by injection in Simulium damnosum s.l. of two Onchocerca species from the wart hog to infective larvae resembling type D larvae (Duke, 1967). Wahl G, et al. **Parasite** 1995 Mar;2(1):55–62
The vector status of Simulium damnosum on the island of Bioko in Equatorial Guinea. Cheke RA, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr;91(2):153–4
Assessment of vector microfilarial uptake as a comparatively non-invasive technique for monitoring onchocerciasis treatment campaigns in the Americas. Davies JB, et al. **Trop Med Int Health** 1997 Apr;2(4):348–55
[Microfilarial loads of onchocerca and experimental vectorial capacity of Simulium soubrense-Simulium sanctipauli group in the forest zone of Ivory Coast] Traore S, et al. **Med Trop (Mars)** 1996;56(4):373–5 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Effect of weather conditions on the flight activity of Nigerian blackflies (Diptera:Simuliidae). Roberts DM, et al. **Med Vet Entomol** 1996 Apr;10(2):137–44
[Aggressiveness of Simulium of the ornatum complex (Diptera: Simuliidae) in Catalonia (Spain). First observation] Gállego J, et al. **Parasite** 1994 Sep;1(3):288 **(Fre)**

VIROLOGY

Vector competence of select black fly species for vesicular stomatitis virus (New Jersey serotype). Mead DG, et al. **Am J Trop Med Hyg** 1997 Jul;57(1):42–8

SIMULIUM see **SIMULIIDAE**

SIN-10 see **MOLSIDOMINE**

SINANOMYCIN see **NETROPSIN**

SINAPIS see **MUSTARD**

SINCALIDE

see related
APPETITE DEPRESSANTS
GASTROINTESTINAL AGENTS

ADMINISTRATION & DOSAGE

Inhibition of sucrose intake by continuous celiac, superior mesenteric, and intravenous CCK-8 infusions. Cox JE, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R319–25
A nose-brain pathway for psychotropic peptides: evidence from a brain evoked potential study with cholecystokinin. Pietrowsky R, et al. **Psychoneuroendocrinology** 1996 Aug; 21(6):559–72

ANALOGS & DERIVATIVES

High-affinity CCK-A receptors on the vagus nerve mediate CCK-stimulated pancreatic secretion in rats. Li Y, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G679–85
Interaction of cholecystokinin and glutamate agonists within the dLGN, the dentate gyrus, and the hippocampus. Gabriel S, et al. **Brain Res Bull** 1996;39(6):381–9
Cholecystokinin (CCK) and C-terminal fragments of CCK: effects of CCK-33, CCK-8 and CCK-4 in the cardiovascular system of diabetic rats. Wiśniewska RJ, et al. **Gen Pharmacol** 1996 Mar;27(2):399–405
Cholecystokinin increases GABA release by inhibiting a resting K+ conductance in hippocampal interneurons. Miller KK, et al. **J Neurosci** 1997 Jul 1;17(13):4994–5003
Cholecystokinin-JMV-180 and pilocarpine are potent inhibitors of cholecystokinin and carbachol actions on guinea pig pancreatic acinar cells. Sjödin L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):631–7
Obesity induced by unspecific early postnatal overfeeding in male and female rats: hypophagic effect of CCK-8S. Voits M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep;354(3):374–8
Cholecystokinin-8S increases dynorphin B, aspartate and glutamate release in the fronto-parietal cortex of the rat via different receptor subtypes. You ZB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):576–81
The influence of gastrin and/or cholecystokinin antagonists on the proliferation of three human astrocytic tumor cell lines. Camby I, et al. **Neuropeptides** 1996 Oct;30(5):433–7
Cholecystokinin depolarizes neurons of cat pancreatic ganglion. Ma RC, et al. **Peptides** 1996;17(5):775–83
The trophic response of rat pancreas to sulfated cholecystokinin-8 is dose- and time-dependent and not affected by vagotomy or atropine. Nylander AG, et al. **Pharmacol Toxicol** 1997 Mar;80(3):142–6
Ethological analysis of cholecystokinin (CCKA and CCKB) receptor ligands in the elevated plus-maze test of anxiety in mice. Johnson NJ, et al. **Psychopharmacology (Berl)** 1996 Apr;124(4):355–64
Cholecystokinin peptides in cerebrospinal fluid: a study in healthy male subjects. Gunnarsson T, et al. **Regul Pept** 1997 Jan 15;68(1):57–61

ANALYSIS

Characterization of a new neurosecretory cell type containing gastrin-cholecystokinin-like peptide in the locust pars intercerebralis: ultrastructural and immunocytochemical studies, in situ and in vitro. Tamarelle M, et al. **J Neurocytol** 1997 Jun;26(6):399–406

ANTAGONISTS & INHIBITORS

Devazepide-induced hyperplasia in the rat liver and bile ducts. Ohlsson B, et al. **Eur Surg Res** 1996 Jul-Aug; 28(4):299–305
The effects of cholecystokinin A and B receptor antagonists, devazepide and L 365260, on citalopram-induced decrease of exploratory behaviour in rat. Matto V, et al. **J Physiol Pharmacol** 1996 Dec;47(4):661–9
Comparison of the effects of two cholecystokinin-receptor antagonists, loxiglumide and L-364,718, on the pancreatic

secretory response to intraduodenal tryptophan in dogs. Niebergall-Roth E, et al. **Scand J Gastroenterol** 1996 Jul; 31(7):723-32

BIOSYNTHESIS

Prohormone convertase 2 is necessary for the formation of cholecystokinin-22, but not cholecystokinin-8, in RIN5F and STC-1 cells. Yoon J, et al. **Endocrinology** 1997 Sep; 138(9):3620-3

Prohormone convertase 1 is necessary for the formation of cholecystokinin 8 in Rin5F and STC-1 cells. Yoon J, et al. **J Biol Chem** 1997 Apr 4;272(14):9450-6

BLOOD

Beta-endorphin and cholecystokinin 8 concentrations in peripheral blood mononuclear cells of autistic children. Brambilla F, et al. **Neuropsychobiology** 1997;35(1):1-4

DIAGNOSTIC USE

Effectiveness of cholecystokinin-stimulated cholescintigraphy in the diagnosis and treatment of acalculous gallbladder disease. Mishkind MT, et al. **Am Surg** 1997 Sep;63(9):769-74

Sincalide: a cholecystokinin agonist as an aid in endoscopic retrograde cholangiopancreatography--a prospective assessment. Weston AP. **J Clin Gastroenterol** 1997 Jun; 24(4):227-30

Should the presence of other diseases exclude subjects as controls in studies of gallbladder response to cholecystokinin octapeptide (sincalide)? Scintigraphic results in patients with malignancies but no known gallbladder disease. Jacobson AF, et al. **Nucl Med Commun** 1996 Jun;17(6):514-9

Acalculous gallbladder disease: US evaluation after slow-infusion cholecystokinin stimulation in symptomatic and asymptomatic adults [see comments] Barr RG, et al. **Radiology** 1997 Jul;204(1):105-11. Comment in: Radiology 1997 Jul;204(1):13-4.

GENETICS

Lipofectin-facilitated transfer of cholecystokinin gene corrects behavioral abnormalities of rats with audiogenic seizures. Zhang LX, et al. **Neuroscience** 1997 Mar; 77(1):15-22

IMMUNOLOGY

Immunogenicity of cholecystokinin octapeptide-conjugated antigens in pigs. Pekas JC. **J Anim Sci** 1996 Aug; 74(8):1953-8

METABOLISM

Distribution of cholecystokinin-8-like immunoreactivity in the frog brain and spinal cord. Petkó M, et al. **Acta Biol Hung** 1996;47(1-4):355-69

Involvement of cholinergic processes in cholecystokinin (CCK182release by luminal oleic acid. Miyasaka K, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):179-82

Antagonistic effect of YM022, an antiulcer agent in rats, on human cholecystokinin (CCK)B/gastrin receptor. Koizumi T, et al. **Jpn J Pharmacol** 1996 Aug;71(4):307-13

The in vivo metabolism of cholecystokinin (CCK-8) is essentially ensured by aminopeptidase A. Migaud M, et al. **Peptides** 1996;17(4):601-7

PHARMACOLOGY

Cholecystokinin depolarizes guinea pig sphincter of Oddi neurons by activating CCK-A receptors. Gokin AP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1365-71

CCK-evoked hyperemia in rat gastric mucosa involves neural mechanisms and nitric oxide. Heinemann A, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):G253-8

High-affinity CCK-A receptors on the vagus nerve mediate CCK-stimulated pancreatic secretion in rats. Li Y, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G679-85

Cholecystokinin octapeptide inhibits carbohydrate but not protein intake. Mamoun AH, et al. **Am J Physiol** 1997 Sep; 273(3 Pt 2):R972-80

Cholecystokinin-induced protection against gastric injury is independent of endogenous somatostatin. Mercer DW, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):G692-700

Acute pancreatitis in rats: effects of sodium taurocholate, CCK-8, and Sec on pancreatic microcirculation. Plusczyk T, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G310-20

CCK is involved in both peripheral and central mechanisms controlling food intake in chickens. Rodríguez-Sinovas A, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R334-40

CCK-8 infusion increases plasma LMW alkaline phosphatase coincident with enterohepatic circulation of bile acids. Solter PF, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G381-8

Involvement of G proteins in the effect of carbachol and cholecystokinin in rat pancreatic islets. Verspohl EJ, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E65-72

Cholecystokinin peptides stimulate pancreatic secretion by multiple signal transduction pathways. Yoshida H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G735-47

Central implants of dilute estradiol enhance the satiety effect of CCK-8. Butera PC, et al. **Behav Neurosci** 1996 Aug; 110(4):823-30

A site-directed mutagenesis study on the conserved alanine residue in the distal third intracellular loops of cholecystokininB and neurotensin receptors. Wang HL. **Br J Pharmacol** 1997 May;121(2):310-6

The increased satiating potency of CCK-8 by estradiol is not mediated by upregulation of NTS CCK receptors. Geary N, et al. **Brain Res** 1996 May 6;719(1-2):179-86

Cholecystokinin octapeptide reverses the kappa-opioid-receptor-mediated depression of calcium current in rat dorsal root ganglion neurons. Xu T, et al. **Brain Res** 1996 Aug 19;730(1-2):207-11

Regulation of dopamine D2 receptor affinity by cholecystokinin octapeptide in fibroblast cells cotransfected with human CCKB and D2L receptor cDNAs. Dasgupta S, et al. **Brain Res Mol Brain Res** 1996 Mar;36(2):292-9

Glucose, potassium, and CCK-8 induce increases in membrane-associated PKC activity that correspond to increases in [Ca2+]i in islet cells from neonatal rats. Wang J, et al. **Cell Signal** 1996 Jun;8(4):305-11

Effect of cholecystokinin octapeptide and atropine on human colonic motility, tone, and transit. O'Brien MD, et al. **Dig Dis Sci** 1997 Jan;42(1):26-33

Recovery of cholecystokinin response of porcine gastric chief cells during monolayer culture. Heim HK, et al. **Digestion** 1997;58(1):10-8

Synergistic interactions between human transfected adenosine A1 receptors and endogenous cholecystokinin receptors in CHO cells. Dickenson JM, et al. **Eur J Pharmacol** 1996 Apr 29;302(1-3):141-51

Effects of cholecystokinin on Y, X, and W cells in the dorsal lateral geniculate nucleus of rats. Gabriel S, et al. **Exp Brain Res** 1996 Apr;109(1):43-55

Cholecystokinin-8 and vasoactive intestinal polypeptide stimulate exocrine pancreatic secretion via duodenally mediated mechanisms in the conscious pig. Kiela P, et al. **Exp Physiol** 1996 May;81(3):375-84

Cholecystokinin octapeptide reverses the inhibitory effect induced by electroacupuncture on C-fiber evoked discharges. Liu NJ, et al. **Int J Neurosci** 1996 Sep; 86(3-4):241-7

Ligand-induced internalization of cholecystokinin receptors. Demonstration of the importance of the carboxyl terminus for ligand-induced internalization of the rat cholecystokinin type B receptor but not the type A receptor. Pohl M, et al. **J Biol Chem** 1997 Jul 18; 272(29):18179-84

Visualization of G protein-coupled receptor trafficking with the aid of the green fluorescent protein. Endocytosis and recycling of cholecystokinin receptor type A. Tarasova NI, et al. **J Biol Chem** 1997 Jun 6;272(23):14817-24

In vitro effects of cholecystokinin fragments on human gallbladders. Evidence for an altered CCK-receptor structure in a subgroup of patients with gallstones. Schneider H, et al. **J Hepatol** 1997 May;26(5):1063-8

Cholecystokinin-induced desensitization, receptor phosphorylation, and internalization in the CHP212 neuroblastoma cell line. Rao RV, et al. **J Neurochem** 1997 Jun;68(6):2356-62

G alpha q/11 mediates cholecystokinin activation of the cationic conductance in rat substantia nigra dopaminergic neurons. Wu T, et al. **J Neurochem** 1996 Mar;66(3):1060-6

Pancreatic secretion evoked by cholecystokinin and non-cholecystokinin-dependent duodenal stimuli via vagal afferent fibres in the rat. Li Y, et al. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):773-82

Expression of two different cholecystokinin receptors in Xenopus oocytes injected with mRNA from rabbit pancreas and rat hippocampus. Shigeri Y, et al. **Jpn J Pharmacol** 1996 Sep;72(1):9-15

Direct contractile effect of cholecystokinin octapeptide on caecal circular smooth muscle cells of guinea pig via both CCK-A and CCK-B/gastrin receptors. Motomura Y, et al. **Life Sci** 1997;60(7):499-504

CholecystokininB receptor from human Jurkat lymphoblastic T cells is involved in activator protein-1-responsive gene activation. Oiry C, et al. **Mol Pharmacol** 1997 Aug; 52(2):292-9

Roles of cholecystokinin receptor phosphorylation in agonist-stimulated desensitization of pancreatic acinar cells and receptor-bearing Chinese hamster ovary cholecystokinin receptor cells. Rao RV, et al. **Mol Pharmacol** 1997 Feb;51(2):185-92

Cholecystokinin-JMV-180 and pilocrrpine are potent inhibitors of cholecystokinin and carbachol actions on guinea pig pancreatic acinar cells. Sjödin L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):631-7

Comparative evaluation of DQ-2511, a novel gastroprokinetic agent, with cisapride in ameliorative action on experimentally induced delayed gastric emptying. Hatanaka S, et al. **Neurogastroenterol Motil** 1996 Sep; 8(3):227-33

Role of different neurotransmitter systems in the cholecystokinin octapeptide-induced anxiogenic response in rats. Biró E, et al. **Neuropeptides** 1997 Jun;31(3):281-5

Prolonged intestinal afferent nerve discharge in response to cholecystokinin-58 compared to cholecystokinin-8 in rats. Kreis ME, et al. **Neurosci Lett** 1997 Jul 18;230(2):89-92

Possible involvement of G-proteins in the regulation of striatal dopamine D2 receptor affinity by cholecystokinin octapeptide. Li XM, et al. **Neurosci Lett** 1997 Jun 13; 228(3):171-4

Electrophysiological changes in rat hippocampal pyramidal neurons produced by cholecystokinin octapeptide. Shinohara S, et al. **Neuroscience** 1997 Jun;78(4):1005-16

Effect of somatostatin and octreotide acetate on OP-CCK-stimulated exocrine secretion in the denervated canine pancreas. Garvin PJ, et al. **Pancreas** 1996 Oct; 13(3):304-10

Ethanol inhibits CCK-induced enzyme secretion by affecting calcium-pump activity in isolated rat pancreatic acini. Tachibana I, et al. **Pancreas** 1996 Oct;13(3):316-23

Inhibition of human neutrophil functions by sulfated and nonsulfated cholecystokinin octapeptides. Carrasco M, et al. **Peptides** 1997;18(3):415-22

Enzyme changes in zymogen granules and in pancreatic secretion throughout long-term CCK treatment. de Dios I, et al. **Peptides** 1997;18(1):101-10

High concentrations of cholecystokinin octapeptide suppress protein kinase C activity in guinea pig pancreatic acini. Kimura T, et al. **Peptides** 1996;17(6):917-25

Cholecystokinin depolarizes neurons of cat pancreatic ganglion. Ma RC, et al. **Peptides** 1996;17(5):775-83

The in vivo metabolism of cholecystokinin (CCK-8) is essentially ensured by aminopeptidase A. Migaud M, et al. **Peptides** 1996;17(4):601-7

Several roles of CCKA and CCKB receptor subtypes in CCK-8-induced and LiCl-induced taste aversion conditioning. Mosher JT, et al. **Peptides** 1996;17(3):483-8

Relationship between gallbladder bile concentration and motility in conscious dogs: role of cholecystokinin. Muramatsu S, et al. **Peptides** 1997;18(1):111-8

CCK-58: a novel reagent for studying the regulation of cholecystokinin bioactivity. Raybould HE, et al. **Peptides** 1996;17(8):1307-11

Effects of cholecystokinin octapeptide (CCK-8) on food intake in adult and aged rats under different feeding conditions. Voigt JP, et al. **Peptides** 1996;17(8):1313-5

Characterization of CCKA receptor mediated pepsinogen secretion in porcine chief cells. Meyer G, et al. **Pharmacology** 1996 Jul;53(1):48-59

The effect of centrally administered CCK-receptor antagonists on food intake in rats. Corp ES, et al. **Physiol Behav** 1997 Jun;61(6):823-7

Effect of pyloric cuffs on cholecystokinin satiety. Cox JE. **Physiol Behav** 1996 Sep;60(3):1023-6

Interaction of cholecystokinin (CCK-8) with agonist and antagonist of beta-adrenergic receptors in circulatory system of diabetic rats. Wiśniewska RJ, et al. **Pol J Pharmacol** 1996 May-Jun;48(3):293-7

Modulation of apomorphine-induced stereotyped behavior by cholecystokinin. Tieppo CA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 May; 21(4):683-95

Nitric oxide is involved in the inhibitory action of cholecystokinin octapeptide (CCK-OP) on proximal colonic motility. Machino H, et al. **Regul Pept** 1997 Mar 12;69(1):47-52

Effect of modulating voltage-dependent calcium channels on cholecystokinin and acetylcholine-induced contractions of the guinea pig gallbladder. Parkman HP, et al. **Regul Pept** 1996 May 7;63(1):31-7

Involvement of phospholipase A2 and arachidonic acid in cholecystokinin-8-induced insulin secretion in rat islets. Simonsson E, et al. **Regul Pept** 1996 Sep 9;65(2):101-7

[Effect of cholecystokinin on prolactin release and its action mechanism in the rats] Zhou Y, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1995 Dec; 17(6):412-7 (Eng. Abstr.) **(Chi)**

[The effect of cholecystokinin octapeptide on ethanol-induced changes in motor activity and in dopamine metabolism in the nucleus accumbens of the rat brain] Medvedeva OF, et al. **Eksp Klin Farmakol** 1996 Nov-Dec; 59(6):44-7 (Eng. Abstr.) **(Rus)**

[The role of serotonin in the effects of cholecystokinin-8 on memory in rats] Semenova TP, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul;82(7):11-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cholecystokinin modulation of spontaneous and excitatory amino acid-induced activity in the opossum cerebellum. Bishop GA. **Neuropeptides** 1996 Dec;30(6):533-40

CCK-58: a novel reagent for studying the regulation of cholecystokinin bioactivity. Raybould HE, et al. **Peptides** 1996;17(8):1307-11

SINCALIDE RECEPTORS see RECEPTORS, CHOLECYSTOKININ

SINDBIS VIRUS

Cell-specific targeting of Sindbis virus vectors displaying IgG-binding domains of protein A. Ohno K, et al. **Nat Biotechnol** 1997 Aug;15(8):763-7

Sindbis virus infection of neonatal mice results in a severe stress response. Trgovcich J, et al. **Virology** 1997 Jan 6; 227(1):234-8

CHEMISTRY

Structural analysis of Sindbis virus capsid mutants involving assembly and catalysis [published erratum appears in J Mol Biol 1997 Feb 28;266(3):633-4] Choi HK, et al. **J Mol Biol** 1996 Sep 20;262(2):151-67

Disulfide bridge-mediated folding of Sindbis virus glycoproteins. Carleton M, et al. **J Virol** 1996 Aug; 70(8):5541-7

CLASSIFICATION

Genetic relatedness of Sindbis virus strains from Europe, Middle East, and Africa. Norder H, et al. **Virology** 1996 Aug 15;222(2):440-5

DRUG EFFECTS

Antiviral activities of medicinal plants of southern Nepal. Taylor RS, et al. **J Ethnopharmacol** 1996 Aug;53(2):97-104

[Comparative study of the mechanism of inhibition of Sindbis virus reproduction by adamantane derivatives: remantadine and amide of 1-adamantane carboxylic acid] Andronova VL. **Antibiot Khimioter** 1996;41(7-8):26-30 (Eng. Abstr.) **(Rus)**

GENETICS

Efficiency of transduction by recombinant Sindbis replicon virus varies among cell lines, including mosquito cells and rat sensory neurons. Corsini J, et al. **Biotechniques** 1996 Sep;21(3):492-7

Sindbis virus vectors for expression in animal cells. Huang HV. **Curr Opin Biotechnol** 1996 Oct;7(5):531-5 (47 ref.)

Incorporation of beta-globin untranslated regions into a Sindbis virus vector for augmentation of heterologous mRNA expression. Strong TV, et al. **Gene Ther** 1997 Jun; 4(6):624-7

Detection of expressed chloramphenicol acetyltransferase in the saliva of Culex pipiens mosquitoes. Kamrud KI, et al. **Insect Biochem Mol Biol** 1997 May;27(5):423-9

Replication and expression of a recombinant Sindbis virus in mosquitoes. Rayms-Keller A, et al. **Insect Mol Biol** 1995 Nov;4(4):245-51

Chimeric Sindbis viruses dependent on the NS3 protease of hepatitis C virus. Filocamo G, et al. **J Virol** 1997 Feb; 71(2):1417-27

Sindbis virus replicons and Sindbis virus: assembly of chimeras and of particles deficient in virus RNA. Frolov I, et al. **J Virol** 1997 Apr;71(4):2819-29

Packaging signals in alphaviruses. Frolova E, et al. **J Virol** 1997 Jan;71(1):248-58

Nonhomologous RNA-RNA recombination events at the 3' nontranslated region of the Sindbis virus genome: hot spots and utilization of nonviral sequences. Hajjou M, et al. **J Virol** 1996 Aug;70(8):5153-64

RNA-RNA recombination in Sindbis virus: roles of the 3' conserved motif, poly(A) tail, and nonviral sequences of template RNAs in polymerase recognition and template switching. Hill KR, et al. **J Virol** 1997 Apr;71(4):2693-704

Construction of hepatitis C-SIN virus recombinants with replicative dependency on hepatitis C virus serine protease activity. Cho YG, et al. **J Virol Methods** 1997 May; 65(2):201-7

Short-order Sindbis vector targeting [news] Wickham T. **Nat Biotechnol** 1997 Aug;15(8):717

Identification of mutations in a Sindbis virus variant able to establish persistent infection in BHK cells: the importance of a mutation in the nsP2 gene. Dryga SA, et al. **Virology** 1997 Feb 3;228(1):74-83

Expression of parvovirus LuIII NS1 from a Sindbis replicon for production of LuIII-luciferase transducing virus. Corsini J, et al. **Virus Res** 1996 Dec;46(1-2):95-104

Characterization of revertants of a Sindbis virus 6K gene mutant that affects proteolytic processing and virus assembly. Ivanova L, et al. **Virus Res** 1995 Dec; 39(2-3):165-79

[Effect of the amide of 1-adamantanecarboxylic acid (AACA) and its combination with ribavirin on the course of experimental infection, caused by the sindbis virus in tissue culture and in mouse brain. Possible isolation of the virus mutant resistant to ribavirin and to a combination of the inhibitors] Andronova VL. **Antibiot Khimioter** 1997; 42(7):3-7 (Eng. Abstr.) **(Rus)**

[Sindbis viruses of various geographic origin and differentiation of them from Western equine encephalomyelitis viruses using the polymerase chain reaction] Sokolova TM, et al. **Vopr Virusol** 1996 May-Jun; 41(3):117-22 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Immunization with nonstructural proteins promotes functional recovery of alphavirus-infected neurons. Gorrell MD, et al. **J Virol** 1997 May;71(5):3415-9

ISOLATION & PURIFICATION

An eruption associated with alphavirus infection. Autio P, et al. **Br J Dermatol** 1996 Aug;135(2):320-3

Evidence of vertical transmission of Ross River and Sindbis viruses (Togaviridae: Alphavirus) by mosquitoes (Diptera: Culicidae) in southeastern Australia. Dhileepan K, et al. **J Med Entomol** 1996 Jan;33(1):180-2

METABOLISM

Dominant inhibitory Ras delays Sindbis virus-induced apoptosis in neuronal cells. Joe AK, et al. **J Virol** 1996 Nov;70(11):7744-51

Mutations in the endo domain of Sindbis virus glycoprotein E2 block phosphorylation, reorientation of the endo domain, and nucleocapsid binding. Liu LN, et al. **Virology** 1996 Aug 1;222(1):236-46

PATHOGENICITY

Genetic determinants of Sindbis virus neuroinvasiveness. Dubuisson J, et al. **J Virol** 1997 Apr;71(4):2636-46

Chimeric Sindbis-Ross River viruses to study interactions between alphavirus nonstructural and structural regions. Kuhn RJ, et al. **J Virol** 1996 Nov;70(11):7900-9

Amino acid changes in the Sindbis virus E2 glycoprotein that increase neurovirulence improve entry into neuroblastoma cells. Tucker PC, et al. **J Virol** 1997 Aug; 71(8):6106-12

Fatal Sindbis virus infection of neonatal mice in the absence of encephalitis. Trgovcich J, et al. **Virology** 1996 Oct 1; 224(1):73-83

Characterization of the infection of Aedes albopictus cell clones by Sindbis virus. Karpf AR, et al. **Virus Res** 1997 Jul;50(1):1-13

PHYSIOLOGY

Astrocyte activation by Sindbis virus: expression of GFAP, cytokines, and adhesion molecules. Brodie C, et al. **Glia** 1997 Apr;19(4):275-85

Low pH-induced pore formation by spike proteins of enveloped viruses. Käsermann F, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3025-32

The formation of intramolecular disulfide bridges is required for induction of the Sindbis virus mutant ts23 phenotype. Carleton M, et al. **J Virol** 1997 Oct;71(10):7696-703

Role of glycoprotein PE2 in formation and maturation of the Sindbis virus spike. Carleton M, et al. **J Virol** 1997 Feb;71(2):1558-66

A single amino acid change in the E2 glycoprotein of Sindbis virus confers neurovirulence by altering an early step of virus replication. Dropulic LK, et al. **J Virol** 1997 Aug; 71(8):6100-5

Superinfection exclusion of alphaviruses in three mosquito cell lines persistently infected with Sindbis virus. Karpf AR, et al. **J Virol** 1997 Sep;71(9):7119-23

Efficient multiplication of a Semliki Forest virus chimera containing Sindbis virus spikes. Smyth J, et al. **J Virol** 1997 Jan;71(1):818-23

Interactions between PE2, E1, and 6K required for assembly of alphaviruses studied with chimeric viruses. Yao JS, et al. **J Virol** 1996 Nov;70(11):7910-20

Complementation of and interference with Sindbis virus replication by full-length and deleted forms of the nonstructural protein, nsP1, expressed in stable transfectants of Hela cells. Li ML, et al. **Virology** 1997 Jan 20;227(2):361-9

Alphavirus budding is dependent on the interaction between the nucleocapsid and hydrophobic amino acids on the cytoplasmic domain of the E2 envelope glycoprotein. Owen KE, et al. **Virology** 1997 Apr 14;230(2):187-96

Analyses of the role of structural changes in the regulation of uncoating and assembly of alphavirus cores. Wengler G, et al. **Virology** 1996 Aug 1;222(1):123-32

[Comparative analysis of expression of genes for 2',5'-oligoadenylate synthetase and mRNA for dsRNA-protein kinase in human fibroblasts infected with the Sindbis alphavirus and induced by alpha-interferon] Sokolova TM, et al. **Vopr Virusol** 1997 May-Jun; 42(3):98-102 (Eng. Abstr.) **(Rus)**

SINGLE-BLIND METHOD

Outcome-based practice: disclosure rates of child sexual abuse comparing allegation blind and allegation informed structured interviews [see comments] Cantlon J, et al. **Child Abuse Negl** 1996 Nov;20(11):1113-20. Comment in: Child Abuse Negl 1996 Nov;20(11):1111-2.

Blinded subjective rankings as a method of assessing treatment effect: a large sample example from the Systolic Hypertension in the Elderly Program (SHEP). Brittain E, et al. **Stat Med** 1997 Mar 30;16(6):681-93

SINGLE-MASKED STUDY see **SINGLE-BLIND METHOD**

SINGLE PARENT

The effects of poverty, race, and family structure on US children's health: data from the NHIS, 1978 through 1980 and 1989 through 1991. Montgomery LE, et al. **Am J Public Health** 1996 Oct;86(10):1401-5

Access to assisted human reproduction services by minority groups. Daniels KR, et al. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):79-85

Family dissolution, family reconstitution, and children's educational careers: recent evidence for Sweden. Jonsson JO, et al. **Demography** 1997 May;34(2):277-93

Migration and premarital childbearing among Puerto Rican Women. Landale NS, et al. **Demography** 1996 Nov; 33(4):429-42

Economic correlates of nonmarital childbearing among adult women. Hoffman SD, et al. **Fam Plann Perspect** 1997 May-Jun;29(3):137-40

The partners of welfare mothers: potential earnings and child support. Brien MJ, et al. **Future Child** 1997 Spring; 7(1):65-73 (29 ref.)

Welfare to work: analysis and recommendations. Larner MB, et al. **Future Child** 1997 Spring;7(1):4-19 (57 ref.)

A comparison of single and married recipients of donor insemination. Klock SC, et al. **Hum Reprod** 1996 Nov; 11(11):2554-7

The mother-headed single-parent family: a feminist critique of the nursing literature [see comments] Ford-Gilboe M, et al. **Nurs Outlook** 1996 Jul-Aug;44(4):173-83 (49 ref.). Comment in: Nurs Outlook 1997 Mar-Apr;45(2):93.

Mother-headed single-parent family [letter; comment] Valente SM, et al. **Nurs Outlook** 1997 Mar-Apr;45(2):93 . Comment on: Nurs Outlook 1996 Jul-Aug;44(4):173-83.

[Being raised by lesbian parents or in a single-parent family is no risk factor for problem behavior, however being raised as an adopted child is] Verhulst FC, et al. **Ned Tijdschr Geneeskd** 1997 Mar 1;141(9):414-8 (29 ref.) (Eng. Abstr.) **(Dut)**

PSYCHOLOGY

Single motherhood and mental health: implications for primary prevention [editorial; comment] Avison WR. **Can Med Assoc J** 1997 Mar 1;156(5):661-3 (9 ref.). Comment on: Can Med Assoc J 1997 Mar 1;156(5):639-45.

Single mothers in Ontario: sociodemographic, physical and mental health characteristics [see comments] Lipman EL, et al. **Can Med Assoc J** 1997 Mar 1;156(5):639-45. Comment in: Can Med Assoc J 1997 Mar 1;156(5):661-3.

Adolescents from one parent, stepparent and intact families: emotional problems and suicide attempts. Garnefski N, et al. **J Adolesc** 1997 Apr;20(2):201-8

Intergenerational aspects of the development of aggression: a preliminary report. Constantino JN. **J Dev Behav Pediatr** 1996 Jun;17(3):176-82

Parental distress and children's problems among single-parent families in China. Cheung CK, et al. **J Genet Psychol** 1997 Sep;158(3):245-60

Parenting attitudes and behaviors of low-income single mothers with young children. Sachs B, et al. **J Pediatr Nurs** 1997 Apr;12(2):67-73

Determinants of observed confidant support for divorced mothers. DeGarmo DS, et al. **J Pers Soc Psychol** 1997 Feb;72(2):336-45

The influence of a big brothers program on the adjustment of boys in single-parent families. Abbott DA, et al. **J Psychol** 1997 Mar;131(2):143-56

Single mothers, poverty and depression. Brown GW, et al. **Psychol Med** 1997 Jan;27(1):21-33

Adjustment of children and interaction of parent and child among single mothers in a disadvantaged South African community. Skuy M, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1171-80

Stress in employed women: a woman's work is never done if she's a working mom [editorial; comment] Light KC. **Psychosom Med** 1997 Jul-Aug;59(4):360-1. Comment on: Psychosom Med 1997 Jul-Aug;59(4):352-9.

Family strengths, motivation, and resources as predictors of health promotion behavior in single-parent and two-parent families. Ford-Gilboe M. **Res Nurs Health** 1997 Jun; 20(3):205-17

Depressive symptomatology in single women heads of households in Puerto Rico: a comparative analysis. Burgos NM, et al. **Women Health** 1995;23(3):1-18

[The characteristics of the psychoemotional background and child rearing in families with parents in prison] Kamaev IA, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Nov-Dec; (6):23-5 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Alcohol consumption patterns among Mexican American mothers and among children from single- and dual-headed households: findings from HHANES 1982-84. Stroup-Benham CA, et al. **Am J Public Health** 1990 Dec; 80 Suppl:36-41

Single mothers in Ontario: sociodemographic, physical and mental health characteristics [see comments] Lipman EL, et al. **Can Med Assoc J** 1997 Mar 1;156(5):639-45. Comment in: Can Med Assoc J 1997 Mar 1;156(5):661-3.

Reconsidering the increase in father-only families. Garasky S, et al. **Demography** 1996 Aug;33(3):385-93

Nonmarital childbearing in the United States: a government report. Hollander D. **Fam Plann Perspect** 1996 Jan-Feb; 28(1):29-32, 41

SINGLE-PARENT FAMILY see **SINGLE PARENT**

SINGLE-PAYER PLAN see **SINGLE-PAYER SYSTEM**

SINGLE-PAYER SYSTEM

Private health care in Canada: savior or siren? DeCoster CA, et al. **Public Health Rep** 1997 Jul-Aug;112(4):298-305; discussion 306-7

ECONOMICS

Cost-effective provision of cardiac services in a fixed-dollar environment. Cohen G, et al. **Ann Thorac Surg** 1996 Nov; 62(5 Suppl):S18-21; discussion S31-2

Expenditure on physicians' services in Canada: was Medicare a structural change? Ferguson B. **Health Econ** 1996

SINGLE-PAYER SYSTEM

Sep-Oct;5(5):409-19
Ontario's health care: a pox on doctors and patients. Arnett JC Jr. **W V Med J** 1997 May-Jun;93(3):116-7

LEGISLATION & JURISPRUDENCE

The National Forum reports: crisis? What crisis? Gray C. **Can Med Assoc J** 1997 Mar 15;156(6):891-2

ORGANIZATION & ADMINISTRATION

Devolving authority for health care in Canada's provinces: 4. Emerging issues and prospects. Lomas J. **Can Med Assoc J** 1997 Mar 15;156(6):817-23

STATISTICS & NUMERICAL DATA

A cross-sectional study of private psychiatric practices under a single-payer health care system. Anderson K, et al. **Can J Psychiatry** 1997 May;42(4):395-401

SINGLE PERSON

see related
WIDOWHOOD

Home alone: the role of cognition in return to independent living. MacNeill SE, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):755-8
The use of technical aids by elderly persons in The Netherlands: an application of the Andersen and Newman model. de Klerk MM, et al. **Gerontologist** 1997 Jun; 37(3):365-73
Poverty among single elderly women under different systems of old-age security: a comparative review. Siegenthaler JK. **Soc Secur Bull** 1996 Fall;59(3):31-44 (59 ref.)
Premarital conception in married couples: the Nigerian Igbo experience. Meniru GI. **West Afr J Med** 1996 Jul-Sep; 15(3):177-80
[The possibilities and problems of a home setting hospice service for a patient living alone] Honda K, et al. **Gan To Kagaku Ryoho** 1996 Dec;23 Suppl 3:272-5 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

The heterosexual singles scene: putting danger into pleasure. Peart R, et al. **AIDS Care** 1996 Jun;8(3):341-9
Cognitive and emotional assessments of perceived risk for HIV among unmarried heterosexuals. Dolcini MM, et al. **AIDS Educ Prev** 1996 Aug;8(4):294-307
Differences between gay men in primary relationships and single men: implications for prevention. Hoff CC, et al. **AIDS Educ Prev** 1996 Dec;8(6):546-59
The treatment of sexually dysfunctional men without partners: a controlled study of three behavioural group approaches. Stravynski A, et al. **Br J Psychiatry** 1997 Apr; 170:338-44
Increasing condom use: evaluation of a theory-based intervention to prevent sexually transmitted diseases in young women. Bryan AD, et al. **Health Psychol** 1996 Sep; 15(5):371-82
Always single and single again women: a qualitative study. Lewis KG, et al. **J Marital Fam Ther** 1997 Apr; 23(2):115-34
The mental health of single homeless people in Northampton hostels. Holland AC. **Public Health** 1996 Sep; 110(5):299-303
Social support and depression among older adults living alone: the importance of friends within and outside of a retirement community. Potts MK. **Soc Work** 1997 Jul; 42(4):348-62
[Change in daily activities in the transition to retirement in single persons and couples] Schäuble G. **Z Gerontol Geriatr** 1996 Sep-Oct;29(5):356-61 (Eng. Abstr.) **(Ger)**
[Unmarried women of the war generation: an explorative study of their goals in life and personal satisfaction] Wilken B, et al. **Z Gerontol Geriatr** 1997 Jan-Feb;30(1):34-45 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

Condom use for disease prevention among unmarried U.S. women. Anderson JE, et al. **Fam Plann Perspect** 1996 Jan-Feb;28(1):25-8
Relationship of sexual mixing across age and ethnic groups to herpes simplex virus-2 among unmarried heterosexual adults with multiple sexual partners. Catania JA, et al. **Health Psychol** 1996 Sep;15(5):362-70
[Health status and medical care accessibility of single, homeless persons] Trabert G. **Gesundheitswesen** 1997 Jun; 59(6):378-86 (Eng. Abstr.) **(Ger)**

SINGLE-PHOTON ABSORPTIOMETRY see **ABSORPTIOMETRY, PHOTON**

SINGLE-PHOTON EMISSION-COMPUTED TOMOGRAPHY see **TOMOGRAPHY, EMISSION-COMPUTED, SINGLE-PHOTON**

SINGLE-STRANDED CONFORMATIONAL POLYMORPHISM see **POLYMORPHISM, SINGLE-STRANDED CONFORMATIONAL**

SINGLE-STRANDED DNA see **DNA,**

SINGLE-STRANDED

SINGLE-STRANDED DNA BINDING PROTEINS see **DNA-BINDING PROTEINS**

SINGLE-TOOTH IMPLANTS see **DENTAL IMPLANTS, SINGLE-TOOTH**

SINOATRIAL BLOCK

[Sino-atrial block] Ueyama C, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):416-9 (14 ref.) **(Jpn)**

CHEMICALLY INDUCED

Irreversible sinus node dysfunction induced by resumption of lithium therapy. Terao T, et al. **Acta Psychiatr Scand** 1996 May;93(5):407-8
Carbamazepine induced sino-atrial block in a young adult [letter] Parihar PS, et al. **J Assoc Physicians India** 1996 Jun;44(6):431-2

SINOATRIAL NODAL REENTRY TACHYCARDIA see **TACHYCARDIA, SINOATRIAL NODAL REENTRY**

SINOATRIAL NODE

Giant atherosclerotic aneurysm of the sinoatrial nodal artery. Kim SH, et al. **J Thorac Cardiovasc Surg** 1997 Aug; 114(2):280-2
[Clinico-pathological correlation in the indeterminate form of experimental Chagas' disease in dogs] Scalabrini A, et al. **Arq Bras Cardiol** 1996 Dec;67(6):385-8 (Eng. Abstr.) **(Por)**

ABNORMALITIES

[Sinus node hypoplasia] Baba K, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(13):286-9 (19 ref.) **(Jpn)**

ANATOMY & HISTOLOGY

The relationship between the sinus node and the right atrial appendage. Taylor JR, et al. **Can J Cardiol** 1997 Jan; 13(1):85-92
Age-related changes in structure and relative collagen content of the human and feline sinoatrial node. A comparative study [see comments] Alings AM, et al. **Eur Heart J** 1995 Nov;16(11):1655-67. Comment in: Eur Heart J 1996 Nov;17(11):1758-9.
The human and feline sinus node [letter; comment] Anderson RH, et al. **Eur Heart J** 1996 Nov;17(11):1758-9. Comment on: Eur Heart J 1995 Nov;16(11):1655-67.

CHEMISTRY

Beta-adrenergic and muscarinic cholinergic receptor densities in the human sinoatrial node: identification of a high beta 2-adrenergic receptor density. Rodefeld MD, et al. **J Cardiovasc Electrophysiol** 1996 Nov;7(11):1039-49
Neurofilament M mRNA is expressed in conduction system myocytes of the developing and adult rabbit heart. Vitadello M, et al. **J Mol Cell Cardiol** 1996 Sep; 28(9):1833-44

CYTOLOGY

ATP-activated cationic current in rabbit sino-atrial node cells. Shoda M, et al. **J Mol Cell Cardiol** 1997 Feb; 29(2):689-95
Correlation between electrical activity and the size of rabbit sino-atrial node cells. Honjo H, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):795-808

DRUG EFFECTS

Variation in effects of Cs+, UL-FS-49, and ZD-7288 within sinoatrial node. Nikmaram MR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2782-92
Mode of action of bradycardic agent, S 16257, on ionic currents of rabbit sinoatrial node cells. Bois P, et al. **Br J Pharmacol** 1996 Jun;118(4):1051-7
Histamine 2 receptor blocker-ranitidine and sinus node dysfunction. Hu WH, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jul;60(1):1-5
Effect of a prenylamine analog (MG8926) on spontaneous action potentials in isolated rabbit sinoatrial node. Nakanishi H, et al. **Fukushima J Med Sci** 1996 Dec; 42(1-2):1-10
Antiarrhythmic and electrophysiological effects of the novel KATP channel opener, rilmakalim, in rabbit cardiac cells. Riccioppo Neto F, et al. **Gen Pharmacol** 1997 Aug; 29(2):201-5
Electrophysiological actions of ryanodine on single rabbit sinoatrial nodal cells. Satoh H. **Gen Pharmacol** 1997 Jan; 28(1):31-8
Effects of nicotine on spontaneous activity and underlying ionic currents in rabbit sinoatrial nodal cells. Satoh H. **Gen Pharmacol** 1997 Jan;28(1):39-44
Actions and interactions of ethanol and imipramine on the rat sinus node. Standen DJ, et al. **Int J Cardiol** 1997 Jul 25;60(2):165-70
Sinus node recovery time assessment revisited: role of pharmacologic blockade of the autonomic nervous system. Bergfeldt L, et al. **J Cardiovasc Electrophysiol** 1996 Feb; 7(2):95-101
Effects of PACAP-38 on the SA nodal pacemaker activity in autonomically decentralized hearts of anesthetized dogs. Hirose M, et al. **J Cardiovasc Pharmacol** 1997 Feb; 29(2):216-21
Mechanisms of suppression and initiation of pacemaker activity in guinea-pig sino-atrial node superfused in high [K+]o. Kim EM, et al. **J Mol Cell Cardiol** 1997 May; 29(5):1433-45
Acetylcholine modulates I(f) and IK(ACh) via different pathways in rabbit sino-atrial node cells. Renaudon B, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):969-75
Activation of f-channels by cAMP analogues in macropatches from rabbit sino-atrial node myocytes. Bois P, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):565-71
Voltage- and time-dependent block of delayed rectifier K+ current in rabbit sino-atrial node cells by external Ca2+ and Mg2+. Ho WK, et al. **J Physiol (Lond)** 1996 Aug 1;494 (Pt 3):727-42
Effects of toborinone (OPC-18790), a new positive inotropic agent, on action potential in guinea pig sinoatrial node: compared with milrinone and E-4031. Orito K, et al. **Jpn J Pharmacol** 1996 Sep;72(1):79-82
Carbamazepine-induced sinus node dysfunction. Johnson CD, et al. **P R Health Sci J** 1997 Mar;16(1):45-9 (37 ref.)
Tyrosine kinase inhibition reduces i(f) in rabbit sinoatrial node myocytes. Wu JY, et al. **Pflugers Arch** 1997 Sep; 434(5):509-14
[The development of local nonexcitability in sinus node cells and other cells with diastolic depolarization in the right atrium of the rabbit under the action of acetylcholine] Vinogradova TM, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov;82(10-11):1-19 (Eng. Abstr.) **(Rus)**

INNERVATION

Selective slow pathway ablation does not alter enhancement of vagal tone on sinus and atrioventricular nodal function. Olsovsky MR, et al. **Am J Cardiol** 1996 Dec 1; 78(11):1289-92
Analysis of initial autonomic adjustments to moderate exercise in humans. Lucini D, et al. **J Hypertens** 1995 Dec; 13(12 Pt 2):1660-3
Sino-aortic denervation causes right atrial beta adrenoceptor down-regulation. Zanesco A, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):677-85
[Electron microscopic study of the nervous apparatus of the sinoatrial region of the human heart in alcoholic cardiomyopathy] Pavlovich ER. **Arkh Patol** 1996 Sep-Oct; 58(5):23-8 (Eng. Abstr.) **(Rus)**

METABOLISM

Heart rate variability, respiratory sinus arrhythmia, and mathematical modeling of acetylcholine pharmacokinetics/pharmacodynamics in sinus node neuroeffector junctions [letter] Dexter F. **Anesth Analg** 1997 Jun;84(6):1393
Modulation by extracellular ATP of L-type calcium channels in guinea-pig single sinoatrial nodal cell. Qi AD, et al. **Br J Pharmacol** 1996 Dec;119(7):1454-62
Age-related changes in structure and relative collagen content of the human and feline sinoatrial node. A comparative study [see comments] Alings AM, et al. **Eur Heart J** 1995 Nov;16(11):1655-67. Comment in: Eur Heart J 1996 Nov;17(11):1758-9.
Two components of the delayed rectifier potassium current, IK, in rabbit sino-atrial node cells. Lei M, et al. **Exp Physiol** 1996 Sep;81(5):725-41
The role of Ca2+ release from sarcoplasmic reticulum in the regulation of sinoatrial node automaticity. Hata T, et al. **Heart Vessels** 1996;11(5):234-41
Differential control of the hyperpolarization-activated current (i(f)) by cAMP gating and phosphatase inhibition in rabbit sino-atrial node myocytes. Accili EA, et al. **J Physiol (Lond)** 1997 May 1;500 (Pt 3):643-51
The newborn rabbit sino-atrial node expresses a neuronal type I-like Na+ channel. Baruscotti M, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):641-8
Activation of f-channels by cAMP analogues in macropatches from rabbit sino-atrial node myocytes. Bois P, et al. **J Physiol (Lond)** 1997 Jun 15;501 (Pt 3):565-71
Identification and properties of an ATP-sensitive K+ current in rabbit sino-atrial node pacemaker cells. Han X, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):337-50
Binding of beta 1-adrenoceptor antagonist [3H]CGP 26505 in rat cerebral cortex and sinus atrial node. Chiellini G, et al. **Neurochem Res** 1996 Oct;21(10):1149-53

PATHOLOGY

A modified method for examining the cardiac conduction system. Song Y, et al. **Forensic Sci Int** 1997 Apr 18; 86(1-2):135-8
[Sinus node hypoplasia] Baba K, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(13):286-9 (19 ref.) **(Jpn)**

PHYSIOLOGY

Properties and modulation of If in newborn versus adult cardiac SA node. Accili EA, et al. **Am J Physiol** 1997 Mar; 272(3 Pt 2):H1549-52

Roles of Cl- channels and Ca2+ mobilization in stretch-induced increase of SA node pacemaker activity. Arai A, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1726-35

NO modulates autonomic effects on sinus discharge rate and AV nodal conduction in open-chest dogs. Elvan A, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H263-71

Baroreflex control of sinus node during dynamic exercise in humans: effects of central command and muscle reflexes. Iellamo F, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1157-64

Regional differences in the role of the Ca2+ and Na+ currents in pacemaker activity in the sinoatrial node. Kodama I, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2793-806

Inactivation of the calcium current is involved in overdrive suppression of rabbit sinoatrial node cells. Watanabe EI, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H2097-107

Model clamp and its application to synchronization of rabbit sinoatrial node cells. Wilders R, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H2168-82

Lack of haemodynamic effects of nitric oxide on post-capillary pulmonary hypertension induced by acute sino-aortic denervation. Galinier M, et al. **Br J Pharmacol** 1997 Jan;120(1):7-12

Nitric oxide can increase heart rate by stimulating the hyperpolarization-activated inward current, I(f). Musialek P, et al. **Circ Res** 1997 Jul;81(1):60-8

Contribution to heart rate variability by mechanoelectric feedback. Stretch of the sinoatrial node reduces heart rate variability. Horner SM, et al. **Circulation** 1996 Oct 1; 94(7):1762-7

Mechanisms for preserved cerebrovascular autoregulation during hypertension in rats after sinoaortic denervation. Talman WT, et al. **Clin Exp Pharmacol Physiol Suppl** 1995; 1:S77-9

Possible role of calcium release from the sarcoplasmic reticulum in pacemaking in guinea-pig sino-atrial node. Rigg L, et al. **Exp Physiol** 1996 Sep;81(5):877-80

The role of Ca2+ release from sarcoplasmic reticulum in the regulation of sinoatrial node automaticity. Hata T, et al. **Heart Vessels** 1996;11(5):234-41

Hemodynamic and norepinephrine responses to pacing-induced heart failure in conscious sinoaortic-denervated dogs. Brändle M, et al. **J Appl Physiol** 1996 Oct;81(4):1855-62

Electrophysiologic properties of the adult human sinus node. Drouin E. **J Cardiovasc Electrophysiol** 1997 Mar;8(3):254-8

Origin of the sinus impulse. Schuessler RB, et al. **J Cardiovasc Electrophysiol** 1996 Mar;7(3):263-74 (57 ref.)

Characterization of a hyperpolarization-activated inward current in cultured pacemaker cells from the sinoatrial node. Liu ZW, et al. **J Mol Cell Cardiol** 1996 Dec; 28(12):2523-35

Acetylcholine modulates I(f) and IK(ACh) via different pathways in rabbit sino-atrial node cells. Renaudon B, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):969-75

ATP-activated cationic current in rabbit sino-atrial node cells. Shoda M, et al. **J Mol Cell Cardiol** 1997 Feb; 29(2):689-95

A TTX-sensitive inward sodium current contributes to spontaneous activity in newborn rabbit sino-atrial node cells. Baruscotti M, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):21-30

Correlation between electrical activity and the size of rabbit sino-atrial node cells. Honjo H, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):795-808

Regional differences in the response of the isolated sino-atrial node of the rabbit to vagal stimulation. Kodama I, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):785-801

Ion currents underlying sinoatrial node pacemaker activity: a new single cell mathematical model. Dokos S, et al. **J Theor Biol** 1996 Aug 7;181(3):245-72

Vagal control of sinoatrial rhythm: a mathematical model. Dokos S, et al. **J Theor Biol** 1996 Sep 7;182(1):21-44

Chaos in weakly-coupled pacemaker cells. Endresen LP. **J Theor Biol** 1997 Jan 7;184(1):41-50

Ionic mechanisms of the cardiac pacemaker potential. Noma A. **Jpn Heart J** 1996 Sep;37(5):673-82 (29 ref.)

The sustained inward current in sino-atrial node cells of guinea-pig heart. Guo J, et al. **Pflugers Arch** 1997 Feb; 433(4):390-6

Monovalent cation conductance of the sustained inward current in rabbit sinoatrial node cells. Guo J, et al. **Pflugers Arch** 1996 Nov-Dec;433(1-2):209-11

Tyrosine kinase inhibition reduces i(f) in rabbit sinoatrial node myocytes. Wu JY, et al. **Pflugers Arch** 1997 Sep; 434(5):509-14

Positive chronotropic responses of rabbit sino-atrial node cells to flash photolysis of caged isoproterenol and cyclic AMP. Tanaka H, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):241-8

[Autonomic regulation of pacemaker activity in the sinoatrial node] Honjo H, et al. **Nippon Rinsho** 1996 Aug; 54(8):2035-40 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Electrophysiological marker regulated by bradycardia] Pokrovskiĭ VM, et al. **Dokl Akad Nauk** 1996 Jul; 349(3):418-20 **(Rus)**

PHYSIOPATHOLOGY

Resolution of exercise intolerance secondary to ischemic sinus node dysfunction following percutaneous transluminal angioplasty. Osborn LA, et al. **Cathet Cardiovasc Diagn** 1997 Sep;42(1):44-7

Pacing-induced chronic atrial fibrillation impairs sinus node function in dogs. Electrophysiological remodeling. Elvan A, et al. **Circulation** 1996 Dec 1;94(11):2953-60

Complex electrophysiological characteristics in atrioventricular nodal reentrant tachycardia with continuous atrioventricular node function curves. Tai CT, et al. **Circulation** 1997 Jun 3;95(11):2541-7

AAIR versus DDDR pacing in patients with impaired sinus node chronotropy: an echocardiographic and cardiopulmonary study. Vardas PE, et al. **Pacing Clin Electrophysiol** 1997 Jul;20(7):1762-8

Electrophysiologic evaluation of extrinsic and intrinsic sinus node dysfunction. Carașca E, et al. **Rom J Intern Med** 1996 Jul-Dec;34(3-4):205-10

[Overdrive suppression test] Fukushima K, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:685-7 (11 ref.) **(Jpn)**

[Measurement of sinus node recovery time (SNRT) and sinoatrial conduction time (SACT)] Tani M, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:680-4 (8 ref.) **(Jpn)**

[Sinus node function, sinoatrial and atrial conduction and the nature of the course of supraventricular heart rate disorders in IHD patients before and after aortocoronary bypass] Litvinenko VA, et al. **Ter Arkh** 1996;68(2):34-7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Positive chronotropic responses of rabbit sino-atrial node cells to flash photolysis of caged isoproterenol and cyclic AMP. Tanaka H, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):241-8

SURGERY

Autonomic interactions for control of atrial rate are maintained after SA nodal parasympathectomy. McGuirt AS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2525-33

A new simplified method for laser sinus node modification without electrophysiological technique. Yamashita T, et al. **Kobe J Med Sci** 1996 Dec;42(6):389-98

SINUS ARRHYTHMIA see ARRHYTHMIA, SINUS

SINUS OF VALSALVA

Pharmacist with hypotension and altered mental status [clinical conference] Van Voorst T, et al. **Acad Emerg Med** 1996 Jun;3(6):634-40

Fatal myocardial ischemia caused by compression of the left coronary system by a large left sinus of Valsalva aneurysm. Bashour TT, et al. **Am Heart J** 1996 Nov;132(5):1050-2

Sinus of valsalva aneurysms [letter; comment] Cheng TO. **Am Heart J** 1996 Dec;132(6):1319. Comment on: Am Heart J 1995 Dec;130(6):1265-9.

Ruptured aneurysm of the sinus of Valsalva. Islam MN, et al. **Bangladesh Med Res Counc Bull** 1996 Apr;22(1):19-26

Sinus of Valsalva aneurysm presenting as myocardial infarction during dobutamine stress test. Ferreira AC, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):400-2 (7 ref.)

Aneurysms of all sinuses of Valsalva and aortic valve prolapse secondary to Behçet's disease [letter] Wakabayashi Y, et al. **Eur Heart J** 1996 Nov;17(11):1766

Unruptured aneurysms of the non-coronary and left sinuses of Valsalva accompanied by severe aortic valve regurgitation. Simic O, et al. **Eur J Cardiothorac Surg** 1996; 10(11):1030-2

Angioplasty of a left anterior descending artery originating from the right sinus of Valsalva (discussion in decision making). Antonellis J, et al. **Int J Cardiol** 1996 Sep; 56(1):86-9

Aortic insufficiency and stenosis in unruptured aneurysm of sinus of Valsalva [letter] Yuan SM. **Int J Cardiol** 1997 May 23;59(3):321-2

Endoaneurysmal repair of a congenital right coronary sinus aneurysm. Olearchyk AS, et al. **J Card Surg** 1997 Mar-Apr; 12(2):81-5

Intraoperative usefulness of transesophageal echocardiography: detection of unsuspected rupture of an aneurysm of the sinus of Valsalva. Lobato EB, et al. **J Cardiothorac Vasc Anesth** 1997 Aug;11(5):619-21

Echocardiography and magnetic resonance imaging of sinus of Valsalva aneurysm with rupture into the ventricle. Kulan K, et al. **J Cardiovasc Surg (Torino)** 1996 Dec;37(6):639-41

Aneurysms of the sinus of Valsalva. Yilmaz AT, et al. **J Cardiovasc Surg (Torino)** 1997 Apr;38(2):119-24

Huge aneurysm of the sinus of Valsalva following infective endocarditis in Behçet's disease. Okada K, et al. **J Heart Valve Dis** 1997 Mar;6(2):179-80

An unusual case of ruptured aneurysm of sinus of Valsalva. Lim ST, et al. **Singapore Med J** 1996 Feb;37(1):115-6

Unruptured congenital aneurysm of the right sinus of Valsalva. Dissecting into the interventricular septum. Kalimanovska-Oštrić D, et al. **Tex Heart Inst J** 1996; 23(3):217-21

Repair of a ruptured sinus of Valsalva aneurysm. Associated with annuloaortic ectasia and coarctation of the aorta in a patient with Marfan syndrome. Tesler UF, et al. **Tex Heart Inst J** 1997;24(2):134-8

Ruptured sinus of Valsalva aneurysm in a patient with autosomal dominant polycystic kidney disease. Sprung RF, et al. **West J Med** 1996 Dec;165(6):379-82

[Surgically treated unruptured sinus of Valsalva aneurysm: a case report] Fukui T, et al. **J Cardiol** 1997;29 Suppl 2:67-71 (Eng. Abstr.) **(Jpn)**

[A case of ruptured sinus of Valsalva aneurysm with bicuspid aortic valve] Ohkado A, et al. **Kyobu Geka** 1996 Jul; 49(7):567-9 (Eng. Abstr.) **(Jpn)**

[A successful surgical case report of acute aortic dissection involving entire sinus of Valsalva] Jung E, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jun;45(6):913-8 (Eng. Abstr.) **(Jpn)**

[A case of extracardiac noncoronary sinus Valsalva aneurysm associated with aortic regugitation] Kochi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jan;45(1):84-7 (Eng. Abstr.) **(Jpn)**

[A case report of an infundibular ventricular septal defect with severe right ventricular outflow tract obstruction due to aneurysm of the aortic sinus of valsalva] Shuntoh K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Dec; 44(12):2183-6 (Eng. Abstr.) **(Jpn)**

[Two cases of ruptured aneurysm of sinus of Valsalva into right atrium (Konno's type IV)] Suesada H, et al. **Rinsho Kyobu Geka** 1989 Jun;9(3):291-6 (Eng. Abstr.) **(Jpn)**

[Aneurysm of the sinus of Valsalva] Sugama M. **Ryoikibetsu Shokogun Shirizu** 1996;(13):323-5 (19 ref.) **(Jpn)**

ABNORMALITIES

Dual left anterior descending coronary artery and anomalous aortic origin of the left circumflex coronary artery: a rare and complicated anomaly. Chang CJ, et al. **Am Heart J** 1997 May;133(5):598-601

Modified unroofing procedure in anomalous aortic origin of left or right coronary artery. van Son JA, et al. **Ann Thorac Surg** 1997 Aug;64(2):568-9

Unruptured aneurysm of the sinus of Valsalva. Malcolm I. **Can J Cardiol** 1996 Sep;12(9):783-5

Anomalous right coronary artery from the left sinus of Valsalva: demonstration of extensive collateral circulation. Burks JM, et al. **Cathet Cardiovasc Diagn** 1996 Sep; 39(1):67-70

Simultaneous biplane coronary and pulmonary arteriography: a novel technique for defining the course of an anomalous left main coronary artery originating from the right sinus of Valsalva. Wang A, et al. **Cathet Cardiovasc Diagn** 1997 Sep;42(1):73-8

Anomalous origin of left main coronary artery from right sinus of Valsalva: modified surgical treatment to avoid neo-coronary ostial stenosis. Van Son JA, et al. **Eur J Cardiothorac Surg** 1996;10(6):467-9

Pitfalls of intervention therapy in a patient with anomalous origin of the right coronary artery from the left sinus of Valsalva associated with organic stenosis [see comments] Sohara H, et al. **J Cardiol** 1997 Feb;29(2):111-5. Comment in: J Cardiol 1997 Jul;30(1):53-4.

Coronary arteries arising from the contralateral aortic sinus: electron beam computed tomographic demonstration of the initial course of the artery with respect to the aorta and the right ventricular outflow tract [letter; comment] Anderson RH. **J Thorac Cardiovasc Surg** 1997 May; 113(5):961-2. Comment on: J Thorac Cardiovasc Surg 1996 Sep;112(3):836-40.

Aberrant left coronary artery arising from the right sinus of Valsalva with a right coronary arteriovenous malformation. Phoon CK, et al. **Pediatr Cardiol** 1997 Sep-Oct;18(5):385-8

[Anomalous origin of the left coronary artery from the right sinus of Valsalva with acute symptoms] Schlotterbeck K, et al. **Z Kardiol** 1996 Jan;85(1):12-5 (Eng. Abstr.) **(Ger)**

[Anomalous origin of the coronary arteries from the other sinus of Valsalva] Kitaoka S, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):813-6 (16 ref.) **(Jpn)**

[Valsalva fistula] Sugama M. **Ryoikibetsu Shokogun Shirizu** 1996;(13):326 (8 ref.) **(Jpn)**

[Right coronary artery originating from the left sinus of Valsalva. Surgical repair] Flórez S, et al. **Rev Esp Cardiol** 1996 Sep;49(9):701-3 (Eng. Abstr.) **(Spa)**

[Left superior vena cava drainage to the coronary sinus. Fetal cardiac doppler] Salazar J, et al. **Rev Esp Cardiol** 1997 Jul; 50(7):529-31 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Location of the coronary arterial orifices in the normal heart. Muriago M, et al. **Clin Anat** 1997;10(5):297-302

The positions of coronary arterial ostia. Turner K, et al. **Clin Anat** 1996;9(6):376-80

INJURIES

Traumatic pseudoaneurysm of the left sinus of Valsalva: a case report. Gharzuddine WS, et al. **J Am Soc Echocardiogr** 1997 May;10(4):377-80

INNERVATION

Neurotransmission of the Bezold-Jarisch reflex in the nucleus tractus solitarii of sino-aortic deafferentated rats. Chianca DA Jr, et al. **Brain Res** 1997 May 9;756(1-2):46-51

SINUS OF VALSALVA

PATHOLOGY

Dilatation of sinus of Valsalva with displacement and compression of the left coronary artery causing sudden death. Carlsson J, et al. **Int J Cardiol** 1996 Aug;55(3):285–8

Anatomic correction of the syndrome of prolapsing right coronary aortic cusp, dilatation of the sinus of Valsalva, and ventricular septal defect. Yacoub MH, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):253–60; discussion 261

PHYSIOLOGY

Absence of evidence for a powerful tonic baroreflex-mediated inhibition on catechol activity in the rat rostral ventrolateral medulla: in vivo voltammetric evidence during sino-aortic deafferentation. Rentero N, et al. **Pflugers Arch** 1997 Sep;434(5):599–608

RADIOGRAPHY

Thrombus in a normal sinus of Valsalva: angiographic, multiplane transoesophageal echocardiographic, and surgical findings. Christiaens L, et al. **Heart** 1996 Sep; 76(3):287–8

SURGERY

Unruptured sinus of Valsalva aneurysm with right ventricular outflow tract obstruction associated with ventricular septal defect. Liang CD, et al. **Cathet Cardiovasc Diagn** 1996 Feb; 37(2):158–61

[Right coronary artery originating from the left sinus of Valsalva. Surgical repair] Flórez S, et al. **Rev Esp Cardiol** 1996 Sep;49(9):701–3 (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

Echocardiographic diagnosis of right and left sinus of Valsalva aneurysms dissecting into the ventricular septum. Silance PG, et al. **J Am Soc Echocardiogr** 1996 Mar–Apr; 9(2):190–4 (12 ref.)

Spontaneous echocardiographic contrast within an unruptured sinus of Valsalva aneurysm: a potential embolic source diagnosed by transesophageal echocardiography. Steinberg E, et al. **J Am Soc Echocardiogr** 1996 Nov–Dec; 9(6):880–1

[The echocardiographic diagnosis of a rare complication of an aneurysm of the sinus of Valsalva] Cabral S, et al. **Rev Port Cardiol** 1997 Apr;16(4):393–6, 352 (11 ref.) (Eng. Abstr.) **(Por)**

SINUS TACHYCARDIA see **TACHYCARDIA, SINUS**

SINUS THROMBOSIS

BLOOD

Hearing loss and headache revealing lateral sinus thrombosis in a patient with factor V Leiden mutation [letter] Crassard I, et al. **Stroke** 1997 Apr;28(4):876–8

CHEMICALLY INDUCED

Cerebral venous thrombosis after myelography with iopamidol. Brugeilles H, et al. **Neuroradiology** 1996 Aug; 38(6):534–6

[Successful direct thrombolysis in a patient with extensive dural sinus thrombosis induced by danazol] Satake R, et al. **Rinsho Shinkeigaku** 1997 Apr;37(4):309–13 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Bilateral papilledema with retinal hemorrhages in association with cerebral venous sinus thrombosis and paroxysmal nocturnal hemoglobinuria. Hauser D, et al. **Am J Ophthalmol** 1996 Oct;122(4):592–3

Central retinal vein occlusion associated with cavernous sinus thrombosis. Sharma S, et al. **Can J Ophthalmol** 1996 Aug; 31(5):255–6

Acute proptosis in relation to activated protein C resistance: a case report. Comer M, et al. **Eye** 1997;11 (Pt 1):115–7

Transverse sinus thrombosis: an unusual cause of headache. Wasson J, et al. **Headache** 1997 Jul–Aug;37(7):457–9 (18 ref.)

The pathophysiology of otitic hydrocephalus. Tomkinson A, et al. **J Laryngol Otol** 1997 Aug;111(8):757–9

Potentially prothrombotic abnormalities of coagulation in benign intracranial hypertension. Sussman J, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):229–33

Thunderclap headache as first symptom of cerebral venous sinus thrombosis. CVST Study Group. de Bruijn SF, et al. **Lancet** 1996 Dec 14;348(9042):1623–5

Two thrombotic complications in a patient with active ulcerative colitis. Gonera RK, et al. **Neth J Med** 1997 Feb; 50(2):88–91

Cerebral venous sinus thrombosis associated with systemic multiple hemangiomas manifesting as chronic subdural hematoma—case report. Takamura Y, et al. **Neurol Med Chir (Tokyo)** 1996 Sep;36(9):650–3

Hearing loss and headache revealing lateral sinus thrombosis in a patient with factor V Leiden mutation [letter] Crassard I, et al. **Stroke** 1997 Apr;28(4):876–8

Venous microembolic signals detected in patients with cerebral sinus thrombosis. Valdueza JM, et al. **Stroke** 1997 Aug;28(8):1607–9

[Diagnosis of a post-thrombophlebitic dural fistula using MR angiography] Meyer X, et al. **J Neuroradiol** 1996 Sep; 23(2):69–73 (Eng. Abstr.) **(Fre)**

[Cerebral vein and sinus thrombosis—an important cause of benign intracranial pressure increase in childhood] Reul J, et al. **Klin Padiatr** 1997 May–Jun;209(3):116–20 (Eng. Abstr.) **(Ger)**

[Coincident arterial and venous cerebral thrombosis in primary antiphospholipid syndrome] Keller E, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):300–2 **(Ger)**

[Multiple dural arteriovenous fistulas following extensive sinus thrombosis: a case report] Sugiura Y, et al. **No Shinkei Geka** 1996 Apr;24(4):379–83 (Eng. Abstr.) **(Jpn)**

[Tactile extinction following the cerebral sinus thrombosis. A study using event-related potentials] Fujikane M, et al. **Rinsho Shinkeigaku** 1996 May;36(5):687–91 (Eng. Abstr.) **(Jpn)**

[Dural arteriovenous fistulas of the posterior fossa associated with lateral sinus thrombosis presenting as progressive visual impairment] Iwakawa J, et al. **Rinsho Shinkeigaku** 1996 Sep;36(9):1095–9 (Eng. Abstr.) **(Jpn)**

[Bacteremia caused by Enterococcus avium secondary to thrombosis of the lateral sinus and the internal jugular vein (letter)] Lozano F, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):458 **(Spa)**

[Thrombosis of the superior longitudinal sinus in patients with AIDS. A review of the literature] Pedraza S, et al. **Rev Neurol** 1997 Feb;25(138):247–9 (16 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Recanalization of the falcine sinus after venous sinus thrombosis. Kesava PP. **AJNR Am J Neuroradiol** 1996 Oct; 17(9):1646–8

Superior sagittal sinus thrombosis with high-signal-intensity CSF mimicking subarachnoid hemorrhage on MR FLAIR images. Bozzao A, et al. **AJR Am J Roentgenol** 1997 Oct; 169(4):1183–4

Sigmoid sinus thrombosis and imaging techniques. Magliulo G, et al. **Ann Otol Rhinol Laryngol** 1996 Dec;105(12):991–3

Thrombosis of the straight sinus complicating hormone replacement therapy. Strachan R, et al. **Br J Neurosurg** 1995;9(6):805–8

Neuroblastoma and venous sinus thrombosis in an adult patient. Wester K, et al. **Br J Neurosurg** 1997 Jun; 11(3):241–4

MRA of venous sinus thrombosis. Wang AM. **Clin Neurosci** 1997;4(3):158–64 (15 ref.)

Case report: venous sinus thrombosis: the use of thrombolysis. Renowden SA, et al. **Clin Radiol** 1997 May;52(5):396–9

Use of magnetic resonance imaging and magnetic resonance angiography in diagnosis of sigmoid sinus thrombosis. Davison SP, et al. **Ear Nose Throat J** 1997 Jul;76(7):436–41

Wegener's granulomatosis masquerading as mastoiditis and lateral-sinus thrombosis. Pathak I, et al. **J Otolaryngol** 1997 Jun;26(3):207–9

Nonseptic lateral sinus thrombosis: the otolaryngologic perspective. Rosen A, et al. **Laryngoscope** 1997 May; 107(5):680–3

Isolated inferior sagittal sinus thrombosis: a case report. Elsherbiny SM, et al. **Neuroradiology** 1997 Jun;39(6):411–3

Cavernous sinus thrombophlebitis: case report. Kriss TC, et al. **Neurosurgery** 1996 Aug;39(2):385–9 (31 ref.)

[Superior sagittal sinus thrombosis in children during the first year of life: clinical aspects, imaging and development] Pedespan JM, et al. **Arch Pediatr** 1996 Jun;3(6):561–5 (Eng. Abstr.) **(Fre)**

[Cerebral venous sinus thrombosis in a young women] Geronooz I, et al. **Rev Med Liege** 1997;52(7):449–51 **(Fre)**

[Superior sagittal sinus thrombosis: a case report] Tutaj A, et al. **Neurol Neurochir Pol** 1996 Nov–Dec;30(6):1049–55 (Eng. Abstr.) **(Pol)**

[Lateral sinus thrombosis in the first three months of pregnancy] Martín-Araguz A, et al. **Rev Neurol** 1997 Feb; 25(138):234–6 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Direct endovascular thrombolytic therapy for dural sinus thrombosis: infusion of alteplase. Kim SY, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):639–45

Direct thrombolysis of superior sagittal sinus thrombosis with coexisting intracranial hemorrhage. Rael JR, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1238–42

Endovascular thrombolysis in deep cerebral venous thrombosis. Spearman MP, et al. **AJNR Am J Neuroradiol** 1997 Mar;18(3):502–6

Case report: venous sinus thrombosis: the use of thrombolysis. Renowden SA, et al. **Clin Radiol** 1997 May;52(5):396–9

Emergency endovascular treatment of stroke. Connors JJ 3rd, et al. **J La State Med Soc** 1996 Nov;148(11):490–7 (10 ref.)

[An unusual combination of carotid artery-cavernous sinus fistula and sinus thrombosis. Successful therapy with anticoagulation] Yousry TA, et al. **Nervenarzt** 1997 Feb; 68(2):135–8 (Eng. Abstr.) **(Ger)**

[Successful direct thrombolysis in a patient with extensive dural sinus thrombosis induced by danazol] Satake R, et al. **Rinsho Shinkeigaku** 1997 Apr;37(4):309–13 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Acute mastoiditis with complications: a report of two cases. Dallari S, et al. **Acta Otorhinolaryngol Belg** 1997; 51(2):113–8

Otogenic thrombosis of the lateral sinus: report of a case in a child. Delbrouck C, et al. **Acta Otorhinolaryngol Belg** 1996;50(3):221–6

Postpartum dural venous sinus thrombosis after postdural puncture headache and epidural blood patch. Borum SE, et al. **Anesthesiology** 1997 Feb;86(2):487–90

Thrombosis of the straight sinus complicating hormone replacement therapy. Strachan R, et al. **Br J Neurosurg** 1995;9(6):805–8

Cavernous sinus thrombosis: a rare complication of sinusitis. Odabaşi AO, et al. **Int J Pediatr Otorhinolaryngol** 1997 Feb 14;39(1):77–83

Intracranial sinus thrombosis secondary to ear disease in an adolescent. Kolenda J, et al. **J Otolaryngol** 1997 Jun; 26(3):203–6

Superior sagittal sinus thrombosis in a patient with systemic lupus erythematosus. Flusser D, et al. **Lupus** 1996 Aug; 5(4):334–6

Dural sinus thrombosis in children with cancer. Reddingius RE, et al. **Med Pediatr Oncol** 1997 Oct;29(4):296–302

Congenital cholesteatoma with spontaneous epidural abscess, sinus thrombosis and cutaneous fistula. Gök A, et al. **Neurosurg Rev** 1996;19(3):189–91

Cavernous sinus thrombosis secondary to abdominal wall abscess. Jinbayashi H, et al. **Ophthalmologica** 1997; 211(5):308–11

Cerebral venous thrombosis and chronic active hepatitis as part of the antiphospholipid syndrome. Kesler A, et al. **Postgrad Med J** 1996 Nov;72(853):690–2

Cerebral venous thrombosis associated with inhalational drug abuse. Murthy BV, et al. **Rhinology** 1996 Sep;34(3):188–90

Activated protein C resistance and factor V Leiden mutation are risk factors for cerebral sinus thrombosis [letter] Siegert CE, et al. **Stroke** 1997 Jun;28(6):1291–2

[Endocranial complications of acute and chronic otitis media in children and adolescents] Schwager K, et al. **Laryngorhinootologie** 1997 Jun;76(6):335–40 (Eng. Abstr.) **(Ger)**

[Cerebral sinus thrombosis in a patient with protein S deficiency: a case report] Fujita A, et al. **No Shinkei Geka** 1997 May;25(5):467–72 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Recanalization of dural sinus occlusion following the disappearance of dural arteriovenous fistula: report of a case] Mori F, et al. **No Shinkei Geka** 1996 Jul;24(7):631–6 (Eng. Abstr.) **(Jpn)**

[Otogenic sigmoid sinus thrombosis in the course of chronic otitis media] Namysłowski G, et al. **Otolaryngol Pol** 1995; 49(5):451–6 (Eng. Abstr.) **(Pol)**

MICROBIOLOGY

Ocular neuromyotonia in a patient with cavernous sinus thrombosis secondary to mucormycosis. Harrison AR, et al. **Am J Ophthalmol** 1997 Jul;124(1):122–3

PATHOLOGY

Histopathological aspects of dural arteriovenous fistulas in the transverse-sigmoid sinus region in nine patients. Hamada Y, et al. **Neurosurgery** 1997 Mar;40(3):452–6; discussion 456–8

An autopsy case of traumatic sinus thrombosis. Seto Y, et al. **Nippon Hoigaku Zasshi** 1996 Feb;50(1):30–2

PHYSIOPATHOLOGY

Cavernous sinus thrombosis: a rare complication of sinusitis. Odabaşi AO, et al. **Int J Pediatr Otorhinolaryngol** 1997 Feb 14;39(1):77–83

RADIOGRAPHY

Angiography in the evaluation of head and neck trauma. Gaskill-Shipley MF, et al. **Neuroimaging Clin N Am** 1996 Aug;6(3):607–24 (69 ref.)

[Value of CT-angiography in diagnosis of cerebral sinus and venous thromboses] Hagen T, et al. **Radiologe** 1996 Nov; 36(11):859–66 (Eng. Abstr.) **(Ger)**

[CT angiography of the cerebral veins] Kirchhof K, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):232–7 (Eng. Abstr.) **(Ger)**

SURGERY

[Arresting massive retrograde hemorrhage in injury of major vessels in external base of the skull] Kiselev AS. **Vestn Otorinolaringol** 1996 Jul–Aug;(4):50–1 **(Rus)**

THERAPY

Nonseptic lateral sinus thrombosis: the otolaryngologic perspective. Rosen A, et al. **Laryngoscope** 1997 May; 107(5):680–3

ULTRASONOGRAPHY

Echocontrast-enhanced transcranial color-coded sonography for the diagnosis of transverse sinus venous thrombosis. Ries S, et al. **Stroke** 1997 Apr;28(4):696-700

Venous microembolic signals detected in patients with cerebral sinus thrombosis. Valdueza JM, et al. **Stroke** 1997 Aug;28(8):1607-9

SINUSITIS

Allergic fungal sinusitis/polyposis. Bent JP 3rd, et al. **Allergy Asthma Proc** 1996 Sep-Oct;17(5):259-68 (30 ref.)

Rhinosinusitis. Lund VJ. **Br J Hosp Med** 1997 Apr 2-15; 57(7):308-12 (18 ref.)

Changing diagnostic and treatment strategies for chronic sinusitis. Wagner W. **Cleve Clin J Med** 1996 Nov-Dec; 63(7):396-405; quiz 420 (34 ref.)

Acute community-acquired sinusitis. Gwaltney JM Jr. **Clin Infect Dis** 1996 Dec;23(6):1209-23; quiz 1224-5 (79 ref.)

Use of symptoms, signs, and blood tests to diagnose acute sinus infections in primary care: comparison with computed tomography. Lindboek M, et al. **Fam Med** 1996 Mar; 28(3):183-8

Sinusitis: bench to bedside. Current findings, future directions. Kaliner MA, et al. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 3):S829-48 (89 ref.)

Pediatric sinusitis: a literature review with emphasis on the role of allergy. Gungor A, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):4-15 (77 ref.)

Sinusitis: bench to bedside. Current findings, future directions. Kaliner MA, et al. **Otolaryngol Head Neck Surg** 1997 Jun;116(6 Pt 2):S1-20 (89 ref.)

Sinusitis in childhood. Isaacson G. **Pediatr Clin North Am** 1996 Dec;43(6):1297-318 (104 ref.)

BLOOD

Local and systemic eosinophil activation in allergic fungal sinusitis. Feger TA, et al. **Ann Allergy Asthma Immunol** 1997 Sep;79(3):221-5

CHEMICALLY INDUCED

Paranasal sinusitis after long-term use of topical nasal decongestants. Min YG, et al. **Acta Otolaryngol (Stockh)** 1996 May;116(3):465-71

Yohimbine and sinusitis [letter] Wylie KR. **Br J Psychiatry** 1996 Sep;169(3):384-5

CLASSIFICATION

Clinical classification as a guide to treatment of sinusitis in children. Weinberg EA, et al. **Laryngoscope** 1997 Feb; 107(2):241-6

[Computer-tomographic scialogy of the inflammatory diseases of nasal sinuses on an aspect of the improvements of classification of sinusitis] Bessonov OV. **Aviakosm Ekolog Med** 1996;30(1):46-51 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Orbital complications of pediatric sinusitis: treatment of periorbital abscess. Mann W, et al. **Am J Rhinol** 1997 Mar-Apr;11(2):149-53

Improvement of bronchial hyperresponsiveness in asthmatic children treated for concomitant sinusitis. Oliveira CA, et al. **Ann Allergy Asthma Immunol** 1997 Jul;79(1):70-4

Treatment of chronic paranasal sinus pain with minimal sinus disease [letter; comment] Harris NJ. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):357-8. Comment on: Ann Otol Rhinol Laryngol 1996 Aug;105(8):607-14.

Effect of new macrolide roxithromycin upon nasal polyps associated with chronic sinusitis. Ichimura K, et al. **Auris Nasus Larynx** 1996;23:48-56

Pseudoephedrine toxicity in renal failure. Lyon CC, et al. **Br J Clin Pract** 1996 Oct-Nov;50(7):396-7

Urethritis associated with disseminated microsporidiosis: clinical response to albendazole. Corcoran GD, et al. **Clin Infect Dis** 1996 Mar;22(3):592-3

The rules of third nerve palsy in children [letter] Yang YC, et al. **Eye** 1996;10 (Pt 5):646-7

Allergic fungal sinusitis with cranial base erosion. Kinsella JB, et al. **Head Neck** 1996 May-Jun;18(3):211-7

Cavernous sinus thrombosis: a rare complication of sinusitis. Odabaşi AO, et al. **Int J Pediatr Otorhinolaryngol** 1997 Feb 14;39(1):77-83

Suppurative complications of infective sinusitis. Conlon BJ, et al. **Ir J Med Sci** 1997 Jul-Sep;166(3):127-9

Allergic fungal sinusitis: incidence and clinical and pathological features of seven cases. Deshpande RB, et al. **J Assoc Physicians India** 1995 Feb;43(2):98-100

Sinusitis in HIV-infected patients. Del Borgo C, et al. **J Chemother** 1997 Apr;9(2):83-8

Bacterial sinusitis associated with subacute, granulomatous thyroiditis [letter] Collazos J, et al. **J Infect** 1997 Mar; 34(2):158-9

The Groote Schuur hospital classification of the orbital complications of sinusitis. Mortimore S, et al. **J Laryngol Otol** 1997 Aug;111(8):719-23

Orbital subperiosteal abscess as a complication of acute orbital cellulitis [letter; comment] Callanan V, et al. **J R Coll Surg Edinb** 1997 Feb;42(1):62-3. Comment on: J R Coll Surg Edinb 1995 Aug;40(4):246-7.

Intracranial complications of sinusitis. Giannoni CM, et al. **Laryngoscope** 1997 Jul;107(7):863-7

Orbital complications of sinusitis in the aspirin triad syndrome. McFadden EA, et al. **Laryngoscope** 1996 Sep; 106(9 Pt 1):1103-7

Invasive Aspergillus sinusitis in patients with human immunodeficiency virus infection. Report of 2 cases and review. Mylonakis E, et al. **Medicine (Baltimore)** 1997 Jul; 76(4):249-55 (18 ref.)

Tracheoesophageal fistula and sinusitis from invasive aspergillosis. Stack BC Jr, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):116-9

Nontuberculous mycobacterial infection of the frontal sinus in a child. Weiss RL, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):110-2

The relation between physician-diagnosed sinusitis, asthma, and skin test reactivity to allergens in 8-year-old children. Lombardi E, et al. **Pediatr Pulmonol** 1996 Sep;22(3):141-6

[Allergic fungal sinusitis: is this rare disease an allergy or infection?] Berrettini S, et al. **Acta Otorhinolaryngol Ital** 1996 Oct;16(5):447-54 (Eng. Abstr.) **(Ita)**

[Paranasal sinuses, middle ear, and allergy] Mogi G. **Arerugi** 1995 Dec;44(12):1355-60 (21 ref.) **(Jpn)**

[Two cases of severe bacterial meningitis with paranasal sinusitis followed by cerebrovascular disease--pathophysiology and treatment of cerebrovascular disease] Miyazato M, et al. **Rinsho Shinkeigaku** 1996 Sep; 36(9):1083-8 (Eng. Abstr.) **(Jpn)**

[A case of paranasal sinusitis-cavernous sinusitis with ophthalmoplegia externa] Nagata A, et al. **Rinsho Shinkeigaku** 1996 Oct;36(10):1179-82 (Eng. Abstr.) **(Jpn)**

[Complicated sinusitis in a diabetic patient] Sala-Mateus C, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):107-8 **(Spa)**

[Nystagmus as uncommon neurological manifestation of sphenoidal sinusitis. Letter] Huezo CA. **Rev Neurol** 1997 Mar;25(139):474 **(Spa)**

DIAGNOSIS

Prevalence of paranasal sinus abnormalities on MRI in a non-ENT population. Gordts F, et al. **Acta Otorhinolaryngol Belg** 1996;50(3):167-70

Diagnosis and management of sinusitis in children. Wald ER. **Adv Pediatr Infect Dis** 1996;12:1-20 (44 ref.)

Sinusitis in an allergist's office: analysis of 200 consecutive cases. McNally PA, et al. **Allergy Asthma Proc** 1997 May-Jun;18(3):169-75

Allergic mucin sinusitis without fungus. Ramadan HH, et al. **Am J Rhinol** 1997 Mar-Apr;11(2):145-7

Allergic fungal sinusitis: experience in an ambulatory allergy practice. Schwartz HJ. **Ann Allergy Asthma Immunol** 1996 Dec;77(6):500-2

Sinusitis. Drake-Lee A. **Br J Hosp Med** 1996 Jun 5-18; 55(11):674-8 (15 ref.)

The rules of third nerve palsy in children [letter] Yang YC, et al. **Eye** 1996;10 (Pt 5):646-7

Correlation of clinical sinusitis signs and symptoms to imaging findings in pediatric patients. Manning SC, et al. **Int J Pediatr Otorhinolaryngol** 1996 Sep;37(1):65-74

Efficacy of nuclear scintigraphy in the diagnosis and management of sinusitis. Javer AR, et al. **J Otolaryngol** 1996 Dec;25(6):375-82

Computed tomography and magnetic resonance diagnosis of allergic fungal sinusitis. Manning SC, et al. **Laryngoscope** 1997 Feb;107(2):170-6

Otitis media and sinusitis: similar diseases. Parsons DS, et al. **Otolaryngol Clin North Am** 1996 Feb;29(1):11-25 (28 ref.)

Acute sinusitis in adults. Difficult to diagnose, essential to treat. Kankam CG, et al. **Postgrad Med** 1997 Aug; 102(2):253-8 (7 ref.)

Sinusitis in children and adolescents. Newton DA. **Prim Care** 1996 Dec;23(4):701-17 (41 ref.)

Diagnosis and treatment of sinusitis by YAMIK sinus catheters. Kozlov VS, et al. **Rhinology** 1996 Jun;34(2):123-4

[Sarcoidosis of the paranasal sinuses as the etiology of therapy refractory dacryocystitis] Anderhuber W, et al. **Laryngorhinootologie** 1997 May;76(5):315-7 (Eng. Abstr.) **(Ger)**

[Cell activation markers in rhinitis and rhinosinusitis. 1: Eosinophilic cationic protein (ECP)] Klimek L, et al. **Laryngorhinootologie** 1996 Nov;75(11):665-70 (Eng. Abstr.) **(Ger)**

[Difficulties in diagnosing sinusitis in primary care practice] Leshem J, et al. **Harefuah** 1996 Jul;131(1-2):50-4 (33 ref.) **(Heb)**

[The role of endoscopic surgery in the treatment of chronic inflammation of paranasal sinuses] Krzeski A, et al. **Otolaryngol Pol** 1996;50(1):37-45 (15 ref.) (Eng. Abstr.) **(Pol)**

[Diagnosis of chronic rhinosinusitis] Canseco Villarreal JI. **Rev Alerg Mex** 1996;43 Spec No:6-7 (10 ref.) (Eng. Abstr.) **(Spa)**

[Chronic rhinosinusitis: predominant symptoms in children under 14 years of age who were seen at the Regional Center for the Prevention and Treatment of Allergic Diseases] Mógica Mógica JD, et al. **Rev Alerg Mex** 1996;43 Spec No:16-8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Clinical effect of low-dose, long-term roxithromycin chemotherapy in patients with chronic sinusitis. Kimura N, et al. **Acta Med Okayama** 1997 Feb;51(1):33-7

Effects of corticosteroid therapy in non-allergic rhinosinusitis. Mygind N. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):164-6 (25 ref.)

Efficacy of long-term administration of clarithromycin in the treatment of intractable chronic sinusitis. Hashiba M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:73-8

Transitional concentration of antibacterial agent to the maxillary sinus via a nebuliser. Kondo H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:64-7

Adjunct effect of loratadine in the treatment of acute sinusitis in patients with allergic rhinitis. Braun JJ, et al. **Allergy** 1997 Jun;52(6):650-5

Management of sinusitis in adult cystic fibrosis. Marks SC, et al. **Am J Rhinol** 1997 Jan-Feb;11(1):11-4

Intranasal budesonide spray as an adjunct to oral antibiotic therapy for acute sinusitis in children. Barlan IB, et al. **Ann Allergy Asthma Immunol** 1997 Jun;78(6):598-601

Improvement of bronchial hyperresponsiveness in asthmatic children treated for concomitant sinusitis. Oliveira CA, et al. **Ann Allergy Asthma Immunol** 1997 Jul;79(1):70-4

Open trial of intravenous immune serum globulin for chronic sinusitis in children. Ramesh S, et al. **Ann Allergy Asthma Immunol** 1997 Aug;79(2):119-24

Comparative effectiveness and safety of cefdinir and amoxicillin-clavulanate in treatment of acute community-acquired bacterial sinusitis. Cefdinir Sinusitis Study Group. Gwaltney JM Jr, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1517-20

Fluticasone [letter; comment] Birchall MA. **Arch Otolaryngol Head Neck Surg** 1997 Apr;123(4):449-50 . Comment on: Arch Otolaryngol Head Neck Surg 1996 Jul;122(7):729-31.

Chronic sinusitis refractory to standard management in patients with humoral immunodeficiencies. Buehring I, et al. **Clin Exp Immunol** 1997 Sep;109(3):468-72

A comparison of the sensitivity of manometric rhinometry, acoustic rhinometry, rhinomanometry and nasal peak flow to detect the decongestant effect of xylometazoline. Porter MJ, et al. **Clin Otolaryngol** 1996 Jun;21(3):218-21

A double-blind, placebo-controlled trial of decongestant-antihistamine for the treatment of sinusitis in children. McCormick DP, et al. **Clin Pediatr (Phila)** 1996 Sep;35(9):457-60

Medical management of sinusitis in pediatric patients. Hopp R, et al. **Curr Probl Pediatr** 1997 May-Jun;27(5):178-86 (43 ref.)

The antibiotic treatment of acute otitis media and sinusitis in children. Cohen R. **Diagn Microbiol Infect Dis** 1997 Jan-Feb;27(1-2):35-9 (19 ref.)

Are antibiotics over-prescribed in Poland? Management of upper respiratory tract infections in primary health care region of Warszawa, Wola. Windak A, et al. **Fam Pract** 1996 Oct;13(5):445-9

Cefuroxime axetil in the treatment of acute sinusitis in childhood. Gürses N, et al. **J Antimicrob Chemother** 1996 Sep;38(3):547-50

Microbiology and management of sinusitis. Brook I. **J Otolaryngol** 1996 Aug;25(4):249-56 (44 ref.)

IL-4 and IL-13 expression in chronic sinusitis: relationship with cellular infiltrate and effect of topical corticosteroid treatment. al Ghamdi K, et al. **J Otolaryngol** 1997 Jun; 26(3):160-6

Antibiotic treatment in acute bacterial sinusitis [letter; comment] Lindbaek M, et al, **Lancet** 1997 May 17; 349(9063):1476; discussion 1476-7. Comment on: Lancet 1997 Mar 8;349(9053):683-7.

Antimicrobial therapy for sinusitis. Poole MD. **Otolaryngol Clin North Am** 1997 Jun;30(3):331-9 (25 ref.)

Shortened course of antibiotic therapy for acute otitis media, sinusitis and tonsillopharyngitis. Pichichero ME, et al. **Pediatr Infect Dis J** 1997 Jul;16(7):680-95 (144 ref.)

Acute sinusitis in adults. Difficult to diagnose, essential to treat. Kankam CG, et al. **Postgrad Med** 1997 Aug; 102(2):253-8 (7 ref.)

Sinusitis in children and adolescents. Newton DA. **Prim Care** 1996 Dec;23(4):701-17 (41 ref.)

Effects of long-term low-dose macrolide administration on neutrophil recruitment and IL-8 in the nasal discharge of chronic sinusitis patients. Suzuki H, et al. **Tohoku J Exp Med** 1997 Jun;182(2):115-24

[Effects of standardized Myrtol in therapy of acute sinusitis--results of a double-blind, randomized multicenter study compared with placebo] Federspil P, et al. **Laryngorhinootologie** 1997 Jan;76(1):23-7 (Eng. Abstr.) **(Ger)**

[Effect of clarithromycin on symptoms and mucociliary transport in patients with sino-bronchial syndrome] Nishi K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33(12):1392-1400 (Eng. Abstr.) **(Jpn)**

[The use of mucolytic preparations (Mucosolvan) in nasal and paranasal sinuses in children] Golusiński W, et al. **Otolaryngol Pol** 1996;50(6):599-606 (Eng. Abstr.) **(Pol)**

[Ligenten treatment of sinusitis] Poliakova TS, et al. **Vestn Otorinolaringol** 1997;(2):38-40 (Eng. Abstr.) **(Rus)**

[Treat sinusitis as before! (letter)] Lychou C. **Lakartidningen** 1997 Jun 4;94(23):2158 **(Swe)**

SINUSITIS

EPIDEMIOLOGY

Prevalence of paranasal sinus abnormalities on MRI in a non-ENT population. Gordts F, et al. **Acta Otorhinolaryngol Belg** 1996;50(3):167-70

Prevalence and risk factors of chronic sinusitis in Korea: results of a nationwide survey. Min YG, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):435-9

Prevalence of sinusitis signs in a non-ENT population. Gordts F, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Nov-Dec;58(6):315-9

A 13-year report on childhood sinusitis: clinical presentations, predisposing factors and possible means of prevention. Henriksson G, et al. **Rhinology** 1996 Sep; 34(3):171-5

[Prevalence of rhinosinusitis. Statistics: January-December 1993] González Escamilla JA, et al. **Rev Alerg Mex** 1996; 43 Spec No:8-11 (31 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Recent trends in clinical isolates from paranasal sinusitis. Suzuki K, et al. **Acta Otolaryngol Suppl (Stockh)** 1996; 525:51-5

Paranasal sinus development in chronic sinusitis, cystic fibrosis, and normal comparison population: a computerized tomography correlation study. Kim HJ, et al. **Am J Rhinol** 1997 Jul-Aug;11(4):275-81

Nasal endoscopy in chronic/recurring sinusitis. Bera SP, et al. **Auris Nasus Larynx** 1997 Apr;24(2):171-7

Paranasal sinusitis following allogeneic bone marrow transplant. Savage DG, et al. **Bone Marrow Transplant** 1997 Jan;19(1):55-9 (29 ref.)

Invasive mold sinusitis: 17 cases in immunocompromised patients and review of the literature. Iwen PC, et al. **Clin Infect Dis** 1997 Jun;24(6):1178-84

Subjective and objective findings in craniofacial pain and chronic rhinosinusitis [letter] Naito K, et al. **Eur Arch Otorhinolaryngol** 1997;254(1):22

Sinusitis in mechanically ventilated patients and its role in the pathogenesis of nosocomial pneumonia. Bert F., et al. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):533-44 (84 ref.)

Chronic sinusitis in children. Calderon E, et al. **J Investig Allergol Clin Immunol** 1996 Jan-Feb;6(1):5-13 (52 ref.)

Upregulation of Th-2 cytokine receptors in atopy- and nonatopy-associated chronic sinusitis. Kotsimbos TC, et al. **J Otolaryngol** 1996 Oct;25(5):317-21

Adenoidal hypertrophy [letter; comment] Knox GW. **Laryngoscope** 1996 Sep;106(9 Pt 1):1187. Comment on: Laryngoscope 1995 Nov;105(11):1202-8.

Allergic rhinosinusitis in the pediatric population. Cook PR, et al. **Otolaryngol Clin North Am** 1996 Feb;29(1):39-56 (67 ref.)

Allergic fungal sinusitis in children. Muntz HR. **Otolaryngol Clin North Am** 1996 Feb;29(1):185-22

Antimicrobial therapy for sinusitis. Poole MD. **Otolaryngol Clin North Am** 1997 Jun;30(3):331-9 (25 ref.)

Prognosis for allergic fungal sinusitis. Kupferberg SB, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):35-41

Immunotherapy in the treatment of allergic fungal sinusitis. Mabry RL, et al. **Otolaryngol Head Neck Surg** 1997 Jan; 116(1):31-5

Sinus infection in intensive care patients. Mevio E, et al. **Rhinology** 1996 Dec;34(4):232-6

Lethal disseminated Fusarium infection with sinus involvement in the immunocompromised host: case report and review of the literature. Rombaux P, et al. **Rhinology** 1996 Dec;34(4):237-41 (27 ref.)

Sinus barotrauma presenting as acute dental pain [letter] Kieser J. **S Afr Med J** 1997 Feb;87(2):184

[Sinusitis--the "normal nose" has medical advantages (news)] Wagner B. **Fortschr Med** 1997 Feb 20;115(5):12, 14 **(Ger)**

[Malformations of intranasal structures and rhinosinusitis in children] Garashchenko TI. **Vestn Otorinolaringol** 1996 Sep-Oct;(5):10-2 (Eng. Abstr.) **(Rus)**

[Orbit complication of sinusitis. A report of 7 cases] Sánchez González FJ, et al. **Acta Otorrinolaringol Esp** 1996 May-Jun;47(3):221-6 (Eng. Abstr.) **(Spa)**

HISTORY

Chandler et al.: "The pathogenesis of orbital complications in acute sinusitis." (Laryngoscope 1970;80:1414-1428) [comment] Healy GB. **Laryngoscope** 1997 Apr;107(4):441-6 . Comment on: Laryngoscope 1970 Sep;80(9):1414-28.

IMMUNOLOGY

Positive identification in situ of mRNA expression of IL-6, and IL-12, and the chemotactic cytokine RANTES in patients with chronic sinusitis and polypoid disease. Clinical relevance and relation to allergy. Davidsson A, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):604-10

Immunologic considerations in the child with recurrent or persistent sinusitis. Herrod HG. **Allergy Asthma Proc** 1997 May-Jun;18(3):145-8 (20 ref.)

Sinusitis in an allergist's office: analysis of 200 consecutive cases. McNally PA, et al. **Allergy Asthma Proc** 1997 May-Jun;18(3):169-75

Distribution of mast cells and eosinophils in nasal polyps from atopic and nonatopic subjects: a morphometric study. Pawliczak R, et al. **Am J Rhinol** 1997 Jul-Aug;11(4):257-62

CD4+ lymphocytes are increased in the sinus mucosa of children with chronic sinusitis. Driscoll PV, et al. **Arch Otolaryngol Head Neck Surg** 1996 Oct;122(10):1071-6

Chronic sinusitis: risk factors for extensive disease. Hoover GE, et al. **J Allergy Clin Immunol** 1997 Aug;100(2):185-91

Mechanism of neutrophil recruitment induced by IL-8 in chronic sinusitis. Suzuki H, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):659-70

IL-4 and IL-13 expression in chronic sinusitis: relationship with cellular infiltrate and effect of topical corticosteroid treatment. al Ghamdi K, et al. **J Otolaryngol** 1997 Jun; 26(3):160-6

Upregulation of Th-2 cytokine receptors in atopy- and nonatopy-associated chronic sinusitis. Kotsimbos TC, et al. **J Otolaryngol** 1996 Oct;25(5):317-21

Pneumococcal vaccination of children with recurrent sinusitis. Giebink GS. **Pediatr Infect Dis J** 1997 May; 16(5):535-6

[Cell surface antigens on inflammatory cells in the paranasal mucosa of patients after macrolide therapy] Miyazawa T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jun; 100(6):671-7 (Eng. Abstr.) **(Jpn)**

[Proliferating cell nuclear antigen (PCNA) immunolocalization in human nasal epithelium with chronic sinusitis detected by confocal laser scanning microscopy] Takeno S, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Aug; 99(8):1119-25 (Eng. Abstr.) **(Jpn)**

METABOLISM

Nitric oxide (NO) production in the upper airways is decreased in chronic sinusitis. Lindberg S, et al. **Acta Otolaryngol (Stockh)** 1997 Jan;117(1):113-7

Reduced sialylation of glycoproteins in nasal glands of patients with chronic sinusitis. Ueno K, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):420-3

Antioxidant levels in the nasal mucosa of patients with chronic sinusitis and healthy controls. Westerveld GJ, et al. **Arch Otolaryngol Head Neck Surg** 1997 Feb; 123(2):201-4

Myeloperoxidase and interleukin-8 levels in chronic sinusitis. Demoly P, et al. **Clin Exp Allergy** 1997 Jun;27(6):672-5

Nasal mucosal cells in human immunodeficiency virus type 1-seropositive patients with sinusitis. Moss RB, et al. **J Clin Lab Anal** 1996;10(6):418-22

[Lipid peroxidation in the blood of children with pyoinflammation of the nose and paranasal sinuses] Karabayev KhE, et al. **Vestn Otorinolaringol** 1997;(4):44-5 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Effects of viral and bacterial infection on nasal and sinus mucosa. van Cauwenberge P, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):316-21 (25 ref.)

The microbiology of chronic sinusitis in children. A review. Wald ER. **Acta Otorhinolaryngol Belg** 1997;51(1):51-4 (8 ref.)

Allergic mucin sinusitis without fungus. Ramadan HH, et al. **Am J Rhinol** 1997 Mar-Apr;11(2):145-7

Local and systemic eosinophil activation in allergic fungal sinusitis. Feger TA, et al. **Ann Allergy Asthma Immunol** 1997 Sep;79(3):221-5

Allergic fungal sinusitis: experience in an ambulatory allergy practice. Schwartz HJ. **Ann Allergy Asthma Immunol** 1996 Dec;77(6):500-2

Allergic fungal sinusitis in the pediatric population. Kupferberg SB, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec;122(12):1381-4

Paecilomyces sinusitis in an immunocompromised adult patient: case report and review. Gucalp R, et al. **Clin Infect Dis** 1996 Aug;23(2):391-3 (10 ref.)

Invasive sinusitis due to Sporothrix schenckii in a patient with AIDS. Morgan M, et al. **Clin Infect Dis** 1996 Dec; 23(6):1319-20

The detection of Mycoplasma pneumoniae in nasal polyps. Gurr PA, et al. **Clin Otolaryngol** 1996 Jun;21(3):269-73

Allergic fungal sinusitis. Kinsella JB, et al. **Clin Otolaryngol** 1996 Oct;21(5):389-92

Paranasal sinus fungus balls. Ferreiro JA, et al. **Head Neck** 1997 Sep;19(6):481-6

Allergic fungal sinusitis: a clinicopathologic study of 16 cases. Torres C, et al. **Hum Pathol** 1996 Aug;27(8):793-9 (50 ref.)

Pathogens responsible for concurrent sinusitis and pneumonia in intensive care unit patients [letter] Bert F, et al. **Infection** 1996 Jan-Feb;24(1):52-3

Desensitization to itraconazole [letter; comment] Douglas R, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):269. Comment on: J Allergy Clin Immunol 1994 Aug;94(2 Pt 1):270-1.

Microbiology and management of sinusitis. Brook I. **J Otolaryngol** 1996 Aug;25(4):249-56 (44 ref.)

Analysis of the recent cluster of invasive fungal sinusitis at the Toronto Hospital for Sick Children. Lueg EA, et al. **J Otolaryngol** 1996 Dec;25(6):366-70

Antifungal activity against allergic fungal sinusitis organisms. Bent JP 3rd, et al. **Laryngoscope** 1996 Nov;106(11):1331-4

In situ hybridization for Aspergillus and Penicillium in allergic fungal sinusitis: a rapid means of speciating fungal pathogens in tissues. Perez-Jaffe LA, et al. **Laryngoscope** 1997 Feb;107(2):233-40

Invasive Aspergillus sinusitis in patients with human immunodeficiency virus infection. Report of 2 cases and review. Mylonakis E, et al. **Medicine (Baltimore)** 1997 Jul; 76(4):249-55 (18 ref.)

Fungal sinusitis. deShazo RD, et al. **N Engl J Med** 1997 Jul 24;337(4):254-9 (50 ref.)

Immunoglobulin- and complement-coated bacteria in effusions obtained during the early course of acute maxillary sinusitis. Rantala H, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 May-Jun; 58(3):151-6

Adenoid bacteriology and sinonasal symptoms in children. Lee D, et al. **Otolaryngol Head Neck Surg** 1997 Mar; 116(3):301-7

Recovery from rhinocerebral mucormycosis with carotid artery occlusion: a pediatric case and review of the literature. Shah PD, et al. **Pediatr Infect Dis J** 1997 Jan; 16(1):68-71 (27 ref.)

[Bacteriology of the nose and sinuses] Stoll D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1996;117(3):179-82 (Eng. Abstr.) **(Fre)**

[Allergic fungal sinusitis: is this rare disease an allergy or infection?] Berrettini S, et al. **Acta Otorhinolaryngol Ital** 1996 Oct;16(5):447-54 (Eng. Abstr.) **(Ita)**

[A case of toxic shock syndrome induced by MRSA after sinus surgery] Nakayama M, et al. **Masui** 1996 Aug; 45(8):994-7 (Eng. Abstr.) **(Jpn)**

[Acute sinusitis, bacteremia and meningitis caused by group F beta-hemolytic Streptococcus] Pérez C, et al. **Acta Otorrinolaringol Esp** 1996 Sep-Oct;47(5):401-3 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Chronic rhinosinusitis in patients with AIDS: potential role of microsporidia [letter] Franzen C, et al. **AIDS** 1996 Jun; 10(6):687-8

Ocular and sinus microsporidial infection cured with systemic albendazole. Gritz DC, et al. **Am J Ophthalmol** 1997 Aug; 124(2):241-3

Microsporidium-associated sinusitis. Moss RB, et al. **Ear Nose Throat J** 1997 Feb;76(2):95-101 (19 ref.)

PATHOLOGY

Eosinophil infiltration in nonallergic chronic hyperplastic sinusitis with nasal polyposis (CHS/NP) is associated with endothelial VCAM-1 upregulation and expression of TNF-alpha. Hamilos DL, et al. **Am J Respir Cell Mol Biol** 1996 Oct;15(4):443-50

Paranasal sinus development in chronic sinusitis, cystic fibrosis, and normal comparison population: a computerized tomography correlation study. Kim HJ, et al. **Am J Rhinol** 1997 Jul-Aug;11(4):275-81

Polypoidal rhinosinusitis in cystic fibrosis: a clinical and histopathological study. Rowe-Jones JM, et al. **Clin Otolaryngol** 1997 Apr;22(2):167-71

Damage of the pharyngeal mucosa and hyperresponsiveness of airway in sinusitis. Rolla G, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):52-7

[Observation on nasal mucociliary ultrastructure of ostiomeatal complex] Qian J, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1996;31(1):6-7 (Eng. Abstr.) **(Chi)**

[Lymphoid follicle formation in sinus mucosa of chronic sinusitis] Tsurumaru H. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Nov;99(11):1662-75 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Immunologic considerations in the child with recurrent or persistent sinusitis. Herrod HG. **Allergy Asthma Proc** 1997 May-Jun;18(3):145-8 (20 ref.)

Treatment of chronic paranasal sinus pain with minimal sinus disease [letter; comment] Harris NJ. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):357-8. Comment on: Ann Otol Rhinol Laryngol 1996 Aug;105(8):607-14.

[The use of mucolytic preparations (Mucosolvan) in nasal and paranasal sinuses in children] Golusiński W, et al. **Otolaryngol Pol** 1996;50(6):599-606 (Eng. Abstr.) **(Pol)**

[Orbit complication of sinusitis. A report of 7 cases] Sánchez González FJ, et al. **Acta Otorrinolaringol Esp** 1996 May-Jun;47(3):221-6 (Eng. Abstr.) **(Spa)**

[Ethmoidal sinusitis during the neonatal period] Zabala Charramendieta E, et al. **An Esp Pediatr** 1997 Jan; 46(1):79-80 **(Spa)**

[Physiopathology of chronic rhinosinusitis] González Díaz SN. **Rev Alerg Mex** 1996;43 Spec No:12-5 (46 ref.) (Eng. Abstr.) **(Spa)**

[Nystagmus as uncommon neurological manifestation of sphenoidal sinusitis. Letter] Huezo CA. **Rev Neurol** 1997 Mar;25(139):474 **(Spa)**

PREVENTION & CONTROL

Aspirin desensitization treatment of aspirin-sensitive patients with rhinosinusitis-asthma: long-term outcomes. Stevenson DD, et al. **J Allergy Clin Immunol** 1996 Oct;98(4):751-8

RADIOGRAPHY

CT findings in general practice patients with suspected acute sinusitis. Lindbaek M, et al. **Acta Radiol** 1996 Sep; 37(5):708-13

Limited axial CT of the paranasal sinuses in screening for sinusitis. Witte RJ, et al. **AJR Am J Roentgenol** 1996 Nov;

167(5):1313–5
The anatomic relevance of the Haller cell in sinusitis. Stackpole SA, et al. **Am J Rhinol** 1997 May–Jun; 11(3):219–23
Ragweed allergic rhinitis and the paranasal sinuses. A computed tomographic study. Naclerio RM, et al. **Arch Otolaryngol Head Neck Surg** 1997 Feb;123(2):193–6
A study of the CT findings in 100 patients with rhinosinusitis and 100 controls. Jones NS, et al. **Clin Otolaryngol** 1997 Feb;22(1):47–51
The role of the ostiomeatal unit anatomic variations in inflammatory disease of the maxillary sinuses. Scribano E, et al. **Eur J Radiol** 1997 May;24(3):172–4
Analysis of CT scanning referrals for chronic rhinosinusitis [letter; comment] **J Laryngol Otol** 1996 Dec; 110(12):1189–90. Comment on: J Laryngol Otol 1996 Jul;110(7):641–3.
Evaluating the limited sinus computed tomography scan in children. Dunham ME. **Laryngoscope** 1997 Mar; 107(3):402–4
Anatomic variation in pediatric chronic sinusitis: a CT study. Lusk RP, et al. **Otolaryngol Clin North Am** 1996 Feb; 29(1):75–91 (25 ref.)
[Computerized tomography of paranasal sinuses—a preoperative check list] Simmen D, et al. **Laryngorhinootologie** 1997 Jan;76(1):8–13 (Eng. Abstr.) **(Ger)**
[Clinical relevance of CT of paranasal sinuses prior to bone marrow transplantation] Oberholzer K, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):493–7 (Eng. Abstr.) **(Ger)**
[Paranasal sinusitis: study with conventional and spiral computerized tomography] Sartoni Galloni S, et al. **Radiol Med (Torino)** 1996 Jul–Aug;92(1–2):28–32 (Eng. Abstr.) **(Ita)**
[Volumetric measurement of the maxillary sinus by coronal CT scan] Ikeda A. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Aug;99(8):1136–43 (Eng. Abstr.) **(Jpn)**
[Computer-tomographic scialogy of the inflammatory diseases of nasal sinuses on an aspect of the improvements of classification of sinusitis] Bessonov OV. **Aviakosm Ekolog Med** 1996;30(1):46–51 (Eng. Abstr.) **(Rus)**
[The x-ray diagnosis of sinusitis in patients with posttraumatic deformities of the middle and upper third of the visceral cranium] Rabukhina NA, et al. **Stomatologiia (Mosk)** 1996;Spec No:73 **(Rus)**

RADIOTHERAPY

[Use of laser therapy in inflammatory diseases of the paranasal sinuses] Elistratov VV, et al. **Vestn Otorinolaringol** 1996 Jul–Aug;(4):46–7 (Eng. Abstr.) **(Rus)**
[Experience in the use of low-energy laser irradiation in the treatment of patients with diseases of the upper respiratory airways and ear] Ovchinnikov IuM, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):36–8 **(Rus)**

SURGERY

Effects of adenoidectomy on sinusitis. Takahashi H, et al. **Acta Otorhinolaryngol Belg** 1997;51(2):85–7
Endonasal microendoscopic pansinusoperation in chronic sinusitis. II. Results and complications. Weber R, et al. **Am J Otolaryngol** 1997 Jul–Aug;18(4):247–53
An analysis of sites of disease in revision endoscopic sinus surgery. Chu CT, et al. **Am J Rhinol** 1997 Jul–Aug; 11(4):287–91
Endonasal sinus surgery improves mucociliary transport in severe chronic sinusitis. Hafner B, et al. **Am J Rhinol** 1997 Jul–Aug;11(4):271–4
Surgical treatment of aspirin triad sinusitis. McFadden EA, et al. **Am J Rhinol** 1997 Jul–Aug;11(4):263–70
Evaluation of prognostic factors in endoscopic sinus surgery. Marks SC, et al. **Am J Rhinol** 1997 May–Jun;11(3):187–91
Analysis of pain and endoscopic sinus surgery for sinusitis. Acquadro MA, et al. **Ann Otol Rhinol Laryngol** 1997 Apr; 106(4):305–9
Local and regional anesthesia for functional endoscopic sinus surgery. Lee WC, et al. **Ann Otol Rhinol Laryngol** 1997 Sep;106(9):767–9
Concurrent functional endoscopic sinus surgery and rhinoplasty. Rizk SS, et al. **Ann Plast Surg** 1997 Apr; 38(4):323–9
Powered functional endoscopic sinus surgery. Krouse HJ, et al. **AORN J** 1997 Sep;66(3):405, 408–11, 413–4
Effects of sinus surgery on speech. Chen MY, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug;123(8):845–52
Efficacy of adenoidectomy in relieving symptoms of chronic sinusitis in children. Vandenberg SJ, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jul;123(7):675–8
Use of antibiotics for expansion of the Merocel packing following endoscopic sinus surgery. Shikani AH. **Ear Nose Throat J** 1996 Aug;75(8):524–6, 528
Endoscopic adenoidectomy with the microdebrider. Yanagisawa E, et al. **Ear Nose Throat J** 1997 Feb;76(2):72, 74
Functional endoscopic sinus surgery: experience with the first 100 patients. Roth Y, et al. **Int Surg** 1995 Jul–Sep; 80(3):278–9
Extended applications of endoscopic sinus surgery—the territorial imperative [editorial] Lund VJ. **J Laryngol Otol** 1997 Apr;111(4):313–5 (13 ref.)
Long-term outcome analysis of functional endoscopic sinus surgery: correlation of symptoms with endoscopic examination findings and potential prognostic variables. Chambers DW, et al. **Laryngoscope** 1997 Apr;107(4):504–10
Endoscopic sinus surgery complications in residency. Gross RD, et al. **Laryngoscope** 1997 Aug;107(8):1080–5
Acquired maxillary sinus hypoplasia: a consequence of endoscopic sinus surgery? Kosko JR, et al. **Laryngoscope** 1996 Oct;106(10):1210–3
Pediatric functional endoscopic sinus surgery: is a second look necessary? Mitchell RB, et al. **Laryngoscope** 1997 Sep; 107(9):1267–9
Endoscopic sinus surgery in the treatment of cystic fibrosis with nasal polyposis. Rowe-Jones JM, et al. **Laryngoscope** 1996 Dec;106(12 Pt 1):1540–4
The evolution of functional endoscopic sinus surgery in the Commonwealth of Virginia. London SD, et al. **Med Prog Technol** 1995–96;21(3):159–63
Endoscopic sinus surgery. A review. Kennedy DW, et al. **Otolaryngol Clin North Am** 1997 Jun;30(3):313–30 (57 ref.)
Soft-tissue shavers in pediatric sinus surgery. Mendelsohn MG, et al. **Otolaryngol Clin North Am** 1997 Jun;30(3):443–9
Current concepts in the surgical management of chronic frontal sinusitis. Nguyen QA, et al. **Otolaryngol Clin North Am** 1997 Jun;30(3):355–70 (80 ref.)
The small-hole technique in endoscopic sinus surgery. Setliff RC 3rd. **Otolaryngol Clin North Am** 1997 Jun;30(3):341–54
Impact of surgical treatment on paranasal fungal infections in bone marrow transplant patients. Kennedy CA, et al. **Otolaryngol Head Neck Surg** 1997 Jun;116(6 Pt 1):610–6
Prognosis for allergic fungal sinusitis. Kupferberg SB, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):35–41
Endoscopic treatment of allergic fungal sinusitis. Quraishi HA, et al. **Otolaryngol Head Neck Surg** 1997 Jul; 117(1):29–34
Outcome for the first 85 patients treated with the functional endoscopic sinus surgery technique. Frisch T, et al. **Rhinology** 1995 Dec;33(4):236–9
Indication, incidence and management of blood transfusion during sinus surgery: a review over 12 years. Maune S, et al. **Rhinology** 1997 Mar;35(1):2–5
Comparison of complications between endoscopic sinus surgery and Caldwell-Luc operation. Ikeda K, et al. **Tohoku J Exp Med** 1996 Sep;180(1):27–31
[Effects of endoscopic sinus surgery and relative factors] Han D, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1996; 31(1):12–5 (Eng. Abstr.) **(Chi)**
[Study of amount of bleeding in endoscopic sinus surgery] Li Y, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1996; 31(1):8–11 (Eng. Abstr.) **(Chi)**
[Endoscopic sinus surgery, clinical aspect with 69 cases] Sun H, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1996; 31(1):18–9 (Eng. Abstr.) **(Chi)**
[The anatomy of the maxillary ostium and the middle meatus antrostomy] Sun S, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1995;30(5):295–8 (Eng. Abstr.) **(Chi)**
[Endoscopic sinus surgery for sinusitis (editorial)] Wang Z, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1996; 31(1):3–4 **(Chi)**
[Endoscopic sinus surgery in children] Zhou B, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1995;30(5):267–9 (Eng. Abstr.) **(Chi)**
[Endoscope-microscope combination (ENDO-OPMI) for endonasal paranasal sinus surgery] Klimek L, et al. **HNO** 1997 May;45(5):367–71 (Eng. Abstr.) **(Ger)**
[Hypoglossal nerve paralysis after endonasal paranasal sinus operation in intubation narcosis] Bachmann G, et al. **Laryngorhinootologie** 1996 Oct;75(10):623–4 (Eng. Abstr.) **(Ger)**
[Effect of postoperative endonasal mucous membrane care on nasal bacterial flora: prospective study of 2 irrigation methods with NaCl solution after paranasal sinus surgery] Johannssen V, et al. **Laryngorhinootologie** 1996 Oct; 75(10):580–3 (Eng. Abstr.) **(Ger)**
[Individual learning curves with reference to endonasal micro-endoscopic pan-sinus operation] Keerl R, et al. **Laryngorhinootologie** 1996 Jun;75(6):338–43 (Eng. Abstr.) **(Ger)**
[How traumatising is mechanical mucous membrane care after interventions on paranasal sinuses? A histological immunohistochemical study] Kühnel T, et al. **Laryngorhinootologie** 1996 Oct;75(10):575–9 (Eng. Abstr.) **(Ger)**
[Complications of endonasal surgery of the paranasal sinuses. Incidence and strategies for prevention] Rudert H, et al. **Laryngorhinootologie** 1997 Apr;76(4):200–15 (Eng. Abstr.) **(Ger)**
[A case of toxic shock syndrome induced by MRSA after sinus surgery] Nakayama M, et al. **Masui** 1996 Aug; 45(8):994–7 (Eng. Abstr.) **(Jpn)**
[The role of endoscopic surgery in the treatment of chronic inflammation of paranasal sinuses] Krzeski A, et al. **Otolaryngol Pol** 1996;50(1):37–45 (15 ref.) (Eng. Abstr.) **(Pol)**
[Microscopic endonasal sinus surgery (MESS) in nasal polyposis: long term results] Wielgosz R, et al. **Otolaryngol Pol** 1996;50(5):490–9 (Eng. Abstr.) **(Pol)**

THERAPY

Diagnosis and management of sinusitis in children. Wald ER. **Adv Pediatr Infect Dis** 1996;12:1–20 (44 ref.)
An analysis of sites of disease in revision endoscopic sinus surgery. Chu CT, et al. **Am J Rhinol** 1997 Jul–Aug; 11(4):287–91
Endonasal sinus surgery improves mucociliary transport in severe chronic sinusitis. Hafner B, et al. **Am J Rhinol** 1997 Jul–Aug;11(4):271–4
Recurrent sinusitis: examining medical treatment options. Kaliner MA. **Am J Rhinol** 1997 Mar–Apr;11(2):123–32 (44 ref.)
Rhinocerebral mucormycosis: cure without surgery? [letter; comment] Anand A, et al. **Arch Intern Med** 1996 Oct 28; 156(19):2262, 2269. Comment on: Arch Intern Med 1996 Feb 12;156(3):337–9.
Allergic fungal sinusitis in the pediatric population. Kupferberg SB, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec;122(12):1381–4
Do antral washouts have a place in the current management of chronic sinusitis? Pang YT, et al. **J Laryngol Otol** 1996 Oct;110(10):926–8
Clinical classification as a guide to treatment of sinusitis in children. Weinberg EA, et al. **Laryngoscope** 1997 Feb; 107(2):241–6
Chronic sinusitis: a medical or surgical disease? Parsons DS. **Otolaryngol Clin North Am** 1996 Feb;29(1):1–9 (19 ref.)
Diagnosis and treatment of sinusitis by YAMIK sinus catheters. Kozlov VS, et al. **Rhinology** 1996 Jun;34(2):123–4
Upper respiratory tract infections – otitis media, sinusitis and pharyngitis. Oh HM. **Singapore Med J** 1995 Aug; 36(4):428–31 (23 ref.)
[Treatments for chronic sinusitis in children—a study by questionnaire from 433 hospitals in Japan] Majima Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Apr;100(4):423–8 (Eng. Abstr.) **(Jpn)**
[Controlled irrigation using sinus catheter IaMIK-5 in the treatment of chronic sinusitis] Kozlov VS. **Vestn Otorinolaringol** 1997;(3):35–7 (Eng. Abstr.) **(Rus)**
[Treatment of acute sinusitis using sinus catheter IaMIK-3] Kozlov VS. **Vestn Otorinolaringol** 1997;(2):27–30 (Eng. Abstr.) **(Rus)**
[The efficacy of using ozone preparations in the combined treatment of paranasal sinusitis] Petrov GM, et al. **Voen Med Zh** 1996 Dec;317(12):26–8, 80 (Eng. Abstr.) **(Rus)**
[Treatment of chronic rhinosinusitis] Galindo de Jaime G. **Rev Alerg Mex** 1996;43 Spec No:19–21 (11 ref.) (Eng. Abstr.) **(Spa)**

VETERINARY

[Sinusitis in ducklings caused primarily by a serologically filtrable agent related to N virus (Dinter, 1949)] Rinaldi A, et al. **Boll Ist Sieroter Milan** 1966 May–Jun; 45(5–6):255–72 **(Ita)**

VIROLOGY

Effects of viral and bacterial infection on nasal and sinus mucosa. van Cauwenberge P, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):316–21 (25 ref.)
Detection of rhinovirus in sinus brushings of patients with acute community-acquired sinusitis by reverse transcription-PCR. Pitkäranta A, et al. **J Clin Microbiol** 1997 Jul;35(7):1791–3
Adenovirus and respiratory syncytial virus in chronic sinusitis using polymerase chain reaction. Ramadan HH, et al. **Laryngoscope** 1997 Jul;107(7):923–5

SINUSITIS, ETHMOID see **ETHMOID SINUSITIS**

SINUSITIS, FRONTAL see **FRONTAL SINUSITIS**

SINUSITIS, MAXILLARY see **MAXILLARY SINUSITIS**

SINUSITIS, SPHENOID see **SPHENOID SINUSITIS**

SIPHONAPTERA see **FLEAS**

SIPHOVIRIDAE

CLASSIFICATION

Taxonomic changes in tailed phages of enterobacteria. Ackermann HW, et al. **Arch Virol** 1997;142(7):1381–90

GENETICS

An origin of DNA replication from Lactococcus lactis bacteriophage c2. Waterfield NR, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1452–3

SIPPLE SYNDROME see **MULTIPLE ENDOCRINE NEOPLASIA TYPE 2A**

SIPUNCULIDA see **NEMATODA**

SIRENOMELIA see **ECTROMELIA**

SIROGNATHOGRAPHY see **JAW RELATION RECORD**

SIS GENES see **ONCOGENES**

SISOMICIN

ANALYSIS

Sensitive high-performance liquid chromatographic assay for aminoglycosides in biological matrices enables the direct estimation of bacterial drug uptake. Stead DA, et al. **J Chromatogr B Biomed Appl** 1997 Jun 6;693(2):415–21

PHARMACOLOGY

Neuromuscular blocking actions of the aminoglycoside antibiotics sisomicin and micronomicin in the rabbit. Matsukawa S, et al. **Tohoku J Exp Med** 1997 Apr; 181(4):471–3

SISOMYCIN see **SISOMICIN**

SISSOMICIN see **SISOMICIN**

SISTER CHROMATID EXCHANGE

Cytogenetic effects of the herbicide chloridazon in cultured sheep lymphocytes. Siviková K, et al. **Acta Vet Hung** 1997; 45(1):11–6

Sister chromatid exchange analysis in the lymphocytes of patients with ankylosing spondylitis. Sönmez S, et al. **Ann Rheum Dis** 1997 Apr;56(4):275–7

Cytogenetic analysis in peripheral lymphocytes of cancer patients treated with cytostatic drugs: results from an EC Collaborative Study. Carbonell E, et al. **Anticancer Drugs** 1996 Jul;7(5):514–9

Evaluation of sister chromatid exchange and chromosome breaks in a cohort of untreated Hodgkin's disease patients. Strom SS, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Apr;6(4):291–3

A comparative study on the effect of MNU on human lymphocyte cultures in vitro evaluated by O6-mdG formation, micronuclei and sister chromatid exchanges induction. Stephanou G, et al. **Cancer Lett** 1996 Dec 3; 109(1–2):109–14

Bloom's syndrome. XIX. Cytogenetic and population evidence for genetic heterogeneity. German J, et al. **Clin Genet** 1996 May;49(5):223–31

Lack of effect of long-term fluoride ingestion on blood chemistry and frequency of sister chromatid exchange in human lymphocytes. Jackson RD, et al. **Environ Mol Mutagen** 1997;29(3):265–71

Spontaneous rate of sister chromatid exchanges (SCEs) and BrdU dose-response relationships in mitotic chromosomes of goat (Capra hircus L.). Di Berardino D, et al. **Hereditas** 1996;124(2):137–43

A search for possible cytogenetic effects of low frequency vibrations in cultured human lymphocytes. Khalil AM, et al. **Hum Exp Toxicol** 1996 Jun;15(6):504–7

Increased frequency of sister chromatid exchange in Helicobacter pylori infection [letter] Ozkul Y, et al. **Infection** 1997 Jan–Feb;25(1):53–4

Sister chromatid exchanges in human peripheral blood lymphocytes after ingestion of high doses of arsenicals. Hantson P, et al. **Int Arch Occup Environ Health** 1996; 68(5):342–4

Investigating the nature of chromatid breaks produced by restriction endonucleases. Harvey AN, et al. **Int J Radiat Biol** 1997 Jan;71(1):21–8

Positive selection of FLP-mediated unequal sister chromatid exchange products in mammalian cells. Aladjem MI, et al. **Mol Cell Biol** 1997 Feb;17(2):857–61

A change in sister chromatid behavior precedes nuclear division in Saccharomyces cerevisiae. Burke DJ, et al. **Mol Gen Genet** 1997 Mar 18;254(1):21–8

A method for detecting sister chromatid exchanges using prematurely condensed chromosomes and immunogold-silver staining. Asakawa Y, et al. **Mutagenesis** 1997 May;12(3):175–7

Genotoxic changes after low-level solvent and fuel exposure on aircraft maintenance personnel. Lemasters GK, et al. **Mutagenesis** 1997 Jul;12(4):237–43

Sister chromatid exchange (SCE) rates in human melanoma cells as an index of mutagenesis. Miranda M, et al. **Mutagenesis** 1997 Jul;12(4):233–6

Damage proneness induced by genomic DNA demethylation in mammalian cells cultivated in vitro. Perticone P, et al. **Mutagenesis** 1997 Jul;12(4):259–64

Induction of sister chromatid exchange by 3,4-expoxybutane-1,2-diol in cultured human lymphocytes of different GSTT1 and GSTM1 genotypes [published erratum appears in Mutat Res 1997 Apr 24;390(1–2):199] Bernardini S, et al. **Mutat Res** 1996 Dec 12;361(2–3):121–7

Effect of decreased glutathione levels in hereditary glutathione synthetase deficiency on dibromoethane-induced genotoxicity in human fibroblasts. DeLeve LD. **Mutat Res** 1997 Mar 17;389(2–3):291–7

Dinitrochlorobenzene is genotoxic by sister chromatid exchange in human skin fibroblasts. DeLeve LD. **Mutat Res** 1996 Nov 4;371(1–2):105–8

Sister chromatid exchange frequency in inhabitants exposed to asbestos in Turkey. Dönmez H, et al. **Mutat Res** 1996 Dec 12;361(2–3):129–32

Spontaneous and induced sister chromatid exchanges and delayed cell proliferation in peripheral lymphocytes of Bowen's disease patients and matched controls of arseniasis-hyperendemic villages in Taiwan. Hsu YH, et al. **Mutat Res** 1997 Jun;386(3):241–51

Genotoxic potential of estrogens. Hundal BS, et al. **Mutat Res** 1997 Mar 17;389(2–3):173–81

Dichotomous relationship between DNA reactivity and the induction of sister chromatid exchanges in vivo and in vitro. Labbauf A, et al. **Mutat Res** 1997 Jun 9;377(1):37–52

Distinct genotoxicity of phenylmercury acetate in human lymphocytes as compared with other mercury compounds. Lee CH, et al. **Mutat Res** 1997 Aug 14;392(3):269–76

Sister chromatid exchange induction in sheep peripheral blood mononuclear cells by helio-neon laser radiation. Ocaña Quero JM, et al. **Mutat Res** 1997 Jun 9;377(1):69–75

Variation in arsenic-induced sister chromatid exchange in human lymphocytes and lymphoblastoid cell lines. Rasmussen RE, et al. **Mutat Res** 1997 Jun;386(3):299–306

Chromosome aberrations, micronuclei, aneuploidy, sister chromatid exchanges, and cancer risk assessment. Tucker JD, et al. **Mutat Res** 1996 Sep;365(1–3):147–59 (47 ref.)

Bioactivation and inactivation of aflatoxin B1 by human, mouse and rat liver preparations: effect on SCE in human mononuclear leucocytes. Wilson AS, et al. **Mutat Res** 1997 Feb 3;373(2):257–64

Comparison of the in vitro effect of adriblastina on induction of SCEs in V79 cells and human peripheral blood lymphocytes. Szabová E. **Neoplasma** 1996;43(6):407–9

Antigenotoxic activities of chitin and chitosan as assayed by sister chromatid exchange. Ohe T. **Sci Total Environ** 1996 Mar 1;181(1):1–5

Cytogenetic effects of butadiene metabolites in rat and mouse splenocytes following in vitro exposures. Kligerman AD, et al. **Toxicology** 1996 Oct 28;113(1–3):336–40

[Study on sister chromatid exchange in lymphocytes of women with fetal intrauterine growth retardation] Wang R, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Jul; 31(7):404–5 (Eng. Abstr.) **(Chi)**

[Relationship between SCE points and G-banding location in patients with nasopharyngeal carcinoma] Xiao L, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar;27(1):31–5 (Eng. Abstr.) **(Chi)**

[The role of genetic differences in the mother-fetus system during biotransformation of proteratogens] Popov VB. **Biull Eksp Biol Med** 1996 Oct;122(10):449–52 **(Rus)**

[Comparative informative value of chromosome aberrations and sister chromatid exchanges in the evaluation of metals in the environment] Nadeenko VG, et al. **Gig Sanit** 1997 May-Jun;(3):10–3 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

compound A induces sister chromatid exchanges in Chinese hamster ovary cells. Eger EI 2nd, et al. **Anesthesiology** 1997 Apr;86(4):918–22

Effects of ICRF-193, a catalytic inhibitor of DNA topoisomerase II, on sister chromatid exchange. Hamatake M, et al. **Anticancer Drugs** 1997 Jul;8(6):637–42

Chromosome survey of seals in the Baltic Sea in 1988–1992. Hongell K. **Arch Environ Contam Toxicol** 1996 Oct; 31(3):399–403

Increased frequencies of sister chromatid exchanges and micronuclei in "in vitro" lymphocyte cultures treated with the fungicides thiram and ziram. Ardito G, et al. **Boll Soc Ital Biol Sper** 1997 Jan–Feb;73(1–2):1–7

Cytogenetic effect of thiabendazole and diphenylammine on cultured human lymphocytes: sister chromatid exchanges and cell cycle delay. Ardito G, et al. **Boll Soc Ital Biol Sper** 1996 May-Jun;72(5–6):171–8

Hypersensitivity to mitomycin C-induced sister chromatid exchange as a biomarker of past exposure to arsenic. Liou SH, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Feb; 5(2):103–7

An investigation of multiple biomarkers among workers exposed to styrene and styrene-7,8-oxide. Rappaport SM, et al. **Cancer Res** 1996 Dec 1;56(23):5410–6

Ascorbic acid and beta-carotene as modulators of oxidative damage. Cozzi R, et al. **Carcinogenesis** 1997 Jan;18(1):223–8

Genotoxic effects of crude juices from Brassica vegetables and juices and extracts from phytopharmaceutical preparations and spices of cruciferous plants origin in bacterial and mammalian cells. Kassie F, et al. **Chem Biol Interact** 1996 Sep 27;102(1):1–16

Chromosomal changes in rheumatoid arthritis patients treated with CPH82. Rantapää Dahlqvist S, et al. **Clin Rheumatol** 1996 Nov;15(6):584–9

Induction of sister chromatid exchanges in rodent tracheal epithelial cells as a sensitive bioassay for detection of genotoxic activity of airborne particulates. Hornberg C, et al. **Exp Toxicol Pathol** 1995 Sep;47(4):241–3

Sister chromatid exchanges induced in vitro and in vivo by an extract of black pepper. Madrigal-Bujaidar E, et al. **Food Chem Toxicol** 1997 Jun;35(6):567–71

Genotoxic effects in workers exposed to benzene: with special reference to exposure biomarkers and confounding factors. Bogadi-Sare A, et al. **Ind Health** 1997 Jul; 35(3):367–73

Unexpected decrease in cytogenetic biomarkers frequencies observed after increased exposure to organophosphorus pesticides in a production plant. Laurent C, et al. **Int Arch Occup Environ Health** 1996;68(6):399–404

Effect of furazolidone on sister-chromatid exchanges, cell proliferation kinetics, and mitotic index in vivo and in vitro. Madrigal-Bujaidar E, et al. **J Toxicol Environ Health** 1997 May;51(1):89–96

The role of poly(ADP-ribose)polymerase in the induction of sister chromatid exchanges and micronuclei by mitomycin C in Down's syndrome cells as compared to euploid cells. Caria H, et al. **Mutat Res** 1997 Jul 3; 377(2):269–77

In vivo dosimetry of ethylene oxide and propylene oxide in the cynomolgus monkey. Couch R, et al. **Mutat Res** 1996 Oct 25;357(1–2):17–23

In vitro cytogenetic analysis of the effects of oxytocin on human peripheral blood lymphocytes. Djelić N, et al. **Mutat Res** 1996 Sep 23;356(2):265–8

Comparative genotoxicity of six salicylic acid derivatives in bone marrow cells of mice. Giri AK, et al. **Mutat Res** 1996 Aug;370(1):1–9

Genotoxicity of 4-chloro-o-toluidine in Salmonella typhimurium, human lymphocytes and V79 cells. Göggelmann W, et al. **Mutat Res** 1996 Aug;370(1):39–47

Modulating factors of individual sensitivity to diepoxybutane: sister chromatid exchanges induced in vitro in human lymphocytes. Landi S, et al. **Mutat Res** 1996 Oct 25; 357(1–2):75–82

Inhibitory effect of chlorophyllin on the frequency of sister chromatid exchanges produced by benzo[a]pyrene in vivo. Madrigal-Bujaidar E, et al. **Mutat Res** 1997 Jan 15; 388(1):79–83

SCE analysis in peripheral blood lymphocytes of a group of filling station attendants. Pitarque M, et al. **Mutat Res** 1997 Apr 24;390(1–2):153–9

Correlation between the adaptive response and individual sensitivity to monoepoxybutene in in vitro experiments on human lymphocytes. Sasiadek M, et al. **Mutat Res** 1997 May 23;390(3):239–43

Benzene-, catechol-, hydroquinone- and phenol-induced cell transformation, gene mutations, chromosome aberrations, aneuploidy, sister chromatid exchanges and unscheduled DNA synthesis in Syrian hamster embryo cells. Tsutsui T, et al. **Mutat Res** 1997 Jan 3;373(1):113–23

Effects of dNTPs on the sister-chromatid exchange (SCE) frequency in human lymphocytes. Xing W. **Mutat Res** 1996 Sep 23;356(2):261–3

Amino acids excess increase SCEs in human lymphocytes. Xing W, et al. **Mutat Res** 1996 Nov 11;372(1):75–8

DNA single strand breakage, DNA adducts, and sister chromatid exchange in lymphocytes and phenanthrene and pyrene metabolites in urine of coke oven workers. Popp W, et al. **Occup Environ Med** 1997 Mar;54(3):176–83

Analysis of cytogenetic effects and DNA adduct formation induced by safrole in Chinese hamster lung cells. Daimon H, et al. **Teratog Carcinog Mutagen** 1997;17(1):7–18

Performance of cytogenetic biomarkers on children exposed to environmental pollutants. Vleminckx C, et al. **Toxicol Ind Health** 1997 Mar-Jun;13(2–3):219–30

Effect of the route of benzo[a]pyrene administration on sister chromatid exchange and DNA binding in bone marrow of mice differing with respect to cytochrome P450 1A1 induction. Brauze D, et al. **Toxicol Lett** 1997 May 16; 91(3):211–7

Cytogenetic studies in coke oven workers. Forni A, et al. **Toxicol Lett** 1996 Nov;88(1–3):185–9

Sister chromatid exchanges in rodent tracheal epithelium exposed in vitro to environmental pollutants. Hornberg C, et al. **Toxicol Lett** 1996 Nov;88(1–3):45–53

Genotoxicity of selected pesticides in the mouse bone-marrow micronucleus test and in the sister-chromatid exchange test with human lymphocytes in vitro. Kevekordes S, et al. **Toxicol Lett** 1996 Dec;89(1):35–42

Characterisation of the toxic metabolite(s) of naphthalene [published erratum appears in Toxicology 1997 Jun 6;120(1):75] Wilson AS, et al. **Toxicology** 1996 Dec 18; 114(3):233–42

[Dynamics of sister chromatid exchanges during repeated administration of thiophosphamide in vivo] Stukalov SV. **Biull Eksp Biol Med** 1997 Jan;123(1):73–4 **(Rus)**

[Formation of sister chromatid exchanges and reparative DNA synthesis in workers exposed to nickel compounds] Perminova IN, et al. **Genetika** 1997 Apr;33(4):556–60 (Eng. Abstr.) **(Rus)**

GENETICS

Age-related increase of baseline frequencies of sister chromatid exchanges, chromosome aberrations, and micronuclei in human lymphocytes. Bolognesi C, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Apr;6(4):249–56 (112 ref.)

On the importance of DNA strand breaks as the first event to initiate sister chromatid exchange (SCE): experiments with restriction endonuclease BglI. Ortiz T, et al. **Chromosome Res** 1996 Nov;4(7):540–4

Cloning and sequencing for the largest subunit of Chinese hamster RNA polymerase II gene: identification of a mutation related to abnormal induction of sister chromatid exchanges. Sugaya K, et al. **Gene** 1997 Jul 31;194(2):267–72

More on genetic predisposition. Strange RC. **Hum Exp Toxicol** 1995 Dec;14(12):992–3

Fitting multi-parameter distributions to sister chromatid exchange data. Bowman KO, et al. **Mutat Res** 1996 Oct 28;358(1):15–24

[SCE rate and lymphocyte differentiation in children with acute lymphoblastic leukemia and SCE rates of leukemia patients in long-term remission] Mertens R, et al. **Klin Padiatr** 1996 Mar-Apr;208(2):73–6 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Extracellular factor(s) following exposure to alpha particles can cause sister chromatid exchanges in normal human cells. Lehnert BE, et al. **Cancer Res** 1997 Jun 1; 57(11):2164–71

Dose dependent of sister chromatid exchanges in humans lymphocytes induced by in vitro alpha–particle irradiation. Schmid E, et al. **Radiat Environ Biophys** 1996 Nov; 35(4):311–4

Alpha–particle–induced sister chromatid exchange in normal human lung fibroblasts: evidence for an extranuclear target. Deshpande A, et al. **Radiat Res** 1996 Mar;145(3):260–7

SITE–DIRECTED MUTAGENESIS see **MUTAGENESIS, SITE–DIRECTED**

SITE MAPPING, RESTRICTION see **RESTRICTION MAPPING**

SITE–SPECIFIC METHYLTRANSFERASES (ADENINE–SPECIFIC) see **DNA MODIFICATION METHYLASES (ADENINE–SPECIFIC)**

SITE–SPECIFIC METHYLTRANSFERASES (CYTOSINE–SPECIFIC) see **DNA MODIFICATION METHYLASES (CYTOSINE–SPECIFIC)**

SITE–SPECIFIC MUTAGENESIS see **MUTAGENESIS, SITE–DIRECTED**

SITOSTEROLS

ANALYSIS

[Searching for cytostatic substances in plant tissue of Maytenus molina by in vitro culture. III. Release of substances from active biological fractions from the callus extract of Maytenus wallichiana R. and B] Dymowski W, et al. **Acta Pol Pharm** 1992;49(1–2):29–33 (Eng. Abstr.) **(Pol)**

BLOOD

Coronary bypass grafts in a young girl with sitosterolemia [letter] Kolovou G, et al. **Eur Heart J** 1996 Jun;17(6):965–6

Abnormal cholesterol biosynthesis in sitosterolaemia and the Smith–Lemli–Opitz syndrome. Salen G, et al. **J Inherit Metab Dis** 1996;19(4):391–400 (25 ref.)

Sitosterolemia. Salen G, et al. **Subcell Biochem** 1997; 28:453–76 (49 ref.)

[Sitosterolemia] Takahashi M, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):48–51 (9 ref.) **(Jpn)**

ISOLATION & PURIFICATION

[Chemical constituents of Gossampinus malabarica (L.) Merr. (II)] Qi Y, et al. **Chung Kuo Chung Yao Tsa Chih** 1996 Apr;21(4):234–5, 256 (Eng. Abstr.) **(Chi)**

[Chemical constituents of the fruits of Vitex trifolia L.] Zeng X, et al. **Chung Kuo Chung Yao Tsa Chih** 1996 Mar; 21(3):167–8, 191 (Eng. Abstr.) **(Chi)**

METABOLISM

Comparison of cholesterol and sitosterol uptake in different brush border membrane models. Compassi S, et al. **Biochemistry** 1997 Jun 3;36(22):6643–52

beta–Sitosterolemia with generalized eruptive xanthomatosis. Hidaka H, et al. **Endocr J** 1997 Feb;44(1):59–64

Distribution study of radioactivity in rats after oral administration of the lipido/sterolic extract of Serenoa repens (Permixon) supplemented with [1–14C]–lauric acid, [1–14C]–oleic acid or [4–14C]–beta–sitosterol. Chevalier G, et al. **Eur J Drug Metab Pharmacokinet** 1997 Jan–Mar; 22(1):73–83

Steroid transformation by mutants of Mycobacterium sp. with altered response to antibiotics. Barthakur S, et al. **J Basic Microbiol** 1996;36(6):383–7

Effect of micellar beta–sitosterol on cholesterol metabolism in CaCo–2 cells. Field FJ, et al. **J Lipid Res** 1997 Feb; 38(2):348–60

Hepatic transport and secretion of unesterified cholesterol in the rat is traced by the plant sterol, sitostanol. Robins SJ, et al. **J Lipid Res** 1996 Jan;37(1):15–21

Allylic nitration of 3 beta–sitosterol and cholesterol acetate: preparation of 7–nitro derivatives. Jiménez–Estrada M, et al. **Steroids** 1997 Jun;62(6):500–3

PHARMACOLOGY

beta–Sitosterol inhibits HT–29 human colon cancer cell growth and alters membrane lipids. Awad AB, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2797–804

beta–Sitosterol and beta–sitosterol glucoside stimulate human peripheral blood lymphocyte proliferation: implications for their use as an immunomodulatory vitamin combination. Bouic PJ, et al. **Int J Immunopharmacol** 1996 Dec; 18(12):693–700

Effect of micellar beta–sitosterol on cholesterol metabolism in CaCo–2 cells. Field FJ, et al. **J Lipid Res** 1997 Feb; 38(2):348–60

THERAPEUTIC USE

A multicentric, placebo–controlled, double–blind clinical trial of beta–sitosterol (phytosterol) for the treatment of benign prostatic hyperplasia. German BPH–Phyto Study group. Klippel KF, et al. **Br J Urol** 1997 Sep;80(3):427–32

SITS

ANTAGONISTS & INHIBITORS

Inhibitors of intracellular pH regulation induce cisplatin resistance in EMT6 mouse mammary tumor cells. Laurencot CM, et al. **Oncol Res** 1995;7(7–8):363–9

PHARMACOLOGY

Inhibition by anion channel blockers of ischemia–evoked release of excitotoxic and other amino acids from rat cerebral cortex. Phillis JW, et al. **Brain Res** 1997 May 30; 758(1–2):9–16

Effects of stilbene derivatives SITS and DIDS on development of intracellular acidosis during ischemia in isolated guinea pig ventricular papillary muscle in vitro. Lai ZF, et al. **Jpn J Pharmacol** 1996 Oct;72(2):161–74

[The effect of a chloride channel inhibitor and of media with a decreased concentration of chlorine ions on spontaneous oocyte maturation in the common frog and the clawed toad] Skoblina MN, et al. **Ontogenez** 1996 Sep–Oct; 27(5):379–83 (Eng. Abstr.) **(Rus)**

[The effect of an inhibitor of chloride channels and of media with a decreased concentration of chlorine ions on the ovulation of oocytes in the common frog] Skoblina MN, et al. **Ontogenez** 1996 Nov–Dec;27(6):434–9 (Eng. Abstr.) **(Rus)**

SITUATIONAL ETHICS see **ETHICS**

SITUATIONAL THERAPY see **MILIEU THERAPY**

SITUS INVERSUS

Esophagectomy in patients with polysplenia: technical considerations. Oakes DD. **J Clin Gastroenterol** 1997 Mar; 24(2):92–6

Congenital aglossia with situs inversus totalis—a case report. Jang GY, et al. **J Korean Med Sci** 1997 Feb;12(1):55–7

[Video laparoscopic cholecystectomy in situ viscerum inversus totalis] D'Agata A, et al. **Minerva Chir** 1997 Mar; 52(3):271–5 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Coronary arteriography in the presence of dextrocardia and situs inversus. Shah RP, et al. **Ann Acad Med Singapore** 1996 Sep;25(5):759–60 (10 ref.)

Specifics of technique in percutaneous mitral commissurotomy in a case of dextrocardia and situs inversus with mitral stenosis. Nallet O, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):85–8

Balloon mitral commissurotomy in a patient with situs inversus and dextrocardia. Chow WH, et al. **J Heart Valve Dis** 1996 May;5(3):307–8

Situs inversus: an uncommon extrarenal association of Alport's syndrome [letter] Rezaie–Jami T, et al. **Nephron** 1996;74(2):426

DIAGNOSIS

Sirenomelia and situs inversus: case report and review of the literature. Langer B, et al. **Fetal Diagn Ther** 1996 Jan–Feb;11(1):79–84 (22 ref.)

ETIOLOGY

Influence of genetic and maternal diabetes in the pathogenesis of visceroatrial heterotaxy in mice. Morishima M, et al. **Teratology** 1996 Oct;54(4):183–90

GENETICS

Autosomal dominant transmission of familial laterality defects. Casey B, et al. **Am J Med Genet** 1996 Feb 2; 61(4):325–8

Defects in the determination of left–right asymmetry [see comments] Splitt MP, et al. **J Med Genet** 1996 Jun; 33(6):498–503 (96 ref.). Comment in: J Med Genet 1996 Dec;33(12):1052.

PATHOLOGY

[Isolated atrial noninversion] Yoshii S, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):508–11 (9 ref.) **(Jpn)**

RADIOGRAPHY

Duodenal atresia and situs inversus: case report. Kiguli–Malwadde E, et al. **East Afr Med J** 1996 Nov; 73(11):769–70

ULTRASONOGRAPHY

A diagnosis obscured: pyloric stenosis with situs inversus [letter; comment] Harrington B, et al. **Arch Dis Child** 1997 Apr;76(4):385. Comment on: Arch Dis Child 1996 Oct;75(4):335–7.

SIV

Nature and sequence of simian immunodeficiency virus–induced central nervous system lesions: a kinetic study. Czub S, et al. **Acta Neuropathol (Berl)** 1996 Nov; 92(5):487–98

Chimeric viruses between SIVmac and various HIV–1 isolates have biological properties that are similar to those of the parental HIV–1. Kuwata T, et al. **AIDS** 1996 Oct; 10(12):1331–7

Focal segmental glomerulosclerosis in primates infected with a simian immunodeficiency virus. Alpers CE, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):413–24

Quinolinic acid and lymphocyte subsets in the intrathecal compartment as biomarkers of SIV infection and simian AIDS. Coe CL, et al. **AIDS Res Hum Retroviruses** 1997 Jul 1;13(10):891–7

9–[2–(Phosphonomethoxy)propyl]adenine therapy of established simian immunodeficiency virus infection in infant rhesus macaques. Van Rompay KK, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2586–91

Separable functions of Nef disrupt two aspects of T cell receptor machinery: CD4 expression and CD3 signaling. Iafrate AJ, et al. **EMBO J** 1997 Feb 17;16(4):673–84

An HIV–1 infection–related idiotype/clonotype (1F7) is expressed on antibodies directed to envelope glycoprotein in simian immunodeficiency virus– and chimeric simian/human immunodeficiency virus–infected rhesus monkeys. Müller S, et al. **Hybridoma** 1997 Feb;16(1):17–21

Evasion of cytotoxic T lymphocyte (CTL) responses by nef–dependent induction of Fas ligand (CD95L) expression on simian immunodeficiency virus–infected cells. Xu XN, et al. **J Exp Med** 1997 Jul 7;186(1):7–16

The history of simian AIDS. Gardner MB. **J Med Primatol** 1996 Jun;25(3):148–57 (91 ref.)

Occurrence and frequency of transmission of naturally occurring simian retroviral infections (SIV, STLV, and SRV) at the CIRMF Primate Center, Gabon. Georges–Courbot MC, et al. **J Med Primatol** 1996 Oct; 25(5):313–26

SIVagm incidence over two decades in a natural population of Ethiopian grivet monkeys (Cercopithecus aethiops aethiops). Jolly CJoff, et al. **J Med Primatol** 1996 Apr; 25(2):78–83

Texture analysis of cerebral white matter in SIV–infected macaque monkeys. Pope TW, et al. **J Neurosci Methods** 1997 Jun 6;74(1):53–64

Increased quinolinate immunoreactivity in the peripheral blood monocytes/macrophages from SIV–infected monkeys. Namboodiri AM, et al. **J Neurovirol** 1996 Dec; 2(6):433–8

Direct ex vivo simian immunodeficiency virus (SIV)–specific cytotoxic activity detected from small intestine intraepithelial lymphocytes of SIV–infected macaques at an advanced stage of infection. Couëdel–Courteille A, et al. **J Virol** 1997 Feb;71(2):1052–7

Early cytokine and chemokine gene expression in lymph nodes of macaques infected with simian immunodeficiency virus is predictive of disease outcome and vaccine efficacy. Zou W, et al. **J Virol** 1997 Feb;71(2):1227–36

Vaccine effect using a live attenuated nef–deficient simian immunodeficiency virus of African green monkeys in the absence of detectable vaccine virus replication in vivo. Beer B, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4062–7

Differential utilization of CCR5 by macrophage and T cell tropic simian immunodeficiency virus strains. Edinger AL, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4005–10

Nef proteins encoded by human and simian immunodeficiency viruses induce the accumulation of endosomes and lysosomes in human T cells. Sanfridson A, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):873–8

Impaired mitogen–driven proliferation and cytokine transcription of lymphocytes from macaques early after simian immunodeficiency virus (SIV) infection. Spring M, et al. **Viral Immunol** 1997;10(2):65–72

Isolation of sooty mangabey simian T–cell leukemia virus type I [STLV–I(sm)] and characterization of a mangabey T–cell line coinfected with STLV–I(sm) and simian immunodeficiency virus SIVsmmPBj14. Fultz PN, et al. **Virology** 1997 Sep 1;235(2):271–85

CHEMISTRY

Basolateral sorting of the HIV type 2 and SIV envelope glycoproteins in polarized epithelial cells: role of the cytoplasmic domain. Ball JM, et al. **AIDS Res Hum Retroviruses** 1997 May 20;13(8):665–75

The N–terminal Arg–rich region of human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus Nef is involved in RNA binding. Echarri A, et al. **Eur J Biochem** 1997 May 15;246(1):38–44

Determination of the secondary structure and global topology of the 44 kDa ectodomain of gp41 of the simian immunodeficiency virus by multidimensional nuclear magnetic resonance spectroscopy. Caffrey M, et al. **J Mol Biol** 1997 Sep 5;271(5):819–26

Human immunodeficiency virus (HIV) Nef is an RNA binding protein in cell–free systems. Echarri A, et al. **J Mol Biol** 1996 Oct 11;262(5):640–51

CLASSIFICATION

Human immunodeficiency virus type 2 (HIV–2)

seroprevalence and characterization of a distinct HIV-2 genetic subtype from the natural range of simian immunodeficiency virus-infected sooty mangabeys. Chen Z, et al. **J Virol** 1997 May;71(5):3953-60

DRUG EFFECTS

Effects of (R)-9-(2-phosphonylmethoxypropyl)adenine monotherapy on chronic SIV infection in macaques. Tsai CC, et al. **AIDS Res Hum Retroviruses** 1997 May 20; 13(8):707-12

New arylpyrido-diazepine and -thiodiazepine derivatives are potent and highly selective HIV-1 inhibitors targeted at the reverse transcriptase. Bellarosa D, et al. **Antiviral Res** 1996 May;30(2-3):109-24

Sulfated pentagalloyl glucose (Y-ART-3) inhibits HIV replication and cytopathic effects in vitro, and reduces HIV infection in hu-PBL-SCID mice. Nakashima H, et al. **Antiviral Res** 1996 May;30(2-3):95-108

Infectivities of human and other primate lentiviruses are activated by desialylation of the virion surface. Hu H, et al. **J Virol** 1996 Nov;70(11):7462-70

ENZYMOLOGY

Enhancement of humoral immunity to SIVenv following simultaneous inoculation of mice by three recombinant adenoviruses encoding SIVenv/poliovirus chimeras, Tat and Rev. Chenciner N, et al. **AIDS Res Hum Retroviruses** 1997 Jun 10;13(9):801-6

Mutations in the SIV env and the M13 lacZa gene generated in vitro by reverse transcriptases and DNA polymerases. Stuke AW, et al. **Arch Virol** 1997;142(6):1139-54

GENETICS

Reverse transcriptase and corresponding activity-blocking antibody for monitoring SIVsm infection in macaques. Ekstrand DH, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):601-10

Characterization of the pathogenic KU-SHIV model of acquired immunodeficiency syndrome in macaques. Joag SV, et al. **AIDS Res Hum Retroviruses** 1997 May 20; 13(8):635-45

A model for alignment of Env V1 and V2 hypervariable domains from human and simian immunodeficiency viruses. Lamers SL, et al. **AIDS Res Hum Retroviruses** 1996 Aug 10;12(12):1169-78

Synergistic neutralization of a chimeric SIV/HIV type 1 virus with combinations of human anti-HIV type 1 envelope monoclonal antibodies or hyperimmune globulins. Li A, et al. **AIDS Res Hum Retroviruses** 1997 May 20; 13(8):647-56

Live attenuated SIV vaccines are not effective in a postexposure vaccination model. Linhart H, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):593-9

Lentiviral genomes with G-to-A hypermutation may result from Taq polymerase errors during polymerase chain reaction. Overbaugh J, et al. **AIDS Res Hum Retroviruses** 1996 Nov 20;12(17):1605-13

Protection against mucosal SIVsm challenge in macaques infected with a chimeric SIV that expresses HIV type 1 envelope. Quesada-Rolander M, et al. **AIDS Res Hum Retroviruses** 1996 Jul 20;12(11):993-9

Restriction of viral population by intravaginal infection of simian immunodeficiency viruses in macaque monkeys. Enose Y, et al. **Arch Virol** 1997;142(1):37-51

Direct amplification and cloning of up to 5-kb lentivirus genomes from serum. Holterman L, et al. **Biotechniques** 1996 Aug;21(2):312-9

The role of major histocompatibility complex polymorphisms on SIV infection in rhesus macaques. Bontrop RE, et al. **Immunol Lett** 1996 Jun;51(1-2):35-8

Detection of Epstein-Barr virus small RNAs EBER1 and EBER2 in lymphomas of SIV-infected rhesus monkeys by in situ hybridization. Pingel S, et al. **Int J Cancer** 1997 Jul 3;72(1):160-5

SIV/HIV-1 hybrid virus expressing the reverse transcriptase gene of HIV-1 remains sensitive to HIV-1-specific reverse transcriptase inhibitors after passage in rhesus macaques. Balzarini J, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 May 1;15(1):1-4

Genotypic analysis of infant macaques infected transplacentally and orally. Martin Amedee A, et al. **J Med Primatol** 1996 Jun;25(3):225-35

Initial characterization of viral sequences from a SHIV-inoculated pig-tailed macaque that developed AIDS. Stephens EB, et al. **J Med Primatol** 1996 Jun; 25(3):175-85

Fast analysis of genomic homologies: primate immunodeficiency virus. Moncany ML, et al. **J Mol Evol** 1996 Aug;43(2):152-60

A role for natural simian immunodeficiency virus and human immunodeficiency virus type 1 nef alleles in lymphocyte activation. Alexander L, et al. **J Virol** 1997 Aug; 71(8):6094-9

Genetic diversity of simian immunodeficiency viruses from West African green monkeys: evidence of multiple genotypes within populations from the same geographical locale. Bibollet-Ruche F, et al. **J Virol** 1997 Jan; 71(1):307-13

Specific N-linked and O-linked glycosylation modifications in the envelope V1 domain of simian immunodeficiency virus variants that evolve in the host alter recognition by neutralizing antibodies. Chackerian B, et al. **J Virol** 1997 Oct;71(10):7719-27

Expression of gamma interferon by simian immunodeficiency virus increases attenuation and reduces postchallenge virus load in vaccinated rhesus macaques. Giavedoni L, et al. **J Virol** 1997 Feb;71(2):866-72

Induction of AIDS by simian immunodeficiency virus lacking NF-kappaB and SP1 binding elements. Ilyinskii PO, et al. **J Virol** 1997 Mar;71(3):1880-7

Characterization of molecularly cloned simian-human immunodeficiency viruses causing rapid CD4+ lymphocyte depletion in rhesus monkeys. Karlsson GB, et al. **J Virol** 1997 Jun;71(6):4218-25

The cytopathicity of a simian immunodeficiency virus Mne variant is determined by mutations in Gag and Env. Kimata JT, et al. **J Virol** 1997 Oct;71(10):7629-39

Neutralization sensitivity of cell culture-passaged simian immunodeficiency virus. Means RE, et al. **J Virol** 1997 Oct;71(10):7895-902

Study of the dynamics of neutralization escape mutants in a chimpanzee naturally infected with the simian immunodeficiency virus SIVcpz-ant. Nyambi PN, et al. **J Virol** 1997 Mar;71(3):2320-30

A chimeric simian/human immunodeficiency virus expressing a primary patient human immunodeficiency virus type 1 isolate env causes an AIDS-like disease after in vivo passage in rhesus monkeys. Reimann KA, et al. **J Virol** 1996 Oct;70(10):6922-8

Conservation and host specificity of Vpr-mediated cell cycle arrest suggest a fundamental role in primate lentivirus evolution and biology. Stivahtis GL, et al. **J Virol** 1997 Jun;71(6):4331-8

Intrarectal transmission of simian immunodeficiency virus in rhesus macaques: selective amplification and host responses to transient or persistent viremia. Trivedi P, et al. **J Virol** 1996 Oct;70(10):6876-83

SIV/HIV-1 chimeric viruses having HIV-1 env gene: a new animal model and a candidate for attenuated live vaccine. Hayami M, et al. **Leukemia** 1997 Apr;11 Suppl 3:95-7

Association of simian immunodeficiency virus Nef with cellular serine/threonine kinases is dispensable for the development of AIDS in rhesus macaques. Lang SM, et al. **Nat Med** 1997 Aug;3(8):860-5

Gene acquisition in HIV and SIV [letter] Sharp PM, et al. **Nature** 1996 Oct 17;383(6601):586-7

New scientific developments towards an AIDS vaccine: report on a workshop organized by EU programme EVA entitled Novel approaches to AIDS vaccine development held at the Institut Pasteur, Paris. 16-17 November 1995. Oxford JS, et al. **Vaccine** 1996 Dec;14(17-18):1712-7

High viral load and CD4 lymphopenia in rhesus and cynomolgus macaques infected by a chimeric primate lentivirus constructed using the env, rev, tat, and vpu genes from HIV-1 Lai. Dunn CS, et al. **Virology** 1996 Sep 15; 223(2):351-61

RNA splice site utilization by simian immunodeficiency viruses derived from sooty mangabey monkeys. Reinhart TA, et al. **Virology** 1996 Oct 1;224(1):338-44

Loss of the SIVsmmPBj14 phenotype and nef genotype during long-term survival of macaques infected by mucosal routes. Schwiebert RS, et al. **Virology** 1997 Mar 31; 230(1):82-92

A full-length and replication-competent proviral clone of SIVAGM from tantalus monkeys. Soares MA, et al. **Virology** 1997 Feb 17;228(2):394-9

A cell-free stock of simian-human immunodeficiency virus that causes AIDS in pig-tailed macaques has a limited number of amino acid substitutions in both SIVmac and HIV-1 regions of the genome and has offered cytotropism. Stephens EB, et al. **Virology** 1997 May 12;231(2):313-21

Replacement of posttranscriptional regulation in SIVmac239 generated a Rev-independent infectious virus able to propagate in rhesus peripheral blood mononuclear cells. von Gegerfelt A, et al. **Virology** 1997 Jun 9;232(2):291-9

Functional analysis of simian immunodeficiency virus SIVAGM long terminal repeat. Sakuragi J, et al. **Virus Genes** 1996;12(1):21-5

Simian immunodeficiency viruses containing mutations in the long terminal repeat NF-kappa B or Sp1 binding sites replicate efficiently in T cells and PHA-stimulated PBMCs. Zhang J, et al. **Virus Res** 1997 Jun;49(2):205-13

[How did the AIDS virus develop? Scientific knowledge and philosophical suppositions] Stahl H. **Schweiz Rundsch Med Prax** 1996 Nov 12;85(46):1473-5 (Eng. Abstr.) **(Ger)**

GROWTH & DEVELOPMENT

Cytokine patterns and viral load in lymph nodes during the early stages of SIV infection. Khatissian E, et al. **Res Virol** 1996 Mar-Jun;147(2-3):181-9

High viral load and CD4 lymphopenia in rhesus and cynomolgus macaques infected by a chimeric primate lentivirus constructed using the env, rev, tat, and vpu genes from HIV-1 Lai. Dunn CS, et al. **Virology** 1996 Sep 15; 223(2):351-61

IMMUNOLOGY

Control of initial viraemia coincides with neutralizing antibody response after SIVmac infection of rhesus macaques [letter] Beer B, et al. **AIDS** 1996 Jun;10(6):681-2

Antibody-dependent cellular cytotoxicity to clinical isolates of HIV-1 and SIVcpz: comparison of human and chimpanzees. Broliden K, et al. **AIDS** 1996 Sep; 10(11):1199-204

Characterization of the expression and immunogenicity of poliovirus replicons that encode simian immunodeficiency virus SIVmac239 Gag or envelope SU proteins. Anderson MJ, et al. **AIDS Res Hum Retroviruses** 1997 Jan 1; 13(1):53-62

Interleukin 1 beta, interleukin 6, tumor necrosis factor alpha, and interleukin 10 responses in peripheral blood mononuclear cells of cynomolgus macaques during acute infection with SIVmac251. Benveniste O, et al. **AIDS Res Hum Retroviruses** 1996 Feb 10;12(3):241-50

Protection against human immunodeficiency virus type 2 and simian immunodeficiency virus in macaques vaccinated against human immunodeficiency virus type 2. Biberfeld G, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):443-6 (22 ref.)

Cytokine mRNA expression in mononuclear cells from different tissues during acute SIVmac251 infection of macaques. Chéret A, et al. **AIDS Res Hum Retroviruses** 1996 Sep 1;12(13):1263-72

Protection of SIVmac-infected macaque monkeys against superinfection by a simian immunodeficiency virus expressing envelope glycoproteins of HIV type 1. Dunn CS, et al. **AIDS Res Hum Retroviruses** 1997 Jul 20; 13(11):913-22

Reverse transcriptase and corresponding activity-blocking antibody for monitoring SIVsm infection in macaques. Ekstrand DH, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):601-10

Simian retrovirus vaccines: simian retrovirus and simian immunodeficiency lentivirus. Gardner MB, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):399-401 (20 ref.)

Recombinant subunit vaccines against primate lentiviruses. Hu SL. **AIDS Res Hum Retroviruses** 1996 Mar 20; 12(5):451-3 (26 ref.)

The relationship between the interferon alpha response and viral burden in primary SIV infection. Khatissian E, et al. **AIDS Res Hum Retroviruses** 1996 Sep 1;12(13):1273-8

Live attenuated SIV vaccines are not effective in a postexposure vaccination model. Linhart H, et al. **AIDS Res Hum Retroviruses** 1997 May 1;13(7):593-9

Simian immunodeficiency virus live and inactivated experimental vaccines. Norley S, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):447-9 (41 ref.)

The neutralization relationship of HIV type 1, HIV type 2, and SIVcpz is reflected in the genetic diversity that distinguishes them. Nyambi PN, et al. **AIDS Res Hum Retroviruses** 1997 Jan 1;13(1):7-17

Anti-major histocompatibility complex antibody responses to simian B cells do not protect macaques against SIVmac infection. Polyanskaya N, et al. **AIDS Res Hum Retroviruses** 1997 Jul 20;13(11):923-31

"Attenuated" simian immunodeficiency virus in macaque neonates. Ruprecht RM, et al. **AIDS Res Hum Retroviruses** 1996 Mar 20;12(5):459-60 (3 ref.)

Vaccination of cynomolgus monkeys with whole inactivated or live-attenuated simian immunodeficiency virus. Titti F, et al. **Antibiot Chemother** 1996;48:131-8

Macaque models for AIDS vaccine development. Johnson RP. **Curr Opin Immunol** 1996 Aug;8(4):554-60 (42 ref.)

Similar abnormalities of idiotype and immunoglobulin light chain expression and of cell-mediated cytotoxicity in HIV-infected humans and simian immunodeficiency virus (SIV)-infected rhesus macaques. Grant MD, et al. **Immunol Cell Biol** 1996 Feb;74(1):38-44

Passive immune globulin therapy in the SIV/macaque model: early intervention can alter disease profile. Haigwood NL, et al. **Immunol Lett** 1996 Jun;51(1-2):107-14

Recombinant subunit vaccines as an approach to study correlates of protection against primate lentivirus infection. Hu SL, et al. **Immunol Lett** 1996 Jun;51(1-2):115-9

SIVagm infection of its natural African green monkey host. Norley SG. **Immunol Lett** 1996 Jun;51(1-2):53-8 (24 ref.)

Attenuated SIV imparts immunity to challenge with pathogenic spleen-derived SIV but cannot prevent repair of the nef deletion. Stahl-Hennig C, et al. **Immunol Lett** 1996 Jun;51(1-2):129-35

Immunological and virological studies of natural SIV infection of disease-resistant nonhuman primates. Villinger F, et al. **Immunol Lett** 1996 Jun;51(1-2):59-68

CD4 and CD8 expressions in African green monkey helper T lymphocytes: implication for resistance to SIV infection. Murayama Y, et al. **Int Immunol** 1997 Jun;9(6):843-51

Virus-induced cytokines regulate circulating lymphocyte levels during primary SIV infections. Rosenberg YJ, et al. **Int Immunol** 1997 May;9(5):703-12

Two orphan seven-transmembrane segment receptors which are expressed in CD4-positive cells support simian immunodeficiency virus infection. Farzan M, et al. **J Exp Med** 1997 Aug 4;186(3):405-11

Upregulation of Fas ligand by simian immunodeficiency virus - a nef-arious mechanism of immune evasion? Johnson RP. **J Exp Med** 1997 Jul 7;186(1):1-5 (50 ref.)

Mechanisms of protection induced by attenuated simian immunodeficiency virus. I. Protection cannot be transferred with immune serum. Almond N, et al. **J Gen Virol** 1997

Aug;78 (Pt 8):1919–22

Long–term non–progressive human immunodeficiency virus infection: new insights from the simian immunodeficiency virus model. Dittmer U, et al. **J Gen Virol** 1997 May;78 (Pt 5):979–84 (55 ref.)

A recombinant human adenovirus expressing the simian immunodeficiency virus Gag antigen can induce long–lived immune responses in mice. Flanagan B, et al. **J Gen Virol** 1997 May;78 (Pt 5):991–7

CD8+ cytotoxic T lymphocytes of a cynomolgus macaque infected with simian immunodeficiency virus (SIV) mac32H–J5 recognize a nine amino acid epitope in SIV Gag p26. Geretti AM, et al. **J Gen Virol** 1997 Apr;78 (Pt 4):821–4

Protection of monkeys vaccinated with vpr– and/or nef–defective simian immunodeficiency virus strain mac/human immunodeficiency virus type 1 chimeric viruses: a potential candidate live–attenuated human AIDS vaccine. Igarashi T, et al. **J Gen Virol** 1997 May;78 (Pt 5):985–9

Macaques infected with attenuated simian immunodeficiency virus resist superinfection with virulence–revertant virus. Sharpe SA, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1923–7

Rapid development of vaccine protection in macaques by live–attenuated simian immunodeficiency virus. Stahl–Hennig C, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):2969–81

Mucosal or targeted lymph node immunization of macaques with a particulate SIVp27 protein elicits virus–specific CTL in the genito–rectal mucosa and draining lymph nodes. Klavinskis LS, et al. **J Immunol** 1996 Sep 15; 157(6):2521–7

Oral immunization with simian immunodeficiency virus p55gag and cholera toxin elicits both mucosal IgA and systemic IgG immune responses in nonhuman primates. Kubota M, et al. **J Immunol** 1997 Jun 1;158(11):5321–9

Mechanisms of protection induced by attenuated simian immunodeficiency virus. IV. Protection against challenge with virus grown in autologous simian cells. Almond N, et al. **J Med Primatol** 1997 Feb–Apr;26(1–2):34–43

Detection of intracellular signal transduction molecules in PBMC from rhesus macaques and sooty mangabeys. Brice GT, et al. **J Med Primatol** 1996 Jun;25(3):210–7

Chemoattractant factors (IP–10, MIP–1alpha, IL–16) mRNA expression in mononuclear cells from different tissues during acute SIVmac251 infection of macaques. Chéret A, et al. **J Med Primatol** 1997 Feb–Apr;26(1–2):19–26

A model for the maturation of protective antibody responses to SIV envelope proteins in experimentally immunized monkeys. Cole KS, et al. **J Med Primatol** 1997 Feb–Apr; 26(1–2):51–8

Induction of immunodeficiency virus–specific immune responses in rhesus monkeys following gene gun–mediated DNA vaccination. Fuller DH, et al. **J Med Primatol** 1996 Jun;25(3):236–41

The immunopathogenesis of retroviral diseases: no immunophenotypic alterations in T, B, and NK cell subsets in SIVmac239–challenged rhesus macaques protected by SIV delta nef vaccination. Giorgi JV, et al. **J Med Primatol** 1996 Jun;25(3):186–91

Immunization of Macaca mulatta with aroA attenuated Salmonella typhimurium expressing the SIVp27 antigen. Steger KK, et al. **J Med Primatol** 1997 Feb–Apr; 26(1–2):44–50

Preclinical AIDS vaccine development: formal survey of global HIV, SIV, and SHIV in vivo challenge studies in vaccinated nonhuman primates. Warren JT, et al. **J Med Primatol** 1997 Feb–Apr;26(1–2):63–81

Evolution of envelope–specific antibody responses in monkeys experimentally infected or immunized with simian immunodeficiency virus and its association with the development of protective immunity. Cole KS, et al. **J Virol** 1997 Jul;71(7):5069–79

Construction, replication, and immunogenic properties of a simian immunodeficiency virus expressing interleukin–2. Gundlach BR, et al. **J Virol** 1997 Mar;71(3):2225–32

Induction of vigorous cytotoxic T–lymphocyte responses by live attenuated simian immunodeficiency virus. Johnson RP, et al. **J Virol** 1997 Oct;71(10):7711–8

Detection of simian immunodeficiency virus (SIV)–specific CD8+ T cells in macaques protected from SIV challenge by prior SIV subunit vaccination. Kent SJ, et al. **J Virol** 1996 Aug;70(8):4941–7

Oral immunization with recombinant Mycobacterium bovis BCG simian immunodeficiency virus nef induces local and systemic cytotoxic T–lymphocyte responses in mice. Lagranderie M, et al. **J Virol** 1997 Mar;71(3):2303–9

Rhesus macaques previously infected with simian/human immunodeficiency virus are protected from vaginal challenge with pathogenic SIVmac239. Miller CJ, et al. **J Virol** 1997 Mar;71(3):1911–21

Study of the dynamics of neutralization escape mutants in a chimpanzee naturally infected with the simian immunodeficiency virus SIVcpz–ant. Nyambi PN, et al. **J Virol** 1997 Mar;71(3):2320–30

Protection of human immunodeficiency virus type 2–exposed seronegative macaques from mucosal simian immunodeficiency virus transmission. Putkonen P, et al. **J Virol** 1997 Jul;71(7):4981–4

Definition of human immunodeficiency virus type 1 gp120 and gp41 cytotoxic T–lymphocyte epitopes and their restricting major histocompatibility complex class I alleles in simian–human immunodeficiency virus–infected rhesus monkeys. Voss G, et al. **J Virol** 1996 Oct;70(10):7335–40

Immunoassay for detection of antibodies to simian immunodeficiency virus and human immunodeficiency virus in serum. Otsyula MG, et al. **Lab Anim Sci** 1996 Apr; 46(2):198–201

Increased enzyme–linked immunosorbent assay specificity with solubilized simian retrovirus 2–infected cell membranes. Thouless ME, et al. **Lab Anim Sci** 1996 Dec; 46(6):619–22

Transient expression of CD20 antigen (pan B cell marker) in activated lymph node T cells. Murayama Y, et al. **Microbiol Immunol** 1996;40(6):467–71

Live HIV vaccines—how safe? [letter; comment] Dittmer U, et al. **Nat Med** 1997 Aug;3(8):816. Comment on: Nat Med 1997 Jan;3(1):32–6.

Enhancement of immunodeficiency virus–specific immune responses in DNA–immunized rhesus macaques. Fuller DH, et al. **Vaccine** 1997 Jun;15(8):924–6

Apoptosis correlates with immune activation in intestinal lymphoid tissue from macaques acutely infected by a highly enteropathic simian immunodeficiency virus, SIVsmmPBj14. Gummuluru S, et al. **Virology** 1996 Nov 1;225(1):21–32

Fetal or neonatal infection with attenuated simian immunodeficiency virus results in protective immunity against oral challenge with pathogenic SIVmac251. Otsyula MG, et al. **Virology** 1996 Aug 1;222(1):275–8

The V3 domain of SIVmac251 gp120 contains a linear neutralizing epitope. Palker TJ, et al. **Virology** 1996 Oct 15;224(2):415–26

Neutralization of SIVmac239/17E in lymphocyte cultures involves virus strain–specific linear and conformational epitopes encoded by different regions of the env gene including the "V3" domain. Wu Z, et al. **Virology** 1996 Aug 1;222(1):184–92

Plasmas from lymphocyte– and macrophage–tropic SIVmac–infected macaques have antibodies with a broader spectrum of virus neutralization activity in macrophage versus lymphocyte cultures. Zhuge W, et al. **Virology** 1997 Jan 6;227(1):24–33

ISOLATION & PURIFICATION

Nested polymerase chain reaction primers that distinguish between SIVSM and HIV type 2. Walther L, et al. **AIDS Res Hum Retroviruses** 1996 Aug 10;12(12):1077–9

Localization of simian immunodeficiency virus nucleic acid and antigen in brains of fetal macaques inoculated in utero. Lane JH, et al. **Am J Pathol** 1996 Oct;149(4):1097–104

Analysis of live, oral poliovirus vaccine monopools for human immunodeficiency virus type 1 and simian immunodeficiency virus [see comments] Khan AS, et al. **J Infect Dis** 1996 Dec;174(6):1185–90. Comment in: J Infect Dis 1997 Aug;176(2):545–6.

A case of pulmonary cestodiasis in a simian immunodeficiency virus–infected pigtailed macaque (Macaca nemestrina) in which virus–infected leukocytes are present within the lesion. Sasseville VG, et al. **J Med Primatol** 1996 Aug;25(4):251–6

Neuroinvasion by simian immunodeficiency virus coincides with increased numbers of perivascular macrophages/microglia and intrathecal immune activation. Lane JH, et al. **J Neurovirol** 1996 Dec;2(6):423–32

Pathogenesis of lymphocyte–tropic and macrophage–tropic SIVmac infection in the brain. Zhu GW, et al. **J Neurovirol** 1995 Mar;1(1):78–91

A molecularly cloned, pathogenic, neutralization–resistant simian immunodeficiency virus, SIVsmE543–3. Hirsch V, et al. **J Virol** 1997 Feb;71(2):1608–20

Plasma viremia in macaques infected with simian immunodeficiency virus: plasma viral load early in infection predicts survival. Watson A, et al. **J Virol** 1997 Jan; 71(1):284–90

Indicator cell lines for detection of primary strains of human and simian immunodeficiency viruses. Vodicka MA, et al. **Virology** 1997 Jun 23;233(1):193–8

METABOLISM

High degree of sensitivity of the simian immunodeficiency virus (SIVmac) envelope glycoprotein subunit association to amino acid changes in the glycoprotein 41 ectodomain. Marcon L, et al. **AIDS Res Hum Retroviruses** 1997 Apr 10;13(6):441–7

Activation of PAK by HIV and SIV Nef: importance for AIDS in rhesus macaques. Sawai ET, et al. **Curr Biol** 1996 Nov 1;6(11):1519–27

The N–terminus of Nef from HIV–1/SIV associates with a protein complex containing Lck and a serine kinase. Baur AS, et al. **Immunity** 1997 Mar;6(3):283–91

Specific N–linked and O–linked glycosylation modifications in the envelope V1 domain of simian immunodeficiency virus variants that evolve in the host alter recognition by neutralizing antibodies. Chackerian B, et al. **J Virol** 1997 Oct;71(10):7719–27

Genetically divergent strains of simian immunodeficiency virus use CCR5 as a coreceptor for entry. Chen Z, et al. **J Virol** 1997 Apr;71(4):2705–14

Envelope glycoproteins from human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus can use human CCR5 as a coreceptor for viral entry and make direct CD4–dependent interactions with this chemokine receptor. Hill CM, et al. **J Virol** 1997 Sep;71(9):6296–304

Human immunodeficiency virus types 1 and 2 and simian immunodeficiency virus Nef use distinct but overlapping target sites for downregulation of cell surface CD4. Hua J, et al. **J Virol** 1997 Sep;71(9):6742–8

Uracil DNA glycosylase specifically interacts with Vpr of both human immunodeficiency virus type 1 and simian immunodeficiency virus of sooty mangabeys, but binding does not correlate with cell cycle arrest. Selig L, et al. **J Virol** 1997 Jun;71(6):4842–6

Expression of inflammatory cytokines and inducible nitric oxide synthase in brains of SIV–infected rhesus monkeys: applications to HIV–induced central nervous system disease. Lane TE, et al. **Mol Med** 1996 Jan;2(1):27–37

A new SIV co–receptor, STRL33 [letter] [see comments] Alkhatib G, et al. **Nature** 1997 Jul 17;388(6639):238. Comment in: Nature 1997 Jul 17;388(6639):230–1.

Expression cloning of new receptors used by simian and human immunodeficiency viruses [see comments] Deng HK, et al. **Nature** 1997 Jul 17;388(6639):296–300. Comment in: Nature 1997 Jul 17;388(6639):230–1.

Initiation of (–) strand DNA synthesis from tRNA(3Lys) on lentiviral RNAs: implications of specific HIV–1 RNA–tRNA(3Lys) interactions inhibiting primer utilization by retroviral reverse transcriptases. Arts EJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10063–8

Receptor function of CD4 structures from African green monkey and pig–tail macaque for simian immunodeficiency virus, SIVsm, SIVagm, and human immunodeficiency virus type–1. Fomsgaard A, et al. **Viral Immunol** 1995; 8(3):121–33

Natural endogenous reverse transcription of simian immunodeficiency virus. Dornadula G, et al. **Virology** 1997 Jan 6;227(1):260–7

PATHOGENICITY

Chemokine expression in simian immunodeficiency virus–induced AIDS encephalitis. Sasseville VG, et al. **Am J Pathol** 1996 Nov;149(5):1459–67

Pathogenesis of SIV encephalitis. Selection and replication of neurovirulent SIV. Zink MC, et al. **Am J Pathol** 1997 Sep;151(3):793–803

A zidovudine–resistant simian immunodeficiency virus mutant with a Q151M mutation in reverse transcriptase causes AIDS in newborn macaques. Van Rompay KK, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):278–83

Comparison of peripheral blood phenotype in pathogenic and attenuated SIV infection. Lines JL, et al. **Biochem Soc Trans** 1997 May;25(2):284S

Cytokine profiling of simian immunodeficiency virus infection of cynomologus macaques. Pathogenic SIVmac251 pJ5C versus non–pathogenic attenuated SIVmac251 pC8C reveals divergence. Stabbings RJ, et al. **Biochem Soc Trans** 1997 May;25(2):285S

Neuropathogenesis of chimeric simian/human immunodeficiency virus infection in pig–tailed and rhesus macaques. Raghavan R, et al. **Brain Pathol** 1997 Jul; 7(3):851–61

Nef and PAK: virulence factor and cellular accomplice. Trono D, et al. **Chem Biol** 1997 Jan;4(1):13–5 (23 ref.)

T cell apoptosis in human immunodeficiency virus type 2– and simian immunodeficiency virus–infected macaques. Dittmer U, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2433–6

Replication and cytopathogenicity of human immunodeficiency virus type 1 (HIV–1)/simian immunodeficiency virus agm3 chimeric viruses in human and monkey cells: the 5' half of the HIV–1 genome is responsible for virus cytopathogenicity. Jin M, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2427–31

Neutralizing and infection–enhancing antibody responses do not correlate with the differential pathogenicity of SIVmac239delta3 in adult and infant rhesus monkeys. Montefiori DC, et al. **J Immunol** 1996 Dec 15; 157(12):5528–35

Infection and pathogenicity of chimeric simian–human immunodeficiency viruses in macaques: determinants of high virus loads and CD4 cell killing. Shibata R, et al. **J Infect Dis** 1997 Aug;176(2):362–73

The value of primate models for studying human immunodeficiency virus pathogenesis. Levy JA. **J Med Primatol** 1996 Jun;25(3):163–74 (44 ref.)

SIV/DeltaB670 transmission across oral, colonic, and vaginal mucosae in the macaque. Trichel AM, et al. **J Med Primatol** 1997 Feb–Apr;26(1–2):3–10

The cytopathicity of a simian immunodeficiency virus Mne variant is determined by mutations in Gag and Env. Kimata JT, et al. **J Virol** 1997 Oct;71(10):7629–39

Pathogenesis of simian immunodeficiency virus encephalitis: viral determinants of neurovirulence. Mankowski JL, et al. **J Virol** 1997 Aug;71(8):6055–60

Infection of an HIV–1/SIVmac chimeric virus having HIV–1 env to macaque monkeys via the vaginal cavity. Ido E, et al. **Microbiol Immunol** 1997;41(3):277–80

Microglia–passaged simian immunodeficiency virus induces neurophysiological abnormalities in monkeys. Prospéro–García O, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14158–63

Impact of various simian immunodeficiency virus variants on induction and nature of neuropathology in macaques. Czub S, et al. **Res Virol** 1996 Mar–Jun;147(2–3):165–70

Simian immunodeficiency virus as a model of HIV pathogenesis. Norley S, et al.

Springer Semin Immunopathol 1997;18(3):391–405 (72 ref.)
Comparison of in vitro and in vivo infectivity of different clade B HIV–1 envelope chimeric simian/human immunodeficiency viruses in Macaca mulatta. Bogers WM, et al. **Virology** 1997 Sep 15;236(1):110–7
Macaques infected with live attenuated SIVmac are protected against superinfection via the rectal mucosa. Cranage MP, et al. **Virology** 1997 Mar 3;229(1):143–54

PHYSIOLOGY

Elevated hepatic gamma–glutamylcysteine synthetase activity and abnormal sulfate levels in liver and muscle tissue may explain abnormal cysteine and glutathione levels in SIV–infected rhesus macaques. Gross A, et al. **AIDS Res Hum Retroviruses** 1996 Nov 20;12(17):1639–41
The lymphocytosis–promoting agent pertussis toxin affects virus burden and lymphocyte distribution in the SIV–infected rhesus macaque. Pauza CD, et al. **AIDS Res Hum Retroviruses** 1997 Jan 1;13(1):87–95
Dendrite cell–T cell mixtures, isolated from the skin and mucosae of macaques, support the replication of SIV. Pope M, et al. **AIDS Res Hum Retroviruses** 1997 Jul 1; 13(10):819–27
The construction and evaluation of SIV/HIV chimeras that express the envelope of European HIV type 1 isolates. Ranjbar S, et al. **AIDS Res Hum Retroviruses** 1997 Jun 10;13(9):797–800
Interferon–gamma expression in macaque lymph nodes during primary infection with simian immunodeficiency virus. Khatissian E, et al. **Cytokine** 1996 Nov;8(11):844–52
Significance of macrophage tropism of SIV in the macaque model of HIV disease. Stephens EB, et al. **J Leukoc Biol** 1997 Jul;62(1):12–9
Immunodeficiency virus cDNA synthesis in resting T lymphocytes is regulated by T cell activation signals and dendritic cells. Polacino PS, et al. **J Med Primatol** 1996 Jun;25(3):201–9
Vpr of simian immunodeficiency virus of African green monkeys is required for replication in macaque macrophages and lymphocytes. Campbell BJ, et al. **J Virol** 1997 Jul;71(7):5593–602
Human immunodeficiency virus type 1 coreceptors participate in postentry stages in the virus replication cycle and function in simian immunodeficiency virus infection. Chackerian B, et al. **J Virol** 1997 May;71(5):3932–9
Simian immunodeficiency virus infection of CD8+ lymphocytes in vivo. Dean GA, et al. **J Virol** 1996 Aug; 70(8):5646–50
Molecular and biological characterization of a neurovirulent molecular clone of simian immunodeficiency virus. Flaherty MT, et al. **J Virol** 1997 Aug;71(8):5790–8
Simian immunodeficiency virus variants with differential T–cell and macrophage tropism use CCR5 and an unidentified cofactor expressed in CEMx174 cells for efficient entry. Kirchhoff F, et al. **J Virol** 1997 Sep; 71(9):6509–16
Utilization of C–C chemokine receptor 5 by the envelope glycoproteins of a pathogenic simian immunodeficiency virus, SIVmac239. Marcon L, et al. **J Virol** 1997 Mar; 71(3):2522–7
Viral dynamics of primary viremia and antiretroviral therapy in simian immunodeficiency virus infection. Nowak MA, et al. **J Virol** 1997 Oct;71(10):7518–25
Replication–competent chimeric lenti–oncovirus with expanded host cell tropism. Reiprich S, et al. **J Virol** 1997 Apr;71(4):3328–31
Transduction of CD34+ hematopoietic progenitor cells with an antitat gene protects T–cell and macrophage progeny from AIDS virus infection. Rosenzweig M, et al. **J Virol** 1997 Apr;71(4):2740–6
The nef gene products of both simian and human immunodeficiency viruses enhance virus infectivity and are functionally interchangeable. Sinclair E, et al. **J Virol** 1997 May;71(5):3641–51
Toward a poliovirus–based simian immunodeficiency virus vaccine: correlation between genetic stability and immunogenicity. Tang S, et al. **J Virol** 1997 Oct; 71(10):7841–50
Breaching barriers [comment] Kraehenbuhl JP, et al. **Nat Med** 1996 Oct;2(10):1080–2. Comment on: Nat Med 1996 Oct;2(10):1084–9.
Progesterone implants enhance SIV vaginal transmission and early virus load [see comments] Marx PA, et al. **Nat Med** 1996 Oct;2(10):1084–9. Comment in: Nat Med 1996 Oct;2(10):1080–2. Comment in: Nat Med 1997 Feb;3(2):124.
A new approach to investigating the relationship between productive infection and cytopathicity in vivo. Reinhart TA, et al. **Nat Med** 1997 Feb;3(2):218–21
Immunodeficiency viruses. Spoilt for choice of co–receptors [news; comment] Clapham PR, et al. **Nature** 1997 Jul 17; 388(6639):230–1. Comment on: Nature 1997 Jul 17;388(6639):238. Comment on: Nature 1997 Jul 17;388(6639):296–300.
Towards a consensus for a role of Nef in both viral replication and immunomodulation? Collette Y. **Res Virol** 1997 Jan–Feb;148(1):23–30 (43 ref.)
Nef and the Nef–associated kinase. Sawai ET, et al. **Res Virol** 1997 Jan–Feb;148(1):47–52 (59 ref.)
Structural and functional correlates between HIV–1 and SIV Nef isolates. Garcia JV, et al. **Virology** 1996 Dec 15; 226(2):161–6
The evolutionary rate of nonpathogenic simian immunodeficiency virus (SIVagm) is in agreement with a rapid and continuous replication in vivo. Müller–Trutwin MC, et al. **Virology** 1996 Sep 1;223(1):89–102
Rev/RRE–independent Mason–Pfizer monkey virus constitutive transport element–dependent propagation of SIVmac239 vectors using a single round of replication assay. Rizvi TA, et al. **Virology** 1996 Aug 15;222(2):457–63
Infected macaques that controlled replication of SIVmac or nonpathogenic SHIV developed sterilizing resistance against pathogenic SHIV(KU–1). Stephens EB, et al. **Virology** 1997 Aug 4;234(2):328–39
Replacement of posttranscriptional regulation in SIVmac239 generated a Rev–independent infectious virus able to propagate in rhesus peripheral blood mononuclear cells. von Gegerfelt A, et al. **Virology** 1997 Jun 9;232(2):291–9
Simian immunodeficiency viruses containing mutations in the long terminal repeat NF–kappa B or Sp1 binding sites replicate efficiently in T cells and PHA–stimulated PBMCs. Zhang J, et al. **Virus Res** 1997 Jun;49(2):205–13

SIV VACCINE see **SAIDS VACCINES**

SIV–1 see **SIV**

SIV–2 see **SIV**

SIXTH DISEASE see **EXANTHEMA SUBITUM**

SIZE PERCEPTION

Reading with magnifiers. Den Brinker BP, et al. **Ergonomics** 1996 Oct;39(10):1231–48 (90 ref.)
A change in viewpoint promotes use of height–in–picture as a depth cue in 5– to 7–year–olds' drawings of a simple depth relationship. Bremner JG, et al. **J Exp Child Psychol** 1997 Aug;66(2):180–92
Development of size modification of human figure drawings in spatial axes systems of varying complexity. Lange–Küttner C. **J Exp Child Psychol** 1997 Aug; 66(2):264–78
Weight perception and the haptic size–weight illusion are functions of the inertia tensor. Amazeen EL, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb;22(1):213–32
The visual perception of three–dimensional length. Norman JF, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb; 22(1):173–86
Shape completion time depends on the size of the occluded region. Shore DI, et al. **J Exp Psychol Hum Percept Perform** 1997 Aug; 23(4):980–98
Inattention magnifies perceived length: the attentional receptive field hypothesis. Tsal Y, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb;22(1):233–43
Disruption to word or letter processing? The origins of case–mixing effects. Mayall K, et al. **J Exp Psychol Learn Mem Cogn** 1997 Sep;23(5):1275–86
How big is a Gabor patch, and why should we care? Fredericksen RE, et al. **J Opt Soc Am A** 1997 Jan; 14(1):1–12
Effects of picture size and placement on memory for written words. Blischak DM, et al. **J Speech Hear Res** 1995 Dec; 38(6):1356–62
Underestimation of the size ratio of Texas to Rhode Island in memory and perception. Bradley DR. **Percept Mot Skills** 1997 Aug;85(1):41–2
Ebbinghaus illusion: effect of figural similarity upon magnitude of illusion when context elements are equal in perceived size. Deni JR, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1171–5
Metric aspects of mental images. Iachini S, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1243–50
Stimulus alignment and age in the selection of bigger rectangles. Shimizu M. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1123–6
Evidence for good recovery of lengths of real objects seen with natural stereo viewing. Frisby JP, et al. **Perception** 1996;25(2):129–54
Interactions of monocular and cyclopean components and the role of depth in the Ebbinghaus illusion. Papathomas TV, et al. **Perception** 1996;25(7):783–95
The role of the angle components in the wings–in and wings–out forms of the Müller–Lyer illusion. Predebon J. **Perception** 1996;25(7):773–81
Pictorial depth and framing have independent effects on the horizontal–vertical illusion. Williams PA, et al. **Perception** 1996;25(8):921–6
Immediately preceding stimuli increase the detection of a less detectable but not a more detectable stimulus. King DL. **Psychol Res** 1996;59(2):94–9
Discrimination learning decreases perceived similarity according to an objective measure. King DL, et al. **Psychol Res** 1996;59(3):187–95
[Anterior denture teeth selected for complete dentures] Uchida T, et al. **Kokubyo Gakkai Zasshi** 1996 Dec; 63(4):593–8 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Size illusion influences how we lift but not how we grasp an object. Brenner E, et al. **Exp Brain Res** 1996 Oct; 111(3):473–6
A motor signal and "visual" size perception. Carey DP, et al. **Exp Brain Res** 1996 Aug;110(3):482–6
Contributions of the left and right cerebral hemispheres to line bisection. Mennemeier M, et al. **Neuropsychologia** 1997 May;35(5):703–15
Quantitative evaluations in gray crows: generalization of the relative attribute "larger set". Zorina ZA, et al. **Neurosci Behav Physiol** 1996 Jul–Aug;26(4):357–64
The spatial limit for motion detection in noise depends on element size, not on spatial frequency. Morgan MJ, et al. **Vision Res** 1997 Mar;37(6):729–36
The distance used for scaling disparities is the same as the one used for scaling retinal size. van Damme W, et al. **Vision Res** 1997 Mar;37(6):757–64

SIZOFIRAN

ADMINISTRATION & DOSAGE

Augmentation of antitumor effect by combined administration with interleukin–2 and sizofiran, a single glucan, on murine EL–4 lymphoma. Kano Y, et al. **Biotherapy** 1996;9(4):241–7
Inhibitory effect of metastasis by combined administration with interleukin–2 and sizofiran, a single glucan––immunohistochemical study. Kano Y, et al. **Biotherapy** 1996;9(4):263–9

ANALOGS & DERIVATIVES

Stereocontrolled synthesis of sulfur–linked analogues of the branched tetrasaccharide repeating–unit of the immunostimulant polysaccharide schizophyllan and of its beta–(1–>3)–branched, beta–(1–>6)–linked isomer. Contour–Galcera MO, et al. **Carbohydr Res** 1996 Feb 7; 281(1):119–28

METABOLISM

The correlation between adhesion of schizophyllan to yeast glucan and its effect on regeneration of yeast protoplast. Hisamatsu M, et al. **Carbohydr Res** 1997 Feb 20; 298(1–2):117–21

PHARMACOLOGY

Effect of sizofiran on regional lymph nodes in patients with head and neck cancer. Kano Y, et al. **Biotherapy** 1996; 9(4):257–62
The correlation between adhesion of schizophyllan to yeast glucan and its effect on regeneration of yeast protoplast. Hisamatsu M, et al. **Carbohydr Res** 1997 Feb 20; 298(1–2):117–21

SJOGREN–LARSSON SYNDROME

Update on Sjögren–Larsson syndrome. Lacour M. **Dermatology** 1996;193(2):77–82 (47 ref.)

DIAGNOSIS

Redefining the Sjögren–Larsson syndrome: atypical findings in three siblings and implications regarding diagnosis. Nigro JF, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):678–84
Sjogren–Larsson syndrome. Phanthumchinda K, et al. **J Med Assoc Thai** 1996 Aug;79(8):541–4

GENETICS

Mutations associated with Sjögren–Larsson syndrome. Tsukamoto N, et al. **Ann Hum Genet** 1997 May;61 (Pt 3):235–42
A missense mutation in the FALDH gene identified in Sjögren–Larsson syndrome patients originating from the northern part of Sweden. Sillén A, et al. **Hum Genet** 1997 Aug;100(2):201–3
Sjögren–Larsson syndrome is caused by a common mutation in northern European and Swedish patients. De Laurenzi V, et al. **J Invest Dermatol** 1997 Jul;109(1):79–83

METABOLISM

Isolation of animal cell mutants defective in long–chain fatty aldehyde dehydrogenase. Sensitivity to fatty aldehydes and Schiff's base modification of phospholipids: implications for Sj–ogren–Larsson syndrome. James PF, et al. **J Biol Chem** 1997 Sep 19;272(38):23532–9

SJOGREN'S SYNDROME

see related
KERATOCONJUNCTIVITIS SICCA

Subgroups of primary Sjögren's syndrome. Sjögren's syndrome in male and paediatric Greek patients. Drosos AA, et al. **Ann Rheum Dis** 1997 May;56(5):333–5
Hepatitis C virus infection and gastric lymphoproliferation in patients with Sjögren's syndrome [letter] Sorrentino D, et al. **Blood** 1997 Sep 1;90(5):2116–7
Systemic lupus erythematosus and Sjögren's syndrome. **Curr Opin Rheumatol** 1997 Sep;9(5):B159–79
Systemic lupus erythematosus and Sjögren's syndrome. **Curr Opin Rheumatol** 1996 Sep;8(5):B137–54
Clinical features, pathogenesis, and treatment of Sjögren's syndrome. Fox RI. **Curr Opin Rheumatol** 1996 Sep; 8(5):438–45 (104 ref.)
Isolated necrotizing and granulomatous vasculitis causing ischemic bowel disease in primary Sjögren's syndrome

[letter] Lie JT. **J Rheumatol** 1995 Dec;22(12):2375–7

Primary Sjögren's syndrome: diagnostic criteria, clinical features, and disease activity. Manthorpe R, et al. **J Rheumatol** 1997 Sep;24 Suppl 50:8–11 (14 ref.)

Androgen stimulation of lacrimal gland function in mouse models of Sjögren's syndrome. Sullivan DA, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3–4):237–45

[Clinical features of Sjögren syndrome] Yazawa Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Apr;100(4):429–35 (Eng. Abstr.) **(Jpn)**

[Sjögren's syndrome and anti-Ro syndrome] Tanaka M. **Ryoikibetsu Shokogun Shirizu** 1996;(15):379–82 (17 ref.) **(Jpn)**

BLOOD

Elevated levels of soluble Fc epsilon RII/CD23 and antibodies to Epstein–Barr virus in patients with Sjögren's syndrome. Suzuki M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:108–12

Soluble interleukin-2 receptor in primary and secondary Sjögren's syndrome. Tomás S, et al. **Br J Rheumatol** 1997 Feb;36(2):194–7

Practical usefulness of IgA-containing immune complex determination in the serum of patients with primary Sjögren's syndrome. Basset C, et al. **Clin Exp Rheumatol** 1997 Mar–Apr;15(2):157–61

Elevation of serum soluble intercellular adhesion molecule-1 (sICAM-1) and beta-2-microglobulin in Sjögren's syndrome. Krejsek J, et al. **Clin Rheumatol** 1997 Mar; 16(2):149–53

Autoantibody repertoire to Ro/SSA and La/SSB antigens in patients with primary and secondary Sjögren's syndrome. Wahren M, et al. **J Autoimmun** 1996 Aug; 9(4):537–44

Recombinant 52 kDa Ro(SSA) ELISA detects autoantibodies in Sjögren's syndrome sera that go undetected by conventional serologic assays. McCauliffe DP, et al. **J Rheumatol** 1997 May;24(5):860–6

Distinct alterations in lineage committed progenitor cells exist in the peripheral blood of patients with rheumatoid arthritis and primary Sjogren's syndrome. Santiago-Schwarz F, et al. **J Rheumatol** 1996 Mar; 23(3):439–46

CHEMICALLY INDUCED

Phenytoin-induced pseudo-Sjögren's syndrome [letter] Chakravarty K, et al. **Br J Rheumatol** 1996 Oct; 35(10):1033–4

Development of Sjögren's syndrome during treatment with recombinant human interferon-alpha-2b for chronic hepatitis C. Unoki H, et al. **J Gastroenterol** 1996 Oct; 31(5):723–7

CLASSIFICATION

Sjögren's syndrome: terminology. Oxholm P, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):693–6

COMPLICATIONS

Sjögren's syndrome with membranous glomerulonephritis detected by urine screening of schoolchildren. Yoshida K, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):533–6 (13 ref.)

Primary Sjögren's syndrome and associated lung disease: CT findings in 50 patients. Franquet T, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):655–8

Anti-inflammatory drugs do not alleviate bronchial hyperreactivity in Sjögren's syndrome. Stålenheim G, et al. **Allergy** 1997 Apr;52(4):423–7

Primary biliary cirrhosis associated with mixed type autoimmune hemolytic anemia and sicca syndrome: a case report and review of literature. Chen CY, et al. **Am J Gastroenterol** 1997 Sep;92(9):1547–9 (21 ref.)

Sjögren's syndrome with chronic pancreatitis, sclerosing cholangitis, and pulmonary infiltrations. Nieminen U, et al. **Am J Gastroenterol** 1997 Jan;92(1):139–42

Sjögren's syndrome with acute renal failure caused by renal pseudolymphoma. Cacoub P, et al. **Am J Kidney Dis** 1996 Nov;28(5):762–6

Interstitial lung disease and primary Sjögren's syndrome: clinical-pathological evaluation and response to treatment [letter; comment] Strimlan CV. **Am J Respir Crit Care Med** 1997 Apr;155(4):1489. Comment on: Am J Respir Crit Care Med 1996 Sep;154(3 Pt 1):794–9.

Hearing loss in the Sjögren syndrome. Tumiati B, et al. **Ann Intern Med** 1997 Mar 15;126(6):450–3

A case of secondary Sjögren's syndrome with a swollen thigh. Deodhar AA, et al. **Ann Rheum Dis** 1997 Mar; 56(3):162–4

Lymphomas in patients with Sjogren's syndrome are marginal zone B-cell neoplasms, arise in diverse extranodal and nodal sites, and are not associated with viruses. Royer B, et al. **Blood** 1997 Jul 15;90(2):766–75

Sjögren's syndrome in women presenting with chronic dyspareunia. Mulherin DM, et al. **Br J Obstet Gynaecol** 1997 Sep;104(9):1019–23

Rheumatic disease patients, prone to Sjögren's syndrome and/or lymphoma, mount an antibody response to BHRF1, the Epstein-Barr viral homologue of BCL-2. Newkirk MM, et al. **Br J Rheumatol** 1996 Nov;35(11):1075–81

Erythema nodosum associated with Sjögren's syndrome [letter] Yamamoto T, et al. **Br J Rheumatol** 1997 Jun; 36(6):707–8

Elevated incidence of hematologic malignancies in patients with Sjögren's syndrome compared with patients with rheumatoid arthritis (Finland). Kauppi M, et al. **Cancer Causes Control** 1997 Mar;8(2):201–4

Sjögren's syndrome and pure red cell aplasia [letter] [see comments] Giordano N, et al. **Clin Exp Rheumatol** 1996 May–Jun;14(3):344–5. Comment in: Clin Exp Rheumatol 1997 Jan–Feb;15(1):119–20.

The association of pure red cell aplasia and primary Sjögren's syndrome [letter; comment] Ibkhatra S, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):119–20. Comment on: Clin Exp Rheumatol 1996 May–Jun;14(3):344–5.

Pleurisy in primary Sjögren's syndrome: T cell receptor beta-chain variable region gene bias and local autoantibody production in the pleural effusion. Kawamata K, et al. **Clin Exp Rheumatol** 1997 Mar–Apr;15(2):193–6

A longitudinal study of lung impairment in patients with primary Sjögren's syndrome. Mialon P, et al. **Clin Exp Rheumatol** 1997 Jul–Aug;15(4):349–54

Autoimmune thyroid disease in systemic lupus erythematosus and Sjögren's syndrome. Scofield RH. **Clin Exp Rheumatol** 1996 May–Jun;14(3):321–30 (100 ref.)

Sleep disturbances, fibromyalgia and primary Sjögren's syndrome. Tishler M, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):71–4

Acquired hemophilia: a rare complication of Sjögren's syndrome. Vignes S, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):559–60

Sjögren's syndrome associated with autoimmune hepatitis. A case report. Biasi D, et al. **Clin Rheumatol** 1997 Jun; 16(4):409–12

A problematic case of chlamydia pericarditis and sicca syndrome [letter] Giordano N, et al. **Clin Rheumatol** 1996 Jan;15(1):99

A case of Sjögren's syndrome associated with Sweet's syndrome. Osawa H, et al. **Clin Rheumatol** 1997 Jan; 16(1):101–5 (16 ref.)

Hearing and Sjögren's syndrome. Trott MS, et al. **Ear Nose Throat J** 1996 Oct;75(10):666–8

Sjögren's syndrome and multiple myeloma [letter] Rodriguez-Cuartero A, et al. **Eur J Cancer** 1997 Jan; 33(1):167–8

Complications of childhood Sjögren syndrome. Kobayashi I, et al. **Eur J Pediatr** 1996 Oct;155(10):890–4

Widespread clonal B-cell disorder in Sjögren's syndrome predisposing to Helicobacter pylori-related gastric lymphoma. De Vita S, et al. **Gastroenterology** 1996 Jun; 110(6):1969–74

a 49-year-old woman with dyspnoea, palpitations and syncope. Gallerani M, et al. **Int J Cardiol** 1996 Jul 5; 55(1):67–78

A rare case of cardiac sarcoidosis in a patient with progressive systemic sclerosis, Sjogren's syndrome, and polymyositis. Hosoya N, et al. **Intern Med** 1995 Dec; 34(12):1164–7

Aplastic anemia complicating Sjögren's syndrome. Matsumoto N, et al. **Intern Med** 1997 May;36(5):371–4

Unilateral acute exacerbation of pulmonary fibrosis in association with Sjögren's syndrome. Takahashi T, et al. **Intern Med** 1996 Oct;35(10):811–4

Sjögren's syndrome associated with thymoma. Matsumoto Y, et al. **J Am Acad Dermatol** 1996 Oct;35(4):639–40

Hypokalemic periodic paralysis: an unusual cause. Thomas N, et al. **J Assoc Physicians India** 1996 Mar;44(3):207–8

Asymptomatic primary Sjögren's syndrome in a patient with penicillin drug eruption. Takahashi H. **J Dermatol** 1997 Jan;24(1):50–3

A case of multicentric reticulohistiocytosis, systemic sclerosis and Sjögren syndrome. Takahashi M, et al. **J Dermatol** 1997 Aug;24(8):530–4

Hypergammaglobulinemic purpura associated with Sjögren's syndrome and chronic C type hepatitis. Yamamoto T, et al. **J Dermatol** 1997 Jan;24(1):7–11

Overlapping cases with psoriasis and Sjögren syndrome: a study of lymphocyte response to staphylococcal enterotoxin B. Yamamoto T, et al. **J Dermatol Sci** 1996 Dec;13(3):212–8

T-cell-rich histiocyte-rich B-cell lymphoma of parotid gland. McCluggage WG, et al. **J Laryngol Otol** 1996 Aug; 110(8):811–3

Pulmonary embolism associated with Sjögren's syndrome in pregnancy. Kikuchi A, et al. **J Obstet Gynaecol Res** 1996 Oct;22(5):421–3

Sjögren's syndrome associated with hypokalemic myopathy due to Bartter's syndrome [letter] Higashi K, et al. **J Rheumatol** 1997 Aug;24(8):1663–4 (17 ref.)

Severe reversible cardiomyopathy associated with systemic vasculitis in primary Sjögren's syndrome [clinical conference] Golan TD, et al. **Lupus** 1997;6(6):505–8

The female patient with faints and fatigue: don't forget Sjögren's syndrome. Asim M, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1516–7

The patient with chronic renal failure of unknown origin—don't forget Sjögren's syndrome. Bacon NC, et al. **Nephrol Dial Transplant** 1996 Aug;11(8):1645–8

ANCA-associated pauci-immune crescentic glomerulonephritis complicating Sjögren's syndrome. Hernández JL, et al. **Nephrol Dial Transplant** 1996 Nov; 11(11):2313–5

Sjögren's syndrome associated with haemolytic-uraemic syndrome as the presenting clinical manifestation. Settefrati N, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2316–9

Primary biliary cirrhosis complicated with Sjögren syndrome and multiple myeloma. A case report [letter] Akashi Y, et al. **Nephron** 1996;73(4):730–2

Peripheral neuropathy associated with sicca complex. Grant IA, et al. **Neurology** 1997 Apr;48(4):855–62

Sicca syndrome in patients infected with the human immunodeficiency virus [published erratum appears in Ophthalmology 1996 Feb;103(2):204] Geier SA, et al. **Ophthalmology** 1995 Sep;102(9):1319–24

Prevalence of periodontal disease in patients with Sjögren's syndrome. Najera MP, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):453–7

Primary localized nodular tongue amyloidosis associated with Sjögren's syndrome. Haraguchi H, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan–Feb; 59(1):60–3

Lethargy in a patient with cirrhosis. Chuah SY, et al. **Postgrad Med J** 1997 Mar;73(857):177–9

Sjögren's syndrome in patients with newly diagnosed untreated non-Hodgkin's lymphoma. Andonopoulos AP, et al. **Rev Rhum Engl Ed** 1997 May;64(5):287–92 (21 ref.)

Thyroid gland disorders in primary Sjögren's syndrome. Punzi L, et al. **Rev Rhum Engl Ed** 1996 Dec;63(11):809–14

Gastritis classified in accordance with the Sydney system in patients with primary Sjögren's syndrome. Collin P, et al. **Scand J Gastroenterol** 1997 Feb;32(2):108–11

Primary Sjögren's syndrome complicated by hemolytic uremic syndrome. Agapitos E, et al. **Scand J Rheumatol** 1996;25(4):263–5

Probability of the development of non-Hodgkin's lymphoma in primary Sjögren's syndrome [letter; comment] Hernández JA, et al. **Scand J Rheumatol** 1996;25(6):396–7 . Comment on: Scand J Rheumatol 1995;24(6):342–5.

Non-Hodgkin's lymphomas complicating Sjögren's syndrome: can Epstein Barr virus be implicated? Jeffers M, et al. **Scand J Rheumatol** 1997;26(3):180–3

Risk factors of calcium stone formation in patients with primary Sjögren's syndrome. Eriksson P, et al. **Urol Res** 1996;24(1):39–43

[Clinical judgment and decision making in clinical practice. A patient with joint symptoms (letter; comment)] Kamerling RK. **Ned Tijdschr Geneeskd** 1996 Sep 28; 140(39):1968–9. Comment on: Ned Tijdschr Geneeskd 1996 Aug 17;140(33):1675–9. **(Dut)**

[Systemic manifestations of primary Gougerot–Sjögren syndrome. Nature and incidence apropos of 34 cases] Ecoiffier EB, et al. **Presse Med** 1997 Jun 21;26(21):995–9 (15 ref.) (Eng. Abstr.) **(Fre)**

[Gougerot Sjögren syndrome and hepatitis C virus: what relation? (editorial)] Wattiaux MJ. **Presse Med** 1997 Apr 26;26(14):652–5 (Eng. Abstr.) **(Fre)**

[Transient Sjögren syndrome with pancreatic involvement (letter)] Chemlal K, et al. **Rev Med Interne** 1997;18(6):492–3 **(Fre)**

[Asbestosis and primary Gougerot–Sjögren syndrome (letter)] Delbrel X, et al. **Rev Med Interne** 1996;17(9):775–6 **(Fre)**

[Hodgkin disease with cellular markers of Epstein–Barr virus complicating the course of Gougerot–Sjögren syndrome (letter)] Gaches F, et al. **Rev Med Interne** 1997;18(1):79–80 **(Fre)**

[After winter ... springtime] Lambert M, et al. **Rev Med Interne** 1997;18 Suppl 3:285s–287s **(Fre)**

[Hypokalemic quadriparesis disclosing distal tubular acidosis in primary Gougerot–Sjögren syndrome (letter)] Neau D, et al. **Rev Med Interne** 1996;17(12):1039–40 **(Fre)**

[Involvements of the peripheral nervous system and primary Gougerot–Sjögren syndrome] Rodier G, et al. **Rev Med Interne** 1996;17(7):558–62 (30 ref.) (Eng. Abstr.) **(Fre)**

[A case report of coronary artery bypass grafting in a patient with Sjögren's syndrome] Ingu A, et al. **Kyobu Geka** 1996 Sep;49(10):847–50 (Eng. Abstr.) **(Jpn)**

[A case of Sjögren's syndrome associated with EDTA-dependent pseudothrombocytopenia] Hosokawa T, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Apr; 20(2):139–44 (Eng. Abstr.) **(Jpn)**

[Severe left ventricular dysfunction in a patient with primary Sjögren's syndrome] Takaoka S, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Jun; 20(3):199–205 (Eng. Abstr.) **(Jpn)**

[A case of Sjögren's syndrome complicated by membranous nephropathy] Kosugi E, et al. **Nippon Jinzo Gakkai Shi** 1996 Sep;38(9):413–6 (Eng. Abstr.) **(Jpn)**

[Lymphocytic interstitial pneumonia associated with Sjögren's syndrome and mediastinal lymphadenopathy: diagnosis by open-lung biopsy] Andoh M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):346–51 (Eng. Abstr.) **(Jpn)**

[Clinical and immunological study of airway disease in collagen vascular disease] Hayakawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:264–7 (Eng. Abstr.) **(Jpn)**

[Sjögren's syndrome complicated by thymoma] Terashima M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Dec; 34(12):1369–74 (Eng. Abstr.) **(Jpn)**

[A case of Sjogren syndrome with renal tubular acidosis, osteomalacia and pseudo-bone fracture] Haba T, et al. **Nippon Naika Gakkai Zasshi** 1994 Jan 10;83(1):127–9 **(Jpn)**

SJOGREN'S SYNDROME

[Case of polyglandular autoimmune syndrome with Schmidt's syndrome complicated with Sjogren's syndrome] Ishii T, et al. **Nippon Naika Gakkai Zasshi** 1996 Dec 10; 85(12):2075–7 **(Jpn)**

[Coping with pathological changes in digestive system and kidney in collagen diseases—special reference to Sjogren's syndrome and interstitial nephritis] Matsumura R, et al. **Nippon Naika Gakkai Zasshi** 1996 Nov 10;85(11):1867–71 (5 ref.) **(Jpn)**

[Sjögren's syndrome with presenting as aseptic meningoencephaloradiculopathy in an elderly woman] Miyachi T, et al. **Nippon Ronen Igakkai Zasshi** 1997 May; 34(5):415–20 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of Sjögren's syndrome with a high titer of anticardiolipin antibody that developed as parkinsonism] Mochizuki H, et al. **Rinsho Shinkeigaku** 1997 Jan;37(1):57–9 (Eng. Abstr.) **(Jpn)**

[A patient with Sjögren syndrome with central pontine myelinolysis and hypokalemic myopathy] Nagashima K, et al. **Rinsho Shinkeigaku** 1996 Nov;36(11):1240–4 (Eng. Abstr.) **(Jpn)**

[Primary biliary cirrhosis (PBC)–CREST overlap syndrome complicated with Sjögren's syndrome] Akiyama Y, et al. **Ryumachi** 1997 Feb;37(1):42–7 (Eng. Abstr.) **(Jpn)**

[A case of Sjögren's syndrome and systemic lupus erythematosus complicated with necrotizing angiitis of the gallbladder] Suwa A, et al. **Ryumachi** 1995 Dec;35(6):904–9 (19 ref.) (Eng. Abstr.) **(Jpn)**

[A case of Sjögren's syndrome with lymphocytic interstitial pneumonia] Takeda T, et al. **Ryumachi** 1996 Jun; 36(3):565–9 (Eng. Abstr.) **(Jpn)**

[A case of an old woman with Sjögren's syndrome associated with insulin-dependent diabetes mellitus] Takeuchi K, et al. **Ryumachi** 1996 Oct;36(5):769–74 (Eng. Abstr.) **(Jpn)**

[Triple autoimmune association in man: Sjogren's syndrome, systemic lupus erythematosus and primary biliary cirrhosis (letter)] Cabanillas Núñez Y, et al. **An Med Interna** 1996 Aug;13(8):407 **(Spa)**

[Sjogren syndrome and hepatitis c virus infection (letter)] Coll J, et al. **An Med Interna** 1996 Aug;13(8):412 **(Spa)**

[Angiocentric pulmonary T-cell lymphoma associated with primary Sjögren syndrome (letter)] Ros S, et al. **Med Clin (Barc)** 1996 Jun 15;107(3):117–8 **(Spa)**

[Acute paraparesis associated with dorsal diastematomyelia in an adult] Carrillo F, et al. **Rev Neurol** 1996 Mar; 24(127):290–2 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Test and symptoms in keratoconjunctivitis sicca and their correlation [see comments] Bjerrum KB. **Acta Ophthalmol Scand** 1996 Oct;74(5):436–41. Comment in: Acta Ophthalmol Scand 1996 Oct;74(5):417.

Utility and safety of parotid gland biopsy in Sjögren's syndrome. Biasi D, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):896–9

Adie syndrome as the initial sign of primary Sjögren syndrome. Bachmeyer C, et al. **Am J Ophthalmol** 1997 May; 123(5):691–2

Prognostic factors in Sjögren's syndrome: comment on the article by Kruize et al [letter; comment] Anand A, et al. **Arthritis Rheum** 1996 Oct;39(10):1765–6. Comment on: Arthritis Rheum 1996 Feb;39(2):297–303.

Lambda light chain deposition disease presenting as sicca syndrome. Hamidou MA, et al. **Arthritis Rheum** 1997 Mar; 40(3):587–8

Should patients presenting with dry eyes be screened for autoimmune rheumatic disorders? [letter] Pal B. **Br J Rheumatol** 1997 Feb;36(2):301

An unusual presentation of Sjögren's syndrome. Crooks GW, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):483–4

Subjective and clinical oral symptoms in patients with primary Sjögren's syndrome. Lundström IM, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):725–31

The lactoferrin tear test in the diagnosis of Sjögren's syndrome. Da Dalt S, et al. **Eur J Ophthalmol** 1996 Jul–Sep; 6(3):284–6

Annular erythema associated with lupus erythematosus/Sjögren's syndrome. Watanabe T, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):214–8

Scaling lichenoid eruptions and Sjögren-like syndrome: manifestations of nonfatal postoperative transfusion-associated graft-versus-host disease? Tanei R, et al. **J Dermatol** 1997 Aug;24(8):514–21

SS-A/Ro antibodies in Chinese patients with systemic lupus erythematosus and Sjögren's syndrome. Tsay GJ, et al. **J Formos Med Assoc** 1996 Dec;95(12):905–10

Sjögren's syndrome: the persisting conundrum [editorial] Buchanan WW. **J Rheumatol** 1997 Sep;24(9):1667–9 (30 ref.)

Biopsy of labial salivary glands and lacrimal glands in the diagnosis of Sjögren's syndrome [letter; comment] Norman JE. **J Rheumatol** 1997 Feb;24(2):409. Comment on: J Rheumatol 1996 Jan;23(1):76–82.

Decreased reflex tearing is associated with lymphocytic infiltration in lacrimal glands. Tsubota K, et al. **J Rheumatol** 1996 Feb;23(2):313–20

Biopsy of labial salivary glands and lacrimal glands in the diagnosis of Sjögren's syndrome [see comments] Xu KP, et al. **J Rheumatol** 1996 Jan;23(1):76–82. Comment in: J Rheumatol 1997 Feb;24(2):409.

Sjögren's syndrome presenting as hypokalemic paralysis due to distal renal tubular acidosis. Zimhony O, et al. **J Rheumatol** 1995 Dec;22(12):2366–8

Primary Sjögren's syndrome presenting as progressive parkinsonian syndrome. Créange A, et al. **Mov Disord** 1997 Jan;12(1):121–3

Reliability of ultrasonography and sialography in the diagnosis of Sjögren's syndrome. Yoshiura K, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Mar;83(3):400–7

Quantitative assessment of clinical disease status in primary Sjögren's syndrome. A cross-sectional study using a new classification model. Asmussen K, et al. **Scand J Rheumatol** 1997;26(3):197–205

Autoantibodies and primary Sjögren's syndrome in a hypocitraturic stone population. Eriksson P, et al. **Scand J Urol Nephrol** 1997 Feb;31(1):73–80

[Preliminary diagnostic criteria for primary Sjogren's syndrome in China] Dong Y, et al. **Chung Hua Nei Ko Tsa Chih** 1996 Feb;35(2):114–7 (Eng. Abstr.) **(Chi)**

[Clinical judgment and decision making in clinical practice. A patient with joint symptoms (letter; comment)] Kamerling RK. **Ned Tijdschr Geneeskd** 1996 Sep 28; 140(39):1968–9. Comment on: Ned Tijdschr Geneeskd 1996 Aug 17;140(33):1675–9. **(Dut)**

[A case from practice (360). Primary Sjögren syndrome] Diamantis I. **Schweiz Rundsch Med Prax** 1996 Oct 29; 85(44):1419–20 **(Ger)**

[Organ-specific nodular pulmonary amyloidosis of the A lambda type in Sjogren syndrome] Schneider F, et al. **Z Arztl Fortbild (Jena)** 1997 Jan;90(8):719–23 (Eng. Abstr.) **(Ger)**

[Fibromyalgia and Sjögren syndrome—clinical and methodological aspects (see comments)] Dohrenbusch R, et al. **Z Rheumatol** 1996 Jan–Feb;55(1):19–27 (Eng. Abstr.) . Comment in: Z Rheumatol 1996 Jan–Feb;55(1):1–3. **(Ger)**

[The imaging diagnosis of Sjögren's syndrome: echography, sialography and scintigraphy compared in the study of the salivary glands] Napoli V, et al. **Minerva Stomatol** 1996 Apr;45(4):141–8 (Eng. Abstr.) **(Ita)**

[Sjögren's syndrome. New diagnostic aspects] Haga HJ, et al. **Tidsskr Nor Laegeforen** 1997 Jun 10;117(15):2197–200 (18 ref.) (Eng. Abstr.) **(Nor)**

[Primary Sjögren's syndrome: clinical and immunologic study of 80 patients] Ramos M, et al. **Med Clin (Barc)** 1997 May 3;108(17):652–7 (Eng. Abstr.) **(Spa)**

[Acute tetraplegia in a patient with Sjögren's syndrome (letter)] Sánchez-Chaparro MA, et al. **Med Clin (Barc)** 1997 Mar 8;108(9):356–7 (10 ref.) **(Spa)**

DRUG THERAPY

Methotrexate in primary Sjögren's syndrome. Skopouli FN, et al. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):555–8

Therapeutic effect of ethamsylate in a case of hyperglobulinemic purpura associated with Sjogren's syndrome [letter] Casas HA. **J Rheumatol** 1996 Mar; 23(3):573

Treatment of primary Sjögren's syndrome with hydroxychloroquine: a retrospective, open-label study. Fox RI, et al. **Lupus** 1996 Jun;5 Suppl 1:S31–6

Antimalarials in Sjögren's syndrome—the Greek experience. Manoussakis MN, et al. **Lupus** 1996 Jun;5 Suppl 1:S28–30 (15 ref.)

[Treatment with pilocarpine hydrochloride for sicca symptoms in Sjögren's syndrome] Takaya M, et al. **Ryumachi** 1997 Jun;37(3):453–7 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Protein kinase C expression in salivary gland acinar epithelial cells in Sjögren's syndrome [letter] Törnwall J, et al. **Lancet** 1997 Jun 21;349(9068):1814–5

Elevated levels of cysteine protease activity in saliva and salivary glands of the nonobese diabetic (NOD) mouse model for Sjögren syndrome. Robinson CP, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5767–71

EPIDEMIOLOGY

Keratoconjunctivitis sicca and primary Sjögren's syndrome in a Danish population aged 30–60 years. Bjerrum KB. **Acta Ophthalmol Scand** 1997 Jun;75(3):281–6

The clinical features of Sjögren's syndrome in Japanese children. Tomiita M, et al. **Acta Paediatr Jpn** 1997 Apr; 39(2):268–72

Hepatitis C virus infection in 'primary' Sjögren's syndrome: prevalence and clinical significance in a series of 90 patients. García-Carrasco M, et al. **Ann Rheum Dis** 1997 Mar;56(3):173–5

Juvenile onset of primary Sjögren's syndrome: report of 10 cases. Ostuni PA, et al. **Clin Exp Rheumatol** 1996 Nov–Dec; 14(6):689–93

High prevalence of subclinical Sjögren's syndrome features in patients with autoimmune thyroid disease. Coll J, et al. **J Rheumatol** 1997 Sep;24(9):1719–24

ETIOLOGY

Does lymphoma 'cure' rheumatoid arthritis? [letter] Dumas A, et al. **Ann Rheum Dis** 1997 Apr;56(4):278

High prevalence of Sjögren's syndrome in patients with HTLV-I associated myelopathy. Nakamura H, et al. **Ann Rheum Dis** 1997 Mar;56(3):167–72

Pathogenesis and treatment of Sjögren's syndrome. Fox RI, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):393–9 (118 ref.)

Ophthalmological aspects in allogenic bone marrow transplantation: Sjögren-like syndrome in graft-versus-host disease. Mencucci R, et al. **Eur J Ophthalmol** 1997 Jan–Mar;7(1):13–8

Sicca syndrome and silicoproteinosis in a dental technician. Orriols R, et al. **Eur Respir J** 1997 Mar;10(3):731–4

Etiologies of the sicca syndrome: primary systemic amyloidosis and others. Richey TK, et al. **Int J Dermatol** 1996 Aug;35(8):553–7

A human T-cell lymphotropic virus type-I carrier with chronic renal failure, aplastic anemia, myelopathy, uveitis, Sjögren's syndrome and panniculitis [see comments] Osato M, et al. **Intern Med** 1996 Sep;35(9):742–5. Comment in: Intern Med 1996 Sep;35(9):677–8.

Lichen planus and Sjögren-type sicca syndrome in a patient with chronic hepatitis C. Tanei R, et al. **J Dermatol** 1997 Jan;24(1):20–7

Reversible parotid enlargement and pseudo-Sjögren's syndrome secondary to hypertriglyceridemia. Sheikh JS, et al. **J Rheumatol** 1996 Jul;23(7):1288–91

Role of the ICAM-1/LFA-1 pathway during the development of autoimmune dacryoadenitis in an animal model for Sjögren's syndrome. Takahashi M, et al. **Pathobiology** 1996;64(5):269–74

Sialadenitis histologically resembling Sjogren syndrome in mice transgenic for hepatitis C virus envelope genes. Koike K, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):233–6

Is collagenous colitis a new etiology of sicca syndrome? Soulier C, et al. **Rev Rhum Engl Ed** 1996 Oct;63(9):600–5

[Sjögren's syndrome and HTLV-I myelopathy] Merle H, et al. **Ann Med Interne (Paris)** 1996;147(8):586–9 (Eng. Abstr.) **(Fre)**

[Extrahepatic diseases in patients with hepatitis C virus infection. Probable or possible associations] Durand JM. **Presse Med** 1997 Jun 21;26(21):1023–8 (118 ref.) **(Fre)**

GENETICS

Biochemical characterization of the reverse transcriptase of a human intracisternal A-type particle (HIAP). Hart DJ, et al. **AIDS Res Hum Retroviruses** 1996 Sep 20; 12(14):1367–72

Association of a new allele of the TAP2 gene, TAP2*Bky2 (Val577), with susceptibility to Sjögren's syndrome. Kumagai S, et al. **Arthritis Rheum** 1997 Sep;40(9):1685–92

Cytokine gene expression and autoantibody production in Sjögren's syndrome of MRL/lpr mice. Hayashi Y, et al. **Autoimmunity** 1996;23(4):269–77

Autoimmune disease of exocrine organs in immunodeficient alymphoplasia mice: a spontaneous model for Sjögren's syndrome. Tsubata R, et al. **Eur J Immunol** 1996 Nov; 26(11):2742–8

Different La/SS-B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757–66

Immunologically restricted and inhibitory anti-Ro/SSA in monozygotic twins. Scofield RH, et al. **Lupus** 1997; 6(4):395–8

IMMUNOLOGY

Association of Epstein-Barr virus (EBV) with Sjögren's syndrome: differential EBV expression between epithelial cells and lymphocytes in salivary glands. Wen S, et al. **Am J Pathol** 1996 Nov;149(5):1511–7

Clinical significance of antinuclear antibodies in systemic rheumatic diseases. Hietarinta M, et al. **Ann Med** 1996 Aug; 28(4):283–91 (84 ref.)

Characterisation of follicular dendritic cells in labial salivary glands of patients with primary Sjögren syndrome: comparison with tonsillar lymphoid follicles. Aziz KE, et al. **Ann Rheum Dis** 1997 Feb;56(2):140–3

Immunohistochemistry of minor salivary gland biopsy specimens from patients with Sjögren's syndrome with and without hepatitis C virus infection. Coll J, et al. **Ann Rheum Dis** 1997 Jun;56(6):390–2

Assessment of anti-endothelial cell antibodies in systemic sclerosis and Sjögren's syndrome. Hebbar M, et al. **Ann Rheum Dis** 1997 Apr;56(4):230–4

Characterization of prelymphomatous stages of B cell lymphoproliferation in Sjögren's syndrome. De Vita S, et al. **Arthritis Rheum** 1997 Feb;40(2):318–31

Molecular cloning of a novel 97-kd Golgi complex autoantigen associated with Sjögren's syndrome. Griffith KJ, et al. **Arthritis Rheum** 1997 Sep;40(9):1693–702

Distinct immunologic features of Finnish Sjögren's syndrome patients with HLA alleles DRB1*0301, DQA1*0501, and DQB1*0201. Alterations in circulating T cell receptor gamma/delta subsets. Kerttula TO, et al. **Arthritis Rheum** 1996 Oct;39(10):1733–9

Peripheral blood in Sjögren's syndrome does not contain increased levels of T lymphocytes reactive with the recombinant Ro/SS-A 52 kD and La/SS-B 48 kD autoantigens. Halse AK, et al. **Autoimmunity** 1996; 23(1):25–34

Cytokine gene expression and autoantibody production in Sjögren's syndrome of MRL/lpr mice. Hayashi Y, et al. **Autoimmunity** 1996;23(4):269–77

Characterization of T cell receptor repertoire and anti-Ro/SSA autoantibodies in relation to sialadenitis of NOD mice. Skarstein K, et al. **Autoimmunity** 1995;

22(1):9–16

T-cell receptor repertoire of infiltrating T cells in lachrymal glands, salivary glands and kidneys from alymphoplasia (aly) mutant mice: a new model for Sjögren's syndrome. Furukawa M, et al. **Br J Rheumatol** 1996 Dec; 35(12):1223–30

Rheumatic disease patients, prone to Sjögren's syndrome and/or lymphoma, mount an antibody response to BHRF1, the Epstein–Barr viral homologue of BCL–2. Newkirk MM, et al. **Br J Rheumatol** 1996 Nov;35(11):1075–81

T-cell receptor in Sjögren's syndrome. Sumida T, et al. **Br J Rheumatol** 1997 Jun;36(6):622–9 (52 ref.)

Effector mechanism of experimental autoimmune sialadenitis in the mouse model for primary Sjögren's syndrome. Hayashi Y, et al. **Cell Immunol** 1996 Aug 1;171(2):217–25

Circulating antibodies against rat parotid gland M3 muscarinic receptors in primary Sjögren's syndrome. Bacman S, et al. **Clin Exp Immunol** 1996 Jun;104(3):454–9

Practical usefulness of IgA–containing immune complex determination in the serum of patients with primary Sjögren's syndrome. Basset C, et al. **Clin Exp Rheumatol** 1997 Mar–Apr;15(2):157–61

Antiphospholipid antibodies in primary Sjögren's syndrome: prevalence and clinical significance in a series of 80 patients. Cervera R, et al. **Clin Exp Rheumatol** 1997 Jul–Aug;15(4):361–5

Ductal Fas antigen and the pathobiology of Sjögren's syndrome [editorial; comment] De Vita S. **Clin Exp Rheumatol** 1996 May–Jun;14(3):231–4. Comment on: Clin Exp Rheumatol 1996 May–Jun;14(3):309–11.

Expression of ductal Fas antigen in sialoadenitis of Sjögren's syndrome [see comments] Matsumura R, et al. **Clin Exp Rheumatol** 1996 May–Jun;14(3):309–11. Comment in: Clin Exp Rheumatol 1996 May–Jun;14(3):231–4.

Association of Sjögren's syndrome with hereditary angioneurotic edema: report of a case. Suzuki Y, et al. **Clin Immunol Immunopathol** 1997 Jul;84(1):95–7

Current concepts of autoimmune exocrinopathy: immunologic mechanisms in the salivary pathology of Sjögren's syndrome. Fox PC, et al. **Crit Rev Oral Biol Med** 1996;7(2):144–58 (111 ref.)

Biclonal immunoglobulin M dysglobulinaemia: evolving aspects in a case of primary Sjögren's syndrome. Pontet F, et al. **Eur J Clin Chem Clin Biochem** 1997 Apr; 35(4):287–90

Epitope mapping of the Ro/SSA60KD autoantigen reveals disease–specific antibody–binding profiles. Routsias JG, et al. **Eur J Clin Invest** 1996 Jun;26(6):514–21

Differential recognition of the 52–kd Ro(SS–A) antigen by sera from patients with primary biliary cirrhosis and primary Sjögren's syndrome. Dörner T, et al. **Hepatology** 1996 Dec;24(6):1404–7

Differential interleukin (IL)–10 and IL–13 gene expression in vivo in salivary glands and peripheral blood mononuclear cells from patients with primary Sjögren's syndrome. Villarreal GM, et al. **Immunol Lett** 1996 Jan; 49(1–2):105–9

Different La/SS–B mRNA isoforms are expressed in salivary gland tissue of patients with primary Sjögren's syndrome. Bachmann M, et al. **J Autoimmun** 1996 Dec;9(6):757–66

Anti–Fc gamma receptor autoantibodies from patients with Sjögren's syndrome do not react with native receptor on human polymorphonuclear leukocytes. Lamour A, et al. **J Autoimmun** 1996 Apr;9(2):181–91

Sjögren's syndrome salivary gland immunopathology: increased laminin expression precedes lymphocytic infiltration. McArthur CP, et al. **J Autoimmun** 1997 Feb; 10(1):59–65

Detection of human–specific anti–la(SSB) antibodies in patients with rheumatoid arthritis. Manoussakis MN, et al. **J Autoimmun** 1995 Dec;8(6):959–69

TCR in Fas–sensitive T cells from labial salivary glands of patients with Sjögren's syndrome. Sumida T, et al. **J Immunol** 1997 Jan 15;158(2):1020–5

Anti–52 kDa Ro(SSA) autoantibodies in different autoimmune diseases preferentially recognize epitopes on the central region of the antigen. Dorner T, et al. **J Rheumatol** 1996 Mar;23(3):462–8

Salivary and serum interleukin 6 in primary Sjögren's syndrome. Grisius MM, et al. **J Rheumatol** 1997 Jun; 24(6):1089–91

The presence of anti–Fc gamma receptor autoantibodies is related to the clinical presentation of primary Sjögren's syndrome. Lamour A, et al. **J Rheumatol** 1995 Dec; 22(12):2241–5

Recombinant 52 kDa Ro(SSA) ELISA detects autoantibodies in Sjögren's syndrome sera that go undetected by conventional serologic assays. McCauliffe DP, et al. **J Rheumatol** 1997 May;24(5):860–6

Sex hormones and Sjögren's syndrome. Sullivan DA. **J Rheumatol** 1997 Sep;24 Suppl 50:17–32 (249 ref.)

New T–cell epitope of Ro/SS–A 52 kDa protein in labial salivary glands from patients with Sjögren's syndrome [letter] Sumida T, et al. **Lancet** 1996 Dec 14;348(9042):1667

Cutaneous diseases in adults associated with anti–Ro/SS–A autoantibody production. McCauliffe DP. **Lupus** 1997; 6(2):158–66 (100 ref.)

Anti–Ro(SS–A) antibody positive Sjögren's/lupus erythematosus overlap syndrome. Provost TT, et al. **Lupus** 1997;6(2):105–11

Late development of anti–La/SS–B antibodies in a patient with Sjogren's syndrome and high titer anti–Ro/SS–A antibodies. Satoh M, et al. **Lupus** 1996 Aug;5(4):337–9

Immunologically restricted and inhibitory anti–Ro/SSA in monozygotic twins. Scofield RH, et al. **Lupus** 1997; 6(4):395–8

Circulating antibodies against neonatal cardiac muscarinic acetylcholine receptor in patients with Sjögren's syndrome. Borda E, et al. **Mol Cell Biochem** 1996 Oct–Nov; 163–164:335–41

Differential immunological aberrations in patients with primary and secondary Sjögren's syndrome. Kroneld U, et al. **Scand J Immunol** 1997 Jun;45(6):698–705

Identification of alpha–fodrin as a candidate autoantigen in primary Sjögren's syndrome. Haneji N, et al. **Science** 1997 Apr 25;276(5312):604–7

Decay–accelerating factor (DAF, CD55)–negative T lymphocytes in the peripheral blood of Sjögren's syndrome patients. Ichikawa Y, et al. **Tokai J Exp Clin Med** 1996 Oct;21(3):121–8

[Cell–mediated immunity in patients with Sjogren's syndrome] Krejsek J, et al. **Cas Lek Cesk** 1997 Jan 22; 136(2):44–7 (Eng. Abstr.) **(Cze)**

[Clonal B–cell reaction in Sjögren disease and Hashimoto autoimmune thyroiditis] Tiemann M, et al. **Pathologe** 1996 Jul;17(4):289–95 (Eng. Abstr.) **(Ger)**

[Rheumatoid factor idiotypes in patients with Sjögren's syndrome] Chen X, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Oct;19(5):468–76 (Eng. Abstr.) **(Jpn)**

[Analysis of infiltrating T–cell receptor in multiple organ lesions of patients with Sjogren's syndrome] Sumida T, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec; 18(6):653–9 (20 ref.) **(Jpn)**

[Clinical and immunological study of airway disease in collagen vascular disease] Hayakawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:264–7 (Eng. Abstr.) **(Jpn)**

[Cardiolipin antibodies in patients with chronic parenchymatous parotitis, Sjögren's syndrome and disease and tumors of the parotid salivary glands] Varshavskaia AA. **Stomatologiia (Mosk)** 1996;Spec No:48–9 **(Rus)**

[Primary Sjögren's syndrome: clinical and immunologic study of 80 patients] Ramos M, et al. **Med Clin (Barc)** 1997 May 3;108(17):652–7 (Eng. Abstr.) **(Spa)**

[Congenital heart block and maternal Sjögren Syndrome (letter)] Hübscher O, et al. **Medicina (B Aires)** 1996; 56(2):207–8 **(Spa)**

METABOLISM

Observation of precorneal tear film in patients with Sjögren's syndrome. Danjo Y, et al. **Acta Ophthalmol Scand** 1995 Dec;73(6):501–5

Premature fat deposition in the salivary glands associated with Sjögren syndrome: MR and CT evidence. Izumi M, et al. **AJNR Am J Neuroradiol** 1997 May;18(5):951–8

Cytokine expression in the salivary glands of Sjögren's syndrome patients in relation to tissue infiltration and lymphoepithelial lesions [letter; comment] Ferraccioli GF, et al. **Arthritis Rheum** 1997 May;40(5):987–90. Comment on: Arthritis Rheum 1996 Aug;39(8):1376–84.

Fas and Fas ligand expression in the salivary glands of patients with primary Sjögren's syndrome. Kong L, et al. **Arthritis Rheum** 1997 Jan;40(1):87–97

Salivary mucous glycoprotein MG1 in Sjögren's syndrome. Saari H, et al. **Clin Chim Acta** 1997 Mar 18;259(1–2):83–96

IL–1 receptor antagonist in saliva; characterization in normal saliva and reduced concentration in Sjögren's syndrome (SS). Dubost JJ, et al. **Clin Exp Immunol** 1996 Nov; 106(2):237–42

Indicators of salivary gland inflammation in primary Sjogren's syndrome. Cuida M, et al. **Eur J Oral Sci** 1997 Jun;105(3):228–33

Analysis of the concentration and output of whole salivary constituents in patients with Sjögren's syndrome. van der Reijden WA, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):335–40

Increased production of B cell growth factor (BCGF) in Sjögren's syndrome. Goto Y, et al. **J Autoimmun** 1996 Aug; 9(4):545–50

Botulinum toxin increases tearing in patients with Sjögren's syndrome: a preliminary report. Spiera H, et al. **J Rheumatol** 1997 Sep;24(9):1842–3

Correlation of goblet cell density and mucosal epithelial membrane mucin expression with rose bengal staining in patients with ocular irritation. Pflugfelder SC, et al. **Ophthalmology** 1997 Feb;104(2):223–35

[Expression of cytokines in labial gland of Sjögren's syndrome] Ding D, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jun;76(6):427–30 (Eng. Abstr.) **(Chi)**

[The normal tear fluid and decreased tearing in patients with Sjögren's disease and Sjögren's syndrome. II. The lipid content] Morozova RP, et al. **Ukr Biokhim Zh** 1996 Mar–Apr;68(2):82–7 (Eng. Abstr.) **(Ukr)**

[The normal tear fluid and decreased tearing in patients with Sjögren's disease and Sjögren's syndrome. I. The protein and glucose content] Morozova rp, et al. **Ukr Biokhim Zh** 1996 Mar–Apr;68(2):77–82 (Eng. Abstr.) **(Ukr)**

PATHOLOGY

CD4–positive T–lymphocytes infiltrate the bronchial mucosa of patients with Sjögren's syndrome. Papiris SA, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):637–41

Immunohistochemical findings of arterial fibrinoid necrosis in major and lingual minor salivary glands of primary Sjögren's syndrome. Takahashi H, et al. **Anal Cell Pathol** 1996 Dec;12(3):145–57

Immunohistochemical characterization of the cellular infiltrates in Sjögren's syndrome, rheumatoid arthritis and osteoarthritis with special reference to calprotectin–producing cells. Cuida M, et al. **APMIS** 1996 Dec;104(12):881–90

Characterization of prelymphomatous stages of B cell lymphoproliferation in Sjögren's syndrome. De Vita S, et al. **Arthritis Rheum** 1997 Feb;40(2):318–31

Molecular cloning of anti–SS–A/Ro 60–kDa peptide Fab fragments from infiltrating salivary gland lymphocytes of a patient with Sjögren's syndrome. Suzuki H, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):101–6

Nailfold capillary abnormalities in patients with Sjögren's syndrome and systemic lupus erythematosus. Ohtsuka T. **Br J Dermatol** 1997 Jan;136(1):94–6

Histopathology of renal biopsies with correlation to clinical findings in primary Sjögren's syndrome. Enestrom S, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):697–703

CD4 cytopenia and occasional expansion of CD4+CD8+lymphocytes in Sjögren's syndrome. Ferraccioli GF, et al. **Clin Exp Rheumatol** 1996 Mar–Apr; 14(2):125–30

Severe, chronic anorexia and extensive leg ulcerations as presenting signs of primary Sjögren's syndrome. Guggisberg D, et al. **Dermatology** 1997;195(1):93–5

Chronic lymphocytic sialoadenitis in HCV–related chronic liver disease: comparison of Sjögren's syndrome. Scott CA, et al. **Histopathology** 1997 Jan;30(1):41–8

Immunohistological analysis of tumour growth factor beta 1 expression in normal and inflamed salivary glands. Kizu Y, et al. **J Clin Pathol** 1996 Sep;49(9):728–32

Sjögren's syndrome plasma cell panniculitis and hidradenitis. McGovern TW, et al. **J Cutan Pathol** 1996 Apr;23(2):170–4

Early asymmetric neuropathy in primary Sjögren's syndrome. Denišlič M, et al. **J Neurol** 1997 Jun; 244(6):383–7

Quantitative analysis of apoptosis and bcl–2 in Sjögren's syndrome. Manganelli P, et al. **J Rheumatol** 1997 Aug; 24(8):1552–7

Reversible parotid enlargement and pseudo–Sjögren's syndrome secondary to hypertriglyceridemia. Sheikh JS, et al. **J Rheumatol** 1996 Jul;23(7):1288–91

The patient with chronic renal failure of unknown origin––don't forget Sjögren's syndrome. Bacon NC, et al. **Nephrol Dial Transplant** 1996 Aug;11(8):1645–8

[The pathology of labial salivary gland in the diagnosis of Sjogren's syndrome] Li X, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Feb; 18(1):19–22 (Eng. Abstr.) **(Chi)**

[Formal pathogenesis of lymphoepithelial cysts in Sjogren's syndrome and HIV–associated sialadenitis] Ihrler S, et al. **Verh Dtsch Ges Pathol** 1996;80:327 **(Ger)**

[Exfoliative conjunctival cytology in Sjögren's syndrome] Sallì L, et al. **Clin Ter** 1996 Oct;147(10):489–93 (Eng. Abstr.) **(Ita)**

[Evaluation of conjunctival epithelial damage in dry eye] Suzuki T, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jan; 101(1):52–6 (Eng. Abstr.) **(Jpn)**

[Study of apoptosis in Sjögren's syndrome] Ogawa N, et al. **Rinsho Byori** 1997 Jul;45(7):643–8 (11 ref.) (Eng. Abstr.) **(Jpn)**

[The comparative clinico–morphological characteristics of chronic parotitis in sarcoidosis and primary Sjögren's syndrome] Varshavskiĭ AI, et al. **Ter Arkh** 1996;68(5):36–41 (Eng. Abstr.) **(Rus)**

[The cytological findings in decreased tear production in patients with Sjögren's disease and syndrome] Zhaboedov GD, et al. **Vestn Oftalmol** 1996 Apr–Jun;112(2):48–50 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Role of nitric oxide in Sjögren's syndrome. Konttinen YT, et al. **Arthritis Rheum** 1997 May;40(5):875–83

Lymphocyte apoptosis and apoptosis–associated gene expression in Sjögren's syndrome. Ogawa N, et al. **Arthritis Rheum** 1996 Nov;39(11):1875–85

Neuroendocrine changes in systemic lupus erythematosus and Sjögren's syndrome. Fox RA, et al. **Baillieres Clin Rheumatol** 1996 May;10(2):333–47 (86 ref.)

Sweating in Sjögrens syndrome [letter; comment] Rees JL. **Br J Dermatol** 1996 Sep;135(3):489. Comment on: Br J Dermatol 1995 Nov;133(5):716–20.

Long–term course of tear gland function in patients with keratoconjunctivitis sicca and Sjögren's syndrome [see comments] Kruize AA, et al. **Br J Ophthalmol** 1997 Jun; 81(6):435–8. Comment in: Br J Ophthalmol 1997 Jun;81(6):426.

An unusual presentation of Sjögren's syndrome. Crooks GW, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):483–4

Esophageal motor function in primary Sjögren's syndrome: correlation with dysphagia and xerostomia. Anselmino M, et al. **Dig Dis Sci** 1997 Jan;42(1):113–8

Primary biliary cirrhosis, sicca complex, and dysphagia. Mang FW, et al. **Dysphagia** 1997 Summer;12(3):167–70

A comparison of glandular involvement between chronic graft–versus–host disease and Sjögren's syndrome. Hiroki

SJOGREN'S SYNDROME

A, et al. **Int J Oral Maxillofac Surg** 1996 Aug;25(4):298–307

Role of cytokines in the destruction of acinar structure in Sjögren's syndrome salivary glands. Azuma M, et al. **Lab Invest** 1997 Sep;77(3):269–80

Evaluation of transparency and barrier function of the cornea by Scheimpflug images. Kitagawa K, et al. **Ophthalmic Res** 1996;28 Suppl 2:72–7

Disturbances of autonomic nervous function in primary Sjögren's syndrome. Mandl T, et al. **Scand J Rheumatol** 1997;26(4):253–8

Pancreatic exocrine involvement in primary Sjögren's syndrome. Ostuni PA, et al. **Scand J Rheumatol** 1996; 25(1):47–51

Glomerular filtration rate in primary Sjögren's syndrome with renal disease. Eriksson P, et al. **Scand J Urol Nephrol** 1996 Apr;30(2):121–7

[Functional reserve of the exocrine pancreas in Sjögren's syndrome] D'Ambrosi A, et al. **Recenti Prog Med** 1997 Jan;88(1):21–5 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Inspiratory and expiratory high-resolution CT findings in a patient with Sjögren's syndrome and cystic lung disease. Meyer CA, et al. **AJR Am J Roentgenol** 1997 Jan; 168(1):101–3

[Clinical and radiographic study of Sjögren syndrome in children] Zhang Z, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1996 Jan;31(1):25–7 (Eng. Abstr.) **(Chi)**

RADIONUCLIDE IMAGING

Salivary gland scintigraphy with 99mTc-pertechnetate in Sjögren's syndrome: relationship to clinicopathologic features of salivary and lacrimal glands. Saito T, et al. **J Oral Pathol Med** 1997 Jan;26(1):46–50

SURGERY

Multiple cerebral arterial occlusions in a young patient with Sjögren's syndrome: case report. Nagahiro S, et al. **Neurosurgery** 1996 Mar;38(3):592–5; discussion 595

THERAPY

Interferon alpha-2 (IFN alpha 2) increases lacrimal and salivary function in Sjögren's syndrome patients. Preliminary results of an open pilot trial versus OH-chloroquine. Ferraccioli GF, et al. **Clin Exp Rheumatol** 1996 Jul–Aug;14(4):367–71

Pathogenesis and treatment of Sjögren's syndrome. Fox RI, et al. **Curr Opin Rheumatol** 1997 Sep;9(5):393–9 (118 ref.)

Sjögren's syndrome therapy: future directions. Moutsopoulos HM. **J Rheumatol** 1997 Sep;24 Suppl 50:33–4 (11 ref.)

[Interstitial pneumonia with Sjögren's syndrome: successful treatment with steroids and an immunosuppressant] Hirata Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):317–21 (Eng. Abstr.) **(Jpn)**

[The use of plasmapheresis in treating Sjögren's disease (syndrome)] Gubin MA, et al. **Stomatologiia (Mosk)** 1996; 75(3):24–6 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

Ultrasound features of Sjögren's syndrome. Ahuja AT, et al. **Australas Radiol** 1996 Feb;40(1):10–4

Parotid gland ultrasonography as a diagnostic tool in primary Sjögren's syndrome. Makula E, et al. **Br J Rheumatol** 1996 Oct;35(10):972–7

URINE

Membranous glomerulonephritis with primary Sjögren's syndrome detected by urine screening of school children [letter] Yoshida K, et al. **Clin Nephrol** 1996 Jun;45(6):422

VIROLOGY

Elevated levels of soluble Fc epsilon RII/CD23 and antibodies to Epstein-Barr virus in patients with Sjögren's syndrome. Suzuki M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:108–12

Detection of HHV-8 in Sjögren's syndrome. Dupin N, et al. **Am J Med** 1996 Dec;101(6):657–8

Association of Epstein-Barr virus (EBV) with Sjögren's syndrome: differential EBV expression between epithelial cells and lymphocytes in salivary glands. Wen S, et al. **Am J Pathol** 1996 Nov;149(5):1511–7

HTLV-I associated uveitis, myelopathy, rheumatoid arthritis and Sjögren's syndrome. Pinheiro SR, et al. **Arq Neuropsiquiatr** 1995 Dec;53(4):777–81

Absence of HTLV-1 tax in Sjögren's syndrome [letter; comment] Rigby SP, et al. **Arthritis Rheum** 1996 Sep; 39(9):1609–11. Comment on: Arthritis Rheum 1993 Oct;36(10):1423–8. Comment on: Arthritis Rheum 1994 Apr;37(4):545–50.

Study of HHV-8 in primary Sjögren's syndrome [letter] Couty JP, et al. **Clin Exp Rheumatol** 1997 May–Jun; 15(3):333–4

HTLV-I arthropathy and Sjögren syndrome. Nishioka K. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S57–62 (34 ref.)

Retrovirus in salivary glands from patients with Sjögren's syndrome. Yamano S, et al. **J Clin Pathol** 1997 Mar; 50(3):223–30

Viruses in the etiopathogenesis of Sjögren's syndrome. Venables PJ, et al. **J Rheumatol** 1997 Sep;24 Suppl 50:3–5 (28 ref.)

A novel exogenous retrovirus sequence identified in humans. Griffiths DJ, et al. **J Virol** 1997 Apr;71(4):2866–72

Detection of Epstein-Barr virus in salivary gland specimens from Sjögren's syndrome patients. Merne ME, et al. **Laryngoscope** 1996 Dec;106(12 Pt 1):1534–9

[Potential role of Epstein-Barr virus in Sjögren's syndrome] Saito I. **Nippon Rinsho** 1997 Jun;55(6):1505–11 (19 ref.) (Eng. Abstr.) **(Jpn)**

SK&F-525-A see **PROADIFEN**

SK&F-38393

ANALOGS & DERIVATIVES

Self-administration of D1 receptor agonists by squirrel monkeys. Grech DM, et al. **Psychopharmacology (Berl)** 1996 May;125(2):97–104

ANTAGONISTS & INHIBITORS

Stimulating dopamine D1 receptors increases the locomotor activity of developing rats. Shieh GJ, et al. **Eur J Pharmacol** 1996 Sep 12;311(2–3):103–7

PHARMACOLOGY

A D1 dopamine agonist stimulates acetylcholine release from dissociated striatal cholinergic neurons. Login IS, et al. **Brain Res** 1996 Jul 15;727(1–2):162–8

D1 dopamine receptors influence Fos immunoreactivity in the globus pallidus and subthalamic nucleus of intact and nigrostriatal-lesioned rats. Ruskin DN, et al. **Brain Res** 1995 Dec 12;703(1–2):156–64

Attenuation of oxidative neuronal necrosis by a dopamine D1 agonist in mouse cortical cell cultures. Noh JS, et al. **Exp Neurol** 1997 Aug;146(2):604–8

Single prenatal injections of melatonin or the D1-dopamine receptor agonist SKF 38393 to pregnant hamsters sets the offsprings' circadian rhythms to phases 180 degrees apart. Viswanathan N, et al. **J Comp Physiol [A]** 1997 Apr; 180(4):339–46

D1 dopamine receptor agonist (SKF-38393) induction of Fos immunoreactivity in progestin receptor-containing areas of female rat brain. Meredith JM, et al. **J Neuroendocrinol** 1997 May;9(5):385–94

Self-injurious behavior and dopaminergic neuron system in neonatal 6-hydroxydopamine-lesioned rat: 2. Intracerebral microinjection of dopamine agonists and antagonists. Okamura H, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):1031–7

The neurotensin antagonist SR 48692 fails to modify the behavioural responses to a dopamine D1 receptor agonist in the rat. Stoessl AJ, et al. **Neuropharmacology** 1997 Jan; 36(1):93–9

D1-D2 dopamine receptor interaction: an in vivo single unit electrophysiological study. Murer MG, et al. **Neuroreport** 1997 Feb 10;8(3):783–7

Evidence for a tachykinin/cholinergic mediation of D1 agonist-induced turning in mice. Poncelet M, et al. **Neurosci Lett** 1996 Mar 1;205(3):185–8

Pre/postnatal dopamine D1 receptor stimulation induces a differential reduction of serotonin levels in hippocampus and superior colliculus of puber rats. Sajnani GG, et al. **Neurosci Lett** 1997 Jul 18;230(2):121–4

Apomorphine and dopamine D(1) receptor agonists increase the firing rates of subthalamic nucleus neurons. Kreiss DS, et al. **Neuroscience** 1996 Jun;72(3):863–76

Activation of dopaminergic D1 receptors promotes morphogenesis of developing striatal neurons. Schmidt U, et al. **Neuroscience** 1996 Sep;74(2):453–60

Lead-induced changes in dopamine D1 sensitivity: modulation by drug discrimination training. Cory-Slechta DA, et al. **Neurotoxicology** 1996 Summer;17(2):445–57

Conditioned grooming induced by the dopamine D1-like receptor agonist SKF 38393 in rats. Page SJ, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):829–33

Vestibular compensation in aged rats with unilateral labyrinthectomy treated with dopaminergic drugs. Drago F, et al. **Pharmacol Res** 1996 Feb;33(2):135–40

DAD1- and DAD2-like agonist effects on motor activity of C57 mice: differences compared to rats. Halberda JP, et al. **Synapse** 1997 May;26(1):81–92

D1 dopamine receptor stimulation inhibits firing activity of midbrain dopamine neurons in reserpine treated rats: an effect eliminated after hemitransection of diencephalon. Sun BC, et al. **Synapse** 1996 Sep;24(1):29–38

THERAPEUTIC USE

Bromocriptine/SKF38393 treatment ameliorates obesity and associated metabolic dysfunctions in obese (ob/ob) mice. Cincotta AH, et al. **Life Sci** 1997;61(10):951–6

SKATEBOARDING see **SKATING**

SKATES (FISH)

ANATOMY & HISTOLOGY

Distinct but overlapping populations of commissural and GABAergic neurons in the dorsal nucleus of the little skate, Raja erinacea. Duman CH, et al. **Brain Behav Evol** 1997; 49(2):99–109

Two classes of bipolar cell in the retina of the skate Raja erinacea. Schlemermeyer E, et al. **J Neurocytol** 1996 Nov; 25(11):625–35

BLOOD

Chloride and taurine effluxes occur by different pathways in skate erythrocytes. Davis-Amaral EM, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1544–9

Band 3 in cell volume regulation in fish erythrocytes. Perlman DF, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Nov;42(7):975–84 (31 ref.)

Corpuscles of Stannius-extract-induced rapid but transient hypocalcemia and hyperphosphatemia in stingray, Dasyatis akajei. Srivastav AK, et al. **Gen Comp Endocrinol** 1996 Oct; 104(1):37–40

GENETICS

Analysis of a cDNA encoding the major vault protein from the electric ray Discopyge ommata. Herrmann C, et al. **Gene** 1997 Mar 25;188(1):85–90

Cloning and characterization of a repetitive DNA detected by HindIII in the genome of Raja montagui (Batoidea, Chondrichthyes). Rocco L, et al. **Gene** 1996 Oct 17; 176(1–2):185–9

alpha, beta, gamma, and delta T cell antigen receptor genes arose early in vertebrate phylogeny. Rast JP, et al. **Immunity** 1997 Jan;6(1):1–11

METABOLISM

Characterization and function of ATP receptors on hepatocytes from the little skate Raja erinacea. Nathanson MH, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R561–70

Identification of a glycosylated relaxin-like molecule from the male Atlantic stingray, Dasyatis sabina. Büllesbach EE, et al. **Biochemistry** 1997 Sep 2;36(35):10735–41

Comparative response to UV irradiation of cytoskeletal elements in rabbit and skate lens epithelial cells. Rafferty NS, et al. **Curr Eye Res** 1997 Apr;16(4):310–9

Isolation of the putative cDNA encoding cholesterol side chain cleavage cytochrome P450 (CYP11A) of the southern stingray (Dasyatis americana). Nunez S, et al. **Gene** 1997 Mar 10;187(1):123–9

Hypotonic stress induces translocation of the osmolyte channel protein pICln in embryonic skate (Raja eglanteria) heart. Musch MW, et al. **J Exp Zool** 1997 Apr 15; 277(6):460–3

Inhibition of acetylcholine release from presynaptic terminals of skate electric organ by calcium channel antagonists: a detailed pharmacological study. Richardson CM, et al. **Neuropharmacology** 1996;35(11):1537–46

PARASITOLOGY

Observations on ultrastructure of the anterior adhesive areas and other anterior glands in the monogenean, Monocotyle spiremae (Monocotylidae), from the gills of Himantura fai (Dasyatididae). Cribb BW, et al. **Int J Parasitol** 1997 Aug; 27(8):907–17

Echinobothrium raschii n. sp. (Cestoda: Diphyllidea) from Rhinoraja longi (Chondrichthyes, Rajoidei) in the Bering Sea. Campbell RA, et al. **J Parasitol** 1997 Feb;83(1):115–20

Six species of Acanthobothrium (Eucestoda: Tetraphyllidea) in stingrays (Chondrichthyes: Rajiformes: Myliobatoidei) from Ecuador. Marguee F, et al. **J Parasitol** 1997 Jun; 83(3):475–84

PHYSIOLOGY

Swelling-activated anion conductance in skate hepatocytes: regulation by cell Cl- and ATP. Jackson PS, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C57–66

A role for GABAergic inhibition in electrosensory processing and common mode rejection in the dorsal nucleus of the little skate, Raja erinacea. Duman CH, et al. **J Comp Physiol [A]** 1996 Dec;179(6):797–807

ATP acting on P2Y receptors triggers calcium mobilization in Schwann cells at the neuroelectrocyte junction in skate. Green AC, et al. **Neuroscience** 1997 Sep;80(2):635–51

SKATING

Bilateral femoral stress fractures in a child due to in-line (roller) skating. Toren A, et al. **Acta Paediatr** 1997 Mar; 86(3):332–3

Toxic gas exposures in ice arenas. Pribyl CR, et al. **Clin J Sport Med** 1996 Oct;6(4):232–6

Force generation capacity of knee extensor muscles in speed skaters. Kanehisa H, et al. **Eur J Appl Physiol** 1996; 73(6):544–51

Skating technique for the straights, based on the optimization of a simulation model. Allinger TL, et al. **Med Sci Sports Exerc** 1997 Feb;29(2):279–86

Impact shock and attenuation during in-line skating. Mahar AT, et al. **Med Sci Sports Exerc** 1997 Aug;29(8):1069–75

Hemoglobin/myoglobin desaturation during speed skating. Rundell KW, et al. **Med Sci Sports Exerc** 1997 Feb; 29(2):248–58

INJURIES

A prospective study of in-line skating: observational series and survey of active in-line skaters--injuries, protective equipment, and training. Adams SL, et al. **Acad Emerg Med** 1996 Apr;3(4):304-11

So, just do it...go upstream. Hargarten SW. **Acad Emerg Med** 1996 Apr;3(4):293-4

Incidence of roller sport injuries in a rural area [letter] Zoch TW, et al. **Acad Emerg Med** 1997 Apr;4(4):330-3

Injuries and use of protective equipment among college in-line skaters. Williams-Avery RM, et al. **Accid Anal Prev** 1996 Nov;28(6):779-84

Late presentation of triceps rupture. A case report and review of the literature. Inhofe PD, et al. **Am J Orthop** 1996 Nov; 25(11):790-2 (10 ref.)

Biomechanical analysis of the effectiveness of in-line skating wrist guards for preventing wrist fractures. Giacobetti FB, et al. **Am J Sports Med** 1997 Mar-Apr;25(2):223-5

Spectrum of roller-blading injuries. Goh SH, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):547-9

Fatigue fracture of the medial malleolus in a junior rollerskater [letter] Dracopoulos GC. **Aust N Z J Surg** 1997 Jan;67(1):60-1

Roller-blades: should they carry a government health warning? Spicer DD, et al. **Injury** 1996 Jul;27(6):401-3

Rollerblading in children: the Edinburgh experience. McGrath D, et al. **J Accid Emerg Med** 1996 Sep;13(5):354-5

A closed pelvic fracture from wheels-in-line skating. Mora M. **J Emerg Med** 1996 Nov-Dec;14(6):711-3

In-line skating fractures in children. Mitts KG, et al. **J Pediatr Orthop** 1996 Sep-Oct;16(5):640-3

Acute compartment syndrome complicating Colles' fracture. Howden PE. **J R Nav Med Serv** 1996 Summer;82(2):139-40

Lower extremity injuries in in-line skaters: a report of two cases. Malanga GA, et al. **J Sports Med Phys Fitness** 1996 Jun;36(2):139-42

Risk factors for injuries from in-line skating and the effectiveness of safety gear [see comments] Schieber RA, et al. **N Engl J Med** 1996 Nov 28;335(22):1630-5. Comment in: N Engl J Med 1996 Nov 28;335(22):1680-5.

Protective equipment for in-line skaters [editorial; comment] Thompson RS, et al. **N Engl J Med** 1996 Nov 28; 335(22):1680-2. Comment on: N Engl J Med 1996 Nov 28;335(22):1630-5.

In-line skate and rollerskate injuries in childhood. Powell EC, et al. **Pediatr Emerg Care** 1996 Aug;12(4):259-62

Skateboarding injuries. Fountain JL, et al. **Sports Med** 1996 Dec;22(6):360-6 (46 ref.)

[Skating injuries. A study of an injury sample in a Danish community skating rink] Johannsen HG, et al. **Nord Med** 1997 Feb;112(2):61-2 (Eng. Abstr.) **(Dan)**

[Roller skating injuries] Houshian S, et al. **Ugeskr Laeger** 1997 Jun 2;159(23):3580-2 (Eng. Abstr.) **(Dan)**

[Roller skating accidents. A dangerous game on the road (editorial)] Juhl M. **Ugeskr Laeger** 1997 Jun 2;159(23):3555 **(Dan)**

[Roller skating accidents as a cause of intracranial bleeding] Knudsen HM, et al. **Ugeskr Laeger** 1997 Jun 2; 159(23):3607-8 (Eng. Abstr.) **(Dan)**

[Roller blade and in-line wheels accidents in children and adolescents] Reinberg O. **Rev Med Suisse Romande** 1996 Oct;116(10):819-21 **(Fre)**

[Injuries due to inline skating] Eingartner C, et al. **Sportverletz Sportschaden** 1997 Jun;11(2):48-51 (Eng. Abstr.) **(Ger)**

[Inline skating--typical injuries and prevention] Jerosch J, et al. **Sportverletz Sportschaden** 1997 Jun;11(2):43-7 (Eng. Abstr.) **(Ger)**

[3 cases of neck injuries in ice hockey players. Neck protection is a good life insurance] Vergis A, et al. **Lakartidningen** 1996 Oct 23;93(43):3813-4 **(Swe)**

PHYSIOLOGY

Resting metabolic rate and energy intake in female gymnasts, figure-skaters and soccer players. Fogelholm GM, et al. **Int J Sports Med** 1995 Nov;16(8):551-6

Aerobic power and supramaximal endurance of competitive figure skaters. Mannix ET, et al. **J Sports Med Phys Fitness** 1996 Sep;36(3):161-8

Kinematics of cross-country ski racing. Bilodeau B, et al. **Med Sci Sports Exerc** 1996 Jan;28(1):128-38

Exercise responses to running and in-line skating at self-selected paces. Melanson EL, et al. **Med Sci Sports Exerc** 1996 Feb;28(2):247-50

Changes in VO2max and maximal treadmill time after 9 wk of running or in-line skate training. Melanson EL, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1422-6

Effects of drafting during short-track speed skating. Rundell KW. **Med Sci Sports Exerc** 1996 Jun;28(6):765-71

Compromised oxygen uptake in speed skaters during treadmill in-line skating. Rundell KW. **Med Sci Sports Exerc** 1996 Jan;28(1):120-7

Performance-influencing factors in homogeneous groups of top athletes: a cross-sectional study. Van Ingen Schenau GJ, et al. **Med Sci Sports Exerc** 1996 Oct;28(10):1305-10

SKATOLE

Design and evaluation of an olfactometer for the assessment of 3-methylindole-induced hyposmia. Owens JG, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):60-70

BLOOD

Relationship between cytochrome P450IIE1 in liver and levels of skatole and its metabolites in intact male pigs. Squires EJ, et al. **J Anim Sci** 1997 Sep;75(9):2506-11

METABOLISM

Mechanistic studies on the cytochrome P450-catalyzed dehydrogenation of 3-methylindole. Skiles GL, et al. **Chem Res Toxicol** 1996 Jan-Feb;9(1):291-7

Identification of beta-glucuronidase-resistant diastereomeric glucuronides of 3-hydroxy-3-methyloxindole formed during 3-methylindole metabolism in goats. Smith DJ, et al. **Drug Metab Dispos** 1996 Jan;24(1):119-25

Relationship between cytochrome P450IIE1 in liver and levels of skatole and its metabolites in intact male pigs. Squires EJ, et al. **J Anim Sci** 1997 Sep;75(9):2506-11

PHARMACOLOGY

Effect of serotonergic blockade on calf pulmonary function after the intravenous administration of 3-methylindole. Linden A, et al. **J Comp Pathol** 1996 May;114(4):361-71

TOXICITY

Production and characterization of specific antibodies: utilization to predict organ- and species-selective pneumotoxicity of 3-methylindole. Kaster JK, et al. **Toxicol Appl Pharmacol** 1997 Apr;143(2):324-37

SKELETAL AGE MEASUREMENT see **AGE DETERMINATION BY SKELETON**

SKELETAL FIXATION see **FRACTURE FIXATION**

SKELETAL MUSCLE see **MUSCLE, SKELETAL**

SKELETAL MUSCLE RELAXANTS see **NEUROMUSCULAR AGENTS**

SKELETAL MUSCLE VENTRICLE see **CARDIOMYOPLASTY**

SKELETIN see **DESMIN**

SKELETON

see related
BONE AND BONES

Locomotor differentiation and different skeletal morphologies in mangabeys (Lophocebus and Cercocebus). Nakatsukasa M. **Folia Primatol (Basel)** 1996;66(1-4):15-24

Functional morphological similarities in the locomotor skeleton of miocene catarrhines and platyrrhine monkeys. Rose MD. **Folia Primatol (Basel)** 1996;66(1-4):7-14 (66 ref.)

Error propagation for relative motion determined from marker positions. Yuan X, et al. **J Biomech** 1997 Sep; 30(9):989-92

SKID ROW ALCOHOLICS see **HOMELESS PERSONS**

SKIING

Occupational dermatoses from exposure to epoxy resin compounds in a ski factory. Jolanki R, et al. **Contact Dermatitis** 1996 Jun;34(6):390-6

Computer simulation of landing movement in downhill skiing: anterior cruciate ligament injuries. Gerritsen KG, et al. **J Biomech** 1996 Jul;29(7):845-54

Dynamics of human flight on skis: improvements in safety and fairness in ski jumping. Müller W, et al. **J Biomech** 1996 Aug;29(8):1061-8

On the velocity maximization in downhill skiing. von Hertzen R, et al. **J Biomech** 1997 May;30(5):525-9

Numerical simulation of a turning alpine ski during recreational skiing. Hirano Y, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1209-13

Effect of kinematic variables on performance in women during a cross-country ski race. Rundell KW, et al. **Med Sci Sports Exerc** 1996 Nov;28(11):1413-7

On-slope evaluation of release bindings for world-class alpine racers. Nordsletten L, et al. **Scand J Med Sci Sports** 1996 Jun;6(3):176-9

[Skiing over Greenland--physical and psychological changes] Sandbaek G, et al. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1104-7 (Eng. Abstr.) **(Nor)**

[Relationship between the adaptation capacity of the organism and the type of response of the opioid system to the stress physical load] Surkina ID, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):135-8 **(Rus)**

INJURIES

Analysis of skiing accidents involving combined injuries to the medial collateral and anterior cruciate ligaments. Hull ML. **Am J Sports Med** 1997 Jan-Feb;25(1):35-40

Shoulder injuries during alpine skiing. Kocher MS, et al. **Am J Sports Med** 1996 Sep-Oct;24(5):665-9

Post-traumatic osteolysis of the distal clavicle. Reber P, et al. **Arch Orthop Trauma Surg** 1996;115(2):120-2 (17 ref.)

Skiing injuries: the increasing workload. Williams RL, et al. **Br J Sports Med** 1995 Dec;29(4):252-4

Factors predisposing to skiing injuries in Britons. Harlow T. **Injury** 1996 Dec;27(10):691-3

Differing injury patterns in snowboarding and alpine skiing. Sutherland AG, et al. **Injury** 1996 Jul;27(6):423-5

Recurrent traumatic dislocation of the hip: report of a case and review of the literature. Weber M, et al. **J Orthop Trauma** 1997 Jul;11(5):382-5 (16 ref.)

Asphyxial death of a young skier. Shephard RJ. **J Sports Med Phys Fitness** 1996 Sep;36(3):223-7

Telemark skiing injuries. Tuggy ML. **J Sports Med Phys Fitness** 1996 Sep;36(3):217-22

Bilateral renal artery thrombosis secondary to blunt trauma: case report and review of the literature. Frassinelli P, et al. **J Trauma** 1997 Feb;42(2):330-2

Snowboard traumatology: an epidemiological study. Pigozzi F, et al. **Orthopedics** 1997 Jun;20(6):505-9

Completion rates and injuries in alpine races during the 1994 Olympic Winter Games. Ekeland A, et al. **Scand J Med Sci Sports** 1996 Oct;6(5):287-90

Injuries in powder skiing. Ekeland A, et al. **Scand J Med Sci Sports** 1996 Dec;6(6):337-40

Ski injuries in Scotland. A review of statistics from Cairngorm ski area winter 1993/94. Langran M, et al. **Scott Med J** 1996 Dec;41(6):169-72

Trends in ski and snowboard injuries. Chissell HR, et al. **Sports Med** 1996 Sep;22(3):141-5 (24 ref.)

Injuries in cross-country skiing: a critical appraisal of the literature. Smith M, et al. **Sports Med** 1996 Mar; 21(3):239-50 (42 ref.)

An analysis of skiing injuries in West Virginia. Metz MM, et al. **W V Med J** 1997 Mar-Apr;93(2):68-71

Snowboarding injuries, a four-year study with comparison with alpine ski injuries [see comments] Davidson TM, et al. **West J Med** 1996 Mar;164(3):231-7. Comment in: West J Med 1996 Oct;165(4):252.

Out-of-control snowboarders [letter; comment] Wise SA. **West J Med** 1996 Oct;165(4):252. Comment on: West J Med 1996 Mar;164(3):231-7.

[Snowboard sports technique, injury pattern, prevention] Dingerkus ML, et al. **Fortschr Med** 1997 Feb 20; 115(5):26-8, 30-1 (16 ref.) (Eng. Abstr.) **(Ger)**

[Severe injuries in winter sports are on the increase (interview by Dr. rer. nat. Anita Schweiger)] Neugebauer R. **Fortschr Med** 1997 Feb 20;115(5):36 **(Ger)**

PHYSIOLOGY

Hard training for 5 mo increases Na(+)-K+ pump concentration in skeletal muscle of cross-country skiers. Evertsen F, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1417-24

Branched-chain amino acid supplementation during repeated prolonged skiing exercises at altitude. Bigard AX, et al. **Int J Sport Nutr** 1996 Sep;6(3):295-306

Muscle activity in wedge, parallel, and giant slalom skiing. Hintermeister RA, et al. **Med Sci Sports Exerc** 1997 Apr; 29(4):548-53

[Use of parameters of energy metabolism for determining body adaptation in highly qualified female athletes] Milashius KM. **Fiziol Cheloveka** 1996 Nov-Dec;22(6):5-9 **(Rus)**

["Middle molecules" as probable modulators of phagocyte function in competitive skiiers] Volchegorski i IA, et al. **Fiziol Cheloveka** 1996 Jan-Feb;22(1):140-2 **(Rus)**

["Middle molecules" and products of lipid peroxidation as a system of non-specific regulators of hemodynamics in competitive skiiers] Volchegorskiĭ IA, et al. **Fiziol Cheloveka** 1996 Nov-Dec;22(6):106-10 **(Rus)**

SKILLED NURSING FACILITIES

Infection surveillance and antibiotic utilization in a community-based skilled nursing facility. Lee YL, et al. **Aging (Milano)** 1996 Apr;8(2):113-22

Therapeutic drama activity for the cognitively impaired elderly in a nursing home. Moriyama M, et al. **Aging (Milano)** 1995 Dec;7(6):441-50

Surveillance of colonization and infection with Staphylococcus aureus susceptible or resistant to methicillin in a community skilled-nursing facility [see comments] Lee YL, et al. **Am J Infect Control** 1997 Aug; 25(4):312-21. Comment in: Am J Infect Control 1997 Aug;25(4):294-6.

Measuring antibiotic use in a long-term care facility. Mylotte JM. **Am J Infect Control** 1996 Jun;24(3):174-9

A diagnostic cluster system for skilled nursing facilities. Odio A, et al. **Fam Med** 1996 Nov-Dec;28(10):732-8

OBRA regulations and the use of psychotropic drugs in long-term care facilities: impact and implications for geropsychiatric care. Stoudemire A, et al. **Gen Hosp Psychiatry** 1996 Mar;18(2):77-94 (138 ref.)

An analysis of the use of the telephone in the management of patients in skilled nursing facilities. Fowkes W, et al. **J Am Geriatr Soc** 1997 Jan;45(1):67-70

Effect of pressure ulcers on the survival of long-term care residents. Berlowitz DR, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):M106-10

[Elderly cancer patients requiring skilled nursing care] Leibovitz A, et al. **Harefuah** 1996 Sep;131(5-6):156-60, 216, 215 (Eng. Abstr.) **(Heb)**

ECONOMICS

Outcomes and costs after hip fracture and stroke. A

SKILLED NURSING FACILITIES

comparison of rehabilitation settings. Kramer AM, et al. **JAMA** 1997 Feb 5;277(5):396–404

ORGANIZATION & ADMINISTRATION

Highlighting the role of policy in nursing practice through a comparison of "DNR" policy influences and "no CPR" decision influences. Wilson DM. **Nurs Outlook** 1996 Nov–Dec;44(6):272–9

STANDARDS

Posthospital setting, resource utilization, and self-care outcome in older women with hip fracture. Levi SJ. **Arch Phys Med Rehabil** 1997 Sep;78(9):973–9

Cardiopulmonary resuscitation policies in long-term care facilities [see comments] Kane RS, et al. **J Am Geriatr Soc** 1997 Feb;45(2):154–7. Comment in: J Am Geriatr Soc 1997 Feb;45(2):245–6.

The building blocks for quality care. Forfa L. **J Nurs Care Qual** 1996 Dec;11(2):1, 4

Enhancing taste, texture, appearance, and presentation of pureed food improved resident quality of life and weight status. Cassens D, et al. **Nutr Rev** 1996 Jan;54(1 Pt 2):S51–4

STATISTICS & NUMERICAL DATA

Pneumonia in a long-term care facility. A prospective study of outcome. Muder RR, et al. **Arch Intern Med** 1996 Nov 11;156(20):2365–70

The prevalence of agitation and brain injury in skilled nursing facilities: a survey. Wolf AP, et al. **Brain Inj** 1996 Apr; 10(4):241–5

Colonization by Staphylococcus aureus resistant to methicillin and ciprofloxacin during 20 months' surveillance in a private skilled nursing facility. Lee YL, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):649–53

TRENDS

Oregon's long-term care system—from nursing facility care to community-based care: an evolution. Dietsche SL. **Nutr Rev** 1996 Jan;54(1 Pt 2):S48–50

UTILIZATION

Using a CQI team to produce a more efficient nursing home placement process. Presnell C, et al. **Jt Comm J Qual Improv** 1997 Feb;23(2):79–92

[Temporary medicosocial admission: alternative to hospitalization of elderly persons?] Rey-Bellet P, et al. **Soz Praventivmed** 1997;42(1):11–20 (Eng. Abstr.) **(Fre)**

SKIMMETIN see **UMBELLIFERONES**

SKIN

consider also terms at CUTANEOUS, CUTIS, and DERMAT-

see related
DERMATOLOGIC AGENTS
KERATINOCYTES

Examination of the ability of people to identify early changes of melanoma in computer-altered pigmented skin lesions. Hanrahan PF, et al. **Arch Dermatol** 1997 Mar;133(3):301–11

Comparison of skin-to-skin contact with standard contact in low-birth-weight infants who are breast-fed. Bier JA, et al. **Arch Pediatr Adolesc Med** 1996 Dec;150(12):1265–9

Corneal choristoma in a beagle dog. Minamide S, et al. **Aust Vet J** 1997 Feb;75(2):93–4

Association of enzyme inhibition with methods of museum skin preparation. Hall LM, et al. **Biotechniques** 1997 May; 22(5):928–30, 932–4

Growth inhibition of cultured fibroblasts by extracts from human dermis [letter; comment] Wheatley D, et al. **Br J Plast Surg** 1997 Jul;50(5):382. Comment on: Br J Plast Surg 1997 Apr;50(3):186–93.

Reduction of progressive burn injury by a stable prostaglandin I2 analogue, beraprost sodium (Procylin): an experimental study in rats. Battal MN, et al. **Burns** 1996 Nov;22(7):531–8

Successful 14-day preservation of rat skin using a two-layer cold-storage method. Chi L, et al. **Burns** 1996 Feb; 22(1):22–5

Soaps and detergents in children. Yamamoto K. **Clin Dermatol** 1996 Jan–Feb;14(1):81–4 (8 ref.)

Cryopreservation of human skin with propane-1,2-diol. Villalba R, et al. **Cryobiology** 1996 Oct;33(5):525–9

Injury and protection in split-thickness skin after very rapid cooling and warming. Zieger MA, et al. **Cryobiology** 1997 Aug;35(1):53–69

Summer woes [editorial] McCarthy JT. **Cutis** 1996 Jul; 58(1):21

Skin surface pressure beneath an above-the-knee cast: plaster casts compared with fiberglass casts. Davids JR, et al. **J Bone Joint Surg Am** 1997 Apr;79(4):565–9

Transplantation performance of human skin cryopreserved by programmed or stepwise freezing and stored at −80 degrees C or −180 degrees C. Ben-Bassat H, et al. **J Burn Care Rehabil** 1996 Sep–Oct;17(5):421–8

A reliable and cost-effective in vitro assay of skin viability for skin banks and burn centers. Klein MB, et al. **J Burn Care Rehabil** 1996 Nov–Dec;17(6 Pt 1):565–70

Investigation of the triacylglycerol composition of iceman's mummified tissue by high-temperature gas chromatography. Mayer BX, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):1–6

The effect of a collagenous implant on deep dermo-periosteal defects in the rabbit. Osaki K, et al. **J Dermatol** 1996 Feb; 23(2):83–8

A story of mice and men: SCID mouse-human skin chimeras in immunology research [editorial] Murphy GF. **J Invest Dermatol** 1996 Oct;107(4):529–30

Skin-color preferences and body satisfaction among South Asian-Canadian and European-Canadian female university students. Sahay S, et al. **J Soc Psychol** 1997 Apr; 137(2):161–71

Sequential lamellar and penetrating keratoplasty for multiple limbal choristomas. Mullaney PB, et al. **Ophthalmic Surg Lasers** 1996 Nov;27(11):952–4

Identification of a starting point of breast skin tears during chicken plucking. Pitcovski J, et al. **Poult Sci** 1997 Feb; 76(2):405–9

Anti gravity. Body blow [news] Mirsky S. **Sci Am** 1997 Mar; 276(3):25

A new method for assessing the gloss of human skin. Lentner A, et al. **Skin Pharmacol** 1996;9(3):184–9

[Experimental study on delayed effect of external skin expansion] Zhang M, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):183–6 (Eng. Abstr.) **(Chi)**

ABNORMALITIES

Continuous expansion for the treatment of skin deformities. Nunes PHF, et al. **Aesthetic Plast Surg** 1996 Jul–Aug; 20(4):347–9

Intestinal malrotation in a child with cardio-facio-cutaneous syndrome. McDaniel CH, et al. **Am J Med Genet** 1997 Jun 13;70(3):284–6 (30 ref.)

Macrocephaly-cutis marmorata telangiectatica congenita: a distinct disorder with developmental delay and connective tissue abnormalities. Moore CA, et al. **Am J Med Genet** 1997 May 2;70(1):67–73

Craniotubular dysplasia with severe postnatal growth retardation, mental retardation, ectodermal dysplasia, and loose skin: Lenz-Majewski-like syndrome. Nishimura G, et al. **Am J Med Genet** 1997 Jul 11;71(1):87–92

Patients with geleophysic dysplasia are not always geleophysic. Santolaya JM, et al. **Am J Med Genet** 1997 Oct 3;72(1):85–90 (12 ref.)

Circumferential ringed creases ("Michelin tire babies") with specific histologic findings and/or karyotype abnormalities: clues to molecular pathogenesis? [letter; comment] Schnur RE, et al. **Am J Med Genet** 1997 Mar 17;69(2):221. Comment on: Am J Med Genet 1996 Mar 1;62(1):23–5.

Congenital anetoderma induced by intrauterine infection? [letter; comment] Aberer E, et al. **Arch Dermatol** 1997 Apr; 133(4):526–7. Comment on: Arch Dermatol 1996 Jun;132(6):671–4.

Linear palmo-plantar porokeratotic hamartoma [letter] Fimiani M, et al. **Br J Dermatol** 1996 Sep;135(3):492–4

The scleroatrophic syndrome of Huriez. Kavanagh GM, et al. **Br J Dermatol** 1997 Jul;137(1):114–8

The cardio-facio-cutaneous syndrome: a long-term follow-up of two patients, with special reference to the neurological features. Sabatino G, et al. **Childs Nerv Syst** 1997 Apr;13(4):238–41

A syndrome of short stature, mental retardation, facial dysmorphism, short webbed neck, skin changes and congenital heart disease. al-Gazali LI, et al. **Clin Dysmorphol** 1996 Oct;5(4):321–7

Cardio-facio-cutaneous (CFC) syndrome—a distinct entity? Report of three patients demonstrating the diagnostic difficulties in delineation of CFC syndrome. Wieczorek D, et al. **Clin Genet** 1997 Jul;52(1):37–46 (57 ref.)

Cutaneous hemangiomas, vascular stains and malformations, and associated syndromes. Esterly NB. **Curr Probl Pediatr** 1996 Jan;26(1):3–39 (272 ref.)

Dog ear: true and false. A simple surgical management. Chrétien-Marquet B, et al. **Dermatol Surg** 1997 Jul; 23(7):547–50; discussion 551

Embryonic heart and skin defects in mice lacking plakoglobin. Bierkamp C, et al. **Dev Biol** 1996 Dec 15; 180(2):780–5

Cloning and characterization of a putative human holocytochrome c-type synthetase gene (HCCS) isolated from the critical region for microphthalmia with linear skin defects (MLS). Schaefer L, et al. **Genomics** 1996 Jun 1; 34(2):166–72

Are copper vapour and frequency doubled Nd:YAG lasers superior to the argon laser for portwine stains at pulse widths of 30–50 milliseconds? Sheehan-Dare RA, et al. **Lasers Surg Med** 1996;18(1):46–51

Molecular genetics and neurobiology of neurodegenerative and neurodevelopmental disorders. Zoghbi HY. **Pediatr Res** 1997 May;41(5):722–6 (33 ref.)

Cervical chrondrocutaneous branchial remnants. Atlan G, et al. **Plast Reconstr Surg** 1997 Jul;100(1):32–9

A case of popliteal pterygium treated along with nerve expansion. Maral T, et al. **Plast Reconstr Surg** 1997 Jul; 100(1):91–5 (15 ref.)

[Histology of supepidermal bullous dermatoses] Megahed M. **Verh Dtsch Ges Pathol** 1996;80:223–8 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Morpho-histological analysis of abdominal skin as related to liposuction. Pinto EB, et al. **Aesthetic Plast Surg** 1997 May–Jun;21(3):153–8

Skin morphology and cytology in marine eels adapted to different lifestyles. Fishelson L. **Anat Rec** 1996 Sep; 246(1):15–29

Multiphoton excitation fluorescence microscopy and spectroscopy of in vivo human skin. Masters BR, et al. **Biophys J** 1997 Jun;72(6):2405–12

Identification of medieval human soft tissue remains in an advanced state of decomposition. Grupe G, et al. **Biotech Histochem** 1997 May;72(3):135–40

Assessment of dermal water by high-frequency ultrasound: comparative studies with nuclear magnetic resonance. Gniadecka M, et al. **Br J Dermatol** 1996 Aug;135(2):218–24

Recent findings on the angioarchitecture of the lymph vessel system of human skin. Lubach D, et al. **Br J Dermatol** 1996 Nov;135(5):733–7

A quantitative analysis of skin displacement in the trotting horse. van Weeren PR, et al. **Equine Vet J Suppl** 1990 Jun; (9):101–9

Quantification of skin displacement in the proximal parts of the limbs of the walking horse. van Weeren PR, et al. **Equine Vet J Suppl** 1990 Jun;(9):110–8

Hair growth and skin in the kinky-coat (kc) musk shrew, Suncus murinus. Ishikawa A, et al. **Exp Anim** 1996 Jul; 45(3):227–32

Growth hormone substitution in growth hormone-deficient adults: effects on collagen type I synthesis and skin thickness. Kann P, et al. **Exp Clin Endocrinol Diabetes** 1996; 104(4):327–33

Stratum corneum architecture, metabolic activity and interactivity with subjacent cell layers. Elias PM. **Exp Dermatol** 1996 Aug;5(4):191–201 (77 ref.)

Tumours of the skin. Ghadially FN, et al. **IARC Sci Publ** 1996;(126):1–43 (111 ref.)

The stratum corneum revisited. Elias PM. **J Dermatol** 1996 Nov;23(11):756–8 (77 ref.)

Three-dimensional microscopic biopsy of in vivo human skin: a new technique based on a flexible confocal microscope. Masters BR, et al. **J Microsc** 1997 Mar;185 (Pt 3):329–38

Adaptive differentiations of the skin of the head in a subterranean rodent, Spalax ehrenbergi. Klauer G, et al. **J Morphol** 1997 Jul;233(1):53–66

Short echo time MRI enables visualisation of the natural state of human stratum corneum water in vivo. Ablett S, et al. **Magn Reson Imaging** 1996;14(4):357–60

In vivo MR microscopy of the human skin. Song HK, et al. **Magn Reson Med** 1997 Feb;37(2):185–91

Comparison of an in vitro skin model to normal human skin for dermatological research. Monteiro-Riviere NA, et al. **Microsc Res Tech** 1997 May 1;37(3):172–9

Use of the Fourier series window protocol with a zig-zag surface coil in 31P NMR human skin spectroscopy. A theoretical study. Bastin ME, et al. **NMR Biomed** 1996 Aug; 9(5):201–7

Inherited ichthyoses: a review of the histology of the skin. Scheimberg I, et al. **Pediatr Pathol Lab Med** 1996 May–Jun; 16(3):359–78 (86 ref.)

Wavelengths for port wine stain laser treatment: influence of vessel radius and skin anatomy. van Gemert MJ, et al. **Phys Med Biol** 1997 Jan;42(1):41–50

Detection of animal tissue thickness using simple vertical electric sounding (VES). Gonzalez CA, et al. **Physiol Meas** 1997 Feb;18(1):85–91

Evaluation of the reliability of reflective marker placements. Marks R, et al. **Physiother Res Int** 1996;1(1):50–61

Skin: MR imaging findings at middle field strength. Hawnaur JM, et al. **Radiology** 1996 Dec;201(3):868–72

A clinical measure of the posterior epidural space depth [see comments] Bevacqua BK, et al. **Reg Anesth** 1996 Sep–Oct; 21(5):456–60. Comment in: Reg Anesth 1997 May–Jun;22(3):297.

A multivariate model to predict the distance from the skin to the epidural space in an obstetric population. Segal S, et al. **Reg Anesth** 1996 Sep–Oct;21(5):451–5

[Determination of the cutaneous sagittal profile of the face from knowledge of the bony profile in the European young adult] Deloison Y, et al. **Bull Assoc Anat (Nancy)** 1996 Mar; 80(248):9–12 (Eng. Abstr.) **(Fre)**

[Morphological characteristics of jerboa (Dipodidae) skin cover] Sokolov VE, et al. **Dokl Akad Nauk** 1997 Feb; 352(5):715–8 **(Rus)**

[The structure of the skin of the external auditory canal and the antiviral activity of the cerumen in carnivorous mammals] Sokolov VE, et al. **Izv Akad Nauk Ser Biol** 1996 Jul–Aug;(4):430–6 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Subcutaneous blood flow in man during sleep with continuous epidural anaesthesia. Sindrup JH, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):636–40

Laser Doppler perfusion imager (LDPI)—for the assessment of skin blood flow changes following sympathetic blocks. Sørensen J, et al. **Acta Anaesthesiol Scand** 1996 Oct; 40(9):1145–8

Reactivity of skin blood flow and heart rate to thermal stimulation in infants during the first postnatal days and after a two-month follow-up. Jahnukainen T, et al. **Acta Paediatr** 1996 Jun;85(6):733–8

Reactivity of skin blood flow and heart rate to external thermal stimulation in anencephaly. Jahnukainen T, et al. **Acta Paediatr** 1997 Apr;86(4):426–7

Skin microcirculation before and after local warming in infants delivered vaginally or by caesarean section. Martin H, et al. **Acta Paediatr** 1997 Mar;86(3):261–7

Vascular reactivity and platelet aggregability during the first five years of insulin-dependent diabetes in children. Ewald U, et al. **Acta Paediatr Suppl** 1997 Feb;418:15–20

Non-adrenergic regulation of microcirculation evoked by antidromic stimulation of the saphenous nerve in the rat skin. Pintér E, et al. **Acta Physiol Hung** 1996;84(3):331–2

Studies on cutaneous blood flow in the mammary gland of lactating rats. Eriksson M, et al. **Acta Physiol Scand** 1996 Sep;158(1):1–6

Mechanisms of cutaneous vasoconstriction during upright posture. Vissing SF, et al. **Acta Physiol Scand** 1997 Feb; 159(2):131–8

Comparative effects of exposure to different light sources (He–Ne laser, InGaAl diode laser, a specific type of noncoherent LED) on skin blood flow for the head. Pöntinen PJ, et al. **Acupunct Electrother Res** 1996 Apr–Jun; 21(2):105–18

The changes of skin and mesenteric microvascular permeability in adaptation to hypoxia in rats. Dubina MV, et al. **Adv Exp Med Biol** 1996;388:363–6

Persistent microvasculopathy in chronic eosinophilia–myalgia syndrome. Smith SA. **Adv Exp Med Biol** 1996;398:359–64

Epimer-specific actions of hepoxilins A3 and B3 on PAF- and bradykinin-evoked vascular permeability in the rat skin in vivo. Wang MM, et al. **Adv Exp Med Biol** 1996; 416:239–41

Vascular effects of occupational exposure to low-dose ionizing radiation. Tomei F, et al. **Am J Ind Med** 1996 Jul;30(1):72–7

Comparative assessment of peripheral sympathetic function by postural vasoconstriction arteriolar reflex and sympathetic skin response in NIDDM patients. Cacciatori V, et al. **Am J Med** 1997 Apr;102(4):365–70

Cocaine effects on digital blood flow and diffusing capacity for carbon monoxide among chronic cocaine users. Sullivan JT, et al. **Am J Med** 1997 Mar;102(3):232–8

Cutaneous microvascular flow in the foot during simulated variable gravities. Chang DS, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R961–6

Evidence of functional beta-adrenoceptors in the cutaneous vasculature. Crandall CG, et al. **Am J Physiol** 1997 Aug; 273(2 Pt 2):H1038–43

Cutaneous vasodilation during dorsal column stimulation is mediated by dorsal roots and CGRP. Croom JE, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H950–7

Decreased active vasodilator sensitivity in aged skin. Kenney WL, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1609–14

Systemic and subcutaneous microvascular Po2 dissociation during 4-h hemorrhagic shock in conscious hamsters. Kerger H, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H827–36

Control of skin blood flow by whole body and local skin cooling in exercising humans. Pérgola PE, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H208–15

Osmoregulatory inhibition of thermally induced cutaneous vasodilation in passively heated humans. Takamata A, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R197–204

Cutaneous vasoconstriction in conscious rabbits during alerting responses detected by hippocampal theta-rhythm. Yu YH, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R208–16

Laser Doppler skin blood flow and sympathetic nervous responses to surgical incision during halothane and isoflurane anesthesia. Mashimo T, et al. **Anesth Analg** 1997 Aug;85(2):291–8

Skin blood flow and plasma catecholamines during removal of pheochromocytoma. Sakuragi T, et al. **Anesthesiology** 1996 Dec;85(6):1485–8

Epidural spinal cord stimulation does not improve microvascular blood flow in neuropathic pain. Devulder J, et al. **Angiology** 1996 Dec;47(12):1145–9

Effect of carbon dioxide-enriched water and fresh water on the cutaneous microcirculation and oxygen tension in the skin of the foot. Hartmann BR, et al. **Angiology** 1997 Apr; 48(4):337–43

Effect of calcium channel blockade on skin blood flow in diabetic hypertension: a comparison of isradipine and atenolol. Rendell MS, et al. **Angiology** 1997 Mar; 48(3):203–13

Thermoregulatory vasoconstriction does not impede core warming during cutaneous heating. Christensen R, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:827–34

Negative pressure breathing and the control of skin blood flow during exercise in a hot environment. Nagashima K, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:604–9

Efferent neuronal organization of thermoregulatory vasomotor control. Zhang YH, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:117–22

Microcirculatory compensation to progressive atherosclerotic disease. Cisek PL, et al. **Ann Vasc Surg** 1997 Jan;11(1):49–53

Enhanced interaction of patients' lymphocytes with human dermal microvascular endothelial cell cultures in active Adamantiades–Behçet disease. Treudler R, et al. **Arch Dermatol** 1996 Nov;132(11):1323–9

Pentoxifylline inhibits human T-cell adhesion to dermal endothelial cells. Bruynzeel I, et al. **Arch Dermatol Res** 1997 Mar;289(4):189–93

In vivo effect of alpha 1-acid glycoprotein on experimentally enhanced capillary permeability in guinea-pig skin. Muchitsch EM, et al. **Arch Int Pharmacodyn Ther** 1996 May–Jun;331(3):313–21

Cutaneous angiosarcomas with a starry-sky pattern. Smith KJ, et al. **Arch Pathol Lab Med** 1997 Sep;121(9):980–4

Oral L-arginine supplementation and cutaneous vascular responses in patients with primary Raynaud's phenomenon. Khan F, et al. **Arthritis Rheum** 1997 Feb;40(2):352–7

Improvement of microcirculatory blood flow under epidural spinal cord stimulation in patients with nonreconstructible peripheral arterial occlusive disease. Claeys LG. **Artif Organs** 1997 Mar;21(3):201–6 (36 ref.)

Cutaneous vascular response to calcitonin gene-related peptide in psoriasis and normal subjects. Artemi P, et al. **Australas J Dermatol** 1997 May;38(2):73–6

Small vessel vasculitis and vasculitis confined to skin. Mat C, et al. **Baillieres Clin Rheumatol** 1997 May;11(2):237–57 (52 ref.)

A new apparatus for non-invasive positioning of laser Doppler flux (LDF) probes in skin areas where local attachment is impossible. Klyscz T, et al. **Biomed Tech (Berl)** 1996 Jan–Feb;41(1–2):14–7

The effects of repeated dermal application of capsaicin to the human skin on pain and vasodilatation induced by intradermal injection of acid and hypertonic solutions. Del Bianco E, et al. **Br J Clin Pharmacol** 1996 Jan;41(1):1–6

An investigation into variability in microvascular skin blood flow and the responses to transdermal delivery of acetylcholine at different sites in the forearm and hand. Gardner-Medwin JM, et al. **Br J Clin Pharmacol** 1997 Apr; 43(4):391–7

Localization of endothelial proliferation and microvascular expansion in active plaque psoriasis. Creamer D, et al. **Br J Dermatol** 1997 Jun;136(6):859–65

An investigation into the effect of ischaemia and pressure on irritant inflammation. Parslew R, et al. **Br J Dermatol** 1997 May;136(5):734–6

Superficial blood flow following photodynamic therapy of malignant non-melanoma skin tumours measured by laser Doppler perfusion imaging. Wang I, et al. **Br J Dermatol** 1997 Feb;136(2):184–9

Involvement of sensory neuropeptides in the development of plasma extravasation in rat dorsal skin following thermal injury. Siney L, et al. **Br J Pharmacol** 1996 Mar; 117(6):1065–70

Non-invasive assessment of vascular reactivity in forearm skin of patients with primary Raynaud's phenomenon and systemic sclerosis. Anderson ME, et al. **Br J Rheumatol** 1996 Dec;35(12):1281–8

Effect of gonadotropin releasing hormone on thermoregulatory vasomotor activity in ovariectomized female rats. Hosono T, et al. **Brain Res** 1997 Apr 18; 754(1–2):88–94

Mechanisms underlying the vascular activity of beta-amyloid protein fragment (beta A(4)25–35) at the level of skin microvasculature. Khalil Z, et al. **Brain Res** 1996 Oct 14; 736(1–2):206–16

Effect of lesion of the hypothalamic mamillary nuclei on skin blood vessel permeability in normal and capsaicin-pretreated rats. Tolochko ZS, et al. **Brain Res** 1997 Mar 28;752(1–2):324–6

Effects of allopurinol, ibuprofen and cyclosporin A on local microcirculatory disturbance due to burn injuries. Cetinkale O, et al. **Burns** 1997 Feb;23(1):43–9

The hypertrophic scar and microcirculation properties. Clark JA, et al. **Burns** 1996 Sep;22(6):447–50

Effect of a bradykinin antagonist on the local inflammatory response following thermal injury. Nwariaku FE, et al. **Burns** 1996 Jun;22(4):324–7

Can superoxide dismutase prevent postburn dermal ischemia? Tan Q, et al. **Burns** 1997 May;23(3):228–31

Increased dermal perfusion after skin burn injury by D-myo-inositol-1,2,6-trisphosphate. Tarnow P, et al. **Burns** 1996 Aug;22(5):363–8

Responses in skin microcirculation to vestibular stimulation before and during motion sickness. Kolev OI, et al. **Can J Neurol Sci** 1997 Feb;24(1):53–7

Reduction of 0.1 Hz microcirculatory fluctuations as evidence of sympathetic dysfunction in insulin-dependent diabetes. Bernardi L, et al. **Cardiovasc Res** 1997 Apr; 34(1):185–91

Peripheral blood flow and noradrenaline responsiveness: the effect of physiological hyperinsulinemia. de Haan CH, et al. **Cardiovasc Res** 1997 Apr;34(1):192–8

A new examination system using photoplethysmography to evaluate skin blood flow during exposure to vibration. Klyscz T, et al. **Cent Eur J Public Health** 1996 May; 4(2):145–8

Potent and long-lasting vasodilatory effects of adrenomedullin in humans. Comparisons between normal subjects and patients with chronic heart failure. Nakamura M, et al. **Circulation** 1997 Mar 4;95(5):1214–21

Endothelin and calcium antagonists in the skin microcirculation of patients with coronary artery disease. Wenzel RR, et al. **Circulation** 1996 Aug 1;94(3):316–22

Adrenergic receptors in the forehead microcirculation. Drummond PD. **Clin Auton Res** 1996 Feb;6(1):23–7

Cold caloric microcirculatory reflex disturbance in patients with Parkinson's disease. Kolev OI, et al. **Clin Auton Res** 1997 Apr;7(2):81–3

Skin blood flow and autonomic reactivity in human poikilothermia. MacKenzie MA, et al. **Clin Auton Res** 1996 Apr;6(2):91–7

Effect of NG-monomethyl-L-arginine on the microcirculation of rat skin. Kakizoe E, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):149–52

Skin temperature changes and changes in skin blood flow monitored with laser Doppler flowmetry and imaging: a methodological study in normal humans. Bornmyr S, et al. **Clin Physiol** 1997 Jan;17(1):71–81

A new device combining laser Doppler perfusion imaging and digital photography. Bornmyr S, et al. **Clin Physiol** 1996 Sep;16(5):535–41

Influence of external pressure on transcutaneous oxygen tension and laser Doppler flowmetry on sacral skin. Colin D, et al. **Clin Physiol** 1996 Jan;16(1):61–72

Post-exercise cutaneous hyperaemia resulting from local exercise of an extremity. Rendell MS, et al. **Clin Physiol** 1997 May;17(3):213–24

Small artery structural alterations of patients with microvascular angina (syndrome X). Bund SJ, et al. **Clin Sci (Colch)** 1996 Dec;91(6):739–43

Skin microcirculation of the foot in diabetic neuropathy. Netten PM, et al. **Clin Sci (Colch)** 1996 Nov;91(5):559–65

Langerhans cell histiocytosis over dilated skin vessels [letter] Bessis D, et al. **Dermatology** 1996;192(4):386–7

The effect of an angiotensin converting enzyme inhibitor on skin microvascular hyperaemia in microalbuminuric insulin-dependent diabetes mellitus. Yosipovitch G, et al. **Diabet Med** 1997 Mar;14(3):235–41

Evaluation of skin vasomotor reflexes in response to deep inspiration in diabetic patients by laser Doppler flowmetry. A new approach to the diagnosis of diabetic peripheral autonomic neuropathy. Aso Y, et al. **Diabetes Care** 1997 Aug;20(8):1324–8

Impaired peripheral vasomotion in diabetes [see comments] Stansberry KB, et al. **Diabetes Care** 1996 Jul;19(7):715–21 . Comment in: Diabetes Care 1997 Mar;20(3):462–3.

Evaluation of microangiopathy of the skin in patients with non-insulin-dependent diabetes mellitus by laser Doppler flowmetry; microvasodilatory responses to beraprost sodium. Aso Y, et al. **Diabetes Res Clin Pract** 1997 Apr; 36(1):19–26

Effects of high-voltage galvanic stimulation of ST36 and ST37 acupuncture points on peripheral blood flow and skin temperature. Balogun JA, et al. **Disabil Rehabil** 1996 Oct; 18(10):523–8

Does change in skin perfusion provide a good index to monitor the sympathetic response to a noxious stimulus in preterm newborns? Kunzek S, et al. **Early Hum Dev** 1997 Sep 19;49(2):81–9

Regional differences in age-related decrements of the cutaneous vascular and sweating responses to passive heating. Inoue Y, et al. **Eur J Appl Physiol** 1996; 74(1–2):78–84

Intense exercise increases the post-exercise threshold for sweating. Kenny GP, et al. **Eur J Appl Physiol** 1997; 76(2):116–21

Relationship between core temperature and skin blood flux in lower limbs during prolonged arm exercise in persons with spinal cord injury. Muraki S, et al. **Eur J Appl Physiol** 1996;72(4):330–4

Effect of maximal arm exercise on skin blood flux in the paralyzed lower limbs in persons with spinal cord injury. Muraki S, et al. **Eur J Appl Physiol** 1996;74(5):481–3

Cold induced vasodilatation and cardiovascular responses in humans during cold water immersion of various upper limb areas. Sendowski I, et al. **Eur J Appl Physiol** 1997; 75(6):471–7

Colocalization of stomatin (band 7.2b) and actin microfilaments in UAC epithelial cells. Snyers L, et al. **Eur J Cell Biol** 1997 Jul;73(3):281–5

Tolerance to lipopolysaccharide-induced increase in vascular permeability in mouse skin. Fujii E, et al. **Eur J Pharmacol** 1996 Oct 10;313(1–2):129–34

Persistence of effects of nitric oxide synthase inhibitors: comparisons on blood flow and plasma exudation in guinea pig skin. Perez AC, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2–3):241–6

Noradrenergic and peptidergic sympathetic regulation of cutaneous microcirculation in the rat. Pintér E, et al. **Eur J Pharmacol** 1997 Apr 23;325(1):57–64

Analysis of the vasodilator nerve function by nicotine in isolated dog skin artery. Uchiyama M, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):19–25

Blood flow rate during orthostatic pressure changes in the pulp skin of the first toe. Midttun M, et al. **Eur J Vasc Endovasc Surg** 1997 Mar;13(3):278–84

Cutaneous vascular control in the arms of women with postmastectomy oedema. Stanton AW, et al. **Exp Physiol** 1996 May;81(3):447–64

Expression of trypsin in vascular endothelial cells. Koshikawa N, et al. **FEBS Lett** 1997 Jun 16;409(3):442–8

Connections between the great saphenous vein and other cutaneous veins of the thigh in human fetuses. Bruska M, et al. **Folia Morphol (Warsz)** 1996;55(4):222–3

Repeatability of laser Doppler measurements of cutaneous blood flow in clinical pharmacology studies. Maison P, et al. **Fundam Clin Pharmacol** 1996;10(3):319–20

Calcium channel blockers blunt postural cutaneous vasoconstriction in hypertensive patients. Iabichella ML,

et al. **Hypertension** 1997 Mar;29(3):751–6

Acute effects of static magnetic fields on cutaneous microcirculation in rabbits. Ohkubo C, et al. **In Vivo** 1997 May–Jun;11(3):221–5

Dermofluorography as a possibility for therapeutic control following sympathectomy. Böhler U, et al. **Int J Microcirc Clin Exp** 1996 Jul–Aug;16(4):195–7

Skin blood flow during vasoconstrictive and vasodilative stimuli in essential hypertension patients: a laser Doppler flowmetry study. Catalano M, et al. **Int J Microcirc Clin Exp** 1997 Mar–Apr;17(2):80–5

Effects of iloprost on skin microcirculation [letter] Creutzig A, et al. **Int J Microcirc Clin Exp** 1996 Jan–Feb;16(1):30

Skin vasomotor reflexes during inspiratory gasp: standardization by spirometric control does not improve reproducibility. du Buf–Vereijken PW, et al. **Int J Microcirc Clin Exp** 1997 Mar–Apr;17(2):86–92

A new technique for controlling the finger skin temperature in microcirculatory research demonstrated in a local cold stress test in healthy controls and patients with Raynaud's phenomenon. Hahn M, et al. **Int J Microcirc Clin Exp** 1996 Jan–Feb;16(1):16–22

Improved reproducibility of the 'large-window' method of assessing transcapillary and interstitial fluorescein diffusion in the skin in healthy subjects and in subjects with insulin–dependent diabetes mellitus. Jager J, et al. **Int J Microcirc Clin Exp** 1997 May–Jun;17(3):150–8

Discrepancy in skin capillary circulation between fingers and toes in patients with type 1 diabetes. Jörneskog G, et al. **Int J Microcirc Clin Exp** 1996 Nov–Dec;16(6):313–9

Disturbed blood flow regulation in venous leg ulcers. Jünger M, et al. **Int J Microcirc Clin Exp** 1996 Sep–Oct; 16(5):259–65

Heterogeneity of capillary density of skin over the dorsum of the foot and toes of healthy subjects. Lamah M, et al. **Int J Microcirc Clin Exp** 1996 Sep–Oct;16(5):271–6

Repeatability of intravital capillaroscopic measurement of capillary density. Lamah M, et al. **Int J Microcirc Clin Exp** 1996 Jan–Feb;16(1):23–9

Oxygen extraction rates in inflamed human skin using the tuberculin reaction as a model. Newton DJ, et al. **Int J Microcirc Clin Exp** 1996 May–Jun;16(3):118–23

Correlation between the uptake of sodium fluorescein in the tissue and xenon–133 clearance and laser Doppler fluxmetry in measuring changes in skin circulation. Proano E, et al. **Int J Microcirc Clin Exp** 1997 Jan–Feb;17(1):22–8

Effect of Ginkgo biloba extract (EGb 761) on the vasospastic response of mouse cutaneous arterioles to platelet activation. Stücker O, et al. **Int J Microcirc Clin Exp** 1997 Mar–Apr;17(2):61–6

Skin microcirculation responses to severe local cooling. Van den Brande P, et al. **Int J Microcirc Clin Exp** 1997 Mar–Apr;17(2):55–60

Cyclosporine and angiogenesis in psoriasis [letter; comment] Li VW, et al. **J Am Acad Dermatol** 1996 Dec;35(6):1019–21 . Comment on: J Am Acad Dermatol 1995 Dec;33(6):947–53.

Topical hydrogen peroxide treatment of ischemic ulcers in the guinea pig [letter; comment] Viders DE. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):788. Comment on: J Am Acad Dermatol 1995 Aug;33(2 Pt 1):217–21.

Baroreceptor control of the cutaneous active vasodilator system. Crandall CG, et al. **J Appl Physiol** 1996 Nov; 81(5):2192–8

Respiratory modulation of blood flow in normal and sympathectomized skin in humans. Baron R, et al. **J Auton Nerv Syst** 1996 Sep 12;60(3):147–53

Skin blood flow abnormalities in a rat model of neuropathic pain: result of decreased sympathetic vasoconstrictor outflow? Kurvers HA, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):19–29

Sympathetically induced paradoxical increases of the cutaneous blood flow in chronically inflamed rats. Tsujii Y, et al. **J Auton Nerv Syst** 1996 Jul 5;59(3):103–12

Fasciocutaneous blood supply in below–knee amputation. Humzah MD, et al. **J Bone Joint Surg Br** 1997 May; 79(3):441–3 (21 ref.)

Substance P has a role in neurogenic mediation of human burn wound healing. Dunnick CA, et al. **J Burn Care Rehabil** 1996 Sep–Oct;17(5):390–6

Species–specific in situ hybridization with fluorochrome–labeled DNA probes to study vascularization of human skin grafts on athymic mice. Young DM, et al. **J Burn Care Rehabil** 1996 Jul–Aug; 17(4):305–10

Cutaneous vasodilation to acetylcholine in patients with essential hypertension. Rossi M, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):406–11

Interleukin–1 induces major phenotypic changes in human skin microvascular endothelial cells. Romero LI, et al. **J Cell Physiol** 1997 Oct;173(1):84–92

Vascular dysfunction induced by elevated glucose levels in rats is mediated by vascular endothelial growth factor. Tilton RG, et al. **J Clin Invest** 1997 May 1;99(9):2192–202

Angiogenesis and malignant melanoma. Angiogenesis is related to the development of vertical (tumorigenic) growth phase. Marcoval J, et al. **J Cutan Pathol** 1997 Apr; 24(4):212–8

Perivascular mast cells in urticaria pigmentosa. Sweet WL, et al. **J Cutan Pathol** 1996 Jun;23(3):247–53

A study of white dermographism in atopic dermatitis. Wong SS, et al. **J Dermatol Sci** 1996 Feb;11(2):148–53

Cutaneous microcirculation of diabetic foot: combined isolated cold stress testing and laser Doppler flowmetry study. Chen YJ, et al. **J Formos Med Assoc** 1997 Aug; 96(8):606–12

Neurocutaneous island flaps in upper limb coverage: experience with 44 clinical cases. Bertelli JA, et al. **J Hand Surg [Am]** 1997 May;22(3):515–26

Some pharmacological and elastic characteristics of isolated subcutaneous small arteries from patients with essential hypertension. Thybo NK, et al. **J Hypertens** 1996 Aug; 14(8):993–8

Mechanism of sustained E–selectin expression in cultured human dermal microvascular endothelial cells. Kluger MS, et al. **J Immunol** 1997 Jan 15;158(2):887–96

Laser Doppler perfusion imaging of skin blood flow using red and near–infrared sources. Abbot NC, et al. **J Invest Dermatol** 1996 Dec;107(6):882–6

Synchronous measurements of blood pressure and red blood cell velocity in capillaries of human skin. Hahn M, et al. **J Invest Dermatol** 1996 Jun;106(6):1256–9

Differential activation of protein kinase C isozymes by phorbol ester and collagen in human skin microvascular endothelial cells. Zhou LY, et al. **J Invest Dermatol** 1996 Aug;107(2):248–52

Acute effects of periarterial sympathectomy on the cutaneous microcirculation. Pollock DC, et al. **J Orthop Res** 1997 May;15(3):408–13

Skin blood flow influences the transcutaneous PCO2 (tc PCO2) during stress in the guinea pig. Braems GA, et al. **J Perinat Med** 1996;24(2):155–61

The relationship between cutaneous C fibre type and antidromic vasodilatation in the rabbit and the rat. Gee MD, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):31–44

The vasodilator component of neurogenic inflammation is caused by a special subclass of heat–sensitive nociceptors in the skin of the pig. Lynn B, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):587–93

Heat–evoked vasodilatation in human hairy skin: axon reflexes due to low–level activity of nociceptive afferents. Magerl W, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):837–48

Skin blood flow responses to the iontophoresis of acetylcholine and sodium nitroprusside in man: possible mechanisms. Morris SJ, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):531–42

Local inhibition of nitric oxide generation in man reduces blood flow in finger pulp but not in hand dorsum skin. Noon JP, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):501–8

Cutaneous blood–flow patterns in free flaps determined by laser Doppler flowmetry. Place MJ, et al. **J Reconstr Microsurg** 1996 Aug;12(6):355–8

The management of unsalvageable free flaps. Wheatley MJ, et al. **J Reconstr Microsurg** 1996 May;12(4):227–9

Monitoring healing of acute Charcot's arthropathy with infrared dermal thermometry. Armstrong DG, et al. **J Rehabil Res Dev** 1997 Jul;34(3):317–21

The frequency of cutaneous vasculitis is not increased in patients with rheumatoid arthritis treated with methotrexate. Kaye O, et al. **J Rheumatol** 1996 Feb; 23(2):253–7

Neural responses of rat abdominal skin artery. Shimamura K, et al. **J Smooth Muscle Res** 1995 Dec;31(6):397–9

Influence of partial nerve injury in the rat on efferent function of sympathetic and antidromically acting sensory nerve fibers. Kurvers HA, et al. **J Trauma** 1996 Dec;41(6):981–8

Effect of S–ethylisothiourea, a putative inhibitor of inducible nitric oxide synthase, on mouse skin vascular permeability. Muraki T, et al. **Jpn J Pharmacol** 1996 Mar;70(3):269–71

Pericytes as collagen–producing cells in excessive dermal scarring. Sundberg C, et al. **Lab Invest** 1996 Feb; 74(2):452–66

Skin blood flow after transdermal S–nitrosothio–acetylglucose [letter] Khan F, et al. **Lancet** 1997 Aug 9;350(9075):410–1

Modelling the assessment of port wine stain parameters from skin surface temperature following a diagnostic laser pulse. Gabay S, et al. **Lasers Surg Med** 1997;20(2):179–87

Thermal damage assessment of blood vessels in a hamster skin flap model by fluorescence measurement of a liposome–dye system. Mordon S, et al. **Lasers Surg Med** 1997;20(2):131–41

Is the "wick method" appropriate to determine the protein osmotic pressure of interstitial fluid? Földi M, et al. **Lymphology** 1996 Sep;29(3):91–4

Peripheral vasoconstrictor responses to sympathetic activation in diabetic patients: relationship with rheological disorders. Valensi P, et al. **Metabolism** 1997 Mar; 46(3):235–41

Changes in subcutaneous interstitial fluid pressure, tissue oxygenation, and skin red cell flux during venous congestion plethysmography in men. Christ F, et al. **Microcirculation** 1997 Mar;4(1):75–81

Shear rate dependency of red cell sequestration in skin capillaries in sickle cell disease and its variation with vasoocclusive crisis. Lipowsky HH, et al. **Microcirculation** 1997 Jun;4(2):289–301

The influence of skin flap ischemia on serum nitric oxide concentrations. Oshima H. **Microsurgery** 1996;17(4):191–7

Skin microcirculation during tapwater iontophoresis in humans: cathode stimulates more than anode. Berliner MN. **Microvasc Res** 1997 Jul;54(1):74–80

Use of dynamic capillaroscopy for studying cutaneous microcirculation in patients with diabetes mellitus. Chang CH, et al. **Microvasc Res** 1997 Mar;53(2):121–7

Deterioration of cutaneous microcirculatory status and its clinical correlation in tetralogy of Fallot. Chang CH, et al. **Microvasc Res** 1996 Jan;51(1):59–68

Synergistic interactions between neuropeptide and histamine on the capillary permeability in rat skin: evaluation by reflectance spectrophotometry. Kakizoe E, et al. **Microvasc Res** 1997 Jul;54(1):27–34

Functional microcirculatory impairment: a possible source of reduced skin oxygen tension in human diabetes mellitus. Mayrovitz HN, et al. **Microvasc Res** 1996 Sep;52(2):115–26

Respiratory–dependent laser–Doppler flux motion in different skin areas and its meaning to autonomic nervous control of the vessels of the skin. Mück–Weymann ME, et al. **Microvasc Res** 1996 Jul;52(1):69–78

The skin blood flow response in wound healing. Rendell MS, et al. **Microvasc Res** 1997 May;53(3):222–34

Regional vs systemic responses to mental stress: a potential mechanism for non–demand–related ischemia. Silverman DG, et al. **Microvasc Res** 1996 May;51(3):396–9

Capillary blood cell velocity in human skin capillaries located perpendicularly to the skin surface: measured by a new laser Doppler anemometer. Stücker M, et al. **Microvasc Res** 1996 Sep;52(2):188–92

A new method for the assessment of tissue hemoglobin oxygenation in patients with chronic venous insufficiency. Thum J, et al. **Microvasc Res** 1996 May;51(3):317–26

Laser Doppler flux characteristics at the skin of the dorsum of the foot in young and in elderly healthy human subjects. Van den Brande P, et al. **Microvasc Res** 1997 Mar; 53(2):156–62

Treatment of benign cutaneous vascular proliferations with the 585–nm flashlamp–pulsed tunable dye laser. Krunic A, et al. **N C Med J** 1996 May–Jun;57(3):180–2

Laser Doppler flowmeter assessment of skin microcirculation in uremic patients on hemodialysis treatment. Rossi M, et al. **Nephron** 1996;73(4):544–8

Intravenous morphine attenuates pain induced changes in skin blood flow in newborn infants. Moustogiannis AN, et al. **Neurol Res** 1996 Oct;18(5):440–4

Sympathetic vasoconstrictor neurons projecting from the guinea–pig superior cervical ganglion to cutaneous or skeletal muscle vascular beds can be distinguished by soma size. Gibbins IL, et al. **Neurosci Lett** 1996 Aug 9; 213(3):197–200

Skin blood flow disturbances in the contralateral limb in a peripheral mononeuropathy in the rat. Kurvers HA, et al. **Neuroscience** 1996 Oct;74(3):935–43

Role of nitric oxide in cutaneous blood flow increases in the rat hindpaw during dorsal column stimulation. Croom JE, et al. **Neurosurgery** 1997 Mar;40(3):565–70; discussion 571

Vascular permeability factor/vascular endothelial growth factor (VPF/VEGF) delays and induces escape from senescence in human dermal microvascular endothelial cells. Watanabe Y, et al. **Oncogene** 1997 May 1; 14(17):2025–32

Laser Doppler perfusion imaging of eyelid skin. Mannor GE, et al. **Ophthal Plast Reconstr Surg** 1996 Sep;12(3):178–85

Glaucoma in phakomatosis pigmentovascularis. Teekhasaenee C, et al. **Ophthalmology** 1997 Jan; 104(1):150–7 (66 ref.)

Reflex sympathetic dystrophy: skin blood flow, sympathetic vasoconstrictor reflexes and pain before and after surgical sympathectomy. Baron R, et al. **Pain** 1996 Oct; 67(2–3):317–26

Independent effects of ischaemia and noradrenaline on thermal hyperalgesia in capsaicin–treated skin. Drummond PD. **Pain** 1996 Sep;67(1):129–33

Vascular involvement in cutaneous sarcoidosis. Takemura T, et al. **Pathol Int** 1997 Feb–Mar;47(2–3):84–9

Wavelengths for port wine stain laser treatment: influence of vessel radius and skin anatomy. van Gemert MJ, et al. **Phys Med Biol** 1997 Jan;42(1):41–50

Three–dimensional reconstruction of cutaneous arteries of the back by computer graphic imaging. Nakajima H, et al. **Plast Reconstr Surg** 1997 Aug;100(2):381–9

The arterial supply of the face lift flap. Whetzel TP, et al. **Plast Reconstr Surg** 1997 Aug;100(2):480–6; discussion 487–8

Influence of the site of skin incision on the circulation in the nipple–areola complex after subcutaneous mastectomy in breast cancer. Proano E, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Sep; 30(3):195–200

Diclofenac and indomethacin influence the healing of normal and ischaemic incisional wounds in skin. Quirinia A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Sep; 31(3):213–9

The effect of topical steroid on the actions of vasoconstrictor and vasodilator peptides in human skin. Goldsmith P, et al. **Skin Pharmacol** 1996;9(5):289–97

Regional variation of nonimmunologic contact urticaria. Functional map of the human face. Shriner DL, et al. **Skin Pharmacol** 1996;9(5):312–21

Inhibition rather than enhancement of hemostatic system activation during initiation of oral anticoagulant treatment. Kyrle PA, et al. **Thromb Haemost** 1997 Apr;77(4):685–9

Influence of healing on the disturbed blood flow regulation in venous ulcers. Jünger M, et al. **Vasa** 1996;25(4):341–8

Changes of cytokeratin expression in the epidermis with chronic venous insufficiency. Peschen M, et al. **Vasa** 1997 May;26(2):76–80

Skin hyperemia in a habitual blusher. Steurer J, et al. **Vasa** 1997 May;26(2):135–6

Non-invasive determination of dermal hemoglobin oxygenation and concentration in patients with peripheral arterial occlusive disease. Thum J, et al. **Vasa** 1997; 26(1):11–7

[Application of the local flap pedicled with a superficial vein in the repair of limb wounds] Xiong M, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):181–3 (Eng. Abstr.) **(Chi)**

[Clinical study of the venous flaps] Xiu Z, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):179–80 (Eng. Abstr.) **(Chi)**

[Cervico-scapulo-dorsal reverse axial flap with pedicle including the transverse cervical artery] Zhang J, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 Jul;11(4):287–9 (Eng. Abstr.) **(Chi)**

[An assessment of factors leading to the failure of clinical application of venous flap] Zhu C, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):177–8 **(Chi)**

[Experimental study of survival mechanism of skin flap with subdermal vascular rete] Feng G, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Oct;33(10):633–5 (Eng. Abstr.) **(Chi)**

[The Laser-Doppler microcirculation technique in the study of the orthosympathetic system in obese and non-insulin-dependent diabetic patients] Smagghue O, et al. **J Mal Vasc** 1996;21(5):299–302 (Eng. Abstr.) **(Fre)**

[Arterial and neural supply of the skin of the palm. Surgical-anatomical findings in Dupuytren's contracture] Schrader M, et al. **Anat Anz** 1997 Aug;179(4):349–53 (Eng. Abstr.) **(Ger)**

[Effect of ultraviolet irradiation on the vascular bed of the skin] Heckmann M. **Fortschr Med** 1997 Feb 10;115(4):46 **(Ger)**

[Atypical zosteriform segmental embolia cutis medicamentosa] Köhler LD, et al. **Hautarzt** 1997 Jul; 48(7):492–5 (Eng. Abstr.) **(Ger)**

[Cutaneous reactions in Crohn disease. Vasculitis in various skin segments] Schlehaider UK, et al. **Hautarzt** 1997 May; 48(5):328–31 (17 ref.) (Eng. Abstr.) **(Ger)**

[Microscopic polyangiitis with eosinophilia—an overlap syndrome or separate disease entity? A case report and review of the literature] Weninger W, et al. **Hautarzt** 1997 May;48(5):332–8 (48 ref.) (Eng. Abstr.) **(Ger)**

[Indications for arterialization of tissue] Hussmann J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1164–6 (Eng. Abstr.) **(Ger)**

["Heat-shock priming" reduces microvascular perfusion failure of critically perfused skin flaps—a possible mechanisms of tissue protection in acute ischemia] Rösken F, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:527–30 (Eng. Abstr.) **(Ger)**

[A new model of in vivo analysis of microcirculation of osteomyocutaneous flaps] Rücker M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:515–7 (Eng. Abstr.) **(Ger)**

[Transdermal administration of platelet-derived growth factor for improved wound healing in local ischemia and diabetes mellitus] Uhl E, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:705–8 (Eng. Abstr.) **(Ger)**

[In vivo analysis of the microcirculation of striated skin muscle during induction of a compartment syndrome] Westermann S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:485–8 (Eng. Abstr.) **(Ger)**

[Abdominothoracic large-caliber skin vein—a symptom of vena cava discontinuity] Wildberger JE, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jul;167(1):101–2 (9 ref.) **(Ger)**

[Tissue oxygenation and microcirculation in dermatoliposclerosis with different degrees of erythema at the margins of venous ulcers. A contribution to hypodermitis symptoms] Schmeller W, et al. **Vasa** 1997; 26(1):18–24 (Eng. Abstr.) **(Ger)**

[Mesenteric traction syndrome during coronary artery bypass graft surgery] Koyama K, et al. **Masui** 1997 Feb;46(2):256–7 (Eng. Abstr.) **(Jpn)**

[A laser flow meter method for evaluating the peripheral blood flow in mice] Murayama M, et al. **Nippon Yakurigaku Zasshi** 1996 Oct;108(4):203–16 (Eng. Abstr.) **(Jpn)**

[The effect of the blood flow rate on blood heat emission in the vascular bed of the skin] Luchakov IuI, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):78–82 (Eng. Abstr.) **(Rus)**

[The effect of electrostimulation of the hypothalamic mamillary nuclei on the vascular permeability of the skin in intact and capsaicin-pretreated rats] Tolochko ZS, et al. **Fiziol Zh Im I M Sechenova** 1996 Dec;82(12):1–5 (Eng. Abstr.) **(Rus)**

[The vascularization of skin connective-tissue regenerates during wound healing under exposure to neurotransmitters and their antagonists] Grabovoĭ AN. **Morfologiia** 1997; 111(2):73–6 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Sebum and water content in the skin of aged immobilized patients. Aisen E, et al. **Acta Derm Venereol** 1997 Mar; 77(2):142–3

A double-blind comparison of levels of terbinafine and itraconazole in plasma, skin, sebum, hair and nails during and after oral medication [letter] Faergemann J, et al. **Acta Derm Venereol** 1997 Jan;77(1):74–6

Increased collagen propeptides in the skin of a scleredema patient but no change in re-epithelialisation rate. Haapasaari KM, et al. **Acta Derm Venereol** 1996 Jul; 76(4):305–9

Microfluorometric study of nuclear DNA in normal human epidermis. Kurose K, et al. **Acta Histochem** 1996 Jan; 98(1):39–46

Development of somatostatin radioimmunoassay for the measurement of plasma and tissue contents of hormone. Németh J, et al. **Acta Physiol Hung** 1996;84(3):313–5

Quantitative measurement of extracellular histamine concentrations in intact human skin in vivo by the microdialysis technique: methodological aspects. Petersen LJ. **Allergy** 1997 May;52(5):547–55

Seasonal variations in integumental glycoconjugates of Rana rugosa. Choi BT, et al. **Anat Rec** 1997 Sep;249(1):24–31

Study of human cutaneous sensory corpuscles using double immunolabelling and confocal laser scanning microscopy. Vega JA, et al. **Anat Rec** 1996 Dec;246(4):557–60

Immunodetection of amelogenin-like proteins in the ganoine of experimentally regenerating scales of Calamoichthys calabaricus, a primitive actinopterygian fish. Zylberberg L, et al. **Anat Rec** 1997 Sep;249(1):86–95

Comparison of histamine-releasing factor recovered from skin and peripheral blood mononuclear cells of patients with chronic idiopathic urticaria. Claveau J, et al. **Ann Allergy Asthma Immunol** 1996 Dec;77(6):475–9

sICAM-1, sE-selectin and sVCAM-1 are constitutively present in human skin lymph and increased in allergic contact dermatitis. Ballmer-Weber BK, et al. **Arch Dermatol Res** 1997 Apr;289(5):251–5

Differential expression of the HsKin17 protein during differentiation of in vitro reconstructed human skin. Biard DS, et al. **Arch Dermatol Res** 1997 Jul;289(8):448–56

Behaviour of laminin 1 and type IV collagen in uninvolved psoriatic skin. Immunohistochemical study using confocal laser scanning microscopy. Mondello MR, et al. **Arch Dermatol Res** 1996 Aug;288(9):527–31

Enkephalin-like immunoreactivity in human skin is found selectively in a fraction of CD68-positive dermal cells: increase in enkephalin-positive cells in lesional psoriasis. Nissen JB, et al. **Arch Dermatol Res** 1997 Apr;289(5):265–71

Immunohistochemical localization of interleukin-6-like immunoreactivity to peripheral nerve-like structures in normal and inflamed human skin. Nordlind K, et al. **Arch Dermatol Res** 1996 Jul;288(8):431–5

Immunohistochemical localization of NO synthases in normal human skin and psoriatic skin. Sakai M, et al. **Arch Dermatol Res** 1996 Sep;288(10):625–7

Autoradiographic mapping of beta-adrenoceptors in human skin. Steinkraus V, et al. **Arch Dermatol Res** 1996 Aug; 288(9):549–53

Regional variation in content, composition and organization of porcine epithelial barrier lipids revealed by thin-layer chromatography and transmission electron microscopy. Law S, et al. **Arch Oral Biol** 1995 Dec;40(12):1085–91

Identification and measurement of beta-endorphin levels in the skin during induced hair growth in mice. Furkert J, et al. **Biochim Biophys Acta** 1997 Aug 29;1336(2):315–22

Isolation of ceramide fractions from human stratum corneum lipid extracts by high-performance liquid chromatography. Gildenast T, et al. **Biochim Biophys Acta** 1997 May 17; 1346(1):69–74

Hydrolysis of parabenes by extracts from differing layers of human skin. Lobemeier C, et al. **Biol Chem** 1996 Oct; 377(10):647–51

Structural diversity of dermatan sulphate in porcine dermis. Qiu G, et al. **Biol Pharm Bull** 1997 Jul;20(7):721–6

Cross-linking of dermal sheep collagen with tannic acid. Heijmen FH, et al. **Biomaterials** 1997 May;18(10):749–54

Multiphoton excitation fluorescence microscopy and spectroscopy of in vivo human skin. Masters BR, et al. **Biophys J** 1997 Jun;72(6):2405–12

Isolation of high-molecular-length DNA from human skin. Bennett PV, et al. **Biotechniques** 1996 Sep;21(3):458–63

Study of free iron and pyridinoline in hypertrophic scars and normal skin. Wan KC, et al. **Br J Biomed Sci** 1996 Sep; 53(3):196–203

Immunohistochemical localization of the Ca2+ binding S100 proteins in normal human skin and melanocytic lesions. Böni R, et al. **Br J Dermatol** 1997 Jul;137(1):39–43

Transforming growth factor beta 1 and its latent form binding protein-1 associate with elastic fibres in human dermis: accumulation in actinic damage and absence in anetoderma. Karonen T, et al. **Br J Dermatol** 1997 Jul;137(1):51–8

Immunohistochemical analysis of the skin in junctional epidermolysis bullosa using laminin 5 chain specific antibodies is of limited value in predicting the underlying gene mutation. McMillan JR, et al. **Br J Dermatol** 1997 Jun;136(6):817–22

Mosaic expression of uncein and 180-kDa bullous pemphigoid antigen in generalized atrophic benign epidermolysis bullosa. Matsumura Y, et al. **Br J Dermatol** 1997 May;136(5):757–61

Increased levels of type I and III collagen and hyaluronan in scleroderma skin. Søndergaard K, et al. **Br J Dermatol** 1997 Jan;136(1):47–53

Growth inhibition of cultured fibroblasts by extracts from human dermis [see comments] Muir IF, et al. **Br J Plast Surg** 1997 Apr;50(3):186–93. Comment in: Br J Plast Surg 1997 Jul;50(5):382.

Expression of the cutaneous lymphocyte antigen and its counter-receptor E-selectin in the skin and joints of patients with psoriatic arthritis. Jones SM, et al. **Br J Rheumatol** 1997 Jul;36(7):748–57

Loss of retinoic acid receptors in mouse skin and skin tumors is associated with activation of the ras(Ha) oncogene and high risk for premalignant progression. Darwiche N, et al. **Cancer Res** 1996 Nov 1;56(21):4942–9

CaN19 expression in benign and malignant hyperplasias of the skin and oral mucosa: evidence for a role in regenerative differentiation. Xia L, et al. **Cancer Res** 1997 Jul 15; 57(14):3055–62

Pixe analysis of pathological skin with special reference to psoriasis and atopic dry skin. Pallon J, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):111–8

Differential distribution of five members of the matrix metalloproteinase family and one inhibitor (TIMP-1) in human liver and skin. Geisler S, et al. **Cell Tissue Res** 1997 Jul;289(1):173–83

A novel bufadienolide, marinosin, in the skin of the giant toad, Bufo marinus. Matsukawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 Feb;45(2):249–54

Structure of stratum corneum lipids characterized by FT-Raman spectroscopy and DSC. III. Mixtures of ceramides and cholesterol. Wegener M, et al. **Chem Phys Lipids** 1997 Aug 8;88(1):73–82

Expanded analysis of benzo[a]pyrene-DNA adducts formed in vitro and in mouse skin: their significance in tumor initiation. Chen L, et al. **Chem Res Toxicol** 1996 Jul-Aug; 9(5):897–903

Automated quantitation of total protein in cultured skin fibroblasts. Williams AJ, et al. **Clin Chim Acta** 1997 Mar 18;259(1-2):129–36

Restricted expression of Fc gammaRIII (CD16) in synovium and dermis: implications for tissue targeting in rheumatoid arthritis (RA). Edwards JC, et al. **Clin Exp Immunol** 1997 Jun;108(3):401–6

Increased interleukin-7 concentrations in lesional skin and in the sera of patients with plaque-type psoriasis. Bonifati C, et al. **Clin Immunol Immunopathol** 1997 Apr;83(1):41–4

Disparate changes in plasma and tissue pentosidine levels after kidney and kidney-pancreas transplantation. Hricik DE, et al. **Clin Transplant** 1996 Dec;10(6 Pt 1):568–73

Identification of proteins that are abnormally regulated in differentiated cultured human keratinocytes. Olsen E, et al. **Electrophoresis** 1995 Dec;16(12):2241–8

Experimental tissue expansion induces changes in expression of procollagen I and III messenger RNA. Löffler JA, et al. **Eur Arch Otorhinolaryngol** 1995;252(8):475–7

The solution structure and activity of caerin 1.1, an antimicrobial peptide from the Australian green tree frog, Litoria splendida. Wong H, et al. **Eur J Biochem** 1997 Jul 15;247(2):545–57

Expression of CD44 isoforms in human skin cancer. Simon JC, et al. **Eur J Cancer** 1996 Jul;32A(8):1394–400

Structure of genes for dermaseptins B, antimicrobial peptides from frog skin. Exon 1-encoded prepropeptide is conserved in genes for peptides of highly different structures and activities. Vouille V, et al. **FEBS Lett** 1997 Sep 1; 414(1):27–32

Cocaine in hair, saliva, skin swabs, and urine of cocaine users' children. Smith FP, et al. **Forensic Sci Int** 1996 Dec 27; 83(3):179–89

Immunohistochemical detection of retinoic acid receptor alpha in human skin: a comparison of different fixation protocols. Epple S, et al. **Histochem J** 1996 Sep; 28(9):657–60

Nonerythroid membrane skeletal proteins in normal and diseased human skin. Shimizu T, et al. **Histol Histopathol** 1996 Apr;11(2):495–501 (72 ref.)

Expression of decorin mRNA in the skin of patients with ossification of the posterior longitudinal ligament. Ishidou Y, et al. **In Vivo** 1995 Sep-Oct;9(5):469–74

Airborne emissions at skin surfaces: a potential biological exposure index. Batterman SA, et al. **Int Arch Occup Environ Health** 1996;68(4):268–74

Separation and quantitation of glycolipids as penetration modifiers in human skin using high-performance liquid chromatography-mass spectrometry with electrospray ionization. Wolf R, et al. **J Chromatogr A** 1997 Apr 4; 766(1-2):71–5

Individual variation of human plantar stratum corneum lipids, determined by automated multiple development of high-performance thin-layer chromatography plates. Zellmer S, et al. **J Chromatogr B Biomed Appl** 1997 Apr 11;691(2):321–9

Recruitment of cycling epidermal cells and expression of filaggrin, involucrin and tenascin in the margin of the active psoriatic plaque, in the uninvolved skin of psoriatic patients and in the normal healthy skin. Gerritsen MJ, et al. **J Dermatol Sci** 1997 Mar;14(3):179–88

Evaluation of cross-reacting anti-human antibodies in the euthymic hairless guinea pig model (HGP) suggests that the HGP may be a model for the study of proliferative skin disease. Smith KJ, et al. **J Dermatol Sci** 1997 Mar;

14(3):240–50

Disaccharide analysis of human skin glycosaminoglycans in sun-exposed and sun-protected skin of aged people. Takahashi Y, et al. **J Dermatol Sci** 1996 Feb;11(2):129–33

An improved method to recover saliva from human skin: the double swab technique. Sweet D, et al. **J Forensic Sci** 1997 Mar;42(2):320–2

PCR-based DNA typing of saliva stains recovered from human skin. Sweet D, et al. **J Forensic Sci** 1997 May; 42(3):447–51

Heterogeneity of chloride channels in the apical membrane of isolated mitochondria-rich cells from toad skin. Sørensen JB, et al. **J Gen Physiol** 1996 Nov;108(5):421–33

Patterns of hyaluronan staining are modified by fixation techniques. Lin W, et al. **J Histochem Cytochem** 1997 Aug; 45(8):1157–63

Detection of mitochondrial DNA deletions in human skin fibroblasts of patients with Pearson's syndrome by two-color fluorescence in situ hybridization. van de Corput MP, et al. **J Histochem Cytochem** 1997 Jan;45(1):55–61

The retinoid X receptor agonist 9-cis-retinoic acid and the 24-hydroxylase inhibitor ketoconazole increase activity of 1,25-dihydroxyvitamin D3 in human skin in vivo. Kang S, et al. **J Invest Dermatol** 1997 Apr;108(4):513–8

The high-affinity receptor for IgE is the predominant IgE-binding structure in lesional skin of atopic dermatitis patients. Klubal R, et al. **J Invest Dermatol** 1997 Mar; 108(3):336–42

The extracellular domain of BPAG2 localizes to anchoring filaments and its carboxyl terminus extends to the lamina densa of normal human epidermal basement membrane. Masunaga T, et al. **J Invest Dermatol** 1997 Aug; 109(2):200–6

Photo-enhanced modification of human skin elastin in actinic elastosis by N(epsilon)-(carboxymethyl)lysine, one of the glycoxidation products of the Maillard reaction. Mizutari K, et al. **J Invest Dermatol** 1997 May;108(5):797–802

The distribution of the desmosomal protein, plakophilin 1, in human skin and skin tumors. Moll I, et al. **J Invest Dermatol** 1997 Feb;108(2):139–46

The formation of competent barrier lipids in reconstructed human epidermis requires the presence of vitamin C. Ponec M, et al. **J Invest Dermatol** 1997 Sep;109(3):348–55

Identification of aberrantly regulated genes in diseased skin using the cDNA differential display technique. Rivas MV, et al. **J Invest Dermatol** 1997 Feb;108(2):188–94

Novel ITGB4 mutations in a patient with junctional epidermolysis bullosa-pyloric atresia syndrome and altered basement membrane zone immunofluorescence for the alpha6beta4 integrin. Takizawa Y, et al. **J Invest Dermatol** 1997 Jun;108(6):943–6

CD44 substituted with heparan sulfate and endo-beta-galactosidase-sensitive oligosaccharides: a major proteoglycan in adult human epidermis. Tuhkanen AL, et al. **J Invest Dermatol** 1997 Aug;109(2):213–8

Alterations of angiotensin II Receptor levels in sutured wounds in rat skin. Abiko M, et al. **J Invest Surg** 1996 Nov-Dec;9(6):447–53

Phase behavior of artificial stratum corneum lipids containing a synthetic pseudo-ceramide: a study of the function of cholesterol. Mizushima H, et al. **J Lipid Res** 1996 Feb; 37(2):361–7

Immunohistochemical localization of utrophin and other cytoskeletal proteins in skin smooth muscle in neuromuscular diseases. Marbini A, et al. **J Neurol Sci** 1996 Nov;143(1-2):156–60

Keratan sulphate is present in developing chick skin in vivo where it could constitute a barrier to advancing neurites as observed in vitro. Hemming FJ, et al. **J Neurosci Res** 1997 Apr 15;48(2):133–45

Three-dimensional distribution of basement membrane components in dystrophic recessive epidermolysis bullosa. Muda AO, et al. **J Pathol** 1996 Aug;179(4):427–31

Reconstruction of in vivo skin autofluorescence spectrum from microscopic properties by Monte Carlo simulation. Zeng H, et al. **J Photochem Photobiol B** 1997 Apr; 38(2-3):234–40

Disappearance of skin lipofuscin storage and marked clinical improvement in adult onset coeliac disease and severe vitamin E deficiency after chronic vitamin E megatherapy. Battisti C, et al. **J Submicrosc Cytol Pathol** 1996 Jul; 28(3):339–44

Vascular endothelial growth factor production in normal epidermis and in benign and malignant epithelial skin tumors. Weninger W, et al. **Lab Invest** 1996 Nov; 75(5):647–57

Wound licking and nitric oxide [letter] Benjamin N, et al. **Lancet** 1997 Jun 14;349(9067):1776

Intracellular staining of Mx proteins in cells from peripheral blood, bone marrow and skin. al-Masri AN, et al. **Mol Pathol** 1997 Feb;50(1):9–14

Nightmare antibiotics [letter; comment] Inglehearn CF. **Nature** 1997 Jul 31;388(6641):416. Comment on: Nature 1997 Jun 26;387(6636):861.

Substance P and calcitonin gene-related peptide in the chicken skin: distribution and cardiovascular effects. Sann H, et al. **Neuropeptides** 1996 Jun;30(3):273–81

Quantitative analysis of cutaneous calcitonin gene-related peptide content in response to acute cutaneous mechanical or thermal stimuli and immobilization-induced stress in rats. Tsuchiya T, et al. **Neuropeptides** 1996 Apr; 30(2):149–57

Immunohistological localization of regenerating protein in ocular structures. Fredj-Reygrobellet D, et al. **Ophthalmic Res** 1996;28(2):130–6

Immunohistochemical detection of 1,25-dihydroxyvitamin D3 receptors (VDR) in human skin. A comparison of five antibodies. Reichrath J, et al. **Pathol Res Pract** 1996 Mar; 192(3):281–9

Multiple bradykinin-related peptides from the skin of the frog, Rana temporaria. Conlon JM, et al. **Peptides** 1997; 18(3):361–5

Production and characterization of site-directed antibodies against dermorphin and dermorphin-related peptides. Cucumel K, et al. **Peptides** 1996;17(6):973–82

In vitro and in vivo biological activities of PG-KII, a novel kassinin-like peptide from the skin of the Australian frog, Pseudophryne guntheri. Improta G, et al. **Peptides** 1996; 17(6):1003–8

Tachykinins and other biologically active peptides from the skin of the Costa Rican phyllomedusid frog Agalychnis callidryas. Mignogna G, et al. **Peptides** 1997;18(3):367–72

Effect of iontophoresis in combination with ionic enhancers on the lipid structure of the stratum corneum: an X-ray diffraction study. Chesnoy S, et al. **Pharm Res** 1996 Oct; 13(10):1581–4

Capillary zone electrophoresis in skin fatty acid analysis. Neubert R, et al. **Pharmazie** 1997 Mar;52(3):212–5

Chromophores in human skin. Young AR. **Phys Med Biol** 1997 May;42(5):789–802 (60 ref.)

New caerin antibacterial peptides from the skin glands of the Australian tree frog Litoria xanthomera. Part 2. Sequence determination using mass spectrometry and associated techniques. Steinborner ST, et al. **Rapid Commun Mass Spectrom** 1997;11(9):997–1000

A critical comparison of methods to quantify stratum corneum removed by tape stripping. Marttin E, et al. **Skin Pharmacol** 1996;9(1):69–77

Improved method for studying skin lipid samples from cyanoacrylate strips by high-performance thin-layer chromatography. Röpke EM, et al. **Skin Pharmacol** 1996; 9(6):381–7

Absence of skin alkaloids in captive-raised Madagascan mantelline frogs (Mantella) and sequestration of dietary alkaloids. Daly JW, et al. **Toxicon** 1997 Jul;35(7):1131–5

Absence of tetrodotoxins in a captive-raised riparian frog, Atelopus varius. Daly JW, et al. **Toxicon** 1997 May; 35(5):705–9

Occurrence of toxins, other than paralysing type, in the skin of Tetraodontiformes fish. Malpezzi EL, et al. **Toxicon** 1997 Jan;35(1):57–65

[A standing wave of chemical reaction on the skin of animals] Kondo S. **Tanpakushitsu Kakusan Koso** 1996 Dec; 41(16):2564–8 (5 ref.) **(Jpn)**

[Immunoglobulin skin and renal deposits in patients with IgA nephropathy and Schonlein-Henoch purpura] Szymanik-Grzelak H, et al. **Pediatr Pol** 1996 Apr; 71(4):321–5 (Eng. Abstr.) **(Pol)**

[Analysis of lactate, ammonia and urea in skin excretions] Khramov VA. **Klin Lab Diagn** 1996 May-Jun;(3):15–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Immunohistochemical study of CD34-positive dendritic cells of human dermis. Narvaez D, et al. **Am J Dermatopathol** 1996 Jun;18(3):283–8

Senescent fibroblasts as feeder cells for lymphoid cell cloning. Grigoriev VG, et al. **Anal Biochem** 1996 May 1; 236(2):250–4

Cell cycle kinetics in normal human skin by in vivo administration of iododeoxyuridine and application of a differentiation marker—implications for cell cycle kinetics in psoriatic skin. van Erp PE, et al. **Anal Cell Pathol** 1996 Jun;11(1):43–54

Ontogeny and characterization of factor XIIIa+ cells in developing human skin. Gibran NS, et al. **Anat Embryol (Berl)** 1996 Jan;193(1):35–41

Skin morphology and cytology in marine eels adapted to different lifestyles. Fishelson L. **Anat Rec** 1996 Sep; 246(1):15–29

A simple immunofluorescence technique for simultaneous visualization of mast cells and nerve fibers reveals selectivity and hair cycle--dependent changes in mast cell--nerve fiber contacts in murine skin. Botchkarev VA, et al. **Arch Dermatol Res** 1997 Apr;289(5):292–302

Proliferative Merkel cells were not detected in human skin. Moll I, et al. **Arch Dermatol Res** 1996 Apr;288(4):184–7

Heterotypic cell-cell adhesion of human mast cells to fibroblasts. Trautmann A, et al. **Arch Dermatol Res** 1997 Mar;289(4):194–203

IL-12 gene expression in human skin-derived CD1a+ dendritic lymph cells. Yawalkar N, et al. **Arch Dermatol Res** 1996 Feb;288(2):79–84

The use of an in vitro wound healing model, the tri-layered skin equivalent, to study the effects of cytokines on the repopulation of the wound defect by fibroblasts and keratinocytes. O'Leary R, et al. **Biochem Soc Trans** 1997 May;25(2):369S

Intracellular pH regulation of newborn rat skin basal cells. Ohkura K, et al. **Biol Pharm Bull** 1996 Dec;19(12):1560–4

Polarity of cultured newborn rat skin basal cell layer. Ohkura K, et al. **Biol Pharm Bull** 1996 Aug;19(8):1013–7

Identification of specific relaxin-binding cells in the cervix, mammary glands, nipples, small intestine, and skin of pregnant pigs. Min G, et al. **Biol Reprod** 1996 Dec; 55(6):1243–52

Heterogeneity of signal transduction mechanisms in human basophils and human skin mast cells. II. Effects of 7-O-methyl-UCN-01, NPC 15437 and bryostatin 1 and 2, four protein kinase C-modulatory agents, on mediator release. Noll T, et al. **Biol Signals** 1997 Jan-Feb;6(1):1–10

In vitro induction of osteogenic differentiation from non-osteogenic mesenchymal cells. Lecoeur L, et al. **Biomaterials** 1997 Jul;18(14):989–93

Cultured skin as a 'smart material' for healing wounds: experience in venous ulcers. Sabolinski ML, et al. **Biomaterials** 1996 Feb;17(3):311–20

Keratinocytes express fibrillin and assemble microfibrils: implications for dermal matrix organization. Haynes SL, et al. **Br J Dermatol** 1997 Jul;137(1):17–23

Morphological and biochemical analyses on fibroblasts and self-produced collagens in a novel three-dimensional culture. Ishikawa O, et al. **Br J Dermatol** 1997 Jan; 136(1):6–11

Human keratinocyte isolation and cell culture: a survey of current practices in the UK. Daniels JT, et al. **Burns** 1996 Feb;22(1):35–9

Human skin histology as demonstrated by Herovici's stain: a guide for the improvement of dermal substitutes for use with cultured keratinocytes? Fitzgerald AM, et al. **Burns** 1996 May;22(3):200–2

Skin replacement by cultured keratinocyte grafts: an Australian experience. Paddle-Ledinek JE, et al. **Burns** 1997 May;23(3):204–11

Age-related response of human dermal fibroblasts to L-ascorbic acid: study of type I and III collagen synthesis. Dumas M, et al. **C R Acad Sci III** 1996 Dec;319(12):1127–32

Grafting assay distinguishes promotion sensitive from promotion resistant JB6 cells. Strickland J, et al. **Carcinogenesis** 1997 Jun;18(6):1135–8

Implantation of autologous skin fibroblast genetically modified to secrete clotting factor IX partially corrects the hemorrhagic tendencies in two hemophilia B patients. Qiu X, et al. **Chin Med J (Engl)** 1996 Nov;109(11):832–9

Detection of Pityrosporum orbiculare reactive T cells from skin and blood in atopic dermatitis and characterization of their cytokine profiles. Tengvall Linder M, et al. **Clin Exp Allergy** 1996 Nov;26(11):1286–97

Effect of melatonin on normal and sclerodermic skin fibroblast proliferation. Carossino AM, et al. **Clin Exp Rheumatol** 1996 Sep-Oct;14(5):493–8

The histological interpretation of high frequency cutaneous ultrasound imaging. Milner SM, et al. **Dermatol Surg** 1997 Jan;23(1):43–5

Comment on study by Gentzkow et al [comment] Caputo GM, et al. **Diabetes Care** 1997 Jan;20(1):116–8. Comment on: Diabetes Care 1996 Apr;19(4):350–4.

Inhibition of hair growth by testosterone in the presence of dermal papilla cells from the frontal bald scalp of the postpubertal stumptailed macaque. Obana N, et al. **Endocrinology** 1997 Jan;138(1):356–61

Stimulation of human skin fibroblast migration by the neuropeptide secretoneurin. Kähler CM, et al. **Eur J Pharmacol** 1996 May 23;304(1-3):135–9

Fibroblasts can modulate the phenotype of malignant epithelial cells in vitro. Atula S, et al. **Exp Cell Res** 1997 Aug 25;235(1):180–7

Cell-matrix interactions induce tyrosine phosphorylation of MAP kinases ERK1 and ERK2 and PLCgamma-1 in two-dimensional and three-dimensional cultures of human fibroblasts. Langholz O, et al. **Exp Cell Res** 1997 Aug 25; 235(1):22–7

Aging affects epidermal growth factor receptor phosphorylation and traffic kinetics. Reenstra WR, et al. **Exp Cell Res** 1996 Sep 15;227(2):252–5

Expression, but lack of calcium mobilization by high-affinity IgE Fc epsilon receptor I on human epidermal and dermal Langerhans cells. Shibaki A, et al. **Exp Dermatol** 1996 Oct; 5(5):272–8

Effects of UVB irradiation on keratinocyte growth factor (KGF) and receptor (KGFR) expression in cultured human keratinocytes. Zhou Y, et al. **Exp Dermatol** 1996 Jun; 5(3):138–44

Role of mitochondria-rich cells in epithelial chloride uptake. Larsen EH, et al. **Exp Physiol** 1996 May;81(3):525–34 (25 ref.)

Comparative studies on mast cell distribution in the skin of humans and laboratory animals. A preliminary report. Godlewski A, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:47–8

Effects of primer-concentration on uronosyl-epimerization and sulfation patterns in p-hydroxyphenyl-O-beta-D-xylopyranoside-primed galactosaminoglycans produced by skin fibroblasts. Cheng F, et al. **Glycoconj J** 1997 Feb;14(2):297–305

Development of a cell line from skin of goldfish, Carassius auratus, and effects of ascorbic acid on collagen deposition. Lee LE, et al. **Histochem J** 1997 Jan;29(1):31–43

Cyclosporin-A affects the organization of cytoskeleton of normal human keratinocytes in culture. Prignano F, et al. **Histol Histopathol** 1996 Oct;11(4):889–94

Characterization of a new in vitro model for studies of reepithelialization in human partial thickness wounds. Jansson K, et al. **In Vitro Cell Dev Biol Anim** 1996 Oct; 32(9):534–40

Hair cycle-associated changes in splenocyte proliferation.

Slominski A, et al. **In Vivo** 1997 Jan–Feb;11(1):101–2

The effect of recombinant stem cell factor on human skin and lung mast cells and basophil leukocytes. Frenz AM, et al. **Inflamm Res** 1997 Feb;46(2):35–9

Comparative effects of UV A and UV B on clonogenic survival and delayed cell death in skin cell lines from humans and fish. O'Reilly JP, et al. **Int J Radiat Biol** 1997 Jul;72(1):111–9

Levels of tryptase, chymase, and Fc epsilon RI alpha messenger RNA in human skin are unchanged after IgE-dependent stimulation of cutaneous mast cells in vivo. Xia HZ, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):224–6

Apoptosis and cutaneous biology. Raskin CA. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):885–96; quiz 897–8 (93 ref.)

Confocal laser scanning microscopy of porcine skin: implications for human wound healing studies. Vardaxis NJ, et al. **J Anat** 1997 May;190 (Pt 4):601–11

The role in cell binding of a beta-bend within the triple helical region in collagen alpha 1 (I) chain: structural and biological evidence for conformational tautomerism on fiber surface. Bhatnagar RS, et al. **J Biomol Struct Dyn** 1997 Apr;14(5):547–60

Conversion of dermal fibroblasts to a myogenic lineage is induced by a soluble factor derived from myoblasts. Wise CJ, et al. **J Cell Biochem** 1996 Jun 1;61(3):363–74

Expression of matrix metalloproteinases during rat skin wound healing: evidence that membrane type-1 matrix metalloproteinase is a stromal activator of pro-gelatinase A. Okada A, et al. **J Cell Biol** 1997 Apr 7;137(1):67–77

Penetration of keratinocyte-derived cytokines into basement membrane. Kondo S, et al. **J Cell Physiol** 1997 May; 171(2):190–5

From newborn to adult: phenotypic and functional properties of skin equivalent and human skin as a function of donor age. Michel M, et al. **J Cell Physiol** 1997 May;171(2):179–89

Fetal and postnatal sera differentially modulate human dermal fibroblast phenotypic and functional features in vitro. Moulin V, et al. **J Cell Physiol** 1997 Apr;171(1):1–10

Immunocytochemical characterization of malignant schwannoma-derived cells in culture. Demitsu T, et al. **J Dermatol** 1997 Jan;24(1):1–6

Hair follicle dermal papilla cell lines from p53-knockout mice. Hanzawa C, et al. **J Dermatol Sci** 1997 May; 15(1):59–63

Effect of human basic fibroblast growth factor on fibroblast proliferation, cell volume, collagen lattice contraction: in comparison with acidic type. Imaizumi T, et al. **J Dermatol Sci** 1996 Feb;11(2):134–41

Novel method to investigate kinetics of rat skin cells by means of an occlusive dressing method using bromodeoxyuridine. Nakano R, et al. **J Dermatol Sci** 1997 Jan;14(1):54–62

Time course of changes in antioxidant enzymes in human skin fibroblasts after UVA irradiation. Shindo Y, et al. **J Dermatol Sci** 1997 Mar;14(3):225–32

Effect of growth factors on dermal fibroblast contraction in normal skin and hypertrophic scar. Yang CC, et al. **J Dermatol Sci** 1997 Feb;14(2):162–9

Effects of prostaglandin E1 on cultured dermal fibroblasts from normal and hypertrophic scarred skin. Zhou LJ, et al. **J Dermatol Sci** 1997 Mar;14(3):217–24

A role for endogenous transforming growth factor beta 1 in Langerhans cell biology: the skin of transforming growth factor beta 1 null mice is devoid of epidermal Langerhans cells. Borkowski TA, et al. **J Exp Med** 1996 Dec 1; 184(6):2417–22

Innervation of melanocytes in human skin. Hara M, et al. **J Exp Med** 1996 Oct 1;184(4):1385–95

Human hair follicle dermal papilla cell, dermal sheath cell and interstitial dermal fibroblast characteristics. Chiu HC, et al. **J Formos Med Assoc** 1996 Sep;95(9):667–74

Heterogeneity of chloride channels in the apical membrane of isolated mitochondria-rich cells from toad skin. Sørensen JB, et al. **J Gen Physiol** 1996 Nov;108(5):421–33

E-cadherin-mediated adhesion involving Langerhans cell-like dendritic cells expanded from murine fetal skin. Jakob T, et al. **J Immunol** 1997 Sep 15;159(6):2693–701

Epidermal proliferation but not quantity of DNA photodamage is correlated with UV-induced mouse skin carcinogenesis. Berton TR, et al. **J Invest Dermatol** 1997 Sep;109(3):340–7

Ex vivo study of skin phototypes. Bessou S, et al. **J Invest Dermatol** 1996 Nov;107(5):684–8

Liposome-associated interferon-alpha-2b functions as an anti-fibrogenic factor for human dermal fibroblasts. Ghahary A, et al. **J Invest Dermatol** 1997 Jul;109(1):55–60

The chemokine repertoire of human dermal microvascular endothelial cells and its regulation by inflammatory cytokines. Goebeler M, et al. **J Invest Dermatol** 1997 Apr; 108(4):445–51

Human epidermal keratinocytes are a source of tenascin-C during wound healing. Latijnhouwers M, et al. **J Invest Dermatol** 1997 May;108(5):776–83

Amphiregulin and nerve growth factor expression are regulated by barrier status in murine epidermis. Liou A, et al. **J Invest Dermatol** 1997 Jan;108(1):73–7

Human cutaneous dendritic cells migrate through dermal lymphatic vessels in a skin organ culture model. Lukas M, et al. **J Invest Dermatol** 1996 Jun;106(6):1293–9

Retroviral transduction of murine epidermal stem cells demonstrates clonal units of epidermal structure. Mackenzie IC. **J Invest Dermatol** 1997 Sep;109(3):377–83

Altered permeability and disordered cutaneous immunoregulatory function in mice with acute barrier disruption. Nishijima T, et al. **J Invest Dermatol** 1997 Aug; 109(2):175–82

The co-culture of dermal fibroblasts with human epidermal keratinocytes induces increased prostaglandin E2 production and cyclooxygenase 2 activity in fibroblasts. Sato T, et al. **J Invest Dermatol** 1997 Sep;109(3):334–9

The effects of trypsin on apoptosis, utriculi size, and skin elasticity in the Rhino mouse. Seiberg M, et al. **J Invest Dermatol** 1997 Sep;109(3):370–6

Epidermal T cells: their functional role and disease relevance for dermatologists. Shiohara T, et al. **J Invest Dermatol** 1997 Sep;109(3):271–5 (45 ref.)

Distinct populations of stromal cells express collagenase-3 (MMP-13) and collagenase-1 (MMP-1) in chronic ulcers but not in normally healing wounds. Vaalamo M, et al. **J Invest Dermatol** 1997 Jul;109(1):96–101

Migration of rat skin dendritic cells. Richters CD, et al. **J Leukoc Biol** 1996 Sep;60(3):317–22

7S globulin from soybean is metabolized in human cell cultures by a specific uptake and degradation system. Lovati MR, et al. **J Nutr** 1996 Nov;126(11):2831–42

Heterogeneity of ICAM-1 expression, and cytokine regulation of ICAM-1 expression, in skin and oral keratinocytes. Li J, et al. **J Oral Pathol Med** 1996 Mar; 25(3):112–8

Most anchoring fibrils in human skin originate and terminate in the lamina densa. Shimizu H, et al. **Lab Invest** 1997 Jun; 76(6):753–63

Mel-5: a novel antibody for differential diagnosis of epidermal pigmented lesions of the skin in paraffin-embedded sections. Bhawan J. **Melanoma Res** 1997 Feb;7(1):43–8

Aging of cultured human skin fibroblasts. Harley CB, et al. **Methods Mol Biol** 1997;75:23–30 (8 ref.)

Establishment, maintenance, and cloning of human dermal fibroblasts. Jones GE, et al. **Methods Mol Biol** 1997; 75:13–21 (4 ref.)

Colcemid alters S phase and other parameters in skin during chronic exposure to benzo(a)pyrene. Miller ML, et al. **Microsc Res Tech** 1996 Nov 1;35(4):307–13

Application of in vitro Myo-differentiation of non-muscle cells to enhance gene expression and facilitate analysis of muscle proteins. Roest PA, et al. **Neuromuscul Disord** 1996 May;6(3):195–202

Milk and egg albumen are superior to human saliva in preserving human skin fibroblasts. Rozenfarb N, et al. **Pediatr Dent** 1997 Jul–Aug;19(5):347–8

Effects of low concentrations of cis- and trans-urocanic acid on cytokine elaboration by keratinocytes. Redondo P, et al. **Photodermatol Photoimmunol Photomed** 1996 Dec; 12(6):237–43

The proteolytic potential of normal human melanocytes: comparison with other skin cells and melanoma cell lines. Bizik J, et al. **Pigment Cell Res** 1996 Oct;9(5):255–64

Protective effect of curcuminoids on epidermal skin cells under free oxygen radical stress [letter] Bonté F, et al. **Planta Med** 1997 Jun;63(3):265–6

Involvement of the cyclin-dependent kinase inhibitor p16 (INK4a) in replicative senescence of normal human fibroblasts. Alcorta DA, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13742–7

Superoxide-mediated clastogenesis and anticlastogenic effects of exogenous superoxide dismutase. Emerit I, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):12799–804

Clonal analysis of stably transduced human epidermal stem cells in culture. Mathor MB, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10371–6

Regulation of Bcl-xL expression in human keratinocytes by cell-substratum adhesion and the epidermal growth factor receptor. Rodeck U, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5067–72

RT-PCR based analysis of T-cell receptor B variable region gene usage in normal human breast skin resident T lymphocytes (SRT). Ahangari G, et al. **Scand J Immunol** 1996 Oct;44(4):330–4

High-resolution cryo-scanning electron microscopy study of the macromolecular structure of fibronectin fibrils. Chen Y, et al. **Scanning** 1997 Aug;19(5):349–55

Melanoma and stroma: an interaction of biological and prognostic importance. Smolle J, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):326–35 (108 ref.)

A skin equivalent model for cosmetological trials: an in vitro efficacy study of a new biopeptide. Augustin C, et al. **Skin Pharmacol** 1997;10(2):63–70

Synthetic wound dressings--evaluation of interactions with epithelial and dermal cells in vitro. Wollina U, et al. **Skin Pharmacol** 1996;9(1):35–42

In vitro bioartificial skin culture model of tissue rejection and inflammatory/immune mechanisms. Strande LF, et al. **Transplant Proc** 1997 Jun;29(4):2118–9

Differences in dermal analogs influence subsequent pigmentation, epidermal differentiation, basement membrane, and rete ridge formation of transplanted composite skin grafts. Medalie DA, et al. **Transplantation** 1997 Aug 15;64(3):454–65

[Stress and skin: experimental approach] Gauthier Y. **Pathol Biol (Paris)** 1996 Dec;44(10):882–7 (30 ref.) (Eng. Abstr.) **(Fre)**

[Merkel cell and neuro-cutaneous system] Misery L, et al. **Pathol Biol (Paris)** 1996 Dec;44(10):849–55 (81 ref.) (Eng. Abstr.) **(Fre)**

[Histological and histochemical investigations on the structure of udder skin of cattle with special reference to changes during in vivo udder perfusion models] Ludewig T, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Dec; 103(12):501–5 (Eng. Abstr.) **(Ger)**

[Effect of interaction of fibroblasts and keratinocytes on interleukin-8 secretion] Konstantinova NV, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):181–4 **(Rus)**

DRUG EFFECTS

Ultrastructure of murine dermis following topical application of the vitamin D3 analogue KH-1060. Kobayasi T. **Acta Derm Venereol** 1997 May;77(3):198–202

Enhanced release of interleukin-8 from human epidermal keratinocytes in response to stimulation with trichophytin in vitro [letter] Koga T, et al. **Acta Derm Venereol** 1996 Sep;76(5):399–400

A novel endogenous mediator of cutaneous inflammation: leukemia inhibitory factor. McKenzie RC, et al. **Acta Derm Venereol** 1996 Mar;76(2):111–4

Effects of topical application of capsaicin to human skin: a comparison of effects evaluated by visual assessment, sensation registration, skin blood flow and cutaneous impedance measurements. Magnusson BM, et al. **Acta Derm Venereol** 1996 Mar;76(2):129–32

Temperature dependency of skin susceptibility to water and detergents. Ohlenschlaeger J, et al. **Acta Derm Venereol** 1996 Jul;76(4):274–6

Measurement of sodium lauryl sulfate-induced skin irritation. Treffel P, et al. **Acta Derm Venereol** 1996 Sep;76(5):341–3

Skin reactions and irritation potential of four commercial toothpastes. Skaare A, et al. **Acta Odontol Scand** 1997 Apr; 55(2):133–6

Response of the rat mucosal and connective tissue type mast cells to interferon-alpha. Daliçik H, et al. **Acta Physiol Pharmacol Ther Latinoam** 1996;46(1):11–21

Methacholine induces wheal-and-flare reactions in human skin but does not release histamine in vivo as assessed by the skin microdialysis technique. Petersen LJ, et al. **Allergy** 1995 Dec;50(12):976–80

Nimesulide reduces skin-test reactivity. Senna GE, et al. **Allergy** 1997 May;52(5):596

Second generation video imaging technique for assessing dermal exposure (VITAE System). Fenske RA, et al. **Am Ind Hyg Assoc J** 1997 Sep;58(9):636–45

Moisturizers: adjunct therapy and advising patients. Jackson EM. **Am J Contact Dermat** 1996 Dec;7(4):247–50 (9 ref.)

Cross-reactions in patch testing and photopatch testing with ketoprofen, thiaprophenic acid, and cinnamic aldehyde. Pigatto P, et al. **Am J Contact Dermat** 1996 Dec;7(4):220–3

Cocaine effects on digital blood flow and diffusing capacity for carbon monoxide among chronic cocaine users. Sullivan JT, et al. **Am J Med** 1997 Mar;102(3):232–8

Nitric oxide increases cutaneous and respiratory heat dissipation in conscious rabbits. Mathai ML, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1691–7

Correlation of neutrophil activation and skin flap survival in pharmacologically altered pigs. Kosko JR, et al. **Ann Otol Rhinol Laryngol** 1997 Sep;106(9):790–4

Re: Obagi's modified trichloroacetic acid (TCA)-controlled variable depth peel: a study of clinical signs correlating with histological findings [letter; comment] Glogau RG, et al. **Ann Plast Surg** 1997 Mar;38(3):298–302. Comment on: Ann Plast Surg 1996 Mar;36(3):225–37. Comment on: Ann Plast Surg 1996 Mar;36(3):334.

Antitumor mechanism of intradermal administration of lipopolysaccharide. Inagawa H, et al. **Anticancer Res** 1997 May-Jun;17(3C):1961–4

Diagnostic value of indirect immunofluorescence on sodium chloride-split skin in differential diagnosis of subepidermal autoimmune bullous dermatoses [see comments] Ghohestani RF, et al. **Arch Dermatol** 1997 Sep; 133(9):1102–7. Comment in: Arch Dermatol 1997 Sep;133(9):1158–60.

Transdermal nicotine suppresses cutaneous inflammation [see comments] Mills CM, et al. **Arch Dermatol** 1997 Jul; 133(7):823–5. Comment in: Arch Dermatol 1997 Jul;133(7):901–2.

The accuracy of indirect immunofluorescence on sodium chloride-split skin in differentiating subepidermal bullous diseases [editorial; comment] Mutasim DF. **Arch Dermatol** 1997 Sep;133(9):1158–60 (23 ref.). Comment on: Arch Dermatol 1997 Sep;133(9):1102–7.

Matrix metalloproteinase inhibitors reduce phorbol ester-induced cutaneous inflammation and hyperplasia. Holleran WM, et al. **Arch Dermatol Res** 1997 Feb; 289(3):138–44

Topical application of a first porphycene dye for photodynamic therapy--penetration studies in human perilesional skin and basal cell carcinoma. Karrer S, et al. **Arch Dermatol Res** 1997 Feb;289(3):132–7

IFN-gamma-induced HLA-DR but not ICAM-1 expression on cultured dermal papilla cells is downregulated by TNF-alpha. König A, et al. **Arch Dermatol Res** 1997 Jul; 289(8):466–70

Effects of basophil-priming and stimulating cytokines on histamine release from isolated human skin mast cells. Nitschke M, et al. **Arch Dermatol Res** 1996 Jul;288(8):463–8

Epicutaneous application of leukotriene B4 induces patterns of tenascin and a heparan sulfate proteoglycan epitope that

are typical for psoriatic lesions. Seyger MM, et al. **Arch Dermatol Res** 1997 May;289(6):331–6

MHC class II+ keratinocytes from IFN gamma–treated human skin activate T cells in the presence of staphylococcal superantigen despite UVB irradiation. Skov L, et al. **Arch Dermatol Res** 1996 May;288(5–6):255–7

Differential in vitro responses of elastin expression to basic fibroblast growth factor and transforming growth factor beta 1 in upper, middle and lower dermal fibroblasts. Tajima S, et al. **Arch Dermatol Res** 1996 Nov;288(12):753–6

Inhibition of collagen expression by azelastine hydrochloride in cultured skin fibroblasts from normal individuals and scleroderma patients. Yamada H, et al. **Arch Dermatol Res** 1996 Sep;288(10):575–8

Effect of topically applied menthol on thermal, pain and itch sensations and biophysical properties of the skin. Yosipovitch G, et al. **Arch Dermatol Res** 1996 May; 288(5–6):245–8

Topical all–trans retinoic acid (RA) induces an early, coordinated increase in RA–inducible skin–specific gene/psoriasin and cellular RA–binding protein II mRNA levels which precedes skin erythema. Zouboulis CC, et al. **Arch Dermatol Res** 1996 Oct;288(11):664–9

Effect of tripeptide–copper complexes on the process of skin wound healing and on cultured fibroblasts. Buffoni F, et al. **Arch Int Pharmacodyn Ther** 1995 Nov–Dec; 330(3):345–60

Effect of calcitonin gene–related peptide on sodium absorption through isolated skin of Rana esculenta. Castronuovo G, et al. **Arch Physiol Biochem** 1996; 104(2):142–7

Enhancement of SDZ ICT 322–induced cataracts and skin changes in rats following vitamin E– and selenium–deficient diet. Längle UW, et al. **Arch Toxicol** 1997;71(5):283–9

Serotonin decreases cytoskeletal and cytosolic glycolytic enzymes and the levels of ATP and glucose 1,6–bisphosphate in skin, which is prevented by the calmodulin antagonists thioridazine and clotrimazole. Ashkenazy–Shahar M, et al. **Biochem Mol Med** 1997 Apr; 60(2):187–93

Stimulation of gap junctional intercellular communication by thalidomide and thalidomide analogs in human skin fibroblasts. Nicolai S, et al. **Biochem Pharmacol** 1997 May 15;53(10):1553–7

The regulation of CD11b integrin levels on human blood leukocytes and leukotriene B4–stimulated skin by a specific leukotriene B4 receptor antagonist (LY293111). van Pelt JP, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):1005–12

Relationship between the amount of propranolol permeating through the stratum corneum of guinea pig skin after application of propranolol adhesive patches and skin irritation. Kobayashi I, et al. **Biol Pharm Bull** 1996 Jun; 19(6):839–44

Protective effects of hydroxybenzoic acids and their esters on cell damage induced by hydroxyl radicals and hydrogen peroxides. Masaki H, et al. **Biol Pharm Bull** 1997 Apr; 20(4):304–8

Inhibitory effect of acyl–CoA and acyl–carnitine compounds on the ischemia–inducing activity of Bordetella heat–labile toxin in guinea pig skin. Nagai M, et al. **Biol Pharm Bull** 1997 Feb;20(2):193–5

Inhibitory effects of sterols isolated from Chlorella vulgaris on 12–O–tetradecanoylphorbol–13–acetate–induced inflammation and tumor promotion in mouse skin. Yasukawa K, et al. **Biol Pharm Bull** 1996 Apr;19(4):573–6

Evaluation of skin sensitization potential of nickel, chromium, titanium and zirconium salts using guinea–pigs and mice. Ikarashi Y, et al. **Biomaterials** 1996 Nov;17(21):2103–8

Effects of chitin and its derivatives on the proliferation and cytokine production of fibroblasts in vitro. Mori T, et al. **Biomaterials** 1997 Jul;18(13):947–51

Low–dose interleukin–2 therapy is not associated with cutaneous toxicity after autologous transplantation [letter; comment] López–Jiménez J, et al. **Bone Marrow Transplant** 1996 Aug;18(2):481–2. Comment on: Bone Marrow Transplant 1995 Jul;16(1):199–200.

Cutaneous hypersensitivity reactions to thiacetazone, HIV infection and thiacetazone concentrations in plasma. Watkins WM, et al. **Br J Clin Pharmacol** 1996 Feb; 41(2):160–2

Tazarotene—first of a new generation of receptor–selective retinoids. Chandraratna RA. **Br J Dermatol** 1996 Oct;135 Suppl 49:18–25

Effect of topical tretinoin on non–sun–exposed human skin connective tissue: induction of tenascin but no major effect on collagen metabolism. Haapasaari KM, et al. **Br J Dermatol** 1997 Jun;136(6):891–900

Early clinical development of tazarotene. Marks R. **Br J Dermatol** 1996 Oct;135 Suppl 49:26–31

Reactivity of tixocortol pivalate–positive patients in intradermal and oral provocation tests. Räsänen L, et al. **Br J Dermatol** 1996 Dec;135(6):931–4

Superficial blood flow following photodynamic therapy of malignant non–melanoma skin tumours measured by laser Doppler perfusion imaging. Wang I, et al. **Br J Dermatol** 1997 Feb;136(2):184–9

Involvement of sensory neuropeptides in the development of plasma extravasation in rat dorsal skin following thermal injury. Siney L, et al. **Br J Pharmacol** 1996 Mar; 117(6):1065–70

Semiquantitative evaluation of dermal exposure to granulated insecticides in coffee (Coffea arabica L.) crop and efficiency of individual protective equipment. Machado–Neto JG, et al. **Bull Environ Contam Toxicol** 1996 Dec;57(6):946–51

Dispase/detergent treated dermal matrix as a dermal substitute. Takami Y, et al. **Burns** 1996 May;22(3):182–90

The effect of the desert cobra (Walterinnesia aegyptia) crude venom and its protein fractions on the metabolic activity of cultured human fibroblasts. al–Saleh SS. **Cell Biol Toxicol** 1996 Jun;12(3):127–34

Effects of detergents on acne. Solomon BA, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):95–9 (8 ref.)

Growth hormone substitution in adult growth hormone–deficient men augments androgen effects on the skin. Blok GJ, et al. **Clin Endocrinol (Oxf)** 1997 Jul; 47(1):29–36

No release of histamine and substance P in capsaicin–induced neurogenic inflammation in intact human skin in vivo: a microdialysis study. Petersen LJ, et al. **Clin Exp Allergy** 1997 Aug;27(8):957–65

Action of cholinesters on sensory nerve endings in skin and muscle. Carr RW, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):355–62 (81 ref.)

Effect of NG–monomethyl–L–arginine on the microcirculation of rat skin. Kakizoe E, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):149–52

Substance P activates the release of histamine from human skin mast cells through a pertussis toxin–sensitive and protein kinase C–dependent mechanism. Columbo M, et al. **Clin Immunol Immunopathol** 1996 Oct;81(1):68–73

In vivo drug–response measurements in target tissues by microdialysis. Müller M, et al. **Clin Pharmacol Ther** 1997 Aug;62(2):165–70

Barrier recovery and influence of irritant stimuli in skin treated with a moisturizing cream. Lodén M. **Contact Dermatitis** 1997 May;36(5):256–60

Transfersomes, liposomes and other lipid suspensions on the skin: permeation enhancement, vesicle penetration, and transdermal drug delivery. Cevc G. **Crit Rev Ther Drug Carrier Syst** 1996;13(3–4):257–388 (331 ref.)

Citric acid increases viable epidermal thickness and glycosaminoglycan content of sun–damaged skin. Bernstein EF, et al. **Dermatol Surg** 1997 Aug;23(8):689–94

Electron resonance studies on the influence of anionic surfactants on human skin. Kawasaki Y, et al. **Dermatology** 1997;194(3):238–42

Mechanical properties of skin in recombinant human growth factor abusers among adult bodybuilders. Piérard–Franchimont C, et al. **Dermatology** 1996; 192(4):389–92

Tachyphylaxis to histamine–induced wheal suppression by topical 0.05% clobetasol propionate in normal versus croton oil–induced dermatitic skin. Singh S, et al. **Dermatology** 1996;193(2):121–3

Topical vitamin D3 derivatives impair the epidermal permeability barrier in normal mouse skin. von Brenken S, et al. **Dermatology** 1997;194(2):151–6

Comparative 32P–postlabeling analysis of exogenous and endogenous DNA adducts in mouse skin exposed to a wood–preserving waste extract, a complex mixture of polycyclic and polychlorinated chemicals. Randerath K, et al. **Environ Mol Mutagen** 1997;29(4):372–8

Microinjection technique for pharmacological evaluation of microvascular permeability in human skin. Herrig I, et al. **Eur J Clin Pharmacol** 1996;49(5):365–9

Investigation of 6–hydroxydopamine–induced plasma extravasation in rat skin. Cambridge H, et al. **Eur J Pharmacol** 1996 Apr 22;301(1–3):151–7

Role of bradykinin B2 receptors and mast cells in the bradykinin–induced skin response in the rat. Morishita M, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):149–54

Influence of nitric oxide on transepithelial transport in toad skin: effects of cholinergic agents and morphine. Neumann V, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):123–8

Persistence of effects of nitric oxide synthase inhibitors: comparisons on blood flow and plasma exudation in guinea pig skin. Perez AC, et al. **Eur J Pharmacol** 1997 Jul 9; 330(2–3):241–6

Scopolamine increases prehensile force during object manipulation by reducing palmar sweating and decreasing skin friction. Smith AM, et al. **Exp Brain Res** 1997 May; 114(3):578–83

Differential effects of TGF–beta1 on hyaluronan synthesis by fetal and adult skin fibroblasts: implications for cell migration and wound healing. Ellis IR, et al. **Exp Cell Res** 1996 Nov 1;228(2):326–33

In situ changes in the relative abundance of human epidermal cytokine messenger RNA levels following exposure to the poison ivy/oak contact allergen urushiol. Boehm KD, et al. **Exp Dermatol** 1996 Jun;5(3):150–60

Skin roughness is negatively correlated to irritation with DMSO, but not with NaOH and SLS. Iliev D, et al. **Exp Dermatol** 1997 Aug;6(4):157–60

Parallel intraindividual evaluation of the vasoconstrictory action and the anti–allergic activity of topical corticosteroids. Seidenari S, et al. **Exp Dermatol** 1997 Apr; 6(2):75–80

The effect of bile acid on the activation of amiloride–sensitive sodium channels in frog skin. Lima MS, et al. **Exp Physiol** 1996 Sep;81(5):755–66

Ozone depletes tocopherols and tocotrienols topically applied to murine skin. Thiele JJ, et al. **FEBS Lett** 1997 Jan 20; 401(2–3):167–70

In vivo noninvasive study of the mechanical properties of the human skin after single application of topical corticosteroids. Dobrev H. **Folia Med (Plovdiv)** 1996; 38(2):11–7

Effect of alpha–tomatine and tomatidine on membrane potential of frog embryos and active transport of ions in frog skin. Blankemeyer JT, et al. **Food Chem Toxicol** 1997 Jul;35(7):639–46

IRAG working group 3. Cell function–based assays. Interagency Regulatory Alternatives Group. Botham P, et al. **Food Chem Toxicol** 1997 Jan;35(1):67–77

A re–appraisal of the skin–sensitizing activity of 2,4–dinitrothiocyanobenzene. Dearman RJ, et al. **Food Chem Toxicol** 1997 Feb;35(2):261–9

Quercetin protects cutaneous tissue–associated cell types including sensory neurons from oxidative stress induced by glutathione depletion: cooperative effects of ascorbic acid. Skaper SD, et al. **Free Radic Biol Med** 1997; 22(4):669–78

Efficacy of topically applied tocopherols and tocotrienols in protection of murine skin from oxidative damage induced by UV–irradiation. Weber C, et al. **Free Radic Biol Med** 1997;22(5):761–9

Chronic dermal studies of petroleum streams in mice. Broddle WD, et al. **Fundam Appl Toxicol** 1996 Mar;30(1):47–54

Inflammatory response of mouse skin exposed to the very potent carcinogen dibenzo[a,l]pyrene: a model for tumor promotion. Casale GP, et al. **Fundam Appl Toxicol** 1997 Mar;36(1):71–8

Influence of dibutyl phthalate on dermal sensitization to fluorescein isothiocyanate. Dearman RJ, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):24–30

Effects of beraprost sodium and prostaglandin E1 on skin blood flow in diabetic rats and normal dogs. Ueno Y, et al. **Gen Pharmacol** 1996 Mar;27(2):333–5

Assessment of the biochemical effects of percutaneous exposure of sulphur mustard in an in vitro human skin system. Lindsay CD, et al. **Hum Exp Toxicol** 1996 Mar; 15(3):237–44

Calcium channel blockers blunt postural cutaneous vasoconstriction in hypertensive patients. Iabichella ML, et al. **Hypertension** 1997 Mar;29(3):751–6

Topical drug vehicle effects on skin and inflammation [letter] Seed MP, et al. **Inflamm Res** 1997 Jun;46(6):191–2

Evaluation of cutaneous reactivity to recently marketed dermatologic products. Shelanski MV, et al. **Int J Dermatol** 1996 Feb;35(2):137–40

Measurement of the skin–cleaning effects of soaps. Wolf R, et al. **Int J Dermatol** 1996 Aug;35(8):598–600

Histopathological changes in Yucatan minipig skin following challenge with sulphur mustard. A sequential study of the first 24 hours following challenge. Brown RF, et al. **Int J Exp Pathol** 1997 Feb;78(1):9–20

The effect of azelastine on acute radiation dermatitis in mice models. Murakami R, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 1;37(4):907–11

Growth factor–induced epidermal invasion of the dermis in human skin organ culture: expression and role of matrix metalloproteinases. Zeigler ME, et al. **Invasion Metastasis** 1996;16(1):11–8

Growth factor–induced epidermal invasion of the dermis in human skin organ culture: dermal invasion correlated with epithelial cell motility. Zeigler ME, et al. **Invasion Metastasis** 1996;16(1):3–10

Platelet–activating factor induces histamine release from human skin mast cells in vivo, which is reduced by local nerve blockade. Petersen LJ, et al. **J Allergy Clin Immunol** 1997 May;99(5):640–7

Cellular inflammatory responses during immediate, developing, and established late–phase allergic cutaneous reactions: effects of cetirizine. Zweiman B, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):341–7

Skin tolerance of adapalene 0.1% gel in combination with other topical antiacne treatments. Caron D, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 2):S113–5

Biologic effects of topical calcipotriol (MC 903) treatment in psoriatic skin. Reichrath J, et al. **J Am Acad Dermatol** 1997 Jan;36(1):19–28

Pharmacology and chemistry of adapalene. Shroot B, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 2):S96–103 (14 ref.)

Adapalene 0.1% gel has low skin–irritation potential. Verschoore M, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 2):S104–9

Effects of alpha–hydroxy acids on photoaged skin [letter; comment] Whitmore SE. **J Am Acad Dermatol** 1997 Apr; 36(4):654–5. Comment on: J Am Acad Dermatol 1996 Feb;34(2 Pt 1):187–95.

Comparative acute toxicity and primary irritancy of the ethylidene and vinyl isomers of norbornene. Ballantyne B, et al. **J Appl Toxicol** 1997 Jul–Aug;17(4):211–21

Structural changes induced by sulphur mustard in rabbit skin. Chauhan RS, et al. **J Appl Toxicol** 1996 Nov–Dec; 16(6):491–5

Evaluation of the dermal carcinogenic potential of re–refined base stocks using the modified Ames assay, PAC analysis and the 32P–postlabeling assay for DNA adduct induction. Dickson JR, et al. **J Appl Toxicol** 1997 Mar–Apr; 17(2):113–7

Effect of atrial natriuretic factor on skin microcirculation versus skeletal muscle blood flow. Branten AJ, et al. **J Cardiovasc Pharmacol** 1996 Feb;27(2):303–6

Interleukin-2 increases transcapillary diffusion of sodium fluorescein in human skin. Costanzo U, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):81-6

Corticosteroids significantly delay the onset of docetaxel-induced fluid retention: final results of a randomized study of the European Organization for Research and Treatment of Cancer Investigational Drug Branch for Breast Cancer. Piccart MJ, et al. **J Clin Oncol** 1997 Sep;15(9):3149-55

Differential effects of noxious conditioning stimulation of the cheek by capsaicin on human sensory and inhibitory masseter reflex responses evoked by tooth pulp stimulation. Kemppainen P, et al. **J Dent Res** 1997 Sep;76(9):1561-8

Effects of thallium ion on cellular components of the skin. Arbiser JL, et al. **J Dermatol** 1997 Mar;24(3):147-55

Systemic 70% deacetylated chitin (DAC-70) as a treatment for MRL/1pr murine lupus; reduction of immunoglobulin deposition in the skin and kidneys [letter] Horiuchi Y, et al. **J Dermatol** 1997 Jan;24(1):63-5

Disaggregation of corneocytes from surfactant-treated sheets of stratum corneum in hyperkeratosis on psoriasis, ichthyosis vulgaris and atopic dermatitis. Shukuwa T, et al. **J Dermatol** 1997 Jun;24(6):361-9

Regulations of collagen synthesis by ascorbic acid, transforming growth factor-beta and interferon-gamma in human dermal fibroblasts cultured in three-dimensional collagen gel are photoaging- and aging-independent. Chung JH, et al. **J Dermatol Sci** 1997 Sep;15(3):188-200

Effect of human basic fibroblast growth factor on fibroblast proliferation, cell volume, collagen lattice contraction: in comparison with acidic type. Imaizumi T, et al. **J Dermatol Sci** 1996 Feb;11(2):134-41

Histopathologic features seen with different animal models following cutaneous sulfur mustard exposure. Smith KJ, et al. **J Dermatol Sci** 1997 Feb;14(2):126-35

Butylated hydroxyanisole blocks the inhibitory effects of tumor necrosis factor-alpha on collagen production in human dermal fibroblasts. Taniguchi S, et al. **J Dermatol Sci** 1996 Apr;12(1):44-9

Effect of growth factors on dermal fibroblast contraction in normal skin and hypertrophic scar. Yang CC, et al. **J Dermatol Sci** 1997 Feb;14(2):162-9

Tumor necrosis factor (TNF)-induced cutaneous necrosis is mediated by TNF receptor 1. Amar S, et al. **J Inflamm** 1995-96;47(4):180-9

Interleukin-1beta is differentially expressed by human dermal papilla cells in response to PKC activation and is a potent inhibitor of human hair follicle growth in organ culture. Xiong Y, et al. **J Interferon Cytokine Res** 1997 Mar; 17(3):151-7

Induction of tumor necrosis factor-alpha in vivo by a skin irritant, tributyltin, through activation of transcription factors: its pharmacological modulation by anti-inflammatory drugs. Corsini E, et al. **J Invest Dermatol** 1997 Jun;108(6):892-6

Topical retinaldehyde increases skin content of retinoic acid and exerts biologic activity in mouse skin. Didierjean L, et al. **J Invest Dermatol** 1996 Nov;107(5):714-9

Unoccluded retinol penetrates human skin in vivo more effectively than unoccluded retinyl palmitate or retinoic acid. Duell EA, et al. **J Invest Dermatol** 1997 Sep; 109(3):301-5

Liarozole inhibits human epidermal retinoic acid 4-hydroxylase activity and differentially augments human skin responses to retinoic acid and retinol in vivo. Kang S, et al. **J Invest Dermatol** 1996 Aug;107(2):183-7

Iontophoretic delivery of ALA provides a quantitative model for ALA pharmacokinetics and PpIX phototoxicity in human skin. Rhodes LE, et al. **J Invest Dermatol** 1997 Jan; 108(1):87-91

Ozone-exposure depletes vitamin E and induces lipid peroxidation in murine stratum corneum. Thiele JJ, et al. **J Invest Dermatol** 1997 May;108(5):753-7

Predictive dosimetry for threshold phototoxicity in photodynamic therapy on normal skin: red wavelengths produce more extensive damage than blue at equal threshold doses. Tsoukas MM, et al. **J Invest Dermatol** 1997 Apr;108(4):501-5

Effects of tretinoin pretreatment on TCA chemical peel in guinea pig skin. Kim IH, et al. **J Korean Med Sci** 1996 Aug;11(4):335-41

Effects of NEM on voltage-activated chloride conductance in toad skin. Nagel W, et al. **J Membr Biol** 1997 Sep 15; 159(2):127-35

Porcelinizing discolorization of the periocular skin following botulinum A toxin injections [letter] Friedland S, et al. **J Neuroophthalmol** 1996 Mar;16(1):70-2

Compared chemical properties of dermonecrotic and lethal toxins from spiders of the genus Loxosceles (Araneae). Barbaro KC, et al. **J Protein Chem** 1996 May;15(4):337-43

Dermal toxicity and percutaneous absorption of cadmium in rats and mice. Lansdown AB, et al. **Lab Anim Sci** 1996 Oct;46(5):549-54

Effects of contact allergens on human Langerhans cells in skin organ culture: migration, modulation of cell surface molecules, and early expression of interleukin-1 beta protein. Rambukkana A, et al. **Lab Invest** 1996 Feb; 74(2):422-36

Interferon-beta, an autocrine cytokine, suppresses human fetal skin fibroblast migration into a denuded area in a cell monolayer but is not involved in the age-related decline of cell migration. Kondo H, et al. **Mech Ageing Dev** 1996 Jun 25;87(3):141-53

A mechanism of skin appendage macropores electroactivation during iontophoresis. Kuzmin PI, et al. **Membr Cell Biol** 1997;10(6):699-706

Antiinflammatory activity of topically applied sertaconazole nitrate. Agut J, et al. **Methods Find Exp Clin Pharmacol** 1996 May;18(4):233-4

Colcemid alters S phase and other parameters in skin during chronic exposure to benzo(a)pyrene. Miller ML, et al. **Microsc Res Tech** 1996 Nov 1;35(4):307-13

Introduction to histological aspects of dermatotoxicology. Monteiro-Riviere NA. **Microsc Res Tech** 1997 May 1; 37(3):171

Ultrastructural characterization of sulfur mustard-induced vesication in isolated perfused porcine skin. Monteiro-Riviere NA, et al. **Microsc Res Tech** 1997 May 1;37(3):229-41

Detection of gene mutation in skin, stomach and liver of MutaMouse following oral or topical treatment with N-methyl-N'-nitro-N-nitrosoguanidine or 1-chloromethylpyrene: some preliminary observations. Brooks TM, et al. **Mutagenesis** 1996 Sep;11(5):529-32

Effect of the non-peptide blocker (+/-) CP 96,345 on the cellular mechanism involved in the response to NK1 receptor stimulation in human skin fibroblasts. Ziche M, et al. **Neuropeptides** 1996 Aug;30(4):345-54

Local application of anti-NGF blocks the collateral sprouting in rats following chronic constriction injury of the sciatic nerve. Ro LS, et al. **Neurosci Lett** 1996 Nov 1;218(2):87-90

Stable analogues of cyclic AMP but not cyclic GMP sensitize unmyelinated primary afferents in rat skin to heat stimulation but not to inflammatory mediators, in vitro. Kress M, et al. **Neuroscience** 1996 Sep;74(2):609-17

Secondary hyperalgesia to mechanical but not heat stimuli following a capsaicin injection in hairy skin. Ali Z, et al. **Pain** 1996 Dec;68(2-3):401-11

Independent effects of ischaemia and noradrenaline on thermal hyperalgesia in capsaicin-treated skin. Drummond PD. **Pain** 1996 Sep;67(1):129-33

Effect of intravenous sodium amytal on cutaneous sensory abnormalities, spontaneous pain and algometric pain pressure thresholds in neuropathic pain patients: a placebo-controlled study. II. Mailis A, et al. **Pain** 1997 Mar;70(1):69-81

Dose-dependent competitive block by topical acetylsalicylic and salicylic acid of low pH-induced cutaneous pain. Steen KH, et al. **Pain** 1996 Jan;64(1):71-82

Truncation studies of alpha-melanotropin peptides identify tripeptide analogues exhibiting prolonged agonist bioactivity. Haskell-Luevano C, et al. **Peptides** 1996; 17(6):995-1002

Interference of a short-chain phospholipid with ion transport pathways in frog skin. Unmack MA, et al. **Pflugers Arch** 1997 Jul;434(3):234-41

In vitro human skin barrier modulation by fatty acids: skin permeation and thermal analysis studies. Tanojo H, et al. **Pharm Res** 1997 Jan;14(1):42-9

The influence of various antidepressants on heart rate and electrodermal activity during psychophysiological examinations of depressive patients. Barg T, et al. **Pharmacopsychiatry** 1996 Nov;29(6):216-9

Phthalocyanine photodynamic therapy: disparate effects of pharmacologic inhibitors on cutaneous photosensitivity and on tumor regression. Anderson C, et al. **Photochem Photobiol** 1997 May;65(5):895-901

Isopimpinellin is not phototoxic in a chick skin assay. Ivie GW, et al. **Photochem Photobiol** 1996 Mar;63(3):306-7

Modulation of 8-methoxypsoralen-photoinduced cutaneous inflammatory reactions by various chemotherapeutic agents in vivo. Kumar JR, et al. **Photochem Photobiol** 1996 Apr; 63(4):535-40

Echinacoside and caffeoyl conjugates protect collagen from free radical-induced degradation: a potential use of Echinacea extracts in the prevention of skin photodamage. Facino RM, et al. **Planta Med** 1995 Dec;61(6):510-4

Isolation and characterization of the glycoprotein fraction with a proliferation-promoting activity on human and hamster cells in vitro from Aloe vera gel. Yagi A, et al. **Planta Med** 1997 Feb;63(1):18-21

Reflexes of the cutaneous microcirculation in amitriptyline and in fluoxetine treated patients. Mück-Weymann M, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):241-4

Dermatotoxic chemical stimulate of c-jun and c-fos transcription and AP-1 DNA binding in human keratinocytes. Burleson FG, et al. **Res Commun Mol Pathol Pharmacol** 1996 Aug;93(2):131-48

Preliminary study on the effect of the selected calmodulin antagonists on the skin. Niczyporuk W, et al. **Rocz Akad Med Bialymst** 1996;41(2):515-24

A skin equivalent model for cosmetological trials: an in vitro efficacy study of a new biopeptide. Augustin C, et al. **Skin Pharmacol** 1997;10(2):63-70

Effect of mu, delta and kappa opioid receptor agonists on a reactive oxygen species mediated model of skin inflammation. Earl JR, et al. **Skin Pharmacol** 1996; 9(4):250-8

Topical retinol and the stratum corneum response to an environmental threat. Goffin V, et al. **Skin Pharmacol** 1997; 10(2):85-9

The effect of topical steroid on the actions of vasoconstrictor and vasodilator peptides in human skin. Goldsmith P, et al. **Skin Pharmacol** 1996;9(5):289-97

DNA ploidy changes in rhino mouse skin induced by all-trans retinoic acid and retinol. González S, et al. **Skin Pharmacol** 1997;10(3):135-43

Effects of ethyl alpha-D-glucoside on skin barrier disruption. Kitamura N, et al. **Skin Pharmacol** 1997;10(3):153-9

Effects of freezing and azide treatment of in vitro human skin on the flux and metabolism of 8-methoxypsoralen. Shaikh NA, et al. **Skin Pharmacol** 1996;9(4):274-80

Effects of inflammation on plasma extravasation and mast cell response in normal and denervated rat skin. Shakhanbeh J, et al. **Skin Pharmacol** 1996;9(3):203-10

Effects of calcipotriol and clobetasol-17-propionate on UVB-irradiated human skin: an immunohistochemical study. van der Vleuten CJ, et al. **Skin Pharmacol** 1996; 9(6):355-65

Effect of antisense oligonucleotides on cytokine release from human keratinocytes in an in vitro model of skin. Crooke RM, et al. **Toxicol Appl Pharmacol** 1996 Sep;140(1):85-93

Hexachlorobenzene-induced immunomodulation and skin and lung lesions: a comparison between brown Norway, Lewis, and Wistar rats. Michielsen CP, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):12-26

Studies of multiroute exposure/dose reconstruction using physiologically based pharmacokinetic models. Roy A, et al. **Toxicol Ind Health** 1996 Mar-Apr;12(2):153-63

A model for quantitative measurement of sulfur mustard skin lesions in the rabbit ear. Zlotogorski A, et al. **Toxicology** 1997 Jun 27;120(2):105-10

Prolonged skin allograft survival after photodynamic therapy associated with modification of donor skin antigenicity. Obochi MO, et al. **Transplantation** 1997 Mar 27;63(6):810-7

Acute toxicity and primary irritancy of alkylalkanolamines. Ballantyne B, et al. **Vet Hum Toxicol** 1996 Dec;38(6):422-6

Chlorhexidine gluconate versus chloroxylenol for preoperative skin preparation in dogs. Stubbs WP, et al. **Vet Surg** 1996 Nov-Dec;25(6):487-94

[An experimental study of the skin- and eye-irritating action of an artichoke preparation] Khalkova Zh. **Probl Khig** 1996; 21:74-80 (Eng. Abstr.) **(Bul)**

[The effect of antiseptic agents on the growth of mouse skin] Zhu Z, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec; 33(12):749-51 (Eng. Abstr.) **(Chi)**

[Skin reactions to bradykinin] Rihoux JP, et al. **Allerg Immunol (Paris)** 1995 Oct;27(8):279-83 (33 ref.) (Eng. Abstr.) **(Fre)**

[Neuromediators in dermatology. Therapeutic prospectives] Claudy A. **Pathol Biol (Paris)** 1996 Dec;44(10):888-94 (69 ref.) (Eng. Abstr.) **(Fre)**

[Two mechanisms of action of progesterone on the skin (results of biochemical analysis)] Ukhina TV, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):173-6 **(Rus)**

[The effect of carbacholine and noradrenaline on intertissue connections during the reparative process] Grabovoĭ AN. **Lik Sprava** 1996 Oct-Dec;(10-12):104-7 (Eng. Abstr.) **(Rus)**

[The structure of the connective-tissue framework of the skin regenerate in rats during the trypsin and ronidase stimulation of wound healing] Surakova TV, et al. **Morfologiia** 1997;111(2):76-9 (Eng. Abstr.) **(Rus)**

[Structural changes in the tissues of white rats after capsaicin administration] Vorob'eva NF, et al. **Morfologiia** 1997; 111(2):59-63 (Eng. Abstr.) **(Rus)**

[The genotoxic effect of ciprofloxacin on cultured cells from the kangaroo rat kidney and on skin fibroblasts from the Indian muntjac] Polianskaia GG, et al. **Tsitologiia** 1996; 38(9):958-73 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Changes in expression of the oligosaccharides in the human fetal skin. Gheri Bryk S, et al. **Anat Anz** 1997 Feb; 179(1):49-56

Ontogeny and characterization of factor XIIIa+ cells in developing human skin. Gibran NS, et al. **Anat Embryol (Berl)** 1996 Jan;193(1):35-41

Inhibition by tunicamycin of mucin synthesis, not morphological changes, in epidermis during retinol-induced mucous metaplasia of chick embryonic cultured skin. Obinata A, et al. **Anat Rec** 1996 Aug; 245(4):715-23

Asymmetric expression of Notch/Delta/Serrate is associated with the anterior-posterior axis of feather buds. Chen CW, et al. **Dev Biol** 1997 Aug 1;188(1):181-7

Specific inhibition of hair follicle formation by epidermal growth factor in an organ culture of developing mouse skin. Kashiwagi M, et al. **Dev Biol** 1997 Sep 1;189(1):22-32

Local delivery of TGF beta2 can substitute for placode epithelium to induce mesenchymal condensation during skin appendage morphogenesis. Ting-Berreth SA, et al. **Dev Biol** 1996 Nov 1;179(2):347-59

Location and growth of epaxial myotome precursor cells. Denetclaw WF Jr, et al. **Development** 1997 Apr; 124(8):1601-10

Multiple roles for endothelin in melanocyte development: regulation of progenitor number and stimulation of differentiation. Reid K, et al. **Development** 1996 Dec; 122(12):3911-9

The mechanism of excisional fetal wound repair in vitro is responsive to growth factors. Belford DA. **Endocrinology** 1997 Sep;138(9):3987-96

Regulation of the chick cutaneous innervation pattern in retinoic acid-induced ectopic feathers and in the naked neck mutant. Pays L, et al. **Int J Dev Biol** 1997 Aug;

41(4):575–9
The ontogeny of adhesion molecules expressed on the vascular endothelium of the developing human skin. Davies JR, et al. **J Anat** 1996 Oct;189 (Pt 2):373–82
Developmentally programmed expression of hyaluronan in human skin and its appendages. Agren UM, et al. **J Invest Dermatol** 1997 Aug;109(2):219–24
Expression of the "skin-type" desmosomal cadherin DSC1 is closely linked to the keratinization of epithelial tissues during mouse development. King IA, et al. **J Invest Dermatol** 1996 Oct;107(4):531–8
Transforming growth factor beta-1 decreases interstitial collagenase in healing human fetal skin. Bullard KM, et al. **J Pediatr Surg** 1997 Jul;32(7):1023–7
Fibroblast growth factor 2 can replace ectodermal signaling for feather development. Song H, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10246–9
[The characteristics of the immune response in embryonic tissue transplantation] Mazur IuI, et al. **Klin Khir** 1995; (2):31–3 **(Ukr)**

ENZYMOLOGY

Ontogenesis and expression of ALDH activity in the skin and the eye of the rat. Pappas P, et al. **Adv Exp Med Biol** 1997;414:73–80
Age-related changes in O-deethylase and aldrin epoxidase activity in mouse skin and liver microsomes. Williams D, et al. **Age Ageing** 1996 Sep;25(5):377–80
Influence of UVA and UVB irradiation on hepatic and cutaneous P450 isoenzymes. Goerz G, et al. **Arch Dermatol Res** 1996 Dec;289(1):46–51
Qualitative and quantitative catalog of tyrosinase alternative transcripts in normal murine skin melanocytes as a basis for detecting melanoma-specific changes. Kelsall SR, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):173–7
Expression of 4alpha-carbinolamine dehydratase in human epidermal keratinocytes. Lei XD, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):556–9
Evidence for a tissue-specific induction of cutaneous CYP2E1 by dexamethasone. Sampol E, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):557–61
Protein kinase C activation and phosphate uptake are altered in intact mucolipidosis type-4 skin fibroblasts. Turgeman D, et al. **Biochem Mol Med** 1996 Oct;59(1):33–7
Effect of adenosine analogues on the expression of matrix metalloproteinases and their inhibitors from human dermal fibroblasts. Svendsrud DH, et al. **Biochem Pharmacol** 1997 May 15;53(10):1511–20
Palmitoyl-protein thioesterase deficiency in fibroblasts of individuals with infantile neuronal ceroid lipofuscinosis and I-cell disease. Verkruyse LA, et al. **Biochim Biophys Acta** 1997 Jul 10;1361(1):1–5
Constitutive endothelial and inducible nitric oxide synthase in inflammatory dermatoses. Rowe A, et al. **Br J Dermatol** 1997 Jan;136(1):18–23
Gene expression and cellular sources of inducible nitric oxide synthase during tumor promotion. Robertson FM, et al. **Carcinogenesis** 1996 Sep;17(9):2053–9
Metabolic studies in twin brothers with 2-methylacetoacetyl-CoA thiolase deficiency. Fontaine M, et al. **Clin Chim Acta** 1996 Nov 15;255(1):67–83
Normal lysosomal enzyme staining in skin tissues of patients with keratoconus. Zhou L, et al. **Cornea** 1996 Jul; 15(4):409–13
Class IV alcohol/retinol dehydrogenase localization in epidermal basal layer: potential site of retinoic acid synthesis during skin development. Haselbeck RJ, et al. **Dev Dyn** 1997 Apr;208(4):447–53
Protein kinase C-independent activation of mitogen-activated protein kinase by epidermal growth factor in skin fibroblasts. Le Panse R, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):339–45
Evaluation of biochemical indices as a hair cycle marker in C3H mice. Hamada K, et al. **Exp Anim** 1996 Jul;45(3):251–6
Isolation of a cDNA encoding a tyrosine kinase expressed in murine skin. Kawachi Y, et al. **Exp Dermatol** 1997 Jun; 6(3):140–6
Murine epidermal lipoxygenase (Aloxe) encodes a 12-lipoxygenase isoform. Kinzig A, et al. **FEBS Lett** 1997 Feb 3;402(2–3):162–6
Expression of trypsin in vascular endothelial cells. Koshikawa N, et al. **FEBS Lett** 1997 Jun 16;409(3):442–8
Endogenous glutathione as potential protectant against free radicals in the skin of vitamin A deficient mice. Pélissier MA, et al. **Food Chem Toxicol** 1997 Jul;35(7):693–6
Hydrogen peroxide (H_2O_2) increases the steady-state mRNA levels of collagenase/MMP-1 in human dermal fibroblasts. Brenneisen P, et al. **Free Radic Biol Med** 1997;22(3):515–24
Microwave incubation improves lipolytic enzyme preservation for ultrastructural cytochemistry. Rassner UA, et al. **Histochem J** 1997 May;29(5):387–92
Growth factor-induced epidermal invasion of the dermis in human skin organ culture: expression and role of matrix metalloproteinases. Zeigler ME, et al. **Invasion Metastasis** 1996;16(1):11–8
Purification and characterization of bleomycin hydrolase, which represents a new family of cysteine proteases, from rat skin. Takeda A, et al. **J Biochem (Tokyo)** 1996 Jan; 119(1):29–36
Development and age-associated differences in electron transport potential and consequences for oxidant generation. Allen RG, et al. **J Biol Chem** 1997 Oct 3; 272(40):24805–12
Subunit Ya-specific glutathione peroxidase activity toward cholesterol 7-hydroperoxides of glutathione S-transferases in cytosols from rat liver and skin. Hiratsuka A, et al. **J Biol Chem** 1997 Feb 21;272(8):4763–9
Molecular cloning and functional expression of a phorbol ester-inducible 8S-lipoxygenase from mouse skin. Jisaka M, et al. **J Biol Chem** 1997 Sep 26;272(39):24410–6
Cell type-specific inhibition of keratinocyte collagenase-1 expression by basic fibroblast growth factor and keratinocyte growth factor. A common receptor pathway. Pilcher BK, et al. **J Biol Chem** 1997 Jul 18;272(29):18147–54
Direct monitoring of prolidase activity in cultured skin fibroblasts using capillary electrophoresis. Zanaboni G, et al. **J Chromatogr B Biomed Appl** 1997 Jul 18;695(1):77–84
Immunohistochemical localization of nitric oxide synthase in normal human skin: expression of endothelial-type and inducible-type nitric oxide synthase in keratinocytes. Shimizu Y, et al. **J Dermatol** 1997 Feb;24(2):80–7
The mitogen-activated protein kinases system (MAP kinase cascade): its role in skin signal transduction. A review. Geilen CC, et al. **J Dermatol Sci** 1996 Sep;12(3):255–62 (44 ref.)
Change of glutathione S-transferases in the skin by ultraviolet B irradiation. Seo KI, et al. **J Dermatol Sci** 1996 Nov; 13(2):153–60
Localization of aminopeptidase activity in freshly excised human skin: direct visualization by confocal laser scanning microscopy. Boderke P, et al. **J Invest Dermatol** 1997 Jan; 108(1):83–6
Activation of ribosomal protein S6 kinase in psoriatic lesions and cultured human keratinocytes by epidermal growth factor receptor ligands. Choi JH, et al. **J Invest Dermatol** 1997 Jan;108(1):98–102
Photosensitization of uroporphyrin augments the ultraviolet A-induced synthesis of matrix metalloproteinases in human dermal fibroblasts. Herrmann G, et al. **J Invest Dermatol** 1996 Sep;107(3):398–403
Liarozole inhibits human epidermal retinoic acid 4-hydroxylase activity and differentially augments human skin responses to retinoic acid and retinol in vivo. Kang S, et al. **J Invest Dermatol** 1996 Aug;107(2):183–7
Evidence for exclusive role of the p55 tumor necrosis factor (TNF) receptor in mediating the TNF-induced collagenase expression by human dermal fibroblasts. Rekdal O, et al. **J Invest Dermatol** 1996 Oct;107(4):565–8
Measurement of 3 beta-hydroxysteroid delta 7-reductase activity in cultured skin fibroblasts utilizing ergosterol as a substrate: a new method for the diagnosis of the Smith-Lemli-Opitz syndrome. Honda M, et al. **J Lipid Res** 1996 Nov;37(11):2433–8
Human alpha-N-acetylgalactosaminidase (alpha-NAGA) deficiency: new mutations and the paradox between genotype and phenotype. Keulemans JL, et al. **J Med Genet** 1996 Jun;33(6):458–64
The H+ pump in frog skin (Rana esculenta): identification and localization of a V-ATPase. Klein U, et al. **J Membr Biol** 1997 May 15;157(2):117–26
Specific delay in the degradation of mitochondrial ATP synthase subunit c in late infantile neuronal ceroid lipofuscinosis is derived from cellular proteolytic dysfunction rather than structural alteration of subunit c. Ezaki J, et al. **J Neurochem** 1996 Oct;67(4):1677–87
5alpha-reductase 1 and 2 expression and activity in human ovarian follicles, stroma and corpus luteum as compared to neonatal foreskin. Haning RV Jr, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):199–204
Rapid identification of Smith-Lemli-Opitz syndrome homozygotes and heterozygotes (carriers) by measurement of deficient 7-dehydrocholesterol-delta 7-reductase activity in fibroblasts. Shefer S, et al. **Metabolism** 1997 Jul; 46(7):844–50
Exon skipping and circular RNA formation in transcripts of the human cytochrome P-450 2C18 gene in epidermis and of the rat androgen binding protein gene in testis. Zaphiropoulos PG. **Mol Cell Biol** 1997 Jun;17(6):2985–93
Ultraviolet B wavelength dependence for the regulation of two major matrix-metalloproteinases and their inhibitor TIMP-1 in human dermal fibroblasts [corrected and republished article originally printed in 1996 Oct;64(4):649-57] Brenneisen P, et al. **Photochem Photobiol** 1996 Nov;64(5):877–85
Ultraviolet B wavelength dependence for the regulation of two major matrix-metalloproteinases and their inhibitor TIMP-1 in human dermal fibroblasts [corrected and republished in Photochem Photobiol 1996 Nov;64(5):877-85] Brenneisen P, et al. **Photochem Photobiol** 1996 Oct;64(4):649–57
cDNA cloning and expression of bovine procollagen I N-proteinase: a new member of the superfamily of zinc-metalloproteinases with binding sites for cells and other matrix components. Colige A, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2374–9
Activity and inhibition of 3-beta-hydroxysteroid dehydrogenase/delta-5-4-isomerase in human skin. Tóth I, et al. **Skin Pharmacol** 1997;10(3):160–8
Regulation of gelatinase production and invasiveness by organ-specific fibroblasts in high- and low-metastatic clones from murine RCT sarcoma. Ohmori K, et al. **Tumour Biol** 1997;18(4):219–31
[Histochemistry of phosphatases in two types of sole skin glands in various species of Far Eastern voles] Sokolov VE, et al. **Dokl Akad Nauk** 1996 Sep;350(2):284–6 **(Rus)**
[Change of isoforms' spectrum of alpha-L-fucoside secreted by affected cells in some hereditary lysosomal diseases] Ivleva TS, et al. **Vopr Med Khim** 1997 May-Jun; 43(3):177–84 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

The product of the mouse nude locus, Whn, regulates the balance between epithelial cell growth and differentiation. Brissette JL, et al. **Genes Dev** 1996 Sep 1;10(17):2212–21
Adult epidermal keratinocytes are endowed with pilosebaceous forming abilities. Ferraris C, et al. **Int J Dev Biol** 1997 Jun;41(3):491–8
Prolactin antagonizes the corticoid-promoted development of adult-type epidermis in cultured larval bullfrog skin. Takada M, et al. **J Exp Biol** 1996 Dec;199 (12):2573–8
Apoptosis and proliferation of fibroblasts during postnatal skin development and scleroderma in the tight-skin mouse. Pablos JL, et al. **J Histochem Cytochem** 1997 May; 45(5):711–9
There is temporal and spatial expression of alpha1 (IV), alpha2 (IV), alpha5 (IV), alpha6 (IV) collagen chains and beta1 integrins during the development of the basal lamina in an "in vitro" skin model. Fleischmajer R, et al. **J Invest Dermatol** 1997 Oct;109(4):527–33
Characterization of dermatologic changes in geriatric rhesus macaques. Huneke RB, et al. **J Med Primatol** 1996 Dec; 25(6):404–13
Distribution of minor collagens during skin development. Garrone R, et al. **Microsc Res Tech** 1997 Aug 15; 38(4):407–12 (35 ref.)
Elastic fiber during development and aging. Pasquali-Ronchetti I, et al. **Microsc Res Tech** 1997 Aug 15;38(4):428–35 (85 ref.)
Molecular histology in skin appendage morphogenesis. Widelitz RB, et al. **Microsc Res Tech** 1997 Aug 15; 38(4):452–65 (70 ref.)
[The effect of antiseptic agents on the growth of mouse skin] Zhu Z, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec; 33(12):749–51 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

T-cell receptor V beta expression is restricted in dermatitis herpetiformis skin. Garioch JJ, et al. **Acta Derm Venereol** 1997 May;77(3):184–6
Immunopathological events of adverse cutaneous reactions to coumarin and heparin. Hermes B, et al. **Acta Derm Venereol** 1997 Jan;77(1):35–8
A novel endogenous mediator of cutaneous inflammation: leukemia inhibitory factor. McKenzie RC, et al. **Acta Derm Venereol** 1996 Mar;76(2):111–4
Preferential expression of T-cell receptor V beta-chains in atopic eczema. Neuber K, et al. **Acta Derm Venereol** 1996 May;76(3):214–8
Delayed-type hypersensitivity in palmoplantar pustulosis: effect of cyclosporin A treatment on skin testing with recall antigens. Remitz A, et al. **Acta Derm Venereol** 1996 Jul; 76(4):310–3
"HIV-peplotion vaccine"--a novel approach to protection against AIDS by transepithelial transport of viral peptides to Langerhans cells for long-term antiviral CTL response. (A review). Becker Y. **Acta Microbiol Immunol Hung** 1996; 43(1):1–17 (83 ref.)
Immunohistochemical localization of cytokines and receptor-associated molecules in human tonsils and skin. Von Gaudecker B, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:71–4
Differential gene expression for interleukin-13 and other cytokines in the skin of atopic dermatitis patients and healthy subjects. Van der Ploeg I, et al. **Adv Exp Med Biol** 1996;409:403–4
The role of basophils and mast cells in acute and late reactions in the skin. Charlesworth EN. **Allergy** 1997;52(34 Suppl):31–43 (73 ref.)
Molecular analysis of allergenic proteins in bovine dander. Rautiainen J, et al. **Allergy** 1996 Jun;51(6):378–82
Nimesulide reduces skin-test reactivity. Senna GE, et al. **Allergy** 1997 May;52(5):596
Stochastic resonance and angry back syndrome: noisy skin. Rietschel RL. **Am J Contact Dermat** 1996 Sep;7(3):152–4 (13 ref.)
Effect of H1-antihistamines on histamine release from dispersed canine cutaneous mast cells. Garcia G, et al. **Am J Vet Res** 1997 Mar;58(3):293–7
Seasonal variation of skin reactivity and specific IgE antibody to house dust mite. Nahm DH, et al. **Ann Allergy Asthma Immunol** 1997 Jun;78(6):589–93
Skin sensitization in asthmatic children less than 36 months of age. Song CH. **Ann Allergy Asthma Immunol** 1997 Sep; 79(3):273–6
Circulating skin-homing T cells in atopic dermatitis. Selective up-regulation of HLA-DR, interleukin-2R, and CD30 and decrease after combined UV-A and UV-B phototherapy [see comments] Piletta PA, et al. **Arch Dermatol** 1996 Oct;132(10):1171–6. Comment in: Arch Dermatol 1996 Oct;132(10):1230–2.
Mast cells and atopic dermatitis. Stereological quantification of mast cells in atopic dermatitis and normal human skin. Damsgaard TE, et al. **Arch Dermatol Res** 1997 Apr; 289(5):256–60

The role of dendritic cells in cutaneous immunity. Lappin MB, et al. **Arch Dermatol Res** 1996 Mar;288(3):109–21 (138 ref.)

Cytokine expression and antigen–presenting capacity of 4F7+ dendritic cells derived from dermis, spleen, and lymph nodes. Mohamadzadeh M, et al. **Arch Dermatol Res** 1997 Jul;289(8):435–9

Sensitivity of human cutaneous mast cells to anaphylactic and nonimmunological stimuli. Brzezińska–Blaszczyk E, et al. **Arch Immunol Ther Exp (Warsz)** 1997;45(1):55–9

Cytokine regulation of major histocompatibility complex antigen expression by human oral and skin keratinocytes. Li J, et al. **Arch Oral Biol** 1996 Jun;41(6):533–8

Effect of soluble interleukin–6 receptor on interleukin–6 synthesis in human skin fibroblasts. Cichy J, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):318–21

Expression of ST2, an interleukin–1 receptor homologue, is induced by proinflammatory stimuli. Kumar S, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):474–8

Cellular immune response to foot–and–mouth disease virus. Cedillo–Barron L, et al. **Biochem Soc Trans** 1997 May; 25(2):275S

Impact of Rantes and MCP–1 chemokines on in vivo basophilic cell recruitment in rat skin injection model and their role in modifying the protein and mRNA levels for histidine decarboxylase. Conti P, et al. **Blood** 1997 Jun 1; 89(11):4120–7

Linear IgA bullous dermatosis limited to the seborrhoeic regions [letter] Ansai SI, et al. **Br J Dermatol** 1996 Dec; 135(6):1006–7

Differential T–cell reactivity to the round and oval forms of Pityrosporum in the skin of patients with psoriasis. Baker BS, et al. **Br J Dermatol** 1997 Mar;136(3):319–25

Langerhans cells, dendritic cells, 'dendrocytes' and macrophages in normal human dermis [letter; comment] de Panfilis G. **Br J Dermatol** 1996 Oct;135(4):652–3. Comment on: Br J Dermatol 1995 Jul;133(1):150–1.

'Angry back syndrome': a non–reproducible phenomenon. Memon AA, et al. **Br J Dermatol** 1996 Dec;135(6):924–30

Drug–induced linear IgA disease: target antigens are heterogeneous. Paul C, et al. **Br J Dermatol** 1997 Mar; 136(3):406–11

Modulation by Chinese herbal therapy of immune mechanisms in the skin of patients with atopic eczema. Xu XJ, et al. **Br J Dermatol** 1997 Jan;136(1):54–9

The location of binding sites of pemphigus vulgaris and pemphigus foliaceus autoantibodies: a post–embedding immunoelectron microscopic study. Zhou S, et al. **Br J Dermatol** 1997 Jun;136(6):878–83

The effect of the selectin binding polysaccharide fucoidin on eosinophil recruitment in vivo. Teixeira MM, et al. **Br J Pharmacol** 1997 Mar;120(6):1059–66

Failure of carcinogen–altered dendritic cells to initiate T cell proliferation is associated with reduced IL–1 beta secretion. Ragg SJ, et al. **Cell Immunol** 1997 May 25;178(1):17–23

Mineral waters: instead of soap or better than soap? Lotti TM, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):101–4 (28 ref.)

Immunohistological analysis of 'negative' patch test sites in atopic dermatitis. Buckley C, et al. **Clin Exp Allergy** 1996 Sep;26(9):1057–63

Histamine is released in the wheal but not the flare following challenge of human skin in vivo: a microdialysis study. Petersen LJ, et al. **Clin Exp Allergy** 1997 Mar;27(3):284–95

The expression of murine cutaneous late phase reaction requires both IgE antibodies and CD4 T cells. Sawada K, et al. **Clin Exp Allergy** 1997 Feb;27(2):225–31

Comparative study of autoantigens for various bullous skin diseases by immunoblotting using different dermo–epidermal separation techniques. Ohata Y, et al. **Clin Exp Dermatol** 1995 Nov;20(6):454–8

The skin as an organ of immunity. Bos JD. **Clin Exp Immunol** 1997 Jan;107 Suppl 1:3–5 (9 ref.)

The desmosome and hemidesmosome in cutaneous autoimmunity. Lin MS, et al. **Clin Exp Immunol** 1997 Jan; 107 Suppl 1:9–15 (55 ref.)

Cadherins and Langerhans cell immunobiology. Udey MC. **Clin Exp Immunol** 1997 Jan;107 Suppl 1:6–8 (32 ref.)

Substance P activates the release of histamine from human skin mast cells through a pertussis toxin–sensitive and protein kinase C–dependent mechanism. Columbo M, et al. **Clin Immunol Immunopathol** 1996 Oct;81(1):68–73

Decreased skin reactivity to codeine in patients with the acquired immunodeficiency syndrome. Simonart Th, et al. **Clin Immunol Immunopathol** 1996 Oct;81(1):12–5

Dichloronitrobenzene: a reappraisal of its skin sensitization potential. Basketter DA, et al. **Contact Dermatitis** 1996 Jan; 34(1):55–8

IL–1 beta protein in human skin lymph does not discriminate allergic from irritant contact dermatitis. Brand CU, et al. **Contact Dermatitis** 1996 Sep;35(3):152–6

Human skin lymph derived from irritant and allergic contact dermatitis: interleukin 10 is increased selectively in elicitation reactions. Brand CU, et al. **Dermatology** 1997; 194(3):221–8

Investigation of skin–derived lymph: an approach to get insight into the skin immune system. Brand CU, et al. **Dermatology** 1996;193(4):283–8

Immunology of skin tests. Leipzig JR, et al. **Ear Nose Throat J** 1996 Mar;75(3):132

Cyclophosphamide–induced blood and tissue eosinophilia in contact sensitivity: mechanism of hapten–induced eosinophil recruitment into the skin. Satoh T, et al. **Eur J Immunol** 1997 Jan;27(1):85–91

Tattooing increases the number of Langerhans cells in skin: an immunocytochemical study. Karanth SS. **Exp Dermatol** 1996 Jun;5(3):168–72

Identification of human skin from a tissue fragment by detection of squamous cell carcinoma–related antigen using an enzyme immunoassay. Kitao T, et al. **Forensic Sci Int** 1996 Dec 2;83(2):81–6

CD44 standard and variant isoform expression in normal human skin appendages and epidermis. Seelentag WK, et al. **Histochem Cell Biol** 1996 Sep;106(3):283–9

Clonotypic analysis of T cells infiltrating the skin of patients with atopic dermatitis: evidence for antigen–driven accumulation of T cells. Tanaka A, et al. **Hum Immunol** 1996 Jun–Jul;48(1–2):107–13

Down–regulation of an established immune response via chemical carcinogen or UVB–altered skin. Chen YP, et al. **Immunol Cell Biol** 1997 Jun;75(3):238–44

Immunology of the skin and the eye. Zierhut M, et al. **Immunol Today** 1996 Oct;17(10):448–50

Contribution of CD4+ and CD8+ T lymphocyte subsets to the cytokine secretion patterns induced in mice during sensitization to contact and respiratory chemical allergens. Dearman RJ, et al. **Immunology** 1996 Dec;89(4):502–10

The role of CD4 molecules in the induction phase of contact hypersensitivity cytokine profiles in the skin and lymph nodes. Fujisawa H, et al. **Immunology** 1996 Oct;89(2):250–5

Expression of VCAM–1 and VLA–4 dependent T–lymphocyte adhesion to dermal fibroblasts stimulated with proinflammatory cytokines. Gao JX, et al. **Immunology** 1996 Nov;89(3):375–83

Cyclosporin A abrogates the acquired immunity to cutaneous reinfection with the parapoxvirus orf virus. Haig DM, et al. **Immunology** 1996 Dec;89(4):524–31

TCR gamma delta+ cells are prominent in normal bovine skin and express a diverse repertoire of antigen receptors. Hein WR, et al. **Immunology** 1997 May;91(1):58–64

Pattern of cytokine receptors expressed by human dendritic cells migrated from dermal explants. Larregina AT, et al. **Immunology** 1997 Jun;91(2):303–13

Interleukin–7 in the skin of Schistosoma mansoni–infected mice is associated with a decrease in interferon–gamma production and leads to an aggravation of the disease. Wolowczuk I, et al. **Immunology** 1997 May;91(1):35–44

Demonstration of the therapeutic potential of non–anaphylactogenic anti–IgE antibodies in murine models of skin reaction, lung function and inflammation. Heusser CH, et al. **Int Arch Allergy Immunol** 1997 May–Jul; 113(1–3):231–5

Factors influencing immediate responses to intradermal allergen administration in patients with respiratory allergy. Hong CS, et al. **Int Arch Allergy Immunol** 1997 May–Jul; 113(1–3):360–2

Adhesion molecules in atopic dermatitis: upregulation of alpha6 integrin expression in spontaneous lesional skin as well as in atopen, antigen and irritative induced patch test reactions. Jung K, et al. **Int Arch Allergy Immunol** 1997 Aug;113(4):495–504

Increases in IL–12 messenger RNA+ cells accompany inhibition of allergen–induced late skin responses after successful grass pollen immunotherapy [see comments] Hamid QA, et al. **J Allergy Clin Immunol** 1997 Feb; 99(2):254–60. Comment in: J Allergy Clin Immunol 1997 Feb;99(2):161–4.

Cross–reactivity of skin and serum specific IgE responses and allergen analysis for three mosquito species with worldwide distribution. Peng Z, et al. **J Allergy Clin Immunol** 1997 Aug;100(2):192–8

Histamine release in intact human skin by monocyte chemoattractant factor–1, RANTES, macrophage inflammatory protein–1 alpha, stem cell factor, anti–IgE, and codeine as determined by an ex vivo skin microdialysis technique. Petersen LJ, et al. **J Allergy Clin Immunol** 1996 Oct;98(4):790–6

Cellular inflammatory responses during immediate, developing, and established late–phase allergic cutaneous reactions: effects of cetirizine. Zweiman B, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):341–7

Characterization of a 50–kDa component of epithelial basement membranes using GDA–J/F3 monoclonal antibody. Gayraud B, et al. **J Biol Chem** 1997 Apr 4; 272(14):9531–8

Immunogenicity of glycerol–preserved human cadaver skin in vitro. Richters CD, et al. **J Burn Care Rehabil** 1997 May–Jun;18(3):228–33

Antigen receptor variable region repertoires expressed by T cells infiltrating thyroid, retroorbital, and pretibial tissue in Graves' disease. Heufelder AE, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3733–9

Distribution of CD44 variant isoforms in human skin: differential expression in components of benign and malignant epithelia. Hale LP, et al. **J Cutan Pathol** 1995 Dec;22(6):536–45

T–cell receptor beta variable region (V beta) usage in cutaneous T–cell lymphomas (CTCL) in comparison to normal and eczematous skin. Potoczna N, et al. **J Cutan Pathol** 1996 Aug;23(4):298–305

Chondroid syringoma: an immunohistochemical study using antibodies to Ca 15–3, KA–93, Ca 19–9, CD44 and BM–1. Tsuji T. **J Cutan Pathol** 1996 Dec;23(6):530–6

Selective expansions of T cells expressing V beta 8 and V beta 13 in skin lesions of patients with chronic cutaneous lupus erythematosus. Furukawa F, et al. **J Dermatol** 1996 Oct;23(10):670–6

The inhibitory effect of anti–adhesion molecule antibodies on eosinophil infiltration in cutaneous late phase response in Balb/c mice sensitized with ovalbumin (OVA). Hakugawa J, et al. **J Dermatol** 1997 Feb;24(2):73–9

Two cases of atypical bullous disease showing linear IgG and IgA deposition in the basement membrane zone. Kawahara Y, et al. **J Dermatol** 1996 Apr;23(4):254–8

Regulation of the immune response by epidermal cytokines and neurohormones. Luger TA, et al. **J Dermatol Sci** 1996 Oct;13(1):5–10 (51 ref.)

A skin homing molecule defines the langerhans cell progenitor in human peripheral blood. Strunk D, et al. **J Exp Med** 1997 Mar 17;185(6):1131–6

Human dendritic cells phagocytose and process Borrelia burgdorferi. Filgueira L, et al. **J Immunol** 1996 Oct 1; 157(7):2998–3005

Reversal of immunosuppression inducible through ultraviolet–exposed skin by in vivo anti–CD11b treatment. Hammerberg C, et al. **J Immunol** 1996 Dec 15; 157(12):5254–61

Contribution of the CD28 molecule to allergic and irritant–induced skin reactions in CD28 –/– mice. Kondo S, et al. **J Immunol** 1996 Dec 1;157(11):4822–9

Differential effects of a monoclonal antibody to cis–urocanic acid on the suppression of delayed and contact hypersensitivity following ultraviolet irradiation. Moodycliffe AM, et al. **J Immunol** 1996 Oct 1; 157(7):2891–9

L–selectin (CD62L) blockade does not impair peritoneal neutrophil emigration or subcutaneous host defense to bacteria in rabbits. Sharar SR, et al. **J Immunol** 1996 Sep 15;157(6):2555–63

L–selectin is involved in lymphocyte migration to sites of inflammation in the skin: delayed rejection of allografts in L–selectin–deficient mice. Tang ML, et al. **J Immunol** 1997 Jun 1;158(11):5191–9

Differential dependence on target site tissue for gene gun and intramuscular DNA immunizations. Torres CA, et al. **J Immunol** 1997 May 15;158(10):4529–32

Dichotomy of blood– and skin–derived IL–4–producing allergen–specific T cells and restricted V beta repertoire in nickel–mediated contact dermatitis. Werfel T, et al. **J Immunol** 1997 Mar 1;158(5):2500–5

Linear IgA bullous dermatosis with IgA antibodies exclusively directed against the 180– or 230–kDa epidermal antigens. Ghohestani RF, et al. **J Invest Dermatol** 1997 Jun;108(6):854–8

Vitamin C abrogates the deleterious effects of UVB radiation on cutaneous immunity by a mechanism that does not depend on TNF–alpha. Nakamura T, et al. **J Invest Dermatol** 1997 Jul;109(1):20–4

Hapten–specific tolerance induced by acute, low–dose ultraviolet B radiation of skin is mediated via interleukin–10. Niizeki H, et al. **J Invest Dermatol** 1997 Jul;109(1):25–30

Retention of long–lived, allergen–specific T cells in atopic dermatitis skin –letter– van Reijsen FC, et al. **J Invest Dermatol** 1997 Apr;108(4):530

Production of IL–1 alpha and IL–1 beta by human skin equivalents parasitized by Sarcoptes scabiei. Arlian LG, et al. **J Parasitol** 1996 Oct;82(5):719–23

Histological and immunological reaction of cattle skin to first–instar larvae of Dermatobia hominis. Oliveira–Sequeira TC, et al. **Med Vet Entomol** 1996 Oct; 10(4):323–30

Local immune response in the skin of the external auditory meatus: an immunohistochemical study. Sirigu P, et al. **Microsc Res Tech** 1997 Aug 1;38(3):329–34

High incidence of a T nucleotide at the second position of codon 97 in Vdelta2–(D)–Jdelta1 junctional sequences of human normal skin gamma delta T–cells. Alaibac M, et al. **Mol Immunol** 1996 Sep;33(13):1035–8

The right stuff: breaking through the xenotransplant barrier [news; comment] Steinman L. **Nat Med** 1996 Nov; 2(11):1185–6. Comment on: Nat Med 1996 Nov;2(11):1211–6.

Skin graft tolerance across a discordant xenogeneic barrier [see comments] Zhao Y, et al. **Nat Med** 1996 Nov; 2(11):1211–6. Comment in: Nat Med 1996 Nov;2(11):1185–6.

A peptide antibiotic from human skin [letter] [see comments] Harder J, et al. **Nature** 1997 Jun 26;387(6636):861. Comment in: Nature 1997 Jul 31;388(6641):416.

Interleukin–2 promotes the motility of dendritic cells and their accumulation in lung and skin. Kradin RL, et al. **Pathobiology** 1996;64(4):180–6

Linear IgA disease with clinical and immunopathological features of epidermolysis bullosa acquisita. Mutasim DF, et al. **Pediatr Dermatol** 1997 Jul–Aug;14(4):303–6

The influence of ultraviolet light on immunological cytotoxicity in the skin. Norris DA, et al. **Photochem Photobiol** 1997 Apr;65(4):636–46 (117 ref.)

Impact of UVB radiation on the epidermal cytokine network. Takashima A, et al. **Photochem Photobiol** 1996 Apr; 63(4):397–400 (80 ref.)

Evidence that DNA damage triggers interleukin 10 cytokine production in UV–irradiated murine keratinocytes. Nishigori C, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10354–9

RT–PCR topography of chronic psoriasis skin based on

analysis of T-cell receptor B variable region gene usage. Ahangari G, et al. **Scand J Immunol** 1997 May;45(5):534–40
Immune responses in mice after gastric and subcutaneous immunization with BCG. Ibsen MW, et al. **Scand J Immunol** 1997 Sep;46(3):274–80
Cutaneous delayed type hypersensitivity in SCID mice adoptively transferred with lymphocytes is B cell independent and H-2 restricted. Taube M, et al. **Scand J Immunol** 1997 May;45(5):515–20
T-cell receptor alpha beta and gamma delta T cells in rat and human skin—are they equivalent? Elbe A, et al. **Semin Immunol** 1996 Dec;8(6):341–9 (82 ref.)
Migratory properties of skin dendritic cells of the rat. Richters CD, et al. **Transplant Proc** 1997 May;29(3):1745–7
Increased expression of ICAM-1 and VCAM-1 in the skin after administration of the first dose of OKT3. ten Berge RJ, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):325–7
Epidermal immunocompetence in canine leishmaniasis. Fondevila D, et al. **Vet Immunol Immunopathol** 1997 May; 56(3–4):319–27
Immunophenotyping of skin-infiltrating T-cell subsets in dogs with atopic dermatitis. Sinke JD, et al. **Vet Immunol Immunopathol** 1997 Jun;57(1–2):13–23
Characterization of lymphocyte subtypes in scabietic skin lesions of naive and sensitized dogs. Arlian LG, et al. **Vet Parasitol** 1997 Mar;68(4):347–58
Characterization of antigen presenting cells and T-cells in progressing scabietic skin lesions. Stemmer BL, et al. **Vet Parasitol** 1996 Dec 31;67(3–4):247–58
A prospective study of the immunophenotype and temporal changes in the histologic lesions of canine demodicosis. Caswell JL, et al. **Vet Pathol** 1997 Jul;34(4):279–87
E7 oncoprotein of human papillomavirus type 16 expressed constitutively in the epidermis has no effect on E7-specific B- or Th-repertoires or on the immune response induced or sustained after immunization with E7 protein. Herd K, et al. **Virology** 1997 Apr 28;231(1):155–65
[Ultraviolet light, skin urocanic acid and immune tolerance (editorial)] Laihia J, et al. **Duodecim** 1995;111(10):905–6 (17 ref.) **(Fin)**
[The immunocompetent structures of the skin and their role in the development of primary skin lymphomas (editorial)] Vavilov AM, et al. **Arkh Patol** 1996 Nov–Dec;58(6):7–12 (52 ref.) (Eng. Abstr.) **(Rus)**
[Langerhans cells and the immunological function of the skin] Buianova AV. **Lik Sprava** 1996 Mar–Apr;(3–4):24–7 (34 ref.) (Eng. Abstr.) **(Rus)**

INJURIES

Two hydrocolloid dressings evaluated in experimental full-thickness wounds in the skin. Agren MS, et al. **Acta Derm Venereol** 1997 Mar;77(2):127–31
Clenched fist injury: a pitfall for patients and surgeons. De Smet L, et al. **Acta Orthop Belg** 1997 Jun;63(2):113–7
Lightguide spectrophotometry for the assessment of skin healing viability in critical limb ischaemia. Harrison DK, et al. **Adv Exp Med Biol** 1996;388:45–51
Nature and determinants of skin "burns" after transthoracic cardioversion. Pagan-Carlo LA, et al. **Am J Cardiol** 1997 Mar 1;79(5):689–91
Hair relaxers: lack of morbidity despite high pH [letter] Mrvos R, et al. **Am J Emerg Med** 1997 Mar;15(2):216
Lichtenberg figures. Resnik BI, et al. **Am J Forensic Med Pathol** 1996 Jun;17(2):99–102
Differential expression and localization of insulin-like growth factors I and II in cutaneous wounds of diabetic and nondiabetic mice. Brown DL, et al. **Am J Pathol** 1997 Sep; 151(3):715–24
Depletion of eosinophil infiltration by anti-IL-5 monoclonal antibody (TRFK-5) accelerates open skin wound epithelial closure. Yang J, et al. **Am J Pathol** 1997 Sep;151(3):813–9
Cellular basis for burn-mediated cardiac dysfunction in adult rabbits. Horton JW. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2615–21
Hepatitis C: risk of a haircut [letter] Gitlin N, et al. **Ann Intern Med** 1997 Mar 1;126(5):410–1
The use of external tissue expansion in the management of wounds and ulcers. Ger R. **Ann Plast Surg** 1997 Apr; 38(4):352–7
A dressing for 'road rash' [letter] La Hausse-Brown TP, et al. **Ann R Coll Surg Engl** 1997 Mar;79(2):154
Clinical and histological responses of congenital melanocytic nevi after single treatment with Q-switched lasers. Grevelink JM, et al. **Arch Dermatol** 1997 Mar;133(3):349–53
alpha 2-Antiplasmin and plasminogen activator inhibitors in healing human skin wounds. Schaefer BM, et al. **Arch Dermatol Res** 1996 Mar;288(3):122–8
In vivo 3-D distributions of electric fields in pig skin with rectangular pulse electrical current stimulation (RPECS). Cheng K, et al. **Bioelectromagnetics** 1996;17(4):253–62
Application of sweet potato fiber to skin wound in rat. Suzuki T, et al. **Biol Pharm Bull** 1996 Jul;19(7):977–83
Skin problems in sugar artists. Bangha E, et al. **Br J Dermatol** 1996 Nov;135(5):772–4
Complications in the use of diathermy. Aigner N, et al. **Burns** 1997 May;23(3):256–64 (25 ref.)
The use of calcium alginate dressings in deep hand burns. Kneafsey B, et al. **Burns** 1996 Feb;22(1):40–3
Epidemiological survey of childhood burn injuries in France. Mercier C, et al. **Burns** 1996 Feb;22(1):29–34
Markedly increased lymphatic removal of hyaluronan from skin after major thermal injury. Onarheim H, et al. **Burns** 1996 May;22(3):212–6
Sparklers as a major hazard for burn injury. Singh S. **Burns** 1997 Jun;23(4):369–72
Breast cancer in previously burned skin: a postburn skin adnexal malignancy? Vögelin E, et al. **Burns** 1997 Jun; 23(4):366–8
Is the psoriatic skin of burn patients suitable for split-thickness skin autograft? [letter] Wang T, et al. **Burns** 1997 May;23(3):272
Fiberoptic phototherapy device unlikely to be cause of "thermal" skin injury [letter; comment] Wiswell TE. **Clin Pediatr (Phila)** 1997 Jun;36(6):369–71. Comment on: Clin Pediatr (Phila) 1996 Aug;35(8):421–2.
Stingray hickey. Evans LA, et al. **Cutis** 1996 Sep;58(3):208–10
Dermatophagia: "wolf-biter". Scott MJ Jr, et al. **Cutis** 1997 Jan;59(1):19–20
The mechanism of excisional fetal wound repair in vitro is responsive to growth factors. Belford DA. **Endocrinology** 1997 Sep;138(9):3987–96
Rat stromelysin 3: cDNA cloning from healing skin wound, activation by furin and expression in rat tissues. Okada A, et al. **Gene** 1997 Feb 7;185(2):187–93
Dressing wound care with less skin irritation [letter] Foltz R. **Geriatrics** 1996 Oct;51(10):14
Wound status evaluation using color image processing. Hansen GL, et al. **IEEE Trans Med Imaging** 1997 Feb; 16(1):78–86
Repopulation of Langerhans cells during wound healing in an experimental human skin/SCID mouse model. Juhász I, et al. **Immunol Lett** 1996 Sep;52(2–3):125–8
Is it possible to trigger collagen synthesis by electric current in skin wounds? Canseven AG, et al. **Indian J Biochem Biophys** 1996 Jun;33(3):223–7
Effects of Centella asiatica extract on dermal wound healing in rats. Suguna L, et al. **Indian J Exp Biol** 1996 Dec; 34(12):1208–11
Chemotactic factors released in culture by intact developing and healing skin lesions produced in rabbits by the irritant sulfur mustard. Tanaka F, et al. **Inflammation** 1997 Apr; 21(2):251–67
Biomechanical and biochemical study of a standardized wound healing model. Paul RG, et al. **Int J Biochem Cell Biol** 1997 Jan;29(1):211–20
Photobleaching during and re-appearance after photodynamic therapy of topical ALA-induced fluorescence in UVB-treated mouse skin. Van der Veen N, et al. **Int J Cancer** 1997 Jul 3;72(1):110–8
Wound measurement [letter] Bahmer FA. **Int J Dermatol** 1997 May;36(5):399
Wound measurement. Wysocki AB. **Int J Dermatol** 1996 Feb; 35(2):82–91 (57 ref.)
Delayed death after attempted suicide by hanging. Hausmann R, et al. **Int J Legal Med** 1997;110(3):164–6
Retrospective study on skin reddenings and petechiae in the eyelids and the conjunctivae in forensic physical examinations. Kondo T, et al. **Int J Legal Med** 1997; 110(4):204–7
A comparative study of three occlusive dressings in the treatment of full-thickness wounds in pigs. Agren MS, et al. **J Am Acad Dermatol** 1997 Jan;36(1):53–8
The effects of ageing on wound healing: immunolocalisation of growth factors and their receptors in a murine incisional model. Ashcroft GS, et al. **J Anat** 1997 Apr;190 (Pt 3):351–65
Expression of cyclin protein after thermal skin injury in a guinea pig model. DeCherney AH, et al. **J Burn Care Rehabil** 1997 Jul-Aug;18(4):292–8
A burn wound healing model in the hairless descendant of the Mexican hairless dog. Matsumura H, et al. **J Burn Care Rehabil** 1997 Jul-Aug;18(4):306–12
Allograft is superior to topical antimicrobial therapy in the treatment of partial-thickness scald burns in children. Rose JK, et al. **J Burn Care Rehabil** 1997 Jul-Aug;18(4):338–41
Enhanced biosynthesis of extracellular matrix proteins and TGF-beta 1 by polyinosinic-polycytidylic acid during cutaneous wound healing in vivo. Sidhu GS, et al. **J Cell Physiol** 1996 Oct;169(1):108–14
Retrovirally mediated gene transfer in a skin equivalent model of chronic wounds. Badiavas E, et al. **J Dermatol Sci** 1996 Oct;13(1):56–62
Laceration repair with tissue adhesive in children. Brown V. **J Fam Pract** 1997 May;44(5):445–6
Effect of age and caloric restriction on cutaneous wound closure in rats and monkeys. Roth GS, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):B98–102
Extracellular matrix characterization during healing of full-thickness wounds treated with a collagen/elastin dermal substitute shows improved skin regeneration in pigs. Lamme EN, et al. **J Histochem Cytochem** 1996 Nov; 44(11):1311–22
Hyaluronic acid of wound fluid in adult and fetal rabbits. Sawai T, et al. **J Pediatr Surg** 1997 Jan;32(1):41–3
Collagen deposition and mechanical strength of colon anastomoses and skin incisional wounds of rats. Oxlund H, et al. **J Surg Res** 1996 Nov;66(1):25–30
Plastic syringe shaft fracture as a risk for percutaneous injury during performance of interventional procedures [letter] Sandhu JS, et al. **J Vasc Interv Radiol** 1995 Nov–Dec; 6(6):987–8
Effects of CO2 laser pulse duration in ablation and residual thermal damage: implications for skin resurfacing. Ross EV, et al. **Lasers Surg Med** 1996;19(2):123–9
The skin blood flow response in wound healing. Rendell MS, et al. **Microvasc Res** 1997 May;53(3):222–34
Spatial and temporal evaluation of locally induced skin trauma recorded with laser Doppler techniques. Staxrud LE, et al. **Microvasc Res** 1996 Jan;51(1):69–79
Cultured epithelial autografts: diving from surgery into matrix biology. Raghunath M, et al. **Pediatr Surg Int** 1997 Sep;12(7):478–83 (52 ref.)
Surgical wound healing monitored repeatedly in vivo using electrical resistance of the epidermis. Spence DW, et al. **Physiol Meas** 1996 May;17(2):57–69
Peripheral cutaneous nerve distribution to the fingers. Stappaerts KH, et al. **Physiother Res Int** 1996;1(1):41–9
The salvage of a degloved hand skin flap by arteriovenous shunting [letter; comment] Balakrishnan C. **Plast Reconstr Surg** 1997 Jun;99(7):2105. Comment on: Plast Reconstr Surg 1996 Jul;98(1):146–50.
Diclofenac and indomethacin influence the healing of normal and ischaemic incisional wounds in skin. Quirinia A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Sep; 31(3):213–9
[Modeling of cutaneous radio-contamination: effects of washings by soap and by solutions of DTPA] Gerasimo P, et al. **Ann Pharm Fr** 1997;55(3):116–24 (Eng. Abstr.) **(Fre)**
[Recognizing the signs of child abuse on the skin] Piérard GE. **Rev Med Liege** 1997 May;52(5):320–3 (25 ref.) **(Fre)**
[Marks on clothing and skin in absolutely and relatively close distance gunshots with fright weapons] Nadjem H, et al. **Arch Kriminol** 1996 May–Jun;197(5–6):175–84 (Eng. Abstr.) **(Ger)**
[Case report of jellyfish injury] Raupp U, et al. **Hautarzt** 1996 Jan;47(1):47–52 (Eng. Abstr.) **(Ger)**
[Cutaneous wound healing: clinical evaluation of locally active growth factors—an overview] Coerper S, et al. **Zentralbl Chir** 1996;121 Suppl:49–51 (21 ref.) **(Ger)**
[Use of cell and molecular biology in a model and the clinic] Vogt PM. **Zentralbl Chir** 1996;121 Suppl:25–8 (43 ref.) **(Ger)**
[The morphofunctional characteristics of connective tissue regeneration in the rat dermis after a gunshot injury] Danilov RK, et al. **Morfologiia** 1997;111(1):70–4 (Eng. Abstr.) **(Rus)**
[An experimental study of the hemostatic system in acute radiation sickness exacerbated by skin burns] Ziablitskiĭ VM, et al. **Radiats Biol Radioecol** 1997 Jan–Feb;37(1):68–75 (Eng. Abstr.) **(Rus)**
[The effect of infrared laser radiation of different frequencies on the healing of skin wounds] Korolev IuN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 May–Jun; (3):8–10 (Eng. Abstr.) **(Rus)**
[Various biochemical indices of wound healing during treatment with preparation SK] Shurygin AIa, et al. **Vopr Med Khim** 1996 Jul–Sep;42(3):227–31 (Eng. Abstr.) **(Rus)**
[Report of a case of traumatic avulsion of the penile skin with amputation of the glans] Martina G, et al. **Arch Esp Urol** 1996 Nov;49(9):981–3 (Eng. Abstr.) **(Spa)**
[Effect of magnetic fields on skin wound healing. Experimental study] Patiño O, et al. **Medicina (B Aires)** 1996;56(1):41–4 (Eng. Abstr.) **(Spa)**
[Intercellular interactions during the healing of an experimental skin wound] Lipshits' RU, et al. **Fiziol Zh** 1997;43(1–2):78–82 (Eng. Abstr.) **(Ukr)**
[The stabilizing effect of enterosgel on the structural bases of membrane digestion and absorption in the small intestine in severe thermal skin burns] Pasechka NV. **Fiziol Zh** 1996; 42(5–6):94–100 (Eng. Abstr.) **(Ukr)**

INNERVATION

Non-adrenergic regulation of microcirculation evoked by antidromic stimulation of the saphenous nerve in the rat skin. Pintér E, et al. **Acta Physiol Hung** 1996;84(3):331–2
Motor unit potential contribution to surface electromyography. Roeleveld K, et al. **Acta Physiol Scand** 1997 Jun;160(2):175–83
Histopathology of peripheral nerves in cutaneous herpesvirus infection. Worrell JT, et al. **Am J Dermatopathol** 1997 Apr; 19(2):133–7
A study of the normal values and habituation phenomenon of sympathetic skin response. Aramaki S, et al. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):2–7
Skin sympathetic outflow during head-down neck flexion in humans. Ray CA, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1142–6
Close link between cutaneous nerve pattern development and feather morphogenesis demonstrated by experimental production of neo-apteria and ectopic feathers: implication of chondroitin sulphate proteoglycans and other matrix molecules. Pays L, et al. **Anat Embryol (Berl)** 1997 May; 195(5):457–66
Two periods in the response of the skin cold receptors to intravenous infusion of noradrenaline. Kozyreva TV. **Ann N Y Acad Sci** 1997 Mar 15;813:176–83
A simple immunofluorescence technique for simultaneous visualization of mast cells and nerve fibers reveals selectivity and hair cycle-dependent changes in mast cell-nerve fiber contacts in murine skin. Botchkarev VA, et al. **Arch Dermatol Res** 1997 Apr;289(5):292–302
The occurrence of cutaneous nerve endings and

neuropeptides in vitiligo vulgaris: a case-control study. Liu PY, et al. **Arch Dermatol Res** 1996 Oct;288(11):670-5

Density and fine structure of peripheral nerves in various skin lesions of atopic dermatitis. Sugiura H, et al. **Arch Dermatol Res** 1997 Feb;289(3):125-31

Bradykinin potentiates the chemoresponsiveness of rat cutaneous C-fibre polymodal nociceptors to interleukin-2. Martin HA. **Arch Physiol Biochem** 1996;104(2):229-38

Intimate associations between PGP9.5-positive nerve fibres and Langerhans cells [letter] Gaudillere A, et al. **Br J Dermatol** 1996 Aug;135(2):343-4

Persistent pruritus after hydroxyethyl starch infusion therapy: a result of long-term storage in cutaneous nerves. Metze D, et al. **Br J Dermatol** 1997 Apr;136(4):553-9

The cutaneous innervation of the female breast and nipple-areola complex: implications for surgery. Jaspars JJ, et al. **Br J Plast Surg** 1997 Jun;50(4):249-59

Collateral sprouting of cutaneous nerves in man. Healy C, et al. **Brain** 1996 Dec;119 (Pt 6):2063-72

The dorsal filament of the weakly electric Apteronotidae (Gymnotiformes; Teleostei) is specialized for electroreception. Franchina CR, et al. **Brain Behav Evol** 1996;47(4):165-78

Immunohistochemical localization of 5-HT2A receptors in peripheral sensory axons in rat glabrous skin. Carlton SM, et al. **Brain Res** 1997 Jul 25;763(2):271-5

Effects of GABA and glycine receptor antagonists on the activity and PAG-induced inhibition of rat dorsal horn neurons. Peng YB, et al. **Brain Res** 1996 Oct 14; 736(1-2):189-201

Cutaneous reflex activity of the cat forelimb during fictive locomotion. Seki K, et al. **Brain Res** 1997 Apr 4; 753(1):56-62

Peripheral afferents with common function cluster in the median nerve and somatotopically innervate the human palm. Ekedahl R, et al. **Brain Res Bull** 1997;42(5):367-76

Patterns of sympathetic skin response in palmar hyperhidrosis. Chu EC, et al. **Clin Auton Res** 1997 Feb; 7(1):1-4

Possible mechanism of anhidrosis in a symptomatic female carrier of Fabry's disease: an assessment by skin sympathetic nerve activity and sympathetic skin response. Yamamoto K, et al. **Clin Auton Res** 1996 Apr;6(2):107-10

Depleted cutaneous innervation in familial amyloid. Ramsey B, et al. **Clin Exp Dermatol** 1996 Nov;21(6):449-50

Action of cholinesters on sensory nerve endings in skin and muscle. Carr RW, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):355-62 (81 ref.)

Differential expression of cell adhesion molecules on trigeminal cutaneous and muscle afferents. Scott SA, et al. **Dev Biol** 1996 Aug 25;178(1):101-12

Limited joint mobility of the ankle in diabetic patients with cutaneous sensory deficit. Simmons RW, et al. **Diabetes Res Clin Pract** 1997 Aug;37(2):137-43

Postural stability of diabetic patients with and without cutaneous sensory deficit in the foot. Simmons RW, et al. **Diabetes Res Clin Pract** 1997 Jun;36(3):153-60

Sympathetic skin responses of the hand in normal subjects: shorter latency at distal phalanx. Kanzato N, et al. **Electroencephalogr Clin Neurophysiol** 1997 Apr; 105(2):165-70

Topographic analyses of somatosensory evoked potentials following stimulation of tibial, sural and lateral femoral cutaneous nerves. Yamada T, et al. **Electroencephalogr Clin Neurophysiol** 1996 Jan;100(1):33-43

Sympathetic skin response in parkinsonian patients. Denišlič M, et al. **Electromyogr Clin Neurophysiol** 1996 Jun; 36(4):231-5

Somatosensory cortical and dermatome evoked potentials: a study conducted on 60 normal subjects. Results and their correlation relative to height and age. Gagnard-Landra C. **Electromyogr Clin Neurophysiol** 1996 Apr-May; 36(3):131-44

Activation by cutaneous or visceral noxious stimulation of spinal neurons projecting to the medullary dorsal reticular nucleus in the rat: a c-fos study. Almeida A, et al. **Eur J Neurosci** 1997 Apr;9(4):686-95

Analysis of cutaneous sensory neurons in transgenic mice lacking the low affinity neurotrophin receptor p75. Bergmann I, et al. **Eur J Neurosci** 1997 Jan;9(1):18-28

Relation between cutaneous receptive fields and muscle afferent input to climbing fibres projecting to the cerebellar C3 zone in the cat. Jörntell H, et al. **Eur J Neurosci** 1996 Aug;8(8):1769-79

Locomotor-related presynaptic modulation of primary afferents in the lamprey. El Manira A, et al. **Eur J Neurosci** 1997 Apr;9(4):696-705

Analysis of the vasodilator nerve function by nicotine in isolated dog skin artery. Uchiyama M, et al. **Eur J Pharmacol** 1997 Feb 19;321(1):19-25

Responses of medullary reticulospinal neurones to stimulation of cutaneous limb nerves during locomotion in intact cats. Drew T, et al. **Exp Brain Res** 1996 Sep;111(2):153-68

Control of grip force during restraint of an object held between finger and thumb: responses of cutaneous afferents from the digits. Macefield VG, et al. **Exp Brain Res** 1996 Feb;108(1):155-71

Convergence of skin reflex and corticospinal effects in segmental and propriospinal pathways to forelimb motoneurones in the cat. Sasaki M, et al. **Exp Brain Res** 1996;107(3):422-34

Changes in motor activity and biomechanics during balance recovery following cutaneous and muscular deafferentation. Thoumie P, et al. **Exp Brain Res** 1996 Jul; 110(2):289-97

Comparison of immunohistochemical and functional reinnervation of skin and muscle after peripheral nerve injury. Verdu E, et al. **Exp Neurol** 1997 Jul;146(1):187-98

Organization of the sural cutaneous input regulating the discharge of triceps surae gamma-motoneurones in the cat. Ellaway PH, et al. **Exp Physiol** 1997 Jan;82(1):121-38

The action of knee joint afferents and the concomitant influence of cutaneous (sural) afferents on the discharge of triceps surae gamma-motoneurones in the cat. Ellaway PH, et al. **Exp Physiol** 1996 Jan;81(1):45-66

The sympathetic skin response: a neurological perspective. Marchello L, et al. **Funct Neurol** 1996 Nov-Dec; 11(6):283-99 (104 ref.)

Influence of respiration on human sympathetic skin response. Krishnamurthy N, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):350-4

Effect of chronic sciatic nerve lesion on the neurogenic inflammatory response in intact and acutely injured denervated rat skin. Bassirat M, et al. **Inflamm Res** 1996 Aug;45(8):380-5

Inhibition of the neurogenic inflammatory response by lidocaine in rat skin. Dux M, et al. **Inflamm Res** 1996 Jan; 45(1):10-3

Regulation of the chick cutaneous innervation pattern in retinoic acid-induced ectopic feathers and in the naked neck mutant. Pays L, et al. **Int J Dev Biol** 1997 Aug; 41(4):575-9

Comparison of dermatomal SEPs and operative findings in lumbar disc disease. Tsonidis C, et al. **Int J Psychophysiol** 1996 Dec;24(3):267-70

Microanatomy of the structures contributing to abdominal cutaneous nerve entrapment syndrome. Applegate WV, et al. **J Am Board Fam Pract** 1997 Sep-Oct;10(5):329-32

Significance of sympathetic skin response in the assessment of autonomic failure in patients with spinal cord injury. Curt A, et al. **J Auton Nerv Syst** 1996 Nov 6;61(2):175-80

Significance of cognitive function in the elicitation of sympathetic skin response in healthy humans. Deguchi K, et al. **J Auton Nerv Syst** 1996 Nov 6;61(2):123-7

Skin sympathetic nerve activity and event-related potentials during auditory oddball paradigms. Ito H, et al. **J Auton Nerv Syst** 1996 Sep 12;60(3):129-35

Altered response in cutaneous sympathetic outflow to mental and thermal stimuli in primary palmoplantar hyperhidrosis. Iwase S, et al. **J Auton Nerv Syst** 1997 Jun 6;64(2-3):65-73

Effect of puncture resistant surgical gloves, finger guards, and glove liners on cutaneous sensibility and surgical psychomotor skills. Woods JA, et al. **J Biomed Mater Res** 1996 Spring;33(1):47-51

Recovery from brain-stem lesions involving the nociceptive pathways: comparison of clinical findings with laser-evoked potentials. Hansen HC, et al. **J Clin Neurophysiol** 1996 Jul;13(4):330-8

Hair cycle-dependent plasticity of skin and hair follicle innervation in normal murine skin. Botchkarev VA, et al. **J Comp Neurol** 1997 Sep 29;386(3):379-95

Monosynaptic input from cutaneous sensory afferents to fin motoneurons in lamprey. el Manira A, et al. **J Comp Neurol** 1996 Jun 10;369(4):533-42

Immunohistochemical study of skin reinnervation by regenerative axons. Navarro X, et al. **J Comp Neurol** 1997 Apr 7;380(2):164-74

Malignant peripheral nerve sheath tumor of the skin: a superficial form of this tumor. Misago N, et al. **J Cutan Pathol** 1996 Apr;23(2):182-8

Innervation of melanocytes in human skin. Hara M, et al. **J Exp Med** 1996 Oct 1;184(4):1385-95

Neurocutaneous island flaps in upper limb coverage: experience with 44 clinical cases. Bertelli JA, et al. **J Hand Surg [Am]** 1997 May;22(3):515-26

Distribution of nerve fibers in the standard incision for carpal tunnel decompression. Biyani A, et al. **J Hand Surg [Am]** 1996 Sep;21(5):855-7

Anatomical classification of sites of compression of the palmar cutaneous branch of the median nerve. al-Qattan MM. **J Hand Surg [Br]** 1997 Feb;22(1):48-9

Effects of noxious cooling of the skin on pain perception in man. Watanabe S, et al. **J Neurol Sci** 1996 Jan; 135(1):68-73

Sympathectomy induces adrenergic excitability of cutaneous C-fiber nociceptors. Bossut DF, et al. **J Neurophysiol** 1996 Jan;75(1):514-7

Responses of rat spinal dorsal horn neurons to intracutaneous microinjection of histamine, capsaicin, and other irritants. Carstens E. **J Neurophysiol** 1997 May;77(5):2499-514

Comparison of human cerebral activation pattern during cutaneous warmth, heat pain, and deep cold pain. Casey KL, et al. **J Neurophysiol** 1996 Jul;76(1):571-81

Pelvic visceral input into the nucleus gracilis is largely mediated by the postsynaptic dorsal column pathway. Al-Chaer ED, et al. **J Neurophysiol** 1996 Oct;76(4):2675-90

Backward and forward walking use different patterns of phase-dependent modulation of cutaneous reflexes in humans. Duysens J, et al. **J Neurophysiol** 1996 Jul; 76(1):301-10

Spinothalamic and spinohypothalamic tract neurons in the sacral spinal cord of rats. II. Responses to cutaneous and visceral stimuli. Katter JT, et al. **J Neurophysiol** 1996 Jun; 75(6):2606-28

Modulation of spinal visceral nociceptive transmission by NMDA receptor activation in the rat. Kolhekar R, et al. **J Neurophysiol** 1996 Jun;75(6):2344-53

Neural encoding of shape: responses of cutaneous mechanoreceptors to a wavy surface stroked across the monkey fingerpad. LaMotte RH, et al. **J Neurophysiol** 1996 Dec;76(6):3787-97

Encoding of corneal input in two distinct regions of the spinal trigeminal nucleus in the rat: cutaneous receptive field properties, responses to thermal and chemical stimulation, modulation by diffuse noxious inhibitory controls, and projections to the parabrachial area. Meng ID, et al. **J Neurophysiol** 1997 Jan;77(1):43-56

GABAA-receptor-mediated conductance and action potential waveform in cutaneous and muscle afferent neurons of the adult rat: differential expression and response to nerve injury. Oyelese AA, et al. **J Neurophysiol** 1996 Oct;76(4):2383-92

Responses of cutaneous A-fiber nociceptors to noxious cold. Simone DA, et al. **J Neurophysiol** 1997 Apr;77(4):2049-60

Correlation of peripheral innervation density and dorsal horn map scale. Wang L, et al. **J Neurophysiol** 1997 Aug; 78(2):689-702

Cutaneous reflexes during human gait: electromyographic and kinematic responses to electrical stimulation. Zehr EP, et al. **J Neurophysiol** 1997 Jun;77(6):3311-25

Specific C-receptors for itch in human skin. Schmelz M, et al. **J Neurosci** 1997 Oct 15;17(20):8003-8

Cutaneous responsiveness of rat single motor units activated by natural stimulation. Solano R, et al. **J Neurosci Methods** 1997 May 16;73(2):135-40

Keratan sulphate is present in developing chick skin in vivo where it could constitute a barrier to advancing neurites as observed in vitro. Hemming FJ, et al. **J Neurosci Res** 1997 Apr 15;48(2):133-45

Neural connection between the ventral portion of the lumbar intervertebral disc and the groin skin. Takahashi Y, et al. **J Neurosurg** 1996 Aug;85(2):323-8

C-polymodal nociceptors activated by noxious low temperature in human skin. Campero M, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):565-72

Movement illusions evoked by ensemble cutaneous input from the dorsum of the human hand. Collins DF, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):857-71

Excitability changes in human cutaneous afferents induced by prolonged repetitive axonal activity. Kiernan MC, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):255-64

Paraesthesiae induced by prolonged high frequency stimulation of human cutaneous afferents. Kiernan MC, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):461-71

The vasodilator component of neurogenic inflammation is caused by a special subclass of heat-sensitive nociceptors in the skin of the pig. Lynn B, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):587-93

Evidence suggesting a transcortical pathway from cutaneous foot afferents to tibialis anterior motoneurones in man. Nielsen J, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):473-84

Experience-induced plasticity of cutaneous maps in the primary somatosensory cortex of adult monkeys and rats. Xerri C, et al. **J Physiol Paris** 1996;90(3-4):277-87

A potentially underrecognized and treatable cause of chronic back pain: entrapment neuropathy of the cluneal nerves. Berthelot JM, et al. **J Rheumatol** 1996 Dec;23(12):2179-81

The value of sympathetic skin response recordings in the assessment of the vesicourethral autonomic nervous dysfunction in spinal cord injured patients. Schurch B, et al. **J Urol** 1997 Jun;157(6):2230-3

Regional cutaneous differences in the duration of bupivacaine local anesthesia in mice. Smith FL. **Life Sci** 1997; 60(18):1613-21

Structural diversity of the ordinary and specialized lateral line organs. Cernuda-Cernuda R, et al. **Microsc Res Tech** 1996 Jul 1;34(4):302-12 (60 ref.)

Enzyme histochemistry of cutaneous sensory nerve formations. Dubový P. **Microsc Res Tech** 1996 Jul 1; 34(4):334-50 (110 ref.)

Degeneration and regeneration of cutaneous sensory nerve formations. Dubový P, et al. **Microsc Res Tech** 1996 Jul 1;34(4):362-75 (110 ref.)

Sensory nerve formations in the skin and their classification [see comments] Malinovský L. **Microsc Res Tech** 1996 Jul 1;34(4):283-301 (135 ref.). Comment in: Microsc Res Tech 1996 Jul 1;34(4):281-2.

Ontogeny of the cutaneous sensory organs. Saxod R. **Microsc Res Tech** 1996 Jul 1;34(4):313-33 (100 ref.)

Cutaneous sensory nerve formations as studied with impregnation techniques: notes about a simple and reliable method. Tolivia Fernández D. **Microsc Res Tech** 1996 Jul 1;34(4):390-6

Immunohistochemistry of human cutaneous Meissner and pacinian corpuscles. Vega JA, et al. **Microsc Res Tech** 1996 Jul 1;34(4):351-61 (110 ref.)

Cutaneous sensory nerve formations: an overview [comment] Vega JA. **Microsc Res Tech** 1996 Jul 1;34(4):281-2 (33 ref.) . Comment on: Microsc Res Tech 1996 Jul 1;34(4):283-301.

Dermatomal/segmental somatosensory evoked potential evaluation of L5/S1 unilateral/unilevel radiculopathies [letter; comment] Fisher MA. **Muscle Nerve** 1997 Mar; 20(3):392-3. Comment on: Muscle Nerve 1996 Apr;19(4):442-9.

The role of cutaneous inputs during magnetic transcranial

stimulation. Rossini PM, et al. **Muscle Nerve** 1996 Oct; 19(10):1302–9

Selective loss of slow and enhancement of fast Na+ currents in cutaneous afferent dorsal root ganglion neurones following axotomy. Rizzo MA, et al. **Neurobiol Dis** 1995 Apr;2(2):87–96

Cutaneous innervation density in the allodynic form of postherpetic neuralgia. Rowbotham MC, et al. **Neurobiol Dis** 1996;3(3):205–14

Neurotransmitter background of the anti-inflammatory effect evoked by activation of sensory nerve fibers. Pintér E, et al. **Neurobiology (Bp)** 1996;4(3):233–5

Intraepidermal nerve fiber density in patients with painful sensory neuropathy. Holland NR, et al. **Neurology** 1997 Mar;48(3):708–11

Quantitation of epidermal nerves in diabetic neuropathy. Kennedy WR, et al. **Neurology** 1996 Oct;47(4):1042–8

Specific subtypes of cutaneous mechanoreceptors require neurotrophin-3 following peripheral target innervation. Airaksinen MS, et al. **Neuron** 1996 Feb;16(2):287–95

Peripheral NMDA and non-NMDA glutamate receptors contribute to nociceptive behaviors in the rat formalin test. Davidson EM, et al. **Neuroreport** 1997 Mar 3;8(4):941–6

Non-conscious choice in cutaneous backward masking.

Altered skin sensitivity in chronic itch: role of peripheral and central mechanisms. Grönroos M, et al. **Neurosci Lett** 1997 Jun 13;228(3):199–202

Sciatic nerve section induces mechanical hyperalgesia in skin adjacent to the deafferented region in rats: lack of correlation with autotomy behavior. Kauppila T, et al. **Neurosci Lett** 1996 Jun 14;211(1):65–7

Plasma extravasation and neuropeptide release in human skin as measured by intradermal microdialysis. Schmelz M, et al. **Neurosci Lett** 1997 Jul 18;230(2):117–20

Excitation of rat cutaneous nociceptors by noxious cold. Simone DA, et al. **Neurosci Lett** 1996 Jul 26;213(1):53–6

Decreased skin sensory innervation in transgenic mice overexpressing insulin-like growth factor-II. Reynolds ML, et al. **Neuroscience** 1997 Aug;79(3):789–97

C-fos can be induced in the neonatal rat spinal cord by both noxious and innocuous peripheral stimulation. Jennings E, et al. **Pain** 1996 Dec;68(2–3):301–6

Modulation of cutaneous nociceptor activity by electrical stimulation in the brain stem does not inhibit the nociceptive excitation of dorsal horn neurons. Morton CR, et al. **Pain** 1997 May;71(1):65–70

Dermatomes in the rat limbs as determined by antidromic stimulation of sensory C-fibers in spinal nerves. Takahashi Y, et al. **Pain** 1996 Sep;67(1):197–202

CO2 laser activation of nociceptive and non-nociceptive thermal afferents from hairy and glabrous skin. Towell AD, et al. **Pain** 1996 Jul;66(1):79–86

Anatomical course of the lateral femoral cutaneous nerve and its susceptibility to compression and injury. Aszmann OC, et al. **Plast Reconstr Surg** 1997 Sep;100(3):600–4

Delayed effect of denervation on wound contraction in rat skin. Engin C, et al. **Plast Reconstr Surg** 1996 Nov; 98(6):1063–7

Reinnervation of the cutaneous part of a free fibula flap [letter] Hage JJ. **Plast Reconstr Surg** 1997 Jul;100(1):277

Mammalian cutaneous mechanoreceptors. Hamann W. **Prog Biophys Mol Biol** 1995;64(1):81–104 (140 ref.)

Spinal cord mechanisms of hyperalgesia and allodynia: role of peripheral input from nociceptors. Cervero F. **Prog Brain Res** 1996;113:413–22 (32 ref.)

Sixty years of C-fiber recordings from animal and human skin nerves: historical notes. Handwerker HO. **Prog Brain Res** 1996;113:39–51

Peptides and cutaneous polymodal nociceptor neurones. Lawson SN. **Prog Brain Res** 1996;113:369–85 (75 ref.)

Neurogenic inflammation caused by cutaneous polymodal receptors. Lynn B. **Prog Brain Res** 1996;113:361–8 (43 ref.)

Cutaneous polymodal receptors: characteristics and plasticity. Perl ER. **Prog Brain Res** 1996;113:21–37 (49 ref.)

Sympathetic modulation of cutaneous polymodal receptors in chronically inflamed and diabetic rats. Sato J, et al. **Prog Brain Res** 1996;113:153–9 (41 ref.)

Medial and lateral antebrachial cutaneous nerve blocks: an easily learned regional anesthetic for forearm arteriovenous fistula surgery. Viscomi CM, et al. **Reg Anesth** 1996 Jan–Feb;21(1):2–5

Contributions of raphe-cortical and thalamocortical axons to the transient somatotopic pattern of serotonin immunoreactivity in rat cortex. Bennett-Clarke CA, et al. **Somatosens Mot Res** 1997;14(1):27–33

Sensory detection and pain thresholds in spinal cord injury patients with and without dysesthetic pain, and in chronic low back pain patients. Cohen MJ, et al. **Somatosens Mot Res** 1996;13(1):29–37

Progressive changes in cutaneous trigger zones for sensation referred to a phantom hand: a case report and review with implications for cortical reorganization. Doetsch GS. **Somatosens Mot Res** 1997;14(1):6–16

Heat pain increases the perceived magnitude of an innocuous electrical stimulus: evidence for a peripheral mechanism. Dowman R, et al. **Somatosens Mot Res** 1996;13(3–4):255–62

Sympathectomy does not influence experimental itch and cutaneous temperature perception thresholds. Ekblom A, et al. **Somatosens Mot Res** 1996;13(2):147–52

Studies of mechanoreceptors in skin of the snout of the echidna Tachyglossus aculeatus. Iggo A, et al. **Somatosens Mot Res** 1996;13(2):129–38

Evidence for synchronous activation of neurons located in different layers of primary somatosensory cortex. Johnson MJ, et al. **Somatosens Mot Res** 1995;12(3–4):235–47

Somatotopic localization of thermal stimuli: I. A comparison of within- versus across-dermatomal separation of innocuous thermal stimuli. Lee DK, et al. **Somatosens Mot Res** 1996;13(1):67–71

Response of monkey glabrous skin mechanoreceptors to random noise sequences: II. Dynamic stimulus state analysis. Looft FJ. **Somatosens Mot Res** 1996;13(1):11–28

Response of monkey glabrous skin mechanoreceptors to random noise sequences: III. Spectral analysis. Looft FJ. **Somatosens Mot Res** 1996;13(3–4):235–44

The "plantar test" apparatus (Ugo Basile Biological Apparatus), a controlled infrared noxious radiant heat stimulus for precise withdrawal latency measurement in the rat, as a tool for humans? Montagne-Clavel J, et al. **Somatosens Mot Res** 1996;13(3–4):215–23

Localization of unmyelinated axons in rat skin and mucocutaneous tissue utilizing the isolectin GS-I-B4. Petruska JC, et al. **Somatosens Mot Res** 1997;14(1):17–26

Spatial acuity of the body surface over the life span. Stevens JC, et al. **Somatosens Mot Res** 1996;13(2):153–66

in the cuneate nucleus of a primate, and some relationships to previously described cortical representations. Xu J, et al. **Somatosens Mot Res** 1996;13(3–4):187–97

[Proprioceptive and cutaneous evoked somatosensory potentials in the baboon: cycles of GABAergic excitability and inhibition] el Kharroussi M, et al. **Neurophysiol Clin** 1997;27(2):89–108 (Eng. Abstr.) **(Fre)**

[Merkel cell and neuro-cutaneous system] Misery L, et al. **Pathol Biol (Paris)** 1996 Dec;44(10):849–55 (81 ref.) (Eng. Abstr.) **(Fre)**

[Neuro-immuno-cutaneous system (NICS)] Misery L. **Pathol Biol (Paris)** 1996 Dec;44(10):867–74 (86 ref.) (Eng. Abstr.) **(Fre)**

[Development of the cutaneous nervous system] Saxod R, et al. **Pathol Biol (Paris)** 1996 Dec;44(10):838–48 (40 ref.) (Eng. Abstr.) **(Fre)**

[Sympathetic skin responses and variability of the R-R interval: correlation with the severity stages of diabetic polyneuropathy] Chassande B, et al. **Rev Neurol (Paris)** 1996 Oct;152(10):623–9 (Eng. Abstr.) **(Fre)**

[Arterial and neural supply of the skin of the palm. Surgical-anatomical findings in Dupuytren's contracture] Schrader M, et al. **Anat Anz** 1997 Aug;179(4):349–53 (Eng. Abstr.) **(Ger)**

[The courses and the segmental origins of the cutaneous branches of the thoracic dorsal rami] Aizawa Y, et al. **Kaibogaku Zasshi** 1996 Jun;71(3):195–210 (Eng. Abstr.) **(Jpn)**

[Sympathetic skin response (SSR)] Deguchi K, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:494–7 (12 ref.) **(Jpn)**

[The skin vasomotor dysfunction of the juvenile muscular atrophy of the distal upper limb—investigation by the ice water immersion test] Kijima M, et al. **Rinsho Shinkeigaku** 1997 Feb;37(2):81–6 (Eng. Abstr.) **(Jpn)**

[Sympathetic skin responses in the face by magnetic stimulation of the neck] Okuda-Matsuoka H, et al. **Rinsho Shinkeigaku** 1996 Oct;36(10):1190–2 (Eng. Abstr.) **(Jpn)**

[Relations between autonomic dysfunction and skin sympathetic nerve activity in Guillain-Barré syndrome: a microneurographical assessment] Yamamoto K, et al. **Rinsho Shinkeigaku** 1995 Oct;35(10):1098–103 (Eng. Abstr.) **(Jpn)**

[Cutaneous innervation: anatomy and physiology. Neuropeptides] Casado-Olea JA. **Rev Neurol** 1997 Sep;25 Suppl 3:S207–13 (31 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Alterations in glycosaminoglycans in wounded skin of diabetic rats. A possible role of IGF-I, IGF-binding proteins and proteolytic activity. Cechowska-Pasko M, et al. **Acta Biochim Pol** 1996;43(3):557–65

Expression of the p53 protein in sun-damaged skin. Barnadas MA, et al. **Acta Derm Venereol** 1996 May;76(3):203–4

Interleukin-8 immunoreactivity in malignant tumours of the skin. Bornscheuer E, et al. **Acta Derm Venereol** 1996 May; 76(3):210–3

Cell adhesion molecule expression in cutaneous lesions of dermatomyositis. Hausmann G, et al. **Acta Derm Venereol** 1996 May;76(3):222–5

Neuropeptide- and capsaicin-induced histamine release in skin monitored with the microdialysis technique. Huttunen M, et al. **Acta Derm Venereol** 1996 May;76(3):205–9

Regulation of collagen expression by interleukin-1 beta is dependent on donor age. Jarisch A, et al. **Acta Derm Venereol** 1996 Jul;76(4):287–90

Enhanced release of interleukin-8 from human epidermal keratinocytes in response to stimulation with trichophytin in vitro [letter] Koga T, et al. **Acta Derm Venereol** 1996 Sep;76(5):399–400

Focal dermal hypoplasia (Goltz syndrome): a decreased accumulation of hyaluronic acid in three-dimensional culture. Sato M, et al. **Acta Derm Venereol** 1996 Sep; 76(5):365–7

Histochemical, immunohistochemical and ultrastructural studies on the action of glucocorticoids on epidermal Langerhans cells (ELC) of murine skin. Bernateck M, et al. **Acta Histochem** 1996 Jan;98(1):101–6

Increased endothelial and epidermal thrombomodulin expression and plasma thrombomodulin level in progressive systemic sclerosis. Mizutani H, et al. **Acta Med Okayama** 1996 Dec;50(6):293–7

Overexpression of tenascin in cholesteatoma and external auditory meatal skin compared to retroauricular epidermis. Schilling V, et al. **Acta Otolaryngol (Stockh)** 1996 Sep; 116(5):741–6

Effect of increased interstitial fluid flux on fractional catabolic rate of high molecular weight [3H]hyaluronan injected in rabbit skin. Reed RK, et al. **Acta Physiol Scand** 1996 Feb;156(2):93–8

Prostaglandin E2 inhibits antidiuretic hormone induced transepithelial sodium transport and cAMP production in frog skin epithelium (Rana esculenta). Rytved KA, et al. **Acta Physiol Scand** 1996 Dec;158(4):357–63

Tissue differences in fragile X mosaics: mosaicism in blood cells may differ greatly from skin. Dobkin CS, et al. **Am J Med Genet** 1996 Aug 9;64(2):296–301

Differential expression and localization of insulin-like growth factors I and II Brown-Borst al. **Am J Pathol** 1997 Sep; 151(3):715–24

Detection of transforming growth factor-beta 1 in dermal lesions of different clinical forms of leprosy. Goulart IM, et al. **Am J Pathol** 1996 Mar;148(3):911–7

Bicarbonate and CO2 transport across the skin of the leopard frog, Rana pipiens: effect of PGF2alpha. Candia OA, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R640–7

Increased synthesis of high-molecular-weight cPLA2 mediates early UV-induced PGE2 in human skin. Gresham A, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1037–50

Microdialysis measurements in skin: evidence for significant lactate release in healthy humans. Jansson PA, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E138–42

Modes of operation of an electroneutral Na+/Li+ countertransport in human skin fibroblasts. Zerbini G, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1373–9

Comparison of CO2 laser, electrocautery, and scalpel incisions on acute-phase reactants in rat skin. Johnson MA, et al. **Am Surg** 1997 Jan;63(1):13–6

Immunohistochemical, ultrastructural, and molecular features of Kindler syndrome distinguish it from dystrophic epidermolysis bullosa. Shimizu H, et al. **Arch Dermatol** 1997 Sep;133(9):1111–7 (47 ref.)

Interleukin-11 production is increased in organ cultures of lesional skin of patients with active plaque-type psoriasis as compared with nonlesional and normal skin. Similarity to interleukin-1 beta, interleukin-6 and interleukin-8. Ameglio F, et al. **Arch Dermatol Res** 1997 Jun; 289(7):399–403

Immunohistochemical study of HSP-70 in two basic leprosy groups. Aroni K, et al. **Arch Dermatol Res** 1996 May; 288(5–6):252–4

Immunohistochemical identification of type II alternatively activated dendritic macrophages (RM 3/1+3, MS-1+/-, 25F9-) in psoriatic dermis. Djemadji-Oudjiel N, et al. **Arch Dermatol Res** 1996 Nov;288(12):757–64

LTA4 hydrolase in human skin: decreased activity, but normal concentration in lesional psoriatic skin. Evidence for different LTA4 hydrolase activity in human lymphocytes and human skin. Iversen L, et al. **Arch Dermatol Res** 1996 May;288(5–6):217–24

Prolonged nuclear accumulation of p53 in xeroderma pigmentosum complementation group A cells after ultraviolet irradiation. Kato S, et al. **Arch Dermatol Res** 1996 May;288(5–6):249–51

Skin-derived antileukoproteinase (SKALP) is decreased in pustular forms of psoriasis. A clue to the pathogenesis of pustule formation? Kuijpers AL, et al. **Arch Dermatol Res** 1996 Oct;288(11):641–7

The occurrence of cutaneous nerve endings and neuropeptides in vitiligo vulgaris: a case-control study. Liu PY, et al. **Arch Dermatol Res** 1996 Oct;288(11):670–5

Type XII collagen in human skin: studies on its localization with monoclonal antibodies. Sasaki T, et al. **Arch Dermatol Res** 1996 Dec;289(1):62–4

Epicutaneous application of leukotriene B4 induces patterns of tenascin and a heparan sulfate proteoglycan epitope that are typical for psoriatic lesions. Seyger MM, et al. **Arch Dermatol Res** 1997 May;289(6):331–6

Expression of SKALP/elafin during wound healing in human skin. van Bergen BH, et al. **Arch Dermatol Res** 1996 Jul; 288(8):458–62

C5a receptors are detectable on mast cells in normal human skin and in psoriatic plaques but not in weal and flare reactions or in uticaria pigmentosa by immunohistochemistry. Werfel T, et al. **Arch Dermatol Res** 1997 Jan;289(2):83–6

GM-CSF mRNA and protein in human skin-derived lymph. Yawalkar N, et al. **Arch Dermatol Res** 1996 Oct; 288(11):637–40

Topical all-trans retinoic acid (RA) induces an early, coordinated increase in RA-inducible skin-specific gene/psoriasin and cellular RA-binding protein II mRNA levels which precedes skin erythema. Zouboulis CC, et al. **Arch Dermatol Res** 1996 Oct;288(11):664–9

Different localizations of growth-associated protein (GAP-43) in mechanoreceptors and free nerve endings of

adult rat periodontal ligament, dental pulp and skin. Maeda T, et al. **Arch Histol Cytol** 1996 Aug;59(3):291–304

A pilot study on the percutaneous absorption of microfine titanium dioxide from sunscreens. Tan MH, et al. **Australas J Dermatol** 1996 Nov;37(4):185–7

Furfural, a precursor of the cytokinin hormone kinetin, and base propenals are formed by hydroxyl radical damage of DNA. Barciszewski J, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):317–9

Alteration of free calcium levels and acylphosphatase muscular isoenzyme in cultured dystrophic skin fibroblasts. Degl'Innocenti D, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):327–30

Generation of active oxygen species from advanced glycation end-products (AGE) under ultraviolet light A (UVA) irradiation. Masaki H, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):306–10

Cytoplasmic processing of human profilaggrin by active mu-calpain. Yamazaki M, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):652–6

The transcription of human alpha 1(I) procollagen gene (COL1A1) is suppressed by tumour necrosis factor-alpha through proximal short promoter elements: evidence for suppression mechanisms mediated by two nuclear-factorbinding sites. Mori K, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):811–6

Serotonin decreases cytoskeletal and cytosolic glycolytic enzymes and the levels of ATP and glucose 1,6-bisphosphate in skin, which is prevented by the calmodulin antagonists thioridazine and clotrimazole. Ashkenazy-Shahar M, et al. **Biochem Mol Med** 1997 Apr; 60(2):187–93

Diagnosis of complex I deficiency in patients with lactic acidemia using skin fibroblast cultures. Pitkänen S, et al. **Biochem Mol Med** 1996 Dec;59(2):134–7

Cyclic AMP-mediated control of LDL receptor gene expression in human skin fibroblasts. Holmes C, et al. **Biochem Soc Trans** 1997 May;25(2):179S

Modulation of type VII collagen (anchoring fibril) expression by retinoids in human skin cells. Chen M, et al. **Biochim Biophys Acta** 1997 Apr 10;1351(3):333–40

Interaction of liposomes with human skin in vitro—the influence of lipid composition and structure. Kirjavainen M, et al. **Biochim Biophys Acta** 1996 Dec 13;1304(3):179–89

Early changes in cutaneous bilirubin and serum bilirubin isomers during intensive phototherapy of jaundiced neonates with blue and green light. Myara A, et al. **Biol Neonate** 1997;71(2):75–82

Transdermal prodrug concepts: permeation of buprenorphine and its alkyl esters through hairless mouse skin and influence of vehicles. Imoto H, et al. **Biol Pharm Bull** 1996 Feb;19(2):263–7

Relationship between amount of beta-blockers permeating through the stratum corneum and skin irritation after application of beta-blocker adhesive patches to guinea pig skin. Kobayashi I, et al. **Biol Pharm Bull** 1997 Apr; 20(4):421–7

In vitro skin penetration and degradation of enkephalin, elcatonin and insulin. Ogiso T, et al. **Biol Pharm Bull** 1997 Jan;20(1):54–60

Intracellular pH regulation of newborn rat skin basal cells. Ohkura K, et al. **Biol Pharm Bull** 1996 Dec;19(12):1560–4

Effect of culture matrix on newborn rat skin basal cells; modification of cell response to extracellular calcium. Ohkura K, et al. **Biol Pharm Bull** 1996 Apr;19(4):501–5

200 years of amphibian water economy: from Robert Townson to the present. Jørgensen CB. **Biol Rev Camb Philos Soc** 1997 May;72(2):153–237 (390 ref.)

Supplementation of calves with stabilized orthosilicic acid. Effect on the Si, Ca, Mg, and P concentrations in serum and the collagen concentration in skin and cartilage. Calomme MR, et al. **Biol Trace Elem Res** 1997 Feb; 56(2):153–65

Characterization of electric-pulse-induced permeabilization of porcine skin using surface electrodes. Gallo SA, et al. **Biophys J** 1997 Jun;72(6):2805–11

Altered distribution and synthesis of laminin-5 (kalinin) in oral lichen planus, epithelial dysplasias and squamous cell carcinomas. Kainulainen T, et al. **Br J Dermatol** 1997 Mar; 136(3):331–6

Tenascin is overexpressed in vitiligo lesional skin and inhibits melanocyte adhesion. Le Poole IC, et al. **Br J Dermatol** 1997 Aug;137(2):171–8

In vivo formation of prostaglandin E1 and prostaglandin E2 in atopic dermatitis. Leonhardt A, et al. **Br J Dermatol** 1997 Mar;136(3):337–40

Suppression of tumour necrosis factor-alpha expression in leprosy skin lesions during treatment for leprosy. Sugita Y, et al. **Br J Dermatol** 1997 Mar;136(3):393–7

Use of lightguide spectrophotometry to investigate the effect of postural changes on skin oxygenation in deep venous insufficiency. Hanna GB, et al. **Br J Surg** 1997 Apr; 84(4):520–3

Localization and activation of substance P receptors in unmyelinated axons of rat glabrous skin. Carlton SM, et al. **Brain Res** 1996 Sep 23;734(1–2):103–8

Enhanced skin carcinogenesis in transgenic mice with high expression of glutathione peroxidase or both glutathione peroxidase and superoxide dismutase. Lu YP, et al. **Cancer Res** 1997 Apr 15;57(8):1468–74

Benzo[c]phenanthrene is activated to DNA-binding diol epoxides in the human mammary carcinoma cell line MCF-7 but only limited activation occurs in mouse skin. Einolf HJ, et al. **Carcinogenesis** 1996 Oct;17(10):2237–44

Characterization of the maitotoxin-induced calcium influx pathway from human skin fibroblasts. Gutierrez D, et al. **Cell Calcium** 1997 Jul;22(1):31–8

Evaluation of skin permeability of drugs by newly prepared polymer membranes. Yamaguchi Y, et al. **Chem Pharm Bull (Tokyo)** 1997 Mar;45(3):537–41

Cytochrome P-450-dependent drug metabolism in skin. Ahmad N, et al. **Clin Dermatol** 1996 Jul–Aug;14(4):407–15

Methods for measuring the skin-cleansing effect of surfactants in comparison with skin roughness and compatibility. Schrader K, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):57–65 (15 ref.)

The effects of detergents on hydration and skin surface lipids. Thune P. **Clin Dermatol** 1996 Jan–Feb;14(1):29–33 (33 ref.)

Expression of the putative inhibitor of the insulin receptor tyrosine kinase PC-1 in dermal fibroblasts from patients with syndromes of severe insulin resistance. Whitehead JP, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):65–70

Effects of systemic corticosteroids on cutaneous histamine secretion and histamine-releasing factor in patients with chronic idiopathic urticaria. Paradis L, et al. **Clin Exp Allergy** 1996 Jul;26(7):815–20

No release of histamine and substance P in capsaicin-induced neurogenic inflammation in intact human skin in vivo: a microdialysis study. Petersen LJ, et al. **Clin Exp Allergy** 1997 Aug;27(8):957–65

Neuropeptides in the skin of patients with atopic dermatitis. Ostlere LS, et al. **Clin Exp Dermatol** 1995 Nov;20(6):462–7

IL-13 over-expression in skin is not confined to IgE-mediated skin inflammation. Van der Ploeg I, et al. **Clin Exp Immunol** 1997 Sep;109(3):526–32

Increased dermal expression of ICAM-1 and VCAM-1 after administration of OKT3 in man. Buysmann S, et al. **Clin Nephrol** 1996 Aug;46(2):84–91

Influence of external pressure on transcutaneous oxygen tension and laser Doppler flowmetry on sacral skin. Colin D, et al. **Clin Physiol** 1996 Jan;16(1):61–72

Water protective effect of barrier creams and moisturizing creams: a new in vivo test method. de Fine Olivarius F, et al. **Contact Dermatitis** 1996 Oct;35(4):219–25

Different pathways in irritant contact eczema? Early differences in the epidermal elemental content and expression of cytokines after application of 2 different irritants. Grängsjö A, et al. **Contact Dermatitis** 1996 Dec; 35(6):355–60

Skin permeability barrier and occlusion: no delay of repair in irritated human skin. Welzel J, et al. **Contact Dermatitis** 1996 Sep;35(3):163–8

Cutaneous microdialysis for the measurement in vivo of the percutaneous absorption of organic solvents. Anderson C, et al. **Curr Probl Dermatol** 1996;25:37–46

Aspects of exposure to UVA tanning sources. Carcinogenic effect in mice and melanogenic effect in man and mice. Bech-Thomsen N. **Dan Med Bull** 1997 Jun;44(3):242–56 (116 ref.)

Analysis of amyloid precursor protein mRNAs in skin fibroblasts in Down's syndrome. Urakami K, et al. **Dementia** 1996 Mar–Apr;7(2):82–5

Neural and skin cell-specific expression pattern conferred by steel factor regulatory sequence in transgenic mice. Yoshida H, et al. **Dev Dyn** 1996 Oct;207(2):222–32

Abnormal glucose transport and GLUT1 cell-surface content in fibroblasts and skeletal muscle from NIDDM and obese subjects. Miele C, et al. **Diabetologia** 1997 Apr;40(4):421–9

Characterization and determination of the relative abundance of two types of insulin-like growth factor binding protein-5 proteases that are secreted by human fibroblasts. Nam TJ, et al. **Endocrinology** 1996 Dec;137(12):5530–6

Heparin inhibition of insulin-like growth factor-binding protein-3 binding to human fibroblasts and rat glioma cells: role of heparan sulfate proteoglycans. Yang YW, et al. **Endocrinology** 1996 Oct;137(10):4363–71

Elevated Th1 cytokine mRNA in skin biopsies and peripheral circulation in patients with erythema nodosum. Llorente L, et al. **Eur Cytokine Netw** 1997 Mar;8(1):67–71

Endogeneously regulated site-specific differentiation of human palmar skin keratinocytes in organotypic cocultures and in nude mouse transplants. Limat A, et al. **Eur J Cell Biol** 1996 Mar;69(3):245–58

The ratio of non-oxidized/oxidized forms of apolipoprotein A-I can affect cholesterol efflux from human skin fibroblasts mediated by high density lipoprotein [letter] Sigalov AB, et al. **Eur J Clin Chem Clin Biochem** 1997 May;35(5):395–6

Metabolism studies on transdermal prostaglandin E1 in human foreskin in vitro. Foldvari M, et al. **Eur J Drug Metab Pharmacokinet** 1997 Apr–Jun; 22(2):111–20

Overexpression of nerve growth factor in skin increases sensory neuron size and modulates Trk receptor expression. Goodness TP, et al. **Eur J Neurosci** 1997 Aug;9(8):1574–85

Influence of nitric oxide on transepithelial transport in toad skin: effects of cholinergic agents and morphine. Neumann V, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):123–8

125I uptake competing with iodine absorption by the thyroid gland following povidone-iodine skin application. Furudate S, et al. **Exp Anim** 1997 Jul;46(3):197–202

Proinflammatory cytokines and their corresponding receptor proteins in eccrine sweat glands in normal and cutaneous leishmaniasis human skin. An immunohistochemical study. Ahmed AA, et al. **Exp Dermatol** 1996 Aug;5(4):230–5

Stratum corneum architecture, metabolic activity and interactivity with subjacent cell layers. Elias PM. **Exp Dermatol** 1996 Aug;5(4):191–201 (77 ref.)

A screening of skin changes, with special emphasis on neurochemical marker antibody evaluation, in patients claiming to suffer from "screen dermatitis" as compared to normal healthy controls. Johansson O, et al. **Exp Dermatol** 1996 Oct;5(5):279–85

Profile of cytokine mRNA expression in spontaneous and UV-induced skin lesions from actinic prurigo patients. Santos-Martínez L, et al. **Exp Dermatol** 1997 Apr;6(2):91–7

Metabolism of topical retinaldehyde and retinol by mouse skin in vivo: predominant formation of retinyl esters and identification of 14-hydroxy-4, 14-retro-retinol. Sass JO, et al. **Exp Dermatol** 1996 Oct;5(5):267–71

Propiomelanocortin (POMC) gene expression by normal skin and keloid fibroblasts in culture: modulation by cytokines. Teofoli P, et al. **Exp Dermatol** 1997 Jun;6(3):111–5

Modifications of proteoglycans secreted into the growth medium by young and senescent human skin fibroblasts. Passi A, et al. **FEBS Lett** 1997 Feb 3;402(2–3):286–90

Active oxygen species mediate the solar ultraviolet radiation-dependent increase in the tumour suppressor protein p53 in human skin fibroblasts. Vile GF. **FEBS Lett** 1997 Jul 21;412(1):70–4

Aggregation of PDGF-beta receptors in human skin fibroblasts: characterization by image correlation spectroscopy (ICS). Wiseman PW, et al. **FEBS Lett** 1997 Jan 13;401(1):43–8

Cutaneous xenobiotic metabolism: glycine conjugation in human and rat keratinocytes. Nasseri-Sina P, et al. **Food Chem Toxicol** 1997 Mar–Apr;35(3–4):409–16

Human skin in vitro percutaneous absorption of gaseous ethylene oxide from fabric. Wester RC, et al. **Food Chem Toxicol** 1997 May;35(5):513–5

Electron paramagnetic resonance studies on nitroxide radical 2,2,5,5-tetramethyl-4-piperidin-1-oxyl (TEMPO) redox reactions in human skin. Fuchs J, et al. **Free Radic Biol Med** 1997;22(6):967–76

Effect of reactive oxygen species on the elastin mRNA expression in cultured human dermal fibroblasts. Kawaguchi Y, et al. **Free Radic Biol Med** 1997;23(1):162–5

Effects of reactive oxygen species on the biosynthesis of 12 (S)-hydroxyeicosatetraenoic acid in mouse epidermal homogenate. Müller K, et al. **Free Radic Biol Med** 1997; 23(2):321–30

Quercetin protects cutaneous tissue-associated cell types including sensory neurons from oxidative stress induced by glutathione depletion: cooperative effects of ascorbic acid. Skaper SD, et al. **Free Radic Biol Med** 1997; 22(4):669–78

Quantitative percutaneous absorption and cutaneous distribution of binary mixtures of phenol and para-nitrophenol in isolated perfused porcine skin. Brooks JD, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):233–43

Rat stromelysin 3: cDNA cloning from healing skin wound, activation by furin and expression in rat tissues. Okada A, et al. **Gene** 1997 Feb 7;185(2):187–93

In vivo transfer of gene and oligodeoxynucleotides into skin of fetal rats by incubation in amniotic fluid. Hayashi SI, et al. **Gene Ther** 1996 Oct;3(10):878–85

Selective suppression of CD44 in keratinocytes of mice bearing an antisense CD44 transgene driven by a tissue-specific promoter disrupts hyaluronate metabolism in the skin and impairs keratinocyte proliferation. Kaya G, et al. **Genes Dev** 1997 Apr 15;11(8):996–1007

A new transdermal delivery system for pilocarpine in glaucoma treatment. Dinslage S, et al. **Ger J Ophthalmol** 1996 Sep;5(5):275–80

Glypican (heparan sulfate proteoglycan) is palmitoylated, deglycanated and reglycanated during recycling in skin fibroblasts. Edgren G, et al. **Glycobiology** 1997 Feb; 7(1):103–12

Lack of acidic fibroblast growth factor activation by heparan sulfate species from diabetic rat skin. Bourin MC. **Glycoconj J** 1997 Jun;14(4):423–32

Changes in the secretion and glycosylation of fibronectin by human skin fibroblasts associated with tuberous sclerosis. Uysal H, et al. **Glycoconj J** 1997 Jun;14(4):439–47

Localisation of VIP-and CGRP-like substances in the skin and sinus hair follicles of various mammalian species. Cheng-Chew SB, et al. **Histochem Cell Biol** 1996 Jun; 105(6):443–52

Differential expression of tenascin in the skin during hapten-induced dermatitis. Koyama Y, et al. **Histochem Cell Biol** 1996 Sep;106(3):263–73

Expression of retinoid-X receptors (-alpha,-beta,-gamma) and retinoic acid receptors (-alpha,-beta,-gamma) in normal human skin: an immunohistological evaluation. Reichrath J, et al. **Histochem J** 1997 Feb;29(2):127–33

Influence of solubility and permeant size on absorption and metabolism of xenobiotics in rabbit skin. Bast GE. **Hum Exp Toxicol** 1997 Aug;16(8):435–40 (20 ref.)

Assessment of the biochemical effects of percutaneous exposure of sulphur mustard in an in vitro human skin system. Lindsay CD, et al. **Hum Exp Toxicol** 1996 Mar; 15(3):237–44

Intracellular free calcium abnormalities in fibroblasts from non-insulin-dependent diabetic patients with and without arterial hypertension. Duner E, et al. **Hypertension** 1997

Apr;29(4):1007–13
Is it possible to trigger collagen synthesis by electric current in skin wounds? Canseven AG, et al.
Indian J Biochem Biophys 1996 Jun;33(3):223–7
In vitro percutaneous absorption of verapamil. Jain GK, et al. **Indian J Exp Biol** 1996 May;34(5):475–7
Autologous versus allogeneic T cell–stimulated IL–6 production by dermal fibroblasts. Spörri B, et al.
Inflammation 1997 Aug;21(4):371–8
Adhesion molecules in atopic dermatitis: upregulation of alpha6 integrin expression in spontaneous lesional skin as well as in atopen, antigen and irritative induced patch test reactions. Jung K, et al. **Int Arch Allergy Immunol** 1997 Aug;113(4):495–504
RANTES mRNA expression in skin and colon of patients with atopic dermatitis. Yamada H, et al.
Int Arch Allergy Immunol 1996;111 Suppl 1:19–21
Interaction between beta–carotene and lipoxygenase in human skin. Bar–Natan R, et al.
Int J Biochem Cell Biol 1996 Aug;28(8):935–41
Cutaneous localization of endothelin–1 in patients with systemic sclerosis: immunoelectron microscopic study. Tabata H, et al. **Int J Dermatol** 1997 Apr;36(4):272–5
The effect of hyaluronan on the in vitro deposition of diclofenac within the skin. Brown MB, et al.
Int J Tissue React 1995;17(4):133–40
Histochemical studies of hyaluronan and the hyaluronan receptor ICAM–1 in psoriasis. Gustafson S, et al.
Int J Tissue React 1995;17(4):167–73
Modulation of ultraviolet light–induced oxidative stress in mice skin related to dietary vitamin A and selenium intake. Savouré N, et al. **Int J Vitam Nutr Res** 1996;66(4):306–15
Erythema multiforme to phenobarbital: involvement of eosinophils and T cells expressing the skin homing receptor. Gonzalez FJ, et al. **J Allergy Clin Immunol** 1997 Jul; 100(1):135–7
Skin distribution and pharmaceutical aspects of adapalene gel. Allec J, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 2):S119–25
The percutaneous absorption of topically applied tretinoin and its effect on endogenous concentrations of tretinoin and its metabolites after single doses or long–term use. Latriano L, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 2):S37–46
Nitric oxide release accounts for the reduced incidence of cutaneous infections in psoriasis [letter; comment] Weller R, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):281–2 . Comment on: J Am Acad Dermatol 1995 Jun;32(6):982–6.
Enhanced collagen synthesis in cultured skin fibroblasts from insulin–dependent diabetic patients with nephropathy. Trevisan R, et al. **J Am Soc Nephrol** 1997 Jul;8(7):1133–9
The ontogeny of adhesion molecules expressed on the vascular endothelium of the developing human skin. Davies JR, et al. **J Anat** 1996 Oct;189 (Pt 2):373–82
Determination of lincomycin residue in salmon tissues by ion–pair reversed–phase liquid chromatography with electrochemical detection. Luo W, et al. **J AOAC Int** 1996 Jul–Aug;79(4):839–43
Cellular content of p53 protein in rat skin after exposure to the space environment. Ohnishi T, et al.
J Appl Physiol 1996 Jul;81(1):183–5
Selective stimulation of cutaneous interleukin 6 expression by skin allergens. Holliday MR, et al. **J Appl Toxicol** 1996 Jan–Feb;16(1):65–70
Percutaneous absorption and metabolism of Coumarin in human and rat skin. Yourick JJ, et al. **J Appl Toxicol** 1997 May–Jun;17(3):153–8
Comparison of integrins in human skin, pig skin, and perfused skin: an in vitro skin toxicology model. Zhang Z, et al. **J Appl Toxicol** 1997 Jul–Aug;17(4):247–53
beta–Adrenoceptor regulation in rat heart, lung and skin after chronic treatment with (—)–tertatolol or (–)–propranolol. Tan YY, et al. **J Auton Pharmacol** 1995 Dec;15(6):421–36
Ascorbate differentially regulates elastin and collagen biosynthesis in vascular smooth muscle cells and skin fibroblasts by pretranslational mechanisms. Davidson JM, et al. **J Biol Chem** 1997 Jan 3;272(1):345–52
Protein disulfide isomerase and newly synthesized procollagen chains form higher–order structures in the lumen of the endoplasmic reticulum. Kellokumpu S, et al.
J Biol Chem 1997 Jan 31;272(5):2770–7
Parathyroid hormone–related protein enhances insulin–like growth factor–I expression by fetal rat dermal fibroblasts. Shin JH, et al. **J Biol Chem** 1997 Sep 19;272(38):23498–502
Defining a region of the human keratin 6a gene that confers inducible expression in stratified epithelia of transgenic mice. Takahashi K, et al. **J Biol Chem** 1997 May 2; 272(18):11979–85
Fibulin–2 binds to the short arms of laminin–5 and laminin–1 via conserved amino acid sequences. Utani A, et al.
J Biol Chem 1997 Jan 31;272(5):2814–20
Integrin and matrix molecule expression in cultured skin replacements. Rennekampff HO, et al.
J Burn Care Rehabil 1996 May–Jun;17(3):213–21
Cell–specific expression of the alpha 1 (I) collagen promoter–CAT transgene in skin and lung: a response to TGF–beta subcutaneous injection and bleomycin endotracheal instillation. Agarwal AR, et al.
J Cell Biochem 1996 Nov 1;63(2):135–48
Conversion of dermal fibroblasts to a myogenic lineage is induced by a soluble factor derived from myoblasts. Wise CJ, et al. **J Cell Biochem** 1996 Jun 1;61(3):363–74
Regulation of platelet–derived growth factor receptor expression by cell context overrides regulation by cytokines. Barrett TB, et al. **J Cell Physiol** 1996 Oct; 169(1):126–38
Annexins II, IV, V and VI relocate in response to rises in intracellular calcium in human foreskin fibroblasts. Barwise JL, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):247–55
High–performance liquid chromatographic measurement of urocanic acid isomers and their ratios in naturally light–exposed skin and naturally shielded skin. Shibata K, et al. **J Chromatogr B Biomed Sci Appl** 1997 Aug 1; 695(2):434–8
Insulin–like growth factors (IGF–I and IGF–II) and IGF–binding protein–3 production by fibroblasts of patients with Turner's syndrome in culture. Barreca A, et al.
J Clin Endocrinol Metab 1997 Apr;82(4):1041–6
Assessment of androgen receptor function in genital skin fibroblasts using a recombinant adenovirus to deliver an androgen–responsive reporter gene [published erratum appears in J Clin Endocrinol Metab 1997 Aug;82(8):2670] McPhaul MJ, et al. **J Clin Endocrinol Metab** 1997 Jun; 82(6):1944–8
Proteolysis of insulin–like growth factor–binding protein–3 by human skin keratinocytes in culture in comparison to that in skin interstitial fluid: the role and regulation of components of the plasmin system. Xu S, et al.
J Clin Endocrinol Metab 1997 Jun;82(6):1863–8
Particle–mediated gene transfer with transforming growth factor–beta1 cDNAs enhances wound repair in rat skin. Benn SI, et al. **J Clin Invest** 1996 Dec 15;98(12):2894–902
Heparin–binding ligands mediate autocrine epidermal growth factor receptor activation In skin organ culture. Stoll S, et al. **J Clin Invest** 1997 Sep 1;100(5):1271–81
Age–dependent increase in ortho–tyrosine and methionine sulfoxide in human skin collagen is not accelerated in diabetes. Evidence against a generalized increase in oxidative stress in diabetes. Wells–Knecht MC, et al.
J Clin Invest 1997 Aug 15;100(4):839–46
Active calcium ion transport Xenopus laevis skin. Guirguis SM, et al. **J Comp Physiol [B]** 1997 Jul;167(5):328–34
Evaluation of pedicled skin flap viability by pH, temperature and fluorescein: an experimental study. Issing WJ, et al.
J Craniomaxillofac Surg 1996 Oct;24(5):305–9
Adhesion molecule expression in normal skin and melanocytic lesions. Role of UV–irradiation and architectural characteristics in nevi. Tronnier M, et al.
J Cutan Pathol 1997 May;24(5):278–85
The stratum corneum revisited. Elias PM. **J Dermatol** 1996 Nov;23(11):756–8 (77 ref.)
A case of recessive X–linked ichthyosis: scale–specific abnormalities of lipid composition may explain the pathogenesis of the skin manifestation. Hamanaka S, et al.
J Dermatol 1997 Mar;24(3):156–60
Diabetic scleredema: a case report and biochemical analysis for glycosaminoglycans. Kobayashi T, et al. **J Dermatol** 1997 Feb;24(2):100–3
Lineage–specific CaN19 expression in human skin: lack of expression in normal melanocytes. Andersen LB, et al.
J Dermatol Sci 1996 Apr;12(1):69–72
Immunolocalization of epimorphin in skin. Butt KI, et al.
J Dermatol Sci 1996 Dec;13(3):193–201
Regulations of collagen synthesis by ascorbic acid, transforming growth factor–beta and interferon–gamma in human dermal fibroblasts cultured in three–dimensional collagen gel are photoaging– and aging–independent. Chung JH, et al. **J Dermatol Sci** 1997 Sep;15(3):188–200
Localization of monocyte chemotactic and activating factor (MCAF/MCP–1) in psoriasis. Deleuran M, et al.
J Dermatol Sci 1996 Dec;13(3):228–36
Failure to detect paramyxovirus RNA in the skin of connective tissue disease. Fujiwara H, et al.
J Dermatol Sci 1996 Jan;11(1):70–5
Ascorbic acid reduces tropoelastin levels in culture medium of chick skin fibroblasts. Hayashi A, et al.
J Dermatol Sci 1996 Feb;11(2):161–6
Age–related changes of water content in the rat skin. Jung JW, et al. **J Dermatol Sci** 1997 Jan;14(1):12–9
Application of non–radiolabeled in situ hybridization system for the detection of polyadenylated RNA to normal and psoriatic human skin. Masunaga T, et al.
J Dermatol Sci 1996 Sep;12(3):227–31
Superantigen–induced cytokine expression in organ–cultured human skin. Matsunaga T, et al. **J Dermatol Sci** 1996 Feb; 11(2):104–10
Novel method to investigate kinetics of rat skin cells by means of an occlusive dressing method using bromodeoxyuridine. Nakano R, et al. **J Dermatol Sci** 1997 Jan;14(1):54–62
Psoralens percutaneous permeation across the human whole skin and the epidermis in respect to their polarity (in vitro study). Saïd A, et al. **J Dermatol Sci** 1997 Feb;14(2):136–44
Analysis of connective tissue macromolecular components in Ishibashi rat skin: role of collagen and elastin in cutaneous aging. Sakuraoka K, et al. **J Dermatol Sci** 1996 Sep;12(3):232–7
Effects of a factor derived from polymorphonuclear leukocytes on the growth and collagen metabolism in normal and scleroderma skin fibroblast cultures. Sasaki T, et al. **J Dermatol Sci** 1996 Jan;11(1):10–18
Elastin expression is up–regulated by retinoic acid but not by retinol in chick embryonic skin fibroblasts. Tajima S, et al. **J Dermatol Sci** 1997 Sep;15(3):166–72
The relationship between quantitative changes in collagen and formation of wrinkles on hairless mouse skin after chronic UV irradiation. Takema Y, et al.
J Dermatol Sci 1996 Apr;12(1):56–63
Butylated hydroxyanisole blocks the inhibitory effects of tumor necrosis factor–alpha on collagen production in human dermal fibroblasts. Taniguchi S, et al.
J Dermatol Sci 1996 Apr;12(1):44–9
Expression of cutaneous lymphocyte–associated antigen defined by monoclonal antibody HECA–452 on human Langerhans cells. Yasaka N, et al. **J Dermatol Sci** 1996 Jan;11(1):19–27
Application of liposomes as potential cutaneous drug delivery systems. In vitro and in vivo investigation with radioactively labelled vesicles. Fresta M, et al.
J Drug Target 1996;4(2):95–101
Transdermal drug delivery: useful paradigms. Potts RO, et al. **J Drug Target** 1995;3(4):247–51 (32 ref.)
Differential regulation of tissue insulin–like growth factor–binding protein (IGFBP)–3, IGF–I and IGF type 1 receptor mRNA levels, and serum IGF–I and IGFBP concentrations by growth hormone and IGF–I. Lemmey AB, et al. **J Endocrinol** 1997 Aug;154(2):319–28
The key role of the H+ V–ATPase in acid–base balance and Na+ transport processes in frog skin. Ehrenfeld J, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):247–56 (78 ref.)
Regionally regulated conversion of protein expression in the skin during anuran metamorphosis. Kobayashi H, et al.
J Exp Zool 1996 Feb 15;274(3):187–92
Redefining cutaneous lymphatic flow: the necessity of preoperative lymphoscintigraphy in the management of malignant melanoma. Kamath D, et al.
J Fla Med Assoc 1997 Mar;84(3):182–7
Proton pump activity of mitochondria–rich cells. The interpretation of external proton–concentration gradients. Jensen LJ, et al. **J Gen Physiol** 1997 Jan;109(1):73–91
Localization of laminin–5 in the epidermal basement membrane. Masunaga T, et al. **J Histochem Cytochem** 1996 Nov;44(11):1223–30
Mechanism of sustained E–selectin expression in cultured human dermal microvascular endothelial cells. Kluger MS, et al. **J Immunol** 1997 Jan 15;158(2):887–96
Human platelets can initiate T cell–dependent contact sensitivity through local serotonin release mediated by IgE antibodies. Matsuda H, et al. **J Immunol** 1997 Mar 15; 158(6):2891–7
Measurement of peroxisomal fatty acid beta–oxidation in cultured human skin fibroblasts. Wanders RJ, et al.
J Inherit Metab Dis 1995;18 Suppl 1:113–24
Costimulation with ultraviolet B and interleukin–1 alpha dramatically increase tumor necrosis factor–alpha production in human dermal fibroblasts. Fujisawa H, et al. **J Interferon Cytokine Res** 1997 May;17(5):307–13
Progression of mycosis fungoides is associated with increasing cutaneous expression of interleukin–10 mRNA. Asadullah K, et al. **J Invest Dermatol** 1996 Dec; 107(6):833–7
Differential expression of collagens XII and XIV in human skin and in reconstructed skin. Berthod F, et al.
J Invest Dermatol 1997 May;108(5):737–42
Altered x–ray diffraction pattern is accompanied by a change in the mode of cross–link formation in lipodermatosclerosis. Brinckmann J, et al. **J Invest Dermatol** 1996 Oct; 107(4):589–92
Defective integrin alpha 6 beta 4 expression in the skin of patients with junctional epidermolysis bullosa and pyloric atresia [published erratum appears in J Invest Dermatol 1997 Feb;108(2):237] Brown TA, et al.
J Invest Dermatol 1996 Sep;107(3):384–91
Decreased level of prosaposin in atopic skin. Chang–Yi C, et al. **J Invest Dermatol** 1997 Sep;109(3):319–23
Human stratum corneum lipids have a distorted orthorhombic packing at the surface of cohesive failure. Chen YL, et al. **J Invest Dermatol** 1996 Jul;107(1):15–9
There is temporal and spatial expression of alpha1 (IV), alpha2 (IV), alpha5 (IV), alpha6 (IV) collagen chains and beta1 integrins during the development of the basal lamina in an "in vitro" skin model. Fleischmajer R, et al.
J Invest Dermatol 1997 Oct;109(4):527–33
Differential expression of human cornifin alpha and beta in squamous differentiating epithelial tissues and several skin lesions. Fujimoto W, et al. **J Invest Dermatol** 1997 Feb; 108(2):200–4
Prostaglandin H–synthase–2 is the main enzyme involved in the biosynthesis of octadecanoids from linoleic acid in human dermal fibroblasts stimulated with interleukin–1beta. Godessart N, et al. **J Invest Dermatol** 1996 Nov; 107(5):726–32
High–dose ultraviolet A1 (UVA1), but not UVA/UVB therapy, decreases IgE–binding cells in lesional skin of patients with atopic eczema. Grabbe J, et al.
J Invest Dermatol 1996 Sep;107(3):419–22
Interleukin–8 is induced in skin equivalents and is highest in those derived from psoriatic fibroblasts. Konstantinova NV, et al. **J Invest Dermatol** 1996 Oct;107(4):615–21
HaCaT cell line as a model system for vitamin D3 metabolism in human skin. Lehmann B. **J Invest Dermatol** 1997 Jan; 108(1):78–82
All–trans–retinoic acid inhibition of Pro alpha1(I) collagen gene expression in fetal rat skin fibroblasts: identification of a retinoic acid response element in the Pro alpha1(I) collagen gene. Meisler NT, et al. **J Invest Dermatol** 1997

Apr;108(4):476–81
2,3,7,8–tetrachlorodibenzo–p–dioxin (TCCD) affects keratin 1 and keratin 17 gene expression and differentially induces keratinization in hairless mouse skin. Panteleyev AA, et al. **J Invest Dermatol** 1997 Mar;108(3):330–5
The formation of competent barrier lipids in reconstructed human epidermis requires the presence of vitamin C. Ponec M, et al. **J Invest Dermatol** 1997 Sep;109(3):348–55
Human dermal fibroblast cells express prolactin in vitro. Richards RG, et al. **J Invest Dermatol** 1996 Jun; 106(6):1250–5
Protein expression of fibroblast growth factor receptor–1 in keratinocytes during wound healing in rat skin. Takenaka H, et al. **J Invest Dermatol** 1997 Jul;109(1):108–12
Quantification of Pro alpha 1(I) collagen mRNA in skin biopsy specimens: levels of transcription in normal skin and in granuloma annulare. Tasanen K, et al. **J Invest Dermatol** 1996 Sep;107(3):314–7
Increased expression of the 72–kDa heat shock protein and reduced sunburn cell formation in human skin after local hyperthermia [letter] Trautinger F, et al. **J Invest Dermatol** 1996 Sep;107(3):442–3
Symposium on Epidermolysis Bullosa: Molecular Genetics of the Cutaneous Basement Membrane Zone, Jefferson Medical College, Philadelphia, Pennsylvania, April 29 and 30, 1996. Uitto J, et al. **J Invest Dermatol** 1996 Nov; 107(5):787–8
Nitric oxide is generated on the skin surface by reduction of sweat nitrate. Weller R, et al. **J Invest Dermatol** 1996 Sep;107(3):327–31
Metabolic fate of oleic acid derived from lysosomal degradation of cholesteryl oleate in human fibroblasts. Groener JE, et al. **J Lipid Res** 1996 Nov;37(11):2271–9
Dual role of prostaglandins (PGE2) in regulation of channel density and open probability of epithelial Na+ channels in frog skin (R. pipiens). Els WJ, et al. **J Membr Biol** 1997 Jan 1;155(1):75–87
Effects of NEM on voltage–activated chloride conductance in toad skin. Nagel W, et al. **J Membr Biol** 1997 Sep 15; 159(2):127–35
Identification of anion–selective channels in the basolateral membrane of mitochondria–rich epithelial cells. Willumsen NJ, et al. **J Membr Biol** 1997 Jun 1;157(3):255–69
Hyaluronic acid is increased in the skin and urine in patients with amyotrophic lateral sclerosis. Ono S, et al. **J Neurol** 1996 Oct;243(10):693–9
7S globulin from soybean is metabolized in human cell cultures by a specific uptake and degradation system. Lovati MR, et al. **J Nutr** 1996 Nov;126(11):2831–42
Inhibition of cell–induced vitreous contraction by synthetic peptide derived from the collagen receptor binding sequence. Yang CH, et al. **J Ocul Pharmacol Ther** 1996 Fall;12(3):353–61
IL–1 alpha and IL–6 production by oral and skin keratinocytes: similarities and differences in response to cytokine treatment in vitro. Li J, et al. **J Oral Pathol Med** 1996 Apr;25(4):157–62
Histochemical study of the influence of transplanted teeth with periodontal ligament of the binding of peanut agglutinin in rat dorsal skin. Abe Y, et al. **J Periodontal Res** 1997 Feb;32(2):249–55
Influence of pH on skin permeation of amino acids. Hatanaka T, et al. **J Pharm Pharmacol** 1996 Jul;48(7):675–9
Characteristics of shed snake skin permeability to indomethacin and fatty alcohols. Kuramoto M, et al. **J Pharm Pharmacol** 1996 Jul;48(7):680–4
An in–vitro study of the effect of hydrocolloid patch occlusion on the penetration of triamcinolone acetonide through skin in man. Ladenheim D, et al. **J Pharm Pharmacol** 1996 Aug;48(8):806–11
Effectiveness and mode of action of isopropyl myristate as a permeation enhancer for naproxen through shed snake skin. Suh H, et al. **J Pharm Pharmacol** 1996 Aug; 48(8):812–6
Effects of skin metabolism on percutaneous penetration of lipophilic drugs. Bando H, et al. **J Pharm Sci** 1997 Jun; 86(6):759–61
In vitro evaluation of a series of N–dodecanoyl–L–amino acid methyl esters as dermal penetration enhancers. Fincher TK, et al. **J Pharm Sci** 1996 Sep;85(9):920–3
Topical delivery of erythromycin from various formulations: an in vivo hairless mouse study. Jayaraman SC, et al. **J Pharm Sci** 1996 Oct;85(10):1082–4
Mutual hairless rat skin permeation–enhancing effect of ethanol/water system and oleic acid. Kim DD, et al. **J Pharm Sci** 1996 Nov;85(11):1191–5
Evaluation of the hairless rat as a model for in vivo percutaneous absorption. Lauer AC, et al. **J Pharm Sci** 1997 Jan;86(1):13–8
Visualization of iontophoretic transport paths in cultured and animal skin models. Lee RD, et al. **J Pharm Sci** 1996 Nov; 85(11):1186–90
Description of the intrafollicular delivery of large molecular weight molecules to follicles of human scalp skin in vitro. Lieb LM, et al. **J Pharm Sci** 1997 Sep;86(9):1022–9
Relationship of skin target site free drug concentration (C*) to the in vivo efficacy: an extensive evaluation of the predictive value of the C* concept using acyclovir as a model drug. Mehta SC, et al. **J Pharm Sci** 1997 Jul; 86(7):797–801
Biomembrane permeation of nicotine: mechanistic studies with porcine mucosae and skin. Nair MK, et al. **J Pharm Sci** 1997 Feb;86(2):257–62
Mechanism for enhancement effect of lipid disperse system on percutaneous absorption [published erratum appears in J Pharm Sci 1996 May;85(5):546] Ogiso T, et al. **J Pharm Sci** 1996 Jan;85(1):57–64
Dermal and underlying tissue pharmacokinetics of lidocaine after topical application. Singh P, et al. **J Pharm Sci** 1994 Jun;83(6):774–82
Effects of vasoconstriction on dermal pharmacokinetics and local tissue distribution of compounds. Singh P, et al. **J Pharm Sci** 1994 Jun;83(6):783–91
Continuous flow mucosal cells for measuring the in–vitro permeability of small tissue samples. Squier CA, et al. **J Pharm Sci** 1997 Jan;86(1):82–4
Hydrogels with enhanced mass transfer for transdermal drug delivery. Zhang I, et al. **J Pharm Sci** 1996 Dec; 85(12):1312–6
Local deep tissue penetration of compounds after dermal application: structure–tissue penetration relationships. Singh P, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):908–17
Build–up of esterified aminolevulinic–acid–derivative–induced porphyrin fluorescence in normal mouse skin. Peng Q, et al. **J Photochem Photobiol B** 1996 Jun;34(1):95–6
Pulsed photoacoustic spectroscopy applied to the diffusion of sunscreen chromophores in human skin: the weakly absorbent regime. Puccetti G, et al. **J Photochem Photobiol B** 1997 Jun;39(2):110–20
Rapid activation of KATP channels by aldosterone in principal cells of frog skin. Urbach V, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):111–20
Effect of environmental conditions on the penetration of benzene through human skin. Nakai JS, et al. **J Toxicol Environ Health** 1997 Aug 8;51(5):447–62
Percutaneous permeation of N,N–diethyl–m–toluamide (DEET) from commercial mosquito repellents and the effect of solvent. Stinecipher J, et al. **J Toxicol Environ Health** 1997 Oct 10;52(2):119–35
Dermal fibroblast culture as a model system for studies of fibrillin assembly and pathogenetic mechanisms: defects in distinct groups of individuals with Marfan's syndrome. Brenn T, et al. **Lab Invest** 1996 Sep;75(3):389–402
Pericytes as collagen–producing cells in excessive dermal scarring. Sundberg C, et al. **Lab Invest** 1996 Feb; 74(2):452–66
Is there tissue penetration after application of topical salicylate formulations? [letter] Cross SE, et al. **Lancet** 1997 Aug 30;350(9078):636
Effect of azelastine on PGE2 production in fibroblasts in normal skin. The possibility of inhibition of inducible cyclooxygenase by azelastine. Inoue H, et al. **Life Sci** 1997; 61(12):PL 171–6
Characterization of collagen fibril segments from chicken embryo cornea, dermis and tendon. Birk DE, et al. **Matrix Biol** 1996 Jul;15(2):111–8
Ageing promotes the increase of early glycation Amadori product as assessed by epsilon–N–(2–furoylmethyl)–L–lysine (furosine) levels in rodent skin collagen. The relationship to dietary restriction and glycoxidation. Sell DR. **Mech Ageing Dev** 1997 Apr; 95(1–2):81–99
Was the formation of 1,25–dihydroxyvitamin D3 initially a catabolic pathway? Chevalier G, et al. **Med Hypotheses** 1997 Apr;48(4):325–9
Vitamin A metabolism and mRNA expression of retinoid–binding protein and receptor genes in human epidermal melanocytes and melanoma cells. Rosdahl I, et al. **Melanoma Res** 1997 Aug;7(4):267–74
Electroperturbation of the human skin barrier in vitro: II. Effects on stratum corneum lipid ordering and ultrastructure. Craane–Van Hinsberg IW, et al. **Microsc Res Tech** 1997 May 1;37(3):200–13
Stereological image analysis of cultured human melanocytes observed by transmission electron microscopy. Donois E, et al. **Microsc Res Tech** 1997 Feb 1;36(3):188–200
Epidermal barrier in disorders of the skin. Fartasch M. **Microsc Res Tech** 1997 Aug 15;38(4):361–72
Roles of E– and P–cadherin in the human skin. Furukawa F, et al. **Microsc Res Tech** 1997 Aug 15;38(4):343–52 (65 ref.)
Distribution of minor collagens during skin development. Garrone R, et al. **Microsc Res Tech** 1997 Aug 15; 38(4):407–12 (35 ref.)
Topography and biological role of integrins in human skin. Marchisio PC, et al. **Microsc Res Tech** 1997 Aug 15; 38(4):353–60 (80 ref.)
Elastic fiber during development and aging. Pasquali–Ronchetti I, et al. **Microsc Res Tech** 1997 Aug 15;38(4):428–35 (85 ref.)
Altered glucocorticoid receptor expression and function during mouse skin carcinogenesis. Budunova IV, et al. **Mol Carcinog** 1997 Mar;18(3):177–85
Induction of PA2.26, a cell–surface antigen expressed by active fibroblasts, in mouse epidermal keratinocytes during carcinogenesis. Gandarillas A, et al. **Mol Carcinog** 1997 Sep;20(1):10–8
Changes in protein expression during multistage mouse skin carcinogenesis. Rundhaug JE, et al. **Mol Carcinog** 1997 Sep; 20(1):125–36
Delays in malignant tumor development in transgenic mice by forced epidermal keratin 10 expression in mouse skin carcinomas. Santos M, et al. **Mol Carcinog** 1997 Sep; 20(1):3–9
Pruritus and skin hydration during dialysis. Morton CA, et al. **Nephrol Dial Transplant** 1996 Oct;11(10):2031–6
Pruritus and skin hydration during dialysis [letter] Yosipovitch G, et al. **Nephrol Dial Transplant** 1997 Aug; 12(8):1769–70
Diagnosis of X–linked Emery–Dreifuss muscular dystrophy by protein analysis of leucocytes and skin with monoclonal antibodies. Manilal S, et al. **Neuromuscul Disord** 1997 Jan; 7(1):63–6
Intracellular detection of laminin alpha 2 chain in skin by electron microscopy immunocytochemistry: comparison between normal and laminin alpha 2 chain deficient subjects. Squarzoni S, et al. **Neuromuscul Disord** 1997 Mar; 7(2):91–8
trkA and trkC expression is increased in human diabetic skin. Terenghi G, et al. **Neurosci Lett** 1997 May 30;228(1):33–6
31P NMR studies of human skin using a modified zig–zag surface coil. Cowie AG, et al. **NMR Biomed** 1996 Aug; 9(5):195–200
MDM–2 protein is expressed in different layers of normal human skin. Dazard JE, et al. **Oncogene** 1997 Mar 6; 14(9):1123–8
Changes in skin pH after the use of baby wipes. Priestley GC, et al. **Pediatr Dermatol** 1996 Jan–Feb;13(1):14–7
Absence of alpha 6(IV) collagen in kidney and skin of X–linked Alport syndrome patients. Hino S, et al. **Pediatr Nephrol** 1996 Dec;10(6):742–4
Postnatal changes in water content and proton magnetic resonance relaxation times in newborn rabbit tissues. Berényi E, et al. **Pediatr Res** 1996 Jun;39(6):1091–8
Cathepsin A deficiency in galactosialidosis: studies of patients and carriers in 16 families. Kleijer WJ, et al. **Pediatr Res** 1996 Jun;39(6):1067–71
An increase in [Ca2+]i activates basolateral chloride channels and inhibits apical sodium channels in frog skin epithelium. Brodin B, et al. **Pflugers Arch** 1996 Nov–Dec; 433(1–2):16–25
The role of mitochondria–rich cells in sodium transport across amphibian skin. Nagel W, et al. **Pflugers Arch** 1996 Nov–Dec;433(1–2):146–52
Interference of a short–chain phospholipid with ion transport pathways in frog skin. Unmack MA, et al. **Pflugers Arch** 1997 Jul;434(3):234–41
Theoretical model of iontophoresis utilized in transdermal drug delivery. Ferry LL. **Pharm Acta Helv** 1995 Dec; 70(4):279–87
In vitro viable skin model. Bronaugh RL. **Pharm Biotechnol** 1996;8:375–86 (13 ref.)
Isolated perfused porcine skin flap systems. Riviere JE. **Pharm Biotechnol** 1996;8:387–407 (42 ref.)
Evaluation of stereoselective transdermal transport and concurrent cutaneous hydrolysis of several ester prodrugs of propranolol: mechanism of stereoselective permeation. Ahmed S, et al. **Pharm Res** 1996 Oct;13(10):1524–9
In vivo evaluation of acyclovir prodrug penetration and metabolism through rat skin using a diffusion/bioconversion model. Bando H, et al. **Pharm Res** 1997 Jan;14(1):56–62
Prednicarbate biotransformation in human foreskin keratinocytes and fibroblasts. Gysler A, et al. **Pharm Res** 1997 Jun;14(6):793–7
Binding of prednisolone and its ester prodrugs in the skin. Hikima T, et al. **Pharm Res** 1997 Feb;14(2):197–202
Influence of vehicle, distant topical delivery, and biotransformation on the chemopreventive activity of apigenin, a plant flavonoid, in mouse skin. Li B, et al. **Pharm Res** 1996 Oct;13(10):1530–4
The influence of an electric field on ion and water accessibility to stratum corneum lipid lamellae. Pechtold LA, et al. **Pharm Res** 1996 Aug;13(8):1168–73
Iontophoresis of nafarelin across human skin in vitro. Rodriguez Bayón AM, et al. **Pharm Res** 1996 May; 13(5):798–800
Selegiline percutaneous absorption in various species and metabolism by human skin. Rohatagi S, et al. **Pharm Res** 1997 Jan;14(1):50–5
Analysis of simultaneous transport and metabolism of ethyl nicotinate in hairless rat skin. Sugibayashi K, et al. **Pharm Res** 1996 Jun;13(6):855–60
Ex vivo application of delta–aminolevulinic acid induces high and specific porphyrin levels in human skin tumors: possible basis for selective photodynamic therapy. Fritsch C, et al. **Photochem Photobiol** 1997 Jul;66(1):114–8
Interactions between vitamin E homologues and ascorbate free radicals in murine skin homogenates irradiated with ultraviolet light. Kitazawa M, et al. **Photochem Photobiol** 1997 Feb;65(2):355–65
Pulsed photoacoustic study of the diffusion of chromophores in human skin. Lahjomri F, et al. **Photochem Photobiol** 1997 Feb;65(2):292–302
Urocanic acid concentration and photoisomerization in Caucasian skin phototypes. Snellman E, et al. **Photochem Photobiol** 1997 May;65(5):862–5
Enhanced proliferation and collagen synthesis of human dermal fibroblasts in chronically photodamaged skin. Chung JH, et al. **Photodermatol Photoimmunol Photomed** 1996 Apr; 12(2):84–9
Inhibition of ultraviolet–induced formation of reactive oxygen species, lipid peroxidation, erythema and skin

photosensitization by polypodium leucotomos. González S, et al. **Photodermatol Photoimmunol Photomed** 1996 Apr; 12(2):45–56

Comparison of changes in endothelial adhesion molecule expression following UVB irradiation of skin and a human dermal microvascular cell line (HMEC–1). Rhodes LE, et al. **Photodermatol Photoimmunol Photomed** 1996 Jun; 12(3):114–21

Characterization of melanogenesis in normal human epidermal melanocytes by chemical and ultrastructural analysis. Nakagawa H, et al. **Pigment Cell Res** 1996 Aug; 9(4):175–8

Involvement of the cyclin–dependent kinase inhibitor p16 (INK4a) in replicative senescence of normal human fibroblasts. Alcorta DA, et al.
Proc Natl Acad Sci U S A 1996 Nov 26;93(24):13742–7

Frequent clones of p53–mutated keratinocytes in normal human skin [see comments] Jonason AS, et al.
Proc Natl Acad Sci U S A 1996 Nov 26;93(24):14025–9. Comment in: Proc Natl Acad Sci U S A 1997 Jan 7;94(1):11–4.

Tissue–specific knockout of the mouse Pig–a gene reveals important roles for GPI–anchored proteins in skin development. Tarutani M, et al.
Proc Natl Acad Sci U S A 1997 Jul 8;94(14):7400–5

Fatty acid composition, eicosanoid production and permeability in skin tissues of rainbow trout (Oncorhynchus mykiss) fed a control or an essential fatty acid deficient diet. Ghioni C, et al.
Prostaglandins Leukot Essent Fatty Acids 1997 Jun; 56(6):479–89

Response to John Kissels' letter to the editor "Characterization of soil adherence to skin: impact of historical misinterpretation of the Que Hee et al. data" [letter] Finley B, et al. **Risk Anal** 1996 Aug;16(4):443–4

Field measurement of dermal soil loading attributable to various activities: implications for exposure assessment. Kissel JC, et al. **Risk Anal** 1996 Feb;16(1):115–25

Multilayered dermal subcompartments for modeling chemical absorption. Bookout RL Jr, et al.
SAR QSAR Environ Res 1996;5(3):133–50

Metabolism of benzocaine during percutaneous absorption in the hairless guinea pig: acetylbenzocaine formation and activity. Kraeling ME, et al. **Skin Pharmacol** 1996; 9(3):221–30

Plasma retinoids after topical use of retinaldehyde on human skin. Sass JO, et al. **Skin Pharmacol** 1996;9(5):322–6

Expression of plasminogen activator inhibitor 2 in the adult and embryonic mouse tissues. Kawata Y, et al.
Thromb Haemost 1996 Oct;76(4):569–76

The influence of diethyl–m–toluamide (DEET) on the percutaneous absorption of permethrin and carbaryl. Baynes RE, et al. **Toxicol Appl Pharmacol** 1997 Jun; 144(2):332–9

Physiologically based modeling of nonsteady state dermal absorption of halogenated methanes from an aqueous solution. Jepson GW, et al. **Toxicol Appl Pharmacol** 1997 Jun;144(2):315–24

The use of mechanistically defined chemical mixtures (MDCM) to assess component effects on the percutaneous absorption and cutaneous disposition of topically exposed chemicals. I. Studies with parathion mixtures in isolated perfused porcine skin. Qiao GL, et al.
Toxicol Appl Pharmacol 1996 Dec;141(2):473–86

The use of mechanistically defined chemical mixtures (MDCM) to assess mixture component effects on the percutaneous absorption and cutaneous disposition of topically exposed chemicals. II. Development of a general dermatopharmacokinetic model for use in risk assessment. Williams PL, et al. **Toxicol Appl Pharmacol** 1996 Dec; 141(2):487–96

Distribution and DNA adduct formation of radiolabeled methylenediphenyl–4,4'–diisocyanate (MDI) in the rat after topical treatment. Vock EH, et al. **Toxicol Lett** 1997 Jul 21;92(2):93–100

Functional expression of minor histocompatibility antigens on human peripheral blood dendritic cells and epidermal Langerhans cells. van Lochem E, et al.
Transpl Immunol 1996 Jun;4(2):151–7

[Analysis of collagen in burned skin with SDS–polyacrylamide gel electrophoresis] Hu Y, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1995 Jul;11(4):277–9 (Eng. Abstr.) **(Chi)**

[Stress and skin: experimental approach] Gauthier Y.
Pathol Biol (Paris) 1996 Dec;44(10):882–7 (30 ref.) (Eng. Abstr.) **(Fre)**

[Substance P and human skin] Staniek V, et al.
Pathol Biol (Paris) 1996 Dec;44(10):860–6 (63 ref.) (Eng. Abstr.) **(Fre)**

[Fatty acids and the epidermis] Schneider IM, et al.
Hautarzt 1997 May;48(5):303–10 (81 ref.) (Eng. Abstr.) **(Ger)**

[Determination of bifonazole using HPLC in pharmacokinetic studies] Kadenatsi IB, et al.
Antibiot Khimioter 1996 May;41(5):19–24 (Eng. Abstr.) **(Rus)**

[Sex steroid–binding globulin, free serum testosterone, and androgen receptors in the skin during papulo–pustulosa and conglobate forms of acne vulgaris] Kushlinskiĭ NE, et al.
Biull Eksp Biol Med 1997 Feb;123(2):188–91 **(Rus)**

[Molecular mechanisms of disrupting lipid metabolism of the skin under conditions of acute acoustic stress] Melkonian MM, et al. **Dokl Akad Nauk** 1996 Aug;349(6):826–8 **(Rus)**

MICROBIOLOGY

Mannose receptors are implicated in the Candida albicans killing activity of epidermal cells [letter] Dobozy A, et al.
Acta Microbiol Immunol Hung 1996;43(1):93–5

Chronic cutaneous bacterial hypersensitivity. Backman KS, et al. **Allergy Asthma Proc** 1996 May–Jun;17(3):137–42

Heterogeneity of Borrelia burgdorferi in the skin. Aberer E, et al. **Am J Dermatopathol** 1996 Dec;18(6):571–9

Susceptibility of transient and commensal skin flora to the essential oil of Melaleuca alternifolia (tea tree oil). Hammer KA, et al. **Am J Infect Control** 1996 Jun;24(3):186–9

Bacteriologic studies of skin, tissue fluid, lymph, and lymph nodes in patients with filarial lymphedema. Olszewski WL, et al. **Am J Trop Med Hyg** 1997 Jul;57(1):7–15

Human skin flora as a potential source of epidural abscess. Sato S, et al. **Anesthesiology** 1996 Dec;85(6):1276–82

Effects of topical erythromycin on ecology of aerobic cutaneous bacterial flora. Vowels BR, et al.
Antimicrob Agents Chemother 1996 Nov;40(11):2598–604

Efficacy of clean v sterile surgical prep kits. Pearce BA, et al. **AORN J** 1997 Sep;66(3):464–70

Molecular detection of Treponema pallidum in secondary and tertiary syphilis. Zoechling N, et al. **Br J Dermatol** 1997 May;136(5):683–6

The effect of detergents on skin pH and its consequences. Korting HC, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):23–7 (29 ref.)

Skin colonization with vancomycin–resistant enterococci among hospitalized patients with bacteremia. Beezhold DW, et al. **Clin Infect Dis** 1997 Apr;24(4):704–6

Staphylococcus aureus skin colonization in infants with atopic dermatitis. Monti G, et al. **Dermatology** 1996; 193(2):83–7

Nasal and cutaneous carriage of Staphylococcus aureus in hemodialysis patients: the effect of nasal mupirocin. Boelaert JR, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):809–11

Comparison of bacillary indexes in slit–skin smears, skin and nerve biopsies; a study from Malawi. Ponnighaus JM, et al. **Int J Lepr Other Mycobact Dis** 1997 Jun;65(2):211–6

Detection of M. leprae by gene amplification; combined ethidium–bromide staining and probe hybridization. Sharma RK, et al. **Int J Lepr Other Mycobact Dis** 1996 Dec;64(4):409–16

Use of NASBA RNA amplification for detection of Mycobacterium leprae in skin biopsies from untreated and treated leprosy patients. van der Vliet GM, et al.
Int J Lepr Other Mycobact Dis 1996 Dec;64(4):396–403

Sequential antibiotic therapy for acne promotes the carriage of resistant staphylococci on the skin of contacts. Miller YW, et al. **J Antimicrob Chemother** 1996 Nov;38(5):829–37

Serial surveillance cultures of skin and catheter hub specimens from critically ill patients with central venous catheters: molecular epidemiology of infection and implications for clinical management and research. Atela I, et al. **J Clin Microbiol** 1997 Jul;35(7):1784–90

The potential for catheter microbial contamination from a needleless connector. Brown JD, et al. **J Hosp Infect** 1997 Jul;36(3):181–9

Bacterial recolonization of the skin under a polyurethane drape in hip surgery. Fleischmann W, et al.
J Hosp Infect 1996 Oct;34(2):107–16

Colonization and infection associated with Malassezia and Candida species in a neonatal unit. Shattuck KE, et al. **J Hosp Infect** 1996 Oct;34(2):123–9

Isolation of Trichophyton raubitschekii in Rio de Janeiro (Brazil). Caiuby MJ, et al. **J Med Vet Mycol** 1996 Sep–Oct; 34(5):361–3

Characterization of non–pigmented Staphylococcus chromogenes. Saito K, et al. **J Vet Med Sci** 1996 Jul; 58(7):711–3

A prospective survey for central line skin–site colonization by the pathogen Malassezia furfur among hospitalized adults receiving total parenteral nutrition. Jatoi A, et al.
JPEN J Parenter Enteral Nutr 1997 Jul–Aug;21(4):230–2

Microbiological monitoring of laboratory pigs. Hansen AK, et al. **Lab Anim** 1997 Jul;31(3):193–200

Transepidermal elimination of lepromatous granuloma: a mechanism for mass transport of viable bacilli. Namisato M, et al. **Lepr Rev** 1997 Jun;68(2):167–72

Higher incidence of viable Mycobacterium leprae within the nerve as compared to skin among multibacillary leprosy patients released from multidrug therapy. Shetty VP, et al. **Lepr Rev** 1997 Jun;68(2):131–8

Lack of microbial proliferation and phototoxic potential of a new matrix patch for estradiol delivery. Mulberry GK, et al. **Maturitas** 1996 Nov;25(3):223–9

A serologic Mycobacteria leprae gelatin particle agglutination (MLPA) in the diagnosis of leprosy: comparison with conventional enzyme–linked immunoassay and bacterial index. Agdamag AT, et al.
Nippon Rai Gakkai Zasshi 1996 Jul;65(2):100–5

Prevention of catheter–related infections: the skin. Darouiche RO, et al. **Nutrition** 1997 Apr;13(4 Suppl):26S–29S (33 ref.)

Pathological and microbiological findings from incidents of unusual mortality of the common frog (Rana temporaria). Cunningham AA, et al.
Philos Trans R Soc Lond B Biol Sci 1996 Nov 29; 351(1347):1539–57

Does double gloving protect surgical staff from skin contamination during plastic surgery? Marín–Bertolín S, et al. **Plast Reconstr Surg** 1997 Apr;99(4):956–60

Campylobacter jejuni seasonal recovery observations of retail market broilers. Willis WL, et al. **Poult Sci** 1997 Feb; 76(2):314–7

Bactericidal activity of 0.5% bupivacaine with preservatives on microorganisms in the human skin flora. Sakuragi T, et al. **Reg Anesth** 1997 Mar–Apr;22(2):178–84

Comparison of media and conditions of incubation for the quantitative culture of Malassezia pachydermatis from canine skin. Bond R, et al. **Res Vet Sci** 1996 Nov; 61(3):273–4

Borrelia burgdorferi sensu lato strains isolated from cutaneous Lyme borreliosis biopsies differentiated by pulsed–field gel electrophoresis. Busch U, et al.
Scand J Infect Dis 1996;28(6):583–9

A new method for in vivo evaluation of antimicrobial agents by translocation of complex dense populations of cutaneous bacteria. Leyden JJ, et al. **Skin Pharmacol** 1996;9(1):60–8

Evaluation of donor skin disinfection methods. Goldman M, et al. **Transfusion** 1997 Mar;37(3):309–12

Skin antisepsis at the donor site: is there room for improvement? [editorial; comment] Schaffner W.
Transfusion 1997 Mar;37(3):249–50. Comment on: Transfusion 1997 Mar;37(3):309–12.

Neisseria gonorrhoeae: vaginal clearance and its correlation with resistance to infection in subcutaneous chambers in orally immunized estradiol–primed mice. Arko RJ, et al.
Vaccine 1997 Aug–Sep;15(12–13):1344–8

Evaluation of skin bacterial flora before and after aseptic preparation of clipped and nonclipped arthrocentesis sites in horses. Hague BA, et al. **Vet Surg** 1997 Mar–Apr; 26(2):121–5

Identification and characterization of staphylococci isolated from cutaneous lesions of goats. Mahanta PN, et al.
Zentralbl Veterinarmed [B] 1997 Jul;44(5):309–11

Diagnostic results in animal dermatophytoses. Schmidt A.
Zentralbl Veterinarmed [B] 1996 Nov;43(9):539–43

[Antiseptic properties of essential oil of Lippia sidoides Cham. Application to the cutaneous microflora] Lacoste E, et al.
Ann Pharm Fr 1996;54(5):228–30 (Eng. Abstr.) **(Fre)**

[A clinical study of skin flora in patients with MRSA colonization after introduction of preventive measures of hospital infection in a geriatric ward] Masaki H, et al.
Kansenshogaku Zasshi 1997 Feb;71(2):97–102 (Eng. Abstr.) **(Jpn)**

[Bacterial culture of the anterior chest skin for prophylaxis in cardiovascular operations: prospective study in two civilian hospitals] Sakakibara Y, et al. **Kyobu Geka** 1997 Jan;50(1):51–4 (Eng. Abstr.) **(Jpn)**

[Bacterial contamination of anesthesiologists' hands and the efficacy of handwashing] Fukada T, et al. **Masui** 1996 Aug; 45(8):1026–30 (Eng. Abstr.) **(Jpn)**

[Importance of instructing anesthesiologists in handwashing against bacterial contamination] Fukada T, et al. **Masui** 1997 Apr;46(4):552–5 (Eng. Abstr.) **(Jpn)**

[The effect of long–term UV radiation exposure on the skin autonomous microflora and on body nonspecific resistance] Strzhizhovskiĭ AD, et al. **Izv Akad Nauk Ser Biol** 1996 Jul–Aug;(4):499–501 (Eng. Abstr.) **(Rus)**

[The action of bacterial antagonists on the aerobic microflora of human skin] Klymniuk SI, et al. **Mikrobiol Z** 1997 Jan–Feb;59(1):53–60 (Eng. Abstr.) **(Ukr)**

PARASITOLOGY

A correlation of the sequestration rate of Plasmodium coatneyi–infected erythrocytes in cerebral and subcutaneous tissues of a rhesus monkey. Nakano Y, et al. **Am J Trop Med Hyg** 1996 Sep;55(3):311–4

Leishmania (Viannia) braziliensis: biological behavior in golden hamsters of isolates from Argentine patients. Sinagra A, et al. **Am J Trop Med Hyg** 1997 Jul;57(1):115–8

Leishmania infection occurring in herpes zoster lesions in an HIV positive patient [letter; comment] Del Giudice P.
Br J Dermatol 1996 Dec;135(6):1005–6. Comment on: Br J Dermatol 1996 Jan;134(1):164–6.

Leishmania mexicana: binding of promastigotes to type I collagen. Lira R, et al. **Exp Parasitol** 1997 Feb;85(2):149–57

ICAM–1 and iNOS expression increased in the skin of mice after vaccination with gamma–irradiated cercariae of Schistosoma mansoni. Ramaswamy K, et al.
Exp Parasitol 1997 Jun;86(2):118–32

Protective responses against skin–dwelling microfilariae of Onchocerca lienalis in severe combined immunodeficient mice. Folkard SG, et al. **Infect Immun** 1997 Jul; 65(7):2846–51

Onchocerciasis: clinical presentation and host parasite interactions in patients of southern Sudan. Stingl P.
Int J Dermatol 1997 Jan;36(1):23–8

Hatching rhythms in the the capsalid monogeneans Benedenia lutjani from the skin and B. rohdei from the gills of Lutjanus carponotatus at Heron Island, Queensland, Australia. Ernst I, et al. **Int J Parasitol** 1996 Nov; 26(11):1191–204

Demodex mites of human skin express Tn but not T (Thomsen–Friedenreich) antigen immunoreactivity [letter] Kanitakis J, et al. **J Cutan Pathol** 1997 Aug;24(7):454–5

Immunohistopathological status of the skin in cases infested with three species of mites. Yassien NA, et al.
J Egypt Soc Parasitol 1996 Dec;26(3):567–73

Establishment of Demodex canis on canine skin engrafted

onto scid-beige mice. Caswell JL, et al. **J Parasitol** 1996 Dec;82(6):911-5

Re-migration of fifth-stage juvenile Dirofilaria immitis into pulmonary arteries after subcutaneous transplantation in dogs, cats, and rabbits. Hayasaki M. **J Parasitol** 1996 Oct; 82(5):835-7

The behaviour of Sarcoptes scabiei var. hominis in human skin: an ultrastructural study. Fimiani M, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):105-13

Incidental subcutaneous gordiid parasitism in a cat. Moisan PG, et al. **J Vet Diagn Invest** 1996 Apr;8(2):270-2

Cutaneous myiasis due to Dermatobia hominis: case report. Murdoch DR, et al. **N Z Med J** 1996 Dec 13; 109(1035):465-6

Assessment of vector microfilarial uptake as a comparatively non-invasive technique for monitoring onchocerciasis treatment campaigns in the Americas. Davies JB, et al. **Trop Med Int Health** 1997 Apr;2(4):348-55

Leishmania infection of canine skin fibroblasts in vivo. Hervás Rodríguez J, et al. **Vet Pathol** 1996 Jul;33(4):469-73

[The pig as dead-end host of Trichophyton verrucosum? A case report] Ollhoff RD, et al. **Tierarztl Prax** 1997 Jul; 25(4):353-5 (Eng. Abstr.) **(Ger)**

PATHOLOGY

The effect of fumaric acid esters and dithranol on acanthosis and hyperproliferation in psoriasis vulgaris. Bacharaçh-Buhles M, et al. **Acta Derm Venereol** 1996 May; 76(3):190-3

Effect of data normalization for age on the correlations between corneometric values and serum molecule levels in plaque-type psoriatic patients. Carducci M, et al. **Acta Derm Venereol** 1997 Mar;77(2):110-4

Rapid cytological diagnosis of primary skin tumours and tumour-like conditions. Daskalopoulou D, et al. **Acta Derm Venereol** 1997 Jul;77(4):292-5

Change of skin roughness due to lowering air humidity in climate chamber. Eberlein-König B, et al. **Acta Derm Venereol** 1996 Nov;76(6):447-9

Acute multifocal skin necrosis: synergism between invasive streptococcal infection and cocaine-induced tissue ischaemia? Hoeger PH, et al. **Acta Derm Venereol** 1996 May;76(3):239-41

Abnormal corneometric values of non-lesional plaque-type psoriatic skin [letter] Mussi A, et al. **Acta Derm Venereol** 1997 May;77(3):237-8

A novel dithranol formulation (Micanol): the effects of monotherapy and UVB combination therapy on epidermal differentiation, proliferation and cutaneous inflammation in psoriasis vulgaris. Van der Vleuten CJ, et al. **Acta Derm Venereol** 1996 Sep;76(5):387-91

Cutaneous necrosis associated with recombinant interferon injection. Report of three cases with interferon beta-1b and review of the literature. Weinberg JM, et al. **Acta Derm Venereol** 1997 Mar;77(2):146-8

CADASIL: skin biopsy allows diagnosis in early stages. Ebke M, et al. **Acta Neurol Scand** 1997 Jun;95(6):351-7

The ultrastructure of skin from a patient with mucopolysaccharidosis IIID. Alroy J, et al. **Acta Neuropathol (Berl)** 1997 Feb;93(2):210-3

Preschool sarcoidosis mimicking juvenile rheumatoid arthritis: the significance of gallium scintigraphy and skin biopsy in the differential diagnosis. Sakurai Y, et al. **Acta Paediatr Jpn** 1997 Feb;39(1):74-8

Colored striae in obese children and adolescents. Hsu HS, et al. **Acta Paediatr Sin** 1996 Sep-Oct;37(5):349-52

Histopathological changes induced by environmental stress in common carp, Japanese coloured carp, European eel, and African catfish. Szakolczai J. **Acta Vet Hung** 1997; 45(1):1-10

Leukemic vasculitis: a feature of leukemia cutis in some patients [see comments] Jones D, et al. **Am J Clin Pathol** 1997 Jun;107(6):637-42. Comment in: Am J Clin Pathol 1997 Jun;107(6):627-9.

Leukemic vasculitis: a newly described pattern of cutaneous involvement [editorial; comment] Smoller BR. **Am J Clin Pathol** 1997 Jun;107(6):627-9. Comment on: Am J Clin Pathol 1997 Jun;107(6):637-42.

Cutaneous pathology in primary erythermalgia. Drenth JP, et al. **Am J Dermatopathol** 1996 Feb;18(1):30-4

Subtle clues to the diagnosis of cholesterol embolism. Kang K, et al. **Am J Dermatopathol** 1996 Aug;18(4):380-4

Histopathology of cutaneous changes in non-drug-induced coma. Kato N, et al. **Am J Dermatopathol** 1996 Aug; 18(4):344-50

Induction of cutaneous hyperplasias by altered stroma. Requena L, et al. **Am J Dermatopathol** 1996 Jun; 18(3):248-68

Medicolegal investigation of death in custody: a postmortem procedure for detection of blunt force injuries. Hiss J, et al. **Am J Forensic Med Pathol** 1996 Dec;17(4):312-4

Lichtenberg figures. Resnik BI, et al. **Am J Forensic Med Pathol** 1996 Jun;17(2):99-102

Artifact from an electrosurgical ground pad. Revercomb CH, et al. **Am J Forensic Med Pathol** 1997 Sep;18(3):293-4

Specific cutaneous involvement indicating relapse of Burkitt's lymphoma [letter] Bachmeyer C, et al. **Am J Hematol** 1997 Feb;54(2):176

Characterization of 18 new mutations in COL7A1 in recessive dystrophic epidermolysis bullosa provides evidence for distinct molecular mechanisms underlying defective anchoring fibril formation. Hovnanian A, et al. **Am J Hum Genet** 1997 Sep;61(3):599-610

Adult colloid milium of the eyelid. Safneck JR, et al. **Am J Ophthalmol** 1997 Mar;123(3):402-3

Localized chronic fibrosing vasculitis of the skin: an inflammatory reaction that occurs in settings other than erythema elevatum diutinum and granuloma faciale. Carlson JA, et al. **Am J Surg Pathol** 1997 Jun;21(6):698-705

Value of skin biopsies in assessing prognosis and progression of acute graft-versus-host disease. Kohler S, et al. **Am J Surg Pathol** 1997 Sep;21(9):988-96

Immunocytochemical and histopathologic characterization of lesions from patients with localized cutaneous leishmaniasis caused by Leishmania panamensis. Isaza DM, et al. **Am J Trop Med Hyg** 1996 Oct;55(4):365-9

Surgical treatment of skin lesions induced by sulfur mustard ("mustard gas")--an experimental study in the guinea pig. Kjellström BT, et al. **Ann Acad Med Singapore** 1997 Jan; 26(1):30-6

X-linked Emery-Dreifuss muscular dystrophy can be diagnosed from skin biopsy or blood sample. Mora M, et al. **Ann Neurol** 1997 Aug;42(2):249-53

Coumadin necrosis of the skin: report of four patients. Miura Y, et al. **Ann Plast Surg** 1996 Sep;37(3):332-7

Determination of the maximal tumor/normal skin ratio after HpD or m-THPC administration in hairless mouse (SKh-1) by fluorescence spectroscopy--a non-invasive method. Bossu E, et al. **Anticancer Drugs** 1997 Jan;8(1):67-72

Clinical and histological responses of congenital melanocytic nevi after single treatment with Q-switched lasers. Grevelink JM, et al. **Arch Dermatol** 1997 Mar;133(3):349-53

Apoptotic and proliferating cells in cutaneous lymphoproliferative diseases. Kikuchi A, et al. **Arch Dermatol** 1997 Jul;133(7):829-33

Frequency and morphologic characteristics of invasive melanomas lacking specific surface microscopic features. Menzies SW, et al. **Arch Dermatol** 1996 Oct; 132(10):1178-82

Expression of transglutaminase 1 (transglutaminase K) in harlequin ichthyosis. Akiyama M, et al. **Arch Dermatol Res** 1997 Jan;289(2):116-9

Matrix metalloproteinase inhibitors reduce phorbol ester-induced cutaneous inflammation and hyperplasia. Holleran WM, et al. **Arch Dermatol Res** 1997 Feb; 289(3):138-44

Skinfold thickness can predict elastosis in hairless mice. Malmusi M, et al. **Arch Dermatol Res** 1996 Oct; 288(11):722-4

Langerhans cell hyperplasia and IgE expression in canine atopic dermatitis. Olivry T, et al. **Arch Dermatol Res** 1996 Sep;288(10):579-85

How to submit a specimen for cutaneous pathology analysis. Using the '5 D's' to get the most from biopsies. Boyd AS, et al. **Arch Fam Med** 1997 Jan-Feb;6(1):64-6 (10 ref.)

Immunoperoxidase and immunofluorescent staining of Rickettsia rickettsii in skin biopsies. A comparative study. Procop GW, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):894-9

Pathological case of the month. Childhood sarcoidosis. Shetty AK, et al. **Arch Pediatr Adolesc Med** 1997 Sep; 151(9):955-6

Small vessel vasculitis and vasculitis confined to skin. Mat C, et al. **Baillieres Clin Rheumatol** 1997 May;11(2):237-57 (52 ref.)

Induction of subcutaneous tissue fibrosis in newborn mice by transforming growth factor beta-simultaneous application with basic fibroblast growth factor causes persistent fibrosis. Shinozaki M, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):292-6

Blistering skin diseases: models for studies on epidermal-dermal adhesion. Bruckner-Tuderman L. **Biochem Cell Biol** 1996;74(6):729-36 (53 ref.)

Risk of extramedullary relapse following allogeneic bone marrow transplantation for acute myelogenous leukemia with leukemia cutis. Michel G, et al. **Bone Marrow Transplant** 1997 Jul;20(2):107-12

In psoriasis the epidermis, including the subepidermal vascular plexus, grows downwards into the dermis. Bacharach-Buhles M, et al. **Br J Dermatol** 1997 Jan; 136(1):97-101

Hidradenitis suppurativa or acne inversa. A clinicopathological study of early lesions. Boer J, et al. **Br J Dermatol** 1996 Nov;135(5):721-5

Recurrent annular erythema with purpura: a new variant of leucocytoclastic vasculitis responsive to dapsone. Cribier B, et al. **Br J Dermatol** 1996 Dec;135(6):972-5

Cutaneous periarteritis nodosa: a clinicopathological study of 79 cases. Daoud MS, et al. **Br J Dermatol** 1997 May; 136(5):706-13

A review of skin ageing and its medical therapy. Gilchrest BA. **Br J Dermatol** 1996 Dec;135(6):867-75 (50 ref.)

Quantitative analysis of tryptase- and chymase-containing mast cells in atopic dermatitis and nummular eczema. Järvikallio A, et al. **Br J Dermatol** 1997 Jun;136(6):871-7

Bullous pemphigoid in association with cutaneous lesions specific to a myelodysplastic syndrome. Modiano P, et al. **Br J Dermatol** 1997 Mar;136(3):402-5

Clinical and pathological heterogeneity in cutaneous gamma-delta T-cell lymphoma: a report of three cases and a review of the literature. Munn SE, et al. **Br J Dermatol** 1996 Dec;135(6):976-81 (17 ref.)

Effect of water on experimentally irritated human skin. Ramsing DW, et al. **Br J Dermatol** 1997 Mar;136(3):364-7

Juvenile amyopathic dermatomyositis. Schmid MH, et al. **Br J Dermatol** 1997 Mar;136(3):431-3

Fulminant metastatic calcinosis with cutaneous necrosis in a child with end-stage renal disease and tertiary hyperparathyroidism. Zouboulis CC, et al. **Br J Dermatol** 1996 Oct;135(4):617-22

Tissue reaction to three subcutaneously implanted local hemostatic agents. Alpaslan C, et al. **Br J Oral Maxillofac Surg** 1997 Apr;35(2):129-32

Keratinocytes contract human dermal extracellular matrix and reduce soluble fibronectin production by fibroblasts in a skin composite model. Ralston DR, et al. **Br J Plast Surg** 1997 Sep;50(6):408-15

Case report: severe fibrosis in a patient with scleroderma and previous radiotherapy--a case report and literature review. Aref I, et al. **Br J Radiol** 1996 Nov;69(827):1055-6 (9 ref.)

Plicometer skin test: a new technique for the evaluation of cutaneous involvement in systemic sclerosis. Nives Parodi M, et al. **Br J Rheumatol** 1997 Feb;36(2):244-50

Implication of basement membrane development on the underlying scar in partial-thickness burn injury. Wood FM, et al. **Burns** 1996 Sep;22(6):459-62

Evaluation of proliferating cell nuclear antigen as a surrogate end point biomarker in actinic keratosis and adjacent, normal-appearing, and non-sun-exposed human skin samples. Einspahr J, et al. **Cancer Epidemiol Biomarkers Prev** 1996 May;5(5):343-8

Human squamous carcinoma cell invasion in organ-cultured skin. Varani J, et al. **Cancer Lett** 1997 Jan 1;111(1-2):51-7

Skin abnormality in aged fyn-/- fak+/- mice. Ilić D, et al. **Carcinogenesis** 1997 Aug;18(8):1473-6

Mononuclear phagocytes and dendritic leukocytes in the skin. Milon G, et al. **Clin Dermatol** 1996 Sep-Oct;14(5):465-70 (65 ref.)

The kinetics of skin thinning induced by topical fluticasone propionate 0.05% cream in volunteer subjects. Dykes PJ, et al. **Clin Exp Dermatol** 1996 May;21(3):180-4

Cutaneous lesions in a case of acute megakaryoblastic leukaemia. Macfarlane AW, et al. **Clin Exp Dermatol** 1996 May;21(3):201-4

Verruciform xanthoma of the penis with acantholytic cells. Requena L, et al. **Clin Exp Dermatol** 1995 Nov;20(6):504-8

Comparison of high frequency (20 MHz) ultrasound and palpation for the assessment of skin involvement in systemic sclerosis (scleroderma). Scheja A, et al. **Clin Exp Rheumatol** 1997 May-Jun;15(3):283-8

Digital image analysis (DIA) of colour changes in human skin exposed to standardized thermal injury and comparison with laser Doppler measurements. Mattsson U, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):31-42

The Raison d'être of Dermatopathology: practical and conceptual at one year of age [editorial] Ackerman AB. **Cutis** 1996 Oct;58(4):251

A case of chrysiasis. Miller ML, et al. **Cutis** 1997 May; 59(5):256-8

Pityriasis rotunda. Pinto GM, et al. **Cutis** 1996 Dec; 58(6):406-8 (20 ref.)

Histology of laser resurfacing. Kauvar AN, et al. **Dermatol Clin** 1997 Jul;15(3):459-67 (64 ref.)

Peritumoral B cell infiltrate associated with chronic lymphocytic leukemia obscuring margin evaluation during Mohs micrographic surgery [letter] Humphreys TR, et al. **Dermatol Surg** 1996 Oct;22(10):894-6 (21 ref.)

Squamous cell carcinoma in situ arising within clear cell acanthoma. Parsons ME, et al. **Dermatol Surg** 1997 Jun; 23(6):487-8

Renaut bodies. Benign disease process mimicking neurotropic tumor infiltration. Skidmore RA, et al. **Dermatol Surg** 1996 Nov;22(11):969-71

Does inflammation contribute to the eradication of basal cell carcinoma following curettage and electrodesiccation? Spencer JM, et al. **Dermatol Surg** 1997 Aug;23(8):625-30; discussion 630-1

Sweet's syndrome in acute myelogenous leukemia showing dermal infiltration of leukemic cells. Deguchi M, et al. **Dermatology** 1997;194(2):182-4

Necrotizing cutaneous lesions caused by interferon beta injections in a patient with multiple sclerosis. Feldmann R, et al. **Dermatology** 1997;195(1):52-3

Self-involuting atrophoderma of the lateral-upper arm. A new benign variant of morphea? Inazumi T, et al. **Dermatology** 1997;194(2):147-50

Enhancing effect of ultraviolet A on ornithine decarboxylase induction and dermatitis evoked by 12-o-tetradecanoylphorbol-13-acetate and its inhibition by curcumin in mouse skin. Ishizaki C, et al. **Dermatology** 1996; 193(4):311-7

Skin infiltration in acute promyelocytic leukemia. Nagao K, et al. **Dermatology** 1997;194(2):168-71

Heterogeneous reactivity with LH7.2 and the first prenatal diagnosis of generalized recessive dystrophic epidermolysis bullosa among Japanese patients. Shimizu H, et al. **Dermatology** 1996;192(3):203-7 (29 ref.)

A case of acrogeria associated with late-onset focal dermal elastosis. Tajima S, et al. **Dermatology** 1996;192(3):264-8

Changes of extracellular matrix in a baboon (Papio hamadryas) model of insulin dependent diabetes: studies using electron microscopy and X-ray diffraction techniques. Heffernan S, et al. **Diabetes Res Clin Pract** 1996 Oct;34(2):65-72

Growth retardation and early death of

beta-1,4-galactosyltransferase knockout mice with augmented proliferation and abnormal differentiation of epithelial cells. Asano M, et al. **EMBO J** 1997 Apr 15; 16(8):1850-7

High and low doses of haptens dictate whether dermal or epidermal antigen-presenting cells promote contact hypersensitivity. Bacci S, et al. **Eur J Immunol** 1997 Feb; 27(2):442-8

Tumor necrosis factor (TNF) receptor type 1 (p55) is a main mediator for TNF-alpha-induced skin inflammation. Kondo S, et al. **Eur J Immunol** 1997 Jul;27(7):1713-8

Pentoxifylline reduces the formation of sunburn cells. Schwarz A, et al. **Exp Dermatol** 1997 Feb;6(1):1-5

Influence of skin and muscle lesions on the hepatic cytochrome P450 function in 10 and 60 day-old male Wistar rats. Klinger W, et al. **Exp Toxicol Pathol** 1995 Sep; 47(4):309-12

Pathogenic in vitro studies of pemphigus vulgaris. I. Experimental model of pemphigus vulgaris in cultures in diffusion chambers. Popova L, et al. **Folia Med (Plovdiv)** 1996;38(2):39-42

The quantitative alteration of the DNA content in strangulation marks is an artefact. Grellner W, et al. **Forensic Sci Int** 1997 Sep 19;89(1-2):15-20

Leukaemia cutis preceding acute myelomonocytic leukaemia. Konstantopoulos K, et al. **Haematologia (Budap)** 1997; 28(3):169-72

The skin injury induced by high energy dose of ultraviolet in hairless descendants of Mexican hairless dogs. Ishii Y, et al. **Histol Histopathol** 1997 Apr;12(2):383-9

Atypical dermal nodules in benign melanocytic naevi. Collina G, et al. **Histopathology** 1997 Jul;31(1):97-101

Idiopathic perniosis and its mimics: a clinical and histological study of 38 cases. Crowson AN, et al. **Hum Pathol** 1997 Apr;28(4):478-84

p53 mutations in solar keratoses. Park WS, et al. **Hum Pathol** 1996 Nov;27(11):1180-4

Histopathology of skin and nerve and clinical classification in leprosy patients [letter] Lakshmi TS, et al. **Indian J Lepr** 1996 Jul-Sep;68(3):258-60

Skin mast cell releasability in dogs with atopic dermatitis. DeMora F, et al. **Inflamm Res** 1996 Aug;45(8):424-7

Wound measurement [letter] Bahmer FA. **Int J Dermatol** 1997 May;36(5):399

Sunlight and air temperature affect autoantibody activity and skin involvement of bullous pemphigoid. Kyriakis KS, et al. **Int J Dermatol** 1996 Jul;35(7):498-501

Kimura's disease. Lenk N, et al. **Int J Dermatol** 1997 Jun; 36(6):437-9

Diagnostic value of cytology in basal cell and squamous cell carcinomas [letter] Oram Y, et al. **Int J Dermatol** 1997 Feb; 36(2):156-7

Lymphomatoid papulosis type A: clinical, morphologic, and immunophenotypic study. Sioutos N, et al. **Int J Dermatol** 1997 Jul;36(7):514-7

Wound measurement. Wysocki AB. **Int J Dermatol** 1996 Feb; 35(2):82-91 (57 ref.)

Influence of postmortem changes on immunohistochemical reactions in skin. Fieguth A, et al. **Int J Legal Med** 1997; 110(1):18-21

Dermal eosinophils in atopic dermatitis undergo cytolytic degeneration. Cheng JF, et al. **J Allergy Clin Immunol** 1997 May;99(5):683-92

Idiopathic capillary leak syndrome: evidence of CD8-positive lymphocytes surrounding damaged endothelial cells. Cicardi M, et al. **J Allergy Clin Immunol** 1997 Mar;99(3):417-9

Evaluation of the atopy patch test and the cutaneous late-phase reaction as relevant models for the study of allergic inflammation in patients with atopic eczema. Langeveld-Wildschut EG, et al. **J Allergy Clin Immunol** 1996 Dec;98(6 Pt 1):1019-27

Cytokine levels and inflammatory responses in developing late-phase allergic reactions in the skin. Zweiman B, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):104-9

Histopathology of solar lentigines of the face: a quantitative study. Andersen WK, et al. **J Am Acad Dermatol** 1997 Mar; 36(3 Pt 1):444-7

Biopsy specimen findings in patients with previous lower extremity cellulitis after saphenous venectomy for coronary artery bypass graft surgery. Baddour LM, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):246-9

Specific skin infiltration as first sign of chronic myelomonocytic leukemia with an unusual phenotype. Braga D, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):804-7 (17 ref.)

Cutaneous manifestations of Churg-Strauss syndrome: a clinicopathologic correlation. Davis MD, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):199-203

Widespread cutaneous necrosis and antiphospholipid antibodies: two episodes related to surgical manipulation and urinary tract infection. Del Castillo LF, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):872-5 (15 ref.)

Prilocaine/lidocaine patch as a local premedication for skin biopsy in children. de Waard-van der Spek FB, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):418-21

Cutaneous localization of chronic lymphocytic leukemia at the site of chickenpox. Doutre MS, et al. **J Am Acad Dermatol** 1997 Jan;36(1):98-9

Aleukemic "leukemia cutis" of monocytic lineage. Gil-Mateo MP, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):837-40

Log-in/log-out time: a quality factor for a reference laboratory--prolonged times for skin pathology processing in managed care-authorized laboratories. Penneys NS. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):995-8

Black granules on the skin after bismuth subsalicylate ingestion. Ruiz-Maldonado R, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):489-90

Linear focal elastosis: a review of three cases in young Japanese men. Tamada Y, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 2):301-3 (7 ref.)

Surgical pearl: the trephine punch for diagnosing panniculitis. Tok J, et al. **J Am Acad Dermatol** 1996 Dec;35(6):980-1

Cutaneous infiltration in acute promyelocytic leukemia. Ueda K, et al. **J Am Acad Dermatol** 1997 Jan;36(1):104-6

Repair of laparoscopic injury to abdominal wall arteries complicated by cutaneous necrosis. Spitzer M, et al. **J Am Assoc Gynecol Laparosc** 1996 May;3(3):449-52

Difficult dermatologic diagnosis. Cutaneous leishmaniasis in a dog. Morgan LW, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):181-2

The effect of the Hurnik-Morris (HM) system on sow locomotion, skin integrity, and litter health. Morris JR, et al. **J Anim Sci** 1997 Feb;75(2):308-10

Structural changes induced by sulphur mustard in rabbit skin. Chauhan RS, et al. **J Appl Toxicol** 1996 Nov-Dec; 16(6):491-5

Photography of dermatological conditions using polarized light. McFall K. **J Audiov Media Med** 1996 Mar;19(1):5-9

Extracellular matrix 22-kDa protein interacts with decorin core protein and is expressed in cutaneous fibrosis. Okamoto O, et al. **J Biochem (Tokyo)** 1996 Jan; 119(1):106-14

Primary closure of fasciotomy incisions with a skin-stretching device in patients with burn and trauma. Caruso DM, et al. **J Burn Care Rehabil** 1997 Mar-Apr; 18(2):125-32

A histological study of Dermagraft-TC in patients' burn wounds. Spielvogel RL. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 2):S16-8

Overexpression of bone morphogenetic protein-6 (BMP-6) in the epidermis of transgenic mice: inhibition or stimulation of proliferation depending on the pattern of transgene expression and formation of psoriatic lesions. Blessing M, et al. **J Cell Biol** 1996 Oct;135(1):227-39

Deficiency of the integrin beta 4 subunit in junctional epidermolysis bullosa with pyloric atresia: consequences for hemidesmosome formation and adhesion properties [published erratum appears in J Cell Sci 1996 Aug;109(Pt 8):preceding table of contents] Niessen CM, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1695-706

Electron microscopic examination of skin biopsy as a cost-effective tool in the diagnosis of lysosomal storage diseases. Prasad A, et al. **J Child Neurol** 1996 Jul; 11(4):301-8

Inverse correlation between CD34 expression and proline-4-hydroxylase immunoreactivity on spindle cells noted in hypertrophic scars and keloids. Aiba S, et al. **J Cutan Pathol** 1997 Feb;24(2):65-9

Dermatomal lichenoid chronic graft-vs-host disease following varicella-zoster infection despite absence of viral genome. Baselga E, et al. **J Cutan Pathol** 1996 Dec; 23(6):576-81

Prognostic evaluation of specific cutaneous infiltrates in B-chronic lymphocytic leukemia. Kaddu S, et al. **J Cutan Pathol** 1996 Dec;23(6):487-94

Leukemic cells within skin lesions of psoriasis in a patient with acute myelogenous leukemia. Metzler G, et al. **J Cutan Pathol** 1997 Aug;24(7):445-8

Mid-dermal elastolysis: a pathological and ultrastructural study of five cases. Neri I, et al. **J Cutan Pathol** 1996 Apr; 23(2):165-9

Perivascular mast cells in urticaria pigmentosa. Sweet WL, et al. **J Cutan Pathol** 1996 Jun;23(3):247-53

Cutaneous histopathology of Sézary syndrome: a study of 41 cases with a proven circulating T-cell clone. Trotter MJ, et al. **J Cutan Pathol** 1997 May;24(5):286-91

Cutaneous pseudosarcomatous polyp--another variant of dermal lipoma or only an "ancient" skin tag? [letter] Zelger BG, et al. **J Cutan Pathol** 1997 Jul;24(6):390-1

A case of linear atrophoderma of Moulin [letter; comment] Braun RP, et al. **J Dermatol** 1996 Sep;23(9):660 (6 ref.). Comment on: J Dermatol 1995 Oct;22(10):767-9.

A case of acral melanocytic hyperplasia: a unique pigmented lesion mimicking acral lentiginous melanoma in situ. Cho KH, et al. **J Dermatol** 1996 Mar;23(3):181-6

Characteristics of T cell lines established from skin lesions of Behçet's disease. Mochizuki M, et al. **J Dermatol Sci** 1997 May;15(1):9-13

Evaluation of cross-reacting anti-human antibodies in the euthymic hairless guinea pig model (HGP) suggests that the HGP may be a model for the study of proliferative skin disease. Smith KJ, et al. **J Dermatol Sci** 1997 Mar; 14(3):240-50

Histopathologic features seen with different animal models following cutaneous sulfur mustard exposure. Smith KJ, et al. **J Dermatol Sci** 1997 Feb;14(2):126-35

Immunohistopathological status of the skin in cases infested with three species of mites. Yassien NA, et al. **J Egypt Soc Parasitol** 1996 Dec;26(3):567-73

Striae in adolescents mistaken for physical abuse. Cohen HA, et al. **J Fam Pract** 1997 Jul;45(1):84-5

Mouse skin damage caused by a recombinant extracellular metalloprotease from Vibrio vulnificus and by V. vulnificus infection. Chuang YC, et al. **J Formos Med Assoc** 1997 Sep;96(9):677-84

Role of a sialyl Lewis(x)-like epitope selectively expressed on vascular endothelial cells in local skin inflammation of the rat. Akahori T, et al. **J Immunol** 1997 Jun 1; 158(11):5384-92

Effect of the inducible nitric oxide synthase inhibitors aminoguanidine and L-N6-(1-iminoethyl)lysine on zymosan-induced plasma extravasation in rat skin. Ridger VC, et al. **J Immunol** 1997 Jul 1;159(1):383-90

A method to recover, enumerate and identify lymphomyeloid cells present in an inflammatory dermal site: a study in laboratory mice. Belkaid Y, et al. **J Immunol Methods** 1996 Nov 29;199(1):5-25

Chronic varicella-zoster virus skin lesions in patients with human immunodeficiency virus are related to decreased expression of gE and gB. Nikkels AF, et al. **J Infect Dis** 1997 Jul;176(1):261-4

Tumor necrosis factor (TNF)-induced cutaneous necrosis is mediated by TNF receptor 1. Amar S, et al. **J Inflamm** 1995-96;47(4):180-9

Hailey-Hailey disease keratinocytes: normal assembly of cell-cell junctions in vitro. Cooley JE, et al. **J Invest Dermatol** 1996 Dec;107(6):877-81

Stratum corneum structure and function correlates with phenotype in psoriasis. Ghadially R, et al. **J Invest Dermatol** 1996 Oct;107(4):558-64

Liposome-associated interferon-alpha-2b functions as an anti-fibrogenic factor for human dermal fibroblasts. Ghahary A, et al. **J Invest Dermatol** 1997 Jul;109(1):55-60

Analysis of the ability of 12-O-tetradecanoylphorbol-13-acetate to induce epidermal hyperplasia, transforming growth factor-alpha, and skin tumor promotion in wa-1 mice. Kiguchi K, et al. **J Invest Dermatol** 1997 May;108(5):784-91

Enhanced inflammation and immunosuppression by ultraviolet radiation in xeroderma pigmentosum group A (XPA) model mice. Miyauchi-Hashimoto H, et al. **J Invest Dermatol** 1996 Sep;107(3):343-8

HIV-1 transmission to lymphoid cells from epidermal cell cultures derived from skin biopsies of AIDS patients [letter] Vella A, et al. **J Invest Dermatol** 1996 Jul;107(1):141-2

Otological lesions in pachyonychia congenita syndrome. Bento RF, et al. **J Laryngol Otol** 1996 Dec;110(12):1145-7

Rothmund-Thomson syndrome: two case reports show heterogeneous cutaneous abnormalities, an association with genetically programmed ageing changes, and increased chromosomal radiosensitivity. Kerr B, et al. **J Med Genet** 1996 Nov;33(11):928-34

An exon skipping mutation of a type V collagen gene (COL5A1) in Ehlers-Danlos syndrome [published erratum appears in J Med Genet 1997 Jan;334(1):87] Nicholls AC, et al. **J Med Genet** 1996 Nov;33(11):940-6

Severe tissue necrosis after cisplatin extravasation at low concentration: possible "immediate recall phenomenon" [letter] Bairey O, et al. **J Natl Cancer Inst** 1997 Aug 20; 89(16):1233-4

Guamanian neurodegenerative disease: ultrastructural studies of skin. Ono S, et al. **J Neurol Sci** 1997 Feb 27;146(1):35-40

Tissue reactions to biodegradable and non-degradable membranes placed transcutaneously in rats, observed longitudinally over a period of 4 weeks. Galgut P, et al. **J Oral Rehabil** 1996 Jan;23(1):17-21

Increased pigmentation in scleroderma. Pope JE, et al. **J Rheumatol** 1996 Nov;23(11):1912-6

Primary cilium expression in cells from normal and aberrant human skin. Strugnell GE, et al. **J Submicrosc Cytol Pathol** 1996 Apr;28(2):215-25

Spontaneous herpes simplex virus infection in common marmosets (Callithrix jacchus). Juan-Sallés C, et al. **J Vet Diagn Invest** 1997 Jul;9(3):341-5

Periodic recurrence of gangrenous dermatitis associated with Clostridium septicum in a broiler chicken operation. Willoughby DH, et al. **J Vet Diagn Invest** 1996 Apr; 8(2):259-61

Immunomapping of basement membrane zone macromolecules in canine salt-split skin. Iwasaki T, et al. **J Vet Med Sci** 1997 May;59(5):391-3

Pemphigus foliaceus with typical histological and immunohistological findings in a dog. Shinya K, et al. **J Vet Med Sci** 1996 Aug;58(8):815-7

Both conserved region 1 (CR1) and CR2 of the human papillomavirus type 16 E7 oncogene are required for induction of epidermal hyperplasia and tumor formation in transgenic mice. Gulliver GA, et al. **J Virol** 1997 Aug; 71(8):5905-14

Prevalence and histopathology of shell disease in turtles from Lake Blackshear, Georgia. Lovich JE, et al. **J Wildl Dis** 1996 Apr;32(2):259-65

Skin necrosis: an unusual complication of hyperphosphatemia during total parenteral nutrition therapy. Janigan DT, et al. **JPEN J Parenter Enteral Nutr** 1997 Jan-Feb;21(1):50-2

Histological comparison of morphea and lichen sclerosus et atrophicus. Nishioka S. **Kurume Med J** 1997;44(2):83-90

Outbreaks of hyperkeratotic dermatitis of athymic nude mice in northern Italy. Scanziani E, et al. **Lab Anim** 1997 Jul; 31(3):206-11

Fibroblast-dependent induction of a murine skin lesion similar to human nevus sebaceus of Jadassohn. Prouty SM, et al. **Lab Invest** 1997 Feb;76(2):179-89

Psoriasis response to the pulsed dye laser. Ros AM, et al. **Lasers Surg Med** 1996;19(3):331-5

Primary resistance to single and multiple drugs in leprosy--a mouse footpad study. Shetty VP, et al. **Lepr Rev** 1996 Dec; 67(4):280–6

Tetrasomy 8 and t(1;11)(p32;q24) in acute myelo–monocytic leukemia with extensive leukemic cutaneous involvement. Ferrara F, et al. **Leuk Lymphoma** 1996 Feb;20(5–6):513–5

Cutaneous monoblastic leukemia as a first sign of relapse six years after autologous bone marrow transplantation for acute leukemia. Weide R, et al. **Leuk Lymphoma** 1996 Aug; 22(5–6):527–9

Intravenous immunoglobulin therapy is not able to efficiently control cutaneous manifestations in patients with lupus erythematosus [letter] De Pità O, et al. **Lupus** 1997; 6(4):415–7

Increased apoptosis during papilloma development in mice susceptible to tumor progression. Stern MC, et al. **Mol Carcinog** 1997 Sep;20(1):137–42

Abnormalities of the sympathetic skin response in lepromatous leprosy. Brown TR, et al. **Muscle Nerve** 1996 Oct;19(10):1357–8

Characteristic morphologic manifestation of CADASIL, cerebral autosomal–dominant arteriopathy with subcortical infarcts and leukoencephalopathy, in skeletal muscle and skin. Goebel HH, et al. **Muscle Nerve** 1997 May;20(5):625–7

Heparin–induced skin necrosis [letter; comment] Carter RL. **N Engl J Med** 1997 Feb 20;336(8):589. Comment on: N Engl J Med 1996 Sep 5;335(10):715.

Heparin–induced skin necrosis [letter; comment] Kumar PD. **N Engl J Med** 1997 Feb 20;336(8):588–9; discussion 589. Comment on: N Engl J Med 1996 Sep 5;335(10):715.

Heparin–induced skin necrosis [letter; comment] McCloskey RV. **N Engl J Med** 1997 Feb 20;336(8):588; discussion 589 . Comment on: N Engl J Med 1996 Sep 5;335(10):715.

Images in clinical medicine. Cutaneous lesions in diffuse large–B–cell lymphoma. Paredi P, et al. **N Engl J Med** 1997 May 1;336(18):1302

Heparin–induced skin necrosis [letter; comment] Schechter FG. **N Engl J Med** 1997 Feb 20;336(8):589. Comment on: N Engl J Med 1996 Sep 5;335(10):715.

Images in clinical medicine. Secondary syphilis. Wirth FA. **N Engl J Med** 1997 Jul 31;337(5):321

Transplantation of systemic sclerosis (SSc) skin grafts into severe combined immunodeficient mice: increased presence of SSc leukocytes in SSc skin grafts and autoantibody production following autologous leukocyte transfer. Kräling BM, et al. **Pathobiology** 1996;64(2):99–114

Reticulohistiocytoma involving the skin, subcutaneous tissue and a regional lymph node. Suwabe H, et al. **Pathol Int** 1996 Jul;46(7):531–7

Vascular involvement in cutaneous sarcoidosis. Takemura T, et al. **Pathol Int** 1997 Feb–Mar;47(2–3):84–9

Skin. Smoller BR, et al. **Pathology (Phila)** 1996;3(2):285–98 (15 ref.)

Multiple acquired vascular nodules [clinical conference] Baselga E, et al. **Pediatr Dermatol** 1997 Jul–Aug; 14(4):327–9

Granulomatous slack skin in childhood. Camacho FM, et al. **Pediatr Dermatol** 1997 May–Jun;14(3):204–8

Multiple leiomyomata presenting in a child. Henderson CA, et al. **Pediatr Dermatol** 1997 Jul–Aug;14(4):287–9

CTCL in patients under 20 years of age: a series of five cases. Hickham PR, et al. **Pediatr Dermatol** 1997 Mar–Apr; 14(2):93–7

Phylloid pigmentary pattern with mosaic trisomy 13. Horn D, et al. **Pediatr Dermatol** 1997 Jul–Aug;14(4):278–80

Leukemia cutis in three children: clinical and immunohistochemical studies. Koga M, et al. **Pediatr Dermatol** 1996 May–Jun;13(3):200–6

Electronmicroscopic observation of the basement membrane zone in focal dermal hypoplasia. Lee IJ, et al. **Pediatr Dermatol** 1996 Jan–Feb;13(1):5–9 (18 ref.)

Phakomatosis pigmentovascularis: report of a case. Mahroughan M, et al. **Pediatr Dermatol** 1996 Jan–Feb; 13(1):36–8 (8 ref.)

Nonlipidized juvenile xanthogranuloma: a histologic and immunohistochemical study. Newman CC, et al. **Pediatr Dermatol** 1997 Mar–Apr;14(2):98–102

Papular eruption on the elbows and trunk in an infant [clinical conference] Patrizi A, et al. **Pediatr Dermatol** 1997 Mar–Apr;14(2):151–3

Melanoma in children and adolescents. Wu SJ, et al. **Pediatr Dermatol** 1997 Mar–Apr;14(2):87–92

Usefulness of histopathologic examination of thick scales in the diagnosis of X–linked dominant chondrodysplasia punctata (Happle). Yanagihara M, et al. **Pediatr Dermatol** 1996 Jan–Feb;13(1):1–4

Cutaneous infiltration by leukemic cells in acute promyelocytic leukemia of a child after treatment with all–trans retinoic acid. Kishimoto S, et al. **Pediatr Hematol Oncol** 1997 Mar–Apr;14(2):169–75

Crohn's disease of the prepuce in a 12–year–old boy: a case report and review of the literature. Phillips SS, et al. **Pediatr Pathol Lab Med** 1997 May–Jun;17(3):497–502 (24 ref.)

Epidermal abnormalities may distinguish type 2 from type 1 and type 3 of Gaucher disease. Sidransky E, et al. **Pediatr Res** 1996 Jan;39(1):134–41

Juvenile dermatomyositis presenting with rash alone. Eisenstein DM, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):391–2 (13 ref.)

Enhanced proliferation and collagen synthesis of human dermal fibroblasts in chronically photodamaged skin. Chung JH, et al. **Photodermatol Photoimmunol Photomed** 1996 Apr; 12(2):84–9

The effect of chemosurgical peels and dermabrasion on dermal elastic tissue. Giese SY, et al. **Plast Reconstr Surg** 1997 Aug;100(2):489–98; discussion 499–500

Photocarcinogenesis and inhibition of intercellular adhesion molecule 1 expression in cells of DNA–repair–defective individuals. Ahrens C, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6837–41

Signature p53 mutation at DNA cross–linking sites in 8–methoxypsoralen and ultraviolet A (PUVA)–induced murine skin cancers. Nataraj AJ, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7961–5

Relationship between the in vitro radiosensitivity of skin fibroblasts and the expression of subcutaneous fibrosis, telangiectasia, and skin erythema after radiotherapy. Johansen J, et al. **Radiother Oncol** 1996 Aug;40(2):101–9

Dermal IgG deposits and increase of mast cells in patients with fibromyalgia--relevant findings or epiphenomena? Enström S, et al. **Scand J Rheumatol** 1997;26(4):308–13

Environmental scanning electron microscopy of personal and household products. Hoyberg K. **Scanning** 1997 Mar; 19(2):109–13

Comparisons of morphology and growth rate between cells from skin biopsies of schizophrenic patients and those from normal individuals. Gliddon AE, et al. **Schizophr Res** 1995 Dec;18(1):29–38

Aesthetic and anatomic analysis of the aging skin. Glogau RG. **Semin Cutan Med Surg** 1996 Sep;15(3):134–8 (5 ref.)

Eosinophilic and neutrophilic spongiosis: clues to the diagnosis of immunobullous diseases and other inflammatory disorders. Machado–Pinto J, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):308–16 (45 ref.)

Melanoma and stroma: an interaction of biological and prognostic importance. Smolle J, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):326–35 (108 ref.)

Immunoperoxidase techniques in the evaluation of cutaneous lymphocytic infiltrates. Smoller BR. **Semin Cutan Med Surg** 1996 Dec;15(4):300–7 (30 ref.)

Utility of skin biopsy in diabetic neuropathy. Kennedy WR, et al. **Semin Neurol** 1996 Jun;16(2):163–71 (40 ref.)

Requirement for C5a in lung vascular injury following thermal trauma to rat skin. Schmid E, et al. **Shock** 1997 Aug;8(2):119–24

Atrophie blanche--a special form of vasculopathy. Kwok CY, et al. **Singapore Med J** 1997 Mar;38(3):123–4 (12 ref.)

Warfarin and heparin–induced skin necrosis and the purple toe syndrome: infrequent complications of anticoagulant treatment. Sallah S, et al. **Thromb Haemost** 1997 Aug; 78(2):785–90 (96 ref.)

Absence of Kaposi's sarcoma–associated human herpes virus 8 in transplantation–related tumors other than Kaposi's sarcoma. Cathomas G, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):836–7

Leishmania infection of canine skin fibroblasts in vivo. Hervás Rodríguez J, et al. **Vet Pathol** 1996 Jul;33(4):469–73

S–100 immunoreactivity in melanomas of the South American opossum Monodelphis domestica. Kusewitt DF, et al. **Vet Pathol** 1997 Jul;34(4):346–50

Trombidiosis–induced dermatitis in white–tailed deer (Odocoileus virginianus). Little SE, et al. **Vet Pathol** 1997 Jul;34(4):350–2

[Apoptosis in the morphology of Lyme borreliosis] Barták P, et al. **Cas Lek Cesk** 1997 Mar 12;136(5):146–7 (Eng. Abstr.) **(Cze)**

[Painful skin eruptions precedes prolonged pain in herpes zoster. Four cases from general practice and a review] Kardel T. **Ugeskr Laeger** 1996 Oct 28;158(44):6282–4 (Eng. Abstr.) **(Dan)**

[Changes of the cutaneous micro–relief in superficial radiation–induced fibrosis: a qualitative study] Lefaix JL, et al. **Bull Cancer** 1996 Nov;83(11):915–22 (Eng. Abstr.) **(Fre)**

[Severe local cutaneous necrosis during treatment with interferon–alpha and ribavirin for chronic viral hepatitis C (letter)] de Ledinghen V, et al. **Gastroenterol Clin Biol** 1997;21(6–7):523–4 **(Fre)**

[Putrefaction–induced green discoloration of cadaver skin with circumscribed sparing of areas in contact with tape strips in suicidal asphyxia] Yamamoto K, et al. **Arch Kriminol** 1996 Nov–Dec;198(5–6):139–44 (Eng. Abstr.) **(Ger)**

[Heparin–associated platelet aggregation syndrome with skin necrosis during hemodialysis] Bredlich RO, et al. **Dtsch Med Wochenschr** 1997 Mar 14;122(11):328–32 (Eng. Abstr.) **(Ger)**

[Stratum corneum] Plewig G, et al. **Hautarzt** 1997 Jul; 48(7):510–21; quiz 520 (26 ref.) **(Ger)**

[Characteristics of normal cross–sectional anatomy of the skin in high resolution magnetic resonance tomography] Stock W, et al. **Hautarzt** 1997 Jan;48(1):26–30 (Eng. Abstr.) **(Ger)**

[Purpura fulminans with extensive skin necroses] Süss R, et al. **Hautarzt** 1996 Jul;47(7):541–4 (Eng. Abstr.) **(Ger)**

[Differentiation of lupus erythematosus and lymphocytic infiltration] Bonczkowitz M, et al. **Verh Dtsch Ges Pathol** 1996;80:235–40 (Eng. Abstr.) **(Ger)**

[Detection of herpes virus–like DNA in various forms of Kaposi's sarcoma but not in other mesenchymal tumors or inflammatory changes in skin] Cathomas G, et al. **Verh Dtsch Ges Pathol** 1996;80:318–21 (Eng. Abstr.) **(Ger)**

[Histology of supepidermal bullous dermatoses] Megahed M. **Verh Dtsch Ges Pathol** 1996;80:223–8 (Eng. Abstr.) **(Ger)**

[Ultrastructural and molecular biological findings in acantholytic dermatoses] Metze D. **Verh Dtsch Ges Pathol** 1996;80:220–2 **(Ger)**

[Differential diagnosis of interface dermatitis] Weyers W, et al. **Verh Dtsch Ges Pathol** 1996;80:241–6 (Eng. Abstr.) **(Ger)**

[The treatment of decubitus lesions] Fugazza G, et al. **Riv Eur Sci Med Farmacol** 1995 Sep–Oct;17(5):197–202 (Eng. Abstr.) **(Ita)**

[The inhibitory effect of LTB4 antagonist on eosinophil infiltration in cutaneous and gut late phase response in BALB/C mice sensitized with ovalubumin (OVA)] Hakugawa J, et al. **Arerugi** 1997 Jan;46(1):42–8 (Eng. Abstr.) **(Jpn)**

[Dermatological findings in the annual examination of the patients with Yusho in 1995–1996] Nakayama J, et al. **Fukuoka Igaku Zasshi** 1997 May;88(5):236–9 (Eng. Abstr.) **(Jpn)**

[Bilateral leg ulcers with pathologic evidence of small vessel vasculitis by skin biopsy during hydroxyurea therapy of chronic myelogenous leukemia] Tomiyama J, et al. **Rinsho Ketsueki** 1997 Mar;38(3):231–3 (Eng. Abstr.) **(Jpn)**

[Carotinosis--a rare cause of skin yellowing (letter)] Car̆žavec D, et al. **Lijec Vjesn** 1996 Jul–Aug;118(7–8):184 **(Scr)**

[Diagnosis of neurometabolic and neurodegenerative diseases by cutaneous biopsy] Idoate Gastearena MA, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S269–80 (64 ref.) (Eng. Abstr.) **(Spa)**

[Adverse cutaneous reactions to drugs in neurology] Redondo Bellón P. **Rev Neurol** 1997 Sep;25 Suppl 3:S309–19 (73 ref.) (Eng. Abstr.) **(Spa)**

[Leukemia cutis in acute promyelocytic leukemia (letter)] del Río Garma J, et al. **Sangre (Barc)** 1997 Feb;42(1):87–8 **(Spa)**

[A new case of congenital leukemia with leukemia cutis] Fernández Redondo C, et al. **Sangre (Barc)** 1995 Dec; 40(6):513–6 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Cutaneous microdialysis. Methodology and validation. Groth L. **Acta Derm Venereol Suppl (Stockh)** 1996;197:1–61 (200 ref.)

Pressure–volume relationship for rat dermis: compression studies. Bert JL, et al. **Acta Physiol Scand** 1997 May; 160(1):89–94

An evaluation of the role of skin temperature during heat adaptation. Regan JM, et al. **Acta Physiol Scand** 1996 Dec; 158(4):365–75

Effect of indirect moxibustion on mouse skin. Chiba A, et al. **Am J Chin Med** 1997;25(2):143–51

Body fat distribution from subcutaneous to intraabdominal: a perspective [editorial; comment] Van Loan MD. **Am J Clin Nutr** 1996 Nov;64(5):787–8. Comment on: Am J Clin Nutr 1996 Nov;64(5):677–84.

Genetically null mice reveal a central role for epidermal growth factor receptor in the differentiation of the hair follicle and normal hair development. Hansen LA, et al. **Am J Pathol** 1997 Jun;150(6):1959–75

Flow velocity of single lymphatic capillaries in human skin. Fischer M, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H358–63

Nitric oxide increases cutaneous and respiratory heat dissipation in conscious rabbits. Mathai ML, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1691–7

Prolactin enables normal development of ACh–stimulated current in cultured larval bullfrog skin. Takada M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1059–63

Validation of cutaneous pressure threshold measurements for the evaluation of hand function. Dellon ES, et al. **Ann Plast Surg** 1997 May;38(5):485–92

Re: UltraPulse carbon dioxide laser with computer pattern generator for facial cosmetic surgery and resurfacing [letter; comment] Shakespeare PG, et al. **Ann Plast Surg** 1997 May;38(5):547–50. Comment on: Ann Plast Surg 1996 May;36(5):522–9.

Using hyaluronic acid to create a fetal–like environment in vitro. Shepard S, et al. **Ann Plast Surg** 1996 Jan;36(1):65–9

Determination and correlation of in vitro viability for hairless mouse and human neonatal whole skin and stratum corneum/epidermis. Bhatt RH, et al. **Arch Dermatol Res** 1997 Feb;289(3):170–3

Skin to skin care:heat balance. Karlsson H. **Arch Dis Child Fetal Neonatal Ed** 1996 Sep;75(2):F130–2

Angiotensin II stimulates proliferation of primary human keratinocytes via a non–AT1, non–AT2 angiotensin receptor. Steckelings UM, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):329–33

Effect of growth factors on fibroblast migration in a simplified wound healing model. Fray TR, et al. **Biochem Soc Trans** 1996 May;24(2):258S

The use of an in vitro wound healing model, the tri–layered skin equivalent, to study the effects of cytokines on the repopulation of the wound defect by fibroblasts and keratinocytes. O'Leary R, et al. **Biochem Soc Trans** 1997

May;25(2):369S
Human fibroblast adhesion to fibrinogen. Farrell DH, et al. **Biochemistry** 1997 Feb 4;36(5):1123–8
Conductivities of pig dermis and subcutaneous fat measured with rectangular pulse electrical current. Cheng K, et al. **Bioelectromagnetics** 1996;17(6):458–66
Conductivity of a chronic wound model. Goldman R, et al. **Bioelectromagnetics** 1996;17(6):445–9
Electric fields and proliferation in a chronic wound model. Goldman R, et al. **Bioelectromagnetics** 1996;17(6):450–7
Evaluation of Yucatan micropig skin for use as an in vitro model for skin permeation study. Fujii M, et al. **Biol Pharm Bull** 1997 Mar;20(3):249–54
Lateral diffusion of small compounds in human stratum corneum and model lipid bilayer systems. Johnson ME, et al. **Biophys J** 1996 Nov;71(5):2656–68
Direct measurement of cutaneous pressures generated by pressure garments. Giele HP, et al. **Burns** 1997 Mar; 23(2):137–41
Functional significance of CD9 association with beta 1 integrins in human epidermal keratinocytes. Jones PH, et al. **Cell Adhes Commun** 1996 Nov;4(4–5):297–305
Effects of spinal dorsal column transection on the response of monkey anterior parietal cortex to repetitive skin stimulation. Tommerdahl M, et al. **Cereb Cortex** 1996 Mar–Apr;6(2):131–55
Oral contraceptives alter circadian rhythm parameters of cortisol, melatonin, blood pressure, heart rate, skin blood flow, transepidermal water loss, and skin amino acids of healthy young women. Reinberg AE, et al. **Chronobiol Int** 1996 Aug;13(3):199–211
Physiological changes in the skin during pregnancy. Elling SV, et al. **Clin Dermatol** 1997 Jan–Feb;15(1):35–43 (39 ref.)
Physiology of the skin—differences between women and men. Tur E. **Clin Dermatol** 1997 Jan–Feb;15(1):5–16 (63 ref.)
The toad skin NaCl check-valve. Herrera FC, et al. **Comp Biochem Physiol A Physiol** 1996 May;114(1):65–70
On the orthogonal anisotropy of human skin as a function of anatomical region. Reihsner R, et al. **Connect Tissue Res** 1996;34(2):145–60
pH measurements during lactic acid stinging test in normal and sensitive skin. Issachar N, et al. **Contact Dermatitis** 1997 Mar;36(3):152–5
Effect of glove occlusion on human skin. (I). short-term experimental exposure. Ramsing DW, et al. **Contact Dermatitis** 1996 Jan;34(1):1–5
Barrier recompensation mechanisms. Grunewald AM, et al. **Curr Probl Dermatol** 1996;25:206–13
Nonallergic "itch" and "prickly" sensation to wool fibers in atopic and nonatopic persons [news] Fisher AA. **Cutis** 1996 Nov;58(5):323–4
Hair keratinization in health and disease. Jones LN, et al. **Dermatol Clin** 1996 Oct;14(4):633–50 (104 ref.)
The use of dermal papilla cells in studies of normal and abnormal hair follicle biology. Randall VA. **Dermatol Clin** 1996 Oct;14(4):585–94 (55 ref.)
No alteration of biophysical parameters in the skin of subjects with respiratory atopy. Conti A, et al. **Dermatology** 1996; 192(4):317–20
Silent period in upper limb muscles after noxious cutaneous stimulation in man. Inghilleri M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Apr; 105(2):109–15
Suppression of spatial localization of a cutaneous stimulus following transcranial magnetic pulse stimulation of the sensorimotor cortex. Seyal M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb;105(1):24–8
Non-painful and painful stimulation of human skin and muscle: analysis of cerebral evoked potentials. Svensson P, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jul; 104(4):343–50
Combination of insulin-like growth factor (IGF)-I and IGF-binding protein-1 promotes fibroblast-embedded collagen gel contraction. Lee YR, et al. **Endocrinology** 1996 Dec;137(12):5278–83
Quantification of skin displacement in the proximal parts of the limbs of the walking horse. van Weeren PR, et al. **Equine Vet J Suppl** 1990 Jun;(9):110–8
A quantitative analysis of skin displacement in the trotting horse. van Weeren PR, et al. **Equine Vet J Suppl** 1990 Jun; (9):101–9
Reconstructed human skin: transplant, graft or biological dressing? Wood EJ, et al. **Essays Biochem** 1995;29:65–85 (52 ref.)
Analysis of sweat evaporation from clothing materials by the ventilated sweat capsule method. Otomasu K, et al. **Eur J Appl Physiol** 1997;76(1):1–7
Characterization and ion channel activities of novel antibacterial proteins from the skin mucosa of carp (Cyprinus carpio). Lemaître C, et al. **Eur J Biochem** 1996 Aug 15;240(1):143–9
The immature skin. Rutter N. **Eur J Pediatr** 1996 Aug;155 Suppl 2:S18–20
Interaction of sympathetic vasoconstriction and antidromic vasodilatation in the control of skin blood flow. Häbler HJ, et al. **Exp Brain Res** 1997 Mar;113(3):402–10
Limitation of sensitization to injured parts of receptive fields in human skin C-nociceptors. Schmelz M, et al. **Exp Brain Res** 1996 Apr;109(1):141–7
Cell-matrix interactions induce tyrosine phosphorylation of MAP kinases ERK1 and ERK2 and PLCgamma-1 in two-dimensional and three-dimensional cultures of human fibroblasts. Langholz O, et al. **Exp Cell Res** 1997 Aug 25; 235(1):22–7
A longitudinal study of human age-related chromosomal analysis in skin fibroblasts. Mukherjee AB, et al. **Exp Cell Res** 1997 Aug 25;235(1):161–9
Endogenous TGF-beta activity is modified during cellular aging: effects on metalloproteinase and TIMP-1 expression. Zeng G, et al. **Exp Cell Res** 1996 Nov 1;228(2):271–6
Skin roughness is negatively correlated to irritation with DMSO, but not with NaOH and SLS. Iliev D, et al. **Exp Dermatol** 1997 Aug;6(4):157–60
Two-point discrimination of vibratory perception on the sole of the human foot. Kowalzik R, et al. **Foot Ankle Int** 1996 Oct;17(10):629–34
The effect of saline iontophoresis on skin integrity in human volunteers. I. Methodology and reproducibility. Camel E, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):168–78
A bidirectional load applicator for the investigation of skin response to mechanical stress. Sanders JE, et al. **IEEE Trans Biomed Eng** 1997 Apr;44(4):290–6
The inverse problem in electroretinography: a study based on skin potentials and a realistic geometry model. van Schijndel NH, et al. **IEEE Trans Biomed Eng** 1997 Feb; 44(2):209–11
Acute effects of static magnetic fields on cutaneous microcirculation in rabbits. Ohkubo C, et al. **In Vivo** 1997 May–Jun;11(3):221–5
Striae distensae of pregnancy. An in vivo biomechanical evaluation. Henry F, et al. **Int J Dermatol** 1997 Jul; 36(7):506–8
Hyaluronic acid and skin: wound healing and aging. Manuskiatti W, et al. **Int J Dermatol** 1996 Aug;35(8):539–44 (82 ref.)
Flow velocity of cutaneous lymphatic capillaries in patients with primary lymphedema. Fischer M, et al. **Int J Microcirc Clin Exp** 1997 May–Jun;17(3):143–9
Skin type distribution and skin disease in Ireland. Gibson GE, et al. **Ir J Med Sci** 1997 Apr–Jun;166(2):72–4
Differentiation potential of rat amnion. Knezevic V. **J Anat** 1996 Aug;189 (Pt 1):1–7
Dew-point hygrometry system for measurement of evaporative water loss in infants. Ariagno RL, et al. **J Appl Physiol** 1997 Mar;82(3):1008–17
Windchill and the risk of tissue freezing. Danielsson U. **J Appl Physiol** 1996 Dec;81(6):2666–73
Effects of the combination of skin cooling and hyperpnea of frigid air in asthmatic and normal subjects. McDonald JS, et al. **J Appl Physiol** 1997 Feb;82(2):453–9
Effect of hypoglycemia on thermoregulatory responses. Passias TC, et al. **J Appl Physiol** 1996 Mar;80(3):1021–32
Alteration of human cutaneous afferent discharges as the result of long-lasting vibration. Ribot-Ciscar E, et al. **J Appl Physiol** 1996 May;80(5):1708–1715
Reexamination of tympanic membrane temperature as a core temperature. Sato KT, et al. **J Appl Physiol** 1996 Apr; 80(4):1233–9
Control of skin blood flow in the neutral zone of human body temperature regulation. Savage MV, et al. **J Appl Physiol** 1996 Apr;80(4):1249–57
Lumped-parameter tissue temperature-blood perfusion model of a cold-stressed fingertip. Shitzer A, et al. **J Appl Physiol** 1996 May;80(5):1829–34
Autonomic nervous system response patterns specificity to basic emotions. Collet C, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):45–57
Assessment of sympathetic nerve activity in the practice of lumbar sympatholysis: interest of sympathetic skin responses. Lefaucheur JP, et al. **J Auton Nerv Syst** 1996 Aug 27;60(1–2):56–60
Attractors and quasi-attractors in the cutaneous perfusion in human subjects and patients: "chaotic" or adaptive behaviour? Schmid-Schönbein H, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):136–40
Interactions of the amino-terminal noncollagenous (NC1) domain of type VII collagen with extracellular matrix components. A potential role in epidermal-dermal adherence in human skin. Chen M, et al. **J Biol Chem** 1997 Jun 6;272(23):14516–22
Ranking the fracture toughness of thin mammalian soft tissues using the scissors cutting test. Pereira BP, et al. **J Biomech** 1997 Jan;30(1):91–4
Effect of skin movement on the analysis of skeletal knee joint motion during running. Reinschmidt C, et al. **J Biomech** 1997 Jul;30(7):729–32
The effects of porosity on endothelialization of ePTFE implanted in subcutaneous and adipose tissue. Salzmann DL, et al. **J Biomed Mater Res** 1997 Mar 15;34(4):463–76
Differential healing and neovascularization of ePTFE implants in subcutaneous versus adipose tissue. Williams SK, et al. **J Biomed Mater Res** 1997 Jun 15;35(4):473–81
Cytoskeleton regulates expression of genes for transforming growth factor-beta 1 and extracellular matrix proteins in dermal fibroblasts. Varedi M, et al. **J Cell Physiol** 1997 Aug;172(2):192–9
Cross-linking of the dermo-epidermal junction of skin regenerating from keratinocyte autografts. Anchoring fibrils are a target for tissue transglutaminase. Raghunath M, et al. **J Clin Invest** 1996 Sep 1;98(5):1174–84
A novel approach to the understanding of human skin barrier function. Forslind B, et al. **J Dermatol Sci** 1997 Feb; 14(2):115–25 (28 ref.)
Increased expression of type VI collagen genes in cutis laxa fibroblasts. Hatamochi A, et al. **J Dermatol Sci** 1996 Feb; 11(2):97–103
Fibrous-long spacing fiber formation by collagen and non-collagenous acidic components from calf skin. Tajima S. **J Dermatol Sci** 1996 Jun;12(2):104–9
Age-related discontinuous changes in the in vivo fluorescence of human facial skin. Takema Y, et al. **J Dermatol Sci** 1997 May;15(1):55–8
Regulation of keratinocyte growth factor gene expression in human skin fibroblasts. Tang A, et al. **J Dermatol Sci** 1996 Jan;11(1):41–50
Effect of water temperature on skin wrinkling. Cales L, et al. **J Hand Surg [Am]** 1997 Jul;22(4):747–9
1alpha,25-dihydroxyvitamin D3 rapidly inhibits fibroblast-induced collagen gel contraction. Greiling D, et al. **J Invest Dermatol** 1996 Jun;106(6):1236–41
Evaluation of human skin reconstituted from composite grafts of cultured keratinocytes and human acellular dermis transplanted to athymic mice. Medalie DA, et al. **J Invest Dermatol** 1996 Jul;107(1):121–7
Tazarotene-induced gene 2 (TIG2), a novel retinoid-responsive gene in skin. Nagpal S, et al. **J Invest Dermatol** 1997 Jul;109(1):91–5
Increased expression of the 72-kDa heat shock protein and reduced sunburn cell formation in human skin after local hyperthermia [letter] Trautinger F, et al. **J Invest Dermatol** 1996 Sep;107(3):442–3
The in situ repair kinetics of epidermal thymine dimers and 6-4 photoproducts in human skin types I and II. Young AR, et al. **J Invest Dermatol** 1996 Jun;106(6):1307–13
Correlation between transepithelial Na+ transport and transepithelial water movement across isolated frog skin (Rana esculenta). Nielsen R. **J Membr Biol** 1997 Sep 1; 159(1):61–9
Noise-enhanced information transmission in rat SA1 cutaneous mechanoreceptors via aperiodic stochastic resonance. Collins JJ, et al. **J Neurophysiol** 1996 Jul; 76(1):642–5
Mechanical response properties of nociceptors innervating feline hairy skin. Garell PC, et al. **J Neurophysiol** 1996 Mar;75(3):1177–89
Stretch sensitivity of mechanoreceptor neurons in rat hairy skin. Grigg P. **J Neurophysiol** 1996 Nov;76(5):2886–95
Cutaneous responsiveness of lumbar spinal neurons in awake and halothane-anesthetized sheep. Herrero JF, et al. **J Neurophysiol** 1995 Oct;74(4):1549–62
Anterior parietal cortical response to tactile and skin-heating stimuli applied to the same skin site. Tommerdahl M, et al. **J Neurophysiol** 1996 Jun;75(6):2662–70
Apgar score [letter; comment] Hodgins C. **J Obstet Gynecol Neonatal Nurs** 1997 Jan–Feb;26(1):15–6 . Comment on: J Obstet Gynecol Neonatal Nurs 1996 May;25(4):299–303.
Effect of postural changes on human lymphatic capillary pressure of the skin. Franzeck UK, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):595–600
Evidence for cutaneous and corticospinal modulation of presynaptic inhibition of Ia afferents from the human lower limb. Iles JF. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):197–207
In vitro relation between preganglionic sympathetic stimulation and activity of cutaneous glands in the bullfrog. Jobling P, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):287–96
A novel physiological function for platelet-derived growth factor-BB in rat dermis. Rodt SA, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):193–200
Cross-talk between ATP-regulated K+ channels and Na+ transport via cellular metabolism in frog skin principal cells. Urbach V, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):99–109
Cutaneous inhibitory receptive fields of withdrawal reflexes in the decerebrate spinal rat. Weng HR, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):253–65
Trapping of 134CS+ in frog skin epithelium as a function of short circuit current. Ussing HH, et al. **Kidney Int** 1996 Jun;49(6):1568–9
Unravelling of physiological functions of retinoic acid using a dominant-negative retinoic acid receptor. Kakizuka A. **Leukemia** 1997 Apr;11 Suppl 3:378–9
Effect of skin impedance on image quality and variability in electrical impedance tomography: a model study. Boone KG, et al. **Med Biol Eng Comput** 1996 Sep;34(5):351–4
Noise of surface bio-potential electrodes based on NASICON ceramic and Ag-AgCl. Gondran C, et al. **Med Biol Eng Comput** 1996 Nov;34(6):460–6
Direct measurement of the optical properties of human breast skin. Treweek SP, et al. **Med Biol Eng Comput** 1996 Jul; 34(4):285–9
Topical drugs for aging skin. **Med Lett Drugs Ther** 1997 Aug 15;39(1007):78–9
Changes in self-reported skin type associated with experience of sunburning in 14–15 year old children of northern European descent. Blizzard L, et al. **Melanoma Res** 1997 Aug;7(4):339–46
A theoretical study of outermost skin layer electroporation. Malkova ON, et al. **Membr Cell Biol** 1997;10(5):601–11
Aspects on the physiology of human skin: studies using particle probe analysis. Forslind B, et al. **Microsc Res Tech** 1997 Aug 15;38(4):373–86 (40 ref.)
Microfibrillar elements of the dermal matrix. Kielty CM, et

al. **Microsc Res Tech** 1997 Aug 15;38(4):413–27 (150 ref.)
Electrodermal response in nonglabrous skin of freely moving rats: mediation by the sympathetic nervous system and evaluation in an animal model of depression. Guinjoan SM, et al. **Neuropsychobiology** 1996;33(3):147–54
Direct isolation of ultra-late (C-fibre) evoked brain potentials by CO2 laser stimulation of tiny cutaneous surface areas in man. Bragard D, et al. **Neurosci Lett** 1996 May 10; 209(2):81–4
Changes in gene expression for skin-type fatty acid binding protein in hypoglossal motor neurons following nerve crush. Owada Y, et al. **Neurosci Lett** 1997 Feb 14; 223(1):25–8
Cultured epithelial autografts: diving from surgery into matrix biology. Raghunath M, et al. **Pediatr Surg Int** 1997 Sep;12(7):478–83 (52 ref.)
The effect of iontophoresis on skin barrier integrity: non-invasive evaluation by impedance spectroscopy and transepidermal water loss. Kalia YN, et al. **Pharm Res** 1996 Jun;13(6):957–60
Seasonal variation in urocanic acid isomers in human skin. de Fine Olivarius F, et al. **Photochem Photobiol** 1997 Jul; 66(1):119–23
Comments on 'dielectric properties of the skin' [letter] Gabriel C. **Phys Med Biol** 1997 Aug;42(8):1671–3
Dielectric properties of the skin [letter] Lahtinen T, et al. **Phys Med Biol** 1997 Jul;42(7):1471–2
The origin of skin-stretch-caused motion artifacts under electrodes. de Talhouet H, et al. **Physiol Meas** 1996 May; 17(2):81–93
Surgical wound healing monitored repeatedly in vivo using electrical resistance of the epidermis. Spence DW, et al. **Physiol Meas** 1996 May;17(2):57–69
Characterization of the permeability barrier of human skin in vivo. Pirot F, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1562–7
Expression of a dominant-negative type II transforming growth factor beta (TGF-beta) receptor in the epidermis of transgenic mice blocks TGF-beta-mediated growth inhibition. Wang XJ, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2386–91
The Merkel cell as a possible mechanoreceptor cell. Ogawa H. **Prog Neurobiol** 1996 Jul;49(4):317–34 (79 ref.)
Is an apple a fruit? Semantic relatedness as reflected by psychophysiological responsivity. Ben-Shakhar G, et al. **Psychophysiology** 1996 Nov;33(6):671–9
Stimulus novelty and significance in electrodermal orienting responses: the effects of adding versus deleting stimulus components. Gati I, et al. **Psychophysiology** 1996 Nov; 33(6):637–43
Affective learning: awareness and aversion. Hamm AO, et al. **Psychophysiology** 1996 Nov;33(6):698–710
Heparin-chitosan complexes stimulate wound healing in human skin. Kratz G, et al.
Scand J Plast Reconstr Surg Hand Surg 1997 Jun; 31(2):119–23
Human skin physiology studied by particle probe microanalysis. Forslind B, et al. **Scanning Microsc** 1995; 9(4):1011–25; discussion 1025–6 (48 ref.)
Wound healing--aiming for perfect skin regeneration. Martin P. **Science** 1997 Apr 4;276(5309):75–81 (92 ref.)
A critical comparison of methods to quantify stratum corneum removed by tape stripping. Marttin E, et al.
Skin Pharmacol 1996;9(1):69–77
[Neuro-immuno-cutaneous system (NICS)] Misery L.
Pathol Biol (Paris) 1996 Dec;44(10):867–74 (86 ref.) (Eng. Abstr.) **(Fre)**
[Skin and neuromediators (editorial)] Misery L, et al.
Pathol Biol (Paris) 1996 Dec;44(10):829 **(Fre)**
[Anguilla skin: a new substrate for the study of transmucosal mucoadhesion and permeation] Burgalassi S, et al.
Boll Chim Farm 1996 Feb;135(2):133–5 **(Ita)**
[A standing wave of chemical reaction on the skin of animals] Kondo S. **Tanpakushitsu Kakusan Koso** 1996 Dec; 41(16):2564–8 (5 ref.) **(Jpn)**
[Effect of high hydrostatic pressure on spontaneously generated difference of the potentials of isolated skin of the frog] Rudakovskii ML, et al. **Aviakosm Ekolog Med** 1996;30(1):51–4 (Eng. Abstr.) **(Rus)**
[Modified chitosan as a stimulant of reparative skin regeneration] Tolstikova TG, et al. **Dokl Akad Nauk** 1996 Oct;350(4):557–9 **(Rus)**
[Patterns in the restoration of skin derivatives in warm-blooded animals] Efimov EA.
Izv Akad Nauk Ser Biol 1997 Mar-Apr;(2):142–8 (Eng. Abstr.) **(Rus)**
[Cutaneous innervation: anatomy and physiology. Neuropeptides] Casado-Olea JA. **Rev Neurol** 1997 Sep;25 Suppl 3:S207–13 (31 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Lightguide spectrophotometry for the assessment of skin healing viability in critical limb ischaemia. Harrison DK, et al. **Adv Exp Med Biol** 1996;388:45–51
AIDS-related varicella zoster meningoencephalitis and radicular pain without cutaneous eruption [letter] Débat Zoguéreh D, et al. **AIDS** 1996 Nov;10(13):1604–6
Neutrophil-mediated injury in ischemic skin flaps: amelioration of ischemic injury by cyclosporine in the rat. Cetinkale O, et al. **Ann Plast Surg** 1996 Jul;37(1):66–74
Signaling networks in barrier homeostasis. The mystery widens [editorial; comment] Elias PM, et al.
Arch Dermatol 1996 Dec;132(12):1505–6. Comment on: Arch Dermatol 1996 Dec;132(12):1453–8.
Functional analyses of the stratum corneum in scars. Sequential studies after injury and comparison among keloids, hypertrophic scars, and atrophic scars [see comments] Suetake T, et al. **Arch Dermatol** 1996 Dec; 132(12):1453–8. Comment in: Arch Dermatol 1996 Dec;132(12):1505–6.
Low but not high rate noxious radiant skin heating evokes a capsaicin-sensitive increase in spinal cord dorsal horn release of substance P. Zachariou V, et al. **Brain Res** 1997 Mar 28;752(1-2):143–50
Mechanical properties of normal skin and hypertrophic scars. Clark JA, et al. **Burns** 1996 Sep;22(6):443–6
Wound healing in elderly human skin. Strigini L, et al.
Clin Dermatol 1996 Mar-Apr;14(2):197–206 (53 ref.)
International survey on the management of patients with SLE. I. General data on the participating centers and the results of a questionnaire regarding mucocutaneous involvement. Vitali C, et al. **Clin Exp Rheumatol** 1996 Nov-Dec;14 Suppl 16:S17–22
The finite element method as a research and teaching tool in the analysis of local skin flaps. Manios A, et al.
Dermatol Surg 1996 Dec;22(12):1029–33
Effects of medical elastic compression stockings on interface pressure and edema prevention. Veraart JC, et al.
Dermatol Surg 1996 Oct;22(10):867–71
Mechanical properties of the diabetic waxy skin. Nikkels-Tassoudji N, et al. **Dermatology** 1996;192(1):19–22
Electromyographic findings in transthyretin (TTR)-related familial amyloid polyneuropathy (FAP). Montagna P, et al. **Electroencephalogr Clin Neurophysiol** 1996 Oct; 101(5):423–30
Skin and diabetes. Sibbald RG, et al.
Endocrinol Metab Clin North Am 1996 Jun;25(2):463–72 (40 ref.)
Computerized evaluation of skin stiffening in scleroderma. Nikkels-Tassoudji N, et al. **Eur J Clin Invest** 1996 Jun; 26(6):457–60
Spontaneous comedones on the skin of hairless descendants of Mexican hairless dogs. Kimura T, et al. **Exp Anim** 1996 Oct;45(4):377–84
Human intramuscular and cutaneous pain: psychophysical comparisons. Svensson P, et al. **Exp Brain Res** 1997 Apr; 114(2):390–2
The changes of stratum corneum interstices and calcium distribution of follicular epithelium of experimentally induced comedones (EIC) by oleic acid. Choi EH, et al.
Exp Dermatol 1997 Feb;6(1):29–35
'Skin roll' ('pinch and roll') test: skinfold thickness and tenderness. Bansevicius D, et al. **Headache** 1997 May; 37(5):281–5
Potential mechanism of skin response to stress. Slominski A, et al. **Int J Dermatol** 1996 Dec;35(12):849–51
Biomechanical alterations in normal skin and hypertrophic scar after thermal injury. McHugh AA, et al.
J Burn Care Rehabil 1997 Mar-Apr;18(2):104–8
Stratum corneum structure and function correlates with phenotype in psoriasis. Ghadially R, et al.
J Invest Dermatol 1996 Oct;107(4):558–64
Food hypersensitivity in 20 dogs with skin and gastrointestinal signs. Paterson S. **J Small Anim Pract** 1995 Dec;36(12):529–34
The value of sympathetic skin response recordings in the assessment of the vesicourethral autonomic nervous dysfunction in spinal cord injured patients. Schurch B, et al. **J Urol** 1997 Jun;157(6):2230–3
Dermal fibroblast culture as a model system for studies of fibrillin assembly and pathogenetic mechanisms: defects in distinct groups of individuals with Marfan's syndrome. Brenn T, et al. **Lab Invest** 1996 Sep;75(3):389–402
Skin plasma exudation and vasodilatation monitored by external detection of conversion electrons. Bergh G, et al.
Microvasc Res 1996 Jan;51(1):51–8
Influence of selective nerve fiber blocks on argon laser-induced thermal pain in the human skin. Grönroos M, et al. **Neurosci Lett** 1996 Jun 21;211(2):143–5
Effect of intravenous sodium amytal on cutaneous limb temperatures and sympathetic skin responses in normal subjects and pain patients with and without Complex Regional Pain Syndromes (type I and II). I. Mailis A, et al. **Pain** 1997 Mar;70(1):59–68
Mechanical properties of skin in Ehlers-Danlos syndrome, types I, II, and III. Henry F, et al. **Pediatr Dermatol** 1996 Nov-Dec;13(6):464–7
[The analysis of causes that intensify skin clinical symptoms in patients with food allergy] Uścinowicz M, et al.
Pediatr Pol 1996 Feb;71(2):93–6 (Eng. Abstr.) **(Pol)**
[The morphofunctional characteristics of connective tissue regeneration in the rat dermis after a gunshot injury] Danilov RK, et al. **Morfologiia** 1997;111(1):70–4 (Eng. Abstr.) **(Rus)**
[Patterns in the change of the evoked skin autonomic potential in nervous system diseases] Mikhailenko AA, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(4):58–61 (Eng. Abstr.) **(Rus)**
[Eruptive pseudoangiomatosis. A case report] González Enseñat MA, et al. **An Esp Pediatr** 1997 Jan;46(1):69–70 **(Spa)**

RADIATION EFFECTS

Photoprotection in vitiligo and normal skin. A quantitative assessment of the role of stratum corneum, viable epidermis and pigmentation. Gniadecka M, et al.
Acta Derm Venereol 1996 Nov;76(6):429–32
Epidermal growth factor and acute radiation damage in CDF1 mice in vivo. Lindegaard JC, et al. **Acta Oncol** 1997; 36(4):393–6
Skin treatment with bepanthen cream versus no cream during radiotherapy--a randomized controlled trial. Løkkevik E, et al. **Acta Oncol** 1996;35(8):1021–6
Photoaging of the connective tissue of skin: its prevention and therapy. Scharffetter-Kochanek K. **Adv Pharmacol** 1997;38:639–55 (116 ref.)
Treatment of nevus of Ota by Q-switched ruby laser. Shimbashi T, et al. **Aesthetic Plast Surg** 1997 Mar-Apr; 21(2):118–21
Maintaining skin integrity during radiation therapy. Korinko A, et al. **Am J Nurs** 1997 Feb;97(2):40–4
Increased synthesis of high-molecular-weight cPLA2 mediates early UV-induced PGE2 in human skin. Gresham A, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1037–50
Influence of UVA and UVB irradiation on hepatic and cutaneous P450 isoenzymes. Goerz G, et al.
Arch Dermatol Res 1996 Dec;289(1):46–51
Prolonged nuclear accumulation of p53 in xeroderma pigmentosum complementation group A cells after ultraviolet irradiation. Kato S, et al. **Arch Dermatol Res** 1996 May;288(5–6):249–51
The immunohistochemical effects of a single challenge with an intermediate dose of ultraviolet B on normal human skin. van der Vleuten CJ, et al. **Arch Dermatol Res** 1996 Aug;288(9):510–6
Skin dose reduction by a clinically viable magnetic deflector. Butson MJ, et al. **Australas Phys Eng Sci Med** 1997 Jun; 20(2):107–11
Effect of block trays on skin dose in radiotherapy. Butson MJ, et al. **Australas Phys Eng Sci Med** 1996 Dec; 19(4):248–51
Skin dose from radiotherapy X-ray beams: the influence of energy. Butson MJ, et al. **Australas Radiol** 1997 May; 41(2):148–50
Generation of active oxygen species from advanced glycation end-products (AGE) under ultraviolet light A (UVA) irradiation. Masaki H, et al.
Biochem Biophys Res Commun 1997 Jun 18;235(2):306–10
Effect of repeated exposure to ultraviolet A (UVA) radiation on the activities of fibroblasts in three dimensional culture. Kang S, et al. **Biochem Soc Trans** 1996 Aug;24(3):445S
Sensitization of skin fibroblasts to UVA by excess iron. Morlière P, et al. **Biochim Biophys Acta** 1997 Mar 15; 1334(2-3):283–90
Thresholds of microwave-evoked warmth sensations in human skin. Blick DW, et al. **Bioelectromagnetics** 1997; 18(6):403–9
Effects of low frequency pulsed electrical current on keratinocytes in vitro. Hinsenkamp M, et al.
Bioelectromagnetics 1997;18(3):250–4
UVB radiation affects the mobility of epidermal growth factor receptors in human keratinocytes and fibroblasts. Lirvall M, et al. **Biosci Rep** 1996 Jun;16(3):227–38
Chronic sun exposure alters both the content and distribution of dermal glycosaminoglycans. Bernstein EF, et al.
Br J Dermatol 1996 Aug;135(2):255–62
The quantitation and kinetics of unscheduled (repair) DNA synthesis in ultraviolet-irradiated human skin by automated image analysis. Chadwick CA, et al. **Br J Dermatol** 1996 Oct;135(4):516–22
Time course of 8-MOP-induced skin photosensitization in PUVA bath photochemotherapy [letter] Kerscher M, et al. **Br J Dermatol** 1997 Mar;136(3):473–4
On the recall phenomenon [letter; comment] Möller H.
Br J Dermatol 1996 Oct;135(4):652. Comment on: Br J Dermatol 1995 Oct;133(4):630–2.
Surface dosimetry in phototherapy: comparison of three ultraviolet B lamps used in the treatment of psoriasis. Snow JL, et al. **Br J Dermatol** 1996 Dec;135(6):949–54
Copper vapour laser treatment of café-au-lait macules. Somyos K, et al. **Br J Dermatol** 1996 Dec;135(6):964–8
Expression of intercellular adhesion molecule-1 in UVA-irradiated human skin cells in vitro and in vivo. Treina G, et al. **Br J Dermatol** 1996 Aug;135(2):241–7
Evidence for UV-associated activation of telomerase in human skin. Ueda M, et al. **Cancer Res** 1997 Feb 1; 57(3):370–4
Assay of different photoproducts after UVA, B and C irradiation of DNA and human skin explants. Bykov VJ, et al. **Carcinogenesis** 1996 Sep;17(9):1949–55
Carcinogenesis induced by UVA (365-nm) radiation: the dose-time dependence of tumor formation in hairless mice. de Laat A, et al. **Carcinogenesis** 1997 May;18(5):1013–20
The effect of photodamage on dermal extracellular matrix. Bernstein EF, et al. **Clin Dermatol** 1996 Mar-Apr; 14(2):143–51 (72 ref.)
Contrasting effects of ultraviolet-A and ultraviolet-B exposure on induction of contact sensitivity in human skin. Skov L, et al. **Clin Exp Immunol** 1997 Mar;107(3):585–8
Factors affecting acute skin toxicity in patients having breast irradiation after conservative surgery: a prospective study of treatment practice at the Royal Marsden Hospital. Fernando IN, et al. **Clin Oncol (R Coll Radiol)** 1996; 8(4):226–33
UV-induced cutaneous photobiology. Beissert S, et al.
Crit Rev Biochem Mol Biol 1996 Dec;31(5–6):381–404 (150

ref.)

Aspects of exposure to UVA tanning sources. Carcinogenic effect in mice and melanogenic effect in man and mice. Bech-Thomsen N. **Dan Med Bull** 1997 Jun;44(3):242-56 (116 ref.)

Erythema induction by ultraviolet radiation points to a possible acquired defense mechanism in chronically sun-exposed human skin. Applegate LA, et al. **Dermatology** 1997;194(1):41-9

Plastic surgery in irradiated areas: analysis of 200 consecutive cases. Kurul S, et al. **Eur J Surg Oncol** 1997 Feb;23(1):48-53

UVA-induced oxidative damage in fibroblasts cultured in a 3-dimensional collagen matrix. Coulomb B, et al. **Exp Dermatol** 1996 Jun;5(3):161-7

Singlet oxygen mediates the activation of JNK by UVA radiation in human skin fibroblasts. Klotz LO, et al. **FEBS Lett** 1997 May 26;408(3):289-91

Efficacy of topically applied tocopherols and tocotrienols in protection of murine skin from oxidative damage induced by UV-irradiation. Weber C, et al. **Free Radic Biol Med** 1997;22(5):761-9

A trace metal (zinc and iron) study on low dose x-radiation response in rat skin. Chatterjee J, et al. **Health Phys** 1997 Aug;73(2):362-8

Skin dose from radionuclide contamination on clothing. Taylor DC, et al. **Health Phys** 1997 Jun;72(6):835-41

Skin doses from luminous plastic-case watches [letter] [see comments] Turvey FJ. **Health Phys** 1996 Dec;71(6):970. Comment in: Health Phys 1997 Aug;73(2):395-6.

Skin alterations induced by long-term exposure to uranium and their effect on permeability. Ubios AM, et al. **Health Phys** 1997 May;72(5):713-5

Comparative effects of UV A and UV B on clonogenic survival and delayed cell death in skin cell lines from humans and fish. O'Reilly JP, et al. **Int J Radiat Biol** 1997 Jul;72(1):111-9

Influence of low doses of gamma-irradiation on mouse skin collagen fibrils. Tzaphlidou M, et al. **Int J Radiat Biol** 1997 Jan;71(1):109-15

Measurement of 6-MV X-ray surface dose when topical agents are applied prior to external beam irradiation. Burch SE, et al. **Int J Radiat Oncol Biol Phys** 1997 May 1; 38(2):447-51

Prognostic factors for acute and late skin reactions in radiotherapy patients. Turesson I, et al. **Int J Radiat Oncol Biol Phys** 1996 Dec 1;36(5):1065-75

The starburst giant cell is useful for distinguishing lentigo maligna from photodamaged skin. Cohen LM. **J Am Acad Dermatol** 1996 Dec;35(6):962-8

Immunosuppression induced by acute solar-simulated ultraviolet exposure in humans: prevention by a sunscreen with a sun protection factor of 15 and high UVA protection. Serre I, et al. **J Am Acad Dermatol** 1997 Aug; 37(2 Pt 1):187-94

Depth of morphologic skin damage and viability after one, two, and three passes of a high-energy, short-pulse CO2 laser (Tru-Pulse) in pig skin. Smith KJ, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):204-10

Effects of a rapidly scanned carbon dioxide laser on porcine dermis. Domankevitz Y, et al. **J Burn Care Rehabil** 1997 May-Jun;18(3):206-9

Sunscreens: progress and perspectives on photoprotection of human skin against UVB and UVA radiation. Pathak MA. **J Dermatol** 1996 Nov;23(11):783-800 (25 ref.)

The study of ultraviolet B-induced apoptosis in cultured mouse keratinocytes and in mouse skin. Baba T, et al. **J Dermatol Sci** 1996 Apr;12(1):18-23

Inhibition of ultraviolet B-induced skin erythema by N-nitro-L-arginine and N-monomethyl-L-arginine. Deliconstantinos G, et al. **J Dermatol Sci** 1997 May; 15(1):23-35

UV-induced apoptosis in rat skin. Iwasaki K, et al. **J Dermatol Sci** 1996 Apr;12(1):31-5

Change of glutathione S-transferases in the skin by ultraviolet B irradiation. Seo KI, et al. **J Dermatol Sci** 1996 Nov; 13(2):153-60

Disaccharide analysis of human skin glycosaminoglycans in sun-exposed and sun-protected skin of aged people. Takahashi Y, et al. **J Dermatol Sci** 1996 Feb;11(2):129-33

The relationship between quantitative changes in collagen and formation of wrinkles on hairless mouse skin after chronic UV irradiation. Takema Y, et al. **J Dermatol Sci** 1996 Apr;12(1):56-63

Broad-spectrum sunscreens provide greater protection against ultraviolet-radiation-induced suppression of contact hypersensitivity to a recall antigen in humans. Damian DL, et al. **J Invest Dermatol** 1997 Aug; 109(2):146-51

Temporal correlation between UV radiation locally-inducible tolerance and the sequential appearance of dermal, then epidermal, class II MHC+CD11b+ monocytic/macrophagic cells. Hammerberg C, et al. **J Invest Dermatol** 1996 Nov;107(5):755-63

8-hydroxy-2'-deoxyguanosine is increased in epidermal cells of hairless mice after chronic ultraviolet B exposure [published erratum appears in J Invest Dermatol 1997 Feb;108(2):237] Hattori Y, et al. **J Invest Dermatol** 1996 Nov;107(5):733-7

Photosensitization of uroporphyrin augments the ultraviolet A-induced synthesis of matrix metalloproteinases in human dermal fibroblasts. Herrmann G, et al. **J Invest Dermatol** 1996 Sep;107(3):398-403

The spectral dependence for UVA-induced cumulative damage in human skin. Lavker R, et al. **J Invest Dermatol** 1997 Jan;108(1):17-21

Enhanced inflammation and immunosuppression by ultraviolet radiation in xeroderma pigmentosum group A (XPA) model mice. Miyauchi-Hashimoto H, et al. **J Invest Dermatol** 1996 Sep;107(3):343-8

Hapten-specific tolerance induced by acute, low-dose ultraviolet B radiation of skin is mediated via interleukin-10. Niizeki H, et al. **J Invest Dermatol** 1997 Jul;109(1):25-30

TNF-alpha and IL-8 are upregulated in the epidermis of normal human skin after UVB exposure: correlation with neutrophil accumulation and E-selectin expression. Strickland I, et al. **J Invest Dermatol** 1997 May;108(5):763-8

The in situ repair kinetics of epidermal thymine dimers and 6-4 photoproducts in human skin types I and II. Young AR, et al. **J Invest Dermatol** 1996 Jun;106(6):1307-13

Thiols and selenium: protective effect on human skin fibroblasts exposed to UVA radiation. Emonet N, et al. **J Photochem Photobiol B** 1997 Aug;40(1):84-90

Oxidative stress and in vivo chemiluminescence in mouse skin exposed to UVA radiation. Evelson P, et al. **J Photochem Photobiol B** 1997 Apr;38(2-3):215-9

Characterization and application of UV detector spore films: the sensitivity curve of a new detector system provides good similarity to the action spectrum for UV-induced erythema in human skin. Quintern LE, et al. **J Photochem Photobiol B** 1997 Jan;37(1-2):158-66

Chronic ultraviolet exposure-induced p53 gene alterations in Sencar mouse skin carcinogenesis model. Tong Y, et al. **J Toxicol Environ Health** 1997 Jun 27;51(3):219-34

Irradiation protection from hypersensitivity [letter] Cowle FJ, et al. **Lancet** 1997 Aug 23;350(9077):566

In vitro changes in non-facial human skin following CO2 laser resurfacing: a comparison study. Gardner ES, et al. **Lasers Surg Med** 1996;19(4):379-87

Side effects from dermatological laser treatment related to UV exposure and epidermal thickness: a murine experiment with the copper vapor laser. Haedersdal M, et al. **Lasers Surg Med** 1997;20(3):233-41

Dynamic epidermal cooling in conjunction with laser-induced photothermolysis of port wine stain blood vessels. Nelson JS, et al. **Lasers Surg Med** 1996;19(2):224-9

Coactivation of AP-1 activity and TGF-beta1 gene expression in the stress response of normal skin cells to ionizing radiation. Martin M, et al. **Oncogene** 1997 Aug 18;15(8):981-9

Risk of radiation induced skin injuries from arrhythmia ablation procedures. Park TH, et al. **Pacing Clin Electrophysiol** 1996 Sep;19(9):1363-9

Ultraviolet B wavelength dependence for the regulation of two major matrix-metalloproteinases and their inhibitor TIMP-1 in human dermal fibroblasts [corrected and republished article originally printed in 1996 Oct;64(4):649-57] Brenneisen P, et al. **Photochem Photobiol** 1996 Nov;64(5):877-85

Ultraviolet B wavelength dependence for the regulation of two major matrix-metalloproteinases and their inhibitor TIMP-1 in human dermal fibroblasts [corrected and republished in Photochem Photobiol 1996 Nov;64(5):877-85] Brenneisen P, et al. **Photochem Photobiol** 1996 Oct;64(4):649-57

Cell cycle effects and concomitant p53 expression in hairless murine skin after longwave UVA (365 nm) irradiation: a comparison with UVB irradiation. de Laat A, et al. **Photochem Photobiol** 1997 Apr;65(4):730-5

Solar-simulated ultraviolet irradiation induces selective influx of CD4+ T lymphocytes in normal human skin. Di Nuzzo S, et al. **Photochem Photobiol** 1996 Dec;64(6):988-93

In situ action spectra suggest that DNA damage is involved in ultraviolet radiation-induced immunosuppression in humans. Hurks HM, et al. **Photochem Photobiol** 1997 Jul; 66(1):76-81

Differential suppression of the human mixed epidermal cell lymphocyte reaction (MECLR) and mixed lymphocyte reaction (MLR) by cis-urocanic acid. Hurks HM, et al. **Photochem Photobiol** 1997 Apr;65(4):616-21

EPR detection of free radicals in UV-irradiated skin: mouse versus human. Jurkiewicz BA, et al. **Photochem Photobiol** 1996 Dec;64(6):918-22

Interactions between vitamin E homologues and ascorbate free radicals in murine skin homogenates irradiated with ultraviolet light. Kitazawa M, et al. **Photochem Photobiol** 1997 Feb;65(2):355-65

Modulation of 8-methoxypsoralen-photoinduced cutaneous inflammatory reactions by various chemotherapeutic agents in vivo. Kumar JR, et al. **Photochem Photobiol** 1996 Apr; 63(4):535-40

UVA II exposure of human skin results in decreased immunization capacity, increased induction of tolerance and a unique pattern of epidermal antigen-presenting cell alteration. LeVee GJ, et al. **Photochem Photobiol** 1997 Apr; 65(4):622-9

Glutathione response after UVA irradiation in mitotic and postmitotic human skin fibroblasts and keratinocytes. Niggli HJ, et al. **Photochem Photobiol** 1997 Apr;65(4):680-4

The influence of ultraviolet light on immunological cytotoxicity in the skin. Norris DA, et al. **Photochem Photobiol** 1997 Apr;65(4):636-46 (117 ref.)

The effect of cold stress on UVB injury in mouse skin and cultured keratinocytes. Ota T, et al. **Photochem Photobiol** 1996 Dec;64(6):984-7

Photogenotoxicity of skin phototumorigenic fluoroquinolone antibiotics detected using the comet assay. Reavy HJ, et al. **Photochem Photobiol** 1997 Sep;66(3):368-73

Natural killer cell activity during UVR-induced skin tumor formation in the Skh hairless mouse. Steerenberg PA, et al. **Photochem Photobiol** 1997 Jan;65(1):150-4

Impact of UVB radiation on the epidermal cytokine network. Takashima A, et al. **Photochem Photobiol** 1996 Apr; 63(4):397-400 (80 ref.)

alpha-Tocopherol, an inhibitor of epidermal lipid peroxidation, prevents ultraviolet radiation from suppressing the skin immune system. Yuen KS, et al. **Photochem Photobiol** 1997 Mar;65(3):587-92

A comparison of human- and headform-based measurements of solar ultraviolet B dose. Airey DK, et al. **Photodermatol Photoimmunol Photomed** 1995 Aug; 11(4):155-8

Effects of near-infrared radiation on the epidermal proliferation and cutaneous immune function in mice. Danno K, et al. **Photodermatol Photoimmunol Photomed** 1996 Dec;12(6):233-6

The sunscreening effect of urocanic acid. de fine Olivarius F, et al. **Photodermatol Photoimmunol Photomed** 1996 Jun; 12(3):95-9

Skin temperature and phototest evaluation. Gniadecka M, et al. **Photodermatol Photoimmunol Photomed** 1996 Oct; 12(5):189-93

Development of cutaneous tolerance to ultraviolet B during ultraviolet B phototherapy for psoriasis. Gonzalez S, et al. **Photodermatol Photoimmunol Photomed** 1996 Apr; 12(2):73-8

Inhibition of ultraviolet-induced formation of reactive oxygen species, lipid peroxidation, erythema and skin photosensitization by polypodium leucotomos. González S, et al. **Photodermatol Photoimmunol Photomed** 1996 Apr; 12(2):45-56

Re: Menter JM, Sayre RM, Etemadi AA, Agin PP, Willis I. Chronic exposure of SK-1 hairless mice to narrow-band ultraviolet A (320-355 nm) [letter; comment] Kligman LH. **Photodermatol Photoimmunol Photomed** 1996 Oct; 12(5):222-3. Comment on: Photodermatol Photoimmunol Photomed 1996 Feb;12(1):7-11.

Threshold level for measurement of UV sensitivity: reproducibility of phototest. Lock-Andersen J, et al. **Photodermatol Photoimmunol Photomed** 1996 Aug; 12(4):154-61

Chronic exposure of Sk-1 hairless mice to narrow-band ultraviolet A (320-355 nm) [see comments] Menter JM, et al. **Photodermatol Photoimmunol Photomed** 1996 Feb; 12(1):7-11. Comment in: Photodermatol Photoimmunol Photomed 1996 Oct;12(5):222-3.

Suppressive effect of ultraviolet B radiation on contact sensitization in mice. II. Systemic immunosuppression is modulated by ultraviolet irradiation and hapten application. Miyauchi-Hashimoto H, et al. **Photodermatol Photoimmunol Photomed** 1996 Aug; 12(4):137-44

Comparison of changes in endothelial adhesion molecule expression following UVB irradiation of skin and a human dermal microvascular cell line (HMEC-1). Rhodes LE, et al. **Photodermatol Photoimmunol Photomed** 1996 Jun; 12(3):114-21

UVB irradiation decreases the magnitude of the Th1 response to hapten but does not increase the Th2 response. Saijo S, et al. **Photodermatol Photoimmunol Photomed** 1996 Aug; 12(4):145-53

Higher cyclobutane pyrimidine dimer and (6-4) photoproduct yields in epidermis of normal humans with increased sensitivity to ultraviolet B radiation. Ueda M, et al. **Photodermatol Photoimmunol Photomed** 1996 Feb; 12(1):22-6

Annual reduction of solar UV exposure to the facial area of outdoor workers in Southeast Queensland by wearing a hat. Wong JC, et al. **Photodermatol Photoimmunol Photomed** 1996 Jun; 12(3):131-5

Chromophores in human skin. Young AR. **Phys Med Biol** 1997 May;42(5):789-802 (60 ref.)

Echinacoside and caffeoyl conjugates protect collagen from free radical-induced degradation: a potential use of Echinacea extracts in the prevention of skin photodamage. Facino RM, et al. **Planta Med** 1995 Dec;61(6):510-4

Measurement of radiation-induced DNA double-strand breaks in human diploid fibroblasts from keloid and normal skin by single-cell gel electrophoresis. Ma S, et al. **Plast Reconstr Surg** 1996 Oct;98(5):821-6

Modulation of ultraviolet light-induced epidermal damage: beneficial effects of tocopherol. Ritter EF, et al. **Plast Reconstr Surg** 1997 Sep;100(4):973-80

The inhibition of antigen-presenting activity of dendritic cells resulting from UV irradiation of murine skin is restored by in vitro photorepair of cyclobutane pyrimidine dimers. Vink AA, et al. **Proc Natl Acad Sci U S A** 1997 May 13; 94(10):5255-60

Connexin 43 expression in normal and irradiated mouse skin. Liu K, et al. **Radiat Res** 1997 Apr;147(4):437-41

Differences in the yields of dicentrics and reciprocal translocations observed in the chromosomes of irradiated human skin fibroblasts and blood lymphocytes from the same healthy individuals. Virsik-Peuckert P, et al. **Radiat Res** 1997 Sep;148(3):209-15

Evaluation of an on-line patient exposure meter in neuroradiology. Gkanatsios NA, et al. **Radiology** 1997 Jun; 203(3):837–42

Measurement of skin entrance exposure with a dose–area–product meter at chest radiography. Parry CK, et al. **Radiology** 1996 Nov;201(2):574–5

Underprediction of human skin erythema at low doses per fraction by the linear quadratic model [see comments] Hamilton CS, et al. **Radiother Oncol** 1996 Jul;40(1):23–30 . Comment in: Radiother Oncol 1996 Jul;40(1):1–3. Comment in: Radiother Oncol 1997 Jun;43(3):324–5.

TLD extrapolation for skin dose determination in vivo. Kron T, et al. **Radiother Oncol** 1996 Nov;41(2):119–23

Double-blind, randomized clinical study comparing hyaluronic acid cream to placebo in patients treated with radiotherapy. Liguori V, et al. **Radiother Oncol** 1997 Feb; 42(2):155–61

Wound healing following radiation therapy: a review. Tibbs MK. **Radiother Oncol** 1997 Feb;42(2):99–106

Clinical evidence of hypersensitivity to low doses in radiotherapy [editorial; comment] Turesson I, et al. **Radiother Oncol** 1996 Jul;40(1):1–3. Comment on: Radiother Oncol 1996 Jul;40(1):23–30.

Radioprotective effects of a protein-free hemodialysate in human epidermis. Beetz A, et al. **Skin Pharmacol** 1996; 9(3):197–202

Topical retinol and the stratum corneum response to an environmental threat. Goffin V, et al. **Skin Pharmacol** 1997; 10(2):85–9

Early skin response to fractionated doses of pions for determining therapeutic gain factors. Ohizumi Y, et al. **Tokai J Exp Clin Med** 1996 Jun;21(2):69–75

[Is the sun our friend?] Barták P. **Cas Lek Cesk** 1996 Jul 26;135(13):403–4 (Eng. Abstr.) **(Cze)**

[Effect of single UVA and UVB irradiation on the surface composition and viscoelastic properties of skin in vivo] Habig J, et al. **Hautarzt** 1996 Jul;47(7):515–20 (Eng. Abstr.) **(Ger)**

[Health risks from infrared emissions from radiant tube heaters in the workplace] Bergamaschi A, et al. **G Ital Med Lav** 1995 Jan–Nov;17(1–6):41–9 (Eng. Abstr.) **(Ita)**

[Evaluation ultraviolet radiation penetration into human skin. II. experimental studies] Cader A, et al. **Med Pr** 1996; 47(1):31–44 (Eng. Abstr.) **(Pol)**

[Assessment of ultraviolet radiation penetration into human skin. I. Theoretical analysis] Cader A, et al. **Med Pr** 1995; 46(6):583–94 (Eng. Abstr.) **(Pol)**

[The effect of long-term UV radiation exposure on the skin autonomous microflora and on body nonspecific resistance] Strzhizhovskiĭ AD, et al. **Izv Akad Nauk Ser Biol** 1996 Jul–Aug;(4):499–501 (Eng. Abstr.) **(Rus)**

[The effect of infrared laser radiation of different frequencies on the healing of skin wounds] Korolev IuN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 May–Jun; (3):8–10 (Eng. Abstr.) **(Rus)**

SECRETION

Distinct cellular mechanisms of cholinergic and beta-adrenergic sweat secretion. Reddy MM, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):C486–94

Ethanol enhances the IFN-gamma, TGF-alpha and IL-6 secretion in psoriatic co-cultures. Ockenfels HM, et al. **Br J Dermatol** 1996 Nov;135(5):746–51

The effect of cetirizine and loratadine on codeine-induced histamine release in human skin in vivo assessed by cutaneous microdialysis. Perzanowska M, et al. **Inflamm Res** 1996 Sep;45(9):486–90

Chemotactic factors released in culture by intact developing and healing skin lesions produced in rabbits by the irritant sulfur mustard. Tanaka F, et al. **Inflammation** 1997 Apr; 21(2):251–67

Isolation and characterization of pleurocidin, an antimicrobial peptide in the skin secretions of winter flounder. Cole AM, et al. **J Biol Chem** 1997 May 2;272(18):12008–13

The structures of the frenatin peptides from the skin secretion of the giant tree frog Litoria infrafrenata. Raftery MJ, et al. **J Pept Sci** 1996 Mar–Apr;2(2):117–24

Exogenous but not endogenous substance P releases histamine from isolated human skin fragments. Tausk F, et al. **Neuropeptides** 1995 Dec;29(6):351–5

[Effect of secretions of specific cutaneous glands on enzymatic activity of a series of regions in the digestive tract in Campbell hamsters (Phodopus Campbelli, Thomas, 1905)] Sokolov VE, et al. **Dokl Akad Nauk** 1996 Jul; 349(1):138–40 **(Rus)**

[The group specificity of the sweat and fat excretions from the skin of the hands] Smetanina NI, et al. **Sud Med Ekspert** 1996 Jul–Sep;39(3):35–6 (Eng. Abstr.) **(Rus)**

SURGERY

Skin expansion in burn sequelae: results and complications. Governa M, et al. **Acta Chir Plast** 1996;38(4):147–53

Thick skin and cosmetic surgery of the nasal tip: how to avoid the cutaneous polly beak. Botti G. **Aesthetic Plast Surg** 1996 Sep–Oct;20(5):421–7

Skin resurfacing with laser in Asians. Kim JW, et al. **Aesthetic Plast Surg** 1997 Mar–Apr;21(2):115–7

Continuous expansion for the treatment of skin deformities. Nunes PHF, et al. **Aesthetic Plast Surg** 1996 Jul–Aug; 20(4):347–9

Treatment of nevus of Ota by Q-switched ruby laser. Shimbashi T, et al. **Aesthetic Plast Surg** 1997 Mar–Apr; 21(2):118–21

Comparison of CO2 laser, electrocautery, and scalpel incisions on acute-phase reactants in rat skin. Johnson MA, et al. **Am Surg** 1997 Jan;63(1):13–6

The arterial blood propofol concentration preventing movement in 50% of healthy women after skin incision. Andrews DT, et al. **Anesth Analg** 1997 Aug;85(2):414–9

Comparison of oral transmucosal fentanyl citrate and intramuscular meperidine, promethazine, and chlorpromazine for conscious sedation of children undergoing laceration repair. Schutzman SA, et al. **Ann Emerg Med** 1996 Oct;28(4):385–90

An inexpensive method of intraoperative skin stretching for closure of large cutaneous wounds. Abramson DL, et al. **Ann Plast Surg** 1997 May;38(5):540–2

Additonal observations using a pulsed carbon dioxide laser with a fixed pulse duration [letter; comment] Smith KJ, et al. **Arch Dermatol** 1997 Jan;133(1):105–7. Comment on: Arch Dermatol 1996 Apr;132(4):395–402. Comment on: Arch Dermatol 1996 Apr;132(4):469–71.

Histological and clinical evaluation of facial resurfacing using a carbon dioxide laser with the computer pattern generator. Rubach BW, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):929–34

Neovascularization of the intestinal graft transplanted in subcutaneous pocket in rats. Takagi T, et al. **Auris Nasus Larynx** 1997;24(1):65–71

Practice tip. W-plasty for ragged lacerations. Murtagh J. **Aust Fam Physician** 1996 Dec;25(12):1864

The treatment of port-wine stains with the pulsed dye laser at 600 nm. Edström DW, et al. **Br J Dermatol** 1997 Mar; 136(3):360–3

Treatment of lichen sclerosus with carbon dioxide laser vaporization. Kartamaa M, et al. **Br J Dermatol** 1997 Mar; 136(3):356–9

Removal of skin staples and the use of EMLA cream [letter] Banwell P, et al. **Br J Plast Surg** 1997 Feb;50(2):144–5

V-Y advancement flaps in the reconstruction of skin defects of the Achilles tendon region: a report of two cases. Tang YW. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Dec; 58(6):453–8

A peeler's thoughts on skin improvement with chemical peels and laser resurfacing. Rubin MG. **Clin Plast Surg** 1997 Apr; 24(2):407–9

Laser resurfacing of rhytides. Fitzpatrick RE. **Dermatol Clin** 1997 Jul;15(3):431–47 (56 ref.)

Histology of laser resurfacing. Kauvar AN, et al. **Dermatol Clin** 1997 Jul;15(3):459–67 (64 ref.)

Laser treatment of tattoos. Kilmer SL. **Dermatol Clin** 1997 Jul;15(3):409–17 (50 ref.)

Complications of laser surgery. Nanni C. **Dermatol Clin** 1997 Jul;15(3):521–34 (84 ref.)

Ultrasound-guided thermocouple placement for cryosurgery. Abramovits W, et al. **Dermatol Surg** 1996 Sep;22(9):771–3

Dermatologic laser surgery. A review. Alster TS, et al. **Dermatol Surg** 1996 Sep;22(9):797–805 (125 ref.)

Intraoperative and postoperative bleeding problems in patients taking warfarin, aspirin, and nonsteroidal antiinflammatory agents. A prospective study. Billingsley EM, et al. **Dermatol Surg** 1997 May;23(5):381–3; discussion 384–5

Ablation threshold [letter] Branson DF. **Dermatol Surg** 1997 Sep;23(9):848

Dog ear: true and false. A simple surgical management. Chrétien-Marquet B, et al. **Dermatol Surg** 1997 Jul; 23(7):547–50; discussion 551

Fast healing after laser skin resurfacing. The minimal mechanical trauma technique. David L, et al. **Dermatol Surg** 1997 May;23(5):359–61

Topical anesthetic agents in dermatologic surgery. A review. Lener EV, et al. **Dermatol Surg** 1997 Aug;23(8):673–83 (58 ref.)

New camouflaging technique following laser resurfacing [letter] O'Donoghue MN. **Dermatol Surg** 1997 Aug; 23(8):717–8

Penetration depth of Ultrapulse carbon dioxide laser in human skin. Trelles MA, et al. **Dermatol Surg** 1996 Oct; 22(10):863–5

Drug management in skin surgery. Lawrence C. **Drugs** 1996 Dec;52(6):805–17 (109 ref.)

The effect of skin incision followed by alfentanil on catecholamine levels and on the T-wave amplitude of ECG during isoflurane anaesthesia. Annila PA, et al. **Int J Clin Monit Comput** 1995;12(4):205–11

Surgical moulages [letter; comment] Tilles G, et al. **Int J Dermatol** 1997 Feb;36(2):154. Comment on: Int J Dermatol 1995 Mar;34(3):219.

Millisecond CO2 laser skin resurfacing. Khan JA. **Int Ophthalmol Clin** 1997 Summer;37(3):29–68 (24 ref.)

A flexible scalpel for shave excision of skin lesions [letter; comment] Epstein E. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1030–1. Comment on: J Am Acad Dermatol 1996 Sep;35(3 Pt 1):452–3.

Suturing--control and conservation [letter; comment] Gross D. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1031–2. Comment on: J Am Acad Dermatol 1996 Aug;35(2 Pt 1):243–4.

Surgical pearl: easy and (usually) painless removal of adhesive dressings. Haas AF, et al. **J Am Acad Dermatol** 1997 Jul;37(1):114–5

Suturing [letter; comment] Ling NS, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1031–2. Comment on: J Am Acad Dermatol 1996 Aug;35 (2 Pt 1):243–4.

Surgical pearl: preparing the defect for an island pedicle flap. Otley CC, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):257–8

Surgical pearl: the self-removable suture. Smith SP 3rd, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1009–10

Digital pad transposition for replacement of the metacarpal or metatarsal pad in dogs. Olsen D, et al. **J Am Anim Hosp Assoc** 1997 Jul–Aug;33(4):337–41

Stellate rhytidectomy: superior entropion repair in a dog with excessive facial skin. Stuhr CM, et al. **J Am Anim Hosp Assoc** 1997 Jul–Aug;33(4):342–5

Skin closure at laparoscopy. Rosen DM, et al. **J Am Assoc Gynecol Laparosc** 1997 May;4(3):347–51

Importance of soft tissue integrity on biomechanical studies of the patella after TKA. Luo ZP, et al. **J Biomech Eng** 1996 Feb;118(1):130–2

Clinical results of cultured epithelial cell grafting in the oral and maxillofacial region. Tsai CY, et al. **J Craniomaxillofac Surg** 1997 Feb;25(1):4–8

Technical considerations in knot construction. Part I. Continuous percutaneous and dermal suture closure. Annunziata CC, et al. **J Emerg Med** 1997 May–Jun; 15(3):351–6

A comparison of the use of plain catgut, skin tapes and polyglactin sutures for skin closure: a prospective clinical trial. Anatol TI, et al. **J R Coll Surg Edinb** 1997 Apr; 42(2):124–7

Biomechanical effects of e-PTFE implant structure on soft tissue implantation stability: a study in the porcine model. Greene D, et al. **Laryngoscope** 1997 Jul;107(7):957–62

Fast and effective skin ablation with an Er:YAG laser: determination of ablation rates and thermal damage zones. Hohenleutner U, et al. **Lasers Surg Med** 1997;20(3):242–7

Healing of laser incisions in rat dermis: comparisons of the carbon dioxide laser under manual and computer control and the scalpel. Howard J, et al. **Lasers Surg Med** 1997; 20(1):90–6

Water flux from partial-thickness skin wounds: comparative study of the effects of Er:YAG and Ho:YAG lasers. Jaffe BH, et al. **Lasers Surg Med** 1996;18(1):1–9

Pulsed Erbium:YAG laser ablation in cutaneous surgery. Kaufmann R, et al. **Lasers Surg Med** 1996;19(3):324–30

Human albumin solder supplemented with TGF-beta 1 accelerates healing following laser welded wound closure. Poppas DP, et al. **Lasers Surg Med** 1996;19(3):360–8

Are copper vapour and frequency doubled Nd:YAG lasers superior to the argon laser for portwine stains at pulse widths of 30–50 milliseconds? Sheehan-Dare RA, et al. **Lasers Surg Med** 1996;18(1):46–51

Skin expansion versus free forearm flap in forehead reconstruction. Di Giuseppe A, et al. **Microsurgery** 1996; 17(5):248–53

A study of general practitioners' skin surgery in Canterbury. Corwin P, et al. **N Z Med J** 1997 Jul 11;110(1047):253–5

Septal-myocutaneous flap technique for lower lid blepharoplasty. Millman AL, et al. **Ophthal Plast Reconstr Surg** 1997 Jun;13(2):84–9

Effects of an erbium, chromium: yttrium, scandium, gallium, garnet laser on mucocutanous soft tissues. Rizoiu IM, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Oct;82(4):386–95

New safety skin hooks. Brooks JG, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):135–6

Characterization of a rat model of incisional pain. Brennan TJ, et al. **Pain** 1996 Mar;64(3):493–501

Skin. Smoller BR, et al. **Pathology (Phila)** 1996;3(2):285–98 (15 ref.)

Growth factors in the repair of partial thickness porcine skin wounds. Breuing K, et al. **Plast Reconstr Surg** 1997 Sep; 100(3):657–64

The use of iodate stain to enhance contrast between vermilion and skin in lip reconstruction. Brusati R, et al. **Plast Reconstr Surg** 1997 Jul;100(1):124–5

Comparison of polydioxanone and polyglactin 910 in intradermal repair. Guyuron B, et al. **Plast Reconstr Surg** 1996 Oct;98(5):817–20

Hair as a filler material for reconstructive or cosmetic surgery. Kaakedjian G, et al. **Plast Reconstr Surg** 1997 Feb; 99(2):443–7

Acute and chronic animal models for excessive dermal scarring: quantitative studies. Morris DE, et al. **Plast Reconstr Surg** 1997 Sep;100(3):674–81

Compartment syndrome of the upper extremity following cutaneous laser surgery. Rheingold LM, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1418–20

The "round block" purse-string suture: a simple method to close skin defects with minimal scarring. Tremolada C, et al. **Plast Reconstr Surg** 1997 Jul;100(1):126–31

Repair of incomplete simple syndactyly by a web flap on a subcutaneous tissue pedicle. Yao JM, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2079–81

Clinical experiences with the external tissue extender. Brongo S, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar; 31(1):57–63

External device for tissue expansion: clinical evaluation of the skin extender. Fan J, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Sep; 30(3):215–20

Influence of the site of skin incision on the circulation in the nipple-areola complex after subcutaneous mastectomy in breast cancer. Proano E, et al.
Scand J Plast Reconstr Surg Hand Surg 1996 Sep; 30(3):195-200

Comparison of two suture materials for intradermal skin closure in dogs. Kirpensteijn J, et al. **Vet Q** 1997 Mar; 19(1):20-2

[Post-gastroplasty plastic surgery] Vandeweyer E, et al.
Rev Med Brux 1996 Sep;17(4):244-7 (Eng. Abstr.) **(Fre)**

[Sasumata(U+I) shape skin incision for the surgery through median sternotomy] Kadoyama C, et al.
Nippon Kyobu Geka Gakkai Zasshi 1997 Jul;45(7):958-63 (Eng. Abstr.) **(Jpn)**

[The results of the surgical treatment of extensive dermal burns in children] Grigor'ev AI, et al.
Vestn Khir Im I I Grek 1996;(1):94 **(Rus)**

[Report of a case of traumatic avulsion of the penile skin with amputation of the glans] Martina G, et al.
Arch Esp Urol 1996 Nov;49(9):981-3 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION see SKIN TRANSPLANTATION

ULTRASONOGRAPHY

A quantitative description of echographic images of sclerotic skin in patients with systemic sclerosis, as assessed by computerized image analysis on 20 MHz B-scan recordings. Seidenari S, et al. **Acta Derm Venereol** 1996 Sep;76(5):361-4

Scanning electron microscopic evaluation of the skin surface after ultrasound exposure. Yamashita N, et al. **Anat Rec** 1997 Apr;247(4):455-61

Comparison of high frequency (20 MHz) ultrasound and palpation for the assessment of skin involvement in systemic sclerosis (scleroderma). Scheja A, et al.
Clin Exp Rheumatol 1997 May-Jun;15(3):283-8

Image processing of 20 MHz B-scan recordings of irritant reactions. Seidenari S. **Curr Probl Dermatol** 1995;23:169-75

The histological interpretation of high frequency cutaneous ultrasound imaging. Milner SM, et al. **Dermatol Surg** 1997 Jan;23(1):43-5

An ultrasound indentation system for biomechanical properties assessment of soft tissues in-vivo. Zheng YP, et al. **IEEE Trans Biomed Eng** 1996 Sep;43(9):912-8

Needle length and injection technique for efficient intramuscular vaccine delivery in infants and children evaluated through an ultrasonographic determination of subcutaneous and muscle layer thickness. Groswasser J, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):400-3

Ultrasonic propagation properties of excised human skin. Moran CM, et al. **Ultrasound Med Biol** 1995;21(9):1177-90

[Ultrasound measurement of skin and cartilage thickness in healthy and reconstructed ears with a 20-MHz ultrasound device] Danter J, et al. **Laryngorhinootologie** 1996 Feb; 75(2):91-4 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Skin ultrastructure after calcipotriol treatment: a transmission electron microscopic and freeze-fracture study on psoriatic patients. Cavicchini S, et al. **Acta Derm Venereol** 1996 May; 76(3):186-9

Dominant dystrophic epidermolysis bullosa albopapuloidea Pasini — ultrastructural observations of albopapuloid lesions and a type VII collagen DNA polymorphism study of a family. Nomura K, et al. **Acta Derm Venereol** 1997 Jul;77(4):277-80

Expression of gastrin-releasing peptide receptor in human skin. Staniek V, et al. **Acta Derm Venereol** 1996 Jul; 76(4):282-6

Microfluorometric study of nuclear DNA in normal human epidermis. Kurose K, et al. **Acta Histochem** 1996 Jan; 98(1):39-46

The ultrastructure of skin from a patient with mucopolysaccharidosis IIID. Alroy J, et al.
Acta Neuropathol (Berl) 1997 Feb;93(2):210-3

Immunohistochemical localization of cytokines and receptor-associated molecules in human tonsils and skin. Von Gaudecker B, et al.
Acta Otolaryngol Suppl (Stockh) 1996;523:71-4

Ultrastructure of ventral epidermis in the terrestrial and aquatic phases of the newt Triturus vittatus (Jenyns). Warburg MR, et al. **Anat Anz** 1997 Aug;179(4):341-7

Immunohistochemical, ultrastructural, and molecular features of Kindler syndrome distinguish it from dystrophic epidermolysis bullosa. Shimizu H, et al. **Arch Dermatol** 1997 Sep;133(9):1111-7 (47 ref.)

Different localizations of growth-associated protein (GAP-43) in mechanoreceptors and free nerve endings of adult rat periodontal ligament, dental pulp and skin. Maeda T, et al. **Arch Histol Cytol** 1996 Aug;59(3):291-304

Ichthyosis congenita type IV: a new case resembling diffuse cutaneous mastocytosis. Brusasco A, et al.
Br J Dermatol 1997 Mar;136(3):377-9

A longitudinal study of a harlequin infant presenting clinically as non-bullous congenital ichthyosiform erythroderma. Haftek M, et al. **Br J Dermatol** 1996 Sep; 135(3):448-53

Examination of cutaneous macroglobulinosis by immunoelectron microscopy. Lipsker D, et al.
Br J Dermatol 1996 Aug;135(2):287-91

Ultrastructure, number, distribution and innervation of electroreceptors and mechanoreceptors in the bill skin of the platypus, Ornithorhynchus anatinus. Manger PR, et al.
Brain Behav Evol 1996;48(1):27-54

Heat shock zone of the burn wound [letter] Harada T, et al. **Burns** 1996 Nov;22(7):578-9

Subcellular distribution of a new fluorinated, biocompatible, non-ionic telomeric carrier: a study in cultured B16 melanoma and rat skin fibroblasts. Chehade F, et al.
Cell Mol Biol (Noisy-le-grand) 1996 May;42(3):335-42

Does hormonal skin aging exist? A study of the influence of different hormone therapy regimens on the skin of postmenopausal women using non-invasive measurement techniques [see comments] Callens A, et al.
Dermatology 1996;193(4):289-94. Comment in: Dermatology 1996 ;193(4):273.

Linear and whorled nevoid hypermelanosis versus incontinentia pigmenti: is pigmentary incontinence really a distinctive feature? Delaporte E, et al. **Dermatology** 1996; 192(1):70-2 (17 ref.)

Basement membrane folds on plantar skin [letter] McGovern TW, et al. **Int J Dermatol** 1997 Jun;36(6):474-5

Histopathological changes in Yucatan minipig skin following challenge with sulphur mustard. A sequential study of the first 24 hours following challenge. Brown RF, et al.
Int J Exp Pathol 1997 Feb;78(1):9-20

Experimental cutaneous leishmaniasis: transmission electron microscopy of the inoculation site. Vasconcellos C, et al.
Int J Exp Pathol 1997 Apr;78(2):81-9

Development of a skin model based on insoluble fibrillar collagen. Geesin JC, et al. **J Biomed Mater Res** 1996 Spring; 33(1):1-8

Delayed postburn blisters: an immunohistochemical and ultrastructural study. Bergman R, et al. **J Cutan Pathol** 1997 Aug;24(7):429-33

Mid-dermal elastolysis: a pathological and ultrastructural study of five cases. Neri I, et al. **J Cutan Pathol** 1996 Apr; 23(2):165-9

Langerhans cell histiocytosis (histiocytosis X) with morphologic expression of desmosomes and microvillous structures. Furukawa M, et al. **J Dermatol** 1997 Jun; 24(6):379-89

Dyschromatosis universalis hereditaria: an electron microscopic examination. Kim NS, et al. **J Dermatol** 1997 Mar;24(3):161-4

Ultrastructure of the lesions of psoriasis vulgaris transplanted into the subcutaneous tissue of nude mice by the skin fenestrating transplantation method. Ueda K, et al.
J Dermatol 1997 Mar;24(3):141-6

Ultrastructure study of experimental cutaneous leishmaniasis before and after Dapsone intake. Eissa MM, et al.
J Egypt Soc Parasitol 1997 Aug;27(2):539-52

Collagen transformation in abdominal skin of rabbit under continuous wave CO2 laser irradiation: a transmission electron microscopy study. Dimitriu C.
J Electron Microsc (Tokyo) 1995 Dec;44(6):467-70

Proton pump activity of mitochondria-rich cells. The interpretation of external proton-concentration gradients. Jensen LJ, et al. **J Gen Physiol** 1997 Jan;109(1):73-91

Mutations in the COL3A1 gene result in the Ehlers-Danlos syndrome type IV and alterations in the size and distribution of the major collagen fibrils of the dermis. Smith LT, et al. **J Invest Dermatol** 1997 Mar;108(3):241-7

Development of an optimal protocol for the ultrastructural examination of skin by transmission electron microscopy. Van den Bergh BA, et al. **J Microsc** 1997 Aug;187 (Pt 2):125-33

Effect of penetration enhancers and iontophoresis on the ultrastructure and cholecystokinin-8 permeability through porcine skin. Bhatia KS, et al. **J Pharm Sci** 1997 Sep; 86(9):1011-5

Skin and conjunctive biopsies as a useful diagnostic tool in tomaculous neuropathy. Federico A, et al.
J Submicrosc Cytol Pathol 1996 Apr;28(2):171-4

The behaviour of Sarcoptes scabiei var. hominis in human skin: an ultrastructural study. Fimiani M, et al.
J Submicrosc Cytol Pathol 1997 Jan;29(1):105-13

Connective tissue in skin biopsies from patients suffering systemic sclerosis. Quaglino D Jr, et al.
J Submicrosc Cytol Pathol 1996 Apr;28(2):287-96

Primary cilium expression in cells from normal and aberrant human skin. Strugnell GE, et al.
J Submicrosc Cytol Pathol 1996 Apr;28(2):215-25

A longitudinal study of human age-related ribosomal RNA gene activity as detected by silver-stained NORs. Thomas S, et al. **Mech Ageing Dev** 1996 Dec 20;92(2-3):101-9

Stereological image analysis of cultured human melanocytes observed by transmission electron microscopy. Donois E, et al. **Microsc Res Tech** 1997 Feb 1;36(3):188-200

Immunodissection of the connective tissue matrix in human skin. Keene DR, et al. **Microsc Res Tech** 1997 Aug 15; 38(4):394-406 (110 ref.)

Microfibrillar elements of the dermal matrix. Kielty CM, et al. **Microsc Res Tech** 1997 Aug 15;38(4):413-27 (150 ref.)

Molecular complexity of the cutaneous basement membrane zone. Uitto J, et al. **Mol Biol Rep** 1996;23(1):35-46 (56 ref.)

Intracellular detection of laminin alpha 2 chain in skin by electron microscopy immunocytochemistry: comparison between normal and laminin alpha 2 chain deficient subjects. Squarzoni S, et al. **Neuromuscul Disord** 1997 Mar; 7(2):91-8

Human cutaneous leishmaniasis: ultrastructural interactions between the inflammatory cells and Leishman bodies in the skin lesions. el-Shoura SM, et al. **Parasite** 1996 Sep; 3(3):229-36

Ciliated cultured dermal fibroblasts in a patient with hyperornithinemia, hyperammonemia and homocitrullinuria (HHH) syndrome. Haust MD.
Pathol Res Pract 1995 Oct;191(10):1062-5

Ultrastructural differentiation of epidermolysis bullosa subtypes and porphyria cutanea tarda. Jaunzems AE, et al. **Pathol Res Pract** 1997;193(3):207-17

Kindler syndrome: report of a case with ultrastructural study and review of the literature. Patrizi A, et al.
Pediatr Dermatol 1996 Sep-Oct;13(5):397-402 (21 ref.)

The Merkel cell as a possible mechanoreceptor cell. Ogawa H. **Prog Neurobiol** 1996 Jul;49(4):317-34 (79 ref.)

VIROLOGY

Ex vivo protocol for testing virus survival on human skin: experiments with herpesvirus 2. Graham ML, et al.
Appl Environ Microbiol 1996 Nov;62(11):4252-5

Molluscum contagiosum virus grows in human skin xenografts. Paslin D, et al. **Arch Dermatol Res** 1997 Jul; 289(8):486-8

Detection of Epstein-Barr virus in primary cutaneous amyloidosis. Chang YT, et al. **Br J Dermatol** 1997 Jun; 136(6):823-6

Prevalence of human herpesvirus-8 in skin lesions. Nishimoto S, et al. **Br J Dermatol** 1997 Aug;137(2):179-84

In situ hybridization detection of varicella zoster virus in paraffin-embedded skin biopsy samples. Annunziato P, et al. **Clin Diagn Virol** 1996 Nov;7(2):69-76

Growth of herpes simplex type 1 on skin explants of atopic eczema. Goodyear HM, et al. **Clin Exp Dermatol** 1996 May; 21(3):185-9

Detection of parvovirus B19 in skin biopsy, serum, and bone marrow of a patient with fever, rash, and polyarthritis followed by pneumonia, pericardial effusion, and hepatitis. Nikkari S, et al. **Eur J Clin Microbiol Infect Dis** 1996 Dec; 15(12):954-7

Mastication of verruca vulgaris associated with esophageal papilloma: HPV-45 sequences detected in oral and cutaneous tissues. Ratoosh SL, et al.
J Am Acad Dermatol 1997 May;36(5 Pt 2):853-7

HIV-1 transmission to lymphoid cells from epidermal cell cultures derived from skin biopsies of AIDS patients [letter] Vella A, et al. **J Invest Dermatol** 1996 Jul;107(1):141-2

Detection and typing of molluscum contagiosum virus in skin lesions by using a simple lysis method and polymerase chain reaction. Nuñez A, et al. **J Med Virol** 1996 Dec;50(4):342-9

Human immunodeficiency virus type 1 strains of subtypes B and E replicate in cutaneous dendritic cell-T-cell mixtures without displaying subtype-specific tropism. Pope M, et al. **J Virol** 1997 Oct;71(10):8001-7

Pathological and microbiological findings from incidents of unusual mortality of the common frog (Rana temporaria). Cunningham AA, et al.
Philos Trans R Soc Lond B Biol Sci 1996 Nov 29; 351(1347):1539-57

Detection of human papillomavirus by the polymerase chain reaction in histologically normal penile skin adjacent to penile warts. Ward KA, et al. **Sex Transm Dis** 1994 Mar-Apr;21(2):83-8

Electron microscope studies of the replication of a British isolate of maedi visna virus in macrophages and skin cell lines. Lee WC, et al. **Vet Microbiol** 1996 Mar; 49(1-2):93-104

Epithelial neoplasms of the skin, the cutaneous mucosa and the transitional epithelium in dogs: an immunolocalization study for papillomavirus antigen. Schwegler K, et al.
Zentralbl Veterinarmed A 1997 Apr;44(2):115-23

Immunohistochemical detection of bovine viral diarrhea virus in skin biopsies: a reliable and fast diagnostic tool. Thür B, et al. **Zentralbl Veterinarmed [B]** 1996 May; 43(3):163-6

SKIN ABSORPTION

see related
ADMINISTRATION, CUTANEOUS

An experimental study on transcutaneous absorption of ethylesters of eicosapentaenoic acid (EPA; 20:5n-3) and docosahexaenoic acid (DHA; 22:6n-3) in pigs. Taugbøl O, et al. **Acta Vet Scand** 1996;37(3):273-7

Transdermal delivery of erythromycin lactobionate--implications for the therapy of gastroparesis. Brand RM, et al. **Aliment Pharmacol Ther** 1997 Jun; 11(3):589-92

Strategy for assigning a 'skin notation': a comment. de Cock J, et al. **Ann Occup Hyg** 1996 Oct;40(5):611-4

Serum concentrations of salicylic acid following topically applied salicylate derivatives. Morra P, et al.
Ann Pharmacother 1996 Sep;30(9):935-40

Cutaneous exposure to bis-(2-chloroethyl)sulfide results in neutrophil infiltration and increased solubility of 180,000 Mr subepidermal collagens. Millard CB, et al.
Biochem Pharmacol 1997 May 15;53(10):1405-12

Relationship between amount of beta-blockers permeating through the stratum corneum and skin irritation after application of beta-blocker adhesive patches to guinea pig skin. Kobayashi I, et al. **Biol Pharm Bull** 1997 Apr; 20(4):421-7

Relationship between the amount of propranolol permeating through the stratum corneum of guinea pig skin after application of propranolol adhesive patches and skin irritation. Kobayashi I, et al. **Biol Pharm Bull** 1996 Jun; 19(6):839–44

Dissociation of insulin oligomers and enhancement of percutaneous absorption of insulin. Ogiso T, et al. **Biol Pharm Bull** 1996 Aug;19(8):1049–54

Transcutaneous metal absorption following chemical burn injury. Neligan PC. **Burns** 1996 May;22(3):232–3

Evaluation for intrinsic skin permeation of unstable compounds. Lee AR, et al. **Chem Pharm Bull (Tokyo)** 1996 Aug;44(8):1621–3

l-Menthol, oleic acid and lauricidin in absorption enhancement of free and sodium salt of diclofenac using ethanol treated silicone membrane as model for skin. Maitani Y, et al. **Chem Pharm Bull (Tokyo)** 1996 Feb; 44(2):403–8

Cutaneous microdialysis for the measurement in vivo of the percutaneous absorption of organic solvents. Anderson C, et al. **Curr Probl Dermatol** 1996;25:37–46

Influence of evaporation and repeated exposure on the percutaneous absorption of organic solvents. Boman A, et al. **Curr Probl Dermatol** 1996;25:47–56

125I uptake competing with iodine absorption by the thyroid gland following povidone-iodine skin application. Furudate S, et al. **Exp Anim** 1997 Jul;46(3):197–202

Percutaneous penetration of N-nitroso-N-methyldodecylamine through human skin in vitro: application from cosmetic vehicles. Walters KA, et al. **Food Chem Toxicol** 1997 Jul;35(7):705–12

Human skin in vitro percutaneous absorption of gaseous ethylene oxide from fabric. Wester RC, et al. **Food Chem Toxicol** 1997 May;35(5):513–5

Quantitative percutaneous absorption and cutaneous distribution of binary mixtures of phenol and para-nitrophenol in isolated perfused porcine skin. Brooks JD, et al. **Fundam Appl Toxicol** 1996 Aug;32(2):233–43

Influence of solubility and permeant size on absorption and metabolism of xenobiotics in rabbit skin. Bast GE. **Hum Exp Toxicol** 1997 Aug;16(8):435–40 (20 ref.)

Skin absorption of solvent mixtures--effect of vehicles on skin absorption of toluene. Tsuruta H. **Ind Health** 1996; 34(4):369–78

The percutaneous absorption of topically applied tretinoin and its effect on endogenous concentrations of tretinoin and its metabolites after single doses or long-term use. Latriano L, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 2):S37–46

Human disodium octaborate tetrahydrate exposure following carpet flea treatment is not associated with significant dermal absorption. Krieger RI, et al. **J Expo Anal Environ Epidemiol** 1996 Jul-Sep;6(3):279–88

1-Hydroxypyrene levels in coal-handling workers at a coke oven. Malkin R, et al. **J Occup Environ Med** 1996 Nov; 38(11):1141–4

Terbutaline transdermal delivery: preformulation studies and limitations of in-vitro predictive parameters. Tenjarla S, et al. **J Pharm Pharmacol** 1996 Nov;48(11):1138–42

An unexpected finding in percutaneous absorption observed between haired and hairless guinea pig skin [letter] Hisoire G, et al. **J Pharm Sci** 1997 Mar;86(3):398–400

Percutaneous absorption of sunscreen agents from liquid paraffin: self-association of octyl salicylate and effects on skin flux. Jiang R, et al. **J Pharm Sci** 1997 Jul;86(7):791–6

Percutaneous absorption of vanilloids: in vivo and in vitro studies. Kasting GB, et al. **J Pharm Sci** 1997 Jan;86(1):142–6

Evaluation of the hairless rat as a model for in vivo percutaneous absorption. Lauer AC, et al. **J Pharm Sci** 1997 Jan;86(1):13–8

Mechanism for enhancement effect of lipid disperse system on percutaneous absorption [published erratum appears in J Pharm Sci 1996 May;85(5):546] Ogiso T, et al. **J Pharm Sci** 1996 Jan;85(1):57–64

Effect of environmental conditions on the penetration of benzene through human skin. Nakai JS, et al. **J Toxicol Environ Health** 1997 Aug 8;51(5):447–62

Dermal absorption of vaporous and liquid 2-methoxyethanol and 2-ethoxyethanol in volunteers. Kežić S, et al. **Occup Environ Med** 1997 Jan;54(1):38–43

In vitro percutaneous penetration of methyl-parathion from a commercial formulation through the human skin. Sartorelli P, et al. **Occup Environ Med** 1997 Jul;54(7):524–5

Evaluation of stereoselective transdermal transport and concurrent cutaneous hydrolysis of several ester prodrugs of propranolol: mechanism of stereoselective permeation. Ahmed S, et al. **Pharm Res** 1996 Oct;13(10):1524–9

In vivo evaluation of acyclovir prodrug penetration and metabolism through rat skin using a diffusion/bioconversion model. Bando H, et al. **Pharm Res** 1997 Jan;14(1):56–62

In vivo and in vitro percutaneous absorption of cancer preventive flavonoid apigenin in different vehicles in mouse skin. Li B, et al. **Pharm Res** 1996 Nov;13(11):1710–5

Selegiline percutaneous absorption in various species and metabolism by human skin. Rohatagi S, et al. **Pharm Res** 1997 Jan;14(1):50–5

Permeation of buprenorphine and its 3-alkyl-ester prodrugs through human skin. Stinchcomb AL, et al. **Pharm Res** 1996 Oct;13(10):1519–23

Passive drug diffusion via standardized skin mini-erosion; methodological aspects and clinical findings with new device. Svedman P, et al. **Pharm Res** 1996 Sep;13(9):1354–9

Skin penetration and sun protection factor of ultra-violet filters from two vehicles. Treffel P, et al. **Pharm Res** 1996 May;13(5):770–4

Correlation between percutaneous rates of p-aminobenzoates and their molecular structure parameters. Fu XC, et al. **Pharmazie** 1997 Aug;52(8):646–7

Advances in transdermal drug delivery. Hadgraft J. **Practitioner** 1996 Nov;240(1568):656–8

Comment on "uptake of chloroform by skin during short exposures to contaminated water" [letter] Brown HS. **Risk Anal** 1996 Feb;16(1):3

Possible oral lead intake via contaminated facial skin. Karita K, et al. **Sci Total Environ** 1997 Jun 20;199(1-2):125–31

Toxicology of topical local anesthetics. Bangha E, et al. **Skin Pharmacol** 1996;9(6):376–80 (28 ref.)

Sebaceous-gland deposition of isotretinoin after topical application: an in vitro study using human facial skin. Tschan T, et al. **Skin Pharmacol** 1997;10(3):126–34

In vitro percutaneous absorption of benzidine in complex mechanistically defined chemical mixtures [published erratum appears in Toxicol Appl Pharmacol 1997 Jun;144(2):401] Baynes RE, et al. **Toxicol Appl Pharmacol** 1996 Dec;141(2):497–506

The influence of diethyl-m-toluamide (DEET) on the percutaneous absorption of permethrin and carbaryl. Baynes RE, et al. **Toxicol Appl Pharmacol** 1997 Jun; 144(2):332–9

Comparative in vitro skin absorption and metabolism of coumarin (1,2-benzopyrone) in human, rat, and mouse. Beckley-Kartey SA, et al. **Toxicol Appl Pharmacol** 1997 Jul;145(1):34–42

Physiologically based modeling of nonsteady state dermal absorption of halogenated methanes from an aqueous solution. Jepson GW, et al. **Toxicol Appl Pharmacol** 1997 Jun;144(2):315–24

The use of mechanistically defined chemical mixtures (MDCM) to assess component effects on the percutaneous absorption and cutaneous disposition of topically exposed chemicals. I. Studies with parathion mixtures in isolated perfused porcine skin. Qiao GL, et al. **Toxicol Appl Pharmacol** 1996 Dec;141(2):473–86

The use of mechanistically defined chemical mixtures (MDCM) to assess mixture component effects on the percutaneous absorption and cutaneous disposition of topically exposed chemicals. II. Development of a general dermatopharmacokinetic model for use in risk assessment. Williams PL, et al. **Toxicol Appl Pharmacol** 1996 Dec; 141(2):487–96

DRUG EFFECTS

Terpene-enhanced transdermal permeation of water and ethanol in human epidermis. Magnusson BM, et al. **Acta Derm Venereol** 1997 Jul;77(4):264–7

Effect of topical laurocapram (Azone) on the in vitro percutaneous permeation of sodium lauryl sulfate using human skin. Szolar-Platzer C, et al. **Acta Derm Venereol** 1996 May;76(3):182–5

Effect of calcitonin gene-related peptide on sodium absorption through isolated skin of Rana esculenta. Castronuovo G, et al. **Arch Physiol Biochem** 1996; 104(2):142–7

Effect of d-limonene, alpha-pinene and cineole on in vitro transdermal human skin penetration of chlorpromazine and haloperidol. Almirall M, et al. **Arzneimittelforschung** 1996 Jul;46(7):676–80

Heparin alters transdermal transport associated with electroporation. Weaver JC, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):637–40

Effect of polyol fatty acid esters on diclofenac permeation through rat skin. Takahashi K, et al. **Biol Pharm Bull** 1996 Jun;19(6):893–6

Effects of all-trans retinoic acid and sodium lauryl sulphate on the permeability of human skin in vitro. Effendy I, et al. **Br J Dermatol** 1996 Sep;135(3):428–32

Possible enhancing mechanism of the cutaneous permeation of 4-biphenylylacetic acid by beta-cyclodextrin derivatives in hydrophilic ointment. Arima H, et al. **Chem Pharm Bull (Tokyo)** 1996 Mar;44(3):582–6

Sodium lauryl sulfate (SLS) induced irritant contact dermatitis: a correlation study between ceramides and in vivo parameters of irritation. di Nardo A, et al. **Contact Dermatitis** 1996 Aug;35(2):86–91

Effect of barrier creams: human skin in vivo. Zhai H, et al. **Contact Dermatitis** 1996 Aug;35(2):92–6

Moisturizers in the prevention of contact dermatitis. Hannuksela M. **Curr Probl Dermatol** 1996;25:214–20 (31 ref.)

Percutaneous penetration (dermatopharmacokinetics) in evaluating barrier creams. Zhai H, et al. **Curr Probl Dermatol** 1996;25:193–205 (24 ref.)

In vivo percutaneous absorption of acetochlor in the rhesus monkey: dose-response and exposure risk assessment. Wester RC, et al. **Food Chem Toxicol** 1996 Oct; 34(10):979–83

Dermal absorption of cis-1,3-dichloropropene vapour: human experimental exposure. Kežić S, et al. **Hum Exp Toxicol** 1996 May;15(5):396–9

Separation and quantitation of glycolipids as penetration modifiers in human skin using high-performance liquid chromatography-mass spectrometry with electrospray ionization. Wolf R, et al. **J Chromatogr A** 1997 Apr 4; 766(1-2):71–5

Enhancing effects of unsaturated fatty acids with various structures on the permeation of indomethacin through rat skin. Morimoto K, et al. **J Pharm Pharmacol** 1996 Nov; 48(11):1133–7

Evaluation of in-vivo transdermal absorption of cyclosporin with absorption enhancer using intradermal microdialysis in rats. Nakashima M, et al. **J Pharm Pharmacol** 1996 Nov; 48(11):1143–6

Terpene penetration enhancers in propylene glycol/water co-solvent systems: effectiveness and mechanism of action. Yamane MA, et al. **J Pharm Pharmacol** 1995 Dec; 47(12A):978–89

Effect of penetration enhancers and iontophoresis on the ultrastructure and cholecystokinin-8 permeability through porcine skin. Bhatia KS, et al. **J Pharm Sci** 1997 Sep; 86(9):1011–5

Evaluation of the effect of different fatty acids on the percutaneous absorption of metaproterenol sulfate. Elyan BM, et al. **J Pharm Sci** 1996 Jan;85(1):101–5

Evaluation of transdermal penetration enhancers using a novel skin alternative. Godwin DA, et al. **J Pharm Sci** 1997 Sep;86(9):1001–5

Mutual hairless rat skin permeation-enhancing effect of ethanol/water system and oleic acid. Kim DD, et al. **J Pharm Sci** 1996 Nov;85(11):1191–5

Effects of phospholipids on the in vitro percutaneous penetration of prednisolone and analysis of mechanism by using attenuated total reflectance-Fourier transform infrared spectroscopy. Yokomizo Y, et al. **J Pharm Sci** 1996 Nov;85(11):1220–6

Percutaneous permeation of N,N-diethyl-m-toluamide (DEET) from commercial mosquito repellents and the effect of solvent. Stinecipher J, et al. **J Toxicol Environ Health** 1997 Oct 10;52(2):119–35

Microscopic FT-IR/DSC system used to simultaneously investigate the conversion process of protein structure in porcine stratum corneum after pretreatment with skin penetration enhancers. Lin SY, et al. **Methods Find Exp Clin Pharmacol** 1996 Apr;18(3):175–81

Effect of vehicles and penetration enhancers on the in vitro and in vivo percutaneous absorption of methotrexate and edatrexate through hairless mouse skin. Chatterjee DJ, et al. **Pharm Res** 1997 Aug;14(8):1058–65

The enhancer effect of several phenyl alcohols on percutaneous penetration of 5-fluorouracil. López A, et al. **Pharm Res** 1997 May;14(5):681–5

In vitro human skin barrier modulation by fatty acids: skin permeation and thermal analysis studies. Tanojo H, et al. **Pharm Res** 1997 Jan;14(1):42–9

Macromolecules as novel transdermal transport enhancers for skin electroporation. Vanbever R, et al. **Pharm Res** 1997 May;14(5):638–44

Unsaturated glycerol monoethers as novel skin penetration enhancers. Loftsson T, et al. **Pharmazie** 1997 Jun; 52(6):463–5

Effect of permeation enhancers on the release of ketoprofen through transdermal drug delivery systems. Singh SK, et al. **Pharmazie** 1996 Oct;51(10):741–4

Effect of various vehicles on ketoprofen permeation across artificial membranes and excised rat skin. Valenta C, et al. **Pharmazie** 1996 Aug;51(8):605–6

No effect of albumin on the dermal absorption rate of hydrocortisone 21-butyrate, permethrin or diflunisal in the isolated, single-pass perfused rabbit ear. Bast GE, et al. **Skin Pharmacol** 1996;9(5):327–33

Metabolism of benzocaine during percutaneous absorption in the hairless guinea pig: acetylbenzocaine formation and activity. Kraeling ME, et al. **Skin Pharmacol** 1996; 9(3):221–30

Simultaneous absorption of copper and zinc through human skin in vitro: influence of counter-ion and vehicle. Pirot F, et al. **Skin Pharmacol** 1996;9(1):43–52

In vitro study of percutaneous absorption, cutaneous bioavailability and bioequivalence of zinc and copper from five topical formulations. Pirot F, et al. **Skin Pharmacol** 1996;9(4):259–69

Use of in vitro skin penetration data and a physiologically based model to predict in vivo blood levels of benzoic acid. Macpherson SE, et al. **Toxicol Appl Pharmacol** 1996 Oct; 140(2):436–43

Studies of multiroute exposure/dose reconstruction using physiologically based pharmacokinetic models. Roy A, et al. **Toxicol Ind Health** 1996 Mar-Apr;12(2):153–63

[Modulation of drug penetration in the skin] Kalbitz J, et al. **Pharmazie** 1996 Sep;51(9):619–37 (124 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Permethrin absorption not detected in single-pass perfused rabbit ear, and absorption with oxidation of 3-phenoxybenzyl alcohol. Bast GE, et al. **Arch Toxicol** 1997;71(3):179–86

Studies on the metabolism and disposition of the new retinoid 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl) carbamoyl]benzoic acid. 5th communication: factors affecting percutaneous absorption in rats. Mizojiri K, et al. **Arzneimittelforschung** 1997 Mar;47(3):270–5

Evaluation of Yucatan micropig skin for use as an in vitro model for skin permeation study. Fujii M, et al. **Biol Pharm Bull** 1997 Mar;20(3):249–54

Percutaneous absorption and disposition studies of

SKIN ABSORPTION

methotrexate in rabbits and rats. Lu G, et al. **Biopharm Drug Dispos** 1997 Jul;18(5):409–22

In vitro percutaneous absorption of model compounds glyphosate and malathion from cotton fabric into and through human skin. Wester RC, et al. **Food Chem Toxicol** 1996 Aug;34(8):731–5

Systemic uptake of chromium in human volunteers following dermal contact with hexavalent chromium (22 mg/L). Corbett GE, et al. **J Expo Anal Environ Epidemiol** 1997 Apr–Jun;7(2):179–89

Permeation characteristics of 8–methoxypsoralen through human skin; relevance to clinical treatment. Anigbogu AN, et al. **J Pharm Pharmacol** 1996 Apr;48(4):357–66

Importance of sebaceous glands in cutaneous penetration of an antiandrogen: target effect of liposomes. Bernard E, et al. **J Pharm Sci** 1997 May;86(5):573–8

Percutaneous absorption of salicylic acid after repeated (14–day) in vivo administration to normal, acnegenic or aged human skin. Davis DA, et al. **J Pharm Sci** 1997 Aug; 86(8):896–9

Experimental studies of methemoglobinemia due to percutaneous absorption of sodium nitrite. Saito T, et al. **J Toxicol Clin Toxicol** 1997;35(1):41–8

In vitro viable skin model. Bronaugh RL. **Pharm Biotechnol** 1996;8:375–86 (13 ref.)

Isolated perfused porcine skin flap systems. Riviere JE. **Pharm Biotechnol** 1996;8:387–407 (42 ref.)

Percutaneous absorption of biologically–active interferon–gamma in a human skin graft–nude mouse model. Short SM, et al. **Pharm Res** 1996 Jul;13(7):1020–7

Analysis of simultaneous transport and metabolism of ethyl nicotinate in hairless rat skin. Sugibayashi K, et al. **Pharm Res** 1996 Jun;13(6):855–60

Transdermal delivery of fentanyl by electroporation. II. Mechanisms involved in drug transport. Vanbever R, et al. **Pharm Res** 1996 Sep;13(9):1360–6

Multilayered dermal subcompartments for modeling chemical absorption. Bookout RL Jr, et al. **SAR QSAR Environ Res** 1996;5(3):133–50

Transdermal iontophoretic delivery of triamcinolone acetonide: a preliminary study in hairless rats. Shigeki S, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Sep; 30(3):177–81

The influence of skin moisture on the dermal absorption of propoxur in human volunteers: a consideration for biological monitoring practices. Meuling WJ, et al. **Sci Total Environ** 1997 Jun 20;199(1–2):165–72

Percutaneous absorption, excretion and metabolism of all–trans–retinoyl beta–glucuronide and of all–trans–retinoic acid in the rat. Barua AB, et al. **Skin Pharmacol** 1996;9(1):17–26

[Life threatening salicylate poisoning caused by percutaneous absorption in severe ichthyosis vulgaris] Germann R, et al. **Hautarzt** 1996 Aug;47(8):624–7 (Eng. Abstr.) **(Ger)**

[The value of oil baths for adjuvant basic therapy of inflammatory dermatoses with dry, barrier–disrupted skin] Melnik B, et al. **Hautarzt** 1996 Sep;47(9):665–72 (62 ref.) (Eng. Abstr.) **(Ger)**

[Longitudinal study of the excretion of 1–hydroxypyrene in urine after external treatment with coal tar] Nenoff P, et al. **Hautarzt** 1997 Apr;48(4):240–5 (Eng. Abstr.) **(Ger)**

[Anguilla skin: a new substrate for the study of transmucosal mucoadhesion and permeation] Burgalassi S, et al. **Boll Chim Farm** 1996 Feb;135(2):133–5 **(Ita)**

RADIATION EFFECTS

Effect of pulsed output ultrasound on the transdermal absorption of indomethacin from an ointment in rats. Asano J, et al. **Biol Pharm Bull** 1997 Mar;20(3):288–91

Difference in the enhancing effects of ultrasound on the skin permeation of polar and non–polar drugs. Ueda H, et al. **Chem Pharm Bull (Tokyo)** 1996 Oct;44(10):1973–6

SKIN AGING

Expression of the p53 protein in sun–damaged skin. Barnadas MA, et al. **Acta Derm Venereol** 1996 May;76(3):203–4

Decreased active vasodilator sensitivity in aged skin. Kenney WL, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1609–14

Generation of active oxygen species from advanced glycation end–products (AGE) under ultraviolet light A (UVA) irradiation. Masaki H, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):306–10

The hairless mouse model for photoaging. Kligman LH. **Clin Dermatol** 1996 Mar–Apr;14(2):183–95 (101 ref.)

Psychologic aspects of aging and the skin. Koblenzer CS. **Clin Dermatol** 1996 Mar–Apr;14(2):171–7 (65 ref.)

Historical observations. Dermatology. Stuttgen G. **Clin Dermatol** 1996 Mar–Apr;14(2):135–42

Therapeutic skin care in the mature patient. Draelos ZD. **Clin Plast Surg** 1997 Apr;24(2):369–77 (45 ref.)

Laser resurfacing of rhytides. Fitzpatrick RE. **Dermatol Clin** 1997 Jul;15(3):431–47 (56 ref.)

Manual resurfacing and trichloroacetic acid for the treatment of patients with widespread actinic damage. Clinical and histologic observations. Cooley JE, et al. **Dermatol Surg** 1997 May;23(5):373–9

Utilizing the ultraviolet (UV detect) camera to enhance the appearance of photodamage and other skin conditions. Fulton JE Jr. **Dermatol Surg** 1997 Mar;23(3):163–9

Yellow lesions and blackheads. Patient's face shows signs of marked sun damage, with keratoses and wrinkling. Levine N. **Geriatrics** 1996 Dec;51(12):26

The aging upper and middle face: an overview for the aesthetic surgeon. Heinz GW, et al. **Int Ophthalmol Clin** 1997 Summer;37(3):1–10 (8 ref.)

Skin aging: observations at the cellular and molecular levels. Yaar M. **Isr J Med Sci** 1996 Nov;32(11):1053–8 (37 ref.)

Age–related changes in facial skin contours and rheology. Henry F, et al. **J Am Geriatr Soc** 1997 Feb;45(2):220–2

Effects of CO2 laser pulse duration in ablation and residual thermal damage: implications for skin resurfacing. Ross EV, et al. **Lasers Surg Med** 1996;19(2):123–9

Ultrapulse CO2 laser resurfacing. Treatment for wrinkled, photodamaged skin. Krunic AL, et al. **N C Med J** 1997 May–Jun;58(3):214–7

Cutaneous facial resurfacing with the carbon dioxide laser. Biesman BS. **Ophthalmic Surg Lasers** 1996 Aug; 27(8):685–98 (62 ref.)

Enhanced proliferation and collagen synthesis of human dermal fibroblasts in chronically photodamaged skin. Chung JH, et al. **Photodermatol Photoimmunol Photomed** 1996 Apr; 12(2):84–9

Ultrapulse carbon dioxide laser with CPG scanner for full–face resurfacing for rhytids, photoaging, and acne scars. Apfelberg DB. **Plast Reconstr Surg** 1997 Jun; 99(7):1817–25

Expression of a dominant–negative type II transforming growth factor beta (TGF–beta) receptor in the epidermis of transgenic mice blocks TGF–beta–mediated growth inhibition. Wang XJ, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2386–91

Diagonal earlobe crease: a coronary risk factor, a genetic marker of coronary heart disease, or a mere wrinkle. Ancient Greco–Roman evidence. Gutiu IA, et al. **Rom J Intern Med** 1996 Jul–Dec;34(3–4):271–8 (27 ref.)

[Controlled dermabrasion with a newly developed erbium–YAG–laser system. Report of preliminary experiences] Teikemeier G, et al. **Hautarzt** 1996 Jul; 47(7):530–2 (Eng. Abstr.) **(Ger)**

[Treatment of wrinkles by Artecoll implant and resurfacing with the CO2 laser] Lemperle G, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1128–34 (Eng. Abstr.) **(Ger)**

[Facial wrinkles—ultrapulsed CO2 laser: alternative or supplement to surgical face lift?] Raulin C, et al. **Laryngorhinootologie** 1997 Jun;76(6):351–7 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Injection of all–trans retinoic acid for treatment of thin wrinkles. Personelle J, et al. **Aesthetic Plast Surg** 1997 May–Jun;21(3):196–204 (49 ref.)

Does estrogen prevent skin aging? Results from the First National Health and Nutrition Examination Survey (NHANES I). Dunn LB, et al. **Arch Dermatol** 1997 Mar; 133(3):339–42

Patient selection in the treatment of glabellar wrinkles with botulinum toxin type A injection. Pribitkin EA, et al. **Arch Otolaryngol Head Neck Surg** 1997 Mar;123(3):321–6

Effect of tretinoin emollient cream on photodamaged skin: relationship between clinical improvement and skin irritation [letter] Thorne EG, et al. **Br J Dermatol** 1996 Oct;135(4):655–6

Cosmetic use of alpha–hydroxy acids. Vidt DG, et al. **Cleve Clin J Med** 1997 Jun;64(6):327–9 (11 ref.)

Topical vitamin C in aging. Colven RM, et al. **Clin Dermatol** 1996 Mar–Apr;14(2):227–34 (58 ref.)

Retinoids in aging. Torras H. **Clin Dermatol** 1996 Mar–Apr; 14(2):207–15 (53 ref.)

Alpha–hydroxyacids in the treatment of signs of photoaging. Van Scott EJ, et al. **Clin Dermatol** 1996 Mar–Apr; 14(2):217–26 (16 ref.)

Topical retinoic acid (tretinoin) for photoaging: conceptions and misperceptions. Kligman AM. **Cutis** 1996 Mar; 57(3):142–4 (11 ref.)

Citric acid increases viable epidermal thickness and glycosaminoglycan content of sun–damaged skin. Bernstein EF, et al. **Dermatol Surg** 1997 Aug;23(8):689–94

Cosmetic therapy with botulinum toxin, Anecdotal memoirs [editorial] Klein AW. **Dermatol Surg** 1996 Sep;22(9):757–9

Treatment of skin aging with topical estrogens. Schmidt JB, et al. **Int J Dermatol** 1996 Sep;35(9):669–74

Cosmetic botulinum toxin injections. Carter SR, et al. **Int Ophthalmol Clin** 1997 Summer;37(3):69–79 (51 ref.)

Dermatoheliosis? [letter; comment] Bart RS. **J Am Acad Dermatol** 1996 Oct;35(4):649–50. Comment on: J Am Acad Dermatol 1995 Dec;33(6):941–6.

Improving the cosmetic appearance of photoaged skin with glycolic acid. Bergfeld W, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1011–3

Topical tretinoin: photodamage treatment overview and developmental toxicology studies. Introduction. Gilchrest BA, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 2):S25–6

Treatment of photodamage with topical tretinoin: an overview. Gilchrest BA. **J Am Acad Dermatol** 1997 Mar; 36(3 Pt 2):S27–36 (29 ref.)

Tretinoin emollient cream for photodamaged skin: results of 48–week, multicenter, double–blind studies. Olsen EA, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):217–26

Sustained improvement in photodamaged skin with reduced tretinoin emollient cream treatment regimen: effect of once–weekly and three–times–weekly applications. Olsen EA, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):227–30

Cutaneous lymphangiectases associated with severe photoaging and topical corticosteroid application. Pena JM, et al. **J Cutan Pathol** 1996 Apr;23(2):175–81

The effects of trypsin on apoptosis, utriculi size, and skin elasticity in the Rhino mouse. Seiberg M, et al. **J Invest Dermatol** 1997 Sep;109(3):370–6

Cosmetic upper–facial rejuvenation with botulinum. Ellis DA, et al. **J Otolaryngol** 1997 Apr;26(2):92–6

Comparative effect of short–term topical tretinoin and glycolic acid on mechanical properties of photodamaged facial skin in HRT–treated menopausal women. Piérard GE, et al. **Maturitas** 1996 Apr;23(3):273–7

Topical drugs for aging skin. **Med Lett Drugs Ther** 1997 Aug 15;39(1007):78–9

Topical treatments for photoaged skin. Separating the reality from the hype. Kligman AM. **Postgrad Med** 1997 Aug; 102(2):115–8, 123–6 (11 ref.)

Resurfacing with topical agents. Lewis AB, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):139–44 (26 ref.)

Deep chemical peeling. Matarasso SL, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):155–61 (33 ref.)

Oxyhemoglobin is a quantifiable measure of experimentally induced chronic tretinoin inflammation and accommodation in photodamaged skin. Kollias N, et al. **Skin Pharmacol** 1997;10(2):97–104

PATHOLOGY

Botulinum toxin for correction of fronto–glabella wrinkles: preliminary evaluation. Matsudo PK. **Aesthetic Plast Surg** 1996 Sep–Oct;20(5):439–41

White fibrous papulosis of the neck in three Sicilian patients. Siragusa M, et al. **Australas J Dermatol** 1996 Nov; 37(4):202–4

A review of skin ageing and its medical therapy. Gilchrest BA. **Br J Dermatol** 1996 Dec;135(6):867–75 (50 ref.)

Actinic rhinophyma: an old disorder with a new name. Kligman AM. **Cutis** 1996 Jun;57(6):389–92

A case of acrogeria associated with late–onset focal dermal elastosis. Tajima S, et al. **Dermatology** 1996;192(3):264–8

Epidermal innervation correlates with severity of photodamage. A quantitative ultrastructural study. Toyoda M, et al. **Exp Dermatol** 1996 Oct;5(5):260–6

Treatment of skin aging with topical estrogens. Schmidt JB, et al. **Int J Dermatol** 1996 Sep;35(9):669–74

Fluorescence photography in the evaluation of hyperpigmentation in photodamaged skin. Kollias N, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):226–30

Cutaneous lymphangiectases associated with severe photoaging and topical corticosteroid application. Pena JM, et al. **J Cutan Pathol** 1996 Apr;23(2):175–81

Ultrastructural evidence for the participation of Langerhans cells in cutaneous photoaging processes: a quantitative comparative study. Toyoda M, et al. **J Dermatol Sci** 1997 Feb;14(2):87–100

Elastic fiber during development and aging. Pasquali–Ronchetti I, et al. **Microsc Res Tech** 1997 Aug 15;38(4):428–35 (85 ref.)

If it's dead, does it make any difference how it got there? Miller TA, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2056–7

Histologic effects of the high–energy pulsed CO2 laser on photoaged facial skin. Stuzin JM, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2036–50; discussion 2051–5

Aesthetic and anatomic analysis of the aging skin. Glogau RG. **Semin Cutan Med Surg** 1996 Sep;15(3):134–8 (5 ref.)

[From cellular senescence to seven ways of skin aging] Piérard GE, et al. **Rev Med Liege** 1997 Apr;52(4):285–8 (23 ref.) **(Fre)**

PHYSIOLOGY

Sebum and water content in the skin of aged immobilized patients. Aisen E, et al. **Acta Derm Venereol** 1997 Mar; 77(2):142–3

Integrity and permeability barrier function of photoaged human epidermis [letter] Reed JT, et al. **Arch Dermatol** 1997 Mar;133(3):395–6

Peeling agents and irritants, unlike tretinoin, do not stimulate collagen synthesis in the photoaged hairless mouse. Kligman LH, et al. **Arch Dermatol Res** 1996 Sep; 288(10):615–20

Skin aging and photoaging: an outlook. Goihman–Yahr M. **Clin Dermatol** 1996 Mar–Apr;14(2):153–60 (58 ref.)

Soaps and detergents in the elderly. Graham–Brown R. **Clin Dermatol** 1996 Jan–Feb;14(1):85–7 (28 ref.)

Commentary. Aging. Ledo A. **Clin Dermatol** 1996 Mar–Apr; 14(2):133

The premature aging syndromes. Pesce K, et al. **Clin Dermatol** 1996 Mar–Apr;14(2):161–70 (70 ref.)

Wound healing in elderly human skin. Strigini L, et al. **Clin Dermatol** 1996 Mar–Apr;14(2):197–206 (53 ref.)

Does hormonal skin aging exist? A study of the influence of different hormone therapy regimens on the skin of postmenopausal women using non–invasive measurement techniques [see comments] Callens A, et al. **Dermatology** 1996;193(4):289–94. Comment in: Dermatology 1996 ;193(4):273.

The quandary of climacteric skin ageing [editorial; comment] Piérard GE. **Dermatology** 1996;193(4):273–4. Comment on: Dermatology 1996 ;193(4):289–94.

Unusual wrinkle formation after temporary skin fixation

followed by UVB irradiation in hairless mouse skin. Takema Y, et al. **Exp Dermatol** 1996 Jun;5(3):145–9
Effect of reactive oxygen species on the elastin mRNA expression in cultured human dermal fibroblasts. Kawaguchi Y, et al. **Free Radic Biol Med** 1997;23(1):162–5
Hyaluronic acid and skin: wound healing and aging. Manuskiatti W, et al. **Int J Dermatol** 1996 Aug;35(8):539–44 (82 ref.)
The aging skin. Bergfeld WF. **Int J Fertil Womens Med** 1997 Mar–Apr;42(2):57–66 (20 ref.)
Optimal ratios of topical stratum corneum lipids improve barrier recovery in chronologically aged skin. Zettersten EM, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):403–8
Age-related changes of water content in the rat skin. Jung JW, et al. **J Dermatol Sci** 1997 Jan;14(1):12–9
Characterization of dermatologic changes in geriatric rhesus macaques. Huneke RB, et al. **J Med Primatol** 1996 Dec; 25(6):404–13
Changes of the basement membrane and type IV collagen in human skin during aging. Vázquez F, et al. **Maturitas** 1996 Nov;25(3):209–15
Topical drugs for aging skin. **Med Lett Drugs Ther** 1997 Aug 15;39(1007):78–9
Elastic fiber-associated proteins of skin in development and photoaging. Werth VP, et al. **Photochem Photobiol** 1996 Mar;63(3):308–13
[From cellular senescence to seven ways of skin aging] Piérard GE, et al. **Rev Med Liege** 1997 Apr;52(4):285–8 (23 ref.) **(Fre)**
[Skin aging] **Gac Med Mex** 1994 Jul–Aug;130(4):275–7 (0 ref.) **(Spa)**

RADIATION EFFECTS

Sun exposure, sunscreens, and skin cancer prevention: a year-round concern. Farmer KC, et al. **Ann Pharmacother** 1996 Jun;30(6):662–73 (87 ref.)
The effect of photodamage on dermal extracellular matrix. Bernstein EF, et al. **Clin Dermatol** 1996 Mar–Apr; 14(2):143–51 (72 ref.)
Sustained improvement in photodamaged skin with reduced tretinoin emollient cream treatment regimen: effect of once-weekly and three-times-weekly applications. Olsen EA, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):227–30
Tretinoin emollient cream for photodamaged skin: results of 48-week, multicenter, double-blind studies. Olsen EA, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):217–26
Ultrastructural evidence for the participation of Langerhans cells in cutaneous photoaging processes: a quantitative comparative study. Toyoda M, et al. **J Dermatol Sci** 1997 Feb;14(2):87–100
Intrinsically aged epidermis displays diminished UVB-induced alterations in barrier function associated with decreased proliferation. Haratake A, et al. **J Invest Dermatol** 1997 Mar;108(3):319–23
Sunlight: an environmental toxin for humans. A primer to advise patients. Morison WL. **Md Med J** 1997 May–Jun; 46(5):227–30
[Effect of single UVA and UVB irradiation on the surface composition and viscoelastic properties of skin in vivo] Habig J, et al. **Hautarzt** 1996 Jul;47(7):515–20 (Eng. Abstr.) **(Ger)**

SKIN APPENDAGE DISEASES

PATHOLOGY

Microcystic adnexal carcinoma with extensive sebaceous differentiation. Pujol RM, et al. **Am J Dermatopathol** 1997 Aug;19(4):358–62
Cutaneous adnexal neoplasms in biopsy specimens processed in the Department of Pathology, University of Malaya. Jayalakshmi P, et al. **Ann Acad Med Singapore** 1996 Jul; 25(4):522–5
Areolar sebaceous hyperplasia: a case report. Belinchón I, et al. **Cutis** 1996 Jul;58(1):63–4 (8 ref.)

SKIN, ARTIFICIAL

Evaluation of acellular human dermis as a dermal analog in a composite skin graft. Medalie DA, et al. **ASAIO J** 1996 Sep–Oct;42(5):M455–62
In vitro reconstructed skin models for wound coverage in deep burns. Berthod F, et al. **Br J Dermatol** 1997 Jun; 136(6):809–16 (71 ref.)
An investigation into the potential of extracellular matrix factors for attachment and proliferation of human keratinocytes on skin substitutes. Daniels JT, et al. **Burns** 1997 Feb;23(1):26–31
Human skin histology as demonstrated by Herovici's stain: a guide for the improvement of dermal substitutes for use with cultured keratinocytes? Fitzgerald AM, et al. **Burns** 1996 May;22(3):200–2
Evaluation of artificial skin (Integra) in a rodent model. King WW, et al. **Burns** 1997 Mar;23 Suppl 1:S30–2
Dispase/detergent treated dermal matrix as a dermal substitute. Takami Y, et al. **Burns** 1996 May;22(3):182–90
Characterization of label-retaining cells in the epidermis of a human skin equivalent. Graeter LJ, et al. **Cell Prolif** 1996 Dec;29(12):679–88
Reduced engraftment and wound closure of cryopreserved cultured skin substitutes grafted to athymic mice. Harriger MD, et al. **Cryobiology** 1997 Sep;35(2):132–42
Collagen fiber architecture of a cultured dermal tissue. Sacks MS, et al. **J Biomech Eng** 1997 Feb;119(1):124–7
Glutaraldehyde crosslinking of collagen substrates inhibits degradation in skin substitutes grafted to athymic mice. Harriger MD, et al. **J Biomed Mater Res** 1997 May; 35(2):137–45
Clinical trials of a biosynthetic temporary skin replacement, Dermagraft-Transitional Covering, compared with cryopreserved human cadaver skin for temporary coverage of excised burn wounds. Hansbrough JF, et al. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 1):43–51
A multicenter clinical trial of a biosynthetic skin replacement, Dermagraft-TC, compared with cryopreserved human cadaver skin for temporary coverage of excised burn wounds. Purdue GF, et al. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 1):52–7
Integrin and matrix molecule expression in cultured skin replacements. Rennekampff HO, et al. **J Burn Care Rehabil** 1996 May–Jun;17(3):213–21
Permanent grafting of living skin substitutes: surgical parameters to control for successful results. Xu W, et al. **J Burn Care Rehabil** 1996 Jan–Feb;17(1):7–13
Surface electrical capacitance as a noninvasive index of epidermal barrier in cultured skin substitutes in athymic mice. Boyce ST, et al. **J Invest Dermatol** 1996 Jul; 107(1):82–7
Increased oligonucleotide permeability in keratinocytes of artificial skin correlates with differentiation and altered membrane function [corrected and republished article originally printed in J Invest Dermatol 1996 Mar;106(3):412–8] Giachetti C, et al. **J Invest Dermatol** 1996 Aug;107(2):256–62
Interleukin-8 is induced in skin equivalents and is highest in those derived from psoriatic fibroblasts. Konstantinova NV, et al. **J Invest Dermatol** 1996 Oct;107(4):615–21
Evaluation of transdermal penetration enhancers using a novel skin alternative. Godwin DA, et al. **J Pharm Sci** 1997 Sep;86(9):1001–5
The use of artificial dermis on the donor defect of the free forearm flap. Tane N, et al. **J Reconstr Microsurg** 1996 May;12(4):215–20
Three-dimensional cultures of keratinocytes and an application to in vitro-amyloid production of cutaneous amyloidosis. Horiguchi Y, et al. **Microsc Res Tech** 1997 Aug 15;38(4):387–93
In vitro bioartificial skin culture model of tissue rejection and inflammatory/immune mechanisms. Strande LF, et al. **Transplant Proc** 1997 Jun;29(4):2118–9
Grafting on nude mice of living skin equivalents produced using human collagens. López Valle CA, et al. **Transplantation** 1996 Aug 15;62(3):317–23

UTILIZATION

The evolutionary development of biologic dressings and skin substitutes. Pruitt BA Jr. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 2):S2–5

SKIN CARE

Treatment of atopic dermatitis in children: the importance of skin care and environmental control. Ganir EM, et al. **Acta Paediatr Jpn** 1996 Dec;38(6):702–4
New developments in cosmetics and skin care products. Draelos ZD. **Adv Dermatol** 1997;12:3–17; discussion 18 (74 ref.)
Moisturizers: adjunct therapy and advising patients. Jackson EM. **Am J Contact Dermat** 1996 Dec;7(4):247–50 (9 ref.)
Soaps, shampoos, and detergents: a scientific soap opera. **Clin Dermatol** 1996 Jan–Feb;14(1):1–132
Entering the 21st century: future perspectives. Wolf R. **Clin Dermatol** 1996 Jan–Feb;14(1):129–32
A model to assess the efficacy of moisturizers--the quantification of soap-induced xerosis by image analysis of adhesive-coated discs (D-Squames). Gammal CE, et al. **Clin Exp Dermatol** 1996 Sep;21(5):338–43
Moisturizers in the prevention of contact dermatitis. Hannuksela M. **Curr Probl Dermatol** 1996;25:214–20 (31 ref.)

ADVERSE EFFECTS

The effect of detergents on skin pH and its consequences. Korting HC, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):23–7 (29 ref.)
The effects of detergents on hydration and skin surface lipids. Thune P. **Clin Dermatol** 1996 Jan–Feb;14(1):29–33 (33 ref.)
Skin scraping, cupping, and moxibustion that may mimic physical abuse. Look KM, et al. **J Forensic Sci** 1997 Jan; 42(1):103–5 (9 ref.)
[Prevalence of skin disorders associated with the use of bleaching cosmetics by Lome women] Pitche P, et al. **Sante** 1997 May–Jun;7(3):161–4 (Eng. Abstr.) **(Fre)**

HISTORY

Soaps: from the Phoenicians to the 20th century--a historical review. Routh HB, et al. **Clin Dermatol** 1996 Jan–Feb; 14(1):3–6

METHODS

Efficacy of clean v sterile surgical prep kits. Pearce BA, et al. **AORN J** 1997 Sep;66(3):464–70
Urea-containing moisturizers influence barrier properties of normal skin. Loden M. **Arch Dermatol Res** 1996 Feb; 288(2):103–7
A comparative study of eyelid cleaning regimens in chronic blepharitis. Key JE. **CLAO J** 1996 Jul;22(3):209–12
Soaps and detergents in the elderly. Graham-Brown R. **Clin Dermatol** 1996 Jan–Feb;14(1):85–7 (28 ref.)
Soaps and detergents in skin diseases. Hannuksela A, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):77–80 (37 ref.)
Mineral waters: instead of soap or better than soap? Lotti TM, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):101–4 (28 ref.)
Effects of detergents on acne. Solomon BA, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):95–9 (8 ref.)
Soaps and detergents in children. Yamamoto K. **Clin Dermatol** 1996 Jan–Feb;14(1):81–4 (8 ref.)
Pressure ulcers. Local wound care. Goode PS, et al. **Clin Geriatr Med** 1997 Aug;13(3):543–52 (20 ref.)
Therapeutic skin care in the mature patient. Draelos ZD. **Clin Plast Surg** 1997 Apr;24(2):369–77 (45 ref.)
Skin care of the normal newborn. Liou LW, et al. **Cutis** 1997 Apr;59(4):171–4 (43 ref.)
The "K" test for dosage of topical medication. Shelley WB, et al. **Cutis** 1997 Jul;60(1):40
The aging skin. Bergfeld WF. **Int J Fertil Womens Med** 1997 Mar–Apr;42(2):57–66 (20 ref.)
Effect of standardized approach to the care of the extremely low birthweight infant. Furdon SA, et al. **J Nurs Care Qual** 1997 Aug;11(6):42–51

NURSING

Maintaining skin integrity during radiation therapy. Korinko A, et al. **Am J Nurs** 1997 Feb;97(2):40–4
Skin care rituals that do more harm than good. Skewes SM. **Am J Nurs** 1996 Oct;96(10):33–5

PSYCHOLOGY

Summer sun exposure: knowledge, attitudes, and behaviors of Midwest adolescents. Robinson JK, et al. **Prev Med** 1997 May–Jun;26(3):364–72

STANDARDS

Skin care rituals that do more harm than good. Skewes SM. **Am J Nurs** 1996 Oct;96(10):33–5
Proposed recommended practices for surgical skin preparation. Association of Operating Room Nurses. **AORN J** 1996 Jan;63(1):221–7
Recommended practices for skin preparation of patients. Association of Operating Room Nurses. **AORN J** 1996 Nov;64(5):813–6
Skin integrity in the pediatric population: preventing and managing pressure ulcers. Quigley SM, et al. **J Soc Pediatr Nurs** 1996 Apr–Jun;1(1):7–18 (35 ref.)

SKIN DISEASES

see related

DERMATOLOGIC AGENTS

1920–1995, Volumes 1–75, subject index. **Acta Derm Venereol Suppl (Stockh)** 1996;194 (Pt 1):1–99
1920–1995, Volumes 1–75, author index. **Acta Derm Venereol Suppl (Stockh)** 1996;194 (Pt 2):1–269
Degos' disease: radiological and immunological aspects. Yoshikawa H, et al. **Acta Neurol Scand** 1996 Nov; 94(5):353–6
Dermatoses in newborns. Treadwell PA. **Am Fam Physician** 1997 Aug;56(2):443–50 (19 ref.)
Something new and different in dermatopathology: the 16th Colloquium of the International Society of Dermatopathology, Cancun, Mexico, November 8–11, 1995. Magaña-Garcia M, et al. **Am J Dermatopathol** 1997 Feb;19(1):97–100
Report of the workshop on training clinical researchers in arthritis and musculoskeletal and skin diseases [letter] DiGiovanna JJ, et al. **Arch Dermatol** 1997 Feb;133(2):241–2
Clinicopathologic findings in the Bannayan-Riley-Ruvalcaba syndrome. Fargnoli MC, et al. **Arch Dermatol** 1996 Oct; 132(10):1214–8
The expanding clinical spectrum of multisystem disease associated with eosinophilia [editorial; comment] Kaufman LD, et al. **Arch Dermatol** 1997 Feb;133(2):225–7. Comment on: Arch Dermatol 1997 Feb;133(2):203–6.
On standard definitions: 33 years hence [letter] Lewis EJ, et al. **Arch Dermatol** 1997 Sep;133(9):1169
Teledermatology and underserved populations [published erratum appears in Arch Dermatol 1997 Jul;133(7):819] Norton SA, et al. **Arch Dermatol** 1997 Feb;133(2):197–200
Acral peeling skin syndrome [letter] Shwayder T, et al. **Arch Dermatol** 1997 Apr;133(4):535–6
The Americans With Disabilities Act and dermatologists. Vaswani SK, et al. **Arch Dermatol** 1997 Jun;133(6):695–8
Teledermatology in the nursing home. Zelickson BD, et al. **Arch Dermatol** 1997 Feb;133(2):171–4
XXIV Annual meeting of the Arbeitsgemeinschaft Dermatologische Forschung. Leipzig, Germany, 24–26 January 1997. Abstracts. **Arch Dermatol Res** 1997;289 Suppl:A1–64, I–II
British Association of Dermatologist annual meeting. Harrogate, United Kingdom, 1–5 July 1997. Abstracts. **Br J Dermatol** 1997 Jul;137 Suppl 50:15–68
British Association of Dermatologists Annual Meeting. Bournemouth, United Kingdom, 2–6 July 1996. Abstracts.

Br J Dermatol 1996 Jul;135 Suppl 47:1–63

Vulval skin disease and the gynaecologist. Evans S. **Br J Hosp Med** 1997 Jun 4–17;57(11):579–81 (3 ref.)

Dermatologic problems in podiatric sports medicine. King MJ. **Clin Podiatr Med Surg** 1997 Jul;14(3):511–24 (9 ref.)

Skin disorders in black children. Laude TA. **Curr Opin Pediatr** 1996 Aug;8(4):381–5 (28 ref.)

Common dermatologic manifestations of cutaneous exposure to petroleum and its derivatives. Beasley KL, et al. **Cutis** 1996 Jul;58(1):59–62 (13 ref.)

Psychopharmacology for dermatologic patients. Koo J, et al. **Dermatol Clin** 1996 Jul;14(3):509–23 (53 ref.)

Case of the month: a newborn with tight skin and joint contractures. Das-Kundu S, et al. **Eur J Pediatr** 1996 Nov; 155(11):987–9

Chronic infantile neurological cutaneous articular syndrome in a patient from Japan. Miura M, et al. **Eur J Pediatr** 1997 Aug;156(8):624–6

Leukokeratoderma estrovale digitorum inversa [letter; comment] Holubar K. **J Am Acad Dermatol** 1997 Apr; 36(4):655. Comment on: J Am Acad Dermatol 1996 Jun;34(6):1074–6.

Special issue: The Symposium of World Dermatology Update held in conjunction with the 59th annual meeting of Tokyo Dermatological Society. **J Dermatol** 1996 Nov; 23(11):727–844

Mastocytosis: new understandings in cutaneous pathophysiology. Lazarus GS. **J Dermatol** 1996 Nov; 23(11):769–72 (15 ref.)

An update of the benign proliferative monocyte-macrophage and dendritic cell disorders. Moschella SL. **J Dermatol** 1996 Nov;23(11):805–15 (56 ref.)

Annual Congress of Dermatologic Research '97. Tours, France, April 10–11, 1997. Abstracts. **J Invest Dermatol** 1997 May;108(5):815–32

Sebaceous gland, acne and related disorders--basic and clinical research, clinical entities and treatment. IV International Dermatology Symposium. Berlin, Germany, April 11–13, 1997. Abstracts. **J Invest Dermatol** 1997 Mar; 108(3):371–98

Dermatologic disorders diminish quality of life [news] Lamberg L. **JAMA** 1997 Jun 4;277(21):1663

Dermatologic complications of HIV infection. Myskowski PL, et al. **Med Clin North Am** 1996 Nov;80(6):1415–35 (75 ref.)

Non-oral pyogenic granuloma in pregnancy: a report of two cases. Smulian JC, et al. **Obstet Gynecol** 1994 Oct;84(4 Pt 2):672–4

Mucocutaneous paraneoplastic syndromes. Cohen PR, et al. **Semin Oncol** 1997 Jun;24(3):334–59 (87 ref.)

[Dermatology in current medicine] Kint A. **Verh K Acad Geneeskd Belg** 1997;59(1):5–12 (Eng. Abstr.) **(Dut)**

[Dermatology meeting of Paris. 20–23 November 1996. Abstracts] **Ann Dermatol Venereol** 1996;123 Suppl 1:S1–233 **(Fre)**

[Dermatology--guidelines and quality assurance for diagnosis and therapy. 39th Session of the German Dermatologic Society, Association of German-language Dermatologists. Karlsruhe, 23–26 April 1997. Abstracts] **Hautarzt** 1997 Apr;48 Suppl 1:S1–138 **(Ger)**

[Alveolar hemorrhage, skin eruption, and gastrointestinal bleeding accompanied by crescentric glomerulonephritis in a patient with cytoplasmic anti-neutrophil cytoplasmic antibody] Kishimoto N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Jul;34(7):790–5 (Eng. Abstr.) **(Jpn)**

[Dermatological examination and treatment on the aged] Yamamoto T. **Nippon Ronen Igakkai Zasshi** 1996 Jun; 33(6):424–9 (7 ref.) **(Jpn)**

[Anticentromere antibodies and lung disease without skin involvement] Fernández-Fernández FJ, et al. **An Med Interna** 1997 Apr;14(4):196–8 (15 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

Eosinophilic myositis with eosinophilic cellulitislike skin lesions. Association with increased serum levels of eosinophil cationic protein and interleukin-5 [see comments] Trüeb RM, et al. **Arch Dermatol** 1997 Feb; 133(2):203–6. Comment in: Arch Dermatol 1997 Feb;133(2):225–7.

Eosinophil cationic protein (ECP) level and its correlation with eosinophil number or IgE level of peripheral blood in patients with various skin diseases. Kim TY, et al. **J Dermatol Sci** 1997 Aug;15(2):89–94

Bullous pemphigoid and linear IgA dermatosis sera recognize a similar 120-kDa keratinocyte collagenous glycoprotein with antigenic cross-reactivity to BP180. Pas HH, et al. **J Invest Dermatol** 1997 Apr;108(4):423–9

CHEMICALLY INDUCED

Sensitive skin: perceptions, evaluation, and treatment. Draelos ZD. **Am J Contact Dermat** 1997 Jun;8(2):67–78 (113 ref.)

Cutaneous histopathologic features in weanling pigs after exposure to three different doses of liquid sulfur mustard. Smith KJ, et al. **Am J Dermatopathol** 1996 Oct;18(5):515–20

Drug-induced pseudolymphoma and hypersensitivity syndrome. Two different clinical entities. Callot V, et al. **Arch Dermatol** 1996 Nov;132(11):1315–21

Nasal septum lesions, skin lesions, and blood chemistry abnormalities in electroplate factory workers in Taiwan. Kuo HW, et al. **Arch Environ Health** 1996 Nov-Dec; 51(6):480

Hospitalization for serious blood and skin disorders following co-trimoxazole. Myers MW, et al. **Br J Clin Pharmacol** 1997 Jun;43(6):649–51

Hospitalization for serious blood and skin disorders following use of co-trimoxazole. Myers MW, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):446–8

Dose-dependent appearance and disappearance of amiodarone-induced skin pigmentation. Kounis NG, et al. **Clin Cardiol** 1996 Jul;19(7):592–4

Cutaneous complications of hormonal replacement therapy. Mor Z, et al. **Clin Dermatol** 1997 Jan-Feb;15(1):147–54 (88 ref.)

Cytokines. Shrum JP. **Clin Dermatol** 1996 Jul-Aug; 14(4):331–6 (67 ref.)

Intradermal challenge with interleukin-8 causes tissue oedema and neutrophil accumulation in atopic and non-atopic human subjects. Douglass J, et al. **Clin Exp Allergy** 1996 Dec;26(12):1371–9

Propylthiouracil-induced cutaneous vasculitis. Yarman S, et al. **Int J Clin Pharmacol Ther** 1997 Jul;35(7):282–6

Cutaneous granulomas caused by an aluminum-zirconium complex: an ingredient of antiperspirants. Montemarano AD, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):496–8

Verification of exposure to sulfur mustard in two casualties of the Iran-Iraq conflict. Benschop HP, et al. **J Anal Toxicol** 1997 Jul-Aug;21(4):249–51

Cutaneous lymphangiectases associated with severe photoaging and topical corticosteroid application. Pena JM, et al. **J Cutan Pathol** 1996 Apr;23(2):175–81

Scleroderma and eosinophilic fasciitis in patients taking fosinopril [letter] Biasi D, et al. **J Rheumatol** 1997 Jun; 24(6):1242

Comparative histopathologic evaluation of animal studies: murine studies with L-tryptophan and constitutents. Brown WR. **J Rheumatol Suppl** 1996 Oct;46:99–108; discussion 108–10

Risk of serious cutaneous disorders after initiation of use of phenytoin, carbamazepine, or sodium valproate: a record linkage study. Tennis P, et al. **Neurology** 1997 Aug; 49(2):542–6

Skin reactions to pesticides. O'Malley MA. **Occup Med** 1997 Apr-Jun;12(2):327–45 (81 ref.)

Drug-induced antisynthetase syndrome. Thickett DR, et al. **Postgrad Med J** 1997 Mar;73(857):165–6

Arsenic poisoning in West Bengal [letter; comment] Saha DP. **Science** 1996 Nov 22;274(5291):1287. Comment on: Science 1996 Oct 11;274(5285):174–5.

Drug-induced pseudolymphoma and drug hypersensitivity syndrome (Drug Rash with Eosinophilia and Systemic Symptoms: DRESS). Bocquet H, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):250–7 (70 ref.)

Warfarin and heparin-induced skin necrosis and the purple toe syndrome: infrequent complications of anticoagulant treatment. Sallah S, et al. **Thromb Haemost** 1997 Aug; 78(2):785–90 (96 ref.)

[Prevalence of skin disorders associated with the use of bleaching cosmetics by Lome women] Pitche P, et al. **Sante** 1997 May-Jun;7(3):161–4 (Eng. Abstr.) **(Fre)**

[Heparin-associated platelet aggregation syndrome with skin necrosis during hemodialysis] Bredlich RO, et al. **Dtsch Med Wochenschr** 1997 Mar 14;122(11):328–32 (Eng. Abstr.) **(Ger)**

[Sarcoidosis in interferon-alpha therapy] Otte HG, et al. **Hautarzt** 1997 Jul;48(7):482–7 (Eng. Abstr.) **(Ger)**

[Severe necrosis during treatment with interferon beta-1b (letter)] Albani C, et al. **Minerva Med** 1997 Jun;88(6):271–2 **(Ita)**

CLASSIFICATION

"New" diseases in dermatopathology. Rapini RP. **Adv Dermatol** 1997;12:213–35; discussion 236 (78 ref.)

COMPLICATIONS

Acquired zosteriform naevus flammeus: a cutaneous marker of central nervous system angiomatosis [letter] Requena L, et al. **Acta Derm Venereol** 1996 Mar;76(2):165–6

Unusual sarcoidosis in a child [letter] Rodríguez-Núñez A. **Acta Paediatr** 1997 Jan;86(1):119

Case of malignant lymphoma associated with primary systemic plasmacytosis with polyclonal hypergammaglobulinemia. Nitta Y. **Am J Dermatopathol** 1997 Jun;19(3):289–93

Intraepidermal neutrophilic IgA dermatosis in a patient with advanced human immunodeficiency virus infection [letter] Muldrow ME, et al. **Arch Dermatol** 1997 May;133(5):667–8

Elastosis perforans serpiginosa associated with unilateral atrophoderma of Pasini and Pierini in an individual with 47,XYY karyotype [letter] Armstrong DK, et al. **Br J Dermatol** 1997 Jul;137(1):158–60

Salivary gland lymphoplasmacytoid lymphoma with nodular cutaneous amyloid deposition and lambda chain paraproteinaemia. Badell A, et al. **Br J Dermatol** 1996 Aug; 135(2):327–9

Cutaneous keratocyst in naevoid basal cell carcinoma syndrome. Baselga E, et al. **Br J Dermatol** 1996 Nov; 135(5):810–2

Ectopic respiratory epithelium associated with multiple malformations. Mahler V, et al. **Br J Dermatol** 1997 Jun; 136(6):933–4

Post-zoster eosinophilic dermatosis [letter; comment] Mitsuhashi Y, et al. **Br J Dermatol** 1997 Mar;136(3):465–6. Comment on: Br J Dermatol 1996 Mar;134(3):504–9.

Graft-versus-host disease-like eruption in a patient with non-Hodgkin's lymphoma. Parkes IR, et al. **Br J Dermatol** 1997 Jul;137(1):137–9

Nutritional deficiency and the skin in Shwachman syndrome [letter] Rybojad MR, et al. **Br J Dermatol** 1996 Aug; 135(2):340–2

Hyper-IgE multicentric Castleman's disease: eosinophilic skin eruption, generalized lymphadenopathy, and polyclonal hyperimmunoglobulinaemia with an extremely high serum IgE level [letter] Ujihara M, et al. **Br J Dermatol** 1996 Aug;135(2):339–40

Isotopic response [letter; comment] Wolf R, et al. **Br J Dermatol** 1997 Mar;136(3):466–7. Comment on: Br J Dermatol 1996 Mar;134(3):504–9. Comment on: Br J Dermatol 1996 Mar;134(3):606.

Cutaneous Rosai-Dorfman disease manifestating as recurrent breast tumor: a case report. Wang JS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Apr; 59(4):269–73

Cutis marmorata telangiectatica congenita with cerebral and ophthalmic anomalies: report of one case. Mu SC, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Jan-Feb;38(1):65–8

Nutrition and the skin. Ryan AS, et al. **Clin Dermatol** 1996 Jul-Aug;14(4):389–406

Human immunodeficiency virus in women: mucocutaneous manifestations. Wright SW, et al. **Clin Dermatol** 1997 Jan-Feb;15(1):93–111 (202 ref.)

Cutaneous macular amyloidosis associated with multiple endocrine neoplasia 2A. de Argila D, et al. **Clin Exp Dermatol** 1996 Jul;21(4):313–4

Endobronchial involvement in a patient presenting with cutaneous sarcoid. Weller R, et al. **Clin Exp Dermatol** 1996 May;21(3):239–40

Massive subcutaneous and intraosseous fat necrosis associated with pancreatitis. Natural evolution of the radiographic picture. Rodriguez M, et al. **Clin Rheumatol** 1997 Mar; 16(2):199–203

Generalized tuberous xanthoma with type IV hyperlipoproteinemia. Cho HR, et al. **Cutis** 1997 Jun; 59(6):315–8

Dermatologic findings in HIV-1-infected patients: a prospective study with emphasis on CD4+ cell count. Reynaud-Mendel B, et al. **Dermatology** 1996;192(4):325–8

Necrobiosis lipoidica and silicotic granulomas on Muller's phlebectomy scars. Vion B, et al. **Dermatology** 1997; 194(1):55–8

Malignant melanoma in xeroderma pigmentosum patients: report of five cases. Kocabalkan O, et al. **Eur J Surg Oncol** 1997 Feb;23(1):43–7

Malignant melanoma of the choroid in association with oculodermal melanocytosis: a case report. Biswas J, et al. **Indian J Ophthalmol** 1995 Sep;43(3):140–1

Dermatologic disorders associated with viral hepatitis infections [see comments] Parsons ME, et al. **Int J Dermatol** 1996 Feb;35(2):77–81 (47 ref.). Comment in: Int J Dermatol 1997 Mar;36(3):237–8.

Skin lesions in HIV-positive and HIV-negative patients in south India. Rajagopalan B, et al. **Int J Dermatol** 1996 Jul; 35(7):489–92

Mixed-cryoglobulinemia associated with cutaneous vasculitis and pulmonary symptoms. Konishi M, et al. **Intern Med** 1997 Jan;36(1):62–7

Cutaneous manifestations of chronic granulomatous disease. A report of four cases and review of the literature. Dohil M, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):899–907 (50 ref.)

Antiphospholipid syndrome and the skin. Gibson GE, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):970–82 (83 ref.)

Epidermal hamartoma presenting as longitudinal pachyleukonychia: a new nail genodermatosis. Moulin G, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):675–7

Guidelines of care for dermatologic conditions in patients infected with HIV. Guidelines/Outcomes Committee. American Academy of Dermatology. Rico MJ, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):450–72

Localized cutaneous amyloidosis associated with mycosis fungoides. Romero LS, et al. **J Am Acad Dermatol** 1997 Jul;37(1):124–7

Cutaneous and neurologic disease associated with HTLV-I infection. Sharata HH, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):869–71

Eosinophilic myositis/perimyositis: frequency and spectrum of cutaneous manifestations. Trüeb RM, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):385–91

Cutaneous granulomas with two clinical presentations in a patient with common variable immunodeficiency. Ziegler EM, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):499–500

Dry eye syndrome associated with Urbach-Wiethe disease. Irkeç M, et al. **J Pediatr Ophthalmol Strabismus** 1996 Sep-Oct;33(5):265–8

The CINCA syndrome: a rare cause of uveitis in childhood. Sadiq SA, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jan-Feb;33(1):59–63

Relationship between cutaneous and pulmonary involvement in systemic sclerosis. Morelli S, et al. **J Rheumatol** 1997

Jan;24(1):81–5
Granulomatous lymphangitis of the penile skin as a cause of penile swelling in children. Mor Y, et al. **J Urol** 1997 Aug;158(2):591–2 (12 ref.)
Progress and new directions in the investigation of the specific dermatoses of pregnancy. Black MM. **Keio J Med** 1997 Mar;46(1):40–1 (13 ref.)
Subcutaneous crystal-storing histiocytosis associated with lymphoplasmacytic lymphoma (immunocytoma) [see comments] Kaufmann O, et al. **Pathol Res Pract** 1996 Nov; 192(11):1148–51. Comment in: Pathol Res Pract 1996 Nov;192(11):1152–62.
Localized elastosis perforans serpiginosa in a boy with Down syndrome [letter] Siragusa M, et al. **Pediatr Dermatol** 1997 May–Jun;14(3):244–6
Agenesis of the urinary bladder with cutaneous ectopic ureteric orifice and multiple birth defects. Bhagwat AD, et al. **Pediatr Surg Int** 1997;12(1):63–5
Malignant change in a chronic skin lesion induced by an intravenous cannula. Nkere UU, et al. **Postgrad Med J** 1997 Jan;73(855):45–7
Imaging of pulmonary–cutaneous disorders: matching the radiologic and dermatologic findings. Franquet T, et al. **Radiographics** 1996 Jul;16(4):855–69
Apoptosis down-regulates inflammation under the advancing epithelial wound edge: delayed patterns in diabetes and improvement with topical growth factors. Brown DL, et al. **Surgery** 1997 Apr;121(4):372–80
Hypophosphatemic vitamin–D resistant rickets associated with epidermal nevus syndrome. A case report. Tokatli A, et al. **Turk J Pediatr** 1997 Apr–Jun;39(2):247–51
Coccidioidomycosis and sarcoidosis. Multiple recurrences. Sharma OP, et al. **West J Med** 1997 May;166(5):345–7
[Epidemiology of skin diseases in HIV-infected patients: a prospective cohort study] Schaub N, et al. **Schweiz Rundsch Med Prax** 1996 Sep 17;85(38):1162–6 (Eng. Abstr.) **(Ger)**
[Neurocutaneous syndrome with hair alterations] Camacho-Martínez F. **Rev Neurol** 1997 Sep;25 Suppl 3:S243–9 (51 ref.) (Eng. Abstr.) **(Spa)**
[Neural tube dysfunction and cutaneous lesions] Vanaclocha-Vanaclocha V, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S232–7 (80 ref.) (Eng. Abstr.) **(Spa)**

CONGENITAL

Restrictive dermopathy: report and review. Mau U, et al. **Am J Med Genet** 1997 Aug 8;71(2):179–85 (37 ref.)
Late manifestation of diabetes insipidus in "pure" cutaneous Langerhans cell histiocytosis. Hoeger PH, et al. **Eur J Pediatr** 1997 Jul;156(7):524–7
Congenital anetoderma in twins. Zellman GL, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):483–5
Congenital smooth muscle hamartoma presenting as a linear atrophic plaque: case report and review of the literature. Grau-Massanes M, et al. **Pediatr Dermatol** 1996 May–Jun; 13(3):222–5 (28 ref.)
Ocular findings in cutis marmorata telangiectatica congenita. Bilateral exudative vitreoretinopathy. Pendergast SD, et al. **Retina** 1997;17(4):306–9
[Cutis marmorata teleangiectatica congenita. Important aspects for dermatologic practice] Rupprecht R, et al. **Hautarzt** 1997 Jan;48(1):21–5 (30 ref.) (Eng. Abstr.) **(Ger)**
[Familial cutaneous collagenoma] Suenaga Y. **Ryoikibetsu Shokogun Shirizu** 1996;(15):264–6 (5 ref.) **(Jpn)**

DIAGNOSIS

Leukemia cutis. Fine needle aspiration findings. Kumar PV. **Acta Cytol** 1997 May–Jun;41(3):666–71
Linear steatocystoma multiplex [letter] D'Souza P, et al. **Acta Derm Venereol** 1997 Mar;77(2):161
Differential expression of desmosomal glycoproteins in keratoacanthoma and squamous cell carcinoma of the skin: an immunohistochemical aid to diagnosis [published erratum appears in Acta Derm Venereol 1996 Nov;76(6):504] Krunic AL, et al. **Acta Derm Venereol** 1996 Sep;76(5):394–8
Polymerase chain reaction and its application for the diagnosis and management of skin diseases. Feldman SR, et al. **Adv Dermatol** 1997;12:115–36; discussion 137 (128 ref.)
Solitary cutaneous cryptococcosis resembling chickenpox: a case report [letter] Martinelli C, et al. **AIDS** 1997 Feb; 11(2):260–1
Principles of skin biopsies for the family physician. Achar S. **Am Fam Physician** 1996 Dec;54(8):2411–8 (14 ref.)
Dermatologic problems encountered in the emergency department. Ferrera PC, et al. **Am J Emerg Med** 1996 Oct; 14(6):588–601 (97 ref.)
Artifact from an electrosurgical ground pad. Revercomb CH, et al. **Am J Forensic Med Pathol** 1997 Sep;18(3):293–4
Moderate and transient transfusion-associated cutaneous graft-versus-host disease in a child infected by human immunodeficiency virus. Klein C, et al. **Am J Med** 1996 Oct;101(4):445–6
Immunophenotyping and gene rearrangement analysis provide additional criteria to differentiate between cutaneous T-cell lymphomas and pseudo-T-cell lymphomas. Bakels V, et al. **Am J Pathol** 1997 Jun; 150(6):1941–9
A 4-year-old girl with purpuric skin lesions [clinical conference] Ryu G, et al. **Ann Allergy Asthma Immunol** 1996 Dec;77(6):448–54
Drug-induced pseudolymphoma and hypersensitivity syndrome. Two different clinical entities. Callot V, et al. **Arch Dermatol** 1996 Nov;132(11):1315–21
Morbilliform eruption in a liver transplantation patient. Connors J, et al. **Arch Dermatol** 1996 Oct;132(10):1161–3
The substitution of digital images for dermatologic physical examination. Kvedar JC, et al. **Arch Dermatol** 1997 Feb; 133(2):161–7
How to submit a specimen for cutaneous pathology analysis. Using the '5 D's' to get the most from biopsies. Boyd AS, et al. **Arch Fam Med** 1997 Jan–Feb;6(1):64–6 (10 ref.)
Problems of the skin. Recognising the morbidity [editorial; comment] Clearihan L. **Aust Fam Physician** 1997 Jun; 26(6):637. Comment on: Aust Fam Physician 1997 Jun;26(6):683–6.
Primary skin infections. Hogan P. **Aust Fam Physician** 1997 Jun;26(6):661–3, 666–7, 669–71
Cutaneous manifestations of chronic graft-versus-host disease. Andrews ML, et al. **Australas J Dermatol** 1997 May;38(2):53–62; quiz 63–4 (79 ref.)
Spitz naevi misdiagnosed histologically as melanoma: prevalence and clinical profile. Orchard DC, et al. **Australas J Dermatol** 1997 Feb;38(1):12–4
Assessment of morbidity from skin diseases [letter] Jemec GB, et al. **Br J Dermatol** 1997 Jul;137(1):157–8
General practitioner referrals [letter; comment] Williams H. **Br J Dermatol** 1997 Apr;136(4):634–5. Comment on: Br J Dermatol 1996 Jul;135(1):70–3.
MRCP. Slides in dermatology: 1. Mallon E, et al. **Br J Hosp Med** 1997 Feb 19–Mar 4;57(4):159–61
Plicometer skin test: a new technique for the evaluation of cutaneous involvement in systemic sclerosis. Nives Parodi M, et al. **Br J Rheumatol** 1997 Feb;36(2):244–50
Detection of M. tuberculosis complex DNA in a lesion resembling sarcoidosis. Baselga E, et al. **Clin Exp Dermatol** 1996 May;21(3):235–8
A dermatologic diary. Portrait of a practice. Shelley WB, et al. **Cutis** 1997 Jul;60(1):19–26
Ectopic Darier's disease of the cervix: an extraordinary cause of an abnormal smear. Adam AE. **Cytopathology** 1996 Dec; 7(6):414–21
Dermatologic nondisease. Cotterill JA. **Dermatol Clin** 1996 Jul;14(3):439–45 (68 ref.)
Pediatric dermatology. Hartley AH, et al. **Dermatol Clin** 1997 Jan;15(1):111–9 (50 ref.)
Pseudopsychodermatologic disease. Koo J, et al. **Dermatol Clin** 1996 Jul;14(3):525–30
Lichen amyloidosis presenting as a papular pruritus syndrome in a human–immunodeficiency–virus–infected man. Goller MM, et al. **Dermatology** 1997;194(1):62–4
Systemic scleroderma and perforating granuloma annulare: differential diagnosis from calcinosis. Tajima S, et al. **Dermatology** 1996;192(3):271–3
Simulators of hand infections. Kann SE, et al. **Instr Course Lect** 1997;46:69–82 (169 ref.)
New dermatologic gopher [letter] Byarlay JA. **Int J Dermatol** 1996 Jan;35(1):72
Infantile gluteal granulomata mimicking mollusca contagiosa [letter] Tabata H, et al. **Int J Dermatol** 1997 Feb;36(2):157–8
Scurvy presenting with cutaneous and articular signs and decrease in red and white blood cells. Yalçin A, et al. **Int J Dermatol** 1996 Dec;35(12):879–81
Decidualized umbilical endometriosis. Skidmore RA, et al. **Int J Gynaecol Obstet** 1996 Mar;52(3):269–73
Dermatoses of the glans penis and prepuce. English JC 3rd, et al. **J Am Acad Dermatol** 1997 Jul;37(1):1–24; quiz 25–6 (352 ref.)
The dermatologist's role in primary care: a primary care physician's view [comment] Hainer BL. **J Am Acad Dermatol** 1996 Dec;35(6):1009–11. Comment on: J Am Acad Dermatol 1996 Dec;35(6):1005–8.
A clinicopathologic approach to granulomatous dermatoses [letter] Haycox CL. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):511
Reliability of dermatology teleconsultations with the use of teleconferencing technology. Phillips CM, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):398–402
Cutaneous Crohn's disease in children. Ploysangam T, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):697–704 (69 ref.)
Is cutaneous plasmacytosis a distinct clinical entity? Shimizu S, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):876–80 (30 ref.)
Dermatologic phenomenon: clinically useful para-diagnostic pearls for everyday practice. Hatfield PM, et al. **J Ark Med Soc** 1997 Aug;94(3):115–9
The role of MT2 and anti-bcl-2 protein antibodies in the differentiation of benign from malignant cutaneous infiltrates of B-lymphocytes with germinal center formation. Chimenti S, et al. **J Cutan Pathol** 1996 Aug; 23(4):319–22
Bilateral accessory tragi on the suprasternal region. Kim SW, et al. **J Dermatol** 1997 Aug;24(8):543–5
Diagnosis and management of iris juvenile xanthogranuloma. Karcioglu ZA, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jan–Feb;34(1):44–51
Preliminary results from the Northern Ireland arms of the UK Multicentre Teledermatology Trial: effect of camera performance on diagnostic accuracy. Loane MA, et al. **J Telemed Telecare** 1997;3 Suppl 1:73–5
Prenatal diagnosis of inherited skin diseases. Shimizu H. **Keio J Med** 1996 Mar;45(1):28–36 (55 ref.)
Information in full and reduced data sets of electrical impedance spectra from various skin conditions, compared using a holographic neural network. Ollmar S, et al. **Med Biol Eng Comput** 1997 Jul;35(4):415–9
Mel-5: a novel antibody for differential diagnosis of epidermal pigmented lesions of the skin in paraffin-embedded sections. Bhawan J. **Melanoma Res** 1997 Feb;7(1):43–8
Diagnostic accuracy of teledermatology: results of a preliminary study in New Zealand. Oakley AM, et al. **N Z Med J** 1997 Feb 28;110(1038):51–3
Chromoblastomycosis: a retrospective study of six cases at the Royal Darwin Hospital from 1989 to 1994. Santos LD, et al. **Pathology** 1996 May;28(2):182–7
Conditions mistaken for child abuse: Part II [see comments] Stewart GM, et al. **Pediatr Emerg Care** 1996 Jun; 12(3):217–21. Comment in: Pediatr Emerg Care 1997 Jun;13(3):244–5.
Neonatal dermatologic challenges. Johr RH, et al. **Pediatr Rev** 1997 Mar;18(3):86–94 (7 ref.)
Cutaneous clues to systemic disease. Kirsner RS, et al. **Postgrad Med** 1997 Jun;101(6):137–9, 144, 147–50 (28 ref.)
Metastatic Crohn's disease. Sangüeza OP, et al. **South Med J** 1997 Sep;90(9):897–900
[Monthly question: should we buy a dermatoscope?] **Ann Dermatol Venereol** 1996;123(8):520–4 **(Fre)**
[Tumoral sarcoidosis] Koessler A, et al. **Ann Dermatol Venereol** 1995;122(11–12):783–5 (Eng. Abstr.) **(Fre)**
[Transient acantholytic dermatosis (Grover disease)] Maghraoui S, et al. **Ann Dermatol Venereol** 1995; 122(11–12):801–6 (41 ref.) **(Fre)**
[Imaging methods in dermatology] el Gammal S, et al. **Hautarzt** 1997 Jun;48(6):432–50; quiz 448 (74 ref.) **(Ger)**
[Activation of epidermal melanocytes is independent of epithelial proliferation and vascularization. Immunohistologic study using HMB-45 antibody with review of the literature] Lommel K, et al. **Hautarzt** 1996 Aug;47(8):616–23 (65 ref.) (Eng. Abstr.) **(Ger)**
[HIV-associated skin diseases] Plettenberg A, et al. **Hautarzt** 1997 Jan;48(1):58–72 (75 ref.) **(Ger)**
[The electron immunochemical detection of mycobacterial antigens in the granulomas of leprosy patients] Maslov AK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb; (1):84–7 (Eng. Abstr.) **(Rus)**
[Infections with cutaneous and nervous system alterations] Losada-Campa A, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S281–93 (76 ref.) (Eng. Abstr.) **(Spa)**
[Systemic autoimmune diseases with neurocutaneous alterations] Oliveros-Cid A, et al. **Rev Neurol** 1997 Sep; 25 Suppl 3:S294–308 (170 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Cycloheximide in dermatology [letter] Montes LF. **Acta Derm Venereol** 1997 May;77(3):240
Moisturizers: adjunct therapy and advising patients. Jackson EM. **Am J Contact Dermat** 1996 Dec;7(4):247–50 (9 ref.)
Cholestyramine ointment to treat buttocks rash and anal excoriation in an infant. White CM, et al. **Ann Pharmacother** 1996 Sep;30(9):954–6
Is cimetidine effective for nongenital warts: a double-blind, placebo-controlled study [letter] Karabulut AA, et al. **Arch Dermatol** 1997 Apr;133(4):533–4
Pulse glucocorticoid therapy. The 'big shot' revisited [comment] Roujeau JC. **Arch Dermatol** 1996 Dec; 132(12):1499–502. Comment on: Arch Dermatol 1996 Dec;132(12):1435–9.
Cimetidine and warts [letter; comment] Sáenz-Santamaría MC, et al. **Arch Dermatol** 1997 Apr;133(4):530–1. Comment on: Arch Dermatol 1996 Jun;132(6):680–2.
Pulse intravenous cyclophosphamide for treatment of autoimmune blistering disease. Is there an advantage over oral routes? [editorial;comment] Werth VP. **Arch Dermatol** 1997 Feb;133(2):229–30. Comment on: Arch Dermatol 1997 Feb;133(2):245.
Topical calcipotriol for treatment of inflammatory linear verrucous epidermal nevus. Zvulunov A, et al. **Arch Dermatol** 1997 May;133(5):567–8
Inhibition of collagen expression by azelastine hydrochloride in cultured skin fibroblasts from normal individuals and scleroderma patients. Yamada H, et al. **Arch Dermatol Res** 1996 Sep;288(10):575–8
Complete remission of lichen-planus-like graft-versus-host disease (GVHD) with extracorporeal photochemotherapy (ECP). Gerber M, et al. **Bone Marrow Transplant** 1997 Mar; 19(5):517–9
Nedocromil sodium ameliorates skin manifestations in a murine model of chronic graft-versus-host disease. Levi-Schaffer F, et al. **Bone Marrow Transplant** 1997 Apr; 19(8):823–8
Calcipotriol in other dermatological disorders. **Br J Clin Pract Symp Suppl** 1996 Feb;83:29
Etretinate may work where acitretin fails. Bleiker TO, et al. **Br J Dermatol** 1997 Mar;136(3):368–70
Allopurinol: a therapeutic alternative for disseminated cutaneous sarcoidosis. Brechtel B, et al. **Br J Dermatol** 1996 Aug;135(2):307–9
Successful treatment with fluconazole of prototheocosis developing at the site of an intralesional corticosteroid injection. Kim ST, et al. **Br J Dermatol** 1996 Nov;

135(5):803–6
Cyclosporin in less common immune-mediated skin diseases. Ruzicka T. **Br J Dermatol** 1996 Sep;135 Suppl 48:40–2 (20 ref.)
Neoral (cyclosporin) in dermatology: technical aspects. Smith SG. **Br J Dermatol** 1996 Sep;135 Suppl 48:2–4 (13 ref.)
Azathioprine in dermatology: a survey of current practice in the U.K. Tan BB, et al. **Br J Dermatol** 1997 Mar; 136(3):351–5
Successful treatment with topical PUVA of nodular cutaneous plasmacytosis associated with alopecia of the scalp. Kaneda M, et al. **Clin Exp Dermatol** 1996 Sep; 21(5):360–4
Current status of photodynamic therapy in dermatology. Bissonnette R, et al. **Dermatol Clin** 1997 Jul;15(3):507–19 (91 ref.)
The 5 alpha-reductase system and its inhibitors. Recent development and its perspective in treating androgen-dependent skin disorders. Chen W, et al. **Dermatology** 1996;193(3):177–84 (58 ref.)
Long-term interferon-alpha therapy induces autoantibodies against epidermis. Fleischmann M, et al. **Dermatology** 1996; 192(1):50–5
Reticular erythematous mucinosis syndrome: glycosaminoglycan synthesis by fibroblasts and abnormal response to interleukin-1 beta. Izumi T, et al. **Dermatology** 1996;192(1):41–5
Remission of lichen amyloidosus after treatment with acitretin [letter] Reider N, et al. **Dermatology** 1997; 194(3):309–11
Current use and future potential role of retinoids in dermatology. Orfanos CE, et al. **Drugs** 1997 Mar; 53(3):358–88 (262 ref.)
Advances in dermatopharmacology—strength and weakness of recently of approved drugs (I). Chang YC, et al. **Int J Clin Pharmacol Ther** 1997 May;35(5):188–94 (32 ref.)
5 alpha-reductase inhibitors—a new hope in dermatology? Amichai B, et al. **Int J Dermatol** 1997 Mar;36(3):182–4 (28 ref.)
Tumescent infiltrators for the installation of dilute steroid suspensions or anaesthetic solutions [letter] Field LM. **Int J Dermatol** 1997 Feb;36(2):158–9
Intralesional chloroquine for the treatment of cutaneous sarcoidosis [letter] Liedtka JE. **Int J Dermatol** 1996 Sep; 35(9):682–3
Antiandrogen therapy in dermatology. Shaw JC. **Int J Dermatol** 1996 Nov;35(11):770–8 (86 ref.)
Guidelines of care for the use of topical glucocorticosteroids. American Academy of Dermatology. Drake LA, et al. **J Am Acad Dermatol** 1996 Oct;35(4):615–9
Rediscovering thalidomide: a review of its mechanism of action, side effects, and potential uses. Tseng S, et al. **J Am Acad Dermatol** 1996 Dec;35(6):969–79 (101 ref.)
Papular mucinosis associated with AIDS: response to isotretinoin. Yen A, et al. **J Am Acad Dermatol** 1997 Jul; 37(1):127–8
Dermatology 1945–95: the golden age of treatment. Fitzpatrick TB. **J Dermatol** 1996 Nov;23(11):728–34 (22 ref.)
A comparative study of the therapeutic effect of probucol and pravastatin on xanthelasma. Fujita M, et al. **J Dermatol** 1996 Sep;23(9):598–602
Anti-oxidative therapy with oral dapsone improved HCV antibody positive annular elastolytic giant cell granuloma. Igawa K, et al. **J Dermatol** 1997 May;24(5):328–31
OK-432 therapy for recalcitrant warts. Inui S, et al. **J Dermatol** 1997 May;24(5):301–5
Primary cutaneous Langerhans cell histiocytosis treated with photochemotherapy. Kwon OS, et al. **J Dermatol** 1997 Jan; 24(1):54–6
Unusual multiple keratoacanthoma in a child successfully treated with 5-fluorouracil. Singal A, et al. **J Dermatol** 1997 Aug;24(8):546–8
Perspectives in cutaneous photodynamic sensitization. Ortel B, et al. **J Photochem Photobiol B** 1996 Nov;36(2):209–11 (14 ref.)
Monoclonal antibody therapy of diffuse cutaneous scleroderma with CAMPATH-1H. Isaacs JD, et al. **J Rheumatol** 1996 Jun;23(6):1103–6
Antihistamines and their role in dermatology. Hafeez ZH. **JPMA J Pak Med Assoc** 1996 Nov;46(11):264–7 (42 ref.)
Effects of the calcium antagonist felodipine on renal haemodynamics, tubular sodium handling, and blood pressure in cyclosporin-treated dermatological patients. Madsen JK, et al. **Nephrol Dial Transplant** 1997 Mar; 12(3):480–4
Degos' disease [letter; comment] McFarland HR. **Neurology** 1997 Jul;49(1):308–9. Comment on: Neurology 1996 Mar;46(3):636–40.
A reappraisal of topical steroid potency. Hepburn DJ, et al. **Pediatr Dermatol** 1996 May-Jun;13(3):239–45 (64 ref.)
Cytochrome P-450 and drug development for skin diseases. Ahmad N, et al. **Skin Pharmacol** 1996;9(4):231–41 (67 ref.)
Graves' dermopathy: does octreotide scintigraphy predict the response to octreotide treatment? Kuyvenhoven JP, et al. **Thyroid** 1996 Oct;6(5):385–9
Basic dermatological treatments for tropical district hospitals. Gibbs S. **Trop Doct** 1997 Jul;27(3):142–5
[Monthly question: administration at home of topical treatment by private nurses] **Ann Dermatol Venereol** 1995; 122(11–12):812–3 **(Fre)**
[Therapeutic alternatives to systemic corticotherapy in severe and chronic dermatologic disorders in the elderly patient] de la Brassinne M. **Rev Med Liege** 1997 Apr;52(4):296–8 (0 ref.) **(Fre)**
[Systemic therapy with glucocorticosteroids in dermatology. Workshop proceedings. 9–10 February 1996, Potsdam] **Fortschr Med Suppl** 1996;174:2–12 **(Ger)**
[Analysis of compound prescriptions by practicing dermatologists. A study of 72,615 prescriptions for patients insured by the North Rhine-Westphalia BKK] Altmeyer P, et al. **Hautarzt** 1997 Jan;48(1):12–20 (Eng. Abstr.) **(Ger)**
[Photodynamic therapy at the threshold of clinical use in disseminated dermatoses] Boehncke WH, et al. **Hautarzt** 1996 Nov;47(11):825–31 (48 ref.) (Eng. Abstr.) **(Ger)**
[Granuloma annulare disseminatum as a rare side effect of allopurinol (letter; comment)] Brechtel B, et al. **Hautarzt** 1996 Feb;47(2):143. Comment on: Hautarzt 1995 May;46(5):343–5. **(Ger)**
[Therapeutic experiences with extracorporeal photopheresis. Technical procedure, follow-up and clinical outcome in 31 skin diseases] Owsianowski M, et al. **Hautarzt** 1996 Feb; 47(2):114–23 (Eng. Abstr.) **(Ger)**
[Treatment of skin lesions with Katogel] Ricci E. **Minerva Chir** 1996 May;51(5):369–75 (Eng. Abstr.) **(Ita)**
[Neuropeptides in dermatologic therapy] Gómez-Bezares P, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S320–4 (60 ref.) (Eng. Abstr.) **(Spa)**
[Tetracyclines as anti-inflammatory treatment in skin diseases] Autio P, et al. **Nord Med** 1996 Dec;111(10):348–51 (15 ref.) (Eng. Abstr.) **(Swe)**

ENZYMOLOGY

Cytochrome P-450 and drug development for skin diseases. Ahmad N, et al. **Skin Pharmacol** 1996;9(4):231–41 (67 ref.)

EPIDEMIOLOGY

Skin disease and age-related cataract. Phillips CI, et al. **Acta Derm Venereol** 1996 Jul;76(4):314–8
Childhood-onset scleroderma from a dermatologist's perspective: comment on the article by Vancheeswaran et al [letter; comment] Jablonska S, et al. **Arthritis Rheum** 1997 Jun;40(6):1183–4. Comment on: Arthritis Rheum 1996 Jun;39(6):1041–9.
The cutaneous-vulvar clinic revisited: a 5-year experience of the Columbia Presbyterian Medical Center Cutaneous-Vulvar Service. Heller DS, et al. **Dermatology** 1997;195(1):26–9
Xeroderma pigmentosum. Kulkarni ML, et al. **Indian Pediatr** 1996 May;33(5):394–8
Dermatoepidemiology. II: Causal inference established by a rule called "ASSOCIATED". Chuang TY, et al. **Int J Dermatol** 1997 Jun;36(6):412–5 (27 ref.)
Skin disease and socioeconomic conditions in rural Africa: Tanzania. Gibbs S. **Int J Dermatol** 1996 Sep;35(9):633–9 (19 ref.)
Skin disease in rural Tanzania. Henderson CA. **Int J Dermatol** 1996 Sep;35(9):640–2
Epidemiology of Behçet's syndrome in Turkey. Tüzün Y, et al. **Int J Dermatol** 1996 Sep;35(9):618–20 (15 ref.)
Skin type distribution and skin disease in Ireland. Gibson GE, et al. **Ir J Med Sci** 1997 Apr-Jun;166(2):72–4
Dermatological conditions in winter in primary health care on Operation Resolute (Bosnia). Winfield DA. **J R Army Med Corps** 1997 Feb;143(1):31–4
A pseudo-outbreak of skin disease in British troops. Croft A, et al. **J R Soc Med** 1996 Oct;89(10):552–6
The epidemiology of dermatologic and venereologic disease in a deployed operational setting. Vidmar DA, et al. **Mil Med** 1996 Jul;161(7):382–6
The prevalence of skin disease among school children in rural Ethiopia—a preliminary assessment of dermatologic needs. Figueroa JI, et al. **Pediatr Dermatol** 1996 Sep–Oct; 13(5):378–81
Are textile formaldehyde regulations reasonable? Experiences from the Finnish textile and clothing industries. Priha E. **Regul Toxicol Pharmacol** 1995 Dec;22(3):243–9
[Non-tumor dermatoses diagnosed in the pathologic anatomy laboratory of the Tokoin University hospital center, Lomé (Togo)] Napo-Koura G, et al. **Sante** 1997 Mar-Apr; 7(2):75–80 **(Fre)**

ETIOLOGY

Notalgia paresthetica, macular posterior pigmentary incontinence, macular amyloidosis and pruritus [letter; comment] Bernhard JD. **Acta Derm Venereol** 1997 Mar; 77(2):164. Comment on: Acta Derm Venereol 1996 Jul;76(4):302–4.
Leukemic vasculitis: a feature of leukemia cutis in some patients [see comments] Jones D, et al. **Am J Clin Pathol** 1997 Jun;107(6):637–42. Comment in: Am J Clin Pathol 1997 Jun;107(6):627–9.
An outbreak of the vesicating beetle Paederus sabaeus Er. (Coleoptera: Staphylinidae) in Rivers State, Nigeria. Okiwelu SN, et al. **Ann Trop Med Parasitol** 1996 Jun; 90(3):345–6
The princess and the pea. An unusual complication after a laparoscopic cholecystectomy. Pharr ME, et al. **Arch Fam Med** 1997 Mar-Apr;6(2):188–9 (10 ref.)
Subcutaneous fat necrosis and polyarthritis associated with pancreatic disease. Shbeeb MI, et al. **Arthritis Rheum** 1996 Nov;39(11):1922–5
Tuberculosis cutis colliquativa during long-term immunosuppressive therapy for rheumatoid arthritis. Sutor GC, et al. **Arthritis Rheum** 1997 Jan;40(1):188–90
Primary skin infections. Hogan P. **Aust Fam Physician** 1997 Jun;26(6):661–3, 666–7, 669–71
Intravenous immunoglobulin in the Guillain-Barré syndrome. May cause severe adverse skin reactions [letter; comment] Hamdalla HH, et al. **BMJ** 1996 Nov 30;313(7069):1399–400 . Comment on: BMJ 1996 Aug 17;313(7054):376–7.
Cytokine expression in human cutaneous chronic graft-versus-host disease. Ochs LA, et al. **Bone Marrow Transplant** 1996 Jun;17(6):1085–92
Skin lesions arising from electrode placement [letter; comment] Dawson C. **Br J Audiol** 1996 Apr;30(2):151. Comment on: Br J Audiol 1995 Oct;29(5):293.
Skin lesions as the only manifestation of the hypereosinophilic syndrome [letter] Barna M, et al. **Br J Dermatol** 1997 Apr; 136(4):646–7
Sunbed use in relation to phenotype, erythema, sunscreen use and skin diseases. A questionnaire survey among Swedish adolescents. Boldeman C, et al. **Br J Dermatol** 1996 Nov;135(5):712–6
Condyloma-like lesions as the presenting sign of multiple myeloma associated amyloidosis [letter] Buezo GF, et al. **Br J Dermatol** 1996 Oct;135(4):665–6
Cutaneous manifestations of fucosidosis. Fleming C, et al. **Br J Dermatol** 1997 Apr;136(4):594–7
Acquired perforating dermatosis in a British dialysis population. Morton CA, et al. **Br J Dermatol** 1996 Nov; 135(5):671–7
Cutaneous manifestations of systemic lupus erythematosus. Yell JA, et al. **Br J Dermatol** 1996 Sep;135(3):355–62
Hepatic GVHD after HLA-haploidentical bone marrow transplantation in children with severe combined immunodeficiency: the effect of ursodeoxycholic acid. Wulffraat NM, et al. **Br J Haematol** 1997 Mar;96(4):776–80
Scalp necrosis in giant cell arteritis and review of the literature. Currey J. **Br J Rheumatol** 1997 Jul;36(7):814–6 (24 ref.)
Dermacase. Gardner's syndrome. **Can Fam Physician** 1997 Jun;43:1061, 1067
Programmed instruction: cancer therapy. Associated late effects (IV). Rodriguez CS, et al. **Cancer Nurs** 1996 Dec; 19(6):455–64; quiz 465–8
Physiological changes in the skin during pregnancy. Elling SV, et al. **Clin Dermatol** 1997 Jan-Feb;15(1):35–43 (39 ref.)
Perimenstrual eruptions. Stephens CJ. **Clin Dermatol** 1997 Jan-Feb;15(1):31–4 (33 ref.)
Metastatic Crohn's disease of the umbilicus. McLelland J, et al. **Clin Exp Dermatol** 1996 Jul;21(4):318–9
Metabolic-associated skin disorders. Giacalone VF, et al. **Clin Podiatr Med Surg** 1996 Jan;13(1):119–38 (90 ref.)
Skin disorders associated with rheumatic disease. Kaminski MJ. **Clin Podiatr Med Surg** 1996 Jan;13(1):139–53 (46 ref.)
Widespread cutaneous necrosis associated with antiphospholipid syndrome. Jou IM, et al. **Clin Rheumatol** 1996 Jul;15(4):394–8
Milia as unusual sequelae to allergic contact dermatitis. Ibbotson SH, et al. **Contact Dermatitis** 1996 Jul;35(1):49–50
Complications of laser surgery. Nanni C. **Dermatol Clin** 1997 Jul;15(3):521–34 (84 ref.)
'Normolipidemic' tendinous and tuberous xanthomatosis. Mancuso G, et al. **Dermatology** 1996;193(1):27–32 (25 ref.)
Cutaneous T-cell lymphoma associated with granulomatous slack skin. Mouly F, et al. **Dermatology** 1996;192(3):288–90
The sound of scratching: an unusual cause of neurotic excoriations [letter] Parsad D, et al. **Dermatology** 1997; 195(1):74
Skin and diabetes. Sibbald RG, et al. **Endocrinol Metab Clin North Am** 1996 Jun;25(2):463–72 (40 ref.)
Bilateral and multifocal generalized eruptions in herpes zoster ophthalmicus: case report. Nath R. **Indian J Ophthalmol** 1996 Mar;44(1):40–2
Transient CD80 expression defect in a patient with variable immunodeficiency and cyclic neutropenia. Moser C, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):96–9
Acute generalized exanthematous pustulosis with cytomegalovirus infection. Haro-Gabaldón V, et al. **Int J Dermatol** 1996 Oct;35(10):735–7
Acquired perforating dermatosis associated with recurrent hepatocellular carcinoma. Lee YS, et al. **Int J Dermatol** 1996 Oct;35(10):743–5
Calcinosis cutis associated with secondary hyperparathyroidism due to renal failure. Shriner DL, et al. **Int J Dermatol** 1996 Dec;35(12):885–7
Epidemiology of Behçet's syndrome in Turkey. Tüzün Y, et al. **Int J Dermatol** 1996 Sep;35(9):618–20 (15 ref.)
Cutaneous allergy to recombinant human type I IL-1 receptor (rhu IL-1RI). Grammer LC, et al. **J Allergy Clin Immunol** 1997 May;99(5):714–5
Anetoderma after hepatitis B immunization in two siblings. Daoud MS, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):779–80
Cutaneous manifestations of sports participation. Pharis DB, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):448–59 (110 ref.)
EBV-associated Kikuchi's histiocytic necrotizing lymphadenitis with cutaneous manifestations. Yen A, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 2):342–6
Suture reaction following skin closure with subcuticular polydioxanone in total knee arthroplasty. Casha JN, et al.

J Arthroplasty 1996 Oct;11(7):859–61

Persistent cutaneous pseudolymphoma after intradermal gold injection. Kalimo K, et al. **J Cutan Pathol** 1996 Aug; 23(4):328–34

Cutaneous sarcoid reactions during long-term remission in a patient with acute myelogenous leukemia. Isoda M. **J Dermatol** 1996 Apr;23(4):293–5

Milia arising in herpes zoster scars. Lee WS, et al. **J Dermatol** 1996 Aug;23(8):556–8 (10 ref.)

Transforming growth factor-alpha (TGF alpha)-producing gastric carcinoma with acanthosis nigricans: an endocrine effect of TGF alpha in the pathogenesis of cutaneous paraneoplastic syndrome and epithelial hyperplasia of the esophagus. Koyama S, et al. **J Gastroenterol** 1997 Feb; 32(1):71–7

Cutaneous necrosis by subcutaneous injection of a-interferon in a patient with chronic type B hepatitis [letter] Kontochristopoulos G, et al. **J Hepatol** 1996 Aug;25(2):271

Skin manifestations and immunological parameters in childhood food allergy. Oehling A, et al. **J Investig Allergol Clin Immunol** 1997 May-Jun;7(3):155–9

Ferréol-Besnier disease with associated recurrent meningitis [letter] Meyer-Lindenberg A, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):297

Steroid-refractory cutaneous graft-versus-host disease after transplantation of haploidentical parental CD34+ cells in children with Down's syndrome and recurrent acute leukemia. Mogul MJ, et al. **J Pediatr Hematol Oncol** 1997 Mar-Apr;19(2):142–4

Sterile abscess formation following plague vaccination. Smith AL, et al. **J R Army Med Corps** 1997 Jun;143(2):116–7

Intradermal urate tophi. Fam AG, et al. **J Rheumatol** 1997 Jun;24(6):1126–31

Microscopic polyangiitis after influenza vaccination. Kelsall JT, et al. **J Rheumatol** 1997 Jun;24(6):1198–202 (15 ref.)

Increased pigmentation in scleroderma. Pope JE, et al. **J Rheumatol** 1996 Nov;23(11):1912–6

Acquired perforating dermatosis in renal and diabetic patients. Farrell AM. **Lancet** 1997 Mar 29;349(9056):895–6

Skin disease in British troops in the Bosnian winter. Smith HR, et al. **Mil Med** 1997 Aug;162(8):548–50

Acute meningococcemia. Sapadin A, et al. **Mt Sinai J Med** 1997 Sep-Oct;64(4–5):353

Dry skin (xerosis) in patients undergoing maintenance haemodialysis: the role of decreased sweating of the eccrine sweat gland. Park TH, et al. **Nephrol Dial Transplant** 1995 Dec;10(12):2269–73

Renal transplantation and skin diseases: review of the literature and results of a 5-year follow-up of 285 patients. Barba A, et al. **Nephron** 1996;73(2):131–6 (40 ref.)

Respiratory symptoms and dermatoses among grinders and brazers of hard metal and stellite blades. Linnainmaa M, et al. **Occup Med (Oxf)** 1997 Jan;47(1):33–9

Actinic granuloma in association with giant cell arteritis: are both caused by sunlight? Lau H, et al. **Pathology** 1997 Aug; 29(3):260–2

Congenital leukemia cutis preceding monoblastic leukemia by 3 months. Monpoux F, et al. **Pediatr Dermatol** 1996 Nov-Dec;13(6):472–6

Purpuric phototherapy-induced eruption in transfused neonates: relation to transient porphyrinemia. Paller AS, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):360–4

The cutaneous manifestations of gastrointestinal disease. Katz SK, et al. **Prim Care** 1996 Sep;23(3):455–76 (63 ref.)

Calciphylaxis mimicking skin lesions of connective tissue diseases. Lue C, et al. **South Med J** 1996 Nov; 89(11):1099–100

Graves' dermopathy [letter; comment] Wortsman J. **Thyroid** 1996 Dec;6(6):655, 657. Comment on: Thyroid 1996 Feb;6(1):41–5.

[Calcified intertrigo, a rare cause of cutaneous calcinosis] Benkalfate L, et al. **Ann Dermatol Venereol** 1995; 122(11-12):789–92 (Eng. Abstr.) **(Fre)**

[Closed spinal dysraphism. Apropos of 3 cases] Benzekri L, et al. **Ann Dermatol Venereol** 1996;123(6-7):378–81 (12 ref.) (Eng. Abstr.) **(Fre)**

[Multicentric histiocytosis with hematological involvement] Bouyssou-Gauthier ML, et al. **Ann Dermatol Venereol** 1996;123(8):460–3 (Eng. Abstr.) **(Fre)**

[Eosinophilia and skin: current data] Dubost-Brama A, et al. **Ann Dermatol Venereol** 1996;123(8):498–509 (103 ref.) **(Fre)**

[Cutaneous vasculitis disclosing parvovirus B19 infection (letter)] Andrès E, et al. **Ann Med Interne (Paris)** 1997; 148(1):107–8 (9 ref.) **(Fre)**

[Spontaneous cutaneous cysto-hepato-bronchial fistula caused by a hydatid cyst. Apropos of a case (letter)] Harandou M, et al. **J Chir (Paris)** 1997 May;134(1):31–4 (Eng. Abstr.) **(Fre)**

[Cutaneous manifestations related to malignant hematologic diseases] Aractingi S, et al. **Presse Med** 1997 Apr 26; 26(14):678–83 (25 ref.) **(Fre)**

[Extrahepatic diseases in patients with hepatitis C virus infection. Probable or possible associations] Durand JM. **Presse Med** 1997 Jun 21;26(21):1023–8 (118 ref.) **(Fre)**

[Cutaneous metastatic Crohn disease. Apropos of a case] Gisserot O, et al. **Rev Med Interne** 1997;18(6):477–80 (23 ref.) (Eng. Abstr.) **(Fre)**

[Cutaneous manifestations of diabetes] Piérard-Franchimont C, et al. **Rev Med Liege** 1996 May;51(5):348–54 (25 ref.) **(Fre)**

[The skin of tobacco smokers] Rahier S, et al. **Rev Med Liege** 1996 Sep;51(9):582–85 (33 ref.) **(Fre)**

[Indoor chemical pollutants and their effects on health] De Luca D'Alessandro E, et al. **Ann Ig** 1996 Sep-Oct; 8(5):593–5 (Eng. Abstr.) **(Ita)**

[Skin manifestation of allergic diseases and collagen disease] Nishioka K. **Arerugi** 1996 Nov;45(11):1149–53 (17 ref.) **(Jpn)**

[Cutaneous manifestations of diabetes mellitus] Nakayama H. **Nippon Rinsho** 1996 Oct;54(10):2790–4 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Cutaneous manifestations in rheumatic diseases] Kaneko F, et al. **Ryumachi** 1996 Aug;36(4):676–87 (33 ref.) **(Jpn)**

[Skin manifestations of chronic intestinal inflammatory disease] Ferrándiz C. **Gastroenterol Hepatol** 1996 Jan; 19(1):16–20 (21 ref.) **(Spa)**

[Vitamin C deficiency and hemorrhagic syndrome (letter)] Rodríguez Cuartero A. **Rev Clin Esp** 1996 Aug;196(8):570 **(Spa)**

GENETICS

Genetic approaches to understanding the keratinopathies. Bale SJ, et al. **Adv Dermatol** 1997;12:99–113; discussion 114 (63 ref.)

Skewed X-chromosome inactivation in female carriers of dyskeratosis congenita. Devriendt K, et al. **Am J Hum Genet** 1997 Mar;60(3):581–7

Genetic linkage of familial granulomatous inflammatory arthritis, skin rash, and uveitis to chromosome 16. Tromp G, et al. **Am J Hum Genet** 1996 Nov;59(5):1097–107

Segmental forms of autosomal dominant skin disorders: different types of severity reflect different states of zygosity [letter] Happle R. **Am J Med Genet** 1996 Dec 11; 66(2):241–2

Restrictive dermopathy: report and review. Mau U, et al. **Am J Med Genet** 1997 Aug 8;71(2):179–85 (37 ref.)

Jadassohn's sebaceous nevus and aphalangia [letter] Midón J, et al. **Ann Plast Surg** 1997 Apr;38(4):438–9

Interactions of the scid or beige mutations with the viable motheaten mutation. Dominique V, et al. **Autoimmunity** 1995;22(4):199–207

Skin abnormality in aged fyn-/- fak+/- mice. Ilić D, et al. **Carcinogenesis** 1997 Aug;18(8):1473–6

Genodermatoses in women. Mevorah B, et al. **Clin Dermatol** 1997 Jan-Feb;15(1):17–29 (98 ref.)

Setleis syndrome: autosomal recessive or autosomal dominant inheritance? al-Gazali LI, et al. **Clin Dysmorphol** 1996 Jul; 5(3):249–53

The genetics of human skin diseases. Epstein EH Jr. **Curr Opin Genet Dev** 1996 Jun;6(3):295–300 (42 ref.)

The plakin family: versatile organizers of cytoskeletal architecture. Ruhrberg C, et al. **Curr Opin Genet Dev** 1997 Jun;7(3):392–7 (48 ref.)

Cutaneous gene therapy. Khavari PA, et al. **Dermatol Clin** 1997 Jan;15(1):27–35 (54 ref.)

Steatocystoma multiplex and oligosymptomatic pachyonychia congenita of the Jackson-Sertoli type. Hohl D. **Dermatology** 1997;195(1):86–8

Human keratin diseases: hereditary fragility of specific epithelial tissues. Corden LD, et al. **Exp Dermatol** 1996 Dec;5(6):297–307 (102 ref.)

Common genodermatoses. Kumar S, et al. **Int J Dermatol** 1996 Oct;35(10):685–94 (171 ref.)

Genodermatoses. Kumar S, et al. **Int J Dermatol** 1996 Oct; 35(10):698–9

Hereditary anetoderma. Peterman A, et al. **J Am Acad Dermatol** 1996 Dec;35(6):999–1000

Congenital anetoderma in twins. Zellman GL, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):483–5

Spontaneous autoimmune skin lesions of MRL/n mice: autoimmune disease-prone genetic background in relation to Fas-defect MRL/lpr mice [see comments] Furukawa F, et al. **J Invest Dermatol** 1996 Jul;107(1):95–100. Comment in: J Invest Dermatol 1996 Jul;107(1):3–4.

RET mutation screening in familial cutaneous lichen amyloidosis and in skin amyloidosis associated with multiple endocrine neoplasia. Hofstra RM, et al. **J Invest Dermatol** 1996 Aug;107(2):215–8

Genetic heterogeneity of familial primary cutaneous amyloidosis: lack of evidence for linkage with the chromosome 10 pericentromeric region in Chinese families. Lee DD, et al. **J Invest Dermatol** 1996 Jul;107(1):30–3

Topical application of viral vectors for epidermal gene transfer. Lu B, et al. **J Invest Dermatol** 1997 May; 108(5):803–8

Molecular genetic approaches to skin disease: keratins and keratinisation. van Steensel MA, et al. **J R Coll Physicians Lond** 1997 Jul-Aug;31(4):379–83

Prenatal diagnosis of inherited skin diseases. Shimizu H. **Keio J Med** 1996 Mar;45(1):28–36 (55 ref.)

Compound heterozygosity for a nonsense mutation and a splice site mutation in the type VII collagen gene (COL7A1) in recessive dystrophic epidermolysis bullosa. Tamai K, et al. **Lab Invest** 1997 Feb;76(2):209–17

Current knowledge and research directions in heritable disorders of connective tissue. Sakai LY, et al. **Matrix Biol** 1996 Sep;15(4):211–29 (91 ref.)

Keith R. Porter Lecture, 1996. Of mice and men: genetic disorders of the cytoskeleton. Fuchs E. **Mol Biol Cell** 1997 Feb;8(2):189–203 (111 ref.)

Xp microdeletion syndrome characterized by pathognomonic linear skin defects on the head and neck. Paulger BR, et al. **Pediatr Dermatol** 1997 Jan-Feb;14(1):26–30

Five generations with steatocystoma multiplex congenita: a treatment regimen. Pamoukian VN, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1142–6

Keratin and the skin: past, present and future [editorial] Morley SM. **QJM** 1997 Jul;90(7):433–5

[Animal and human genetic skin diseases. Parallelism and use] Larrègue M, et al. **Ann Dermatol Venereol** 1996; 123(6-7):417–25 (49 ref.) **(Fre)**

[Primary cutaneous osteoma in hereditary Albright osteodystrophy] Diercks K, et al. **Hautarzt** 1996 Sep; 47(9):673–5 (Eng. Abstr.) **(Ger)**

[Dyskeratosis congenita. Genetic hematologic-immunologic systemic disease with pancytopenia] Sölder B, et al. **Klin Padiatr** 1996 Nov-Dec;208(6):344–9 (50 ref.) (Eng. Abstr.) **(Ger)**

[The determination of the complementation groups for the cells of patients with xeroderma pigmentosum and the Cockayne syndrome found in Russia] Pleskach NM, et al. **Tsitologiia** 1996;38(8):863–8 (Eng. Abstr.) **(Rus)**

HISTORY

The history of photography in dermatology. Milestones from the roots to the 20th century. Neuse WH, et al. **Arch Dermatol** 1996 Dec;132(12):1492–8

Tommaso de Amicis, Augusto Ducrey, Lodovico Tommasi: three Neapolitan stars in the dermatovenereology firmament. Schiavo AL, et al. **Int J Dermatol** 1996 Jan; 35(1):57–62

[50 years Zwickau Dermatologic Clinic in the Heinrich-Braum Hospital] Otremba H, et al. **Hautarzt** 1997 Jun;48(6):425–7 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Antibody production to heat shock proteins with Mr 65 kD (HSP65) in cutaneous inflammation: a possible relation to focal infection. Izaki S, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:197–200

Skin reaction to contrast medium. Gonzalo-Garijo MA, et al. **Allergy** 1997 Aug;52(8):875–6

Microscopic polyangiitis. Delineation of a cutaneous-limited variant associated with antimyeloperoxidase autoantibody. Irvine AD, et al. **Arch Dermatol** 1997 Apr;133(4):474–7

Macular amyloidosis [letter] Mattheou-Vakali G, et al. **Br J Dermatol** 1996 Sep;135(3):489–91

Six cases positive for anti-centromere antibodies with ulcer and gangrene in the extremities. Takahashi M, et al. **Br J Rheumatol** 1997 Aug;36(8):889–93

Immunologic aspects: immunology of mineral water spas. Ghersetich I, et al. **Clin Dermatol** 1996 Nov-Dec; 14(6):563–6 (36 ref.)

Monoclonal antibody to heparan sulfate from autoimmune tight skin (TSK) mice binds to the endothelial cell surface. Matic M, et al. **Immunol Invest** 1997 Apr;26(3):371–81

Correlation of skin disorders with CD4 lymphocyte counts in patients with HIV/AIDS. Goldstein B, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):262–4

Expression of major histocompatibility complex class II molecules by dermal inflammatory cells, epidermal Langerhans cells and keratinocytes in canine dermatological disease. Day MJ. **J Comp Pathol** 1996 Nov; 115(4):317–26

The utility of transgenic mouse models in the study of cutaneous immunology and inflammation. Kupper TS. **J Dermatol** 1996 Nov;23(11):741–5 (26 ref.)

Eosinophil cationic protein (ECP) level and its correlation with eosinophil number or IgE level of peripheral blood in patients with various skin diseases. Kim TY, et al. **J Dermatol Sci** 1997 Aug;15(2):89–94

IL-7 overexpression in transgenic mouse keratinocytes causes a lymphoproliferative skin disease dominated by intermediate TCR cells: evidence for a hierarchy in IL-7 responsiveness among cutaneous T cells. Williams IR, et al. **J Immunol** 1997 Sep 15;159(6):3044–56

Skin manifestations and immunological parameters in childhood food allergy. Oehling A, et al. **J Investig Allergol Clin Immunol** 1997 May-Jun;7(3):155–9

Antinuclear antibodies in children with localized scleroderma. Rosenberg AM, et al. **J Rheumatol** 1995 Dec; 22(12):2337–43

Analysis of causes which intensify the skin symptoms in food allergy. Uścinowicz M, et al. **Rocz Akad Med Bialymst** 1995;40(3):538–43

METABOLISM

Expression of keratins (K10 and K17) in steatocystoma multiplex, eruptive vellus hair cysts, and epidermoid and trichilemmal cysts. Tomková H, et al. **Am J Dermatopathol** 1997 Jun;19(3):250–3

Altered profile of urinary arsenic metabolites in adults with chronic arsenicism. A pilot study. Del Razo LM, et al. **Arch Toxicol** 1997;71(4):211–7

Reticular erythematous mucinosis syndrome: glycosaminoglycan synthesis by fibroblasts and abnormal response to interleukin-1 beta. Izumi T, et al. **Dermatology** 1996;192(1):41–5

Targeted disruption of decorin leads to abnormal collagen fibril morphology and skin fragility. Danielson KG, et al. **J Cell Biol** 1997 Feb 10;136(3):729–43

Folliculosebaceous cystic hamartoma with a neural component: an immunohistochemical study. Toyoda M, et al. **J Dermatol** 1997 Jul;24(7):451–7

SKIN DISEASES

Epidermal structural proteins in skin disorders. Manabe M, et al. **J Dermatol Sci** 1997 Sep;15(3):143–65 (167 ref.)

Immunohistochemical studies of basement membrane proteins and proliferation and apoptosis markers in sulfur mustard induced cutaneous lesions in weanling pigs. Smith KJ, et al. **J Dermatol Sci** 1997 Sep;15(3):173–82

Differential expression of human cornifin alpha and beta in squamous differentiating epithelial tissues and several skin lesions. Fujimoto W, et al. **J Invest Dermatol** 1997 Feb; 108(2):200–4

Lack of expression of E-cadherin is associated with dissemination of Langerhans' cell histiocytosis and poor outcome. Geissmann F, et al. **J Pathol** 1997 Mar; 181(3):301–4

Epidermal barrier in disorders of the skin. Fartasch M. **Microsc Res Tech** 1997 Aug 15;38(4):361–72

Three-dimensional cultures of keratinocytes and an application to in vitro–amyloid production of cutaneous amyloidosis. Horiguchi Y, et al. **Microsc Res Tech** 1997 Aug 15;38(4):387–93

MICROBIOLOGY

Long-term follow-up of juvenile-onset cutaneous polyarteritis nodosa associated with streptococcal infection. Till SH, et al. **Br J Rheumatol** 1997 Aug;36(8):909–11

Cutaneous and muscular abscesses secondary to Actinomyces meyeri pneumonia. Liaudet L, et al. **Clin Infect Dis** 1996 Jan;22(1):185–6 (9 ref.)

Slowly growing mycobacteria and chronic skin disorders. Mattila JO, et al. **Clin Infect Dis** 1996 Nov;23(5):1043–8

Staphylococcal scalded skin syndrome caused by exfoliative toxin B-producing methicillin-resistant Staphylococcus aureus [letter] Yokota S, et al. **Eur J Pediatr** 1996 Aug; 155(8):722

Nodular granulomatous phlebitis of the skin: a fourth type of tuberculid. Hara K, et al. **Histopathology** 1997 Feb; 30(2):129–34

Hyaluronic acid capsule and the role of streptococcal entry into keratinocytes in invasive skin infection. Schrager HM, et al. **J Clin Invest** 1996 Nov 1;98(9):1954–8

PARASITOLOGY

Cutaneous sparganosis. Griffin MP, et al. **Am J Dermatopathol** 1996 Feb;18(1):70–2

Cutaneous lesions due to Acanthamoeba sp in a patient with AIDS. Deluol AM, et al. **J Eukaryot Microbiol** 1996 Sep–Oct;43(5):130S–131S

Cutaneous myiasis acquired in New York State. Rao R, et al. **Pediatrics** 1997 Apr;99(4):601–2

PATHOLOGY

Naevus lipomatosus cutaneous superficialis: overlap with connective tissue naevi [letter] Orteu CH, et al. **Acta Derm Venereol** 1996 May;76(3):243–5

Histiocytic necrotizing lymphadenitis (Kikuchi–Fujimoto's disease) with cutaneous involvement [letter] Rosina P, et al. **Acta Derm Venereol** 1997 Jan;77(1):86–7

Macular posterior pigmentary incontinence: its relation to macular amyloidosis and notalgia paresthetica [see comments] Westermark P, et al. **Acta Derm Venereol** 1996 Jul;76(4):302–4. Comment in: Acta Derm Venereol 1997 Mar;77(2):164.

Conjunctival keratoacanthoma. Schellini SA, et al. **Acta Ophthalmol Scand** 1997 Jun;75(3):335–7 (22 ref.)

Hybrid cysts showing alternate combination of eruptive vellus hair cyst, steatocystoma multiplex, and epidermoid cyst, and an association among the three conditions. Ahn SK, et al. **Am J Dermatopathol** 1996 Dec;18(6):645–9

Malignant histiocytosis presenting as multiple erythematous plaques and cutaneous depigmentation. Akiyama M, et al. **Am J Dermatopathol** 1997 Jun;19(3):299–302

Folliculosebaceous cystic hamartoma with perifollicular mucinosis. Aloi F, et al. **Am J Dermatopathol** 1996 Feb; 18(1):58–62

Mucinous syringometaplasia. An immunohistochemical and ultrastructural study of a case. Bergman R, et al. **Am J Dermatopathol** 1996 Oct;18(5):521–6

Cutaneous pathology in primary erythermalgia. Drenth JP, et al. **Am J Dermatopathol** 1996 Feb;18(1):30–4

Simultaneous occurrence of multiple trichoblastomas and steatocystoma multiplex. Gianotti R, et al. **Am J Dermatopathol** 1997 Jun;19(3):294–8

Cutaneous sparganosis. Griffin MP, et al. **Am J Dermatopathol** 1996 Feb;18(1):70–2

Elastolytic dermatoses [letter; comment] Holubar K. **Am J Dermatopathol** 1997 Feb;19(1):103. Comment on: Am J Dermatopathol 1996 Apr;18(2):212–7.

Annular lesions in exogenous ochronosis [letter; comment] Jordaan HF. **Am J Dermatopathol** 1996 Feb;18(1):106–7. Comment on: Am J Dermatopathol 1995 Feb;17(1):18–22.

Cutaneous metaplastic synovial cyst in an Ehlers-Danlos patient. Nieto S, et al. **Am J Dermatopathol** 1997 Aug; 19(4):407–10

Case of malignant lymphoma associated with primary systemic plasmacytosis with polyclonal hypergammaglobulinemia. Nitta Y. **Am J Dermatopathol** 1997 Jun;19(3):289–93

Steatocystoma multiplex: a case with unusual clinical and histological manifestation. Setoyama M, et al. **Am J Dermatopathol** 1997 Feb;19(1):89–92

Ciliated cyst of the perineal skin. Sidoni A, et al. **Am J Dermatopathol** 1997 Feb;19(1):93–6

Cutaneous histopathologic features in weanling pigs after exposure to three different doses of liquid sulfur mustard. Smith KJ, et al. **Am J Dermatopathol** 1996 Oct;18(5):515–20

Adult colloid milium of the eyelid. Safneck JR, et al. **Am J Ophthalmol** 1997 Mar;123(3):402–3

Immunohistochemical study of skin lesions in acute and chronic graft versus host disease following bone marrow transplantation. Favre A, et al. **Am J Surg Pathol** 1997 Jan;21(1):23–34

Proliferating cell nuclear antigen (PCNA) expression in pseudoepitheliomatous hyperplasia, keratoacanthoma and squamous cell carcinoma of the skin. Li J, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):526–30

Comparison of computer-aided design and rule of nines methods in the evaluation of the extent of body involvement in cutaneous lesions [letter] Kanthraj GR, et al. **Arch Dermatol** 1997 Jul;133(7):922–3.

Infantile perianal pyramidal protrusion. Kayashima K, et al. **Arch Dermatol** 1996 Dec;132(12):1481–4

A hyperpigmented, rippled eruption in a Hispanic woman. Macular amyloidosis. Lines RR 3rd, et al. **Arch Dermatol** 1997 Mar;133(3):383, 386

Lymphomatoid granulomatosis of the skin and lung. An angiocentric T-cell-rich B-cell lymphoproliferative disorder. McNiff JM, et al. **Arch Dermatol** 1996 Dec; 132(12):1464–70

Cutaneous involvement in sarcoidosis. Relationship to systemic disease [editorial] Mañá J, et al. **Arch Dermatol** 1997 Jul;133(7):882–8 (75 ref.)

Asymptomatic nodules on the chest. Cutaneous sinus histiocytosis (CSH) (cutaneous Rosai-Dorfman disease). Saenz-Santamaria MC, et al. **Arch Dermatol** 1997 Feb; 133(2):233, 236

Anetoderma of prematurity [letter; comment] Todd DJ. **Arch Dermatol** 1997 Jun;133(6):789. Comment on: Arch Dermatol 1996 Jun;132(6):671–4.

Experimental induction and ultrastructural characterization of apoptosis in murine acute cutaneous graft-versus-host disease. Yoo YH, et al. **Arch Dermatol Res** 1997 Jun; 289(7):389–98

Alpha1-antitrypsin deficiency, arthritis, and pancreatitis: comment on the dermatologic vignette by Shbeeb et al [letter] Rubinstein HM. **Arthritis Rheum** 1997 Sep; 40(9):1732

A blue-black macule of recent onset (tumoral melanosis). Kossard S. **Australas J Dermatol** 1996 Nov;37(4):215–7

Interactions of the scid or beige mutations with the viable motheaten mutation. Dominique V, et al. **Autoimmunity** 1995;22(4):199–207

Is histological examination of tissue removed by general practitioners always necessary? Before and after comparison of detection rates of serious skin lesions. Lowy A, et al. **BMJ** 1997 Aug 16;315(7105):406–8

Granuloma faciale entirely in an extrafacial location [letter] Castaño E, et al. **Br J Dermatol** 1997 Jun;136(6):978–9 (9 ref.)

Effects of xerosis and ageing on epidermal proliferation and differentiation. Engelke M, et al. **Br J Dermatol** 1997 Aug; 137(2):219–25

Becker's naevus with ipsilateral areolar hypoplasia in three males [letter] Sharma R, et al. **Br J Dermatol** 1997 Mar; 136(3):471–2

Linear atrophoderma of Moulin: a disease which follows Blaschko's lines. Wollenberg A, et al. **Br J Dermatol** 1996 Aug;135(2):277–9 (34 ref.)

Scalp necrosis in giant cell arteritis and review of the literature. Currey J. **Br J Rheumatol** 1997 Jul;36(7):814–6 (24 ref.)

Dermatologic problems of the menopause. Graham-Brown R. **Clin Dermatol** 1997 Jan–Feb;15(1):143–5 (19 ref.)

Basement membrane zone. Ray MC, et al. **Clin Dermatol** 1996 Jul–Aug;14(4):321–30 (48 ref.)

Reactive perforating collagenosis--transepidermal elimination of type IV collagen. Herzinger T, et al. **Clin Exp Dermatol** 1996 Jul;21(4):279–82

Unilateral naevoid telangiectasia syndrome in pregnancy. Woollons A, et al. **Clin Exp Dermatol** 1996 Nov; 21(6):459–60 (6 ref.)

Clinical evaluation of cutaneous lesions of the back: spinal signatures that do not go away. Humphreys RP. **Clin Neurosurg** 1996;43:175–87 (6 ref.)

Mucocutaneous conditions affecting the mouth. Williams DM. **Curr Top Pathol** 1996;90:1–28 (92 ref.)

The Raison d'être of Dermatopathology: practical and conceptual at one year of age [editorial] Ackerman AB. **Cutis** 1996 Oct;58(4):251

The non-Langerhans' cell histiocytoses in childhood. Burgdorf WH, et al. **Cutis** 1996 Sep;58(3):201–7 (69 ref.)

Cutaneous granulomas as a presenting sign in ataxia-telangiectasia. Drolet BA, et al. **Dermatology** 1997; 194(3):273–5 (16 ref.)

Eruptive vellus hair cyst and steatocystoma multiplex: hybrid cysts. Hurlimann AF, et al. **Dermatology** 1996;192(1):64–6

A case of acrogeria associated with late-onset focal dermal elastosis. Tajima S, et al. **Dermatology** 1996;192(3):264–8

An unusual axillary mass. Gandhi A, et al. **Eur J Surg Oncol** 1996 Oct;22(5):549–50

Spontaneous comedones on the skin of hairless descendants of Mexican hairless dogs. Kimura T, et al. **Exp Anim** 1996 Oct;45(4):377–84

Human keratin diseases: hereditary fragility of specific epithelial tissues. Corden LD, et al. **Exp Dermatol** 1996 Dec;5(6):297–307 (102 ref.)

Proliferative activity of keratoacanthoma and para-aramid-induced keratinizing squamous lesions of the lungs of rats as assessed by the proliferating cell nuclear antigen and nucleolar organizer regions. Frame SR, et al. **Exp Toxicol Pathol** 1996 Nov;48(6):523–5

Nonerythroid membrane skeletal proteins in normal and diseased human skin. Shimizu T, et al. **Histol Histopathol** 1996 Apr;11(2):495–501 (72 ref.)

Nodular erythema elevatum diutinum mimicking cutaneous neoplasms. Shanks JH, et al. **Histopathology** 1997 Jul; 31(1):91–6

Acral-lentiginous naevus of plantar skin [letter; comment] Slater D. **Histopathology** 1996 Jul;29(1):95–6. Comment on: Histopathology 1995 Dec;27(6):549–55.

Static image analysis of skin specimens: the application of telepathology to frozen section evaluation. Weinstein LJ, et al. **Hum Pathol** 1997 Jan;28(1):30–5

Transepidermal migration of resorbing bone fragments. Boyd AS, et al. **Int J Dermatol** 1996 Dec;35(12):884–5

Fat necrosis with features of erythema nodosum in a patient with metastatic pancreatic carcinoma. Durden FM, et al. **Int J Dermatol** 1996 Jan;35(1):39–41

Subcutaneous fat necrosis of the newborn. Mather MK, et al. **Int J Dermatol** 1997 Jun;36(6):450–2

Annular atrophic plaques of the skin (Christianson's disease). Ramos-Caro FA, et al. **Int J Dermatol** 1997 Jul; 36(7):518–21

Primary localized cutaneous amyloidosis: a clinicopathologic study from Saudi Arabia. al-Ratrout JT, et al. **Int J Dermatol** 1997 Jun;36(6):428–34

White fibrous papulosis of the neck. Zanca A, et al. **Int J Dermatol** 1996 Oct;35(10):720–2

Acquired reactive perforating collagenosis: unilateral umbilicated papules along the lesions of herpes zoster. Bang SW, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):778–9

Epiluminescence microscopy of small pigmented skin lesions: short-term formal training improves the diagnostic performance of dermatologists. Binder M, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):197–202

Folliculosebaceous cystic hamartoma [letter; comment] Donati P, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):502. Comment on: J Am Acad Dermatol 1996 Jan;34(1):77–81.

Cutaneous nodular reaction to oral mercury. Jun JB, et al. **J Am Acad Dermatol** 1997 Jul;37(1):131–3

Multiple eruptive milia: report of a case, review of the literature, and a classification. Langley RG, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 2):353–6 (34 ref.)

A clinicopathologic approach to granulomatous dermatoses. Rabinowitz LO, et al. **J Am Acad Dermatol** 1996 Oct; 35(4):588–600 (70 ref.)

Reactive perforating collagenosis in Treacher Collins syndrome. Tay YK, et al. **J Am Acad Dermatol** 1996 Dec; 35(6):982–3

Skin biopsy indications in primary care practice: a population-based study [see comments] Jones TP, et al. **J Am Board Fam Pract** 1996 Nov–Dec;9(6):397–404. Comment in: J Am Board Fam Pract 1997 Mar–Apr;10(2):175–6.

Photography of dermatological conditions using polarized light. McFall K. **J Audiov Media Med** 1996 Mar;19(1):5–9

Primary pigmented nodular adrenocortical disease: reevaluation of a patient with carney complex 27 years after unilateral adrenalectomy. Sarlis NJ, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1274–8

Langerhans' cells are depleted in chronic graft versus host disease. Aractingi S, et al. **J Clin Pathol** 1997 Apr; 50(4):305–9

Milia en plaque associated with pseudoxanthoma elasticum. Cho SH, et al. **J Cutan Pathol** 1997 Jan;24(1):61–3

Persistent cutaneous pseudolymphoma after intradermal gold injection. Kalimo K, et al. **J Cutan Pathol** 1996 Aug; 23(4):328–34

The clinical and histomorphological features of pityriasis rubra pilaris. A comparative analysis with psoriasis. Magro CM, et al. **J Cutan Pathol** 1997 Aug;24(7):416–24

Apoptotic cell death in formation of vesicular skin lesions in patients with acquired zinc deficiency. Mori H, et al. **J Cutan Pathol** 1996 Aug;23(4):359–63

Mid-dermal elastolysis: a pathological and ultrastructural study of five cases. Neri I, et al. **J Cutan Pathol** 1996 Apr; 23(2):165–9

Cutaneous lymphangiectases associated with severe photoaging and topical corticosteroid application. Pena JM, et al. **J Cutan Pathol** 1996 Apr;23(2):175–81

Intermediate- and low-molecular-weight keratin detection with the monoclonal antibody MNF116. An immunohistochemical study on 232 paraffin-embedded cutaneous lesions. Prieto VG, et al. **J Cutan Pathol** 1996 Jun;23(3):234–41

Lipomembranous changes in nodular-cystic fat necrosis. Pujol RM, et al. **J Cutan Pathol** 1995 Dec;22(6):551–5

New applications of electron microscopy techniques in dermatopathology. Schaumburg-Lever G. **J Cutan Pathol** 1995 Dec;22(6):483–7

Tumoral calcinosis: report of a case and brief review of the literature. Abraham Z, et al. **J Dermatol** 1996 Aug; 23(8):545–50 (41 ref.)

Pigmented epidermal cyst. Akasaka T, et al. **J Dermatol** 1997 Jul;24(7):475–8

Multiple basaloid cell hamartoma with alopecia and autoimmune disease (systemic lupus erythematosus). Akasaka T, et al. **J Dermatol** 1996 Nov;23(11):821–4 (12 ref.)

Apoptotic cell death of neutrophils in development of skin lesions of patients with anaphylactoid purpura. Banno S, et al. **J Dermatol** 1997 Feb;24(2):94–9

Reactive perforating collagenosis and acquired perforating dermatosis: presentation of two cases. Kyriaki A, et al. **J Dermatol** 1997 Mar;24(3):170–3

Evaluation of cross-reacting anti-human antibodies in the euthymic hairless guinea pig model (HGP) suggests that the HGP may be a model for the study of proliferative skin disease. Smith KJ, et al. **J Dermatol Sci** 1997 Mar; 14(3):240–50

Cutaneous pseudolymphoma occurring during methotrexate therapy for rheumatoid arthritis [letter] Flipo RM, et al. **J Rheumatol** 1997 Apr;24(4):809–10

Monoclonal antibody therapy of diffuse cutaneous scleroderma with CAMPATH-1H. Isaacs JD, et al. **J Rheumatol** 1996 Jun;23(6):1103–6

Eosinophilic granuloma. al Jaradi M, et al. **JPMA J Pak Med Assoc** 1997 Mar;47(3):98–100

Mel-5: a novel antibody for differential diagnosis of epidermal pigmented lesions of the skin in paraffin-embedded sections. Bhawan J. **Melanoma Res** 1997 Feb;7(1):43–8

Primary cutaneous granulomatous phlebitis with visceral involvement: unmasking of a masked villain. Lie JT. **Mod Pathol** 1996 Jul;9(7):719–24

Ocular manifestations of the organoid nevus syndrome. Shields JA, et al. **Ophthalmology** 1997 Mar;104(3):549–57

Vascular involvement in cutaneous sarcoidosis. Takemura T, et al. **Pathol Int** 1997 Feb–Mar;47(2–3):84–9

Anogenital skin diseases of childhood. Siegfried EC, et al. **Pediatr Ann** 1997 May;26(5):321–31

Subcutaneous tumor in an infant [clinical conference] Calobrisi SD, et al. **Pediatr Dermatol** 1996 Mar–Apr; 13(2):171–2

An asymptomatic papule on the face [clinical conference] Evans LA, et al. **Pediatr Dermatol** 1996 May–Jun; 13(3):253–4

Primary Anetoderma in children: report of two cases and literature review. Karrer S, et al. **Pediatr Dermatol** 1996 Sep–Oct;13(5):382–5 (22 ref.)

Leukemia cutis in three children: clinical and immunohistochemical studies. Koga M, et al. **Pediatr Dermatol** 1996 May–Jun;13(3):200–6

Skin manifestations in individuals of African or Asian descent. Laude TA, et al. **Pediatr Dermatol** 1996 Mar–Apr; 13(2):158–68

Childhood calcinosis cutis. Rodríguez-Cano L, et al. **Pediatr Dermatol** 1996 Mar–Apr;13(2):114–7

Epidermal abnormalities may distinguish type 2 from type 1 and type 3 of Gaucher disease. Sidransky E, et al. **Pediatr Res** 1996 Jan;39(1):134–41

An unusual cutaneous manifestation of ulcerative colitis: thrombotic skin gangrene. Singh S, et al. **Postgrad Med J** 1996 Oct;72(852):623–4

Neoplastic progression and prognosis in melanoma. Elder DE, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):336–48 (87 ref.)

Immunohistochemistry: a prognostic as well as diagnostic tool? Mehregan D, et al. **Semin Cutan Med Surg** 1996 Dec; 15(4):317–25 (85 ref.)

Cutaneous neural heterotopias and related tumors relevant for the dermatopathologist. Argenyi ZB. **Semin Diagn Pathol** 1996 Feb;13(1):60–71 (62 ref.)

Cutaneous gangrene secondary to metastatic calcification in end stage renal failure--a case report. Tan HH, et al. **Singapore Med J** 1996 Aug;37(4):438–40 (12 ref.)

Primary breast cancer in aberrant breast tissue in the axilla. Yerra L, et al. **South Med J** 1997 Jun;90(6):661–2 (9 ref.)

Staging evaluation and surveillance for melanoma patients in a fiscally restrictive medical environment. A commentary. Ross MI. **Surg Clin North Am** 1996 Dec; 76(6):1423–32 (43 ref.)

Ophthalmic features of the organoid nevus syndrome. Shields JA, et al. **Trans Am Ophthalmol Soc** 1996;94:65–86; discussion 86–7 (46 ref.)

[Quadri-chromic staining in routine cutaneous histopathology (hematoxylin, eosin, saffron and astra blue)] Cribier B, et al. **Ann Dermatol Venereol** 1995; 122(11–12):758–63 (Eng. Abstr.) **(Fre)**

[Recurrent pyogenic granuloma or Warner and Wilson-Jones syndrome] Senser M, et al. **Arch Pediatr** 1997 Jul;4(7):653–5 (Eng. Abstr.) **(Fre)**

[Clinical signs of connective tissue diseases in children] Piérard GE, et al. **Rev Med Liege** 1997;52(7):452–6 (23 ref.) **(Fre)**

[Flow cytometry in dermatology] Bauer R, et al. **Hautarzt** 1996 Jul;47(7):561–78 (36 ref.) **(Ger)**

[Applications of electron microscopy in dermatology] Sterniczky B, et al. **Hautarzt** 1996 Feb;47(2):148–65 quiz 162–3 (41 ref.) **(Ger)**

[Differentiation of lupus erythematosus and lymphocytic infiltration] Bonczkowitz M, et al. **Verh Dtsch Ges Pathol** 1996;80:235–40 (Eng. Abstr.) **(Ger)**

[Detection of herpes virus-like DNA in various forms of Kaposi's sarcoma but not in other mesenchymal tumors or inflammatory changes in skin] Cathomas G, et al. **Verh Dtsch Ges Pathol** 1996;80:318–21 (Eng. Abstr.) **(Ger)**

[Histology of supepidermal bullous dermatoses] Megahed M. **Verh Dtsch Ges Pathol** 1996;80:223–8 (Eng. Abstr.) **(Ger)**

[Edelmann's syndrome] Redchyts' IV, et al. **Lik Sprava** 1996 Mar–Apr;(3–4):163–5 **(Ukr)**

PHYSIOPATHOLOGY

Role of reactive oxygen species in dermatologic diseases. Boh EE. **Clin Dermatol** 1996 Jul–Aug;14(4):343–52 (53 ref.)

International survey on the management of patients with SLE. I. General data on the participating centers and the results of a questionnaire regarding mucocutaneous involvement. Vitali C, et al. **Clin Exp Rheumatol** 1996 Nov–Dec;14 Suppl 16:S17–22

Dermatological manifestations of 71 Down syndrome children admitted to a clinical genetics unit. Ercis M, et al. **Clin Genet** 1996 Nov;50(5):317–20

Pediatric dermatology. Hartley AH, et al. **Dermatol Clin** 1997 Jan;15(1):111–9 (50 ref.)

Cutaneous sensory disorder. Koo J, et al. **Dermatol Clin** 1996 Jul;14(3):497–502 (23 ref.)

Mechanical properties of the diabetic waxy skin. Nikkels-Tassoudji N, et al. **Dermatology** 1996;192(1):19–22

Plectin abnormality in epidermolysis bullosa simplex Ogna: non-responsiveness of basal keratinocytes to some anti-rat plectin antibodies. Koss-Harnes D, et al. **Exp Dermatol** 1997 Feb;6(1):41–8

Pyogenic granuloma stimulates angiogenesis in the chick embryo chorioallantoic membrane. Ribatti D, et al. **Int J Microcirc Clin Exp** 1996 Mar–Apr;16(2):82–8

Subcutaneous cysts: another cause of "failed" spinal anesthesia? Kelly D, et al. **J Clin Anesth** 1996 Nov; 8(7):603–4

[Prosthesis edge nodule and verrucous hyperplasia in leg amputees] Wlotzke U, et al. **Z Orthop Ihre Grenzgeb** 1997 May–Jun;135(3):233–5 (Eng. Abstr.) **(Ger)**

[Role of neuropeptides in dermatology] Sánchez-Carpintero I, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S222–31 (88 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Photoaging of the connective tissue of skin: its prevention and therapy. Scharffetter-Kochanek K. **Adv Pharmacol** 1997;38:639–55 (116 ref.)

Protective effect of povidone-iodine ointment against skin lesions induced by sulphur and nitrogen mustards and by non-mustard vesicants. Wormser U, et al. **Arch Toxicol** 1997;71(3):165–70

A semipermeable skin dressing for extremely low birth weight infants. Donahue ML, et al. **J Perinatol** 1996 Jan–Feb;16(1):20–6

Health and safety behaviour and compliance in electroplating workshops. Halliday-Bell J, et al. **Occup Med (Oxf)** 1997 May;47(4):237–40

[1st Otto Braun-Falco Alumni Lecture Tübigen 26 April 1996. K. Wolff: Prevention in dermatology] Ring J. **Hautarzt** 1996 Nov;47(11):873 **(Ger)**

PSYCHOLOGY

Suicide in dermatological patients. Cotterill JA, et al. **Br J Dermatol** 1997 Aug;137(2):246–50

Dermatology quality of life scales--a measure of the impact of skin diseases. Morgan M, et al. **Br J Dermatol** 1997 Feb; 136(2):202–6

Psychodermatology of women. Koblenzer CS. **Clin Dermatol** 1997 Jan–Feb;15(1):127–41 (127 ref.)

Patient-physician consensus on quality of life in dermatology. Jemec GB, et al. **Clin Exp Dermatol** 1996 May;21(3):177–9

Dermatologic nondisease. Cotterill JA. **Dermatol Clin** 1996 Jul;14(3):439–45 (68 ref.)

The psychosocial impact of skin disease. An overview. Ginsburg IH. **Dermatol Clin** 1996 Jul;14(3):473–84 (69 ref.)

Pseudopsychodermatologic disease. Koo J, et al. **Dermatol Clin** 1996 Jul;14(3):525–30

Psychophysiology of stress in dermatology. The psychobiologic pattern of psychosomatics. Panconesi E, et al. **Dermatol Clin** 1996 Jul;14(3):399–421 (117 ref.)

Gratteurs de papier. III: Doctors through the looking-glass. A topsy-turvy world. Koblenzer CS. **Int J Dermatol** 1996 Aug;35(8):545–7

Privacy and display--issues of good practice for dermatologists. Ryan TJ, et al. **Int J Dermatol** 1997 Jan; 36(1):2–9

Skindex, a quality-of-life measure for patients with skin disease: reliability, validity, and responsiveness. Chren MM, et al. **J Invest Dermatol** 1996 Nov;107(5):707–13

Convergent and discriminant validity of a generic and a disease-specific instrument to measure quality of life in patients with skin disease. Chren MM, et al. **J Invest Dermatol** 1997 Jan;108(1):103–7

Baffling skin ailments may originate in psyche [news] Lamberg L. **JAMA** 1997 Jun 4;277(21):1660–2

The different faces of depression in dermatology [editorial] Cotterill JA. **Natl Med J India** 1996 Sep–Oct;9(5):203–4

Psychiatric morbidity among dermatology inpatients. Pulimood S, et al. **Natl Med J India** 1996 Sep–Oct; 9(5):208–10

[Skin and stress] Consoli S. **Pathol Biol (Paris)** 1996 Dec; 44(10):875–81 (28 ref.) (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Skin and bones: dermatologic conditions with skeletal abnormalities. Harlow CL, et al. **Skeletal Radiol** 1997 Apr; 26(4):201–13 (48 ref.)

RADIONUCLIDE IMAGING

Graves' dermopathy: does octreotide scintigraphy predict the response to octreotide treatment? Kuyvenhoven JP, et al. **Thyroid** 1996 Oct;6(5):385–9

RADIOTHERAPY

Thorium X in dermatology: a closed chapter. Scerri L, et al. **Int J Dermatol** 1996 Feb;35(2):142–4

Treatment of pyogenic granuloma in children with the flashlamp-pumped pulsed dye laser. Tay YK, et al. **Pediatrics** 1997 Mar;99(3):368–70

REHABILITATION

Mineral water and spas in Italy. Andreassi L, et al. **Clin Dermatol** 1996 Nov–Dec;14(6):627–32 (16 ref.)

Mineral water and spas in France. Karam P. **Clin Dermatol** 1996 Nov–Dec;14(6):607–10 (21 ref.)

Mineral water and spas in Spain. Ledo E. **Clin Dermatol** 1996 Nov–Dec;14(6):641–6 (19 ref.)

[Bath additives in dermatologic balneotherapy. Indications and approaches in current research] Schempp CM, et al. **Hautarzt** 1996 Dec;47(12):894–900 (49 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Surgical treatment of skin lesions induced by sulfur mustard ("mustard gas")—an experimental study in the guinea pig. Kjellström BT, et al. **Ann Acad Med Singapore** 1997 Jan; 26(1):30–6

Incision and drainage of cutaneous abscesses is not associated with bacteremia in afebrile adults. Bobrow BJ, et al. **Ann Emerg Med** 1997 Mar;29(3):404–8

Cutaneous lasers: a review. Rosenbach A, et al. **Ann Plast Surg** 1996 Aug;37(2):220–31 (146 ref.)

Surgical management of calcinosis cutis universalis in systemic lupus erythematosus. Cousins MA, et al. **Arthritis Rheum** 1997 Mar;40(3):570–2

The use of nerve blocks in the laser treatment of cutaneous lesions. Pay AD, et al. **Br J Plast Surg** 1997 Feb;50(2):132–4

What is new in cutaneous laser research. Grossman MC. **Dermatol Clin** 1997 Jan;15(1):1–8 (58 ref.)

Laser treatment of warts and other epidermal and dermal lesions. Hruza GJ. **Dermatol Clin** 1997 Jul;15(3):487–506 (129 ref.)

Camouflaging techniques and dermatologic surgery. Draelos ZD. **Dermatol Surg** 1996 Dec;22(12):1023–7

Postoperative syncope after office surgery [letter] Fletman H. **Dermatol Surg** 1997 May;23(5):403

The purse-string closure [letter] Greenbaum SS, et al. **Dermatol Surg** 1996 Dec;22(12):1054–6

The efficacy of dermabrasion in the treatment of nodular amyloidosis. Lien MH, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 2):315–6

Laser medicine in dermatology. Anderson RR. **J Dermatol** 1996 Nov;23(11):778–82 (17 ref.)

Surgical management of cutaneous infection caused by atypical mycobacteria after penetrating injury: the hidden dangers of horticulture. Holland J, et al. **J Trauma** 1997 Feb;42(2):337–40

Use of Er:YAG laser for benign skin disorders. Dmovšek-Olup B, et al. **Lasers Surg Med** 1997;21(1):13–9

Cutaneous applications of lasers. Ries WR, et al. **Otolaryngol Clin North Am** 1996 Dec;29(6):915–29 (45 ref.)

Five generations with steatocystoma multiplex congenita: a treatment regimen. Pamoukian VN, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1142–6

Calcinosis cutis requiring sculpturing in scleroderma [letter] Sengezer M, et al. **Plast Reconstr Surg** 1996 Dec; 98(7):1319–21

Office procedures. Cryotherapy of dermal abnormalities. Jester DM. **Prim Care** 1997 Jun;24(2):269–80 (12 ref.)

Laser skin resurfacing. Dover JS, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):177–88 (66 ref.)

Preoperative anesthesia and postoperative considerations in laser resurfacing. Fitzpatrick RE, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):170–6 (11 ref.)

Dermabrasion. Mandy SH. **Semin Cutan Med Surg** 1996 Sep; 15(3):162–9 (20 ref.)

[Fibrous hamartoma in childhood--a report of a rare case from practice] Mainkhard K, et al. **Khirurgiia (Sofiia)** 1996; 49(3):51–2 (9 ref.) **(Bul)**

[Dermatological laser treatment. A review of therapeutic possibilities and equipment] Haedersdal M, et al. **Ugeskr Laeger** 1997 May 26;159(22):3376–82 (40 ref.) (Eng. Abstr.) **(Dan)**

[Laser treatment in dermatology (editorial)] Zachariae H. **Ugeskr Laeger** 1997 May 26;159(22):3365 **(Dan)**

[Surgical cover of dorsolumbar radionecrosis. Apropos of 6 cases] Camus E, et al. **Ann Chir Plast Esthet** 1996 Aug; 41(4):354–9 (Eng. Abstr.) **(Fre)**

[Utilization potential of the CO2-laser in dermal changes] Happak W, et al. **Handchir Mikrochir Plast Chir** 1996 Nov; 28(6):328–33 (Eng. Abstr.) **(Ger)**

[Q-switched ruby laser in dermatologic therapy. Use and indications] Michel S, et al. **Hautarzt** 1997 Jul;48(7):462–70

(81 ref.) (Eng. Abstr.) **(Ger)**

[Use of argon laser in dermatology] Telegdy E, et al. **Orv Hetil** 1996 Sep 22;137(38):2083–8 (Eng. Abstr.) **(Hun)**

[Laser surgical treatment of neurofibromas] Katalinich D. **Khirurgiia (Mosk)** 1996;(5):52–4 (Eng. Abstr.) **(Rus)**

[Lasers in dermatologic surgery] Takač S, et al. **Med Pregl** 1997 May–Jun;50(5–6):215–9 (Eng. Abstr.) **(Scr)**

[Cutaneous cryosurgery in family medicine: dimethyl ether–propane spray versus liquid nitrogen] Caballero Martínez F, et al. **Aten Primaria** 1996 Sep 30;18(5):211–6 (Eng. Abstr.) **(Spa)**

THERAPY

Photoaging of the connective tissue of skin: its prevention and therapy. Scharffetter–Kochanek K. **Adv Pharmacol** 1997;38:639–55 (116 ref.)

Dermatologic problems encountered in the emergency department. Ferrera PC, et al. **Am J Emerg Med** 1996 Oct; 14(6):588–601 (97 ref.)

Alternative therapies for cutaneous disorders [editorial; comment] Eisenberg D. **Arch Dermatol** 1997 Mar; 133(3):379–80. Comment on: Arch Dermatol 1997 Mar;133(3):316–21.

Hospitalization for skin disease improves quality of life [letter] Hurwitz D, et al. **Arch Dermatol** 1997 Jun;133(6):797–8

Bioclimatology at the Dead Sea in Israel. Abels DJ, et al. **Clin Dermatol** 1996 Nov–Dec;14(6):653–8 (41 ref.)

Soaps and detergents in skin diseases. Hannuksela A, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):77–80 (37 ref.)

Spa therapy in Poland. Omulecki A, et al. **Clin Dermatol** 1996 Nov–Dec;14(6):679–83 (15 ref.)

Mineral water and spas in Bulgaria. Vassileva S. **Clin Dermatol** 1996 Nov–Dec;14(6):601–5 (16 ref.)

A dermatologic diary. Portrait of a practice. Shelley WB, et al. **Cutis** 1997 Jun;59(6):301–2

A dermatologic diary. Portrait of a practice. Shelley WB, et al. **Cutis** 1997 Jul;60(1):19–26

Cutaneous gene therapy. Khavari PA, et al. **Dermatol Clin** 1997 Jan;15(1):27–35 (54 ref.)

Gene delivery to the epidermis. Trainer AH, et al. **Hum Mol Genet** 1997;6(10):1761–7 (63 ref.)

The need for evidence–based management of skin diseases. Ladhani S. **Int J Dermatol** 1997 Jan;36(1):17–22 (74 ref.)

The proportion of medical consultations motivated by skin diseases in the health centers of Bamako (Republic of Mali). Mahé A, et al. **Int J Dermatol** 1997 Mar;36(3):185–6

Indications, contraindications and possible side–effects of climatotherapy at the Dead–Sea. Shani J, et al. **Int J Dermatol** 1997 Jul;36(7):481–92 (47 ref.)

Guidelines for the use of phototherapy and photochemotherapy in Ireland. Murphy GM, et al. **Ir J Med Sci** 1997 Apr–Jun;166(2):92–7

Medical issues and emergencies in the dermatology office. Fader DJ, et al. **J Am Acad Dermatol** 1997 Jan;36(1):1–16; quiz 16–8 (141 ref.)

Primary care in dermatology: whose role should it be? [see comments] Ramsay DL, et al. **J Am Acad Dermatol** 1996 Dec;35(6):1005–8. Comment in: J Am Acad Dermatol 1996 Dec;35(6):1009–11.

Guidelines of care for dermatologic conditions in patients infected with HIV. Guidelines/Outcomes Committee. American Academy of Dermatology. Rico MJ, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):450–72

Topical application of viral vectors for epidermal gene transfer. Lu B, et al. **J Invest Dermatol** 1997 May; 108(5):803–8

Dermatology. Dover JS, et al. **JAMA** 1997 Jun 18; 277(23):1848–50

A pediatrician's view: 'don't look at that light. It could burn your eyes out.' Altemeier WA 3rd. **Pediatr Ann** 1996 Feb; 25(2):68–71

Combining surgical methods for skin resurfacing. Coleman WP 3rd, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):194–9 (11 ref.)

Complications of resurfacing. Ragland HP, et al. **Semin Cutan Med Surg** 1996 Sep;15(3):200–7 (23 ref.)

The place of laser resurfacing within the range of medical and surgical skin resurfacing techniques. Roenigk HH Jr. **Semin Cutan Med Surg** 1996 Sep;15(3):208–13 (13 ref.)

Abscess aspiration in a bush hospital in Botswana. Kennedy I. **Trop Doct** 1997 Oct;27(4):237–9

[New phototherapies] Moreau A, et al. **Ann Dermatol Venereol** 1996;123(8):510–8 **(Fre)**

[Dermatologic laser therapy] Mrk NJ. **Tidsskr Nor Laegeforen** 1997 Aug 30;117(20):2988 **(Nor)**

ULTRASONOGRAPHY

Restrictive dermopathy and associated prenatal ultrasound findings: case report. van der Stege JG, et al. **Ultrasound Obstet Gynecol** 1997 Aug;10(2):140–1

URINE

[Longitudinal study of the excretion of 1–hydroxypyrene in urine after external treatment with coal tar] Nenoff P, et al. **Hautarzt** 1997 Apr;48(4):240–5 (Eng. Abstr.) **(Ger)**

VETERINARY

Vascular hamartomas of the dorsal carpal region in three young thoroughbred horses. Colbourne CM, et al. **Aust Vet J** 1997 Jan;75(1):20–3

Debilitating cutaneous poxvirus infection in a Hodgson's grandala (Grandala coelicolor). Orós J, et al. **Avian Dis** 1997 Apr–Jun;41(2):481–3

Cutaneous avian pox in a house sparrow. Mikaelian I, et al. **Can Vet J** 1996 Jul;37(7):434

Skin and liver diseases induced in flounder (Platichthys flesus) after long–term exposure to contaminated sediments in large–scale mesocosms. Vethaak AD, et al. **Environ Health Perspect** 1996 Nov;104(11):1218–29

Persistent papillomavirus infection in a cat. Lozano–Alarcón F, et al. **J Am Anim Hosp Assoc** 1996 Sep–Oct;32(5):392–6

Comments on greyhounds with cutaneous and renal vasculopathy [letter] Clark P. **J Am Vet Med Assoc** 1997 May 15;210(10):1414; discussion 1414–5

Comments on greyhounds with cutaneous and renal vasculopathy [letter] O'Brien M. **J Am Vet Med Assoc** 1997 May 15;210(10):1413–4; discussion 1414–5

Expression of major histocompatibility complex class II molecules by dermal inflammatory cells, epidermal Langerhans cells and keratinocytes in canine dermatological disease. Day MJ. **J Comp Pathol** 1996 Nov; 115(4):317–26

Relationship between thickness, chapping and Staphylococcus aureus colonization of bovine teat tissue. Fox LK, et al. **J Dairy Res** 1996 Aug;63(3):369–75

New records of subcutaneous mites (Acari:Hypoderatidae) in birds, with examples of potential host colonization events. Pence DB, et al. **J Med Entomol** 1997 Jul; 34(4):411–6

Bovine hereditary zinc deficiency: lethal trait A 46. Machen M, et al. **J Vet Diagn Invest** 1996 Apr;8(2):219–27

Periodic recurrence of gangrenous dermatitis associated with Clostridium septicum in a broiler chicken operation. Willoughby DH, et al. **J Vet Diagn Invest** 1996 Apr; 8(2):259–61

A telephone survey of eel fishermen regarding external lesions and mortalities of American eels (Anguilla rostrata) from Lake Ontario and the St. Lawrence River basin, Canada. Dutil L, et al. **Prev Vet Med** 1997 Jul;31(1–2):33–49

A processing plant survey of external lesions of American eels (Anguilla rostrata) from Lake Ontario and the St. Lawrence River, Canada. Dutil LT, et al. **Prev Vet Med** 1997 Jul;31(1–2):19–32

The development of cockle, a sheep pelt defect, in relation to size of infestation and time of exposure to Bovicola ovis, the sheep–biting louse. Heath AC, et al. **Vet Parasitol** 1996 Dec 31;67(3–4):259–67

Identification and characterization of staphylococci isolated from cutaneous lesions of goats. Mahanta PN, et al. **Zentralbl Veterinarmed [B]** 1997 Jul;44(5):309–11

[3rd World Congress Veterinary Dermatology] Overgaauw PA, et al. **Tijdschr Diergeneeskd** 1996 Dec 15;121(24):716–8 **(Dut)**

[Cordylobia anthropophaga as a cause of cutaneous myiasis in a dog in Germany] Dongus H, et al. **Tierarztl Prax** 1996 Oct;24(5):493–6 (Eng. Abstr.) **(Ger)**

VIROLOGY

Detection of human papillomavirus DNA in keratoacanthomas by polymerase chain reaction. Hsi ED, et al. **Am J Dermatopathol** 1997 Feb;19(1):10–5

Cutaneous verruca with genital human papillomavirus in a 2–year–old girl. Payne DA, et al. **Am J Dermatopathol** 1997 Jun;19(3):258–60

Known HPV types have no association with keratoacanthomas. Lu S, et al. **Arch Dermatol Res** 1996 Mar;288(3):129–32

Kaposi's sarcoma–associated herpesvirus (KSHV) sequences in premalignant and malignant skin tumors. Inagi R, et al. **Arch Virol** 1996;141(11):2217–23

Prevalence of human herpesvirus–8 in skin lesions. Nishimoto S, et al. **Br J Dermatol** 1997 Aug;137(2):179–84

What is new in clinical research of viral diseases of the skin. Walther RR. **Dermatol Clin** 1997 Jan;15(1):189–96 (65 ref.)

Granulomatous vasculitis associated with herpes virus: a persistent, painful, postherpetic papular eruption. Snow JL, et al. **Mayo Clin Proc** 1997 Sep;72(9):851–3

SKIN DISEASES, BACTERIAL

Superficial cutaneous Nocardia asteroides infection in an immunocompetent pregnant woman. Kannon GA, et al. **J Am Acad Dermatol** 1996 Dec;35(6):1000–2

COMPLICATIONS

Pseudomonas stutzeri septicaemia in association with a bullous skin eruption. Priestley GS, et al. **Anaesth Intensive Care** 1996 Dec;24(6):710–3

Subcutaneous lesions and bacteraemia due to Stenotrophomonas maltophilia in three leukaemic patients with neutropenia. Moser C, et al. **Br J Dermatol** 1997 Jun; 136(6):949–52

Mycobacterium kansasii infection in a patient presenting with porphyria cutanea tarda. Jarrett P, et al. **Clin Exp Dermatol** 1996 Jul;21(4):286–7

An unusual case of refractory Campylobacter jejuni infection in a patient with X–linked agammaglobulinemia: successful combined therapy with maternal plasma and ciprofloxacin. Autenrieth IB, et al. **Clin Infect Dis** 1996 Sep;23(3):526–31

Multiple Salmonella typhi subcutaneous abscesses in a sickle cell anaemia patient. Sarma PS, et al. **J Assoc Physicians India** 1996 Aug;44(8):563–4

The association of primary varicella infection and streptococcal infection of the cutaneous and musculoskeletal system: a case report. Poon AH, et al. **Magn Reson Imaging** 1997;15(1):131–3

Skin lesions in a patient with hairy cell leukaemia. Raanani P, et al. **Postgrad Med J** 1997 Jun;73(860):375–7

Mycobacterium ulcerans skin infection in a patient with HIV infection: is this incidental? [letter] Ameh EA, et al. **Trop Doct** 1997 Jan;27(1):59

[An abscess may be hiding another] Bataillon V, et al. **Ann Biol Clin (Paris)** 1997 Jan–Feb;55(1):41–2 **(Fre)**

DIAGNOSIS

Disseminated papular eruption caused by Serratia marcescens: a new cutaneous manifestation in HIV–positive patients [letter] Muñoz–Pérez MA, et al. **AIDS** 1996 Sep; 10(10):1179–80

Immunoperoxidase and immunofluorescent staining of Rickettsia rickettsii in skin biopsies. A comparative study. Procop GW, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):894–9

Toxic streptococcal syndrome. Stanford DG, et al. **Australas J Dermatol** 1997 Aug;38(3):158–60

Acrodermatitis chronica atrophicans in an 11–year–old girl. Muellegger RR, et al. **Br J Dermatol** 1996 Oct; 135(4):609–12

Cutaneous infection caused by Tsukamurella paurometabolum. Granel F, et al. **Clin Infect Dis** 1996 Oct; 23(4):839–40

Current aspects of bacterial infections of the skin. Sadick NS. **Dermatol Clin** 1997 Apr;15(2):341–9 (50 ref.)

Fish tank granuloma in a 14–month–old girl. Speight EL, et al. **Pediatr Dermatol** 1997 May–Jun;14(3):209–12

Fever and a rash. Jeffery KJ, et al. **Postgrad Med J** 1997 Jun;73(860):329–31

[Atypical mycobacterial skin infections] Gbery IP, et al. **Sante** 1996 Sep–Oct;6(5):317–22 (31 ref.) (Eng. Abstr.) **(Fre)**

[Detection of Helicobacter pylori in dermatoses. Clinical incidental finding or pathogenetic association?] Tebbe B, et al. **Hautarzt** 1996 Aug;47(8):587–90 (29 ref.) (Eng. Abstr.) **(Ger)**

[Cutaneous lesions and pulmonary infiltrates, Cutaneous actinomycisis] Domínguez JR, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):269–70 **(Spa)**

[Cutaneous infections by Mycobacterium marinum. Description of 3 cases and review of the literature] Dorronsoro I, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):82–4 (22 ref.) (Eng. Abstr.) **(Spa)**

[Necrotic chin lesion in a patient with a meningeal syndrome] González A, et al. **Enferm Infecc Microbiol Clin** 1997 Mar; 15(3):163–4 **(Spa)**

DRUG THERAPY

Mycobacterium marinum skin infection successfully treated with levofloxacin. Iijima S, et al. **Arch Dermatol** 1997 Aug; 133(8):947–9

Risk factors leading to clinical failure in the treatment of intra–abdominal or skin/soft tissue infections. Falagas ME, et al. **Eur J Clin Microbiol Infect Dis** 1996 Dec; 15(12):913–21

Development of resistance to clarithromycin after treatment of cutaneous Mycobacterium chelonae infection. Driscoll MS, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):495–6

Antimicrobial agents for the dermatologist. II. Macrolides, fluoroquinolones, rifamycins, tetracyclines, trimethoprim–sulfamethoxazole, and clindamycin. Epstein ME, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):365–81; quiz 382–4 (181 ref.)

Antimicrobial agents for the dermatologist. I. Beta–lactam antibiotics and related compounds. Epstein ME, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):149–65; quiz 166–8 (143 ref.)

An open study of mupirocin in Libyan patients with skin infections. El Ferghani N. **J Int Med Res** 1995 Nov–Dec; 23(6):508–17

Sensitivity to antibacterials of Staphylococcus aureus isolated from skin infections: a comparison of two hospitals. Nishijima S, et al. **J Int Med Res** 1997 Jan–Feb;25(1):8–13

Sensitivity to antibacterials of Staphylococcus aureus isolated from different types of skin infections. Nishijima S, et al. **J Int Med Res** 1997 Jan–Feb;25(1):1–7

Primary care management of common dermatologic disorders in women. Pharmacologic considerations. Emmons L, et al. **J Nurse Midwifery** 1997 May–Jun; 42(3):228–53 (54 ref.)

Oral antibiotic therapy for uncomplicated bacterial skin infections in children. Darmstadt GL. **Pediatr Infect Dis J** 1997 Feb;16(2):227–40 (182 ref.)

[Ciprofloxacin in treatment of common bacterial skin infections. Results of an open study in general practice] Braun H. **Fortschr Med** 1996 Feb 20;114(5):55–6 **(Ger)**

[Clinical efficacy of silver sulfadiazine (AgSD: Geben cream) for ulcerative skin lesions infected with MRSA] Yoshida T, et al. **Jpn J Antibiot** 1997 Jan;50(1):39–44 (Eng. Abstr.) **(Jpn)**

[Curative and prophylactic immunomodulation by

vaccination in mucocutaneous streptococcal infections] Topciu V, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan-Jun;41(1-2):71-3 **(Rum)**

[Use of cefpirome in the treatment of patients with skin and soft tissue infections] Iakovlev VP, et al. **Antibiot Khimioter** 1996;41(12):24-9 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Outbreaks of hyperkeratotic dermatitis of athymic nude mice in northern Italy. Scanziani E, et al. **Lab Anim** 1997 Jul; 31(3):206-11

A prolonged outbreak of streptococcal infection among workers at a meat plant. Sims P, et al. **Public Health** 1996 Mar;110(2):81-4

[Mycobacterium marinum skin infection in Spain (letter; comment) (see comments)] Ramos JM, et al. **Med Clin (Barc)** 1996 Feb 3;106(4):155. Comment on: Med Clin (Barc) 1995 May 13;104(18):717. Comment in: Med Clin (Barc) 1997 Mar 1;108(8):315-6. **(Spa)**

ETIOLOGY

Skin abscess with lumbar epidural catheterization in infants: is it dangerous? Report of two cases. Meunier JF, et al. **Anesth Analg** 1997 Jun;84(6):1248-9

Cutaneous involvement in Whipple's disease [letter] Balestrieri GP, et al. **Br J Dermatol** 1996 Oct;135(4):666-8

Cutaneous and pulmonary infections caused by Mycobacterium vaccae. Hachem R, et al. **Clin Infect Dis** 1996 Jul;23(1):173-5

Long term complication of button gastrostomy tube. Hellstern PA, et al. **J Ark Med Soc** 1996 Nov;93(6):269-70

From the Centers for Disease Control and Prevention. Infection with Mycobacterium abscessus associated with intramuscular injection of adrenal cortex extract--Colorado and Wyoming, 1995-1996. **JAMA** 1996 Oct 9;276(14):1130

Nocardia brasiliensis: in vitro and in vivo growth response to steroid sex hormones. Hernandez-Hernandez F, et al. **Mycopathologia** 1995 Nov;132(2):79-85

[Campylobacter jejuni septicemia with cutaneous sites in a patient with human immunodeficiency virus infection (letter)] Malbec D, et al. **Rev Med Interne** 1997;18(3):257-8 **(Fre)**

[Mycobacterium marinum as the rare cause of a chronic skin and soft-tissue infection (letter)] Hunfeld KP, et al. **Dtsch Med Wochenschr** 1997 Jul 11;122(28-29):917 **(Ger)**

IMMUNOLOGY

A case of lymphocutaneous nocardiosis with a review of lymphocutaneous nocardiosis reported in Japan [see comments] Ye Z, et al. **J Dermatol** 1996 Feb;23(2):120-4 (29 ref.). Comment in: J Dermatol 1997 Jan;24(1):68.

MICROBIOLOGY

Isolation of Dermatophilus sp from skin lesions in farmed saltwater crocodiles (Crocodylus porosus). Buenviaje GN, et al. **Aust Vet J** 1997 May;75(5):365-7

Infection with Mycobacterium avium-intracellulare with abscess, ulceration and fistula formation. Hide M, et al. **Br J Dermatol** 1997 Jan;136(1):121-3

Serratia marcescens granuloma [letter] Yanagi T, et al. **Br J Dermatol** 1997 Feb;136(2):289-90

An outbreak of fatal nosocomial infections due to group A streptococcus on a medical ward. Ramage L, et al. **Infect Control Hosp Epidemiol** 1996 Jul;17(7):429-31

Isolated cutaneous Mycobacterium avium complex infection in AIDS. Alfandari S, et al. **Int J Dermatol** 1997 Apr; 36(4):294-5

Images in clinical medicine. Mycobacterium marinum infection of the hand. Ramakrishnan L. **N Engl J Med** 1997 Aug 28;337(9):612

Images in clinical medicine. Fish-tank granuloma. Wolfe SF, et al. **N Engl J Med** 1997 Apr 10;336(15):1065

Periodic fever and skin lesions caused by disseminated Mycobacterium chelonae infection in an immunocompetent child. Ryan ME, et al. **Pediatr Infect Dis J** 1996 Mar; 15(3):270-2

[Mycobacterium marinum. A rare cause of infection of the skin and joints] Byg KE, et al. **Ugeskr Laeger** 1997 Sep 1;159(36):5384-6 (Eng. Abstr.) **(Dan)**

[Skin infections due to Staphylococcus aureus and Streptococcus pyogenes] Arata J. **Nippon Rai Gakkai Zasshi** 1996 Jul;65(2):83-7 (10 ref.) **(Jpn)**

[Cutaneous infection caused by Mycobacterium chelonae. Presentation of 3 cases with multiple lesions (published erratum appears in Rev Clin Esp 1996 Nov;196(11):802)] Herrero JB, et al. **Rev Clin Esp** 1996 Sep;196(9):606-9 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Acute multifocal skin necrosis: synergism between invasive streptococcal infection and cocaine-induced tissue ischaemia? Hoeger PH, et al. **Acta Derm Venereol** 1996 May;76(3):239-41

Extraordinary case report: cutaneous anthrax. Mallon E, et al. **Am J Dermatopathol** 1997 Feb;19(1):79-82

Mycobacterium kansasii infection limited to the skin in a patient with AIDS. Curcó N, et al. **Br J Dermatol** 1996 Aug;135(2):324-6

Primary cutaneous infection with Mycobacterium avium intracellulare complex resembling lupus vulgaris. Kullavanijaya P, et al. **Br J Dermatol** 1997 Feb;136(2):264-6

Iatrogenic Mycobacterium abscessus infection: histopathology of 71 patients. Rodríguez G, et al. **Br J Dermatol** 1997 Aug;137(2):214-8

Pitted keratolysis: clinical manifestations in 53 cases. Takama H, et al. **Br J Dermatol** 1997 Aug;137(2):282-5

Localized cutaneous infection caused by Mycobacterium avium complex in an AIDS patient. Esteban J, et al. **Clin Exp Dermatol** 1996 May;21(3):230-1

Isolated cutaneous non-tuberculous mycobacterial infection as a manifestation of AIDS [published erratum appears in Clin Exp Dermatol 1996 Nov;21(6):468] Paige DG, et al. **Clin Exp Dermatol** 1996 May;21(3):226-9

Breast and cutaneous mycobacteriosis: diagnosis by fine-needle aspiration biopsy. Thompson KS, et al. **Diagn Cytopathol** 1997 Jul;17(1):45-9

Cutaneous Mycobacterium kansasii infection associated with a papulonecrotic tuberculid reaction. Callahan EF, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):497-9

PREVENTION & CONTROL

[Curative and prophylactic immunomodulation by vaccination in mucocutaneous streptococcal infections] Topciu V, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan-Jun;41(1-2):71-3 **(Rum)**

SURGERY

Primary skin infections secondary to Vibrio vulnificus: the role of operative intervention. Halow KD, et al. **J Am Coll Surg** 1996 Oct;183(4):329-34

THERAPY

Current aspects of bacterial infections of the skin. Sadick NS. **Dermatol Clin** 1997 Apr;15(2):341-9 (50 ref.)

[Effects of hyperbaric oxygenation in skin and pulmonary infections caused by Pseudomonas aeruginosa] Marmo M, et al. **Minerva Anestesiol** 1996 Sep;62(9):281-7 (Eng. Abstr.) **(Ita)**

VETERINARY

Digital dermatitis in a Friesian cow. McLennan MW, et al. **Aust Vet J** 1996 Oct;74(4):314-5

Antimicrobial therapy of skin and ear infections. Dowling PM. **Can Vet J** 1996 Nov;37(11):695-9 (6 ref.)

Characterization of non-pigmented Staphylococcus chromogenes. Saito K, et al. **J Vet Med Sci** 1996 Jul; 58(7):711-3

Proceedings of a workshop on the control of Amblyomma variegatum and associated diseases. Accra, Ghana, 4 November 1994. **Trop Anim Health Prod** 1996 May;28(2 Suppl):1S-89S

The pathogenesis of dermatophilosis. Ambrose NC. **Trop Anim Health Prod** 1996 May;28(2 Suppl):29S-37S (24 ref.)

Chemotherapy of dermatophilosis--a preliminary study. Aning KG, et al. **Trop Anim Health Prod** 1996 May;28(2 Suppl):38S-43S; discussion 74S-86S

Dermatophilosis in Ghana: effect on the livestock industry. Koney EB. **Trop Anim Health Prod** 1996 May;28(2 Suppl):3S-8S; discussion 74S-86S

Control of Amblyomma variegatum and dermatophilosis on local and exotic breeds of cattle in Ghana. Morrow AN, et al. **Trop Anim Health Prod** 1996 May;28(2 Suppl):44S-49S; discussion 74S-86S

Research on dermatophilosis in Africa. Oppong EN. **Trop Anim Health Prod** 1996 May;28(2 Suppl):9S-17S; discussion 74S-86S

Dermatophilosis and abscessation of lymph nodes in a group of tick-infested horses in Uganda. Shannon D. **Trop Anim Health Prod** 1997 May;29(2):102-4

[Isolation of Corynebacterium diphtheriae subsp. belfanti from a cow with chronic active dermatitis] Corboz L, et al. **Schweiz Arch Tierheilkd** 1996;138(12):596-9 (Eng. Abstr.) **(Ger)**

SKIN DISEASES, BULLOUS see **SKIN DISEASES, VESICULOBULLOUS**

SKIN DISEASES, ECZEMATOUS

DRUG THERAPY

Eczema/dermatitis: management & tips. Edwards L. **Compr Ther** 1997 Feb;23(2):148-54 (10 ref.)

ETIOLOGY

Extrapulmonary sarcoidosis: rapid spontaneous remission of marked splenomegaly. Ali Y, et al. **J Natl Med Assoc** 1996 Nov;88(11):714-6

IMMUNOLOGY

Aeroallergen contact dermatitis. Taïeb A, et al. **Clin Rev Allergy Immunol** 1996 Summer;14(2):209-23 (64 ref.)

PATHOLOGY

The role of cytology in the diagnosis of Paget's disease of the nipple. Gupta RK, et al. **Pathology** 1996 Aug; 28(3):248-50

SKIN DISEASES, FUNGAL see **DERMATOMYCOSES**

SKIN DISEASES, INFECTIOUS

Childhood dermatitis in the tropics: with special emphasis on infective dermatitis, a marker for infection with human T-cell leukemia virus-I. La Grenade L, et al. **Cutis** 1996 Aug;58(2):115-8 (41 ref.)

HIV-related skin diseases. Geusau A, et al. **J R Coll Physicians Lond** 1997 Jul-Aug;31(4):374-9 (38 ref.)

COMPLICATIONS

Use of thrombospondin level to predict the clinical course of atopic dermatitis associated with food hypersensitivity or skin infection. Huang SW, et al. **J Dermatol Sci** 1996 Jan;11(1):59-63

DIAGNOSIS

Use of the rapid streptococcus test in extrapharyngeal sites. Bourgeois SD, et al. **Am Fam Physician** 1996 Oct; 54(5):1634-6

Distinguishing vesicular and pustular disorders in the neonate. Wagner A. **Curr Opin Pediatr** 1997 Aug; 9(4):396-405 (86 ref.)

Dermatology and the recently returned traveler: infectious diseases with dermatologic manifestations. Lucchina LC, et al. **Int J Dermatol** 1997 Mar;36(3):167-81 (55 ref.)

Comparison of virus culture and the polymerase chain reaction for diagnosis of mucocutaneous herpes simplex virus infection. Safrin S, et al. **Sex Transm Dis** 1997 Mar; 24(3):176-80

[HIV-associated skin diseases. 1: Follow-up and epidemiology of HIV infection, pathogen-induced HIV-associated dermatoses] Ramsauer J, et al. **Hautarzt** 1996 Oct;47(10):795-813 (73 ref.) **(Ger)**

DRUG THERAPY

Study of use of cefdinir versus cephalexin for treatment of skin infections in pediatric patients. The Cefdinir Pediatric Skin Infection Study Group. Tack KJ, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):739-42

Cutaneously applied acyclovir acts systemically in the treatment of herpetic infection in the hairless mouse. Bolger GT, et al. **Antiviral Res** 1997 Aug;35(3):157-65

Drug treatment of skin and soft tissue infections in elderly long-term care residents. Lertzman BH, et al. **Drugs Aging** 1996 Aug;9(2):109-21 (41 ref.)

Mupirocine ointment for symptomatic pitted keratolysis [letter] Vazquez-Lopez F, et al. **Infection** 1996 Jan-Feb; 24(1):55

Pediatric dermatology: advances in therapy. Chapel KL, et al. **J Am Acad Dermatol** 1997 Apr;36(4):513-26; quiz 527-30 (149 ref.)

A comparative study of the efficacy, safety and tolerability of azithromycin and cefaclor in the treatment of children with acute skin and/or soft tissue infections. Montero L. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:125-31

Clinical evaluation of cefpodoxime proxetil in patients with dermatological infections. Imaizumi T, et al. **J Chemother** 1995 Nov;7 Suppl 4:137-41

Microbiological and clinical studies on cefpodoxime proxetil for bacterial skin and soft tissue infections in pediatric patients. Ito K, et al. **J Chemother** 1995 Nov;7 Suppl 4:124-6

Clinical evaluation of cefpodoxime proxetil dry syrup in pediatric cutaneous bacterial infection. Terui T, et al. **J Chemother** 1995 Nov;7 Suppl 4:119-21

EPIDEMIOLOGY

Infectious considerations in the world traveler. Tornieporth NG, et al. **Dermatol Clin** 1997 Apr;15(2):285-93 (34 ref.)

Human immunodeficiency virus infection and other risk factors for skin abscesses and endocarditis among injection drug users [see comments] Spijkerman IJ, et al. **J Clin Epidemiol** 1996 Oct;49(10):1149-54. Comment in: J Clin Epidemiol 1997 Jun;50(6):745.

Cutaneous infection in meatworkers. Lillington T, et al. **Occup Med (Oxf)** 1997 May;47(4):197-202

ETIOLOGY

Cutaneous Mycobacterium avium complex infection at an intramuscular injection site in a patient with AIDS. Meadows JR, et al. **Clin Infect Dis** 1997 Jun;24(6):1273-4

Distinguishing vesicular and pustular disorders in the neonate. Wagner A. **Curr Opin Pediatr** 1997 Aug; 9(4):396-405 (86 ref.)

[Cutaneous manifestations related to malignant hematologic diseases] Aractingi S, et al. **Presse Med** 1997 Apr 26; 26(14):678-83 (25 ref.) **(Fre)**

METABOLISM

p53, WAF1/CIP1 and mdm2 expression in skin lesions associated with human papillomavirus and human immunodeficiency virus. Arany I, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1281-5

SKIN DISEASES, INFECTIOUS

MICROBIOLOGY

Cutaneous infection due to Mycobacterium abscessus. A case report. Vogels MT, et al. **Acta Derm Venereol** 1997 May; 77(3):222–4

Cutaneous protothecosis in association with the acquired immunodeficiency syndrome. Polk P, et al. **South Med J** 1997 Aug;90(8):831–2

PARASITOLOGY

Cutaneous infections due to Acanthamoeba in patients with acquired immunodeficiency syndrome. Chandrasekar PH, et al. **Arch Intern Med** 1997 Mar 10;157(5):569–72

PATHOLOGY

Small, freshly arrived histiocytes in cutaneous and mucosal herpetic lesions. van den Oord JJ, et al. **Arch Dermatol Res** 1996 Aug;288(9):500–6

Cutaneous infections due to Acanthamoeba in patients with acquired immunodeficiency syndrome. Chandrasekar PH, et al. **Arch Intern Med** 1997 Mar 10;157(5):569–72

Tropical diseases and women. Kaur V. **Clin Dermatol** 1997 Jan–Feb;15(1):171–8 (60 ref.)

Mouse skin damage caused by a recombinant extracellular metalloprotease from Vibrio vulnificus and by V. vulnificus infection. Chuang YC, et al. **J Formos Med Assoc** 1997 Sep;96(9):677–84

SURGERY

Squamous cell carcinoma in perineal inflammatory disease. Gur E, et al. **Ann Plast Surg** 1997 Jun;38(6):653–7

VETERINARY

The association between Amblyomma variegatum and dermatophilosis: epidemiology and immunology. Koney EB, et al. **Trop Anim Health Prod** 1996 May;28(2 Suppl):18S–25S; discussion 74S–86S

Cutaneous protothecosis in a dog. Ginel PJ, et al. **Vet Rec** 1997 Jun 21;140(25):651–3

VIROLOGY

Detection of Epstein–Barr virus in primary cutaneous amyloidosis. Chang YT, et al. **Br J Dermatol** 1997 Jun; 136(6):823–6

SKIN DISEASES, PAPULOSQUAMOUS

Transient cephalic neonatal pustulosis [letter; comment] Bardazzi F, et al. **Arch Dermatol** 1997 Apr;133(4):528–30 . Comment on: Arch Dermatol 1996 Feb;132(2):190–3.

CHEMICALLY INDUCED

Acute generalized exanthematous pustulosis induced by paracetamol. A case with severe hemodynamic disturbances. De Coninck AL, et al. **Dermatology** 1996; 193(4):338–41 (35 ref.)

Acute generalized exanthematous pustulosis induced by dexamethasone injection. Demitsu T, et al. **Dermatology** 1996;193(1):56–8 (14 ref.)

Acute generalized exanthematous pustulosis. Beylot C, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):244–9 (34 ref.)

COMPLICATIONS

Small bowel fistulae in Degos' disease: a case report and literature review. Atchabahian A, et al. **Am J Gastroenterol** 1996 Oct;91(10):2208–11 (57 ref.)

Umbilicated papular sarcoidosis [letter] Kashyap S, et al. **Clin Exp Dermatol** 1996 Sep;21(5):395–6

Symptomatic atrophic papulosis in a patient with systemic lupus erythematosus [letter] Török L. **Clin Exp Dermatol** 1996 Sep;21(5):390–2

Papular mucinosis associated with human–immunodeficiency–virus infection. Azaña JM, et al. **Int J Dermatol** 1996 Sep;35(9):652–4 (15 ref.)

Degos' disease associated with rheumatoid arthritis [letter] Demitsu T, et al. **J Dermatol** 1997 Jul;24(7):488–90

DIAGNOSIS

Acrokeratoelastoidosis. Dyall–Smith D. **Australas J Dermatol** 1996 Nov;37(4):213–4 (6 ref.)

Lichen amyloidosis presenting as a papular pruritus syndrome in a human–immunodeficiency–virus–infected man. Goller MM, et al. **Dermatology** 1997;194(1):62–4

Pruritic papular eruptions and candidiasis due to HIV infection. Uchigasaki S, et al. **J Dermatol** 1996 Aug; 23(8):572–6

[Erythema elevatum and diutinum in Crohn disease] Elsner J, et al. **Hautarzt** 1996 Sep;47(9):701–4 (Eng. Abstr.) **(Ger)**

[Rheumatoid neutrophilic dermatitis—a rare dermatosis in patients with active rheumatoid arthritis] Mrowietz U, et al. **Hautarzt** 1996 Dec;47(12):921–6 (8 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

[Local DMSO treatment of macular and papular amyloidosis] Ozkaya–Bayazit E, et al. **Hautarzt** 1997 Jan;48(1):31–7 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Non–infective mucocutaneous presentations of human immunodeficiency virus infection. Hamann ID, et al. **Australas J Dermatol** 1997 Aug;38(3):105–12; quiz 113–4 (43 ref.)

Acute generalized exanthematous pustulosis induced by hydroxychloroquine [letter] Assier–Bonnet H, et al. **Dermatology** 1996;193(1):70–1 (9 ref.)

Grouped papules in Hurler–Scheie syndrome. Schiro JA, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):868–70

Urticarial vasculitis with papular lesions in a patient with type C hepatitis and cryoglobulinemia. Kuniyuki S, et al. **J Dermatol** 1996 Apr;23(4):279–83

Acquired Blaschko dermatitis: acquired relapsing self–healing Blaschko dermatitis. Lee HJ, et al. **J Dermatol** 1996 Sep; 23(9):639–42 (16 ref.)

MICROBIOLOGY

The identification of methicillin–resistant Staphylococcus aureus in Osler's nodes and Janeway lesions of acute bacterial endocarditis. Parikh SK, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):767–8

PATHOLOGY

Papular urticaria: a histopathologic study of 30 patients. Jordaan HF, et al. **Am J Dermatopathol** 1997 Apr; 19(2):119–26

Multiple asymptomatic hyperkeratotic papules on the lower part of the legs. Hyperkeratosis lenticularis perstans (HLP) (Flegel disease). Li TH, et al. **Arch Dermatol** 1997 Jul; 133(7):910–1, 913–4

Unilateral perianogenital papulokeratotic lesion. Inflammatory linear verrucous epidermal nevus (ILVEN). Opršalova K, et al. **Arch Dermatol** 1996 Dec; 132(12):1508–9, 1511–2

White fibrous papulosis of the neck in three Sicilian patients. Siragusa M, et al. **Australas J Dermatol** 1996 Nov; 37(4):202–4

Benign persistent papular acantholytic and dyskeratotic eruption with features of warty dyskeratoma [letter] Urbani CE, et al. **Australas J Dermatol** 1996 Nov;37(4):225–6 (13 ref.)

Acute generalized exanthematic pustulosis: a case with a lymphoma–like presentation. Eeckhout I, et al. **Dermatology** 1997;194(4):408–10

Malignant atrophic papulosis. Willa–Craps C, et al. **Dermatology** 1997;195(1):89–90

Ectopic pearly penile papules: a paediatric case [see comments] Neri I, et al. **Genitourin Med** 1997 Apr;73(2):136 . Comment in: Genitourin Med 1997 Apr;73(2):137–8.

Pearly penile papules [comment] Oates JK. **Genitourin Med** 1997 Apr;73(2):137–8 (13 ref.). Comment on: Genitourin Med 1997 Apr;73(2):136.

Malignant atrophic papulosis (Degos' disease) with extensive cardiopulmonary involvement. Mauad T, et al. **Histopathology** 1996 Jan;28(1):84–6

Polymorphic eruption of pregnancy. Tarocchi S, et al. **Int J Dermatol** 1997 Jun;36(6):448–50

VETERINARY

Multiple pigmented cutaneous papules associated with a novel canine papillomavirus in an immunosuppressed dog. Le Net JL, et al. **Vet Pathol** 1997 Jan;34(1):8–14

VIROLOGY

No evidence of KSHV/HHV–8 in mycosis fungoides or associated disorders. Henghold WB 2nd, et al. **J Invest Dermatol** 1997 Jun;108(6):920–2

SKIN DISEASES, PARASITIC

see related
ECTOPARASITIC INFESTATIONS

First reports of subcutaneous sparganosis in Sri Lanka. Wijesundera MS, et al. **Ceylon Med J** 1997 Mar;42(1):30–2

[Human subcutaneous dirofilariasis: 8 more cases in Italy] Pampiglione S, et al. **Pathologica** 1996 Apr;88(2):91–6 (Eng. Abstr.) **(Ita)**

[Cutaneous hydatidosis, apropos of a case (letter)] Martínez–Albadejo M, et al. **An Med Interna** 1996 Jun; 13(6):306–7 **(Spa)**

COMPLICATIONS

Skin changes in chronic lymphatic filariasis. Burri H, et al. **Trans R Soc Trop Med Hyg** 1996 Nov–Dec;90(6):671–4

DIAGNOSIS

Dirofilariasis, a rare, usually imported dermatosis. Degardin P, et al. **Dermatology** 1996;192(4):398–9

Onchocerciasis: clinical presentation and host parasite interactions in patients of southern Sudan. Stingl P. **Int J Dermatol** 1997 Jan;36(1):23–8

DRUG THERAPY

Primary care management of common dermatologic disorders in women. Pharmacologic considerations. Emmons L, et al. **J Nurse Midwifery** 1997 May–Jun; 42(3):228–53 (54 ref.)

Onchocerca volvulus: striking decrease in transmission in the Vina valley (Cameroon) after eight annual large scale ivermectin treatments. Boussinesq M, et al. **Trans R Soc Trop Med Hyg** 1997 Jan–Feb;91(1):82–6

The chemotherapy of onchocerciasis XX: ivermectin in combination with albendazole. Awadzi K, et al. **Trop Med Parasitol** 1995 Dec;46(4):213–20

Ivermectin treatment of hyperreactive onchodermatitis (sowda) in Liberia. Darge K, et al. **Trop Med Parasitol** 1995 Dec;46(4):206–12

[Ivermectin and tropical dermatoses] Caumes E. **Bull Soc Pathol Exot** 1997;90(1):37–8 (17 ref.) (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Infectious considerations in the world traveler. Tornieporth NG, et al. **Dermatol Clin** 1997 Apr;15(2):285–93 (34 ref.)

Onchocerciasis hyperendemic in the Unturán mountains: an extension of the endemic region in southern Venezuela. Botto C, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr; 91(2):150–2

ETIOLOGY

[Subcutaneous cysticercosis] Del Giudice P, et al. **Ann Dermatol Venereol** 1996;123(8):474–7 (30 ref.) (Eng. Abstr.) **(Fre)**

[Cutaneous lesions as the only manifestations of reactions to Trypanosoma cruzi infection in a recipient of a kidney transplant] Amato JG, et al. **Rev Soc Bras Med Trop** 1996 Jan–Feb;30(1):61–3 (Eng. Abstr.) **(Por)**

IMMUNOLOGY

Cutaneous amebiasis in an Iranian immunodeficient alcoholic: immunochemical and histological study [letter] Loschiavo F, et al. **Dermatology** 1997;194(4):370–1 (16 ref.)

PARASITOLOGY

Subcutaneous dirofilariasis: single inoculum, multiple worms. Orihel TC, et al. **Am J Trop Med Hyg** 1997 Apr;56(4):452–5

Pathogenicity of experimental caryosporosis. Vítovec J, et al. **Int J Parasitol** 1997 Jul;27(7):819–24

Fatal granulomatous amoebic encephalitis caused by Balamuthia mandrillaris. Reed RP, et al. **Med J Aust** 1997 Jul 21;167(2):82–4 (10 ref.)

Detection and characterization of Leishmania in tissues of patients with post kala–azar dermal leishmaniasis using a specific monoclonal antibody. Ismail A, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):283–5

[Myiasis caused by Dermatobia hominis (letter)] Arocha J, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):453 **(Spa)**

PATHOLOGY

Pruritus and chronic papular dermatitis in an Ethiopian man. Onchocerciasis (chronic papular onchodermatitis). Lazarov A, et al. **Arch Dermatol** 1997 Mar;133(3):382–3, 385–6

Acanthamoeba infection. Wortman PD. **Int J Dermatol** 1996 Jan;35(1):48–51 (31 ref.)

Skin changes in chronic lymphatic filariasis. Burri H, et al. **Trans R Soc Trop Med Hyg** 1996 Nov–Dec;90(6):671–4

PREVENTION & CONTROL

[Preliminary activities of the program for the control and treatment of onchocerciasis in the Yanomâmi territory, Roraima, Brazil] Coelho GE, et al. **Rev Soc Bras Med Trop** 1996 Jan–Feb;30(1):69–72 (Eng. Abstr.) **(Por)**

VETERINARY

Occurrence of cutaneous infections of Myxobolus episquamalis (Myxozoa:Myxobolidae) in sea mullet, Mugil cephalus L, in Australia. Rothwell JT, et al. **Aust Vet J** 1997 May;75(5):349–52

Protozoal dermatitis of farmed Atlantic salmon in British Columbia. Brocklebank JR. **Can Vet J** 1997 Jun;38(6):386–7

Dermatitis in young Florida sandhill cranes (Grus canadensis pratensis) due to infestation by the chigger, Blankaartia sinnamaryi. Spalding MG, et al. **J Parasitol** 1997 Aug; 83(4):768–71

Diagnostic exercise: cutaneous lesions and unilateral hind limb swelling in a rhesus monkey. Jackson RK, et al. **Lab Anim Sci** 1996 Aug;46(4):444–7

Stephanofilaria boomkeri n. sp., as a cause of severe skin disease in pigs in Zaire. Bain O, et al. **Parasite** 1996 Dec; 3(4):377–81

Development by injection in Simulium damnosum s.l. of two Onchocerca species from the wart hog to infective larvae resembling type D larvae (Duke, 1967). Wahl G, et al. **Parasite** 1995 Mar;2(1):55–62

A prospective study of the immunophenotype and temporal changes in the histologic lesions of canine demodicosis. Caswell JL, et al. **Vet Pathol** 1997 Jul;34(4):279–87

[Mite infestation rate of pet dogs with ear dermatoses] Park GS, et al. **Korean J Parasitol** 1996 Jun;34(2):143–50 (Eng. Abstr.) **(Kor)**

SKIN DISEASES, STAPHYLOCOCCAL see **STAPHYLOCOCCAL SKIN INFECTIONS**

SKIN DISEASES, VASCULAR

Cutaneous necrotizing vasculitis. Lotti T, et al.
Int J Dermatol 1996 Jul;35(7):457–74 (242 ref.)
[Livedo reticularis] Kuramochi M.
Ryoikibetsu Shokogun Shirizu 1996;(14):557 **(Jpn)**

BLOOD

A study of coagulation and anti-endothelial antibodies in idiopathic livedo reticularis. Faclieru D, et al.
Acta Derm Venereol 1997 May;77(3):181–3

CHEMICALLY INDUCED

Methotrexate related cutaneous vasculitis [letter] Torner O, et al. **Clin Rheumatol** 1997 Jan;16(1):108–9 (7 ref.)
Purpuric patch test reaction and venulitis due to methyl methacrylate in a dental prosthesis. Koch P, et al.
Contact Dermatitis 1996 Mar;34(3):213–15
Livedo reticularis and thrombotic purpura related to the use of diphenhydramine associated with pyrithyldione. Morell A, et al. **Dermatology** 1996;193(1):50–1
Injection site vasculitis in a patient receiving interferon alfa for chronic hepatitis C. Christian MM, et al.
J Am Acad Dermatol 1997 Jul;37(1):118–20

CLASSIFICATION

Cutaneous lymphocytic vasculitis: a definition, a review, and a proposed classification. Carlson JA, et al.
Semin Diagn Pathol 1996 Feb;13(1):72–90 (57 ref.)

COMPLICATIONS

Primary hyperoxaluria in an adult with renal failure, livedo reticularis, retinopathy, and peripheral neuropathy. Farreli J, et al. **Am J Kidney Dis** 1997 Jun;29(6):947–52
Erythema elevatum diutinum in association with coeliac disease. Tasanen K, et al. **Br J Dermatol** 1997 Apr; 136(4):624–7
Erythema elevatum diutinum in human immunodeficiency virus-infected patients—report of a case and review of the literature. Dronda F, et al. **Clin Exp Dermatol** 1996 May; 21(3):222–5 (14 ref.)
Leukocytoclastic vasculitis in subacute cutaneous lupus erythematosus: clinicopathologic study of three cases and review of the literature. Sánchez-Pérez J, et al.
Dermatology 1996;193(3):230–5 (22 ref.)
Septic microemboli in a Janeway lesion of bacterial endocarditis [published erratum appears in J Am Acad Dermatol 1997 May;36(5 Pt 1):696] Vinson RP, et al.
J Am Acad Dermatol 1996 Dec;35(6):984–5
Degos' disease associated with rheumatoid arthritis [letter] Demitsu T, et al. **J Dermatol** 1997 Jul;24(7):488–90
Left ventricular myxoma, adrenal tumour and cutaneous vasculitis—a case report [letter; comment] Rajasoorya C. **Singapore Med J** 1996 Apr;37(2):233–4. Comment on: Singapore Med J 1995 Jun;36(3):328–30.
[An unusual course in hairy-cell leukemia with marked abdominal lymphadenopathy, leukemic infiltration of the cornea and skin changes] Zák P, et al. **Vnitr Lek** 1996 Jul; 42(7):463–6 (Eng. Abstr.) **(Cze)**

CONGENITAL

Cutis marmorata telangiectatica congenita with hypoplasia of the right iliac and femoral veins. Morgan JM, et al.
Br J Dermatol 1997 Jul;137(1):119–22
Cutis marmorata telangiectatica congenita: report of one case. Yeh YC, et al.
Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih 1997 May-Jun;38(3):223–5
Cutaneous hemangiomas, vascular stains and malformations, and associated syndromes. Esterly NB.
Curr Probl Pediatr 1996 Jan;26(1):3–39 (272 ref.)
Cutis marmorata telangiectatica congenita: an unusual presentation with monoatrophy in two Chinese children. Wong V. **J Paediatr Child Health** 1997 Feb;33(1):71–3
Cutis marmorata telangiectatica congenita or neonatal lupus? Carrascosa JM, et al. **Pediatr Dermatol** 1996 May-Jun; 13(3):230–2

DIAGNOSIS

Acute haemorrhagic oedema of infancy, a benign variant of leucocytoclastic vasculitis. Krause I, et al.
Acta Paediatr 1996 Jan;85(1):114–7
Acute haemorrhagic oedema of infancy: a case report. Tomaç N, et al. **Clin Exp Dermatol** 1996 May;21(3):217–9
Masson's intravascular papillary endothelial hyperplasia mimicking Stewart-Treves syndrome: report of a case. Romani J, et al. **Cutis** 1997 Mar;59(3):148–50
Necrosing livedo reticularis in a patient with recurrent pulmonary hemorrhage. Aronoff DM, et al.
J Am Acad Dermatol 1997 Aug;37(2 Pt 2):300–2 (15 ref.)
Plantar thrombotic nodules with marked neovascularization in diabetes: a symptom which has been overlooked? Akimoto S, et al. **J Dermatol** 1997 Jun;24(6):405–9
Diagnosis and treatment of the systemic and cutaneous necrotizing vasculitis syndromes. Allen NB, et al.
Med Clin North Am 1997 Jan;81(1):243–59 (39 ref.)
Multiorgan sarcoidosis presenting with symmetric polyarthralgia, cutaneous vasculitis, and sicca symptoms. Gran JT. **Scand J Rheumatol** 1997;26(3):225–6
[Neurocutaneous syndromes with vascular alterations] de Felipe I, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S250–8 (74 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Lipo-prostaglandin E1 therapy for livedo reticularis with ulceration [letter] Nonaka Y, et al. **Acta Derm Venereol** 1997 May;77(3):246–7
Low-dose danazol in the treatment of livedoid vasculitis. Hsiao GH, et al. **Dermatology** 1997;194(3):251–5

ETIOLOGY

Leukemic vasculitis: a newly described pattern of cutaneous involvement [editorial; comment] Smoller BR.
Am J Clin Pathol 1997 Jun;107(6):627–9. Comment on: Am J Clin Pathol 1997 Jun;107(6):637–42.
Eruptive satellite vascular malformations after removal of a melanocytic naevus. Deroo M, et al. **Br J Dermatol** 1997 Aug;137(2):292–5
Cutaneous lymphocytic vasculitis in acute myeloid leukaemia. Farrell AM, et al. **Br J Dermatol** 1996 Sep; 135(3):471–4
Pustular vasculitis and sclerosing cholangitis [letter] Jones SA, et al. **Br J Dermatol** 1996 Oct;135(4):662–3
Persistent telangiectatic erythema associated with an automatic implantable cardioverter defibrillator [letter] Krasagakis K, et al. **Br J Dermatol** 1997 Apr;136(4):633
Urticarial vasculitis associated with polycythaemia rubra vera. Farell AM, et al. **Clin Exp Dermatol** 1996 Jul; 21(4):302–4
Pseudo-Kaposi's sarcoma associated with acquired arteriovenous fistula. Kim TH, et al. **J Dermatol** 1997 Jan; 24(1):28–33
Livedo reticularis, rhabdomyolysis, massive intestinal infarction, and death after carbon dioxide arteriography. Rundback JH, et al. **J Vasc Surg** 1997 Aug;26(2):337–40 (13 ref.)
[Cutaneous and neurologic vasculitis disclosing EBV-selective immunodeficiency] Grosieux C, et al.
Ann Dermatol Venereol 1996;123(6–7):387–92 (Eng. Abstr.) **(Fre)**
[Cutaneous cholesterol emboli secondary to acute hepatocellular failure (letter)] Debure C, et al.
Presse Med 1997 Apr 5;26(11):512–3 **(Fre)**
[Livedo racemosa generalisata in atrial myxoma] Rambusch EG, et al. **Z Rheumatol** 1996 Jan-Feb;55(1):58–62 (Eng. Abstr.) **(Ger)**

GENETICS

Malignant atrophic papulosis (Degos' disease) involving three generations of a family. Katz SK, et al.
J Am Acad Dermatol 1997 Sep;37(3 Pt 1):480–4

IMMUNOLOGY

A study of coagulation and anti-endothelial antibodies in idiopathic livedo reticularis. Faclieru D, et al.
Acta Derm Venereol 1997 May;77(3):181–3
Cutaneous manifestations in systemic vasculitis. Decleva I, et al. **Clin Rev Allergy Immunol** 1997 Spring;15(1):5–20 (84 ref.)

PATHOLOGY

Dabska tumor developing within a preexisting vascular malformation. Quecedo E, et al. **Am J Dermatopathol** 1996 Jun;18(3):302–7 (14 ref.)
Cutaneous manifestations in systemic vasculitis. Decleva I, et al. **Clin Rev Allergy Immunol** 1997 Spring;15(1):5–20 (84 ref.)
Malignant atrophic papulosis (Degos' disease) with extensive cardiopulmonary involvement. Mauad T, et al.
Histopathology 1996 Jan;28(1):84–6
Intravascular fasciitis [letter] Beer K, et al.
Int J Dermatol 1996 Feb;35(2):147–8
Cutaneous vasculitis in Behçet's disease: a clinical and histopathologic study of 20 patients. Chen KR, et al.
J Am Acad Dermatol 1997 May;36(5 Pt 1):689–96
Cutaneous polyarteritis nodosa – a report of three cases. Aggarwal A, et al. **J Assoc Physicians India** 1995 May; 43(5):368–9
Cutaneous lymphocytic vasculitis: a definition, a review, and a proposed classification. Carlson JA, et al.
Semin Diagn Pathol 1996 Feb;13(1):72–90 (57 ref.)

SURGERY

Treatment of angioma serpiginosum using a pulsed tunable dye laser. Long CC, et al. **Br J Dermatol** 1997 Apr; 136(4):631–2
Laser treatment for an unusual reactive vascular proliferation. Constantinescu MA, et al. **Br J Plast Surg** 1996 Sep; 49(6):420–2
Laser treatment of acquired vascular lesions. Ross BS, et al. **Dermatol Clin** 1997 Jul;15(3):385–96 (67 ref.)
The use of the frequency-doubled Q-switched Nd:YAG laser in the treatment of small cutaneous vascular lesions. Goldberg DJ, et al. **Dermatol Surg** 1996 Oct;22(10):841–4
Treatment of benign cutaneous vascular proliferations with the 585-nm flashlamp-pulsed tunable dye laser. Krunic A, et al. **N C Med J** 1996 May-Jun;57(3):180–2
Treatment of the cutaneous vascular component of the Rothmund-Thomson syndrome [letter; comment] Geronemus RG. **Pediatr Dermatol** 1996 Mar-Apr;13(2):175 . Comment on: Pediatr Dermatol 1995 Sep;12(3):277–80.

VETERINARY

Familial cutaneous vasculopathy of German shepherds: clinical, genetic and preliminary pathological and immunological studies. Weir JA, et al. **Can Vet J** 1994 Dec; 35(12):763–9

VIROLOGY

Cryoglobulinemia and cutaneous leukocytoclastic vasculitis with hepatitis C virus infection. Buezo GF, et al.
Int J Dermatol 1996 Feb;35(2):112–5
Cutaneous necrotizing vasculitis associated with hepatitis A virus infection. Press J, et al. **J Rheumatol** 1997 May; 24(5):965–7

SKIN DISEASES, VESICULAR see **SKIN DISEASES, VESICULOBULLOUS**

SKIN DISEASES, VESICULOBULLOUS

Misdiagnosis, treatments, and outcomes in the immunobullous diseases in children. Weston WL, et al.
Pediatr Dermatol 1997 Jul-Aug;14(4):264–72
[SAPHO syndrome: common denominator for various bone and skin diseases] Jahangier ZN, et al.
Ned Tijdschr Geneeskd 1997 Apr 19;141(16):764–9 (37 ref.) (Eng. Abstr.) **(Dut)**

BLOOD

Ofuji's disease and cytokines: Remission of eosinophilic pustular folliculitis associated with increased serum concentrations of interferon gamma. Teraki Y, et al.
Dermatology 1996;192(1):16–8

CHEMICALLY INDUCED

Minocycline-induced acute generalized exanthematous pustulosis in a patient with generalized pustular psoriasis showing elevated level of sELAM-1 [letter] Yamamoto T, et al. **Acta Derm Venereol** 1997 Mar;77(2):168–9
Bullous drug eruption treated with amputation. A challenging case of vancomycin-induced linear IgA disease. Bitman LM, et al. **Arch Dermatol** 1996 Nov;132(11):1289–90
Generalized pustular rash and erythema. Toxic pustuloderma. Wollina U, et al. **Arch Dermatol** 1997 Apr;133(4):500–1, 503–4
Penicillamine-induced type II bullous systemic lupus erythematosus [letter] Condon C, et al. **Br J Dermatol** 1997 Mar;136(3):474–5
Toxic pustuloderma induced by intracavernous prostaglandin E1 [letter] Gallego I, et al. **Br J Dermatol** 1997 Jun; 136(6):975–6
Ramipril-associated lichen planus pemphigoides. Ogg GS, et al. **Br J Dermatol** 1997 Mar;136(3):412–4
Drug-induced linear IgA disease: target antigens are heterogeneous. Paul C, et al. **Br J Dermatol** 1997 Mar; 136(3):406–11
Contact sensitization to pyridine derivatives. Sesseville D, et al. **Contact Dermatitis** 1996 Aug;35(2):100–1
Acute generalized exanthematous pustulosis secondary to diltiazem therapy. Blodgett TP, et al. **Cutis** 1997 Jul; 60(1):45–7
Azathioprine-induced skin peeling syndrome. Hermanns-Lê T, et al. **Dermatology** 1997;194(2):175–6
Linear IgA bullous dermatosis after contact with sodium hypochlorite. Pellicano R, et al. **Dermatology** 1997; 194(3):284–6
Generalized pustular dermatosis following paclitaxel therapy [letter] Weinberg JM, et al. **Int J Dermatol** 1997 Jul; 36(7):559–60 (8 ref.)
Transient acantholytic dermatosis (Grover's disease) in a patient with progressive systemic sclerosis treated with D-penicillamine [letter] Zvulunov A, et al.
Int J Dermatol 1997 Jun;36(6):476–7
Penicillamine-induced bullous dermatoses. Bialy-Golan A, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):732–42 (113 ref.)
Iododerma after computed tomographic scan with intravenous radiopaque contrast media. Chang MW, et al.
J Am Acad Dermatol 1997 Jun;36(6 Pt 1):1014–6
Interleukin-2 associated linear IgA bullous dermatosis. Tranvan A, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):865–7
Toxicity of mustard gas skin lesions. Petrali JP, et al.
Microsc Res Tech 1997 May 1;37(3):221–8

COMPLICATIONS

Pseudomonas stutzeri septicaemia in association with a bullous skin eruption. Priestley GS, et al.
Anaesth Intensive Care 1996 Dec;24(6):710–3
Chronic bullous disease of childhood and a paecilomyces lung infection in chronic granulomatous disease. Sillevis Smitt JH, et al. **Arch Dis Child** 1997 Aug;77(2):150–2
Linear IgA disease and ulcerative colitis. Paige DG, et al.
Br J Dermatol 1997 May;136(5):779–82
Linear IgA disease in a patient with bladder carcinoma. Ródenas JM, et al. **Br J Dermatol** 1997 Feb;136(2):257–9 (26 ref.)
Subcorneal pustular dermatosis (Sneddon-Wilkinson

syndrome): another cutaneous manifestation of SAPHO syndrome? [letter] Scarpa R, et al. **Br J Rheumatol** 1997 May;36(5):602–3

Amicrobial pustular dermatosis of cutaneous folds associated with autoimmune disorders: a new entity? Marzano AV, et al. **Dermatology** 1996;193(2):88–93

Papuloerythroderma of Ofuji: a report of 2 cases including the first European case associated with visceral carcinoma. Schepers C, et al. **Dermatology** 1996;193(2):131–5 (22 ref.)

Bullous pemphigoid in lepromatous leprosy. Thappa DM, et al. **Indian J Lepr** 1996 Jul–Sep;68(3):251–4

[Non-microbial pustulosis and systemic lupus erythematosus (letter)] López Estebaranz JL, et al.
Ann Dermatol Venereol 1996;123(6–7):401–2 **(Fre)**

CONGENITAL

A new case of extensive congenital erosions and vesicles healing with reticulate scarring. Fernández-Pugnaire MA, et al. **Dermatology** 1997;194(3):278–80 (16 ref.)

DIAGNOSIS

Immunofluorescence diagnosis of bullous dermatoses on formalin-fixed tissue sections after antigen retrieval [letter; comment] Al-Rifai I, et al. **Am J Dermatopathol** 1997 Feb; 19(1):103–5. Comment on: Am J Dermatopathol 1995 Dec;17(6):560–3.

Diagnostic value of indirect immunofluorescence on sodium chloride-split skin in differential diagnosis of subepidermal autoimmune bullous dermatoses [see comments]
Ghohestani RF, et al. **Arch Dermatol** 1997 Sep; 133(9):1102–7. Comment in: Arch Dermatol 1997 Sep;133(9):1158–60.

The accuracy of indirect immunofluorescence on sodium chloride-split skin in differentiating subepidermal bullous diseases [editorial; comment] Mutasim DF.
Arch Dermatol 1997 Sep;133(9):1158–60 (23 ref.). Comment on: Arch Dermatol 1997 Sep;133(9):1102–7.

Pathological case of the month. Linear IgA dermatosis of childhood (benign chronic bullous dermatosis of childhood). Gereige RS, et al.
Arch Pediatr Adolesc Med 1997 Mar;151(3):320–1

Chronic bullous disease of childhood--another cause for potential misdiagnosis of sexual abuse? Coleman H, et al. **Br J Gen Pract** 1997 Aug;47(421):507–8

Blistering diseases of the skin. Buchman JS.
Clin Podiatr Med Surg 1996 Jan;13(1):91–108 (39 ref.)

Distinguishing vesicular and pustular disorders in the neonate. Wagner A. **Curr Opin Pediatr** 1997 Aug; 9(4):396–405 (86 ref.)

Eosinophilic pustular folliculitis (Ofuji disease) in a child. Lazarov A, et al. **Cutis** 1996 Aug;58(2):135–8 (14 ref.)

A Behçet-like disease presenting as ulcerative stomatitis and scarring pustular lesions of the face. Shelley WB, et al. **Cutis** 1997 Feb;59(2):74–6

Hereditary bullous acrokeratotic poikiloderma of Weary-Kindler associated with pseudoainhum and sclerotic bands. Krunic AL, et al. **Int J Dermatol** 1997 Jul; 36(7):529–33 (18 ref.)

Uncommon cutaneous manifestations of lupus erythematosus. Mascaro JM, et al. **Lupus** 1997;6(2):122–31 (84 ref.)

An acute generalized bullous eruption in a young girl [clinical conference] Skidmore RA, et al. **Pediatr Dermatol** 1996 Nov-Dec;13(6):509–12

Diagnosis and treatment of pustular disorders in the neonate. Van Praag MC, et al. **Pediatr Dermatol** 1997 Mar-Apr; 14(2):131–43 (77 ref.)

Eosinophilic and neutrophilic spongiosis: clues to the diagnosis of immunobullous diseases and other inflammatory disorders. Machado-Pinto J, et al.
Semin Cutan Med Surg 1996 Dec;15(4):308–16 (45 ref.)

DRUG THERAPY

Management of immunobullous disorders: the clinical significance of interindividual variation in azathioprine metabolism [letter; comment] Anstey A.
Clin Exp Dermatol 1996 May;21(3):247–8. Comment on: Clin Exp Dermatol 1995 May;29(3):189–201. Comment on: Clin Exp Dermatol 1995 Jul;20(4):283–93.

Colchicine as a novel therapeutic agent in chronic bullous dermatosis of childhood. Banodkar DD, et al.
Int J Dermatol 1997 Mar;36(3):213–6

Diagnosis and treatment of pustular disorders in the neonate. Van Praag MC, et al. **Pediatr Dermatol** 1997 Mar-Apr; 14(2):131–43 (77 ref.)

ENZYMOLOGY

Tryptase concentration in skin blister fluid from patients with bullous skin conditions. Brockow K, et al.
Arch Dermatol Res 1996 Nov;288(12):771–3

EPIDEMIOLOGY

An outbreak of the vesicating beetle Paederus sabaeus Er. (Coleoptera: Staphylinidae) in Rivers State, Nigeria. Okiwelu SN, et al. **Ann Trop Med Parasitol** 1996 Jun; 90(3):345–6

A cluster of atypical skin lesions in well-baby nurseries and a neonatal intensive care unit. Keroack MA, et al.
J Perinatol 1996 Sep-Oct;16(5):370–3

ETIOLOGY

Extensive vesiculobullous eruption following limited ruby laser treatment for incontinentia pigmenti: a case report. Nagase T, et al. **Australas J Dermatol** 1997 Aug;38(3):155–7

Acquired immunobullous disease: a cutaneous manifestation of IgM macroglobulinaemia. Whittaker SJ, et al.
Br J Dermatol 1996 Aug;135(2):283–6

Distinguishing vesicular and pustular disorders in the neonate. Wagner A. **Curr Opin Pediatr** 1997 Aug; 9(4):396–405 (86 ref.)

Drywall stilt dermatosis. Lewis EJ, et al. **Cutis** 1996 Dec; 58(6):391–2

Intraepidermal IgA pustulosis associated with monoclonal IgA gammopathy in an HIV-infected patient [letter] Barnadas MA, et al. **Dermatology** 1997;194(3):308–9

Erosive pustular dermatosis of the scalp in skin grafts: report of three cases. Ena P, et al. **Dermatology** 1997;194(1):80–4 (26 ref.)

Vesiculopustular eruption associated with mycoplasma pneumoniae pneumopathy. Winnock T, et al.
Dermatology 1996;192(1):73–4

Bullous eruption in a patient with systemic lupus erythematosus: mite dermatitis caused by Cheyletiella blakei. Cvancara JL, et al. **J Am Acad Dermatol** 1997 Aug; 37(2 Pt 1):265–7

Drug induced acute generalized exanthematous pustulosis. Katagiri K, et al. **J Dermatol** 1996 Sep;23(9):623–7

Acquired Blaschko dermatitis: acquired relapsing self-healing Blaschko dermatitis. Lee HJ, et al. **J Dermatol** 1996 Sep; 23(9):639–42 (16 ref.)

Extensive bullae formation in acute iliofemoral venous thrombosis. Hsu TS. **J Formos Med Assoc** 1996 Jul; 95(7):579–80

A cluster of atypical skin lesions in well-baby nurseries and a neonatal intensive care unit. Keroack MA, et al.
J Perinatol 1996 Sep-Oct;16(5):370–3

A peculiar form of amicrobial pustulosis of the folds associated with systemic lupus erythematosus and other auto-immune diseases. Lagrange S, et al. **Lupus** 1997; 6(6):514–20

Bullous skin disease in lupus erythematosus. Yell JA, et al. **Lupus** 1997;6(2):112–21 (67 ref.)

Bullous dermatosis of end-stage renal disease: a possible association between abnormal porphyrin metabolism and aluminium [see comments] Gafter U, et al.
Nephrol Dial Transplant 1996 Sep;11(9):1787–91. Comment in: Nephrol Dial Transplant 1997 May;12(5):1083.

Bullous dermatosis of end-stage renal disease and aluminium [letter; comment] Tercedor J, et al.
Nephrol Dial Transplant 1997 May;12(5):1083. Comment on: Nephrol Dial Transplant 1996 Sep;11(9):1787–91.

Vesiculopustular eruption of Crohn's disease. Matheson BK, et al. **Pediatr Dermatol** 1996 Mar-Apr;13(2):127–30

[A case for diagnosis: erosive pustular dermatosis of the scalp] Loche F, et al. **Ann Dermatol Venereol** 1995; 122(11–12):799–800 **(Fre)**

[Bullous manifestations of Kaposi disease associated with AIDS] Perrot JL, et al. **Ann Dermatol Venereol** 1995; 122(11–12):793–5 (Eng. Abstr.) **(Fre)**

[Light and heavy chain deposition disease with cutaneous and renal manifestations] Safa G, et al.
Ann Dermatol Venereol 1996;123(8):490–2 (Eng. Abstr.) **(Fre)**

[Bullous skin reactions after soft roentgen radiotherapy of HIV-associated Kaposi sarcomas] Thoma-Greber E, et al. **Hautarzt** 1997 May;48(5):339–42 (Eng. Abstr.) **(Ger)**

GENETICS

The genetic basis of hereditary blistering disorders. Paller AS. **Curr Opin Pediatr** 1996 Aug;8(4):367–71 (38 ref.)

IMMUNOLOGY

Autoimmune bullous diseases. Rye B, et al.
Am Fam Physician 1997 Jun;55(8):2709–18 (26 ref.)

Immune-mediated subepithelial blistering diseases of the mucous membranes. Improving the detection of circulating autoantibodies by the use of concentrated serum samples. Korman NJ, et al. **Arch Dermatol** 1996 Oct;132(10):1194–8

IgA antikeratinocyte surface autoantibodies from two types of intercellular IgA vesiculopustular dermatosis recognize distinct isoforms of desmocollin. Hashimoto T, et al.
Arch Dermatol Res 1996 Jul;288(8):447–52

Linear IgA bullous dermatosis limited to the seborrhoeic regions [letter] Ansai SI, et al. **Br J Dermatol** 1996 Dec; 135(6):1006–7

Drug-induced linear IgA disease: target antigens are heterogeneous. Paul C, et al. **Br J Dermatol** 1997 Mar; 136(3):406–11

Linear immunoglobulin A (IgA) bullous dermatosis of childhood: identification of the target antigens and study of the cellular sources. Yamane Y, et al. **Br J Dermatol** 1996 Nov;135(5):785–90

Comparative study of autoantigens for various bullous skin diseases by immunoblotting using different dermo-epidermal separation techniques. Ohata Y, et al.
Clin Exp Dermatol 1995 Nov;20(6):454–8

The immunology of bullous oculo-muco-cutaneous disorders. Pleyer U, et al. **Immunol Today** 1996 Mar; 17(3):111–3 (12 ref.)

Linear IgA bullous dermatosis in south India. Ajithkumar K, et al. **Int J Dermatol** 1997 Mar;36(3):191–3

An extract from cultured human keratinocytes that contains the major autoantigens related to autoimmune bullous skin diseases. Batteux F, et al. **J Clin Immunol** 1997 May; 17(3):228–33

Two cases of atypical bullous disease showing linear IgG and IgA deposition in the basement membrane zone. Kawahara Y, et al. **J Dermatol** 1996 Apr;23(4):254–8

A case of linear IgA disease: an immunofluorescent study using confocal laser scan microscopy. Kobayashi T, et al.
J Dermatol 1997 May;24(5):306–9

Detection of autoantibody against 97-kD antigen by immunoblot, but not by indirect immunofluorescence, in a patient with linear IgA bullous dermatosis. Ohno H, et al. **J Dermatol** 1996 Oct;23(10):665–9

Linear IgA bullous dermatosis with IgA antibodies exclusively directed against the 180- or 230-kDa epidermal antigens. Ghohestani RF, et al. **J Invest Dermatol** 1997 Jun;108(6):854–8

Human desmocollin 1 (Dsc1) is an autoantigen for the subcorneal pustular dermatosis type of IgA pemphigus. Hashimoto T, et al. **J Invest Dermatol** 1997 Aug; 109(2):127–31

A novel subepidermal blistering disease with autoantibodies to a 200-kDa antigen of the basement membrane zone [corrected and republished article originally printed in J Invest Dermatol 1996 Mar;106(3):465–70] Zillikens D, et al. **J Invest Dermatol** 1996 Jun;106(6):1333–8

IgA antibodies in chronic bullous disease of childhood react with 97 kDa basement membrane zone protein. Zone JJ, et al. **J Invest Dermatol** 1996 Jun;106(6):1277–80

Linear IgA disease with clinical and immunopathological features of epidermolysis bullosa acquisita. Mutasim DF, et al. **Pediatr Dermatol** 1997 Jul-Aug;14(4):303–6

METABOLISM

Bullous dermatosis of end-stage renal disease: a possible association between abnormal porphyrin metabolism and aluminium [see comments] Gafter U, et al.
Nephrol Dial Transplant 1996 Sep;11(9):1787–91. Comment in: Nephrol Dial Transplant 1997 May;12(5):1083.

Bullous dermatosis of end-stage renal disease and aluminium [letter; comment] Tercedor J, et al.
Nephrol Dial Transplant 1997 May;12(5):1083. Comment on: Nephrol Dial Transplant 1996 Sep;11(9):1787–91.

PATHOLOGY

Bullous lesions in Kaposi's sarcoma: case report. Borroni G, et al. **Am J Dermatopathol** 1997 Aug;19(4):379–83

Bullous systemic lupus erythematosus--a case report and review. Tay YK, et al. **Ann Acad Med Singapore** 1995 Nov; 24(6):879–82 (14 ref.)

Palmoplantar pustules in an infant. Acropustulosis of infancy. Dorton DW, et al. **Arch Dermatol** 1996 Nov; 132(11):1365–6, 1368–9

Papules and vesicles in an 18-month-old boy. Eosinophilic pustulosis (EP) of childhood. Papa CA, et al.
Arch Dermatol 1997 Jun;133(6):775–6, 778

Are eosinophilic pustular folliculitis of infancy and infantile acropustulosis the same entity? Vicente J, et al.
Br J Dermatol 1996 Nov;135(5):807–9

Twins with impetigo herpetiformis [letter] Alli N, et al.
Int J Dermatol 1996 Feb;35(2):149–50

Wells' syndrome: vesiculobullous presentation and possible role of ectoparasites. Chang DK, et al. **Int J Dermatol** 1997 Apr;36(4):288–91

A case of linear IgA disease: an immunofluorescent study using confocal laser scan microscopy. Kobayashi T, et al.
J Dermatol 1997 May;24(5):306–9

RADIOTHERAPY

Subcorneal pustular dermatosis (Sneddon-Wilkinson disease) treated with narrowband (TL-01) UVB phototherapy [letter] Cameron H, et al. **Br J Dermatol** 1997 Jul; 137(1):150–1

Subcorneal pustular dermatosis responsive to narrowband (TL-01) UVB phototherapy [letter] Orton DI, et al.
Br J Dermatol 1997 Jul;137(1):149–50

SURGERY

Bullous drug eruption treated with amputation. A challenging case of vancomycin-induced linear IgA disease. Bitman LM, et al. **Arch Dermatol** 1996 Nov;132(11):1289–90

SKIN DISEASES, VIRAL

Segmental zoster paresis of limbs. Merchut MP, et al.
Electromyogr Clin Neurophysiol 1996 Sep;36(6):369–75 (21 ref.)

Resistant herpes infection of the palm in a patient with acquired immunodeficiency syndrome: a case report. Dilley D, et al. **J Hand Surg [Am]** 1997 Jul;22(4):650–2

COMPLICATIONS

High prevalence of cutaneous viral infections in AIDS patients with Kaposi's sarcoma: insight into the role of human herpesvirus 8? [letter] Simonart T, et al. **AIDS** 1997 May;11(6):824–6

Concurrent cytomegalovirus, M. tuberculosis and M. avium-intracellulare cutaneous infection in an HIV patient. Núñez M, et al. **J Dermatol** 1997 Jun;24(6):401–4

Severity of skin lesions of herpes zoster at the worst phase rather than age and involved region most influences the duration of acute herpetic pain. Higa K, et al. **Pain** 1997 Feb;69(3):245–53

[Polyradiculitis and cutaneous herpes zoster (letter)] Sánchez Ayuso FJ, et al. **An Med Interna** 1995 Aug;12(8):413–1 **(Spa)**

CONGENITAL

Congenitally acquired herpes zoster infection in a newborn. Mogami S, et al. **Dermatology** 1997;194(3):276–7

DIAGNOSIS

Chronic varicella zoster infection mimicking a basal cell carcinoma in an AIDS patient. Tsao H, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):831–3

[Zoster. The manifestation forms in the skin, complications and therapy] Gross G. **Dtsch Med Wochenschr** 1997 Jan 31;122(5):132–9 (50 ref.) **(Ger)**

[Acute generalized exanthematous pustulosis due to Coxsackie B4 virus] Feio AB, et al. **Acta Med Port** 1997 Jun–Jul;10(6–7):487–91 (9 ref.) (Eng. Abstr.) **(Por)**

[Cutaneous infection with the cytomegalovirus virus in AIDS patients] Franca I, et al. **Acta Med Port** 1997 Jun–Jul; 10(6–7):479–84 (21 ref.) (Eng. Abstr.) **(Por)**

[Diagnosis of infections caused by varicella zoster virus (letter)] Barraquer P, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):277–8 **(Spa)**

DRUG THERAPY

Primary care management of common dermatologic disorders in women. Pharmacologic considerations. Emmons L, et al. **J Nurse Midwifery** 1997 May–Jun; 42(3):228–53 (54 ref.)

Administration of oral acyclovir suppressive therapy after neonatal herpes simplex virus disease limited to the skin, eyes and mouth: results of a phase I/II trial. Kimberlin D, et al. **Pediatr Infect Dis J** 1996 Mar;15(3):247–54

ENZYMOLOGY

Alterations in mast cell proteinases and protease inhibitors in the progress of cutaneous herpes zoster infection. Kaminska R, et al. **J Pathol** 1996 Dec;180(4):434–40

ETIOLOGY

Dermatologic manifestations of hepatitis C infection. Schwaber MJ, et al. **Int J Dermatol** 1997 Apr;36(4):251–4 (25 ref.)

IMMUNOLOGY

Cellular immunity in cutaneous and genital HPV infections. Malejczyk J, et al. **Clin Dermatol** 1997 Mar–Apr; 15(2):261–74 (131 ref.)

PATHOLOGY

Response to interferon treatment decreases with epidermal dedifferentiation in condylomas. Arany I, et al. **Antiviral Res** 1996 Aug;32(1):19–26

An eruption associated with alphavirus infection. Autio P, et al. **Br J Dermatol** 1996 Aug;135(2):320–3

Characteristic but unfamiliar—the cowpox infection, transmitted by a domestic cat. Stolz W, et al. **Dermatology** 1996;193(2):140–3

Cutaneous localization of chronic lymphocytic leukemia at the site of chickenpox. Doutre MS, et al. **J Am Acad Dermatol** 1997 Jan;36(1):98–9

Dermatomal lichenoid chronic graft-vs-host disease following varicella-zoster infection despite absence of viral genome. Baselga E, et al. **J Cutan Pathol** 1996 Dec; 23(6):576–81

Images in clinical medicine. Positive Tzanck smear. Cohen LM. **N Engl J Med** 1997 Aug 21;337(8):535

[Milker's nodules] Hansen SK, et al. **Ugeskr Laeger** 1997 Jan 20;159(4):436–7 (Eng. Abstr.) **(Dan)**

SURGERY

[The CO2 laser treatment of extensive skin changes to the vulva caused by the human papillomavirus (HPV) and refractory to other types of therapy] Nachev A, et al. **Akush Ginekol (Sofiia)** 1996;35(1–2):55–6 (Eng. Abstr.) **(Bul)**

THERAPY

Response to interferon treatment decreases with epidermal dedifferentiation in condylomas. Arany I, et al. **Antiviral Res** 1996 Aug;32(1):19–26

VETERINARY

Lymphocystis disease in snapper (Pagrus auratus) from Spencer Gulf, South Australia. Durham PJ, et al. **Aust Vet J** 1996 Oct;74(4):312–3

VIROLOGY

Different arrangement of human papillomavirus E2 binding sites distinguishes cutaneous types from those associated with mucosal lesions. Garrido-Guerrero E, et al. **Arch Med Res** 1996 Autumn;27(3):389–94

SKIN DRUG ADMINISTRATION see **ADMINISTRATION, CUTANEOUS**

SKIN ELECTRIC CONDUCTANCE see **GALVANIC SKIN RESPONSE**

SKIN FISTULA see **CUTANEOUS FISTULA**

SKIN NEOPLASMS

Extramammary Paget's disease [letter; comment] Burrows NP, et al. **Acta Derm Venereol** 1997 Jan;77(1):78. Comment on: Acta Derm Venereol 1996 Mar;76(2):173–4.

Cutaneous malignant melanoma. Ringborg U. **Acta Otolaryngol (Stockh)** 1996 Sep;116(5):641–6 (25 ref.)

Metastasizing dermatofibroma [letter] Colby TV. **Am J Surg Pathol** 1997 Aug;21(8):976

New types of cancer after basal-cell cancer [letter; comment] Stewart GM. **Ann Intern Med** 1997 Jul 1;127(1):87; discussion 87–8. Comment on: Ann Intern Med 1996 Nov 15;125(10):815–21.

Talking with patients suffering from malignant melanoma. Milton GW. **Ann N Y Acad Sci** 1997 Feb 20;809:330–5

Malignant melanoma in children. A review [published erratum appears in Arch Dermatol 1997 Jul;133(7):833] Ruiz-Maldonado R, et al. **Arch Dermatol** 1997 Mar; 133(3):363–71 (133 ref.)

Naevus lipomatosus cutaneous superficialis. Armstrong DK, et al. **Australas J Dermatol** 1997 May;38(2):88–90

Management of cutaneous lymphoma. Russell-Jones R, et al. **Baillieres Clin Haematol** 1996 Dec;9(4):743–67 (125 ref.)

Mycosis fungoides and Sezary syndrome [see comments] Diamandidou E, et al. **Blood** 1996 Oct 1;88(7):2385–409 (296 ref.). Comment in: Blood 1997 Apr 15;89(8):3062–4.

Kaposi's sarcoma after autologous bone marrow transplantation for multiple myeloma. Vivancos P, et al. **Bone Marrow Transplant** 1996 Apr;17(4):669–71

Cutaneous melanoma in patients with sarcoma. Berking C, et al. **Cancer** 1997 Feb 15;79(4):843–8

Ultra-late recurrence (15 years or longer) of cutaneous melanoma. Tsao H, et al. **Cancer** 1997 Jun 15; 79(12):2361–70 (29 ref.)

Animal models of melanoma. Kusewitt DF, et al. **Cancer Surv** 1996;26:35–70 (199 ref.)

Etiology and pathogenesis of squamous cell carcinoma. Markey AC. **Clin Dermatol** 1995 Nov–Dec;13(6):537–43 (99 ref.)

Etiology and pathogenesis of basal cell carcinoma. Miller SJ. **Clin Dermatol** 1995 Nov–Dec;13(6):527–36 (185 ref.)

Radiation therapy for skin neoplasms. Parker RG. **Clin Dermatol** 1995 Nov–Dec;13(6):579–88 (51 ref.)

Cancer of the skin in the older patient. Keller KL, et al. **Clin Geriatr Med** 1997 May;13(2):339–61 (43 ref.)

Malignant & premalignant tumors. Scheinberg RS. **Compr Ther** 1997 Mar;23(3):190–6 (10 ref.)

Melanoma and other skin neoplasms. **Curr Opin Oncol** 1996 Mar;8(2):B79–85

Cutaneous hemangiomas, vascular stains and malformations, and associated syndromes. Esterly NB. **Curr Probl Pediatr** 1996 Jan;26(1):3–39 (272 ref.)

Basal cell carcinoma of the scrotum. Schleicher SM, et al. **Cutis** 1997 Mar;59(3):116

Angiokeratomas: an update. Schiller PI, et al. **Dermatology** 1996;193(4):275–82 (57 ref.)

Breast metastases of Merkel cell carcinoma. Schnabel T, et al. **Eur J Cancer** 1996 Aug;32A(9):1617–8

Malignant melanoma of the penis. de Bree E, et al. **Eur J Surg Oncol** 1997 Jun;23(3):277–9

Dermatofibrosarcoma protuberans of the upper lip: an overview and a case report. Vandeweyer E, et al. **Eur J Surg Oncol** 1997 Jun;23(3):275–7 (22 ref.)

Pilomatrix carcinoma. Vico P, et al. **Eur J Surg Oncol** 1997 Aug;23(4):370–1

Dermatofibrosarcoma protuberans. Garcia C, et al. **Int J Dermatol** 1996 Dec;35(12):867–71

Lentigo maligna and lentigo maligna melanoma [letter; comment] Altshuler JH. **J Am Acad Dermatol** 1996 Dec; 35(6):1016–7. Comment on: J Am Acad Dermatol 1995 Dec;33(6):923–36; quiz 937–40.

Primary cutaneous plasmocytoma in a patient with chronic lymphatic leukemia. Belinchón I, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):777–8

Full proceedings from the National Conference to Develop a National Skin Cancer Agenda. American Academy of Dermatology and Centers for Disease Control and Prevention, Washington, D.C., April 8–10, 1995. Goldsmith LA, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):748–56

Merkel cell carcinoma: report of ten cases with emphasis on clinical course, treatment, and in vitro drug sensitivity. Krasagakis K, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):727–32

Epidermal nevus syndrome: association with central precocious puberty and woolly hair nevus. Tay YK, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):839–42

Dermatofibrosarcoma protuberans of the hallux. Behfar KN, et al. **J Am Podiatr Med Assoc** 1996 Mar;86(3):126–8

Malignant chondroid syringoma of scalp with cervical lymph node metastases. Seenu V, et al. **J Assoc Physicians India** 1996 Aug;44(8):565–6

Myxoma of the hand. al-Qattan MM. **J Hand Surg [Br]** 1996 Oct;21(5):690–2

Complications of the nevoid basal cell carcinoma syndrome: a case report. Walter AW, et al. **J Pediatr Hematol Oncol** 1997 May–Jun;19(3):258–62

HIV-related skin diseases. Geusau A, et al. **J R Coll Physicians Lond** 1997 Jul–Aug;31(4):374–9 (38 ref.)

Skin cancer. Rees J. **J R Coll Physicians Lond** 1997 May–Jun; 31(3):246–50 (22 ref.)

Renal transplant recipients and protection from sun: need for education [letter] Butt A, et al. **Lancet** 1997 Jan 18; 349(9046):179–80

Basal-cell carcinoma as predictor for other cancers. Goldberg LH. **Lancet** 1997 Mar 8;349(9053):664–5

Merkel cell tumor in a woman with chronic lymphocytic leukemia. Safadi R, et al. **Leuk Lymphoma** 1996 Feb; 20(5–6):509–11

Malignant melanoma: an emerging and preventable medical catastrophe. Creagan ET. **Mayo Clin Proc** 1997 Jun; 72(6):570–4

Malignant melanoma: Mayo Clinic experience. Sim FH, et al. **Mayo Clin Proc** 1997 Jun;72(6):565–9 (35 ref.)

Skin Cancer and UV Radiation. Bochum, Germany, 3–6 October, 1996. Abstracts. **Melanoma Res** 1996 Sep;6 Suppl 1:S1–83

What do Danes know about naevi, skin cancer and melanoma? Experience from a dermatological out-patient clinic. Osterlind A, et al. **Melanoma Res** 1997 Feb; 7(1):69–73

Society of Surgical Oncology practice guidelines. Melanoma surgical practice guidelines. Coit D, et al. **Oncology (Huntingt)** 1997 Sep;11(9):1317–23

Primary mucinous carcinoma of the skin. Report of case. Boscaino A, et al. **Pathologica** 1995 Dec;87(6):689–91

Management of nevus spilus [see comments] Casanova D, et al. **Pediatr Dermatol** 1996 May–Jun;13(3):233–8. Comment in: Pediatr Dermatol 1996 May–Jun;13(3):250–2. Comment in: Pediatr Dermatol 1997 Mar–Apr;14(2):155–6.

Superficial hemangiomas: associations and management. Enjolras O, et al. **Pediatr Dermatol** 1997 May–Jun; 14(3):173–9

MR imaging of symptomatic neurocutaneous melanosis in children. Byrd SE, et al. **Pediatr Radiol** 1997 Jan; 27(1):39–44

Cutaneous involvement in children with acute lymphoblastic leukemia or lymphoblastic lymphoma. The Children's Leukemia Cooperative Group of the European Organization of Research and Treatment of Cancer (EORTC). Millot F, et al. **Pediatrics** 1997 Jul;100(1):60–4

Basal cell carcinoma in the groin of a black patient with femoral vessel invasion and a second primary malignancy. Beckenstein MS, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):872–5

The multidisciplinary melanoma center. Sagebiel RW. **Surg Clin North Am** 1996 Dec;76(6):1433–9 (6 ref.)

Dr white responds. White LP. **West J Med** 1996 Feb; 164(2):182–3

[Malignant melanoma of the skin. Epidemiology, risk factors, clinical diagnosis] Vosmik F. **Cas Lek Cesk** 1996 Jul 26; 135(13):405–8 (Eng. Abstr.) **(Cze)**

[Lipomas and liposarcomas (letter; comment)] Balsslev E. **Ugeskr Laeger** 1997 Jun 2;159(23):3618–9. Comment on: Ugeskr Laeger 1997 Feb 3;159(6):736–9. **(Dan)**

[Lipomas (letter)] Møller NE. **Ugeskr Laeger** 1997 Jun 2; 159(23):3616–7 **(Dan)**

[Merkel cell carcinoma: primary cutaneous neuroendocrine tumor] Brousse C, et al. **Rev Med Interne** 1996; 17(12):1025–8 (23 ref.) (Eng. Abstr.) **(Fre)**

[Cutaneous lymphoma] Hauschild A, et al. **Dtsch Med Wochenschr** 1996 Oct 25;121(43):1335–40 (32 ref.) **(Ger)**

[Acquired melanocytic nevi in children—a beauty spot or warning sign?] Azizi E, et al. **Harefuah** 1997 Mar 16; 132(6):416–20 (41 ref.) **(Heb)**

[Primary cutaneous lymphoma—mycosis fungoides] Nagatani T, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):23–9 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Hemangioma, angiosarcoma] Fukushige J. **Ryoikibetsu Shokogun Shirizu** 1996;(14):455–7 (10 ref.) **(Jpn)**

[Melanocytosis neurocutanea] Kopecký S, et al. **Bratisl Lek Listy** 1996 Nov;97(11):688–92 (Eng. Abstr.) **(Slo)**

[Misleading information about the management of malignant melanomas (letter)] Asbrink E, et al. **Lakartidningen** 1997 Aug 6;94(32–33):2718 **(Swe)**

BLOOD

Risk of squamous cell carcinoma of the skin in relation to plasma selenium, alpha-tocopherol, beta-carotene, and retinol: a nested case-control study. Karagas MR, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jan;6(1):25–9

Serum S100—a marker for disease monitoring in metastatic melanoma. Henze G, et al. **Dermatology** 1997;194(3):208–12

Circulating adhesion molecules as prognostic factors for cutaneous melanoma. Schaider H, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):209–13

E- and P-cadherin expression in tumor tissues and soluble E-cadherin levels in sera of patients with skin cancer. Shirahama S, et al. **J Dermatol Sci** 1996 Oct;13(1):30–6

Circulating interleukin-2 receptors are a group of multimeric proteins with immunoreactivity for interleukin-2 receptor

alpha, beta, and gamma chains. Dummer R, et al. **J Interferon Cytokine Res** 1996 Apr;16(4):315–20

Simultaneous measurement of serum 5-S-cysteinyldopa, circulating intercellular adhesion molecule-1 and soluble interleukin-2 receptor levels in Japanese patients with malignant melanoma. Hasegawa M, et al. **Melanoma Res** 1997 Jun;7(3):243–51

Prognostic value of serum analyses of S-100 beta protein in malignant melanoma. von Schoultz E, et al. **Melanoma Res** 1996 Apr;6(2):133–7

Serum-soluble IL-2 receptor and IL-6 levels in patients with melanoma. Boyano MD, et al. **Oncology** 1997 Sep-Oct; 54(5):400–6

[Preliminary evaluation of a method for detection of individual malignant melanoma cells in peripheral blood while monitoring the course of the malignancy and its treatment] Szenajch J, et al. **Pol Arch Med Wewn** 1997 Jan;97(1):30–6 (Eng. Abstr.) **(Pol)**

BLOOD SUPPLY

Tumor vascularity as a prognostic indicator in intermediate-thickness (0.76–4 mm) cutaneous melanoma. A quantitative assay. Rongioletti F, et al. **Am J Dermatopathol** 1996 Oct;18(5):474–7

Cross-species comparison of angiogenesis during the premalignant stages of squamous carcinogenesis in the human cervix and K14-HPV16 transgenic mice. Smith-McCune K, et al. **Cancer Res** 1997 Apr 1; 57(7):1294–300

Quantification of vascularity in nodular melanoma and Spitz's nevus. Binder M, et al. **J Cutan Pathol** 1997 May; 24(5):272–7

Differences in tumor microvessel density between squamous cell carcinomas and basal cell carcinomas may relate to their different biologic behavior. Weninger W, et al. **J Cutan Pathol** 1997 Jul;24(6):364–9

Microregional fluctuations in perfusion within human tumours detected using laser Doppler flowmetry. Pigott KH, et al. **Radiother Oncol** 1996 Jul;40(1):45–50

CHEMICALLY INDUCED

Behavior of the basement membrane during carcinoma cell invasion in chemically induced carcinomas of the skin. Köpf-Maier P, et al. **Acta Anat (Basel)** 1996;155(1):1–13

Flare-up of squamous cell carcinoma of the skin following fludarabine therapy for chronic lymphocytic leukemia. Davidovitz Y, et al. **Acta Haematol** 1997;98(1):44–6

Cutaneous carcinoma during long-term hydroxyurea therapy: a report of 5 cases [letter] Callot-Mellot C, et al. **Arch Dermatol** 1996 Nov;132(11):1395–7 (5 ref.)

Hormones, immunology, nevi, and melanoma [editorial; comment] McLean DI, et al. **Arch Dermatol** 1997 Jun; 133(6):783–4. Comment on: Arch Dermatol 1997 Jun;133(6):795–6.

Effect of growth hormone therapy on melanocytic nevi in survivors of childhood neoplasia [letter] [see comments] Zvulunov A, et al. **Arch Dermatol** 1997 Jun;133(6):795–6 . Comment in: Arch Dermatol 1997 Jun;133(6):783–4.

Nitric oxide synthase and skin tumor promotion. Ahmad N, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):328–31

Multiple squamous cell carcinomas in a psoriatic patient following high-dose photochemotherapy and cyclosporin treatment: response to long-term acitretin maintenance. van de Kerkhof PC, et al. **Br J Dermatol** 1997 Feb;136(2):275–8

Chemical exposures, medical history, and risk of squamous and basal cell carcinoma of the skin. Gallagher RP, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Jun;5(6):419–24

Serum beta-carotene level, arsenic methylation capability, and incidence of skin cancer. Hsueh YM, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Aug;6(8):589–96

Mutagenic, carcinogenic and cocarcinogenic activity of cashewnut shell liquid. George J, et al. **Cancer Lett** 1997 Jan 15;112(1):11–6

Effects of capsaicin on chemically-induced two-stage mouse skin carcinogenesis. Park KK, et al. **Cancer Lett** 1997 Mar 19;114(1-2):183–4

Skin carcinogenicity of condensed asphalt roofing fumes and their fractions following dermal application to mice. Sivak A, et al. **Cancer Lett** 1997 Jul 15;117(1):113–23

Enhanced skin carcinogenesis in transgenic mice with high expression of glutathione peroxidase or both glutathione peroxidase and superoxide dismutase. Lu YP, et al. **Cancer Res** 1997 Apr 15;57(8):1468–74

Quantitation of early clonal expansion of two mutant 61st codon c-Ha-ras alleles in DMBA/TPA treated mouse skin by nested PCR/RFLP. Finch JS, et al. **Carcinogenesis** 1996 Dec;17(12):2551–7

Porphyrin-mediated photosensitization has a weak tumor promoting activity in mouse skin: possible role of in situ-generated reactive oxygen species. Giri U, et al. **Carcinogenesis** 1996 Sep;17(9):2023–8

Transplacental mutagenicity of cisplatin: H-ras codon 12 and 13 mutations in skin tumors of SENCAR mice. Munoz EF, et al. **Carcinogenesis** 1996 Dec;17(12):2741–5

Chemical carcinogens and antigens contribute to cutaneous tumor promotion by depleting epidermal Langerhans cells. Qu M, et al. **Carcinogenesis** 1997 Jun;18(6):1277–9

Susceptibility of 129/SvEv mice in two-stage carcinogenesis protocols to 12-O-tetradecanoylphorbol-13-acetate promotion. Reiners JJ Jr, et al. **Carcinogenesis** 1997 Mar; 18(3):593–7

Genetics of chemical carcinogenesis--III. Tissue-specificity of the genes controlling susceptibility and resistance to skin carcinogenesis in the mouse. Saran A, et al. **Carcinogenesis** 1996 Nov;17(11):2463–8

Squamous cell carcinoma of the scrotum. Taniguchi S, et al. **Dermatology** 1996;193(3):253–4

Development of malignant melanoma after repeated topical photodynamic therapy with 5-aminolevulinic acid at the exposed site. Wolf P, et al. **Dermatology** 1997;194(1):53–4

Coal tar therapy. Is it carcinogenic? van Schooten FJ, et al. **Drug Saf** 1996 Dec;15(6):374–7

Mechanism of skin tumorigenesis by contact sensitizers: the effect of the corticosteroid fluocinolone acetonide on inflammation and tumor induction by 2,4 dinitro-1-fluorobenzene in the skin of the TG.AC (v-Ha-ras) mouse. Albert RE, et al. **Environ Health Perspect** 1996 Oct;104(10):1062–8

Carcinogenic risks of inorganic arsenic in perspective. Byrd DM, et al. **Int Arch Occup Environ Health** 1996; 68(6):484–94

Arsenic and the skin. Schwartz RA. **Int J Dermatol** 1997 Apr;36(4):241–50 (144 ref.)

Lymphomatoid papulosis and FK 506. Siddiqui MA, et al. **Int J Dermatol** 1997 Mar;36(3):202–5

Malignant melanoma and levodopa: is there a relationship? Two new cases and a review of the literature. Pfützner W, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 2):332–6 (68 ref.)

Analysis of the ability of 12-O-tetradecanoylphorbol-13-acetate to induce epidermal hyperplasia, transforming growth factor-alpha, and skin tumor promotion in wa-1 mice. Kiguchi K, et al. **J Invest Dermatol** 1997 May;108(5):784–91

Naevocyte triggering by recombinant human growth hormone. Piérard GE, et al. **J Pathol** 1996 Sep;180(1):74–9

Quinolone antibiotic with potential to photosensitize skin tumorigenesis. Johnson BE, et al. **J Photochem Photobiol B** 1997 Feb;37(3):171–3

Fluoroquinolone antibacterials enhance UVA-induced skin tumors. Klecak G, et al. **J Photochem Photobiol B** 1997 Feb;37(3):174–81

Induction of PA2.26, a cell-surface antigen expressed by active fibroblasts, in mouse epidermal keratinocytes during carcinogenesis. Gandarillas A, et al. **Mol Carcinog** 1997 Sep;20(1):10–8

New strains of inbred SENCAR mice with increased susceptibility to induction of papillomas and squamous cell carcinomas in skin. Hennings H, et al. **Mol Carcinog** 1997 Sep;20(1):143–50

Evidence that mirex promotes a unique population of epidermal cells that cannot be distinguished by their mutant Ha-ras genotype. Kim TW, et al. **Mol Carcinog** 1997 Sep; 20(1):115–24

Identification of differentially expressed genes in chemically induced skin tumors. Rutberg SE, et al. **Mol Carcinog** 1997 Sep;20(1):88–98

Comparison of chemical carcinogen skin tumor induction efficacy in inbred, mutant, and hybrid strains of mice: morphologic variations of induced tumors and absence of a papillomavirus cocarcinogen. Sundberg JP, et al. **Mol Carcinog** 1997 Sep;20(1):19–32

Decreases in phorbol ester-induced papilloma development in v-Ha-ras transgenic TG.AC mice during reduced gene dosage of bcl-2. Trempus CS, et al. **Mol Carcinog** 1997 Sep;20(1):68–77

Dietary conjugated linoleic acid modulation of phorbol ester skin tumor promotion. Belury MA, et al. **Nutr Cancer** 1996; 26(2):149–57

Effect of spray-dried yogurt and lactic acid bacteria on the initiation and promotion stages of chemically induced skin carcinogenesis in mice. McCarthy AC, et al. **Nutr Cancer** 1997;27(3):231–7

Activation of erbB2 and c-src in phorbol ester-treated mouse epidermis: possible role in mouse skin tumor promotion. Xian W, et al. **Oncogene** 1997 Mar 27;14(12):1435–44

Cutaneous carcinoma and PUVA lentigines in Thai patients treated with oral PUVA. Gritiyarangsan P, et al. **Photodermatol Photoimmunol Photomed** 1995 Aug; 11(4):174–7

Skin cancer and inorganic arsenic: uncertainty-status of risk. Brown KG, et al. **Risk Anal** 1997 Feb;17(1):37–42

[Metastatic malignant melanoma in treated non-Hodgkin's lymphoma] Falk S, et al. **Hautarzt** 1996 Sep;47(9):716–8 (21 ref.) (Eng. Abstr.) **(Ger)**

[Induction of multiple melanocytic nevus cell nevi in 2 children with malignant hematologic systemic diseases and chemotherapy-induced immunosuppression] Jappe U, et al. **Hautarzt** 1996 Jul;47(7):537–40 (Eng. Abstr.) **(Ger)**

[Kaposi sarcoma in cyclosporin A therapy of actinic reticuloid] Waldmann V, et al. **Hautarzt** 1997 Apr; 48(4):262–5 (Eng. Abstr.) **(Ger)**

[(-)-Epigallocatechin gallate, the main constituent of Japanese green tea, inhibits tumor promotion of okadaic acid] Yoshizawa S. **Fukuoka Igaku Zasshi** 1996 Oct; 87(10):215–21 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Abnormal desmoglein expression by squamous cell carcinoma cells. Harada H, et al. **Acta Derm Venereol** 1996 Nov; 76(6):417–20

An immunohistochemical study of p53 protein expression in classical Kaposi's sarcoma. Bergman R, et al. **Am J Dermatopathol** 1996 Aug;18(4):367–70

Immunohistochemical study of primary and recurrent basal cell and metatypical carcinomas of the skin. Kazantseva IA, et al. **Am J Dermatopathol** 1996 Feb;18(1):35–42

Cyclin kinase inhibitor p21WAF1/CIP1 in malignant melanoma: reduced expression in metastatic lesions. Maelandsmo GM, et al. **Am J Pathol** 1996 Dec; 149(6):1813–22

CD40 is a prognostic marker in primary cutaneous malignant melanoma. van den Oord JJ, et al. **Am J Pathol** 1996 Dec; 149(6):1953–61

Increased level of c-erbB-2/neu/HER-2 protein in cutaneous squamous cell carcinoma. Ahmed NU, et al. **Br J Dermatol** 1997 Jun;136(6):908–12

Immunohistochemical localization of the Ca2+ binding S100 proteins in normal human skin and melanocytic lesions. Böni R, et al. **Br J Dermatol** 1997 Jul;137(1):39–43

Intracellular expression of type VII collagen in squamous cell carcinoma complicating dystrophic epidermolysis bullosa [letter] Kanitakis J, et al. **Br J Dermatol** 1997 Aug; 137(2):310–3

Expression and ultrastructural localization of HMB-45 antigen. Kikuchi A, et al. **Br J Dermatol** 1996 Sep; 135(3):400–5

Non-erythroid spectrin (fodrin) in cutaneous tumours: diminished in cell membranes, increased in the cytoplasm. Tuominen H, et al. **Br J Dermatol** 1996 Oct;135(4):576–80

CaN19 expression in benign and malignant hyperplasias of the skin and oral mucosa: evidence for a role in regenerative differentiation. Xia L, et al. **Cancer Res** 1997 Jul 15; 57(14):3055–62

DNA image cytometry on sections as compared with image cytometry on smears and flow cytometry in melanoma. Klapperstück T, et al. **Cytometry** 1996 Sep 1;25(1):82–9

The immunohistochemical characteristics of the basosquamous cell carcinoma. Jones MS, et al. **Dermatol Surg** 1997 Mar;23(3):181–4

Expression of CD44 isoforms in human skin cancer. Simon JC, et al. **Eur J Cancer** 1996 Jul;32A(8):1394–400

Immunohistochemical expression of IL-10 in mycosis fungoides. Buhl L, et al. **Exp Dermatol** 1997 Aug;6(4):195–8

Evaluation of laminin and cytokeratin-10 expression in squamous cell carcinoma of the skin. Osiecka BJ, et al. **Folia Histochem Cytobiol** 1997;35(2):121–2

Differential expression of alpha 1(IV), alpha 2(IV), alpha 5(IV) and alpha 6(IV) collagen chains in the basement membrane of basal cell carcinoma. Tanaka K, et al. **Histochem J** 1997 Jul;29(7):563–70

An immunocytochemical assessment of 19 cases of cutaneous angiosarcoma. Orchard GE, et al. **Histopathology** 1996 Mar;28(3):235–40

p53-protein and Ki-67-antigen expression are both reliable biomarkers of prognosis in thick stage I nodular melanomas of the skin. Vogt T, et al. **Histopathology** 1997 Jan; 30(1):57–63

Antigen Ki-67 and c-myc oncogene as related to histoclinical parameters in pigmented skin lesions. Korabiowska M, et al. **In Vivo** 1995 Sep-Oct;9(5):433–8

The value of Nm23 expression as an independent prognostic indicator in primary thick melanoma. Holmes SC, et al. **J Cutan Pathol** 1996 Aug;23(4):344–9

p53 immunoreactivity in non-melanoma skin cancer from immunosuppressed and immunocompetent individuals: a comparative study of 246 tumours. Khorshid SM, et al. **J Cutan Pathol** 1996 Jun;23(3):229–33

Immunohistochemical localization of muscarinic acetylcholine receptors in primary and metastatic malignant melanomas. Lammerding-Köppel M, et al. **J Cutan Pathol** 1997 Mar;24(3):137–44

Vla and alpha 6 beta 4 integrin expression in neuroendocrine carcinomas of the skin (their xenografts on nude mice and a corresponding primary culture). Perrin C, et al. **J Cutan Pathol** 1996 Jun;23(3):223–8

Purification and structural analysis of extracellular matrix of a skin tumor from a patient with juvenile hyaline fibromatosis. Katagiri K, et al. **J Dermatol Sci** 1996 Oct; 13(1):37–48

Immunohistochemical detection of p21WAF1/CIP1 and p53 proteins in formalin-fixed paraffin-embedded tissue sections of squamous cell carcinoma of the skin. Matsuta M, et al. **J Dermatol Sci** 1997 Mar;14(3):233–9

Human papillomavirus DNA in non-melanoma skin cancers of a renal transplant recipient: detection of a new sequence related to epidermodysplasia verruciformis associated types. Höpfl R, et al. **J Invest Dermatol** 1997 Jan; 108(1):53–6

T helper 1 cytokine mRNA is increased in spontaneously regressing primary melanomas. Lowes MA, et al. **J Invest Dermatol** 1997 Jun;108(6):914–9

Identification of novel cadherins expressed in human melanoma cells. Matsuyoshi N, et al. **J Invest Dermatol** 1997 Jun;108(6):908–13

The distribution of the desmosomal protein, plakophilin 1, in human skin and skin tumors. Moll I, et al. **J Invest Dermatol** 1997 Feb;108(2):139–46

Angio-tumoral complex in human malignant melanoma characterised by free laminin: ultrastructural and immunohistochemical observations. Lugassy C, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):19–28

Vascular endothelial growth factor production in normal epidermis and in benign and malignant epithelial skin

tumors. Weninger W, et al. **Lab Invest** 1996 Nov; 75(5):647–57

Aberrant expression of a hemidesmosomal protein, bullous pemphigoid antigen 2, in human squamous cell carcinoma. Yamada T, et al. **Lab Invest** 1996 Oct;75(4):589–600

E-cadherin expression in human melanoma. Danen EH, et al. **Melanoma Res** 1996 Apr;6(2):127–31

Partial characterisation of human melanoma cell-derived factors that stimulate fibroblast glycosaminoglycan synthesis. Godden JL, et al. **Pathobiology** 1996;64(5):262–8

S-100 immunoreactivity in melanomas of the South American opossum Monodelphis domestica. Kusewitt DF, et al. **Vet Pathol** 1997 Jul;34(4):346–50

[Immunophenotypic characterization of cutaneous neuroendocrine carcinoma derived from Merkel cells] Pozharisskii KM, et al. **Arkh Patol** 1996 Sep–Oct;58(5):13–8 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

"New" diseases in dermatopathology. Rapini RP. **Adv Dermatol** 1997;12:213–35; discussion 236 (78 ref.)

Classification of melanocytic nevi: do nodular and flat nevi develop differently? Schmoeckel C. **Am J Dermatopathol** 1997 Feb;19(1):31–4

Marginal zone lymphoma of skin [letter; comment] Slater DN. **Am J Surg Pathol** 1997 Jun;21(6):739–40. Comment on: Am J Surg Pathol 1996 Aug;20(8):1011–23.

Report of the symposium on Cutaneous Lymphomas: Sixth International Conference on Malignant Lymphoma. Jaffe ES, et al. **Ann Oncol** 1997;8 Suppl 1:83–4

Primary B-cell lymphomas of the skin. Kerl H, et al. **Ann Oncol** 1997;8 Suppl 2:29–32 (26 ref.)

The morphologic spectrum of cutaneous B-cell lymphomas [editorial; comment] Kerl H, et al. **Arch Dermatol** 1996 Nov;132(11):1376–7. Comment on: Arch Dermatol 1996 Nov;132(11):1304–8.

EORTC classification for primary cutaneous lymphomas: a proposal from the Cutaneous Lymphoma Study Group of the European Organization for Research and Treatment of Cancer. Willemze R, et al. **Blood** 1997 Jul 1;90(1):354–71 (130 ref.)

Classification of localized melanoma by the exponential survival trees method. Huang X, et al. **Cancer** 1997 Mar 15;79(6):1122–8

Kaposi's sarcoma classification: a problem not yet defined. Cottoni F, et al. **Int J Dermatol** 1996 Jul;35(7):480–3

Lentigo maligna and lentigo maligna melanoma [letter; comment] Dallimore KJ. **J Am Acad Dermatol** 1997 Mar; 36(3 Pt 1):500. Comment on: J Am Acad Dermatol 1995 Dec;33(6):923–36; quiz 937–40.

MIN terminology [letter] Slater D. **J Clin Pathol** 1997 Jul; 50(7):619–20

The Revised European-American Classification of Lymphoid Neoplasms (REAL): a new perspective for the classification of cutaneous lymphomas. Sander CA, et al. **J Cutan Pathol** 1997 Jul;24(6):329–41 (93 ref.)

The classification of melanoma: time for a further revision? Cochran AJ, et al. **Melanoma Res** 1997 Feb;7(1):4–9 (12 ref.)

Proposed reclassification of melanoma: a meeting held at the XVIth International Pigment Cell Congress, 3rd November 1996. Cochran AJ. **Pigment Cell Res** 1997 Feb–Apr; 10(1–2):60–3

Cutaneous malignant melanoma: classification and clinical diagnosis. Porras BH, et al. **Semin Cutan Med Surg** 1997 Jun;16(2):88–96 (34 ref.)

Variants of melanoma. Reed RJ, et al. **Semin Cutan Med Surg** 1997 Jun;16(2):137–58 (12 ref.)

Unusual variants of melanoma: fact or fiction? Sagebiel RW. **Semin Oncol** 1996 Dec;23(6):703–8

[Frequent skin tumors in geriatrics] Piérard-Franchimont C, et al. **Rev Med Liege** 1997 Apr;52(4):289–95 (20 ref.) **(Fre)**

COMPLICATIONS

Extramammary Paget's disease of the axilla with an underlying apocrine carcinoma [letter] [see comments] Morgan JM, et al. **Acta Derm Venereol** 1996 Mar; 76(2):173–4 (8 ref.). Comment in: Acta Derm Venereol 1997 Jan;77(1):78.

Leishmaniasis and Kaposi's sarcoma in an HIV-infected patient [letter; comment] Abajo P, et al. **Am J Dermatopathol** 1997 Feb;19(1):101–3. Comment on: Am J Dermatopathol 1995 Apr;17(2):145–50.

Malignant neoplasms associated with seborrheic keratoses. An analysis of 54 cases. Cascajo CD, et al. **Am J Dermatopathol** 1996 Jun;18(3):278–82

Melanocytic nevi and risk of cutaneous malignant melanoma in southern Spain. Ródenas JM, et al. **Am J Epidemiol** 1997 Jun 1;145(11):1020–9

Malignant melanoma and Charcot-Marie-Tooth disease: a further case [letter] Manoukian S, et al. **Am J Med Genet** 1997 Jan 20;68(2):242

The epithelioid blue nevus. A multicentric familial tumor with important associations, including cardiac myxoma and psammomatous melanotic schwannoma. Carney JA, et al. **Am J Surg Pathol** 1996 Mar;20(3):259–72

Interferon alpha-2a therapy for disseminated intravascular coagulation in a patient with blue rubber bleb nevus syndrome. A case report. Kunishige M, et al. **Angiology** 1997 Mar;48(3):273–7

New types of cancer after basal-cell cancer [letter; comment] Shimm DS. **Ann Intern Med** 1997 Jul 1;127(1):87; discussion 87–8. Comment on: Ann Intern Med 1996 Nov 15;125(10):815–21.

Human immunodeficiency virus infection and subsequent melanoma. Kind GM, et al. **Ann Plast Surg** 1996 Sep; 37(3):273–7

Chronic leg ulcers: beware the 'wolf in sheep's clothing!'. Boyce DE, et al. **Ann R Coll Surg Engl** 1997 Sep; 79(5):381–2

Cutaneous keratocyst in naevoid basal cell carcinoma syndrome. Baselga E, et al. **Br J Dermatol** 1996 Nov; 135(5):810–2

Simultaneous onset of primary cutaneous B-cell lymphoma and human herpesvirus 8-associated Kaposi's sarcoma. Berti E, et al. **Br J Dermatol** 1997 Jun;136(6):924–9

Widespread angiokeratomas and tuberous sclerosis. Gil-Mateo MP, et al. **Br J Dermatol** 1996 Aug;135(2):280–2

Squamous cell carcinoma arising in chronic lymphoedema. Lister RK, et al. **Br J Dermatol** 1997 Mar;136(3):384–7 (19 ref.)

Squamous cell carcinoma of the scalp following a chemical burn and chronic discoid lupus erythematosus [letter] Onayemi O, et al. **Br J Dermatol** 1996 Aug;135(2):342–3

Pain relief with Emla of ulcerating lesions in mycosis fungoides [letter] Robins G, et al. **Br J Dermatol** 1997 Feb; 136(2):287

A case of melanoma concurrent with progressive systemic sclerosis. Videtic GM, et al. **Cancer Invest** 1997;15(3):224–6

Epidermodysplasia verruciformis. Immunological and nonimmunological surveillance mechanisms: role in tumor progression. Majewski S, et al. **Clin Dermatol** 1997 May–Jun;15(3):321–34 (122 ref.)

Multiple dermatofibromas in a patient with HIV infection. Armstrong DK, et al. **Clin Exp Dermatol** 1995 Nov; 20(6):474–6

Profound anaemia secondary to an ulcerated basal cell carcinoma [letter] Higgins J, et al. **Clin Exp Dermatol** 1996 Sep;21(5):389–90

Mucinosis of the mammary areolae and mycosis fungoides. Vázquez-Doval FJ, et al. **Clin Exp Dermatol** 1996 Sep; 21(5):374–6

A patient with cutaneous T-cell lymphoma and dermatomyositis. Federman DG, et al. **Cutis** 1997 May; 59(5):277

Cutaneous T-cell lymphoma associated with granulomatous slack skin. Mouly F, et al. **Dermatology** 1996;192(3):288–90

Coexistence of multiple perifollicular fibromas and colonic polyp and cancer. Sasai S, et al. **Dermatology** 1996; 192(3):262–3 (11 ref.)

A case of Cobb syndrome associated with lymphangioma circumscriptum. Shim JH, et al. **Dermatology** 1996; 193(1):45–7 (11 ref.)

Epidermolysis bullosa dystrophica of Hallopeau–Siemens and squamous-cell carcinoma: a case report. Van Rengen A, et al. **Dermatology** 1996;192(4):418–9

Primary Ki-1 lymphoma and the aetiology of B symptoms [letter] O'Rourke N, et al. **Eur J Cancer** 1996 May; 32A(5):902–3

Direct osteolysis induced by metastatic murine melanoma cells: role of matrix metalloproteinases. Sanchez-Sweatman OH, et al. **Eur J Cancer** 1997 May;33(6):918–25

Flecked chorioretinopathy associated with Birt-Hogg-Dubé syndrome. Walter P, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun;235(6):359–61

Supernumerary nipples occurring together with Becker's naevus: an association involving one common paradominant trait? Urbani CE, et al. **Hum Genet** 1997 Sep; 100(3–4):388–90

Nevus flammeus in tuberous sclerosis [letter] Patnekar PN, et al. **Indian Pediatr** 1995 Sep;32(9):1038–9

Subcutaneous angiocentric T-cell lymphoma associated with fatal hemophagocytic syndrome. Baselga E, et al. **Int J Dermatol** 1997 May;36(5):363–7

Vitiligo associated with metastatic malignant melanoma. Cavallari V, et al. **Int J Dermatol** 1996 Oct;35(10):738–40

Kaposi's sarcoma and sarcoidosis coexisting in lesions of HIV-seronegative patient. Dessoukey MW, et al. **Int J Dermatol** 1996 Nov;35(11):824–6

Multiple familial pilomatricomas associated with myotonic dystrophy. Graells J, et al. **Int J Dermatol** 1996 Oct; 35(10):732–3

Exfoliative dermatitis and malignant melanoma: coincidence or association [letter] Thami GP, et al. **Int J Dermatol** 1996 Sep;35(9):682

Multiple pilomatricomas in association with myotonic dystrophy and a family history of melanoma. Berberian BJ, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):268–9

Scabies in HTLV-I seropositive patients [letter; comment] del Giudice P. **J Am Acad Dermatol** 1997 Jan;36(1):134–5 . Comment on: J Am Acad Dermatol 1996 Jan;34(1):69–76.

Localized cutaneous amyloidosis associated with mycosis fungoides. Romero LS, et al. **J Am Acad Dermatol** 1997 Jul;37(1):124–7

Multiple cutaneous malignancies in a patient with pityriasis rubra pilaris and focal acantholytic dyskeratosis. Tannenbaum CB, et al. **J Am Acad Dermatol** 1996 Nov; 35(5 Pt 1):781–2

Leiomyoma of the hand in a child who has the human immunodeficiency virus. Yang SS, et al. **J Bone Joint Surg Am** 1996 Dec;78(12):1904–6

Colosplenic fistula in a patient treated with interleukin-2 for malignant melanoma. Chun ES, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):674–6 (8 ref.)

Two cases of basal cell carcinoma arising in seborrheic keratosis. Akasaka T, et al. **J Dermatol** 1997 May; 24(5):322–7

Multiple new-onset subcutaneous nodules of the upper extremity digits: giant cell tumor of tendon sheath and lipoma. Cohen PR. **J Dermatol** 1996 Apr;23(4):290–2

Leukemoid reaction in epidermal squamous cell carcinoma. Kiyosawa T, et al. **J Dermatol** 1996 Aug;23(8):539–44

Multiple dermatofibromas accompanied by eruptive benign keratoses in a patient with systemic lupus erythematosus. Kuniyuki S, et al. **J Dermatol** 1996 Sep;23(9):619–22 (14 ref.)

Intradermal dermoid cyst associated with occult spinal dysraphism. Misago N, et al. **J Dermatol** 1996 Apr; 23(4):275–8

Merkel cell carcinoma and multiple Bowen's disease: incidental association or possible relationship to inorganic arsenic exposure? Ohnishi Y, et al. **J Dermatol** 1997 May; 24(5):310–6

A case of tuberous sclerosis with a giant angiofibroma. Wataya-Kaneda M, et al. **J Dermatol** 1997 Feb;24(2):132–4

Classical Kaposi's: a rare cause of gastrointestinal haemorrhage. Chapman SM, et al. **J Gastroenterol Hepatol** 1996 Apr;11(4):408–10

Psoriasis: association with 2 rare cutaneous urological malignancies. Loughlin KR. **J Urol** 1997 Feb;157(2):622–3

Extramedullary myeloid cell tumors in myelodysplastic-syndromes: not a true indication of impending acute myeloid leukemia. Byrd JC, et al. **Leuk Lymphoma** 1996 Mar;21(1–2):153–9 (50 ref.)

Spindle cell (Kaposiform) hemangioendothelioma with Kasabach-Merritt syndrome in an infant: successful treatment with alpha-2A interferon. Deb G, et al. **Med Pediatr Oncol** 1997 May;28(5):358–61

Acral melanoma in association with melanocytic naevus [letter; comment] Saida T. **Melanoma Res** 1997 Feb;7(1):78 . Comment on: Melanoma Res 1996 Jun;6(3):241–6.

Neurocutaneous melanosis with the Dandy-Walker malformation: a possible rare pathoetiologic association. Chaloupka JC, et al. **Neuroradiology** 1996 Jul;38(5):486–9

Glaucoma in phakomatosis pigmentovascularis. Teekhasaenee C, et al. **Ophthalmology** 1997 Jan; 104(1):150–7 (66 ref.)

Crouzon disease with acanthosis nigricans and melanocytic nevi. Gines E, et al. **Pediatr Dermatol** 1996 Jan–Feb; 13(1):18–21 (16 ref.)

Phakomatosis pigmentovascularis: report of a case. Mahroughan M, et al. **Pediatr Dermatol** 1996 Jan–Feb; 13(1):36–8 (8 ref.)

Linear sebaceous nevus syndrome: report of a patient with unusual associated abnormalities. Palazzi P, et al. **Pediatr Dermatol** 1996 Jan–Feb;13(1):22–4 (16 ref.)

Phakomatosis pigmentovascularis. Van Gysel D, et al. **Pediatr Dermatol** 1996 Jan–Feb;13(1):33–5

Perineal and lip ulcerations as the presenting manifestation of hemangioma of infancy. Liang MG, et al. **Pediatrics** 1997 Feb;99(2):256–9

Malignant change in a chronic skin lesion induced by an intravenous cannula. Nkere UU, et al. **Postgrad Med J** 1997 Jan;73(855):45–7

Cutaneous T-cell lymphoma, tropical spastic paraparesis, cerebral vasculitis, and protein S deficiency in a patient with HTLV-I. Schwartz J, et al. **South Med J** 1996 Oct; 89(10):999–1000

[Melanoma-associated retinopathy. Apropos of a case and review of the literature] Bret-Dibat C, et al. **Bull Cancer** 1996 Dec;83(12):1019–22 (Eng. Abstr.) **(Fre)**

[Pilomatrixoma associated with anetoderma] Bertazzoni MG, et al. **Pathologica** 1996 Feb;88(1):43–5 (Eng. Abstr.) **(Ita)**

[Hodgkin's disease in a patient with sarcoidosis] Silva GN, et al. **Acta Med Port** 1996 Jul–Sep;9(7–9):287–93 (Eng. Abstr.) **(Por)**

CONGENITAL

Giant congenital naevus of the scalp and cranium: case report and review of the literature. Madaree A, et al. **Br J Plast Surg** 1997 Jan;50(1):20–5 (8 ref.)

Congenital desmoid tumor of the scalp: a histologically benign lesion with aggressive clinical behavior. Martínez-Lage JF, et al. **Childs Nerv Syst** 1996 Jul; 12(7):409–12

An unusual presentation of multiple congenital melanocytic nevi with a limb distribution. Lin YT, et al. **Dermatology** 1997;194(4):362–3

Dermabrasion of congenital nevocellular nevi: experience in 215 patients. Rompel R, et al. **Dermatology** 1997; 194(3):261–7

A cystic teratoma of the skin. Tsai TF, et al. **Histopathology** 1996 Oct;29(4):384–6

Giant congenital nevomelanocytic nevus and intracerebral calcified lesion. Arisoy AE, et al. **Int J Dermatol** 1996 Dec; 35(12):877–8

Congenital hemangiopericytoma of the skin. Ferreira CM, et al. **Int J Dermatol** 1997 Jul;36(7):521–3

Neurocutaneous melanosis and Dandy-Walker syndrome in an infant. Green LJ, et al. **Int J Dermatol** 1997 May; 36(5):356–9

Neurocutaneous melanosis: clinical features of large congenital melanocytic nevi in patients with manifest

central nervous system melanosis. DeDavid M, et al. **J Am Acad Dermatol** 1996 Oct;35(4):529–38 (104 ref.)

A study of large congenital melanocytic nevi and associated malignant melanomas: review of cases in the New York University Registry and the world literature. DeDavid M, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):409–16 (106 ref.)

Congenital hemangioma: evidence of accelerated involution. Boon LM, et al. **J Pediatr** 1996 Mar;128(3):329–35

Spontaneous remission of congenital leukemia [see comments] Dinulos JG, et al. **J Pediatr** 1997 Aug;131(2):300–3 (17 ref.). Comment in: J Pediatr 1997 Aug;131(2):176–7.

A solitary congenital self-healing histiocytosis. Report of a case and review of the literature. Shy SW, et al. **Pathol Res Pract** 1996 Aug;192(8):869–74; discussion 875–6 (23 ref.)

Management of congenital melanocytic nevi: a decade later. **Pediatr Dermatol** 1996 Jul–Aug;13(4):321–40

Congenital melanoma: a case suggesting rhabdomyogenic differentiation. Koyama T, et al. **Pediatr Dermatol** 1996 Sep–Oct;13(5):389–93

Diagnosing and treating congenital melanocytic nevus simulating malignant melanoma. Kovach R, et al. **W V Med J** 1996 Jul–Aug;92(4):191–3

[Neoplasms in nevus spilus] Breitkopf C, et al. **Hautarzt** 1996 Oct;47(10):759–62 (Eng. Abstr.) **(Ger)**

[Cerebrospinal fluid in the diagnosis of cerebro-meningeal metastasis from malignant melanoma arising from giant congenital melanocytic nevus: case report] Rolim JA, et al. **Arq Neuropsiquiatr** 1996 Sep;54(3):479–83 (Eng. Abstr.) **(Por)**

DIAGNOSIS

Failure of gadopentetate dimeglumine-enhanced, high-resolution magnetic resonance imaging to differentiate among melanin-containing skin tumors. Mäurer J, et al. **Acad Radiol** 1996 Mar;3(3):186–91

Rapid cytological diagnosis of primary skin tumours and tumour-like conditions. Daskalopoulou D, et al. **Acta Derm Venereol** 1997 Jul;77(4):292–5

Differential expression of desmosomal glycoproteins in keratoacanthoma and squamous cell carcinoma of the skin: an immunohistochemical aid to diagnosis [published erratum appears in Acta Derm Venereol 1996 Nov;76(6):504] Krunic AL, et al. **Acta Derm Venereol** 1996 Sep;76(5):394–8

A giant solitary molluscum contagiosum, resembling nodular basal cell carcinoma, in a renal transplant recipient [letter] Taşkapan O, et al. **Acta Derm Venereol** 1996 May; 76(3):247–8

Differentiation of primary and secondary cutaneous B-cell lymphoma by Southern blot analysis. Sepp N, et al. **Am J Clin Pathol** 1996 Dec;106(6):749–57

AIDS-associated B-cell non-Hodgkin's lymphoma masquerading as a cutaneous T-cell neoplasm: an aberrant immunophenotype requiring comprehensive analysis for lineage resolution. Aboulafia D, et al. **Am J Dermatopathol** 1997 Feb;19(1):66–72

Cytokeratin 20 immunoreactivity distinguishes Merkel cell (primary cutaneous neuroendocrine) carcinomas and salivary gland small cell carcinomas from small cell carcinomas of various sites. Chan JK, et al. **Am J Surg Pathol** 1997 Feb;21(2):226–34

Evaluation of new putative tumor markers for melanoma. Miliotes G, et al. **Ann Surg Oncol** 1996 Nov;3(6):558–63

Primary care clinicians' performance for detecting actinic keratoses and skin cancer [published erratum appears in Arch Intern Med 1997 Aug 11–25;157(15):1686] Whited JD, et al. **Arch Intern Med** 1997 May 12;157(9):985–90

Epidermal nevus syndrome associated with a complex choristoma and a bilateral choroidal osteoma. Mullaney PB, et al. **Arch Ophthalmol** 1996 Oct;114(10):1292–3

Silhouette symmetry: an unsupportable histologic criterion for distinguishing Spitz nevi and compound nevi from malignant melanoma. Okun MR. **Arch Pathol Lab Med** 1997 Jan;121(1):48–53

Kaposi's sarcoma. Clearlhan L. **Aust Fam Physician** 1996 Mar;25(3):428–9

Effect of a public awareness campaign on the appropriateness of patient-initiated skin examination in general practice. Baade PD, et al. **Aust N Z J Public Health** 1996 Dec; 20(6):640–3

Flesh-coloured micropapules on the face and upper trunk. Kossard S, et al. **Australas J Dermatol** 1996 Feb;37(1):55–6

Dermal cylindroma and eccrine spiradenoma. Lee MW, et al. **Australas J Dermatol** 1996 Feb;37(1):48–9

Dermal melanocytosis: a clinical spectrum. Stanford DG, et al. **Australas J Dermatol** 1996 Feb;37(1):19–25 (35 ref.)

Immunohistochemical staining following melanin bleaching in an atypical junctional melanocytic lesion with prominent dermal melanosis [letter] Orchard GE, et al. **Br J Biomed Sci** 1997 Mar;54(1):74–5

Laser beam microdissection in the diagnosis of cutaneous B-cell lymphoma. Cerroni L, et al. **Br J Dermatol** 1997 May;136(5):743–6

Malignant melanoma in childhood [letter; comment] Eedy DJ. **Br J Dermatol** 1997 Jan;136(1):137–8. Comment on: Br J Dermatol 1996 Apr;134(4):607–16.

Spontaneous regression in angiocentric T-cell lymphoma [letter; comment] Slater DN. **Br J Dermatol** 1997 Apr; 136(4):633–4. Comment on: Br J Dermatol 1996 Mar;134(3):554–8.

What use do people make of physicians in checking their skin for cancer? Del Mar CB, et al. **Cancer Detect Prev** 1996;20(4):325–31

Detection of melanoma by monitoring the intracellular fluorescein fluorescence polarization changes in lymphocytes. Merimsky O, et al. **Cancer Detect Prev** 1997; 21(2):167–77

Melanoma-associated antigens as messenger RNA detection markers for melanoma. Sarantou T, et al. **Cancer Res** 1997 Apr 1;57(7):1371–6

Screening for melanoma. Elwood JM. **Cancer Treat Res** 1996; 86:129–47 (76 ref.)

Diagnosis of nonmelanoma skin cancer. Brodland DG. **Clin Dermatol** 1995 Nov–Dec;13(6):551–7 (6 ref.)

Plaque variant of trichoblastic fibroma [letter] Betti R, et al. **Clin Exp Dermatol** 1996 May;21(3):250–1

Basal cell carcinoma in a teenage boy. Koch SE, et al. **Clin Pediatr (Phila)** 1997 Feb;36(2):113–4

Textural parameters based on the Spatial Gray Level Dependence Method applied to melanocytic nevi. Pope TW, et al. **Comput Biomed Res** 1996 Dec;29(6):429–37

Malignant primary skin tumors in children. Sasson M, et al. **Curr Opin Pediatr** 1996 Aug;8(4):372–7 (34 ref.)

Indurated plaques of mycosis fungoides in a woman with fulminant hepatic failure. Vannucci SA, et al. **Cutis** 1996 Mar;57(3):159–62 (11 ref.)

Cytological features of pigmented basal cell carcinoma—a potential diagnostic pitfall. Calder CJ, et al. **Cytopathology** 1996 Apr;7(2):132–5

Fine needle aspiration (FNA) cytology of pilomatrixoma. Kumar N, et al. **Cytopathology** 1996 Apr;7(2):125–31

Diagnostic problems of desmoplastic melanoma in a boy with xeroderma pigmentosa [letter; comment] Johr RH, et al. **Dermatol Surg** 1997 Jun;23(6):495–6. Comment on: Dermatol Surg 1996 Jan;22(1):95–6.

The use of antidesmoglein stains in Mohs micrographic surgery. A potential aid for the differentiation of basal cell carcinoma from horizontal sections of the hair follicle and folliculocentric basaloid proliferation. Krunic AL, et al. **Dermatol Surg** 1997 Jun;23(6):463–8

The use of a digital imaging system in a dermatologic surgery practice. Price MA, et al. **Dermatol Surg** 1997 Jan; 23(1):31–2

Granulomatous mycosis fungoides presenting as sarcoidosis. Bessis D, et al. **Dermatology** 1996;193(4):330–2

Atrophic pigmented dermatofibrosarcoma presenting as infraorbital hyperpigmentation. Chuan MT, et al. **Dermatology** 1997;194(1):65–7

Superficial spreading melanoma resembling Spitz nevus on the plantar surface [letter] Kato T, et al. **Dermatology** 1996; 193(4):353–4 (17 ref.)

Dermatofibrosarcoma protuberans as a diagnostic pitfall in fine-needle aspiration diagnosis of angiosarcoma of the breast [letter] Kocjan G, et al. **Diagn Cytopathol** 1996 Feb; 14(1):94–5

Cutaneous epithelioid angiosarcoma: a potential diagnostic trap for cytopathologists. Ng WK, et al. **Diagn Cytopathol** 1997 Feb;16(2):160–6; discussion 166–7

Mimics of pilomatrixomas in fine-needle aspirates. Sánchez Sánchez C, et al. **Diagn Cytopathol** 1996 Feb;14(1):75–83 (28 ref.)

The accuracy of skin self-examination for atypical nevi. Titus-Ernstoff L, et al. **Epidemiology** 1996 Nov;7(6):619–23

Care of the skin at midlife: diagnosis of pigmented lesions. Gordon ML, et al. **Geriatrics** 1997 Aug;52(8):56–8, 67–8; quiz 69 (16 ref.)

Kaposi's sarcoma of the skin. Consider HIV testing in older patients with this malignant neoplasm. Gross JS, et al. **Geriatrics** 1996 Dec;51(12):21,51

Malignant melanoma in stasis dermatitis. Blessing K. **Histopathology** 1997 Feb;30(2):135–9

Melanocytic intra-epidermal neoplasia (MIN) [letter; comment] Slater DN. **Histopathology** 1997 Feb;30(2):195–7 . Comment on: Histopathology 1996 Jun;28(6):497–512.

Simulators of hand infections. Kann SE, et al. **Instr Course Lect** 1997;46:69–82 (169 ref.)

Congenital hemangiopericytoma of the skin. Ferreira CM, et al. **Int J Dermatol** 1997 Jul;36(7):521–3

Multiple painful keratoacanthomas. Frank TL, et al. **Int J Dermatol** 1996 Sep;35(9):648–50 (24 ref.)

Malignant melanoma: a review of 75 malpractice cases. Jackson R. **Int J Dermatol** 1997 Jul;36(7):497–8

An unusual case of benign neonatal hemangiomatosis mimicking juvenile xanthogranuloma [letter] Kuniyuki S. **Int J Dermatol** 1997 Apr;36(4):316–7

Is it lymphoma or lymphomatoid papulosis? Demierre MF, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):765–72

Lentigo maligna and lentigo maligna melanoma [letter] Johr RH, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):512

Persistent nevus: an exception to the ABCD rule of dermoscopy. Marghoob AA, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):474–5

Laboratory tests and imaging studies in patients with cutaneous malignant melanomas: a survey of experienced physicians. Provost N, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):711–20

Chronic varicella zoster infection mimicking a basal cell carcinoma in an AIDS patient. Tsao H, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):831–3

Cutaneous fibrous histiocytoma [letter] Derk FF, et al. **J Am Podiatr Med Assoc** 1997 May;87(5):241–2

Pseudopseudohypoparathyroidism, presenting with osteoma cutis. Lucky AW, et al. **J Bone Miner Res** 1997 Jun; 12(6):995

Diagnosis of thin melanoma [letter] Cook MG. **J Clin Pathol** 1997 Jul;50(7):619

The role of MT2 and anti-bcl-2 protein antibodies in the differentiation of benign from malignant cutaneous infiltrates of B-lymphocytes with germinal center formation. Chimenti S, et al. **J Cutan Pathol** 1996 Aug; 23(4):319–22

Solitary cutaneous myofibromas in adults: report of six cases and discussion of differential diagnosis. Guitart J, et al. **J Cutan Pathol** 1996 Oct;23(5):437–44

Dermatopathology standards [letter] Rabinowitz AD, et al. **J Cutan Pathol** 1996 Apr;23(2):194–6

Pigmented lesions of the conjunctiva. Farber M, et al. **J Dermatol** 1996 Nov;23(11):746–50 (8 ref.)

Squamous cell carcinoma arising from lupus vulgaris on an old burn scar: diagnosis by polymerase chain reaction. Hagiwara K, et al. **J Dermatol** 1996 Dec;23(12):883–9 (17 ref.)

Atypical melanosis of the foot. Nogita T. **J Dermatol** 1996 Nov;23(11):825–7

Multiple nodular lesions seen in a patient with neurocutaneous melanosis. Sasaki Y, et al. **J Dermatol** 1996 Nov;23(11):828–31 (11 ref.)

Malignant melanoma: differential diagnosis of pigmented lesions. Le AD, et al. **J Fla Med Assoc** 1997 Mar; 84(3):166–74 (45 ref.)

A small cavernous vascular malformation in the hand mimicking a glomus tumour. al-Qattan MM. **J Hand Surg [Br]** 1996 Oct;21(5):693–4

Improved resolution of magnetic resonance microscopy in examination of skin tumors. el Gammal S, et al. **J Invest Dermatol** 1996 Jun;106(6):1287–92

Adult T-cell leukemia/lymphoma with features of CD30-positive anaplastic large cell lymphoma—a case report. Lee SN, et al. **J Korean Med Sci** 1997 Aug; 12(4):364–8

Spinal and cutaneous schwannomatosis is a variant form of type 2 neurofibromatosis: a clinical and molecular study. Evans DG, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr; 62(4):361–6

Hereditary neurocutaneous angiomatosis. Report of four cases. Leblanc R, et al. **J Neurosurg** 1996 Dec; 85(6):1135–42

Nine cases of Merkel cell tumour. Bose A. **J R Soc Med** 1997 Aug;90(8):439–42

Differentiating dysplastic nevi from melanoma [letter; comment] Whitmore SE. **JAMA** 1997 Aug 20;278(7):548–9 . Comment on: JAMA 1997 May 14;277(18):1439–44.

Epiluminescence microscopy in clinical diagnosis of pigmented skin lesions? Rigel DS. **Lancet** 1997 May 31; 349(9065):1566–7

Molecular diagnosis of skin relapse in acute lymphoblastic leukemia. Balduzzi A, et al. **Leukemia** 1996 Nov; 10(11):1823–5

Electric current density imaging of mice tumors. Serša I, et al. **Magn Reson Med** 1997 Mar;37(3):404–9

Malignant melanoma: prognostic indicators. Ahmed I. **Mayo Clin Proc** 1997 Apr;72(4):356–61 (40 ref.)

Mucosal, genital, and unusual clinical variants of melanoma. Rogers RS 3rd, et al. **Mayo Clin Proc** 1997 Apr;72(4):362–6 (15 ref.)

Uncommon cutaneous neoplasms. Harrington AC, et al. **Md Med J** 1997 May–Jun;46(5):255–62 (48 ref.)

Nonmelanoma skin cancer. Katz MH. **Md Med J** 1997 May–Jun;46(5):239–42 (20 ref.)

Diagnosis of pigmented skin lesions aided by epiluminescence microscopy. Peck GL. **Md Med J** 1997 May–Jun; 46(5):247–50 (5 ref.)

Continuing medical education case study series. An innovative programme for general practitioners on malignant melanoma. Laidlaw JM, et al. **Med Educ** 1996 May;30(3):226–31

How many melanomas have I missed? Is this the question? [letter; comment] Del Mar CB. **Med J Aust** 1996 Oct 21; 165(8):456. Comment on: Med J Aust 1996 Apr 1;164(7):431–6.

Did Leonardo da Vinci have a BCC? [letter] Gapp GL, et al. **Med J Aust** 1996 Dec 2–16;165(11–12):681–2

Systematic review of the diagnostic accuracy of dermatoscopy in detecting malignant melanoma. Mayer J. **Med J Aust** 1997 Aug 18;167(4):206–10 (25 ref.)

Statistical evaluation of epiluminescence microscopy criteria in the differential diagnosis of malignant melanoma and pigmented basal cell carcinoma. Püspök-Schwarz M, et al. **Melanoma Res** 1997 Aug;7(4):307–11

Contribution of histopathologic and molecular analyses to the diagnosis of cutaneous B-cell infiltrates. Dubus P, et al. **Mod Pathol** 1996 Dec;9(12):1147–55

Deep cerebral invasion by basal cell carcinoma of the scalp. Parizel PM, et al. **Neuroradiology** 1996 Aug;38(6):575–7

Accuracy of clinical diagnosis of cutaneous eyelid lesions. Kersten RC, et al. **Ophthalmology** 1997 Mar;104(3):479–84

Primary mucinous carcinoma of the skin. Abe S, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1160–4

Basal and squamous cell carcinomas. What every primary care physician should know. Marghoob AA. **Postgrad Med** 1997 Aug;102(2):139–42, 146, 152–4 passim (20 ref.)

A rapidly enlarging keratinised 'skull-cap'. Samuel LM, et al. **Postgrad Med J** 1997 Feb;73(856):111–3

Paramagnetic metal scavenging by melanin: MR imaging. Enochs WS, et al. **Radiology** 1997 Aug;204(2):417–23

MR imaging and scintigraphy of gene expression through melanin induction. Weissleder R, et al. **Radiology** 1997 Aug; 204(2):425–9

Cutaneous malignant melanoma: classification and clinical diagnosis. Porras BH, et al. **Semin Cutan Med Surg** 1997 Jun;16(2):88–96 (34 ref.)

Malignant melanoma from the dermatologic perspective. Swetter SM. **Surg Clin North Am** 1996 Dec;76(6):1287–98 (64 ref.)

In situ and very thin melanomas (< 0.75 mm) are similarly and commonly recognizable. Bono A, et al. **Tumori** 1996 Nov–Dec;82(6):600–2

Diagnosing and treating congenital melanocytic nevus simulating malignant melanoma. Kovach R, et al. **W V Med J** 1996 Jul–Aug;92(4):191–3

Miliary brain metastases from malignant melanoma. Rainov NG, et al. **Zentralbl Neurochir** 1996;57(1):20–4

[The testicular feminization syndrome combined with disseminated hemangiomatosis] Nedkova V, et al. **Akush Ginekol (Sofiia)** 1996;35(4):35–7 (Eng. Abstr.) **(Bul)**

[A case for diagnosis: pilomatrixoma] Aissoudi M, et al. **Ann Dermatol Venereol** 1995;122(11–12):797–8 **(Fre)**

[Pachydermodactyly in adolescents: a sign of discomfort?] Cartier H, et al. **Arch Pediatr** 1996 Nov;3(11):1091–4 (Eng. Abstr.) **(Fre)**

[Merkel cell tumor of the skin] Hauschild A, et al. **Dtsch Med Wochenschr** 1997 Jun 6;122(23):753–6 (25 ref.) **(Ger)**

[Adenoid cystic cribriform trichoblastoma] Betti R, et al. **Hautarzt** 1997 Jun;48(6):417–9 (13 ref.) (Eng. Abstr.) **(Ger)**

[Imaging methods in dermatology] el Gammal S, et al. **Hautarzt** 1997 Jun;48(6):432–50; quiz 448 (74 ref.) **(Ger)**

[Rare variants of cutaneous T-cell lymphomas] Goerdt S, et al. **Hautarzt** 1996 Feb;47(2):96–105 (68 ref.) (Eng. Abstr.) **(Ger)**

[Activation of epidermal melanocytes is independent of epithelial proliferation and vascularization. Immunohistologic study using HMB-45 antibody with review of the literature] Lommel K, et al. **Hautarzt** 1996 Aug;47(8):616–23 (65 ref.) (Eng. Abstr.) **(Ger)**

[First melanoma metastases after 10 years and more of remission] Peters A, et al. **Hautarzt** 1997 May;48(5):311–7 (Eng. Abstr.) **(Ger)**

[Panfolliculoma. Clinical and immunohistochemical findings in 4 cases] Schirren CG, et al. **Hautarzt** 1996 Aug; 47(8):610–5 (Eng. Abstr.) **(Ger)**

[Dysplastic nevus in differential epiluminescence microscopy diagnosis of melanoma] Schulz H. **Hautarzt** 1996 Feb; 47(2):109–13 (Eng. Abstr.) **(Ger)**

[Characteristics of normal cross-sectional anatomy of the skin in high resolution magnetic resonance tomography] Stock W, et al. **Hautarzt** 1997 Jan;48(1):26–30 (Eng. Abstr.) **(Ger)**

[Epithelioid cell histiocytoma] Wilk M, et al. **Hautarzt** 1996 Jul;47(7):526–9 (Eng. Abstr.) **(Ger)**

[Epiluminescence microscopy in diagnosis of pigmented skin tumors] Wolf IH, et al. **Hautarzt** 1997 May;48(5):353–62 **(Ger)**

[A rare differential diagnosis of suspicious contrast medium enhancement in breast MRI. Melanoma metastasis in both breasts] Heinig A, et al. **Radiologe** 1997 Jul;37(7):588–90 **(Ger)**

[Initial diagnosis of melanoma metastasis to the spleen: case report of follow-up in atypical early invasion of the spleen] Hess U, et al. **Rontgenpraxis** 1996 Feb;49(2):23–24 **(Ger)**

[Merkel cell tumor] Fónyad G, et al. **Orv Hetil** 1997 Jun 29;138(26):1695–7 (Eng. Abstr.) **(Hun)**

[Neuroendocrine carcinoma of the skin] Licheri S, et al. **Minerva Chir** 1996 Jun;51(6):497–500 (Eng. Abstr.) **(Ita)**

[Epidermal nevus syndrome—bi-symptom type] Pawlaczyk M, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(5):505–10 (Eng. Abstr.) **(Pol)**

[Malignant skin neoplasms] Karapetian RM, et al. **Ter Arkh** 1995;67(12):72–3 **(Rus)**

[Clinical diagnosis of primary melanoma of the skin] Barchuk AS, et al. **Vopr Onkol** 1996;42(5):96–100 (18 ref.) (Eng. Abstr.) **(Rus)**

[Thrombocytopenia with multiple internal and cutaneous tumors] Vallina E, et al. **Rev Clin Esp** 1996 Dec; 196(12):863–5 **(Spa)**

[Reality is completely different from imagination of the oncologists at Radiumhemmet (letter; comment)] Borglund E. **Lakartidningen** 1997 Sep 3;94(36):3017–8. Comment on: Lakartidningen 1997 Jul 9;94(28–29):2539–43. **(Swe)**

[Malignant skin melanoma a difficult clinical diagnosis. The primary management is often insufficient (see comments)] Wallberg B, et al. **Lakartidningen** 1997 Jul 9; 94(28–29):2539–43. Comment in: Lakartidningen 1997 Sep 3;94(36):3017–8. **(Swe)**

[Delayed diagnosis of subungual melanoma. Two cases were misjudged as onychomycosis] Wallberg B, et al. **Lakartidningen** 1997 Jul 9;94(28–29):2543–4 **(Swe)**

DRUG THERAPY

PUVA in early mycosis fungoides may give long-term remission and delay extracutaneous spread. Roupe G, et al. **Acta Derm Venereol** 1996 Nov;76(6):475–8

One case of Stewart-Treves syndrome successfully treated at two years by chemotherapy and radiation therapy in a 73-year-old woman. Malhaire JP, et al. **Acta Oncol** 1997; 36(4):442–3

Local recurrence of basal cell carcinoma and cisplatinum containing chemotherapy. Moeholt K, et al. **Acta Oncol** 1997;36(1):87

Platinum-based cytotoxic therapy in basal cell carcinoma—a review of the literature. Moeholt K, et al. **Acta Oncol** 1996; 35(6):677–82 (33 ref.)

Treatment of metastatic melanoma with combined chemotherapy containing cisplatin, vinblastine and dacarbazine (CVD) and biotherapy using interleukin-2 and interferon-alpha. Legha SS, et al. **Ann Oncol** 1996 Oct; 7(8):827–35

Phase II study of a closely spaced ifosfamide—cisplatin schedule with the addition of G-CSF in advanced non-small-cell lung cancer and malignant melanoma. Planting AS, et al. **Ann Oncol** 1996 Dec;7(10):1080–2

Peripheral nerve entrapment: an unusual adverse event with high-dose interleukin-2 therapy [letter] Sikora SS, et al. **Ann Oncol** 1996 Jul;7(5):535–6

Mortality, major amputation rates, and leukopenia after isolated limb perfusion with phenylalanine mustard for the treatment of melanoma. Taber SW, et al. **Ann Surg Oncol** 1997 Jul–Aug;4(5):440–5 (30 ref.)

Determination of the maximal tumor/normal skin ratio after HpD or m-THPC administration in hairless mouse (SKh-1) by fluorescence spectroscopy—a non-invasive method. Bossu E, et al. **Anticancer Drugs** 1997 Jan;8(1):67–72

In vivo effects of tumor necrosis factor-alpha or flavone acetic acid in combination with doxorubicin on multidrug-resistant B16 melanoma. D'Alessandro N, et al. **Anticancer Drugs** 1996 May;7(3):281–7

Confluent and reticulate papillomatosis: successful treatment with minocycline [letter] [published erratum appears in Arch Dermatol 1997 Mar;133(3):293] Fung MA, et al. **Arch Dermatol** 1996 Nov;132(11):1400–1

Treatment of multiple lesions of Bowen disease with isotretinoin and interferon alfa. Efficacy of combination chemotherapy. Gordon KB, et al. **Arch Dermatol** 1997 Jun; 133(6):691–3

Tufted angioma associated with platelet trapping syndrome: response to aspirin. Léauté-Labrèze C, et al. **Arch Dermatol** 1997 Sep;133(9):1077–9 (12 ref.)

Treatment of superficial basal cell carcinomas using topically applied delta-aminolaevulinic acid and a filtered xenon lamp. Wennberg AM, et al. **Arch Dermatol Res** 1996 Sep; 288(10):561–4

Photochemotherapy for mycosis fungoides: current status. Watson A. **Australas J Dermatol** 1997 Feb;38(1):9–11 (20 ref.)

Non-HIV-related Kaposi's sarcoma suppressed by dapsone. de Haas ER, et al. **Br J Dermatol** 1996 Nov;135(5):813–4

Treatment of inflammatory linear verrucous epidermal naevus with topical vitamin D3 [letter] Mitsuhashi Y, et al. **Br J Dermatol** 1997 Jan;136(1):134–5

Large patches of Bowen's disease treated by topical aminolaevulinic acid photodynamic therapy. Stables GI, et al. **Br J Dermatol** 1997 Jun;136(6):957–60

Superficial blood flow following photodynamic therapy of malignant non-melanoma skin tumours measured by laser Doppler perfusion imaging. Wang I, et al. **Br J Dermatol** 1997 Feb;136(2):184–9

The role of radiation therapy and chemotherapy in the treatment of Merkel cell carcinoma. Fenig E, et al. **Cancer** 1997 Sep 1;80(5):881–5

Zeniplatin in advanced malignant melanoma and renal cancer: phase II studies with unexpected nephrotoxicity. Aamdal S, et al. **Cancer Chemother Pharmacol** 1997; 40(5):439–43

Human tumor models in the severe combined immune deficient (scid) mouse. Paine-Murrieta GD, et al. **Cancer Chemother Pharmacol** 1997;40(3):209–14

Retinoids in the management of non-melanoma skin cancer and melanoma. Craven NM, et al. **Cancer Surv** 1996; 26:267–88 (145 ref.)

The treatment of disseminated malignant melanoma with special reference to the role of interferons, vinca alkaloids and tamoxifen. Bezwoda WR. **Cancer Treat Rev** 1997 Jan; 23(1):17–34 (144 ref.)

A case of recurrent (following surgery x2) invasive malignant melanoma with satellitosis (stage IIIA) successfully resolving after azelaic acid treatment administered by several routes [letter] Nazzaro-Porro M, et al. **Clin Exp Dermatol** 1996 Jul;21(4):321–3

Oral indomethacin and ranitidine in advanced melanoma: a phase II study. Mertens WC, et al. **Clin Oncol (R Coll Radiol)** 1996;8(2):112–5

Minocycline treatment for confluent and reticulated papillomatosis. Chang SN, et al. **Cutis** 1996 Jun;57(6):454–7

Photodynamic treatment of skin malignancies with aminolevulinic acid. Emphasis on anatomical observations and in vitro erythema visual assessment [editorial; comment] Salasche SJ. **Dermatol Surg** 1997 Mar;23(3):161 . Comment on: Dermatol Surg 1996 Nov;22(11):929–34.

Photodynamic treatment of skin malignancies with aminolevulinic acid. Emphasis on anatomical observations and in vivo erythema visual assessment [see comments] Tosca AD, et al. **Dermatol Surg** 1996 Nov;22(11):929–34 . Comment in: Dermatol Surg 1997 Mar;23(3):161.

Vinorelbine therapy for Kaposi's sarcoma in a kidney transplant patient. Brambilla L, et al. **Dermatology** 1997; 194(3):281–3

Combination of etoposide, idarubicin, cyclophosphamide, vincristine, prednisone and bleomycin (VICOP-B) in the treatment of advanced cutaneous T-cell lymphoma. Fierro MT, et al. **Dermatology** 1997;194(3):268–72

Extracorporeal photochemotherapy induces a significant increase in CD36+ circulating monocytes in patients with mycosis fungoides. Fimiani M, et al. **Dermatology** 1997; 194(2):107–10

Increased risk for opportunistic infections during chemotherapy in HIV-infected patients with Kaposi's sarcoma. Plettenberg A, et al. **Dermatology** 1997; 194(3):234–7

Confluent and reticulated papillomatosis responsive to minocycline. Shimizu S, et al. **Dermatology** 1997; 194(1):59–61

A comparison of dosimetric methods in isolated limb perfusion with melphalan for malignant melanoma of the lower extremity. Byrne DS, et al. **Eur J Cancer** 1996 Nov; 32A(12):2082–7

Is isolated limb perfusion of metastatic malignant melanoma of the extremity worthwhile? Koops HS, et al. **Eur J Cancer** 1996 Sep;32A(10):1633–40

A single centre's 10 year experience with isolated limb perfusion in the treatment of recurrent malignant melanoma of the limb. Lingam MK, et al. **Eur J Cancer** 1996 Sep; 32A(10):1668–73

Beta-human choriogonadotropin therapy and HIV-related Kaposi's sarcoma. Witzke O, et al. **Eur J Med Res** 1997 Apr 21;2(4):155–8

Subcutaneous metastasis from an ovarian carcinoma disappeared following tamoxifen therapy. Flam F, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Feb;64(2):225–6

A new treatment with bleomycin for complicated cutaneous hemangioma in children. Sarihan H, et al. **Eur J Pediatr Surg** 1997 Jun;7(3):158–62

Recurrent melanoma of the leg and polypoid lesions of the gallbladder—a management dilemma. Gould SW, et al. **Eur J Surg Oncol** 1997 Aug;23(4):368–9

The oxidizing agent menadione induces an increase in the intracellular molecular oxygen concentration in K562 and A431 cells: direct measurement using the new paramagnetic EPR probe fusinite. Santini MT, et al. **Free Radic Biol Med** 1996;20(7):915–24

Chemotherapy for metastatic melanoma during pregnancy. Dipaola RS, et al. **Gynecol Oncol** 1997 Sep;66(3):526–30 (21 ref.)

Local steroid therapy in cutaneous hemangiomas. Gangopadhyay AN, et al. **Indian Pediatr** 1996 Jan; 33(1):31–3

Retinoid-interferon therapy of solid tumors. Lippman SM, et al. **Int J Cancer** 1997 Feb 7;70(4):481–3 (27 ref.)

Effects of electrochemotherapy on cutaneous metastases of human malignant melanoma [letter] Giraud P, et al. **Int J Radiat Oncol Biol Phys** 1996 Dec 1;36(5):1285

Role of steroid in childhood haemangioma: a 10 years review. Gangopadhyay AN, et al. **Int Surg** 1997 Jan–Mar; 82(1):49–51

Treatment with modified heparins inhibits experimental metastasis formation and leads, in some animals, to long-term survival. Sciumbata T, et al. **Invasion Metastasis** 1996;16(3):132–43

Pediatric dermatology: advances in therapy. Chapel KL, et al. **J Am Acad Dermatol** 1997 Apr;36(4):513–26; quiz 527–30 (149 ref.)

Photopheresis therapy for cutaneous T-cell lymphoma [see comments] Duvic M, et al. **J Am Acad Dermatol** 1996 Oct; 35(4):573–9. Comment in: J Am Acad Dermatol 1997 Aug;37(2 Pt 1):287–8.

Pentostatin (2'-deoxycoformycin) in the treatment of cutaneous T-cell lymphoma. Greiner D, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):950–5

Nonsurgical treatment of basal cell carcinomas with intralesional 5-fluorouracil/epinephrine injectable gel. Miller BH, et al. **J Am Acad Dermatol** 1997 Jan;36(1):72–7

Hyaluronidase enhances the therapeutic effect of vinblastine in intralesional treatment of Kaposi's sarcoma. Military Medical Consortium for the Advancement of Retroviral Research (MMCARR). Smith KJ, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):239–42

Two patients with confluent and reticulated papillomatosis: response to oral isotretinoin and 10% lactic acid lotion. Solomon BA, et al. **J Am Acad Dermatol** 1996 Oct; 35(4):645–6

5-fluorouracil iontophoretic therapy for Bowen's disease. Welch ML, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):956–8

Long-term follow-up of patients with cutaneous T-cell lymphoma treated with extracorporeal photochemotherapy. Zic JA, et al. **J Am Acad Dermatol** 1996 Dec;35(6):935–45

Randomized placebo-controlled clinical trial of high-dose interleukin-2 in combination with a soluble p75 tumor necrosis factor receptor immunoglobulin G chimera in patients with advanced melanoma and renal cell carcinoma. Du Bois JS, et al. **J Clin Oncol** 1997 Mar;15(3):1052–62

Interferon alfa-2a and interleukin-2 with or without cisplatin in metastatic melanoma: a randomized trial of the European Organization for Research and Treatment of Cancer Melanoma Cooperative Group. Keilholz U, et al. **J Clin Oncol** 1997 Jul;15(7):2579–88

Antitumour-promoting and antitumour activities of the crude

extract from the leaves of Juniperus chinensis. Ali AM, et al. **J Ethnopharmacol** 1996 Sep;53(3):165–9

Bilateral adrenal hemorrhage and adrenal insufficiency in a patient with lymphomatous adrenal infiltration following administration of a fusion toxin (DAB(486)interleukin–2). Cohen R, et al. **J Immunother** 1994 Oct;16(3):229–33

Photodynamic therapy with 5–aminolaevulinic acid–induced porphyrins of an amelanotic melanoma in vivo. Abels C, et al. **J Photochem Photobiol B** 1997 Aug;40(1):76–83

Miltefosine in recurrent cutaneous breast cancer [letter] Clive S, et al. **Lancet** 1997 Mar 1;349(9052):621–2

Extracorporeal photopheresis in Sézary syndrome [letter] Russell–Jones R, et al. **Lancet** 1997 Sep 20;350(9081):886

Why tyrosinase for treatment of melanoma. Song YH. **Lancet** 1997 Jul 12;350(9071):82–3

Photodynamic therapy of facial squamous cell carcinoma in cats using a new photosensitizer. Magne ML, et al. **Lasers Surg Med** 1997;20(2):202–9

2–Chlorodeoxyadenosine in cutaneous T–cell lymphoproliferative disorders. Kong LR, et al. **Leuk Lymphoma** 1997 Jun;26(1–2):89–97

Spindle cell (Kaposiform) hemangioendothelioma with Kasabach–Merritt syndrome in an infant: successful treatment with alpha–2A interferon. Deb G, et al. **Med Pediatr Oncol** 1997 May;28(5):358–61

2nd International Conference on the Adjuvant Therapy of Malignant Melanoma. London, UK, 14–15 March, 1997. Report and abstracts. Retsas S, et al. **Melanoma Res** 1997 Apr;7(2):153–73

DTIC vs. IFN–alpha plus DTIC in the treatment of patients with metastatic malignant melanoma. Rudolf Z, et al. **Neoplasma** 1996;43(2):93–7

Suppression of mouse skin papilloma by canthaxanthin and beta–carotene in vivo: possibility of the regression of tumorigenesis by carotenoids without conversion to retinoic acid. Katsumura N, et al. **Nutr Cancer** 1996; 26(2):203–8

Inhibitory effect of TMK688 on skin tumor initiation caused by 7,12–dimethylbenz[a]anthracene in relation to inhibition of aryl hydrocarbon hydroxylase activity and Cyp1a1 mRNA induction. Jiang H, et al. **Pharmacology** 1996 Aug; 53(2):123–32

Apoptosis is an early event during phthalocyanine photodynamic therapy–induced ablation of chemically induced squamous papillomas in mouse skin. Agarwal R, et al. **Photochem Photobiol** 1996 Apr;63(4):547–52

Regional isolated perfusion of extremities for melanoma: a 20–year experience with drugs other than L–phenylalanine mustard. Ariyan S, et al. **Plast Reconstr Surg** 1997 Apr; 99(4):1023–9

Efficacy, safety, and risk–benefit analysis of adjuvant interferon alfa–2b in melanoma. Kirkwood JM, et al. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S16–23

The role of interferon alfa in the treatment of metastatic melanoma. Legha SS. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S24–31 (35 ref.)

Durable complete responses in metastatic melanoma treated with interleukin–2 in combination with interferon alpha and chemotherapy. Legha SS. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S39–43 (25 ref.)

Treatment of malignant melanoma with interleukin–2. Philip PA, et al. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S32–8 (64 ref.)

Outpatient chemoimmunotherapy for the treatment of metastatic melanoma. Thompson JA, et al. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S44–8

Combination chemotherapy (dacarbazine, carmustine, cisplastin, and tamoxifen) in advanced melanoma. Tan EH, et al. **Singapore Med J** 1996 Apr;37(2):165–7

Medical treatment of metastatic melanoma. Houghton AN, et al. **Surg Clin North Am** 1996 Dec;76(6):1343–54 (113 ref.)

Hyperthermia potentiates antitumor effect of thermosensitive–liposome–encapsulated melphalan and radiation in murine melanoma. Chelvi TP, et al. **Tumour Biol** 1997;18(4):250–60

[Photodynamic therapy at the threshold of clinical use in disseminated dermatoses] Boehncke WH, et al. **Hautarzt** 1996 Nov;47(11):825–31 (48 ref.) (Eng. Abstr.) **(Ger)**

[Photodynamic therapy (PDT)] Wolf P. **Hautarzt** 1997 Feb; 48(2):137–48; quiz 148 (10 ref.) **(Ger)**

[The treatment of primary cutaneous B–cell small cleaved–cell lymphomas a clinical follow–up study of 55 patients who were treated with radio– and polychemotherapy] Sack H. **Strahlenther Onkol** 1996 Oct; 172(10):585–6 **(Ger)**

[Clinical results of extremity perfusion in malignant melanoma] Huber R, et al. **Zentralbl Chir** 1996; 121(3):234–42 (Eng. Abstr.) **(Ger)**

[Bropirimine (U–54461S) early phase II clinical studies—to investigate the efficacy and safety of bropirimine treatment on various malignant tumors (urological, hematologic, and dermal cancers)] Furue H, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):67–75 (Eng. Abstr.) **(Jpn)**

[Chemotherapy for advanced adenocarcinoma of the skin: experience with combination chemotherapy and a review of the literature] Yamazaki N. **Gan To Kagaku Ryoho** 1997 Jan;24(1):30–6 (15 ref.) (Eng. Abstr.) **(Jpn)**

[L–MTP–PE—a potential antineoplastic agent] Dzierzbicka K, et al. **Postepy Hig Med Dosw** 1997;51(2):227–36 (37 ref.) (Eng. Abstr.) **(Pol)**

ECONOMICS

The price tag for skin tags. Zuber TJ. **Hosp Pract (Off Ed)** 1997 Mar 15;32(3):221–2

ENZYMOLOGY

Occurrence of indoleamine 2,3–dioxygenase in human cutaneous malignant melanoma. Bertazzo A, et al. **Adv Exp Med Biol** 1996;398:519–22

Cyclin kinase inhibitor p21WAF1/CIP1 in malignant melanoma: reduced expression in metastatic lesions. Maelandsmo GM, et al. **Am J Pathol** 1996 Dec; 149(6):1813–22

Nitric oxide synthase and skin tumor promotion. Ahmad N, et al. **Biochem Biophys Res Commun** 1997 Mar 17; 232(2):328–31

Cathepsin B and D expression in squamous cell carcinoma. Kawada A, et al. **Br J Dermatol** 1996 Dec;135(6):905–10

Immunohistochemical study of alpha, mu and pi class glutathione S transferase expression in malignant melanoma. MMM Group. Multidisciplinary Malignant Melanoma Group. Moral A, et al. **Br J Dermatol** 1997 Mar; 136(3):345–50

Overexpression of protein kinase C–alpha and –beta isozymes by stromal dendritic cells in basal and squamous cell carcinoma. Reynolds NJ, et al. **Br J Dermatol** 1997 May; 136(5):666–73

Enhanced skin carcinogenesis in transgenic mice with high expression of glutathione peroxidase or both glutathione peroxidase and superoxide dismutase. Lu YP, et al. **Cancer Res** 1997 Apr 15;57(8):1468–74

Ornithine decarboxylase overexpression is a sufficient condition for tumor promotion in mouse skin. O'Brien TG, et al. **Cancer Res** 1997 Jul 1;57(13):2630–7

Inhibition of glutathione S–transferase activity in human melanoma cells by alpha,beta–unsaturated carbonyl derivatives. Effects of acrolein, cinnamaldehyde, citral, crotonaldehyde, curcumin, ethacrynic acid, and trans–2–hexenal. Iersel ML, et al. **Chem Biol Interact** 1996 Oct 21;102(2):117–32

Primary neuroendocrine carcinoma of the skin expresses tyrosinase mRNA: detection by a specific nested PCR technique. Alegre M, et al. **Dermatology** 1997;194(4):334–7

Immunohistochemical examination of the expression of O6–methylguanine–DNA methyltransferase in human melanoma metastases [published erratum appears in Eur J Cancer 1997 Apr;33(4):701] Egyházi S, et al. **Eur J Cancer** 1997 Jan;33(1):129–34

Gene expression of matrix metalloproteinase–1 (interstitial collagenase) and matrix metalloproteinase–3 (stromelysin–1) in basal cell carcinoma by in situ hybridization using chondroitin ABC lyase. Tsukifuji R, et al. **Histochem J** 1997 May;29(5):401–7

Glycosylation of lipoprotein lipase in human subcutaneous lipomas. Park JW, et al. **Horm Metab Res** 1996 Jan; 28(1):7–10

Immunohistochemical analysis of procathepsin L and cathepsin B in cutaneous Kaposi's sarcoma. Thewes M, et al. **Int J Dermatol** 1997 Feb;36(2):100–3

Matrix metalloproteinase–2 (72 kD type IV collagenase) expression occurs in the early stage of human melanocytic tumour progression and may have prognostic value. Väisänen A, et al. **J Pathol** 1996 Nov;180(3):283–9

The plasminogen activation system in melanoma cell lines and in melanocytic lesions. de Vries TJ, et al. **Melanoma Res** 1996 Apr;6(2):79–88 (93 ref.)

Nitric oxide synthase activity is up–regulated in melanoma cell lines: a potential mechanism for metastases formation. Joshi M, et al. **Melanoma Res** 1996 Apr;6(2):121–6

Opposite effect of stable transfection of bioactive transforming growth factor–beta 1 (TGF beta 1) versus exogenous TGF beta 1 treatment on expression of 92–kDa type IV collagenase in mouse skin squamous cell carcinoma CH72 celis. Rundhaug JE, et al. **Mol Carcinog** 1997 Jun; 19(2):122–36

Comparison of ultraviolet light–induced skin carcinogenesis and ornithine decarboxylase activity in sencar and hairless SKH–1 mice fed a constant level of dietary lipid varying in corn and coconut oil. Berton TR, et al. **Nutr Cancer** 1996;26(3):353–63

Increased thymidylate synthase gene expression in metastatic melanoma. Vlaykova T, et al. **Oncology** 1997 Mar–Apr; 54(2):146–52

Polymorphism in detoxifying enzymes and susceptibility to skin cancer. Lear J, et al. **Photochem Photobiol** 1996 Apr; 63(4):424–8 (24 ref.)

Aberrant retention of tyrosinase in the endoplasmic reticulum mediates accelerated degradation of the enzyme and contributes to the dedifferentiated phenotype of amelanotic melanoma cells. Halaban R, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6210–5

Selective increase in specific alternative splice variants of tyrosinase in murine melanomas: a projected basis for immunotherapy. Le Fur N, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5332–7

EPIDEMIOLOGY

Conjunctival naevi in Denmark 1960–1980. A 21–year follow–up study. Gerner N, et al. **Acta Ophthalmol Scand** 1996 Aug;74(4):334–7

Re: "Reliability of reported sunburn history in a case–control study of cutaneous malignant melanoma" [letter; comment] Gefeller O, et al. **Am J Epidemiol** 1996 Oct 1;144(7):707–8 . Comment on: Am J Epidemiol 1995 Jun 1;141(11):1033–7.

Skin cancer in a subtropical Australian population: incidence and lack of association with occupation. The Nambour Study Group. Green A, et al. **Am J Epidemiol** 1996 Dec 1;144(11):1034–40

Prevalence of melanocytic nevi and freckles in young Israeli males. Correlation with melanoma incidence in Jewish migrants: demographic and host factors. Pavlotsky F, et al. **Am J Epidemiol** 1997 Jul 1;146(1):78–86

Case–control study of malignant melanoma among employees of the Lawrence Livermore National Laboratory. Moore DH 2nd, et al. **Am J Ind Med** 1997 Oct;32(4):377–91

Risk for subsequent cancer after diagnosis of basal–cell carcinoma. A population–based, epidemiologic study [see comments] Frisch M, et al. **Ann Intern Med** 1996 Nov 15; 125(10):815–21. Comment in: Ann Intern Med 1996 Nov 15;125(10):852–4. Comment in: Ann Intern Med 1997 Jul 1;127(1):87; discussion 87–8.

Basal–cell carcinoma of the skin: a harbinger of cutaneous and noncutaneous multiple primary cancer [editorial; comment] Schottenfeld D. **Ann Intern Med** 1996 Nov 15; 125(10):852–4. Comment on: Ann Intern Med 1996 Nov 15;125(10):815–21.

Epidemiology of nonmelanoma skin cancer: a review. Corona R. **Ann Ist Super Sanita** 1996;32(1):37–42 (60 ref.)

Molecular epidemiology of skin cancers: DNA repair and non–melanocytic skin cancer. Hall J, et al. **Ann Ist Super Sanita** 1996;32(1):43–51 (56 ref.)

Differences in malignant melanoma between children and adolescents. A 35–year epidemiological study. Berg P, et al. **Arch Dermatol** 1997 Mar;133(3):295–7 (20 ref.)

Trends in the population–based incidence of squamous cell carcinoma of the skin first diagnosed between 1984 and 1992. Gray DT, et al. **Arch Dermatol** 1997 Jun; 133(6):735–40 (29 ref.)

Differences in age and body site distribution of the histological subtypes of basal cell carcinoma. A possible indicator of differing causes. McCormack CJ, et al. **Arch Dermatol** 1997 May;133(5):593–6

Cutaneous squamous cell carcinoma in human immunodeficiency virus–infected patients. A study of epidemiologic risk factors, human papillomavirus, and p53 expression. Maurer TA, et al. **Arch Dermatol** 1997 May; 133(5):577–83

Melanoma incidence: if it quacks like a duck... [letter; comment] Rigel DS, et al. **Arch Dermatol** 1997 May; 133(5):656–9. Comment on: Arch Dermatol 1996 Aug;132(8):881–4.

The skin cancer workload in Australian general practice. Del Mar CB, et al. **Aust Fam Physician** 1997 Jan;26 Suppl 1:S24–7

Non–melanoma skin cancer and solar keratoses. I. Methods and descriptive results of the South Wales Skin Cancer Study. Harvey I, et al. **Br J Cancer** 1996 Oct;74(8):1302–7

Non–melanoma skin cancer and solar keratoses II analytical results of the South Wales Skin Cancer Study. Harvey I, et al. **Br J Cancer** 1996 Oct;74(8):1308–12

Non–Hodgkin's lymphomas, chronic lymphocytic leukaemias and skin cancers. Levi F, et al. **Br J Cancer** 1996 Dec; 74(11):1847–50

Cutaneous malignant melanoma in Northern Ireland. Pedlow PJ, et al. **Br J Cancer** 1997;76(1):124–6

Seasonal patterns in the diagnosis of cutaneous malignant melanoma: analysis of the data of the German Central Malignant Melanoma Registry [letter] Blum A, et al. **Br J Dermatol** 1997 Jun;136(6):968–9

Cutaneous malignant melanoma in southern Sweden 1965, 1975, and 1985. Prognostic factors and histologic correlations. Måsbäck A, et al. **Cancer** 1997 Jan 15; 79(2):275–83

Nevi and migration within the United States and Canada: a population–based cross–sectional study. Dennis LK, et al. **Cancer Causes Control** 1996 Jul;7(4):464–73

Epidemiology of sun exposure and skin cancer. Armstrong BK, et al. **Cancer Surv** 1996;26:133–53 (46 ref.)

Truncal site and detoxifying enzyme polymorphisms significantly reduce time to presentation of further primary cutaneous basal cell carcinoma. Lear JT, et al. **Carcinogenesis** 1997 Aug;18(8):1499–503

The natural history and management of Merkel cell carcinoma of the skin: a review of 22 patients treated at the Royal Marsden Hospital. Savage P, et al. **Clin Oncol (R Coll Radiol)** 1997;9(3):164–7

Melanoma epidemiology [see comments] Berwick M, et al. **Curr Opin Oncol** 1997 Mar;9(2):178–82 (55 ref.). Comment in: Curr Opin Oncol 1997 Mar;9(2):175–7.

Excess benign melanocytic naevi in renal transplant recipients. Szepietowski J, et al. **Dermatology** 1997; 194(1):17–9

Dysplastic nevi are a risk factor for uveal melanoma. Hammer H, et al. **Eur J Ophthalmol** 1996 Oct–Dec;6(4):472–4

Plantar acral melanoma—an experience from a regional cancer centre, India. Vijaykumar DK, et al. **Indian J Cancer** 1996 Sep;33(3):122–9

Xeroderma pigmentosum. Kulkarni ML, et al. **Indian Pediatr** 1996 May;33(5):394–8

Diet and risk of cutaneous malignant melanoma: a prospective study of 50,757 Norwegian men and women. Veierød MB, et al. **Int J Cancer** 1997 May 16;71(4):600–4

Nonmelanoma skin cancer in northern Finland. Koskinen A, et al. **Int J Dermatol** 1996 Oct;35(10):700–3

Basal cell carcinoma in Qatar. Mahmoud SF, et al. **Int J Dermatol** 1996 Oct;35(10):704–6

Epidemiology of primary cutaneous malignant melanoma in Jordan. Oumeish OY. **Int J Dermatol** 1997 Feb;36(2):113–5

Incidence of malignant melanoma of the skin in Norway, 1955–1989: associations with solar ultraviolet radiation, income and holidays abroad. Bentham G, et al. **Int J Epidemiol** 1996 Dec;25(6):1132–8

Reproducibility of a self–administered questionnaire for assessment of melanoma risk. Westerdahl J, et al. **Int J Epidemiol** 1996 Apr;25(2):245–51

The risk of non–melanoma skin cancer incidence in the Japanese atomic bomb survivors. Little MP, et al. **Int J Radiat Biol** 1997 May;71(5):589–602

Merkel cell carcinoma in Israel. Brenner B, et al. **Isr J Med Sci** 1996 Dec;32(12):1235–8

Cutaneous malignant melanoma in young adults under age 30. Tamir G, et al. **Isr J Med Sci** 1996 Dec;32(12):1290–6

Lifetime risk for development of skin cancer in the U.S. population: current estimate is now 1 in 5 [editorial] Rigel DS, et al. **J Am Acad Dermatol** 1996 Dec;35(6):1012–3

Bowen's disease: statistical study of a 10 year period. Kovács A, et al. **J Dermatol** 1996 Apr;23(4):267–74

Variability of skin cancer registration practice in the United Kingdom. Maudsley G, et al. **J Epidemiol Community Health** 1997 Jun;51(3):337–8

Florida's undeclared epidemic: malignant melanoma. Kamath D, et al. **J Fla Med Assoc** 1997 Mar;84(3):161–5

Screening for cutaneous malignant melanoma: a feasibility study. Törnberg S, et al. **J Med Screen** 1996;3(4):211–5

Photocarcinogenesis: an overview. Black HS, et al. **J Photochem Photobiol B** 1997 Aug;40(1):29–47 (194 ref.)

Ultraviolet radiation and skin cancer of humans. Urbach F. **J Photochem Photobiol B** 1997 Aug;40(1):3–7

Clinically recognized dysplastic nevi. A central risk factor for cutaneous melanoma [see comments] Tucker MA, et al. **JAMA** 1997 May 14;277(18):1439–44. Comment in: JAMA 1997 May 14;277(18):1475–6. Comment in: JAMA 1997 Aug 20;278(7):548–9.

Doses of solar ultraviolet radiation correlate with skin cancer rates in Japan. Suzuki T, et al. **Kobe J Med Sci** 1996 Dec; 42(6):375–88

Malignant melanoma: incidence issues and their effect on diagnosis and treatment in the 1990s. Rigel DS. **Mayo Clin Proc** 1997 Apr;72(4):367–71 (35 ref.)

The melanoma epidemic: more apparent than real? Swerlick RA, et al. **Mayo Clin Proc** 1997 Jun;72(6):559–64

Melanoma of the skin in Rhode Island. Fulton JP. **Med Health R I** 1996 Nov;79(11):400–1

A high incidence of melanoma found in patients with multiple dysplastic naevi by photographic surveillance. Kelly JW, et al. **Med J Aust** 1997 Aug 18;167(4):191–4

Prospective study of the incidence of melanoma in the Paris region in 1994. The PETRI Melanoma Group. Baccard M, et al. **Melanoma Res** 1997 Aug;7(4):335–8

Skin cancer epidemiology in 1996: the Third Symposium on the Epidemiology of Melanoma and Non–melanocytic Skin Cancer. Elwood M, et al. **Melanoma Res** 1997 Feb; 7(1):74–7

Occurrence of melanomas on the upper and lower limbs in eastern Australia. Green A, et al. **Melanoma Res** 1996 Oct; 6(5):387–94

Malignant melanoma: reduced risk associated with early childbearing and multiparity. Lambe M, et al. **Melanoma Res** 1996 Apr;6(2):147–53

Latitude, coastal or interior location and the evolution of the melanoma epidemic in the United States. Lee JA. **Melanoma Res** 1997 Jun;7(3):179–88

Skin cancer trends at Wilford Hall Medical Center. LeVasseur JG, et al. **Mil Med** 1997 Jul;162(7):459–62

Estimates of ozone depletion and skin cancer incidence to examine the Vienna Convention achievements. Slaper H, et al. **Nature** 1996 Nov 21;384(6606):256–8

Melanoma and sun exposure. Elwood JM. **Semin Oncol** 1996 Dec;23(6):650–66 (69 ref.)

Dysplastic nevi and other risk markers for melanoma. Seykora J, et al. **Semin Oncol** 1996 Dec;23(6):682–7 (52 ref.)

Gender, geography and socio–economic status in the diffusion of malignant melanoma risk. Aase A, et al. **Soc Sci Med** 1996 Jun;42(12):1621–37

Epidemiology of malignant melanoma. Liu T, et al. **Surg Clin North Am** 1996 Dec;76(6):1205–22 (66 ref.)

Malignancy after renal transplantation: analysis of incidence and risk factors in 1700 patients followed during a 25–year period. Hiesse C, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):831–3

Cutaneous neoplasms and human papillomavirus in renal transplant patients: experience of one center in Mexico. Orozco–Topete R, et al. **Transplant Proc** 1996 Dec; 28(6):3314–6

Skin tumours posttransplantation: a retrospective analysis of 28 years' experience at a single centre. Webb MC, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):828–30

[Epidemiology of malignant skin neoplasms in Russia] Dvořin VV, et al. **Vopr Onkol** 1997;43(3):263–8 **(Rus)**

[Epidemiology of skin tumors of the face and neck (ORL region) treated surgically from 1981 to 1990] Sente M, et al. **Med Pregl** 1996;49(11–12):483–6 (Eng. Abstr.) **(Scr)**

[On the epidemiology of melanoma] García Pérez A. **An R Acad Nac Med (Madr)** 1996;113(2):313–33; discussion 333–4 **(Spa)**

ETHNOLOGY

Immunolocalizations of human gelatinase (type IV collagenase, MMP–9) and TIMP (tissue inhibitor of metalloproteinases) in normal epidermis and some epidermal tumors. Kobayashi T, et al. **Arch Dermatol Res** 1996 May;288(5–6):239–44

Incidence of cutaneous melanoma among non–Hispanic whites, Hispanics, Asians, and blacks: an analysis of california cancer registry data, 1988–93. Cress RD, et al. **Cancer Causes Control** 1997 Mar;8(2):246–52

Malignant melanoma in American black females: an unusual distribution of primary sites. Muchmore JH, et al. **J Am Coll Surg** 1996 Nov;183(5):457–65

ETIOLOGY

Radiation therapy for squamous cell carcinoma in dystrophic epidermolysis bullosa: case reports and literature review. Bastin KT, et al. **Am J Clin Oncol** 1997 Feb;20(1):55–8 (23 ref.)

Investigation of an excess of melanoma among employees of the Lawrence Livermore National Laboratory [see comments] Austin DF, et al. **Am J Epidemiol** 1997 Mar 15;145(6):524–31. Comment in: Am J Epidemiol 1997 Mar 15;145(6):532–5.

Skin cancer in a subtropical Australian population: incidence and lack of association with occupation. The Nambour Study Group. Green A, et al. **Am J Epidemiol** 1996 Dec 1;144(11):1034–40

Prevalence of melanocytic nevi and freckles in young Israeli males. Correlation with melanoma incidence in Jewish migrants: demographic and host factors. Pavlotsky F, et al. **Am J Epidemiol** 1997 Jul 1;146(1):78–86

Invited commentary: are low radiation doses or occupational exposures really risk factors for malignant melanoma? [comment] Wilkinson GS. **Am J Epidemiol** 1997 Mar 15; 145(6):532–5. Comment on: Am J Epidemiol 1997 Mar 15;145(6):524–31.

Aleukemic leukemia cutis preceding overt acute myeloid leukemia in myelodysplastic syndrome [letter] Rodríguez JN, et al. **Am J Hematol** 1997 Jan;54(1):91–2

Malignant melanoma and Charcot–Marie–Tooth disease: a further case [letter] Manoukian S, et al. **Am J Med Genet** 1997 Jan 20;68(2):242

Malignancy arising in seborrheic keratosis: a report of two cases. Yap WM, et al. **Ann Acad Med Singapore** 1997 Mar; 26(2):235–7 (15 ref.)

Increase of melanocytic nevus counts in children during 5 years of follow–up and analysis of associated factors [see comments] Luther H, et al. **Arch Dermatol** 1996 Dec; 132(12):1473–8. Comment in: Arch Dermatol 1997 Aug;133(8):1049.

Erythema, skin cancer risk, and sunscreens [editorial] Naylor MF. **Arch Dermatol** 1997 Mar;133(3):373–5

Skin disorders in organ transplant recipients. External anogenital lesions [editorial; comment] Penn I. **Arch Dermatol** 1997 Feb;133(2):221–3. Comment on: Arch Dermatol 1997 Feb;133(2):175–8.

Development of melanocytic nevi in children [letter; comment] Sybert VP. **Arch Dermatol** 1997 Aug;133(8):1049 . Comment on: Arch Dermatol 1996 Dec;132(12):1473–8.

Sun behaviour and perceptions of risk for melanoma among 21–year–old New Zealanders. Douglass HM, et al. **Aust N Z J Public Health** 1997 Jun;21(3):329–34

Solar ultraviolet radiation is not a major cause of primary cutaneous non–Hodgkin's lymphoma [letter] Newton R. **BMJ** 1997 May 17;314(7092):1483–4

Sunscreens, suntans, and skin cancer. Local councils should remove sunbeds from leisure centres [letter; comment] [see comments] Norris JF. **BMJ** 1996 Oct 12;313(7062):941–2 . Comment on: BMJ 1996 Jun 29;312(7047):1621–2. Comment in: BMJ 1997 Apr 26;314(7089):1280–1.

Renal allograft recipients with high susceptibility to cutaneous malignancy have an increased prevalence of human papillomavirus DNA in skin tumours and a greater risk of anogenital malignancy. Arends MJ, et al. **Br J Cancer** 1997;75(5):722–8

Leukaemia cutis at the site of prior herpes zoster [letter; comment] Bahadoran P, et al. **Br J Dermatol** 1997 Mar; 136(3):465. Comment on: Br J Dermatol 1996 Mar;134(3):504–9.

Kaposi's sarcoma associated with immunosuppression for bullous pemphigoid. Halpern SM, et al. **Br J Dermatol** 1997 Jul;137(1):140–3

Angiosarcoma of the scalp associated with renal transplantation. Kibe Y, et al. **Br J Dermatol** 1997 May; 136(5):752–6 (24 ref.)

Three cases of multiple basal cell carcinoma arising in port–wine stains previously treated with thorium X [letter] Shah M, et al. **Br J Dermatol** 1996 Nov;135(5):861–2

Sun and skin cancer. Whittaker S. **Br J Hosp Med** 1996 Nov 20–Dec 10;56(10):515–8 (13 ref.)

Carcinoma in a pressure sore [letter] Ceuppens A, et al. **Br J Plast Surg** 1997 Jul;50(5):382–3

A shorter lag period of mesenchymal malignancy on Marjolin's ulcer. Celiköz B, et al. **Burns** 1997 Feb; 23(1):72–4 (10 ref.)

Postburn scar carcinomas in Kashmiris. Chowdri NA, et al. **Burns** 1996 Sep;22(6):477–82

Basal cell carcinoma developing on a burn scar. Koga Y, et al. **Burns** 1997 Feb;23(1):75–7 (11 ref.)

Malignant schwannoma in a burn scar. Scott JR, et al. **Burns** 1996 Sep;22(6):494–6

Loss of retinoic acid receptors in mouse skin and skin tumors is associated with activation of the ras(Ha) oncogene and high risk for premalignant progression. Darwiche N, et al. **Cancer Res** 1996 Nov 1;56(21):4942–9

Ultraviolet radiation A–induced precursors of cutaneous melanoma in Monodelphis domestica. Ley RD. **Cancer Res** 1997 Sep 1;57(17):3682–4

Induction of cancer, actinic keratosis, and specific p53 mutations by UVB light in human skin maintained in severe combined immunodeficient mice. Nomura T, et al. **Cancer Res** 1997 Jun 1;57(11):2081–4

Evidence for UV–associated activation of telomerase in human skin. Ueda M, et al. **Cancer Res** 1997 Feb 1; 57(3):370–4

The role of UVA in the aetiology of non–melanoma skin cancer. de Laat JM, et al. **Cancer Surv** 1996;26:173–91 (109 ref.)

Skin cancer. Introduction. Leigh IM, et al. **Cancer Surv** 1996; 26:1–6

Relevance of in vitro melanocytic cell studies to the understanding of melanoma. Linge C. **Cancer Surv** 1996; 26:71–87 (49 ref.)

The genetic basis of xeroderma pigmentosum and trichothiodystrophy syndromes. Stary A, et al. **Cancer Surv** 1996;26:155–71 (54 ref.)

Photoimmunology of non–melanoma skin cancer. Streilein JW. **Cancer Surv** 1996;26:207–17 (40 ref.)

Carcinogenesis induced by UVA (365–nm) radiation: the dose–time dependence of tumor formation in hairless mice. de Laat A, et al. **Carcinogenesis** 1997 May;18(5):1013–20

Cutaneous cryptococcosis and Kaposi's sarcoma occurring in the same lesions in a patient with the acquired immunodeficiency syndrome. Glassman SJ, et al. **Clin Exp Dermatol** 1995 Nov;20(6):480–6

Pathogenesis of cutaneous T–cell lymphoma: implications for the use of recombinant cytokines and photopheresis. Rook AH, et al. **Clin Exp Immunol** 1997 Jan;107 Suppl 1:16–20 (35 ref.)

Pathogenesis of Kaposi's sarcoma. Cooke FJ. **Clin Oncol (R Coll Radiol)** 1996;8(3):189–94 (22 ref.)

A place in the shade: reducing the risks of UV exposure. Trouton KJ, et al. **CMAJ** 1997 Jul 15;157(2):175–8 **(Eng, Fre)**

UV–induced cutaneous photobiology. Beissert S, et al. **Crit Rev Biochem Mol Biol** 1996 Dec;31(5–6):381–404 (150 ref.)

Sunburn, sunscreen, and melanoma. Donawho C, et al. **Curr Opin Oncol** 1996 Mar;8(2):159–66 (57 ref.)

Bowen's disease and arsenism from tobacco smoke: an association? Person JR. **Cutis** 1996 Jul;58(1):65–6 (17 ref.)

Malignant melanoma in a tattoo: case report and review of the literature [published erratum appears in Cutis 1997 Apr;59(4):163] Soroush V, et al. **Cutis** 1997 Mar;59(3):111–2

Aspects of exposure to UVA tanning sources. Carcinogenic effect in mice and melanogenic effect in man and mice. Bech–Thomsen N. **Dan Med Bull** 1997 Jun;44(3):242–56 (116 ref.)

Advances in Kaposi's sarcoma. Myskowski PL, et al. **Dermatol Clin** 1997 Jan;15(1):177–88 (122 ref.)

Malignant melanoma occurring in chronic venous ulceration [letter] Andrews BT, et al. **Dermatol Surg** 1997 Jul; 23(7):598–9

Squamous cell carcinoma in situ arising within clear cell acanthoma. Parsons ME, et al. **Dermatol Surg** 1997 Jun; 23(6):487–8

The development of a Marjolin's cancer in a human immunodeficiency virus–positive hemophilic man and review of the literature. Rahimizadeh A, et al. **Dermatol Surg** 1997 Jul;23(7):560–3 (40 ref.)

Kaposi's sarcoma as manifestation of immunosuppression in organ transplant recipients. Aebischer MC, et al. **Dermatology** 1997;195(1):91–2

Kaposi's sarcoma after liver transplantation. Besnard V, et al. **Dermatology** 1996;193(2):100–4

Kaposi's sarcoma in renal–transplant recipients: experience at the Catholic University in Rome, 1988–1996. Lesnoni La Parola I, et al. **Dermatology** 1997;194(3):229–33

Skin tumors in photochemotherapy for psoriasis: a single–center follow–up of 496 patients. Maier H, et al. **Dermatology** 1996;193(3):185–91

Invasive atypical fibroxanthoma and eruptive actinic keratoses in a heart transplant patient. Paquet P, et al. **Dermatology** 1996;192(4):411–3

Kaposi's sarcoma during immunosuppressive therapy for atopic dermatitis. Vandercam B, et al. **Dermatology** 1997; 194(2):180–2

Bronchial hyperreactivity, increased endotoxin lethality and melanocytic tumorigenesis in transgenic mice overexpressing platelet–activating factor receptor. Ishii S, et al. **EMBO J** 1997 Jan 2;16(1):133–42

The effect of 60–Hz magnetic fields on co–promotion of chemically induced skin tumors on SENCAR mice: a discussion of three studies. McLean JR, et al. **Environ Health Perspect** 1997 Jan;105(1):94–6

Ultraviolet exposure and cancer. Wolf P. **Eur J Cancer Prev** 1996 Oct;5(5):381–3 (7 ref.)

Malignant melanoma in xeroderma pigmentosum patients: report of five cases. Kocabalkan O, et al. **Eur J Surg Oncol** 1997 Feb;23(1):43–7

Risk factors for childhood melanoma in Queensland, Australia. Whiteman DC, et al. **Int J Cancer** 1997 Jan 6;

70(1):26–31
Postpemphigus acanthomata: a sign of clinical activity? Yesudian PD, et al. **Int J Dermatol** 1997 Mar;36(3):194–6
The aging skin. Bergfeld WF. **Int J Fertil Womens Med** 1997 Mar–Apr;42(2):57–66 (20 ref.)
Actinic keratoses. Callen JP, et al. **J Am Acad Dermatol** 1997 Apr;36(4):650–3 (14 ref.)
Skin necrosis with subsequent formation of squamous cell carcinoma after subcutaneous interferon beta injection. Fruland JE, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):488–9
Eruptive melanocytic nevi after Stevens–Johnson syndrome. Shoji T, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 2):337–9 (14 ref.)
Demographic, psychosocial, and objective risk factors related to perceived risk of skin cancer. Webb JA, et al. **J Cancer Educ** 1996 Fall;11(3):174–7
CD44 and melanocytic tumors: a possible role for standard CD44 in the epidermotropic spread of melanoma. Fernández–Figueras MT, et al. **J Cutan Pathol** 1996 Apr; 23(2):133–9
The skin cancer cascade: from ozone depletion to melanoma--some definitions and some new interpretation, 1996. Fitzpatrick TB. **J Dermatol** 1996 Nov;23(11):816–20 (11 ref.)
Non–melanoma skin tumors occurring on a Japanese psoriatic patient treated with longterm photochemotherapy [letter] Tamada Y, et al. **J Dermatol** 1997 Aug;24(8):552–3
Epidermal proliferation but not quantity of DNA photodamage is correlated with UV–induced mouse skin carcinogenesis. Berton TR, et al. **J Invest Dermatol** 1997 Sep;109(3):340–7
Risk of basal cell and squamous cell skin cancers after ionizing radiation therapy. For The Skin Cancer Prevention Study Group. Karagas MR, et al. **J Natl Cancer Inst** 1996 Dec 18;88(24):1848–53
Re: relationship between sunlight exposure and a key genetic alteration in basal cell carcinoma [letter] Lear JT, et al. **J Natl Cancer Inst** 1997 Mar 19;89(6):454–5
Therapy with orally administered methoxsalen and ultraviolet A radiation during childhood increases the risk of basal cell carcinoma. The PUVA Follow–up Study. Stern RS, et al. **J Pediatr** 1996 Dec;129(6):915–7 (8 ref.)
Risk factors for basal cell carcinoma in the UK: case–control study in 806 patients. Lear JT, et al. **J R Soc Med** 1997 Jul;90(7):371–4
Skin and bone tumors induced by repeated beta–irradiation of mice: threshold effect and p53 mutations. Ootsuyama A. **J Radiat Res (Tokyo)** 1996 Sep;37(3):151–9
Both conserved region 1 (CR1) and CR2 of the human papillomavirus type 16 E7 oncogene are required for induction of epidermal hyperplasia and tumor formation in transgenic mice. Gulliver GA, et al. **J Virol** 1997 Aug; 71(8):5905–14
Epidermodysplasia verruciformis. Hafeez ZH, et al. **JPMA J Pak Med Assoc** 1996 Dec;46(12):282–4
Immunosuppression and risk of non–melanoma skin cancer in renal transplant recipients [letter] Glover MT, et al. **Lancet** 1997 Feb 8;349(9049):398
Development of squamous cell carcinoma in chronic discoid lupus erythematosus: a report of two patients with anti–Ro/SSA antibodies [letter] Miyagawa S, et al. **Lupus** 1996 Dec;5(6):630–2
A role for photoproducts of vitamin D in the etiology of cutaneous melanoma? Braun MM, et al. **Med Hypotheses** 1997 Apr;48(4):351–4
Kinetics of wound–induced v–Ha–ras transgene expression and papilloma development in transgenic Tg.AC mice. Cannon RE, et al. **Mol Carcinog** 1997 Sep;20(1):108–14
Delays in malignant tumor development in transgenic mice by forced epidermal keratin 10 expression in mouse skin carcinomas. Santos M, et al. **Mol Carcinog** 1997 Sep; 20(1):3–9
The p53 tumour suppressor gene: a model for molecular epidemiology of human cancer. Soussi T. **Mol Med Today** 1996 Jan;2(1):32–7 (43 ref.)
Arsenic can mediate skin neoplasia by chronic stimulation of keratinocyte–derived growth factors. Germolec DR, et al. **Mutat Res** 1997 Jun;386(3):209–18
Malignant melanoma in patients treated for psoriasis with methoxsalen (psoralen) and ultraviolet A radiation (PUVA). The PUVA Follow–Up Study [see comments] Stern RS, et al. **N Engl J Med** 1997 Apr 10;336(15):1041–5 . Comment in: N Engl J Med 1997 Apr 10;336(15):1090–1. Comment in: N Engl J Med 1997 Aug 14;337(7):502–3.
Melanoma after PUVA therapy for psoriasis [letter; comment] Whitmore SE, et al. **N Engl J Med** 1997 Aug 14;337(7):502–3. Comment on: N Engl J Med 1997 Apr 10;336(15):1041–5.
Should PUVA be abandoned? [editorial; comment] Wolff K. **N Engl J Med** 1997 Apr 10;336(15):1090–1. Comment on: N Engl J Med 1997 Apr 10;336(15):1041–5.
Percutaneous biopsy of operable liver lesions: is it necessary or advisable? Jourdan JL, et al. **N Z Med J** 1996 Dec 13; 109(1035):469–70
Post–transplantation Kaposi's sarcoma appearing simultaneously in same cadaver donor renal transplant recipients. Bottalico D, et al. **Nephrol Dial Transplant** 1997 May;12(5):1055–7
Fatal Merkel–cell tumour (cutaneous neuroendocrine carcinoma) complicating renal transplantation. Douds AC, et al. **Nephrol Dial Transplant** 1995 Dec;10(12):2346–8
Kaposi sarcoma in a paediatric renal transplant recipient. Ozen S, et al. **Nephrol Dial Transplant** 1996 Jun; 11(6):1162–3
Comparison of ultraviolet light–induced skin carcinogenesis and ornithine decarboxylase activity in sencar and hairless SKH–1 mice fed a constant level of dietary lipid varying in corn and coconut oil. Berton TR, et al. **Nutr Cancer** 1996;26(3):353–63
Prevention of photocarcinogenesis by topical administration of pure epigallocatechin gallate isolated from green tea. Gensler HL, et al. **Nutr Cancer** 1996;26(3):325–35
Basal cell carcinoma in a girl after cobalt irradiation to the cranium for acute lymphoblastic leukemia: case report and literature review. Garcia–Silva J, et al. **Pediatr Dermatol** 1996 Jan–Feb;13(1):54–7 (13 ref.)
Oncogenes and tumor suppressor genes in photocarcinogenesis. Ananthaswamy HN, et al. **Photochem Photobiol** 1996 Apr;63(4):428–32 (36 ref.)
Photobiology of photocarcinogenesis. de Gruijl FR. **Photochem Photobiol** 1996 Apr;63(4):372–5 (21 ref.)
Relevance of animal models of photocarcinogenesis to humans. Forbes PD. **Photochem Photobiol** 1996 Apr; 63(4):357–62 (39 ref.)
Mexoryl SX protects against solar–simulated UVR–induced photocarcinogenesis in mice. Fourtanier A. **Photochem Photobiol** 1996 Oct;64(4):688–93
Cytokines and photocarcinogenesis. Granstein RD. **Photochem Photobiol** 1996 Apr;63(4):390–4 (54 ref.)
Lessons learned from xeroderma pigmentosum. Kraemer KH. **Photochem Photobiol** 1996 Apr;63(4):420–2 (19 ref.)
Analysis of rodent photo cocarcinogenicity models for hazard evaluation and risk assessment: industry viewpoint. Kraus AL. **Photochem Photobiol** 1996 Apr;63(4):365–9 (54 ref.)
Photocarcinogenesis: mechanisms, models and human health implications. Mukhtar H, et al. **Photochem Photobiol** 1996 Apr;63(4):356–7
Assessment of risk for photocarcinogenesis: regulatory reviewer viewpoint. Osterberg RE, et al. **Photochem Photobiol** 1996 Apr;63(4):362–5
Signal transduction mechanisms in photocarcinogenesis. Pentland AP. **Photochem Photobiol** 1996 Apr;63(4):379–80 (11 ref.)
Relevance of in vivo models in melanoma skin cancer. Setlow RB. **Photochem Photobiol** 1996 Apr;63(4):410–2 (18 ref.)
Time and dose dependence of acceptance of UV–induced syngeneic tumor implants in chronically UV–exposed hairless mice. Sontag Y, et al. **Photochem Photobiol** 1997 Feb;65(2):342–6
Immunogenetics of sunlight–induced skin cancer. Streilein JW. **Photochem Photobiol** 1996 Apr;63(4):422–4 (21 ref.)
Mutagenic lesions in carcinogenesis: induction and repair of pyrimidine dimers. Sutherland BM. **Photochem Photobiol** 1996 Apr;63(4):375–7 (27 ref.)
Oxidant, antioxidant status and photocarcinogenesis: the role of gene activation. Tyrrell RM. **Photochem Photobiol** 1996 Apr;63(4):380–3 (31 ref.)
Controversies in the role of sunlight in the pathogenesis of cutaneous melanoma. Weinstock MA. **Photochem Photobiol** 1996 Apr;63(4):406–10 (33 ref.)
Tumor suppressor gene mutations and photocarcinogenesis. Ziegler A, et al. **Photochem Photobiol** 1996 Apr;63(4):432–5 (38 ref.)
Perceived susceptibility to and knowledge of malignant melanoma: screening participants vs the general population. Brandberg Y, et al. **Prev Med** 1996 Mar–Apr;25(2):170–7
Sunlight and skin cancer: another link revealed [comment] Kraemer KH. **Proc Natl Acad Sci U S A** 1997 Jan 7; 94(1):11–4 (56 ref.). Comment on: Proc Natl Acad Sci U S A 1996 Nov 26;93(24):14025–9.
Melanoma and sun exposure. Elwood JM. **Semin Oncol** 1996 Dec;23(6):650–66 (69 ref.)
Linear basal cell carcinomas: report of multiple sequential tumors localized to a radiotherapy port and review of the literature. Chopra KF, et al. **Tex Med** 1997 Jul;93(7):57–9 (10 ref.)
Primary cutaneous melanoma of the buttock: does injury from ultraviolet light play a role? Wagner RF Jr. **Tex Med** 1996 Nov;92(11):66–7
[Cutaneous localizations of chronic lymphoid leukemia in a zona area] Bahadoran P, et al. **Ann Dermatol Venereol** 1996; 123(8):471–3 (Eng. Abstr.) **(Fre)**
[Post–radiotherapy cutaneous neuro–endocrine carcinoma] Lardy F, et al. **Ann Dermatol Venereol** 1996;123(8):464–7 (Eng. Abstr.) **(Fre)**
[Metastatic epidermoid carcinoma in idiopathic CD4+ T lymphocytopenia syndrome] Michel JL, et al. **Ann Dermatol Venereol** 1996;123(8):478–82 (24 ref.) (Eng. Abstr.) **(Fre)**
[Will ecology, photo–climatology and geography affect tomorrow's dermatology?] Piérard GE. **Rev Med Liege** 1996 Oct;51(10):647–8 **(Fre)**
[The enigma of Kaposi sarcoma] Rüdlinger R. **Hautarzt** 1996 Feb;47(2):91–5 (43 ref.) (Eng. Abstr.) **(Ger)**
[Neurofibromatosis with abdominal and severe central nervous system complications] Nagy K, et al. **Orv Hetil** 1996 Nov 3;137(44):2465–8 (Eng. Abstr.) **(Hun)**
[Psychiatry and dermatologic neoplasms: results of an experimental study] Angelini G, et al. **Minerva Med** 1996 Sep;87(9):401–5 (Eng. Abstr.) **(Ita)**
[Etiology of malignant melanoma--what do we know?] Helsing P. **Tidsskr Nor Laegeforen** 1997 Mar 10; 117(7):969–71 (33 ref.) (Eng. Abstr.) **(Nor)**
[A case of malignant degeneration of the walls of an epithelial coccygeal cyst] Lavreshin PM, et al. **Vestn Khir Im I I Grek** 1996;155(5):95 **(Rus)**
[Sun and skin cancer. Role of the pediatrician] Albisu Andrade Y. **An Esp Pediatr** 1997 Feb;46(2):111–3 **(Spa)**
[The transformation of psoriasis into mycosis fungoides in a person who worked to cleanup the aftermath of the accident at the Chernobyl Atomic Electric Power Station] Liashenko IN, et al. **Lik Sprava** 1995 Sep–Dec;(9–12):29–31 **(Ukr)**

GENETICS

Multiple facial cylindromas in twins [letter] Cucurell M, et al. **Acta Derm Venereol** 1996 Jul;76(4):333–4
DNA–ploidy abnormalities are a reflection of the metastatic potential of malignant melanoma. Microfluorometric DNA analysis. Umebayashi Y, et al. **Acta Derm Venereol** 1997 Mar;77(2):118–21
Fine mapping of the locus for nevoid basal cell carcinoma syndrome on chromosome 9q. Undén AB, et al. **Acta Derm Venereol** 1997 Jan;77(1):4–9
Studies on cultured fibroblasts from patients with cutaneous malignant melanoma. Rüdiger HW, et al. **Acta Univ Carol [Med] (Praha)** 1992;38(1–4):67–74
bcl–2 expression in pilomatricoma. Farrier S, et al. **Am J Dermatopathol** 1997 Jun;19(3):254–7
Expression and mutation of the tumor suppressor gene p53 in AIDS–associated Kaposi's sarcoma. Li JJ, et al. **Am J Dermatopathol** 1997 Aug;19(4):373–8
Immunophenotyping and gene rearrangement analysis provide additional criteria to differentiate between cutaneous T–cell lymphomas and pseudo–T–cell lymphomas. Bakels V, et al. **Am J Pathol** 1997 Jun; 150(6):1941–9
Benign clonal keratinocyte patches with p53 mutations show no genetic link to synchronous squamous cell precancer or cancer in human skin. Ren ZP, et al. **Am J Pathol** 1997 May;150(5):1791–803
Cytogenetic analysis of subcutaneous angiolipoma: further evidence supporting its difference from ordinary pure lipomas: a report of the CHAMP Study Group. Sciot R, et al. **Am J Surg Pathol** 1997 Apr;21(4):441–4
Familial aggregation of malignant melanoma/dysplastic naevi and tumours of the nervous system: an original syndrome of tumour proneness. Bahuau M, et al. **Ann Genet** 1997; 40(2):78–91
Genetic alterations in skin cancer. D'errico M, et al. **Ann Ist Super Sanita** 1996;32(1):53–63 (75 ref.)
Hemangioma in twins. Cheung DS, et al. **Ann Plast Surg** 1997 Mar;38(3):269–74
bcl–2 vs p53 protein expression and apoptotic rate in human nonmelanoma skin cancers. Wikonkal NM, et al. **Arch Dermatol** 1997 May;133(5):599–602
Apoptosis identified with DNA fragmentation in basal cell carcinomas. Mori O, et al. **Arch Dermatol Res** 1996 May; 288(5–6):258–61
Analysis of microsatellite instability and loss of heterozygosity in keratoacanthoma. Peris K, et al. **Arch Dermatol Res** 1997 Mar;289(4):185–8
Loss of expression of the p16 gene is frequent in malignant skin tumors. Chang TG, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):85–8
Clonal origin of tumor cells in a plexiform neurofibroma with LOH in NF1 intron 38 and in dermal neurofibromas without LOH of the NF1 gene. Däschner K, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):346–50
Mutations of the INK4a locus in squamous cell carcinomas of human skin. Kubo Y, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):38–41
p53 mutations in squamous cell carcinomas from renal transplant recipients. Bennett MA, et al. **Biochem Soc Trans** 1997 Feb;25(1):342–5
Presence of t(2;5) in primary CD30+ cutaneous lymphoproliferative disorders [letter; comment] Beylot–Barry M, et al. **Blood** 1996 Oct 15;88(8):3240–1. Comment on: Blood 1996 Apr 15;87(8):3437–41.
Recurring structural chromosome abnormalities in peripheral blood lymphocytes of patients with mycosis fungoides/Sézary syndrome. Thangavelu M, et al. **Blood** 1997 May 1;89(9):3371–7
Low frequency of allelic loss in skin tumours from immunosuppressed individuals. Rehman I, et al. **Br J Cancer** 1997;76(6):757–9
Tumour cells of extramammary Paget's disease do not show either p53 mutation or allelic loss at several selected loci implicated in other cancers. Takata M, et al. **Br J Cancer** 1997;76(7):904–8
The scleroatrophic syndrome of Huriez. Kavanagh GM, et al. **Br J Dermatol** 1997 Jul;137(1):114–8
Relationship of T leukaemias with cerebriform nuclei to T–prolymphocytic leukaemia: a cytogenetic analysis with in situ hybridization. Brito–Babapulle V, et al. **Br J Haematol** 1997 Mar;96(4):724–32
A possible role for human papillomaviruses and c–myc, c–Ha–ras, and p53 gene alterations in malignant cutaneous lesions from renal transplant recipients. Pelisson I, et al. **Cancer Detect Prev** 1996;20(1):20–30
Expression of p53 protein in actinic keratosis, adjacent, normal–appearing, and non–sun–exposed human skin. Einspahr J, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Aug;6(8):583–7

Quantitative detection of ultraviolet-specific p53 mutations in normal skin from Japanese patients. Ouhtit A, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jun;6(6):433–8

Involvement of 8q, 22q, and monosomy 21 in an epithelioid sarcoma [letter] Sonobe H, et al. **Cancer Genet Cytogenet** 1997 Jul 15;96(2):178–80

Chromosome 11 abnormalities in Bowen disease of the vulva. Swanson GP, et al. **Cancer Genet Cytogenet** 1997 Feb; 93(2):109–14

Cytogenetic study of neuroendocrine carcinoma of Merkel cells. Vázquez-Mazariego Y, et al. **Cancer Genet Cytogenet** 1996 Nov;92(1):79–81

Molecular pathology of melanoma. Newton Bishop JA. **Cancer Metastasis Rev** 1997 Jun;16(1–2):141–54 (114 ref.)

Relative susceptibilities of XPA knockout mice and their heterozygous and wild-type littermates to UVB-induced skin cancer. Berg RJ, et al. **Cancer Res** 1997 Feb 15; 57(4):581–4

p53 mutations and chromosome instability in basal cell carcinomas developed at an early or late age. D'Errico M, et al. **Cancer Res** 1997 Feb 15;57(4):747–52

Localization and characterization of a chromosome 11 tumor suppressor gene using organotypic raft cultures. Gioeli D, et al. **Cancer Res** 1997 Mar 15;57(6):1157–65

Disruption of the MMAC1/PTEN gene by deletion or mutation is a frequent event in malignant melanoma. Guldberg P, et al. **Cancer Res** 1997 Sep 1;57(17):3660–3

Up-regulation of vascular endothelial growth factor/vascular permeability factor in mouse skin carcinogenesis correlates with malignant progression state and activated H-ras expression levels. Larcher F, et al. **Cancer Res** 1996 Dec 1;56(23):5391–6

A malignant melanoma tumor suppressor on human chromosome 11. Robertson G, et al. **Cancer Res** 1996 Oct 1;56(19):4487–92

Mutations in the human homologue of Drosophila patched (PTCH) in basal cell carcinomas and the Gorlin syndrome: different in vivo mechanisms of PTCH inactivation. Unden AB, et al. **Cancer Res** 1996 Oct 15;56(20):4562–5

Low incidence of p53 mutations in UVA (365-nm)-induced skin tumors in hairless mice. van Kranen HJ, et al. **Cancer Res** 1997 Apr 1;57(7):1238–40

Mutations in the human homologue of the Drosophila segment polarity gene patched (PTCH) in sporadic basal cell carcinomas of the skin and primitive neuroectodermal tumors of the central nervous system. Wolter M, et al. **Cancer Res** 1997 Jul 1;57(13):2581–5

Transgenic models of epidermal neoplasia and multistage carcinogenesis. Arbeit JM. **Cancer Surv** 1996;26:7–34 (103 ref.)

DNA damage and repair in melanoma and non-melanoma skin cancer. Camplejohn RS. **Cancer Surv** 1996;26:193–206 (46 ref.)

CDKN2 mutations in melanoma. Dracopoli NC, et al. **Cancer Surv** 1996;26:115–32 (72 ref.)

The role of atypical mole syndrome and cutaneous naevi in the development of melanoma. Easton D. **Cancer Surv** 1996;26:237–49 (43 ref.)

Detection of melanoma cells in peripheral blood using reverse transcription polymerase chain reaction assay for tyrosinase mRNA. Jung FA, et al. **Cancer Surv** 1996;26:251–65 (38 ref.)

Molecular genetics of human non-melanoma skin cancer. Quinn AG. **Cancer Surv** 1996;26:89–114

Processing of three different types of DNA damage in cell lines of a cutaneous squamous cell carcinoma progression model. Diem C, et al. **Carcinogenesis** 1997 Apr;18(4):657–62

The role of UV-B light in skin carcinogenesis through the analysis of p53 mutations in squamous cell carcinomas of hairless mice. Dumaz N, et al. **Carcinogenesis** 1997 May; 18(5):897–904

Association of tumor development with increased cellular proliferation and transgene overexpression, but not c-Ha-ras mutations, in v-Ha-ras transgenic Tg.AC mice. Hansen LA, et al. **Carcinogenesis** 1996 Sep;17(9):1825–33

Multiple cutaneous basal cell carcinomas: glutathione S-transferase (GSTM1, GSTT1) and cytochrome P450 (CYP2D6, CYP1A1) polymorphisms influence tumour numbers and accrual. Lear JT, et al. **Carcinogenesis** 1996 Sep;17(9):1891–6

Transplacental mutagenicity of cisplatin: H-ras codon 12 and 13 mutations in skin tumors of SENCAR mice. Munoz EF, et al. **Carcinogenesis** 1996 Dec;17(12):2741–5

Genetics of chemical carcinogenesis--III. Tissue-specificity of the genes controlling susceptibility and resistance to skin carcinogenesis in the mouse. Saran A, et al. **Carcinogenesis** 1996 Nov;17(11):2463–8

Defective transcription-coupled repair in Cockayne syndrome B mice is associated with skin cancer predisposition. van der Horst GT, et al. **Cell** 1997 May 2;89(3):425–35

Multigenic control of skin tumour development in mice. Nagase H, et al. **Ciba Found Symp** 1996;197:156–68; discussion 168–80 (85 ref.)

Generalized endemic Kaposi's sarcoma. Coleman R, et al. **Clin Exp Dermatol** 1995 Nov;20(6):471–3

Molecular genetic approaches to non-melanoma and melanoma skin cancer. Rees JL, et al. **Clin Exp Dermatol** 1996 Jul;21(4):253–62 (141 ref.)

Use of microgenomic technology for analysis of alterations in DNA copy number and gene expression in malignant melanoma. Trent JM, et al. **Clin Exp Immunol** 1997 Jan; 107 Suppl 1:33–40

The expression of p53 in patients with coexistent breast carcinoma and malignant melanoma. Barnes N, et al. **Clin Oncol (R Coll Radiol)** 1996;8(3):185–6

Synergistic interactions between XPC and p53 mutations in double-mutant mice: neural tube abnormalities and accelerated UV radiation-induced skin cancer. Cheo DL, et al. **Curr Biol** 1996 Dec 1;6(12):1691–4

Familial leiomyomata. Vellanki LS, et al. **Cutis** 1996 Jul; 58(1):80–2 (9 ref.)

Translocation, t(17;22)(q22;q13), in dermatofibrosarcoma protuberans: a new tumor-associated chromosome rearrangement. Pedeutour F, et al. **Cytogenet Cell Genet** 1996;72(2–3):171–4

The molecular basis of xeroderma pigmentosum. Copeland NE, et al. **Dermatol Surg** 1997 Jun;23(6):447–55 (52 ref.)

Clinical-basic science connection [editorial] Miller SJ. **Dermatol Surg** 1997 Jul;23(7):515–6

Cancer proneness of linear porokeratosis may be explained by allelic loss. Happle R. **Dermatology** 1997;195(1):20–5 (73 ref.)

Characterization of the nuclear deoxyribonucleic acid content and nuclear morphometry in 71 primary cutaneous melanomas. Renard N, et al. **Dermatology** 1997; 194(4):318–24

Patched gene linked to skin cancer [news] **Environ Health Perspect** 1996 Oct;104(10):1026

Deletion mapping of the short arm of chromosome 3 in Merkel cell carcinoma. Leonard JH, et al. **Genes Chromosomes Cancer** 1996 Feb;15(2):102–7

Loss of heterozygosity of chromosome 13 in Merkel cell carcinoma. Leonard JH, et al. **Genes Chromosomes Cancer** 1997 Sep;20(1):93–7

Cellular fibrous histiocytoma of the skin: evidence of a clonal process with different karyotype from dermatofibrosarcoma. Vanni R, et al. **Genes Chromosomes Cancer** 1997 Apr;18(4):314–7

Hereditary multiple benign cystic epithelioma (multiple trichoepithelioma) with onset at early age. Correa-Cerro LS, et al. **Genet Couns** 1997;8(2):83–6

Giant congenital nevocellular nevus and natal teeth. Karthikeyan G, et al. **Indian Pediatr** 1996 May;33(5):417–9

p16/CDKN2 and CDK4 gene mutations in sporadic melanoma development and progression. Piccinin S, et al. **Int J Cancer** 1997 Feb 20;74(1):26–30

p53 mutation spectrum in Japanese Bowen's disease suggests a role for mutagens other than ultraviolet light. Takata M, et al. **Int J Cancer** 1997 May 2;71(3):370–2

Loss of expression of the p16INK4/CDKN2 gene in cutaneous malignant melanoma correlates with tumor cell proliferation and invasive stage. Talve L, et al. **Int J Cancer** 1997 Jun 20;74(3):255–9

Target of skin tumorigenesis: cyclin D1-cdk4. Inohara S, et al. **Int J Dermatol** 1996 Sep;35(9):609–13 (59 ref.)

Generalized epidermolytic hyperkeratosis in a child born to a parent with systematized epidermolytic linear epidermal nevus. Reddy BS, et al. **Int J Dermatol** 1997 Mar; 36(3):198–200

Molecular analysis of clonality in Kaposi's sarcoma. Delabesse E, et al. **J Clin Pathol** 1997 Aug;50(8):664–8

Numerical aberrations of chromosome 7 detected in 15 microns paraffin-embedded tissue sections of primary cutaneous melanomas by fluorescence in situ hybridization and confocal laser scanning microscopy. D'Alessandro I, et al. **J Cutan Pathol** 1997 Feb;24(2):70–5

Comparative genomic hybridization (CGH) discloses chromosomal and subchromosomal copy number changes in Merkel cell carcinomas. Härle M, et al. **J Cutan Pathol** 1996 Oct;23(5):391–7

Expression of the nm23 metastasis-suppressor gene product in skin tumors. Kanitakis J, et al. **J Cutan Pathol** 1997 Mar; 24(3):151–6

Identification of aneuploidy in recurrent clear cell hidradenoma by DNA image cytometry (ICM-DNA). Kiehl P, et al. **J Cutan Pathol** 1997 May;24(5):314–21

The pathogenesis of large cell transformation in cutaneous T-cell lymphoma is not associated with t(2;5)(p23;q35) chromosomal translocation. Li G, et al. **J Cutan Pathol** 1997 Aug;24(7):403–8

Overexpression of the cyclin-dependent kinase inhibitor p21(WAF1/CIP1) in human cutaneous malignant melanoma. Trotter MJ, et al. **J Cutan Pathol** 1997 May; 24(5):265–71

Interphase cytogenetic demonstration of chromosome 9 loss in thick melanomas. Wolfe KQ, et al. **J Cutan Pathol** 1997 Aug;24(7):398–402

p53 gene mutation analysis in porokeratosis and porokeratosis-associated squamous cell carcinoma. Ninomiya Y, et al. **J Dermatol Sci** 1997 Mar;14(3):173–8

Human collagenase-3 is expressed in malignant squamous epithelium of the skin. Airola K, et al. **J Invest Dermatol** 1997 Aug;109(2):225–31

Molecular analysis of the immunoglobulin VH gene rearrangement in a primary cutaneous immunoblastic B-cell lymphoma by micromanipulation and single-cell PCR. Gellrich S, et al. **J Invest Dermatol** 1997 Oct; 109(4):541–5

The gene for multiple familial trichoepithelioma maps to chromosome 9p21. Harada H, et al. **J Invest Dermatol** 1996 Jul;107(1):41–3

Infrequent mutation of p16INK4 in sporadic melanoma [see comments] Healy E, et al. **J Invest Dermatol** 1996 Sep; 107(3):318–21. Comment in: J Invest Dermatol 1997 Jun;108(6):950.

Further evidence for ultraviolet light induction of CDKN2 (p16INK4) mutations in sporadic melanoma in vivo [letter; comment] Herbst RA, et al. **J Invest Dermatol** 1997 Jun; 108(6):950. Comment on: J Invest Dermatol 1996 Sep;107(3):318–21.

HLA-DR5 and DQB1*03 class II alleles are associated with cutaneous T-cell lymphoma. Jackow CM, et al. **J Invest Dermatol** 1996 Sep;107(3):373–6

Chromosomal abnormalities in cutaneous T-cell lymphoma and in its premalignant conditions as detected by G-banding and interphase cytogenetic methods. Karenko L, et al. **J Invest Dermatol** 1997 Jan;108(1):22–9

p53 mutation in squamous cell carcinomas from psoriasis patients treated with psoralen + UVA (PUVA). Nataraj AJ, et al. **J Invest Dermatol** 1997 Aug;109(2):238–43

Comet assay demonstrates a higher ultraviolet B sensitivity to DNA damage in dysplastic nevus cells than in common melanocytic nevus cells and foreskin melanocytes. Noz KC, et al. **J Invest Dermatol** 1996 Jun;106(6):1198–202

Radiation-induced chromatid breaks and DNA repair in blood lymphocytes of patients with dysplastic nevi and/or cutaneous melanoma. Sanford KK, et al. **J Invest Dermatol** 1997 Oct;109(4):546–9

Search for genes that suppress cancer metastasis [editorial; comment] Fidler IJ, et al. **J Natl Cancer Inst** 1996 Dec 4;88(23):1700–3. Comment on: J Natl Cancer Inst 1996 Dec 4;88(23):1731–7.

Developmental genes and cancer: role of patched in basal cell carcinoma of the skin. Gailani MR, et al. **J Natl Cancer Inst** 1997 Aug 6;89(15):1103–9 (98 ref.)

Screening for CDKN2A mutations in hereditary melanoma [editorial; comment] Goldstein AM, et al. **J Natl Cancer Inst** 1997 May 21;89(10):676–8 (33 ref.). Comment on: J Natl Cancer Inst 1997 May 21;89(10):697–702.

Rare syndrome yields important piece of gene puzzle [news] Keoun B. **J Natl Cancer Inst** 1996 Nov 6;88(21):1516–8

Screening of germline mutations in the CDKN2A and CDKN2B genes in Swedish families with hereditary cutaneous melanoma [see comments] Platz A, et al. **J Natl Cancer Inst** 1997 May 21;89(10):697–702. Comment in: J Natl Cancer Inst 1997 May 21;89(10):676–8.

Hereditary neurocutaneous angiomatosis. Report of four cases. Leblanc R, et al. **J Neurosurg** 1996 Dec; 85(6):1135–42

Chronic ultraviolet exposure-induced p53 gene alterations in Sencar mouse skin carcinogenesis model. Tong Y, et al. **J Toxicol Environ Health** 1997 Jun 27;51(3):219–34

Deletion of the p53 gene in a patient with aggressive burn scar carcinoma. Harland DL, et al. **J Trauma** 1997 Jan; 42(1):104–7

Genetics of cutaneous melanoma and nevi. Greene MH. **Mayo Clin Proc** 1997 May;72(5):467–74 (75 ref.)

Cutaneous malignant melanoma in women is uncommonly associated with a family history of melanoma in first-degree relatives: a case-control study. Cutler C, et al. **Melanoma Res** 1996 Dec;6(6):435–40

Apparent anticipation in familial melanoma. Goldstein AM, et al. **Melanoma Res** 1996 Dec;6(6):441–6

Analysis of the E-cadherin and P-cadherin promoters in murine keratinocyte cell lines from different stages of mouse skin carcinogenesis. Faraldo ML, et al. **Mol Carcinog** 1997 Sep;20(1):33–47

New strains of inbred SENCAR mice with increased susceptibility to induction of papillomas and squamous cell carcinomas in skin. Hennings H, et al. **Mol Carcinog** 1997 Sep;20(1):143–50

Altered expression of insulin-like growth factor I and its receptor during multistage carcinogenesis in mouse skin. Rho O, et al. **Mol Carcinog** 1996 Oct;17(2):62–9

Uncoordinated regulation of mRNA expression of the three isoforms of transforming growth factor-beta in the mouse skin carcinogenesis model. Rundhaug JE, et al. **Mol Carcinog** 1997 Feb;18(2):115–26

Comparison of chemical carcinogen skin tumor induction efficacy in inbred, mutant, and hybrid strains of mice: morphologic variations of induced tumors and absence of a papillomavirus cocarcinogen. Sundberg JP, et al. **Mol Carcinog** 1997 Sep;20(1):19–32

Decreases in phorbol ester-induced papilloma development in v-Ha-ras transgenic TG.AC mice during reduced gene dosage of bcl-2. Trempus CS, et al. **Mol Carcinog** 1997 Sep;20(1):68–77

Spontaneous and induced sister chromatid exchanges and delayed cell proliferation in peripheral lymphocytes of Bowen's disease patients and matched controls of arseniasis-hyperendemic villages in Taiwan. Hsu YH, et al. **Mutat Res** 1997 Jun;386(3):241–51

Radiosensitivity of blood lymphocytes from basocellular carcinoma patients, as detected by the micronucleus assay. Ochi-Lohmann TH, et al. **Mutat Res** 1996 Oct 25; 357(1–2):97–106

Deregulation of the platelet-derived growth factor B-chain gene via fusion with collagen gene COL1A1 in dermatofibrosarcoma protuberans and giant-cell fibroblastoma Simon MP, et al. **Nat Genet** 1997 Jan; 15(1):95–8

Sunlight and skin cancer: inhibition of p53 mutations in UV-irradiated mouse skin by sunscreens. Ananthaswamy HN, et al. **Nat Med** 1997 May;3(5):510–4

Overexpression of insulin-like growth factor-1 induces hyperplasia, dermal abnormalities, and spontaneous tumor formation in transgenic mice. Bol DK, et al. **Oncogene** 1997 Apr 10;14(14):1725-34

Expression of a binding protein for FGF is associated with epithelial development and skin carcinogenesis. Kurtz A, et al. **Oncogene** 1997 Jun 5;14(22):2671-81

Molecular pathology in basal cell cancer with p53 as a genetic marker. Pontén F, et al. **Oncogene** 1997 Aug 28; 15(9):1059-67

Loss of p21CIP1/WAF1 does not recapitulate accelerated malignant conversion caused by p53 loss in experimental skin carcinogenesis. Weinberg WC, et al. **Oncogene** 1997 Aug 7;15(6):685-90

Loss of heterozygosity on murine chromosome 6 in two-stage carcinogenesis: evidence for a conserved tumor suppressor gene. Zenklusen JC, et al. **Oncogene** 1997 Jan 9;14(1):109-14

Immunohistochemical detection of p53 in melanomas with rare p53 gene mutations is associated with mdm-2 overexpression. Poremba C, et al. **Oncol Res** 1995; 7(7-8):331-9

Oncogenes and tumor suppressor genes in cutaneous malignant melanoma. Albino AP, et al.
Photochem Photobiol 1996 Apr;63(4):412-8 (79 ref.)

Oncogenes and tumor suppressor genes in photocarcinogenesis. Ananthaswamy HN, et al.
Photochem Photobiol 1996 Apr;63(4):428-32 (36 ref.)

Polymorphism in detoxifying enzymes and susceptibility to skin cancer. Lear J, et al. **Photochem Photobiol** 1996 Apr; 63(4):424-8 (24 ref.)

Gene expression in skin tumors induced in hairless mice by chronic exposure to ultraviolet B irradiation. Sato H, et al. **Photochem Photobiol** 1997 May;65(5):908-14

Tumor suppressor gene mutations and photocarcinogenesis. Ziegler A, et al. **Photochem Photobiol** 1996 Apr;63(4):432-5 (38 ref.)

Signature p53 mutation at DNA cross-linking sites in 8-methoxypsoralen and ultraviolet A (PUVA)-induced murine skin cancers. Nataraj AJ, et al.
Proc Natl Acad Sci U S A 1996 Jul 23;93(15):7961-5

Genetic susceptibility to tumor progression in mouse skin carcinogenesis. Stern MC, et al. **Prog Clin Biol Res** 1996; 395:47-55 (19 ref.)

Repair of directly and indirectly UV-induced DNA lesions and of DNA double-strand breaks in cells from skin cancer-prone patients with the disorders dysplastic nevus syndrome or basal cell nevus syndrome. Rünger TM, et al. **Recent Results Cancer Res** 1997;143:337-51

Nevoid basal-cell syndrome: literature review and case report in a family. José Tincani A, et al.
Rev Paul Med 1995 May-Jun;113(3):917-21 (19 ref.)

Basal cell carcinomas in mice overexpressing sonic hedgehog. Oro AE, et al. **Science** 1997 May 2;276(5313):817-21

A review of inherited predisposition to melanoma. Cannon-Albright LA, et al. **Semin Oncol** 1996 Dec; 23(6):667-72 (66 ref.)

Clinical implications of cytogenetic abnormalities in melanoma. Nelson MA, et al. **Surg Clin North Am** 1996 Dec;76(6):1257-71 (65 ref.)

HLA class I polymorphism and the susceptibility to malignant melanoma. Muto M, et al. **Tissue Antigens** 1996 May;47(5):447-9

A transgenic mouse model of skin cancer in XPA-deficient humans. O'Neill TP. **Toxicol Pathol** 1996 Sep-Oct; 24(5):642-3

p53 abnormalities are rare events in neuroendocrine (Merkel cell) carcinoma of the skin. An immunohistochemical and SSCP analysis. Schmid M, et al. **Virchows Arch** 1997 Mar; 430(3):233-7

["Blue rubber bleb nevus syndrome"--or Bean's syndrome] Bonde CT, et al. **Ugeskr Laeger** 1997 Jun 30;159(27):4274-5 (Eng. Abstr.) **(Dan)**

[DNA lesions: mechanisms of recognition and repair] Sarasin A. **Bull Cancer** 1997 May;84(5):467-72 (Eng. Abstr.) **(Fre)**

[Cell cycle control, genetic instability and cancer] Funk JO, et al. **Hautarzt** 1997 Mar;48(3):157-65 (62 ref.) (Eng. Abstr.) **(Ger)**

[Type 1 neurofibromatosis. Molecular and clinical aspects] Schweigerer L. **Hautarzt** 1996 Aug;47(8):591-8 (41 ref.) (Eng. Abstr.) **(Ger)**

[Neurofibroma with contralateral linear hyperpigmentation along Blaschko lines] Winter T, et al. **Hautarzt** 1997 Jan; 48(1):51-4 (Eng. Abstr.) **(Ger)**

[Detection of clonality of cutaneous T-cell lymphomas using polymerase chain reaction] Graf A, et al. **Pathologe** 1996 Nov;17(6):446-50 (Eng. Abstr.) **(Ger)**

[Molecular biology of melanoma--1997] Zlotogorski A, et al. **Harefuah** 1997 Jun 15;132(12):855-8 (33 ref.) **(Heb)**

[Dyscromic neurocutaneous syndromes] Sola-Casas MA, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S259-64 (23 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

Historical aspects of nonmelanoma skin cancer. Jackson R, et al. **Clin Dermatol** 1995 Nov-Dec;13(6):517-25

Local unorthodox healers of cancer in the Appalachian south. Cavender A. **J Community Health** 1996 Oct;21(5):359-74

Gender, geography and socio-economic status in the diffusion of malignant melanoma risk. Aase A, et al.
Soc Sci Med 1996 Jun;42(12):1621-37

[Historical development of photodynamic therapy] Kick G, et al. **Hautarzt** 1996 Aug;47(8):644-9 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Molecular detection of tumor-associated antigens shared by human cutaneous melanomas and gliomas. Chi DD, et al. **Am J Pathol** 1997 Jun;150(6):2143-52

Presence of the T-cell activation marker OX-40 on tumor infiltrating lymphocytes and draining lymph node cells from patients with melanoma and head and neck cancers. Vetto JT, et al. **Am J Surg** 1997 Sep;174(3):258-65

Immune response to polyvalent melanoma cell vaccine in AJCC stage III melanoma: an immunologic survival model. Jones RC, et al. **Ann Surg Oncol** 1996 Sep;3(5):437-45

CD40 expression in epidermal tumors. Viac J, et al.
Anticancer Res 1997 Jan-Feb;17(1B):569-72

Is favorable prognosis of squamous cell carcinoma of the skin due to efficient immune surveillance? [editorial; comment] Smolle J, et al. **Arch Dermatol** 1997 May; 133(5):645-6. Comment on: Arch Dermatol 1997 May;133(5):585-90.

T-cell population of primary and secondary cutaneous B-cell lymphomas does not express the cutaneous lymphocyte-associated antigen (CLA). Marti RM, et al. **Arch Dermatol Res** 1997 May;289(6):327-30

Demonstration of frequent occurrence of clonal T cells in the peripheral blood of patients with primary cutaneous T-cell lymphoma. Muche JM, et al. **Blood** 1997 Aug 15; 90(4):1636-42

Demonstration of antibodies to human T-cell lymphotropic virus-I tax in patients with the cutaneous T-cell lymphoma, mycosis fungoides, who are seronegative for antibodies to the structural proteins of the virus. Pancake BA, et al. **Blood** 1996 Oct 15;88(8):3004-9

Interleukin-7 receptor expression in cutaneous T-cell lymphomas. Bagot M, et al. **Br J Dermatol** 1996 Oct; 135(4):572-5

CD44 expression in melanocytic lesions: a marker of malignant progression? Harwood CA, et al.
Br J Dermatol 1996 Dec;135(6):876-82

Immunoreactivity of glycoprotein IIb is present in metastasized but not in non-metastasized primary malignant melanoma. Puerschel WC, et al. **Br J Dermatol** 1996 Dec; 135(6):883-7

Autoantibodies to tyrosinase: the bridge between melanoma and vitiligo. Fishman P, et al. **Cancer** 1997 Apr 15; 79(8):1461-4

Generation of primary tumor-specific cytotoxic T lymphocytes from autologous and human lymphocyte antigen class I-matched allogeneic peripheral blood lymphocytes by B7 gene-modified melanoma cells. Yang S, et al. **Cancer Res** 1997 Apr 15;57(8):1561-8

Chemical carcinogens and antigens contribute to cutaneous tumor promotion by depleting epidermal Langerhans cells. Qu M, et al. **Carcinogenesis** 1997 Jun;18(6):1277-9

Recognition of gp43 tumor-associated antigen peptide by both HLA-A2 restricted CTL lines and antibodies from melanoma patients. Takahashi T, et al. **Cell Immunol** 1997 Jun 15;178(2):162-71

Dermatopathologic advances in clinical research. The expression of antibody to CD34 in mucocutaneous lesions. off Cohen PR, et al. **Dermatol Clin** 1997 Jan;15(1):159-76 (76 ref.)

What of the clinical significance of the cryoimmune response? [letter; comment] Ablin RJ. **Dermatol Surg** 1997 Jun; 23(6):499-500. Comment on: Dermatol Surg 1996 Oct;22(10):854-8.

High CD44 surface expression on primary tumours of malignant melanoma correlates with increased metastatic risk and reduced survival. Dietrich A, et al.
Eur J Cancer 1997 May;33(6):926-30

Significant reduction of human monocyte chemotactic response to monocyte-chemotactic protein 1 in patients with primary and metastatic malignant melanoma. Müller R, et al. **Exp Dermatol** 1997 Apr;6(2):81-6

Tumor antigen expression in compound dysplastic nevi and superficial spreading melanoma defined by a panel of nevomelanoma monoclonal antibodies. Lazzaro B, et al. **Hybridoma** 1996 Apr;15(2):141-6

Melanoma immunotherapy: new dreams or solid hopes? Maio M, et al. **Immunol Today** 1996 Sep;17(9):405-7

Growth of transplanted tumours in mice treated with macrophages and their products. Stern K, et al.
In Vivo 1995 Sep-Oct;9(5):479-88

In situ T-cell responses in a primary regressive melanoma and subsequent metastases: a comparative analysis. Carcelain G, et al. **Int J Cancer** 1997 Jul 17;72(2):241-7

Dendritic epidermal T-cell involvement in induction of CD8+ T cell-mediated immunity against an ultraviolet radiation-induced skin tumor. Cavanagh LL, et al.
Int J Cancer 1997 Jan 6;70(1):98-105

Sunscreen lotions prevent ultraviolet radiation-induced suppression of antitumor immune responses. Roberts LK, et al. **Int J Cancer** 1997 Mar 28;71(1):94-102

Ca(2+)-binding proteins S100A6 and S100B in primary cutaneous melanoma. Böni R, et al. **J Cutan Pathol** 1997 Feb;24(2):76-80

Immune-associated cells in basal cell carcinomas of skin. Deng JS, et al. **J Cutan Pathol** 1996 Apr;23(2):140-6

CD44 and melanocytic tumors: a possible role for standard CD44 in the epidermotropic spread of melanoma. Fernández-Figueras MT, et al. **J Cutan Pathol** 1996 Apr; 23(2):133-9

Distribution of CD44 variant isoforms in human skin: differential expression in components of benign and malignant epithelia. Hale LP, et al. **J Cutan Pathol** 1995 Dec;22(6):536-45

Intradermal and subcutaneous leiomyosarcoma: a clinicopathological and immunohistochemical study of 41 cases. Jensen ML, et al. **J Cutan Pathol** 1996 Oct; 23(5):458-63

Cutaneous leiomyomas lack estrogen and progesterone receptor immunoreactivity. McGinley KM, et al.
J Cutan Pathol 1997 Apr;24(4):241-5

Nuclear morphometry, immunohistochemical staining with Ki-67 antibody and mitotic index in the assessment of proliferative activity and prognosis of primary malignant melanomas of the skin. Talve LA, et al.
J Cutan Pathol 1996 Aug;23(4):335-43

Tissue distribution of a melanoma-associated antigen immunogenic in patients with melanoma as analyzed by polyclonal antibodies to recombinant peptide antigen. Kako S, et al. **J Dermatol** 1996 Apr;23(4):230-7

Kaposi's sarcoma associated with lung cancer and immunosuppression. Kato N, et al. **J Dermatol** 1996 Aug; 23(8):564-71

Immunohistochemical detection of Ki-67 in epithelial skin tumors in formalin-fixed paraffin-embedded tissue sections using a new monoclonal antibody (MIB-1). Matsuta M, et al. **J Dermatol** 1996 Mar;23(3):147-52

Kinetics of immunological parameters in patients with malignant melanoma treated with hyperthermic isolated limb perfusion. Nakayama J, et al. **J Dermatol Sci** 1997 May;15(1):1-8

Proliferating cell nuclear antigen (PCNA); prognostic value in the clinical recurrence of primary basal cell carcinoma. Toth DP, et al. **J Dermatol Sci** 1996 Jan;11(1):36-40

Enhanced growth of murine melanoma in ultraviolet-irradiated skin is associated with local inhibition of immune effector mechanisms. Donawho CK, et al.
J Immunol 1996 Jul 15;157(2):781-6

Quantitation of the density of cell surface carbohydrate antigens on cancer cells with a sensitive cell-suspension ELISA. Ravindranath MH, et al. **J Immunol Methods** 1996 Oct 16;197(1-2):51-67

Adjuvant immunotherapy in malignant melanoma: impact of antibody formation against interferon-alpha on immunoparameters in vivo. Davis-Daneshfar A, et al.
J Immunother 1997 May;20(3):208-13

Functional class II antigen presentation pathway in metastatic melanoma cell lines [comment] Akporiaye ET, et al.
J Immunother Emphasis Tumor Immunol 1996 Nov; 19(6):398. Comment on: J Immunother Emphasis Tumor Immunol 1996 Nov;19(6):387-97.

MHC class II-mediated antigen presentation by melanoma cells [see comments] Brady MS, et al.
J Immunother Emphasis Tumor Immunol 1996 Nov; 19(6):387-97. Comment in: J Immunother Emphasis Tumor Immunol 1996 Nov;19(6):398.

HLA class I antigens in Japanese patients with melanoma. Kageshita T, et al.
J Immunother Emphasis Tumor Immunol 1996 Nov; 19(6):428-32

Secretion of both IL-2 and IL-4 by tumor cells results in rejection and immunity. Strome SE, et al.
J Immunother Emphasis Tumor Immunol 1996 Jan; 19(1):21-32

The immune response to class I-associated tumor-specific cutaneous T-cell lymphoma antigens. Berger CL, et al.
J Invest Dermatol 1996 Sep;107(3):392-7

Relation between HLA antigens and skin cancer in renal transplant recipients in Queensland, Australia. Bouwes Bavinck JN, et al. **J Invest Dermatol** 1997 May; 108(5):708-11

Induction of specific cytotoxic T lymphocytes against autologous brain tumor by crossreactive allo-tumor cell stimulation. Saitoh S, et al. **Jpn J Cancer Res** 1997 Mar; 88(3):289-95

Clinical responses and lymphoid infiltrates in metastatic melanoma following treatment with intralesional GM-CSF. Si Z, et al. **Melanoma Res** 1996 Jun;6(3):247-55

CD99 (p30/32MIC2) immunoreactivity in the diagnosis of leukemia cutis. Dorfman DM, et al. **Mod Pathol** 1997 Apr; 10(4):283-8

Transplantation analyses of the immunogenicity of epidermal tumors generated in murine skin two-stage carcinogenesis protocols. Reiners JJ Jr, et al. **Mol Carcinog** 1997 Sep; 20(1):48-57

Immunohistochemical expression of p53 protein, mitotic index and nuclear morphometry in primary malignant melanoma of the skin. Talve L, et al. **Pathol Res Pract** 1996 Aug;192(8):825-33

Natural killer cell activity during UVR-induced skin tumor formation in the Skh hairless mouse. Steerenberg PA, et al. **Photochem Photobiol** 1997 Jan;65(1):150-4

In vivo accumulation of the same anti-melanoma T cell clone in two different metastatic sites. Hishii M, et al.
Proc Natl Acad Sci U S A 1997 Feb 18;94(4):1378-83

Effect of interleukin 12 on tumor induction by 3-methylcholanthrene. Noguchi Y, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11798-801

Immunophenotypic characterization of tumor infiltrating lymphocytes and peripheral blood lymphocytes isolated

from melanomatous and non-melanomatous Sinclair miniature swine. Morgan CD, et al. **Vet Immunol Immunopathol** 1996 Dec;55(1-3):189-203

[CD7, HLA-DR, CD38 positive acute undifferentiated leukemia with subcutaneous tumor and thymoma] Doi T, et al. **Rinsho Ketsueki** 1996 Aug;37(8):676-81 (Eng. Abstr.) **(Jpn)**

[The immunocompetent structures of the skin and their role in the development of primary skin lymphomas (editorial)] Vavilov AM, et al. **Arkh Patol** 1996 Nov-Dec;58(6):7-12 (52 ref.) (Eng. Abstr.) **(Rus)**

[A comparison of the morphofunctional characteristics of the peripheral blood lymphocytes and the immune status of patients with malignant melanoma of the skin] Naleskina LA, et al. **Tsitol Genet** 1996 Sep-Oct;30(5):16-22 (Eng. Abstr.) **(Rus)**

METABOLISM

Insulin inhibits tyrosinase activity and 5-S-cysteinyldopa formation in human melanoma cells. Benathan M, et al. **Acta Derm Venereol** 1997 Jul;77(4):281-4

The vitronectin receptor alpha-V beta-3, contrary to ICAM-1, is not modulated by interferon-gamma and tumour necrosis factor-alpha on melanoma cell lines. Boccaletti V, et al. **Acta Derm Venereol** 1996 Jul; 76(4):269-73

Interleukin-8 immunoreactivity in malignant tumours of the skin. Bornscheuer E, et al. **Acta Derm Venereol** 1996 May; 76(3):210-3

Immunohistochemical detection of cathepsins in Merkel cell carcinomas [letter] Thewes M, et al. **Acta Derm Venereol** 1997 Jul;77(4):328-9

Expression of nerve growth factor and epidermal growth factor receptors in neural nevi with nevic corpuscles. Argenyi ZB, et al. **Am J Dermatopathol** 1996 Oct; 18(5):460-4

Epidermolytic acanthomas: clinical characteristics and immunohistochemical features. Cohen PR, et al. **Am J Dermatopathol** 1997 Jun;19(3):232-41

Tenascin expression in cutaneous fibrohistiocytic tumors. Immunohistochemical investigation of 24 cases. Franchi A, et al. **Am J Dermatopathol** 1996 Oct;18(5):454-9

Quantitative morphology of collagen fibers in cutaneous malignant melanoma and melanocytic nevus. Smolle J, et al. **Am J Dermatopathol** 1996 Aug;18(4):358-63

Ectopic G-CSF expression in human melanoma lines marks a trans-dominant pathway of tumor progression. Safarians S, et al. **Am J Pathol** 1997 Mar;150(3):949-62

Differentiation-associated overexpression of the cyclin-dependent kinase inhibitor p21waf-1 in human cutaneous squamous cell carcinoma. Tron VA, et al. **Am J Pathol** 1996 Oct;149(4):1139-46

Expression of gelatinase B and the extracellular matrix metalloproteinase inducer EMMPRIN in benign and malignant pigment cell lesions of the skin. van den Oord JJ, et al. **Am J Pathol** 1997 Sep;151(3):665-70

Detection of the p35 and p40 subunits of interleukin-12 in melanoma and bladder cancer cell lines. Stanley AJ, et al. **Ann N Y Acad Sci** 1996 Oct 31;795:384-6

p53, WAF1/CIP1 and mdm2 expression in skin lesions associated with human papillomavirus and human immunodeficiency virus. Arany I, et al. **Anticancer Res** 1997 Mar-Apr;17(2B):1281-5

Decreasing resistance during fast infusion of a subcutaneous tumor. Dillehay LE. **Anticancer Res** 1997 Jan-Feb; 17(1A):461-6

Bcl-2 overexpression in basaloid proliferations overlying dermatofibromas and basal cell carcinomas. Rossen K, et al. **APMIS** 1997 Jan;105(1):35-40

Topical application of a first porphycene dye for photodynamic therapy--penetration studies in human perilesional skin and basal cell carcinoma. Karrer S, et al. **Arch Dermatol Res** 1997 Feb;289(3):132-7

Localization of annexin I (lipocortin I, p35) mRNA in normal and diseased human skin by in situ hybridization. Sato-Matsumura KC, et al. **Arch Dermatol Res** 1996 Sep; 288(10):565-9

Expression of vascular endothelial growth factor in normal epidermis, epithelial tumors and cultured keratinocytes. Viac J, et al. **Arch Dermatol Res** 1997 Feb;289(3):158-63

The expression of cytokines by an established basal cell carcinoma cell line (BCC-1/KMC) compared with cultured normal keratinocytes. Yen HT, et al. **Arch Dermatol Res** 1996 Mar;288(3):157-61

Expression and structural features of endoglin (CD105), a transforming growth factor beta1 and beta3 binding protein, in human melanoma. Altomonte M, et al. **Br J Cancer** 1996 Nov;74(10):1586-91

Enhanced expression of vascular endothelial growth factor in metastatic melanoma. Salven P, et al. **Br J Cancer** 1997; 76(7):930-4

Altered expression of the hemidesmosome-anchoring filament complex proteins in basal cell carcinoma: possible role in the origin of peritumoral lacunae. Bahadoran P, et al. **Br J Dermatol** 1997 Jan;136(1):35-42

Expression of platelet-derived growth factor (PDGF)-A, PDGF-B and the PDGF-alpha receptor, but not the PDGF-beta receptor, in human malignant melanoma in vivo. Barnhill RL, et al. **Br J Dermatol** 1996 Dec; 135(6):898-904

Expression of adhesion molecules in pagetoid reticulosis (Woringer-Kolopp disease). Drillenburg P, et al. **Br J Dermatol** 1997 Apr;136(4):613-6

Coexpression of p21Waf1/Cip1 and p53 in sun-exposed normal epidermis, but not in neoplastic epidermis [see comments] Inohara S, et al. **Br J Dermatol** 1996 Nov; 135(5):717-20. Comment in: Br J Dermatol 1997 May;136(5):803.

Altered distribution and synthesis of laminin-5 (kalinin) in oral lichen planus, epithelial dysplasias and squamous cell carcinomas. Kainulainen T, et al. **Br J Dermatol** 1997 Mar; 136(3):331-6

Proliferation markers Ki67 and PCNA in cutaneous squamous cell carcinomas: lack of prognostic value [letter] Kanitakis J, et al. **Br J Dermatol** 1997 Apr;136(4):643-4

Functional thrombomodulin expression on epithelial skin tumours as a differentiation marker for suprabasal keratinocytes. Mizutani H, et al. **Br J Dermatol** 1996 Aug; 135(2):187-93

Metallothionein expression in basaloid proliferations overlying dermatofibromas and in basal cell carcinomas. Rossen K, et al. **Br J Dermatol** 1997 Jan;136(1):30-4

Flow cytometric analysis of p53 oncoprotein expression in cutaneous melanoma. Ross DA, et al. **Br J Surg** 1997 Jun; 84(6):803-7

The effect of TGF-beta 1 on cell proliferation and proteoglycan production in human melanoma cells depends on the degree of cell differentiation. Heredia A, et al. **Cancer Lett** 1996 Dec 3;109(1-2):39-47

Pharmacokinetic studies on 5-aminolevulinic acid-induced protoporphyrin IX accumulation in tumours and normal tissues. Heyerdahl H, et al. **Cancer Lett** 1997 Jan 30; 112(2):225-31

Heterogeneous expression of immunotherapy candidate proteins gp100, MART-1, and tyrosinase in human melanoma cell lines and in human melanocytic lesions. de Vries TJ, et al. **Cancer Res** 1997 Aug 1;57(15):3223-9

Clinical significance of alpha(v)beta3 integrin and intercellular adhesion molecule-1 expression in cutaneous malignant melanoma lesions. Natali PG, et al. **Cancer Res** 1997 Apr 15;57(8):1554-60

Human patched (PTCH) mRNA is overexpressed consistently in tumor cells of both familial and sporadic basal cell carcinoma. Undén AB, et al. **Cancer Res** 1997 Jun 15;57(12):2336-40

Lack of expression of dopamine D2 receptors in malignant melanoma: evidence for interaction of iodobenzofurans with melanin. Böni R, et al. **Dermatology** 1996; 193(3):198-202

Epidermal fatty-acid-binding protein in psoriasis, basal and squamous cell carcinomas: an immunohistological study. Masouyé I, et al. **Dermatology** 1996;192(3):208-13

Expression pattern of human hair keratin basic 1 (hHb1) in hair follicle and pilomatricoma. Régnier CH, et al. **Exp Dermatol** 1997 Apr;6(2):87-90

p53 expression and proliferative activity in Bowen's disease with or without chronic arsenic exposure. Kuo TT, et al. **Hum Pathol** 1997 Jul;28(7):786-90

Translation initiation factor eIF-4A1 mRNA is consistently overexpressed in human melanoma cells in vitro. Eberle J, et al. **Int J Cancer** 1997 May 2;71(3):396-401

Dysregulated expression of transforming growth factor beta and its type-I and type-II receptors in basal-cell carcinoma. Furue M, et al. **Int J Cancer** 1997 May 16; 71(4):505-9

Expression of the co-stimulatory molecule CD40 on melanoma cells. Thomas WD, et al. **Int J Cancer** 1996 Dec 11;68(6):795-801

31P magnetic resonance spectroscopy detection of response-predictive adenosine triphosphate decrease in irradiated radiation-induced fibrosarcoma-1 tumors. Sijens PE, et al. **Invest Radiol** 1997 Jan;32(1):39-43

Relation between expression of adhesion molecules and clinical behavior in cutaneous follicle center cell lymphomas. Beljaards RC, et al. **J Am Acad Dermatol** 1997 Jul;37(1):34-40

p53 tumor suppressor gene protein expression in premalignant and malignant skin lesions of kidney transplant recipients. Gibson GE, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):924-31

Immunohistochemical characterization of dermatofibrosarcoma protuberans with practical applications for diagnosis and treatment. Haycox CL, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):438-44 (38 ref.)

p21WAF1/CIP1 expression in non-melanoma skin tumors. Ahmed NU, et al. **J Cutan Pathol** 1997 Apr;24(4):223-7

The prognostic significance of basic fibroblast growth factor in cutaneous malignant melanoma. al-Alousi S, et al. **J Cutan Pathol** 1996 Dec;23(6):506-10

Expression of basic fibroblast growth factor in desmoplastic melanoma. al-Alousi S, et al. **J Cutan Pathol** 1996 Apr; 23(2):118-25

Less expression of cyclin E in cutaneous squamous cell carcinomas than in benign and premalignant keratinocytic lesions. Bito T, et al. **J Cutan Pathol** 1997 May;24(5):305-8

The role of alpha E beta 7 integrin (CD103) and E-cadherin in epidermotropism in cutaneous T-cell lymphoma. Dietz SB, et al. **J Cutan Pathol** 1996 Aug;23(4):312-8

Correlation between clonotypic T-cell receptor beta chain variable region (TCR-V beta) gene expression and aberrant T-cell antigen expression in cutaneous T-cell lymphoma. Finn DT, et al. **J Cutan Pathol** 1996 Aug;23(4):306-11

Differences of bcl-2 protein expression between Merkel cells and Merkel cell carcinomas. Moll I, et al. **J Cutan Pathol** 1996 Apr;23(2):109-17

CD44 variant expression in cutaneous T-cell lymphoma. Orteu CH, et al. **J Cutan Pathol** 1997 Jul;24(6):342-9

The intermediate filament peripherin is expressed in cutaneous melanocytic lesions. Prieto VG, et al. **J Cutan Pathol** 1997 Mar;24(3):145-50

Expression of the mast cell growth factor interleukin-3 in melanocytic lesions correlates with an increased number of mast cells in the perilesional stroma: implications for melanoma progression. Reed JA, et al. **J Cutan Pathol** 1996 Dec;23(6):495-505

Expression of CD44 isoforms and beta 1,6-branched oligosaccharides in human malignant melanoma is correlated with tumor progression but not with metastatic potential. Seelentag WK, et al. **J Cutan Pathol** 1997 Apr; 24(4):206-11

Immunohistochemical analysis of platelet-derived growth factor and its receptors in fibrohistiocytic tumors. Taniuchi K, et al. **J Cutan Pathol** 1997 Aug;24(7):393-7

Adhesion molecule expression in normal skin and melanocytic lesions. Role of UV-irradiation and architectural characteristics in nevi. Tronnier M, et al. **J Cutan Pathol** 1997 May;24(5):278-85

Keratoacanthoma and squamous cell carcinoma: study of PCNA and Le(Y) expression. Tsuji T. **J Cutan Pathol** 1997 Aug;24(7):409-15

Alteration of human melanoma gangliosides by IFN-gamma, IL-2, and IL-4. Ando I, et al. **J Dermatol** 1996 Apr; 23(4):225-9

In vitro comparison between mouse B16 and human melanoma cell lines of the expression of ICAM-1 induced by cytokines and/or hyperthermia. Nakayama J, et al. **J Dermatol** 1997 Jun;24(6):351-60

Dermatofibroma and dermatofibrosarcoma protuberans: an immunohistochemical study reveals distinctive antigenic profiles. Hsi ED, et al. **J Dermatol Sci** 1996 Jan;11(1):1-9

Expression of p53 protein in melanoma progression. Kanoko M, et al. **J Dermatol Sci** 1996 Jun;12(2):97-103

E- and P-cadherin expression in tumor tissues and soluble E-cadherin levels in sera of patients with skin cancer. Shirahama S, et al. **J Dermatol Sci** 1996 Oct;13(1):30-6

Expression of retinoic acid receptor proteins in basal cell carcinomas: an immunohistochemical analysis. Kamradt J, et al. **J Histochem Cytochem** 1996 Dec;44(12):1415-20

Analysis of expression of the melanoma-associated antigens MART-1 and gp100 in metastatic melanoma cell lines and in in situ lesions. Marincola FM, et al. **J Immunother Emphasis Tumor Immunol** 1996 May; 19(3):192-205

Progression of mycosis fungoides is associated with increasing cutaneous expression of interleukin-10 mRNA. Asadullah K, et al. **J Invest Dermatol** 1996 Dec; 107(6):833-7

Imbalance in the antioxidant pool in melanoma cells and normal melanocytes from patients with melanoma. Picardo M, et al. **J Invest Dermatol** 1996 Sep;107(3):322-6

Stromelysin-3 mRNA associated with myofibroblasts is overexpressed in aggressive basal cell carcinoma and in dermatofibroma but not in dermatofibrosarcoma. Undén AB, et al. **J Invest Dermatol** 1996 Aug;107(2):147-53

Infantile acute monocytic leukemia with tumor formation in the skin expressing adhesion molecules as seen by electronmicroscopy. Asano T, et al. **Leuk Lymphoma** 1996 Sep;23(1-2):173-9

Interferon-inducible protein-10 and the pathogenesis of cutaneous T-cell lymphomas. Sarris AH, et al. **Leuk Lymphoma** 1996 Dec;24(1-2):103-10

Analysis of IL-2, IL-4 and their receptors in clonally-related cell lines derived from a patient with a progressive cutaneous T-cell lymphoproliferative disorder. Wasik MA, et al. **Leuk Lymphoma** 1996 Sep;23(1-2):125-36

MEL-P, a GM-CSF-producing human melanoma cell line [published erratum appears in Melanoma Res 1996 Aug;6(4):337] Ciotti P, et al. **Melanoma Res** 1996 Jun; 6(3):203-13

Characterization of interleukin-1 alpha-induced melanoma cell motility: inhibition by type I and type II receptor-blocking monoclonal antibodies. Dekker SK, et al. **Melanoma Res** 1997 Jun;7(3):223-30

Effect of retinoic acid on melanoma cell-derived factor stimulation of fibroblast glycosaminoglycan synthesis. Edward M, et al. **Melanoma Res** 1997 Jun;7(3):189-96

Investigation of oestrogen receptors, sex steroids and soluble adhesion molecules in the progression of malignant melanoma. Miller JG, et al. **Melanoma Res** 1997 Jun; 7(3):197-208

In situ expression of transforming growth factor beta is associated with melanoma progression and correlates with Ki67, HLA-DR and beta 3 integrin expression. Moretti S, et al. **Melanoma Res** 1997 Aug;7(4):313-21

HNK-1 antigens on uveal and cutaneous melanoma cell lines. Tang NE, et al. **Melanoma Res** 1996 Dec;6(6):411-8

The melanoma-specific XMEL antigen is expressed in dysplastic naevi. Tron VA, et al. **Melanoma Res** 1997 Jun; 7(3):209-13

Expression of FGF1 and FGFR1 in human melanoma tissues. Xerri L, et al. **Melanoma Res** 1996 Jun;6(3):223-30

Estrogen and progesterone receptors and anti-gross cystic disease fluid protein 15 (BRST-2) fail to distinguish metastatic breast carcinoma from eccrine neoplasms. Wallace ML, et al. **Mod Pathol** 1995 Dec;8(9):897-901

Altered glucocorticoid receptor expression and function during mouse skin carcinogenesis. Budunova IV, et al. **Mol Carcinog** 1997 Mar;18(3):177–85

Kinetics of wound-induced v-Ha-ras transgene expression and papilloma development in transgenic Tg.AC mice. Cannon RE, et al. **Mol Carcinog** 1997 Sep;20(1):108–14

Induction of PA2.26, a cell-surface antigen expressed by active fibroblasts, in mouse epidermal keratinocytes during carcinogenesis. Gandarillas A, et al. **Mol Carcinog** 1997 Sep;20(1):10–8

Changes in protein expression during multistage mouse skin carcinogenesis. Rundhaug JE, et al. **Mol Carcinog** 1997 Sep; 20(1):125–36

Identification of differentially expressed genes in chemically induced skin tumors. Rutberg SE, et al. **Mol Carcinog** 1997 Sep;20(1):88–98

Perturbation in connexin 43 and connexin 26 gap-junction expression in mouse skin hyperplasia and neoplasia. Sawey MJ, et al. **Mol Carcinog** 1996 Oct;17(2):49–61

Characterization of mutant HA-ras gene expression in transformed murine keratinocyte lines grown under in vitro and in vivo conditions. Volpe JP, et al. **Mol Carcinog** 1996 Dec;17(4):202–6

Upregulation of fibroblast growth factors and their receptors during multi-stage epidermal carcinogenesis in K14-HPV16 transgenic mice. Arbeit JM, et al. **Oncogene** 1996 Nov 7;13(9):1847–57

Enforced c-KIT expression renders highly metastatic human melanoma cells susceptible to stem cell factor-induced apoptosis and inhibits their tumorigenic and metastatic potential. Huang S, et al. **Oncogene** 1996 Dec 5; 13(11):2339–47

Altered production of laminin and nidogen by high and low metastatic variants of murine melanoma cells. Valente P, et al. **Oncol Res** 1996;8(3):131–8

Ex vivo application of delta-aminolevulinic acid induces high and specific porphyrin levels in human skin tumors: possible basis for selective photodynamic therapy. Fritsch C, et al. **Photochem Photobiol** 1997 Jul;66(1):114–8

Constitutive activation of a slowly migrating isoform of Stat3 in mycosis fungoides: tyrphostin AG490 inhibits Stat3 activation and growth of mycosis fungoides tumor cell lines. Nielsen M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6764–9

Markers of melanogenesis in malignant melanoma. Matous B, et al. **Sb Lek** 1994;95(4):333–38 (20 ref.)

A comparative immunohistochemical study of mammary and extramammary Paget's disease and superficial spreading melanoma, with particular emphasis on melanocytic markers. Ramachandra S, et al. **Virchows Arch** 1996 Dec; 429(6):371–6

MICROBIOLOGY

Molecular subtyping of Borrelia burgdorferi sensu lato isolates from five patients with solitary lymphocytoma. Picken RN, et al. **J Invest Dermatol** 1997 Jan;108(1):92–7

MORTALITY

Prognostic model for primary melanoma [letter; comment] Jain BP. **Ann Intern Med** 1997 May 15;126(10):832. Comment on: Ann Intern Med 1996 Sep 1;125(5):369–75.

Increased survival of patients treated with a vaccinia melanoma oncolysate vaccine: second interim analysis of data from a phase III, multi-institutional trial. Wallack MK, et al. **Ann Surg** 1997 Aug;226(2):198–206

Prognostic factors and outcome in craniofacial surgery for malignant cutaneous tumors involving the anterior skull base. Dias FL, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jul;123(7):738–42

Deaths due to squamous cell carcinoma in Australia: is there a case for a public health intervention? Rosenblatt L, et al. **Australas J Dermatol** 1996 Feb;37(1):26–9

Elevated serum levels of S100 and survival in metastatic malignant melanoma. Buer J, et al. **Br J Cancer** 1997; 75(9):1373–6

Gender and cutaneous melanoma. Miller JG, et al. **Br J Dermatol** 1997 May;136(5):657–65 (58 ref.)

Follow-up requirements for thick cutaneous melanoma. Sylaidis P, et al. **Br J Plast Surg** 1997 Jul;50(5):349–53

Malignant melanoma in Europe: changes in mortality rates (1970–90) in European Community countries. Balzi D, et al. **Cancer Causes Control** 1997 Jan;8(1):85–92

Action profiles of predictors of death and survival time in stage I malignant melanoma. Helfenstein U, et al. **Dermatology** 1996;192(1):1–7

Prognostic models in melanoma. Halpern AC, et al. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S2–7

[Prognosis of thin cutaneous head and neck melanomas] Andersson AP, et al. **Ugeskr Laeger** 1997 Jun 2; 159(23):3583–5 (Eng. Abstr.) **(Dan)**

[Increased survival in distant melanoma metastasis and the effect of treatments. Analysis of the disease course of patients with a survival of 2 years or more] Garbe C. **Hautarzt** 1996 Jan;47(1):35–43 (Eng. Abstr.) **(Ger)**

[Survival analysis in patients with cutaneous malignant melanoma] Radović-Kovačević V, et al. **Srp Arh Celok Lek** 1997 May-Jun;125(5–6):132–7 (Eng. Abstr.) **(Scc)**

PARASITOLOGY

Interferon alfa-2a and interleukin-2 with or without cisplatin in metastatic melanoma: a randomized trial of the European Organization for Research and Treatment of Cancer Melanoma Cooperative Group. Keilholz U, et al. **J Clin Oncol** 1997 Jul;15(7):2579–88

PATHOLOGY

Indirect computed tomography lymphography using iodinated nanoparticles to detect cancerous lymph nodes in a cutaneous melanoma model. Wisner ER, et al. **Acad Radiol** 1996 Jan;3(1):40–8

Behavior of the basement membrane during carcinoma cell invasion in chemically induced carcinomas of the skin. Köpf-Maier P, et al. **Acta Anat (Basel)** 1996;155(1):1–13

Cytology of pilomatrixoma (calcifying epithelioma of Malherbe) in fine needle aspirates. Domanski HA, et al. **Acta Cytol** 1997 May-Jun;41(3):771–7

Fine needle aspiration cytology of cutaneous meningioma [letter] Mandreker S, et al. **Acta Cytol** 1996 Nov-Dec; 40(6):1325–6

Multiple myeloma presenting as a subcutaneous nodule on the chest wall: diagnosis by fine needle aspiration [letter] Pinto RG, et al. **Acta Cytol** 1997 Jul-Aug;41(4):1233–4

Scrotal angiokeratoma in a young man [letter] Hisa T, et al. **Acta Derm Venereol** 1996 May;76(3):248–9

Comparative nuclear morphometric analysis of aggressive and non-aggressive squamous cell carcinomas of the skin. Narvaez D, et al. **Acta Derm Venereol** 1997 Mar;77(2):115–7

Naevus lipomatosus cutaneous superficialis: overlap with connective tissue naevi [letter] Orteu CH, et al. **Acta Derm Venereol** 1996 May;76(3):243–5

Impaired expression of stem cell factor in dermatofibroma fibroblasts. Yamamoto T, et al. **Acta Derm Venereol** 1996 Jul;76(4):257–9

Syringocystadenoma papilliferum, basal cell carcinoma and trichilemmoma arising from nevus sebaceus of Jadassohn [letter] Yoon DH, et al. **Acta Derm Venereol** 1997 May; 77(3):242–3

Metastatic lesion of the cervical spine secondary to an extraocular sebaceous carcinoma. Antuña SA, et al. **Acta Orthop Belg** 1996 Dec;62(4):229–32

Cutaneous lymphoepithelial neoplasms. Okamura JM, et al. **Adv Dermatol** 1997;12:277–94; discussion 295 (34 ref.)

Solitary metastatic melanoma of the small intestine [letter] Roguin A, et al. **Am Fam Physician** 1996 Oct;54(5):1481, 1484

Immunophenotypic identification of Sezary cells in peripheral blood. Bogen SA, et al. **Am J Clin Pathol** 1996 Dec;106(6):739–48

Genital angiomyofibroblastoma. Comparison with aggressive angiomyxoma and other myxoid neoplasms of skin and soft tissue. Ockner DM, et al. **Am J Clin Pathol** 1997 Jan; 107(1):36–44

Assessment of clonality in cutaneous lymphoid infiltrates by polymerase chain reaction analysis of immunoglobulin heavy chain gene rearrangement. Ritter JH, et al. **Am J Clin Pathol** 1997 Jul;108(1):60–8

Spitz Nevus. Ackerman AB. **Am J Dermatopathol** 1997 Aug; 19(4):419–21

Dermatoscopic and videomicroscopic features of melanocytic plantar nevi. Akasu R, et al. **Am J Dermatopathol** 1996 Feb;18(1):10–8

Malignant histiocytosis presenting as multiple erythematous plaques and cutaneous depigmentation. Akiyama M, et al. **Am J Dermatopathol** 1997 Jun;19(3):299–302

Primary neuroendocrine carcinoma of the skin with an unusual follicular lymphocytic infiltrate of the dermis. Bastian BC, et al. **Am J Dermatopathol** 1996 Dec; 18(6):625–8

Carcinosarcoma of the skin. Case report and literature review. Biernat W, et al. **Am J Dermatopathol** 1996 Dec; 18(6):614–9 (15 ref.)

Cutaneous adnexal carcinoma arising within a solitary cylindroma-spiradenoma. Biernat W, et al. **Am J Dermatopathol** 1996 Feb;18(1):77–82

Bullous lesions in Kaposi's sarcoma: case report. Borroni G, et al. **Am J Dermatopathol** 1997 Aug;19(4):379–83

Malignant melanoma in situ colonizing basal cell carcinoma. A simulator of invasive melanoma. Burkhalter A, et al. **Am J Dermatopathol** 1997 Jun;19(3):303–7

Hypermelanotic nevus: clinical, histopathologic, and ultrastructural features in 316 cases. Cohen LM, et al. **Am J Dermatopathol** 1997 Feb;19(1):23–30 (9 ref.)

Myxoid metastases of melanoma: report of three cases and review of the literature. Collina G, et al. **Am J Dermatopathol** 1997 Feb;19(1):52–7 (23 ref.)

Lymphangioma-like variant of Kaposi's sarcoma: clinicopathologic study of seven cases with review of the literature. Cossu S, et al. **Am J Dermatopathol** 1997 Feb; 19(1):16–22 (25 ref.)

Basal cell carcinoma arising in association with desmoplastic trichilemmoma. Crowson AN, et al. **Am J Dermatopathol** 1996 Feb;18(1):43–8

Giant cell fibroblastoma. New histological observations. Díaz-Cascajo C, et al. **Am J Dermatopathol** 1996 Aug; 18(4):403–8

Expression of intercellular adhesion molecule 3 (CDw50) on endothelial cells in cutaneous lymphomas. A comparative study between nodal and cutaneous lymphomas. Dommann SN, et al. **Am J Dermatopathol** 1997 Aug;19(4):391–5

Adenoma of anogenital mammary-like glands. Donati P, et al. **Am J Dermatopathol** 1996 Feb;18(1):73–6

Multiple retiform hemangioendotheliomas. A low-grade angiosarcoma. Duke D, et al. **Am J Dermatopathol** 1996 Dec;18(6):606–10

Low-grade mucoepidermoid carcinoma on the vermilion border of the lip. Fernández-Figueras MT, et al. **Am J Dermatopathol** 1997 Apr;19(2):197–201

Simultaneous occurrence of multiple trichoblastomas and steatocystoma multiplex. Gianotti R, et al. **Am J Dermatopathol** 1997 Jun;19(3):294–8

Metastatic endometrial adenocarcinoma to the skin of a toe. Giardina VN, et al. **Am J Dermatopathol** 1996 Feb; 18(1):94–8 (40 ref.)

Absence of Epstein-Barr virus in lymphoepitheliomalike carcinoma of the skin. Polymerase chain reaction evidence and review of five cases. Gillum PS, et al. **Am J Dermatopathol** 1996 Oct;18(5):478–82

CD34 and factor-XIIIa immunoreactivity in dermatofibrosarcoma protuberans and dermatofibroma. Goldblum JR, et al. **Am J Dermatopathol** 1997 Apr; 19(2):147–53

Merkel cell carcinoma diagnosed by fine-needle aspiration. Gottschalk-Sabag S, et al. **Am J Dermatopathol** 1996 Jun; 18(3):269–72

Eccrine or apocrine poroma? Six poromas with divergent adnexal differentiation. Harvell JD, et al. **Am J Dermatopathol** 1996 Feb;18(1):1–9 (30 ref.)

Nevus spilus (speckled lentiginous nevus) associated with a nodular neurotized nevus. Hwang SM, et al. **Am J Dermatopathol** 1997 Jun;19(3):308–11

Morphological stages of pilomatricoma. Kaddu S, et al. **Am J Dermatopathol** 1996 Aug;18(4):333–8

Immunohistochemical study of primary and recurrent basal cell and metatypical carcinomas of the skin. Kazantseva IA, et al. **Am J Dermatopathol** 1996 Feb;18(1):35–42

Combined skin lesions. Keen CE. **Am J Dermatopathol** 1996 Oct;18(5):527–32

Atypical fibroxanthoma with osteoclast-like multinucleated giant cells. Khan ZM, et al. **Am J Dermatopathol** 1997 Apr; 19(2):174–9

Detection of apoptosis by in situ labeling in pilomatricoma. Kishimoto S, et al. **Am J Dermatopathol** 1996 Aug; 18(4):339–43

Primary cutaneous osteosarcoma [letter; comment] Kuo TT. **Am J Dermatopathol** 1996 Feb;18(1):109. Comment on: Am J Dermatopathol 1995 Feb;17(1):53–7.

Reactive angioendotheliomatosis. Case report and review of the literature. Lazova R, et al. **Am J Dermatopathol** 1996 Feb;18(1):63–9 (26 ref.)

Lymphomatoid papulosis and cutaneous CD30+ lymphoma. LeBoit PE. **Am J Dermatopathol** 1996 Jun;18(3):221–35 (61 ref.)

Prognostic significance of Ki-67 and p53 immunoreactivity in cutaneous squamous cell carcinomas. Mansoor A, et al. **Am J Dermatopathol** 1996 Aug;18(4):351–7

Pleomorphic angioleiomyoma. Martínez JA, et al. **Am J Dermatopathol** 1996 Aug;18(4):409–12

Nodular myxoid change in melanocytic nevi. A report of two cases. Mehregan DR, et al. **Am J Dermatopathol** 1996 Aug;18(4):400–2

Spiradenoma and dermal cylindroma: comparative immunohistochemical analysis and histogenetic considerations. Meybehm M, et al. **Am J Dermatopathol** 1997 Apr;19(2):154–61

Malignant proliferating trichilemmal tumor [letter] Noto G, et al. **Am J Dermatopathol** 1997 Apr;19(2):202–4 (16 ref.)

Cell proliferation and p53 protein expressions in cutaneous epithelial neoplasms. Onodera H, et al. **Am J Dermatopathol** 1996 Dec;18(6):580–8

Primary metaplastic carcinoma (carcinosarcoma) of the skin. A clinicopathologic study of four cases and review of the literature. Patel NK, et al. **Am J Dermatopathol** 1997 Aug; 19(4):363–72 (24 ref.)

CD56/neural cell adhesion molecule expression in primary extranodal Ki-1/CD30+ lymphoma. Report of a pediatric case with simultaneous cutaneous and bone localizations. Paulli M, et al. **Am J Dermatopathol** 1997 Aug;19(4):384–90

Glomus tumor in neural tissue [letter; comment] Polk P, et al. **Am J Dermatopathol** 1996 Aug;18(4):444. Comment on: Am J Dermatopathol 1995 Aug;17(4):395–8.

Malignant mesothelioma metastatic to the skin, presenting as inflammatory carcinoma. Prieto VG, et al. **Am J Dermatopathol** 1997 Jun;19(3):261–5

Solitary sclerotic fibroma of the skin: a sclerotic dermatofibroma? Pujol RM, et al. **Am J Dermatopathol** 1996 Dec;18(6):620–4

Microcystic adnexal carcinoma with extensive sebaceous differentiation. Pujol RM, et al. **Am J Dermatopathol** 1997 Aug;19(4):358–62

Dabska tumor developing within a preexisting vascular malformation. Quecedo E, et al. **Am J Dermatopathol** 1996 Jun;18(3):302–7 (14 ref.)

Cutaneous pilar leiomyoma: clinicopathologic analysis of 53 lesions in 45 patients. Raj S, et al. **Am J Dermatopathol** 1997 Feb;19(1):2–9

Atypical cutaneous changes after topical treatment with nitrogen mustard in patients with mycosis fungoides. Reddy VB, et al. **Am J Dermatopathol** 1996 Feb;18(1):19–23

Induction of cutaneous hyperplasias by altered stroma. Requena L, et al. **Am J Dermatopathol** 1996 Jun; 18(3):248–68

Pleomorphic angioleiomyoma [letter] Rosai J. **Am J Dermatopathol** 1997 Aug;19(4):419

Well-differentiated malignant cylindroma [letter; comment]

Sangüeza OP. **Am J Dermatopathol** 1996 Feb;18(1):107-9 . Comment on: Am J Dermatopathol 1995 Apr;17(2):169-73.

Trichoblastoma and basal cell carcinoma are neoplasms with follicular differentiation sharing the same profile of cytokeratin intermediate filaments. Schirren CG, et al. **Am J Dermatopathol** 1997 Aug;19(4):341-50

Case of dermatofibroma with monster cells: a review and an immunohistochemical study. Setoyama M, et al. **Am J Dermatopathol** 1997 Jun;19(3):312-5 (6 ref.)

Primary cutaneous Ewing's family sarcoma. Report of a case with immunostaining for glycoprotein p30/32 mic2. Sexton CW, et al. **Am J Dermatopathol** 1996 Dec;18(6):601-5

Chondrosarcomatous cutaneous metastasis. A unique manifestation of sarcomatoid (metaplastic) breast carcinoma. Sexton CW, et al. **Am J Dermatopathol** 1996 Oct;18(5):538-42

Lymphoepithelioma-like carcinoma of the skin. Shek TW, et al. **Am J Dermatopathol** 1996 Dec;18(6):637-44

Granular cell dermatofibroma. Soyer HP, et al. **Am J Dermatopathol** 1997 Apr;19(2):168-73

Persistent pigmented purpuric dermatitis and mycosis fungoides: simulant, precursor, or both? A study by light microscopy and molecular methods. Toro JR, et al. **Am J Dermatopathol** 1997 Apr;19(2):108-18

Solitary cutaneous myofibroma of the glans penis. Val-Bernal JF, et al. **Am J Dermatopathol** 1996 Jun;18(3):317-21

Trichoblastic fibroma. A case report and an immunohistochemical study of cytokeratin expression. Watanabe S, et al. **Am J Dermatopathol** 1996 Jun; 18(3):308-13

Melanoma in situ versus melanocytic hyperplasia in sun-damaged skin. Assessment of the significance of histopathologic criteria for differential diagnosis. Weyers W, et al. **Am J Dermatopathol** 1996 Dec;18(6):560-6

Subcutaneous ("inverted") verrucous carcinoma with bone invasion. Yip KM, et al. **Am J Dermatopathol** 1997 Feb; 19(1):83-6

Verocay body--prominent cutaneous schwannoma. Zelger BG, et al. **Am J Dermatopathol** 1997 Jun;19(3):242-9

Prominent myofibroblastic differentiation. A pitfall in the diagnosis of dermatofibroma. Zelger BW, et al. **Am J Dermatopathol** 1997 Apr;19(2):138-46

An indolent type of Epstein-Barr virus-associated T-cell-rich B-cell lymphoma of the skin: report of a case. Take H, et al. **Am J Hematol** 1996 Jul;52(3):221-3

Conjunctival metastasis from a cutaneous melanoma as the initial sign of dissemination. Kwapiszeski BR, et al. **Am J Ophthalmol** 1997 Feb;123(2):266-8

Metastasis to the parotid gland: is a radical surgical approach justified? Jecker P, et al. **Am J Otolaryngol** 1996 Mar-Apr; 17(2):102-5

Lack of lymphangiogenesis in human primary cutaneous melanoma. Consequences for the mechanism of lymphatic dissemination. de Waal RM, et al. **Am J Pathol** 1997 Jun; 150(6):1951-7

Human sunlight-induced basal-cell-carcinoma-associated dendritic cells are deficient in T cell co-stimulatory molecules and are impaired as antigen-presenting cells. Nestle FO, et al. **Am J Pathol** 1997 Feb;150(2):641-51

Effect of extended sleep deprivation on tumor growth in rats. Bergmann BM, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1460-4

The epithelioid blue nevus. A multicentric familial tumor with important associations, including cardiac myxoma and psammomatous melanotic schwannoma. Carney JA, et al. **Am J Surg Pathol** 1996 Mar;20(3):259-72

Follicular basal cell hyperplasia overlying dermatofibroma. Cheng L, et al. **Am J Surg Pathol** 1997 Jun;21(6):711-8

Metastasizing cellular dermatofibroma. A report of two cases. Colome-Grimmer MI, et al. **Am J Surg Pathol** 1996 Nov; 20(11):1361-7

Cutaneous leiomyosarcoma. Kaddu S, et al. **Am J Surg Pathol** 1997 Sep;21(9):979-87

Desmoplastic and spindle-cell malignant melanoma. An immunohistochemical study. Longacre TA, et al. **Am J Surg Pathol** 1996 Dec;20(12):1489-500

Epithelioid hemangioendothelioma of skin and soft tissues: clinicopathologic and immunohistochemical study of 30 cases. Mentzel T, et al. **Am J Surg Pathol** 1997 Apr; 21(4):363-74

A clinicopathologic and immunohistochemical comparative study of cutaneous and intramuscular forms of juvenile xanthogranuloma. Nascimento AG. **Am J Surg Pathol** 1997 Jun;21(6):645-52

Intravascular large cell lymphoma coexisting within hemangiomas of the skin. Rubin MA, et al. **Am J Surg Pathol** 1997 Jul;21(7):860-4

Immunophenotyping of dermal spindle cell tumors: diagnostic value of monocyte marker Ki-M1p and histogenetic considerations. Rudolph P, et al. **Am J Surg Pathol** 1997 Jul;21(7):791-800

Atypical fibroxanthoma. An unusual variant with osteoclast-like giant cells. Tomaszewski MM, et al. **Am J Surg Pathol** 1997 Feb;21(2):213-8

Dedifferentiated liposarcoma of the subcutis. Yoshikawa H, et al. **Am J Surg Pathol** 1996 Dec;20(12):1525-30

Dermal and subcutaneous variants of plexiform fibrohistiocytic tumor. Zelger B, et al. **Am J Surg Pathol** 1997 Feb;21(2):235-41 (17 ref.)

Clear cell dermatofibroma [letter] Zelger B. **Am J Surg Pathol** 1997 Jun;21(6):737

Merkel cell carcinoma: an aggressive malignancy. Pergolizzi J Jr, et al. **Am Surg** 1997 May;63(5):450-4

Morphometric analysis in prognostic evaluation of stage I thick cutaneous melanomas. Mauri MF, et al. **Anal Quant Cytol Histol** 1997 Aug;19(4):311-5

Primary malignant melanoma of the skin. Relationships of nuclear DNA content, nuclear morphometric variables, Clark level and tumor thickness. Talve LA, et al. **Anal Quant Cytol Histol** 1997 Feb;19(1):62-74

Intracellular distribution of type II collagen mRNA and prolyl 4-hydroxylase in embryonic avian corneal epithelia. Hirsch MS, et al. **Anat Rec** 1996 Jan;244(1):1-14

Cutaneous adnexal neoplasms in biopsy specimens processed in the Department of Pathology, University of Malaya. Jayalakshmi P, et al. **Ann Acad Med Singapore** 1996 Jul; 25(4):522-5

Proliferating cell nuclear antigen (PCNA) expression in pseudoepitheliomatous hyperplasia, keratoacanthoma and squamous cell carcinoma of the skin. Li J, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):526-30

Basal cell and squamous cell carcinomas. Clinico-histological features. Annessi G, et al. **Ann Ist Super Sanita** 1996; 32(1):29-36 (28 ref.)

Report of the symposium on Cutaneous Lymphomas: Sixth International Conference on Malignant Lymphoma. Jaffe ES, et al. **Ann Oncol** 1997;8 Suppl 1:83-4

Treatment of metastatic melanoma with combined chemotherapy containing cisplatin, vinblastine and dacarbazine (CVD) and biotherapy using interleukin-2 and interferon-alpha. Legha SS, et al. **Ann Oncol** 1996 Oct; 7(8):827-35

Cutaneous fibrous histiocytoma with osteoclast-like giant cells. Steinthorsson G, et al. **Ann Plast Surg** 1996 Aug; 37(2):217-9

Prognostic importance of tumor diameter in nodular melanomas [letter] Straume O, et al. **Ann Plast Surg** 1997 May;38(5):550-1

Computed tomography in staging of patients with melanoma metastatic to the regional nodes. Johnson TM, et al. **Ann Surg Oncol** 1997 Jul-Aug;4(5):396-402

Localizing the sentinel node in cutaneous melanoma: gamma probe detection versus blue dye. Kapteijn BA, et al. **Ann Surg Oncol** 1997 Mar;4(2):156-60

Determination of the maximal tumor/normal skin ratio after HpD or m-THPC administration in hairless mouse (SKh-1) by fluorescence spectroscopy--a non-invasive method. Bossu E, et al. **Anticancer Drugs** 1997 Jan;8(1):67-72

Immunocytochemical detection of prostate specific antigen expression in human primary and metastatic melanomas. Bodey B, et al. **Anticancer Res** 1997 May-Jun; 17(3C):2343-6

Merkel cell carcinoma of the skin. Treatment of primary, recurrent and metastatic disease: review of clinical cases. Queirolo P, et al. **Anticancer Res** 1997 May-Jun; 17(3C):2339-42

Xeroderma pigmentosum variant or pigmented xerodermoid. Somos S, et al. **Anticancer Res** 1997 Jan-Feb;17(1B):753-6

Blue nodules in a newborn. Neuroblastoma. Alspaugh CD, et al. **Arch Dermatol** 1997 Jun;133(6):775, 778

Sentinel lymph node evaluation in melanoma. Brady MS, et al. **Arch Dermatol** 1997 Aug;133(8):1014-20 (32 ref.)

Fibroepithelial polyps and pathologic evaluation [letter; comment] Brodell RT, et al. **Arch Dermatol** 1997 Jul; 133(7):915-6. Comment on: Arch Dermatol 1996 Dec;132(12):1459-62.

Keratinocyte-lymphocyte interaction in cutaneous T-cell lymphoma. Modulation of keratinocyte antigen My7 by a soluble factor produced by T lymphocytes. Célérier P, et al. **Arch Dermatol** 1997 Jul;133(7):837-40

Tufted angioma: is it the same as angioblastoma (Nakagawa)? [letter; comment] Cho KH. **Arch Dermatol** 1997 Jun; 133(6):789. Comment on: Arch Dermatol 1996 Jun;132(6):703-4, 706-7.

Multiple facial angiofibromas and collagenomas in patients with multiple endocrine neoplasia type 1. Darling TN, et al. **Arch Dermatol** 1997 Jul;133(7):853-7

The utility of submitting fibroepithelial polyps for histological examination [see comments] Eads TJ, et al. **Arch Dermatol** 1996 Dec;132(12):1459-62. Comment in: Arch Dermatol 1997 Jul;133(7):915-6.

Plaque variant of trichoblastic fibroma [letter; comment] Escalonilla P, et al. **Arch Dermatol** 1996 Nov; 132(11):1388-90. Comment on: Arch Dermatol 1995 Feb;131(2):198-201.

An asymptomatic scaly plaque. Unilesional mycosis fungoides (MF). Evans LT, et al. **Arch Dermatol** 1997 Feb; 133(2):231, 234

Nodular basal cell carcinoma in vivo vs in vitro. Establishment of pure cell cultures, cytomorphologic characteristics, ultrastructure, immunophenotype, biosynthetic activities, and generation of antisera. Grando SA, et al. **Arch Dermatol** 1996 Oct;132(10):1185-93

Analysis of tumor-infiltrating lymphocytes in cutaneous squamous cell carcinoma. Haeffner AC, et al. **Arch Dermatol** 1997 May;133(5):585-90

Multiple, hereditary dome-shaped papules and acrochordons. Birt-Hogg-Dubé syndrome. Haimowitz JE, et al. **Arch Dermatol** 1997 Sep;133(9):1163, 1166 (8 ref.)

Examination of the ability of people to identify early changes of melanoma in computer-altered pigmented skin lesions. Hanrahan PF, et al. **Arch Dermatol** 1997 Mar;133(3):301-11

A congenital pink plaque. Basaloid follicular hamartoma. Keough GC, et al. **Arch Dermatol** 1997 Mar;133(3):381-2, 384-5

Apoptotic and proliferating cells in cutaneous lymphoproliferative diseases. Kikuchi A, et al. **Arch Dermatol** 1997 Jul;133(7):829-33

Clinical stage IA (limited patch and plaque) mycosis fungoides. A long-term outcome analysis. Kim YH, et al. **Arch Dermatol** 1996 Nov;132(11):1309-13

Nonpigmented dysplastic melanocytic nevi. Knoell KA, et al. **Arch Dermatol** 1997 Aug;133(8):992-4

Differences in age and body site distribution of the histological subtypes of basal cell carcinoma. A possible indicator of differing causes. McCormack CJ, et al. **Arch Dermatol** 1997 May;133(5):593-6

An enlarging papulosquamous plaque on the buttock. Adult T-cell leukemia/lymphoma. Marcaró JM Jr, et al. **Arch Dermatol** 1997 Feb;133(2):232-3, 235-6

Multiple papules on the elbows. Congenital osteoma cutis. Mast AM, et al. **Arch Dermatol** 1997 Jun;133(6):777, 780

Frequency and morphologic characteristics of invasive melanomas lacking specific surface microscopic features. Menzies SW, et al. **Arch Dermatol** 1996 Oct; 132(10):1178-82

Poikilodermatous plaques on the torso of a young man. Granulomatous slack skin syndrome. Ostezan LB, et al. **Arch Dermatol** 1997 Feb;133(2):231-2, 234-5

Scaly erythematous lesion in a patient with extensive solar damage. Malignant melanoma in situ, amelanotic type. Prieto VG, et al. **Arch Dermatol** 1996 Oct;132(10):1239, 1242

A distinctive annular facial plaque. Desmoplastic trichopithelioma. Punwaney J, et al. **Arch Dermatol** 1996 Oct;132(10):1239-40, 1242-3

Mucinous nevus [letter] Rongioletti F, et al. **Arch Dermatol** 1996 Dec;132(12):1522-3 (8 ref.)

Pigmented lesions in actinically damaged skin. Histopathologic comparison of biopsy and excisional specimens [see comments] Somach SC, et al. **Arch Dermatol** 1996 Nov;132(11):1297-302. Comment in: Arch Dermatol 1996 Nov;132(11):1380-2.

Critical effects of intense sun exposure on the expression of epiluminescence microscopy features of acquired melanocytic nevi. Stanganelli I, et al. **Arch Dermatol** 1997 Aug;133(8):979-82

Avoiding sampling error in the biopsy of pigmented lesions [editorial; comment] Stevens G, et al. **Arch Dermatol** 1996 Nov;132(11):1380-2. Comment on: Arch Dermatol 1996 Nov;132(11):1297-1302.

Primary cutaneous large B-cell lymphomas of the legs. A distinct type of cutaneous B-cell lymphoma with an intermediate prognosis. Dutch Cutaneous Lymphoma Working Group [see comments] Vermeer MH, et al. **Arch Dermatol** 1996 Nov;132(11):1304-8. Comment in: Arch Dermatol 1996 Nov;132(11):1376-7.

Reliability of the histopathologic diagnosis of melanocytic dysplasia. The Dysplastic Nevus Panel [see comments] Weinstock MA, et al. **Arch Dermatol** 1997 Aug; 133(8):953-8. Comment in: Arch Dermatol 1997 Aug;133(8):1033-6.

Dermal cysts of the rhino mouse develop into unopened sebaceous glands. Bernerd F, et al. **Arch Dermatol Res** 1996 Sep;288(10):586-95

Apoptosis identified with DNA fragmentation in basal cell carcinomas. Mori O, et al. **Arch Dermatol Res** 1996 May; 288(5-6):258-61

New immunodeficient (nude-scid, beige-scid) mice as excellent recipients of human skin grafts containing intraepidermal neoplasms. Takizawa Y, et al. **Arch Dermatol Res** 1997 Mar;289(4):213-8

Primary choroidal melanoma in a patient with previous cutaneous melanoma. Scull JJ, et al. **Arch Ophthalmol** 1997 Jun;115(6):796-8 (16 ref.)

Neurotropic cutaneous tumors of the head and neck. Osguthorpe JD, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug;123(8):871-6

Cutaneous angiosarcomas with a starry-sky pattern. Smith KJ, et al. **Arch Pathol Lab Med** 1997 Sep;121(9):980-4

Optimal selective sentinel lymph node dissection in primary malignant melanoma. Leong SP, et al. **Arch Surg** 1997 Jun; 132(6):666-72; discussion 673

Complete regression of primary cutaneous malignant melanoma. Menzies SW, et al. **Arch Surg** 1997 May; 132(5):553-6

Basal cell carcinoma. A common skin tumour. Clearihan L. **Aust Fam Physician** 1996 Feb;25(2):248-9

The benefit of postoperative radiotherapy in metastatic basal cell carcinoma. Christie DR. **Aust N Z J Surg** 1997 Jul; 67(7):491-3

Mobile fat; three stages? [letter] Hisa T, et al. **Australas J Dermatol** 1996 Nov;37(4):223-4

Pigmented squamous cell carcinoma with dendritic melanocytes. Kossard S, et al. **Australas J Dermatol** 1997 Aug;38(3):145-7 (16 ref.)

Primary leiomyosarcoma of the skin. Wargon O. **Australas J Dermatol** 1997 Feb;38(1):26-8 (6 ref.)

Malignant melanoma presenting as bilateral breast masses. Jayalakshmi S, et al. **Australas Radiol** 1997 Feb;41(1):38-40 (11 ref.)

Clonal origin of tumor cells in a plexiform neurofibroma with LOH in NF1 intron 38 and in dermal neurofibromas without LOH of the NF1 gene. Däschner K, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):346-50

SKIN NEOPLASMS

Role of mast cell and stem cell factor in hyperpigmented mycosis fungoides [letter] Yamamoto T, et al. **Blood** 1997 Aug 1;90(3):1338–40

Tamoxifen, 17beta–oestradiol and the calmodulin antagonist J8 inhibit human melanoma cell invasion through fibronectin. Dewhurst LO, et al. **Br J Cancer** 1997; 75(6):860–8

Cerebral metastases of cutaneous melanoma. Gupta G, et al. **Br J Cancer** 1997;76(2):256–9

Non-pigmented nodular plantar melanoma in 12 Japanese patients. Kato T, et al. **Br J Dermatol** 1997 Feb; 136(2):207–11

Acute cholecystitis from metastatic melanoma to the gall-bladder in a patient with a low-risk melanoma. Langley RG, et al. **Br J Dermatol** 1997 Feb;136(2):279–82 (25 ref.)

Risk of developing multiple primary cutaneous melanomas in patients with the classic atypical-mole syndrome: a case-control study. Marghoob AA, et al. **Br J Dermatol** 1996 Nov;135(5):704–11

Basal cell carcinomas in the lung of a patient with naevoid basal cell carcinoma syndrome: metastatic or primary? [letter] Ramón-Faba P, et al. **Br J Dermatol** 1997 Aug; 137(2):313–4

Site, histological type, and thickness of primary cutaneous malignant melanoma in western Netherlands since 1980. van der Spek-Keijser LM, et al. **Br J Dermatol** 1997 Apr; 136(4):565–71

Cutaneous CD30 positive large T cell lymphoma of the upper lip: a rare presentation. Chandu A, et al. **Br J Oral Maxillofac Surg** 1997 Jun;35(3):193–5

Merkel cell carcinoma of the skin. Al-Ghazal SK, et al. **Br J Plast Surg** 1996 Oct;49(7):491–6 (28 ref.)

Cutaneous malignant melanoma in the young. Zhu N, et al. **Br J Plast Surg** 1997 Jan;50(1):10–4

Skin appendage involvement in anal intraepithelial neoplasia. Skinner PP, et al. **Br J Surg** 1997 May;84(5):675–8

Bowenoid papulosis of the penis. Bhojwani A, et al. **Br J Urol** 1997 Sep;80(3):508

Dermacase. Becker's nevus. Adams SP. **Can Fam Physician** 1997 May;43:855, 863

The surgical and oncologic significance of the axillary arch during axillary lymphadenectomy. Petrasek AJ, et al. **Can J Surg** 1997 Feb;40(1):44–7

Desmoplastic squamous cell carcinoma of skin and vermilion surface: a highly malignant subtype of skin cancer. Breuninger H, et al. **Cancer** 1997 Mar 1;79(5):915–9

Metastatic cutaneous squamous cell carcinoma derived from actinic keratosis. Dinehart SM, et al. **Cancer** 1997 Mar 1; 79(5):920–3

Classification of localized melanoma by the exponential survival trees method. Huang X, et al. **Cancer** 1997 Mar 15;79(6):1122–8

Life-long screening of patients with intermediate-thickness cutaneous melanoma for asymptomatic pulmonary recurrences: a cost-effectiveness analysis. Mooney MM, et al. **Cancer** 1997 Sep 15;80(6):1052–64

Independent prognostic importance of vascular invasion in nodular melanomas. Straume O, et al. **Cancer** 1996 Sep 15;78(6):1211–9

Active immunization of metastatic melanoma patients with interleukin-2–transduced allogeneic melanoma cells: evaluation of efficacy and tolerability. Belli F, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):197–203

The effect of TGF-beta 1 on cell proliferation and proteoglycan production in human melanoma cells depends on the degree of cell differentiation. Heredia A, et al. **Cancer Lett** 1996 Dec 3;109(1–2):39–47

The effect of oral quercetin on UVB-induced tumor growth and local immunosuppression in SKH-1. Steerenberg PA, et al. **Cancer Lett** 1997 Mar 19;114(1–2):187–9

Human squamous carcinoma cell invasion in organ-cultured skin. Varani J, et al. **Cancer Lett** 1997 Jan 1;111(1–2):51–7

Molecular pathology of melanoma. Newton Bishop JA. **Cancer Metastasis Rev** 1997 Jun;16(1–2):141–54 (114 ref.)

Evidence that cutaneous carcinogen-initiated epithelial cells from mice are quiescent rather than actively cycling. Morris RJ, et al. **Cancer Res** 1997 Aug 15;57(16):3436–43

Differences in the calcium-mediated regulation of gap junctional intercellular communication between a cell line consisting of initiated cells and a carcinoma-derived cell line. Jansen LA, et al. **Carcinogenesis** 1996 Nov; 17(11):2311–9

Gene expression and cellular sources of inducible nitric oxide synthase during tumor promotion. Robertson FM, et al. **Carcinogenesis** 1996 Sep;17(9):2053–9

Grafting assay distinguishes promotion sensitive from promotion resistant JB6 cells. Strickland J, et al. **Carcinogenesis** 1997 Jun;18(6):1135–8

p53-binding proteins in squamous cell carcinoma and normal human keratinocytes. Kumar MG, et al. **Cell Growth Differ** 1995 Dec;6(12):1601–8

Molecular analysis of melanoma precursor lesions. Wang Y, et al. **Cell Growth Differ** 1996 Dec;7(12):1733–40

Histopathology of cutaneous squamous cell carcinoma. Maguire B, et al. **Clin Dermatol** 1995 Nov-Dec; 13(6):559–68 (75 ref.)

Histology of basal cell carcinoma. Maloney ME. **Clin Dermatol** 1995 Nov-Dec;13(6):545–9 (26 ref.)

Comparative aspects of nonmelanoma skin cancer. Walder EJ. **Clin Dermatol** 1995 Nov-Dec;13(6):569–78 (21 ref.)

Malignant blue naevus with distant subcutaneous metastasis. Böni R, et al. **Clin Exp Dermatol** 1996 Nov;21(6):427–30

Acral lentiginous melanoma of the palm [letter] Kato T, et al. **Clin Exp Dermatol** 1996 Sep;21(5):388–9

Agminate Spitz naevi occurring in an adult after the excision of a solitary Spitz naevus--report of a case and review of the literature. Sabroe RA, et al. **Clin Exp Dermatol** 1996 May;21(3):197–200 (16 ref.)

Linear dermatomyofibroma. Trotter MJ, et al. **Clin Exp Dermatol** 1996 Jul;21(4):307–9

Poikilodermatous and verrucous mycosis fungoides. Wakelin SH, et al. **Clin Exp Dermatol** 1996 May;21(3):205–8

Plasma cell tumour in a renal transplant recipient. Whittam LR, et al. **Clin Exp Dermatol** 1996 Sep;21(5):367–9

Mycosis fungoides with spontaneously regressing CD30-positive tumorous lesions. Woodrow SL, et al. **Clin Exp Dermatol** 1996 Sep;21(5):370–3

Clinical evaluation of cutaneous lesions of the back: spinal signatures that do not go away. Humphreys RP. **Clin Neurosurg** 1996;43:175–87 (6 ref.)

Skin disorders of the lower extremity in adults as reported in the current literature. Black JR, et al. **Clin Podiatr Med Surg** 1996 Jan;13(1):109–17 (38 ref.)

Primary and metastatic malignant tumors in soft tissue of skin. Diagnostic, surgical, and prognostic considerations for the foot. Potter GK, et al. **Clin Podiatr Med Surg** 1996 Jan;13(1):155–72 (85 ref.)

Cutaneous squamous cell carcinoma metastatic to the parotid gland in a transplant patient. Christiansen TN, et al. **Clin Transplant** 1996 Dec;10(6 Pt 1):561–3 (23 ref.)

Of mice and men: a critical reappraisal of the two-stage theory of carcinogenesis. Iversen OH. **Crit Rev Oncog** 1995; 6(3–6):357–405 (184 ref.)

Pathology of malignant melanoma, including new markers and techniques in diagnosis and prognosis. De Wit PE, et al. **Curr Opin Oncol** 1996 Mar;8(2):143–51 (69 ref.)

A pigmented scalp nodule: malignant blue nevus. English JC 3rd, et al. **Cutis** 1996 Jul;58(1):40–2 (6 ref.)

Nevus comedonicus: report of a case with genital involvement. González-Martínez R, et al. **Cutis** 1996 Dec; 58(6):418–9

An atypical piloleiomyoma presenting as a nonhealing ulcerated nodule. Harford RR, et al. **Cutis** 1996 Mar; 57(3):168–70

Juvenile melanoma (Spitz nevus). Helm KF, et al. **Cutis** 1996 Jul;58(1):35–9 (63 ref.)

Giant polypoid basal cell carcinoma. McElroy J, et al. **Cutis** 1996 Oct;58(4):289–92 (25 ref.)

Skin metastases from prostate cancer associated with malignant melanoma. Offidani A, et al. **Cutis** 1997 May; 59(5):278–80

An unusual case of giant dermatofibroma in a patient with diabetes mellitus and necrobiosis lipoidica. Omulecki A, et al. **Cutis** 1996 Oct;58(4):282–5 (20 ref.)

Pedunculated proliferative papillomatosis. Potter TS, et al. **Cutis** 1996 Jun;57(6):451–2

Granular cell basal cell carcinoma. Reichel M. **Cutis** 1997 Feb;59(2):88–90 (6 ref.)

Pigmented sweat gland tumor mimicking melanoma. Roaf V, et al. **Cutis** 1997 Jan;59(1):43–6

Multinucleate cell angiohistiocytoma. Romiti R, et al. **Cutis** 1997 Apr;59(4):190–2

Subcutaneous T-cell lymphoma: a case report and additional observations. Sajben FP, et al. **Cutis** 1996 Oct;58(4):297–302 (42 ref.)

Blue rubber bleb nevus syndrome associated with diffuse angiokeratoma. Trattner A, et al. **Cutis** 1997 May; 59(5):264–6

Cytological features of pigmented basal cell carcinoma--a potential diagnostic pitfall. Calder CJ, et al. **Cytopathology** 1996 Apr;7(2):132–5

Dermoscopy (epiluminescence microscopy) of pigmented skin lesions. Current status and evolving trends. Argenyi ZB. **Dermatol Clin** 1997 Jan;15(1):79–95 (43 ref.)

Dermatopathologic advances in clinical research. The expression of antibody to CD34 in mucocutaneous lesions. off Cohen PR, et al. **Dermatol Clin** 1997 Jan;15(1):159–76 (76 ref.)

The dynamic interplay of malignant and benign T cells in cutaneous T-cell lymphoma. Herrick C, et al. **Dermatol Clin** 1997 Jan;15(1):149–57 (36 ref.)

Deep penetrating nevus. Barr RJ. **Dermatol Online J** 1997 Mar;3(1):7

Malignant melanoma simulating a seborrheic keratosis: a case report. Richert CA, et al. **Dermatol Online J** 1997 Mar; 3(1):5

Stump the experts. Case. Myxoid liposarcoma. Bondar GL, et al. **Dermatol Surg** 1997 May;23(5):333, 407–8

Another case of spontaneous regression of Merkel cell (neuroendocrine) carcinoma. Connelly TJ, et al. **Dermatol Surg** 1997 Jul;23(7):588–90

Stump the experts. Desmoplastic melanoma with features of malignant spindled and epithelioid schwannoma. Conroy EA, et al. **Dermatol Surg** 1997 Apr;23(4):237, 311–2

Dermabrasion and premalignant disease [letter] Field LM. **Dermatol Surg** 1997 Aug;23(8):714

Stump the experts. Cellular dermatofibroma. Primka EJ, et al. **Dermatol Surg** 1997 Aug;23(8):711–3

Renaut bodies. Benign disease process mimicking neurotropic tumor infiltration. Skidmore RA, et al. **Dermatol Surg** 1996 Nov;22(11):969–71

Tumors with smooth muscle differentiation. Spencer JM, et al. **Dermatol Surg** 1996 Sep;22(9):761–8 (61 ref.)

Correlation between the histopathology and the epiluminescence microscopy features of malignant blue nevus. Stanganelli I, et al. **Dermatol Surg** 1996 Oct; 22(10):846–8 (13 ref.)

Perineural and neural involvement in skin cancers. Terashi H, et al. **Dermatol Surg** 1997 Apr;23(4):259–64; discussion 264–5

Carcinoma of the mammary crease simulating rodent ulcer basal cell carcinoma. Report of a case with immunohistochemical analysis [letter] Vazquez-López F, et al. **Dermatol Surg** 1997 Jun;23(6):494–5

Transforming growth factor-beta and bcl-2 distribution patterns distinguish trichoepithelioma from basal cell carcinoma. Verhaegh ME, et al. **Dermatol Surg** 1997 Aug; 23(8):695–700

Malignant melanoma and squamous cell carcinoma forming one tumour on a burn scar. Akiyama M, et al. **Dermatology** 1997;194(2):157–61

Malignant cellular blue nevus: a clinicopathological study of 6 cases. Aloi F, et al. **Dermatology** 1996;192(1):36–40

Two cases of localized B-cell lymphoma in the acquired immunodeficiency syndrome. Castanet J, et al. **Dermatology** 1997;194(2):185–7

Anaplastic progression of classic Kaposi's sarcoma. Cerimele D, et al. **Dermatology** 1997;194(3):287–9

Clinical review of 247 case records of Spitz nevus (epithelioid cell and/or spindle cell nevus). Dal Pozzo V, et al. **Dermatology** 1997;194(1):20–5

Multiple hidrocystomas. de Eusebio E, et al. **Dermatology** 1996;193(2):152–3

Solitary eccrine syringofibroadenoma (or eccrine syringofibroadenomatous hyperplasia?) and diabetic polyneuropathy. Gambini C, et al. **Dermatology** 1996; 193(1):68–9 (13 ref.)

Action profiles of predictors of death and survival time in stage I malignant melanoma. Helfenstein U, et al. **Dermatology** 1996;192(1):1–7

Phacomatosis pigmentokeratotica: a patient with the rare melanocytic-epidermal twin nevus syndrome. Hermes B, et al. **Dermatology** 1997;194(1):77–9

Squamous cell carcinoma arising in a verrucous epidermal nevus. Ichikawa T, et al. **Dermatology** 1996;193(2):135–8 (18 ref.)

Clinicopathological study of acral melanoma in situ in 44 Japanese patients. Kato T, et al. **Dermatology** 1996; 193(3):192–7

Nodular balloon cell component in a cutaneous melanoma of the superficial spreading type. Kiene P, et al. **Dermatology** 1996;192(3):274–6

A case of Bednar tumor. Immunohistochemical positivity for CD34. Kobayashi T, et al. **Dermatology** 1997;195(1):57–9

Quality-switched ruby laser treatment of solar lentigines and Becker's nevus: a histopathological and immunohistochemical study. Kopera D, et al. **Dermatology** 1997;194(4):338–43

Ex vivo quality-switched ruby laser irradiation of cutaneous melanocytic lesions: persistence of S-100-, HMB-45- and Masson-positive cells. Kopera D, et al. **Dermatology** 1997; 194(4):344–50

A naturally occurring ring seborrheic keratosis [letter] Meffert JJ, et al. **Dermatology** 1996;192(4):383–4

Dermatofibrosarcoma protuberans of the sole. Mizushima J, et al. **Dermatology** 1996;192(3):280–2 (11 ref.)

Expression of autocrine motility factor receptor in cutaneous malignant melanoma. Nagai Y, et al. **Dermatology** 1996; 192(1):8–11

p53 Protein overexpression in verrucous carcinoma of the skin. Noel JC, et al. **Dermatology** 1996;192(1):12–5

Proliferating tricholemmal cyst should always be considered as a low-grade carcinoma [letter] Noto G, et al. **Dermatology** 1997;194(4):374–5 (16 ref.)

Collision of primary malignant neoplasms on the skin: the connection between malignant melanoma and basal cell carcinoma. Piérard GE, et al. **Dermatology** 1997; 194(4):378–9

Expression of NM23 protein in acquired melanocytic nevi, malignant melanoma and metastases of malignant melanoma: an immunohistological assessment in human skin. Reichrath J, et al. **Dermatology** 1997;194(2):136–9

Characterization of the nuclear deoxyribonucleic acid content and nuclear morphometry in 71 primary cutaneous melanomas. Renard N, et al. **Dermatology** 1997; 194(4):318–24

Eruptive dermatofibromas in AIDS patients: a form of mycobacteriosis? [letter; comment] Silvestre JF, et al. **Dermatology** 1997;194(2):197. Comment on: Dermatology 1995;190(4):309–12. Comment on: Dermatology 1995;190(4):319.

Significance of mitotic cells or clumping cells in p53 immunopositivity of Bowen's disease [letter] Ura H, et al. **Dermatology** 1997;194(1):87–8

Porokeratotic eccrine ostial and dermal duct nevus of late onset: more frequent than previously suggested? Valks R, et al. **Dermatology** 1996;193(2):138–40 (17 ref.)

Palmar papillomatous lesions reminiscent of epidermal nevus in a case of focal dermal hypoplasia: a nosological consideration. van der Steen PH, et al. **Dermatology** 1996; 193(2):147–8

Tufted angioma, a particular form of angioma. Vanhooteghem O, et al. **Dermatology** 1997;194(4):402–4

Proliferating tricholemmal cyst: a possible pitfall in cytological diagnosis. Biernat W, et al.

Diagn Cytopathol 1996 Jul;15(1):73–5

Are the globular eosinophilic paranuclear inclusions seen in fine–needle aspirates pathognomonic of malignant rhabdoid tumor? [letter; comment] Pérez–Guillermo M, et al. **Diagn Cytopathol** 1996 Aug;15(2):179–81. Comment on: Diagn Cytopathol 1992;8(4):369–73.

Mimics of pilomatrixomas in fine–needle aspirates. Sánchez Sánchez C, et al. **Diagn Cytopathol** 1996 Feb;14(1):75–83 (28 ref.)

Dermatofibrosarcoma protuberans: a clinicopathological study in an African population. Mbonde MP, et al. **East Afr Med J** 1996 Jun;73(6):410–3 (21 ref.)

Ileal metastases from malignant melanoma: endoscopic diagnosis. Gomollón F, et al. **Endoscopy** 1996 Aug; 28(6):530–1

Capsaicin inhibits plasma membrane NADH oxidase and growth of human and mouse melanoma lines. Morré DJ, et al. **Eur J Cancer** 1996 Oct;32A(11):1995–2003

Phase II study of a short course of weekly high–dose cisplatin combined with long–term oral etoposide in metastatic malignant melanoma. Planting AS, et al. **Eur J Cancer** 1996 Oct;32A(11):2026–8

Detection of early micrometastases in subcutaneous fat of primary malignant melanoma patients by identification of tyrosinase–mRNA [see comments] Proebstle TM, et al. **Eur J Cancer** 1996 Sep;32A(10):1664–7. Comment in: Eur J Cancer 1996 Sep;32A(10):1627–9.

Detection of early micrometastases in malignant melanoma [editorial; comment] Rankin EM. **Eur J Cancer** 1996 Sep; 32A(10):1627–9. Comment on: Eur J Cancer 1996 Sep;32A(10):1664–7.

The impact of ultrasound scanning in the staging and follow–up of patients with clinical stage I cutaneous melanoma. Rossi CR, et al. **Eur J Cancer** 1997 Feb; 33(2):200–3

Endometroid carcinoma arising with a scar endometriosis. Gücer F, et al. **Eur J Gynaecol Oncol** 1997;18(1):42–3

Merkel cell carcinoma of the eyelid. Dini M, et al. **Eur J Ophthalmol** 1997 Jan–Mar;7(1):108–12

Cellular proliferation characteristics of basal cell carcinoma: relationship to clinical subtype and histopathology. Horlock NM, et al. **Eur J Surg Oncol** 1997 Jun;23(3):247–52

Long–term complete remission of melanoma liver metastases after intermittent intra–arterial cisplatin chemotherapy and surgery. Metzger U, et al. **Eur J Surg Oncol** 1997 Jun; 23(3):270–4

Ultraviolet rays induced expression of lectins on the surface of a squamous carcinoma keratinocyte cell line. Condaminet B, et al. **Exp Cell Res** 1997 May 1; 232(2):216–24

A realistic approach to the sensitivity of PCR–DGGE and its application as a sensitive tool for the detection of clonality in cutaneous T–cell proliferations. Meyer JC, et al. **Exp Dermatol** 1997 Jun;6(3):122–7

Merkel cells and Merkel cell carcinoma express the BCL–2 proto–oncogene [corrected and and republished article originally printed in Exp Dermatol 1996 Apr;5(2):102–7] Plettenberg A, et al. **Exp Dermatol** 1996 Jun;5(3):183–8

Trichofolliculoma of the eyelid [letter] Taniguchi S, et al. **Eye** 1996;10 (Pt 6):751–2

Encapsulated uninodular dermatofibrosarcoma protuberans of the dermis: a case report. Magro G, et al. **Gen Diagn Pathol** 1997 Jun;142(5–6):353–6

Adult solitary cutaneous myofibroma: a case report. Rahimi S, et al. **Gen Diagn Pathol** 1996 Oct;142(2):109–11

Sustained nontumorigenic phenotype correlates with a largely stable chromosome content during long–term culture of the human keratinocyte line HaCaT. Boukamp P, et al. **Genes Chromosomes Cancer** 1997 Aug;19(4):201–14

Intermediate filament aggregates in mitoses of primary cutaneous neuroendocrine (Merkel cell) carcinoma. Alvarez–Gago T, et al. **Histopathology** 1996 Apr; 28(4):349–55 (30 ref.)

Neuroendocrine differentiation in eccrine carcinoma [letter; comment] Banerjee SS, et al. **Histopathology** 1996 Oct; 29(4):389–90. Comment on: Histopathology 1995 Jul;27(1):82–6.

Acral–lentiginous naevus of plantar skin [see comments] Clemente C, et al. **Histopathology** 1995 Dec;27(6):549–55 . Comment in: Histopathology 1996 Jul;29(1):95–6.

Atypical dermal nodules in benign melanocytic naevi. Collina G, et al. **Histopathology** 1997 Jul;31(1):97–101

The evaluation of diagnostic and prognostic criteria and the terminology of thin cutaneous malignant melanoma by the CRC Melanoma Pathology Panel [see comments] Cook MG, et al. **Histopathology** 1996 Jun;28(6):497–512. Comment in: Histopathology 1997 Feb;30(2):195–7.

Malignant melanoma metastasising to a basal cell carcinoma. Cowley GP, et al. **Histopathology** 1996 Nov;29(5):469–70

Atypical plexiform fibrohistiocytic tumour. Fisher C. **Histopathology** 1997 Mar;30(3):271–3

Kaposiform haemangioendothelioma associated with Kasabach–Merritt syndrome. Fukunaga M, et al. **Histopathology** 1996 Mar;28(3):281–4

Epithelioid sarcoma masquerading as perforating granuloma annulare [letter] Lopez–Rios F, et al. **Histopathology** 1997 Jul;31(1):102–3

Primary cutaneous myxoid malignant melanoma. McCluggage WG, et al. **Histopathology** 1996 Feb; 28(2):179–82

An immunocytochemical assessment of 19 cases of cutaneous angiosarcoma. Orchard GE, et al. **Histopathology** 1996 Mar;28(3):235–40

Clear cell basal carcinoma: an unusual variant [letter; comment] Reck A, et al. **Histopathology** 1996 Oct; 29(4):390–1. Comment on: Histopathology 1990 Nov;17(5):401–5.

Nodular erythema elevatum diutinum mimicking cutaneous neoplasms. Shanks JH, et al. **Histopathology** 1997 Jul; 31(1):91–6

A cystic teratoma of the skin. Tsai TF, et al. **Histopathology** 1996 Oct;29(4):384–6

p53–protein and Ki–67–antigen expression are both reliable biomarkers of prognosis in thick stage I nodular melanomas of the skin. Vogt T, et al. **Histopathology** 1997 Jan; 30(1):57–63

Clear cell dermatofibroma. Wambacher–Gasser B, et al. **Histopathology** 1997 Jan;30(1):64–9

Squamoid eccrine ductal carcinoma. Wong TY, et al. **Histopathology** 1997 Mar;30(3):288–93

Sclerotic lipoma: lipomas simulating sclerotic fibroma. Zelger BG, et al. **Histopathology** 1997 Aug;31(2):174–81

Role of apoptosis in spontaneous regression of peripheral T–cell lymphoma arising in the skin or subcutis. Arai E, et al. **Hum Pathol** 1997 Apr;28(4):472–7

Hibernoma of scalp: case report and review of literature. Naik R, et al. **Indian J Cancer** 1996 Jun;33(2):116–8 (13 ref.)

Rhabdoid phenotype in squamous carcinoma. A report of two cases. Pai SA, et al. **Indian J Cancer** 1996 Sep; 33(3):161–4

Comparison of the site distribution of melanoma in New Zealand and Canada. Bulliard JL, et al. **Int J Cancer** 1997 Jul 17;72(2):231–5

Resistance to IL–1 anti–proliferative effect, accompanied by characteristics of advanced melanoma, permits invasion of human melanoma cells in vitro, but not metastasis in the nude mouse. Hayashi H, et al. **Int J Cancer** 1997 May 2; 71(3):416–21

Differential expression patterns of S100A2, S100A4 and S100A6 during progression of human malignant melanoma. Maelandsmo GM, et al. **Int J Cancer** 1997 Aug 22; 74(4):464–9

Stimulation of interleukin–11 production from osteoblast–like cells by transforming growth factor–beta and tumor cell factors. Morinaga Y, et al. **Int J Cancer** 1997 May 2; 71(3):422–8

p16/CDKN2 and CDK4 gene mutations in sporadic melanoma development and progression. Piccinin S, et al. **Int J Cancer** 1997 Feb 20;74(1):26–30

Melanoma in childhood: an EORTC–MCG multicenter study on the clinico–pathological aspects. Spatz A, et al. **Int J Cancer** 1996 Nov 4;68(3):317–24

Interleukin–10 is a growth factor for human melanoma cells and down–regulates HLA class–I, HLA class–II and ICAM–1 molecules. Yue FY, et al. **Int J Cancer** 1997 May 16;71(4):630–7

Subcutaneous angiocentric T–cell lymphoma associated with fatal hemophagocytic syndrome. Baselga E, et al. **Int J Dermatol** 1997 May;36(5):363–7

Solitary truncal porokeratotic eccrine ostial and dermal duct nevus in a sixty–year–old man. Beer K, et al. **Int J Dermatol** 1996 Feb;35(2):124–5

Basal cell carcinomas of covered and unusual sites of the body. Betti R, et al. **Int J Dermatol** 1997 Jul;36(7):503–5

Multiple cutaneous melanoma metastases. Cagnoni ML, et al. **Int J Dermatol** 1997 Feb;36(2):136–8

Cutaneous aggressive osteoblastoma. Cannavo SP, et al. **Int J Dermatol** 1996 Jul;35(7):504–5

Solitary plexiform neurofibroma is not pathognomonic of von Recklinghausen's neurofibromatosis: a report of a case. Fisher DA, et al. **Int J Dermatol** 1997 Jun;36(6):439–42

Melanoma on dysplastic nevus spilus. Grinspan D, et al. **Int J Dermatol** 1997 Jul;36(7):499–502

Juvenile hyaline fibromatosis in two South African black children. Jacyk WK, et al. **Int J Dermatol** 1996 Oct; 35(10):740–2

From melanotic to amelanotic lentigo maligna: an aggressive variant presenting as an inflammatory lesion. Kiene P, et al. **Int J Dermatol** 1997 Feb;36(2):123–5 (13 ref.)

Liposarcoma associated with fever and reversible hepatic dysfunction. Kiyosawa T, et al. **Int J Dermatol** 1997 Feb; 36(2):132–4

Ki–1 anaplastic large cell lymphoma. Mysore V, et al. **Int J Dermatol** 1996 Aug;35(8):583–4

Diagnostic value of cytology in basal cell and squamous cell carcinomas [letter] Oram Y, et al. **Int J Dermatol** 1997 Feb; 36(2):156–7

Nevus lipomatosus superficialis on the face. Park HJ, et al. **Int J Dermatol** 1997 Jun;36(6):435–7

Pseudo–melanoma revealing Laugier–Hunziker syndrome. Porneuf M, et al. **Int J Dermatol** 1997 Feb;36(2):138–41

Microcystic adnexal carcinoma. Sabhikhi AK, et al. **Int J Dermatol** 1997 Feb;36(2):134–6

Subcutaneous panniculitic T–cell lymphoma. Wang CY, et al. **Int J Dermatol** 1996 Jan;35(1):1–8 (34 ref.)

Congenital teratoma of the cheek: report of a case. Biglioli F, et al. **Int J Oral Maxillofac Surg** 1996 Jun;25(3):208–9

Multiple metastases of a malignant cutaneous melanoma in the cavitary system of the upper urinary tract. Török P, et al. **Int Urol Nephrol** 1997;29(1):19–24

Merkel cell carcinoma in Israel. Brenner B, et al. **Isr J Med Sci** 1996 Dec;32(12):1235–8

Cutaneous malignant melanoma in young adults under age 30. Tamir G, et al. **Isr J Med Sci** 1996 Dec;32(12):1290–6

Epiluminescence microscopy: criteria of cutaneous melanoma progression. Argenziano G, et al. **J Am Acad Dermatol** 1997 Jul;37(1):68–74

Community perceptions about the important signs of early melanoma. Baade PD, et al. **J Am Acad Dermatol** 1997 Jan;36(1):33–9

Immunohistochemical nuclear staining for p53, PCNA, and Ki–67 in different histologic variants of basal cell carcinoma. Barrett TL, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):430–7

Acquired linear blue nevi. Bart BJ. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):268–9

The utility of fine needle aspiration in the diagnosis of melanoma metastatic to lymph nodes. Basler GC, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):403–8

Trichilemmal carcinoma. Billingsley EM, et al. **J Am Acad Dermatol** 1997 Jan;36(1):107–9

Epiluminescence microscopy of small pigmented skin lesions: short–term formal training improves the diagnostic performance of dermatologists. Binder M, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):197–202

The starburst giant cell is useful for distinguishing lentigo maligna from photodamaged skin. Cohen LM. **J Am Acad Dermatol** 1996 Dec;35(6):962–8

Lentigo maligna and lentigo maligna melanoma [letter] Cohen LM. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):913

Systematized inflammatory epidermal nevus with symmetrical involvement: an unusual case of CHILD syndrome? Fink–Puches R, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 2):823–6

Plantar granulomatous cutaneous T–cell lymphoma. Gibson GE, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 2):326–8 (13 ref.)

Metastatic squamous cell carcinoma arising in Bowen's disease of the palm. González–Pérez R, et al. **J Am Acad Dermatol** 1997 Apr;36(4):635–6

Lichenoid changes in mycosis fungoides. Guitart J, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):417–22

Intracranial osteolytic meningioma affecting the scalp. Iglesias ME, et al. **J Am Acad Dermatol** 1996 Oct; 35(4):641–2

Disseminated cutaneous epithelioid hemangioma. Kanik AB, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):851–3

Mucinous carcinoma of the skin. Karimipour DJ, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 2):323–6

Clinical and histologic spectrum of human T–cell lymphotropic virus type I–associated lymphoma involving the skin [letter; comment] Kikuchi A. **J Am Acad Dermatol** 1997 Jan;36(1):133–4. Comment on: J Am Acad Dermatol 1996 Jan;34(1):69–76.

Benign melanocytic lesions [letter; comment] Marks R. **J Am Acad Dermatol** 1996 Dec;35(6):1017–8. Comment on: J Am Acad Dermatol 1995 Dec;33(6):1000–7.

Trichilemmomal carcinoma in a patient with Cowden's disease (multiple hamartoma syndrome). O'Hare AM, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1021–3

Correlation of histologic subtypes of primary basal cell carcinoma and number of Mohs stages required to achieve a tumor–free plane. Orengo IF, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):395–7

Changes in size of melanocytic nevi during pregnancy. Pennoyer JW, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):378–82

Proliferation marker Ki–S5 as a diagnostic tool in melanocytic lesions. Rudolph P, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):169–78

Multiple cutaneous granular cell tumors in a child with possible neurofibromatosis. Sahn EE, et al. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 2):327–30

High rate of malignant transformation in hyperkeratotic actinic keratoses. Suchniak JM, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):392–4

Mucinous nevus: report of two cases and review of the literature. Suhr KB, et al. **J Am Acad Dermatol** 1997 Aug; 37(2 Pt 2):312–3 (4 ref.)

Lymphocytic aleukemic leukemia cutis. Taniguchi S, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):849–50 (7 ref.)

Prognostic factors and evaluation of mycosis fungoides and Sézary syndrome. Toro JR, et al. **J Am Acad Dermatol** 1997 Jul;37(1):58–67

Benign melanocytic lesions [letter; comment] Whitmore SE. **J Am Acad Dermatol** 1996 Dec;35(6):1018–9. Comment on: J Am Acad Dermatol 1995 Dec;33(6):1000–7.

Increased proportion of aggressive–growth basal cell carcinoma in the Veterans Affairs population of Palo Alto, California. Wrone DA, et al. **J Am Acad Dermatol** 1996 Dec;35(6):907–10

Skin biopsy indications in primary care practice: a population–based study [see comments] Jones TP, et al. **J Am Board Fam Pract** 1996 Nov–Dec;9(6):397–404. Comment in: J Am Board Fam Pract 1997 Mar–Apr;10(2):175–6.

T–cell lymphoma cell lines (HUT102 and HUT78) established at the National Cancer Institute: history and importance to understanding the biology, clinical features, and therapy of cutaneous T–cell lymphomas (CTCL) and adult T–cell leukemia–lymphomas (ATLL). Bunn PA Jr, et al. **J Cell Biochem Suppl** 1996;24:12–23 (125 ref.)

Critical analysis of the current American Joint Committee on Cancer staging system for cutaneous melanoma and proposal of a new staging system [see comments] Buzaid

AC, et al. **J Clin Oncol** 1997 Mar;15(3):1039–51. Comment in: J Clin Oncol 1997 Aug;15(8):3026.

Diagnosis in Oncology. Leukemia cutis. Hahn WC, et al. **J Clin Oncol** 1997 May;15(5):2170–1

Evaluation of tyrosinase mRNA as a tumor marker in the blood of melanoma patients. Jung FA, et al. **J Clin Oncol** 1997 Aug;15(8):2826–31

Cutaneous melanoma, staging system [letter; comment] Nathanson L. **J Clin Oncol** 1997 Aug;15(8):3026. Comment on: J Clin Oncol 1997 Mar;15(3):1039–51.

AIDS–related Kaposi's sarcoma. van den Brink MR, et al. **J Clin Oncol** 1997 Mar;15(3):1283–4

A nationwide survey of observer variation in the diagnosis of thin cutaneous malignant melanoma including the MIN terminology. CRC Melanoma Pathology Panel [see comments] **J Clin Pathol** 1997 Mar;50(3):202–5. Comment in: J Clin Pathol 1997 Mar;50(3):179–80.

Proliferation indexes—a comparison between cutaneous basal and squamous cell carcinomas [letter; comment] Maiolino P, et al. **J Clin Pathol** 1997 Apr;50(4):355. Comment on: J Clin Pathol 1996 Jul;49(7):549–51.

Diagnosis of thin melanoma [editorial; comment] Mooi WJ. **J Clin Pathol** 1997 Mar;50(3):179–80. Comment on: J Clin Pathol 1997 Mar;50(3):202–5.

Cycloheximide–induced apoptosis in melanoma cells derived from regressing cutaneous tumours of Sinclair swine. Gossett R, et al. **J Comp Pathol** 1996 Nov;115(4):353–72

Immunohistochemical detection of P53 overexpression in paraffin wax–embedded squamous cell carcinomas of cattle, horses, cats and dogs. Teifke JP, et al. **J Comp Pathol** 1996 Feb;114(2):205–10

Idiopathic solitary neuroma of skin with unusual histologic changes. Ahn SK, et al. **J Cutan Pathol** 1995 Dec; 22(6):570–3

Expression of basic fibroblast growth factor in desmoplastic melanoma. al–Alousi S, et al. **J Cutan Pathol** 1996 Apr; 23(2):118–25

Multiple malignant cylindromas of skin in association with basal cell adenocarcinoma with adenoid cystic features of minor salivary gland. Antonescu CR, et al. **J Cutan Pathol** 1997 Aug;24(7):449–53

Distinctive clinicopathologic features associated with regressive primary CD30 positive cutaneous lymphomas: analysis of 6 cases. Bernier M, et al. **J Cutan Pathol** 1997 Mar;24(3):157–63

Unusual features of primary dermatofibrosarcoma protuberans and its myxoid recurrence. Betti R, et al. **J Cutan Pathol** 1996 Jun;23(3):283–7

Skin lesions revealing neonatal acute leukemias with monocytic differentiation. A report of 3 cases. Canioni D, et al. **J Cutan Pathol** 1996 Jun;23(3):254–8

Trisomy 7 in keratoacanthoma and squamous cell carcinoma detected by fluorescence in–situ hybridization. Cheville JC, et al. **J Cutan Pathol** 1995 Dec;22(6):546–50

Infundibulocystic basaloid neoplasm. de Eusebio E, et al. **J Cutan Pathol** 1996 Apr;23(2):147–50

Epithelial markers and differentiation in adnexal neoplasms of the skin: an immunohistochemical study including individual cytokeratins. Demirkesen C, et al. **J Cutan Pathol** 1995 Dec;22(6):518–35

Immune–associated cells in basal cell carcinomas of skin. Deng JS, et al. **J Cutan Pathol** 1996 Apr;23(2):140–6

Extranodal spread of anaplastic large cell (CD30+) lymphoma presenting as a cutaneous perivascular infiltrate. Derringer GA, et al. **J Cutan Pathol** 1996 Aug;23(4):323–7

Myoid differentiation in dermatofibrosarcoma protuberans and its fibrosarcomatous variant [letter; comment] Diaz–Cascajo C. **J Cutan Pathol** 1997 Mar;24(3):197–8. Comment on: J Cutan Pathol 1996 Feb;23(1):30–6.

Superinfected cutaneous angiosarcoma: a highly malignant neoplasm simulating an inflammatory process. Diaz–Cascajo C, et al. **J Cutan Pathol** 1997 Jan;24(1):56–60

Detection of CD44 splice variants in formalin–fixed, paraffin–embedded specimens of human skin cancer. Dietrich A, et al. **J Cutan Pathol** 1997 Jan;24(1):37–42

Calcifying and ossifying soft tissue lesions presenting in the skin [editorial] Fletcher CD. **J Cutan Pathol** 1996 Aug; 23(4):297

Folliculotropic mycosis fungoides with large–cell transformation presenting as dissecting cellulitis of the scalp. Gilliam AC, et al. **J Cutan Pathol** 1997 Mar; 24(3):169–75

Small–diameter invasive melanomas: clinical and pathologic characteristics [see comments] Gonzalez A, et al. **J Cutan Pathol** 1996 Apr;23(2):126–32. Comment in: J Cutan Pathol 1997 Apr;24(4):261–2.

Solitary cutaneous myofibromas in adults: report of six cases and discussion of differential diagnosis. Guitart J, et al. **J Cutan Pathol** 1996 Oct;23(5):437–44

Clinical and histological features of poor prognosis in cutaneous metastatic melanomas. Hofmann–Wellenhof R, et al. **J Cutan Pathol** 1996 Jun;23(3):199–204

Bowenoid epidermotropic metastatic squamous cell carcinoma. Ihm CW, et al. **J Cutan Pathol** 1996 Oct; 23(5):479–84

Intradermal and subcutaneous leiomyosarcoma: a clinicopathological and immunohistochemical study of 41 cases. Jensen ML, et al. **J Cutan Pathol** 1996 Oct; 23(5):458–63

Proliferating pilomatricoma. A histopathologic simulator of matrical carcinoma. Kaddu S, et al. **J Cutan Pathol** 1997 Apr;24(4):228–34

Concerning small diameter invasive melanoma [letter] Kamino H, et al. **J Cutan Pathol** 1997 Apr;24(4):262–3

Nevoid malignant melanoma: morphologic patterns and immunohistochemical reactivity. McNutt NS, et al. **J Cutan Pathol** 1995 Dec;22(6):502–17

Malignant peripheral nerve sheath tumor of the skin: a superficial form of this tumor. Misago N, et al. **J Cutan Pathol** 1996 Apr;23(2):182–8

Differences of bcl–2 protein expression between Merkel cells and Merkel cell carcinomas. Moll I, et al. **J Cutan Pathol** 1996 Apr;23(2):109–17

Extra–acral calcifying aponeurotic fibroma: a distinctive case with 23–year follow–up. Murphy BA, et al. **J Cutan Pathol** 1996 Aug;23(4):369–72

Multiple cutaneous myxomas. Report of a case without other elements of Carney's complex. Murphy CM, et al. **J Cutan Pathol** 1995 Dec;22(6):556–62

Histogenesis of clear cell hidradenoma: immunohistochemical study of keratin expression. Ohnishi T, et al. **J Cutan Pathol** 1997 Jan;24(1):30–6

T–cell receptor beta variable region (V beta) usage in cutaneous T–cell lymphomas (CTCL) in comparison to normal and eczematous skin. Potoczna N, et al. **J Cutan Pathol** 1996 Aug;23(4):298–305

Intermediate– and low–molecular–weight keratin detection with the monoclonal antibody MNF116. An immunohistochemical study on 232 paraffin–embedded cutaneous lesions. Prieto VG, et al. **J Cutan Pathol** 1996 Jun;23(3):234–41

Expression of the mast cell growth factor interleukin–3 in melanocytic lesions correlates with an increased number of mast cells in the perilesional stroma: implications for melanoma progression. Reed JA, et al. **J Cutan Pathol** 1996 Dec;23(6):495–505

Cutaneous adult myofibroma: a vascular neoplasm. Requena L, et al. **J Cutan Pathol** 1996 Oct;23(5):445–57

Clear–cell atypical fibroxanthoma: an uncommon histopathologic variant of atypical fibroxanthoma. Requena L, et al. **J Cutan Pathol** 1997 Mar;24(3):176–82 (34 ref.)

T–cell–rich B–cell lymphoma presenting in skin. A clinicopathologic analysis of six cases. Sander CA, et al. **J Cutan Pathol** 1996 Apr;23(2):101–8

Primary cutaneous immunocytoma: report of an unusual case with secondary spreading to the gastrointestinal tract. Sangüeza OP, et al. **J Cutan Pathol** 1997 Jan;24(1):43–6

Retiform hemangioendothelioma. A new case in a child with diffuse endovascular papillary endothelial proliferation. Sanz–Trelles A, et al. **J Cutan Pathol** 1997 Aug;24(7):440–4 (12 ref.)

A nevoid plaque with histological changes of trichoepithelioma and cylindroma in Brooke–Spiegler syndrome. An immunohistochemical study with cytokeratins. Schirren CG, et al. **J Cutan Pathol** 1995 Dec; 22(6):563–9

Merkel cells are absent in basal cell carcinomas but frequently found in trichoblastomas. An immunohistochemical study. Schulz T, et al. **J Cutan Pathol** 1997 Jan;24(1):14–24

Concerning small–diameter invasive melanoma [letter; comment] Shaw HM, et al. **J Cutan Pathol** 1997 Apr; 24(4):261–2. Comment on: J Cutan Pathol 1996 Apr;23(2):126–32.

Myxoid dermatofibrohistiocytoma: an indolent post–traumatic tumor composed of CD34+ epithelioid and dendritic cells and factor XIIIa+ dendrophages. Silverman JS, et al. **J Cutan Pathol** 1996 Dec;23(6):551–7

Dermatofibroma with granular cells. Val–Bernal JF, et al. **J Cutan Pathol** 1996 Dec;23(6):562–5

Cutaneous angiomyolipoma. Val–Bernal JF, et al. **J Cutan Pathol** 1996 Aug;23(4):364–8

Ossifying fibromyxoid tumor of soft parts. Velasco–Pastor AM, et al. **J Cutan Pathol** 1996 Aug;23(4):381–4

Cutaneous pseudosarcomatous polyp: a histological and immunohistochemical study. Williams BT, et al. **J Cutan Pathol** 1996 Apr;23(2):189–93

Cutaneous pseudosarcomatous polyp—another variant of dermal lipoma or only an "ancient" skin tag? [letter] Zelger BG, et al. **J Cutan Pathol** 1997 Jul;24(6):390–1

Nuchal fibroma. Abraham Z, et al. **J Dermatol** 1997 Apr; 24(4):262–5

Trichoblastoma with rippled–pattern. Akasaka T, et al. **J Dermatol** 1997 Mar;24(3):174–8

A case of pigmented dermatofibrosarcoma protuberans (Bednar tumor). Akasaka T, et al. **J Dermatol** 1997 Jun; 24(6):390–4

Cutaneous mixed tumor containing ossification, hair matrix, and sebaceous ductal differentiation. Akasaka T, et al. **J Dermatol** 1997 Feb;24(2):125–31

Giant basal cell carcinomas: report of four cases and considerations. Betti R, et al. **J Dermatol** 1997 May; 24(5):317–21

Regional eruptive neurofibromas. Betti R, et al. **J Dermatol** 1997 Mar;24(3):198–201

A case of multiple nevoid hypertrichosis. Chang SN, et al. **J Dermatol** 1997 May;24(5):337–41 (10 ref.)

A case of acral melanocytic hyperplasia: a unique pigmented lesion mimicking acral lentiginous melanoma in situ. Cho KH, et al. **J Dermatol** 1996 Mar;23(3):181–6

A case of subcutaneous malignant fibrous histiocytoma circumscribed by fibrous tissue. Fukunaka H, et al. **J Dermatol** 1996 Nov;23(11):836–9 (14 ref.)

A case of cutaneous malignant fibrous histiocytoma. Ichikawa E, et al. **J Dermatol** 1996 Aug;23(8):535–8

Pilomatricoma with a bullous appearance. Inui S, et al. **J Dermatol** 1997 Jan;24(1):57–9

A case of connective tissue nevus associated with seborrheic keratosis–like eruption, atrophic scar, alopecia, and microtia. Isoda M, et al. **J Dermatol** 1996 Aug;23(8):577–9

Epidermal nevus syndrome with hemangioma simplex [letter] Kawachi R, et al. **J Dermatol** 1997 Jan;24(1):66–7

Lymphoepithelioma–like carcinoma of the skin. Ko T, et al. **J Dermatol** 1997 Feb;24(2):104–9

A case of apple–shaped pedunculated lipofibroma. Kwon KS, et al. **J Dermatol** 1997 Apr;24(4):258–61 (8 ref.)

Congenital atrophic plaque. Mihara I, et al. **J Dermatol** 1996 Nov;23(11):832–5

Familial atypical mole syndrome manifesting as polypoid melanoma: a case report and review of the Japanese literature. Misago N, et al. **J Dermatol** 1996 Oct; 23(10):689–96 (38 ref.)

A case of Bednar tumor recurring after 23 years. Mochizuki Y, et al. **J Dermatol** 1996 Sep;23(9):614–8 (17 ref.)

A case of Sézary syndrome associated with cutaneous transformation. Sakai H, et al. **J Dermatol** 1996 Oct; 23(10):697–702

Expression of E–cadherin in skin carcinomas. Tada H, et al. **J Dermatol** 1996 Feb;23(2):104–10

Multiple leiomyoma cutis associated with Becker's nevus [letter] Thappa DM, et al. **J Dermatol** 1996 Oct; 23(10):719–20

Lentiginous melanocytic hyperplasia overlying dermatofibroma. Toda S, et al. **J Dermatol** 1996 Nov; 23(11):840–4 (13 ref.)

A unique case of squamous cell carcinoma showing adenocarcinomatous features with focal apocrine differentiation. Yamamoto O, et al. **J Dermatol** 1997 Apr; 24(4):249–54

Comparison of migration and invasiveness of epithelial tumor and melanoma cells in vitro. Wach F, et al. **J Dermatol Sci** 1996 Jun;12(2):118–26

Non–melanoma skin cancer: a case–control study on risk factors and protective measures. Suárez–Varela MM, et al. **J Environ Pathol Toxicol Oncol** 1996;15(2–4):255–61

The clinical relevance of sentinel lymph nodes identified with radiolymphoscintigraphy. Brobeil A, et al. **J Fla Med Assoc** 1997 Mar;84(3):157–60

Pathologic examination of the sentinel lymph node. Messina JL, et al. **J Fla Med Assoc** 1997 Mar;84(3):153–6

Investment in new technology research can save future health care dollars. Reintgen D, et al. **J Fla Med Assoc** 1997 Mar; 84(3):175–81

Enhanced growth of murine melanoma in ultraviolet–irradiated skin is associated with local inhibition of immune effector mechanisms. Donawho CK, et al. **J Immunol** 1996 Jul 15;157(2):781–6

Cutaneous pseudolymphoma. Naik R, et al. **J Indian Med Assoc** 1996 Feb;94(2):81

Chondroid syringoma of the scrotum. Poku JW, et al. **J Int Med Res** 1996 Nov–Dec;24(6):482–6

Adhesive and migratory behaviors of nevus cells differ from those of epidermal melanocytes and are not linked to the histological type of nevus. Mengeaud V, et al. **J Invest Dermatol** 1996 Jun;106(6):1224–9

Apoptosis induction of ultraviolet light A and photochemotherapy in cutaneous T–cell Lymphoma: relevance to mechanism of therapeutic action. Yoo EK, et al. **J Invest Dermatol** 1996 Aug;107(2):235–42

Angiosarcoma of the head and neck. el–Sharkawi S. **J Laryngol Otol** 1997 Feb;111(2):175–6

Gingival metastasis of merkel cell carcinoma: a case report. Schmidt–Westhausen A, et al. **J Oral Pathol Med** 1996 Jan;25(1):44–7

Quinolone antibacterials: a new class of photochemical carcinogens. Mäkinen M, et al. **J Photochem Photobiol B** 1997 Feb;37(3):182–7

Characterization of melanosomes and melanogenesis in cells cultured from Ota's nevus. Kishikawa T, et al. **J Submicrosc Cytol Pathol** 1997 Jul;29(3):339–52

Advanced cutaneous squamous cell carcinoma of the trunk and extremity: analysis of prognostic factors. North JH Jr, et al. **J Surg Oncol** 1997 Mar;64(3):212–7

Expert pathology consultation through the Internet: melanoma versus benign melanocytic tumours. Della Mea V, et al. **J Telemed Telecare** 1997;3 Suppl 1:17–9

Superior orbital fissure syndrome caused by intraorbital spread of a cutaneous squamous cell carcinoma and not detected on computed tomography and magnetic resonance imaging. de Keizer RJ, et al. **Jpn J Ophthalmol** 1997 Mar–Apr;41(2):104–10

Squamous–cell cancer in Verneuil's disease (hidradenitis suppurativa) [letter] Malaguarnera M, et al. **Lancet** 1996 Nov 23;348(9039):1449

Cutaneous monoblastic leukemia as a first sign of relapse six years after autologous bone marrow transplantation for acute leukemia. Weide R, et al. **Leuk Lymphoma** 1996 Aug; 22(5–6):527–9

The life of a skin cancer. Brodland DG. **Mayo Clin Proc** 1997 May;72(5):475–8 (15 ref.)

Dermatopathologic variants of malignant melanoma. Perniciaro C. **Mayo Clin Proc** 1997 Mar;72(3):273–9 (38 ref.)

Malignant melanoma: basic approach to clinicopathologic correlation. Su WP. **Mayo Clin Proc** 1997 Mar;72(3):267–72 (5 ref.)

Use of gamma detecting probe and isosulphan blue to localize

sentinel node in patients with malignant melanoma. Singh K, et al. **Md Med J** 1996 Jun;45(6):476–81

Characteristics of incompletely excised basal cell carcinomas of the skin. Rippey JJ, et al. **Med J Aust** 1997 Jun 2; 166(11):581–3

MEL-P, a GM-CSF-producing human melanoma cell line [published erratum appears in Melanoma Res 1996 Aug;6(4):337] Ciotti P, et al. **Melanoma Res** 1996 Jun; 6(3):203–13

Selective growth of human melanoma cells in the brain parenchyma of nude mice. Fujimaki T, et al. **Melanoma Res** 1996 Oct;6(5):363–71

Superantigen-induced lysis of melanoma cells. Krull F, et al. **Melanoma Res** 1997 Jun;7(3):214–22

In situ expression of transforming growth factor beta is associated with melanoma progression and correlates with Ki67, HLA-DR and beta 3 integrin expression. Moretti S, et al. **Melanoma Res** 1997 Aug;7(4):313–21

Acral melanoma in association with melanocytic naevus [letter; comment] Saida T. **Melanoma Res** 1997 Feb;7(1):78 . Comment on: Melanoma Res 1996 Jun;6(3):241–6.

Prognostic significance of nm23 protein expression in malignant melanoma. An immunohistochemical study. van den Oord JJ, et al. **Melanoma Res** 1997 Apr;7(2):121–8

Acral lentiginous melanoma (including in situ melanoma) arising in association with naevocellular naevi [see comments] Wong TY, et al. **Melanoma Res** 1996 Jun; 6(3):241–6. Comment in: Melanoma Res 1997 Feb;7(1):78.

Expression of FGF1 and FGFR1 in human melanoma tissues. Xerri L, et al. **Melanoma Res** 1996 Jun;6(3):223–30

Metastatic melanoma: endoscopy as aid to earlier in vivo diagnosis of gastrointestinal involvement. A case report. Giacobbe A, et al. **Minerva Gastroenterol Dietol** 1996 Sep; 42(3):169–71

Recommendations for the reporting of tissues removed as part of the surgical treatment of cutaneous melanoma. Association of Directors of Anatomic and Surgical Pathology. **Mod Pathol** 1997 Apr;10(4):387–90

Evidence that initiated keratinocytes clonally expand into multiple existing hair follicles during papilloma histogenesis in SENCAR mouse skin. Binder RL, et al. **Mol Carcinog** 1997 Sep;20(1):151–8

Enhanced sensitivity to tumor growth and development in multistage skin carcinogenesis by transforming growth factor-alpha-induced epidermal growth factor receptor activation but not p53 inactivation. Shibata MA, et al. **Mol Carcinog** 1997 Mar;18(3):160–70

Increased apoptosis during papilloma development in mice susceptible to tumor progression. Stern MC, et al. **Mol Carcinog** 1997 Sep;20(1):137–42

Retinoic acid signaling cascade in differentiating murine epidermal keratinocytes: alterations in papilloma- and carcinoma-derived cell lines. Vettermann O, et al. **Mol Carcinog** 1997 Sep;20(1):58–67

Characterization of mutant HA-ras gene expression in transformed murine keratinocyte lines grown under in vitro and in vivo conditions. Volpe JP, et al. **Mol Carcinog** 1996 Dec;17(4):202–6

Increased expression of G1 cyclins and cyclin-dependent kinases during tumor progression of chemically induced mouse skin neoplasms. Zhang SY, et al. **Mol Carcinog** 1997 Mar;18(3):142–52

Images in clinical medicine. Cutaneous lesions in diffuse large-B-cell lymphoma. Paredi P, et al. **N Engl J Med** 1997 May 1;336(18):1302

Induction of basal cell carcinoma features in transgenic human skin expressing Sonic Hedgehog. Fan H, et al. **Nat Med** 1997 Jul;3(7):788–92

Approaches to prove the melanoma origin in amelanotic human melanoma cell lines. Blaško M, et al. **Neoplasma** 1996;43(6):411–5

Upregulation of fibroblast growth factors and their receptors during multi-stage epidermal carcinogenesis in K14-HPV16 transgenic mice. Arbeit JM, et al. **Oncogene** 1996 Nov 7;13(9):1847–57

Molecular pathology in basal cell cancer with p53 as a genetic marker. Pontén F, et al. **Oncogene** 1997 Aug 28; 15(9):1059–67

Lymph node removal may provide prognostic information for melanoma patients [news] **Oncology (Huntingt)** 1996 Nov;10(11):1637–8

The role of cytology in the diagnosis of periocular basal cell carcinomas. Barton K, et al. **Ophthal Plast Reconstr Surg** 1996 Sep;12(3):190–4; discussion 195

Divided nevus of the eyelid: a case report. Ribuffo D, et al. **Ophthal Plast Reconstr Surg** 1996 Sep;12(3):186–9

Need for confirmation of positioning of ruthenium plaques by postoperative B-scan ultrasonography. Anteby II, et al. **Ophthalmic Surg Lasers** 1996 Dec;27(12):1024–9

Echographic evaluation and findings in metastatic melanoma to extraocular muscles. DiBernardo C, et al. **Ophthalmology** 1996 Nov;103(11):1794–7

Perineural spread of cutaneous squamous cell carcinoma via the orbit. Clinical features and outcome in 21 cases. McNab AA, et al. **Ophthalmology** 1997 Sep;104(9):1457–62

An asymptomatic enlargement of the upper lip [clinical conference] Manganaro AM, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Sep;82(3):238–40

Birt-Hogg-Dubé syndrome: a review and presentation of the first case with oral lesions. Nadershahi NA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Apr;83(4):496–500 (19 ref.)

Angiosarcoma of the scalp. Visor RL, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):138

Malignant rhabdoid tumor in adults—heterogenous tumors with a unique morphological phenotype. Leong FJ, et al. **Pathol Res Pract** 1996 Aug;192(8):796–807 (34 ref.)

A solitary congenital self-healing histiocytosis. Report of a case and review of the literature. Shy SW, et al. **Pathol Res Pract** 1996 Aug;192(8):869–74; discussion 875–6 (23 ref.)

Immunohistochemical expression of p53 protein, mitotic index and nuclear morphometry in primary malignant melanoma of the skin. Talve L, et al. **Pathol Res Pract** 1996 Aug;192(8):825–33

Langerhans cells in the development of skin cancer: a qualitative and quantitative comparison of cell markers in normal, acanthotic and neoplastic ovine skin. Townsend WL, et al. **Pathology** 1997 Feb;29(1):42–50

Pachydermodactyly in two young girls. Bardazzi F, et al. **Pediatr Dermatol** 1996 Jul-Aug;13(4):288–91

Granulomatous slack skin in childhood. Camacho FM, et al. **Pediatr Dermatol** 1997 May-Jun;14(3):204–8

Indurated purple-red plaque [clinical conference] Francis JS, et al. **Pediatr Dermatol** 1997 Jan-Feb;14(1):53–5

Amelanotic Spitzoid melanoma in the burn scar of a child. Ghorbani Z, et al. **Pediatr Dermatol** 1996 Jul-Aug; 13(4):285–7

Congenital cerebriform nodule. Hebel J, et al. **Pediatr Dermatol** 1996 Jul-Aug;13(4):345–6

Multiple leiomyomata presenting in a child. Henderson CA, et al. **Pediatr Dermatol** 1997 Jul-Aug;14(4):287–9

CTCL in patients under 20 years of age: a series of five cases. Hickham PR, et al. **Pediatr Dermatol** 1997 Mar-Apr; 14(2):93–7

Congenital melanoma: a case suggesting rhabdomyogenic differentiation. Koyama T, et al. **Pediatr Dermatol** 1996 Sep-Oct;13(5):389–93

Cellular blue nevus of the scalp infiltrating the underlying bone: case report and review. Micali G, et al. **Pediatr Dermatol** 1997 May-Jun;14(3):199–203 (17 ref.)

Linear sebaceous nevus syndrome: report of a patient with unusual associated abnormalities. Palazzi P, et al. **Pediatr Dermatol** 1996 Jan-Feb;13(1):22–4 (16 ref.)

Melanoma in children and adolescents. Wu SJ, et al. **Pediatr Dermatol** 1997 Mar-Apr;14(2):87–92

Cutaneous leiomyosarcoma in a child. Yanguas I, et al. **Pediatr Dermatol** 1997 Jul-Aug;14(4):281–3

Lymphangiomatosis of the body wall: a report of two cases associated with chylothorax and fatal outcome. Moerman P, et al. **Pediatr Pathol Lab Med** 1997 Jul-Aug;17(4):617–24

Quercetin prevents UV-induced local immunosuppression, but does not affect UV-induced tumor growth in SKH-1 hairless mice. Steerenberg PA, et al. **Photochem Photobiol** 1997 Apr;65(4):736–44

Myxoid liposarcoma of the scalp: case report and literature review. Herman O, et al. **Plast Reconstr Surg** 1997 Jul; 100(1):84–5 (9 ref.)

Sentinel lymph node biopsy in melanoma of the head and neck. Wells KE, et al. **Plast Reconstr Surg** 1997 Sep; 100(3):591–4

Multiple primary melanomas [letter; comment] Yii NW, et al. **Plast Reconstr Surg** 1996 Oct;98(5):902–3. Comment on: Plast Reconstr Surg 1995 Nov;96(6):1384–9.

Examination of DNA-ploidy in melanocytic nevi cells using video-imaging cytometry. Skowronek J, et al. **Pol J Pathol** 1997;48(1):37–41

Splenomegaly. al-Omishy H, et al. **Postgrad Med J** 1997 Feb; 73(856):125–6

Skin: MR imaging findings at middle field strength. Hawnaur JM, et al. **Radiology** 1996 Dec;201(3):868–72

Cytology of metastatic cutaneous melanoma to the vitreous and retina. Spraul CW, et al. **Retina** 1996;16(4):328–32

Early diagnosis of melanoma by surface microscopy (dermatoscopy). Paschoal FM. **Rev Paul Med** 1996 Jul-Aug;114(4):1220–1

Melanoma ganglionic metastasis 30 years after treatment of the primary tumor—a case report. Tincani AJ, et al. **Rev Paul Med** 1996 Mar-Apr;114(2):1131–3

Dermal leiomyosarcoma of the right fifth finger. Case report. Munk B, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Jun;31(2):179–80

Amelanotic malignant melanoma. Adler MJ, et al. **Semin Cutan Med Surg** 1997 Jun;16(2):122–30 (52 ref.)

Staging and prognosis of melanoma. Brown M. **Semin Cutan Med Surg** 1997 Jun;16(2):113–21 (51 ref.)

Biopsy technique for pigmented lesions. Cockerell CJ. **Semin Cutan Med Surg** 1997 Jun;16(2):108–12 (15 ref.)

Melanoma and melanoma in situ: build a better diagnosis through architecture. McCalmont TH. **Semin Cutan Med Surg** 1997 Jun;16(2):97–107 (7 ref.)

Immunohistochemistry: a prognostic as well as diagnostic tool? Mehregan D, et al. **Semin Cutan Med Surg** 1996 Dec; 15(4):317–25 (85 ref.)

Melanoma and stroma: an interaction of biological and prognostic importance. Smolle J, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):326–35 (108 ref.)

Desmoplastic neurotropic melanoma. Tsao H, et al. **Semin Cutan Med Surg** 1997 Jun;16(2):131–6 (24 ref.)

Mucocutaneous neoplasms in patients with human immunodeficiency virus infection. Cockerell CJ. **Semin Diagn Pathol** 1996 Feb;13(1):19–39 (131 ref.)

Clear cell tumors of the skin. Suster S. **Semin Diagn Pathol** 1996 Feb;13(1):40–59 (74 ref.)

Lymphoscintigraphy, the sentinel node concept, and the intraoperative gamma probe in melanoma, breast cancer, and other potential cancers. Alazraki NP, et al. **Semin Nucl Med** 1997 Jan;27(1):55–67 (51 ref.)

Prognosis and staging in melanoma. Garrison M, et al. **Semin Oncol** 1996 Dec;23(6):725–33 (77 ref.)

Pregnancy and the prognosis of malignant melanoma. Grin CM, et al. **Semin Oncol** 1996 Dec;23(6):734–6 (20 ref.)

The clinical and histological differential diagnosis of malignant melanoma. Keller JM, et al. **Semin Oncol** 1996 Dec;23(6):693–702 (25 ref.)

Cutaneous melanomas that defy conventional prognostic indicators. McCarthy WH, et al. **Semin Oncol** 1996 Dec; 23(6):709–13

Melanoma: criteria for histological diagnosis and its reporting. Metcalf JS. **Semin Oncol** 1996 Dec;23(6):688–92 (11 ref.)

Detection of occult melanoma cells in sentinel lymph nodes and blood. Reintgen DS, et al. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S11–5 (23 ref.)

Unusual variants of melanoma: fact or fiction? Sagebiel RW. **Semin Oncol** 1996 Dec;23(6):703–8

Squamous cell carcinoma arising in an unhealed wound in Crohn's disease. Sarani B, et al. **South Med J** 1997 Sep; 90(9):940–2

Pathology of malignant melanoma. Heasley DD, et al. **Surg Clin North Am** 1996 Dec;76(6):1223–55 (34 ref.)

Stereotactic radiosurgery for malignant melanoma to the brain. Seung SK, et al. **Surg Clin North Am** 1996 Dec; 76(6):1399–411

The influence of laparotomy and laparoscopy on tumor growth in a rat model. Jacobi CA, et al. **Surg Endosc** 1997 Jun;11(6):618–21

Prognostic factors for cutaneous squamous cell and basal cell carcinoma. Determinants of risk of recurrence, metastasis, and development of subsequent skin cancers. Barksdale SK, et al. **Surg Oncol Clin N Am** 1997 Jul;6(3):625–38 (53 ref.)

Prognostic factors in malignant melanoma. Kashani-Sabet M, et al. **Surg Oncol Clin N Am** 1997 Jul;6(3):599–623 (143 ref.)

Melanoma nodal metastases: biologic significance and therapeutic considerations. Reintgen D. **Surg Oncol Clin N Am** 1996 Jan;5(1):105–20 (24 ref.)

A transgenic mouse model of skin cancer in XPA-deficient humans. O'Neill TP. **Toxicol Pathol** 1996 Sep-Oct; 24(5):642–3

Absence of Kaposi's sarcoma-associated human herpes virus 8 in transplantation-related tumors other than Kaposi's sarcoma. Cathomas G, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):836–7

Granular cell basal cell carcinoma of the skin. Report of a case with immunocytochemical positivity for lysozyme. Boscaino A, et al. **Tumori** 1997 May-Jun;83(3):712–4

Solitary melanoma metastasis of the kidney: a case report. Lenisa L, et al. **Tumori** 1996 Nov-Dec;82(6):614–5

Cutaneous malignant melanomas in 57 cats: identification of (amelanotic) signet-ring and balloon cell types and verification of their origin by immunohistochemistry, electron microscopy, and in situ hybridization. van der Linde-Sipman JS, et al. **Vet Pathol** 1997 Jan;34(1):31–8

Recommendations for the reporting of tissues removed as part of the surgical treatment of cutaneous melanoma. Association of Directors of Anatomic and Surgical Pathology. **Virchows Arch** 1997 Aug;431(2):79–81 (7 ref.)

Light and electron microscopic investigation of the process of healing of the naevus of Ota by Q-switched alexandrite laser irradiation. Hakozaki M, et al. **Virchows Arch** 1997 Jul;431(1):63–71

Factor XIIIa-positive dendrocytes and proliferative activity of cutaneous cancers. Piérard-Franchimont C, et al. **Virchows Arch** 1996 Sep;429(1):43–8

[Dermatofibrosarcoma protuberans—a clinico-anatomical and immunohistochemical study] Popkhristova E. **Khirurgiia (Sofiia)** 1996;49(6):42–5 (Eng. Abstr.) **(Bul)**

[Squamous cell carcinoma in neuropathic plantar ulcers in leprosy: another example of Marjolin's ulcer] Schoeman BJ. **S Afr Med J** 1996 Aug;86(8):966–9 (Eng. Abstr.) **(Dut)**

[Cardiac metastasis of melanoma disclosed by tamponade] Legoux B, et al. **Ann Dermatol Venereol** 1996; 123(6-7):393–4 (Eng. Abstr.) **(Fre)**

[Recurrence of giant-cell fibroblastoma as dermatofibrosarcoma protuberans in the adult] Denoux Y, et al. **Ann Pathol** 1996 Dec;16(6):457–9 (Eng. Abstr.) **(Fre)**

[Retiform hemangioendothelioma] Dufau JP, et al. **Ann Pathol** 1997 Mar;17(1):47–51 (Eng. Abstr.) **(Fre)**

[Clinico-pathologic spectrum of cutaneous angiosarcoma and the difficulties of pathologic diagnosis] Laporte JL, et al. **Ann Pathol** 1996 Sep;16(4):247–53 (62 ref.) **(Fre)**

[Multinucleated cell angiohistiocytoma. Report of 6 cases] Le Cam-Savin C, et al. **Ann Pathol** 1996 Dec;16(6):435–8 (Eng. Abstr.) **(Fre)**

[Primary meningioma of the scalp. Report of a case (letter)] Le Pelletier F, et al. **Ann Pathol** 1997 Mar;17(1):75–6 **(Fre)**

[Monitoring of the margins of excision of skin tumors] Wechsler J, et al. **Ann Pathol** 1997 Mar;17(1):67–71 (Eng. Abstr.) **(Fre)**

[Gastric metastasis of cutaneous melanoma. Apropos of a

case letter] Bettineschi F, et al. **J Chir (Paris)** 1997 May; 134(1):35–8 (Eng. Abstr.) **(Fre)**

[Multiple pilomatricoma. Apropos of a case] Urvoy M, et al. **J Fr Ophtalmol** 1996;19(6–7):464–6 (Eng. Abstr.) **(Fre)**

[Blue tumors] Lazareth I, et al. **Rev Med Interne** 1996; 17(10):852–3 **(Fre)**

[Synopsis of primary cutaneous lymphomas] Piérard GE, et al. **Rev Med Liege** 1996 Dec;51(12):754–8 (23 ref.) **(Fre)**

[Frequent skin tumors in geriatrics] Piérard–Franchimont C, et al. **Rev Med Liege** 1997 Apr;52(4):289–95 (20 ref.) **(Fre)**

[Flow cytometry in dermatology] Bauer R, et al. **Hautarzt** 1996 Jul;47(7):561–78 (36 ref.) **(Ger)**

[Metastatic melanoma of low Breslow thickness] Hundeiker M, et al. **Hautarzt** 1997 Mar;48(3):171–4 (Eng. Abstr.) **(Ger)**

[Malignant blue nevus with metastasis to lymph nodes and brain] Niederecker C, et al. **Hautarzt** 1996 Sep;47(9):711–5 (Eng. Abstr.) **(Ger)**

[Reactive angioendotheliomatosis in chronic lymphatic leukemia] Schmidt K, et al. **Hautarzt** 1996 Jul;47(7):550–5 (33 ref.) (Eng. Abstr.) **(Ger)**

[Development of squamous cell carcinoma in chronic anal eczema and therapeutic consequences] Sommer B, et al. **Hautarzt** 1996 Nov;47(11):850–3 (Eng. Abstr.) **(Ger)**

[Applications of electron microscopy in dermatology] Sterniczky B, et al. **Hautarzt** 1996 Feb;47(2):148–65 quiz 162–3 (41 ref.) **(Ger)**

[Diagnostic value of 123iodine–ibzm scintigraphy for staging of malignant melanomas] Henker C, et al. **Nuklearmedizin** 1997 Jan;36(1):1–6 (Eng. Abstr.) **(Ger)**

[Tumor of the follicular infundibulum. Study of determining follicular differentiation] Schirren CG, et al. **Pathologe** 1996 Nov;17(6):440–5 (Eng. Abstr.) **(Ger)**

[Detection of herpes virus–like DNA in various forms of Kaposi's sarcoma but not in other mesenchymal tumors or inflammatory changes in skin] Cathomas G, et al. **Verh Dtsch Ges Pathol** 1996;80:318–21 (Eng. Abstr.) **(Ger)**

[Isolated metastasis in the gallbladder from malignant cutaneous melanoma discovered by ultrasound] Bedó F, et al. **Orv Hetil** 1996 Jun 30;137(26):1427–8 (Eng. Abstr.) **(Hun)**

[Multiple metastases of malignant cutaneous melanoma into the upper urinary tract] Török P, et al. **Orv Hetil** 1997 Feb 2;138(5):285–7 (13 ref.) (Eng. Abstr.) **(Hun)**

[Rare association of a mixed tumor of the skin with a carcinoma of low grade malignancy. Clinical case] Riboni V, et al. **Minerva Chir** 1996 Jul–Aug;51(7–8):617–20 (Eng. Abstr.) **(Ita)**

[Early stage Stewart–Treves syndrome: report of 2 cases and review of the literature] Bisceglia M, et al. **Pathologica** 1996 Dec;88(6):483–90 (97 ref.) (Eng. Abstr.) **(Ita)**

[A case of invasive bladder cancer with Pagetoid skin lesion of the vulva and anogenital Paget's disease] Koga F, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Apr;88(4):503–6 (Eng. Abstr.) **(Jpn)**

[A case of von Recklinghausen's disease complicated by adenocarcinoma of the papilla of Vater] Nagayama K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Feb;94(2):123–8 (16 ref.) **(Jpn)**

[Cerebrospinal fluid in the diagnosis of cerebro–meningeal metastasis from malignant melanoma arising from giant congenital melanocytic nevus: case report] Rolim JA, et al. **Arq Neuropsiquiatr** 1996 Sep;54(3):479–83 (Eng. Abstr.) **(Por)**

[Balloon–cell nevi and balloon–cell malignant melanoma] Gordeladze AS, et al. **Arkh Patol** 1996 Jul–Aug;58(4):64–7 (Eng. Abstr.) **(Rus)**

[A comparison of the morphofunctional characteristics of the peripheral blood lymphocytes and the immune status of patients with malignant melanoma of the skin] Naleskina LA, et al. **Tsitol Genet** 1996 Sep–Oct;30(5):16–22 (Eng. Abstr.) **(Rus)**

[Painful skin tumors revealing pathology of the female genital system] Querol Nasarre I, et al. **Rev Clin Esp** 1997 Mar; 197(3):209–10 (Eng. Abstr.) **(Spa)**

[Homogeneous clinical behavior of a group of cutaneous B–cell lymphomas] de Misa RF, et al. **Sangre (Barc)** 1995 Dec;40(6):465–70 (21 ref.) (Eng. Abstr.) **(Spa)**

[Melanocytic tumors. Liberal nevus surgery and histopathological scrutiny reduce mortality] Larsson O, et al. **Lakartidningen** 1997 Jul 9;94(28–29):2545–7 (10 ref.) **(Swe)**

PHYSIOPATHOLOGY

Epithelial induction in dermatofibroma: a role for the epidermal growth factor (EGF) receptor. Morgan MB, et al. **Am J Dermatopathol** 1997 Feb;19(1):35–40

Rates of flow of technetium 99m--labeled human serum albumin from peripheral injection sites to sentinel lymph nodes [see comments] Nathanson SD, et al. **Ann Surg Oncol** 1996 Jul;3(4):329–35. Comment in: Ann Surg Oncol 1996 Jul;3(4):327–8. Comment in: Ann Surg Oncol 1997 Apr–May;4(3):279–81.

Changing standards of surgical care for the melanoma patient [editorial; comment] Reintgen DS. **Ann Surg Oncol** 1996 Jul;3(4):327–8. Comment on: Ann Surg Oncol 1996 Jul;3(4):329–35.

Changes in gap junctional intercellular communication in mouse skin carcinogenesis. Holden PR, et al. **Carcinogenesis** 1997 Jan;18(1):15–21

Is mycosis fungoides exacerbated by fluoxetine? Vermeer MH, et al. **J Am Acad Dermatol** 1996 Oct;35(4):635–6

Diminished TCR signaling in cutaneous T cell lymphoma is associated with decreased activities of Zap70, Syk and membrane–associated Csk. Fargnoli MC, et al. **Leukemia** 1997 Aug;11(8):1338–46

The life of a skin cancer. Brodland DG. **Mayo Clin Proc** 1997 May;72(5):475–8 (15 ref.)

Retinoic acid signaling cascade in differentiating murine epidermal keratinocytes: alterations in papilloma– and carcinoma–derived cell lines. Vettermann O, et al. **Mol Carcinog** 1997 Sep;20(1):58–67

[Prosthesis edge nodule and verrucous hyperplasia in leg amputees] Wlotzke U, et al. **Z Orthop Ihre Grenzgeb** 1997 May–Jun;135(3):233–5 (Eng. Abstr.) **(Ger)**

[Changes in the optical characteristics of the skin of patients with basal cell carcinoma] Zhuravel' VG. **Vopr Onkol** 1997; 43(2):151–3 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Delayed tumor onset in transgenic mice fed an amino acid–based diet supplemented with red wine solids. Clifford AJ, et al. **Am J Clin Nutr** 1996 Nov;64(5):748–56

Activating patients to practice skin cancer prevention: response to mailed materials from physicians versus HMOs. Gerbert B, et al. **Am J Prev Med** 1997 May–Jun; 13(3):214–20

Sun exposure, sunscreens, and skin cancer prevention: a year–round concern. Farmer KC, et al. **Ann Pharmacother** 1996 Jun;30(6):662–73 (87 ref.)

Inhibition of ultraviolet light induced skin carcinogenesis in SKH–1 mice by apigenin, a plant flavonoid. Birt DF, et al. **Anticancer Res** 1997 Jan–Feb;17(1A):85–91

Effects of a new clerodane diterpenoid isolated from propolis on chemically induced skin tumors in mice. Mitamura T, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2669–72

Should every day be melanoma monday? Chiarello SE. **Arch Dermatol** 1997 May;133(5):569–71

Erythema, skin cancer risk, and sunscreens [editorial] Naylor MF. **Arch Dermatol** 1997 Mar;133(3):373–5

The case for sunscreens. A review of their use in preventing actinic damage and neoplasia. Naylor MF, et al. **Arch Dermatol** 1997 Sep;133(9):1146–54 (50 ref.)

Primary school children's perceptions of the effects of sun on skin. Rademaker M, et al. **Australas J Dermatol** 1996 Feb;37(1):30–6

Sunscreens, suntans and skin cancer. People do not apply enough sunscreen for protection [letter; comment] Diffey BL. **BMJ** 1996 Oct 12;313(7062):942. Comment on: BMJ 1996 Jun 29;312(7047):1621–2.

A study of the impact of Sun Awareness Week 1995. Fleming C, et al. **Br J Dermatol** 1997 May;136(5):719–24

The use of targeted and non–targeted advertising to enrich skin cancer screening samples. Katris P, et al. **Br J Dermatol** 1996 Aug;135(2):268–74

Is a health promotion campaign successful in retail pharmacies? Leinweber CE, et al. **Can J Public Health** 1995 Nov–Dec;86(6):380–3

Ultraviolet radiation and safety behaviours at an outdoor community event. Manion IG, et al. **Can J Public Health** 1997 Mar–Apr;88(2):119–22

Changes in skin protection behaviors, attitudes, and sunburn: in a population with the highest incidence of skin cancer in the world. Baade PD, et al. **Cancer Detect Prev** 1996; 20(6):566–75

Skin cancer prevention, early detection, and management: current beliefs and practices of Australian family physicians. Girgis A, et al. **Cancer Detect Prev** 1996; 20(4):316–24

Dose–related preventive and therapeutic effects of antioxidants–anticarcinogens on experimentally induced malignant tumors in Wistar rats. Evangelou A, et al. **Cancer Lett** 1997 May 1;115(1):105–11

Anti–tumor promoting effects of naphthoquinone derivatives on short term Epstein–Barr early antigen activation assay and in mouse skin carcinogenesis. Kapadia GJ, et al. **Cancer Lett** 1997 Feb 26;113(1–2):47–53

Topical tretinoin enhances corticosteroid–induced inhibition of tumorigenesis in hairless mice previously exposed to solar simulating radiation. Kligman LH, et al. **Cancer Lett** 1996 Oct 22;107(2):217–22

Inhibitory effect of dietary curcumin on skin carcinogenesis in mice. Limtrakul P, et al. **Cancer Lett** 1997 Jun 24; 116(2):197–203

Retinoids in prevention of skin cancer. Moon TE, et al. **Cancer Lett** 1997 Mar 19;114(1–2):203–5

Inhibitory effect of pheophorbide a, a chlorophyll–related compound, on skin tumor promotion in ICR mouse. Nakamura Y, et al. **Cancer Lett** 1996 Nov 29;108(2):247–55

The DNA repair protein O6–methylguanine–DNA methyltransferase protects against skin tumor formation induced by antineoplastic chloroethylnitrosourea. Becker K, et al. **Cancer Res** 1997 Aug 15;57(16):3335–8

Effects of tea, decaffeinated tea, and caffeine on UVB light–induced complete carcinogenesis in SKH–1 mice: demonstration of caffeine as a biologically important constituent of tea. Huang MT, et al. **Cancer Res** 1997 Jul 1;57(13):2623–9

Cancer chemopreventive activity mediated by deguelin, a naturally occurring rotenoid. Udeani GO, et al. **Cancer Res** 1997 Aug 15;57(16):3424–8

Effect of naturally occurring coumarins on the formation of epidermal DNA adducts and skin tumors induced by benzo[a]pyrene and 7,12–dimethylbenz[a]anthracene in SENCAR mice. Cai Y, et al. **Carcinogenesis** 1997 Aug; 18(8):1521–7

Inhibitory effects of topical application of low doses of curcumin on 12–O–tetradecanoylphorbol–13–acetate–induced tumor promotion and oxidized DNA bases in mouse epidermis. Huang MT, et al. **Carcinogenesis** 1997 Jan;18(1):83–8

Protection against induction of mouse skin papillomas with low and high risk of conversion to malignancy by green tea polyphenols. Katiyar SK, et al. **Carcinogenesis** 1997 Mar;18(3):497–502

Melanoma: stop the epidemic [editorial] McCarthy JT. **Cutis** 1997 Jun;59(6):300

Volunteer melanoma screenings. Follow–up, compliance, and outcome. de Rooij MJ, et al. **Dermatol Surg** 1997 Mar; 23(3):197–201

Chemoprevention of ultraviolet radiation–induced skin cancer. Ley RD, et al. **Environ Health Perspect** 1997 Jun; 105 Suppl 4:981–4 (50 ref.)

How to decrease morbidity and mortality of skin cancer: primary prevention of skin cancer/screening of skin cancer. Report of a workshop held under the auspices of the Society of Dermatological Prevention (ADP e.V.), Commission of Early Detection and Prevention of Skin Cancer. 11 May 1994, Hamburg, Germany. **Eur J Cancer Prev** 1996 Aug;5(4):297–9 (3 ref.)

Chemoprevention of skin cancer. Green A. **IARC Sci Publ** 1996;(136):111–9 (68 ref.)

Sunscreen lotions prevent ultraviolet radiation–induced suppression of antitumor immune responses. Roberts LK, et al. **Int J Cancer** 1997 Mar 28;71(1):94–102

"Safe sun": preventing adult disease in adolescence [editorial; comment] Litt IF. **J Adolesc Health** 1996 Dec;19(6):377. Comment on: J Adolesc Health 1996 Dec;19(6):409–15.

Executive summary of the national Partners in Prevention Skin Cancer Conference: American Academy of Dermatology and Centers for Disease Control and Prevention. Bergfeld WF, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):798–801

Sunny days, healthy ways: evaluation of a skin cancer prevention curriculum for elementary school–aged children. Buller DB, et al. **J Am Acad Dermatol** 1996 Dec; 35(6):911–22

Every day is melanoma Monday [letter] Chiarello SE. **J Am Acad Dermatol** 1996 Oct;35(4):649

Trends in sun exposure knowledge, attitudes, and behaviors: 1986 to 1996. Robinson JK, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):179–86

Skin type and optimistic bias in relation to the sun protection and suntanning behaviors of young adults. Clarke VA, et al. **J Behav Med** 1997 Apr;20(2):207–22

Predictors of sunbathing and sunscreen use in college undergraduates. Hillhouse JJ, et al. **J Behav Med** 1996 Dec; 19(6):543–61

Attitudes about skin cancer prevention: a qualitative study. Gerbert B, et al. **J Cancer Educ** 1996 Summer;11(2):96–101

Educating the public about skin cancer prevention: a role for pharmacists. Souvignier ST, et al. **J Clin Pharm Ther** 1996 Dec;21(6):399–406

Skin cancer prevention: a time for action. Everett SA, et al. **J Community Health** 1997 Jun;22(3):175–83

Sunscreens: progress and perspectives on photoprotection of human skin against UVB and UVA radiation. Pathak MA. **J Dermatol** 1996 Nov;23(11):783–800 (25 ref.)

Non–melanoma skin cancer: a case–control study on risk factors and protective measures. Suárez–Varela MM, et al. **J Environ Pathol Toxicol Oncol** 1996;15(2–4):255–61

"Times are changing" [editorial] Reintgen D. **J Fla Med Assoc** 1997 Mar;84(3):145–6

Effectiveness of a skin cancer control educational intervention for internal medicine housestaff and attending physicians. Dolan NC, et al. **J Gen Intern Med** 1997 Sep; 12(9):531–6

Inhibition of neutrophil elastase suppresses the development of skin tumors in hairless mice. Starcher B, et al. **J Invest Dermatol** 1996 Aug;107(2):159–63

Protective effects of silymarin against photocarcinogenesis in a mouse skin model. Katiyar SK, et al. **J Natl Cancer Inst** 1997 Apr 16;89(8):556–66

From the Centers for Disease Control and Prevention. Media dissemination of and public response to the Ultraviolet Index--United States, 1994–1995. **JAMA** 1997 Jun 11; 277(22):1751–2

Effects of selenium supplementation for cancer prevention in patients with carcinoma of the skin. A randomized controlled trial. Nutritional Prevention of Cancer Study Group [see comments] [published erratum appears in JAMA 1997 May 21;277(19):1520] Clark LC, et al. **JAMA** 1996 Dec 25;276(24):1957–63. Comment in: JAMA 1996 Dec 25;276(24):1984–5. Comment in: JAMA 1997 Mar 19;277(11):880; discussion 881. Comment in: JAMA 1997 Mar 19;277(11):880–1; discussion 881.

AAD wants to convert sun worshippers [news] Goldsmith MF. **JAMA** 1997 Jun 11;277(22):1745–6

Anti–tumor promoting activity of canventol and its synthetic analogs through inhibition of protein isoprenylation. Komori A, et al. **Jpn J Cancer Res** 1996 Sep;87(9):875–81

Auraptene, a citrus coumarin, inhibits 12–O–tetradecanoylphorbol–13–acetate–induced tumor

promotion in ICR mouse skin, possibly through suppression of superoxide generation in leukocytes. Murakami A, et al. **Jpn J Cancer Res** 1997 May;88(5):443–52

Atypical mole syndrome: a brief overview for the primary care physician. Henneberry JM, et al. **Md Med J** 1997 May–Jun;46(5):243–6 (15 ref.)

Sunlight: an environmental toxin for humans. A primer to advise patients. Morison WL. **Md Med J** 1997 May–Jun; 46(5):227–30

Proposed skin cancer screening recommendations. Rhode Island Department of Health. Griffith RC, et al. **Med Health R I** 1996 Nov;79(11):402–3

National Melanoma/Skin Cancer Detection and Prevention Month—May 1997. **MMWR Morb Mortal Wkly Rep** 1997 May 2;46(17):369

Media dissemination of and public response to the Ultraviolet Index—United States, 1994–1995. **MMWR Morb Mortal Wkly Rep** 1997 May 2;46(17):370–3

Protection against malignant conversion in SENCAR mouse skin by all trans retinoic acid: inhibition of the ras p21–processing enzyme farnesyltransferase and Ha–ras p21 membrane localization. Agarwal R, et al. **Mol Carcinog** 1996 Sep;17(1):13–22

Dietary conjugated linoleic acid modulation of phorbol ester skin tumor promotion. Belury MA, et al. **Nutr Cancer** 1996; 26(2):149–57

Dietary retinoic acid inhibits mouse skin carcinogenesis irrespective of age at initiation. De Luca LM, et al. **Nutr Cancer** 1996;25(3):249–57

Prevention of photocarcinogenesis by topical administration of pure epigallocatechin gallate isolated from green tea. Gensler HL, et al. **Nutr Cancer** 1996;26(3):325–35

Importance of the form of topical vitamin E for prevention of photocarcinogenesis. Gensler HL, et al. **Nutr Cancer** 1996;26(2):183–91

General guidelines for a low-fat diet effective in the management and prevention of nonmelanoma skin cancer. Jaax S, et al. **Nutr Cancer** 1997;27(2):150–6

Patients must receive education on universal sun safety precautions. Duey C, et al. **Oncol Nurs Forum** 1997 Apr; 24(3):457–8

Sun Smart Day: a pilot program for photoprotection education. Buller MK, et al. **Pediatr Dermatol** 1997 Jul–Aug;14(4):257–63

Teaching children about skin cancer: the draw–and–write technique as an evaluation tool. Pion IA, et al. **Pediatr Dermatol** 1997 Jan–Feb;14(1):6–12

Influence of vehicle, distant topical delivery, and biotransformation on the chemopreventive activity of apigenin, a plant flavonoid, in mouse skin. Li B, et al. **Pharm Res** 1996 Oct;13(10):1530–4

Chemoprevention of photocarcinogenesis. Agarwal R, et al. **Photochem Photobiol** 1996 Apr;63(4):440–4 (50 ref.)

Sunscreens and photocarcinogenesis: an objective assessment. Elmets CA, et al. **Photochem Photobiol** 1996 Apr; 63(4):435–40 (46 ref.)

Mexoryl SX protects against solar–simulated UVR–induced photocarcinogenesis in mice. Fourtanier A. **Photochem Photobiol** 1996 Oct;64(4):688–93

DNA repair enzymes in prevention of photocarcinogenesis. Yarosh DB, et al. **Photochem Photobiol** 1996 Apr; 63(4):445–7 (25 ref.)

Living and working in the sun: a symposium held as part of the XVIth International Pigment Cell Conference. Cochran AJ, et al. **Pigment Cell Res** 1997 Feb–Apr; 10(1–2):74–6

Anti–tumor promoting activities of lantadenes on mouse skin tumors and mouse hepatic tumors [letter] Inada A, et al. **Planta Med** 1997 Jun;63(3):272–4

A message from preventive medicine and your physician. **Prev Med** 1997 Jul–Aug;26(4):409

A message from Preventive Medicine and your physician. Diseases of old age and how they start in childhood. **Prev Med** 1996 Sep–Oct;25(5):515

Perceived susceptibility to and knowledge of malignant melanoma: screening participants vs the general population. Brandberg Y, et al. **Prev Med** 1996 Mar–Apr;25(2):170–7

Sun protection behaviors of the U.S. white population. Hall HI, et al. **Prev Med** 1997 Jul–Aug;26(4):401–7

Reducing ultraviolet radiation exposure in children. Mayer JA, et al. **Prev Med** 1997 Jul–Aug;26(4):516–22

Skin cancer prevention and early detection practices in a sample of rural women. Michielutte R, et al. **Prev Med** 1996 Nov–Dec;25(6):673–83

Summer sun exposure: knowledge, attitudes, and behaviors of Midwest adolescents. Robinson JK, et al. **Prev Med** 1997 May–Jun;26(3):364–72

Blocking activator protein–1 activity, but not activating retinoic acid response element, is required for the antitumor promotion effect of retinoic acid. Huang C, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5826–30

The prevention of skin cancer: is there a gap between evidence and practice? Sabri K, et al. **Public Health** 1996 Nov;110(6):347–50

Skin self–examination for melanoma—another golden rule. Howell JB. **Semin Cutan Med Surg** 1997 Jun;16(2):174–8 (19 ref.)

Beachfront screening for skin cancer in Texas Gulf coast surfers. Dozier S, et al. **South Med J** 1997 Jan;90(1):55–8

[Sunscreens should not be used to prolong exposure to sun] Skov L, et al. **Ugeskr Laeger** 1997 Aug 11;159(33):4992–3 **(Dan)**

[Screening for cutaneous carcinoma] Beani JC. **Bull Cancer** 1996 Sep;83(9):755–7 (Eng. Abstr.) **(Fre)**

[Experience in the screening of melanoma] Grob JJ, et al. **Bull Cancer** 1996 Sep;83(9):758–60 (Eng. Abstr.) **(Fre)**

[Prevention of sunburn—especially in children—cannot be emphasized enough. On prevention, diagnosis and therapy of malignant melanoma (interview by Elisabeth B. Moosmann)] Bergen E. **Fortschr Med** 1996 Jul 20; 114(20–21):20–2 **(Ger)**

[Prevention of melanoma by sun protective measures in childhood. Temporal changes in awareness of parents] Kölmel KF, et al. **Hautarzt** 1997 Jun;48(6):391–6 (Eng. Abstr.) **(Ger)**

[1st Otto Braun–Falco Alumni Lecture Tübigen 26 April 1996. K. Wolff: Prevention in dermatology] Ring J. **Hautarzt** 1996 Nov;47(11):873 **(Ger)**

[(–)-Epigallocatechin gallate, the main constituent of Japanese green tea, inhibits tumor promotion of okadaic acid] Yoshizawa S. **Fukuoka Igaku Zasshi** 1996 Oct; 87(10):215–21 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Attitude toward alternative therapy, compliance with standard treatment, and need for emotional support in patients with melanoma [see comments] Söllner W, et al. **Arch Dermatol** 1997 Mar;133(3):316–21. Comment in: Arch Dermatol 1997 Mar;133(3):379–80.

Sunscreens, suntans and skin cancer. Knowledge about sunscreens is inadequate [letter; comment] Fleming C, et al. **BMJ** 1996 Oct 12;313(7062):942. Comment on: BMJ 1996 Jun 29;312(7047):1621–2.

'Naevophobia'. Allan SJ, et al. **Clin Exp Dermatol** 1995 Nov; 20(6):499–501

Attitudes toward health risks and sunbathing behavior. Beech JR, et al. **J Psychol** 1996 Nov;130(6):669–77

Skin cancer prevention and early detection practices in a sample of rural women. Michielutte R, et al. **Prev Med** 1996 Nov–Dec;25(6):673–83

Positive attitudes towards suntanning and reported tendency to engage in lifestyle behaviors that increase risk of skin cancer. Hanley JM, et al. **Psychol Rep** 1996 Oct;79(2):417–8

The role of psychological variables in a group of melanoma patients. An Israeli sample. Baider L, et al. **Psychosomatics** 1997 Jan–Feb;38(1):45–53

The psychological challenges facing melanoma patients. Kneier AW. **Surg Clin North Am** 1996 Dec;76(6):1413–21 (23 ref.)

RADIOGRAPHY

Computed tomography in evaluation of patients with stage III melanoma. Kuvshinoff BW, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):252–8

[Bone lesions due to endemic African Kaposi sarcoma: a case report] Simon F, et al. **Med Trop (Mars)** 1997;57(2):174–6 (Eng. Abstr.) **(Fre)**

[CT and supplementary HR–CT of Kaposi's sarcoma of the pulmonary parenchyma—the morphology of the findings and the diagnostic value] Zeschnigk T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):8–13 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Lymphoscintigraphy as a predictor of lymphatic drainage from cutaneous melanoma. Berger DH, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):247–51

Computed tomography in evaluation of patients with stage III melanoma. Kuvshinoff BW, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):252–8

Sigma–receptor imaging by means of I123–IDAB scintigraphy: clinical application in melanoma and non–small cell lung cancer. Everaert H, et al. **Anticancer Res** 1997 May–Jun;17(3B):1577–82

Somatostatin receptor scintigraphy of non–neuroendocrine malignancies with 111In–pentetreotide. Limouris GS, et al. **Anticancer Res** 1997 May–Jun;17(3B):1593–7

Two phase scintigraphic mapping of lymphatic drainage in cutaneous melanoma using 99mTc–sulfur microcolloid/99mTc antimelanoma antibody. Limouris GS, et al. **Anticancer Res** 1997 May–Jun;17(3B):1667–9

Radioiodine–labelled alpha–methyl–tyrosine in malignant melanoma: cell culture studies and results in patients. Böni R, et al. **Br J Dermatol** 1997 Jul;137(1):96–100

Scintigraphic detection of invasive cutaneous malignant melanoma with Tc–99m MIBI. Alonso O, et al. **Clin Nucl Med** 1996 Jul;21(7):557–9

Subcutaneous dissemination of B cell lymphoma shown by Tc–99m sestamibi. Hirano T, et al. **Clin Nucl Med** 1996 Dec;21(12):980–2

Dynamic lymphoscintigraphy to identify the sentinel and satellite nodes. Taylor A Jr, et al. **Clin Nucl Med** 1996 Oct;21(10):755–8

Contralateral groin node metastasis from lower limb melanoma [letter] Thompson JF, et al. **Eur J Cancer** 1997 May;33(6):976–7

Optimized sampling and parameter estimation for quantification in whole body PET. Ho–Shon K, et al. **IEEE Trans Biomed Eng** 1996 Oct;43(10):1021–8

PET for diagnosis of malignant lymphoma of the scalp: comparison of [11C]methyl–L–methionine and [18F]fluoro–2–deoxyglucose. Tsuyuguchi N, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):590–3 (16 ref.)

Redefining cutaneous lymphatic flow: the necessity of preoperative lymphoscintigraphy in the management of malignant melanoma. Kamath D, et al. **J Fla Med Assoc** 1997 Mar;84(3):182–7

Lymphatic mapping and sentinel node biopsy in patients with malignant melanoma. Reintgen D, et al. **J Fla Med Assoc** 1997 Mar;84(3):188–93

Structure distribution relationship of iodine–123–iodobenzamides as tracers for the detection of melanotic melanoma. Brandau W, et al. **J Nucl Med** 1996 Nov;37(11):1865–71

201Tl whole–body scintigraphy in patients with malignant melanoma. Brenner W, et al. **Nucl Med Commun** 1997 Mar; 18(3):230–4

The role of lymphoscintigraphy and sentinel node mapping in assessing patient risk in melanoma. Essner R. **Semin Oncol** 1997 Feb;24(1 Suppl 4):S8–10 (15 ref.)

[Selective regional lymphadenectomy in malignant melanoma using a gamma probe] Rettenbacher L, et al. **Acta Med Austriaca** 1997;24(2):79–80 (Eng. Abstr.) **(Ger)**

["Sentinel" lymphonodectomy with scintillation detector. A new strategy in treatment of malignant melanoma] Bachter D, et al. **Hautarzt** 1996 Oct;47(10):754–8 (Eng. Abstr.) **(Ger)**

[Diagnostic value of 123iodine–ibzm scintigraphy for staging of malignant melanomas] Henker C, et al. **Nuklearmedizin** 1997 Jan;36(1):1–6 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

HIV–associated cutaneous Kaposi's sarcoma—palliative local treatment by radiotherapy. Saran FH, et al. **Acta Oncol** 1997;36(1):55–8

Radiation therapy for squamous cell carcinoma in dystrophic epidermolysis bullosa: case reports and literature review. Bastin KT, et al. **Am J Clin Oncol** 1997 Feb;20(1):55–8 (23 ref.)

Multimodality treatment of squamous cell carcinoma complicating pilonidal disease. Kulaylat MN, et al. **Am Surg** 1996 Nov;62(11):922–9 (59 ref.)

Kaposi sarcoma unrelated to human immunodeficiency virus infection: long–term results of radiotherapy [letter; comment] González–Acosta P, et al. **Arch Dermatol** 1997 Jan;133(1):107–8. Comment on: Arch Dermatol 1996 Mar;132(3):285–90.

Clinical and histological responses of congenital melanocytic nevi after single treatment with Q–switched lasers. Grevelink JM, et al. **Arch Dermatol** 1997 Mar;133(3):349–53

Treatment of lentigo maligna. Gaspar ZS, et al. **Australas J Dermatol** 1997 Feb;38(1):1–6; quiz 7–8 (40 ref.)

Total skin electron therapy at two energies on a linear accelerator. Turner JR, et al. **Australas Phys Eng Sci Med** 1995 Dec;18(4):208–20

Radiotherapy for melanotic freckles. Christie DR, et al. **Australas Radiol** 1996 Aug;40(3):331–3

Extensive basal cell carcinoma treated with the mould radiotherapy technique. Leung JT. **Australas Radiol** 1997 Feb;41(1):20–1

Mycosis fungoides and total skin electron beam radiation [letter; comment] Jones GW, et al. **Blood** 1997 Apr 15; 89(8):3062–4 (12 ref.). Comment on: Blood 1996 Oct 1;88(7):2385–409.

Basal cell carcinoma of the face: surgery or radiotherapy? Results of a randomized study. Avril MF, et al. **Br J Cancer** 1997;76(1):100–6

Merkel cell carcinoma of the skin treated by primary radiotherapy [letter] al–Ghazal SK, et al. **Br J Dermatol** 1997 Apr;136(4):640–1

A clinical study of radiation cataract formation in adult life following gamma irradiation of the lens in early childhood [see comments] Wilde G, et al. **Br J Ophthalmol** 1997 Apr; 81(4):261–6. Comment in: Br J Ophthalmol 1997 Apr;81(4):257.

Fast neutron radiotherapy and boron neutron capture therapy: application to a human melanoma test system. Laramore GE, et al. **Bull Cancer Radiother** 1996;83 Suppl:191s–7s

The role of radiation therapy and chemotherapy in the treatment of Merkel cell carcinoma. Fenig E, et al. **Cancer** 1997 Sep 1;80(5):881–5

Ki–1 skin lymphoproliferative disorders: management with radiation therapy. Kaufmann TP, et al. **Cancer Invest** 1997; 15(2):91–7 (30 ref.)

Benign and low–grade tumors of the soft tissues: role for radiation therapy. Suit HD, et al. **Cancer Treat Res** 1997; 91:95–105 (34 ref.)

Radiation therapy for skin neoplasms. Parker RG. **Clin Dermatol** 1995 Nov–Dec;13(6):579–88 (51 ref.)

Disseminated superficial porokeratosis developing after electron–beam total skin irradiation for mycosis fungoides. Romaní J, et al. **Clin Exp Dermatol** 1996 Jul;21(4):310–2

Radiotherapy is a useful treatment for lymphangioma circumscriptum: a report of two patients. Denton AS, et al. **Clin Oncol (R Coll Radiol)** 1996;8(6):400–1

Oral pilocarpine improves radiotherapy–induced dry eyes. Kumar S, et al. **Clin Oncol (R Coll Radiol)** 1997;9(1):62–3

Skin cancer and intraoperative radiation therapy: strange bedfellows [letter; comment] Johnstone PA. **Dermatol Surg** 1996 Oct;22(10):891–2. Comment on: Dermatol Surg 1995 Nov;21(11):975–8.

Comparison of the Q–switched alexandrite (755 nm) and Q–switched Nd:YAG (1064 nm) lasers in the treatment

of benign melanocytic nevi. Rosenbach A, et al. **Dermatol Surg** 1997 Apr;23(4):239–44; discussion 244–5

Radiation therapy in AIDS–related cutaneous Kaposi's sarcoma. Conill C, et al. **Dermatology** 1997;195(1):40–2

Quality–switched ruby laser treatment of solar lentigines and Becker's nevus: a histopathological and immunohistochemical study. Kopera D, et al. **Dermatology** 1997;194(4):338–43

Ex vivo quality–switched ruby laser irradiation of cutaneous melanocytic lesions: persistence of S–100–, HMB–45– and Masson–positive cells. Kopera D, et al. **Dermatology** 1997; 194(4):344–50

211At–methylene blue for targeted radiotherapy of disseminated melanoma: microscopic analysis of tumour versus normal tissue damage. Link EM, et al. **Eur J Cancer** 1996 Oct;32A(11):1986–94

Consequences of optimization in PDR brachytherapy––is a routine geometrical optimization recommendable? Berns C, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15; 37(5):1171–80

Treatment of small nevomelanocytic nevi with a Q–switched ruby laser. Vibhagool C, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):738–41

Radionuclide therapy of skin cancers and Bowen's disease using a specially designed skin patch. Lee JD, et al. **J Nucl Med** 1997 May;38(5):697–702

Osteomyelitis occurring in the zygomatic bone. Anderson PJ, et al. **J R Coll Surg Edinb** 1997 Jun;42(3):196–7

Treatment of the nevus of Ota with the pigmented lesion dye laser. Viehman GE, et al. **N C Med J** 1996 Sep–Oct; 57(5):326–8

The radiosensitivity of human malignant melanomas evaluated by cytokinesis–block micronucleus assay. Widel M, et al. **Neoplasma** 1997;44(2):109–16

Treatment of nevus of Ota with the Candela PLDL and PLTL lasers [letter; comment] Mixter RC, et al. **Plast Reconstr Surg** 1996 Nov;98(6):1112–3. Comment on: Plast Reconstr Surg 1996 Mar;97(3):544–54.

Human melanoma treated by boron neutron capture therapy: comparison of the clinical response with the predicted response. Hiratsuka J, et al. **Radiat Med** 1996 Sep–Oct; 14(5):257–63

Radiation therapy for patients with xeroderma pigmentosum. Sakata K, et al. **Radiat Med** 1996 Mar–Apr;14(2):87–90 (16 ref.)

Intracranial tumors after radium treatment for skin hemangioma during infancy––a cohort and case–control study. Karlsson P, et al. **Radiat Res** 1997 Aug;148(2):161–7

New approaches to treating advanced melanoma: adjuvant treatment of high–risk primary melanoma and boron neutron capture therapy. Rogers GS, et al. **Semin Cutan Med Surg** 1997 Jun;16(2):165–73 (40 ref.)

Malignant melanoma: the role of radiation therapy revisited. Jenrette JM. **Semin Oncol** 1996 Dec;23(6):759–62 (33 ref.)

Radiation therapy for malignant melanoma. Geara FB, et al. **Surg Clin North Am** 1996 Dec;76(6):1383–98 (84 ref.)

Hyperthermia potentiates antitumor effect of thermosensitive–liposome–encapsulated melphalan and radiation in murine melanoma. Chelvi TP, et al. **Tumour Biol** 1997;18(4):250–60

Light and electron microscopic investigation of the process of healing of the naevus of Ota by Q–switched alexandrite laser irradiation. Hakozaki M, et al. **Virchows Arch** 1997 Jul;431(1):63–71

[Psychiatric disorders and somatic diseases (letter; comment)] Bremer GJ. **Ned Tijdschr Geneeskd** 1997 Mar 29; 141(13):650. Comment on: Ned Tijdschr Geneeskd 1997 Feb 1;141(5):247–9. **(Dut)**

[Bullous skin reactions after soft roentgen radiotherapy of HIV–associated Kaposi sarcomas] Thoma–Greber E, et al. **Hautarzt** 1997 May;48(5):339–42 (Eng. Abstr.) **(Ger)**

[The treatment of primary cutaneous B–cell small cleaved–cell lymphomas a clinical follow–up study of 55 patients who were treated with radio– and polychemotherapy] Sack H. **Strahlenther Onkol** 1996 Oct; 172(10):585–6 **(Ger)**

[The potentials of impulse laser radiation in treating I–stage melanomas of the skin] Moskalik KG, et al. **Vestn Khir Im I I Grek** 1996;155(2):38–40 (Eng. Abstr.) **(Rus)**

[Skin lesions in epidemic Kaposi's sarcoma (AIDS): local control assessment and esthetic results of a schedule of superficial radiotherapy] Pinazo J, et al. **Rev Clin Esp** 1996 Dec;196(12):806–10 (Eng. Abstr.) **(Spa)**

REHABILITATION

Basal cell carcinomas cause little handicap. Blackford S, et al. **Qual Life Res** 1996 Apr;5(2):191–4

SECONDARY

Penile metastases from bladder carcinoma [letter] Filosa G, et al. **Acta Derm Venereol** 1996 May;76(3):250–1

Metastatic lesions to the skin in children and adolescents. Pesce K, et al. **Adv Dermatol** 1997;12:237–74; discussion 275

Carcinoma en cuirasse: uncontrolled local recurrence of breast carcinoma after transverse rectus abdominis myocutaneous flap reconstruction [letter] Wells DC, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):914–5

Metastatic endometrial adenocarcinoma to the skin of a toe. Giardina VN, et al. **Am J Dermatopathol** 1996 Feb; 18(1):94–8 (40 ref.)

Malignant mesothelioma metastatic to the skin, presenting as inflammatory carcinoma. Prieto VG, et al. **Am J Dermatopathol** 1997 Jun;19(3):261–5

Epidermotropically metastatic breast carcinomas. Rare histopathologic variants mimicking melanoma and Paget's disease. Requena L, et al. **Am J Dermatopathol** 1996 Aug; 18(4):385–95

Cutaneous metastasis of an osteosarcoma. A case report. Setoyama M, et al. **Am J Dermatopathol** 1996 Dec; 18(6):629–32

Chondrosarcomatous cutaneous metastasis. A unique manifestation of sarcomatoid (metaplastic) breast carcinoma. Sexton CW, et al. **Am J Dermatopathol** 1996 Oct;18(5):538–42

Metastatic testicular choriocarcinoma of the skin. Report and review of the literature. Shimizu S, et al. **Am J Dermatopathol** 1996 Dec;18(6):633–6 (9 ref.)

Differential sensitivity of estrogen/progesterone receptors and BRST–2 markers in metastatic ductal and lobular breast carcinoma to the skin. Wallace ML, et al. **Am J Dermatopathol** 1996 Jun;18(3):241–7

Cutaneous metastasis of ocular malignant melanoma. An unusual presentation simulating blue nevi. Wieselthier JS, et al. **Am J Dermatopathol** 1996 Jun;18(3):289–95 (17 ref.)

Cutaneous metastases from gastric adenocarcinoma. Report of two cases and review of the literature. Boscaino A, et al. **Arch Anat Cytol Pathol** 1996;44(1):60–4 (8 ref.)

Bleomycin–mediated electrochemotherapy of metastatic melanoma. Glass LF, et al. **Arch Dermatol** 1996 Nov; 132(11):1353–7

An unusual metastasis to the thumb in a laryngectomized tracheoesophageal speaker. Lewin JS, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):1007–9

Port–site recurrence after thoracoscopic resection of oesophageal cancer. Dixit AS, et al. **Aust N Z J Surg** 1997 Feb–Mar;67(2–3):148–9

Radioiodine–labelled alpha–methyl–tyrosine in malignant melanoma: cell culture studies and results in patients. Böni R, et al. **Br J Dermatol** 1997 Jul;137(1):96–100

Cytological diagnosis of zosteriform skin metastases in undiagnosed breast carcinoma [letter] Heckmann M, et al. **Br J Dermatol** 1996 Sep;135(3):502–3

Metastatic skin cancer; a case with signet ring cell histology. Inoue Y, et al. **Br J Dermatol** 1996 Oct;135(4):634–7

Cutaneous metastases from a papillary thyroid carcinoma [letter] Makris A, et al. **Br J Dermatol** 1996 Nov; 135(5):860–1

Immunoreactivity of glycoprotein IIb is present in metastasized but not in non–metastasized primary malignant melanoma. Puerschel WC, et al. **Br J Dermatol** 1996 Dec; 135(6):883–7

Peculiar inflammatory cutaneous metastasis from stomach adenocarcinoma [letter] Sahin S, et al. **Br J Dermatol** 1997 Apr;136(4):650–2

Cutaneous metastases from transitional cell carcinomas of the bladder and renal pelvis. Chitale SV, et al. **Br J Urol** 1997 Feb;79(2):292–3

Skin metastases from follicular thyroid carcinoma: a case report. Kuo MC, et al. **Chang Keng I Hsueh** 1996 Mar; 19(1):77–82

Skin metastases from prostate cancer associated with malignant melanoma. Offidani A, et al. **Cutis** 1997 May; 59(5):278–80

Is isolated limb perfusion of metastatic malignant melanoma of the extremity worthwhile? Koops HS, et al. **Eur J Cancer** 1996 Sep;32A(10):1633–40

A single centre's 10 year experience with isolated limb perfusion in the treatment of recurrent malignant melanoma of the limb. Lingam MK, et al. **Eur J Cancer** 1996 Sep; 32A(10):1668–73

Subcutaneous metastasis from an ovarian carcinoma disappeared following tamoxifen therapy. Flam F, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Feb;64(2):225–6

Endometrial adenocarcinoma metastatic to the scalp: case report and literature review. Kushner DM, et al. **Gynecol Oncol** 1997 Jun;65(3):530–3 (9 ref.)

Cutaneous metastases in pancreatic adenocarcinoma. Puri AS, et al. **Indian J Pathol Microbiol** 1995 Jan;38(1):99–101

Multiple cutaneous melanoma metastases. Cagnoni ML, et al. **Int J Dermatol** 1997 Feb;36(2):136–8

Cutaneous metastases from anaplastic thyroid carcinoma. Taniguchi S, et al. **Int J Dermatol** 1996 Aug;35(8):574–5

Cutaneous metastases from pancreatic cancer. Miyahara M, et al. **Int J Pancreatol** 1996 Oct;20(2):127–30 (17 ref.)

Consequences of optimization in PDR brachytherapy––is a routine geometrical optimization recommendable? Berns C, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15; 37(5):1171–80

First experiences with superfractionated skin irradiations using large afterloading molds. Fritz P, et al. **Int J Radiat Oncol Biol Phys** 1996 Aug 1;36(1):147–57

Clinical features of skin metastasis from lung cancer. Hidaka T, et al. **Intern Med** 1996 Jun;35(6):459–62 (13 ref.)

Malignant melanoma in association with inflammatory skin metastasis [letter; comment] Botev IN. **J Am Acad Dermatol** 1997 Feb;36(2 Pt 1):280. Comment on: J Am Acad Dermatol 1994 Feb;30(2 Pt 2):304–7.

Thyroid carcinoma metastatic to the skin: a cutaneous manifestation of a widely disseminated malignancy. Dahl PR, et al. **J Am Acad Dermatol** 1997 Apr;36(4):531–7 (40 ref.)

Metastasis in an electrodesiccation and curettage scar [published erratum appears in J Am Acad Dermatol 1997 May;36(5 Pt 1):704] Dunn PT, et al. **J Am Acad Dermatol** 1997 Jan;36(1):117–8

Carcinoma erysipelatoides resulting from genitourinary cancer. Elston DM, et al. **J Am Acad Dermatol** 1996 Dec; 35(6):993–5

Generalized cutaneous metastases from breast adenocarcinoma. Gade JN, et al. **J Am Acad Dermatol** 1997 Jul;37(1):129–30

Mucoepidermoid carcinoma with cutaneous presentation. Yen A, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 2):340–2 (17 ref.)

Skin metastases: an unusual presenting sign of gastric carcinoma. Kostandy G, et al. **J Clin Gastroenterol** 1996 Oct;23(3):236–8

Extranodal spread of anaplastic large cell (CD30+) lymphoma presenting as a cutaneous perivascular infiltrate. Derringer GA, et al. **J Cutan Pathol** 1996 Aug;23(4):323–7

Clinical and histological features of poor prognosis in cutaneous metastatic melanomas. Hofmann–Wellenhof R, et al. **J Cutan Pathol** 1996 Jun;23(3):199–204

Bowenoid epidermotropic metastatic squamous cell carcinoma. Ihm CW, et al. **J Cutan Pathol** 1996 Oct; 23(5):479–84

Expression of the nm23 metastasis–suppressor gene product in skin tumors. Kanitakis J, et al. **J Cutan Pathol** 1997 Mar; 24(3):151–6

Immunohistochemical localization of muscarinic acetylcholine receptors in primary and metastatic malignant melanomas. Lammerding–Köppel M, et al. **J Cutan Pathol** 1997 Mar;24(3):137–44

Functional class II antigen presentation pathway in metastatic melanoma cell lines [comment] Akporiaye ET, et al. **J Immunother Emphasis Tumor Immunol** 1996 Nov; 19(6):398. Comment on: J Immunother Emphasis Tumor Immunol 1996 Nov;19(6):387–97.

Combination therapy with interferon–gamma and interleukin–2 for the treatment of metastatic melanoma. Kim CJ, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan;19(1):50–8

Multiple cutaneous metastases from laryngeal carcinoma. Bhandarkar P, et al. **J Laryngol Otol** 1997 Jul;111(7):654–5

Atypical carcinoid of larynx: presentation with scalp metastases. Ereño C, et al. **J Laryngol Otol** 1997 Jan; 111(1):89–91

Skin metastases of osteogenic sarcoma: a case report with review of the literature [letter] ten Harkel AD, et al. **J Pediatr Hematol Oncol** 1997 May–Jun;19(3):266–7

Photodynamic therapy of cutaneous metastases of breast cancer after local application of meso–tetra–(para–sulphophenyl)–porphin (TPPS4). Lapeš M, et al. **J Photochem Photobiol B** 1996 Nov;36(2):205–7

Cutaneous lymphangitis carcinomatosa: a rare primary manifestation of malignancy. Keohane SG, et al. **J R Soc Med** 1996 Oct;89(10):582–3

Miltefosine in recurrent cutaneous breast cancer [letter] Clive S, et al. **Lancet** 1997 Mar 1;349(9052):621–2

Nitric oxide synthase activity is up–regulated in melanoma cell lines: a potential mechanism for metastases formation. Joshi M, et al. **Melanoma Res** 1996 Apr;6(2):121–6

Estrogen and progesterone receptors and anti–gross cystic disease fluid protein 15 (BRST–2) fail to distinguish metastatic breast carcinoma from eccrine neoplasms. Wallace ML, et al. **Mod Pathol** 1995 Dec;8(9):897–901

Port–site metastases of adenocarcinoma of the fallopian tube after laparoscopically assisted vaginal hysterectomy and salpingo–oophorectomy. Bacha EA, et al. **Surg Endosc** 1996 Nov;10(11):1102–3

Gastric cancer with carcinoma erysipeloides caused by spontaneous thoracic duct rupture: report of a case. Yamamura Y, et al. **Surg Today** 1997;27(2):166–8

[Apropos of a case of epidermoid carcinoma metastasizing into the digital pulp] Horn GF. **Ann Chir Plast Esthet** 1996 Jun;41(3):308–10 (Eng. Abstr.) **(Fre)**

[A case for diagnosis: umbilical metastasis] Cabarrot–Moreau A, et al. **Ann Dermatol Venereol** 1996;123(8):493–4 **(Fre)**

[Umbilical metastasis of an endometrial adenocarcinoma: "Sister (Mary) Joseph's nodule". Review of the literature] Poncelet C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(8):799–803 (13 ref.) (Eng. Abstr.) **(Fre)**

[Photochemotherapy with indocyanine green in cutaneous metastases of rectal carcinoma] Karrer S, et al. **Dtsch Med Wochenschr** 1997 Sep 12;122(37):1111–4 (Eng. Abstr.) **(Ger)**

[A case of breast cancer metastasis to the skin and bone 13 years after, and to the brain 17 years after mastectomy] Itoshima T, et al. **Gan To Kagaku Ryoho** 1997 Aug; 24(10):1331–3 (Eng. Abstr.) **(Jpn)**

[Subcutaneous metastasis as the first manifestation of kidney cancer dissemination] Martínez Sarmiento M, et al. **Actas Urol Esp** 1997 Apr;21(4):402–5 (21 ref.) (Eng. Abstr.) **(Spa)**

[Burned–out testicular tumor] Sanz Chinesta S, et al. **Actas Urol Esp** 1996 Jun;20(6):586–90 (Eng. Abstr.) **(Spa)**

[Cutaneous angiomatous metastasis of hepatocarcinoma (letter)] García–Patos V, et al. **Gastroenterol Hepatol** 1996 Mar;19(3):183–4 **(Spa)**

SECRETION

Malignant hypercalcemia induced by a parathyroid

hormone-related protein secreted by a cutaneous squamous cell carcinoma [letter] Reynaud-Mendel B, et al. **Arch Dermatol** 1997 Jan;133(1):113

Constitutive secretion of GM-CSF by three different cell lines derived from a single patient with a progressive cutaneous lymphoproliferative disorder. Marti RM, et al. **Cytokine** 1996 Apr;8(4):323-9

Secretion of both IL-2 and IL-4 by tumor cells results in rejection and immunity. Strome SE, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan; 19(1):21-32

SURGERY

Merkel cell carcinoma: the use of surgery and radiotherapy for locoregional control. Mistiaen WP, et al. **Acta Chir Belg** 1997 Jan-Feb;97(1):52-4

The management of extensive tumours of the scalp. Kozák J, et al. **Acta Chir Plast** 1995;37(3):71-5

Lentigo maligna treated with ruby laser [letter] Thissen M, et al. **Acta Derm Venereol** 1997 Mar;77(2):163

Multimodality treatment of squamous cell carcinoma complicating pilonidal disease. Kulaylat MN, et al. **Am Surg** 1996 Nov;62(11):922-9 (59 ref.)

Merkel cell cancer: is prophylactic lymph node dissection indicated? Victor NS, et al. **Am Surg** 1996 Nov; 62(11):879-82

Recurrent basal cell carcinoma in margin-pcsitive tumors. Friedman HI, et al. **Ann Plast Surg** 1997 Mar;38(3):232-5

Squamous cell carcinoma in perineal inflammatory disease. Gur E, et al. **Ann Plast Surg** 1997 Jun;38(6):653-7

Dermatofibrosarcoma protuberans (DFSP): growth characteristics based on tumor modeling and a review of cases treated with Mohs micrographic surgery. Haycox CL, et al. **Ann Plast Surg** 1997 Mar;38(3):246-51 (32 ref.)

Giant plexiform fibrohistiocytic tumor of skin [letter] Karataş O, et al. **Ann Plast Surg** 1997 Mar;38(3):306-7

Acroangiodermatitis (pseudo-Kaposi's sarcoma) associated with Klippel-Trénaunay syndrome. Lyle WG, et al. **Ann Plast Surg** 1996 Dec;37(6):654-6

Bilobed fasciocutaneous flap for primary repair of a large upper arm defect with secondary closure of the donor site without a skin graft. Onishi K, et al. **Ann Plast Surg** 1997 Aug;39(2):205-9

Tissue expansion with endoscopy. Serra JM, et al. **Ann Plast Surg** 1997 Feb;38(2):101-8

Endoscopic-assisted transaxillary removal of lipomas in the back and shoulder region. Takeuchi M, et al. **Ann Plast Surg** 1997 Feb;38(2):109-14

Extended V-Y flap: patient reports and reconsideration. Terashi H, et al. **Ann Plast Surg** 1997 Feb;38(2):147-50

Transcranial erosion of a benign dermal cylindroma. Wyld L, et al. **Ann Plast Surg** 1996 Feb;36(2):194-6

Late recurrence of malignant melanoma and second primary malignant melanoma: a report of 3 patients [letter] Yoshitatsu S, et al. **Ann Plast Surg** 1997 Jun;38(6):663-4

Recent advances in the care of the patient with malignant melanoma [see comments] Reintgen D, et al. **Ann Surg** 1997 Jan;225(1):1-14 (51 ref.). Comment in: Ann Surg 1997 Jan;225(1):15-6.

Advances in the care of the patient with malignant melanoma [editorial; comment] Seigler HF. **Ann Surg** 1997 Jan; 225(1):15-6. Comment on: Ann Surg 1997 Jan;225(1):1-14.

Surgical management of primary cutaneous melanomas of the hands and feet. Tseng JF, et al. **Ann Surg** 1997 May; 225(5):544-50; discussion 550-3

Local recurrence in malignant melanoma: long-term results of the multiinstitutional randomized surgical trial. Karakousis CP, et al. **Ann Surg Oncol** 1996 Sep;3(5):446-52

Selective lymphadenectomy in patients with Merkel cell (cutaneous neuroendocrine) carcinoma. Messina JL, et al. **Ann Surg Oncol** 1997 Jul-Aug;4(5):389-95

Lymphangiectomy and treatment modalities in Merkel cell carcinoma: a report of five new cases. Vandeput JJ, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3887-93 (49 ref.)

Clinical parameters of tumescent anesthesia in skin cancer reconstructive surgery. A review of 86 patients. Acosta AE. **Arch Dermatol** 1997 Apr;133(4):451-4

Theoretical and empirical arguments in relation to elective lymph node dissection for melanoma. Piepkorn M, et al. **Arch Dermatol** 1997 Aug;133(8):995-1002 (110 ref.)

Revising the practice of melanoma margin resections [letter; comment] Sanders CJ. **Arch Dermatol** 1997 Jan; 133(1):103-5. Comment on: Arch Dermatol 1996 Jul;132(7):811-4.

Resection margins in primary cutaneous melanoma [letter; comment] Weinstock MA. **Arch Dermatol** 1997 Jan; 133(1):103. Comment on: Arch Dermatol 1996 Jul;132(7):811-4.

Optimal selective sentinel lymph node dissection in primary malignant melanoma. Leong SP, et al. **Arch Surg** 1997 Jun; 132(6):666-72; discussion 673

Skin grafting technique. Foreman RW. **Aust Fam Physician** 1996 Sep;25(9):1397-9

The abductor digiti minimi flap: a case report and review. Bloom RJ, et al. **Aust N Z J Surg** 1997 Aug;67(8):582-3

Treatment of lentigo maligna. Gaspar ZS, et al. **Australas J Dermatol** 1997 Feb;38(1):1-6; quiz 7-8 (40 ref.)

The use of monoclonal antibody stains in Mohs micrographic surgery. Salmon RM. **Australas J Dermatol** 1997 Feb; 38(1):44-5

Basal cell carcinoma of the face: surgery or radiotherapy? Results of a randomized study. Avril MF, et al. **Br J Cancer** 1997;76(1):100-6

Excision of selected skin tumours using Mohs' micrographic surgery with horizontal paraffin-embedded sections. Barlow RJ, et al. **Br J Dermatol** 1996 Dec;135(6):911-7

Eruptive satellite vascular malformations after removal of a melanocytic naevus. Deroo M, et al. **Br J Dermatol** 1997 Aug;137(2):292-5

Mycosis fungoides palmaris et plantaris: successful treatment with the carbon dioxide laser. Goldberg DJ, et al. **Br J Dermatol** 1997 Apr;136(4):617-9

A prospective study of Mohs' micrographic surgery in two English centres. Julian CG, et al. **Br J Dermatol** 1997 Apr; 136(4):515-8

Five-year results of curettage-cryosurgery of selected large primary basal cell carcinomas on the nose: an alternative treatment in a geographical area underserved by Mohs' surgery. Nordin P, et al. **Br J Dermatol** 1997 Feb; 136(2):180-3

Ferguson-Smith syndrome: the importance of long term follow-up. Chakrabarty KH, et al. **Br J Plast Surg** 1996 Oct;49(7):497-8

Recurrence of thin melanoma: how effective is follow-up? Moloney DM, et al. **Br J Plast Surg** 1996 Sep;49(6):409-13

Surgical management of malignant melanoma. McKay AJ. **Br J Surg** 1997 Jan;84(1):5-7

Melanoma of the nose. Papadopoulos T, et al. **Br J Surg** 1997 Jul;84(7):986-9

Practice tips. Mole no more. Manca DP. **Can Fam Physician** 1997 Aug;43:1359

Principles of reconstruction following excision of nonmelanoma skin cancer. Fazio MJ, et al. **Clin Dermatol** 1995 Nov-Dec;13(6):601-16 (29 ref.)

Mohs micrographic surgery for nonmelanoma skin cancer. Telfer NR. **Clin Dermatol** 1995 Nov-Dec;13(6):593-600 (54 ref.)

Primary cutaneous adenoid cystic carcinoma [letter] Irvine AD, et al. **Clin Exp Dermatol** 1996 May;21(3):249-50

Surgical issues in the management of melanoma [see comments] Fraker DL. **Curr Opin Oncol** 1997 Mar; 9(2):183-8 (40 ref.). Comment in: Curr Opin Oncol 1997 Mar;9(2):175-7.

The dermatologist and managed care. Brodkin RH, et al. **Cutis** 1996 Nov;58(5):352

Recurrent lentigo maligna invading a skin graft successfully treated with Mohs' micrographic surgery. Cohen LM, et al. **Cutis** 1996 Mar;57(3):175-8 (26 ref.)

Laser treatment of port-wine stains and hemangiomas. Garden JM, et al. **Dermatol Clin** 1997 Jul;15(3):373-83 (47 ref.)

Advances in dermatologic surgery. Perez M. **Dermatol Clin** 1997 Jan;15(1):9-18 (61 ref.)

What of the clinical significance of the cryoimmune response? [letter; comment] Ablin RJ. **Dermatol Surg** 1997 Jun; 23(6):499-500. Comment on: Dermatol Surg 1996 Oct;22(10):854-8.

How many skin cancers require Mohs micrographic surgery? [letter; comment] Berger RS. **Dermatol Surg** 1997 Jun; 23(6):496-7. Comment on: Dermatol Surg 1996 Aug;22(8):711-3.

Nitrous oxide cryosurgery applied to skin cancers [letter] Boullie MC. **Dermatol Surg** 1997 Aug;23(8):714-6

Cryosurgical treatment of professional chronic radiodermatitis. Conejo-Mir JS, et al. **Dermatol Surg** 1997 Jun;23(6):483-6

Sentinel node dissection in the treatment of melanoma. Report of three cases and review of the literature. Cottingham T, et al. **Dermatol Surg** 1997 Feb;23(2):113-8; discussion 118-9 (33 ref.)

A comparison of Mohs micrographic surgery and wide excision for the treatment of atypical fibroxanthoma. Davis JL, et al. **Dermatol Surg** 1997 Feb;23(2):105-10

Hairline reconstruction utilizing modified winged V-plastic hair-bearing flaps and focal anastomotic line excisions. Field LM. **Dermatol Surg** 1996 Nov;22(11):937-40

Fractional cryosurgery. A new technique for basal cell carcinoma of the eyelids and periorbital area. Gonçalves JC. **Dermatol Surg** 1997 Jun;23(6):475-81 (26 ref.)

Debulking of skin cancers with radio frequency before cryosurgery. Gonçalves JC, et al. **Dermatol Surg** 1997 Apr; 23(4):253-6; discussion 256-7

Treatment of nevus spilus with the Q-switched ruby laser. Grevelink JM, et al. **Dermatol Surg** 1997 May;23(5):365-9; discussion 369-70

Cryogen spray cooling during Nd:YAG laser treatment of hemangiomas. A preliminary animal model study. Hoffman WL, et al. **Dermatol Surg** 1997 Aug;23(8):635-41

Peritumoral B cell infiltrate associated with chronic lymphocytic leukemia obscuring margin evaluation during Mohs micrographic surgery [letter] Humphreys TR, et al. **Dermatol Surg** 1996 Oct;22(10):894-6 (21 ref.)

Skin cancer and intraoperative radiation therapy: strange bedfellows [letter; comment] Johnstone PA. **Dermatol Surg** 1996 Oct;22(10):891-2. Comment on: Dermatol Surg 1995 Nov;21(11):975-8.

Repair of central upper lip (philtral) surgical defects with island pedicle flaps. Kaufman AJ, et al. **Dermatol Surg** 1996 Dec;22(12):1003-7

Squamous cell carcinoma arising in osteomyelitis and chronic wounds. Treatment with Mohs micrographic surgery vs amputation. Kirsner RS, et al. **Dermatol Surg** 1996 Dec; 22(12):1015-8

Cutaneous micrographic surgery for atypical fibroxanthoma. Limmer BL, et al. **Dermatol Surg** 1997 Jul;23(7):553-7; discussion 557-8

An assessment of the suitability of Mohs micrographic surgery in patients aged 90 years and older. MacFarlane DF, et al. **Dermatol Surg** 1997 May;23(5):389-92; discussion 392-3

Cryosurgery in the treatment of basal cell carcinoma. Assessment of one and two freeze-thaw cycle schedules [see comments] Mallon E, et al. **Dermatol Surg** 1996 Oct; 22(10):854-8. Comment in: Dermatol Surg 1997 Jun;23(6):499-500.

Multiple trichoepitheliomas successfully treated with a high-energy, pulsed carbon dioxide laser. Rosenbach A, et al. **Dermatol Surg** 1997 Aug;23(8):708-10

Transverse sectioning of a pigmented lesion. Salasche SJ, et al. **Dermatol Surg** 1997 Jul;23(7):578-82

Does inflammation contribute to the eradication of basal cell carcinoma following curettage and electrodesiccation? Spencer JM, et al. **Dermatol Surg** 1997 Aug;23(8):625-30; discussion 630-1

Ambulatory narrow excision for thin melanoma (< or = 2 mm): results of a prospective study. Bono A, et al. **Eur J Cancer** 1997 Jul;33(8):1330-2

Subcutaneous basal cell epithelioma presenting as a breast lump: an unusual and perplexing lesion. Sheen-Chen SM, et al. **Eur J Surg** 1996 May;162(5):425-7

The pedicled omentoplasty and split skin graft (POSSG) for reconstruction of large chest wall defects. A validity study of 34 patients. Contant CM, et al. **Eur J Surg Oncol** 1996 Oct;22(5):532-7

Blue rubber bleb nevus syndrome: endoscopic removal of the gastrointestinal hemangiomas. Bak YT, et al. **Gastrointest Endosc** 1997 Jan;45(1):90-2

Endoscopic polypectomy under laparotomy throughout the alimentary tract for a patient with blue rubber bleb nevus syndrome. Shimada S, et al. **Gastrointest Endosc** 1997 May; 45(5):423-7 (25 ref.)

Cutaneous nasal malignancies: is primary reconstruction safe? Evans GR, et al. **Head Neck** 1997 May;19(3):182-7

Treatment outcome for 424 primary cases of clinical I cutaneous malignant melanoma of the head and neck. Kane WJ, et al. **Head Neck** 1997 Sep;19(6):457-65

Congenital syringocystadenoma papilliferum of the ear and neck treated with the CO2 laser. Jordan JA, et al. **Int J Pediatr Otorhinolaryngol** 1996 Dec 5;38(1):81-7

Surgical margins for malignant melanoma: another point of view [editorial; comment] Kanzler MH, et al. **J Am Acad Dermatol** 1996 Dec;35(6):1014-5. Comment on: J Am Acad Dermatol 1995 Sep;33(3):532-4.

Recurrent basal cell carcinoma treated with cryosurgery. Kuflik EG, et al. **J Am Acad Dermatol** 1997 Jul;37(1):82-4

Who removes pigmented skin lesions? Marks R, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):721-6

Surgical margins for excision of primary cutaneous melanoma. Zitelli JA, et al. **J Am Acad Dermatol** 1997 Sep; 37(3 Pt 1):422-9

Mohs micrographic surgery for the treatment of primary cutaneous melanoma. Zitelli JA, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):236-45

Dermatofibrosarcoma protuberans. Salvaging quality of life using two approaches to treatment. Gurevitch D, et al. **J Am Podiatr Med Assoc** 1996 Sep;86(9):439-46

Atypical melanosis of the foot. Nogita T. **J Dermatol** 1996 Nov;23(11):825-7

The use of selective lymphadenectomy in squamous cell carcinoma of the wrist: a case report. Stadelmann WK, et al. **J Hand Surg [Am]** 1997 Jul;22(4):726-31

Melanoma of the hand. Warso M, et al. **J Hand Surg [Am]** 1997 Mar;22(2):354-60

Surgery and laser therapy. Lawrence CM. **J R Coll Physicians Lond** 1997 Jul-Aug;31(4):369-73 (25 ref.)

Microsurgical reconstruction during the early puerperium. Iglesias M, et al. **J Reconstr Microsurg** 1996 May; 12(4):211-3

Advanced cutaneous squamous cell carcinoma of the trunk and extremity: analysis of prognostic factors. North JH Jr, et al. **J Surg Oncol** 1997 Mar;64(3):212-7

Double V-Y subcutaneous island flap. Parell GJ, et al. **Laryngoscope** 1996 Nov;106(11):1434-5

The surgical management of invasive primary melanoma: an update. Lange JR. **Md Med J** 1997 May-Jun;46(5):251-4 (21 ref.)

Mohs micrographic surgery for the treatment of difficult skin cancers. Skouge JW. **Md Med J** 1997 May-Jun;46(5):231-7 (42 ref.)

The significance of birthmarks [letter; comment] Arianayagam C. **Med J Aust** 1997 Jan 6;166(1):56. Comment on: Med J Aust 1996 May 20;164(10):618-23.

Treatment of benign cutaneous vascular proliferations with the 585-nm flashlamp-pulsed tunable dye laser. Krunic A, et al. **N C Med J** 1996 May-Jun;57(3):180-2

A study of general practitioners' skin surgery in Canterbury. Corwin P, et al. **N Z Med J** 1997 Jul 11;110(1047):253-5

Role of sentinel node biopsy in the management of malignant melanoma. North JH Jr, et al. **Oncology (Huntingt)** 1996 Aug;10(8):1237-42; discussion 1242-6 (20 ref.)

Conceptual considerations in head & neck reconstruction. Defect analysis and options for reconstruction. Clevens RA, et al. **Otolaryngol Clin North Am** 1997 Aug; 30(4):495-517 (17 ref.)

Nevus spilus: a potential precursor of cutaneous melanoma worthy of aggressive surgical excision? [comment] Rhodes AR. **Pediatr Dermatol** 1996 May-Jun;13(3):250-2. Comment on: Pediatr Dermatol 1996 May-Jun;13(3):233-8.

Sun protection and sunscreen use after surgical treatment of basal cell carcinoma. Harth Y, et al. **Photodermatol Photoimmunol Photomed** 1995 Aug; 11(4):140-2

The necessity for aggressive treatment with Marjolin's ulcers of the scalp [letter] Aköz T, et al. **Plast Reconstr Surg** 1997 Sep;100(3):805-6

Surgical treatment of dermatofibrosarcoma protuberans. Arnaud EJ, et al. **Plast Reconstr Surg** 1997 Sep; 100(4):884-95

Reconstruction of the localized eyebrow defect. Cedars MG. **Plast Reconstr Surg** 1997 Sep;100(3):685-9

Q-switched ruby laser treatment of oculodermal melanosis (nevus of Ota). Chang CJ, et al. **Plast Reconstr Surg** 1996 Oct;98(5):784-90

Surgical treatment of large cutaneous lesions of the back in children by concentric cutaneous mobilization. Chrétien-Marquet B, et al. **Plast Reconstr Surg** 1997 Sep; 100(4):926-36

Temporal bipedicled scalp flap: zone of necrosis by accidental rupture of one pedicle [letter] Giraldo F, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1317-9

A trilobed flap for reconstruction of nasal skin defects. Iida N, et al. **Plast Reconstr Surg** 1997 Sep;100(4):991-5

Aggressive surgical treatment of digital papillary adenocarcinoma. Singla AK, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2058-60

Use of a paper pattern for scrotal skin replacement [letter] Ueda K, et al. **Plast Reconstr Surg** 1997 Mar;99(3):916-7

Surgical treatment of malignant melanoma. Huth JF. **Semin Cutan Med Surg** 1997 Jun;16(2):159-64 (19 ref.)

The surgical management of melanoma: from diagnosis to local treatment. Baron PL. **Semin Oncol** 1996 Dec; 23(6):714-8 (34 ref.)

Surgical management of patients with intermediate thickness melanoma: current role of elective lymph node dissection. Cole DJ, et al. **Semin Oncol** 1996 Dec;23(6):719-24 (41 ref.)

Surgical therapy of primary cutaneous melanoma. Geraghty PJ, et al. **Semin Surg Oncol** 1996 Nov-Dec;12(6):386-93 (33 ref.)

The role of plastic surgery in the treatment of malignant melanoma. Eshima I. **Surg Clin North Am** 1996 Dec; 76(6):1331-42 (37 ref.)

Surgical treatment of malignant melanoma. Karakousis CP. **Surg Clin North Am** 1996 Dec;76(6):1299-312 (58 ref.)

Reconstructive surgery in melanoma patients. Ariyan S. **Surg Oncol Clin N Am** 1996 Oct;5(4):785-807 (09 ref.)

Oncologic and reconstructive considerations in nonmelanotic skin and lip cancers. Luce EA, et al. **Surg Oncol Clin N Am** 1996 Oct;5(4):751-84 (60 ref.)

Melanoma nodal metastases: biologic significance and therapeutic considerations. Reintgen D. **Surg Oncol Clin N Am** 1996 Jan;5(1):105-20 (24 ref.)

Lymphatic mapping and epitrochlear lymph node dissection for melanoma. Tanabe KK. **Surgery** 1997 Jan;121(1):102-4

[Clinical application of 72-hour fast expansion of the soft tissue] Wu W, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 May;12(3):190-2 (Eng. Abstr.) **(Chi)**

[Who should treat lipomas? (letter; comment)] Sørensen EA. **Ugeskr Laeger** 1997 Jun 2;159(23):3617-8. Comment on: Ugeskr Laeger 1997 Feb 3;159(6):719. **(Dan)**

[Mohs' method of micrographic surgery as treatment for recurrent basal cell carcinoma] van Baardwijk AA, et al. **Ned Tijdschr Geneeskd** 1997 Mar 15;141(11):524-9 (Eng. Abstr.) **(Dut)**

[Natural skin expansion. Applications to the surgery of nevus of the head and neck in children] Bennaceur S, et al. **Ann Chir Plast Esthet** 1996 Aug;41(4):338-45 (Eng. Abstr.) **(Fre)**

[Two-stage excision of extensive cutaneous carcinoma of the face. A retrospective study of 80 patients] Arfi C, et al. **Ann Dermatol Venereol** 1995;122(11-12):764-8 (Eng. Abstr.) **(Fre)**

[Scintillation probe guided sentinel lymphadenectomy in malignant melanoma] Büchels HK, et al. **Chirurg** 1997 Jan; 68(1):45-50 (Eng. Abstr.) **(Ger)**

[Lymph node dissections in malignant melanoma] Hohenberger W, et al. **Chirurg** 1996 Aug;67(8):779-87 (24 ref.) (Eng. Abstr.) **(Ger)**

[Merkel cell tumor of the hand in a 104-year-old patient. Case report with review of the literature] Sonak RA, et al. **Handchir Mikrochir Plast Chir** 1996 Jan;28(1):43-5 (21 ref.) (Eng. Abstr.) **(Ger)**

[Teleangiectasia haemorrhagica hereditaria. Surgical therapy of malignant skin tumors (Osler-Weber-Rendu disease] Breuninger H, et al. **Hautarzt** 1997 Jul;48(7):496-9 (Eng. Abstr.) **(Ger)**

[Elective lymph node dissection in primary malignant melanoma (see comments)] Petres J, et al. **Hautarzt** 1996 Jan;47(1):29-34 (Eng. Abstr.). Comment in: Hautarzt 1996 Sep;47(9):722-3. **(Ger)**

[Comment on the contribution by J. Petres et al. Effective lymph node dissection in primary malignant melanoma (letter; comment)] Schadendorf D. **Hautarzt** 1996 Sep; 47(9):722-3. Comment on: Hautarzt 1996 Jan;47(1):29-34. **(Ger)**

[Is surgical therapy of distant metastases of malignant melanoma worthwhile?] Göhl J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:122-6 (Eng. Abstr.) **(Ger)**

[Value of regional lymph node excision for prognosis of advanced malignant melanoma treated by perfusion of the extremity] Huber R, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:118-21 (Eng. Abstr.) **(Ger)**

[Basic principles of melanoma surgery] Walz MK. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:111-4 (18 ref.) (Eng. Abstr.) **(Ger)**

[Value of lymphatic outflow directed continuity dissection in melanoma surgery] Winter H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:115-7 (Eng. Abstr.) **(Ger)**

[11 cases of anal Bowen's disease] Kreyden OP, et al. **Schweiz Med Wochenschr** 1996 Sep 7;126(36):1536-40 (Eng. Abstr.) **(Ger)**

[Squamous cell carcinoma and basal cell carcinoma] Suzuki T, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):16-22 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Curettage and cryosurgery of epithelial skin cancer. Good 5-year results in the treatment of nose and ear cancer] Nordin P. **Lakartidningen** 1996 Sep 18;93(38):3241-3 (Eng. Abstr.) **(Swe)**

[Choices in the management of epithelial cancer of the skin] Skoog V. **Lakartidningen** 1996 Sep 18;93(38):3225 **(Swe)**

THERAPY

Interleukin-4 in the treatment of AIDS-related Kaposi's sarcoma. Tulpule A, et al. **Ann Oncol** 1997 Jan;8(1):79-83

Severe hypotension following inadvertent intravenous administration of interferon alfa-2a [letter] Hanson DS, et al. **Ann Pharmacother** 1997 Mar;31(3):371-2

Increased survival of patients treated with a vaccinia melanoma oncolysate vaccine: second interim analysis of data from a phase III, multi-institutional trial. Wallack MK, et al. **Ann Surg** 1997 Aug;226(2):198-206

Merkel cell carcinoma of the skin. Treatment of primary, recurrent, and metastatic disease: review of clinical cases. Queirolo P, et al. **Anticancer Res** 1997 Jan-Feb; 17(1B):673-7 (22 ref.)

Merkel cell carcinoma of the skin. Treatment of primary, recurrent and metastatic disease: review of clinical cases. Queirolo P, et al. **Anticancer Res** 1997 May-Jun; 17(3C):2339-42

Middle-term evolution of patients with advanced cutaneous T-cell lymphoma treated with high-dose recombinant interleukin-2 [letter; comment] Baccard M, et al. **Arch Dermatol** 1997 May;133(5):656. Comment on: Arch Dermatol 1995 May;131(5):574-9.

Treating patients with melanoma with interferon [letter] Cook J, et al. **Arch Dermatol** 1997 Mar;133(3):387-9

Bleomycin-mediated electrochemotherapy of metastatic melanoma. Glass LF, et al. **Arch Dermatol** 1996 Nov; 132(11):1353-7

Attitude toward alternative therapy, compliance with standard treatment, and need for emotional support in patients with melanoma [see comments] Söllner W, et al. **Arch Dermatol** 1997 Mar;133(3):316-21. Comment in: Arch Dermatol 1997 Mar;133(3):379-80.

Novel electrode designs for electrochemotherapy. Gilbert RA, et al. **Biochim Biophys Acta** 1997 Feb 11;1334(1):9-14

A phase I trial of recombinant human interleukin-1 beta (OCT-43) following high-dose chemotherapy and autologous bone marrow transplantation. Elkordy M, et al. **Bone Marrow Transplant** 1997 Feb;19(4):315-22

Chemoimmunotherapy with bleomycin, vincristine, lomustine, dacarbazine (BOLD) plus interferon alpha for metastatic melanoma: a multicentre phase II study. Punt CJ, et al. **Br J Cancer** 1997;76(2):266-9

Comparison of photodynamic therapy with cryotherapy in the treatment of Bowen's disease. Morton CA, et al. **Br J Dermatol** 1996 Nov;135(5):766-71

Interferon adjuvant therapy of melanoma [letter; comment] Kirkwood JM, et al. **Cancer** 1997 May 1;79(9):1843-6. Comment on: Cancer 1996 Sep 1;78(5):944-7.

Active immunization of metastatic melanoma patients with interleukin-2-transduced allogeneic melanoma cells: evaluation of efficacy and tolerability. Belli F, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):197-203

Tumor reactivity of immune T cells in short-term culture. Krauss JC, et al. **Cancer Immunol Immunother** 1996 Dec; 43(4):231-9

Analysis of Pmel17/gp100 expression in primary human tissue specimens: implications for melanoma immuno- and gene-therapy. Wagner SN, et al. **Cancer Immunol Immunother** 1997 Jun;44(4):239-47

The development of therapeutic vaccines of the management of malignant melanoma. Dalgleish AG, et al. **Cancer Surv** 1996;26:289-319 (158 ref.)

Treatment of melanoma in-transit metastases confined to the limb. Eggermont AM. **Cancer Surv** 1996;26:335-49 (65 ref.)

Current immunotherapy for melanoma. Newton Bishop JA. **Cancer Surv** 1996;26:321-33 (54 ref.)

Treatment of subcutaneous tumor with adoptively transferred T cells. Peng L, et al. **Cell Immunol** 1997 May 25; 178(1):24-32

Treatment of cutaneous T cell lymphoma with low doses of interferon alpha-2b. Qiu B, et al. **Chin Med J (Engl)** 1996 May;109(5):404-6

Cryotherapy of nonmelanoma skin cancer. August PJ. **Clin Dermatol** 1995 Nov-Dec;13(6):589-92 (14 ref.)

Use of vaccines in treatment of malignant melanoma. Bystryn JC, et al. **Clin Dermatol** 1996 Jul-Aug;14(4):337-41 (13 ref.)

Comparison of treatment modalities for squamous cell carcinoma. Geisse JK. **Clin Dermatol** 1995 Nov-Dec; 13(6):621-6 (31 ref.)

Comparison of treatment modalities for basal cell carcinoma. Rowe DE. **Clin Dermatol** 1995 Nov-Dec;13(6):617-20 (15 ref.)

Two cases of Kaposi's sarcoma in renal and liver transplant recipients treated with interferon. Halmos O, et al. **Clin Transplant** 1996 Aug;10(4):374-8

Melanoma and other skin neoplasms. **Curr Opin Oncol** 1997 Mar;9(2):B56-64

The treatment of metastatic melanoma with chemotherapy and biologics [see comments] Atkins MB. **Curr Opin Oncol** 1997 Mar;9(2):205-13 (71 ref.). Comment in: Curr Opin Oncol 1997 Mar;9(2):175-7.

Melanoma and other skin neoplasms [editorial; comment] Schuchter LM. **Curr Opin Oncol** 1997 Mar;9(2):175-7 (7 ref.). Comment on: Curr Opin Oncol 1997 Mar;9(2):178-82. Comment on: Curr Opin Oncol 1997 Mar;9(2):183-8. Comment on: Curr Opin Oncol 1997 Mar;9(2):189-204. Comment on: Curr Opin Oncol 1997 Mar;9(2):205-13.

Adjuvant therapy for melanoma [see comments] Sondak VK, et al. **Curr Opin Oncol** 1997 Mar;9(2):189-204 (119 ref.). Comment in: Curr Opin Oncol 1997 Mar;9(2):175-7.

Advances in Kaposi's sarcoma. Myskowski PL, et al. **Dermatol Clin** 1997 Jan;15(1):177-88 (122 ref.)

Actinic cheilitis. A treatment review. Dufresne RG Jr, et al. **Dermatol Surg** 1997 Jan;23(1):15-21 (38 ref.)

Current status of melanoma vaccines. Kuhn CA, et al. **Dermatol Surg** 1997 Aug;23(8):649-54; discussion 654-5 (33 ref.)

Combination of local PUVA-therapy and interferon alpha-2A in the treatment of tumoral stage mycosis fungoides [letter] Delpuget-Bertin N, et al. **Dermatology** 1996;193(1):74-5

Prognostic value of tuberculin and BCG immunoreactivity in stage I high-risk malignant melanoma (EORTC protocol 18781). Henz BM, et al. **Dermatology** 1996;193(2):105-9

Induction of heat shock protein 70 genes in human lymphocytes during fever therapy. Dressel R, et al. **Eur J Clin Invest** 1996 Jun;26(6):499-505

Antitumoral local effect and metastatic risk of focused extracorporeal pyrotherapy on Dunning R-3327 tumors. Bataille N, et al. **Eur Urol** 1996;29(1):72-7

Interleukin-7. Biology and implications for dermatology. Möller P, et al. **Exp Dermatol** 1996 Jun;5(3):129-37 (91 ref.)

The success of TNF alpha in isolated limb perfusion for irresectable extremity soft tissue sarcomas, melanoma and carcinomas: observations in patients and preclinical perfusion models. Eggermont AM. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1357-70 (74 ref.)

Interferon-alpha therapy for multiple hemangiomas associated with coarctation of the aorta. Hijii T, et al. **Heart Vessels** 1996;11(4):211-4

Melanoma immunotherapy: new dreams or solid hopes? Maio M, et al. **Immunol Today** 1996 Sep;17(9):405-7

Primary inoculation tuberculosis after immunotherapy for malignant melanoma with BCG vaccine. Caplan SE, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):783-5

Adjuvant therapy for cutaneous malignant melanoma. Demierre MF, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):747-64 (153 ref.)

Proceedings of the International Consensus Conference on Cutaneous T-cell Lymphoma (CTCL) Treatment Recommendations. Boston, Massachusetts, Oct. 1 and 2, 1994. Demierre MF, et al. **J Am Acad Dermatol** 1997 Mar; 36(3 Pt 1):460-6 (44 ref.)

Treatment of cutaneous T-cell lymphoma with extracorporeal photopheresis monotherapy and in combination with recombinant interferon alfa: a 10-year experience at a single institution. Gottlieb SL, et al. **J Am Acad Dermatol** 1996 Dec;35(6):946-57

Response rates in photopheresis therapy for cutaneous T-cell lymphoma [letter; comment] Zackheim HS, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 1):287-8. Comment on: J Am Acad Dermatol 1996 Oct;35(4):573-9.

Autologous hapten-modified melanoma vaccine as postsurgical adjuvant treatment after resection of nodal metastases. Berd D, et al. **J Clin Oncol** 1997 Jun; 15(6):2359-70

Quality-of-life-adjusted survival analysis of interferon alfa-2b adjuvant treatment of high-risk resected cutaneous melanoma: an Eastern Cooperative Oncology Group study [see comments] Cole BF, et al. **J Clin Oncol** 1996 Oct; 14(10):2666-73. Comment in: J Clin Oncol 1997 May;15(5):2172.

Rapid destruction of murine and human melanomas by local injection of absolute ethanol: augmentation of the anti-proliferative effects with a combination of biological response modifiers. Nakayama J, et al. **J Dermatol** 1996 Mar;23(3):156-64

Kinetics of immunological parameters in patients with malignant melanoma treated with hyperthermic isolated limb perfusion. Nakayama J, et al. **J Dermatol Sci** 1997 May;15(1):1-8

Multicentre experience with combined hyperthermia and radiation therapy in the treatment of superficially located

non-Hodgkin's lymphomas. Donato V, et al. **J Exp Clin Cancer Res** 1997 Mar;16(1):87-90

The adjuvant treatment of malignant melanoma. Reintgen D, et al. **J Fla Med Assoc** 1997 Mar;84(3):147-52

Combination therapy with interferon-gamma and interleukin-2 for the treatment of metastatic melanoma. Kim CJ, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan;19(1):50-8

Phase Ia/Ib trial of anti-GD2 chimeric monoclonal antibody 14.18 (ch14.18) and recombinant human granulocyte-macrophage colony-stimulating factor (rhGM-CSF) in metastatic melanoma. Murray JL, et al. **J Immunother Emphasis Tumor Immunol** 1996 May; 19(3):206-17

Transient induction of E-selectin expression following TNF alpha-based isolated limb perfusion in melanoma and sarcoma patients is not tumor specific. Nooijen PT, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan; 19(1):33-44

Vitiligo in patients with melanoma: normal tissue antigens can be targets for cancer immunotherapy. Rosenberg SA, et al. **J Immunother Emphasis Tumor Immunol** 1996 Jan; 19(1):81-4

Treatment of experimental subcutaneous human melanoma with a replication-restricted herpes simplex virus mutant. Randazzo BP, et al. **J Invest Dermatol** 1997 Jun; 108(6):933-7

Apoptosis induction of ultraviolet light A and photochemotherapy in cutaneous T-cell Lymphoma: relevance to mechanism of therapeutic action. Yoo EK, et al. **J Invest Dermatol** 1996 Aug;107(2):235-42

Successful treatment of infantile hemangiomas with interferon-alpha-2b. Chang E, et al. **J Pediatr Hematol Oncol** 1997 May-Jun;19(3):237-44

Adjuvant immunotherapy in melanoma with irradiated autologous tumor cells and low dose cyclophosphamide. Elias EG, et al. **J Surg Oncol** 1997 Jan;64(1):17-22

Notes on cancer management from a visiting Australian researcher [letter] Green A. **Jpn J Clin Oncol** 1997 Apr; 27(2):120

Extracorporeal photopheresis and interferon-alpha in advanced cutaneous T-cell lymphoma [letter] Dippel E, et al. **Lancet** 1997 Jul 5;350(9070):32-3

Low-dose integrated chemoimmuno-hormonotherapy with cisplatin, subcutaneous interleukin-2, alpha-interferon and tamoxifen for advanced metastatic melanoma--a pilot study. Bernengo MG, et al. **Melanoma Res** 1996 Jun; 6(3):257-65

Clinical responses and lymphoid infiltrates in metastatic melanoma following treatment with intralesional GM-CSF. Si Z, et al. **Melanoma Res** 1996 Jun;6(3):247-55

Treatment of massive or life-threatening hemangiomas with recombinant alpha(2a)-interferon. Bauman NM, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):99-110

Hemangiomas and vascular malformations. Morelli JG. **Pediatr Ann** 1996 Feb;25(2):91, 94-6 (20 ref.)

Management of hemangiomas. **Pediatr Dermatol** 1997 Jan-Feb;14(1):57-83

Management of hemangioma of infancy: review of 245 patients. Achauer BM, et al. **Plast Reconstr Surg** 1997 Apr; 99(5):1301-8

Two cases of Merkel cell carcinoma cured by intratumor injection of natural human tumor necrosis factor. Hata Y, et al. **Plast Reconstr Surg** 1997 Feb;99(2):547-53

Selective increase in specific alternative splice variants of tyrosinase in murine melanomas: a projected basis for immunotherapy. Le Fur N, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5332-7

Adjuvant application of interferons. el Kassas H, et al. **Semin Oncol** 1996 Dec;23(6):737-43 (35 ref.)

Active specific immunization in the treatment of patients with melanoma. Mastrangelo MJ, :t al. **Semin Oncol** 1996 Dec; 23(6):773-81 (57 ref.)

Chemo-immunotherapy for advanced-stage malignancies and its impact on quality of life: multidimensional evaluation in ten cancer patients. Curreli L, et al. **Support Care Cancer** 1996 Nov;4(6):462-4

Isolated hyperthermia chemotherapy perfusion for limb melanoma. Krementz ET, et al. **Surg Clin North Am** 1996 Dec;76(6):1313-30

Immunotherapy of malignant melanoma. Leong SP. **Surg Clin North Am** 1996 Dec;76(6):1355-81 (165 ref.)

Computer database for melanoma registry. A clinical management and research tool to monitor outcomes and ensure continuous quality improvement. Reintgen D, et al. **Surg Clin North Am** 1996 Dec;76(6):1273-85 (20 ref.)

Modulation of specific active immunization against murine melanoma using recombinant cytokines. Stidham KR, et al. **Surg Oncol** 1996 Oct-Dec;5(5-6):221-9

[General skin cancer. Quantity, treatment and quality (editorial)] Frentz G. **Ugeskr Laeger** 1996 Dec 9; 158(50):7202 **(Dan)**

[Results of treatment of non-melanoma skin cancer in a dermatologic practice. A prospective study] Veien SK, et al. **Ugeskr Laeger** 1996 Dec 9;158(50):7213-5 (Eng. Abstr.) **(Dan)**

[A patient with a psychiatric disorder who refuses treatment of a somatic disease (see comments)] Monden MA, et al. **Ned Tijdschr Geneeskd** 1997 Feb 1;141(5):247-9 (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1997 Mar 29;141(13):649-50. Comment in: Ned Tijdschr Geneeskd 1997 Mar 29;141(13):650. **(Dut)**

[Neuroendocrine primary cutaneous carcinoma. Therapeutic aspects in 13 patients] Bedane C, et al. **Ann Dermatol Venereol** 1996;123(8):443-6 (Eng. Abstr.) **(Fre)**

[Protocol for optimal therapy of malignant melanoma in the metastatic stage by the Dermatologic Oncology Working Group] Hauschild A. **Hautarzt** 1996 Jan;47(1):67-8 **(Ger)**

[Therapy studies in dermatologic oncology. Recommendations for patient education] Nashan D, et al. **Hautarzt** 1997 Feb;48(2):100-2 (Eng. Abstr.) **(Ger)**

[Sarcoidosis in interferon-alpha therapy] Otte HG, et al. **Hautarzt** 1997 Jul;48(7):482-7 (Eng. Abstr.) **(Ger)**

[Epilation in Becker nevus] Raulin C. **Hautarzt** 1996 Jul; 47(7):557-8 **(Ger)**

[Gene therapy in malignant melanoma. Interview with D. Schadendorf] Schadendorf D. **Hautarzt** 1996 Dec; 47(12):962-4 **(Ger)**

[Interferon-alpha-induced psoriasis vulgaris] Wölfer LU, et al. **Hautarzt** 1996 Feb;47(2):124-8 (Eng. Abstr.) **(Ger)**

[O2 utilization during hyperthermic extremity perfusion with rhTNF alpha and melphalan] Haier J, et al. **Langenbecks Arch Chir** 1997;382(3):128-33 (Eng. Abstr.) **(Ger)**

[Isolated hyperthermic perfusion of extremities in malignant melanoma with melphalan and tumor necrosis factor] Kettelhack C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:127-9 (Eng. Abstr.) **(Ger)**

[Current therapy concepts in cutaneous T-cell lymphomas] Nestle FO, et al. **Schweiz Med Wochenschr** 1997 Feb 22; 127(8):311-20 (62 ref.) (Eng. Abstr.) **(Ger)**

[Modern tumor therapy as seen in melanoma] Dummer R, et al. **Schweiz Rundsch Med Prax** 1996 Dec 10; 85(50):1609-14 (32 ref.) (Eng. Abstr.) **(Ger)**

[Malignant melanoma in childhood and adolescence] Karplus G, et al. **Harefuah** 1996 Jun 16;130(12):843-50 (43 ref.) **(Heb)**

[Treatment of malignant melanoma: recent advances and perspectives] Saida T. **Gan To Kagaku Ryoho** 1997 Jan; 24(1):10-5 (20 ref.) (Eng. Abstr.) **(Jpn)**

[The use of a low-intensity eddy-current magnetic field in treating patients with skin lymphomas] Rodin IuA, et al. **Voen Med Zh** 1996 Dec;317(12):32-4 **(Rus)**

[Treatment of basocellular carcinoma] Karadaglić D. **Vojnosanit Pregl** 1996 Mar-Apr;53(2):137-40 (20 ref.) **(Scr)**

ULTRASONOGRAPHY

Sonography of cutaneous non-Hodgkin's lymphomas. Giovagnorio F. **Clin Radiol** 1997 Apr;52(4):301-3

Ultrasonographic evaluation of superficial lymph node metastases in melanoma. Tregnaghi A, et al. **Eur J Radiol** 1997 May;24(3):216-21

Limitations of high frequency ultrasound in determining the invasiveness of cutaneous malignant melanoma. Partsch B, et al. **Melanoma Res** 1996 Oct;6(5):395-8

Ultrasound backscatter microscope analysis of mouse melanoma progression. Turnbull DH, et al. **Ultrasound Med Biol** 1996;22(7):845-53

Cutaneous hemangioma of the thigh: prenatal diagnosis. Gonçalves LF, et al. **Ultrasound Obstet Gynecol** 1997 Feb; 9(2):128-30

[Non-invasive high resolution ultrasound of malignant melanoma of the skin. Possibilities, limits, alternatives] Freitag M, et al. **Fortschr Med** 1996 Jul 20;114(20-21):251-6 (0 ref.) (Eng. Abstr.) **(Ger)**

[The difficulty of ultrasound diagnosis of lymph node metastases of malignant melanoma in protracted tumor growth] Carl M, et al. **Hautarzt** 1997 Apr;48(4):234-9 (Eng. Abstr.) **(Ger)**

[Ultrasound morphology of peripheral lymph nodes] Abolmaali N, et al. **Z Arztl Fortbild Qualitatssich** 1997 Jul; 91(4):355-60 (11 ref.) (Eng. Abstr.) **(Ger)**

[High resolution 20 MHz ultrasound diagnosis in dermatology for noninvasive imaging of malignant melanomas] Happe M, et al. **Z Arztl Fortbild Qualitatssich** 1997 Jul;91(4):347-53 (0 ref.) (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Measurement of the maturation parameter by using computer-assisted interactive image analysis may be helpful in the differential diagnosis between compound Spitz nevus and malignant melanoma. Bergman R, et al. **Am J Dermatopathol** 1996 Dec;18(6):567-70

Superficial spreading melanoma and blue naevus within naevus spilus--ultrastructural assessment of giant pigment granules. Cox NH, et al. **Dermatology** 1997;194(3):213-6

Dermatomyofibroma: further support of its myofibroblastic nature by electronmicroscopy. NG WK, et al. **Histopathology** 1996 Aug;29(2):181-3

Purification and structural analysis of extracellular matrix of a skin tumor from a patient with juvenile hyaline fibromatosis. Katagiri K, et al. **J Dermatol Sci** 1996 Oct; 13(1):37-48

Angio-tumoral complex in human malignant melanoma characterised by free laminin: ultrastructural and immunohistochemical observations. Lugassy C, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):19-28

Expression of fibroblast growth factor receptors in naevus-cell naevus and malignant melanoma. Ahmed NU, et al. **Melanoma Res** 1997 Aug;7(4):299-305

Morphometric study of nucleolar organiser regions in ameloblastoma and basal cell carcinoma. Rosa LE, et al. **Oral Oncol** 1997 May;33(3):209-14

Ultrastructural study of Kaposi's sarcoma. Bosman C, et al. **Pathologica** 1996 Feb;88(1):8-17

VETERINARY

Immunophenotypic and ultrastructural evidence of the langerhans cell origin of the canine cutaneous histiocytoma. Marchal T, et al. **Acta Anat (Basel)** 1995;153(3):189-202

Squamous cell carcinoma-like and pox lesions occurring simultaneously in chorioallantoic membranes of chicken embryos inoculated with materials from squamous cell carcinoma and pox lesions in broiler chickens. Fallavena LC, et al. **Avian Dis** 1997 Apr-Jun;41(2):469-71

Longitudinal and cross-sectional studies to evaluate the risk of sarcoid associated with castration. Reid SW, et al. **Can J Vet Res** 1997 Apr;61(2):89-93

Papillomatosis of a farmed black cod in British Columbia. Brocklebank JR. **Can Vet J** 1996 Sep;37(9):556

Metastatic vaccine associated fibrosarcoma in a 10-year-old cat. Sandler I, et al. **Can Vet J** 1997 Jun;38(6):374

Immortalization of inbred rabbit keratinocytes from a Shope papilloma and tumorigenic transformation of the cells by EJ-ras. Peng X, et al. **Cancer Lett** 1996 Nov 12; 108(1):101-9

Sinclair swine with spontaneously regressing cutaneous melanomas do not have autoantibodies against retinal bipolar cells [letter] Alexander KR, et al. **Exp Eye Res** 1996 Sep;63(3):347-9

Tumours of the skin. Ghadially FN, et al. **IARC Sci Publ** 1996;(126):1-43 (111 ref.)

Radiotherapy of incompletely resected, moderately differentiated mast cell tumors in the dog: 37 cases (1989-1993). Frimberger AE, et al. **J Am Anim Hosp Assoc** 1997 Jul-Aug;33(4):320-4

Feline cutaneous squamous cell carcinoma of the nasal planum and the pinnae: 61 cases. Lana SE, et al. **J Am Anim Hosp Assoc** 1997 Jul-Aug;33(4):329-32

Estimated prevalence of injection-site sarcomas in cats during 1992 [see comments] Coyne MJ, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):249-51. Comment in: J Am Vet Med Assoc 1997 Apr 1;210(7):889-90.

The issue of injection site sarcomas [letter; comment] Gemmill LT. **J Am Vet Med Assoc** 1997 Apr 1; 210(7):889-90. Comment on: J Am Vet Med Assoc 1997 Jan 15;210(2):249-51.

Squamous cell carcinoma of the midventral abdominal pad in three gerbils. Jackson TA, et al. **J Am Vet Med Assoc** 1996 Aug 15;209(4):789-91

Frequency of argyrophilic nucleolar organizer regions in fine-needle aspirates and biopsy specimens from mast cell tumors in dogs. Kravis LD, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1418-20

Recommendations of the vaccine-Associated Feline Sarcoma Task Force [letter; comment] Romatowski J. **J Am Vet Med Assoc** 1997 Apr 1;210(7):890. Comment on: J Am Vet Med Assoc 1997 Feb 1;210(3):310-1.

Cutaneous epitheliotropic lymphoma in a ferret. Rosenbaum MR, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1441-4

Cycloheximide-induced apoptosis in melanoma cells derived from regressing cutaneous tumours of Sinclair swine. Gossett R, et al. **J Comp Pathol** 1996 Nov;115(4):353-72

Immunohistochemical detection of P53 overexpression in paraffin wax-embedded squamous cell carcinomas of cattle, horses, cats and dogs. Teifke JP, et al. **J Comp Pathol** 1996 Feb;114(2):205-10

Skin tumours in cattle and sheep after freeze- or heat-branding. Yeruham I, et al. **J Comp Pathol** 1996 Jan; 114(1):101-6

What is your diagnosis? Mast cell sarcoma. Dunn K. **J Small Anim Pract** 1997 Mar;38(3):93, 108

Metastatic renal carcinoma in an African grey parrot (Psittacus erithacus erithacus). Latimer KS, et al. **J Vet Diagn Invest** 1996 Apr;8(2):261-4

Dermoid cysts in cats: two cases and a review of the literature. Rochat MC, et al. **J Vet Diagn Invest** 1996 Oct; 8(4):505-7

A prospective study of radiation therapy for the treatment of grade 2 mast cell tumors in 32 dogs. al-Sarraf R, et al. **J Vet Intern Med** 1996 Nov-Dec;10(6):376-8

Production of granulocyte colony-stimulating factor and granulocyte-macrophage colony-stimulating factor by carcinomas in a dog and a cat with paraneoplastic leukocytosis [see comments] Sharkey LC, et al. **J Vet Intern Med** 1996 Nov-Dec;10(6):405-8. Comment in: J Vet Intern Med 1997 Mar-Apr;11(2):95.

Growth and metastasis of two canine mast cell tumors in SCID mice. Maruo K, et al. **J Vet Med Sci** 1996 Jun; 58(6):567-9

Malignant chromatophoroma in a canebrake rattlesnake (Crotalus horridus atricaudatus). Gregory CR, et al. **J Zoo Wildl Med** 1997 Jun;28(2):198-203

Molecular characterization of a piscine retrovirus, walleye dermal sarcoma virus. Holzschu DL, et al. **Leukemia** 1997 Apr;11 Suppl 3:172-5

Tumour suppressor gene p53 in the horse: identification, cloning, sequencing and a possible role in the pathogenesis of equine sarcoid. Bucher K, et al. **Res Vet Sci** 1996 Sep; 61(2):114-9

An epithelioid cell type of amelanotic melanoma of the pinna in a Fischer-344 rat: a case report. Nakashima N, et al. **Toxicol Pathol** 1996 Mar-Apr;24(2):258-61

Tumors of the skin and associated structures. Meleo KA. **Vet Clin North Am Small Anim Pract** 1997 Jan;27(1):73-94 (67 ref.)

Immunophenotypic characterization of tumor infiltrating lymphocytes and peripheral blood lymphocytes isolated from melanomatous and non-melanomatous Sinclair miniature swine. Morgan CD, et al. **Vet Immunol Immunopathol** 1996 Dec;55(1-3):189-203

Cutaneous malignant melanomas in 57 cats: identification of (amelanotic) signet-ring and balloon cell types and verification of their origin by immunohistochemistry, electron microscopy, and in situ hybridization. van der Linde-Sipman JS, et al. **Vet Pathol** 1997 Jan;34(1):31-8

Mitotic phase distribution, mitotic activity and apoptosis in basal cell tumours of canine skin. Maiolino P, et al. **Zentralbl Veterinarmed A** 1996 Dec;43(10):619-24

Epithelial neoplasms of the skin, the cutaneous mucosa and the transitional epithelium in dogs: an immunolocalization study for papillomavirus antigen. Schwegler K, et al. **Zentralbl Veterinarmed A** 1997 Apr;44(2):115-23

[A case of cutaneous epitheliotropic malignant lymphoma (mycosis fungoides) in a horse] Hilbe M, et al. **Berl Munch Tierarztl Wochenschr** 1997 Mar;110(3):86-9 (Eng. Abstr.) **(Ger)**

VIROLOGY

CD 30+ cutaneous lymphoma [letter; comment] Orenstein M. **Am J Clin Pathol** 1996 Dec;106(6):800-1. Comment on: Am J Clin Pathol 1996 Apr;105(4):440-50.

Absence of Epstein-Barr virus in lymphoepitheliomalike carcinoma of the skin. Polymerase chain reaction evidence and review of five cases. Gillum PS, et al. **Am J Dermatopathol** 1996 Oct;18(5):478-82

An indolent type of Epstein-Barr virus-associated T-cell-rich B-cell lymphoma of the skin: report of a case. Take H, et al. **Am J Hematol** 1996 Jul;52(3):221-3

Lack of evidence of any association between human herpesvirus 8 and various skin tumors from both immunocompetent and immunosuppressed patients [letter] Dupin N, et al. **Arch Dermatol** 1997 Apr;133(4):537

Absence of human herpesvirus 8 DNA sequences in patients with immunosuppression-associated dermatofibromas [letter] Foreman K, et al. **Arch Dermatol** 1997 Jan; 133(1):108-9

Kaposi sarcoma-associated herpesvirus/human herpesvirus type 8 and Epstein-Barr virus in iatrogenic Kaposi sarcoma [letter] Henghold WB 2nd, et al. **Arch Dermatol** 1997 Jan; 133(1):109-11

Latent Epstein-Barr virus infection is frequently detected in subcutaneous lymphoma associated with hemophagocytosis but not in nonfatal cytophagic histiocytic panniculitis [letter; comment] Iwatsuki K, et al. **Arch Dermatol** 1997 Jun;133(6):787-8. Comment on: Arch Dermatol 1996 Nov;132(11):1345-50.

Detection of human herpesvirus 8 and human T-cell lymphotropic virus type 1 sequences in Kaposi sarcoma [see comments] Lebbé C, et al. **Arch Dermatol** 1997 Jan; 133(1):25-30. Comment in: Arch Dermatol 1997 Jan;133(1):83-5. Comment in: Arch Dermatol 1997 Aug;133(8):1050-1.

Demonstration of human papillomavirus type 16-related DNA and absence of detectable p53 gene mutations in widespread cutaneous squamous cell carcinomas after oral psoralen with UV-A treatment [letter] Rübben A, et al. **Arch Dermatol** 1996 Oct;132(10):1257-9

Kaposi sarcoma, Kaposi sarcoma-associated herpesvirus, and human T-cell lymphotropic virus type 1. What is the current evidence for causality? [editorial; comment] Warmuth I, et al. **Arch Dermatol** 1997 Jan;133(1):83-5. Comment on: Arch Dermatol 1997 Jan;133(1):25-30.

Rare presence of human herpesvirus 8 in skin tumors from patients with psoriasis treated with oral psoralen plus UV-A [letter] Wolf P, et al. **Arch Dermatol** 1997 Apr; 133(4):538-9

Failure to demonstrate human papillomavirus (HPV) involvement in Bowen's disease of the skin. Lu S, et al. **Arch Dermatol Res** 1996 Dec;289(1):40-5

Kaposi's sarcoma-associated herpesvirus (KSHV) sequences in premalignant and malignant skin tumors. Inagi R, et al. **Arch Virol** 1996;141(11):2217-23

Absence of human T-lymphotropic virus type I in Japanese patients with cutaneous T-cell lymphoma. Kikuchi A, et al. **Blood** 1997 Mar 1;89(5):1529-32

Primary effusion lymphoma in women: report of two cases of Kaposi's sarcoma herpes virus-associated effusion-based lymphoma in human immunodeficiency virus-negative women. Said JW, et al. **Blood** 1996 Oct 15;88(8):3124-8

Lack of evidence of human herpesvirus 8 DNA sequences in HIV-negative patients with various lymphoproliferative disorders of the skin. Dupin N, et al. **Br J Dermatol** 1997 Jun;136(6):827-30

DNA analysis indicates patient-specific human papillomavirus type 16 strains in Bowen's disease on fingers and in archival samples from genital dysplasia. Forslund O, et al. **Br J Dermatol** 1997 May;136(5):678-82

Increased anti-Epstein-Barr virus antibodies in epidermotropic cutaneous T-cell lymphoma: a study of 64 patients. Jumbou O, et al. **Br J Dermatol** 1997 Feb; 136(2):212-6

Primary cutaneous T-cell lymphoma with an angiocentric growth pattern: association with Epstein-Barr virus. Misago N, et al. **Br J Dermatol** 1996 Oct;135(4):638-43

Human herpesvirus 8 DNA is rarely found in Bowen's disease of non-immunosuppressed patients [letter] Mitsuishi T, et al. **Br J Dermatol** 1997 May;136(5):803-4

Absence of human herpesvirus-8 DNA in angiosarcomas and other skin tumours in immunocompetent patients, and in graft-versus-host disease in the immunosuppressed recipients of bone marrow transplants [letter] Takata M, et al. **Br J Dermatol** 1997 Jul;137(1):156-7

The presence of mucosal human papillomavirus in Bowen's disease of the hands. Mitsuishi T, et al. **Cancer** 1997 May 15;79(10):1911-7

A possible role for human papillomaviruses and c-myc, c-Ha-ras, and p53 gene alterations in malignant cutaneous lesions from renal transplant recipients. Pelisson I, et al. **Cancer Detect Prev** 1996;20(1):20-30

The role of papillomaviruses in human non-melanoma skin cancer. McGregor JM, et al. **Cancer Surv** 1996;26:219-36 (94 ref.)

The rabbit viral skin papillomas and carcinomas: a model for the immunogenetics of HPV-associated carcinogenesis. Breitburd F, et al. **Clin Dermatol** 1997 Mar-Apr; 15(2):237-47 (111 ref.)

Role of HPV in cutaneous premalignant and malignant tumors. Pfister H, et al. **Clin Dermatol** 1997 May-Jun; 15(3):335-47 (101 ref.)

Absence of human papillomavirus DNA in verrucous carcinoma [letter] La Placa M Jr, et al. **Dermatology** 1996; 193(3):271-2

Demonstration of herpes virus 8 in a lymphangioma-like Kaposi's sarcoma occurring in a non-immunosuppressed patient [letter] Noël JC, et al. **Dermatology** 1997;194(1):90-1

Kaposi's sarcoma and herpesvirus 8: a word of caution [letter] Simonart T, et al. **Dermatology** 1996;193(3):272

The difficulty of detecting HTLV-1 proviral sequences in patients with mycosis fungoides. Pancake BA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 1;13(4):314-9

Human papillomavirus-associated tumors of the skin and mucosa. Majewski S, et al. **J Am Acad Dermatol** 1997 May; 36(5 Pt 1):659-85; quiz 686-8 (272 ref.)

Detection of herpesvirus-like DNA by nested PCR on archival skin biopsy specimens of various forms of Kaposi sarcoma. Cathomas G, et al. **J Clin Pathol** 1996 Aug; 49(8):631-3

Detection of human papillomavirus DNA in squamous cell carcinomas of a patient with mycosis fungoides: report of a case. Liranzo MO, et al. **J Cutan Pathol** 1997 Jan; 24(1):47-50

No evidence of KSHV/HHV-8 in mycosis fungoides or associated disorders. Henghold WB 2nd, et al. **J Invest Dermatol** 1997 Jun;108(6):920-2

Failure to detect human T-lymphotropic virus type-I proviral DNA in cell lines and tissues from patients with cutaneous T-cell lymphoma. Li G, et al. **J Invest Dermatol** 1996 Sep;107(3):308-13

Evidence against a role for human T-cell lymphotrophic virus type I (HTLV-I) in the pathogenesis of American cutaneous T-cell lymphoma. Wood GS, et al. **J Invest Dermatol** 1996 Sep;107(3):301-7

Detection of HPV DNA in trichilemmomas by polymerase chain reaction. Rohwedder A, et al. **J Med Virol** 1997 Feb; 51(2):119-25

Oncogenesis of mammary glands, skin, and bones by polyomavirus correlates with viral persistence and prolonged genome replication potential. Wirth JJ, et al. **J Virol** 1997 Feb;71(2):1072-8

"Hemangiodermatitis" associated with chronic hepatitis C virus infection [letter; comment] Mazzone A, et al. **Mayo Clin Proc** 1996 Nov;71(11):1124-5. Comment on: Mayo Clin Proc 1995 Jun;70(6):559-64.

Detection of human herpes virus type 8 DNA sequences as a valuable aid in the differential diagnosis of Kaposi's sarcoma. Maiorana A, et al. **Mod Pathol** 1997 Mar; 10(3):182-7

Absence of human T-cell lymphotropic virus type I in cutaneous T-cell lymphoma [letter] Kikuchi A, et al. **N Engl J Med** 1997 Jan 23;336(4):296-7

Frequency of mucosal HPV DNA detection (types 6/11, 16/18, 31/35/51) in skin lesions of renal transplant patients. Mansat-Krzyzanowska E, et al. **Transpl Int** 1997; 10(2):137-40

Virus infection and cancer risk in transplant recipients. McGregor JM, et al. **Trends Microbiol** 1996 Jan;4(1):2-3 (14 ref.)

SKIN PIGMENTATION

Transcutaneous bilirubinometry in Chinese, Malay and Indian infants. Tan KL, et al. **Acta Paediatr** 1996 Aug;85(8):986-90

Prediction of minimal erythema dose with a reflectance melanin meter. Damian DL, et al. **Br J Dermatol** 1997 May; 136(5):714-8

Reticulate acropigmentation of Dohi. Ostlere LS, et al. **Clin Exp Dermatol** 1995 Nov;20(6):477-9

Digital image analysis (DIA) of colour changes in human skin exposed to standardized thermal injury and comparison with laser Doppler measurements. Mattsson U, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):31-42

The Q-switched ND:YAG laser effectively treats tattoos in darkly pigmented skin. Jones A, et al. **Dermatol Surg** 1996 Dec;22(12):999-1001

Atrophic brown spots on the legs. What is the role of diabetes in the development of these chronic papules? Levine N. **Geriatrics** 1997 Mar;52(3):27

Brown patches, skin tags on axilla. Are this patient's velvety plaques related to his obesity and diabetes? Levine N. **Geriatrics** 1996 Oct;51(10):27

Skin type and optimistic bias in relation to the sun protection and suntanning behaviors of young adults. Clarke VA, et al. **J Behav Med** 1997 Apr;20(2):207-22

Thyroid gland abnormalities in patients with the syndrome of spotty skin pigmentation, myxomas, endocrine overactivity, and schwannomas (Carney complex). Stratakis CA, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2037-43

Laser Doppler perfusion imaging of skin blood flow using red and near-infrared sources. Abbot NC, et al. **J Invest Dermatol** 1996 Dec;107(6):882-6

Ex vivo study of skin phototypes. Bessou S, et al. **J Invest Dermatol** 1996 Nov;107(5):684-8

Regulation of pigmentation in cultured skin substitutes by cytometric sorting of melanocytes and keratinocytes. Swope VB, et al. **J Invest Dermatol** 1997 Sep;109(3):289-95

Ageing of bruising in children. Stephenson T. **J R Soc Med** 1997 Jun;90(6):312-4 (14 ref.)

Unusual skin depigmentation following eyelid cryosurgery. Zabriskie NA, et al. **Ophthal Plast Reconstr Surg** 1996 Dec; 12(4):296-8

The influence of demographic factors on phase-modulated spectroscopy in adults. Levy WJ. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):751-3

Accuracy of pulse oximetry in pigmented patients. Bothma PA, et al. **S Afr Med J** 1996 May;86(5 Suppl):594-6

Atrophie blanche--a special form of vasculopathy. Kwok CY, et al. **Singapore Med J** 1997 Mar;38(3):123-4 (12 ref.)

Surgical treatment of left-atrial myxoma in Carney's complex. Akbaş H, et al. **Thorac Cardiovasc Surg** 1997 Jun; 45(3):148-50

[Pigmentation (café au lait spots), 2) family history] Kobayashi K, et al. **No To Shinkei** 1996 Aug;48(8):762 **(Jpn)**

DRUG EFFECTS

Nonpigmenting fixed exanthema from ephedrine and pseudoephedrine. García Ortiz JC, et al. **Allergy** 1997 Feb; 52(2):229-30

Use of human skin reconstructs in the study of pigment modifiers. Bessou S, et al. **Arch Dermatol** 1997 Mar; 133(3):331-6

Skin pigmentation and pharmacokinetics of melanotan-I in humans. Ugwu SO, et al. **Biopharm Drug Dispos** 1997 Apr; 18(3):259-69

Burns related to the use of psoralens as a tanning agent. Geary P. **Burns** 1996 Dec;22(8):636-7

Psoralens used for cosmetic sun tanning: an unusual cause of extensive burn injury. Nettelblad H, et al. **Burns** 1996 Dec;22(8):633-5

Dose-dependent appearance and disappearance of amiodarone-induced skin pigmentation. Kounis NG, et al. **Clin Cardiol** 1996 Jul;19(7):592-4

Diacylglycerol-induced tanning [letter; comment] Costlow ME, et al. **J Invest Dermatol** 1997 Jan;108(1):120-2. Comment on: J Invest Dermatol 1995 Nov;105(5):687-92.

Mercury content in skin-lightening creams and potential hazards to the health of Saudi Women. al-Saleh I, et al. **J Toxicol Environ Health** 1997 Jun 6;51(2):123-30

[Prevalence of skin disorders associated with the use of bleaching cosmetics by Lome women] Pitche P, et al. **Sante** 1997 May-Jun;7(3):161-4 (Eng. Abstr.) **(Fre)**

GENETICS

Prezygotic origin of the isochromosome 12p in Pallister-Killian syndrome. Cormier-Daire V, et al. **Am J Med Genet** 1997 Mar 17;69(2):166-8

How common is pigmentary mosaicism? [letter; comment] Krivo JM. **Arch Dermatol** 1997 Apr;133(4):527-8. Comment on: Arch Dermatol 1996 Oct;132(10):1167-70.

Evidence for a genetic basis to the enhanced total lung capacity of Andean highlanders. Greksa LP. **Hum Biol** 1996 Feb;68(1):119-29

Patterns of neuronal differentiation in neural tube mutant mice: curly tail and Pax3 splotch-delayed. Keller-Peck CR, et al. **J Comp Neurol** 1996 May 13;368(4):516-26

Comparison of the melanogenesis in human black and light brown melanocytes. Maeda K, et al. **J Dermatol Sci** 1997 Mar;14(3):199-206

The genetic basis of epidermolysis bullosa simplex with mottled pigmentation. Uttam J, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9079-84

The genetics of pigmentation: from fancy genes to complex traits. Barsh GS. **Trends Genet** 1996 Aug;12(8):299-305 (53 ref.)

[Expression of the mutant gene mi in mice: white spotting pattern] Koniukhov BV, et al. **Genetika** 1996 Nov; 32(11):1521-7 (Eng. Abstr.) **(Rus)**

[Lethal allele of the Spotted (gray spots) gene in swine] Nikitin SV, et al. **Genetika** 1996 Aug;32(8):1119-24 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Photoprotection in vitiligo and normal skin. A quantitative assessment of the role of stratum corneum, viable epidermis and pigmentation. Gniadecka M, et al. **Acta Derm Venereol** 1996 Nov;76(6):429–32

Spacial variability of basal skin chromametry on the ventral forearm of healthy volunteers. Ale SI, et al. **Arch Dermatol Res** 1996 Nov;288(12):774–7

Cephalocaudal progression of jaundice in newborns admitted to neonatal intensive care units. Knudsen A, et al. **Biol Neonate** 1997;71(6):357–61

Red and blue telangiectasias. Differences in oxygenation? Sommer A, et al. **Dermatol Surg** 1997 Jan;23(1):55–9

Skin tone, hostility, and blood pressure in young normotensive African Americans. Ernst FA, et al. **Ethn Dis** 1997 Winter;7(1):34–40

What insights into vertebrate pigmentation has the axolotl model system provided? Frost-Mason SK, et al. **Int J Dev Biol** 1996 Aug;40(4):685–93 (44 ref.)

Salamander pigment patterns: how can they be used to study developmental mechanisms and their evolutionary transformation? Parichy DM. **Int J Dev Biol** 1996 Aug; 40(4):871–84 (130 ref.)

Pupillary dilation and funduscopy with 1.0% hydroxyamphetamine plus 0.25% tropicamide (Paremyd) versus tropicamide (0.5 or 1.0%) as a function of iris and skin pigmentation, and age. Cooper J, et al. **J Am Optom Assoc** 1996 Nov;67(11):669–75

Abnormalities of the cortico–geniculate pathway in Siamese cats. Montero VM, et al. **J Comp Neurol** 1978 May 1; 179(1):1–12

Increased pigmentation in scleroderma. Pope JE, et al. **J Rheumatol** 1996 Nov;23(11):1912–6

Seasonal variation in urocanic acid isomers in human skin. de Fine Olivarius F, et al. **Photochem Photobiol** 1997 Jul; 66(1):119–23

Relationship between skin color and sun exposure history: a statistical classification approach. Rubegni P, et al. **Photochem Photobiol** 1997 Feb;65(2):347–51

Erythema and melanogenesis action spectra in heavily pigmented individuals as compared to fair-skinned Caucasians. Kollias N, et al. **Photodermatol Photoimmunol Photomed** 1996 Oct; 12(5):183–8

Differences in dermal analogs influence subsequent pigmentation, epidermal differentiation, basement membrane, and rete ridge formation of transplanted composite skin grafts. Medalie DA, et al. **Transplantation** 1997 Aug 15;64(3):454–65

RADIATION EFFECTS

Seasonal variation of skin pigmentation. Lock-Andersen J, et al. **Acta Derm Venereol** 1997 May;77(3):219–21

Assessing children's ultraviolet radiation exposure: the potential usefulness of a colorimeter. Eckhardt L, et al. **Am J Public Health** 1996 Dec;86(12):1802–4

Erythema induction by ultraviolet radiation points to a possible acquired defense mechanism in chronically sun-exposed human skin. Applegate LA, et al. **Dermatology** 1997;194(1):41–9

Experimental reproduction of polymorphous light eruption and benign summer light eruption by whole-body UVA irradiation. Lambert J, et al. **Dermatology** 1997; 194(4):388–91

Photography and densitometry to measure skin pigmentation caused by ultraviolet exposure. Cass M. **J Audiov Media Med** 1996 Dec;19(4):179–80

Light-sensitive response in melanophores of Xenopus laevis: I. Spectral characteristics of melanophore response in isolated tail fin of Xenopus tadpole. Moriya T, et al. **J Exp Zool** 1996 Sep 1;276(1):11–8

Risk assessment of side effects from copper vapor and argon laser treatment: the importance of skin pigmentation. Haedersdal M, et al. **Lasers Surg Med** 1997;20(1):84–9

Topical W-7 inhibits ultraviolet radiation-induced melanogenesis in Skh:HR2 pigmented hairless mice. Dowdy JC, et al. **Photodermatol Photoimmunol Photomed** 1995 Aug; 11(4):143–8

SKIN SUBSTITUTES see **SKIN, ARTIFICIAL**

SKIN SYPHILIS see **SYPHILIS, CUTANEOUS**

SKIN TEMPERATURE

Intraoperative monitoring of skin temperature changes of hands before, during, and after endoscopic thoracic sympathectomy: using infrared thermograph and thermometer for measurement. Chuang TY, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):85–8

Temperature profiles during resuscitation predict survival following burns complicated by smoke inhalation injury. Platt AJ, et al. **Burns** 1997 May;23(3):250–5

Effect of starting temperature on the repeatability of thermotactile thresholds. Ruffell CM, et al. **Cent Eur J Public Health** 1995;3 Suppl:81–4

Effects of high-voltage galvanic stimulation of ST36 and ST37 acupuncture points on peripheral blood flow and skin temperature. Balogun JA, et al. **Disabil Rehabil** 1996 Oct; 18(10):523–8

Temperatures measured by a deep body thermometer (Coretemp) compared with tissue temperatures measured at various depths using needles placed into the sole of the foot. Matsukawa T, et al. **Eur J Anaesthesiol** 1996 Jul; 13(4):340–5

Analysis of cryotherapy penetration: a comparison of the plaster cast, synthetic cast, Ace wrap dressing, and Robert-Jones dressing. Weresh MJ, et al. **Foot Ankle Int** 1996 Jan;17(1):37–40

Outer ear temperature and time of death. Baccino E, et al. **Forensic Sci Int** 1996 Dec 2;83(2):133–46

Effect of local limb temperature on pulse oximetry and the plethysmographic pulse wave. Schramm WM, et al. **Int J Clin Monit Comput** 1997 Feb;14(1):17–22

A new technique for controlling the finger skin temperature in microcirculatory research demonstrated in a local cold stress test in healthy controls and patients with Raynaud's phenomenon. Hahn M, et al. **Int J Microcirc Clin Exp** 1996 Jan–Feb;16(1):16–22

Predicting neuropathic ulceration with infrared dermal thermometry. Armstrong DG, et al. **J Am Podiatr Med Assoc** 1997 Jul;87(7):336–7

The effects of forced-air warming on postbypass central and skin temperatures and shivering activity. Mort TC, et al. **J Clin Anesth** 1996 Aug;8(5):361–70

Monitoring neuropathic ulcer healing with infrared dermal thermometry. Armstrong DG, et al. **J Foot Ankle Surg** 1996 Jul–Aug;35(4):335–8; discussion 372–3

Comparative effectiveness of videothermography, contact thermography, and infrared beam thermography for scanning relative skin temperature. Sherman RA, et al. **J Rehabil Res Dev** 1996 Oct;33(4):377–86

Modelling the assessment of port wine stain parameters from skin surface temperature following a diagnostic laser pulse. Gabay S, et al. **Lasers Surg Med** 1997;20(2):179–87

The "cold hands sign" in multiple system atrophy. Klein C, et al. **Mov Disord** 1997 Jul;12(4):514–8

Infrared dermal thermometry for the high-risk diabetic foot. Armstrong DG, et al. **Phys Ther** 1997 Feb;77(2):169–75; discussion 176–7

Clinical trials: testing of adult chemical heating pad. Herman J, et al. **Sch Inq Nurs Pract** 1996 Summer;10(2):135–46; discussion 147–51

[Measurement of skin temperature as a method of detecting febrile diseases in swine] Wendt M, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Jan;104(1):29–33 (Eng. Abstr.) **(Ger)**

[The effects on image instructions and spontaneous use of imagery on the self-control of skin temperature] Morisaki H. **Shinrigaku Kenkyu** 1997 Apr;68(1):33–7 (Eng. Abstr.) **(Jpn)**

[Contact thermometry of lesions in alopecia areata] Mijailović B, et al. **Vojnosanit Pregl** 1997 Jan–Feb; 54(1):31–3 (Eng. Abstr.) **(Scr)**

DRUG EFFECTS

Influences of ovariectomy and continuous replacement of 17beta-estradiol on the tail skin temperature and behavior in the forced swimming test in rats. Okada M, et al. **Jpn J Pharmacol** 1997 Jan;73(1):93–6

Relationship between drinking and increase in tail skin temperature of rats treated with L-5-hydroxytryptophan. Fregly MJ, et al. **Pharmacology** 1996 Feb;52(2):69–77

Transdermal glyceryl trinitrate (nitroglycerin) in healthy persons: acute effects on skin temperature and hemodynamic orthostatic response. Haebisch EM. **Rev Paul Med** 1995 Sep–Oct;113(5):973–82

[Addition of fentanyl to epidural lidocaine raises the toe temperature] Akiyoshi H, et al. **Masui** 1996 Oct; 45(10):1278–80 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Regional skin temperature, heat flow and conductance in preterm neonates nursed in low and in neutral environmental temperature. Karlsson H, et al. **Acta Paediatr** 1996 Jan;85(1):81–7

Thermal balance in term and preterm newborn infants nursed in an incubator equipped with a radiant heat source. Sjörs G, et al. **Acta Paediatr** 1997 Apr;86(4):403–9

Local constriction of arteriovenous anastomoses in the cooled finger. Bergersen TK, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R880–6

Control of skin blood flow by whole body and local skin cooling in exercising humans. Pérgola PE, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H208–15

Spontaneous skin temperature oscillations in normal human subjects. Shusterman V, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1173–81

Influence of thermoregulatory vasomotion and ambient temperature variation on the accuracy of core-temperature estimates by cutaneous liquid-crystal thermometers. Ikeda T, et al. **Anesthesiology** 1997 Mar;86(3):603–12

Behaviour and physiological responses during prone and supine sleep in early infancy. Skadberg BT, et al. **Arch Dis Child** 1997 Apr;76(4):320–4

Capillary blood sampling: should the heel be warmed? [letter; comment] Dunn PM. **Arch Dis Child Fetal Neonatal Ed** 1996 Sep;75(2):F143–4. Comment on: Arch Dis Child Fetal Neonatal Ed 1996 Mar;74(2):F139–40.

Skin temperature changes of the cow mammary gland and the heat flux from its surface before and after milking. Janeczek W, et al. **Arch Vet Pol** 1995;35(1-2):35–44

Skin temperature changes and changes in skin blood flow monitored with laser Doppler flowmetry and imaging: a methodological study in normal humans. Bornmyr S, et al. **Clin Physiol** 1997 Jan;17(1):71–81

Hand and finger skin temperatures in convective and contact cold exposure. Chen F, et al. **Eur J Appl Physiol** 1996; 72(4):372–9

Influence of skin temperature on heat pain threshold in humans. Pertovaara A, et al. **Exp Brain Res** 1996; 107(3):497–503

Correlation of pain with temperature and blood-flow changes in the lower limb following chemical lumbar sympathectomy in reflex sympathetic dystrophy. A case report. Cooke ED, et al. **Int Angiol** 1995 Sep;14(3):226–8

The effect of change in skin temperature due to evaporative cooling on sweating response during exercise. Kondo N, et al. **Int J Biometeorol** 1997 Apr;40(2):99–102

Skin microcirculation responses to severe local cooling. Van den Brande P, et al. **Int J Microcirc Clin Exp** 1997 Mar–Apr;17(2):55–60

Effect of skin temperature on multifrequency bioelectrical impedance analysis. Gudivaka R, et al. **J Appl Physiol** 1996 Aug;81(2):838–45

Contralateral temperature changes of the finger surface during video endoscopic sympathectomy for palmar hyperhidrosis. Wu JJ, et al. **J Auton Nerv Syst** 1996 Jul 5;59(3):98–102

Bilateral skin temperature, handedness, and the biofeedback control of skin temperature. Grimsley DL, et al. **J Behav Med** 1996 Feb;19(1):87–94

Comparison of esophageal, tympanic, and forehead skin temperatures in adult patients. Patel N, et al. **J Clin Anesth** 1996 Sep;8(6):462–8

Cutaneous vasomotor responses in young type I diabetic patients. Bornmyr S, et al. **J Diabetes Complications** 1997 Jan–Feb;11(1):21–6

Temperature effects on vibrotactile sensitivity threshold measurements: implications for carpal tunnel screening tests. Klinenberg E, et al. **J Hand Surg [Am]** 1996 Jan; 21(1):132–7

The cooling effects of electroacupuncture on the skin temperature of the hand. Landry MD, et al. **J Hand Ther** 1996 Oct–Dec;9(4):359–66

Characteristics of temporal summation of second pain sensations elicited by brief contact of glabrous skin by a preheated thermode. Vierck CJ Jr, et al. **J Neurophysiol** 1997 Aug;78(2):992–1002

C-polymodal nociceptors activated by noxious low temperature in human skin. Campero M, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):565–72

Measurement of menopausal hot flushes: validation and cross-validation. de Bakker IP, et al. **Maturitas** 1996 Oct; 25(2):87–98

Nociceptive responses to high and low rates of noxious cutaneous heating are mediated by different nociceptors in the rat: behavioral evidence [see comments] Yeomans DC, et al. **Pain** 1996 Nov;68(1):133–40. Comment in: Pain 1996 Nov;68(1):1–3.

Nociceptive responses to high and low rates of noxious cutaneous heating are mediated by different nociceptors in the rat: electrophysiological evidence. Yeomans DC, et al. **Pain** 1996 Nov;68(1):141–50

Temperature dependency of turn/amplitude parameters. Finsterer J, et al. **Pflugers Arch** 1996 Apr;431(6):950–3

Effect of restraint on drug-induced changes in skin and core temperature in biotelemetered rats. Wright BE, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):219–25

Relationship between drinking and increase in tail skin temperature of rats treated with L-5-hydroxytryptophan. Fregly MJ, et al. **Pharmacology** 1996 Feb;52(2):69–77

Skin temperature and phototest evaluation. Gniadecka M, et al. **Photodermatol Photoimmunol Photomed** 1996 Oct; 12(5):189–93

Sympathectomy does not influence experimental itch and cutaneous temperature perception thresholds. Ekblom A, et al. **Somatosens Mot Res** 1996;13(2):147–52

[Effects of age and skin temperature on peripheral nerve conduction velocity--a basic study for nerve conduction velocity measurement in worksite] Yuasa J, et al. **Sangyo Eiseigaku Zasshi** 1996 Jul;38(4):158–64 (Eng. Abstr.) **(Jpn)**

[Effect of total body cooling on local skin thermal sensitivity] Divert VE, et al. **Fiziol Cheloveka** 1996 Nov–Dec; 22(6):90–4 **(Rus)**

[Skin-temperature response in children of preschool age] Zmanovskiĭ IuF, et al. **Fiziol Cheloveka** 1996 Jul–Aug; 22(4):118–21 **(Rus)**

RADIATION EFFECTS

Irradiation induced blood flow changes in the breast during radiotherapy--a pilot study. Nitzan M, et al. **J Basic Clin Physiol Pharmacol** 1996;7(1):71–82

SKIN TEST END-POINT TITRATION

PSYCHOLOGY

Reduction in skin reactions to histamine after a hypnotic procedure. Laidlaw TM, et al. **Psychosom Med** 1996 May-Jun;58(3):242–8

SKIN TESTS

An electrical impedance technique for assessment of wheals. Nyrén M, et al. **Allergy** 1996 Dec;51(12):923–6

Skin prick tests and specific IgE in adults from three different areas of Sweden. Plaschke P, et al. **Allergy** 1996 Jul; 51(7):461–72

Nimesulide reduces skin-test reactivity. Senna GE, et al. **Allergy** 1997 May;52(5):596

Pharmacy-based skin-testing program in a community hospital. Clyne KE, et al. **Am J Health Syst Pharm** 1996 Sep 1;53(17):2062–7

Reliability of anergy skin testing in persons with HIV infection [letter; comment] Klein RS, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1490. Comment on: Am J Respir Crit Care Med 1996 Jun;153(6 Pt 1):1982–4.

Spacial variability of basal skin chromametry on the ventral forearm of healthy volunteers. Ale SI, et al. **Arch Dermatol Res** 1996 Nov;288(12):774–7

Predictive testing in contact dermatitis. Irritant dermatitis. Basketter DA, et al. **Clin Dermatol** 1997 Jul–Aug; 15(4):637–44

Methods for measuring the skin-cleansing effect of surfactants in comparison with skin roughness and compatibility. Schrader K, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):57–65 (15 ref.)

Wash tests: evaluation by instrument methodology. Tupker RA, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):51–5 (23 ref.)

Does an allergy skin test on school-children predict respiratory symptoms in adulthood? Kagamimori S, et al. **Clin Exp Allergy** 1996 Mar;26(3):262–9

Dinitrohalobenzenes: evaluation of relative skin sensitization potential using the local lymph node assay. Basketter DA, et al. **Contact Dermatitis** 1997 Feb;36(2):97–100

Reproducibility of a non-invasive skin irritancy test in a cohort of metalworker trainees. Iliev D, et al. **Contact Dermatitis** 1997 Feb;36(2):101–3

Immunology of skin tests. Leipzig JR, et al. **Ear Nose Throat J** 1996 Mar;75(3):132

Epicutaneous skin tests. Leipzig JR, et al. **Ear Nose Throat J** 1996 Nov;75(11):705, 709

Disposable epicutaneous skin tests. Leipzig JR, et al. **Ear Nose Throat J** 1996 Dec;75(12):762–3

Evaluation of the anthraxin skin test for diagnosis of acute and past human anthrax. Shlyakhov E, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar;15(3):242–5

Serum immunoglobulin level and skin prick test response. Wjst M, et al. **Eur J Med Res** 1997 Apr 21;2(4):177–81

In vitro lymphocyte proliferation as compared to patch test using gold, palladium and nickel. Cederbrant K, et al. **Int Arch Allergy Immunol** 1997 Mar;112(3):212–7

Skin test reactivity to recombinant Aspergillus fumigatus allergen I/a in patients with cystic fibrosis. Nikolaizik WH, et al. **Int Arch Allergy Immunol** 1996 Dec;111(4):403–8

Reliability of olive pollen extracts for skin prick tests [letter] Waisel Y, et al. **J Allergy Clin Immunol** 1996 Sep; 98(3):715–6

The assessment of the emotional and immunological consequences of examination stress. Vedhara K, et al. **J Behav Med** 1996 Oct;19(5):467–78

Specific sensitization to Dermatophagoides pteronyssinus and cutaneous reactivity to histamine in Brazilian children. Halász MR, et al. **J Investig Allergol Clin Immunol** 1997 Mar–Apr;7(2):98–102

Skinprick test sensitivity to olive pollen [letter] [corrected and republished article originally printed in Med J Aust 1996 Sep 16;165(6):352] Azmi MH, et al. **Med J Aust** 1996 Oct 21;165(8):460

Skinprick–test sensitivity to olive pollen [letter] Bateman PP. **Med J Aust** 1997 Mar 3;166(5):279–80

Anergy skin testing and preventive therapy for HIV-infected persons: revised recommendations. Centers for Disease Control and Prevention. **MMWR Morb Mortal Wkly Rep** 1997 Sep 5; 46(RR–15):1–10

Sympathetic skin response (SSR) in multiple sclerosis. Zakrzewska-Pniewska B, et al. **Neurol Neurochir Pol** 1996; 30 Suppl 3:121–8

Skin tests in the diagnosis of food allergy. Dreborg S. **Pediatr Allergy Immunol** 1995;6 Suppl 8:38–43 (29 ref.)

Delayed type hypersensitivity testing in hospitalized children: a retrospective chart review. Gingras TM, et al. **Pediatr Infect Dis J** 1996 Mar;15(3):267–9

Skin test for silicone implants [letter] Atabey A, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1316–7

Intradermic survey with histoplasmin and paracoccidioidin [letter] Barrett TV. **Rev Soc Bras Med Trop** 1996 Nov–Dec; 29(6):619–20

Delayed-type hypersensitivity skin reaction estimated with Multitest CMI in human giardiasis. Flisiak R, et al. **Rocz Akad Med Bialymst** 1996;41(2):239–44

[Skin prick tests with allergens in general practice] Olsen OF. **Ugeskr Laeger** 1996 Nov 18;158(47):6771–4 (Eng. Abstr.) **(Dan)**

[Diagnosis of allergy in family practice] Olsen OF. **Ugeskr Laeger** 1996 Nov 18;158(47):6775–7 (Eng. Abstr.) **(Dan)**

[Apropos of anaphylactic shock caused by application of fluorescein on the ocular conjunctiva (letter)] Moneret-Vautrin DA. **Presse Med** 1997 Mar 22;26(9):420 **(Fre)**

[Relation between asthma and atopy markers in children and young adults] Pereira Vega A, et al. **Arch Bronconeumol** 1997 Jun;33(6):272–7 (Eng. Abstr.) **(Spa)**

[Comparison of 2 skin test methods for the diagnosis of allergic diseases] del Río Navarro BE, et al. **Rev Alerg Mex** 1996 Jul–Aug;43(4):100–3 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Choosing a skin test device [letter; comment] Kniker WT. **Ann Allergy Asthma Immunol** 1997 May;78(5):524–5. Comment on: Ann Allergy Asthma Immunol 1996 May;76(5):478.

EMLA cream for pain reduction in diagnostic allergy skin testing: effects on wheal and flare responses. Sicherer SH, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):64–8

INSTRUMENTATION

Choosing a skin test device [letter; comment] Kniker WT. **Ann Allergy Asthma Immunol** 1997 May;78(5):524–5. Comment on: Ann Allergy Asthma Immunol 1996 May;76(5):478.

[Comparative study of 3 types of lancets for performing prick tests] Montalvo A, et al. **Allergol Immunopathol (Madr)** 1996 Mar–Apr;24(2):58–64 (Eng. Abstr.) **(Spa)**

[Prick tests using RM steel lancets] Ramos Morín CJ. **Rev Alerg Mex** 1997 Mar–Apr;44(2):51–4 (Eng. Abstr.) **(Spa)**

METHODS

A computer program based on parallel line assay for analysis of skin tests. Martín S, et al. **Allergy** 1997 Jan;52(1):97–100

Estimation of skin prick test reactions with a scanning program. Pijnenborg H, et al. **Allergy** 1996 Nov; 51(11):782–8

Bevel-down superior to bevel-up in intradermal skin testing. Howard A, et al. **Ann Allergy Asthma Immunol** 1997 Jun; 78(6):594–6

Intradermal compared with prick testing in the diagnosis of anaesthetic allergy. Fisher MM, et al. **Br J Anaesth** 1997 Jul;79(1):59–63

Wash tests: evaluation by instrument methodology. Tupker RA, et al. **Clin Dermatol** 1996 Jan–Feb;14(1):51–5 (23 ref.)

Design of an optimally-diagnostic skin test solution for diagnosis of sensitivity to timothy grass (Phleum pratense) pollen. Wheeler AW, et al. **Clin Exp Allergy** 1996 Aug; 26(8):897–902

Olive oil: suitability for use as a vehicle in the local lymph node assay. Basketter DA, et al. **Contact Dermatitis** 1996 Sep;35(3):190–1

The value and limitations of rechallenge in the guinea pig maximization test. Frankild S, et al. **Contact Dermatitis** 1996 Sep;35(3):135–40 (45 ref.)

Sodium lauryl sulfate effect on the density of epidermal Langerhans cells. Evaluation of different test models. Mikulowska A, et al. **Contact Dermatitis** 1996 Jun; 34(6):397–401

Double use tests for latex allergy. Tanglertsampan C, et al. **Contact Dermatitis** 1997 Jun;36(6):311–2

Standard and special tests for the barrier integrity of medical gloves. Part I: The use and abuse of vinyl gloves by health care workers allergic to latex [news] Fisher AA. **Cutis** 1997 Feb;59(2):61–2

Use of Leishmania major derived leishmanin for skin test surveys of visceral leishmaniasis in Ethiopia. Hailu A, et al. **East Afr Med J** 1997 Jan;74(1):41–5

Measuring atopy in a multi-centre epidemiological study. Chinn S, et al. **Eur J Epidemiol** 1996 Apr;12(2):155–62

Fel d 1 peptides: effect on skin tests and cytokine synthesis in cat–allergic human subjects. Simons FE, et al. **Int Immunol** 1996 Dec;8(12):1937–45

Appraisal of the validity of histamine-induced wheal and flare to predict the clinical efficacy of antihistamines. Monroe EW, et al. **J Allergy Clin Immunol** 1997 Feb; 99(2):S798–806 (65 ref.)

Evaluation of Duotip-Test. Stryk SV, et al. **J Allergy Clin Immunol** 1997 Jan;99(1 Pt 1):149–50

Comparative study between skin prick tests and TOP-CAST allergen leukocyte stimulation in diagnosis of allergic status. Medrala W, et al. **J Investig Allergol Clin Immunol** 1997 Mar–Apr;7(2):115–8

Quantitative skin prick tests and serum IgE antibodies in atopic asthmatics. Rosario NA, et al. **J Investig Allergol Clin Immunol** 1997 Jan–Feb;7(1):40–5

Montenegro skin test--evaluation of the composition and stability of the antigen preparation. da Costa CA, et al. **Mem Inst Oswaldo Cruz** 1996 Mar–Apr;91(2):193–4

In vivo diagnostic procedures: skin testing, nasal provocation, and bronchial provocation. Peebles RS, et al. **Methods** 1997 Sep;13(1):14–24

[Comparative study of prick and intradermal cutaneous tests in allergic rhinitis] Rodríguez Zuleta L, et al. **Rev Alerg Mex** 1996 Nov–Dec;43(6):143–7 (Eng. Abstr.) **(Spa)**

[Clinical usefulness of Multitest in the evaluation of cellular immunity] Feijoó RM, et al. **Rev Med Chil** 1996 Mar; 124(3):327–36 (Eng. Abstr.) **(Spa)**

STANDARDS

The local lymph node assay: a viable alternative to currently accepted skin sensitization tests. Basketter DA, et al. **Food Chem Toxicol** 1996 Oct;34(10):985–97 (70 ref.)

The local lymph node assay: status of validation. Chamberlain M, et al. **Food Chem Toxicol** 1996 Oct;34(10):999–1002 (20 ref.)

The use of standardized allergen extracts. American Academy of Allergy, Asthma and Immunology (AAAAI). **J Allergy Clin Immunol** 1997 May;99(5):583–6

Natural rubber latex skin testing reagents: safety and diagnostic accuracy of nonammoniated latex, ammoniated latex, and latex rubber glove extracts. Hamilton RG, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):872–83

STATISTICS & NUMERICAL DATA

[Frequency of positive skin tests in asthma patients over 30 years] Buczyłko K, et al. **Pneumonol Alergol Pol** 1997; 65(1–2):61–4 (Eng. Abstr.) **(Pol)**

VETERINARY

Effects of mold proteases on the biological activity of allergenic pollen extracts. Rosenbaum MR, et al. **Am J Vet Res** 1996 Oct;57(10):1447–52

The use of listeriolysin O in an ELISA, a skin test and a lymphocyte blastogenesis assay on sheep experimentally infected with Listeria monocytogenes, Listeria ivanovii or Listeria innocua. Baetz AL, et al. **Vet Microbiol** 1996 Jul; 51(1–2):151–9

The Brucellin skin test as a tool to discriminate false positive serological reactions in bovine brucellosis. Pouillot R, et al. **Vet Res** 1997 Jul–Aug;28(4):365–74

Anthraxin skin testing: an alternative method for anthrax vaccine and post-vaccinal immunity assessment. Shlyakhov E, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):483–8

SKIN TRANSPLANTATION

see related

SURGICAL FLAPS

Calcium alginate dressings promote healing of split skin graft donor sites. O'Donoghue JM, et al. **Acta Chir Plast** 1997; 39(2):53–5

Giant plexiform fibrohistiocytic tumor of skin [letter] Karataş O, et al. **Ann Plast Surg** 1997 Mar;38(3):306–7

Favorable donor site for epidermal cultivation for the treatment of burn scars with autologous cultured epithelium. Kumagai N, et al. **Ann Plast Surg** 1997 May; 38(5):506–13

Treatment of thromboembolic complications of fulminant meningococcal septic shock. Mele JA 3rd, et al. **Ann Plast Surg** 1997 Mar;38(3):283–90 (29 ref.)

Hemostasis at skin graft donor sites: evaluation of topical agents. Netscher DT, et al. **Ann Plast Surg** 1996 Jan; 36(1):7–10

An evaluation of excision with application of autografts or porcine xenografts within 24 hours of burn injury. Still JM, et al. **Ann Plast Surg** 1996 Feb;36(2):176–9

Cultured skin for massive burns. A prospective, controlled trial. Munster AM. **Ann Surg** 1996 Sep;224(3):372–5; discussion 375–7

Molluscum contagiosum virus grows in human skin xenografts. Paslin D, et al. **Arch Dermatol Res** 1997 Jul; 289(8):486–8

Skin grafting technique. Foreman RW. **Aust Fam Physician** 1996 Sep;25(9):1397–9

Retention dressings: a new option for donor site dressings. Giele H. **Australas J Dermatol** 1997 Aug;38(3):166

Skin storage. Skin banks would not benefit from being taken over by National Blood Service [letter; comment] Powell BW. **BMJ** 1996 Dec 7;313(7070):1485. Comment on: BMJ 1996 Aug 24;313(7055):439.

Skin storage. Demand has outstripped supply in Sheffield's skin bank [letter; comment] Ralston DR, et al. **BMJ** 1996 Dec 7;313(7070):1485. Comment on: BMJ 1996 Aug 24;313(7055):439.

Treatment of burns and donor sites with human allogeneic keratinocytes grown on acellular pig dermis. Matoušková E, et al. **Br J Dermatol** 1997 Jun;136(6):901–7

Early results using a porcine dermal collagen implant as an interpositional barrier to prevent recurrent Frey's syndrome. Webster K. **Br J Oral Maxillofac Surg** 1997 Apr;35(2):104–6

Cool perfusion solutions for skin flaps [letter; comment] [see comments] Grishin IG, et al. **Br J Plast Surg** 1996 Sep; 49(6):424. Comment on: Br J Plast Surg 1995 Apr;48(3):132–44. Comment in: Br J Plast Surg 1996 Sep;49(6):424–5.

A perfusion solution containing an antithrobotic agent and an oxygen free radical scavenger has a beneficial effect on postischaemic oedema and skin flap survival [letter; comment] Knight KR, et al. **Br J Plast Surg** 1996 Sep; 49(6):424–5. Comment on: Br J Plast Surg 1996 Sep;49(6):424.

Anatomical basis for a fasciocutaneous flap from the hypothenar eminence of the hand. Omokawa S, et al. **Br J Plast Surg** 1996 Dec;49(8):559–63

Skin from the amputated limb should not be wasted [letter] Taylor PR. **Br J Surg** 1996 Nov;83(11):1653–4

Successful 14-day preservation of rat skin using a two-layer cold-storage method. Chi L, et al. **Burns** 1996 Feb;

22(1):22-5
Skin replacement by cultured keratinocyte grafts: an Australian experience. Paddle-Ledinek JE, et al. **Burns** 1997 May;23(3):204-11
Silicone net and Hypafix as a dressing for skin grafts [letter] Platt AJ, et al. **Burns** 1996 Sep;22(6):505
Acceleration of skin graft healing by growth factors. Wang HJ, et al. **Burns** 1996 Feb;22(1):10-4
Is the psoriatic skin of burn patients suitable for split-thickness skin autograft? [letter] Wang T, et al. **Burns** 1997 May;23(3):272
Tissue xenografts as a model system for study of the pathogenesis of papillomaviruses. Howett MK, et al. **Clin Dermatol** 1997 Mar-Apr;15(2):229-36 (53 ref.)
Grafting following short-pulse carbon dioxide laser de-epithelialization. Kahn AM, et al. **Dermatol Surg** 1996 Nov;22(11):965-7; discussion 967-8
Long-term assessment of chronic leg ulcer treatment by autologous skin grafts. Ruffieux P, et al. **Dermatology** 1997; 195(1):77-80
A case of pyoderma gangrenosum stabilized with lymecycline, topical benzoyl peroxide and treated by autograft. Vereecken P, et al. **Dermatology** 1997;195(1):50-1
Reconstructed human skin: transplant, graft or biological dressing? Wood EJ, et al. **Essays Biochem** 1995;29:65-85 (52 ref.)
The pedicled omentoplasty and split skin graft (POSSG) for reconstruction of large chest wall defects. A validity study of 34 patients. Contant CM, et al. **Eur J Surg Oncol** 1996 Oct;22(5):532-7
Plastic surgery in irradiated areas: analysis of 200 consecutive cases. Kurul S, et al. **Eur J Surg Oncol** 1997 Feb;23(1):48-53
Autogenous skin graft in the treatment of large incisional lumbar hernias and bulges. Staerman F, et al. **Eur Urol** 1997;32(2):209-12
Anatomy of upper extremity skin flaps. Birkbeck DP, et al. **Hand Clin** 1997 May;13(2):175-87 (71 ref.)
Skin graft reconstruction of the composite resection defect. Alvi A, et al. **Head Neck** 1996 Nov-Dec;18(6):538-43; discussion 543-4
Gracilis myocutaneous flap to reconstruct large perineal defects. Solomon MJ, et al. **Int J Colorectal Dis** 1996; 11(1):49-51
Successful treatment of vitiligo with PUVA-pigmented autologous epidermal grafting. Suga Y, et al. **Int J Dermatol** 1996 Jul;35(7):518-22
Treatment of stable vitiligo with autologous epidermal grafting and PUVA [letter; comment] Shenoi SD, et al. **J Am Acad Dermatol** 1997 May;36(5 Pt 1):802-3. Comment on: J Am Acad Dermatol 1995 Jun;32(6):943-8.
Formulation of 'idealized' topical antimicrobial mixtures for use with cultured skin grafts. Holder IA, et al. **J Antimicrob Chemother** 1996 Sep;38(3):457-63
Transplantation performance of human skin cryopreserved by programmed or stepwise freezing and stored at -80 degrees C or -180 degrees C. Ben-Bassat H, et al. **J Burn Care Rehabil** 1996 Sep-Oct;17(5):421-8
Dermasorb versus Jelonet in patients with burns skin graft donor sites. Cadier MA, et al. **J Burn Care Rehabil** 1996 May-Jun;17(3):246-51
Assessment of cosmetic and functional results of conservative versus surgical management of facial burns. Fraulin FO, et al. **J Burn Care Rehabil** 1996 Jan-Feb;17(1):19-29
Clinical trials of a biosynthetic temporary skin replacement, Dermagraft-Transitional Covering, compared with cryopreserved human cadaver skin for temporary coverage of excised burn wounds. Hansbrough JF, et al. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 1):43-51
Intradermal injection of epinephrine to decrease blood loss during split-thickness skin grafting. Hughes WB, et al. **J Burn Care Rehabil** 1996 May-Jun;17(3):243-5
Dermagraft-TC pivotal efficacy and safety study. Purdue GF. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 2):S13-4
A multicenter clinical trial of a biosynthetic skin replacement, Dermagraft-TC, compared with cryopreserved human cadaver skin for temporary coverage of excised burn wounds. Purdue GF, et al. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 1):52-7
Allograft is superior to topical antimicrobial therapy in the treatment of partial-thickness scald burns in children. Rose JK, et al. **J Burn Care Rehabil** 1997 Jul-Aug;18(4):338-41
Acute cholecystectomy performed through cultured epithelial autografts in a patient with burn injuries: a case report. Still J, et al. **J Burn Care Rehabil** 1996 Sep-Oct; 17(5):429-31
Species-specific in situ hybridization with fluorochrome-labeled DNA probes to study vascularization of human skin grafts on athymic mice. Young DM, et al. **J Burn Care Rehabil** 1996 Jul-Aug; 17(4):305-10
Aesthetic and functional reconstruction with the trapezius osseomyocutaneous flap and dental implants in oral cavity cancer patients. Navarro-Vila C, et al. **J Craniomaxillofac Surg** 1996 Dec;24(6):322-9
Skin replacement in Dupuytren's disease. Hall PN, et al. **J Hand Surg [Br]** 1997 Apr;22(2):193-7
Extracellular matrix characterization during healing of full-thickness wounds treated with a collagen/elastin dermal substitute shows improved skin regeneration in pigs. Lamme EN, et al. **J Histochem Cytochem** 1996 Nov; 44(11):1311-22
Human skin/SCID mouse chimeras as an in vivo model for human cutaneous mast cell hyperplasia. Christofidou-Solomidou M, et al. **J Invest Dermatol** 1997 Jul;109(1):102-7
T-lymphocyte dependence of psoriatic pathology in human psoriatic skin grafted to SCID mice. Gilhar A, et al. **J Invest Dermatol** 1997 Sep;109(3):283-8
Evaluation of human skin reconstituted from composite grafts of cultured keratinocytes and human acellular dermis transplanted to athymic mice. Medalie DA, et al. **J Invest Dermatol** 1996 Jul;107(1):121-7
Human delayed-type hypersensitivity reaction in a SCID mouse engrafted with human T cells and autologous skin. Petzelbauer P, et al. **J Invest Dermatol** 1996 Oct; 107(4):576-81
Vestibuloplasty with a split thickness skin graft in a patient with Ehlers-Danlos syndrome. Borris TJ, et al. **J Oral Maxillofac Surg** 1997 Apr;55(4):419-23
Impression technique for nonosseous free-tissue transfer reconstruction after cranioorbitomaxillary resection: A clinical report. Dumbrigue HB, et al. **J Prosthet Dent** 1996 Jul;76(1):4-7
Acellular human dermal matrix as a small vessel substitute. Inoue Y, et al. **J Reconstr Microsurg** 1996 Jul;12(5):307-11
Laser Doppler evaluation of burned hands predicts need for surgical grafting. Schiller WR, et al. **J Trauma** 1997 Jul; 43(1):35-9; discussion 39-40
Use of a porcine dermis template to enhance widely expanded mesh autologous split-thickness skin graft growth: preliminary report. Wang HJ, et al. **J Trauma** 1997 Feb; 42(2):177-82
Graft persistence in animal models of psoriasis [letter] Boehncke WH. **Nat Med** 1997 Jul;3(7):702-3
Current concepts in oromandibular reconstruction. Burkey BB, et al. **Otolaryngol Clin North Am** 1997 Aug; 30(4):607-30 (47 ref.)
Conceptual considerations in head & neck reconstruction. Defect analysis and options for reconstruction. Clevens RA, et al. **Otolaryngol Clin North Am** 1997 Aug; 30(4):495-517 (17 ref.)
Transplantation of systemic sclerosis (SSc) skin grafts into severe combined immunodeficient mice: increased presence of SSc leukocytes in SSc skin grafts and autoantibody production following autologous leukocyte transfer. Kräling BM, et al. **Pathobiology** 1996;64(2):99-114
Are excision and skin grafting satisfactory in the treatment of lymphocytic infiltration of the skin? [letter] Aköz T, et al. **Plast Reconstr Surg** 1997 Mar;99(3):923-4
Securing skin grafts of the ear by the double-bolster technique [letter] Manstein CH, et al. **Plast Reconstr Surg** 1996 Oct;98(5):903-5
Expanded full-thickness skin grafts: an occasional first choice for reconstruction [letter] Netscher DT. **Plast Reconstr Surg** 1996 Nov;98(6):1120-2
Combined use of allograft and autograft epidermal cultures in therapy of burns. Nuñez-Gutiérrez H, et al. **Plast Reconstr Surg** 1996 Nov;98(6):929-39; discussion 940-1
Implementation of parameters in the expansion ratio of mesh skin grafts. Vandeput JJ, et al. **Plast Reconstr Surg** 1997 Sep;100(3):653-6
Coverage of volar hand skin defects with great toe skin grafts [letter] Wendt JR. **Plast Reconstr Surg** 1996 Dec; 98(7):1314-5
Pig but not human interferon-gamma initiates human cell-mediated rejection of pig tissue in vivo. Sultan P, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8767-72
Transgenic studies with a keratin promoter-driven growth hormone transgene: prospects for gene therapy. Wang X, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):219-26
Dermal grafting for a patient with scleroderma. Case report. Ho-Asjoe M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Dec; 30(4):325-7
Symptomatic urethral hair ball and diverticulum complicating island flap urethroplasty. Crew JP, et al. **Scand J Urol Nephrol** 1996 Jun;30(3):231-3
Efficacy of cultured epithelial autografts in pediatric burns and reconstructive surgery. Gobet R, et al. **Surgery** 1997 Jun;121(6):654-61
Leflunomide abrogates accelerated heart allograft rejection in presensitized rats. Cheung A, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1294-5
Induction of mixed hematopoietic chimerism and specific transplantation tolerance to allogeneic and xenogeneic grafts by selective elimination of donor-reactive host cells following nonmyeloablative conditioning. Prigozhina TB, et al. **Transplant Proc** 1997 Sep;29(6):2644-6
Acceptance of primary skin graft after treatment with anti-intercellular adhesion molecule-1 and anti-leukocyte function-associated antigen-1 monoclonal antibodies in mice. Isobe M, et al. **Transplantation** 1996 Aug 15; 62(3):411-3
T cell-dependent acceleration of chemoattractant cytokine gene expression during secondary rejection of allogeneic skin grafts. Kondo T, et al. **Transplantation** 1997 Mar 15; 63(5):732-42
Grafting on nude mice of living skin equivalents produced using human collagens. López Valle CA, et al. **Transplantation** 1996 Aug 15;62(3):317-23
Differences in dermal analogs influence subsequent pigmentation, epidermal differentiation, basement membrane, and rete ridge formation of transplanted composite skin grafts. Medalie DA, et al. **Transplantation** 1997 Aug 15;64(3):454-65
Herpes simplex 1716--an ICP 34.5 mutant--is severely replication restricted in human skin xenografts in vivo. Randazzo BP, et al. **Virology** 1996 Sep 15;223(2):392-5
[Effect of Tripterygium wolfordii on inhibition of rejection reaction of allogeneic skin graft in mice] Lei W, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 Jul;11(4):294-5 **(Chi)**
[Value of cutaneous allografts in the treatment of severe burns] Schlotterer M. **Chirurgie** 1997;122(1):6-8; discussion 9 (30 ref.) (Eng. Abstr.) **(Fre)**
[Dry and moist wound treatment of burns] Krenzer-Scheidemantel G. **Zentralbl Chir** 1996;121 Suppl:92-4 **(Ger)**
[Surgical treatment of rhinophyma using dermo-epidermal graft. A case report] Cervelli V, et al. **Minerva Chir** 1997 Mar;52(3):301-5 (Eng. Abstr.) **(Ita)**
[Thy-1 induction and its tissue-specific regulation in the rat--studies on acute rejection and granulomatous inflammation] Takeuchi E. **Hokkaido Igaku Zasshi** 1996 Jul;71(4):531-42 (Eng. Abstr.) **(Jpn)**
[Acoustic estimation of skin graft in children with postburn contractures] Fedorova VN, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):478-80 **(Rus)**
[Treatment of deep burns with human fetal tissues] Smirnov SV, et al. **Biull Eksp Biol Med** 1994 Apr;117(4):405-7 **(Rus)**
[Method of plastic replacement of extended laryngopharyngeal and cervical esophagus defects] Gubin MA, et al. **Vestn Otorinolaringol** 1997;(2):44-6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

The donor site morbidity of free DIEP flaps and free TRAM flaps for breast reconstruction. Blondeel N, et al. **Br J Plast Surg** 1997 Jul;50(5):322-30
HIV transmission by transplantation of allograft skin: a review of the literature. Pirnay JP, et al. **Burns** 1997 Feb; 23(1):1-5 (60 ref.)
Erosive pustular dermatosis of the scalp in skin grafts: report of three cases. Ena P, et al. **Dermatology** 1997;194(1):80-4 (26 ref.)
Disease transmission by means of allograft. Kealey GP. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 2):S10-1
Cellulitis associated with burn scars: a retrospective review. Mukhdomi GJ, et al. **J Burn Care Rehabil** 1996 Jul-Aug; 17(4):346-50

HISTORY

Forearm free skin flap transplantation: a report of 56 cases. 1981 [classical article] Yang GF, et al. **Br J Plast Surg** 1997 Apr;50(3):162-5
The history of hypospadias. Smith ED. **Pediatr Surg Int** 1997 Feb;12(2-3):81-5

IMMUNOLOGY

Induction of specific tolerance by 15-deoxyspergualin (DOS) treatment after rat skin and kidney transplantation in rats. Analysis of effectivity of various protocols of DOS application. Waaga AM, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(2-3):143-53
Prolongation of survival of alloskin grafts with no concurrent general suppression of the burned patient's immune system: a preliminary clinical investigation. Wu J, et al. **Burns** 1996 Aug;22(5):353-8
The role of selectins and CD18 in leukotriene B4-mediated white blood cell emigration in human skin grafts transplanted on SCID mice. Yan HC, et al. **Cell Adhes Commun** 1996 Apr;3(6):475-86
Production of high levels of Th1 and Th2 cytokines in mice with acquired transplantation tolerance. Holáň V, et al. **Cell Immunol** 1996 Nov 25;174(1):7-12
In vivo effects of cytokines on psoriatic skin grafted on nude mice: involvement of the tumour necrosis factor (TNF) receptor. Gilhar A, et al. **Clin Exp Immunol** 1996 Oct; 106(1):134-42
The mechanism of specific prolongation of class I-mismatched skin grafts induced by retroviral gene therapy. Mayfield RS, et al. **Eur J Immunol** 1997 May; 27(5):1177-81
Immunosuppression by anti-ICAM-1 and anti-LFA-1 monoclonal antibodies of free and vascularized skin allograft rejection. Iwata T, et al. **Immunobiology** 1996 Jul; 195(2):160-71
Anti-CD4 monoclonal antibody reduces the dose of cyclophosphamide required to induce tolerance to H-2 haplotype identical skin allografts in mice. Omoto K, et al. **Immunobiology** 1996 Jan;195(1):16-32
HLA-G functions as a restriction element and a transplantation antigen in mice. Horuzsko A, et al. **Int Immunol** 1997 May;9(5):645-53
Rat pancreatic islet and skin xenograft survival in CD4 and CD8 knockout mice. Krieger NR, et al. **J Autoimmun** 1997 Jun;10(3):309-15
Induction of psoriasiform inflammation by a bacterial superantigen in the SCID-hu xenogeneic transplantation model. Boehncke WH, et al. **J Cutan Pathol** 1997 Jan; 24(1):1-7
T cell regulation in adult transplantation tolerance. Davies JD, et al. **J Immunol** 1996 Jul 15;157(2):529-33

Gamma delta TCR+ hybridomas derived from mice preimmunized via the portal vein adoptively transfer increased skin allograft survival in vivo. Gorczynski RM, et al. **J Immunol** 1996 Jul 15;157(2):574–81

Requirement of CD4 T cells for skin graft rejection against thymus leukemia (TL) antigen and multiple epitopes on the TL molecule recognized by CD4 T cells. Tsuji K, et al. **J Immunol** 1997 Jul 1;159(1):159–66

MHC class I expression on dendritic cells is sufficient to sensitize for transplantation immunity. Lenz P, et al. **J Invest Dermatol** 1996 Dec;107(6):844–8

Migration of rat skin dendritic cells. Richters CD, et al. **J Leukoc Biol** 1996 Sep;60(3):317–22

Fate of allogeneic skin transplantations in a marsupial (Monodelphis domestica). Stone WH, et al. **Lab Anim Sci** 1997 Jun;47(3):283–7

In vitro production and transplantation of immunologically active skin equivalents. Rouabhia M. **Lab Invest** 1996 Oct; 75(4):503–17

Blockade of CD2–LFA–3 interactions protects human skin allografts in immunodeficient mouse/human chimeras. Sultan P, et al. **Nat Biotechnol** 1997 Aug;15(8):759–62

Contact hypersensitivity is suppressed after sensitisation by dinitrofluorobenzene of early stage iso–skin grafts. Yasuda H, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Sep; 30(3):169–75

Late adjunctive therapy with single doses of rapamycin in skin–allografted mice treated with antilymphocyte serum and donor bone marrow cells. De Fazio SR, et al. **Transpl Immunol** 1996 Jun;4(2):105–12

Xenogeneic iso–skin graft and mixed lymphocyte reaction studies using HLA–DP transgenic mice. Hagihara M, et al. **Transpl Immunol** 1996 Sep;4(3):220–6

Total lymphoid irradiation, without intrathymic injection of donor cells, induces indefinite acceptance of heart but not islet or skin allografts in rats. Papalois BE, et al. **Transpl Int** 1996;9 Suppl 1:S372–8

Intrathymic cell allografts followed through a major graft challenge. Buck BE, et al. **Transplant Proc** 1997 Jun; 29(4):2080–2

Hyperimmunized agammaglobulinemic RAG mice develop accelerated rejection of skin allografts due to CD8+ T cell immunization. Chargui J, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):867

Liver transplantation–mediated transfer of immunity: accelerated rejection of a skin graft from a sensitized donor. Dahmen U, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1123–5

Accelerated rejection of a skin graft after liver transplantation from a sensitized donor: functional aspects of microchimerism. Dahmen U, et al. **Transplant Proc** 1996 Dec;28(6):3243–5

Stem cell transfusion as a new method for the induction of tolerance in organ transplantation. de Vries–van der Zwan A, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1209–10

Gamma delta TCR+, type–2 cytokine produced by hybridoma cells produced in mice given portal vein pretransplant immunization and allogeneic grafts can increase graft survival on adoptive transfer. Gorczynski R, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):865–6

Extended skin allo– and xenograft survival in mice treated with rapamycin, antilymphocyte serum, and donor–specific bone marrow transfusion. Hale DA, et al. **Transplant Proc** 1996 Dec;28(6):3269

Prolongation of skin allograft survival in mice treated with CTLA–4 Ig in combination with rapamycin or cyclosporine. Hale DA, et al. **Transplant Proc** 1996 Dec; 28(6):3270–1

Role of the thymus in donor specific hyporesponsiveness induced by retroviral transduction of bone marrow using an MHC class I gene. Hayashi H, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1133

A unique mechanism of tolerance by perioperative intrathymic injection of bone marrow cells with a short course of ALS and FK506 in the rat cardiac allograft model. Ito A, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1137–8

A three–cell cluster hypothesis for noncognate T–B cell collaboration via direct recognition of allogeneic dendritic cells. Kelly CM, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1003–4

Induction of tolerance to islet and skin allografts by intrathymic inoculation of thymic stromal cell clones in mice. Koja S, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):765–6

Expression of dendritic cell markers on bone marrow cells in a fraction enriched for the ability to prolong skin allograft survival in ALS–treated murine recipients. Masli S, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1147–8

A novel series of low molecular weight immunosuppressive agents. Ocain TD, et al. **Transplant Proc** 1996 Dec; 28(6):3032–4

CD4–targeted therapy induces "infectious" tolerance to cardiac allografts in sensitized rat recipients. Onodera K, et al. **Transplant Proc** 1997 May;29(3):1907–8

Th2–type cytokines in the "infectious" tolerance pathway. Onodera K, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1290–1

Clonal deletion is one mechanism responsible for tolerance in mixed hematopoietic chimeras. Orloff SL, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1198–200

Bromocriptine prevents the immunosuppression induced in mice by anti–lymphocytic antiserum. Rosso di San Secondo VE, et al. **Transplant Proc** 1996 Dec;28(6):3193–5

Donor pretreatment with methylprednisolone synergistically prolongs survival of cardiac allografts in sensitized rat recipients conditioned with rapamycin. Schmidbauer G, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):607–8

Acute skin graft rejection can be prevented and treated in rat models by malononitrilamides. Schorlemmer HU, et al. **Transplant Proc** 1996 Dec;28(6):3048–50

Control of mouse–to–rat skin xenograft rejection by malononitrilamides. Schorlemmer HU, et al. **Transplant Proc** 1996 Dec;28(6):3037–9

Mechanisms of rejection of nonvascularized grafts: the role of perforin and Fas. Selvaggi G, et al. **Transplant Proc** 1997 Jun;29(4):2075–6

Intrathymic immunomodulation of sensitized rat recipients of cardiac allografts: requirements for allorecognition pathways. Stadlbauer TH, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1016

Nonspecific repeated skin graft sensitization induces liver allograft rejection in a spontaneously tolerant liver allograft model. Tanigawa T, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):1047–9

Extent of chimerism determines the mode of tolerance in mixed bone marrow chimeras. Taniguchi H, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1193–5

Vascularized bone marrow allotransplantation in rats prolongs a simultaneous skin allograft. Tsuchida Y, et al. **Transplant Proc** 1997 May;29(3):1732–3

Effects of intrathymic tolerance on mouse heart and skin allograft acceptance. Tu Y, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1063–4

Second–set rejection of skin allografts is mediated by a T cell subset in mice unable to mount a humoral response with cytotoxic antibodies. Yoshimura R, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):868

Skin allograft rejection in mice lacking inducible nitric oxide synthase. Casey JJ, et al. **Transplantation** 1997 Aug 27; 64(4):589–93

Strain variation in susceptibility to monoclonal antibody–induced transplantation tolerance. Davies JD, et al. **Transplantation** 1997 Jun 15;63(11):1570–3

Expression of chemokine genes during rejection and long–term acceptance of cardiac allografts. Fairchild RL, et al. **Transplantation** 1997 Jun 27;63(12):1807–12

Prolonged survival of rat skin allograft by treatment with FK506 ointment. Fujita T, et al. **Transplantation** 1997 Sep 27;64(6):922–5

Use of CTLA4–Ig in combination with conventional immunosuppressive agents to prolong allograft survival. Hale DA, et al. **Transplantation** 1997 Sep 27;64(6):897–900

CD8+ effector cells responding to residual class I antigens, with help from CD4+ cells stimulated indirectly, cause rejection of "major histocompatibility complex–deficient" skin grafts. Lee RS, et al. **Transplantation** 1997 Apr 27; 63(8):1123–33

Prolonged survival of mouse skin allografts in recipients treated with donor splenocytes and antibody to CD40 ligand. Markees TG, et al. **Transplantation** 1997 Jul 27; 64(2):329–35

Suppression of mouse skin allograft rejection by protein A–Yersiniae V antigen fusion peptide. Motin VL, et al. **Transplantation** 1997 Apr 15;63(7):1040–2

CD4+ T cells are able to reject class I disparate allografts. Sawada T, et al. **Transplantation** 1997 Jul 27;64(2):335–40

Human cell–mediated rejection of porcine xenografts in an immunodeficient mouse model. Sawada T, et al. **Transplantation** 1997 May 15;63(9):1331–8

The role of the perforin and Fas pathways of cytotoxicity in skin graft rejection. Selvaggi G, et al. **Transplantation** 1996 Dec 27;62(12):1912–5

Effects of leflunomide and cyclosporine on myocutaneous allograft survival in the rat. Yeh LS, et al. **Transplantation** 1996 Sep 27;62(6):861–3

Fractionated dosing of cyclophosphamide for establishing long–lasting skin allograft survival, stable mixed chimerism, and intrathymic clonal deletion in mice primed with allogeneic spleen cells. Zhang QW, et al. **Transplantation** 1997 Jun 15;63(11):1667–73

Presentation of the HPV16E7 protein by skin grafts is insufficient to allow graft rejection in an E7–primed animal. Dunn LA, et al. **Virology** 1997 Aug 18;235(1):94–103

[Immune tolerance of skin xenotransplants] Werner JA. **HNO** 1997 Feb;45(2):59–60 **(Ger)**

[Intrathymic immunomodulation brings about a therapeutic window for systemic administration of CTLA4Ig in a model of accelerated rejection] Stadlbauer TH, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:195–9 (Eng. Abstr.) **(Ger)**

[Cyclophosphamide–induced immunological tolerance: an overview] Mayumi H. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1097–108 (101 ref.) (Eng. Abstr.) **(Jpn)**

[The characteristics of the immune response in embryonic tissue transplantation] Mazur IuI, et al. **Klin Khir** 1995; (2):31–3 **(Ukr)**

INSTRUMENTATION

Absorbable skin graft staples: a clinical trial using Graftac–X. O'Broin ES, et al. **Br J Plast Surg** 1996 Oct;49(7):485–7

Trigger–fired pinch–graft harvester for use in chronic venous ulcers. Greenwood JE, et al. **Br J Surg** 1997 Mar; 84(3):397–8

A convenient and efficient moldable dressing for skin grafts. Ducic Y, et al. **Laryngoscope** 1997 Jul;107(7):954–6

Comparison of full thickness skin graft "take" after excision with the carbon dioxide laser and scalpel. Schmidt BL, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):206–14

Need a pizza meshed skin? A simple expansion device. Bell MS, et al. **Trop Doct** 1997 Oct;27(4):229

METHODS

Rationale for early tangential excision and grafting in burn patients. Kisslaogglu E, et al. **Acta Chir Plast** 1997; 39(1):9–12

Experience with the modified Meek technique. Raff T, et al. **Acta Chir Plast** 1996;38(4):142–6

Efficacy of pinch grafting in leg ulcers of different aetiologies. Ahnlide I, et al. **Acta Derm Venereol** 1997 Mar; 77(2):144–5

The anti–aging effect of moxibustion and moxibustion combined with skin allograft evaluated from optic and electron microscopy study of thymus and pituitary glands. Zhang L, et al. **Acupunct Electrother Res** 1996 Apr–Jun; 21(2):93–104

An alternative treatment for the split skin–graft donor site. Ablaza VJ, et al. **Aesthetic Plast Surg** 1997 May–Jun; 21(3):207–9

Surgical treatment of skin lesions induced by sulfur mustard ("mustard gas")––an experimental study in the guinea pig. Kjellström BT, et al. **Ann Acad Med Singapore** 1997 Jan; 26(1):30–6

The radial Chinese flap at the expense of the palmar radiocarpal arch. A case report. Gutierrez de la Cámara A, et al. **Ann Chir Main Memb Super** 1997;16(2):111–7

Treatment of extensive hypomelanosis with autologous cultured epithelium. Kumagai N, et al. **Ann Plast Surg** 1997 Jul;39(1):68–73

Brachioradialis musculocutaneous flap closure of the elbow utilizing a distal skin island: a case report. Lalikos JF, et al. **Ann Plast Surg** 1997 Aug;39(2):201–4

Full–thickness skin grafts from eyelids to penis, plus split–thickness grafts in chronic balanitis xerotica obliterans. Rudolph R, et al. **Ann Plast Surg** 1997 Feb; 38(2):173–6

Pathogenesis, clinical features and management of hidradenitis suppurativa [letter] Rorison P, et al. **Ann R Coll Surg Engl** 1997 Sep;79(5):385

New immunodeficient (nude–scid, beige–scid) mice as excellent recipients of human skin grafts containing intraepidermal neoplasms. Takizawa Y, et al. **Arch Dermatol Res** 1997 Mar;289(4):213–8

Evaluation of acellular human dermis as a dermal analog in a composite skin graft. Medalie DA, et al. **ASAIO J** 1996 Sep–Oct;42(5):M455–62

Chronic venous ulcer. Some references may be misleading [letter; comment] Cole RP. **BMJ** 1997 Jul 19;315(7101):188; discussion 189. Comment on: BMJ 1997 Apr 5;314(7086):1019–23.

The use of perichondrial cutaneous grafts to repair defects of the lower third of the nose. Gloster HM Jr, et al. **Br J Dermatol** 1997 Jan;136(1):43–6

Skin grafts as pharmacological agents: pre–wounding of the donor site. Kirsner RS, et al. **Br J Dermatol** 1996 Aug; 135(2):292–6

A one–stage dorsal free–graft urethroplasty for bulbar urethral strictures. Barbagli G, et al. **Br J Urol** 1996 Dec; 78(6):929–32

Burn scar contracture release: a simplified technique utilizing contact media. Davey RB. **Burns** 1996 Aug;22(5):406–8

Treatment for depigmentation following burn injuries. Kahn AM, et al. **Burns** 1996 Nov;22(7):552–4

Whither [corrected] skin replacement? [editorial] [published erratum appears in Burns 1997 Mar;23(2):195] Munster AM. **Burns** 1997 Feb;23(1):v

Dispase/detergent treated dermal matrix as a dermal substitute. Takami Y, et al. **Burns** 1996 May;22(3):182–90

Reduced engraftment and wound closure of cryopreserved cultured skin substitutes grafted to athymic mice. Harriger MD, et al. **Cryobiology** 1997 Sep;35(2):132–42

Harvesting split–thickness grafts with tumescent anesthesia [letter] Field LM, et al. **Dermatol Surg** 1997 Jan;23(1):62

Laser–assisted dermal grafting for the correction of cutaneous contour defects. Goodman G. **Dermatol Surg** 1997 Feb; 23(2):95–9

Split–thickness skin grafting for lower extremity ulcerations. Kirsner RS, et al. **Dermatol Surg** 1997 Feb;23(2):85–91; quiz 92–3 (59 ref.)

Lower eyelid reconstruction using pedicled skin flap and palatal mucoperiosteum. Perry MJ, et al. **Dermatol Surg** 1997 May;23(5):395–7; discussion 397–8 (10 ref.)

Treatment of dystrophic epidermolysis bullosa with autologous meshed split–thickness skin grafts and allogeneic cultured keratinocytes. Verplancke P, et al. **Dermatology** 1997;194(4):380–2

Skin harvesting on the scalp in children: utopia or reality. Gyger D, et al. **Eur J Pediatr Surg** 1996 Jun;6(3):166–9

The physiology and technique of skin grafting. Ablove RH, et al. **Hand Clin** 1997 May;13(2):163–73 (19 ref.)

Dermabrasion and epithelial sheet grafting [letter; comment] Hann SK, et al. **J Am Acad Dermatol** 1996 Oct;35(4):652 . Comment on: J Am Acad Dermatol 1995 Oct;33(4):646–8.

The use of free tissue transfer in burn reconstruction.

Abramson DL, et al. **J Burn Care Rehabil** 1996 Sep–Oct; 17(5):402–8 (16 ref.)
The use of skin from a monozygotic twin combined with cultured epithelial autografts as coverage for a large surface area burn: a case report and review of the literature. Caruso DM, et al. **J Burn Care Rehabil** 1996 Sep–Oct;17(5):432–4 (18 ref.)
The use of a permanent dermal allograft in full–thickness burns of the hand and foot: a report of three cases. Lattari V, et al. **J Burn Care Rehabil** 1997 Mar–Apr;18(2):147–55
The Euro Skin Bank: development and application of glycerol–preserved allografts. Mackie DP.
J Burn Care Rehabil 1997 Jan–Feb;18(1 Pt 2):S7–9
Unna's boot dressings facilitate outpatient skin grafting of hands. Sanford S, et al. **J Burn Care Rehabil** 1996 Jul–Aug; 17(4):323–6
Permanent grafting of living skin substitutes: surgical parameters to control for successful results. Xu W, et al.
J Burn Care Rehabil 1996 Jan–Feb;17(1):7–13
Midface soft tissue reconstruction with the facio–cervico–pectoral flap. Soler–Presas F, et al.
J Craniomaxillofac Surg 1997 Feb;25(1):39–45
Prefabrication of combined scapula flaps for microsurgical reconstruction in oro–maxillofacial defects: a new method [see comments] Vinzenz KG, et al.
J Craniomaxillofac Surg 1996 Aug;24(4):214–23. Comment in: J Craniomaxillofac Surg 1997 Jun;25(3):174.
Experience with the osteocutaneous fibula flap: an analysis of 24 consecutive reconstructions of composite mandibular defects. Wolff KD, et al. **J Craniomaxillofac Surg** 1996 Dec; 24(6):330–8
A preliminary report on the use of relon mesh in the repair of eventrations with large parietal defects. An experimental study in rats. Birbilis T, et al. **J Int Med Res** 1997 May–Jun; 25(3):135–40
Objective evaluation of function of the lower lip reconstructed with a myocutaneous advancement flap. Yoshida H, et al. **J Oral Rehabil** 1996 Feb;23(2):143–6
Collapsed nasal–valve widening by composite grafting to the nasal floor. Fanous N, et al. **J Otolaryngol** 1996 Oct; 25(5):313–6
Analysis of cellular and decellular allogeneic dermal grafts for the treatment of full–thickness wounds in a porcine model. Reagan BJ, et al. **J Trauma** 1997 Sep;43(3):458–66
Skin grafting in otology. Harvey SA. **Laryngoscope** 1997 Sep; 107(9):1199–202
Latissimus dorsi musculocutaneous free flap transplantation to salvage below–elbow amputation in an emergency operation: a case report. Naito T, et al. **Microsurgery** 1996; 17(3):155–7
Platysma myocutaneous flap: use for intraoral reconstruction. Ozçelik T, et al. **Otolaryngol Head Neck Surg** 1997 Apr; 116(4):493–6
Cartilage viability with interpolated skin flaps: an experimental study. Park SS, et al.
Otolaryngol Head Neck Surg 1997 Apr;116(4):483–8
Burns (Part 2). Tops and flops using cultured epithelial autografts in children. Meuli M, et al. **Pediatr Surg Int** 1997 Sep;12(7):471–7 (73 ref.)
Cultured epithelial autografts: diving from surgery into matrix biology. Raghunath M, et al. **Pediatr Surg Int** 1997 Sep;12(7):478–83 (52 ref.)
A simple, rapid, reproducible tie–over dressing. Amir A, et al. **Plast Reconstr Surg** 1996 Nov;98(6):1092–4
The plantar marginal septum cutaneous island flap: a new flap in forefoot reconstruction. Bertelli JA, et al.
Plast Reconstr Surg 1997 Apr;99(5):1390–5
Reversed saphenous neurocutaneous island flap: clinical experience. Cavadas PC. **Plast Reconstr Surg** 1997 Jun; 99(7):1940–6
Skin grafting on liver [letter] Hosokawa K, et al.
Plast Reconstr Surg 1997 Feb;99(2):589–90
The infragluteal skin flap: a new option for reconstruction in the perineogenital area. Knol AC, et al.
Plast Reconstr Surg 1997 Jun;99(7):1954–9
A full–thickness chondrocutaneous flap from the auricular concha for repair of tracheal defects. Koshima I, et al.
Plast Reconstr Surg 1997 Jun;99(7):1887–93
The vermilion–sharing graft for repairing a vermilionectomy defect. Kroll SS, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):876–9
The expanded forehead scalping flap: a new method of total nasal reconstruction [letter; comment] Lazarus D, et al.
Plast Reconstr Surg 1997 Jun;99(7):2116. Comment on: Plast Reconstr Surg 1996 Jul;98(1):155–9.
Reversed free osteoarthrocutaneous dorsalis pedis flap for simultaneous reconstruction of the trapeziometacarpal joint and the first metacarpal bone. Macionis V.
Plast Reconstr Surg 1997 Jun;99(7):2066–70
The fasciocutaneous supraclavicular artery island flap for releasing postburn mentosternal contractures. Pallua N, et al. **Plast Reconstr Surg** 1997 Jun;99(7):1878–84; discussion 1885–6
Timing, magnitude, and utility of surgical delay in the TRAM flap: I. Animal studies. Restifo RJ, et al.
Plast Reconstr Surg 1997 Apr;99(5):1211–6
Timing, magnitude, and utility of surgical delay in the TRAM flap: II. Clinical studies. Restifo RJ, et al.
Plast Reconstr Surg 1997 Apr;99(5):1217–23
Reston: an alternate method of skin graft fixation [letter] Saltz R, et al. **Plast Reconstr Surg** 1997 Feb;99(2):601–2
Use of a paper pattern for scrotal skin replacement [letter] Ueda K, et al. **Plast Reconstr Surg** 1997 Mar;99(3):916–7
Reconstructive surgery in melanoma patients. Ariyan S.
Surg Oncol Clin N Am 1996 Oct;5(4):785–807 (09 ref.)
Soft–tissue reconstruction following extravasation of chemotherapeutic agents. Shenaq SM, et al.
Surg Oncol Clin N Am 1996 Oct;5(4):825–45 (35 ref.)
Skin graft reconstruction of chronic genital lymphedema. Morey AF, et al. **Urology** 1997 Sep;50(3):423–6
[Therapeutic efficacy of cultured keratocytes combined with autograft patches for the cicatrization of leg ulcers] Rakic L, et al. **Rev Med Liege** 1997 Feb;52(2):64–8 **(Fre)**
[Skin cultivation in treatment of severely burned patients] Spilker G, et al.
Langenbecks Arch Chir Suppl Kongressbd 1996;113:1149–55 (Eng. Abstr.) **(Ger)**
[New developments in covering post–traumatic soft tissue defects] Berger A, et al. **Orthopade** 1997 May;26(5):470–80 (34 ref.) (Eng. Abstr.) **(Ger)**
[Immediate reconstruction of the nipple using a portion of the areola following quadrantectomy including the nipple–areola complex] Pricolo R. **Minerva Ginecol** 1995 Nov;47(11):515–7 (Eng. Abstr.) **(Ita)**
[A method for local dermatoplasty in cicatricial contractures of the neck] Dmitriev GI, et al.
Vestn Khir Im I I Grek 1996;155(4):70–1 **(Rus)**
[Experimental and clinical validation of auto– and allodermoplasty using transverse dermal micrografts in deep burns] Izmaĭlov GA, et al.
Vestn Khir Im I I Grek 1996;155(5):56–8 (Eng. Abstr.) **(Rus)**
[Pinch grafting in slow–healing leg ulcer. An old method becomes popular again] Tarstedt M, et al.
Lakartidningen 1997 Jun 25;94(26–27):2473–6 **(Swe)**

PATHOLOGY

Histological characteristics of the healing process of frozen skin allograft used in the treatment of burns. Omi T, et al. **Burns** 1996 May;22(3):206–11
In vivo effects of cytokines on psoriatic skin grafted on nude mice: involvement of the tumour necrosis factor (TNF) receptor. Gilhar A, et al. **Clin Exp Immunol** 1996 Oct; 106(1):134–42
Debridement of porcine burns with a highly purified, ananain–based cysteine protease preparation. Orgill DP, et al. **J Burn Care Rehabil** 1996 Jul–Aug;17(4):311–22
The role of platelet–activating factor in musculocutaneous flap reperfusion injury. Stotland MA, et al.
Plast Reconstr Surg 1997 Jun;99(7):1989–99; discussion 2000–1
E– and L–selectin adhesion molecules in musculocutaneous flap reperfusion injury. Stotland MA, et al.
Plast Reconstr Surg 1997 Jun;99(7):2010–20
Angora mouse mutation: altered hair cycle, follicular dystrophy, phenotypic maintenance of skin grafts, and changes in keratin expression. Sundberg JP, et al.
Vet Pathol 1997 May;34(3):171–9
[Cultivated keratinocytes on micro–carriers: in vitro studies of a new carrier system] Hecht J, et al.
Handchir Mikrochir Plast Chir 1997 Mar;29(2):101–6 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

A new apparatus for non–invasive positioning of laser Doppler flux (LDF) probes in skin areas where local attachment is impossible. Klyscz T, et al.
Biomed Tech (Berl) 1996 Jan–Feb;41(1–2):14–7
Hyperpigmentation of human skin grafted on to athymic nude mice: immunohistochemical study. Matsumoto K, et al.
Br J Dermatol 1996 Sep;135(3):412–8
Analysis of high–energy phosphometabolites in delayed experimental skin flaps using 31P nuclear magnetic resonance spectroscopy. Ha B, et al. **Br J Plast Surg** 1997 Jun;50(4):272–9
The expression of cytokines, growth factors and ICAM–1 in the healing of human cutaneous xenografts on nude mice. Matsumoto K, et al. **Exp Dermatol** 1997 Feb;6(1):13–21
The physiology and technique of skin grafting. Ablove RH, et al. **Hand Clin** 1997 May;13(2):163–73 (19 ref.)
A mixture of allogeneic dermal tissue and autologous microskin grafting of rabbit skin wound. Lin SD, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1997 May; 13(5):301–7
The enhancement of wound healing with human skin allograft. Spence RJ, et al. **Surg Clin North Am** 1997 Jun; 77(3):731–45
Prolonged skin allograft survival after photodynamic therapy associated with modification of donor skin antigenicity. Obochi MO, et al. **Transplantation** 1997 Mar 27;63(6):810–7

STANDARDS

Operational standards and regulations for tissue banks. Heck E. **J Burn Care Rehabil** 1997 Jan–Feb;18(1 Pt 2):S11–2
Perspectives in the use of allograft. Herndon DN.
J Burn Care Rehabil 1997 Jan–Feb;18(1 Pt 2):S6

VETERINARY

Acceptance of skin grafts by isogenic rainbow trout (Oncorhynchus mykiss). Ristow SS, et al.
Am J Vet Res 1996 Nov;57(11):1576–9
Digital pad transposition for replacement of the metacarpal or metatarsal pad in dogs. Olsen D, et al.
J Am Anim Hosp Assoc 1997 Jul–Aug;33(4):337–41
Fate of allogeneic skin transplantations in a marsupial (Monodelphis domestica). Stone WH, et al.
Lab Anim Sci 1997 Jun;47(3):283–7
Genetic monitoring of inbred rodents from controlled production colonies through biochemical markers and skin grafting procedures. Whitmore SP, et al. **Lab Anim Sci** 1996 Oct;46(5):585–8
Medial saphenous fasciocutaneous and myocutaneous free flap transfer in eight dogs. Degner DA, et al. **Vet Surg** 1997 Jan–Feb;26(1):20–5

SKIN TUBERCULOSIS see **TUBERCULOSIS, CUTANEOUS**

SKIN ULCER

Ulcerative sarcoidosis. Case report and review of the literature. Albertini JG, et al. **Arch Dermatol** 1997 Feb; 133(2):215–9 (50 ref.)

CHEMICALLY INDUCED

Dressing for a cocaine–induced skin ulcer. Blattel RA.
Can Fam Physician 1997 Apr;43:625
Skin ulceration potential of paclitaxel in a mouse skin model in vivo [letter; comment] Bertelli G, et al. **Cancer** 1997 Jun 1;79(11):2266–9. Comment on: Cancer 1996 Jul 1;78(1):152–6.
Livedo–like dermatitis (Nicolau's syndrome): a review of three cases. Ruffieux P, et al. **Dermatology** 1996; 193(4):368–71 (16 ref.)
An ulcerated lesion at the BCG vaccination site during the course of Kawasaki disease. Kuniyuki S, et al.
J Am Acad Dermatol 1997 Aug;37(2 Pt 2):303–4 (15 ref.)
Severe cutaneous and venous damage after DIC therapy. Yuasa T, et al. **J Dermatol** 1997 Jul;24(7):466–70 (14 ref.)
A case of cutaneous necrosis during interferon–beta 1b (B–IFN) therapy in multiple sclerosis [letter] Albani C, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):418
Occupational skin ulceration in chrome platers. Williams N.
Occup Med (Oxf) 1997 Jul;47(5):309–10
[Perianal ergotismus gangraenosus] Brandt O, et al.
Hautarzt 1997 Mar;48(3):199–202 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Proximal cutaneous necrosis in association with chronic renal failure. Whittam LR, et al. **Br J Dermatol** 1996 Nov; 135(5):778–81
Fatal Rhizopus infection in a hand [letter] La Hausse–Brown TP, et al. **Br J Plast Surg** 1996 Dec;49(8):572–3
A shorter lag period of mesenchymal malignancy on Marjolin's ulcer. Celiköz B, et al. **Burns** 1997 Feb; 23(1):72–4 (10 ref.)
Shewanella alga bacteremia in two patients with lower leg ulcers. Domínguez H, et al. **Clin Infect Dis** 1996 Jun; 22(6):1036–9
Increased risk of infection with human immunodeficiency virus type 1 among uncircumcised men presenting with genital ulcer disease in Kenya. Tyndall MW, et al.
Clin Infect Dis 1996 Sep;23(3):449–53
Squamous cell carcinoma arising in osteomyelitis and chronic wounds. Treatment with Mohs micrographic surgery vs amputation. Kirsner RS, et al. **Dermatol Surg** 1996 Dec; 22(12):1015–8
The predictive value of sensation testing in the development of neuropathic ulceration on the hands of leprosy patients. Kuipers M, et al. **Lepr Rev** 1994 Sep;65(3):253–61

DIAGNOSIS

Primary intracranial malignant tumour mistaken for a postburn scalp Marjolin's ulcer. Cavadas PC, et al.
Burns 1996 Jun;22(4):331–4
The trigeminal trophic syndrome: an under–recognized complication. Kavanagh GM, et al. **Clin Exp Dermatol** 1996 Jul;21(4):299–301
Diagnostic potential of a serological assay for the diagnosis of ulcerans disease based on the putative Mycobacterium ulcerans toxin. Roberts B, et al. **J Med Microbiol** 1997 Apr; 46(4):333–9

DRUG THERAPY

Treatment of infectious skin defects or ulcers with electrolyzed strong acid aqueous solution. Sekiya S, et al.
Artif Organs 1997 Jan;21(1):32–8
Topical hydrogen peroxide treatment of ischemic ulcers in the guinea pig [letter; comment] Viders DE.
J Am Acad Dermatol 1996 Nov;35(5 Pt 1):788. Comment on: J Am Acad Dermatol 1995 Aug;33(2 Pt 1):217–21.
Effects of calcium alginate on cellular wound healing processes modeled in vitro. Doyle JW, et al.
J Biomed Mater Res 1996 Dec;32(4):561–8
The effect of topical 0.75% metronidazole gel on malodorous cutaneous ulcers. Finlay IG, et al.
J Pain Symptom Manage 1996 Mar;11(3):158–62
Topical treatment of skin ulcers in prolidase deficiency. Jemec GB, et al. **Pediatr Dermatol** 1996 Jan–Feb; 13(1):58–60
[Clinical efficacy of silver sulfadiazine (AgSD: Geben cream) for ulcerative skin lesions infected with MRSA] Yoshida

T, et al. **Jpn J Antibiot** 1997 Jan;50(1):39–44 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Herpes zoster–associated trigeminal neurotrophic ulcer [letter] Nielsen NH, et al. **Acta Derm Venereol** 1996 Mar; 76(2):159–60 (8 ref.)

Cutaneous necrosis associated with recombinant interferon injection. Report of three cases with interferon beta–1b and review of the literature. Weinberg JM, et al. **Acta Derm Venereol** 1997 Mar;77(2):146–8

Ulceration of a previously healed BCG scar in suspected disseminated BCG infection. Eregie CO. **Ann Trop Paediatr** 1997 Jun;17(2):135–9

Spontaneous necrosis of the skin associated with cryofibrinogenemia, cryoglobulinemia, and homocystinuria. Williamson AE, et al. **Ann Vasc Surg** 1996 Jul;10(4):365–9

Monosymptomatic hypochondriacal psychosis complicated by self–inflicted skin ulceration, skull defect and brain abscess. Wang CK, et al. **Br J Dermatol** 1997 Aug; 137(2):299–302

Tethered cord syndrome presenting as a nonhealing cutaneous ulcer. Brand N, et al. **Childs Nerv Syst** 1996 Sep; 12(9):562–3

Cutaneous heparin necrosis in a patient with heterozygous protein S deficiency. Libow LF, et al. **Cutis** 1997 May; 59(5):242–4

A woman with painful skin ulceration after angioplasty. Choucair M, et al. **Hosp Pract (Off Ed)** 1997 Apr 15; 32(4):177, 181–2, 184

Skin necrosis with subsequent formation of squamous cell carcinoma after subcutaneous interferon beta injection. Fruland JE, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):488–9

Cutaneous ulcerations resulting from intramuscular injections of interferon alfa [letter; comment] Konohana A, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):788–9 (9 ref.) . Comment on: J Am Acad Dermatol 1995 Sep;33(3):393–410; quiz 410–2.

Reflex sympathetic dystrophy with mutilating ulcerations suspicious of a factitial origin. Lipp KE, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 2):843–5

Skin ulcer and immunoblot patterns by inoculation sites in BALB/c mice infected with Leishmania major. Lee M, et al. **Korean J Parasitol** 1997 Mar;35(1):31–8

Trigeminal trophic syndrome. Dicken CH. **Mayo Clin Proc** 1997 Jun;72(6):543–5

Perineal and lip ulcerations as the presenting manifestation of hemangioma of infancy. Liang MG, et al. **Pediatrics** 1997 Feb;99(2):256–9

Syphilitic gumma. de Carvalho MF, et al. **Trans R Soc Trop Med Hyg** 1996 Sep–Oct;90(5):548–9

[Ulcer lesions in sarcoidosis: apropos of a case (letter)] Porteau L, et al. **Ann Med Interne (Paris)** 1997;148(1):105–6 **(Fre)**

[Coping with intractable skin ulcers in patients with collagen diseases] Kubota Y, et al. **Nippon Naika Gakkai Zasshi** 1996 Nov 10;85(11):1877–81 (5 ref.) **(Jpn)**

[Case of bilateral temporal skin ulcer with temporal arteritis] Toshima M, et al. **Nippon Naika Gakkai Zasshi** 1996 Nov 10;85(11):1938–9 **(Jpn)**

[A 57–year–old woman with multiple skin ulcers] de Andrés R, et al. **Rev Clin Esp** 1996 Nov;196(11):787–8 **(Spa)**

HISTORY

[Treatment of skin ulcers and wounds through the centuries] Angelotti N, et al. **Minerva Med** 1997 Jan–Feb; 88(1–2):49–55 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Microbial colonizers in leprosy skin ulcers and intensity of inflammation. Sturm AW, et al. **Int J Lepr Other Mycobact Dis** 1996 Sep;64(3):274–81

METABOLISM

The pathogenesis of the transepithelial elimination of the collagen bundles in acquired reactive perforating collagenosis. A light and electron microscopical study. Yanagihara M, et al. **J Cutan Pathol** 1996 Oct;23(5):398–403

Ischemic tissue oxygen capacitance after hyperbaric oxygen therapy: a new physiologic concept. Siddiqui A, et al. **Plast Reconstr Surg** 1997 Jan;99(1):148–55

MICROBIOLOGY

A problem of genital ulceration. Golledge CL. **Aust Fam Physician** 1996 Nov;25(11):1783

Infection with Mycobacterium avium–intracellulare with abscess, ulceration and fistula formation. Hide M, et al. **Br J Dermatol** 1997 Jan;136(1):121–3

Unusual skin ulceration in an HIV–positive patient who had cutaneous syphilis and neurosyphilis. Tucker SC, et al. **Br J Dermatol** 1997 Jun;136(6):946–8

Mycobacterium kansasii infection in a patient presenting with porphyria cutanea tarda. Jarrett P, et al. **Clin Exp Dermatol** 1996 Jul;21(4):286–7

Microbial colonizers in leprosy skin ulcers and intensity of inflammation. Sturm AW, et al. **Int J Lepr Other Mycobact Dis** 1996 Sep;64(3):274–81

Malodorous wounds [letter; comment] Reisinger EC, et al. **Lancet** 1996 Dec 21–28;348(9043):1736. Comment on: Lancet 1996 Nov 9;348(9037):1282.

Disseminated Histoplasma capsulatum infection presenting as genital ulcerations. Smith MB, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):842–4

[Buruli ulcers in rural areas of Bénin: management of 635 cases] Aguiar J, et al. **Med Trop (Mars)** 1997;57(1):83–90 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Generalized ulcers. Noduloulcerative syphilis (malignant syphilis, lues maligna). Merkert R. **Arch Dermatol** 1997 Aug;133(8):1027–8, 1030–1

An atypical piloleiomyoma presenting as a nonhealing ulcerated nodule. Harford RR, et al. **Cutis** 1996 Mar; 57(3):168–70

Perianal cytomegalovirus ulcer in an HIV–infected patient. Aloi F, et al. **Dermatology** 1996;192(1):81–3

The pathogenesis of the transepithelial elimination of the collagen bundles in acquired reactive perforating collagenosis. A light and electron microscopical study. Yanagihara M, et al. **J Cutan Pathol** 1996 Oct;23(5):398–403

Ulcerative lichen planus: a rare variant of lichen planus. Isogai Z, et al. **J Dermatol** 1997 Apr;24(4):270–2

Hallux amputation in combination with a lumbar sympathectomy for treatment of a non–healing ulceration in a patient with Buerger's disease. O'Connor KJ, et al. **J Foot Ankle Surg** 1996 Jul–Aug;35(4):339–43

[Measurement of the volume of the skin ulcer in cutaneous leishmaniasis] Correia D, et al. **Rev Soc Bras Med Trop** 1996 Nov–Dec;29(6):593–8 (Eng. Abstr.) **(Por)**

PHYSIOPATHOLOGY

Healing rate of skin ulcers [letter; comment] Spencer RP. **Acta Derm Venereol** 1996 May;76(3):246–7. Comment on: Acta Derm Venereol 1995 May;75(3):193–7.

Interaction between the insulin–like growth factor family and the integrin receptor family in tissue repair processes. Evidence in a rabbit ear dermal ulcer model. Galiano RD, et al. **J Clin Invest** 1996 Dec 1;98(11):2462–8

PREVENTION & CONTROL

Altered skin integrity in children admitted to a pediatric intensive care unit. Zollo MB, et al. **J Nurs Care Qual** 1996 Dec;11(2):62–7

SURGERY

The use of external tissue expansion in the management of wounds and ulcers. Ger R. **Ann Plast Surg** 1997 Apr; 38(4):352–7

Anatomic design of a sensate plantar flap. Narsete TA. **Ann Plast Surg** 1997 May;38(5):538–9

Skin from the amputated limb should not be wasted [letter] Taylor PR. **Br J Surg** 1996 Nov;83(11):1653–4

Cryosurgical treatment of professional chronic radiodermatitis. Conejo–Mir JS, et al. **Dermatol Surg** 1997 Jun;23(6):483–6

Limited microsurgical arteriolysis for complications of digital vasospasm. Tham S, et al. **J Hand Surg [Br]** 1997 Jun; 22(3):359–61

Modification of the gluteus maximus V–Y advancement flap for sacral ulcers: the gluteal fasciocutaneous flap method. Ohjimi H, et al. **Plast Reconstr Surg** 1996 Dec; 98(7):1247–52

[An assessment of factors leading to the failure of clinical application of venous flap] Zhu C, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):177–8 **(Chi)**

[Perianal ulcer during therapy of acute lymphatic leukemia (ALL)] Heimbold S, et al. **Zentralbl Chir** 1996;121 Suppl:78 **(Ger)**

[Plastic surgery therapy of infected and clean radiation ulcers--problem wounds as the responsibility of plastic surgery] Rieck B, et al. **Zentralbl Chir** 1996;121 Suppl:61–4 **(Ger)**

THERAPY

Hyperbaric oxygen therapy and free radical production: an experimental study in doxorubicin (Adriamycin) extravasation injuries [see comments] Monstrey SJ, et al. **Ann Plast Surg** 1997 Feb;38(2):163–8. Comment in: Ann Plast Surg 1997 Jul;39(1):105.

Failure of plasmapheresis in the treatment of recalcitrant skin ulcers in a patient with mixed cryoglobulinemia [letter; comment] Machet L, et al. **Arch Dermatol** 1997 Mar; 133(3):389–91. Comment on: Arch Dermatol 1996 May;132(5):498–500.

Dressing for a cocaine–induced skin ulcer. Blattel RA. **Can Fam Physician** 1997 Apr;43:625

Ischemic tissue oxygen capacitance after hyperbaric oxygen therapy: a new physiologic concept. Siddiqui A, et al. **Plast Reconstr Surg** 1997 Jan;99(1):148–55

[Enzymatic cleaning with collagenase in the local treatment of skin lesions complicated by scab and necrotic debris] Pietrantoni P, et al. **Minerva Chir** 1996 Sep;51(9):751–4 (Eng. Abstr.) **(Ita)**

VETERINARY

Ulcerative dermatitis associated with Uronema sp infection of farmed sand whiting Sillago ciliata. Gill PA, et al. **Aust Vet J** 1997 May;75(5):357

Clinical and clinicopathologic abnormalities in greyhounds with cutaneous and renal glomerular vasculopathy: 18 cases (1992–1994). Cowan LA, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):789–93

VIROLOGY

HIV infection presenting as chronic postpartum perineal sepsis. Dwyer PL, et al. **Aust N Z J Obstet Gynaecol** 1995 Nov;35(4):431–3

SKIN WINDOW TECHNIQUE

[Control of photocoagulation intensity by thermo–induced release of a fluorescent marker encapsulated in liposomes: study of an in vivo vascular model] Desmettre T, et al. **J Fr Ophtalmol** 1996;19(11):667–78 (Eng. Abstr.) **(Fre)**

SKIN WRINKLING see **SKIN AGING**

SKINFOLD THICKNESS

Growth and subcutaneous fat during the first five years of insulin–dependent diabetes in children. Tuvemo T, et al. **Acta Paediatr Suppl** 1997 Feb;418:1–5

Fitness, fatness, and the effect of training assessed by magnetic resonance imaging and skinfold–thickness measurements in healthy adolescent females. Eliakim A, et al. **Am J Clin Nutr** 1997 Aug;66(2):223–31

Body composition assessed on the basis of arm circumference and triceps skinfold thickness: a new index validated in children by magnetic resonance imaging. Rolland–Cachera MF, et al. **Am J Clin Nutr** 1997 Jun;65(6):1709–13

Triceps skinfold thickness patterns: Caucasian and African–American adolescent full–term pregnancies. Rees JM, et al. **Ann N Y Acad Sci** 1997 May 28;817:313–20

Skinfold thickness can predict elastosis in hairless mice. Malmusi M, et al. **Arch Dermatol Res** 1996 Oct; 288(11):722–4

Skinfold thicknesses: is there a need to be very precise in their location? Durnin JV, et al. **Br J Nutr** 1997 Jan; 77(1):3–7

Anthropometrical antecedents of non–insulin dependent diabetes mellitus: an age and sex matched comparison study of anthropometric indices in schoolchildren from a high prevalence Port Moresby community. Amini J, et al. **Diabetes Res Clin Pract** 1997 Mar;35(2–3):75–80

Influence of the thickness of soft tissues overlying human masseter and temporalis muscles on the electromyographic maximal voluntary contraction level. van der Glas HW, et al. **Eur J Oral Sci** 1996 Apr;104(2 (Pt 1)):87–95

Body composition in children based on anthropometric data. A presentation of normal values. Gerver WJ, et al. **Eur J Pediatr** 1996 Oct;155(10):870–6

'Skin roll' ('pinch and roll') test: skinfold thickness and tenderness. Bansevicius D, et al. **Headache** 1997 May; 37(5):281–5

Skinfold and near infrared body fat measurements have sex–specific differences, but may be useful in combination with BMI for determining relative risk factors on a large scale [letter] Rothacker DQ. **Int J Obes Relat Metab Disord** 1995 Dec;19(12):929

Relation between the longitudinal development of lipoprotein levels and biological parameters during adolescence and young adulthood in Amsterdam, The Netherlands. Twisk JW, et al. **J Epidemiol Community Health** 1996 Oct; 50(5):505–11

Distribution of blood pressure and influence of subcutaneous fat on systolic and diastolic levels in a tribal population. Babu BV, et al. **J Indian Med Assoc** 1996 Aug;94(8):289–91, 293

Distribution of subcutaneous fat and equations for predicting percent body fat from skinfold measurements: a comparison between Chinese females from two age cohorts. Fu FH, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):224–7

Validity of skinfold estimates of percent fat in high school female gymnasts. Housh TJ, et al. **Med Sci Sports Exerc** 1996 Oct;28(10):1331–5

Estimation of obesity in schoolchildren by measuring skinfold thickness. Kanda A, et al. **Public Health** 1997 Jan; 111(1):29–32

[Hydrostatic weighing, skinfold thickness, body mass index relationships in high school girls] Tahara Y, et al. **Nippon Koshu Eisei Zasshi** 1995 Dec;42(12):1061–8 (Eng. Abstr.) **(Jpn)**

[Brachial indicators of fat and muscle in schoolchildren of a rural community according to social groups (General Lavalle, Buenos Aires, Argentina)] Bolzán AG, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):281–5 (Eng. Abstr.) **(Spa)**

[Screening for fetal chromosome aberrations. Ultrasonic measurement of nuchal translucency thickness is most efficient] Valentin L. **Lakartidningen** 1997 Aug 20; 94(34):2810–2, 2815–6 (52 ref.) **(Swe)**

SKULL

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CEPHALOMETRY

CRANIOMETRY
CRANIOTOMY
INTRACRANIAL PRESSURE
TREPHINING

Cranial and intracranial aspergillosis of sino-nasal origin. Report of nine cases. Naim-Ur-Rahman, et al. **Acta Neurochir (Wien)** 1996;138(8):944-50

Osteomyelitis of the skull vault from a human bite. Phillips NI, et al. **Br J Neurosurg** 1997 Apr;11(2):168-9

Syringomyelia associated with a posterior fossa cyst. Illustration of two cases. Tokime T, et al. **J Neurosurg** 1997 May;86(5):907

Mechanical evaluation of four- versus eight-pin halo fixation. Letts M, et al. **J Pediatr Orthop** 1997 Jan-Feb;17(1):121-4

Adult-onset subacute sclerosing panencephalitis first seen as craniocervical myoclonus. Vela L, et al. **Mov Disord** 1997 May;12(3):462-4

Earliest known Old World monkey skull [see comments] Benefit BR, et al. **Nature** 1997 Jul 24;388(6640):368-71. Comment in: Nature 1997 Jul 24;388(6640):327-8.

Paleoanthropology. One skull does not a species make [news; comment] Delson E. **Nature** 1997 Oct 2;389(6650):445-6. Comment on: Nature 1997 Oct 2;389(6650):489-92.

Surgical results for meningiomas of the craniocervical junction. Samii M, et al. **Neurosurgery** 1996 Dec; 39(6):1086-94; discussion 1094-5

Optic nerve decompression in fibrous dysplasia: indications, efficacy, and safety. Chen YR, et al. **Plast Reconstr Surg** 1997 Jan;99(1):22-30; discussion 31-3

Craniocervical junction subarachnoid hemorrhage associated with atlanto-occipital dislocation. Przybylski GJ, et al. **Spine** 1996 Aug 1;21(15):1761-8

[Management of breach of the tegmen isolated or associated with cephalocele] Aïdan P, et al. **Ann Otolaryngol Chir Cervicofac** 1996;113(6):329-37 (Eng. Abstr.) **(Fre)**

[Cold abscess of the forehead with intracranial extension disclosing tuberculous osteitis of the skull (letter)] Granier F, et al. **Presse Med** 1997 Mar 29;26(10):467 **(Fre)**

[Polyostotic fibrous dysplasia. A clinical case report] Gallesio C, et al. **Minerva Stomatol** 1996 Nov;45(11):533-40 (16 ref.) (Eng. Abstr.) **(Ita)**

[A case of cranial osteomyelitis after head injury with exaggeration and remission for thirty years] Onoue S, et al. **No Shinkei Geka** 1997 Jun;25(6):543-7 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Skull abnormalities on MR of children with sickle cell disease [letter; comment] Murphy KJ. **AJNR Am J Neuroradiol** 1997 Mar;18(3):596. Comment on: AJNR Am J Neuroradiol 1996 May;17(5):965-72.

Rubinstein-Taybi syndrome: objective evaluation of craniofacial structure. Allanson JE, et al. **Am J Med Genet** 1997 Sep 5;71(4):414-9

Deletion 4q21/4q22 syndrome: two patients with de novo 4q21.3q23 and 4q13.2q23 deletions. Nowaczyk MJ, et al. **Am J Med Genet** 1997 Apr 14;69(4):400-5

Sutural bone frequency in synostotic rabbit crania. Burrows AM, et al. **Am J Phys Anthropol** 1997 Apr;102(4):555-63

Management of an extensive cervicofacial lymphovenous malformation of the maxillofacial region. DeLuca L, et al. **Ann Plast Surg** 1996 Jun;36(6):644-8

Macrocephaly and chromosome disorders: a case report. Drigo P, et al. **Brain Dev** 1996 Jul-Aug;18(4):312-5

The child with a cephalocele: etiology, neuroimaging, and outcome. Martínez-Lage JF, et al. **Childs Nerv Syst** 1996 Sep;12(9):540-50

Mandibular dysmorphology in unicoronal synostosis and plagiocephaly without synostosis. Kane AA, et al. **Cleft Palate Craniofac J** 1996 Sep;33(5):418-23

Airway management in children with craniofacial anomalies. Perkins JA, et al. **Cleft Palate Craniofac J** 1997 Mar; 34(2):135-40

Cranio-oculo-fronto-nasal malformation: a new MCA condition? Lopes VL, et al. **Clin Dysmorphol** 1997 Jan; 6(1):25-9

Prenatal diagnosis of cloverleaf skull in the subtype 2 Pfeiffer syndrome [letter] Martinelli P, et al. **Clin Dysmorphol** 1997 Jan;6(1):89-90

Duodenal web in the syndrome of osteopathia striata with cranial sclerosis [letter] Bar-Oz B, et al. **Clin Genet** 1996 Jun;49(6):329-30

Congenital scalp defect, distal limb reduction anomalies, right spastic hemiplegia and hypoplasia of the left arteria cerebri media. Further evidence that interruption of early embryonic blood supply may result in Adams-Oliver (plus) syndrome. Fryns JP, et al. **Clin Genet** 1996 Dec;50(6):505-9

Cranial anomaly of homozygous rSey rat is associated with a defect in the migration pathway of midbrain crest cells. Osumi-Yamashita N, et al. **Dev Growth Differ** 1997 Feb; 39(1):53-67

Morphological characteristic of the skull with gnathoschisis and palatoschisis. Malinowski A, et al. **Folia Morphol (Warsz)** 1996;55(2):83-8

A clinical study of the craniofacial features in Apert syndrome. Cohen MM Jr, et al. **Int J Oral Maxillofac Surg** 1996 Feb;25(1):45-53

A case of Baller-Gerold syndrome following in vitro fertilization-embryo transfer. Mihai M, et al. **J Assist Reprod Genet** 1996 Jan;13(1):79-81

Congenital renal tubular dysplasia and skull ossification defects similar to teratogenic effects of angiotensin converting enzyme (ACE) inhibitors. Kumar D, et al. **J Med Genet** 1997 Jul;34(7):541-5

Towards computer assisted evaluation of plagiocephaly. Donegan HA, et al. **Med Inf (Lond)** 1996 Apr-Jun; 21(2):155-67

Cerebellomedullary compression in recessive craniometaphyseal dysplasia. Boltshauser E, et al. **Neuroradiology** 1996 May;38 Suppl 1:S193-5

Reconstruction of midfacial and anterior skull-base defects. Hochman M. **Otolaryngol Clin North Am** 1995 Dec; 28(6):1269-77 (13 ref.)

Craniofacial manifestations of the amniotic band syndrome. Bagatin M, et al. **Otolaryngol Head Neck Surg** 1997 Apr; 116(4):525-8 (15 ref.)

Arteriovenous malformation of the cervical spinal cord with unusual drainage into the cranial cavity. Matsko DE, et al. **Pathol Res Pract** 1996 Sep;192(9):942-7; discussion 948

Acrania: report of the first surviving case. Kurata H, et al. **Pediatr Neurosurg** 1996;24(1):52-4

[Mohr-Claussen syndrome] Nakano M, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):281-3 (10 ref.) **(Jpn)**

[Clinical assessment of calvarial reconstruction with autogenic bone graft or implants of acrylate and polypropylene-polyester knitted fabric] Zieliński A, et al. **Neurol Neurochir Pol** 1996 Nov-Dec;30(6):981-94; discussion 995 (Eng. Abstr.) **(Pol)**

ANATOMY & HISTOLOGY

Morphometric investigations of the connections between the posterior C-1 root and the accessory nerve in the human cranial cervical region. Schneider U, et al. **Acta Anat (Basel)** 1996;156(2):118-22

Cranial MR findings in Wilson's disease. Saatci I, et al. **Acta Radiol** 1997 Mar;38(2):250-8

Imaging the temporal fossa. Swanson CE, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):801-6

Early anthropological contributions to "geometric morphometrics". Cole TM 3rd. **Am J Phys Anthropol** 1996 Oct;101(2):291-6

Cranial shape in fruit, nectar, and exudate feeders: implications for interpreting the fossil record. Dumont ER. **Am J Phys Anthropol** 1997 Feb;102(2):187-202

Cranial variation in the Iberian Peninsula and the Balearic Islands: inferences about the history of the population. Fox CL, et al. **Am J Phys Anthropol** 1996 Mar;99(3):413-28

Allometric patterns of cranial bone thickness in fossil hominids. Gauld SC. **Am J Phys Anthropol** 1996 Jul; 100(3):411-26

Comparison of craniofacial features of major human groups. Hanihara T. **Am J Phys Anthropol** 1996 Mar;99(3):389-412

A new reconstruction of RUD 77, a partial cranium of Dryopithecus brancoi from Rudabánya, Hungary. Kordos L, et al. **Am J Phys Anthropol** 1997 Jun;103(2):277-94

Concordance of cranial and dental morphological traits and evidence for endogamy in ancient Egypt. Prowse TL, et al. **Am J Phys Anthropol** 1996 Oct;101(2):237-46 (98 ref.)

Skull of Catopithecus browni, an early tertiary catarrhine. Simons EL, et al. **Am J Phys Anthropol** 1996 Jun; 100(2):261-92

Sutural effects of fronto-occipital cranial modification. White CD. **Am J Phys Anthropol** 1996 Jul;100(3):397-410

Finite-element modeling of the human neurocranium under functional anatomical aspects. Mall G, et al. **Anat Anz** 1997 Aug;179(4):303-9

Dimensional differences in the craniofacial morphologies of groups with deep and shallow mandibular antegonial notching. Lambrechts AH, et al. **Angle Orthod** 1996; 66(4):265-72

Toward virtual anatomy: a stereoscopic 3-D interactive multimedia computer program for cranial osteology. Trelease RB. **Clin Anat** 1996;9(4):269-72

Developmental patterning and evolution of the mammalian viscerocranium: genetic insights into comparative morphology. Kuratani S, et al. **Dev Dyn** 1997 Jun; 209(2):139-55 (145 ref.)

The cranial lateral-line system in Clarias gariepinus (Burchell, 1822) (Siluroidei:Clariidae): morphology and development of canal related bones. Adriaens D, et al. **Eur J Morphol** 1997 Jul;35(3):181-208

Relationships between the orientation and moment arms of the human jaw muscles and normal craniofacial morphology. van Spronsen PH, et al. **Eur J Orthod** 1997 Jun;19(3):313-28

Morphological characteristic of the skull with gnathoschisis and palatoschisis. Malinowski A, et al. **Folia Morphol (Warsz)** 1996;55(2):83-8

Geometric morphometrics in primatology: craniofacial variation in Homo sapiens and Pan troglodytes. Lynch JM, et al. **Folia Primatol (Basel)** 1996;67(1):15-39

The eustachian tube caliber and craniofacial skeleton in guinea pigs. Kemaloğlu YK, et al. **Int J Pediatr Otorhinolaryngol** 1996 Dec 5;38(1):53-63

An accessory foramen deep in the infraorbital fissure [letter] Bisaria KK, et al. **J Anat** 1996 Oct;189 (Pt 2):461-2

Reconstruction of three-dimensional anatomical landmark coordinates using video-based stereophotogrammetry. Stevens WP. **J Anat** 1997 Aug;191 (Pt 2):277-84

Anatomical compartments of the parasellar region: adipose tissue bodies represent intracranial continuations of extracranial spaces. Weninger WJ, et al. **J Anat** 1997 Aug; 191 (Pt 2):269-75

A visualization of ontogenous cephalometric growth using bicubic interpolation. Kress-Russick M. **J Biocommun** 1996;23(3):25-9

The Sima de los Huesos crania (Sierra de Atapuerca, Spain). A comparative study. Arsuaga JL, et al. **J Hum Evol** 1997 Aug-Sep;33(2-3):219-81

The temporal bones from Sima de los Huesos Middle Pleistocene site (Sierra de Atapuerca, Spain). A phylogenetic approach. Martínez I, et al. **J Hum Evol** 1997 Aug-Sep;33(2-3):283-318

The Orce skull: anatomy of a mistake. Moyà-Solà S, et al. **J Hum Evol** 1997 Jul;33(1):91-7

Phenotypic plasticity in skull and dental morphology in the prairie deer mouse (Peromyscus maniculatus bairdii). Myers P, et al. **J Morphol** 1996 Aug;229(2):229-37

A three-dimensional virtual model of the head generated from digitalized CT or MR images for anatomical-radiological and neurosurgical evaluations. Juanes JA, et al. **J Neuroradiol** 1996 Dec;23(4):211-6

Skull thickness and halo-pin placement in children: the effects of race, gender, and laterality. Loder RT. **J Pediatr Orthop** 1996 May-Jun;16(3):340-3

Osteometrical and CT examination of the Japanese wolf skull. Endo H, et al. **J Vet Med Sci** 1997 Jul;59(7):531-8

Palaeoanthropology. Fossil muzzles and other puzzles [news; comment] Köhler M, et al. **Nature** 1997 Jul 24; 388(6640):327-8. Comment on: Nature 1997 Jul 24;388(6640):368-71.

Size variation in Middle Pleistocene humans. Arsuaga JL, et al. **Science** 1997 Aug 22;277(5329):1086-8

Cephalad distribution of three differing volumes of new methylene blue injected into the epidural space in adult goats. Johnson RA, et al. **Vet Surg** 1996 Sep-Oct; 25(5):448-51

[The skull and brain according to Leonardo: a survey on 4 pages by de Vinci and analogy of the onion. The scientific philosophy of the domino theory (editorial)] Castan P. **J Neuroradiol** 1997 Aug;24(2):79-82 **(Fre)**

[Combined supra- and infratentorial transpetrosal approach] Sawamura Y. **No Shinkei Geka** 1996 Dec;24(12):1079-85 (9 ref.) **(Jpn)**

[A method for the topographic anatomical study of the fourth ventricle in relation to the structures of the cranial base and vault] Dobrovol'skiĭ GF. **Morfologiia** 1997; 111(1):98-100 **(Rus)**

[The classification of variants and anomalies of the human skull] Speranskiĭ VS. **Morfologiia** 1996;109(3):47-51 (Eng. Abstr.) **(Rus)**

[The size and shape of the orbits and their correlation with the size and shape of the cerebral and visceral portions of the cranium] Speranskiĭ VS, et al. **Morfologiia** 1996; 109(3):52-4 **(Rus)**

[The structural typology of the human cerebral cranium] Zaĭchenko AA. **Morfologiia** 1997;111(2):102-5 (Eng. Abstr.) **(Rus)**

[Characteristics of skulls of ancient skeletons from the province of Xinjiang in China] Djurić-Srejić M, et al. **Srp Arh Celok Lek** 1996 May-Jun;124(5-6):124-9 (Eng. Abstr.) **(Scc)**

BLOOD SUPPLY

Comparative endocranial vascular changes due to craniosynostosis and artificial cranial deformation. O'Loughlin VD. **Am J Phys Anthropol** 1996 Nov; 101(3):369-85

Galeo-pericranial flaps in the forehead: a study of blood supply and volumes. Potparić Z, et al. **Br J Plast Surg** 1996 Dec;49(8):519-28

Skull infarction and epidural hematomas in a patient with sickle cell anemia. Resar LM, et al. **J Pediatr Hematol Oncol** 1996 Nov;18(4):413-5

Arteriovenous malformation of the cervical spinal cord with unusual drainage into the cranial cavity. Matsko DE, et al. **Pathol Res Pract** 1996 Sep;192(9):942-7; discussion 948

CHEMISTRY

Behavior of carbonate and magnesium ions in the initial crystallites at the early developmental stages of the rat calvaria. Kakei M, et al. **Anat Anz** 1997 Aug;179(4):311-6

CYTOLOGY

Enhancement by conditioned medium of stretched calvarial bone cells of the osteoclast-like cell formation induced by parathyroid hormone in mouse bone marrow cultures. Soma S, et al. **Arch Oral Biol** 1997 Mar;42(3):205-11

$Ca2+$-ATPase inhibitors and $Ca2+$-ionophore induce osteoclast-like cell formation in the cocultures of mouse bone marrow cells and calvarial cells. Takami M, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):111-5

Analysis of chondroprogenitor frequency and cartilage differentiation in a novel family of clonal chondrogenic rat cell lines. Grigoriadis AE, et al. **Differentiation** 1996 Sep;60(5):299-307

Age-related changes in bone formation, osteoblastic cell proliferation, and differentiation during postnatal osteogenesis in human calvaria. de Pollak C, et al. **J Cell Biochem** 1997 Jan;64(1):128-39

Single cell analysis of intracellular osteopontin in osteogenic cultures of fetal rat calvarial cells. Zohar R, et al. **J Cell Physiol** 1997 Jan;170(1):88-100

Recombinant human bone morphogenetic protein-2 stimulates differentiation in primary cultures of fetal rat calvarial osteoblasts. Chaudhari A, et al. **Mol Cell Biochem** 1997 Feb;167(1-2):31-9

[In vitro culture of neonatal mouse calvaria as a model for study of bone resorption] Zhang WZ, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1996 Jan; 31(1):48-50 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

In vitro interaction between tetracalcium phosphate-based cement and calvarial osteogenic cells. Yoshimine Y, et al. **Biomaterials** 1996 Dec;17(23):2241-5

Hydrogen peroxide, but not superoxide, stimulates bone resorption in mouse calvariae. Fraser JH, et al. **Bone** 1996 Sep;19(3):223-6

Rapid nodule evaluation computer-aided image analysis procedure for bone nodule quantification. Nefussi JR, et al. **Bone** 1997 Jan;20(1):5-16

Insulin increases histomorphometric indices of bone formation In vivo. Cornish J, et al. **Calcif Tissue Int** 1996 Dec;59(6):492-5

Effect of platelet-derived growth factor-BB on bone formation in calvarial defects: an experimental study in rabbits. Vikjaer D, et al. **Eur J Oral Sci** 1997 Feb; 105(1):59-66

Bacterial porins stimulate bone resorption. Meghji S, et al. **Infect Immun** 1997 Apr;65(4):1313-6

Xenogeneic moose (Alces alces) bone morphogenetic protein (mBMP)-induced repair of critical-size skull defects in sheep. Viljanen VV, et al. **Int J Oral Maxillofac Surg** 1996 Jun;25(3):217-222

Modulation of the effects of glucocorticoids on collagen synthesis in fetal rat calvariae by insulin-like growth factor binding protein-2. Kream BE, et al. **J Bone Miner Res** 1997 Jun;12(6):889-95

Transforming growth factor-beta stimulates bone resorption in neonatal mouse calvariae by a prostaglandin-unrelated but cell proliferation-dependent pathway. Lerner UH. **J Bone Miner Res** 1996 Nov;11(11):1628-39

Limited chondro-osteogenesis by recombinant human transforming growth factor-beta 1 in calvarial defects of adult baboons (Papio ursinus). Ripamonti U, et al. **J Bone Miner Res** 1996 Jul;11(7):938-45

Effects on cultured neonatal mouse calvaria of the flavonoids isolated from Boerhaavia repens. Li J, et al. **J Nat Prod** 1996 Nov;59(11):1015-8

EMBRYOLOGY

The influence of ethyl alcohol on the development of the chondrocranium of Gallus gallus. Heyns M. **Adv Anat Embryol Cell Biol** 1997;134:1-127 (90 ref.)

Chondrogenic cell subpopulation of chick embryonic calvarium: isolation by peanut agglutinin affinity chromatography and in vitro characterization. Stringa E, et al. **Anat Embryol (Berl)** 1996 Nov;194(5):427-37

Osteogenesis of the fetal bovine skull. Soana S, et al. **Anat Histol Embryol** 1996 Sep;25(3):167-73

Embryonic origin and fate of chondroid tissue and secondary cartilages in the avian skull. Lengelé B, et al. **Anat Rec** 1996 Nov;246(3):377-93

Expression of 72-kDa gelatinase (matrix metalloproteinase-2) in the developing mouse craniofacial complex. Iamaroon A, et al. **Arch Oral Biol** 1996 Dec;41(12):1109-19

Genetic analysis of craniofacial development in the vertebrate embryo. Schilling TF. **Bioessays** 1997 Jun;19(6):459-68 (56 ref.)

Three-dimensional fetal cephalometry. Bettega G, et al. **Cleft Palate Craniofac J** 1996 Nov;33(6):463-7

Effects of fetus weight, dam strain, dam weight, and litter size on the craniofacial morphogenesis of CL/Fr mouse fetuses affected with cleft lip and palate. Nonaka K, et al. **Cleft Palate Craniofac J** 1997 Jul;34(4):325-30

Xbap, a vertebrate gene related to bagpipe, is expressed in developing craniofacial structures and in anterior gut muscle. Newman CS, et al. **Dev Biol** 1997 Jan 15; 181(2):223-33

Disruption of Msx-1 and Msx-2 reveals roles for these genes in craniofacial, eye, and axial development. Foerst-Potts L, et al. **Dev Dyn** 1997 May;209(1):70-84

Mutations affecting craniofacial development in zebrafish. Neuhauss SC, et al. **Development** 1996 Dec;123:357-67

Dorsal hindbrain ablation results in rerouting of neural crest migration and changes in gene expression, but normal hyoid development. Saldivar JR, et al. **Development** 1997 Jul; 124(14):2729-39

Glucocorticoid-induced differentiation of fetal rat calvarial osteoblasts is mediated by bone morphogenetic protein-6. Boden SD, et al. **Endocrinology** 1997 Jul;138(7):2820-8

Nerve growth factor in the developing craniofacial region of the mouse embryo. Louryan S, et al. **Eur J Morphol** 1995 Nov;33(5):415-9

Mammalian craniofacial embryology in vitro. Osumi-Yamashita N, et al. **Int J Dev Biol** 1997 Apr; 41(2):187-94 (73 ref.)

Embryonic neural chimeras in the study of vertebrate brain and head development. Le Douarin NM, et al. **Int Rev Cytol** 1997;175:241-309 (200 ref.)

The role of transforming growth factor alpha in rat craniofacial development and chondrogenesis. Huang L, et al. **J Anat** 1996 Aug;189 (Pt 1):73-86

Morphological deficiency in the prenatal anterior cranial base of midfacially retrognathic mice. Ma W, et al. **J Anat** 1996 Jun;188 (Pt 3):547-55

Effects of osteogenic protein-1 (OP-1, BMP-7) on bone matrix protein expression by fetal rat calvarial cells are differentiation stage specific. Li IW, et al. **J Cell Physiol** 1996 Oct;169(1):115-25

3D-computed tomography: a new method for the evaluation of fetal cranial morphology. Neumann K, et al. **J Craniofac Genet Dev Biol** 1997 Jan-Mar;17(1):9-22

Recombinant human bone morphogenetic protein-2 stimulates differentiation in primary cultures of fetal rat calvarial osteoblasts. Chaudhari A, et al. **Mol Cell Biochem** 1997 Feb;167(1-2):31-9

Neural crest apoptosis and the establishment of craniofacial pattern: an honorable death. Graham A, et al. **Mol Cell Neurosci** 1996;8(2-3):76-83 (26 ref.)

Postneurulation rapid brain growth represents a critical time for encephalocele formation: a chick model. Gluckman TJ, et al. **Pediatr Neurosurg** 1996 Sep;25(3):130-6

Barx2, a new homeobox gene of the Bar class, is expressed in neural and craniofacial structures during development. Jones FS, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18; 94(6):2632-7

[Analysis of retinoic acid effects on craniofacial development in quail embryo] Ru W. **Kokubyo Gakkai Zasshi** 1997 Mar; 64(1):38-51 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Regulation of collagenase-3 by bone morphogenetic protein-2 in bone cell cultures. Varghese S, et al. **Endocrinology** 1997 Mar;138(3):1035-40

GROWTH & DEVELOPMENT

Craniofacial bone remodeling in growing rats fed a low-calcium and vitamin-D-deficient diet and the influence of masticatory muscle function. Kiliaridis S, et al. **Acta Odontol Scand** 1996 Oct;54(5):320-6

Cranial growth in Saimiri sciureus (Cebidae) and its alteration by nutritional factors: a longitudinal study. Dressino V, et al. **Am J Phys Anthropol** 1997 Apr;102(4):545-54

How and why humans grow thin skulls: experimental evidence for systemic cortical robusticity. Lieberman DE. **Am J Phys Anthropol** 1996 Oct;101(2):217-36

Orthocephalization in the postweaning squirrel monkey. Pucciarelli HM, et al. **Am J Phys Anthropol** 1996 Oct; 101(2):173-81

Behavior of carbonate and magnesium ions in the initial crystallites at the early developmental stages of the rat calvaria. Kakei M, et al. **Anat Anz** 1997 Aug;179(4):311-6

Some methods of assessing postnatal craniofaciodental growth: a retrospective of personal research. Sarnat BG. **Cleft Palate Craniofac J** 1997 Mar;34(2):159-72 (57 ref.)

Effect of unilateral function on craniofacial growth. Bukovic D Jr, et al. **Coll Antropol** 1997 Jun;21(1):217-28

Craniofacial development: knockout mice take one on the chin. Richman J, et al. **Curr Biol** 1996 Apr 1;6(4):364-7 (23 ref.)

Catch-up growth induced by growth hormone in the craniofacial skeleton of the Snell strain of the hypopituitary dwarf mouse. Rice DP, et al. **Eur J Orthod** 1997 Apr; 19(2):141-50

A visualization of ontogenous cephalometric growth using bicubic interpolation. Kress-Russick M. **J Biocommun** 1996;23(3):25-9

Role of beta-GP-derived Pi in mineralization via ecto-alkaline phosphatase in cultured fetal calvaria cells. Anagnostou F, et al. **J Cell Biochem** 1996 Aug;62(2):262-74

Age-related changes in bone formation, osteoblastic cell proliferation, and differentiation during postnatal osteogenesis in human calvaria. de Pollak C, et al. **J Cell Biochem** 1997 Jan;64(1):128-39

Dietary consistency and craniofacial development related to masticatory function in minipigs. Ciochon RL, et al. **J Craniofac Genet Dev Biol** 1997 Apr-Jun;17(2):96-102

Postnatal changes in the cranial base in rabbits with congenital coronal suture synostosis. Smith TD, et al. **J Craniofac Genet Dev Biol** 1996 Apr-Jun;16(2):107-17

The epigenetic impact of weaning on craniofacial morphology during growth. Helm JW, et al. **J Exp Zool** 1996 Nov 1;276(4):243-53

Early development of chondrocranium in the tailed frog Ascaphus truei (Amphibia: Anura): implications for anuran palatoquadrate homologies. Reiss JO. **J Morphol** 1997 Jan; 231(1):63-100

Age-related changes of plasma alkaline phosphatase and inorganic phosphorus, and late ossification of the cranial roof in the Spanish imperial eagle (Aquila adalberti C. L. Brehm, 1861). Dobado-Berrios PM, et al. **Physiol Zool** 1997 Jul-Aug;70(4):421-7

[The influence of pharmacological manipulation on postsurgical labial scar contraction and craniofacial growth in rabbits] Zhang L, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1996 Mar;12(2):101-3 (Eng. Abstr.) **(Chi)**

INJURIES

Sutural effects of fronto-occipital cranial modification. White CD. **Am J Phys Anthropol** 1996 Jul;100(3):397-410

Calvarial deformity and remodeling following prolonged scalp expansion in a child. Calobrace MB, et al. **Ann Plast Surg** 1997 Aug;39(2):186-9

Perioperative nursing care of patients with craniofacial injuries. Hayes KM, et al. **AORN J** 1996 Sep;64(3):385-98; quiz 407-10, 413-4 (44 ref.)

Monosymptomatic hypochondriacal psychosis complicated by self-inflicted skin ulceration, skull defect and brain abscess. Wang CK, et al. **Br J Dermatol** 1997 Aug; 137(2):299-302

Self-trephination of the skull with an electric power drill. Wadley JP, et al. **Br J Neurosurg** 1997 Apr;11(2):156-8

Skull and orbital blow-out fractures in a horse. Blogg JR, et al. **Equine Vet J Suppl** 1990 Sep;(10):5-7

Bevelling in exit gunshot wounds in bones. Quatrehomme G, et al. **Forensic Sci Int** 1997 Sep 19;89(1-2):93-101

Industrial high-voltage electrical burn of the skull, a preventable injury. Wright HR, et al. **J Emerg Med** 1997 May-Jun;15(3):345-9

Acute hydrocephalus in posterior fossa injury. Karasawa H, et al. **J Neurosurg** 1997 Apr;86(4):629-32

Patients with retained transcranial knife blades: a high-risk group. Taylor AG, et al. **J Neurosurg** 1997 Oct;87(4):512-5

Pediatric craniocerebral wounds from plastic bullets: prognostic implications, course, and outcome. Paret G, et al. **J Trauma** 1996 Nov;41(5):859-63

State of the cerebral cortex in severe penetrating gunshot injuries to the skull and brain (experimental studies). Novozhilova AP, et al. **Neurosci Behav Physiol** 1997 Mar-Apr;27(2):183-8

Cerebral arterial spasm after penetrating craniocerebral gunshot wounds: transcranial Doppler and cerebral blood flow findings. Kordestani RK, et al. **Neurosurgery** 1997 Aug;41(2):351-9; discussion 359-60

[Temporary bone defect following cranial contusion in infants] Szénásy J, et al. **Orv Hetil** 1996 May 12; 137(19):1037-9 (Eng. Abstr.) **(Hun)**

[A statistical epidemiological study of cranio-maxillofacial trauma in the Friuli Venezia Giulia region] Miotti A, et al. **Minerva Stomatol** 1996 Apr;45(4):149-56 (Eng. Abstr.) **(Ita)**

[Use of computerized tomography for localization of a foreign body impacted into the cranium] Pelc R, et al. **Wiad Lek** 1996;49(1-6):59-65 (Eng. Abstr.) **(Pol)**

[Pulmonary complications in severe combined craniocerebral trauma (their pathogenesis, clinical picture, diagnosis and treatment)] Gembitskiĭ EV, et al. **Klin Med (Mosk)** 1996; 74(2):12-6 (Eng. Abstr.) **(Rus)**

METABOLISM

Immunolocalization of transforming growth factor-beta in the bone tissue. Hosoi T, et al. **Calcif Tissue Int** 1996 Oct; 59(4):305-6

Expression of parathyroid hormone-related peptide (PTHrP) and PTH/PTHrP receptor in newborn human calvaria osteoblastic cells. Lomri A, et al. **Eur J Endocrinol** 1997 Jun;136(6):640-8

Identification of macrophage migration inhibitory factor in murine neonatal calvariae and osteoblasts. Onodera S, et al. **Immunology** 1996 Nov;89(3):430-5

Modulation of the effects of glucocorticoids on collagen synthesis in fetal rat calvariae by insulin-like growth factor binding protein-2. Kream BE, et al. **J Bone Miner Res** 1997 Jun;12(6):889-95

Changes in parathyroid hormone receptor binding affinity during egg laying: implications for calcium homeostasis in chicken. Yasuoka T, et al. **J Bone Miner Res** 1996 Dec; 11(12):1913-20

Mechanical stimulation of osteopontin mRNA expression and synthesis in bone cell cultures. Klein-Nulend J, et al. **J Cell Physiol** 1997 Feb;170(2):174-81

MICROBIOLOGY

Tuberculous osteitis of the skull: a case report and review of the literature. Tyagi AK, et al. **Br J Neurosurg** 1996 Aug;10(4):399-401

Eikenella corrodens skull infection: a case report with review of the literature. Arana E, et al. **Surg Neurol** 1997 Apr; 47(4):389-91 (9 ref.)

PATHOLOGY

Suboccipital tangential gunshot wound. Elron M, et al. **Acta Neurochir (Wien)** 1997;139(4):377-8

Further clinical delineation and increased morbidity in males with osteopathia striata with cranial sclerosis: an X-linked disorder? Pellegrino JE, et al. **Am J Med Genet** 1997 May 16;70(2):159-65

Possible paleopathological evidence of treponematosis from a megalithic site at Agripalle, India. Rao VV, et al. **Am J Phys Anthropol** 1996 May;100(1):49-55

Lesions of the calvaria: surgical experience with 42 patients. Wecht DA, et al. **Ann Surg Oncol** 1997 Jan;4(1):28-36

Time-related deviations of fibronectin and type I, II and III collagen on the interface between a hydroxyapatite disc and the rim of a calvarial trephine defect in rabbits. Lindholm TC, et al. **Biomaterials** 1996 Aug;17(15):1515-20

Giant congenital naevus of the scalp and cranium: case report and review of the literature. Madaree A, et al. **Br J Plast Surg** 1997 Jan;50(1):20-5 (8 ref.)

Insulin-like growth factor I does not stimulate bone resorption in cultured neonatal mouse calvarial bones. Jonsson KB, et al. **Calcif Tissue Int** 1996 Nov;59(5):366-70

Unusual tumours of the skull and skull base: a pictorial essay.

Levy RA, et al. **Can Assoc Radiol J** 1996 Dec;47(6):434–43

Contribution of craniofacial risk factors in increasing apneic activity among obese and nonobese habitual snorers. Nelson S, et al. **Chest** 1997 Jan;111(1):154–62

Examination of craniofacial morphology in children with unilateral cleft lip and palate. Öztürk Y, et al. **Cleft Palate Craniofac J** 1996 Jan;33(1):32–6

Primary Candida albicans empyema associated with epidural hematomas in craniocervical junction. Duffner F, et al. **Clin Neuropathol** 1997 May–Jun;16(3):143–6

Cranio–facial fibro–osseous dysplasia. A case report and overview of the management of the condition. Delap TG, et al. **Int J Pediatr Otorhinolaryngol** 1996 Oct;37(2):179–91 (37 ref.)

Intracranial osteolytic meningioma affecting the scalp. Iglesias ME, et al. **J Am Acad Dermatol** 1996 Oct; 35(4):641–2

Osteoclastic superoxide production and bone resorption: stimulation and inhibition by modulators of NADPH oxidase. Darden AG, et al. **J Bone Miner Res** 1996 May; 11(5):671–5

Paleopathological evidence of the cranial remains from the Sima de los Huesos Middle Pleistocene site (Sierra de Atapuerca, Spain). Description and preliminary inferences. Pérez PJ, et al. **J Hum Evol** 1997 Aug–Sep;33(2–3):409–21

Fibro–osseous lesions of the head and neck. Beasley DJ, et al. **J La State Med Soc** 1996 Oct;148(10):413–5 (12 ref.)

Intradiploic epidermoid cysts. Arana E, et al. **Neuroradiology** 1996 May;38(4):306–11

Intracranial plasma cell granuloma. Breidahl WH, et al. **Neuroradiology** 1996 May;38 Suppl 1:S86–9

State of the cerebral cortex in severe penetrating gunshot injuries to the skull and brain (experimental studies). Novozhilova AP, et al. **Neurosci Behav Physiol** 1997 Mar–Apr;27(2):183–8

Midfacial degloving for the management of nasal, sinus, and skull–base neoplasms. Maniglia AJ, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1127–43

Axial skeleton and pituitary gland in human fetuses with spina bifida and cranial encephalocele. Kjaer I, et al. **Pediatr Pathol Lab Med** 1996 Nov–Dec;16(6):909–26

An extensive type of polyostotic fibrous dysplasia. Sener RN. **Pediatr Radiol** 1997 Apr;27(4):339–41

[Demonstration of a cranial autopsy performed during the Great Plague of Marseille (1720–1722)] Signoli M, et al. **C R Acad Sci III** 1997 Jul;320(7):575–80 (Eng. Abstr.) **(Fre)**

[Pericranial sinus] Leblanc I, et al. **J Neuroradiol** 1994 Apr; 21(3):161-9 (Eng. Abstr.) **(Fre)**

[The keratocyst or epidermoid cyst: the current state of understanding apropos of a case with intracranial involvement] Franc C, et al. **Rev Stomatol Chir Maxillofac** 1996 Oct;97(5):270–82 (134 ref.) (Eng. Abstr.) **(Fre)**

[A case of sarcoidosis with skull lesions] Watanabe Y, et al. **Nippon Naika Gakkai Zasshi** 1996 May 10;85(5):759–60 **(Jpn)**

[Craniocerebral imaging in children with short stature] Barros L, et al. **Acta Med Port** 1997 May;10(5):361–5 (Eng. Abstr.) **(Por)**

[The interrelationship between bone tissue structure and the dynamics of the process in the surgical treatment of fibrous osteodysplasia of the bones of the visceral cranium] Baluta OE, et al. **Stomatologiia (Mosk)** 1996;75(3):33 **(Rus)**

PHYSIOLOGY

Entrainment and the cranial rhythmic impulse. McPartland JM, et al. **Altern Ther Health Med** 1997 Jan;3(1):40–5 (80 ref.)

Osteogenesis of the fetal bovine skull. Soana S, et al. **Anat Histol Embryol** 1996 Sep;25(3):167–73

A holographic study of variations in bone deformations resulting from different headgear forces in a macerated human skull. Zentner A, et al. **Angle Orthod** 1996; 66(6):463–72

Time–related deviations of fibronectin and type I, II and III collagen on the interface between a hydroxyapatite disc and the rim of a calvarial trephine defect in rabbits. Lindholm TC, et al. **Biomaterials** 1996 Aug;17(15):1515–20

The influence of skull–conductivity misspecification on inverse source localization in realistically shaped finite element head models. Pohlmeier R, et al. **Brain Topogr** 1997 Spring;9(3):157–62

Bone mineral density of the skull in premenopausal women. Turner AS, et al. **Calcif Tissue Int** 1997 Aug;61(2):110–3

Craniofacial osseointegrated implant–induced strain distribution: a numerical study. del Valle V, et al. **Int J Oral Maxillofac Implants** 1997 Mar–Apr;12(2):200–10

Linearity of sound transmission through the human skull in vivo. Håkansson B, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2239–43

Potential efficacy of basic fibroblast growth factor incorporated in biodegradable hydrogels for skull bone regeneration. Yamada K, et al. **J Neurosurg** 1997 May; 86(5):871–5

The controversy of cranial bone motion. Rogers JS, et al. **J Orthop Sports Phys Ther** 1997 Aug;26(2):95–103 (50 ref.)

Osteopromotion for cranioplasty: an experimental study in rats using acidic fibroblast growth factor. Cuevas P, et al. **Surg Neurol** 1997 Mar;47(3):242–6

PHYSIOPATHOLOGY

Relationship between anterior fontanelle pressure measurements and clinical signs in infantile hydrocephalus. Hanlo PW, et al. **Childs Nerv Syst** 1996 Apr;12(4):200–9

[Cranial fasciitis in childhood: a case report and literature review] Méndez Gallart R, et al. **An Esp Pediatr** 1996 Nov; 45(5):530–2 (16 ref.) **(Spa)**

RADIOGRAPHY

Prediction of uvulopalatopharyngoplasty response using cephalometric radiographs. Woodson BT, et al. **Am J Otolaryngol** 1997 May–Jun;18(3):179–84

A method of magnification correction for posteroanterior radiographic cephalometry. Hsiao TH, et al. **Angle Orthod** 1997;67(2):137–42

Posterior cephalometric radiographic analysis in obstructive sleep apnea. Woodson BT, et al. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):310–3

Cranial fasciitis. Hoya K, et al. **Childs Nerv Syst** 1996 Sep; 12(9):556–8

Comparison of the reliability of craniofacial anatomic landmarks based on cephalometric radiographs and three–dimensional CT scans. Kragskov J, et al. **Cleft Palate Craniofac J** 1997 Mar;34(2):111–6

Cranial base in newborns with complete cleft lip and palate: radiographic study: Mølsted K, Kjaer I, Dahl E. 1995;32:199–205 [letter; comment] Schendel SA. **Cleft Palate Craniofac J** 1996 Jan;33(1):84. Comment on: Cleft Palate Craniofac J 1995 May;32(3):199–205.

Surface interpolation with radial basis functions for medical imaging. Carr JC, et al. **IEEE Trans Med Imaging** 1997 Feb;16(1):96–107

Radiology case of the month. Paget's disease with onset of increasing bone pain. Paget's disease with coexisting multiple myeloma. Neitzschman HR. **J La State Med Soc** 1997 Apr;149(4):109–10

CT assessment of jugular foramen dominance and its association with hand preference. Adams WM, et al. **J Laryngol Otol** 1997 Mar;111(3):290–2

The beaten copper cranium: a correlation between intracranial pressure, cranial radiographs, and computed tomographic scans in children with craniosynostosis. Tuite GF, et al. **Neurosurgery** 1996 Oct;39(4):691–9

[Contribution of post mortem skull scanning for the study of sudden infant death] Bardainne M, et al. **Arch Pediatr** 1996 Jul;3(7):661–7 (Eng. Abstr.) **(Fre)**

[BRACS—a method for cephalometric diagnosis and orthodontic treatment planning. Biometric radiographic analysis of the craniofacial skeleton] Järvinen SH. **Dtsch Zahn Mund Kieferheilkd Zentralbl** 1991;79(1):23–9 (Eng. Abstr.) **(Ger)**

[Craniocerebral imaging in children with short stature] Barros L, et al. **Acta Med Port** 1997 May;10(5):361–5 (Eng. Abstr.) **(Por)**

[Analysis of x–ray manifestations and changes in dysplastic lesions of the skull bones] Rabukhina NA, et al. **Vestn Rentgenol Radiol** 1996 Nov–Dec;(6):19–22 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Abnormal skull uptake on bone scan. Ackerman L, et al. **Semin Nucl Med** 1997 Apr;27(2):190–3 (46 ref.)

SURGERY

A stable positioning for patients requiring large calvarial exposure for surgical correction of cranial synostosis. Behnke J, et al. **Acta Neurochir (Wien)** 1996; 138(9):1099–101; discussion 1101–2

Presigmoid approaches to skull base lesions. Lawton MT, et al. **Adv Tech Stand Neurosurg** 1997;23:189–204 (28 ref.)

Transfacial approaches to the skull base. Uttley D. **Adv Tech Stand Neurosurg** 1997;23:145–88 (77 ref.)

Ectopic cranium: postoperative abdominal wall skull fragments [letter] Marlow TJ, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1201

Computer–assisted intraoperative navigation during skull base surgery. Carrau RL, et al. **Am J Otolaryngol** 1996 Mar–Apr;17(2):95–101 (20 ref.)

Effect of craniectomy, durotomy, and wound closure on intracranial pressure in healthy cats. Harrington ML, et al. **Am J Vet Res** 1996 Nov;57(11):1659–61

The effect of skull–pin insertion on cerebrospinal fluid pressure and cerebral perfusion pressure: influence of sufentanil and fentanyl. Jamali S, et al. **Anesth Analg** 1997 Jun;84(6):1292–6

Computed tomography artifacts associated with craniofacial fixation devices: an experimental study. Anastakis DJ, et al. **Ann Plast Surg** 1996 Oct;37(4):349–55

Management of an extensive cervicofacial lymphovenous malformation of the maxillofacial region. DeLuca L, et al. **Ann Plast Surg** 1996 Jun;36(6):644–8

Microvascular reconstruction of complex craniofacial defects. Aspoas AR, et al. **Ann R Coll Surg Engl** 1997 Jul; 79(4):278–83

Paediatric craniofacial surgery: historical perspectives, recent advancements and refinements. Posnick JC. **Br J Oral Maxillofac Surg** 1995 Dec;33(6):343–61 (88 ref.)

Titanium mesh and bone dust calvarial patch during cranioplasty. O'Broin ES, et al. **Cleft Palate Craniofac J** 1997 Jul;34(4):354–6

The craniofacial dysostosis syndromes. Staging of reconstruction and management of secondary deformities. Posnick JC. **Clin Plast Surg** 1997 Jul;24(3):429–46 (43 ref.)

Secondary craniofacial management following initial correction of nonsyndromic craniosynostosis. Shin JH, et al. **Clin Plast Surg** 1997 Jul;24(3):415–28 (26 ref.)

Intracranial epidural abscess: late complication of allograft cranioplasty. Morioka T, et al. **Fukuoka Igaku Zasshi** 1996 Feb;87(2):57–9

An automatic technique for finding and localizing externally attached markers in CT and MR volume images of the head. Wang MY, et al. **IEEE Trans Biomed Eng** 1996 Jun; 43(6):627–37

Guided tissue regeneration and local delivery of insulinlike growth factor I by bioerodible polyorthoester membranes in rat calvarial defects. Busch O, et al. **Int J Oral Maxillofac Implants** 1996 Jul–Aug;11(4):498–505

Osteoinductive potential of freeze–dried, biodegradable, poly (glycolic acid–co–lactic acid) disks incorporated with bone morphogenetic protein in skull defects of rats. Miki T, et al. **Int J Oral Maxillofac Surg** 1996 Oct;25(5):402–6

Ultrastructural identification of cells involved in the healing of intramembranous and endochondral bones. Rabie AB, et al. **Int J Oral Maxillofac Surg** 1996 Oct;25(5):383–8

Repair of human skull defects using osteoinductive bone alloimplants. Kübler N, et al. **J Craniomaxillofac Surg** 1995 Dec;23(6):337–46

Anatomical considerations of high jugular bulb in lateral skull base surgery. Aslan A, et al. **J Laryngol Otol** 1997 Apr; 111(4):333–6

Skull base surgery in Prasat Neurological Institute. Panichavatana S, et al. **J Med Assoc Thai** 1995 Dec; 78(12):648–55

Impression technique for nonosseous free–tissue transfer reconstruction after cranioorbitomaxillary resection: A clinical report. Dumbrigue HB, et al. **J Prosthet Dent** 1996 Jul;76(1):4–7

Craniectomy: an aggressive treatment approach in severe encephalitis. Schwab S, et al. **Neurology** 1997 Feb; 48(2):412–7

Epidermoid tumor of the occipital bone. Kuzeyli K, et al. **Neurosurg Rev** 1996;19(2):109–12

Galeal flap: clinical application in periorbital and orbital reconstruction. Liu D, et al. **Ophthal Plast Reconstr Surg** 1996 Dec;12(4):273–8

Reconstruction of midfacial and anterior skull–base defects. Hochman M. **Otolaryngol Clin North Am** 1995 Dec; 28(6):1269–77 (13 ref.)

Midfacial degloving for the management of nasal, sinus, and skull–base neoplasms. Maniglia AJ, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1127–43

Outcome analysis of the transglabellar/subcranial approach for lesions of the anterior cranial fossa: a comparison with the classic craniotomy approach. Jung TM, et al. **Otolaryngol Head Neck Surg** 1997 Jun;116(6 Pt 1):642–6

Refinement in cranial bone graft harvesting [letter] Cavadas PC. **Plast Reconstr Surg** 1997 Apr;99(4):1196

Detection of titanium in human tissues after craniofacial surgery. Jorgenson DS, et al. **Plast Reconstr Surg** 1997 Apr; 99(4):976–9; discussion 980–1

Long–term outcome of extensive skull reconstruction using demineralized perforated bone in Siamese twins joined at the skull vertex. Salyer KE, et al. **Plast Reconstr Surg** 1997 May;99(6):1721–6

Arterialized occipitoparietal osteocutaneous flap. Yoshioka N, et al. **Plast Reconstr Surg** 1997 Feb;99(2):543–6

Repeated bone repositioning in the growing rabbit calvarium hampers bone segment incorporation. Zellin G, et al. **Plast Reconstr Surg** 1997 Sep;100(3):619–26

Onlay bone graft behaviour after marrow exposure of the recipient rat skull bone. Alberius P, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Dec; 30(4):257–66

Eikenella corrodens skull infection: a case report with review of the literature. Arana E, et al. **Surg Neurol** 1997 Apr; 47(4):389–91 (9 ref.)

Osteopromotion for cranioplasty: an experimental study in rats using acidic fibroblast growth factor. Cuevas P, et al. **Surg Neurol** 1997 Mar;47(3):242–6

Cranioplasty: cosmetic or therapeutic? Dujovny M, et al. **Surg Neurol** 1997 Mar;47(3):238–41 (23 ref.)

Symptomatic patients after craniectomy. Schiffer J, et al. **Surg Neurol** 1997 Mar;47(3):231–7 (22 ref.)

[Do corticotherapy and hemodilution decrease postoperative inflammation after maxillofacial surgery?] Peillon D, et al. **Ann Fr Anesth Reanim** 1996;15(2):157–61 (Eng. Abstr.) **(Fre)**

[Osteoplastic surgery of the frontal sinus: indications, procedures and results apropos of 75 cases] Weber R, et al. **Rev Laryngol Otol Rhinol (Bord)** 1997;118(2):91–4 (Eng. Abstr.) **(Fre)**

[Clinical assessment of calvarial reconstruction with autogenic bone graft or implants of acrylate and polypropylene–polyester knitted fabric] Zieliński A, et al. **Neurol Neurochir Pol** 1996 Nov–Dec;30(6):981–94; discussion 995 (Eng. Abstr.) **(Pol)**

[Craniomaxillofacial fibrous dysplasias] Kowalik S, et al. **Otolaryngol Pol** 1996;50(3):263–71 (Eng. Abstr.) **(Pol)**

[Endoprosthesis of the cranium and facial skull with perforated plates made of titanium] Bel'chenko VA, et al. **Stomatologiia (Mosk)** 1996;75(2):52–4 (Eng. Abstr.) **(Rus)**

SKULL

TRANSPLANTATION

Use of frozen cranial vault bone allografts in the repair of extensive cranial bone defects. Vanaclocha V, et al. **Acta Neurochir (Wien)** 1997;139(7):653–60

ULTRASONOGRAPHY

Comparison between observation of spontaneous movements and neurologic examination in preterm infants [see comments] Cioni G, et al. **J Pediatr** 1997 May; 130(5):704–11. Comment in: J Pediatr 1997 May;130(5):683–4.

Neurodevelopmental outcome of Malaysian very low birth weight infants: predictive value of cranial ultrasound appearances. Ong LC, et al. **Singapore Med J** 1997 Mar; 38(3):108–11

A comparative analysis of second–trimester ultrasound dating formulae in pregnancies conceived with artificial reproductive techniques. Mul T, et al. **Ultrasound Obstet Gynecol** 1996 Dec;8(6):397–402

SKULL BASE

Massive osteolysis of the skull base. Frankel DG, et al. **Pediatr Radiol** 1997 Mar;27(3):265–7

Primary eosinophilic granuloma invading the skull base: case report and critical review of the literature. Lunardi P, et al. **Tumori** 1996 Jul–Aug;82(4):397–400 (20 ref.)

ABNORMALITIES

The craniocervical junction in man, the osseous variations, their significance and differential diagnosis. Prescher A. **Anat Anz** 1997 Feb;179(1):1–19 (208 ref.)

Occult malformations of the skull base. Schick B, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jan;123(1):77–80

Thin–plate spline analysis of the cranial base in subjects with Class III malocclusion. Singh GD, et al. **Eur J Orthod** 1997 Aug;19(4):341–53

Inadvertent intracranial insertion of a nasogastric tube in a non–trauma patient. Freij RM, et al. **J Accid Emerg Med** 1997 Jan;14(1):45–7

Congenital encephalocele of the medial skull base. Mulcahy MM, et al. **Laryngoscope** 1997 Jul;107(7):910–4

Etretinate–induced malformation of the first two branchial arches: differential staining and microdissection study of embryonic cartilage. Jacobsson C, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 May–Jun; 59(3):147–54

ANATOMY & HISTOLOGY

The craniocervical junction in man, the osseous variations, their significance and differential diagnosis. Prescher A. **Anat Anz** 1997 Feb;179(1):1–19 (208 ref.)

Neurocranial morphology as determined by asymmetries of the skull base. Gözil R, et al. **J Anat** 1996 Dec;189 (Pt 3):673–5

Microsurgical anatomy of the transcondylar, supracondylar, and paracondylar extensions of the far–lateral approach. Wen HT, et al. **J Neurosurg** 1997 Oct;87(4):555–85

Sella–Nasion line revisited. Sarhan OA. **J Oral Rehabil** 1995 Dec;22(12):905–8

Microsurgical anatomy of the infratemporal fossa as viewed laterally and superiorly. Vrionis FD, et al. **Neurosurgery** 1996 Oct;39(4):777–85; discussion 785–6

[A method for the topographic anatomical study of the fourth ventricle in relation to the structures of the cranial base and vault] Dobrovol'skiĭ GF. **Morfologiia** 1997; 111(1):98–100 **(Rus)**

BLOOD SUPPLY

Dural arteriovenous fistula at the craniocervical junction with perimedullary venous drainage. Mascalchi M, et al. **AJNR Am J Neuroradiol** 1996 Jun–Jul;17(6):1137–41

EMBRYOLOGY

Prenatal development of cranial base in normal Korean fetuses. Lee SK, et al. **Anat Rec** 1996 Dec;246(4):524–34

[Histological study of synchondroses and of the nasal capsule in the human fetal cranium] Caltabiano C, et al. **Minerva Stomatol** 1996 Oct;45(10):441–9 (Eng. Abstr.) **(Ita)**

GROWTH & DEVELOPMENT

The developing anterior skull base: CT appearance from birth to 2 years of age. Belden CJ, et al. **AJNR Am J Neuroradiol** 1997 May;18(5):811–8

The role of the cranial base in facial growth: experimental craniofacial synostosis in the rabbit. Rosenberg P, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1396–407

INJURIES

Fractures at the base of the skull in gunshots to the head. Betz P, et al. **Forensic Sci Int** 1997 May 5;86(3):155–61

Fractures of the base of the skull in charred bodies—post–mortem heat injuries or signs of mechanical traumatisation? Bohnert M, et al. **Forensic Sci Int** 1997 May 23;87(1):55–62

Superior dislocation of mandibular condyle into the middle cranial fossa. A case report. Long X, et al. **Int J Oral Maxillofac Surg** 1997 Feb;26(1):29–30

Are fractures of the base of the skull influenced by the mass of the protective helmet? A retrospective study in fatally injured motorcyclists. Konrad CJ, et al. **J Trauma** 1996 Nov;41(5):854–8

Craniocervical bone pneumatisation. Sadler DJ, et al. **Neuroradiology** 1996 May;38(4):330–2

Diagnosis and treatment of frontobasal skull fractures. Kral T, et al. **Neurosurg Rev** 1997;20(1):19–23

[Management of frontobasal fractures: an interdisciplinary challenge (editorial)] Krier C, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Feb; 32(2):69–71 **(Ger)**

[Post–traumatic cerebrospinal rhinorrhea] Spangenberg P, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Feb;32(2):105–8 (Eng. Abstr.) **(Ger)**

[Antibiotic prophylaxis in laterobasal fractures (see comments)] Steidtmann K, et al. **HNO** 1997 Jun; 45(6):448–52 (Eng. Abstr.). Comment in: HNO 1997 Jun;45(6):421–3. **(Ger)**

[Trauma to the anterior cranial base. Report of a case] Spallaccia F, et al. **Minerva Stomatol** 1996 Jun;45(6):289–93 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Wegener granulomatosis of the eustachian tube and skull base mimicking a malignant tumor. Helmberger RC, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1785–90

Wegener's granulomatosis of the skull base. Andrews JT, et al. **Am J Otolaryngol** 1996 Sep–Oct;17(5):349–52

Finite element analysis of the cranial base in subjects with Class III malocclusion. Singh GD, et al. **Br J Orthod** 1997 May;24(2):103–12

Allergic fungal sinusitis with cranial base erosion. Kinsella JB, et al. **Head Neck** 1996 May–Jun;18(3):211–7

Morphometry of the cranial base in subjects with Class III malocclusion. Singh GD, et al. **J Dent Res** 1997 Feb; 76(2):694–703

Osteoblastoma of the nasal cavity invading the anterior skull base in a young child. Case report. Imai K, et al. **J Neurosurg** 1997 Oct;87(4):625–8 (9 ref.)

Skull base osteomyelitis. Malignant external otitis. Slattery WH 3rd, et al. **Otolaryngol Clin North Am** 1996 Oct; 29(5):795–806 (30 ref.)

Intracranial route of a cervical neuroblastoma through skull base foramina. Goldberg RM, et al. **Pediatr Radiol** 1996 Oct;26(10):715–6

[Skull base aspergillosis granuloma originating from the sphenoid sinus: a case report] Yamamoto H, et al. **No Shinkei Geka** 1997 May;25(5):433–6 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

The developing anterior skull base: CT appearance from birth to 2 years of age. Belden CJ, et al. **AJNR Am J Neuroradiol** 1997 May;18(5):811–8

Image–interactive orientation in the middle cranial fossa approach to the internal auditory canal: an experimental study. Vrionis FD, et al. **Comput Aided Surg** 1997; 2(1):34–41

Allergic fungal sinusitis with cranial base erosion. Kinsella JB, et al. **Head Neck** 1996 May–Jun;18(3):211–7

Chondrosarcoma of the anterior cranial fossa. Report of two cases. Spallone A, et al. **J Neurosurg Sci** 1996 Jun; 40(2):115–20

SURGERY

Aneurysms of the vertebro–basilar junction area: preliminary experience in endovascular and surgical management. Collice M, et al. **Acta Neurochir (Wien)** 1997;139(2):124–33

Multilayer reconstruction of the middle cranial fossa floor. Goel A. **Acta Neurochir (Wien)** 1996;138(5):584–9

The orbitozygomatic infratemporal fossa approach: a quantitative anatomical study. Honeybul S, et al. **Acta Neurochir (Wien)** 1996;138(3):255–64

Endoscopic transsphenoidal resection of a large chordoma in the posterior fossa. Jho HD, et al. **Acta Neurochir (Wien)** 1997;139(4):343–7; discussion 347–8

Control of complications in the midfrontobasal approach. van Dijk JM, et al. **Acta Neurochir (Wien)** 1997;139(4):355–7; discussion 357–8

Hydroxyapatite cement to repair skull base defects: radiologic appearance. Weissman JL, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1569–74

Neurotologic skull base surgery [editorial] Leonetti JP. **Am J Otol** 1997 Jan;18(1):1

Resection of bilateral orbital and cranial base basal cell carcinoma with preservation of vision. Behmand RA, et al. **Ann Plast Surg** 1996 Jun;36(6):637–40

The surgical management of patients with glomus tumours of the skull base [see comments] Whitfield PC, et al. **Br J Neurosurg** 1996 Aug;10(4):343–50. Comment in: Br J Neurosurg 1997 Jun;11(3):265.

Galeo–pericranial flaps in the forehead: a study of blood supply and volumes. Potparić Z, et al. **Br J Plast Surg** 1996 Dec;49(8):519–28

Innovations in surgical approach: lateral cranial base approaches. Day JD, et al. **Clin Neurosurg** 1996;43:72–90 (29 ref.)

Anterior midline approaches to the central skull base. Harsh GR 4th, et al. **Clin Neurosurg** 1996;43:15–43 (41 ref.)

Transpetrosal and combination approaches to skull base lesions. Lawton MT, et al. **Clin Neurosurg** 1996;43:91–112 (29 ref.)

Innovations in cranial approaches and exposures: anterolateral approaches. Van Loveren HR, et al. **Clin Neurosurg** 1996;43:44–52 (26 ref.)

Secondary craniofacial problems following skull base surgery. Beals SP, et al. **Clin Plast Surg** 1997 Jul; 24(3):565–81 (45 ref.)

Infratemporal approaches to nasopharyngeal tumors. Suárez C, et al. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S165–8

Wide reconstruction of the anterior cranial base with bipedicled galeopericranial flap. Terashi H, et al. **Head Neck** 1996 May–Jun;18(3):292–4

Visual evoked potentials in endoscopic and anterior skull base surgery: a review. Jones NS. **J Laryngol Otol** 1997 Jun; 111(6):513–6 (33 ref.)

Intra–operative facial nerve monitoring. Its predictive value after skull base surgery. Magliulo G, et al. **J Laryngol Otol** 1997 Aug;111(8):715–8

Cranial base approaches to posterior circulation aneurysms. Day JD, et al. **J Neurosurg** 1997 Oct;87(4):544–54

Surgical management of deep–seated dural arteriovenous malformations. Lewis AI, et al. **J Neurosurg** 1997 Aug; 87(2):198–206

Surgical exposure of the petrous internal carotid artery: practical application for skull base surgery. Dew LA, et al. **Laryngoscope** 1997 Jul;107(7):967–76

Glabellar approach: simplified midline anterior skull base approach. Jho HD, et al. **Minim Invasive Neurosurg** 1997 Jun;40(2):62–7

Splitting of temporalis muscle for basal exposure—technical note. Goel A. **Neurol Med Chir (Tokyo)** 1997 Jan; 37(1):59–62

Eosinophilic granuloma of the clivus: case report, follow–up of two previously reported cases, and review of the literature on cranial base eosinophilic granuloma. Brisman JL, et al. **Neurosurgery** 1997 Jul;41(1):273–8; discussion 278–9 (43 ref.)

Update on skull base surgery. Chang CY, et al. **Otolaryngol Clin North Am** 1996 Jun;29(3):467–501 (86 ref.)

Middle cranial fossa surgery with image–guided instrumentation. Sargent EW, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):131–4

Application of the skull base technique to the repair of transsphenoidal meningoencephaloceles. Kai Y, et al. **Pediatr Neurosurg** 1996 Jul;25(1):54–6

Philosophy of skull base surgery: a lecture by Dr. Madjid Samii Lima, Peru; July 2, 1995. Ausman JI. **Surg Neurol** 1997 Feb;47(2):154–5

[The facial approach to the median structures of the skull base] Beziat JL, et al. **Rev Stomatol Chir Maxillofac** 1997 Sep;98(3):183–206 (91 ref.) (Eng. Abstr.) **(Fre)**

[Dissection of the cranial base en bloc with the infratemporal fossa] Belli E, et al. **Minerva Stomatol** 1997 Mar;46(3):79–86 (Eng. Abstr.) **(Ita)**

[Single stage excision for an intractable brain abscess and free rectus abdominis flap for reconstruction of the anterior skull base] Katoh M, et al. **No Shinkei Geka** 1997 May; 25(5):461–5 (Eng. Abstr.) **(Jpn)**

[Report on 2nd International Conference of Neurosurgery of Acoustic Nerve and 2nd Congress of the Society of Skull Surgery] Pietruski J. **Otolaryngol Pol** 1996; 50(1):106–11 **(Pol)**

[Reconstruction of the anterior cranial base with a frontal muscle flap in cerebrospinal fluid fistulae] Costa H, et al. **Acta Med Port** 1997 Jan;10(1):19–26 (Eng. Abstr.) **(Por)**

SKULL BASE NEOPLASMS

COMPLICATIONS

Herpes simplex meningitis after surgical removal of a clivus chordoma [letter] [published erratum appears in Eur J Clin Microbiol Infect Dis 1997 Jun;16(6):481] Najioullah F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):327–8

Torticollis secondary to posterior fossa tumors. Gupta AK, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):505–7

DIAGNOSIS

Use of preoperative MR to predict dural, perineural, and venous sinus invasion of skull base tumors. Eisen MD, et al. **AJNR Am J Neuroradiol** 1996 Nov–Dec;17(10):1937–45

Wegener granulomatosis of the eustachian tube and skull base mimicking a malignant tumor. Helmberger RC, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1785–90

Adenosquamous carcinoma of the facial bones, skull base, and calvaria: CT and MR manifestations. Som PM, et al. **AJNR Am J Neuroradiol** 1997 Jan;18(1):173–5

Wegener's granulomatosis of the skull base. Andrews JT, et al. **Am J Otolaryngol** 1996 Sep–Oct;17(5):349–52

Clivus chordoma. Radner G, et al. **Del Med J** 1997 Sep; 69(9):467–9

Imaging of the skull base. Weber AL. **Eur J Radiol** 1996 Mar;22(1):68–81 (68 ref.)

Trigeminal neuralgia and contralateral mass [letter; comment] Cappabianca P, et al. **J Neurosurg** 1997 Jan;86(1):171–2. Comment on: J Neurosurg 1996 Jun;84(6):1067–71.

Pediatric neurotologic skull base surgery. Jackson CG, et al. **Laryngoscope** 1996 Oct;106(10):1205–9

MRI of intracranial chordomas. Extent of tumour and contrast enhancement: criteria for differential diagnosis. Doucet V, et al. **Neuroradiology** 1997 Aug;39(8):571–6

Maffucci's syndrome associated with a cranial base chondrosarcoma: case report and literature review. Ramina R, et al. **Neurosurgery** 1997 Jul;41(1):269–72 (28 ref.)
Transbasal nasal polyposis masquerading as a skull base malignancy. Hao SP, et al.
Otolaryngol Head Neck Surg 1996 Dec;115(6):556–9
Pituitary prolactinoma mimicking tumor originating from the sphenoid sinus or clivus. Masui T, et al. **Radiat Med** 1996 Jul–Aug;14(4):189–91
Chondrosarcoma of the skull base: CT, MR and pathological features. Maleux G, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1996 Dec;165(6):599–601
[Chondroma of the petrous bone. A contribution to differential skull base tumor diagnosis] Tisch M, et al.
Laryngorhinootologie 1997 Jun;76(6):371–3 (Eng. Abstr.) **(Ger)**
[A case of dermoid cyst in the posterior fossa with dermal sinus] Yoshida K. **No To Shinkei** 1997 Apr;49(4):390 **(Jpn)**

GENETICS

Loss of heterozygosity in the retinoblastoma tumor suppressor gene in skull base chordomas and chondrosarcomas. Eisenberg MB, et al. **Surg Neurol** 1997 Feb;47(2):156–60; discussion 160–1

MORTALITY

Why is female sex an independent predictor of shortened overall survival after proton/photon radiation therapy for skull base chordomas? Halperin EC.
Int J Radiat Oncol Biol Phys 1997 May 1;38(2):225–30 (48 ref.)

PATHOLOGY

Wegener's granulomatosis of the skull base. Andrews JT, et al. **Am J Otolaryngol** 1996 Sep–Oct;17(5):349–52
Salivary gland–like tumors of the sellar region. Hampton TA, et al. **Am J Surg Pathol** 1997 Apr;21(4):424–34
Local invasivity of glioblastoma multiforme with destruction of skull bone. Case report and review of the literature. Rainov NG, et al. **Neurosurg Rev** 1996;19(3):183–8
Mesenchymal chondrosarcoma in anterior skull base: case report. Sugiyama K, et al. **Noshuyo Byori** 1996 Apr; 13(1):57–60
Mass in the infratemporal fossa [clinical conference] Todd R, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 Aug;84(2):116–8
[A clinicopathological and immunohistochemical study of 34 cases of chordoma] Hu Y, et al.
Chung Hua Ping Li Hsueh Tsa Chih 1996 Jun;25(3):142–4 (Eng. Abstr.) **(Chi)**
[Dedifferentiated (sarcomatoid) chordoma in the base of the skull. Report of a case] Losi L, et al. **Pathologica** 1996 Dec;88(6):514–8 (25 ref.) (Eng. Abstr.) **(Ita)**
[En bloc resection of the temporal bone for middle ear carcinoma extending to the cranial base] Somekawa Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jul;100(7):782–9 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Neuropsychological function in adults after high dose fractionated radiation therapy of skull base tumors. Glosser G, et al. **Int J Radiat Oncol Biol Phys** 1997 May 1; 38(2):231–9
[The early postoperative period in patients with tumors of the posterior cranial fossa] Bragina NN, et al.
Zh Nevropatol Psikhiatr Im S S Korsakova 1997;97(2):10–4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Clinical relevance of somatostatin receptor scintigraphy in patients with skull base tumours. Luyken C, et al.
Acta Neurochir Suppl (Wien) 1996;65:102–4

RADIOTHERAPY

Why is female sex an independent predictor of shortened overall survival after proton/photon radiation therapy for skull base chordomas? Halperin EC.
Int J Radiat Oncol Biol Phys 1997 May 1;38(2):225–30 (48 ref.)
Results of a prospective randomized trial comparing standard dose neuraxis irradiation (3,600 cGy/20) with reduced neuraxis irradiation (2,340 cGy/13) in patients with low-stage medulloblastoma. A Combined Children's Cancer Group–Pediatric Oncology Group Study. Deutsch M, et al. **Pediatr Neurosurg** 1996;24(4):167–176; discussion 176–7
Hyperfractionated craniospinal radiation in medulloblastoma. Marymont MH, et al. **Pediatr Neurosurg** 1996;24(4):178–84

SECONDARY

Skull base metastases causing acute bilateral hypoglossal nerve palsy. Rotta FT, et al. **J Neurol Sci** 1997 May 1; 148(1):127–9
[Skull base metastasis from renal cell carcinoma presenting as abducens nerve paresis: report of two cases] Sagoh M, et al. **No Shinkei Geka** 1996 Sep;24(9):829–33 (Eng. Abstr.) **(Jpn)**

SURGERY

Multilayer reconstruction of the middle cranial fossa floor. Goel A. **Acta Neurochir (Wien)** 1996;138(5):584–9
A combined reverse temporalis muscle flap and pericranial flap for reconstruction of an anterior cranial base defect: a case report. Atabey A, et al. **Ann Plast Surg** 1997 Aug; 39(2):190–2
Management of the orbit during anterior fossa craniofacial resection. Andersen PE, et al.
Arch Otolaryngol Head Neck Surg 1996 Dec;122(12):1305–7
Computer-assisted resection of benign sinonasal tumors with skull base and orbital extension. Senior BA, et al.
Arch Otolaryngol Head Neck Surg 1997 Jul;123(7):706–11
The surgical management of osseous cranial base tumours in children. Holmes AD, et al. **Aust N Z J Surg** 1997 Oct; 67(10):722–30
Glomus tumours of the skull base [letter; comment] Whitfield PC, et al. **Br J Neurosurg** 1997 Jun;11(3):265. Comment on: Br J Neurosurg 1996 Aug;10(4):343–50.
The surgical management of patients with glomus tumours of the skull base [see comments] Whitfield PC, et al.
Br J Neurosurg 1996 Aug;10(4):343–50. Comment in: Br J Neurosurg 1997 Jun;11(3):265.
Approaches and reconstruction in skull base operation. Peng Z, et al. **Chin Med J (Engl)** 1996 Sep;109(9):700–4
Hemifacial degloving approach to tumours in the infratemporal and pterygopalatine fossae: a preliminary report. Hirano A, et al. **J Craniomaxillofac Surg** 1996 Oct; 24(5):285–8
Craniofacial osteotomies to facilitate resection of large tumours of the anterior skull base. Tzortzidis F, et al.
J Craniomaxillofac Surg 1996 Aug;24(4):224–9
Surgical treatment of anterior basal meningiomas. DeMonte F. **J Neurooncol** 1996 Sep;29(3):239–48 (31 ref.)
Petroclival and foramen magnum meningiomas: surgical approaches and pitfalls. Sekhar LN, et al. **J Neurooncol** 1996 Sep;29(3):249–59 (22 ref.)
Endoscopic endonasal transsphenoidal surgery: experience with 50 patients. Jho HD, et al. **J Neurosurg** 1997 Jul; 87(1):44–51
Skull base chordomas: a management challenge. al-Mefty O, et al. **J Neurosurg** 1997 Feb;86(2):182–9
Fronto-ethmoidal and orbital osteomas with intracranial extension. Report of two cases. Maiuri F, et al.
J Neurosurg Sci 1996 Mar;40(1):65–70 (24 ref.)
Cerebellar mutism after posterior cranial fossa surgery. Salvati M, et al. **J Neurosurg Sci** 1996 Mar;40(1):59–63 (21 ref.)
Pediatric neurotologic skull base surgery. Jackson CG, et al. **Laryngoscope** 1996 Oct;106(10):1205–9
Hemifacial dismasking flap for anterior skull base tumor—technical note. Kyutoku S, et al.
Neurol Med Chir (Tokyo) 1996 Sep;36(9):666–9; discussion 669–70
Craniopharyngioma extended into the posterior fossa. Sarioğlu AC, et al. **Neurosurg Rev** 1996;19(4):265–7
Anterior transcranial (craniofacial) resection of tumors of the paranasal sinuses: surgical technique and results [letter; comment] Goel A. **Neurosurgery** 1997 Jan;40(1):218–9; discussion 219–20. Comment on: Neurosurgery 1996 Mar;38(3):471–9; discussion 479–80.
Meningeal architecture of the cavernous sinus: clinical and surgical implications. Kawase T, et al. **Neurosurgery** 1996 Sep;39(3):527–34; discussion 534–6
Anterior transcranial (craniofacial) resection of tumors of the paranasal sinuses: surgical technique and results [letter; comment] Kaye AH. **Neurosurgery** 1997 Jan;40(1):219; discussion 219–20. Comment on: Neurosurgery 1996 Mar;38(3):471–9; discussion 479–80.
Update on skull base surgery. Chang CY, et al.
Otolaryngol Clin North Am 1996 Jun;29(3):467–501 (86 ref.)
Outcome analysis of the transglabellar/subcranial approach for lesions of the anterior cranial fossa: a comparison with the classic craniotomy approach. Jung TM, et al.
Otolaryngol Head Neck Surg 1997 Jun;116(6 Pt 1):642–6
Surgical approach to midline skull base tumors with olfactory preservation. Fukuta K, et al. **Plast Reconstr Surg** 1997 Aug;100(2):318–25
Gamma Knife radiosurgery in skull base meningiomas. Preliminary experience with 50 cases. Nicolato A, et al.
Stereotact Funct Neurosurg 1996;66 Suppl 1:112–20
[Possible indications for temporalis muscle flaps in plastic-reconstructive surgery of the head and neck] Schick B, et al. **Laryngorhinootologie** 1997 Apr;76(4):235–40 (Eng. Abstr.) **(Ger)**
[A simple technique for reconstruction of anterior and middle cranial base after palliative tumor resection] Piek J.
Zentralbl Neurochir 1997;58(2):61–5 (Eng. Abstr.) **(Ger)**
[Cranial base surgery] Pomeranz S, et al. **Harefuah** 1996 Nov 15;131(10):377–81, 456 (Eng. Abstr.) **(Heb)**
[Surgical approach to cranial base and craniofacial tumors] Nowak S, et al. **Neurol Neurochir Pol** 1997 Jan–Feb; 31(1):169–79 (Eng. Abstr.) **(Pol)**
[Report on 2nd International Conference of Neurosurgery of Acoustic Nerve and 2nd Congress of the Society of Skull Surgery] Pietruski J. **Otolaryngol Pol** 1996; 50(1):106–11 **(Pol)**
[A craniofacial approach to disseminated tumors of the anterior portions of the cranial base] Cherekaev VA, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Jan–Mar; (1):35–8 (Eng. Abstr.) **(Rus)**

THERAPY

Preoperative embolization of anastomoses of the jugular bulb: an adjuvant in jugular foramen surgery. Carrier DA, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1252–6
Combined irradiation and chemotherapy using ifosfamide, cisplatin, and etoposide for children with medulloblastoma/posterior fossa primitive neuroectodermal tumor—results of a pilot study. Sawamura Y, et al. **Neurol Med Chir (Tokyo)** 1996 Sep;36(9):632–8

SKULL FRACTURES

Trends in the aetiology of facial fractures in the south of Ireland (1975–1993). Carroll SM, et al. **Ir Med J** 1996 Sep–Oct;89(5):188–9
Diagnosis and management of nasal trauma for primary care physicians. Hester TO, et al. **J Ky Med Assoc** 1997 Sep; 95(9):386–92
Penetrating cranio-cerebral injuries. Buxton N.
J R Army Med Corps 1997 Jun;143(2):112–4 (34 ref.)
Frontal sinus fractures. Ginsburg CM. **Pediatr Rev** 1997 Apr; 18(4):120–1

CEREBROSPINAL FLUID

[THe characteristics of the biochemical reactions of the cerebrospinal fluid in victims with gunshot wounds of the skull and brain in relation to treatment outcome] Khil'ko VA, et al. **Vestn Khir Im I I Grek** 1996;155(5):46–9 (Eng. Abstr.) **(Rus)**
[The immunological and biochemical reactions of the cerebrospinal fluid in victims of blast injuries of the skull and brain] Khil'ko VA, et al. **Vestn Khir Im I I Grek** 1995; 154(4–6):54–5 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

The forgotten condyle: the appearance, morphology, and classification of occipital condyle fractures. Noble ER, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):507–13
Temporal bone fractures inducing facial nerve paralysis: a new classification and its clinical significance [see comments] Yanagihara N, et al. **Ear Nose Throat J** 1997 Feb;76(2):79–80, 83–6 (10 ref.). Comment in: Ear Nose Throat J 1997 Feb;76(2):64.
Frontal basilar trauma: classification and treatment. Burstein F, et al. **Plast Reconstr Surg** 1997 Apr;99(5):1314–21; discussion 1322–3

COMPLICATIONS

Cervical spine injury complicating facial trauma: incidence and management. Merritt RM, et al. **Am J Otolaryngol** 1997 Jul–Aug;18(4):235–8
Magnetic resonance imaging of traumatic transection of the optic chiasm. De Nunzio M, et al. **Australas Radiol** 1997 May;41(2):155–6
Traumatic cerebrospinal fluid leakage: risk factors and the use of prophylactic antibiotics. Choi D, et al.
Br J Neurosurg 1996 Dec;10(6):571–5
Should patients with facial fractures be regarded as high risk for HIV? Crosher RF, et al.
Br J Oral Maxillofac Surg 1997 Feb;35(1):59–63
Facial palsy from temporal bone fracture [editorial; comment] Pulec JL. **Ear Nose Throat J** 1997 Feb;76(2):64. Comment on: Ear Nose Throat J 1997 Feb;76(2):79–80; 83–6.
Temporal bone fractures inducing facial nerve paralysis: a new classification and its clinical significance [see comments] Yanagihara N, et al. **Ear Nose Throat J** 1997 Feb;76(2):79–80, 83–6 (10 ref.). Comment in: Ear Nose Throat J 1997 Feb;76(2):64.
Bilateral traumatic abducens palsy as a complication of a frontal-nasal-orbital-ethmoidal fracture. Celiköz B, et al.
J Oral Maxillofac Surg 1996 Dec;54(12):1471–4
Early onset of leptomeningeal cyst with severe brain herniation: report of two cases. Wang J, et al.
Neuropediatrics 1997 Jun;28(3):184–8
Sagittal sinus occlusion, caused by an overlying depressed cranial fracture, presenting with late signs and symptoms of intracranial hypertension: case report. van den Brink WA, et al. **Neurosurgery** 1996 May;38(5):1044–6
Skull fractures in infants and predictors of associated intracranial injury. Shane SA, et al. **Pediatr Emerg Care** 1997 Jun;13(3):198–203
A case of gustatory rhinorrhoea. Franceschini SS, et al.
Rhinology 1997 Mar;35(1):41–3 (15 ref.)
Onset of uncomplicated cerebrospinal fluid fistula 27 years after head injury: case report. Salca HC, et al.
Surg Neurol 1997 Feb;47(2):132–3
[Restoration of vision after surgical treatment of traumatic optic neuropathy of an uncommon type. Case report and literature review] Haninec P, et al. **Cesk Slov Oftalmol** 1996 Sep;52(4):249–52 (15 ref.) (Eng. Abstr.) **(Cze)**

DIAGNOSIS

Evaluation and management of facial fractures. Carithers JS, et al. **Am Fam Physician** 1997 Jun;55(8):2675–82 (10 ref.)
Traumatic chiasmal syndrome: a feature photograph. Goh KY, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):614–5
Infants with isolated skull fracture: what are their clinical characteristics, and do they require hospitalization?

Greenes DS, et al. **Ann Emerg Med** 1997 Sep;30(3):253–9

Penetrating head injury caused by chopstick--case report. Kawamura S, et al. **Neurol Med Chir (Tokyo)** 1997 Apr; 37(4):332–5

Occipital condyle fractures. Tuli S, et al. **Neurosurgery** 1997 Aug;41(2):368–76; discussion 376–7 (42 ref.)

Current perspective on temporal bone trauma. Nosan DK, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):67–71

The value of MRI in the early diagnosis of growing skull fracture. Husson B, et al. **Pediatr Radiol** 1996 Oct; 26(10):744–7

Growing fracture of the orbital roof. Jamjoom ZA. **Surg Neurol** 1997 Aug;48(2):184–8 (15 ref.)

[Ischemic brain infarct, petrous bone fracture (letter)] Heidenreich P. **Dtsch Med Wochenschr** 1996 Nov 15; 121(46):1448 **(Ger)**

[Ischemic brain infarct, petrous bone fracture (letter)] von Kummer R. **Dtsch Med Wochenschr** 1996 Nov 15; 121(46):1447–8 **(Ger)**

DRUG THERAPY

Heparan-like molecules induce the repair of skull defects. Blanquaert F, et al. **Bone** 1995 Dec;17(6):499–506

[Antibiotic prophylaxis in laterobasal fractures (see comments)] Steidtmann K, et al. **HNO** 1997 Jun; 45(6):448–52 (Eng. Abstr.). Comment in: HNO 1997 Jun;45(6):421–3. **(Ger)**

EPIDEMIOLOGY

Skull fractures in children: a population study. Johnstone AJ, et al. **J Accid Emerg Med** 1996 Nov;13(6):386–9

Blindness after facial trauma. Zachariades N, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):34–7

ETIOLOGY

Air bag-related fatality in a short, forward-positioned driver [see comments] Perez J, et al. **Ann Emerg Med** 1996 Dec; 28(6):722–4. Comment in: Ann Emerg Med 1996 Dec;28(6):709–10.

Middle third injuries [letter] Anderson PJ, et al. **Br J Oral Maxillofac Surg** 1995 Dec;33(6):395

Fractures of the base of the skull in charred bodies--post-mortem heat injuries or signs of mechanical traumatisation? Bohnert M, et al. **Forensic Sci Int** 1997 May 23;87(1):55–62

Are fractures of the base of the skull influenced by the mass of the protective helmet? A retrospective study in fatally injured motorcyclists. Konrad CJ, et al. **J Trauma** 1996 Nov;41(5):854–8

Skull fracture caused by vacuum extraction [see comments] Hickey K, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):671–3 . Comment in: Obstet Gynecol 1997 Feb;89(2);319.

Skull fracture caused by vacuum extraction [letter; comment] Ross MG. **Obstet Gynecol** 1997 Feb;89(2):319. Comment on: Obstet Gynecol 1996 Oct;88(4 Pt 2):671–3.

[Intracranial complications after endonasal surgery (letter)] Figueira-Moure A, et al. **Rev Esp Anestesiol Reanim** 1996 Jun-Jul;43(6):225–7 **(Spa)**

MORTALITY

Air bag-related fatality in a short, forward-positioned driver [see comments] Perez J, et al. **Ann Emerg Med** 1996 Dec; 28(6):722–4. Comment in: Ann Emerg Med 1996 Dec;28(6):709–10.

PATHOLOGY

Persistent pattern of variations in thickness of the human nasal septum: implications for stress and trauma as illustrated by a complex fracture in a 4-year-old boy. van Velzen D, et al. **Adv Otorhinolaryngol** 1997;51:46–50

The forgotten condyle: the appearance, morphology, and classification of occipital condyle fractures. Noble ER, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):507–13

The influence of maxillary dentures on mid-facial fracture patterns. Cooter RD, et al. **Br J Plast Surg** 1996 Sep; 49(6):379–82

Cranial fractures and direction of fire in low velocity gunshots. Betz P, et al. **Int J Legal Med** 1996;109(2):58–61

[The clinico-morphological characteristics and expert assessment of intracranial parenchymatous hemorrhages in craniocerebral trauma] Pashinian GA, et al. **Sud Med Ekspert** 1997 Jul-Sep;40(3):3–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Impact of skull fracture on neuropsychological functioning following closed head injury. Smith-Seemiller L, et al. **Brain Inj** 1997 Mar;11(3):191–6

RADIOGRAPHY

Conservative management of extradural haematomas: effects of skull fractures on resorption rate. Tuncer R, et al. **Acta Neurochir (Wien)** 1997;139(3):203–7

Fracture of the occipital condyles and associated craniocervical ligament injury: incidence, CT imaging and implications. Bloom AI, et al. **Clin Radiol** 1997 Mar; 52(3):198–202

Intracranial meningioma at the site of a previous cranial fracture: case report and review of the literature. Cervoni L, et al. **Ital J Neurol Sci** 1996 Feb;17(1):79–81

Occult gunshot injury of the temporal bone. Geary UM, et al. **J Accid Emerg Med** 1997 May;14(3):185–6

Predictive value of skull radiography for intracranial injury in children with blunt head injury. Lloyd DA, et al. **Lancet** 1997 Mar 22;349(9055):821–4

The significance of carotid canal involvement in basilar cranial fracture. Resnick DK, et al. **Neurosurgery** 1997 Jun; 40(6):1177–81

Occipital condyle fracture and ligament injury: imaging by CT. Bloom AI, et al. **Pediatr Radiol** 1996 Nov; 26(11):786–90

[Selective indications of skull radiography after head injury in children] Toupin JM, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(3):201–07 (Eng. Abstr.) **(Fre)**

[Skull injury in childhood: comparison of ultrasonography with conventional X-rays and computerized tomography] Steiner S, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Oct;165(4):353–8 (Eng. Abstr.) **(Ger)**

[Diagnostic problems in fractures of the occipital condyles] Heinz BC, et al. **Unfallchirurg** 1997 Feb;100(2):100–4 (Eng. Abstr.) **(Ger)**

[The x-ray diagnosis of sinusitis in patients with posttraumatic deformities of the middle and upper third of the visceral cranium] Rabukhina NA, et al. **Stomatologiia (Mosk)** 1996;Spec No:73 **(Rus)**

[Comparison of the results of roentgenography, panoramic zonography and computer-aided tomography in some deformations of facial skull] Rabukhina NA, et al. **Vestn Rentgenol Radiol** 1997 Jan-Feb;(1):20–4 (Eng. Abstr.) **(Rus)**

REHABILITATION

Prevalence of impairments 5 years after a head injury, and their relationship with disabilities and outcome. Masson F, et al. **Brain Inj** 1996 Jul;10(7):487–97

SURGERY

Growing skull fractures: surgical management of difficult and atypical cases. Naim-Ur-Rahman, et al. **Acta Neurochir (Wien)** 1996;138(9):1088–93

An expresso explosion [letter] Abenavoli FM, et al. **Ann Plast Surg** 1996 Dec;37(6):679

Pediatric facial fractures: a demographic analysis outside an urban environment. Sherick DG, et al. **Ann Plast Surg** 1997 Jun;38(6):578–84; discussion 584–5

Criteria for selective management of the orbital rim and floor in zygomatic complex and midface fractures. Shumrick KA, et al. **Arch Otolaryngol Head Neck Surg** 1997 Apr; 123(4):378–84

Pediatric depressed skull fractures: analysis of 530 cases. Erşahin Y, et al. **Childs Nerv Syst** 1996 Jun;12(6):323–31 (15 ref.)

Long-term follow up of a growing skull fracture treated by dura and cranioplasty with artificial dura mater and methylmethacrylate. Hayashi Y, et al. **Childs Nerv Syst** 1997 Jun;13(6):349–51

Posttraumatic intradiploic arachnoid cyst of the posterior fossa. Martínez-Lage JF, et al. **Childs Nerv Syst** 1997 May; 13(5):293–6 (15 ref.)

Wide reconstruction of the anterior cranial base with bipedicled galeopericranial flap. Terashi H, et al. **Head Neck** 1996 May-Jun;18(3):292–4

Remote stereotactic visualization for image-guided surgery: technical innovation. Millesi W, et al. **J Craniomaxillofac Surg** 1997 Jun;25(3):136–8

Post-traumatic intracranial epidural Aspergillus fumigatus abscess. Letscher V, et al. **J Med Vet Mycol** 1997 Jul-Aug; 35(4):279–82

"High risk" anterior basal skull fractures. Surgical treatment of 64 consecutive cases. Talamonti G, et al. **J Neurosurg Sci** 1995 Sep;39(3):191–7

Usefulness of color Doppler sonography in a growing skull fracture: case report. Yoshioka H, et al. **J Trauma** 1997 Jan;42(1):144–6

Diagnosis and treatment of frontobasal skull fractures. Kral T, et al. **Neurosurg Rev** 1997;20(1):19–23

Crush injuries to the head [letter; comment] Gonzalez Tortosa J, et al. **Neurosurgery** 1996 Oct;39(4):877–8. Comment on: Neurosurgery 1995 Sep;37(3):401–6; discussion 407.

Current perspective on temporal bone trauma. Nosan DK, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):67–71

Transplanted demineralized bone graft in cranial reconstructive surgery. Moss SD, et al. **Pediatr Neurosurg** 1995;23(4):199–204; discussion 204–5

Simple appliance for reduction of facial skeletal fractures [letter] Taher AA. **Plast Reconstr Surg** 1997 Jan;99(1):272–3

Comparison of rigid plate versus wire fixation in the management of zygoma fractures: a long-term follow-up clinical study [letter; comment] Taher AA. **Plast Reconstr Surg** 1997 Feb;99(2):592. Comment on: Plast Reconstr Surg 1995 Sep;96(3):570–5.

Guidelines for treatment of head injury in adults. Opinions of a group of neurosurgeons. Fernandez R, et al. **Zentralbl Neurochir** 1997;58(2):72–4

[Osteoplastic surgery of the frontal sinus: indications, procedures and results apropos of 75 cases] Weber R, et al. **Rev Laryngol Otol Rhinol (Bord)** 1997;118(2):91–4 (Eng. Abstr.) **(Fre)**

[Anesthesia with the laryngeal mask during the treatment of fractures of the nose. A study of a group of 53 patients] Villain M, et al. **Rev Stomatol Chir Maxillofac** 1997 Jan; 98(1):16–8 (Eng. Abstr.) **(Fre)**

[Management of frontobasal fractures: an interdisciplinary challenge (editorial)] Krier C, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Feb; 32(2):69–71 **(Ger)**

[Post-traumatic cerebrospinal rhinorrhea] Spangenberg P, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Feb;32(2):105–8 (Eng. Abstr.) **(Ger)**

[Management of panfacial fractures--also an intubation problem] Prochno T, et al. **HNO** 1996 Jan;44(1):19–21 (Eng. Abstr.) **(Ger)**

[Osteosynthesis in the mid-face and forehead area] Siegert R, et al. **Laryngorhinootologie** 1996 Jul;75(7):419–25 (Eng. Abstr.) **(Ger)**

[Fractures of the facial bones--second most frequent concomitant injury in polytrauma (editorial)] Regel G, et al. **Unfallchirurg** 1997 May;100(5):329 **(Ger)**

[Modern principles in treatment of complex injuries of the facial bones] Schierle HP, et al. **Unfallchirurg** 1997 May; 100(5):330–7 (30 ref.) (Eng. Abstr.) **(Ger)**

[The surgical correction of traumatic deformities of the orbit in naso-fronto-orbito-cribriform fractures] Mal'chikova LP, et al. **Stomatologiia (Mosk)** 1997;76(3):38–40 (Eng. Abstr.) **(Rus)**

THERAPY

Evaluation and management of facial fractures. Carithers JS, et al. **Am Fam Physician** 1997 Jun;55(8):2675–82 (10 ref.)

Intracranial placement of a nasotracheal tube after facial fracture: a rare complication [see comments] Marlow TJ, et al. **J Emerg Med** 1997 Mar-Apr;15(2):187–91 (12 ref.) . Comment in: J Emerg Med 1997 Mar-Apr;15(2):243–4.

Blind nasotracheal intubation in the presence of facial trauma [see comments] Rosen CL, et al. **J Emerg Med** 1997 Mar-Apr;15(2):141–5. Comment in: J Emerg Med 1997 Mar-Apr;15(2):243–4.

Perimortem intracranial orogastric tube insertion in a pediatric trauma patient with a basilar skull fracture. Junsanto T, et al. **J Trauma** 1997 Apr;42(4):746–7

Occipital condyle fractures. Tuli S, et al. **Neurosurgery** 1997 Aug;41(2):368–76; discussion 376–7 (42 ref.)

Primary closure of contaminated scalp wound [letter] Chitkara N, et al. **Trop Doct** 1997 Oct;27(4):251–2

ULTRASONOGRAPHY

Usefulness of color Doppler sonography in a growing skull fracture: case report. Yoshioka H, et al. **J Trauma** 1997 Jan;42(1):144–6

[Ultrasound imaging of nasal bone fractures with a 20-MHz ultrasound scanner] Danter J, et al. **HNO** 1996 Jun; 44(6):324–8 (Eng. Abstr.) **(Ger)**

[Skull injury in childhood: comparison of ultrasonography with conventional X-rays and computerized tomography] Steiner S, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Oct;165(4):353–8 (Eng. Abstr.) **(Ger)**

VETERINARY

Skull and orbital blow-out fractures in a horse. Blogg JR, et al. **Equine Vet J Suppl** 1990 Sep;(10):5–7

What is your diagnosis? Trauma-induced skull fracture and bacterial meningitis. Johnson PJ, et al. **J Am Vet Med Assoc** 1996 Sep 1;209(5):901–2

SKULL NEOPLASMS

Osteoma of the middle ear. Harley EH, et al. **Ann Otol Rhinol Laryngol** 1997 Aug;106(8):714–5

Parosteal osteogenic sarcoma of the mastoid bone. Seely DR, et al. **Ann Otol Rhinol Laryngol** 1997 Sep;106(9):729–32

Case report: CT and MRI of intracranial dermoid causing headache. Zimmerman JR, et al. **J Miss State Med Assoc** 1996 Mar;37(3):509–12

Extradural intrasphenoidal cavernous sinus schwannoma. Case illustration. De Jesús O, et al. **J Neurosurg** 1996 Aug; 85(2):359

Pituitary ectopic adenoma [letter; comment] Goel A. **J Neurosurg** 1996 Aug;85(2):362. Comment on: J Neurosurg 1995 Dec;83(6):1092–4.

Chondromyxoid fibroma of the temporal bone. LeMay DR, et al. **Surg Neurol** 1997 Aug;48(2):148–52 (23 ref.)

[Temporo-sphenoidal giant cell tumors, apropos of a case] Barnabé D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1997; 118(2):133–7 (30 ref.) (Eng. Abstr.) **(Fre)**

CLASSIFICATION

Cranial osteomas: their classification and management. Report on a giant osteoma and review of the literature. Haddad FS, et al. **Surg Neurol** 1997 Aug;48(2):143–7 (32 ref.)

COMPLICATIONS

Choroidal folds associated with a sellar mass. Söylev MF, et al. **Int Ophthalmol** 1996-97;20(5):259–61

Papillary adenoma of endolymphatic sac origin: a temporal

bone tumor in von Hippel-Lindau disease. Case report. Ouallet JC, et al. **J Neurosurg** 1997 Sep;87(3):445-9 (11 ref.)
Intrasellar paraganglioma: report of a case in a sibship of von Hippel-Lindau disease. Scheithauer BW, et al. **Neurosurgery** 1996 Feb;38(2):395-9 (26 ref.)

CONGENITAL

Imaging case study of the month. Congenital cholesteatoma isolated to the mastoid. Luntz M, et al. **Ann Otol Rhinol Laryngol** 1997 Jul;106(7 Pt 1):608-10

DIAGNOSIS

Intraoperative squash and touch cytology of chondroid chordoma of the skull base. Report of a case with immunocytochemical and immunohistochemical studies. Nabeshima K, et al. **Acta Cytol** 1997 May-Jun;41(3):913-8
Malignant hemangioendothelioma (angiosarcoma) of the skull: plain film, CT, and MR appearance. Bourekas EC, et al. **AJNR Am J Neuroradiol** 1996 Nov-Dec; 17(10):1946-8
Fibrosing inflammatory pseudotumors involving the skull base: MR and CT manifestations with histopathologic comparison. Han MH, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):515-21
Malignant fibrous histiocytoma of the temporal bone with endocranial extension. Nakayama K, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):331-4
Craniocerebral plasmacytoma: MR features. Provenzale JM, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):389-92
Spinal subdural enhancement after suboccipital craniectomy. Shaw DW, et al. **AJNR Am J Neuroradiol** 1996 Aug; 17(7):1373-7
Adenosquamous carcinoma of the facial bones, skull base, and calvaria: CT and MR manifestations. Som PM, et al. **AJNR Am J Neuroradiol** 1997 Jan;18(1):173-5
Primary intraosseous hemangioma of the orbit: CT and MR appearance. Sweet C, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):379-81
Bulky plasmacytoma of the skull with intracranial involvement [letter; comment] Savas MC, et al. **Am J Hematol** 1997 Feb;54(2):173. Comment on: Am J Hematol 1996 May;52(1):60-1.
Slow-flow phenomena in magnetic resonance imaging of the jugular bulb masquerading as skull base neoplasms. Widick MH, et al. **Am J Otol** 1996 Jul;17(4):648-52
Osteogenic sarcoma of the temporal bone. Sharma SC, et al. **Am J Otolaryngol** 1997 May-Jun;18(3):220-3
Chondromyxoid fibroma of the skull base: a tumor which may be confused with chordoma and chondrosarcoma. A report of three cases and review of the literature. Keel SB, et al. **Am J Surg Pathol** 1997 May;21(5):577-82 (25 ref.)
Melanoma of the petrous apex of the temporal bone. Barnes DE, et al. **Ann Otol Rhinol Laryngol** 1997 Jun; 106(6):519-21
Imaging quiz case 2. Glomus tympanicum tumor of the temporal bone. Cheng A, et al. **Arch Otolaryngol Head Neck Surg** 1997 May;123(5):549, 551-2
Unusual tumours of the skull and skull base: a pictorial essay. Levy RA, et al. **Can Assoc Radiol J** 1996 Dec;47(6):434-43
Unusual osteolytic midline lesion of the skull: benign osteoblastoma of the parietal bone. Martinez-Lage JF, et al. **Childs Nerv Syst** 1996 Jun;12(6):343-5
Telangiectatic osteosarcoma of the skull. A post-Paget case. Donato G, et al. **Clin Neuropathol** 1997 Jul-Aug; 16(4):201-3
Calcified meningioma of the skull base simulating chondrosarcoma. Geirnaerdt MJ, et al. **Eur J Radiol** 1995 Dec 15;21(2):148-51
Solitary plasmacytomas of the occipital bone: a report of two cases. Okamoto K, et al. **Eur Radiol** 1997;7(4):503-6
Sphenoidal ridge meningioma masquerade: glaucoma with a sphenoidal ridge meningioma [letter] Watts P, et al. **Eye** 1996;10 (Pt 5):629-34
Role of fine needle aspiration cytology in diagnosis of malignant scalp and underlying bone tumours. Mondal A, et al. **Indian J Pathol Microbiol** 1996 Oct;39(4):265-9
Hemangioendothelioma of the temporal bone in a child. Eliashar R, et al. **Int J Pediatr Otorhinolaryngol** 1997 May 4;40(1):67-71
Chondrosarcoma of the petrous apex. Dilemmas in diagnosis and treatment. Lau DP, et al. **J Laryngol Otol** 1997 Apr; 111(4):368-71
Three-dimensional reconstruction of melanotic neuroectodermal tumor of infancy involving the occipital bone and dura. Raila FA, et al. **J Neuroimaging** 1997 Apr; 7(2):123-6
Intraosseous meningioma [letter; comment] Arana E, et al. **J Neurosurg** 1996 Aug;85(2):362-3. Comment on: J Neurosurg 1995 Nov;83(5):912-5.
Zygomatic leiomyoma. Case report. Robiony M, et al. **Minerva Stomatol** 1996 Dec;45(12):593-7 (17 ref.)
Giant cell tumor of sphenoid-diverse presentation: report of two cases. Behari S, et al. **Neurol Res** 1996 Oct;18(5):462-6
99mTc-SPECT in the diagnosis of skull base metastasis. Jansen BP, et al. **Neurology** 1997 May;48(5):1326-30
Multiple calvarial cavernous haemangiomas: case report and review of the literature. Kumar NA, et al. **Neuroradiology** 1996 May;38 Suppl 1:S83-5 (10 ref.)
Giant-cell tumour of the sphenoid bone: case report. Rimmelin A, et al. **Neuroradiology** 1996 Oct;38(7):650-3
Intradiploic haemangioma associated with epidural haematoma. Uemura K, et al. **Neuroradiology** 1996 Jul; 38(5):456-7
Osteoblastoma of the calvaria: report of two cases diagnosed with MRI and clinical review. Cervoni L, et al. **Neurosurg Rev** 1997;20(1):51-4 (16 ref.)
Symptomatic hypertrophic pacchionian granulation mimicking bone tumor: case report. Kuroiwa T, et al. **Neurosurgery** 1996 Oct;39(4):860-2
Clival chordoma presenting as acute esotropia due to bilateral abducens palsy. Harada T, et al. **Ophthalmologica** 1997; 211(2):109-11
Verrucous carcinoma of maxillary antrum. Indudharan R, et al. **Singapore Med J** 1996 Oct;37(5):559-61 (17 ref.)
Hemangioma of the temporal bone in a patient presumed to have Ménière's syndrome. Burton L, et al. **South Med J** 1997 Jul;90(7):736-9
[Primary osteosarcoma of the skull. Apropos of 2 cases] el Quessar A, et al. **J Neuroradiol** 1997 Jun;24(1):70-4 (Eng. Abstr.) **(Fre)**
[Osteoma of the mastoid: apropos of 2 cases] Guérin N, et al. **Rev Laryngol Otol Rhinol (Bord)** 1996;117(2):127-32 (30 ref.) (Eng. Abstr.) **(Fre)**
[Osteoblastoma simulating osteosarcoma of the petrous bone] Weber C, et al. **Aktuelle Radiol** 1996 Nov;6(6):338-40 (Eng. Abstr.) **(Ger)**
[Glomus tumors of the petrous bone] **Rontgenpraxis** 1997 Aug;50(8):253-4 **(Ger)**
[Embryonal rhabdomyosarcoma in adults: a case report] Manfrè L, et al. **Radiol Med (Torino)** 1997 Apr;93(4):457-9 **(Ita)**
[Report of a case of intraosseous meningioma: a review of the literature and diagnostic value using MRI study] Kobayashi N, et al. **No Shinkei Geka** 1996 Nov; 24(11):1015-9 (Eng. Abstr.) **(Jpn)**
[Ewing's sarcoma at the occipital bone presenting as acute epidural hematoma: a case report] Yamashita Y, et al. **No Shinkei Geka** 1997 Jun;25(6):567-71 (Eng. Abstr.) **(Jpn)**
[Craniomaxillofacial fibrous dysplasias] Kowalik S, et al. **Otolaryngol Pol** 1996;50(3):263-71 (Eng. Abstr.) **(Pol)**
[A giant-cell tumor of the parietal skull bones in childhood (a clinical case)] Govenko FS, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1996 Jul-Sep;(3):37-9 (28 ref.) **(Rus)**

DRUG THERAPY

Effect of chemotherapy on survival of craniofacial osteosarcoma: a systematic review of 201 patients. Smeele LE, et al. **J Clin Oncol** 1997 Jan;15(1):363-7 (27 ref.)
Hodgkin's disease of middle ear and mastoid. Solanellas J, et al. **J Laryngol Otol** 1996 Sep;110(9):869-71

EPIDEMIOLOGY

Primary non-Hodgkin's lymphoma of the cranial vault. Bhatia S, et al. **Clin Oncol (R Coll Radiol)** 1997;9(3):195-6 (7 ref.)

ETIOLOGY

Radiation-induced sarcoma of the skull: report of two cases. Salvati M, et al. **Ital J Neurol Sci** 1997 Apr;18(2):101-4
Irradiation induced osteosarcoma in the posterior cranial fossa six years after surgery and radiation for medulloblastoma [letter] Koot RW, et al. **J Neurol Neurosurg Psychiatry** 1996 Oct;61(4):429-30

MORTALITY

Effect of chemotherapy on survival of craniofacial osteosarcoma: a systematic review of 201 patients. Smeele LE, et al. **J Clin Oncol** 1997 Jan;15(1):363-7 (27 ref.)
[Adenoid cystic carcinoma in patients in the ENT Department of the K. Marcinkowski University of Medical Sciences in Poznan in years 1980-1995] Szmeja Z, et al. **Otolaryngol Pol** 1996;50(4):363-71 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Intracranial chondrosarcoma. Labram EK, et al. **Acta Neurochir (Wien)** 1997;139(2):156-7
Malignant change in an intradiploic epidermoid cyst. Hoeffel C, et al. **Acta Neurol Belg** 1997 Mar;97(1):45-9
Fibrosing inflammatory pseudotumors involving the skull base: MR and CT manifestations with histopathologic comparison. Han MH, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):515-21
The subtemporal-transpetrous approach for excision of petroclival tumors. Megerian CA, et al. **Am J Otol** 1996 Sep;17(5):773-9
Clinicopathologic study of leptomeningeal carcinomatosis involving the temporal bone. Imamura S, et al. **Ann Otol Rhinol Laryngol** 1997 Aug;106(8):674-9
Intracranial chondromyxoid fibroma. Report of a case and review of the literature. Wolf DA, et al. **Arch Pathol Lab Med** 1997 Jun;121(6):626-30 (23 ref.)
Primary sellar haemorrhagic melanoma: case report and review of the literature. Aubin MJ, et al. **Br J Neurosurg** 1997 Feb;11(1):80-3 (12 ref.)
Cavernous haemangiomas in the cavernous sinus [letter; comment] Başkaya MK. **Br J Neurosurg** 1996 Aug; 10(4):422-3. Comment on: Br J Neurosurg 1995;9(1):77-80.
Two cases of localized B-cell lymphoma in the acquired immunodeficiency syndrome. Castanet J, et al. **Dermatology** 1997;194(2):185-7
Fine-needle aspiration of chondroblastic osteosarcoma of the skull: report of a case in an 11-year-old girl. Ellison DA, et al. **Diagn Cytopathol** 1996 Feb;14(1):51-5
Cytologic diagnosis of bile peritonitis. Elsheikh TM, et al. **Diagn Cytopathol** 1996 Feb;14(1):56-9
Malignant granular cell tumor: a case report and review of the recent literature. Simsir A, et al. **Hum Pathol** 1996 Aug; 27(8):853-8 (40 ref.)
Role of fine needle aspiration cytology in diagnosis of malignant scalp and underlying bone tumours. Mondal A, et al. **Indian J Pathol Microbiol** 1996 Oct;39(4):265-9
Post-irradiation liposarcoma of the temporal bone. Coatesworth AP, et al. **J Laryngol Otol** 1996 Aug; 110(8):779-81
An unusual sphenoid ridge tumor: cementifying fibroma. Molinari SP, et al. **J Neurol** 1996 Jan;243(1):103-4
Non-Hodgkin's lymphoma as a new cause of non-thrombotic superior sagittal sinus occlusion [letter] Gironell A, et al. **J Neurol Neurosurg Psychiatry** 1997 Jul;63(1):121-2
Irradiation induced osteosarcoma in the posterior cranial fossa six years after surgery and radiation for medulloblastoma [letter] Koot RW, et al. **J Neurol Neurosurg Psychiatry** 1996 Oct;61(4):429-30
Osteoblastoma of the nasal cavity invading the anterior skull base in a young child. Case report. Imai K, et al. **J Neurosurg** 1997 Oct;87(4):625-8 (9 ref.)
Ossifying fibroma of the skull in a patient with neurofibromatosis type 1. Case report. Ruggieri M, et al. **J Neurosurg** 1996 Nov;85(5):941-4
Lipomas of the internal auditory canal. Greinwald JH Jr, et al. **Laryngoscope** 1997 Mar;107(3):364-8
Correspondence re: Lavoie M, Morency RM: Low-grade papillary adenomatous tumors of the temporal bone: report of two cases and review of the literature. Mod Pathol 8:603, 1995 [letter; comment] Pollak A. **Mod Pathol** 1996 Apr; 9(4):460-1. Comment on: Mod Pathol 1995 Aug;8(6):603-8.
Giant cell tumor of the fronto-parietal bone. A case report. Kuzeyli K, et al. **Neurosurg Rev** 1995;18(4):265-8
Local invasivity of glioblastoma multiforme with destruction of skull bone. Case report and review of the literature. Rainov NG, et al. **Neurosurg Rev** 1996;19(3):183-8
Cancer of the external auditory canal and temporal bone. Kuhel WI, et al. **Otolaryngol Clin North Am** 1996 Oct; 29(5):827-52 (88 ref.)
Spindle cell variant of embryonal rhabdomyosarcoma. Don DM, et al. **Otolaryngol Head Neck Surg** 1997 Apr; 116(4):529-32
[Benign chondroblastoma of the occipital bone. A case report] Araújo JF, et al. **Arq Neuropsiquiatr** 1995 Dec; 53(4):834-6 (Eng. Abstr.) **(Por)**
[Tympanomastoid glomus tumor and persistent stapedial artery] Arellano B, et al. **Acta Otorrinolaringol Esp** 1996 Nov-Dec;47(6):471-3 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Testing the hypothalamic-pituitary-adrenal axis in survivors of childhood brain and skull-based tumors. Shankar RR, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1995-8

RADIOGRAPHY

Primary intraosseous meningiomas. Arana E, et al. **Acta Radiol** 1996 Nov;37(6):937-42
The role of imaging in the diagnosis of giant cell tumor of the skull base. Silvers AR, et al. **AJNR Am J Neuroradiol** 1996 Aug;17(7):1392-5
Primary intraosseous meningiomas of the skull. Changhong L, et al. **Clin Radiol** 1997 Jul;52(7):546-9
Radiographic manifestations of multiple myeloma in the mandible: a retrospective study of 77 patients. Witt C, et al. **J Oral Maxillofac Surg** 1997 May;55(5):450-3; discussion 454-5
Unusual frontal osteoma, mimicking a haemangioma. Saraç K, et al. **Neuroradiology** 1996 Jul;38(5):458-9

RADIONUCLIDE IMAGING

An unusual first impression of skull base metastasis. "The sunglasses illusion". Sutter CW, et al. **Clin Nucl Med** 1996 Apr;21(4):322
Thallium-201 single photon emission computed tomography imaging of meningioma cells in hyperostosis. Mori K, et al. **Neurol Med Chir (Tokyo)** 1997 Aug;37(8):594-9

RADIOTHERAPY

High-dose radiation-induced meningiomas in elderly. Salvati M, et al. **Neurosurg Rev** 1996;19(2):81-3
Chordoma: long-term follow-up after radical photon irradiation. Catton C, et al. **Radiother Oncol** 1996 Oct; 41(1):67-72

REHABILITATION

Rehabilitation of patients with extended facial and craniofacial resection. Mathog RH, et al. **Laryngoscope** 1997 Jan;107(1):30-9

SKULL NEOPLASMS

SECONDARY

Metastatic carcinoma of the temporal bone. Streitmann MJ, et al. **Am J Otol** 1996 Sep;17(5):780–3

Clinicopathologic study of leptomeningeal carcinomatosis involving the temporal bone. Imamura S, et al. **Ann Otol Rhinol Laryngol** 1997 Aug;106(8):674–9

Intracranial juvenile nasopharyngeal angiofibroma. Gupta AC, et al. **Aust N Z J Surg** 1997 Jul;67(7):477–82

Late recurrence and endocranial metastasis caused by giant cell tumor. Segura J, et al. **Chir Organi Mov** 1996 Sep–Dec; 81(4):413–9 **(Eng, Ita)**

An unusual first impression of skull base metastasis. "The sunglasses illusion". Sutter CW, et al. **Clin Nucl Med** 1996 Apr;21(4):322

Extracranial metastasis of glioblastoma multiforme diagnosed by fine-needle aspiration: a report of two cases and a review of the literature. Vural G, et al. **Diagn Cytopathol** 1996 Jul;15(1):60–5 (29 ref.)

Pterygopalatine fossa and maxillary nerve infiltration in nasopharyngeal carcinoma. Chong VF, et al. **Head Neck** 1997 Mar;19(2):121–5

Adenocarcinoma of the lung with metastasis to the skull presenting as cystic lesions. Gray LC, et al. **J Am Acad Dermatol** 1997 Apr;36(4):644–6

Skull metastasis with brain invasion from thyroid papillary microcarcinoma. Lin KD, et al. **J Formos Med Assoc** 1997 Apr;96(4):280–2

Prostate cancer masquerading as a zygomatic posttraumatic mass. Harlan JW, et al. **Mayo Clin Proc** 1997 Mar; 72(3):248–50

99mTc-SPECT in the diagnosis of skull base metastasis. Jansen BP, et al. **Neurology** 1997 May;48(5):1326–30

Temporomandibular joint metastasis from rectal carcinoma: CT findings before and after radiotherapy. A case report. Balestreri L, et al. **Tumori** 1997 May–Jun;83(3):718–20 (6 ref.)

[Malignant paraganglioma with intracranial metastasis: a case report] Tomita H, et al. **No Shinkei Geka** 1996 Nov; 24(11):1045–8 (Eng. Abstr.) **(Jpn)**

SURGERY

The management of extensive tumours of the scalp. Kozák J, et al. **Acta Chir Plast** 1995;37(3):71–5

Infratemporal fossa surgery for malignant diseases. Iannetti G, et al. **Acta Neurochir (Wien)** 1996;138(6):658–71; discussion 671

Intradiploic epidermoid cyst of the frontal bone presenting with tension pneumocephalus. Jakubowski E, et al. **Acta Neurochir (Wien)** 1997;139(1):86–7

Spinal subdural enhancement after suboccipital craniectomy. Shaw DW, et al. **AJNR Am J Neuroradiol** 1996 Aug; 17(7):1373–7

Neurotologic skull base surgery [editorial] Leonetti JP. **Am J Otol** 1997 Jan;18(1):1

The subtemporal–transpetrous approach for excision of petroclival tumors. Megerian CA, et al. **Am J Otol** 1996 Sep;17(5):773–9

Osteogenic sarcoma of the temporal bone. Sharma SC, et al. **Am J Otolaryngol** 1997 May–Jun;18(3):220–3

Resection of bilateral orbital and cranial base basal cell carcinoma with preservation of vision. Behmand RA, et al. **Ann Plast Surg** 1996 Jun;36(6):637–40

Transcranial erosion of a benign dermal cylindroma. Wyld L, et al. **Ann Plast Surg** 1996 Feb;36(2):194–6

Microvascular reconstruction of complex craniofacial defects. Aspoas AR, et al. **Ann R Coll Surg Engl** 1997 Jul; 79(4):278–83

Lesions of the calvaria: surgical experience with 42 patients. Wecht DA, et al. **Ann Surg Oncol** 1997 Jan;4(1):28–36

Intracranial juvenile nasopharyngeal angiofibroma. Gupta AC, et al. **Aust N Z J Surg** 1997 Jul;67(7):477–82

Petrosectomies for invasive tumours: surgery and reconstruction. Malata CM, et al. **Br J Plast Surg** 1996 Sep;49(6):370–8

The combined costal cartilage and rectus abdominis myocutaneous free flap [letter] Yano K, et al. **Br J Plast Surg** 1996 Sep;49(6):423–4

Radiosurgery for skull base malignancies and nasopharyngeal carcinoma [see comments] Cmelak AJ, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):997–1003 . Comment in: Int J Radiat Oncol Biol Phys 1997 Mar 15;37(5):973–4.

Rehabilitation of patients with extended facial and craniofacial resection. Mathog RH, et al. **Laryngoscope** 1997 Jan;107(1):30–9

Temporal bone carcinoma: contemporary perspectives in the skull base surgical era. Pensak ML, et al. **Laryngoscope** 1996 Oct;106(10):1234–7

CNS involvement of Langerhans cell histiocytosis. Report of 23 surgically treated cases. Belen D, et al. **Neurosurg Rev** 1996;19(4):247–52

Primary Ewing's sarcoma of the temporal bone with intracranial, extracranial and intraorbital extension. Case report. Kuzeyli K, et al. **Neurosurg Rev** 1997;20(2):132–4

Primary intraosseous meningioma of the temporal bone in an infant. A case report. Kuzeyli K, et al. **Neurosurg Rev** 1996;19(3):197–9 (15 ref.)

Chordomas and chondrosarcomas of the cranial base: results and follow-up of 60 patients. Crockard A. **Neurosurgery** 1996 Feb;38(2):420

Primary intracranial metatypical basal cell carcinoma: case report. Gall C, et al. **Neurosurgery** 1997 Jul;41(1):279–81; discussion 281–2

Midfacial degloving for the management of nasal, sinus, and skull-base neoplasms. Maniglia AJ, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1127–43

Extended temporal bone resection for squamous cell carcinoma. Moffat DA, et al. **Otolaryngol Head Neck Surg** 1997 Jun;116(6 Pt 1):617–23

Ewing's sarcoma of the skull in an infant. A case report and review. Hadfield MG, et al. **Pediatr Neurosurg** 1996 Aug; 25(2):100–4 (64 ref.)

Transplanted demineralized bone graft in cranial reconstructive surgery. Moss SD, et al. **Pediatr Neurosurg** 1995;23(4):199–204; discussion 204–5

Use of hydroxyapatite for reconstruction after surgical removal of intraosseous hemangioma in the zygomatic bone. Hirano S, et al. **Plast Reconstr Surg** 1997 Jul; 100(1):86–90 (18 ref.)

Cranial osteomas: their classification and management. Report on a giant osteoma and review of the literature. Haddad FS, et al. **Surg Neurol** 1997 Aug;48(2):143–7 (32 ref.)

[Surgical treatment of space-occupying lesions in the nasal cavity and paranasal sinus involving the skull base] Huang D, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1995; 30(6):340–2 (Eng. Abstr.) **(Chi)**

[Anterior cranio-facial resection for malignant tumors: report of 91 cases] Cantù G, et al. **Acta Otorhinolaryngol Ital** 1996 Feb;16(1):16–24 (Eng. Abstr.) **(Ita)**

[The operation for malignant tumors in the frontal skull base: combined transbasal & transfacial approach] Kawakami K, et al. **No Shinkei Geka** 1996 Jul;24(7):613–20 (Eng. Abstr.) **(Jpn)**

[A case of middle cranial fossa meningioma extending into the infratemporal fossa: an approach to the pterygoid extension of the sphenoid sinus via the infratemporal fossa] Nakaguchi H, et al. **No Shinkei Geka** 1996 Jul;24(7):643–8 (Eng. Abstr.) **(Jpn)**

[Chondroblastoma of the temporal bone: a case report] Shimizu J, et al. **No Shinkei Geka** 1997 Jun;25(6):555–9 (Eng. Abstr.) **(Jpn)**

[Postoperative complications of anterior and middle skull base surgery] Tokutomi T, et al. **No Shinkei Geka** 1997 Jan;25(1):29–34 (Eng. Abstr.) **(Jpn)**

[Characteristics of visual impairment complicated with planum sphenoidale and tuberculum sellae meningiomas and their surgical results] Uede T, et al. **No Shinkei Geka** 1996 Dec;24(12):1093–8 (Eng. Abstr.) **(Jpn)**

[Ewing's sarcoma at the occipital bone presenting as acute epidural hematoma: a case report] Yamashita Y, et al. **No Shinkei Geka** 1997 Jun;25(6):567–71 (Eng. Abstr.) **(Jpn)**

THERAPY

Preoperative endovascular embolization of craniospinal hemangioblastomas. Eskridge JM, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):525–31

SKUNKS

VIROLOGY

Characterization of a human adenovirus 5: rabies glycoprotein recombinant vaccine reisolated from orally vaccinated skunks. Lutze-Wallace C, et al. **Biologicals** 1995 Dec;23(4):271–7

SLAUGHTERHOUSES see **ABATTOIRS**

SLEEP

see related

POLYSOMNOGRAPHY

Interhemispheric differences of sleep EEG complexity. Szelenberger W, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(4):955–9

The relationship between sleep and cognitive functions during wakefulness: an introduction. Schulz H, et al. **Acta Neurol Belg** 1997 Jun;97(2):93–5 (8 ref.)

Factors that disturb sleep in nursing home residents. Gentili A, et al. **Aging (Milano)** 1997 Jun;9(3):207–13

Sleep in the pediatric ICU: an empirical investigation. Cureton-Lane RA, et al. **Am J Crit Care** 1997 Jan; 6(1):56–63

Sleep in multiple pregnancy: breathing patterns, oxygenation, and periodic leg movements. Nikkola E, et al. **Am J Obstet Gynecol** 1996 May;174(5):1622–5

On parents and children sleeping together [letter; comment] Dettwyler KA. **Am J Orthopsychiatry** 1997 Jan; 67(1):159–62. Comment on: Am J Orthopsychiatry 1995 Jul;65(3):411–8.

Sleep deprivation combined with consecutive sleep phase advance as a fast-acting therapy in depression: an open pilot trial in medicated and unmedicated patients. Berger M, et al. **Am J Psychiatry** 1997 Jun;154(6):870–2

Enduring effects of early abuse on locomotor activity, sleep, and circadian rhythms. Glod CA, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:465–7

Sleeping position and cot death [letter] Paky F, et al. **Arch Dis Child** 1996 Aug;75(2):171–2

Complex interaction of the sleep-wake cycle and circadian phase modulates mood in healthy subjects. Boivin DB, et al. **Arch Gen Psychiatry** 1997 Feb;54(2):145–52

A motor milestone change noted with a change in sleep position. Jantz JW, et al. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):565–8

Sleep classification in infants by decision tree-based neural networks. Koprinska I, et al. **Artif Intell Med** 1996 Aug; 8(4):387–401

Methods of testing for sleepiness [corrected] [published erratum appears in Behav Med 1996 Spring;22(1):following table of contents] Mitler MM, et al. **Behav Med** 1996 Winter;21(4):171–83 (67 ref.)

Managing fatigue in operational settings. 1: Physiological considerations and countermeasures. Rosekind MR, et al. **Behav Med** 1996 Winter;21(4):157–65 (41 ref.)

Ironic effects of sleep urgency. Ansfield ME, et al. **Behav Res Ther** 1996 Jul;34(7):523–31

Indirect bright light improves circadian rest-activity rhythm disturbances in demented patients. Van Someren EJ, et al. **Biol Psychiatry** 1997 May 1;41(9):955–63

Sudden infant death syndrome. Many infants move from position in which they are put to sleep [letter; comment] De Jonge GA, et al. **BMJ** 1996 Nov 23;313(7068):1333; discussion 1333–4. Comment on: BMJ 1996 Jul 27;313(7051):191–5.

Nocturnal noninvasive positive pressure ventilatory assistance [see comments] Claman DM, et al. **Chest** 1996 Dec;110(6):1581–8 (71 ref.). Comment in: Chest 1997 May;111(5):1471–2.

Catching up on sleep. The National Sleep Disorders Research Plan [editorial] Phillips BA, et al. **Chest** 1996 Nov; 110(5):1132–3

Cheyne-Stokes respiration during sleep in congestive heart failure. Quaranta AJ, et al. **Chest** 1997 Feb;111(2):467–73 (49 ref.)

The sleep/wake habits of patients diagnosed as having obstructive sleep apnea. Rosenthal L, et al. **Chest** 1997 Jun; 111(6):1494–9

Sleep-related myocardial ischemia and sleep structure in patients with obstructive sleep apnea and coronary heart disease. Schäfer H, et al. **Chest** 1997 Feb;111(2):387–93

Amplitude reduction of the circadian temperature and sleep rhythms in the elderly. Carrier J, et al. **Chronobiol Int** 1996 Nov;13(5):373–86

The difference between activity when in bed and out of bed. III. Nurses on night work. Minors D, et al. **Chronobiol Int** 1996 Oct;13(4):273–82

Promoting sleep in shiftworkers and intercontinental travelers. Stone BM, et al. **Chronobiol Int** 1997 Mar; 14(2):133–43 (64 ref.)

Delaying and extending sleep during weekends: sleep recovery or circadian effect? Valdez P, et al. **Chronobiol Int** 1996 Aug;13(3):191–8

Analysis of pulse oximetry data in normal sleeping children. Owen G, et al. **Clin Otolaryngol** 1997 Feb;22(1):13–22

Nocturnal blood glucose profiles in patients with type 1 diabetes mellitus on multiple (> or = 4) daily insulin injection regimens. Vervoort G, et al. **Diabet Med** 1996 Sep;13(9):794–9

Links between infant crying and sleep-waking at six weeks of age. James-Roberts IS, et al. **Early Hum Dev** 1997 Apr 25;48(1-2):143–52

Prone sleeping infants have a reduced ability to lose heat. Tuffnell CS, et al. **Early Hum Dev** 1995 Oct 2;43(2):109–16

Relationship of interictal epileptiform discharges to sleep depth in partial epilepsy. Malow BA, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan;102(1):20–6

Nocturnal sleep and daytime somnolence in untreated patients with temporal lobe epilepsy: changes after treatment with controlled-release carbamazepine. Gigli GL, et al. **Epilepsia** 1997 Jun;38(6):696–701

Sleep suppression of ventricular arrhythmias: a predictor of beta-blocker efficacy [see comments] Pitzalis MV, et al. **Eur Heart J** 1996 Jun;17(6):917–25. Comment in: Eur Heart J 1997 Feb;18(2):349–50.

Infant behaviour in response to a change in body position from side to prone during sleep. Skadberg BT, et al. **Eur J Pediatr** 1996 Dec;155(12):1052–6

Sleep and the menstrual cycle. Manber R, et al. **Health Psychol** 1997 May;16(3):209–14

Short-term variability of blood pressure during sleep in snorers with or without apnea. Leroy M, et al. **Hypertension** 1996 Dec;28(6):937–43

Free-living, 24-hour, and sleeping energy expenditure in sedentary, strength-trained, and endurance-trained men. Seale JL, et al. **Int J Sport Nutr** 1996 Dec;6(4):370–81

Influence of sleep and meal schedules on performance peaks in competitive sprinters. Javierre C, et al. **Int J Sports Med** 1996 Aug;17(6):404–8

Changes in sleep spindle activity of subject with chronic somatosensitive and sensorial deficits. Preliminary results. Scrofani A, et al. **Ital J Neurol Sci** 1996 Dec;17(6):423–8

Supine infant sleep: what do family physicians recommend? Spieker MR, et al. **J Am Board Fam Pract** 1996 Sep–Oct; 9(5):319–23

Circadian rest-activity rhythms in demented and nondemented older community residents and their caregivers. Pollak CP, et al. **J Am Geriatr Soc** 1997 Apr; 45(4):446–52

Sleep quality in people with HIV disease. Nokes KM, et al. **J Assoc Nurses AIDS Care** 1996 May–Jun;7(3):43–50

Effects of the D2 receptor agonist bromocriptine on sleep

bruxism: report of two single-patient clinical trials. Lobbezoo F, et al. **J Dent Res** 1997 Sep;76(9):1610–4

The siesta and ambulatory blood pressure: is waking up the same in the morning and afternoon? Bursztyn M, et al. **J Hum Hypertens** 1996 May;10(5):287–92

Blood pressure during siesta: effect on 24–h ambulatory blood pressure profiles analysis. Stergiou GS, et al. **J Hum Hypertens** 1997 Feb;11(2):125–31

Effects of sleep and circadian rhythm on human circulating immune cells. Born J, et al. **J Immunol** 1997 May 1; 158(9):4454–64

Daytime sleepiness and napping amongst the elderly in relation to somatic health and medical treatment. Asplund R. **J Intern Med** 1996 Mar;239(3):261–7

13th European Congress on Sleep Research. Brussels, Belgium, 16–21 June 1996. Abstracts. **J Sleep Res** 1996 Jun;5 Suppl 1:1–273

Normal respiratory pattern during sleep in young fragile X–syndrome patients [letter] Musumeci SA, et al. **J Sleep Res** 1996 Dec;5(4):272

Seasonal covariation of the circadian phases of rectal temperature and slow wave sleep onset. Van Dongen HP, et al. **J Sleep Res** 1997 Mar;6(1):19–25

Mattresses and sleep for patients with low back pain: a survey of orthopaedic surgeons. Levy H, et al. **J South Orthop Assoc** 1996 Fall;5(3):185–7

Natural filling cystometry in small boys with posterior urethral valves: unstable valve bladders become stable during sleep. Holmdahl G, et al. **J Urol** 1997 Sep;158(3 Pt 2):1017–21

Knitting up the raveled sleave of care: role of sleep and effects of its lack examined [news] Lamberg L. **JAMA** 1996 Oct 16;276(15):1205–7

Wake–up call aimed at drowsy drivers: message is 'drive alert, arrive alive' [news] Lamberg L. **JAMA** 1996 Oct 16;276(15):1209–10

Sleep quality in older adults: effects of exercise training and influence of sunlight exposure [letter; comment] O'Connor PJ, et al. **JAMA** 1997 Apr 2;277(13):1034–5. Comment on: JAMA 1997 Jan 1;277(1):32–7. Comment on: JAMA 1997 Jan 1;277(1):64–6.

Co–sleeping and sudden infant death syndrome [see comments] Mitchell EA. **Lancet** 1996 Nov 30; 348(9040):1466. Comment in: Lancet 1997 Jan 4;349(9044):56–7.

Sleep and sexual offending. Fenwick P. **Med Sci Law** 1996 Apr;36(2):122–34

The sleep of long–haul truck drivers [see comments] Mitler MM, et al. **N Engl J Med** 1997 Sep 11;337(11):755–61. Comment in: N Engl J Med 1997 Sep 11;337(11):783–4.

Effects of hand dominance and sleep side preference on hemodialysis vascular access survival. Diskin CJ, et al. **Nephron** 1996;74(4):724–8

Short–lived head pains. Raskin NH. **Neurol Clin** 1997 Feb; 15(1):143–52 (44 ref.)

Concentrations of plasma testosterone in sudden manhood death syndrome. Tsunoda K, et al. **Nippon Hoigaku Zasshi** 1997 Feb;51(1):26–31

Risk of infection from sleeping with contact lenses on: causes of risk. Goodlaw E. **Optom Vis Sci** 1996 Mar;73(3):156–8 (29 ref.)

How should sleeping babies lie? [editorial; comment] Brooks JG. **Pediatr Pulmonol** 1996 Dec;22(6):333–4. Comment on: Pediatr Pulmonol 1996 Dec;22(6):342–7.

Infant sleep position in licensed child care centers. Gershon NB, et al. **Pediatrics** 1997 Jul;100(1):75–8

Bedsharing promotes breastfeeding. McKenna JJ, et al. **Pediatrics** 1997 Aug;100(2 Pt 1):214–9

Misrepresentation of sleep–laboratory dream research with children. Foulkes D. **Percept Mot Skills** 1996 Aug; 83(1):205–6

Recognition memory, circadian rhythms, and sleep. Koulack D. **Percept Mot Skills** 1997 Aug;85(1):99–104

Scores on morningness–eveningness and sleep habits of Korean students, Japanese students, and Japanese workers. Park YM, et al. **Percept Mot Skills** 1997 Aug;85(1):143–54

A multicenter study of sleep–wake rhythm disorders: clinical features of sleep–wake rhythm disorders. Yamadera H, et al. **Psychiatry Clin Neurosci** 1996 Aug;50(4):195–201

Relationship between sleep and mood in patients with rapid–cycling bipolar disorder. Leibenluft E, et al. **Psychiatry Res** 1996 Jul 31;63(2–3):161–8

Co–sleeping: gender differences in college students' retrospective reports of sleeping with parents during childhood. Billingham RE, et al. **Psychol Rep** 1996 Dec; 79(3 Pt 2):1423–6

Evaluation of the use of three different devices for nocturnal oxygen therapy in COPD patients. Domingo C, et al. **Respiration** 1996;63(4):230–5

Bibliography of recent literature in sleep research. **Sleep** 1996 Jun;19(5):445–51

Bibliography of recent literature in sleep research. **Sleep** 1996 Nov;19(9):749–55

Bibliography of recent literature in sleep research. **Sleep** 1996 Dec;19(10):856–64

Bibliography of recent literature in sleep research. **Sleep** 1996 Jul;19(6):519–28

Bibliography of recent literature in sleep research. **Sleep** 1996 May;19(4):355–60

Bibliography of recent literature in sleep research. **Sleep** 1996 Apr;19(3):258–73

Bibliography of recent literature in sleep research. **Sleep** 1995 Dec;18(10):919–26

Bibliography of recent literature in sleep research. **Sleep** 1997 Jan;20(1):77–94

Bibliography of recent literature in sleep research. **Sleep** 1996 Oct;19(8):668–76

Citations retrieved by brain information service. **Sleep** 1996 Feb;19(2):180–6

Bibliography of recent literature in sleep research. **Sleep** 1996 Sep;19(7):602–8

Bibliography of recent literature in sleep research. **Sleep** 1997 Feb;20(2):171–83

Use of wrist activity for monitoring sleep/wake in demented nursing–home patients. Ancoli–Israel S, et al. **Sleep** 1997 Jan;20(1):24–7

Variations in circadian rhythms of activity, sleep, and light exposure related to dementia in nursing–home patients. Ancoli–Israel S, et al. **Sleep** 1997 Jan;20(1):18–23

We are chronically sleep deprived. Bonnet MH, et al. **Sleep** 1995 Dec;18(10):908–11 (34 ref.)

Overestimation of sleep latency by patients with suspected hypersomnolence. Chervin RD, et al. **Sleep** 1996 Feb; 19(2):94–100

Daytime sleep propensity after moderate circadian phase shifts induced with bright light exposure. Dumont M, et al. **Sleep** 1997 Jan;20(1):11–7

The effects of a short daytime nap after restricted night sleep. Gillberg M, et al. **Sleep** 1996 Sep;19(7):570–5

Sleep–promoting and hypothermic effects of daytime melatonin administration in humans. Hughes RJ, et al. **Sleep** 1997 Feb;20(2):124–31

What does the multiple sleep latency test measure in a community sample? Kronholm E, et al. **Sleep** 1995 Dec; 18(10):827–35

The effects of regularizing sleep–wake schedules on daytime sleepiness. Manber R, et al. **Sleep** 1996 Jun;19(5):432–41

Rapid shift in sleep time and acrophase of melatonin secretion in short shift work schedule. Quera–Salva MA, et al. **Sleep** 1996 Sep;19(7):539–43

Phase advance in moderately sleepy and alert normals. Roehrs T, et al. **Sleep** 1996 Jun;19(5):417–22

A randomized controlled trial of the effect of exercise on sleep. Singh NA, et al. **Sleep** 1997 Feb;20(2):95–101

A factor replication of the Sleep–Wake Activity Inventory (SWAI) in a Mexican population. Valencia–Flores M, et al. **Sleep** 1997 Feb;20(2):111–4

Automobile crashes and sleep. Findley LJ, et al. **Va Med Q** 1996 Fall;123(4):258–9

Moonstruck ostriches [letter] Madeiros CA. **Vet Rec** 1997 May 24;140(21):564

Pain and sleep [editorial] Friedrichs ES. **Wis Med J** 1997 Feb;96(2):8–9

[Influence of parental educational practices on the sleep and attentional performances in children] Billon–Descarpentries J. **Arch Pediatr** 1997 Feb;4(2):181–5 (Eng. Abstr.) **(Fre)**

[Sleeping position, prevention of sudden death syndrome and gastroesophageal reflux] Faure C, et al. **Arch Pediatr** 1996 Jun;3(6):598–601 (16 ref.) (Eng. Abstr.) **(Fre)**

[Incidence of sudden infant death and outcome of sleep position in Seine–Maritime (letter) (see comments)] Pellerin MA, et al. **Arch Pediatr** 1996 Jun;3(6):610–1. Comment in: Arch Pediatr 1997 Jan;4(1):96–7. **(Fre)**

[Proceedings of the 3rd Congress of the German Association for Sleep Research and Sleep Medicine. Bochum, 19–21, 1995] **Wien Med Wochenschr** 1996;146(13–14):269–401 **(Ger)**

[Chronic obstructive lung disease and sleep] Bishara H. **Harefuah** 1996 Jun 2;130(11):775–7 (41 ref.) **(Heb)**

[Falling asleep at the wheel: chronicle of a predicatable accident (editorial)] Lavie P. **Harefuah** 1997 Apr 15; 132(8):552–3 **(Heb)**

[Sedation and sleep induction instead of anesthesia in infants and young children during CT and MRI examinations] Weisenbach J, et al. **Orv Hetil** 1996 Mar 24;137(12):629–32 (Eng. Abstr.) **(Hun)**

[The characteristics of the structure of night sleep in patients who have had a stroke] Gasanov RL, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(4):11–4 (Eng. Abstr.) **(Rus)**

[The typology of the objective disorders of night sleep in insomnia] Kovrov GV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(4):7–10 (Eng. Abstr.) **(Rus)**

[The medicine of sleep in the neurological light (editorial)] Vein AM. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(4):4–6 **(Rus)**

[The sleeping position and deformities caused by compression: an alert for outpatient pediatricians. Letter] Pastor Gómez AM, et al. **An Esp Pediatr** 1997 Mar; 46(3):313–4 **(Spa)**

[Respiratory disorders during sleep in chronic obstructive lung disease] Togores Solivellas B, et al. **Arch Bronconeumol** 1996 Jan;32(1):32–9 (78 ref.) **(Spa)**

[The efficacy of sleep hygiene measures in the treatment of insomnia] Martinez–Manzano C, et al. **Gac Med Mex** 1997 Jan–Feb;133(1):3–6 (Eng. Abstr.) **(Spa)**

[Epileptic seizures during sleep] Mauri JA, et al. **Rev Neurol** 1996 Oct;24(134):1233–6 (Eng. Abstr.) **(Spa)**

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Effects of benzodiazepines, sleep and sleep deprivation on vigilance and memory. Coenen AM, et al. **Acta Neurol Belg** 1997 Jun;97(2):123–9

Opposite effects of GABAA and NMDA receptor antagonists on ethanol–induced behavioral sleep in rats. Beleslin DB, et al. **Alcohol** 1997 Mar–Apr;14(2):167–73

Effect of neonatal thyroid hormone alterations in CNS ethanol sensitivity in adult LS and SS mice. Segall MA, et al. **Alcohol** 1996 Nov–Dec;13(6):559–67

Mapping quantitative trait loci for ethanol–induced anesthesia in LSxSS recombinant inbred and F2 mice: methodology and results. Bennett B, et al. **Alcohol Alcohol Suppl** 1994; 2:79–86

Long–term ethanol and nicotine treatment elicit tolerance to ethanol. Collins AC, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):990–9

Effects of ethanol and temperature on NMDA receptor function in different mouse genotypes. Musleh W, et al. **Alcohol Clin Exp Res** 1996 Oct;20(7):1299–304

Sedation in allergic rhinitis is caused by the condition and not by antihistamine treatment. Spaeth J, et al. **Allergy** 1996 Dec;51(12):893–906

Progesterone–induced changes in sleep in male subjects. Friess E, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E885–91

Interleukin–1 induces changes in sleep, brain temperature, and serotonergic metabolism. Gemma C, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R601–6

Effect of interleukin–1 beta on EEG power density during sleep depends on circadian phase. Lancel M, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R830–7

Progesterone induces changes in sleep comparable to those of agonistic GABAA receptor modulators. Lancel M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):E763–72

VIP decelerates non–REM–REM cycles and modulates hormone secretion during sleep in men. Murck H, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R905–11

Effects of systemic GHRH on sleep in intact and hypophysectomized rats. Obál F Jr, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E230–7

Human immunodeficiency virus envelope glycoprotein 120 alters sleep and induces cytokine mRNA expression in rats [published errata appear in Am J Physiol 1996 Aug;271(2 Pt 2):section R following table of contents and 1996 Dec;271(6 Pt 3):section R following table of contents] Opp MR, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R963–70

Tolerance of mefloquine by SwissAir trainee pilots. Schlagenhauf P, et al. **Am J Trop Med Hyg** 1997 Feb; 56(2):235–40

Melatonin: a wonder drug for jet lag, daytime sleep, better sex, & longer life? **Aviat Space Environ Med** 1996 Aug; 67(8):792

Melatonin efficacy in aviation missions requiring rapid deployment and night operations. Comperatore CA, et al. **Aviat Space Environ Med** 1996 Jun;67(6):520–4

Citalopram: differential sleep/wake and EEG power spectrum effects after single dose and chronic administration. Neckelmann D, et al. **Behav Brain Res** 1996 Sep;79(1–2):183–92

Are neurovegetative symptoms stable in relapsing or recurrent atypical depressive episodes? Nierenberg AA, et al. **Biol Psychiatry** 1996 Oct 15;40(8):691–6

Effect of p–chlorophenylalanine (PCPA) on sleep and monoamines content in the brain of a lizard species. Huitrón–Reséndiz S, et al. **Brain Res** 1997 Jun 27; 761(1):19–24

Flumazenil but not FG7142 reverses the decrease in pentobarbital sleep caused by activation of central noradrenergic systems in mice. Matsumoto K, et al. **Brain Res** 1997 Apr 18;754(1–2):325–8

Central corticotropin–releasing factor and benzodiazepine receptor systems are involved in the social isolation stress–induced decrease in ethanol sleep in mice. Matsumoto K, et al. **Brain Res** 1997 Apr 11;753(2):318–21

Human sleep EEG following the 5–HT1A antagonist pindolol: possible disinhibition of raphe neuron activity. Seifritz E, et al. **Brain Res** 1997 Jun 6;759(1):84–91

Prenatal exposure to alcohol in adult rats: relationships between sleep and memory deficits, and effects of glucose administration on memory. Stone WS, et al. **Brain Res** 1996 Dec 2;742(1–2):98–106

Neuropeptide Y reverses corticotropin–releasing hormone– and psychological stress–caused shortening of sodium pentobarbital–induced sleep in rats. Yamada K, et al. **Brain Res** 1996 Jul 1;725(2):272–5

Sleep/waking effects following intrathecal administration of the 5–HT(1A) Agonist 8–OH–DPAT alone and in combination with the putative 5–HT(1A) antagonist NAN–190 in rats. Bjørkum AA, et al. **Brain Res Bull** 1996; 39(6):373–9

Electrographic patterns of postprandial sleep after food deprivation or intraventricular adrenaline injections in pigeons. Dario AJ, et al. **Brain Res Bull** 1996;39(4):249–54

Nitric oxide donors SIN–1 and SNAP promote nonrapid–eye–movement sleep in rats. Kapás L, et al. **Brain Res Bull** 1996;41(5):293–8

Re: Rapid stabilization at home [letter; comment] Jeffries JJ. **Can J Psychiatry** 1997 May;42(4):427. Comment on: Can J Psychiatry 1996 Nov;41(9):605–6.

Effects of repeated administration of zolpidem on sleep, diurnal and nocturnal respiratory function, vigilance, and physical performance in patients with COPD. Girault C, et al. **Chest** 1996 Nov;110(5):1203–11

Maternal polydrug use including cocaine and postnatal infant sleep architecture: preliminary observations and implications for respiratory control and behavior. Gingras

JL, et al. **Early Hum Dev** 1995 Nov 24;43(3):197–204

Sleep latency measures of caffeine effects during sleep deprivation. Kelly TL, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 102(5):397–400

Effects of chronic treatment with methadone and naltrexone on sleep in addicts. Staedt J, et al. **Eur Arch Psychiatry Clin Neurosci** 1996;246(6):305–9

Effect of neuroleptics on ethanol–treated rats. Popović MR, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jul–Sep; 21(3):247–50

Ro 15–4513 potentiates, instead of antagonizes, ethanol–induced sleep in mice exposed to small platform stress. Pokk P, et al. **Eur J Pharmacol** 1996 Dec 12; 317(1):15–20

Effects of N6–cyclopentyladenosine and caffeine on sleep regulation in the rat. Schwierin B, et al. **Eur J Pharmacol** 1996 Apr 11;300(3):163–71

Acute, subchronic and discontinuation effects of zopiclone on sleep EEG and nocturnal melatonin secretion. Mann K, et al. **Eur Neuropsychopharmacol** 1996 Aug;6(3):163–8

Manipulation of pyramidal cell firing in the hippocampus of freely behaving rats by local application of K+ via microdialysis. Ludvig N, et al. **Hippocampus** 1996; 6(2):97–108

Sleep in patients with chronic primary insomnia during long–term zolpidem administration and after its withdrawal. Monti JM, et al. **Int Clin Psychopharmacol** 1996 Dec;11(4):255–63

Effects of inspired gas on sleep–related apnea in the rat. Christon J, et al. **J Appl Physiol** 1996 Jun;80(6):2102–7

Polysomnography in drug development. Dietrich B. **J Clin Pharmacol** 1997 Jan;37(1 Suppl):70S–78S (81 ref.)

A comparison of nefazodone and fluoxetine on mood and on objective, subjective, and clinician–rated measures of sleep in depressed patients: a double–blind, 8–week clinical trial [published erratum appears in J Clin Psychiatry 1997 Jun;58(6):275] Gillin JC, et al. **J Clin Psychiatry** 1997 May; 58(5):185–92

Late–afternoon ethanol intake affects nocturnal sleep and the sleep EEG in middle–aged men. Landolt HP, et al. **J Clin Psychopharmacol** 1996 Dec;16(6):428–36

Strain differences in the somnogenic effects of interferon inducers in mice. Toth LA. **J Interferon Cytokine Res** 1996 Dec;16(12):1065–72

Mice lacking the TNF 55 kDa receptor fail to sleep more after TNFalpha treatment. Fang J, et al. **J Neurosci** 1997 Aug 1;17(15):5949–55

Allopregnanolone affects sleep in a benzodiazepine–like fashion. Lancel M, et al. **J Pharmacol Exp Ther** 1997 Sep; 282(3):1213–8

Effects of triazolam on sleep, daytime sleepiness, and morning stiffness in patients with rheumatoid arthritis. Walsh JK, et al. **J Rheumatol** 1996 Feb;23(2):245–52

Day–time melatonin administration: effects on core temperature and sleep onset latency. Reid K, et al. **J Sleep Res** 1996 Sep;5(3):150–4

Sleeping time after phenobarbital treatment and the brain levels of gamma–aminobutyric acid and phenobarbital at the regaining of righting response point in ethionine–induced liver–disordered mice. Noguchi M, et al. **J Toxicol Sci** 1996 May;21(2):113–23

Effect of Japanese angelica root extract on pentobarbital–induced sleep in group–housed and socially isolated mice: evidence for the central action. Matsumoto K, et al. **Jpn J Pharmacol** 1997 Apr;73(4):353–6

Analysis of sleep EEGs by the interval histogram method—validity of the baseline night as a control and the effect of ethyl loflazepate (CM6912). Kuwahara H, et al. **Kurume Med J** 1996;43(4):305–12

Coadministered pentobarbital anesthesia postpones but does not block the motor and sleep EEG responses to MK–801. Feinberg I, et al. **Life Sci** 1997;60(12):PL 217–22

Sleep induction by microinjection of pentobarbital into the medial preoptic area in rats. Mendelson WB. **Life Sci** 1996; 59(22):1821–8

Majonoside–R2 reverses social isolation stress–induced decrease in pentobarbital sleep in mice: possible involvement of neuroactive steroids. Nguyen TT, et al. **Life Sci** 1997;61(4):395–402

Sleep benefit in Parkinson's disease. Merello M, et al. **Mov Disord** 1997 Jul;12(4):506–8

Anandamide may mediate sleep induction [letter] Mechoulam R, et al. **Nature** 1997 Sep 4;389(6646):25–6

Brain monoamine changes in rats after short periods of ozone exposure. González–Piña R, et al. **Neurochem Res** 1997 Jan; 22(1):63–6

Bromocriptine–induced blockade of pregnancy affects sleep patterns in rats. Zhang SQ, et al. **Neuroimmunomodulation** 1996 Jul–Aug;3(4):219–26

Effects of drugs on sleep. Obermeyer WH, et al. **Neurol Clin** 1996 Nov;14(4):827–40 (116 ref.)

Sleep promoting effects of intravenously administered acidic fibroblast growth factor. Galan JM, et al. **Neurol Res** 1996 Dec;18(6):567–9

Soporific effect of the neurosteroid pregnanolone in relation to the substance's plasma level: a pilot study. Schulz H, et al. **Neuropsychobiology** 1996;34(2):106–12

Relationship between the effects of a hypnotic drug, zopiclone, on polysomnography and on daytime EEGs. Yamadera H, et al. **Neuropsychobiology** 1997;35(3):152–5

Longitudinal effects of nortriptyline on EEG sleep and the likelihood of recurrence in elderly depressed patients. Buysse DJ, et al. **Neuropsychopharmacology** 1996 Apr; 14(4):243–52

Fluoxetine–induced sleep disturbance in depressed patients. Dorsey CM, et al. **Neuropsychopharmacology** 1996 Jun; 14(6):437–42

Somatostatin impairs sleep in elderly human subjects. Frieboes RM, et al. **Neuropsychopharmacology** 1997 May; 16(5):339–45

Role of GABAA receptors in sleep regulation. Differential effects of muscimol and midazolam on sleep in rats. Lancel M, et al. **Neuropsychopharmacology** 1996 Jul;15(1):63–74

Sleep and waking during acute histamine H3 agonist BP 2.94 or H3 antagonist carboperamide (MR 16155) administration in rats. Monti JM, et al. **Neuropsychopharmacology** 1996 Jul;15(1):31–5

Thalidomide, a hypnotic with immune modulating properties, increases cataplexy in canine narcolepsy. Kanbayashi T, et al. **Neuroreport** 1996 Aug 12;7(12):1881–6

Inhibition of tumor necrosis factor attenuates physiological sleep in rabbits. Takahashi S, et al. **Neuroreport** 1996 Jan 31;7(2):642–6

Daytime melatonin administration enhances sleepiness and theta/alpha activity in the waking EEG. Cajochen C, et al. **Neurosci Lett** 1996 Apr 5;207(3):209–13

Hypnotic and hypothermic effects of melatonin on daytime sleep in humans: lack of antagonism by flumazenil. Nave R, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):123–6

The effects of ozone exposure on the sleep–wake cycle and serotonin contents in the pons of the rat. Paz C, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):49–52

Sleep and signs of attention during 3 months of intranasal vasopressin: a pilot study in two elderly subjects. Perras B, et al. **Peptides** 1996;17(7):1253–5

Effects of four antiepileptic drugs on sleep and waking in the rat under both light and dark phases. Bertorelli R, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):559–65

Effects of a D2 receptor agonist RO 41–9067 alone and with clonidine on sleep parameters in the rat. Python A, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):291–6

Acute zinc administration prolongs hexobarbitone–induced sleeping time in C57/6J mice. Tan BK, et al. **Pharmacol Res** 1995 Oct;32(4):233–6

Effects of dexamethasone on sleep. Moser NJ, et al. **Pharmacol Toxicol** 1996 Aug;79(2):100–2

Nocturnal melatonin secretion and sleep after doxepin administration in chronic primary insomnia. Hajak G, et al. **Pharmacopsychiatry** 1996 Sep;29(5):187–92

Longtime administration of growth hormone–releasing hormone (GHRH) does not restore the reduced efficiency of GHRH on sleep endocrine activity in 2 old–aged subjects—a preliminary study. Murck H, et al. **Pharmacopsychiatry** 1997 Jul;30(4):122–4

The influence of lorazepam upon pre– and poststimulus EEG during sleep in man. Wagner P, et al. **Pharmacopsychiatry** 1997 Jan;30(1):16–22

Effect of vitamin B12 on the sleep–wake rhythm following an 8–hour advance of the light–dark cycle in the rat. Kiuchi T, et al. **Physiol Behav** 1997 Apr;61(4):551–4

Effect of atenolol on nocturnal sleep and temperature in young men: reversal by pharmacological doses of melatonin. Van Den Heuvel CJ, et al. **Physiol Behav** 1997 Jun;61(6):795–802

Effects of 24–hr nicotine replacement on sleep and daytime activity during smoking cessation. Wolter TD, et al. **Prev Med** 1996 Sep–Oct;25(5):601–10

A double–blind, placebo–controlled evaluation of the effects of orally administered venlafaxine on sleep in inpatients with major depression. Luthringer R, et al. **Psychopharmacol Bull** 1996;32(4):637–46

Low dose melatonin improves sleep in healthy middle–aged subjects. Attenburrow ME, et al. **Psychopharmacology (Berl)** 1996 Jul;126(2):179–81

Analysis of sleep EEG microstructure in subchronic paroxetine treatment of healthy subjects. Röschke J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):44–9

The effects of paroxetine and nefazodone on sleep: a placebo controlled trial. Sharpley AL, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):50–4

An evaluative study of the short–term effects of once–daily, sustained–release theophylline on sleep in nocturnal asthmatics. Richardt D, et al. **S Afr Med J** 1996 Jul; 86(7):803–4

A quantitative evaluation of the relationships between growth hormone secretion and delta wave electroencephalographic activity during normal sleep and after enrichment in delta waves. Gronfier C, et al. **Sleep** 1996 Dec;19(10):817–24

Effects of alcohol on sleep parameters of sleep–deprived healthy volunteers. Lobo LL, et al. **Sleep** 1997 Jan; 20(1):52–9

Endogenous and exogenous nitric oxide in the pedunculopontine tegmentum induces sleep. Datta S, et al. **Synapse** 1997 Sep;27(1):69–78

[Melatonin—a wonder drug from America?] Huether G. **Internist (Berl)** 1996 Aug;37(8):848–50 **(Ger)**

[Sleep modifies anticholinergic mydriasis] Krastel H, et al. **Ophthalmologe** 1996 Aug;93(4):476–8 (Eng. Abstr.) **(Ger)**

[Potentiating and delaying effect of dalargin analogs on the duration of experimental nembutal–induced sleep] Khugaeva VK, et al. **Biull Eksp Biol Med** 1996 Dec; 122(12):618–22 **(Rus)**

[Sleep disorders and impaired learning ability in rats with parkinsonian syndrome induced by MPTP] Nerobkova LN, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):288–91 **(Rus)**

[The contrary effects of ethanol on the behavior of short– and long–sleep C57BL/6 mice in a dark–light chamber] Lapin IP, et al. **Eksp Klin Farmakol** 1996 Mar–Apr; 59(2):50–2 (Eng. Abstr.) **(Rus)**

[The effect of cadmium on the wakefulness–sleep cycle in rats in early postnatal ontogeny] Aristakesian EA, et al. **Zh Evol Biokhim Fiziol** 1996 Jul–Aug;32(4):402–8 (Eng. Abstr.) **(Rus)**

[The effect of unilateral destruction of the head of the caudate nucleus with kainic acid on the structure of the wakefulness–sleep cycle and the EEG in rats] Vataev SI, et al. **Zh Evol Biokhim Fiziol** 1996 Jul–Aug;32(4):434–9 (Eng. Abstr.) **(Rus)**

[The effect of unilateral destruction of the caudate nucleus with kainic acid on the nature of the electrical activity in the rat brain in the wakefulness–sleep cycle] Vataev SI, et al. **Zh Evol Biokhim Fiziol** 1996 Sep–Oct;32(5):613–9 (Eng. Abstr.) **(Rus)**

[The effect of Imovane on sleep structure and respiratory indices during sleep in insomnia patients] Eligulashvili TS, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(4):50–2 (Eng. Abstr.) **(Rus)**

[The effect of Lendormin (brotizolam) on the sleep structure and subjective assessment of sleep in insomnia patients] Kovrov GV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(3):55–7 (Eng. Abstr.) **(Rus)**

GENETICS

Genetics of narcolepsy and other sleep disorders. Mignot E. **Am J Hum Genet** 1997 Jun;60(6):1289–302 (199 ref.)

Relationship of sleep abnormalities to patient genotypes in Prader–Willi syndrome. Vgontzas AN, et al. **Am J Med Genet** 1996 Sep 20;67(5):478–82

Glycine receptors from long–sleep and short–sleep mice: genetic differences in drug sensitivity. Mascia MP, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):169–72

Twins under shift work: a case study of sleep log data. Fukuda K. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):931–7

IMMUNOLOGY

Sedation in allergic rhinitis is caused by the condition and not by antihistamine treatment. Spaeth J, et al. **Allergy** 1996 Dec;51(12):893–906

Der p I concentrations in mattress surface and floor dust collected from infants' bedrooms. van Strien RT, et al. **Clin Exp Allergy** 1995 Dec;25(12):1184–9

PHYSIOLOGY

Subcutaneous blood flow in man during sleep with continuous epidural anaesthesia. Sindrup JH, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):636–40

Human sleep/wake regulation. Gillberg M. **Acta Anaesthesiol Scand Suppl** 1997;110:8–10 (11 ref.)

Interhemispheric differences of sleep EEG complexity. Szelenberger W, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(4):955–9

Functional uncertainty, aging and memory processes during sleep. Salzarulo P, et al. **Acta Neurol Belg** 1997 Jun; 97(2):118–22 (31 ref.)

The static–charge–sensitive bed in the monitoring of respiration during sleep in infants and young children. Kirjavainen T, et al. **Acta Paediatr** 1996 Oct;85(10):1146–52

Comparison of measured sleeping metabolic rate and predicted basal metabolic rate in the first year of life. Wells JC, et al. **Acta Paediatr** 1996 Sep;85(9):1013–8

Tryptophan, oxygenase, and sleep. Hayaishi O. **Adv Exp Med Biol** 1996;398:3–11, vi

Homeostatic sleep regulation in habitual short sleepers and long sleepers. Aeschbach D, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 2):R41–53

Natural hypothermia and sleep deprivation: common effects on recovery sleep in the Djungarian hamster. Deboer T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1364–71

Continuous recordings of brain regional circulation during sleep/wake state transitions in rats. Gerashchenko D, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R855–63

Pregnancy–associated sleep changes in the rat. Kimura M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1063–9

Temperature sensitivity of sleep homeostasis during hibernation in the golden–mantled ground squirrel. Larkin JE, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R777–84

Body temperature and sleep in intact and ovariectomized female rats. Li H, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1753–8

VIP decelerates non–REM–REM cycles and modulates hormone secretion during sleep in men. Murck H, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R905–11

Relationships between sleep quality and glucose regulation in normal humans. Scheen AJ, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E261–70

Nocturnal melatonin onset is phase locked to the primary sleep gate. Shochat T, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R364–70

Inhibition of brain interleukin–1 attenuates sleep rebound after sleep deprivation in rabbits. Takahashi S, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R677–82

Inhibition of tumor necrosis factor prevents

warming-induced sleep responses in rabbits. Takahashi S, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1325-9

Dynamics of the sleep EEG after an early evening nap: experimental data and simulations. Werth E, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R501-10

Coronary and total peripheral resistance changes during sleep in a porcine model. Zinkovska SM, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H723-9

Which elderly patients with remitted depression remain well with continued interpersonal psychotherapy after discontinuation of antidepressant medication? Reynolds CF 3rd, et al. **Am J Psychiatry** 1997 Jul;154(7):958-62

Effects of menopause and nasal occlusion on breathing during sleep. Carskadon MA, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):205-10

Impaired respiratory response to resistive loading during sleep in healthy offspring of patients with obstructive sleep apnea. Pillar G, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1602-8

The determinants of respiratory rate during mechanical ventilation. Tobert DG, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):485-92

A tongue retaining device and sleep-state genioglossus muscle activity in patients with obstructive sleep apnea. Ono T, et al. **Angle Orthod** 1996;66(4):273-80

Thermoregulation and sleep. Closely linked but separable. Krueger JM, et al. **Ann N Y Acad Sci** 1997 Mar 15; 813:281-6

Sleep and arousal: thalamocortical mechanisms. McCormick DA, et al. **Annu Rev Neurosci** 1997;20:185-215 (122 ref.)

Effects of two kinds of pillow on thermoregulatory responses during night sleep. Kawabata A, et al. **Appl Human Sci** 1996 Jul;15(4):155-9

Metabolic rate of sleeping infants. Hull D, et al. **Arch Dis Child** 1996 Oct;75(4):282-7

Individual variation in sleeping metabolic rates in infants. Hull D, et al. **Arch Dis Child** 1996 Oct;75(4):288-91

Behaviour and physiological responses during prone and supine sleep in early infancy. Skadberg BT, et al. **Arch Dis Child** 1997 Apr;76(4):320-4

Higher rectal temperatures in co-sleeping infants. Tuffnell CS, et al. **Arch Dis Child** 1996 Sep;75(3):249-50

Sleeping metabolic rate in infants [letter] Wells JC, et al. **Arch Dis Child** 1997 May;76(5):479

Introduction to the neurophysiological study of sleep: central regulation of skeletal and ocular activities. Gottesmann C. **Arch Ital Biol** 1997 Jun;135(3):279-314 (274 ref.)

Some practical considerations and policy implications of studies of sleep patterns. Mitler MM, et al. **Behav Med** 1996 Winter;21(4):184-5

Sleep electroencephalogram in seasonal affective disorder and in control women: effects of midday light treatment and sleep deprivation. Brunner DP, et al. **Biol Psychiatry** 1996 Sep 15;40(6):485-96

Sleep in the wake of complicated grief symptoms: an exploratory study. McDermott OD, et al. **Biol Psychiatry** 1997 Mar 15;41(6):710-6

The relationship between longitudinal clinical course and sleep and cortisol changes in adolescent depression. Rao U, et al. **Biol Psychiatry** 1996 Sep 15;40(6):474-84

Electroencephalographic sleep and urinary free cortisol in adolescent depression: a preliminary report of changes from episode to recovery. Rao U, et al. **Biol Psychiatry** 1997 Feb 1;41(3):369-73

Dynamics of EEG spindle frequency activity during extended sleep in humans: relationship to slow-wave activity and time of day. Aeschbach D, et al. **Brain Res** 1997 Feb 14;748(1-2):131-6

Preoptic/anterior hypothalamic neurons: thermosensitivity in wakefulness and non rapid eye movement sleep. Alam MN, et al. **Brain Res** 1996 Apr 29;718(1-2):76-82

Influence of a 1 h immobilization stress on sleep states and corticotropin-like intermediate lobe peptide (CLIP or ACTH18-39, Ph-ACTH18-39) brain contents in the rat. Bonnet C, et al. **Brain Res** 1997 Mar 14;751(1):54-63

Sleep and nitric oxide: effects of 7-nitro indazole, inhibitor of brain nitric oxide synthase. Dzoljic MR, et al. **Brain Res** 1996 Apr 29;718(1-2):145-50

Role of the locus coeruleus in the sleep rebound following two different sleep deprivation methods in the rat. González MM, et al. **Brain Res** 1996 Nov 18; 740(1-2):215-26

State-dependent cellular activity patterns of the cat paraventricular hypothalamus measured by reflectance imaging. Kristensen MP, et al. **Brain Res** 1996 Jul 15; 727(1-2):107-17

Role of cholinergic inputs to the medial preoptic area in regulation of sleep-wakefulness and body temperature in freely moving rats. Mallick BN, et al. **Brain Res** 1997 Mar 7;750(1-2):311-7

Sleep in rats rendered chronically hyperprolactinemic with anterior pituitary grafts. Obál F Jr, et al. **Brain Res** 1997 Apr 25;755(1):130-6

Human sleep EEG following the 5-HT1A antagonist pindolol: possible disinhibition of raphe neuron activity. Seifritz E, et al. **Brain Res** 1997 Jun 6;759(1):84-91

Brainstem stimulation during sleep evokes abnormal rhythmic activity in thalamic neurons in feline penicillin epilepsy. Szymusiak R, et al. **Brain Res** 1996 Mar 25;713(1-2):253-60

Sleep, genes and death: fatal familial insomnia. Fiorino AS. **Brain Res Brain Res Rev** 1996 Oct;22(3):258-64 (51 ref.)

Origin and evolution of sleep: roles of vision and endothermy. Kavanau JL. **Brain Res Bull** 1997;42(4):245-64 (239 ref.)

Effects of sleep on somatosensory evoked responses in human: a magnetoencephalographic study. Kitamura Y, et al. **Brain Res Cogn Brain Res** 1996 Nov;4(4):275-9

Becoming circadian--A one-year study of the development of the sleep-wake cycle in children. Menna-Barreto L, et al. **Braz J Med Biol Res** 1996 Jan;29(1):125-9

Interactions between sleep, other body rhythms, immune responses, and exercise. Shephard RJ, et al. **Can J Appl Physiol** 1997 Apr;22(2):95-116 (219 ref.)

Relationship between sleep, neck muscle activity, and pain in cervical dystonia. Lobbezoo F, et al. **Can J Neurol Sci** 1996 Nov;23(4):285-90

Long-term effects of nasal intermittent positive-pressure ventilation on pulmonary function and sleep architecture in patients with neuromuscular diseases. Barbé F, et al. **Chest** 1996 Nov;110(5):1179-83

Quantitative aspiration during sleep in normal subjects. Gleeson K, et al. **Chest** 1997 May;111(5):1266-72

Normal oxyhemoglobin saturation during sleep. How low does it go? Gries RE, et al. **Chest** 1996 Dec;110(6):1489-92

Effects of noninvasive positive pressure ventilation on gas exchange and sleep in COPD patients. Krachman SL, et al. **Chest** 1997 Sep;112(3):623-8

Positional vs nonpositional obstructive sleep apnea patients: anthropomorphic, nocturnal polysomnographic, and multiple sleep latency test data. Oksenberg A, et al. **Chest** 1997 Sep;112(3):629-39

The three-process model of alertness and its extension to performance, sleep latency, and sleep length. Akerstedt T, et al. **Chronobiol Int** 1997 Mar;14(2):115-23

Twenty-four-hour prolactin profiles in night workers. Spiegel K, et al. **Chronobiol Int** 1996 Oct;13(4):283-93

Growth hormone secretion in night workers. Weibel L, et al. **Chronobiol Int** 1997 Jan;14(1):49-60

Computerized scoring of abnormal human sleep: a validation. Sangal RB, et al. **Clin Electroencephalogr** 1997 Apr; 28(2):64-7

Brain monoamines in aggression and sleep. Reis DJ. **Clin Neurosurg** 1971;18:471-502

Psychophysiology of human sleep. Snyder F. **Clin Neurosurg** 1971;18:503-36

Sleep-related breathing and movement disorders in healthy elderly and demented subjects. Bader GG, et al. **Dementia** 1996 Sep-Oct;7(5):279-87

Relationship between objective and subjective sleep measures in depressed patients and healthy controls. Armitage R, et al. **Depress Anxiety** 1997;5(2):97-102

Heart rate variability: sleep stage, time of night, and arousal influences. Bonnet MH, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 102(5):390-6

The effect of sleep onset on event related potentials with rapid rates of stimulus presentation. de Lugt DR, et al. **Electroencephalogr Clin Neurophysiol** 1996 Jun; 98(6):484-92

Chaotic behavior of EEG slow-wave activity during sleep. Ferri R, et al. **Electroencephalogr Clin Neurophysiol** 1996 Dec;99(6):539-43

Temporal relationships between pulsatile cortisol secretion and electroencephalographic activity during sleep in man. Gronfier C, et al. **Electroencephalogr Clin Neurophysiol** 1997 Sep;103(3):405-8

Topographic analysis of coherence and propagation of EEG activity during sleep and wakefulness. Kamiński M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Mar; 102(3):216-27

Changes in cerebral blood flow velocity in healthy young men during overnight sleep and while awake. Kuboyama T, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb; 102(2):125-31

The mismatch negativity to frequency deviant stimuli during natural sleep. Loewy DH, et al. **Electroencephalogr Clin Neurophysiol** 1996 Jun; 98(6):493-501

Objective measurement of sleepiness in summer vacation long-distance drivers. Philip P, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 102(5):383-9

Sensory processing during early and late nocturnal sleep. Plihal W, et al. **Electroencephalogr Clin Neurophysiol** 1996 Sep;99(3):247-56

Autosomal dominant nocturnal frontal lobe epilepsy (ADNFLE) [letter; comment] Ambrosetto G. **Epilepsia** 1997 Jun;38(6):739-40. Comment on: Epilepsia 1996 Oct;37(10):964-76.

Effects of sleep and sleep stage on epileptic and nonepileptic seizures. Bazil CW, et al. **Epilepsia** 1997 Jan;38(1):56-62

Autosomal dominant nocturnal frontal lobe epilepsy (ADNFLE) [letter; comment] Plazzi G, et al. **Epilepsia** 1997 Jun;38(6):738; discussion 739-40. Comment on: Epilepsia 1996 Oct;37(10):964-76.

A new frequency based automatic sleep analysis - description of the healthy sleep. Todorova A, et al. **Eur J Med Res** 1997 May 28;2(5):185-97

A quantitative study of electroencephalography, eye movements and neck electromyography characterizing the sleep-wake cycle of the guinea-pig. Escudero M, et al. **Eur J Neurosci** 1996 Mar;8(3):572-80

Positive correlations between cerebral protein synthesis rates and deep sleep in Macaca mulatta. Nakanishi H, et al. **Eur J Neurosci** 1997 Feb;9(2):271-9

Critical role for M3 muscarinic receptors in paradoxical sleep generation in the cat. Sakai K, et al. **Eur J Neurosci** 1997 Mar;9(3):415-23

Motor activity in sleep bruxism with concomitant jaw muscle pain. A retrospective pilot study. Lavigne GJ, et al. **Eur J Oral Sci** 1997 Feb;105(1):92-5

Sleep-related O2 desaturation and daytime pulmonary haemodynamics in COPD patients with mild hypoxaemia. Chaouat A, et al. **Eur Respir J** 1997 Aug;10(8):1730-5

Obstructive sleep apnoea syndrome: is the "half-night polysomnography" an adequate method for evaluating sleep profile and respiratory events? Fanfulla F, et al. **Eur Respir J** 1997 Aug;10(8):1725-9

Residual effect of nCPAP applied for part of the night in patients with obstructive sleep apnoea [see comments] Hers V, et al. **Eur Respir J** 1997 May;10(5):973-6. Comment in: Eur Respir J 1997 May;10(5):969-70.

Impact of sleep in respiratory failure. McNicholas WT. **Eur Respir J** 1997 Apr;10(4):920-33 (185 ref.)

Expiratory flow limitation during sleep in heavy snorers and obstructive sleep apnoea patients. Stănescu D, et al. **Eur Respir J** 1996 Oct;9(10):2116-21

Patterns of neuronal firing in the human lateral thalamus during sleep and wakefulness. Tsoukatos J, et al. **Exp Brain Res** 1997 Feb;113(2):273-82

Modeling the spontaneous reactivation of experience-specific hippocampal cell assembles during sleep. Shen B, et al. **Hippocampus** 1996;6(6):685-92

Measurement of spontaneous, 12-hour sleep-associated GH secretion in prepubertal children with short stature: clinical relevance and practicability? Schmidt H, et al. **Horm Res** 1996 Jul;46(1):33-7

Plasma epinephrine and norepinephrine concentrations of healthy humans associated with nighttime sleep and morning arousal. Dodt C, et al. **Hypertension** 1997 Jul;30(1 Pt 1):71-6

Do weekly and fast-rotating shiftwork schedules differentially affect duration and quality of sleep? Fischer FM, et al. **Int Arch Occup Environ Health** 1997; 69(5):354-60

A new basal body temperature 5 h after nocturnal sleep onset. Eldor J. **Int J Gynaecol Obstet** 1996 Oct;55(1):73-4

Sleep oxygen desaturation in late sequelae of pulmonary tuberculosis. Sakuma T, et al. **Intern Med** 1996 Jul; 35(7):534-9

Breathing during sleep in myasthenia gravis. Manni R, et al. **Ital J Neurol Sci** 1995 Dec;16(9):589-94

Lack of effect of sleep on energy expenditure and physiologic measures in critically ill burn patients. Gottschlich MM, et al. **J Am Diet Assoc** 1997 Feb;97(2):131-9

Superior laryngeal nerve section alters responses to upper airway distortion in sleeping dogs. Curran AK, et al. **J Appl Physiol** 1997 Sep;83(3):768-75

Interaction of chemical and state effects on ventilation during sleep onset. Dunai J, et al. **J Appl Physiol** 1996 Nov; 81(5):2235-43

Negative pressure-induced deformation of the upper airway causes central apnea in awake and sleeping dogs. Harms CA, et al. **J Appl Physiol** 1996 May;80(5):1528-39

Ventilatory dynamics during transient arousal from NREM sleep: implications for respiratory control stability. Khoo MC, et al. **J Appl Physiol** 1996 May;80(5):1475-84

Sequential arousal and airway-defensive behavior of infants in asphyxial sleep environments. Lijowska AS, et al. **J Appl Physiol** 1997 Jul;83(1):219-28

Neurocirculatory consequences of abrupt change in sleep state in humans. Morgan BJ, et al. **J Appl Physiol** 1996 May;80(5):1627-36

Breathing during wakefulness and NREM sleep in humans without an upper airway. Morrell MJ, et al. **J Appl Physiol** 1996 Jul;81(1):274-81

Airway obstruction during sleep increases blood pressure without arousal. O'Donnell CP, et al. **J Appl Physiol** 1996 Mar;80(3):773-81

Effects of genioglossal response to negative airway pressure on upper airway collapsibility during sleep. Philip-Joët F, et al. **J Appl Physiol** 1996 May;80(5):1466-74

Breathing and brain blood flow during sleep in patients with chronic mountain sickness. Sun S, et al. **J Appl Physiol** 1996 Aug;81(2):611-8

Interaction of heart-rate fluctuations and respiration in 12 to 14-year-old children during sleeping and waking. Unbehaun A, et al. **J Auton Nerv Syst** 1996 Mar 7; 57(3):141-3

Disruption of endocrine rhythms in sleeping sickness with preserved relationship between hormonal pulsatility and the REM-NREM sleep cycles. Brandenberger G, et al. **J Biol Rhythms** 1996 Sep;11(3):258-67

Estimating the endogenous circadian temperature rhythm without keeping people awake. Carrier J, et al. **J Biol Rhythms** 1997 Jun;12(3):266-77

An approach to studying circadian rhythms of adolescent humans. Carskadon MA, et al. **J Biol Rhythms** 1997 Jun; 12(3):278-89

Correlations between sleep and wake in internally synchronized and desynchronized circadian rhythms in humans under prolonged isolation. Chandrashekaran MK, et al. **J Biol Rhythms** 1997 Feb;12(1):26-33

Relationship between napping and melatonin in the blind. Lockley SW, et al. **J Biol Rhythms** 1997 Feb;12(1):16-25

The effects of evening bright light on next-day sleep propensity. Tzischinsky O, et al. **J Biol Rhythms** 1997 Jun;

12(3):259–65
Brain capillary perfusion during sleep. Zoccoli G, et al. **J Cereb Blood Flow Metab** 1996 Nov;16(6):1312–8
Blocking of central nervous mineralocorticoid receptors counteracts inhibition of pituitary–adrenal activity in human sleep. Born J, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1106–10
Relationships between intact parathyroid hormone 24–hour profiles, sleep–wake cycle, and sleep electroencephalographic activity in man. Chapotot F, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3759–65
To sleep, perchance to eat [editorial; comment] Drange MR, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1311–2. Comment on: J Clin Endocrinol Metab 1997 May;82(5):1313–6.
Simultaneous stimulation of slow–wave sleep and growth hormone secretion by gamma–hydroxybutyrate in normal young Men. Van Cauter E, et al. **J Clin Invest** 1997 Aug 1;100(3):745–53
Sleep and blood pressure: spontaneous baroreflex sensitivity in dippers and non–dippers. Vaile JC, et al. **J Hypertens** 1996 Dec;14(12):1427–32
Molecular mechanism of sleep regulation by prostaglandin D2. Urade Y, et al. **J Lipid Mediat Cell Signal** 1996 Sep; 14(1–3):71–82 (47 ref.)
Slow wave sleep drives inhibition of pituitary–adrenal secretion in humans. Bierwolf C, et al. **J Neuroendocrinol** 1997 Jun;9(6):479–84
Changes in sleep–endocrine activity after growth hormone–releasing hormone depend on time of administration. Schier T, et al. **J Neuroendocrinol** 1997 Mar; 9(3):201–5
Sleep and neurological diseases. Autret A. **J Neurol** 1997 Apr;244(4 Suppl 1):S1–2 (17 ref.)
Sleep and the epilepsies. Autret A, et al. **J Neurol** 1997 Apr; 244(4 Suppl 1):S10–7 (73 ref.)
Cardiac autonomic function during sleep in several neuropsychiatric disorders. Ferini–Strambi L, et al. **J Neurol** 1997 Apr;244(4 Suppl 1):S29–36
Sleep in patients with amyotrophic lateral sclerosis. Hetta J, et al. **J Neurol** 1997 Apr;244(4 Suppl 1):S7–9 (10 ref.)
Positron emission tomography studies of sleep and sleep disorders. Maquet P. **J Neurol** 1997 Apr;244(4 Suppl 1):S23–8 (46 ref.)
Active–sleep–related suppression of feline trigeminal sensory neurons: evidence implicating presynaptic inhibition via a process of primary afferent depolarization. Cairns BE, et al. **J Neurophysiol** 1996 Mar;75(3):1152–62
Projection neurons of the lateral amygdaloid nucleus are virtually silent throughout the sleep–waking cycle. Gaudreau H, et al. **J Neurophysiol** 1996 Mar;75(3):1301–5
Muscimol and midazolam do not potentiate each other's effects on sleep EEG in the rat. Lancel M, et al. **J Neurophysiol** 1997 Mar;77(3):1624–9
Low–frequency rhythms in the thalamus of intact–cortex and decorticated cats. Timofeev I, et al. **J Neurophysiol** 1996 Dec;76(6):4152–68
Spontaneous discharge and peripherally evoked orofacial responses of trigemino–thalamic tract neurons during wakefulness and sleep. Cairns BE, et al. **J Neurosci** 1996 Dec 15;16(24):8149–59
Cellular–synaptic generation of sleep spindles, spike–and–wave discharges, and evoked thalamocortical responses in the neocortex of the rat. Kandel A, et al. **J Neurosci** 1997 Sep 1;17(17):6783–97
Functional neuroanatomy of human slow wave sleep. Maquet P, et al. **J Neurosci** 1997 Apr 15;17(8):2807–12
Sleep and sleep regulation in normal and prion protein–deficient mice. Tobler I, et al. **J Neurosci** 1997 Mar 1;17(5):1869–79
Computerization of Fujimori's method of waveform recognition. A review and methodological considerations for its application to all–night sleep EEG. Uchida S, et al. **J Neurosci Methods** 1996 Jan;64(1):1–12 (60 ref.)
Effects of an external nasal dilator on sleep and breathing patterns in newborn infants with and without congestion [see comments] Scharf MB, et al. **J Pediatr** 1996 Dec; 129(6):804–8. Comment in: J Pediatr 1996 Dec;129(6):781–8.
Behavioral sleep states in very low birth weight preterm neonates: relation to neonatal health and vagal maturation. Doussard–Rossevelt J, et al. **J Pediatr Psychol** 1996 Dec; 21(6):785–802
The effect of maternal smoking during pregnancy on sleep respiratory and arousal patterns in neonates. Tirosh E, et al. **J Perinatol** 1996 Nov–Dec;16(6):435–8
A comparison of the ventilatory response of sleeping newborn lambs to step and progressive hypoxaemia. Cohen G, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):203–13
Mechanisms of long–lasting hyperpolarizations underlying slow sleep oscillations in cat corticothalamic networks. Contreras D, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):251–64
Phase–shifting human circadian rhythms: influence of sleep timing, social contact and light exposure. Duffy JF, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):289–97
Synaptic responsiveness of cortical and thalamic neurones during various phases of slow sleep oscillation in cat. Timofeev I, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):265–78
Dynamics of hippocampal memory formation in waking and sleep states. Wilson M. **J Physiol Paris** 1996;90(5–6):351–2
Melatonin, sleep, aging, and the health protection branch [editorial] Young SN. **J Psychiatry Neurosci** 1996 May; 21(3):161–4 (34 ref.)
Respiratory and body movements as indicators of sleep stage and wakefulness in infants and young children. Kirjavainen T, et al. **J Sleep Res** 1996 Sep;5(3):186–94
Travel fatigue and jet–lag. Reilly T, et al. **J Sports Sci** 1997 Jun;15(3):365–9
Hemodynamic factors regulating blood pressure during sleep in patients with mild essential hypertension. Tochikubo O, et al. **Jpn Circ J** 1997 Jan;61(1):25–37
Nocturnal micturition, sleep and well–being in women of ages 40–64 years. Asplund R, et al. **Maturitas** 1996 May; 24(1–2):73–81
Observations on sleeping position and essential hypertension. FitzGerald WA. **Med Hypotheses** 1997 Jul;49(1):27–30
Columnar analysis of sleep electroencephalogram. Johannisson T. **Med Hypotheses** 1997 Aug;49(2):187–9
Sleep as vegetation: a tautological theory of sleep. Pansera F. **Med Hypotheses** 1996 Apr;46(4):312–4
Peptides, sleep and cortistatin [news] de Lecea L, et al. **Mol Psychiatry** 1996 Nov;1(5):349–51
Utility of monitoring breathing during night hours in COPD patients undergoing long–term oxygen therapy. Damato S, et al. **Monaldi Arch Chest Dis** 1997 Apr;52(2):106–11
"Macbeth - does murder sleep". The mysterious mythic melatonin morass. Mack RB. **N C Med J** 1996 May–Jun; 57(3):162–4
Paradoxical sleep deprivation and sleep recording following training in a brightness discrimination avoidance task in Sprague–Dawley rats: paradoxical effects. Smith C. **Neurobiol Learn Mem** 1996 Nov;66(3):283–94
Antiserum to growth hormone decreases sleep in the rat. Obál F Jr, et al. **Neuroendocrinology** 1997 Jul;66(1):9–16
Communication between CNS and ENS: do regulatory peptides play a role in control of sleep modulation of gastrointestinal motility? [editorial] Husebye E. **Neurogastroenterol Motil** 1997 Mar;9(1):1–3
Meal–induced secretion of gastrointestinal regulatory peptides is not affected by sleep. Soffer EE, et al. **Neurogastroenterol Motil** 1997 Mar;9(1):7–12
Sleep in psychiatric disorders. Benca RM. **Neurol Clin** 1996 Nov;14(4):739–64 (140 ref.)
Sleep and degenerative neurologic disorders. Chokroverty S. **Neurol Clin** 1996 Nov;14(4):807–26 (87 ref.)
Sleep and neuromuscular disorders. Culebras A. **Neurol Clin** 1996 Nov;14(4):791–805 (41 ref.)
Sleep–related erectile activity. Hirshkowitz M, et al. **Neurol Clin** 1996 Nov;14(4):721–37 (90 ref.)
Sleep and epilepsy. Malow BA. **Neurol Clin** 1996 Nov; 14(4):765–89 (80 ref.)
Clinical correlates of sleep benefit in Parkinson's disease. Currie LJ, et al. **Neurology** 1997 Apr;48(4):1115–7
Habitual sleep patterns and risk for stroke and coronary heart disease: a 10–year follow–up from NHANES I. Qureshi AI, et al. **Neurology** 1997 Apr;48(4):904–11
Body temperature regulation in the newborn infant: interaction with sleep and clinical implications. Bach V, et al. **Neurophysiol Clin** 1996;26(6):379–402 (147 ref.)
Relationship between the time courses of power in the frequency bands of human sleep EEG. Merica H, et al. **Neurophysiol Clin** 1997;27(2):116–28
Heart rate changes during sleep in normal two–month–old infants. Nogues B, et al. **Neurophysiol Clin** 1996; 26(6):414–22
c–Fos expression during wakefulness and sleep. Pompeiano M, et al. **Neurophysiol Clin** 1995;25(6):329–41 (56 ref.)
Abnormal theta response to nociceptive stimuli during sleep EEG in children with febrile convulsions and control children. Santoni JR, et al. **Neurophysiol Clin** 1996; 26(3):164–9
Recognition of rapid–eye–movement sleep from single–channel EEG data by artificial neural networks: a study in depressive patients with and without amitriptyline treatment. Grözinger M, et al. **Neuropsychobiology** 1996; 33(3):155–9
Sleep EEG analysis by linear prediction: frequency changes of slow–wave activity within NREM and REM sleep episodes in healthy men. Lanquart JP, et al. **Neuropsychobiology** 1996;34(1):1–8
Comparison between conventional and neural network classifiers for rat sleep–wake stage discrimination. Robert C, et al. **Neuropsychobiology** 1997;35(4):221–5
Sleep in schizophrenia: a polysomnographic study on drug–naive patients. Lauer CJ, et al. **Neuropsychopharmacology** 1997 Jan;16(1):51–60
Involvement of corticosteroid–like neurosteroids in pentobarbital–induced sleep. Burade VS, et al. **Neuroreport** 1996 Dec 20;8(1):139–41
Effect of strychnine on rat locus coeruleus neurones during sleep and wakefulness. Darracq L, et al. **Neuroreport** 1996 Dec 20;8(1):351–5
Muscarinic receptor subtypes in the medial preoptic area and sleep–wake cycles. Imeri L, et al. **Neuroreport** 1996 Jan 31;7(2):417–20
Slow wave sleep is accompanied by release of certain amino acids in the thalamus of cats. Kékesi KA, et al. **Neuroreport** 1997 Mar 24;8(5):1183–6
Are there cholinergic and non–cholinergic paradoxical sleep–on neurones in the pons? Sakai K, et al. **Neuroreport** 1996 Nov 4;7(15–17):2449–53
Brain topography of the human sleep EEG: antero–posterior shifts of spectral power. Werth E, et al. **Neuroreport** 1996 Dec 20;8(1):123–7
The transition from slow–wave sleep to paradoxical sleep: evolving facts and concepts of the neurophysiological processes underlying the intermediate stage of sleep. Gottesmann C. **Neurosci Biobehav Rev** 1996 Autumn; 20(3):367–87 (167 ref.)
State–dependent changes of extracellular glutamate in the medial preoptic area in freely behaving rats. Azuma S, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):179–82
Inter–individual differences in the effects of acute stress on the sleep–wakefulness cycle in the rat. Bouyer JJ, et al. **Neurosci Lett** 1997 Apr 11;225(3):193–6
Voltammetric detection of nitric oxide (NO) in the rat brain: its variations throughout the sleep–wake cycle. Burlet S, et al. **Neurosci Lett** 1997 Apr 25;226(2):131–5
Advances of human core temperature minimum and maximal paradoxical sleep propensity by ambient thermal transients. Dewasmes G, et al. **Neurosci Lett** 1996 Aug 30;215(1):25–8
Influences of emotion upon parotid secretion in human. Gemba H, et al. **Neurosci Lett** 1996 Jun 28;211(3):159–62
Social stress induces high intensity sleep in rats. Meerlo P, et al. **Neurosci Lett** 1997 Mar 28;225(1):41–4
Temporal relationship between dynamic heart rate variability and electroencephalographic activity during sleep in man. Otzenberger H, et al. **Neurosci Lett** 1997 Jul 4;229(3):173–6
Auditory deprivation modifies sleep in the guinea–pig. Pedemonte M, et al. **Neurosci Lett** 1997 Feb 14;223(1):1–4
Ambient temperature during torpor affects NREM sleep EEG during arousal episodes in hibernating European ground squirrels. Strijkstra AM, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):177–80
The caudo ventral pontine tegmentum is involved in the generation of high velocity eye saccades in bursts during paradoxical sleep in the cat. Vanni–Mercier G, et al. **Neurosci Lett** 1996 Aug 2;213(2):127–31
Non–rapid eye movement sleep is suppressed in transgenic mice with a deficiency in the somatotropic system. Zhang J, et al. **Neurosci Lett** 1996 Dec 13;220(2):97–100
Spindle oscillations during cortical spreading depression in naturally sleeping cats. Contreras D, et al. **Neuroscience** 1997 Apr;77(4):933–6
Memory, sleep and the evolution of mechanisms of synaptic efficacy maintenance. Kavanau JL. **Neuroscience** 1997 Jul; 79(1):7–44 (347 ref.)
High–frequency gamma electroencephalogram activity in association with sleep–wake states and spontaneous behaviors in the rat. Maloney KJ, et al. **Neuroscience** 1997 Jan;76(2):541–55
Determination of NADH in the rat brain during sleep–wake states with an optic fibre sensor and time–resolved fluorescence procedures. Mottin S, et al. **Neuroscience** 1997 Aug;79(3):683–93
GABA release in the locus coeruleus as a function of sleep/wake state. Nitz D, et al. **Neuroscience** 1997 Jun; 78(3):795–801
Importance of the ventrolateral region of the periaqueductal gray and adjacent tegmentum in the control of paradoxical sleep as studied by muscimol microinjections in the cat. Sastre JP, et al. **Neuroscience** 1996 Sep;74(2):415–26
A prospective study of sleep, mood, and cognitive function in postpartum and nonpostpartum women. Swain AM, et al. **Obstet Gynecol** 1997 Sep;90(3):381–6
Rescheduling a three shift system at a steel rolling mill: effects of a one hour delay of shift starting times on sleep and alertness in younger and older workers. Rosa RR, et al. **Occup Environ Med** 1996 Oct;53(10):677–85
Sequential daily relations of sleep, pain intensity, and attention to pain among women with fibromyalgia. Affleck G, et al. **Pain** 1996 Dec;68(2–3):363–8
The influence of sleeping position on functional residual capacity and effective pulmonary blood flow in healthy neonates. Aiton NR, et al. **Pediatr Pulmonol** 1996 Dec; 22(6):342–7
Influence of sedation on arousal and cardiorespiratory responses to airflow obstruction in sleeping lambs. Jakubowska AE, et al. **Pediatr Res** 1996 Oct;40(4):564–70
Relationship of ventricular tachycardia to sleep/wakefulness in a model of sudden cardiac death. Moïse NS, et al. **Pediatr Res** 1996 Aug;40(2):344–50
Dynamics of respiratory patterning in normal infants and infants who subsequently died of the sudden infant death syndrome. Schechtman VL, et al. **Pediatr Res** 1996 Oct; 40(4):571–7
Eliminating sleep–associated hypoxemia improves growth in infants with bronchopulmonary dysplasia. Moyer–Mileur LJ, et al. **Pediatrics** 1996 Oct;98(4 Pt 1):779–83
The actigraph data analysis software: I. A novel approach to scoring and interpreting sleep–wake activity. Jean–Louis G, et al. **Percept Mot Skills** 1997 Aug;85(1):207–16
The actigraph data analysis software: II. A novel approach to scoring and interpreting sleep–wake activity. Jean–Louis G, et al. **Percept Mot Skills** 1997 Aug;85(1):219–26
Vigilance state episodes and cortical temperature in the Djungarian hamster: the influence of photoperiod and ambient temperature. Deboer T, et al. **Pflugers Arch** 1997 Jan;433(3):230–7
Inhibition of tumor necrosis factor in the brain suppresses rabbit sleep. Takahashi S, et al. **Pflugers Arch** 1995 Dec; 431(2):155–60
Role of medial preoptic area beta adrenoceptors in the regulation of sleep–wakefulness. Sood S, et al.

Pharmacol Biochem Behav 1997 May-Jun;57(1-2):1-5
Longtime administration of growth hormone-releasing hormone (GHRH) does not restore the reduced efficiency of GHRH on sleep endocrine activity in 2 old-aged subjects--a preliminary study. Murck H, et al. **Pharmacopsychiatry** 1997 Jul;30(4):122-4
Can normal subjects be motivated to fall asleep faster? Harrison Y, et al. **Physiol Behav** 1996 Aug;60(2):681-4
Characterization of transition sleep episodes in baseline EEG recordings of adult rats. Mandile P, et al. **Physiol Behav** 1996 Dec;60(6):1435-9
A neuronal transition probability model for the evolution of power in the sigma and delta frequency bands of sleep EEG. Merica H, et al. **Physiol Behav** 1997 Sep;62(3):585-9
A study of sleep in the European blackbird. Szymczak JT, et al. **Physiol Behav** 1996 Oct;60(4):1115-20
Baseline transition sleep and associated sleep episodes are related to the learning ability of rats. Vescia S, et al. **Physiol Behav** 1996 Dec;60(6):1513-25
Influences of fat and carbohydrate on postprandial sleepiness, mood, and hormones. Wells AS, et al. **Physiol Behav** 1997 May;61(5):679-86
Light curtails sleep in anesthetized hornets: extraretinal light perception. Kristianpoller N, et al. **Physiol Chem Phys Med NMR** 1995;27(3):193-201
Brain lipids that induce sleep are novel modulators of 5-hydroxytrypamine receptors. Huidobro-Toro JP, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8078-82
Functional reorganization in thalamocortical networks: transition between spindling and delta sleep rhythms. Terman D, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15417-22
Sleep regulation: relation to photoperiod, sleep duration, waking activity, and torpor. Borbély AA, et al. **Prog Brain Res** 1996;111:343-8 (29 ref.)
Inter and intrahemispheric EEG correlation as a function of sleep cycles. Corsi-Cabrera M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Apr; 20(3):387-405
Acetylcholine releases of mesopontine PGO-on cells in the lateral geniculate nucleus in sleep-waking cycle and serotonergic regulation. Kodama T, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1213-27
Periodic leg movements in sleep in essential hypertension. Espinar-Sierra J, et al. **Psychiatry Clin Neurosci** 1997 Jun; 51(3):103-7
The differences of self-ratings of sleep quality associated with epinephrine and wake time during 4 hour sleep. Nishihara K, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):277-83
The present and the future of sleep research in Asia. Okuma T. **Psychiatry Clin Neurosci** 1995 May;49(2):91-7 (22 ref.)
Counteracting driver sleepiness: effects of napping, caffeine, and placebo. Horne JA, et al. **Psychophysiology** 1996 May; 33(3):306-9
Effects of different sleep duration on delta sleep in recovery nights. Lucidi F, et al. **Psychophysiology** 1997 Mar; 34(2):227-33
45-hour continuous quintuple-site actimetry: relations between trunk and limb movements and effects of circadian sleep-wake rhythmicity. Middelkoop HA, et al. **Psychophysiology** 1997 Mar;34(2):199-203
The pupillary light reflex cannot be used to measure sleepiness. Ranzijn R, et al. **Psychophysiology** 1997 Jan; 34(1):17-22
Respiratory responses to preoptic/anterior hypothalamic warming during sleep in kittens. Ni H, et al. **Reprod Fertil Dev** 1996;8(1):79-86
Post-hyperventilation hypopnea in humans during NREM sleep. Badr MS, et al. **Respir Physiol** 1996 Feb; 103(2):137-45
Dynamics of periodic breathing and arousal during sleep at extreme altitude. Khoo MC, et al. **Respir Physiol** 1996 Jan; 103(1):33-43
Effects of cooling the ventrolateral medulla on diaphragm activity during NREM sleep. Ohtake PJ, et al. **Respir Physiol** 1996 Jul;104(2-3):127-35
The effect of polysomnography on sleep position: possible implications on the diagnosis of positional obstructive sleep apnea. Metersky ML, et al. **Respiration** 1996;63(5):283-7
Color density spectral array for quick evaluation of sleep during nasal continuous positive airway pressure. Rey M, et al. **Respiration** 1996;63(2):100-5
The effects of music interventions on postoperative pain and sleep in coronary artery bypass graft (CABG) patients. Zimmerman L, et al. **Sch Inq Nurs Pract** 1996 Summer; 10(2):153-700; discussion 171-4
"Replay" of hippocampal "memories" [letter; comment] Moore GP, et al. **Science** 1996 Nov 15;274(5290):1216-7. Comment on: Science 1996 Mar 29;271(5257):1870-3.
Adenosine: a mediator of the sleep-inducing effects of prolonged wakefulness. Porkka-Heiskanen T, et al. **Science** 1997 May 23;276(5316):1265-8
Respiratory responses to tracheobronchial stimulation during sleep and wakefulness in the adult cat. Anderson CA, et al. **Sleep** 1996 Jul;19(6):472-8
The multiple sleep latency test: comparison of sleep onset criteria. Benbadis SR, et al. **Sleep** 1996 Oct;19(8):632-6
We are chronically sleep deprived. Bonnet MH, et al. **Sleep** 1995 Dec;18(10):908-11 (34 ref.)
Should we be taking more sleep? Harrison Y, et al. **Sleep** 1995 Dec;18(10):901-7 (54 ref.)
Longitudinal changes in diary- and laboratory-based sleep measures in healthy "old old" and "young old" subjects: a three-year follow-up. Hoch CC, et al. **Sleep** 1997 Mar; 20(3):192-202
Determination of sleep and wakefulness with the actigraph data analysis software (ADAS). Jean-Louis G, et al. **Sleep** 1996 Nov;19(9):739-43
Morning work: effects of early rising on sleep and alertness. Kecklund G, et al. **Sleep** 1997 Mar;20(3):215-23
Sleeping position, orientation, and proximity in bedsharing infants and mothers. Richard C, et al. **Sleep** 1996 Nov; 19(9):685-90
Objective assessment of sleep and alertness in medical house staff and the impact of protected time for sleep. Richardson GS, et al. **Sleep** 1996 Nov;19(9):718-26
Sleep and melatonin in infants: a preliminary study. Sadeh A. **Sleep** 1997 Mar;20(3):185-91
First-night-effects on generalized anxiety disorder (GAD)-based insomnia: laboratory versus home sleep recordings. Saletu B, et al. **Sleep** 1996 Nov;19(9):691-7
Nocturnal polysomnography with and without continuous pharyngeal and esophageal pressure measurements. Skatvedt O, et al. **Sleep** 1996 Jul;19(6):485-90
Statistical features of hypnagogic EEG measured by a new scoring system. Tanaka H, et al. **Sleep** 1996 Nov; 19(9):731-8
Delayed phase jumps of sleep onset in a patient with non-24-hour sleep-wake syndrome. Uchiyama M, et al. **Sleep** 1996 Oct;19(8):637-40
Physiological regulation of the human growth hormone (GH)-insulin-like growth factor type I (IGF-I) axis: predominant impact of age, obesity, gonadal function, and sleep. Veldhuis JD, et al. **Sleep** 1996 Dec;19(10 Suppl):S221-4 (17 ref.)
Topographical and temporal patterns of brain activity during the transition from wakefulness to sleep. Wright KP Jr, et al. **Sleep** 1995 Dec;18(10):880-9
The effects of acute exercise on sleep: a quantitative synthesis. Youngstedt SD, et al. **Sleep** 1997 Mar;20(3):203-14
Sleeping cells in the human thalamus. Kiss ZH, et al. **Stereotact Funct Neurosurg** 1995;65(1-4):125-9
Evaluation of nocturnal bronchoconstriction by all night tracheal sound monitoring. Lenclud C, et al. **Thorax** 1996 Jul;51(7):694-8
[Respiratory disorders during sleep in children] Kirjavainen T, et al. **Duodecim** 1995;111(12):1154-64 (44 ref.) **(Fin)**
[Increased resistance of the upper respiratory airways during sleep] Tuunainen A, et al. **Duodecim** 1995;111(12):1148-53 (25 ref.) **(Fin)**
[Evaluation of erectile function during sleep] Dudoret N. **Journ Annu Diabetol Hotel Dieu** 1996;:249-52 **(Fre)**
[The quality of sleep: an underestimated factor in glycemic regulation?] Scheen AJ, et al. **Journ Annu Diabetol Hotel Dieu** 1996;:253-65 (49 ref.) **(Fre)**
[Melatonin in humans: a biochemical marker of the circadian clock and an endogenous synchronizer] Claustrat B, et al. **Neurophysiol Clin** 1995;25(6):351-9 (43 ref.) (Eng. Abstr.) **(Fre)**
[Propensity for sleep and diurnal somnolence in the course of sleep apnea syndrome] Krieger J, et al. **Neurophysiol Clin** 1996;26(3):131-7 (32 ref.) (Eng. Abstr.) **(Fre)**
[Contribution of positron emission tomography in the study of wakefulness and sleep. Status of the question] Maquet P. **Neurophysiol Clin** 1995;25(6):342-50 (35 ref.) (Eng. Abstr.) **(Fre)**
[Actimetry: simplified analysis of wake-sleep rhythms in the newborn. Preliminary results] Vanhulle C, et al. **Neurophysiol Clin** 1996;26(6):403-13 (Eng. Abstr.) **(Fre)**
[Circadian rhythm in normal and pathological sleep] Billiard M, et al. **Pathol Biol (Paris)** 1996 Jun;44(6):509-17 (23 ref.) (Eng. Abstr.) **(Fre)**
[Prone sleeping position and other risk factors in sudden infant death syndrome: a prevalence study in Geneva] Bouvier P, et al. **Soz Praventivmed** 1997;42(2):121-7 (Eng. Abstr.) **(Fre)**
[Sleep, breathing and gastroesophageal reflux] Rasche K, et al. **Dtsch Med Wochenschr** 1997 May 16;122(20):659-63 (46 ref.) **(Ger)**
[Respiratory function diagnosis during sleep: possibilities and limitations] Penzel T, et al. **Pneumologie** 1997 Apr;51 Suppl 2:444-9 (Eng. Abstr.) **(Ger)**
[Sleep and heart failure (editorial)] Moruzzi P. **Cardiologia** 1997 Feb;42(2):121-2 **(Ita)**
[Sleep and the coronary vessels (editorial)] Moruzzi P. **Cardiologia** 1996 Nov;41(11):1027-8 **(Ita)**
[Non-photic entrainment of human circadian clock—effects of forced sleep-wake schedule on the circadian rhythm in plasma melatonin] Nakamura K. **Hokkaido Igaku Zasshi** 1996 May;71(3):403-22 (Eng. Abstr.) **(Jpn)**
[Central sleep apnea syndrome successfully treated with nasal bi-level positive airway pressure and sleep position adjustment] Morishima YN, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):365-70 (Eng. Abstr.) **(Jpn)**
[Polysomnography (PSG)] Hayakawa T, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:383-5 (5 ref.) **(Jpn)**
[Developmental characteristics of frontal spindle and centro-parietal spindle] Nagata K, et al. **No To Hattatsu** 1996 Sep;28(5):409-17 (Eng. Abstr.) **(Jpn)**
[Circadian variation of lung function in health persons] Franczuk M, et al. **Pneumonol Alergol Pol** 1997; 65(1-2):96-103 (26 ref.) **(Pol)**
[Quality of sleep and periodic breathing during sleep in healthy persons at a height of 3200 meters] Koziej M, et al. **Pneumonol Alergol Pol** 1996;64(9-10):651-7 (Eng. Abstr.) **(Pol)**
[Effect of altitude on blood oxygenation during sleep in patients with bronchial asthma] Mańkowski M, et al. **Pneumonol Alergol Pol** 1996;64(9-10):658-63 (Eng. Abstr.) **(Pol)**
[The wakefulness-sleep cycle during antiorthostatic hypokinesia] Vein AM, et al. **Aviakosm Ekolog Med** 1997; 31(1):47-52 (Eng. Abstr.) **(Rus)**
[Structure of spatially coherent relationships between brain potentials in various frequency bands of the EEG] Tsitseroshin MN, et al. **Fiziol Cheloveka** 1996 Jan-Feb; 22(1):11-21 **(Rus)**
[The effect of generalized seizures on the structure of the circadian wakefulness-sleep cycle and on the EEG of rats with a hereditary predisposition for audiogenic convulsions] Oganesian GA, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):1-8 (Eng. Abstr.) **(Rus)**
[New data on the characteristics of sleep and the organization of the wakefulness-sleep cycle in cold-blooded vertebrates] Karmanova IG. **Zh Evol Biokhim Fiziol** 1996 Jul-Aug; 32(4):511-35 (10 ref.) **(Rus)**
[An evolutionary-dissolutive analysis of the wakefulness-sleep cycle in Tourette syndrome patients Oganesian GA, et al. **Zh Evol Biokhim Fiziol** 1996 Jul-Aug; 32(4):478-87 **(Rus)**
[Emotional stress and sleep: a study of adrenalectomized rats] Koval'zon VM, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):584-91 (Eng. Abstr.) **(Rus)**
[Meta-analysis: trials with melatonin and its effect on the sleep. Letter] Valdizán-Usón JR, et al. **Rev Neurol** 1997 Feb;25(138):302 **(Spa)**

SLEEP APNEA SYNDROMES

Obstructive sleep apnoea. The clinical consequences. Fogarty P. **Aust Fam Physician** 1996 Feb;25(2):170, 172, 174 passim (16 ref.)
A wake up call for sleep disordered breathing [editorial; comment] Fleetham JA. **BMJ** 1997 Mar 22; 314(7084):839-40. Comment on: BMJ 1997 Mar 22;314(7084):851-60. Comment on: BMJ 1997 Mar 22;314(7084):860-3.
Snoring and breathing pauses during sleep: telephone interview survey of a United Kingdom population sample [see comments] Ohayon MM, et al. **BMJ** 1997 Mar 22; 314(7084):860-3. Comment in: BMJ 1997 Mar 22;314(7084):839-40.
Health effects of obstructive sleep apnoea and the effectiveness of continuous positive airways pressure: a systematic review of the research evidence [see comments] Wright J, et al. **BMJ** 1997 Mar 22;314(7084):851-60 (144 ref.). Comment in: BMJ 1997 Mar 22;314(7084):839-40. Comment in: BMJ 1997 Aug 9;315(7104):367; discussion 369. Comment in: BMJ 1997 Aug 9;315(7104):367-8. Comment in: BMJ 1997 Aug 9;315(7104):368; discussion 369. Comment in: BMJ 1997 Aug 9;315(7104):368-9. Comment in: BMJ 1997 Aug 9;315(7104):369. Comment in: ACP J Club 1997 Sep-Oct;127(2):45.
Sleep apnea and its imitators. Feinsilver SH. **Compr Ther** 1996 Oct;22(10):661-4 (5 ref.)
Congenital central hypoventilation syndrome (Ondine's curse syndrome) in two siblings: delayed diagnosis and successful noninvasive treatment. Kerbl R, et al. **Eur J Pediatr** 1996 Nov;155(11):977-80
Sleep apnea: a challenge in critical care. Noureddine SN. **Heart Lung** 1996 Jan-Feb;25(1):37-42; quiz 43-4
Rx for a good night's sleep: diagnosing and treating sleep apnea. Dordick V. **Iowa Med** 1997 Apr;87(4):159-60 (0 ref.)
Sleep apnea-hypopnea syndrome in a sample of veterans of the Persian Gulf War. Peacock MD, et al. **Mil Med** 1997 Apr;162(4):249-51
Obstructive sleep apnoea. Part I: Diagnosis, aetiology, and current treatment. Robertson CJ. **N Z Dent J** 1996 Dec; 92(410):110-3 (49 ref.)
Central sleep apnea. Thalhofer S, et al. **Respiration** 1997; 64(1):2-9 (79 ref.)
Heart rate variability in children with obstructive sleep apnea. Aljadeff G, et al. **Sleep** 1997 Feb;20(2):151-7
Blood pressure "dipping" and "non-dipping" in obstructive sleep apnea syndrome patients. Suzuki M, et al. **Sleep** 1996 Jun;19(5):382-7
Sleep-disordered breathing in older adults: is it a condition distinct from that in middle-aged adults? [editorial; comment] Young T. **Sleep** 1996 Sep;19(7):529-30. Comment on: Sleep 1996 Sep;19(7):531-8.
[Sleep-related breathing disorders--an interdisciplinary topic in undergraduate and postgraduate medical education] Tomori Z, et al. **Bratisl Lek Listy** 1997 Feb;98(2):73-9 (Eng. Abstr.) **(Slo)**
[How to investigate and treat sleep apnea syndrome? Medical specialty and place of residency may be decisive] Ingridsson CS, et al. **Lakartidningen** 1997 Aug 6; 94(32-33):2746-8 **(Swe)**

SLEEP APNEA SYNDROMES

BLOOD

Serotonin-induced cortisol release in CPAP-treated obstructive sleep apnea patients. Hudgel DW, et al. **Chest** 1997 Mar;111(3):632-8

Circulating endothelin-1 in obstructive sleep apnea. Saarelainen S, et al. **Endothelium** 1997;5(2):115-8

Changes in the arterial PCO2 during a single night's sleep in patients with obstructive sleep apnea. Chin K, et al. **Intern Med** 1997 Jul;36(7):454-60

Sleep apnea, norepinephrine-release rate, and daytime hypertension. Ziegler MG, et al. **Sleep** 1997 Mar; 20(3):224-31

CHEMICALLY INDUCED

Sleep apnea in patients receiving growth hormone. Gerard JM, et al. **Clin Pediatr (Phila)** 1997 Jun;36(6):321-6

Sleep apnea-like syndrome induced by nitrous oxide inhalation in normal men. Beydon L, et al. **Respir Physiol** 1997 Jun;108(3):215-24

Obstructive sleep apnoea following rapid weight gain secondary to treatment with vigabatrin (Sabril). Lambert MV, et al. **Seizure** 1997 Jun;6(3):233-5

CLASSIFICATION

Cephalometric and demographic characteristics of obstructive sleep apnea: an evaluation with partial least squares analysis. Lowe AA, et al. **Angle Orthod** 1997; 67(2):143-53

COMPLICATIONS

Sleep-related disorders in carpal tunnel syndrome. Lehtinen I, et al. **Acta Neurol Scand** 1996 May;93(5):360-5

Effect of tonsillectomy and adenoidectomy on obese children with sleep-associated breathing disorders. Kudoh F, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:216-8

Cephalometric analysis in patients with obstructive sleep apnea syndrome. Mochizuki T, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;524:64-72

Sleep apnea associated with congenital diseases and moderate hypertrophy of tonsils. Suzuki K, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:225-7

Nasal obstruction and obstructive sleep apnea: a review. Kushida CA, et al. **Allergy Asthma Proc** 1997 Mar-Apr; 18(2):69-71 (27 ref.)

Hypertension and sleep apnea in black South Africans. A case control study. Bartel PR, et al. **Am J Hypertens** 1995 Dec;8(12 Pt 1):1200-5

Sleep-disordered breathing in women: occurrence and association with coronary artery disease [see comments] Mooe T, et al. **Am J Med** 1996 Sep;101(3):251-6. Comment in: ACP J Club 1997 May-Jun;126(3):78.

Caesarean section and sleep apnoea syndrome [letter] Mercer M. **Anaesthesia** 1996 Oct;51(10):992

Three sudden postoperative respiratory arrests associated with epidural opioids in patients with sleep apnea. Ostermeier AM, et al. **Anesth Analg** 1997 Aug;85(2):452-60 (45 ref.)

Population-based study of sleep-disordered breathing as a risk factor for hypertension. Young T, et al. **Arch Intern Med** 1997 Aug 11-25;157(15):1746-52

Sleep complaints in postpolio syndrome. van Kralingen KW, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):609-11

Effect of angiotensin converting enzyme inhibition [Cilazapril] on blood pressure recording in hypertensive obstructive sleep apneic patients. Grote L, et al. **Blood Press** 1997 Jul;6(4):235-41

Obstructive sleep apnoea. Authors' reply [letter] Wright J, et al. **BMJ** 1997 Aug 30;315(7107):551

Obstructive sleep apnoea syndrome: is this an overlooked cause of desaturation in the immediate postoperative period? Vidhani K, et al. **Br J Anaesth** 1997 Apr; 78(4):442-3

Respiratory dreams and nightmares. Douglas NJ. **Br J Hosp Med** 1997 Feb 5-18;57(3):95-8

Anaesthetic management of patients with sleep apnoea syndrome [published erratum appears in Can J Anaesth 1996 Nov;43(11):1184] Boushra NN. **Can J Anaesth** 1996 Jun;43(6):599-616 (139 ref.)

Aortic root dilatation in Marfan's syndrome: a contribution from obstructive sleep apnea? Cistulli PA, et al. **Chest** 1997 Jun;111(6):1763-6 (16 ref.)

Pulmonary hypertension and obstructive sleep apnea [letter; comment] Rowley JA. **Chest** 1996 Nov;110(5):1377. Comment on: Chest 1996 Apr;109(4):1101-2.

Sleep-related myocardial ischemia and sleep structure in patients with obstructive sleep apnea and coronary heart disease. Schäfer H, et al. **Chest** 1997 Feb;111(2):387-93

Sleep apnoea in treated acromegaly: relative frequency and predisposing factors. Rosenow F, et al. **Clin Endocrinol (Oxf)** 1996 Nov;45(5):563-9

Is there a relationship between the degree of nasal obstruction and snoring? Jessen M, et al. **Clin Otolaryngol** 1993 Dec; 18(6):485-7

Upper airway obstruction and raised intracranial pressure in children with craniosynostosis. Gonsalez S, et al. **Eur Respir J** 1997 Feb;10(2):367-75

Pulmonary hypertension in the obstructive sleep apnoea syndrome: prevalence, causes and therapeutic consequences. Kessler R, et al. **Eur Respir J** 1996 Apr; 9(4):787-94 (55 ref.)

Right ventricular dysfunction in obstructive sleep apnoea: reversal with nasal continuous positive airway pressure. Nahmias J, et al. **Eur Respir J** 1996 May;9(5):945-51

Short-term variability of blood pressure during sleep in snorers with or without apnea. Leroy M, et al. **Hypertension** 1996 Dec;28(6):937-43

Pediatric brain stem gliomas with the predominant symptom of sleep apnea. Ito K, et al. **Int J Pediatr Otorhinolaryngol** 1996 Sep;37(1):53-64

Is sleep apnea a cause of reversible dementia in old age? [editorial; comment] Bliwise DL. **J Am Geriatr Soc** 1996 Nov;44(11):1407-9 (62 ref.). Comment on: J Am Geriatr Soc 1996 Nov;44(11):1287-94.

Sleep-disordered breathing and systemic hypertension in the older male. Stoohs RA, et al. **J Am Geriatr Soc** 1996 Nov; 44(11):1295-300

The many faces of sleep disturbance [letter] Brooks JG, et al. **J Am Osteopath Assoc** 1997 Jul;97(7):385

Central apnea in a child with congenital autonomic dysfunction and universal pain loss. Hansen A, et al. **J Child Neurol** 1996 Mar;11(2):162-4

Apnea of infancy, seizures, and gastroesophageal reflux: an important but infrequent association. Tirosh E, et al. **J Child Neurol** 1996 Mar;11(2):98-100

Hypoxic hepatitis caused by severe hypoxemia from obstructive sleep apnea. Henrion J, et al. **J Clin Gastroenterol** 1997 Jun;24(4):245-9

Obstructive sleep apnea as a cause of systemic hypertension. Evidence from a canine model [see comments] Brooks D, et al. **J Clin Invest** 1997 Jan 1;99(1):106-9. Comment in: J Clin Invest 1997 Jan 1;99(1):1-2.

Sleep apnea causes daytime hypertension [editorial; comment] Dempsey JA. **J Clin Invest** 1997 Jan 1;99(1):1-2 . Comment on: J Clin Invest 1997 Jan 1;99(1):106-9.

Obstructive sleep apnea-induced supraventricular tachycardia. Randazzo DN, et al. **J Electrocardiol** 1996 Jan;29(1):65-7

Essential and secondary hypertension and sleep-disordered breathing: a unifying hypothesis. Silverberg DS, et al. **J Hum Hypertens** 1996 Jun;10(6):353-63 (207 ref.)

Habitual snoring, sleep apnoea, and stroke prevention [letter; comment] Bassetti C. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):303. Comment on: J Neurol Neurosurg Psychiatry 1996 Oct;61(4):333-8.

Raised intracranial pressure in chronic respiratory disease [letter; comment] Brockmeier B, et al. **Lancet** 1997 Mar 22;349(9055):883. Comment on: Lancet 1997 Jan 11;349(9045):98.

Sleep apnoea as a cause of daytime and nocturnal enuresis [letter] [see comments] Steers WD, et al. **Lancet** 1997 May 31;349(9065):1604. Comment in: Lancet 1997 Jul 19;350(9072):221-2.

Obstructive sleep apnoea and cardiovascular morbidity. Fletcher EC. **Monaldi Arch Chest Dis** 1996 Feb;51(1):77-80 (30 ref.)

Appetite-suppressant drugs and primary pulmonary hypertension [letter; comment] Sobieraj J. **N Engl J Med** 1997 Feb 13;336(7):510; discussion 512-3. Comment on: N Engl J Med 1996 Aug 29;335(9):609-16.

Floppy eyelid syndrome and obstructive sleep apnea. McNab AA. **Ophthal Plast Reconstr Surg** 1997 Jun;13(2):98-114 (45 ref.)

Asymptomatic bradyarrhythmias as a marker for sleep apnea: appropriate recognition and treatment may reduce the need for pacemaker therapy. Stegman SS, et al. **Pacing Clin Electrophysiol** 1996 Jun;19(6):899-904

Symptoms related to snoring and sleep apnoea in subjects with chronic bronchitis: report from the Obstructive Lung Disease in Northern Sweden Study. Larsson LG, et al. **Respir Med** 1997 Jan;91(1):5-12

A non-urologic cause of nocturia and enuresis--obstructive sleep apnea syndrome (OSAS). Ulfberg J, et al. **Scand J Urol Nephrol** 1996 Apr;30(2):135-7

Long-term effects of a dental appliance therapy: a case of obstructive sleep apnea syndrome with enuresis [letter] Arai H, et al. **Sleep** 1997 Feb;20(2):158-9

Chronic hiccups and sleep. Arnulf I, et al. **Sleep** 1996 Apr; 19(3):227-31

Sleep-induced breathing instability. University of Wisconsin-Madison Sleep and respiration Research Group. Dempsey JA, et al. **Sleep** 1996 Apr;19(3):236-47 (61 ref.)

Arousals and the sleep apnea/hypopnea syndrome. Douglas NJ, et al. **Sleep** 1996 Dec;19(10 Suppl):S196-7 (7 ref.)

The rat as a model of chronic recurrent episodic hypoxia and effect upon systemic blood pressure. Fletcher EC, et al. **Sleep** 1996 Dec;19(10 Suppl):S210-2

Can the treatment of sleep apnea syndrome prevent the cardiovascular consequences? Fletcher EC. **Sleep** 1996 Nov;19(9 Suppl):S67-70 (9 ref.)

Vascular function in OSA. Hedner J. **Sleep** 1996 Dec;19(10 Suppl):S213-7 (27 ref.)

Central sleep apnea-hypopnea syndrome in heart failure: prevalence, impact, and treatment. Javaheri S. **Sleep** 1996 Dec;19(10 Suppl):S229-31

Is obstructive sleep apnea (OSA) a risk factor for myocardial infarction and cardiac arrhythmias in patients with coronary heart disease (CHD)? Koehler U, et al. **Sleep** 1996 May;19(4):283-6

Management of simple snoring, upper airway resistance syndrome, and moderate sleep apnea syndrome. Lévy P, et al. **Sleep** 1996 Nov;19(9 Suppl):S101-10 (80 ref.)

Acute and chronic cardiovascular responses to sleep disordered breathing. Morgan BJ. **Sleep** 1996 Dec;19(10 Suppl):S206-9 (17 ref.)

Altered cardiac contractility in sleep apnea. Nelesen RA, et al. **Sleep** 1996 Feb;19(2):139-44

Cardiogenic oscillations and airway patency [letter; comment] Pennock BE. **Sleep** 1996 Apr;19(3):255-7. Comment on: Sleep 1995 Oct;18(8):651-8.

Critical analysis of the results of surgery in the treatment of snoring, upper airway resistance syndrome (UARS), and obstructive sleep apnea (OSA). Pépin JL, et al. **Sleep** 1996 Nov;19(9 Suppl):S90-100 (92 ref.)

A reversible uvulopalatal flap for snoring and sleep apnea syndrome. Powell N, et al. **Sleep** 1996 Sep;19(7):593-9

Neuropsychological function in mild sleep-disordered breathing. Redline S, et al. **Sleep** 1997 Feb;20(2):160-7

Obesity and weight loss in obstructive sleep apnea: a critical review. Strobel RJ, et al. **Sleep** 1996 Feb;19(2):104-15 (82 ref.)

Diabetes and sleep apnea. Strohl KP. **Sleep** 1996 Dec;19(10 Suppl):S225-8 (29 ref.)

EEG frequency changes during sleep apneas. Svanborg E, et al. **Sleep** 1996 Apr;19(3):248-54

Hemodynamic consequences of obstructive sleep apnea. Weiss JW, et al. **Sleep** 1996 Jun;19(5):388-97

Snoring as part of a dose-response relationship between sleep-disordered breathing and blood pressure. Young T, et al. **Sleep** 1996 Dec;19(10 Suppl):S202-5

The effect of hypoxia on baroreflexes and pressor sensitivity in sleep apnea and hypertension. Ziegler MG, et al. **Sleep** 1995 Dec;18(10):859-65

Central sleep apnea. Koenig SM. **Va Med Q** 1996 Fall; 123(4):247-50 (17 ref.)

[Sleeping disorders rarely come singly] dé Weerd AW, et al. **Ned Tijdschr Geneeskd** 1997 Mar 22;141(12):561-5 (Eng. Abstr.) **(Dut)**

[Sleep apnea and anesthesia] Lindgren L. **Duodecim** 1995; 111(12):1131-3 (17 ref.) **(Fin)**

[Sleep apnea as a risk factor] Zeitlhofer J, et al. **Acta Med Austriaca** 1995;22(4):64-8 (51 ref.) (Eng. Abstr.) **(Ger)**

[Arterial hypertension and obstructive sleep apnea] Sturm A. **Dtsch Med Wochenschr** 1997 Apr 4;122(14):455-9 (54 ref.) **(Ger)**

[Complicated course of rheumatoid arthritis with pulmonary involvement, myocardial fibrosis and sleep apnea syndrome] Offers E, et al. **Pneumologie** 1996 Dec; 50(12):906-11 (Eng. Abstr.) **(Ger)**

[Obstructive sleep apnea syndrome in children with Down's syndrome] Levanon A, et al. **Harefuah** 1996 Sep; 131(5-6):193-6 (23 ref.) **(Heb)**

[Gastro-esophageal reflux, sleep apnea syndrome, and their association] Pillar G, et al. **Harefuah** 1996 Nov 1; 131(9):352-6 (42 ref.) **(Heb)**

[Association between sleep apnea syndrome and coronary artery disease] Akasaka K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan;35(1):16-21 (Eng. Abstr.) **(Jpn)**

[Echocardiographic analysis of cardiac size and function in patients with severe obstructive sleep apnea] Kober J, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 2:187-92 (Eng. Abstr.) **(Pol)**

[Chronic alveolar hypoventilation in obstructive sleep apnea syndrome] Brzecka A, et al. **Pol Merkuriusz Lek** 1996 Jul; 1(1):8-10 (Eng. Abstr.) **(Pol)**

[The obstructive sleep apnea syndrome with visceral involvement] Mihăiţan F, et al. **Pneumoftiziologia** 1996 Jul-Dec;45(3-4):169-72 (13 ref.) (Eng. Abstr.) **(Rum)**

[Non-apneic respiratory arousal in obstructive sleep apnea syndrome] Pareja JA, et al. **Neurologia** 1996 Aug-Sep; 11(7):244-7 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital central hypoventilation syndrome: mutation analysis of the receptor tyrosine kinase RET. Bolk S, et al. **Am J Med Genet** 1996 Jun 28;63(4):603-9

Peripheral chemoreceptors in congenital central hypoventilation syndrome. Cutz E, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):358-63

Congenital central hypoventilation syndrome: ocular findings in 37 children. Goldberg DS, et al. **J Pediatr Ophthalmol Strabismus** 1996 May-Jun; 33(3):175-80

[Continuous ambulatory monitoring in quality control of home therapy of congenital central hypoventilation syndrome (CCHS)] Schäfer C, et al. **Wien Med Wochenschr** 1996;146(13-14):323-4 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Diagnosis by dynamic MRI in sleep disordered breathing. Hasegawa K, et al. **Acta Otolaryngol Suppl (Stockh)** 1996; 523:245-7

Snoring children: factors predicting sleep apnea. Nieminen P, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:190-4

Relationship between oral breathing and nasal obstruction in patients with obstructive sleep apnea. Ohki M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:228-30

Hypertrophy of the palatine tonsils and sleep respiratory disorders. Otsu SY, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:219-21

Evaluation of the pharyngeal airway in obstructive sleep

apnea: study by ultrafast MR imaging. Yokoyama M, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:242–4

Reconstruction of three–dimensional images of the pharynx in patients with sleep apnea using three–dimensional fast low–angle shot MR imaging. Suto Y, et al. **AJR Am J Roentgenol** 1997 May;168(5):1320–1

Posterior cephalometric radiographic analysis in obstructive sleep apnea. Woodson BT, et al. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):310–3

Diagnosis and treatment of sleep apnea within the community. The Walla Walla Project. Ball EM, et al. **Arch Intern Med** 1997 Feb 24;157(4):419–24

The gender bias in sleep apnea diagnosis. Are women missed because they have different symptoms? Young T, et al. **Arch Intern Med** 1996 Nov 25;156(21):2445–51

Controversies in sleep disorders medicine. Pulmonologists respond! Phillips B, et al. **Chest** 1996 Dec;110(6):1597–602

The sleep/wake habits of patients diagnosed as having obstructive sleep apnea. Rosenthal L, et al. **Chest** 1997 Jun; 111(6):1494–9

Experiences of a sleep disorders center: 1700 patients later. Mendelson WB. **Cleve Clin J Med** 1997 Jan;64(1):46–51

Computerized scoring of abnormal human sleep: a validation. Sangal RB, et al. **Clin Electroencephalogr** 1997 Apr; 28(2):64–7

A grading system for patients with obstructive sleep apnoea—based on sleep nasendoscopy. Pringle MB, et al. **Clin Otolaryngol** 1993 Dec;18(6):480–4

The value of sleep nasendoscopy in the evaluation of patients with suspected sleep–related breathing disorders. Sadaoka T, et al. **Clin Otolaryngol** 1996 Dec;21(6):485–9

Sleep–disordered breathing: a novel predictor of atrial fibrillation after coronary artery bypass surgery. Mooe T, et al. **Coron Artery Dis** 1996 Jun;7(6):475–8

Visual and different automatic scoring profiles of respiratory variables in the diagnosis of sleep apnoea–hypopnoea syndrome. Carrasco O, et al. **Eur Respir J** 1996 Jan; 9(1):125–30

Snoring: analysis, measurement, clinical implications and applications. Dalmasso F, et al. **Eur Respir J** 1996 Jan; 9(1):146–59 (92 ref.)

Predictive value of clinical features for the obstructive sleep apnoea syndrome [see comments] Deegan PC, et al. **Eur Respir J** 1996 Jan;9(1):117–24. Comment in: Eur Respir J 1997 May;10(5):1194–5.

Diagnostic accuracy of a portable recording device (MESAM IV) in suspected obstructive sleep apnoea. Esnaola S, et al. **Eur Respir J** 1996 Dec;9(12):2597–605

Obstructive sleep apnoea syndrome: is the "half–night polysomnography" an adequate method for evaluating sleep profile and respiratory events? Fanfulla F, et al. **Eur Respir J** 1997 Aug;10(8):1725–9

Comparison of ResMed AutoSet (version 3.03) with polysomnography in the diagnosis of the sleep apnoea/hypopnoea syndrome. Gugger M. **Eur Respir J** 1997 Mar;10(3):587–91

Predictors of pulmonary hypertension in obstructive sleep apnoea syndrome [letter] Herranz AD. **Eur Respir J** 1996 Apr;9(4):850–1

Clinical prediction rules in obstructive sleep apnoea syndrome [letter; comment] Herranz AD. **Eur Respir J** 1997 May;10(5):1194–5. Comment on: Eur Respir J 1996 Jan;9(1):117–24.

Comparison of a limited computerized diagnostic system (ResCare Autoset) with polysomnography in the diagnosis of obstructive sleep apnoea syndrome. Kiely JL, et al. **Eur Respir J** 1996 Nov;9(11):2360–4

Diagnostic criteria for the sleep apnoea syndrome: time for consensus [editorial] McNicholas WT. **Eur Respir J** 1996 Apr;9(4):634–5

Should patients with sleep apnoea/hypopnoea syndrome be diagnosed and managed on the basis of home sleep studies? [see comments] Parra O, et al. **Eur Respir J** 1997 Aug; 10(8):1720–4. Comment in: Eur Respir J 1997 Aug;10(8):1699–700.

Screening obstructive sleep apnoea syndrome by home videotape recording in children. Sivan Y, et al. **Eur Respir J** 1996 Oct;9(10):2127–31

An unattended device for sleep–related breathing disorders: validation study in suspected obstructive sleep apnoea syndrome. Zucconi M, et al. **Eur Respir J** 1996 Jun; 9(6):1251–6

Use of computerized visual performance test in assessing day–time vigilance in patients with sleep apneas and restless sleep. Jokinen T, et al. **Int J Clin Monit Comput** 1995; 12(4):225–30

Central apnea in a child with congenital autonomic dysfunction and universal pain loss. Hansen A, et al. **J Child Neurol** 1996 Mar;11(2):162–4

Polysomnographic analysis of arousal responses in obstructive sleep apnea syndrome by means of the cyclic alternating pattern. Terzano MG, et al. **J Clin Neurophysiol** 1996 Mar;13(2):145–55

The importance of a multidisciplinary approach to the assessment of patients with obstructive sleep apnoea [corrected and republished in J Oral Rehabil 1995 Aug;22(8):607–12] L'Estrange PR, et al. **J Oral Rehabil** 1996 Jan;23(1):72–7

Evaluation of activity–based techniques to identify transient arousal in respiratory sleep disorders. Drinnan MJ, et al. **J Sleep Res** 1996 Sep;5(3):173–80

Normal respiratory pattern during sleep in young fragile X–syndrome patients [letter] Musumeci SA, et al. **J Sleep Res** 1996 Dec;5(4):272

Screening for obstructive sleep apnea in patients presenting for snoring surgery. Pradhan PS, et al. **Laryngoscope** 1996 Nov;106(11):1393–7

Pharyngeal wall vibration detection using an artificial neural network. Behbehani K, et al. **Med Biol Eng Comput** 1997 May;35(3):193–8

Central alveolar hypoventilation (Ondine's curse) treated with negative pressure ventilation. Cirignotta F, et al. **Monaldi Arch Chest Dis** 1996 Feb;51(1):22–6

Clinical diagnosis and assessment of obstructive sleep apnoea syndrome. McNicholas WT. **Monaldi Arch Chest Dis** 1997 Feb;52(1):37–42 (43 ref.)

Obstructive sleep apnea in pregnancy. Lefcourt LA, et al. **Obstet Gynecol Surv** 1996 Aug;51(8):503–6 (14 ref.)

Pulse oximetry: accuracy of methods of interpreting graphic summaries. Lafontaine VM, et al. **Pediatr Pulmonol** 1996 Feb;21(2):121–31

Polysomnographic studies in children with adenotonsillar hypertrophy and suspected obstructive sleep apnea. Sanchez–Armengol A, et al. **Pediatr Pulmonol** 1996 Aug; 22(2):101–5

Recognition of sleep–disordered breathing in children. Guilleminault C, et al. **Pediatrics** 1996 Nov;98(5):871–82

Diagnostic use of daytime polysomnography versus nocturnal polysomnography in sleep apnea syndrome. Mizuma H, et al. **Psychiatry Clin Neurosci** 1996 Aug; 50(4):211–6

Ultra–low–field magnetic resonance imaging in upper airways obstruction in sleep apnea syndrome. Okada T, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):285–9

Clinical assessment of the sleep apnoea syndrome. McNicholas WT. **QJM** 1996 Aug;89(8):637–40

Sleep apnea syndrome: evaluation with dynamic MR imaging of the upper airway [letter; comment] Shellock FG. **Radiology** 1997 Jul;204(1):281–2. Comment on: Radiology 1996 Nov;201(2):393–8.

Limitations and promise in the diagnosis and treatment of obstructive sleep apnoea. Aboussouan LS, et al. **Respir Med** 1997 Apr;91(4):181–91 (112 ref.)

The effect of polysomnography on sleep position: possible implications on the diagnosis of positional obstructive sleep apnea. Metersky ML, et al. **Respiration** 1996;63(5):283–7

Predictive diagnostic value of clinical assessment and nonlaboratory monitoring system recordings in patients with symptoms suggestive of obstructive sleep apnea syndrome. Schäfer H, et al. **Respiration** 1997;64(3):194–9

Obstructive sleep apnea in children. Marcus CL, et al. **Semin Pediatr Neurol** 1996 Mar;3(1):23–8 (21 ref.)

Comparison of direct and indirect measurements of respiratory airflow: implications for hypopneas. Berg S, et al. **Sleep** 1997 Jan;20(1):60–4

Assessment of respiratory effort by means of strain gauges and esophageal pressure swings: a comparative study. Boudewyns A, et al. **Sleep** 1997 Feb;20(2):168–70

Cardiorespiratory sleep studies for children can often be performed in the home. Brouillette RT, et al. **Sleep** 1996 Dec;19(10 Suppl):S278–80

Nightly variability in the indices of sleep–disordered breathing in men being evaluated for impotence with consecutive night polysomnograms. Chediak AD, et al. **Sleep** 1996 Sep;19(7):589–92

Automated recognition of EEG changes accompanying arousal in respiratory sleep disorders. Drinnan MJ, et al. **Sleep** 1996 May;19(4):296–303

The diagnosis of sleep apnea: questionnaires and home studies. Flemons WW, et al. **Sleep** 1996 Dec;19(10 Suppl):S243–7 (15 ref.)

A laboratory validation study of the diagnostic mode of the Autoset system for sleep–related respiratory disorders. Fleury B, et al. **Sleep** 1996 Jul;19(6):502–5

Measurement of general health status in obstructive sleep apnea hypopnea patients. Fornas C, et al. **Sleep** 1995 Dec; 18(10):876–9

Comparison of simulated driving performance in narcolepsy and sleep apnea patients. George CF, et al. **Sleep** 1996 Nov; 19(9):711–7

Modeling the interaction between arousal and chemical drive in sleep–disordered breathing. Khoo MC, et al. **Sleep** 1996 Dec;19(10 Suppl):S167–9

Acute and chronic cardiovascular responses to sleep disordered breathing. Morgan BJ. **Sleep** 1996 Dec;19(10 Suppl):S206–9 (17 ref.)

Using self–reported questionnaire data to prioritize OSA patients for polysomnography. Pouliot Z, et al. **Sleep** 1997 Mar;20(3):232–6

Hypotension reduces sleep apneas in Zucker lean and Zucker obese rats. Radulovacki M, et al. **Sleep** 1996 Dec; 19(10):767–73

Obstructive sleep apnea syndrome (OSAS) in children: diagnostic challenges. Rosen CL. **Sleep** 1996 Dec;19(10 Suppl):S274–7

Augmented very low frequency component of heart rate variability during obstructive sleep apnea. Shiomi T, et al. **Sleep** 1996 Jun;19(5):370–7

Is it necessary to record sleep? Stradling JR, et al. **Sleep** 1996 Dec;19(10 Suppl):S251–4 (25 ref.)

Split–night studies for the diagnosis and treatment of sleep–disordered breathing. Strollo PJ Jr, et al. **Sleep** 1996 Dec;19(10 Suppl):S255–9

Complex home monitoring. White DP. **Sleep** 1996 Dec;19(10 Suppl):S248–50 (10 ref.)

Comparison of cephalometric analysis with ethnicity in obstructive sleep apnea syndrome. Will MJ, et al. **Sleep** 1995 Dec;18(10):873–5

Are thyroid function tests necessary in patients with suspected sleep apnea? Winkelman JW, et al. **Sleep** 1996 Dec;19(10):790–3

Comparison of partially attended night time respiratory recordings and full polysomnography in patients with suspected sleep apnoea/hypopnoea syndrome. Lloberes P, et al. **Thorax** 1996 Oct;51(10):1043–7

[Value of cardio–respiratory tests associated with plethysmography and monitoring of nocturnal erections] Lemaire A, et al. **Contracept Fertil Sex** 1996 Dec; 24(12):879–82 **(Fre)**

[Sleep apnea syndrome. Differential diagnostic reflections from the point of view of sleep medicine] Kraemer S, et al. **Dtsch Med Wochenschr** 1997 Jun 13;122(24):789–93 (11 ref.) **(Ger)**

[Diagnostic methods and standards in sleep medicine] Penzel T, et al. **Internist (Berl)** 1996 May;37(5):442–53 (45 ref.) **(Ger)**

[Neurovegetative symptoms in infants with sleep–related respiratory disorders] Niewerth HJ, et al. **Klin Padiatr** 1997 Mar–Apr;209(2):54–8 (Eng. Abstr.) **(Ger)**

[Pupillography for objective vigilance assessment. Methodological problems and possible solutions] Wilhelm B, et al. **Ophthalmologe** 1996 Aug;93(4):446–50 (Eng. Abstr.) **(Ger)**

[Predictive value of laryngoscopy with reference to the severity of obstructive sleep apnea] Geibel M, et al. **Pneumologie** 1997 Aug;51 Suppl 3:809–10 (Eng. Abstr.) **(Ger)**

[Use of discontinuous long–term blood pressure measurement (Spacelabs 90207) in patients with sleep apnea—a comparison with intra–arterial data] Heitmann J, et al. **Pneumologie** 1997 Aug;51 Suppl 3:747–9 (Eng. Abstr.) **(Ger)**

[Event related potentials and neuropsychological studies in sleep apnea patients] Kotterba S, et al. **Pneumologie** 1997 Aug;51 Suppl 3:712–5 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of seizures in sleep] Mayer G, et al. **Pneumologie** 1997 Aug;51 Suppl 3:698–705 (31 ref.) (Eng. Abstr.) **(Ger)**

[Sleep related respiratory disorders] Peter JH. **Pneumologie** 1996 Sep;50 Suppl 2:607–10 (24 ref.) **(Ger)**

[Indications in sleep–apnea syndrome. When and why is further assessment meaningful?] Bloch KE, et al. **Schweiz Rundsch Med Prax** 1997 Mar 11;86(11):437–41 (Eng. Abstr.) **(Ger)**

[Severity of obstructive sleep apnea syndrome—correlation with cephalometric parameters] Hierl T, et al. **Wien Med Wochenschr** 1996;146(13–14):361–3 (Eng. Abstr.) **(Ger)**

[Sex–specific sleep anamnesis in obstructive sleep apnea syndrome?] Orth M, et al. **Wien Med Wochenschr** 1996; 146(13–14):357–8 (Eng. Abstr.) **(Ger)**

[Spectral analysis of blood pressure in patients with sleep related respiratory disorders] Penzel T, et al. **Wien Med Wochenschr** 1996;146(13–14):359–61 (Eng. Abstr.) **(Ger)**

[Long–term analysis of respiration in sleep] Schüttler F, et al. **Wien Med Wochenschr** 1996;146(13–14):382–4 (Eng. Abstr.) **(Ger)**

[Sleep apnea in myasthenia gravis] Stepansky R, et al. **Wien Med Wochenschr** 1996;146(9–10):209–10 (Eng. Abstr.) **(Ger)**

[Methodology and problems in home monitoring of children with sleep–related respiratory disorders—perspectives] Wiater A, et al. **Wien Med Wochenschr** 1996; 146(13–14):319–20 (Eng. Abstr.) **(Ger)**

[Sleep apnea as a risk marker in coronary heart disease] Schäfer H, et al. **Z Kardiol** 1996 Oct;85(10):768–75 (Eng. Abstr.) **(Ger)**

[Image diagnosis and function tests—obstructive sleep apnea syndromes] Asakura K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jan;100(1):68–71 **(Jpn)**

[Automated analysis of all–night records of tracheal sound to detect sleep disordered breathing] Nakano H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Jul;34(7):765–70 (Eng. Abstr.) **(Jpn)**

[Current problems in the Diagnosis and stage classification of sleep apnea syndrome] Nishimura M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:59–65 (Eng. Abstr.) **(Jpn)**

[Developing the portable type sleep apnea detector, and verifying the usefulness of the device] Koja S, et al. **Seishin Shinkeigaku Zasshi** 1997;99(4):181–97 (Eng. Abstr.) **(Jpn)**

[Pulse oximetry. Reproducibility of two nights' recordings] Grebstad JA, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10; 117(7):926–8 (Eng. Abstr.) **(Nor)**

[The connection between respiratory disorders during sleep and peripheral autonomic insufficiency in diabetics] Poluéktov MG, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(5):11–4 (Eng. Abstr.) **(Rus)**

[The diagnosis of sleep apnea syndrome (editorial; comment)] Garcia Rio F, et al. **An Med Interna** 1996 Feb;13(2):53–4 . Comment on: An Med Interna 1996 Feb;13(2):55–8. **(Spa)**

[The diagnosis of sleep apnea syndrome with a portable device. Our experience with 100 cases (see comments)] Sanchez-Alarcos JM, et al. **An Med Interna** 1996 Feb; 13(2):55-8 (Eng. Abstr.). Comment in: An Med Interna 1996 Feb;13(2):53-4. **(Spa)**

[Evaluation of the cephalometric structure of the upper airway on the configuration of the obstructive sleep apnea syndrome] Biurrún O, et al. **An Otorrinolaringol Ibero Am** 1996;23(1):53-71 (Eng. Abstr.) **(Spa)**

[Nocturnal pneumology hospitals] Díaz Lobato S, et al. **Arch Bronconeumol** 1997 Feb;33(2):89-91 **(Spa)**

[Respiratory polygraphy in the diagnosis of obstructive sleep apnea syndrome] García Díaz EM, et al. **Arch Bronconeumol** 1997 Feb;33(2):69-73 (Eng. Abstr.) **(Spa)**

[Usefulness of the visual analysis of night oximetry as a screening method in patients with suspected clinical obstructive sleep apnea syndrome] Rodríguez González-Moro JM, et al. **Arch Bronconeumol** 1996 Nov; 32(9):437-41 (Eng. Abstr.) **(Spa)**

[Is the repetition of a sleep study with portable system without surveillance useful? (letter)] de Pablo A, et al. **Med Clin (Barc)** 1997 Jun 28;109(5):198-9 **(Spa)**

DRUG THERAPY

Medroxyprogesterone acetate in the treatment of obstructive sleep apnea. Terra SG, et al. **Ann Pharmacother** 1997 Jun; 31(6):776-8 (15 ref.)

Effect of angiotensin converting enzyme inhibition [Cilazapril] on blood pressure recording in hypertensive obstructive sleep apneic patients. Grote L, et al. **Blood Press** 1997 Jul;6(4):235-41

Reversal of central sleep apnea with oxygen. Franklin KA, et al. **Chest** 1997 Jan;111(1):163-9

Theophylline for infants with abnormal pneumographic results. A randomized double blind, placebo-controlled trial. Paky F, et al. **Klin Padiatr** 1997 Mar-Apr;209(2):66-70

Do systemic corticosteroids effectively treat obstructive sleep apnea secondary to adenotonsillar hypertrophy? Al-Ghamdi SA, et al. **Laryngoscope** 1997 Oct; 107(10):1382-7

Theophylline and sleep-disordered breathing in heart failure [letter; comment] Goggins M. **N Engl J Med** 1997 Jan 30; 336(5):379. Comment on: N Engl J Med 1996 Aug 22;335(8):562-7.

p-SPA, a peripheral adenosine A1 analogue, reduces sleep apneas in rats. Monti D, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):341-5

Modafinil in obstructive sleep apnea-hypopnea syndrome: a pilot study in 6 patients. Arnulf I, et al. **Respiration** 1997; 64(2):159-61

Hydralazine reduces elevated sleep apnea index in spontaneously hypertensive (SHR) rats to equivalence with normotensive Wistar-Kyoto rats. Carley DW, et al. **Sleep** 1996 Jun;19(5):363-6

A double-blind, randomized trial of sabeluzole--a putative glutamate antagonist--in obstructive sleep apnea. Hedner J, et al. **Sleep** 1996 May;19(4):287-9

ENZYMOLOGY

Decrease in immunoreactive neutral endopeptidase in uvula epithelium of patients with obstructive sleep apnea. Zakkar M, et al. **Ann Otol Rhinol Laryngol** 1997 Jun;106(6):474-7

EPIDEMIOLOGY

Prevalence of sleep-disordered breathing in diastolic heart failure. Chan J, et al. **Chest** 1997 Jun;111(6):1488-93

Prevalence of obstructive sleep apnoea in patients with coronary artery disease. Andreas S, et al. **Coron Artery Dis** 1996 Jul;7(7):541-5

Prevalence of sleep apnoea syndrome in the Spanish adult population. Marin JM, et al. **Int J Epidemiol** 1997 Apr; 26(2):381-6

Headache, snoring and sleep apnoea. Ulfberg J, et al. **J Neurol** 1996 Sep;243(9):621-5

Late onset central hypoventilation syndrome. Del Carmen Sanchez M, et al. **Pediatr Pulmonol** 1996 Mar;21(3):189-91

Prevalence and correlates of snoring and observed apneas in 5,201 older adults [see comments] Enright PL, et al. **Sleep** 1996 Sep;19(7):531-8. Comment in: Sleep 1996 Sep;19(7):529-30.

Prevalence of sleep-disordered breathing in ages 40-64 years: a population-based survey. Kripke DF, et al. **Sleep** 1997 Jan;20(1):65-76

The epidemiology of sleep apnoea. Davies RJ, et al. **Thorax** 1996 Aug;51 Suppl 2:S65-70 (38 ref.)

[Increased daytime tiredness, nocturnal hypertension and sleep apnea: studies in rural general practice] Grote L, et al. **Pneumologie** 1997 Aug;51 Suppl 3:750-3 (Eng. Abstr.) **(Ger)**

[Driving performance and auto accidents in patients with sleep apnea] Findley LJ. **Wien Med Wochenschr** 1996; 146(13-14):335-6 (16 ref.) (Eng. Abstr.) **(Ger)**

[Obstructive sleep apnea in patients with coronary heart disease] Sanner B, et al. **Wien Med Wochenschr** 1996; 146(13-14):345-7 (Eng. Abstr.) **(Ger)**

[Diagnosis and treatment of sleep apnea syndrome in Japan --comparison with other countries] Kimura H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:85-9 (89 ref.) (Eng. Abstr.) **(Jpn)**

[Traffic accidents and sleep apnea (editorial)] Jiménez Gómez A, et al. **Arch Bronconeumol** 1997 Jan;33(1):4-5 **(Spa)**

ETHNOLOGY

Racial differences in sleep-disordered breathing in African-Americans and Caucasians [published erratum appears in Am J Respir Crit Care Med 1997 May;155(5):1820] Redline S, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):186-92

ETIOLOGY

Pharyngeal patency caused by stimulation of the hypoglossal nerve in anaesthesia-relaxed patients. Ilomäki J, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:210-1

Adenotonsillar hypertrophy and skeletal morphology of children with obstructive sleep apnea syndrome. Shintani T, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:222-4

Sleep disorders in patients with severe nasal obstruction due to septal deviation. Silvoniemi P, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:199-201

Reflex apnoea response and inflammatory mediators in infants with respiratory tract infection. Lindgren C, et al. **Acta Paediatr** 1996 Jul;85(7):798-803

The febrile stress of routine vaccination does not increase central apnoea in normal infants. Tappin DM, et al. **Acta Paediatr** 1997 Aug;86(8):873-80

Effect of bedtime alcohol on inspiratory resistance and respiratory drive in snoring and nonsnoring men. Dawson A, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):183-90

Short-term antihypertensive medication does not exacerbate sleep-disordered breathing in newly diagnosed hypertensive patients. Bartel PR, et al. **Am J Hypertens** 1997 Jun;10(6):640-5

Is excessive daytime sleepiness characteristic of Prader-Willi syndrome? The effects of weight change. Harris JC, et al. **Arch Pediatr Adolesc Med** 1996 Dec;150(12):1288-93

MRI of the pharynx in young patients with sleep disordered breathing. Suto Y, et al. **Br J Radiol** 1996 Nov; 69(827):1000-4

Influence of maxillary constriction on nasal resistance and sleep apnea severity in patients with Marfan's syndrome. Cistulli PA, et al. **Chest** 1996 Nov;110(5):1184-8

Robin sequence: obstructive sleep apnea following pharyngeal flap. Abramson DL, et al. **Cleft Palate Craniofac J** 1997 May;34(3):256-60

Sleep apnea syndrome produced by a second branchial cyst [letter] Aoki M, et al. **Eur Arch Otorhinolaryngol** 1996; 253(7):443-4

Obstructive sleep apnoea syndrome (OSAS) as a complication of carcinoid syndrome treated successfully by hepatic artery embolization. Milkiewicz P, et al. **Eur J Gastroenterol Hepatol** 1997 Feb;9(2):217-20

Upper airway patency and nocturnal desaturation in habitual snoring and obstructive sleep apnea: pathogenesis of sleep-related breathing disorders. Boot H, et al. **Eur Neurol** 1996;36(4):206-10

Goitre: a cause of obstructive sleep apnoea in euthyroid patients. Deegan PC, et al. **Eur Respir J** 1997 Feb; 10(2):500-2

Longitudinal assessment of hypercapnic ventilatory drive after tracheotomy in a patient with the Prader-Willi syndrome. Gozal D, et al. **Eur Respir J** 1996 Jul;9(7):1565-8

Mandibular setback for surgical correction of mandibular hyperplasia--does it provoke sleep-related breathing disorders? Hochban W, et al. **Int J Oral Maxillofac Surg** 1996 Oct;25(5):333-8

Sleep apnea in a patient with Becker muscular dystrophy [letter] Ferri R, et al. **Ital J Neurol Sci** 1997 Feb;18(1):59-60

Nasal obstruction as a risk factor for sleep-disordered breathing. The University of Wisconsin Sleep and Respiratory Research Group. Young T, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):S757-62

Visceral fat accumulation as an important risk factor for obstructive sleep apnoea syndrome in obese subjects. Shinohara E, et al. **J Intern Med** 1997 Jan;241(1):11-8

Abductor vocal fold palsy in the Shy-Drager syndrome presenting with snoring and sleep apnoea [letter; comment] Brown LK. **J Laryngol Otol** 1997 Jul;111(7):689-90. Comment on: J Laryngol Otol 1996 Jul;110(7):681-2.

Snoring, apnea, and nasal resistance. Piché J, et al. **J Otolaryngol** 1996 Jun;25(3):150-4

Otolaryngologic manifestations of neurofibromatosis in children. Sobol SE, et al. **J Otolaryngol** 1997 Feb;26(1):13-9 (39 ref.)

Sleep in detoxified alcoholics: impairment of most standard sleep parameters and increased risk for sleep apnea, but not for myoclonias--a controlled study. Le Bon O, et al. **J Stud Alcohol** 1997 Jan;58(1):30-6

Lingual tonsil hypertrophy producing obstructive sleep apnea. Dündar A, et al. **Laryngoscope** 1996 Sep;106(9 Pt 1):1167-9

Do systemic corticosteroids effectively treat obstructive sleep apnea secondary to adenotonsillar hypertrophy? Al-Ghamdi SA, et al. **Laryngoscope** 1997 Oct; 107(10):1382-7

Sleep-related breathing disturbances: their pathogenesis and potential interest to the nephrologist. Silverberg DS, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):680-3 (37 ref.)

Temporary obstructive apnoea syndrome attributed to cryptococcus (meningo) encephalitis. Buyse B, et al. **Respir Med** 1996 Oct;90(9):571-4

Nocturnal arterial oxygen desaturation secondary to a sphenoidal meningioma. García-Rio F, et al. **Respiration** 1997;64(3):229-32

Sleep-related hypoxaemia in chronic obstructive pulmonary disease: causes, consequences and treatment. Weitzenblum E, et al. **Respiration** 1997;64(3):187-93 (42 ref.)

Sleep apnea in sarcoidosis. Turner GA, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1997 Mar;14(1):61-4

Should everyone be monitored for upper-airway resistance and how? Guilleminault C, et al. **Sleep** 1996 Dec;19(10 Suppl):S260-2

Sleep-disordered breathing in patients with acute supra- and infratentorial strokes. A prospective study of 39 patients. Bassetti C, et al. **Stroke** 1997 Sep;28(9):1765-72

[Is snoring a health risk?] Ylikoski J. **Duodecim** 1995; 111(12):1129-30 **(Fin)**

[Facial asymmetry and obstructive sleep apnea syndrome] Richter M, et al. **Rev Stomatol Chir Maxillofac** 1996 Dec; 97(6):374-82 (Eng. Abstr.) **(Fre)**

[Adeno-tonsillar hyperplasia and obstructive sleep related respiratory disorders] Scholle S, et al. **Pneumologie** 1997 Aug;51 Suppl 3:811-3 (Eng. Abstr.) **(Ger)**

[Effect of alcohol on minimal effective nCPAP pressure] Wessendorf TE, et al. **Pneumologie** 1997 Aug;51 Suppl 3:783-5 (Eng. Abstr.) **(Ger)**

[Significance of oscillatory impedance in etiological determination of arousal in sleep related respiratory disorders] Schlenker E, et al. **Wien Med Wochenschr** 1996; 146(13-14):379-81 (Eng. Abstr.) **(Ger)**

[A case of sleep apnea syndrome due to a nasopharyngeal tumor] Shibata N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Jan;99(1):6-12 (31 ref.) (Eng. Abstr.) **(Jpn)**

[Central alveolar hypoventilation syndrome with compression of the medulla oblongata by tortuous and elongated vertebral arteries] Goto S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):1003-8 (Eng. Abstr.) **(Jpn)**

[Respiratory failure: respiratory disorder during sleep in patients with myotonic dystrophy] Takasugi T, et al. **Rinsho Shinkeigaku** 1995 Dec;35(12):1486-8 (Eng. Abstr.) **(Jpn)**

[Evaluation of the character of morphologic traits in persons with obstructive sleep apnea] Kosińska M, et al. **Pneumonol Alergol Pol** 1996;64(5-6):295-302 (Eng. Abstr.) **(Pol)**

[Disorders of respiration during sleep (editorial)] Pierzchała W, et al. **Pol Merkuriusz Lek** 1996 Jul;1(1):5-7 (30 ref.) **(Pol)**

[Obstructive apnea syndrome during sleep secondary to a pharyngeal lymphoma. Improvement with continuous pressure treatment of the upper airway] Espinosa G, et al. **Arch Bronconeumol** 1996 Dec;32(10):547-9 (Eng. Abstr.) **(Spa)**

GENETICS

Congenital central hypoventilation syndrome: mutation analysis of the receptor tyrosine kinase RET. Bolk S, et al. **Am J Med Genet** 1996 Jun 28;63(4):603-9

Impaired respiratory response to resistive loading during sleep in healthy offspring of patients with obstructive sleep apnea. Pillar G, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1602-8

HISTORY

Status thymico-lymphaticus, apnoea, and sudden infant death--lessons learned from the past? Poets CF. **Eur J Pediatr** 1996 Mar;155(3):165-7

Who was Ondine and what was his curse? Rolak LA. **J Child Neurol** 1996 Nov;11(6):461

IMMUNOLOGY

High prevalence of allergic sensitization in children with habitual snoring and obstructive sleep apnea. McColley SA, et al. **Chest** 1997 Jan;111(1):170-3

[Incidence of cutaneous sensitization to environmental allergens in obstructive sleep apnea syndrome] Duchna HW, et al. **Pneumologie** 1997 Aug;51 Suppl 3:763-6 (Eng. Abstr.) **(Ger)**

METABOLISM

Cerebral metabolism in sleep apnea. Evaluation by magnetic resonance spectroscopy. Kamba M, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):296-8

Heat shock protein 72 level decreases during sleep in patients with obstructive sleep apnea syndrome. Noguchi T, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1316-22

Exhaled pentane and nitric oxide levels in patients with obstructive sleep apnea. Olopade CO, et al. **Chest** 1997 Jun; 111(6):1500-4

Histochemical properties of upper airway muscles: comparison of dilator and nondilator muscles. Bracher A, et al. **Eur Respir J** 1997 May;10(5):990-3

Overnight growth hormone secretion in achondroplasia: deconvolution analysis, correlation with sleep state, and changes after treatment of obstructive sleep apnea. Waters KA, et al. **Pediatr Res** 1996 Mar;39(3):547-53

Metabolic aspects of sleep apnea. Grunstein RR. **Sleep** 1996 Dec;19(10 Suppl):S218-20 (14 ref.)

MORTALITY

Morbidity, mortality and sleep-disordered breathing in community dwelling elderly [see comments] Ancoli-Israel S, et al. **Sleep** 1996 May;19(4):277-82. Comment in: Sleep 1996 May;19(4):275-6.

Chronologic age, physiologic age and mortality in sleep apnea [editorial; comment] Bliwise DL. **Sleep** 1996 May; 19(4):275-6. Comment on: Sleep 1996 May;19(4):277-82.

[Prognostically relevant parameters in patients with coronary heart disease, arterial hypertension and sleep apnea disorders] Peters AJ, et al. **Pneumologie** 1997 Jun; 51(6):580-5 (Eng. Abstr.) **(Ger)**

[Apnea characteristics of children who later died: comparison of sudden infant death with other causes of death] Schlüter B, et al. **Wien Med Wochenschr** 1996;146(13-14):321-3 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Cephalometric comparisons of craniofacial and upper airway structure by skeletal subtype and gender in patients with obstructive sleep apnea. Lowe AA, et al. **Am J Orthod Dentofacial Orthop** 1996 Dec;110(6):653-64

A role of pharyngeal length in obstructive sleep apnea patients. Pae EK, et al. **Am J Orthod Dentofacial Orthop** 1997 Jan;111(1):12-7

Peripheral chemoreceptors in congenital central hypoventilation syndrome. Cutz E, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):358-63

Effect of mandibular and tongue protrusion on upper airway size during wakefulness. Ferguson KA, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1748-54

A predictive morphometric model for the obstructive sleep apnea syndrome. Kushida CA, et al. **Ann Intern Med** 1997 Oct 15;127(8 (Pt 1)):581-7

Contribution of craniofacial risk factors in increasing apneic activity among obese and nonobese habitual snorers. Nelson S, et al. **Chest** 1997 Jan;111(1):154-62

Multiple sclerosis with medullary plaques and fatal sleep apnea (Ondine's curse). Auer RN, et al. **Clin Neuropathol** 1996 Mar-Apr;15(2):101-5

The cephalometric morphology of patients with obstructive sleep apnoea (OSA). Battagel JM, et al. **Eur J Orthod** 1996 Dec;18(6):557-69

Airway dimensions and head posture in obstructive sleep apnoea. Solow B, et al. **Eur J Orthod** 1996 Dec;18(6):571-9

Cardiopulmonary pathology in patients with sleep apnea/obesity hypoventilation syndrome [see comments] Ahmed Q, et al. **Hum Pathol** 1997 Mar;28(3):264-9. Comment in: Hum Pathol 1997 Mar;28(3):261-3.

Anatomy of pharynx in patients with obstructive sleep apnea and in normal subjects. Isono S, et al. **J Appl Physiol** 1997 Apr;82(4):1319-26

Quantitative magnetic resonance imaging of upper airways musculature in an animal model of sleep apnea. Schotland HM, et al. **J Appl Physiol** 1996 Sep;81(3):1339-46

Obstructive sleep apnoea syndrome: results and conclusions of a principal component analysis. Hierl T, et al. **J Craniomaxillofac Surg** 1997 Aug;25(4):181-5

Retropalatal airway characteristics in uvulopalatopharyngoplasty compared with transpalatal advancement pharyngoplasty. Woodson BT. **Laryngoscope** 1997 Jun;107(6):735-40

Sleep apnea syndrome: comparison of MR imaging of the oropharynx with physiologic indexes [see comments] Suto Y, et al. **Radiology** 1996 Nov;201(2):393-8. Comment in: Radiology 1997 Jul;204(1):281-2.

[State of ENT organs in patients with sleep apnea syndrome and methods of surgical treatment] Tsukerberg LN, et al. **Vestn Otorinolaringol** 1996 May-Jun;(3):42-3 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Sleep apnea and cognitive dysfunction in myasthenia gravis. Stepansky R, et al. **Acta Med Austriaca** 1997;24(3):128-31

Frontal lobe-related cognitive functions in patients with sleep apnea syndrome before and after treatment. Feuerstein C, et al. **Acta Neurol Belg** 1997 Jun;97(2):96-107

Nasal obstruction and obstructive sleep apnea: a review. Kushida CA, et al. **Allergy Asthma Proc** 1997 Mar-Apr; 18(2):69-71 (27 ref.)

Pressure-heart rate responses to alpha-adrenergic stimulation and hormonal regulation in normotensive patients with obstructive sleep apnea. Maillard D, et al. **Am J Hypertens** 1997 Jan;10(1):24-31

Effects of hypoxia and hypercapnia on patterns of sleep-associated apnea in elephant seal pups. Milsom W, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R1017-24

Energy expenditure in obstructive sleep apnea: effects of treatment with continuous positive airway pressure. Stenlöf K, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):E1036-43

Upper airway anesthesia reduces phasic genioglossus activity during sleep apnea. Berry RB, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):127-32

Effect of obstructive sleep apnea versus sleep fragmentation on responses to airway occlusion. Brooks D, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1609-17

Depressed baroreflex sensitivity in patients with obstructive sleep apnea. Carlson JT, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1490-6

Inspiratory dynamic obstruction detected by forced oscillation during CPAP. A model study. Farré R, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):952-6

Pulmonary artery pressure response to hypoxia in sleep apnea. Laks L, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):193-8

Uvulopalatopharyngoplasty may compromise nasal CPAP therapy in sleep apnea syndrome [letter; comment] Loube DI. **Am J Respir Crit Care Med** 1997 Jun;155(6):2112-3. Comment on: Am J Respir Crit Care Med 1996 Dec;154(6 Pt 1):1759-62.

Sleep fragmentation and daytime wakefulness [editorial; comment] Mendelson WB. **Am J Respir Crit Care Med** 1997 May;155(5):1499-500. Comment on: Am J Respir Crit Care Med 1997 May;155(5):1596-1601.

Mechanism of apnea lengthening across the night in obstructive sleep apnea. Montserrat JM, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):988-93

Effects of sleep posture on upper airway stability in patients with obstructive sleep apnea. Neill AM, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):199-204

Ventilatory-control abnormalities in familial sleep apnea. Redline S, et al. **Am J Respir Crit Care Med** 1997 Jul; 156(1):155-60

Role of chemosensitivity in intrathoracic pressure changes during obstructive sleep apnea. Sforza E, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1741-7

Pulmonary function in obese snorers with or without sleep apnea syndrome. Zerah-Lancner F, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):522-7

Body position and late postoperative nocturnal hypoxaemia. Rosenberg-Adamsen S, et al. **Anaesthesia** 1997 Jun; 52(6):589-92

A tongue retaining device and sleep-state genioglossus muscle activity in patients with obstructive sleep apnea. Ono T, et al. **Angle Orthod** 1996;66(4):273-80

Heart rate response profiles during head upright tilt test in infants with apparent life threatening events. Edner A, et al. **Arch Dis Child** 1997 Jan;76(1):27-30

Direct hypoglossal nerve stimulation in obstructive sleep apnea. Eisele DW, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jan;123(1):57-61

Effect of short term graded withdrawal of nasal continuous positive airway pressure on systemic blood pressure in patients with obstructive sleep apnoea. Stradling JR, et al. **Blood Press** 1996 Jul;5(4):234-40

Obstructive sleep apnoea: fact not fiction. Battagel JM. **Br J Orthod** 1996 Nov;23(4):315-24 (38 ref.)

Respiratory sleep disorders and high blood pressure. Fletcher EC. **Cardiologia** 1997 May;42(5):469-79 (78 ref.)

Heart rate variability in patients with sleep-related breathing disorders. Bauer T, et al. **Cardiology** 1996 Nov-Dec; 87(6):492-6

The single-breath diffusing capacity for carbon monoxide in obstructive sleep apnea and obesity. Collard P, et al. **Chest** 1996 Nov;110(5):1189-93

Sympathetic nervous system alterations in sleep apnea. The relative importance of respiratory disturbance, hypoxia, and sleep quality. Dimsdale JE, et al. **Chest** 1997 Mar; 111(3):639-42

The pharyngeal critical pressure. The whys and hows of using nasal continuous positive airway pressure diagnostically. Gold AR, et al. **Chest** 1996 Oct; 110(4):1077-88 (48 ref.)

Positional vs nonpositional obstructive sleep apnea patients: anthropomorphic, nocturnal polysomnographic, and multiple sleep latency test data. Oksenberg A, et al. **Chest** 1997 Sep;112(3):629-39

Posture-dependent change of tracheal sounds at standardized flows in patients with obstructive sleep apnea. Pasterkamp H, et al. **Chest** 1996 Dec;110(6):1493-8

Pulmonary hemodynamics and hypoxemia in sleep apnea [letter; comment] Sajkov D, et al. **Chest** 1997 Jan; 111(1):256-7. Comment on: Chest 1996 Feb;109(2):380-6.

Heart rate during obstructive sleep apnea depends on individual hypoxic chemosensitivity of the carotid body. Sato F, et al. **Circulation** 1997 Jul 1;96(1):274-81

Measurement of P300 and sleep characteristics in patients with hypersomnia: do P300 latencies, P300 amplitudes, and multiple sleep latency and maintenance of wakefulness tests measure different factors? Sangal RB, et al. **Clin Electroencephalogr** 1997 Jul;28(3):179-84

Obstructive sleep apnea and abnormal P300 latency topography. Sangal RB, et al. **Clin Electroencephalogr** 1997 Jan;28(1):16-25

Heart rate variability in patients with daytime sleepiness suspected of having sleep apnoea syndrome: a receiver-operating characteristic analysis. Keyl C, et al. **Clin Sci (Colch)** 1997 Apr;92(4):335-43

Chiari type I malformation, glossopharyngeal neuralgia and central sleep apnoea in a child. Yglesias A, et al. **Dev Med Child Neurol** 1996 Dec;38(12):1126-30

Respiratory control in children with Prader-Willi syndrome. Schlüter B, et al. **Eur J Pediatr** 1997 Jan;156(1):65-8

Breathing pattern during sleep disruptive snoring. Bloch KE, et al. **Eur Respir J** 1997 Mar;10(3):576-86

Relief of sleep apnoea after treatment of acromegaly: report of three cases and review of the literature. Buyse B, et al. **Eur Respir J** 1997 Jun;10(6):1401-4

A system to generate simultaneous forced oscillation and continuous positive airway pressure. Farré R, et al. **Eur Respir J** 1997 Jun;10(6):1349-53

Acoustic analysis of snoring sound in patients with simple snoring and obstructive sleep apnoea. Fiz JA, et al. **Eur Respir J** 1996 Nov;9(11):2365-70

Control of breathing in hypercapnic patients with obstructive sleep apnoea [letter; comment] Koziej M, et al. **Eur Respir J** 1996 Jul;9(7):1576-7. Comment on: Eur Respir J 1994 Nov;7(11):2005-10.

Relationship between body mass index, age and upper airway measurements in snorers and sleep apnoea patients. Mayer P, et al. **Eur Respir J** 1996 Sep;9(9):1801-9

Lack of evidence for diaphragmatic fatigue over the course of the night in obstructive sleep apnoea. Montserrat JM, et al. **Eur Respir J** 1997 Jan;10(1):133-8

Palatopharyngeus has respiratory activity and responds to negative pressure in sleep apnoeics. Mortimore IL, et al. **Eur Respir J** 1996 Apr;9(4):773-8

Expiratory flow limitation during sleep in heavy snorers and obstructive sleep apnoea patients. Stănescu D, et al. **Eur Respir J** 1996 Oct;9(10):2116-21

Influence of moderate alcohol consumption on obstructive sleep apnoea with and without AutoSet nasal CPAP therapy. Teschler H, et al. **Eur Respir J** 1996 Nov; 9(11):2371-7

Upper airway size and collapsibility in snorers: evaluation with digital fluoroscopy. Tsushima Y, et al. **Eur Respir J** 1996 Aug;9(8):1611-8

Hypoxia, obstructive sleep apnea syndrome, and pulmonary hypertension [editorial; comment] Kay JM. **Hum Pathol** 1997 Mar;28(3):261-3. Comment on: Hum Pathol 1997 Mar;28(3):264-9.

Analysis of physiological time series using wavelet transforms. Figliola A, et al. **IEEE Eng Med Biol Mag** 1997 May-Jun;16(3):74-9

Abnormal brain stem auditory evoked potentials in a girl with the central alveolar hypoventilation syndrome. Litscher G, et al. **Int J Neurosci** 1996 Nov;87(3-4):113-7

Effect of prone position on apnea severity in obstructive sleep apnea. Matsuzawa Y, et al. **Intern Med** 1995 Dec; 34(12):1190-3

Nasal obstruction as a risk factor for sleep-disordered breathing. The University of Wisconsin Sleep and Respiratory Research Group. Young T, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):S757-62

Effect of topical upper airway anesthesia on apnea duration through the night in obstructive sleep apnea. Cala SJ, et al. **J Appl Physiol** 1996 Dec;81(6):2618-26

Comparative hemodynamic effects of periodic obstructive and simulated central apneas in sedated pigs. Chen L, et al. **J Appl Physiol** 1997 Aug;83(2):485-94

Effects of inspired gas on sleep-related apnea in the rat. Christon J, et al. **J Appl Physiol** 1996 Jun;80(6):2102-7

Interaction of cross-sectional area, driving pressure, and airflow of passive velopharynx. Isono S, et al. **J Appl Physiol** 1997 Sep;83(3):851-9

Reflex apneic response evoked by laryngeal exposure to wood smoke in rats: neural and chemical mechanisms. Lin YS, et al. **J Appl Physiol** 1997 Sep;83(3):723-30

Arousal pattern following central and obstructive breathing abnormalities in infants and children. McNamara F, et al. **J Appl Physiol** 1996 Dec;81(6):2651-7

Electrical stimulation of the lingual musculature in obstructive sleep apnea. Schwartz AR, et al. **J Appl Physiol** 1996 Aug;81(2):643-52

Effects of inhaled CO2 and added dead space on idiopathic central sleep apnea. Xie A, et al. **J Appl Physiol** 1997 Mar; 82(3):918-26

Intracerebroventricular propranolol prevented vascular resistance increases on arousal from sleep apnea. Zinkovska S, et al. **J Appl Physiol** 1997 May;82(5):1637-43

Pathophysiologic and therapeutic implications of sleep apnea in congestive heart failure. Bradley TD, et al. **J Card Fail** 1996 Sep;2(3):223-40 (150 ref.)

Changes in cardiac autonomic control during nocturnal repetitive oxygen desaturation episodes in patients with coronary artery disease. Keyl C, et al. **J Cardiovasc Risk** 1996 Apr;3(2):221-7

Cognitive function in patients with sleep apnea after acute nocturnal nasal continuous positive airway pressure (CPAP) treatment: sleepiness and hypoxemia effects. Valencia-Flores M, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):197-210

Suppressed cardiac and electroencephalographic arousal on apnea/hypopnea termination in elderly patients with cerebral infarction. Noda A, et al. **J Clin Neurophysiol** 1997 Jan;14(1):68-72

Absence of bradycardic response to apnea and hypoxia in heart transplant recipients with obstructive sleep apnea. Madden BP, et al. **J Heart Lung Transplant** 1997 Apr; 16(4):394-7

Electrophysiological brainstem investigations in obstructive sleep apnoea syndrome. Urban PP, et al. **J Neurol** 1996 Feb;243(2):171-4

A method of studying adaptive changes of the oropharynx to variation in mandibular position in patients with obstructive sleep apnoea. L'Estrange PR, et al. **J Oral Rehabil** 1996 Oct;23(10):699-711

Sleep and upper airway obstruction in children with achondroplasia. Zucconi M, et al. **J Pediatr** 1996 Nov; 129(5):743-9

Is sleep apnea a predisposing factor for tobacco use? Schrand JR. **Med Hypotheses** 1996 Dec;47(6):443-8 (37 ref.)

Acute and chronic influences of obstructive sleep apnoea on the pulmonary circulation. Marrone O, et al. **Monaldi Arch Chest Dis** 1997 Jun;52(3):263-7 (42 ref.)

Obstructive sleep apnea and related disorders. Chervin RD, et al. **Neurol Clin** 1996 Aug;14(3):583–609 (145 ref.)
Central sleep apnea. Guilleminault C, et al. **Neurol Clin** 1996 Aug;14(3):611–28 (74 ref.)
Sleep apnea in patients with transient ischemic attack and stroke: a prospective study of 59 patients. Bassetti C, et al. **Neurology** 1996 Nov;47(5):1167–73
Electrocerebral inactivity associated with obstructive sleep apnea. Connelly CS, et al. **Neurology** 1997 May; 48(5):1464–6
Sleep anomalies in the chronic fatigue syndrome. A comorbidity study. Fischler B, et al. **Neuropsychobiology** 1997;35(3):115–22
Passive constriction of the upper airway during central apneas: fiberoptic and EMG investigations. Guilleminault C, et al. **Respir Physiol** 1997 Apr;108(1):11–22
Color density spectral array for quick evaluation of sleep during nasal continuous positive airway pressure. Rey M, et al. **Respiration** 1996;63(2):100–5
Motor control of the pharyngeal musculature and implications for the pathogenesis of obstructive sleep apnea. Horner RL. **Sleep** 1996 Dec;19(10):827–53 (272 ref.)
Static properties of the passive pharynx in sleep apnea. Isono S, et al. **Sleep** 1996 Dec;19(10 Suppl):S175–7
Sleep fragmentation in obstructive sleep apnea. Kimoff RJ. **Sleep** 1996 Nov;19(9 Suppl):S61–6 (65 ref.)
Does upper airway muscle injury trigger a vicious cycle in obstructive sleep apnea? A hypothesis. Petrof BJ, et al. **Sleep** 1996 Jul;19(6):465–71
Electrical stimulation of upper airway musculature. Smith PL, et al. **Sleep** 1996 Dec;19(10 Suppl):S284–7
Respiratory dreams and nightmares. Douglas N. **Thorax** 1996 Sep;51(9):882–6 (30 ref.)
Effect of body position on tongue posture in awake patients with obstructive sleep apnoea. Miyamoto K, et al. **Thorax** 1997 Mar;52(3):255–9
Assessment of the nocturnal blood pressure relative to sleep stages in patients with obstructive sleep apnea. Grote L, et al. **Z Kardiol** 1996;85 Suppl 3:112–4
Hypertension and obstructive sleep apnea. Ambulatory blood pressure monitoring before and with nCPAP–therapy. Lies A, et al. **Z Kardiol** 1996;85 Suppl 3:140–2
[Weight loss and the functioning of the autonomic nervous system in sleep apnea patients] Pesonen PH, et al. **Duodecim** 1995;111(12):1136–40 **(Fin)**
[Ventricular late potentials and sleep apnea syndromes] Maillier B, et al. **Ann Cardiol Angeiol (Paris)** 1996 Dec; 45(10):561–6 (Eng. Abstr.) **(Fre)**
[Propensity for sleep and diurnal somnolence in the course of sleep apnea syndrome] Krieger J, et al. **Neurophysiol Clin** 1996;26(3):131–7 (32 ref.) (Eng. Abstr.) **(Fre)**
[Late ventricular potentials in patients with sleep apnea syndrome (letter)] Maillier B, et al. **Presse Med** 1997 Mar 15;26(8):369 **(Fre)**
[Respiratory disorders during sleep] Teculescu D, et al. **Rev Epidemiol Sante Publique** 1997 Mar;45(1):64–77 (114 ref.) (Eng. Abstr.) **(Fre)**
[Sleep—respiration—hemodynamics] Grote L. **Internist (Berl)** 1996 May;37(5):470–82 (76 ref.) **(Ger)**
[Proceedings of the 10th annual session of the working group of the German Society for Pneumology. Nocturnal Respiratory and Circulatory Disorders. Freiburg, 16–18 March 1995] **Pneumologie** 1997 Aug;51 Suppl 3:697–813 **(Ger)**
[Heart rate variability in patients with sleep associated breathing disorders] Bauer T, et al. **Pneumologie** 1997 Aug; 51 Suppl 3:736–9 (Eng. Abstr.) **(Ger)**
[Cardiorespiratory coupling in obstructive sleep apnea (OSA)] Grote L, et al. **Pneumologie** 1997 Apr;51 Suppl 2:423–9 (Eng. Abstr.) **(Ger)**
[Carotid baroreflex in sleep apnea patients] Klawe JJ, et al. **Pneumologie** 1997 Aug;51 Suppl 3:744–6 (Eng. Abstr.) **(Ger)**
[Acoustic evoked potentials (AEP) in obstructive sleep apnea syndrome] Kotterba S, et al. **Pneumologie** 1996 Dec; 50(12):924–6 (Eng. Abstr.) **(Ger)**
[Sleep and respiration at an altitude of 6,400 m (Aconcagua, Argentina] Netzer N, et al. **Pneumologie** 1997 Aug;51 Suppl 3:729–35 (Eng. Abstr.) **(Ger)**
[Comparative study of thoracic and abdominal effort, respiratory oscillatory impedance (ROI) and intrathoracic pressure in sleep apnea syndrome] Schlenker E, et al. **Pneumologie** 1997 Aug;51 Suppl 3:758–62 (Eng. Abstr.) **(Ger)**
[Change in bronchial hyperreactivity with nCPAP respiration in patients with sleep related respiratory disorders] Thalhofer S, et al. **Pneumologie** 1997 Aug;51 Suppl 3:767–9 (Eng. Abstr.) **(Ger)**
[Clinical significance of snoring] Bloch KE. **Schweiz Med Wochenschr** 1997 Feb 1;127(5):170–5 (28 ref.) (Eng. Abstr.) **(Ger)**
[Breathing disorders during sleep: current developments (editorial)] Gugger M. **Schweiz Med Wochenschr** 1997 Feb 8;127(6):204–7 (27 ref.) **(Ger)**
[Anamnestic and polygraphic parameters in obstructive sleep apnea syndrome patients with reduced nasal respiration during the day in comparison with obstructive sleep apnea patients with normal nasal respiration] Duchna HW, et al. **Wien Med Wochenschr** 1996;146(13–14):348–9 (Eng. Abstr.) **(Ger)**
[Assessment of attention parameters in sleep apnea patients] Gresele C, et al. **Wien Med Wochenschr** 1996; 146(13–14):344–5 (Eng. Abstr.) **(Ger)**
[Sleep and breathing disorders in patients with brain stem lesions] Schäfer D, et al. **Wien Med Wochenschr** 1996; 146(13–14):296–8 (Eng. Abstr.) **(Ger)**
[Periodic breathing with periodic oxygen variation in infancy] von Czettritz G, et al. **Wien Med Wochenschr** 1996; 146(13–14):317–9 (Eng. Abstr.) **(Ger)**
[Pupillography as an objective attention test] Wilhelm B, et al. **Wien Med Wochenschr** 1996;146(13–14):387–9 (Eng. Abstr.) **(Ger)**
[Influence of sleep apnea on nocturnal blood pressure] Shibata N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jun; 100(6):678–84 (Eng. Abstr.) **(Jpn)**
[Sign and symptoms in Japanese patients with obstructive sleep apnea: present status and problems] Takasaki Y. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:40–5 (Eng. Abstr.) **(Jpn)**
[Estimation of SIDS with measurement of cardio–respiratory contribution ratio through multivariate autoregressive modelling approach] Kojo M, et al. **No To Hattatsu** 1996 Sep;28(5):379–84 (Eng. Abstr.) **(Jpn)**
[Sleep apnea syndrome (SAS)] Shiomi T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):457–9 (8 ref.) **(Jpn)**
[Pulmonary circulation at rest and during exercise in patients with obstructive sleep apnea before and after one year of treatment with CPAP] Hawryłkiewicz I, et al. **Pneumonol Alergol Pol** 1996;64(9–10):638–43 (Eng. Abstr.) **(Pol)**
[Effect of CPAP and BiPAP assisted breathing on pulmonary hemodynamics in patients with obstructive sleep apnea] Palasiewicz G, et al. **Pneumonol Alergol Pol** 1996; 64(9–10):664–70 (Eng. Abstr.) **(Pol)**
[Hypercapnic stimulation and ventilation response in the syndrome of sleep obstructive apnea. Comparison of reinhalation and steady state (published erratum appears in Arch Bronconeumol 1996 Nov;32(9):452)] Soto Campos JG, et al. **Arch Bronconeumol** 1996 Aug–Sep;32(7):341–7 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Population and occupational screening for obstructive sleep apnea: are we there yet? Baumel MJ, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):9–14
Benzodiazepine receptor antagonist (flumazenil) does not affect sleep–related breathing disorders. Schönhofer B, et al. **Eur Respir J** 1996 Sep;9(9):1816–20
Conducting truck drivers' physical exams. The high prevalence of sleep apnea. Asp DS. **Minn Med** 1997 Jan; 80(1):29–30
Helping with obstructive sleep apnoea. Wyndham M. **Practitioner** 1997 Mar;241(1572):157
Predictive diagnostic value of clinical assessment and nonlaboratory monitoring system recordings in patients with symptoms suggestive of obstructive sleep apnea syndrome. Schäfer H, et al. **Respiration** 1997;64(3):194–9
[Is SnorEx also ApneaEx? A study with a new intra–oral prosthesis as a form of therapy of obstructive sleep apnea syndrome] Schönhofer B, et al. **Pneumologie** 1997 Aug;51 Suppl 3:804–8 (Eng. Abstr.) **(Ger)**
[Effectiveness of an anti–snoring prosthesis in obstructive sleep apnea syndrome] Winkels W, et al. **Pneumologie** 1997 Aug;51 Suppl 3:802–3 (Eng. Abstr.) **(Ger)**
[Portable home monitoring system in screening for sleep–disordered breathing] Hida W, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:46–9 (11 ref.) (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Frontal lobe–related cognitive functions in patients with sleep apnea syndrome before and after treatment. Feuerstein C, et al. **Acta Neurol Belg** 1997 Jun;97(2):96–107
Disordered sleep and noncompliance in a patient with end–stage renal disease. Kimmel PL, et al. **Adv Ren Replace Ther** 1997 Jan;4(1):55–67
The Ondine curse, false suffocation alarms, trait–state suffocation fear, and dyspnea–suffocation fear in panic attacks [letter; comment] Ley R. **Arch Gen Psychiatry** 1997 Jul;54(7):677–8. Comment on: Arch Gen Psychiatry 1996 Jan;53(1):83–5.
Quality of life consequences of sleep–disordered breathing. Flemons WW, et al. **J Allergy Clin Immunol** 1997 Feb; 99(2):S750–6 (76 ref.)
Improvement in excessive daytime sleepiness after surgical treatment for obstructive sleep apnea syndrome. Yamadera W. **Psychiatry Clin Neurosci** 1995 Aug;49(4):213–21
[Difficult patients in the sleep laboratory—nCPAP therapy in psychiatric patients with sleep apnea disorders] Bosse–Henck A, et al. **Wien Med Wochenschr** 1996; 146(13–14):352–4 (Eng. Abstr.) **(Ger)**
[Memory performance of Parkinson patients with and without sleep apnea syndrome] Schwalen S, et al. **Wien Med Wochenschr** 1996;146(13–14):294–5 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Axial CT measurements of the cross–sectional area of the oropharynx in adults with obstructive sleep apnea syndrome. Avrahami E, et al. **AJNR Am J Neuroradiol** 1996 Jun–Jul;17(6):1107–11
Prediction of uvulopalatopharyngoplasty response using cephalometric radiographs. Woodson BT, et al. **Am J Otolaryngol** 1997 May–Jun;18(3):179–84
[A patient with myotonic dystrophy who presented with chest roentgenographic abnormalities and alveolar hypoventilation] Matsumoto H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):997–1002 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Assessment of cardiac sympathetic function with iodine–123–MIBG imaging in obstructive sleep apnea syndrome. Otsuka N, et al. **J Nucl Med** 1997 Apr; 38(4):567–72

REHABILITATION

Oral appliance therapy for the treatment of obstructive sleep apnea. Fleetham JA, et al. **Sleep** 1996 Dec;19(10 Suppl):S288–90 (5 ref.)
Tiredness and somnolence despite initial treatment of obstructive sleep apnea syndrome (what to do when an OSAS patient stays hypersomnolent despite treatment). Guilleminault C, et al. **Sleep** 1996 Nov;19(9 Suppl):S117–22
Utilization of health care services in patients with severe obstructive sleep apnea. Kryger MH, et al. **Sleep** 1996 Nov; 19(9 Suppl):S111–6
The mandibular repositioning device: role in the treatment of obstructive sleep apnea. Menn SJ, et al. **Sleep** 1996 Dec; 19(10):794–800
Treatment of obstructive sleep apnea syndrome. A review of surgical approaches. Givens CD Jr, et al. **Va Med Q** 1996 Fall;123(4):266–9 (24 ref.)
[Value of various intra– and extraoral therapeutic procedures for treatment of obstructive sleep apnea and snoring] Schönhofer B, et al. **Med Klin** 1997 Mar 15;92(3):167–74 (35 ref.) (Eng. Abstr.) **(Ger)**
[Ambulatory, comprehensive, behavior therapy–oriented weight reduction program (Optifast Program). An alternative therapy in obstructive sleep apnea] Herrendorf G, et al. **Nervenarzt** 1996 Aug;67(8):695–700 (Eng. Abstr.) **(Ger)**
[Physical training of patients with sleep apnea] Netzer N, et al. **Pneumologie** 1997 Aug;51 Suppl 3:779–82 (Eng. Abstr.) **(Ger)**

SURGERY

The effect of laser–uvulopalatopharyngoplasty on the nasal and nasopharyngeal volume measured with acoustic rhinometry. Antila J, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:202–5
Treatment of sleep apnea and snoring in children. Ishizuka Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:234–5
Effect of surgery on obstructive sleep apnea. Nishimura T, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:231–3
The effect of nasal obstruction on outcomes of uvulopalatopharyngoplasty. Virkkula P, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:195–8
Digital fluoroscopy before and after laser uvulopalatopharyngoplasty in obstructive sleep apnea. Importance of pharyngeal collapsibility and hyoid bone position. Tsushima Y, et al. **Acta Radiol** 1997 Mar; 38(2):214–21
Prediction of uvulopalatopharyngoplasty response using cephalometric radiographs. Woodson BT, et al. **Am J Otolaryngol** 1997 May–Jun;18(3):179–84
Age–related outcomes of sleep apnea surgery in infants and children. Januszkiewicz JS, et al. **Ann Plast Surg** 1997 May; 38(5):465–77
Uvulopalatopharyngoplasty vs laser–assisted uvulopalatoplasty. Anatomical considerations [see comments] Finkelstein Y, et al. **Arch Otolaryngol Head Neck Surg** 1997 Mar;123(3):265–76. Comment in: Arch Otolaryngol Head Neck Surg 1997 Mar;123(3):278–9.
Long–term follow–up of patients with obstructive sleep apnea treated with uvulopalatopharyngoplasty. Janson C, et al. **Arch Otolaryngol Head Neck Surg** 1997 Mar; 123(3):257–62
Comparing uvulopalatopharyngoplasty and laser–assisted uvulopalatoplasty [comment] Terris DJ. **Arch Otolaryngol Head Neck Surg** 1997 Mar;123(3):278–9. Comment on: Arch Otolaryngol Head Neck Surg 1997 Mar;123(3):265–76.
Obstructive sleep apnoea: the role of the oral and maxillofacial surgeon. Dimitroulis G. **Aust Dent J** 1997 Feb;42(1):25–9 (26 ref.)
Availability of a meta–analysis of the surgical treatment of obstructive sleep apnea [editorial] Hudgel DW. **Chest** 1997 Feb;111(2):265–6
Radiofrequency volumetric reduction of the tongue. A porcine pilot study for the treatment of obstructive sleep apnea syndrome. Powell NB, et al. **Chest** 1997 May; 111(5):1348–55
Septoplasty for obstructive sleep apnea in infants after cleft lip repair. Josephson GD, et al. **Cleft Palate Craniofac J** 1996 Nov;33(6):473–6
An unusual appearance of velopharyngeal closure in a post–uvulopalatopharyngoplasty patient. Yanagisawa E, et al. **Ear Nose Throat J** 1997 Jan;76(1):14–5 (5 ref.)
Articulation after uvulopalatopharyngoplasty. Nakai K, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):417–20

Continuous pressure measurements in the evaluation of patients for laser assisted uvulopalatoplasty. Skatvedt O, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):390–4

Patient selection and surgical results in obstructive sleep apnea. Dündar A, et al.
Eur Arch Otorhinolaryngol Suppl 1997;1:S157–61

Long–term follow–up after surgical treatment of obstructive sleep apnoea by maxillomandibular advancement. Conradt R, et al. **Eur Respir J** 1997 Jan;10(1):123–8

Surgical correction of obstructive sleep apnea in the complicated pediatric patient documented by polysomnography. Wiet GJ, et al.
Int J Pediatr Otorhinolaryngol 1997 Aug 20;41(2):133–43

Surgical treatment of sleep apnea syndrome. Pillar G, et al. **Isr J Med Sci** 1996 Sep;32(9):710–5 (48 ref.)

CO2 laser palatoplasty: early results. Ingrams DR, et al. **J Laryngol Otol** 1996 Aug;110(8):754–6

Hyoid myotomy and suspension for obstructive sleep apnea syndrome [letter; comment] Sandler NA, et al.
J Oral Maxillofac Surg 1997 Jun;55(6):656. Comment on: J Oral Maxillofac Surg 1996 Nov;54(11):1339–45.

Hyoid myotomy and suspension for obstructive sleep apnea syndrome [see comments] Schmitz JP, et al.
J Oral Maxillofac Surg 1996 Nov;54(11):1339–45 (19 ref.) . Comment in: J Oral Maxillofac Surg 1997 Jun;55(6):656.

One–stage laser–assisted uvulopalatoplasty [letter; comment] Finkelstein Y, et al. **J Otolaryngol** 1997 Apr;26(2):147–8. Comment on: J Otolaryngol 1996 Jun;25(3):155–61.

Laser–assisted uvulopalatoplasty with Nd:YAG laser for sleep disorders. Hanada T, et al. **Laryngoscope** 1996 Dec; 106(12 Pt 1):1531–3

Midline glossectomy and epiglottidectomy for obstructive sleep apnea syndrome. Mickelson SA, et al.
Laryngoscope 1997 May;107(5):614–9

A cost–effective and rational surgical approach to patients with snoring, upper airway resistance syndrome, or obstructive sleep apnea syndrome. Utley DS, et al.
Laryngoscope 1997 Jun;107(6):726–34

Uvulopalatopharyngoplasty versus laser–assisted uvulopalatoplasty for the treatment of obstructive sleep apnea. Walker RP, et al. **Laryngoscope** 1997 Jan; 107(1):76–82

Retropalatal airway characteristics in uvulopalatopharyngoplasty compared with transpalatal advancement pharyngoplasty. Woodson BT.
Laryngoscope 1997 Jun;107(6):735–40

Efficacy of laser–assisted uvulopalatoplasty. Lauretano AM, et al. **Lasers Surg Med** 1997;21(2):109–16

Laser–uvulopalatoplasty (LUPP) under local anesthesia: effective, safe and comfortable. Haraldsson PO, et al.
ORL J Otorhinolaryngol Relat Spec 1996 Mar–Apr; 58(2):99–104

Laser–assisted uvulopalatoplasty: description of the technique and pre– and postoperative evaluation of subjective symptoms. Skatvedt O.
ORL J Otorhinolaryngol Relat Spec 1996 Sep–Oct; 58(5):243–7

Closure of permanent tracheostomy in patients with sleep apnea: a comparison of two techniques. Mickelson SA, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):36–40

Surgical treatment of obstructive sleep apnea in neurologically compromised patients. Cohen SR, et al.
Plast Reconstr Surg 1997 Mar;99(3):638–46

Surgical maxillofacial treatment of obstructive sleep apnea. Hochban W, et al. **Plast Reconstr Surg** 1997 Mar; 99(3):619–26; discussion 627–8

Down syndrome: identification and surgical management of obstructive sleep apnea. Lefaivre JF, et al.
Plast Reconstr Surg 1997 Mar;99(3):629–37

Practice parameters for the treatment of obstructive sleep apnea in adults: the efficacy of surgical modifications of the upper airway. Report of the American Sleep Disorders Association. **Sleep** 1996 Feb;19(2):152–5

Why should we enlarge the pharynx in obstructive sleep apnea? Collard P, et al. **Sleep** 1996 Nov;19(9 Suppl):S85–7

The role of maxillomandibular surgery for treating obstructive sleep apnea. Sher AE. **Sleep** 1996 Nov;19(9 Suppl):S88–9

The efficacy of surgical modifications of the upper airway in adults with obstructive sleep apnea syndrome. Sher AE, et al. **Sleep** 1996 Feb;19(2):156–77 (97 ref.)

Changes in airway characteristics after transpalatal advancement pharyngoplasty compared to uvulopalatopharyngoplasty (UPPP). Woodson BT. **Sleep** 1996 Dec;19(10 Suppl):S291–3

Laser assisted uvulopalatoplasty in sleep disordered breathing [editorial] Ryan CF. **Thorax** 1997 Jan;52(1):5–8

[The surgical management of obstructive sleep apnea syndromes. Preliminary phase I results (the Stanford technic) in a series of 26 patients] Levy J, et al.
Rev Stomatol Chir Maxillofac 1997 Jan;98(1):19–25 (Eng. Abstr.) **(Fre)**

[Functional palatoraphy and modified genioplasty in obstructive sleep apnea] Cohrs S, et al.
Wien Med Wochenschr 1996;146(13–14):366–8 (Eng. Abstr.) **(Ger)**

[Effect of adenotomy on mental performance of children with adenoid vegetations] Paditz E, et al.
Wien Med Wochenschr 1996;146(13–14):327–8 (Eng. Abstr.) **(Ger)**

[Principles of surgical treatment of obstructive sleep apnea by interventions on the facial bones] Reinert S, et al.
Wien Med Wochenschr 1996;146(13–14):368–72 (20 ref.) (Eng. Abstr.) **(Ger)**

[Functional palatoraphy and modified chin osteotomy in surgical therapy of sleep–related respiratory disorders with obstruction of the upper airways] Wiltfang J, et al.
Wien Med Wochenschr 1996;146(13–14):363–5 (Eng. Abstr.) **(Ger)**

[Surgical treatment of obstructive sleep apnea and snoring] Nishimura T. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:71–5 (Eng. Abstr.) **(Jpn)**

[The influence of tonsillectomy on the health status and the development of dental arch in children with obstructive sleep apnea syndrome] Powajbo K. **Otolaryngol Pol** 1996; 50(5):561–3 **(Pol)**

[State of ENT organs in patients with sleep apnea syndrome and methods of surgical treatment] Tsukerberg LN, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):42–3 (Eng. Abstr.) **(Rus)**

[Surgical multiple level reconstruction of the upper airways for treatment of obstructive sleep apnea. Two clinical cases] Biurrun O, et al. **Acta Otorrinolaringol Esp** 1996 Nov–Dec; 47(6):479–83 (Eng. Abstr.) **(Spa)**

THERAPY

Comparison of two dental devices for treatment of obstructive sleep apnea syndrome (OSAS). Hans MG, et al. **Am J Orthod Dentofacial Orthop** 1997 May; 111(5):562–70

Continuous versus bilevel positive airway pressure in a patient with idiopathic central sleep apnea. Hommura F, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1482–5

Comparison of manual and automatic CPAP titration in patients with sleep apnea/hypopnea syndrome. Lloberes P, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1755–8

Uvulopalatopharyngoplasty may compromise nasal CPAP therapy in sleep apnea syndrome [letter; comment] Loube DI. **Am J Respir Crit Care Med** 1997 Jun;155(6):2112–3. Comment on: Am J Respir Crit Care Med 1996 Dec;154(6 Pt 1):1759–62.

Uvulopalatopharyngoplasty may compromise nasal CPAP therapy in sleep apnea syndrome [see comments] Mortimore IL, et al. **Am J Respir Crit Care Med** 1996 Dec; 154(6 Pt 1):1759–62. Comment in: Am J Respir Crit Care Med 1997 Jun;155(6):2112–3.

A new tongue advancement technique for sleep–disordered breathing: side effects and efficacy. Schönhofer B, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):732–8

Case report: surgical–orthodontic management of posttraumatic obstructive sleep apnea syndrome. Mossaz CF, et al. **Angle Orthod** 1997;67(2):155–60

Efficacy of automatic continuous positive airway pressure therapy that uses an estimated required pressure in the treatment of the obstructive sleep apnea syndrome. Sériès F, et al. **Ann Intern Med** 1997 Oct 15;127(8 (Pt 1)):588–95

Diagnosis and treatment of sleep apnea within the community. The Walla Walla Project. Ball EM, et al.
Arch Intern Med 1997 Feb 24;157(4):419–24

Dentistry's role in obstructive sleep apnoea. Review and case report. Miles PG, et al. **Aust Dent J** 1996 Aug;41(4):248–51 (18 ref.)

Treatment of snoring and obstructive sleep apnoea by rapid maxillary expansion [letter] Palmisano RG, et al.
Aust N Z J Med 1996 Jun;26(3):428–9

Obstructive sleep apnoea. Some criticisms of studies are unfounded [letter; comment] Engleman HM, et al. **BMJ** 1997 Aug 9;315(7104):369. Comment on: BMJ 1997 Mar 22;314(7084):851–60.

Obstructive sleep apnoea. Review was misleading and may deny cost effective treatment to patients [letter; comment] Gibson GJ, et al. **BMJ** 1997 Aug 9;315(7104):368; discussion 369. Comment on: BMJ 1997 Mar 22;314(7084):851–60.

Obstructive sleep apnoea. Superficial analysis ignores evidence on efficacy of treatment [letter; comment] Pack AI, et al. **BMJ** 1997 Aug 9;315(7104):367–8. Comment on: BMJ 1997 Mar 22;314(7084):851–60.

Obstructive sleep apnoea. Treatment prevents road accidents, injury, and death caused by daytime sleepiness [letter; comment] Semple SJ, et al. **BMJ** 1997 Aug 9; 315(7104):368–9. Comment on: BMJ 1997 Mar 22;314(7084):851–60.

Obstructive sleep apnoea. False impression of objectivity may deny patients affordable treatment [letter; comment] Shneerson J, et al. **BMJ** 1997 Aug 9;315(7104):367; discussion 369. Comment on: BMJ 1997 Mar 22;314(7084):851–60.

Obstructive sleep apnoea. Evidence for efficacy of continuous positive airways pressure is compelling [letter; comment] Stradling JR, et al. **BMJ** 1997 Aug 9; 315(7104):368; discussion 369. Comment on: BMJ 1997 Mar 22;314(7084):851–60.

Why be limited to nocturnal noninvasive IPPV? [letter; comment] Bach JR. **Chest** 1997 May;111(5):1471–2. Comment on: Chest 1996 Dec;110(6):1581–8.

"Dephlogisticated air" revisited. Oxygen treatment for central sleep apnea syndrome [editorial] Brown LK. **Chest** 1997 Feb;111(2):269–71

Who should treat sleep apnea and how? [editorial; comment] Cartwright R. **Chest** 1997 Feb;111(2):266–8. Comment on: Chest 1997 Feb;111(2):382–6.

Cervical collar in sleep apnea [letter] Genovese J, et al.
Chest 1996 Dec;110(6):1627–8

The pharyngeal critical pressure. The whys and hows of using nasal continuous positive airway pressure diagnostically. Gold AR, et al. **Chest** 1996 Oct; 110(4):1077–88 (48 ref.)

Bed partners' assessment of nasal continuous positive airway pressure therapy in obstructive sleep apnea. Kiely JL, et al. **Chest** 1997 May;111(5):1261–5

Group education sessions and compliance with nasal CPAP therapy. Likar LL, et al. **Chest** 1997 May;111(5):1273–7

Treatment algorithm for OSA [letter; comment] Loube DI. **Chest** 1997 Feb;111(2):528–9. Comment on: Chest 1996 May;109(5):1346–58.

Survey of oral appliance practice among dentists treating obstructive sleep apnea patients [see comments] Loube MD, et al. **Chest** 1997 Feb;111(2):382–6. Comment in: Chest 1997 Feb;111(2):266–8.

Treatment of obstructive sleep apnoea using nasal CPAP in children with craniofacial dysostoses. Gonsalez S, et al. **Childs Nerv Syst** 1996 Nov;12(11):713–9

Vienna phrenic pacemaker—experience with diaphragm pacing in children. Girsch W, et al. **Eur J Pediatr Surg** 1996 Jun;6(3):140–3

Patterns of muscle activity in legs in sleep apnea patients before and during nCPAP therapy. Briellmann RS, et al. **Eur Neurol** 1997;38(2):113–8

Risk of traffic accidents in patients with sleep–disordered breathing: reduction with nasal CPAP. Cassel W, et al. **Eur Respir J** 1996 Dec;9(12):2606–11

A system to generate simultaneous forced oscillation and continuous positive airway pressure. Farré R, et al.
Eur Respir J 1997 Jun;10(6):1349–53

Longitudinal assessment of hypercapnic ventilatory drive after tracheotomy in a patient with the Prader–Willi syndrome. Gozal D, et al. **Eur Respir J** 1996 Jul;9(7):1565–8

Residual effect of nCPAP applied for part of the night in patients with obstructive sleep apnoea [see comments] Hers V, et al. **Eur Respir J** 1997 May;10(5):973–6. Comment in: Eur Respir J 1997 May;10(5):969–70.

Control of breathing in hypercapnic patients with obstructive sleep apnoea [letter; comment] Koziej M, et al.
Eur Respir J 1996 Jul;9(7):1576–7. Comment on: Eur Respir J 1994 Nov;7(11):2005–10.

Evaluation of an auto–nCPAP device based on snoring detection. Lofaso F, et al. **Eur Respir J** 1996 Sep; 9(9):1795–800

Compliance with nasal CPAP therapy for obstructive sleep apnoea: how much is enough? [editorial; comment] McNicholas WT. **Eur Respir J** 1997 May;10(5):969–70. Comment on: Eur Respir J 1997 May;10(5):973–6.

Should patients with sleep apnoea/hypopnoea syndrome be diagnosed and managed on the basis of home sleep studies? [see comments] Parra O, et al. **Eur Respir J** 1997 Aug; 10(8):1720–4. Comment in: Eur Respir J 1997 Aug;10(8):1699–700.

Acceptance and long–term compliance with nCPAP in patients with obstructive sleep apnoea syndrome. Pieters T, et al. **Eur Respir J** 1996 May;9(5):939–44

Effects of long–term nocturnal nasal ventilation on spontaneous breathing during sleep in neuromuscular and chest wall disorders. Piper AJ, et al. **Eur Respir J** 1996 Jul;9(7):1515–22

Nasal continuous positive airway pressure with supplemental oxygen in coexistent sleep apnoea–hypopnoea syndrome and severe chronic obstructive pulmonary disease. Sampol G, et al. **Eur Respir J** 1996 Jan;9(1):111–6

Influence of moderate alcohol consumption on obstructive sleep apnoea with and without AutoSet nasal CPAP therapy. Teschler H, et al. **Eur Respir J** 1996 Nov; 9(11):2371–7

Abnormal autonomic stress responses in obstructive sleep apnoea are reversed by nasal continuous positive airway pressure. Veale D, et al. **Eur Respir J** 1996 Oct;9(10):2122–6

Continuous positive airway pressure treatment results in weight less in obese and overweight patients with obstructive sleep apnea. Loube DI, et al.
J Am Diet Assoc 1997 Aug;97(8):896–7

The unacceptable face of evidence–based medicine [editorial] Stradling JR, et al. **J Eval Clin Pract** 1997 Apr;3(2):99–103 (39 ref.)

Therapy for sleep apnea: who should be treated with CPAP? Chaudhary BA, et al. **J Med Assoc Ga** 1997 Sep;86(3):230–2 (26 ref.)

A method of studying adaptive changes of the oropharynx to variation in mandibular position in patients with obstructive sleep apnoea. L'Estrange PR, et al.
J Oral Rehabil 1996 Oct;23(10):699–711

Effects of electrical stimulation to the soft palate on snoring and obstructive sleep apnea. Schwartz RS, et al.
J Prosthet Dent 1996 Sep;76(3):273–81

Effect of nasal CPAP treatment on plasma volume, aldosterone and 24–h blood pressure in obstructive sleep apnoea. Saarelainen S, et al. **J Sleep Res** 1996 Sep; 5(3):181–5

Sleep apnoea and the misuse of evidence–based medicine [letter; comment] Kryger M. **Lancet** 1997 Mar 15; 349(9054):803–4. Comment on: Lancet 1997 Jan 18;349(9046):201–2.

Sleep apnoea and the misuse of evidence–based medicine [letter; comment] Shaw D. **Lancet** 1997 Mar 15; 349(9054):803. Comment on: Lancet 1997 Jan 18;349(9046):201–2.

SLEEP APNEA SYNDROMES

Sleep apnoea and the misuse of evidence-based medicine [see comments] Stradling J. **Lancet** 1997 Jan 18;349(9046):201-2 . Comment in: Lancet 1997 Mar 15;349(9054):803. Comment in: Lancet 1997 Mar 15;349(9054):803-4.

Sleep apnoea and the misuse of evidence-based medicine [letter; comment] Walsworth-Bell J. **Lancet** 1997 Mar 15; 349(9054):803. Comment on: Lancet 1997 Jan 18;349(9046):201-2.

Sporadic apnea: paradoxical transformation to eupnea by perturbations that inhibit inspiration. Paydarfar D, et al. **Med Hypotheses** 1997 Jul;49(1):19-26

Central alveolar hypoventilation (Ondine's curse) treated with negative pressure ventilation. Cirignotta F, et al. **Monaldi Arch Chest Dis** 1996 Feb;51(1):22-6

Obstructive sleep apnoea. Part II: Treatment with a customised dental appliance. Robertson CJ. **N Z Dent J** 1997 Mar;93(411):4-9

Obstructive sleep apnea in pregnancy. Lefcourt LA, et al. **Obstet Gynecol Surv** 1996 Aug;51(8):503-6 (14 ref.)

Limitations and promise in the diagnosis and treatment of obstructive sleep apnoea. Aboussouan LS, et al. **Respir Med** 1997 Apr;91(4):181-91 (112 ref.)

Color density spectral array for quick evaluation of sleep during nasal continuous positive airway pressure. Rey M, et al. **Respiration** 1996;63(2):100-5

Sleep-related hypoxaemia in chronic obstructive pulmonary disease: causes, consequences and treatment. Weitzenblum E, et al. **Respiration** 1997;64(3):187-93 (42 ref.)

Mandibular-Lingual Repositioning Device--MLRD: preliminary results of 8 patients with obstructive sleep apnea syndrome--OSAS. Castro Barbosa R, et al. **Rev Paul Med** 1995 May-Jun;113(3):888-94

Nasal continuous positive airway pressure treatment: current realities and future. Berthon-Jones M, et al. **Sleep** 1996 Nov;19(9 Suppl):S131-5

Ambulatory blood pressure on and off continuous positive airway pressure therapy for the sleep apnea/hypopnea syndrome: effects in "non-dippers". Engleman HM, et al. **Sleep** 1996 Jun;19(5):378-81

Can the treatment of sleep apnea syndrome prevent the cardiovascular consequences? Fletcher EC. **Sleep** 1996 Nov;19(9 Suppl):S67-70 (9 ref.)

Acute withdrawal of nasal CPAP in obstructive sleep apnea does not cause a rise in stress hormones. Grunstein RR, et al. **Sleep** 1996 Dec;19(10):774-82

How and why should we stabilize the upper airway? Hoffstein V. **Sleep** 1996 Nov;19(9 Suppl):S57-60 (30 ref.)

Accuracy of CPAP predicted from anthropometric and polysomnographic indices [letter; comment] Hoffstein V. **Sleep** 1997 Mar;20(3):237-8. Comment on: Sleep 1996 Sep;19(7):600-1.

Long-term compliance with CPAP therapy in obstructive sleep apnea patients and in snorers. Krieger J, et al. **Sleep** 1996 Nov;19(9 Suppl):S136-43

From snoring to sleep apnea syndrome: therapeutic approach [editorial] Lévy P, et al. **Sleep** 1996 Nov;19(9 Suppl):S55-6

Methods to stabilize the upper airway using positive pressure. Rapoport DM. **Sleep** 1996 Nov;19(9 Suppl):S123-30

Computerized adjustable versus fixed NCPAP treatment of obstructive sleep apnea. Scharf MB, et al. **Sleep** 1996 Jul; 19(6):491-6

Evaluation of treatment efficacy in sleep apnea hypopnea syndrome. Sériès F. **Sleep** 1996 Nov;19(9 Suppl):S71-6 (29 ref.)

Auto CPAP in the treatment of sleep apnea hypopnea syndrome. Sériès F. **Sleep** 1996 Dec;19(10 Suppl):S281-3

Treatment of obstructive sleep apnea with a self-titrating continuous positive airway pressure (CPAP) system. Sharma S, et al. **Sleep** 1996 Jul;19(6):497-501

New approaches to monitoring sleep-related breathing disorders. Stradling JR, et al. **Sleep** 1996 Nov;19(9 Suppl):S77-84 (49 ref.)

Split-night studies for the diagnosis and treatment of sleep-disordered breathing. Strollo PJ Jr, et al. **Sleep** 1996 Dec;19(10 Suppl):S255-9

Night-to-night variability in CPAP use over the first three months of treatment. Weaver TE, et al. **Sleep** 1997 Apr; 20(4):278-83

Who should receive treatment for sleep apnoea? [editorial] Bennett LS, et al. **Thorax** 1997 Feb;52(2):103-4

Effect of CPAP therapy on daytime function in patients with mild sleep apnoea/hypopnoea syndrome. Engleman HM, et al. **Thorax** 1997 Feb;52(2):114-9

A short-term controlled trial of an adjustable oral appliance for the treatment of mild to moderate obstructive sleep apnoea. Ferguson KA, et al. **Thorax** 1997 Apr;52(4):362-8

Effects of nasal CPAP on simulated driving performance in patients with obstructive sleep apnoea. George CF, et al. **Thorax** 1997 Jul;52(7):648-53

Automatic nasal continuous positive airway pressure titration in the laboratory: patient outcomes. Stradling JR, et al. **Thorax** 1997 Jan;52(1):72-5

Magnetic therapy is ineffective for the treatment of snoring and obstructive sleep apnea syndrome [see comments] Dexter D Jr. **Wis Med J** 1997 Mar;96(3):35-7. Comment in: Wis Med J 1997 Mar;96(3):10-1.

[Dental appliances for the treatment of obstructive sleep apnea syndrome] Liu Y, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1996 Jan;31(1):12-5 (Eng. Abstr.) **(Chi)**

[Effects of nasal continuous positive airway pressure on breathing pattern and respiratory drive in patients with obstructive sleep apnea syndrome] Zhao X, et al. **Chung Hua Nei Ko Tsa Chih** 1995 Dec;34(12):808-11 (Eng. Abstr.) **(Chi)**

[Compliance in treatment of the sleep apnea syndrome using continuous positive pressure respiration] Sonka K, et al. **Cas Lek Cesk** 1997 May 29;136(11):348-51 (Eng. Abstr.) **(Cze)**

[Is the self-setting CPAP machine going to be revolutionary in the treatment and diagnosis of obstructive sleep apnea syndrome?] Polo O. **Duodecim** 1995;111(12):1133-5 **(Fin)**

[Sleep apnea and nocturnal ventilatory assistance (nCPAP): 5-year experience in the conventional system] Noseda A, et al. **Rev Med Brux** 1997 Apr;18(2):64-9 (Eng. Abstr.) **(Fre)**

[Treatment of obstructive sleep apnea syndrome using a mandibular advancement prosthesis: review of the literature] Lockhart R, et al. **Rev Stomatol Chir Maxillofac** 1996 Dec;97(6):365-73 (56 ref.) (Eng. Abstr.) **(Fre)**

[Concepts of noninvasive ventilation] Becker HF, et al. **Internist (Berl)** 1996 May;37(5):500-10 (82 ref.) **(Ger)**

[Complications of nasal CPAP therapy. Consequences for general practice] Fietze I, et al. **Med Klin** 1996 Dec 15; 91(12):758-65 (67 ref.) (Eng. Abstr.) **(Ger)**

[Guidelines for home oxygen and home ventilation therapy. German Society of Pneumology, German Society of Sleep Medicine, Working Group of Nocturnal Respiratory and Cardiovascular Disorders, Working Circle of Home and Long-Term Ventilation] Köhler D, et al. **Med Klin** 1997 Jan 15;92(1):2-6 **(Ger)**

[Noninvasive ventilation of a 4-year-old boy with severe central late onset hypoventilation syndrome] Paditz E, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:46-9 (Eng. Abstr.) **(Ger)**

[Primary alveolar hypoventilation in adulthood] Stammnitz A, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:50-3 (Eng. Abstr.) **(Ger)**

[Present status and future aspects of the respiratory pacemaker] Thoma H, et al. **Med Klin** 1997 Apr 28;92 Suppl 1:77-81 (Eng. Abstr.) **(Ger)**

[Restless legs syndrome and periodic leg movements during sleep in patients with sleep apnea--a therapeutic problem?] Dorow P, et al. **Pneumologie** 1997 Aug;51 Suppl 3:716-20 (Eng. Abstr.) **(Ger)**

[Nasal CPAP therapy of obstructive sleep apnea syndrome with expiratory pressure reduction: a prospective randomized study of acceptance of treatment during therapy initiation] Ficker JH, et al. **Pneumologie** 1997 Jun; 51(6):586-91 (Eng. Abstr.) **(Ger)**

[Multiple sleep latency test in patients with obstructive snoring] Fietze I, et al. **Pneumologie** 1997 Aug;51 Suppl 3:706-11 (Eng. Abstr.) **(Ger)**

[Do patients with obstructive sleep apnea syndrome treated with nCPAP therapy lose weight?] Hein H, et al. **Pneumologie** 1997 Aug;51 Suppl 3:776-8 (Eng. Abstr.) **(Ger)**

[Extent of variations in minimal CPAP pressure requirements during a single night] Hein H, et al. **Pneumologie** 1997 Aug; 51 Suppl 3:786-8 (Eng. Abstr.) **(Ger)**

[Mechanical/prosthetic protrusion of the mandible: effects on the pharynx] Hochban W, et al. **Pneumologie** 1996 Dec; 50(12):919-23 (Eng. Abstr.) **(Ger)**

[Computer-assisted nCPAP settings in comparison with conventional methods] Hoster M, et al. **Pneumologie** 1997 Aug;51 Suppl 3:754-7 (Eng. Abstr.) **(Ger)**

[Complicated course of rheumatoid arthritis with pulmonary involvement, myocardial fibrosis and sleep apnea syndrome (letter)] Korte M. **Pneumologie** 1997 Jul;51(7):695 **(Ger)**

[Technical differences in various CPAP and BiLevel CPAP devices] Netzer N, et al. **Pneumologie** 1997 Aug;51 Suppl 3:789-95 (Eng. Abstr.) **(Ger)**

[Unattended continuous positive airway pressure titration--clinical relevance and cardiorespiratory risks] Raschke F. **Pneumologie** 1997 Jun;51(6):593-4 **(Ger)**

[Current concepts and techniques in home ventilation therapy] Raschke F, et al. **Pneumologie** 1997 Apr;51 Suppl 2:450-5 (18 ref.) (Eng. Abstr.) **(Ger)**

[Automated CPAP--use for obstructive sleep apnea syndrome] Sastry M, et al. **Pneumologie** 1997 Jun; 51(6):592-3 **(Ger)**

[Problems in nasal CPAP management of the obstructive apnea patient--when is a tracheotomy indicated? A case report] Schmidt H, et al. **Pneumologie** 1997 Aug;51 Suppl 3:796-7 (Eng. Abstr.) **(Ger)**

[Effect of n-CPAP therapy on outcome of cold provocation] Thalhofer S, et al. **Pneumologie** 1997 Aug;51 Suppl 3:773-5 (Eng. Abstr.) **(Ger)**

[Bronchial hyperreactivity and nCPAP therapy] Wenzel G, et al. **Pneumologie** 1997 Aug;51 Suppl 3:770-2 (Eng. Abstr.) **(Ger)**

[Optical stimulation method (Snore-Stop) and tongue retainer (Snore-Master) without relevance in therapy of obstructive sleep apnea and snoring] Wenzel M, et al. **Pneumologie** 1997 Mar;51(3):326-9 (Eng. Abstr.) **(Ger)**

[Complicated course of rheumatoid arthritis with pulmonary involvement, myocardial fibrosis and sleep apnea syndrome (letter)] Wessendorf TE, et al. **Pneumologie** 1997 Jul; 51(7):694 **(Ger)**

[nCPAP therapy and maxillary and mandibular osteotomy compared: attention during the day in obstructive sleep apnea] Conradt R, et al. **Wien Med Wochenschr** 1996; 146(13-14):372-4 (Eng. Abstr.) **(Ger)**

[Microbiological studies of a nasal positive pressure respirator with and without a humidifier system] Hetzel J, et al. **Wien Med Wochenschr** 1996;146(13-14):354-6 (Eng. Abstr.) **(Ger)**

[Effect of automatically titrated CPAP systems on sleep and respiration in sleep apnea syndrome] Hoster M, et al. **Wien Med Wochenschr** 1996;146(13-14):385-7 (Eng. Abstr.) **(Ger)**

[Modification of cardiopulmonary performance parameters in patients with obstructive sleep apnea treated with nCPAP therapy] Konermann M, et al. **Wien Med Wochenschr** 1996;146(13-14):340-3 (Eng. Abstr.) **(Ger)**

[nCPAP/nBIPAP therapy in sleep-related obstructive respiratory disorders in childhood] Scholle S, et al. **Wien Med Wochenschr** 1996;146(13-14):325-7 (Eng. Abstr.) **(Ger)**

[Non-surgical treatment of obstructive sleep apnea] Akashiba T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec; 33 Suppl:66-70 (Eng. Abstr.) **(Jpn)**

[Central sleep apnea syndrome successfully treated with nasal bi-level positive airway pressure and sleep position adjustment] Morishima YN, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):365-70 (Eng. Abstr.) **(Jpn)**

[Treatment of obstructive sleep apnea syndrome with a mandibular positioning device and other nonsurgical modalities] Sakakibara H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:76-84 (Eng. Abstr.) **(Jpn)**

[Pulmonary circulation at rest and during exercise in patients with obstructive sleep apnea before and after one year of treatment with CPAP] Hawryłkiewicz I, et al. **Pneumonol Alergol Pol** 1996;64(9-10):638-43 (Eng. Abstr.) **(Pol)**

[Effect of CPAP and BiPAP assisted breathing on pulmonary hemodynamics in patients with obstructive sleep apnea] Palasiewicz G, et al. **Pneumonol Alergol Pol** 1996; 64(9-10):664-70 (Eng. Abstr.) **(Pol)**

[Long-term effects of nasal continuous positive airway pressure on ventilatory patterns of patients with obstructive sleep apnea syndrome] Soler JJ, et al. **Arch Bronconeumol** 1997 Apr;33(4):172-8 (Eng. Abstr.) **(Spa)**

[Level of compliance in the treatment of sleep obstructive apnea syndrome with nasal continuous positive pressure] Terán Santos J, et al. **Rev Clin Esp** 1996 Aug;196(8):509-14 (Eng. Abstr.) **(Spa)**

SLEEP DEPRIVATION

Effects of benzodiazepines, sleep and sleep deprivation on vigilance and memory. Coenen AM, et al. **Acta Neurol Belg** 1997 Jun;97(2):123-9

Natural hypothermia and sleep deprivation: common effects on recovery sleep in the Djungarian hamster. Deboer T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1364-71

Operant control of ambient temperature during sleep deprivation. Shaw PJ, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R682-90

Sleep deprivation combined with consecutive sleep phase advance as a fast-acting therapy in depression: an open pilot trial in medicated and unmedicated patients. Berger M, et al. **Am J Psychiatry** 1997 Jun;154(6):870-2

Serum prolactin, growth hormone, total corticoids, thyroid hormones and thyrotropine during serial therapeutic sleep deprivation. Kuhs H, et al. **Biol Psychiatry** 1996 May 15; 39(10):857-64

The effects of sleep loss on task performance and the electroencephalogram in young and elderly subjects. Smulders FT, et al. **Biol Psychol** 1997 Mar 21; 45(1-3):217-39

Rapid eye movement (REM) sleep deprivation in 6-OHDA nigro-striatal lesioned rats with and without transplants of dissociated chromaffin cells. Drucker-Colín R, et al. **Brain Res** 1996 Aug 12;729(2):170-5

Sleep latency measures of caffeine effects during sleep deprivation. Kelly TL, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 102(5):397-400

The diagnostic yield of a second EEG after partial sleep deprivation: a prospective study in children with newly diagnosed seizures. Carpay JA, et al. **Epilepsia** 1997 May; 38(5):595-9

Granulocyte chemiluminescence response to serum opsonized zymosan particles ex vivo during long-term strenuous exercise, energy and sleep deprivation in humans. Wiik P, et al. **Eur J Appl Physiol** 1996;73(3-4):251-8

The effect of sleep deprivation on sleep states, breathing events, peripheral chemoresponsiveness and arousal propensity in healthy 3 month old infants. Thomas DA, et al. **Eur Respir J** 1996 May;9(5):932-8

Effects of a selective sleep deprivation on subsequent anaerobic performance. Mougin F, et al. **Int J Sports Med** 1996 Feb;17(2):115-9

Can negative self-schemes in depressives be altered through sleep deprivation? Baving L, et al. **J Affect Disord** 1997 Feb;42(2-3):93-101

Sleep deprivation, allergy symptoms, and negatively reinforced problem behavior. Kennedy CH, et al. **J Appl Behav Anal** 1996 Spring;29(1):133-5

Research grant report: how does night call affect next-day

performance in anesthesia? [news] Lichtor JL, et al. **J Clin Monit** 1996 May;12(3):277–8

Sleep quality versus sleep quantity: relationships between sleep and measures of health, well-being and sleepiness in college students [see comments] Pilcher JJ, et al. **J Psychosom Res** 1997 Jun;42(6):583–96. Comment in: J Psychosom Res 1997 Jun;42(6):513–4.

Changes in direct current potentials during sleep deprivation. Hoffmann RF, et al. **J Sleep Res** 1996 Sep;5(3):143–9

Sleep deprivation reduces the citalopram-induced inhibition of serotoninergic neuronal firing in the nucleus raphe dorsalis of the rat. Prévot E, et al. **J Sleep Res** 1996 Dec; 5(4):238–45

Combination of bright light and caffeine as a countermeasure for impaired alertness and performance during extended sleep deprivation. Wright KP Jr, et al. **J Sleep Res** 1997 Mar;6(1):26–35

Knitting up the raveled sleave of care: role of sleep and effects of its lack examined [news] Lamberg L. **JAMA** 1996 Oct 16;276(15):1205–7

The perils of drowsy driving [editorial; comment] Dement WC. **N Engl J Med** 1997 Sep 11;337(11):783–4. Comment on: N Engl J Med 1997 Sep 11;337(11):755–61.

Eye-blink rates and depression. Is the antidepressant effect of sleep deprivation mediated by the dopamine system? Ebert D, et al. **Neuropsychopharmacology** 1996 Oct; 15(4):332–9

Accidental death and the shift to daylight savings time. Coren S. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):921–2

Effect of sleep deficit, knowledge of results, and stimulus quality on reaction time and response force. Jaśkowski P, et al. **Percept Mot Skills** 1997 Apr;84(2):563–72

Long-term changes in open field behaviour following a single social defeat in rats can be reversed by sleep deprivation. Meerlo P, et al. **Physiol Behav** 1996 Jul;60(1):115–9

Effects of short- and long-term REM sleep deprivation on sexual behavior in male rats. Velazquez-Moctezuma J, et al. **Physiol Behav** 1996 Feb;59(2):277–81

Sleep deprivation by the "flower pot" technique and spatial reference memory. Youngblood BD, et al. **Physiol Behav** 1997 Feb;61(2):249–56

Sleep loss, a possible factor in augmenting manic episode. Barbini B, et al. **Psychiatry Res** 1996 Nov 15;65(2):121–5

Are physiological effects of sleep deprivation in the rat mediated by bacterial invasion? Bergmann BM, et al. **Sleep** 1996 Sep;19(7):554–62

Time course of reaction time and EEG while performing a vigilance task during total sleep deprivation. Corsi-Cabrera M, et al. **Sleep** 1996 Sep;19(7):563–9

Cumulative sleepiness, mood disturbance, and psychomotor vigilance performance decrements during a week of sleep restricted to 4–5 hours per night. Dinges DF, et al. **Sleep** 1997 Apr;20(4):267–7

Effects of alcohol on sleep parameters of sleep-deprived healthy volunteers. Lobo LL, et al. **Sleep** 1997 Jan; 20(1):52–9

Decreased attentional responsivity during sleep deprivation: orienting response latency, amplitude, and habituation. McCarthy ME, et al. **Sleep** 1997 Feb;20(2):115–23

Effect of sleep deprivation on driving safety in housestaff. Marcus CL, et al. **Sleep** 1996 Dec;19(10):763–6

Effects of sleep deprivation on performance: a meta-analysis. Pilcher JJ, et al. **Sleep** 1996 May;19(4):318–26

Auditory awakening thresholds in sleepy and alert individuals. Rosenthal L, et al. **Sleep** 1996 May;19(4):290–5

[Psychological results of mental performance in sleep deprivation] Dahms P, et al. **Wien Med Wochenschr** 1996; 146(13–14):287–9 (Eng. Abstr.) **(Ger)**

[Subjective diurnal fatigue and sleep deprivation response] Volk S, et al. **Wien Med Wochenschr** 1996; 146(13–14):309–10 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

The relationship between sleep deprivation and the nocturnal decline of blood pressure. Rosansky SJ, et al. **Am J Hypertens** 1996 Nov;9(11):1136–8

Effect of extended sleep deprivation on tumor growth in rats. Bergmann BM, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1460–4

EEG delta power and auditory arousal in rested and sleep-deprived rabbits. Opp MR, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R648–55

Inhibition of brain interleukin-1 attenuates sleep rebound after sleep deprivation in rabbits. Takahashi S, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R677–82

Effects of sleep deprivation with reference to military operations. Giam GC. **Ann Acad Med Singapore** 1997 Jan; 26(1):88–93 (20 ref.)

Effects of sleep deprivation on the postnatal development of visual-deprived cells in the cat's lateral geniculate nucleus. Pompeiano O, et al. **Arch Ital Biol** 1995 Dec; 134(1):121–40

Total sleep deprivation and the thyroid axis: effects of sleep and waking activity. Gary KA, et al. **Aviat Space Environ Med** 1996 Jun;67(6):513–9

Low-dimensional dynamic self-organization in delta-sleep: effect of partial sleep deprivation. Cerf R, et al. **Biol Cybern** 1996 May;74(5):395–403

Sleep electroencephalogram in seasonal affective disorder and in control women: effects of midday light treatment and sleep deprivation. Brunner DP, et al. **Biol Psychiatry** 1996 Sep 15;40(6):485–96

Reduced inhibitory potency of serotonin reuptake blockers on central serotonergic neurons in rats selectively deprived of rapid eye movement sleep. Maudhuit C, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1000–7

Selective slow-wave sleep deprivation influences blood serotonin profiles and serum melatonin concentrations in healthy subjects. Rao ML, et al. **Biol Psychiatry** 1996 Oct 1;40(7):664–7

Differential role of dopamine receptors on motor asymmetries of nigro-striatal lesioned animals that are REM sleep deprived. Durán-Vázquez A, et al. **Brain Res** 1997 Jan 2;744(1):171–4

Sleep deprivation in rats with preoptic/anterior hypothalamic lesions. Feng PF, et al. **Brain Res** 1995 Dec 12; 703(1–2):93–9

Role of the locus coeruleus in the sleep rebound following two different sleep deprivation methods in the rat. González MM, et al. **Brain Res** 1996 Nov 18; 740(1–2):215–26

Brain distribution of vasoactive intestinal peptide receptors following REM sleep deprivation. Jiménez-Anguiano A, et al. **Brain Res** 1996 Jul 22;728(1):37–46

Alterations in c-fos expression after different experimental procedures of sleep deprivation in the cat. Ledoux L, et al. **Brain Res** 1996 Sep 30;735(1):108–18

CSF levels of prostaglandins, especially the level of prostaglandin D2, are correlated with increasing propensity towards sleep in rats. Ram A, et al. **Brain Res** 1997 Mar 14;751(1):81–9

Caffeine and light effects on nighttime melatonin and temperature levels in sleep-deprived humans. Wright KP Jr, et al. **Brain Res** 1997 Jan 30;747(1):78–84

Rapid eye movement sleep deprivation in kittens amplifies LGN cell-size disparity induced by monocular deprivation. Oksenberg A, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):51–61

NGFI-A expression in the rat brain after sleep deprivation. Pompeiano M, et al. **Brain Res Mol Brain Res** 1997 Jun; 46(1–2):143–53

Food deprivation and hypothermia in desynchronized sleep-deprived rats. Hoshino K. **Braz J Med Biol Res** 1996 Jan;29(1):41–6

Erythrocyte magnesium and prostaglandin dynamics in chronic sleep deprivation. Tanabe K, et al. **Clin Cardiol** 1997 Mar;20(3):265–8

Assessing vigilance through a brief pencil and paper letter cancellation task (LCT): effects of one night of sleep deprivation and of the time of day. Casagrande M, et al. **Ergonomics** 1997 Jun;40(6):613–30

Sleep deprivation hastens the antidepressant action of fluoxetine. Benedetti F, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(2):100–3

The effect of sleep deprivation and exercise load on isokinetic leg strength and endurance. Bulbulian R, et al. **Eur J Appl Physiol** 1996;73(3–4):273–7

The impact of sleep deprivation on erotic erections. Ferini-Strambi L, et al. **Eur Urol** 1996;30(1):50–3

Cardiopulmonary interactions following REM sleep deprivation in Sprague-Dawley rats. Radulovacki M, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):371–5

Sleepiness, performance, and neuroendocrine function during sleep deprivation: effects of exposure to bright light or exercise. Leproult R, et al. **J Biol Rhythms** 1997 Jun; 12(3):245–58

Temperature circadian rhythms during the menstrual cycle and sleep deprivation in premenstrual dysphoric disorder and normal comparison subjects. Parry BL, et al. **J Biol Rhythms** 1997 Feb;12(1):34–46

Effect of sleep deprivation on the growth hormone response to the alpha-3 adrenergic receptor agonist, clonidine, in normal subjects. Lal S, et al. **J Neural Transm** 1997; 104(2–3):291–8

Characterization and sleep deprivation-induced expression modulation of dendrin, a novel dendritic protein in rat brain neurons. Neuner-Jehle M, et al. **J Neurosci Res** 1996 Oct 15;46(2):138–51

Alertness and memory after sleep deprivation and diazepam intake. Gorissen M, et al. **J Psychopharmacol (Oxf)** 1997; 11(3):233–9

Paradoxical sleep deprivation and sleep recording following training in a brightness discrimination avoidance task in Sprague-Dawley rats: paradoxical effects. Smith C. **Neurobiol Learn Mem** 1996 Nov;66(3):283–94

Age-dependent suppression of nocturnal growth hormone levels during sleep deprivation. Mullington J, et al. **Neuroendocrinology** 1996 Sep;64(3):233–41

Some measures to reduce effects of prolonged sleep deprivation. Lagarde D, et al. **Neurophysiol Clin** 1995; 25(6):376–85 (28 ref.) (Eng. Abstr.)

Effects of sleep deprivation on serotonergic neuronal activity in the dorsal raphe nucleus of the freely moving cat. Gardner JP, et al. **Neuropsychopharmacology** 1997 Aug; 17(2):72–81

Sleep deprivation increases brain serotonin turnover in the rat. Asikainen M, et al. **Neuroreport** 1997 May 6; 8(7):1577–82

Modulation of IL-1 beta gene expression in the rat CNS during sleep deprivation. Mackiewicz M, et al. **Neuroreport** 1996 Jan 31;7(2):529–33

Influence of paradoxical sleep deprivation on the intermediate stage of sleep in the rat. Gandolfo G, et al. **Neurosci Res** 1996 Jun;25(2):123–7

Alterations in synaptosomal calcium concentrations after rapid eye movement sleep deprivation in rats. Mallick BN, et al. **Neuroscience** 1996 Dec;75(3):729–36

Changes in monoamines and their metabolite concentrations in REM sleep-deprived rat forebrain nuclei. Farooqui SM, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):385–91

Dopamine agonist amineptine prevents the antidepressant effect of sleep deprivation. Benedetti F, et al. **Psychiatry Res** 1996 Dec 20;65(3):179–84

Selective and total sleep deprivation: effect on the sleep EEG in the rat. Endo T, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):97–110

Circadian rhythms of prolactin and thyroid-stimulating hormone during the menstrual cycle and early versus late sleep deprivation in premenstrual dysphoric disorder. Parry BL, et al. **Psychiatry Res** 1996 May 17;62(2):147–60

Effects of chronic treatment with zimelidine and REM sleep deprivation on the regulation of raphe neuronal activity in a rat model of depression. Maudhuit C, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):267–74

Effects of 72 hours sleep deprivation on wound healing in the rat. Landis CA, et al. **Res Nurs Health** 1997 Jun; 20(3):259–67

The impact of inadequate sleep on children's daytime cognitive function. Dahl RE. **Semin Pediatr Neurol** 1996 Mar;3(1):44–50 (50 ref.)

The alerting effects of short and long naps in narcoleptic, sleep deprived, and alert individuals. Helmus T, et al. **Sleep** 1997 Apr;20(4):251–7

[Pro-psychotic change of binocular depth inversion by sleep deprivation] Sternemann U, et al. **Nervenarzt** 1997 Jul; 68(7):593–6 (Eng. Abstr.) **(Ger)**

[Stress and fatigue in long distance 2-man cockpit crew] Samel A, et al. **Wien Med Wochenschr** 1996; 146(13–14):272–6 (Eng. Abstr.) **(Ger)**

SLEEP-DISORDERED BREATHING see **SLEEP APNEA SYNDROMES**

SLEEP DISORDERS

Sleep disorders in the elderly. Flamer HE. **Aust N Z J Med** 1996 Feb;26(1):96–104 (60 ref.)

Sleep and rheumatic disease. Hench PK. **Bull Rheum Dis** 1996 Dec;45(8):1–6

Catching up on sleep. The National Sleep Disorders Research Plan [editorial] Phillips BA, et al. **Chest** 1996 Nov; 110(5):1132–3

Children's nighttime fears. King N, et al. **Clin Psychol Rev** 1997;17(4):431–43 (44 ref.)

Sleep disorders in primary care. Ball EM. **Compr Ther** 1997 Jan;23(1):25–30

Pediatric sleep disorders: a review of the past 10 years. Anders TF, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jan;36(1):9–20 (46 ref.)

Sleep disorders in the elderly: a primary care perspective. Bliwise DL. **J Med Assoc Ga** 1997 Apr;86(2):115–8 (14 ref.)

Knitting up the raveled sleave of care: role of sleep and effects of its lack examined [news] Lamberg L. **JAMA** 1996 Oct 16;276(15):1205–7

Consultation in sleep medicine. Brown LK. **Mt Sinai J Med** 1996 Jan;63(1):24–38 (54 ref.)

Childhood sleep disorders. Ferber R. **Neurol Clin** 1996 Aug; 14(3):493–511 (87 ref.)

Periodic limb movements and restless legs syndrome. Trenkwalder C, et al. **Neurol Clin** 1996 Aug;14(3):629–50 (138 ref.)

Parasomnias in children. Wise MS. **Pediatr Ann** 1997 Jul; 26(7):427–33 (27 ref.)

'My child won't sleep'. Haslam D. **Practitioner** 1995 Dec; 239(1557):730–2 (1 ref.)

Emotional distress, physical symptoms and sleep disorders [comment] Hansotia P. **Wis Med J** 1996 Dec;95(12):836–7 . Comment on: Wis Med J 1996 Dec;95(12):846–50.

[Excessive daytime sleepiness] Petiau C, et al. **Rev Med Interne** 1997;18(3):210–8 (58 ref.) (Eng. Abstr.) **(Fre)**

[Proceedings of the 3rd Congress of the German Association for Sleep Research and Sleep Medicine. Bochum, 19–21, 1995] **Wien Med Wochenschr** 1996;146(13–14):269–401 **(Ger)**

[Sleep disorders viewed from clinical psychiatry] Ora T. **Seishin Shinkeigaku Zasshi** 1996;98(9):629–41 (20 ref.) **(Jpn)**

BLOOD

High cholesterol levels in patients with sleep panic. Ağargün MY, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1064–5

Elevation of plasma cytokines in disorders of excessive daytime sleepiness: role of sleep disturbance and obesity [see comments] Vgontzas AN, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1313–6. Comment in: J Clin Endocrinol Metab 1997 May;82(5):1311–2.

CHEMICALLY INDUCED

Absence of effects of prolonged simvastatin therapy on nocturnal sleep in a large randomized placebo-controlled study. Oxford Cholesterol Study Group. Keech AC, et al. **Br J Clin Pharmacol** 1996 Oct;42(4):483–90

Drug-induced sleep disturbances. Focus on nonpsychotropic

medications. Novak M, et al. **Drug Saf** 1997 Feb; 16(2):133–49 (124 ref.)
Very long sleep after one dose of clorazepate [letter] Calenda E, et al. **Eur J Anaesthesiol** 1997 Jul;14(4):477–8

CLASSIFICATION

[Parasomnias] Culebras A. **Rev Neurol** 1997 Jan; 25(137):106–10 (3 ref.) **(Spa)**

COMPLICATIONS

REM sleep behaviour disorder: a treatable cause of falls in elderly people. Morfis L, et al. **Age Ageing** 1997 Jan; 26(1):43–4
Sleep disturbances in clinically stable young asthmatic adults. Vir R, et al. **Ann Allergy Asthma Immunol** 1997 Sep; 79(3):251–5
Chronic headaches and sleep disorders. Paiva T, et al. **Arch Intern Med** 1997 Aug 11–25;157(15):1701–5
Sleep complaints in postpolio syndrome. van Kralingen KW, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):609–11
Sleep disturbances, fibromyalgia and primary Sjögren's syndrome. Tishler M, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):71–4
Sleep disorders. Overview and relationship to orofacial pain. Bailey DR. **Dent Clin North Am** 1997 Apr;41(2):189–209 (35 ref.)
Treatment of multiple sleep problems in children with developmental disabilities: faded bedtime with response cost versus bedtime scheduling. Piazza CC, et al. **Dev Med Child Neurol** 1997 Jun;39(6):414–8
Favorable effect of transcranial electrostimulation on behavior disorders in elderly patients with dementia: a double-blind study. Hozumi S, et al. **Int J Neurosci** 1996 Nov;88(1–2):1–10
Sleep disorders [letter] Karitani M, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep;36(9):1161–2
Breathing disorders during sleep and cognitive performance in an older community sample: the EVA Study [see comments] Dealberto MJ, et al. **J Am Geriatr Soc** 1996 Nov;44(11):1287–94. Comment in: J Am Geriatr Soc 1996 Nov;44(11):1407–9.
Sleep disturbance, psychosocial correlates, and cardiovascular disease in 5201 older adults: the Cardiovascular Health Study. Newman AB, et al. **J Am Geriatr Soc** 1997 Jan;45(1):1–7
Sleep disorder related to Parkinson's disease. Partinen M. **J Neurol** 1997 Apr;244(4 Suppl 1):S3–6 (25 ref.)
Sleep patterns among children with attention-deficit hyperactivity disorder: a reexamination of parent perceptions. Ball JD, et al. **J Pediatr Psychol** 1997 Jun; 22(3):389–98
Musculoskeletal complaints and fibromyalgia in patients attending a respiratory sleep disorders clinic. Donald F, et al. **J Rheumatol** 1996 Sep;23(9):1612–6
Fatigue in ankylosing spondylitis: its prevalence and relationship to disease activity, sleep, and other factors. Jones SD, et al. **J Rheumatol** 1996 Mar;23(3):487–90
Juvenile fibromyalgia: clinical and polysomnographic aspects. Roizenblatt S, et al. **J Rheumatol** 1997 Mar; 24(3):579–85
Sleep in young untreated hypothyroid subjects [letter] Sridhar GR, et al. **J Sleep Res** 1996 Sep;5(3):198–9
A first case of progressive supranuclear palsy and pre-clinical REM sleep behavior disorder presenting as inhibition of speech during wakefulness and somniloquy with phasic muscle twitching during REM sleep. Pareja JA, et al. **Neurologia** 1996 Oct;11(8):304–6
The relationship of sleep problems and sleep-associated feeding to nursing caries. Shantinath SD, et al. **Pediatr Dent** 1996 Sep–Oct;18(5):375–8
The incidence of parasomnias in child bruxers versus nonbruxers. Weideman CL, et al. **Pediatr Dent** 1996 Nov–Dec;18(7):456–60
Modafinil decreases hypersomnolence in the English bulldog, a natural animal model of sleep-disordered breathing. Panckeri KA, et al. **Sleep** 1996 Oct;19(8):626–31
Supplementary motor area seizure resembling sleep disorder. Tachibana N, et al. **Sleep** 1996 Dec;19(10):811–6
Precocious loss of physiological sleep in a case of Creutzfeldt Jakob disease: a serial polygraphic study. Terzano MG, et al. **Sleep** 1995 Dec;18(10):849–58
Periodic limb movements of sleep and the restless legs syndrome. Williams DC. **Va Med Q** 1996 Fall;123(4):260–5 (50 ref.)
Sleep, sleep disorders and motor vehicle crashes. Hansotia P. **Wis Med J** 1997 May;96(5):42–7
[Somatization, sleep and depression. Proceedings of the 11th International Thematic Meeting. Nice, France, June 16, 1995] **Encephale** 1995 Dec;21 Spec No 7:1–47 **(Fre)**
[Coincidence of anxiety and sleep disorders. Overview and case reports] Hajak G, et al. **Fortschr Neurol Psychiatr** 1996 Jan;64(1):26–40 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Changes in sleep architecture following chronic mild stress. Cheeta S, et al. **Biol Psychiatry** 1997 Feb 15;41(4):419–27
Sleep and depression in combat-related PTSD inpatients. Woodward SH, et al. **Biol Psychiatry** 1996 Feb 1; 39(3):182–92
Standards for polysomnography in Canada. The Standards Committees of the Canadian Sleep Society and the Canadian Thoracic Society [see comments] George CF. **Can Med Assoc J** 1996 Dec 15;155(12):1673–8 (10 ref.). Comment in: Can Med Assoc J 1996 Dec 15;155(12):1693–4. Comment in: Can Med Assoc J 1997 May 15;156(10):1379.
Sleep statement for adults only [letter; comment] Mitchell I. **Can Med Assoc J** 1997 May 15;156(10):1379. Comment on: Can Med Assoc J 1996 Dec 15;155(12):1673–8.
Polysomnography: addressing the need for standards [editorial; comment] [see comments] Whitelaw WA, et al. **Can Med Assoc J** 1996 Dec 15;155(12):1693–4. Comment on: Can Med Assoc J 1996 Dec 15;155(12):1673–8. Comment in: CMAJ 1997 Jun 15;156(12):1698–9, 1701.
Specific eating and sleeping problems in Prader-Willi and Williams-Beuren syndrome. Sarimski K. **Child Care Health Dev** 1996 May;22(3):143–50
Nocturnal partial seizures and arousals/awakenings from sleep: an ambulatory EEG study. Manni R, et al. **Funct Neurol** 1997 May–Aug;12(3–4):107–11
Use of computerized visual performance test in assessing day-time vigilance in patients with sleep apneas and restless sleep. Jokinen T, et al. **Int J Clin Monit Comput** 1995; 12(4):225–30
Depression, anxiety, and sleep disturbances. Reifler BV. **Int Psychogeriatr** 1996;8 Suppl 3:415–8; discussion 423–4
Self-reported sleep disturbance as a prodromal symptom in recurrent depression. Perlis ML, et al. **J Affect Disord** 1997 Feb;42(2–3):209–12
Home assessment of sleep disorders by portable monitoring. Broughton R, et al. **J Clin Neurophysiol** 1996 Jul; 13(4):272–84 (75 ref.)
Sleep disturbances and suicidal behavior in patients with major depression. Ağargün MY, et al. **J Clin Psychiatry** 1997 Jun;58(6):249–51
Sleep history is neglected diagnostic information. Challenges for primary care physicians. Haponik EF, et al. **J Gen Intern Med** 1996 Dec;11(12):759–61
Severe sleep disturbance and daytime challenging behaviour in children with severe learning disabilities. Wiggs L, et al. **J Intellect Disabil Res** 1996 Dec;40 (Pt 6):518–28
Two faces of nocturnal tongue biting. Vasiknanonte P, et al. **J Med Assoc Thai** 1997 Aug;80(8):500–7
Evaluation of sleep disordered breathing with unattended recording: the Nightwatch System. Ancoli-Israel S, et al. **J Med Eng Technol** 1997 Jan–Feb;21(1):10–4
Comparison of the results of the Epworth Sleepiness Scale and the Multiple Sleep Latency Test. Chervin RD, et al. **J Psychosom Res** 1997 Feb;42(2):145–55
The Sleep Disturbance Scale for Children (SDSC). Construction and validation of an instrument to evaluate sleep disturbances in childhood and adolescence. Bruni O, et al. **J Sleep Res** 1996 Dec;5(4):251–61
Poor sleep in adolescents: a study of 869 17-year-old Italian secondary school students. Manni R, et al. **J Sleep Res** 1997 Mar;6(1):44–9
A first case of progressive supranuclear palsy and pre-clinical REM sleep behavior disorder presenting as inhibition of speech during wakefulness and somniloquy with phasic muscle twitching during REM sleep. Pareja JA, et al. **Neurologia** 1996 Oct;11(8):304–6
Sleep paralysis presenting with reactive depression [letter] Gangdev PS, et al. **S Afr Med J** 1996 Dec;86(12 Suppl):1617–8
Nocturnal epilepsies in adults. Yaqub BA, et al. **Seizure** 1997 Apr;6(2):145–9
Cardiac autonomic activity during wakefulness and sleep in REM sleep behavior disorder. Ferini-Strambi L, et al. **Sleep** 1996 Jun;19(5):367–9
The symptomatology of periodic limb movement disorder [letter; comment] Picchietti DL, et al. **Sleep** 1996 Nov; 19(9):747–8. Comment on: Sleep 1996 Apr;19(3):219–23.
How should the multiple sleep latency test be analyzed? Pollak CP. **Sleep** 1997 Jan;20(1):34–9
Evaluating night wakings in sleep-disturbed infants: a methodological study of parental reports and actigraphy. Sadeh A. **Sleep** 1996 Dec;19(10):757–62
Sleep disorders easy to miss ... or misdiagnose. Bahan I. **Tenn Med** 1997 Aug;90(8):307–8
[Poorly understood sleep disorders in depression] Tiberge M. **Encephale** 1995 Dec;21 Spec No 7:29–33 (27 ref.) (Eng. Abstr.) **(Fre)**
[Diagnostic methods and standards in sleep medicine] Penzel T, et al. **Internist (Berl)** 1996 May;37(5):442–53 (45 ref.) **(Ger)**
[Differential diagnostic concepts in sleep medicine and their particular significance for the internist] Peter JH. **Internist (Berl)** 1996 May;37(5):454–62 (33 ref.) **(Ger)**
[Dream recall and sleep disorders] Schredl M, et al. **Psychother Psychosom Med Psychol** 1997 Mar–Apr; 47(3–4):108–16 (Eng. Abstr.) **(Ger)**
[Aspects of medical expert assessment of sleep-waking disorders] Mayer G. **Wien Med Wochenschr** 1996; 146(13–14):391–5 (24 ref.) (Eng. Abstr.) **(Ger)**
[How to set up a sleep laboratory in a community general hospital] Nakamura H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:50–8 (Eng. Abstr.) **(Jpn)**
[Who should coordinate the board of sleep disorders? (letter)] Benetó A. **Rev Neurol** 1996 Jan;24(125):111–2 **(Spa)**
[Who should coordinate the board of sleep disorders? (letter)] Culebras A. **Rev Neurol** 1996 Jan;24(125):113–4 **(Spa)**
[Who should coordinate the board of sleep disorders? (letter)] Vives EC. **Rev Neurol** 1996 Jan;24(125):112–3 **(Spa)**

DRUG THERAPY

Improvement of hypertonus after treatment for sleep disturbances in three patients with severe brain damage. Tanaka H, et al. **Brain Dev** 1997 Jun;19(4):240–4
Long-term melatonin treatment in blind children and young adults with circadian sleep-wake disturbances. Palm L, et al. **Dev Med Child Neurol** 1997 May;39(5):319–25
Overnight sedation with midazolam or propofol in the ICU: effects on sleep quality, anxiety and depression. Treggiari-Venzi M, et al. **Intensive Care Med** 1996 Nov; 22(11):1186–90
Clonidine for sleep disturbances associated with attention-deficit hyperactivity disorder: a systematic chart review of 62 cases. Prince JB, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May; 35(5):599–605
Melatonin appears ineffective in children with intellectual deficits and fragmented sleep: six "N of 1" trials. Camfield P, et al. **J Child Neurol** 1996 Jul;11(4):341–3
Lamotrigine in the treatment of nocturnal myoclonus syndrome (NMS): two case reports. Staedt J, et al. **J Neural Transm** 1996;103(3):355–61
Use of melatonin in the treatment of paediatric sleep disorders. Jan JE, et al. **J Pineal Res** 1996 Nov;21(4):193–9 (61 ref.)
Adult night terrors and paroxetine [letter] Wilson SJ, et al. **Lancet** 1997 Jul 19;350(9072):185
A simple alternative to quinine for nocturnal muscle cramps [letter] Miller JM. **Md Med J** 1996 May;45(5):383
The effect of catecholamine precursor L-dopa on sleep bruxism: a controlled clinical trial. Lobbezoo F, et al. **Mov Disord** 1997 Jan;12(1):73–8
A double blind cross over trial of theophylline prophylaxis for sleep hypoxaemia in Duchenne muscular dystrophy. Khan Y, et al. **Neuromuscul Disord** 1997 Mar;7(2):75–80
Melatonin: media hype or therapeutic breakthrough? Kendler BS. **Nurse Pract** 1997 Feb;22(2):66–7, 71–2, 77 (75 ref.)
Daily melatonin intake resets circadian rhythms of a sighted man with non-24-hour sleep-wake syndrome who lacks the nocturnal melatonin rise. Nakamura K, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):121–7
A multicenter study of sleep-wake rhythm disorders: therapeutic effects of vitamin B12, bright light therapy, chronotherapy and hypnotics. Yamadera H, et al. **Psychiatry Clin Neurosci** 1996 Aug;50(4):203–9
Patients' knowledge and attitudes regarding sleep and hypnotics. Magnúsdóttir SD, et al. **Scand J Prim Health Care** 1996 Jun;14(2):106–10
Sudden arousals from slow wave sleep and panic disorder: successful treatment with anticonvulsants—a case report. Dantendorfer K, et al. **Sleep** 1996 Nov;19(9):744–6
Non-24-hour sleep-wake syndrome in a sighted man: circadian rhythm studies and efficacy of melatonin treatment. McArthur AJ, et al. **Sleep** 1996 Sep;19(7):544–53
[Use of antidepressants in sleep disorders: practical considerations] Touchon J. **Encephale** 1995 Dec;21 Spec No 7:41–7 (24 ref.) (Eng. Abstr.) **(Fre)**
[Biological models of depression: effect of antidepressants on sleep] Viot-Blanc V. **Encephale** 1995 Dec;21 Spec No 7:35–40 (25 ref.) (Eng. Abstr.) **(Fre)**
[Therapy of nocturnal asthma: salmeterol versus nocturnal administration of retard theophylline—comparison of effectiveness and tolerance] Ukena D, et al. **Pneumologie** 1997 Mar;51(3):317–23 (Eng. Abstr.) **(Ger)**
[Melatonin: a new wonder drug?] Wirz-Justice A. **Schweiz Rundsch Med Prax** 1996 Oct 15;85(42):1332–6 (Eng. Abstr.) **(Ger)**

ECONOMICS

[Economic aspects of sleep medicine] Peter JH. **Wien Med Wochenschr** 1996;146(13–14):395–401 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Sleeping problems at 78 degrees north: the Svalbard Study. Nilssen O, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):44–8
Sleep and anxieties in Brazilian children: the role of cultural and environmental factors in child sleep disturbance. Dollinger SJ, et al. **Am J Orthopsychiatry** 1996 Apr; 66(2):252–61
Sleep problems of elementary school children. A community survey. Blader JC, et al. **Arch Pediatr Adolesc Med** 1997 May;151(5):473–80
Fatigue and sleep disorders. Lichstein KL, et al. **Behav Res Ther** 1997 Aug;35(8):733–40
Hypnagogic and hypnopompic hallucinations: pathological phenomena? Ohayon MM, et al. **Br J Psychiatry** 1996 Oct; 169(4):459–67
Prevalence of sleep disorders in childhood and adolescence with headache: a case-control study. Bruni O, et al. **Cephalalgia** 1997 Jun;17(4):492–8
Sleep disturbances, fibromyalgia and primary Sjögren's syndrome. Tishler M, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):71–4
Increased prevalence of sleep disturbances and daytime sleepiness in subjects with bronchial asthma: a population study of young adults in three European countries. Janson C, et al. **Eur Respir J** 1996 Oct;9(10):2132–8
Principal lifetime occupation and sleep quality in the elderly.

Geroldi C, et al. **Gerontology** 1996;42(3):163–9

Psychiatric disturbances and the use of psychotropic drugs in a population of nonagenarians. Forsell Y, et al. **Int J Geriatr Psychiatry** 1997 May;12(5):533–6

Sleep disturbance, psychosocial correlates, and cardiovascular disease in 5201 older adults: the Cardiovascular Health Study. Newman AB, et al. **J Am Geriatr Soc** 1997 Jan;45(1):1–7

The iceberg delusion. Herman J. **J Clin Epidemiol** 1996 Dec; 49(12):1467–68

Time–trend of sleep disorder in relation to night work: a study of sequential 1–year prevalences within the GAZEL cohort. Moneta GB, et al. **J Clin Epidemiol** 1996 Oct; 49(10):1133–41

Daytime sleepiness and napping amongst the elderly in relation to somatic health and medical treatment. Asplund R. **J Intern Med** 1996 Mar;239(3):261–7

Differences between primigravidae and multigravidae mothers in sleep disturbances, fatigue, and functional status. Waters MA, et al. **J Nurse Midwifery** 1996 Sep–Oct; 41(5):364–7

High prevalence of personality disorders among circadian rhythm sleep disorders (CRSD) patients. Dagan Y, et al. **J Psychosom Res** 1996 Oct;41(4):357–63

Correlates of sleep problems among men: the Vietnam Era Twin Registry. Fabsitz RR, et al. **J Sleep Res** 1997 Mar; 6(1):50–6

Blindness and sleep patterns [letter] Leger D, et al. **Lancet** 1996 Sep 21;348(9030):830–1

Comparison of eight and 12 hour shifts: impacts on health, wellbeing, and alertness during the shift. Tucker P, et al. **Occup Environ Med** 1996 Nov;53(11):767–72

Sleep complaints in chronic postconcussion syndrome. Perlis ML, et al. **Percept Mot Skills** 1997 Apr;84(2):595–9

Quality of sleep during economic recession in Finland: a longitudinal cohort study. Hyyppä MT, et al. **Soc Sci Med** 1997 Sep;45(5):731–8

[The elderly, sleep habits and use of psychotropic drugs by the French population] Ohayon M, et al. **Encephale** 1996 Sep–Oct;22(5):337–50 (Eng. Abstr.) **(Fre)**

[Sleep behavior in the first 3 years of life] Fegert JM, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Feb; 46(2):69–91 (50 ref.) (Eng. Abstr.) **(Ger)**

[Epidemiological study of sleep disorders in patients in Swiss general practice] Haldemann R, et al. **Schweiz Rundsch Med Prax** 1996 Dec 17;85(51–52):1656–62 (Eng. Abstr.) **(Ger)**

[Sleep complaints and hypnotic use by the elderly—results of a representative survey in West Germany] Simen S, et al. **Wien Med Wochenschr** 1996;146(13–14):306–9 (Eng. Abstr.) **(Ger)**

ETHNOLOGY

Isolated sleep paralysis in African Americans with panic disorder. Paradis CM, et al. **Cult Divers Ment Health** 1997; 3(1):69–76

Sleep in Korea: a developmental perspective. Jeong DU. **Psychiatry Clin Neurosci** 1995 May;49(2):115–7 (5 ref.)

ETIOLOGY

Nocturnal hypoglycaemia and sleep disturbances in young teenagers with insulin dependent diabetes mellitus. Porter PA, et al. **Arch Dis Child** 1996 Aug;75(2):120–3

Sleep and pain complaints in TBI [letter; comment] Richter KJ, et al. **Arch Phys Med Rehabil** 1997 Apr;78(4):451. Comment on: Arch Phys Med Rehabil 1996 Dec;77(12):1298–302.

Effects of sleeping in a chemical protective mask on sleep quality and cognitive performance. Lieberman HR, et al. **Aviat Space Environ Med** 1996 Sep;67(9):841–8

A study of USAF air traffic controller shiftwork: sleep, fatigue, activity, and mood analyses. Luna TD, et al. **Aviat Space Environ Med** 1997 Jan;68(1):18–23

Long–term melatonin treatment in blind children and young adults with circadian sleep–wake disturbances. Palm L, et al. **Dev Med Child Neurol** 1997 May;39(5):319–25

Sleep disorders and breathing alterations in patients with chronic heart failure. Traversi E, et al. **G Ital Cardiol** 1997 May;27(5):423–9

Sleep problems in older adults: putting myths to bed. Ancoli–Israel S. **Geriatrics** 1997 Jan;52(1):20–30 (30 ref.)

Roadblocks encountered in recruiting patients for a study of sleep disruption in Alzheimer's disease. Dowling GA, et al. **Image J Nurs Sch** 1997 Spring;29(1):59–64

Daytime sleepiness and REM abnormalities in Prader–Willi syndrome: evidence of generalized hypoarousal. Vgontzas AN, et al. **Int J Neurosci** 1996 Nov;87(3–4):127–39

Effects of critical care unit noise on the subjective quality of sleep. Topf M, et al. **J Adv Nurs** 1996 Sep;24(3):545–51

Increased nocturnal activity and impaired sleep maintenance in abused children. Glod CA, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep; 36(9):1236–43

Sleep disturbances in Parkinson's disease patients and spouses. Smith MC, et al. **J Am Geriatr Soc** 1997 Feb;45(2):194–9

Practitioner review: assessment and treatment of sleep disorders in children and adolescents. Stores G. **J Child Psychol Psychiatry** 1996 Nov;37(8):907–25 (100 ref.)

Sleep disorders and aging: understanding the causes. Vitiello MV. **J Gerontol A Biol Sci Med Sci** 1997 Jul;52(4):M189–91 (23 ref.)

Musculoskeletal complaints and fibromyalgia in patients attending a respiratory sleep disorders clinic [letter] Potter PJ. **J Rheumatol** 1997 Aug;24(8):1657–8

Sleep in detoxified alcoholics: impairment of most standard sleep parameters and increased risk for sleep apnea, but not for myoclonias—a controlled study. Le Bon O, et al. **J Stud Alcohol** 1997 Jan;58(1):30–6

Sleep disturbance and blindness [letter] Moseley MJ, et al. **Lancet** 1996 Nov 30;348(9040):1514–5

Sleep–related periodic leg movements associated with spinal cord lesions. Lee MS, et al. **Mov Disord** 1996 Nov; 11(6):719–22

REM sleep behavior disorders in multiple system atrophy. Plazzi G, et al. **Neurology** 1997 Apr;48(4):1094–7

Nocturnal and respiratory disturbances in Steele–Richardson–Olszewski syndrome (progressive supranuclear palsy). De Bruin VS, et al. **Postgrad Med J** 1996 May;72(847):293–6

Sleep in Korea: a developmental perspective. Jeong DU. **Psychiatry Clin Neurosci** 1995 May;49(2):115–7 (5 ref.)

Sleep, psychological distress, and stress arousal in women with fibromyalgia. Shaver JL, et al. **Res Nurs Health** 1997 Jun;20(3):247–57

Environmental noise as a cause of sleep disruption in an intermediate respiratory care unit. Aaron JN, et al. **Sleep** 1996 Nov;19(9):707–10

Are physiological effects of sleep deprivation in the rat mediated by bacterial invasion? Bergmann BM, et al. **Sleep** 1996 Sep;19(7):554–62

Sleep quality in Lyme disease. Greenberg HE, et al. **Sleep** 1995 Dec;18(10):912–6

[Differential diagnosis of seizures in sleep] Mayer G, et al. **Pneumologie** 1997 Aug;51 Suppl 3:698–705 (31 ref.) (Eng. Abstr.) **(Ger)**

[Unilateral, nocturnal lower leg pain] Gürke T. **Schweiz Rundsch Med Prax** 1997 Jul 2;86(27–28):1129–30 **(Ger)**

[Sleep disorders: disease entities, symptoms or playing field of specialists? (editorial; comment)] Saletu B. **Wien Klin Wochenschr** 1997 Jun 6;109(11):377–8. Comment on: Wien Klin Wochenschr 1997 Jun 6;109(11):390–9. **(Ger)**

[Clinical aspects of sleep disorders—experiences with 817 patients of an ambulatory sleep clinic; comment] Saletu B, et al. **Wien Klin Wochenschr** 1997 Jun 6;109(11):390–9 (Eng. Abstr.). Comment on: Wien Klin Wochenschr 1997 Jun 6;109(11):377–8. **(Ger)**

[Disturbance of active sleep components in neonates with congenital hypothyroidism] Araki S, et al. **No To Hattatsu** 1996 Nov;28(6):484–9 (Eng. Abstr.) **(Jpn)**

[Sleep disturbances in elderly hypertensive patients] Pereira A, et al. **Rev Port Cardiol** 1996 May;15(5):387–92, 364 (Eng. Abstr.) **(Por)**

[On the problem of regulating the biological rhythms of the body] Komarov FI, et al. **Klin Med (Mosk)** 1996;74(8):4–6 **(Rus)**

[Sleep respiratory disorders in fibromyalgia syndrome] Alvarez Lario B, et al. **Arch Bronconeumol** 1997 Mar; 33(3):143–7 (73 ref.) **(Spa)**

GENETICS

Genetics of narcolepsy and other sleep disorders. Mignot E. **Am J Hum Genet** 1997 Jun;60(6):1289–302 (199 ref.)

Relationship of sleep abnormalities to patient genotypes in Prader–Willi syndrome. Vgontzas AN, et al. **Am J Med Genet** 1996 Sep 20;67(5):478–82

HLA class II genes associated with REM sleep behavior disorder. Schenck CH, et al. **Ann Neurol** 1996 Feb; 39(2):261–3

Sleep–wake dysrhythm in mitochondrial diabetes mellitus [letter] Suzuki Y, et al. **Diabetes Res Clin Pract** 1997 Feb; 35(1):61–2

Autosomal dominant nocturnal frontal lobe epilepsy (ADNFLE) [letter; comment] Ambrosetto G. **Epilepsia** 1997 Jun;38(6):739–40. Comment on: Epilepsia 1996 Oct;37(10):964–76.

Autosomal dominant nocturnal frontal lobe epilepsy (ADNFLE) [letter; comment] Plazzi G, et al. **Epilepsia** 1997 Jun;38(6):738; discussion 739–40. Comment on: Epilepsia 1996 Oct;37(10):964–76.

[Familial nocturnal frontal lobe epilepsy. Clinical aspects and genetics] Steinlein O. **Nervenarzt** 1996 Oct;67(10):870–4 (Eng. Abstr.) **(Ger)**

NURSING

Effects of an environmental manipulation emphasizing client–centred care on agitation and sleep in dementia sufferers in a nursing home. Matthews EA, et al. **J Adv Nurs** 1996 Sep;24(3):439–47

Once upon a time... therapeutic stories as a psychiatric nursing intervention. Hinds S. **J Psychosoc Nurs Ment Health Serv** 1997 May;35(5):46–7

PATHOLOGY

Lewy body variant of Alzheimer's disease (AD) identified by postmortem ubiquitin staining in a previously reported case of AD associated with REM sleep behavior disorder [letter] Schenck CH, et al. **Biol Psychiatry** 1997 Sep 15; 42(6):527–8

A case of REM sleep behavior disorder with autopsy–confirmed Alzheimer's disease: postmortem brain stem histochemical analyses. Schenck CH, et al. **Biol Psychiatry** 1996 Sep 1;40(5):422–5

PHYSIOPATHOLOGY

Elevated sleep arousal thresholds in enuretic boys: clinical implications. Wolfish NM, et al. **Acta Paediatr** 1997 Apr; 86(4):381–4

Which depressed patients will respond to interpersonal psychotherapy? The role of abnormal EEG sleep profiles. Thase ME, et al. **Am J Psychiatry** 1997 Apr;154(4):502–9

Effect of obstructive sleep apnea versus sleep fragmentation on responses to airway occlusion. Brooks D, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1609–17

The effect of nonvisible sleep fragmentation on daytime function [see comments] Martin SE, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1596–601. Comment in: Am J Respir Crit Care Med 1997 May;155(5):1499–500.

Blood pressure rhythms in sleep disorders and dysautonomia. Cortelli P, et al. **Ann N Y Acad Sci** 1996 Aug 15;783:204–21 (122 ref.)

Psychobiology of sleep disturbances in posttraumatic stress disorder. Mellman TA. **Ann N Y Acad Sci** 1997 Jun 21; 821:142–9 (44 ref.)

Polygraphic characterization of the sleep–epilepsy patterns in a hydranencephalic child with severe generalized seizures of the Lennox–Gastaut syndrome. Velasco M, et al. **Arch Med Res** 1997 Summer;28(2):297–302

A polysomnographic study of sleep disturbance in community elderly with self–reported environmental chemical odor intolerance. Bell IR, et al. **Biol Psychiatry** 1996 Jul 15;40(2):123–33

The effect of propranolol on sleep bruxism: hypothetical considerations based on a case study. Sjöholm TT, et al. **Clin Auton Res** 1996 Feb;6(1):37–40

Sleep disorders and breathing alterations in patients with chronic heart failure. Traversi E, et al. **G Ital Cardiol** 1997 May;27(5):423–9

Evolution of segmental myoclonus during sleep: polygraphic study of two cases. Bauleo S, et al. **Ital J Neurol Sci** 1996 Jun;17(3):227–32

EEG and sleep disturbances during dives at 450 msw in helium–nitrogen–oxygen mixture. Rostain JC, et al. **J Appl Physiol** 1997 Aug;83(2):575–82

Circadian rhythm sleep disorders: pathophysiology and treatment. Richardson GS, et al. **J Clin Neurophysiol** 1996 Jan;13(1):17–31 (110 ref.)

Circadian rhythm, sleep, and epilepsy. Shouse MN, et al. **J Clin Neurophysiol** 1996 Jan;13(1):32–50 (200 ref.)

Neurobiology of disruptive nocturnal behavior [letter; comment] Friedman EH. **J Geriatr Psychiatry Neurol** 1996 Apr;9(2):102. Comment on: J Geriatr Psychiatry Neurol 1995 Apr;8(2):107–10.

Positron emission tomography studies of sleep and sleep disorders. Maquet P. **J Neurol** 1997 Apr;244(4 Suppl 1):S23–8 (46 ref.)

Restless legs and periodic leg movements in sleep syndromes. Wetter TC, et al. **J Neurol** 1997 Apr;244(4 Suppl 1):S37–45 (104 ref.)

Actigraphic sleep monitoring in posttraumatic stress disorder (PTSD) patients [see comments] Dagan Y, et al. **J Psychosom Res** 1997 Jun;42(6):577–81. Comment in: J Psychosom Res 1997 Jun;42(6):513–4.

Sleep pathophysiology—a useful tool in psychiatry [editorial; comment] Shapiro CM. **J Psychosom Res** 1997 Jun; 42(6):513–4. Comment on: J Psychosom Res 1997 Jun;42(6):515–6. Comment on: J Psychosom Res 1997 Jun;42(6):577–81. Comment on: J Psychosom Res 1997 Jun;42(6):583–96.

NREM sleep parasomnias. Mahowald MW, et al. **Neurol Clin** 1996 Nov;14(4):675–96 (213 ref.)

REM sleep parasomnias. Schenck CH, et al. **Neurol Clin** 1996 Nov;14(4):697–720 (96 ref.)

Disorders of the circadian sleep–wake cycle. Wagner DR. **Neurol Clin** 1996 Aug;14(3):651–70 (107 ref.)

Sleep and neuromuscular disease: frequency of sleep–disordered breathing in a neuromuscular disease clinic population. Labanowski M, et al. **Neurology** 1996 Nov;47(5):1173–80

The sleepwalking/night terrors syndrome in adults. Crisp AH. **Postgrad Med J** 1996 Oct;72(852):599–604 (16 ref.)

Free–running circadian rhythm of melatonin in a sighted man despite a 24–hour sleep pattern: a non–24–hour circadian syndrome. Hashimoto S, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):109–14

A sighted man with non–24–hour sleep–wake syndrome shows damped plasma melatonin rhythm. Nakamura K, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):115–9

The present and the future of sleep research in Asia. Okuma T. **Psychiatry Clin Neurosci** 1995 May;49(2):91–7 (22 ref.)

Restoration of detectable melatonin after entrainment to a 24–hour schedule in a 'free–running' man. Oren DA, et al. **Psychoneuroendocrinology** 1997 Jan;22(1):39–52

The impact of inadequate sleep on children's daytime cognitive function. Dahl RE. **Semin Pediatr Neurol** 1996 Mar;3(1):44–50 (50 ref.)

Excessive daytime sleepiness in a 13–year–old. Kotagal S, et al. **Semin Pediatr Neurol** 1996 Sep;3(3):170–2

Sleep–related breathing disorders in patients with multiple system atrophy and vocal fold palsy. Sadaoka T, et al. **Sleep** 1996 Jul;19(6):479–84

[Increased resistance of the upper respiratory airways during sleep] Tuunainen A, et al. **Duodecim** 1995;111(12):1148–53 (25 ref.) **(Fin)**

[Sleep disorders and neuroendocrine regulation in depression] Linkowski P, et al. **Encephale** 1995 Dec;21 Spec No 7:25–8 (Eng. Abstr.) **(Fre)**

[Circadian rhythm in normal and pathological sleep] Billiard M, et al. **Pathol Biol (Paris)** 1996 Jun;44(6):509–17 (23 ref.) (Eng. Abstr.) **(Fre)**

[Sleep—respiration—hemodynamics] Grote L. **Internist (Berl)** 1996 May;37(5):470–82 (76 ref.) **(Ger)**

[Effect of biological rhythm on sleep–wakefulness regulation] Zulley J. **Internist (Berl)** 1996 May;37(5):463–9 (12 ref.) **(Ger)**

[Sleep fragmentation as the cause of daytime sleepiness and reduced performance] Bonnet MH. **Wien Med Wochenschr** 1996;146(13–14):332–4 (14 ref.) (Eng. Abstr.) **(Ger)**

[Signs of right heart stress in diurnal normoxemic patients with chronic obstructive lung disease and nocturnal hypoxemia] Rasche K, et al. **Wien Med Wochenschr** 1996; 146(13–14):350–2 (Eng. Abstr.) **(Ger)**

[The role of neuropeptides in normal and disordered sleep regulation] Steiger A, et al. **Wien Med Wochenschr** 1996; 146(13–14):291–3 (Eng. Abstr.) **(Ger)**

[Chronic obstructive lung disease and sleep] Bishara H. **Harefuah** 1996 Jun 2;130(11):775–7 (41 ref.) **(Heb)**

PREVENTION & CONTROL

Treatment of circadian rhythm disorders—melatonin. Arendt J, et al. **Chronobiol Int** 1997 Mar;14(2):185–204 (74 ref.)

Preventing sleep problems in infants: a randomized controlled trial. Kerr SM, et al. **J Adv Nurs** 1996 Nov;24(5):938–42

PSYCHOLOGY

Sleep and anxieties in Brazilian children: the role of cultural and environmental factors in child sleep disturbance. Dollinger SJ, et al. **Am J Orthopsychiatry** 1996 Apr; 66(2):252–61

Psychobiology of sleep disturbances in posttraumatic stress disorder. Mellman TA. **Ann N Y Acad Sci** 1997 Jun 21; 821:142–9 (44 ref.)

Relationship between objective and subjective sleep measures in depressed patients and healthy controls. Armitage R, et al. **Depress Anxiety** 1997;5(2):97–102

The relation of sleep difficulties to fatigue, mood and disability in chronic fatigue syndrome. Morriss RK, et al. **J Psychosom Res** 1997 Jun;42(6):597–605

Sleep characteristics of Japanese working men who score alexithymic on the Toronto Alexithymia Scale. Fukunishi I, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):859–65

[Sleep disorders in prison] Bourgeois D. **Encephale** 1997 May–Jun;23(3):180–3 (11 ref.) (Eng. Abstr.) **(Fre)**

[ICD–10 (International Classification of Diseases): a new way with speed bumps? Discussed on the example of depression, anxiety and sleep disorders] **Psychiatr Prax** 1996 Jan;23(1 Suppl):1–8 **(Ger)**

REHABILITATION

Moderate-intensity exercise and self-rated quality of sleep in older adults. A randomized controlled trial [see comments] King AC, et al. **JAMA** 1997 Jan 1;277(1):32–7 . Comment in: JAMA 1997 Jan 1;277(1):64–6. Comment in: JAMA 1997 Apr 2;277(13):1034–5.

THERAPY

Phototherapy for patients with Alzheimer disease with disturbed sleep patterns: results of a community-based pilot study. Colenda CC, et al. **Alzheimer Dis Assoc Disord** 1997 Sep;11(3):175–8

Effects of sleep deprivation with reference to military operations. Giam GC. **Ann Acad Med Singapore** 1997 Jan; 26(1):88–93 (20 ref.)

Effects of light and chronotherapy on human circadian rhythms in delayed sleep phase syndrome: cytokines, cortisol, growth hormone, and the sleep–wake cycle. Weyerbrock A, et al. **Biol Psychiatry** 1996 Oct 15; 40(8):794–7

Consumer opinion concerning the treatment of a common sleep problem. Bramble D. **Child Care Health Dev** 1996 Nov;22(6):355–66

Treatment of multiple sleep problems in children with developmental disabilities: faded bedtime with response cost versus bedtime scheduling. Piazza CC, et al. **Dev Med Child Neurol** 1997 Jun;39(6):414–8

Roadblocks encountered in recruiting patients for a study of sleep disruption in Alzheimer's disease. Dowling GA, et al. **Image J Nurs Sch** 1997 Spring;29(1):59–64

Favorable effect of transcranial electrostimulation on behavior disorders in elderly patients with dementia: a double-blind study. Hozumi S, et al. **Int J Neurosci** 1996 Nov;88(1–2):1–10

Behavioral intervention strategies for sleep–activity disruption. Dowling GA. **Int Psychogeriatr** 1996;8 Suppl 1:77–86 (34 ref.)

Sleep disorders [letter] Lask B. **J Am Acad Child Adolesc Psychiatry** 1997 Sep;36(9):1161

A multicenter study of sleep–wake rhythm disorders: therapeutic effects of vitamin B12, bright light therapy, chronotherapy and hypnotics. Yamadera H, et al. **Psychiatry Clin Neurosci** 1996 Aug;50(4):203–9

Sleep disturbances in the demented elderly: treatment in ambulatory care. Stoppe G, et al. **Sleep** 1995 Dec; 18(10):844–8

Incidence of periodic leg movements and of the restless legs syndrome during sleep following acute physical activity in spinal cord injury subjects. de Mello MT, et al. **Spinal Cord** 1996 May;34(5):294–6

[Phototherapy of jet lag, night work and sleep disorders] Bjorvatn B, et al. **Tidsskr Nor Laegeforen** 1997 Jun 30; 117(17):2489–92 (33 ref.) (Eng. Abstr.) **(Nor)**

[Phototherapy. An alternative for seasonal affective disorders or sleep disorders] Holsten F, et al. **Tidsskr Nor Laegeforen** 1997 Jun 30;117(17):2484–8 (68 ref.) (Eng. Abstr.) **(Nor)**

SLEEP, REM

REM sleep behaviour disorder: a treatable cause of falls in elderly people. Morfis L, et al. **Age Ageing** 1997 Jan; 26(1):43–4

REM sleep as a criterion of temperature comfort and temperature homeostasis "well-being" in euthermic and hibernating mammals. Pastukhov YF. **Ann N Y Acad Sci** 1997 Mar 15;813:71–2

HLA class II genes associated with REM sleep behavior disorder. Schenck CH, et al. **Ann Neurol** 1996 Feb; 39(2):261–3

Electroencephalographic sleep correlates of episode and vulnerability to recurrence in depression. Buysse DJ, et al. **Biol Psychiatry** 1997 Feb 15;41(4):406–18

Changes in sleep architecture following chronic mild stress. Cheeta S, et al. **Biol Psychiatry** 1997 Feb 15;41(4):419–27

Cyclic alternating pattern of sleep electroencephalogram in patients with panic disorder. Ferini-Strambi L, et al. **Biol Psychiatry** 1996 Aug 1;40(3):225–7

Sex differences in paradoxical sleep: influences of estrus cycle and ovariectomy. Fang J, et al. **Brain Res** 1996 Sep 23; 734(1–2):275–85

Memory scores in middle-aged rats predict later deficits in memory, paradoxical sleep, and blood glucose regulation in old age. Stone WS, et al. **Exp Aging Res** 1997 Jul–Sep; 23(3):287–300

Near cardiac death with onset in REM sleep: a polysomnographic case report [letter] Bassetti C, et al. **J Sleep Res** 1997 Mar;6(1):57–8

The alteration of human sleep and circadian rhythms during spaceflight. Gundel A, et al. **J Sleep Res** 1997 Mar;6(1):1–8

A new approach to the analysis of the human sleep/wakefulness continuum. Pardey J, et al. **J Sleep Res** 1996 Dec;5(4):201–10

Processing of auditory stimuli during tonic and phasic periods of REM sleep as revealed by event-related brain potentials. Sallinen M, et al. **J Sleep Res** 1996 Dec;5(4):220–8

Sleep during arousal episodes as a function of prior torpor duration in hibernating European ground squirrels. Strijkstra AM, et al. **J Sleep Res** 1997 Mar;6(1):36–43

Autism, Asperger's syndrome and the Crick–Mitchison theory of the biological function of REM sleep. Brown DW. **Med Hypotheses** 1996 Nov;47(5):399–403

Reverse learning and the physiological basis of eye movement desensitization. Hassard A. **Med Hypotheses** 1996 Oct; 47(4):277–82 (45 ref.)

A first case of progressive supranuclear palsy and pre-clinical REM sleep behavior disorder presenting as inhibition of speech during wakefulness and somniloquy with phasic muscle twitching during REM sleep. Pareja JA, et al. **Neurologia** 1996 Oct;11(8):304–6

REM sleep behavior disorders in multiple system atrophy. Plazzi G, et al. **Neurology** 1997 Apr;48(4):1094–7

Probable diffuse Lewy body disease presenting as REM sleep behavior disorder. Turner RS, et al. **Neurology** 1997 Aug; 49(2):523–7

Effects of short- and long-term REM sleep deprivation on sexual behavior in male rats. Velazquez-Moctezuma J, et al. **Physiol Behav** 1996 Feb;59(2):277–81

A longitudinal study of EEG sleep in schizophrenia. Keshavan MS, et al. **Psychiatry Res** 1996 Jan 31; 59(3):203–11

Sleep-related hypoxaemia in chronic obstructive pulmonary disease: causes, consequences and treatment. Weitzenblum E, et al. **Respiration** 1997;64(3):187–93 (42 ref.)

Comparison of a frequency-based analysis of electroencephalograms (Ż-ratio) and visual scoring on the multiple sleep latency test. Albertario CL, et al. **Sleep** 1995 Dec;18(10):836–43

Does a subtropical climate imply a seasonal rhythm in REM sleep? Askenasy JJ, et al. **Sleep** 1995 Dec;18(10):895–900

Sleep-induced breathing instability. University of Wisconsin-Madison Sleep and respiration Research Group. Dempsey JA, et al. **Sleep** 1996 Apr;19(3):236–47 (61 ref.)

Differential effects of total and upper airway influenza viral infection on sleep in mice. Fang I, et al. **Sleep** 1996 May; 19(4):337–42

Cardiac autonomic nervous activity in sleep-related painful erections. Ferini-Strambi L, et al. **Sleep** 1996 Feb; 19(2):136–8

Cardiac autonomic activity during wakefulness and sleep in REM sleep behavior disorder. Ferini-Strambi L, et al. **Sleep** 1996 Jun;19(5):367–9

Autonomic consequences of arousal from sleep: mechanisms and implications. Horner RL. **Sleep** 1996 Dec;19(10 Suppl):S193–5 (10 ref.)

Periodic K-alpha sleep EEG activity and periodic limb movements during sleep: comparisons of clinical features and sleep parameters. MacFarlane JG, et al. **Sleep** 1996 Apr;19(3):200–4

A preliminary study of sleep in the ferret, Mustela putorius furo: a carnivore with an extremely high proportion of REM sleep. Marks GA, et al. **Sleep** 1996 Feb;19(2):83–93

Slow potential shifts at sleep—wake transitions and shifts between NREM and REM sleep. Marshall L, et al. **Sleep** 1996 Feb;19(2):145–51

Electrophysiological correlates of higher states of consciousness during sleep in long-term practitioners of the Transcendental Meditation program. Mason LI, et al. **Sleep** 1997 Feb;20(2):102–10

Ventilatory stability during sleep studied with proportional assist ventilation (PAV). Meza S, et al. **Sleep** 1996 Dec; 19(10 Suppl):S164–6

Maternal sleep and arousals during bedsharing with infants. Mosko S, et al. **Sleep** 1997 Feb;20(2):142–50

Heart rate variations during sleep in preadolescents. Pivik RT, et al. **Sleep** 1996 Feb;19(2):117–35

How should the multiple sleep latency test be analyzed? Pollak CP. **Sleep** 1997 Jan;20(1):34–9

A two-week sleep extension in sleepy normals. Roehrs T, et al. **Sleep** 1996 Sep;19(7):576–82

Auditory awakening thresholds in sleepy and alert individuals. Rosenthal L, et al. **Sleep** 1996 May;19(4):290–5

Sleep state effects on nonpanting breathing during preoptic/anterior hypothalamic warming in cats and kittens. Schechtman VL, et al. **Sleep** 1997 Jan;20(1):1–10

Computer classification of state in healthy preterm neonates. Scher MS, et al. **Sleep** 1997 Feb;20(2):132–41

Objective sleep quality of healthy older men and women is differentially disrupted by nighttime periodic blood sampling via indwelling catheter. Vitiello MV, et al. **Sleep** 1996 May;19(4):304–11

Hemodynamic consequences of obstructive sleep apnea. Weiss JW, et al. **Sleep** 1996 Jun;19(5):388–97

First night effects in post-traumatic stress disorder inpatients. Woodward SH, et al. **Sleep** 1996 May;19(4):312–7

[Disorders of REM sleep during experimental depressive syndrome induced by systemic administration to rats of 1-methyl-4-phenyl-1,2,36-tetrahydropyridine (MPTP)] Krupina NA, et al. **Biull Eksp Biol Med** 1997 Feb; 123(2):138–42 **(Rus)**

[Epileptic syndromes which show continuous spike and wake complexes during slow wave sleep] Nieto-Barrera M, et al. **Rev Neurol** 1997 Jul;25(143):1045–51 (Eng. Abstr.) **(Spa)**

[Electrical status epilepticus during sleep] Ortega JJ, et al. **Rev Neurol** 1996 Dec;24(136):1551–3 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Melatonin and S-20098 increase REM sleep and wake-up propensity without modifying NREM sleep homeostasis. Cajochen C, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1189–96

VIP decelerates non-REM–REM cycles and modulates hormone secretion during sleep in men. Murck H, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R905–11

Differential response of rapid eye movement sleep to cholinergic blockade by scopolamine in currently depressed, remitted, and normal control subjects. Poland RE, et al. **Biol Psychiatry** 1997 May 1;41(9):929–38

Rapid eye movement (REM) sleep deprivation in 6-OHDA nigro-striatal lesioned rats with and without transplants of dissociated chromaffin cells. Drucker-Colín R, et al. **Brain Res** 1996 Aug 12;729(2):170–5

REM sleep inhibition by desipramine: evidence for an alpha-1 adrenergic mechanism. Ross RJ, et al. **Brain Res** 1995 Dec 1;701(1–2):129–34

Glucose attenuation of atropine-induced deficits in paradoxical sleep and memory. Stone WS, et al. **Brain Res** 1995 Oct 2;694(1–2):133–8

Transdermal nicotine on sleep and PGO spikes. Vazquez J, et al. **Brain Res** 1996 Oct 21;737(1–2):317–20

Effects of the GABAB antagonist CGP 35348 on sleep–wake states, behaviour, and spike–wave discharges in old rats. Puigcerver A, et al. **Brain Res Bull** 1996;40(3):157–62

Effect of clonidine and yohimbine on sleep in healthy men: a double-blind, randomized, controlled trial. Gentili A, et al. **Eur J Clin Pharmacol** 1996;50(6):463–5

Desynchronized (REM) sleep inhibition induced by carbachol microinjections into the nucleus basalis of Meynert is mediated by the glutamatergic system. Manfridi A, et al. **Exp Brain Res** 1996 Apr;109(1):174–8

Serotonin at the laterodorsal tegmental nucleus suppresses rapid-eye-movement sleep in freely behaving rats. Horner RL, et al. **J Neurosci** 1997 Oct 1;17(19):7541–52

Effects of thyrotropin-releasing hormone and its analogs on daytime sleepiness and cataplexy in canine narcolepsy. Nishino S, et al. **J Neurosci** 1997 Aug 15;17(16):6401–8

Latency of eye movement and mean latency of eye movement within REM sleep. The methods and the applications. Jernajczyk W. **Neurol Neurochir Pol** 1996;30 Suppl 3:31–5

Effects of zolpidem on local cerebral glucose metabolism during non-REM sleep in normal volunteers: a positron emission tomography study. Gillin JC, et al. **Neuropsychopharmacology** 1996 Sep;15(3):302–13

Ipsapirone, a 5-HT1A agonist, suppresses REM sleep equally in unmedicated depressed patients and normal controls.

Gillin JC, et al. **Neuropsychopharmacology** 1996 Aug; 15(2):109–15

Vesicular acetylcholine transport inhibitor suppresses REM sleep. Capece ML, et al. **Neuroreport** 1997 Jan 20;8(2):481–4

Chronic administration of melatonin reduces REM sleep in the Djungarian hamster (Phodopus sungorus). Deboer T, et al. **Neurosci Lett** 1997 Aug 8;231(2):118–22

Influence of zopiclone, a new generation hypnotic, on the intermediate stage and paradoxical sleep in the rat. Gauthier P, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):139–43

Hydralazine reduces elevated sleep apnea index in spontaneously hypertensive (SHR) rats to equivalence with normotensive Wistar–Kyoto rats. Carley DW, et al. **Sleep** 1996 Jun;19(5):363–6

Interaction of serotonergic excitatory drive to hypoglossal motoneurons with carbachol–induced, REM sleep–like atonia. Kubin L, et al. **Sleep** 1996 Apr;19(3):187–95

Effects of low oral doses of melatonin, given 2–4 hours before habitual bedtime, on sleep in normal young humans. Zhdanova IV, et al. **Sleep** 1996 Jun;19(5):423–31

PHYSIOLOGY

Biological predictors of suicidality in schizophrenia. Lewis CF, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):416–20

Location and quantification of muscarinic receptor subtypes in rat pons: implications for REM sleep generation. Baghdoyan HA. **Am J Physiol** 1997 Sep;273(3 Pt 2):R896–904

Development of REM and slow wave sleep in the rat. Frank MG, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1792–9

GABA release in the dorsal raphe nucleus: role in the control of REM sleep. Nitz D, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R451–5

Rapid eye movement density among adolescents with major depressive disorder revisited [letter; comment] Goetz RR, et al. **Arch Gen Psychiatry** 1996 Nov;53(11):1066–7. Comment on: Arch Gen Psychiatry 1987 Jan;44(1):61–8.

Amygdaloid control of alerting and behavioral arousal in rats: involvement of serotonergic mechanisms. Sanford LD, et al. **Arch Ital Biol** 1995 Dec;134(1):81–99

Dexamethasone nonsuppression and short rapid eye movement latency in schizophrenia: markers of an affective diathesis? Goldman M, et al. **Biol Psychiatry** 1996 Nov 1;40(9):927–9

Sleep–onset rapid eye movement after electroconvulsive therapy is more frequent in patients who respond less well to electroconvulsive therapy. Grunhaus L, et al. **Biol Psychiatry** 1997 Aug 1;42(3):191–200

Reduced inhibitory potency of serotonin reuptake blockers on central serotoninergic neurons in rats selectively deprived of rapid eye movement sleep. Maudhuit C, et al. **Biol Psychiatry** 1996 Nov 15;40(10):1000–7

Dexamethasone response, thyrotropin–releasing hormone stimulation, rapid eye movement latency, and subtypes of depression. Rush AJ, et al. **Biol Psychiatry** 1997 May 1; 41(9):915–28

Lewy body variant of Alzheimer's disease (AD) identified by postmortem ubiquitin staining in a previously reported case of AD associated with REM sleep behavior disorder [letter] Schenck CH, et al. **Biol Psychiatry** 1997 Sep 15; 42(6):527–8

A case of REM sleep behavior disorder with autopsy–confirmed Alzheimer's disease: postmortem brain stem histochemical analyses. Schenck CH, et al. **Biol Psychiatry** 1996 Sep 1;40(5):422–5

Relationship between DST nonsuppression and shortened REM latency in schizophrenia. Tandon R, et al. **Biol Psychiatry** 1996 Oct 1;40(7):660–3

Sleep development in children with congenital and acquired hypothyroidism. Hayashi M, et al. **Brain Dev** 1997 Jan; 19(1):43–9

Differential role of dopamine receptors on motor asymmetries of nigro–striatal lesioned animals that are REM sleep deprived. Durán–Vázquez A, et al. **Brain Res** 1997 Jan 2;744(1):171–4

Brain distribution of vasoactive intestinal peptide receptors following REM sleep deprivation. Jiménez–Anguiano A, et al. **Brain Res** 1996 Jul 22;728(1):37–46

Sleep in rats rendered chronically hyperprolactinemic with anterior pituitary grafts. Obál F Jr, et al. **Brain Res** 1997 Apr 25;755(1):130–6

Chronic low–amplitude electrical stimulation of the laterodorsal tegmental nucleus of freely moving cats increases REM sleep. Thakkar M, et al. **Brain Res** 1996 Jun 3;723(1–2):223–7

Rapid eye movement sleep deprivation in kittens amplifies LGN cell–size disparity induced by monocular deprivation. Oksenberg A, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):51–61

Pontine cholinergic neurons show Fos–like immunoreactivity associated with cholinergically induced REM sleep. Shiromani PJ, et al. **Brain Res Mol Brain Res** 1996 May; 38(1):77–84

Sleep, dreams, and sudden death: the case for sleep as an autonomic stress test for the heart. Verrier RL, et al. **Cardiovasc Res** 1996 Feb;31(2):181–211 (268 ref.)

Cellular basis of pontine ponto–geniculo–occipital wave generation and modulation. Datta S. **Cell Mol Neurobiol** 1997 Jun;17(3):341–65 (172 ref.)

Bilirubin, REM sleep, and phototransduction of environmental time cues. A hypothesis. Oren DA. **Chronobiol Int** 1997 May;14(3):319–29 (75 ref.)

Rapid eye movements density as a measure of sleep need: REM density decreases linearly with the reduction of prior sleep duration. Lucidi F, et al. **Electroencephalogr Clin Neurophysiol** 1996 Dec; 99(6):556–61

Quantitative EEG and statistical mapping of wakefulness and REM sleep in the evaluation of mild to moderate Alzheimer's disease. Hassainia F, et al. **Eur Neurol** 1997; 37(4):219–24

Firing of inferior colliculus auditory neurons is phase–locked to the hippocampus theta rhythm during paradoxical sleep and waking. Pedemonte M, et al. **Exp Brain Res** 1996 Nov; 112(1):41–6

Cardiopulmonary interactions following REM sleep deprivation in Sprague–Dawley rats. Radulovacki M, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):371–5

Daytime sleepiness and REM abnormalities in Prader–Willi syndrome: evidence of generalized hypoarousal. Vgontzas AN, et al. **Int J Neurosci** 1996 Nov;87(3–4):127–39

Dreaming away depression: the role of REM sleep and dreaming in affective disorders. Beauchemin KM, et al. **J Affect Disord** 1996 Nov 25;41(2):125–33

Technique for repetitive recording from fetal respiratory neurons. Ioffe S, et al. **J Appl Physiol** 1996 Mar; 80(3):1057–60

Diaphragmatic activity during REM sleep in the adult cat. Orem J, et al. **J Appl Physiol** 1996 Aug;81(2):751–60

The future of computer–assisted investigation of the polysomnogram: sleep microstructure. Kubicki S, et al. **J Clin Neurophysiol** 1996 Jul;13(4):285–94 (70 ref.)

A quantitative assessment of the maturation of phasic motor inhibition during REM sleep. Kohyama J. **J Neurol Sci** 1996 Nov;143(1–2):150–5

Phasic motor activity reduction occurring with horizontal rapid eye movements during REM sleep is disturbed in infantile spasms. Kohyama J, et al. **J Neurol Sci** 1996 Jun; 138(1–2):82–7

Excitation of the brain stem pedunculopontine tegmentum cholinergic cells induces wakefulness and REM sleep. Datta S, et al. **J Neurophysiol** 1997 Jun;77(6):2975–88

Maturation of motility and motor inhibition in rapid–eye–movement sleep. Kohyama J, et al. **J Pediatr** 1997 Jan;130(1):117–22

Sleep–related erections [editorial; comment] [see comments] Hirshkowitz M. **J Psychosom Res** 1997 Jun;42(6):515–6. Comment on: J Psychosom Res 1997 Jun;42(6):517–30. Comment on: J Psychosom Res 1997 Jun;42(6):531–9. Comment on: J Psychosom Res 1997 Jun;42(6):547–53. Comment in: J Psychosom Res 1997 Jun;42(6):513–4.

Androgen and sleep–related erections. Hirshkowitz M, et al. **J Psychosom Res** 1997 Jun;42(6):541–6

Evaluation of erectile dysfunction and sleep–related erections [see comments] Moore CA, et al. **J Psychosom Res** 1997 Jun;42(6):531–9 (32 ref.). Comment in: J Psychosom Res 1997 Jun;42(6):515–6.

Cardiovascular disease and sleep–related erections [see comments] Rosen RC, et al. **J Psychosom Res** 1997 Jun; 42(6):517–30 (25 ref.). Comment in: J Psychosom Res 1997 Jun;42(6):515–6.

REM sleep in depressed patients: different attempts to achieve adaptation. Rotenberg VS, et al. **J Psychosom Res** 1997 Jun;42(6):565–75

Sleep–related erections: absence of change following presleep sexual arousal [see comments] Ware JC, et al. **J Psychosom Res** 1997 Jun;42(6):547–53. Comment in: J Psychosom Res 1997 Jun;42(6):515–6.

Muscle artifacts in the sleep EEG: automated detection and effect on all–night EEG power spectra. Brunner DP, et al. **J Sleep Res** 1996 Sep;5(3):155–64

Sleep–related painful erections: clinical and polysomnographic features. Ferini–Strambi L, et al. **J Sleep Res** 1996 Sep;5(3):195–7

Respiratory and body movements as indicators of sleep stage and wakefulness in infants and young children. Kirjavainen T, et al. **J Sleep Res** 1996 Sep;5(3):186–94

Prostaglandin D synthase (beta–trace protein): a molecular clock to trace the origin of REM sleep? Sri Kantha S. **Med Hypotheses** 1997 May;48(5):411–2 (21 ref.)

REM sleep and amygdala [news] Maquet P, et al. **Mol Psychiatry** 1997 May;2(3):195–6

REM sleep parasomnias. Schenck CH, et al. **Neurol Clin** 1996 Nov;14(4):697–720 (96 ref.)

Relationship between the time courses of power in the frequency bands of human sleep EEG. Merica H, et al. **Neurophysiol Clin** 1997;27(2):116–28

Recognition of rapid–eye–movement sleep from single–channel EEG data by artificial neural networks: a study in depressive patients with and without amitriptyline treatment. Grözinger M, et al. **Neuropsychobiology** 1996; 33(3):155–9

REM sleep dream mentation in right hemispherectomized patients. McCormick L, et al. **Neuropsychologia** 1997 May; 35(5):695–701

Increased basal REM sleep but no difference in dark induction or light suppression of REM sleep in flinders rats with cholinergic supersensitivity. Benca RM, et al. **Neuropsychopharmacology** 1996 Jul;15(1):45–51

Prolonged enhancement of REM sleep produced by carbachol microinjection into the amygdala. Calvo JM, et al. **Neuroreport** 1996 Jan 31;7(2):577–80

Event–related potentials (ERPs) to deviant auditory stimuli during sleep and waking. Nordby H, et al. **Neuroreport** 1996 Apr 10;7(5):1082–6

Acceleration of EEG theta wave precedes the phasic surge of arterial pressure during REM sleep in the rat. Sei H, et al. **Neuroreport** 1996 Nov 25;7(18):3059–62

The transition from slow–wave sleep to paradoxical sleep: evolving facts and concepts of the neurophysiological processes underlying the intermediate stage of sleep. Gottesmann C. **Neurosci Biobehav Rev** 1996 Autumn; 20(3):367–87 (167 ref.)

GABA in locus coeruleus regulates spontaneous rapid eye movement sleep by acting on GABAA receptors in freely moving rats. Kaur S, et al. **Neurosci Lett** 1997 Feb 21; 223(2):105–8

Alterations in synaptosomal calcium concentrations after rapid eye movement sleep deprivation in rats. Mallick BN, et al. **Neuroscience** 1996 Dec;75(3):729–36

Lucid dreaming and the mind–body relationship: a model for the cognitive and physiological variations in rapid eye movement sleep. Lequerica A. **Percept Mot Skills** 1996 Aug;83(1):331–6 (17 ref.)

Vigilance state episodes and cortical temperature in the Djungarian hamster: the influence of photoperiod and ambient temperature. Deboer T, et al. **Pflugers Arch** 1997 Jan;433(3):230–7

Changes in monoamines and their metabolite concentrations in REM sleep–deprived rat forebrain nuclei. Farooqui SM, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):385–91

Possible involvement of an endogenous benzodiazepine receptor ligand of the inverse agonist type in the regulation of rapid–eye movement (REM) sleep: an hypothesis. Wichlinski LJ. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jan; 20(1):1–44 (182 ref.)

Fluctuations of rectal and tympanic temperatures with changes of ambient temperature during night sleep. Hashizume Y. **Psychiatry Clin Neurosci** 1997 Jun; 51(3):129–33

Repeated REM sleep deprivation after chronic haloperidol administration in the rat. Salín–Pascual RJ, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):216–9

REM sleep eye movement counts correlate with visual imagery in dreaming: a pilot study. Hong CC, et al. **Psychophysiology** 1997 May;34(3):377–81

Effect of ventilatory drive on upper airway patency in humans during NREM sleep. Badr MS. **Respir Physiol** 1996 Jan;103(1):1–10 (33 ref.)

Dissociation of W/REM/NREM states may cause psychotic symptoms [letter] Saucerman SA. **Schizophr Res** 1997 Jun 20;25(3):261–3

Dreaming as delirium: a mental status analysis of our nightly madness. Hobson JA. **Semin Neurol** 1997 Jun;17(2):121–8 (12 ref.)

The frequency of multiple sleep onset REM periods among subjects with no excessive daytime sleepiness. Bishop C, et al. **Sleep** 1996 Nov;19(9):727–30

Excitatory drive to the respiratory system in REM sleep. Orem J. **Sleep** 1996 Dec;19(10 Suppl):S154–6 (18 ref.)

[Is there a bulbar pacemaker responsible for the ultradian rhythm of paradoxical sleep?] Jouvet M, et al. **Arch Ital Biol** 1995 Dec;134(1):39–56 (Eng. Abstr.) **(Fre)**

[Paradoxical human sleep] Maquet P. **Rev Med Liege** 1996 Oct;51(10):632 **(Fre)**

[Sequential analysis of transmission properties of the CNS during consecutive REM periods] Mann K, et al. **Wien Med Wochenschr** 1996;146(13–14):283–4 (Eng. Abstr.) **(Ger)**

[Value of registering nocturnal REM phase related erections in diagnosis of erectile impotence] Sohn M, et al. **Wien Med Wochenschr** 1996;146(13–14):389–90 (Eng. Abstr.) **(Ger)**

[Nocturnal penile tumescence] Takanami M, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:393–6 (6 ref.) **(Jpn)**

[Recording of nocturnal penile tumescence using the Rigiscan device] Slojewski M, et al. **Wiad Lek** 1997;50(1–3):55–8 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

[REM suppression induced by digital mobile radio telephones] Mann K, et al. **Wien Med Wochenschr** 1996; 146(13–14):285–6 (Eng. Abstr.) **(Ger)**

SLEEP STAGES

The scope and nature of the drowsy driving problem in New York State. McCartt AT, et al. **Accid Anal Prev** 1996 Jul; 28(4):511–17

A quantitative study of daytime sleepiness induced by carbamazepine and add–on vigabatrin in epileptic patients. Bonanni E, et al. **Acta Neurol Scand** 1997 Apr;95(4):193–6

Glucoprivation counteracts effects of testosterone on daily torpor in Siberian hamsters. Dark J, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R398–403

Sleep fragmentation and daytime wakefulness [editorial; comment] Mendelson WB. **Am J Respir Crit Care Med** 1997 May;155(5):1499–500. Comment on: Am J Respir Crit Care Med 1997 May;155(5):1596–1601.

Sleep after laparoscopic cholecystectomy. Rosenberg–Adamsen S, et al. **Br J Anaesth** 1996 Nov; 77(5):572–5

Tonic, phasic, and transient EEG correlates of auditory awareness in drowsiness. Makeig S, et al.

Brain Res Cogn Brain Res 1996 Jul;4(1):15–25

Sympathetic nervous system alterations in sleep apnea. The relative importance of respiratory disturbance, hypoxia, and sleep quality. Dimsdale JE, et al. **Chest** 1997 Mar; 111(3):639–42

Transient psychosis in a girl with epilepsy and continuous spikes and waves during slow sleep (CSWS). Kyllerman M, et al. **Eur Child Adolesc Psychiatry** 1996 Dec; 5(4):216–21

Increased prevalence of sleep disturbances and daytime sleepiness in subjects with bronchial asthma: a population study of young adults in three European countries. Janson C, et al. **Eur Respir J** 1996 Oct;9(10):2132–8

Anorexia and cachexia, asthenia, and lethargy. Watanabe S, et al. **Hematol Oncol Clin North Am** 1996 Feb;10(1):189–206 (100 ref.)

Napping in the elderly and its association with night sleep and psychological status. Frisoni GB, et al. **Int Psychogeriatr** 1996 Fall;8(3):477–87

Shortening of the photoperiod affects sleep distribution, EEG and cortical temperature in the Djungarian hamster. Deboer T, et al. **J Comp Physiol [A]** 1996 Oct;179(4):483–92

Cardiac autonomic regulation during sleep in panic disorder [letter] Ferini-Strambi L, et al. **J Neurol Neurosurg Psychiatry** 1996 Oct;61(4):421–2

Comparison of the results of the Epworth Sleepiness Scale and the Multiple Sleep Latency Test. Chervin RD, et al. **J Psychosom Res** 1997 Feb;42(2):145–55

Respiratory and body movements as indicators of sleep stage and wakefulness in infants and young children. Kirjavainen T, et al. **J Sleep Res** 1996 Sep;5(3):186–94

Clinical features and management of two cases of encephalitis lethargica. Blunt SB, et al. **Mov Disord** 1997 May; 12(3):354–9

Passive smoking of cannabis [letter] Ramadas D, et al. **N Z Med J** 1996 Sep 27;109(1030):366

Nephrogenic diabetes insipidus in a lethargic lithium-treated patient. Meinardi JR, et al. **Neth J Med** 1997 Mar; 50(3):105–9

Randomized, double-blind, placebo-controlled crossover trial of modafinil in the treatment of excessive daytime sleepiness in narcolepsy. Broughton RJ, et al. **Neurology** 1997 Aug;49(2):444–51

Correlations of splitting and phobic anxiety with dreaming. Kroth J, et al. **Percept Mot Skills** 1997 Aug;85(1):333–4

Sleep deprivation by the "flower pot" technique and spatial reference memory. Youngblood BD, et al. **Physiol Behav** 1997 Feb;61(2):249–56

Lethargy in a patient with cirrhosis. Chuah SY, et al. **Postgrad Med J** 1997 Mar;73(857):177–9

Ultra-low-field magnetic resonance imaging in upper airways obstruction in sleep apnea syndrome. Okada T, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):285–9

Improvement in excessive daytime sleepiness after surgical treatment for obstructive sleep apnea syndrome. Yamadera W. **Psychiatry Clin Neurosci** 1995 Aug;49(4):213–21

Progressive somnolence and confusion in a patient with hereditary hemorrhagic telangiectasias. Samandari T, et al. **Tenn Med** 1996 Nov;89(11):417–8

[Treatment of excessive daytime sleepiness] Sonka K. **Ceska Slov Psychiatr** 1996 May;92 Suppl 1:15–22 (Eng. Abstr.) **(Cze)**

[The elderly, sleep habits and use of psychotropic drugs by the French population] Ohayon M, et al. **Encephale** 1996 Sep–Oct;22(5):337–50 (Eng. Abstr.) **(Fre)**

[Sleep behavior in the first 3 years of life] Fegert JM, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Feb; 46(2):69–91 (50 ref.) (Eng. Abstr.) **(Ger)**

[Parkinsonism after lethargic encephalitis: possibly the first Spanish case in the second half of the century] Guitera V, et al. **Neurologia** 1996 Jan;11(1):37–40 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Ritanserin-induced changes in sleep-waking phases in rats. Kirov R, et al. **Acta Physiol Pharmacol Bulg** 1995; 21(4):87–92

Effect of bedtime alcohol on inspiratory resistance and respiratory drive in snoring and nonsnoring men. Dawson A, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):183–90

Effect of exogenous GM1 on ethanol sensitivity in selectively bred mouse lines. Ullman MD, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):661–5

Melatonin and S-20098 increase REM sleep and wake-up propensity without modifying NREM sleep homeostasis. Cajochen C, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1189–96

VIP decelerates non-REM-REM cycles and modulates hormone secretion during sleep in men. Murck H, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):R905–11

Sedation and performance issues in the treatment of allergic conditions [see comments] Adelsberg BR. **Arch Intern Med** 1997 Mar 10;157(5):494–500 (42 ref.). Comment in: ACP J Club 1997 Jul–Aug;127(1):10.

Acutely shifting the sleep-wake cycle: nighttime sleepiness after diurnal administration of temazepam or placebo. Porcù S, et al. **Aviat Space Environ Med** 1997 Aug; 68(8):688–94

Estimation of the time course of slow-wave sleep over the night in depressed patients: effects of clomipramine and clinical response. Ehlers CL, et al. **Biol Psychiatry** 1996 Feb 1;39(3):171–81

Lethargy with omeprazole. Meeuwisse EJ, et al. **BMJ** 1997 Feb 15;314(7079):481

Sleep cycle disturbances induced by apamin, a selective blocker of Ca(2+)-activated K+ channels. Gandolfo G, et al. **Brain Res** 1996 Oct 14;736(1–2):344–7

Alertness, cognition and morphine in patients with advanced cancer. Clemons M, et al. **Cancer Treat Rev** 1996 Nov; 22(6):451–68

Effects of estrogen replacement therapy on rates of cyclic alternating patterns and hot-flush events during sleep in postmenopausal women: a pilot study. Scharf MB, et al. **Clin Ther** 1997 Mar–Apr;19(2):304–11

Nocturnal plasma melatonin levels after flunitrazepam administration in healthy subjects. Hajak G, et al. **Eur Neuropsychopharmacol** 1996 May;6(2):149–53

Greater efficacy of episodic than continuous growth hormone-releasing hormone (GHRH) administration in promoting slow-wave sleep (SWS). Marshall L, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1009–13

A multicenter, double-blind comparison of the effects of nefazodone and fluoxetine on sleep architecture and quality of sleep in depressed outpatients. Armitage R, et al. **J Clin Psychopharmacol** 1997 Jun;17(3):161–8

NREM delta stimulation following MK-801 is a response of sleep systems. Campbell IG, et al. **J Neurophysiol** 1996 Dec;76(6):3714–20

Effects of thyrotropin-releasing hormone and its analogs on daytime sleepiness and cataplexy in canine narcolepsy. Nishino S, et al. **J Neurosci** 1997 Aug 15;17(16):6401–8

The electroencephalographic sleep pattern in schizophrenic patients treated with clozapine or classical antipsychotic drugs. Wetter TC, et al. **J Psychiatr Res** 1996 Nov–Dec; 30(6):411–9

Effects of a specific CCK-A antagonist, Loxiglumide, on postprandial mood and sleepiness. Wells AS, et al. **J Psychopharmacol (Oxf)** 1997;11(3):241–6

The link between sleep and depression: the effects of antidepressants on EEG sleep. van Bemmel AL. **J Psychosom Res** 1997 Jun;42(6):555–64 (77 ref.)

Effects of triazolam on sleep, daytime sleepiness, and morning stiffness in patients with rheumatoid arthritis. Walsh JK, et al. **J Rheumatol** 1996 Feb;23(2):245–52

The GABAA agonist THIP (gaboxadol) increases non-REM sleep and enhances delta activity in the rat. Lancel M, et al. **Neuroreport** 1996 Sep 2;7(13):2241–5

The hypothermic effect of late evening melatonin does not block the phase delay induced by concurrent bright light in human subjects. Kräuchi K, et al. **Neurosci Lett** 1997 Aug 22;232(1):57–61

Daily melatonin intake resets circadian rhythms of a sighted man with non-24-hour sleep-wake syndrome who lacks the nocturnal melatonin rise. Nakamura K, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):121–7

Effects of hCRH on sleep and body temperature rhythms. Tsuchiyama Y, et al. **Psychiatry Clin Neurosci** 1995 Dec; 49(5–6):299–304

The GABAA agonist THIP produces slow wave sleep and reduces spindling activity in NREM sleep in humans. Faulhaber J, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(3):285–91

Influence of zopiclone, a new generation hypnotic, on the intermediate stage and paradoxical sleep in the rat. Gauthier P, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):139–43

Suspected bentonite toxicosis in a cat from ingestion of clay cat litter [see comments] Hornfeldt CS, et al. **Vet Hum Toxicol** 1996 Oct;38(5):365–6. Comment in: Vet Hum Toxicol 1997 Jun;39(3):181–2.

[Biological models of depression: effect of antidepressants on sleep] Viot-Blanc V. **Encephale** 1995 Dec;21 Spec No 7:35–40 (25 ref.) (Eng. Abstr.) **(Fre)**

[Effect of vitamin B12 on sleep quality and performance of shift workers] Bohr KC. **Wien Med Wochenschr** 1996; 146(13–14):289–91 (Eng. Abstr.) **(Ger)**

[Clozapine, cytokines, fever and sleep] Hinze-Selch D, et al. **Wien Med Wochenschr** 1996;146(13–14):311–3 (Eng. Abstr.) **(Ger)**

GENETICS

Contribution to the genetics of symptomatic generalized tonic-clonic seizures: waking and sleep EEGs in siblings. Degen R, et al. **Acta Neurol Scand** 1996 Jan;93(1):9–13

Quantitative trait locus analyses of sleep-times induced by sedative-hypnotics in LSXSS recombinant inbred strains of mice. Christensen SC, et al. **Alcohol Clin Exp Res** 1996 May;20(3):543–50

Effects of acute prenatal ethanol administration in a reciprocal cross of C57BL/6J and short-sleep mice: maternal effects and nonmaternal factors. Gilliam DM, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):28–34

Changes in gene expression during the sleep-waking cycle: a new view of activating systems. Tononi G, et al. **Arch Ital Biol** 1995 Dec;134(1):21–37 (121 ref.)

IMMUNOLOGY

Lethargy, fever, and hyponatremia in a patient with common variable immunodeficiency [clinical conference] Stone HD Jr, et al. **Ann Allergy Asthma Immunol** 1997 Aug; 79(2):105–11

PHYSIOLOGY

The sleep of non-depressed patients with panic disorder: a comparison with normal controls. Arriaga F, et al. **Acta Psychiatr Scand** 1996 Mar;93(3):191–4

Acetylcholinesterase and choline uptake in striatum from rats with varying sleeping times. Chumakova OV, et al. **Alcohol Alcohol** 1996 Mar;31(2):217–20

Development of diurnal organization of EEG slow-wave activity and slow-wave sleep in the rat. Frank MG, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R472–8

Development of REM and slow wave sleep in the rat. Frank MG, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1792–9

GABA release in posterior hypothalamus across sleep-wake cycle. Nitz D, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1707–12

Nocturnal periodic breathing and the development of acute high altitude illness. Eichenberger U, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1748–54

Circadian rhythms: basic neurobiology and clinical applications. Moore RY. **Annu Rev Med** 1997;48:253–66 (59 ref.)

Time course of sleep inertia after nighttime and daytime sleep episodes. Achermann P, et al. **Arch Ital Biol** 1995 Dec; 134(1):109–19

The effect of optokinetic stimulation on daytime sleepiness. Leslie KR, et al. **Arch Ital Biol** 1997 Jun;135(3):219–28

Hypothalamic homeothermy across the ultradian sleep cycle. Parmeggiani PL. **Arch Ital Biol** 1995 Dec;134(1):101–7 (25 ref.)

Sleep states, memory processes and synaptic plasticity. Smith C. **Behav Brain Res** 1996 Jun;78(1):49–56 (71 ref.)

Low-dimensional dynamic self-organization in delta-sleep: effect of partial sleep deprivation. Cerf R, et al. **Biol Cybern** 1996 May;74(5):395–403

Influence of sleep state and respiratory pattern on cyclical fluctuations of cerebral blood flow velocity in healthy preterm infants. Rehan VK, et al. **Biol Neonate** 1996; 69(6):357–67

Selective slow-wave sleep deprivation influences blood serotonin profiles and serum melatonin concentrations in healthy subjects. Rao ML, et al. **Biol Psychiatry** 1996 Oct 1;40(7):664–7

Amplitude frequency characteristics of evoked potentials during sleep: an analysis of the brain's transfer properties in depression. Röschke J, et al. **Biol Psychiatry** 1996 Oct 15;40(8):736–43

Seasonal variation in core temperature regulation during sleep in patients with winter seasonal affective disorder. Schwartz PJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):122–31

Identifying an abnormal electroencephalographic sleep profile to characterize major depressive disorder. Thase ME, et al. **Biol Psychiatry** 1997 May 1;41(9):964–73

Regional cerebral blood flow throughout the sleep-wake cycle. An H2(15)O PET study. Braun AR, et al. **Brain** 1997 Jul;120 (Pt 7):1173–97

Evolution of daytime quiet sleep components in early treated phenylketonuric infants. De Giorgis GF, et al. **Brain Dev** 1996 May–Jun;18(3):201–6

Correlation between CSWS and aphasia in Landau-Kleffner syndrome: a study of three cases. Li M, et al. **Brain Dev** 1996 May–Jun;18(3):197–200

Dynamics of EEG spindle frequency activity during extended sleep in humans: relationship to slow-wave activity and time of day. Aeschbach D, et al. **Brain Res** 1997 Feb 14;748(1–2):131–6

Thermosensitive neurons of the diagonal band in rats: relation to wakefulness and non-rapid eye movement sleep. Alam MN, et al. **Brain Res** 1997 Mar 28;752(1–2):81–9

Effect of age on the sleep EEG: slow-wave activity and spindle frequency activity in young and middle-aged men. Landolt HP, et al. **Brain Res** 1996 Nov 4;738(2):205–12

Similarities and differences in behavioral state organization during sleep periods in the perinatal infant before and after birth. Groome LJ, et al. **Child Dev** 1997 Feb;68(1):1–11

Development of sleep spindles in the first year of life. Hughes JR. **Clin Electroencephalogr** 1996 Jul;27(3):107–15

Measurement of P300 and sleep characteristics in patients with hypersomnia: do P300 latencies, P300 amplitudes, and multiple sleep latency and maintenance of wakefulness tests measure different factors? Sangal RB, et al. **Clin Electroencephalogr** 1997 Jul;28(3):179–84

Sleep architecture as related to temperature changes in neonates at term. Tirosh E, et al. **Clin Physiol** 1996 Nov; 16(6):603–8

The nature of dominant Lyapunov exponent and attractor dimension curves of EEG in sleep. Pradhan N, et al. **Comput Biol Med** 1996 Sep;26(5):419–28

Polysomnographic studies in patients referred for ECT: pre-ECT studies. Grunhaus L, et al. **Convuls Ther** 1996 Dec;12(4):224–31

Cyclic alternating pattern sequences in non-apneic snorers with and without nasal dilation. Scharf MB, et al. **Ear Nose Throat J** 1996 Sep;75(9):617–9

The detection of drowsiness and sleep onset periods from ambulatory recorded polygraphic data. Hirvonen K, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb; 102(2):132–7

Precursors of the evoked K-complex in event-related brain potentials in stage 2 sleep. Sallinen M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Apr; 102(4):363–73

Effects of sleep and sleep stage on epileptic and nonepileptic seizures. Bazil CW, et al. **Epilepsia** 1997 Jan;38(1):56–62

Neurobiology of sleep suppression of ventricular arrhythmias

[letter; comment] Friedman EH. **Eur Heart J** 1997 Feb; 18(2):349–50. Comment on: Eur Heart J 1996 Jun;17(6):917–25.
The effect of sleep deprivation on sleep states, breathing events, peripheral chemoresponsiveness and arousal propensity in healthy 3 month old infants. Thomas DA, et al. **Eur Respir J** 1996 May;9(5):932–8
Nonlinear eye movement detection method for drowsiness studies. Värri A, et al. **Int J Biomed Comput** 1996 Dec; 43(3):227–42
Alpha sleep and information processing, perception of sleep, pain, and arousability in fibromyalgia. Perlis ML, et al. **Int J Neurosci** 1997 Feb;89(3–4):265–80
Human heart rate variability and sleep stages. Toscani L, et al. **Ital J Neurol Sci** 1996 Dec;17(6):437–9
Progressive changes in airway resistance during sleep. Kay A, et al. **J Appl Physiol** 1996 Jul;81(1):282–92
A relationship between heat loss and sleepiness: effects of postural change and melatonin administration. Kräuchi K, et al. **J Appl Physiol** 1997 Jul;83(1):134–9
Triphasic waves in a psychiatric population: a retrospective study. Blatt I, et al. **J Clin Neurophysiol** 1996 Jul; 13(4):324–9
Comparison between visual scoring of cyclic alternating pattern (CAP) and computerized assessment of slow EEG oscillations in the transition from light to deep non-REM sleep. Ferrillo F, et al. **J Clin Neurophysiol** 1997 May; 14(3):210–6
Past and future of computer-assisted sleep analysis and drowsiness assessment. Hasan J. **J Clin Neurophysiol** 1996 Jul;13(4):295–313 (190 ref.)
The future of computer-assisted investigation of the polysomnogram: sleep microstructure. Kubicki S, et al. **J Clin Neurophysiol** 1996 Jul;13(4):285–94 (70 ref.)
5-HT2 receptors are partially involved in the relationship between renin release and delta relative power. Brandenberger G, et al. **J Endocrinol Invest** 1996 Sep; 19(8):556–62
Neurodegeneration, sleep, and cerebral energy metabolism: a testable hypothesis. Mamelak M. **J Geriatr Psychiatry Neurol** 1997 Jan;10(1):29–32 (42 ref.)
Spatiotemporal patterns of spindle oscillations in cortex and thalamus. Contreras D, et al. **J Neurosci** 1997 Feb 1; 17(3):1179–96
Regional cerebral blood flow changes as a function of delta and spindle activity during slow wave sleep in humans. Hofle N, et al. **J Neurosci** 1997 Jun 15;17(12):4800–8
An on-line automated sleep-wake classification system for laboratory animals. Witting W, et al. **J Neurosci Methods** 1996 Jun;66(2):109–12
Morphology of active sleep--quiet sleep transitions in normal human term fetuses. Groome LJ, et al. **J Perinat Med** 1996; 24(2):171–6
Sleep in women [editorial] Driver HS. **J Psychosom Res** 1996 Mar;40(3):227–30 (21 ref.)
An automatic sleep-stage analysis system with off-line high-speed processing using a super mini-computer. Kuwahara H, et al. **Kurume Med J** 1996;43(3):243–8
Effects of training volume on sleep, psychological, and selected physiological profiles of elite female swimmers. Taylor SR, et al. **Med Sci Sports Exerc** 1997 May; 29(5):688–93
Sleep state, cardiorespiratory and electrocortical activity in infants with transposition of great vessels. Sahni R, et al. **Neuropediatrics** 1997 Jun;28(3):162–7
Work hours and sleepiness. Akerstedt T. **Neurophysiol Clin** 1995;25(6):367–75 (68 ref.) (Eng. Abstr.)
Main trends in rectal temperature during sleep. Hypnogram and thermogram. Almirall H, et al. **Neuropsychobiology** 1997;35(2):84–90
Automatic SCSB analysis of motor and autonomic nervous functions compared with sleep stages. Kaartinen J, et al. **Neuroreport** 1996 Apr 10;7(5):1102–6
Event-related potentials (ERPs) to deviant auditory stimuli during sleep and waking. Nordby H, et al. **Neuroreport** 1996 Apr 10;7(5):1082–6
Memory, sleep, and dynamic stabilization of neural circuitry: evolutionary perspectives. Kavanau JL. **Neurosci Biobehav Rev** 1996 Summer;20(2):289–311 (236 ref.)
Influence of paradoxical sleep deprivation on the intermediate stage of sleep in the rat. Gandolfo G, et al. **Neurosci Res** 1996 Jun;25(2):123–7
Influence of sleep states on laryngeal and abdominal muscle response to upper airway occlusion in lambs. Kianicka I, et al. **Pediatr Res** 1997 Jun;41(6):862–71
Selective activation of CCK-B receptors does not induce sleep and does not affect EEG slow-wave activity and brain temperature in rats. Chang HY, et al. **Physiol Behav** 1997 Jul;62(1):175–9
Active immunization of rats against insulin beta subunits: effects on sleep and feeding. De Saint Hilaire Z, et al. **Physiol Behav** 1997 May;61(5):649–51
Evolution of delta activity within the nonREM sleep episode: a biphasic hypothesis. Merica H, et al. **Physiol Behav** 1997 Jul;62(1):213–9
Relationship between circadian period and size of phase shifts in Syrian hamsters. Reebs SG, et al. **Physiol Behav** 1997 May;61(5):661–6
Free-running circadian rhythm of melatonin in a sighted man despite a 24-hour sleep pattern: a non-24-hour circadian syndrome. Hashimoto S, et al. **Psychiatry Clin Neurosci** 1997 Jun;51(3):109–14
Social rhythm stability following late-life spousal bereavement: associations with depression and sleep impairment. Brown LF, et al. **Psychiatry Res** 1996 May 17;62(2):161–9
Selective and total sleep deprivation: effect on the sleep EEG in the rat. Endo T, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):97–110
Neuroendocrine and sleep variables in major depressed inpatients: role of severity. Hubain P, et al. **Psychiatry Res** 1996 Jun 26;63(1):83–92
Circadian profiles of melatonin in melancholic depressed patients and healthy subjects in relation to cortisol secretion and sleep. Voderholzer U, et al. **Psychiatry Res** 1997 Aug 8;71(3):151–61
BPRS symptom factors and sleep variables in schizophrenia. Zarcone VP, et al. **Psychiatry Res** 1997 Feb 7; 66(2–3):111–20
Physiological background of enuresis type I. A preliminary report. Watanabe H, et al. **Scand J Urol Nephrol Suppl** 1997;183:7–9; discussion 9–10
The relationship between sleep and epilepsy in children. Bourgeois B. **Semin Pediatr Neurol** 1996 Mar;3(1):29–35 (40 ref.)
Normal electrographic-polysomnographic patterns in preterm and fullterm infants. Scher MS. **Semin Pediatr Neurol** 1996 Mar;3(1):2–12
The frequency of multiple sleep onset REM periods among subjects with no excessive daytime sleepiness. Bishop C, et al. **Sleep** 1996 Nov;19(9):727–30
A finger-tapping task and a reaction time task as behavioral measures of the transition from wakefulness to sleep: which task interferes less with the sleep onset process. Casagrande M, et al. **Sleep** 1997 Apr;20(4):301–12
Circadian characteristics of sleep propensity function in healthy elderly: a comparison with young adults. Haimov I, et al. **Sleep** 1997 Apr;20(4):294–300
The alerting effects of short and long naps in narcoleptic, sleep deprived, and alert individuals. Helmus T, et al. **Sleep** 1997 Apr;20(4):251–7
Sleep fragmentation in obstructive sleep apnea. Kimoff RJ. **Sleep** 1996 Nov;19(9 Suppl):S61–6 (65 ref.)
Infant sleep architecture during bedsharing and possible implications for SIDS. Mosko S, et al. **Sleep** 1996 Nov; 19(9):677–84
Distribution of delta activity across nonrapid eye movement sleep episodes in healthy young men. Preud'homme XA, et al. **Sleep** 1997 Apr;20(4):313–20
Correlation between K complex, periodic leg movements (PLM), and myoclonus during sleep in paraplegic adults before and after an acute physical activity. Mello MT, et al. **Spinal Cord** 1997 Apr;35(4):248–52
Assessment of the nocturnal blood pressure relative to sleep stages in patients with obstructive sleep apnea. Grote L, et al. **Z Kardiol** 1996;85 Suppl 3:112–4
Effect of nocturnal blood pressure measurement on sleep and blood pressure during sleep. Middeke M. **Z Kardiol** 1996; 85 Suppl 3:99–105 (14 ref.)
[Awakening, sleep and length of sleep in children] Woringer V. **Rev Med Suisse Romande** 1997 May;117(5):407–11 **(Fre)**
[Sleep--respiration--hemodynamics] Grote L. **Internist (Berl)** 1996 May;37(5):470–82 (76 ref.) **(Ger)**
[Effect of biological rhythm on sleep-wakefulness regulation] Zulley J. **Internist (Berl)** 1996 May;37(5):463–9 (12 ref.) **(Ger)**
[Sleep evaluation in infancy, early childhood and childhood] Scholle S, et al. **Klin Padiatr** 1996 Sep-Oct;208(5):285–9 (Eng. Abstr.) **(Ger)**
[Actigraphy: methodological limits for evaluation of sleep stages and sleep structure of healthy probands] Conradt R, et al. **Pneumologie** 1997 Aug;51 Suppl 3:721–4 (Eng. Abstr.) **(Ger)**
[Multiple sleep latency test in patients with obstructive snoring] Fietze I, et al. **Pneumologie** 1997 Aug;51 Suppl 3:706–11 (Eng. Abstr.) **(Ger)**
[Sleep fragmentation as the cause of daytime sleepiness and reduced performance] Bonnet MH. **Wien Med Wochenschr** 1996;146(13–14):332–4 (14 ref.) (Eng. Abstr.) **(Ger)**
[Effect of automatically titrated CPAP systems on sleep and respiration in sleep apnea syndrome] Hoster M, et al. **Wien Med Wochenschr** 1996;146(13–14):385–7 (Eng. Abstr.) **(Ger)**
[Nonlinear dynamics in regulation of heart rate in healthy infants] Mrowka R, et al. **Wien Med Wochenschr** 1996; 146(13–14):313–6 (Eng. Abstr.) **(Ger)**
[Stress and fatigue in long distance 2-man cockpit crew] Samel A, et al. **Wien Med Wochenschr** 1996; 146(13–14):272–6 (Eng. Abstr.) **(Ger)**
[Sleep and breathing disorders in patients with brain stem lesions] Schäfer D, et al. **Wien Med Wochenschr** 1996; 146(13–14):296–8 (Eng. Abstr.) **(Ger)**
[Computer-assisted analysis of sleep stages using the laboratory software package "Spike 2"] Schäfer T, et al. **Wien Med Wochenschr** 1996;146(13–14):377–8 (Eng. Abstr.) **(Ger)**
[The role of neuropeptides in normal and disordered sleep regulation] Steiger A, et al. **Wien Med Wochenschr** 1996; 146(13–14):291–3 (Eng. Abstr.) **(Ger)**
[Sleep structure in relation to respiration and heart rate in children in puberty] Unbehaun A, et al. **Wien Med Wochenschr** 1996;146(13–14):329–31 (Eng. Abstr.) **(Ger)**
[Physical performance and sleep in athletes] Zimmermann E. **Wien Med Wochenschr** 1996;146(13–14):280–2 (Eng. Abstr.) **(Ger)**
[Synchronization of human circadian rhythm with a social timer: role of motivation. I. Sleep-wakefulness rhythm] Sorokin AA, et al. **Fiziol Cheloveka** 1996 Nov-Dec; 22(6):47–54 **(Rus)**
[The identification of the human functional state during night sleep by the heart rhythm indices] Bashmakov MIu, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun;82(5–6):43–7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effects of pulsed high-frequency electromagnetic fields on human sleep. Mann K, et al. **Neuropsychobiology** 1996; 33(1):41–7

SLEEP TERROR DISORDER see **SLEEP DISORDERS**

SLEEPWALKING see **SOMNAMBULISM**

SLIM DISEASE see **HIV WASTING SYNDROME**

SLIME BACTERIA see **MYXOCOCCALES**

SLIME MOLDS see **MYXOMYCOTA**

SLIPPED DISK see **INTERVERTEBRAL DISK DISPLACEMENT**

SLOTHS

ANATOMY & HISTOLOGY

Megatherium, the stabber. Fariña RA, et al. **Proc R Soc Lond B Biol Sci** 1996 Dec 22;263(1377):1725–9

GENETICS

Gender determination of the Linne's two-toed sloth (Choloepus didactylus) using SRY amplified from hair. Murata K, et al. **J Vet Med Sci** 1996 Dec;58(12):1157–9

PHYSIOLOGY

Megatherium, the stabber. Fariña RA, et al. **Proc R Soc Lond B Biol Sci** 1996 Dec 22;263(1377):1725–9

SLOTTED ATTACHMENT, DENTAL see **DENTURE PRECISION ATTACHMENT**

SLOW ALPHA 2-MACROGLOBULINS see **ALPHA-MACROGLOBULINS**

SLOW REACTING SUBSTANCE OF ANAPHYLAXIS see **SRS-A**

SLOW-REACTING SUBSTANCES see **AUTACOIDS**

SLOW VIRUS DISEASES

see related
PRION DISEASES

DIAGNOSIS

[The Epstein-Barr virus in patients with infectious endocarditis] Zhiburt EB, et al. **Ter Arkh** 1997;69(4):42–3 (Eng. Abstr.) **(Rus)**

VIROLOGY

[Neurotropic viruses--classification, structure and characteristics] Hotta H. **Nippon Rinsho** 1997 Apr; 55(4):777–82 (7 ref.) (Eng. Abstr.) **(Jpn)**

SLUDGE see **SEWAGE**

SLUDGE, BILIARY see **BILE**

SLUMS see **POVERTY AREAS**

SLY SYNDROME see **MUCOPOLYSACCHARIDOSIS VII**

SMALL-AREA ANALYSIS

Small area variation in low birthweight: looking beyond socioeconomic predictors. Crosse EA, et al. **Can J Public Health** 1997 Jan-Feb;88(1):57–61
Association between ambient air concentrations of nitrogen dioxide and respiratory symptoms in children in Prague, Czech Republic. Preliminary results from the Czech part of the SAVIAH Study. Small Area Variation in Air Pollution and Health. Pikhart H, et al. **Cent Eur J Public Health** 1997 Jun;5(2):82–5
On the appropriateness of small-area analysis for cost containment [comment] Wennberg JE. **Health Aff (Millwood)** 1996 Winter;15(4):164–7. Comment on: Health Aff (Millwood) 1996 Winter;15(4):156–63.
Methods for investigating localized clustering of disease. The detection of small-area database anomalies. Newell JN, et al. **IARC Sci Publ** 1996;(135):87–100

SMALL-AREA ANALYSIS

Use of deprivation indices in small area studies [letter; comment] Lawson A. **J Epidemiol Community Health** 1996 Dec;50(6):689–90. Comment on: J Epidemiol Community Health 1995 Dec;49 Suppl 2;S15–9. Comment on: J Epidemiol Community Health 1995 Dec;49 Suppl 2:S20–7. Comment on: J Epidemiol Community Health 1995 Dec;49 Suppl 2;S57–64.

Urban small area variation in adolescents' health behaviour. Karvonen S, et al. **Soc Sci Med** 1997 Oct;45(7):1089–98

Spatial partitioning using multivariate cluster analysis and a contiguity algorithm. Carvalho MS, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1885–94

Protecting confidentiality in small population health and environmental statistics. Cox LH. **Stat Med** 1996 Sep 15–30; 15(17–18):1895–905

Power determination for geographically clustered data using generalized estimating equations. Hendricks SA, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1951–60

Toward congruence between theory and practice in small area analysis and local public health data. Kirby RS. **Stat Med** 1996 Sep 15–30;15(17–18):1859–66

Empirical Bayes estimation of small area prevalence of non-rare conditions. Martuzzi M, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1867–73

Use of density equalizing map projections (DEMP) in the analysis of childhood cancer in four California counties. Merrill DW, et al. **Stat Med** 1996 Sep 15–30; 15(17–18):1837–48

The spatial relationship between infant mortality and birth defect rates in a U.S. city. Rushton G, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1907–19

Use of Stone's method in studies of disease risk around point sources of environmental pollution. Shaddick G, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1927–34

Classification methods for denominators in small areas. Wittie PS, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1921–6

An empirical Bayes method for studying variation in knee replacement rates. Zhou XH, et al. **Stat Med** 1996 Sep 15–30;15(17–18):1875–84

[Methodological traps in small area studies of regional distribution of illnesses (letter)] Schlattman. **Gesundheitswesen** 1996 Jul;58(7):411–4 **(Ger)**

SMALL NUCLEAR RIBONUCLEOPROTEINS see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U1 see **RIBONUCLEOPROTEINS, SMALL, U1**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U2 see **RIBONUCLEOPROTEINS, SMALL, U2**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U3 see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U4 see **RIBONUCLEOPROTEINS, SMALL, U4–U6**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U4–U6 see **RIBONUCLEOPROTEINS, SMALL, U4–U6**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U5 see **RIBONUCLEOPROTEINS, SMALL, U5**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U6 see **RIBONUCLEOPROTEINS, SMALL, U4–U6**

SMALL NUCLEAR RIBONUCLEOPROTEINS, U7 see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

SMALL NUCLEAR RNA see **RNA, SMALL NUCLEAR**

SMALL ROUND-STRUCTURED VIRUSES see **NORWALK VIRUS**

SMALLPOX

DRUG THERAPY

[Study of the effectiveness of recombinant alpha2-interferon and its inducers in primates with orthopoxvirus infection] Loginova SIa, et al. **Vopr Virusol** 1997 Jul–Aug;42(4):186–8 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Oscillatory dynamics of smallpox and the impact of vaccination. Duncan CJ, et al. **J Theor Biol** 1996 Dec 21; 183(4):447–54

HISTORY

Smallpox: the triumph over the most terrible of the ministers of death. Barquet N, et al. **Ann Intern Med** 1997 Oct 15; 127(8 (Pt 1)):635–42

Jenner, romanticism and research [letter; comment] Ozsoylu S. **Arch Dis Child** 1997 Jan;76(1):81. Comment on: Arch Dis Child 1996 Jan;74(1):1–2.

Two hundred years on: Jenner and the discovery of vaccination. Brines R. **Immunol Today** 1996 May; 17(5):203–4

The scourge that was [editorial] **Indian J Physiol Pharmacol** 1996 Apr;40(2):107–8

The smallpox saga and the origin(s) of vaccination. Cook GC. **J R Soc Health** 1996 Aug;116(4):253–5

Smallpox and Queen Anne [letter] Keynes M. **J R Soc Med** 1997 Jan;90(1):60

Smallpox--Stockholm, Sweden, 1963 [classical article] **MMWR Morb Mortal Wkly Rep** 1996 Jun 28;45(25):538–45

The smallpox legacy: a history of pediatric immunizations. Gregorio L. **Pharos** 1996 Fall;59(4):7–13

An important bicentenary [editorial] Beaver MW. **Public Health** 1997 Jan;111(1):3–4

Edward Jenner's vaccine. Henderson DA. **Public Health Rep** 1997 Mar–Apr;112(2):116–21

Jenner Jabs James Phipps with live cowpox [editorial] Spier RE. **Vaccine** 1996 Dec;14(17–18):i

Answers to the right question. Foege WH. **West J Med** 1997 Apr;166(4):287–8

Edward Jenner, slayer of the "speckled monster". Empson J. **World Health Forum** 1996;17(4):351–3

[Smallpox: an historical review] Theves G. **Bull Soc Sci Med Grand Duche Luxemb** 1997;134(1):31–51 (48 ref.) (Eng. Abstr.) **(Ger)**

[The bicentenary of smallpox vaccination] Kumate J, et al. **Gac Med Mex** 1997 Mar–Apr;133(2):91–120 **(Spa)**

[Bicentennial of smallpox vaccine: experiences and lessons] Kumate-Rodríguez J. **Salud Publica Mex** 1996 Sep–Oct; 38(5):379–85 (Eng. Abstr.) **(Spa)**

[Edward Jenner, his prayer was granted after 175 years. He was not perplexed by cow-pox...] Iwarson S. **Lakartidningen** 1996 Dec 18;93(51–52):4755–7 **(Swe)**

IMMUNOLOGY

Immunology and the elderly: an historical perspective for future international action. Weksler ME. **Mech Ageing Dev** 1997 Feb;93(1–3):1–6

Genetically engineered poxviruses for recombinant gene expression, vaccination, and safety. Moss B. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11341–8 (180 ref.)

PATHOLOGY

[Viability of smallpox virus in scabs from patients] Belanov EF, et al. **Dokl Akad Nauk** 1997 Jun;354(6):832–4 **(Rus)**

PREVENTION & CONTROL

[Smallpox: an historical review] Theves G. **Bull Soc Sci Med Grand Duche Luxemb** 1997;134(1):31–51 (48 ref.) (Eng. Abstr.) **(Ger)**

[Is smallpox really eradicated? (editorial)] Michaeli D. **Harefuah** 1997 Mar 16;132(6):408 **(Heb)**

[Nonparenteral immunization methods against smallpox] Vorob'ev AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct; (5):117–21 (31 ref.) **(Rus)**

SMALLPOX VACCINE

ADMINISTRATION & DOSAGE

[Nonparenteral immunization methods against smallpox] Vorob'ev AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct; (5):117–21 (31 ref.) **(Rus)**

HISTORY

The Jenner bicentenary: the introduction and early distribution of smallpox vaccine. Baxby D. **FEMS Immunol Med Microbiol** 1996 Nov;16(1):1–10

The smallpox saga and the origin(s) of vaccination. Cook GC. **J R Soc Health** 1996 Aug;116(4):253–5

Little honoured in his own country: statues in recognition of Edward Jenner MD FRS. Empson J. **J R Soc Med** 1996 Sep;89(9):514–8

Edward Jenner and vaccination. Brown J. **J S C Med Assoc** 1996 Dec;92(12):512

The smallpox legacy: a history of pediatric immunizations. Gregorio L. **Pharos** 1996 Fall;59(4):7–13

Edward Jenner's vaccine. Henderson DA. **Public Health Rep** 1997 Mar–Apr;112(2):116–21

Edward Jenner, slayer of the "speckled monster". Empson J. **World Health Forum** 1996;17(4):351–3

[Jenner's cowpox vaccine in light of current vaccinology] Huygelen C. **Verh K Acad Geneeskd Belg** 1996; 58(5):479–536; discussion 537–8 (144 ref.) (Eng. Abstr.) **(Dut)**

[200th anniversary of the Jenner smallpox vaccine] Budai J. **Orv Hetil** 1996 Aug 25;137(34):1875–7 **(Hun)**

[Edward Jenner (1749–1823)--benefactor to mankind (100th anniversary of the first vaccination against smallpox)] Kempa ME. **Pol Merkuriusz Lek** 1996 Dec;1(6):433–4 **(Pol)**

[The bicentenary of smallpox vaccination] Kumate J, et al. **Gac Med Mex** 1997 Mar–Apr;133(2):91–120 **(Spa)**

[Bicentennial of smallpox vaccine: experiences and lessons] Kumate-Rodríguez J. **Salud Publica Mex** 1996 Sep–Oct; 38(5):379–85 (Eng. Abstr.) **(Spa)**

[Edward Jenner, his prayer was granted after 175 years. He was not perplexed by cow-pox...] Iwarson S. **Lakartidningen** 1996 Dec 18;93(51–52):4755–7 **(Swe)**

THERAPEUTIC USE

Increased survival of patients treated with a vaccinia melanoma oncolysate vaccine: second interim analysis of data from a phase III, multi-institutional trial. Wallack MK, et al. **Ann Surg** 1997 Aug;226(2):198–206

SMALLPOX VIRUS see **VARIOLA VIRUS**

SMEAR LAYER

Effect of different concentrations of EDTA on smear removal and collagen exposure in periodontitis-affected root surfaces. Blomlöf J, et al. **J Clin Periodontol** 1997 Aug; 24(8):534–7

Smear removal and collagen exposure after non-surgical root planing followed by etching with an EDTA gel preparation. Blomlöf JP, et al. **J Periodontol** 1996 Sep; 67(9):841–5

A pilot study of lactic acid as an enamel and dentin conditioner for dentin-bonding agent development. Ayad MF, et al. **J Prosthet Dent** 1996 Sep;76(3):254–9

Smear layer instability caused by hemostatic agents. Land MF, et al. **J Prosthet Dent** 1996 Nov;76(5):477–82

Demineralization of resected root-ends with methylene blue dye. Morgan LA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):74–8

Effect of dentin treatment on in vitro root tubule bacterial invasion. Perez F, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Oct;82(4):446–51

Effect of smear layer on coronal microleakage. Vassiliadis L, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Sep;82(3):315–20

SMELL

see related
ANOSMIA
ODORS

The role of congruency and pleasantness in odor-induced taste enhancement. Schifferstein HN, et al. **Acta Psychol (Amst)** 1996 Oct;94(1):87–105

Perceived odor, irritation, and health symptoms following short-term exposure to acetone. Dalton P, et al. **Am J Ind Med** 1997 May;31(5):558–69

Cross-modal correspondence between vision and olfaction: the color of smells. Gilbert AN, et al. **Am J Psychol** 1996 Fall;109(3):335–51

Odor intensity and color lightness are correlated sensory dimensions. Kemp SE, et al. **Am J Psychol** 1997 Spring; 110(1):35–46

Information coding in the vertebrate olfactory system. Buck LB. **Annu Rev Neurosci** 1996;19:517–44 (187 ref.)

Olfactory bedside test. A simple approach to identify temporo-orbitofrontal dysfunction. Savic I, et al. **Arch Neurol** 1997 Feb;54(2):162–8

Olfactory evoked potentials produced by electrical stimulation of the olfactory mucosa. Ishimaru T, et al. **Auris Nasus Larynx** 1996;23:98–104

Sexually dimorphic aspects of spontaneous activity in meadow voles (Microtus pennsylvanicus): effects of exposure to fox odor. Perrot-Sinal TS, et al. **Behav Neurosci** 1996 Oct;110(5):1126–32

An analysis of blocking in odorant mixtures: an increase but not a decrease in intensity of reinforcement produces unblocking. Smith BH. **Behav Neurosci** 1997 Feb; 111(1):57–69

Sex differences in olfactory identification and Wisconsin Card Sorting performance in schizophrenia: relationship to attention and verbal ability. Seidman LJ, et al. **Biol Psychiatry** 1997 Jul 15;42(2):104–15

Computational parallels between the biological olfactory pathway and its analogue 'the electronic nose': Part II. Sensor-based machine olfaction. Pearce TC. **Biosystems** 1997;41(2):69–90

Effects of visual and verbal interference tasks on olfactory memory: the role of task complexity. Annett JM, et al. **Br J Psychol** 1996 Aug;87 (Pt 3):447–60

A comparison of the encoding of content and order in olfactory memory and in memory for visually presented verbal materials. White TL, et al. **Br J Psychol** 1997 Aug; 88 (Pt 3):459–72

Synaptophysin-like immunoreactivity in the rat olfactory bulb during postnatal development and after restricted early olfactory experience. Johnson BA, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):24–30

JASTS XXX. 30th Japanese Symposium on Taste and Smell. Osaka, Japan, October 29–31, 1996. Abstracts. **Chem Senses** 1997 Jun;22(3):331–61

Olfactory quality: from descriptor profiles to similarities. Callegari P, et al. **Chem Senses** 1997 Feb;22(1):1–8

Odor perception and beliefs about risk. Dalton P. **Chem Senses** 1996 Aug;21(4):447–58

Effects of panel experience on olfactory memory performance: influence of stimuli familiarity and labeling ability of subjects. Lesschaeve I, et al. **Chem Senses** 1996 Dec;21(6):699–709

Some basic psychophysics of calcium salt solutions. Tordoff MG. **Chem Senses** 1996 Aug;21(4):417–24

Coding mechanisms in insect olfaction. Mustaparta H.

Ciba Found Symp 1996;200:149–57 (51 ref.)
The role of mosquito olfaction in oviposition site location and in the avoidance of unsuitable hosts. Pickett JA, et al. **Ciba Found Symp** 1996;200:109–19; discussion 119–23, 178–83 (42 ref.)
Taste and smell in familial dysautonomia. Gadoth N, et al. **Dev Med Child Neurol** 1997 Jun;39(6):393–7
Psychological effect of stereoscopic 3–D images with fragrances. Kawai T, et al. **Ergonomics** 1996 Nov; 39(11):1364–9
Atonal is a proneural gene for a subset of olfactory sense organs in Drosophila. Gupta BP, et al. **Genes Cells** 1997 Mar;2(3):225–33
Mimicking sensing mechanism of smell–oscillations of electrical potential difference across a bipolar liquid membrane induced by olfactory agents. Srivastava RC, et al. **Indian J Biochem Biophys** 1996 Jun;33(3):195–8
Olfactory acuity as a function of age and gender: a comparison of African and American samples. Barber CE. **Int J Aging Hum Dev** 1997;44(4):317–34
Use of olfactory cues in foraging by owl monkeys (Aotus nancymai) and capuchin monkeys (Cebus apella). Bolen RH, et al. **J Comp Psychol** 1997 Jun;111(2):152–8
Magnitude estimation of perceived odor intensity: empirical and theoretical properties. Baird JC, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb;22(1):244–55
Influence of training and experience on the perception of multicomponent odor mixtures. Livermore A, et al. **J Exp Psychol Hum Percept Perform** 1996 Apr;22(2):267–77
Perceptual and imaginary mixtures in chemosensation. Schifferstein HN. **J Exp Psychol Hum Percept Perform** 1997 Feb;23(1):278–88
Olfaction and the homing ability of pigeons in the southeastern United States. Bingman VP, et al. **J Exp Zool** 1996 Oct 15;276(3):186–92
A medieval controversy about odor. Kemp S. **J Hist Behav Sci** 1997 Summer;33(3):211–9
Olfactory dysfunction in Parkinson's disease. Hawkes CH, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):436–46
Assessment of olfaction in multiple sclerosis: evidence of dysfunction by olfactory evoked response and identification tests. Hawkes CH, et al. **J Neurol Neurosurg Psychiatry** 1997 Aug;63(2):145–51
Olfactory function in young adolescents with Down's syndrome. McKeown DA, et al. **J Neurol Neurosurg Psychiatry** 1996 Oct;61(4):412–4
Odorant–specific spatial patterns in mucosal activity predict perceptual differences among odorants. Kent PF, et al. **J Neurophysiol** 1995 Oct;74(4):1777–81
Brucellosis from sniffing bacteriological cultures [letter] [see comments] Grammont–Cupillard M, et al. **Lancet** 1996 Dec 21–28;348(9043):1733–4. Comment in: Lancet 1997 Mar 1;349(9052):651.
Exposure to Brucella in the laboratory [letter; comment] Zervos MJ, et al. **Lancet** 1997 Mar 1;349(9052):651. Comment on: Lancet 1996 Dec 21–28;348(9043):1733–4.
Olfaction in birds: differential embryonic expression of nine putative odorant receptor genes in the avian olfactory system. Nef S, et al. **Mech Dev** 1996 Mar;55(1):65–77
Olfactory dysfunction in multiple sclerosis [letter] [published erratum appears in N Engl J Med 1997 Apr 14;337(7):507] Doty RL, et al. **N Engl J Med** 1997 Jun 26;336(26):1918–9
Perinatal responsiveness to alcohol's chemosensory cues as a function of prenatal alcohol administration during gestational days 17–20 in the rat. Dominguez HD, et al. **Neurobiol Learn Mem** 1996 Mar;65(2):103–12
Update on monosodium glutamate: sensory properties and safety [editorial] Schiffman SS. **Nutrition** 1996 Jun; 12(6):451–2
Effect of verbal cues on recognition memory and pleasantness evaluation of unfamiliar odors. Ayabe–Kanamura S, et al. **Percept Mot Skills** 1997 Aug;85(1):275–85
Incidental memory of differently processed odors. Hvastja L, et al. **Percept Mot Skills** 1997 Aug;85(1):235–44
Odors as cues for the recall of words unrelated to odor. Morgan CL. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1227–34
Olfactory conditioning in the honey bee, Apis mellifera: effects of odor intensity. Bhagavan S, et al. **Physiol Behav** 1997 Jan;61(1):107–17
Semantic–free scaling of odor quality. Stevens DA, et al. **Physiol Behav** 1996 Jul;60(1):211–5
Surgical approach to midline skull base tumors with olfactory preservation. Fukuta K, et al. **Plast Reconstr Surg** 1997 Aug;100(2):318–25
On the scent of asthma. Kerrigan P. **Practitioner** 1997 Jan; 241(1570):48 (0 ref.)
Emotion, olfaction, and the human amygdala: amygdala activation during aversive olfactory stimulation. Zald DH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4119–24
Olfactory evoked potentials in Parkinson's disease, Alzheimer's disease and anosmic patients [published erratum appears in Psychiatry Clin Neurosci 1996 Aug;50(4):234] Sakuma K, et al. **Psychiatry Clin Neurosci** 1996 Feb;50(1):35–40
Relationship between odor perception and depression in the Japanese elderly. Satoh S, et al. **Psychiatry Clin Neurosci** 1996 Oct;50(5):271–5
Deviant olfactory experiences as indicators of risk for psychosis. Kwapil TR, et al. **Schizophr Bull** 1996; 22(2):371–82
Disorders of smell, taste, and food intake in a patient with a dorsomedial thalamic infarct. Rousseaux M, et al. **Stroke** 1996 Dec;27(12):2328–30
[Learning by mice of Y–maze using drinking reinforcement and aversive olfactory stimulus (beneficial effect of ginsenosides)] Chepurnov SA, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):253–7 **(Rus)**
[Reflex therapy in the treatment of cochleo–vestibular and olfactory disorders] Shibina LM, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):48–50 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Ontogenetic differences in the expression of olfactory–conditioned aversions resulting from a state of acute alcohol intoxication in the rat. Lopez MF, et al. **Alcohol** 1996 Sep–Oct;13(5):473–81
Mecamylamine–induced impairment of acquisition and retrieval of olfactory conditioning in the honeybee. Lozano VC, et al. **Behav Brain Res** 1996 Nov;81(1–2):215–22
Analyses of response patterns clarify lead effects in olfactory reversal and extradimensional shift tasks: assessment of inhibitory control, associative ability, and memory. Hilson JA, et al. **Behav Neurosci** 1997 Jun;111(3):532–42
Glutamate and vasopressin interact to control scent marking in Syrian hamsters (Mesocricetus auratus). Bamshad M, et al. **Brain Res** 1996 Aug 26;731(1–2):213–6
Differential effects of cocaine, alcohol, and nicotine dependence on olfactory evoked potentials. Bauer LO, et al. **Drug Alcohol Depend** 1996 Sep;42(1):21–6
Olfactory conditioning impairment following posttraining NMDA receptor blockade in neonatal rats. Weldon DA, et al. **Neurobiol Learn Mem** 1997 Jan;67(1):34–42
Disturbances of taste and smell induced by drugs. Ackerman BH, et al. **Pharmacotherapy** 1997 May–Jun;17(3):482–96 (126 ref.)
The discriminative stimulus effects of muscimol in rats. Grech DM, et al. **Psychopharmacology (Berl)** 1997 Feb; 129(4):339–47
Chloroform–induced olfactory mucosal degeneration and osseous ethmoid hyperplasia are not associated with olfactory deficits in Fischer 344 rats. Dorman DC, et al. **Toxicology** 1997 Sep 26;122(1–2):39–50

GENETICS

Visualizing an olfactory sensory map. Mombaerts P, et al. **Cell** 1996 Nov 15;87(4):675–86
Odor perception phenotypes: multiple, specific hyperosmias to musks. Gilbert AN, et al. **Chem Senses** 1996 Aug; 21(4):411–6
Genetic and molecular studies of olfaction in Drosophila. Hekmat–Scafe DS, et al. **Ciba Found Symp** 1996; 200:285–96; discussion 296–301 (54 ref.)
Drosophila melanogaster NADPH–cytochrome P450 oxidoreductase: pronounced expression in antennae may be related to odorant clearance. Hovemann BT, et al. **Gene** 1997 Apr 21;189(2):213–9
Mutation of the central nervous system neuroblast proliferation repressor ana leads to defects in larval olfactory behavior. Park Y, et al. **J Neurobiol** 1997 Aug; 33(2):199–211
Olfactory learning deficits in mutants for leonardo, a Drosophila gene encoding a 14–3–3 protein. Skoulakis EM, et al. **Neuron** 1996 Nov;17(5):931–44
The influence of dietary and genetic cues on the ability of rats to discriminate between the urinary odors of MHC–congenic mice. Brown RE, et al. **Physiol Behav** 1996 Aug;60(2):365–72
Hyposmia for butanol and vanillin in mutant staggerer male mice. Deiss V, et al. **Physiol Behav** 1997 Feb;61(2):209–13
Odor of specific alcohol solutions selectively alters locomotor activity of alcohol–drinking P rats. Myers RD, et al. **Physiol Behav** 1997 Jan;61(1):71–5
Olfaction: transient expression of a putative odorant receptor in the avian notochord. Nef S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4766–71
Olfaction in Drosophila: from odor to behavior. Carlson JR. **Trends Genet** 1996 May;12(5):175–80 (49 ref.)

PHYSIOLOGY

Olfaction in bird dogs during hunting. Steen JB, et al. **Acta Physiol Scand** 1996 May;157(1):115–9
Olfactory loss in Usher syndrome: another sensory deficit? [letter] Zrada SE, et al. **Am J Med Genet** 1996 Sep 6; 64(4):602–3
Olfactory identification deficits in schizophrenia: correlation with duration of illness. Moberg PJ, et al. **Am J Psychiatry** 1997 Jul;154(7):1016–8
Mechanisms of olfactory discrimination: converging evidence for common principles across phyla. Hildebrand JG, et al. **Annu Rev Neurosci** 1997;20:595–631 (237 ref.)
Olfactory dysfunction in patients with head trauma. Doty RL, et al. **Arch Neurol** 1997 Sep;54(9):1131–40
Olfactory dysfunction for pyridine and dementia progression in Alzheimer disease. Nordin S, et al. **Arch Neurol** 1997 Aug;54(8):993–8
Opposite effects depending on learning and memory demands in dorsomedial prefrontal cortex lesioned rats performing an olfactory task. Chaillan FA, et al. **Behav Brain Res** 1997 Jan;82(2):203–12
Development of vicarious trial–and–error behavior in odor discrimination learning in the rat: relation to hippocampal function? Hu D, et al. **Behav Brain Res** 1997 Jun; 86(1):67–70
Modulation of inhibition in a model of olfactory bulb reduces overlap in the neural representation of olfactory stimuli. Linster C, et al. **Behav Brain Res** 1997 Mar;84(1–2):117–27
Lesions in the magnocellular preoptic nucleus decrease olfactory investigation in rats. Paolini AG, et al. **Behav Brain Res** 1996 Nov;81(1–2):223–31
Vomeronasal system involvement in response to conspecific odors in adult male opossums, Monodelphis domestica. Shapiro LS, et al. **Behav Brain Res** 1996 May; 77(1–2):101–13
Olfaction, GABAergic neurotransmission in the olfactory bulb, and intermale aggression in mice: modulation by steroids. Guillot PV, et al. **Behav Genet** 1996 Sep; 26(5):497–504 (65 ref.)
Brainstem lesions and gustatory function: II. The role of the nucleus of the solitary tract in Na+ appetite, conditioned taste aversion, and conditioned odor aversion in rats. Grigson PS, et al. **Behav Neurosci** 1997 Feb;111(1):169–79
5–HT2 receptor involvement in conditioned olfactory learning in the neonate rat pup. McLean JH, et al. **Behav Neurosci** 1996 Dec;110(6):1426–34
Cortico–hippocampal representations in simultaneous odor discrimination: a computational interpretation of Eichenbaum, Mathews, and Cohen (1989). Myers CE, et al. **Behav Neurosci** 1996 Aug;110(4):685–706
Flavor and the frontal cortex. Schul R, et al. **Behav Neurosci** 1996 Aug;110(4):760–5
Remembrance of odors past: enhancement by central facilitation of AMPA receptors. Stäubli U, et al. **Behav Neurosci** 1996 Oct;110(5):1067–73
Bulbocortical interplay in olfactory information processing via synchronous oscillations. Fukai T. **Biol Cybern** 1996 Apr;74(4):309–17
Olfactory information processing during the course of the menstrual cycle. Pause BM, et al. **Biol Psychol** 1996 Sep 27;44(1):31–54
Roles of maternal vision and olfaction in suckling–mediated inhibition of luteinizing hormone secretion, expression of maternal selectivity, and lactational performance of beef cows. Griffith MK, et al. **Biol Reprod** 1996 Apr;54(4):761–8
High–gain, low–noise amplification in olfactory transduction. Kleene SJ. **Biophys J** 1997 Aug;73(2):1110–7
Computational parallels between the biological olfactory pathway and its analogue 'the electronic nose': Part I. Biological olfaction. Pearce TC. **Biosystems** 1997; 41(1):43–67
Coding of odour intensity in a sensory neuron. Vermeulen A, et al. **Biosystems** 1997;40(1–2):203–10
Sensitivity and behavioral responses to the pheromone androstenone are not mediated by the vomeronasal organ in domestic pigs. Dorries KM, et al. **Brain Behav Evol** 1997; 49(1):53–62
A possible protocognitive role for odor in human infant development. Van Toller S, et al. **Brain Cogn** 1995 Dec; 29(3):275–93 (98 ref.)
Recovery of olfactory function in thirteen–day–old rats after olfactory bulb transplantation but not after olfactory bulb ablation. Evers SM, et al. **Brain Res** 1996 Jun 10; 724(1):129–35
Peripherally obtained electrophysiological responses to olfactory stimulation in man: electro–olfactograms exhibit a smaller degree of desensitization compared with subjective intensity estimates. Hummel T, et al. **Brain Res** 1996 Apr 22;717(1–2):160–4
Differential labelling of primary olfactory system subcomponents by SBA (lectin) and NADPH–d histochemistry in the frog Pipa. Meyer DL, et al. **Brain Res** 1997 Jul 11;762(1–2):275–80
Odour–induced c–fos expression in the rat olfactory bulb: involvement of centrifugal afferents. Sallaz M, et al. **Brain Res** 1996 May 20;721(1–2):66–75
Continuous neurogenesis in the olfactory brain of adult shore crabs, Carcinus maenas. Schmidt M. **Brain Res** 1997 Jul 11;762(1–2):131–43
Detection and discrimination of propionic acid after removal of its 2–DG identified major focus in the olfactory bulb: a psychophysical analysis. Slotnick BM, et al. **Brain Res** 1997 Jul 11;762(1–2):89–96
Olfactory memory and maternal behaviour–induced changes in c–fos and zif/268 mRNA expression in the sheep brain. Da Costa AP, et al. **Brain Res Mol Brain Res** 1997 Jun; 46(1–2):63–76
Olfactory receptors, vomeronasal receptors, and the organization of olfactory information. Bargmann CI. **Cell** 1997 Aug 22;90(4):585–7 (17 ref.)
High sulfotransferase activity for phenolic aromatic odorants present in the mouse olfactory organ. Tamura H, et al. **Chem Biol Interact** 1997 Apr 18;104(1):1–9
Cognitive processes in odorant mixture assessment. Booth DA. **Chem Senses** 1995 Dec;20(6):639–43 (19 ref.)
Comparison of models of odor interaction. Cain WS, et al. **Chem Senses** 1995 Dec;20(6):625–37
Electrophysiological evidence for the broad distribution of specific odorant receptor molecules across the olfactory organ of the channel catfish. Chang Q, et al. **Chem Senses** 1996 Oct;21(5):519–27
Pheromones as tools for olfactory research.Introduction. Christensen TA, et al. **Chem Senses** 1996 Apr;21(2):241–3
Rapid classical conditioning of odor response in a physiological model for olfactory research, the tiger

salamander. Dorries KM, et al. **Chem Senses** 1997 Jun; 22(3):277–86

A study of the test–retest reliability of ten olfactory tests. Doty RL, et al. **Chem Senses** 1995 Dec;20(6):645–56

Evaluating the 'Labeled Magnitude Scale' for measuring sensations of taste and smell. Green BG, et al. **Chem Senses** 1996 Jun;21(3):323–34

Effect of nasal dilators on perceived odor intensity. Hornung DE, et al. **Chem Senses** 1997 Apr;22(2):177–80

'Sniffin' sticks': olfactory performance assessed by the combined testing of odor identification, odor discrimination and olfactory threshold. Hummel T, et al. **Chem Senses** 1997 Feb;22(1):39–52

Olfactory evoked potential produced by electrical stimulation of the human olfactory mucosa. Ishimaru T, et al. **Chem Senses** 1997 Feb;22(1):77–81

Failure to demonstrate systematic changes in olfactory perception in the course of pregnancy: a longitudinal study. Laska M, et al. **Chem Senses** 1996 Oct;21(5):567–71

Olfactory functions in Parkinson's disease and Alzheimer's disease. Lehrner JP, et al. **Chem Senses** 1997 Feb; 22(1):105–10

Central processing of odor concentration is a temporal phenomenon as revealed by chemosensory event–related potentials (CSERP). Pause BM, et al. **Chem Senses** 1997 Feb;22(1):9–26

Orthonasal and retronasal odorant identification based upon vapor phase input from common substances. Pierce J, et al. **Chem Senses** 1996 Oct;21(5):529–43

The role of perceptual and structural similarity in cross–adaptation. Pierce JD Jr, et al. **Chem Senses** 1996 Apr;21(2):223–37

Is short–term odour recognition predictable from odour profile? Royet JP, et al. **Chem Senses** 1996 Oct;21(5):553–66

An empirical test of Olsson's interaction model using mixtures of tastants. Schifferstein HN, et al. **Chem Senses** 1996 Jun; 21(3):283–91

Biological responsiveness to pheromones provides fundamental and unique insight into olfactory function. Sorensen PW. **Chem Senses** 1996 Apr;21(2):245–56 (86 ref.)

Pemenone and androstenone do not cross–adapt reciprocally. Stevens DA, et al. **Chem Senses** 1996 Dec;21(6):711–7

A spectroscopic mechanism for primary olfactory reception. Turin L. **Chem Senses** 1996 Dec;21(6):773–91

Le Nez du Vin––a quick test of olfaction. McMahon C, et al. **Clin Otolaryngol** 1996 Jun;21(3):278–80

Validation of the combined olfactory test. Robson AK, et al. **Clin Otolaryngol** 1996 Dec;21(6):512–8

Information coding in the mammalian olfactory system. Buck LB. **Cold Spring Harb Symp Quant Biol** 1996;61:147–55 (57 ref.)

Olfactory recognition and discrimination in Caenorhabditis elegans. Chou JH, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:157–64 (23 ref.)

The molecular biology of olfactory perception. Mombaerts P, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:135–45 (41 ref.)

Genetic approaches to mammalian olfaction. Reed RR. **Cold Spring Harb Symp Quant Biol** 1996;61:165–72 (53 ref.)

Food selection by the domestic cat, an obligate carnivore. Bradshaw JW, et al. **Comp Biochem Physiol A Physiol** 1996 Jul;114(3):205–9

Ca2+ and Cl(–)–dependence of the turtle olfactory response to odorants and forskolin. Kashiwayanagi M, et al. **Comp Biochem Physiol A Physiol** 1996 Sep;115(1):43–52

Olfactory processing: maps, time and codes. Laurent G. **Curr Opin Neurobiol** 1997 Aug;7(4):547–53 (55 ref.)

Targeting olfaction. Mombaerts P. **Curr Opin Neurobiol** 1996 Aug;6(4):481–6 (25 ref.)

Olfactory mechanisms in Drosophila melanogaster. Smith DP. **Curr Opin Neurobiol** 1996 Aug;6(4):500–5 (52 ref.)

Development of the Drosophila olfactory sense organs utilizes cell–cell interactions as well as lineage. Reddy GV, et al. **Development** 1997 Feb;124(3):703–12

Olfactory event–related potentials: older males demonstrate the greatest deficits. Morgan CD, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jul;104(4):351–8

Chemosensory–event–related potentials to olfactory stimulations. Wada M. **Eur Arch Otorhinolaryngol Suppl** 1997;1:S79–81

Variation in nutrient intake with dental status, age and odour perception. Griep MI, et al. **Eur J Clin Nutr** 1996 Dec; 50(12):816–25

Odor representation and discrimination in mitral/tufted cells of the rat olfactory bulb. Motokizawa F. **Exp Brain Res** 1996 Nov;112(1):24–34

Glutamine synthetase is a glial–specific marker in the olfactory regions of the lobster (Panulirus argus) nervous system. Linser PJ, et al. **Glia** 1997 Aug;20(4):275–83

Combined olfactory contact with the parent colony and direct contact with nonbreeding animals does not maintain suppression of ovulation in female naked mole–rats (Heterocephalus glaber). Smith TE, et al. **Horm Behav** 1997 Jun;31(3):277–88

Olfactory social memory in rats is facilitated by histamine. Argyriou A, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S39–40

The influence of cognitive bias on the perceived odor, irritation and health symptoms from chemical exposure. Dalton P, et al. **Int Arch Occup Environ Health** 1997; 69(6):407–17

Regulation of c–Fos mRNA and fos protein expression in olfactory bulbs from unilaterally odor–deprived adult mice. Jin BK, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):971–82

The aging olfactory epithelium: neurogenesis, response to damage, and odorant–induced activity. Loo AT, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):881–900

Activity blockade does not prevent the construction of olfactory glomeruli in the moth Manduca sexta. Oland LA, et al. **Int J Dev Neurosci** 1996 Nov;14(7–8):983–96

Fetal alcohol syndrome: early olfactory learning as a model system to study neurobehavioral deficits. Kirstein CL, et al. **Int J Neurosci** 1997 Jan;89(1–2):119–32 (128 ref.)

Olfactory function in Huntington's disease patients and at–risk offspring. Moberg PJ, et al. **Int J Neurosci** 1997 Jan;89(1–2):133–9

The effects of active and passive stimulation on chemosensory event–related potentials. Lorig TS, et al. **Int J Psychophysiol** 1996 Oct;23(3):199–205

Evaluation of olfactory function by topographic EEG analysis in patients with Parkinson's disease. Gori S, et al. **Ital J Neurol Sci** 1995 Dec;16(9):595–601

Olfactory dysfunction in type I pseudohypoparathyroidism: dissociation from Gs alpha protein deficiency. Doty RL, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):247–50

Sublingual plicae (anterior processes) are not necessary for garter snake vomeronasal function. Halpern M, et al. **J Comp Psychol** 1997 Sep;111(3):302–6

The olfactory memory of the honeybee Apis mellifera. III. Bilateral sensory input is necessary for induction and expression of olfactory blocking. Thorn RS, et al. **J Exp Biol** 1997 Jul;200 (Pt 14):2045–55

Transfer of voltage independence from a rat olfactory channel to the Drosophila ether–à–go–go K+ channel. Tang CY, et al. **J Gen Physiol** 1997 Mar;109(3):301–11

Olfaction: what's new in the nose. Firestein S, et al. **J Neurobiol** 1996 May;30(1):1–2

Neuroblast ablation in Drosophila P[GAL4] lines reveals origins of olfactory interneurons. Stocker RF, et al. **J Neurobiol** 1997 May;32(5):443–56

Urine–derived compound evokes membrane responses in mouse vomeronasal receptor neurons. Moss RL, et al. **J Neurophysiol** 1997 May;77(5):2856–62

Selectivity and response characteristics of human olfactory neurons. Rawson NE, et al. **J Neurophysiol** 1997 Mar; 77(3):1606–13

Orbitofrontal cortex neurons: role in olfactory and visual association learning. Rolls ET, et al. **J Neurophysiol** 1996 May;75(5):1970–81

Representation of olfactory information in the primate orbitofrontal cortex. Rolls ET, et al. **J Neurophysiol** 1996 May;75(5):1982–96

Relation of chemical structure to spatial distribution of sensory responses in rat olfactory epithelium. Scott JW, et al. **J Neurophysiol** 1996 May;75(5):2036–49

Coexpression of two odorant–binding protein homologs in Drosophila: implications for olfactory coding. Hekmat–Scafe DS, et al. **J Neurosci** 1997 Mar 1; 17(5):1616–24

The characterization of the Olf–1/EBF–like HLH transcription factor family: implications in olfactory gene regulation and neuronal development. Wang SS, et al. **J Neurosci** 1997 Jun 1;17(11):4149–58

Vital staining from dye–coated microprobes identifies new olfactory interneurons for optical and electrical recording. Gelperin A, et al. **J Neurosci Methods** 1997 Mar; 72(1):97–108

Modulation of synaptic plasticity in the hippocampus and piriform cortex by physiologically meaningful olfactory cues in an olfactory association task. Chaillan FA, et al. **J Physiol Paris** 1996;90(5–6):343–7

Odor discrimination of 'cAMP–' and 'IP3–increasing' odorants at high temperature and at high NaCl concentration in turtle olfactory system. Kashiwayanagi M, et al. **J Physiol Paris** 1997 Feb;91(1):1–6

Olfactory recognition memory. Keverne EB, et al. **J Physiol Paris** 1996;90(5–6):399–401 (13 ref.)

Behavioral, neural and cellular components underlying olfactory learning in the honeybee. Menzel R, et al. **J Physiol Paris** 1996;90(5–6):395–8 (36 ref.)

Olfactory identification ability in patients with panic disorder. Kopala LC, et al. **J Psychiatry Neurosci** 1996 Nov; 21(5):340–2

A numerical model of nasal odorant transport for the analysis of human olfaction. Keyhani K, et al. **J Theor Biol** 1997 Jun 7;186(3):279–301

Age–related differences in episodic odour recognition: the role of access to specific odour names. Larsson M, et al. **Memory** 1997 May;5(3):361–78

Taste and smell. Neglected senses that contribute to the malnutrition of AIDS. Heald AE, et al. **N C Med J** 1997 Mar–Apr;58(2):100–4

The three–dimensional structure of bovine odorant binding protein and its mechanism of odor recognition [see comments] Bianchet MA, et al. **Nat Struct Biol** 1996 Nov; 3(11):934–9. Comment in: Nat Struct Biol 1996 Nov;3(11):902–6.

From the nose to the brain [news] Bargmann C. **Nature** 1996 Dec 12;384(6609):512–3

Olfactory adaptation. The nose leads the eye [news; comment] Gold GH, et al. **Nature** 1997 Feb 20; 385(6618):677, 679. Comment on: Nature 1997 Feb 20;385(6618):725–9.

Formation of olfactory memories mediated by nitric oxide. Kendrick KM, et al. **Nature** 1997 Aug 14;388(6643):670–4

Mechanism of odorant adaptation in the olfactory receptor cell [see comments] Kurahashi T, et al. **Nature** 1997 Feb 20;385(6618):725–9. Comment in: Nature 1997 Feb 20;385(6618):677, 679.

Odour encoding by temporal sequences of firing in oscillating neural assemblies [see comments] Wehr M, et al. **Nature** 1996 Nov 14;384(6605):162–6. Comment in: Nature 1996 Novc 14;384(6605):115, 117.

Olfactory identification in elderly schizophrenia and Alzheimer's disease. Moberg PJ, et al. **Neurobiol Aging** 1997 Mar–Apr;18(2):163–7

Combinatorial and chemotopic odorant coding in the zebrafish olfactory bulb visualized by optical imaging. Friedrich RW, et al. **Neuron** 1997 May;18(5):737–52

5–HT4 receptors improve social olfactory memory in the rat. Letty S, et al. **Neuropharmacology** 1997 Apr–May; 36(4–5):681–7

Identification of cytoskeletal proteins in the antennae of the silkmoths Antheraea polyphemus and A. pernyi. Kumar GL, et al. **Neuroreport** 1996 Aug 12;7(12):1985–9

The effects of age on olfactory learning and memory in the honey bee Apis mellifera. Ray S, et al. **Neuroreport** 1997 Feb 10;8(3):789–93

Odorants activate the human superior temporal sulcus. Kettenmann B, et al. **Neurosci Lett** 1996 Jan 19; 203(2):143–5

Topographic projections from the periamygdaloid cortex to select subregions of the lateral nucleus of the amygdala in the rat. Savander V, et al. **Neurosci Lett** 1996 Jun 28; 211(3):167–70

Odorant evoked magnetic fields in humans. Sakuma K, et al. **Neurosci Res** 1997 Feb;27(2):115–22

Fos immunohistochemical determination of brainstem neuronal activation in the muskrat after nasal stimulation. McCulloch PF, et al. **Neuroscience** 1997 Jun;78(3):913–25

Formation of an olfactory recognition memory in mice: reassessment of the role of nitric oxide. Okere CO, et al. **Neuroscience** 1996 Mar;71(2):349–54

Molecular mechanisms of olfactory processing in the mammalian olfactory epithelium. Hatt H. **ORL J Otorhinolaryngol Relat Spec** 1996 Jul–Aug; 58(4):183–94 (56 ref.)

Olfactory threshold after nasal allergen challenge. Hinriksdóttir I, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan–Feb; 59(1):36–8

Life–span development of odor identification, learning, and olfactory sensitivity. Cain WS, et al. **Perception** 1995; 24(12):1457–72

Molecular basis of signal recognition in olfaction. Breer H. **Pflugers Arch** 1996;431(6 Suppl 2):R311–2 (5 ref.)

Learned olfactory discrimination of amino acids and their binary mixtures in bullhead catfish (Ameiurus nebulosus). Valentinčič T, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R313–4

Precipitated morphine withdrawal induces a conditioned aversion in the preweaning rat. Barr GA, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):779–83

Sexual differentiation of odor and partner preference in the rat. Bakker J, et al. **Physiol Behav** 1996 Aug;60(2):489–94

Responses to odorants by the domestic chick. Burne TH, et al. **Physiol Behav** 1996 Dec;60(6):1441–7

Generalization among related complex odorant mixtures and their components: analysis of olfactory perception in the spiny lobster. Derby CD, et al. **Physiol Behav** 1996 Jul; 60(1):87–95

Deafferentation of the olfactory bulbs of male rats reduces erection to remote cues from females. Edwards DA, et al. **Physiol Behav** 1997 Jul;62(1):145–9

Hypothalamic and olfactory control of sexual behavior and partner preference in male rats. Edwards DA, et al. **Physiol Behav** 1996 Nov;60(5):1347–54

Seasonal changes in urinary odors and in responses to them by blind subterranean mole rats. Heth G, et al. **Physiol Behav** 1996 Sep;60(3):963–8

Influence of olfactory stimulation on nociceptive behavior in mice. Jahangeer AC, et al. **Physiol Behav** 1997 Aug; 62(2):359–66

Elemental and configural learning and the perception of odorant mixtures by the spiny lobster Panulirus argus. Livermore A, et al. **Physiol Behav** 1997 Jul;62(1):169–74

The role of olfaction in oil preference in the chicken. Mabayo RT, et al. **Physiol Behav** 1996 Jun;59(6):1185–8

Early olfactory experience, novelty, and choice of sexual partner by male rats. Moore CL, et al. **Physiol Behav** 1996 Nov;60(5):1361–7

Olfactory sensory–specific satiety in humans. Rolls ET, et al. **Physiol Behav** 1997 Mar;61(3):461–73

Appetitive sexual behavior in male rats: 1. The role of olfaction in level–changing behavior. Van Furth WR, et al. **Physiol Behav** 1996 Sep;60(3):999–1005

An ear for quality: differential associative characteristics of taste–potentiated auditory and odor avoidance. von Kluge S, et al. **Physiol Behav** 1996 Aug;60(2):331–9

Castration affects the emission of an ultrasonic vocalization in a nocturnal primate, the grey mouse lemur (Microcebus murinus). Zimmermann E. **Physiol Behav** 1996 Sep; 60(3):693–7

Olfaction and brainstem circuits of reproductive behavior in the rat. Shipley MT, et al. **Prog Brain Res** 1996; 107:355–77 (188 ref.)

Neural mechanisms of mammalian olfactory learning. Brennan PA, et al. **Prog Neurobiol** 1997 Mar;51(4):457–81 (160 ref.)

Scopolamine impairs the ability of parturient ewes to learn to recognise their lambs. Lévy F, et al. **Psychopharmacology (Berl)** 1997 Jan;129(1):85–90

Intranasal chemoreception in patients with multiple chemical sensitivities: a double-blind investigation. Hummel T, et al. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 2):S79–86

"Sniffin' sticks": screening of olfactory performance. Kobal G, et al. **Rhinology** 1996 Dec;34(4):222–6

Mutant mice and worms help solve mysteries of olfaction [news] Barinaga M. **Science** 1996 Oct 25;274(5287):500–1

[Odor perception in relation to age, general health, nutritional status, and dental status] Griep MI, et al. **Tijdschr Gerontol Geriatr** 1997 Feb;28(1):11–7 (Eng. Abstr.) **(Dut)**

[Clinical olfaction tests] Ishimaru T, et al. **Nippon Rinsho** 1997 Mar;55 Suppl 1:484–6 (8 ref.) **(Jpn)**

[An olfactory memory formed in the vomeronasal system] Kaba H. **Tanpakushitsu Kakusan Koso** 1996 Nov; 41(14):2077–83 (29 ref.) **(Jpn)**

[A role of early olfactory experience in the individual recognition in gray rats (Rattus norvegicus)] Sokolov VE, et al. **Dokl Akad Nauk** 1997 Jul;355(1):140–2 **(Rus)**

[Food smell as a problem in trophology] Ugolev DA, et al. **Fiziol Zh Im I M Sechenova** 1996 Mar;82(3):66–73 (33 ref.) **(Rus)**

[Objective assessment of the olfactory analyzer function based on recording of olfacto-vegetative and olfacto-vestibular reactions] Ovchinnikov IuM, et al. **Vestn Otorinolaringol** 1996 May–Jun;(3):19–20 (Eng. Abstr.) **(Rus)**

[An aversive olfactory signal during the Y-maze learning of mice selected for greater or lesser brain weight] Kholmanskikh SS, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):527–32 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Head-portion exposure to low-level X-rays reduces isolation-induced aggression of mouse, and involvement of the olfactory carnosine in modulation of the radiation effects. Miyachi Y, et al. **Behav Brain Res** 1996 Nov; 81(1–2):135–40

Neonatal gamma-ray irradiation impairs learning and memory of an olfactory associative task in adult rats. Chaillan FA, et al. **Eur J Neurosci** 1997 May;9(5):884–94

SMILING

Neurological picture. Mimetic smile. Husain AM. **J Neurol Neurosurg Psychiatry** 1997 Aug;63(2):144

Social smile and occult bacteremia. Bass JW, et al. **Pediatr Infect Dis J** 1996 Jun;15(6):541

Increasing social smiles of young children with disabilities. Calhoun ML, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1265–6

Reading a smiling face: messages conveyed by various forms of smiling. Otta E, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1111–21

[Studies of the system analysis of social motivation, IV: The varieties of smiling and the problem of motivational adjustment] Bischof N. **Z Psychol Z Angew Psychol** 1996; 204(1):1–40 (Eng. Abstr.) **(Ger)**

[Art and anatomy of the smile] Rabell J, et al. **Gac Med Mex** 1996 Jan–Feb;132(1):77–81 (Eng. Abstr.) **(Spa)**

SMITH-LEMLI-OPITZ SYNDROME

A new face for an old syndrome [editorial] Kelley RI. **Am J Med Genet** 1997 Jan 31;68(3):251–6

[Smith Lemli-Opitz syndrome] Ieshima A. **Ryoikibetsu Shokogun Shirizu** 1996;(15):302–4 (16 ref.) **(Jpn)**

BLOOD

Clinical and biochemical screening for Smith-Lemli-Opitz syndrome. Italian SLOS Collaborative Group. Guzzetta V, et al. **Acta Paediatr** 1996 Aug;85(8):937–42

Pitfalls in measuring plasma cholesterol in the Smith-Lemli-Opitz syndrome. Jira PE, et al. **Clin Chem** 1997 Jan;43(1):129–33

Cholesta-5,7,9(11)-trien-3 beta-ol found in plasma of patients with Smith-Lemli-Opitz syndrome indicates formation of sterol hydroperoxide. De Fabiani E, et al. **J Lipid Res** 1996 Nov;37(11):2280–7

Changes in serum sterols of rats treated with 7-dehydrocholesterol-delta 7-reductase inhibitors: comparison to levels in humans with Smith-Lemli-Opitz syndrome. Wolf C, et al. **J Lipid Res** 1996 Jun; 37(6):1325–33

Maternal serum marker levels in two pregnancies affected with Smith-Lemli-Opitz syndrome [letter] Canick JA, et al. **Prenat Diagn** 1997 Feb;17(2):187–9

CEREBROSPINAL FLUID

Highly increased CSF concentrations of cholesterol precursors in Smith-Lemli-Opitz syndrome. van Rooij A, et al. **J Inherit Metab Dis** 1997 Aug;20(4):578–80

CLASSIFICATION

Abnormal cholesterol biosynthesis in the Smith-Lemli-Opitz and the lethal acrodysgenital syndromes. Cormier-Daire V, et al. **Eur J Pediatr** 1996 Aug;155(8):656–9

DIAGNOSIS

Clinical and biochemical screening for Smith-Lemli-Opitz syndrome. Italian SLOS Collaborative Group. Guzzetta V, et al. **Acta Paediatr** 1996 Aug;85(8):937–42

Sterol concentrations in cultured Smith-Lemli-Opitz syndrome skin fibroblasts: diagnosis of a biochemically atypical case of the syndrome. Honda A, et al. **Am J Med Genet** 1997 Jan 31;68(3):282–7

Direct analysis of filter paper blood specimens for identification of Smith-Lemli-Opitz syndrome using time-of-flight secondary ion mass spectrometry. Zimmerman PA, et al. **Am J Med Genet** 1997 Jan 31; 68(3):300–4

MRI in Smith-Lemli-Opitz syndrome type I. Trasimeni G, et al. **Childs Nerv Syst** 1997 Jan;13(1):47–9

Measurement of 3 beta-hydroxysteroid delta 7-reductase activity in cultured skin fibroblasts utilizing ergosterol as a substrate: a new method for the diagnosis of the Smith-Lemli-Opitz syndrome. Honda M, et al. **J Lipid Res** 1996 Nov;37(11):2433–8

Maternal serum marker levels in two pregnancies affected with Smith-Lemli-Opitz syndrome [letter] Canick JA, et al. **Prenat Diagn** 1997 Feb;17(2):187–9

First-trimester diagnosis of Smith-Lemli-Opitz syndrome. Sharp P, et al. **Prenat Diagn** 1997 Apr;17(4):355–61

DRUG THERAPY

Smith-Lemli-Opitz syndrome produced in rats with AY 9944 treated by intravenous injection of lipoprotein cholesterol. Chambers CM, et al. **Am J Med Genet** 1997 Jan 31; 68(3):322–7

Clinical effects of cholesterol supplementation in six patients with the Smith-Lemli-Opitz syndrome (SLOS). Elias ER, et al. **Am J Med Genet** 1997 Jan 31;68(3):305–10

Treatment of Smith-Lemli-Opitz syndrome: results of a multicenter trial. Irons M, et al. **Am J Med Genet** 1997 Jan 31;68(3):311–4

Cholesterol and bile acid replacement therapy in children and adults with Smith-Lemli-Opitz (SLO/RSH) syndrome. Nwokoro NA, et al. **Am J Med Genet** 1997 Jan 31;68(3):315–21

ENZYMOLOGY

Abnormal cholesterol biosynthesis in sitosterolaemia and the Smith-Lemli-Opitz syndrome. Salen G, et al. **J Inherit Metab Dis** 1996;19(4):391–400 (25 ref.)

Sex reversal in an infant with Smith-Lemli-Opitz syndrome, type II: evidence for 5-alpha reductase deficiency. Salbert BA, et al. **J Pediatr Endocrinol Metab** 1996 Jan–Feb; 9(1):67–9

Rapid identification of Smith-Lemli-Opitz syndrome homozygotes and heterozygotes (carriers) by measurement of deficient 7-dehydrocholesterol-delta 7-reductase activity in fibroblasts. Shefer S, et al. **Metabolism** 1997 Jul; 46(7):844–50

ETHNOLOGY

Opitz syndrome in a Japanese male. Nishiyama T, et al. **Int J Urol** 1996 Jul;3(4):326–8

GENETICS

Physical mapping of the chromosome 7 breakpoint region in an SLOS patient with t(7;20) (q32.1;q13.2). Alley TL, et al. **Am J Med Genet** 1997 Jan 31;68(3):279–81

Chromosome 22q11.2 deletion in a boy with Opitz (G/BBB) syndrome. Fryburg JS, et al. **Am J Med Genet** 1996 Mar 29;62(3):274–5

Linkage analysis in a family with the Opitz GBBB syndrome refines the location of the gene in Xp22 to a 4 cM region. May M, et al. **Am J Med Genet** 1997 Jan 20;68(2):244–8

Phenotypic diversity in the Smith-Lemli-Opitz syndrome. Seller MJ, et al. **Clin Dysmorphol** 1997 Jan;6(1):69–73

Confirmation of defective cholesterol biosynthesis in 2 previously described adult sibs with Smith-Lemli-Opitz syndrome [letter] De Die-Smulders C, et al. **Genet Couns** 1996;7(2):161–2

Rapid identification of Smith-Lemli-Opitz syndrome homozygotes and heterozygotes (carriers) by measurement of deficient 7-dehydrocholesterol-delta 7-reductase activity in fibroblasts. Shefer S, et al. **Metabolism** 1997 Jul; 46(7):844–50

HISTORY

Smith-Lemli-Opitz syndrome diagnosed in a 130-year-old anatomical specimen. Oostra RJ, et al. **Am J Med Genet** 1997 Jan 31;68(3):257–9

METABOLISM

Clinical and biochemical spectrum of patients with RSH/Smith-Lemli-Opitz syndrome and abnormal cholesterol metabolism. Cunniff C, et al. **Am J Med Genet** 1997 Jan 31;68(3):263–9

Screening for abnormal cholesterol biosynthesis in the Smith-Lemli-Opitz syndrome: rapid determination of plasma 7-dehydrocholesterol by ultraviolet spectrometry. Honda A, et al. **Am J Med Genet** 1997 Jan 31;68(3):288–93

Holoprosencephaly in RSH/Smith-Lemli-Opitz syndrome: does abnormal cholesterol metabolism affect the function of Sonic Hedgehog? Kelley RL, et al. **Am J Med Genet** 1996 Dec 30;66(4):478–84

Increased expression of low-density lipoprotein receptors in a Smith-Lemli-Opitz infant with elevated bilirubin levels. Ness GC, et al. **Am J Med Genet** 1997 Jan 31;68(3):294–9

Abnormal cholesterol metabolism in Smith-Lemli-Opitz syndrome. Elias ER, et al. **Curr Opin Pediatr** 1995 Dec; 7(6):710–4 (27 ref.)

Abnormal cholesterol biosynthesis in the Smith-Lemli-Opitz syndrome. Salen G, et al. **Ital J Gastroenterol** 1995 Dec; 27(9):506–8

Abnormal cholesterol biosynthesis in the Smith-Lemli-Opitz syndrome. Salen G, et al. **J Lipid Res** 1996 Jun; 37(6):1169–80 (64 ref.)

The Smith-Lemli-Opitz syndrome: a potentially fatal birth defect caused by a block in the last enzymatic step in cholesterol biosynthesis. Tint GS, et al. **Subcell Biochem** 1997;28:117–44 (135 ref.)

Inhibition of 7-dehydrocholesterol reductase by the teratogen AY9944: a rat model for Smith-Lemli-Opitz syndrome. Kolf-Clauw M, et al. **Teratology** 1996 Sep; 54(3):115–25

[Identification of impaired cholesterol biosynthesis in a Japanese patient of Smith-Lemli-Opitz syndrome] Hasui M, et al. **No To Hattatsu** 1997 Jan;29(1):61–6 (Eng. Abstr.) **(Jpn)**

[Smith-Lemli-Opitz syndrome: abnormal cholesterol biosynthesis] de la Torre Verdú M, et al. **An Esp Pediatr** 1997 Jun;46(6):617–20 **(Spa)**

PATHOLOGY

Pathogenesis of malformations in a rodent model for Smith-Lemli-Opitz syndrome. Dehart DB, et al. **Am J Med Genet** 1997 Jan 31;68(3):328–37

Cardiovascular malformations in Smith-Lemli-Opitz syndrome. Lin AE, et al. **Am J Med Genet** 1997 Jan 31; 68(3):270–8 (102 ref.)

Smith-Lemli-Opitz syndrome: further delineation of the phenotype. Worthington S, et al. **Clin Dysmorphol** 1997 Jul;6(3):263–6

Opitz syndrome in a Japanese male. Nishiyama T, et al. **Int J Urol** 1996 Jul;3(4):326–8

PHYSIOPATHOLOGY

Smith-Lemli-Opitz syndrome: thirty-year follow-up of "S" of "RSH" syndrome. Pauli RM, et al. **Am J Med Genet** 1997 Jan 31;68(3):260–2

Abnormal cholesterol biosynthesis in the Smith-Lemli-Opitz and the lethal acrodysgenital syndromes. Cormier-Daire V, et al. **Eur J Pediatr** 1996 Aug;155(8):656–9

THERAPY

New treatment strategy for Smith-Lemli-Opitz syndrome [letter] Jira P, et al. **Lancet** 1997 Apr 26;349(9060):1222

Smith-Lemli-Opitz syndrome: treatment with cholesterol and bile acids [letter] Ullrich K, et al. **Neuropediatrics** 1996 Apr;27(2):111–2

SMITTIA see **CHIRONOMIDAE**

SMOG

ADVERSE EFFECTS

Nitrite-induced photo-oxidation of thiol and its implications in smog toxicity to the eye: prevention by ascorbate. Varma SD, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):179–87

SMOKE

Endothelin-A receptor antagonist BQ-610 blocks cigarette smoke-induced mitogenesis in rat airways and vessels. Dadmanesh F, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L614–8

Cigarette smoke condensate-induced adhesion molecule expression and transendothelial migration of monocytes. Shen Y, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1624–33

Cigarette smoke induces interleukin-8 release from human bronchial epithelial cells. Mio T, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1770–6

Smoke plume evacuation in the OR. Lanfranchi JA. **AORN J** 1997 Mar;65(3):627–33

Aircraft fires, smoke toxicity, and survival. Chaturvedi AK, et al. **Aviat Space Environ Med** 1996 Mar;67(3):275–8 (18 ref.)

Cells are present in the smoke created during laparoscopic surgery. Champault G, et al. **Br J Surg** 1997 Jul;84(7):993–5

Long-term effects of cigarette-smoke exposure on plasma testosterone, luteinizing hormone and follicle-stimulating hormone levels in male rats. Yardimci S, et al. **Br J Urol** 1997 Jan;79(1):66–9

Bronchiolitis obliterans in a man who used his wood-burning stove to burn synthetic construction materials. [see comments] Janigan DT, et al. **Can Med Assoc J** 1997 Apr 15;156(8):1171–3. Comment in: Can Med Assoc J 1997 Apr 15;156(8):1147–8.

Evidence for peroxynitrite as an oxidative stress-inducing

compound of aqueous cigarette smoke fractions. Muller T, et al. **Carcinogenesis** 1997 Feb;18(2):295–301

Inhibitory influence of lung vagal C-fiber afferents on the delayed ventilatory response to inhaled wood smoke in rats. Wang CY, et al. **Chin J Physiol** 1996;39(1):15–22

In utero exposure to cigarette smoking influences lung function at birth. Lødrup Carlsen KC, et al. **Eur Respir J** 1997 Aug;10(8):1774–9

Nitric oxide in cigarette smoke as a mediator of oxidative damage. Epperlein MM, et al. **Int J Exp Pathol** 1996 Oct; 77(5):197–200

Control of microbiological quality and shelf-life of catfish (Clarias gariepinus) by chemical preservatives and smoking. Efiuvwevwere BJ, et al. **J Appl Bacteriol** 1996 May; 80(5):465–70

Enrichment of benzo[a]pyrene in smoked food products and determination by high-performance liquid chromatography-fluorescence detection. García Falcón MS, et al. **J Chromatogr A** 1996 Nov 15;753(2):207–15

Effects of tobacco smoke exposure on the kinetics of bupivacaine in mice. Attolini L, et al. **Life Sci** 1997; 60(10):725–34

Inhibition of brain monoamine oxidase by adducts of 1,2,3,4-tetrahydroisoquinoline with components of cigarette smoke. Méndez-Alvarez E, et al. **Life Sci** 1997; 60(19):1719–27

Significant reduction of UVB caused by smoke from biomass burning in Brazil. Mims FM 3rd. **Photochem Photobiol** 1996 Nov;64(5):814–6

[Laparoscopic surgery. Does smoke transport cells?] Champault G, et al. **Ann Chir** 1997;51(2):140–3; discussion 144 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Bronchoalveolar lavage findings in firefighters. Bergström CE, et al. **Am J Ind Med** 1997 Oct;32(4):332–6

Pulmonary function and respiratory symptoms in forest firefighters. Betchley C, et al. **Am J Ind Med** 1997 May; 31(5):503–9

Expression of mRNA for gastrin-releasing peptide receptor by human bronchial epithelial cells. Association with prolonged tobacco exposure and responsiveness to bombesin-like peptides. Siegfried JM, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):358–66

Free radical chemistry of cigarette smoke and its implication in human cancer. Kodama M, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):433–7

Government agency issues surgical smoke hazard control. **AORN J** 1996 Dec;64(6):1045

Regulation of surgical smoke plume. Romig CL, et al. **AORN J** 1997 Apr;65(4):824–8

Bronchiolitis obliterans and wood-burning stoves [editorial; comment] Hogg JC. **Can Med Assoc J** 1997 Apr 15; 156(8):1147–8. Comment on: Can Med Assoc J 1997 Apr 15;156(8):1171–3.

The carcinogenicity of environmental tobacco smoke. Witschi H, et al. **Carcinogenesis** 1997 Mar;18(3):575–86

Epstein-Barr virus episomes as targets for cigarette smoke- and gamma-irradiation-induced DNA damage: studies on the EBNA-1 region by a new gene-specific technique. Yang Q, et al. **Carcinogenesis** 1997 Jul;18(7):1401–5

Combined effects of ethanol and cigarette smoke on hepatic and pulmonary xenobiotic metabolizing enzymes in rats. Eke BC, et al. **Chem Biol Interact** 1996 Dec 20; 102(3):155–67

Effect of menthol cigarettes on biochemical markers of smoke exposure among black and white smokers. Clark PI, et al. **Chest** 1996 Nov;110(5):1194–8

Cooking fuel smoke and respiratory symptoms among women in low-income areas in Maputo. Ellegård A. **Environ Health Perspect** 1996 Sep;104(9):980–5

Health and respirable particulate (PM10) air pollution: a causal or statistical association? Gamble JF, et al. **Environ Health Perspect** 1996 Aug;104(8):838–50 (97 ref.)

The tar fraction of cigarette smoke does not promote arteriosclerotic plaque development. Penn A, et al. **Environ Health Perspect** 1996 Oct;104(10):1108–13

Comparative study of DNA adduct formation in mice following inhalation of smoke from cigarettes that burn or primarily heat tobacco. Brown BG, et al. **Environ Mol Mutagen** 1997;29(3):303–11

Role of thromboxane-A2 and cholinergic mechanisms in bronchoconstriction induced by cigarette smoke in guinea-pigs. Matsumoto K, et al. **Eur Respir J** 1996 Dec; 9(12):2468–73

A longitudinal analysis of pulmonary function in rats during a 12 month cigarette smoke exposure. Wright JL, et al. **Eur Respir J** 1997 May;10(5):1115–9

Antiproteases attenuate the release of neutrophil chemotactic activity from bronchial epithelial cells induced by smoke. Koyama S, et al. **Exp Lung Res** 1996 Jan-Feb;22(1):1–19

Comparison of cigarette smoke-induced lipid peroxidation in vitro and in vivo. Kuhl P, et al. **Exp Toxicol Pathol** 1996 Nov;48(6):541–3

Characterization of cigarette smoke-induced micronuclei in vitro. Veltel D, et al. **Exp Toxicol Pathol** 1996 Nov; 48(6):548–50

Induction of gamma-glutamylcysteine synthetase by cigarette smoke is associated with AP-1 in human alveolar epithelial cells. Rahman I, et al. **FEBS Lett** 1996 Oct 28;396(1):21–5

Effect of alkaloids in cigarette smoke on human granulosa cell progesterone synthesis and cell viability. Gocze PM, et al. **Gynecol Endocrinol** 1996 Aug;10(4):223–8

Anti-oxidant enzymes, gamma-glutamyl transpeptidase and lipid peroxidation in kidney of rats exposed to cigarette smoke. Anand CV, et al. **Indian J Exp Biol** 1996 May; 34(5):486–8

Expression of cellular genes in HPV16-immortalized and cigarette smoke condensate-transformed human endocervical cells. Yang X, et al. **J Cell Biochem** 1997 Sep 1;66(3):309–21

Status asthmaticus in a paramedic following exposure to a roadside flare: a case report. Federman JH, et al. **J Emerg Med** 1997 Jan-Feb;15(1):87–9

Assessment of exposure to polycyclic aromatic hydrocarbons during firefighting by measurement of urinary 1-hydroxypyrene. Moen BE, et al. **J Occup Environ Med** 1997 Jun;39(6):515–9

Effects of different exposure times to tobacco smoke intoxication on carboxyhemoglobin and hepatic enzymate activities in mice. Attolini L, et al. **J Pharmacol Toxicol Methods** 1996 Aug;35(4):211–5

Combined exposure to cigarette smoke and hypercholesterolemia decreases vasorelaxation of the aorta. Mudaliar JH, et al. **J Vasc Surg** 1997 May;25(5):884–9

Effects of cigarette smoke inhalation on plasma diltiazem levels in rats. Matsuka N, et al. **Methods Find Exp Clin Pharmacol** 1997 Apr;19(3):173–9

Transient increase of serum Clara cell protein (CC16) after exposure to smoke. Bernard A, et al. **Occup Environ Med** 1997 Jan;54(1):63–5

Wood-burning stoves and lower respiratory illnesses in Navajo children. Robin LF, et al. **Pediatr Infect Dis J** 1996 Oct;15(10):859–65

Involvement of hydroxyl radical in the immediate ventilatory responses to inhaled wood smoke in rats. Kou YR, et al. **Respir Physiol** 1997 Jan;107(1):1–13

Smoky skies, mosquitoes, and disease [letter] Mims FM 3rd, et al. **Science** 1997 Jun 20;276(5320):1774–5

Smoke toxicity 'standard' test method for materials. **Toxicology** 1996 Dec 31;115(1-3):201–22

Situational smoke toxicity testing: hazard assessment as the 'front end' of a smoke toxicity test. Clarke FB, et al. **Toxicology** 1996 Dec 31;115(1-3):179–84 (7 ref.)

In-flight cabin smoke control. Eklund TI. **Toxicology** 1996 Dec 31;115(1-3):135–44

Overview of combustion toxicology. Hartzell GE. **Toxicology** 1996 Dec 31;115(1-3):7–23 (70 ref.)

Reactions to particles in smoke. Hill IR. **Toxicology** 1996 Dec 31;115(1-3):119–22 (17 ref.)

Behavioural impairment in smoke environments. Purser D. **Toxicology** 1996 Dec 31;115(1-3):25–40 (17 ref.)

Effect of vitamin A supplementation on cigarette smoke-induced lipid peroxidation. Helen A, et al. **Vet Hum Toxicol** 1997 Feb;39(1):18–21

[Alcohol and smoking. The risk factors for the oral cavity] Weinstein RL, et al. **Minerva Stomatol** 1996 Sep; 45(9):405–13 (100 ref.) (Eng. Abstr.) **(Ita)**

[Cytotoxicity caused by tobacco] Martínez RD. **Rev Alerg Mex** 1996 Jan-Feb;43(1):5–8 (Eng. Abstr.) **(Spa)**

ANALYSIS

Substances in the aqueous fraction of cigarette smoke inhibit lipid peroxidation in synaptosomes of rat cerebral cortex. Kamisaki Y, et al. **Biochem Mol Biol Int** 1997 Jun; 42(1):1–10

Chemical composition and potential hazards of electrocautery smoke. Sagar PM, et al. **Br J Surg** 1996 Dec;83(12):1792

Determination of volatile N-nitrosamines in combustion smoke samples. Kataoka H, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):570–6

Gaseous aliphatic aldehydes in smoke from burning raw materials of Chinese joss sticks. Lee RS, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):361–6

Cigarette smoke-induced bronchoconstriction: causative agents and role of thromboxane receptors. Hong JL, et al. **J Appl Physiol** 1996 Nov;81(5):2053–9

Reflex apneic response evoked by laryngeal exposure to wood smoke in rats: neural and chemical mechanisms. Lin YS, et al. **J Appl Physiol** 1997 Sep;83(3):723–30

Selective determination of volatile N-nitrosamines by derivatization with diethyl chlorothiophosphate and gas chromatography with flame photometric detection. Kataoka H, et al. **J Chromatogr A** 1996 Feb 2;723(1):93–9

Physical characterization of incense aerosols. Mannix RC, et al. **Sci Total Environ** 1996 Dec 20;193(2):149–58

PREVENTION & CONTROL

Surgical smoke evacuation systems. **Health Devices** 1997 Apr; 26(4):132–72

ESU-pencil-based smoke evacuation wands. **Health Devices** 1997 Apr;26(4):173–6

Improving laparoscopic visibility and safety through smoke evacuation. Divilio LT. **Surg Laparosc Endosc** 1996 Oct; 6(5):380–4

SMOKE INHALATION INJURY

Smoke inhalation is a multilevel insult to the pulmonary system. Lentz CW, et al. **Curr Opin Pulm Med** 1997 May; 3(3):221–6 (28 ref.)

Smoke inhalation among firefighters. Bizovi KE, et al. **Occup Med** 1995 Oct-Dec;10(4):721–33 (52 ref.)

Burn injuries in firefighters. Cimino VG, et al. **Occup Med** 1995 Oct-Dec;10(4):707–20 (34 ref.)

BLOOD

Evolution and significance of circulating procalcitonin levels compared with IL-6, TNF alpha and endotoxin levels early after thermal injury. Carsin H, et al. **Burns** 1997 May; 23(3):218–24

Transient increase of serum Clara cell protein (CC16) after exposure to smoke. Bernard A, et al. **Occup Environ Med** 1997 Jan;54(1):63–5

Effect of severe smoke inhalation injury on systemic microvascular blood flow in sheep. Schenarts PJ, et al. **Shock** 1996 Sep;6(3):201–5

CHEMICALLY INDUCED

Evaluation of lethality estimates for combustion gases in military scenarios. Smith SM, et al. **Toxicology** 1996 Dec 31;115(1-3):157–65

COMPLICATIONS

Early complications and value of initial clinical and paraclinical observations in victims of smoke inhalation without burns. Hantson P, et al. **Chest** 1997 Mar; 111(3):671–5

Combined smoke inhalation and body surface burns injury does not necessarily imply long-term respiratory health consequences. Bourbeau J, et al. **Eur Respir J** 1996 Jul; 9(7):1470–4

Extracorporeal membrane oxygenation in pediatric respiratory failure secondary to smoke inhalation injury. Lessin MS, et al. **J Pediatr Surg** 1996 Sep;31(9):1285–7

Effect of severe smoke inhalation injury on systemic microvascular blood flow in sheep. Schenarts PJ, et al. **Shock** 1996 Sep;6(3):201–5

DIAGNOSIS

Transient increase of serum Clara cell protein (CC16) after exposure to smoke. Bernard A, et al. **Occup Environ Med** 1997 Jan;54(1):63–5

ETIOLOGY

Reactions to particles in smoke. Hill IR. **Toxicology** 1996 Dec 31;115(1-3):119–22 (17 ref.)

METABOLISM

TNF-alpha in smoke inhalation lung injury. Hales CA, et al. **J Appl Physiol** 1997 May;82(5):1433–7

MORTALITY

Temperature profiles during resuscitation predict survival following burns complicated by smoke inhalation injury. Platt AJ, et al. **Burns** 1997 May;23(3):250–5

PHYSIOPATHOLOGY

Unilateral smoke inhalation in sheep: effect on left lung lymph flow with right lung injury. Kikuchi Y, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1620–4

Reflex apneic response evoked by laryngeal exposure to wood smoke in rats: neural and chemical mechanisms. Lin YS, et al. **J Appl Physiol** 1997 Sep;83(3):723–30

Ventilation-perfusion alterations after smoke inhalation injury in an ovine model. Shimazu T, et al. **J Appl Physiol** 1996 Nov;81(5):2250–9

Inhaled nitric oxide selectively reduces pulmonary hypertension after ovine smoke inhalation but does not improve oxygenation. Booke M, et al. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 1):27–33

Pulmonary effects of firefighting. Scannell CH, et al. **Occup Med** 1995 Oct-Dec;10(4):789–801 (42 ref.)

Application of full-scale fire tests to characterize and improve the aircraft postcrash fire environment. Sarkos CP. **Toxicology** 1996 Dec 31;115(1-3):79–87 (16 ref.)

PREVENTION & CONTROL

The prophylactic effects of U75412E pretreatment in a smoke-induced lung injury rabbit model. Wang S, et al. **Pharmacol Toxicol** 1996 Nov;79(5):231–7

In-flight cabin smoke control. Eklund TI. **Toxicology** 1996 Dec 31;115(1-3):135–44

New research avenues in toxicology: 7-gas N-Gas Model, toxicant suppressants, and genetic toxicology. Levin BC. **Toxicology** 1996 Dec 31;115(1-3):89–106 (41 ref.)

The management of aircraft passenger survival in fire. Trimble EJ. **Toxicology** 1996 Dec 31;115(1-3):41–61 (25 ref.)

RADIONUCLIDE IMAGING

Detection of acute inhalation injury in fire victims by means of technetium-99m DTPA radioaerosol inhalation lung scintigraphy. Lin WY, et al. **Eur J Nucl Med** 1997 Feb; 24(2):125–9

THERAPY

Prehospital care of the burned patient. Crawford ME, et al.

Eur J Emerg Med 1996 Dec;3(4):247–51 (28 ref.)

Effects of mode of inhalation of carbon monoxide and of normobaric oxygen administration on carbon monoxide elimination from the blood. Levasseur L, et al. **Hum Exp Toxicol** 1996 Nov;15(11):898–903

Pre-hospital cardiopulmonary resuscitation and pneumoperitoneum. Rainer TH, et al. **J Accid Emerg Med** 1995 Dec;12(4):288–90

The use of perfluorocarbon-associated gas exchange to improve ventilation and decrease mortality after inhalation injury in a neonatal swine model. Fitzpatrick JC, et al. **J Pediatr Surg** 1997 Feb;32(2):192–6

[Emergency medicine for the practitioner: management of patients who are victims of a smoky fire] Kirchner N, et al. **Rev Med Suisse Romande** 1997 Apr;117(4):325–9 **(Fre)**

SMOKELESS TOBACCO see **TOBACCO, SMOKELESS**

SMOKING

see related
TOBACCO SMOKE POLLUTION
TOBACCO USE DISORDER

Breastfeeding, smoking and the presence of the child's father in the household. Eriksen W. **Acta Paediatr** 1996 Nov; 85(11):1272–7

Is breastfeeding beneficial and maternal smoking harmful to the cognitive development of children? Niemelä A, et al. **Acta Paediatr** 1996 Oct;85(10):1202–6

Primary prevention in a high-risk group: smoking habits in adolescents with homozygous alpha-1-antitrypsin deficiency (ATD). Thelin T, et al. **Acta Paediatr** 1996 Oct; 85(10):1207–12

Do work-place smoking bans cause smokers to smoke "harder"? Results from a naturalistic observational study. Chapman S, et al. **Addiction** 1997 May;92(5):607–10

Society for Research on Nicotine and Tobacco. Perkins KA, et al. **Addiction** 1996 Jan;91(1):129–44

Withdrawing respect from the tobacco trade [editorial] West R. **Addiction** 1997 Feb;92(2):133–5

Assessment of vitamin A status in chronic obstructive pulmonary disease patients and healthy smokers. Paiva SA, et al. **Am J Clin Nutr** 1996 Dec;64(6):928–34

Relation of smoking at baseline and during trial years 1–6 to food and nutrient intakes and weight in the special intervention and usual care groups in the Multiple Risk Factor Intervention Trial. Stamler J, et al. **Am J Clin Nutr** 1997 Jan;65(1 Suppl):374S–402S

Coronary vascular reserve is similarly reduced in hypertensive patients without any other coronary risk factors and in normotensive smokers and hypercholesterolemic patients with angiographically normal coronary arteries. Antony I, et al. **Am J Hypertens** 1997 Feb;10(2):181–8

Smoking related to 24-h ambulatory blood pressure and heart rate: a study in 352 normotensive Danish subjects. Mikkelsen KL, et al. **Am J Hypertens** 1997 May;10(5 Pt 1):483–91

Smoking intervention in subjects at risk of asbestos-related lung cancer. Waage HP, et al. **Am J Ind Med** 1997 Jun; 31(6):705–12

Hemostasis in newborns of smoking and nonsmoking mothers. Mercelina-Roumans PE, et al. **Am J Obstet Gynecol** 1997 Mar;176(3):662–6

Smoking and microvascular repairs [letter; comment] Oreck SL. **Am J Orthop** 1997 Apr;26(4):252. Comment on: Am J Orthop 1996 Oct;25(10):685–9.

The effects of tobacco advertising: brand loyalty, brand switching, or market expansion? [editorial; comment] Davis RM. **Am J Prev Med** 1996 Jan–Feb;12(1):2–3. Comment on: Am J Prev Med 1996 Jan–Feb;12(1):14–6.

The extent of cigarette brand and company switching: results from the Adult Use-of-Tobacco Survey [see comments] Siegel M, et al. **Am J Prev Med** 1996 Jan–Feb;12(1):14–6 . Comment in: Am J Prev Med 1996 Jan–Feb;12(1):2–3.

Employee and public responses to simulated violations of no-smoking regulations in Spain. Bonfill X, et al. **Am J Public Health** 1997 Jun;87(6):1035–7

Annotation: the use of educational attainment as an indicator of socioeconomic position [comment] Hadden WC. **Am J Public Health** 1996 Nov;86(11):1525–6. Comment on: Am J Public Health 1996 Nov;86(11):1582–9.

The effects of cigarette smoking and gestational weight change on birth outcomes in obese and normal-weight women [see comments] Hellerstedt WL, et al. **Am J Public Health** 1997 Apr;87(4):591–6. Comment in: Am J Public Health 1997 Apr;87(4):543–4.

The early use of alcohol and tobacco: its relation to children's competence and parents' behavior. Jackson C, et al. **Am J Public Health** 1997 Mar;87(3):359–64

Comment: Gunsmoke—changing public attitudes toward smoking and firearms. Kellermann AL. **Am J Public Health** 1997 Jun;87(6):910–3

The relationship between cigarette smoking and education revisited: implications for categorizing persons' educational status [published erratum appears in Am J Public Health 1997 Feb;87(2):168] Zhu BP, et al. **Am J Public Health** 1996 Nov;86(11):1582–9

The effects of cigarette smoking and alcohol consumption on serum liver enzyme activities: a dose-related study in men. Whitehead TP, et al. **Ann Clin Biochem** 1996 Nov; 33 (Pt 6):530–5

Immunohistochemical analysis of 4-aminobiphenyl-DNA adducts in oral mucosal cells of smokers and nonsmokers. Romano G, et al. **Anticancer Res** 1997 Jul–Aug; 17(4A):2827–30

Alcohol consumption and smoking habits as determinants of blood lead levels in a national population sample from Germany. Weyermann M, et al. **Arch Environ Health** 1997 May–Jun;52(3):233–9

Human papillomavirus in head and neck squamous cell carcinomas in nonsmokers. Fouret P, et al. **Arch Otolaryngol Head Neck Surg** 1997 May;123(5):513–6

Effects of smoking and marine diet on birthweight in Greenland. Bjerregaard P, et al. **Arctic Med Res** 1996 Oct; 55(4):156–64

Betel nut and smoking. Are they both protective in ulcerative colitis? A pilot study. Lee CN, et al. **Arq Gastroenterol** 1996 Jan–Mar;33(1):3–5

Effects of serum lipoproteins and smoking on atherosclerosis in young men and women. The PDAY Research Group. Pathobiological Determinants of Atherosclerosis in Youth. McGill HC Jr, et al. **Arterioscler Thromb Vasc Biol** 1997 Jan;17(1):95–106

Dietary intake of Australian smokers and nonsmokers. English RM, et al. **Aust N Z J Public Health** 1997 Apr; 21(2):141–6

The challenge for Beijing: the 10th world conference on tobacco or health [editorial] Beaglehole R. **BMJ** 1997 Aug 23;315(7106):440–1

Queen should remove her crest from cigarette packets [letter; comment] Goldberg D. **BMJ** 1996 Nov 9;313(7066):1210 . Comment on: BMJ 1996 Jul 13;313(7049):97–100.

The global cigarette [editorial] Gray N. **BMJ** 1996 Nov 30; 313(7069):1348

The tobacco industry and scientific publications. Challenges on grounds of self evident potential bias are not unfair [letter; comment] Hedley AJ. **BMJ** 1997 May 3; 314(7090):1350. Comment on: BMJ 1997 Feb 1;314(7077):371.

Traders' views on sale of cigarettes to children [letter] Jones DW, et al. **BMJ** 1997 Apr 5;314(7086):1047

Cigarettes and drugs in Northern Ireland. Violent lawlessness is not mitigated by the unworthiness of victims [letter] Robshaw J. **BMJ** 1996 Nov 9;313(7066):1210

Jewish paper forgoes tobacco advertising [news] Siegel-Itzkovich J. **BMJ** 1997 Jun 7;314(7095):1644

EU confronts tobacco policy contradictions [news] Watson R. **BMJ** 1996 Nov 16;313(7067):1228

The tobacco industry and scientific publications. Findings of scientists who were and were not funded by tobacco industry were strikingly different [letter; comment] Whidden P. **BMJ** 1997 May 3;314(7090):1350–1. Comment on: BMJ 1997 Feb 1;314(7077):371.

CYP1A2 activity, gender and smoking, as variables influencing the toxicity of caffeine. Carrillo JA, et al. **Br J Clin Pharmacol** 1996 Jun;41(6):605–8

Cigarette deaths, cigarette advertisements, cigarette recruits, cigarette money [editorial] Jackson G. **Br J Clin Pract** 1996 Dec;50(8):422

Tobacco smoking. Jarvis M. **Br J Clin Psychol** 1996 May; 35 (Pt 2):319–20

Editor's Choice (August 1996) [letter] Croall J. **Br J Obstet Gynaecol** 1996 Dec;103(12):1272

Smoking cessation in pregnancy. Brown DC. **Can Fam Physician** 1996 Jan;42:102–5 (18 ref.)

Risk of squamous cell carcinoma and adenocarcinoma of the lung in relation to lifetime filter cigarette smoking. Stellman SD, et al. **Cancer** 1997 Aug 1;80(3):382–8

Dietary and tobacco risk factors for adult onset glioma in the San Francisco Bay Area (California, USA) [see comments] Lee M, et al. **Cancer Causes Control** 1997 Jan; 8(1):13–24. Comment in: Cancer Causes Control 1997 Jan;8(1):3–4.

Colorectal cancer and folate status: a nested case–control study among male smokers. Glynn SA, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Jul;5(7):487–94

p53 mutations in squamous cell carcinoma of the head and neck predominate in a subgroup of former and present smokers with a low frequency of genetic instability. Liloglou T, et al. **Cancer Res** 1997 Sep 15;57(18):4070–4

Evidence of anti-benzo[a]pyrene diolepoxide-DNA adduct formation in human colon mucosa. Alexandrov K, et al. **Carcinogenesis** 1996 Sep;17(9):2081–3

Dietary phenolics as anti-mutagens and inhibitors of tobacco-related DNA adduction in the urothelium of smokers. Malaveille C, et al. **Carcinogenesis** 1996 Oct; 17(10):2193–200

Detection of DNA adducts in human nasal mucosa tissue by 32P-postlabeling analysis. Peluso M, et al. **Carcinogenesis** 1997 Feb;18(2):339–44

Associations between cytochrome P4502E1 genotype, mutagen sensitivity, cigarette smoking and susceptibility to lung cancer. Wu X, et al. **Carcinogenesis** 1997 May; 18(5):967–73

Cigarette barons' bedfellows: ignorant, corruptible or both? [editorial] Goonaratna C. **Ceylon Med J** 1997 Jun; 42(2):62–3

Cigarette smoking and urinary 3-alkyladenine excretion in man. Prevost V, et al. **Chem Res Toxicol** 1996 Mar; 9(2):439–44

Risks of home oxygen therapy for cigarette smokers [letter] Kathawalla S, et al. **Chest** 1996 Oct;110(4):1130

Diet, smoking and exercise: interrelationships between adolescent health behaviours. Coulson NS, et al. **Child Care Health Dev** 1997 May;23(3):207–16

The effects of maternal alcohol consumption and cigarette smoking during pregnancy on acoustic cry analysis. Nugent JK, et al. **Child Dev** 1996 Aug;67(4):1806–15

Cigarette smoking, weight gain, and coronary mortality: results from the Chicago Western Electric Study. Fulton JE, et al. **Circulation** 1997 Sep 2;96(5):1438–44

Association of cigarette smoking with chronotropic incompetence and prognosis in the Framingham Heart Study. Lauer MS, et al. **Circulation** 1997 Aug 5; 96(3):897–903

Modulation of oxidant stress in vivo in chronic cigarette smokers. Reilly M, et al. **Circulation** 1996 Jul 1;94(1):19–25

Specificity of salivary thiocyanate as marker of cigarette smoking is not affected by alimentary sources. Galanti LM. **Clin Chem** 1997 Jan;43(1):184–5

Smoking and menopause. Chiechi LM, et al. **Clin Exp Obstet Gynecol** 1997;24(1):26–7

Association of genetic variation at the beta-fibrinogen gene locus and plasma fibrinogen levels; interaction between allele frequency of the G/A-455 polymorphism, age and smoking. Thomas AE, et al. **Clin Genet** 1996 Oct; 50(4):184–90

Influence of smoking on the survival rate of diabetic patients requiring hemodialysis. Biesenbach G, et al. **Diabetes Care** 1996 Jun;19(6):625–8

Effect of smoking on the prevalence of albuminuria in Japanese men with non-insulin-dependent diabetes mellitus. Ikeda Y, et al. **Diabetes Res Clin Pract** 1997 Apr; 36(1):57–61

Nicotine, caffeine and alcohol use in high- and low-dose benzodiazepine users. Lekka NP, et al. **Drug Alcohol Depend** 1997 May 2;45(3):207–12

Target marketing of tobacco and alcohol-related products to ethnic minority groups in the United States. Moore DJ, et al. **Ethn Dis** 1996 Winter–Spring;6(1–2):83–98 (56 ref.)

Smoking after heart transplantation: an underestimated hazard? Nägele H, et al. **Eur J Cardiothorac Surg** 1997 Jul;12(1):70–4

Cigarette smoking is associated with differences in nutritional habits and related to lipoprotein alterations independently of food and alcohol intake. Dallongeville J, et al. **Eur J Clin Nutr** 1996 Oct;50(10):647–54

Attitudes and opinions of French cardiologists towards smoking. Tessier JF, et al. **Eur J Epidemiol** 1995 Dec; 11(6):615–20

Smoking and quality of life in Crohn's disease—as many questions answered as unanswered [comment] Hodgson HJ, et al. **Eur J Gastroenterol Hepatol** 1996 Nov;8(11):1067–9 (19 ref.). Comment on: Eur J Gastroenterol Hepatol 1996 Nov;8(11):1075–81.

Reduction in cortical IMP-SPET tracer uptake with recent cigarette consumption in a young group of healthy males. San Diego HIV Neurobehavioral Research Center. Rourke SB, et al. **Eur J Nucl Med** 1997 Apr;24(4):422–7

Controlled study of the association of smoking with lactobacilli, mutans streptococci and yeasts in saliva. Sakki T, et al. **Eur J Oral Sci** 1996 Oct–Dec;104(5–6):619–22

Smoking—good or bad for semen? [letter] Cope GF, et al. **Fertil Steril** 1997 Sep;68(3):565–6

alpha-Tocopherol binding activity of red blood cells in smokers. Bellizzi MC, et al. **Free Radic Res** 1997 Jul; 27(1):105–12

Tobacco smoke upper respiratory response relationships in healthy nonsmokers. Bascom R, et al. **Fundam Appl Toxicol** 1996 Jan;29(1):86–93

Down's syndrome and maternal smoking in early pregnancy. Källén K. **Genet Epidemiol** 1997;14(1):77–84

Adult coeliac disease, dermatitis herpetiformis and smoking [letter] Lear JT, et al. **Gut** 1997 Feb;40(2):289

Intermittent dysphagia in a causal smoker. Ansari A, et al. **Hosp Pract (Off Ed)** 1997 Aug 15;32(8):235–6

Prognostic value of p53 in non-small cell lung cancer: relationship with proliferating cell nuclear antigen and cigarette smoking. Esposito V, et al. **Hum Pathol** 1997 Feb; 28(2):233–7

An hypothesis on the association between maternal smoking and dizygotic twinning. James WH. **Hum Reprod** 1997 Jul; 12(7):1391–2

Coffee and alcohol intake, smoking and risk of multiple pregnancy. Parazzini F, et al. **Hum Reprod** 1996 Oct; 11(10):2306–9

Cigarette smoking as a risk factor for intraepithelial lesion of the cervix uteri. Kalogeraki A, et al. **In Vivo** 1996 Nov–Dec;10(6):613–6

Occupational factors, smoking habits and tobacco withdrawal symptoms among male Japanese employees. Kawakami N, et al. **Ind Health** 1997;35(1):9–15

Using the blood concentration of 2,5-dimethylfuran as a marker for smoking. Ashley DL, et al. **Int Arch Occup Environ Health** 1996;68(3):183–7

Differences in the association between smoking and relative body weight by level of education. Molarius A, et al. **Int J Obes Relat Metab Disord** 1997 Mar;21(3):189–96

Smoking in Irish journals: a content analysis 1960–1994. Howell F. **Ir Med J** 1996 Jan–Feb;89(1):18–20

Cigarette smoking and maternal-child HIV transmission. Turner BJ, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 1;14(4):327–37

Maternal smoking during pregnancy and lactation increases the risk for atopic eczema in the offspring. Schäfer T, et al. **J Am Acad Dermatol** 1997 Apr;36(4):550–6

Deficiency in nitric oxide bioactivity in epicardial coronary arteries of cigarette smokers. Kugiyama K, et al. **J Am Coll Cardiol** 1996 Nov 1;28(5):1161–7

Smoking and women: a major "disconnect" [editorial] Eriksen M. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):7, 18

Let's not overlook nicotine [letter] Roll JM, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):143

Smoking increases conversion of lactate to glucose during submaximal exercise. Huie MJ, et al. **J Appl Physiol** 1996 May;80(5):1554–9

Pulmonary clearance and lung function: influence of acute tobacco intoxication and of vitamin E. Scherrer–Crosbie M, et al. **J Appl Physiol** 1996 Sep;81(3):1071–7

Effect of smoking on cerebrovascular reactivity. Silvestrini M, et al. **J Cereb Blood Flow Metab** 1996 Jul;16(4):746–9

Effect of birth weight and maternal smoking on cord blood leptin concentrations of full–term and preterm newborns. Mantzoros CS, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):2856–61

The effects of tobacco smoking on the short, middle, and long latency responses of the blink reflex in humans. Leon–S FE, et al. **J Clin Neurophysiol** 1997 Mar; 14(2):144–9

Antidepressant effects of nicotine [letter] Hawkins JW. **J Clin Psychiatry** 1997 Jul;58(7):324–5

Cigarette smoking, serum lipids, folate, and vitamin B12 in lung cancer. Gürdal–Yüksel E, et al. **J Environ Pathol Toxicol Oncol** 1996;15(2–4):161–7

Parental smoking and the nutrient intake and food choice of British teenagers aged 16–17 years. Crawley HF, et al. **J Epidemiol Community Health** 1996 Jun;50(3):306–12

Smoking and alcohol consumption in Trent, UK: an analysis of item non–response. Dengler R. **J Epidemiol Community Health** 1996 Dec;50(6):687

Weight gain during the first year of life in relation to maternal smoking and breast feeding in Norway. Nafstad P, et al. **J Epidemiol Community Health** 1997 Jun;51(3):261–5

Retailers' compliance to the law banning cigarette sale to minors. Suriyawongpaisal P, et al. **J Med Assoc Thai** 1996 Feb;79(2):127–31

Duration of smoking abstinence and success in quitting. Gilpin EA, et al. **J Natl Cancer Inst** 1997 Apr 16; 89(8):572–6

The NMA's advocacy against smoking. Smith Veal Y. **J Natl Med Assoc** 1996 Feb;88(2):75–6

Tobacco, caffeine, alcohol, and carpal tunnel syndrome in American industry. A cross–sectional study of 1464 workers. Nathan PA, et al. **J Occup Environ Med** 1996 Mar;38(3):290–8

Cigarette smoking at hire as a predictor of employment outcome. Ryan J, et al. **J Occup Environ Med** 1996 Sep; 38(9):928–33

Effect of prenatal alcohol and cigarette exposure on two– and six–month–old infants' adrenocortical reactivity to stress. Ramsay DS, et al. **J Pediatr Psychol** 1996 Dec; 21(6):833–40

The public image of smoking [letter] Cardwell M, et al. **J R Army Med Corps** 1994 Feb;140(1):52

Health profiles of current and former smokers and lifelong abstainers. OXCHECK Study Group. OXford and Collaborators HEalth CheckK. Tang J, et al. **J R Coll Physicians Lond** 1997 May–Jun;31(3):304–9

Tackling the tobacco challenge: achieving 'healthy public policy' in tobacco control in Guernsey. Jeffs D, et al. **J R Soc Health** 1996 Dec;116(6):367–75

Cigarette smoking, plastic surgery, and microsurgery. Chang LD, et al. **J Reconstr Microsurg** 1996 Oct;12(7):467–74 (79 ref.)

Tobacco use for identifying pregnant women at risk of substance abuse. Svikis D, et al. **J Reprod Med** 1997 May; 42(5):299–302

Cigarette smoking, N–acetyltransferase 2 genetic polymorphisms, and breast cancer risk [see comments] Ambrosone CB, et al. **JAMA** 1996 Nov 13; 276(18):1494–501. Comment in: JAMA 1996 Nov 13;276(18):1511–2. Comment in: JAMA 1997 Feb 19;277(7):533; discussion 534. Comment in: JAMA 1997 Feb 19;277(7):533–4; discussion 534.

Recognition of cigarette advertisement product logos [letter] Fischer PM. **JAMA** 1997 Feb 19;277(7):532

Nicotine content and health risks of cigars. Henningfield JE, et al. **JAMA** 1996 Dec 18;276(23):1857–8

Smokers and breast cancer. 'Chemical individuality' and cancer predisposition [editorial; comment] Lin HJ. **JAMA** 1996 Nov 13;276(18):1511–2. Comment on: JAMA 1996 Nov 13;276(18):1494–501.

Smoking and risk of cryptococcosis in patients with AIDS [letter] Olson PE, et al. **JAMA** 1997 Feb 26;277(8):629–30

The renal risks of smoking. Orth SR, et al. **Kidney Int** 1997 Jun;51(6):1669–77 (154 ref.)

Smoking and oestrogen–replacement therapy as protective factors for Alzheimer's disease [letter] [see comments] Lerner A, et al. **Lancet** 1997 Feb 8;349(9049):403–4. Comment in: Lancet 1997 Jul 26;350(9073):295.

Smoking and Alzheimer's disease [letter; comment] Peto R. **Lancet** 1997 Jul 26;350(9073):295. Comment on: Lancet 1997 Feb 8;349(9049):403–4.

Effects of maternal smoking during pregnancy and a family history of asthma on respiratory function in newborn infants. Stick SM, et al. **Lancet** 1996 Oct 19; 348(9034):1060–4

Smoking multiple high– versus low–nicotine cigarettes: impact on resting energy expenditure. Collins LC, et al. **Metabolism** 1996 Aug;45(8):923–6

Navy health care provider attitudes and practices concerning patient tobacco use. Conway TL, et al. **Mil Med** 1996 Sep; 161(9):510–20

Cigarette smoking before and after an excise tax increase and an antismoking campaign—Massachusetts, 1990–1996. **MMWR Morb Mortal Wkly Rep** 1996 Nov 8;45(44):966–70

Evaluation of DNA damage in leukocytes of ex–smokers by single cell gel electrophoresis. Frenzilli G, et al. **Mutat Res** 1997 Apr 29;375(2):117–23

Influence of GSTM1 and GSTT1 polymorphisms on the frequency of chromosome aberrations in lymphocytes of smokers and pesticide–exposed greenhouse workers. Scarpato R, et al. **Mutat Res** 1997 Mar 17;389(2–3):227–35

32P–postlabelling of aromatic DNA adducts in white blood cells and alveolar macrophages of smokers: saturation at high exposures. Van Schooten FJ, et al. **Mutat Res** 1997 Aug 1;378(1–2):65–75

The Food and Drug Administration's regulation of tobacco products [letter; comment] Papagiannis A. **N Engl J Med** 1997 Mar 20;336(12):881. Comment on: N Engl J Med 1996 Sep 26;335(13):988–94.

The American Cancer Society versus tobacco. The first 40 years or the last? Dessart G. **Nat Med** 1997 Jul;3(7):712–3

Lung clearance of inhaled 99Tcm–erythromycin lactobionate in non–smokers and smokers. Durak H, et al. **Nucl Med Commun** 1996 Oct;17(10):895–901

Nutrient intake according to education, smoking, and alcohol in Italian women. D'Avanzo B, et al. **Nutr Cancer** 1997; 28(1):46–51

Cigarette smoking and ten–year progression of diabetic retinopathy. Moss SE, et al. **Ophthalmology** 1996 Sep; 103(9):1438–42

New health program targets teenage smoking [news] **Pa Med** 1997 Feb;100(2):20

Maternal smoking, birthweight and gestational age in sudden infant death syndrome (SIDS) babies and their surviving siblings. Oyen N, et al. **Paediatr Perinat Epidemiol** 1997 Jan;11 Suppl 1:84–95

Smoking during pregnancy: Missouri longitudinal study. Schramm WF. **Paediatr Perinat Epidemiol** 1997 Jan;11 Suppl 1:73–83

Prostate cancer and smoking: a review of case–control and cohort studies [published erratum appears in Prostate 1996 Dec;29(6):402] Lumey LH. **Prostate** 1996 Oct;29(4):249–60 (71 ref.)

Cognitive performance effects of subcutaneous nicotine in smokers and never–smokers. Foulds J, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):31–8

Assessing the sensory role of nicotine in cigarette smoking [published erratum appears in Psychopharmacology (Berl) 1996 Dec;128(4):432] Pritchard WS, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):55–62

Airways reactivity, atopy and bronchoalveolar lavage in male smokers with airflow obstruction. García–García JM, et al. **Respiration** 1996;63(4):199–204

Alcohol consumption modifies the total lung capacity in smokers. Ström K, et al. **Respiration** 1996;63(2):66–72

Smoking among health care students [letter] Birkholtz FF, et al. **S Afr Med J** 1996 Aug;86(8):984

The effects of interview mode on smoking attitudes and behavior: self–report among female Latino adolescents. Kaplan CP, et al. **Subst Use Misuse** 1996 Jun;31(8):947–63

Tobacco abuse [letter; comment] Lee LH. **Tenn Med** 1996 Nov;89(11):421. Comment on: Tenn Med 1996 Aug;89(8):299–300.

Two dimensional protein patterns of bronchoalveolar lavage fluid from non–smokers, smokers, and subjects exposed to asbestos. Lindahl M, et al. **Thorax** 1996 Oct;51(10):1028–35

The influence of smoking on soluble adhesion molecules and endothelial cell markers. Blann AD, et al. **Thromb Res** 1997 Mar 1;85(5):433–8

Self–service tobacco displays and consumer theft [letter] Caldwell MC, et al. **Tob Control** 1996 Summer;5(2):160–1

Tobacco and aging: a call for papers for the global coordinated theme issues of 1997 [editorial] Davis RM. **Tob Control** 1996 Winter;5(4):257–8 (18 ref.)

American cigarette manufacturers' ability to pay damages: overview and a rough calculation. Harris JE. **Tob Control** 1996 Winter;5(4):292–4

One–year follow up of college student occasional smokers [letter] Hines D, et al. **Tob Control** 1996 Autumn;5(3):231

Smokers are unaware of the filter vents now on most cigarettes: results of a national survey. Kozlowski LT, et al. **Tob Control** 1996 Winter;5(4):265–70

Smoking–related knowledge and attitudes of senior Australian medical students. Roche AM, et al. **Tob Control** 1996 Winter;5(4):271–9

Conflict of ethics and practice in hospitalized patients who want to smoke. Chappell J, et al. **West J Med** 1996 Mar; 164(3):263–6

[Smoking among 11–15 year–old adolescents, 1984–1994] Due EP, et al. **Ugeskr Laeger** 1997 Feb 17;159(8):1090–3 (Eng. Abstr.) **(Dan)**

[Tobacco smoking. What happened since 1971? (editorial)] Nielsen PE. **Ugeskr Laeger** 1997 Apr 14;159(16):2348–9 **(Dan)**

[How I recognize and treat tobacco use in diabetes] Lebeau B. **Journ Annu Diabetol Hotel Dieu** 1997;:229–36 (8 ref.) **(Fre)**

[Beware of tobaccoless cigarettes (letter)] Lagrue G, et al. **Presse Med** 1997 Jun 28;26(22):1048–9 **(Fre)**

[The Ames test: application to smokers' urine] Pélissier AL, et al. **Rev Med Interne** 1996;17(8):635–9 (Eng. Abstr.) **(Fre)**

[A study on the relationship between sources of health information concerning smoking and drinking, and health behavior] Kubo N, et al. **Nippon Eiseigaku Zasshi** 1996 Jul;51(2):579–87 (Eng. Abstr.) **(Jpn)**

[Time–trends of smoking habit by age, sex and birth year—observations among participants in mass screening for lung cancer in Osaka, Japan] Nishimura C. **Nippon Koshu Eisei Zasshi** 1996 Dec;43(12):1063–7 **(Jpn)**

[Influence of smoking on medical care expense of middle–aged workers] Yamamoto W, et al. **Nippon Koshu Eisei Zasshi** 1996 Aug;43(8):597–605 (Eng. Abstr.) **(Jpn)**

[NO2 inhalation in two smokers and two non–smokers] Shimatsu Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Oct; 34(10):1145–9 (Eng. Abstr.) **(Jpn)**

[Physicians who smoke. A survey of smoking habits and life style of Norwegian physicians] Aasland OG, et al. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):332–7 (Eng. Abstr.) **(Nor)**

[Not smoking–free, but better than in Norway!] Haug K. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1943–5 **(Nor)**

[Cigarette smoking of mothers in pregnancy and environmental tobacco smoke as factors of increasing susceptibility of older children to acute respiratory infections] Jedrychowski W, et al. **Przegl Epidemiol** 1996; 50(4):457–65 (Eng. Abstr.) **(Pol)**

[Books published in Spain on smoking] Guardiola E, et al. **Arch Bronconeumol** 1996 Dec;32(10):535–40 (Eng. Abstr.) **(Spa)**

[Smoking. Factors involved in its addiction and maintenance] Casas Anguita J, et al. **Med Clin (Barc)** 1996 Nov 23; 107(18):706–10 (32 ref.) **(Spa)**

[An attempt to evaluate intervention. A questionnaire about the smoking habits school children] Evardsson I, et al. **Lakartidningen** 1997 May 14;94(20):1889–92 **(Swe)**

[Why all these half measures in the tobacco debate? (letter)] Gustafson P. **Lakartidningen** 1996 Dec 4;93(49):4524 **(Swe)**

[The question of tobacco was swept under the carpet (letter)] Unnegård H. **Lakartidningen** 1996 Oct 30;93(44):3883 **(Swe)**

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Perioperative respiratory events in smokers and nonsmokers undergoing general anaesthesia. Schwilk B, et al. **Acta Anaesthesiol Scand** 1997 Mar;41(3):348–55

Langerhans' cells in cervical condyloma and intraepithelial neoplasia in smoking and non–smoking adolescents [letter] Derchain SF, et al. **Acta Derm Venereol** 1996 Nov; 76(6):493–4

Fetal exposure to tobacco smoke products: a comparison between self–reported maternal smoking and concentrations of cotinine and thiocyanate in cord serum. Nafstad P, et al. **Acta Obstet Gynecol Scand** 1996 Nov; 75(10):902–7

Fetal growth impairment from smoking—is it influenced by maternal anthropometry? Zarén B, et al. **Acta Obstet Gynecol Scand Suppl** 1997;165:30–4

Is pregnancy smoking causal to testis cancer in sons? A hypothesis. Clemmesen J. **Acta Oncol** 1997;36(1):59–63

Lifestyle factors and hip arthrosis. A case referent study of body mass index, smoking and hormone therapy in 503 Swedish women. Vingård E, et al. **Acta Orthop Scand** 1997 Jun;68(3):216–20

Maternal smoking and feto–infant mortality: biological pathways and public health significance. Cnattingius S, et al. **Acta Paediatr** 1996 Dec;85(12):1400–2

Interactions between maternal smoking and other prenatal risk factors for sudden infant death syndrome (SIDS). Schellscheidt J, et al. **Acta Paediatr** 1997 Aug;86(8):857–63

Predictors of brief smoking intervention in a midwifery setting. Cooke M, et al. **Addiction** 1996 Nov;91(11):1715–25

The association between cigarette smoking and selected HIV–related medical conditions. Conley LJ, et al. **AIDS** 1996 Sep;10(10):1121–6

Tobacco control and the American Medical Association. Houston TP. **Alaska Med** 1996 Jan–Mar;38(1):49–50

Tobacco erases 30 years of progress: preliminary analysis of the effect of tobacco smoking on Alaska Native birth weight. Murphy NJ, et al. **Alaska Med** 1996 Jan–Mar; 38(1):31–3

Association between maternal smoking and severe respiratory syncytial virus infections and sudden infant death syndrome. Singleton R. **Alaska Med** 1996 Jan–Mar;38(1):34

Influence of nicotine on myocardial stiffness and fibrosis during chronic ethanol use. Rajiyah G, et al. **Alcohol Clin Exp Res** 1996 Sep;20(6):985–9

Effect of acute cigarette smoking on endothelium–dependent brachial artery dilatation in healthy individuals. Lekakis J, et al. **Am J Cardiol** 1997 Feb 15;79(4):529–31

Effects of long–term cigarette smoking on endothelium–dependent responses in humans. McVeigh

GE, et al. **Am J Cardiol** 1996 Sep 15;78(6):668–72

Reversible reduction in plasma concentration of nitric oxide induced by cigarette smoking in young adults. Node K, et al. **Am J Cardiol** 1997 Jun 1;79(11):1538–41

Tobacco [editorial] Roberts WC. **Am J Cardiol** 1996 Nov 1;78(9):1084–5

Cigarette smoking and antioxidant vitamins: the smoke screen continues to clear but has a way to go [editorial; comment] [see comments] Cross CE, et al. **Am J Clin Nutr** 1997 Feb; 65(2):562–3. Comment on: Am J Clin Nutr 1997 Feb;65(2):496–502. Comment in: Am J Clin Nutr 1997 Sep;66(3):708–10.

Ascorbic acid and dehydroascorbic acid as biomarkers of oxidative stress caused by smoking. Lykkesfeldt J, et al. **Am J Clin Nutr** 1997 Apr;65(4):959–63

Smoking, alcohol consumption, and leukocyte counts. Parry H, et al. **Am J Clin Pathol** 1997 Jan;107(1):64–7

Smoking: a burden to patient and society. Keller KB, et al. **Am J Crit Care** 1996 Jul;5(4):314–6

Maternal cigarette smoking as a risk factor for placental abruption, placenta previa, and uterine bleeding in pregnancy. Ananth CV, et al. **Am J Epidemiol** 1996 Nov 1;144(9):881–9

Maternal age modifies the effect of maternal smoking on intrauterine growth retardation but not on late fetal death and placental abruption. Cnattingius S. **Am J Epidemiol** 1997 Feb 15;145(4):319–23

Effects of cigarette smoking, caffeine consumption, and alcohol intake on fecundability. Curtis KM, et al. **Am J Epidemiol** 1997 Jul 1;146(1):32–41

Depression, smoking, and lung cancer [comment] Friedman GD. **Am J Epidemiol** 1996 Dec 15;144(12):1104–6. Comment on: Am J Epidemiol 1996 Dec 15;144(12):1096–103.

Smoking history in middle age and subsequent cognitive performance in elderly Japanese-American men. The Honolulu-Asia Aging Study. Galanis DJ, et al. **Am J Epidemiol** 1997 Mar 15;145(6):507–15

Re: "Invited commentary: response to Science article, 'Epidemiology faces its limits'" [letter; comment] Hamill PV. **Am J Epidemiol** 1997 Sep 15;146(6):527–8. Comment on: Am J Epidemiol 1996 Apr 15;143(8):747–9.

Environmental tobacco smoke and breastfeeding duration. Horta BL, et al. **Am J Epidemiol** 1997 Jul 15;146(2):128–33

Effects of smoking on the incidence of non-insulin-dependent diabetes mellitus. Replication and extension in a Japanese cohort of male employees. Kawakami N, et al. **Am J Epidemiol** 1997 Jan 15; 145(2):103–9

Maternal smoking during pregnancy and childhood cancer. Klebanoff MA, et al. **Am J Epidemiol** 1996 Dec 1; 144(11):1028–33

Re: Effects of caffeine consumption on delayed conception [letter; comment] Papathoma E. **Am J Epidemiol** 1996 Oct 15;144(8):799–800; discussion 801. Comment on: Am J Epidemiol 1995 Dec 15;142(12):1322–9.

Effects of maternal cigarette smoking and alcohol consumption on blood lead levels of newborns. Rhainds M, et al. **Am J Epidemiol** 1997 Feb 1;145(3):250–7

Smoking and fatal prostate cancer in a large cohort of adult men. Rodriguez C, et al. **Am J Epidemiol** 1997 Mar 1; 145(5):466–75

Smoking, nicotine dependence, and depressive symptoms in the CARDIA Study. Effects of educational status. Son BK, et al. **Am J Epidemiol** 1997 Jan 15;145(2):110–6

Effect of caffeine intake during pregnancy on birth weight. Vlajinac HD, et al. **Am J Epidemiol** 1997 Feb 15; 145(4):335–8

Effects of cigarette smoking, diabetes, high cholesterol, and hypertension on all-cause mortality and cardiovascular disease mortality in Mexican Americans. The San Antonio Heart Study. Wei M, et al. **Am J Epidemiol** 1996 Dec 1; 144(11):1058–65

Re: "Smoking reduces fecundity: a European multicenter study on infertility and subfecundity" [letter; comment] Zhou H, et al. **Am J Epidemiol** 1997 Jan 1;145(1):81–2. Comment on: Am J Epidemiol 1996 Mar 15;143(6):578–87.

Does smoking predispose to peptic ulcer relapse after eradication of Helicobacter pylori? Chan FK, et al. **Am J Gastroenterol** 1997 Mar;92(3):442–5

No relationship between smoking and hepatitis B virus-related hepatocellular carcinoma [letter; comment] Sivri B, et al. **Am J Gastroenterol** 1997 May;92(5):914. Comment on: Am J Gastroenterol 1996 Jun;91(6):1195–203.

Intranasal nicotine spray does not augment the adverse effects of cigarette smoking on myocardial oxygen demand or coronary arterial dimensions. Keeley EC, et al. **Am J Med** 1996 Oct;101(4):357–63

Cigarette smoking and severe uncontrolled hypertension in inner-city African Americans. McNagny SE, et al. **Am J Med** 1997 Aug;103(2):121–7

The paradoxical effect of smoking in preeclamptic pregnancies: smoking reduces the incidence but increases the rates of perinatal mortality, abruptio placentae, and intrauterine growth restriction. Cnattingius S, et al. **Am J Obstet Gynecol** 1997 Jul;177(1):156–61

Cigarette smoking and its orthopedic consequences. Kwiatkowski TC, et al. **Am J Orthop** 1996 Sep;25(9):590–7 (112 ref.)

Dental asymmetry, maternal obesity, and smoking. Kieser JA, et al. **Am J Phys Anthropol** 1997 Jan;102(1):133–9

Maternal smoking during pregnancy and limb reduction malformations in Sweden. Källén K. **Am J Public Health** 1997 Jan;87(1):29–32

Ethnic differences in the prevalence of nonmalignant respiratory disease among uranium miners [see comments] Mapel DW, et al. **Am J Public Health** 1997 May;87(5):833–8 . Comment in: Am J Public Health 1997 May;87(5):730–2.

Annotation: cigarette smoking, nutrition, and birthweight [comment] [published erratum appears in Am J Public Health 1997 Jun;87(6):925] Rasmussen KM, et al. **Am J Public Health** 1997 Apr;87(4):543–4. Comment on: Am J Public Health 1997 Apr;87(4):591–6.

Cigarette smoking: a risk factor for idiopathic pulmonary fibrosis. Baumgartner KB, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):242–8

ATS statement—cigarette smoking and health [letter] Hasan SU. **Am J Respir Crit Care Med** 1996 Nov;154(5):1579–80

Integrin upregulation on sputum neutrophils in smokers with chronic airway obstruction. Maestrelli P, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1296–300

Morphologic determinants of airway responsiveness in chronic smokers. Riess A, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1444–9

Longitudinal studies of active and passive smoking. Samet JM, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 2):S257–65 (77 ref.)

Lone cryptogenic fibrosing alveolitis: a functional-morphologic correlation based on extent of disease on thin-section computed tomography. Wells AU, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1367–75

Parental smoking behavior and passive smoke exposure in children with asthma. Winkelstein ML, et al. **Ann Allergy Asthma Immunol** 1997 Apr;78(4):419–23

Some sequels to the Surgeon General's Report on Smoking and Health: thirty years later. Breslow L. **Ann Epidemiol** 1996 Sep;6(5):372–5

Smoking and autoimmune thyroid disease [letter] Fernandez-Soto L, et al. **Ann Intern Med** 1997 Jun 15; 126(12):1005

Differences in the effect of cigarette smoking on endothelial function in chinese and white adults [see comments] Woo KS, et al. **Ann Intern Med** 1997 Sep 1;127(5):372–5. Comment in: Ann Intern Med 1997 Sep 1;127(5):401–3.

Molecular epidemiology of bladder cancer. Vineis P, et al. **Ann Ist Super Sanita** 1996;32(1):21–7 (39 ref.)

Smoking as a risk factor for abdominal aortic aneurysm. Powell JT, et al. **Ann N Y Acad Sci** 1996 Nov 18;800:246–8

Smoke gets in your joints? [comment] Deighton C. **Ann Rheum Dis** 1997 Aug;56(8):453–4. Comment on: Ann Rheum Dis 1997 Aug;56(8):463–9.

Cigarette smoking and rheumatoid arthritis severity [see comments] Saag KG, et al. **Ann Rheum Dis** 1997 Aug; 56(8):463–9. Comment in: Ann Rheum Dis 1997 Aug;56(8):453–4.

Favre-Racouchot syndrome: a case for smokers' comedones [letter] Keough GC, et al. **Arch Dermatol** 1997 Jun; 133(6):796–7

Cigarette smoking and inflammatory skin disease. The good and the bad [editorial; comment] Smith JB, et al. **Arch Dermatol** 1997 Jul;133(7):901–2. Comment on: Arch Dermatol 1997 Jul;133(7):823–5.

Increase in child behavior problems resulting from maternal smoking during pregnancy. Orlebeke JF, et al. **Arch Environ Health** 1997 Jul–Aug;52(4):317–21

Beedi smoking and hematological variation. Sreerama KK, et al. **Arch Environ Health** 1997 Mar–Apr;52(2):150

Maternal smoking during pregnancy and the risk of conduct disorder in boys. Wakschlag LS, et al. **Arch Gen Psychiatry** 1997 Jul;54(7):670–6

A prospective study of cigarette smoking and the risk of pancreatic cancer. Fuchs CS, et al. **Arch Intern Med** 1996 Oct 28;156(19):2255–60

Reduced cardiovascular mortality risk in male smokers who are physically active. Results from a 25-year follow-up of the prospective population study men born in 1914. Hedblad B, et al. **Arch Intern Med** 1997 Apr 28; 157(8):893–9

Smoking behavior on the first day of a quit attempt predicts long-term abstinence. Westman EC, et al. **Arch Intern Med** 1997 Feb 10;157(3):335–40

Cigarette smoking and the risk of development of lens opacities. The Framingham studies. Hiller R, et al. **Arch Ophthalmol** 1997 Sep;115(9):1113–8

Smoking is also associated with age-related macular degeneration in persons aged 85 years and older: The Rotterdam Study [letter; comment] Klaver CC, et al. **Arch Ophthalmol** 1997 Jul;115(7):945. Comment on: Arch Ophthalmol 1996 Oct;114(10):1193–6.

Age-related macular degeneration and smoking. The Rotterdam Study [see comments] Vingerling JR, et al. **Arch Ophthalmol** 1996 Oct;114(10):1193–6. Comment in: Arch Ophthalmol 1997 Jul;115(7):945.

Smoking and rheumatoid arthritis—observations from a multicase family study: comment on the article by Silman et al [letter; comment] McDonagh JE, et al. **Arthritis Rheum** 1997 Mar;40(3):594. Comment on: Arthritis Rheum 1996 May;39(5):732–5.

A comparison of the quantitation of macrophage foam cell populations and the extent of apolipoprotein E deposition in developing atherosclerotic lesions in young people: high and low serum thiocyanate groups as an indication of smoking. PDAY Research Group. Pathobiological Determinants of Atherosclerosis in Youth. Botti TP, et al. **Atherosclerosis** 1996 Aug 2;124(2):191–202

The insulin resistance syndrome and postprandial lipid intolerance in smokers. Eliasson B, et al. **Atherosclerosis** 1997 Feb 28;129(1):79–88

Impairment of endothelium-dependent relaxation of rabbit aortas by cigarette smoke extract—role of free radicals and attenuation by captopril. Ota Y, et al. **Atherosclerosis** 1997 Jun;131(2):195–202

Risk factors associated with the development of peripheral arterial disease in smokers: a case-control study. Powell JT, et al. **Atherosclerosis** 1997 Feb 28;129(1):41–8

Reverse smoking and palatal mucosal changes in Filipino women. Epidemiological features. Mercado-Ortiz G, et al. **Aust Dent J** 1996 Oct;41(5):300–3

How well does epidemiological evidence hold for the relationship between smoking and adverse obstetric outcomes in New South Wales? Wong PP, et al. **Aust N Z J Obstet Gynaecol** 1997 May;37(2):168–73

Buerger's disease in Hong Kong: a review of 89 cases. Lau H, et al. **Aust N Z J Surg** 1997 May;67(5):264–9

Comparisons of altitude tolerance and hypoxia symptoms between nonsmokers and habitual smokers. Yoneda I, et al. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):807–11

Cigarette smoking is associated with abnormal involuntary movements in the general male population—a study of men born in 1933. Nilsson A, et al. **Biol Psychiatry** 1997 Mar 15;41(6):717–23

Smoking affects blood pressure [editorial] Hansson L, et al. **Blood Press** 1996 Mar;5(2):68

How smoking affects blood pressure. Omvik P. **Blood Press** 1996 Mar;5(2):71–7 (69 ref.)

Captopril does not blunt the sympathoadrenal response to cigarette smoking in normotensive humans. Ottesen MM, et al. **Blood Press** 1997 Jan;6(1):29–34

Smoking and blood pressure [editorial] Wilhelmsen L. **Blood Press** 1996 Mar;5(2):69–70

Premature grey hair and hair loss among smokers: a new opportunity for health education? Mosley JG, et al. **BMJ** 1996 Dec 21–28;313(7072):1616

Alcohol, tobacco and oesophageal cancer: effects of the duration of consumption, mean intake and current and former consumption. Launoy G, et al. **Br J Cancer** 1997; 75(9):1389–96

The dose-response relationship between cigarette consumption, biochemical markers and risk of lung cancer. Law MR, et al. **Br J Cancer** 1997;75(11):1690–3

Childhood cancer and parental use of tobacco: deaths from 1953 to 1955. Sorahan T, et al. **Br J Cancer** 1997;75(1):134–8

Smoking and postmenopausal hormone replacement therapy. Jensen J. **Br J Clin Pract Symp Suppl** 1996 Sep;86:6–8 (25 ref.)

Cigarette smoking in men may be a risk factor for increased severity of psoriasis of the extremities [letter] Gupta MA, et al. **Br J Dermatol** 1996 Nov;135(5):859–60

Tobacco smoking and risk of haematological malignancies in adults: a case-control study. Pasqualetti P, et al. **Br J Haematol** 1997 Jun;97(3):659–62

Inflammatory bowel disease: does smoking hold some answers? [editorial] Thomas GA, et al. **Br J Hosp Med** 1996 Nov 6–19;56(9):443–4

Influence of hypertensive disorders and cigarette smoking on placental abruption and uterine bleeding during pregnancy. Ananth CV, et al. **Br J Obstet Gynaecol** 1997 May;104(5):572–8

The role of cigarette smoking in prostatic enlargement. Küpeli B, et al. **Br J Urol** 1997 Aug;80(2):201–4

Effects of cigarette smoke on nitric oxide-induced increase in cyclic GMP in nerve terminals of rat cerebral cortex. Kamisaki Y, et al. **Brain Res Mol Brain Res** 1996 Nov; 42(1):39–44

Effect of tobacco consumption on bone mineral density in healthy young males. Ortego-Centeno N, et al. **Calcif Tissue Int** 1997 Jun;60(6):496–500

Aortic dissection and use of the nicotine patch: a case involving a temporal relationship. Ropchan GV, et al. **Can J Cardiol** 1997 May;13(5):525–8

Smoking and diseases of the gastrointestinal system: an epidemiological review with special reference to sex differences. Ashley MJ. **Can J Gastroenterol** 1997 May–Jun; 11(4):345–52 (84 ref.)

Tobacco and health [see comments] **Can Med Assoc J** 1997 Jan 15;156(2):240A–240F. Comment in: CMAJ 1997 Jul 15;157(2):133; discussion 133–4. **(Eng, Fre)**

Predictors of mortality from kidney cancer in 332,547 men screened for the Multiple Risk Factor Intervention Trial. Coughlin SS, et al. **Cancer** 1997 Jun 1;79(11):2171–7

The influence of cigarette smoking, alcohol, and green tea consumption on the risk of carcinoma of the cardia and distal stomach in Shanghai, China [letter; comment] Galanis DJ, et al. **Cancer** 1997 May 1;79(9):1840–1. Comment on: Cancer 1996 Jun 15;77(12):2449–57.

Harvard report on cancer prevention. Causes of human cancer. Smoking. **Cancer Causes Control** 1996 Nov;7 Suppl 1:S5–6

Multiple myeloma among Blacks and Whites in the United States: role of cigarettes and alcoholic beverages. Brown LM, et al. **Cancer Causes Control** 1997 Jul;8(4):610–4

Association of smoking, body mass, and physical activity with risk of prostate cancer in the Iowa 65+ Rural Health Study (United States). Cerhan JR, et al. **Cancer Causes Control** 1997 Mar;8(2):229–38

A case-control study of cytochrome P450 1A1, glutathione

S-transferase M1, cigarette smoking and lung cancer susceptibility (Massachusetts, United States). Garcia-Closas M, et al. **Cancer Causes Control** 1997 Jul;8(4):544–53

Trends in urinary bladder cancer incidence in Sweden 1960–93 with special reference to histopathology, time period, birth cohort, and smoking. Thörn M, et al. **Cancer Causes Control** 1997 Jul;8(4):560–7

Tobacco and non-Hodgkin's lymphoma: combined analysis of three case-control studies (United States). Zahm SH, et al. **Cancer Causes Control** 1997 Mar;8(2):159–66

A nested case-control study on alcohol drinking, tobacco smoking, and cancer. Murata M, et al. **Cancer Detect Prev** 1996;20(6):557–65

Alcohol, cigarette smoking, and the risk of breast cancer. Ranstam J, et al. **Cancer Detect Prev** 1995;19(6):487–93

Association of family history of cervical, ovarian, and uterine cancer with histological categories of lung cancer: the Iowa Women's Health Study. Anderson KE, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jun;6(6):401–5

Effects of CYP2D6 activity and tobacco on larynx cancer risk. Benhamou S, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Sep;5(9):683–6

Reproductive history and cigarette smoking as risk factors for thyroid cancer in women: a population-based case-control study. Galanti MR, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Jun;5(6):425–31

Smoking and pancreatic cancer in men and women. Muscat JE, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jan; 6(1):15–9

Cigarette smoking and large cell carcinoma of the lung. Muscat JE, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):477–80

Childhood brain tumors and exposure to tobacco smoke. Norman MA, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Feb;5(2):85–91 (52 ref.)

Prenatal exposure to tobacco smoke and childhood brain tumors: results from the United States West Coast childhood brain tumor study. Norman MA, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Feb;5(2):127–33

Arylamine N-acetyltransferase 1 (NAT1) and 2 (NAT2) polymorphisms in susceptibility to bladder cancer: the influence of smoking. Okkels H, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Apr;6(4):225–31

Smoking, gender, and survival association with allele loss for the LOH11B lung cancer region on chromosome 11. Schreiber G, et al. **Cancer Epidemiol Biomarkers Prev** 1997 May;6(5):315–9

Cigarette smoking and chromosome 9 alterations in bladder cancer. Zhang ZF, et al. **Cancer Epidemiol Biomarkers Prev** 1997 May;6(5):321–6

GSTM1 gene polymorphism as a possible marker for susceptibility to head and neck cancers among Japanese smokers. Kihara M, et al. **Cancer Lett** 1997 Jan 30; 112(2):257–62

Gender differences in smoking and risk for oral cancer. Muscat JE, et al. **Cancer Res** 1996 Nov 15;56(22):5192–7

Association between cigarette smoking and FHIT gene alterations in lung cancer. Sozzi G, et al. **Cancer Res** 1997 Jun 1;57(11):2121–3

Relationship between acetylator status, smoking, and diet and colorectal cancer risk in the north-east of England. Welfare MR, et al. **Carcinogenesis** 1997 Jul;18(7):1351–4

Cigarette smoking and coronary heart disease: risks and management. Rigotti NA, et al. **Cardiol Clin** 1996 Feb; 14(1):51–68 (113 ref.)

Confronting the prenatal effects of active and passive tobacco smoking on the birth weight of children. Jedrychowski W, et al. **Cent Eur J Public Health** 1996 Sep;4(3):201–5

Risk factors of intrauterine growth retardation: a study of an urban population in Poland. Kalinka J, et al. **Cent Eur J Public Health** 1996 Sep;4(3):192–6

The effect of cigarettes smoking on the blood counts of T and NK cells in subjects with occupational exposure to organic solvents. Moszczyński P, et al. **Cent Eur J Public Health** 1996 Sep;4(3):164–8

Symptoms and diseases and smoking habits in female episodic cluster headache and migraine patients. Hannerz J. **Cephalalgia** 1997 Jun;17(4):499–500

Basic science of small cell lung cancer. Williams CL. **Chest Surg Clin N Am** 1997 Feb;7(1):1–19 (140 ref.)

The effects of cigarette smoke on the progression of septic pseudarthrosis of the tibia treated by Ilizarov external fixator. Gualdrini G d, et al. **Chir Organi Mov** 1996 Sep-Dec;81(4):395-400 hl **(Eng, Ita)**

Antioxidant vitamin C improves endothelial dysfunction in chronic smokers. Heitzer T, et al. **Circulation** 1996 Jul 1; 94(1):6–9

Unfavorable effect of smoking on the elastic properties of the human aorta. Stefanadis C, et al. **Circulation** 1997 Jan 7;95(1):31–8

Maternal cigarette smoking and oral clefts: a meta-analysis. Wyszynski DF, et al. **Cleft Palate Craniofac J** 1997 May; 34(3):206–10

Smoking and the complications of diabetes mellitus. Reddy SS. **Cleve Clin J Med** 1996 Nov-Dec;63(7):373–5; quiz 419

Smoking and endocrine ophthalmopathy: impact of smoking severity and current vs lifetime cigarette consumption. Pfeilschifter J, et al. **Clin Endocrinol (Oxf)** 1996 Oct; 45(4):477–81

The effects of smoking on remission and relapse of Graves' disease [letter] Unüvar N, et al. **Clin Endocrinol (Oxf)** 1997 Mar;46(3):377–8

Chronic smoke exposure alters the phenotype pattern and the metabolic response in human alveolar macrophages. Sköld CM, et al. **Clin Exp Immunol** 1996 Oct;106(1):108–13

Relationship of cigarette smoking to blood pressure and serum lipids and lipoproteins in men. Imamura H, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):397–402

Effects of tobacco smoking on human ocular smooth pursuit [published erratum appears in Clin Pharmacol Ther 1997 Jun;61(6):627] Domino EF, et al. **Clin Pharmacol Ther** 1997 Mar;61(3):349–59

Smoking causes cancer! Harris RF. **Curr Biol** 1997 Feb 1; 7(2):R60

Smoking causes cancer! [letter] Pfeifer GP, et al. **Curr Biol** 1997 May 1;7(5):R271

Bowen's disease and arsenism from tobacco smoke: an association? Person JR. **Cutis** 1996 Jul;58(1):65–6 (17 ref.)

Cigarette smoking and progression of retinopathy and nephropathy in type 1 diabetes. Mühlhauser I, et al. **Diabet Med** 1996 Jun;13(6):536–43

Diurnal variation in blood pressure in insulin-dependent diabetic smokers and non-smokers with and without microalbuminuria. Sinha RN, et al. **Diabet Med** 1997 Apr; 14(4):291–5

Cigarette smoke increases gastric ulcer size in part by an angiotensin II-mediated mechanism in rats. Seno K, et al. **Dig Dis Sci** 1997 Jan;42(1):74–8

Reinke's edema. Sataloff RT, et al. **Ear Nose Throat J** 1997 Feb;76(2):70

Severe hyperkeratosis mimicking carcinoma. Sataloff RT, et al. **Ear Nose Throat J** 1996 Oct;75(10):647

Maternal smoking and tooth formation in the foetus. III. Thin mandibular incisors and delayed motor development at 1 year of age. Heikkinen T, et al. **Early Hum Dev** 1997 Feb 20;47(3):327–40

The effect of maternal smoking on birth weight in twin pregnancies. Rydhstroem H, et al. **Early Hum Dev** 1996 Sep 20;46(1–2):43–53

Pre- and post-natal growth in children of women who smoked in pregnancy. Vik T, et al. **Early Hum Dev** 1996 Jul 19;45(3):245–55

FHIT gene and cancer [news] **Environ Health Perspect** 1996 Aug;104(8):818–9

Maternal tobacco smoke exposure and persistent pulmonary hypertension of the newborn. Bearer C, et al. **Environ Health Perspect** 1997 Feb;105(2):202–6

Cigarette smoking and p53 mutations in lung cancer and bladder cancer. Husgafvel-Pursiainen K, et al. **Environ Health Perspect** 1996 May;104 Suppl 3:553–6

Maternal smoking during pregnancy and postnatal exposure to environmental tobacco smoke as predisposition factors to acute respiratory infections. Jedrychowski W, et al. **Environ Health Perspect** 1997 Mar;105(3):302–6

DNA adducts in human tissues: biomarkers of exposure to carcinogens in tobacco smoke. Phillips DH. **Environ Health Perspect** 1996 May;104 Suppl 3:453–8 (55 ref.)

Cigarette smoke radicals and the role of free radicals in chemical carcinogenicity. Pryor WA. **Environ Health Perspect** 1997 Jun;105 Suppl 4:875–82 (110 ref.)

The importance of age and smoking in evaluating adverse cytogenetic effects of exposure to environmental agents. Tucker JD, et al. **Environ Health Perspect** 1996 May;104 Suppl 3:489–92

Smoking-associated mitochondrial DNA mutations in human hair follicles. Liu CS, et al. **Environ Mol Mutagen** 1997; 30(1):47–55

A prospective study of alcohol, smoking, caffeine, and the risk of duodenal ulcer in men. Aldoori WH, et al. **Epidemiology** 1997 Jul;8(4):420–4

The influence of body size, smoking, and diet on bone density in pre- and postmenopausal women. Franceschi S, et al. **Epidemiology** 1996 Jul;7(4):411–4

Estimating multivariate risk-difference models in case-control studies [letter; comment] Nurminen M. **Epidemiology** 1997 Jan;8(1):111–2. Comment on: Epidemiology 1996 Mar;7(2):144–50.

Smoking, atherosclerosis and risk of abdominal aortic aneurysm [see comments] Lee AJ, et al. **Eur Heart J** 1997 Apr;18(4):671–6. Comment in: Eur Heart J 1997 Apr;18(4):545–6.

Acute myocardial infarction in the young--the role of smoking. Rumboldt Z, et al. **Eur Heart J** 1995 Nov; 16(11):1745–6

Very high male lung cancer incidence in areas with tobacco industries [letter] Janssen-Heijnen ML, et al. **Eur J Cancer** 1996 Dec;32A(13):2372–3

Cigarette smoking and the risk of breast cancer. Braga C, et al. **Eur J Cancer Prev** 1996 Jun;5(3):159–64

Case-control study of risk factors for cervical squamous cell neoplasia in Denmark. IV: role of smoking habits. Kjaer SK, et al. **Eur J Cancer Prev** 1996 Oct;5(5):359–65

Haemoglobin adducts of N-nitroso compounds. Richter E. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:115–9 (32 ref.)

Tobacco-specific nitrosamines. Spiegelhalder B, et al. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:33–8 (38 ref.)

Smoking and cancer with emphasis on Italy. Talamini R, et al. **Eur J Cancer Prev** 1996 Oct;5(5):396–7 (9 ref.)

Tobacco and other risk factors for oesophageal cancer in alcohol non-drinkers. Tavani A, et al. **Eur J Cancer Prev** 1996 Oct;5(5):313–8

The effect of beta-carotene on sputum cytology in smokers: a preliminary study. van Poppel G, et al. **Eur J Cancer Prev** 1997 Jun;6(3):294–9

Smoking cessation improves insulin sensitivity in healthy middle-aged men. Eliasson B, et al. **Eur J Clin Invest** 1997 May;27(5):450–6

Cigarette smoking stimulates cysteinyl leukotriene production in man. Fauler J, et al. **Eur J Clin Invest** 1997 Jan;27(1):43–7

The diet and body weight of British teenage smokers at 16–17 years. Crawley HF, et al. **Eur J Clin Nutr** 1995 Dec; 49(12):904–14

Smoking and inflammatory bowel disease. Forbes A. **Eur J Gastroenterol Hepatol** 1996 Aug;8(8):761–3

Effects of smoking on the presentation and clinical course of inflammatory bowel disease. Fraga XF, et al. **Eur J Gastroenterol Hepatol** 1997 Jul;9(7):683–7

Cigarette smoking and quality of life in patients with inflammatory bowel disease. South Limburg IBD Study Group [see comments] Russel MG, et al. **Eur J Gastroenterol Hepatol** 1996 Nov;8(11):1075–81. Comment in: Eur J Gastroenterol Hepatol 1996 Nov;8(11):1067–9.

Influence of dose and cessation of kiraiku, cigarettes and alcohol use on the risk of developing oral leukoplakia. Macigo FG, et al. **Eur J Oral Sci** 1996 Oct–Dec; 104(5–6):498–502

Dose-dependent cigarette smoking-related inflammatory responses in healthy adults. Kuschner WG, et al. **Eur Respir J** 1996 Oct;9(10):1989–94

Gender difference in smoking effects on lung function and risk of hospitalization for COPD: results from a Danish longitudinal population study. Prescott E, et al. **Eur Respir J** 1997 Apr;10(4):822–7

Serum and BAL Clara cell 10 kDa protein (CC10) levels and CC10-positive bronchiolar cells are decreased in smokers. Shijubo N, et al. **Eur Respir J** 1997 May; 10(5):1108–14

Acute influence of cigarette smoke on secretion of pulmonary surfactant in rat alveolar type II cells in culture. Wirtz HR, et al. **Eur Respir J** 1996 Jan;9(1):24–32

Ultrastructural changes in 9-day old mouse embryos following maternal tobacco smoke inhalation. Bnait KS, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):453–61

Does cigarette smoking impair natural or assisted fecundity? Hughes EG, et al. **Fertil Steril** 1996 Nov;66(5):679–89 (71 ref.)

Immunodetection of cotinine protein in granulosa-lutein cells of women exposed to cigarette smoke. Zenzes MT, et al. **Fertil Steril** 1997 Jul;68(1):76–82

13-week inhalation toxicity study of menthol cigarette smoke. Gaworski CL, et al. **Food Chem Toxicol** 1997 Jul; 35(7):683–92

Mainstream and sidestream cigarette smoke exposure increases retinol in guinea pig lungs. Mukherjee S, et al. **Free Radic Biol Med** 1995 Mar;18(3):507–14

Role of oxidants/antioxidants in smoking-induced lung diseases. Rahman I, et al. **Free Radic Biol Med** 1996; 21(5):669–81 (155 ref.)

Smoking, azathioprine, and clinical course in Crohn's disease [letter; comment] Cottone M, et al. **Gastroenterology** 1996 Oct;111(4):1161–2. Comment on: Gastroenterology 1996 Feb;110(2):424–31.

Analysis of gene-smoking interaction in lung cancer. Gauderman WJ, et al. **Genet Epidemiol** 1997;14(2):199–214

Adult coeliac disease and cigarette smoking. Snook JA, et al. **Gut** 1996 Jul;39(1):60–2

Smoking and ulcer perforation. Svanes C, et al. **Gut** 1997 Aug;41(2):177–80

Effect of smoking on ceruloplasmin and its ferroxidase activity in pregnant women. Dalamaga AL, et al. **Gynecol Obstet Invest** 1996;42(1):13–5

Cervical cotinine and macrophage-Langerhans cell density in the normal human uterine cervix. Poppe WA, et al. **Gynecol Obstet Invest** 1996;41(4):253–9

Cyclin D1 abnormalities and tobacco exposure in head and neck squamous cell carcinoma. Davidson BJ, et al. **Head Neck** 1996 Nov-Dec;18(6):512–21

Chemoprevention of respiratory tract cancer. Khuri FR, et al. **Hematol Oncol Clin North Am** 1997 Jun;11(3):387–408 (72 ref.)

Lung cancer and chronic obstructive pulmonary disease. Petty TL. **Hematol Oncol Clin North Am** 1997 Jun; 11(3):531–41 (19 ref.)

Menthol cigarette use in African Americans. Richardson T. **Hosp Pract (Off Ed)** 1996 Aug 15;31(8):22H–22I

Hidden persuasion. Jenner P. **Hum Exp Toxicol** 1996 Aug; 15(8):696–8

Correlation of hematologic markers of inflammation and lung function: a comparison of asymptomatic smokers and nonsmokers. McKarns SC, et al. **Hum Exp Toxicol** 1996 Jun;15(6):523–32

Biomonitoring exposure to environmental tobacco smoke (ETS): a critical reappraisal. Scherer G, et al. **Hum Exp Toxicol** 1997 Aug;16(8):449–59 (119 ref.)

Cigarette smoking may affect meiotic maturation of human oocytes. Zenzes MT, et al. **Hum Reprod** 1995 Dec; 10(12):3213–17

Neural circulatory responses to carbon monoxide in healthy humans. Hausberg M, et al. **Hypertension** 1997 May; 29(5):1114–8

Angiotensin-converting enzyme gene polymorphism adds

risk for the severity of coronary atherosclerosis in smokers. Hibi K, et al. **Hypertension** 1997 Sep;30(3 Pt 2):574–9

Chemoprevention of lung cancer: the beta–Carotene and Retinol Efficacy Trial (CARET) in high–risk smokers and asbestos–exposed workers. Omenn GS, et al. **IARC Sci Publ** 1996;(136):67–85

Cigarette smoking and vaginal atrophy in postmenopausal women. Kalogeraki A, et al. **In Vivo** 1996 Nov–Dec; 10(6):597–600

Brainstem auditory evoked potentials (BAEPs) in tobacco smokers. Kumar V, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):381–4

Smoking cessation in primary care. Hurt RD. **Indiana Med** 1996 Mar–Apr;89(2):165–8

Tobacco curriculum for medical students, residents and practicing physicians. Kristeller JL, et al. **Indiana Med** 1996 Mar–Apr;89(2):199–204

Effects of tobacco use on the health of Indiana citizens. Steele GK, et al. **Indiana Med** 1996 Mar–Apr;89(2):145–8

Trends in the incidence of smoking–associated cancers in Norway, 1954–93. Engeland A. **Int J Cancer** 1996 Sep 27; 68(1):39–46

Use of multiple primary cancers to indicate associations between smoking and cancer incidence: an analysis of 500,000 cancer cases diagnosed in Norway during 1953–93. Engeland A, et al. **Int J Cancer** 1997 Feb 7;70(4):401–7

Ki–ras mutations in exocrine pancreatic cancer: association with clinico–pathological characteristics and with tobacco and alcohol consumption. PANK–ras I Project Investigators. Malats N, et al. **Int J Cancer** 1997 Mar 17; 70(6):661–7

Tobacco smoking and gastric cancer: review and meta–analysis. Trédaniel J, et al. **Int J Cancer** 1997 Aug 7;72(4):565–73

Smoking, alcohol use, dietary factors and risk of small intestinal adenocarcinoma. Wu AH, et al. **Int J Cancer** 1997 Mar 4;70(5):512–7

Cancer screening of upper aerodigestive tract in Japanese alcoholics with reference to drinking and smoking habits and aldehyde dehydrogenase–2 genotype. Yokoyama A, et al. **Int J Cancer** 1996 Nov 4;68(3):313–6

Family history of cancer and risk of lung cancer in lifetime non–smokers and long–term ex–smokers. Brownson RC, et al. **Int J Epidemiol** 1997 Apr;26(2):256–63

Smoking and Parkinson's disease: a case–control study in Germany. Hellenbrand W, et al. **Int J Epidemiol** 1997 Apr; 26(2):328–39

Effect of age, sex and smoking habits on pneumococcal antibodies in an elderly population. Sankilampi U, et al. **Int J Epidemiol** 1997 Apr;26(2):420–7

Smoking during pregnancy and poor antenatal care: two major preventable risk factors for sudden infant death syndrome. Schlaud M, et al. **Int J Epidemiol** 1996 Oct; 25(5):959–65

The mind–body connection—anxiety, panic, mood and compulsion [news] **Int J Fertil Menopausal Stud** 1996 Nov–Dec;41(6):498–505

Smoking and implant failure—benefits of a smoking cessation protocol. Bain CA. **Int J Oral Maxillofac Implants** 1996 Nov–Dec;11(6):756–9

Cigarette smoking and silent brain infarction in normal adults. Yamashita K, et al. **Intern Med** 1996 Sep;35(9):704–6

Spirometric gated quantitative computed tomography of the lung in healthy smokers and nonsmokers. Pelinkovic D, et al. **Invest Radiol** 1997 Jun;32(6):335–43

Effect of smoking on the clinical progression of HIV–1 infection. Galai N, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 15;14(5):451–8

Effect of cigarette smoking on HIV–related oral lesions. Palacio H, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Apr 1;14(4):338–42

Acne inversa (pyodermia fistulans sinifica) and smoking [letter; comment] Bassukas ID, et al. **J Am Acad Dermatol** 1997 Jun;36(6 Pt 1):1029. Comment on: J Am Acad Dermatol 1996 May;34(5 Pt 1):717–32; quiz 733–4.

Smoking and prognosis after acute myocardial infarction in the thrombolytic era (Israeli Thrombolytic National Survey). Gottlieb S, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1506–13

Effects of smoking and smoking cessation on healing after mechanical periodontal therapy. Grossi SG, et al. **J Am Dent Assoc** 1997 May;128(5):599–607

Nicotine: a gateway drug? Jessup M. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):21

Smoking and reproductive health. Stein Z. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):29–30

Cancer–related issues for women. Rospond RM. **J Am Pharm Assoc (Wash)** 1996 Nov;NS36(11):655–60 (26 ref.)

Smoking, alcohol and the risk of Dupuytren's contracture. Burge P, et al. **J Bone Joint Surg Br** 1997 Mar;79(2):206–10

The effects of smoking on periodontal structures: a literature review. Bouclin R, et al. **J Can Dent Assoc** 1997 May; 63(5):356, 360–3 (59 ref.)

Tobacco smoking and periodontal diseases. Qandil R, et al. **J Can Dent Assoc** 1997 Mar;63(3):187–92, 194–5 (60 ref.)

Cigarette smoking and blood pressure in a worker population: a cross–sectional study. Fogari R, et al. **J Cardiovasc Risk** 1996 Feb;3(1):55–9

Meta–analysis of risk factors for peptic ulcer. Nonsteroidal antiinflammatory drugs, Helicobacter pylori, and smoking. Kurata JH, et al. **J Clin Gastroenterol** 1997 Jan;24(1):2–17

Molar furcation involvement associated with cigarette smoking in periodontal referrals. Mullally BH, et al. **J Clin Periodontol** 1996 Jul;23(7):658–61

Relationship between cigarette smoking and hypothyroidism in patients with Hashimoto's thyroiditis. Fukata S, et al. **J Endocrinol Invest** 1996 Oct;19(9):607–12

Tobacco and cancer in Turkey. Firat D. **J Environ Pathol Toxicol Oncol** 1996;15(2–4):155–60

The smoking addiction of pregnant women and the consequences on their offspring's intellectual development. Frydman M. **J Environ Pathol Toxicol Oncol** 1996; 15(2–4):169–72 (11 ref.)

Relationships between smoking habits and other behavior factors among males: from the results of the 1990 National Cardiovascular Survey in Japan. Nakamura Y, et al. **J Epidemiol** 1996 Jun;6(2):87–91

Smoking habits and risk of fatal stroke: 18 years follow up of the Oslo Study. Håheim LL, et al. **J Epidemiol Community Health** 1996 Dec;50(6):621–4

Tobacco smoking and alcohol consumption as risk factors for glioma: a case–control study in Melbourne, Australia. Hurley SF, et al. **J Epidemiol Community Health** 1996 Aug; 50(4):442–6

Lifelong exposures and the potential for stroke prevention: the contribution of cigarette smoking, exercise, and body fat. Shinton R. **J Epidemiol Community Health** 1997 Apr; 51(2):138–43

Smoking and the digestive system. Kamada T, et al. **J Gastroenterol** 1995 Dec;30(6):803–8 (76 ref.)

Cigarette smoking, abdominal blood flow and abdominal diseases [editorial; comment] Bolondi L, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):995–6. Comment on: J Gastroenterol Hepatol 1996 Nov;11(11):997–1000.

Brief communication: smoking and duodenal blood flow. Guslandi M, et al. **J Gastroenterol Hepatol** 1997 Apr; 12(4):347–8

Doppler ultrasound evaluation of acute effects of cigarette smoking on portal blood flow in man [see comments] Rapaccini GL, et al. **J Gastroenterol Hepatol** 1996 Nov; 11(11):997–1000. Comment in: J Gastroenterol Hepatol 1996 Nov;11(11):995–6.

Smoking habits and respiratory symptoms: observations among college students and professionals. Ghosal AG, et al. **J Indian Med Assoc** 1996 Feb;94(2):55–7

Influence of continued smoking and some biological risk factors on restenosis after percutaneous transluminal coronary angioplasty. Kotamäki M, et al. **J Intern Med** 1996 Nov;240(5):293–301

Alcohol and coronary heart disease: the roles of HDL–cholesterol and smoking. Mänttäri M, et al. **J Intern Med** 1997 Feb;241(2):157–63

Modification of human LDL by in vitro incubation with cigarette smoke or copper ions: implications for allergies, asthma and atherosclerosis. Vruwink KG, et al. **J Investig Allergol Clin Immunol** 1996 Sep–Oct; 6(5):294–300

AACR issues statement on the proposed tobacco settlement [news] **J Natl Cancer Inst** 1997 Sep 3;89(17):1259

Re: Risk factors for lung cancer and for intervention effects in CARET, the Beta–Carotene and Retinol Efficacy trial [letter; comment] Challem JJ. **J Natl Cancer Inst** 1997 Feb 19;89(4):325–6. Comment on: J Natl Cancer Inst 1996 Nov 6;88(21):1550–9.

Re: Differences in lung cancer risk between men and women: examination of the evidence [letter; comment] Cohn BA, et al. **J Natl Cancer Inst** 1996 Dec 18;88(24):1867–8. Comment on: J Natl Cancer Inst 1996 Feb 21;88(3–4):183–92.

Cigarette advertisement cites journal [letter] Crespo GG. **J Natl Cancer Inst** 1997 Feb 5;89(3):260

The smoking gun and the damage done: genetic alterations in the lungs of smokers [editorial; comment] Fearon ER. **J Natl Cancer Inst** 1997 Jun 18;89(12):834–6. Comment on: J Natl Cancer Inst 1997 Jun 18;89(12):857–62.

Tobacco, alcohol, and socioeconomic status and adenocarcinomas of the esophagus and gastric cardia [see comments] Gammon MD, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1277–84. Comment in: J Natl Cancer Inst 1997 Sep 3;89(17):1247–9.

Tobacco, colorectal cancer, and adenomas: a review of the evidence. Giovannucci E, et al. **J Natl Cancer Inst** 1996 Dec 4;88(23):1717–30 (118 ref.)

Paternal cigarette smoking and the risk of childhood cancer among offspring of nonsmoking mothers. Ji BT, et al. **J Natl Cancer Inst** 1997 Feb 5;89(3):238–44

Clonal genetic alterations in the lungs of current and former smokers [see comments] Mao L, et al. **J Natl Cancer Inst** 1997 Jun 18;89(12):857–62. Comment in: J Natl Cancer Inst 1997 Jun 18;89(12):834–6.

Beta–Carotene and lung cancer promotion in heavy smokers—a plausible relationship? [editorial; comment] Mayne ST, et al. **J Natl Cancer Inst** 1996 Nov 6; 88(21):1513–5. Comment on: J Natl Cancer Inst 1996 Nov 6;88(21):1550–9. Comment on: J Natl Cancer Inst 1996 Nov 6;88(21):1560–70.

Re: Smoking and colorectal cancer: a 20–year follow–up study of Swedish construction workers [letter; comment] Norstein J. **J Natl Cancer Inst** 1997 Jan 1;89(1):95–6. Comment on: J Natl Cancer Inst 1996 Sep 18;88(18):1302–7.

Identification of tobacco–specific carcinogen in the cervical mucus of smokers and nonsmokers. Prokopczyk B, et al. **J Natl Cancer Inst** 1997 Jun 18;89(12):868–73

Studies suggest fathers who smoke may increase future children's cancer risk [news] Reynolds T. **J Natl Cancer Inst** 1997 Mar 5;89(5):348–9

Semen of smokers and cervical cancer risk [letter] [see comments] Tokudome S. **J Natl Cancer Inst** 1997 Jan 1; 89(1):96–7. Comment in: J Natl Cancer Inst 1997 Apr 2;89(7):520.

Re: semen of smokers and cervical cancer risk [letter; comment] Whidden P. **J Natl Cancer Inst** 1997 Apr 2; 89(7):520. Comment on: J Natl Cancer Inst 1997 Jan 1;89(1):96–7.

Molecular damage in the bronchial epithelium of current and former smokers. Wistuba II, et al. **J Natl Cancer Inst** 1997 Sep 17;89(18):1366–73

Cigarette smoking and esophageal and gastric cardia adenocarcinoma [editorial; comment] Zhang ZF, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1247–9. Comment on: J Natl Cancer Inst 1997 Sep 3;89(17):1277–84.

Coronary heart disease risk factors and cigarette smoking among rural African Americans. Willems JP, et al. **J Natl Med Assoc** 1997 Jan;89(1):37–47

Activity of alpha 1–antitrypsin and cigarette smoking in subarachnoid haemorrhage from ruptured aneurysm. Gaetani P, et al. **J Neurol Sci** 1996 Sep 15;141(1–2):33–8

Cigarette smoking–induced increase in the risk of symptomatic vasospasm after aneurysmal subarachnoid hemorrhage. Lasner TM, et al. **J Neurosurg** 1997 Sep; 87(3):381–4

Increased energy intake in pregnant smokers does not prevent human fetal growth retardation. Muscati SK, et al. **J Nutr** 1996 Dec;126(12):2984–9

In harm's way: childbearing women and nicotine. Scheibmeir M, et al. **J Obstet Gynecol Neonatal Nurs** 1997 Jul–Aug; 26(4):477–84 (49 ref.)

Prooxidant effects of maternal smoking and formula in newborn infants. Schwarz KB, et al. **J Pediatr Gastroenterol Nutr** 1997 Jan;24(1):68–74

Advanced maternal age and smoking: risk factors for admission to a neonatal intensive care unit. Yüksel B, et al. **J Perinat Med** 1996;24(4):397–403

The effect of maternal smoking during pregnancy on sleep respiratory and arousal patterns in neonates. Tirosh E, et al. **J Perinatol** 1996 Nov–Dec;16(6):435–8

Periodontal status of diabetic and non–diabetic men: effects of smoking, glycemic control, and socioeconomic factors. Bridges RB, et al. **J Periodontol** 1996 Nov;67(11):1185–92

Response to periodontal therapy in diabetics and smokers. Grossi SG, et al. **J Periodontol** 1996 Oct;67(10 Suppl):1094–102 (60 ref.)

Levels of cigarette consumption and response to periodontal therapy. Kaldahl WB, et al. **J Periodontol** 1996 Jul; 67(7):675–81

The effect of smoking on mechanical and antimicrobial periodontal therapy. Kinane DF, et al. **J Periodontol** 1997 May;68(5):467–72

Influence of smoking on long–term clinical results of intrabony defects treated with regenerative therapy. Rosen PS, et al. **J Periodontol** 1996 Nov;67(11):1159–63

Cigarette smoking increases the risk for subgingival infection with periodontal pathogens. Zambon JJ, et al. **J Periodontol** 1996 Oct;67(10 Suppl):1050–4

The relationship of smoking on peri–implant tissue: a retrospective study. Haas R, et al. **J Prosthet Dent** 1996 Dec;76(6):592–6

Progress towards a fire–safe cigarette. Brigham PA, et al. **J Public Health Policy** 1995;16(4):433–9 (0 ref.)

Hydroxocobalamin versus cyanocobalamin [letter] Freeman AG. **J R Soc Med** 1996 Nov;89(11):659

Gamete intrafallopian transfer. Does smoking play a role? Chung PH, et al. **J Reprod Med** 1997 Feb;42(2):65–70

Uterine myomas and smoking. Results from an Italian study. Parazzini F, et al. **J Reprod Med** 1996 May;41(5):316–20

Psychosocial and pharmacologic explanations of nicotine's "gateway drug" function. Lindsay GB, et al. **J Sch Health** 1997 Apr;67(4):123–6 (27 ref.)

A serendipitous peek at tobacco. Hornsby RP. **J Tenn Med Assoc** 1996 Mar;89(3):90–1

A prospective study of cigarette smoking and risk of age–related macular degeneration in men [see comments] Christen WG, et al. **JAMA** 1996 Oct 9;276(14):1147–51. Comment in: JAMA 1996 Oct 9;276(14):1178–9.

Smoke gets in your eyes too [editorial; comment] Klein R, et al. **JAMA** 1996 Oct 9;276(14):1178–9. Comment on: JAMA 1996 Oct 9;276(14):1141–6. Comment on: JAMA 1996 Oct 9;276(14):1147–51.

A prospective study of cigarette smoking and age–related macular degeneration in women [see comments] Seddon JM, et al. **JAMA** 1996 Oct 9;276(14):1141–6. Comment in: JAMA 1996 Oct 9;276(14):1178–9.

Anal atresia: effect of smoking and drinking habits during pregnancy. Yuan P, et al. **Jpn J Hum Genet** 1995 Dec; 40(4):327–32

Calcium–channel blockers and cancer [letter; comment] Mann SJ. **Lancet** 1996 Oct 26;348(9035):1165; discussion 1167. Comment on: Lancet 1996 Aug 24;348(9026):493–7.

Mucosal injuries of the upper aerodigestive tract after smoking crack or freebase cocaine. Meleca RJ, et al. **Laryngoscope** 1997 May;107(5):620–5

Role of superoxide anions in airway hyperresponsiveness

induced by cigarette smoke in conscious guinea pigs. Nishikawa M, et al. **Lung** 1996;174(5):279–89

Cancer, cigarette smoking and premature death in Europe: a review including the Recommendations of European Cancer Experts Consensus Meeting, Helsinki, October 1996. Boyle P. **Lung Cancer** 1997 May;17(1):1–60 (285 ref.)

Aspects of the epidemiology of lung cancer in smokers and nonsmokers in the United States. Kabat GC. **Lung Cancer** 1996 Aug;15(1):1–20 (55 ref.)

Mortality from chronic obstructive pulmonary disease. Buechner JS. **Med Health R I** 1996 Mar;79(3):116–7

Fish oil may be an antidote for the cardiovascular risk of smoking. McCarty MF. **Med Hypotheses** 1996 Apr; 46(4):337–47 (166 ref.)

Cigarette smoking is not associated with hyperinsulinemia: evidence against a causal relationship between smoking and insulin resistance. Wareham NJ, et al. **Metabolism** 1996 Dec;45(12):1551–6

A cytochrome P4502E1 genetic polymorphism and tobacco smoking in breast cancer. Shields PG, et al. **Mol Carcinog** 1996 Nov;17(3):144–50

Respiratory bronchiolitis–associated interstitial lung disease: a case report with bronchoalveolar lavage findings. Bosi F, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):448–50

Induction of micronuclei by smokeless tobacco on buccal mucosa cells of habitual users. Ozkul Y, et al. **Mutagenesis** 1997 Jul;12(4):285–7

The effects of maternal cigarette smoke exposure on somatic mutant frequencies at the hprt locus in healthy newborns. Finette BA, et al. **Mutat Res** 1997 Jun 9;377(1):115–23

Heavy cigarette smokers show higher mutagenicity in urine. Mure K, et al. **Mutat Res** 1997 Jan 3;373(1):107–11

DNA damage in exfoliated buccal cells of smokers assessed by the single cell gel electrophoresis assay [published erratum appears in Mutat Res 1997 Apr 24;390(1–2):197] Rojas E, et al. **Mutat Res** 1996 Sep 13;370(2):115–20

Coronary risk factors and plaque morphology in men with coronary disease who died suddenly [see comments] Burke AP, et al. **N Engl J Med** 1997 May 1;336(18):1276–82. Comment in: N Engl J Med 1997 May 1;336(18):1312–4.

Effect of smoking status on the long–term outcome after successful percutaneous coronary revascularization [see comments] Hasdai D, et al. **N Engl J Med** 1997 Mar 13; 336(11):755–61. Comment in: ACP J Club 1997 Sep–Oct;127(2):52.

Cumulative effects of high cholesterol levels, high blood pressure, and cigarette smoking on carotid stenosis. Wilson PW, et al. **N Engl J Med** 1997 Aug 21;337(8):516–22

Maternal tobacco use and adverse reproductive outcome [editorial] Krishnamurthy S. **Natl Med J India** 1997 Jan–Feb;10(1):2–4

Does CARET reduce lung cancer and heart disease? [letter] Vaidya JS. **Natl Med J India** 1997 Jan–Feb;10(1):47

Smoking...harmful to the brain [news; comment] [see comments] Iversen LL. **Nature** 1996 Jul 18;382(6588):206–7 . Comment on: Nature 1996 Jul 18;382(6588):255–7. Comment in: Nature 1996 Nov 7;384(6604):18–9.

Smoking and diabetes mellitus [see comments] Dierkx RI, et al. **Neth J Med** 1996 Apr;48(4):150–62 (108 ref.). Comment in: Neth J Med 1996 Apr;48(4):125–7.

Smoking and the human vertebral column: a review of the impact of cigarette use on vertebral bone metabolism and spinal fusion. Hadley MN, et al. **Neurosurgery** 1997 Jul; 41(1):116–24 (138 ref.)

Reading and language in 9– to 12–year olds prenatally exposed to cigarettes and marijuana. Fried PA, et al. **Neurotoxicol Teratol** 1997 May–Jun;19(3):171–83

Beta–carotene increases lung cancer incidence in cigarette smokers. De Luca LM, et al. **Nutr Rev** 1996 Jun; 54(6):178–80 (17 ref.)

Influence of smoking on hormone secretion in obese and lean female smokers. Szostak–Wegierek D, et al. **Obes Res** 1996 Jul;4(4):321–8

The association of smoking and risk of condyloma acuminatum in women. Feldman JG, et al. **Obstet Gynecol** 1997 Mar;89(3):346–50

Smoking in pregnancy, exhaled carbon monoxide, and birth weight. Secker–Walker RH, et al. **Obstet Gynecol** 1997 May;89(5 Pt 1):648–53

Exposure to nickel compounds and smoking in relation to incidence of lung and nasal cancer among nickel refinery workers. Andersen A, et al. **Occup Environ Med** 1996 Oct; 53(10):708–13

Clinical measures, smoking, radon exposure, and risk of lung cancer in uranium miners. Finkelstein MM. **Occup Environ Med** 1996 Oct;53(10):697–702

Relation between decline in FEV1 and exposure to dust and tobacco smoke in aluminium potroom workers. Søyseth V, et al. **Occup Environ Med** 1997 Jan;54(1):27–31

Smoking and exposure to occupational hazards in 8,304 workers in Guangzhou, China. Lam TH, et al. **Occup Med (Oxf)** 1996 Oct;46(5):351–5

Statement of the American Association for Cancer Research on the proposed tobacco settlement [news] **Oncology (Huntingt)** 1997 Sep;11(9):1287, 1292

Human cataract risk factors: significance of abstention from, and high consumption of, ethanol (U–curve) and non–significance of smoking. Phillips CI, et al. **Ophthalmic Res** 1996;28(4):237–47

Risk of tongue cancer associated with tobacco smoking and alcohol consumption: a case–control study. Zheng T, et al. **Oral Oncol** 1997 Mar;33(2):82–5

Tobacco use and cancer [letter; comment] Ephros H, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Sep;82(3):236. Comment on: Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1995 Aug;80(2):178–82. Comment on: Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Apr;81(4):376–7.

The effect of smoking at different life stages on bone mineral density in elderly men and women. Kiel DP, et al. **Osteoporos Int** 1996;6(3):240–8

Head and neck cancer screening among 4611 tobacco users older than forty years. Prout MN, et al. **Otolaryngol Head Neck Surg** 1997 Feb;116(2):201–8

Sudden infant death syndrome and parental smoking––a literature review. Golding J. **Paediatr Perinat Epidemiol** 1997 Jan;11(1):67–77 (29 ref.)

Cocaine and cigarettes: a comparison of risks. Kistin N, et al. **Paediatr Perinat Epidemiol** 1996 Jul;10(3):269–78

Do parental smoking and history of allergy influence cord–serum IgE? Atici A, et al. **Pediatr Allergy Immunol** 1995 Nov;6(4):213–5

Effects of environmental tobacco smoke exposure in utero and/or postnatally on brain development. Gospe SM Jr, et al. **Pediatr Res** 1996 Mar;39(3):494–8

Maternal smoking and pulmonary neuroendocrine cells in sudden infant death syndrome. Cutz E, et al. **Pediatrics** 1996 Oct;98(4 Pt 1):668–72

Lung cancer risk in relation to mephenytoin hydroxylation activity. Benhamou S, et al. **Pharmacogenetics** 1997 Apr; 7(2):157–9

Nicotine–containing versus de–nicotinized cigarettes: effects on craving and withdrawal. Gross J, et al. **Pharmacol Biochem Behav** 1997 May–Jun;57(1–2):159–65

So little time. Zaloznik AJ. **Pharos** 1996 Winter;59(1):7

The additive effects of smoking and hypertension. More reasons to help your patients kick the habit. Kochar MS, et al. **Postgrad Med** 1996 Nov;100(5):147–8, 151–4, 159–60 (13 ref.)

A six–year follow–up study of smoking habits and microvascular complications in young adults with type 1 diabetes. Sinha RN, et al. **Postgrad Med J** 1997 May; 73(859):293–4

Proceedings of the Workshop on the Changing Mortality Rates of Tobacco–Related Diseases: ACS CPS–1 and CPS–2 Studies. New York, New York, April 15, 1996. **Prev Med** 1997 Jul–Aug;26(4):411–59

Is screening for chronic obstructive pulmonary disease justified? Badgett RG, et al. **Prev Med** 1997 Jul–Aug; 26(4):466–72 (86 ref.)

The role of nicotine in smoking–related cardiovascular disease. Benowitz NL. **Prev Med** 1997 Jul–Aug;26(4):412–7 (45 ref.)

Nicotine regulates smoking patterns. Djordjevic MV, et al. **Prev Med** 1997 Jul–Aug;26(4):435–40

The changing cigarette. Hoffmann D, et al. **Prev Med** 1997 Jul–Aug;26(4):427–34 (57 ref.)

A cohort approach to tobacco use and mortality: the case of Quebec. Pelletier F, et al. **Prev Med** 1996 Nov–Dec; 25(6):730–40

Changes in mortality from smoking in two American Cancer Society prospective studies since 1959. Thun MJ, et al. **Prev Med** 1997 Jul–Aug;26(4):422–6

Molecular epidemiology of breast cancer. Ambrosone CB, et al. **Prog Clin Biol Res** 1997;396:83–99 (100 ref.)

Association between cigarette smoking and prostatism in a Japanese community. Roberts RO, et al. **Prostate** 1997 Feb 15;30(3):154–9

Mecamylamine does not precipitate withdrawal in cigarette smokers. Eissenberg T, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):328–36

Noise stress does not modulate effects of smoking/nicotine on beta–endorphin, cortisol, ACTH, glucose, and mood. Gilbert DG, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(3):197–202

Faster P300 latency after smoking in visual but not auditory oddball tasks. Houlihan ME, et al. **Psychopharmacology (Berl)** 1996 Feb;123(3):231–8

Characterization of tobacco withdrawal symptoms: transdermal nicotine reduces hunger and weight gain. Jorenby DE, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(2):130–8

Paced smoking in the laboratory and in the natural smoking setting: differential situation–specific effects in light and heavy smokers. Schupp PE, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):283–8

Subjective and cardiovascular effects of intravenous nicotine in smokers and non–smokers. Soria R, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):221–6

The effects of recent food, alcohol, and tobacco intake and the temporal scheduling of testing on cardiovascular activity at rest and during psychological stress. Sheffield D, et al. **Psychophysiology** 1997 Mar;34(2):204–12

Smoking status and nicotine administration differentially modify hemodynamic stress reactivity in men and women. Girdler SS, et al. **Psychosom Med** 1997 May–Jun; 59(3):294–306

Lifestyle and dietary differences in smokers and non–smokers from an Italian employee population. Bottoni A, et al. **Public Health** 1997 May;111(3):161–4

Differences between studies in reported relative risks associated with smoking: an overview. van de Mheen PJ, et al. **Public Health Rep** 1996 Sep–Oct;111(5):420–6; discussion 427 (40 ref.)

Cigarette smoking: CT and pathologic findings of associated pulmonary diseases. Hartman TE, et al. **Radiographics** 1997 Mar–Apr;17(2):377–90

"Inconsistency between workplace and spousal studies of environmental tobacco smoke and lung cancer" [comment] LeVois ME, et al. **Regul Toxicol Pharmacol** 1997 Apr; 25(2):194–5. Comment on: Regul Toxicol Pharmacol 1995 Dec;22(3):292–3.

Detection of oxidative DNA damage in human sperm and the association with cigarette smoking. Shen HM, et al. **Reprod Toxicol** 1997 Sep–Oct;11(5):675–80

Human sperm morphometry and smoking, caffeine, and alcohol consumption. Vine MF, et al. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):179–84

Role of aortic chemoreceptors in the hypertensive response to cigarette smoke. Anand A. **Respir Physiol** 1996 Dec; 106(3):231–8

Smoking in urban pregnant women in South Africa. Steyn K, et al. **S Afr Med J** 1997 Apr;87(4):460–3

The acute effect of smoking on systemic haemodynamics, kidney and endothelial functions in insulin–dependent diabetic patients with microalbuminuria. Hansen HP, et al. **Scand J Clin Lab Invest** 1996 Aug;56(5):393–9

Does smoking aggravate musculoskeletal pain? Eriksen WB, et al. **Scand J Rheumatol** 1997;26(1):49–54

Epithelial, possibly precancerous, lesions of the lung in relation to smoking, passive smoking, and socio–demographic variables. Agapitos E, et al. **Scand J Soc Med** 1996 Dec;24(4):259–63

Is foetal growth reduction induced by smoking modified by body mass or gestational weight gain? [letter] Weijin Z, et al. **Scand J Soc Med** 1996 Sep;24(3):155–6

Smoking, smoking withdrawal and schizophrenia: case reports and a review of the literature. Dalack GW, et al. **Schizophr Res** 1996 Nov 15;22(2):133–41 (45 ref.)

Effect of smoking on neuroleptics in schizophrenia. Salokangas RK, et al. **Schizophr Res** 1997 Jan 17; 23(1):55–60

Requirement for macrophage elastase for cigarette smoke–induced emphysema in mice. Hautamaki RD, et al. **Science** 1997 Sep 26;277(5334):2002–4

Prevention of lung cancer: the key is to stop smoking. Risser NL. **Semin Oncol Nurs** 1996 Nov;12(4):260–9 (69 ref.)

Biology of lung cancer. Works CR, et al. **Semin Oncol Nurs** 1996 Nov;12(4):276–84 (90 ref.)

The association of cigarette smoking with placenta previa and abruptio placentae. Andres RL. **Semin Perinatol** 1996 Apr;20(2):154–9 (43 ref.)

The maternal and fetal physiologic effects of nicotine. Lambers DS, et al. **Semin Perinatol** 1996 Apr;20(2):115–26 (47 ref.)

Cigarette smoking as a risk factor or an exacerbating factor for restless legs syndrome and sleep bruxism. Lavigne GL, et al. **Sleep** 1997 Apr;20(4):290–3

Warthin's tumor and cigarette smoking. Vories AA, et al. **South Med J** 1997 Apr;90(4):416–8

The effects of smoking on exercise performance. Huie MJ. **Sports Med** 1996 Dec;22(6):355–9 (34 ref.)

Maternal smoking during pregnancy and birth outcomes with weight gain adjustments via varying–coefficient models. Segal MR, et al. **Stat Med** 1997 Jul 30;16(14):1603–16

99mTc–HMPAO brain SPECT imaging in a case of repeated syncopal episodes associated with smoking. Fukuda H, et al. **Stroke** 1997 Jul;28(7):1461–3

Risk factors for cerebral hemorrhage in the era of well–controlled hypertension. Melbourne Risk Factor Study (MERFS) Group. Thrift AG, et al. **Stroke** 1996 Nov; 27(11):2020–5

Direct and indirect effects of selected risk factors in producing adverse consequences of drug use. Thomas BS. **Subst Use Misuse** 1997 Mar;32(4):377–98

Parental cigarette smoking and risk for congenital anomalies of the heart, neural tube, or limb. Wasserman CR, et al. **Teratology** 1996 Apr;53(4):261–7

Teratogen update: smoking and reproductive outcomes. Werler MM. **Teratology** 1997 Jun;55(6):382–8 (101 ref.)

Silica exposure and risk of lung cancer [letter; comment] [see comments] Morgan WKC, et al. **Thorax** 1996 Jul;51(7):772 . Comment on: Thorax 1996 Jan;51(1):97–102. Comment in: Thorax 1997 Feb;52(2):203.

The effect of cigarette–smoking on cardiovascular risk factors: a study of monozygotic twins discordant for smoking. Calori G, et al. **Thromb Haemost** 1996 Jan; 75(1):14–8

Smoking, haemostatic factors and the severity of aorto–iliac and femoro–popliteal disease. Smith FB, et al. **Thromb Haemost** 1996 Jan;75(1):19–24

What should be the elements of any settlement with the tobacco industry? [editorial] Burns D, et al. **Tob Control** 1997 Spring;6(1):1–4

Release of carbon granules from cigarettes with charcoal filters. Pauly JL, et al. **Tob Control** 1997 Spring;6(1):33–40

Do men and women differ in exposure per cigarette? [letter] Pomerleau CS, et al. **Tob Control** 1997 Spring;6(1):61

Smoking impairs alveolar macrophage activation after inert dust exposure. Möller W, et al. **Toxicol Lett** 1996 Nov; 88(1–3):131–7

Carcinoma of the lung after heart transplantation. Goldstein DJ, et al. **Transplantation** 1996 Sep 27;62(6):772–5 (18 ref.)

Cigarette smoking as a risk factor for tuberculosis in young adults: a case–control study [letter; comment] Levy MH, et al. **Tuber Lung Dis** 1996 Dec;77(6):570. Comment on:

Tuber Lung Dis 1996 Apr;77(2):112–6.

Tobacco smoking, alcohol drinking and dietary factors as determinants of new primaries among male laryngeal cancer patients: a case–cohort study. Russo A, et al. **Tumori** 1996 Nov–Dec;82(6):519–25

Cigarette smoking and retinal carotenoids: implications for age–related macular degeneration. Hammond BR Jr, et al. **Vision Res** 1996 Sep;36(18):3003–9

African–American smokers and cancers of the lung and of the upper respiratory and digestive tracts. Is menthol part of the puzzle? Richardson TL. **West J Med** 1997 Mar; 166(3):189–94 (44 ref.)

Passive smoking, platelet function and atherosclerosis. Kritz H, et al. **Wien Klin Wochenschr** 1996;108(18):582–8 (50 ref.)

[Effects of smoking on lung function in populations of Beijing and Guangzhou] Rao X, et al.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1996 Feb; 19(1):14–7 (Eng. Abstr.) **(Chi)**

[Smoking and the development of Warthin tumor of the parotid gland] Yu G, et al.
Chung Hua Kou Chiang Hsueh Tsa Chih 1995 Jul; 30(4):195–7, 255 (Eng. Abstr.) **(Chi)**

[Loss of alveolar attachments in smoker's lungs and its relation to small airway abnormalities] Ma H, et al.
Chung Hua Ping Li Hsueh Tsa Chih 1996 Aug;25(4):216–9 (Eng. Abstr.) **(Chi)**

[The environment, life style and pregnancy outcome] Dejmek J, et al. **Cas Lek Cesk** 1996 Aug 21;135(16):510–5 (Eng. Abstr.) **(Cze)**

[Patients with familial combined hyperlipidemia and smoking] Králíková E, et al. **Cas Lek Cesk** 1997 Jul 14; 136(14):439–42 (Eng. Abstr.) **(Cze)**

[Adverse effect of tobacco smoking on wound healing (editorial)] Alsbjørn BF. **Ugeskr Laeger** 1997 Aug 11; 159(33):4963–4 **(Dan)**

[Smoking reduces the biological capacity of conception. Results from a European multicenter study. The European Study Group on Infertility and Subfecundity] Bolumar F, et al. **Ugeskr Laeger** 1997 Jul 14;159(29):4526–32 (Eng. Abstr.) **(Dan)**

[Cigarette smoking further increases the risk of thrombosis in patients with mild hypertension] Fornitz GG, et al.
Ugeskr Laeger 1997 Apr 7;159(15):2230–2 (Eng. Abstr.) **(Dan)**

[Intrauterine growth retardation and premature delivery. The effect of smoking and psychosocial factors] Nordentoft M, et al. **Ugeskr Laeger** 1997 May 26;159(22):3393–400 (Eng. Abstr.) **(Dan)**

[Effects of tobacco smoking on the incidence of flap necrosis after mastectomy] Zimmermann–Nielsen E, et al.
Ugeskr Laeger 1997 Aug 11;159(33):4974–6 (Eng. Abstr.) **(Dan)**

[Is smoking cigars or pipes harmful? (letter)] Knol K.
Ned Tijdschr Geneeskd 1997 Mar 15;141(11):547–8 **(Dut)**

[Is smoking cigars and pipes harmful? (letter) (see comments)] Kranendonk O. **Ned Tijdschr Geneeskd** 1997 Jan 4;141(1):59 . Comment in: Ned Tijdschr Geneeskd 1997 Apr 19;141(16):790. **(Dut)**

[Is smoking a cigar or pipe harmful? (letter; comment)] van Mourik JC, et al. **Ned Tijdschr Geneeskd** 1997 Apr 19; 141(16):790. Comment on: Ned Tijdschr Geneeskd 1996 Aug 17;140(33):1700. Comment on: Ned Tijdschr Geneeskd 1997 Jan 4;141(1):59. **(Dut)**

["Active" and "passive" smoking of pregnant women and risks to the child] Kaminski M. **Bull Acad Natl Med** 1997 Apr; 181(4):754–63 (52 ref.) **(Fre)**

[Ectopic pregnancy recurrence: role of gynecologic, obstetric, contraceptive and smoking history] Saada M, et al. **Contracept Fertil Sex** 1997 Jun;25(6):457–62 (Eng. Abstr.) **(Fre)**

[Tobacco and arterial diseases: the reasons for the present failure (editorial)] Lagrue G, et al. **J Mal Vasc** 1997; 22(1):3–4 **(Fre)**

[Obstacles to stopping smoking among patients with vascular risk] Lagrue G, et al. **J Mal Vasc** 1997;22(1):56–61 (Eng. Abstr.) **(Fre)**

[The skin of tobacco smokers] Rahier S, et al.
Rev Med Liege 1996 Sep;51(9):582–85 (33 ref.) **(Fre)**

[Smoking and chronic obstructive lung disease. What will stop respiratory function deterioration?] Reinke C.
Rev Med Suisse Romande 1997 Aug;117(8):621–2 **(Fre)**

[Nicotine and worsening myasthenia] Moreau T, et al.
Rev Neurol (Paris) 1997 Mar;153(2):141–3 (10 ref.) (Eng. Abstr.) **(Fre)**

[Smoking and the periodontium (I). History and clinical aspects. A review of the literature] Brochut PF, et al.
Schweiz Monatsschr Zahnmed 1997;107(8):672–86 (89 ref.) **(Fre, Ger)**

[Smoking behavior and views on the smoking topic in the Styrian population—results of a survey at the Graz autumn convention] Maier R, et al. **Acta Med Austriaca** 1996; 23(3):101–4 (Eng. Abstr.) **(Ger)**

[Current interdisciplinary diagnosis and therapy of endocrine orbitopathy. Smoking and endocrine orbitopathy (letter)] Pfeilschifter J, et al. **Dtsch Med Wochenschr** 1997 Aug 22; 122(34–35):1060–1 **(Ger)**

[The recording of parenchymal lung changes in smokers by high–resolution computed tomography] Müller–Leisse C, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1997 Feb;166(2):108–14 (Eng. Abstr.) **(Ger)**

[Diagnosis and therapy of nicotine dependence] Schoberberger R, et al. **Versicherungsmedizin** 1997 Feb 1; 49(1):25–9 (Eng. Abstr.) **(Ger)**

[Single passive smoking exposure induces no measurable oxidation of low density lipoproteins] Oguogho A, et al. **Wien Klin Wochenschr** 1996;108(18):589–92 (Eng. Abstr.) **(Ger)**

[Molecular biology of tobacco smoke associated neoplasia] Zojer N, et al. **Wien Klin Wochenschr** 1996;108(18):574–81 (79 ref.) (Eng. Abstr.) **(Ger)**

[Playing with fire...] Bar–Dayan Y, et al. **Harefuah** 1996 Dec 1;131(11):474–6, 535 (Eng. Abstr.) **(Heb)**

[Cigarette smoking and osteoporosis] Dolev E. **Harefuah** 1997 Apr 1;132(7):511–3 **(Heb)**

[Smoking and the heart] Eldar M, et al. **Harefuah** 1997 Apr 1;132(7):513–7 **(Heb)**

[The carcinogenetic role of environmental exposure to pipe smoke—report from the Hungarian reform era] Kiss L. **Orv Hetil** 1996 Mar 24;137(12):643–4 **(Hun)**

[Inferences, Philip Morris and the bibliographic impact factor] Terracini B. **Epidemiol Prev** 1997 Jan–Mar;21(1):6–9 **(Ita)**

[Transcutaneous oximetry in smokers with moderate hypertension and peripheral arterial disease treated with amlodipine and defibrotide, also with total smoking cessation] Cicco G, et al. **Minerva Cardioangiol** 1995 Oct; 43(10):423–8 (Eng. Abstr.) **(Ita)**

[Acute eosinophilic pneumonia induced by cigarette smoke] Sasaki T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan;35(1):89–94 (Eng. Abstr.) **(Jpn)**

[Effect of smoking on the decline in forced expiratory volume in one second] Sato K, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1997 Mar; 35(3):288–93 (Eng. Abstr.) **(Jpn)**

[Preventive action against smoking–related injuries requires concentration on a wide front (see comments)] Disen A. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):330–1. Comment in: Tidsskr Nor Laegeforen 1997 Feb 28;117(6):851. **(Nor)**

[Estimation of aromatic DNA adduct levels in laryngeal tumors in relation to cancer staging] Szyfter W, et al.
Otolaryngol Pol 1995;49(5):410–7 (Eng. Abstr.) **(Pol)**

[Impact of active and passive smoking during pregnancy on birth weight of the newborn] Jędrychowski W, et al.
Pol Merkuriusz Lek 1996 Dec;1(6):379–82 (Eng. Abstr.) **(Pol)**

[The role of tobacco smoking as a risk factor for intrauterine growth retardation and preterm delivery] Kalinka J, et al. **Przegl Epidemiol** 1996;50(3):309–13 (Eng. Abstr.) **(Pol)**

[Pathophysiology of the harmful influence of smoking on the course of gastric and duodenal ulcer diseases] Budzyński J, et al. **Przegl Lek** 1996;53(11):811–5 (26 ref.) (Eng. Abstr.) **(Pol)**

[Smoking and inflammatory bowel disease: an epidemiological case–control study] Martins Júnior EV, et al. **Arq Gastroenterol** 1996 Apr–Jun;33(2):74–8 (49 ref.) (Eng. Abstr.) **(Por)**

[Intestinal inflammatory disease and smoking (editorial)] Miszputen SJ. **Arq Gastroenterol** 1996 Jan–Mar;33(1):1–2 **(Por)**

[Effects of climate and smoking on human health in the North] Solonin IuG. **Gig Sanit** 1997 Jan–Feb;(1):46–8 **(Rus)**

[The effect of smoking on the general somatic and stomatological status of the population] Alimskiĭ AV, et al. **Stomatologiia (Mosk)** 1996;75(2):70–9 (168 ref.) **(Rus)**

[The effect of smoking on morbidity and the disqualification of flight personnel] Vlasov VV. **Voen Med Zh** 1996 Oct; 317(10):48–50, 80 (Eng. Abstr.) **(Rus)**

[The effect of cigarette smoking during pregnancy on fetal growth] Vlajinac H, et al. **Srp Arh Celok Lek** 1997 Sep–Oct; 125(9–10):267–71 (Eng. Abstr.) **(Scc)**

[Smokers' edema of the vocal cords] Večerina–Volić S, et al. **Lijec Vjesn** 1997 Jan;119(1):1–4 (Eng. Abstr.) **(Scr)**

[Toxic habits in relation to cancer of the larynx] Morales Suárez–Varela MM, et al. **Acta Otorrinolaringol Esp** 1997 Jan–Feb;48(1):45–50 (Eng. Abstr.) **(Spa)**

[Distribution of lipidic values in teenagers that smoke] Palau Bondia J, et al. **An Esp Pediatr** 1997 Mar;46(3):245–51 (Eng. Abstr.) **(Spa)**

[No to tobacco, yes to life (editorial; comment)] González Svatetz CA. **Med Clin (Barc)** 1997 Feb 1;108(4):141–2. Comment on: Med Clin (Barc) 1997 Feb 1;108(4):121–7. **(Spa)**

[Morbidity, mortality and the potential years of life lost attributable to tobacco (see comments)] Rodríguez Tapioles R, et al. **Med Clin (Barc)** 1997 Feb 1;108(4):121–7 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Feb 1;108(4):141–2. **(Spa)**

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The behavior of amidolytic factor VII in smoking and non–smoking pregnant women in relation to their gestational age. Devies IE, et al.
Acta Obstet Gynecol Scand 1997 May;76(5):405–8

Hormone–metabolic status in moderately smoking breast cancer patients. Berstein LM, et al. **Acta Oncol** 1997; 36(2):137–40

Reversible reduction in plasma concentration of nitric oxide induced by cigarette smoking in young adults. Node K, et al. **Am J Cardiol** 1997 Jun 1;79(11):1538–41

Effects of supplemental beta–carotene, cigarette smoking, and alcohol consumption on serum carotenoids in the Alpha–Tocopherol, Beta–Carotene Cancer Prevention Study. Albanes D, et al. **Am J Clin Nutr** 1997 Aug; 66(2):366–72

Longitudinal relation between smoking and white blood cells. Sunyer J, et al. **Am J Epidemiol** 1996 Oct 15;144(8):734–41

Serum potassium, cigarette smoking, and mortality in middle–aged men. Wannamethee SG, et al.
Am J Epidemiol 1997 Apr 1;145(7):598–606

Cigarette smoking and leukocyte subpopulations in men. Freedman DS, et al. **Ann Epidemiol** 1996 Jul;6(4):299–306

Serum leptin levels in Mexican Americans and non–Hispanic whites: association with body mass index and cigarette smoking [see comments] Wei M, et al. **Ann Epidemiol** 1997 Feb;7(2):81–6. Comment in: Ann Epidemiol 1997 Feb;7(2):79–80.

Effects of aspirin on platelet aggregation in smokers and nonsmokers. Chant C, et al. **Ann Pharmacother** 1997 Mar; 31(3):290–3

Smoking affects plasma–soluble interleukin–2 receptor levels in patients with schizophrenia [letter; comment] Pollmächer T, et al. **Arch Gen Psychiatry** 1997 Jan;54(1):89–90. Comment on: Arch Gen Psychiatry 1995 Aug;52(8):668–72.

Association of plasma fibrinogen levels with coronary artery disease, smoking and inflammatory markers. de Maat MP, et al. **Atherosclerosis** 1996 Apr 5;121(2):185–91

Increased levels of autoantibodies to cardiolipin and oxidised low density lipoprotein are inversely associated with plasma vitamin C status in cigarette smokers. Fickl H, et al. **Atherosclerosis** 1996 Jul;124(1):75–81

Effect of ascorbate supplementation on low density lipoprotein oxidation in smokers. Fuller CJ, et al.
Atherosclerosis 1996 Jan 26;119(2):139–50

Plasma levels of lipid and cholesterol oxidation products and cytokines in diabetes mellitus and cigarette smoking: effects of vitamin E treatment. Mol MJ, et al. **Atherosclerosis** 1997 Mar 21;129(2):169–76

alpha–Tocopherol binding activity of human red blood cells: implications in nutritional assessment of vitamin E status. Bellizzi MC, et al. **Biochem Soc Trans** 1996 May;24(2):201S

Increased levels of the nicotine metabolite cotinine in schizophrenic smokers compared to other smokers. Olincy A, et al. **Biol Psychiatry** 1997 Jul 1;42(1):1–5

Sources of variability in nicotine and cotinine levels with use of nicotine nasal spray, transdermal nicotine, and cigarette smoking. Benowitz NL, et al.
Br J Clin Pharmacol 1997 Mar;43(3):259–67

Cigarette smoking and random serum cholesterol levels in a Northern Ireland general practice population of 18– to 20–year–old students and non–students. Brown JS, et al.
Br J Gen Pract 1996 Nov;46(412):665–9

The effects of chronic smoking on the fibrinolytic potential of plasma and platelets. Simpson AJ, et al.
Br J Haematol 1997 Apr;97(1):208–13

Maternal smoking and fetal carboxyhaemoglobin and blood gas levels [letter; comment] Vreman HJ, et al.
Br J Obstet Gynaecol 1996 Nov;103(11):1171–2. Comment on: Br J Obstet Gynaecol 1996 Jan;103(1):78–82.

Long–term effects of cigarette–smoke exposure on plasma testosterone, luteinizing hormone and follicle–stimulating hormone levels in male rats. Yardimci S, et al.
Br J Urol 1997 Jan;79(1):66–9

Blood cadmium, game consumption and tobacco smoking in southern Ontario anglers and hunters. Cole DC, et al.
Can J Public Health 1997 Jan–Feb;88(1):44–6

Effects of indole–3–carbinol on the metabolism of 4–(methylnitrosamino)–1–(3–pyridyl)–1–butanone in smokers. Taioli E, et al.
Cancer Epidemiol Biomarkers Prev 1997 Jul;6(7):517–22

Hemoglobin adducts of acrylamide and acrylonitrile in laboratory workers, smokers and nonsmokers. Bergmark E. **Chem Res Toxicol** 1997 Jan;10(1):78–84

Long–term smoking impairs platelet–derived nitric oxide release. Ichiki K, et al. **Circulation** 1996 Dec 15; 94(12):3109–14

Thiocyanate in smokers interferes with the Nova magnesium ion–selective electrode. Rehak NN, et al. **Clin Chem** 1997 Sep;43(9):1595–600

Exposure to high ambient temperature increases absorption and plasma concentrations of transdermal nicotine. Vanakoski J, et al. **Clin Pharmacol Ther** 1996 Sep; 60(3):308–15

Lymphocyte cAMP and ageing: significance of subset composition, plasma noradrenaline, regular physical training and long–term smoking. Knudsen JH, et al.
Clin Sci (Colch) 1996 Nov;91(5):621–6

Plasma RRR–alpha–tocopherol concentrations are lower in smokers than in non–smokers after ingestion of a similar oral load of this antioxidant vitamin. Munro LH, et al.
Clin Sci (Colch) 1997 Jan;92(1):87–93

Smoking is independently associated with high plasma insulin levels in nondiabetic men. Rönnemaa T, et al.
Diabetes Care 1996 Nov;19(11):1229–32

Increase in circulating products of lipid peroxidation in smokers with IDDM. Zoppini G, et al. **Diabetes Care** 1996 Nov;19(11):1233–6

Removing the smoking confounder from blood volatile organic compounds measurements. Ashley DL, et al.
Environ Res 1995 Oct;71(1):39–45

Is cigarette smoking an effect modifier of the relation between antihypertensive therapy and blood lipids? Derby CA, et al. **Epidemiology** 1997 Jan;8(1):48–54

Significant elevation of tumour–associated isoforms of soluble

CD44 in serum of normal individuals caused by cigarette smoking. Kittl EM, et al. **Eur J Clin Chem Clin Biochem** 1997 Feb;35(2):81–4

Cotinine concentrations in plasma of smoking pregnant women and their infants. Mercelina-Roumans PE, et al. **Eur J Clin Chem Clin Biochem** 1996 Jul;34(7):525–8

Plasma noradrenaline and ageing: effects of smoking habits. Jensen EW, et al. **Eur J Clin Invest** 1996 Oct;26(10):839–46

The effect of ascorbic acid on plasma lipids and oxidisability of LDL in male smokers. Samman S, et al. **Eur J Clin Nutr** 1997 Jul;51(7):472–7

Determinants of plasma concentrations of nicotine and cotinine during cigarette smoking and transdermal nicotine treatment. Gourlay SG, et al. **Eur J Clin Pharmacol** 1997; 51(5):407–14

Cigarette smoking, sex hormones and bone density in women. Law MR, et al. **Eur J Epidemiol** 1997 Jul;13(5):553–8

Cigarette smoke-modified low density lipoprotein impairs endothelium-dependent relaxation in isolated rabbit arteries. Kagota S, et al. **Gen Pharmacol** 1996 Apr; 27(3):477–81

Coagulation factor XIII in pregnant smokers and non-smokers. van Wersch JW, et al. **Int J Clin Lab Res** 1997;27(1):68–71

The independent association of smoking and drinking with serum beta-carotene levels among males in Miyagi, Japan. Fukao A, et al. **Int J Epidemiol** 1996 Apr;25(2):300–6

Mortality and morbidity of potentially misclassified smokers. Suadicani P, et al. **Int J Epidemiol** 1997 Apr;26(2):321–7

Plasma concentrations of carotenoids and tocopherols in male long-term tobacco chewers, smokers and nonusers. Driskell JA, et al. **Int J Vitam Nutr Res** 1996;66(3):203–9

Alterations in circulating thyroid hormones in Indian smokers (bidi-and cigarette). Behera D, et al. **J Assoc Physicians India** 1995 Feb;43(2):96–7

Simultaneous solid-phase extraction and gas chromatographic-mass spectrometric determination of hemoglobin adducts from tobacco-specific nitrosamines and aromatic amines. Kutzer C, et al. **J Chromatogr Sci** 1997 Jan;35(1):1–6

Soluble interleukin-1 receptor antagonist serum levels in smokers and nonsmokers with Graves' ophthalmopathy undergoing orbital radiotherapy. Hofbauer LC, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2244–7

Cigarettes and the wages of sn-2: oxidized species of PAF in smoking hamsters [editorial; comment] FitzGerald GA. **J Clin Invest** 1997 May 15;99(10):2300–1 (10 ref.). Comment on: J Clin Invest 1997 May 15;99(10):2358–64.

Vitamin C blocks inflammatory platelet-activating factor mimetics created by cigarette smoking [see comments] Lehr HA, et al. **J Clin Invest** 1997 May 15;99(10):2358–64. Comment in: J Clin Invest 1997 May 15;99(10):2300–1.

Biological monitoring of exposure to cadmium, a human carcinogen, as a result of active and passive smoking. Shaham J, et al. **J Occup Environ Med** 1996 Dec; 38(12):1220–8

Soluble adhesion molecules in serum of smokers and non-smokers, with and without periodontitis. Koundouros E, et al. **J Periodontal Res** 1996 Nov;31(8):596–9

Effect of smoking cessation on lipoprotein A-I and lipoprotein A-I:A-II levels. Richard F, et al. **Metabolism** 1997 Jun;46(6):711–5

Effects of cigarette smoke inhalation on plasma diltiazem levels in rats. Matsuka N, et al. **Methods Find Exp Clin Pharmacol** 1997 Apr;19(3):173–9

Pulse oximetry correction for smoking exposure. Glass KL, et al. **Mil Med** 1996 May;161(5):273–6

Peroxidized low-density lipoprotein with four kinds of hydroperoxidized cholesteryl linoleate estimated in plasma of young heavy smokers. Kanazawa T, et al. **Pathobiology** 1996;64(3):115–22

Behavioral effects of N-cyanomethylmethamphetamine, a product derived from smoking methamphetamine with tobacco, in mice and rats. Sekine H, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):167–72

[Smoking and pregnancy: search for a correlation between cotininemia and Doppler findings] Lymperopoulou A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(8):824–7 (Eng. Abstr.) **(Fre)**

[Effects of alcohol consumption, smoking, and dietary habits on blood concentrations of lead and cadmium] Roggi C, et al. **Ann Ig** 1996 Nov-Dec;8(6):657–65 **(Ita)**

[An investigation of the factors influencing serum pepsinogen levels--sex, age, smoking, drinking] Kitahara F, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Dec;93(12):867–75 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Reactivity to nicotine patches wrongly blamed on contact allergy. von Bahr B, et al. **Contact Dermatitis** 1997 Jul; 37(1):44–5

Mecamylamine does not precipitate withdrawal in cigarette smokers. Eissenberg T, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):328–36

[Nicotine patches. Are they really useful? (editorial)] Monsó E. **Arch Bronconeumol** 1996 Nov;32(9):435–6 **(Spa)**

ECONOMICS

Pharmacoeconomic analysis of smoking-cessation interventions [see comments] McGhan WF, et al. **Am J Health Syst Pharm** 1996 Jan 1;53(1):45–52. Comment in: Am J Health Syst Pharm 1996 Jan 1;53(1):77–9.

Low-cost cigarettes and smoking behavior in California, 1990–1993. Cavin SW, et al. **Am J Prev Med** 1996 Jan-Feb; 12(1):17–21

A cost-benefit analysis of the average smoker: a government perspective. Doran CM, et al. **Aust N Z J Public Health** 1996 Dec;20(6):607–11

Health authorities plan legal action against tobacco companies [news] Dyer C. **BMJ** 1997 Jun 28; 314(7098):1849

Economic argument is the key to tobacco control [news] Tomlinson R. **BMJ** 1997 Sep 6;315(7108):565

Tobacco pricing, taxation, consumption and revenue: Alberta 1985–1995. Mummery WK, et al. **Can J Public Health** 1996 Sep-Oct;87(5):314–6

The cost of smoking in Canada, 1991. Kaiserman MJ. **Chronic Dis Can** 1997;18(1):13–9

Tobacco abroad: infiltrating foreign markets [news] Holzman D. **Environ Health Perspect** 1997 Feb;105(2):178–83

Estimating tobacco-related health-care and mortality costs in Florida. Lynch TA, et al. **J Fla Med Assoc** 1996 Feb; 83(2):128–33

Tobacco: the Third World War [letter; comment] [see comments] Edmonstone M. **J R Coll Physicians Lond** 1996 Nov-Dec;30(6):588–9. Comment on: J R Coll Physicians Lond 1996 Jul-Aug;30(4):360–5. Comment in: J R Coll Physicians Lond 1997 Jan-Feb;31(1):112.

Tobacco: the Third World War. In response [letter; comment] Mackay J. **J R Coll Physicians Lond** 1997 Jan-Feb;31(1):112. Comment on: J R Coll Physicians Lond 1996 Nov-Dec;30(6):588–9.

The health care costs of smoking. Barendregt JJ, et al. **N Engl J Med** 1997 Oct 9;337(15):1052–7

Tobacco litigation [letter; comment] Lawyer EZ. **N Engl J Med** 1997 Jun 19;336(25):1832; discussion 1833–4 . Comment on: N Engl J Med 1997 Jan 23;336(4):304–8.

Tobacco litigation [letter; comment] Rabinoff M. **N Engl J Med** 1997 Jun 19;336(25):1833; discussion 1833–4 . Comment on: N Engl J Med 1997 Jan 23;336(4):304–8.

Cigarette taxes. The straw to break the camel's back. Grossman M, et al. **Public Health Rep** 1997 Jul-Aug; 112(4):290–7

Tax and spend: a policy to help poor smokers [editorial; comment] Marsh A. **Tob Control** 1997 Spring;6(1):5–6. Comment on: Tob Control 1997 Spring;6(1):14–8.

EPIDEMIOLOGY

Seasons and depression: the influence of cigarette smoking. D'Mello DA, et al. **Addict Behav** 1996 Sep-Oct;21(5):671–4

Do as I say: parent smoking, antismoking socialization, and smoking onset among children. Jackson C, et al. **Addict Behav** 1997 Jan-Feb;22(1):107–14

Relationship of personal tobacco-raising, parental smoking, and other factors to tobacco use among adolescents living in a tobacco-producing region. Noland MP, et al. **Addict Behav** 1996 May-Jun;21(3):349–61

The accuracy of self-report of smoking status in pregnant women. Walsh RA, et al. **Addict Behav** 1996 Sep-Oct; 21(5):675–9

Depression and smoking initiation among US Latinos. Escobedo LG, et al. **Addiction** 1996 Jan;91(1):113–9

Adult smokers who do not smoke daily. Gilpin E, et al. **Addiction** 1997 Apr;92(4):473–80

Drug use in the high intensity drug trafficking area of the US Southwest border. Harrison LD, et al. **Addiction** 1996 Jan;91(1):47–61

Irish descent, religion, and alcohol and tobacco use. Mullen K, et al. **Addiction** 1996 Feb;91(2):243–54

Prevalence, reliability and bias of adolescents' reports of smoking and quitting. Stanton WR, et al. **Addiction** 1996 Nov;91(11):1705–14

Tobacco use in rural Alaska and the trampling tobacco project. Beltz DN. **Alaska Med** 1996 Jan-Mar;38(1):24–5

Tobacco use among Alaska youth. Hansen MA, et al. **Alaska Med** 1996 Jan-Mar;38(1):26–30

The prevalence of tobacco use among Alaska adults. Owen P, et al. **Alaska Med** 1996 Jan-Mar;38(1):21–3, 51

A prospective, high-risk study of the relationship between tobacco dependence and alcohol use disorders. Sher KJ, et al. **Alcohol Clin Exp Res** 1996 May;20(3):485–92

Combined use of cocaine with alcohol or cigarettes. Wiseman EJ, et al. **Am J Drug Alcohol Abuse** 1996 Nov;22(4):577–87

Effect of proxy-reported smoking status on population estimates of smoking prevalence. Hyland A, et al. **Am J Epidemiol** 1997 Apr 15;145(8):746–51

Sudden infant death syndrome and smoking in the United States and Sweden. MacDorman MF, et al. **Am J Epidemiol** 1997 Aug 1;146(3):249–57

Tobacco, alcohol, and drug use increasing among women [news] **Am J Health Syst Pharm** 1996 Aug 15;53(16):1890, 1895

Validity of occupational exposure and smoking data obtained from surviving spouses and colleagues. Hansen KS. **Am J Ind Med** 1996 Oct;30(4):392–7

Cigarette smoking and tuberculin skin test conversion among incarcerated adults. Anderson RH, et al. **Am J Prev Med** 1997 May-Jun;13(3):175–81

Perceived and measured availability of tobacco to youths in 14 Minnesota communities: the TPOP Study. Tobacco Policy Options for Prevention. Forster JL, et al. **Am J Prev Med** 1997 May-Jun;13(3):167–74

ADHD and maternal smoking during pregnancy [letter; comment] Chabrol H, et al. **Am J Psychiatry** 1997 Aug; 154(8):1177–8. Comment on: Am J Psychiatry 1996 Sep;153(9):1138–42.

Differences in the reported prevalence of adolescents who have never smoked [letter] Abernathy T. **Am J Public Health** 1997 Feb;87(2):298–9

Tobacco promotion and susceptibility to tobacco use among adolescents aged 12 through 17 years in a nationally representative sample. Altman DG, et al. **Am J Public Health** 1996 Nov;86(11):1590–3

Decreasing smoking prevalence during pregnancy in Sweden: the effect on small-for-gestational-age births. Cnattingius S, et al. **Am J Public Health** 1997 Mar; 87(3):410–3

Alcohol, tobacco, and other drug use among rural/small town and urban youth: a secondary analysis of the monitoring the future data set. Cronk CE, et al. **Am J Public Health** 1997 May;87(5):760–4

The effect of cigarette taxes on cigarette consumption, 1955 through 1994. Meier KJ, et al. **Am J Public Health** 1997 Jul;87(7):1126–30

The relationship of cigarette prices and no-smoking bylaws to the prevalence of smoking in Canada. Stephens T, et al. **Am J Public Health** 1997 Sep;87(9):1519–21

Reliability of proxy reports of parental smoking by elementary schoolchildren. Barnett T, et al. **Ann Epidemiol** 1997 Aug;7(6):396–9

Some sequels to the Surgeon General's Report on Smoking and Health: thirty years later. Breslow L. **Ann Epidemiol** 1996 Sep;6(5):372–5

Response error in self-reported current smoking frequency by black and white established smokers. Clark PI, et al. **Ann Epidemiol** 1996 Nov;6(6):483–9

The epidemiology of left-handedness in a hospital population [see comments] Stellman SD, et al. **Ann Epidemiol** 1997 Apr;7(3):167–71. Comment in: Ann Epidemiol 1997 Apr;7(3):165–6.

Relation between smoking and periodontal disease by oral hygiene status in Japanese factory workers. Imaki M, et al. **Appl Human Sci** 1997 Mar;16(2):77–81

Smoking and age-related maculopathy. The Blue Mountains Eye Study. Smith W, et al. **Arch Ophthalmol** 1996 Dec; 114(12):1518–23

Relationship between cigarette smoking and health risk and problem behaviors among US adolescents. Escobedo LG, et al. **Arch Pediatr Adolesc Med** 1997 Jan;151(1):66–71

Factors influencing smoking behavior in Hong Kong primary schoolchildren: targets for prevention. Peters J, et al. **Asia Pac J Public Health** 1995;8(2):102–8

Smoking behaviours and beliefs of older Australians. Wakefield M, et al. **Aust N Z J Public Health** 1996 Dec; 20(6):603–6

China's smoking epidemic grows [news] Tomlinson R. **BMJ** 1997 Aug 30;315(7107):502

US tobacco firms target Asia [news] Wallerstein C. **BMJ** 1997 Jul 26;315(7102):209

p53 gene aberrations in non-small-cell lung carcinomas from a smoking population. Liloglou T, et al. **Br J Cancer** 1997; 75(8):1119–24

Exercise and smoking habits among Swedish postmenopausal women. Frisk J, et al. **Br J Sports Med** 1997 Sep; 31(3):217–23

Occupations, cigarette smoking, and lung cancer in the epidemiological follow-up to the NHANES I and the California Occupational Mortality Study. Leigh JP. **Bull N Y Acad Med** 1996 Winter;73(2):370–97

Smoking status of chronic hospital patients: implications for health promotion programs. Hirdes JP, et al. **Can J Public Health** 1996 Sep-Oct;87(5):317–8

In Hong Kong, smokers are butting out in record numbers. Brooks JR. **Can Med Assoc J** 1997 May 15;156(10):1441–3

The tobacco tragedy in northern Canada [letter] Gilchrist FI. **Can Med Assoc J** 1997 Feb 1;156(3):345, 348

Characteristics of pregnant women who engage in binge alcohol consumption [see comments] Gladstone J, et al. **Can Med Assoc J** 1997 Mar 15;156(6):789–94. Comment in: Can Med Assoc J 1997 Mar 15;156(6):807–8.

Taxes and the tobacco wars [editorial; comment] Green LW. **Can Med Assoc J** 1997 Jan 15;156(2):205–6. Comment on: Can Med Assoc J 1997 Jan 15;156(2):187–91.

The effect of tobacco tax cuts on cigarette smoking in Canada [see comments] Hamilton VH, et al. **Can Med Assoc J** 1997 Jan 15;156(2):187–91. Comment in: Can Med Assoc J 1997 Jan 15;156(2):205–6. Comment in: Can Med Assoc J 1997 May 15;156(10):1377–8.

Alcohol, tobacco and cannabis use among Nova Scotia adolescents: implications for prevention and harm reduction [see comments] Poulin C, et al. **Can Med Assoc J** 1997 May 15;156(10):1387–93. Comment in: Can Med Assoc J 1997 May 15;156(10):1397–9.

Canada a country of two solitudes when smoking rates among anglophones, francophones compared. Wharry S. **Can Med Assoc J** 1997 Jan 15;156(2):244–5

Consensus conference: smoking and prostate cancer. Colditz G. **Cancer Causes Control** 1996 Sep;7(5):560–2 (7 ref.)

Smoking habits and risk of cancers other than lung cancer: 28 years' follow-up of 26,000 Norwegian men and women. Engeland A, et al. **Cancer Causes Control** 1996 Sep; 7(5):497–506

Cigarette smoking and breast cancer. Baron JA, et al. **Cancer Epidemiol Biomarkers Prev** 1996 May;5(5):399–403

Smoking and adrenal cancer mortality among United States

veterans. Chow WH, et al.
Cancer Epidemiol Biomarkers Prev 1996 Feb;5(2):79–80
Cases and controls from different settings: ideals and practicalities [editorial; comment] Fletcher RH.
Cancer Epidemiol Biomarkers Prev 1997 Aug;6(8):555–6. Comment on: Cancer Epidemiol Biomarkers Prev 1997 Aug;6(8):565–71.
Identifying and recruiting healthy control subjects from a managed care organization: a methodology for molecular epidemiological case–control studies of cancer [see comments] Hudmon KS, et al.
Cancer Epidemiol Biomarkers Prev 1997 Aug;6(8):565–71. Comment in: Cancer Epidemiol Biomarkers Prev 1997 Aug;6(8):555–6.
Pancreas cancer, tobacco smoking and consumption of alcoholic beverages: a case–control study. Partanen TJ, et al. **Cancer Lett** 1997 Jun 3;116(1):27–32
Cigarette smoking habits among primary school children in Turkey [letter] Emri S, et al. **Chest** 1997 Sep;112(3):863–4
Cigarette smoking habits among schoolchildren. Meijer B, et al. **Chest** 1996 Oct;110(4):921–6
Coronary artery disease in patients undergoing lung volume reduction surgery for emphysema. Thurnheer R, et al. **Chest** 1997 Jul;112(1):122–8
Cigarette smoking and lung cancer trends. A light at the end of the tunnel? Weiss W. **Chest** 1997 May;111(5):1414–6
Maternal smoking and orofacial clefts. Källén K.
Cleft Palate Craniofac J 1997 Jan;34(1):11–6
Smoking habits of black South African patients with diabetes mellitus. Gill GV, et al. **Diabet Med** 1996 Nov;13(11):996–9
Prevalence and demographic correlates of symptoms of last year dependence on alcohol, nicotine, marijuana and cocaine in the U.S. population. Kandel D, et al.
Drug Alcohol Depend 1997 Jan 10;44(1):11–29
A comparison of cocaine-dependent cigarette smokers and non-smokers on demographic, drug use and other characteristics. Roll JM, et al. **Drug Alcohol Depend** 1996 Mar;40(3):195–201
Adolescents' experiences of smoking cessation. Stanton WR, et al. **Drug Alcohol Depend** 1996 Dec 2;43(1–2):63–70
Cigarette smoking and solvent use among Japanese adolescents. Wada K, et al. **Drug Alcohol Depend** 1997 Jul 4;46(3):137–45
Cigarette smoking and perceptions about smoking and health in Chad. Leonard L. **East Afr Med J** 1996 Aug;73(8):509–12
Reliability of information on cigarette smoking and beverage consumption provided by hospital controls. D'Avanzo B, et al. **Epidemiology** 1996 May;7(3):312–5
Alcohol and smoking in relation to the prevalence of adenomatous colorectal polyps detected at sigmoidoscopy. Longnecker MP, et al. **Epidemiology** 1996 May;7(3):275–80
Smoking and risk of hospitalization [letter] Penttinen J. **Epidemiology** 1997 Mar;8(2):220–1
The effects of alcohol and smoking upon the age, anatomic sites and stage in the development of cancer of the oral cavity and oropharynx in females in the south west Netherlands. de Boer MF, et al.
Eur Arch Otorhinolaryngol 1997;254(4):177–9
Smoking and lung cancer in women [editorial]
Eur J Cancer Prev 1997 Jun;6(3):217–8
Personality, smoking and inflammatory bowel disease. Barrett SM, et al. **Eur J Gastroenterol Hepatol** 1996 Jul;8(7):651–5
Breastfeeding, maternal smoking and lower respiratory tract infections. Nafstad P, et al. **Eur Respir J** 1996 Dec; 9(12):2623–9
Influence of some socio-demographic factors on smoking status of academicians. Kumar A, et al.
Indian J Chest Dis Allied Sci 1997 Jan–Mar;39(1):5–12
Tobacco use by Indiana children and adolescents. Bailey WJ. **Indiana Med** 1996 Mar–Apr;89(2):138–44
IgE levels, atopy markers and hay fever in relation to age, sex and smoking status in a normal adult Swiss population. SAPALDIA (Swiss Study on Air Pollution and Lung Diseases in Adults) Team. Wüthrich B, et al.
Int Arch Allergy Immunol 1996 Dec;111(4):396–402
A prospective study of smoking and risk of prostate cancer. Adami HO, et al. **Int J Cancer** 1996 Sep 17;67(6):764–8
Use of multiple primary cancers to indicate associations between smoking and cancer incidence: an analysis of 500,000 cancer cases diagnosed in Norway during 1953–93. Engeland A, et al. **Int J Cancer** 1997 Feb 7;70(4):401–7
Tobacco use and colon cancer [published erratum appears in Int J Cancer 1997 May 16;71(4):706] Slattery ML, et al. **Int J Cancer** 1997 Jan 27;70(3):259–64
Maternal smoking and urinary organ malformations. Källen K. **Int J Epidemiol** 1997 Jun;26(3):571–4
Agreement between self and partner reports of paternal drinking and smoking. The ALSPAC Study Team. Avon Longitudinal Study of Pregnancy and Childhood. Passaro KT, et al. **Int J Epidemiol** 1997 Apr;26(2):315–20
Cluster versus individual randomization in adolescent tobacco and alcohol studies: illustrations for design decisions. Slymen DJ, et al. **Int J Epidemiol** 1997 Aug; 26(4):765–71
A case–control study of smoking and Alzheimer's disease. Hillier V, et al. **Int J Geriatr Psychiatry** 1997 Mar; 12(3):295–300
Risk of pancreatic carcinoma in smokers enhanced by weight gain. Results from 10-year follow-up of the Malmö preventive Project Cohort Study. Ogren M, et al.
Int J Pancreatol 1996 Oct;20(2):95–101
Trends in smoking prevalence: the Kilkenny Health Project Population Surveys 1985 to 1991. Shelley E, et al.
Ir Med J 1996 Sep–Oct;89(5):182–5
Self-reported alcohol use patterns in a sample of male and female heavy smokers. Pomerleau CS, et al.
J Addict Dis 1997;16(3):19–24
Tobacco use among male high school athletes. Davis TC, et al. **J Adolesc Health** 1997 Aug;21(2):97–101
Patterns of smoking among inner-city teenagers: smoking has a pediatric age of onset. Najem GR, et al.
J Adolesc Health 1997 Mar;20(3):226–31
Cigarette smoking among junior and senior high school students in Japan [see comments] Osaki Y, et al.
J Adolesc Health 1996 Jan;18(1):59–65. Comment in: J Adolesc Health 1996 Jan;18(1):1.
Cigarette smoking, major depression, and other psychiatric disorders among adolescents. Brown RA, et al.
J Am Acad Child Adolesc Psychiatry 1996 Dec; 35(12):1602–10
ADHD is associated with early initiation of cigarette smoking in children and adolescents. Milberger S, et al.
J Am Acad Child Adolesc Psychiatry 1997 Jan;36(1):37–44
Binge drinking, tobacco, and illicit drug use and involvement in college athletics. A survey of students at 140 American colleges. Wechsler H, et al. **J Am Coll Health** 1997 Mar; 45(5):195–200
Smoking among adolescent girls: prevalence and etiology. French SA, et al. **J Am Med Womens Assoc** 1996 Jan–Apr; 51(1–2):25–8 (35 ref.)
Smoking is not a predictor of mortality and morbidity following coronary artery bypass grafting. Utley JR, et al. **J Card Surg** 1996 Nov–Dec;11(6):377–84; discussion 385–6
Relationship between smoking status and cardiovascular disease risk factors in young adult males in Taiwan. Chu NF, et al. **J Cardiovasc Risk** 1996 Apr;3(2):205–8
Inter-relationships of plasma fibrinogen, low-density lipoprotein cholesterol, cigarette smoking and the prevalence of cardiovascular disease. Fowkes FG, et al.
J Cardiovasc Risk 1996 Jun;3(3):307–11
Screening for smokers in four Sydney teaching hospitals. Richmond RL, et al. **J Cardiovasc Risk** 1996 Apr; 3(2):199–203
Epidemiological features of first-visit outpatients in Japan: comparison with general population and variation by sex, age, and season. Inoue M, et al. **J Clin Epidemiol** 1997 Jan;50(1):69–77
National incidence of smoking and misclassification among the U.S. married female population. Ogden MW, et al.
J Clin Epidemiol 1997 Mar;50(3):253–63
Predictors of risk for different stages of adolescent smoking in a biracial sample. Robinson LA, et al.
J Consult Clin Psychol 1997 Aug;65(4):653–62
Initiation of cigarette smoking among children with and without learning disabilities. Robertson SB, et al.
J Dev Behav Pediatr 1996 Aug;17(4):248–52
Frequency of contact with cigarette advertising and smoking experience among young women in Japan. Sone T.
J Epidemiol 1997 Mar;7(1):43–7
Smoking habits, local brand cigarettes and lung cancer risk in Okinawa, Japan. Wakai K, et al. **J Epidemiol** 1997 Jun; 7(2):99–105
Cigarette smoking and nasopharyngeal cancer: an analysis of the relationship according to age at starting smoking and age at diagnosis. Zhu K, et al. **J Epidemiol** 1997 Jun; 7(2):107–11
Smoking during pregnancy: how reliable are maternal self reports in New Zealand? Ford RP, et al.
J Epidemiol Community Health 1997 Jun;51(3):246–51
Tobacco use prevalence and correlates among adolescents in a clinician initiated tobacco prevention trial in California, USA. Hovell MF, et al. **J Epidemiol Community Health** 1996 Jun;50(3):340–6
Smoking and relative body weight: an international perspective from the WHO MONICA Project. Molarius A, et al. **J Epidemiol Community Health** 1997 Jun; 51(3):252–60
A comprehensive study of smoking in primary school children in Hong Kong: implications for prevention. Peters J, et al. **J Epidemiol Community Health** 1997 Jun; 51(3):239–45
The sociodemographic pattern of tobacco cessation in the 1980s: results from a panel study of living condition surveys in Sweden. Tillgren P, et al.
J Epidemiol Community Health 1996 Dec;50(6):625–30
Tobacco consumption in Florida. Beitsch LM, et al.
J Fla Med Assoc 1996 Feb;83(2):98–101
School and neighborhood characteristics associated with school rates of alcohol, cigarette, and marijuana use. Ennett ST, et al. **J Health Soc Behav** 1997 Mar;38(1):55–71
Smoking habits and respiratory symptoms: observations among college students and professionals. Ghosal AG, et al. **J Indian Med Assoc** 1996 Feb;94(2):55–7
Does smoking cause low back pain? Results from a population-based study. Leboeuf-Yde C, et al.
J Manipulative Physiol Ther 1996 Feb;19(2):99–108
For women smokers, the gender gap is narrowing [news] McIntosh H. **J Natl Cancer Inst** 1997 Jan 15;89(2):120–1
Cigarette smoking among U.S. adults by state and region: estimates from the current population survey. Shopland DR, et al. **J Natl Cancer Inst** 1996 Dec 4;88(23):1748–58
Coronary heart disease risk factors and cigarette smoking among rural African Americans. Willems JP, et al.
J Natl Med Assoc 1997 Jan;89(1):37–47
Brain aging in a sample of normal Egyptians cognition, education, addiction and smoking. Elwan O, et al.
J Neurol Sci 1997 May 1;148(1):79–86
Radiographic small lung opacities and pleural abnormalities in relation to smoking, urbanization status, and occupational asbestos exposure in Finland. Zitting AJ, et al.
J Occup Environ Med 1996 Jun;38(6):602–9
Positive smoking history as a preliminary screening device for substance use in pregnant adolescents. Archie CL, et al. **J Pediatr Adolesc Gynecol** 1997 Feb;10(1):13–7
Tobacco control programmes for universities: a feasibility study. Willcox ML. **J Public Health Med** 1997 Mar; 19(1):37–44
Tobacco use and usual source of cigarettes among high school students—United States, 1995. Office on Smoking and Health. **J Sch Health** 1996 Aug;66(6):222–4
Patterns of tobacco and alcohol use among sedentary, exercising, nonathletic, and athletic youth. Rainey CJ, et al. **J Sch Health** 1996 Jan;66(1):27–32
Smoking status among women in households with young children. Sarna L, et al. **J Soc Pediatr Nurs** 1996 Oct–Dec; 1(3):117–25
Correlates of alcohol, tobacco and marijuana use among Scottish postsecondary helping-profession students. Engs RC, et al. **J Stud Alcohol** 1997 Jul;58(4):435–44
Nicotine and alcohol abuse in African American women who smoke crack cocaine. Boyd CJ, et al. **J Subst Abuse** 1996; 8(4):463–9
Cigarette smoking in alcohol and cocaine abusers. Burling TA, et al. **J Subst Abuse** 1996;8(4):445–52
From the Centers for Disease Control and Prevention. Cigar smoking among teenagers—United States, Massachusetts, and New York, 1996. **JAMA** 1997 Jul 2;278(1):17–9
From the Centers for Disease Control and Prevention. Prevalence of cigarette smoking among secondary school students—Budapest, Hungary, 1995. **JAMA** 1997 Apr 9; 277(14):1110–1
From the Centers for Disease Control and Prevention. State-specific prevalence of cigarette smoking—United States, 1995. **JAMA** 1996 Dec 4;276(21):1713
Tobacco use in Vietnam. Prevalence, predictors, and the role of the transnational tobacco corporations. Jenkins CN, et al. **JAMA** 1997 Jun 4;277(21):1726–31
An earlier fracture as a risk factor for new fracture and its association with smoking and menopausal age in women. Johansson C, et al. **Maturitas** 1996 May;24(1–2):97–106
European medical schools and tobacco. Crofton JW, et al.
Med Educ 1996 Nov;30(6):424–7
Changes in smoking prevalence following a strict no-smoking policy in U.S. Navy recruit training. Hurtado SL, et al. **Mil Med** 1996 Oct;161(10):571–6
Addition of prevalence of cigarette smoking as a nationally notifiable condition—June 1996.
MMWR Morb Mortal Wkly Rep 1996 Jun 28;45(25):537
Cigarette smoking among adults—United States, 1994.
MMWR Morb Mortal Wkly Rep 1996 Jul 12;45(27):588–90
Cigar smoking among teenagers—United States, Massachusetts, and New York, 1996.
MMWR Morb Mortal Wkly Rep 1997 May 23; 46(20):433–40
Prevalence of cigarette smoking among secondary school students—Budapest, Hungary, 1995.
MMWR Morb Mortal Wkly Rep 1997 Jan 24;46(3):56–9
State-specific prevalence of cigarette smoking—United States, 1995. **MMWR Morb Mortal Wkly Rep** 1996 Nov 8;45(44):962–6
Tobacco use among Missouri high school students, 1995. Miller N, et al. **Mo Med** 1997 Jul;94(7):332–7
The hook that kills ... Missouri's children are being hooked on cigarettes at a much younger age. Zylka JM.
Mo Med 1997 Jan;94(1):8–10
Prevalence of high cholesterol, high blood pressure, and smoking among elementary schoolchildren in North Carolina. Bradley CB, et al. **N C Med J** 1997 Sep–Oct; 58(5):362–7
Smoking in pregnancy in North Carolina. Maternal characteristics and trends, 1988–1994. Buescher PA.
N C Med J 1997 Sep–Oct;58(5):356–60
Exercise and breast cancer [letter; comment] Jackson JA. **N Engl J Med** 1997 Sep 4;337(10):708; discussion 709. Comment on: N Engl J Med 1997 May 1;336(18):1269–75.
The effect of enforcing tobacco-sales laws on adolescents' access to tobacco and smoking behavior. Rigotti NA, et al. **N Engl J Med** 1997 Oct 9;337(15):1044–51
Sale of cigarettes to school children aged 14 and 15 years in New Zealand. Ford DJ, et al. **N Z Med J** 1997 Jun 27;110(1046):225–7
Socioeconomic distribution of smoking in a population of 10,529 New Zealanders. Whitlock G, et al. **N Z Med J** 1997 Sep 12;110(1051):327–30
Cigarette smoking and its comorbidity. Glassman AH.
NIDA Res Monogr 1997;172:52–60 (22 ref.)
Low birthweight, preterm births and intrauterine growth retardation in relation to maternal smoking. Horta BL, et al. **Paediatr Perinat Epidemiol** 1997 Apr;11(2):140–51
Tobacco use measurement, prediction, and intervention in elementary schools in four states: the CATCH Study. Elder JP, et al. **Prev Med** 1996 Jul–Aug;25(4):486–94
Distributions of smokers by stage: international comparison and association with smoking prevalence. Etter JF, et al.
Prev Med 1997 Jul–Aug;26(4):580–5

Long-term responses of higher and lower risk youths to smoking prevention interventions. Flynn BS, et al. **Prev Med** 1997 May-Jun;26(3):389-94

Smoking, smoking cessation, and understanding of the role of multiple cardiac risk factors among the urban poor. Hyman DJ, et al. **Prev Med** 1996 Nov-Dec;25(6):653-9

Pipe smoking in the United States, 1965-1991: prevalence and attributable mortality. Nelson DE, et al. **Prev Med** 1996 Mar-Apr;25(2):91-9

A cohort approach to tobacco use and mortality: the case of Quebec. Pelletier F, et al. **Prev Med** 1996 Nov-Dec; 25(6):730-40

Changing mortality from coronary heart disease among smokers and nonsmokers over a 20-year interval. Scheidt S. **Prev Med** 1997 Jul-Aug;26(4):441-6

Impact of filter cigarette smoking on lung cancer histology. Stellman SD, et al. **Prev Med** 1997 Jul-Aug;26(4):451-6

Workshop discussion panel. III: Implications of the changing tobacco-related mortality from COPD in the CPS-1 and CPS-2 surveys. Wise RA, et al. **Prev Med** 1997 Jul-Aug; 26(4):457-9

National high school survey finds resurgence in marijuana use and increased tobacco use [news] **Psychiatr Serv** 1997 Feb;48(2):257-8

Cigarette smoking among patients with mental retardation and mental illness [see comments] Hymowitz N, et al. **Psychiatr Serv** 1997 Jan;48(1):100-2. Comment in: Psychiatr Serv 1997 Jul;48(7):955.

Partner's smoking: a major determinant for changes in women's smoking behaviour during and after pregnancy. Nafstad P, et al. **Public Health** 1996 Nov;110(6):379-85

Comparing the smoking behavior of veterans and nonveterans. McKinney WP, et al. **Public Health Rep** 1997 May-Jun;112(3):212-7; discussion 218

Risk-taking behaviour of Cape Peninsula high-school students. Part IX. Evidence for a syndrome of adolescent risk behaviour. Flisher AJ, et al. **S Afr Med J** 1996 Sep; 86(9):1090-3

Childhood tobacco use: a 1996 update. Nord AE. **S D J Med** 1996 Dec;49(12):468-9

Relationship of cigarette smoking, alcohol use, and dietary habits with Helicobacter pylori infection in Japanese men. Shinchi K, et al. **Scand J Gastroenterol** 1997 Jul;32(7):651-5

Social support and the smoking behaviour of parents with preschool children. Eriksen W, et al. **Scand J Soc Med** 1997 Jun;25(2):93-9

Lung cancer mortality update and prevalence of smoking among copper miners and smelters. Chen R, et al. **Scand J Work Environ Health** 1995 Dec;21(6):513-6

Smoking in the Singapore Armed Forces. Lim MK, et al. **Singapore Med J** 1997 Feb;38(2):50-3

Smoking prevalence among women in the European community 1950-1990. Graham H. **Soc Sci Med** 1996 Jul; 43(2):243-54

Gender, social pressure, and smoking cessations: the Community Intervention Trial for Smoking Cessation (COMMIT) at baseline. Royce JM, et al. **Soc Sci Med** 1997 Feb;44(3):359-70

Tobacco smoking: a survey in a community with excess lung cancer. Sa P, et al. **South Med J** 1997 Jun;90(6):601-5

The prevalence and motivating factors of adolescent smoking at a rural middle school in Taiwan. Wang CS, et al. **Subst Use Misuse** 1996 Aug;31(10):1447-58

Vital stats. Teen smoking in Texas. **Tex Med** 1997 Feb; 93(2):24

Poverty status and cigarette smoking prevalence and cessation in the United States, 1983-1993: the independent risk of being poor [see comments] Flint AJ, et al. **Tob Control** 1997 Spring;6(1):14-8. Comment in: Tob Control 1997 Spring;6(1):5-6.

Smoking prevalence in younger Italians [letter] La Vecchia C, et al. **Tob Control** 1996 Autumn;5(3):231-2

Smoking behaviour and attitudes among adult Saudi nationals in Riyadh City, Saudi Arabia. Saeed AA, et al. **Tob Control** 1996 Autumn;5(3):215-9

A survey of smoking in medical inpatients and controls in Blantyre, Malawi [letter] Maher D, et al. **Trop Doct** 1996 Jul;26(3):139

Smoking in Italy, 1994. Pagano R, et al. **Tumori** 1996 Jul-Aug;82(4):309-13

Lifestyle in Curaçao. Smoking, alcohol consumption, eating habits and exercise. Grol ME, et al. **West Indian Med J** 1997 Mar;46(1):8-14

Gender and ethnic differences in the prevalence of alcohol, cigarette, and illicit drug use over time in a cohort of young Hispanic adolescents in south Florida. Khoury EL, et al. **Women Health** 1996;24(1):21-40

[Evaluation of smoking in chronic severe respiratory insufficiency patients treated with long-term oxygen at home] Cornette A, et al. **Rev Mal Respir** 1996;13(4):405-11 (Eng. Abstr.) **(Fre)**

[Smoking in students in secondary schools in Burkina Faso] Sondo B, et al. **Rev Mal Respir** 1996 Oct;13(5):493-7 (Eng. Abstr.) **(Fre)**

[10 years after the Augsburg MONICA Study. What happened to the risk factors?] Hense HW. **Fortschr Med** 1997 Jun 20;115(17):59-60 **(Ger)**

[Odds ratio] Hölzel D. **Internist (Berl)** 1997 Jun;38(6):613-4 **(Ger)**

[Smoking habits of young Israeli soldiers] Ashkenazi I, et al. **Harefuah** 1997 Apr 1;132(7):502-7, 526 (Eng. Abstr.) **(Heb)**

[Characteristics of smoking, drinking, dietary habits, and physical exercise in health behavioral models] Ozasa K, et al. **Nippon Koshu Eisei Zasshi** 1995 Dec;42(12):1029-41 (Eng. Abstr.) **(Jpn)**

[Tobacco epidemics should be taken seriously. New measures are needed] Jacobsen CD. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):395-7 **(Nor)**

[Changes in tobacco smoking patterns in Poland in the years 1976, 1986 and 1990] Jokiel M. **Przegl Epidemiol** 1996; 50(3):299-307 (Eng. Abstr.) **(Pol)**

[Tobacco consumption, between the tragedy of the data and indifference] Didilescu C. **Pneumoftiziologia** 1996 Jul-Dec; 45(3-4):191-2 **(Rum)**

[The spread of harmful habits among medical students and their attitude to them] Vinogradov PB, et al. **Gig Sanit** 1996 May-Jun;(3):49-51 **(Rus)**

[Young men and psychoactive substances] Pecci MC. **Acta Psiquiatr Psicol Am Lat** 1995 Dec;41(4):288-99 (Eng. Abstr.) **(Spa)**

[Prevalence of tobacco and alcohol consumption, attitudes and knowledge in high school students of the province of Tarragona (Spain)] Pérez Ollé R, et al. **An Esp Pediatr** 1996 Dec;45(6):583-90 (Eng. Abstr.) **(Spa)**

[Smoking in schools. A cross-sectional epidemiologic study of a population of 4,281 school children] Pascual Lledó JF, et al. **Arch Bronconeumol** 1996 Feb;32(2):69-75 (Eng. Abstr.) **(Spa)**

[Smoking. Prevalence and attitudes among health science students] Henríquez Sánchez P, et al. **Aten Primaria** 1996 Nov 15;18(8):436-41 (Eng. Abstr.) **(Spa)**

[The consumption of alcohol, tobacco and drugs in adolescents] Martínez Alvarez J, et al. **Aten Primaria** 1996 Oct 31;18(7):383-5 (Eng. Abstr.) **(Spa)**

[Contraceptive use and smoking among Spanish women] Prada C, et al. **Aten Primaria** 1996 Nov 15;18(8):442-5 (Eng. Abstr.) **(Spa)**

[Distribution of habits related to health in a female Canarian population] Navarro Rodríguez MC, et al. **Gac Sanit** 1997 May-Jun;11(3):131-5 (Eng. Abstr.) **(Spa)**

[Smoking prevalence trends in Catalonia, Spain, 1982-1994] Pardell H, et al. **Med Clin (Barc)** 1997 Jun 21;109(4):125-9 (Eng. Abstr.) **(Spa)**

[Morbidity, mortality and the potential years of life lost attributable to tobacco (see comments)] Rodríguez Tapioles R, et al. **Med Clin (Barc)** 1997 Feb 1;108(4):121-7 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Feb 1;108(4):141-2. **(Spa)**

[Prevalence and characteristics associated with tobacco use in a general population in Barcelona from 1983 to 1992] Nebot M, et al. **Rev Clin Esp** 1996 Jun;196(6):359-64 (Eng. Abstr.) **(Spa)**

[Tobacco addiction in primary health care workers in the health area number 4 of Insalud in Madrid: prevalence of consumption and attitude] Ortiz Marrón H, et al. **Rev Esp Salud Publica** 1996 May-Jun;70(3):295-302 (Eng. Abstr.) **(Spa)**

[Tobacco consumption in the population insured by Mexican Institute of Social Security] Fernández-Gárate IH, et al. **Salud Publica Mex** 1997 Mar-Apr;39(2):125-32 (Eng. Abstr.) **(Spa)**

[28-year follow up of smoking habits of Swedish physicians. Reduced number of smokers but increased number of snuff-users] Bolinder G, et al. **Lakartidningen** 1996 Nov 27;93(48):4437-40, 4443-4 **(Swe)**

ETHNOLOGY

Cigarette smoking and severe uncontrolled hypertension in inner-city African Americans. McNagny SE, et al. **Am J Med** 1997 Aug;103(2):121-7

Differences in patterns of tobacco use in Vietnamese, African-American, Hispanic, and Caucasian adolescents in Worcester, Massachusetts. Wiecha JM. **Am J Prev Med** 1996 Jan-Feb;12(1):29-37

Patterns of cigarette smoking among Hispanics in the United States: results from HHANES 1982-84. Haynes SG, et al. **Am J Public Health** 1990 Dec;80 Suppl:47-53

Health risk behaviors of Hispanics in the United States: findings from HHANES, 1982-84. Marks G, et al. **Am J Public Health** 1990 Dec;80 Suppl:20-6

Correlates of tobacco use among Native American women in western North Carolina. Spangler JG, et al. **Am J Public Health** 1997 Jan;87(1):108-11

The validity of self-reports of smoking: analyses by race/ethnicity in a school sample of urban adolescents. Wills TA, et al. **Am J Public Health** 1997 Jan;87(1):56-61

Trends in cigarette smoking among children in a southern community, 1976-1994: the Bogalusa Heart Study [see comments] Greenlund KJ, et al. **Ann Epidemiol** 1996 Nov; 6(6):476-82. Comment in: Ann Epidemiol 1996 Nov;6(6):474-5.

Smoking among black and white youth: differences that matter [editorial; comment] Novotny TE. **Ann Epidemiol** 1996 Nov;6(6):474-5. Comment on: Ann Epidemiol 1996 Nov;6(6):476-82.

Smoking among Chinese patients with schizophrenia. Chong SA, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):350-3

The use of tobacco, alcohol and other drugs by young Aboriginal people in Albany, Western Australia. Gray D, et al. **Aust N Z J Public Health** 1997 Feb;21(1):71-6

Use of betel quid and cigarettes among Bangladeshi patients in an inner-city practice: prevalence and knowledge of health effects. Ahmed S, et al. **Br J Gen Pract** 1997 Jul; 47(420):431-4

Patient and smoking patterns in northern California American Indian Clinics. Urban and rural contrasts. Hodge FS, et al. **Cancer** 1996 Oct 1;78(7 Suppl):1623-8

Lung carcinoma in African Americans and whites. A population-based study in metropolitan Detroit, Michigan. Schwartz AG, et al. **Cancer** 1997 Jan 1;79(1):45-52

Factors associated with variations in pulmonary function among elderly Japanese-American men. Burchfiel CM, et al. **Chest** 1997 Jul;112(1):87-97

Cigarette use among migrant and nonmigrant Mexican American youth: a socialization latent-variable model. Swaim RC, et al. **Health Psychol** 1996 Jul;15(4):269-81

Menthol cigarette use in African Americans. Richardson T. **Hosp Pract (Off Ed)** 1996 Aug 15;31(8):22H-22I

Racial differences in the impact of smoking-attributable disease on health care costs in Indiana. Emont S. **Indiana Med** 1996 Mar-Apr;89(2):161-4

Sociobehavioral influences on smoking initiation of Hispanic adolescents. Cowdery JE, et al. **J Adolesc Health** 1997 Jan; 20(1):46-50

Acculturation and cigarette smoking among African American adults. Klonoff EA, et al. **J Behav Med** 1996 Oct;19(5):501-14

Parenting style and adolescent depressive symptoms, smoking, and academic achievement: ethnic, gender, and SES differences. Radziszewska B, et al. **J Behav Med** 1996 Jun;19(3):289-305

Smoking and socioeconomic status in a population-based inner city sample of African-Americans, Latinos and whites. Siegel D, et al. **J Cardiovasc Risk** 1996 Jun; 3(3):295-300

Clinical annotation of tobacco use in patient charts at Indian Health Service clinics and hospitals. Reece DH. **J Community Health** 1996 Oct;21(5):389-96

Probing the paradoxical pattern of cigarette smoking among African-Americans: low teenage consumption and high adult use. Feigelman W, et al. **J Drug Educ** 1995; 25(4):307-20

Cardiovascular implications of smoking: the surgeon general's point of view. Manley AF. **J Health Care Poor Underserved** 1997 Aug;8(3):303-10 (15 ref.)

Multivariate profile of smoking in Southeast Asian men: a biochemically verified analysis. Moeschberger ML, et al. **Prev Med** 1997 Jan-Feb;26(1):53-8

The "race" concept in smoking: a review of the research on African Americans. King G. **Soc Sci Med** 1997 Oct; 45(7):1075-87

GENETICS

Association between alcohol use and smoking in adolescent and young adult twins: a bivariate genetic analysis. Koopmans JR, et al. **Alcohol Clin Exp Res** 1997 May; 21(3):537-46

Absence of p53 mutations in squamous carcinomas of the tongue in nonsmoking and nondrinking patients younger than 40 years. Sorensen DM, et al. **Arch Otolaryngol Head Neck Surg** 1997 May;123(5):503-6

Mitochondrial genome damage associated with cigarette smoking. Ballinger SW, et al. **Cancer Res** 1996 Dec 15; 56(24):5692-7

Distribution of p53 and K-ras mutations in human lung cancer tissues. Gao HG, et al. **Carcinogenesis** 1997 Mar; 18(3):473-8

Contribution of genetic and nutritional factors to DNA damage in heavy smokers. Mooney LA, et al. **Carcinogenesis** 1997 Mar;18(3):503-9

Smoking-associated mitochondrial DNA mutations in human hair follicles. Liu CS, et al. **Environ Mol Mutagen** 1997; 30(1):47-55

Peculiarities of the GSTM1 0/0 genotype in French heavy smokers with various types of chronic bronchitis. Baranova H, et al. **Hum Genet** 1997 Jun;99(6):822-6

Heavy consumption of cigarettes, alcohol and coffee in male twins. Swan GE, et al. **J Stud Alcohol** 1997 Mar; 58(2):182-90

The consumption of tobacco, alcohol, and coffee in Caucasian male twins: a multivariate genetic analysis. Swan GE, et al. **J Subst Abuse** 1996;8(1):19-31

p53 mutations and protein expression in primary cultures of normal oral mucosa in smokers and non-smokers. Colucci S, et al. **Oral Oncol** 1997 Jul;33(4):240-6

Differences in psychomotor reaction time in male monozygotic twins discordant for lifetime cigarette smoking. Gibbons LE, et al. **Percept Mot Skills** 1996 Dec; 83(3 Pt 2):1219-25

CYP2D6 genotypes in cigarette smokers and non-tobacco users. Cholerton S, et al. **Pharmacogenetics** 1996 Jun; 6(3):261-3

[Genetic polymorphisms of drug-metabolizing enzymes and susceptibility to lung cancer--relevance to smoking] Uematsu F. **Nippon Rinsho** 1996 Feb;54(2):513-7 (27 ref.) (Eng. Abstr.) **(Jpn)**

HISTORY

Images of youth: the issue of juvenile smoking, 1880-1914. Welshman J. **Addiction** 1996 Sep;91(9):1379-86

Historical notes on the introduction of tobacco into Alaska. Fortuine R. **Alaska Med** 1996 Jan-Mar;38(1):3-7

Pipe-smoking along the Yukon (1867). Fortuine R. **Alaska Med** 1997 Apr-Jun;39(2):53

Historic ceremonial and medicinal use of tobacco among American Indians. Reece DH. **Alaska Med** 1996 Jan-Mar; 38(1):8

Re:"Morton Levin (1904–1995): history in the making" [letter; comment] Terris M. **Am J Epidemiol** 1997 Aug 15; 146(4):365. Comment on: Am J Epidemiol 1996 Mar 15;143(6):648–9.

The anti-tobacco campaign of the Nazis: a little known aspect of public health in Germany, 1933–45. Proctor RN. **BMJ** 1996 Dec 7;313(7070):1450–3

The Nazi war on tobacco: ideology, evidence, and possible cancer consequences. Proctor RN. **Bull Hist Med** 1997 Fall;71(3):435–88

Oscar Auerbach, M.D.: in memoriam. Garfinkel L. **Cancer** 1997 May 15;79(10):1853–5

Recruiting women smokers: the engineering of consent. Brandt AM. **J Am Med Womens Assoc** 1996 Jan-Apr; 51(1–2):63–6

Deadly targeting of women in promoting cigarettes. O'Keefe AM, et al. **J Am Med Womens Assoc** 1996 Jan-Apr; 51(1–2):67–9

Cigarette smoking and health promotion in Nazi Germany [letter; comment] Procter RN. **J Epidemiol Community Health** 1997 Apr;51(2):208–10. Comment on: J Epidemiol Community Health 1996 Feb;50(1):109–10.

Advertisements in the Laryngoscope. Clinical confirmation. **Laryngoscope** 1997 Jan;107(1):6

Changing FDR's image. Caldwell MC, et al. **Tob Control** 1996 Winter;5(4):312–5

Those who live by the sword.... Chapman S. **Tob Control** 1997 Spring;6(1):59–60

[Smoking and the periodontium (I). History and clinical aspects. A review of the literature] Brochut PF, et al. **Schweiz Monatsschr Zahnmed** 1997;107(8):672–86 (89 ref.) **(Fre, Ger)**

IMMUNOLOGY

Anti-p53 antibodies in serum of smokers and head and neck cancer patients. Wollenberg B, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):413–8

Interplay of cigarette smoking and occupational exposure on specific immunoglobulin E antibodies to cobalt. Shirakawa T, et al. **Arch Environ Health** 1997 Mar-Apr;52(2):124–8

Smoking and immune responses in pigeon fanciers' lung. Baldwin CI, et al. **Biochem Soc Trans** 1997 May;25(2):325S

Neutrophil activation in smokers. Pitzer JE, et al. **Biorheology** 1996 Jan-Feb;33(1):45–58

Presence and persistence of serum anti-benzo[a]pyrene diolepoxide-DNA adduct antibodies in smokers: effects of smoking reduction and cessation. Pulerà N, et al. **Int J Cancer** 1997 Jan 17;70(2):145–9

The effect of race, smoking and immunoglobulin allotypes on IgG subclass concentrations. Gunsolley JC, et al. **J Periodontal Res** 1997 May;32(4):381–7

Do parental smoking and history of allergy influence cord-serum IgE? Atici A, et al. **Pediatr Allergy Immunol** 1995 Nov;6(4):213–5

Peripheral blood lymphocyte cell subsets in subjects with chronic obstructive pulmonary disease: association with smoking, IgE and lung function. de Jong JW, et al. **Respir Med** 1997 Feb;91(2):67–76

Smoking and immunity: an additional player in the mosaic of autoimmunity. George J, et al. **Scand J Immunol** 1997 Jan;45(1):1–6 (51 ref.)

Smoking and bronchial responsiveness in nonatopic and atopic young adults. Spanish Group of the European Study of Asthma. Sunyer J, et al. **Thorax** 1997 Mar;52(3):235–8

[Carcinoembryonic antigen and neutrophils in healthy smokers] Kashiwabara K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Feb;35(2):154–9 (Eng. Abstr.) **(Jpn)**

[Effect of cigarette smoking on T and NK cell count in blood of persons occupationally exposed to organic solvents] Moszczyński P, et al. **Med Pr** 1995;46(6):541–7 (Eng. Abstr.) **(Pol)**

LEGISLATION & JURISPRUDENCE

The analysis of policy: understanding the process of policy development. Ryder D. **Addiction** 1996 Sep;91(9):1265–70

Criminal deception. Davis RM. **Alaska Med** 1996 Jan-Mar; 38(1):43–8

Anchorage clears the air. How Anchorage came to ban smoking in all buildings operated by city government including public schools. Wilson R. **Alaska Med** 1996 Jan-Mar;38(1):10–1

Perceived and measured availability of tobacco to youths in 14 Minnesota communities: the TPOP Study. Tobacco Policy Options for Prevention. Forster JL, et al. **Am J Prev Med** 1997 May-Jun;13(3):167–74

No butts about it: public smoking ends in Vermont. Carney JK, et al. **Am J Public Health** 1997 May;87(5):860–1

Alternative models for controlling smoking among adolescents [letter; comment] Pletten LJ. **Am J Public Health** 1997 May;87(5):869–71. Comment on: Am J Public Health 1996 Feb;86(2):156–8.

Were asbestos-filtered Kent cigarettes sold in Australia? [letter] Chapman S, et al. **Aust N Z J Public Health** 1996 Apr;20(2):218–9

Cigarettes and drugs in Northern Ireland. Banning smoking would not stop people from buying cigarettes [letter] Cashman D. **BMJ** 1996 Nov 9;313(7066):1210

Florida wins huge award from tobacco firms [news] Charatan FB. **BMJ** 1997 Sep 6;315(7108):564

France faces first tobacco lawsuits [news] Dorozynski A. **BMJ** 1997 Jan 11;314(7074):93

Tobacco firms face no-win, no-fee action [news] Dyer C. **BMJ** 1996 Oct 5;313(7061):835

Tobacco companies seek to pay $300bn as lawsuit settlement [news] Rutter T. **BMJ** 1997 Apr 26;314(7089):1217

United States bans smoking on federal property [news] Rutter T. **BMJ** 1997 Aug 16;315(7105):384

Canada proposes tough antitobacco laws [news] Spurgeon D. **BMJ** 1997 Feb 22;314(7080):539

Romania plans tough antismoking laws [news] Toma TP. **BMJ** 1997 May 24;314(7093):1506

Britain declares war on smoking [news] Warden J. **BMJ** 1997 May 24;314(7093):1502

Smoking crackdown by UK government [news] Warden J. **BMJ** 1997 Jul 19;315(7101):144

Tobacco regulation--does tax income come before health? [editorial] Jackson G. **Br J Clin Pract** 1996 Mar;50(2):67

Legislation in Connecticut seeks to prevent adolescent deaths: now and in the future [editorial] Zavoski RW. **Conn Med** 1996 Apr;60(4):231–2

California's tobacco control saga. Novotny TE, et al. **Health Aff (Millwood)** 1996 Spring;15(1):58–72

State legislators' intentions to vote and subsequent votes on tobacco control legislation. Flynn BS, et al. **Health Psychol** 1997 Jul;16(4):401–4

Indiana laws regarding tobacco control. Caparo JA, et al. **Indiana Med** 1996 Mar-Apr;89(2):193–4

Restricting smoking at the University of Köln, Germany: a case study. Apel M, et al. **J Am Coll Health** 1997 Mar; 45(5):219–23

Public policy: effective treatment for tobacco disease. Scheg KE. **J Am Med Womens Assoc** 1996 Jan-Apr;51(1–2):52–6; 69 (61 ref.)

Reducing the illegal sales of cigarettes to minors: analysis of alternative enforcement schedules. Jason L, et al. **J Appl Behav Anal** 1996 Fall;29(3):333–44

Tobacco on trial: justice in Florida. Howard PT, et al. **J Fla Med Assoc** 1996 Feb;83(2):122–7

Florida tobacco control legislation. Kessler SR, et al. **J Fla Med Assoc** 1996 Feb;83(2):113–6

An interview: Stanton A. Glantz, PhD [see comments] Mahan CS. **J Fla Med Assoc** 1996 Feb;83(2):90–2. Comment in: J Fla Med Assoc 1996 Jun-Jul;83(6):433.

Tobacco and health in Louisiana. A position paper by the Louisiana Cancer and Lung Trust Fund Board. **J La State Med Soc** 1997 Apr;149(4):117–8

Breaking through the tobacco industry's smoke screen: state lawsuits for reimbursement of medical expenses. Meade KE. **J Leg Med** 1996 Mar;17(1):113–41 (311 ref.)

Overcoming a powerful tobacco lobby in enacting local smoking ordinances: the Contra Costa County experience. Ellis GA, et al. **J Public Health Policy** 1996;17(1):28–46

The tobacco dilemma: from warning to banning--or just plain smoke? [editorial] Healy BP. **J Womens Health** 1997 Jun;6(3):253–4

Preemption in tobacco control. Review of an emerging public health problem. Siegel M, et al. **JAMA** 1997 Sep 10; 278(10):858–63

Children's exposure to environmental tobacco smoke in private vehicles [letter] Roberts LM, et al. **Med J Aust** 1996 Sep 16;165(6):350

Minnesota delegation proposes tobacco resolution [news] **Minn Med** 1997 Jul;80(7):33, 35

Minnesota takes on the tobacco industry [news] Crimmins TJ. **Minn Med** 1997 Aug;80(8):34

Tobacco litigation [letter; comment] Kruszewski SP. **N Engl J Med** 1997 Jun 19;336(25):1833; discussion 1833–4 . Comment on: N Engl J Med 1997 Jan 23;336(4):304–8.

Where there's smoke,.... Caudill CC. **Nebr Med J** 1996 Sep; 81(9):299–300

A conversation with Gary Gurian [interview by Robert B. Sklaroff, MD] Gurian G. **Pa Med** 1996 Apr;99(4):38–9

Clearing the air: challenges to introducing smoking restrictions in West Virginia. Stebbins KR. **Soc Sci Med** 1997 May;44(9):1393–401

Texas physicians led fight to pass tough tobacco-control laws for minors. Moran T. **Tex Med** 1997 Aug;93(8):32–8

Year of the child. Ortolon K. **Tex Med** 1997 Mar;93(3):22–6

New legislation in Turkey [letter] Emri S. **Tob Control** 1997 Spring;6(1):61

Political realities of statewide smoking legislation: the passage of California's Assembly Bill 13. Macdonald HR, et al. **Tob Control** 1997 Spring;6(1):41–54

Annoyance from environmental tobacco smoke and support for no-smoking policies at eight large Dutch workplaces. Willemsen MC, et al. **Tob Control** 1996 Summer;5(2):132–8

1995 tobacco control ordinances survey: Wisconsin counties, cities and villages. Brazin S, et al. **Wis Med J** 1996 Nov; 95(11):773–4

METABOLISM

Erythrocyte vitamin E and plasma ascorbate concentrations in relation to erythrocyte peroxidation in smokers and nonsmokers: dose response to vitamin E supplementation [see comments] Brown KM, et al. **Am J Clin Nutr** 1997 Feb;65(2):496–502. Comment in: Am J Clin Nutr 1997 Feb;65(2):562–3. Comment in: Am J Clin Nutr 1997 Sep;66(3):708–10.

No effect of supplementation with vitamin E, ascorbic acid, or coenzyme Q10 on oxidative DNA damage estimated by 8-oxo-7,8-dihydro-2'-deoxyguanosine excretion in smokers. Priemé H, et al. **Am J Clin Nutr** 1997 Feb; 65(2):503–7

Quantitative RT-PCR measurement of cytochromes p450 1A1, 1B1, and 2B7, microsomal epoxide hydrolase, and NADPH oxidoreductase expression in lung cells of smokers and nonsmokers. Willey JC, et al. **Am J Respir Cell Mol Biol** 1997 Jul;17(1):114–24

Urinary desmosine excretion in smokers with and without rapid decline of lung function: the Normative Aging Study. Gottlieb DJ, et al. **Am J Respir Crit Care Med** 1996 Nov; 154(5):1290–5

Integrin upregulation on sputum neutrophils in smokers with chronic airway obstruction. Maestrelli P, et al. **Am J Respir Crit Care Med** 1996 Nov;154(5):1296–300

Systemic oxidative stress in asthma, COPD, and smokers. Rahman I, et al. **Am J Respir Crit Care Med** 1996 Oct; 154(4 Pt 1):1055–60

Abuse of smoking methamphetamine mixed with tobacco. V. Plasma metabolites of N-cyanomethylmethamphetamine, a pyrolysis product formed by smoking methamphetamine in tobacco, and the species difference between mouse and rat. Sekine H, et al. **Biol Pharm Bull** 1996 Jun;19(6):845–51

Monoamine oxidase, tobacco smoking, and psychiatric disorders [letter] Domino EF. **Biol Psychiatry** 1996 Sep 1;40(5):433–4

Genotyping of the CYP1A1 and GSTM1 genes in esophageal carcinoma patients with special reference to smoking. Nimura Y, et al. **Cancer** 1997 Sep 1;80(5):852–7

Immunoperoxidase quantitation of 4-aminobiphenyl- and polycyclic aromatic hydrocarbon-DNA adducts in exfoliated oral and urothelial cells of smokers and nonsmokers. Hsu TM, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Mar;6(3):193–9

p53 protein expression and increased SSCP mobility shifts in the p53 gene in normal urothelium cultured from smokers. Mothersill C, et al. **Carcinogenesis** 1997 Jun; 18(6):1241–5

Tobacco smoke, recurrences, and p53/bcl-2 expression in bladder cancer. Pacchioni D, et al. **Carcinogenesis** 1997 Aug;18(8):1659–61

Effect of menthol cigarettes on biochemical markers of smoke exposure among black and white smokers. Clark PI, et al. **Chest** 1996 Nov;110(5):1194–8

Adaptation of lung antioxidants to cigarette smoking in humans. Hilbert J, et al. **Chest** 1996 Oct;110(4):916–20

Smoking cessation is associated with an increase in exhaled nitric oxide. Robbins RA, et al. **Chest** 1997 Aug; 112(2):313–8

Association between cigarette smoking and lipid peroxidation in a controlled feeding study. Miller ER 3rd, et al. **Circulation** 1997 Aug 19;96(4):1097–101

Abnormal effect of cigarette smoking on pituitary hormone secretions in insulin-dependent diabetes mellitus. Chiodera P, et al. **Clin Endocrinol (Oxf)** 1997 Mar;46(3):351–7

Nicotine and cotinine in maternal and neonatal hair as markers of gestational smoking. Eliopoulos C, et al. **Clin Invest Med** 1996 Aug;19(4):231–42

Pulmonary clearance of [99mTc]DTPA and [99mTc]albumin in smokers. Nilsson K, et al. **Clin Physiol** 1997 Mar; 17(2):183–92

Smoking, alcohol and lipoprotein metabolism. Porkka KV, et al. **Curr Opin Lipidol** 1996 Jun;7(3):162–6 (47 ref.)

No acute effects of smoking and nicotine nasal spray on lipolysis measured by subcutaneous microdialysis. Eliasson B, et al. **Eur J Clin Invest** 1997 Jun;27(6):503–9

Effect of supplementation of smoking men with plain or slow release ascorbic acid on lipoprotein oxidation. Nyyssönen K, et al. **Eur J Clin Nutr** 1997 Mar;51(3):154–63

The expression of adhesion molecules in cigarette smoke-induced airways obstruction. González S, et al. **Eur Respir J** 1996 Oct;9(10):1995–2001

Increased content of hydrogen peroxide in the expired breath of cigarette smokers. Nowak D, et al. **Eur Respir J** 1996 Apr;9(4):652–7

Erythrocyte carbonic anhydrase activity in smokers and in diabetic patients. Abel P, et al. **Exp Clin Endocrinol Diabetes** 1997;105 Suppl 2:17–9

Mainstream and sidestream cigarette smoke exposure increases retinol in guinea pig lungs. Mukherjee S, et al. **Free Radic Biol Med** 1995 Mar;18(3):507–14

The effect of smoking and varicocele on human sperm acrosin activity and acrosome reaction. El Mulla KF, et al. **Hum Reprod** 1995 Dec;10(12):3190–4

Comparison of single breath and steady state methods for measurement of lung transfer factor for CO in normal subjects and smokers. Mahajan KK, et al. **Indian J Physiol Pharmacol** 1996 Jul;40(3):267–70

Concentration of metals, ceruloplasmin, metallothionein and the activity of N-acetyl-beta-D-glucosaminidase and gamma-glutamyltransferase in pregnant women who smoke and in those environmentally exposed to tobacco smoke and in their infants. Part I. Milnerowicz H, et al. **Int J Occup Med Environ Health** 1997;10(2):187–202

Eicosanoids and lipocortin-1 in BAL fluid in asthma: effects of smoking and inhaled glucocorticoids. Van Hal PT, et al. **J Appl Physiol** 1996 Aug;81(2):548–55

Blood antioxidant status and urine sulfate and thiocyanate levels in smokers. Abou-Seif MA. **J Biochem Toxicol** 1996; 11(3):133–8

DNA adducts in human placenta in relation to tobacco smoke exposure and plasma antioxidant status. Daube H, et al. **J Cancer Res Clin Oncol** 1997;123(3):141–51

Influence of oral contraceptive use and cigarette smoking, alone and together, on antipyrine pharmacokinetics. Scavone JM, et al. **J Clin Pharmacol** 1997 May;37(5):437–41

Cigarette smoking causes biochemical changes in blood that are suggestive of oxidative stress: a case–control study. Hulea SA, et al. **J Environ Pathol Toxicol Oncol** 1995; 14(3–4):173–80

Cigarette smoke increases cholesterol oxidation and lipid peroxidation of human low-density lipoprotein and decreases its binding to the hepatic receptor in vitro. Mahfouz MM, et al. **J Environ Pathol Toxicol Oncol** 1995; 14(3–4):181–92

Re: Bcl-2 Overexpression and smoking history in head and neck cancer [letter; comment] Ogden GR. **J Natl Cancer Inst** 1996 Dec 18;88(24):1864–6. Comment on: J Natl Cancer Inst 1995 Jul 5;87(13):1024–5.

The influence of cigarette consumption and smoking machine yields of tar and nicotine on the nicotine uptake and oral mucosal lesions in smokers. Andersson G, et al. **J Oral Pathol Med** 1997 Mar;26(3):117–23

Effect of snuff and smoking on tenascin expression in oral mucosa. Luomanen M, et al. **J Oral Pathol Med** 1997 Aug; 26(7):334–8

Pulmonary catabolism of interleukin 6 evaluated by lung perfusion of normal and smoker rats. Pessina GP, et al. **J Pharm Pharmacol** 1996 Oct;48(10):1063–7

Effect of smoking history on [3H]nicotine binding in human postmortem brain. Breese CR, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):7–13

Beta-carotene and disease: a suggested pro-oxidant and anti-oxidant mechanism and speculations concerning its role in cigarette smoking. Truscott TG. **J Photochem Photobiol B** 1996 Sep;35(3):233–5

Hydroxocobalamin analysis and pharmacokinetics [letter] Osterich JD, et al. **J Toxicol Clin Toxicol** 1997; 35(4):409–15; discussion 417

Relationships between smoking habits, smoking-associated hematological changes, and urinary benzene metabolites. Haufroid V, et al. **J Toxicol Environ Health** 1997 Sep; 52(1):1–17

Expression of adhesion molecules in peripheral pulmonary vessels from smokers and nonsmokers. Schaberg T, et al. **Lung** 1996;174(2):71–81

Effect of age on alteration of glutathione metabolism following chronic cigarette smoke inhalation in mice. Teramoto S, et al. **Lung** 1996;174(2):119–26

Effects of genetically determined S-mephenytoin 4-hydroxylation status and cigarette smoking on the single-dose pharmacokinetics of oral alprazolam. Otani K, et al. **Neuropsychopharmacology** 1997 Jan;16(1):8–14

Smoking and response to psychotropic drugs [letter; comment] Schein J. **Psychiatr Serv** 1997 Jul;48(7):955. Comment on: Psychiatr Serv 1997 Jan;48(1):100–2.

Possible inhibitory effect of diazepam on the metabolism of zotepine, an antipsychotic drug. Kondo T, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):311–4

Examining the relation between usual-brand nicotine yield, blood cotinine concentration and the nicotine-"compensation" hypothesis. Pritchard WS, et al. **Psychopharmacology (Berl)** 1996 Apr;124(3):282–4

Increased expression of membrane-associated phospholipase A2 in the lower respiratory tract of asymptomatic cigarette smokers. Yamashita JI, et al. **Respir Med** 1996 Sep; 90(8):479–83

Validation of self-reported smoking by analysis of hair for nicotine and cotinine. Eliopoulos C, et al. **Ther Drug Monit** 1996 Oct;18(5):532–6

MORTALITY

Increase in lung cancer in Alaska natives: how high will the rates go? Lanier AP. **Alaska Med** 1996 Jan–Mar;38(1):38–9

Smoking attributable mortality and economic costs in Alaska 1992–94 [published erratum appears in Alaska Med 1997 Jan–Mar;39(1):28] Schumacher C. **Alaska Med** 1996 Jan–Mar;38(1):13–7

Do smokers understand the mortality effects of smoking? Evidence from the Health and Retirement Survey. Schoenbaum M. **Am J Public Health** 1997 May;87(5):755–9

Obesity, alcohol consumption, smoking, and mortality. Chyou PH, et al. **Ann Epidemiol** 1997 May;7(4):311–7

Mortality in second generation Irish people living in England and Wales. Possibility of excess smoking should be investigated [letter; comment] Cruickshank JK. **BMJ** 1996 Sep 21;313(7059):753; discussion 753–4. Comment on: BMJ 1996 Jun 1;312(7043):1373–4. Comment on: BMJ 1996 Jun 1;312(7043):1389–92.

Life expectancy in men who have never smoked and those who have smoked continuously: 15 year follow up of large cohort of middle aged British men. Phillips AN, et al. **BMJ** 1996 Oct 12;313(7062):907–8

Smoking death toll shifts to Third World [news] Tomlinson R. **BMJ** 1997 Sep 6;315(7108):565

Prospective study of effect of switching from cigarettes to pipes or cigars on mortality from three smoking related diseases. Wald NJ, et al. **BMJ** 1997 Jun 28;314(7098):1860–3

Which features of smoking determine mortality risk in former cigarette smokers with diabetes? The World Health Organization Multinational Study Group. Chaturvedi N, et al. **Diabetes Care** 1997 Aug;20(8):1266–72

Smoking patterns and mortality attributable to smoking in a cohort of 3528 construction workers. Rothenbacher D, et al. **Eur J Epidemiol** 1996 Aug;12(4):335–40

The constitutional hypothesis negated by twins discordant for smoking and mortality [letter; comment] Jongbloet PH. **Int J Epidemiol** 1997 Feb;26(1):241–3. Comment on: Int J Epidemiol 1996 Jun;25(3):554–9.

Mortality and morbidity of potentially misclassified smokers. Suadicani P, et al. **Int J Epidemiol** 1997 Apr;26(2):321–7

Estimating tobacco-related health-care and mortality costs in Florida. Lynch TA, et al. **J Fla Med Assoc** 1996 Feb; 83(2):128–33

Premature mortality in aboriginal adults in the Northern Territory, 1979–1991 [letter; comment] Wilson GC. **Med J Aust** 1997 Mar 3;166(5):278–9. Comment on: Med J Aust 1996 Sep 16;165(6):309–12.

Smoking-attributable mortality and years of potential life lost—United States, 1984. **MMWR Morb Mortal Wkly Rep** 1997 May 23; 46(20):444–51

Projected smoking-related deaths among youth—United States. **MMWR Morb Mortal Wkly Rep** 1996 Nov 8; 45(44):971–4

Cigarette smoking in China—a message for India. Gupta PC. **Natl Med J India** 1997 Mar–Apr;10(2):74–5

Survival analysis. Blackwell E, et al. **Nutrition** 1996 Jun; 12(6):459–60

Changes in mortality from smoking in two American Cancer Society prospective studies since 1959. Thun MJ, et al. **Prev Med** 1997 Jul–Aug;26(4):422–6

Mortality from tobacco in developed countries: are indirect estimates reliable? Lee PN. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 1):60–8 (25 ref.)

Impact of future cigarette smoking scenarios on mortality of the adult population in the United States, 2000–2050. Nam CB, et al. **Soc Biol** 1996 Fall–Winter;43(3–4):155–68

[Cigarette smoking and acute myocardial infarct] Trappolini M, et al. **Minerva Cardioangiol** 1996 Dec;44(12):609–16 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Cytopathological analysis of sputum in patients with airflow obstruction and significant smoking histories. Kennedy TC, et al. **Cancer Res** 1996 Oct 15;56(20):4673–8

Effect of smoking on micronucleated epithelial cells in smears from the uterine cervix. Lehucher-Michel MP, et al. **Carcinogenesis** 1997 Apr;18(4):749–53

Tracheobronchial histopathology in habitual smokers of cocaine, marijuana, and/or tobacco. Fligiel SE, et al. **Chest** 1997 Aug;112(2):319–26

The potentiating actions of cigarette smoking on ethanol-induced gastric mucosal damage in rats. Chow JY, et al. **Gastroenterology** 1997 Oct;113(4):1188–97

Cigarette smoking may affect meiotic maturation of human oocytes. Zenzes MT, et al. **Hum Reprod** 1995 Dec; 10(12):3213–17

Nicotinic system and Alzheimer's disease [letter; comment] Gambassi G, et al. **J Am Geriatr Soc** 1997 May;45(5):655–6. Comment on: J Am Geriatr Soc 1996 Aug;44(8):905–9.

Tachykinin activation of human alveolar macrophages in tobacco smoke and sarcoidosis: a phenotypical and functional study. Brunelleschi S, et al. **Neuropeptides** 1996 Oct;30(5):456–64

PHYSIOPATHOLOGY

Blood pressure levels and variability, smoking, and left ventricular structure in normotension and in borderline and mild hypertension. Majahalme S, et al. **Am J Hypertens** 1996 Nov;9(11):1110–8

Vascular abnormalities associated with long-term cigarette smoking identified by arterial waveform analysis. McVeigh GE, et al. **Am J Med** 1997 Mar;102(3):227–31

Smoking impairs baroreflex sensitivity in humans. Mancia G, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1555–60

Tobacco smoke-induced lung emphysema in guinea pigs is associated with increased interstitial collagenase. Selman M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):L734–43

Ozone responsiveness in smokers and nonsmokers. Frampton MW, et al. **Am J Respir Crit Care Med** 1997 Jan; 155(1):116–21

The effect of cigarette smoking on the bone marrow. Terashima T, et al. **Am J Respir Crit Care Med** 1997 Mar; 155(3):1021–6

Alcohol consumption during pregnancy and infant birth weight [letter] Larroque B, et al. **Ann Epidemiol** 1996 Mar; 6(2):169–70

Ambulatory blood pressure monitoring in normotensive smokers and nonsmokers. Kawasaki T, et al. **Ann N Y Acad Sci** 1996 Aug 15;783:328–9

Is preconditioning by nicotine responsible for the better prognosis in smokers with acute myocardial infarction? Birnbaum Y, et al. **Basic Res Cardiol** 1996 May–Jun; 91(3):240–7

Blood flow velocity in the extraocular vessels in chronic smokers. Kaiser HJ, et al. **Br J Ophthalmol** 1997 Feb; 81(2):133–5

Effect of breathing 100% oxygen on retinal and optic nerve head capillary blood flow in smokers and non-smokers. Langhans M, et al. **Br J Ophthalmol** 1997 May;81(5):365–9

Does cigarette smoking paradoxically increase survival in idiopathic dilated cardiomyopathy?. The Washington, D.C., Dilated Cardiomyopathy Study. Metayer C, et al. **Cardiology** 1996 Nov–Dec;87(6):502–8

Role of endogenous nitric oxide in airflow obstruction in smokers. Kanazawa H, et al. **Chest** 1996 Oct;110(4):927–9

Acceleration of tibia and distal radius fracture healing in patients who smoke. Cook SD, et al. **Clin Orthop** 1997 Apr;(337):198–207

Smoking is independently associated with high plasma insulin levels in nondiabetic men. Rönnemaa T, et al. **Diabetes Care** 1996 Nov;19(11):1229–32

Differential effects of cocaine, alcohol, and nicotine dependence on olfactory evoked potentials. Bauer LO, et al. **Drug Alcohol Depend** 1996 Sep;42(1):21–6

Long-term cigarette smoking is associated with increased myocardial perfusion heterogeneity assessed by positron emission tomography. Meeder JG, et al. **Eur J Nucl Med** 1996 Nov;23(11):1442–7

Effect of haloperidol on the behavioral stimulation by N-cyanomethylmethamphetamine, a main product of smoking methamphetamine mixed with tobacco. Kuribara H, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):1–6

The effect of smoking and varicocele on human sperm acrosin activity and acrosome reaction. El Mulla KF, et al. **Hum Reprod** 1995 Dec;10(12):3190–4

Effects of obesity, current smoking status, and alcohol consumption on heart rate variability in male white-collar workers. Kageyama T, et al. **Int Arch Occup Environ Health** 1997;69(6):447–54

Smoking and male reproduction: a review. Vine MF. **Int J Androl** 1996 Dec;19(6):323–37 (110 ref.)

The relationship between body weight and patterns of smoking in women and men. Rásky E, et al. **Int J Epidemiol** 1996 Dec;25(6):1208–12

Cigarette smoking, bacterial pneumonia, and other clinical outcomes in HIV-1 infection. Terry Beirn Community Programs for Clinical Research on AIDS. Burns DN, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 1;13(4):374–83

Cigarette smoking is associated with increased human monocyte adhesion to endothelial cells: reversibility with oral L-arginine but not vitamin C. Adams MR, et al. **J Am Coll Cardiol** 1997 Mar 1;29(3):491–7

Cigarette smoke-induced bronchoconstriction: causative agents and role of thromboxane receptors. Hong JL, et al. **J Appl Physiol** 1996 Nov;81(5):2053–9

Thromboxane causes airway hyperresponsiveness after cigarette smoke-induced neurogenic inflammation. Matsumoto K, et al. **J Appl Physiol** 1996 Dec;81(6):2358–64

Effect of cigarette smoke extract on arteriolar dilatation in vivo. Mayhan WG, et al. **J Appl Physiol** 1996 Nov; 81(5):1996–2003

Smoking and asthma among 23-year-olds. Kaplan BA, et al. **J Asthma** 1997;34(3):219–26

Evidence from a chronobiometric approach that chronic smokers, although normotensive, show an increase in diurnal blood pressure. Kawasaki T, et al. **J Cardiovasc Risk** 1996 Jun;3(3):313–7

Healing response of gingival recession defects following guided tissue regeneration procedures in smokers and non-smokers. Trombelli L, et al. **J Clin Periodontol** 1997 Aug;24(8):529–33

Rapid lung cytokine accumulation and neutrophil recruitment after lipopolysaccharide inhalation by cigarette smokers and nonsmokers. Wesselius LJ, et al. **J Lab Clin Med** 1997 Jan;129(1):106–14

Cigarette smoking increases endothelial-derived vasorelaxation in the rat carotid artery in a dose-dependent manner. Nene S, et al. **J Surg Res** 1997 Aug;71(2):101–6

Is sleep apnea a predisposing factor for tobacco use? Schrand JR. **Med Hypotheses** 1996 Dec;47(6):443–8 (37 ref.)

Assessing the topographic EEG changes associated with aging and acute/long-term effects of smoking. Knott VJ, et al. **Neuropsychobiology** 1996;33(4):210–22

Psychophysiological and subjective effects of cigarettes having varying nicotine yields but relatively constant "tar" yields. Pritchard WS, et al. **Neuropsychobiology** 1996; 34(4):208–21

The effects of smoking on ovarian function and fertility during assisted reproduction cycles. Van Voorhis BJ, et al. **Obstet Gynecol** 1996 Nov;88(5):785–91

Effects of mecamylamine on spontaneous EEG and performance in smokers and non-smokers. Pickworth WB, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):181–7

Acute thermogenic effects of nicotine and alcohol in healthy male and female smokers. Perkins KA, et al. **Physiol Behav** 1996 Jul;60(1):305–9

The role of cigarettes and nicotine in the onset and treatment of ulcerative colitis. Birtwistle J. **Postgrad Med J** 1996 Dec; 72(854):714–8 (58 ref.)

Respiratory response to cigarette smoking among adolescent smokers: a pilot study. Prokhorov AV, et al. **Prev Med** 1996 Sep–Oct;25(5):633–40

Brain monoamine oxidase A inhibition in cigarette smokers. Fowler JS, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):14065–9

Effect of cigarette smoking on prepulse inhibition of the acoustic startle reflex in healthy male smokers. Kumari V, et al. **Psychopharmacology (Berl)** 1996 Nov;128(1):54–60

The continuous and simultaneous blood flow velocity

measurement of four cerebral vessels and a peripheral vessel during cigarette smoking. Morioka C, et al. **Psychopharmacology (Berl)** 1997 Jun;131(3):220–9

Cigarette smoking and psychophysiological stress responsiveness: effects of recent smoking and temporary abstinence. Tsuda A, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):226–33

Effects of cigarette smoking on EEG spectral–band power, dimensional complexity, and nonlinearity during reaction–time task performance. Houlihan ME, et al. **Psychophysiology** 1996 Nov;33(6):740–6

Effects of smoking and clinical status on lung function in human immunodeficiency virus (HIV)–seropositive subjects. McCabe RN, et al. **Respir Med** 1997 Apr; 91(4):221–9

Pulmonary function is diminished in older asymptomatic smokers and ex–smokers with low attenuation areas on high–resolution computed tomography. Betsuyaku T, et al. **Respiration** 1996;63(6):333–8

Cosinor analysis of circadian peak expiratory flow variability in normal subjects, passive smokers, heavy smokers, patients with chronic obstructive pulmonary disease and patients with interstitial lung disease. Casale R, et al. **Respiration** 1997;64(4):251–6

Detection of CYP1A1 mRNA levels and CYP1A1 Msp polymorphisms as possible biomarkers of exposure and susceptibility in smokers and non–smokers. Rumsby PC, et al. **Teratog Carcinog Mutagen** 1996;16(1):65–74

Thirty month variability of aerosol pulse dispersion and conventional lung function parameters in healthy middle aged smokers and nonsmokers. Siekmeier R, et al. **Toxicol Lett** 1996 Nov;88(1–3):263–70

Stress, hormonal changes, alcohol, food constituents and drugs: factors that advance the incidence of tobacco smoke–related cancer? Maser E. **Trends Pharmacol Sci** 1997 Aug;18(8):270–5 (95 ref.)

[The interaction between rocuronium and smoking. The effect of smoking on neuromuscular transmission after rocuronium] Latorre F, et al. **Anaesthesist** 1997 Jun; 46(6):493–5 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Measurement of alcohol and tobacco availability to underage students. Klepp KI, et al. **Addict Behav** 1996 Sep–Oct; 21(5):585–95

Intervention for relapse to smoking: the Lung Health Study restart programs. Murray RP, et al. **Addict Behav** 1997 Mar–Apr;22(2):281–6

Qualitative development of smoking prevention programming for minority youth. Parker VC, et al. **Addict Behav** 1996 Jul–Aug;21(4):521–5

Identification of adolescents at risk for smoking initiation: validation of a measure of susceptibility. Unger JB, et al. **Addict Behav** 1997 Jan–Feb;22(1):81–91

Subgroups of smokers with different success rates after use of transdermal nicotine. Swan GE, et al. **Addiction** 1997 Feb;92(2):207–17

Tobacco control? [letter; comment] Uzych L. **Addiction** 1996 Sep;91(9):1387–8. Comment on: Addiction 1995 Dec;90(12):1581–6.

Alaskans voice strong support for tobacco tax increase. Holen AM. **Alaska Med** 1996 Jan–Mar;38(1):41–2

Prevention that works. Nakamura P. **Alaska Med** 1996 Jan–Mar;38(1):18–20

Tobacco taxes: the Canadian experience. Sweanor DT. **Alaska Med** 1996 Jan–Mar;38(1):40–1

Children and tobacco: the FDA's final rule. Rheinstein PH, et al. **Am Fam Physician** 1997 Mar;55(4):1441–4 (12 ref.)

FDA regulates tobacco marketing to minors [news] **Am J Health Syst Pharm** 1996 Oct 1;53(19):2254–5

Smoking's challenge to pharmacy [editorial] Talley CR. **Am J Health Syst Pharm** 1996 Jan 1;53(1):41

Helping patients to quit smoking. Gorman M. **Am J Nurs** 1997 Mar;97(3):64–5

Impact of a one–day antismoking program on male secondary–school adolescents in southwestern Saudi Arabia. Abolfotouh MA, et al. **Am J Prev Med** 1997 May–Jun;13(3):151–2

Medical students' smoking history and their preventive pulmonary attitudes [letter] Frye AW. **Am J Prev Med** 1996 Jan–Feb;12(1):4

Does gender affect response to a brief clinic–based smoking intervention? Whitlock EP, et al. **Am J Prev Med** 1997 May–Jun;13(3):159–66

Screening for adolescent smoking among primary care physicians in California. Franzgrote M, et al. **Am J Public Health** 1997 Aug;87(8):1341–5

Promoting abstinence among relapsed chronic smokers: the effect of telephone support. Lando HA, et al. **Am J Public Health** 1996 Dec;86(12):1786–90

State health agencies' role in a more balanced and sophisticated tobacco control program [letter; comment] Lumpkin JR, et al. **Am J Public Health** 1996 Oct; 86(10):1482–3. Comment on: Am J Public Health 1996 Feb;86(2):156–8.

European Cancer Experts recommendations for tobacco control. Helsinki Tobacco Consensus Conference. Boyle P. **Ann Oncol** 1997 Jan;8(1):9–13 (18 ref.)

A mandate for physician activism in the war against tobacco. Barnes MM. **Arch Fam Med** 1997 May–Jun;6(3):215–7

Do cigarette warning labels reduce smoking? Paradoxical effects among adolescents. Robinson TN, et al. **Arch Pediatr Adolesc Med** 1997 Mar;151(3):267–72

Smoking cessation. 2: Components of effective intervention. Tsoh JY, et al. **Behav Med** 1997 Spring;23(1):15–27 (66 ref.)

Test sales do not have impact on prevalence of smoking by children [letter] Bagott M, et al. **BMJ** 1997 Aug 23; 315(7106):491

Tobacco marketing: shackling the pied piper [editorial] Hastings G, et al. **BMJ** 1997 Aug 23;315(7106):439–40

Hong Kong bans tobacco advertising [news] Mackay J, et al. **BMJ** 1997 Jul 5;315(7099):8

The campaigner who dreams of a tobacco free world [news] Rutter T. **BMJ** 1997 Aug 23;315(7106):448

Changes among retailers selling cigarettes to minors. Dovell RA, et al. **Can J Public Health** 1996 Jan–Feb;87(1):66–8

Smoking status of chronic hospital patients: implications for health promotion programs. Hirdes JP, et al. **Can J Public Health** 1996 Sep–Oct;87(5):317–8

Disadvantaged women and smoking. Stewart MJ, et al. **Can J Public Health** 1996 Jul–Aug;87(4):257–60

Cutting tobacco taxes, endangering youth [letter; comment] Birkett N. **Can Med Assoc J** 1997 May 15;156(10):1377–8 . Comment on: Can Med Assoc J 1997 Jan 15;156(2):187–91.

In Hong Kong, smokers are butting out in record numbers. Brooks JR. **Can Med Assoc J** 1997 May 15;156(10):1441–3

Reducing the harm of adolescent substance use [editorial; comment] Erickson PG. **Can Med Assoc J** 1997 May 15; 156(10):1397–9 (15 ref.). Comment on: Can Med Assoc J 1997 May 15;156(10):1387–93.

Right to bill may affect amount of tobacco counselling by MDs. Sullivan P, et al. **Can Med Assoc J** 1997 Jan 15; 156(2):241–3

Recruiting cancer patients to participate in motivating their relatives to quit smoking. A cancer control study of the Cancer and Leukemia Group B (CALGB 9072). Schilling A, et al. **Cancer** 1997 Jan 1;79(1):152–60

Active and passive smoking: hazards for children. Etzel RA. **Cent Eur J Public Health** 1997 Jun;5(2):54–6

Antidote for America's leading pediatric disease [news] Gilpin B, et al. **Circulation** 1996 Aug 1;94(3):233

Tobacco and health care [letter; comment] Arkinstall WW. **CMAJ** 1997 Jul 15;157(2):133; discussion 133–4. Comment on: Can Med Assoc J 1997 Jan 15;156(2):240A–240F.

Tobacco and health care [letter; comment] Finlayson R. **CMAJ** 1997 Jul 15;157(2):133; discussion 133–4. Comment on: Can Med Assoc J 1997 Jan 15;156(2):240A–240F.

The role of the pediatrician in smoking prevention. Sockrider MM. **Curr Opin Pediatr** 1997 Jun;9(3):225–9 (39 ref.)

A double–blind randomized trial of nicotine nasal spray as an aid in smoking cessation. Blöndal T, et al. **Eur Respir J** 1997 Jul;10(7):1585–90

Community coalitions for prevention and health promotion: factors predicting satisfaction, participation, and planning. Butterfoss FD, et al. **Health Educ Q** 1996 Feb;23(1):65–79

The smoke–free university: anticipating health education needs of faculty and staff. Robinson L. **Health Educ Q** 1996 Feb;23(1):8–15

A meta–analysis of smoking prevention programs after adjustment for errors in the unit of analysis. Rooney BL, et al. **Health Educ Q** 1996 Feb;23(1):48–64

Using mass media to prevent cigarette smoking among adolescent girls. Worden JK, et al. **Health Educ Q** 1996 Nov;23(4):453–68

Smoker networks and the "typical smoker": a prospective analysis of smoking cessation. Gibbons FX, et al. **Health Psychol** 1996 Nov;15(6):469–77

Temptations to smoke after quitting: a comparison of lapsers and maintainers. Shiffman S, et al. **Health Psychol** 1996 Nov;15(6):455–61

Reaching smokers with lower educational attainment. Millar WJ. **Health Rep** 1996 Autumn;8(2):11–9(Eng); 13–22(Fre) **(Eng, Fre)**

Social patterns of smoking behavior: trends and practice implications. Kaplan MS, et al. **Health Soc Work** 1997 Feb; 22(1):47–52 (60 ref.)

Tobacco control: a brief review of its history and prospects for the future. Emmons KM, et al. **Hematol Oncol Clin North Am** 1997 Apr;11(2):177–95 (103 ref.)

The proposed tobacco deal: not so fast [editorial] Bartecchi CE, et al. **Hosp Pract (Off Ed)** 1997 Aug 15;32(8):17–20, 28–9

ASSIST: making a difference in Indiana. Bishop KL. **Indiana Med** 1996 Mar–Apr;89(2):126–8

Tobacco free at the Indianapolis 500. Blom ED. **Indiana Med** 1996 Mar–Apr;89(2):207–9

A conversation with Ronald M. Davis, M.D. [interview by Bob Carlson] Carlson B. **Indiana Med** 1996 Mar–Apr; 89(2):121–4

Tobacco education in low–literacy individuals. Ciampa C. **Indiana Med** 1996 Mar–Apr;89(2):188–92

Ethical responsibilities of physicians in tobacco control. Gaffney M. **Indiana Med** 1996 Mar–Apr;89(2):196–8

Tobacco control and the AMA: health, policy and politics. Houston TP. **Indiana Med** 1996 Mar–Apr;89(2):129–31

A conversation with C. Everett Koop, M.D. [interview by Stephen J. Jay] Jay SJ. **Indiana Med** 1996 Mar–Apr; 89(2):116–20

Trends of public opinion on tobacco use and public policy. Torabi MR. **Indiana Med** 1996 Mar–Apr;89(2):132–5

Relation between smoking status of physicians and their enthusiasm to offer smoking cessation advice [see comments] Kawakami M, et al. **Intern Med** 1997 Mar; 36(3):162–5. Comment in: Intern Med 1997 Mar;36(3):159.

Adolescent girls' constructions of smoking identities: implications for health promotion. Lloyd B, et al. **J Adolesc** 1997 Feb;20(1):43–56

Young people's representations of others' views of smoking: is there a link with smoking behaviour? Thrush D, et al. **J Adolesc** 1997 Feb;20(1):57–70

Smoking v women's health: the challenge ahead. Blumenthal SJ. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):8

How clinicians can affect patient smoking behavior through community involvement and clinical practice. Epps RP, et al. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):43–7 (8 ref.)

Tobacco litigation as a public health and cancer control strategy. Kelder GE, et al. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):57–62

Women and tobacco: international issues. Mackay J. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):48–51

Public policy: effective treatment for tobacco disease. Scheg KE. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):52–6; 69 (61 ref.)

Kids, cancer, and the Joe Camel connection [editorial; comment] Koh HK. **J Clin Oncol** 1997 Jun;15(6):2181–2. Comment on: J Clin Oncol 1997 Jun;15(6):2194–204.

Tobacco use among pediatric cancer patients: recommendations for developing clinical smoking interventions [see comments] Tyc VL, et al. **J Clin Oncol** 1997 Jun;15(6):2194–204 (81 ref.). Comment in: J Clin Oncol 1997 Jun;15(6):2181–2.

Impact of a smoking ban on a locked psychiatric unit [letter; comment] Pearlman T. **J Clin Psychiatry** 1997 Apr; 58(4):179. Comment on: J Clin Psychiatry 1996 Aug;57(8):329–32.

Butt out!! Why the FDA lacks jurisdiction to curb smoking of adolescents and children. Boyd MA. **J Contemp Health Law Policy** 1996 Fall;13(1):169–97

Preventing adolescent cigarette smoking. Botvin GJ. **J Dev Behav Pediatr** 1997 Feb;18(1):47–8

Randomised controlled trial of anti–smoking advice in pregnancy: 20 years on [comment] Donovan JW. **J Epidemiol Community Health** 1996 Jun;50(3):237–8. Comment on: J Epidemiol Community Health 1996 Jun;50(3):232–6.

Current trends in tobacco prevention and cessation in Nebraska physicians' offices. McIlvain HE, et al. **J Fam Pract** 1997 Feb;44(2):193–202

Getting serious about tobacco control. Role for organized medicine. A message from the American Medical Association. Houston TP. **J Fla Med Assoc** 1996 Feb; 83(2):96–7

An interview: Stanton A. Glantz, PhD [see comments] Mahan CS. **J Fla Med Assoc** 1996 Feb;83(2):90–2. Comment in: J Fla Med Assoc 1996 Jun–Jul;83(6):433.

Florida tobacco prevention and control program: building capacity through collaboration. Marty PJ, et al. **J Fla Med Assoc** 1996 Feb;83(2):117–21

Opposition to tobacco use. A nonpartisan public health issue [editorial] Sims J. **J Fla Med Assoc** 1996 Feb;83(2):79–80

A tobacco–free Sunshine State. Science and public opinion support stronger tobacco controls. Sims J. **J Fla Med Assoc** 1996 Feb;83(2):87–9

Cardiovascular implications of smoking: the surgeon general's point of view. Manley AF. **J Health Care Poor Underserved** 1997 Aug;8(3):303–10 (15 ref.)

Cigarette smoking among girls and women in the United States, 1965–1994. Husten CG. **J Med Assoc Ga** 1997 Sep; 86(3):213–6

Limiting access to tobacco products [editorial] Lockey MW. **J Miss State Med Assoc** 1997 Apr;38(4):133–4

National Cancer Policy Board adds its voice to tobacco issues [news] Smigel K. **J Natl Cancer Inst** 1997 Aug 6; 89(15):1097–8

The National Medical Association—an advocate for a smoke–free environment. Morgan RC Jr. **J Natl Med Assoc** 1996 Dec;88(12):766–7

A smoking cessation plan for pregnant women. Kilby JW. **J Obstet Gynecol Neonatal Nurs** 1997 Jul–Aug; 26(4):397–402 (25 ref.)

In harm's way: childbearing women and nicotine. Scheibmeir M, et al. **J Obstet Gynecol Neonatal Nurs** 1997 Jul–Aug; 26(4):477–84 (49 ref.)

Worksite characteristics and changes in worksite tobacco–control initiatives. Results from the COMMIT study. Sorensen G, et al. **J Occup Environ Med** 1997 Jun; 39(6):520–6

Up in smoke? Linking patient assaults to a psychiatric hospital's smoking ban. Rauter UK, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jun;35(6):35–40

The National Women's Tobacco Control Plan. McLellan DL, et al. **J Public Health Policy** 1996;17(1):47–58 (02 ref.)

Tobacco prevention in tobacco–raising areas: lessons from the lion's den. Noland MP. **J Sch Health** 1996 Sep; 66(7):266–8

Pro–innovation bias: the case of the Giant Texas SmokeScream. Smith DW, et al. **J Sch Health** 1996 Aug; 66(6):210–3

From the Centers for Disease Control and Prevention. Tobacco tax initiative—Oregon, 1996. **JAMA** 1997 May 28;277(20):1586–7

FDA timetable set for reducing use of tobacco by children and adolescents [news] Marwick C. **JAMA** 1997 Mar 12; 277(10):778

From the Food and Drug Administration. Nightingale SL. **JAMA** 1996 Oct 9;276(14):1128

FDA poster campaign targets teen smoking [news] Skolnick AA. **JAMA** 1997 Aug 27;278(8):616

AMA gets Goethe trophy for antismoking efforts [news] Skolnick AA. **JAMA** 1996 Nov 27;276(20):1630

Teenagers' smoking--a great public health problem, renewing the pool of smokers. Agha F, et al. **JPMA J Pak Med Assoc** 1996 Dec;46(12):284–6

Stick to life: a sticker competition for smoking prevention. Freitas FA. **MCN Am J Matern Child Nurs** 1997 Jan–Feb; 22(1):50–1

Stop selling tobacco to children. Fulton JP. **Med Health R I** 1996 Feb;79(2):69–71

The Tripler Tobacco–Cessation Program: predictors for success and improved efficacy. Faue M, et al. **Mil Med** 1997 Jul;162(7):445–9

Tobacco sales—intrusion is justified [letter; comment] Francis PB. **Mil Med** 1996 Feb;161(2):A3. Comment on: Mil Med 1995 Nov;160(11):543–4.

Commissary tobacco debate continues [letter] Owen MN. **Mil Med** 1996 May;161(5):A5–A6

Tobacco sales should stop [letter; comment] Wayne BA. **Mil Med** 1996 Feb;161(2):A4. Comment on: Mil Med 1995 Nov;160(11):543–4.

Impact of promotion of the Great American Smokeout and availability of over–the–counter nicotine medications, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Sep 19;46(37):867–71

Tobacco tax initiative--Oregon, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Mar 21;46(11):246–8

Accessibility to minors of cigarettes from vending machines--Broward County, Florida, 1996 [published erratum appears in MMWR Morb Mortal Wkly Rep 1996 Dec 6;45(48):1060] **MMWR Morb Mortal Wkly Rep** 1996 Nov 29;45(47):1036–8

"Kids caught in the middle" [editorial] Thomas JR. **Mo Med** 1997 Jan;94(1):4

Kids and cigarettes. Preventing children from smoking. Perry RF. **N C Med J** 1996 Nov–Dec;57(6):373–6

The Food and Drug Administration's regulation of tobacco products [letter; comment] Moore GE. **N Engl J Med** 1997 Mar 20;336(12):880. Comment on: N Engl J Med 1996 Sep 26;335(13):988–94.

Can we make New Jersey smoke–free? Downs L. **N J Med** 1997 Aug;94(8):61–2

Should minors be held accountable for tobacco use? Kutscher AH, et al. **N J Med** 1997 Feb;94(2):71–4

Aids to smoking cessation [letter; comment] Martin P. **N Z Med J** 1997 Jun 27;110(1046):235. Comment on: N Z Med J 1997 Apr 11;110(1041):131–2.

Tobacco—the public and the politics [news] Das Dores Silva YJ. **Natl Med J India** 1996 Mar–Apr;9(2):93–4

Tips to help smokers. Mainarich K. **Nurse Pract** 1997 Feb; 22(2):162

Senate bill would control sale of tobacco to minors [letter] Sklaroff R, et al. **Pa Med** 1996 Jul;99(7):8–9

The Food and Drug Administration's rule on tobacco: blending science and Law. Kessler DA, et al. **Pediatrics** 1997 Jun;99(6):884–7

Tobacco–use prevention and cessation. For infants, children, adolescents, and adults. Institute for Clinical Systems Integration. **Postgrad Med** 1997 Mar;101(3):292–300, 302

Smoking and chewing in young people [editorial] Setness PA. **Postgrad Med** 1997 Mar;101(3):13, 16–8

Predictors of tobacco sales to minors. Arday DR, et al. **Prev Med** 1997 Jan–Feb;26(1):8–13

Smoking behavior and attitude toward smoking regulations and passive smoking in the workplace. A study among 974 employees in the German metal industry. Brenner H, et al. **Prev Med** 1997 Jan–Feb;26(1):138–43

Long–term responses of higher and lower risk youths to smoking prevention interventions. Flynn BS, et al. **Prev Med** 1997 May–Jun;26(3):389–94

Are adolescents receptive to current sales promotion practices of the tobacco industry? Gilpin EA, et al. **Prev Med** 1997 Jan–Feb;26(1):14–21

Correlates of physician counseling associated with obesity and smoking. Heywood A, et al. **Prev Med** 1996 May–Jun; 25(3):268–76

Effects of a 2.5–mg silver acetate lozenge on initial and long–term smoking cessation. Hymowitz N, et al. **Prev Med** 1996 Sep–Oct;25(5):537–46

Exposure to environmental tobacco smoke--perceptions of African American children and adolescents. Kurtz ME, et al. **Prev Med** 1996 May–Jun;25(3):286–92

Asking age and identification may decrease minors' access to tobacco. Landrine H, et al. **Prev Med** 1996 May–Jun; 25(3):301–6

Experts' agreement on the relative effectiveness of 29 smoking reduction strategies. Paul CL, et al. **Prev Med** 1996 Sep–Oct;25(5):517–26

Factors affecting attrition in a longitudinal smoking prevention study. Siddiqui O, et al. **Prev Med** 1996 Sep–Oct;25(5):554–60

A two–year follow–up on the effects of a smoking ban in an inpatient psychiatric service. Velasco J, et al. **Psychiatr Serv** 1996 Aug;47(8):869–71

Does using relapse prevention increase the efficacy of a program for smoking cessation?: An empirical study. Becoña E, et al. **Psychol Rep** 1997 Aug;81(1):291–6

Charting WHO--goals for licit and illicit drugs for the year 2000: are we 'on track'? Fischer B, et al. **Public Health** 1997 Sep;111(5):271–5

Children's smoking habits in an agricultural community in Japan and the importance of a no smoking program integrating family, school and community health. Fukushima T, et al. **Public Health** 1997 Sep;111(5):289–92

Smoking among hospital doctors in Israel and their attitudes regarding anti–smoking legislation. Samuels N. **Public Health** 1997 Sep;111(5):285–8

Using drugs--normal pastime or vice? [editorial] Slack RC. **Public Health** 1997 Sep;111(5):269

Transdermal nicotine plus support in patients attending hospital with smoking–related diseases: a placebo–controlled study. Campbell IA, et al. **Respir Med** 1996 Jan;90(1):47–51

Tobacco control from a global and national perspective [editorial] Yach D, et al. **S Afr Med J** 1996 Aug;86(8):931–3

The pregnant smoker's experience of ante–natal care--results from a qualitative study. Haugland S, et al. **Scand J Prim Health Care** 1996 Dec;14(4):216–22

Tobacco control: the dramatic choice [editorial] Novelli WD. **Science** 1997 Oct 10;278(5336):203

Power of one: nurses and tobacco control. Gallagher J, et al. **Semin Oncol Nurs** 1996 Nov;12(4):270–5 (14 ref.)

Prevention of lung cancer: the key is to stop smoking. Risser NL. **Semin Oncol Nurs** 1996 Nov;12(4):260–9 (69 ref.)

Smoking [editorial] Emmanuel SC. **Singapore Med J** 1997 Feb;38(2):49

Prevention research for alcohol and other drugs: a look ahead to what is needed. Jansen MA. **Subst Use Misuse** 1996 Jul; 31(9):1217–22

Tobacco preventive measures by dental care staff. An attempt to reduce the use of tobacco among adolescents. Skjöldebrand J, et al. **Swed Dent J** 1997;21(1–2):49–54

Taking action on teen smoking. Texas physicians back tobacco regulations, counsel teens. Jones TL. **Tex Med** 1996 Mar;92(3):33–5

Texas physicians led fight to pass tough tobacco–control laws for minors. Moran T. **Tex Med** 1997 Aug;93(8):32–8

FDA regulations restricting the sale and distribution of cigarettes and smokeless tobacco to protect children and adolescents (executive summary). **Tob Control** 1996 Autumn;5(3):236–46

Tobacco policy rating form: a tool for evaluating worksite and tribal smoking control policies. Glasgow RE, et al. **Tob Control** 1996 Winter;5(4):286–91

"The Marlboro Man." Imperi M. **Tob Control** 1997 Spring; 6(1):7–8

Non–smoking policies and practices in Norwegian delivery units in 1994. Iversen OE, et al. **Tob Control** 1996 Summer; 5(2):139–41

Battling upstream against the tobacco epidemic in China [news] Mackay J. **Tob Control** 1997 Spring;6(1):9–10

Smoking on hospital grounds and the impact of outdoor smoke–free zones. Nagle AL, et al. **Tob Control** 1996 Autumn;5(3):199–204

Quitting smoking: why, how, and what might help. Pederson LL, et al. **Tob Control** 1996 Autumn;5(3):209–14

"Garbage face": a managed care organisation's response to tobacco use. Sandell SD. **Tob Control** 1996 Winter; 5(4):259–61

Bill gives hope that Turkey can fly [news] Simpson D. **Tob Control** 1997 Spring;6(1):10–1

Trends in prevalence and acceptance of workplace smoking bans among indoor workers in South Australia. Wakefield M, et al. **Tob Control** 1996 Autumn;5(3):205–8

1996: the year voters rejected the Marlboro Man [news] Wilbur P, et al. **Tob Control** 1997 Spring;6(1):11–3

Annoyance from environmental tobacco smoke and support for no–smoking policies at eight large Dutch workplaces. Willemsen MC, et al. **Tob Control** 1996 Summer;5(2):132–8

Tobacco: a future disaster for Turkey's children. Crofton J. **Turk J Pediatr** 1996 Jan–Mar;38(1):1–11

Vending machine sales of cigarettes to children: results of compliance checks in Wisconsin, 1992–1995. Fox J, et al. **Wis Med J** 1996 Feb;95(2):111–3

Modeling smoking cessation: exploring the use of a videotape to help pregnant women quit smoking. Secker–Walker RH, et al. **Women Health** 1997;25(1):23–35

Bellagio conference on tobacco and development [news] **World Health Forum** 1996;17(2):208–9

Tobacco in Africa. Yach D. **World Health Forum** 1996; 17(1):29–36

[Cigarette taxation: lessons to learn from the 1994 crisis] Plante E. **Can J Public Health** 1996 Sep–Oct;87(5):312–3 **(Fre)**

[Tobacco: raise taxes to save lives (letter)] Mélihan–Cheinin P. **Promot Educ** 1995 Dec;2(4):6 **(Fre)**

[Prevention] Kaelin RM. **Rev Med Suisse Romande** 1997 Aug; 117(8):627–8 **(Fre)**

[Health promotion in Germany 10 years after the Ottawa Charter--exemplified by prevention of smoking] Luber E. **Gesundheitswesen** 1997 Jun;59(6):387–90 (Eng. Abstr.) **(Ger)**

[Smoking and health: the physician's responsibility. A statement by the Health and Smoking Committee. ACCP, ATS, ERS, APSR, CTS, IUATLD] **Pneumologie** 1996 Mar;50(3):270–4 **(Ger)**

[The campaign against smoking--are we approaching the moment of truth?] Sela BA. **Harefuah** 1996 Dec 1; 131(11):524–30 **(Heb)**

[Evaluation of a health education program for preventing alcohol and tobacco abuse in a health unit in Lombardi, Italy] Donato F, et al. **Epidemiol Prev** 1996 Jan–Mar; 20(1):24–30 (Eng. Abstr.) **(Ita)**

[The short–term effect of a smoking prevention program for the upper graders of elementary schools--the results of intervention study for two years with quasi–experimental design] Nishioka N, et al. **Nippon Koshu Eisei Zasshi** 1996 Jun;43(6):434–45 (Eng. Abstr.) **(Jpn)**

[Estimation and control measures for environmental tobacco smoke in an office] Seto T, et al. **Sangyo Ika Daigaku Zasshi** 1996 Dec 1;18(4):273–9 (Eng. Abstr.) **(Jpn)**

[Teachers' attitudes toward smoking prevention at schools] Barrueco M, et al. **Arch Bronconeumol** 1996 Feb;32(2):64–8 (Eng. Abstr.) **(Spa)**

[Validity of recording preventive activities in medical histories: consumption and antismoking counseling] Cabezas Peña C, et al. **Aten Primaria** 1996 Oct 15; 18(6):309–13 (Eng. Abstr.) **(Spa)**

[Antismoking intervention in chronic patients (letter; comment)] Moreno Ortigosa A. **Aten Primaria** 1997 Mar 15;19(4):213. Comment on: Aten Primaria 1996 Jul–Aug;18(3):123–6. **(Spa)**

[How should smoking sensitization campaigns be conducted at health institutions?] Jiménez Ruiz CA. **Rev Clin Esp** 1996 Jun;196(6):392–4 **(Spa)**

PSYCHOLOGY

Subtypes within a sample of precontemplating smokers: a preliminary extension of the stages of change. Dijkstra A, et al. **Addict Behav** 1997 May–Jun;22(3):327–37

Do as I say: parent smoking, antismoking socialization, and smoking onset among children. Jackson C, et al. **Addict Behav** 1997 Jan–Feb;22(1):107–14

The impact of behavior and addiction on psychological models of cigarette and alcohol use during pregnancy. Moore PJ, et al. **Addict Behav** 1996 Sep–Oct;21(5):645–68

A personality typology of smokers. Patton D, et al. **Addict Behav** 1997 Mar–Apr;22(2):269–73

Are psychosocial factors related to smoking in grade–6 students? Pederson LL, et al. **Addict Behav** 1997 Mar–Apr; 22(2):169–81

Addiction versus stages of change models in predicting smoking cessation. Farkas AJ, et al. **Addiction** 1996 Sep; 91(9):1271–80; discussion 1281–92

Prediction, causation, description, and natural history of smoking cessation. Fisher EB. **Addiction** 1996 Sep; 91(9):1285–7

My dad can predict better than your dad: so what? Hughes JR. **Addiction** 1996 Sep;91(9):1284–5

Assessing the generalizability of smoking studies. Hughes JR, et al. **Addiction** 1997 Apr;92(4):469–72

Should the stage of change model be challenged? Pierce JP, et al. **Addiction** 1996 Sep;91(9):1290–2

Co–factors for smoking and evolutionary psychobiology. Pomerleau CS. **Addiction** 1997 Apr;92(4):397–408 (115 ref.)

On models, methods and premature conclusions. Prochaska JO, et al. **Addiction** 1996 Sep;91(9):1281–3

"Addiction versus stages of change models" vs. "addiction and stages of change models." Shiffman S. **Addiction** 1996 Sep;91(9):1289–90

Interventions cannot ignore intentions. Stockwell T. **Addiction** 1996 Sep;91(9):1283–4

Further support for the stages of change model? Sutton S. **Addiction** 1996 Sep;91(9):1287–9

Effects of alcohol cues on smoking urges and topography among alcoholic men. Rohsenow DJ, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):101–7

Helping your patients to quit smoking. Danis PG, et al. **Am Fam Physician** 1997 Mar;55(4):1207–14, 1217–8 (35 ref.)

Further evidence of an association between attention–deficit/hyperactivity disorder and cigarette smoking. Findings from a high–risk sample of siblings. Milberger S, et al. **Am J Addict** 1997 Summer;6(3):205–17

The keyboard and the Camel [editorial] Kepple SR. **Am J Health Syst Pharm** 1996 Jan 1;53(1):80–1

Cigarette smoking attitudes and first use among third–through sixth–grade students: the Bogalusa Heart Study. Greenlund KJ, et al. **Am J Public Health** 1997 Aug; 87(8):1345–8

Adolescent smokers' provision of tobacco to other adolescents. Wolfson M, et al. **Am J Public Health** 1997 Apr;87(4):649–51

Violent assault, posttraumatic stress disorder, and depression. Risk factors for cigarette use among adult women. Acierno RA, et al. **Behav Modif** 1996 Oct;20(4):363–84

Monoamine oxidase, tobacco smoking, and psychiatric disorders [letter] Domino EF. **Biol Psychiatry** 1996 Sep 1;40(5):433–4

Self–reported smoking in vascular disease: the need for biochemical confirmation. Daly RJ, et al. **Br J Biomed Sci** 1996 Sep;53(3):204–8

Smoking and attention: a review and reformulation of the stimulus–filter hypothesis. Kassel JD. **Clin Psychol Rev** 1997;17(5):451–78 (200 ref.)

Smoking among suicide attempters. Beratis S, et al. **Compr Psychiatry** 1997 Mar–Apr;38(2):74–9

Effects of past history of major depression on smoking characteristics, monoamine oxidase–A and –B activities and withdrawal symptoms in dependent smokers. Berlin I, et

al. **Drug Alcohol Depend** 1997 Apr 14;45(1-2):31-7
Smoking habits and attitudes in a methadone maintenance treatment population. Clemmey P, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2-3):123-32
Mood and physiological effects of subcutaneous nicotine in smokers and never-smokers. Foulds J, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2-3):105-15
Family structure, personality, drinking, smoking and illicit drug use: a study of UK teenagers. Miller P. **Drug Alcohol Depend** 1997 Apr 14;45(1-2):121-9
Smoking produces a smaller increase in heart rate in the natural smoking environment than in the laboratory. Mucha RF, et al. **Drug Alcohol Depend** 1996 Nov;42(3):209-15
Cigarette smoking and perceptions about smoking and health in Chad. Leonard L. **East Afr Med J** 1996 Aug;73(8):509-12
Results of a questionnaire about nurse students' smoking habits and knowledges in an Italian teaching school of nursing. Boccoli E, et al. **Eur J Epidemiol** 1996 Feb; 12(1):1-3
Parental smoking and sociodemographic factors related to smoking among German medical students. Brenner H, et al. **Eur J Epidemiol** 1996 Apr;12(2):171-6
Craving is associated with smoking relapse: findings from three prospective studies. Killen JD, et al. **Exp Clin Psychopharmacol** 1997 May;5(2):137-42
Influence of acute smoking exposure on the subsequent reinforcing value of smoking. Perkins KA, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):277-85
Individual differences in the subjective effects of the first cigarette of the day: a self-report method for studying tolerance. Pillitteri JL, et al. **Exp Clin Psychopharmacol** 1997 Feb;5(1):83-90
Changes in cigarette smoking not observed following repeated cocaine self-administration. Radzius A, et al. **Exp Clin Psychopharmacol** 1997 Feb;5(1):51-3
Cocaine use can increase cigarette smoking: evidence from laboratory and naturalistic settings. Roll JM, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):263-8
Sampling for qualitative research using quantitative methods. 1. Measuring GPs' attitudes towards discussing smoking with patients. Coleman T, et al. **Fam Pract** 1996 Dec; 13(6):526-30
Pregnancy, ultrasound screening and smoking attitudes. Eurenius K, et al. **Gynecol Obstet Invest** 1996;42(2):73-6
Role of the self-image and smoker stereotype in smoking onset during early adolescence: a longitudinal study. Aloise-Young PA, et al. **Health Psychol** 1996 Nov; 15(6):494-7
Health locus of control and value for health in smokers and nonsmokers. Bennett P, et al. **Health Psychol** 1997 Mar; 16(2):179-82
The natural history of cigarette smoking from adolescence to adulthood: demographic predictors of continuity and change. Chassin L, et al. **Health Psychol** 1996 Nov; 15(6):478-84
Smoking status, dietary intake, and physical activity in a sample of working adults. French SA, et al. **Health Psychol** 1996 Nov;15(6):448-54
Smoker networks and the "typical smoker": a prospective analysis of smoking cessation. Gibbons FX, et al. **Health Psychol** 1996 Nov;15(6):469-77
Attentional mediation of cigarette smoking's effect on anxiety. Kassel JD, et al. **Health Psychol** 1997 Jul; 16(4):359-68
Validation of susceptibility as a predictor of which adolescents take up smoking in the United States. Pierce JP, et al. **Health Psychol** 1996 Sep;15(5):355-61
Temptations to smoke after quitting: a comparison of lapsers and maintainers. Shiffman S, et al. **Health Psychol** 1996 Nov;15(6):455-61
The effect of a reduced energy diet and meal patterns on smoking and coffee drinking in women. Lawson RH, et al. **Int J Eat Disord** 1997 Mar;21(2):137-45 (36 ref.)
Effects of smoking and telic/parateliic dominance on the contingent negative variation (CNV). Cook MR, et al. **Int J Psychophysiol** 1996 Aug-Sep;23(1-2):101-10
Induction of smoking urge through imaginal and in vivo procedures: physiological and self-report manifestations. Drobes DJ, et al. **J Abnorm Psychol** 1997 Feb;106(1):15-25
Predicting the stages of smoking acquisition according to the theory of planned behavior. Hill AJ, et al. **J Adolesc Health** 1997 Aug;21(2):107-15
Cigarette smoking and the intention to quit among pregnant smokers. Hutchison KE, et al. **J Behav Med** 1996 Jun; 19(3):307-16
Pros and cons of quitting, self-efficacy, and the stages of change in smoking cessation. Dijkstra A, et al. **J Consult Clin Psychol** 1996 Aug;64(4):758-63
Interactive effects of depression symptoms, nicotine dependence, and weight change on late smoking relapse. Killen JD, et al. **J Consult Clin Psychol** 1996 Oct; 64(5):1060-7
Progression from a smoking lapse to relapse: prediction from abstinence violation effects, nicotine dependence, and lapse characteristics. Shiffman S, et al. **J Consult Clin Psychol** 1996 Oct;64(5):993-1002
The relations of school staff smokers' attitudes about modeling smoking behavior in students and their receptivity to no-smoking policy. Galaif ER, et al. **J Drug Educ** 1996;26(4):313-22
College students' smoking behavior, perceived stress, and coping styles. Naquin MR, et al. **J Drug Educ** 1996; 26(4):367-76
Attitude and peer cross pressure: adolescent drug and alcohol use. Robin SS, et al. **J Drug Educ** 1996;26(1):69-99
The smoking addiction of pregnant women and the consequences on their offspring's intellectual development. Frydman M. **J Environ Pathol Toxicol Oncol** 1996; 15(2-4):169-72 (11 ref.)
Subliminal manipulation of smoking. Frydman M. **J Environ Pathol Toxicol Oncol** 1996;15(2-4):173-6 (8 ref.)
Tobacco use initiation. Future intentions to use, and attitudes toward use in sample of Florida 5th-graders. McDermott RJ, et al. **J Fla Med Assoc** 1996 Feb;83(2):93-5
Cigarette smoking in young adults: childhood and adolescent personality, familial, and peer antecedents. Brook JS, et al. **J Genet Psychol** 1997 Jun;158(2):172-88
The effects of smoking outside workplaces on non-regular smokers. Clarke J, et al. **J Occup Environ Med** 1997 Aug; 39(8):734-9
Stress, social support and health-related behavior: a study of smoking, alcohol consumption and physical exercise. Steptoe A, et al. **J Psychosom Res** 1996 Aug;41(2):171-80
The pregnant smoker: a preliminary investigation of the social and psychological influences. Haslam C, et al. **J Public Health Med** 1997 Jun;19(2):187-92
Tobacco prevention in tobacco-raising areas: lessons from the lion's den. Noland MP. **J Sch Health** 1996 Sep; 66(7):266-8
Symptomatology and energy intake during the menstrual cycle in smoking women. Allen SS, et al. **J Subst Abuse** 1996;8(3):303-19
Personality differences related to smoking and adult attention deficit hyperactivity disorder. Downey KK, et al. **J Subst Abuse** 1996;8(1):129-35
Smoking and preference for brand of cigarette among adolescents. Volk RJ, et al. **J Subst Abuse** 1996;8(3):347-59
Feasibility of smoking cessation counseling by phone with alcohol treatment center graduates. Leed-Kelly A, et al. **J Subst Abuse Treat** 1996 May-Jun;13(3):203-10
Knowledge and attitudes about smoking in medical students before and after a tobacco seminar. Chung TW, et al. **Med Educ** 1996 Jul;30(4):290
Smoking behaviour and attitudes among Australian medical students. Richmond RL, et al. **Med Educ** 1997 May; 31(3):169-76
Evaluation of smoking on the physical activity and depressive symptoms relationship. Brown DR, et al. **Med Sci Sports Exerc** 1996 Feb;28(2):233-40
The theory of planned behavior applied to cigarette smoking in African-American, Puerto Rican, and non-Hispanic white teenage females. Hanson MJ. **Nurs Res** 1997 May-Jun;46(3):155-62
Attitude towards smoking and oral cancer prevention among northern Italian dentists. Lodi G, et al. **Oral Oncol** 1997 Mar;33(2):100-4
Self-recognition of alcohol and cigarette dependency among high school seniors. Daughton JM, et al. **Percept Mot Skills** 1997 Aug;85(1):115-20
Effects of smoking on EEG alpha asymmetry during production of random sequences of numbers. Hori T, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):827-34
Menstrual phase, history of smoking, and taste discrimination in young women. Pasquali B. **Percept Mot Skills** 1997 Jun; 84(3 Pt 2):1243-6
Menthol and nonmenthol cigarettes and smoke exposure in black and white women. Ahijevych K, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):355-60
Nicotine preference in smokers as a function of smoking abstinence. Perkins KA, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):257-63
Acute reinforcing effects of low-dose nicotine nasal spray in humans. Perkins KA, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):235-41
Dissociating the nicotine and airway sensory effects of smoking. Westman EC, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):309-15
Distributions of smokers by stage: international comparison and association with smoking prevalence. Etter JF, et al. **Prev Med** 1997 Jul-Aug;26(4):580-5
Cognitive-behavioral mediators of changing multiple behaviors: smoking and a sedentary lifestyle. King TK, et al. **Prev Med** 1996 Nov-Dec;25(6):684-91
Rationale, design, and baseline data for Commit to Quit: an exercise efficacy trial for smoking cessation among women. Marcus BH, et al. **Prev Med** 1997 Jul-Aug;26(4):586-97
A replication and elaboration of the esteem-enhancement model. Vega WA, et al. **Psychiatry** 1996 Summer; 59(2):128-44
Smoking and trait anxiety. Canals J, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):809-10
Family life satisfaction, age, length of residency: predicting alcohol and cigarette use among Korean adolescents in Australia. Hong SM, et al. **Psychol Rep** 1996 Feb; 78(1):187-93
Weight loss for women: studies of smokers and nonsmokers using hypnosis and multicomponent treatments with and without overt aversion. Johnson DL. **Psychol Rep** 1997 Jun;80(3 Pt 1):931-3
Habit-specific locus of control scales for drinking, smoking, and eating. Ludtke HA, et al. **Psychol Rep** 1996 Apr; 78(2):363-9
Smoking and stress: cigarettes and marihuana. McCann N, et al. **Psychol Rep** 1996 Oct;79(2):366
Association of depressive symptoms and school adolescents' smoking: a cross-lagged analysis. Wang MQ, et al. **Psychol Rep** 1996 Aug;79(1):127-30
Predictors of cigarette smoking among adolescents. Williams JG, et al. **Psychol Rep** 1997 Apr;80(2):481-2
Double-blind fluoxetine in depressed alcoholic smokers. Cornelius JR, et al. **Psychopharmacol Bull** 1997; 33(1):165-70
The use of a dual-task procedure for the assessment of cognitive effort associated with cigarette craving. Cepeda-Benito A, et al. **Psychopharmacology (Berl)** 1996 Sep;127(2):155-63
Nicotine discrimination and self-administration in humans as a function of smoking status. Perkins KA, et al. **Psychopharmacology (Berl)** 1997 Jun;131(4):361-70
Methodological considerations in nicotine research: the use of "denicotinised" cigarettes as the control condition in smoking studies. Rusted JM, et al. **Psychopharmacology (Berl)** 1996 May;125(2):176-8
Depressive, not anxiety, symptoms are associated with current cigarette smoking among university internal medical patients. Kick SD, et al. **Psychosomatics** 1997 Mar-Apr;38(2):132-9
Is there an increased lability in parents' smoking behaviour after a childbirth? Eriksen W, et al. **Scand J Prim Health Care** 1996 Jun;14(2):86-91
Smoking and associated factors among young Swedish females. Herlitz C, et al. **Scand J Prim Health Care** 1996 Dec;14(4):209-15
Smoking and vulnerability for schizophrenia. de Leon J. **Schizophr Bull** 1996;22(3):405-9 (19 ref.)
Girls, pecking order and smoking. Michell L, et al. **Soc Sci Med** 1997 Jun;44(12):1861-9
Hostility, cigarette smoking and alcohol consumption in the general population. Whiteman MC, et al. **Soc Sci Med** 1997 Apr;44(8):1089-96
Social influence on southern adolescents' smoking transition: a retrospective study. Wang MQ, et al. **South Med J** 1997 Feb;90(2):218-22
Nicotine dependence and intentions to quit smoking in three samples of male and female recovering alcoholics and problem drinkers. Bobo JK, et al. **Subst Use Misuse** 1996 Jan;31(1):17-33
Job dissatisfaction and substance use among employed high school students: the moderating influence of active and avoidant coping styles. Frone MR, et al. **Subst Use Misuse** 1997 Apr;32(5):571-85
Tobacco addiction: more from Dr Chapman [letter; comment] Chapman S. **World Health Forum** 1996; 17(1):76-7. Comment on: World Health Forum 1995;16(1):1-9; discussion 10-27. Comment on: World Health Forum 1995;16(3):267-9.
[Smoking behavior, knowledge and attitudes of freshmen students] Shiota M, et al. **Nippon Koshu Eisei Zasshi** 1997 Apr;44(4):247-56 (Eng. Abstr.) **(Jpn)**
[Smoking. Prevalence and attitudes among health science students] Henriquez Sánchez P, et al. **Aten Primaria** 1996 Nov 15;18(8):436-41 (Eng. Abstr.) **(Spa)**

THERAPY

Society for Research on Nicotine and Tobacco. Heishman SJ, et al. **Addiction** 1997 May;92(5):615-33
Assessing the generalizability of smoking studies. Hughes JR, et al. **Addiction** 1997 Apr;92(4):469-72
Pharmacoeconomic analysis of smoking-cessation interventions [see comments] McGhan WF, et al. **Am J Health Syst Pharm** 1996 Jan 1;53(1):45-52. Comment in: Am J Health Syst Pharm 1996 Jan 1;53(1):77-9.
Design and analysis of studies evaluating smoking cessation interventions where effects vary between practices or practitioners. Butler C, et al. **Fam Pract** 1996 Aug; 13(4):402-7
An experimental comparison of three different schedules of reinforcement of drug abstinence using cigarette smoking as an exemplar. Roll JM, et al. **J Appl Behav Anal** 1996 Winter;29(4):495-504; quiz 504-5
Effects of smoking cessation on insulin and cardiovascular risk factors—a controlled study of 4 months' duration. Nilsson P, et al. **J Intern Med** 1996 Oct;240(4):189-94

TRENDS

Long-term trends in cigarette smoking among young U.S. adults. Escobedo LG, et al. **Addict Behav** 1997 May-Jun; 22(3):427-30
Women and smoking: an update for the 1990s. Kendrick JS, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):528-35 (62 ref.)
Tobacco pricing, taxation, consumption and revenue: Alberta 1985-1995. Mummery WK, et al. **Can J Public Health** 1996 Sep-Oct;87(5):314-6
The critical age that the young start the devastating habits of smoking and narcotics [letter] Koraka M. **Chest** 1997 May;111(5):1466-7
Smoking patterns and mortality attributable to smoking in a cohort of 3528 construction workers. Rothenbacher D, et al. **Eur J Epidemiol** 1996 Aug;12(4):335-40
Trends of smoking among medical students. Venkataraman S, et al. **Indian J Med Res** 1996 Nov;104:316-20
Lung cancer, smoking and smelter work in a occupational cohort. Sandström A, et al. **Int J Epidemiol** 1995 Dec; 24(6):1071-7

SMOKING

Trends and effects of cigarette smoking among girls and women in the United States, 1965–1993. Husten CG, et al. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):11–8

Smoking in Oklahoma: the seven-year trend. Hann N, et al. **J Okla State Med Assoc** 1997 Mar;90(3):94–100

The changing cigarette, 1950–1995. Hoffmann D, et al. **J Toxicol Environ Health** 1997 Mar;50(4):307–64 (176 ref.)

Declining rates of smoking among medical practitioners [letter] Young JM, et al. **Med J Aust** 1997 Aug 18; 167(4):232

"Sobering facts" [editorial] Thomas JR. **Mo Med** 1997 Feb; 94(2):57–8

Trends in smoking initiation among adolescents and young adults—United States, 1980–1989. Cummings KM, et al. **Oncology (Huntingt)** 1996 Mar;10(3):274, 276

Trends in smoking by birth cohort for births between 1940 and 1975: a reconstructed cohort analysis of the 1990 Ontario Health Survey. Birkett NJ. **Prev Med** 1997 Jul–Aug;26(4):534–41

Trends in cigarette smoking in the United States. Garfinkel L. **Prev Med** 1997 Jul–Aug;26(4):447–50

Changing smoking patterns and mortality from chronic obstructive pulmonary disease. Wise RA. **Prev Med** 1997 Jul–Aug;26(4):418–21 (23 ref.)

Smoking status, knowledge of health effects and attitudes towards tobacco control in South Africa. Reddy P, et al. **S Afr Med J** 1996 Nov;86(11):1389–93

Tobacco use among young adults in Norway, 1973–95: has the decrease levelled out? Kraft P, et al. **Tob Control** 1997 Spring;6(1):27–32

URINE

Cigarette smoking and urinary oestrogen excretion in premenopausal and post-menopausal women. Key TJ, et al. **Br J Cancer** 1996 Oct;74(8):1313–6

Interference of nicotine metabolites in cotinine determination by RIA. Zuccaro P, et al. **Clin Chem** 1997 Jan;43(1):180–1

A simple near-patient test for nicotine and its metabolites in urine to assess smoking habit. Cope G, et al. **Clin Chim Acta** 1996 Dec 30;256(2):135–49

Metabolites of
4-(N-methylnitrosamino)-1-(3-pyridyl)-1-butanone in urine of smokers [published erratum appears in Eur J Cancer Prev 1997 Feb;6(1):99] Meger M, et al. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:121–4

Measurement of urinary 8-Epi-prostaglandin F2alpha, a novel index of lipid peroxidation in vivo, by immunoaffinity extraction/gas chromatography-mass spectrometry. Basal levels in smokers and nonsmokers. Bachi A, et al. **Free Radic Biol Med** 1996;20(4):619–24

trans,trans-muconic acid as a biomarker of non-occupational environmental exposure to benzene. Ruppert T, et al. **Int Arch Occup Environ Health** 1997;69(4):247–51

Smokers and urinary genotoxins: implications for selection of cohorts and modulation of endpoints in chemoprevention trials. De Flora S, et al. **J Cell Biochem Suppl** 1996;25:92–8

Use of Salmonella typhimurium TA 98, YG 1024 and YG 1021 and deconjugating enzymes for evaluating the mutagenicity from smokers' urine. Kuenemann-Migeot C, et al. **Mutat Res** 1997 May 23;390(3):283–91

Heavy cigarette smokers show higher mutagenicity in urine. Mure K, et al. **Mutat Res** 1997 Jan 3;373(1):107–11

Urinary neutral endopeptidase in workers exposed to cadmium: interaction with cigarette smoking. Nortier J, et al. **Occup Environ Med** 1997 Jun;54(6):432–6

SMOKING CESSATION

Tobacco cessation interventions in health care settings: rationale, model, outcomes. Lichtenstein E, et al. **Addict Behav** 1996 Nov–Dec;21(6):709–20 (45 ref.)

The impact of caffeine use on tobacco cessation and withdrawal. Swanson JA, et al. **Addict Behav** 1997 Jan–Feb; 22(1):55–68

Predictors of brief smoking intervention in a midwifery setting. Cooke M, et al. **Addiction** 1996 Nov;91(11):1715–25

A role for dopamine in nicotine psychosis? [letter] Foulds J. **Addiction** 1996 Sep;91(9):1388–9

Another case of nicotine psychosis? [letter; comment] Scurlock H, et al. **Addiction** 1996 Sep;91(9):1388. Comment on: Addiction 1995 Mar;90(3):435–7.

Addiction specialists and the AHCPR Smoking Cessation Clinical Practice Guideline [editorial] Wetter DW. **Addiction** 1997 Jun;92(6):653–5

Reversible reduction in plasma concentration of nitric oxide induced by cigarette smoking in young adults. Node K, et al. **Am J Cardiol** 1997 Jun 1;79(11):1538–41

Two products join ranks of smoking cessation treatments [news] **Am J Health Syst Pharm** 1997 Jul 1;54(13):1478

Effective smoking cessation treatments available but underused [news][see comments] **Am J Health Syst Pharm** 1996 Jul 15;53(14):1640, 1643. Comment in: Am J Health Syst Pharm 1996 Jul 15;53(14):1665.

Promoting smoking cessation [editorial; comment] Ellsworth AJ. **Am J Health Syst Pharm** 1996 Jul 15;53(14):1665. Comment on: Am J Health Syst Pharm 1996 Jul 15;53(14):1640, 1643.

Lifestyle modification: weight control, exercise, and smoking cessation. Winslow E, et al. **Am J Med** 1996 Oct 8; 101(4A):4A25S–31S; discussion 31S–33S

Demographic bias in physician smoking cessation counseling. Rogers LQ, et al. **Am J Med Sci** 1997 Mar;313(3):153–8

Teaching smoking-cessation counseling to medical students using simulated patients. Eyler AE, et al. **Am J Prev Med** 1997 May–Jun;13(3):153–8

Helping women quit smoking: baseline observations for a community health education project. Secker-Walker RH, et al. **Am J Prev Med** 1996 Sep–Oct;12(5):367–77

Does gender affect response to a brief clinic-based smoking intervention? Whitlock EP, et al. **Am J Prev Med** 1997 May–Jun;13(3):159–66

Major depression following smoking cessation. Covey LS, et al. **Am J Psychiatry** 1997 Feb;154(2):263–5

Promoting abstinence among relapsed chronic smokers: the effect of telephone support. Lando HA, et al. **Am J Public Health** 1996 Dec;86(12):1786–90

A nurse-managed smoking cessation program for hospitalized smokers. Taylor CB, et al. **Am J Public Health** 1996 Nov;86(11):1557–60

A smoking cessation program at a public antenatal clinic. Walsh RA, et al. **Am J Public Health** 1997 Jul;87(7):1201–4

Smoking screening and management in primary care practices. McBride PE, et al. **Arch Fam Med** 1997 Mar–Apr;6(2):165–72

Smoking cessation after surgery. A randomized trial. Simon JA, et al. **Arch Intern Med** 1997 Jun 23;157(12):1371–6

Smoking behavior on the first day of a quit attempt predicts long-term abstinence. Westman EC, et al. **Arch Intern Med** 1997 Feb 10;157(3):335–40

Smoking cessation increases the resistance of low-density lipoprotein to oxidation. Sasaki A, et al. **Atherosclerosis** 1997 Apr;130(1–2):109–11

Smoking cessation. 3: Needed healthcare policy changes. McClure JB, et al. **Behav Med** 1997 Spring;23(1):29–34

Smoking cessation. 1: An overview of research. Skaar KL, et al. **Behav Med** 1997 Spring;23(1):5–13 (55 ref.)

Smoking cessation. 2: Components of effective intervention. Tsoh JY, et al. **Behav Med** 1997 Spring;23(1):15–27 (66 ref.)

The WHO wants governments to encourage people to stop smoking [letter] [see comments] Asvall JE. **BMJ** 1997 Jun 7;314(7095):1688. Comment in: BMJ 1997 Jun 21;314(7097):1827.

US tobacco firms agree to $369bn deal [news] Beecham L. **BMJ** 1997 Jun 28;314(7098):1849

Nicotine replacement therapy should be prescribable on NHS [letter; comment] Fowler G. **BMJ** 1997 Jun 21; 314(7097):1827. Comment on: BMJ 1997 Jun 7;314(7095):1688.

Effectiveness of antismoking telephone helpline: follow up survey. Platt S, et al. **BMJ** 1997 May 10;314(7091):1371–5

Joe Camel beware as doctors strike back [news] Tanne JH. **BMJ** 1996 Nov 30;313(7069):1349

Teenage smoking [letter; comment] Ngeow WC. **Br Dent J** 1996 Mar 23;180(6):208. Comment on: Br Dent J 1995 Dec 9–23;179(11–12):411–5.

Anti-smoking advice in general practice consultations: general practitioners' attitudes, reported practice and perceived problems. Coleman T, et al. **Br J Gen Pract** 1996 Feb;46(403):87–91

Family physicians and smoking cessation. Survey of practices, opinions, and barriers. Mowat DL, et al. **Can Fam Physician** 1996 Oct;42:1946–51

Cigarette smoking and coronary heart disease: risks and management. Rigotti NA, et al. **Cardiol Clin** 1996 Feb; 14(1):51–68 (113 ref.)

Effects of transdermal nicotine patches on ambulatory ECG monitoring findings: a double-blind study in healthy smokers. Khoury Z, et al. **Cardiovasc Drugs Ther** 1996 May; 10(2):179–84

Accepting the "guideline" challenge [editorial] Bailey WC, et al. **Chest** 1996 Dec;110(6):1379–81

Smoking cessation and lung cancer resection. Dresler CM, et al. **Chest** 1996 Nov;110(5):1199–202

Smoking cessation is associated with an increase in exhaled nitric oxide. Robbins RA, et al. **Chest** 1997 Aug; 112(2):313–8

Antidote for America's leading pediatric disease [news] Gilpin B, et al. **Circulation** 1996 Aug 1;94(3):233

Curbing the tobacco menace [editorial; comment] Kannel WB. **Circulation** 1997 Aug 19;96(4):1070. Comment on: Circulation 1997 Aug 19;96(4):1089–96.

The effect of ephedrine plus caffeine on smoking cessation and postcessation weight gain. Nørregaard J, et al. **Clin Pharmacol Ther** 1996 Dec;60(6):679–86

The efficiency of the matched-pairs design of the Community Intervention Trial for Smoking Cessation (COMMIT). Freedman LS, et al. **Control Clin Trials** 1997 Apr; 18(2):131–9

Development of a prospective register of smoking cessation trials. Silagy C, et al. **Control Clin Trials** 1996 Jun; 17(3):235–41

Current approaches in smoking cessation. Skaar K, et al. **Curr Opin Oncol** 1996 Sep;8(5):434–40 (19 ref.)

Effects of past history of major depression on smoking characteristics, monoamine oxidase-A and -B activities and withdrawal symptoms in dependent smokers. Berlin I, et al. **Drug Alcohol Depend** 1997 Apr 14;45(1–2):31–7

Smoking cessation as a rigorous primary intervention for coronary events in middle-aged men. A commentary based on the WOSCOP findings. West of Scotland Coronary Prevention Study [letter] von Eyben FE. **Eur Heart J** 1997 Jul;18(7):1187–9

Smoking cessation improves insulin sensitivity in healthy middle-aged men. Eliasson B, et al. **Eur J Clin Invest** 1997 May;27(5):450–6

Quitting smoking in northern Italy: a cross-sectional analysis of 2621 subjects. Fernandez E, et al. **Eur J Epidemiol** 1997 Apr;13(3):267–73

Influence of dose and cessation of kiraiku, cigarettes and alcohol use on the risk of developing oral leukoplakia. Macigo FG, et al. **Eur J Oral Sci** 1996 Oct–Dec; 104(5–6):498–502

Importance of baseline cotinine plasma values in smoking cessation: results from a double-blind study with nicotine patch [see comments] Paoletti P, et al. **Eur Respir J** 1996 Apr;9(4):643–51. Comment in: Eur Respir J 1996 Apr;9(4):629–31.

Recycling of hard-core smokers with nicotine nasal spray. Tønnesen P, et al. **Eur Respir J** 1996 Aug;9(8):1619–23

Teaching smoking cessation to family practice residents: an experiential approach. Hall MN, et al. **Fam Med** 1996 May; 28(5):331–6

Occupational factors, smoking habits and tobacco withdrawal symptoms among male Japanese employees. Kawakami N, et al. **Ind Health** 1997;35(1):9–15

Smoking cessation in primary care. Hurt RD. **Indiana Med** 1996 Mar–Apr;89(2):165–8

Workplace tobacco interventions. Perry G Jr. **Indiana Med** 1996 Mar–Apr;89(2):157–9

Indiana family physician attitudes and practices concerning smoking cessation. Saywell RM, et al. **Indiana Med** 1996 Mar–Apr;89(2):149–56

The Indiana Prenatal Substance Use Prevention Program: its impact on smoking cessation among high-risk pregnant women. Waller CS, et al. **Indiana Med** 1996 Mar–Apr; 89(2):184–7

Presence and persistence of serum anti-benzo[a]pyrene diolepoxide-DNA adduct antibodies in smokers: effects of smoking reduction and cessation. Pulerà N, et al. **Int J Cancer** 1997 Jan 17;70(2):145–9

Family history of cancer and risk of lung cancer in lifetime non-smokers and long-term ex-smokers. Brownson RC, et al. **Int J Epidemiol** 1997 Apr;26(2):256–63

Is leptin sensitivity the link between smoking cessation and weight gain? Hodge AM, et al. **Int J Obes Relat Metab Disord** 1997 Jan;21(1):50–3

Smoking and implant failure—benefits of a smoking cessation protocol. Bain CA. **Int J Oral Maxillofac Implants** 1996 Nov–Dec;11(6):756–9

Relation between smoking status of physicians and their enthusiasm to offer smoking cessation advice [see comments] Kawakami M, et al. **Intern Med** 1997 Mar; 36(3):162–5. Comment in: Intern Med 1997 Mar;36(3):159.

The role of medical professionals in smoking control in Japan [editorial; comment] Shimao T. **Intern Med** 1997 Mar; 36(3):159. Comment on: Intern Med 1997 Mar;36(3):162–5.

Cardiovascular toxicity of nicotine: implications for nicotine replacement therapy. Benowitz NL, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1422–31 (123 ref.)

Managing nicotine dependence [editorial; comment] Kottke TE. **J Am Coll Cardiol** 1997 Jul;30(1):131–2. Comment on: J Am Coll Cardiol 1997 Jul;30(1):125–30.

Office-based training in tobacco cessation for dental professionals. Wood GJ, et al. **J Am Dent Assoc** 1997 Feb; 128(2):216–24

Women gain weight 1 year after smoking cessation while dietary intake temporarily increases. Caan B, et al. **J Am Diet Assoc** 1996 Nov;96(11):1150–5

Smoking cessation and gender: the influence of physiological, psychological, and behavioral factors. Gritz ER, et al. **J Am Med Womens Assoc** 1996 Jan–Apr;51(1–2):35–42 (86 ref.)

Attitudes and practices of African-American physicians toward smoking interventions: an earlier study. King G. **J Assoc Acad Minor Phys** 1997;8(2):22–8

A pathophysiological basis for informed preoperative smoking cessation counseling. Akrawi W, et al. **J Cardiothorac Vasc Anesth** 1997 Aug;11(5):629–40 (161 ref.)

Development of major depressive disorder during smoking-cessation treatment. Borrelli B, et al. **J Clin Psychiatry** 1996 Nov;57(11):534–8

Depression after smoking cessation: case reports. Stage KB, et al. **J Clin Psychiatry** 1996 Oct;57(10):467–9

Tobacco control activities of Iowa dental hygienists. Chambers AK, et al. **J Community Health** 1996 Oct; 21(5):375–87

Behavior therapy and the transdermal nicotine patch: effects on cessation outcome, affect, and coping. Cinciripini PM, et al. **J Consult Clin Psychol** 1996 Apr;64(2):314–23

Pros and cons of quitting, self-efficacy, and the stages of change in smoking cessation. Dijkstra A, et al. **J Consult Clin Psychol** 1996 Aug;64(4):758–63

Nicotine gum dose and weight gain after smoking cessation. Doherty K, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):799–807

How much weight gain occurs following smoking cessation? A comparison of weight gain using both continuous and point prevalence abstinence. Klesges RC, et al. **J Consult Clin Psychol** 1997 Apr;65(2):286–91

Are weight concerns predictive of smoking cessation? A prospective analysis. Meyers AW, et al. **J Consult Clin Psychol** 1997 Jun;65(3):448–52

First lapses to smoking: within-subjects analysis of real-time

reports. Shiffman S, et al. **J Consult Clin Psychol** 1996 Apr; 64(2):366–79

The relations of school staff smokers' attitudes about modeling smoking behavior in students and their receptivity to no–smoking policy. Galaif ER, et al. **J Drug Educ** 1996;26(4):313–22

Randomised controlled trial of anti–smoking advice in pregnancy. 1977 [classical article] Donovan JW. **J Epidemiol Community Health** 1996 Jun;50(3):232–6

The sociodemographic pattern of tobacco cessation in the 1980s: results from a panel study of living condition surveys in Sweden. Tillgren P, et al. **J Epidemiol Community Health** 1996 Dec;50(6):625–30

Current trends in tobacco prevention and cessation in Nebraska physicians' offices. McIlvain HE, et al. **J Fam Pract** 1997 Feb;44(2):193–202

Smoking cessation. Schlede CM. **J Fla Med Assoc** 1996 Feb; 83(2):108–12 (30 ref.)

Predictors of success in a smoking cessation clinic. Sherman SE, et al. **J Gen Intern Med** 1996 Nov;11(11):702–4

Tobacco addiction and hypertension. Pipe A. **J Hum Hypertens** 1996 Feb;10 Suppl 2:S13–6 (24 ref.)

Effects of smoking cessation on insulin and cardiovascular risk factors—a controlled study of 4 months' duration. Nilsson P, et al. **J Intern Med** 1996 Oct;240(4):189–94

Retailers' compliance to the law banning cigarette sale to minors. Suriyawongpaisal P, et al. **J Med Assoc Thai** 1996 Feb;79(2):127–31

Duration of smoking abstinence and success in quitting. Gilpin EA, et al. **J Natl Cancer Inst** 1997 Apr 16; 89(8):572–6

African–American physicians and smoking cessation counseling. Berman BA, et al. **J Natl Med Assoc** 1997 Aug; 89(8):534–42

Cigarette smoking at hire as a predictor of employment outcome. Ryan J, et al. **J Occup Environ Med** 1996 Sep; 38(9):928–33

Cancer prevention in the dental practice: oral cancer screening and tobacco cessation advice. Martin LM, et al. **J Public Health Dent** 1996 Fall;56(6):336–40

Tobacco control programmes for universities: a feasibility study. Willcox ML. **J Public Health Med** 1997 Mar; 19(1):37–44

Health profiles of current and former smokers and lifelong abstainers. OXCHECK Study Group. OXford and Collaborators HEalth CheckK. Tang J, et al. **J R Coll Physicians Lond** 1997 May–Jun;31(3):304–9

Measuring tobacco withdrawal: a review of self–report questionnaires. Patten CA, et al. **J Subst Abuse** 1996; 8(1):93–113 (75 ref.)

Substance–dependent inpatients who accept smoking treatment. Seidner AL, et al. **J Subst Abuse** 1996;8(1):33–44

Tobacco addiction [letter; comment] Lyman A. **JAMA** 1996 Oct 23–30;276(16):1299; discussion 1299–1300. Comment on: JAMA 1996 Jun 19;275(23):1792–3.

Intensive smoking cessation efforts cost–effective [news] Marwick C. **JAMA** 1996 Oct 23–30;276(16):1291

Effect of diagnosis of "smoker's lung". RYLUNG Group [letter; comment] Brandt CJ, et al. **Lancet** 1997 Jan 25; 349(9047):253. Comment on: Lancet 1997 Jan 25;349(9047):285.

Smoking cessation in comprehensive pulmonary rehabilitation [letter; comment] Kawane H. **Lancet** 1997 Jan 25;349(9047):285. Comment on: Lancet 1996 Oct 26;348(9035):1115–9.

Factors affecting smoking cessation in patients with head and neck cancer. Vander Ark W, et al. **Laryngoscope** 1997 Jul; 107(7):888–92

Smoking history–taking skills: a simple guide to teach medical students. Boehlecke B, et al. **Med Educ** 1996 Jul;30(4):283–9

Recent problems with paracervical vasopressin: a possible synergistic reaction with nicotine. Groudine SB, et al. **Med Hypotheses** 1996 Jul;47(1):19–21

Bupropion (Zyban) for smoking cessation. **Med Lett Drugs Ther** 1997 Aug 15;39(1007):77–8

Effect of smoking cessation on lipoprotein A–I and lipoprotein A–I:A–II levels. Richard F, et al. **Metabolism** 1997 Jun;46(6):711–5

Impact of promotion of the Great American Smokeout and availability of over–the–counter nicotine medications, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Sep 19;46(37):867–71

Smoking–cessation guidelines [editorial] Thomas JR. **Mo Med** 1996 Jul;93(7):318–9

Guidelines on smoking cessation for general practitioners and other health professionals. European Medical Association Smoking or Health (EMASH). **Monaldi Arch Chest Dis** 1997 Jun;52(3):282–4

The tobacco pouch [editorial] Masironi R. **Monaldi Arch Chest Dis** 1997 Jun;52(3):211

Getting patients to stop smoking [letter] Stoodt G, et al. **N C Med J** 1996 May–Jun;57(3):128

Can we make New Jersey smoke–free? Downs L. **N J Med** 1997 Aug;94(8):61–2

Interview with Paul E. Wallner, DO [interview by Bill Berlin] Wallner PE. **N J Med** 1997 Aug;94(8):21–3

Usefulness of markers in managing tobacco withdrawal. Roussel G, et al. **Pathol Biol (Paris)** 1997 Jun;45(6):467–71

The pediatrician's obligation in smoking cessation [letter] Wadlington WB, et al. **Pediatr Ann** 1996 Jun;25(6):306–8

Pharmacology of nicotine and its therapeutic use in smoking cessation and neurodegenerative disorders. Balfour DJ, et al. **Pharmacol Ther** 1996;72(1):51–81 (289 ref.)

Quitting smoking raises whole blood glutathione. Lane JD, et al. **Physiol Behav** 1996 Nov;60(5):1379–81

Tobacco–use prevention and cessation. For infants, children, adolescents, and adults. Institute for Clinical Systems Integration. **Postgrad Med** 1997 Mar;101(3):292–300, 302

Promoting worksite smoking control policies and actions: the Community Intervention Trial for Smoking Cessation (COMMIT) experience. The COMMIT Research Group. Glasgow RE, et al. **Prev Med** 1996 Mar–Apr;25(2):186–94

Teaching smoking cessation skills to senior medical students: a block–randomized controlled trial of four different approaches. Roche AM, et al. **Prev Med** 1996 May–Jun; 25(3):251–8

Reducing maternal smoking and relapse: long–term evaluation of a pediatric intervention. Severson HH, et al. **Prev Med** 1997 Jan–Feb;26(1):120–30

Mecamylamine does not precipitate withdrawal in cigarette smokers. Eissenberg T, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):328–36

Randomised controlled trial of ondansetron in smoking cessation. West R, et al. **Psychopharmacology (Berl)** 1996 Jul;126(1):95–6

Transient increases in albumin and hyaluronan in bronchoalveolar lavage fluid after quitting smoking: possible signs of reparative mechanisms. Sköld CM, et al. **Respir Med** 1996 Oct;90(9):523–9

Tobacco control in a traditional Fijian village: indigenous methods of smoking cessation and relapse prevention. Groth–Marnat G, et al. **Soc Sci Med** 1996 Aug;43(4):473–7

Tobacco preventive measures by dental care staff. An attempt to reduce the use of tobacco among adolescents. Skjöldebrand J, et al. **Swed Dent J** 1997;21(1–2):49–54

Integrating smoking cessation into periconceptional care [letter] Gönczi L, et al. **Tob Control** 1996 Summer;5(2):160

Quitting smoking: why, how, and what might help. Pederson LL, et al. **Tob Control** 1996 Autumn;5(3):209–14

International Quit & Win '96: a global campaign to promote smoking cessation [letter] Puska P, et al. **Tob Control** 1996 Winter;5(4):342

Social context variables as predictors of smoking cessation. Rice VH, et al. **Tob Control** 1996 Winter;5(4):280–5

Accuracy of patient recall of opportunistic smoking cessation advice in general practice [see comments] Ward J, et al. **Tob Control** 1996 Summer;5(2):110–3. Comment in: Tob Control 1996 Summer;5(2):95–6.

[Smoking cessation in general practice (letter; comment)] Hansen JG. **Ugeskr Laeger** 1996 Nov 4;158(45):6473. Comment on: Ugeskr Laeger 1996 Aug 26;158(35):4905–8. **(Dan)**

[Support and guidelines, nicotine substitutes and clonidine have positive effects on smoking cessation. Five Cochrane meta–analyses on agents used in smoking cessation] Lous J. **Ugeskr Laeger** 1997 Sep 22;159(39):5783–6 **(Dan)**

[Tobacco smoking. What happened since 1971? (editorial)] Nielsen PE. **Ugeskr Laeger** 1997 Apr 14;159(16):2348–9 **(Dan)**

[Smoking regulations! (letter)] Palshof T. **Ugeskr Laeger** 1996 Oct 14;158(42):5954 **(Dan)**

[Obstacles to stopping smoking among patients with vascular risk] Lagrue G, et al. **J Mal Vasc** 1997;22(1):56–61 (Eng. Abstr.) **(Fre)**

[Recurrent buccal aphthosis after smoking cessation (letter)] Lagrue G, et al. **Presse Med** 1996 Dec 21;25(40):2043 **(Fre)**

[Smoking and health: the physician's responsibility. A statement by the Health and Smoking Committee. ACCP, ATS, ERS, APSR, CTS, IUATLD] **Pneumologie** 1996 Mar;50(3):270–4 **(Ger)**

[Diagnosis and therapy of nicotine dependence] Schoberberger R, et al. **Versicherungsmedizin** 1997 Feb 1; 49(1):25–9 (Eng. Abstr.) **(Ger)**

[Transcutaneous oximetry in smokers with moderate hypertension and peripheral arterial disease treated with amlodipine and defibrotide, also with total smoking cessation] Cicco G, et al. **Minerva Cardioangiol** 1995 Oct; 43(10):423–8 (Eng. Abstr.) **(Ita)**

[Prevention of lung cancer through smoking control activities in Japan] Oshima A. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:13–6 (Eng. Abstr.) **(Jpn)**

[Effect of smoking on the decline in forced expiratory volume in one second] Sato K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):288–93 (Eng. Abstr.) **(Jpn)**

[Preventive action against smoking–related injuries requires concentration on a wide front (see comments)] Disen A. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):330–1. Comment in: Tidsskr Nor Laegeforen 1997 Feb 28;117(6):851. **(Nor)**

[Not smoking–free, but better than in Norway!] Haug K. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1943–5 **(Nor)**

[Tobacco epidemics should be taken seriously. New measures are needed] Jacobsen CD. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):395–7 **(Nor)**

[The campaign against smoking—time for concentration (letter; comment)] Janssen CW. **Tidsskr Nor Laegeforen** 1997 Feb 28;117(6):851. Comment on: Tidsskr Nor Laegeforen 1997 Jan 30;117(3):330–1. **(Nor)**

[Nicotine dependence among Norwegian smokers and possible consequences for preventive actions] Kraft P, et al. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):340–5 (Eng. Abstr.) **(Nor)**

[Sun, surfing and cigarettes] Valbø A. **Tidsskr Nor Laegeforen** 1997 Jan 30;117(3):400–1 **(Nor)**

[USA. Super–hero in the fight against smoking] Bergström L. **Lakartidningen** 1997 Jan 29;94(5):299 **(Swe)**

[Help the patient with asthma to life–long smoking cessation (letter; comment)] Lykken K, et al. **Lakartidningen** 1997 Jan 29;94(5):317. Comment on: Lakartidningen 1996 Oct 16;93(42):3711–3. **(Swe)**

ECONOMICS

The economics of smoking cessation [comment] Haxby DG, et al. **Am J Health Syst Pharm** 1996 Jan 1;53(1):77–9 (13 ref.). Comment on: Am J Health Syst Pharm 1996 Jan 1;53(1):45–52.

Pharmacoeconomic analysis of smoking–cessation interventions [see comments] McGhan WF, et al. **Am J Health Syst Pharm** 1996 Jan 1;53(1):45–52. Comment in: Am J Health Syst Pharm 1996 Jan 1;53(1):77–9.

Short–term economic and health benefits of smoking cessation: myocardial infarction and stroke [see comments] Lightwood JM, et al. **Circulation** 1997 Aug 19; 96(4):1089–96. Comment in: Circulation 1997 Aug 19;96(4):1070.

Health and economic implications of a work–site smoking–cessation program: a simulation analysis. Warner KE, et al. **J Occup Environ Med** 1996 Oct;38(10):981–92

A retrospective analysis of the costs and consequences of a tobacco–cessation program for active duty service members. Miller MJ, et al. **Mil Med** 1996 Jul;161(7):420–4

The health care costs of smoking. Barendregt JJ, et al. **N Engl J Med** 1997 Oct 9;337(15):1052–7

Tax and spend: a policy to help poor smokers [editorial; comment] Marsh A. **Tob Control** 1997 Spring;6(1):5–6. Comment on: Tob Control 1997 Spring;6(1):14–8.

ETHNOLOGY

Heart, body, and soul: impact of church–based smoking cessation interventions on readiness to quit. Voorhees CC, et al. **Prev Med** 1996 May–Jun;25(3):277–85

METHODS

A comparison of two methods to teach smoking–cessation techniques to medical students. Papadakis MA, et al. **Acad Med** 1997 Aug;72(8):725–7

Current issues in behavioral and pharmacological approaches to smoking cessation. Hajek P. **Addict Behav** 1996 Nov–Dec;21(6):699–707 (40 ref.)

Intervention for relapse to smoking: the Lung Health Study restart programs. Murray RP, et al. **Addict Behav** 1997 Mar–Apr;22(2):281–6

Incorporating social support into a community–wide smoking–cessation contest. Pirie PL, et al. **Addict Behav** 1997 Jan–Feb;22(1):131–7

A stage paradigm for integrating clinical and public health approaches to smoking cessation. Prochaska JO. **Addict Behav** 1996 Nov–Dec;21(6):721–32

Retracing the steps of Marco Polo: from clinical trials to diffusion of interventions for smokers. Richmond RL. **Addict Behav** 1996 Nov–Dec;21(6):683–97 (65 ref.)

Contingency management for tobacco smoking in methadone–maintained opiate addicts. Shoptaw S, et al. **Addict Behav** 1996 May–Jun;21(3):409–12

The future of smoking cessation therapy in the United States. Hughes JR. **Addiction** 1996 Dec;91(12):1797–802 (66 ref.)

Efficacy of a nicotine inhaler in smoking cessation: a double–blind, placebo–controlled trial. Schneider NG, et al. **Addiction** 1996 Sep;91(9):1293–306

Nutrition and smoking cessation. Stefanich C. **Alaska Med** 1996 Jan–Mar;38(1):36–7

Helping your patients to quit smoking. Danis PG, et al. **Am Fam Physician** 1997 Mar;55(4):1207–14, 1217–8 (35 ref.)

Results of two levels of adjunctive treatment used with the nicotine patch. Lifrak P, et al. **Am J Addict** 1997 Spring; 6(2):93–8

Nicotine patches in smoking cessation: a randomized trial among over–the–counter customers in Denmark. Sønderskov J, et al. **Am J Epidemiol** 1997 Feb 15; 145(4):309–18

Helping patients to quit smoking. Gorman M. **Am J Nurs** 1997 Mar;97(3):64–5

Transdermal nicotine replacement in pregnancy: maternal pharmacokinetics and fetal effects. Wright LN, et al. **Am J Obstet Gynecol** 1997 May;176(5):1090–4

Statewide assessment of a behavioral intervention to reduce cigarette smoking by pregnant women. Wright LN, et al. **Am J Obstet Gynecol** 1996 Aug;175(2):283–7; discussion 287–8

The effectiveness of a media–led intervention to reduce smoking among Vietnamese–American men. Jenkins CN, et al. **Am J Public Health** 1997 Jun;87(6):1031–4

Physicians counseling smokers. A population–based survey of patients' perceptions of health care provider–delivered smoking cessation interventions. Goldstein MG, et al. **Arch Intern Med** 1997 Jun 23;157(12):1313–9

The nicotine inhaler in smoking cessation. Hjalmarson A, et al. **Arch Intern Med** 1997 Aug 11–25;157(15):1721–8

Smoking cessation in hospitalized patients. Results of a randomized trial. Miller NH, et al. **Arch Intern Med** 1997 Feb 24;157(4):409–15

Evaluation of cranial electrostimulation therapy on

short-term smoking cessation. Pickworth WB, et al. **Biol Psychiatry** 1997 Jul 15;42(2):116–21

The role of the dental team in the promotion of smoking cessation. Newton JT, et al. **Br Dent J** 1997 May 10; 182(9):353–5 (17 ref.)

Smoking cessation in pregnancy. Brown DC. **Can Fam Physician** 1996 Jan;42:102–5 (18 ref.)

In Hong Kong, smokers are butting out in record numbers. Brooks JR. **Can Med Assoc J** 1997 May 15;156(10):1441–3

Pharmacologic management of patients using smoking cessation aids. Ostrowski DJ, et al. **Dent Clin North Am** 1996 Jul;40(3):779–801 (68 ref.)

The benefits of stopping smoking and the role of nicotine replacement therapy in older patients. Gourlay SG, et al. **Drugs Aging** 1996 Jul;9(1):8–23 (125 ref.)

A double-blind randomized trial of nicotine nasal spray as an aid in smoking cessation. Blöndal T, et al. **Eur Respir J** 1997 Jul;10(7):1585–90

Smoking cessation with a 16 h nicotine patch: results in a group of hospital workers. Jímenez Ruiz CA, et al. **Eur Respir J** 1997 Mar;10(3):573–5

Individualizing medical treatment for tobacco dependence [editorial; comment] Sachs DP, et al. **Eur Respir J** 1996 Apr;9(4):629–31. Comment on: Eur Respir J 1996 Apr;9(4):643–51.

Nurse-conducted smoking cessation with minimal intervention in a lung clinic: a randomized controlled study. Tønnesen P, et al. **Eur Respir J** 1996 Nov;9(11):2351–5

Smoking cessation: a four-step plan to help older patients quit. Boyd NR. **Geriatrics** 1996 Nov;51(11):52–7; quiz 58 (21 ref.)

Doing the right thing at the right time? The interaction of stages and processes of change in successful smoking cessation. Perz CA, et al. **Health Psychol** 1996 Nov; 15(6):462–8

Best practices for smoking cessation intervention for hospitalized patients. DeWeese J. **Indiana Med** 1996 Mar-Apr;89(2):181–3

Nicotine patch therapy in smoking cessation reduces the extent of exercise-induced myocardial ischemia [see comments] Mahmarian JJ, et al. **J Am Coll Cardiol** 1997 Jul;30(1):125–30. Comment in: J Am Coll Cardiol 1997 Jul;30(1):131–2.

Smoking cessation techniques. Lando HA, et al. **J Am Med Womens Assoc** 1996 Jan-Apr;51(1-2):31–4, 47 (46 ref.)

Smoking cessation is not an oxymoron [editorial] Allen TW. **J Am Osteopath Assoc** 1996 Aug;96(8):460

One-year evaluation results from CableQuit: a community cable television smoking cessation pilot program. Valois RF, et al. **J Behav Med** 1996 Oct;19(5):479–99

Smoking cessation for the hospitalized cardiac patient: rationale for and report of a model program. Stillman FA. **J Cardiovasc Nurs** 1995 Jan;9(2):25–36

Implementation and outcomes of a community-based self-help smoking cessation program. Shuster GF 3rd, et al. **J Community Health Nurs** 1996;13(3):187–98

Mood management and nicotine gum in smoking treatment: a therapeutic contact and placebo-controlled study. Hall SM, et al. **J Consult Clin Psychol** 1996 Oct;64(5):1003–9

Nicotine patch and self-help video for cigarette smoking cessation. Killen JD, et al. **J Consult Clin Psychol** 1997 Aug;65(4):663–72

Prospective evaluation of three smoking interventions in 205 recovering alcoholics: one-year results of Project SCRAP-Tobacco. Martin JE, et al. **J Consult Clin Psychol** 1997 Feb;65(1):190–4

Telephone counseling for smoking cessation: effects of single-session and multiple-session interventions. Zhu SH, et al. **J Consult Clin Psychol** 1996 Feb;64(1):202–11

Smoking cessation interventions in rural family practices: an UPRNet study. Sesney JW, et al. **J Fam Pract** 1997 Jun; 44(6):578–85

Patterns of use of a free nicotine patch program for Medicaid and uninsured patients. Jaén CR, et al. **J Natl Med Assoc** 1997 May;89(5):325–8

A smoking cessation plan for pregnant women. Kilby JW. **J Obstet Gynecol Neonatal Nurs** 1997 Jul-Aug; 26(4):397–402 (25 ref.)

In harm's way: childbearing women and nicotine. Scheibmeir M, et al. **J Obstet Gynecol Neonatal Nurs** 1997 Jul-Aug; 26(4):477–84 (49 ref.)

Feasibility of smoking cessation counseling by phone with alcohol treatment center graduates. Leed-Kelly A, et al. **J Subst Abuse Treat** 1996 May-Jun;13(3):203–10

The Tripler Tobacco-Cessation Program: predictors for success and improved efficacy. Faue M, et al. **Mil Med** 1997 Jul;162(7):445–9

Treating tobacco addiction--nicotine or no nicotine? [editorial; comment] Benowitz NL. **N Engl J Med** 1997 Oct 23;337(17):1230–1. Comment on: N Engl J Med 1997 Oct 23;337(17):1195–202.

A comparison of sustained-release bupropion and placebo for smoking cessation [see comments] Hurt RD, et al. **N Engl J Med** 1997 Oct 23;337(17):1195–202. Comment in: N Engl J Med 1997 Oct 23;337(17):1230–1.

The safety of transdermal nicotine as an aid to smoking cessation in patients with cardiac disease. Joseph AM, et al. **N Engl J Med** 1996 Dec 12;335(24):1792–8

Aids to smoking cessation [letter] [see comments] Dankwa E. **N Z Med J** 1997 Apr 11;110(1041):131–2. Comment in: N Z Med J 1997 Jun 27;110(1046):235.

Aids to smoking cessation [letter; comment] Martin P. **N Z Med J** 1997 Jun 27;110(1046):235. Comment on: N Z Med J 1997 Apr 11;110(1041):131–2.

A comparison of nicotine delivery systems in a multimodality smoking cessation program. Kupecz D, et al. **Nurse Pract** 1996 Feb;21(2):73, 77–8, 81 passim

Tips to help smokers. Mainarich K. **Nurse Pract** 1997 Feb; 22(2):162

Nicotine patch therapy in adolescent smokers. Smith TA, et al. **Pediatrics** 1996 Oct;98(4 Pt 1):659–67

Smoking cessation rates 4 years after treatment by nicotine gum and acupuncture. Clavel-Chapelon F, et al. **Prev Med** 1997 Jan-Feb;26(1):25–8

Smoking cessation counseling by residents in an outpatient clinic. Cornuz J, et al. **Prev Med** 1997 May-Jun;26(3):292–6

Rationale, design, and baseline data for Commit to Quit: an exercise efficacy trial for smoking cessation among women. Marcus BH, et al. **Prev Med** 1997 Jul-Aug;26(4):586–97

Reaching midlife and older smokers: tailored interventions for routine medical care. Morgan GD, et al. **Prev Med** 1996 May-Jun;25(3):346–54

Cost-effectiveness of smoking cessation modalities: comparing apples with oranges? Mudde AN, et al. **Prev Med** 1996 Nov-Dec;25(6):708–16

Experts' agreement on the relative effectiveness of 29 smoking reduction strategies. Paul CL, et al. **Prev Med** 1996 Sep-Oct;25(5):517–26

Analysis of a multicomponent smoking cessation project: what worked and why. Resnicow K, et al. **Prev Med** 1997 May-Jun;26(3):373–81

A trial of church-based smoking cessation interventions for rural African Americans. Schorling JB, et al. **Prev Med** 1997 Jan-Feb;26(1):92–101

Effects of 24-hr nicotine replacement on sleep and daytime activity during smoking cessation. Wolter TD, et al. **Prev Med** 1996 Sep-Oct;25(5):601–10

Does using relapse prevention increase the efficacy of a program for smoking cessation?: An empirical study. Becoña E, et al. **Psychol Rep** 1997 Aug;81(1):291–6

The course of alcohol withdrawal in a general hospital [letter] Green J, et al. **QJM** 1997 Aug;90(8):552

Schizophrenia and nicotine use: report of a pilot smoking cessation program and review of neurobiological and clinical issues. Ziedonis DM, et al. **Schizophr Bull** 1997; 23(2):247–54

Clinical outcome of smoking-cessation trial of nicotine chewing gum evaluated by analysis of nicotine in hair. Mizuno A, et al. **Ther Drug Monit** 1997 Aug;19(4):407–12

Smoking cessation--new challenge and opportunities. Leistikow BN. **West J Med** 1996 Oct;165(4):226–7

Smoke-free signals from the chief: new federal regulations and clinical practice guideline help physicians help reduce tobacco use. Kennedy M. **Wis Med J** 1996 Nov; 95(11):762–6

Modeling smoking cessation: exploring the use of a videotape to help pregnant women quit smoking. Secker-Walker RH, et al. **Women Health** 1997;25(1):23–35

[Nicotine replacement therapy for cessation of smoking] Sela BA. **Harefuah** 1997 Apr 1;132(7):507–11 **(Heb)**

[Nicotine patches. Are they really useful? (editorial)] Monsó E. **Arch Bronconeumol** 1996 Nov;32(9):435–6 **(Spa)**

PSYCHOLOGY

Subtypes within a sample of precontemplating smokers: a preliminary extension of the stages of change. Dijkstra A, et al. **Addict Behav** 1997 May-Jun;22(3):327–37

Young smokers' attitudes about methods for quitting smoking: barriers and benefits to using assisted methods. Hines D. **Addict Behav** 1996 Jul-Aug;21(4):531–5

The GAINS project: outcome of smoking cessation strategies in four urban Native American clinics. Giving American Indians No-smoking Strategies. Johnson KM, et al. **Addict Behav** 1997 Mar-Apr;22(2):207–18

Motivation for smoking cessation among the Norwegian public. Rundmo T, et al. **Addict Behav** 1997 May-Jun; 22(3):377–86

Self-concept changes over time in cognitive-behavioral treatment for smoking cessation. Shadel WG, et al. **Addict Behav** 1996 Sep-Oct;21(5):659–63

Pregnancy smoking cessation: a case of mistaken identity. Stotts AL, et al. **Addict Behav** 1996 Jul-Aug;21(4):459–71

Abstinence effects as predictors of 28-day relapse in smokers. Swan GE, et al. **Addict Behav** 1996 Jul-Aug;21(4):481–90

Addiction versus stages of change models in predicting smoking cessation. Farkas AJ, et al. **Addiction** 1996 Sep; 91(9):1271–80; discussion 1281–92

Prediction, causation, description, and natural history of smoking cessation. Fisher EB. **Addiction** 1996 Sep; 91(9):1285–7

The effect of caffeine on cue exposure responses in ex-smokers. Hepple J, et al. **Addiction** 1996 Feb; 91(2):269–73

My dad can predict better than your dad: so what? Hughes JR. **Addiction** 1996 Sep;91(9):1284–5

Assessing the generalizability of smoking studies. Hughes JR, et al. **Addiction** 1997 Apr;92(4):469–72

Should the stage of change model be challenged? Pierce JP, et al. **Addiction** 1996 Sep;91(9):1290–2

On models, methods and premature conclusions. Prochaska JO, et al. **Addiction** 1996 Sep;91(9):1281–3

"Addiction versus stages of change models" vs. "addiction and stages of change models." Shiffman S. **Addiction** 1996 Sep;91(9):1289–90

Interventions cannot ignore intentions. Stockwell T. **Addiction** 1996 Sep;91(9):1283–4

Further support for the stages of change model? Sutton S. **Addiction** 1996 Sep;91(9):1287–9

The keyboard and the Camel [editorial] Kepple SR. **Am J Health Syst Pharm** 1996 Jan 1;53(1):80–1

The impact of depression on smoking cessation in women. Borrelli B, et al. **Am J Prev Med** 1996 Sep-Oct;12(5):378–87 (121 ref.)

Effects of a systematic approach to tobacco cessation in a community-based practice. Pine D, et al. **Arch Fam Med** 1997 Jul-Aug;6(4):363–7

Smoking cessation programmes are neglecting the needs of persons with neuropsychiatric disorders [letter] Polgar S, et al. **Aust N Z J Med** 1996 Aug;26(4):572–3

Depression and cholesterol-lowering chemotherapy: potential influence of smoking cessation, depression history, and dietary change [comment] Cinciripini PM. **Behav Med** 1996 Summer;22(2):85–6. Comment on: Behav Med 1996 Summer;22(2):82–4.

Readiness to stop smoking in schizophrenia. Addington J, et al. **Can J Psychiatry** 1997 Feb;42(1):49–52

Recruiting cancer patients to participate in motivating their relatives to quit smoking. A cancer control study of the Cancer and Leukemia Group B (CALGB 9072). Schilling A, et al. **Cancer** 1997 Jan 1;79(1):152–60

Efficacy of buspirone in smoking cessation: a placebo-controlled trial. Schneider NG, et al. **Clin Pharmacol Ther** 1996 Nov;60(5):568–75

Smoking habits and attitudes in a methadone maintenance treatment population. Clemmey P, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2–3):123–32

Mood and physiological effects of subcutaneous nicotine in smokers and never-smokers. Foulds J, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2–3):105–15

Craving is associated with smoking relapse: findings from three prospective studies. Killen JD, et al. **Exp Clin Psychopharmacol** 1997 May;5(2):137–42

Effects of nicotine dose and administration method on withdrawal symptoms and side effects during short-term smoking abstinence. Leischow SJ, et al. **Exp Clin Psychopharmacol** 1997 Feb;5(1):54–64

Influence of acute smoking exposure on the subsequent reinforcing value of smoking. Perkins KA, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):277–85

A self-help smoking cessation program for inner-city African Americans: results from the Harlem Health Connection Project. Resnicow K, et al. **Health Educ Behav** 1997 Apr; 24(2):201–17

Smoker networks and the "typical smoker": a prospective analysis of smoking cessation. Gibbons FX, et al. **Health Psychol** 1996 Nov;15(6):469–77

Incorporating biomarkers of exposure and genetic susceptibility into smoking cessation treatment: effects on smoking-related cognitions, emotions, and behavior change. Lerman C, et al. **Health Psychol** 1997 Jan; 16(1):87–99

Doing the right thing at the right time? The interaction of stages and processes of change in successful smoking cessation. Perz CA, et al. **Health Psychol** 1996 Nov; 15(6):462–8

Prospective predictors of quit attempts and smoking cessation in young adults. Rose JS, et al. **Health Psychol** 1996 Jul; 15(4):261–8

Temptations to smoke after quitting: a comparison of lapsers and maintainers. Shiffman S, et al. **Health Psychol** 1996 Nov;15(6):455–61

A day at a time: predicting smoking lapse from daily urge. Shiffman S, et al. **J Abnorm Psychol** 1997 Feb;106(1):104–16

Stages of change in smoking during pregnancy in low-income women. Solomon LJ, et al. **J Behav Med** 1996 Aug;19(4):333–44

Readiness to change smoking behavior in a community health center population. Tessaro I, et al. **J Community Health** 1997 Feb;22(1):15–31

Interactive effects of depression symptoms, nicotine dependence, and weight change on late smoking relapse. Killen JD, et al. **J Consult Clin Psychol** 1996 Oct; 64(5):1060–7

Depression and smoking cessation: characteristics of depressed smokers and effects of nicotine replacement. Kinnunen T, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):791–8

Gender and smoking cessation: a factor structure comparison of processes of change. O'Connor EA, et al. **J Consult Clin Psychol** 1996 Feb;64(1):130–8

Remember that? A comparison of real-time versus retrospective recall of smoking lapses. Shiffman S, et al. **J Consult Clin Psychol** 1997 Apr;65(2):292–300

Progression from a smoking lapse to relapse: prediction from abstinence violation effects, nicotine dependence, and lapse characteristics. Shiffman S, et al. **J Consult Clin Psychol** 1996 Oct;64(5):993–1002

Psychodynamic aspects of smoking cessation among physicians. Dubois M, et al. **J Environ Pathol Toxicol Oncol** 1996;15(1):55–8

Age and stage of readiness for smoking cessation. Clark MA, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jul; 52(4):S212–21

Cognitive reactions to smoking relapse: the reciprocal relation between dissonance and self-esteem. Gibbons FX,

et al. **J Pers Soc Psychol** 1997 Jan;72(1):184–95
Modification of smoking habits five months after myocardial infarction: relationship with personality characteristics. Huijbrechts IP, et al. **J Psychosom Res** 1996 Apr; 40(4):369–78
The pregnant smoker: a preliminary investigation of the social and psychological influences. Haslam C, et al. **J Public Health Med** 1997 Jun;19(2):187–92
Symptomatology and energy intake during the menstrual cycle in smoking women. Allen SS, et al. **J Subst Abuse** 1996;8(3):303–19
Predictors of tobacco quit attempts among recovering alcoholics. Bobo JK, et al. **J Subst Abuse** 1996;8(4):431–43
Depression following smoking cessation in women. Bock BC, et al. **J Subst Abuse** 1996;8(1):137–44
The relationship of gender, diet patterns, and body type to weight change following smoking reduction: a multivariate approach. Gray CL, et al. **J Subst Abuse** 1995;7(4):405–23
Willingness of female smokers to tolerate postcessation weight gain. Pomerleau CS, et al. **J Subst Abuse** 1996; 8(3):371–8
Can psychiatric and chemical dependency treatment units be smoke free? Patten CA, et al. **J Subst Abuse Treat** 1996 Mar–Apr;13(2):107–18 (77 ref.)
Addressing women's concerns about weight gain due to smoking cessation. Perkins KA, et al. **J Subst Abuse Treat** 1997 Mar–Apr;14(2):173–82 (65 ref.)
Nicotine preference in smokers as a function of smoking abstinence. Perkins KA, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):257–63
Effects of a 2-day abstinence from smoking on dietary, cognitive, subjective, and physiologic parameters among younger and older female smokers. Kos J, et al. **Physiol Behav** 1997 May;61(5):671–8
Distributions of smokers by stage: international comparison and association with smoking prevalence. Etter JF, et al. **Prev Med** 1997 Jul–Aug;26(4):580–5
Patients' perceptions of their physician's role in smoking cessation by age and readiness to stop smoking. Kviz FJ, et al. **Prev Med** 1997 May–Jun;26(3):340–9
Determinants of intention to quit smoking among Dutch employees: the influence of the social environment. Willemsen MC, et al. **Prev Med** 1996 Mar–Apr; 25(2):195–202
Cigarette smoking and psychophysiological stress responsiveness: effects of recent smoking and temporary abstinence. Tsuda A, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):226–33
Who quits smoking during pregnancy? Más R, et al. **Scand J Soc Med** 1996 Jun;24(2):102–6
Smoking, smoking withdrawal and schizophrenia: case reports and a review of the literature. Dalack GW, et al. **Schizophr Res** 1996 Nov 15;22(2):133–41 (45 ref.)
Nicotine dependence and intentions to quit smoking in three samples of male and female recovering alcoholics and problem drinkers. Bobo JK, et al. **Subst Use Misuse** 1996 Jan;31(1):17–33
Withdrawal symptoms and previous attempts to quit smoking: associations with self-efficacy. Scholte RH, et al. **Subst Use Misuse** 1997 Jan;32(2):133–48
[Long-term effectiveness of anti-smoking counseling in primary care: the relapse process] Comas Fuentes A, et al. **Rev Esp Salud Publica** 1996 May–Jun;70(3):283–93 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

A criterion measurement model for health behavior change. Velicer WF, et al. **Addict Behav** 1996 Sep–Oct;21(5):555–84
Application of random-effects regression models in relapse research. Hedeker D, et al. **Addiction** 1996 Dec;91 Suppl:S211–29
The association between having children, family size and smoking cessation in adults. Jarvis MJ. **Addiction** 1996 Mar; 91(3):427–34
Prevalence, reliability and bias of adolescents' reports of smoking and quitting. Stanton WR, et al. **Addiction** 1996 Nov;91(11):1705–14
Do smokers want to quit? Mullins R, et al. **Aust N Z J Public Health** 1996 Aug;20(4):426–7
Adolescents' experiences of smoking cessation. Stanton WR, et al. **Drug Alcohol Depend** 1996 Dec 2;43(1–2):63–70
Effectiveness and prognostic factors of success in 12 smoking cessation clinics in the hospitals of Assistance publique–Hôpitaux de Paris. Giraud A, et al. **Int J Qual Health Care** 1996 Jun;8(3):291–6
The age of stopping smoking: the Spanish example. Becoña E, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1304–6
Trends in smoking by birth cohort for births between 1940 and 1975: a reconstructed cohort analysis of the 1990 Ontario Health Survey. Birkett NJ. **Prev Med** 1997 Jul–Aug;26(4):534–41
Distributions of smokers by stage: international comparison and association with smoking prevalence. Etter JF, et al. **Prev Med** 1997 Jul–Aug;26(4):580–5
Smoking, smoking cessation, and understanding of the role of multiple cardiac risk factors among the urban poor. Hyman DJ, et al. **Prev Med** 1996 Nov–Dec;25(6):653–9
Evaluation of a national Quit and Win contest: determinants for successful quitting. Korhonen T, et al. **Prev Med** 1997 Jul–Aug;26(4):556–64
Gender, social pressure, and smoking cessations: the Community Intervention Trial for Smoking Cessation (COMMIT) at baseline. Royce JM, et al. **Soc Sci Med** 1997 Feb;44(3):359–70
Does cessation of smoking cause a change in alcohol consumption? Evidence from the Lung Health Study. Murray RP, et al. **Subst Use Misuse** 1996 Jan;31(2):141–56
Poverty status and cigarette smoking prevalence and cessation in the United States, 1983–1993: the independent risk of being poor [see comments] Flint AJ, et al. **Tob Control** 1997 Spring;6(1):14–8. Comment in: Tob Control 1997 Spring;6(1):5–6.

SMOKING, PASSIVE see **TOBACCO SMOKE POLLUTION**

SMOOTH MUSCLE TUMOR

COMPLICATIONS

Gastrointestinal smooth muscle tumors and iron deficiency anemia in children. Cordova Z, et al. **Med Pediatr Oncol** 1997 Jun;28(6):441–3

DIAGNOSIS

Problematic uterine smooth muscle neoplasms [letter; comment] Hart WR. **Am J Surg Pathol** 1997 Feb; 21(2):252–5. Comment on: Am J Surg Pathol 1994 Jun;18(6):535–58.
Gastrointestinal smooth muscle tumors and iron deficiency anemia in children. Cordova Z, et al. **Med Pediatr Oncol** 1997 Jun;28(6):441–3
Gastric smooth muscle tumors: diagnostic dilemmas and factors affecting outcome. Sanders L, et al. **World J Surg** 1996 Oct;20(8):992–5

ETIOLOGY

Epstein-Barr virus (EBV)-associated hepatic and splenic smooth muscle tumours after kidney transplantation. Morel D, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1864–6

GENETICS

bcl-2 is preferentially expressed in tumours of muscle origin but is not related to p53 expression. Soini Y, et al. **Histopathology** 1996 Feb;28(2):141–5

PATHOLOGY

Epithelioid smooth-muscle tumors of the uterus: a clinicopathologic study of 18 patients. Prayson RA, et al. **Am J Surg Pathol** 1997 Apr;21(4):383–91
Primary smooth muscle tumors of the thyroid gland. Thompson LD, et al. **Cancer** 1997 Feb 1;79(3):579–87 (60 ref.)
Role of fine-needle aspiration cytology in the preoperative evaluation of smooth muscle tumors. Barbazza R, et al. **Diagn Cytopathol** 1997 Apr;16(4):326–30
Smooth muscle tumours of the pleura [letter; comment] Moran CA, et al. **Histopathology** 1997 Jan;30(1):97–8. Comment on: Histopathology 1995 Sep;27(3):295–6.
bcl-2 is preferentially expressed in tumours of muscle origin but is not related to p53 expression. Soini Y, et al. **Histopathology** 1996 Feb;28(2):141–5
Epstein-Barr virus-associated post-transplant primary smooth muscle tumor of the liver: report of an autopsy case. Sadahira Y, et al. **Pathol Int** 1996 Aug;46(8):601–4

THERAPY

Phase II trial of recombinant human macrophage colony-stimulating factor in metastatic soft tissue sarcoma. Momin FA, et al. **J Immunother** 1994 Oct;16(3):224–8

VIROLOGY

Latent Epstein-Barr virus infection demonstrated in low-grade leiomyosarcomas of adults with acquired immunodeficiency syndrome, but not in adjacent Kaposi's lesion or smooth muscle tumors in immunocompetent patients. Boman F, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):834–8
Epstein-Barr virus-associated post-transplant primary smooth muscle tumor of the liver: report of an autopsy case. Sadahira Y, et al. **Pathol Int** 1996 Aug;46(8):601–4

SMS 201-995 see **OCTREOTIDE**

SNAIL VENOMS see **MOLLUSK VENOMS**

SNAILS

Asthma after consumption of snails in house-dust-mite-allergic patients: a case of IgE cross-reactivity. van Ree R, et al. **Allergy** 1996 Jun; 51(6):387–93
Laboratory experiments on snail predation by Sargochromis codringtoni, a candidate for biological control of the snails that transmit schistosomiasis. Chimbari MJ, et al. **Ann Trop Med Parasitol** 1997 Jan;91(1):95–102
Acetylcholinesterase distribution in the central nervous system of the Megalobulimus oblongus (Gastropoda, Pulmonata). Zancan DM, et al. **Arch Anat Histol Embryol** 1993–94;75:75–86
Waste yield, proximate and mineral composition of three different types of land snails found in Nigeria. Adeyeye EI. **Int J Food Sci Nutr** 1996 Mar;47(2):111–6
Molluscicidal activity of neem (Azadirachta indica A. Juss). Singh K, et al. **J Ethnopharmacol** 1996 May;52(1):35–40
Conus geographus envenomation [letter] Fegan D, et al. **Lancet** 1997 Jun 7;349(9066):1672

CHEMISTRY

A noncompetitive peptide inhibitor of the nicotinic acetylcholine receptor from Conus purpurascens venom. Shon KJ, et al. **Biochemistry** 1997 Aug 5;36(31):9581–7
Effects of Echinostoma trivolvis (trematoda) infection on metallic ions in the host snail Helisoma trivolvis (gastropoda). Layman LR, et al. **Parasitol Res** 1996; 82(1):19–21
The 1.1 A crystal structure of the neuronal acetylcholine receptor antagonist, alpha-conotoxin PnIA from Conus pennaceus. Hu SH, et al. **Structure** 1996 Apr 15;4(4):417–23

CLASSIFICATION

A molecular phylogeny of Mobile River drainage basin pleurocerid snails (Caenogastropoda: Cerithioidea). Lydeard C, et al. **Mol Phylogenet Evol** 1997 Feb; 7(1):117–28
Allozyme variation among six populations of the freshwater-snail Oncomelania hupensis in Zhejiang, China. Qian BZ, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):400–5

DRUG EFFECTS

Actions of neuroactive peptides and nitric oxide on Ascaris, Achatina and Helix tissues. Walker RJ, et al. **Acta Biol Hung** 1995;46(2–4):183–93
Butachlor impact on protein, free amino acid and glutamine contents, and on activity levels of aminotransferases, glutamate dehydrogenase and glutamine synthetase in the fresh water snail, Pila globosa (Swainson). Rajyalakshmi T, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):949–60
Histopathological effects of phenol on the digestive gland of Amphimelania holandri Fér. (Gastropoda, prosobranchia). Lajtner J, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):458–64
Tyrosine hydroxylase-negative, dopaminergic neurons are targets for transmitter-depleting action of haloperidol in the snail brain. Sakharov DA, et al. **Cell Mol Neurobiol** 1996 Aug;16(4):451–61
Action of the herbicide butachlor on cholinesterases in the freshwater snail Pila globosa (Swainson). Rajyalakshmi T, et al. **Drug Chem Toxicol** 1996 Nov;19(4):325–31
Feeding stimulants activate an identified dopaminergic interneuron that induces the feeding motor program in Helisoma. Quinlan EM, et al. **J Neurophysiol** 1997 Aug; 78(2):812–24

ENZYMOLOGY

Isozyme polymorphism of esterases in the genus Lanistes (Mollusca:Prosobranchiata) and genetic analysis of populations. Abdelmordy MB, et al. **Biochem Genet** 1997 Apr;35(3–4):77–89
Glycolytic enzyme binding in Otala lactea hepatopancreas: effect of taxol, colchicine and cytochalasin B and D on the in vivo enzyme distribution. Brooks SP, et al. **Biochem Mol Biol Int** 1997 Apr;41(4):841–9
Identification of a vitamin K-dependent carboxylase in the venom duct of a Conus snail. Stanley TB, et al. **FEBS Lett** 1997 Apr 21;407(1):85–8
Effect of serotonin and neuropeptides on adenylate cyclase of the central nervous system and peripheral organs of the freshwater snail Planorbarius corneus. Ferretti ME, et al. **Neurochem Int** 1996 Apr;28(4):417–24
Allozyme variation among six populations of the freshwater-snail Oncomelania hupensis in Zhejiang, China. Qian BZ, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):400–5

GENETICS

Isozyme polymorphism of esterases in the genus Lanistes (Mollusca:Prosobranchiata) and genetic analysis of populations. Abdelmordy MB, et al. **Biochem Genet** 1997 Apr;35(3–4):77–89
Complete DNA sequence of the mitochondrial genome of Cepaea nemoralis (Gastropoda: Pulmonata). Terrett JA, et al. **J Mol Evol** 1996 Feb;42(2):160–8
A molecular phylogeny of Mobile River drainage basin pleurocerid snails (Caenogastropoda: Cerithioidea). Lydeard C, et al. **Mol Phylogenet Evol** 1997 Feb; 7(1):117–28
Genetic population structure of the prosobranch snail Potamopyrgus antipodarum (Gray) in Denmark using PCR-RAPD fingerprints. Jacobsen R, et al. **Proc R Soc Lond B Biol Sci** 1996 Aug 22;263(1373):1065–70
Extreme divergence of mitochondrial DNA within species of pulmonate land snails. Thomaz D, et al. **Proc R Soc Lond B Biol Sci** 1996 Mar 22;263(1368):363–8
[Genome multiplication mechanisms in the development of albumen gland polyploid cells of Succinea lauta (Gastropoda:Pulmonata). V. Polyploidizing mitosis and endomitosis] Anisimov AP. **Tsitologiia** 1997;39(2–3):218–28 (Eng. Abstr.) **(Rus)**

SNAILS

[Genome multiplication mechanisms in the development of albumen gland polyploid cells of Succinea lauta (Gastropoda:Pulmonata). VI. Ultrastructural research of endomitotic structure] Anisimov AP. **Tsitologiia** 1997; 39(2-3):229-36 (Eng. Abstr.) **(Rus)**

[Genome multiplication in the development of albumen gland polyploid cells of Succinea lauta (Gastropoda:Pulmonata).VII. Transcriptive activity of the nuclei in the endomitotic cycle] Anisimov AP. **Tsitologiia** 1997;39(2-3):237-43 (Eng. Abstr.) **(Rus)**

[Genome multiplication mechanisms in the development of albumen gland polyploid cell of Succinea lauta (Gastropoda:Pulmonata). VIII. Pseudomitosis in the terminally differentiated cells] Anisimov AP. **Tsitologiia** 1997;39(2-3):244-52 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Snail ingestion and asthma. Grembiale RD, et al. **Allergy** 1996 May;51(5):361

[Fluke invasion and the immune system of the snail] Kofta W. **Wiad Parazytol** 1997;43(1):27-38 (40 ref.) (Eng. Abstr.) **(Pol)**

METABOLISM

Butachlor impact on protein, free amino acid and glutamine contents, and on activity levels of aminotransferases, glutamate dehydrogenase and glutamine synthetase in the fresh water snail, Pila globosa (Swainson). Rajyalakshmi T, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):949-60

Mercury residues in south Florida apple snails (Pomacea paludosa). Eisemann JD, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):739-43

Opsin-like immunoreactivity in the circadian pacemaker neurons and photoreceptors of the eye of the opisthobranch mollusc Bulla gouldiana. Geusz ME, et al. **Cell Tissue Res** 1997 Jan;287(1):203-10

Effect of Zn, Cu, Pb, and Cd on fitness in snails (Helix aspersa). Laskowski R, et al. **Ecotoxicol Environ Saf** 1996 Jun;34(1):59-69

The dolastatins. Pettit GR. **Fortschr Chem Org Naturst** 1997; 70:1-79 (175 ref.)

Pharmacological characteristics of an outward current produced by beta-hydroxy-L-glutamic acid on a snail neurone. Zhang W, et al. **Gen Pharmacol** 1996 Apr; 27(3):499-504

Statistical approach for evolutionary relationship of alpha-conotoxins and members of insulin-superfamily. Berger S, et al. **Horm Metab Res** 1996 Oct;28(10):535-40

Isolation and partial characterization of N-acetyl-D-galactosamine-binding lectins from Epiphragmophora trenquelleonis snail. Castagna L, et al. **J Biochem (Tokyo)** 1996 Feb;119(2):372-7

Protein kinase involvement in land snail aestivation and anoxia: protein kinase A kinetic properties and changes in second messenger compounds during depressed metabolism. Brooks SP, et al. **Mol Cell Biochem** 1996 Mar 23;156(2):153-61

Metallothionein in snail Cd and Cu metabolism [letter] Dallinger R, et al. **Nature** 1997 Jul 17;388(6639):237-8

Suppression by calmodulin of glutamate-induced potassium current in identified snail neurons. Onozuka M, et al. **Neurosci Lett** 1996 Feb 2;204(1-2):105-8

Accumulation of copper, nickel, lead and zinc by snail, Lunella coronatus and pearl oyster, Pinctada radiata from the Kuwait coast before and after the Gulf War oil spill. Bu-Olayan AH, et al. **Sci Total Environ** 1997 Apr 30; 197(1-3):161-5

PARASITOLOGY

Food selection behaviour of potential biological agents to control intermediate host snails of schistosomiasis: Sargochromis codringtoni and Tilapia rendalli. Chimbari MJ, et al. **Acta Trop** 1996 May;61(3):191-9

Saulea vitrea and low prevalence of schistosomiasis. Gbakima AA. **Afr J Med Med Sci** 1996 Mar;25(1):91-3

Cercarial density in the river of an endemic area of schistosomiasis haematobia in Kenya. Muhoho ND, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):162-7

The suitability of Trochoidea seetzenii of different ages as snail intermediate hosts of Muellerius cf. capillaris (Nematoda:Protostrongylidae). Solomon A, et al. **Int J Parasitol** 1996 Nov;26(11):1317-9

Development and validation of a satellites based geographic information system (GIS) model for epidemiology of Schistosoma risk assessment on snail level in Kafr El-Sheikh Governorate. Abdel-Rahman MS, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):299-316

Temporal variations in the infection of a population of Clypeomorus bifasciata (Gastropoda: Prosobranchia) by a digenean microphallid larva in Kuwait Bay. Abdul-Salam J, et al. **J Helminthol** 1997 Mar;71(1):1-7

The probability of a marine gastropod being infected by a trematode. Curtis LA. **J Parasitol** 1996 Oct;82(5):830-3

In vivo and ectopic encystment of Echinostoma revolutum and chemical excystation of the metacercariae. Fried B, et al. **J Parasitol** 1997 Apr;83(2):251-4

The prevalence of cercariae from Stagnicola emarginata (Lymnaeidae) over 50 years in northern Michigan. Keas BE, et al. **J Parasitol** 1997 Jun;83(3):536-40

The effect of diet and reproductive maturity on the growth and reproduction of Helisoma anceps (Pulmonata) infected by Halipegus occidualis (Trematoda). Keas BE, et al. **J Parasitol** 1997 Feb;83(1):96-104

Parasitic effects on host life-history traits: a review of recent studies. Michalakis Y, et al. **Parasite** 1994 Dec;1(4):291-4 (20 ref.)

Effects of Echinostoma trivolvis (trematoda) infection on metallic ions in the host snail Helisoma trivolvis (gastropoda). Layman LR, et al. **Parasitol Res** 1996; 82(1):19-21

Schistosoma haematobium: comparative studies on prevalence and cercarial shedding according to the shell diameter of Planorbarius metidjensis at miracidial exposure. Zekhnini A, et al. **Parasitol Res** 1997;83(3):303-5

A family of fibrinogen-related proteins that precipitates parasite-derived molecules is produced by an invertebrate after infection. Adema CM, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8691-6

Changes in Neotricula beta-aperta population density following construction of the Pak Mun Dam in northeast Thailand, with implications for the transmission of schistosomiasis. Attwood SW. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):24-8

Experimental infection of five subspecies of Oncomelania snails with Angiostrongylus cantonensis. Iwanaga Y. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):767-73

Survival of beta and gamma races of Neotricula aperta snail intermediate hosts of Schistosoma mekongi in raw waters. Lohachit C, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):396-9

[Fluke invasion and the immune system of the snail] Kofta W. **Wiad Parazytol** 1997;43(1):27-38 (40 ref.) (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Further study on the effects of achatin-I, an Achatina endogenous neuroexcitatory tetrapeptide having a D-phenylalanine residue, on Achatina neurones. Takeuchi H, et al. **Acta Biol Hung** 1995;46(2-4):395-400

Actions of neuroactive peptides and nitric oxide on Ascaris, Achatina and Helix tissues. Walker RJ, et al. **Acta Biol Hung** 1995;46(2-4):183-93

Variations in learning reflect individual differences in sensory function and synaptic integration. Matzel LD, et al. **Behav Neurosci** 1996 Oct;110(5):1084-95

Light-dependent and -independent behavioral effects of extremely low frequency magnetic fields in a land snail are consistent with a parametric resonance mechanism. Prato FS, et al. **Bioelectromagnetics** 1997;18(3):284-91

Behavioural evidence that magnetic field effects in the land snail, Cepaea nemoralis, might not depend on magnetite or induced electric currents. Prato FS, et al. **Bioelectromagnetics** 1996;17(2):123-30

Multiple classes of catecholamine vesicles observed during exocytosis from the Planorbis cell body. Chen G, et al. **Brain Res** 1995 Dec 1;701(1-2):167-74

Electrochemical monitoring of bursting exocytotic events from the giant dopamine neuron of Planorbis corneus. Chen G, et al. **Brain Res** 1996 Sep 9;733(1):119-24

Intracellularly applied anti-P70 antibody blocks the induction of abnormal membrane properties by pentylenetetrazole in identified Euhadra neurons. Onozuka M, et al. **Brain Res** 1996 Apr 15;716(1-2):187-91

Studying the snail's clock at better than a snail's pace. Block GD. **Braz J Med Biol Res** 1996 Jan;29(1):71-5 (26 ref.)

Lipid peroxidation and histopathological changes in the digestive gland of a freshwater snail Planorbarius corneus L. (Gastropoda, Pulmonata) exposed to chronic and sub-chronic concentrations of PCP. Klobučar GI, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):128-34

Heart rate and temperature in the snail Megalobulimus sanctipauli: role of the cardiac nerve. Romero SM, et al. **Can J Physiol Pharmacol** 1996 Dec;74(12):1362-5

Modulation of in vivo neuronal sprouting by serotonin in the adult CNS of the snail. Baker MW, et al. **Cell Mol Neurobiol** 1996 Oct;16(5):561-76 (50 ref.)

Lineweaver-Burk analysis for the blocking effects of mammalian dopamine receptor antagonists on dopamine-induced currents in Achatina giant neurones. Emaduddin M, et al. **Gen Pharmacol** 1996 Oct; 27(7):1209-13

Opiate signaling regulates microglia activities in the invertebrate nervous system. Sonetti D, et al. **Gen Pharmacol** 1997 Jul;29(1):39-47

Effects of L-glutamic acid and its agonists on snail neurones. Zhang W, et al. **Gen Pharmacol** 1996 Apr;27(3):487-97

Conditioned defensive reflex in the edible snail (molecular-genetic aspects). Grinkevich LN, et al. **Neurosci Behav Physiol** 1997 May-Jun;27(3):216-20

Molecular-cellular mechanisms of the formation of long-term memory in the edible snail. Nikitin VP, et al. **Neurosci Behav Physiol** 1997 May-Jun;27(3):212-5

Antinociceptive effects of a pulsed magnetic field in the land snail, Cepaea nemoralis. Thomas AW, et al. **Neurosci Lett** 1997 Jan 31;222(2):107-10

Bursting firing of action potentials in central snail neurons elicited by d-amphetamine: role of cytoplasmic second messengers. Chen YH, et al. **Neurosci Res** 1997 Apr; 27(4):295-304

New 2-pyrazolines of anticipated molluscicidal activity. Mishriky N, et al. **Pharmazie** 1996 Aug;51(8):544-8

Survival of beta and gamma races of Neotricula aperta snail intermediate hosts of Schistosoma mekongi in raw waters. Lohachit C, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):396-9

[A comparison of serotonin- and dopaminergic neuronal systems in sexually mature and juvenile terrestrial mollusks of the genera Helix and Eobania] Ierusalimskiĭ VN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May-Jun; 47(3):563-76 (Eng. Abstr.) **(Rus)**

SNAKE BITES

see related

ANTIVENINS

Association of rattlesnake bite location with severity of clinical manifestations. Moss ST, et al. **Ann Emerg Med** 1997 Jul;30(1):58-61

Severe envenomation by the taipan (Oxyuranus scutellatus) [see comments] Southern DA, et al. **Med J Aust** 1996 Dec 2-16;165(11-12):662-4. Comment in: Med J Aust 1997 Jul 7;167(1):54-5.

Envenomation by the horned viper (Vipera ammodytes L.). Radonić V, et al. **Mil Med** 1997 Mar;162(3):179-82

Snakebite in children [letter] Pantanowitz L. **S Afr Med J** 1997 Jan;87(1):77

Intraarticular envenomation by Trimeresurus flavomaculatus mcgregori resulting in joint destruction. Clark RF, et al. **Toxicon** 1997 Jun;35(6):837-42

[Snake and scorpion envenomation in Tunisia. Tunis, 26-30 January 1995. Abstracts] **Arch Inst Pasteur Tunis** 1995 Jul-Oct;72(3-4):185-245 **(Fre)**

[Envenomation by exotic snakes] Aubert M, et al. **Med Trop (Mars)** 1996;56(4):384-92 (10 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Platelet aggregation in patients bitten by the Brazilian snake Bothrops jararaca. Sano-Martins IS, et al. **Thromb Res** 1997 Jul 15;87(2):183-95

Is the severity of Tityus serrulatus scorpion envenoming related to plasma venom concentrations? de Rezende NA, et al. **Toxicon** 1996 Jul;34(7):820-3

COMPLICATIONS

Thoracic complications following snake envenomization. Halkin A, et al. **Am J Med** 1997 Jun;102(6):585-7

Correlation of renal status with hematologic profile in viperine bite. Vijeth SR, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):168-70

Thrombocytopenia following timber rattlesnake envenomation. Bond RG, et al. **Ann Emerg Med** 1997 Jul; 30(1):40-4

Canebrake rattlesnake envenomation. Carroll RR, et al. **Ann Emerg Med** 1997 Jul;30(1):45-8

Cerebral infarct after rattlesnake bite [letter] Cole M. **Arch Neurol** 1996 Oct;53(10):957-8

Acute renal failure after snakebite: a report of four cases. Chen JB, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jan;59(1):65-9

Snake envenomation: 5 years experience in a referral hospital [letter] Jose R, et al. **Indian Pediatr** 1996 Nov;33(11):972-3

Cerebral infarction after envenomation by viper [published erratum appears in J Comput Assist Tomogr 1997 May-Jun;21(3):following table of contents] Murthy JM, et al. **J Comput Assist Tomogr** 1997 Jan-Feb;21(1):35-7

Unconsciousness following snake bite envenomation [letter] Kumar PD, et al. **J Indian Med Assoc** 1995 Oct; 93(10):397-8

Ascending hemorrhagic signs after a bite from a copperhead [letter] Roberts JR, et al. **N Engl J Med** 1997 Apr 24; 336(17):1262-3

A case of human bite by the pelagic sea snake, Pelamis platurus (Serpentes: Hydrophiidae). Solórzano A. **Rev Biol Trop** 1995 Apr-Dec;43(1-3):321-2

Coagulopathy and fibrinolysis following the bite of a hump-nosed viper (Hypnale hypnale). Premawardena AP, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun;90(3):293

[Uveitis after viper bite (letter)] Guille des Buttes P, et al. **Arch Pediatr** 1996 Aug;3(8):832-3 **(Fre)**

[Snake bite during pregnancy (letter)] Dao B, et al. **Med Trop (Mars)** 1997;57(1):100-1 **(Fre)**

DIAGNOSIS

Assessment and management of coral and other exotic snake envenomations. Gaar GG. **J Fla Med Assoc** 1996 Mar; 83(3):178-82

The effect of species and geographical origin of snakes on the identification of their venom using a commercial assay [letter] Clancy AM, et al. **Med J Aust** 1997 Jul 7;167(1):56

A novel way to identify a cobra bite [letter] van Wyk CW. **S Afr Med J** 1997 Apr;87(4):473

DRUG THERAPY

Snake and spider antivenin: risks and benefits of therapy. Weisman RS, et al. **J Fla Med Assoc** 1996 Mar;83(3):192-5

Development and clinical application of immunoassays for European adder (Vipera berus berus) venom and antivenom. Sjostrom L, et al. **Toxicon** 1996 Jan;34(1):91-8

Antibiotic prophylaxis for pit viper envenomation: prospective, controlled trial. Kerrigan KR, et al. **World J Surg** 1997 May;21(4):369–72; discussion 372–3

[Per oral glucocorticoid is infective for viper bite (letter)] Härkönen M. **Duodecim** 1995;111(18):1803–4 **(Fin)**

EPIDEMIOLOGY

Incidence, pathology, and treatment of adder (Vipera berus L.) bites in man. Reading CJ. **J Accid Emerg Med** 1996 Sep;13(5):346–51 (32 ref.)

Snake bites in Kenya: a preliminary survey of four areas. Coombs MD, et al. **Trans R Soc Trop Med Hyg** 1997 May–Jun;91(3):319–21

A comparison of clinical and epidemiological aspects of bites by small and large South American rattlesnakes. Jorge MT, et al. **Trop Doct** 1997 Apr;27(2):106–7

[Epidemiology of accidents due to bites of poisonous snakes: a study of cases attended in 1988] Ribeiro LA, et al. **Rev Saude Publica** 1995 Oct;29(5):380–8 (Eng. Abstr.) **(Por)**

[The epidemiology of accidental bites by venomous snakes in the state of Ceará, Brazil] Feitosa RF, et al. **Rev Soc Bras Med Trop** 1997 Jul–Aug;30(4):295–301 (Eng. Abstr.) **(Por)**

[Exotic snakes may strike even here!] Karlson-Stiber C. **Lakartidningen** 1996 Nov 27;93(48):4393–6 **(Swe)**

ETIOLOGY

A case of local tissue necrosis following a bite by the Australian tiger snake Notechis scutatus. Penington A, et al. **Aust N Z J Surg** 1997 Jun;67(6):385–8 (20 ref.)

[Tropical snakes as a risk of accidents even in Sweden. Four cases from the Norrbotten] Holmen C. **Lakartidningen** 1996 Nov 27;93(48):4409–11 **(Swe)**

IMMUNOLOGY

Effect of Crotalus venom on the humoral and cellular immune response. Cardoso DF, et al. **Toxicon** 1997 Apr; 35(4):607–12

An enzyme-linked immunosorbent assay (ELISA) that discriminates between the venoms of Brazilian Bothrops species and Crotalus durissus. Chávez-Olórtegui C, et al. **Toxicon** 1997 Feb;35(2):253–60

Clinical indicators of envenoming and serum levels of venom antigens in patients bitten by Bothrops lanceolatus in Martinique. Research Group on Snake Bites in Martinique. Bucher B, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr; 91(2):186–90

MORTALITY

Snake envenomation: 5 years experience in a referral hospital [letter] Jose R, et al. **Indian Pediatr** 1996 Nov;33(11):972–3

[Evaluation of deaths by accidents with venomous snakes in the State of São Paulo, 1988/1989] Lebrão ML, et al. **Rev Assoc Med Bras** 1995 Sep–Oct;41(5):343–7 (Eng. Abstr.) **(Por)**

PATHOLOGY

The Gaboon viper, Bitis gabonica: hemorrhagic, metabolic, cardiovascular and clinical effects of the venom. Marsh N, et al. **Life Sci** 1997;61(8):763–9 (35 ref.)

PHYSIOPATHOLOGY

Clinical and laboratory alterations in horses during immunization with snake venoms for the production of polyvalent (Crotalinae) antivenom. Angulo Y, et al. **Toxicon** 1997 Jan;35(1):81–90

Electrocardiographic abnormalities in patients bitten by taipans (Oxyuranus scutellatus canni) and other elapid snakes in Papua New Guinea. Lalloo DG, et al. **Trans R Soc Trop Med Hyg** 1997 Jan–Feb;91(1):53–6

PREVENTION & CONTROL

Malaria vaccine [letter; comment] Bawaskar HS, et al. **Lancet** 1996 Nov 16;348(9038):1379. Comment on: Lancet 1996 Sep 14;348(9029):701–7.

PSYCHOLOGY

An interesting case of viper bite [letter] Saha BK, et al. **J Indian Med Assoc** 1995 Oct;93(10):398–9

SURGERY

A case of local tissue necrosis following a bite by the Australian tiger snake Notechis scutatus. Penington A, et al. **Aust N Z J Surg** 1997 Jun;67(6):385–8 (20 ref.)

THERAPY

New approaches in antivenom therapy. Choumet V, et al. **Adv Exp Med Biol** 1996;391:515–20

Naja naja cobra bite. Britt A, et al. **Am J Emerg Med** 1997 Sep;15(5):529–31

First clinical experiences with a new ovine Fab Echis ocellatus snake bite antivenom in Nigeria: randomized comparative trial with Institute Pasteur Serum (Ipser) Africa antivenom. Meyer WP, et al. **Am J Trop Med Hyg** 1997 Mar;56(3):291–300

Exotic envenomation [letter; comment] Bey TA, et al. **Ann Emerg Med** 1997 Jan;29(1):195. Comment on: Ann Emerg Med 1996 Jul;28(1):87–9.

Successful treatment of crotalid-induced neurotoxicity with a new polyspecific crotalid Fab antivenom. Clark RF, et al. **Ann Emerg Med** 1997 Jul;30(1):54–7

Affinity-purified, mixed monospecific crotalid antivenom ovine Fab for the treatment of crotalid venom poisoning. Dart RC, et al. **Ann Emerg Med** 1997 Jul;30(1):33–9

Relationship of venom effects to venom antigen and antivenom serum concentrations in a patient with Crotalus atrox envenomation treated with a Fab antivenom. Seifert SA, et al. **Ann Emerg Med** 1997 Jul;30(1):49–53

Cobra bite victim: down but not out [letter] Cheng EY, et al. **Ann Pharmacother** 1996 Jul–Aug;30(7–8):885–6

Re: Pit viper bites: rational management in locales in which copperheads and cottonmouths predominate [letter; comment] Bucknall NC. **Ann Plast Surg** 1997 Mar; 38(3):302–4. Comment on: Ann Plast Surg 1996 Mar;36(3):276–85.

Rattlesnake bite in a patient with horse allergy and von Willebrand's disease: case report. Dubinsky I. **Can Fam Physician** 1996 Nov;42:2207–11

Lessons from four studies on the management of snake bite in Sri Lanka. Sellahewa K. **Ceylon Med J** 1997 Mar; 42(1):8–15

Assessment and management of coral and other exotic snake envenomations. Gaar GG. **J Fla Med Assoc** 1996 Mar; 83(3):178–82

Treatment of pit viper envenomation. Kitchens CS. **J Fla Med Assoc** 1996 Mar;83(3):174–7

First clinical experiences with specific sheep Fab fragments in snake bite. Report of a multicentre study of Vipera berus envenoming. Karlson-Stiber C, et al. **J Intern Med** 1997 Jan;241(1):53–8

Delayed administration of Vipera xanthina palaestinae antivenin. Bentur Y, et al. **J Toxicol Clin Toxicol** 1997; 35(3):257–61

Severe envenomation by the taipan (Oxyuranus scutellatus) [letter; comment] Lalloo DG, et al. **Med J Aust** 1997 Jul 7;167(1):54–5. Comment on: Med J Aust 1996 Dec 2–16;165(11–12):662–4.

Emergency care for snake bites [letter] Knight J. **Nurse Pract** 1996 Dec;21(12 Pt 1):16, 92

Management of snake and spider bite in pregnancy. Pantanowitz L, et al. **Obstet Gynecol Surv** 1996 Oct; 51(10):615–20 (48 ref.)

Snake bites by the jararacuçu (Bothrops jararacussu): clinicopathological studies of 29 proven cases in São Paulo State, Brazil. Milani Júnior R, et al. **QJM** 1997 May; 90(5):323–34

Neostigmine in the treatment of snake accidents caused by Micrurus frontalis: report of two cases (1). Vital Brazil O, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jan–Feb;38(1):61–7

Clinical trial of intramuscular anti-snake venom administration as a first aid measure in the field in the management of Russell's viper bite patients. Win-Aung, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):494–7

Time factor in the detection of circulating whole venom and crotoxin and efficacy of antivenom therapy in patients envenomed by Crotalus durissus. Amaral CF, et al. **Toxicon** 1997 May;35(5):699–704

Anticholinesterases as antidotes to envenomation of rats by the death adder (Acanthophis antarcticus). Flachsenberger W, et al. **Toxicon** 1994 Jan;32(1):35–9

Snakebite by the bushmaster (Lachesis muta) in Brazil: case report and review of the literature. Jorge MT, et al. **Toxicon** 1997 Apr;35(4):545–54 (33 ref.)

A randomized double-blind clinical trial of two antivenoms in patients bitten by Bothrops atrox in Colombia. The Regional Group on Antivenom Therapy Research (REGATHER). Otero R, et al. **Trans R Soc Trop Med Hyg** 1996 Nov–Dec;90(6):696–700

[Adder bites are dangerous even in adults] Nieminen S, et al. **Duodecim** 1995;111(13):1216–21 **(Fin)**

[Antivenom serum doses in the treatment of poisoning by a venomous snake of the genus Bothrops] Jorge MT, et al. **Rev Assoc Med Bras** 1997 Jan–Mar;43(1):74–6 (18 ref.) **(Por)**

VETERINARY

Snake envenomation in cats and its detection by rapid immunoassay. Moisidis AV, et al. **Aust Vet J** 1996 Aug; 74(2):143–7

Acute, flaccid quadriplegia in three cats with suspected coral snake envenomation. Chrisman CL, et al. **J Am Anim Hosp Assoc** 1996 Jul–Aug;32(4):343–9

SNAKE ENVENOMATION see **SNAKE BITES**

SNAKE VENOMS

see related

ANTIVENINS

Snake and spider antivenin: risks and benefits of therapy. Weisman RS, et al. **J Fla Med Assoc** 1996 Mar;83(3):192–5

Establishment of an animal model for myoglobinuria by use of a myotoxin from Pseudechis australis (king brown snake) venom in mice. Ponraj D, et al. **Lab Anim Sci** 1996 Aug; 46(4):393–8

Clinical trial of intramuscular anti-snake venom administration as a first aid measure in the field in the management of Russell's viper bite patients. Win-Aung, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):494–7

[Snake and scorpion envenomation in Tunisia. Tunis, 26–30 January 1995. Abstracts] **Arch Inst Pasteur Tunis** 1995 Jul–Oct;72(3–4):185–245 **(Fre)**

ANTAGONISTS & INHIBITORS

Ehretianone, a novel quinonoid xanthene from Ehretia buxifolia with antisnake venom activity. Selvanayagam ZE, et al. **J Nat Prod** 1996 Jul;59(7):664–7

BLOOD

Snake envenomation in cats and its detection by rapid immunoassay. Moisidis AV, et al. **Aust Vet J** 1996 Aug; 74(2):143–7

CHEMISTRY

Purification and characterization of nerve growth factors (NGFs) from the snake venoms. Hayashi K, et al. **Adv Exp Med Biol** 1996;391:403–16

Overview of snake venom chemistry. Tu AT. **Adv Exp Med Biol** 1996;391:37–62 (97 ref.)

Critical interactions at the dimer interface of kappa-bungarotoxin, a neuronal nicotinic acetylcholine receptor antagonist. Grant GA, et al. **Biochemistry** 1997 Mar 18;36(11):3353–8

Conformational comparison in the snake toxin family. Falkenstein RJ, et al. **Int J Pept Protein Res** 1996 Mar; 47(3):167–76

Only snake curaremimetic toxins with a fifth disulfide bond have high affinity for the neuronal alpha7 nicotinic receptor. Servent D, et al. **J Biol Chem** 1997 Sep 26; 272(39):24279–86

cDNA sequence analysis and mutagenesis studies on the A chain of beta-bungarotoxin from Taiwan banded krait. Chang LS, et al. **J Protein Chem** 1996 Nov;15(8):755–61

The effect of species and geographical origin of snakes on the identification of their venom using a commercial assay [letter] Clancy AM, et al. **Med J Aust** 1997 Jul 7;167(1):56

Foci of amino acid residue conservation in the 3D structures of the Kunitz BPTI proteinase inhibitors: how do variants from snake venom differ? Cardle L, et al. **Protein Eng** 1997 Feb;10(2):131–6

Structural model of the anti-snake-toxin antibody, M alpha 2,3. Tenette C, et al. **Proteins** 1996 Sep;26(1):9–31

Isolation and partial characterization of a prothrombin-activating enzyme from the venom of the Australian rough-scaled snake (Tropidechis carinatus). Marsh NA, et al. **Toxicon** 1997 Apr;35(4):563–71

ENZYMOLOGY

Differential effects of snake venom phospholipase A2 neurotoxin (beta-bungarotoxin) and enzyme (Naja naja atra) on protein kinases. Ueno E, et al. **Biochem Pharmacol** 1996 Oct 25;52(8):1287–93

Kininase activities of some snake venoms. al-Joufi AM, et al. **Immunopharmacology** 1996 May;32(1–3):163–5

Zinc (Zn^{2+}) binds to and stimulates the activity of group I but not group II phospholipase A2. Lindahl M, et al. **Inflammation** 1996 Dec;20(6):599–611

Enzymatic properties of the Duvernoy's secretion of Blanding's tree snake (Boiga blandingi) and of the mangrove snake (Boiga dendrophila). Broaders M, et al. **Toxicon** 1997 Jul;35(7):1143–8

The effects of two phospholipase A2 inhibitors on the neuromuscular blocking activities of homologous phospholipases A2 from the venom of Pseudechis australis, the Australian king brown snake. Fatehi M, et al. **Toxicon** 1995 Dec;33(12):1633–43

Identification of phospholipase A2 and neurotoxic activities in the venom of the New Guinean small-eyed snake (Micropechis ikaheka). Geh SL, et al. **Toxicon** 1997 Jan; 35(1):101–9

An aqueous endpoint assay of snake venom phospholipase A2. Holzer M, et al. **Toxicon** 1996 Oct;34(10):1149–55

Localization and expression of phospholipases A2 in Trimeresurus flavoviridis (habu snake) venom gland. Ogawa T, et al. **Toxicon** 1995 Dec;33(12):1645–52

[Acetylcholinesterase from snake venoms] Cousin X, et al. **C R Seances Soc Biol Fil** 1997;191(3):381–400 (78 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Comparative studies of antisera against different toxins. Nascimento N, et al. **Adv Exp Med Biol** 1996;391:509–14

Effect of adjuvants on the antibody response of mice to Bothrops asper (Terciopelo) snake venom. Rucavado A, et al. **Braz J Med Biol Res** 1996 Oct;29(10):1337–40

Immunological studies of rabbit antibodies against hemorrhagic fractions of Crotalus viridis viridis venom: role of crossreacting antibodies in neutralization. Li Q, et al. **Comp Biochem Physiol A Physiol** 1996 Jun;114(2):167–73

ISOLATION & PURIFICATION

Venom yields from several species of colubrid snakes and differential effects of ketamine. Hill RE, et al. **Toxicon** 1997 May;35(5):671–8

SNAKE VENOMS

METABOLISM

Nerve growth factors from snake venoms: chemical properties, mode of action and biological significance. Kostiza T, et al. **Toxicon** 1996 Jul;34(7):787–806 (75 ref.)

PHARMACOLOGY

Interaction of thrombin–activated platelets with extracellular matrices (fibronectin and vitronectin): comparison of the activity of Arg–Gly–Asp–containing venom peptides and monoclonal antibodies against glycoprotein IIb/IIIa complex. Sheu JB, et al. **J Pharm Pharmacol** 1997 Jan; 49(1):78–84

Snake venom proteins modulating the interaction between von Willebrand factor and platelet glycoprotein Ib. Fujimura Y, et al. **Thromb Haemost** 1996 Nov;76(5):633–9 (62 ref.)

Isolation and partial characterization of a prothrombin–activating enzyme from the venom of the Australian rough–scaled snake (Tropidechis carinatus). Marsh NA, et al. **Toxicon** 1997 Apr;35(4):563–71

Snake venom, fertilization and neurogenesis. Yedvobnick B. **Trends Neurosci** 1996 Dec;19(12):528–30 (17 ref.)

POISONING

[Renal dysfunction caused by animal poisons (snake venoms, bite and punctured poisoning)] Suda M, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):571–3 (16 ref.) **(Jpn)**

THERAPEUTIC USE

Ancrod: the use of snake venom in the treatment of patients with heparin–induced thrombocytopenia and thrombosis undergoing coronary artery bypass grafting: nursing management. Lathan LO, et al. **Heart Lung** 1996 Nov–Dec; 25(6):451–60; quiz 461–2 (27 ref.)

TOXICITY

Snake venoms as probes to study the kinetics of formation and architecture of fibrin network structure. Azhar A, et al. **Adv Exp Med Biol** 1996;391:417–25

Differential effects of snake venom phospholipase A2 neurotoxin (beta–bungarotoxin) and enzyme (Naja naja atra) on protein kinases. Ueno E, et al. **Biochem Pharmacol** 1996 Oct 25;52(8):1287–93

alpha–Bungarotoxin, kappa–bungarotoxin, alpha–cobratoxin and erabutoxin–b do not affect [3H]acetylcholine release from the rat isolated left hemidiaphragm. Apel C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):646–52

Identification of phospholipase A2 and neurotoxic activities in the venom of the New Guinean small–eyed snake (Micropechis ikaheka). Geh SL, et al. **Toxicon** 1997 Jan; 35(1):101–9

The effects of Duvernoy's gland secretion from the xenodontine colubrid Philodryas olfersii on striated muscle and the neuromuscular junction: partial characterization of a neuromuscular fraction. Prado–Franceschi J, et al. **Toxicon** 1996 Apr;34(4):459–66

URINE

Snake envenomation in cats and its detection by rapid immunoassay. Moisidis AV, et al. **Aust Vet J** 1996 Aug; 74(2):143–7

SNAKES

see related
SNAKE BITES
SNAKE VENOMS

Snake envenomation in cats and its detection by rapid immunoassay. Moisidis AV, et al. **Aust Vet J** 1996 Aug; 74(2):143–7

Parental history, aversive exposure and the development of snake and spider phobia in women. Fredrikson M, et al. **Behav Res Ther** 1997 Jan;35(1):23–8

Tracheal resection and anastomosis for an intratracheal chondroma in a ball python. Diethelm G, et al. **J Am Vet Med Assoc** 1996 Aug 15;209(4):786–8

Toward a standard experiment for studying post–treatment return of fear. Rose MP, et al. **J Anxiety Disord** 1997 May–Jun;11(3):263–77

RM and Beaux: reductions in cardiac activity in response to a pet snake. Eddy TJ. **J Nerv Ment Dis** 1996 Sep; 184(9):573–5

Disgust as the source of false positive effects in the measurement of ophidiophobia. Klieger DM, et al. **J Psychol** 1997 Jul;131(4):371–82

Biliary cryptosporidiosis in two corn snakes (Elaphe guttata). Cimon KY, et al. **J Vet Diagn Invest** 1996 Jul;8(3):398–9

Diagnosis of subclinical cryptosporidiosis in captive snakes based on stomach lavage and cloacal sampling. Graczyk TK, et al. **Vet Parasitol** 1996 Dec 31;67(3–4):143–51

ANATOMY & HISTOLOGY

Man's fractured sternum was probably due to snake's weight when it fell [letter] Davies DW. **BMJ** 1997 Jul 19; 315(7101):191

BLOOD

Biosynthesis of thromboxane by snake (Elaphe obsoleta) erythrocytes and the requirement of eicosanoid production for blood clotting. Herman CA, et al. **Biochim Biophys Acta** 1997 Feb 11;1334(1):23–7

[Blood parameters as an aid in the diagnosis of reptile diseases] Kölle P, et al. **Tierarztl Prax** 1996 Aug;24(4):402–5 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Reviews of venomous snake systematics in Toxicon [letter; comment] Wüster W, et al. **Toxicon** 1996 Apr;34(4):397–8 (1 ref.). Comment on: Toxicon 1996 Apr;34(4):399–406.

Synopsis of recent developments in venomous snake systematics. Wüster W, et al. **Toxicon** 1997 Mar; 35(3):319–40 (103 ref.)

GENETICS

Evolution of disintegrin cysteine–rich and mammalian matrix–degrading metalloproteinases: gene duplication and divergence of a common ancestor rather than convergent evolution. Moura–da–Silva AM, et al. **J Mol Evol** 1996 Sep;43(3):263–9

Gene rearrangements in snake mitochondrial genomes: highly concerted evolution of control–region–like sequences duplicated and inserted into a tRNA gene cluster. Kumazawa Y, et al. **Mol Biol Evol** 1996 Nov;13(9):1242–54

Re: Homology in phylogenetic analysis: alignment of transfer RNA genes and the phylogenetic position of snakes [letter] Macey JR, et al. **Mol Phylogenet Evol** 1997 Apr;7(2):272–9

IMMUNOLOGY

Detection of Cryptosporidium–specific serum immunoglobulins in captive snakes by a polyclonal antibody in the indirect ELISA. Graczyk TK, et al. **Vet Res** 1997;28(2):131–42

MICROBIOLOGY

Salmonella meningitis acquired from pet snakes [letter] Paton JH, et al. **Arch Dis Child** 1997 Jul;77(1):93

PHYSIOLOGY

The photoreceptors and visual pigments of the garter snake (Thamnophis sirtalis): a microspectrophotometric, scanning electron microscopic and immunocytochemical study. Sillman AJ, et al. **J Comp Physiol [A]** 1997 Aug; 181(2):89–101

Release properties of isolated neuromuscular boutons of the garter snake. Wilkinson RS, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):503–14

SNEDDON–CHAMPION SYNDROME see **SNEDDON SYNDROME**

SNEDDON SYNDROME

COMPLICATIONS

Sneddon's syndrome: a vascular systemic disease with kidney involvement? Macário F, et al. **Nephron** 1997;75(1):94–7

DIAGNOSIS

The natural course of cerebral lesions in Sneddon syndrome. Tourbah A, et al. **Arch Neurol** 1997 Jan;54(1):53–60

Sneddon's syndrome (livedo racemosa and cerebral infarction) presenting psychiatric disturbance and shortening of fingers and toes. Kume M, et al. **Intern Med** 1996 Aug;35(8):668–73 (15 ref.)

[Sneddon syndrome] Borowiecka I, et al. **Pol Arch Med Wewn** 1996 Jun;95(6):555–60 (Eng. Abstr.) **(Pol)**

GENETICS

[Familial Binswanger–type encephalopathy with Sneddon syndrome] Murase N, et al. **Rinsho Shinkeigaku** 1996 Feb; 36(2):336–40 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

[Progression of livedo vasculitis] Zelger B. **Verh Dtsch Ges Pathol** 1996;80:229 **(Ger)**

PSYCHOLOGY

Neuropsychological deficits in patients with Sneddon's syndrome. Weissenborn K, et al. **J Neurol** 1996 Apr; 243(4):357–63

SNEDDON–WILKINSON DISEASE see **SKIN DISEASES, VESICULOBULLOUS**

SNEEZING

"Sneeze of a cancer from the lung": sternumentum carcinomae pulmonariae. Hornick PI, et al. **Ann Thorac Surg** 1997 Apr; 63(4):1174–5

Paroxysmal sneezing in a 7–year–old cat. Gabor L, et al. **Aust Vet J** 1997 May;75(5):320, 328, 335

Eschew the achoo! [letter] Elwood T, et al. **Can J Anaesth** 1996 Feb;43(2):192–3

[A pearl in the nose––can it be "cured" with white pepper? (letter)] Eidenson Y. **Lakartidningen** 1997 May 7; 94(19):1782 **(Swe)**

DRUG EFFECTS

Nasal hypersensitivity and recurrent adenoids disease. Filiaci F, et al. **Allergol Immunopathol (Madr)** 1997 Jul–Aug; 25(4):199–202

Low dose clemastine inhibits sneezing and rhinorrhea during the early nasal allergic reaction. Chung JH, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):307–12

Bless you [letter] Ngeow WC. **Br Dent J** 1996 Apr 6; 180(7):246

A clinical study to evaluate the efficacy of the antihistamine doxylamine succinate in the relief of runny nose and sneezing associated with upper respiratory tract infection. Eccles R, et al. **J Pharm Pharmacol** 1995 Dec; 47(12A):990–3

PHYSIOLOGY

Changes in Fos–like immunoreactivity evoked by maturation of the sneeze reflex triggered by nasal air puff stimulation in kittens. Masmoudi K, et al. **Brain Res** 1997 May 16; 757(1):102–10

SNORING

Snoring and breathing pauses during sleep: telephone interview survey of a United Kingdom population sample [see comments] Ohayon MM, et al. **BMJ** 1997 Mar 22; 314(7084):860–3. Comment in: BMJ 1997 Mar 22;314(7084):839–40.

Snoring and arousals: a retrospective analysis. Hoffstein V, et al. **Sleep** 1995 Dec;18(10):866–72

From snoring to sleep apnea syndrome: therapeutic approach [editorial] Lévy P, et al. **Sleep** 1996 Nov;19(9 Suppl):S55–6

[Snoring] Miljeteig H. **Tidsskr Nor Laegeforen** 1997 Mar 10; 117(7):922 **(Nor)**

CHEMICALLY INDUCED

Effect of bedtime alcohol on inspiratory resistance and respiratory drive in snoring and nonsnoring men. Dawson A, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):183–90

COMPLICATIONS

Short–term variability of blood pressure during sleep in snorers with or without apnea. Leroy M, et al. **Hypertension** 1996 Dec;28(6):937–43

Habitual snoring, sleep apnoea, and stroke prevention [letter; comment] Bassetti C. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):303. Comment on: J Neurol Neurosurg Psychiatry 1996 Oct;61(4):333–8.

Symptoms related to snoring and sleep apnoea in subjects with chronic bronchitis: report from the Obstructive Lung Disease in Northern Sweden Study. Larsson LG, et al. **Respir Med** 1997 Jan;91(1):5–12

Is snoring dangerous to your health? Hoffstein V. **Sleep** 1996 Jul;19(6):506–16 (34 ref.)

Management of simple snoring, upper airway resistance syndrome, and moderate sleep apnea syndrome. Lévy P, et al. **Sleep** 1996 Nov;19(9 Suppl):S101–10 (80 ref.)

A reversible uvulopalatal flap for snoring and sleep apnea syndrome. Powell N, et al. **Sleep** 1996 Sep;19(7):593–9

[Is snoring a health risk?] Ylikoski J. **Duodecim** 1995; 111(12):1129–30 **(Fin)**

[Is it possible to predict nocturnal hypoxemia in snorers?] Grebstad JA, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10; 117(7):923–6 (Eng. Abstr.) **(Nor)**

DIAGNOSIS

Snoring children: factors predicting sleep apnea. Nieminen P, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:190–4

Peculiar snoring in patients with multiple system atrophy: its sound source, acoustic characteristics, and diagnostic significance. Kakitsuba N, et al. **Ann Otol Rhinol Laryngol** 1997 May;106(5):380–4

Evaluation of an auto–nCPAP device based on snoring detection. Lofaso F, et al. **Eur Respir J** 1996 Sep; 9(9):1795–800

Adults who snore. Lindblom SS. **Postgrad Med** 1997 Jun; 101(6):171–2, 174, 183–4 passim

Comparing perceptions and measurements of snoring. Hoffstein V, et al. **Sleep** 1996 Dec;19(10):783–9

EPIDEMIOLOGY

Snoring and atherosclerotic manifestations in a 70–year–old population. Jennum P, et al. **Eur J Epidemiol** 1996 Jun; 12(3):285–90

A survey of habitual snoring in centenarians. Shiomi T, et al. **J Am Geriatr Soc** 1997 Jan;45(1):84–6

Headache, snoring and sleep apnoea. Ulfberg J, et al. **J Neurol** 1996 Sep;243(9):621–5

Prevalence and correlates of snoring and observed apneas in 5,201 older adults [see comments] Enright PL, et al. **Sleep** 1996 Sep;19(7):531–8. Comment in: Sleep 1996 Sep;19(7):529–30.

Snoring. The not so silent partner. McGehee RF Jr, et al. **Va Med Q** 1996 Fall;123(4):244–6, 250

ETIOLOGY

Limitation of vocal fold abduction only during sleep in a patient with Shy-Drager syndrome. Sadaoka T, et al. **Am J Otolaryngol** 1997 Mar-Apr;18(2):145-7

Peculiar snoring in patients with multiple system atrophy: its sound source, acoustic characteristics, and diagnostic significance. Kakitsuba N, et al. **Ann Otol Rhinol Laryngol** 1997 May;106(5):380-4

Is there a relationship between the degree of nasal obstruction and snoring? Jessen M, et al. **Clin Otolaryngol** 1993 Dec; 18(6):485-7

Snoring, apnea, and nasal resistance. Piché J, et al. **J Otolaryngol** 1996 Jun;25(3):150-4

Snoring as part of a dose-response relationship between sleep-disordered breathing and blood pressure. Young T, et al. **Sleep** 1996 Dec;19(10 Suppl):S202-5

IMMUNOLOGY

High prevalence of allergic sensitization in children with habitual snoring and obstructive sleep apnea. McColley SA, et al. **Chest** 1997 Jan;111(1):170-3

PATHOLOGY

Snoring and oral submucous fibrosis. Soni AK. **J Laryngol Otol** 1997 Apr;111(4):346-8

PHYSIOPATHOLOGY

Pulmonary function in obese snorers with or without sleep apnea syndrome. Zerah-Lancner F, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):522-7

Upper airway patency and nocturnal desaturation in habitual snoring and obstructive sleep apnea: pathogenesis of sleep-related breathing disorders. Boot H, et al. **Eur Neurol** 1996;36(4):206-10

Breathing pattern during sleep disruptive snoring. Bloch KE, et al. **Eur Respir J** 1997 Mar;10(3):576-86

Snoring: analysis, measurement, clinical implications and applications. Dalmasso F, et al. **Eur Respir J** 1996 Jan; 9(1):146-59 (92 ref.)

Acoustic analysis of snoring sound in patients with simple snoring and obstructive sleep apnoea. Fiz JA, et al. **Eur Respir J** 1996 Nov;9(11):2365-70

Relationship between body mass index, age and upper airway measurements in snorers and sleep apnoea patients. Mayer P, et al. **Eur Respir J** 1996 Sep;9(9):1801-9

Expiratory flow limitation during sleep in heavy snorers and obstructive sleep apnoea patients. Stănescu D, et al. **Eur Respir J** 1996 Oct;9(10):2116-21

Upper airway size and collapsibility in snorers: evaluation with digital fluoroscopy. Tsushima Y, et al. **Eur Respir J** 1996 Aug;9(8):1611-8

Effect of body position on tongue posture in awake patients with obstructive sleep apnoea. Miyamoto K, et al. **Thorax** 1997 Mar;52(3):255-9

[Respiratory disorders during sleep] Teculescu D, et al. **Rev Epidemiol Sante Publique** 1997 Mar;45(1):64-77 (114 ref.) (Eng. Abstr.) **(Fre)**

[Multiple sleep latency test in patients with obstructive snoring] Fietze I, et al. **Pneumologie** 1997 Aug;51 Suppl 3:706-11 (Eng. Abstr.) **(Ger)**

[Clinical significance of snoring] Bloch KE. **Schweiz Med Wochenschr** 1997 Feb 1;127(5):170-5 (28 ref.) (Eng. Abstr.) **(Ger)**

[Bernoulli's law is of current interest during snoring. Mechanisms make the air flow easier] Ulfberg J. **Lakartidningen** 1996 Oct 23;93(43):3780-2 **(Swe)**

PREVENTION & CONTROL

Improved nasal breathing reduces snoring and morning tiredness. A 6-month follow-up study. Löth S, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec; 122(12):1337-40

[Value of various intra- and extraoral therapeutic procedures for treatment of obstructive sleep apnea and snoring] Schönhofer B, et al. **Med Klin** 1997 Mar 15;92(3):167-74 (35 ref.) (Eng. Abstr.) **(Ger)**

[Is SnorEx also ApneaEx? A study with a new intra-oral prosthesis as a form of therapy of obstructive sleep apnea syndrome] Schönhofer B, et al. **Pneumologie** 1997 Aug;51 Suppl 3:804-8 (Eng. Abstr.) **(Ger)**

[Optical stimulation method (Snore-Stop) and tongue retainer (Snore-Master) without relevance in therapy of obstructive sleep apnea and snoring] Wenzel M, et al. **Pneumologie** 1997 Mar;51(3):326-9 (Eng. Abstr.) **(Ger)**

[Effectiveness of an anti-snoring prosthesis in obstructive sleep apnea syndrome] Winkels W, et al. **Pneumologie** 1997 Aug;51 Suppl 3:802-3 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Psychomotor and cognitive performance in nonapneic snorers: preliminary findings. Verstraeten E, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1211-22

REHABILITATION

Management of simple snoring, upper airway resistance syndrome, and moderate sleep apnea syndrome. Lévy P, et al. **Sleep** 1996 Nov;19(9 Suppl):S101-10 (80 ref.)

SURGERY

The effect of laser-uvulopalatopharyngoplasty on the nasal and nasopharyngeal volume measured with acoustic rhinometry. Antila J, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:202-5

Treatment of sleep apnea and snoring in children. Ishizuka Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:234-5

Snoring--a simple surgical solution. Myatt HM, et al. **Clin Otolaryngol** 1996 Oct;21(5):419-24

Comparison of the effectiveness of uvulopalatopharyngoplasty and laser palatoplasty for snoring. Shehab ZP, et al. **Clin Otolaryngol** 1997 Apr; 22(2):158-61

Influence of uvulopalatopharyngoplasty on alpha-EEG arousals in nonapnoeic snorers. Boudewyns A, et al. **Eur Respir J** 1997 Jan;10(1):129-32

The surgical treatment of snoring [letter; comment] Clarke RW, et al. **J Laryngol Otol** 1997 Jun;111(6):598. Comment on: J Laryngol Otol 1996 Dec;110(12):1103-4.

The surgical treatment of snoring [see comments] Harries PG, et al. **J Laryngol Otol** 1996 Dec;110(12):1103-4 (9 ref.) . Comment in: J Laryngol Otol 1997 Jun;111(6):598.

CO2 laser palatoplasty: early results. Ingrams DR, et al. **J Laryngol Otol** 1996 Aug;110(8):754-6

One-stage laser-assisted uvulopalatoplasty [see comments] Dickson RI, et al. **J Otolaryngol** 1996 Jun;25(3):155-61. Comment in: J Otolaryngol 1997 Apr;26(2):147-8.

One-stage laser-assisted uvulopalatoplasty [letter; comment] Finkelstein Y, et al. **J Otolaryngol** 1997 Apr;26(2):147-8. Comment on: J Otolaryngol 1996 Jun;25(3):155-61.

Patient evaluation of laser-assisted uvulopalatoplasty. Vukovic L, et al. **J Otolaryngol** 1996 Dec;25(6):404-7

Electrocautery versus carbon dioxide laser for uvulopalatoplasty in the treatment of snoring. Gnuechtel MM, et al. **Laryngoscope** 1997 Jul;107(7):848-54

Screening for obstructive sleep apnea in patients presenting for snoring surgery. Pradhan PS, et al. **Laryngoscope** 1996 Nov;106(11):1393-7

A cost-effective and rational surgical approach to patients with snoring, upper airway resistance syndrome, or obstructive sleep apnea syndrome. Utley DS, et al. **Laryngoscope** 1997 Jun;107(6):726-34

Objective assessment of snoring before and after laser-assisted uvulopalatoplasty. Walker RP, et al. **Laryngoscope** 1996 Nov;106(11):1372-7

Efficacy of laser-assisted uvulopalatoplasty. Lauretano AM, et al. **Lasers Surg Med** 1997;21(2):109-16

Laser-assisted uvulopalatoplasty: evaluation of postoperative discomfort and the effectiveness of this procedure. Schiebert LL, et al. **Lasers Surg Med** 1997;20(2):157-63

The role of laser assisted uvulopalatoplasty in snoring and sleep apnea. Rapp MF, et al. **Nebr Med J** 1996 Feb; 81(2):30-6

Laser-uvulopalatoplasty (LUPP) under local anesthesia: effective, safe and comfortable. Haraldsson PO, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Mar-Apr; 58(2):99-104

Laser-assisted uvulopalatoplasty for habitual snoring without sleep apnea: outcome and complications. Ikeda K, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jan-Feb; 59(1):45-9

Laser-assisted uvulopalatoplasty: description of the technique and pre- and postoperative evaluation of subjective symptoms. Skatvedt O. **ORL J Otorhinolaryngol Relat Spec** 1996 Sep-Oct; 58(5):243-7

Efficacy of cold-steel uvulopalatoplasty. Casiano RR, et al. **Otolaryngol Head Neck Surg** 1996 Nov;115(5):471-3

Outpatient uvuloplasty [letter] Ylikoski J. **Otolaryngol Head Neck Surg** 1996 Oct;115(4):373

Critical analysis of the results of surgery in the treatment of snoring, upper airway resistance syndrome (UARS), and obstructive sleep apnea (OSA). Pépin JL, et al. **Sleep** 1996 Nov;19(9 Suppl):S90-100 (92 ref.)

A reversible uvulopalatal flap for snoring and sleep apnea syndrome. Powell N, et al. **Sleep** 1996 Sep;19(7):593-9

[Surgical treatment of obstructive sleep apnea and snoring] Nishimura T. **Nippon Kyobu Shikkan Gakkai Zasshi** 1995 Dec;33 Suppl:71-5 (Eng. Abstr.) **(Jpn)**

[Treatment of chronic snoring with CO2 laser] Del Cañizo Alvarez A. **Acta Otorrinolaringol Esp** 1997 Mar;48(2):121-5 (Eng. Abstr.) **(Spa)**

THERAPY

Comparison of two dental devices for treatment of obstructive sleep apnea syndrome (OSAS). Hans MG, et al. **Am J Orthod Dentofacial Orthop** 1997 May; 111(5):562-70

Treatment of snoring and obstructive sleep apnoea by rapid maxillary expansion [letter] Palmisano RG, et al. **Aust N Z J Med** 1996 Jun;26(3):428-9

Cyclic alternating pattern sequences in non-apneic snorers with and without nasal dilation. Scharf MB, et al. **Ear Nose Throat J** 1996 Sep;75(9):617-9

Effects of electrical stimulation to the soft palate on snoring and obstructive sleep apnea. Schwartz RS, et al. **J Prosthet Dent** 1996 Sep;76(3):273-81

Long-term compliance with CPAP therapy in obstructive sleep apnea patients and in snorers. Krieger J, et al. **Sleep** 1996 Nov;19(9 Suppl):S136-43

Dental appliances in the treatment of snoring. A comparison between an activator, a soft-palate lifter, and a mouth-shield. Marklund M, et al. **Swed Dent J** 1996; 20(5):183-8

Magnetic therapy is ineffective for the treatment of snoring and obstructive sleep apnea syndrome [see comments] Dexter D Jr. **Wis Med J** 1997 Mar;96(3):35-7. Comment in: Wis Med J 1997 Mar;96(3):10-1.

Alternative medicine and snoring [editorial; comment] Leo G. **Wis Med J** 1997 Mar;96(3):10-1. Comment on: Wis Med J 1997 Mar;96(3):35-7.

SNOW

Slipping on ice and snow--elderly women and young men are typical victims. Björnstig U, et al. **Accid Anal Prev** 1997 Mar;29(2):211-5

An association between snowfall and ED presentation of cardiac arrest. Spitalnic SJ, et al. **Am J Emerg Med** 1996 Oct;14(6):572-3

Epidemic of accidental carbon monoxide poisonings caused by snow-obstructed exhaust systems. Rao R, et al. **Ann Emerg Med** 1997 Feb;29(2):290-2

Springtime peaks of trace metals in Antarctic snow. Ikegawa M, et al. **Environ Health Perspect** 1997 Jun;105(6):654-9

The effects of the severe snowstorm of 1996 in the New England community [letter] Lalikos JF, et al. **J Trauma** 1997 Feb;42(2):348

SNOWMOBILES see **OFF-ROAD MOTOR VEHICLES**

SNRNP see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

U1 SNRNP see **RIBONUCLEOPROTEINS, SMALL, U1**

U2 SNRNP see **RIBONUCLEOPROTEINS, SMALL, U2**

U3 SNRNP see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

U4 SNRNP see **RIBONUCLEOPROTEINS, SMALL, U4-U6**

U4-U6 SNRNP see **RIBONUCLEOPROTEINS, SMALL, U4-U6**

U5 SNRNP see **RIBONUCLEOPROTEINS, SMALL, U5**

U6 SNRNP see **RIBONUCLEOPROTEINS, SMALL, U4-U6**

U7 SNRNP see **RIBONUCLEOPROTEINS, SMALL NUCLEAR**

SNUFF see **TOBACCO, SMOKELESS**

SOAPS

A randomized trial of surgical scrubbing with a brush compared to antiseptic soap alone. Loeb MB, et al. **Am J Infect Control** 1997 Feb;25(1):11-5

The contribution of repellent soap to malaria control. Kroeger A, et al. **Am J Trop Med Hyg** 1997 May; 56(5):580-4

Soaps, shampoos, and detergents: a scientific soap opera. **Clin Dermatol** 1996 Jan-Feb;14(1):1-132

No time for handwashing!? Handwashing versus alcoholic rub: can we afford 100% compliance? Voss A, et al. **Infect Control Hosp Epidemiol** 1997 Mar;18(3):205-8

Hand washing with soap reduces diarrhoea and spread of bacterial pathogens in a Bangladesh village. Shahid NS, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):85-9

Distribution of bacteria on hands and the effectiveness of brief and thorough decontamination procedures using non-medicated soap. Chamberlain AN, et al. **Zentralbl Bakteriol** 1997 Apr;285(4):565-75

ADMINISTRATION & DOSAGE

Mineral waters: instead of soap or better than soap? Lotti TM, et al. **Clin Dermatol** 1996 Jan-Feb;14(1):101-4 (28 ref.)

ADVERSE EFFECTS

A model to assess the efficacy of moisturizers--the quantification of soap-induced xerosis by image analysis of adhesive-coated discs (D-Squames). Gammal CE, et al. **Clin Exp Dermatol** 1996 Sep;21(5):338-43

An outbreak of hand dermatitis among workers using sodium lauryl sulfate for skin cleansing. Dihoom M, et al. **Contact Dermatitis** 1996 May;34(5):366-7

CHEMISTRY

Determination of chromium and nickel in commercial foam bath products by ETA-AAS. Ciaralli L, et al. **Ann Ist Super Sanita** 1996;32(3):381-5

Molecular association of normal alkanoic acids with their thallium(I) salts: a new homologous series of fatty acid metal soaps. Fernández-García M, et al. **J Lipid Res** 1997 Feb;38(2):361-72

Effect of cleaning dentine with soap and pumice on shear bond strength of dentine-bonding agents. Bachmann M, et al. **J Oral Rehabil** 1997 Jun;24(6):433-8

SOAPS

HISTORY

Soaps: from the Phoenicians to the 20th century--a historical review. Routh HB, et al. **Clin Dermatol** 1996 Jan-Feb; 14(1):3-6

PHARMACOLOGY

A new model for assessing the damaging effects of soaps and surfactants on human stratum corneum. Shukuwa T, et al. **Acta Derm Venereol** 1997 Jan;77(1):29-34

Measurement of the skin-cleaning effects of soaps. Wolf R, et al. **Int J Dermatol** 1996 Aug;35(8):598-600

Disaggregation of corneocytes from surfactant-treated sheets of stratum corneum in hyperkeratosis on psoriasis, ichthyosis vulgaris and atopic dermatitis. Shukuwa T, et al. **J Dermatol** 1997 Jun;24(6):361-9

THERAPEUTIC USE

A comparative study of eyelid cleaning regimens in chronic blepharitis. Key JE. **CLAO J** 1996 Jul;22(3):209-12

Poison ivy/oak dermatitis. Part I: Prevention--soap and water, topical barriers, hyposensitization. Fisher AA. **Cutis** 1996 Jun;57(6):384-6 (13 ref.)

Soap and home care [letter] Arzt AH. **J Am Dent Assoc** 1997 Aug;128(8):1064

[Modeling of cutaneous radio-contamination: effects of washings by soap and by solutions of DTPA] Gerasimo P, et al. **Ann Pharm Fr** 1997;55(3):116-24 (Eng. Abstr.) **(Fre)**

SOCCER

Promotion of mouthguards among amateur football players in Victoria. Jolly KA, et al. **Aust N Z J Public Health** 1996 Dec;20(6):630-9

Not all those who died after Hillsborough did so by 3 15 pm [letter; comment] Walker E. **BMJ** 1997 Apr 26; 314(7089):1283. Comment on: BMJ 1997 Mar 22;314(7084):901-2.

Energy and macronutrient intakes of professional football (soccer) players. Maughan RJ. **Br J Sports Med** 1997 Mar; 31(1):45-7

The effect of carbohydrate ingestion on the motor skill proficiency of soccer players. Zeederberg C, et al. **Int J Sport Nutr** 1996 Dec;6(4):348-55

Unusual development of acute exertional compartment syndrome due to delayed diagnosis. A case report. Willy C, et al. **Int J Sports Med** 1996 Aug;17(6):458-61

Referee's ear [letter] Nigro PJ, et al. **J Occup Environ Med** 1996 Apr;38(4):329

Dynamic trunk strength of Canadian football players, soccer players, and middle to long distance runners. Williams CA, et al. **J Orthop Sports Phys Ther** 1997 Apr;25(4):271-6

Communications to the 3rd World Congress of Science and Football. Cardiff, Wales, 9-13 April 1995. Abstracts. **J Sports Sci** 1995 Dec;13(6):499-522

Analysis and modification of verbal coaching behaviour: the usefulness of a data-driven intervention strategy. More KG, et al. **J Sports Sci** 1996 Dec;14(6):523-43

Varicoceles in young soccer players [letter] Scaramuzza A, et al. **Lancet** 1996 Oct 26;348(9035):1180-1

Osteoarthritis of the knee in retired, elite Australian Rules footballers. Deacon A, et al. **Med J Aust** 1997 Feb 17; 166(4):187-90

Smoke-free soccer: US women take the lead [news] Forbes R. **Tob Control** 1996 Summer;5(2):105-6

INJURIES

Epidemiology of anterior cruciate ligament injuries in soccer. Bjordal JM, et al. **Am J Sports Med** 1997 May-Jun; 25(3):341-5

Acute and chronic brain injury in United States National Team Soccer Players [letter; comment] Jordan BD. **Am J Sports Med** 1996 Sep-Oct;24(5):704-5. Comment on: Am J Sports Med 1996 Mar-Apr;24(2):205-10.

Acute and chronic brain injury in United States National Team soccer players [see comments] [published erratum appears in Am J Sports Med 1996 Jul-Aug;24(4):563] Jordan SE, et al. **Am J Sports Med** 1996 Mar-Apr; 24(2):205-10. Comment in: Am J Sports Med 1996 Sep-Oct;24(5):704-5.

Chondral delamination of the knee in soccer players. Levy AS, et al. **Am J Sports Med** 1996 Sep-Oct;24(5):634-9

The footballer's fracture [published erratum appears in Br J Sports Med 1996 Sep;30(3):273] Cattermole HR, et al. **Br J Sports Med** 1996 Jun;30(2):171-5

Risk assessment in professional football: an examination of accidents and incidents in the 1994 World Cup finals. Hawkins RD, et al. **Br J Sports Med** 1996 Jun;30(2):165-70

Postural corrections after standardised perturbations of single limb stance: effect of training and orthotic devices in patients with ankle instability. Pintsaar A, et al. **Br J Sports Med** 1996 Jun;30(2):151-5

Bilateral locked posterior shoulder dislocation in a footballer. Ryan J, et al. **Br J Sports Med** 1997 Mar;31(1):74-5

Injury in rugby league: a four year prospective survey. Stephenson S, et al. **Br J Sports Med** 1996 Dec;30(4):331-4

Bucket-handle tear of the medial plica. Gerbino PG 2nd, et al. **Clin J Sport Med** 1996 Oct;6(4):265-8; discussion 268-9

Transverse stress fracture of the patella: a case report. Mata SG, et al. **Clin J Sport Med** 1996 Oct;6(4):259-61

Closed complete rupture of the flexor hallucis longus tendon at the groove of the talus. Inokuchi S, et al. **Foot Ankle Int** 1997 Jan;18(1):47-9 (10 ref.)

Scaphoid fractures in soccer goalkeepers. Green JR Jr, et al. **J Okla State Med Assoc** 1997 Feb;90(2):45-7

Injury to a soccer player. Monu JU, et al. **J South Orthop Assoc** 1994 Winter;3(4):303-5

Intracapsular chondroma [letter] Pope TL Jr. **J South Orthop Assoc** 1997 Summer;6(2):115

Sports injuries in footballers related to defects of posture and body mechanics. Watson AW. **J Sports Med Phys Fitness** 1995 Dec;35(4):289-94

Prevention of anterior cruciate ligament injuries in soccer. A prospective controlled study of proprioceptive training. Caraffa A, et al. **Knee Surg Sports Traumatol Arthrosc** 1996; 4(1):19-21

Brain lesions in players of contact sports [letter] Autti T, et al. **Lancet** 1997 Apr 19;349(9059):1144

Football injuries: tackling the damage. Crisp T. **Practitioner** 1995 Dec;239(1557):703-9 (3 ref.)

Escherichia vulneris in a Danish soccer wound. Jepsen CF, et al. **Scand J Infect Dis** 1997;29(3):313-4 (6 ref.)

Ultrasound in the diagnosis and treatment of iliopsoas tendinitis: a case report. Fredberg U, et al. **Scand J Med Sci Sports** 1995 Dec;5(6):369-70

Epidemiology and traumatology of injuries in elite soccer: a prospective study in Finland. Lüthje P, et al. **Scand J Med Sci Sports** 1996 Jun;6(3):180-5

Soccer injuries. II: Aetiology and prevention. Inklaar H. **Sports Med** 1994 Aug;18(2):81-93 (83 ref.)

Common soccer injuries. Diagnosis, treatment and rehabilitation. Tucker AM. **Sports Med** 1997 Jan; 23(1):21-32 (41 ref.)

[Apophyseolysis and avulsion fractures of the anterior inferior iliac spine. A case report] Bartl R, et al. **Unfallchirurgie** 1997 Apr;23(2):74-7 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Total and regional bone mass in female soccer players. Alfredson H, et al. **Calcif Tissue Int** 1996 Dec;59(6):438-42

Resting metabolic rate and energy intake in female gymnasts, figure-skaters and soccer players. Fogelholm GM, et al. **Int J Sports Med** 1995 Nov;16(8):551-6

Effects of hyperhydration on total body water, temperature regulation and performance of elite young soccer players in a warm climate. Rico-Sanz J, et al. **Int J Sports Med** 1996 Feb;17(2):85-91

Sports-specific adaptation of left ventricular muscle mass in athlete's heart. II: An echocardiographic study with 400-m runners and soccer players. Urhausen A, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S152-6

Lipoprotein profile, diet and body composition in athletes practicing mixed an anaerobic activities. Giada F, et al. **J Sports Med Phys Fitness** 1996 Sep;36(3):211-6

Peak torque of quadriceps and hamstring muscles in basketball and soccer players of different divisions. Zakas A, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):199-205

Energetics of high-intensity exercise (soccer) with particular reference to fatigue. Reilly T. **J Sports Sci** 1997 Jun; 15(3):257-63

Omega-3 fatty acid supplementation does not improve maximal aerobic power, anaerobic threshold and running performance in well-trained soccer players. Raastad T, et al. **Scand J Med Sci Sports** 1997 Feb;7(1):25-31

[Is autonomic control of the heart rate at rest altered by detraining? A study of heart rate variability in professional soccer players after the pretraining period and after the preparatory period for competitions] Rebelo AN, et al. **Rev Port Cardiol** 1997 Jun;16(6):535-41, 508 (Eng. Abstr.) **(Por)**

PSYCHOLOGY

Dynamic-system analysis of opponent relationships in collective actions in soccer. Gréhaigne JF, et al. **J Sports Sci** 1997 Apr;15(2):137-49 (26 ref.)

Home field advantage: does anxiety contribute? Duffy LJ, et al. **Percept Mot Skills** 1997 Feb;84(1):283-6

STANDARDS

Dynamic-system analysis of opponent relationships in collective actions in soccer. Gréhaigne JF, et al. **J Sports Sci** 1997 Apr;15(2):137-49 (26 ref.)

SOCIAL ACCOUNTABILITY see **SOCIAL RESPONSIBILITY**

SOCIAL ADJUSTMENT

Premorbid adjustment as predictor of outcome in schizophrenia: results of a prospective study. Bailer J, et al. **Acta Psychiatr Scand** 1996 May;93(5):368-77

The Nithsdale Schizophrenia Surveys. XV. Social adjustment in schizophrenia: associations with gender, symptoms and childhood antecedents. MacEwan TH, et al. **Acta Psychiatr Scand** 1997 Mar;95(3):254-8

Psychosocial functioning in adolescent psychiatric patients: a prospective study on changes in psychosocial functioning among severely and moderately impaired adolescent out-patients. Pelkonen M, et al. **Acta Psychiatr Scand** 1997 Sep;96(3):217-24

Parent, teacher and self-reports as predictors of signs of disturbance in adolescents: whose information carries the most weight? Verhulst FC, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):75-81

Ten-year time trends of psychopathology in Dutch children and adolescents: no evidence for strong trends. Verhulst FC, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):7-13

Factors predicting psychosocial recovery in psychiatric patients. Viinamäki H, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):365-71

Confirmatory and disconfirmatory family communication as predictor of offspring socio-emotional functioning. A 10 to 14 year follow-up of children at risk. Wichstrom L, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):49-56

A prospective 1-5 year outcome study in first-admitted and readmitted schizophrenic patients; relationship to heredity, premorbid adjustment, duration of disease and education level at index admission and neuroleptic treatment. Wieselgren IM, et al. **Acta Psychiatr Scand** 1996 Jan; 93(1):9-19

Are psychosocial factors related to smoking in grade-6 students? Pederson LL, et al. **Addict Behav** 1997 Mar-Apr; 22(2):169-81

Social competence in opiate-addicted individuals: gender differences, relationship to psychiatric diagnoses, and treatment response. Rutherford MJ, et al. **Addict Behav** 1997 May-Jun;22(3):419-25

Neuropsychological function and psychosocial status of alcohol rehabilitation program residents. Zlotnick C, et al. **Addict Behav** 1997 Mar-Apr;22(2):183-94

Understanding relapse in the broader context of post-treatment functioning. Connors GJ, et al. **Addiction** 1996 Dec;91 Suppl:S173-89

Substance abuse and homelessness: social selection or social adaptation? Johnson TP, et al. **Addiction** 1997 Apr; 92(4):437-45

An empirical investigation of the construct of personality authority in late adolescent women and their level of college adjustment. Protinsky H, et al. **Adolescence** 1996 Summer;31(122):291-5

Psychosocial problem assessment and end-stage renal disease patient outcomes. Vourlekis BS, et al. **Adv Ren Replace Ther** 1997 Apr;4(2):136-44 (18 ref.)

Empowerment theory, research, and application. Perkins DD, et al. **Am J Community Psychol** 1995 Oct;23(5):569-79 (14 ref.)

Relation of social network characteristics to 5-year mortality among young-old versus old-old white women in an urban community. Yasuda N, et al. **Am J Epidemiol** 1997 Mar 15;145(6):516-23

Psychosocial predictors of mental health in a population of elderly women. Test of an explanatory model. Bienenfeld D, et al. **Am J Geriatr Psychiatry** 1997 Winter;5(1):43-53

Beliefs about social integration from the perspectives of persons with mental retardation, job coaches, and employers. Chadsey-Rusch J, et al. **Am J Ment Retard** 1997 Jul;102(1):1-12

Is repression adaptive? Relationships to socioemotional adjustment, academic performance, and self-image. Bybee J, et al. **Am J Orthopsychiatry** 1997 Jan;67(1):59-69

Correlations of premorbid adjustment in schizophrenia with auditory event-related potential and neuropsychological abnormalities. Levitt JJ, et al. **Am J Psychiatry** 1996 Oct; 153(10):1347-9

Serum lithium levels and psychosocial function in patients with bipolar I disorder. Solomon DA, et al. **Am J Psychiatry** 1996 Oct;153(10):1301-7

Vagal reactivity and affective adjustment in infants. Convergent response systems. Bazhenova OV, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:469-71

Evidence for social phobia and other psychiatric disorders in adults who were growth hormone deficient during childhood. Stabler B, et al. **Anxiety** 1996;2(2):86-9

Adjustment of women with systemic lupus erythematosus. Failla S, et al. **Appl Nurs Res** 1996 May;9(2):87-93

Bowel function, mental health, and psychosocial function in adolescents with Hirschsprung's disease. Diseth TH, et al. **Arch Dis Child** 1997 Feb;76(2):100-6

The influence of expressed emotion, family dynamics, and symptom type on the social adjustment of schizophrenic young adults. King S, et al. **Arch Gen Psychiatry** 1996 Dec; 53(12):1098-104

Treating depressed primary care patients improves their physical, mental, and social functioning. Coulehan JL, et al. **Arch Intern Med** 1997 May 26;157(10):1113-20

Adjustment after spinal cord injury: a 9-year longitudinal study. Krause JS. **Arch Phys Med Rehabil** 1997 Jun; 78(6):651-7

Sense of belonging and indicators of social and psychological functioning. Hagerty BM, et al. **Arch Psychiatr Nurs** 1996 Aug;10(4):235-44

Physical attractiveness in schizophrenia. The mediating role of social skill. Penn DL, et al. **Behav Modif** 1997 Jan; 21(1):78-85

Psychosocial adjustment of children and adults with port wine stains. van der Horst CM, et al. **Br J Plast Surg** 1997 Sep;50(6):463-7

Patients with traumatic brain injury referred to a rehabilitation and re-employment programme: social and professional outcome for 508 Finnish patients 5 or more years after injury. Asikainen I, et al. **Brain Inj** 1996 Dec; 10(12):883-99

Recovery and rehabilitation following traumatic brain injury. Dombovy ML, et al. **Brain Inj** 1997 May;11(5):305–18
Resilience in highly stressed urban children: concepts and findings. Cowen EL, et al. **Bull N Y Acad Med** 1996 Winter; 73(2):267–84 (46 ref.)
Freud, Prozac, and the human condition [letter] Khouzam HR. **Can J Psychiatry** 1996 Apr;41(3):195
Causal attributions, coping strategies, and adjustment to breast cancer. Lavery JF, et al. **Cancer Nurs** 1996 Feb; 19(1):20–8
A quality of life instrument for adolescents with chronic headache. Langeveld JH, et al. **Cephalalgia** 1996 May; 16(3):183–96; discussion 137
The socioemotional development of orphans in orphanages and traditional foster care in Iraqi Kurdistan. Ahmad A, et al. **Child Abuse Negl** 1996 Dec;20(12):1161–73
Perceptions of abuse: effects on adult psychological and social adjustment. Varia R, et al. **Child Abuse Negl** 1996 Jun;20(6):511–26
Reciprocal negative affect in parent–child interactions and children's peer competency. Carson JL, et al. **Child Dev** 1996 Oct;67(5):2217–26
The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. Crick NR. **Child Dev** 1996 Oct; 67(5):2317–27
Parents' reactions to children's negative emotions: relations to children's social competence and comforting behavior. Eisenberg N, et al. **Child Dev** 1996 Oct;67(5):2227–47
The relations of regulation and emotionality to resiliency and competent social functioning in elementary school children. Eisenberg N, et al. **Child Dev** 1997 Apr;68(2):295–311
Reciprocal influences among adrenocortical activation, psychosocial processes, and the behavioral adjustment of clinic-referred children. Granger DA, et al. **Child Dev** 1996 Dec;67(6):3250–62
Peer victimization: cause or consequence of school maladjustment? Kochenderfer BJ, et al. **Child Dev** 1996 Aug;67(4):1305–17
Mothers' social coaching, mother–child relationship style, and children's peer competence: is the medium the message? Mize J, et al. **Child Dev** 1997 Apr;68(2):312–32
The internal working model of the self, attachment, and competence in five-year-olds. Verschueren K, et al. **Child Dev** 1996 Oct;67(5):2493–511
The relationship between parenting types and older adolescents' personality, academic achievement, adjustment, and substance use. Weiss LH, et al. **Child Dev** 1996 Oct;67(5):2101–14
Adult functioning of children who lived in kin versus nonrelative family foster homes. Benedict MI, et al. **Child Welfare** 1996 Sep–Oct;75(5):529–49
The effect of treatment variables on mood and social adjustment in adult patients with pituitary disease. Peace KA, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):445–50
Gender differences in psychosocial adjustment to chronic pain and expenditures for health care services used. Weir R, et al. **Clin J Pain** 1996 Dec;12(4):277–90
Life expectancy and social adaptation in individuals with Down syndrome with and without surgery for congenital heart disease. Hijii T, et al. **Clin Pediatr (Phila)** 1997 Jun; 36(6):327–32
Comparison of postal version of the Frenchay Activities Index with interviewer-administered version for use in people with stroke. Carter J, et al. **Clin Rehabil** 1997 May; 11(2):131–8
Rural–urban differences in psychiatric status and functioning among clients with severe mental illness. Dottl SL, et al. **Community Ment Health J** 1997 Aug;33(4):311–21
School phobia with separation anxiety disorder: a comparative 20- to 29-year follow-up study of 35 school refusers. Flakierska-Praquin N, et al. **Compr Psychiatry** 1997 Jan–Feb;38(1):17–22
Attention deficit hyperactivity disorder adults: comorbidities and adaptive impairments. Murphy K, et al. **Compr Psychiatry** 1996 Nov–Dec;37(6):393–401
Peer experiences and social self-perceptions: a sequential model. Boivin M, et al. **Dev Psychol** 1997 Jan;33(1):135–45
Relation between academic achievement and social adjustment: evidence from Chinese children. Chen X, et al. **Dev Psychol** 1997 May;33(3):518–25
Engagement in gender normative versus nonnormative forms of aggression: links to social-psychological adjustment. Crick NR. **Dev Psychol** 1997 Jul;33(4):610–7
Roles of temperamental arousal and gender-segregated play in young children's social adjustment. Fabes RA, et al. **Dev Psychol** 1997 Jul;33(4):693–702
Relational aggression, gender, and peer acceptance: invariance across culture, stability over time, and concordance among informants. Tomada G, et al. **Dev Psychol** 1997 Jul;33(4):601–9
Continuity and change in children's social maladjustment: a developmental behavior genetic study. van den Oord EJ, et al. **Dev Psychol** 1997 Mar;33(2):319–32
A positive view of self: risk or protection for aggressive children? Hughes JN, et al. **Dev Psychopathol** 1997 Winter; 9(1):75–94
Discourse processes underlying social competence in children with language learning disabilities. Vallance DD, et al. **Dev Psychopathol** 1997 Winter;9(1):95–108
Psychological adjustment to IDDM: 10-year follow-up of an onset cohort of child and adolescent patients. Jacobson AM, et al. **Diabetes Care** 1997 May;20(5):811–8
Weightings of items on the Code-Müller Protocols: the effects of clinical experience of aphasia therapy. Herrmann M, et al. **Disabil Rehabil** 1996 Oct;18(10):509–14
Social adjustment and rehabilitation in international competitors with spinal injuries sustained in military service. Lovell ME, et al. **Disabil Rehabil** 1997 Mar; 19(3):92–6
Social adjustment and competence 35 years after onset of childhood epilepsy: a prospective controlled study. Jalava M, et al. **Epilepsia** 1997 Jun;38(6):708–15
The relationship between early school problems and severe psychosocial problems up to 18 years of age. Sundelin C, et al. **Eur Child Adolesc Psychiatry** 1996;5 Suppl 1:64–6
Widening perspectives: quality of life as a measure of outcome in the treatment of patients with cancers of the head and neck. Morris J. **Eur J Cancer B Oral Oncol** 1994 Jan;30B(1):29–31 (19 ref.)
Social integration, sexual behavior and fertility in patients with bladder exstrophy—a long-term follow up. Stein R, et al. **Eur J Pediatr** 1996 Aug;155(8):678–83
Psychosocial adjustment and the quality of the mother–child relationship at four months postpartum after conception by in vitro fertilization. McMahon CA, et al. **Fertil Steril** 1997 Sep;68(3):492–500
Long-term effects of early childhood programs on social outcomes and delinquency. Yoshikawa H. **Future Child** 1995 Winter;5(3):51–75 (83 ref.)
Psychosocial outcomes of breast-conserving surgery versus mastectomy: a meta-analytic review. Moyer A. **Health Psychol** 1997 May;16(3):284–98
Social dynamics and the cortisol response to immobilization stress of the African wild dog, Lycaon pictus. de Villiers MS, et al. **Horm Behav** 1997 Feb;31(1):3–14
The family metaphor applied to nursing home life. Nyström AE, et al. **Int J Nurs Stud** 1996 Jun;33(3):237–48
Psychic reality and psycho-social problems in children. Ornstein A. **Int J Psychoanal** 1996 Apr;77 (Pt 2):383–5
Acquired hearing loss: social and psychological issues and adjustment processes. Rutman D, et al. **Int J Rehabil Res** 1995 Dec;18(4):313–23
The biopsychosocial disease consequence model in rehabilitation: model development in the Finnish 'work hardening' programme for chronic pain. Talo S, et al. **Int J Rehabil Res** 1996 Jun;19(2):93–109 (35 ref.)
1995 IPA/Bayer Research Awards in Psychogeriatrics. Late-life consequences of affective spectrum disorder. Vaillant GE, et al. **Int Psychogeriatr** 1996 Spring;8(1):13–32
Social and psychological adjustment of Soviet-born and Israeli-born adolescents: the effect of the family. Slonim-Nevo V, et al. **Isr J Psychiatry Relat Sci** 1997; 34(2):128–38
The short-term consequences of early onset cannabis use. Fergusson DM, et al. **J Abnorm Child Psychol** 1996 Aug; 24(4):499–512
Combat exposure and adult psychosocial adjustment among U.S. Army veterans serving in Vietnam, 1965–1971. Barrett DH, et al. **J Abnorm Psychol** 1996 Nov;105(4):575–81
Dual diagnosis patients in the modified therapeutic community: does a criminal history hinder adjustment to treatment? Taylor SM, et al. **J Addict Dis** 1997;16(3):31–8
Functional status of the oldest-old in a home setting. Krach P, et al. **J Adv Nurs** 1996 Sep;24(3):456–64
Social-vocational adjustment in unipolar mood disorders: results of the DSM-IV field trial. Evans S, et al. **J Affect Disord** 1996 Jun 5;38(2–3):73–80
Psychosocial characteristics of adolescents with a past history of dysthymic disorder: comparison with adolescents with past histories of major depressive and non-affective disorders, and never mentally ill controls. Klein DN, et al. **J Affect Disord** 1997 Feb;42(2–3):127–35
Effects of Special Olympics International on social competence in persons with mental retardation. Dykens EM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Feb; 35(2):223–9
A prospective four-year follow-up study of children at risk for ADHD: psychiatric, neuropsychological, and psychosocial outcome. Faraone SV, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1449–59
Anxious children in adulthood: a prospective study of adjustment. Last CG, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):645–52
Child survivors of suicide: psychosocial characteristics. Pfeffer CR, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jan;36(1):65–74
Relationship of depressive, conduct, and comorbid disorders and social functioning in childhood. Renouf AG, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul; 36(7):998–1004
Is ADHD social disability really comorbidity? [letter; comment] Stein MA, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1570–1. Comment on: J Am Acad Child Adolesc Psychiatry 1996 May;35(5):571–8.
Psychosocial adjustment and educational outcome in adolescents with a childhood diagnosis of attention deficit disorder. Wilson JM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May; 35(5):579–87
Problems and awareness of support services among students at an urban Australian university. Schweitzer RD. **J Am Coll Health** 1996 Sep;45(2):73–7
The assessment of diabetes-related cognitive and social factors: the Multidimensional Diabetes Questionnaire. Talbot F, et al. **J Behav Med** 1997 Jun;20(3):291–312
Paget's disease of bone and quality of life. Gold DT, et al. **J Bone Miner Res** 1996 Dec;11(12):1897–904
Who chooses to undergo reconstructive surgery? Empirically confirming the subjectivity and social basis of body image. Pruzinsky T. **J Burn Care Rehabil** 1997 Jul–Aug; 18(4):372–4
Malaise scores in adulthood of children and young people who have been in care. Cheung SY, et al. **J Child Psychol Psychiatry** 1997 Jul;38(5):575–80
Child care quality and children's behavioral adjustment: a four-year longitudinal study. Deater-Deckard K, et al. **J Child Psychol Psychiatry** 1996 Nov;37(8):937–48
The Emanuel Miller Memorial Lecture 1995. Children's relationships: bridging the divide between cognitive and social development. Dunn J. **J Child Psychol Psychiatry** 1996 Jul;37(5):507–18
The impact of paternal alcoholism and maternal social position on boys' school adjustment, pubertal maturation and sexual behavior: a test of two competing hypotheses. Malo J, et al. **J Child Psychol Psychiatry** 1997 Feb; 38(2):187–97
The Teddy Bears' Picnic : four-year-old children's personal constructs in relation to behavioural problems and to teacher global concern. Mueller N. **J Child Psychol Psychiatry** 1996 May;37(4):381–9
Improvement in psychosocial adjustment for psychiatric patients after a 16-week life skills education program. Reddon JR, et al. **J Clin Psychol** 1996 Mar;52(2):169–72
Leisure motivation in relation to psychosocial adjustment and personality in young offender and high school samples. Reddon JR, et al. **J Clin Psychol** 1996 Nov;52(6):679–85
Hopelessness in a community population in Japan. Tanaka E, et al. **J Clin Psychol** 1996 Nov;52(6):609–15
Stress, maternal distress, and children's adjustment following immigration: the buffering role of social support. Short KH, et al. **J Consult Clin Psychol** 1997 Jun;65(3):494–503
Illness and the development of social competence. Parmelee AH Jr. **J Dev Behav Pediatr** 1997 Apr;18(2):120–4
Family environment and adolescent psychological well-being, school adjustment, and problem behavior: a pioneer study in a Chinese context. Shek DT. **J Genet Psychol** 1997 Mar;158(1):113–28
The retirement adjustment process: changes in the well-being of male retirees across time. Gall TL, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):P110–7
The intergenerational costs of parental social stressors: academic and social difficulties in early adolescence for children of young mothers. Menaghan EG, et al. **J Health Soc Behav** 1997 Mar;38(1):72–86
Lesbian coming out as a multidimensional process. Morris JF. **J Homosex** 1997;33(2):1–22 (42 ref.)
Intelligence and psychosocial adjustment in velocardiofacial syndrome: a study of 37 children and adolescents with VCFS. Swillen A, et al. **J Med Genet** 1997 Jun;34(6):453–8
Sojourner readjustment: mental health of international students after one year's foreign sojourn and its psychosocial correlates. Furukawa T. **J Nerv Ment Dis** 1997 Apr;185(4):263–8
Psychosocial outcome of young adults with epilepsy in childhood. Kokkonen J, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):265–8
Psychosocial functioning of children, adolescents, and adults following hypospadias surgery: a comparative study. Mureau MA, et al. **J Pediatr Psychol** 1997 Jun;22(3):371–87
Body image and psychosocial adjustment in adolescent cancer survivors. Pendley JS, et al. **J Pediatr Psychol** 1997 Feb;22(1):29–43
Somatic function, mental health, and psychosocial adjustment of adolescents with anorectal anomalies. Diseth TH, et al. **J Pediatr Surg** 1996 May;31(5):638–43
On the structure of social self-concept for pre-, early, and late adolescents: a test of the Shavelson, Hubner, and Stanton (1976) model. Byrne BM, et al. **J Pers Soc Psychol** 1996 Mar;70(3):599–613
Behavioral inhibition: stability and associations with adaptation from childhood to early adulthood. Gest SD. **J Pers Soc Psychol** 1997 Feb;72(2):467–75
Family history assessment of personality disorders: II. Association with measures of psychosocial functioning in direct evaluations with relatives. Lara ME, et al. **J Personal Disord** 1997 Summer;11(2):137–45
Rethinking race and attrition in nursing programs: a hermeneutic inquiry. Jordan JD. **J Prof Nurs** 1996 Nov–Dec;12(6):382–90
Quality of life and social integration of severely mentally ill patients: a longitudinal study. Tempier R, et al. **J Psychiatry Neurosci** 1997 Jul;22(4):249–55
The influence of a big brothers program on the adjustment of boys in single-parent families. Abbott DA, et al. **J Psychol** 1997 Mar;131(2):143–56
Assessing family differentiation: four areas of competence in mother–adolescent relationships. Theriault J. **J Psychol** 1997 Sep;131(5):565–8
Blending two realities into a unique perspective [interview by Shirley A. Smoyak] Deegan P. **J Psychosoc Nurs Ment Health Serv** 1996 Sep;34(9):39–46
Resilience in children with disabilities—transition to

adulthood [editorial] White PH. **J Rheumatol** 1996 Jun; 23(6):960–2
Acculturation mode, identity variation, and psychosocial adjustment. Damji T, et al. **J Soc Psychol** 1996 Aug; 136(4):493–500
Using cooperative learning to enhance the academic and social experiences of freshman student athletes. Dudley BS, et al. **J Soc Psychol** 1997 Aug;137(4):449–59
When walking fails [see comments] Iezzoni LI. **JAMA** 1996 Nov 20;276(19):1609–13. Comment in: JAMA 1997 Feb 5;277(5):373; discussion 373–4.
Nationwide study of health and coping among immigrant children and families [news] Lamberg L. **JAMA** 1996 Nov 13;276(18):1455–6
War–wounded refugees: the types of injury and influence of disability on well–being and social integration. Hermansson AC, et al. **Med Confl Surviv** 1996 Oct–Dec; 12(4):284–302
Life adjustment correlates of physical self–concepts. Sonstroem RJ, et al. **Med Sci Sports Exerc** 1996 May; 28(5):619–25
Social and educational resources for patients with Tourette syndrome. Packer LE. **Neurol Clin** 1997 May;15(2):457–73 (51 ref.)
Social stress induces high intensity sleep in rats. Meerlo P, et al. **Neurosci Lett** 1997 Mar 28;225(1):41–4
Neurological and psychosocial outcome 4 to 7 years after subarachnoid hemorrhage. Ogden JA, et al. **Neurosurgery** 1997 Jul;41(1):25–34
Predictors of psychosocial adjustment in patients with implantable cardioverter defibrillators. Burgess ES, et al. **Pacing Clin Electrophysiol** 1997 Jul;20(7):1790–5
Longitudinal examination of the behavioral, language, and social changes in a population of adolescents and young adults with autistic disorder. Ballaban–Gil K, et al. **Pediatr Neurol** 1996 Oct;15(3):217–23
Measures of language proficiency as predictors of behavioral difficulties, social and cognitive development in 2–year–old children. Carson DK, et al. **Percept Mot Skills** 1997 Jun; 84(3 Pt 1):923–30
Influences on fit between psychiatric patients' psychosocial needs and their hospital discharge plan. Cohen N, et al. **Psychiatr Serv** 1997 Apr;48(4):518–23
Community integration of former state hospital patients: outcomes of a policy shift in Vermont. Dewees M, et al. **Psychiatr Serv** 1996 Oct;47(10):1088–92
Assessing clinical outcomes: the community functioning of persons with serious mental illness. Dickerson FB. **Psychiatr Serv** 1997 Jul;48(7):897–902 (51 ref.)
Cultural distance and its relationship to psychological adjustment of international exchange students. Furukawa T. **Psychiatry Clin Neurosci** 1997 Jun;51(3):87–91
Eye–tracking performance and adaptive functioning over the short–term course of first–episode psychosis. Katsanis J, et al. **Psychiatry Res** 1996 Aug 30;64(1):19–26
Clinical and psychosocial predictors of recurrence in recovered bipolar and unipolar depressives: a one–year controlled prospective study. Staner L, et al. **Psychiatry Res** 1997 Mar 3;69(1):39–51
Negotiating the middle years: ego–resiliency and successful midlife adjustment in women. Klohnen EC, et al. **Psychol Aging** 1996 Sep;11(3):431–42
Mental illness in late life: socioeconomic conditions, psychiatric symptoms, and adjustment of long–term sufferers. Meeks S, et al. **Psychol Aging** 1997 Jun; 12(2):296–308
Pre–morbid asociality in neuroleptic–resistant and neuroleptic–responsive schizophrenia. Findling RL, et al. **Psychol Med** 1996 Sep;26(5):1033–41
Comparison of differences in the association of social support and adjustment between Chinese and Japanese students in Japan: a research note. Jou YH, et al. **Psychol Rep** 1996 Aug;79(1):107–12
Clients' functioning and need for case management. Muzekari LH, et al. **Psychol Rep** 1997 Feb;80(1):203–8
Interpersonal deficits and time spent in exercise or active recreation. Pinto RM, et al. **Psychol Rep** 1996 Feb; 78(1):323–8
Weinberger adjustment typology and the five factor model of personality. Ramanaiah NV, et al. **Psychol Rep** 1996 Apr;78(2):432–4
Dimensionality of a scale of adjustment to unemployment. Sightler KW, et al. **Psychol Rep** 1996 Aug;79(1):19–23
Prospective evaluation of psychosocial adaptation to stoma surgery: the role of self–efficacy. Bekkers MJ, et al. **Psychosom Med** 1996 Mar–Apr;58(2):183–91
Coping and psychosocial adaptation: longitudinal effects over time and stages in breast cancer. Heim E, et al. **Psychosom Med** 1997 Jul–Aug;59(4):408–18
Relationship of psychiatric morbidity and psychosocial factors in organ transplant candidates. Chacko RC, et al. **Psychosomatics** 1996 Mar–Apr;37(2):100–7
Preinjury psychiatric illness and postinjury adjustment in adult burn survivors. Fauerbach JA, et al. **Psychosomatics** 1996 Nov–Dec;37(6):547–55
Psychosocial morbidity and adjustment to illness among long–term cancer survivors. A six–year follow–up study. Grassi L, et al. **Psychosomatics** 1996 Nov–Dec;37(6):523–32
Contributions of maternal identity and lifestyle to young children's adjustment. Preski S, et al. **Res Nurs Health** 1997 Apr;20(2):107–17
Family expectation, social adjustment and gender differences in a sample of schizophrenic patients. Shirakawa I, et al. **Rev Saude Publica** 1996 Jun;30(3):205–12
Hearing rehabilitation in a psychosocial framework. Stephens D. **Scand Audiol Suppl** 1996;43:57–66
Sober adolescence—predictor of psychosocial maladjustment in young adulthood? Pape H, et al. **Scand J Psychol** 1996 Dec;37(4):362–77
Children of psychosocial risk–mothers: life events, social interaction, and behaviour problems at the age of 8 years. Wadsby M, et al. **Scand J Soc Med** 1996 Dec;24(4):227–36
First person account: the end of two roads. **Schizophr Bull** 1997;23(1):163–4
Neuropsychological and psychophysiological correlates of psychosocial functioning in schizophrenia. Brekke JS, et al. **Schizophr Bull** 1997;23(1):19–28
Social–Adaptive Functioning Evaluation (SAFE): a rating scale for geriatric psychiatric patients. Harvey PD, et al. **Schizophr Bull** 1997;23(1):131–45
First–episode schizophrenia: II. Premorbid patterns by gender. Larsen TK, et al. **Schizophr Bull** 1996;22(2):257–69
Negative labelling of individuals with first episode schizophrenia: the effect of premorbid functioning. Bean G, et al. **Schizophr Res** 1996 Nov 15;22(2):111–8
Relationships between social competence, psychopathology and work performance and their predictive value for vocational rehabilitation of schizophrenic outpatients. Hoffmann H, et al. **Schizophr Res** 1997 Jan 17;23(1):69–79
What influences social skills in patients with schizophrenia? Preliminary study using the role play test, WAIS–R and event–related potential. Ikebuchi E, et al. **Schizophr Res** 1996 Nov 15;22(2):143–50
The social dysfunction index (SDI) for patients with schizophrenia and related disorders. Munroe–Blum H, et al. **Schizophr Res** 1996 May;20(1–2):211–9
Long–term follow–up of schizophrenia in 16 countries. A description of the International Study of Schizophrenia conducted by the World Health Organization. Sartorius N, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Sep; 31(5):249–58
Psychosocial study of epilepsy in Africa. Jilek–Aall L, et al. **Soc Sci Med** 1997 Sep;45(5):783–95
Coming–out issues for adult lesbians: a group intervention. Morrow DF. **Soc Work** 1996 Nov;41(6):647–56
Estimating social adjustment following spinal trauma—II: Population trends and effects of compensation on adjustment. Glass CA, et al. **Spinal Cord** 1997 Jun; 35(6):349–57
Estimating social adjustment following spinal trauma—I: Who is more realistic—patient or spouse? A statistical justification. Glass CA, et al. **Spinal Cord** 1997 May; 35(5):320–5
Effect of drug user treatment on psychosocial change: a comparison of in–treatment and out–of–treatment cocaine users. Bell DC, et al. **Subst Use Misuse** 1996 Jul; 31(9):1083–100
Personal and environmental factors in relation to adjustment of offspring of alcoholics. Chang JK, et al. **Subst Use Misuse** 1996 Aug;31(10):1401–12
Children and families can achieve normal psychological adjustment and a good quality of life following pediatric liver transplantation: a long–term study. Stone RD, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1571–2
[Psychosocial adjustment of unipolar and bipolar patients] Escande M, et al. **Encephale** 1995 Dec;21 Spec No 4:55–9 (29 ref.) **(Fre)**
[Rehabilitation of psychiatrically ill and handicapped patients—historical, conceptual and scientific aspects] Eikelmann B, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):72–8 (Eng. Abstr.) **(Ger)**
[Psychiatric handicap—precursor or social sequelae of schizophrenia?] Maurer K, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):79–85 (Eng. Abstr.) **(Ger)**
[Social rehabilitation in day care facilities for psychiatrically ill and handicapped patients—results of a concomitant study of a model program by the Rhine–Land District Group] Regus M, et al. **Gesundheitswesen** 1997 May; 59(5):307–14 (Eng. Abstr.) **(Ger)**
[Prevalence of psychiatric disorders and outcome of social integration of homeless men] Reker T, et al. **Gesundheitswesen** 1997 Feb;59(2):79–82 (Eng. Abstr.) **(Ger)**
[Medical, occupational, social rehabilitation of psychiatric patients in an organized systems] Schottky L. **Gesundheitswesen** 1996 Nov;58(11):611–5 (Eng. Abstr.) **(Ger)**
[Psychosocial aspects of ENT tumor surgery (comment)] Kiss A. **HNO** 1997 Jun;45(6):424. Comment on: HNO 1997 Jun;45(6):433–41. **(Ger)**
[Psychosocial aspects of ENT tumor surgery (excluding laryngectomy). 2: Analysis of empirical studies (see comments)] Kollbrunner J, et al. **HNO** 1997 Jun; 45(6):433–41 (0 ref.) (Eng. Abstr.). Comment in: HNO 1997 Jun;45(6):424. **(Ger)**
[Psychosocial aspects of mucoviscidosis/cystic fibrosis in adulthood] Ullrich G. **Pneumologie** 1996 Dec;50 Suppl 3:817–21 **(Ger)**
[Social integration of patients of a long–term institution] Mönking HS, et al. **Psychiatr Prax** 1997 Jan;24(1):32–6 (Eng. Abstr.) **(Ger)**
[The social status of schizophrenic patients during the course of 8 years catamnesis and significance of relatives for psychosocial integration] Mönking HS, et al. **Psychiatr Prax** 1996 Nov;23(6):282–4 (Eng. Abstr.) **(Ger)**
[Social psychiatry and social aspects of psychiatry—on the historical applications of the concepts] Priebe S, et al. **Psychiatr Prax** 1997 Jan;24(1):3–9 (Eng. Abstr.) **(Ger)**
[Social competence and ability to make decisions] Stähelin HB. **Ther Umsch** 1997 Jun;54(6):356–60 (Eng. Abstr.) **(Ger)**
[Functional, neuropsychological and social outcome of polytrauma patients with severe craniocerebral trauma] Lehmann U, et al. **Unfallchirurg** 1997 Jul;100(7):552–60 (Eng. Abstr.) **(Ger)**
[From early retirement to retirement—change and stability of the social status of East Germany early retirees] Ernst J. **Z Gerontol Geriatr** 1996 Sep–Oct;29(5):352–5 (Eng. Abstr.) **(Ger)**
[Indicators of social functioning and social participation in mentally ill participants in a public health rehabilitation programme: a one year follow–up study] Kitajima K, et al. **Nippon Koshu Eisei Zasshi** 1996 Feb;43(2):111–7 (Eng. Abstr.) **(Jpn)**
[A socio–relational basis of "irrational" cooperation: an experimental study with the selective–play paradigm] Hayashi N, et al. **Shinrigaku Kenkyu** 1997 Feb;67(6):444–51 (Eng. Abstr.) **(Jpn)**
[Family characteristics, organic risk factors, psychopathological picture and premorbid adjustment of hospitalized adolescent patients] Małkiewicz–Borkowska M, et al. **Psychiatr Pol** 1996 Nov–Dec;30(6):889–905 (Eng. Abstr.) **(Pol)**
[A model of the levels of functioning for psychiatric medicosocial expertise] Pkhidenko SV. **Lik Sprava** 1996 Jan–Feb;(1–2):95–7 (Eng. Abstr.) **(Rus)**
[Medico–social problems of young pregnant women] Agarkov NM, et al. **Probl Sotsialnoi Gig Istor Med** 1997 Jul–Aug;(4):18–21 (Eng. Abstr.) **(Rus)**
[Social problems of families having a child with infantile cerebral palsy] Khusnutdinova ZA, et al. **Probl Sotsialnoi Gig Istor Med** 1997 Jul–Aug;(4):14–8 (Eng. Abstr.) **(Rus)**
[The medical aspects of the rehabilitation of patients with congenital heart defects and the problems of their social integration into modern society] Gritsenko VV, et al. **Vestn Khir Im I I Grek** 1997;156(2):11–6 (Eng. Abstr.) **(Rus)**
[Social and medical aspects of multimodality therapy for lymphogranulomatosis in children] Susuleva NA, et al. **Vestn Ross Akad Med Nauk** 1996;(10):21–3 (Eng. Abstr.) **(Rus)**
[A method for the self–assessment of social adaptation in parkinsonism patients] Glozman ZhM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):35–9 (Eng. Abstr.) **(Rus)**
[The current aspects of the social and biological adaptation of epilepsy patients in Russia] Gromov SA, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(2):14–7 (Eng. Abstr.) **(Rus)**

SOCIAL ALIENATION

Perceived workplace harassment experiences and problem drinking among physicians: broadening the stress/alienation paradigm. Richman JA, et al. **Addiction** 1996 Mar;91(3):391–403
Reliability and validity of Palestinian Student Alienation Scale. Abdallah T. **Adolescence** 1997 Summer; 32(126):367–71
Alienation and imagination: the literature of exclusion. Willms JL. **Ann Intern Med** 1997 Jun 1;126(11):923
Mental disorder among refugees and the impact of persecution and exile: some findings from an out–patient population. Lavik NJ, et al. **Br J Psychiatry** 1996 Dec; 169(6):726–32
The consistency and concomitants of inhibition: some of the children, all of the time. Rubin KH, et al. **Child Dev** 1997 Jun;68(3):467–83
Community–based resilient peer treatment of withdrawn maltreated preschool children. Fantuzzo J, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1377–86
Public mental health. II: The psychological dimension. Curle A. **Med Confl Surviv** 1997 Jan–Mar;13(1):26–36 (3 ref.)

PSYCHOLOGY

A questionnaire for the measurement of paranoia/suspiciousness. Rawlings D, et al. **Br J Clin Psychol** 1996 Sep;35 (Pt 3):451–61

SOCIAL BEHAVIOR

Assessing medical students' perceptions of mistreatment in their second and third years. Richardson DA, et al. **Acad Med** 1997 Aug;72(8):728–30
Estimating blood alcohol level from observable signs. McKnight AJ, et al. **Accid Anal Prev** 1997 Mar; 29(2):247–55
Psychometric evaluation of the Situational Confidence Questionnaire in adolescents: fitting a graded item response model. Kirisci L, et al. **Addict Behav** 1996 May–Jun; 21(3):303–17
Social skills training for young adolescents: cognitive and performance components. Thompson KL, et al. **Adolescence** 1996 Fall;31(123):505–21

Reducing HIV incidence in developing countries with structural and environmental interventions. Sweat MD, et al. **AIDS** 1995;9 Suppl A:S251-7 (55 ref.)

A non'human primate model of type II alcoholism? Part 2. Diminished social competence and excessive aggression correlates with low cerebrospinal fluid 5-hydroxyindoleacetic acid concentrations. Higley JD, et al. **Alcohol Clin Exp Res** 1996 Jun;20(4):643-50

Psychological empowerment: issues and illustrations. Zimmerman MA. **Am J Community Psychol** 1995 Oct; 23(5):581-99 (51 ref.)

Mosaicism for the FMR1 gene influences adaptive skills development in fragile X-affected males. Cohen IL, et al. **Am J Med Genet** 1996 Aug 9;64(2):365-9

Validation and assessment of a conversational interaction intervention. Hughes C, et al. **Am J Ment Retard** 1996 Mar; 100(5):493-509

Comparison of socially accepted and rejected children with mental retardation. Siperstein GN, et al. **Am J Ment Retard** 1997 Jan;101(4):339-51

Interdependence of architectural features and program variables in community residences for people with mental retardation. Thompson T, et al. **Am J Ment Retard** 1996 Nov;101(3):315-27

The bully pulpit [editorial] Gould JS. **Am J Orthop** 1997 Mar;26(3):184

Gender-related factors affecting primate social behavior: grooming, rank, age, and kinship in heterosexual and all-male groups of stumptail macaques. Butovskaya ML, et al. **Am J Phys Anthropol** 1996 Sep;101(1):39-54

Affiliative relationships between adult males and immature group members in naturally occurring ringtailed lemurs (Lemur catta). Gould L. **Am J Phys Anthropol** 1997 Jun; 103(2):163-71

Social cues modulate free-running circadian activity rhythms in the diurnal rodent, Octodon degus. Goel N, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R797-804

The Evaluation of the Resolving Conflict Creatively Program: an overview. Aber JL, et al. **Am J Prev Med** 1996 Sep-Oct;12(5 Suppl):82-90

Longitudinal study of dominance relations among captive patas monkeys. Goldman EN, et al. **Am J Primatol** 1997; 42(1):41-51

Pair-rearing infant monkeys (Macaca nemestrina) using a "rotating-peer" strategy. Novak MF, et al. **Am J Primatol** 1997;41(2):141-9

Behavioral and social correlates of escape from suppression of ovulation in female common marmosets housed with the natal family. Saltzman W, et al. **Am J Primatol** 1997; 41(1):1-21

Styles of male social behavior and their endocrine correlates among low-ranking baboons. Virgin CE Jr, et al. **Am J Primatol** 1997;42(1):25-39

Transfer of tools and food between groups of tufted capuchins (Cebus apella). Westergaard GC, et al. **Am J Primatol** 1997;43(1):33-41

Social development in nursery-reared pigtailed macaques (Macaca nemestrina). Worlein JM, et al. **Am J Primatol** 1997;41(1):23-35

A neurobiological basis of social attachment. Insel TR. **Am J Psychiatry** 1997 Jun;154(6):726-35 (84 ref.)

The early use of alcohol and tobacco: its relation to children's competence and parents' behavior. Jackson C, et al. **Am J Public Health** 1997 Mar;87(3):359-64

Sex differences in social behavior. Are the social role and evolutionary explanations compatible? Archer J. **Am Psychol** 1996 Sep;51(9):909-17

Specific neuroendocrine mechanisms not involving generalized stress mediate social regulation of female reproduction in cooperatively breeding marmoset monkeys. Abbott DH, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:219-38 (106 ref.)

Circulating oxytocin in male guinea pigs affected by the female cohabitation and reproductive condition. Barth R, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:593-5

Prolactin and modulation of social processes in domestic chicks. Bekkedal MY, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:472-4

Communicative genes and the evolution of empathy. Selfish and social emotions as voices of selfish and social genes. Buck R, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:481-3

The integrative neurobiology of affiliation. Introduction. Carter CS, et al. **Ann N Y Acad Sci** 1997 Jan 15; 807:xiii-xviii

Integrative functions of lactational hormones in social behavior and stress management. Carter CS, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:164-74 (78 ref.)

Effects of prenatal stress on behavior in adolescent rhesus monkeys. Clarke AS, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:490-1

Species diversity and the evolution of behavioral controlling mechanisms. Crews D. **Ann N Y Acad Sci** 1997 Jan 15; 807:1-21 (64 ref.)

Social modulation of corticosteroid responses in male prairie voles. DeVries AC, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:494-7

Brain sexual dimorphism and sex differences in parental and other social behaviors. De Vries GJ, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:273-86 (89 ref.)

Conflict resolution and distress alleviation in monkeys and apes. de Wall FB, et al. **Ann N Y Acad Sci** 1997 Jan 15; 807:317-28 (57 ref.)

Exploratory behavior correlates with social organization and is responsive to peptide injections in prairie voles. Dharmadhikari A, et al. **Ann N Y Acad Sci** 1997 Jan 15; 807:610-2

Evolutionary perspectives on primate mating systems and behavior. Dixson AF. **Ann N Y Acad Sci** 1997 Jan 15; 807:42-61 (102 ref.)

The emergence of affiliative behavior in infant spotted hyenas (Crocuta crocuta). Drea CM, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:498-500

Neurohumoral brain dynamics of social group formation. Implications for autism. Freeman WJ. **Ann N Y Acad Sci** 1997 Jan 15;807:501-3

Innateness of communicative behaviors. Ginsburg BE, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:484-5

Social facilitation, affiliation, and dominance in the social life of spotted hyenas. Glickman SE, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:175-84

Social behavior in autism. Grossman JB, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:440-54 (120 ref.)

Molecular aspects of monogamy. Insel TR, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:302-16 (44 ref.)

Affiliation and neuropsychiatric disorders: the deficit syndrome of schizophrenia. Kirkpatrick B. **Ann N Y Acad Sci** 1997 Jan 15;807:455-68 (69 ref.)

Effects of serotonin depletion on the play of juvenile rats. Knutson B, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:475-7

Psychobiology of early social attachment in rhesus monkeys. Clinical implications. Kraemer GW. **Ann N Y Acad Sci** 1997 Jan 15;807:401-18 (34 ref.)

Social attachment, brain function, and aggression. Kraemer GW, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:121-35

Competition and chemical communication in wild groups of common marmosets (Callithrix jacchus). Lazaro-Perea C, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:534-7

Psychobiological consequences of social relationships. Levine S, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:210-8 (58 ref.)

Socioemotional behavior in adult rhesus monkeys after early versus late lesions of the medial temporal lobe. Málková L, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:538-40

Attachment relationships in New World primates. Mendoza SP, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:203-9 (24 ref.)

The affiliative vocal subsystem of squirrel monkeys. Newman JD, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:546-8

Intra- and extra-pair behavior and initial clutch success in captive zebra finch colonies. Oliva-Purdy J, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:549-51

Mice show strain differences in social affiliation. Implications for open field behavior. Pieper JO, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:552-5

Intraspecific variation and the presence of a father can influence the expression of monogamous and communal traits in prairie voles. Roberts RL, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:559-62

Perinatal hormone exposure alters the expression of selective affiliative preferences in prairie voles. Roberts RL, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:563-6

Escape from social suppression of sexual behavior and of ovulation in female common marmosets. Saltzman W, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:567-70

The role of contact calls in the social behavior of the budgerigar (Melopsittacus undulatus). Shea SD, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:571-3

Social stress, depression, and brain dopamine in female cynomolgus monkeys. Shively CA, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:574-7

Affiliative processes and vocal development. Snowdon CT. **Ann N Y Acad Sci** 1997 Jan 15;807:340-51 (36 ref.)

Sexually initiated affiliation facilitates rhesus monkey integration. Tannenbaum PL, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:578-82

Physiological and endocrine effects of social contact. Uvnäs-Moberg K. **Ann N Y Acad Sci** 1997 Jan 15; 807:146-63 (90 ref.)

Hormonal modulation of sexual behavior and affiliation in rhesus monkeys. Wallen K, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:185-202

Ecological constraints and the evolution of hormone-behavior interrelationships. Wingfield JC, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:22-41 (67 ref.)

Regulatory mechanisms of oxytocin-mediated sociosexual behavior. Witt DM. **Ann N Y Acad Sci** 1997 Jan 15; 807:287-301 (80 ref.)

The 5' flanking region of the monogamous prairie vole oxytocin receptor gene directs tissue-specific expression in transgenic mice. Young LJ, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:514-7

Non-random associations between fears, beliefs and behaviors among panic patients. Middleton H. **Anxiety** 1996;2(6):265-78

Primate displacement activities as an ethopharmacological model of anxiety. Schino G, et al. **Anxiety** 1996;2(4):186-91

Social rhythm in anxiety disorder patients. Shear MK, et al. **Anxiety** 1994;1(2):90-5

Spanking by parents and subsequent antisocial behavior of children [see comments] Straus MA, et al. **Arch Pediatr Adolesc Med** 1997 Aug;151(8):761-7. Comment in: Arch Pediatr Adolesc Med 1997 Aug;151(8):758-60.

Social and functional variables associated with urinary tract infections in persons with spinal cord injury. Liguori PA, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):156-60

A survey of social outcome in schizophrenia in Tasmania. Kirkby K, et al. **Aust N Z J Psychiatry** 1997 Jun; 31(3):405-10

CGP 36,742, an orally active GABAB receptor antagonist, facilitates memory in a social recognition test in rats. Mondadori C, et al. **Behav Brain Res** 1996 May; 77(1-2):227-9

Behavioral reactivity to social and nonsocial stimulations: a multivariate analysis of six inbred rat strains. Berton O, et al. **Behav Genet** 1997 Mar;27(2):155-66

Issues in the genetics of social behavior: revisited. Hahn ME, et al. **Behav Genet** 1996 Sep;26(5):463-70 (24 ref.)

Physical attractiveness in schizophrenia. The mediating role of social skill. Penn DL, et al. **Behav Modif** 1997 Jan; 21(1):78-85

D1 dopamine receptor mediation of social and nonsocial emotional reactivity in mice: effects of housing and strain difference in motor activity. Gendreau PL, et al. **Behav Neurosci** 1997 Apr;111(2):424-34

Executive function of the hippocampus in social behavior in the rat. Maaswinkel H, et al. **Behav Neurosci** 1997 Aug; 111(4):777-84

Determinants of primate social organization: comparative evidence and new insights from Malagasy lemurs. Kappeler PM. **Biol Rev Camb Philos Soc** 1997 Feb;72(1):111-51 (248 ref.)

The relationship between sociotropy/autonomy and patterns of symptomatology in the depressed elderly. Allen NB, et al. **Br J Clin Psychol** 1997 Feb;36 (Pt 1):121-32

Teachers' views on bullying: definitions, attitudes and ability to cope. Boulton MJ. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):223-33

Bully/victim problems and their association with Eysenck's personality dimensions in 8 to 13 year-olds. Mynard H, et al. **Br J Educ Psychol** 1997 Mar;67 (Pt 1):51-4

The impact of stalkers on their victims. Pathé M, et al. **Br J Psychiatry** 1997 Jan;170:12-7

Emotions are social. Parkinson B. **Br J Psychol** 1996 Nov; 87 (Pt 4):663-83 (86 ref.)

Early determinants of behaviour: evidence from primate studies. Suomi SJ. **Br Med Bull** 1997 Jan;53(1):170-84 (59 ref.)

Neonatal endotoxin exposure alters the development of social behavior and the hypothalamic-pituitary-adrenal axis in selectively bred mice. Granger DA, et al. **Brain Behav Immun** 1996 Sep;10(3):249-59

Psychosocial influences on immune responses to HSV-1 infection in BALB/c mice. Karp JD, et al. **Brain Behav Immun** 1997 Mar;11(1):47-62

Assessment of pragmatic communication skills in adolescents after traumatic brain injury. Turkstra LS, et al. **Brain Inj** 1996 May;10(5):329-45

Role of the central amygdala in social communication in Syrian hamsters (Mesocricetus auratus). Bamshad M, et al. **Brain Res** 1997 Jan 2;744(1):15-22

Long-term effects of chronic social stress on serotonergic indices in the prefrontal cortex of adult male cynomolgus macaques. Fontenot MB, et al. **Brain Res** 1995 Dec 24; 705(1-2):105-8

5-HT1A and benzodiazepine receptors in the basolateral amygdala modulate anxiety in the social interaction test, but not in the elevated plus-maze. Gonzalez LE, et al. **Brain Res** 1996 Sep 2;732(1-2):145-53

Dopamine D3 agonists disrupt social behavior in rats. Kagaya T, et al. **Brain Res** 1996 May 20;721(1-2):229-32

Histaminergic neurons facilitate social memory in rats. Prast H, et al. **Brain Res** 1996 Sep 23;734(1-2):316-8

Evaluation of children's social skills groups using self-report measures with children and parents [letter] McNamee JE, et al. **Can J Psychiatry** 1997 Aug;42(6):663-4

Effect of attitudes and subjective norms on intention to provide oral care to patients receiving antineoplastic chemotherapy. Wallace KG, et al. **Cancer Nurs** 1997 Feb; 20(1):34-41

Social interaction and sensorimotor gating abnormalities in mice lacking Dvl1. Lijam N, et al. **Cell** 1997 Sep 5; 90(5):895-905

The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. Crick NR. **Child Dev** 1996 Oct; 67(5):2317-27

Parents' reactions to children's negative emotions: relations to children's social competence and comforting behavior. Eisenberg N, et al. **Child Dev** 1996 Oct;67(5):2227-47

The relations of regulation and emotionality to resiliency and competent social functioning in elementary school children. Eisenberg N, et al. **Child Dev** 1997 Apr;68(2):295-311

Contemporaneous and longitudinal prediction of children's social functioning from regulation and emotionality. Eisenberg N, et al. **Child Dev** 1997 Aug;68(4):642-64

Social pretend play in Korean- and Anglo-American preschoolers. Farver JA, et al. **Child Dev** 1997 Jun; 68(3):544-56

Behavioral, affective, and social correlates of involvement in cross-sex friendship in elementary school. Kovacs DM, et al. **Child Dev** 1996 Oct;67(5):2269-86

Parents' use of inductive discipline: relations to children's empathy and prosocial behavior. Krevans J, et al. **Child Dev** 1996 Dec;67(6):3263-77

Mothers' social coaching, mother-child relationship style, and children's peer competence: is the medium the

message? Mize J, et al. **Child Dev** 1997 Apr;68(2):312–32
Infants' responses to facial and vocal emotional signals in a social referencing paradigm. Mumme DL, et al. **Child Dev** 1996 Dec;67(6):3219–37
The early socialization of aggressive victims of bullying. Schwartz D, et al. **Child Dev** 1997 Aug;68(4):665–75
Otitis media and the social behavior of day-care-attending children. Vernon-Feagans L, et al. **Child Dev** 1996 Aug; 67(4):1528–39
Social responsivity: judging signals of young children with and without developmental delays. Walden TA. **Child Dev** 1996 Oct;67(5):2074–85
The effects of depression and chronic pain on psychosocial and physical functioning. Holzberg AD, et al. **Clin J Pain** 1996 Jun;12(2):118–25
The origin and formulation of Chinese character: an introduction to confucianism and its influence on Chinese behavior patterns. Huang DD, et al. **Cult Divers Ment Health** 1996;2(1):35–42 (24 ref.)
Learning in social networks and contraceptive choice. Kohler HP. **Demography** 1997 Aug;34(3):369–83
Behavioral and physiological characteristics of Indian and Chinese-Indian hybrid rhesus macaque infants. Champoux M, et al. **Dev Psychobiol** 1997 Jul;31(1):49–63
Temperament, social competence, and adrenocortical activity in preschoolers. Gunnar MR, et al. **Dev Psychobiol** 1997 Jul;31(1):65–85
Social play with an unfamiliar group in weanling rats (Rattus norvegicus). Kahana A, et al. **Dev Psychobiol** 1997 Mar; 30(2):165–76
Infant regulation of the vagal "brake" predicts child behavior problems: a psychobiological model of social behavior. Porges SW, et al. **Dev Psychobiol** 1996 Dec;29(8):697–712
Potentiation and inhibition of ultrasonic vocalization of rat pups: regulation by social cues. Shair HN, et al. **Dev Psychobiol** 1997 Apr;30(3):195–200
Age and sex differences in dyadic and group interaction. Benenson JF, et al. **Dev Psychol** 1997 May;33(3):538–43
Relations among children's social goals, implicit personality theories, and responses to social failure. Erdley CA, et al. **Dev Psychol** 1997 Mar;33(2):263–72
A developmental investigation of social aggression among children. Galen BR, et al. **Dev Psychol** 1997 Jul; 33(4):589–600
Children's attachment representations: longitudinal relations to school behavior and academic competency in middle childhood and adolescence. Jacobsen T, et al. **Dev Psychol** 1997 Jul;33(4):703–10
Development and validation of a social functioning scale, the Social Adaptation Self-evaluation Scale. Bosc M, et al. **Eur Neuropsychopharmacol** 1997 Apr;7 Suppl 1:S57–70; discussion S71–3
Do noradrenaline and serotonin differentially affect social motivation and behaviour? Dubini A, et al. **Eur Neuropsychopharmacol** 1997 Apr;7 Suppl 1:S49–55; discussion S71–3
The output of the hippocampus is inhibited during social behavior in the male rat. Garritano J, et al. **Exp Brain Res** 1996 Sep;111(1):35–40
Effects of d-amphetamine on task performance and social behavior of humans in a residential laboratory. Ward AS, et al. **Exp Clin Psychopharmacol** 1997 May;5(2):130–6
Mothers in a wild group of moor macaques (Macaca maurus) are more attractive to other group members when holding their infants. Matsumura S. **Folia Primatol (Basel)** 1997; 68(2):77–85
Stability and change in personality across the life span: behavioral-genetic versus evolutionary approaches. Cipriani DC. **Genet Soc Gen Psychol Monogr** 1996 Feb; 122(1):55–74
The structure of empathy during middle childhood and its relationship to prosocial behavior. Litvack-Miller W, et al. **Genet Soc Gen Psychol Monogr** 1997 Aug;123(3):303–24
Social modulation of sex steroid concentrations in the urine of male cichlid fish Oreochromis mossambicus. Oliveira RF, et al. **Horm Behav** 1996 Mar;30(1):2–12
Gene targeting approaches to neuroendocrinology: oxytocin, maternal behavior, and affiliation. Young LJ, et al. **Horm Behav** 1997 Jun;31(3):221–31 (34 ref.)
Olfactory social memory in rats is facilitated by histamine. Argyriou A, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S39–40
Exploring factors of perceived social performance, health and personal control among retired seniors and seniors owning home-based businesses in non-metropolitan counties. Kean RC, et al. **Int J Aging Hum Dev** 1996; 43(4):297–315
Hepatitis A in a Chinese urban population: the spectrum of social and behavioural risk factors. Mäusezahl D, et al. **Int J Epidemiol** 1996 Dec;25(6):1271–9
The relationship between patient behaviour and environmental quality for the dementing. Bowie P, et al. **Int J Geriatr Psychiatry** 1997 Jul;12(7):718–23
Impact of information compression on intellectual activities in the brain. Eriksson JT. **Int J Neural Syst** 1996 Sep; 7(4):543–50 (14 ref.)
The Empirical Behavioral Pathology in Alzheimer's Disease (E-BEHAVE-AD) Rating Scale. Auer SR, et al. **Int Psychogeriatr** 1996 Summer;8(2):247–66
Role of autobiographical memory in social problem solving and depression. Goddard L, et al. **J Abnorm Psychol** 1996 Nov;105(4):609–16
People and places: behavioral settings and personal network characteristics as correlates of needle sharing. Latkin C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Nov 1;13(3):273–80
Imaginary companions in adolescence: sign of a deficient or positive development. Seiffge-Krenke I. **J Adolesc** 1997 Apr;20(2):137–54
The effects of peer ridicule on depression and self-image among adolescent females with Turner syndrome. Rickert VI, et al. **J Adolesc Health** 1996 Jul;19(1):34–8
Adolescents with physical disabilities: some psychosocial aspects of health. Stevens SE, et al. **J Adolesc Health** 1996 Aug;19(2):157–64
Toward a new psychometric definition of social disability in children with attention-deficit hyperactivity disorder [see comments] Greene RW, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May;35(5):571–8 . Comment in: J Am Acad Child Adolesc Psychiatry 1996 Dec;35(12):1570–1.
Language level and nonverbal social-communicative behaviors in autistic and language-delayed children. Lord C, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1542–50
Children with ADHD and tic disorder and their classmates: behavioral normalization with methylphenidate. Nolan EE, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May; 36(5):597–604
Delivery method and supplement consumption by grazing ruminants: a review. Bowman JG, et al. **J Anim Sci** 1997 Feb;75(2):543–50 (44 ref.)
Feeding and social behavior of fallow deer (Dama dama L.) under intensive pasture confinement. Mattiello S, et al. **J Anim Sci** 1997 Feb;75(2):339–47
Providing social contacts and objects for nibbling moderates reactivity and oral behaviors in veal calves. Veissier I, et al. **J Anim Sci** 1997 Feb;75(2):356–65
Social expectancies and self-perceptions in anxiety-disordered children. Chansky TE, et al. **J Anxiety Disord** 1997 Jul-Aug;11(4):347–63
Cultural factors in social anxiety: a comparison of social phobia symptoms and Taijin kyofusho. Kleinknecht RA, et al. **J Anxiety Disord** 1997 Mar-Apr;11(2):157–77
Multiple peer use of pivotal response training to increase social behaviors of classmates with autism: results from trained and untrained peers. Pierce K, et al. **J Appl Behav Anal** 1997 Spring;30(1):157–60
Trajectories and profiles of adaptive behavior in males with fragile X syndrome: multicenter studies. Dykens E, et al. **J Autism Dev Disord** 1996 Jun;26(3):287–301
Social initiations by autistic children to adults and other children. Hauck M, et al. **J Autism Dev Disord** 1995 Dec; 25(6):579–95
Benchmarks of social treatment for children with autism. McGee GG, et al. **J Autism Dev Disord** 1997 Aug; 27(4):353–64
Teaching preschool age autistic children to make spontaneous initiations to peers using priming. Zanolli K, et al. **J Autism Dev Disord** 1996 Aug;26(4):407–22
Social skills training in a case of obsessive-compulsive disorder with schizotypal personality disorder. Mckay D, et al. **J Behav Ther Exp Psychiatry** 1996 Jun;27(2):189–94
Long-term stability of individual differences in the emotional responsiveness of children with autism. Dissanayake C, et al. **J Child Psychol Psychiatry** 1996 May;37(4):461–7
Rating child psychiatric caseness from detailed case histories. Goodman R, et al. **J Child Psychol Psychiatry** 1996 May; 37(4):369–79
Treating people as objects, agents, or "subjects": how young children with and without autism make requests. Phillips W, et al. **J Child Psychol Psychiatry** 1995 Nov; 36(8):1383–98
Children with a pervasive developmental disorder, children with a language disorder and normally developing children in situations with high- and low-level involvement of the caregiver. Willemsen-Swinkels SH, et al. **J Child Psychol Psychiatry** 1997 Mar;38(3):327–36
Social problem solving in hyperactive-aggressive children: how and what they think in conditions of automatic and controlled processing. Bloomquist ML, et al. **J Clin Child Psychol** 1997 Jun;26(2):172–80
A model policy addressing mistreatment of medical students. Strong C, et al. **J Clin Ethics** 1996 Winter;7(4):341–6; discussion 347–8
Nonverbal support giving induces nonverbal support seeking in depressed patients. Geerts E, et al. **J Clin Psychol** 1997 Jan;53(1):35–9
Psychosocial characteristics of subtle and blatant racists as compared to tolerant individuals. Hightower E. **J Clin Psychol** 1997 Jun;53(4):369–74
Structural plasticity of identified glomeruli in the antennal lobes of the adult worker honey bee. Winnington AP, et al. **J Comp Neurol** 1996 Feb 12;365(3):479–90
Hearing in blind subterranean Zambian mole-rats (Cryptomys sp.): collective behavioural audiogram in a highly social rodent. Brückmann G, et al. **J Comp Physiol [A]** 1997 Jul;181(1):83–8
Factors influencing young chimpanzees' (Pan troglodytes) recognition of attention. Povinelli DJ, et al. **J Comp Psychol** 1996 Dec;110(4):336–45
Social referencing by young chimpanzees (Pan troglodytes). Russell CL, et al. **J Comp Psychol** 1997 Jun;111(2):185–93
Introduction to the special section on structural analysis of social behavior. Benjamin LS. **J Consult Clin Psychol** 1996 Dec;64(6):1203–12
Estimating individual influences of behavioral intentions: an application of random-effects modeling to the theory of reasoned action. Hedeker D, et al. **J Consult Clin Psychol** 1996 Feb;64(1):109–20
Structural analysis of social behavior as a common metric for programmatic psychopathology and psychotherapy research. Henry WP. **J Consult Clin Psychol** 1996 Dec; 64(6):1263–75
Articulating subtype differences in self and relational experience among alcoholic men using structural analysis of social behavior. Ichiyama MA, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1245–54
Attributions for child behavior in parents of children without behavior disorders and children with attention deficit-hyperactivity disorder. Johnston C, et al. **J Consult Clin Psychol** 1997 Aug;65(4):636–45
Relationship of social perceptions and self-concept in bulimia nervosa. Wonderlich S, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1231–7
Preadolescents' understanding of ethnic discrimination. Verkuyten M, et al. **J Genet Psychol** 1997 Mar; 158(1):97–112
Gift-giving among gay men: the reification of social relations. Rucker M, et al. **J Homosex** 1996;31(1-2):43–56
Social pressures have selected for an extended juvenile period in primates. Joffe TH. **J Hum Evol** 1997 Jun;32(6):593–605
Adult psychosocial outcome in early-treated phenylketonuria. Ris MD, et al. **J Inherit Metab Dis** 1997 Aug;20(4):499–508
Behavioural changes in people with learning disability and dementia: a descriptive study. Duggan L, et al. **J Intellect Disabil Res** 1996 Aug;40 (Pt 4):311–21
Expressive pragmatic skills in pre-school children with and without Down's syndrome: parental perceptions. Johnston F, et al. **J Intellect Disabil Res** 1997 Feb;41 (Pt 1):19–29
On the war of attrition and other games among kin. Mesterton-Gibbons M. **J Math Biol** 1996;34(3):253–60
The physiological and behavioral effects of radio music on singly housed baboons. Brent L, et al. **J Med Primatol** 1996 Oct;25(5):370–4
Is obsessive-compulsive disorder a pathology of the human disposition to perform socially meaningful rituals? Evidence of similar content. Fiske AP, et al. **J Nerv Ment Dis** 1997 Apr;185(4):211–22
Compression of the pituitary stalk elicits chronic increases in CSF vasopressin, oxytocin as well as in social investigation and aggressiveness. Haller J, et al. **J Neuroendocrinol** 1996 May;8(5):361–5
Non-obscene complex socially inappropriate behavior in Tourette's syndrome. Kurlan R, et al. **J Neuropsychiatry Clin Neurosci** 1996 Summer;8(3):311–7
Chronic social stress alters levels of corticotropin-releasing factor and arginine vasopressin mRNA in rat brain. Albeck DS, et al. **J Neurosci** 1997 Jun 15;17(12):4895–903
Children's attitudes and behavioral intentions toward a peer with Tourette syndrome. Friedrich S, et al. **J Pediatr Psychol** 1996 Jun;21(3):307–19
Brief report: preschoolers' social preferences for interacting with peers with physical differences. Nabors LA, et al. **J Pediatr Psychol** 1997 Feb;22(1):113–22
A clinician-friendly version of the interpersonal circumplex: structural analysis of social behavior (SASB). Benjamin LS. **J Pers Assess** 1996 Apr;66(2):248–66
Chronic and predispositional guilt: relations to mental health, prosocial behavior, and religiosity. Quiles ZN, et al. **J Pers Assess** 1997 Aug;69(1):104–26
Working models of attachment: implications for explanation, emotion and behavior. Collins NL. **J Pers Soc Psychol** 1996 Oct;71(4):810–32
Behavioral inhibition: stability and associations with adaptation from childhood to early adulthood. Gest SD. **J Pers Soc Psychol** 1997 Feb;72(2):467–75
Still participating after all these years: a study of life task participation in later life. Harlow RE, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1235–49
On the nature of self-monitoring: construct explication with Q-sort ratings. John OP, et al. **J Pers Soc Psychol** 1996 Oct;71(4):763–76
Objective standards are not enough: affective, self-evaluative, and behavioral responses to social comparison information. Klein WM. **J Pers Soc Psychol** 1997 Apr;72(4):763–74
In search of the powerful self-fulfilling prophecy. Madon S, et al. **J Pers Soc Psychol** 1997 Apr;72(4):791–809
Effects of communication, information overlap, and behavioral consistency on consensus in social perception. Malloy TE, et al. **J Pers Soc Psychol** 1997 Aug; 73(2):270–80
Failure to recognize the effect of implicit social influence on the presentation of self. Vorauer JD, et al. **J Pers Soc Psychol** 1997 Aug;73(2):281–95
Verbal abuse of staff nurses by physicians. Manderino MA, et al. **J Prof Nurs** 1997 Jan-Feb;13(1):48–55
Attachment and the representation of intimate relationships in adulthood. Morrison TL, et al. **J Psychol** 1997 Jan; 131(1):57–71
Frontal-subcortical circuits: the anatomic basis of executive, social and motivated behaviors. Masterman DL, et al. **J Psychopharmacol (Oxf)** 1997;11(2):107–14 (60 ref.)
'Talk to me' patient communication in a long-term care

facility. Morse JM, et al.
J Psychosoc Nurs Ment Health Serv 1997 May;35(5):34–9
Alexithymia, social support and health problems. Lumley MA, et al. **J Psychosom Res** 1996 Dec;41(6):519–30
Sociosexual behaviour and paternity in procarbazine–exposed rats with or without regional testicular circulatory isolation. Farr SA, et al. **J Reprod Fertil** 1997 May; 110(1):29–34
Social roles, social norms, and self–presentation in the quiz effect of Ross, Amabile, and Steinmetz. Gibbins K, et al. **J Soc Psychol** 1996 Oct;136(5):625–34
Cooperative learning and peer acceptance of students with learning disabilities. Putnam J, et al. **J Soc Psychol** 1996 Dec;136(6):741–52
Cooperativeness and bully/victim problems among Australian schoolchildren. Rigby K, et al.
J Soc Psychol 1997 Jun;137(3):357–68
Sociological and behavioural characteristics of perimenopausal women with an express attitude to hormone substitution therapy. Jensen LB, et al.
Maturitas 1996 Feb;23(1):73–83
Not everything is in the genes [editorial] **Nature** 1997 Jun 19;387(6635):743
The moral ape [letter] Dimijian GG. **Nature** 1997 Jan 2; 385(6611):12
The monkeys' defence alliance [news] Dunbar R. **Nature** 1997 Apr 10;386(6625):555, 557
Cooperative care of young in mammals. König B.
Naturwissenschaften 1997 Mar;84(3):95–104 (95 ref.)
Activation of 5–HT2B receptors in the medial amygdala causes anxiolysis in the social interaction test in the rat. Duxon MS, et al. **Neuropharmacology** 1997 Apr–May; 36(4–5):601–8
5–HT4 receptors improve social olfactory memory in the rat. Letty S, et al. **Neuropharmacology** 1997 Apr–May; 36(4–5):681–7
Vagotomy attenuates behavioural effects of interleukin–1 injected peripherally but not centrally. Bluthé RM, et al. **Neuroreport** 1996 Jun 17;7(9):1485–8
The neurobiology of social play behavior in rats. Vanderschuren LJ, et al. **Neurosci Biobehav Rev** 1997 May; 21(3):309–26 (276 ref.)
The effect of social learning on a conditioned avoidance response of rats treated prenatally with aluminum lactate. Gonda Z, et al. **Neurotoxicol Teratol** 1997 Jan–Feb; 19(1):59–63
Stress urinary incontinence due to a low–pressure urethra: a socially invalidizing disease. Meyer S, et al.
Neurourol Urodyn 1996;15(3):177–86
Greeting behaviour and psychogenic need: interviews on experiences of therapists, clergymen, and car salesmen. Aström J, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):939–56
Increasing social smiles of young children with disabilities. Calhoun ML, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1265–6
Influence of background music on preschoolers' behavior: a naturalistic approach. Godeli MR, et al.
Percept Mot Skills 1996 Jun;82(3 Pt 2):1123–9
A validity study of the social skills rating system–teacher version with disabled and nondisabled preschool children. Lyon MA, et al. **Percept Mot Skills** 1996 Aug;83(1):307–16
Facially impaired man versus chimpanzee: a within–primate differentiation effect. Wion F. **Percept Mot Skills** 1996 Oct; 83(2):691–700
Transient cerebral ischemia inhibits juvenile recognition in the Mongolian gerbil. Andersen MB, et al.
Pharmacol Biochem Behav 1997 Apr;56(4):719–25
Interactions of Ginkgo biloba extract (EGb 761), diazepam and ethyl beta–carboline–3–carboxylate on social behavior of the rat. Chermat R, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):333–9
Behavioural effects in mice of subchronic buspirone, ondansetron and tianeptine. I. Social interactions. Cutler MG, et al. **Pharmacol Biochem Behav** 1997 Feb; 56(2):287–93
Behavioural effects in mice of subchronic chlordiazepoxide, maprotiline, and fluvoxamine. I. Social interactions. Cutler MG, et al. **Pharmacol Biochem Behav** 1997 May–Jun; 57(1–2):119–25
Prenatal exposure to morphine affects juvenile play behavior and adult social behavior in rats. Hol T, et al.
Pharmacol Biochem Behav 1996 Dec;55(4):615–8
On mouse pups and their lactating dams: behavioral consequences of early exposure to oxazepam and interacting factors. Laviola G.
Pharmacol Biochem Behav 1996 Dec;55(4):459–74 (130 ref.)
Galantide improves social memory in rats. Arletti R, et al.
Pharmacol Res 1997 Apr;35(4):317–9
Emily post has surgery. Ashmore JD Jr. **Pharos** 1997 Winter; 60(1):35–6
Computers and social isolation [letter] Gravanis MB.
Pharos 1996 Summer;59(3):50
Prenatal protein malnutrition affects the social interactions of juvenile rats. Almeida SS, et al. **Physiol Behav** 1996 Jul; 60(1):197–201
Social behaviour in sheep relates to behaviour and neurotransmitter responses to nociceptive stimuli. Cook CJ, et al. **Physiol Behav** 1996 Sep;60(3):741–51
Sex differences and the development of social behavior in a marsupial, the gray short–tailed opossum (Monodelphis domestica). Fadem BH, et al. **Physiol Behav** 1997 Jun; 61(6):857–61
Social organization and aggression in a group of olfactory bulbectomized male mice. Liebenauer LL, et al.
Physiol Behav 1996 Aug;60(2):403–9
Roles of the basolateral amygdala and hippocampus in social recognition in rats. Maaswinkel H, et al. **Physiol Behav** 1996 Jul;60(1):55–63
Role of corticosterone in the behavioral effects of central interleukin–1 beta. Propes MJ, et al. **Physiol Behav** 1997 Jan;61(1):7–13
Defect in interleukin–1beta secretion prevents sickness behavior in C3H/HeJ mice. Segreti J, et al.
Physiol Behav 1997 Jun;61(6):873–8
Intermingling heavy and light strain chickens may cause social stress. Gvaryahu G, et al. **Poult Sci** 1996 Jul; 75(7):849–51
The effects of stress on social preferences are sexually dimorphic in prairie voles. DeVries AC, et al.
Proc Natl Acad Sci U S A 1996 Oct 15;93(21):11980–4
Reproductive suppression in subordinate, non–breeding female Damaraland mole–rats: two components to a lifetime of socially induced infertility. Bennett NC, et al. **Proc R Soc Lond B Biol Sci** 1996 Nov 22; 263(1376):1599–603
LH responses to single doses of exogenous GnRH by social Mashona mole–rats: a continuum of socially induced infertility in the family Bathyergidae. Bennett NC, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22;264(1384):1001–6
Genetic and behavioural evidence of monogamy in a mammal, Kirk's dik–dik (Madoqua kirkii). Brotherton PN, et al. **Proc R Soc Lond B Biol Sci** 1997 May 22; 264(1382):675–81
Dominance and queen succession in captive colonies of the eusocial naked mole–rat, Heterocephalus glaber. Clarke FM, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22; 264(1384):993–1000
Rehab rounds. Long–term support and social skills training for patients with schizophrenia. Dobson D.
Psychiatr Serv 1996 Nov;47(11):1195–6, 1199
Social and living skills of new long–stay hospital patients and new long–term community patients. Sood S, et al.
Psychiatr Serv 1996 Jun;47(6):619–22
A two–year follow–up on the effects of a smoking ban in an inpatient psychiatric service. Velasco J, et al.
Psychiatr Serv 1996 Aug;47(8):869–71
Social rhythm stability following late–life spousal bereavement: associations with depression and sleep impairment. Brown LF, et al. **Psychiatry Res** 1996 May 17;62(2):161–9
Prevalence of seasonal changes in mood and behavior during the winter months in central Texas. Hegde AL, et al.
Psychiatry Res 1996 Jun 1;62(3):265–71
Machiavellianism: a synthesis of the evolutionary and psychological literatures. Wilson DS, et al. **Psychol Bull** 1996 Mar;119(2):285–99 (152 ref.)
Effect of infants on adult social relations in the squirrel monkey (Saimiri Sciureus). Aruguete MS, et al.
Psychol Rep 1996 Oct;79(2):603–11
Social class and behavior: simultaneous class positions yield different amounts of income. Muntaner C, et al.
Psychol Rep 1996 Oct;79(2):379–82
Correlates of Portuguese college students' shyness and sociability. Neto F. **Psychol Rep** 1996 Feb;78(1):79–82
Central mediation of the effects of interleukin–1 on social exploration and body weight in mice. Bluthé RM, et al.
Psychoneuroendocrinology 1997 Jan;22(1):1–11
Social information processing in mild mentally retarded children. Gomez R, et al. **Res Dev Disabil** 1996 May–Jun; 17(3):217–27
The factor structure of the Reiss Screen for Maladaptive Behaviors in institutional and community populations. Sturmey P, et al. **Res Dev Disabil** 1996 Jul–Aug; 17(4):285–91
Activity during unemployment and mental health. Underlid K. **Scand J Psychol** 1996 Sep;37(3):269–81
Knowledge of HIV infection and the fear of mixing socially with HIV–infected and AIDS–sick patients among STD patients in Bergen, Norway. Tveit KS, et al.
Scand J Soc Med 1995 Dec;23(4):242–50
The relationship of social cognition to ward behavior in chronic schizophrenia. Penn DL, et al. **Schizophr Res** 1996 Jul 5;20(3):327–35
Human groups as units of selection. Wilson DS. **Science** 1997 Jun 20;276(5320):1816–7
Face and politeness in pharmacist–physician interaction. Lambert BL. **Soc Sci Med** 1996 Oct;43(8):1189–98
Social behavior and aggressive problems of cats. Crowell–Davis SL, et al.
Vet Clin North Am Small Anim Pract 1997 May; 27(3):549–68 (31 ref.)
Social dynamics and behavior problems in multiple–dog households. Juarbe–Díaz SV.
Vet Clin North Am Small Anim Pract 1997 May; 27(3):497–514 (11 ref.)
Puppy socialization classes. Seksel K.
Vet Clin North Am Small Anim Pract 1997 May; 27(3):465–77 (48 ref.)
Behavior problems of pet pigs. Tynes VV.
Vet Clin North Am Small Anim Pract 1997 May; 27(3):667–90 (35 ref.)
[Behavioral dimensions in elderly patients: factor structure of the Behavioral Observation Scale for Intramural Psychogeriatrics] de Jonghe JF, et al.
Tijdschr Gerontol Geriatr 1996 Aug;27(4):159–64 (Eng. Abstr.) **(Dut)**
[Social dominance and rank relationships in domestic pigs: a critical review] Puppe B.
Berl Munch Tierarztl Wochenschr 1996 Nov–Dec; 109(11–12):457–64 (91 ref.) (Eng. Abstr.) **(Ger)**
[Integration of young goats into a herd of adult goats] Schwarz E, et al. **Berl Munch Tierarztl Wochenschr** 1997 Jun;110(6):214–9 (Eng. Abstr.) **(Ger)**
[Sociocultural reasons for the pigeon problem] Haag–Wackernagel D.
DTW Dtsch Tierarztl Wochenschr 1997 Feb;104(2):52–7 (Eng. Abstr.) **(Ger)**
[FAUSTLOS—a curriculum for promoting social competence and preventing aggressive and violent behavior in children] Krannich S, et al.
Prax Kinderpsychol Kinderpsychiatr 1997 Mar;46(3):236–47 (Eng. Abstr.) **(Ger)**
[Disintegrative psychosis with main symptoms of dysfunctional social behavior] Albert R, et al.
Psychiatr Prax 1997 Jul;24(4):207–8 **(Ger)**
[Behavior dissorders in psittacines. 1. Symptoms and causes] Hollmann P. **Tierarztl Prax** 1997 May;25(3):233–40 (Eng. Abstr.) **(Ger)**
[Studies of the system analysis of social motivation, IV: The varieties of smiling and the problem of motivational adjustment] Bischof N. **Z Psychol Z Angew Psychol** 1996; 204(1):1–40 (Eng. Abstr.) **(Ger)**
[Analysis of flushing response to alcohol and drinking behavior in Japanese male students] Sobue I, et al.
Nippon Eiseigaku Zasshi 1997 Jan;51(4):722–33 (Eng. Abstr.) **(Jpn)**
[Indicators of social functioning and social participation in mentally ill participants in a public health rehabilitation programme: a one year follow–up study] Kitajima K, et al. **Nippon Koshu Eisei Zasshi** 1996 Feb;43(2):111–7 (Eng. Abstr.) **(Jpn)**
[Role of the zoosocial factor in acute extinction of exploratory behavior in mice and effects on it of piracetam and scopolamine] Kravchenko EV, et al.
Biull Eksp Biol Med 1996 Jul;122(7):48–50 **(Rus)**
[A method for evaluating the zoosocial behavior of rats in psychopharmacology] Petrov VI, et al.
Eksp Klin Farmakol 1996 Jul–Aug;59(4):65–9 (Eng. Abstr.) **(Rus)**
[Risky social–psychological situations as a manifestation of population psycho–emotional stress] Zarakovskiĭ GM, et al. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):33–41 **(Rus)**
[The effect of chronic social conflicts on the indices of nonspecific resistance in mice] Popova NA, et al.
Fiziol Zh Im I M Sechenova 1996 Dec;82(12):12–7 (Eng. Abstr.) **(Rus)**
[On the methodological approaches to the study of remarriage as a demographic and medical–social problem under current economic conditions] Vasilieva TP, et al.
Probl Sotsialnoi Gig Istor Med 1995 May–Jun;(3):6–8 **(Rus)**
[The effect of the repeated experience of aggression in daily confrontations on the individual and social behavior of male mice] Kudriavtseva NN, et al.
Zh Vyssh Nerv Deiat Im I P Pavlova 1997 Jan–Feb; 47(1):86–97 (Eng. Abstr.) **(Rus)**
[The effect of the repeated experience of victories and defeats in social conflicts on the function of the brain serotoninergic system in male mice] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov–Dec; 46(6):1088–96 (Eng. Abstr.) **(Rus)**
[Hypothalamic neurons and zoosocial interactions] Zaĭchenko MI, et al.
Zh Vyssh Nerv Deiat Im I P Pavlova 1996 May–Jun; 46(3):539–46 (Eng. Abstr.) **(Rus)**

SOCIAL BEHAVIOR DISORDERS

see related
ANTISOCIAL PERSONALITY DISORDER

CHEMICALLY INDUCED

Differentiating behavioral disturbances of dementia from drug side effects. Eastham JH, et al. **Int Psychogeriatr** 1996; 8 Suppl 3:429–34; discussion 447–8 (57 ref.)

CLASSIFICATION

ICD–10 checklists—a tool for clinicians' use of the ICD–10 classification of mental and behavioral disorders. Janca A, et al. **Compr Psychiatry** 1996 May–Jun;37(3):180–7

COMPLICATIONS

Low body weight in male children and adolescents with schizoid personality disorder or Asperger's disorder. Hebebrand J, et al. **Acta Psychiatr Scand** 1997 Jul; 96(1):64–7
Assessment of social–cognitive processes in children with mental retardation. Leffert JS, et al. **Am J Ment Retard** 1996 Mar;100(5):441–55
Adolescent suicidality in urban minorities and its relationship to conduct disorders, depression, and separation anxiety. Fe'dman M, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jan;36(1):75–84
More on melatonin [letter] Horrigan JP, et al.

J Am Acad Child Adolesc Psychiatry 1997 Aug;36(8):1014

Communication, social-emotional development and parenting stress in Cornelia-de-Lange syndrome. Sarimski K. **J Intellect Disabil Res** 1997 Feb;41 (Pt 1):70-5

DIAGNOSIS

Assessment of behavioral symptoms in community-dwelling dementia patients. Weiner MF, et al. **Am J Geriatr Psychiatry** 1997 Winter;5(1):26-30

Survey of functional assessment procedures used with individuals who display mental retardation and severe problem behaviors. Desrochers MN, et al. **Am J Ment Retard** 1997 Mar;101(5):535-46

Assessment of social-cognitive processes in children with mental retardation. Leffert JS, et al. **Am J Ment Retard** 1996 Mar;100(5):441-55

Subtypes of social withdrawal in early childhood: sociometric status and social-cognitive differences across four years. Harrist AW, et al. **Child Dev** 1997 Apr;68(2):278-94

Persisting childish behavior after bilateral thalamic infarcts. Fukatsu R, et al. **Eur Neurol** 1997;37(4):230-5

Behavioral disorders in dementia. Marini G, et al. **Funct Neurol** 1997 May-Aug;12(3-4):207-10 (15 ref.)

Behavioural problems in Sydney nursing homes [letter] Shah A. **Int J Geriatr Psychiatry** 1997 Feb;12(2):273

Falling, hoarding and hiding, eating disturbances, and sexual disinhibition. Brännström B. **Int Psychogeriatr** 1996;8 Suppl 3:419-22

Direct observation of behavioral disturbances of dementia and their environmental context. Burgio L. **Int Psychogeriatr** 1996;8 Suppl 3:343-6

Diagnostic classification of neuropsychiatric signs and symptoms in patients with dementia. Caine ED. **Int Psychogeriatr** 1996;8 Suppl 3:273-9; discussion 289-91 (12 ref.)

Conceptualization of agitation: results based on the Cohen-Mansfield Agitation Inventory and the Agitation Behavior Mapping Instrument. Cohen-Mansfield J. **Int Psychogeriatr** 1996;8 Suppl 3:309-15; discussion 351-4 (45 ref.)

Theories behind existing scales for rating behavior in dementia. Cummings JL. **Int Psychogeriatr** 1996;8 Suppl 3:293-300 (34 ref.)

Vascular dementia and Alzheimer's disease: should we be studying both within the same study? Eriksson S. **Int Psychogeriatr** 1996;8 Suppl 3:443-5; discussion 447-8

Dementia Behavior Disturbance Scale. Gauthier S, et al. **Int Psychogeriatr** 1996;8 Suppl 3:325-7

Emotional lability, intrusiveness, and catastrophic reactions. Haupt M. **Int Psychogeriatr** 1996;8 Suppl 3:409-14

Environmental and social aspects of behavioral disturbances in dementia. Lawlor BA. **Int Psychogeriatr** 1996;8 Suppl 3:259-61

Differentiating behavioral disturbances of dementia from symptoms of delirium. Luxenberg JS. **Int Psychogeriatr** 1996;8 Suppl 3:425-7; discussion 447-8

Dysfunctional Behavior Rating Instrument. Molloy DW, et al. **Int Psychogeriatr** 1996;8 Suppl 3:333-41; discussion 351-4

Behavioral disturbances of dementia: practical and conceptual issues. Rabins PV. **Int Psychogeriatr** 1996;8 Suppl 3:281-3; discussion 289-91

Behavioral pathology in Alzheimer's disease (BEHAVE-AD) rating scale. Reisberg B, et al. **Int Psychogeriatr** 1996;8 Suppl 3:301-8; discussion 351-4 (14 ref.)

Behavioral disturbances of dementia in ambulatory care settings. Ritchie K. **Int Psychogeriatr** 1996;8 Suppl 3:439-42

Behavioral disturbances of dementia in the nursing home. Rovner BW. **Int Psychogeriatr** 1996;8 Suppl 3:435-7

Neuroimaging and the origin of psychiatric symptoms in dementia. Sultzer DL. **Int Psychogeriatr** 1996;8 Suppl 3:239-43; discussion 269-72 (11 ref.)

Caretaker Obstreperous Behavior Rating Scale. Swearer JM, et al. **Int Psychogeriatr** 1996;8 Suppl 3:321-4

CERAD behavior rating scale for dementia. Tariot PN. **Int Psychogeriatr** 1996;8 Suppl 3:317-20; discussion 351-4

Behavioral manifestations of dementia: a research agenda. Tariot PN. **Int Psychogeriatr** 1996;8 Suppl 1:31-8 (11 ref.)

Disinhibition, apathy, indifference, fatigability, complaining, and negativism. Webster J, et al. **Int Psychogeriatr** 1996; 8 Suppl 3:403-8 (27 ref.)

Behavioral disturbances of dementia and caregiver issues. Zarit SH. **Int Psychogeriatr** 1996;8 Suppl 3:263-8; discussion 269-72

Behavioral disturbances of dementia in DSM-IV and ICD-10: fact or fiction? Zaudig M. **Int Psychogeriatr** 1996; 8 Suppl 3:285-8 (10 ref.)

The clinical assessment of attachment in children under five. Boris NW, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):291-3

Peer assessment of social reputation in community samples of disruptive and nondisruptive children: utility of the revised class play method. Realmuto GM, et al. **J Clin Child Psychol** 1997 Mar;26(1):67-76

Disruptive behavior and actigraphic measures in home-dwelling patients with Alzheimer's disease: preliminary report. Friedman L, et al. **J Geriatr Psychiatry Neurol** 1997 Apr;10(2):58-62

Psychosocial assessment methods in childhood epilepsy: focus on sub-Saharan Africa. Famuyiwa OO, et al. **J R Soc Health** 1997 Apr;117(2):110-4

Construct validity of two tests of social cognition in schizophrenia. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 26;63(1):77-82

A comparison of the Diagnostic Assessment for the Severely Handicapped-II (DASH-II) and the Aberrant Behavior Checklist (ABC). Paclawskyj TR, et al. **Res Dev Disabil** 1997 Jul-Aug;18(4):289-98

The social dysfunction index (SDI) for patients with schizophrenia and related disorders. Munroe-Blum H, et al. **Schizophr Res** 1996 May;20(1-2):211-9

Symptoms, cognitive and social functioning in recent-onset schizophrenia: a longitudinal study. Van der Does AJ, et al. **Schizophr Res** 1996 Mar;19(1):61-71

DRUG THERAPY

An open pilot study of citalopram for behavioral disturbances of dementia. Plasma levels and real-time observations. Pollock BG, et al. **Am J Geriatr Psychiatry** 1997 Winter; 5(1):70-8

From transmitters to treatment: the pharmacotherapy of behavioural disturbances in dementia. Herrmann N, et al. **Can J Psychiatry** 1997 Jun;42 Suppl 1:51S-64S (193 ref.)

Selegiline in the treatment of behavioural disturbance in Alzheimer's disease. Lawlor BA, et al. **Int J Geriatr Psychiatry** 1997 Mar;12(3):319-22

Behavioral symptoms in dementia: community-based research. Auer SR, et al. **Int Psychogeriatr** 1996;8 Suppl 3:363-6; discussion 381-2

Nursing home research from industry's perspective. Brecher M. **Int Psychogeriatr** 1996;8 Suppl 3:367-70

Nursing home research from investigators' perspective. Finkel SI, et al. **Int Psychogeriatr** 1996;8 Suppl 3:371-3; discussion 381-2

Meta-analysis of controlled pharmacologic trials. Schneider LS. **Int Psychogeriatr** 1996;8 Suppl 3:375-9; discussion 381-2

Olanzapine in PDD [letter] Horrigan JP, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep;36(9):1166-7

The effect of buspirone on challenging behaviour in mentally retarded patients: an open prospective multiple-case study. Verhoeven WM, et al. **J Intellect Disabil Res** 1996 Dec; 40 (Pt 6):502-8

Acute disturbed or violent behaviour: principles of treatment. Kerr IB, et al. **J Psychopharmacol (Oxf)** 1997;11(3):271-7 (40 ref.)

Psychopharmacological treatment of aggressive behavior: implications for domestically violent men. Maiuro RD, et al. **Violence Vict** 1996 Fall;11(3):239-61 (108 ref.)

EPIDEMIOLOGY

The burden of conditions not attributable to mental disorders. Siddique CM, et al. **Am J Psychiatry** 1996 Nov; 153(11):1489-91

Relationship between cigarette smoking and health risk and problem behaviors among US adolescents. Escobedo LG, et al. **Arch Pediatr Adolesc Med** 1997 Jan;151(1):66-71

Noncoital sexual interactions and problem behaviour among young adolescents: the Norwegian Longitudinal Health Behaviour Study. Jakobsen R, et al. **J Adolesc** 1997 Feb; 20(1):71-83

Young adult drug use and delinquency: childhood antecedents and adolescent mediators. Brook JS, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1584-92

Origins of comorbidity between conduct and affective disorders. Fergusson DM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Apr;35(4):451-60

Comorbidity of juvenile obsessive-compulsive disorder with disruptive behavior disorders. Geller DA, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1637-46

Inattentive and hyperactive behaviors and driving offenses in adolescence. Nada-Raja S, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Apr;36(4):515-22

Substance abuse treatment of American Indian adolescents: comorbid symptomatology, gender differences, and treatment patterns. Novins DK, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1593-601

Increased rate of conduct problems in urban areas: what is the mechanism? Wichstrøm L, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Apr;35(4):471-9

MMPI profiles of depressed adolescents with and without conduct disorder. Herkov MJ, et al. **J Clin Psychol** 1996 Nov;52(6):705-10

The overlap of attention deficit hyperactivity disorder with other common mental disorders. Hazell P. **J Paediatr Child Health** 1997 Apr;33(2):131-7 (60 ref.)

A quarter century of violence in the United States. An epidemiologic assessment. Stanton B, et al. **Psychiatr Clin North Am** 1997 Jun;20(2):269-82

Social phobia, avoidant personality disorder and atypical depression: co-occurrence and clinical implications. Alpert JE, et al. **Psychol Med** 1997 May;27(3):627-33

A preliminary study on the prevalence of challenging behaviours. Chung MC, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1427-30

The prevalence of self-reported problems in young adults from the general population. Ferdinand RF, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Jan;31(1):10-20

ETHNOLOGY

Behavioral and psychological signs and symptoms of dementia: implications for research and treatment. Cross-cultural perspectives: India. Chandra V. **Int Psychogeriatr** 1996;8 Suppl 3:479-81; discussion 491-2

Cross-cultural perspectives: Caribbean, Native American, and Yoruba. Hendrie HC, et al. **Int Psychogeriatr** 1996;8 Suppl 3:483-6

Behavioral and psychological signs and symptoms of dementia: implications for research and treatment. Cross-cultural perspectives. Argentina. Mangone CA. **Int Psychogeriatr** 1996;8 Suppl 3:473-8; discussion 491-2

Factor validity and reliability for the Aberrant Behavior Checklist-Community in a Japanese population with mental retardation. Ono Y. **Res Dev Disabil** 1996 Jul-Aug; 17(4):303-9

ETIOLOGY

Childhood adversities and psychosocial disorders. Maughan B, et al. **Br Med Bull** 1997 Jan;53(1):156-69 (50 ref.)

Association of prenatal alcohol exposure with behavioral and learning problems in early adolescence. Olson HC, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep; 36(9):1187-94

Early drinking onset and its association with alcohol use and problem behavior in late adolescence. Gruber E, et al. **Prev Med** 1996 May-Jun;25(3):293-300

GENETICS

The apolipoprotein E epsilon 4 allele is associated with increased behavioral disturbance in Alzheimer's disease [letter] Murphy GM Jr, et al. **Am J Geriatr Psychiatry** 1997 Winter;5(1):88-9

Genetics of criminal and antisocial behavior. Proceedings of a symposium. London, 14-16 February 1995. **Ciba Found Symp** 1996;194:1-283

Twins behaving badly [letter] Harding JJ. **Lancet** 1997 Sep 20;350(9081):885

Genetic basis of bad behaviour in adolescents [letter] McGuffin P, et al. **Lancet** 1997 Aug 9;350(9075):411-2

Genetics of aggressive and violent behavior. Cadoret RJ, et al. **Psychiatr Clin North Am** 1997 Jun;20(2):301-22

Self-report delinquency and violence in adult twins [letter] Rushton JP. **Psychiatr Genet** 1996 Summer;6(2):87-9

HISTORY

The prison medical service and the deviant 1895-1948. Sim J. **Clio Med** 1995;34:102-15; discussion 116-7

METABOLISM

[Digestive amines of bacterial origin and behavior disorders. Apropos of a case] Gabastou JM, et al. **Pathol Biol (Paris)** 1996 Apr;44(4):275-81 (Eng. Abstr.) **(Fre)**

NURSING

Perspective of a clinical trials research nurse. Cooler CY. **Int Psychogeriatr** 1996;8 Suppl 3:465-8; discussion 469-72

Perspective of an institution-based research nurse. Norberg A. **Int Psychogeriatr** 1996;8 Suppl 3:459-63; discussion 469-73 (30 ref.)

PHYSIOPATHOLOGY

An investigation into the psychobiology of social phobia: personality domains and serotonergic function. Chatterjee S, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):544-50

A cognitive-behavioral model of anxiety in social phobia. Rapee RM, et al. **Behav Res Ther** 1997 Aug;35(8):741-56

Huntington's disease, behavioral disturbances, and kynurenines: preclinical findings and therapeutic perspectives. Vécsei L, et al. **Biol Psychiatry** 1996 Jun 15; 39(12):1061-3

Neurochemistry and neurotransmitters. Gottfries CG. **Int Psychogeriatr** 1996;8 Suppl 3:225-31

Circadian rhythm-related behavioral disturbances and structural hypothalamic changes in Alzheimer's disease. Hoogendijk WJ, et al. **Int Psychogeriatr** 1996;8 Suppl 3:245-52; discussion 269-72

PREVENTION & CONTROL

Teachers' views on bullying: definitions, attitudes and ability to cope. Boulton MJ. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):223-33

School-based secondary prevention for children with disruptive behavior: initial outcomes. Braswell L, et al. **J Abnorm Child Psychol** 1997 Jun;25(3):197-208

Perceived social support from family, school, and peers: relationship with emotional and behavioral problems among adolescents. Garnefski N, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1657-64

A prompt plus delayed contingency procedure for reducing bathroom graffiti. Watson TS. **J Appl Behav Anal** 1996 Spring;29(1):121-4

PSYCHOLOGY

An investigation into the psychobiology of social phobia: personality domains and serotonergic function. Chatterjee

S, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):544–50

A longitudinal study of social, psychological and behavioural factors associated with drunken driving and public drunkenness. Karlsson G, et al. **Addiction** 1997 Apr; 92(4):447–57

Patterns of adolescent involvement in problem behaviors: relationship to self–efficacy, social competence, and life events. Chung H, et al. **Am J Community Psychol** 1996 Dec;24(6):771–84

Teachers' views on bullying: definitions, attitudes and ability to cope. Boulton MJ. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):223–33

Behaviour disturbance and other predictors of carer burden in Alzheimer's disease. Coen RF, et al. **Int J Geriatr Psychiatry** 1997 Mar;12(3):331–6

Caregivers and behavioral disturbances: effects and interventions. Brodaty H. **Int Psychogeriatr** 1996;8 Suppl 3:455–8

Behavioral and psychological signs and symptoms of dementia: a consensus statement on current knowledge and implications for research and treatment. Finkel SI, et al. **Int Psychogeriatr** 1996;8 Suppl 3:497–500 (0 ref.)

Perspectives of a family caregiver. Kenowsky S. **Int Psychogeriatr** 1996;8 Suppl 3:449–53

Future research directions. Khachaturian Z. **Int Psychogeriatr** 1996;8 Suppl 3:493–5

Impact of exposure to community violence on violent behavior and emotional distress among urban adolescents. Farrell AD, et al. **J Clin Child Psychol** 1997 Mar;26(1):2–14

Family cohesion as a buffer against the effects of problem–drinking fathers on psychological distress, deviant behavior, and heavy drinking in adolescents. Farrell MP, et al. **J Health Soc Behav** 1995 Dec;36(4):377–85

Family perspectives on problem behavior. Turnbull AP, et al. **Ment Retard** 1996 Oct;34(5):280–93

Communication skill and behaviour disorder. Chung MC, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1183–6

Social cognition in schizophrenia. Penn DL, et al. **Psychol Bull** 1997 Jan;121(1):114–32 (285 ref.)

A savant poet. Dowker A, et al. **Psychol Med** 1996 Sep; 26(5):913–24

Geophysical variables and behavior: LXXXL. Testing the lunar hypothesis with rural behavioral reports. Vance DE. **Psychol Rep** 1996 Dec;79(3 Pt 1):1080–2

[The personality of soldiers with inappropriate behavior patterns at the end of military service] Dedić G, et al. **Vojnosanit Pregl** 1997 Jan–Feb;54(1):11–7 (Eng. Abstr.) **(Scr)**

REHABILITATION

The TAPS project. 36: the most difficult to place long–stay psychiatric in–patients. Outcome one year after relocation. Team for the Assessment of Psychiatric Services. Trieman N, et al. **Br J Psychiatry** 1996 Sep;169(3):289–92

The effectiveness of DRL in the management and treatment of severe behaviour disorders following brain injury [published erratum appears in Brain Inj 1997 Jul;11(7):541–2] Alderman N, et al. **Brain Inj** 1997 Feb; 11(2):79–101

The Wellness Group: a novel intervention for coping with disruptive behavior in elderly nursing home residents. Lantz MS, et al. **Gerontologist** 1997 Aug;37(4):551–6

The effect of Danquah Communication System (DanCS) boards on maladaptive behaviours among individuals with severe intellectual impairment and non–verbal communication skills. Danquah SA, et al. **Int J Rehabil Res** 1996 Jun;19(2):143–56

A behavioral diagnostic paradigm for integrating behavior–analytic and psychopharmacological interventions for people with a dual diagnosis. Pyles DA, et al. **Res Dev Disabil** 1997 May–Jun;18(3):185–214 (60 ref.)

THERAPY

Meta–analytic study on treatment effectiveness for problem behaviors with individuals who have mental retardation. Didden R, et al. **Am J Ment Retard** 1997 Jan;101(4):387–99

Outcome of short–term child psychiatric hospitalization: teacher evaluation at 5–month and 12–month follow–up. Sourander A, et al. **Eur Child Adolesc Psychiatry** 1996 Dec; 5(4):204–11

Challenges in management of Alzheimer's disease behavioral symptoms. Baldwin BA. **Int Psychogeriatr** 1996;8 Suppl 1:117–9

Evaluation of interventions in Alzheimer's disease. Beck C. **Int Psychogeriatr** 1996;8 Suppl 1:17–20

Interventions, outcomes, and efficacy in Alzheimer's disease behavioral research. Beck C. **Int Psychogeriatr** 1996;8 Suppl 1:63–6

Impediments to research progress in development of behavioral approaches to treatment and care of persons with Alzheimer's disease. Berg L. **Int Psychogeriatr** 1996; 8 Suppl 1:113–4

Interventions for family caregivers of patients with Alzheimer's disease in community–based settings: items for consideration. Buckwalter K. **Int Psychogeriatr** 1996;8 Suppl 1:121–2

Interventions for the behavioral complications of Alzheimer's disease: behavioral approaches. Burgio L. **Int Psychogeriatr** 1996;8 Suppl 1:45–52 (35 ref.)

New ways to approach manifestations of Alzheimer's disease and to reduce caregiver burden. Cohen–Mansfield J. **Int Psychogeriatr** 1996;8 Suppl 1:91–4

Barriers to behavioral research on dementia. Cummings JL. **Int Psychogeriatr** 1996;8 Suppl 1:21–3

Neuropsychiatric assessment and intervention in Alzheimer's disease. Cummings JL. **Int Psychogeriatr** 1996;8 Suppl 1:25–30 (15 ref.)

Behavioral intervention strategies for sleep–activity disruption. Dowling GA. **Int Psychogeriatr** 1996;8 Suppl 1:77–86 (34 ref.)

Behavioral treatment of Alzheimer's disease. Ferris SH, et al. **Int Psychogeriatr** 1996;8 Suppl 1:87–90 (3 ref.)

Using technology in behavioral approaches to Alzheimer's disease. Holmes D, et al. **Int Psychogeriatr** 1996;8 Suppl 1:67–71

Behavioral problems and interventions in Alzheimer's disease: research needs. Lawton MP. **Int Psychogeriatr** 1996;8 Suppl 1:95–8

Relationship between patient characteristics and the effectiveness of nonpharmacologic approaches to prevent or treat behavioral symptoms. Maslow K. **Int Psychogeriatr** 1996;8 Suppl 1:73–6

Next steps for social and behavioral research related to Alzheimer's disease. Montgomery RJ. **Int Psychogeriatr** 1996;8 Suppl 1:103–7

A research agenda for disruptive behaviors in Alzheimer's disease: a combined biomedical and behavioral approach. Raskind M. **Int Psychogeriatr** 1996;8 Suppl 1:53–8 (29 ref.)

Behavioral approaches to treatment of Alzheimer's disease. Reifler BV. **Int Psychogeriatr** 1996;8 Suppl 1:99–102

Behavioral intervention approaches to the treatment and management of Alzheimer's disease: a research agenda. Reisberg B. **Int Psychogeriatr** 1996;8 Suppl 1:38–44

Methodological issues in the management of behavioral disturbances in dementia. Swearer JM. **Int Psychogeriatr** 1996;8 Suppl 1:59–62

Selecting outcome measures for clinical trials of behavioral disturbances of dementia. Teri L. **Int Psychogeriatr** 1996; 8 Suppl 3:347–9; discussion 351–4

Relationship of behavioral disturbances in demented patients to institutional care. Winblad B. **Int Psychogeriatr** 1996;8 Suppl 1:133–5

Interventions for family management of patients with Alzheimer's disease. Wykle ML. **Int Psychogeriatr** 1996;8 Suppl 1:109–11

Parent–assisted transfer of children's social skills training: effects on children with and without attention–deficit hyperactivity disorder. Frankel F, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1056–64

Predictors of response to cognitive–behavioral group therapy for social phobia. Chambless DL, et al. **J Anxiety Disord** 1997 May–Jun;11(3):221–40

Use of the Child Behavior Checklist and DSM–III–R diagnosis in predicting outcome of children's social skills training. Frankel F, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):149–61

Clients' expectancies and their relationship to pretreatment symptomatology and outcome of cognitive–behavioral group treatment for social phobia. Safren SA, et al. **J Consult Clin Psychol** 1997 Aug;65(4):694–8

Challenging behaviour: the effectiveness of specialist support teams. Lowe K, et al. **J Intellect Disabil Res** 1996 Aug; 40 (Pt 4):336–47

Staff strategies and explanations for intervening with challenging behaviours: a replication in a community sample. Watts MJ, et al. **J Intellect Disabil Res** 1997 Jun; 41 (Pt 3):258–63

Management of geriatric behavior problems. Dyck G. **Psychiatr Clin North Am** 1997 Mar;20(1):165–80 (34 ref.)

SOCIAL BREAKDOWN SYNDROME

DIAGNOSIS

Squalor syndrome and psychogeriatric admissions. Shaw T, et al. **Int Psychogeriatr** 1996 Winter;8(4):669–74

THERAPY

Intervention and social breakdown in the elderly. Little JD. **Aust N Z J Psychiatry** 1996 Oct;30(5):681–4

SOCIAL CHANGE

Changing society, changing drinking: solitary drinking as a non–pathological behaviour. Demers A, et al. **Addiction** 1996 Oct;91(10):1505–16

Commentary: change. Middleman EL, et al. **Am J Med Qual** 1997 Spring;12(1):44–7 (6 ref.)

Secular changes in standing height, sitting height and sexual maturation of Chinese––the Hong Kong Growth Study, 1993. Leung SS, et al. **Ann Hum Biol** 1996 Jul–Aug; 23(4):297–306

Aetiology of asthma [letter] Kraemer S. **Arch Dis Child** 1997 Aug;77(2):188

Changes in families and getting youngsters to the dentist. Waldman HB. **ASDC J Dent Child** 1997 May–Jun; 64(3):212–7, 228

Suffering, justice, and the politics of becoming [see comments] Connolly WE. **Cult Med Psychiatry** 1996 Sep; 20(3):251–77. Comment in: Cult Med Psychiatry 1996 Sep;20(3):279–86. Comment in: Cult Med Psychiatry 1996 Sep;20(3):287–90.

Comments on "Suffering, justice and the politics of becoming" [comment] Minow M. **Cult Med Psychiatry** 1996 Sep; 20(3):279–86. Comment on: Cult Med Psychiatry 1996 Sep;20(3):251–77.

Internal migration in China, 1950–1988. Liang Z, et al. **Demography** 1996 Aug;33(3):375–84

Trade–offs in the family: sibling effects on daughters' activities in 1910. Sassler S. **Demography** 1995 Nov; 32(4):557–75

Does marriage matter? Waite LJ. **Demography** 1995 Nov; 32(4):483–507 (62 ref.)

Dissolution of premarital cohabitation in Canada. Wu Z, et al. **Demography** 1995 Nov;32(4):521–32

The market is a strange creature: family medicine meeting the challenges of the changing political and socioeconomic structure. Westin S. **Fam Pract** 1995 Dec;12(4):394–401 (37 ref.)

Gender, the state, and constructing the old as dependent: lessons from the economic transition in Poland. Calasanti TM, et al. **Gerontologist** 1997 Aug;37(4):452–61 (34 ref.)

The structural adjustment programme and the elderly in Nigeria. Ekpenyong S. **Int J Aging Hum Dev** 1995; 41(4):267–80

Respect redefined: focus group insights from Singapore. Mehta K. **Int J Aging Hum Dev** 1997;44(3):205–19

Modernity, postmodernity and disability in developing countries. Lysack C. **Int J Rehabil Res** 1997 Jun;20(2):121–8 (17 ref.)

Medicine in relation to society [editorial] Wolf S. **Integr Physiol Behav Sci** 1996 Oct–Dec;31(4):277–88

The art of nursing in a 'postmodern' context. Lister P. **J Adv Nurs** 1997 Jan;25(1):38–44 (50 ref.)

Space, time and radical imagination: nursing in the here and now [editorial] Parker JM. **J Adv Nurs** 1996 Dec; 24(6):1103–4

Looking at discourse in a literature review of nursing texts. Traynor M. **J Adv Nurs** 1996 Jun;23(6):1155–61 (46 ref.)

Hiding behind motherhood. Turkel AR. **J Am Acad Psychoanal** 1996 Spring;24(1):163–77

Medical informatics challenges of the 1990s: acknowledging secular change [editorial] Tuttle MS. **J Am Med Inform Assoc** 1997 Jul–Aug;4(4):322–4

Observations on health care issues in the former Soviet Union. Davidow SL. **J Community Health** 1996 Feb; 21(1):51–60

Parents' perceptions of children's worries in a changing world. Gottlieb D, et al. **J Genet Psychol** 1996 Mar; 157(1):104–18

The initiation of adolescent sexual and contraceptive behavior during changing times. Cooksey EC, et al. **J Health Soc Behav** 1996 Mar;37(1):59–74

The decline of civility: the coarsening of America [editorial] Stulc JP. **J Ky Med Assoc** 1996 Oct;94(10):457–8

Access to care in post–economic reform rural China: results from a 1994 cross–sectional survey. Shi L. **J Public Health Policy** 1996;17(3):347–61

Getting started: a survey of medical student activism. Bambas A. **JAMA** 1996 Nov 6;276(17):1436–7

The AMA–MSS: leading the charge for change. Merchen TD, et al. **JAMA** 1996 Nov 6;276(17):1438

Activism and the medical student [editorial] Oransky I. **JAMA** 1996 Nov 6;276(17):1434

Times of a medical student activist. Silver–Isenstadt AD. **JAMA** 1996 Nov 6;276(17):1435

Lighting a candle in the Romanian darkness. Gallagher T. **Med War** 1992 Jan–Mar;8(1):25–30

Physicians' reactions to patients: what has happened during the past 10 years. Gorlin R, et al. **Mt Sinai J Med** 1996 Oct–Nov;63(5–6):420–7

India: 50 years after independence. Miller DD, et al. **Nat Biotechnol** 1997 Aug;15(8):727–9

Class differences and traffic deaths. Krus DJ, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1005–6

"Brazil: a paradigm of many developing countries". Blay EA. **Promot Educ** 1995 Dec;2(4):25–8

Social gradient of CVD risk in Germany before/after unification. Heinemann L, et al. **Rev Environ Health** 1996 Jan–Jun;11(1–2):7–14

Dietary habits in Eastern Germany: changes after reunification and their relation to CHD risk profiles (DRECAN). Jaross W, et al. **Rev Environ Health** 1996 Jan–Jun;11(1–2):27–33

Macrosocial transition and health hazards. Schröder H, et al. **Rev Environ Health** 1996 Jan–Jun;11(1–2):1–5 (9 ref.)

Regional variation in infant survival in China. Ren XS. **Soc Biol** 1996 Spring–Summer;43(1–2):1–19

Cultural problems of ageing especially regarding gender and intergenerational equity. Henrard JC. **Soc Sci Med** 1996 Sep;43(5):667–80 (115 ref.)

Cultural aspects of ageing: gender and inter–generational issues. Jefferys M. **Soc Sci Med** 1996 Sep;43(5):681–7 (36 ref.)

The impact of globalization on the determination and management of ethical choices in the health arena. Kalekin–Fishman D. **Soc Sci Med** 1996 Sep;43(5):809–22 (126 ref.)

Are there social correlates to suicide? Mäkinen I. **Soc Sci Med** 1997 Jun;44(12):1919–29

Medical heresy––the view of a heretic. Stambolovic V. **Soc Sci Med** 1996 Sep;43(5):601–4

Women's lives in transition: a qualitative analysis of the fertility decline in Bangladesh. Simmons R.

SOCIAL CHANGE

Stud Fam Plann 1996 Sep-Oct;27(5):251-68

Challenges of the tobacco control movement. Ahrens D. **Wis Med J** 1996 Nov;95(11):779-80

Ethics and health in a changing world. Barreto D, et al. **World Health Forum** 1996;17(2):150-5

Health and society in times of change. Deppe HU. **World Health Forum** 1996;17(2):194-6

Challenges in health development. Nugroho G, et al. **World Health Forum** 1997;18(1):44-7

Tuberculosis control in Kyrgyzstan--an opportunity. Raviglione MC, et al. **World Health Forum** 1996; 17(1):85-90

Health care in Kazakstan. Sharmanov T, et al. **World Health Forum** 1996;17(2):197-9

[Necessity to adapt the functioning of the Society of Physicians to medical and social change] Daher M. **J Med Liban** 1996;44(4 Suppl):S21-7 **(Fre)**

[Health education in Lebanon: current state and perspectives] Mekhael E. **Promot Educ** 1997 Mar;4(1):27-31 **(Fre)**

[Ambulatory management during the transformation process--a survey of physicians in new German districts] Heim N, et al. **Gesundheitswesen** 1997 Jan;59(1):29-35 (Eng. Abstr.) **(Ger)**

[Quality of diabetes management in the free Saxony state--scientific evaluation of the Saxony model for managing diabetes. EVA group] Schulze J, et al. **Gesundheitswesen** 1996 Sep;58 Suppl 2:144-8 (Eng. Abstr.) **(Ger)**

[Social status of visually handicapped patients in new combined federal Germany--a comparison with the status before 1990] Walther HR, et al. **Rehabilitation (Stuttg)** 1996 Aug;35(3):161-9 (Eng. Abstr.) **(Ger)**

[Family relations and informal social networks in the social structure and demographic change] Backes GM. **Z Gerontol Geriatr** 1996 Jan-Feb;29(1):29-33 (Eng. Abstr.) **(Ger)**

[From early retirement to retirement--change and stability of the social status of East Germany early retirees] Ernst J. **Z Gerontol Geriatr** 1996 Sep-Oct;29(5):352-5 (Eng. Abstr.) **(Ger)**

[Change in East Germany intergenerational relations in a large city. Results of the 4th survey phase of the Halle Longitudinal Study of participants of the 1994 senior college (HALSEKO)] Genz M. **Z Gerontol Geriatr** 1996 Sep-Oct;29(5):367-71 (Eng. Abstr.) **(Ger)**

[Global changes and trends in work safety and health] Pinnagoda C. **Rev Esp Salud Publica** 1996 Jul-Aug; 70(4):485-92 (Eng. Abstr.) **(Spa)**

SOCIAL CLASS

Earnings and schooling: an overview of economic research based on the Australian Twin Register. Miller P, et al. **Acta Genet Med Gemellol (Roma)** 1996;45(4):417-29 (19 ref.)

The changes in the social class distribution of moderate and high alcohol consumption and of alcohol-related disabilities over time in Stockholm County and in Sweden. Romelsjö A, et al. **Addiction** 1996 Sep;91(9):1307-23

The disadvantage of being advantaged?--on a social gradient in excess mortality among alcohol abusers. Rossow I, et al. **Addiction** 1996 Dec;91(12):1821-9

Neighborhood environments and coronary heart disease: a multilevel analysis. Diez-Roux AV, et al. **Am J Epidemiol** 1997 Jul 1;146(1):48-63

Additional clarification re: "The Bell curve: on race, social class, and epidemiologic research" [letter] Muntaner C, et al. **Am J Epidemiol** 1997 Oct 1;146(7):607-8

Influence of social class on SMRs among Y-12 workers [letter; comment] Loomis DP, et al. **Am J Ind Med** 1997 Jan;31(1):122. Comment on: Am J Ind Med 1997 Jan;31(1):121.

Re: Mortality of workers at a nuclear materials plant [letter; comment] [see comments] Mirer FE. **Am J Ind Med** 1997 Jan;31(1):121. Comment on: Am J Ind Med 1996 Feb;29(2):131-41. Comment in: Am J Ind Med 1997 Jan;31(1):121.

Racial differences in breast cancer survival: the interaction of socioeconomic status and tumor biology. Simon MS, et al. **Am J Obstet Gynecol** 1997 Jun;176(6):S233-9

Social status, social context, and arterial blood pressure. Dressler WW, et al. **Am J Phys Anthropol** 1997 Jan; 102(1):55-66

Concordance of cranial and dental morphological traits and evidence for endogamy in ancient Egypt. Prowse TL, et al. **Am J Phys Anthropol** 1996 Oct;101(2):237-46 (98 ref.)

Culture as a stressor: a revised model of biocultural interaction. Schell LM. **Am J Phys Anthropol** 1997 Jan; 102(1):67-77 (49 ref.)

Socioeconomic status, race, and death from coronary heart disease. Escobedo LG, et al. **Am J Prev Med** 1997 Mar-Apr;13(2):123-30

Social class and premature mortality among men: a method for state-based surveillance. Barnett E, et al. **Am J Public Health** 1997 Sep;87(9):1521-5

Social class and asthma--distinguishing between the disease and the diagnosis [editorial; comment] Gergen P. **Am J Public Health** 1996 Oct;86(10):1361-2. Comment on: Am J Public Health 1996 Oct;86(10):1406-9.

The effects of occupation-based social position on mortality in a large American cohort. Gregorio DI, et al. **Am J Public Health** 1997 Sep;87(9):1472-5

Annotation: the use of educational attainment as an indicator of socioeconomic position [comment] Hadden WC. **Am J Public Health** 1996 Nov;86(11):1525-6. Comment on: Am J Public Health 1996 Nov;86(11):1582-9.

The impact of socioeconomic status on health functioning as assessed by the SF-36 questionnaire: the Whitehall II Study [see comments] Hemingway H, et al. **Am J Public Health** 1997 Sep;87(9):1484-90. Comment in: Am J Public Health 1997 Sep;87(9):1411-3.

Socioeconomic differences in hysterectomy: the Wisconsin Longitudinal Study. Marks NF, et al. **Am J Public Health** 1997 Sep;87(9):1507-14

The body politic and the power of socioeconomic status [editorial; comment] Moss N. **Am J Public Health** 1997 Sep;87(9):1411-3 (18 ref.). Comment on: Am J Public Health 1997 Sep;87(9):1484-90.

The "Black Report" of Spain--the Commission on Social Inequalities in Health. Navarro V. **Am J Public Health** 1997 Mar;87(3):334-5

Social differences in health: life-cycle effects between ages 23 and 33 in the 1958 British birth cohort [see comments] Power C, et al. **Am J Public Health** 1997 Sep; 87(9):1499-503. Comment in: Am J Public Health 1997 Sep;87(9):1409-11.

Acute rheumatic fever in an Arabian Gulf country--effect of climate, advantageous socioeconomic conditions, and access to medical care. Eltohami EA, et al. **Angiology** 1997 Jun;48(6):481-9

Ethnic differences in the prevalence of asthma in middle class children. Nelson DA, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):21-6

Social class and race disparities in premature stroke mortality among men in North Carolina. Casper ML, et al. **Ann Epidemiol** 1997 Feb;7(2):146-53

Socioeconomic status, ethnicity and obesity in women [editorial; comment] Jeffery RW. **Ann Epidemiol** 1996 Jul; 6(4):263-5. Comment on: Ann Epidemiol 1996 Jul;6(4):266-75.

Race, socioeconomic status, and obesity in 9- to 10-year-old girls: the NHLBI Growth and Health Study [see comments] Kimm SY, et al. **Ann Epidemiol** 1996 Jul; 6(4):266-75. Comment in: Ann Epidemiol 1996 Jul;6(4):263-5.

Migration status, socioeconomic status, and mortality rates in Mexican Americans and non-Hispanic whites: the San Antonio Heart Study. Wei M, et al. **Ann Epidemiol** 1996 Jul;6(4):307-13

The role of socioeconomic status and serum fatty acids in the relationship between intake of animal foods and cardiovascular risk factors. Yeh LL, et al. **Ann Epidemiol** 1996 Jul;6(4):290-8

The impact of caste on the growth of male Sikhs in Punjab, India. Singh LP, et al. **Ann Hum Biol** 1997 Mar-Apr; 24(2):131-9

Functional recovery after myocardial infarction in men: the independent effects of social class. Ickovics JR, et al. **Ann Intern Med** 1997 Oct 1;127(7):518-25

Gender, racial, ethnic, sexual, and class identities. Frable DE. **Annu Rev Psychol** 1997;48:139-62 (185 ref.)

Measuring social class in US public health research: concepts, methodologies, and guidelines. Krieger N, et al. **Annu Rev Public Health** 1997;18:341-78 (202 ref.)

Social class differences in women's fat and fibre consumption: a cross-national study. Hupkens CL, et al. **Appetite** 1997 Apr;28(2):131-49

Influences of gender and social class on adolescents' perceptions of health. Goodman E, et al. **Arch Pediatr Adolesc Med** 1997 Sep;151(9): 99-904

Depression, stressful life events, social support, and self-esteem in middle class African American women. Warren BJ. **Arch Psychiatr Nurs** 1997 Jun;11(3):107-17

The relationship of socioeconomic status, race, and modifiable risk factors to outcomes in patients with systemic lupus erythematosus. Karlson EW, et al. **Arthritis Rheum** 1997 Jan;40(1):47-56

Disadvantage, and the cost of food [letter; comment] Mackerras D. **Aust N Z J Public Health** 1997 Apr;21(2):218 . Comment on: Aust N Z J Public Health 1996 Dec;20(6):611-7.

Structural, material and economic influences on the food-purchasing choices of socioeconomic groups [see comments] Turrell G. **Aust N Z J Public Health** 1996 Dec; 20(6):611-7. Comment in: Aust N Z J Public Health 1997 Apr;21(2):218.

Socioeconomic determinants of health. The contribution of nutrition to inequalities in health. James WP, et al. **BMJ** 1997 May 24;314(7093):1545-9 (31 ref.)

Does the decline in child injury mortality vary by social class? A comparison of class specific mortality in 1981 and 1991. Roberts I, et al. **BMJ** 1996 Sep 28;313(7060):784-6

Lifetime socioeconomic position and mortality: prospective observational study [published erratum appears in BMJ 1997 Apr 5;314(7086):1012] [see comments] Smith GD, et al. **BMJ** 1997 Feb 22;314(7080):547-52. Comment in: ACP J Club 1997 Jul-Aug;127(1):20.

First myocardial infarction in patients of Indian subcontinent and European origin. Ethnic differences in outcome may be confounded by socioeconomic status [letter; comment] White M. **BMJ** 1997 Jul 12;315(7100):118; discussion 119-20. Comment on: BMJ 1997 Mar 1;314(7081):639-42.

Socioeconomic determinants of health. Health inequalities: relative or absolute material standards? Wilkinson RG. **BMJ** 1997 Feb 22;314(7080):591-5

Social classes [letter; comment] Skellett NJ. **Br Dent J** 1997 Feb 8;182(3):86. Comment on: Br Dent J 1996 Dec 7-21;181(11-12):398.

Social class and weight as prognostic factors in early breast cancer. Haybittle J, et al. **Br J Cancer** 1997;75(5):729-33

Income class and pharmaceutical expenditure in Canada: 1964-1990. Lexchin J. **Can J Public Health** 1996 Jan-Feb; 87(1):46-50

The age peak in childhood acute lymphoblastic leukemia: exploring the potential relationship with socioeconomic status. Swensen AR, et al. **Cancer** 1997 May 15; 79(10):2045-51

Harvard report on cancer prevention. Causes of human cancer. Socioeconomic status. **Cancer Causes Control** 1996 Nov;7 Suppl 1:S33-5

Culture and class influences on Anglo and Puerto Rican mothers' beliefs regarding long-term socialization goals and child behavior. Harwood RL, et al. **Child Dev** 1996 Oct; 67(5):2446-61

Socioeconomic status and obesity. Stunkard AJ. **Ciba Found Symp** 1996;201:174-82; discussion 182-7, 188-93 (28 ref.)

Conference on Socioeconomic Status and Cardiovascular Health and disease [news] Lenfant C. **Circulation** 1996 Nov 1;94(9):2041-4

Rates of tetanus protection and transplacental tetanus antibody transfer in pregnant women from different socioeconomic groups in Peru. Madico G, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):753-5

Transdisciplinary approach in women's health research: a study on urban middle class women. Mukhopadhyay S. **Coll Antropol** 1997 Jun;21(1):41-6

Caries experience and fluorosis prevalence in Chilean children from different socio-economic status. Villa AE, et al. **Community Dent Oral Epidemiol** 1996 Jun;24(3):225-7

Predictors of depressive symptomatology among lower social class caregivers of persons with chronic mental illness. Song LY, et al. **Community Ment Health J** 1997 Aug; 33(4):269-86

Alternative psychotherapeutic practice among middle class Americans: I: Case studies and follow-up. Zatzick DF, et al. **Cult Med Psychiatry** 1997 Mar;21(1):53-88

Health care information and class in America [editorial] Lally JF. **Del Med J** 1997 Jan;69(1):21-2

The age of extremes: a revisionist perspective [comment] Farley R. **Demography** 1996 Nov;33(4):417-20; discussion 427-8 (17 ref.). Comment on: Demography 1996 Nov;33(4):395-412; discussion 413-6.

The political economy of inequality in the "age of extremes" [see comments] Hout M, et al. **Demography** 1996 Nov; 33(4):421-5; discussion 427-8 (22 ref.). Comment in: Demography 1996 Nov;33(4):395-412; discussion 413-6.

The age of extremes: concentrated affluence and poverty in the twenty-first century [see comments] Massey DS. **Demography** 1996 Nov;33(4):395-412; discussion 413-6 (100 ref.). Comment in: Demography 1996 Nov;33(4):417-20; discussion 427-8. Comment in: Demography 1996 Nov;33(4):421-5; discussion 427-8.

A bad start for socioeconomically disadvantaged children [editorial] Olden K. **Environ Health Perspect** 1996 May; 104(5):462-3

Socioeconomic status, number of siblings, and respiratory infections in early life as determinants of atopy in children. Forastiere F, et al. **Epidemiology** 1997 Sep;8(5):566-70

Sociodemographic correlates of hearing loss and hearing aid use in Hispanic adults. Lee DJ, et al. **Epidemiology** 1996 Jul;7(4):443-6

Social class and coronary disease in rural population of north India. The Indian Social Class and Heart Survey. Singh RB, et al. **Eur Heart J** 1997 Apr;18(4):588-95

Serum insulin-like growth factor I and physical performance in prepubertal Bolivian girls of a high and low socio-economic status. Beaune B, et al. **Eur J Appl Physiol** 1997;76(1):98-102

Obesity, social class and Western diet: a link to breast cancer prognosis. Stoll BA. **Eur J Cancer** 1996 Jul;32A(8):1293-5 (56 ref.)

Socio-economic influences on gender inequalities in child health in rural Bangladesh. Rousham EK. **Eur J Clin Nutr** 1996 Aug;50(8):560-4

Consequences of occupational asthma on employment and financial status: a follow-up study. Ameille J, et al. **Eur Respir J** 1997 Jan;10(1):55-8

The relationship between asthma admission rates, routes of admission, and socioeconomic deprivation. Watson JP, et al. **Eur Respir J** 1996 Oct;9(10):2087-93

Gender, race, class and self-reported sexually transmitted disease incidence. Tanfer K, et al. **Fam Plann Perspect** 1995 Sep-Oct;27(5):196-202

Socio-economic status, chronic morbidity and health services utilization by families. Gómez Rodríguez E, et al. **Fam Pract** 1996 Aug;13(4):382-5

Street foods. Report of an FAO technical meeting. Calcutta, India. 6-9 November 1995. United Nations. **FAO Food Nutr Pap** 1997;63:1-76 **(Eng, Fre, Spa)**

Equity in health care utilization: further tests based on hurdle models and Swedish micro data. Gerdtham UG. **Health Econ** 1997 May-Jun;6(3):303-19

Self-efficacy as a predictor of dietary change in a low-socioeconomic-status southern adult population. Shannon J, et al. **Health Educ Behav** 1997 Jun;24(3):357-68

The relationship between socioeconomic status, hostility, and blood pressure reactions to mental stress in men: data from the Whitehall II study. Carroll D, et al. **Health Psychol** 1997 Mar;16(2):131–6

mtDNA variation in caste populations of Andhra Pradesh, India [see comments] Bamshad M, et al. **Hum Biol** 1996 Feb;68(1):1–28. Comment in: Hum Biol 1997 Jun;69(3):431–5.

Genetic differentiation and population structure of some occupational caste groups in Uttar Pradesh, India. Lanchbury JS, et al. **Hum Biol** 1996 Oct;68(5):655–78

Analysis of mtDNA [letter; comment] Spurdle A, et al. **Hum Biol** 1997 Jun;69(3):431–5. Comment on: Hum Biol 1996 Feb;68(1):1–28.

Prevalence of Epstein–Barr viral sequences and EBV LMP1 oncogene deletions in Burkitt's lymphoma from Pakistan: epidemiological correlations. Mansoor A, et al. **Hum Pathol** 1997 Mar;28(3):283–8

Strengths and needs of working–class African–American and Anglo–American grandparents. Watson JA, et al. **Int J Aging Hum Dev** 1997;44(2):149–65

Social environment, morbidity and use of health care among people with diabetes mellitus in Trinidad. Gulliford MC, et al. **Int J Epidemiol** 1997 Jun;26(3):620–7

Alcoholism in social classes and occupations in Sweden. Hemmingsson T, et al. **Int J Epidemiol** 1997 Jun; 26(3):584–91

Severity of childhood asthma by socioeconomic status. Mielck A, et al. **Int J Epidemiol** 1996 Apr;25(2):388–93 (33 ref.)

Haemostatic and other cardiovascular risk factors, and socioeconomic status among middle–aged Finnish men and women. Myllykangas M, et al. **Int J Epidemiol** 1995 Dec; 24(6):1110–6

The interrelationship between income, health and employment status. Stronks K, et al. **Int J Epidemiol** 1997 Jun;26(3):592–600

Strong mediators of social inequalities in risk of ischaemic heart disease: a six–year follow–up in the Copenhagen Male Study. Suadicani P, et al. **Int J Epidemiol** 1997 Jun; 26(3):516–22

Socioeconomic status within social class and mortality: a prospective study in middle–aged British men. Wannamethee SG, et al. **Int J Epidemiol** 1997 Jun; 26(3):532–41

Dietary intake of a physically active elderly Spanish male group of high socioeconomic status. Ortega RM, et al. **Int J Food Sci Nutr** 1996 Jul;47(4):307–13

Relationships between social class, nutrient intake and dietary patterns in Edinburgh schoolchildren [published erratum appears in Int J Food Sci Nutr 1997 Jan;48(1):4] Ruxton CH, et al. **Int J Food Sci Nutr** 1996 Jul;47(4):341–9

Recommendations of the conference "Measuring Social Inequalities in Health". Sponsored by the National Institutes of Health, September 28–30, 1994. **Int J Health Serv** 1996; 26(3):521–7

Integrating nonemployment into research on health inequalities. Arber S. **Int J Health Serv** 1996;26(3):445–81

People and places: contrasting perspectives on the association between social class and health. Kaplan GA. **Int J Health Serv** 1996;26(3):507–19

Accounting for the public's health: an introduction to selected papers from a U.S. conference on "measuring social inequalities in health". Krieger N, et al. **Int J Health Serv** 1996;26(3):383–90

Measuring social inequalities in health in the United States: a historical review, 1900–1950. Krieger N, et al. **Int J Health Serv** 1996;26(3):391–418

Income, social stratification, class, and private health insurance: a study of the Baltimore metropolitan area. Muntaner C, et al. **Int J Health Serv** 1996;26(4):655–71

The class analysis of poverty: a response to Erik Olin Wright [see comments] Novak T. **Int J Health Serv** 1996; 26(1):187–95. Comment in: Int J Health Serv 1996;26(2):371–9.

Race/ethnicity and socioeconomic status: measurement and methodological issues. Williams DR. **Int J Health Serv** 1996;26(3):483–505 (81 ref.)

The class analysis of poverty: a response to Tony Novak [comment] Wright EO. **Int J Health Serv** 1996;26(2):371–9 (6 ref.). Comment on: Int J Health Serv 1995;25(1):85–100. Comment on: Int J Health Serv 1996;26(1):187–95.

Health and social standing of young men viewed in light of information on their childhood and adolescence. Pietilä AM, et al. **Int J Nurs Stud** 1995 Dec;32(6):545–55

Acculturation, socioeconomic status, and obesity in Mexican Americans, Cuban Americans, and Puerto Ricans. Khan LK, et al. **Int J Obes Relat Metab Disord** 1997 Feb; 21(2):91–6

Risk factors for childhood obesity in a transitional society in Thailand. Mo–suwan L, et al. **Int J Obes Relat Metab Disord** 1996 Aug;20(8):697–703

Height and social class in male adolescents from different ethnic backgrounds in Israel. Lusky A, et al. **Isr J Med Sci** 1997 Feb;33(2):117–22

Guidelines for adolescent health research: issues of race and class. Jenkins RR, et al. **J Adolesc Health** 1995 Nov; 17(5):314–22 (43 ref.)

How do socioeconomic status and age influence infant food patterns? Nevling W, et al. **J Am Diet Assoc** 1997 Apr; 97(4):418–20

A prospective study on socioeconomic aspects of fracture of the proximal femur. Schürch MA, et al. **J Bone Miner Res** 1996 Dec;11(12):1935–42

The impact of paternal alcoholism and maternal social position on boys' school adjustment, pubertal maturation and sexual behavior: a test of two competing hypotheses. Malo J, et al. **J Child Psychol Psychiatry** 1997 Feb; 38(2):187–97

Socioeconomic status and cancer survival in Ontario. Mackillop WJ, et al. **J Clin Oncol** 1997 Apr;15(4):1680–9

Total and occupationally active life expectancies in relation to social class and marital status in men classified as healthy at 20 in Finland. Kaprio J, et al. **J Epidemiol Community Health** 1996 Dec;50(6):653–60

Cause specific social class mortality differentials for child injury and poisoning in England and Wales. Roberts I. **J Epidemiol Community Health** 1997 Jun;51(3):334–5

Social class and cancer survival in Turin, Italy. Rosso S, et al. **J Epidemiol Community Health** 1997 Feb;51(1):30–4

Small area statistics as markers for personal social status in the Scottish heart health study. Woodward M. **J Epidemiol Community Health** 1996 Oct;50(5):570–6

Middle– and working–class black and white children's speech during a picture–labeling task. Lawrence VW. **J Genet Psychol** 1997 Jun;158(2):226–40

Geographic distance and contact between middle–aged children and their parents: the effects of social class over 20 years. Greenwell L, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jan;52(1):S13–26

Race, socioeconomic status, and health: accounting for race differences in health. Schoenbaum M, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52 Spec No:61–73

The neighborhood context of adolescent mental health. Aneshensel CS, et al. **J Health Soc Behav** 1996 Dec; 37(4):293–310

Prevalence and determinants of hypertension in the Indian social class and heart survey. Singh RB, et al. **J Hum Hypertens** 1997 Jan;11(1):51–6

Smoking habits and respiratory symptoms: observations among college students and professionals. Ghosal AG, et al. **J Indian Med Assoc** 1996 Feb;94(2):55–7

Variation in menarcheal age of Assamese girls. Sengupta S, et al. **J Indian Med Assoc** 1996 Mar;94(3):88–90 (10 ref.)

Increasing socioeconomic inequalities and the mental health of the poor [editorial] Rogler LH. **J Nerv Ment Dis** 1996 Dec;184(12):719–22

Perception of risk, choice of maternity site, and socio economic level of twin mothers. Papiernik E, et al. **J Perinat Med** 1997;25(2):139–45

Using area–based measures of socioeconomic status in dental health services research. Locker D, et al. **J Public Health Dent** 1996 Spring;56(2):69–75

Social class, spoken language and pattern of care as determinants of continuity of carer in maternity services in east London. Hemingway H, et al. **J Public Health Med** 1997 Jun;19(2):156–61

Deprivation and health. Chadwick Lecture 1996. Black D. **J R Coll Physicians Lond** 1996 Sep–Oct;30(5):466–71

Down at heart—the meaning and implications of social inequalities in cardiovascular disease. Smith GD. **J R Coll Physicians Lond** 1997 Jul–Aug;31(4):414–24 (71 ref.)

Socioeconomic status in ankylosing spondylitis: relationship between occupation and disease activity. Roussou E, et al. **J Rheumatol** 1997 May;24(5):908–11

Tracking children from poverty at risk for specific language impairment: a 3–year longitudinal study. Fazio BB, et al. **J Speech Hear Res** 1996 Jun;39(3):611–24

Are there social inequities in child morbidity and mortality in rural Vietnam. Hoa DP, et al. **J Trop Pediatr** 1997 Aug; 43(4):226–31

Insulin resistance syndrome and childhood social conditions [letter; comment] Davey Smith G, et al. **Lancet** 1997 Jan 25;349(9047):284–5. Comment on: Lancet 1996 Nov 9;348(9037):1259–63.

Socioeconomic inequalities in morbidity and mortality in western Europe [letter] Di Carlo A, et al. **Lancet** 1997 Aug 16;350(9076):518

How important is social class a factor in preterm birth? Lumley J. **Lancet** 1997 Apr 12;349(9058):1040–1

Socioeconomic inequalities in morbidity and mortality in western Europe [letter; comment] Vågerö D, et al. **Lancet** 1997 Aug 16;350(9076):516; discussion 517–8. Comment on: Lancet 1997 Jun 7;349(9066):1655–9.

Influence of fathers' social class on cardiovascular disease in middle–aged men [see comments] Wannamethee SG, et al. **Lancet** 1996 Nov 9;348(9037):1259–63. Comment in: Lancet 1996 Nov 9;348(9037):1254–5. Comment in: Lancet 1997 Jan 25;349(9047):284–5.

How important a factor is social class in preterm birth? [letter] Wildschut HI, et al. **Lancet** 1997 Jul 12; 350(9071):148

"Public health" for whose benefit? Multiple discourses on malaria in Sri Lanka. Silva KT. **Med Anthropol** 1997 May; 17(3):195–214

Sociodemographic and educational correlates of hearing loss in Hispanic children. Lee DJ, et al. **Paediatr Perinat Epidemiol** 1997 Jul;11(3):333–44

Parental awareness, habits, and social factors and their relationship to baby bottle tooth decay. Febres C, et al. **Pediatr Dent** 1997 Jan–Feb;19(1):22–7

Class differences and traffic deaths. Krus DJ, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1005–6

Current patterns and trends in male mortality by social class (based on occupation). Drever F, et al. **Popul Trends** 1996 Winter;(86):15–20

Are physicians less likely to recommend preventive services to low–SES patients? Solberg LI, et al. **Prev Med** 1997 May–Jun;26(3):350–7

The economic life of seriously mentally ill people in the community. Polak P, et al. **Psychiatr Serv** 1996 Mar; 47(3):270–4

Maternal child–rearing attitudes, IQ, and socioeconomic status as related to cognitive abilities of five–year–old children. Andersson HW, et al. **Psychol Rep** 1996 Aug; 79(1):3–14

Social class and behavior: simultaneous class positions yield different amounts of income. Muntaner C, et al. **Psychol Rep** 1996 Oct;79(2):379–82

Neuroticism and type A behaviour pattern in healthy Italian blue–collar workers [see comments] Sanavio E, et al. **Psychother Psychosom** 1996;65(3):145–9. Comment in: Psychother Psychosom 1997;66(2):111.

Social inequalities in the experience of illness in Sweden: a "double suffering". Blank N, et al. **Scand J Soc Med** 1996 Jun;24(2):81–9

Relationships between health behavior, knowledge, and beliefs among Swedish blue–collar workers. Näslund GK. **Scand J Soc Med** 1997 Jun;25(2):100–10

Fertility patterns according to occupational grouping in Norway, 1989. Strand K, et al. **Scand J Soc Med** 1996 Mar;24(1):50–4

Socio–economic status, health and life–style in two elderly cohorts in Jyväskylä. Pohjolainen P, et al. **Scand J Soc Med Suppl** 1997;52:1–65

Is a child's risk of early onset schizophrenia increased in the highest social class? Mäkikyrö T, et al. **Schizophr Res** 1997 Feb 28;23(3):245–52

Health inequalities in later life in a social democratic welfare state. Dahl E, et al. **Soc Sci Med** 1997 Mar;44(6):871–81

An economic and sociological interpretation of social differences in health–related behaviour: an encounter as a guide to social epidemiology. Lindbladh E, et al. **Soc Sci Med** 1996 Dec;43(12):1817–27

Childhood conditions, sense of coherence, social class and adult ill health: exploring their theoretical and empirical relations. Lundberg O. **Soc Sci Med** 1997 Mar;44(6):821–31

The integration of two health systems: social stratification, work and health in East and West Germany. Lüschen G, et al. **Soc Sci Med** 1997 Mar;44(6):883–99

Why do poor people behave poorly? Variation in adult health behaviours and psychosocial characteristics by stages of the socioeconomic lifecourse. Lynch JW, et al. **Soc Sci Med** 1997 Mar;44(6):809–19

The Black Report and beyond: what are the issues? Macintyre S. **Soc Sci Med** 1997 Mar;44(6):723–45 (196 ref.)

Comparing measures of health inequality. Manor O, et al. **Soc Sci Med** 1997 Sep;45(5):761–71

Social inequalities in health: next questions and converging evidence. Marmot M, et al. **Soc Sci Med** 1997 Mar; 44(6):901–10

Social class, gender and intrahousehold food allocations to children in South Asia. Miller BD. **Soc Sci Med** 1997 Jun; 44(11):1685–95

Is general practitioner decision making associated with patient socio–economic status? Scott A, et al. **Soc Sci Med** 1996 Jan;42(1):35–46

Health inequalities in the early years: is there equalisation in youth? West P. **Soc Sci Med** 1997 Mar;44(6):833–58

Socioeconomic status and adolescent injuries. Williams JM, et al. **Soc Sci Med** 1997 Jun;44(12):1881–91

Socioeconomic inequality and psychopathology: are socioeconomic status and social class interchangeable? Wohlfarth T. **Soc Sci Med** 1997 Aug;45(3):399–410

Classism in the curriculum [letter] Santiago M. **Soc Work** 1996 May;41(3):336

Psychosocial factors in the workplace—do they predict new episodes of low back pain? Evidence from the South Manchester Back Pain Study. Papageorgiou AC, et al. **Spine** 1997 May 15;22(10):1137–42

Evaluation of social status as a contributing factor to the stroke belt region of the United States. Howard G, et al. **Stroke** 1997 May;28(5):936–40

Medical care for the underclass. Houck PW. **Va Med Q** 1997 Summer;124(3):146

[Social support network evolution after the birth of their first baby: comparison between lower and middle class mothers] Seguin L, et al. **Can J Public Health** 1995 Nov–Dec;86(6):392–6 (Eng. Abstr.) **(Fre)**

[Socioeconomic categories and mortality] Ducimetière P. **Rev Epidemiol Sante Publique** 1997 Jun;45(3):263–4 **(Fre)**

[Variability of home dietary habits of families living in Bamako (Mali) according to their socioeconomic status] Ag Bendech M, et al. **Sante** 1996 Sep–Oct;6(5):285–97 (Eng. Abstr.) **(Fre)**

[Medicinal drug use by children] Buser K, et al. **Gesundheitswesen** 1997 Apr;59(4):252–7 (Eng. Abstr.) **(Ger)**

[Age–related social inequality in mortality] Stolpe S. **Gesundheitswesen** 1997 Apr;59(4):242–7 (Eng. Abstr.) **(Ger)**

[Socio–economic status of the family. Effect on nutrition and health of the child] Netrebenko OK, et al. **Vopr Pitan** 1997;

SOCIAL CLASS

(1):42–3 **(Rus)**

[Physical activity and leisure time in children. I: Relation to socioeconomic status] Mur de Frenne L, et al. **An Esp Pediatr** 1997 Feb;46(2):119–25 (Eng. Abstr.) **(Spa)**

[Influence of health centers and social class in the prevalence of breast feeding] Lluch Fernández C, et al. **Aten Primaria** 1996 Sep 30;18(5):253–6 (Eng. Abstr.) **(Spa)**

SOCIAL CLUBS, THERAPEUTIC see **SELF-HELP GROUPS**

SOCIAL CONDITIONS

Images of youth: the issue of juvenile smoking, 1880–1914. Welshman J. **Addiction** 1996 Sep;91(9):1379–86

Challenging the conventional wisdom [editorial] Joel LA. **Am J Nurs** 1997 Jan;97(1):7

Health and the life course: why safety nets matter. Bartley M, et al. **BMJ** 1997 Apr 19;314(7088):1194–6

Child mortality in a collapsing African society. Ibrahim MM, et al. **Bull World Health Organ** 1996;74(5):547–52

Effect of anthropometric characteristics and socio-economic status on physical performances of pre-pubertal children living in Bolivia at low altitude. de Jonge R, et al. **Eur J Appl Physiol** 1996;74(4):367–74

The Jerusalem seventy-year-old longitudinal study. I: Description of the initial cross-sectional survey. Stessman J, et al. **Eur J Epidemiol** 1995 Dec;11(6):675–84

Social circumstances reports—a critical evaluation. Larmour PA. **Health Bull (Edinb)** 1996 Nov;54(6):486–9

Profile of Jerusalem's 70 year olds—social data. Cohen A, et al. **Isr J Med Sci** 1996 Aug;32(8):688–701

Living conditions, inequalities in health, human rights and security: a European perspective in a global context. Middleton J. **Med Confl Surviv** 1996 Jul–Sep;12(3):240–53 (76 ref.)

Social structure, reproductive health and the knowledge-behaviour gap. Jagdeo TP. **Promot Educ** 1996 Sep;3(3):11–4, 45

[Colombia 1996: social and health situation] Botero D. **Med Trop (Mars)** 1996;56(2):123–8 (12 ref.) **(Fre)**

[Scientific Commission for the Study of Social Inequities of Health in Spain (editorial)] Navarro López V, et al. **Rev Esp Salud Publica** 1996 Sep–Dec;70(5–6):503–4 **(Spa)**

[Social inequities of health in Spain. Report of the Scientific Commission for the Study of Social Inequities in Health in Spain] Navarro López V, et al. **Rev Esp Salud Publica** 1996 Sep–Dec;70(5–6):505–636 (Eng. Abstr.) **(Spa)**

SOCIAL CONFORMITY

see related
SOCIAL CONTROL, INFORMAL

A critique of social bonding and control theory of delinquency using the principles of Psychology of Mind. Kelley TM. **Adolescence** 1996 Summer;31(122):321–37 (31 ref.)

Lifestyle and risk of premature sexual activity in a high school population of Seventh-Day Adventists: Valuegenesis 1989. Weinbender ML, et al. **Adolescence** 1996 Summer;31(122):265–81

Age changes in the causes of individual differences in conservatism. Eaves L, et al. **Behav Genet** 1997 Mar; 27(2):121–4

Living systems theory as a paradigm for organizational behavior: understanding humans, organizations, and social processes. Vancouver JB. **Behav Sci** 1996 Jul;41(3):165–204 (200 ref.)

Disruptiveness, friends' characteristics, and delinquency in early adolescence: a test of two competing models of development. Vitaro F, et al. **Child Dev** 1997 Aug; 68(4):676–89

Era-related changes in the Japanese cultural and social structure and conformist personality pathology—with a particular emphasis on borderline personality disorder. Tamai K. **Fukuoka Igaku Zasshi** 1997 Apr;88(4):84–9 (2 ref.)

Psychosocial conventionality, health orientation, and contraceptive use in adolescence. Costa FM, et al. **J Adolesc Health** 1996 Jun;18(6):404–16

Experience with risk-taking adolescents [letter; comment] Kay P. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1423–4. Comment on: J Am Acad Child Adolesc Psychiatry 1995 Dec;34(12):1682–3.

Influences of social groups on eating patterns: a study among young adults. Oygard L, et al. **J Behav Med** 1996 Feb; 19(1):1–15

Social referencing by young chimpanzees (Pan troglodytes). Russell CL, et al. **J Comp Psychol** 1997 Jun;111(2):185–93

Attitude and peer cross pressure: adolescent drug and alcohol use. Robin SS, et al. **J Drug Educ** 1996;26(1):69–99

Fear of death and the judgment of social transgressions: a multidimensional test of terror management theory. Florian V, et al. **J Pers Soc Psychol** 1997 Aug;73(2):369–80

Intergroup norms and intergroup discrimination: distinctive self-categorization and social identity effects. Jetten J, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1222–33

When exceptions prove the rule: how extremity of deviance determines the impact of deviant examples on stereotypes. Kunda Z, et al. **J Pers Soc Psychol** 1997 May;72(5):965–79

Interpersonal perception and metaperception in nonoverlapping social groups. Malloy TE, et al. **J Pers Soc Psychol** 1997 Feb;72(2):390–8

Self-definition, defensive processing, and influence: the normative impact of majority and minority groups. Wood W, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1181–93

The relationship between psychological reactance and self-esteem. Hellman CM, et al. **J Soc Psychol** 1997 Feb; 137(1):135–8

Asymmetries of facial motility during the dissimulation of emotion. Clarici A, et al. **Percept Mot Skills** 1996 Aug; 83(1):263–74

For an anthropology of vulnerability. Stanghellini G. **Psychopathology** 1997;30(1):1–11 (71 ref.)

Beyond the orthodox: heresy in medicine and the social sciences from a cross-cultural perspective. Gürsoy A. **Soc Sci Med** 1996 Sep;43(5):577–99 (156 ref.)

Gender, social pressure, and smoking cessations: the Community Intervention Trial for Smoking Cessation (COMMIT) at baseline. Royce JM, et al. **Soc Sci Med** 1997 Feb;44(3):359–70

Medical heresy—the view of a heretic. Stambolovic V. **Soc Sci Med** 1996 Sep;43(5):601–4

[Significance of membership in new religious movements for regulation of self concept exemplified by the Hare Krischna movement] Kraus D, et al. **Psychother Psychosom Med Psychol** 1997 Jan;47(1):21–6 (Eng. Abstr.) **(Ger)**

[School children and loud music. On the significance of technically enhanced music on the life style of students] Hanel J. **Schriftenr Ver Wasser Boden Lufthyg** 1996; 99:1–149 **(Ger)**

SOCIAL CONTROL, FORMAL

Crackdown on drugs [news] **Addiction** 1996 Aug;91(8):1240

A critique of social bonding and control theory of delinquency using the principles of Psychology of Mind. Kelley TM. **Adolescence** 1996 Summer;31(122):321–37 (31 ref.)

Cigarette sales to African-American and white minors in low-income areas of Baltimore. Voorhees CC, et al. **Am J Public Health** 1997 Apr;87(4):652–4

The future of Britain's high security hospitals. Many staff working in secure psychiatric facilities want to be become members of Prison Officers' Association [letter; comment] Caton B. **BMJ** 1997 May 31;314(7094):1622. Comment on: BMJ 1997 May 3;314(7090):1292–3.

The future of Britain's high security hospitals [editorial] [see comments] Murphy E. **BMJ** 1997 May 3;314(7090):1292–3 . Comment in: BMJ 1997 May 31;314(7094):1622.

The future of Britain's high security hospitals. Primacy of patients must be re-established as sole reason for hospitals' existence [letter; comment] Travers RF. **BMJ** 1997 May 31;314(7094):1622. Comment on: BMJ 1997 May 3;14(7090):1292–3.

Changes among retailers selling cigarettes to minors. Dovell RA, et al. **Can J Public Health** 1996 Jan–Feb;87(1):66–8

Disasters, the media and social structures: a typology of credibility hierarchy persistence based on a newspaper coverage of the Love Canal and six other disasters. Ploughman P. **Disasters** 1997 Jun;21(2):118–37 (79 ref.)

Psychopharmacoepidemiology in Iceland: effects of regulations and new medications. Helgason T, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(2):93–9

Patient prescribed sertraline charged with driving under the influence [letter] Lock J. **J Clin Psychopharmacol** 1997 Feb; 17(1):61

Disciplining children with disabilities under the Individuals with Disabilities Education Act. Ramsingh OM. **J Contemp Health Law Policy** 1995 Fall;12(1):155–81 (211 ref.)

A topography of psychiatric disorders among correction officers. Tartaglini AJ, et al. **J Occup Environ Med** 1997 Jun;39(6):569–73

Immunization compliance among public and private school children. Fredrickson DD, et al. **J Sch Health** 1997 Feb; 67(2):75–7

The relationship between psychological reactance and self-esteem. Hellman CM, et al. **J Soc Psychol** 1997 Feb; 137(1):135–8

The state of medical device regulation [letter; comment] Loftman BA. **J Spinal Disord** 1996 Dec;9(6):544. Comment on: J Spinal Disord 1995 Oct;8(5):396–412.

Detention of persistently nonadherent patients with tuberculosis [see comments] Oscherwitz T, et al. **JAMA** 1997 Sep 10;278(10):843–6. Comment in: JAMA 1997 Sep 10;278(10):865–7.

Illicit drugs for medical use [letter] Marks J. **Lancet** 1997 May 3;349(9061):1329

The role of forensic medical services of Azerbaijan Republic in cases of natural calamities, terrorist actions and other urgent situations—organizational principles of joint activities of forensic medical services and the law-enforcement agencies. Youssifli RM, et al. **Med Law** 1996;15(2):337–40

Drink driving legislation. Letter from Drs. Stark and Rogers [letter] Green PG. **Med Leg J** 1996;64 (Pt 1):43

Crime affects our health. Hellawell K. **Med Leg J** 1996;64 (Pt 1):6–22

Letter from Doctors Stark and Rogers [letter] [see comments] Ley N. **Med Leg J** 1996;64 (Pt 1):43. Comment in: Med Leg J 1996;64 (Pt 4):198–9.

Is it time for a formal disciplinary code for psychiatric in-patients in England and Wales? Crichton JH. **Med Sci Law** 1996 Jan;36(1):65–8

Jaffee v. Redmond: psychotherapist-patient privilege in the federal courts. Appelbaum PS. **Psychiatr Serv** 1996 Oct; 47(10):1033–4, 1052

Law officers' role in commitment [letter; comment] Cox WF. **Psychiatr Serv** 1997 Apr;48(4):543. Comment on: Psychiatr Serv 1997 Jan;48(1):17–8.

Psychoanalysis on the beat. Children, police, and urban trauma. Marans S. **Psychoanal Study Child** 1996;51:522–41

Note on concurrent validation of the personality assessment inventory in law enforcement. Hays JR. **Psychol Rep** 1997 Aug;81(1):244–6

Predicting the rate with which law enforcement officers are murdered. Lester D. **Psychol Rep** 1996 Apr;78(2):578

Environmental risk harmonization: federal/state approaches to risk assessment and management. Kamrin MA. **Regul Toxicol Pharmacol** 1997 Apr;25(2):158–65 (16 ref.)

Science advice and the regulation of chemicals [editorial] Stöhrer G, et al. **Regul Toxicol Pharmacol** 1997 Apr; 25(2):89–90

Perceived effectiveness of community-based measures against alcohol misuse among "problem" and "nonproblem" drinkers. Goldstein RB, et al. **Subst Use Misuse** 1997 Apr; 32(5):507–54

A historical survey of police suicide in Queensland, Australia, 1843–1992. Cantor CH, et al. **Suicide Life Threat Behav** 1995 Winter;25(4):499–507

1995 tobacco control ordinances survey: Wisconsin counties, cities and villages. Brazin S, et al. **Wis Med J** 1996 Nov; 95(11):773–4

[Childhood and violence: perpetrator and victim perspectives from the viewpoint of criminology] Wetzels P, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):143–52 (Eng. Abstr.) **(Ger)**

[Public health and national security (editorial)] Alleyne G. **Bol Oficina Sanit Panam** 1996 May;120(5):369–77 **(Spa)**

[Public health and public wealth: social costs as a basis for restrictive policies. 1980. (classical article)] Courtwright DT. **Salud Publica Mex** 1996 Jul–Aug;38(4):294–304 **(Spa)**

METHODS

Substance-free residence halls: the promise and the practice. Finn P. **J Am Coll Health** 1996 Sep;45(2):51–8

Understanding violence [editorial] Obholzer A. **Med Confl Surviv** 1997 Jan–Mar;13(1):1–2

Dog as detective. Slovenko R. **Med Law** 1995;14(5–6):485–8

SOCIAL CONTROL, INFORMAL

Perception of friends' use of alcohol, cigarettes, and marijuana among urban schoolchildren: a longitudinal analysis. Iannotti RJ, et al. **Addict Behav** 1996 Sep–Oct; 21(5):615–32

Situational norms for drinking and drunkenness: trends in the US adult population, 1979–1990. Greenfield TK, et al. **Addiction** 1997 Jan;92(1):33–47

Control theory, labeling theory, and the delivery of services for drug abuse to adolescents. Downs WR, et al. **Adolescence** 1997 Spring;32(125):1–24

Peacebuilders: a theoretically driven, school-based model for early violence prevention. Embry DD, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):91–100

Neither too sweet nor too sour: problem peers, maternal control, and problem behavior in African American adolescents. Mason CA, et al. **Child Dev** 1996 Oct; 67(5):2115–30

Prevalence and effectiveness of self-regulatory techniques used to avoid drunk driving. Brown SL. **J Behav Med** 1997 Feb;20(1):55–66

A longitudinal study of adolescents' attitudes about assistance in the development of moral values. Zern DS. **J Genet Psychol** 1997 Mar;158(1):79–95

A reconsideration of parental and peer influences on adolescent deviance. Aseltine RH Jr. **J Health Soc Behav** 1995 Jun;36(2):103–21

Amount of psychological stress reported by high school volleyball officials. Stewart MJ, et al. **Percept Mot Skills** 1996 Aug;83(1):337–8

Household smoking restrictions and adolescents' exposure to environmental tobacco smoke. Biener L, et al. **Prev Med** 1997 May–Jun;26(3):358–63

Social psychological variables in populations contrasted by income and suicide rate: Durkheim revisited. Ferrada-Noli M. **Psychol Rep** 1997 Aug;81(1):307–16

Neighborhoods and violent crime: a multilevel study of collective efficacy. Sampson RJ, et al. **Science** 1997 Aug 15;277(5328):918–24

METHODS

Youth tobacco sale compliance checks: impact on vendor practices and community policy. Schensky AE, et al. **Wis Med J** 1996 Nov;95(11):775–8

SOCIAL DESIRABILITY

The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy. Gilbert P.
Br J Med Psychol 1997 Jun;70 (Pt 2):113–47 (140 ref.)
Caring for "socially undesirable" patients [see comments] Jecker NS. **Camb Q Healthc Ethics** 1996 Fall;5(4):500–10 . Comment in: Camb Q Healthc Ethics 1996 Fall;5(4):519–32.
Analysis of risk to children participating in a sociometric task. Iverson AM, et al. **Dev Psychol** 1997 Jan;33(1):104–12
What they want and what they get: the social goals of boys with ADHD and comparison boys. Melnick SM, et al.
J Abnorm Child Psychol 1996 Apr;24(2):169–85
Toward a new psychometric definition of social disability in children with attention-deficit hyperactivity disorder [see comments] Greene RW, et al.
J Am Acad Child Adolesc Psychiatry 1996 May;35(5):571–8 . Comment in: J Am Acad Child Adolesc Psychiatry 1996 Dec;35(12):1570–1.
Reputation enhancement theory and adolescent substance use. Odgers P, et al. **J Child Psychol Psychiatry** 1996 Nov; 37(8):1015–22
Peer assessment of social reputation in community samples of disruptive and nondisruptive children: utility of the revised class play method. Realmuto GM, et al.
J Clin Child Psychol 1997 Mar;26(1):67–76
Sex role conflict, social desirability, and eating-disorder attitudes and behaviors. Johnson ME, et al.
J Gen Psychol 1996 Jan;123(1):75–87
The relationship of homophobia to intimacy in heterosexual men. Monroe M, et al. **J Homosex** 1997;33(2):23–37
Absorption, social desirability, and symptoms in a behavioral medicine population. Gick M, et al. **J Nerv Ment Dis** 1997 Jul;185(7):454–8
Brief report: preschoolers' social preferences for interacting with peers with physical differences. Nabors LA, et al.
J Pediatr Psychol 1997 Feb;22(1):113–22
A preliminary analysis of the perceived risks of misusing multiple substances, trait anxiety, and approval motivation. Hittner JB. **J Psychol** 1997 Sep;131(5):501–11
Ratings of interpersonal conduct in small groups by aggregated peers and self: replicated factor analyses. Hurley JR. **J Soc Psychol** 1996 Oct;136(5):597–611
Facially impaired man versus chimpanzee: a within-primate differentiation effect. Wion F. **Percept Mot Skills** 1996 Oct; 83(2):691–700
Social desirability in the assessment of trauma. Brunet A, et al. **Psychol Rep** 1996 Oct;79(2):511–4
Eysenck personality inventory: impulsivity/neuroticism and social desirability response set. Kumari V. **Psychol Rep** 1996 Feb;78(1):35–40
Response set of social desirability in relation to the Mental, Physical and Spiritual Well-Being Scale. Vella-Brodrick DA, et al. **Psychol Rep** 1997 Aug;81(1):127–30
Is anonymity important in AIDS survey research? Zagumny MJ, et al. **Psychol Rep** 1996 Feb;78(1):270
Girls, pecking order and smoking. Michell L, et al.
Soc Sci Med 1997 Jun;44(12):1861–9
Socially desirable responding and offence characteristics among rapists. Kroner DG, et al. **Violence Vict** 1996 Fall; 11(3):263–70
[Sociability, violence and exclusion] Woringer V.
Rev Med Suisse Romande 1997 May;117(5):399–405 **(Fre)**
[When a sense of justice hinders social efficiency: Pareto axiom revisited] Ohtsubo Y, et al. **Shinrigaku Kenkyu** 1996 Dec;67(5):367–74 (Eng. Abstr.) **(Jpn)**

SOCIAL DISCRIMINATION see **PREJUDICE**

SOCIAL DISORGANIZATION see **ANOMIE**

SOCIAL DISTANCE

The influence of psychiatric hospital and community residence labels on social rejection of the mentally ill. Ingamells S, et al. **Br J Clin Psychol** 1996 Sep;35 (Pt 3):359–67
A methodological note on the application of the generalized grid technique in the measurement of perceived intercultural distance. Puddifoot JE. **Br J Soc Psychol** 1996 Sep;35 (Pt 3):433–41
Engagement and detachment: understanding patients' experiences with nursing. Kralik D, et al. **J Adv Nurs** 1997 Aug;26(2):399–407
Relationship of people across an international border based on an isonymy analysis across the German–Danish frontier. Boldsen J, et al. **J Biosoc Sci** 1996 Apr;28(2):177–83
The reverse social distance scale. Lee MY, et al.
J Soc Psychol 1996 Feb;136(1):17–24
Psychological reaction to perceived erasure of community boundaries. Puddifoot JE. **J Soc Psychol** 1997 Jun; 137(3):343–55
The perception of an out-group after provocation by one of its members. Ruscher JB, et al. **J Soc Psychol** 1997 Feb; 137(1):5–9
Public perceptions of former psychiatric patients in England. Reda S. **Psychiatr Serv** 1996 Nov;47(11):1253–5
Social distance towards the mentally ill: results of representative surveys in the Federal Republic of Germany. Angermeyer MC, et al. **Psychol Med** 1997 Jan;27(1):131–41
Effect of infants on adult social relations in the squirrel monkey (Saimiri Sciureus). Aruguete MS, et al.
Psychol Rep 1996 Oct;79(2):603–11
[Social distance of the population toward psychiatric patients] Angermeyer MC, et al. **Gesundheitswesen** 1996 Jul;58(1 Suppl):18–24 (Eng. Abstr.) **(Ger)**

SOCIAL DOMINANCE

Longitudinal study of dominance relations among captive patas monkeys. Goldman EN, et al. **Am J Primatol** 1997; 42(1):41–51
Familial influences on ovulatory function in common marmosets (Callithrix jacchus). Saltzman W, et al.
Am J Primatol 1997;41(3):159–77
Social and reproductive conditions modulate urinary cortisol excretion in black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Am J Primatol** 1997;42(4):253–67
Styles of male social behavior and their endocrine correlates among low-ranking baboons. Virgin CE Jr, et al.
Am J Primatol 1997;42(1):25–39
Social facilitation, affiliation, and dominance in the social life of spotted hyenas. Glickman SE, et al.
Ann N Y Acad Sci 1997 Jan 15;807:175–84
The gender gap: differences in political attitudes and social dominance orientation. Pratto F, et al.
Br J Soc Psychol 1997 Mar;36 (Pt 1):49–68
Social defeat stress selectively alters mesocorticolimbic dopamine release: an in vivo microdialysis study. Tidey JW, et al. **Brain Res** 1996 May 20;721(1–2):140–9
Daddy's girl? Anomalous social rank of a female rhesus macaque (Macaca mulatta). Ball HL.
Folia Primatol (Basel) 1997;68(1):44–9
What a maleless group can tell us about the constraints on female transfer in Thomas's langurs (Presbytis thomasi). Steenbeek R. **Folia Primatol (Basel)** 1996;67(4):169–81
Behavioral dominance and corpus luteum function in red deer Cervus elaphus. Flint AP, et al. **Horm Behav** 1997 Jun; 31(3):296–304
Sex determination and the maternal dominance hypothesis. Grant VJ. **Hum Reprod** 1996 Nov;11(11):2371–5 (59 ref.)
Behavioral characteristics of two rat strains differing in sensitivity to the cardiotoxic effect of isoprenaline. Starec M, et al. **Int J Neurosci** 1996 Nov;87(3–4):241–8
Male testosterone linked to high social dominance but low physical aggression in early adolescence. Schaal B, et al.
J Am Acad Child Adolesc Psychiatry 1996 Oct; 35(10):1322–30
Influence of owner personality type on expression and treatment outcome of dominance aggression in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1996 Sep 15; 209(6):1107–9
Use of fluoxetine to treat dominance aggression in dogs. Dodman NH, et al. **J Am Vet Med Assoc** 1996 Nov 1; 209(9):1585–7
Medical practice and social authority [see comments] Pippin RB. **J Med Philos** 1996 Aug;21(4):417–37 (19 ref.). Comment in: J Med Philos 1996 Aug;21(4):357–73.
Stress and dominance in a social fish. Fox HE, et al.
J Neurosci 1997 Aug 15;17(16):6463–9
The gender gap in occupational role attainment: a social dominance approach. Pratto F, et al.
J Pers Soc Psychol 1997 Jan;72(1):37–53
Rank and reproduction in the female spotted hyaena. Holekamp KE, et al. **J Reprod Fertil** 1996 Nov; 108(2):229–37
Testosterone secretion, musth behaviour and social dominance in captive male Asian elephants living near the equator. Lincoln GA, et al. **J Reprod Fertil** 1996 Sep; 108(1):107–13
Social status and aggression: a field study analyzed by survival analysis. Diekmann A, et al. **J Soc Psychol** 1996 Dec;136(6):761–8
Characterization and treatment of 20 canine dominance aggression cases. Uchida Y, et al. **J Vet Med Sci** 1997 May; 59(5):397–9
Creation of a defense dominant during the functioning of a blink dominant in the rabbit. Roshchina GYa.
Neurosci Behav Physiol 1996 Jul–Aug;26(4):349–56
Alterations in the central nervous alpha 2-adrenoceptor system under chronic psychosocial stress. Flügge G.
Neuroscience 1996 Nov;75(1):187–96
Involvement of the brain catecholaminergic system in the regulation of dominant behavior. Serova LI, et al.
Pharmacol Biochem Behav 1996 Feb;53(2):285–90
Dissociation between adrenal tyrosinehydroxylase and phenylethanolamine N-methyltransferase activities following repeated experience of defeats in individually housed male DBA/2J mice. Haemisch A, et al.
Physiol Behav 1996 Jun;59(6):1117–22
Dominance and queen succession in captive colonies of the eusocial naked mole-rat, Heterocephalus glaber. Clarke FM, et al. **Proc R Soc Lond B Biol Sci** 1997 Jul 22; 264(1384):993–1000
Social dominance and 22-year all-cause mortality in men. Houston BK, et al. **Psychosom Med** 1997 Jan–Feb; 59(1):5–12
The influence of dominance rank on the reproductive success of female chimpanzees [see comments] Pusey A, et al.
Science 1997 Aug 8;277(5327):828–31. Comment in: Science 1997 Aug 8;277(5327):774–5.
Subtle, secret female chimpanzees [comment] Wrangham RW. **Science** 1997 Aug 8;277(5327):774–5. Comment on: Science 1997 Aug 8;277(5327):828–31.
Stress and behaviorally induced reproductive dysfunction in primates. Cameron JL. **Semin Reprod Endocrinol** 1997 Feb; 15(1):37–45 (56 ref.)
Medical professional dominance and client dissatisfaction. A study of doctor-patient interaction and reported dissatisfaction with medical care among female patients at four hospitals in Trinidad and Tobago. Phillips D.
Soc Sci Med 1996 May;42(10):1419–25
Assessment, management, and prognosis of canine dominance-related aggression. Reisner IR.
Vet Clin North Am Small Anim Pract 1997 May; 27(3):479–95 (75 ref.)
The Dominance Scale: preliminary psychometric properties. Hamby SL. **Violence Vict** 1996 Fall;11(3):199–212
[Social dominance and rank relationships in domestic pigs: a critical review] Puppe B.
Berl Munch Tierarztl Wochenschr 1996 Nov–Dec; 109(11–12):457–64 (91 ref.) (Eng. Abstr.) **(Ger)**
[Monoamine oxidase activity in the brain of male laboratory mice differing in the capacity for social dominance] Kozlova ON, et al. **Genetika** 1996 Oct;32(10):1375–80 (Eng. Abstr.) **(Rus)**
[The spatial relationships and social structure of gerbils in the genus Meriones (Gerbillinae, Rodentia)] Gromov VS.
Zh Obshch Biol 1997 Mar–Apr;58(2):35–54 (Eng. Abstr.) **(Rus)**

SOCIAL ENVIRONMENT

see related
LIFE STYLE

Learning in the social context of ambulatory care clinics. Bowen JL, et al. **Acad Med** 1997 Mar;72(3):187–90
Fatigue, mindset and ecology in the hazard dominant environment. Nelson TM. **Accid Anal Prev** 1997 Jul; 29(4):409–15
Environmental influence on outcome after experiment brain infarction. Johansson BB. **Acta Neurochir Suppl (Wien)** 1996;66:63–7
Home environment and cognitive abilities in infants born small-for-gestational-age. Andersson HW, et al.
Acta Obstet Gynecol Scand Suppl 1997;165:82–6
Relationships between characteristics of the ward atmosphere and treatment outcome in a psychiatric day-care unit based on occupational therapy. Eklund M, et al.
Acta Psychiatr Scand 1997 Apr;95(4):329–35
Psychosocial factors and completed suicide in personality disorders. Heikkinen M, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):49–57
Ethnicity, social factors, illness and suicide: a follow-up study of a random sample of the Swedish population. Johansson LM, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):125–31
Correlates of life satisfaction among psychiatric patients. Koivumaa-Honkanen HT, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):372–8
Do young women in tropical regions constitute a recognized social category? Ahlberg BM. **Acta Trop** 1996 Dec 30; 62(4):201–7 (15 ref.)
Drinking location and risk of alcohol-impaired driving among high school seniors. Lee JA, et al. **Addict Behav** 1997 May-Jun;22(3):387–93
Are psychosocial factors related to smoking in grade-6 students? Pederson LL, et al. **Addict Behav** 1997 Mar-Apr; 22(2):169–81
Effects of alcohol and expectancy on self-disclosure and anxiety in male and female social drinkers. Schippers GM, et al. **Addict Behav** 1997 May-Jun;22(3):305–14
Fostering self-change among problem drinkers: a proactive community intervention. Sobell LC, et al. **Addict Behav** 1996 Nov-Dec;21(6):817–33
The first hit: circumstances surrounding initiation into injecting. Crofts N, et al. **Addiction** 1996 Aug;91(8):1187–96
Changing society, changing drinking: solitary drinking as a non-pathological behaviour. Demers A, et al. **Addiction** 1996 Oct;91(10):1505–16
Drug use in the high intensity drug trafficking area of the US Southwest border. Harrison LD, et al. **Addiction** 1996 Jan;91(1):47–61
Mediators of adolescents' stress in a college preparatory environment. Ainslie RC, et al. **Adolescence** 1996 Winter; 31(124):913–24
Adolescents and adults at the mall: dyadic interactions. Readdick CA, et al. **Adolescence** 1997 Summer; 32(126):313–22
AIDS 1995. Social, cultural and political aspects: overview. Aggleton P, et al. **AIDS** 1995;9 Suppl A:S237–8
Social and behavioral issues in phase III HIV preventive vaccine trials. Grinstead OA. **AIDS** 1995;9 Suppl A:S245–50 (32 ref.)
Reducing HIV incidence in developing countries with structural and environmental interventions. Sweat MD, et al. **AIDS** 1995;9 Suppl A:S251–7 (55 ref.)
Children's AIDS-related knowledge and attitudes: variations by grade, race, gender, socioeconomic status, and size of community. Kistner J, et al. **AIDS Educ Prev** 1997 Jun; 9(3):285–98
Low dose of ethanol induces conditioned place preference in rats after repeated exposures to ethanol or saline injections. Bienkowski P, et al. **Alcohol Alcohol** 1996 Nov; 31(6):547–53

SOCIAL ENVIRONMENT

Adolescent risk factors and the prediction of persistent alcohol and drug use into adulthood. Bates ME, et al. **Alcohol Clin Exp Res** 1997 Aug;21(5):944–50

Effect of surrogate fostering on splenic lymphocytes in fetal ethanol exposed rats. Giberson PK, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):44–55

Subtypes of alcohol-dependent men: a typology based on relative genetic and environmental loading. Johnson EO, et al. **Alcohol Clin Exp Res** 1996 Nov;20(8):1472–80

Effects of alcohol exposure and artificial rearing during development on septal and hippocampal neurotransmitters in adult rats. Kelly SJ. **Alcohol Clin Exp Res** 1996 Jun; 20(4):670–6

Prenatal alcohol exposure results in hyperactivity of the hypothalamic–pituitary–adrenal axis of the offspring: modulation by fostering at birth and postnatal handling. Ogilvie KM, et al. **Alcohol Clin Exp Res** 1997 May; 21(3):424–9

Effects of alcohol cues on smoking urges and topography among alcoholic men. Rohsenow DJ, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):101–7

Strategies for revealing the multiple determinants of drinking: pharmacological and environmental manipulations. Tomkins DM. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):125A–127A

"When I am lonely the mountains call me": the impact of sacred geography on Navajo psychological well being. Griffin-Pierce T. **Am Indian Aisk Native Ment Health Res** 1997;7(3):1–10

Familial factors in illicit drug abuse: an interdisciplinary perspective. Ripple CH, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):147–72 (54 ref.)

The transmission of parent/adult-child drinking patterns: testing a gender-specific structural model. Yu J, et al. **Am J Drug Alcohol Abuse** 1997 Feb;23(1):143–65

Inhibition of social behavior in chimpanzees under high-density conditions. Aureli F, et al. **Am J Primatol** 1997;41(3):213–28

Interactions between infant growth and survival: evidence for selection on age-specific body weight in captive common marmosets (Callithrix jacchus). Jaquish CE, et al. **Am J Primatol** 1997;42(4):269–80

Social support: a genetic-epidemiologic analysis. Kendler KS. **Am J Psychiatry** 1997 Oct;154(10):1398–404

Gene–environment interaction in vulnerability to schizophrenia: findings from the Finnish Adoptive Family Study of Schizophrenia. Wahlberg KE, et al. **Am J Psychiatry** 1997 Mar;154(3):355–62

Sociocultural influences in the theory of Karen Horney. Miccolis G. **Am J Psychoanal** 1996 Jun;56(2):141–7

Sociometric risk networks and risk for HIV infection. Friedman SR, et al. **Am J Public Health** 1997 Aug; 87(8):1289–96

Neighborhood social environments and the distribution of low birthweight in Chicago. Roberts EM. **Am J Public Health** 1997 Apr;87(4):597–603

On the incomplete architecture of human ontogeny. Selection, optimization, and compensation as foundation of developmental theory. Baltes PB. **Am Psychol** 1997 Apr; 52(4):366–80 (110 ref.)

Social ties and health: the benefits of social integration. Seeman TE. **Ann Epidemiol** 1996 Sep;6(5):442–51 (69 ref.)

Effects of marital status on the risk of mortality in poor and non-poor neighborhoods. Smith KR, et al. **Ann Epidemiol** 1997 Jul;7(5):343–9

Grouped caging predisposes male mice to ankylosing enthesopathy. Weinreich S, et al. **Ann Rheum Dis** 1996 Sep; 55(9):645–7

Health psychology: what is an unhealthy environment and how does it get under the skin? Taylor SE, et al. **Annu Rev Psychol** 1997;48:411–47 (215 ref.)

Searching for the biological pathways between stress and health. Kelly S, et al. **Annu Rev Public Health** 1997; 18:437–62 (177 ref.)

Genetic and environmental factors affecting menarcheal age in Spanish women. Sánchez-Andrés A. **Anthropol Anz** 1997 Mar;55(1):69–78

The effect of social setting on response to a preloading manipulation in non-obese women and men. Kim JY, et al. **Appetite** 1996 Aug;27(1):25–40

A global scale to measure the quality of the family environment [see comments] Rey JM, et al. **Arch Gen Psychiatry** 1997 Sep;54(9):817–22. Comment in: Arch Gen Psychiatry 1997 Sep;54(9):785–9.

A prospective study of psychological distress related to refugee camp experience. McKelvey RS, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):549–54

Rooming-in: an alternative to involuntary detention. Richardson ME. **Aust N Z J Psychiatry** 1996 Apr; 30(2):263–9

Differential effects of communal rearing and preweaning handling on open-field behavior and hot-plate latencies in mice. Clausing P, et al. **Behav Brain Res** 1997 Jan; 82(2):179–84

Development of vicarious trial-and-error behavior in odor discrimination learning in the rat: relation to hippocampal function? Hu D, et al. **Behav Brain Res** 1997 Jun; 86(1):67–70

Effects of neonatal stimulation on later cognitive function and hippocampal nerve growth factor. Pham TM, et al. **Behav Brain Res** 1997 Jun;86(1):113–20

Resistance of experientially-induced changes in murine plus-maze behaviour to altered retest conditions. Rodgers RJ, et al. **Behav Brain Res** 1997 Jun;86(1):71–7

The D2 dopamine receptor (DRD2) gene and family stress; interactive effects on cognitive functions in children. Berman SM, et al. **Behav Genet** 1997 Jan;27(1):33–43

Behavioral reactivity to social and nonsocial stimulations: a multivariate analysis of six inbred rat strains. Berton O, et al. **Behav Genet** 1997 Mar;27(2):155–66

Life events and personality in late adolescence: genetic and environmental relations. Billig JP, et al. **Behav Genet** 1996 Nov;26(6):543–54

The influence of 2-propanol and acetone on oviposition rate and oviposition site preference for acetic acid and ethanol of Drosophila melanogaster. Eisses KT. **Behav Genet** 1997 May;27(3):171–80

The effect of early experience on MHC-based mate preferences in two B10.W strains of mice (Mus domesticus). Eklund A. **Behav Genet** 1997 May;27(3):223–9

Success in mating: a coordinated approach to fitness through genotypes incorporating genes for stress resistance and heterozygous advantage under stress. Parsons P. **Behav Genet** 1997 Jan;27(1):75–81

Selective breeding for isolation-induced intermale aggression in mice: associated responses and environmental influences. Sandnabba NK. **Behav Genet** 1996 Sep;26(5):477–88 (100 ref.)

Studies on wild house mice. VII. Prenatal maternal environment and aggression. Sluyter F, et al. **Behav Genet** 1996 Sep;26(5):513–8

Genetic and environmental contributions to the correlation between alcohol consumption and symptoms of anxiety and depression. Results from a bivariate analysis of Norwegian twin data. Tambs K, et al. **Behav Genet** 1997 May; 27(3):241–50

Genetic and environmental influences on child reports of manifest anxiety and symptoms of separation anxiety and overanxious disorders: a community-based twin study. Topolski TD, et al. **Behav Genet** 1997 Jan;27(1):15–28

Effects of censored variables on family studies. van den Oord EJ, et al. **Behav Genet** 1997 Mar;27(2):99–112

Elevation of plasma beta-endorphin levels of shy elderly in response to novel laboratory experiences. Bell IR, et al. **Behav Med** 1997 Winter;22(4):168–73

Psychosocial influences on central and peripheral vision and reaction time during demanding tasks. Williams JM, et al. **Behav Med** 1997 Winter;22(4):160–7

Planned Activities Training for mothers of children with developmental disabilities. Community generalization and follow-up. Huynen KB, et al. **Behav Modif** 1996 Oct; 20(4):406–27

Behavioral momentum. Implications and development from reinforcement theories. Plaud JJ, et al. **Behav Modif** 1996 Apr;20(2):183–201 (38 ref.)

Hippocampal lesions impair contextual fear conditioning in two strains of mice. Chen C, et al. **Behav Neurosci** 1996 Oct;110(5):1177–80

Sexual behavior regulated (paced) by the female induces conditioned place preference. Paredes RG, et al. **Behav Neurosci** 1997 Feb;111(1):123–8

Stimulus configuration, occasion setting, and the hippocampus. Schmajuk NA, et al. **Behav Neurosci** 1997 Apr;111(2):235–57; appendix 258 (90 ref.)

Embarrassment about the first panic attack predicts agoraphobia in panic disorder patients. Amering M, et al. **Behav Res Ther** 1997 Jun;35(6):517–21

Rearing experience and biogenic amine activity in infant rhesus monkeys. Clarke AS, et al. **Biol Psychiatry** 1996 Sep 1;40(5):338–52

Pregnancy, delivery and infancy complications and attention deficit hyperactivity disorder: issues of gene–environment interaction. Milberger S, et al. **Biol Psychiatry** 1997 Jan 1;41(1):65–75

Behavior and physiology of social stress and depression in female cynomolgus monkeys. Shively CA, et al. **Biol Psychiatry** 1997 Apr 15;41(8):871–82

Does community residence mean more community contact for people with severe, long-term psychiatric disabilities? Dilks SL, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):183–92

Relationships, individual differences, and children's use of literate language. Pellegrini AD, et al. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):139–52

Relations between perceptions of the teaching environment and approaches to teaching. Prosser M, et al. **Br J Educ Psychol** 1997 Mar;67 (Pt 1):25–35

Early life and adult disorder: research themes. Marmot MG. **Br Med Bull** 1997 Jan;53(1):3–9

Natural cytotoxicity toward K562 cells by macaque lymphocytes from infancy through puberty: effects of early social challenge. Laudenslager ML, et al. **Brain Behav Immun** 1996 Sep;10(3):275–87

Impact of social confrontation on rat CD4 T cells bearing different CD45R isoforms. Stefanski V, et al. **Brain Behav Immun** 1996 Dec;10(4):364–79

Mechanism of altered synaptic strength due to experience: relation to long-term potentiation. Foster TC, et al. **Brain Res** 1996 Oct 14;736(1-2):243–50

Sociosexual stimuli affect ER- and PR-mRNA abundance in the hypothalamus of all-female whiptail lizards. Hartman V, et al. **Brain Res** 1996 Nov 25;741(1-2):344–7

Adolescent alcohol use: social determinants and the case for early family-centered prevention. Family-focused prevention of adolescent drinking. Schor EL. **Bull N Y Acad Med** 1996 Winter;73(2):335–56 (86 ref.)

Hospitals and health services enterprises as social systems [comment] White KL. **Bull N Y Acad Med** 1996 Winter; 73(2):430–2. Comment on: Bull N Y Acad Med 1996 Winter;73(2):418–29.

Effects of social housing condition on the response of the Shionogi mouse mammary carcinoma (SC115) to chemotherapy. Kerr LR, et al. **Cancer Res** 1997 Mar 15; 57(6):1124–8

Stress characteristics in schoolchildren related to different educational strategies and school climates. Havlinova M, et al. **Cent Eur J Public Health** 1995 Nov;3(4):205–9

School leaving: a longitudinal perspective including neighborhood effects. Ensminger ME, et al. **Child Dev** 1996 Oct;67(5):2400–16

Interactions between family environment and friendship and associations with self-perceived well-being during early adolescence. Gauze C, et al. **Child Dev** 1996 Oct; 67(5):2201–16

Social influences on false belief access: specific sibling influences or general apprenticeship? Lewis C, et al. **Child Dev** 1996 Dec;67(6):2930–47

Family climate and behavior in families with conduct disordered children. Slee PT. **Child Psychiatry Hum Dev** 1996 Summer;26(4):255–66

Aggression from a developmental perspective: genes, environments and interactions. Cairns RB. **Ciba Found Symp** 1996;194:45–56; discussion 57–60 (31 ref.)

Violence in psychiatric patients: the role of psychosis, frontal lobe impairment, and ward turmoil. Krakowski M, et al. **Compr Psychiatry** 1997 Jul-Aug;38(4):230–6

Left–handedness in twins: genes or environment? Orlebeke JF, et al. **Cortex** 1996 Sep;32(3):479–90

Bio-ecological approach to cognitive assessment. Armour-Thomas E, et al. **Cult Divers Ment Health** 1997; 3(2):131–44 (15 ref.)

A bio-ecological case study: a Caribbean child. Gopaul-McNicol SA, et al. **Cult Divers Ment Health** 1997; 3(2):145–51

"Missed, dissed, and pissed": making meaning of neighborhood risk, fear and anger management in urban black youth. Stevenson HC Jr. **Cult Divers Ment Health** 1997;3(1):37–52

Predictors of hostility in a group of relocated refugees. Westermeyer J, et al. **Cult Divers Ment Health** 1997; 3(1):53–60

Writing Amish culture into genes: biological reductionism in a study of manic depression. Floersch J, et al. **Cult Med Psychiatry** 1997 Jun;21(2):137–59

The ontogeny of antipredator behavior in paradise fish larvae (Macropodus opercularis) IV. The effect of exposure to siblings. Miklósi A, et al. **Dev Psychobiol** 1997 May; 30(4):283–91

A developmental analysis of contextual fear conditioning. Pugh CR, et al. **Dev Psychobiol** 1996 Mar;29(2):87–100

Age and sex differences in dyadic and group interaction. Benenson JF, et al. **Dev Psychol** 1997 May;33(3):538–43

Exploring the genetic etiology of low general cognitive ability from 14 to 36 months. Petrill SA, et al. **Dev Psychol** 1997 May;33(3):544–8

Epigenetic approaches to developmental psychopathology. Goldsmith HH, et al. **Dev Psychopathol** 1997 Spring; 9(2):365–87 (105 ref.)

Integrating nature and nurture: implications of person–environment correlations and interactions for developmental psychopathology. Rutter M, et al. **Dev Psychopathol** 1997 Spring;9(2):335–64 (270 ref.)

Rethinking the relationships between disability, rehabilitation, and society. Imrie R. **Disabil Rehabil** 1997 Jul;19(7):263–71 (37 ref.)

Models of disability. Marks D. **Disabil Rehabil** 1997 Mar; 19(3):85–91 099 (57 ref.)

Hearing impairment, disability and handicap in elderly people living in residential care and in the community. Stumer J, et al. **Disabil Rehabil** 1996 Feb;18(2):76–82

Environmental causes and impact of refugee movements: a critique of the current debate. Kibreab G. **Disasters** 1997 Mar;21(1):20–38 (90 ref.)

Detection of alcohol problems in primary care outpatients under different conditions. Chan AW, et al. **Drug Alcohol Depend** 1996 Jun;41(2):151–5

Multi-level covariance structure analysis of intra-familial substance use. Duncan TE, et al. **Drug Alcohol Depend** 1997 Jul 4;46(3):167–80

Indicators of genetic and environmental influences in drug abusing individuals. Johnson EO, et al. **Drug Alcohol Depend** 1996 May;41(1):17–23

Smoking produces a smaller increase in heart rate in the natural smoking environment than in the laboratory. Mucha RF, et al. **Drug Alcohol Depend** 1996 Nov;42(3):209–15

Prohibition of take-home dosages: negative consequences on methadone maintenance treatment. Pani PP, et al. **Drug Alcohol Depend** 1996 May;41(1):81–4

Excessive drinking situations in German alcoholics: replication of a three-factor model used for North Americans. Victorio-Estrada A, et al. **Drug Alcohol Depend** 1996 May;41(1):75–9

Children's development related to day-care, type of family and other home factors. Andersson BE. **Eur Child Adolesc Psychiatry** 1996;5 Suppl 1:73–5

Psychosocial influence on the physical and mental

development of Swedish children. Zetterström R. **Eur Child Adolesc Psychiatry** 1996;5 Suppl 1:67–72

Cocaine use can increase cigarette smoking: evidence from laboratory and naturalistic settings. Roll JM, et al. **Exp Clin Psychopharmacol** 1997 Aug;5(3):263–8

Era-related changes in the Japanese cultural and social structure and conformist personality pathology—with a particular emphasis on borderline personality disorder. Tamai K. **Fukuoka Igaku Zasshi** 1997 Apr;88(4):84–9 (2 ref.)

Factors associated with paranoid symptoms in a community sample of older adults. Blazer DG, et al. **Gerontologist** 1996 Feb;36(1):70–5

Measuring child work and residence adjustments to parents' long-term care needs. Stern S. **Gerontologist** 1996 Feb; 36(1):76–87

Growth environment and personality in adult migraineurs and their migraine-free siblings. Persson B. **Headache** 1997 Mar;37(3):159–68

Environmental stress as a developmental cue: corticotropin-releasing hormone is a proximate mediator of adaptive phenotypic plasticity in amphibian metamorphosis. Denver RJ. **Horm Behav** 1997 Apr; 31(2):169–79

The socioendocrinology of adolescent development in male rhesus monkeys (Macaca mulatta). Dixson AF, et al. **Horm Behav** 1997 Apr;31(2):126–35

Independent differentiation of sexual and social traits. Kendrick AM, et al. **Horm Behav** 1996 Dec;30(4):600–10

Using new genetics tools to advance the behavioral neurosciences beyond nature versus nurture. Lederhendler II. **Horm Behav** 1997 Jun;31(3):186–7

Sexual partner preference in female zebra finches: the role of early hormones and social environment. Mansukhani V, et al. **Horm Behav** 1996 Dec;30(4):506–13

Combined olfactory contact with the parent colony and direct contact with nonbreeding animals does not maintain suppression of ovulation in female naked mole-rats (Heterocephalus glaber). Smith TE, et al. **Horm Behav** 1997 Jun;31(3):277–88

Social and developmental influences on reproductive function in female Wied's black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Horm Behav** 1997 Apr; 31(2):159–68

Nature needs nurture: the interaction of hormonal and social influences on the development of behavioral sex differences in rhesus monkeys. Wallen K. **Horm Behav** 1996 Dec; 30(4):364–78

Health beliefs and social influence in home safety practices of mothers with preschool children. Russell KM, et al. **Image J Nurs Sch** 1996 Spring;28(1):59–64

Incidence of diarrhoea and some related environmental and behavioural factors in Jhuggis of Delhi. Lal P, et al. **Indian J Public Health** 1996 Apr-Jun;40(2):35–7

Preparation for caregiving: a study of multigeneration families. Sörensen S, et al. **Int J Aging Hum Dev** 1996; 42(1):43–63

Psycho-social risk factors for ischaemic heart disease among men in the subarctic area. Messner T, et al. **Int J Circumpolar Health** 1997 Apr;56(1-2):12–20

The effects of hypnosis, context reinstatement, and anxiety on eyewitness memory. Ready DJ, et al. **Int J Clin Exp Hypn** 1997 Jan;45(1):55–68

Direct observation of behavioral disturbances of dementia and their environmental context. Burgio L. **Int Psychogeriatr** 1996;8 Suppl 3:343–6

Social and psychosocial factors predicting depression in old age: a longitudinal study. Kivelä SL, et al. **Int Psychogeriatr** 1996 Winter;8(4):635–44

Environmental and social aspects of behavioral disturbances in dementia. Lawlor BA. **Int Psychogeriatr** 1996;8 Suppl 3:259–61

A transactional analysis of biobehavioral systems. Germana J. **Integr Physiol Behav Sci** 1996 Jul-Sep;31(3):210–8 (35 ref.)

Medicine in relation to society [editorial] Wolf S. **Integr Physiol Behav Sci** 1996 Oct-Dec;31(4):277–88

Heritability of MMPI personality indicators of psychopathology in twins reared apart. DiLalla DL, et al. **J Abnorm Psychol** 1996 Nov;105(4):491–9

Modeling genetic and environmental influences in the etiology of conduct disorder: a study of 2,682 adult twin pairs. Slutske WS, et al. **J Abnorm Psychol** 1997 May; 106(2):266–79

People and places: behavioral settings and personal network characteristics as correlates of needle sharing. Latkin C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Nov 1;13(3):273–80

Psychosocial predictors and consequences of drug use: a developmental perspective within a prospective study. Newcomb MD. **J Addict Dis** 1997;16(1):51–89

Social interventions for homeless substance abusers: evaluating treatment outcomes [editorial] Stahler GJ. **J Addict Dis** 1995;14(4):xv-xxvi (41 ref.)

The role of social influences and tobacco availability on adolescent smokeless tobacco use. Boyle RG, et al. **J Adolesc Health** 1997 Apr;20(4):279–85

Illuminating environmental influences on women's caring. Wuest J. **J Adv Nurs** 1997 Jul;26(1):49–58

Parsing the genetic and nongenetic variance in children's depressive behavior. Murray KT, et al. **J Affect Disord** 1996 Apr 26;38(1):23–34

Genetic influence on parent-reported attention-related problems in a Norwegian general population twin sample. Gjone H, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May;35(5):588–96; discussion 596–8

Depression, family environment, and adolescent suicidal behavior. Hollis C. **J Am Acad Child Adolesc Psychiatry** 1996 May; 35(5):622–30

Relationship of personality, environmental, and DICA variables to adolescent hopelessness: a neural network sensitivity approach. Kashani JH, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May;35(5):640–5

Importance of nonshared environmental factors for childhood and adolescent psychopathology. Pike A, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May; 35(5):560–70 (59 ref.)

On situating homophobia. Moss D. **J Am Psychoanal Assoc** 1997;45(1):201–15

Normative data for the personal report of confidence as a speaker. Phillips GC, et al. **J Anxiety Disord** 1997 Mar-Apr;11(2):215–20

Moderating effects of personal and contextual factors in age discrimination. Perry EL, et al. **J Appl Psychol** 1996 Dec; 81(6):628–47

A functional-analytic approach to the diagnosis of a transient tic disorder. Carr JE, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):291–7

Human behavioral momentum: implications for applied behavior analysis and therapy. Plaud JJ, et al. **J Behav Ther Exp Psychiatry** 1996 Jun;27(2):139–48

Variations in familial neonatal mortality risks in four countries. Curtis SL, et al. **J Biosoc Sci** 1996 Apr; 28(2):141–59

What genetic research on intelligence tells us about the environment. Plomin R, et al. **J Biosoc Sci** 1996 Oct; 28(4):587–606 (64 ref.)

Reputation enhancement theory and adolescent substance use. Odgers P, et al. **J Child Psychol Psychiatry** 1996 Nov; 37(8):1015–22

The identification of pervasive hyperactivity: is clinic observation necessary? Tripp G, et al. **J Child Psychol Psychiatry** 1997 Feb;38(2):219–34

To be or not to be at home? A neuropsychological approach to delusion for place. Sellal F, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):234–48

Mode of foraging competition is related to tutor preference in Zenaida aurita. Dolman CS, et al. **J Comp Psychol** 1996 Mar;110(1):45–54

Age differences in the ability of chimpanzees to distinguish mirror-images of self from video images of others. Eddy TJ, et al. **J Comp Psychol** 1996 Mar;110(1):38–44

A kinematic analysis of evasive dodging movements used during food protection in the rat (Rattus norvegicus): evidence for sex differences in movement. Field EF, et al. **J Comp Psychol** 1996 Sep;110(3):298–306

Behavioral and glucocorticoid responses of adult domestic dogs (Canis familiaris) to companionship and social separation. Tuber DS, et al. **J Comp Psychol** 1996 Mar; 110(1):103–8

Kinship and familiarity as factors affecting social transfer of food preferences in adult Mongolian gerbils (Meriones unguiculatus). Valsecchi P, et al. **J Comp Psychol** 1996 Sep; 110(3):243–51

Menstrual synchrony under optimal conditions: Bedouin families. Weller A, et al. **J Comp Psychol** 1997 Jun; 111(2):143–51

Social malleability in cowbirds: new measures reveal new evidence of plasticity in the eastern subspecies (Molothrus ater ater). West MJ, et al. **J Comp Psychol** 1996 Mar; 110(1):15–26

Perceived environmental stressors for dental hygiene students. Roberts RA, et al. **J Dent Educ** 1996 Oct; 60(10):836–41

Schools, families, and early adolescents: what are we doing wrong and what can we do instead? Eccles JS, et al. **J Dev Behav Pediatr** 1996 Aug;17(4):267–76 (65 ref.)

Environmental factors influencing weaning of a young child from mechanical ventilator support. Lemanek KL, et al. **J Dev Behav Pediatr** 1997 Jun;18(3):166–70

Foster home environments: a preliminary report. Simms MD, et al. **J Dev Behav Pediatr** 1996 Jun;17(3):170–5

Precursors, mediators and problem drinking: path analytic models for men and women. Woldt BD, et al. **J Drug Educ** 1996;26(1):1–12

Inferring category characteristics from sample characteristics: inductive reasoning and social projection. Krueger J, et al. **J Exp Psychol Gen** 1996 Mar;125(1):52–68

Health care of Latina women. Sociocultural factors. Vera MI. **J Fla Med Assoc** 1996 Aug-Sep;83(7):494–7 (15 ref.)

The social transformation of medical morning report [editorial; comment] Parrino TA. **J Gen Intern Med** 1997 May;12(5):332–3. Comment on: J Gen Intern Med 1997 May;12(5):263–6.

Effect of modality in earwitness identification: memory for verbal and nonverbal auditory stimuli presented in two contexts. Huss MT, et al. **J Gen Psychol** 1996 Oct; 123(4):277–87

Delirium in geropsychiatric patients: patient characteristics and treatment outcomes. McGee SB, et al. **J Geriatr Psychiatry Neurol** 1997 Jan;10(1):7–10

The relationship of social environment, social networks, and health outcomes in the Seattle Longitudinal Study: two analytical approaches. Bosworth HB, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Sep;52(5):P197–205

The neighborhood context of adolescent mental health. Aneshensel CS, et al. **J Health Soc Behav** 1996 Dec; 37(4):293–310

School and neighborhood characteristics associated with school rates of alcohol, cigarette, and marijuana use. Ennett ST, et al. **J Health Soc Behav** 1997 Mar;38(1):55–71

The social context of mental illness and violence. Hiday VA. **J Health Soc Behav** 1995 Jun;36(2):122–37 (143 ref.)

Men with learning disabilities who have sex with men in public places: mapping the needs of services and users in south east London. Cambridge P. **J Intellect Disabil Res** 1996 Jun;40 (Pt 3):241–51

Time-based lag sequential analysis and the functional assessment of challenging behaviour. Emerson E, et al. **J Intellect Disabil Res** 1996 Jun;40 (Pt 3):260–74

A comparison of the effects of four therapy procedures on concentration and responsiveness in people with profound learning disabilities. Lindsay WR, et al. **J Intellect Disabil Res** 1997 Jun;41 (Pt 3):201–7

Early and later adoptions have different long-term effects on male rat offspring. Barbazanges A, et al. **J Neurosci** 1996 Dec 1;16(23):7783–90

Exposure to environmental complexity promotes recovery of cognitive function after traumatic brain injury. Hamm RJ, et al. **J Neurotrauma** 1996 Jan;13(1):41–7

A content analysis of safety behaviors of television characters: implications for children's safety and injury. Potts R, et al. **J Pediatr Psychol** 1996 Aug;21(4):517–28

Effects of poverty on home environment: an analysis of three-year outcome data for low birth weight premature infants. Watson JE, et al. **J Pediatr Psychol** 1996 Jun; 21(3):419–31

A dispositional and situational assessment of children's coping: testing alternative models of coping. Ayers TS, et al. **J Pers** 1996 Dec;64(4):923–58

Heritability of the big five personality dimensions and their facets: a twin study. Jang KL, et al. **J Pers** 1996 Sep; 64(3):577–91

The interactional context of problem-, emotion-, and relationship-focused coping: the role of the big five personality factors. O'Brien TB, et al. **J Pers** 1996 Dec; 64(4):775–813 (100 ref.)

Adolescents' well-being and perceived control across 14 sociocultural contexts. Grob A, et al. **J Pers Soc Psychol** 1996 Oct;71(4):785–95

Social context, coping strategies, and depressive symptoms: an expanded model with cardiac patients. Holahan CJ, et al. **J Pers Soc Psychol** 1997 Apr;72(4):918–28

Social comparison and affiliation under threat: effects on recovery from major surgery. Kulik JA, et al. **J Pers Soc Psychol** 1996 Nov;71(5):967–79

When self-categorization makes sense: the role of meaningful social categorization in minority and majority members' self-perception. Simon B, et al. **J Pers Soc Psychol** 1997 Aug;73(2):310–20

Failure to recognize the effect of implicit social influence on the presentation of self. Vorauer JD, et al. **J Pers Soc Psychol** 1997 Aug;73(2):281–95

A developmental perspective on family risk factors in somatization. Terre L, et al. **J Psychosom Res** 1997 Feb; 42(2):197–208

Psychosocial factors and physical illness in primary care: promoting the biopsychosocial model in medical practice [editorial] Zimmermann C, et al. **J Psychosom Res** 1996 Apr;40(4):351–8 (60 ref.)

The development and prevention of cardiovascular disease risk factors: socioenvironmental influences. Terris M. **J Public Health Policy** 1996;17(4):426–41

Effects of mating dynamics and crowding on sex ratio variance in mice. Krackow S. **J Reprod Fertil** 1997 May; 110(1):87–90

Sex ratio and litter size in the guinea-pig. Peaker M, et al. **J Reprod Fertil** 1996 Sep;108(1):63–7

Adolescent gender differences in alcohol problem behaviors and the social contexts of drinking. Treiman KA, et al. **J Sch Health** 1996 Oct;66(8):299–304

The effects of two types of exposure on attitudes toward aspects of juvenile delinquency. Leunes A, et al. **J Soc Psychol** 1996 Dec;136(6):699–708

Seminatural housing increases subsequent ethanol intake in male Maudsley Reactive rats. Adams N, et al. **J Stud Alcohol** 1996 Jul;57(4):349–51

Drinking environment and sociodemographic factors among DWI offenders. Chang I, et al. **J Stud Alcohol** 1996 Nov; 57(6):659–69

Alcohol and injury: a comparison of three emergency room samples in two regions. Cherpitel CJ. **J Stud Alcohol** 1997 May;58(3):323–31

The relation between heavy alcohol use and bar patronage: a latent growth model. Curran PJ, et al. **J Stud Alcohol** 1996 Jul;57(4):410–8

Help-seeking for alcohol-related problems: social contexts surrounding entry into alcoholism treatment or Alcoholics Anonymous. George AA, et al. **J Stud Alcohol** 1996 Jul; 57(4):449–57

Estimating genetic and environmental effects of alcohol use and dependence from a national survey: a "quasi-adoption" study. Light JM, et al. **J Stud Alcohol** 1996 Sep; 57(5):507–20 (45 ref.)

Two varieties of helping in drunk-driving intervention:

personal and situational factors. Newcomb MD, et al. **J Stud Alcohol** 1997 Mar;58(2):191–9

Longitudinal changes in alcohol and drug use among men seen at a gay-specific substance abuse treatment agency. Paul JP, et al. **J Stud Alcohol** 1996 Sep;57(5):475–85

Late-life problem drinking: personal and environmental risk factors for 4-year functioning outcomes and treatment seeking. Brennan PL, et al. **J Subst Abuse** 1996;8(2):167–80

Relationship between posttreatment drinking and alternative responses to high-risk situations proposed during treatment by problem drinkers. Breslin FC, et al. **J Subst Abuse** 1996; 8(4):479–86

"About last night": the social ecology of sexual behavior relative to alcohol use among adolescents and young adults in substance abuse treatment. Tubman JG, et al. **J Subst Abuse** 1995;7(4):449–61

Assessing the structure, content, and perceived social climate of residential posttraumatic stress disorder treatment programs. Johnson DR, et al. **J Trauma Stress** 1997 Jul; 10(3):361–76

Individual differences in posttraumatic stress disorder symptom profiles in Holocaust survivors in concentration camps or in hiding. Yehuda R, et al. **J Trauma Stress** 1997 Jul;10(3):453–63

Of selves and souls, bodies and persons, individuals and societies: a commentary on Donald Pollock's "Personhood and illness among the Kulina" [see comments] Roseman M. **Med Anthropol Q** 1996 Sep;10(3):342–6; discussion 376–8. Comment in: Med Anthropol Q 1996 Sep;10(3):319–41.

Discourse, power, and the diagnosis of weakness: encountering practitioners in Bangladesh. Wilce JM. **Med Anthropol Q** 1997 Sep;11(3):352–74

Evaluation and comparison of health care Work Environment Scale in military settings. Maloney JP, et al. **Mil Med** 1996 May;161(5):284–9

Effect of differential rearing environments on morphine-induced behaviors, opioid receptors and dopamine synthesis. Bardo MT, et al. **Neuropharmacology** 1997 Feb;36(2):251–9

Morphology of environmentally induced synaptic plasticity in vomeronasal system. Matsuoka M, et al. **Neuroreport** 1996 Oct 2;7(14):2347–52

Differential activation of the rat hippocampus and perirhinal cortex by novel visual stimuli and a novel environment. Zhu XO, et al. **Neurosci Lett** 1997 Jun 27;229(2):141–3

Measurement of the early rearing environment: caregiver-child interaction. Beckwith L. **NIDA Res Monogr** 1996;166:205–24

Relationship between self-concept and classroom behavior among learning and nonlearning disabled students in regular classes. Cadieux A. **Percept Mot Skills** 1996 Jun; 82(3 Pt 1):1043–50

Social physique anxiety: personality constructs, motivations, exercise attitudes, and behaviors. Frederick CM, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):963–72

Human ethology: eating, security, and curiosity. Freidenberg BM, et al. **Percept Mot Skills** 1996 Oct;83(2):489–90

A visual orientation system for promoting indoor travel in persons with profound developmental disabilities and visual impairment. Lancioni GE, et al. **Percept Mot Skills** 1996 Oct;83(2):619–26

Contextual mediation of perceptions in hauntings and poltergeist-like experiences. Lange R, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):755–62

Effects of d-amphetamine in grouped versus isolated humans. de Wit H, et al. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1-2):333–40

Sorting out nature vs. nurture [letter; comment] Beiser HR. **Pharos** 1996 Summer;59(3):49. Comment on: Pharos 1996 Spring;59(2):24–9.

Comparative analysis of anxiety-like behavior in partition and plus-maze tests after agonistic interactions in mice. Avgustinovich DF, et al. **Physiol Behav** 1997 Jan; 61(1):37–43

Environmental enrichment, immunocompetence, and resistance to Babesia microti in male mice. Barnard CJ, et al. **Physiol Behav** 1996 Nov;60(5):1223–31

Juvenile friends, behavior, and immune responses to separation in bonnet macaque infants. Boccia ML, et al. **Physiol Behav** 1997 Feb;61(2):191–8

Effects of environmental conditions on food consumption in female and male rats. Brown KJ, et al. **Physiol Behav** 1996 Jul;60(1):293–7

Rearing piglets in a poor environment: developmental aspects of social stress in pigs. De Jonge FH, et al. **Physiol Behav** 1996 Aug;60(2):389–96

The effects of mixing on behavior and circadian parameters of salivary cortisol in pigs. Ekkel ED, et al. **Physiol Behav** 1997 Jul;62(1):181–4

Effect of fenfluramine on food intake, mood, and performance of humans living in a residential laboratory. Foltin RW, et al. **Physiol Behav** 1996 Feb;59(2):295–305

Effect of environmental enrichment and housing density on immune system reactivity to acute exercise stress. Kingston SG, et al. **Physiol Behav** 1996 Jul;60(1):145–50

IRI-514, a synthetic peptide analogue of thymopentin, reduces the behavioral response to social stress in rats. Menzaghi F, et al. **Physiol Behav** 1996 Aug;60(2):397–401

Effects of postnatal handling of rats on emotional, HPA-axis, and prolactin reactivity to novelty and conflict. Núñez JF, et al. **Physiol Behav** 1996 Nov;60(5):1355–9

Reinforcer revaluation and conditioned place preference. Perks SM, et al. **Physiol Behav** 1997 Jan;61(1):1–5

Deoxycorticosterone acetate (DOCA)-induced sodium appetite in group-housed mice. Rodd ZA, et al. **Physiol Behav** 1996 Nov;60(5):1387–9

Early environmental influences can attenuate the blood pressure response to acute stress in borderline hypertensive rats. Sanders BJ, et al. **Physiol Behav** 1997 May; 61(5):749–54

Differential environmental modulations on locomotor activity, exploration and spatial behaviour in young and old rats. Van Waas M, et al. **Physiol Behav** 1996 Feb; 59(2):265–71

Determinants of intention to quit smoking among Dutch employees: the influence of the social environment. Willemsen MC, et al. **Prev Med** 1996 Mar-Apr; 25(2):195–202

Differences in social environment between inpatient and day hospital-crisis respite settings. Davidson L, et al. **Psychiatr Serv** 1996 Jul;47(7):714–20

The importance of ward atmosphere in inpatient treatment of schizophrenia on short-term units. Melle I, et al. **Psychiatr Serv** 1996 Jul;47(7):721–6

Situational feature recognition in schizophrenic outpatients. Corrigan PW, et al. **Psychiatry Res** 1996 Jun 1;62(3):251–7

Plasma neuropeptide Y in anxiety disorders: findings in panic disorder and social phobia. Stein MB, et al. **Psychiatry Res** 1996 Jan 31;59(3):183–8

Complicating the theory. The application of psychoanalytic concepts and understanding to family preservation. Adnopoz J. **Psychoanal Study Child** 1996;51:411–21

States of overstimulation in early childhood. Rosenblitt DL. **Psychoanal Study Child** 1996;51:542–61

Group intervention with second graders at risk for behavioral problems: a pilot study. Castillo SC, et al. **Psychol Rep** 1997 Apr;80(2):415–8

Arcade gambling: a research note. Griffiths M, et al. **Psychol Rep** 1997 Apr;80(2):413–4

Is there psychopathology in the coparents of schizophrenic adoptees' half-siblings? Ingraham LJ, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1296–8

The "imaginary audience," self-handicapping, and drinking patterns among college students. Montgomery RL, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):783–6

Environment is not the most important variable in determining oral morphine consumption in Wistar rats. Petrie BF. **Psychol Rep** 1996 Apr;78(2):391–400

What have you learned from your homeless experience? A phenomenological approach for counseling unsheltered homeless men. Sumerlin JR. **Psychol Rep** 1996 Dec;79(3 Pt 1):883–90

Cases of Sprague-Dawley rats which did not respond to an 'alarm substance' in the forced swimming test. Tachibana T, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):1007–18

Contextual effects on adolescent disorders relevant to coping. Tiffany DW, et al. **Psychol Rep** 1996 Apr;78(2):593–4

Sexual harassment: the "reasonable person" vs "reasonable woman" standards have not been resolved. Woody WD, et al. **Psychol Rep** 1996 Feb;78(1):329–30

Handedness and speech: a critical reappraisal of the role of genetic and environmental factors in the cerebral lateralization of function. Provins KA. **Psychol Rev** 1997 Jul;104(3):554–71 (310 ref.)

Context-dependent behavioral effects of interleukin-1 in the rhesus monkey (Macaca mulatta). Friedman EM, et al. **Psychoneuroendocrinology** 1996 Jul;21(5):455–68

Rapid laminar-dependent changes in GFAP immunoreactive astrocytes in the visual cortex of rats reared in a complex environment. Jones TA, et al. **Psychoneuroendocrinology** 1996 Feb;21(2):189–201

Menstrual variability and the measurement of menstrual synchrony. Weller L, et al. **Psychoneuroendocrinology** 1997 Feb;22(2):115–28 (35 ref.)

Life events, environmental variables and child depression. Muratori F, et al. **Psychopathology** 1997 Mar-Apr; 30(2):111–7

Paced smoking in the laboratory and in the natural smoking setting: differential situation-specific effects in light and heavy smokers. Schupp PE, et al. **Psychopharmacology (Berl)** 1996 Oct;127(3):283–8

Social determinants of cardiovascular reactivity: effects of incentive to exert influence and evaluative threat. Smith TW, et al. **Psychophysiology** 1997 Jan;34(1):63–73

Impact of social environment characteristics on neuroendocrine regulation. Seeman TE, et al. **Psychosom Med** 1996 Sep-Oct;58(5):459–71 (159 ref.)

Physicians' view of their work environment and organisation. Arnetz BB. **Psychother Psychosom** 1997;66(3):155–62

Managing fear associated with nursing in urban environments: first steps. Hayes ER, et al. **Public Health Nurs** 1996 Apr;13(2):90–6

Predictors of BMI among adults with Down syndrome: the social context of health promotion. Fujiura GT, et al. **Res Dev Disabil** 1997 Jul-Aug;18(4):261–74

Initiating requests during community-based vocational training by students with mental retardation and sensory impairments. Heller KW, et al. **Res Dev Disabil** 1996 May-Jun;17(3):173–84

Assessment and treatment of episodic self-injury: a case study. O'Reilly MF. **Res Dev Disabil** 1996 Sep-Oct; 17(5):349–61

The stereotypy analysis: an instrument for examining environmental variables associated with differential rates of stereotypic behavior. Pyles DA, et al. **Res Dev Disabil** 1997 Jan-Feb;18(1):11–38

The factor structure of the Reiss Screen for Maladaptive Behaviors in institutional and community populations. Sturmey P, et al. **Res Dev Disabil** 1996 Jul-Aug; 17(4):285–91

Factors affecting the creation of a new ecology in a boys-only physical education class at a military school. Hastie PA. **Res Q Exerc Sport** 1997 Mar;68(1):62–73

Environmental influences on psychological restoration. Hartig T, et al. **Scand J Psychol** 1996 Dec;37(4):378–93

Sickness absence from back pain, psychosocial work characteristics and employment grade among office workers. Hemingway H, et al. **Scand J Work Environ Health** 1997 Apr;23(2):121–9

Associations between self-rated psychosocial work conditions and musculoskeletal symptoms and signs. Stockholm MUSIC I Study Group. Toomingas A, et al. **Scand J Work Environ Health** 1997 Apr;23(2):130–9

Neurocognitive deficits and social functioning in outpatients with schizophrenia. Dickerson F, et al. **Schizophr Res** 1996 Aug 23;21(2):75–83

The relationship of social cognition to ward behavior in chronic schizophrenia. Penn DL, et al. **Schizophr Res** 1996 Jul 5;20(3):327–35

Neighborhoods and violent crime: a multilevel study of collective efficacy. Sampson RJ, et al. **Science** 1997 Aug 15;277(5328):918–24

Normal aging and environmental effects on communication. Lubinski R, et al. **Semin Speech Lang** 1997 May; 18(2):107–25; quiz 125–6 (90 ref.)

Urban ecological structure and perceived child and adolescent psychological disorder. Leclair JA, et al. **Soc Sci Med** 1997 Jun;44(11):1649–59

Race/ethnicity, the social environment, and health. Lillie-Blanton M, et al. **Soc Sci Med** 1996 Jul;43(1):83–91 (41 ref.)

Are there social correlates to suicide? Mäkinen I. **Soc Sci Med** 1997 Jun;44(12):1919–29

Perceived social support, family environment and psychosocial recovery in bone marrow transplant long-term survivors. Molassiotis A, et al. **Soc Sci Med** 1997 Feb;44(3):317–25

Past or present? Childhood living conditions and current socioeconomic status as determinants of adult health. Rahkonen O, et al. **Soc Sci Med** 1997 Feb;44(3):327–36

Aids, violence and behavioral coding: information theory, risk behavior and dynamic process on core-group sociogeographic networks. Wallace R, et al. **Soc Sci Med** 1996 Aug;43(3):339–52

Social influence on southern adolescents' smoking transition: a retrospective study. Wang MQ, et al. **South Med J** 1997 Feb;90(2):218–22

The influence of religious affiliation on sociocultural predictors of drinking among Black and White Americans. Herd D. **Subst Use Misuse** 1996 Jan;31(1):35–63

Relationships among alcohol availability, drinking location, alcohol consumption, and drinking problems in adolescents. Jones-Webb R, et al. **Subst Use Misuse** 1997 Aug; 32(10):1261–85

Social influences: effects of the social environment on the use of alcohol and other drugs. Szalay LB, et al. **Subst Use Misuse** 1996 Feb;31(3):343–373

Trauma and addiction experiences of African American women. Davis RE. **West J Nurs Res** 1997 Aug; 19(4):442–60; discussion 460–5

Afghan refugee issues in the U.S. social environment. Lipson JG, et al. **West J Nurs Res** 1997 Feb;19(1):110–26

HIV risk behaviors become survival techniques for aboriginal women. Mill JE. **West J Nurs Res** 1997 Aug;19(4):466–89

Comparison of home and clinical blood pressure measurements: clinical applications. de Gaudemaris R, et al. **Z Kardiol** 1996;85 Suppl 3:60–5 (37 ref.)

[Ethology of panic disorders] Cyrulnik B. **Encephale** 1996 Dec;22 Spec No 5:42–5 (10 ref.) (Eng. Abstr.) **(Fre)**

[Exclusion and very long term hospitalization: social and institutional environment] Fraysse P, et al. **Encephale** 1996 Oct;22 Spec No 3:53–6 **(Fre)**

[Patient environment as the domain of the family physician. Organ-specific medicine is only one side of the issue] Pillau H. **Fortschr Med** 1997 Apr 30;115(12):33–4 **(Ger)**

[The world is too fast for Parkinson patients. Diagnosis and therapy of Parkinson disease in general practice] Reiss J. **Fortschr Med** 1997 May 10;115(13):42, 45–7 **(Ger)**

[Psychopathological concepts of induced insanity exemplified by folie a deux] Arenz D, et al. **Fortschr Neurol Psychiatr** 1996 Jan;64(1):13–9 (Eng. Abstr.) **(Ger)**

[Backache in East and West Germany] Berger-Schmitt R, et al. **Gesundheitswesen** 1996 Oct;58(10):519–24 (Eng. Abstr.) **(Ger)**

[Prevalence of psychiatric disorders and outcome of social integration of homeless men] Reker T, et al. **Gesundheitswesen** 1997 Feb;59(2):79–82 (Eng. Abstr.) **(Ger)**

[Limit values for polycyclic aromatic hydrocarbons in soil of children's playgrounds--basic criteria and recommendations] Roscher E, et al. **Gesundheitswesen** 1996 Aug-Sep;58(8–9):470–6 (Eng. Abstr.) **(Ger)**

[The status of aggressive children and victims of aggression in school] Klicpera C, et al.

Prax Kinderpsychol Kinderpsychiatr 1996 Jan;45(1):2–9 (Eng. Abstr.) **(Ger)**
[Violence in the school—analysis of the problem and possible interventions] Meier U.
Prax Kinderpsychol Kinderpsychiatr 1997 Mar;46(3):169–81 (31 ref.) (Eng. Abstr.) **(Ger)**
[Effect of partially open department on unit atmosphere] Modestin J, et al. **Psychiatr Prax** 1996 Nov;23(6):285–9 (Eng. Abstr.) **(Ger)**
[Hospital depression units judged by patients] Rahn E. **Psychiatr Prax** 1996 Jul;23(4):172–4 (Eng. Abstr.) **(Ger)**
[Department social climate on mixed sex and segregated acute psychiatric units. Results of a survey] Vieweg T, et al. **Psychiatr Prax** 1996 Nov;23(6):290–3 (Eng. Abstr.) **(Ger)**
[Homeless patients in the psychiatric clinic. Results of a 12-month study of the living conditions of psychiatric patients in an urban public health clinic (see comments)] Wessel T, et al. **Psychiatr Prax** 1997 Jul;24(4):167–71 (Eng. Abstr.). Comment in: Psychiatr Prax 1997 Jul;24(4):161. **(Ger)**
[We're moving closer and closer to the insane asylum...": Modern life and nervous system diseases by Johann CHristian Reil (1759–1813)] Roelcke V.
Sudhoffs Arch Z Wissenschaftsgesch 1996;80(1):56–67 (Eng. Abstr.) **(Ger)**
[Assessing the risk of HIV infection in the clinic and daily environment by medical students] Klewer J, et al.
Z Arztl Fortbild (Jena) 1996 Jun;90(4):321–4 (Eng. Abstr.) **(Ger)**
[Are psychophysiologic changes in the "public speaking" paradigm an expression of emotional stress?] Erdmann G, et al. **Z Exp Psychol** 1996;43(2):224–55 (Eng. Abstr.) **(Ger)**
[Cardiovascular effects of active coping behavior in mental and social stress situations during various incentive conditions] Gramer M, et al. **Z Exp Psychol** 1996; 43(2):256–78 (Eng. Abstr.) **(Ger)**
[Residents of homes for the aged in Germany: characteristics of social structure and choice of nursing home] Klein T, et al. **Z Gerontol Geriatr** 1997 Jan–Feb;30(1):54–67 (Eng. Abstr.) **(Ger)**
[Living conditions and mortality in the elderly after surgical management of para-articular hip fractures] Reich I, et al. **Z Gerontol Geriatr** 1997 Jan–Feb;30(1):18–23 (Eng. Abstr.) **(Ger)**
[A bio–psychosocial treatment concept improves coping with illness by geriatric patients] Schmeling–Kludas C.
Z Gerontol Geriatr 1997 May–Jun;30(3):242–7 (Eng. Abstr.) **(Ger)**
[Typical configurations of psychosocial stress factors of psychiatrically conspicuous children and adolescents] Werner K, et al. **Z Kinder Jugenpsychiatr** 1996 Dec; 24(4):240–52 (Eng. Abstr.) **(Ger)**
[The nature of personality: a co–evolutionary perspective] Asendorpf JB. **Z Psychol Z Angew Psychol** 1996; 204(1):97–115 (Eng. Abstr.) **(Ger)**
[Evaluation of environmental stimulation and its relation to physical deterioration in the elderly after 3 years—a health–social longitudinal study] Anme T.
Nippon Koshu Eisei Zasshi 1997 Mar;44(3):159–66 (Eng. Abstr.) **(Jpn)**
[Health status, social networks and support systems of so called old old in a population–based comparative study of residents ages 69–74 and 75–80] Kishi R, et al.
Nippon Koshu Eisei Zasshi 1996 Dec;43(12):1009–23 (Eng. Abstr.) **(Jpn)**
[Influence of social environments on brain aging] Kobayashi S, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jan;33(1):22–6 (Eng. Abstr.) **(Jpn)**
[A study in cognitive complexity of the self: an evaluation of the Linville's index] Hayashi F, et al.
Shinrigaku Kenkyu 1997 Feb;67(6):452–7 (Eng. Abstr.) **(Jpn)**
[Social networks and diffusion of AIDS in Brazil] Barcellos C, et al. **Bol Oficina Sanit Panam** 1996 Jul;121(1):11–24 (Eng. Abstr.) **(Por)**
[Opinions about disease among members of the social network of patients with Hansen's disease in Recife] Feliciano KV, et al. **Rev Panam Salud Publica** 1997 Feb; 1(2):112–8 (Eng. Abstr.) **(Por)**
[Conflicts and support strategies in clashes in 2 groups of crab–eating monkeys formed from individuals with differing social status by birth] Butovskaia ML, et al.
Izv Akad Nauk Ser Biol 1996 Nov–Dec;(6):736–42 (Eng. Abstr.) **(Rus)**
[Monitoring food consumption and nutritional status of Moscow schoolchildren in 1992–1994. 2. Anthropometric evaluation of nutritional status, effect of social factors on the character and status of nutrition] Martinchik AN, et al. **Vopr Pitan** 1997;(1):3–9 (Eng. Abstr.) **(Rus)**

SOCIAL FACILITATION

On the importance of peer influence for adolescent drug use: commonly neglected considerations. Bauman KE, et al. **Addiction** 1996 Feb;91(2):185–98 (116 ref.)
Understanding relapse in the broader context of post–treatment functioning. Connors GJ, et al. **Addiction** 1996 Dec;91 Suppl:S173–89
Looking forward and back to relapse: implications for research and practice. Connors GJ, et al. **Addiction** 1996 Dec;91 Suppl:S191–6
Marlatt's classification of relapse precipitants: is the Emperor still wearing clothes? Donovan DM. **Addiction** 1996 Dec; 91 Suppl:S131–7
Application of random–effects regression models in relapse research. Hedeker D, et al. **Addiction** 1996 Dec;91 Suppl:S211–29
Is Marlatt's relapse taxonomy reliable or valid? Kadden RM. **Addiction** 1996 Dec;91 Suppl:S139–45
The reliability of Marlatt's taxonomy for classifying relapses. Longabaugh R, et al. **Addiction** 1996 Dec;91 Suppl:S73–88
Replication and extension of Marlatt's taxonomy of relapse precipitants: overview of procedures and results. The Relapse Research Group. Lowman C, et al. **Addiction** 1996 Dec;91 Suppl:S51–71
Construct validation analyses on the Marlatt typology of relapse precipitants. Maisto SA, et al. **Addiction** 1996 Dec; 91 Suppl:S89–97
Taxonomy of high–risk situations for alcohol relapse: evolution and development of a cognitive–behavioral model. Marlatt GA. **Addiction** 1996 Dec;91 Suppl:S37–49 (30 ref.)
Lest taxonomy become taxidermy: a comment on the relapse replication and extension project. Marlatt GA.
Addiction 1996 Dec;91 Suppl:S147–53
What predicts relapse? Prospective testing of antecedent models. Miller WR, et al. **Addiction** 1996 Dec;91 Suppl:S155–72
Gender differences in relapse situations. Rubin A, et al.
Addiction 1996 Dec;91 Suppl:S111–20
Predictive validity of Marlatt's relapse taxonomy versus a more general relapse code. Stout RL, et al. **Addiction** 1996 Dec;91 Suppl:S99–110
Latent transition analysis for longitudinal data. Velicer WF, et al. **Addiction** 1996 Dec;91 Suppl:S197–209
Relapse research and the Reasons for Drinking Questionnaire: a factor analysis of Marlatt's relapse taxonomy. Zywiak WH, et al. **Addiction** 1996 Dec;91 Suppl:S121–30
Socio–cultural determinants of meal size and frequency. De Castro JM. **Br J Nutr** 1997 Apr;77 Suppl 1:S39–54; discussion S54–5 (74 ref.)
The relationship between risk networks' patterns of crack cocaine and alcohol consumption and HIV–related sexual behaviors among adult injection drug users: a prospective study. Latkin CA, et al. **Drug Alcohol Depend** 1996 Nov; 42(3):175–81
Excessive drinking situations in German alcoholics: replication of a three–factor model used for North Americans. Victorio–Estrada A, et al.
Drug Alcohol Depend 1996 May;41(1):75–9
Social patterns of smoking behavior: trends and practice implications. Kaplan MS, et al. **Health Soc Work** 1997 Feb; 22(1):47–52 (60 ref.)
Family enhancement of cognitive style in anxious and aggressive children. Barrett PM, et al.
J Abnorm Child Psychol 1996 Apr;24(2):187–203
Induction of smoking urge through imaginal and in vivo procedures: physiological and self–report manifestations. Drobes DJ, et al. **J Abnorm Psychol** 1997 Feb;106(1):15–25
The peer relations of dropouts: a comparative study of at–risk and not at–risk youths. Ellenbogen S, et al. **J Adolesc** 1997 Aug;20(4):355–67
Experience with risk–taking adolescents [letter; comment] Kay P. **J Am Acad Child Adolesc Psychiatry** 1996 Nov; 35(11):1423–4. Comment on: J Am Acad Child Adolesc Psychiatry 1995 Dec;34(12):1682–3.
Reputation enhancement theory and adolescent substance use. Odgers P, et al. **J Child Psychol Psychiatry** 1996 Nov; 37(8):1015–22
Attitude and peer cross pressure: adolescent drug and alcohol use. Robin SS, et al. **J Drug Educ** 1996;26(1):69–99
Cigarette smoking in young adults: childhood and adolescent personality, familial, and peer antecedents. Brook JS, et al. **J Genet Psychol** 1997 Jun;158(2):172–88
Exploring the effects of age of alcohol use initiation and psychosocial risk factors on subsequent alcohol misuse. Hawkins JD, et al. **J Stud Alcohol** 1997 May;58(3):280–90
Correlates of change in adolescent alcohol consumption in Ireland: implications for understanding influences and enhancing interventions. Morgan M, et al.
Subst Use Misuse 1997 Apr;32(5):609–19
["Nice young people looking for fun" (interview by Dr. rer nat. Anita Schweiger)] Tretter F. **Fortschr Med** 1997 Mar 10;115(7):44–6 **(Ger)**

SOCIAL IDENTIFICATION

Grassroots emergency medicine: a survey of U.S. medical schools [letter] Schlaishunt S, et al. **Acad Emerg Med** 1996 Jun;3(6):648–50
Social identities and response to treatment for alcohol and cocaine abuse. Weisz C. **Addict Behav** 1996 Jul–Aug; 21(4):445–58
Control theory, labeling theory, and the delivery of services for drug abuse to adolescents. Downs WR, et al.
Adolescence 1997 Spring;32(125):1–24
The collectivistic nature of ethnic identity development among Asian–American college students. Yeh CJ, et al. **Adolescence** 1996 Fall;31(123):645–61
Mesmerism and Masonry: early historical interactions. Gravitz MA. **Am J Clin Hypn** 1997 Apr;39(4):266–70
The development of a measure of enculturation for Native American youth. Zimmerman MA, et al.
Am J Community Psychol 1996 Apr;24(2):295–310
Multicultural identity and gay men in the era of AIDS. Paradis BA. **Am J Orthopsychiatry** 1997 Apr;67(2):300–7
A threat in the air. How stereotypes shape intellectual identity and performance. Steele CM. **Am Psychol** 1997 Jun;52(6):613–29
Gender, racial, ethnic, sexual, and class identities. Frable DE. **Annu Rev Psychol** 1997;48:139–62 (185 ref.)
Gender difference in cereal intake: possible impacts of social group affiliation and season. Chakrabarty M.
Anthropol Anz 1996 Dec;54(4):355–60
Sense of belonging and indicators of social and psychological functioning. Hagerty BM, et al. **Arch Psychiatr Nurs** 1996 Aug;10(4):235–44
Living systems theory as a paradigm for organizational behavior: understanding humans, organizations, and social processes. Vancouver JB. **Behav Sci** 1996 Jul;41(3):165–204 (200 ref.)
The role of limbic vasopressin and oxytocin in social recognition. van Wimersma Greidanus TB, et al.
Brain Res 1996 Mar 25;713(1–2):153–9
Belonging nowhere and everywhere: multiracial identity development. Deters KA. **Bull Menninger Clin** 1997 Summer;61(3):368–84
Effects of friendship and gender on peer group entry. Zarbatany L, et al. **Child Dev** 1996 Oct;67(5):2287–300
Exile and professional identity: on going back to Cuba. Shapiro ER. **Cult Divers Ment Health** 1996;2(1):21–33
'Oh, don't you envy us our privileged lives?' A review of the disability culture movement. Brown SE.
Disabil Rehabil 1997 Aug;19(8):339–49 (25 ref.)
Social identity and arterial blood pressure in the African–American community. Dressler WW. **Ethn Dis** 1996 Winter–Spring;6(1–2):176–89
Affective and physiological responses to racism: the roles of afrocentrism and mode of presentation. Jones DR, et al. **Ethn Dis** 1996 Winter–Spring;6(1–2):109–22
A comprehensive Afrocentric rites of passage program for black male adolescents. Harvey AR, et al.
Health Soc Work 1997 Feb;22(1):30–7
Adolescent girls' constructions of smoking identities: implications for health promotion. Lloyd B, et al.
J Adolesc 1997 Feb;20(1):43–56
Professional identity: values embedded in meaningful nursing practice. Fagermoen MS. **J Adv Nurs** 1997 Mar; 25(3):434–41
Influences of social groups on eating patterns: a study among young adults. Oygard L, et al. **J Behav Med** 1996 Feb; 19(1):1–15
The identity of mixed parentage adolescents. Tizard B, et al. **J Child Psychol Psychiatry** 1995 Nov;36(8):1399–410
Inferring category characteristics from sample characteristics: inductive reasoning and social projection. Krueger J, et al. **J Exp Psychol Gen** 1996 Mar;125(1):52–68
The formation of gay and lesbian identity and community in the Connecticut River Valley of western Massachusetts, 1900–1970. Bonfitto VF. **J Homosex** 1997;33(1):69–96
How nurse–midwives define themselves in relation to nursing, medicine, and midwifery. Scoggin J.
J Nurse Midwifery 1996 Jan–Feb;41(1):36–42
Neonatal nurse practitioners: identity as advanced practice nurses. Beal JA, et al. **J Obstet Gynecol Neonatal Nurs** 1996 Jun;25(5):401–6
Selective self–stereotyping. Biernat M, et al.
J Pers Soc Psychol 1996 Dec;71(6):1194–209
Social identity and physical health: accelerated HIV progression in rejection–sensitive gay men. Cole SW, et al. **J Pers Soc Psychol** 1997 Feb;72(2):320–35
Individuality and relatedness of the self: an autophotographic study. Dollinger SJ, et al. **J Pers Soc Psychol** 1996 Dec; 71(6):1268–78
The cultural construction of self–enhancement: an examination of group–serving biases. Heine SJ, et al.
J Pers Soc Psychol 1997 Jun;72(6):1268–83
Intergroup norms and intergroup discrimination: distinctive self–categorization and social identity effects. Jetten J, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1222–33
Social comparison and affiliation under threat: effects on recovery from major surgery. Kulik JA, et al.
J Pers Soc Psychol 1996 Nov;71(5):967–79
When exceptions prove the rule: how extremity of deviance determines the impact of deviant examples on stereotypes. Kunda Z, et al. **J Pers Soc Psychol** 1997 May;72(5):965–79
Target entitativity: implications for information processing about individual and group targets. McConnell AR, et al.
J Pers Soc Psychol 1997 Apr;72(4):750–62
Interpersonal perception and metaperception in nonoverlapping social groups. Malloy TE, et al.
J Pers Soc Psychol 1997 Feb;72(2):390–8
Big fish in small ponds: a social hierarchy analysis of intergroup bias. Seta JJ, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1210–21
When self–categorization makes sense: the role of meaningful social categorization in minority and majority members' self–perception. Simon B, et al. **J Pers Soc Psychol** 1997 Aug;73(2):310–20
Cognitive bias in procedural justice: formation and implications of illusory correlations in perceived intergroup fairness. Stroessner SJ, et al. **J Pers Soc Psychol** 1996 Oct; 71(4):717–28

SOCIAL IDENTIFICATION

Looking for truth in all the wrong places? Asymmetric search of individuating information about stereotyped group members. Trope Y, et al. **J Pers Soc Psychol** 1997 Aug; 73(2):229–41

Motivated language use in intergroup contexts: need-for-closure effects on the linguistic intergroup bias. Webster DM, et al. **J Pers Soc Psychol** 1997 May; 72(5):1122–31

Self-definition, defensive processing, and influence: the normative impact of majority and minority groups. Wood W, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1181–93

Analysis of affiliation-related traits in terms of the PAD Temperament Model. Mehrabian A. **J Psychol** 1997 Jan; 131(1):101–17 (42 ref.)

Psychological reaction to perceived erasure of community boundaries. Puddifoot JE. **J Soc Psychol** 1997 Jun; 137(3):343–55

The perception of an out-group after provocation by one of its members. Ruscher JB, et al. **J Soc Psychol** 1997 Feb; 137(1):5–9

Race-specific versus general stamps on African-American women's survey return rates. Price JH, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):928–30

What do men want? Gender differences and two spheres of belongingness: comment on Cross and Madson (1997) [comment] Baumeister RF, et al. **Psychol Bull** 1997 Jul; 122(1):38–44; discussion 51–5. Comment on: Psychol Bull 1997 Jul;122(1):5–37.

FIRO-B scores and success in a positive peer-culture residential treatment program. Lee RE. **Psychol Rep** 1996 Feb;78(1):215–20

Political identification and perceptions of homelessness: attributed causality and attitudes on public policy. Pellegrini RJ, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1139–48

Being a "joiner" and psychological well-being. Wann DL, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1186

Predictors of cigarette smoking among adolescents. Williams JG, et al. **Psychol Rep** 1997 Apr;80(2):481–2

The costs and benefits of boundary maintenance: stress, religion and culture among Jews in Britain. Loewenthal KM, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May; 32(4):200–7

Life stories and shared experience. Steffen V. **Soc Sci Med** 1997 Jul;45(1):99–111

Measuring affiliation with 12-step groups. Kingree JB. **Subst Use Misuse** 1997 Jan;32(2):181–94

[Psychiatrists and their identity] Kasahara Y. **Seishin Shinkeigaku Zasshi** 1996;98(9):597–602 (4 ref.) **(Jpn)**

[Self-esteem experience in everyday life: an examination from the viewpoint of "locus of reality"] Kawamoto I. **Shinrigaku Kenkyu** 1996 Jun;67(2):102–9 (Eng. Abstr.) **(Jpn)**

SOCIAL INSURANCE see **SOCIAL SECURITY**

SOCIAL INTERACTION see **INTERPERSONAL RELATIONS**

SOCIAL ISOLATION

Solitary drinking: a risk factor for alcohol-related problems? Bourgault C, et al. **Addiction** 1997 Mar;92(3):303–12

Adolescent gender differences in time alone and time devoted to conversation. Smith TE. **Adolescence** 1997 Summer; 32(126):483–96

Effects of early weaning and social isolation on subsequent alcohol intake in rats. Fahlke C, et al. **Alcohol** 1997 Mar-Apr;14(2):175–80

Effects of isolation-rearing on acoustic startle and pre-pulse inhibition in Wistar and fawn hooded rats. Hall FS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:542–4

Genetic studies in Medzev, an isolate in south-eastern Slovakia. 1. History, demography, marriage patterns. Sivákova D, et al. **Anthropol Anz** 1996 Sep;54(3):193–200

Head-portion exposure to low-level X-rays reduces isolation-induced aggression of mouse, and involvement of the olfactory carnosine in modulation of the radiation effects. Miyachi Y, et al. **Behav Brain Res** 1996 Nov; 81(1-2):135–40

Long-term impoverished housing effects on Morris maze performance after a fimbria lesion. van Rijzingen IM, et al. **Behav Brain Res** 1996 May;77(1-2):149–54

Developmental isolation and subsequent adult behavior of Drosophila paulistorum. III. Alternative rearing [published erratum appears in Behav Genet 1996 Sep;26(5):533] Kim YK, et al. **Behav Genet** 1996 Jan;26(1):27–37

Developmental isolation and subsequent adult behavior of Drosophila paulistorum. II. prior experience. Kim YK, et al. **Behav Genet** 1996 Jan;26(1):15–25

Selective breeding for isolation-induced intermale aggression in mice: associated responses and environmental influences. Sandnabba NK. **Behav Genet** 1996 Sep;26(5):477–88 (100 ref.)

Repeated isolation in the neonatal rat produces alterations in behavior and ventral striatal dopamine release in the juvenile after amphetamine challenge. Kehoe P, et al. **Behav Neurosci** 1996 Dec;110(6):1435–44

Neuropharmacological actions of Pluchea indica Less root extract in socially isolated mice. Thongpraditchote S, et al. **Biol Pharm Bull** 1996 Mar;19(3):379–83

Social isolation in animal models of relevance to neuropsychiatric disorders. Kim JW, et al. **Biol Psychiatry** 1996 Nov 1;40(9):918–22

The community's response to mentally ill people [editorial] Sussman S. **BMJ** 1997 Feb 15;314(7079):458

An ethological approach to self-injury [editorial] [see comments] Jones IH, et al. **Br J Psychiatry** 1996 Sep; 169(3):263–7 (21 ref.). Comment in: Br J Psychiatry 1997 Feb;170:192–3.

Effect of isolation-rearing on noradrenaline release in rat hypothalamus and hippocampus in vitro. Fulford AJ, et al. **Brain Res** 1997 Feb 14;748(1-2):93–9

Central corticotropin-releasing factor and benzodiazepine receptor systems are involved in the social isolation stress-induced decrease in ethanol sleep in mice. Matsumoto K, et al. **Brain Res** 1997 Apr 11;753(2):318–21

Neonatal ablations of the amygdala and inferior temporal cortex alter the vocal response to social separation in rhesus macaques. Newman JD, et al. **Brain Res** 1997 May 30; 758(1-2):180–6

Effects of social isolation rearing on learning in the Morris water maze. Wongwitdecha N, et al. **Brain Res** 1996 Apr 9;715(1-2):119–24

Effects of social housing condition on the response of the Shionogi mouse mammary carcinoma (SC115) to chemotherapy. Kerr LR, et al. **Cancer Res** 1997 Mar 15; 57(6):1124–8

Subtypes of social withdrawal in early childhood: sociometric status and social-cognitive differences across four years. Harrist AW, et al. **Child Dev** 1997 Apr;68(2):278–94

Social isolation affects the pattern of cardiovascular responses to repetitive acoustic startle stimuli. Blanc J, et al. **Clin Exp Pharmacol Physiol** 1997 Jan;24(1):40–5

Evidence that endogenous corticotropin-releasing factor suppresses behavioral responses of guinea pig pups to brief isolation in novel surroundings. Hennessy MB, et al. **Dev Psychobiol** 1997 Jul;31(1):39–47

Conspecific aggression and predation: costs for a solitary mantled howler monkey. Cuarón AD. **Folia Primatol (Basel)** 1997;68(2):100–5

Psychic reality and solitude. Fabricius J. **Int J Psychoanal** 1996 Apr;77 (Pt 2):367–71

Longitudinal study of early childhood injuries and acute illnesses in the offspring of adolescent mothers who were aggressive, withdrawn, or aggressive-withdrawn in childhood. Serbin LA, et al. **J Abnorm Psychol** 1996 Nov; 105(4):500–7

Nurses' learning experience and expressed opinions regarding seclusion practice within one NHS trust. Alty A. **J Adv Nurs** 1997 Apr;25(4):786–93

A case of Diogenes syndrome [letter] [see comments] Reyes-Ortiz CA, et al. **J Am Geriatr Soc** 1996 Dec; 44(12):1486. Comment in: J Am Geriatr Soc 1996 Dec;44(12):1484–5.

Correlations between sleep and wake in internally synchronized and desynchronized circadian rhythms in humans under prolonged isolation. Chandrashekaran MK, et al. **J Biol Rhythms** 1997 Feb;12(1):26–33

Behavioral and glucocorticoid responses of adult domestic dogs (Canis familiaris) to companionship and social separation. Tuber DS, et al. **J Comp Psychol** 1996 Mar; 110(1):103–8

Drug rehabilitation in a treatment farm setting: the Nitawgi farm experience, 1978–1990. Richardson DW. **J Dev Behav Pediatr** 1996 Aug;17(4):258–61

The capacity to be alone as a stress buffer. Larson R, et al. **J Soc Psychol** 1996 Feb;136(1):5–16

Majonoside-R2 reverses social isolation stress-induced decrease in pentobarbital sleep in mice: possible involvement of neuroactive steroids. Nguyen TT, et al. **Life Sci** 1997;61(4):395–402

Social deprivation stress induces adaptative changes of opioid mechanisms in the rat tail artery. Parra L, et al. **Life Sci** 1997;60(25):2315–22

Cardiovascular and hormonal changes induced by isolation and confinement. Maillet A, et al. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S53–5

Persons found helpless in their homes [letter; comment] Roush RE, et al. **N Engl J Med** 1996 Nov 21;335(21):1612; discussion 1612–3. Comment on: N Engl J Med 1996 Jun 27;334(26):1710–6. Comment on: N Engl J Med 1996 Jun 27;334(26):1738–9.

Social isolation in the rat enhances alpha 2-autoreceptor function in the hippocampus in vivo. Fulford AJ, et al. **Neuroscience** 1997 Mar;77(1):57–64

Differential sexual activity of isolated and group-housed male mice: lack of substantial influence of acute or chronic naloxone administration. deCatanzaro D, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):169–74

Effects of d-amphetamine in grouped versus isolated humans. de Wit H, et al. **Pharmacol Biochem Behav** 1997 May-Jun; 57(1-2):333–40

Acute and subchronic effects of tiapride on isolation-induced aggression in male mice. Navarro JF, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):255–9

Effect of social isolation on the reinforcing properties of morphine in the conditioned place preference test. Wongwitdecha N, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):531–4

Behavioral, cardiac and cortisol responses to brief peer separation and reunion in cattle. Boissy A, et al. **Physiol Behav** 1997 May;61(5):693–9

Isolation alters striatal met-enkephalin immunoreactivity in rat pups. Carden SE, et al. **Physiol Behav** 1996 Jul; 60(1):51–3

Individual housing from rearing modifies the performance of young rats on the elevated plus-maze apparatus. Da Silva NL, et al. **Physiol Behav** 1996 Dec;60(6):1391–6

Dissociation between adrenal tyrosinehydroxylase and phenylethanolamine N-methyltransferase activities following repeated experience of defeats in individually housed male DBA/2J mice. Haemisch A, et al. **Physiol Behav** 1996 Jun;59(6):1117–22

The effects of isolation-rearing of rats on behavioural responses to food and environmental novelty. Hall FS, et al. **Physiol Behav** 1997 Aug;62(2):281–90

The effects of isolation-rearing on sucrose consumption in rats. Hall FS, et al. **Physiol Behav** 1997 Aug;62(2):291–7

The effects of isolation-rearing on preference by rats for a novel environment. Hall FS, et al. **Physiol Behav** 1997 Aug; 62(2):299–303

Separation as a new animal model for self-induced weight loss. van Leeuwen SD, et al. **Physiol Behav** 1997 Jul; 62(1):77–81

Effect of isolation on morphine-induced running and changes in body temperature. Coudereau JP, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jul; 20(5):827–38

An updated national survey on seclusion and restraint. Crenshaw WB, et al. **Psychiatr Serv** 1997 Mar;48(3):395–7

Environment is not the most important variable in determining oral morphine consumption in Wistar rats. Petrie BF. **Psychol Rep** 1996 Apr;78(2):391–400

Psychological disturbance alters thymic and adrenal hormone secretion in a parallel but independent manner. Coe CL, et al. **Psychoneuroendocrinology** 1996 Feb;21(2):237–47

Multiple regulators of ultrasonic vocalization in the infant rat [published erratum appears in Psychoneuroendocrinology 1996 Jul;21(5):501] Hofer MA. **Psychoneuroendocrinology** 1996 Feb;21(2):203–17 (72 ref.)

Isolation impairs place preference conditioning to morphine but not aversive learning in mice. Coudereau JP, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):117–23

Increased 5-HT2C receptor responsiveness occurs on rearing rats in social isolation. Fone KC, et al. **Psychopharmacology (Berl)** 1996 Feb;123(4):346–52

Reduction of guinea pig pup isolation calls by anxiolytic and antidepressant drugs. Molewijk HE, et al. **Psychopharmacology (Berl)** 1996 Nov;128(1):31–8

Post-weaning housing conditions influence the behavioural effects of cocaine and d-amphetamine. Smith JK, et al. **Psychopharmacology (Berl)** 1997 May;131(1):23–33

The influence of exile and repatriation on mental and physical health. A population-based study. Sundquist J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Jan;31(1):21–8

[Deafness-blindness in the elderly leading to psychosocial problems (comment)] Stoop JA. **Ned Tijdschr Geneeskd** 1996 Sep 14;140(37):1845–8. Comment on: Ned Tijdschr Geneeskd 1996 Oct 26;140(43):2148. **(Dut)**

[Schizophrenia and exclusion. Current and future perspectives] Furtos J, et al. **Encephale** 1996 Oct;22 Spec No 3:39–48 (50 ref.) **(Fre)**

[Sociability, violence and exclusion] Woringer V. **Rev Med Suisse Romande** 1997 May;117(5):399–405 **(Fre)**

[Genetic studies in Banat, Romania] Schmidt HD, et al. **Anthropol Anz** 1996 Sep;54(3):201–10 (Eng. Abstr.) **(Ger)**

[Population-demographic structure in the Kurskaya district. Isolation by distance] Ivanov VP, et al. **Genetika** 1997 Mar; 33(3):381–6 (Eng. Abstr.) **(Rus)**

[A comparison of the effects of dopamine agonists on self-stimulation of the hypothalamus with destruction of the mesolimbic brain structures in rats raised under conditions of social isolation] Panchenko GN, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep-Oct; 46(5):937–43 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Psychological reactions during polar expeditions and isolation in hyperbaric chambers. Sandal GM, et al. **Aviat Space Environ Med** 1996 Mar;67(3):227–34

Flumazenil reverses the decrease in the hypnotic activity of pentobarbital by social isolation stress: are endogenous benzodiazepine receptor ligands involved? Ojima K, et al. **Brain Res** 1997 Jan 16;745(1-2):127–33

Neonatal isolation alters LTP in freely moving juvenile rats: sex differences. Bronzino JD, et al. **Brain Res Bull** 1996; 41(3):175–83

Fear of ostracism still silences some gay MDs, students [see comments] Robb N. **Can Med Assoc J** 1996 Oct 1; 155(7):972–7. Comment in: Can Med Assoc J 1996 Dec 15;155(12):1664, 1666.

Child maltreatment: testing the social isolation hypothesis [see comments] Coohey C. **Child Abuse Negl** 1996 Mar; 20(3):241–54. Comment in: Child Abuse Negl 1996 Mar;20(3):239–40.

Parental social isolation [editorial; comment] Jones DP. **Child Abuse Negl** 1996 Mar;20(3):239–40. Comment on: Child Abuse Negl 1996 Mar;20(3):241–54.

The emergence of solitude as a constructive domain of experience in early adolescence. Larson RW. **Child Dev** 1997 Feb;68(1):80–93

Diogenes syndrome: of omelettes and souffles [editorial;

comment] Reifler BV. **J Am Geriatr Soc** 1996 Dec; 44(12):1484–5. Comment on: J Am Geriatr Soc 1996 Dec;44(12):1486.

The impact of the homecoming reception on the development of posttraumatic stress disorder. The West Haven Homecoming Stress Scale (WHHSS). Johnson DR, et al. **J Trauma Stress** 1997 Apr;10(2):259–77

Hypothalamic–pituitary–adrenal responses to brief social separation. Hennessy MB. **Neurosci Biobehav Rev** 1997 Jan; 21(1):11–29 (148 ref.)

Rough–and–tumble play behavior in Fischer–344 and buffalo rats: effects of social isolation. Siviy SM, et al. **Physiol Behav** 1997 Apr;61(4):597–602

SOCIAL JUSTICE

see related
CIVIL RIGHTS
HUMAN RIGHTS

On the 50th anniversary of Acta Medica Croatica [letter] Kraljević L. **Acta Med Croatica** 1997;51(2):116

Do we really mean preventive medicine for all? O'Hanlan KA. **Am J Prev Med** 1996 Sep–Oct;12(5):411–4 (57 ref.)

Topics for our times: affirmative action and women's health. Chavkin W. **Am J Public Health** 1997 May;87(5):732–4

Reframing women's risk: social inequalities and HIV infection. Zierler S, et al. **Annu Rev Public Health** 1997; 18:401–36 (168 ref.)

Equity in health care: some conceptual and practical issues. Jan S, et al. **Aust N Z J Public Health** 1996 Feb;20(1):9–11

Equity, poverty and health for all. Calman KC. **BMJ** 1997 Apr 19;314(7088):1187–91

The injustice of compensation for victims of medical accidents. Harris J. **BMJ** 1997 Jun 21;314(7097):1821–3

Primary care: opportunities and threats. Threat to social justice. Heath I. **BMJ** 1997 Feb 22;314(7080):598–9

The economic attributes of medical care: implications for rationing choices in the United States and United Kingdom. Banks DA. **Camb Q Healthc Ethics** 1996 Fall;5(4):546–58

The eclipse of the individual in policy (where is the place for justice?) [comment] Bliton MJ, et al. **Camb Q Healthc Ethics** 1996 Fall;5(4):519–32. Comment on: Camb Q Healthc Ethics 1996 Fall;5(4):485–92. Comment on: Camb Q Healthc Ethics 1996 Fall;5(4):500–10. Comment on: Camb Q Healthc Ethics 1996 Fall;5(4):511–8.

Justice, virtue, and beyond: after Macintyre. Buehler C. **Camb Q Healthc Ethics** 1996 Fall;5(4):533

Seeking justice for Priscilla [see comments] Lantos J. **Camb Q Healthc Ethics** 1996 Fall;5(4):485–92. Comment in: Camb Q Healthc Ethics 1996 Fall;5(4):519–32.

Justice, society, physicians and ethics committees: incorporating ideas of justice into patient care decisions. Loewy EH. **Camb Q Healthc Ethics** 1996 Fall;5(4):559–69

The ethical neutrality of prospective payments: justice issues. McDowell J. **Camb Q Healthc Ethics** 1996 Fall;5(4):570–8

Recapturing justice in the managed care era. Moreno JD. **Camb Q Healthc Ethics** 1996 Fall;5(4):493–9

Justice and the individual in the Hippocratic tradition [see comments] Zaner RM. **Camb Q Healthc Ethics** 1996 Fall; 5(4):511–8. Comment in: Camb Q Healthc Ethics 1996 Fall;5(4):519–32.

The use and abuse of participatory action research [editorial] Hagey RS. **Chronic Dis Can** 1997;18(1):1–4

Environmental justice in action [news] Haynes RC. **Environ Health Perspect** 1997 Apr;105(4):374–7

The court's effectiveness in protecting the rights of juveniles in delinquency cases. Ainsworth JE. **Future Child** 1996 Winter;6(3):64–74

The nature of the court today. Rubin HT. **Future Child** 1996 Winter;6(3):40–52

Is justice enough? Ends and means in bioethics. **Hastings Cent Rep** 1996 Nov–Dec;26(6):9–10

Justice, fair procedures, and the goals of medicine. Daniels N. **Hastings Cent Rep** 1996 Nov–Dec;26(6):10–2

Beyond distributive justice in health reform. Jennings B. **Hastings Cent Rep** 1996 Nov–Dec;26(6):14–5

Of magic bullets and social justice: emerging challenges of recent advances in AIDS treatment. Linsk NL, et al. **Health Soc Work** 1997 Feb;22(1):70–4

Quality, context and distributive justice: the role of utilization research and management. Lewis S. **Int J Qual Health Care** 1995 Dec;7(4):325–31

Support for affirmative action, justice perceptions, and work attitudes: a study of gender and racial–ethnic group differences. Parker CP, et al. **J Appl Psychol** 1997 Jun; 82(3):376–89

Group differences: is the good society impossible? Flynn JR. **J Biosoc Sci** 1996 Oct;28(4):573–85 (24 ref.)

A citizens' AIDS Task Force: overcoming obstacles. Aiken JH. **J Homosex** 1997;32(3–4):145–67

Medical ethics in the developing world: a liberation theology perspective. Anjos MF. **J Med Philos** 1996 Dec; 21(6):629–37

Ambiguities and irresolvable tensions in the ADA: a reply to Loretta M. Kopelman and Anita Silvers [comment] Cutter MA. **J Med Philos** 1996 Apr;21(2):225–35. Comment on: J Med Philos 1996 Apr;21(2):187–208. Comment on: J Med Philos 1996 Apr;21(2):209–24.

Ethical assumptions and ambiguities in the Americans With Disabilities Act [see comments] Kopelman LM. **J Med Philos** 1996 Apr;21(2):187–208. Comment in: J Med Philos 1996 Apr;21(2):225–35.

The new triad: responsibility, solidarity, and subsidiarity. Sass HM. **J Med Philos** 1995 Dec;20(6):587–94

(In) equality, (ab) normality, and the Americans With Disabilities Act [see comments] Silvers A. **J Med Philos** 1996 Apr;21(2):209–24. Comment in: J Med Philos 1996 Apr;21(2):225–35.

Self–interest and fairness in problems of resource allocation: allocators versus recipients. Diekmann KA, et al. **J Pers Soc Psychol** 1997 May;72(5):1061–74

Cognitive bias in procedural justice: formation and implications of illusory correlations in perceived intergroup fairness. Stroessner SJ, et al. **J Pers Soc Psychol** 1996 Oct; 71(4):717–28

How do I judge my outcome when I do not know the outcome of others? The psychology of the fair process effect. van den Bos K, et al. **J Pers Soc Psychol** 1997 May; 72(5):1034–46

Working towards social justice in health. Whitehead M. **J R Soc Health** 1996 Aug;116(4):256–63 (55 ref.)

Religiosity and sphere–specific just world beliefs in 16– to 18–year–olds. Crozier S, et al. **J Soc Psychol** 1997 Aug; 137(4):510–3

Getting started: a survey of medical student activism. Bambas A. **JAMA** 1996 Nov 6;276(17):1436–7

The AMA–MSS: leading the charge for change. Merchen TD, et al. **JAMA** 1996 Nov 6;276(17):1438

Activism and the medical student [editorial] Oransky I. **JAMA** 1996 Nov 6;276(17):1434

Times of a medical student activist. Silver–Isenstadt AD. **JAMA** 1996 Nov 6;276(17):1435

"Human debris": border politics, body parts, and the reclamation of the Americas in Leslie Marmon Silko's Almanac of the Dead. Stanford AF. **Lit Med** 1997 Spring; 16(1):23–42

Philosophic perspectives on access to health care: distributive justice in health care. Buchanan A. **Mt Sinai J Med** 1997 Mar;64(2):90–5

Equitable access to cancer services in the 21st century. Facione NC, et al. **Nurs Outlook** 1997 May–Jun; 45(3):118–24 (32 ref.)

The political and moral economy of mental health. Cohen CI. **Psychiatr Serv** 1997 Jun;48(6):768–70

An integrative framework for explaining reactions to decisions: interactive effects of outcomes and procedures. Brockner J, et al. **Psychol Bull** 1996 Sep;120(2):189–208 (73 ref.)

Viewers' ratings of violence presented in justified and unjustified contexts. Moore SR, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):931–5

Equity in the access to mammography in Spain. Luengo S, et al. **Soc Sci Med** 1996 Oct;43(8):1263–71

Pregnancy and addiction: translating research into practice. Whiteford LM, et al. **Soc Sci Med** 1997 May;44(9):1371–80

Radicalizing recovery: addiction, spirituality, and politics. Morell C. **Soc Work** 1996 May;41(3):306–12 (34 ref.)

Should a criminal receive a heart transplant? Medical justice vs. societal justice. Schneiderman LJ, et al. **Theor Med** 1996 Mar;17(1):33–44

Some aspects of justice in the allocation of organs for transplantation [letter] Obermann K. **Transplantation** 1997 Jul 27;64(2):371

Gender justice in genetics. Mahowald MB. **Womens Health Issues** 1997 Jul–Aug;7(4):230–3 (4 ref.)

[When a sense of justice hinders social efficiency: Pareto axiom revisited] Ohtsubo Y, et al. **Shinrigaku Kenkyu** 1996 Dec;67(5):367–74 (Eng. Abstr.) **(Jpn)**

[Equal health care] Allebeck P. **Lakartidningen** 1996 Oct 16; 93(42):3667–8 **(Swe)**

[The welfare wall is cracked. Low–educated people are not favoured by health services] Haglund B, et al. **Lakartidningen** 1996 Oct 16;93(42):3672, 3675–7 **(Swe)**

LEGISLATION & JURISPRUDENCE

An impaired judicial system [letter; comment] Workman S. **CMAJ** 1997 Jun 15;156(12):1698. Comment on: Can Med Assoc J 1997 Mar 15;156(6):889–90.

Frankly my dear, I don't give a damn [editorial] Monks P. **Med Sci Law** 1996 Jul;36(3):185–7

PSYCHOLOGY

The quiet revolution: consciousness raising and psychoanalytic practice. Bernardez T. **Bull Menninger Clin** 1996 Fall;60(4):480–7

STANDARDS

The juvenile court: analysis and recommendations. Stevenson CS, et al. **Future Child** 1996 Winter;6(3):4–28 (109 ref.)

SOCIAL MEDICINE

Proceedings of the XVIth Congress of the International Academy of Legal Medicine and Social Medicine. Strasbourg, France, 31 May–2 June, 1994. **Acta Med Leg Soc (Liege)** 1994;44:1–532

Deprivation and health. Chadwick Lecture 1996. Black D. **J R Coll Physicians Lond** 1996 Sep–Oct;30(5):466–71

Social medicine and the United States [letter; comment] Uzych L. **Scand J Soc Med** 1996 Sep;24(3):150–1. Comment on: Scand J Soc Med 1995 Sep;23(3):145–9.

Development and status of social medicine in Germany. Weber A, et al. **Scand J Soc Med** 1996 Sep;24(3):145–9

Causes of change in the health of populations: a biopsychosocial viewpoint. Arnetz BB. **Soc Sci Med** 1996 Sep;43(5):605–8 (31 ref.)

International stratification and the health of women: an empirical comparison of alternative models of world–system position. Dyches H, et al. **Soc Sci Med** 1996 Oct;43(7):1063–72

The relation of self–reported back pain to psychosocial, behavioral, and health–related factors in a working population in Switzerland. Foppa I, et al. **Soc Sci Med** 1996 Oct;43(7):1119–26

Disease ecology and a reformist alternative: the case of infant mortality. Gesler WM, et al. **Soc Sci Med** 1997 Mar; 44(5):657–71 (106 ref.)

Urban violence and health—South Africa 1995. Gilbert L. **Soc Sci Med** 1996 Sep;43(5):873–86 (74 ref.)

Child development and long–term outcomes: a population health perspective and summary of successful interventions. Hertzman C, et al. **Soc Sci Med** 1996 Oct;43(7):1083–95 (84 ref.)

How religion influences morbidity and health: reflections on natural history, salutogenesis and host resistance. Levin JS. **Soc Sci Med** 1996 Sep;43(5):849–64 (67 ref.)

Disease ecology at a crossroads: man–made environments, human rights and perpetual development utopias. Pedersen D. **Soc Sci Med** 1996 Sep;43(5):745–58 (80 ref.)

[Aspects and perspectives of social medicine. Dedicated to Prof. Dr. Hans Schaefer for his 90th birthday] **Gesundheitswesen** 1996 Oct;58 Suppl 3:155–224 **(Ger)**

[In recognition of Prof. Dr. Kurt–Alphons Jochheim on the award of the Salomon–Neumann Medal of the German Society of Social Medicine and Prevention] Brennecke R. **Gesundheitswesen** 1996 Feb;58(2):69–71 **(Ger)**

["Full shift light masonry work". Apparently a crux—social medicine epicrisis] Piechowiak H. **Gesundheitswesen** 1996 Oct;58(10):557–9 **(Ger)**

[Social medicine aspects of addiction medicine] Tretter F. **Gesundheitswesen** 1996 Oct;58 Suppl 3:211–8 **(Ger)**

[Medical–scientific counseling—important for the society, difficult for the physician] Bjørndal A. **Tidsskr Nor Laegeforen** 1997 Jan 20;117(2):189–90 **(Nor)**

[Population responsibility in general practice (letter; comment)] Fjermestad T, et al. **Tidsskr Nor Laegeforen** 1996 Oct 30;116(26):3157–8. Comment on: Tidsskr Nor Laegeforen 1996 Sep 10;116(21):2573–6. Comment on: Tidsskr Nor Laegeforen 1996 Oct 20;116(25):3048–9. **(Nor)**

[Strengthening of social medicine (letter)] Forsdahl A. **Tidsskr Nor Laegeforen** 1996 Nov 30;116(29):3530 **(Nor)**

[Population responsibility in general practice (letter; comment) (see comments)] Hagestad K. **Tidsskr Nor Laegeforen** 1996 Oct 20;116(25):3048–9. Comment on: Tidsskr Nor Laegeforen 1996 Sep 10;116(21):2573–6. Comment in: Tidsskr Nor Laegeforen 1996 Oct 30;116(26):3157–8. **(Nor)**

[A system of listed patients and tasks of social medicine (letter)] Kolstrup N, et al. **Tidsskr Nor Laegeforen** 1996 Nov 30;116(29):3530 **(Nor)**

[Suicide from the standpoint of social medicine] Voĭtsekhovich BA, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Mar–Apr;(2):16–9 (Eng. Abstr.) **(Rus)**

[Social medicine has "let thousand flowers bloom". Public health science should be the basis] Larsson S. **Lakartidningen** 1997 Sep 10;94(37):3157–60 **(Swe)**

ECONOMICS

[Contract physician payment in the EGM and HVM tension field. Presentation at the 27th Continuing Education Congress for honorary judges of the contract physician circle of social and federal social courts 28th September 1996 in Potsdam] Schneider G. **Chirurg** 1997 Jan; 68(1):Suppl 3–10 **(Ger)**

[Social medicine in the ecology curriculum—Leipzig experiences with a social medicine practicum] Meier J, et al. **Gesundheitswesen** 1997 Jan;59(1):51–5 (Eng. Abstr.) **(Ger)**

[Community health politics—responsibilities in the social state] Pföhler W. **Gesundheitswesen** 1996 Nov;58(11):592–5 **(Ger)**

EDUCATION

Humanistic and social education for physicians: the experience of the Colombian School of Medicine. Triana JE. **J Med Philos** 1996 Dec;21(6):651–7

The Dutch experience with regard to the training for public health. Doeleman F. **Public Health** 1997 May;111(3):125–7 (0 ref.)

[Social medicine in teaching and research] Brennecke R. **Gesundheitswesen** 1996 Oct;58 Suppl 3:163–8 **(Ger)**

[Problem–based learning in a social medicine course—a concept for improving learning achievement and practice relevance] Busse R. **Gesundheitswesen** 1996 Jul; 58(7):406–10 (Eng. Abstr.) **(Ger)**

[Knowledge control in training in social medicine] Slauma TF. **Probl Sotsialnoi Gig Istor Med** 1997 Jul–Aug;(4):47–9 (Eng. Abstr.) **(Rus)**

HISTORY

South Africa's early experiment in social medicine: its

pioneers and politics. Marks S. **Am J Public Health** 1997 Mar;87(3):452–9

That which we call social medicine.... Gunning–Schepers LJ. **J Epidemiol Community Health** 1997 Jun;51(3):224–6

The British Journal of Social Medicine: what was in a name? Murphy S, et al. **J Epidemiol Community Health** 1997 Feb; 51(1):2–8

Durkheim among the statisticians. Turner S. **J Hist Behav Sci** 1996 Oct;32(4):354–78

Cleave the colossus and the history of the 'saccharine disease' concept. Campbell GD. **Nutr Health** 1996;11(1):1–11

[The early history of the German Society of Social Medicine and Prevention] Schaefer H, et al. **Gesundheitswesen** 1996 Oct;58 Suppl 3:157–8 **(Ger)**

[History, social history and sociology of medicine. An imaginary controversy with Christian Probst] Labisch A. **Sudhoffs Arch Z Wissenschaftsgesch** 1996;80(1):1–27 (Eng. Abstr.) **(Ger)**

[Works of G. A. Batkis and current problems of social medicine (on the 100th anniversary of the birth of the scientist)] Lisitsyn IuL. **Probl Sotsialnoi Gig Istor Med** 1995 Mar–Apr;(2):54–6 **(Rus)**

LEGISLATION & JURISPRUDENCE

[Public health in social responsibility] Badura B. **Gesundheitswesen** 1996 Feb;58(2):64–8 **(Ger)**

[Public health in social responsibility—social medicine aspects] Gostomzyk JG. **Gesundheitswesen** 1996 Feb; 58(2):61–3 **(Ger)**

[Perspectives in social medicine counseling and expert assessment exemplified by the medical service of health insurance] Schaller H, et al. **Gesundheitswesen** 1996 Oct; 58 Suppl 3:188–93 **(Ger)**

METHODS

General practice in the megazone keynote lecture, 3rd European Congress on Family Medicine/General Practice, WONCA, Stockholm, 4 July 1996. Fugelli P. **Fam Pract** 1997 Feb;14(1):12–6

[The role of health care in occupational disability (letter; comment)] Jong GD. **Ned Tijdschr Geneeskd** 1996 Dec 7;140(49):2477. Comment on: Ned Tijdschr Geneeskd 1996 Oct 5;140(40):1982–6. **(Dut)**

TRENDS

Psychiatry and health in low–income populations. Eisenberg L. **Compr Psychiatry** 1997 Mar–Apr;38(2):69–73

[Social medicine and the public health service] Gostomzyk JG. **Gesundheitswesen** 1996 Oct;58 Suppl 3:194–9 **(Ger)**

[The public health system in transition] Gostomzyk JG. **Gesundheitswesen** 1997 Apr;59(4):200–2 **(Ger)**

[Psychiatry and public health. Introduction] Häfner H. **Gesundheitswesen** 1996 Jul;58(1 Suppl):7–9 **(Ger)**

[Public health in transition—a social science perspective] Kühn H. **Gesundheitswesen** 1997 Apr;59(4):213–6 **(Ger)**

[Social medicine and epidemiology: significance for conquering illness] Löwel H. **Gesundheitswesen** 1996 Oct; 58 Suppl 3:174–9 **(Ger)**

[Rehabilitation and social medicine] Raspe H. **Gesundheitswesen** 1996 Oct;58 Suppl 3:183–7 **(Ger)**

[Tradition and future with reference to an academy] Schmacke N. **Gesundheitswesen** 1997 May;59(5):346–8 **(Ger)**

[Social medicine and health system research, status and perspectives] Schwartz FW. **Gesundheitswesen** 1996 Oct;58 Suppl 3:180–2 **(Ger)**

[Observations on social medicine in public health transition] Schwartz FW, et al. **Gesundheitswesen** 1997 Apr; 59(4):207–12 (Eng. Abstr.) **(Ger)**

[Disciplinary organization of medical sociology—a contribution to the dialogue with social medicine] Siegrist J. **Gesundheitswesen** 1996 Oct;58 Suppl 3:200–4 (Eng. Abstr.) **(Ger)**

[Public health and social medicine] von Troschke J. **Gesundheitswesen** 1996 Oct;58 Suppl 3:205–10 **(Ger)**

[The development of social hygiene science and the contribution of the N. A, Semashko Research Institute of Social Hygiene, Economics and Public Health Management in this field of medicine] Ovcharov VK. **Probl Sotsialnoi Gig Istor Med** 1995 Jan–Feb;(1):8–21 **(Rus)**

SOCIAL MOBILITY

Aetiology of asthma [letter] Kraemer S. **Arch Dis Child** 1997 Aug;77(2):188

Urban labor markets and individual transitions out of poverty. Iceland J. **Demography** 1997 Aug;34(3):429–41

Family dissolution, family reconstitution, and children's educational careers: recent evidence for Sweden. Jonsson JO, et al. **Demography** 1997 May;34(2):277–93

The dynamics of childhood poverty. Corcoran ME, et al. **Future Child** 1997 Summer–Fall;7(2):40–54 (41 ref.)

The escape from poverty among rural and urban elders. Jensen L, et al. **Gerontologist** 1997 Aug;37(4):462–8

Big fish in small ponds: a social hierarchy analysis of intergroup bias. Seta JJ, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1210–21

The concept of status incongruence revisited: a 22–year follow–up of mortality for middle–aged men. Faresjö T, et al. **Scand J Soc Med** 1997 Mar;25(1):28–32

Health–related social mobility: a comparison of currently employed men and women in Britain and Finland. Rahkonen O, et al. **Scand J Soc Med** 1997 Jun;25(2):83–92

SOCIAL PERCEPTION

see related
STEREOTYPING

Parent, teacher and self–reports as predictors of signs of disturbance in adolescents: whose information carries the most weight? Verhulst FC, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):75–81

The relationship of social context of drinking, perceived social norms, and parental influence to various drinking patterns of adolescents. Beck KH, et al. **Addict Behav** 1996 Sep–Oct;21(5):633–44

Perception of friends' use of alcohol, cigarettes, and marijuana among urban schoolchildren: a longitudinal analysis. Iannotti RJ, et al. **Addict Behav** 1996 Sep–Oct; 21(5):615–32

Drinking, the majority fallacy, cognitive dissonance and social pressure. Mäkelä K. **Addiction** 1997 Jun;92(6):729–36

Adolescents' perceptions of family functioning in the United Arab Emirates. Alnajjar AA. **Adolescence** 1996 Summer; 31(122):433–42

The relationship between Type A parenting and adolescent perceptions of family environment. Forgays DK. **Adolescence** 1996 Winter;31(124):841–62

Patterns of parenting during adolescence: perceptions of adolescents and parents. Paulson SE, et al. **Adolescence** 1996 Summer;31(122):369–81

College students' perceptions of the prevalence of risky sexual behaviour. Seal DW, et al. **AIDS Care** 1996 Aug; 8(4):453–66

Social implications of behavioral interventions for persons with mental retardation. Bihm EM, et al. **Am J Ment Retard** 1997 May;101(6):567–78

Labeling and discrimination of facial expressions by aggressive and nonaggressive men with mental retardation. Walz NC, et al. **Am J Ment Retard** 1996 Nov;101(3):282–91

Attributional bias and reactive aggression. Hudley C, et al. **Am J Prev Med** 1996 Sep–Oct;12(5 Suppl):75–81

Physicians counseling smokers. A population–based survey of patients' perceptions of health care provider–delivered smoking cessation interventions. Goldstein MG, et al. **Arch Intern Med** 1997 Jun 23;157(12):1313–9

Application of an attribution–affect–action model of caregiving behavior. Fopma–Loy J, et al. **Arch Psychiatr Nurs** 1997 Aug;11(4):210–7

A Malay crosscultural worldview and forensic review of amok. Hatta SM. **Aust N Z J Psychiatry** 1996 Aug; 30(4):505–10 (30 ref.)

Short–term mood change, perceived funniness, and the effect of humor stimuli. Moran CC. **Behav Med** 1996 Spring; 22(1):32–8

Recognition bias for critical faces in social phobics. Lundh LG, et al. **Behav Res Ther** 1996 Oct;34(10):787–94

A cognitive–behavioral model of anxiety in social phobia. Rapee RM, et al. **Behav Res Ther** 1997 Aug;35(8):741–56

Law school performance predicted by explanatory style. Satterfield JM, et al. **Behav Sci Law** 1997 Winter; 15(1):95–105

Abnormal recognition of facial expression of emotions in depressed patients with major depression disorder and schizotypal personality disorder. Mikhailova ES, et al. **Biol Psychiatry** 1996 Oct 15;40(8):697–705

Teachers' views on bullying: definitions, attitudes and ability to cope. Boulton MJ. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):223–33

Awareness and perceptions of outcomes after traumatic brain injury. Hillier SL, et al. **Brain Inj** 1997 Jul;11(7):525–36

Social categorization and the formation of intergroup attitudes in children. Bigler RS, et al. **Child Dev** 1997 Jun; 68(3):530–43

Social influences on false belief access: specific sibling influences or general apprenticeship? Lewis C, et al. **Child Dev** 1996 Dec;67(6):2930–47

Neighbors' perceptions of group homes. Cook JR. **Community Ment Health J** 1997 Aug;33(4):287–99

Preschoolers' understanding of mental and bodily reactions to contamination: what you don't know can hurt you, but cannot sadden you. Kalish C. **Dev Psychol** 1997 Jan; 33(1):79–91

Early reasoning about desires: evidence from 14– and 18–month–olds. Repacholi BM, et al. **Dev Psychol** 1997 Jan;33(1):12–21

Young children's appreciation of the mental impact of their communicative signals. Shwe HI, et al. **Dev Psychol** 1997 Jul;33(4):630–6

The health consequences of racial discrimination: a study of African Americans. Broman CL. **Ethn Dis** 1996 Winter–Spring;6(1–2):148–53

The perceived racism scale: a multidimensional assessment of the experience of white racism among African Americans. McNeilly MD, et al. **Ethn Dis** 1996 Winter–Spring;6(1–2):154–66

Medical school culture and generalist education: perceptions of a medical school faculty. Curtis P, et al. **Fam Med** 1997 May;29(5):353–8

Interpretation of facial expressions of emotion: the influence of eyebrows. Kirkpatrick SW, et al. **Genet Soc Gen Psychol Monogr** 1996 Nov;122(4):405–23

Schematic drawings of facial expressions for emotion recognition and interpretation by preschool–aged children. MacDonald PM, et al. **Genet Soc Gen Psychol Monogr** 1996 Nov;122(4):373–88

Facial interpretation and component consistency. Sullivan LA, et al. **Genet Soc Gen Psychol Monogr** 1996 Nov; 122(4):389–404

The developmental stake hypothesis and changing perceptions of intergenerational relations, 1971–1985. Lynott PP, et al. **Gerontologist** 1997 Jun;37(3):394–405

Awareness of deficit in Alzheimer's disease: relation to caregiver burden. Seltzer B, et al. **Gerontologist** 1997 Feb; 37(1):20–4

Risk ranking by perception. Osei EK, et al. **Health Phys** 1997 Feb;72(2):195–203

Coder gender and potential for hostility ratings. Davidson K, et al. **Health Psychol** 1996 Jul;15(4):298–302

Perceiving wisdom: do age and gender play a part? Hira FJ, et al. **Int J Aging Hum Dev** 1997;44(2):85–101

Cross–cultural differences in adolescents' perceptions of their grandparents. Hurme H. **Int J Aging Hum Dev** 1997; 44(3):221–53

Evaluation of infantilizing speech in a rehabilitation setting: relation to age. Whitmer RA, et al. **Int J Aging Hum Dev** 1997;44(2):129–36

Aging and the aged in Aesopic fables. Wortley J. **Int J Aging Hum Dev** 1997;44(3):183–203

What depressive symptoms are reported in Alzheimer's patients? Weiner MF, et al. **Int J Geriatr Psychiatry** 1997 Jun;12(6):648–52

World view change in adult children of Alcoholics/Al–Anon self–help groups: reconstructing the alcoholic family. Humphreys K. **Int J Group Psychother** 1996 Apr; 46(2):255–63

Social epistemology, gender and nursing theory. Cash K. **Int J Nurs Stud** 1997 Apr;34(2):137–43 (27 ref.)

Attitudes towards mental patients in Hong Kong. Chou KL, et al. **Int J Soc Psychiatry** 1996 Autumn;42(3):213–9

Public perception of discharged psychiatric patients: a community survey. Reda S. **Int J Soc Psychiatry** 1996 Autumn;42(3):220–9

Attributional styles of aggressive boys and their mothers. Bickett LR, et al. **J Abnorm Child Psychol** 1996 Aug; 24(4):457–72

A revised teacher rating scale for reactive and proactive aggression. Brown K, et al. **J Abnorm Child Psychol** 1996 Aug;24(4):473–80

A cognitive–interpersonal approach to depressive symptoms in preadolescent children. Rudolph KD, et al. **J Abnorm Child Psychol** 1997 Feb;25(1):33–45

Children's responding to live interadult conflict: the role of form of anger expression. el–Sheikh M, et al. **J Abnorm Child Psychol** 1996 Aug;24(4):401–15

Dysphoria and children's processing of supportive interactions. Shirk SR, et al. **J Abnorm Child Psychol** 1997 Jun;25(3):239–49

Levels of analysis in cognitive bases of maternal disciplinary dysfunction. Strassberg Z. **J Abnorm Child Psychol** 1997 Jun;25(3):209–15

Young people's representations of others' views of smoking: is there a link with smoking behaviour? Thrush D, et al. **J Adolesc** 1997 Feb;20(1):57–70

Do fifth graders' attitudes and intentions toward alcohol use predict seventh–grade use? Webb JA, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1611–7

Social expectancies and self–perceptions in anxiety–disordered children. Chansky TE, et al. **J Anxiety Disord** 1997 Jul–Aug;11(4):347–63

Maternal expectations and attributions about coping in anxious children. Kortlander E, et al. **J Anxiety Disord** 1997 May–Jun;11(3):297–315

Social perception in children with autism: an attentional deficit? Pierce K, et al. **J Autism Dev Disord** 1997 Jun; 27(3):265–82

Reputation enhancement theory and adolescent substance use. Odgers P, et al. **J Child Psychol Psychiatry** 1996 Nov; 37(8):1015–22

Theory of mind and rule use in individuals with Down's syndrome: a test of the uniqueness and specificity claims. Zelazo PD, et al. **J Child Psychol Psychiatry** 1996 May; 37(4):479–84

Interpersonal perceptions of depressed and borderline inpatients. Stern MI, et al. **J Clin Psychol** 1997 Jan; 53(1):41–9

The role of dysphoric mood and gender in interpersonal responses to nondysphoric others. Tan JC, et al. **J Clin Psychol** 1996 Sep;52(5):499–508

Effects of speech and language disorders on raters' perceptions. Williams DF, et al. **J Commun Disord** 1996 Jan–Feb;29(1):1–12

Factors influencing young chimpanzees' (Pan troglodytes) recognition of attention. Povinelli DJ, et al. **J Comp Psychol** 1996 Dec;110(4):336–45

Perceptions and satisfaction with emergency department care. Rhee KJ, et al. **J Emerg Med** 1996 Nov–Dec; 14(6):679–83

The association between receptive nonverbal processing abilities and internalizing/externalizing problems in girls and boys. Lancelot C, et al. **J Genet Psychol** 1997 Sep; 158(3):297–302

The relation of nonverbal processing ability of faces and

voices and children's feelings of depression and competence. Nowicki S Jr, et al. **J Genet Psychol** 1997 Sep;158(3):357–63

Preschool children's use of information about age and perceptual access to infer another person's knowledge. Pillow BH, et al. **J Genet Psychol** 1997 Sep;158(3):365–76

Preadolescents' understanding of ethnic discrimination. Verkuyten M, et al. **J Genet Psychol** 1997 Mar; 158(1):97–112

First impressions of the nurse and nursing care. Mangum S, et al. **J Nurs Care Qual** 1997 Jun;11(5):39–47

Intuitive theories of human immunodeficiency virus transmission: their development and implications. Sigelman CK, et al. **J Pediatr Psychol** 1996 Aug;21(4):555–72

Eliciting facial affect, motivation, and expectancies in transference: significant-other representations in social relations. Andersen SM, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1108–29

Self-esteem and "if . . . then" contingencies of interpersonal acceptance. Baldwin MW, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1130–41

Simultaneous assimilation and contrast effects in judgments of self and others. Biernat M, et al. **J Pers Soc Psychol** 1997 Aug;73(2):254–69

Mood and the use of scripts: does a happy mood really lead to mindlessness? Bless H, et al. **J Pers Soc Psychol** 1996 Oct;71(4):665–79

Lay dispositionism and implicit theories of personality. Chiu CY, et al. **J Pers Soc Psychol** 1997 Jul;73(1):19–30

Working models of attachment: implications for explanation, emotion and behavior. Collins NL. **J Pers Soc Psychol** 1996 Oct;71(4):810–32

Constructive biases in social judgment: experiments on the self-verification of question contents. Fiedler K, et al. **J Pers Soc Psychol** 1996 Nov;71(5):861–73

Fear of death and the judgment of social transgressions: a multidimensional test of terror management theory. Florian V, et al. **J Pers Soc Psychol** 1997 Aug;73(2):369–80

Resolving the apparent discrepancy between the incongruency effect and the expectancy-based illusory correlation effect: the TRAP model. Garcia-Marques L, et al. **J Pers Soc Psychol** 1996 Nov;71(5):845–60

Anti-black prejudice as a function of exposure to the negative behavior of a single black person. Henderson-King EI, et al. **J Pers Soc Psychol** 1996 Oct;71(4):654–64

The working self-concept in transference: significant-other activation and self change. Hinkley K, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1279–95

Do we know how much people like one another? Kenny DA, et al. **J Pers Soc Psychol** 1996 Nov;71(5):928–36

Objective standards are not enough: affective, self-evaluative, and behavioral responses to social comparison information. Klein WM. **J Pers Soc Psychol** 1997 Apr;72(4):763–74

When exceptions prove the rule: how extremity of deviance determines the impact of deviant examples on stereotypes. Kunda Z, et al. **J Pers Soc Psychol** 1997 May;72(5):965–79

Mood and the correction of positive versus negative stereotypes. Lambert AJ, et al. **J Pers Soc Psychol** 1997 May;72(5):1002–16

Meta-accuracy among acquainted individuals: a social relations analysis of interpersonal perception and metaperception. Levesque MJ. **J Pers Soc Psychol** 1997 Jan;72(1):66–74

Target entitativity: implications for information processing about individual and group targets. McConnell AR, et al. **J Pers Soc Psychol** 1997 Apr;72(4):750–62

In search of the powerful self-fulfilling prophecy. Madon S, et al. **J Pers Soc Psychol** 1997 Apr;72(4):791–809

Interpersonal perception and metaperception in nonoverlapping social groups. Malloy TE, et al. **J Pers Soc Psychol** 1997 Feb;72(2):390–8

Agreement and accuracy in children's interpersonal perceptions: a social relations analysis. Malloy TE, et al. **J Pers Soc Psychol** 1996 Oct;71(4):692–702

Effects of communication, information overlap, and behavioral consistency on consensus in social perception. Malloy TE, et al. **J Pers Soc Psychol** 1997 Aug; 73(2):270–80

Counterfactual thinking and ascriptions of cause and preventability. Mandel DR, et al. **J Pers Soc Psychol** 1996 Sep;71(3):450–63

Adult attachment style and information processing: individual differences in curiosity and cognitive closure. Mikulincer M. **J Pers Soc Psychol** 1997 May;72(5):1217–30

The self-fulfilling nature of positive illusions in romantic relationships: love is not blind, but prescient. Murray SL, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1155–80

A new look at defensive projection: thought suppression, accessibility, and biased person perception. Newman LS, et al. **J Pers Soc Psychol** 1997 May;72(5):980–1001

Memory for and experience of differential competitive behavior of individuals and groups. Pemberton MB, et al. **J Pers Soc Psychol** 1996 Nov;71(5):953–66

Why minority group members perceive or do not perceive the discrimination that confronts them: the role of self-esteem and perceived control. Ruggiero KM, et al. **J Pers Soc Psychol** 1997 Feb;72(2):373–89

Terror management and cognitive-experiential self-theory: evidence that terror management occurs in the experiential system. Simon L, et al. **J Pers Soc Psychol** 1997 May; 72(5):1132–46

Cognitive bias in procedural justice: formation and implications of illusory correlations in perceived intergroup fairness. Stroessner SJ, et al. **J Pers Soc Psychol** 1996 Oct; 71(4):717–28

How do I judge my outcome when I do not know the outcome of others? The psychology of the fair process effect. van den Bos K, et al. **J Pers Soc Psychol** 1997 May; 72(5):1034–46

College students' judgements and perceptions of persons with AIDS from different risk groups. Johnson ME, et al. **J Psychol** 1996 Sep;130(5):527–36

Supporting people with disabilities [letter] Bazzoui CA. **J Psychosoc Nurs Ment Health Serv** 1997 Jul;35(7):6–7

Alexithymia, social support and health problems. Lumley MA, et al. **J Psychosom Res** 1996 Dec;41(6):519–30

Societal factors that negatively affect the mental health support for the British Army's Service personnel involved in major trauma. Finnegan AP. **J R Army Med Corps** 1997 Jun;143(2):107–11

Perceived risk of fighting and actual fighting behavior among middle school students. St. George DM, et al. **J Sch Health** 1997 May;67(5):178–81

The reverse social distance scale. Lee MY, et al. **J Soc Psychol** 1996 Feb;136(1):17–24

Helping behaviors and the perception of helping intentions among Chinese students. Li F. **J Soc Psychol** 1997 Aug; 137(4):496–501

Suspiciousness, mental simulation, and norm theory. Pipes RB, et al. **J Soc Psychol** 1997 Aug;137(4):421–7

Person perception as a function of marital status and age. Stacy NL, et al. **J Soc Psychol** 1997 Jun;137(3):395–7

The Posttraumatic Growth Inventory: measuring the positive legacy of trauma. Tedeschi RG, et al. **J Trauma Stress** 1996 Jul;9(3):455–71

Gay and lesbian issues in graduate medical education. Townsend MH. **N C Med J** 1997 Mar–Apr;58(2):114–6

Genetically enhanced food for thought. Golub ES. **Nat Biotechnol** 1997 Feb;15(2):112

Brain asymmetry and facial attractiveness: facial beauty is not simply in the eye of the beholder. Chen AC, et al. **Neuropsychologia** 1997 Apr;35(4):471–6

Left hemisphere representations of emotional facial expressions. Stone VE, et al. **Neuropsychologia** 1996 Jan; 34(1):23–9

Facial expression processing after amygdalotomy. Young AW, et al. **Neuropsychologia** 1996 Jan;34(1):31–9

'Theory of mind' in the brain. Evidence from a PET scan study of Asperger syndrome. Happé F, et al. **Neuroreport** 1996 Dec 20;8(1):197–201

Children's conflict-related emotions: implications for morality and autonomy. Arsenio W, et al. **New Dir Child Dev** 1996 Fall;(73):25–39

The oncology nursing image: lifting the mist. Krebs LU, et al. **Oncol Nurs Forum** 1996 Sep;23(8):1297–304

Voice and advertising: effects of intonation and intensity of voice on source credibility, attitudes toward the advertised service and the intent to buy. Gélinas-Chebat C, et al. **Percept Mot Skills** 1996 Aug;83(1):243–62

How do nonalcoholics view alcoholics? Groettum G, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1202

Language style and evaluation of a female speaker. Hawkes KC, et al. **Percept Mot Skills** 1996 Aug;83(1):80–2

Eyeblinks in formation of impressions. Omori Y, et al. **Percept Mot Skills** 1996 Oct;83(2):591–4

Reading a smiling face: messages conveyed by various forms of smiling. Otta E, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1111–21

Patients' perceptions of their physician's role in smoking cessation by age and readiness to stop smoking. Kviz FJ, et al. **Prev Med** 1997 May–Jun;26(3):340–9

Nonverbal interpersonal sensitivity and persistence of depression: perception of emotions in schematic faces. Bouhuys AL, et al. **Psychiatry Res** 1996 Oct 16; 64(3):193–203

The construction of the world in psychosis. Castoriadis C. **Psychoanal Rev** 1996 Dec;83(6):929–44

Counterfactual thinking. Roese NJ. **Psychol Bull** 1997 Jan; 121(1):133–48 (165 ref.)

Social distance towards the mentally ill: results of representative surveys in the Federal Republic of Germany. Angermeyer MC, et al. **Psychol Med** 1997 Jan;27(1):131–41

Insight, psychosis and ethnicity: a case-note study. Johnson S, et al. **Psychol Med** 1996 Sep;26(5):1081–4

The internal reliability of a General Mattering Scale in homeless men. DeForge BR, et al. **Psychol Rep** 1997 Apr; 80(2):429–30

Transfer of social attributions in stimulus equivalence classes by preschool children. Egli M, et al. **Psychol Rep** 1997 Feb;80(1):3–21

A short measure of perceived empathy. Plank RE, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1219–26

Optimism, social support, stress, and physical and psychological well-being in Japanese women. Sumi K. **Psychol Rep** 1997 Aug;81(1):299–306

Perceptual differences in racial descriptions of Euro-American and Hispanic persons. Tomkiewicz J, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1339–43

A conceptual model of quality of life in schizophrenia: description and preliminary clinical validation. Awad AG, et al. **Qual Life Res** 1997 Jan;6(1):21–6

Social information processing in mild mentally retarded children. Gomez R, et al. **Res Dev Disabil** 1996 May–Jun; 17(3):217–27

Reproduction and resistance to the culture of femininity and masculinity in secondary school physical education. Chepyator-Thomson JR, et al. **Res Q Exerc Sport** 1997 Mar;68(1):89–99

Cue availability and affect perception in schizophrenia. Bellack AS, et al. **Schizophr Bull** 1996;22(3):535–44

Attribution of intentions to others in people with schizophrenia: a non-verbal exploration with comic strips. Sarfati Y, et al. **Schizophr Res** 1997 Jun 20;25(3):199–209

Lay theories of heroin addiction. Furnham A, et al. **Soc Sci Med** 1996 Jul;43(1):29–40

Elderly hospitalized patients' perceptions of the interaction with the social worker during discharge planning. Kadushin G. **Soc Work Health Care** 1996;23(1):1–21

[The elderly in TV commercials: ridiculous or respectable?] van Selm M, et al. **Tijdschr Gerontol Geriatr** 1996 Dec; 27(6):237–42 (Eng. Abstr.) **(Dut)**

[Intentional awareness and schizophrenia] Hardy-Baylé MC, et al. **Encephale** 1996 Oct;22 Spec No 3:104–7 (12 ref.) **(Fre)**

[Self and informant perception of clinical manifestations of Alzheimer dementia: results of a structured interview (CAMDEX)] Förstl H, et al. **Fortschr Neurol Psychiatr** 1996 Jun;64(6):228–33 (Eng. Abstr.) **(Ger)**

[Sensitive delusion of reference--only of historical significance? A current case example] Richartz E, et al. **Nervenarzt** 1996 Jul;67(7):595–8 (Eng. Abstr.) **(Ger)**

[Relationship of 'sekentei' to utilization of health, social and nursing services by the elderly] Momose Y, et al. **Nippon Koshu Eisei Zasshi** 1996 Mar;43(3):209–19 (Eng. Abstr.) **(Jpn)**

[The function of a face on person perception: the effect of the number of targets and degree of facial attractiveness] Kawanishi C. **Shinrigaku Kenkyu** 1995 Oct;66(4):261–8 (Eng. Abstr.) **(Jpn)**

[The effects of self-awareness on the internal and external viewpoint for self-imagery] Sugiura T. **Shinrigaku Kenkyu** 1996 Feb;66(6):418–24 (Eng. Abstr.) **(Jpn)**

[The effect of interdependency on the levels of self and other perception] Yuge Y. **Shinrigaku Kenkyu** 1996 Aug; 67(3):177–85 (Eng. Abstr.) **(Jpn)**

[Modifying our image depends of our interest in it (letter; comment)] Onrubia X, et al. **Rev Esp Anestesiol Reanim** 1996 Dec;43(10):380–1. Comment on: Rev Esp Anestesiol Reanim 1996 Jun-Jul;204–7. **(Spa)**

[Ethical substrates behind social perception of medical performance] Rosselot E. **Rev Med Chil** 1996 Jan; 124(1):109–16 (Eng. Abstr.) **(Spa)**

SOCIAL PLANNING

Organizing Asian Pacific Islanders in an urban community to reduce HIV risk: a case study. Loue S, et al. **AIDS Educ Prev** 1996 Oct;8(5):381–93

From relief to development: food for work in Bangladesh. Hyder M. **Disasters** 1996 Mar;20(1):21–33

Conflict, the continuum and chronic emergencies: a critical analysis of the scope for linking relief, rehabilitation and development planning in Sudan. Macrae J, et al. **Disasters** 1997 Sep;21(3):223–43 (23 ref.)

A good turn for Africa, please [editorial] **Lancet** 1997 Jan 11;349(9045):69

School-as-community activity selection at continuation high schools. Sussman S, et al. **Subst Use Misuse** 1997 Jan; 32(2):113–31

SOCIAL POLICY see **PUBLIC POLICY**

SOCIAL PROBLEMS

see related
ALCOHOLISM
STUDENT DROPOUTS
SUBSTANCE DEPENDENCE

Reframing women's risk: social inequalities and HIV infection. Zierler S, et al. **Annu Rev Public Health** 1997; 18:401–36 (168 ref.)

Australia's new gun laws: preventing the backslide [editorial] Peters R. **Aust N Z J Public Health** 1996 Aug;20(4):339–40

Dissecting people and ignoring social structure: an analysis of individualism, public policy, and genetic labeling. Miringoff ML. **Behav Sci Law** 1996 Autumn;14(4):433–42 (36 ref.)

General practitioners' knowledge of their patients' psychosocial problems: multipractice questionnaire survey. Gulbrandsen P, et al. **BMJ** 1997 Apr 5;314(7086):1014–8

Africa's emerging AIDS-orphans crisis. Baggaley RC, et al. **Can Med Assoc J** 1997 Mar 15;156(6):873–5

Impact on health care adds to the social cost of homelessness, MDs say [see comments] Lowry F. **Can Med Assoc J** 1996 Dec 15;155(12):1737–9. Comment in: Can Med Assoc J 1997 Feb 15;156(4):481.

An Afrocentric program for African American males in the juvenile justice system. Harvey AR, et al. **Child Welfare** 1997 Jan–Feb;76(1):197–211

"Back to the kitchen". Goldbloom RB. **Clin Pediatr (Phila)** 1997 Jul;36(7):373–80

In the shadow of plenty, Cuba copes with a crippled health care system [see comments] Williams RC. **CMAJ** 1997 Aug

1;157(3):291–3. Comment in: CMAJ 1997 Aug 1;157(3):281–4.
Relationship between sexual experience and non–sexual behaviours among secondary school students in Arusha, Tanzania. Lugoe WL, et al. **East Afr Med J** 1995 Oct; 72(10):635–40
Social inequalities and emerging infectious diseases. Farmer P. **Emerg Infect Dis** 1996 Oct–Dec;2(4):259–69 (60 ref.)
Public perceptions about unplanned pregnancy. Mauldon J, et al. **Fam Plann Perspect** 1997 Jan–Feb;29(1):25–9, 40
Young people's health needs in Botswana: a challenge for nursing. Seboni N. **Int Nurs Rev** 1997 Jul–Aug;44(4):110–4
The social determinants of the decline of life expectancy in Russia and eastern Europe: a lifestyle explanation. Cockerham WC. **J Health Soc Behav** 1997 Jun;38(2):117–30
Sydney Anglicans and homosexuality. Hilliard D. **J Homosex** 1997;33(2):101–23 (48 ref.)
Imagining the citizen, imagining the enemy. Shay J. **Lit Med** 1996 Fall;15(2):221–3
The witnessing imagination: social trauma, creative artists, and witnessing professionals. Weine SM. **Lit Med** 1996 Fall; 15(2):167–82
Government, not war, is our worst disease [letter] Papermaster T. **Minn Med** 1997 Apr;80(4):6–7
Letter from London [news] Black J. **Natl Med J India** 1996 Jan–Feb;9(1):39–41
Macrosocial transition and health hazards. Schröder H, et al. **Rev Environ Health** 1996 Jan–Jun;11(1–2):1–5 (9 ref.)
Test–retest reliability of the Social Problem Questionnaire in primary care in Italy. Piccinelli M. **Soc Psychiatry Psychiatr Epidemiol** 1997 Feb;32(2):57–62
Anthropological research and the politics of HIV prevention: towards a critique of policy and priorities in the age of AIDS. Waterston A. **Soc Sci Med** 1997 May;44(9):1381–91
Perceptions of school violence as a problem and reports of violent events: a national survey of school social workers. Astor RA, et al. **Soc Work** 1997 Jan;42(1):55–68
Health dilemmas at the borders—a global challenge. Kamel WW. **World Health Forum** 1997;18(1):9–16 (22 ref.)
[Alzheimer's disease. A medical and social challenge] Forette F. **Bull Acad Natl Med** 1996 Oct;180(7):1731–45; discussion 1745–6 (61 ref.) (Eng. Abstr.) **(Fre)**
[Personal problems related to illicit drug use in dropouts compared to students] Cousineau D. **Can J Public Health** 1996 Sep–Oct;87(5):329–32 (Eng. Abstr.) **(Fre)**
[The health and social problems of immigrant children] Viviano GG, et al. **Pediatr Med Chir** 1996 May–Jun; 18(3):289–93 (Eng. Abstr.) **(Ita)**
[AIDS as a social problem] Sidorenko GI, et al. **Gig Sanit** 1996 Sep–Oct;(5):40–2 **(Rus)**
[The socioeconomic aspects of the problems of acute and chronic opisthorchiasis in western Siberia] Pustovalova VIa, et al. **Med Parazitol (Mosk)** 1996 Apr–Jun;(2):16–7 **(Rus)**
[Social problems of transition society and health of populations of the North of the European Russia] Viaz'min AM. **Med Tr Prom Ekol** 1996;(5):6–8 (Eng. Abstr.) **(Rus)**
[Tuberculosis in children and adolescents as a social problem] Ovsiankina ES, et al. **Probl Tuberk** 1996;(6):36–7 (Eng. Abstr.) **(Rus)**
[The problem of suicides in society and the Armed Forces] Nechiporenko VV, et al. **Voen Med Zh** 1996 Dec; 317(12):12–8 **(Rus)**
[Shigellosis in Moscow: new trends in the epidemiological process and their social determinants] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jan–Feb; (1):31–5 (Eng. Abstr.) **(Rus)**
[A method of detection psychosocial problems at the family physician's office] de la Revilla L, et al. **Aten Primaria** 1997 Feb 28;19(3):133–7 (Eng. Abstr.) **(Spa)**
[Indicators for evaluating social problems in daily health care practice] Grau Bartomeu J, et al. **Aten Primaria** 1996 Dec; 18(10):546–50 (Eng. Abstr.) **(Spa)**
[Teenage pregnancy as a public problem: a critical view] Stern C. **Salud Publica Mex** 1997 Mar–Apr;39(2):137–43 (Eng. Abstr.) **(Spa)**
[The disability of patients with hypertension as a social hygiene problem] Kardash VE. **Lik Sprava** 1995 Sep–Dec; (9–12):185–8 **(Ukr)**

HISTORY

[Psychiatric homelessness research. From "psychopathology of the vagrant" to "homeless mentally ill"] Greifenhagen A, et al. **Nervenarzt** 1996 Nov;67(11):905–10 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

Explorations in a proposed national policy for children and families. Chung WS, et al. **Adolescence** 1997 Summer; 32(126):429–36
HIV and medicolegal aspects [letter] Momonchand A. **J Indian Med Assoc** 1996 Mar;94(3):120
A research perspective on drug related nuisance—Dutch experiences. Garretsen HF, et al. **Med Law** 1996; 15(4):705–14
Can the law serve as the solution to social ills? The case of the Mental Health (Patients in the Community) Act, 1995. Prins H. **Med Sci Law** 1996 Jul;36(3):217–20
Pregnancy and addiction: translating research into practice. Whiteford LM, et al. **Soc Sci Med** 1997 May;44(9):1371–80

PREVENTION & CONTROL

Harm reduction: come as you are. Marlatt GA. **Addict Behav** 1996 Nov–Dec;21(6):779–88 (18 ref.)
Do increased levels of drug abuse treatment lead to fewer drug–related problems? Smart RG, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):421–9
The new preventive medicine for a new millennium. Scutchfield FD, et al. **Aviat Space Environ Med** 1996 Apr; 67(4):369–75
The National Campaign to Prevent Teen Pregnancy. Foster HW Jr. **J Pediatr Nurs** 1997 Apr;12(2):120–1
Psychosocial disorders in young people: on the agenda but not on the mend. Eckersley R. **Med J Aust** 1997 Apr 21; 166(8):423–4 (23 ref.)
Significant achievement award. FACES Maimonides Theatre Network for Teens. Department of Psychiatry, Maimonides Medical Center, Brooklyn, New York. Montez S. **Psychiatr Serv** 1996 Oct;47(10):1115
Peacekeeping and peacemaking: the conceptual foundations of a plan to reduce violence and improve the quality of life in a midsized community in Jamaica. Twemlow SW, et al. **Psychiatry** 1996 Summer;59(2):156–74
Why is MetLife interested in violence issues? [comment] Kamen HP. **Stat Bull Metrop Insur Co** 1996 Jul–Sep; 77(3):11. Comment on: Stat Bull Metrop Insur Co 1996 Jul–Sep;77(3):2–10.

PSYCHOLOGY

The Dutch instant lottery: prevalence and correlates of at–risk playing. Hendriks VM, et al. **Addiction** 1997 Mar; 92(3):335–46
Sex ratios of drinking patterns and problems among blacks and whites: results from a national survey. Herd D. **J Stud Alcohol** 1997 Jan;58(1):75–82
Comment on "catholicism and indices of social pathology in the states" [comment] Lester D. **Psychol Rep** 1997 Jun; 80(3 Pt 1):1005–6. Comment on: Psychol Rep 1995 Apr;76(2):573–4.
Individuality and community: the contrasting role of the state in family life in the United States and Sweden. Scarr S. **Scand J Psychol** 1996 Mar;37(1):93–102
Heroin addicts in the community and in treatment compared for severity of problems and need for help. Eland–Goossensen A, et al. **Subst Use Misuse** 1997 Aug; 32(10):1313–30 (24 ref.)
[Psychiatry, homelessness and other unpleasant topics (editorial; comment)] Rössler W. **Psychiatr Prax** 1997 Jul; 24(4):161. Comment on: Psychiatr Prax 1997 Jul;24(4):162–6. Comment on: Psychiatr Prax 1997 Jul;24(4):167–71. **(Ger)**

STATISTICS & NUMERICAL DATA

Overview of studies on drinking patterns and consequences. Bondy SJ. **Addiction** 1996 Nov;91(11):1663–74 (95 ref.)
Temporal drinking patterns and variation in social consequences. Dawson DA. **Addiction** 1996 Nov; 91(11):1623–35
Alcohol consumption in high school adolescents: frequency of use and dimensional structure of associated problems. Lewinsohn PM, et al. **Addiction** 1996 Mar;91(3):375–90
Risk functions for alcohol–related problems in a 1988 US national sample. Midanik LT, et al. **Addiction** 1996 Oct; 91(10):1427–37; discussion 1439–56
On the emerging paradigm of drinking patterns and their social and health consequences. Rehm J, et al. **Addiction** 1996 Nov;91(11):1615–21
Changes in alcohol use and alcohol–related problems among 7th to 12th grade students in New York State, 1983–1994. Barnes GM, et al. **Alcohol Clin Exp Res** 1997 Aug; 21(5):916–22
The burden of conditions not attributable to mental disorders. Siddique CM, et al. **Am J Psychiatry** 1996 Nov; 153(11):1489–91
Comorbidity: A sign of the times [editorial; comment] Pivik RT. **J Psychiatry Neurosci** 1997 Mar;22(2):97–8. Comment on: J Psychiatry Neurosci 1997 Mar;22(2):99–104.
The relation between states' adoption of English as their official language to demographic and social pathology variables. Joubert CE. **Psychol Rep** 1997 Jun;80(3 Pt 2):1324–6
Social psychological indicators associated with the suicide rate: a comment [comment] Lester D, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1065–6. Comment on: Psychol Rep 1996 Dec;79(3 Pt 1):707–10.
Social stress, homicide, and suicide. Lester D. **Psychol Rep** 1996 Dec;79(3 Pt 1):922
Teenagers' view of violence and social tension in U.S. public schools [see comments] Mushinski M. **Stat Bull Metrop Insur Co** 1996 Jul–Sep;77(3):2–10. Comment in: Stat Bull Metrop Insur Co 1996 Jul–Sep;77(3):11.

TRENDS

Ten–year time trends of psychopathology in Dutch children and adolescents: no evidence for strong trends. Verhulst FC, et al. **Acta Psychiatr Scand** 1997 Jul;96(1):7–13
It is easier to recall a defective car than a defective law [editorial] Laster L. **Hosp Pract (Off Ed)** 1996 Nov 15; 31(11):9–10
Cycles of social reform: is the current anti–alcohol movement cresting? [letter] Engs RC. **J Stud Alcohol** 1997 Mar; 58(2):223–4
The architecture of conflict [editorial; comment] Gaudiani VA. **Pharos** 1997 Winter;60(1):37. Comment on: Pharos 1997 Winter;60(1):2–6. Comment on: Pharos 1997 Winter;60(1):13–6. Comment on: Pharos 1997 Winter;60(1):32–4.
Toward the year 2000 [editorial] Leshner AI. **Subst Use Misuse** 1996 Jan;31(2):207–13
[The third epoch, the third world and the third millennium] Diczfalusy E. **Chirurg** 1996 Dec;67(12):supp 289–95 **(Ger)**
[Harm reduction—on the paradigm changes in drug dependence treatment (editorial)] Kuhlmann T. **Psychiatr Prax** 1996 Jul;23(4):157–60 (Eng. Abstr.) **(Ger)**
[Current problems (editorial)] Mertz DP. **Versicherungsmedizin** 1996 Dec 1;48(6):191–2 **(Ger)**
[Current problems and the development of public health in Russia] Shchepin OP. **Probl Sotsialnoi Gig Istor Med** 1995 Jan–Feb;(1):3–8 **(Rus)**
[Modern social problems in phthisiology] Khudushina TA, et al. **Probl Tuberk** 1996;(6):32–3 **(Rus)**

SOCIAL PSYCHIATRY see **COMMUNITY PSYCHIATRY**

SOCIAL PSYCHOLOGY see **PSYCHOLOGY, SOCIAL**

SOCIAL REINFORCEMENT see **REINFORCEMENT, SOCIAL**

SOCIAL RESPONSIBILITY

The logical geography of concepts and shared responsibilities concerning research misconduct. Guenin LM. **Acad Med** 1996 Jun;71(6):595–603
The University of Maryland Medical System invests in its community's minorities. Schimpff SC, et al. **Acad Med** 1996 Jun;71(6):604–12
A community–wide Responsible Beverage Service program in three communities: early findings. Saltz RF, et al. **Addiction** 1997 Jun;92 Suppl 2:S237–49
The more things change the more they stay the same. Broder MI. **Am J Med** 1997 Mar;102(3):223–6
A debt to society. Herman J. **Arch Fam Med** 1997 Mar–Apr; 6(2):111
Can we achieve accountability for long–term outcomes? Batterham RW, et al. **Arch Phys Med Rehabil** 1996 Dec; 77(12):1219–25 (76 ref.)
Excessive responsibility in obsessional concerns: a fine–grained experimental analysis. Ladouceur R, et al. **Behav Res Ther** 1997 May;35(5):423–7
Freedom, responsibility, and health. Bunker JP, et al. **BMJ** 1996 Dec 21–28;313(7072):1582–4
Rights and responsibilities in HIV prevention [letter; comment] Danziger R. **BMJ** 1996 Nov 9;313(7066):1206. Comment on: BMJ 1996 Aug 3;313(7052):303. Comment on: BMJ 1996 Aug 3;313(7052):304.
Drug companies have a duty to continue treatment [comment] Emery S, et al. **BMJ** 1997 Mar 22;314(7084):889 . Comment on: BMJ 1997 Mar 22;314(7084):887–8.
A communitarian approach to physician–assisted death. Miller FG. **Camb Q Healthc Ethics** 1997 Winter;6(1):78–87
Accountability and communication [news] Beatty JD. **Can J Oncol** 1995 Jul;5(2):VII–VIII
The impact of Canadian Criminal Code changes on remands and assessments of fitness to stand trial and criminal responsibility in British Columbia. Roesch R, et al. **Can J Psychiatry** 1997 Jun;42(5):509–14
Demonstrating social accountability in medical education [editorial; comment] Hennen B. **Can Med Assoc J** 1997 Feb 1;156(3):365–7. Comment on: Can Med Assoc J 1997 Feb 1;156(3):379–83.
Students work to foster tolerance [letter] Kumar B. **CMAJ** 1997 Aug 15;157(4):370
Construction and practice of medical responsibility: dilemmas and narratives from geriatrics. Kaufman SR. **Cult Med Psychiatry** 1997 Mar;21(1):1–26
Social contract and deterring famine: first thoughts. de Waal A. **Disasters** 1996 Sep;20(3):194–205 (25 ref.)
Professional privilege, driving and epilepsy, the doctor's responsibility. Beran RG. **Epilepsy Res** 1997 Mar; 26(3):415–21
Liberty, responsibility, and the common good. Steinbock B. **Hastings Cent Rep** 1996 Nov–Dec;26(6):45–7
Geographies of responsibility. Walker M. **Hastings Cent Rep** 1997 Jan–Feb;27(1):38–44 (15 ref.)
Professional standards in health care: calling all parties to account. Emanuel LL. **Health Aff (Millwood)** 1997 Jan–Feb;16(1):52–4
Who is holding whom accountable for quality? [see comments] Gosfield AG. **Health Aff (Millwood)** 1997 May–Jun;16(3):26–40 (21 ref.). Comment in: Health Aff (Millwood) 1997 May–Jun;16(3):41–3.
The role of states in accountability for quality [comment] Riley T. **Health Aff (Millwood)** 1997 May–Jun;16(3):41–3 . Comment on: Health Aff (Millwood) 1997 May–Jun;16(3):26–40.
Dimensions of accountability for not–for–profit hospitals and health systems. Gamm LD. **Health Care Manage Rev** 1996 Spring;21(2):74–86 (72 ref.)

Better boards and beyond. Holland TP, et al. **Hosp Health Netw** 1997 Apr 5;71(7):80, 82, 84

Four who fight back. Novarro L. **Hosp Health Netw** 1997 Feb 20;71(4):18–20, 22, 24

Homelessness and adolescents [editorial] Litt IF. **J Adolesc Health** 1997 May;20(5):335

Finnish public health nurses' experiences of primary health care based on the population responsibility principle. Koponen P, et al. **J Adv Nurs** 1997 Jul;26(1):41–8

Organizational citizenship behavior and the quantity and quality of work group performance. Podsakoff PM, et al. **J Appl Psychol** 1997 Apr;82(2):262–70

Psychological antecedents of escalation behavior: effects of choice, responsibility, and decision consequences. Schoorman FD, et al. **J Appl Psychol** 1996 Dec; 81(6):786–94

Acute and chronic distress and posttraumatic stress disorder as a function of responsibility for serious motor vehicle accidents. Delahanty DL, et al. **J Consult Clin Psychol** 1997 Aug;65(4):560–7

Sleepwalking disorder and mens rea: a review and case report. Maricopa County Superior Court. Thomas TN. **J Forensic Sci** 1997 Jan;42(1):17–24 (51 ref.)

Adam Smith and the health industry versus Albert Schweitzer and social responsibility. Jorgensen NE. **J Health Care Finance** 1997 Spring;23(3):91–2

Preserving community in health care [see comments] Emanuel EJ, et al. **J Health Polit Policy Law** 1997 Feb; 22(1):147–84. Comment in: J Health Polit Policy Law 1997 Feb;22(1):223–30. Comment in: J Health Polit Policy Law 1997 Feb;22(1):231–43.

Community, professions, and participation [editorial] Frankford DM. **J Health Polit Policy Law** 1997 Feb; 22(1):101–4

Health accounts and communicative power [comment] Tanenbaum SJ. **J Health Polit Policy Law** 1997 Feb; 22(1):223–30. Comment on: J Health Polit Policy Law 1997 Feb;22(1):105–45. Comment on: J Health Polit Policy Law 1997 Feb;22(1):147–84. Comment on: J Health Polit Policy Law 1997 Feb;22(1):185–221.

Economic analyses, the medical commons, and patients' dilemmas: what is the physician's role? Wynia MK. **J Investig Med** 1997 Feb;45(2):35–43 (62 ref.)

Choice–sensitive health costs. Jindal B. **J La State Med Soc** 1997 Feb;149(2):62–71

Authority, autonomy, responsibility and authorisation: with specific reference to adolescent mental health practice. Sutton A. **J Med Ethics** 1997 Feb;23(1):26–31

Health care accountability: communicating quality to the public. Ribnick PG, et al. **J Nurs Care Qual** 1997 Aug; 11(6):9–13

The five-factor model, conscientiousness, and driving accident involvement. Arthur W Jr, et al. **J Pers** 1996 Sep; 64(3):593–618

Reactions to penalties for an offense in relation to authoritarianism, values, perceived responsibility, perceived seriousness, and deservingness. Feather NT. **J Pers Soc Psychol** 1996 Sep;71(3):571–87

Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and moderated by gender. Gaines SO Jr, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1460–76

The merchants, not the customers: resisting the alcohol and tobacco industries' strategy to blame young people for illegal alcohol and tobacco sales. Mosher JF. **J Public Health Policy** 1995;16(4):412–32 (47 ref.)

Responsible choices for achieving reform of the American health system. Ellwood P, et al. **J Soc Health Syst** 1996; 5(2):15–28

The relationship of gender balance at work, family responsibilities and workplace characteristics to drinking among male and female attorneys. Shore ER. **J Stud Alcohol** 1997 May;58(3):297–302

How will society handle people with presymptomatic genetic disease? [letter] Hankey GJ. **Med J Aust** 1997 Jan 6; 166(1):55

How do nonalcoholics view alcoholics? Groettum G, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1202

"...The best of times... the worst of times": bringing environmental health to life. Hagard S. **Promot Educ** 1995 Dec;2(4):21–4

Attribution of responsibility for alcohol-related offenses. Kelly KT, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1159–65

The social responsibility of physicians as agents of public health services. Wing AJ. **Ren Fail** 1996 May;18(3):425–31

Medicine and social responsibility—a role for South African doctors [editorial] Benatar SR. **S Afr Med J** 1997 Mar; 87(3):281–3

Teenage pregnancy—extent of socio-economic support from the baby's father [letter] Dhlamini N, et al. **S Afr Med J** 1997 Jan;87(1):78–9

Individuality and community: the contrasting role of the state in family life in the United States and Sweden. Scarr S. **Scand J Psychol** 1996 Mar;37(1):93–102

Responsibilities and rights in the promotion of health: differing positions of the individual and the state. Bell NK. **Soc Sci Med** 1996 Sep;43(5):775–82 (16 ref.)

On the goals of medicine: a Chilean perspective. Lolas F. **Soc Sci Med** 1996 Jul;43(1):125–7

Cognition and affect after cervical screening: the role of previous test outcome and personal obligation in future uptake expectations. Orbell S. **Soc Sci Med** 1996 Oct; 43(8):1237–43

Psychosocial work environment in human service organizations: a conceptual analysis and development of the demand–control model. Söderfeldt B, et al. **Soc Sci Med** 1996 May;42(9):1217–26 (50 ref.)

Of community, organs and obligations: routine salvage with a twist. Loewy EH. **Theor Med** 1996 Mar;17(1):61–74

Engagement and suffering in responsible caregiving: on overcoming maleficience in health care. Schultz DS, et al. **Theor Med** 1996 Sep;17(3):189–207 (17 ref.)

Genetic accountability and pregnant women. Rothenberg KH. **Womens Health Issues** 1997 Jul–Aug;7(4):215–9 (12 ref.)

[Public health in social responsibility] Badura B. **Gesundheitswesen** 1996 Feb;58(2):64–8 **(Ger)**

[Public health in social responsibility—social medicine aspects] Gostomzyk JG. **Gesundheitswesen** 1996 Feb; 58(2):61–3 **(Ger)**

[Thoughts on the correlation of hope, trust, responsibility and shame in the relationship between patients and their physicians] Hartmann F. **Med Klin** 1996 Oct 15; 91(10):660–4 **(Ger)**

[Science entails responsibility. Opening address of the president of the 103rd Congress of the German Society of Internal Medicine, Wiesbaden, 6 April 1997] Köbberling J. **Med Klin** 1997 Apr 15;92(4):181–9 **(Ger)**

[Under-stand, in order to understand other people (editorial)] Weill RD. **Schweiz Monatsschr Zahnmed** 1996;106(11):981 **(Ger)**

[Current problems (editorial)] Mertz DP. **Versicherungsmedizin** 1996 Dec 1;48(6):191–2 **(Ger)**

[Responsibility for the individual or the whole? Ethical considerations on medical responsibility] Vollmann J, et al. **Z Arztl Fortbild (Jena)** 1996 Oct;90(6):527–32 (22 ref.) (Eng. Abstr.) **(Ger)**

[Treatment and responsibility ethics in dealing with severely ill and dying patients—discussion stimulation] Petzold ER. **Z Psychosom Med Psychoanal** 1996;42(1):88–100 (Eng. Abstr.) **(Ger)**

[Senationalism and responsibility in scientific research (editorial)] Falk R. **Harefuah** 1996 Jun 16;130(12):825–6 **(Heb)**

[The options in allocating the responsibilities for implementing public health measures to control West Nile virus infection in Romania] Ion-Nedelcu N, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan–Jun; 42(1–2):71–5 **(Rum)**

[The problems of irresponsibility and decreased responsibility in the works of the outstanding jurist of Russia, A. P. Kunitsyn] Roĭtel'man AG. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(2):57–61 **(Rus)**

[Academic responsibility for public policy on health] Firpo-Betancourt A. **P R Health Sci J** 1997 Mar; 16(1):57–62 **(Spa)**

[Company obligations in matters of occupational hazard prevention] Manzano F. **Rev Esp Salud Publica** 1996 Jul–Aug;70(4):469–83 (Eng. Abstr.) **(Spa)**

[Incorporation of conscience objectors in Insalud (editorial)] Pérez López RB. **Rev Esp Salud Publica** 1996 May–Jun; 70(3):245–9 **(Spa)**

[The professional obligations, rights and responsibility of physicians] Zaval'niuk AKh. **Lik Sprava** 1996 Jul–Sep; (7–9):191–4 **(Ukr)**

SOCIAL SCIENCES

The politics of collaboration as viewed through the lens of a collaborative nursing research project. Beattie J, et al. **J Adv Nurs** 1996 Oct;24(4):682–7 (26 ref.)

Enhancing sustainable vaccination programmes in an unstable world: a social science perspective [letter] Streefland PH. **J Epidemiol Community Health** 1996 Oct;50(5):601–4

Evolutionary psychologists look for roots of cognition [news] Williams N. **Science** 1997 Jan 3;275(5296):29–30

The image of sociobiology [letter] Wilson TP. **Science** 1996 Nov 1;274(5288):703–4

Integrating behavioral and social sciences research at the National Institutes of Health, U.S.A. Anderson NB. **Soc Sci Med** 1997 Apr;44(7):1069–71

Social scientists and the new tuberculosis. Farmer P. **Soc Sci Med** 1997 Feb;44(3):347–58

Beyond the orthodox: heresy in medicine and the social sciences from a cross-cultural perspective. Gürsoy A. **Soc Sci Med** 1996 Sep;43(5):577–99 (156 ref.)

[Evaluating quality and effectiveness in the promotion of health: approaches and methods of public health and social sciences] Deccache A. **Promot Educ** 1997 Jun;4(2):10–5 (Eng. Abstr.) **(Fre)**

[Social sciences and health sciences: difficulties of interaction and solution alternatives (editorial)] Castro R. **Salud Publica Mex** 1996 Jul–Aug;38(4):225–6 **(Spa)**

ECONOMICS

Behavioral scientists at the Centers for Disease Control and Prevention. Evolving and integrated roles. Roberts GW, et al. **Am Psychol** 1997 Feb;52(2):143–6

Centers for Disease Control and Prevention partnerships with external behavioral and social scientists. Roles, extramural funding, and employment. Rugg DL, et al. **Am Psychol** 1997 Feb;52(2):147–53

EDUCATION

Attitudes towards the relevance of biological, behavioural and social sciences in nursing education. Thornton T. **J Adv Nurs** 1997 Jul;26(1):180–6

Training in reproductive health and sexuality: the case of a regional program in Latin America. Ramos S, et al. **Womens Health Issues** 1997 Mar–Apr;7(2):109–12

ORGANIZATION & ADMINISTRATION

How are the social sciences helping empower the poor to promote their own health and development? Perry HB. **J Diarrhoeal Dis Res** 1996 Jun;14(2):125–38

Training in reproductive health and sexuality: the case of a regional program in Latin America. Ramos S, et al. **Womens Health Issues** 1997 Mar–Apr;7(2):109–12

STATISTICS & NUMERICAL DATA

[Confounding effects in social science studies and their control. The examples of personality, social support, psychiatric disease] Manz R. **Psychother Psychosom Med Psychol** 1997 Jun; 47(6):198–205 (Eng. Abstr.) **(Ger)**

TRENDS

Influence of behavioral and social science on public health policymaking. Holtgrave DR, et al. **Am Psychol** 1997 Feb; 52(2):167–73

Behavioral and social sciences at the Centers for Disease Control and Prevention. Critical disciplines for public health. Snider DE Jr, et al. **Am Psychol** 1997 Feb; 52(2):140–2

Behavioral and social research in rheumatology [see comments] Callahan LF, et al. **Curr Opin Rheumatol** 1997 Mar;9(2):126–32 (40 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):87–9.

[Public health in transition—a social science perspective] Kühn H. **Gesundheitswesen** 1997 Apr;59(4):213–6 **(Ger)**

SOCIAL SECURITY

Lowering infant mortality in western Europe: national health service vs social security systems [letter; comment] Grubaugh SG, et al. **Am J Public Health** 1996 Dec; 86(12):1823–4. Comment on: Am J Public Health 1995 Oct;85(10):1397–401.

Mothers at risk of alloimmunization to the Rh (D) antigen and availability of gamma-globulin at the Mexican Institute of Social Security. Zavala C, et al. **Arch Med Res** 1996 Autumn;27(3):373–6

Benefits Agency always holds consent before approaching healthcare professionals for information [letter; comment] Aylward M. **BMJ** 1997 Apr 19;314(7088):1202–3. Comment on: BMJ 1997 Feb 1;314(7077):376.

Incentives to disability in federal disability insurance and supplemental security income. Quadagno J. **Clin Orthop** 1997 Mar;(336):11–7

Insecure about Social Security. Part 2: Some proposals for reform could compromise the fairness of the system [editorial] Butler RN. **Geriatries** 1997 Sep;52(9):17–8

Insecure about Social Security. Part 1: How the system works and what is being assumed about its uncertain future [editorial] Butler RN. **Geriatrics** 1997 Aug;52(8):10–2

Disability and quality of life in cystic fibrosis from early age to adulthood. Nasr SZ, et al. **J Adolesc Health** 1996 Dec; 19(6):381–3

Assessing dissimulation among Social Security disability income claimants. Griffin GA, et al. **J Consult Clin Psychol** 1996 Dec;64(6):1425–30

Research and politics in policymaking for Social Security [editorial] Berkowitz ED. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):S115–6

The politics of dependency estimates: Social Security Board statistics, 1935–1939. Gratton B. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):S117–24

Order effects in the administration of a forced-choice procedure for detection of malingering in disability claimants' evaluations. Guilmette TJ, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1007–16

Job patterns of disabled beneficiaries. Hennessey JC. **Soc Secur Bull** 1996 Winter;59(4):3–11

[Paradoxical welfare perception by the baby boom generation around 2025. 3 scenarios for pension and care] Jansweijer R. **Tijdschr Gerontol Geriatr** 1997 Apr;28(2):51–8 (Eng. Abstr.) **(Dut)**

[Social insurance and health care (editorial)] Huunan-Seppälä A. **Duodecim** 1995;111(17):1645–6 **(Fin)**

["Index for rehabilitation eligibility" for screening social insurance workers] Potthoff P, et al. **Gesundheitswesen** 1997 Jun;59(6):362–71 (Eng. Abstr.) **(Ger)**

[Physicians and social security] Grytten NJ. **Tidsskr Nor Laegeforen** 1997 Apr 10;117(9):1323–5 **(Nor)**

[Physicians and security—synergism or polarity?] Rosenberg S. **Tidsskr Nor Laegeforen** 1997 Apr 10;117(9):1326 **(Nor)**

[Medical social security card for children and adolescents. Desired homogeneity and moving forward (editorial)] Moya M. **An Esp Pediatr** 1997 May;46(5):423 **(Spa)**

["The Use and Control of Stress". A program applied to workers of the IMSS. Instituto Mexicano del Seguro Social] Maldonado-Islas G, et al. **Gac Med Mex** 1997

Jan-Feb;133(1):7-11 (Eng. Abstr.) **(Spa)**

[Tobacco consumption in the population insured by Mexican Institute of Social Security] Fernández-Gárate IH, et al. **Salud Publica Mex** 1997 Mar-Apr;39(2):125-32 (Eng. Abstr.) **(Spa)**

[A hearing on export in social services] Lennholm B. **Lakartidningen** 1996 Oct 2;93(40):3440 **(Swe)**

ECONOMICS

Analysing the cost of health. Dewever A. **Acta Gastroenterol Belg** 1997 Apr-Jun;60(2):168-71

Who takes early Social Security benefits? The economic and health characteristics of early beneficiaries. Burkhauser RV, et al. **Gerontologist** 1996 Dec;36(6):789-99

Touching the third rail: time to return the retirement age for early Social Security benefits to 65 [editorial] [see comments] Burkhauser RV. **Gerontologist** 1996 Dec; 36(6):726-7. Comment in: Gerontologist 1997 Apr;37(2):149.

Caregiving and women's Social Security benefits: a response to Sandell and Iams. O'Grady-LeShane R, et al. **Gerontologist** 1996 Dec;36(6):812-3; discussion 814-5

Touching the third rail: time to return the retirement age for early Social Security benefits to 65 [letter; comment] Palmore EB. **Gerontologist** 1997 Apr;37(2):149. Comment on: Gerontologist 1996 Dec;36(6):726-7.

The welfare state, pensions, privatization: the case of Social Security in the United States. Du Boff RB. **Int J Health Serv** 1997;27(1):1-23 (23 ref.)

Treatment outcomes for methadone clients receiving lump-sum payments at initiation of disability benefits [see comments] Herbst MD, et al. **Psychiatr Serv** 1996 Feb; 47(2):119-20, 142. Comment in: Psychiatr Serv 1996 Nov;47(11):1266.

Disability payments and drug abuse [letter; comment] [published erratum appears in Psychiatr Serv 1997 Jan;48(1):99] Leong GB, et al. **Psychiatr Serv** 1996 Nov; 47(11):1266. Comment on: Psychiatr Serv 1996 Feb;47(2):119-20, 142.

Excerpt from the report of the 1994-96 Advisory Council on Social Security: findings and recommendations. **Soc Secur Bull** 1996 Winter;59(4):51-68

Research Grant Summary. **Soc Secur Bull** 1996 Winter; 59(4):71-4 (11 ref.)

Report to Congress on rising cost of Social Security Disability Insurance benefits. **Soc Secur Bull** 1996 Spring; 59(1):67-71

Actuarial status of the Social Security and Medicare Trust Funds. **Soc Secur Bull** 1996 Summer;59(2):57-63

Social Security and immigrant earnings. Duleep HO, et al. **Soc Secur Bull** 1996 Summer;59(2):20-30

Poverty among single elderly women under different systems of old-age security: a comparative review. Siegenthaler JK. **Soc Secur Bull** 1996 Fall;59(3):31-44 (59 ref.)

Income protection for the aged in the 21st century: a framework to help inform the debate. Wheeler PM, et al. **Soc Secur Bull** 1996 Summer;59(2):3-19

Comparative costs of family planning services and hospital-based maternity care in Turkey. Cakir HV, et al. **Stud Fam Plann** 1996 Sep-Oct;27(5):269-76

[Comment on R. Diel, K. Ahrens, M. Talaulicar, B. Jaeschke. Additional food payments in diabetes mellitus in social law: what is required? (letter; comment)] Becker W, et al. **Gesundheitswesen** 1996 Jan;58(1):53; discussion 55-6. Comment on: Gesundheitswesen 1995 Jul;57(7):373-9. **(Ger)**

[Comment on R. Diel, K. Ahrens, M. Talaulicar, B. Jaeschke. Additional food payments in diabetes mellitus in social law: what is required? (letter; comment)] Köhler BM, et al. **Gesundheitswesen** 1996 Jan;58(1):53-5; discussion 55-6. Comment on: Gesundheitswesen 1995 Jul;57(7):373-9. **(Ger)**

[Demands on the legal pension security system based on the demographic change] Rürup B. **Z Gerontol Geriatr** 1996 Jan-Feb;29(1):42-5 (Eng. Abstr.) **(Ger)**

HISTORY

Social insurance for health service. Roemer MI. **Scand J Soc Med** 1997 Jun;25(2):65-6

LEGISLATION & JURISPRUDENCE

Rehabilitation efforts before and after tightening eligibility for disability benefits in Norway. Claussen B. **Int J Rehabil Res** 1997 Jun;20(2):139-47

Unanimous vote for parity coverage of mental illness in U.S. senate is followed by heated debate over costs [news] **Psychiatr Serv** 1996 Jul;47(7):779-80

Tougher eligibility rules will end SSI benefits for thousands of children with disabilities [news] **Psychiatr Serv** 1997 Apr; 48(4):564

[Work disability in social insurance] Härkönen H, et al. **Duodecim** 1995;111(17):1659-65 **(Fin)**

[Benefits paid for by the Social Insurance Institution and the assessment of handicap] Kaukinen K. **Duodecim** 1995; 111(17):1720-1 **(Fin)**

[Personality and adjustment disorders] Leppävuori A. **Duodecim** 1995;111(17):1679-82 **(Fin)**

[Depressive disorders] Niskanen P, et al. **Duodecim** 1995; 111(17):1677-9 (7 ref.) **(Fin)**

[Experiences in realization of guidelines of the nursing care insurance regulation--outcome in home care service after expert assessment by medical service personnel] Lucke M, et al. **Gesundheitswesen** 1996 Dec;58(12):641-7 (Eng. Abstr.) **(Ger)**

[Current legislation in public health--an example for post-modern social ethics?] Rothfuss J, et al. **Gesundheitswesen** 1996 Oct;58(10):505-9 (Eng. Abstr.) **(Ger)**

[The Parkinson patient in expert social medicine assessment with special reference to the nursing care law] Semsch-Poppe B, et al. **Gesundheitswesen** 1996 Dec; 58(12):635-40 (18 ref.) (Eng. Abstr.) **(Ger)**

[Health care status of rheumatic patients in rheumatologic centers 1993] Zink A, et al. **Gesundheitswesen** 1996 Dec; 58(12):648-56 (Eng. Abstr.) **(Ger)**

[Handicapped and chronically ill patients: special effect on the affected] Rinn F. **Rehabilitation (Stuttg)** 1997 May; 36(2):76-81 (Eng. Abstr.) **(Ger)**

[Social status of visually handicapped patients in new combined federal Germany--a comparison with the status before 1990] Walther HR, et al. **Rehabilitation (Stuttg)** 1996 Aug;35(3):161-9 (Eng. Abstr.) **(Ger)**

[Minimum requirements in medical expert assessment of occupational disability of patients with chronic nonspecific pain] Raspe HH. **Versicherungsmedizin** 1997 Aug 1; 49(4):118-25 (31 ref.) (Eng. Abstr.) **(Ger)**

[The diabetic patient: management without legal discrimination] Waldhäusl W, et al. **Wien Klin Wochenschr** 1996;108(21):692-6 **(Ger)**

["Retirement at age 58"--improvement or deterioration of living status?] Behrend C. **Z Gerontol Geriatr** 1996 Sep-Oct;29(5):339-42 (Eng. Abstr.) **(Ger)**

ORGANIZATION & ADMINISTRATION

Executive summary of "balancing security and opportunity: the challenge of disability income policy". **Soc Secur Bull** 1996 Spring;59(1):79-84

Social Security in the 90s: the imperatives of change. Hoskins DD. **Soc Secur Bull** 1996 Spring;59(1):72-8

Privatizing Social Security: the Chilean experience. Kritzer BE. **Soc Secur Bull** 1996 Fall;59(3):45-55 (53 ref.)

State optional supplementation of SSI payments, 1974-95. Ponce EO. **Soc Secur Bull** 1996 Spring;59(1):52-66

STATISTICS & NUMERICAL DATA

Social Security Bulletin. Annual statistical supplement, 1996. **Annu Stat Suppl Soc Secur Bull** 1996 Sep;:1-408

Prescribed medication and nutrition of social care patients in Crete, Greece. Tzimis L, et al. **Public Health** 1996 Nov; 110(6):361-7

Psychosomatic symptoms in human service work. A study on Swedish social workers and social insurance personnel. Söderfeldt B, et al. **Scand J Soc Med** 1996 Mar;24(1):43-9

Deeming rules and the increase in the number of children with disabilities receiving SSI: evaluating the effects of a regulatory change. Hannsgen GP, et al. **Soc Secur Bull** 1996 Spring;59(1):43-51

Living arrangements of SSI recipients. Kochhar S, et al. **Soc Secur Bull** 1997;60(1):18-28

Labor-force participation and earnings of SSI disability recipients: a pooled cross-sectional times series approach to the behavior of individuals. Muller LS, et al. **Soc Secur Bull** 1996 Spring;59(1):22-42

Work while receiving disability insurance benefits: additional findings from the New Beneficiary Followup Survey. Schechter ES. **Soc Secur Bull** 1997;60(1):3-17

[The redistribution between generations within the framework of social security and health insurance (news)] **Schweiz Monatsschr Zahnmed** 1996;106(12):1123 **(Fre)**

TRENDS

Death and taxes: longer life, consumption, and social security [published erratum appears in Demography 1997 May;34(2):170] Lee R, et al. **Demography** 1997 Feb; 34(1):67-81

Lost in the campaign rhetoric. Today's decisions on Social Security and Medicare will steer the era of longevity [editorial] Butler RN. **Geriatrics** 1996 Nov; 51(11):9-10

Trends in the characteristics of DI and SSI disability awardees and duration of program participation. Rupp K, et al. **Soc Secur Bull** 1996 Spring;59(1):3-21

[Social security in Finland] Lehto M. **Duodecim** 1995; 111(17):1653-6 (0 ref.) **(Fin)**

[Observations on social medicine in public health transition] Schwartz FW, et al. **Gesundheitswesen** 1997 Apr; 59(4):207-12 (Eng. Abstr.) **(Ger)**

[Attitude to social insurance in a generational comparison] Rinne K, et al. **Z Gerontol Geriatr** 1996 Nov-Dec; 29(6):446-51 **(Ger)**

SOCIAL SECURITY ADMINISTRATION (U.S.) see **UNITED STATES SOCIAL SECURITY ADMINISTRATION**

SOCIAL SERVICE see **SOCIAL WORK**

SOCIAL SERVICE, PSYCHIATRIC see **SOCIAL WORK, PSYCHIATRIC**

SOCIAL SUPPORT

see related

SELF-HELP GROUPS

Follow-up survey of support services for lesbian, gay, and bisexual medical students. Townsend MH, et al. **Acad Med** 1996 Sep;71(9):1012-4

Family-oriented support at the onset of diabetes mellitus: a comparison of two group conditions during 2 years following diagnosis. Sundelin J, et al. **Acta Paediatr** 1996 Jan;85(1):49-55

Psychosocial predictors of major affective recurrences in bipolar disorder: a 4-year longitudinal study of patients on prophylactic treatment. Stefos G, et al. **Acta Psychiatr Scand** 1996 Jun;93(6):420-6

Antecedent life events, social supports and response to antidepressants in depressed patients. Tomaszewska W, et al. **Acta Psychiatr Scand** 1996 Nov;94(5):352-7

Confirmatory and disconfirmatory family communication as predictor of offspring socio-emotional functioning. A 10 to 14 year follow-up of children at risk. Wichstrom L, et al. **Acta Psychiatr Scand** 1996 Jan;93(1):49-56

Incorporating social support into a community-wide smoking-cessation contest. Pirie PL, et al. **Addict Behav** 1997 Jan-Feb;22(1):131-7

Mediators of adolescents' stress in a college preparatory environment. Ainslie RC, et al. **Adolescence** 1996 Winter; 31(124):913-24

Social support and self-esteem in unemployed university graduates. Lacković-Grgin K, et al. **Adolescence** 1996 Fall; 31(123):701-7

Big Brothers: impact on Little Brothers' self-concepts and behaviors. Turner S, et al. **Adolescence** 1996 Winter; 31(124):875-82

The nature and amount of support college-age adolescents request and receive from parents. Valery JH, et al. **Adolescence** 1997 Summer;32(126):323-37

Peer resource consulting: redesigning a new future. Kapron K, et al. **Adv Ren Replace Ther** 1997 Jul;4(3):267-74 (24 ref.)

Participatory evaluation of counselling, medical and social services of The AIDS Support Organization (TASO) in Uganda. Kaleeba N, et al. **AIDS Care** 1997 Feb;9(1):13-26

Burnout, social support and AIDS volunteers. Maslanka H. **AIDS Care** 1996 Apr;8(2):195-206

AIDS knowledge, teaching comfort, and support for AIDS education among school teachers: a statewide survey. Boscarino JA, et al. **AIDS Educ Prev** 1996 Jun;8(3):267-77

The role of psychosocial assessment and support in occupational exposure management. Tannebaum J, et al. **AIDS Educ Prev** 1997 Jun;9(3):275-84

A comparison of two techniques to reach relatives of alcoholics for information of available support. Zetterlind U, et al. **Alcohol Alcohol** 1996 Jul;31(4):359-63

Supportive and rehabilitative programs. **Am Ann Deaf** 1997 Apr;142(2):233-64

Perceived social support and treatment retention on an inpatient addiction treatment unit. Westreich L, et al. **Am J Addict** 1997 Spring;6(2):144-9

The influence of posttreatment mutual help group participation on the friendship networks of substance abuse patients. Humphreys K, et al. **Am J Community Psychol** 1997 Feb;25(1):1-16

Cultural specificity of support sources, correlates and contexts: three studies of African-American and caucasian youth. Maton KI, et al. **Am J Community Psychol** 1996 Aug;24(4):551-87

Stress, coping, HIV status, psychosocial resources, and depressive mood in African American gay, bisexual, and heterosexual men. Peterson JL, et al. **Am J Community Psychol** 1996 Aug;24(4):461-87

Network Therapy for addiction: assessment of the clinical outcome of training. Galanter M, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):355-67

Validation of a scale for network therapy: a technique for systematic use of peer and family support in addition treatment. Keller DS, et al. **Am J Drug Alcohol Abuse** 1997 Feb;23(1):115-27

A comparison of the Johnson Intervention with four other methods of referral to outpatient treatment. Loneck B, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):233-46

Effects of social support and personal coping resources on mortality in older age: the Longitudinal Aging Study Amsterdam. Penninx BW, et al. **Am J Epidemiol** 1997 Sep 15;146(6):510-9

Relation of social network characteristics to 5-year mortality among young-old versus old-old white women in an urban community. Yasuda N, et al. **Am J Epidemiol** 1997 Mar 15;145(6):516-23

Modeling the cross-sectional relationships between religion, physical health, social support, and depressive symptoms. Koenig HG, et al. **Am J Geriatr Psychiatry** 1997 Spring; 5(2):131-44

Stress appraisal and social support of Chinese mothers of adult children with mental retardation. Chen TY, et al. **Am J Ment Retard** 1997 Mar;101(5):473-82

Peer social networks of young boys with developmental delays. Guralnick MJ. **Am J Ment Retard** 1997 May; 101(6):595-612

Neglected victims of homicide: the needs of young siblings of murder victims. Freeman LN, et al. **Am J Orthopsychiatry** 1996 Jul;66(3):337-45 (30 ref.)

Social support, competence, and depression in mothers of abused children. Kinard EM. **Am J Orthopsychiatry** 1996 Jul;66(3):449–62

Public health as a county government priority: problems and solutions for the political arena. Marando VL, et al. **Am J Prev Med** 1995 Nov–Dec;11(6 Suppl):17–23

Social support: a genetic-epidemiologic analysis. Kendler KS. **Am J Psychiatry** 1997 Oct;154(10):1398–404

The psychological consequences of cardiopulmonary resuscitation training for family members of patients at risk for sudden death. Dracup K, et al. **Am J Public Health** 1997 Sep;87(9):1434–9

Promoting abstinence among relapsed chronic smokers: the effect of telephone support. Lando HA, et al. **Am J Public Health** 1996 Dec;86(12):1786–90

Weapon carrying among black adolescents: a social network perspective. Myers GP, et al. **Am J Public Health** 1997 Jun;87(6):1038–40

Using social gatherings to encourage HIV risk reduction among drug users. Wood M, et al. **Am J Public Health** 1996 Dec;86(12):1815–6

Prenatal health behaviors and psychosocial risk factors in pregnant women of Mexican origin: the role of acculturation. Zambrana RE, et al. **Am J Public Health** 1997 Jun;87(6):1022–6

Psychologic treatment by EMS personnel in disasters [letter; comment] Reeves RR, et al. **Ann Emerg Med** 1997 Feb; 29(2):299–300. Comment on: Ann Emerg Med 1996 Aug;28(2):119–28.

Integrating social-skills training interventions with parent training and family-focused support to prevent conduct disorder in high-risk populations. The Fast Track Multisite Demonstration Project. The Conduct Problems Prevention Research Group. Bierman KL. **Ann N Y Acad Sci** 1996 Sep 20;794:256–64 (21 ref.)

Aggressive youth: healing biology with relationship. Vance JE. **Ann N Y Acad Sci** 1997 Jan 15;807:587–9

Social support and physical health in the rural elderly. Johnson JE. **Appl Nurs Res** 1996 May;9(2):61–6

Compliance with influenza vaccination. Its relation with epidemiologic and sociopsychological factors. van Essen GA, et al. **Arch Fam Med** 1997 Mar–Apr;6(2):157–62; discussion 163

Psychosocial interventions in coronary artery disease [letter; comment] Reyes-Ortiz CA. **Arch Intern Med** 1997 Jan 13; 157(1):130. Comment on: Arch Intern Med 1996 Apr 8;156(7):745–52.

Medical students act as Big Brothers/Big Sisters to support human immunodeficiency virus-infected children's psychosocial needs. Tess J, et al. **Arch Pediatr Adolesc Med** 1997 Feb;151(2):189–92

Sense of relatedness and interpersonal network of adult offspring caregivers: linkages with crisis, emotional arousal, and perceived health. England M. **Arch Psychiatr Nurs** 1996 Apr;10(2):85–95

Depression, stressful life events, social support, and self-esteem in middle class African American women. Warren BJ. **Arch Psychiatr Nurs** 1997 Jun;11(3):107–17

Effective breastfeeding support in a general practice. Lawlor-Smith C, et al. **Aust Fam Physician** 1997 May; 26(5):573–5, 578–80

Rooming in: the Vellore experience [letter] Rajagopalan M, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):607–8

Rooming-in: an alternative to involuntary detention. Richardson ME. **Aust N Z J Psychiatry** 1996 Apr; 30(2):263–9

Higher levels of social support predict greater survival following acute myocardial infarction: the Corpus Christi Heart Project. Farmer IP, et al. **Behav Med** 1996 Summer; 22(2):59–66

Physical and psychosocial outcomes in cancer patients: a comparison of different age groups. Greimel ER, et al. **Br J Cancer** 1997;76(2):251–5

Emotional support for cancer patients: what do patients really want? Slevin ML, et al. **Br J Cancer** 1996 Oct;74(8):1275–9

How does marriage protect women with histories of affective disorder from post-partum relapse? Marks M, et al. **Br J Med Psychol** 1996 Dec;69 (Pt 4):329–42

Which patients will benefit from psychosocial intervention after cystectomy for bladder cancer? Månsson A, et al. **Br J Urol** 1997 Jul;80(1):50–7

Caring for head and neck oncology patients. Does social support lead to better quality of life? Mathieson CM, et al. **Can Fam Physician** 1996 Sep;42:1712–20

Social support, social networks and coronary artery disease rehabilitation: a review. Anderson D, et al. **Can J Cardiol** 1996 Aug;12(8):739–44 (52 ref.)

Re: Dr Penney Page's letter [letter] Myers MF. **Can J Psychiatry** 1996 Oct;41(8):536

Distress symptoms and support systems of Chinese parents of children with cancer. Martinson IM, et al. **Cancer Nurs** 1997 Apr;20(2):94–9

Social support and breast self-examination. Wagle A, et al. **Cancer Nurs** 1997 Feb;20(1):42–8

Social support in child abuse and neglect: support functions, sources, and contexts. Albarracin D, et al. **Child Abuse Negl** 1997 Jul;21(7):607–15

Traumatic childhood events, perceived availability of emotional support, and the development of dissociative tendencies. Irwin HJ. **Child Abuse Negl** 1996 Aug; 20(8):701–7

Social support and coping strategies as mediators of the effects of child abuse and neglect [editorial; comment] Jones DP. **Child Abuse Negl** 1997 Feb;21(2):207–9. Comment on: Child Abuse Negl 1997 Feb;21(2):211–26. Comment on: Child Abuse Negl 1997 Feb;21(2):227–40.

Parental abusive versus supportive behaviors and their relation to hostility and aggression in young adults. Nicholas KB, et al. **Child Abuse Negl** 1996 Dec; 20(12):1195–211

Social support and coping strategies as mediators of adult adjustment following childhood maltreatment [see comments] Runtz MG, et al. **Child Abuse Negl** 1997 Feb; 21(2):211–26. Comment in: Child Abuse Negl 1997 Feb;21(2):207–9.

Neighbourhood support to families with a disabled child: observations on a coping strategy of caregivers in a Jamaican community-based rehabilitation programme. Bischoff R, et al. **Child Care Health Dev** 1996 Nov; 22(6):397–410

Needs and responses of parents following the diagnosis of childhood cancer. Sloper P. **Child Care Health Dev** 1996 May;22(3):187–202

Pre-adolescent chumship as a buffer against psychopathology in adolescents with weak family support and weak parental bonding. Bachar E, et al. **Child Psychiatry Hum Dev** 1997 Summer;27(4):209–20

Integration of coping and social support perspectives: implications for the study of adaptation to chronic diseases. Schreurs KM, et al. **Clin Psychol Rev** 1997;17(1):89–112 (126 ref.)

Parent and family support groups with African American families: the process of family and community empowerment. Boyd-Franklin N, et al. **Cult Divers Ment Health** 1997;3(2):83–92

Stress, social support, and college adjustment among Latino students. Jarama Alvan SL, et al. **Cult Divers Ment Health** 1996;2(3):193–203

Black women, work, stress, and perceived discrimination: the focused support group model as an intervention for stress reduction. Mays VM. **Cult Divers Ment Health** 1995; 1(1):53–65

Psychosocial risk and protective influences in Hawaiian adolescent psychopathology. Nahulu LB, et al. **Cult Divers Ment Health** 1996;2(2):107–14

Does family support buffer the impact of specific chronic diseases on mobility in community-dwelling elderly? Kriegsman DM, et al. **Disabil Rehabil** 1997 Feb;19(2):71–83

Psychological distress, social support and coping behaviour among polio survivors: a 5-year perspective on 63 polio patients. Schanke AK. **Disabil Rehabil** 1997 Mar; 19(3):108–16

Changes in network characteristics and HIV risk behavior among injection drug users. Hoffmann JP, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1-2):41–51

The relationship between risk networks' patterns of crack cocaine and alcohol consumption and HIV-related sexual behaviors among adult injection drug users: a prospective study. Latkin CA, et al. **Drug Alcohol Depend** 1996 Nov; 42(3):175–81

Social networks and service utilisation in patients with severe mental illness. Becker T, et al. **Epidemiol Psichiatr Soc** 1997 Jan–Apr;6(1 Suppl):113–25

Looking beyond age and race: the structure of networks, functions of support, and chronic stress [editorial; comment] Berkman LF. **Epidemiology** 1997 Sep;8(5):469–70 (9 ref.). Comment on: Epidemiology 1997 Sep;8(5):475–81. Comment on: Epidemiology 1997 Sep;8(5):482–7.

Change in social ties and subsequent mortality in rural elders [see comments] Cerhan JR, et al. **Epidemiology** 1997 Sep; 8(5):475–81. Comment in: Epidemiology 1997 Sep;8(5):469–70.

Social support, stress, and blood pressure in black adults [see comments] Strogatz DS, et al. **Epidemiology** 1997 Sep; 8(5):482–7. Comment in: Epidemiology 1997 Sep;8(5):469–70.

Proper psychosocial rehabilitation for stabilised patients with schizophrenia: the role of new therapies. Peuskens J. **Eur Neuropsychopharmacol** 1996;6 Suppl 2:S7–12

Social and psychological resources in the oldest old. Martin P, et al. **Exp Aging Res** 1996 Apr–Jun;22(2):121–39

General practitioners' views about the need for a stress support service. Young G, et al. **Fam Pract** 1996 Dec; 13(6):517–21

Social determinants of loneliness among older Americans. Mullins LC, et al. **Genet Soc Gen Psychol Monogr** 1996 Nov;122(4):453–73

Attitudes of the critically ill toward prolonging life: the role of social support. Mutran EJ, et al. **Gerontologist** 1997 Apr; 37(2):192–9

Measuring psychosocial aspects of well-being in older community residents: performance of four short scales. Steiner A, et al. **Gerontologist** 1996 Feb;36(1):54–62

Program: N'go Doo Dee Family Support Initiative. **Health Educ Q** 1996 Nov;23(4):415–6

Supportive behaviors in natural support networks of people with serious mental illness. Walsh J, et al. **Health Soc Work** 1996 Nov;21(4):296–303

Nurses' willingness to care for AIDS patients and spirituality, social support, and death anxiety. Sherman DW. **Image J Nurs Sch** 1996 Fall;28(3):205–13

Self-reported sleep disturbance among African-American elderly: the effects of depression, health status, exercise, and social support. Bazargan M. **Int J Aging Hum Dev** 1996;42(2):143–60

Loneliness among the oldest old, a comparison between residents living in nursing homes and residents living in the community. Bondevik M, et al. **Int J Aging Hum Dev** 1996;43(3):181–97

Interventions for caregivers of patients with Alzheimer's disease: a review and analysis of content, process, and outcomes. Bourgeois MS, et al. **Int J Aging Hum Dev** 1996; 43(1):35–92 (117 ref.)

Social support and depression among elderly Korean immigrants in the United States. Lee MS, et al. **Int J Aging Hum Dev** 1996;42(4):313–27

Patterns of self-disclosure across social support networks: elderly, middle-aged, and young adults. Parker RG, et al. **Int J Aging Hum Dev** 1995;41(4):281–97

Determinants of perceived family support and conflict: life-course variations among the physically disabled. Turner HA. **Int J Aging Hum Dev** 1996;42(1):21–41

Correlates of perceived social support and equality of interpersonal relationships at mid-life. Von Dras DD, et al. **Int J Aging Hum Dev** 1996;43(3):199–217

Social support in patients with anorexia nervosa and bulimia nervosa. Tiller JM, et al. **Int J Eat Disord** 1997 Jan; 21(1):31–8

Social relationships in later life: a review of the research literature [editorial] Phillipson C. **Int J Geriatr Psychiatry** 1997 May;12(5):505–12 (61 ref.)

Alzheimer's disease in Poland [editorial] Szczepanowska B. **Int J Geriatr Psychiatry** 1997 Jul;12(7):693–4

The contributions of nursing science to social support. Stewart MJ, et al. **Int J Nurs Stud** 1995 Dec;32(6):535–44 (87 ref.)

Stress, coping, and social support as psychosocial factors in readmissions for ischaemic heart disease. Stewart MJ, et al. **Int J Nurs Stud** 1997 Apr;34(2):151–63

Geriatric rehabilitation ('alters-rehabilitation')-the new challenge for social medicine and science. Barolin GS. **Int J Rehabil Res** 1996 Sep;19(3):201–18

Attitudes toward disability and beliefs regarding support for a university student with quadriplegia. Gannon PM, et al. **Int J Rehabil Res** 1996 Jun;19(2):163–9

The effects of age and disability on social support. McColl MA, et al. **Int J Rehabil Res** 1995 Dec;18(4):325–40

The social networks of older schizophrenia patients. Clinical Research Center on Late Life Psychosis Research Group. Semple SJ, et al. **Int Psychogeriatr** 1997 Mar;9(1):81–94

Dysphoria and children's processing of supportive interactions. Shirk SR, et al. **J Abnorm Child Psychol** 1997 Jun;25(3):239–49

Electrodermal activity and social network as predictors of outcome of episodes in schizophrenia. Hultman CM, et al. **J Abnorm Psychol** 1996 Nov;105(4):626–36

Shyness and low social support as interactive diatheses, with loneliness as mediator: testing an interpersonal-personality view of vulnerability to depressive symptoms. Joiner TE Jr. **J Abnorm Psychol** 1997 Aug;106(3):386–94

The association between social support and course of depression: is it confounded with personality? Lara ME, et al. **J Abnorm Psychol** 1997 Aug;106(3):478–82

Social interventions for homeless substance abusers: evaluating treatment outcomes [editorial] Stahler GJ. **J Addict Dis** 1995;14(4):xv–xxvi (41 ref.)

A peer approach to high risk youth. Hritz SA, et al. **J Adolesc Health** 1997 Apr;20(4):259–60

Depressive symptoms in California adolescents: family structure and parental support. Patten CA, et al. **J Adolesc Health** 1997 Apr;20(4):271–8

Impact of a social support program on teenage prenatal care use and pregnancy outcomes. Rogers MM, et al. **J Adolesc Health** 1996 Aug;19(2):132–40

The relationship of partner support to outcomes for teenage mothers and their children: a review. Roye CF, et al. **J Adolesc Health** 1996 Aug;19(2):86–93 (45 ref.)

Research project to aid caregivers of people with Alzheimer's disease [news] **J Adv Nurs** 1996 Jul;24(1):3

Health maintenance for the independent frail older adult: can it improve physical and mental well-being? Dungan JM, et al. **J Adv Nurs** 1996 Jun;23(6):1185–93

Icelandic women's identifications of stressors and social support during the diagnostic phase of breast cancer. Fridfinnsdottir EB. **J Adv Nurs** 1997 Mar;25(3):526–31

An exploration of parental perception of the nature and level of support needed to care for their child with special needs. Hall S. **J Adv Nurs** 1996 Sep;24(3):512–21

Support as experienced by patients with cancer during radiotherapy treatments. Hinds G, et al. **J Adv Nurs** 1997 Aug;26(2):371–9

Physical and social correlates of perceived psychological support among hospitalized AIDS patients. Kataoka-Yahiro MR, et al. **J Adv Nurs** 1996 Jul; 24(1):167–73

Patterns of recovery among Norwegian heart surgery patients. Kirkevold M, et al. **J Adv Nurs** 1996 Nov; 24(5):943–51

Social support: a conceptual analysis. Langford CP, et al. **J Adv Nurs** 1997 Jan;25(1):95–100 (53 ref.)

The nature of social support as experienced by women treated for breast cancer. Lugton J. **J Adv Nurs** 1997 Jun; 25(6):1184–91

Social support provided by nurses to recent mothers on a maternity ward. Tarkka MT, et al. **J Adv Nurs** 1996 Jun; 23(6):1202–6

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Nonverbal attunement between depressed patients and an interviewer predicts subsequent improvement. Geerts E, et al. **J Affect Disord** 1996 Sep 9;40(1-2):15-21

Non-verbal behavioral interactions of depressed patients with partners and strangers: the role of behavioral social support and involvement in depression persistence. Hale WW 3rd, et al. **J Affect Disord** 1997 Jul;44(2-3):111-22

Perceived social support from family, school, and peers: relationship with emotional and behavioral problems among adolescents. Garnefski N, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1657-64

Relationship of perceived competencies, perceived social support, and gender to substance use in young adolescents. Lifrak PD, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):933-40

Problems and awareness of support services among students at an urban Australian university. Schweitzer RD. **J Am Coll Health** 1996 Sep;45(2):73-7

Psychosocial concerns and weight control behaviors among overweight and nonoverweight Native American adolescents. Neumark-Sztainer D, et al. **J Am Diet Assoc** 1997 Jun;97(6):598-604

Academic effects of providing peer support in general education classrooms on students without disabilities. Cushing LS, et al. **J Appl Behav Anal** 1997 Spring; 30(1):139-50; quiz 150-1

Social support for HIV-infected mothers: relation to HIV care seeking. Williams AB, et al. **J Assoc Nurses AIDS Care** 1997 Jan-Feb;8(1):91-8

Families of children with Prader-Willi syndrome: stress-support and relations to child characteristics. Hodapp RM, et al. **J Autism Dev Disord** 1997 Feb; 27(1):11-24

Hostility, social support, and ambulatory cardiovascular activity. Benotsch EG, et al. **J Behav Med** 1997 Apr; 20(2):163-76

Supportive and negative responses in the partner relationship: their association with psychological adjustment among individuals with cancer. Manne SL, et al. **J Behav Med** 1997 Apr;20(2):101-25

The availability of social support reduces cardiovascular reactivity to acute psychological stress. Uchino BN, et al. **J Behav Med** 1997 Feb;20(1):15-27

Social support and adherence behavior among women with abnormal Pap smears. Crane LA. **J Cancer Educ** 1996 Fall; 11(3):164-73

Integrating psychosocial services for lung volume reduction and lung transplantation patients into a pulmonary rehabilitation program. Crouch RH, et al. **J Cardiopulm Rehabil** 1997 Jan-Feb;17(1):16-8

Promoting wellness in cardiac rehabilitation: exploring the role of altruism. Sullivan GB, et al. **J Cardiovasc Nurs** 1997 Apr;11(3):43-52 (47 ref.)

Life events, social support and the risk of sudden infant death syndrome. Ford RP, et al. **J Child Psychol Psychiatry** 1996 Oct;37(7):835-40

Family support decreases influence of deviant peers on Hispanic adolescents' substance use. Frauenglass S, et al. **J Clin Child Psychol** 1997 Mar;26(1):15-23

Psychosocial consequences of caring for a spouse with multiple sclerosis. Knight RG, et al. **J Clin Exp Neuropsychol** 1997 Feb;19(1):7-19

Predicting the short-term outcome of first episodes and recurrences of clinical depression: a prospective study of life events, difficulties, and social support networks. Brugha TS, et al. **J Clin Psychiatry** 1997 Jul;58(7):298-306

Optimism, social support, and premenstrual dysphoria. Fontaine KR, et al. **J Clin Psychol** 1997 Apr;53(3):243-7

Nonverbal support giving induces nonverbal support seeking in depressed patients. Geerts E, et al. **J Clin Psychol** 1997 Jan;53(1):35-9

Perceived availability of different types of social support among cynically hostile women. Hart KE. **J Clin Psychol** 1996 Jul;52(4):383-7

The impact of service characteristics on functional outcomes from community support programs for persons with schizophrenia: a growth curve analysis. Brekke JS, et al. **J Consult Clin Psychol** 1997 Jun;65(3):464-75

Appraisal, coping, and social support as mediators of well-being in black and white family caregivers of patients with Alzheimer's disease. Haley WE, et al. **J Consult Clin Psychol** 1996 Feb;64(1):121-9

Supportive versus cognitive-behavioral intervention programs in achieving adjustment to home peritoneal kidney dialysis. Hener T, et al. **J Consult Clin Psychol** 1996 Aug;64(4):731-41

Posttraumatic stress, family functioning, and social support in survivors of childhood leukemia and their mothers and fathers. Kazak AE, et al. **J Consult Clin Psychol** 1997 Feb; 65(1):120-9

Stress, maternal distress, and children's adjustment following immigration: the buffering role of social support. Short KH, et al. **J Consult Clin Psychol** 1997 Jun;65(3):494-503

A prospective study of social networks in relation to total mortality and cardiovascular disease in men in the USA. Kawachi I, et al. **J Epidemiol Community Health** 1996 Jun; 50(3):245-51

Unemployment and health: the quality of social support among residents in the Trent region of England. Roberts H, et al. **J Epidemiol Community Health** 1997 Feb; 51(1):41-5

Balance and source of social support in relation to well-being. Jung J. **J Gen Psychol** 1997 Jan;124(1):77-90

Social support and depressive symptoms: differential patterns in wife and daughter caregivers. Li LW, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jul;52(4):S200-11

Social support, depression, and activities of daily living in older heart surgery patients. Oxman TE, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Jan;52(1):P1-14

Sources of support and interpersonal stress in the networks of married caregiving daughters: findings from a 2-year longitudinal study. Suitor JJ, et al. **J Gerontol B Psychol Sci Soc Sci** 1996 Nov;51(6):S297-306

Family cohesion as a buffer against the effects of problem-drinking fathers on psychological distress, deviant behavior, and heavy drinking in adolescents. Farrell MP, et al. **J Health Soc Behav** 1995 Dec;36(4):377-85

The effects of family composition, health, and social support linkages on mortality. Rogers RG. **J Health Soc Behav** 1996 Dec;37(4):326-38

Parental support and adolescent physical health status: a latent growth-curve analysis. Wickrama KA, et al. **J Health Soc Behav** 1997 Jun;38(2):149-63

The impact of social support on gay male couples. Smith RB, et al. **J Homosex** 1997;33(2):39-61

The social support of Flemish gay men: an exploratory study. Vincke J, et al. **J Homosex** 1996;31(4):107-21

Social factors and the meaning of food in adherence to medical diets: results of a maternal phenylketonuria summer camp. Waisbren SE, et al. **J Inherit Metab Dis** 1997 Mar; 20(1):21-7

Blood pressure in relation to medical, psychological and social variables in a population of 80-year-olds. Survival during 6 years. Jensen E, et al. **J Intern Med** 1997 Mar; 241(3):205-12

Creating independent voices: the emergence of state wide family advocacy networks. Briggs HE. **J Ment Health Adm** 1996 Fall;23(4):447-57

Services for clients of community support programs in rural Wisconsin. Hollingsworth EJ. **J Ment Health Adm** 1997 Winter;24(1):55-63

An exploratory study of male recovering substance abusers living in a self-help, self-governed setting. Jason LA, et al. **J Ment Health Adm** 1997 Summer;24(3):332-9

Social network disturbances and psychological distress following earthquake evacuation. Bland SH, et al. **J Nerv Ment Dis** 1997 Mar;185(3):188-94

Faculty commitment: retaining minority nursing students in majority institutions. Campbell AR, et al. **J Nurs Educ** 1996 Oct;35(7):298-303 (28 ref.)

Evaluation of a supplementary retention program for African-American baccalaureate nursing students. Hesser A, et al. **J Nurs Educ** 1996 Oct;35(7):304-9

Academic support program for high-risk students. Parkes BS, et al. **J Nurs Educ** 1996 Oct;35(7):331-3

The Postpartum Support Questionnaire: reliability and validity. Logsdon MC, et al. **J Nurs Meas** 1996 Winter; 4(2):129-42

Effects of social support on prenatal care and health behaviors of low-income women. Schaffer MA, et al. **J Obstet Gynecol Neonatal Nurs** 1997 Jul-Aug;26(4):433-40

Effects of social support, stress, and level of illness on caregiving of children with AIDS. Hughes CB, et al. **J Pediatr Nurs** 1996 Dec;11(6):347-58

A social support intervention for parents of children with juvenile rheumatoid arthritis: results of a randomized trial. Ireys HT, et al. **J Pediatr Psychol** 1996 Oct;21(5):633-41

Mothers' resolution of their child's diagnosis and self-reported measures of parenting stress, marital relations, and social support. Sheeran T, et al. **J Pediatr Psychol** 1997 Apr;22(2):197-212

Stability and change in psychosocial resources during caregiving and bereavement in partners of men with AIDS. Park CL, et al. **J Pers** 1997 Jun;65(2):421-47

Partners' stress underestimations lead to women's distress: a study of pregnant inner-city women. Chapman HA, et al. **J Pers Soc Psychol** 1997 Aug;73(2):418-25

Determinants of observed confidant support for divorced mothers. DeGarmo DS, et al. **J Pers Soc Psychol** 1997 Feb;72(2):336-45

Social context, coping strategies, and depressive symptoms: an expanded model with cardiac patients. Holahan CJ, et al. **J Pers Soc Psychol** 1997 Apr;72(4):918-28

Mixed messages: implications of social conflict and social support within close relationships for adjustment to a stressful life event. Major B, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1349-63

Received and perceived social support in times of stress: a test of the social support deterioration deterrence model. Norris FH, et al. **J Pers Soc Psychol** 1996 Sep;71(3):498-511

Stability in extraversion and aspects of social support at midlife. Von Dras DD, et al. **J Pers Soc Psychol** 1997 Jan; 72(1):233-41

How are social support effects mediated? A test with parental support and adolescent substance use. Wills TA, et al. **J Pers Soc Psychol** 1996 Nov;71(5):937-52

The influence of a big brothers program on the adjustment of boys in single-parent families. Abbott DA, et al. **J Psychol** 1997 Mar;131(2):143-56

Going home with AIDS [news] **J Psychosoc Nurs Ment Health Serv** 1996 Jul;34(7):12

Impoverished women at risk for AIDS. Social support variables. Nyamathi A, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Nov;34(11):31-9

Caring for caregivers: perceptions of social support. Rose LE. **J Psychosoc Nurs Ment Health Serv** 1997 Feb; 35(2):17-24

A prospective study of changes in negative mood states of women undergoing surgical hysterectomy: the relationship to cognitive predisposition and familial support. Thornton EW, et al. **J Psychosom Obstet Gynaecol** 1997 Mar; 18(1):22-30

Are abnormal gastrofiberscopic findings related to hostility with poor social support or to negative responses to stress? Fukunishi I, et al. **J Psychosom Res** 1996 Oct;41(4):337-42

Alexithymia, social support and health problems. Lumley MA, et al. **J Psychosom Res** 1996 Dec;41(6):519-30

Stress, social support and health-related behavior: a study of smoking, alcohol consumption and physical exercise. Steptoe A, et al. **J Psychosom Res** 1996 Aug;41(2):171-80

Effectiveness of a training program for enhancing therapists' understanding of the supportive-expressive treatment model for breast cancer groups. Classen C, et al. **J Psychother Pract Res** 1997 Summer;6(3):211-8

Coronary heart disease: a review of the role of psychosocial stress and social support. Greenwood DC, et al. **J Public Health Med** 1996 Jun;18(2):221-31 (52 ref.)

Practical issues in psychosocial measures. Wolfe F. **J Rheumatol** 1997 May;24(5):990-3 (35 ref.)

Analysis of children's physical activity and its association with adult encouragement and social cognitive variables. Biddle S, et al. **J Sch Health** 1996 Feb;66(2):75-8

A structural equations model of stress, locus of control, social support, psychiatric symptoms, and propensity to leave a job. Afzalur Rahim M, et al. **J Soc Psychol** 1996 Feb; 136(1):69-84

The capacity to be alone as a stress buffer. Larson R, et al. **J Soc Psychol** 1996 Feb;136(1):5-16

Anger coping styles and perceived social support. Palfai TP, et al. **J Soc Psychol** 1997 Aug;137(4):405-11

Twelve month adherence of adults who joined a fitness program with a spouse vs without a spouse. Wallace JP, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):206-13

Social and community resources and long-term recovery from treated and untreated alcoholism. Humphreys K, et al. **J Stud Alcohol** 1997 May;58(3):231-8

Influences of family and friends on client progress during drug abuse treatment. Knight DK, et al. **J Subst Abuse** 1996;8(4):417-29

Motivating methadone patients to include drug-free significant others in treatment: a behavioral intervention. Kidorf M, et al. **J Subst Abuse Treat** 1997 Jan-Feb; 14(1):23-8

Hope, coping, and social support in combat-related posttraumatic stress disorder. Irving LM, et al. **J Trauma Stress** 1997 Jul;10(3):465-79

Children's selective coping after a bus disaster: confronting behavior and perceived support. Milgram N, et al. **J Trauma Stress** 1996 Oct;9(4):687-702

Social ties and susceptibility to the common cold. Cohen S, et al. **JAMA** 1997 Jun 25;277(24):1940-4

Supporting the adoptive family: a developmental approach. Peterson EA. **MCN Am J Matern Child Nurs** 1997 May-Jun;22(3):147-52 (8 ref.)

Prevention as a form of support: implications for the new definition. Coulter DL. **Ment Retard** 1996 Apr;34(2):108-16

Presidential address 1996--are we there yet? Kiernan WE. **Ment Retard** 1996 Dec;34(6):387-94

Analysis of the typicalness of supported employment jobs, natural supports, and wage and integration outcomes. Mank D, et al. **Ment Retard** 1997 Jun;35(3):185-97

Level of mental impairment in the Jamaican elderly and the issues of screening levels, caregiving, support systems, carepersons, and female burden. Eldemire D. **Mol Chem Neuropathol** 1996 May-Aug;28(1-3):115-20

Parity for mental illness--the half-full glass [editorial] Sabshin M. **Mol Psychiatry** 1997 May;2(3):177

Kinchart-sociograms as a method for describing the social networks of drug-using women. Pivnick A. **NIDA Res Monogr** 1996;166:163-82

Reciprocity, emotional well-being, and family functioning as determinants of family satisfaction in caregivers of elderly parents. Carruth AK, et al. **Nurs Res** 1997 Mar-Apr;46(2):93-100

HIV-risk behaviors and mental health characteristics among homeless or drug-recovering women and their closest sources of social support. Nyamathi A, et al. **Nurs Res** 1997 May-Jun;46(3):133-7

Psychosocial concerns and health-compromising behaviors among overweight and nonoverweight adolescents. Neumark-Sztainer D, et al. **Obes Res** 1997 May;5(3):237-49

Continuous labor support from labor attendant for primiparous women: a meta-analysis. Zhang J, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):739-44

Brain tumor support group: content themes and mechanisms of support. Leavitt MB, et al. **Oncol Nurs Forum** 1996 Sep; 23(8):1247-56

Stress, social support and pregnancy outcome: a reassessment based on recent research. Hoffman S, et al. **Paediatr Perinat Epidemiol** 1996 Oct;10(4):380-405 (144 ref.)

Psychosocial support in an outpatient clinic [letter] Ackerman GM, et al. **Palliat Med** 1997 Mar;11(2):167-8

Measures of anxiety among tennis players in singles and doubles matches. Terry PC, et al. **Percept Mot Skills** 1996

Oct;83(2):595–603
After the diagnosis. Ham RJ. **Postgrad Med** 1997 Jun; 101(6):57–8, 60–4, 66 passim
Type A and Type B behaviors, work stressors, and social support at work. Hagihara A, et al. **Prev Med** 1997 Jul–Aug;26(4):486–94
Influences on fit between psychiatric patients' psychosocial needs and their hospital discharge plan. Cohen N, et al. **Psychiatr Serv** 1997 Apr;48(4):518–23
Rehab rounds. Long–term support and social skills training for patients with schizophrenia. Dobson D. **Psychiatr Serv** 1996 Nov;47(11):1195–6, 1199
Engaging significant others: the Tom Sawyer approach to case management. Kanter J. **Psychiatr Serv** 1996 Aug; 47(8):799–801 (20 ref.)
A brief method of assessing adult inpatients' level of need for community support systems. Kazarian SS, et al. **Psychiatr Serv** 1996 Jun;47(6):654–6
"With a little help from my friends I get by": self–help books and psychotherapy. Essay review. Apfel RJ. **Psychiatry** 1996 Winter;59(4):309–22
Social relations and depressive symptomatology in a sample of community–dwelling French older adults. Antonucci TC, et al. **Psychol Aging** 1997 Mar;12(1):189–95
Social support deficits, loneliness and life events as risk factors for depression in old age. The Gospel Oak Project VI. Prince MJ, et al. **Psychol Med** 1997 Mar;27(2):323–32
Social support and psychiatric sickness absence: a prospective study of British civil servants. Stansfeld SA, et al. **Psychol Med** 1997 Jan;27(1):35–48
Association of alexithymia with low utilization and perception on a measure of social support in patients on peritoneal dialysis. Fukunishi I, et al. **Psychol Rep** 1997 Feb;80(1):127–30
Loneliness, perceived social support, and anxiety among Israeli adolescents. Ginter EJ, et al. **Psychol Rep** 1996 Aug; 79(1):335–41
Comparison of differences in the association of social support and adjustment between Chinese and Japanese students in Japan: a research note. Jou YH, et al. **Psychol Rep** 1996 Aug;79(1):107–12
Social support desired vs received by high school students in or not in a delinquency prevention program. Lewandowski LM, et al. **Psychol Rep** 1996 Feb;78(1):111–4
Social support, need for support, and anxiety among women graduate students. Munir SS, et al. **Psychol Rep** 1997 Apr; 80(2):383–6
Stress, coping, and social support in hypothetically psychosis–prone subjects. Schuldberg D, et al. **Psychol Rep** 1996 Jun;78(3 Pt 2):1267–83
Optimism, social support, stress, and physical and psychological well–being in Japanese women. Sumi K. **Psychol Rep** 1997 Aug;81(1):299–306
New psychosocial treatments for the outpatient management of bipolar disorder. Miklowitz DJ, et al. **Psychopharmacol Bull** 1996;32(4):613–21
Social support effects on cardiovascular reactivity: is a stranger as effective as a friend? Christenfeld N, et al. **Psychosom Med** 1997 Jul–Aug;59(4):388–98
Supportive telephone intervention for patients receiving chemotherapy. A pilot study. Alter CL, et al. **Psychosomatics** 1996 Sep–Oct;37(5):425–31
Relationship of alexithymia and poor social support to ulcerative changes on gastrofiberscopy. Fukunishi I, et al. **Psychosomatics** 1997 Jan–Feb;38(1):20–6
Avoidance coping behaviors and low social support are related to depressive symptoms in HIV–positive patients in Japan. Fukunishi I, et al. **Psychosomatics** 1997 Mar–Apr; 38(2):113–8
Coping style and social support in women suffering from cluster headache or migraine. Blomkvist V, et al. **Psychother Psychosom** 1997;66(3):150–4
The role of the social network in active euthanasia and physician–assisted suicide [see comments] Muller MT, et al. **Public Health** 1996 Sep;110(5):271–3. Comment in: Public Health 1996 Sep;110(5):269.
Social support as road map and vehicle: an analysis of data from focus group interviews with a group of African American women. Di Martile Bolla C, et al. **Public Health Nurs** 1996 Oct;13(5):331–6
Social networks of women caregivers. Fudge H, et al. **Public Health Nurs** 1997 Feb;14(1):20–7
Health and social support among older women in congregate housing. Lough MA, et al. **Public Health Nurs** 1996 Dec; 13(6):434–41
The effects of community differences on health status, health stress, and helping networks in a sample of 900 elderly. Preston DB, et al. **Public Health Nurs** 1996 Feb;13(1):72–9
Social support and knowledge level of the older adult homebound person with diabetes. Zink MR. **Public Health Nurs** 1996 Aug;13(4):253–62
Parents of children and adolescents with severe mental retardation: stress, family resources, normalization, and their application for out–of–home placement. Rimmerman A, et al. **Res Dev Disabil** 1996 Nov–Dec;17(6):487–94
Social support sources among older women with heart failure: continuity versus loss over time. Friedman MM. **Res Nurs Health** 1997 Aug;20(4):319–27
Effects of formal supports on stress outcomes in family caregivers of Alzheimer's patients. Winslow BW. **Res Nurs Health** 1997 Feb;20(1):27–37
Paramedics organizational culture and their care for relatives of cardiac arrest victims. Steen E, et al. **Resuscitation** 1997 Feb;34(1):57–63
Teenage pregnancy––extent of socio–economic support from the baby's father [letter] Dhlamini N, et al. **S Afr Med J** 1997 Jan;87(1):78–9
Relationships between social support, social coping and life events in the relapse of schizophrenic patients. Hultman CM, et al. **Scand J Psychol** 1997 Mar;38(1):3–13
Social support after the loss on an infant child: a long–term perspective. Thuen F. **Scand J Psychol** 1997 Jun; 38(2):103–10
Impact of patient with patient interaction on perceived rheumatoid arthritis overall disease status. Baker PR, et al. **Scand J Rheumatol** 1996;25(4):207–12
Health behaviour, social integration, perceived health and dysfunction. A comparison between patients with type I and II diabetes and controls. Aalto AM, et al. **Scand J Soc Med** 1996 Dec;24(4):272–81
Social support and the smoking behaviour of parents with preschool children. Eriksen W, et al. **Scand J Soc Med** 1997 Jun;25(2):93–9
Health and social networks as predictors of survival in old age. Ljungquist B, et al. **Scand J Soc Med** 1996 Jun; 24(2):90–101
Social support and patterns of adjustment to breast cancer. Hoskins CN, et al. **Sch Inq Nurs Pract** 1996 Summer; 10(2):99–123; discussion 125–33
CCPP–Copenhagen Community Psychiatric Project. Implementation of community mental health centres in Copenhagen: effects of service utilization, social integration, quality of life and positive and negative symptoms. Nordentoft M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Nov;31(6):336–44
The Mannheim interview on social support psychometric characteristics of a Spanish version. Vázquez Morejón AJ, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May; 32(4):208–14
Life stress, social support and psychological distress in late adolescence. Ystgaard M. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):277–83
The communication atmosphere between physician colleagues: competitive perfectionism or supportive dialogue? A Norwegian study. Akre V, et al. **Soc Sci Med** 1997 Feb;44(4):519–26
Role of control and support in occupational stress: an integrated model. Baker E, et al. **Soc Sci Med** 1996 Oct; 43(7):1145–59
Determinants of the use of ambulant social care by the elderly. Crets S. **Soc Sci Med** 1996 Dec;43(12):1709–20
An international study on measuring social support: interactions and satisfaction. Doeglas D, et al. **Soc Sci Med** 1996 Nov;43(9):1389–97
Social networks, social support and coping with serious illness: the family connection. Ell K. **Soc Sci Med** 1996 Jan;42(2):173–83 (173 ref.)
Beyond single indicators of social networks: a LISREL analysis of social ties among the elderly. Glass TA, et al. **Soc Sci Med** 1997 May;44(10):1503–17
Social networks, social support, personal empowerment, and the adaptation of psychiatric consumers/survivors: path analytic models. Hall GB, et al. **Soc Sci Med** 1996 Dec; 43(12):1743–54
The Latin American trial of psychosocial support during pregnancy: effects on mother's wellbeing and satisfaction. Latin American Network For Perinatal and Reproductive Research (LANPER). Langer A, et al. **Soc Sci Med** 1996 Jun;42(11):1589–97
Perceived social support, family environment and psychosocial recovery in bone marrow transplant long–term survivors. Molassiotis A, et al. **Soc Sci Med** 1997 Feb;44(3):317–25
A randomized trial of an empirically–derived social support intervention to prevent low birthweight among African American women [see comments] Norbeck JS, et al. **Soc Sci Med** 1996 Sep;43(6):947–54. Comment in: Soc Sci Med 1997 Sep;45(5):797, 799.
Direct and buffer effects of social support and personal coping resources in individuals with arthritis. Penninx BW, et al. **Soc Sci Med** 1997 Feb;44(3):393–402
Social support as conversation: analysing breast cancer patients' interactions with their partners. Pistrang N, et al. **Soc Sci Med** 1997 Sep;45(5):773–82
Social support in pregnancy can reduce the incidence of low birthweight deliveries [letter; comment] Pittroff R. **Soc Sci Med** 1997 Sep;45(5):797, 799. Comment on: Soc Sci Med 1996 Sep;43(6):947–54.
Social network associations with contraceptive use among Cameroonian women in voluntary associations. Valente TW, et al. **Soc Sci Med** 1997 Sep;45(5):677–87
Aids, violence and behavioral coding: information theory, risk behavior and dynamic process on core–group sociogeographic networks. Wallace R, et al. **Soc Sci Med** 1996 Aug;43(3):339–52
Paid work, unpaid work and social support: a study of the health of male and female nurses. Walters V, et al. **Soc Sci Med** 1996 Dec;43(11):1627–36
Low birthweight in a public prenatal care program: behavioral and psychosocial risk factors and psychosocial intervention. Zimmer–Gembeck MJ, et al. **Soc Sci Med** 1996 Jul;43(2):187–97
Social support networks of confidants to people with AIDS. Jankowski S, et al. **Soc Work** 1996 Mar;41(2):206–13
Caregiving and social support in two illness groups. Monahan DJ, et al. **Soc Work** 1997 May;42(3):278–87
Social support and depression among older adults living alone: the importance of friends within and outside of a retirement community. Potts MK. **Soc Work** 1997 Jul; 42(4):348–62
Samantha Morrisey: suicide and the need for support. Maltsberger JT. **Suicide Life Threat Behav** 1995 Winter; 25(4):519–25
Protective factors for suicidal black females. Nisbet PA. **Suicide Life Threat Behav** 1996 Winter;26(4):325–41
Who cares for the care–givers? [editorial; comment] Glaus A, et al. **Support Care Cancer** 1996 Nov;4(6):399–400. Comment on: Support Care Cancer 1996 Nov;4(6):408–15.
Social context variables as predictors of smoking cessation. Rice VH, et al. **Tob Control** 1996 Winter;5(4):280–5
Evaluation of a social health intervention among homeless tuberculosis patients. Díez E, et al. **Tuber Lung Dis** 1996 Oct;77(5):420–4
Do social reactions to sexual assault victims vary by support provider? Ullman SE. **Violence Vict** 1996 Summer; 11(2):143–57
Family stress and support among former Soviet immigrants. Aroian KJ, et al. **West J Nurs Res** 1996 Dec;18(6):655–74
Social support and network conflict in firefighters and paramedics. Beaton RD, et al. **West J Nurs Res** 1997 Jun; 19(3):297–313
Gender differences in participation and responsiveness to a health intervention for older Americans. Gallagher RA, et al. **Women Health** 1997;25(3):63–81
[Job strain, social support and mental health: a study on the male heavy manufacturing workers] Yang MJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jun; 13(6):332–41 (Eng. Abstr.) **(Chi)**
[Support and guidelines, nicotine substitutes and clonidine have positive effects on smoking cessation. Five Cochrane meta–analyses on agents used in smoking cessation] Lous J. **Ugeskr Laeger** 1997 Sep 22;159(39):5783–6 **(Dan)**
[The "Marrainage" Project: a nonprofessional intervention with families at risk for child neglect] Moreault L, et al. **Can J Public Health** 1996 Jan–Feb;87(1):42–5 (Eng. Abstr.) **(Fre)**
[Social support network evolution after the birth of their first baby: comparison between lower and middle class mothers] Seguin L, et al. **Can J Public Health** 1995 Nov–Dec;86(6):392–6 (Eng. Abstr.) **(Fre)**
[Role of associations in bipolar patients] Attar–Lévy D, et al. **Encephale** 1997 Jan;23 Spec No 1:42–8 (16 ref.) (Eng. Abstr.) **(Fre)**
[Home visits during pregnancy. Review of randomized studies and further questions] Blondel B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(5):515–22 (26 ref.) (Eng. Abstr.) **(Fre)**
[Informal and professional assistance in persons aged 75 years and over] Aptel I, et al. **Rev Epidemiol Sante Publique** 1997 Mar;45(1):85–8 **(Fre)**
[Support in the after care of patients operated for breast cancer] Maertens de Noordhout A. **Rev Med Liege** 1997 Feb;52(2):79–82 **(Fre)**
[Spontaneous and organized support among Italian women and men in the city of Zurich] Decurtins L, et al. **Gesundheitswesen** 1996 Jan;58(1):36–43 (Eng. Abstr.) **(Ger)**
[Voluntary help in psychiatry from the viewpoint of the volunteer] Schöck I. **Gesundheitswesen** 1996 Jul;58(1 Suppl):95–7 (Eng. Abstr.) **(Ger)**
[Using natural helping systems] Voges B. **Gesundheitswesen** 1996 Jul;58(1 Suppl):91–4 (Eng. Abstr.) **(Ger)**
[Work with relatives from the viewpoint of the relatives] Walter K. **Gesundheitswesen** 1996 Jul;58(1 Suppl):98–9 (Eng. Abstr.) **(Ger)**
[What is supportive psychotherapy?] Wöller W, et al. **Nervenarzt** 1996 Mar;67(3):249–52 (17 ref.) (Eng. Abstr.) **(Ger)**
[The social status of schizophrenic patients during the course of 8 years catamnesis and significance of relatives for psychosocial integration] Mönking HS, et al. **Psychiatr Prax** 1996 Nov;23(6):282–4 (Eng. Abstr.) **(Ger)**
[Voluntary aids in psychiatry] Rössler W, et al. **Psychiatr Prax** 1996 Jul;23(4):168–71 (Eng. Abstr.) **(Ger)**
[Confounding effects in social science studies and their control. The examples of personality, social support, psychiatric disease] Manz R. **Psychother Psychosom Med Psychol** 1997 Jun; 47(6):198–205 (Eng. Abstr.) **(Ger)**
[Positive role of family in coping with schizophrenic illness] Waldner P, et al. **Psychother Psychosom Med Psychol** 1996 Jul;46(7):276–81 (30 ref.) (Eng. Abstr.) **(Ger)**
[Family relations and informal social networks in the social structure and demographic change] Backes GM. **Z Gerontol Geriatr** 1996 Jan–Feb;29(1):29–33 (Eng. Abstr.) **(Ger)**
[Social networks of elderly migrants: on the relevance of familial and intra–ethnic support] Dietzel–Papakyriakou M, et al. **Z Gerontol Geriatr** 1996 Jan–Feb;29(1):34–41 (Eng. Abstr.) **(Ger)**
[Psychosocial support to improve quality of life (QOL) in home terminal carcinoma patients] Hirano T, et al. **Gan To Kagaku Ryoho** 1996 Dec;23 Suppl 3:317–21 (Eng.

SOCIAL SUPPORT

Abstr.) **(Jpn)**
[Social support exchange and quality of life among the Korean elderly in a rural area] Kim H, et al. **Nippon Koshu Eisei Zasshi** 1996 Jan;43(1):37–49 (Eng. Abstr.) **(Jpn)**
[Health status, social networks and support systems of so called old old in a population-based comparative study of residents ages 69–74 and 75–80] Kishi R, et al. **Nippon Koshu Eisei Zasshi** 1996 Dec;43(12):1009–23 (Eng. Abstr.) **(Jpn)**
[Social network and social support for married women and their spouses] Kawaura Y, et al. **Shinrigaku Kenkyu** 1996 Oct;67(4):333–9 (Eng. Abstr.) **(Jpn)**
[When need is greatest--is help nearest? Help and treatment after attempted suicide among adolescents] Rossow I, et al. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1740–3 (Eng. Abstr.) **(Nor)**
[Experiences of the long-term unemployed with health care services. A survey from Lillesand] Ytterdahl T, et al. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2776–8 (Eng. Abstr.) **(Nor)**
[Analysis of psychosocial factors in epidemiologic study of cardiologic examination--preliminary results of Warsaw POL-MONICA] Piwoński J, et al. **Przegl Lek** 1996; 53(12):847–53 (Eng. Abstr.) **(Pol)**
[The concept of social network as an example of modern diagnostic processes in forensic psychiatry] Gierowski JK, et al. **Psychiatr Pol** 1995 Nov–Dec;29(6):731–42 (12 ref.) (Eng. Abstr.) **(Pol)**
[Detection of tuberculosis in homeless persons and their sociopsychological characteristics] Punga VV, et al. **Probl Tuberk** 1996;(6):29–31 (Eng. Abstr.) **(Rus)**
[Quality-of-life support for patients during antitumor chemotherapy (a lecture)] Perevodchikova NI. **Ter Arkh** 1996;68(10):37–41 **(Rus)**
[The problem of non-medical support of breast cancer patients after radical surgery and its practical solution] Demin EV. **Vopr Onkol** 1996;42(5):92–5 (Eng. Abstr.) **(Rus)**
[The protection and support of the breast feeding of infants in Russia] Ladodo KS. **Vopr Pitan** 1996;(1):37–9 **(Rus)**
[Health and social problems in the aged] Grujić V, et al. **Med Pregl** 1997 Mar–Apr;50(3–4):115–9 (Eng. Abstr.) **(Scr)**
[Validity and reliability of the Duke-UNC-11 questionnaire of functional social support] Bellón Saameño JA, et al. **Aten Primaria** 1996 Sep 15;18(4):153–6, 158–63 (Eng. Abstr.) **(Spa)**
[Social support and perceived health status in non-institutionalized population over 60 years of age] Ferrando J, et al. **Gac Sanit** 1996 Jul–Aug;10(55):174–82 (Eng. Abstr.) **(Spa)**
[Psychosocial support activities. Care at the Södersjukhuset] Hansson-Lönnqvist G. **Lakartidningen** 1997 Mar 26; 94(13):1192–5 **(Swe)**
[Psychosocial support activities. Work at the crisis center in Uppsala] Johannesson KB. **Lakartidningen** 1997 Mar 26; 94(13):1198–202 **(Swe)**
[Psychosocial support activities. Help to persons calling the Karolinska hospital's hotline] Markström M, et al. **Lakartidningen** 1997 Mar 26;94(13):1195–8 **(Swe)**
[Additional support and help, no special treatment. Children with HIV infection have right to day care centers, school, friends] Wilhelmson B. **Lakartidningen** 1996 Oct 9; 93(41):3579–81 **(Swe)**

SOCIAL VALUES

Perceived social norms as crucial determinants of mother's injury-preventive behaviour. Sellström E, et al. **Acta Paediatr** 1996 Jun;85(6):702–7
The relationship of social context of drinking, perceived social norms, and parental influence to various drinking patterns of adolescents. Beck KH, et al. **Addict Behav** 1996 Sep–Oct;21(5):633–44
A literature-based approach to teaching values to adolescents: does it work? Adler ES, et al. **Adolescence** 1997 Summer;32(126):275–86
Adolescent females "voice" changes can signal difficulties for teachers and administrators. Wren DJ. **Adolescence** 1997 Summer;32(126):463–70
Ethnic and multicultural factor in alcohol research methods. Caetano R. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):117A–120A
Americanization in our schools for the deaf. 1921 [classical article] Read ED. **Am Ann Deaf** 1997 Jul;142(3):49–52
Working with the family: the role of values. Bloch S, et al. **Am J Psychother** 1996 Summer;50(3):274–84
Values in psychotherapy. Holmes J. **Am J Psychother** 1996 Summer;50(3):259–73 (31 ref.)
The child's right to a family environment. Why children's rights and family values are compatible. Melton GB. **Am Psychol** 1996 Dec;51(12):1234–8
Cultural relativism and cultural diversity: implications for nursing practice. Baker C. **ANS Adv Nurs Sci** 1997 Sep; 20(1):3–11
Life support decisions for children: what do parents value? Kirschbaum MS. **ANS Adv Nurs Sci** 1996 Sep;19(1):51–71
The values history as a nursing intervention to encourage use of advance directives among older adults. Schirm V, et al. **Appl Nurs Res** 1996 May;9(2):93–6
Values, stress, and coping among practicing family physicians. Post DM. **Arch Fam Med** 1997 May–Jun; 6(3):252–5
Quaker belief and child psychiatry [letter; comment] Allchin WH. **Br J Psychiatry** 1996 Oct;169(4):526. Comment on: Br J Psychiatry 1996 Jul;169(1):1–5.
Dimensions of life meaning: a qualitative investigation at mid-life. O'Connor K, et al. **Br J Psychol** 1996 Aug;87 (Pt 3):461–77
The risk society in an age of anxiety: situating fear of crime. Hollway W, et al. **Br J Sociol** 1997 Jun;48(2):255–66 (15 ref.)
Myths, realities, and the political world: the anthropology of insanity defense attitudes [see comments] Perlin ML. **Bull Am Acad Psychiatry Law** 1996;24(1):5–26 (138 ref.). Comment in: Bull Am Acad Psychiatry Law 1996;24(3):423–6. Comment in: Bull Am Acad Psychiatry Law 1996;24(3):426–7.
Comparing and using assessments of the value of information to clinical decision-making. Urquhart CJ, et al. **Bull Med Libr Assoc** 1996 Oct;84(4):482–9
Political bias, moral values, and spirituality in the training of psychotherapists. Aponte HJ. **Bull Menninger Clin** 1996 Fall;60(4):488–502
Individual autonomy and collective decisionmaking. Goldworth A. **Camb Q Healthc Ethics** 1997 Summer; 6(3):356–7
Developing habits and knowing what habits to develop: a look at the role of virtue in ethics. Loewy EH. **Camb Q Healthc Ethics** 1997 Summer;6(3):347–55
Attitudes of the Singapore public to actions suggesting child abuse. Elliott JM, et al. **Child Abuse Negl** 1997 May; 21(5):445–64
Can reflections on 20 years of searching. Garbarino J. **Child Abuse Negl** 1996 Mar;20(3):157–60
Toward a reorientation of values and practice in child welfare. Onheiber MD. **Child Psychiatry Hum Dev** 1997 Spring;27(3):151–64
The origin and formulation of Chinese character: an introduction to confucianism and its influence on Chinese behavior patterns. Huang DD, et al. **Cult Divers Ment Health** 1996;2(1):35–42 (24 ref.)
Constructing common ground: borderland experiences in America. Wellman D. **Cult Divers Ment Health** 1997; 3(1):13–21
Sex masks: the double life of female commercial sex workers in Mexico City. Castañeda X, et al. **Cult Med Psychiatry** 1996 Jun;20(2):229–47
Cultures in psychiatric nosology: the CCMD-2-R and international classification of mental disorders. Lee S. **Cult Med Psychiatry** 1996 Dec;20(4):421–72 (115 ref.)
Ethics, values, and world culture: the impact on rehabilitation. Banja JD. **Disabil Rehabil** 1996 Jun; 18(6):279–84 (7 ref.)
Personal values related to primary care specialty aspirations. Schubot DB, et al. **Fam Med** 1996 Nov–Dec;28(10):726–31
Family values, religiosity, and emotional reactions to schizophrenia in Mexican and Anglo-American cultures. Weisman AG, et al. **Fam Process** 1996 Jun;35(2):227–37
Values underpinning poverty programs for children. Heclo HH. **Future Child** 1997 Summer-Fall;7(2):141–8
Trends, issues, perspectives, and values for the aging of the baby boom cohorts. Cornman JM, et al. **Gerontologist** 1996 Feb;36(1):15–26 (70 ref.)
Age norms and the structure of consciousness: some final comments. Foner A. **Gerontologist** 1996 Apr;36(2):221–3
Organizational age norms: why is it so hard to know one when you see one? Lawrence BS. **Gerontologist** 1996 Apr; 36(2):209–20
Making sausage: The Ninth Circuit's opinion. Schneider CE. **Hastings Cent Rep** 1997 Jan–Feb;27(1):27–8
Is the person trade-off a valid method for allocating health care resources? Pinto Prades JL. **Health Econ** 1997 Jan–Feb;6(1):71–81
Nursing science in the global community. Ketefian S, et al. **Image J Nurs Sch** 1997 Spring;29(1):11–5 (27 ref.)
Explanations of body image disturbance: a test of maturational status, negative verbal commentary, social comparison, and sociocultural hypotheses. Stormer SM, et al. **Int J Eat Disord** 1996 Mar;19(2):193–202
Medicine in relation to society [editorial] Wolf S. **Integr Physiol Behav Sci** 1996 Oct–Dec;31(4):277–88
Some sociopsychological and political perspectives of the meaning of the Holocaust: a view from Israel. Moses R, et al. **Isr J Psychiatry Relat Sci** 1997;34(1):55–68
Adolescent knowledge, values, and coping strategies: implications for health in sub-Saharan Africa. Balmer DH, et al. **J Adolesc Health** 1997 Jul;21(1):33–8
Looking for virtue in a virtuous society--discursive ethics and dental managed care. Chambers DW. **J Am Coll Dent** 1996 Winter;63(4):39–42
Cultural factors in social anxiety: a comparison of social phobia symptoms and Taijin kyofusho. Kleinknecht RA, et al. **J Anxiety Disord** 1997 Mar–Apr;11(2):157–77
Cultural pathways toward Antonovsky's sense of coherence. Bowman BJ. **J Clin Psychol** 1997 Feb;53(2):139–42
Research in American Indian and Alaska Native communities: navigating the cultural universe of values and process. Norton IM, et al. **J Consult Clin Psychol** 1996 Oct;64(5):856–60
The formation of gay and lesbian identity and community in the Connecticut River Valley of western Massachusetts, 1900–1970. Bonfitto VF. **J Homosex** 1997;33(1):69–96
Medical futility and the social context. Halliday R. **J Med Ethics** 1997 Jun;23(3):148–53
Bioethics and the construction of medical reality [comment] Cherry MJ. **J Med Philos** 1996 Aug;21(4):357–73 (54 ref.) . Comment on: J Med Philos 1996 Aug;21(4):375–416. Comment on: J Med Philos 1996 Aug;21(4):417–37. Comment on: J Med Philos 1996 Aug;21(4):439–66.
The Norwegian welfare state in transition: rationing and plurality of values as ethical challenges for the health care system. Norheim OF. **J Med Philos** 1995 Dec;20(6):639–55
Registration of neural maps through value-dependent learning: modeling the alignment of auditory and visual maps in the barn owl's optic tectum. Rucci M, et al. **J Neurosci** 1997 Jan 1;17(1):334–52
Reactions to penalties for an offense in relation to authoritarianism, values, perceived responsibility, perceived seriousness, and deservingness. Feather NT. **J Pers Soc Psychol** 1996 Sep;71(3):571–87
Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and moderated by gender. Gaines SO Jr, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1460–76
The cultural construction of self-enhancement: an examination of group-serving biases. Heine SJ, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1268–83
Individual and collective processes in the construction of the self: self-enhancement in the United States and self-criticism in Japan. Kitayama S, et al. **J Pers Soc Psychol** 1997 Jun;72(6):1245–67
When exemplification fails: hypocrisy and the motive for self-integrity. Stone J, et al. **J Pers Soc Psychol** 1997 Jan; 72(1):54–65
Nursing and the "politics of meaning". Oldaker S. **J Prof Nurs** 1996 Sep–Oct;12(5):265
The structure of attitudes toward persons who are deaf: emotions, values, and stereotypes. Kiger G. **J Psychol** 1997 Sep;131(5):554–60
Gender differences in Arab students' attitudes toward Canadian society and second language learning. Abu-Rabia S. **J Soc Psychol** 1997 Feb;137(1):125–8
Social roles, social norms, and self-presentation in the quiz effect of Ross, Amabile, and Steinmetz. Gibbins K, et al. **J Soc Psychol** 1996 Oct;136(5):625–34
Attitudes toward sexual behavior among unmarried Zambian secondary school females. Pillai VK, et al. **J Soc Psychol** 1996 Feb;136(1):111–2
Perceived weight of other persons. Rudin JP. **J Soc Psychol** 1996 Dec;136(6):719–26
Cycles of social reform: is the current anti-alcohol movement cresting? [letter] Engs RC. **J Stud Alcohol** 1997 Mar; 58(2):223–4
A value-laden issue [letter; comment] Petersen LA. **MCN Am J Matern Child Nurs** 1996 Mar–Apr;21(2):105. Comment on: MCN Am J Matern Child Nurs 1995 Nov–Dec;20(6):315–21.
Using genetic information: the individual and the community. Kegley JA. **Med Law** 1996;15(3):377–89
Focusing on values and lifestyle outcomes in an effort to improve the quality of residential services in Oregon. Newton JS, et al. **Ment Retard** 1996 Feb;34(1):1–12
Clarity of judgment during amoral times in a society addicted to codified law. Neel Distinguished Research Lecturer. Jennings MM. **Otolaryngol Head Neck Surg** 1997 Jul; 117(1):1–6
Medical ethics in today's society [editorial] Leffall LD Jr. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):7–11
Fumes from the spleen. **Paediatr Perinat Epidemiol** 1997 Jan; 11(1):21–4
The architecture of conflict [editorial; comment] Gaudiani VA. **Pharos** 1997 Winter;60(1):37. Comment on: Pharos 1997 Winter;60(1):2–6. Comment on: Pharos 1997 Winter;60(1):13–6. Comment on: Pharos 1997 Winter;60(1):32–4.
Altruism--a flawed morality? [letter] [see comments] Lanard MS. **Pharos** 1997 Winter;60(1):39. Comment in: Pharos 1996 Fall;59(4):14–7.
Cultural factors in the emergence of borderline pathology [see comments] Paris J. **Psychiatry** 1996 Summer; 59(2):185–92. Comment in: Psychiatry 1996 Summer;59(2):193–5.
Peacekeeping and peacemaking: the conceptual foundations of a plan to reduce violence and improve the quality of life in a midsized community in Jamaica. Twemlow SW, et al. **Psychiatry** 1996 Summer;59(2):156–74
Cultural norms and the patient's experience of the analyst's business practices. Bader MJ. **Psychoanal Q** 1997 Jan; 66(1):93–7
Socialization forces and the stability of work values from late adolescence to early adulthood. Cotton L, et al. **Psychol Rep** 1997 Feb;80(1):115–24
Male nurses' sex-role orientation and values. McCutcheon LE. **Psychol Rep** 1996 Dec;79(3 Pt 2):1227–32
Using drugs--normal pastime or vice? [editorial] Slack RC. **Public Health** 1997 Sep;111(5):269
The value of community health nursing: a phenomenological study of the perceptions of community health nurses. Leipert BD. **Public Health Nurs** 1996 Feb;13(1):50–7
Relationships among children's beliefs, perceptions of their parents' beliefs, and their moderate-to-vigorous physical activity. Kimiecik JC, et al. **Res Q Exerc Sport** 1996 Sep; 67(3):324–36
Importance and attainment of life values among disabled and non-disabled people. Montgomery H, et al.

Scand J Rehabil Med 1996 Dec;28(4):233–40
The social construction of drug debates. Dingelstad D, et al. **Soc Sci Med** 1996 Dec;43(12):1829–38 (65 ref.)
From lineage to conjugality: the social context of fertility decisions among the Pare of northern Tanzania. Hollos M, et al. **Soc Sci Med** 1997 Aug;45(3):361–72
Women and AIDS: an analysis of media misrepresentations. Sacks V. **Soc Sci Med** 1996 Jan;42(1):59–73
Genetics, reproductive technologies, euthanasia and the search for a new societal paradigm [editorial] Somerville MA. **Soc Sci Med** 1996 Jun;42(12):ix–xii
The 'limits' of medicalization?: modern medicine and the lay populace in 'late' modernity. Williams SJ, et al. **Soc Sci Med** 1996 Jun;42(12):1609–20
Social work values, professional unity, and the South African context. Drower SJ. **Soc Work** 1996 Mar;41(2):138–46
Drinking-related assessment instruments: cross-cultural studies. Annis HM, et al. **Subst Use Misuse** 1996 Sep–Oct; 31(11–12):1525–46
A dialogue between virtue ethics and care ethics. Benner P. **Theor Med** 1997 Mar–Jun;18(1–2):47–61
The crisis of virtue: arming for the cultural wars and Pellegrino at the limes. Engelhardt HT Jr. **Theor Med** 1997 Mar–Jun;18(1–2):165–72
Adolescent decision-making: giving weight to age-specific values. Ladd RE, et al. **Theor Med** 1995 Dec;16(4):333–45
Of community, organs and obligations: routine salvage with a twist. Loewy EH. **Theor Med** 1996 Mar;17(1):61–74
The social concept of disease. Räikkä J. **Theor Med** 1996 Dec;17(4):353–61
Living donor transplantation: ethical, social, legal and religious aspects in Albania. Myftar B, et al. **Transplant Proc** 1996 Dec;28(6):3582–3
The applicability of the theory of planned behavior to abusive men's cessation of violent behavior. Tolman RM, et al. **Violence Vict** 1996 Winter;11(4):341–54
Women, the body and brand extension in medicine: cosmetic surgery and the paradox of choice. Gillespie R. **Women Health** 1996;24(4):69–85
The social production of housework disability. McDonough PA. **Women Health** 1996;24(4):1–25
Ethics and human values in health policy. Bankowski Z. **World Health Forum** 1996;17(2):146–9
[Inaugural conference given on the occasion of the Revue d'Epidémiologie et de Santé Publique 20th anniversary on the theme: how does a disease become a public health problem?] Touraine A. **Rev Epidemiol Sante Publique** 1997 Jun;45(3):185–91 **(Fre)**
[Disappearance of shame and puberty in girls] Kämmerer A, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Feb; 46(2):113–21 (35 ref.) (Eng. Abstr.) **(Ger)**
[Personal values and goal orientations of chronically ill adolescents and young adults] Schmitt GM. **Psychother Psychosom Med Psychol** 1997 Jun;47(6):189–97 (80 ref.) (Eng. Abstr.) **(Ger)**
[Healthy life style. Perspectives of prevention in modern society] Raspe H. **Z Arztl Fortbild (Jena)** 1997 Jan; 90(8):741–6 (Eng. Abstr.) **(Ger)**
[Value priorities and drug addiction] Tamayo A, et al. **Acta Psiquiatr Psicol Am Lat** 1995 Dec;41(4):300–7 (31 ref.) (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Basic cultural values and differences in attitudes towards health, illness and treatment preferences within a psychosomatic frame of reference. Bekker FJ, et al. **Psychother Psychosom** 1996;65(4):191–8
Identity, ideology and inequality: methodologies in medical anthropology, Guatemala 1950–1995. Barrett B. **Soc Sci Med** 1997 Mar;44(5):579–87

SOCIAL WELFARE

Inaugural commentary [editorial] Joel LA. **Am J Nurs** 1997 Mar;97(3):7
Work and welfare: job histories, barriers to employment, and predictors of work among low-income single mothers. Brooks MG, et al. **Am J Orthopsychiatry** 1996 Oct; 66(4):526–37
Patterns of welfare use among poor and homeless women [see comments] Salomon A, et al. **Am J Orthopsychiatry** 1996 Oct;66(4):510–25. Comment in: Am J Orthopsychiatry 1996 Oct;66(4):484–5.
Alcohol and drug use, abuse, and dependence among welfare recipients. Grant BF, et al. **Am J Public Health** 1996 Oct; 86(10):1450–4
Variations in take-up of the Family Fund. Hirst MA. **Child Care Health Dev** 1997 Mar;23(2):157–71
Family empowerment: one outcome of cooperative preschool education. Dunlap KM. **Child Welfare** 1997 Jul–Aug; 76(4):501–18
Building community capacity to promote social and public health: challenges for universities [editorial] Poole DL. **Health Soc Work** 1997 Aug;22(3):163–70 (48 ref.)
Health as an irreversible part of the welfare state: Canadian government policy under the Tories. O'Neill MA. **Int J Health Serv** 1996;26(3):547–59 (41 ref.)
Rethinking the western construction of the welfare state. Walker A, et al. **Int J Health Serv** 1996;26(1):67–92 (69 ref.)
Health and welfare data on optical memory cards in Isehara city. Sakashita Y, et al. **Med Inf (Lond)** 1996 Jan–Mar; 21(1):69–79
Lighting a candle in the Romanian darkness. Gallagher T. **Med War** 1992 Jan–Mar;8(1):25–30
Agricultural policy and social returns to eradication programs: the case of Aujeszky's disease in Sweden. Andersson H, et al. **Prev Vet Med** 1997 Feb;29(4):311–28 (30 ref.)
Hunger, food security and welfare policies: issues and debates in First World societies. Riches G. **Proc Nutr Soc** 1997 Mar;56(1A):63–74 (26 ref.)
Creating integrated service systems for homeless persons with mental illness: the ACCESS Program. Access to Community Care and Effective Services and Supports. Randolph F, et al. **Psychiatr Serv** 1997 Mar;48(3):369–73
The factor structure of the Maslach Burnout Inventory in two Swedish human service organizations. Söderfeldt M, et al. **Scand J Psychol** 1996 Dec;37(4):437–43
Health inequalities in later life in a social democratic welfare state. Dahl E, et al. **Soc Sci Med** 1997 Mar;44(6):871–81
[Health care systems and welfare in European community] Geddes M. **Epidemiol Prev** 1995 Dec;19(65):297–303 **(Ita)**
[Relationship of 'sekentei' to utilization of health, social and nursing services by the elderly] Momose Y, et al. **Nippon Koshu Eisei Zasshi** 1996 Mar;43(3):209–19 (Eng. Abstr.) **(Jpn)**
[Awareness of health and welfare planning for elderly and methods to increase awareness: based on social marketing] Tamura M, et al. **Nippon Koshu Eisei Zasshi** 1996 Nov; 43(11):954–64 (Eng. Abstr.) **(Jpn)**
[Patients' advocate or defender of the welfare state?] Bruusgaard D. **Tidsskr Nor Laegeforen** 1996 Aug 30; 116(20):2455–7 (Eng. Abstr.) **(Nor)**
[Guardians of the welfare state?] Nessa J. **Tidsskr Nor Laegeforen** 1996 Aug 30;116(20):2452–4 (Eng. Abstr.) **(Nor)**
[Social medical insurance and public health management in Austria] Semenova VYu, et al. **Probl Sotsialnoi Gig Istor Med** 1996 Jan–Feb;(1):50–4 **(Rus)**
[The Nation's health as a social mechanism of society's stable well-being] Razumov AN. **Vestn Ross Akad Med Nauk** 1997;(4):15–8 (Eng. Abstr.) **(Rus)**
[A hearing on export in social services] Lennholm B. **Lakartidningen** 1996 Oct 2;93(40):3440 **(Swe)**

ECONOMICS

The welfare state, pensions, privatization: the case of Social Security in the United States. Du Boff RB. **Int J Health Serv** 1997;27(1):1–23 (23 ref.)
Can markets give us the health system we want? [see comments] Rice T. **J Health Polit Policy Law** 1997 Apr; 22(2):383–426 (76 ref.). Comment in: J Health Polit Policy Law 1997 Apr;22(2):467–73. Comment in: J Health Polit Policy Law 1997 Apr;22(2):475–96.
Breaking through the barriers: healthcare for the homeless. Gillis LM, et al. **J Nurs Adm** 1997 Jun;27(6):30–4
Health services market testing—the experience of the community services review team in British Forces Germany. Leach AJ, et al. **J R Army Med Corps** 1996 Jun;142(2):67–70
Private social welfare expenditures, 1972–94. Kerns WL. **Soc Secur Bull** 1997;60(1):54–60 **(Eng, Eng)**
The new politics of child and family policies. Kamerman SB. **Soc Work** 1996 Sep;41(5):453–65

HISTORY

"Why do they hate me so much?" A history of welfare and its abandonment in the United States. Withorn A. **Am J Orthopsychiatry** 1996 Oct;66(4):496–509
Women's enterprise. Establishing the Lethbridge Nursing Mission, 1909–1919. Richardson S. **Nurs Hist Rev** 1997; 5:105–30

LEGISLATION & JURISPRUDENCE

Reform, not rhetoric: a critique of welfare policy and charting of new directions. Aaronson S, et al. **Am J Orthopsychiatry** 1996 Oct;66(4):583–98
Putting poor mothers to work [editorial; comment] Bassuk EL. **Am J Orthopsychiatry** 1996 Oct;66(4):484–5. Comment on: Am J Orthopsychiatry 1996 Oct;66(4):510–25.
Welfare reform and access to family-supportive benefits in the workplace. Piotrkowski CS, et al. **Am J Orthopsychiatry** 1996 Oct;66(4):538–47
Welfare reform and the real lives of poor women: introduction. Salomon A. **Am J Orthopsychiatry** 1996 Oct; 66(4):486–9
Providing legal services to vulnerable populations through a clinic–law firm collaboration. Deinard AS, et al. **Am J Public Health** 1997 Mar;87(3):463–4
Health insurance coverage of foreign-born US residents—the implications of the new welfare reform law [comment] Ladenheim K. **Am J Public Health** 1997 Jan;87(1):12–4. Comment on: Am J Public Health 1997 Jan;87(1):96–102.
Changing welfare as we know it: some thoughts about the impact on children. Waldman HB. **ASDC J Dent Child** 1997 Mar–Apr;64(2):135–40 (19 ref.)
America's most cruel xenophobia. Keigher SM. **Health Soc Work** 1997 Aug;22(3):232–7 (15 ref.)
Speaking of personal responsibility and individual accountability.... Keigher SM. **Health Soc Work** 1996 Nov; 21(4):304–11 (9 ref.)
Welfare reform: the bad, the ugly, and the maybe not too awful [editorial] Poole DL. **Health Soc Work** 1996 Nov; 21(4):243–6
It is easier to recall a defective car than a defective law [editorial] Laster L. **Hosp Pract (Off Ed)** 1996 Nov 15; 31(11):9–10
Welfare reform: a women's health perspective. Davis MF. **J Am Med Womens Assoc** 1996 Aug–Oct;51(4):166–70
Word from Washington. Croser MD. **Ment Retard** 1997 Feb; 35(1):51–8
Is shelter a private problem? [editorial] Mulroy EA, et al. **Soc Work** 1996 Mar;41(2):125–8
[2 steps forward and one back?—Response of child welfare to sexual abuse experiences of girls and boys] Rohleder C, et al. **Prax Kinderpsychol Kinderpsychiatr** 1996 Oct; 45(8):297–300 (Eng. Abstr.) **(Ger)**
[Medical expert assessment in social rights—responsibilities of the physician] Kertzendorff KW. **Z Arztl Fortbild (Jena)** 1996 Nov;90(7):612–7 **(Eng. Abstr.)** **(Ger)**
[Medical expert assessment in social rights lawsuits] Winkler H. **Z Arztl Fortbild (Jena)** 1996 Nov;90(7):618–21; discussion 622 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Welfare participation and self-esteem in later life. Krause N. **Gerontologist** 1996 Oct;36(5):665–73

STATISTICS & NUMERICAL DATA

Shelters for runaway and homeless youths: capacity and occupancy. Greene JM, et al. **Child Welfare** 1997 Jul–Aug; 76(4):549–61

TRENDS

Socioeconomic determinants of health: community marginalisation and the diffusion of disease and disorder in the United States. Wallace R, et al. **BMJ** 1997 May 3; 314(7090):1341–5
Welfare reforms and services for children and families: setting a new practice, research, and policy agenda. Freeman EM. **Soc Work** 1996 Sep;41(5):521–32
[Observations on social medicine in public health transition] Schwartz FW, et al. **Gesundheitswesen** 1997 Apr; 59(4):207–12 (Eng. Abstr.) **(Ger)**
[Social services and the pressure to modernize: new needs and developmental trends in care of the elderly] Heinze RG, et al. **Z Gerontol Geriatr** 1996 Jan–Feb;29(1):46–50 (Eng. Abstr.) **(Ger)**

SOCIAL WORK

see related

COMMUNITY HEALTH SERVICES

RELIEF WORK

Psychosocial problem assessment and end-stage renal disease patient outcomes. Vourlekis BS, et al. **Adv Ren Replace Ther** 1997 Apr;4(2):136–44 (18 ref.)
Knowledge about Alzheimer disease among primary care physicians, psychologists, nurses, and social workers. Barrett JJ, et al. **Alzheimer Dis Assoc Disord** 1997 Jun; 11(2):99–106
Youth at risk: definitions and implications for service delivery. Resnick G, et al. **Am J Orthopsychiatry** 1996 Apr; 66(2):172–88
Community care and social services. Renwick D. **BMJ** 1996 Oct 5;313(7061):869–72 (9 ref.)
Basic premises, guiding principles, and competent practices for a positive youth development approach to working with gay, lesbian, and bisexual youths in out-of home care. Mallon GP. **Child Welfare** 1997 Sep–Oct;76(5):591–609
Understanding and countering racism with first nations children in out-of-home care. Palmer S, et al. **Child Welfare** 1996 Nov–Dec;75(6):709–25 (20 ref.)
Concrete strategies for sensitizing youth-serving agencies to the needs of gay, lesbian, and other sexual minority youths. Phillips S, et al. **Child Welfare** 1997 May–Jun;76(3):393–409
Troubles in Smurftown: youth gangs and moral visions on Guam. Schmitz S, et al. **Child Welfare** 1997 May–Jun; 76(3):411–28
Listening to patients. Brown G. **Clin Obstet Gynecol** 1996 Dec;39(4):893–901
The socially complex family. New dilemmas for the neonatal social worker. Carson DP. **Clin Perinatol** 1996 Sep; 23(3):609–20 (5 ref.)
A randomized controlled trial of enhanced Social Service occupational therapy for stroke patients. Logan PA, et al. **Clin Rehabil** 1997 May;11(2):107–13
Awareness and fear of violence among medical and social work students. Ellwood AL, et al. **Fam Med** 1996 Jul–Aug; 28(7):488–92
Social patterns of smoking behavior: trends and practice implications. Kaplan MS, et al. **Health Soc Work** 1997 Feb; 22(1):47–52 (60 ref.)
America's most cruel xenophobia. Keigher SM. **Health Soc Work** 1997 Aug;22(3):232–7 (15 ref.)
Heart disease and associated risk factors among Hawaiians: culturally responsive strategies. Mokuau N, et al. **Health Soc Work** 1995 Feb;20(1):46–51 (20 ref.)
Resilience in adult children of alcoholics: a nonpathological approach to social work practice. Palmer N.

Health Soc Work 1997 Aug;22(3):201–9

Retooling for community health partnerships in primary care and prevention [editorial] Poole DL, et al. **Health Soc Work** 1997 Feb;22(1):2–4

Students implement community project for the homeless. Helvie CO. **J Nurs Educ** 1996 Nov;35(8):377–9

Patterns of service use and treatment involvement of methadone maintenance patients. Widman M, et al. **J Subst Abuse Treat** 1997 Jan–Feb;14(1):29–35

Laminated cards for helping battered women. Von Burg MM. **MCN Am J Matern Child Nurs** 1996 May–Jun; 21(3):159–60

The 'safety net' and other myths. It's time to challenge our cherished illusions [editorial] Oberg CN. **Postgrad Med** 1997 May;101(5):11, 15–6

Relation among measures of burnout, job satisfaction, and role dynamics for a sample of South African child-care social workers. Bhana A, et al. **Psychol Rep** 1996 Oct; 79(2):431–4

Reactions to managed care among psychologists and social workers. Chambliss C, et al. **Psychol Rep** 1997 Feb; 80(1):147–54

Determinants of the willingness to endorse assisted suicide. A survey of physicians, nurses, and social workers. Portenoy RK, et al. **Psychosomatics** 1997 May–Jun; 38(3):277–87

Family adaptation to a child's feeding and swallowing disorder: a social work perspective. Parrish M. **Semin Speech Lang** 1997 Feb;18(1):71–7; quiz 77–8

Psychosocial work environment in human service organizations: a conceptual analysis and development of the demand–control model. Söderfeldt B, et al. **Soc Sci Med** 1996 May;42(9):1217–26 (50 ref.)

Perceptions of school violence as a problem and reports of violent events: a national survey of school social workers. Astor RA, et al. **Soc Work** 1997 Jan;42(1):55–68

Homophobia and heterosexism in social workers. Berkman CS, et al. **Soc Work** 1997 Jul;42(4):319–32

Mental retardation and domestic violence: an ecological approach to intervention. Carlson BE. **Soc Work** 1997 Jan; 42(1):79–89 (30 ref.)

Mothers in recovery: rebuilding families in the aftermath of addiction. Carten AJ. **Soc Work** 1996 Mar;41(2):214–23

Social work values, professional unity, and the South African context. Drower SJ. **Soc Work** 1996 Mar;41(2):138–46

Domestic violence and role-taking: collegial inaccuracies. Forte JA, et al. **Soc Work** 1997 Jan;42(1):116–8

A constructivist perspective on clinical social work practice with ethnically diverse clients. Greene GJ, et al. **Soc Work** 1996 Mar;41(2):172–80

HIV/AIDS and suicide: be open [comment] Holtby ME. **Soc Work** 1996 May;41(3):324. Comment on: Soc Work 1995 Nov;40(6):783–7.

Resettlement: a cultural and psychological crisis. Hulewat P. **Soc Work** 1996 Mar;41(2):129–35

Social support networks of confidants to people with AIDS. Jankowski S, et al. **Soc Work** 1996 Mar;41(2):206–13

Making a difference: women of action in the community. Lazzari MM, et al. **Soc Work** 1996 Mar;41(2):197–205

Case advocacy in child welfare. Litzelfelner P, et al. **Soc Work** 1997 Jul;42(4):392–402 (56 ref.)

Using a focus group of clinicians to develop a research project on therapeutic process for clients with dual diagnoses. Loneck B, et al. **Soc Work** 1997 Jan;42(1):107–11

HIV/AIDS and suicide: further precautions. Mancoske RJ. **Soc Work** 1996 May;41(3):325–6

The social worker as moral citizen: ethics in action. Manning SS. **Soc Work** 1997 May;42(3):223–30

Navajo elderly people in a reservation nursing home: admission predictors and culture care practices. Mercer SO. **Soc Work** 1996 Mar;41(2):181–9

Affordable housing: a basic need and a social issue [editorial] Mulroy EA, et al. **Soc Work** 1996 May;41(3):245–9

Should social work clients have the right to effective treatment? Myers LL, et al. **Soc Work** 1997 May; 42(3):288–98 (56 ref.)

Taking exception to "Asymmetrical role-taking: comparing battered and nonbattered women" [comment] Starsoneck L, et al. **Soc Work** 1997 Jan;42(1):113–5. Comment on: Soc Work 1996 Jan;41(1):59–73.

Challenging privilege through Africentric social work practice. Swigonski ME. **Soc Work** 1996 Mar;41(2):153–61

Culturally informed social work practice with American Indian clients: guidelines for non–Indian social workers. Williams EE, et al. **Soc Work** 1996 Mar;41(2):147–51

Toward a more holistic understanding of ethics in social work. Abramson M. **Soc Work Health Care** 1996;23(2):1–14

Perinatal social work and the high risk obstetrics patient. Bachman DH, et al. **Soc Work Health Care** 1997; 24(3–4):3–19 (36 ref.)

Implementation of computerized social work data base/assessments. Breeding W, et al. **Soc Work Health Care** 1996;23(2):81–98

Successful living placement for adults with disabilities: considerations for social work practice. DePoy E, et al. **Soc Work Health Care** 1996;23(4):21–34

Elderly hospitalized patients' perceptions of the interaction with the social worker during discharge planning. Kadushin G. **Soc Work Health Care** 1996;23(1):1–21

The profile of HIV infection in women: a challenge to the profession. Katz DA. **Soc Work Health Care** 1997; 24(3–4):127–34 (18 ref.)

The impact of a client's diagnosis of AIDS on social workers' clinical judgements: an experimental study. Knight C. **Soc Work Health Care** 1996;23(4):35–50

Social policy considerations in perinatal social work. Mahan CK. **Soc Work Health Care** 1997;24(3–4):135–40

Perinatal loss: considerations in social work practice. Mahan CK, et al. **Soc Work Health Care** 1997;24(3–4):141–52 (17 ref.)

A birth father and adoption in the perinatal setting. Menard BJ. **Soc Work Health Care** 1997;24(3–4):153–63 (18 ref.)

A comparison of transplant patient and social worker attitudes in regard to transplant patient psychosocial selection criteria, role expectations and communication style. Paris W, et al. **Soc Work Health Care** 1996; 23(1):39–52

The challenge of practice based research: a group approach. Sidell NL, et al. **Soc Work Health Care** 1996;23(2):99–111

Euthanasia and physician assisted suicide; a social work update. Smokowski PR, et al. **Soc Work Health Care** 1996; 23(1):53–65

Social work with transport disabled persons: a wayfinding perspective in health care. Taylor B, et al. **Soc Work Health Care** 1996;23(4):3–19

[What does the social assistant do in nephrology? A group of social assistants of ASNEP (letter)] **Nephrologie** 1996; 17(5):307–8 **(Fre)**

[Self-awareness of a social worker or recognition determines awareness (letter)] Gromer D, et al. **Psychiatr Prax** 1997 Jul;24(4):212 **(Ger)**

[Comment on W. Häfner–Ranabauer et al.: Quality assurance in clinical social work: how do social workers assess the success of their interventions? (letter)] Grossheim T. **Psychiatr Prax** 1997 Jul;24(4):212 **(Ger)**

[Social network and social support for married women and their spouses] Kawaura Y, et al. **Shinrigaku Kenkyu** 1996 Oct;67(4):333–9 (Eng. Abstr.) **(Jpn)**

[The viewpoint of social workers on the future legislative framework for the prevention of occupational hazards] Díaz Ojeda M, et al. **Rev Esp Salud Publica** 1996 Jul–Aug; 70(4):453–61 (Eng. Abstr.) **(Spa)**

EDUCATION

Developing the interview protocol for video-recorded child sexual abuse investigations: a training experience with police officers, social workers, and clinical psychologists in Hong Kong. Cheung KM. **Child Abuse Negl** 1997 Mar; 21(3):273–84

The role of family support programs in building developmental assets among young adolescents: a national survey of services and staff training needs. Scales PC. **Child Welfare** 1997 Sep–Oct;76(5):611–35

Values in health care professional socialization: implications for geriatric education in interdisciplinary teamwork. Clark PG. **Gerontologist** 1997 Aug;37(4):441–51 (80 ref.)

Social work education and the field of aging. Fahey CJ. **Gerontologist** 1996 Feb;36(1):36–41

Advancing social work practice in health care settings: a collaborative partnership for continuing education. Browne CV, et al. **Health Soc Work** 1996 Nov;21(4):267–76

Educating students for a changing health care environment: an examination of health care practice course content. Kadushin G, et al. **Health Soc Work** 1997 Aug;22(3):211–22

Differential work assignments of social work practitioners in hospitals. Levin R, et al. **Health Soc Work** 1995 Feb; 20(1):21–30

Knowledge about and attitudes toward persons with developmental disabilities: an assessment of Israeli social work students. Duvdevany I, et al. **Int J Rehabil Res** 1995 Dec;18(4):362–7

Preparation of social workers for serving individuals with developmental disabilities: a brief report. DePoy E, et al. **Ment Retard** 1996 Feb;34(1):54–7

The emerging health care world: implications for social work practice and education. Berkman B. **Soc Work** 1996 Sep; 41(5):541–51

Classism in the curriculum [letter] Santiago M. **Soc Work** 1996 May;41(3):336

Social work in the academic medical center: advanced training—a necessity. Berkman B, et al. **Soc Work Health Care** 1996;24(1–2):115–35

School and agency collaboration in a cost conscious health care environment. Christ GH. **Soc Work Health Care** 1996; 24(1–2):53–72

A pilot study of fieldwork rotations vs. year long placements for social work students in a public hospital. Cuzzi L, et al. **Soc Work Health Care** 1996;24(1–2):73–91

A post-master's program in gerontological social work: fulfilling a practice need in health care. Eckert JW, et al. **Soc Work Health Care** 1996;24(1–2):137–52

Education of staff and students in health care settings: integrating practice and research. Hall JA, et al. **Soc Work Health Care** 1996;24(1–2):93–113

Professional social work and health care: challenges for the future. Introduction. Mailick MD, et al. **Soc Work Health Care** 1996;24(1–2):1–7

Educational preparation for contemporary health care social work practice. Spitzer WJ, et al. **Soc Work Health Care** 1996;24(1–2):9–34

[Social work and social gerontology: gerontologic graduate and continuing education for social workers/social pedagogues] Karl F. **Z Gerontol Geriatr** 1997 Mar–Apr; 30(2):123–6 (Eng. Abstr.) **(Ger)**

[The role of the School of Health Care and Social Work at the Trnava University in health care education] Krčméry V Jr, et al. **Bratisl Lek Listy** 1996 Nov;97(11):700–1 **(Slo)**

HISTORY

Social workers and national health care: are there lessons from Great Britain? Dworkin J. **Health Soc Work** 1997 May;22(2):117–23

[Individual charity work in medical-social work in Byelarus] Kul'panovich OA. **Probl Sotsialnoi Gig Istor Med** 1995 Jul–Aug;(4):53–5 **(Rus)**

[The history of medical-social problems of the population of the Amur region during the Great Patriotic War] Voyt LN. **Probl Sotsialnoi Gig Istor Med** 1995 Jul–Aug;(4):60–2 **(Rus)**

LEGISLATION & JURISPRUDENCE

The new federal role in education and family services: goal setting without responsibility. Allen-Meares P. **Soc Work** 1996 Sep;41(5):533–40

Distinction is more than semantics [letter] Bagnell J. **Soc Work** 1996 Mar;41(2):239–40

Shaping the policy practice agenda of social work in the field of aging. Greene RR, et al. **Soc Work** 1996 Sep; 41(5):553–60

[Social visit as an instrument for ambulatory hospital-based services for disabled patients] Förster H, et al. **Med Klin** 1996 Nov 15;91(11):723–4 **(Ger)**

[2 steps forward and one back?—Response of child welfare to sexual abuse experiences of girls and boys] Rohleder C, et al. **Prax Kinderpsychol Kinderpsychiatr** 1996 Oct; 45(8):297–300 (Eng. Abstr.) **(Ger)**

[Social rights aspects of expert medical assessment] Roeder B. **Z Arztl Fortbild (Jena)** 1996 Nov;90(7):607–11 (Eng. Abstr.) **(Ger)**

MANPOWER

Influence of information related to child physical abuse on professional ratings of adjustment and prognosis. DeRoma VM, et al. **Child Abuse Negl** 1997 Mar;21(3):295–308

["The Use and Control of Stress". A program applied to workers of the IMSS. Instituto Mexicano del Seguro Social] Maldonado-Islas G, et al. **Gac Med Mex** 1997 Jan–Feb;133(1):7–11 (Eng. Abstr.) **(Spa)**

METHODS

The acquisition of life skills through adventure-based activities and programs: a review of the literature. Moote GT Jr, et al. **Adolescence** 1997 Spring;32(125):143–67 (102 ref.)

A week in the country: a model respite program. Miller SL, et al. **AIDS Educ Prev** 1996 Apr;8(2):176–86

Characteristics and consequences of help-giving practices in contrasting human services programs. Trivette CM, et al. **Am J Community Psychol** 1996 Apr;24(2):273–93

Child age and caseworker attention in child protective services investigations. Freeman JB, et al. **Child Abuse Negl** 1996 Oct;20(10):907–20

Assessing risk in families affected by substance abuse. Olsen LJ, et al. **Child Abuse Negl** 1996 Sep;20(9):833–42

Developing delinquent youths: a reintegrative model for rehabilitation and a new role for the juvenile justice system. Bazemore G, et al. **Child Welfare** 1997 Sep–Oct; 76(5):665–716 (91 ref.)

Re-engineering social work's approach to holistic healing [editorial] Aguilar MA. **Health Soc Work** 1997 May; 22(2):83–4

In the aftermath: serial crisis intervention for people with HIV. Poindexter CC. **Health Soc Work** 1997 May; 22(2):125–32 (51 ref.)

A support group intervention to facilitate young adults' adjustment to cancer. Roberts CS, et al. **Health Soc Work** 1997 May;22(2):133–41

Humor in the emergency room: a social work perspective. van Wormer K, et al. **Health Soc Work** 1997 May; 22(2):87–92 (17 ref.)

Alternative health practices in ethnically diverse rural areas: a collaborative research project. Vest GW, et al. **Health Soc Work** 1997 May;22(2):95–100

Perinatal social work with childbearing adolescents. Adams D, et al. **Soc Work Health Care** 1997;24(3–4):85–97 (37 ref.)

Perinatal social work and the family of the newborn intensive care infant. Bachman DH, et al. **Soc Work Health Care** 1997;24(3–4):21–37 (15 ref.)

The role of the social worker in perinatal substance-abuse. Cook C. **Soc Work Health Care** 1997;24(3–4):65–83 (46 ref.)

Counseling prenatal diagnosis patients: the role of the social worker. Fertel PE, et al. **Soc Work Health Care** 1997; 24(3–4):47–63 (28 ref.)

Infertility and assisted reproductive technology: the role of the perinatal social worker. Greenfeld DA. **Soc Work Health Care** 1997;24(3–4):39–46 (12 ref.)

Postpartum depression: a review for perinatal social workers. Walther VN. **Soc Work Health Care** 1997;24(3–4):99–111 (12 ref.)

ORGANIZATION & ADMINISTRATION

General practice: additional services [letter] Gibbons B, et al. **Br J Gen Pract** 1997 Jul;47(420):465–6

Promoting inter-agency collaboration in child services. Bradford R. **Child Care Health Dev** 1993 Nov-Dec; 19(6):355-67

Community youth development: learning the new story. Jarvis SV, et al. **Child Welfare** 1997 Sep-Oct;76(5):719-41

Hotlines as discrete services in mental health and human service organizations. Seeley MF. **Crisis** 1996;17(3):100-1, 104

Psychogeriatric organization in the medico-social network: the experience of the canton of Vaud, Switzerland. Wertheimer J. **Dement Geriatr Cogn Disord** 1997 Mar-Apr; 8(2):143-5

The Family Preservation and Support Services Program. Ahsan N. **Future Child** 1996 Winter;6(3):157-60

The Illinois elder abuse system: program description and administrative findings. Neale AV, et al. **Gerontologist** 1996 Aug;36(4):502-11

Confidentiality and managed care: ethical and legal concerns. Davidson JR, et al. **Health Soc Work** 1996 Aug; 21(3):208-15 (23 ref.)

Connecting group members through telephone and computer groups. Galinsky MJ, et al. **Health Soc Work** 1997 Aug; 22(3):181-8

Culturally specific health care model for ensuring health care use by rural, ethnically diverse families affected by HIV/AIDS. Goicoechea-Balbona AM. **Health Soc Work** 1997 Aug;22(3):172-80

What role for social work in the new health care practice paradigm? Keigher SM. **Health Soc Work** 1997 May; 22(2):149-55 (17 ref.)

Partnerships for improved service delivery: the Newark Target Cities Project. Kraft MK, et al. **Health Soc Work** 1997 May;22(2):143-8

Medicaid managed care and urban poor people: implications for social work. Perloff JD. **Health Soc Work** 1996 Aug; 21(3):189-95 (33 ref.)

Keeping managed care in balance [editorial] Poole DL. **Health Soc Work** 1996 Aug;21(3):163-6 (29 ref.)

Partnerships buffer and strengthen [editorial] Poole DL. **Health Soc Work** 1995 Feb;20(1):2-4

Legislating for user involvement in the United Kingdom: mental health services and the NHS and Community Care Act 1990. Bowl R. **Int J Soc Psychiatry** 1996 Autumn; 42(3):165-80

The golden boom: the health needs of seniors. Noonan SS. **N J Med** 1997 Sep;94(9):31, 33-4

Developments in the UK: work of the Low Income Project Team. Nelson M. **Proc Nutr Soc** 1997 Mar;56(1A):91-100 (13 ref.)

When social workers and physicians collaborate: positive and negative interdisciplinary experiences. Abramson JS, et al. **Soc Work** 1996 May;41(3):270-81

The new federal role in education and family services: goal setting without responsibility. Allen-Meares P. **Soc Work** 1996 Sep;41(5):533-40

Homeless veterans: perspectives on social services use. Applewhite SL. **Soc Work** 1997 Jan;42(1):19-30

Are culturally sophisticated agencies better workplaces for social work staff and administrators? Gant LM. **Soc Work** 1996 Mar;41(2):163-71

Building a neighborhood network: interorganizational collaboration to prevent child abuse and neglect. Mulroy EA. **Soc Work** 1997 May;42(3):255-64

The personal is ecological: environmentalism of social work. Park KM. **Soc Work** 1996 May;41(3):320-3

Afrocentricity: an emerging paradigm in social work practice. Schiele JH. **Soc Work** 1996 May;41(3):284-94 (63 ref.)

[The concept of sociomedical work in Russia in the late 1990] Martynenko AV. **Vestn Ross Akad Med Nauk** 1997; (8):44-50 (21 ref.) (Eng. Abstr.) **(Rus)**

STANDARDS

Certification for child protective services staff members: the Texas initiative. Birmingham J, et al. **Child Welfare** 1996 Nov-Dec;75(6):727-40

Strengthening our child abuse response system. Eichler TP. **Del Med J** 1997 Jul;69(7):331-3

Cerebral palsy--the transition from youth to adulthood. Stevenson CJ, et al. **Dev Med Child Neurol** 1997 May; 39(5):336-42

Responsibilities and effectiveness of the juvenile court in handling dependency cases. Hardin M. **Future Child** 1996 Winter;6(3):111-25

Social work with suicidal clients: challenges of implementing practice guidelines and standards of care. Callahan J. **Health Soc Work** 1996 Nov;21(4):277-85

Ethical dilemmas in discharge planning for patients with Alzheimer's disease. Cummings SM, et al. **Health Soc Work** 1997 May;22(2):101-8 (39 ref.)

Pseudoissues in practice evaluation: impediments to responsible practice. Staudt M. **Soc Work** 1997 Jan; 42(1):99-106 (36 ref.)

Social work in the academic medical center: advanced training--a necessity. Berkman B, et al. **Soc Work Health Care** 1996;24(1-2):115-35

[Contemporary social medical problems of the family and issues in medical-social services] Grinina OV. **Probl Sotsialnoi Gig Istor Med** 1994 Jul-Aug;(4):6-10 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Aging families of adults with mental retardation: patterns and correlates of service use, need, and knowledge. Smith GC. **Am J Ment Retard** 1997 Jul;102(1):13-26

Mental disorder in an elderly home care population: associations with health and social service use. Banerjee S, et al. **Br J Psychiatry** 1996 Jun;168(6):750-6

Quantitative vs qualitative methods [editorial; comment] Logan S. **Child Care Health Dev** 1997 Jul;23(4):283-5. Comment on: Child Care Health Dev 1997 Jul;23(4):287-96.

Assessing social work effectiveness in child care practice: the contribution of randomized controlled trials [see comments] Newman T, et al. **Child Care Health Dev** 1997 Jul;23(4):287-96 (25 ref.). Comment in: Child Care Health Dev 1997 Jul;23(4):283-5.

The prevalence of learning disability in a Health and Social Services Board in Northern Ireland. McDonald G, et al. **J Intellect Disabil Res** 1996 Dec;40 (Pt 6):550-6

Psychosomatic symptoms in human service work. A study on Swedish social workers and social insurance personnel. Söderfeldt B, et al. **Scand J Soc Med** 1996 Mar;24(1):43-9

Determinants of the use of ambulant social care by the elderly. Crets S. **Soc Sci Med** 1996 Dec;43(12):1709-20

Percentage of elderly and the use of welfare services at city welfare offices in Japan. Ida O, et al. **Soc Sci Med** 1996 Dec;43(11):1527-32

TRENDS

Introduction: the many faces of aging: challenges for the future. Gutheil IA. **Gerontologist** 1996 Feb;36(1):13-4

Kinship care: the African American response to family preservation. Scannapieco M, et al. **Soc Work** 1996 Mar; 41(2):190-6

Social work practice in health care: looking to the future with a different lens. Volland PJ. **Soc Work Health Care** 1996;24(1-2):35-51

[Problems of the development of clinical social work as professional activity] Martynenko AV. **Probl Sotsialnoi Gig Istor Med** 1995 Jul-Aug;(4):41-4 (Eng. Abstr.) **(Rus)**

SOCIAL WORK DEPARTMENT, HOSPITAL

Developing a research unit within a hospital social work department. Christ GH, et al. **Health Soc Work** 1995 Feb; 20(1):60-9

Addressing AIDS long-term care issues through education and advocacy. Marder R, et al. **Health Soc Work** 1995 Feb;20(1):75-80

Delivery of home care services after discharge: what really happens. Simon EP, et al. **Health Soc Work** 1995 Feb; 20(1):5-14

Themes from the frontlines: hospital social work with people with AIDS. Beckerman N, et al. **Soc Work Health Care** 1996;23(4):75-89

An economic analysis of two models of hospital care for AIDS patients: implications for hospital discharge planning. Fahs MC, et al. **Soc Work Health Care** 1996;22(4):21-34

Education of staff and students in health care settings: integrating practice and research. Hall JA, et al. **Soc Work Health Care** 1996;24(1-2):93-113

The relationship between therapeutic termination and job satisfaction among medical social workers. Resnick C, et al. **Soc Work Health Care** 1996;23(3):17-33

MANPOWER

Differential work assignments of social work practitioners in hospitals. Levin R, et al. **Health Soc Work** 1995 Feb; 20(1):21-30

Social work in the academic medical center: advanced training--a necessity. Berkman B, et al. **Soc Work Health Care** 1996;24(1-2):115-35

A pilot study of fieldwork rotations vs. year long placements for social work students in a public hospital. Cuzzi L, et al. **Soc Work Health Care** 1996;24(1-2):73-91

ORGANIZATION & ADMINISTRATION

The changing scene of social work in hospitals: a report of a national study by the Society for Social Work Administrators in Health Care and NASW [see comments] Berger CS, et al. **Health Soc Work** 1996 Aug;21(3):167-77 . Comment in: Health Soc Work 1997 Feb;22(1):79.

Social work in restructuring hospitals: meeting the challenge. Globerman J, et al. **Health Soc Work** 1996 Aug; 21(3):178-88

What role for social work in the new health care practice paradigm? Keigher SM. **Health Soc Work** 1997 May; 22(2):149-55 (17 ref.)

STANDARDS

Ethical dilemmas in discharge planning for patients with Alzheimer's disease. Cummings SM, et al. **Health Soc Work** 1997 May;22(2):101-8 (39 ref.)

TRENDS

We need to monitor changes [letter; comment] Matorin S. **Health Soc Work** 1997 Feb;22(1):79. Comment on: Health Soc Work 1996 Aug;21(3):167-77.

SOCIAL WORK, PSYCHIATRIC

Guidelines for choosing an "intervention package" for working with adolescent girls in distress. Berger R, et al. **Adolescence** 1996 Fall;31(123):709-19

The case for integration of social work psychosocial services into rural primary care practice. Badger LW, et al. **Health Soc Work** 1997 Feb;22(1):20-9

Diversity in schizophrenia: toward a richer biopsychosocial understanding for social work practice. Farmer RL, et al. **Health Soc Work** 1997 May;22(2):109-16

Stress and mental health social work. A developmental perspective. Pottage D, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):124-31

The social worker's record of the hospitalized patient: a physician's perspective. Benbassat J. **Isr J Psychiatry Relat Sci** 1996;33(4):246-52 (27 ref.)

Supportive care of the patient with pancreatic cancer: the role of the oncology social worker. Kennedy VN. **Oncology (Huntingt)** 1996 Sep;10(9 Suppl):35-7 (9 ref.)

Engaging significant others: the Tom Sawyer approach to case management. Kanter J. **Psychiatr Serv** 1996 Aug; 47(8):799-801 (20 ref.)

[Social work in inpatient psychiatric management. An empirical study of indications and success] Hambrecht M, et al. **Nervenarzt** 1996 Nov;67(11):953-9 (Eng. Abstr.) **(Ger)**

[Quality assurance in clinical social work: how do social workers judge the success of their interventions?] Häfner-Ranabauer W, et al. **Psychiatr Prax** 1996 Sep; 23(5):226-9 (Eng. Abstr.) **(Ger)**

EDUCATION

Increasing the effectiveness of frontline workers through a model mental health training program. Weisberg S. **Community Ment Health J** 1996 Aug;32(4):363-70

Factitious disorder by proxy: awareness among mental health practitioners. Ostfeld BM, et al. **Gen Hosp Psychiatry** 1996 Mar;18(2):113-6

The clubhouse model as exemplar. Merging psychiatric nursing and psychosocial rehabilitation. Farrell SP, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jan;35(1):27-34

ORGANIZATION & ADMINISTRATION

Services for older people with mental health problems: inequalities and strategies to help the 'have-nots'. Jolley D. **Dement Geriatr Cogn Disord** 1997 Mar-Apr;8(2):132-5

Documentation of client dangerousness in a managed care environment. Callahan J. **Health Soc Work** 1996 Aug; 21(3):202-7 (34 ref.)

Managed care and people with severe mental illness: challenges and opportunities for social work. Shera W. **Health Soc Work** 1996 Aug;21(3):196-201 (56 ref.)

Radicalizing recovery: addiction, spirituality, and politics. Morell C. **Soc Work** 1996 May;41(3):306-12 (34 ref.)

The strengths perspective in social work practice: extensions and cautions. Saleebey D. **Soc Work** 1996 May; 41(3):296-305 (55 ref.)

[Psychiatric care of neglected and abused children and their parents] Bonard O. **Rev Med Suisse Romande** 1997 May; 117(5):425-8 **(Fre)**

STANDARDS

The ethics of non-sexual dual relationships: a dilemma for the rural mental health professional. Brownlee K. **Community Ment Health J** 1996 Oct;32(5):497-503

TRENDS

Getting the story straight and passing it along. New thoughts on promoting collaborative partnerships with consumers, survivors, and family members [editorial] Palmer-Erbs VK, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jan; 35(1):3-5

The future of clinical social work and managed cost organizations. Munson CE. **Psychiatr Serv** 1997 Apr; 48(4):479-82

[Quality assurance in clinical social work: specific interventions for specific problem areas in different psychiatric patient groups?] Häfner-Ranabauer W, et al. **Psychiatr Prax** 1996 Jan;23(1):21-5 (Eng. Abstr.) **(Ger)**

SOCIAL WORKERS see **SOCIAL WORK**

SOCIALISM

Adolescence and senescence: new challenges for the Formerly Socialist Economies of Europe (FSE). Balogh A. **Adv Contracept** 1996 Dec;12(4):315-8 (13 ref.)

Disease ecology and a reformist alternative: the case of infant mortality. Gesler WM, et al. **Soc Sci Med** 1997 Mar; 44(5):657-71 (106 ref.)

HISTORY

[The destiny of the Latvian physician Lasar Kopelowitsch (1902-1941) and psychobiology] Becker R. **Medizinhist J** 1997;32(1):83-99 **(Ger)**

SOCIALIZATION

Development of capacities of communication and socialization in young deaf children: utility of a common assessment protocol for implanted or hearing aid equipped children. Dauman R, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):234–9

Do as I say: parent smoking, antismoking socialization, and smoking onset among children. Jackson C, et al. **Addict Behav** 1997 Jan–Feb;22(1):107–14

The social impact of Life Education: estimating drug use prevalence among Victorian primary school students and the statewide effect of the Life Education programme. Hawthorne G. **Addiction** 1996 Aug;91(8):1151–9

A literature–based approach to teaching values to adolescents: does it work? Adler ES, et al. **Adolescence** 1997 Summer;32(126):275–86

The acquisition of life skills through adventure–based activities and programs: a review of the literature. Moote GT Jr, et al. **Adolescence** 1997 Spring;32(125):143–67 (102 ref.)

Family structure versus parental attachment in controlling adolescent deviant behavior: a social control model. Sokol–Katz J, et al. **Adolescence** 1997 Spring; 32(125):199–215

Parental influence on children's socialization to gender roles. Witt SD. **Adolescence** 1997 Summer;32(126):253–9 (42 ref.)

Patterns of adolescent involvement in problem behaviors: relationship to self–efficacy, social competence, and life events. Chung H, et al. **Am J Community Psychol** 1996 Dec;24(6):771–84

Control–relevant intervention in the treatment of minor and major depression in a long–term care facility. Rosen J, et al. **Am J Geriatr Psychiatry** 1997 Summer;5(3):247–57

Beliefs about social integration from the perspectives of persons with mental retardation, job coaches, and employers. Chadsey–Rusch J, et al. **Am J Ment Retard** 1997 Jul;102(1):1–12

Understanding professional behavior: experiences of occupational therapy students in mental health settings. Lyons M. **Am J Occup Ther** 1997 Sep;51(8):686–92

Clinical interpretation of "understanding professional behavior: experiences of occupational therapy students in mental health settings". Tryssenaar J. **Am J Occup Ther** 1997 Sep;51(8):693–5

Early risk factors for serious antisocial behavior at age 21: a longitudinal community study. Pakiz B, et al. **Am J Orthopsychiatry** 1997 Jan;67(1):92–101

Spinal cord injury rehabilitation. 5. Through the lifespan. Cawley MF, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S73–8 (75 ref.)

Sexual socialization and motives for intercourse among Norwegian adolescents. Traeen B, et al. **Arch Sex Behav** 1996 Jun;25(3):289–302

Social skills training for adults with mental retardation in job–related settings. Huang W, et al. **Behav Modif** 1997 Jan;21(1):3–44

Origins of antisocial behavior. Negative reinforcement and affect dysregulation of behavior as socialization mechanisms in family interaction. Snyder J, et al. **Behav Modif** 1997 Apr;21(2):187–215

The therapeutic effect of reactive self–monitoring on the reduction of inappropriate social and stereotypic behaviours. Pope ST, et al. **Br J Clin Psychol** 1996 Nov; 35 (Pt 4):585–94

The impact of education groups for people with schizophrenia on social functioning and quality of life. Atkinson JM, et al. **Br J Psychiatry** 1996 Feb; 168(2):199–204

Sex differences in aggression: does social representation mediate form of aggression? Campbell A, et al. **Br J Soc Psychol** 1997 Jun;36 (Pt 2):161–71

Culture and class influences on Anglo and Puerto Rican mothers' beliefs regarding long–term socialization goals and child behavior. Harwood RL, et al. **Child Dev** 1996 Oct; 67(5):2446–61

Coping socialization in middle childhood: tests of maternal and paternal influences. Kliewer W, et al. **Child Dev** 1996 Oct;67(5):2339–57

Children's narratives about hypothetical moral dilemmas and objective measures of their conscience: mutual relations and socialization antecedents. Kochanska G, et al. **Child Dev** 1996 Aug;67(4):1420–36

Mutually responsive orientation between mothers and their young children: implications for early socialization. Kochanska G. **Child Dev** 1997 Feb;68(1):94–112

Personal storytelling as a medium of socialization in Chinese and American families. Miller PJ, et al. **Child Dev** 1997 Jun;68(3):557–68

Mothers' social coaching, mother–child relationship style, and children's peer competence: is the medium the message? Mize J, et al. **Child Dev** 1997 Apr;68(2):312–32

The early socialization of aggressive victims of bullying. Schwartz D, et al. **Child Dev** 1997 Aug;68(4):665–75

The role of socialization in male anorexia nervosa: two cases. Halperin EN. **Child Psychiatry Hum Dev** 1996 Spring; 26(3):159–68

Consultation to residential psychosocial rehabilitation agencies. Kupers TA. **Community Ment Health J** 1996 Aug; 32(4):403–13; discussion 415–8 (32 ref.)

What should be the focus of emotion regulation in children? A nonlinear dynamic mathematical model of children's peer interaction in groups. Gottman JM, et al. **Dev Psychopathol** 1997 Spring;9(2):421–52

Values in health care professional socialization: implications for geriatric education in interdisciplinary teamwork. Clark PG. **Gerontologist** 1997 Aug;37(4):441–51 (80 ref.)

Cigarette use among migrant and nonmigrant Mexican American youth: a socialization latent–variable model. Swaim RC, et al. **Health Psychol** 1996 Jul;15(4):269–81

Key influences on the professional socialisation and practice of students undertaking different pre–registration nurse education programmes in the United Kingdom. Fitzpatrick JM, et al. **Int J Nurs Stud** 1996 Oct;33(5):506–18

The social biofeedback theory of parental affect–mirroring: the development of emotional self–awareness and self–control in infancy. Gergely G, et al. **Int J Psychoanal** 1996 Dec;77 (Pt 6):1181–212

School–based secondary prevention for children with disruptive behavior: initial outcomes. Braswell L, et al. **J Abnorm Child Psychol** 1997 Jun;25(3):197–208

Social interventions for homeless substance abusers. Morgan LK. **J Addict Dis** 1995;14(4):183–95

Adolescent drinking behaviour and the role of family life: a Scottish perspective. Shucksmith J, et al. **J Adolesc** 1997 Feb;20(1):85–101

How suggestible are preschool children? Cognitive and social factors. Ceci SJ, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):948–58

Parent–assisted transfer of children's social skills training: effects on children with and without attention–deficit hyperactivity disorder. Frankel F, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1056–64

Trajectories and profiles of adaptive behavior in males with fragile X syndrome: multicenter studies. Dykens E, et al. **J Autism Dev Disord** 1996 Jun;26(3):287–301

The influence of nonhandicapped peers on the social interactions of children with a pervasive development disorder. Roeyers H. **J Autism Dev Disord** 1996 Jun; 26(3):303–20

Use of the Child Behavior Checklist and DSM–III–R diagnosis in predicting outcome of children's social skills training. Frankel F, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):149–61

Practitioner review: psychosocial treatments for conduct disorder in children. Kazdin AE. **J Child Psychol Psychiatry** 1997 Feb;38(2):161–78 (150 ref.)

Ineffective parenting and childhood conduct problems: the moderating role of callous–unemotional traits. Wootton JM, et al. **J Consult Clin Psychol** 1997 Apr;65(2):301–8

Culture and child behavior and psychosocial development. Pachter LM, et al. **J Dev Behav Pediatr** 1996 Jun; 17(3):191–8 (44 ref.)

The association between receptive nonverbal processing abilities and internalizing/externalizing problems in girls and boys. Lancelot C, et al. **J Genet Psychol** 1997 Sep; 158(3):297–302

A longitudinal study of adolescents' attitudes about assistance in the development of moral values. Zern DS. **J Genet Psychol** 1997 Mar;158(1):79–95

The effects of role socialization on the initiation of cocaine use: an event history analysis from adolescence into middle adulthood. Burton RP, et al. **J Health Soc Behav** 1996 Mar; 37(1):75–90

The social context of mental illness and violence. Hiday VA. **J Health Soc Behav** 1995 Jun;36(2):122–37 (143 ref.)

Progress in social–independent functioning of young people with Down's syndrome. Sloper P, et al. **J Intellect Disabil Res** 1996 Feb;40 (Pt 1):39–48

Socialization into nursing: nursing students as learners. Reutter L, et al. **J Nurs Educ** 1997 Apr;36(4):149–55

Epigenesis of the nurse practitioner role revisited. Roberts SJ, et al. **J Nurs Educ** 1997 Feb;36(2):67–73

Development and testing of the Nursing Role Model Competence Scale (NRMCS). Lynn MR. **J Nurs Meas** 1995 Winter;3(2):93–108

Prevalence of maternal depression and its relationship to ADL skills in children with developmental delay. Harvey JM, et al. **J Paediatr Child Health** 1997 Feb;33(1):42–6

Integration of a sexuality counseling service into a reproductive health program for persons with mental retardation. Elkins TE, et al. **J Pediatr Adolesc Gynecol** 1997 Feb;10(1):24–7

Children's normative beliefs about aggression and aggressive behavior. Huesmann LR, et al. **J Pers Soc Psychol** 1997 Feb;72(2):408–19

Autonomy and goal attainment: parenting, gender, and children's social competence. Crockenberg S, et al. **New Dir Child Dev** 1996 Fall;(73):41–55

Self in relation to other: preschoolers' verbal social comparisons within narrative discourse. Mintz J. **New Dir Child Dev** 1995 Fall;(69):61–73

Learning about self and other during requests. Smiley PA, et al. **New Dir Child Dev** 1995 Fall;(69):7–19

Explore very young children's conceptions of "self" and "other" [editorial] Sperry LL, et al. **New Dir Child Dev** 1995 Fall;(69):1–5

Young children's presentations of self in conversational narration. Sperry LL, et al. **New Dir Child Dev** 1995 Fall; (69):47–60

Incorporating political socialization theory into baccalaureate nursing education. Brown SG. **Nurs Outlook** 1996 May–Jun;44(3):120–3 (29 ref.)

Information processing, social skill, and gender in schizophrenia. Penn DL, et al. **Psychiatry Res** 1996 Jan 31;59(3):213–20

Psychosocial development and life experiences in adulthood: a 22–year sequential study. Van Manen KJ, et al. **Psychol Aging** 1997 Jun;12(2):239–46

Socialization forces and the stability of work values from late adolescence to early adulthood. Cotton L, et al. **Psychol Rep** 1997 Feb;80(1):115–24

The civilization of violence. Lester D. **Psychol Rep** 1996 Dec; 79(3 Pt 2):1122

Comment on "catholicism and indices of social pathology in the states" [comment] Lester D. **Psychol Rep** 1997 Jun; 80(3 Pt 1):1005–6. Comment on: Psychol Rep 1995 Apr;76(2):573–4.

What have you learned from your homeless experience? A phenomenological approach for counseling unsheltered homeless men. Sumerlin JR. **Psychol Rep** 1996 Dec;79(3 Pt 1):883–90

Attraction to physical activity in urban schoolchildren: parental socialization and gender influences. Brustad RJ. **Res Q Exerc Sport** 1996 Sep;67(3):316–23

[The phenomenon of aggressive behavior and potential violence in children and adolescents (editorial)] Cierpka M. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar; 46(3):141–2 **(Ger)**

[Management of violent acts within the scope of a pedagogic concept of self and social development—or: talking with school children about violence] Gebauer K. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):182–94 (Eng. Abstr.) **(Ger)**

[The status of aggressive children and victims of aggression in school] Klicpera C, et al. **Prax Kinderpsychol Kinderpsychiatr** 1996 Jan;45(1):2–9 (Eng. Abstr.) **(Ger)**

[FAUSTLOS—a curriculum for promoting social competence and preventing aggressive and violent behavior in children] Krannich S, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):236–47 (Eng. Abstr.) **(Ger)**

[Decreasing violence in the school: study of a cooperative intervention] Nolting HP, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar; 46(3):195–205 (Eng. Abstr.) **(Ger)**

[Aggression and violence in children in different contexts] Ratzke K, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):153–68 (Eng. Abstr.) **(Ger)**

[Childhood and violence: perpetrator and victim perspectives from the viewpoint of criminology] Wetzels P, et al. **Prax Kinderpsychol Kinderpsychiatr** 1997 Mar;46(3):143–52 (Eng. Abstr.) **(Ger)**

[The family's emotional environment and social skill level in schizophrenia] Motak E. **Psychiatr Pol** 1996 Nov–Dec; 30(6):929–38 (Eng. Abstr.) **(Pol)**

SOCIALIZED DENTISTRY see **STATE DENTISTRY**

SOCIALIZED MEDICINE see **STATE MEDICINE**

SOCIETIES

see related
LIBRARY ASSOCIATIONS

Meetings of the Association of American Medical Colleges and the Council of Academic Societies, 1995–1996. Friedman PJ. **Acad Radiol** 1996 Sep;3(9):770–7

Infection control: an idea whose time has come. Laxton CE. **Am J Infect Control** 1997 Feb;25(1):34–7

Cooperative agreements between academic professional associations and the Centers for Disease Control and Prevention. Tyler CW Jr, et al. **Am J Prev Med** 1996 Jul–Aug;12(4 Suppl):6–7

The role of the British Olympic Association [editorial] Budgett R. **Br J Sports Med** 1996 Jun;30(2):80–1

Proceedings, Ninety–Fifth Annual Meeting Medical Library Association, Inc. Washington, D.C. May 7–10, 1995. **Bull Med Libr Assoc** 1996 Jan;84(1):133–61

Rachael Keller Anderson Medical Library Association President 1997–1998. Braude RM. **Bull Med Libr Assoc** 1997 Jul;85(3):307–10

Associations that produce significant publications for the health sciences: results from tracking a phantom literature. Eldredge JD. **Bull Med Libr Assoc** 1996 Oct;84(4):572–9

Formation of a molecular epidemiology group? Ambrosone CB, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Aug; 6(8):651–3

Physician–assisted suicide and euthanasia [editorial] Clark DC, et al. **Crisis** 1996;17(4):146

Health economics e–mail discussion lists. Hollingsworth B. **Health Econ** 1997 Jan–Feb;6(1):95–7

Position of the American Dietetic Association: food and water safety. **J Am Diet Assoc** 1997 Feb;97(2):184–9 (44 ref.)

Position of the American Dietetic Association: nutrition in comprehensive program planning for persons with developmental disabilities. **J Am Diet Assoc** 1997 Feb; 97(2):189–93 (39 ref.)

Report on the American Dietetic Association's member needs assessment/satisfaction study. Member Needs Assessment/Satisfaction Study Steering Committee. **J Am Diet Assoc** 1997 Jan;97(1):76–80

Position of the American Dietetic Association: the role of

registered dietitians in enteral and parenteral nutrition support [published erratum appears in J Am Diet Assoc 1997 Apr;97(4):376] **J Am Diet Assoc** 1997 Mar;97(3):302–4
How ADA participates in the federal regulatory process [news] **J Am Diet Assoc** 1997 Mar;97(3):250
ADA mobilizes grassroots action to secure Medicare coverage for medical nutrition therapy. **J Am Diet Assoc** 1996 Dec;96(12):1241
Position of the American Dietetic Association: nutrition education for the public. **J Am Diet Assoc** 1996 Nov; 96(11):1183–7 (40 ref.)
Medicare reform offers ADA opportunity to promote MNT [news] **J Am Diet Assoc** 1997 Apr;97(4):378
Position of the American Dietetic Association: natural resource conservation and waste management. **J Am Diet Assoc** 1997 Apr;97(4):425–8
Role expansion for dietetics professionals [see comments] Dowling R. **J Am Diet Assoc** 1996 Oct;96(10):1001–2. Comment in: J Am Diet Assoc 1997 Feb;97(2):126.
Two perspectives on the 'good food/bad food' issue [letter] Kalman D. **J Am Diet Assoc** 1996 Dec;96(12):1238
Taking steps toward a more diverse association [letter; comment] Malum DJ. **J Am Diet Assoc** 1997 May;97(5):472 . Comment on: J Am Diet Assoc 1996 Dec;96(12):1242–4.
Taking steps toward a more diverse association [letter; comment] Matthews L, et al. **J Am Diet Assoc** 1997 May; 97(5):472. Comment on: J Am Diet Assoc 1996 Dec;96(12):1242–4.
Two perspectives on the 'good food/bad food' issue [letter] Morgan RL, et al. **J Am Diet Assoc** 1996 Dec;96(12):1238
Position of the American Dietetic Association: nutrition, aging, and the continuum of care. Weddle D, et al. **J Am Diet Assoc** 1996 Oct;96(10):1048–52 (46 ref.)
American Public Health Association. Opening doors for podiatric medicine. Willens S. **J Am Podiatr Med Assoc** 1997 Feb;87(2):90–1
Reflections on AVMA economic symposium [letter] McClenahan M. **J Am Vet Med Assoc** 1996 Jul 1;209(1):33
Responsible extra-label use of drugs [letter; comment] Reece TR. **J Am Vet Med Assoc** 1996 Nov 1;209(9):1545–6. Comment on: J Am Vet Med Assoc 1996 Sep 1;209(5):897–8.
Practice profile of members of the American College of Nurse-Midwives. Findings of a direct mail survey. **J Nurse Midwifery** 1997 Jul–Aug;42(4):355–63
Putting patients first? [letter] Ignagni K. **N Engl J Med** 1997 Oct 9;337(15):1084; discussion 1086
Managing managed care's tarnished image [editorial] Kassirer JP. **N Engl J Med** 1997 Jul 31;337(5):338–9
Putting patients first? [letter] Mischler NE. **N Engl J Med** 1997 Oct 9;337(15):1085; discussion 1086
Essays from Scotland [editorial] Kirby EC. **Nutr Health** 1997; 11(4):231–2
Leukemia Society of America testifies on FDA reform. Rudnick S. **Oncology (Huntingt)** 1996 Aug;10(8):1139
Membership in associations and suicide rates. Lester D. **Psychol Rep** 1996 Aug;79(1):202
[Injury pattern in a sports club with its own sports physician] Fredberg U, et al. **Ugeskr Laeger** 1997 May 19; 159(21):3147–50 (Eng. Abstr.) **(Dan)**
[A society of amateurs in the history of medicine] Korostelev NB. **Probl Sotsialnoi Gig Istor Med** 1996 Mar–Apr;(2):61–2 **(Rus)**
[Swedish Society for Health and Human Rights wants to make contacts (letter; comment)] Jakobsson SW, et al. **Lakartidningen** 1997 Jan 8;94(1–2):18. Comment on: Lakartidningen 1996 Nov 20;93(47):4245. **(Swe)**

HISTORY

75 years—a retrospective look at the AVA [editorial] Sutherland AK. **Aust Vet J** 1996 Jul;74(1):36
Historical note and notice: The New York Society of Forensic Sciences at Lehman College, City University of New York, 1985 to 1996. Taff ML, et al. **Bull N Y Acad Med** 1997 Summer;74(1):148–50
The hardships of turning fifty. Cécyre A. **Can Vet J** 1996 Nov;37(11):650–2 **(Eng, Fre)**
The first 25 years of the American College of Veterinary Internal Medicine. Willoughby RA. **J Vet Intern Med** 1997 May–Jun;11(3):153–60
[The Thurgau Society for Veterinary Medicine in the years 1814 to 1939] Krähenmann A. **Schweiz Arch Tierheilkd** 1997;139(1):29–34 **(Ger)**

LEGISLATION & JURISPRUDENCE

The Federal Trade Commission and the veterinarian's freedom to communicate. Hannah HW. **J Am Vet Med Assoc** 1996 Oct 1;209(7):1250–1

ORGANIZATION & ADMINISTRATION

Canadian veterinary organizations—time to reorganize? Grenn HH. **Can Vet J** 1997 Mar;38(3):153–6 **(Eng, Fre)**
The health education profession in the 21st century: setting the stage. National Commission for Health Education Credentialing, Inc., Coalition of National Health Education Organizations, USA. **J Sch Health** 1996 Oct;66(8):291–8
Kids at increased risk in a changing environment—challenges, responses, and opportunities. O'Rourke TW. **J Sch Health** 1996 Jan;66(1):41–4
Presidential address. The Medico-Legal Society. Allsopp KM. **Med Leg J** 1997;65 (Pt 1):19–33
[European federation of audiological societies (EFAS). Goals and purposes of the organization] Skarżyński H. **Otolaryngol Pol** 1995;49(5):499–506 **(Pol)**

STATISTICS & NUMERICAL DATA

Report on the 1995 membership database of the American Dietetic Association. Bryk JA, et al. **J Am Diet Assoc** 1997 Feb;97(2):197–203
Positive steps toward a multicultural association [see comments] Saracino J, et al. **J Am Diet Assoc** 1996 Dec; 96(12):1242–4. Comment in: J Am Diet Assoc 1997 May;97(5):472.

SOCIETIES, DENTAL

A worthwhile investment? [letter; comment] Holt V. **Br Dent J** 1997 Mar 8;182(5):169. Comment on: Br Dent J 1996 Dec 7–21;181(11–12):396–7.
Mike Bassett talks to the editor [letter; comment] Mackie I. **Br Dent J** 1996 Sep 21;181(6):196. Comment on: Br Dent J 1996 Jul 20;181(2):43–5.
MGDS–a worthwhile investment? [see comments] Nathan KA. **Br Dent J** 1996 Dec 7–21;181(11–12):396–7. Comment in: Br Dent J 1997 Mar 8;182(5):169. Comment in: Br Dent J 1997 May 24;182(10):371.
United we stand: divided we fall. Seward M. **Br Dent J** 1996 Oct 5;181(7):267–9
The Commonwealth Dental Association [editorial] Hunt JM. **Community Dent Health** 1996 Dec;13(4):187–8
Presidential address to the British Association for the Study of Community Dentistry, Dundee, March 1996. Pine CM. **Community Dent Health** 1996 Sep;13(3):178–9
Should the federal trade commission allow dentistry to require its members to adhere to a high standard in advertising? Allamano BL. **J Am Coll Dent** 1996 Spring; 63(1):19–22
Sealed with a scarab: the ACD's official emblem traces its heritage to ancient Egypt. Curtis EK. **J Am Coll Dent** 1997 Spring;64(1):38–9
Continued competency assessment: what the California Dental Association is doing. Gartrell RS. **J Am Coll Dent** 1996 Spring;63(1):11–3
Professional Ethics in Dentistry Network (PEDNET). Odom JG. **J Am Coll Dent** 1996 Winter;63(4):53–4
Our future is information. Brookfield JR. **J Can Dent Assoc** 1996 Feb;62(2):113
CDA is dentistry's voice. Dolman B. **J Can Dent Assoc** 1997 May;63(5):325
IADR in years to come. Glantz PO. **J Dent Res** 1997 Aug; 76(8):1431–2
Investing in your future. Keller JC. **J Dent Res** 1997 Aug; 76(8):1517–8
Helping our cause by getting on board [editorial] Laskin DM. **J Oral Maxillofac Surg** 1997 Jun;55(6):539
Double degree members and their importance to AAOMS. American Association of Oral and Maxillofacial Surgeons [editorial] Laskin DM. **J Oral Maxillofac Surg** 1997 Sep; 55(9):911
DSSNY takes the high road [editorial] Albert SB. **N Y State Dent J** 1996 Mar;62(3):4–5
The several faces of commitment. Albert SB, et al. **N Y State Dent J** 1996 Mar;62(3):54–8
An insider's view. Bempkins JL. **N Y State Dent J** 1996 Mar; 62(3):62–3
There is reason to hope... and organized dentistry provides it [editorial] Caruso JR. **N Y State Dent J** 1997 Mar; 63(3):8–9
Dental students care. Cohen LR. **N Y State Dent J** 1996 Mar;62(3):65–6
Organized dentistry is still a bargain [editorial] Feinberg E. **N Y State Dent J** 1996 Mar;62(3):10–1
Ducking responsibility [letter] Gelb M. **N Y State Dent J** 1996 Oct;62(8):16
We want to participate. Lee JY. **N Y State Dent J** 1996 Mar; 62(3):63–4
Winning the hearts and minds of dental students. Meeske J. **N Y State Dent J** 1996 Mar;62(3):60–1
DSSNY prevails in two long-fought legislative battles. Plunkett LR. **N Y State Dent J** 1996 Oct;62(8):8–11
Finding our way. Singer T. **N Y State Dent J** 1996 Mar; 62(3):64–5
The Internet: implications for the American Academy of Pediatric Dentistry. Ferguson JB. **Pediatr Dent** 1997 May; 19(3):214–7
Texas pediatric dentists' attitudes toward practice issues and the role of the component society. Kendrick AG, et al. **Pediatr Dent** 1996 Nov–Dec;18(7):433–9
[Africa can be helped. The Fédération Dentaire Internationale coordinates aid for dentally underserved countries (news)] **Schweiz Monatsschr Zahnmed** 1997; 107(4):350–1 **(Ger)**
[Presidential change in the SSO. Société Suisse d'Odonto-Stomatologie (editorial)] Hirzel HC. **Schweiz Monatsschr Zahnmed** 1996;106(6):537, 539 **(Ger, Fre)**
[The SSO in the service of science and its members. Société suisse d'Odonto-Stomatologie (editorial)] Müller R. **Schweiz Monatsschr Zahnmed** 1996;106(1):7, 9 **(Ger, Fre)**
[The information age—where does the SSO stand? Société Suisse d'Odonto-Stomatologie (editorial)] Müller R. **Schweiz Monatsschr Zahnmed** 1996;106(10):885, 887 **(Ger, Fre)**
[Dental implants. Innovations—quality assurance—acquisition] Kovács L. **Fogorv Sz** 1997 Jul; 90(7):201–8 (Eng. Abstr.) **(Hun)**
[The dental service under the new management conditions in light of the realization of the program of the Stomatology Association (All-Russian), A Strategy for the Development of Stomatology in Russia] Leont'ev VK. **Stomatologiia (Mosk)** 1996;Spec No:7–11 **(Rus)**

ECONOMICS

The core of CDA problems [editorial] Crawford PR. **J Can Dent Assoc** 1996 Sep;62(9):679

HISTORY

Jewels of the British Dental Association Hastings, Bexhill and District Section—Southern Counties Branch. **Br Dent J** 1996 Apr 6;180(7):263
History of the International Association of Oral Surgeons 1962–1986 and International Association of Oral and Maxillofacial Surgeons 1986–1996. Part I. Walker RV, et al. **Int J Oral Maxillofac Surg** 1996 Aug;25(4):254–63
The history of the association's founding [editorial] Obwegeser HL. **J Craniomaxillofac Surg** 1997 Feb; 25(1):1–3
Homage to the NMA: the NDA story (1895 to 1975)—Part 2. Dummett CO. **J Natl Med Assoc** 1997 Aug;89(8):555–63
Homage to the NMA: the NDA story (1895 to 1975)—Part 1. Dummett CO. **J Natl Med Assoc** 1997 Jul;89(7):486–92

LEGISLATION & JURISPRUDENCE

DSSNY provides for legal well-being of members. Plunkett LR. **N Y State Dent J** 1996 Mar;62(3):12–4

ORGANIZATION & ADMINISTRATION

The most respected voice in dentistry. ACD president-elect's address. September 27, 1996. Orlando, Florida. Farrell CV. **J Am Coll Dent** 1996 Winter;63(4):4–7
Councils help funnel information to and from components. **N Y State Dent J** 1996 Mar;62(3):26–8
Laws of nature prevail [editorial] Calnon WR. **N Y State Dent J** 1996 Mar;62(3):8–9
DSSNY Council on New Dentist helps students and young professionals. Stewart-Flamenbaum T. **N Y State Dent J** 1996 Mar;62(3):30–1

TRENDS

Future gazing and leadership [editorial] Chambers DW. **J Am Coll Dent** 1996 Winter;63(4):2–3

SOCIETIES, MEDICAL

The role of molecular biology in neurosurgery. Meeting of the Research Committee of the EANS in Hamburg, March 3–5, 1995. Westphal M, et al. **Acta Neurochir (Wien)** 1996; 138(6):771–5
Radiology's three crises. Linton OW. **AJR Am J Roentgenol** 1997 Apr;168(4):885–8; discussion 883
Alcohol research: celebrating the past, building the future. Gordis E. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):32A–37A
Stepping off the treadmill [letter] Flatt LJ. **Am Heart J** 1996 Dec;132(6):1323–4
Accredited laboratories. **Am Ind Hyg Assoc J** 1996 Apr; 57(4):401–12
AIHA and OSHA reform [see comments] Rose VE. **Am Ind Hyg Assoc J** 1996 Apr;57(4):325. Comment in: Am Ind Hyg Assoc J 1996 Sep;57(9):859–60.
Credentials available in human clinical nutrition: a report of the Intersociety Committee on Nutrition Certification. Chernoff R, et al. **Am J Clin Nutr** 1997 May;65(5):1562–6
The ASCP Resident Physician Section: results of surveys pertaining to "graduated responsibility for residents in anatomic pathology". American Society of Cytopathology [see comments] Nayar R, et al. **Am J Clin Pathol** 1997 Jun;107(6):632–6. Comment in: Am J Clin Pathol 1997 Jun;107(6):630–1.
The ASCP Resident Physician Section: results of surveys pertaining to graduated responsibility for residents in anatomic pathology. American Society of Cytopathology [editorial; comment] Ross JS. **Am J Clin Pathol** 1997 Jun; 107(6):630–1. Comment on: Am J Clin Pathol 1997 Jun;107(6):632–6.
Invited commentary: on the role of ethics committees in epidemiology professional societies. Coughlin SS. **Am J Epidemiol** 1997 Aug 1;146(3):209–13
Association of professors of human or medical genetics: summary of first annual workshop. Friedman JM. **Am J Med Genet** 1996 Oct 28;65(3):235–40
Interobserver and intraobserver reliability of the proposed International Continence Society, Society of Gynecologic Surgeons, and American Urogynecologic Society pelvic organ prolapse classification system [see comments] Hall AF, et al. **Am J Obstet Gynecol** 1996 Dec;175(6):1467–70; discussion 1470–1. Comment in: Am J Obstet Gynecol 1997 Jul;177(1):248.
Join the AAP [editorial] Braverman SE. **Am J Phys Med Rehabil** 1996 Sep–Oct;75(5):325
What's in a name? [editorial] Hebert SC. **Am J Physiol** 1997 Jan;272(1 Pt 2):F1

Festschrift in honor of Melvin Sabshin, M.D., Medical Director American Psychiatric Association, 1974–1997. **Am J Psychiatry** 1997 Jun;154(6 Suppl):1–92

Response to the presidential address: new challenges for proven values. Sacks HS. **Am J Psychiatry** 1997 Oct; 154(10):1350–3

Presidential Address of the American Orthopaedic Society for Sports Medicine. Boland AL. **Am J Sports Med** 1996 Nov–Dec;24(6):712–5

Re: Is there a plastic surgery beltway? [letter; comment] Dibbell DG Jr. **Ann Plast Surg** 1996 Dec;37(6):680. Comment on: Ann Plast Surg 1996 Jul;37(1):119.

Telephone conferencing. Hall DM. **Arch Dis Child** 1996 Nov; 75(5):460–1

A College of Paediatrics and Child Health. Meadow R. **Arch Dis Child** 1996 Sep;75(3):173–4

A pediatric perspective on medical necessity. Berman S. **Arch Pediatr Adolesc Med** 1997 Aug;151(8):858–9

The Student Pediatric Society: an intervention to promote a career in pediatrics. Kaplan KM. **Arch Pediatr Adolesc Med** 1997 May;151(5):528–30

A national treasure. The 82nd Clinical Congress of the American College of Surgeons [editorial] [published erratum appears in Arch Surg 1996 Dec;131(12):1317] Organ CH Jr. **Arch Surg** 1996 Oct;131(10):1019

Electronic mail (Email). Bollen M. **Aust Fam Physician** 1996 Feb;25(2):121–2

The Shepherd Foundation [letter] Rowe IL. **Aust Fam Physician** 1996 Oct;25(10):1646

Urological society [editorial] Arnold EP. **Aust N Z J Surg** 1997 Jan;67(1):1

The College as an educational institution. Bogduk N. **Aust N Z J Surg** 1997 Oct;67(10):679–81

A critical evaluation of free paper abstracts accepted for the 1996 RACS Annual Scientific Congress. Usatoff V, et al. **Aust N Z J Surg** 1997 Jan;67(1):45–6

Directory issue of the Aerospace Medical Association. **Aviat Space Environ Med** 1996 Sep;67(9 Suppl):A1–128

New AsMA HIV policy [news] **Aviat Space Environ Med** 1997 Mar;68(3):279

BMA opposes legalisation of euthanasia [news] Beecham L. **BMJ** 1997 Jul 12;315(7100):80

Medical associations: guilds or leaders? [editorial] Berwick DM. **BMJ** 1997 May 31;314(7094):1564–5

Uniting medical students worldwide: Dr. Luisa Bramana interviewed by Pritpal S. Tamber. Brumana L. **BMJ** 1997 Mar 29;314(7085):924

Presentation of Federico Hernández Morales, MD, MACP. 1994 laureate of the Puerto Rico Chapter American College of Physicians [editorial] Ramírez EA. **Bol Asoc Med P R** 1996 Jan–Mar;88(1–3):1–2

Report from the 46th annual scientific session of the American College of Cardiology, Anaheim, California, 16–19 March 1997 [see comments] Wroe CD. **Br J Clin Pract** 1997 Apr–May;51(3):157–9. Comment in: Br J Clin Pract 1997 Apr–May;51(3):131–2.

The computer research network of the Royal New Zealand College of General Practitioners: an approach to general practice research in New Zealand. Dovey SM, et al. **Br J Gen Pract** 1996 Dec;46(413):749–52

The National Counselling Service for Sick Doctors [editorial] Brandon S. **Br J Hosp Med** 1995 Dec 13–1996 Jan 16; 54(11):545–7; discussion 548

Training for hospital medicine: what the Royal Society of Medicine offers. Marston A. **Br J Hosp Med** 1996 Sep 18–Oct 1;56(6):278

Association of Anatomists, membership list. **Bull Assoc Anat (Nancy)** 1995 Dec;79(247):VI–XIV

British Medical Association Library free MEDLINE service: survey of members taking part in an initial pilot project. Rowlands JL, et al. **Bull Med Libr Assoc** 1996 Jan; 84(1):116–21

Membership list. **Bull Mem Acad R Med Belg** 1996;151:1–80

The position of the New York Academy of Medicine on physician-assisted suicide. Barondess JA. **Bull N Y Acad Med** 1997 Summer;74(1):109–13

Efforts by the American Academy of Pediatrics to prevent and reduce violence and its effects on children and adolescents. Comerci GD. **Bull N Y Acad Med** 1996 Winter;73(2):398–410

About changing faces: promoting a good quality of life for people with visible disfigurements. Partridge J. **Burns** 1997 Mar;23(2):186–7

The International Federation of Societies on Skeletal Diseases (IFSSD): a new interdisciplinary world organization on musculo-skeletal disorders [editorial] Gennari C. **Calcif Tissue Int** 1996 Mar;58(3):127–8

Euthanasia in the Netherlands: the role of the Dutch medical profession. Dillmann RJ. **Camb Q Healthc Ethics** 1996 Winter;5(1):100–6

Requesting diagnostic imaging examinations: a position paper of the Canadian Association of Radiologists. Stolberg HO, et al. **Can Assoc Radiol J** 1997 Apr;48(2):89–91

Lobbying the lawmakers. The college and assisted death [editorial] Bereza E, et al. **Can Fam Physician** 1997 Feb; 43:191–3, 201–2 **(Eng, Fre)**

College to continue leading role [letter] Ferrier C. **Can Fam Physician** 1997 May;43:843

MAINPRO. Working toward a more flexible, accessible, and meaningful program for members. Handfield-Jones. **Can Fam Physician** 1997 Apr;43:721–3 **(Eng, Fre)**

Who comes first, doctors or patients? [letter] Newman A. **Can Fam Physician** 1996 Nov;42:2135, 2137

Retrospective. Part 4: health care system [news] Perkin RL. **Can Fam Physician** 1996 Jan;42:184

"No CPR" policy could be dangerous [letter; comment] Rabheru K. **Can Fam Physician** 1997 Apr;43:609, 611, 613 . Comment on: Can Fam Physician 1996 Dec;42:2320–2, 2330–2.

Accountability and communication [news] Beatty JD. **Can J Oncol** 1995 Jul;5(2):VII–VIII

Action Statement for Health Promotion in Canada. Dafoe GH. **Can J Public Health** 1996 Jul–Aug;87(4):220 **(Eng, Fre)**

CPHA gun control campaign successful. Dafoe GH. **Can J Public Health** 1995 Nov–Dec;86(6):364 **(Eng, Fre)**

It's time for CMA to put the lid on privatization [editorial] [see comments] Carver C. **Can Med Assoc J** 1996 Oct 15; 155(8):1156–7. Comment in: Can Med Assoc J 1997 Mar 15;156(6):770–1. Comment in: Can Med Assoc J 1997 Mar 15;156(6):771.

Helping patients return to work. Kazimirski JC. **Can Med Assoc J** 1997 Mar 1;156(5):680–1 **(Eng, Fre)**

BCMA becomes first Canadian medical group to form Committee on Violence. LeBourdais E. **Can Med Assoc J** 1996 Nov 15;155(10):1477–9

Surgical centre provided military backdrop for CMA annual meeting in Sydney. Sullivan P. **Can Med Assoc J** 1996 Dec 15;155(12):1731–2

Eying guidelines [letter; comment] Wensel RH, et al. **Can Med Assoc J** 1996 Dec 15;155(12):1666, 1668. Comment on: Can Med Assoc J 1996 Sep 1;155(5):574–6.

CMA leads drive to improve physicians' management skills. Wharry S. **Can Med Assoc J** 1997 Feb 1;156(3):409–10

Role of professional organizations and managed health care. Lewin JC. **Cancer** 1997 Feb 1;79(3 Suppl):653–5

Research initiatives in vascular disease. Shively VP, et al. **Cardiovasc Surg** 1996 Oct;4(5):565–9

Five year trends in cardiac catheterization: a report from the Registry of the Society for Cardiac Angiography and Interventions. Krone RJ, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):31–5

The International Headache Society classification and diagnostic criteria are valid and extremely useful. Olesen J. **Cephalalgia** 1996 Aug;16(5):293–5; discussion 295–6

Are the International Headache Society criteria for headache useful? Pearce JM. **Cephalalgia** 1996 Aug;16(5):289–93; discussion 295–6

Message from the new president of the ISPN [letter] Bhagwati SN. **Childs Nerv Syst** 1996 Jul;12(7):369–70

A second term for the editors. Status and goals for the review process [editorial] Vatner SF, et al. **Circ Res** 1996 Jul; 79(1):1–3

Why you should support the American Heart Association! Presented at the 69th scientific sessions of the American Heart Association. November 10, 1996. New Orleans, Louisiana. Breslow JL. **Circulation** 1996 Dec 1; 94(11):3016–22

Natural course of moderate cardiac allograft rejection (International Society for Heart Transplantation grade 2) early and late after transplantation. Brunner-La Rocca HP, et al. **Circulation** 1996 Sep 15;94(6):1334–8

American College of Cardiology 45th Annual Scientific Session, Orlando, Florida, March 24 to 27, 1996. Ferguson JJ. **Circulation** 1996 Jul 1;94(1):1–5

Nutrition and children. A statement for healthcare professionals from the Nutrition Committee, American Heart Association. Fisher EA, et al. **Circulation** 1997 May 6;95(9):2332–3

Guide to primary prevention of cardiovascular diseases. A statement for healthcare professionals from the Task Force on Risk Reduction. American Heart Association Science Advisory and Coordinating Committee. Grundy SM, et al. **Circulation** 1997 May 6;95(9):2329–31

When to start cholesterol-lowering therapy in patients with coronary heart disease. A statement for healthcare professionals from the American Heart Association Task Force on Risk Reduction. Grundy SM, et al. **Circulation** 1997 Mar 18;95(6):1683–5

Management of deep vein thrombosis and pulmonary embolism. A statement for healthcare professionals. Council on Thrombosis (in consultation with the Council on Cardiovascular Radiology), American Heart Association. Hirsh J, et al. **Circulation** 1996 Jun 15; 93(12):2212–45 (451 ref.)

Automatic external defibrillators for public access defibrillation: recommendations for specifying and reporting arrhythmia analysis algorithm performance, incorporating new waveforms, and enhancing safety. A statement for health professionals from the American Heart Association Task Force on Automatic External Defibrillation, Subcommittee on AED Safety and Efficacy. Kerber RE, et al. **Circulation** 1997 Mar 18;95(6):1677–82

Fiber, lipids, and coronary heart disease. A statement for healthcare professionals from the Nutrition Committee, American Heart Association. Van Horn L. **Circulation** 1997 Jun 17;95(12):2701–4 (53 ref.)

Confessions of an American clinical anatomist. Seifert MF. **Clin Anat** 1997;10(3):208–9

First Annual Conference of Indian Autonomic Society 1–2 October 1994, Cuttack, Orissa, India. **Clin Auton Res** 1996 Feb;6(1):49–50

The emerging infections network: a new venture for the Infectious Diseases Society of America. Executive Committee of the Infectious Diseases Society of America Emerging Infections Network. **Clin Infect Dis** 1997 Jul; 25(1):34–6

National Health and Medical Research Council recommendations on diphtheria vaccination. **Commun Dis Intell** 1997 Jun 12;21(12):165

Congratulations to Michael Deren [letter] Jacobson CE Jr. **Conn Med** 1996 Aug;60(8):505

Data, data everywhere [editorial; comment] Nelson LD. **Crit Care Med** 1997 Aug;25(8):1265. Comment on: Crit Care Med 1997 Aug;25(8):1320–3.

American Diabetes Association Postgraduate Course, 1996: treatment and prevention of diabetes Bloomgarden ZT. **Diabetes Care** 1996 Jul;19(7):784–6

American Diabetes Association annual meeting 1996: complications, treatment of type I diabetes, and IGF-I. Bloomgarden ZT. **Diabetes Care** 1997 Jan;20(1):111–4

IDF Member Associations' activities presented in the 15th IDF Congress Exhibition [published erratum appears in Diabetes Res Clin Pract 1996 Jun;33(1):67] Okuno G, et al. **Diabetes Res Clin Pract** 1995 Dec;30(3):243–7

The emergent needs for basic research, education, and surveillance of antimicrobial resistance. Problems facing the report from the American Society for Microbiology Task Force on Antibiotic Resistance. Jones RN. **Diagn Microbiol Infect Dis** 1996 Aug;25(4):153–61 (57 ref.)

Seventh World Congress of the International Rehabilitation Medicine Association (IRMA VII, Washington DC, 9–16 April 1994). Towards the 21st century: challenges for rehabilitation [editorial] Tuel SM. **Disabil Rehabil** 1996 Jun; 18(6):277–8

Award of the Felix Hoppe-Seyler prize of the German Society for Laboratory Medicine, of the Gábor Szász Prize of the German Society for Clinical Chemistry and of the National IFCC-AVL Award. Körber F. **Eur J Clin Chem Clin Biochem** 1997 May;35(5):405–9

The Junior Radiologists Forum of the European Association of Radiology. A brief outline of its role and performed and planned activities. Pavone P. **Eur Radiol** 1996;6 Suppl 1:S1–2

Presidential lecture, European Spine Society, 1995. The role of Europe in the spine--past and future perspectives. Postacchini F. **Eur Spine J** 1995;4(6):323–6

Building organizational consensus. Hobbs J. **Fam Med** 1997 Jun;29(6):385–6

Family medicine--a world view [editorial] Jones R. **Fam Pract** 1995 Dec;12(4):387–8

Revised American Society for Reproductive Medicine classification of endometriosis: 1996. **Fertil Steril** 1997 May; 67(5):817–21

Quality control by the Society of Hair Testing. Sachs H. **Forensic Sci Int** 1997 Jan 17;84(1–3):145–50 (4 ref.)

American Gastroenterological Association medical position statement: guidelines on the use of esophageal pH recording. **Gastroenterology** 1996 Jun;110(6):1981

The global mission of the American Gastroenterological Association in advancing gastroenterology: rising to new international challenges. Fromm H. **Gastroenterology** 1996 Oct;111(4):1141–2

The American Gastroenterological Association: the defining force in gastroenterology--for everybody! Gelfand MD. **Gastroenterology** 1996 Sep;111(3):811–2

Report on consensus conference on colorectal cancer: Royal College of Surgeons of Edinburgh 1993. Fearon KC, et al. **Health Bull (Edinb)** 1996 Jan;54(1):22–31 (17 ref.)

The Scottish Royal Colleges: a prospective survey of continuing medical education undertaken by their examiners. Thomas JS, et al. **Health Bull (Edinb)** 1996 Jan; 54(1):66–78

Education ... Citizens for Public Research and Education Funding [news] **Hosp Health Netw** 1997 Mar 5;71(5):14

Physicians. Home-grown HMOs. Meyer H. **Hosp Health Netw** 1997 Jan 5;71(1):46, 48, 50

Infertility revisited: the state of the art today and tomorrow. The ESHRE Capri Workshop. European Society for Human Reproduction and Embryology. **Hum Reprod** 1996 Aug;11(8):1779–807 (254 ref.)

The American College of Obstetricians and Gynecologists: a decade of responding to violence against women. Jones RF 3rd, et al. **Int J Gynaecol Obstet** 1997 Jul;58(1):43–50

Autonomy and practice: the case of complementary practitioners in the UK. Tovey P. **Int J Qual Health Care** 1997 Feb;9(1):55–9

Society for Adolescent Medicine new members. April 5, 1996–January 3, 1997. **J Adolesc Health** 1997 Feb; 20(2):174–6

Presidential address. Elster A. **J Adolesc Health** 1997 Sep; 21(3):197–202

Society for Adolescent Medicine 1997 meeting. Rosenfeld WD. **J Adolesc Health** 1996 May;18(5):373–8

American College of Cardiology report on ECGEXAM. Mason JW, et al. **J Am Coll Cardiol** 1997 Feb;29(2):466–8

Education--the foundation and future of the ACC. Popp RL. **J Am Coll Cardiol** 1997 Sep;30(3):845–6

The American College of Cardiology National Database: progress and challenges. American College of Cardiology Database Committee. Weintraub WS, et al. **J Am Coll Cardiol** 1997 Feb;29(2):459–65

How to review a manuscript for the Journal of the American College of Dentists. Chambers DW. **J Am Coll Dent** 1995 Winter;62(4):49–52

The ADA Washington office. Palmer C. **J Am Coll Dent** 1996 Spring;63(1):23–4

1996 nephrology curriculum: American Society of Nephrology [editorial] Kumar R. **J Am Soc Nephrol** 1997 Jun;8(6):1016–7

Nephrology core curriculum. The American Society of Nephrology and the American Society of Nephrology Training Program Directors Committee. Kumar R, et al. **J Am Soc Nephrol** 1997 Jun;8(6):1018–27

Arkansas physicians in the AMA. Your representatives to medicine's strongest voice. Kolb JM Jr. **J Ark Med Soc** 1997 Jan;93(8):404–6

Highlights of the ninth annual scientific meeting of the Association for Academic Minority Physicians, 1995. Trotman BW, et al. **J Assoc Acad Minor Phys** 1996; 7(1):11–2

Proliferation of medical associations [letter] Agarwal A. **J Assoc Physicians India** 1995 Jan;43(1):72

The American Orthopaedic Association: critical choices. Weinstein SL. **J Bone Joint Surg Am** 1997 Sep;79(9):1282–9

The publication outcome for the papers presented at the 1990 ABA conference. Landry VL. **J Burn Care Rehabil** 1996 Jan–Feb;17(1):23A–6A

Con: anesthesia societies should not consider endorsement of patient care guidelines written by other societies. Arens JF. **J Cardiothorac Vasc Anesth** 1996 Jun;10(4):538–9

Pro: anesthesia societies should consider endorsement of patient care guidelines written by other societies. Roizen MF. **J Cardiothorac Vasc Anesth** 1996 Jun;10(4):536–7

Practice styles and preferences of ASCRS members—1996 survey [see comments] Leaming DV. **J Cataract Refract Surg** 1997 May;23(4):527–35. Comment in: J Cataract Refract Surg 1997 May;23(4):457.

Greek physicians' and dentists' compliance with the British society for antimicrobial chemotherapy (BSAC) guidelines for preventing bacterial endocarditis. Panos G, et al. **J Chemother** 1996 Aug;8(4):270–7

The Society for Intravenous Anesthesia: aims and goals [editorial] Glass PS, et al. **J Clin Anesth** 1997 Sep;9(6 Suppl):1S–2S

More IMG involvement needed. Bagby RJ. **J Fla Med Assoc** 1996 Oct;83(8):533–4

Can a specialty society educate its members to think differently about clinical decisions? Results of a randomized trial. Gifford DR, et al. **J Gen Intern Med** 1996 Nov; 11(11):664–72

Treatment of the fellow eye in acute angle–closure glaucoma: a case report and survey of members of the American Glaucoma Society [see comments] Davidorf JM, et al. **J Glaucoma** 1996 Aug;5(4):228–32. Comment in: J Glaucoma 1996 Aug;5(4):225–7.

The Registry of the International Society for Heart and Lung Transplantation: thirteenth official report—1996. Hosenpud JD, et al. **J Heart Lung Transplant** 1996 Jul;15(7):655–74

Consistencies and controversies in the application of the International Society for Heart and Lung Transplantation working formulation for heart transplant biopsy specimens. Rapamycin Cardiac Rejection Treatment Trial Pathologists. Winters GL, et al. **J Heart Lung Transplant** 1996 Jul;15(7):728–35

Members of the European Association for the Study of the Liver, 1996. **J Hepatol** 1996;25 Suppl 1:224–42

Medical ethics and torture—Indian perspective. Chaudhuri BR. **J Indian Med Assoc** 1996 Jul;94(7):259–61

Medical profession and torture. Choudhuri PK. **J Indian Med Assoc** 1996 Jul;94(7):255–6

Role of medical journals in torture. Ray I. **J Indian Med Assoc** 1996 Jul;94(7):267–9

Family Planning Training Programme of the Indian Medical Association. Sobti JC. **J Indian Med Assoc** 1996 Jun; 94(6):245–7

Torture and medical professior—an overview. Umesh MS. **J Indian Med Assoc** 1996 Jul;94(7):257–8, 261 (17 ref.)

Membership directory, Society for Leukocyte Biology, 1996. **J Leukoc Biol Suppl** 1996;:70–146

Caring for Georgia's elderly: MAG's involvement. Thurman L, et al. **J Med Assoc Ga** 1997 Apr;86(2):138–43

National Medical Association/National Institutes of Health Workshop on Violence and the Conduct of Research. Workgroup Proceedings, June 1–2, 1994. Martinez RA, et al. **J Natl Med Assoc** 1995 Nov;87(11):797–802

The National Medical Association—an advocate for a smoke-free environment. Morgan RC Jr. **J Natl Med Assoc** 1996 Dec;88(12):766–7

Sleeping through a revolution inaugural address. Morgan RC Jr. **J Natl Med Assoc** 1996 Oct;88(10):625–8

The National Medical Association and the Black press: a critical partnership for the promotion of excellent health care for all African Americans. Morgan RC Jr. **J Natl Med Assoc** 1997 Apr;89(4):230–2

Nuclear medicine organizations in Europe [news] Ell PJ. **J Nucl Med** 1996 Nov;37(11):26N, 31N

A proposed revision of the ACOEM Code of Ethics. American College of Occupational and Environmental Medicine. Rothstein MA. **J Occup Environ Med** 1997 Jul; 39(7):616–22

ACOEM Code of Ethical Conduct. American College of Occupational and Environmental Medicine [editorial] Teichman RF. **J Occup Environ Med** 1997 Jul;39(7):614–5

Double degree members and their importance to AAOMS. American Association of Oral and Maxillofacial Surgeons [editorial] Laskin DM. **J Oral Maxillofac Surg** 1997 Sep; 55(9):911

Indications for pediatric gastrointestinal endoscopy: a medical position statement of the North American Society for Pediatric Gastroenterology and Nutrition. Squires RH Jr, et al. **J Pediatr Gastroenterol Nutr** 1996 Aug; 23(2):107–10

Why should there be a National Perinatal Association? [editorial] Perelman R. **J Perinatol** 1996 Jan–Feb;16(1):1–2

Evaluation of a journal club as a forum to practise critical appraisal skills. Sandifer QD, et al. **J R Coll Physicians Lond** 1996 Nov–Dec;30(6):520–2

Weight management and fitness in the community. Fitzgerald G. **J R Soc Health** 1996 Aug;116(4):264–5

Submitting a paper to the Society's Journal. Watkins J, et al. **J R Soc Health** 1997 Feb;117(1):20–2

Oral presentations for surgical meetings. Edwards MJ, et al. **J Surg Res** 1997 Feb 15;68(1):87–90 (4 ref.)

A Canadian National Trauma Registry: the time is now. McLellan BA. **J Trauma** 1997 May;42(5):763–8

Organizations of medical interest. **JAMA** 1997 Jan 15; 277(3):187–92

Consortium 'gangs up' on prostate cancer [news] Gunby P. **JAMA** 1996 Oct 16;276(15):1209

Medicine and public health: pursuing a common destiny. Reiser SJ. **JAMA** 1996 Nov 6;276(17):1429–30

East meets west to cure Russia's ills [news] Skolnick AA. **JAMA** 1997 Feb 26;277(8):613–4

On the evolution of a society—with an apology to Charles Darwin. Fabri PJ. **JPEN J Parenter Enteral Nutr** 1996 Sep–Oct;20(5):316–8

UK academy of medicine [letter; comment] Macara AW. **Lancet** 1996 Oct 19;348(9034):1108. Comment on: Lancet 1996 Sep 14;348(9029):700.

Medical ethics: the Israeli Medical Association [letter] Mahler C. **Lancet** 1997 Aug 30;350(9078):669; discussion 669–70

Medical ethics: the Israeli Medical Association [letter] Malnick SD. **Lancet** 1997 Aug 30;350(9078):669; discussion 669–70

Medical ethics: the Israeli Medical Association [letter] Prosor R. **Lancet** 1997 Aug 30;350(9078):669; discussion 669–70

Medical ethics: the Israeli Medical Association. Summerfield D. **Lancet** 1997 Jul 5;350(9070):63–4

Distinctive features of the region. Chatti ME. **Med Educ** 1995;29 Suppl 1:28–30

Confidentiality and the AMA's new code of ethics [letter] Gerber P. **Med J Aust** 1997 Jul 7;167(1):50

Confidentiality and the AMA's new code of ethics: an imprudent formulation? [letter] Komesaroff PA. **Med J Aust** 1997 Feb 17;166(4):221

Confidentiality and the AMA's new code of ethics: an imprudent formulation? [see comments] Kuhse H. **Med J Aust** 1996 Sep 16;165(6):327–9. Comment in: Med J Aust 1996 Nov 4;165(9):532.

A layman's role on the GMC. Sims R. **Med Leg J** 1996;64 (Pt 3):114–28

Lighting a candle in the Romanian darkness. Gallagher T. **Med War** 1992 Jan–Mar;8(1):25–30

MSMS task force explores alternatives. **Mich Med** 1996 Mar; 95(3):30–2

New group insurance trust product. MSMS members have another high–quality, low–cost option. DeShano CL. **Mich Med** 1996 Nov;95(11):25

MSMS a full–service organization. Greenhoe S. **Mich Med** 1996 Nov;95(11):22–3

Building family values. Doctor urges members to participate in "medical family". Papp JP. **Mich Med** 1997 Mar;96(3):14, 46

Doctors jump to medical Web sites via MSMSNET. Skutar C. **Mich Med** 1997 May;96(5):8

MMA sets policy at 143rd annual meeting [news] **Minn Med** 1996 Nov;79(11):33, 35

MMA calls for fair Medicare reimbursement. Christensen RG. **Minn Med** 1997 May;80(5):34

Physicians give MMA high ratings. Dombrosk S. **Minn Med** 1997 May;80(5):19–20

mma.unveils.World.Wide.Web.home.page. Dombrosk S. **Minn Med** 1996 Nov;79(11):20–4

Tips for improving the MMA's home page [letter] Zook P. **Minn Med** 1997 Jan;80(1):6

1997–8 membership directory of the Missouri State Medical Association. **Mo Med** 1997 Aug;94(8):405–539

1996–97 membership directory of the Missouri State Medical Association. **Mo Med** 1996 Aug;93(8):409–545

The MSNJ House of Delegates at work. **N J Med** 1996 Aug; 93(8):45–52

MSNJ's expert panel on late–term abortion. Medical Society of New Jersey. Caggiano AP Jr, et al. **N J Med** 1997 Aug; 94(8):25–8 (0 ref.)

MSNJ's been workin' on the web. Hutner G, et al. **N J Med** 1997 Feb;94(2):27–9

Interview with Carl Restivo, Jr, MD [interview by Bill Berlin] Restivo C Jr. **N J Med** 1997 Jun;94(6):23–5

Interview with Joseph W. Sokolowski, Jr, MD [interview by Bill Berlin] Sokolowski JW Jr. **N J Med** 1997 Feb; 94(2):23–5

Forty years of randomised trials in the New Zealand Medical Journal. Neal B, et al. **N Z Med J** 1996 Oct 11; 109(1031):372–3 (6 ref.)

The American Cancer Society versus tobacco. The first 40 years or the last? Dessart G. **Nat Med** 1997 Jul;3(7):712–3

International Medical Commission, Bhopal: a model for the future. Bertell R, et al. **Natl Med J India** 1996 Mar–Apr; 9(2):86–91

Nephrology and renal replacement therapy in South Korea: a brief report on the Korean Society of Nephrology and Korean Society of Transplantation. Kim MJ. **Nephrol Dial Transplant** 1996 Jun;11(6):979–81

Position statement on the physician workforce in neurology. American Academy of Neurology. **Neurology** 1996 Apr; 46(4):1184–5

Managed care and neurologists: ethical considerations. The Ethics and Humanities Subcommittee of the Practice Committee of the American Academy of Neurology. **Neurology** 1997 Aug;49(2):321–2

Standards of efficacy for evaluation of treatment outcomes in urinary incontinence: recommendations of the Urodynamic Society. Blaivas JG, et al. **Neurourol Urodyn** 1997;16(3):145–7

Definition and classification of urinary incontinence: recommendations of the Urodynamic Society. Blaivas JG, et al. **Neurourol Urodyn** 1997;16(3):149–51

Combinations of maximum urinary flow rate and American Urological Association symptom index that are more specific for identifying obstructive and non–obstructive prostatism. Schacterle RS, et al. **Neurourol Urodyn** 1996; 15(5):459–70; discussion 470–2

Lack of correlation of the American Urological Association Symptom 7 Index with urodynamic bladder outlet obstruction. Sirls LT, et al. **Neurourol Urodyn** 1996; 15(5):447–56; discussion 457

Ethics: the new mainstream issue for the ICU and SCCM [editorial] Hoyt JW. **New Horiz** 1997 Feb;5(1):3–5

Screening examination of premature infants for retinopathy of prematurity. A joint statement of the American Academy of Pediatric, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology. **Ophthalmology** 1997 May;104(5):888–9

Pennsylvania Medical Society 1996–97 membership directory. **Pa Med** 1996 Aug;99(8):28–216

Vocal minority: international medical graduates [interview by Diane K. Blair] Alvear DT. **Pa Med** 1997 Apr; 100(4):20–1

More answers to your PO questions. Lance MP. **Pa Med** 1996 Feb;99(2):16–7

Physician leaders testify on tort reform. Rhoads JE Jr. **Pa Med** 1996 Apr;99(4):28–30

European Centre of Pathology as a basis of progress of European pathology in the future. Zubritsky AN. **Pathol Res Pract** 1996 Nov;192(11):1079–80; discussion 1081

Contribution of the Italian scientists to the ISDQP. International Society of Diagnostic Quantitative Pathology. Collan Y. **Pathologica** 1997 Feb;89(1):89–90

American Pediatric Society presidential address 1996: the APS and academic pediatrics. Battaglia FC. **Pediatr Res** 1996 Dec;40(6):777–83

Trends in practice characteristics: analyses of 19 periodic surveys (1987–1992) of Fellows of the American Academy of Pediatrics. Brotherton SE, et al. **Pediatrics** 1997 Jul; 100(1):8–18

A message to nurses from the nurse council member [editorial] Uttley L. **Perit Dial Int** 1996 Nov–Dec;16(6):556

Allen W. Cowley, Jr. 70th president of APS. Can APS capture the bright future of physiology? Cowley AW Jr. **Physiologist** 1997 Apr;40(2):49, 58–64

Who owns the guidelines? [editorial] Holmes B. **Practitioner** 1996 Nov;240(1568):617

Errors by the American Psychiatric Association, the American Psychological Association, and the National Educational, Association in representing homosexuality in amicus briefs about Amendment 2 to the U.S. Supreme Court. Cameron P, et al. **Psychol Rep** 1996 Oct; 79(2):383–404 (70 ref.)

Special resuscitation situations. An advisory statement on conditions which may require modifications in resuscitation procedures or techniques. Prepared by members of the International Liaison Committee on Resuscitation. **Resuscitation** 1997 Apr;34(2):129–49

The ILCOR advisory statements. International Liaison Committee on Resuscitation [editorial] Baskett PJ, et al. **Resuscitation** 1997 Apr;34(2):97–8

Early defibrillation. An advisory statement by the Advanced Life Support Working Group of the International Liaison Committee on Resuscitation. Bossaert L, et al. **Resuscitation** 1997 Apr;34(2):113–4

Advisory statements of the International Liaison Committee on Resuscitation ('ILCOR'). Chamberlain DA, et al. **Resuscitation** 1997 Apr;34(2):99–100

Recommended guidelines for reviewing, reporting, and conducting research on in–hospital resuscitation: the in–hospital 'Utstein style'. A statement for healthcare professionals from the American Heart Association, the European Resuscitation Council, the Heart and Stroke Foundation of Canada, the Australian Resuscitation Council, and the Resuscitation Councils of Southern Africa. Cummins RO, et al. **Resuscitation** 1997 Apr; 34(2):151–83

Single rescuer adult basic life support. An advisory statement from the Basic Life Support Working Group of the International Liaison Committee on Resuscitation (ILCOR). Handley AJ, et al. **Resuscitation** 1997 Apr; 34(2):101–8

The Universal ALS algorithm. An advisory statement by the Advanced Life Support Working Group of the International Liaison Committee on Resuscitation. Kloeck W, et al. **Resuscitation** 1997 Apr;34(2):109–11

Paediatric life support. An advisory statement by the Paediatric Life Support Working Group of the International Liaison Committee on Resuscitation. Nadkarni V, et al. **Resuscitation** 1997 Apr;34(2):115–27 (69 ref.)

Society of Pneumology of the French Languages. Membership list 1996. **Rev Mal Respir** 1996;13(3 Suppl):1–24

Opinions on the abortion legislature [news] Cronjé HS. **S Afr Med J** 1996 Sep;86(9 Suppl):1170

MASA and a truth commission for the medical profession [editorial] Mandell BB, et al. **S Afr Med J** 1996 Sep; 86(9):1070–1

The formation of one Medical Association of South Africa [editorial] Mutloane M. **S Afr Med J** 1996 Aug;86(8):941

New SDSMA members. Physicians, medical students and residents who have recently joined the South Dakota State Medical Association. **S D J Med** 1997 Feb;50(2):73–5

The Scandinavian Prostatic Cancer Group [editorial] Hedlund PO. **Scand J Urol Nephrol** 1997 Feb;31(1):5–7

Doctors' fees [editorial] Lim MK. **Singapore Med J** 1997 May;38(5):187–8

Substance abuse and dependence in physicians: the Missouri Physicians' Health Program. Bohigian GM, et al. **South Med J** 1996 Nov;89(11):1078–80

Use of a national data base to assess perioperative risk, morbidity, mortality, and cost savings in coronary artery bypass grafting. Nikas DJ, et al. **South Med J** 1996 Nov; 89(11):1074–7

Validation of the American Spinal Injury Association (ASIA) motor score and the National Acute Spinal Cord Injury Study (NASCIS) motor score. El Masry WS, et al. **Spine** 1996 Mar 1;21(5):614–9

Bringing scholarship to the courtroom: the Daubert decision and its impact on the Teratology Society [editorial] Brent RL. **Teratology** 1995 Nov;52(5):247–51

Friend of the court. **Tex Med** 1997 Jul;93(7):24–6

Making a difference. Ortolon K. **Tex Med** 1996 Sep; 92(9):22–5

Rationale for a medical society sponsored expert witness program. Scarano VR. **Tex Med** 1996 Dec;92(12):80–5

German Society for Thoracic and Cardiovascular Surgery, Swiss Society for Thoracic and Cardiovascular Surgery, Austrian Society for Thoracic and Cardiovascular Surgery. Membership list 1995. **Thorac Cardiovasc Surg** 1996 Feb; 44 Suppl 1:4–38

Cardiac surgery in Germany during 1995. A report by the German Society for Thoracic and Cardiovascular Surgery. Kalmár P, et al. **Thorac Cardiovasc Surg** 1996 Jun; 44(3):161–4

Oncology in transition: the pivotal role of the American Society of Clinical Oncology. Glick JH. **Trans Am Clin Climatol Assoc** 1996;108:245–55; discussion 255–8

Members. American Ophthalmological Society. **Trans Am Ophthalmol Soc** 1996;94:xviiii–xxxii

Recommendations for the reporting of resected neoplasms of the kidney. Association of Directors of Anatomical and Surgical Pathology. Nochomovitz LE, et al. **Virchows Arch** 1996 May;428(2):71–3

Panel two: reporting and advertising success rates—the Gordian Knot of assisted reproductive technology. The role of professional societies. Garcia JE. **Womens Health Issues** 1997 May–Jun;7(3):188–92; discussion 194–6

Inherited thrombophilia [news] **World Health Forum** 1996; 17(2):210

[What should not be forgotten in the development of the next program of the Czech Surgical Society (editorial)] Hájek M. **Rozhl Chir** 1996 May;75(5):229 **(Cze)**

[Internal medicine cooperation with UEMS (Union of Medical Specialists)] Thorsgaard N, et al. **Nord Med** 1997 Feb;112(2):53–4 **(Dan)**

[KNMVD's involvement in swine fever. Provision of information is essential for control. Royal Dutch Society of Veterinary Medicine (news)] Deleu S. **Tijdschr Diergeneeskd** 1997 Apr 15;122(8):239–40 **(Dut)**

[The practice needs a generally competent veterinarian] Deleu S. **Tijdschr Diergeneeskd** 1996 Dec 1;121(23):688–95 **(Dut)**

[Palliative care—objectives and accomplishments of the Association for the Development of Palliative Care] Kermarec J. **Bull Acad Natl Med** 1996 Nov;180(8):1951–64; discussion 1964–5 (13 ref.) (Eng. Abstr.) **(Fre)**

[The educated societies and the development of medical evaluation] Fourquet F, et al. **Cah Sociol Demogr Med** 1997 Jan–Mar;37(1):53–75 (Eng. Abstr.) **(Fre)**

[The Medical Council and expertise on surgical responsibility] Glorion B. **Chirurgie** 1996;121(7):519–21 **(Fre)**

[Organization of well-informed medical societies in France] Fourquet F, et al. **Presse Med** 1997 May 3–10;26(15):715–8 **(Fre)**

[Cardiology 96: "State of the art". 62nd anniversary of the German Society for Cardiology. April, 11–13, 1996, Manheim] Stiefelhagen P. **Anaesthesist** 1996 Aug; 45(8):760–3 **(Ger)**

[Report on the XXIII Neonatal and Infant Respiratory Symposium 10 to 15 March 1996 in Vail, Colorado] Holzki J. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep;31(7):442–5 **(Ger)**

[Clinical competence of the surgeon and surgical risk. Teupitz Discussion 18 and 19 October in Motzen] Horntrich J. **Chirurg** 1997 Apr;68(4):suppl 101–3 **(Ger)**

[3rd Gerontopsychiatric Specialty Conference in Dusseldorf] Haupt M. **Fortschr Neurol Psychiatr** 1996 Jul;64(7):278–9 **(Ger)**

[96th Congress of the Society of North and North West German Neurologists and Psychiatrists from 21 to 23 April 1995 in Hamburg] Kunze K, et al. **Fortschr Neurol Psychiatr** 1996 Jul;64(7):280–3 **(Ger)**

[In recognition of Prof. Dr. Kurt-Alphons Jochheim on the award of the Salomon-Neumann Medal of the German Society of Social Medicine and Prevention] Brennecke R. **Gesundheitswesen** 1996 Feb;58(2):69–71 **(Ger)**

[Occupational cancer] Dietz a, et al. **HNO** 1997 Jul; 45(7):495–7 **(Ger)**

[The middle ear] Hüttenbrink KB. **HNO** 1997 Jul;45(7):503–5 **(Ger)**

[Cochlear implants] Marangos N. **HNO** 1997 Jul;45(7):505–6 **(Ger)**

[Standards for otorhinolaryngology—practical goal or wishful thinking?] Schneider W. **HNO** 1997 May; 45(5):349–50 **(Ger)**

[18th European Cardiology Congress. Cardiology 200 years after discovery of digitalis glycosides. Birmingham/UK, 25–29 August 1996] Lindner UK, et al. **Internist (Berl)** 1996 Nov;37(11):1179–85 **(Ger)**

[Medical education. Educational reform—teaching must be in the classroom. Homburg/Saar International Symposium, 16–17 February 1996: Perspectives in Medical Education] Oberhofer E. **Internist (Berl)** 1996 May;37(5):532–3 **(Ger)**

[Progress and continuing education in medicine. Practical medicine—what is new and important? 20th Interdisciplinary Forum of the Federal Physician Group, Cologne, January 1996] Stiefelhagen P. **Internist (Berl)** 1996 May;37(5):524–33 **(Ger)**

[Hepatology 1995—from molecular biology to clinical aspects. Basel Liver Week, October 1995] Stiefelhagen P. **Internist (Berl)** 1996 Mar;37(3):324–7 **(Ger)**

[Integration of medical progress into patient management. 101st Congress of the German Society of Internal Medicine, April 1996, Wiesbaden] Stiefelhagen P. **Internist (Berl)** 1996 Sep;37(9):950–4 **(Ger)**

[Cardiology 96: "State of the art". 62nd Annual Congress of the German Society of Cardiology, 11–13 April 1996 in Mannheim] Stiefelhagen P. **Internist (Berl)** 1996 Sep; 37(9):955–8 **(Ger)**

[Position of the German Society of Surgery and the Professional Organization of German Surgeons on "changes in the spectrum of the health provision contract of hospitals and their effects"] Pichlmayr R, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:656–8 **(Ger)**

[Meeting report] Janz D. **Nervenarzt** 1997 Mar;68(3):279 **(Ger)**

[Reports of the German Society of Psychiatry, Psychotherapy and Neurology] Weig W, et al. **Nervenarzt** 1996 Dec;67(12):1046–8 **(Ger)**

[The role of the Swiss Medical Association (FMH) in health care of migrants] Steiner-König U. **Schweiz Rundsch Med Prax** 1997 May 7;86(19):797–9 (Eng. Abstr.) **(Ger)**

[German Society for Thoracic and Cardiovascular Surgery membership list] **Thorac Cardiovasc Surg** 1997 Feb;45(1 Suppl):7–39 **(Ger)**

[Doppler and duplex diagnosis of non-arteriosclerotic vascular diseases. Congress report of the Summer Congress of the Professional Circle for Vascular Diagnosis of DEGUM. 1995 Summer Congress] Ludwig MM. **Ultraschall Med** 1996 Aug;17(4):199–204 **(Ger)**

[56th Annual Meeting of the American Association for the Surgery of Trauma. 19–21 September 1996, Houston, USA] Ertel W. **Unfallchirurg** 1997 Apr;100(4):305–6 **(Ger)**

[Record breaking-AAOS 1997. 64th annual meeting American Academy of Orthopedic Surgeons, 13.–17. 02. 1997, San Francisco] Hüfner T, et al. **Unfallchirurg** 1997 Jun;100(6):483–6 **(Ger)**

[1996 Annual Meeting of the Orthopedic Trauma Association] Wippermann B. **Unfallchirurg** 1997 Jul; 100(7):569–70 **(Ger)**

[Committee "Hospital Hygiene and Infection Prevention" of the Robert-Koch institutes not authorized by a vote of the scientific organization] **Unfallchirurgie** 1996 Dec; 22(6):279–80 **(Ger)**

[List of members] **Verh Dtsch Ges Pathol** 1996;80:717–53 **(Ger)**

[Report on the 1st Psychotherapy World Congress in Vienna] Kindermann J. **Wien Med Wochenschr** 1996;146(17):478–9 (Eng. Abstr.) **(Ger)**

[Report of the 51st Congress of the German Society of Digestive and Metabolic Diseases 18–21 September 1996 in Aachen] Mattern S. **Z Gastroenterol** 1997 Feb; 35(2):XVII–XXIX **(Ger)**

[Opening address at the 62nd Annual Meeting of the German Society of Cardiology-Cardiovascular Research, Mannheim, 11–13 April 1996] Lüderitz B. **Z Kardiol** 1996; 85 Suppl 6:1–4 **(Ger)**

[Address of the president on the occasion of the 62nd Annual Meeting of the German Society of Cardiology-Cardiovascular Research, Mannheim, 11–13 April 1996] Meyer J. **Z Kardiol** 1996;85 Suppl 6:5–10 **(Ger)**

["The Stent Summit", 30–31 May 1996 in London] Grundmann RT. **Zentralbl Chir** 1996;121(9):794–5 **(Ger)**

[Standards in treatment and assessment of transsexual patients. German Society of Sexual Research, Academy of Sexual Medicine and Society of Sexual Science] Becker S, et al. **Zentralbl Gynakol** 1997;119(8):398–401 **(Ger)**

[Satellite symposium "Fetal Pulse Oximetry Sub Partu" of the North German Society of Gynecology and Obstetrics in Göttingen 29 September 1995] Butterwegge M. **Zentralbl Gynakol** 1996;118(3):174–5 **(Ger)**

[The study group for Information Processing in Gynecology and Obstetrics—Section of the German Society of Gynecology and Obstetrics e. V. (AIG): Responsibilities and current projects] Seufert R, et al. **Zentralbl Gynakol** 1997;119(8):396–7 (Eng. Abstr.) **(Ger)**

[Letters to the editor] Bonaccorsi P. **Acta Otorhinolaryngol Ital** 1996 Aug;16(4):392–3 **(Ita)**

[The Italian Association of Radiology (SIRM) and the industrial sector for scientific research: potential development (editorial)] Cardinale AE. **Radiol Med (Torino)** 1996 Nov;92(5):513 **(Ita)**

[Community health care and medicine—on a view point of the Japan Medical Association] Tsuboi E. **Hokkaido Igaku Zasshi** 1997 Mar;72(2):145–53 **(Jpn)**

[Report on medico-legal data from the mass-investigation performed by the Medico-Legal Society of Japan (XIV). Autopsy cases of traffic accidents in Japan (1990–1994). Planning and Development Committee of The Medico-Legal Society of Japan] **Nippon Hoigaku Zasshi** 1997 Apr;51(2):120–6 (Eng. Abstr.) **(Jpn)**

[Report on medico-legal data from the mass-investigation performed by The Medico-Legal Society of Japan (XV). Autopsy cases of therapeutic complications and other medical misadventures in Japan (1981–1991). Planning and Development Committee of The Medico-Legal Society of Japan] **Nippon Hoigaku Zasshi** 1997 Apr;51(2):127–34 (Eng. Abstr.) **(Jpn)**

[A directory of the Japanese Nephrology Society. 1997] **Nippon Jinzo Gakkai Shi** 1997 Mar;:1–352 **(Jpn)**

[Report of Ad hoc Lp(a) Standardization Subcommittee in Standardization Committee of the Japan Society of Clinical Pathology. I. Summary of the results of questionnaire to the Lp(a) test reagent markers] Sakurabayashi I, et al. **Rinsho Byori** 1996 Mar;44(3):287–91 **(Jpn)**

[Report of Ad hoc Lp (a) standardization subcommittee in Standardization Committee of the Japan Society of Clinical Pathology. II. Results of the survey for the correction of-inter-laboratory variations by the unified reference material] Sakurabayashi I, et al. **Rinsho Byori** 1996 Mar; 44(3):292–6 **(Jpn)**

[The committee of physicians—an important part of quality assurance?] Gudmundsson E. **Tidsskr Nor Laegeforen** 1996 Oct 30;116(26):3147–8 **(Nor)**

[On historical site—the Norwegian Medical Society's new headquarters] Holck P. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3611–3 (Eng. Abstr.) **(Nor)**

[A wave of uprising and sharpened profile or the unions] Jensen P. **Tidsskr Nor Laegeforen** 1996 Sep 20; 116(22):2652–3 **(Nor)**

[Conference of the American Occupational Hygienists. 18–24 May 1996, Washington, USA] Indulski JA. **Med Pr** 1997; 48(2):223–36 **(Pol)**

[Report from a monthly scientific conference in the Pediatric Clinic of the Medical Academy in Hanover and from the 27th European congress of the Heidelberg society of child nephrology, September, 1993] Prandota J. **Pediatr Pol** 1996 Apr;71(4):377–9 **(Pol)**

[Resolution of the main board of the Polish Society of Allergology] Płusa T. **Pneumonol Alergol Pol** 1997; 65(1–2):129–33 **(Pol)**

[Report from the IX Scientific-Educational Conference of the Polish Society of Nephrology 10–12 October 1996 Włocławek] Ostrowski J, et al. **Pol Arch Med Wewn** 1997 Mar;97(3):297–9 **(Pol)**

[Position of the Principle Board of the Polish Allergy Society on unconventional methods of diagnosis and treatment] **Pol Merkuriusz Lek** 1996 Oct;1(4):291 **(Pol)**

[The Brazilian Digestive Motility Society and Arquivos de Gastroenterologia (editorial)] Michelsohn NH. **Arq Gastroenterol** 1995 Jul–Sep;32(3):101 **(Por)**

[First Congress of N.I. Pirogov Surgical Association (Tashkent, 16–18 October 1996)] Perel'man MI. **Khirurgiia (Mosk)** 1997;(4):4–7 **(Rus)**

[Report No. 1001 of the meeting of the Scientific Society of Surgeons of the City of Kiev and the Kiev region, 12/17/95] **Klin Khir** 1996;(10):54–5 **(Rus)**

[Russian Scientific Society of Clinical Laboratory Diagnosis] Men'shikov VV. **Klin Lab Diagn** 1996 Sep–Oct;(5):53 **(Rus)**

[The First Congress of the Association of Clinical Cytologists of the Russian Federation] Petrova AS, et al. **Klin Lab Diagn** 1996 Jul–Aug;(4):3–4 **(Rus)**

[The 14th World Congress of International Association of traffic medicine (August 20–23, 1995, Singapore)] El'garova LV. **Med Tr Prom Ekol** 1996;(8):41–2 **(Rus)**

[The plenary Meeting of the Research Medical Association of Phthisiologists and the Research and Practical Conference af the Mari Republican Center for Tuberculosis

Control] Rybka LN. **Probl Tuberk** 1997;(2):64–5 **(Rus)**

[The Spanish Pediatric Association and Internet (editorial)] Moya M, et al. **An Esp Pediatr** 1997 Jun;46(6):533 **(Spa)**

[Guideline on the management of threatening hemoptysis. The SEPAR Working Group] **Arch Bronconeumol** 1997 Jan;33(1):31–40 **(Spa)**

[Requirements, guidelines and recommendations of the Mexican Society of Cardiology concerning teaching of cardiology] Guadalajara Boo JF, et al. **Arch Inst Cardiol Mex** 1996 Nov–Dec;66(6):539–43 **(Spa)**

[Our international projection (editorial)] Mendive Arbeloa JM. **Aten Primaria** 1997 Feb 15;19(2):63–4 **(Spa)**

[Influence of the Mexican Federation of Gynecology and Obstetrics on the development of gynecology and obstetrics] Ahued Ahued JR. **Ginecol Obstet Mex** 1996 Sep;64:385–91 **(Spa)**

[Mexican consensus on Helicobacter pylori. National Consensus Group of the Mexican Association of Gastroenterology] **Rev Gastroenterol Mex** 1997 Jan–Mar; 62(1):41–5 (0 ref.) **(Spa)**

[Presidential transition address: the Mexican Association of Gastroenterology (editorial)] Robles Díaz G. **Rev Gastroenterol Mex** 1997 Jan–Mar;62(1):64–5 **(Spa)**

[Presidential acceptance address: the Mexican Association of Gastroenterology (editorial)] Sanjurjo Garán JL. **Rev Gastroenterol Mex** 1997 Jan–Mar;62(1):66–7 **(Spa)**

[Results of inquiries on women's networks are needed (letter)] Berntsson C. **Lakartidningen** 1997 Mar 19;94(12):1052 **(Swe)**

[A letter to the chairman of the Medical Society: dangerous to have "wrong" views––what does the Society do?] Fischer J. **Lakartidningen** 1997 Jul 23;94(30–31):2628 **(Swe)**

[Future structure of the Medical Society. Members must have the opportunity to influence the society's policy] Johnson K. **Lakartidningen** 1997 May 28;94(22):2053 **(Swe)**

[The central committee of the Medical Society: Sweden needs all its physicians!] Leth R. **Lakartidningen** 1997 Feb 12;94(7):493–4 **(Swe)**

[Continuing education in a deep crisis. Medical societies should take over the responsibility!] Zederfeldt B. **Lakartidningen** 1997 Feb 19;94(8):600 **(Swe)**

[Report on the activities of the Scientific Society of Surgeons, 1993–1995] **Klin Khir** 1996;(8):54–5 **(Ukr)**

[Plenum of the management of the Scientific Society of Surgeons of Ukraine] **Klin Khir** 1996;(5):54–5 **(Ukr)**

ECONOMICS

All physicians should pay dues! Norland C. **Mo Med** 1996 Oct;93(10):639–41

HISTORY

Belgian neurology: the past, the present and the future. Dehaene I. **Acta Neurol Belg** 1996 Sep;96(3):178–84

The Sir James Mackenzie Cardiological Society and the American College of Cardiology. Kligfield P, et al. **Am J Cardiol** 1996 Oct 1;78(7):808–13

History of the Association of Directors of Anatomic and Surgical Pathology. Frable WJ. **Am J Clin Pathol** 1996 Oct;106(4 Suppl 1):S50–7

Sing for the gov nor: a call to advocacy for tropical medicine and hygiene. Burke DS. **Am J Trop Med Hyg** 1997 Jan; 56(1):1–6

The World Federation of Societies of Anesthesiologists: McMechan's final legacy? Bacon DR. **Anesth Analg** 1997 May;84(5):1130–5

Response to "Iconography in anesthesiology: the importance of society seals in the 1920s and 1930s" [letter; comment] Ichim S. **Anesthesiology** 1997 Jun;86(6):1427; discussion 1428. Comment on: Anesthesiology 1996 Aug;85(2):414–9.

Response to "Iconography in anesthesiology: the importance of society seals in the 1920s and 1930s" [letter; comment] Welsh B. **Anesthesiology** 1997 Jun;86(6):1428. Comment on: Anesthesiology 1996 Aug;85(2):414–9.

What, another milestone? The first steps in the founding of a specialty. Wiegenstein J. **Ann Emerg Med** 1997 Sep; 30(3):329–33

The Annals July 1997: 50 years young [editorial] Jackson B. **Ann R Coll Surg Engl** 1997 Jul;79(4):241–2

The British Association of Head and Neck Oncologists within the wider perspectives of the USA and Europe. Shaw HJ. **Ann R Coll Surg Engl** 1997 May;79(3 Suppl):111–4

The fellowship and the definition of surgery [letter] Thomson JP. **Ann R Coll Surg Engl** 1997 May;79(3 Suppl):126

The Fellowship and the definition of surgery. Williams DI. **Ann R Coll Surg Engl** 1996 Nov;78(6 Suppl):283–8

The heritage of the Southern Thoracic Surgical Association. Alford WC Jr. **Ann Thorac Surg** 1997 Feb;63(2):305–8

The American Academy of Ophthalmology [editorial] Letocha CE. **Arch Ophthalmol** 1996 Dec;114(12):1508–9

The College of American Pathologists, 1946–1996: laboratory accreditation. Hamlin WB, et al. **Arch Pathol Lab Med** 1997 Jul;121(7):745–53

The College of American Pathologists, 1946–1996. The surveys program. Wagner LR. **Arch Pathol Lab Med** 1997 Jun;121(6):646–51

The College of American Pathologists, 1946–1996. Ethics and professional relations. Wagner LR. **Arch Pathol Lab Med** 1997 Sep;121(9):1009–14

The College of American Pathologists, 1946–1996: membership and its benefits. Wagner LR, et al. **Arch Pathol Lab Med** 1997 Apr;121(4):427–37

The College of American Pathologists, 1946–1996. Building the structure. Wagner LR, et al. **Arch Pathol Lab Med** 1997 Feb;121(2):177–86

The early history of the New Zealand Association of Psychotherapists and the related movement for primary prevention in mental health: some recollections. Cook PS. **Aust N Z J Psychiatry** 1996 Jun;30(3):405–9

Preserving individualism in the organizational society: "Cooperation" and American medical practice, 1900–1920. Madison DL. **Bull Hist Med** 1996 Fall;70(3):442–83

150 years of the New York Academy of Medicine: a series of exhibitions. Black LF, et al. **Bull N Y Acad Med** 1996 Winter;73(2):433–55

Some historical perspectives on AACC. Roethel DA. **Clin Chem** 1997 Jul;43(7):1232–5

History of the Association of Bone and Joint Surgeons. Derkash RS. **Clin Orthop** 1997 Apr;(337):306–9

American Gastroenterological Association. The centennial year: the development of important ideas during the last 100 years. Farrar JT. **Gastroenterology** 1997 Jan;112(1):287

American Gastroenterological Association. Our new president––Phillip P. Toskes, M.D. McGuigan JE. **Gastroenterology** 1997 May;112(5):1437–41

Introduction: from reproductive endocrinology to reproductive health. The short history of a new departure by ESHRE. European Society for Human Reproduction and Embryology. Diczfalusy E, et al. **Hum Reprod** 1996 Aug;11(8):1776–7

History of the IEA: 1984–1995. Holland WW, et al. **Int J Epidemiol** 1997 Feb;26(1):228–39

Medicine and the Dublin Philosophical Society (1683–1686). Counihan HE. **Ir J Med Sci** 1997 Apr–Jun;166(2):102–5

SAM memory: a link between past and future. Slap GB. **J Adolesc Health** 1996 Sep;19(3):191–4

AAMP 1995 distinguished service award to Carroll Moton Leevy, MD. Wilson DE. **J Assoc Acad Minor Phys** 1996; 7(1):13–4

The history of the association's founding [editorial] Obwegeser HL. **J Craniomaxillofac Surg** 1997 Feb; 25(1):1–3

Doctors and corporatist politics: the case of the Mexican medical profession. Nigenda G, et al. **J Health Polit Policy Law** 1997 Feb;22(1):73–99

James W. Kincaid, MD. 1859–1933. Conner EH. **J Ky Med Assoc** 1996 Aug;94(8):344

Robert G. Cox––reflections on 35 eventful years as KMA's leader [interview] Cox RG. **J Ky Med Assoc** 1996 Nov; 94(11):482–6

From "Doc" on horseback to managed care––in commemoration of the 140th Anniversary of the Mississippi State Medical Association. Evers KA. **J Miss State Med Assoc** 1996 Dec;37(12):856–905

Homage to the NMA: the NDA story (1895 to 1975)––Part 1. Dummett CO. **J Natl Med Assoc** 1997 Jul;89(7):486–92

Essayists, essays, and hosts: Daniel Hale Williams Medical Reading Club. Greene Reed T, et al. **J Natl Med Assoc** 1996 Oct;88(10):663–77

Marcus Fitzherbert Wheatland, MD. Oestreich AE. **J Natl Med Assoc** 1995 Nov;87(11):829–38

The history of otolaryngology in Canada: the provincial and regional organizations concerned with standards, accreditation, and continuing medical education. Baxter JD. **J Otolaryngol** 1996 Oct;25(5):349–56

A brief report on the history and role of The American Psychosomatic Society. Oken D, et al. **J Psychosom Res** 1997 Mar;42(3):307–10

The creation of the Faculty of Community Medicine (now the Faculty of Public Health Medicine) of the Royal Colleges of Physicians of the United Kingdom. Warren MD. **J Public Health Med** 1997 Mar;19(1):93–105

Robert Columbus Bruce, M.D., 1877–1944. Brown JM. **J S C Med Assoc** 1997 Feb;93(2):79

"The character and usefulness of this calling:" thoughts on the coming sesquicentennial [editorial] Bryan CS. **J S C Med Assoc** 1997 Apr;93(4):162–3

The birth of Kidney International. de Wardener H, et al. **Kidney Int Suppl** 1996 Dec;57:S107–9

The International Society of Nephrology years: a perspective. Seldin DW, et al. **Kidney Int Suppl** 1996 Dec; 57:S105–6

The Triological Society: cradle of certification. Cantrell RW. **Laryngoscope** 1997 Oct;107(10):1287–91

Presidential address from 1963 meeting of the American Triological Society in Los Angeles. House HP. **Laryngoscope** 1997 Apr;107(4):453–4

Presidential reflections. Keller AP Jr. **Laryngoscope** 1997 May;107(5):585–7

Celebrating a century of scholarship, leadership, and service. Neel HB 3rd. **Laryngoscope** 1997 May;107(5):588–91

Capital, profession and medical technology: the electro-therapeutic institutes and the Royal College of Physicians, 1888–1922. Ueyama T. **Med Hist** 1997 Apr; 41(2):150–81

Camden County Medical Society's sesquicentennial [letter] Reichman JH. **N J Med** 1996 Sep;93(9):10, 12

Nathan Davis and medicine's move from trade to profession. Ziskin L, et al. **N J Med** 1996 Dec;93(12):43–6

The organization of the Child Neurology Society: a personal view. Swaiman KF. **Pediatr Neurol** 1996 Jul;15(1):9–16

History of the American Society of Maxillofacial Surgeons: 1947–1997. Cohen SR, et al. **Plast Reconstr Surg** 1997 Sep; 100(3):766–801

The early history of the Association of Surgeons of South Africa. Skapinker S. **S Afr J Surg** 1996 May;34(2):66

The formation and evolution of the Society of Nuclear Medicine. Harris CC. **Semin Nucl Med** 1996 Jul; 26(3):180–90

Revisiting Texas' pathology frontier. Franke J. **Tex Med** 1996 Apr;92(4):50–2

John Coakley Lettsom and "the highest and most divine profession, that can engage human intellect". Porter R. **Trans Med Soc Lond** 1994–95;111:22–34

Factory work for doctors: the early years of the Section on Industrial Medicine and Public Health of the College of Physicians of Philadelphia. Gunn JL. **Trans Stud Coll Physicians Phila** 1995 Dec;17:61–93

[The Czech Surgical Society between the two world wars] Sváb J, et al. **Rozhl Chir** 1996 Mar;75(3):131–8 (Eng. Abstr.) **(Cze)**

[Pioneers in medicine in Lebanon and the first medical associations] Khouri R. **J Med Liban** 1996;44(4 Suppl):S3–11 **(Fre)**

[150 years of the Berliner Tierärztliche Gesselschaft. Historical survey] Scheunemann H. **Berl Munch Tierarztl Wochenschr** 1996 Oct;109(10):392–6 **(Ger)**

[The early history of the German Society of Social Medicine and Prevention] Schaefer H, et al. **Gesundheitswesen** 1996 Oct;58 Suppl 3:157–8 **(Ger)**

[German influence on Japan ophthalmology (letter)] Shimizu K. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):481–2 **(Ger)**

[History of the Swiss Society of Pathology. A fragment] Baumann RP. **Pathologe** 1997 May;18 Suppl 1:S33–9 **(Ger)**

[100 years of the German Society of Pathology (1897–1997)] Dhom G. **Pathologe** 1997 May;18 Suppl 1:S1–17 (Eng. Abstr.) **(Ger)**

[Historical development of the Thüringen Society of Surgery] Schröder H. **Zentralbl Chir** 1996;121(2):148–50 **(Ger)**

[The antecedents of the 1876 Legislation No. XIV: The Hungarian Council of Public Health (1868), the Hungarian Society for Public Health (1886) and the Judiciary Medical Council (1890)] Honti J. **Orv Hetil** 1997 Apr 20; 138(16):1009–11 **(Hun)**

[History of the Numismatic Division of the Hungarian Society of Medical History 1976–1996] Süle T. **Orv Hetil** 1997 Jun 29;138(26):1700–2 **(Hun)**

[100th anniversary of the Hungarian Association of Gynecologists] Szállási A. **Orv Hetil** 1996 Nov 3; 137(44):2469–70 **(Hun)**

[Chronicle of the Hungarian Society of Electroencephalography (EEG)] Walsa R. **Orv Hetil** 1996 Aug 25;137(34):1877–80 **(Hun)**

[Ophthalmology in Japan and the foundation of the Ophthalmological Society] **Nippon Ganka Gakkai Zasshi** 1996 Dec;100(12 Spec No):18–31 **(Jpn)**

[From barber-surgeons' guild to medical association. A 400th anniversary] Sandvik H, et al. **Tidsskr Nor Laegeforen** 1996 Dec 10;116(30):3614–7 (Eng. Abstr.) **(Nor)**

[What did the Medical Society of Warsaw contribute to Polish medicine] Konopka S. **Arch Hist Med (Warsz)** 1972; 35(4):381–92 **(Pol)**

[History of the Warsaw Medical Society library] Skrzypczak A. **Arch Hist Med (Warsz)** 1972;35(4):405–17 **(Pol)**

[Outstanding leaders of the Warsaw Medical Society] Stembrowicz W. **Arch Hist Med (Warsz)** 1972; 35(4):393–403 **(Pol)**

[Sanitation-hygienic state of Kamieniec Podolski in light of publications of the Podolski Medical Society in Kamieniec (1859–1865)] Wacek S. **Arch Hist Med (Warsz)** 1972; 35(4):455–63 **(Pol)**

[The activity of the Lublin branch of the Polish Society of phthisiopneumonology in 1948–1995] **Pneumonol Alergol Pol** 1996;64 Suppl 1:134–5 **(Pol)**

[Professor Edward Szczeklik––life and achievements of an honorary member of the Polish Society of Internal Medicine] Kucharz EJ. **Pol Arch Med Wewn** 1996 Dec; 96(6):605–7 **(Pol)**

[Professor Walery Jaworski––life and achievements of the first honorary member of the Polish Society of Internal Medicine] Kucharz EJ. **Pol Arch Med Wewn** 1995 Nov; 94(5):456–9 **(Pol)**

[Ideas and works of Albert Schweitzer in Poland] Gaertner H. **Przegl Lek** 1996;53(6):514–6 (Eng. Abstr.) **(Pol)**

[Formation of the Pirogov Society (the 110th anniversary of the Society of Russian Physicians in commemoration of N.I. Pirogov)] Mirskiĭ MB. **Gig Sanit** 1996 Nov–Dec; (6):43–5 **(Rus)**

[History of organization and activities of Moscow Therapeutic Society] Gembitskiĭ EB. **Klin Med (Mosk)** 1997;75(4):68–71 **(Rus)**

[A century of the Bryansk Society of Physicians] Shchigolev II. **Probl Sotsialnoi Gig Istor Med** 1996 Sep–Oct;(5):52–4 **(Rus)**

[100th anniversary of the Moscow Scientific-Practical Society of Otorhinolaryngology] Pal'chun VT, et al. **Vestn Otorinolaringol** 1997;(3):4–10 **(Rus)**

[125 years of the Serbian Medical Society. Traditions which arose in history, values which endure] Paunović VR. **Srp Arh Celok Lek** 1997 May–Jun;125(5–6):129–31 **(Scc)**

SOCIETIES, MEDICAL

[Dates from Serbian history--on the 125th anniversary of the Serbian Medical Society (editorial)] Jokanović V. **Med Pregl** 1997 May-Jun;50(5-6):169-73 **(Scr)**

[1910-1911, a crucial biennium in the history of the Asociación Española de Urología (I). How our association was born] Maganto Pavón E. **Actas Urol Esp** 1997 Apr; 21(4):319-29 (Eng. Abstr.) **(Spa)**

[1910-1911, a crucial biennium in the history of the Asociación Española de Urología (II). Its founding members, the I National Congress and the first Record of the Minutes] Maganto Pavon E. **Actas Urol Esp** 1997 Apr;21(4):330-6 (Eng. Abstr.) **(Spa)**

[History of the Gastroenterology Society of Puebla, first branch of the Mexican Gastroenterology Association] Tovia Arrioja F, et al. **Rev Gastroenterol Mex** 1995 Oct-Dec;60(4 Suppl 1):S49-50 **(Spa)**

[The Kiev Surgical Society] Bohonis P. **Lik Sprava** 1996 Oct-Dec;(10-12):171-5 **(Ukr)**

LEGISLATION & JURISPRUDENCE

Louisiana Cancer and Lung Trust Fund Board. Whiting RS, et al. **J La State Med Soc** 1996 Apr;148(4):151-4

ORGANIZATION & ADMINISTRATION

Options for electoral change. Bollen M. **Aust Fam Physician** 1996 Mar;25(3):275-6

Getting to know about Colombia [letter] Caballero-Uribe CV. **Br J Rheumatol** 1997 Feb;36(2):268-9

Growing popularity of complementary medicine leads to national organization for MDs. Gray C. **CMAJ** 1997 Jul 15;157(2):186-8

Future tense: ASGE strides toward the millennium [editorial] Kozarek RA. **Gastrointest Endosc** 1997 Jun;45(6):535-6

S.O.S. (Save our societies). Appleby C. **Hosp Health Netw** 1996 Oct 5;70(19):58, 60, 62

Research programs of the AOA and their role in osteopathic medical education. Retz KC, et al. **J Am Osteopath Assoc** 1996 Nov;96(11):679-83

Ophthalmology and the Internet [editorial] Lindstrom RL. **J Cataract Refract Surg** 1996 Nov;22(9):1127-9 (11 ref.)

More like war than peace [letter] Gbur CJ Jr, et al. **J Endovasc Surg** 1996 Feb;3(1):123

The scientific platform and activity of the Ukrainian INEC Section. Rubenchik BL, et al. **J Environ Pathol Toxicol Oncol** 1996;15(2-4):299-301 (4 ref.)

Who are we? A few do it all [editorial] Shea JD. **J Fla Med Assoc** 1996 Jan;83(1):11-2

The Gastroenterological Society of Australia. Toouli J. **J Gastroenterol Hepatol** 1997 May;12(5):S5-7

World Hypertension League statement. Hypertension control in the world: an agenda for the coming decade. Based on the 1995 WHL Ottawa Declaration. **J Hum Hypertens** 1997 Apr;11(4):245-7

Quo vadis. (where are we going?). McMillan FL. **J Miss State Med Assoc** 1997 Apr;38(4):130-1

Auxiliary to the National Medical Association: its commitment to the National Medical Association [editorial] Dunmore GP. **J Natl Med Assoc** 1997 Jun;89(6):377

HIV/AIDS in African Americans: role of the National Medical Association in diagnosis, treatment, and eradication. Morgan RC Jr. **J Natl Med Assoc** 1997 Jan; 89(1):14-8

The American Board of Independent Medical Examiners. Peterson KW, et al. **J Occup Environ Med** 1997 Jun; 39(6):509-14

Pediatric rheumatology clinic populations in the United States: results of a 3 year survey. Pediatric Rheumatology Database Research Group. Bowyer S, et al. **J Rheumatol** 1996 Nov;23(11):1968-74

The incidence of pediatric rheumatic diseases: results from the Canadian Pediatric Rheumatology Association Disease Registry [see comments] Malleson PN, et al. **J Rheumatol** 1996 Nov;23(11):1981-7. Comment in: J Rheumatol 1996 Nov;23(11):1834-7.

Pediatric rheumatology in the United Kingdom: data from the British Pediatric Rheumatology Group National Diagnostic Register. Symmons DP, et al. **J Rheumatol** 1996 Nov;23(11):1975-80

Hematopoietic stem cell transplants for autoimmune disease: role of EULAR. European League Against Rheumatism. van de Putte LB, et al. **J Rheumatol Suppl** 1997 May; 48:98-9

Facts you may not know--and opinions you may not have considered--about the AIUM's voluntary accreditation program [letter] Arger PH. **J Ultrasound Med** 1996 Aug; 15(8):611-2

Michigan physician groups and the MSMS services they use. Bouffard K. **Mich Med** 1996 Nov;95(11):17-21

Putting patients first--a 100-year tradition. Lichter PR. **Ophthalmology** 1997 Mar;104(3):347-54

Assuring relevancy in changing times. Greco VF. **Pa Med** 1996 Dec;99(12):14-5

Statement to the TRC by Dr Edoo Barker, Medical Association of South Africa [editorial] Barker E, et al. **S Afr Med J** 1997 Aug;87(8):977-8

Constitution and Bylaws amendments. **Tenn Med** 1997 Jun; 90(6):225-35

[Bulgarian Surgical Society. Minutes. Bylaws] **Khirurgiia (Sofiia)** 1996;49(4):4-8 **(Bul)**

[The future of gynecology-obstetrics in Europe] Lansac J. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(3):329-32 (Eng. Abstr.) **(Fre)**

[The Society of Physicians: from yesterday to tomorrow. The missions of the Society of Physicians and ordinal elections] Boustany FN. **J Med Liban** 1996;44(4 Suppl):S19-20 **(Fre)**

[Necessity to adapt the functioning of the Society of Physicians to medical and social change] Daher M. **J Med Liban** 1996;44(4 Suppl):S21-7 **(Fre)**

[The physician elected to the Counsel of the Order of Physicians. Criteria and responsibilities] Dahfer M. **J Med Liban** 1996;44(1):2-3 **(Fre)**

[The charter of the public organization, the Association of Neurosurgeons of Russia] **Zh Vopr Neirokhir Im N N Burdenko** 1996 Apr-Jun; (2):40-1 **(Rus)**

STANDARDS

ACCME--a burdensome bureaucracy. An alternative suggestion for obtaining continuing medical education credits [editorial] Muschenheim F. **Ann Clin Lab Sci** 1996 Mar-Apr;26(2):192-3

Cytopathology laboratory improvement programs of the College of American Pathologists: Laboratory Accreditation Program (CAP LAP) and Performance Improvement Program in Cervicovaginal Cytology (CAP PAP). Nielsen ML. **Arch Pathol Lab Med** 1997 Mar; 121(3):256-9 (26 ref.)

Code of Ethics of the Canadian Medical Association [see comments] **Can Med Assoc J** 1996 Oct 15; 155(8):1176A-1176D. Comment in: Can Med Assoc J 1996 Oct 15;155(8):1063-5. **(Eng, Fre)**

The CMA Code of Ethics: more room for reflection [editorial; comment] Kenny NP. **Can Med Assoc J** 1996 Oct 15;155(8):1063-5. Comment on: Can Med Assoc J 1996 Oct 15;155(8):1148-9. Comment on: Can Med Assoc J 1996 Oct 15;155(8):1176A-D.

Revised Code of Ethics wins CMA approval [see comments] Rafuse J. **Can Med Assoc J** 1996 Oct 15;155(8):1148-9. Comment in: Can Med Assoc J 1996 Oct 15;155(8):1063-5.

Practice protocol for the examination of specimens removed from patients with ovarian tumors: a basis for checklists. Cancer Committee, College of American Pathologists. Scully RE, et al. **Gynecol Oncol** 1996 Nov;63(2):276-89

Society for Healthcare Epidemiology of America and Infectious Diseases Society of America Joint Committee on the Prevention of Antimicrobial Resistance: guidelines for the prevention of antimicrobial resistance in hospitals. Shlaes DM, et al. **Infect Control Hosp Epidemiol** 1997 Apr; 18(4):275-91

Consensus statement: guidelines for PSA following radiation therapy. American Society for Therapeutic Radiology and Oncology Consensus Panel. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1035-41

American Brachytherapy Society (ABS) consensus guidelines for brachytherapy of esophageal cancer. Clinical Research Committee, American Brachytherapy Society, Philadelphia, PA. Gaspar LE, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1;38(1):127-32

Informed consent for research purposes in intensive care patients in Europe--part II. An official statement of the European Society of Intensive Care Medicine. Working Group on Ethics. Lemaire F, et al. **Intensive Care Med** 1997 Apr;23(4):435-9

White paper on cataract surgery. American Academy of Ophthalmology and American Society of Cataract and Refractive Surgery [see comments] **J Cataract Refract Surg** 1996 Jul-Aug;22(6):645-50. Comment in: J Cataract Refract Surg 1996 Jul-Aug;22(6):643-4.

Recommended breast cancer surveillance guidelines. American Society of Clinical Oncology. **J Clin Oncol** 1997 May;15(5):2149-56

Tumor marker guidelines [letter] Sklaroff RB. **J Clin Oncol** 1997 May;15(5):2175-6

Medical council of India [letter] Agarwal AK. **Natl Med J India** 1996 Jan-Feb;9(1):50

Treatment of respiratory syncytial virus bronchiolitis: 1995 poll of members of the European Society for Paediatric Infectious Diseases. Kimpen JL, et al. **Pediatr Infect Dis J** 1997 May;16(5):479-81

Clinical assessment of the 1987 American College of Rheumatology criteria for rheumatoid arthritis [see comments] Levin RW, et al. **Scand J Rheumatol** 1996; 25(5):277-81. Comment in: Scand J Rheumatol 1997;26(3):229.

[Guidelines for autopsy findings and handling of tissues of subjects with probable or certain Creutzfeldt-Jacob disease or other prion diseases. Italian Society of Pathologic Anatomy and Diagnostic Cytopathology] **Pathologica** 1996 Aug;88(4):328-30 **(Ita)**

[Guidelines and recommendations of the Mexican Society of Cardiology for training in cardiology] Galván Montiel O. **Arch Inst Cardiol Mex** 1996 May-Jun;66(3):288-90 **(Spa)**

STATISTICS & NUMERICAL DATA

Operative laparoscopy: American Association of Gynecologic Laparoscopists, 1993 membership survey. Levy BS, et al. **J Am Assoc Gynecol Laparosc** 1994 Aug; 1(4 Pt 1):301-5

The Registry of the International Society for Heart and Lung Transplantation: fourteenth official report--1997. Hosenpud JD, et al. **J Heart Lung Transplant** 1997 Jul; 16(7):691-712

Rates of membership of professional organisations in general practice [letter] Ward JE, et al. **Med J Aust** 1997 Jul 21; 167(2):107-8

Bibliometric analysis of the scientific productivity of the Italian Society of Nephrology for a period of five consecutive years (1990-1994). Schena FP, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2359-60

[Survey of the opinion of the readers of Revista Espanõla de Cardiología] Marrugat de la Iglesia J. **Rev Esp Cardiol** 1997 Jan;50(1):1-4 (Eng. Abstr.) **(Spa)**

TRENDS

For what we stand. Kohorn EI. **Am J Obstet Gynecol** 1996 Dec;175(6):1414-7

Quality and liability issues with the Papanicolaou smear: the role of professional organizations in reform initiatives. Stanley MW. **Arch Pathol Lab Med** 1997 Mar;121(3):321-6 (10 ref.)

Change creates challenges and opportunities for rheumatologists and the American College of Rheumatology. Weaver AL. **Arthritis Rheum** 1997 Apr; 40(4):610-4

Comment: what is 'ethics'? [comment] Lowy C. **Aust N Z J Psychiatry** 1997 Feb;31(1):83-4. Comment on: Aust N Z J Psychiatry 1997 Feb;31(1):76-82.

The ethics committee of a psychiatric college: its procedures and themes [see comments] Pargiter R, et al. **Aust N Z J Psychiatry** 1997 Feb;31(1):76-82. Comment in: Aust N Z J Psychiatry 1997 Feb;31(1):83-4.

The significance of an international society. Di Rocco C. **Childs Nerv Syst** 1996 May;12(5):234-41

A proper role for organized medicine in a new era [editorial] Clough JD. **Cleve Clin J Med** 1997 May;64(5):232-3

Joseph M. Mathews oration. Changing times, hard times, time's a-wasting. Gathright JB Jr. **Dis Colon Rectum** 1997 Apr;40(4):385-7

Establishing SGO's strategic direction for the next millennium. Society of Gynecologic Oncologists. Gershenson DM. **Gynecol Oncol** 1997 Aug;66(2):190-6

Presidential message. The challenge of the 1990s and beyond. Levy BS. **J Am Assoc Gynecol Laparosc** 1994 Nov;2(1):5-6

The meeting, the society, and the future: where do we go from here? Couser WG. **J Am Soc Nephrol** 1997 Jun; 8(6):972-9

Cancer education--challenges of the present. Kennedy BJ. **J Cancer Educ** 1997 Spring;12(1):17-9

Past, present and future of gastroenterology in Japan: the 100th anniversary of the Japanese Society of Gastroenterology in 1998. Sato N, et al. **J Gastroenterol Hepatol** 1997 May;12(5):S2-4

Introspection in the house of medicine. Bell H. **Minn Med** 1997 May;80(5):12-7

The future of the Association of American Physicians. Rubenstein AH. **Proc Assoc Am Physicians** 1996 Sep; 108(5):390-7

Melvin Sabshin reflects on two decades at the helm of the APA [interview by John A. Talbott and Howard H. Goldman] Sabshin M. **Psychiatr Serv** 1997 Sep;48(9):1164-7

1996 North American Spine Society presidential address. Saal JA. **Spine** 1997 Jul 15;22(14):1545-52

[Retrospect--prospects] Hempel K, et al. **Chirurg** 1997 Jan; 68(1):Suppl 1-2 **(Ger)**

[Society of Medical Specialty Professional Organizations] Holfelder G. **Chirurg** 1996 Sep;67(9):suppl 215-6 **(Ger)**

["From tradition into the future" (editorial)] Völcker HE. **Ophthalmologe** 1997 Mar;94(3):185 **(Ger)**

[New challenges for the Sociedade Portuguesa de Cardiologia] van Zeller P. **Rev Port Cardiol** 1997 May; 16(5):481-5 **(Por)**

[The All-Russian Society of Forensic Medical Personnel in the period between congresses (1992-1996)] Kriukov VN, et al. **Sud Med Ekspert** 1997 Apr-Jun;40(2):6-8 **(Rus)**

SOCIETIES, NURSING

Using public opinion to protect nursing practice. Schildmeier D. **Am J Nurs** 1997 Mar;97(3):56-8

Project Alpha provides opportunities to promote perioperative nursing. Graybill-D'Ercole PA. **AORN J** 1996 Nov;64(5):781-5

AORN's response to the Pew Taskforce on Health Care Workforce Regulation. Groah LK, et al. **AORN J** 1997 Feb;65(2):202, 205-7, 210-2 passim

AORN's recommended practices. Weemering ML, et al. **AORN J** 1996 Nov;64(5):810-2

Current research initiatives of AONE. Beyers M. **Appl Nurs Res** 1997 Aug;10(3):163

Northern nurses' flourishing crossborder partnerships. Trane E. **Int Nurs Rev** 1997 Mar-Apr;44(2):52-6

Getting the word out: expanding the association of nurses in AIDS care networking potential among nurses in clinical practice. Stevens PE, et al. **J Assoc Nurses AIDS Care** 1996 Jul-Aug;7(4):91-3

Community Health Accreditation Program and Joint Commission announce cooperative agreement. **J Nurs Adm** 1996 Dec;26(12):4

Symposium on nursing centers: past, present and future. Frenn M, et al. **J Nurs Educ** 1996 Feb;35(2):54-62

Domestic violence. Implications for the American College of Nurse-Midwives and its members. Paluzzi PA, et al. **J Nurse Midwifery** 1996 Nov-Dec;41(6):430-5 (14 ref.)
Peer review in a New York chapter of the ACNM 1987-1994. Stein E. **J Nurse Midwifery** 1996 Sep-Oct;41(5):401-4
APON merges onto the information superhighway. Kelley SJ. **J Pediatr Oncol Nurs** 1997 Jul;14(3):186-8
Policy and guidelines for prevention and management of human immunodeficiency virus and hepatitis B virus infection in the nursing education community. American Association of Colleges of Nursing. **J Prof Nurs** 1997 Sep-Oct;13(5):325-8
Faculty uninformed in the information age? [editorial] Archer L. **J Prof Nurs** 1997 Jan-Feb;13(1):1-2
Putting prevention into practice. Rains JW, et al. **J Prof Nurs** 1997 Mar-Apr;13(2):124-8
Rejecting the role of victim [letter; comment] Ballard KA. **MCN Am J Matern Child Nurs** 1997 Mar-Apr;22(2):72. Comment on: MCN Am J Matern Child Nurs 1996 Jul-Aug;21(4):167-8.
American Academy of Nursing's HIV/AIDS Nursing Care Summit: the final synthesis. Portillo CJ, et al. **Nurs Outlook** 1996 Sep-Oct;44(5):229-34
Improving the quality of cancer care [editorial; comment] Haylock PJ. **Oncol Nurs Forum** 1997 Jul;24(6):949. Comment on: Oncol Nurs Forum 1997 Jul;24(6):951-3.
[Different levels of trauma care. A new nursing society] Gårdelöf B. **Lakartidningen** 1996 Oct 2;93(40):3476-7 **(Swe)**

HISTORY

Historical beginnings of a professional nursing organization dedicated to the care of children and adolescents with cancer and their families: the Association of Pediatric Oncology Nursing from 1974 to 1993. Heiney SP, et al. **J Pediatr Oncol Nurs** 1996 Oct;13(4):196-203

LEGISLATION & JURISPRUDENCE

Collective bargaining comes of age. Ketter J. **Am J Nurs** 1996 Dec;96(12):62-3

ORGANIZATION & ADMINISTRATION

Strengthening AORN's future. Burchiel RN. **AORN J** 1996 Feb;63(2):452
Update on virtual nursing informatics organizations. Newbold SK. **Comput Nurs** 1997 May-Jun;15(3):122-5
The chapter's role in educating ANAC members. Melroe H. **J Assoc Nurses AIDS Care** 1996;7 Suppl 1:55-7
Accreditation under siege [editorial] Tanner CA. **J Nurs Educ** 1996 Sep;35(6):243-4
Developing intergroup nursing research in pediatric oncology [editorial] Hinds PS, et al. **J Pediatr Oncol Nurs** 1997 Jul;14(3):135-6
If you build it, they will come [news] Sharp N. **Nurse Pract** 1996 Sep;21(9):127-9

STANDARDS

Licensure of international students. American Association of Colleges of Nursing. **J Prof Nurs** 1996 Sep-Oct;12(5):330

SOCIETIES, PHARMACEUTICAL

ASHP Board of Directors, councils, committees, and staff. **Am J Health Syst Pharm** 1996 Aug 1;53(15):1830-6
NABP resolutions address pharmacy education, practice, public image [news] **Am J Health Syst Pharm** 1996 Jul 15;53(14):1653-4
APhA house of delegates considers issues from assisted suicide to collaborative practice [news] **Am J Health Syst Pharm** 1997 May 1;54(9):1025-6
ASHP's development of patient-education programs. Reilly MJ. **Am J Health Syst Pharm** 1996 May 15;53(10):1177-9
ASHP response to FDA reform. Wallace ML. **Am J Health Syst Pharm** 1996 Sep 1;53(17):2089-90
The PMAC code of marketing practices: time for improvement? Pharmaceutical Manufacturers Association of Canada [editorial; comment] [see comments] Desjardins JG. **Can Med Assoc J** 1997 Feb 1;156(3):363-4. Comment on: Can Med Assoc J 1997 Feb 1;156(3):351-6. Comment in: Can Med Assoc J 1997 Apr 1;156(7):982-3.
APhA on the Internet: a user's guide. **J Am Pharm Assoc (Wash)** 1997 Jan-Feb;NS37(1):5-6
Changes: here and everywhere [editorial] Posey LM. **J Am Pharm Assoc (Wash)** 1997 Jan-Feb;NS37(1):7
The PDA Training and Research Institute [editorial] Schwartz JB. **PDA J Pharm Sci Technol** 1997 May-Jun; 51(3):103
Survey of ACCP members regarding health economics and outcomes assessment. Paladino JA. **Pharmacotherapy** 1996 Mar-Apr;16(2):267-70
Supporting the industry: the Association of the British Pharmaceutical Industry. **Trends Pharmacol Sci** 1996 Feb; 17(2):50
[The seventeenth report on Survey of the Adverse Reaction to Radiopharmaceuticals (the 20th survey in 1994). Subcommittee of Safety Issue for the Radiopharmaceuticals Medical and Pharmaceutical Committee. Japan Radioisotope Association] **Kaku Igaku** 1996 Jun; 33(6):675-86 **(Jpn)**

HISTORY

Joseph A. Oddis: influences and achievements. Talley CR, et al. **Am J Health Syst Pharm** 1997 Aug 15;54(16):1815-25
Coming full circle. Griffenhagen GB. **J Am Pharm Assoc (Wash)** 1996 Jan;NS36(1):5-6
[The German Pharmaceutical Society--the regional group of Hamburg introduces itself] Stahl-Biskup E, et al. **Pharm Unserer Zeit** 1997 Mar;26(2):81-3 **(Ger)**
[Moritz Geoldner--a co-founder of the German Pharmaceutical Society] Staiger C, et al. **Pharm Unserer Zeit** 1996 Nov;25(6):326-31 **(Ger)**

ORGANIZATION & ADMINISTRATION

Overcrowded meeting rooms. Alteri D. **Am J Health Syst Pharm** 1996 Oct 15;53(20):2396, 2405

STANDARDS

ASHP therapeutic position statement on strategies for preventing and treating multidrug-resistant tuberculosis. **Am J Health Syst Pharm** 1997 Feb 15;54(4):428-31
ASHP guidelines on pharmacist-conducted patient education and counseling. **Am J Health Syst Pharm** 1997 Feb 15; 54(4):431-4
ASHP guidelines on the provision of medication information by pharmacists. **Am J Health Syst Pharm** 1996 Aug 1; 53(15):1843-5

STATISTICS & NUMERICAL DATA

Louisiana hospital pharmacists' membership in ASHP. Aparasu RR, et al. **Am J Health Syst Pharm** 1996 Nov 15;53(22):2737-9

SOCIETIES, SCIENTIFIC

Membership of tobacco industry scientists in scientific societies [editorial] Perkins KA. **Addiction** 1997 May; 92(5):517-20; discussion 521-9
Who takes credit? [letter; comment] Macenski AG. **Am Ind Hyg Assoc J** 1996 Sep;57(9):859-60. Comment on: Am Ind Hyg Assoc J 1996 Apr;57(4):325.
Double-u double-u double-u dot APIC dot org: a review of the APIC World Wide Web site [see comments] Harr J. **Am J Infect Control** 1996 Dec;24(6):455-62. Comment in: Am J Infect Control 1996 Dec;24(6):417-20.
Association of professors of human or medical genetics: summary of first annual workshop. Friedman JM. **Am J Med Genet** 1996 Oct 28;65(3):235-40
Expanding the biocultural synthesis toward a biology of poverty. Leatherman TL, et al. **Am J Phys Anthropol** 1997 Jan;102(1):1-3
The blood and guts of analysis at five years to the millennium. Engels R. **Am J Psychoanal** 1996 Sep;56(3):353-4
Health Care Financing Administration/American Society for Cytotechnology inspections: government assessment of cytology laboratory practice under the regulations of the Clinical Laboratory Improvement Amendments of 1988. Triol JH, et al. **Arch Pathol Lab Med** 1997 Mar; 121(3):264-6 (3 ref.)
International Study Group for Implantable Infusion Devices 1996. The world's only implantable infusion pump society. Buchwald H, et al. **ASAIO J** 1997 May-Jun;43(3):132-6
Directory issue of the Aerospace Medical Association. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 2):A15-131
International Society of Vitamins and Related Biofactors. A new sponsor for BioFactors. Ernster L. **Biofactors** 1995-96; 5(3):123-4
Membership list. **Bull Assoc Anat (Nancy)** 1996 Dec; 80(251):VIII-XV
Conference report: 18th IASP Congress in Venice. Arensman E. **Crisis** 1995;16(3):135
High society. **Curr Biol** 1996 Oct 1;6(10):1207
Tenth Annual ASTPHLD Conference on Human Retrovirus Testing [news] Pearson JL. **Emerg Infect Dis** 1995 Jul-Sep; 1(3):105
The 1996 Thomas Hunt Morgan Medal Franklin W. Stahl. Drake JW. **Genetics** 1997 Jan;145(1):1-2
Behavior Therapy and Research Society. Roster of clinical fellows-1996 (including overseas fellows). **J Behav Ther Exp Psychiatry** 1997 Mar;28(1):i-v
International Society of Exposure Analysis. McKone TE. **J Expo Anal Environ Epidemiol** 1997 Oct-Dec;7(4):403-9
International Society of Exposure Analysis. Sexton K. **J Expo Anal Environ Epidemiol** 1996 Apr-Jun;6(2):119-22
Current status of the international toxicology guidelines, focusing on the OECD and ICH guidelines. Kurokawa Y. **J Toxicol Sci** 1996 Feb;21(1):65-7
Notes on the 40th conference of the American Biophysical Society. **Membr Cell Biol** 1997;10(6):717-22
Errors by the American Psychiatric Association, the American Psychological Association, and the National Educational, Association in representing homosexuality in amicus briefs about Amendment 2 to the U.S. Supreme Court. Cameron P, et al. **Psychol Rep** 1996 Oct; 79(2):383-404 (70 ref.)
The making of the Transplantation Society. Najarian JS. **Transplant Proc** 1997 Feb-Mar;29(1-2):7-11
[The German Society of Pathology on the threshold of its second century] Heitz PU, et al. **Pathologe** 1997 May;18 Suppl 1:S18-20 **(Ger)**
[Proceedings and resolutions of the First Congress of the International Union of Pathologists' Associations] Sarkisov DS, et al. **Arkh Patol** 1996 May-Jun;58(3):42-3 **(Rus)**

HISTORY

A retrospective on infection control. Part 2: twentieth century--the flame burns. Larson E. **Am J Infect Control** 1997 Aug;25(4):340-9
The Brucellosis Research Network of the United Nations University/Biotechnology in Latin America and the Caribbean Program. Dukes TW. **Can Vet J** 1997 Feb; 38(2):93-4
The role of international organizations in setting nutritional standards in the 1920s and 1930s. Weindling P. **Clio Med** 1995;32:319-32
A history of the International Society for Analytical Cytology. Dean PN. **Cytometry** 1996 Aug 1;24(4):300-11
The history of International Congresses of Clinical Chemistry, 1954-1996. Broughton PM. **Eur J Clin Chem Clin Biochem** 1997 Jul;35(7):561-7
The European Histamine Research Society: a silver anniversary [editorial] Mannaioni PF. **Inflamm Res** 1997 May;46(5):155-6
The formation of the German Psychoanalytic Association (DPV): regaining the psychoanalytical orientation lost in the Third Reich. Eickhoff FW. **Int J Psychoanal** 1995 Oct; 76 (Pt 5):945-56
Freud as leader: the early years of the Viennese society. Eisold K. **Int J Psychoanal** 1997 Feb;78 (Pt 1):87-104
The Società Italiana di Neurologia: origins. Salomone G, et al. **Ital J Neurol Sci** 1996 Aug;17(4):311-9
Cancer education--lessons from the past. Bakemeier RF. **J Cancer Educ** 1997 Spring;12(1):9-16
William Small 1734-1775: no publications, much influence. Hull G. **J R Soc Med** 1997 Feb;90(2):102-5
Cooperation of Nordic Pharmacological and Toxicological Societies: history and future perspectives. Schou JS. **Pharmacol Toxicol** 1996 Jun;78(6):361-3
A historical progression of the Midwest Regional Chapter of the SQA. Wilderman RC, et al. **Qual Assur** 1997 Jan-Mar;5(1):69-77
[75 years Swiss Society of History of Medicine and Natural Sciences (editorial)] Bickel MH. **Gesnerus** 1996; 53(3-4):165-74 **(Ger)**
[Publishing activities of the Society of Natural History] Kapronczay K. **Orv Hetil** 1997 Feb 9;138(6):361-3 **(Hun)**
[I. M. Sechenov's "The draft of the "Statute..."] Sechenov IM. **Fiziol Zh Im I M Sechenova** 1996 May-Jun; 82(5-6):139-47 **(Rus)**
[Brief history of the Spanish Society of Microbiology. VI. From 1991 to 1995] García Mendoza C. **Microbiologia** 1996 Dec;12(4):621-30 (Eng. Abstr.) **(Spa)**
[Brief history of the Spanish Society of Microbiology. V. From 1987 to 1991] García Mendoza C. **Microbiologia** 1996 Sep;12(3):457-64 (Eng. Abstr.) **(Spa)**
[Brief history of the Spanish Microbiology Society. IV. From 1983 to 1987] García Mendoza C. **Microbiologia** 1996 Jun; 12(2):307-16 **(Spa)**
[Brief history of the Spanish Society of Microbiology. III. From 1977 to 1983] Garciá Mendoza C. **Microbiologia** 1996 Mar;12(1):107-16 (Eng. Abstr.) **(Spa)**
[The journal of the Spanish Society of Microbiology, 1945-1995] Isamat D, et al. **Microbiologia** 1996 Mar; 12(1):117-25 (Eng. Abstr.) **(Spa)**

ORGANIZATION & ADMINISTRATION

About ISCAIPNET. Seay A. **Inj Prev** 1997 Mar;3(1):4
Challenges and opportunities for cancer educators in the new health care environment. Mirand EA. **J Cancer Educ** 1997 Spring;12(1):8
From the AACE president--perseverance, innovation, and progress. Sachdeva AK. **J Cancer Educ** 1995 Winter; 10(4):185
Multinational, multicultural, and multiprofessional lessons [editorial] Collins NH. **J Hematother** 1997 Jun;6(3):189-90
Bylaws of the American Physical Therapy Association. **Phys Ther** 1996 Oct;76(10):1140-9
Standing rules of the American Physical Therapy Association. **Phys Ther** 1996 Oct;76(10):1150-3
On cabbages and kings: the IUBMB--problems and prospects [editorial] Bradshaw RA. **Trends Biochem Sci** 1997 Aug; 22(8):281-2

STANDARDS

American Society of Cytopathology Laboratory Accreditation Program. Gupta PK, et al. **Arch Pathol Lab Med** 1997 Mar;121(3):260-3 (25 ref.)
Health Care Financing Administration/American Society for Cytotechnology inspections: government assessment of cytology laboratory practice under the regulations of the Clinical Laboratory Improvement Amendments of 1988. Triol JH, et al. **Arch Pathol Lab Med** 1997 Mar; 121(3):264-6 (3 ref.)
A method for implementing the American Association of Physicists in Medicine Task Group-43 dosimetry recommendations for 125I transperineal prostate seed implants on commercial treatment planning systems. Luse RW, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1; 37(3):737-41
[The ethical code of HUGO] Lisker R. **Gac Med Mex** 1996 Jul-Aug;132(4):457-8 **(Spa)**

SOCIETIES, SCIENTIFIC

TRENDS

Nutrition Societies Presidents' Forum: future challenges and opportunities for nutrition societies in the 21st century. Blackburn GL, et al. **Am J Clin Nutr** 1996 Nov; 64(5):813–22

SOCIOECONOMIC FACTORS

Socioeconomic status and perinatal outcome according to residence area in the city of Malmö. Gudmundsson S, et al. **Acta Obstet Gynecol Scand** 1997 Apr;76(4):318–23

Sociodemographic and clinical variables as predictors of the diagnostic characteristics of first episodes of schizophrenia. Vázquez-Barquero JL, et al. **Acta Psychiatr Scand** 1996 Sep;94(3):149–55

Political and economic influences on alcohol-related science: some considerations [letter] Fillmore KM. **Addiction** 1996 Dec;91(12):1872–5

The disadvantage of being advantaged?--on a social gradient in excess mortality among alcohol abusers. Rossow I, et al. **Addiction** 1996 Dec;91(12):1821–9

Difficulties in mobility among elderly people and their association with socioeconomic factors, dwelling environment and use of services. Sakari-Rantala R, et al. **Aging (Milano)** 1995 Dec;7(6):433–40 (58 ref.)

Children's AIDS-related knowledge and attitudes: variations by grade, race, gender, socioeconomic status, and size of community. Kistner J, et al. **AIDS Educ Prev** 1997 Jun; 9(3):285–98

The SECCAT survey: I. The costs and consequences of alcoholism. McKenna M, et al. **Alcohol Alcohol** 1996 Nov; 31(6):565–76

Neighborhood environments and coronary heart disease: a multilevel analysis. Diez-Roux AV, et al. **Am J Epidemiol** 1997 Jul 1;146(1):48–63

Unemployment in inner-city renal transplant recipients: predictive and sociodemographic factors. Markell MS, et al. **Am J Kidney Dis** 1997 Jun;29(6):881–7

Epidemiology of pediatric tuberculosis in Chicago, 1974 to 1994: a continuing public health problem. Reinhard C, et al. **Am J Med Sci** 1997 Jun;313(6):336–40

Manual dexterity of South African children growing in contrasting socioeconomic conditions. Verdonck MC, et al. **Am J Occup Ther** 1997 Apr;51(4):303–6

Plasticity, political economy, and physical growth status of Guatemala Maya children living in the United States. Bogin B, et al. **Am J Phys Anthropol** 1997 Jan;102(1):17–32

Social economics of childhood glucocorticoid stress response and health. Flinn MV, et al. **Am J Phys Anthropol** 1997 Jan;102(1):33–53

Nutritional status and mortality of highland children in Nepal: impact of sociocultural factors. Huijbers PM, et al. **Am J Phys Anthropol** 1996 Oct;101(2):137–44

Socioeconomic differences in cervical cancer: two case-control studies in Colombia and Spain. de Sanjosé S, et al. **Am J Public Health** 1996 Nov;86(11):1532–8

The health status of elderly persons in the last year of life: a comparison of deaths by suicide, injury, and natural causes. Grabbe L, et al. **Am J Public Health** 1997 Mar; 87(3):434–7

Race, ethnicity, and health outcomes--unraveling the mediating role of socioeconomic status [comment] Guralnik JM, et al. **Am J Public Health** 1997 May;87(5):728–30. Comment on: Am J Public Health 1997 May;87(5):805–10.

Whither studies on the socioeconomic foundations of population health? [editorial; comment] Kaplan GA, et al. **Am J Public Health** 1997 Sep;87(9):1409–11 (18 ref.). Comment on: Am J Public Health 1997 Sep;87(9):1476–83. Comment on: Am J Public Health 1997 Sep;87(9):1491–8. Comment on: Am J Public Health 1997 Sep;87(9):1499–503. Comment on: Am J Public Health 1997 Sep;87(9):1504–6.

Socioeconomic status and racial and ethnic differences in functional status associated with chronic diseases [see comments] Kington RS, et al. **Am J Public Health** 1997 May;87(5):805–10. Comment in: Am J Public Health 1997 May;87(5):728–30.

An experimental analysis of sociocultural variables in sales of cigarettes to minors. Klonoff EA, et al. **Am J Public Health** 1997 May;87(5):823–6

Workplace conditions, socioeconomic status, and the risk of mortality and acute myocardial infarction: the Kuopio Ischemic Heart Disease Risk Factor Study. Lynch J, et al. **Am J Public Health** 1997 Apr;87(4):617–22

The late-stage diagnosis of colorectal cancer: demographic and socioeconomic factors. Mandelblatt J, et al. **Am J Public Health** 1996 Dec;86(12):1794–7

The influence of socioeconomic position on health--and vice versa [letter] Morris NM. **Am J Public Health** 1996 Nov; 86(11):1649–50

The "Black Report" of Spain--the Commission on Social Inequalities in Health. Navarro V. **Am J Public Health** 1997 Mar;87(3):334–5

Potentially avoidable hospitalizations: inequalities in rates between US socioeconomic groups. Pappas G, et al. **Am J Public Health** 1997 May;87(5):811–6

Socioeconomic factors in Helicobacter pylori infection among Danish adults. Rosenstock SJ, et al. **Am J Public Health** 1996 Nov;86(11):1539–44

The School Enrollment-Based Health Insurance program: socioeconomic factors in enrollees' use of health services. Shenkman E, et al. **Am J Public Health** 1996 Dec; 86(12):1791–3

Ethnic differences in birthweight: the role of lifestyle and other factors. Shiono PH, et al. **Am J Public Health** 1997 May;87(5):787–93

Relationship between serum ferritin, alcohol intake, and social status in 2235 Danish men and women. Milman N, et al. **Ann Hematol** 1996 Mar;72(3):145–51

The socio-economic aspects of malnutrition in Sicily. La Grutta A, et al. **Ann Ist Super Sanita** 1995;31(4):441–4 (14 ref.)

Dietary sodium and potassium, socioeconomic status and blood pressure in a Chinese population. Tian HG, et al. **Appetite** 1996 Jun;26(3):235–46

Twelve-year trends in cardiovascular disease risk factors in the Minnesota Heart Survey. Are socioeconomic differences widening? Irbarren C, et al. **Arch Intern Med** 1997 Apr 28;157(8):873–81

Socioeconomic differentials in cancer incidence and mortality in urban New South Wales, 1987–1991. Smith D, et al. **Aust N Z J Public Health** 1996 Apr;20(2):129–37

Factors influencing plasma zinc levels in low-income pregnant women. Neggers YH, et al. **Biol Trace Elem Res** 1996 Oct-Nov;55(1–2):127–35

Socioeconomic differences in mortality among diabetic people in Finland: five year follow up. Koskinen SV, et al. **BMJ** 1996 Oct 19;313(7063):975–8

Do socioeconomic differences in mortality persist after retirement? 25 year follow up of civil servants from the first Whitehall study. [see comments] Marmot MG, et al. **BMJ** 1996 Nov 9;313(7066):1177–80. Comment in: BMJ 1997 Apr 12;314(7087):1130.

Effect of population mixing and socioeconomic status in England and Wales, 1979–85, on lymphoblastic leukaemia in children. Stiller CA, et al. **BMJ** 1996 Nov 23; 313(7068):1297–300

Counting the cost of social disadvantage in primary care: retrospective analysis of patient data [see comments] Worrall A, et al. **BMJ** 1997 Jan 4;314(7073):38–42. Comment in: BMJ 1997 Apr 26;314(7089):1275. Comment in: BMJ 1997 Apr 26;314(7089):1276.

Are sociodemographic factors predictive of preterm birth? A reappraisal of the 1958 British Perinatal Mortality Survey. Wildschut HI, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):57–63

Changing social factors and their long-term implications for health. Wadsworthx ME. **Br Med Bull** 1997 Jan; 53(1):198–209 (67 ref.)

Small area variation in low birthweight: looking beyond socioeconomic predictors. Crosse EA, et al. **Can J Public Health** 1997 Jan-Feb;88(1):57–61

The influence of black race and socioeconomic status on the use of breast-conserving surgery for Medicare beneficiaries. Michalski TA, et al. **Cancer** 1997 Jan 15; 79(2):314–9

Race and ethnicity as determinants of child health: a personal view. Spencer N. **Child Care Health Dev** 1996 Sep; 22(5):327–45 (66 ref.)

Cohabiting partners' economic circumstances and marriage. Smock PJ, et al. **Demography** 1997 Aug;34(3):331–41

Socio-economic status and membership of the British Diabetic Association in Scotland. Connolly V, et al. **Diabet Med** 1996 Oct;13(10):898–901

Sociodemographic risk factors to disease control in children with diabetes. Overstreet S, et al. **Diabet Med** 1997 Feb; 14(2):153–7

Effect of socioeconomic risk factors on the difference in prevalence of diabetes between rural and urban populations in Bangladesh. abu Sayeed M, et al. **Diabetes Care** 1997 Apr;20(4):551–5

The impact of socioeconomic status on cardiovascular risk factors in African-Americans at high risk for type II diabetes. Implications for syndrome X. Gaillard TR, et al. **Diabetes Care** 1997 May;20(5):745–52

Personal-model beliefs and social-environmental barriers related to diabetes self-management. Glasgow RE, et al. **Diabetes Care** 1997 Apr;20(4):556–61

Psychological adjustment to IDDM: 10-year follow-up of an onset cohort of child and adolescent patients. Jacobson AM, et al. **Diabetes Care** 1997 May;20(5):811–8

Diabetes self-management. Self-reported recommendations and patterns in a large population. Ruggiero L, et al. **Diabetes Care** 1997 Apr;20(4):568–76

Health insurance and the financial impact of IDDM in families with a child with IDDM. Songer TJ, et al. **Diabetes Care** 1997 Apr;20(4):577–84

Prediction of attrition from day hospital treatment in lower socioeconomic cocaine-dependent men. Alterman AI, et al. **Drug Alcohol Depend** 1996 Mar;40(3):227–33

Mortality effects of community socioeconomic status. Anderson RT, et al. **Epidemiology** 1997 Jan;8(1):42–7

Are there socio-economic differences in survival after acute myocardial infarction? Wilhelmsen L, et al. **Eur Heart J** 1996 Nov;17(11):1619–23

Subjectively experienced symptoms in relation to socio-economic factors in women. Furunes B, et al. **Eur J Epidemiol** 1996 Dec;12(6):617–24

Asthma and respiratory symptoms in 6–7 yr old Italian children: gender, latitude, urbanization and socioeconomic factors. SIDRIA (Italian Studies on Respiratory Disorders in Childhood and the Environment). **Eur Respir J** 1997 Aug;10(8):1780–6

Economic correlates of nonmarital childbearing among adult women. Hoffman SD, et al. **Fam Plann Perspect** 1997 May-Jun;29(3):137–40

The determinants of first sex by age 14 in a high-risk adolescent population. Mott FL, et al. **Fam Plann Perspect** 1996 Jan-Feb;28(1):13–8

SES and ethnic differences in perceived caregiver availability among young-old Mexican Americans and non-Hispanic whites. Talamantes MA, et al. **Gerontologist** 1996 Feb; 36(1):88–99

The dismantling of a myth: a review of eating disorders and socioeconomic status. Gard MC, et al. **Int J Eat Disord** 1996 Jul;20(1):1–12 (40 ref.)

The relationship between socioeconomic status and eating-disordered behaviors in a community sample of adolescent girls. Rogers L, et al. **Int J Eat Disord** 1997 Jul;22(1):15–23

Social class and chronic illness in Dublin. Lyons RA, et al. **Ir Med J** 1996 Sep-Oct;89(5):174–6

Potential barriers to parent monitoring: social disadvantage, marital status, and maternal psychiatric disorder. Chilcoat HD, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1673–82

Effect of altitude and socioeconomic status on VO2max and anaerobic power in prepubertal Bolivian girls. Blonc S, et al. **J Appl Physiol** 1996 Jun;80(6):2002–8

Socioeconomic status, race and life expectancy in Arkansas, 1970–1990. Swanson DA, et al. **J Ark Med Soc** 1997 Feb; 93(9):445–7

Professional perceptions of children with developmental difficulties: the influence of race and socioeconomic status. Cuccaro ML, et al. **J Autism Dev Disord** 1996 Aug; 26(4):461–9

Maternal education and family income as determinants of severe disease following acute diarrhoea in children: a case control study. Mahalanabis D, et al. **J Biosoc Sci** 1996 Apr; 28(2):129–39

Smoking and socioeconomic status in a population-based inner city sample of African-Americans, Latinos and whites. Siegel D, et al. **J Cardiovasc Risk** 1996 Jun; 3(3):295–300

The effect of socioeconomic status on the long-term outcome of cancer. Stavraky KM, et al. **J Clin Epidemiol** 1996 Oct; 49(10):1155–60

Access to bone marrow transplantation for leukemia and lymphoma: the role of sociodemographic factors. Mitchell JM, et al. **J Clin Oncol** 1997 Jul;15(7):2644–51

Socioeconomic deprivation, ethnicity, and stroke mortality in Greater London and south east England [see comments] Maheswaran R, et al. **J Epidemiol Community Health** 1997 Apr;51(2):127–31. Comment in: J Epidemiol Community Health 1997 Apr;51(2):132–3.

Health and social precursors of unemployment in young men in Great Britain. Montgomery SM, et al. **J Epidemiol Community Health** 1996 Aug;50(4):415–22

Race and self assessed health status: the role of socioeconomic factors in the USA. Ren XS, et al. **J Epidemiol Community Health** 1996 Jun;50(3):269–73

Socio-economic factors in cardiovascular disease. Marmot MG. **J Hypertens Suppl** 1996 Dec;14(5):S201–5 (12 ref.)

Some medico-socio-demographic factors and intra-uterine growth retardation. Chhabra S, et al. **J Indian Med Assoc** 1996 Apr;94(4):127–30

Health, health care utilization and living conditions in foreign-born diabetic patients in southern Sweden. Hjelm K, et al. **J Intern Med** 1997 Aug;242(2):131–41

Uptake of cervical screening in general practice: effect of practice organisation, structure, and deprivation. Ibbotson T, et al. **J Med Screen** 1996;3(1):35–9

Tobacco, alcohol, and socioeconomic status and adenocarcinomas of the esophagus and gastric cardia [see comments] Gammon MD, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1277–84. Comment in: J Natl Cancer Inst 1997 Sep 3;89(17):1247–9.

President's cancer panel probes pervasive link between race and health outcomes [news] Reynolds T. **J Natl Cancer Inst** 1997 Jul 2;89(13):914–5

Anthropometric and nutritional evaluation of short statured children from low socio-economic class. Büyükgebiz B, et al. **J Pediatr Endocrinol Metab** 1996 Mar-Apr; 9(2):189–92

Social groups and prevention of preterm births in a population of twin mothers. Papiernik E, et al. **J Perinat Med** 1996;24(6):669–76

Psychosocial factors and chronic pelvic pain: a comparison of women with endometriosis and with unexplained pain. Peveler R, et al. **J Psychosom Res** 1996 Mar;40(3):305–15

Incidence of rheumatoid arthritis is not related to indicators of socioeconomic deprivation. Bankhead C, et al. **J Rheumatol** 1996 Dec;23(12):2039–42

Socioeconomic inequalities in morbidity and mortality in western Europe. The EU Working Group on Socioeconomic Inequalities in Health [see comments] Mackenbach JP, et al. **Lancet** 1997 Jun 7;349(9066):1655–9 . Comment in: Lancet 1997 Aug 16;350(9076):516; discussion 517–8.

Socioeconomic factors in the families of children with lymphoid malignancy in the UAE. Révész T, et al. **Leukemia** 1997 Apr;11(4):588–93

Premature ageing: the link between psychosocial risk factors and disease. Nilsson PM. **Med Hypotheses** 1996 Jul; 47(1):39–42

Comparison of alcohol consumption patterns and social problems between women and men drink-drivers. Rogers

DM, et al. **Med J Aust** 1997 Apr 7;166(7):358–61
Chronic alcoholism in a forensic material. 1. Social parameters in alcoholics. Thomsen JL. **Med Sci Law** 1996 Jul;36(3):199–208
Variation in health and health care use by socioeconomic status in Winnipeg, Canada: does the system work well? Yes and no. Roos NP, et al. **Milbank Q** 1997;75(1):89–111
Biological and sociocultural approaches of histoplasmosis in the State of Guerrero, Mexico. Taylor ML, et al. **Mycoses** 1996 Sep–Oct;39(9–10):375–9
Child health in times of social and economic change. Fancourt R. **N Z Med J** 1997 Mar 28;110(1040):95–7
Height, gross domestic product and suicide and homicide. Lester D. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1182
Social correlates of suicide in the British Isles. Lester D. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1194
Effects of population and affluence on CO2 emissions. Dietz T, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):175–9
Socio-economic differentials in health: the role of nutrition. Smith GD, et al. **Proc Nutr Soc** 1997 Mar;56(1A):75–90 (75 ref.)
Adolescent Kingston girls' school achievement: nutrition, health and social factors. Walker SP, et al. **Proc Nutr Soc** 1996 Mar;55(1B):333–43
Prostate cancer, race, and socioeconomic status: inadequate adjustment for social factors in assessing racial differences. Dale W, et al. **Prostate** 1996 Nov;29(5):271–81 (53 ref.)
Social psychological variables in populations contrasted by income and suicide rate: Durkheim revisited. Ferrada-Noli M. **Psychol Rep** 1997 Aug;81(1):307–16
Psychiatric health, ethnicity and socioeconomic factors among suicides in Stockholm. Ferrada-Noli M, et al. **Psychol Rep** 1997 Aug;81(1):323–32
Social psychological vs socioeconomic hypotheses on the epidemiology of suicide: an empirical study [see comments] Ferrada-Noli M. **Psychol Rep** 1996 Dec;79(3 Pt 1):707–10 . Comment in: Psychol Rep 1997 Feb;80(1):34. Comment in: Psychol Rep 1997 Jun;80(3 Pt 2):1065–6.
Social psychological indicators associated with the suicide rate: replying to the socioeconomic hypothesis. Ferrada-Noli M. **Psychol Rep** 1997 Feb;80(1):315–22
Suicide and wealth in Sweden: comment on Ferrada-Noli [comment] Lester D, et al. **Psychol Rep** 1997 Feb;80(1):34 . Comment on: Psychol Rep 1996 Dec;79(3 Pt 1):707–10.
Homicide rates in the Caribbean Islands [comment] Lester D. **Psychol Rep** 1996 Dec;79(3 Pt 1):1070. Comment on: Psychol Rep 1994 Aug;75(1 Pt 1):351–2.
Social gradient of CVD risk in Germany before/after unification. Heinemann L, et al. **Rev Environ Health** 1996 Jan–Jun;11(1–2):7–14
Eclampsia—cause and prevention [letter; comment] Bailey N. **S Afr Med J** 1997 Apr;87(4):475. Comment on: S Afr Med J 1996 Dec;86(12):1536–9.
Spirometry of healthy adult South African men. Part II. Interrelationship between socio-environmental factors and 'race' as determinants of spirometry. Goldin JG, et al. **S Afr Med J** 1996 Jul;86(7):820–6
Short-term and long-term sick-leave in Sweden: relationships with social circumstances, working conditions and gender. Blank N, et al. **Scand J Soc Med** 1995 Dec; 23(4):265–72
Foreign- and Swedish-born diabetic patients—a population-based study of prevalence, glycaemic control and social position. Hjelm K, et al. **Scand J Soc Med** 1996 Dec;24(4):243–52
Effects on birthweights of maternal education, socio-economic status, and work-related characteristics. Nordström ML, et al. **Scand J Soc Med** 1996 Mar; 24(1):55–61
A comparative review of psychosocial and occupational environment in native Swedes and immigrants. Rosmond R, et al. **Scand J Soc Med** 1996 Dec;24(4):237–42
Socioeconomic inequity in health care: a study of services utilization in Curaçao. Alberts JF, et al. **Soc Sci Med** 1997 Jul;45(2):213–20
Back pain claim rates and the business cycle. Brooker AS, et al. **Soc Sci Med** 1997 Aug;45(3):429–39
A reexamination of "sociological and economic theories of suicide: a comparison of the U.S.A. and Taiwan" [comment] Chuang HL, et al. **Soc Sci Med** 1996 Aug;43(3):421–3. Comment on: Soc Sci Med 1992 Feb;34(3):333–4.
A regional comparison of socioeconomic and health indices in a Canadian province. Frohlich N, et al. **Soc Sci Med** 1996 May;42(9):1273–81
Quality of sleep during economic recession in Finland: a longitudinal cohort study. Hyyppä MT, et al. **Soc Sci Med** 1997 Sep;45(5):731–8
Managed care pharmacy, socioeconomic assessments and drug adoption decisions. Lyles A, et al. **Soc Sci Med** 1997 Aug;45(4):511–21
Age-specific education and income gradients in morbidity and mortality in a Canadian province. Mustard CA, et al. **Soc Sci Med** 1997 Aug;45(3):383–97
Past or present? Childhood living conditions and current socioeconomic status as determinants of adult health. Rahkonen O, et al. **Soc Sci Med** 1997 Feb;44(3):327–36
Health behaviour and risk behaviour: socioeconomic differences in an Austrian rural county. Stronegger WJ, et al. **Soc Sci Med** 1997 Feb;44(3):423–6
Health lifestyle behaviour and socio-demographic characteristics. A study of Varna, Glasgow and Edinburgh. Uitenbroek DG, et al. **Soc Sci Med** 1996 Aug;43(3):367–77
Female life expectancy, gender stratification, health status, and level of economic development: a cross-national study of less developed countries. Williamson JB, et al. **Soc Sci Med** 1997 Jul;45(2):305–17
Socioeconomic inequality and psychopathology: are socioeconomic status and social class interchangeable? Wohlfarth T. **Soc Sci Med** 1997 Aug;45(3):399–410
Socioeconomic level, sedentary lifestyle, and wine consumption as possible explanations for geographic distribution of cerebrovascular disease mortality in Spain. Rodríguez Artalejo F, et al. **Stroke** 1997 May;28(5):922–8
The role of ethnic versus nonethnic sociocultural factors in substance use and misuse. Collins RL. **Subst Use Misuse** 1996 Jan;31(1):95–101 (27 ref.)
Secular changes of body height and mass in the children and adolescents of Lódź. Stolarczyk H, et al. **Z Morphol Anthropol** 1996 Sep;81(2):167–77
[Intrauterine growth retardation and premature delivery. The effect of smoking and psychosocial factors] Nordentoft M, et al. **Ugeskr Laeger** 1997 May 26;159(22):3393–400 (Eng. Abstr.) **(Dan)**
[Why does recession decrease the incidence of mental disorders? (letter)] Salokangas RK. **Duodecim** 1995; 111(16):1576–7 **(Fin)**
[Medicinal drug use by children] Buser K, et al. **Gesundheitswesen** 1997 Apr;59(4):252–7 (Eng. Abstr.) **(Ger)**
[1995 Berlin social structure atlas—a planning instrument for health and social planning within the scope of administrative reform in Berlin] Meinlschmidt G. **Gesundheitswesen** 1996 Feb;58(2):72–81 (Eng. Abstr.) **(Ger)**
[Age-related social inequality in mortality] Stolpe S. **Gesundheitswesen** 1997 Apr;59(4):242–7 (Eng. Abstr.) **(Ger)**
[Unequal conditions for longevity—determinants of mortality from the longitudinal perspective] Voges W. **Z Gerontol Geriatr** 1996 Jan–Feb;29(1):18–22 (Eng. Abstr.) **(Ger)**
[Effect of changed conditions on body height and body weight of preschool children in Jena] Kromeyer K, et al. **Z Morphol Anthropol** 1995 Dec;81(1):91–100 (Eng. Abstr.) **(Ger)**
[Socioeconomic status, dietary habits and physical activity in overweight/obese children: results of a retrospective study] Petti S, et al. **Ann Ig** 1997 May–Jun;9(3):229–36 **(Ita)**
[Specific features of the pattern and clinical manifestations of respiratory tuberculosis in new cases under the present-day conditions] Baiborodova TI, et al. **Probl Tuberk** 1997;(1):44–6 (Eng. Abstr.) **(Rus)**
[A concept of control of antituberculous measures under new socioeconomic conditions in Russia] Karpov LP. **Probl Tuberk** 1997;(1):6–8 (6 ref.) **(Rus)**
[Improving antitubercular care for children under the conditions of the tense social and epidemiological situation in the country] Korol' OI. **Probl Tuberk** 1997;(1):61–2 **(Rus)**
[The impact of ecological pressing on tuberculosis and nonspecific lung diseases in the Astrakhan' region] Vinnik LA. **Probl Tuberk** 1997;(1):27–30 (6 ref.) (Eng. Abstr.) **(Rus)**
[Present day socioeconomic conditions and the populations health] Ovcharov VK. **Vestn Ross Akad Med Nauk** 1997; (1):51–9 (18 ref.) (Eng. Abstr.) **(Rus)**
[Health, marginality and regional development] Urbina-Fuentes M, et al. **Gac Med Mex** 1996 Nov–Dec; 132(6):575–97 (Eng. Abstr.) **(Spa)**
[Effects of health services and socioeconomic factors in spatial differences in mortality in Mexico] López-Ríos O. **Salud Publica Mex** 1997 Jan–Feb;39(1):16–24 (Eng. Abstr.) **(Spa)**

SOCIOECONOMIC STATUS see **SOCIAL CLASS**

SOCIOENVIRONMENTAL THERAPY

Psychosocial rehabilitation and psychiatry: what are the boundaries? Bachrach LL. **Can J Psychiatry** 1996 Feb; 41(1):28–35 (55 ref.)
Benchmarks of social treatment for children with autism. McGee GG, et al. **J Autism Dev Disord** 1997 Aug; 27(4):353–64
Long-term impact of clozapine and psychosocial treatment on psychiatric symptoms and cognitive functioning. Grace J, et al. **Psychiatr Serv** 1996 Jan;47(1):41–5
Effectiveness of clozapine and a social learning program for severely disabled psychiatric inpatients. Menditto AA, et al. **Psychiatr Serv** 1996 Jan;47(1):46–51
[Inpatient social therapy in adolescents with social behavior disorders] Hirschberg W. **Prax Kinderpsychol Kinderpsychiatr** 1996 Dec; 45(10):374–82 (Eng. Abstr.) **(Ger)**

HISTORY

[Sociotherapy by Goethe: Wilhelm Meister's education. 5th book, chapter 16] Finzen A, et al. **Psychiatr Prax** 1997 Jan;24(1):41–2 **(Ger)**

SOCIOLOGY

see related
GROUP PROCESSES

Parasites, pawns and partners: disability research and the role of non-disabled researchers. Stone E, et al. **Br J Sociol** 1996 Dec;47(4):699–716
The modification of human society by natural systems: discontinuities caused by the exploitation of endemic species and the introduction of exotics. Cairns J Jr, et al. **Environ Health Perspect** 1996 Nov;104(11):1142–5 (28 ref.)
Introduction. Gold DT. **Gerontologist** 1996 Apr;36(2):224–5
Mutual attraction: demography and life-course analysis. Uhlenberg P. **Gerontologist** 1996 Apr;36(2):226–9
Recovery from anorexia nervosa: a sociological perspective. Garrett CJ. **Int J Eat Disord** 1997 Apr;21(3):261–72
Breaking the boundaries between nursing and sociology: a critical realist ethnography of the theory-practice gap. Porter S, et al. **J Adv Nurs** 1996 Aug;24(2):413–20
Theory, explanation, and a third generation of theoretical development in social gerontology. Bengtson VL, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Mar;52(2):S72–88 (154 ref.)
More danger in doctrine than in genetics [letter] Badcock C. **Nature** 1997 Jul 3;388(6637):13

EDUCATION

Assimilating sociology: critical reflections on the 'sociology in nursing' debate. Mulholland J. **J Adv Nurs** 1997 Apr; 25(4):844–52 (27 ref.)
Sociology and the nursing curriculum: a further comment. Porter S. **J Adv Nurs** 1997 Jul;26(1):214–8
Feedback—sociology and the nursing curriculum: a reply to Sam Porter. Sharp K. **J Adv Nurs** 1996 Jun;23(6):1275–8

HISTORY

[History, social history and sociology of medicine. An imaginary controversy with Christian Probst] Labisch A. **Sudhoffs Arch Z Wissenschaftsgesch** 1996;80(1):1–27 (Eng. Abstr.) **(Ger)**

SOCIOLOGY, MEDICAL

Confronting the emerging HIV epidemic in Vietnam: social context and preliminary data on physician preparedness [letter] Ha TP, et al. **AIDS** 1996 Sep;10(10):1180–1
Philosophy and the accident. Campbell R. **Clio Med** 1997; 41:17–34
The development and use of the concept of a sexually transmitted disease core. Thomas JC, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S134–43 (103 ref.)
Medical practice and social authority [see comments] Pippin RB. **J Med Philos** 1996 Aug;21(4):417–37 (19 ref.). Comment in: J Med Philos 1996 Aug;21(4):357–73.
Toward a political ecology of health in medical anthropology [comment] Baer HA. **Med Anthropol Q** 1996 Dec; 10(4):451–4 (15 ref.). Comment on: Med Anthropol Q 1996 Dec;10(4):455–75. Comment on: Med Anthropol Q 1996 Dec;10(4):476–95. Comment on: Med Anthropol Q 1996 Dec;10(4):496–515.
Reconfiguring nature and culture: intersections of medical anthropology and technoscience studies. Casper MJ, et al. **Med Anthropol Q** 1996 Dec;10(4):523–36 (64 ref.)
An excellent prognosis. Franklin S. **Med Anthropol Q** 1996 Dec;10(4):683–6
Technology and alternative cancer therapies: an analysis of heterodoxy and constructivism. Hess DJ. **Med Anthropol Q** 1996 Dec;10(4):657–74 (62 ref.)
Transforming "body parts" into therapeutic tools: a report from Germany. Hogle LF. **Med Anthropol Q** 1996 Dec; 10(4):675–82
Anthropology and technoscience studies: prospects for synthesis and ambiguity. Kaufert PA, et al. **Med Anthropol Q** 1996 Dec;10(4):686–90
"How's the baby doing?" Struggling with narratives of progress in a neonatal intensive care unit. Layne LL. **Med Anthropol Q** 1996 Dec;10(4):624–56
Death in technological time: locating the end of meaningful life. Lock M. **Med Anthropol Q** 1996 Dec;10(4):575–600 (63 ref.)
Should medical ecology be political? [comment] McElroy A. **Med Anthropol Q** 1996 Dec;10(4):519–22. Comment on: Med Anthropol Q 1996 Dec;10(4):455–75. Comment on: Med Anthropol Q 1996 Dec;10(4):476–95. Comment on: Med Anthropol Q 1996 Dec;10(4):496–515.
The social dynamics of genetic testing: the case of Fragile-X. Nelkin D. **Med Anthropol Q** 1996 Dec;10(4):537–50
Confusion, fear, and chauvinism: perspectives on the medical sociology of chronic pain. Bilkey WJ. **Perspect Biol Med** 1996 Winter;39(2):270–80
The social construction of drug debates. Dingelstad D, et al. **Soc Sci Med** 1996 Dec;43(12):1829–38 (65 ref.)
Interdisciplinary health research—a symposium. Sachs L, et al. **Soc Sci Med** 1997 Apr;44(8):1209–10
[Antinomies and epistemological "sutures" between the socio-biological and the collective-individual characteristics within the field of social epidemiology] de Melo-Filho DA. **Rev Saude Publica** 1996 Aug;30(4):383–91 (22 ref.) (Eng. Abstr.) **(Por)**
[The content analysis of medical sociological information] Poliakov IV, et al. **Probl Sotsialnoi Gig Istor Med** 1997

SOCIOLOGY, MEDICAL

Jul-Aug;(4):42-3 (Eng. Abstr.) **(Rus)**

HISTORY

How the concept of profession evolved in the work of historians of medicine. Burnham JC. **Bull Hist Med** 1996 Spring;70(1):1-24

Accidents in history: an introduction. Cooter R, et al. **Clio Med** 1997;41:1-16

The moment of the accident: culture, militarism and modernity in late-Victorian Britain. Cooter R. **Clio Med** 1997;41:107-57

Accidents: the remnants of a modern classificatory system. Green J. **Clio Med** 1997;41:35-58

Accidents in the eighteenth century. Porter R. **Clio Med** 1997;41:90-106

METHODS

Personal risk taking and the spread of disease: beyond core groups. Rothenberg RB, et al. **J Infect Dis** 1996 Oct;174 Suppl 2:S144-9 (36 ref.)

TRENDS

The social transformation of medical morning report [editorial; comment] Parrino TA. **J Gen Intern Med** 1997 May;12(5):332-3. Comment on: J Gen Intern Med 1997 May;12(5):263-6.

[Disciplinary organization of medical sociology--a contribution to the dialogue with social medicine] Siegrist J. **Gesundheitswesen** 1996 Oct;58 Suppl 3:200-4 (Eng. Abstr.) **(Ger)**

SOCIOMETRIC TECHNIQUES

Sociometric risk networks and risk for HIV infection. Friedman SR, et al. **Am J Public Health** 1997 Aug; 87(8):1289-96

Parental correlates of socially neglected, rejected, and average children. A laboratory study. Franz DZ, et al. **Behav Modif** 1996 Apr;20(2):170-82

A methodological note on the application of the generalized grid technique in the measurement of perceived intercultural distance. Puddifoot JE. **Br J Soc Psychol** 1996 Sep;35 (Pt 3):433-41

Subtypes of social withdrawal in early childhood: sociometric status and social-cognitive differences across four years. Harrist AW, et al. **Child Dev** 1997 Apr;68(2):278-94

Analysis of risk to children participating in a sociometric task. Iverson AM, et al. **Dev Psychol** 1997 Jan;33(1):104-12

Toward a new psychometric definition of social disability in children with attention-deficit hyperactivity disorder [see comments] Greene RW, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May;35(5):571-8 . Comment in: J Am Acad Child Adolesc Psychiatry 1996 Dec;35(12):1570-1.

Kinchart-sociograms as a method for describing the social networks of drug-using women. Pivnick A. **NIDA Res Monogr** 1996;166:163-82

SOCIOPATHIC PERSONALITY see **ANTISOCIAL PERSONALITY DISORDER**

SODIUM

see related
HYPERNATREMIA
HYPONATREMIA
NATRIURESIS

Central infusion of the AT1 receptor antagonist losartan inhibits thirst but not sodium appetite in cattle. Blair-West JR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1940-5

Sodium appetite in the sham-drinking rat after chorda tympani nerve transection. Frankmann SP, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R339-45

Molecular dynamics study of water and Na+ ions in models of the pore region of the nicotinic acetylcholine receptor. Smith GR, et al. **Biophys J** 1997 Sep;73(3):1364-81

Involvement of Na+-Ca2+ exchanger in reperfusion-induced delayed cell death of cultured rat astrocytes. Matsuda T, et al. **Eur J Neurosci** 1996 May; 8(5):951-8

Hydrocarbon chain length-dependent antagonism of acylcarnitines to the depressant effect of lysophosphatidylcholine on cardiac sodium current. Sato T, et al. **J Mol Cell Cardiol** 1996 Oct;28(10):2183-94

Nifedipine improves recovery function of kidneys preserved in a high-sodium, low-potassium cold-storage solution: study with the isolated perfused rat kidney technique. Ramella-Virieux SG, et al. **Nephrol Dial Transplant** 1997 Mar;12(3):449-55

Increased sodium appetite stimulates c-fos expression in the organum vasculosum of the lamina terminalis. Lane JM, et al. **Neuroscience** 1997 Jun;78(4):1167-76

Contribution of the sodium-calcium exchanger to contractions in immature rabbit ventricular myocytes. Chin TK, et al. **Pediatr Res** 1997 Apr;41(4 Pt 1):480-5

Mineralocorticoid receptors, salt, and hypertension. Funder JW, et al. **Recent Prog Horm Res** 1997;52:247-60; discussion 261-2 (54 ref.)

Developmental changes in Ca(2+)-uptake, Na+,Ca(2+)-exchange and Ca(2+)-ATPase in freshly isolated embryonic, newborn and adult chicken heart. Prakash P, et al. **Reprod Fertil Dev** 1996;8(1):71-8

ADMINISTRATION & DOSAGE

Dialysate sodium delivery can alter chronic blood pressure management. Flanigan MJ, et al. **Am J Kidney Dis** 1997 Mar;29(3):383-91

Sodium ramping in hemodialysis: a study of beneficial and adverse effects. Sang GL, et al. **Am J Kidney Dis** 1997 May;29(5):669-77

Time course of saline-induced recovery of the gustatory system in sodium-restricted rats. Stewart RE, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R704-12

Antagonistic actions of renal dopamine and 5-hydroxytryptamine: endogenous 5-hydroxytryptamine, 5-HT1A receptors and antinatriuresis during high sodium intake. Soares-da-Silva P, et al. **Br J Pharmacol** 1996 Mar; 117(6):1193-8

Aiding fluid prescription for the dysnatremias. Adrogué HJ, et al. **Intensive Care Med** 1997 Mar;23(3):309-16

Effects of the addition of potassium or sodium, but not calcium, to prepartum ratios on milk fever in dairy cows. Goff JP, et al. **J Dairy Sci** 1997 Jan;80(1):176-86

Role of chloride and sodium in DOCA-salt hypertensive rats. Kubota Y, et al. **Kobe J Med Sci** 1995 Aug;41(4):113-25

Brain oxytocin receptor antagonism disinhibits sodium appetite in preweanling rats. Chow SY, et al. **Regul Pept** 1997 Jan 29;68(2):119-24

ADVERSE EFFECTS

[The role of sodium serum level disturbances in the development of central pontine myelinolysis] Cegielska J, et al. **Neurol Neurochir Pol** 1996 Nov-Dec;30(6):1021-31 (Eng. Abstr.) **(Pol)**

ANALYSIS

Blood volume changes during three different profiles of dialysate sodium variation with similar intradialytic sodium balances in chronic hemodialyzed patients. Movilli E, et al. **Am J Kidney Dis** 1997 Jul;30(1):58-63

Effect of omeprazole on sodium and potassium output in pentagastrin-stimulated equine gastric contents. Merritt AM, et al. **Am J Vet Res** 1996 Nov;57(11):1640-4

Sodium Green as a potential probe for intracellular sodium imaging based on fluorescence lifetime. Szmacinski H, et al. **Anal Biochem** 1997 Aug 1;250(2):131-8

Measurement of sweat sodium using a modified enzymatic assay [see comments] Keevil BG, et al. **Ann Clin Biochem** 1996 Sep;33 (Pt 5):459-61. Comment in: Ann Clin Biochem 1997 Mar;34 (Pt 2):211.

Enzymatic measurement of sweat sodium and chloride [letter; comment] Taylor RP, et al. **Ann Clin Biochem** 1997 Mar; 34 (Pt 2):211. Comment on: Ann Clin Biochem 1996 Sep;33 (Pt 5):459-61.

Sodium and chlorine concentrations in mixed saliva of healthy and cystic fibrosis children. Jiménez-Reyes M, et al. **Appl Radiat Isot** 1996 Mar;47(3):273-7

Sodium concentration of water from softeners. Yarows SA, et al. **Arch Intern Med** 1997 Jan 27;157(2):218-22

Optimization of sodium removal in paired filtration dialysis by single pool sodium and conductivity kinetic models. Di Filippo S, et al. **Blood Purif** 1997;15(1):34-44

Effect of egg turning and fertility upon the sodium concentration of albumen of the Japanese quail. Latter GV, et al. **Br Poult Sci** 1996 May;37(2):301-8

Pulp mill sourced organic compounds and sodium levels in water and sediments from the Tarawera River, New Zealand. Wilkins AL, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):434-41

Fast 23Na magnetic resonance imaging of acute reperfused myocardial infarction. Potential to assess myocardial viability. Kim RJ, et al. **Circulation** 1997 Apr 1; 95(7):1877-85

Enzymatic determination of sodium and chloride in sweat. Taylor RP, et al. **Clin Biochem** 1996 Feb;29(1):33-7

Sodium status, corticosteroid metabolism and blood pressure in normal human subjects and in a patient with abnormal salt appetite. Ingram MC, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):375-8

Glycine protects against hepatocyte killing by KCN or hypoxia by preventing intracellular Na+ overload in the rat. Carini R, et al. **Hepatology** 1997 Jul;26(1):107-12

Determination of sodium in biological materials by instrumental neutron activation analysis. Cunningham WC, et al. **J AOAC Int** 1997 Jul-Aug;80(4):871-82

Ion chromatographic study of sodium, potassium and ammonium in human body fluids with bulk acoustic wave detection. Yu BS, et al. **J Chromatogr B Biomed Appl** 1997 May 23;693(1):43-9

Triple quantum sodium imaging of articular cartilage. Reddy R, et al. **Magn Reson Med** 1997 Aug;38(2):279-84

In vivo sodium multiple quantum spectroscopy of human articular cartilage. Reddy R, et al. **Magn Reson Med** 1997 Aug;38(2):207-14

Post-exercise rehydration in man: effects of volume consumed and drink sodium content. Shirreffs SM, et al. **Med Sci Sports Exerc** 1996 Oct;28(10):1260-71

Sodium distribution in black and white women. Aloia JF, et al. **Miner Electrolyte Metab** 1997;23(2):74-8

International consensus on the standardization of sodium and potassium measurements by ion-selective electrodes in undiluted samples. Külpmann WR, et al. **Scand J Clin Lab Invest Suppl** 1996;224:145-60 (6 ref.)

[A study of coloring in human lens nucleus--association of four inorganic elements and dielectric behavior with nuclear color] Matsuoka R, et al. **Nippon Ganka Gakkai Zasshi** 1997 Apr;101(4):359-64 (Eng. Abstr.) **(Jpn)**

[A comparative study of the sodium, potassium, urea, creatinine, and uric acid concentrations in the human amniotic fluid between weeks 15-20 and 38-42] Bauk FA, et al. **Rev Assoc Med Bras** 1996 Jan-Mar;42(1):7-10 (Eng. Abstr.) **(Por)**

[Changes in the electrolyte content of human saliva, urine and sweat under repeated heat exposures] Klimina NV. **Fiziol Cheloveka** 1997 May-Jun;23(3):97-103 **(Rus)**

[Changes in calcium, phosphate, magnesium and sodium content in bones of ovariectomized rats] de Bortoli MA, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):38-41 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Dual inhibitory effects of dopamine on Na+ homeostasis in rat aorta smooth muscle cells. Borin ML. **Am J Physiol** 1997 Feb;272(2 Pt 1):C428-38

Inhibition of Na+ and Ca2+ reabsorption by P2u purinoceptors requires PKC but not Ca2+ signaling. Koster HP, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F53-60

Methylprednisolone inhibits uptake of Ca2+ and Na+ ions into concanavalin A-stimulated thymocytes. Buttgereit F, et al. **Biochem J** 1997 Sep 1;326 (Pt 2):329-32

5-Hydroxytryptamine inhibits Na absorption and stimulates Cl secretion across canine tracheal epithelial sheets. Tamaoki J, et al. **Clin Exp Allergy** 1997 Aug;27(8):972-7

Endogenous sodium-potassium-chloride cotransport inhibitor in congestive heart failure. Dubois-Randé JL, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1464-70

Suppressing Na+ influx induces an increase in intracellular ATP concentration in mouse pancreatic beta-cells. Ding WG, et al. **Jpn J Physiol** 1997 Jun;47(3):299-306

Role of Na(+)-H+ exchange on reperfusion related myocardial injury and arrhythmias in an open-chest swine model. Fukuta M, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):2027-33

BLOOD

Sodium-lithium countertransport is associated with insulin resistance and urinary albumin excretion in young African-Americans. Falkner B, et al. **Am J Kidney Dis** 1997 Jan;29(1):45-53

Sodium depletion enhances fibrosis and the expression of TGF-beta1 and matrix proteins in experimental chronic cyclosporine nephropathy. Shihab FS, et al. **Am J Kidney Dis** 1997 Jul;30(1):71-81

Circadian relationships between circulating atrial natriuretic peptides and serum sodium and chloride in healthy humans. Sothern RB, et al. **Am J Nephrol** 1996;16(6):462-70

Hypokalemia, high erythrocyte Na+ and low erythrocyte Na,K-ATPase in relatives of patients dying from sudden unexplained death syndrome in north-east Thailand and in survivors from near-fatal attacks. Tosukhowong P, et al. **Am J Nephrol** 1996;16(5):369-74

Natriuresis caused by increased carotid Na+ concentration after renal denervation. Emmeluth C, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F510-7

Na(+)-K(+)-2Cl- cotransport, Na+/H+ exchange, and cell volume in ferret erythrocytes. Mairbäurl H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1603-11

Pseudohyponatraemia secondary to hypercholesterolaemia. Ko GT, et al. **Ann Clin Biochem** 1997 May;34 (Pt 3):324-5

The serum anion gap. Has the reference interval really fallen? Roberts WL, et al. **Arch Pathol Lab Med** 1997 Jun; 121(6):568-72

The monovalent cation "leak" transport in human erythrocytes: an electroneutral exchange process. Richter S, et al. **Biophys J** 1997 Aug;73(2):733-45

Determining the adequacy of sodium balance in hemodialysis using a kinetic model. Di Filippo S, et al. **Blood Purif** 1996; 14(6):431-6

Effect of progressive incremental exercise and beta-adrenergic blockade on erythrocyte ion concentrations. McKelvie RS, et al. **Can J Physiol Pharmacol** 1997 Jan;75(1):19-25

Incidence of nursing sickness and biochemical observations in lactating mink with and without dietary salt supplementation. Clausen TN, et al. **Can J Vet Res** 1996 Oct;60(4):271-6

Ethnic differences of renin-sodium profile and renal prostaglandins in the pathogenesis of systemic arterial hypertension. Somova L, et al. **Cent Afr J Med** 1996 Jun; 42(6):170-5

Validation of candidate reference methods based on ion chromatography for determination of total sodium, potassium, calcium and magnesium in serum through comparison with flame atomic emission and absorption spectrometry. Thienpont LM, et al. **Clin Biochem** 1996 Dec;29(6):501-8

Heparin interference with sodium and albumin assays [letter] Karon BS, et al. **Clin Chem** 1997 Apr;43(4):697-8

Comparison of methods for measurement of Na+/U+ countertransport across the erythrocyte membrane [letter] van Norren K, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1090-2

Weight changes and serum sodium concentrations after an

ultradistance multisport triathlon. Speedy DB, et al. **Clin J Sport Med** 1997 Apr;7(2):100–3

Effects of high external concentrations of K+ on 86Rb+ efflux in human platelets: evidence for Na+/K+/2Cl- co-transport. de Silva HA, et al. **Clin Sci (Colch)** 1996 Dec; 91(6):725–31

Amiloride-sensitive Na+/H+ exchange in erythrocytes of patients with NIDDM: a prospective study. Koren W, et al. **Diabetologia** 1997 Mar;40(3):302–6

Alterations in plasma volume, plasma constituents, renin activity and aldosterone induced by maximal exercise in the horse. Masri M, et al. **Equine Vet J Suppl** 1990 Jun; (9):72–7

Intermethod variability of sodium and potassium results: patients' sera and commercially available control sera. Cattozzo G, et al. **Eur J Clin Chem Clin Biochem** 1997 May;35(5):387–92

An amiloride-sensitive, volume-dependent Na+ transport across the lamprey (Lampetra fluviatilis) erythrocyte membrane. Gusev GP, et al. **Gen Physiol Biophys** 1996 Apr;15(2):129–43

Erythrocyte sodium-lithium countertransport in non-modulating offspring and essential hypertensive individuals: response to enalapril. Sánchez RA, et al. **Hypertension** 1997 Jul;30(1 Pt 1):99–105

Monitoring sodium removal and delivered dialysis by conductivity. Locatelli F, et al. **Int J Artif Organs** 1995 Nov;18(11):716–21

Prescription and surveillance of the acetate-free biofiltration sessions: the bicarbonate cycle. Pacitti A, et al. **Int J Artif Organs** 1995 Nov;18(11):722–5

Coexistence of central diabetes insipidus and salt wasting: the difficulties in diagnosis, changes in natremia, and treatment. Laredo S, et al. **J Am Soc Nephrol** 1996 Dec; 7(12):2527–32

Effect of racing on serum sodium and potassium concentrations and acid-base status of Alaskan sled dogs. Hinchcliff KW, et al. **J Am Vet Med Assoc** 1997 Jun 1; 210(11):1615–8

The effect of fluvoxamine on serum prolactin and serum sodium concentrations: relation to platelet 5-HT2A receptor status. Spigset O, et al. **J Clin Psychopharmacol** 1997 Aug;17(4):292–7

Abnormalities of erythrocyte sodium transport in reflux nephropathy. Goonasekera CD, et al. **J Hum Hypertens** 1996 Jul;10(7):473–6

Erythrocyte sodium transport and the probability of having hypertension. Turner ST, et al. **J Hypertens** 1996 Jul; 14(7):829–37

Effects of gramicidin and tryptophan-N-formylated gramicidin on the sodium and potassium content of human erythrocytes. Otten-Kuipers MA, et al. **Mol Membr Biol** 1996 Oct-Dec;13(4):225–32

Hyponatraemic renal pseudofailure--don't forget the possibility of uroperitoneum. Wystrychowski A, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2491–2

Plasma triglycerides cosegregate with erythrocyte sodium content in F2 rats of HTG x Lewis cross. Zicha J, et al. **Physiol Res** 1995;44(6):425–8

Virginiamycin and caloric density effects on live performance, blood serum metabolite concentration, and carcass composition of broilers reared in thermoneutral and cycling ambient temperatures. Belay T, et al. **Poult Sci** 1996 Nov;75(11):1383–92

Trapping of electrolytes during fluid absorption in transurethral resection of the prostate. Hahn RG. **Scand J Urol Nephrol** 1997 Jun;31(3):259–63

Laboratory parameters following contact laser ablation of the prostate for benign prostatic hypertrophy. Gomella LG, et al. **Tech Urol** 1995 Fall;1(3):168–71

[Effect of dialysis on Na+/K+-ATP-ase activity in uremic children] Vásárhelyi B, et al. **Orv Hetil** 1996 Oct 6; 137(40):2193–6 (Eng. Abstr.) **(Hun)**

[The role of sodium serum level disturbances in the development of central pontine myelinolysis] Cegielska J, et al. **Neurol Neurochir Pol** 1996 Nov-Dec;30(6):1021–31 (Eng. Abstr.) **(Pol)**

[Disordered Na+/H+ metabolism in the erythrocytes of patients with insulin-dependent diabetes mellitus] Balashova TS, et al. **Ter Arkh** 1996;68(2):53–6 (Eng. Abstr.) **(Rus)**

[Na+/H+ metabolism in the erythrocytes of healthy subjects and in patients with chronic heart failure] Gadzhiev AB, et al. **Ter Arkh** 1995;67(12):28–9 **(Rus)**

CEREBROSPINAL FLUID

Sympathoadrenal activity in the visceral (viscerovascular) reflexes to distension of the urinary bladder. Medda BK, et al. **Jpn J Physiol** 1996 Feb;46(1):3–92

Cerebrospinal fluid sodium concentration and osmosensitive sites related to arterial pressure in anaesthetized rats. Nose H, et al. **Pflugers Arch** 1996 Apr;431(6):807–13

CHEMISTRY

The physiological property and function of the electrolyzed-ionized calcium Aquamax on water molecular clusters fractionization. Hatto M, et al. **Artif Organs** 1997 Jan;21(1):43–9

The selectivity for K+ versus Na+ in DNA quadruplexes is dominated by relative free energies of hydration: a thermodynamic analysis by 1H NMR. Hud NV, et al. **Biochemistry** 1996 Dec 3;35(48):15383–90

The binding site of sodium in the gramicidin A channel: comparison of molecular dynamics with solid-state NMR data. Woolf TB, et al. **Biophys J** 1997 May;72(5):1930–45

Influence of Na+ on DNA reactions with aromatic epoxides and diol epoxides: evidence that DNA catalyzes the formation of benzo[a]pyrene and benz[a]anthracene adducts at intercalation sites. Fernando H, et al. **Chem Res Toxicol** 1996 Dec;9(8):1391–402

Kinetic studies of the effects of K+, Na+ and Li+ on the catalytic activity of human erythrocyte pyridoxal kinase. Lainé-Cessac P, et al. **Enzyme Protein** 1996; 49(5-6):291–304

Sodium and potassium ion-promoted formation of supramolecular aggregates of 2'-deoxyguanylyl-(3'-5')-2'-deoxyguanosine. Ghana R, et al. **J Biomol Struct Dyn** 1996 Aug;14(1):101–10

Cation-pi interactions in aromatics of biological and medicinal interest: electrostatic potential surfaces as a useful qualitative guide. Mecozzi S, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):10566–71

Characterisation of sodium cations in dehydrated zeolite NaX by 23Na NMR spectroscopy. Feuerstein M, et al. **Solid State Nucl Magn Reson** 1996 Nov;7(2):95–103

DEFICIENCY

Regulation of colonic H-K-ATPase in large intestine and kidney by dietary Na depletion and dietary K depletion. Sangan P, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C685–96

Role of renal nerves in sodium depletion-induced salt appetite. Thunhorst RL, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R806–12

ANG II chronically supports renal and lumbar sympathetic activity in sodium-deprived, conscious rats. Xu L, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2591–8

Absence of a salt (NaCl) preference or appetite in sodium-replete or depleted kittens. Yu S, et al. **Appetite** 1997 Aug;29(1):1–10

Permissive role of alpha-tocopherol in the stimulation of aldosterone by sodium depletion in the guinea pig. Möbius K, et al. **Eur J Endocrinol** 1996 Jun;134(6):758–63

Role of nitric oxide in the attenuated pressor responses of pregnant or sodium-deplete sheep. Tresham JJ, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):908–15

Effects of propionate and ammonium on contractions produced by sodium removal in human internal mammary artery and saphenous vein. Miyahara K, et al. **Jpn J Physiol** 1996 Jun;46(3):243–8

Response of severely malnourished patients to preoperative parenteral nutrition: a randomized clinical trial of water and sodium restriction [see comments] Gil MJ, et al. **Nutrition** 1997 Jan;13(1):26–31. Comment in: Nutrition 1997 Jan;13(1):54–5.

Mammalian bombesin-like peptides suppress sham drinking of salt by sodium-deficient rats. Flynn FW. **Peptides** 1996; 17(6):951–6

Activity in rat nucleus tractus solitarius after recovery from sodium deprivation. McCaughey SA, et al. **Physiol Behav** 1996 Aug;60(2):501–6

Effects of intracerebroventricular injections of losartan or PD123319 on arterial pressure and heart rate of sodium replete and sodium deplete rats. De Luca LA Jr, et al. **Regul Pept** 1996 Oct 8;66(1-2):31–5

The effect of losartan on drinking and NaCl intake in the rat in response to hyperosmotic and hypovolaemic stimuli: effect of route of administration and strain of rat. Findlay AL. **Regul Pept** 1996 Oct 8;66(1-2):95–100

Centrally administered losartan inhibits the reduction in plasma renin concentration caused by intracerebroventricular hypertonic saline in Na-depleted sheep. McKinley MJ, et al. **Regul Pept** 1996 Oct 8; 66(1-2):37–40

Effects of the selective tachykinin NK3 receptor agonist NH2-senktide on intraoral intake and taste reactivity responses elicited by NaCl in sodium-replete rats. Polidori C, et al. **Regul Pept** 1996 Oct 8;66(1-2):101–4

Idazoxan and the effect of intracerebroventricular oxytocin or vasopressin on sodium intake of sodium-depleted rats. Sato MA, et al. **Regul Pept** 1997 Apr 30;69(3):137–42

Increased salt preference in adult offspring raised by mother rats consuming excessive amounts of salt and water. Vijande M, et al. **Regul Pept** 1996 Oct 8;66(1-2):105–8

[Serum sodium imbalance in the bedridden elderly. Part One: Realities and problem of management] Sasaki A, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jun;33(6):440–3 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Detection of duodenal fluid in the oesophagus with a sodium ion selective electrode. Watson DI, et al. **J Gastroenterol Hepatol** 1996 May;11(5):486–90

METABOLISM

Studies on the effect of ethanol on the Na+, and the Na+, K(+)-ATPase activities of plasma membranes of rat kidney proximal tubular cells. Rothman A, et al. **Acta Cient Venez** 1994;45(4):281–6

Proximal tubular reabsorption of growth hormone and sodium/fluid in normo- and microalbuminuric insulin-dependent diabetes mellitus. Turner G, et al. **Acta Diabetol** 1997 Mar;34(1):27–32

Water and sodium disorders following surgical excision of pituitary region tumours. Poon WS, et al. **Acta Neurochir (Wien)** 1996;138(8):921–7

Sodium and potassium currents of type I spiral ganglion cells from rat. Moore EJ, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):552–60

Characterization of bumetanide-sensitive Na+ and K+ transport in rat skeletal muscle. Dørup I, et al. **Acta Physiol Scand** 1996 Oct;158(2):119–27

Na+/glucose cotransport in the colonic adenocarcinoma cell line HT29 cl.19A: effect of cAMP. Hemlin M, et al. **Acta Physiol Scand** 1997 Jun;160(2):185–94

Energy requirement of sodium reabsorption in the thick ascending limb of Henle's loop in the dog kidney: effects of bumetanide and ouabain. Ostensen J, et al. **Acta Physiol Scand** 1996 Jun;157(2):275–81

Prostaglandin E2 inhibits antidiuretic hormone induced transepithelial sodium transport and cAMP production in frog skin epithelium (Rana esculenta). Rytved KA, et al. **Acta Physiol Scand** 1996 Dec;158(4):357–63

Modulation of Ca2+ and Na+ transport by taurine in heart and vascular smooth muscle. Bkaily G, et al. **Adv Exp Med Biol** 1996;403:263–73

Heterogeneity and functional properties of subtypes of sodium-dependent glutamate transporters in the mammalian central nervous system. Robinson MB, et al. **Adv Pharmacol** 1997;37:69–115 (210 ref.)

Genetic and nongenetic determinants of salt sensitivity and blood pressure. Cowley AW Jr. **Am J Clin Nutr** 1997 Feb; 65(2 Suppl):587S–593S (50 ref.)

Mechanisms of abnormal renal sodium handling in obesity hypertension. Hall JE. **Am J Hypertens** 1997 May;10(5 Pt 2):49S–55S (48 ref.)

Spironolactone prevents Na+/H+ exchange enhancement in primary aldosteronism. Koren W, et al. **Am J Hypertens** 1997 Mar;10(3):341–5

Effect of insulin on renal sodium and uric acid handling in essential hypertension. Muscelli E, et al. **Am J Hypertens** 1996 Aug;9(8):746–52

Sodium lithium countertransport and blood pressure. Longitudinal findings. Trevisan M, et al. **Am J Hypertens** 1996 Nov;9(11):1132–5

Effects of Na-K-2Cl cotransport inhibition on myocardial Na and Ca during ischemia and reperfusion. Anderson SE, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C608–18

Inhibition of amiloride-sensitive Na+ channel by isothiouronium derivatives. Avigdor A, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1457–62

Molecular biology of Na+ absorption. Barbry P, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G571–85 (155 ref.)

Protein prenylation is required for aldosterone-stimulated Na+ transport. Blazer-Yost BL, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1928–35

Dual inhibitory effects of dopamine on Na+ homeostasis in rat aorta smooth muscle cells. Borin ML. **Am J Physiol** 1997 Feb;272(2 Pt 1):C428–38

Effects of EGF on alveolar epithelial junctional permeability and active sodium transport. Borok Z, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):L559–65

Effects of osteoclastic resorption on bone surface ion composition. Bushinsky DA, et al. **Am J Physiol** 1996 Oct; 271(4 Pt 1):C1025–31

Extracellular cGMP inhibits transepithelial sodium transport by LLC-PK1 renal tubular cells. Chevalier RL, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):F283–8

Calcitonin activates an Na(+)-independent HCO3(-)-dependent pathway in the rabbit distal convoluted tubule. Dagher G, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):F97–103

Pleiotropic upregulation of Na(+)-dependent cotransporters by retinoic acid in opossum kidney cells. de Toledo FG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F438–44

Thyroid status and regulation of intracellular sodium in rabbit heart. Doohan MM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):H1589–97

Angiotensin II: a humoral mediator for the gastric sodium monitor. Duggan KA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F406–10

Intracellular electrolytes regulate the volume set point of the organic osmolyte/anion channel VSOAC. Emma F, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1766–75

No evidence for a role of reverse Na(+)-Ca2+ exchange in insulin release from mouse pancreatic islets. Garcia-Barrado MJ, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E426–33

Enhanced colonic Na+ absorption in cystic fibrosis mice versus normal mice. Grubb BR, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G393–400

Amylin stimulates proximal tubular sodium transport and cell proliferation in the rat kidney. Harris PJ, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F13–21

Substrate-dependent expression of Na+ transport and shunt conductance in A6 epithelia. Helman SI, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C434–41

Glucocorticosteroids increase sodium transport in middle ear epithelium. Herman P, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C184–90

Inhibition by external Cd2+ of Na/Ca exchange and L-type Ca channel in rabbit ventricular myocytes. Hobai IA, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2164–72

Separate regulation of Na+ and anion transport by IMCD: location, aldosterone, hypertonicity, TGF-beta 1, and

cAMP. Husted RF, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F433–9

Characteristics of renal Na(+)-D-glucose cotransport in the skate (Raja erinacea) and shark (Squalus acanthias). Kipp H, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R134–42

Evidence for Cl(–)-independent HCO3- transport in basolateral membranes of Necturus oxyntopeptic cells. Klingensmith ME, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1096–103

Cytoplasmic phosphates in Na(+)-K+ balance in KCN-poisoned rat heart: a 87Rb-, 23Na-, and 31P-NMR study. Kupriyanov VV, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):H1303–11

Atrial natriuretic peptide and sodium homeostasis in compensated heart failure. Lohmeier TE, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1353–63

Influence of stimulation frequency on [Na+]i and contractile function in Langendorff-perfused rat heart. Maier LS, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1246–54

Urodilatin is involved in sodium homeostasis and exerts sodium-state-dependent natriuretic and diuretic effects. Meyer M, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):F489–97

Immortalized human bladder cell line exhibits amiloride-sensitive sodium absorption. Perrone RD, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F148–53

Cytosolic [Ca2+], [Na+], and pH in guinea pig ventricular myocytes exposed to anoxia and reoxygenation. Ralenkotter L, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2679–85

Indirect coupling of urate and p-aminohippurate transport to sodium in human brush-border membrane vesicles. Roch-Ramel F, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F61–8

Nitric oxide stimulates guanylate cyclase and regulates sodium transport in rabbit proximal tubule. Rocznіak A, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F106–15

Chronic regulation of transepithelial Na+ transport by the rate of apical Na+ entry. Rokaw MD, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C600–7

FK-506 and rapamycin but not cyclosporin inhibit aldosterone-stimulated sodium transport in A6 cells. Rokaw MD, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C194–202

Mechanisms compensating Na and water retention induced by long-term reduction of renal perfusion pressure. Seeliger E, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R646–54

Differing mechanisms of stimulation of Na+ absorption in rabbit proximal colon. Sellin JH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G435–45

Differential effects of polycationic protein on Cl- secretory and Na+ absorptive airways. Smith MD, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):L762–71

Vectorial efflux of cGMP and its dependence on sodium in the cortical collecting duct. Stoos BA, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1676–81

Dopamine inhibits AVP-dependent Na+ transport and water permeability in rat CCD via a D4-like receptor. Sun D, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F391–400

Cyclic nucleotide-gated cation channels mediate sodium absorption by IMCD (mIMCD-K2) cells. Vandorpe DH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):C901–10

Fast sodium influx provides an initial step to trigger contractions in cat ventricle. Vites AM, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H674–86

Nitric oxide regulates HCO3- and Na+ transport by a cGMP-mediated mechanism in the kidney proximal tubule. Wang T. **Am J Physiol** 1997 Feb;272(2 Pt 2):F242–8

Na+/Ca2+ exchange currents and SR Ca2+ contents in postinfarction myocytes. Zhang XQ, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1800–7

Keratinocyte growth factor increases transalveolar sodium reabsorption in normal and injured rat lungs. Guery BP, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1777–84

Effects of propofol on sodium channel-dependent sodium influx and glutamate release in rat cerebrocortical synaptosomes. Ratnakumari L, et al. **Anesthesiology** 1997 Feb;86(2):428–39

c-Fos induction in the nucleus of the solitary tract of sodium-depleted rats by salt intake, peripheral bombesin, and the combination. Frankmann SP, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:292–4

The effect of hyperthermia on intracellular sodium concentrations of isolated human cells. Gaffin SL, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:637–9

Sodium dependency of constitutive activity at 5-HT1D alpha/1D beta receptors. Gray DW, et al. **Ann N Y Acad Sci** 1997 May 30;812:236–9

Sequential changes in biliary lipids and gallbladder ion transport during gallstone formation. Giurgiu DI, et al. **Ann Surg** 1997 Apr;225(4):382–90

Drug effects on intracellular mycobacteria determined by mass spectrometric analysis of the Na(+)-to-K+ ratios of individual bacterial organisms. Wiese M, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2047–53

Sodium/glucose cotransporter activity in cystic fibrosis [letter] Hardcastle PT, et al. **Arch Dis Child** 1996 Aug; 75(2):170

Oxime depression of the fast sodium current in myocardial cells. Sada H, et al. **Arch Int Pharmacodyn Ther** 1995 Nov-Dec;330(3):319–31

Defining cooking salt intakes for patient counselling and policy making. Sánchez-Castillo CP, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):259–64

Sodium ion-dependent hydrogen production in Acidaminococcus fermentans. Härtel U, et al. **Arch Microbiol** 1996 Nov;166(5):350–6

Role of Na+/Ca2+ exchanger in preventing Na+ overload and hepatocyte injury: opposite effects of extracellular and intracellular Ca2+ chelation. Carini R, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):107–10

Glucose induces cytoplasmic Na+ oscillations in pancreatic beta-cells. Grapengiesser E. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):830–5

Novel effect of insulin: insulin-stimulated Na+ transport is mediated by hydrolysis of phosphoinositides. Isales C, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):156–9

Sodium-dependent and -independent transport of L-glutamate in the rat intestinal crypt-like cell line IEC-17. Mordrelle A, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):244–7

Rapid decrease in cellular sodium and chloride content during cold incubation of cultured liver endothelial cells and hepatocytes. Gizewski ER, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):693–9

Modification of cation selectivity of valinomycin by complexing it with an anion: delta pH decay studies. Prabhananda BS, et al. **Biochem Mol Biol Int** 1996 Feb; 38(2):417–24

Activation of sodium transport and intracellular sodium lowering by the neuroleptic drug chlorpromazine. Else PL, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):275–81

High-resolution kinetic studies of the reassembly of the tetra-manganese cluster of photosynthetic water oxidation: proton equilibrium, cations, and electrostatics. Ananyev GM, et al. **Biochemistry** 1996 Nov 19;35(46):14608–17

Na(+)-H+ and Na(+)-Li+ exchange are mediated by the same membrane transport protein in human red blood cells: an NMR investigation. Chi Y, et al. **Biochemistry** 1996 Sep 24;35(38):12433–42

Phosphorylation of the sodium-potassium adenosinetriphosphatase with adenosine triphosphate and sodium ion that requires subconformations in addition to principal E1 and E2 conformations of the enzyme. Ghosh MC, et al. **Biochemistry** 1996 Sep 24;35(38):12587–90

Molecular basis for the coupling ion selectivity of F1F0 ATP synthases: probing the liganding groups for Na+ and Li+ in the c subunit of the ATP synthase from Propionigenium modestum. Kaim G, et al. **Biochemistry** 1997 Jul 29; 36(30):9185–94

Aspartate 55 in the Na+/proline permease of Escherichia coli is essential for Na+-coupled proline uptake. Quick M, et al. **Biochemistry** 1997 Apr 15;36(15):4631–6

Na+ ions binding to the bradykinin B2 receptor suppress agonist-independent receptor activation. Quitterer U, et al. **Biochemistry** 1996 Oct 15;35(41):13368–77

Monovalent cation transport: lack of structural deformation upon cation binding. Tian F, et al. **Biochemistry** 1996 Sep 17;35(37):11959–66

Aldosterone-induced proteins in primary cultures of rabbit renal cortical collecting system. Bindels RJ, et al. **Biochim Biophys Acta** 1996 Oct 2;1284(1):63–8

Primary sodium ion translocating enzymes. Dimroth P. **Biochim Biophys Acta** 1997 Jan 16;1318(1-2):11–51 (273 ref.)

Conductive Na+ transport in fetal lung alveolar apical membrane vesicles is regulated by fatty acids and G proteins. Fyfe GK, et al. **Biochim Biophys Acta** 1997 Jan 10;1355(1):33–42

Determination of Na+/Cl-, Na+/HCO3- and Na+/K+/2Cl- co-transporter activity in corneal endothelial cell plasma membrane vesicles. Lane JR, et al. **Biochim Biophys Acta** 1997 Sep 4;1328(2):237–42

Interaction of substrates with the intestinal brush border membrane Na/phosphate cotransporter. Peerce BE. **Biochim Biophys Acta** 1997 Jan 14;1323(1):45–56

Sodium-dependent carnitine transport in human placental choriocarcinoma cells. Prasad PD, et al. **Biochim Biophys Acta** 1996 Oct 2;1284(1):109–17

Hypertonicity-induced alkalinization of rat hepatocytes is not involved in activation of Na+ conductance or Na+,K+-ATPase. Wehner F, et al. **Biochim Biophys Acta** 1997 Sep 4;1328(2):166–76

The molecular environment of the Na+ binding site of thrombin. Zhang E, et al. **Biophys Chem** 1997 Jan 31; 63(2-3):185–200

Unitary cardiac Na+, Ca2+ exchange current magnitudes determined from channel-like noise and charge movements of ion transport. Hilgemann DW. **Biophys J** 1996 Aug; 71(2):759–68

Conductance and permeation of monovalent cations through depletion-activated Ca2+ channels (ICRAC) in Jurkat T cells. Lepple-Wienhues A, et al. **Biophys J** 1996 Aug; 71(2):787–94

Current-voltage relations and steady-state characteristics of Na+-Ca2+ exchange: characterization of the eight-state consecutive transport model. Omelchenko A, et al. **Biophys J** 1996 Oct;71(4):1751–63

Mechanisms of sodium/calcium selectivity in sodium channels probed by cysteine mutagenesis and sulfhydryl modification. Pérez-García MT, et al. **Biophys J** 1997 Mar; 72(3):989–96

The effect of a transmembrane osmotic flux on the ion concentration distribution in the immediate membrane vicinity measured by microelectrodes. Pohl P, et al. **Biophys J** 1997 Apr;72(4):1711–8

Inner sarcolemmal leaflet Ca(2+) binding: its role in cardiac Na/Ca exchange. Wang SY, et al. **Biophys J** 1996 May; 70(5):2266–74

Responses of the renal prostanoids to a short-term depletion of sodium or potassium in healthy women. Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1996 Mar-Apr;72(3-4):109–16

Pharmacological evidence that the activation of the Na(+)-Ca2+ exchanger protects C6 glioma cells during chemical hypoxia. Amoroso S, et al. **Br J Pharmacol** 1997 May;121(2):303–9

Characterization of Na+ influx mediated by ATP(4-)-activated P2 purinoceptors in PC12 cells. Choi SY, et al. **Br J Pharmacol** 1996 Jun;118(4):935–40

Dual regulation of the Na+/H(+)-exchange in rat peritoneal mast cells: role of protein kinase C and calcium on pHi regulation and histamine release. Friis UG, et al. **Br J Pharmacol** 1996 Jul;118(6):1327–34

Modulation by locally produced luminal angiotensin II of proximal tubular sodium reabsorption via an AT1 receptor. Hiranyachattada S, et al. **Br J Pharmacol** 1996 Oct; 119(4):617–8

An autoradiographic study of dextromethorphan high-affinity binding sites in rat brain: sodium-dependency and colocalization with paroxetine. Meoni P, et al. **Br J Pharmacol** 1997 Apr;120(7):1255–62

Inhibition of regulatory volume decrease in swollen rat primary astrocyte cultures by methylmercury is due to increased amiloride-sensitive Na+ uptake. Vitarella D, et al. **Brain Res** 1996 Sep 2;732(1-2):169–78

Elevation of either axoplasmic norepinephrine or sodium level induced release of norepinephrine from cardiac sympathetic nerve terminals. Yamazaki T, et al. **Brain Res** 1996 Oct 21;737(1-2):343–6

Demonstration of the existence of mRNAs encoding N1/cif and N2/cit sodium/nucleoside cotransporters in rat brain. Anderson CM, et al. **Brain Res Mol Brain Res** 1996 Dec; 42(2):358–61

Induction of Na+/myo-inositol co-transporter mRNA after rat cryogenic injury. Yamashita T, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1-2):236–42

In vivo neutron activation analysis of sodium and chlorine in tumor tissue after fast neutron therapy. Auberger T, et al. **Bull Cancer Radiother** 1996;83 Suppl:37s–42s

Effect of melittin on the apical membrane Na+ and Cl- conductances of frog cornea epithelium. Carrasquer G, et al. **Can J Physiol Pharmacol** 1997 Mar;75(3):199–204

Effect of internal sodium and cellular calcium load on voltage-dependence of the Indo-1 transient in guinea-pig ventricular myocytes. Levi AJ, et al. **Cardiovasc Res** 1996 Sep;32(3):534–50

Mechanisms underlying depressed Na+/Ca2+ exchanger activity in the diabetic heart. Schaffer SW, et al. **Cardiovasc Res** 1997 Apr;34(1):129–36

Interaction between Na ions and the Cl/HCO3 exchanger in basolateral membranes from rat jejunum. Orsenigo MN, et al. **Cell Biochem Funct** 1996 Mar;14(1):69–73

Use of La3+ to distinguish activity of the plasmalemmal Ca2+ pump from Na+/Ca2+ exchange in arterial myocytes. Shimizu H, et al. **Cell Calcium** 1997 Jan; 21(1):31–41

Low concentrations of ouabain stimulate Na/Ca exchange in neurons. Saghian AA, et al. **Cell Mol Neurobiol** 1996 Aug;16(4):489–98

Regulation of phosphoinositide cycle by intracellular sodium in the blood-brain barrier. Catalán RE, et al. **Cell Signal** 1996 Aug;8(5):387–92

Unusual behavior of ion transport mediated by polyene antibiotics. Activation energies for the exchange of Na+ ions through liposomal membranes studied by 23Na-NMR spectroscopy. Kimura A, et al. **Chem Pharm Bull (Tokyo)** 1997 Mar;45(3):431–6

The role of extracellular sodium in the mechanism of a neuronal in vitro circadian pacemaker. Khalsa SB, et al. **Chronobiol Int** 1997 Jan;14(1):1–8

Modulation by pH0 and intracellular Ca2+ of Na(+)-H+ exchange in diabetic rat isolated ventricular myocytes. Le Prigent K, et al. **Circ Res** 1997 Feb;80(2):253–60

Genetic polymorphisms and erythrocyte sodium-lithium countertransport in essential hypertension. Tournoy KG, et al. **Clin Chim Acta** 1996 Nov 15;255(1):39–55

Effects of dietary salt and angiotensin-converting enzyme inhibitor on ATP-driven Ca pump and Na/Ca exchange in aortic rings of Dahl rats. Ashida T, et al. **Clin Exp Hypertens** 1996 Aug;18(6):851–71

Regulation of sodium transport by endogenous dopamine production in proximal tubular and OK cells. Baines AD, et al. **Clin Exp Hypertens** 1997 Jan-Feb;19(1-2):87–91 (14 ref.)

Stimulation of the gastric sodium monitor reduces hepatic angiotensin-converting enzyme activity. Duggan KA, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):449–50

Role of renal dopaminergic activity on renal sodium-water metabolism in congestive heart failure. Hayashi M, et al. **Clin Exp Pharmacol Physiol** 1996 Oct-Nov;23(10-11):874–7

Genetic factors associated with altered sodium transport in human hypertension: a twin study. Nowson CA, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):424–6

Stimulation of gastric osmoreceptors but not the sodium monitor increases renal angiotensin-converting enzyme activity. Ye VZ, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):463–4

Regulation of renal tubular sodium transport by angiotensin II and atrial natriuretic factor. Harris PJ, et al. **Clin Exp Pharmacol Physiol Suppl** 1996;3:S112–8 (74 ref.)

Effect of felodipine on blood pressure, body sodium, plasma renin activity and plasma aldosterone in hypertensive and normotensive rats. Ledingham JM, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S323–5

Abnormal distal tubular sodium reabsorption during dopamine infusion in patients with essential hypertension evaluated by the lithium clearance methods. Nielsen CB, et al. **Clin Nephrol** 1997 May;47(5):304–9

Transperitoneal transport of sodium during hypertonic peritoneal dialysis. Graff J, et al. **Clin Physiol** 1996 Jan; 16(1):31–9

Catamenial variations in erythrocyte sodium–lithium countertransport and blood pressure. Adebayo GI, et al. **Clin Sci (Colch)** 1997 Jul;93(1):29–34

Raised affinity for extracellular sodium of the sodium–lithium countertransporter is associated with a family history of hypertension and uraemia in patients with renal disease. Carr SJ, et al. **Clin Sci (Colch)** 1997 May;92(5):497–503

Sodium–lithium countertransport, sodium–hydrogen exchange and membrane microviscosity in patients with hyperlipidaemia. MacLeod MJ, et al. **Clin Sci (Colch)** 1997 Mar;92(3):237–46

Mechanism of the impaired natriuretic response to frusemide during sodium depletion: a micropuncture study in rats. Shirley DG, et al. **Clin Sci (Colch)** 1996 Sep;91(3):299–305

Renal handling of urate and sodium during acute physiological hyperinsulinaemia in healthy subjects. Ter Maaten JC, et al. **Clin Sci (Colch)** 1997 Jan;92(1):51–8

Contribution of Na(+)-glucose cotransport to the short-circuit current in the pigmented rabbit conjunctiva [letter; comment] Xiao-ping S, et al. **Curr Eye Res** 1996 Oct;15(10):iii–iv. Comment on: Curr Eye Res 1996 Apr;15(4):447–51.

Interactions between arterial pressure and sodium excretion. Navar LG, et al. **Curr Opin Nephrol Hypertens** 1996 Jan; 5(1):64–71 (89 ref.)

Sodium balance in renal failure. Shemin D, et al. **Curr Opin Nephrol Hypertens** 1997 Mar;6(2):128–32 (39 ref.)

Sodium channel expression: a dynamic process in neurons and non-neuronal cells. Black JA, et al. **Dev Neurosci** 1996; 18(3):139–52 (101 ref.)

Jejunal water and electrolyte transport in human cryptosporidiosis. Kelly P, et al. **Dig Dis Sci** 1996 Oct; 41(10):2095–9

Effect of fludrocortisone and spironolactone on sodium and potassium losses in secretory diarrhea. Wenzl HH, et al. **Dig Dis Sci** 1997 Jan;42(1):119–28

Effects of age and coion (K+ and Na+) on the toxicity of thiocyanate to rainbow trout (Oncorhynchus mykiss) during pulse or continuous exposure. Kevan SD, et al. **Ecotoxicol Environ Saf** 1996 Dec;35(3):288–93

A mutation causing pseudohypoaldosteronism type 1 identifies a conserved glycine that is involved in the gating of the epithelial sodium channel. Gründer S, et al. **EMBO J** 1997 Mar 3;16(5):899–907

Involvement of arginine vasopressin and renal sodium handling in pathogenesis of hyponatremia in elderly patients. Ishikawa S, et al. **Endocr J** 1996 Feb;43(1):101–8

Endogenous 11 beta-hydroxysteroid dehydrogenase inhibitors and their role in glucocorticoid Na+ retention and hypertension. Morris DJ, et al. **Endocr Res** 1996 Nov; 22(4):793–801

Cytoplasmic Ca2+ in glucagon-producing pancreatic alpha-cells exposed to carbachol and agents affecting Na+ fluxes. Berts A, et al. **Endocrine** 1997 Feb;6(1):79–83

Subunit c from the sodium-ion-translocating F1F0-ATPase of Propionigenium modestum--production, purification and properties of the protein in dodecylsulfate solution. Matthey U, et al. **Eur J Biochem** 1997 Aug 1;247(3):820–5

Assay of human erythrocyte sodium-dependent lithium efflux: the importance of timing of blood sampling. Adebayo GI, et al. **Eur J Clin Invest** 1996 Feb;26(2):131–5

Mechanisms of changes in renal handling of sodium following transjugular intrahepatic portal systemic stent-shunt (TIPSS). Jalan R, et al. **Eur J Gastroenterol Hepatol** 1996 Nov;8(11):1111–6

Na(+)-Ca2+ exchange currents in cortical neurons: concomitant forward and reverse operation and effect of glutamate. Yu SP, et al. **Eur J Neurosci** 1997 Jun; 9(6):1273–81

Indomethacin and piroxicam inhibit Na+-adenosine transport in rat renal brush-border membranes. González-Castillo C, et al. **Eur J Pharmacol** 1997 Jun 25; 329(2–3):245–52

Extrusion mechanisms of intracellular Ca2+ in human aortic endothelial cells. Goto Y, et al. **Eur J Pharmacol** 1996 Oct 24;314(1–2):185–92

Inducible expression of Na+/myo-inositol cotransporter mRNA in anterior epithelium of bovine lens: affiliation with hypertonicity and cell proliferation. Cammarata PR, et al. **Exp Eye Res** 1997 May;64(5):745–57

Beta-agonist-induced activation of Na+ absorption and KCl release in rat fetal distal lung epithelium: a study of cell volume regulation. Nakahari T, et al. **Exp Physiol** 1997 May;82(3):521–36

Transport of sodium across the isolated bovine rumen epithelium: interaction with short-chain fatty acids, chloride and bicarbonate. Sehested J, et al. **Exp Physiol** 1996 Jan;81(1):79–94

Na+/Ca2+ exchanger modulates kainate-triggered Ca2+ signaling in Bergmann glial cells in situ. Kirischuk S, et al. **FASEB J** 1997 Jun;11(7):566–72

Evidence for a Na+-Ca2+ exchanger in rat pancreatic ducts. Hug M, et al. **FEBS Lett** 1996 Nov 18; 397(2–3):298–302

Inhibition of epithelial Na+ currents by intracellular domains of the cystic fibrosis transmembrane conductance regulator. Kunzelmann K, et al. **FEBS Lett** 1997 Jan 6;400(3):341–4

Identification of Asp804 and Asp808 as Na+ and K+ coordinating residues in alpha-subunit of renal Na,K-ATPase. Pedersen PA, et al. **FEBS Lett** 1997 Jan 3;400(2):206–10

Sequence of subunit c of the Na(+)-translocating F1F0 ATPase of Acetobacterium woodii: proposal for determinants of Na+ specificity as revealed by sequence comparisons. Rahlfs S, et al. **FEBS Lett** 1997 Mar 10; 404(2–3):269–71

The presence of H+ and Na+ -linked Ca2+ extruding systems in Methanobacterium thermoautotrophicum. Varecka L, et al. **FEBS Lett** 1996 Dec 9;399(1–2):171–4

Extracellular Mg2+ regulates the intracellular Na+ concentration in rat sublingual acini. Zhang GH, et al. **FEBS Lett** 1997 Jun 30;410(2–3):387–90

The Na+/H+ exchange isoform NHE3 regulates basal canine ileal Na+ absorption in vivo. Maher MM, et al. **Gastroenterology** 1997 Jan;112(1):174–83

Hypothyroidism affects the expression of electrogenic amiloride-sensitive sodium transport in rat colon. Pácha J, et al. **Gastroenterology** 1996 Dec;111(6):1551–7

Gum arabic promotes rat jejunal sodium and water absorption from oral rehydration solutions in two models of diarrhea. Wapnir RA, et al. **Gastroenterology** 1997 Jun; 112(6):1979–85

Ion transport in rat antral mucosa in vitro: general characteristics. Bakoš P, et al. **Gen Physiol Biophys** 1995 Dec;14(6):473–90

A Bacillus subtilis locus encoding several gene products affecting transport of cations. Sturr MG, et al. **Gene** 1997 Mar 25;188(1):91–4

AMPA/kainate receptor activation blocks K+ currents via internal Na+ increase in mouse cultured stellate astrocytes. Robert A, et al. **Glia** 1997 May;20(1):38–50

Gap junctions equalize intracellular Na+ concentration in astrocytes. Rose CR, et al. **Glia** 1997 Aug;20(4):299–307

Nutrient regulation of human intestinal sugar transporter (SGLT1) expression. Dyer J, et al. **Gut** 1997 Jul;41(1):56–9

L-arginine in low concentration improves rat intestinal water and sodium absorption from oral rehydration solutions. Wapnir RA, et al. **Gut** 1997 May;40(5):602–7

Ultrastructural localization of the Na-K-Cl cotransporter in the lateral wall of the rabbit cochlear duct. Mizuta K, et al. **Hear Res** 1997 Apr;106(1–2):154–62

Na(+)-dependent and -independent Cl-/HCO-3 exchange mediate cellular HCO3- transport in cultured human intrahepatic bile duct cells. Strazzabosco M, et al. **Hepatology** 1997 Apr;25(4):976–85

Salty language is confusing. Segal AS. **Hosp Pract (Off Ed)** 1996 Oct 15;31(10):81–4

Role of ouabain-like compound in the regulation of transmembrane sodium and potassium gradients in rats. Goto A, et al. **Hypertension** 1997 Sep;30(3 Pt 2):753–8

Renal determinants for sodium sensitivity of blood pressure [letter; comment] Kimura G, et al. **Hypertension** 1996 Dec; 28(6):1102–3. Comment on: Hypertension 1996 Feb;27(2):202–8.

Characterization of a sodium-response transcriptional mechanism. Ruiz-Opazo N, et al. **Hypertension** 1997 Aug; 30(2 Pt 1):191–8

Intrarenal determinants of sodium retention in mild heart failure: effects of angiotensin-converting enzyme inhibition. Volpe M, et al. **Hypertension** 1997 Aug;30(2 Pt 1):168–76

Extracellular calcium stimulates Na(+)-dependent putrescine uptake in B16 melanoma cells. Minchin RF, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):447–54

Glibenclamide inhibits mitochondrial K+ and Na+ uniports induced by magnesium depletion. Szewczyk A, et al. **Int J Biochem Cell Biol** 1996 Aug;28(8):863–71

Timolol decreases aqueous humor flow but not Na+ movement from plasma to aqueous. Maren TH, et al. **Invest Ophthalmol Vis Sci** 1997 May;38(6):1274–7

Polymorphism in the beta subunit and Na+ transport [editorial] Warnock DG. **J Am Soc Nephrol** 1996 Dec; 7(12):2490–4 (62 ref.)

Urinary concentrating defect in experimental hemochromatosis. Zhou XJ, et al. **J Am Soc Nephrol** 1996 Jan;7(1):128–34

Effects of fatiguing stimulation on intracellular Na+ and K+ in frog skeletal muscle. Balog EM, et al. **J Appl Physiol** 1996 Aug;81(2):679–85

Effect of ATP-induced permeabilization on loading of the Na+ probe SBFI into endothelial cells. Cutaia M, et al. **J Appl Physiol** 1996 Jul;81(1):509–15

Sodium alterations in isolated rat heart during cardioplegic arrest. Schepkin VD, et al. **J Appl Physiol** 1996 Dec; 81(6):2696–702

Enhancement of intestinal water absorption and sodium transport by glycerol in rats. Wapnir RA, et al. **J Appl Physiol** 1996 Dec;81(6):2523–7

Effects of ischemia on intracellular sodium and phosphates in the in vivo rat liver. Xia ZF, et al. **J Appl Physiol** 1996 Sep;81(3):1395–403

Changes of blood pressure, sodium excretion and sodium balance due to variations of the renin-angiotensin-aldosterone system. Reinhardt HW, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):184–7

Blood-flow sensing by anionic biopolymers. Siegel G, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):207–13

Putative channel components for the fast-rotating sodium-driven flagellar motor of a marine bacterium. Asai Y, et al. **J Bacteriol** 1997 Aug;179(16):5104–10

An Na+-pumping V1V0-ATPase complex in the thermophilic bacterium Clostridium fervidus. Höner zu Bentrup K, et al. **J Bacteriol** 1997 Feb;179(4):1274–9

Primary structure and properties of the Na+/glucose symporter (Sg1S) of Vibrio parahaemolyticus. Sarker RI, et al. **J Bacteriol** 1997 Mar;179(5):1805–8

Mechanism responsible for oligomycin-induced occlusion of Na+ within Na/K-ATPase. Arato-Oshima T, et al. **J Biol Chem** 1996 Oct 11;271(41):25604–10

Mutation of the protein kinase C phosphorylation site on rat alpha1 Na+,K+-ATPase alters regulation of intracellular Na+ and pH and influences cell shape and adhesiveness. Belusa R, et al. **J Biol Chem** 1997 Aug 8; 272(32):20179–84

Ion and bumetanide binding by the Na-K-Cl cotransporter. Importance of transmembrane domains. Isenring P, et al. **J Biol Chem** 1997 Sep 26;272(39):24556–62

Regulation of a c-Jun amino-terminal kinase/stress-activated protein kinase cascade by a sodium-dependent signal transduction pathway. Kuroki DW, et al. **J Biol Chem** 1997 Sep 19;272(38):23905–11

Biophysical characteristics of the pig kidney Na+/glucose cotransporter SGLT2 reveal a common mechanism for SGLT1 and SGLT2. Mackenzie B, et al. **J Biol Chem** 1996 Dec 20;271(51):32678–83

Activation of Na+/H+ exchange is required for regulatory volume decrease after modest "physiological" volume increases in jejunal villus epithelial cells. MacLeod RJ, et al. **J Biol Chem** 1996 Sep 20;271(38):23138–45

Cloning of a third mammalian Na+-Ca2+ exchanger, NCX3. Nicoll DA, et al. **J Biol Chem** 1996 Oct 4; 271(40):24914–21

Nonhydrolyzable analogues of GTP activate a new Na+ current in a rat mast cell line. Parekh AB. **J Biol Chem** 1996 Sep 20;271(38):23161–8

Rapamycin inhibits protein kinase C activity and stimulates Na+ transport in A6 cells. Rokaw MD, et al. **J Biol Chem** 1996 Dec 13;271(50):32468–73

Angiotensin II and vasopressin modulate intracellular free magnesium in vascular smooth muscle cells through Na+-dependent protein kinase C pathways. Touyz RM, et al. **J Biol Chem** 1996 Oct 4;271(40):24353–8

Na+-dependent release of Mg2+ from an intracellular pool in rat sublingual mucous acini. Zhang GH, et al. **J Biol Chem** 1996 Nov 15;271(46):29067–72

Na+/Ca2+ exchange in rat osteoblast-like UMR 106 cells. White KE, et al. **J Bone Miner Res** 1996 Nov; 11(11):1666–75

NMR relaxation studies on hepatic intracellular and extracellular sodium in rats with burn injury. Xia Z, et al. **J Burn Care Rehabil** 1997 May-Jun;18(3):193–9

Gene expression of the Na-Ca exchanger in cardiac hypertrophy. Menick DR, et al. **J Card Fail** 1996 Dec;2(4 Suppl):S69–76 (40 ref.)

Role of intracellular sodium overload in the genesis of cardiac arrhythmias. Levi AJ, et al. **J Cardiovasc Electrophysiol** 1997 Jun;8(6):700–21 (209 ref.)

Possible involvement of altered Na+ -Ca2+ exchange in negative inotropic effects of class I antiarrhythmic drugs on rabbit and rat ventricles. Ito K, et al. **J Cardiovasc Pharmacol** 1996 Mar;27(3):355–61

Effect of methylisobutyl amiloride on [Na+]i, reperfusion arrhythmias, and function in ischemic rat hearts. Tani M, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):794–801

Rat lung alveolar type II cell line maintains sodium transport characteristics of primary culture. Michaut P, et al. **J Cell Physiol** 1996 Oct;169(1):78–86

Short-term growth hormone (GH) treatment of GH-deficient adults increases body sodium and extracellular water, but not blood pressure. Hoffman DM, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1123–8

Regulation of sodium-dependent phosphate transport in osteoclasts. Gupta A, et al. **J Clin Invest** 1997 Aug 1; 100(3):538–49

Metabolism of water, sodium, potassium, and chlorine by high yielding dairy cows at the onset of lactation. Silanikove N, et al. **J Dairy Sci** 1997 May;80(5):949–56

Potassium, sodium, and cancer: a review. Jansson B. **J Environ Pathol Toxicol Oncol** 1996;15(2–4):65–73 (12 ref.)

The renal electrogenic Na+:HCO-3 cotransporter. Boron VF, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):263–8 (24 ref.)

The key role of the H+ V-ATPase in acid-base balance and Na+ transport processes in frog skin. Ehrenfeld J, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):247–56 (78 ref.)

Reduced liver function is the trigger for renal sodium retention following portal vein ligation in the rat. Murakami S, et al. **J Gastroenterol Hepatol** 1996 Sep; 11(9):850–6

Calcium signaling in transgenic mice overexpressing cardiac Na(+)-Ca2+ exchanger. Adachi-Akahane S, et al. **J Gen Physiol** 1997 Jun;109(6):717–29

Elevated [Cl-]i, and [Na+]i inhibit Na+, K+, Cl-

cotransport by different mechanisms in squid giant axons. Breitwieser GE, et al. **J Gen Physiol** 1996 Feb; 107(2):261–70

Anomalous regulation of the Drosophila Na(+)–Ca2+ exchanger by Ca2+. Hryshko LV, et al. **J Gen Physiol** 1996 Jul;108(1):67–74

The effect of ionic strength and specific anions on substrate binding and hydrolytic activities of Na,K–ATPase [see comments] Nørby JG, et al. **J Gen Physiol** 1997 May; 109(5):555–70. Comment in: J Gen Physiol 1997 May;109(5):525–6.

Equilibrium of phosphointermediates of sodium and potassium ion transport adenosine triphosphatase: action of sodium ion and Hofmeister effect [see comments] Suzuki K, et al. **J Gen Physiol** 1997 May;109(5):537–54. Comment in: J Gen Physiol 1997 May;109(5):525–6.

Sodium kinetics of Na,K–ATPase alpha isoforms in intact transfected HeLa cells. Zahler R, et al. **J Gen Physiol** 1997 Aug;110(2):201–13

Effects of long–term administration of octreotide on sodium retention and atrial natriuretic peptide in carbon tetrachloride–induced cirrhotic rats. Wang SS, et al. **J Hepatol** 1997 May;26(5):1128–34

Sodium and the kidney in essential hypertension. de Wardener HE. **J Hum Hypertens** 1996 Oct;10(10):645–8 (65 ref.)

Angiotensin–converting enzyme (ACE) gene polymorphism and the erythrocyte sodium–lithium countertransporter (SLC) phenotype in hypertension [see comments] Hardman TC, et al. **J Hum Hypertens** 1996 Jun;10(6):429–30. Comment in: J Hum Hypertens 1997 Apr;11(4):251–2.

Glucose load and renal sodium handling in mild essential hypertension on different sodium intakes. Inoue J, et al. **J Hum Hypertens** 1996 Aug;10(8):523–9

Increased proximal sodium reabsorption is associated with increased cardiovascular risk in men. Cappuccio FP, et al. **J Hypertens** 1996 Jul;14(7):909–14

An abnormal sodium metabolism in Japanese patients with essential hypertension, judged by serum sodium distribution, renal function and the renin–aldosterone system. Komiya I, et al. **J Hypertens** 1997 Jan;15(1):65–72

Na+,K+,Cl– cotransport is a marker of distal tubular function in essential hypertension. Righetti M, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1775–8

Sodium–lithium countertransport [letter; comment] Siffert W, et al. **J Hypertens** 1996 Sep;14(9):1153–4. Comment on: J Hypertens 1996 Jun;14(6):695–703.

Oedema formation with the vasodilators nifedipine and diazoxide: direct local effect or sodium retention? van Hamersvelt HW, et al. **J Hypertens** 1996 Aug;14(8):1041–5

Erythrocyte Na(+)–Li+ countertransport in essential hypertension: correlation with membrane lipids levels. Villar J, et al. **J Hypertens** 1996 Aug;14(8):969–73

Cryptosporidiosis–induced impairment of ion transport and Na+–glucose absorption in adult immunocompromised mice. Kapel N, et al. **J Infect Dis** 1997 Sep;176(3):834–7

Relationship between sodium–lithium countertransport and insulin sensitivity in mild hypertension. Herlitz H, et al. **J Intern Med** 1996 Mar;239(3):235–40

Evaluation of multiple–quantum–filtered 23Na NMR in monitoring intracellular Na content in the isolated perfused rat heart in the absence of a chemical–shift reagent. Tauskela JS, et al. **J Magn Reson** 1997 Jul;127(1):115–27

Bisphenolic compounds that enhance cell cation transport are found in commercial phenol red. Kym PR, et al. **J Med Chem** 1996 Dec 6;39(25):4897–904

Concentration dependence of sodium permeation and sodium ion interactions in the cyclic AMP–gated channels of mammalian olfactory receptor neurons. Balasubramanian S, et al. **J Membr Biol** 1997 Sep 1;159(1):41–52

Extracellular GTP causes membrane–potential oscillations through the parallel activation of Mg2+ and Na+ currents in Paramecium tetraurelia. Clark KD, et al. **J Membr Biol** 1997 May 15;157(2):159–67

Dual role of prostaglandins (PGE2) in regulation of channel density and open probability of epithelial Na+ channels in frog skin (R. pipiens). Els WJ, et al. **J Membr Biol** 1997 Jan 1;155(1):75–87

The basis of higher Na+ transport by inner medullary collecting duct cells from Dahl salt–sensitive rats: implicating the apical membrane Na+ channel. Husted RF, et al. **J Membr Biol** 1997 Mar 1;156(1):9–18

Determination of the Na permeability of the tight junctions of MDCK cells by fluorescence microscopy. Kovbasnjuk O, et al. **J Membr Biol** 1995 Dec;148(3):223–32

Correlation between transepithelial Na+ transport and transepithelial water movement across isolated frog skin (Rana esculenta). Nielsen R. **J Membr Biol** 1997 Sep 1; 159(1):61–9

Alkaline pH and internal calcium increase Na+ and K+ effluxes in LK sheep red blood cells in Cl–free solutions. Ortiz–Carranza O, et al. **J Membr Biol** 1997 Apr 1; 156(3):287–95

Nerve growth factor increases sodium current in pancreatic beta cells. Rosenbaum T, et al. **J Membr Biol** 1996 Sep; 153(1):53–8

Ion secretion and isotonic transport in frog skin glands. Ussing HH, et al. **J Membr Biol** 1996 Jul;152(2):101–10

Vibrio alginolyticus mutants resistant to phenamil, a specific inhibitor of the sodium–driven flagellar motor. Kojima S, et al. **J Mol Biol** 1997 Jan 24;265(3):310–8

The relation between cellular sodium, pH and volumes and the activity of Na/H antiport during hypothermic ischemia: multinuclear NMR studies of rat hearts. Askenasy N, et al. **J Mol Cell Cardiol** 1996 Mar;28(3):589–601

Na–dependent regulation of intracellular free magnesium concentration in isolated rat ventricular myocytes. Handy RD, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1641–51

Effect of ATP depletion on kinetics of Na/Ca exchange–mediated Ca influx in Na–loaded heart cells. Haworth RA, et al. **J Mol Cell Cardiol** 1997 Feb; 29(2):503–14

Monensin–induced reversal of positive force–frequency relationship in cardiac muscle: role of intracellular sodium in rest–dependent potentiation of contraction. Mubagwa K, et al. **J Mol Cell Cardiol** 1997 Mar;29(3):977–89

The modulation of pacing–induced changes in intracellular sodium levels by extracellular Ca2+ in isolated perfused rat hearts. Simor T, et al. **J Mol Cell Cardiol** 1997 Apr; 29(4):1225–35

The role of the Na+ channel in the accumulation of intracellular Na+ during myocardial ischemia: consequences for post–ischemic recovery. van Emous JG, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):85–96

Interaction between Na+ and H+ ions on Na–H exchange in sheep cardiac Purkinje fibers. Wu ML, et al. **J Mol Cell Cardiol** 1997 Apr;29(4):1131–40

Differences in expression of sarcoplasmic reticulum Ca2+–ATPase and Na+–Ca2+ exchanger genes between adjacent and remote noninfarcted myocardium after myocardial infarction. Yoshiyama M, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):255–64

Differential inhibition of secretagogue–stimulated sodium uptake in adrenal chromaffin cells by activation of D4 and D5 dopamine receptors. Dahmer MK, et al. **J Neurochem** 1996 Nov;67(5):1960–4

Early events in free radical–mediated damage of isolated nerve terminals: effects of peroxides on membrane potential and intracellular Na+ and Ca2+ concentrations. Tretter L, et al. **J Neurochem** 1996 May;66(5):2057–66

Spatial distribution of synaptically activated sodium concentration changes in cerebellar Purkinje neurons. Callaway JC, et al. **J Neurophysiol** 1997 Jan;77(1):145–52

NMDA receptor activation inhibits neuronal volume regulation after swelling induced by veratridine–stimulated Na+ influx in rat cortical cultures. Churchwell KB, et al. **J Neurosci** 1996 Dec 1;16(23):7447–57

K+ channel expression and cell proliferation are regulated by intracellular sodium and membrane depolarization in oligodendrocyte progenitor cells. Knutson P, et al. **J Neurosci** 1997 Apr 15;17(8):2669–82

Mechanisms of H+ and Na+ changes induced by glutamate, kainate, and D–aspartate in rat hippocampal astrocytes. Rose CR, et al. **J Neurosci** 1996 Sep 1;16(17):5393–404

Measurement of intracellular Na+ concentration by a Na+–sensitive fluorescent dye, sodium–binding benzofuran isophthalate, in porcine adrenal chromaffin cells–usage of palytoxin as a Na+ ionophore. Ito S, et al. **J Neurosci Methods** 1997 Jul 18;75(1):21–7

Decreased sodium ion absorption across nasal epithelium of very premature infants with respiratory distress syndrome [see comments] Barker PM, et al. **J Pediatr** 1997 Mar; 130(3):373–7. Comment in: J Pediatr 1997 Mar;130(3):342–4.

Respiratory distress syndrome: the importance of effective transport [editorial; comment] O'Brodovich HM. **J Pediatr** 1997 Mar;130(3):342–4. Comment on: J Pediatr 1997 Mar;130(3):373–7.

Does primary salt wasting occur in 11–beta–hydroxylase deficiency? Singer–Granick C, et al. **J Pediatr Endocrinol Metab** 1995 Oct–Dec;8(4):275–80 (21 ref.)

A feast from a fast. MacLeod RJ. **J Pediatr Gastroenterol Nutr** 1997 Jan;24(1):115–6

Inhibition by protamine of catecholamine secretion and ion influxes in bovine adrenal medullary cells in culture. Minami K, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):838–43

Nitrous oxide enhances Na+/Ca++ exchange in the neuroblastoma cell line SK–N–SH. Resendes MC, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):795–801

Influence of renal nerves and sodium balance on the acute antidiuretic effect of bendroflumethiazide in rats with diabetes insipidus. Spannow J, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1155–62

Axonal calcium entry during fast 'sodium' action potentials in rat cerebellar Purkinje neurones. Callewaert G, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):641–7

Slow inactivation of Na+ current and slow cumulative spike adaptation in mouse and guinea–pig neocortical neurones in slices [published erratum appears in J Physiol (Lond) 1996 Aug 1;494(Pt 3):907] Fleidervish IA, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):83–97

Accumulation of intracellular HCO3– by Na(+)–HCO3– cotransport in interlobular ducts from guinea–pig pancreas. Ishiguro H, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):169–78

Hypoxia increases persistent sodium current in rat ventricular myocytes. Ju YK, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):337–47

Quisqualate–preferring metabotropic glutamate receptor activates Na(+)–Ca2+ exchange in rat basolateral amygdala neurones. Keele NB, et al. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):87–104

Endothelin–1 potently stimulates chloride secretion and inhibits Na(+)–glucose absorption in human intestine in vitro. Kuhn M, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):391–402

The effect of internal sodium and caesium on phasic contraction of patch–clamped rabbit ventricular myocytes. Levi AJ, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):1–19

Oscillatory bursting of phasically firing rat supraoptic neurones in low–Ca2+ medium: Na+ influx, cytosolic Ca2+ and gap junctions. Li Z, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):379–94

Block of large conductance Ca(2+)–activated K+ channels in rabbit vascular myocytes by internal Mg2+ and Na+. Morales E, et al. **J Physiol (Lond)** 1996 Sep 15;495 (Pt 3):701–16

Regulation of intracellular sodium in cultured rat hippocampal neurones. Rose CR, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):573–87

Properties and functions of Na(+)–activated K+ channels in the soma of rat motoneurones. Safronov BV, et al. **J Physiol (Lond)** 1996 Dec 15;497 (Pt 3):727–34

Cross–talk between ATP–regulated K+ channels and Na+ transport via cellular metabolism in frog skin principal cells. Urbach V, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):99–109

The action of angiotensin II on the intracellular sodium content of suspensions of rat proximal tubules. Wong PS, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):219–27

Effect of sarcoplasmic reticulum Ca release into diadic region on Na/Ca exchange in cardiac myocytes. Lewartowski B, et al. **J Physiol Pharmacol** 1996 Dec;47(4):577–90

Effects of corticosteroids on parameters related to Na+ transport by amphibian renal distal cells (A6) in culture. Lyoussi B, et al. **J Steroid Biochem Mol Biol** 1996 Nov; 59(3–4):323–31

Effects of dexamethasone on (Na+ + K+)–ATPase and other parameters related to transepithelial Na+ transport by amphibian renal distal cells (A6) in culture. Lyoussi B, et al. **J Steroid Biochem Mol Biol** 1996 Nov; 59(3–4):333–8

Renal clearance of endogenous creatinine, urea, sodium, and potassium in normal cats and cats with chronic renal failure. Deguchi E, et al. **J Vet Med Sci** 1997 Jul;59(7):509–12

Alteration of intracellular potassium and sodium concentrations correlates with induction of cytopathic effects by human immunodeficiency virus. Voss TG, et al. **J Virol** 1996 Aug;70(8):5447–54

Epidermal growth factor up–regulates sodium–glucose cotransport in enterocyte models in the presence of cholera toxin. Mehta DI, et al. **JPEN J Parenter Enteral Nutr** 1997 Jul–Aug;21(4):185–91

Physiological requirement of aldosterone action on the Na+/K+ pump in ADH–stimulated Na+ absorption in renal epithelium. Marunaka Y. **Jpn J Physiol** 1996 Aug; 46(4):357–61

Simultaneous effects of carbachol on intracellular Na+ activity, action potential, and twitch tension in guinea–pig cardiac ventricular papillary muscles. Yang JM, et al. **Jpn J Physiol** 1996 Jun;46(3):225–30

Effects of phenylephrine on intracellular Na+ and H+ activities in guinea–pig cardiac ventricular papillary muscles. Yang JM, et al. **Jpn J Physiol** 1996 Apr; 46(2):137–44

Contribution of Na+/Ca2+ exchanger in maintaining [Ca2+]c at a stable state in rat pancreatic islets. Yoshihashi K, et al. **Jpn J Physiol** 1996 Dec;46(6):473–80

Molecular mechanisms in the regulation of renal proximal tubular Na/phosphate cotransport. Murer H, et al. **Kidney Blood Press Res** 1996;19(3–4):151–4 (27 ref.)

Correlation between intracellular activities of Ca2+ and Na+ in rat cortical collecting duct–A possible coupling mechanism between Na+–K+–ATPase and Basolateral K+ conductance. Schlatter E, et al. **Kidney Blood Press Res** 1996;19(1):24–31

Cellular mechanisms for bi–directional regulation of tubular sodium reabsorption. Aperia A, et al. **Kidney Int** 1996 Jun; 49(6):1743–7 (44 ref.)

Characterization of sodium–calcium exchange in rabbit renal arterioles. Fowler BC, et al. **Kidney Int** 1996 Dec; 50(6):1856–62

Altered sodium–calcium exchange in afferent arterioles of the spontaneously hypertensive rat. Nelson LD, et al. **Kidney Int** 1996 Dec;50(6):1889–96

Regulation of the renal Na–HCO3 cotransporter: V. mechanism of the inhibitory effect of parathyroid hormone. Ruiz OS, et al. **Kidney Int** 1996 Feb;49(2):396–402

Regulation of the renal Na–HCO3 cotransporter: VII. Mechanism of the cholinergic stimulation. Ruiz OS, et al. **Kidney Int** 1997 Apr;51(4):1069–77

A potential mechanism for proximal tubule angiotensin II–mediated sodium flux associated with receptor–mediated endocytosis and arachidonic acid release. Becker BN, et al. **Kidney Int Suppl** 1996 Dec;57:S66–72

Effect of vasopressin on intracellular Na+ concentration in cortical collecting duct. Breyer MD, et al. **Kidney Int Suppl** 1996 Dec;57:S57–61

AVP and aldosterone at physiological concentrations have synergistic effects on Na+ transport in rat CCD. Hawk CT, et al. **Kidney Int Suppl** 1996 Dec;57:S35–41

Pathogenesis of water and sodium retention in cirrhosis. Martin PY, et al. **Kidney Int Suppl** 1997 Jun;59:S43–9 (66 ref.)

Sodium and water retention in heart failure: pathogenesis and treatment. Martin PY, et al. **Kidney Int Suppl** 1997 Jun;59:S57–61 (39 ref.)

Small changes in extracellular sodium influence myogenic tone in rabbit facial vein by changing its sensitivity to calcium. Henrion D, et al. **Life Sci** 1997;60(10):743–9

Potentiation of histamine-induced catecholamine secretion by ouabain in cultured bovine adrenal chromaffin cells is dependent on calcium and sodium influx. Houchi H, et al. **Life Sci** 1997;60(23):2051–8

Effect of dietary versus pharmacological correction of hypertriglyceridemia on red blood cell membrane sodium/lithium countertransport activity. Pagano E, et al. **Life Sci** 1997;60(26):2389–97

Sodium ion distribution in the vitreous body. Boicelli CA, et al. **MAGMA** 1996 Sep–Dec;4(3–4):241–5

Fast three dimensional sodium imaging. Boada FE, et al. **Magn Reson Med** 1997 May;37(5):706–15

Quantitative tissue sodium concentration mapping of normal rat brain. Christensen JD, et al. **Magn Reson Med** 1996 Jul;36(1):83–9

Mechanisms responsible for the increased magnesium efflux associated with raised [Na+]o in the isolated perfused rat heart. Hustler BI, et al. **Magnes Res** 1995 Dec;8(4):307–14

A stochastic simulation of direct ion passage through a sodium channel. Veresov VG. **Membr Cell Biol** 1997; 11(1):101–13

Cellular sodium membrane transport and cardiovascular risk factors in non-insulin-dependent diabetes mellitus. Foyle WJ, et al. **Metabolism** 1996 Aug;45(8):961–5

Modulation of cytosolic and nuclear Ca2+ and Na+ transport by taurine in heart cells. Bkaily G, et al. **Mol Cell Biochem** 1997 May;170(1–2):1–8

Evidence that up-regulation of the parotid Na(+)-K(+)-2Cl- cotransporter by hypertonic shrinkage is not duplicated by isotonic shrinkage. Ferri C, et al. **Mol Cell Biochem** 1997 Apr;169(1–2):21–5

Influence of vanadate on glycolysis, intracellular sodium, and pH in perfused rat hearts. Geraldes CF, et al. **Mol Cell Biochem** 1997 May;170(1–2):53–63

Cooperative interaction between Ca2+ binding sites in the hydrophilic loop of the Na(+)–Ca2+ exchanger. Levitsky DO, et al. **Mol Cell Biochem** 1996 Jul–Aug;160–161:27–32

Regulation of intracellular level of Na+, K+ and glycerol in Saccharomyces cerevisiae under osmotic stress. Sunder S, et al. **Mol Cell Biochem** 1996 May 24;158(2):121–4

Rapid activation of calcium-sensitive Na+/H+ exchange induced by 20-hydroxyecdysone in salivary gland cells of Drosophila melanogaster. Schneider S, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):73–9

A two-gene ABC-type transport system that extrudes Na+ in Bacillus subtilis is induced by ethanol or protonophore. Cheng J, et al. **Mol Microbiol** 1997 Mar;23(6):1107–20

Inhibition of the cardiac sarcolemma Na+/Ca2+ exchanger by conformationally constrained small cyclic peptides. Khananshvili D, et al. **Mol Pharmacol** 1997 Jan; 51(1):126–31

Stimulation of protein kinase C rapidly reduces intracellular Na+ concentration via activation of the Na+ pump in OK cells. Pedemonte CH, et al. **Mol Pharmacol** 1997 Jul; 52(1):88–97

Transport of adenosine by recombinant purine- and pyrimidine-selective sodium/nucleoside cotransporters from rat jejunum expressed in Xenopus laevis oocytes. Yao SY, et al. **Mol Pharmacol** 1996 Dec;50(6):1529–35

Expression cloning and characterization of a renal electrogenic Na+/HCO3- cotransporter. Romero MF, et al. **Nature** 1997 May 22;387(6631):409–13

Some sodium, potassium and water changes in the elderly and their treatment. Andreucci VE, et al. **Nephrol Dial Transplant** 1996;11 Suppl 9:9–17 (113 ref.)

A view of type I and II Na+/P(i) transporters through microelectrodes [editorial] Busch AE. **Nephrol Dial Transplant** 1997 Apr;12(4):638–40 (11 ref.)

Sodium and water profiling in chronic uraemia. Churchill DN. **Nephrol Dial Transplant** 1996;11 Suppl 8:38–41 (15 ref.)

Renal sodium handling in experimental diabetes: role of NO. Komers R, et al. **Nephrol Dial Transplant** 1996 Nov; 11(11):2170–7

Urea, sodium, and water changes in profiling dialysis. Mann H, et al. **Nephrol Dial Transplant** 1996;11 Suppl 8:10–5 (12 ref.)

Electrolyte modelling: sodium. Is dialysate sodium profiling actually useful? Petitclerc T, et al. **Nephrol Dial Transplant** 1996;11 Suppl 2:35–8 (21 ref.)

Atrial natriuretic peptide, sodium retention, and proteinuria in nephrotic syndrome. Plum J, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1034–42

Sodium profiling in elderly haemodialysis patients. Raja RM. **Nephrol Dial Transplant** 1996;11 Suppl 8:42–5 (16 ref.)

Abnormal effect of thiol groups on erythrocyte Na/Li countertransport kinetics in adult polycystic kidney disease. Vareesangthip K, et al. **Nephrol Dial Transplant** 1995 Dec; 10(12):2219–23

Inhibition of sodium-dependent uptake processes in purified rat brain synaptosomes by Lophozozymus pictor toxin and palytoxin. Lau CO, et al. **Neurochem Int** 1996 Apr; 28(4):385–90

Na(+)-K(+)-Cl- cotransport system in brain capillary endothelial cells: response to endothelin and hypoxia. Kawai N, et al. **Neurochem Res** 1996 Oct;21(10):1259–66

Nigericin-induced Na+/H+ and K+/H+ exchange in synaptosomes: effect on [3H]GABA release. Rodríguez R, et al. **Neurochem Res** 1996 Aug;21(8):889–95

A role of intracellular Na+ in the regulation of synaptic transmission and turnover of the vesicular pool in cultured hippocampal cells. Bouron A, et al. **Neuron** 1996 Nov; 17(5):969–78

The protective action of tetrodotoxin and (+/-)-kavain on anaerobic glycolysis, ATP content and intracellular Na+ and Ca2+ of anoxic brain vesicles. Gleitz J, et al. **Neuropharmacology** 1996;35(12):1743–52

Glutamate is transported across the rat blood-brain barrier by a sodium-independent system. Benrabh H, et al. **Neurosci Lett** 1996 May 24;210(1):9–12

Biochemical evidence of the sodium influx stimulating related peptide in the brain of the leech Theromyzon tessulatum. Salzet M, et al. **Neurosci Lett** 1996 Aug 9;213(3):161–4

A transient outward cationic current activated by Na+ influx into frog visual neurones in vitro. Zaykin A, et al. **Neurosci Lett** 1996 Feb 16;205(1):5–8

Intracellular free Na+ concentration increases in cultured retinal cells under oxidative stress conditions. Agostinho P, et al. **Neurosci Res** 1996 Aug;25(4):343–51

Intracellular Ca2+, Na+ and H+ transients evoked by kainate in the leech giant glial cells in situ. Munsch T, et al. **Neurosci Res** 1997 Jan;27(1):45–56

Fast Na+ spike generation in dendrites of guinea-pig substantia nigra pars compacta neurons. Nedergaard S, et al. **Neuroscience** 1996 Jul;73(2):381–96

Intracellular calcium redistribution accompanies changes in total tissue Na+, K+ and water during the first two hours of in vitro incubation of hippocampal slices. Siklós L, et al. **Neuroscience** 1997 Aug;79(4):1013–22

A new chromatographic method for measurement of rubidium transport activities in cultured bovine retinal pigment epithelial cells. Crider JY, et al. **Ophthalmic Res** 1997;29(3):117–23

Influence of cardiac dysfunction on fast sodium current regulation by Forskolin. Kirstein M, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):2018–22

Long-term control of blood pressure and sodium balance: is the baseline nocturnal? Michell A. **Perspect Biol Med** 1997 Summer;40(4):516–28 (61 ref.)

Cystic fibrosis and non-cystic-fibrosis human nasal epithelium show analogous Na+ absorption and reversible block by phenamil. Blank U, et al. **Pflugers Arch** 1997 May; 434(1):19–24

Characterization of hormone-stimulated Na+ transport in a high-resistance clone of the MDCK cell line. Blazer-Yost BL, et al. **Pflugers Arch** 1996 Aug;432(4):685–91

Regional differences in the regulation of intracellular sodium and in action potential configuration in rabbit left ventricle. Cook SJ, et al. **Pflugers Arch** 1997 Feb;433(4):515–22

The amiloride inhibitable Na+ conductance of rat colonic crypt cells is suppressed by forskolin. Ecke D, et al. **Pflugers Arch** 1996 Apr;431(6):984–6

The role of mitochondria-rich cells in sodium transport across amphibian skin. Nagel W, et al. **Pflugers Arch** 1996 Nov-Dec;433(1–2):146–52

Effects of reduced electrochemical Na+ gradient on contractility in skeletal muscle: role of the Na+-K+ pump. Overgaard K, et al. **Pflugers Arch** 1997 Aug; 434(4):457–65

Effects of the Na+/H+-exchange inhibitor Hoe 642 on intracellular pH, calcium and sodium in isolated rat ventricular myocytes. Russ U, et al. **Pflugers Arch** 1996 Nov-Dec;433(1–2):26–34

Whole-cell currents from the cloned canine cardiac Na+/Ca2+ exchanger NCX1 overexpressed in a fibroblast cell CCL39. Uehara A, et al. **Pflugers Arch** 1997 Jul; 434(3):335–8

Interference of a short-chain phospholipid with ion transport pathways in frog skin. Unmack MA, et al. **Pflugers Arch** 1997 Jul;434(3):234–41

Re-examination of Na+-dependent regulation of cAMP-dependent Cl- currents in the heart. Warth JD, et al. **Pflugers Arch** 1997 Mar;433(5):597–607

Chlorine and sodium perfusion and electrolyte balance in human tissue and tumours before and during neutron and photon radiotherapy. Koester L, et al. **Phys Med Biol** 1997 Aug;42(8):1587–603

Water electrolyte concentrations in different segments of the kidney of rats during prolonged restriction of motor activity. Zorbas YG, et al. **Physiol Chem Phys Med NMR** 1996;28(3):197–204

Reduced Na+ uptake in the NaCl-hypersensitive sos1 mutant of Arabidopsis thaliana. Ding L, et al. **Plant Physiol** 1997 Mar;113(3):795–9

Rapid activation of Na+/H+ exchange by aldosterone in renal epithelial cells requires Ca2+ and stimulation of a plasma membrane proton conductance. Gekle M, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10500–4

Cytosolic Na+ controls and epithelial Na+ channel via the Go guanine nucleotide-binding regulatory protein. Komwatana P, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8107–11

Novel isoforms of the beta and gamma subunits of the Xenopus epithelial Na channel provide information about the amiloride binding site and extracellular sodium sensing. Puoti A, et al. **Proc Natl Acad Sci U S A** 1997 May 27; 94(11):5949–54

Effect of 5-hydroxytryptamine on bioelectric properties of airway epithelial cells in culture. Tamaoki J, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jun;92(3):285–98

Regional differences in the effect of mucosal glucose and amino acids on ion transport in normal and cholera toxin-stimulated porcine small intestine. Grøndahl ML, et al. **Scand J Gastroenterol** 1997 May;32(5):478–84

Effect of cadmium on Na-Pi cotransport kinetics in rabbit renal brush-border membrane vesicles. Park K, et al. **Toxicol Appl Pharmacol** 1997 Aug;145(2):255–9

Na(+)- and Cl(-)-dependent neurotransmitter transporters in bovine retina: identification and localization by in situ hybridization histochemistry. Jones EM. **Vis Neurosci** 1995 Nov-Dec;12(6):1135–42

pH changes in frog rods upon manipulation of putative pH-regulating transport mechanisms. Kalamkarov G, et al. **Vision Res** 1996 Oct;36(19):3029–36

[Na/Ca exchange] Herchuelz A. **Bull Mem Acad R Med Belg** 1996;151(1):125–31; discussion 131–4 (Eng. Abstr.) **(Fre)**

[Effects of adrenergic stimulation on transmembrane transport of Na+ in patients with essential hypertension] Saitta A, et al. **Minerva Med** 1997 Jul–Aug;88(7–8):275–82 (Eng. Abstr.) **(Ita)**

[The effects of prostaglandin I2 on membrane Na+, K+ transport systems in cultured vascular smooth muscle cells] Uchida H. **Nippon Jinzo Gakkai Shi** 1996 Sep;38(9):399–406 (Eng. Abstr.) **(Jpn)**

[Early postirradiation changes in Na+ and fluid transport across alveolar epithelium in rats] Suzuki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Feb; 35(2):167–72 (Eng. Abstr.) **(Jpn)**

[Essential hypertension] Ando K, et al. **Nippon Rinsho** 1996 Mar;54(3):770–5 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Na+/K+/2Cl- cotransport protein, Na+/Cl- cotransport protein] Inoue T, et al. **Nippon Rinsho** 1996 Mar; 54(3):625–31 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Na+ -dependent amino acid transporters: their structure and function] Kanai Y. **Nippon Rinsho** 1996 Mar; 54(3):368–45 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Na+ -Ca2+ exchanger] Matsuda T, et al. **Nippon Rinsho** 1996 Mar;54(3):612–7 (27 ref.) (Eng. Abstr.) **(Jpn)**

[Sodium-losing nephropathy] Terano T, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):674–7 (4 ref.) **(Jpn)**

[Influence of magnesium on rate of sodium transport through lymphocyte membranes in patients with hypertension] Kucharski W, et al. **Pol Arch Med Wewn** 1996 Jul;96(1):1–7 (Eng. Abstr.) **(Pol)**

[Renin plasma profile and sodium sensitivity of blood pressure in hypertensive patients with or without a family history of hypertension] Więcek A, et al. **Pol Arch Med Wewn** 1996 Nov;96(5):451–7 (Eng. Abstr.) **(Pol)**

[Reduction of the antihypertensive effects of enalapril by indomethacin. Its independence from renal sodium retention] Polónia J, et al. **Rev Port Cardiol** 1996 Jun; 15(6):485–92, 460 (Eng. Abstr.) **(Por)**

[Effects of hypokinesia of different duration on electrolyte contents in muscle tissue of rats] Gritsuk AI, et al. **Aviakosm Ekolog Med** 1997;31(3):28–33 (Eng. Abstr.) **(Rus)**

[A study of the mechanism of lidocaine and befol effects on Na-exchange in normal cardiomyocytes and in the experimental model of hypoxia in vitro] Khankoeva AI, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):45–7 **(Rus)**

[Comparative characteristic of sodium blocking properties of anti-arrhythmia agents on isolated rats cardiomyocytes] Khankoeva AI, et al. **Biull Eksp Biol Med** 1997 Jun; 123(6):666–8 **(Rus)**

[Role of sodium ions in the protective action of nucleotides and their hydrolytic products in calcium paradox] Alabovskiĭ VV, et al. **Vestn Ross Akad Med Nauk** 1996; (5):45–51 (Eng. Abstr.) **(Rus)**

[The effect of physical factors on the active transport of sodium ions across cell membranes] Tereshin SIu. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Mar–Apr; (2):41–3 (31 ref.) **(Rus)**

[Effect of a sodium transmembrane gradient on efflux of creatinine from the myocardium] Alabovskiĭ VV, et al. **Vopr Med Khim** 1996 Oct–Dec;42(4):291–5 (Eng. Abstr.) **(Rus)**

[Effect of extracellular concentration of sodium on swelling of cardiomyocytes and myocardial damage during calcium paradox] Alabovskiĭ VV, et al. **Vopr Med Khim** 1997 Jul–Aug;43(4):239–46 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Hyperosmolality inhibits sodium absorption and chloride secretion in mIMCD-K2 cells. Green RB, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1248–54

IMCD cells cultured from Dahl S rats absorb more Na+ than Dahl R rats. Husted RF, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1029–36

Effect of calcitonin gene-related peptide on sodium absorption through isolated skin of Rana esculenta. Castronuovo G, et al. **Arch Physiol Biochem** 1996; 104(2):142–7

Sieving coefficients for small solutes during experimental peritoneal dialysis in rats. Park MS, et al. **Blood Purif** 1995 Nov-Dec;13(6):289–300

Increased Na(+)-H+ exchanger activity in the ileal brush-border membrane of spontaneously hypertensive

rats. Vázquez CM, et al. **Cell Mol Life Sci** 1997 May; 53(5):442–6

5-Hydroxytryptamine inhibits Na absorption and stimulates Cl secretion across canine tracheal epithelial sheets. Tamaoki J, et al. **Clin Exp Allergy** 1997 Aug;27(8):972–7

Intraluminal peptide YY induces colonic absorption in vivo. Liu CD, et al. **Dis Colon Rectum** 1997 Apr;40(4):478–82

Iodide uptake and experimental 131I therapy in transplanted undifferentiated thyroid cancer cells expressing the Na+/I- symporter gene. Shimura H, et al. **Endocrinology** 1997 Oct;138(10):4493–6

Intestinal transport of water, sodium & glucose from an electrolyte solution with & without bicarbonate. Islam S, et al. **Indian J Med Res** 1996 Oct;104:254–6

A simple mathematical model of intradialytic sodium kinetics: "in vivo" validation during hemodialysis with constant or variable sodium. Ursino M, et al. **Int J Artif Organs** 1996 Jul;19(7):393–403

Oral rehydration solutions: enhanced sodium absorption with gum arabic. Wapnir RA, et al. **J Am Coll Nutr** 1996 Aug; 15(4):377–82

Activation of Na+-permeant cation channel by stretch and cyclic AMP-dependent phosphorylation in renal epithelial A6 cells. Marunaka Y, et al. **J Gen Physiol** 1997 Sep; 110(3):327–36

Effect of a chronic high-salt diet on whole-body and organ sodium contents of Dahl rats. Tsunooka K, et al. **J Hypertens** 1997 Aug;15(8):851–6

Presteady-state currents of the rabbit Na+/glucose cotransporter (SGLT1). Hazama A, et al. **J Membr Biol** 1997 Jan 15;155(2):175–86

Regulation of Na+ reabsorption in aldosterone target epithelia. Verrey F, et al. **Kidney Blood Press Res** 1997; 20(3):148–50

The effect of brefeldin A on terbutaline-induced sodium absorption in fetal rat distal lung epithelium. Ito Y, et al. **Pflugers Arch** 1997 Aug;434(4):492–4

Disruption of cell volume regulation by mercuric chloride is mediated by an increase in sodium permeability and inhibition of an osmolyte channel in skate hepatocytes. Ballatori N, et al. **Toxicol Appl Pharmacol** 1996 Oct; 140(2):404–10

Effect of weaning in the pig on ileal ion transport measured in vitro. Miller BG, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):289–99

PHARMACOLOGY

The effect of hypertonic sodium and dantrolene on propranolol cardiotoxicity. Kerns W 2nd, et al. **Acad Emerg Med** 1997 Jun;4(6):545–51

Na+ and Ca2+ cooperatively down regulate the A-type potassium currents in Helix neurons. Erdélyi L. **Acta Biol Hung** 1995;46(2–4):417–25

Sodium- and chloride-dependent transport of taurine at the blood-brain barrier. Tsuji A, et al. **Adv Exp Med Biol** 1996; 403:385–91 (12 ref.)

Sodium, potassium, and blood pressure. Weinberger MH. **Am J Hypertens** 1997 May;10(5 Pt 2):46S–48S (19 ref.)

Reduction of extracellular Na+ causes a release of Ca2+ from internal stores in airway epithelial cells. Boitano S, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):L1189–97

Medullary pathways mediating depressor responses from Na(+)-sensitive sites in nucleus of the solitary tract. Hochstenbach SL, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R126–33

Sympathoexcitatory and pressor responses to increased brain sodium and ouabain are mediated via brain ANG II. Huang BS, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H275–80

Sodium-glucose cotransporters display sodium- and phlorizin-dependent water permeability. Loike JD, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1774–9

Sodium-dependent nucleoside transport in the human intestinal brush-border membrane. Patil SD, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1314–20

Effect of chronic cold exposure on Na-dependent D-glucose transport along small intestine in ducklings. Thomas V, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1429–38

Sodium effects on 4-aminopyridine-sensitive transient outward current in canine ventricular cells. Zygmunt AC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):H1–11

Sodium-dependent succinate decarboxylation by a new anaerobic bacterium belonging to the genus Peptostreptococcus. Janssen PH, et al. **Antonie Van Leeuwenhoek** 1996 Jul;70(1):11–20

Sodium-dependent transport of phosphate in neuronal and related cells. Furman S, et al. **Biochim Biophys Acta** 1997 Apr 3;1325(1):34–40

Effects of class III antiarrhythmic drugs on the Na(+)-activated K+ channels in guinea-pig ventricular cells. Mori K, et al. **Br J Pharmacol** 1996 Sep;119(1):133–41

Induction by low Na+ or Cl- of cocaine sensitive carrier-mediated efflux of amines from cells transfected with the cloned human catecholamine transporters. Pifl C, et al. **Br J Pharmacol** 1997 May;121(2):205–12

Lowering extracellular Na+ concentration causes NMDA receptor-mediated neuronal death in cultured rat hippocampal slices. Takahashi M, et al. **Brain Res** 1996 Sep 30;735(1):1–8

Excitotoxic lesions of the ventral anteroventral third ventricle and pressor responses to central sodium, ouabain and angiotensin II. Veerasingham SJ, et al. **Brain Res** 1997 Feb 21;749(1):157–60

Rapid and transient up-regulation of Na+/myo-inositol cotransporter transcription in the brain of acute hypernatremic rats. Minami Y, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):64–70

Effects of nutrient HCO3- and Cl- on potential difference responses to nutrient Na+ changes in secreting and inhibited states of frog stomach. Schwartz M, et al. **Can J Physiol Pharmacol** 1996 Jan;74(1):58–64

A detailed 1H and 13C NMR study of a repeating disaccharide of hyaluronan: the effect of sodium and calcium ions. Sicińska W, et al. **Carbohydr Res** 1996 Jun 5;286:151–9

Effects of elevating [Na]i on membrane currents of canine ventricular myocytes: role of intracellular Ca ions. Saxena NC, et al. **Cardiovasc Res** 1997 Mar;33(3):548–60

Suppression of bitterness by sodium: variation among bitter taste stimuli. Breslin PA, et al. **Chem Senses** 1995 Dec; 20(6):609–23

Interactions of Na+, H2O2 and the Na+-Ca2+ exchanger stimulate Ca2+ release in CK1.4 cells. Fang Y, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):170–4

Effects of Mn2+ on the responses induced by different spasmogens in the oestrogen-primed rat uterus. Magraner J, et al. **Eur J Pharmacol** 1997 May 20;326(2–3):211–22

Defective inhibition of sodium on basophil histamine release in patients with allergic rhinitis and bronchial asthma. Tedeschi A, et al. **Eur Respir J** 1996 Oct;9(10):2070–6

Pressure natriuresis in salt-sensitive and salt-resistant Sabra rats. Gross V, et al. **Hypertension** 1997 Jun;29(6):1252–9

Sodium ions affect axis formation and epiboly in fish embryos. Minin AA, et al. **Int J Dev Biol** 1996;Suppl 1:233S–234S

Identification of a novel, sodium-dependent, reduced glutathione transporter in the rat lens epithelium. Kannan R, et al. **Invest Ophthalmol Vis Sci** 1996 Oct;37(11):2269–75

Na+-induced transcription of nhaA, which encodes an Na+/H+ antiporter in Escherichia coli, is positively regulated by nhaR and affected by hns. Dover N, et al. **J Bacteriol** 1996 Nov;178(22):6508–17

Sodium-driven, osmotically activated glycine betaine transport in Listeria monocytogenes membrane vesicles. Gerhardt PN, et al. **J Bacteriol** 1996 Nov;178(21):6105–9

Na+-induced structural change of a soil bacterium, S34, and Ca2+ requirement for preserving its original structure. Mitsui H, et al. **J Bacteriol** 1997 May;179(10):3350–3

Characterization of a novel Na+-dependent, guanosine-specific, nitrobenzylthioinosine-sensitive transporter in acute promyelocytic leukemia cells. Flanagan SA, et al. **J Biol Chem** 1997 Jul 18;272(29):18026–32

Regulation of the rat liver sodium-dependent bile acid cotransporter gene by prolactin. Mediation of transcriptional activation by Stat5. Ganguly TC, et al. **J Clin Invest** 1997 Jun 15;99(12):2906–14

The effect of ionic strength and specific anions on substrate binding and hydrolytic activities of Na,K-ATPase [see comments] Nørby JG, et al. **J Gen Physiol** 1997 May; 109(5):555–70. Comment in: J Gen Physiol 1997 May;109(5):525–6.

Block of N-type calcium channels in chick sensory neurons by external sodium. Polo-Parada L, et al. **J Gen Physiol** 1997 Jun;109(6):693–702

Na+ activation of the muscarinic K+ channel by a G-protein-independent mechanism. Sui JL, et al. **J Gen Physiol** 1996 Nov;108(5):381–91

Equilibrium of phosphointermediates of sodium and potassium ion transport adenosine triphosphatase: action of sodium ion and Hofmeister effect [see comments] Suzuki K, et al. **J Gen Physiol** 1997 May;109(5):537–54. Comment in: J Gen Physiol 1997 May;109(5):525–6.

Sodium sensitivity of blood pressure in hypertensives is not related to sodium, but rather to renin. Krekels MM, et al. **J Hum Hypertens** 1996 Sep;10 Suppl 3:S127–30

Renal function reserve and sodium sensitivity in essential hypertension. Sanai T, et al. **J Lab Clin Med** 1996 Jul; 128(1):89–97

Gating and conduction properties of a sodium-activated cation channel from lobster olfactory receptor neurons. Zhainazarov AB, et al. **J Membr Biol** 1997 Mar 15; 156(2):173–90

Transient inward current is conducted through two types of channels in cardiac Purkinje fibres. Han X, et al. **J Mol Cell Cardiol** 1996 Oct;28(10):2069–84

Modeling of the interaction of Na+ and K+ with the binding of the cocaine analogue 3beta-(4-[125I]iodophenyl)tropane-2beta-carboxylic acid isopropyl ester to the dopamine transporter. Chen NH, et al. **J Neurochem** 1997 May;68(5):1968–81

Antagonistic effect of Na+ and Mg2+ on P2z purinoceptor-associated pores in dibutyryl cyclic AMP-differentiated NG108-15 cells. Song SL, et al. **J Neurochem** 1996 Oct;67(4):1694–701

L-aspartate but not the D form is secreted through microvesicle-mediated exocytosis and is sequestered through Na+-dependent transporter in rat pinealocytes. Yatsushiro S, et al. **J Neurochem** 1997 Jul;69(1):340–7

Extracellular sodium dependence of GnRH-stimulated growth hormone release in goldfish pituitary cells. Van Goor F, et al. **J Neuroendocrinol** 1997 Mar;9(3):207–16

Kinetic properties of unitary Na+-dependent K+ channels in inside-out patches from isolated guinea-pig ventricular myocytes. Mistry DK, et al. **J Physiol (Lond)** 1997 Apr 1;500 (Pt 1):39–50

Sympathoadrenal activity in the visceral (viscerovascular) reflexes to distension of the urinary bladder. Medda BK, et al. **Jpn J Physiol** 1996 Feb;46(1):3–92

Effects of monovalent cations, pH and temperature on the dissociation constant (KD) for the fluorescent indicator mag-fura-2 at different excitation wavelengths. Howarth FC, et al. **Magnes Res** 1995 Dec;8(4):299–306

Deprivation of Na+, Ca2+ and Mg2+ from the extracellular solution increases cytosolic Ca2+ and stimulates catecholamine secretion from cultured bovine adrenal chromaffin cells. Luxoro M, et al. **Mol Cell Biochem** 1997 May;170(1–2):65–73

Importance of sodium ion to the progesterone-initiated acrosome reaction in human sperm. Garcia MA, et al. **Mol Reprod Dev** 1996 Dec;45(4):513–20

Mechanism of modulation of [3H]raclopride binding to dopaminergic receptors in rat striatal membranes by sodium ions. Lepiku M, et al. **Neurochem Int** 1997 Jun;30(6):575–81

Increased Na(+)-dependent high affinity uptake of glutamate in astrocytes chronically exposed to ethanol. Smith TL, et al. **Neurosci Lett** 1996 Nov 1;218(2):142–4

Extracellular sodium concentration has diverse effects on the hypoxia-induced increase in intracellular Ca2+ in rat hippocampal slices. Yamaguchi S, et al. **Neurosci Lett** 1997 Sep 5;232(3):163–6

The glutathione level of retinal Müller glial cells is dependent on the high-affinity sodium-dependent uptake of glutamate. Reichelt W, et al. **Neuroscience** 1997 Apr; 77(4):1213–24

Sulfonylurea-sensitive potassium current evoked by sodium-loading in rat midbrain dopamine neurons. Seutin V, et al. **Neuroscience** 1996 Apr;71(3):709–19

Block of BK (maxi K) channels of rat pituitary melanotrophs by Na+ and other alkali metal ions. Kehl SJ. **Pflugers Arch** 1996 Aug;432(4):623–9

Sodium-dependent adenosine transport is diminished in brush border membrane vesicles from hypothyroid rat kidney. Martínez F, et al. **Pflugers Arch** 1997 Jan;433(3):269–75

Characterization of a sodium-dependent vitamin transporter mediating the uptake of pantothenate, biotin and lipoate in human placental choriocarcinoma cells. Prasad PD, et al. **Placenta** 1997 Sep;18(7):527–33

1H MAS and 1H[23Na] double resonance NMR studies on the modification of surface hydroxyl groups of gamma-alumina by sodium. Deng F, et al. **Solid State Nucl Magn Reson** 1997 Feb;7(4):281–90

[The mechanisms of the effect of a high extracellular sodium concentration on the contractile activity of the isolated rat heart] Alabovskiĭ VV, et al. **Eksp Klin Farmakol** 1996 Nov-Dec;59(6):17–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Expression cloning of NaDC-2, an intestinal Na(+)- or Li(+)-dependent dicarboxylate transporter. Bai L, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G267–74

Acute and neonatal capsaicin treatment inhibit jejunal amino acid absorption through a Na+-dependent mechanism. Barada KA, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G815–21

The amiloride-sensitive epithelial Na+ channel: binding sites and channel densities. Blazer-Yost BL, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):C761–9 (87 ref.)

Whole cell and unitary amiloride-sensitive sodium currents in M-1 mouse cortical collecting duct cells. Chalfant ML, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C998–1010

Sodium-independent inward chloride pumping in rat cardiac ventricular cells. Chipperfield AR, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H735–9

Properties of sodium and potassium currents of cultured adult human atrial myocytes. Feng J, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1676–86

Potential-dependent block of human delayed rectifier K+ channels by internal Na+. Johansson S, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1131–44

Growth hormone-releasing hormone augments voltage-gated Na+ current in cultured rat pituitary cells. Kato M. **Am J Physiol** 1996 Jan;270(1 Pt 1):C125–30

Regional differences in the role of the Ca2+ and Na+ currents in pacemaker activity in the sinoatrial node. Kodama I, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2793–806

Kinetics and osmoregulation of Na(+)-and Cl(-)-dependent betaine transporter in rat renal medulla. Moeckel GW, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):F100–6

Effects of a short-chain phospholipid on ion transport pathways in rabbit nasal airway epithelium. Röpke M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):L646–55

A role for a background sodium current in spontaneous action potentials and secretion from rat lactotrophs. Sankaranarayanan S, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1927–34

Apical Na+ conductance in maturing rabbit principal cell. Satlin LM, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F391–7

cGMP stimulates sodium and chloride currents in rat tracheal airway epithelia. Schwiebert EM, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):C911–22

Roles of Ca2+ and Na+ in the inward current and action potentials of guinea pig ureteral myocytes. Sui JL, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C535–42

Sphingosine 1-phosphate stimulates Na+/H+ exchange in thyroid FRTL-5 cells. Törnquist K. **Am J Physiol** 1997 Mar;272(3 Pt 1):C1052–7

Altered sodium current response to intracellular fatty acids

in halothane-hypersensitive skeletal muscle. Wieland SJ, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C347-53
Regulation of sodium current development in cultured atrial tumor myocytes (AT-1 cells). Yang T, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H541-7
Sphingolipid actions on sodium and calcium currents of rat ventricular myocytes. Yasui K, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C645-9
Lack of inhibition by inhalational anesthetics of myocardial contraction dependent on intracellular sodium activity. Komai H, et al. **Anesthesiology** 1996 Nov;85(5):1139-46
Inhibitory effect of internal sodium and Hepes on the voltage-dependent potassium conductance of rat Leydig cells. Desaphy JF, et al. **Biochim Biophys Acta** 1996 Nov 13;1285(1):9-13
Fast voltage clamp discloses a new component of presteady-state currents from the Na(+)-glucose cotransporter. Chen XZ, et al. **Biophys J** 1996 Nov; 71(5):2544-52
Na+,K(+)-ATPase pump currents in giant excised patches activated by an ATP concentration jump. Friedrich T, et al. **Biophys J** 1996 Nov;71(5):2486-500
Properties of Na(+)-dependent K+ conductance in the apical membrane of frog taste cells. Miyamoto T, et al. **Brain Res** 1996 Apr 9;715(1-2):79-85
Sodium dependency of the inward potassium rectifier in horizontal cells isolated from the white bass retina. Pfeiffer-Linn CL, et al. **Brain Res** 1995 Dec 1; 701(1-2):81-8
Sodium-dependent proline and glutamate uptake by hippocampal synaptosomes during postnatal development. Cohen SM, et al. **Brain Res Dev Brain Res** 1997 Jun 18; 100(2):230-3
Alterations of Na+ currents in myocytes from epicardial border zone of the infarcted heart. A possible ionic mechanism for reduced excitability and postrepolarization refractoriness. Pu J, et al. **Circ Res** 1997 Jul;81(1):110-9
Relative role of alkalosis and sodium ions in reversal of class I antiarrhythmic drug-induced sodium channel blockade by sodium bicarbonate. Bou-Abboud E, et al. **Circulation** 1996 Oct 15;94(8):1954-61
Reduction of the current of injury leaving the amputation inhibits limb regeneration in the red spotted newt. Jenkins LS, et al. **Dev Biol** 1996 Sep 15;178(2):251-62
Two types of modified cardiac Na+ channels after cytosolic interventions at the alpha-subunit capable of removing Na+ inactivation. Benz I, et al. **Eur Biophys J** 1997; 25(3):189-200
Sodium current amplitude increases dramatically in human retinal glial cells during diseases of the eye. Francke M, et al. **Eur J Neurosci** 1996 Dec;8(12):2662-70
Gastric acid secretion after blockade of angiotensin AT1 receptors in the Na(+)-depleted rat. Chow L, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):309-17
Activation of gelatinase A (72-kDa type IV collagenase) induced by monensin in normal human fibroblasts. Li L, et al. **Exp Cell Res** 1997 May 1;232(2):322-30
Anoxia-induced neuronal injury: role of Na+ entry and Na+-dependent transport. Chidekel AS, et al. **Exp Neurol** 1997 Aug;146(2):403-13
Differential inhibition by riluzole, lamotrigine, and phenytoin of sodium and calcium currents in cortical neurons: implications for neuroprotective strategies. Stefani A, et al. **Exp Neurol** 1997 Sep;147(1):115-22
The occurrence of stable subconductance levels in Na(+)-activated K+ channels in excised membrane patches from guinea-pig ventricular myocytes. Mistry DK, et al. **Exp Physiol** 1996 Nov;81(6):899-907
Discrimination of transport systems of L-tyrosine in mouse mammary gland: characterization of system T. Rekha, et al. **Indian J Exp Biol** 1996 Aug;34(8):750-7
Influence of heat on Na(+)-dependent HCO3-/Cl- exchanger function in a thermoresistant cell line. Liu FF, et al. **Int J Radiat Biol** 1996 Oct;70(4):481-9
Na/K pump current in guinea pig cardiac myocytes and the effect of Na leak. Dobretsov M, et al. **J Cardiovasc Electrophysiol** 1997 Jul;8(7):758-67
Evidence for a persistent Na+ conductance in neurons of the gastric mill rhythm generator of spiny lobsters. Elson RC, et al. **J Exp Biol** 1997 Jun;200 (Pt 12):1795-807
Regulation of Na+/H+ antiporter in trout red blood cells. Malapert M, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):353-60 (48 ref.)
Biophysics of a trespasser, Na+ block of Ca2+ channels. McCleskey EW. **J Gen Physiol** 1997 Jun;109(6):677-80
Mechanically activated currents in chick heart cells. Hu H, et al. **J Membr Biol** 1996 Dec;154(3):205-16
Age-related changes of sodium-dependent D-[3H]aspartate and [3H]FK506 binding in rat brain. Araki T, et al. **J Neural Transm** 1997;104(2-3):259-67
Identification of a system N-like Na(+)-dependent glutamine transport activity in rat brain neurons. Tamarappoo BK, et al. **J Neurochem** 1997 Mar;68(3):954-60
Regulation of mu-opioid receptor in neural cells by extracellular sodium. Yabaluri N, et al. **J Neurochem** 1997 Mar;68(3):1053-61
Sodium-dependent plateau potentials in cultured Retzius cells of the medicinal leech. Angstadt JD, et al. **J Neurophysiol** 1996 Sep;76(3):1491-502
Frequency-dependent propagation of sodium action potentials in dendrites of hippocampal CA1 pyramidal neurons. Callaway JC, et al. **J Neurophysiol** 1995 Oct; 74(4):1395-403
Astrocytic inwardly rectifying potassium currents are dependent on external sodium ions. Ransom CB, et al. **J Neurophysiol** 1996 Jul;76(1):626-30
Dopaminergic modulation of sodium current in hippocampal neurons via cAMP-dependent phosphorylation of specific sites in the sodium channel alpha subunit. Cantrell AR, et al. **J Neurosci** 1997 Oct 1;17(19):7330-8
Uptake and release of [3H]formycin B via sodium-dependent nucleoside transporters in mouse leukemic L1210/MA27.1 cells. Borgland SL, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):347-53
Shaker B K+ conductance in Na+ solutions lacking K+ ions: a remarkably stable non-conducting state produced by membrane depolarizations. Gómez-Lagunas F. **J Physiol (Lond)** 1997 Feb 15;499 (Pt 1):3-15
Intracellular sodium homeostasis in rat hippocampal astrocytes. Rose CR, et al. **J Physiol (Lond)** 1996 Mar 1; 491 (Pt 2):291-305
The role of Na(+)-Ca2+ exchange in activation of excitation-contraction coupling in rat ventricular myocytes. Wasserstrom JA, et al. **J Physiol (Lond)** 1996 Jun 1;493 (Pt 2):529-42
The role of extracellular cations in the development of myogenic contraction in isolated rat small arteries. Watanabe J, et al. **Jpn Circ J** 1996 Apr;60(4):239-46
Sodium balance and hypertension in obese and fatty rats. Suzuki H, et al. **Kidney Int Suppl** 1996 Jun;55:S150-3
Carbamazepine inhibition of neuronal Na+ currents: quantitative distinction from phenytoin and possible therapeutic implications. Kuo CC, et al. **Mol Pharmacol** 1997 Jun;51(6):1077-83
Angiotensin II as a stimulator of Na(+)-dependent Ca2+ efflux from freshly isolated adult rat cardiomyocytes. Fukuta Y, et al. **Neurosci Lett** 1996 Aug 2;213(2):95-8
Tetrodotoxin-resistant Na+ spikes of C fibers have at least two subtypes in the isolated bullfrog sciatic nerve. Kobayashi J, et al. **Neurosci Lett** 1996 Dec 27;221(1):9-12
Serotonin increases Na(+)-dependent Ca2+ efflux from bovine adrenal chromaffin cells in culture. Minakuchi K, et al. **Neurosci Lett** 1997 Feb 14;223(1):17-20
Sodium-dependent increase in quantal secretion induced by brevetoxin-3 in Ca2+-free medium is associated with depletion of synaptic vesicles and swelling of motor nerve terminals in situ. Meunier FA, et al. **Neuroscience** 1997 Jun; 78(3):883-93
State-dependent inhibition of Na+ currents by the neuroprotective agent 619C89 in rat hippocampal neurons and in a mammalian cell line expressing rat brain type IIA Na+ channels. Xie XM, et al. **Neuroscience** 1996 Aug; 73(4):951-62
Na(+)-dependent uptake of 1,5-anhydro-D-glucitol via the transport systems for D-glucose and D-mannose in the kidney epithelial cell line, LLC-PK1. Saito H, et al. **Nippon Jinzo Gakkai Shi** 1996 Oct;38(10):435-40
Monovalent cation conductance of the sustained inward current in rabbit sinoatrial node cells. Guo J, et al. **Pflugers Arch** 1996 Nov-Dec;433(1-2):209-11
Increased sodium-dependent D-glucose transport in the jejunal brush-border membrane of spontaneously hypertensive rat. Vázquez CM, et al. **Pflugers Arch** 1996 Jun;432(2):329-35
Residue 225 determines the Na(+)-induced allosteric regulation of catalytic activity in serine proteases. Dang QD, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10653-6
[Effect of extracellular Na+ on the alpha-1-adrenergic contractile reaction of the rat vas deferens] Berdysheva LV. **Dokl Akad Nauk** 1997 Mar;353(3):408-10 **(Rus)**

THERAPEUTIC USE

Randomised double blind study of hypotonic oral rehydration solution in diarrhoea. Rautanen T, et al. **Arch Dis Child** 1997 Mar;76(3):272-4
The effect of sodium and ultrafiltration modelling on plasma volume changes and haemodynamic stability in intensive care patients receiving haemodialysis for acute renal failure: a prospective, stratified, randomized, cross-over study. Paganini EP, et al. **Nephrol Dial Transplant** 1996;11 Suppl 8:32-7
[An antibacterial sorptive preparation for preparing the large intestine for a surgical intervention] Rudichenko VM, et al. **Klin Khir** 1995;(3):28-9 **(Ukr)**
[The sodium form of sudamate--a new low-toxicity antimicrobial preparation] Rudychenko VM, et al. **Lik Sprava** 1995 Mar-Apr;(3-4):132-5 (Eng. Abstr.) **(Ukr)**

TOXICITY

The target of sodium toxicity in Saccharomyces cerevisiae. Almagro A, et al. **Folia Microbiol (Praha)** 1996;41(1):82-3
Sodium toxicity and pathology associated with exposure of waterfowl to hypersaline playa lakes of southeast New Mexico. Meteyer CU, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):269-80

URINE

Reduced renal sodium excretion in Walker-256 tumor-bearing rats. Rettori O, et al. **Acta Physiol Pharmacol Ther Latinoam** 1996;46(2):111-8
Urinary sodium excretion and myocardial infarction in hypertensive patients: a prospective cohort study. Alderman M, et al. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):682S-686S
Effects of L-arginine infusion on renal hemodynamics and sodium excretion during hypo-, normo-, and hyperinsulinemia, as studied in dogs. García-Robles R, et al. **Am J Hypertens** 1996 Jul;9(7):681-6
Fructose feeding in rats is not associated with sodium retention. Iyer SN, et al. **Am J Hypertens** 1996 Oct;9(10 Pt 1):1018-23
Role of urinary arginine vasopressin in the sodium excretion in patients with chronic renal failure. Nonoguchi H, et al. **Am J Med Sci** 1996 Nov;312(5):195-201
Atrial natriuretic peptide in preeclampsia: metabolic clearance, sodium excretion and renal hemodynamics. Irons DW, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):F483-7
Comparison of methods for sodium and potassium determination in llama urine. Christopher MM, et al. **Am J Vet Res** 1996 Jan;57(1):25-30
Usefulness of fractional excretion of sodium in critically ill pre-term newborns. Tapia-Rombo CA, et al. **Arch Med Res** 1997 Summer;28(2):253-7
gamma-L-glutamyl-5-hydroxy-L-tryptophan, but not gamma-L-glutamyl-L-tryptophan, causes sodium retention in normal man. Li Kam Wa TC, et al. **Br J Clin Pharmacol** 1996 Sep;42(3):365-70
Central interaction between atrial natriuretic peptide and angiotensin II in the control of sodium intake and excretion in female rats. De-Angelis PR, et al. **Braz J Med Biol Res** 1996 Dec;29(12):1671-4
Reduced renal sodium excretion in primary hypertensive patients after an oral glucose load. Gontijo JA, et al. **Braz J Med Biol Res** 1996 Oct;29(10):1291-9
Role of duration of diuretic effect in preventing sodium retention. Ferguson JA, et al. **Clin Pharmacol Ther** 1997 Aug;62(2):203-8
Low-dose brain natriuretic peptide infusion in normal men and the influence of endopeptidase inhibition. Florkowski CM, et al. **Clin Sci (Colch)** 1997 Mar;92(3):255-60
Comparison of the effects on urinary sodium excretion of indomethacin and of carbidopa in normal volunteers given an intravenous saline infusion. Stokes GS, et al. **Clin Sci (Colch)** 1997 Apr;92(4):409-14
Renal response to volume expansion in streptozotocin-induced diabetic rats: influence of calcium channel blockade. Patel KP, et al. **Diabetes Res Clin Pract** 1997 Mar;35(2-3):69-74
Effects of insulin and lipid emulsion on renal haemodynamics and renal sodium handling in IDDM patients. Pelikánová T, et al. **Diabetologia** 1996 Sep;39(9):1074-82
Genetic and environmental effects on urinary kallikrein, catecholamines, sodium, potassium, urea nitrogen and inorganic sulfate sulfur levels in school-age twins. Kagamimori S, et al. **Hum Hered** 1996 Jan-Feb;46(1):1-6
Intrarenal dopamine production and distribution in the rat. Physiological control of sodium excretion. Wang ZQ, et al. **Hypertension** 1997 Jan;29(1 Pt 2):228-34
Electrolytes are associated with blood pressure at old age: the Rotterdam Study. Geleijnse JM, et al. **J Hum Hypertens** 1997 Jul;11(7):421-3
Glucose load and renal sodium handling in mild essential hypertension on different sodium intakes. Inoue J, et al. **J Hum Hypertens** 1996 Aug;10(8):523-9
Blockade of cytochrome P-450 epoxygenase pathway attenuates the natriuresis of N(G)-monomethyl-L-arginine infusion in the spontaneously hypertensive rat. Khraibi AA, et al. **J Lab Clin Med** 1997 Mar;129(3):330-6
Sodium excretion influences calcium homeostasis in elderly men and women. Dawson-Hughes B, et al. **J Nutr** 1996 Sep;126(9):2107-12
The Hobart Salt Study 1995: few meet national sodium intake target [see comments] Beard TC, et al. **Med J Aust** 1997 Apr 21;166(8):404-7. Comment in: Med J Aust 1997 Apr 21;166(8):396-7.
Renal sodium handling in children with nephrotic relapse: relation to hypovolaemic symptoms. Van de Walle JG, et al. **Nephrol Dial Transplant** 1996 Nov;11(11):2202-8
Effects of neuropeptide Y on intrarenal hemodynamics, plasma renin activity and urinary sodium excretion in rats. Evéquoz D, et al. **Nephron** 1996;73(3):467-72
Is there a relationship between urinary calcium/creatinine and sodium/potassium ratios in children? [letter] De Palma MT, et al. **Pediatr Nephrol** 1996 Dec;10(6):808-9
The relationship between urinary calcium, sodium, and potassium excretion and the role of potassium in treating idiopathic hypercalciuria. Osorio AV, et al. **Pediatrics** 1997 Oct;100(4):675-81
On a dual role for clonidine stimulation of the ventromedial nucleus of the hypothalamus in sodium and potassium renal excretions of rats. Saad WA, et al. **Pharmacology** 1996 Nov; 53(5):281-8
The influence of Vicia faba (broad bean) seedlings on urinary sodium excretion. Vered Y, et al. **Planta Med** 1997 Jun; 63(3):237-40
[Chronology of portal hypertension, decreased sodium excretion, and activation of the renin-angiotensin system in experimental biliary cirrhosis] Poo JL, et al. **Rev Invest Clin** 1997 Jan-Feb;49(1):15-23 (Eng. Abstr.) **(Spa)**

SODIUM ACETATE

SODIUM ACETATE

ADMINISTRATION & DOSAGE

Randomised controlled trial of acetate in preterm neonates receiving parenteral nutrition. Peters O, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul;77(1):F12–5

ANALOGS & DERIVATIVES see ACETATES

BLOOD

Quantitative bioanalysis utilizing high–performance liquid chromatography/electrospray mass spectrometry via selected–ion monitoring of the sodium ion adduct [M+Na]+. Jemal M, et al. **Rapid Commun Mass Spectrom** 1997;11(10):1083–8

TOXICITY

Differences in sensitivity to developmental toxicants as seen in Xenopus and Pimephales embryos. DeYoung DJ, et al. **Bull Environ Contam Toxicol** 1996 Jan;56(1):143–50

SODIUM BICARBONATE

see related

BUFFERS

Buffered lidocaine decreases the pain of digital anesthesia in the foot. Friedman HE, et al. **J Am Podiatr Med Assoc** 1997 May;87(5):219–23

[Local anesthesia] Meley M, et al. **Ann Chir** 1997;51(3):289–91 (Eng. Abstr.) **(Fre)**

ADMINISTRATION & DOSAGE

Pharmacokinetic evaluation of omeprazole suspension following oral administration in rats: effect of neutralization of gastric acid. Watanabe K, et al. **Acta Med Okayama** 1996 Aug;50(4):219–22

Does the administration of carbicarb lead acutely to back–titration of non–bicarbonate buffers? Kamel KS. **Clin Nephrol** 1996 Aug;46(2):112–6

Prerace venous blood acid–base values in standardbred horses. Soma LR, et al. **Equine Vet J** 1996 Sep;28(5):390–6

ADVERSE EFFECTS

Concentration–dependent precipitation of sodium bicarbonate with ciprofloxacin lactate [letter] [see comments] Trissel LA. **Am J Health Syst Pharm** 1996 Jan 1;53(1):84–5. Comment in: Am J Health Syst Pharm 1996 Jul 15;53(14):1732.

Metabolic alkalosis and myoclonus from antacid ingestion. Okada K, et al. **Intern Med** 1996 Jun;35(6):515–6

BLOOD

Laboratory presentation in diabetic ketoacidosis and duration of therapy. Linares MY, et al. **Pediatr Emerg Care** 1996 Oct;12(5):347–51

CHEMISTRY

Compatibility of ciprofloxacin lactate with sodium bicarbonate during simulated Y–site administration. Gilbert DL Jr, et al. **Am J Health Syst Pharm** 1997 May 15; 54(10):1193–5

More on compatibility of mannitol and sodium bicarbonate in injectable fluids [letter] Matuschka PR, et al. **Am J Health Syst Pharm** 1996 Nov 1;53(21):2639

Studies on aluminium leaching from cookware in tea and coffee and estimation of aluminium content in toothpaste, baking powder and paan masala. Rajwanshi P, et al. **Sci Total Environ** 1997 Jan 30;193(3):243–9

METABOLISM

Indomethacin decreases gastroduodenal mucosal bicarbonate secretion in humans. Mertz–Nielsen A, et al. **Scand J Gastroenterol** 1995 Dec;30(12):1160–5

PHARMACOLOGY

Tris–hydroxymethyl aminomethane and sodium bicarbonate to buffer metabolic acidosis in an isolated heart model. Sirieix D, et al. **Am J Respir Crit Care Med** 1997 Mar; 155(3):957–63

Acid–base, metabolic, and hemodynamic effects of sodium bicarbonate or tromethamine administration in anesthetized dogs with experimentally induced metabolic acidosis. Moon PF, et al. **Am J Vet Res** 1997 Jul;58(7):771–6

Effect of sodium bicarbonate administration on blood constituents of horses. Rivas LJ, et al. **Am J Vet Res** 1997 Jun;58(6):658–63

Effect of sodium bicarbonate administration on renal function of horses. Rivas LJ, et al. **Am J Vet Res** 1997 Jun; 58(6):664–71

Normovolaemic haemodilution attenuates cardiac depression induced by sodium bicarbonate in canine metabolic acidosis. Tanaka M, et al. **Br J Anaesth** 1996 Sep; 77(3):408–12

Relative role of alkalosis and sodium ions in reversal of class I antiarrhythmic drug–induced sodium channel blockade by sodium bicarbonate. Bou–Abboud E, et al. **Circulation** 1996 Oct 15;94(8):1954–61

Hemodynamic effects of epinephrine, bicarbonate and calcium in the early postnatal period in a lamb model of single–ventricle physiology created in utero. Reddy VM, et al. **J Am Coll Cardiol** 1996 Dec;28(7):1877–83

Effects of sodium bicarbonate and sodium chloride on the elimination of etorphine in equine urine. Lloyd DR, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):81–8

The effects of physical form of feed, carbohydrate source, and inclusion of sodium bicarbonate on the diet selections of sheep. Cooper SD, et al. **J Anim Sci** 1996 Jun; 74(6):1240–51

Effect of ingested sodium bicarbonate on muscle force, fatigue, and recovery. Verbitsky O, et al. **J Appl Physiol** 1997 Aug;83(2):333–7

Dietary mixtures of sodium bicarbonate, sodium chloride, and potassium chloride: effects on lactational performance, acid–base status, and mineral metabolism of Holstein cows. Sanchez WK, et al. **J Dairy Sci** 1997 Jun;80(6):1207–16

Metabolic alkalosis induced by pre–exercise ingestion of NaHCO3 does not modulate the slow component of VO2 kinetics in humans. Zołądź JA, et al. **J Physiol Pharmacol** 1997 Jun;48(2):211–23

Effect of acute bicarbonate administration on exercise responses of COPD patients. Coppoolse R, et al. **Med Sci Sports Exerc** 1997 Jun;29(6):725–32

Effect of NaHCO3 on lactate kinetics in forearm muscles during leg exercise in man. Granier PL, et al. **Med Sci Sports Exerc** 1996 Jun;28(6):692–7

Effect of sodium bicarbonate amount on in vitro indomethacin release from self–setting carbonated–apatite cement. Otsuka M, et al. **Pharm Res** 1997 Apr;14(4):444–9

Improving eggshell quality at high temperatures with dietary sodium bicarbonate. Balnave D, et al. **Poult Sci** 1997 Apr; 76(4):588–93

Effect of acute induced metabolic alkalosis on the acid/base responses to sprint exercise of six racing greyhounds. Holloway SA, et al. **Res Vet Sci** 1996 Nov;61(3):245–51

Influence of alkaline buffers on cytoplasmic pH in myocardial cells exposed to metabolic acidosis. Li YC, et al. **Resuscitation** 1996 Jul;32(1):33–44

The effects of sodium bicarbonate ingestion on exercise performance. Linderman JK, et al. **Sports Med** 1994 Aug; 18(2):75–80 (34 ref.)

Chlortetracycline fluorescence patterns and in vitro fertilisation of frozen–thawed boar spermatozoa incubated under various bicarbonate concentrations. Abeydeera LR, et al. **Zygote** 1997 May;5(2):117–25

THERAPEUTIC USE

Alkalinization is ineffective for severe hyperkalemia in nonnephrectomized dogs. Hyperkalemia Research Group. Kaplan JL, et al. **Acad Emerg Med** 1997 Feb;4(2):93–9

Alkali therapy versus sodium chloride supplement in low birthweight infants with incipient late metabolic acidosis. Kalhoff H, et al. **Acta Paediatr** 1997 Jan;86(1):96–101

Fluoxetine–induced cardiotoxicity with response to bicarbonate therapy. Graudins A, et al. **Am J Emerg Med** 1997 Sep;15(5):501–3

Sodium bicarbonate in cardiac arrest: a reappraisal. Vukmir RB, et al. **Am J Emerg Med** 1996 Mar;14(2):192–206 (184 ref.)

Effect of bicarbonate administration on plasma potassium in dialysis patients: interactions with insulin and albuterol. Allon M, et al. **Am J Kidney Dis** 1996 Oct;28(4):508–14

Alkali therapy extends the period of survival during hypoxia: studies in rats. Halperin FA, et al. **Am J Physiol** 1996 Aug; 271(2 Pt 2):R381–7

Effect of alkali therapy with NaHCO3 or THAM on cardiac contractility. Mazer CD, et al. **Am J Physiol** 1996 May; 270(5 Pt 2):R955–62

Plasma potassium response after tromethamine (THAM) or sodium bicarbonate in the acidotic rabbit. Waters JH, et al. **Anesth Analg** 1996 Oct;83(4):789–92

Treatment of severe respiratory failure during status asthmaticus in children and adolescents using high flow oxygen and sodium bicarbonate. Mansmann HC Jr, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):69–73

Effect of water and bicarbonate loading in patients with chronic renal failure. Passfall J, et al. **Clin Nephrol** 1997 Feb;47(2):92–8

Epinephrine and sodium bicarbonate independently and additively increase survival in experimental amitriptyline poisoning. Knudsen K, et al. **Crit Care Med** 1997 Apr; 25(4):669–74

Effects of buffer agents on postresuscitation myocardial dysfunction. Sun S, et al. **Crit Care Med** 1996 Dec; 24(12):2035–41

The acute reversal of a diet–induced metabolic acidosis does not restore endurance capacity during high–intensity exercise in man. Ball D, et al. **Eur J Appl Physiol** 1996; 73(1–2):105–12

Reaction of term newborns with prolonged postnatal dyspnoea to early oxygen, mask continuous positive airway pressure, and volume expansion: a prospective, randomised, clinical trial [see comments] Hauer AC, et al. **Eur J Pediatr** 1996 Sep;155(9):805–10. Comment in: Eur J Pediatr 1997 May;156(5):419–20.

High–sodium crystalloid solution for treatment of hypernatremia in a Vietnamese pot–bellied pig. Banks P, et al. **J Am Vet Med Assoc** 1996 Oct 1;209(7):1268–70

Sodium bicarbonate to correct widened QRS in a case of flecainide overdose. Goldman MJ, et al. **J Emerg Med** 1997 Mar–Apr;15(2):183–6

Acute therapy for hyperkalemia with the combined regimen of bicarbonate and beta(2)–adrenergic agonist (salbutamol) in chronic renal failure patients. Kim HJ. **J Korean Med Sci** 1997 Apr;12(2):111–6

Cardiopulmonary resuscitation in children [letter; comment] Fruchter O. **N Engl J Med** 1997 May 1;336(18):1325; discussion 1325–6. Comment on: N Engl J Med 1996 Nov 14;335(20):1473–9.

Prophylaxis of acute renal failure in patients with rhabdomyolysis. Homsi E, et al. **Ren Fail** 1997 Mar; 19(2):283–8

Unexpected return of cardiac action after termination of cardiopulmonary resuscitation. Voelckel W, et al. **Resuscitation** 1996 Jul;32(1):27–9

[The efficacy of dequalinium chloride/benzalkonium chloride as well as medicinal plants on the gingiva] Gruber I, et al. **Dtsch Zahn Mund Kieferheilkd Zentralbl** 1991;79(1):3–8 (Eng. Abstr.) **(Ger)**

[Controversies concerning the use of sodium bicarbonate in metabolic acidosis] Bogdanik T. **Przegl Lek** 1995; 52(10):513–7 (21 ref.) **(Pol)**

[Metabolic acidosis in calves with diarrhea and treatment with NaHCO3] Michna A, et al. **Vet Med (Praha)** 1996 Oct;41(10):305–10 (Eng. Abstr.) **(Slo)**

TOXICITY

Dose–dependent amplification by L–ascorbic acid of NaHCO3 promotion of rat urinary bladder carcinogenesis. Iwata H, et al. **Toxicol Pathol** 1997 May–Jun;25(3):284–90

SODIUM CEPHALOTHIN see **CEPHALOTHIN**

SODIUM CHANNELS

see related

NA(+)–K(+)–EXCHANGING ATPASE

Auditory cortex neurons: primary culture and ion channel activity in rat. Moore EJ, et al. **Acta Otolaryngol (Stockh)** 1995 Nov;115(6):776–82

A molecular basis for the therapy of the long QT syndrome. Priori SG, et al. **Arch Mal Coeur Vaiss** 1996 Sep; 89(9):1185–7

A TTX–sensitive inward sodium current contributes to spontaneous activity in newborn rabbit sino–atrial node cells. Baruscotti M, et al. **J Physiol (Lond)** 1996 Apr 1;492 (Pt 1):21–30

A stochastic simulation of direct ion passage through a sodium channel. Veresov VG. **Membr Cell Biol** 1997; 11(1):101–13

[The amiloride sensitive sodium channel] Barbry P, et al. **Nephrologie** 1996;17(7):389–93 (26 ref.) (Eng. Abstr.) **(Fre)**

[Recent progress in sodium channel structures relevant to their functions] Nakayama H. **Nippon Rinsho** 1996 Mar; 54(3):652–9 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Structure, function and regulation of voltage–gated sodium channel] Okamura Y. **Tanpakushitsu Kakusan Koso** 1997 Feb;42(3 Suppl):208–12 (22 ref.) **(Jpn)**

ANALYSIS

Optimization of a mammalian expression system for the measurement of sodium channel gating currents. Sheets MF, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C1001–6

Immunolocalization of the ubiquitin–protein ligase Nedd4 in tissues expressing the epithelial Na+ channel (ENaC). Staub O, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1871–80

Distribution of sodium channels in chronically demyelinated spinal cord axons: immunoultrastructural localization and electrophysiological observations. Brain Research 544 (1991) 59–70 [letter; comment] Black JA, et al. **Brain Res** 1997 Jun 27;761(1):1. Comment on: Brain Res 1991 Mar 22;544(1):59–70.

Action potential–like responses in B104 cells with low Na+ channel densities. Gu XQ, et al. **Brain Res** 1996 Sep 30; 735(1):50–8

Immunocytochemical investigations of sodium channels along nodal and internodal portions of demyelinated axons. England JD, et al. **Microsc Res Tech** 1996 Aug 1; 34(5):445–51 (51 ref.)

Structure and chromosomal localization of the beta2 subunit of the human brain sodium channel. Eubanks J, et al. **Neuroreport** 1997 Aug 18;8(12):2775–9

ANTAGONISTS & INHIBITORS

Sodium channels and therapy of central nervous system diseases. Taylor CP, et al. **Adv Pharmacol** 1997;39:47–98 (300 ref.)

Reduction of myocardial infarct size in rabbits and inhibition of activation of rabbit and human neutrophils by lidocaine. Vitola JV, et al. **Am Heart J** 1997 Mar;133(3):315–22

Brefeldin A inhibition of apical Na+ channels in epithelia. Fisher RS, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C138–47

Peptide block of constitutively activated Na+ channels in Liddle's disease. Ismailov II, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 1):C214–23

cAMP stimulates CFTR–like Cl– channels and inhibits amiloride–sensitive Na+ channels in mouse CCD cells. Letz B, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C657–66

Biophysical and molecular properties of amiloride–inhibitable Na+ channels in alveolar epithelial cells. Matalon S, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L1–22 (152 ref.)

Effects of a short-chain phospholipid on ion transport pathways in rabbit nasal airway epithelium. Röpke M, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):L646-55

Blockade of lysophosphatidylcholine-modified cardiac Na channels by a lidocaine derivative QX-222. Undrovinas AI, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H790-7

Lamotrigine inhibits extracellular glutamate accumulation during transient global cerebral ischemia in rabbits. Bacher A, et al. **Anesthesiology** 1997 Feb;86(2):459-63

Blocking mechanisms of ketamine and its enantiomers in enzymatically demyelinated peripheral nerve as revealed by single-channel experiments. Bräu ME, et al. **Anesthesiology** 1997 Feb;86(2):394-404

Effects of propofol on sodium channel-dependent sodium influx and glutamate release in rat cerebrocortical synaptosomes. Ratnakumari L, et al. **Anesthesiology** 1997 Feb;86(2):428-39

Inhibition of sodium channel currents by antineuronal autoantibody from autoimmune mice. Crimando J, et al. **Ann N Y Acad Sci** 1997 Aug 14;823:303-7

Disappearance with ischaemic depolarization of the antifibrillatory activity in a sodium channel blocker and appearance in calcium channel blocker. Bui-Xuan B, et al. **Arch Int Pharmacodyn Ther** 1996 May-Jun; 331(3):246-62

Restoration of fast inactivation in an inactivation-defective human heart sodium channel by the cysteine modifying reagent benzyl-MTS: analysis of IFM-ICM mutation. Chahine M, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):606-10

Slow inactivation of sodium channels: more than just a laboratory curiosity [comment] Cannon SC. **Biophys J** 1996 Jul;71(1):5-7. Comment on: Biophys J 1996 Jul;71(1):227-36.

Use dependence of tetrodotoxin block of sodium channels: a revival of the trapped-ion mechanism. Conti F, et al. **Biophys J** 1996 Sep;71(3):1295-312

Locations of local anesthetic dibucaine in model membranes and the interaction between dibucaine and a Na+ channel inactivation gate peptide as studied by 2H- and 1H-NMR spectroscopies. Kuroda Y, et al. **Biophys J** 1996 Sep; 71(3):1191-207

Development of an ultra high sensitive tissue biosensor for determination of swellfish poisoning, tetrodotoxin. Cheun B, et al. **Biosens Bioelectron** 1996;11(12):1185-91

Pharmacokinetics of 619C89, a novel neuronal sodium channel inhibitor, in acute stroke patients after loading and discrete maintenance infusions. Hussein Z, et al. **Br J Clin Pharmacol** 1996 Jun;41(6):505-11

Characterization of lamotrigine inhibition of Na+ channels in rat hippocampal neurones. Kuo CC, et al. **Br J Pharmacol** 1997 Jul;121(6):1231-8

Lidocaine block of LQT-3 mutant human Na+ channels. An RH, et al. **Circ Res** 1996 Jul;79(1):103-8

Modulation of Na+ current inactivation by stimulation of protein kinase C in cardiac cells. Watson CL, et al. **Circ Res** 1997 Sep;81(3):380-6

Relative role of alkalosis and sodium ions in reversal of class I antiarrhythmic drug-induced sodium channel blockade by sodium bicarbonate. Bou-Abboud E, et al. **Circulation** 1996 Oct 15;94(8):1954-61

Sodium channel block with mexiletine is effective in reducing dispersion of repolarization and preventing torsade des pointes in LQT2 and LQT3 models of the long-QT syndrome. Shimizu W, et al. **Circulation** 1997 Sep 16; 96(6):2038-47

Adverse effects of class I antiarrhythmic drugs. Caron J, et al. **Drug Saf** 1997 Jul;17(1):8-36 (366 ref.)

Blockade of cardiac Na+ channels by a charged class I antiarrhythmic agent, bisaramil: possible interaction of the drug with a pre-open closed state. Sunami A, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):245-55

Inhibition of epithelial Na+ currents by intracellular domains of the cystic fibrosis transmembrane conductance regulator. Kunzelmann K, et al. **FEBS Lett** 1997 Jan 6;400(3):341-4

The role of exposed tryptophan residues in the activity of the cardiotonic polypeptide anthopleurin B. Dias-Kadambi BL, et al. **J Biol Chem** 1996 Sep 27;271(39):23828-35

Lidocaine and nisoldipine attenuate almokalant-induced dispersion of repolarization and early afterdepolarizations in vitro. Abrahamsson C, et al. **J Cardiovasc Electrophysiol** 1996 Nov;7(11):1074-81

Hypertonic saline does not reverse the sodium channel blocking actions of lidocaine: evidence from electrophysiologic and defibrillation studies. Ujhelyi MR, et al. **J Cardiovasc Pharmacol** 1997 Jan;29(1):61-8

Pharmacological targeting of long QT mutant sodium channels. Wang DW, et al. **J Clin Invest** 1997 Apr 1; 99(7):1714-20

Proton inhibition of sodium channels: mechanism of gating shifts and reduced conductance. Bénitah J, et al. **J Membr Biol** 1997 Jan 15;155(2):121-31

Local blockade of sodium channels by tetrodotoxin ameliorates tissue loss and long-term functional deficits resulting from experimental spinal cord injury. Teng YD, et al. **J Neurosci** 1997 Jun 1;17(11):4359-66

Differential action of riluzole on tetrodotoxin-sensitive and tetrodotoxin-resistant sodium channels. Song JH, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):707-14

Beneficial effects of dilazep on the palmitoyl-L-carnitine-induced derangements in isolated, perfused rat heart: comparison with tetrodotoxin. Hara A, et al. **Jpn J Pharmacol** 1997 Jun;74(2):147-53

Permeability of a neuroprotective compound NS-7 into brain: comparison between normal and middle cerebral artery-occluded rats. Itoh Y, et al. **Life Sci** 1997; 61(10):957-66

The role of inactivation in open-channel block of the sodium channel: studies with inactivation-deficient mutant channels. Grant AO, et al. **Mol Pharmacol** 1996 Dec; 50(6):1643-50

Carbamazepine inhibition of neuronal Na+ currents: quantitative distinction from phenytoin and possible therapeutic implications. Kuo CC, et al. **Mol Pharmacol** 1997 Jun;51(6):1077-83

Inhibition of pacemaker current by the bradycardic agent ZD 7288 is lost use-dependently in sheep cardiac Purkinje fibres. Berger F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):64-72

The effects of Na+ channel blockers on somatosensory processing by rat dorsal horn neurones. Blackburn-Munro G, et al. **Neuroreport** 1997 May 6;8(7):1549-54

Inhibition of synaptosomal veratridine-induced sodium influx by antidepressants and neuroleptics used in chronic pain. Deffois A, et al. **Neurosci Lett** 1996 Dec 13;220(2):117-20

Phenytoin and carbamazepine: differential inhibition of sodium currents in small cells from adult rat dorsal root ganglia. Rush AM, et al. **Neurosci Lett** 1997 Apr 25; 226(2):95-8

The influence of sodium channel blockade on the defibrillation energy requirements of biphasic versus monophasic shocks. Nelson SD, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 1):1568-73

Tetrodotoxin inhibits neuropathic ectopic activity in neuromas, dorsal root ganglia and dorsal horn neurons. Omana-Zapata I, et al. **Pain** 1997 Aug;72(1-2):41-9

An increase in [Ca2+]i activates basolateral chloride channels and inhibits apical sodium channels in frog skin epithelium. Brodin B, et al. **Pflugers Arch** 1996 Nov-Dec; 433(1-2):16-25

Association between ion fluxes and defense responses in pea and cowpea tissues. Amano M, et al. **Plant Cell Physiol** 1997 Jun;38(6):698-706

Effects of lung expansion on lung liquid production in vitro by lungs from fetal guinea-pigs. I. Basic studies and the effects of amiloride and propranolol. Nelson PG, et al. **Reprod Fertil Dev** 1996;8(3):335-46

Solution structure of the sodium channel antagonist conotoxin GS: a new molecular caliper for probing sodium channel geometry. Hill JM, et al. **Structure** 1997 Apr 15; 5(4):571-83

Modification of nasal membrane potential difference with inhaled amiloride and loperamide in the cystic fibrosis (CF) mouse. Ghosal S, et al. **Thorax** 1996 Dec;51(12):1229-32

The effects of verapamil and lidocaine on the duration of propofol and xylazine-ketamine anesthesia in broiler chickens. Roder JD, et al. **Vet Hum Toxicol** 1996 Jun; 38(3):181-3

[Comparative characteristic of sodium blocking properties of anti-arrhythmia agents on isolated rats cardiomyocytes] Khankoeva AI, et al. **Biull Eksp Biol Med** 1997 Jun; 123(6):666-8 **(Rus)**

[Sodium channel plugs and an almost perfect crime (editorial)] Kotsias BA. **Medicina (B Aires)** 1995;55(5 Pt 2):621-4 **(Spa)**

BIOSYNTHESIS

Expression and functional analysis of voltage-activated Na+ channels in human prostate cancer cell lines and their contribution to invasion in vitro. Laniado ME, et al. **Am J Pathol** 1997 Apr;150(4):1213-21

Glucocorticoid regulation of epithelial sodium channel genes in human fetal lung. Venkatesh VC, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):L227-33

Cloning and characterization of sodium channel cDNA from puffer fish. Shahjahan M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:346-8

Isolation of chicken alpha ENaC splice variants from a cochlear cDNA library. Killick R, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):33-7

Sodium channel alpha-subunit mRNAs I, II, III, NaG, Na6 and hNE (PN1): different expression patterns in developing rat nervous system. Felts PA, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):71-82

Expression of the amiloride-sensitive sodium channel beta subunit gene in human B lymphocytes. Oh Y, et al. **J Am Soc Nephrol** 1997 Jan;8(1):126-9

A novel tetrodotoxin-sensitive, voltage-gated sodium channel expressed in rat and human dorsal root ganglia. Sangameswaran L, et al. **J Biol Chem** 1997 Jun 6; 272(23):14805-9

Up-regulation of functional voltage-dependent sodium channels by insulin in cultured bovine adrenal chromaffin cells. Yamamoto R, et al. **J Neurochem** 1996 Oct; 67(4):1401-8

Immature epithelial Na+ channel expression is one of the pathogenetic mechanisms leading to human neonatal respiratory distress syndrome. O'Brodovich HM. **Proc Assoc Am Physicians** 1996 Sep;108(5):345-55 (86 ref.)

Regulation of sodium channel gene expression by class I antiarrhythmic drugs and n - 3 polyunsaturated fatty acids in cultured neonatal rat cardiac myocytes. Kang JX, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2724-8

CHEMISTRY

Structure and modulation of Na+ and Ca2+ channels. Catterall WA. **Ann N Y Acad Sci** 1993 Dec 20;707:1-19 (79 ref.)

Molecular aspects of ion permeation through channels. Imoto K. **Ann N Y Acad Sci** 1993 Dec 20;707:38-50 (28 ref.)

Identification of ligand-binding sites that form external mouth of ion pore in calcium and sodium channels. Nakayama H, et al. **Ann N Y Acad Sci** 1993 Dec 20; 707:349-51

Structure and function of sodium channels. Noda M. **Ann N Y Acad Sci** 1993 Dec 20;707:20-37 (32 ref.)

A sodium channel model. Sato C, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:338-41

Cloning and characterization of sodium channel cDNA from puffer fish. Shahjahan M, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:346-8

Antisense oligonucleotides discriminating between two muscular Na+ channel isoforms. Brinkmeier H, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):235-41

Role for Pro-13 in directing high-affinity binding of anthopleurin B to the voltage-sensitive sodium channel. Kelso GJ, et al. **Biochemistry** 1996 Nov 12;35(45):14157-64

On the structural basis for ionic selectivity among Na+, K+, and Ca2+ in the voltage-gated sodium channel [see comments] Favre I, et al. **Biophys J** 1996 Dec;71(6):3110-25 . Comment in: Biophys J 1996 Dec;71(6):2916-8.

Single-channel analysis of inactivation-defective rat skeletal muscle sodium channels containing the F1304Q mutation. Lawrence JH, et al. **Biophys J** 1996 Sep;71(3):1285-94

Mechanisms of sodium/calcium selectivity in sodium channels probed by cysteine mutagenesis and sulfhydryl modification. Pérez-García MT, et al. **Biophys J** 1997 Mar; 72(3):989-96

Topology of the P segments in the sodium channel pore revealed by cysteine mutagenesis. Yamagishi T, et al. **Biophys J** 1997 Jul;73(1):195-204

Sequence of the voltage-gated sodium channel beta1-subunit in wild-type and in quivering mice. Grosson CL, et al. **Brain Res Mol Brain Res** 1996 Dec;42(2):222-6

Molecular and physicochemical aspects of local anesthetic-membrane interaction. de-Paula E, et al. **Braz J Med Biol Res** 1996 Jul;29(7):877-94 (199 ref.)

A mutation causing pseudohypoaldosteronism type 1 identifies a conserved glycine that is involved in the gating of the epithelial sodium channel. Gründer S, et al. **EMBO J** 1997 Mar 3;16(5):899-907

Investigating synthetic P-regions from voltage-gated sodium channel at the conformational and functional levels. Cosette P, et al. **Eur Biophys J** 1997;25(4):275-84

Kinetic interconversion of rat and bovine homologs of the alpha subunit of an amiloride-sensitive Na+ channel by C-terminal truncation of the bovine subunit. Fuller CM, et al. **J Biol Chem** 1996 Oct 25;271(43):26602-8

Identification of an amiloride binding domain within the alpha-subunit of the epithelial Na+ channel. Ismailov II, et al. **J Biol Chem** 1997 Aug 22;272(34):21075-83

Movement of the Na+ channel inactivation gate during inactivation. Kellenberger S, et al. **J Biol Chem** 1996 Nov 29;271(48):30971-9

Novel isoforms of the beta and gamma subunits of the Xenopus epithelial Na channel provide information about the amiloride binding site and extracellular sodium sensing. Puoti A, et al. **Proc Natl Acad Sci U S A** 1997 May 27; 94(11):5949-54

Characterizing the mu-conotoxin binding site on voltage-sensitive sodium channels with toxin analogs and channel mutations. Chahine M, et al. **Receptors Channels** 1995;3(3):161-74

Solution structure of the sodium channel antagonist conotoxin GS: a new molecular caliper for probing sodium channel geometry. Hill JM, et al. **Structure** 1997 Apr 15; 5(4):571-83

CLASSIFICATION

Phylogenetic characterization of the epithelial Na+ channel (ENaC) family. Le T, et al. **Mol Membr Biol** 1996 Jul-Sep; 13(3):149-57

DRUG EFFECTS

Stretch modulates amiloride sensitivity and cation selectivity of sodium channels in human B lymphocytes. Achard JM, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C224-34

Mechanism of modulation of the voltage-gated skeletal and cardiac muscle sodium channels by fatty acids. Bendahhou S, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C592-600

Regulation of amiloride-sensitive Na+ channels by endothelin-1 in distal nephron cells. Gallego MS, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):F451-60

cAMP stimulates CFTR-like Cl- channels and inhibits amiloride-sensitive Na+ channels in mouse CCD cells. Letz B, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C657-66

Luminal adenosine receptors regulate amiloride-sensitive Na+ channels in A6 distal nephron cells. Ma H, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F798-805

Localization of amiloride-sensitive sodium channels in A6 cells by atomic force microscopy. Smith PR, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1295-8

Blockade of lysophosphatidylcholine-modified cardiac Na channels by a lidocaine derivative QX-222. Undrovinas AI, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H790-7

Oxime depression of the fast sodium current in myocardial cells. Sada H, et al. **Arch Int Pharmacodyn Ther** 1995 Nov-Dec;330(3):319-31

Voltage-dependent effect of Al3+ on channel activities in hippocampal neurons. Kanazirska M, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):84-7

A novel antagonist, No. 7943, of the Na+/Ca2+ exchange current in guinea-pig cardiac ventricular cells. Watano T, et al. **Br J Pharmacol** 1996 Oct;119(3):555-63

Down-regulation of Na channel expression by A23187 in N1E-115 neuroblastoma cells. Hirsh JK, et al. **Brain Res** 1996 Jan 15;706(2):343-6

Channel activators reduce the expression of sodium channel alpha-subunit mRNA in developing neurons. Lara A, et al. **Brain Res Mol Brain Res** 1996 Apr;37(1-2):116-24

Effects of endothelin 1 on calcium and sodium currents in isolated human cardiac myocytes. Cheng TH, et al. **Can J Physiol Pharmacol** 1995 Dec;73(12):1774-83

Effects of Tityus serrulatus scorpion toxin gamma on voltage-gated Na+ channels. Marcotte P, et al. **Circ Res** 1997 Mar;80(3):363-9

Lysophosphatidylcholine modulates cardiac I(Na) via multiple protein kinase pathways. Watson CL, et al. **Circ Res** 1997 Sep;81(3):387-95

Comparison of the effects of a series of kappa-opioid receptor agonists upon sodium channel function in rat brain miniprisms. Tiger G, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 May;117(1):69-73

A new scorpion venom toxin paralytic to insects that affects Na+ channel activation. Purification, structure, antigenicity and mode of action. Borchani L, et al. **Eur J Biochem** 1996 Oct 15;241(2):525-32

Vincamine and vincanol are potent blockers of voltage-gated Na+ channels. Erdo SA, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):69-73

Anticonvulsive action of (+/-)-kavain estimated from its properties on stimulated synaptosomes and Na+ channel receptor sites. Gleitz J, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):89-97

Block of Na+ channel by bepridil in isolated guinea-pig ventricular myocytes. Sato N, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):373-9

Felbamate inhibits cloned voltage-dependent Na+ channels from human and rat brain. Taglialatela M, et al. **Eur J Pharmacol** 1996 Dec 5;316(2-3):373-7

The local anesthetic, n-butyl-p-aminobenzoate, reduces rat sensory neuron excitability by differential actions on fast and slow Na+ current components. Van den Berg RJ, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):87-95

The effect of bile acid on the activation of amiloride-sensitive sodium channels in frog skin. Lima MS, et al. **Exp Physiol** 1996 Sep;81(5):755-66

A single serine residue confers tetrodotoxin insensitivity on the rat sensory-neuron-specific sodium channel SNS. Sivilotti L, et al. **FEBS Lett** 1997 Jun 2;409(1):49-52

HOE 694 affords protection versus veratrine contractures in rat atria by Na+ channel blockade. Le Grand B, et al. **Fundam Clin Pharmacol** 1996;10(5):467-73

The binding site on cochlear stereocilia for antisera raised against renal Na+ channels is blocked by amiloride and dihydrostreptomycin. Furness DN, et al. **Hear Res** 1996 Apr;93(1-2):136-46

Differential effects of lipid-soluble toxins on sodium channels and L-type calcium channels in frog ventricular cells. Furue T, et al. **Hiroshima J Med Sci** 1997 Mar;46(1):43-50

Veratridine delays apoptotic neuronal death induced by NGF deprivation through a Na(+)-dependent mechanism in cultured rat sympathetic neurons. Tanaka S, et al. **Int J Dev Neurosci** 1997 Feb;15(1):15-27

Sodium and potassium channel modulators: their role in neuroprotection. Obrenovitch TP. **Int Rev Neurobiol** 1997; 40:109-35 (159 ref.)

Electrophysiologic effects of sodium channel blockade on anisotropic conduction and conduction block in canine myocardium: preferential slowing of longitudinal conduction by flecainide versus disopyramide or lidocaine. Kondo T, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1639-44

Comparison of mouse bioassay and sodium channel cytotoxicity assay for detecting paralytic shellfish poisoning toxins in shellfish extracts. Truman P, et al. **J AOAC Int** 1996 Sep-Oct;79(5):1130-3

Nodal Na(+)-channel displacement is associated with nerve-conduction slowing in the chronically diabetic BB/W rat: prevention by aldose reductase inhibition. Cherian PV, et al. **J Diabetes Complications** 1996 Jul-Aug; 10(4):192-200

Protein kinase regulation of a cloned epithelial Na+ channel. Awayda MS, et al. **J Gen Physiol** 1996 Jul;108(1):49-65

Multiple open channel states revealed by lidocaine and QX-314 on rat brain voltage-dependent sodium channels. Salazar BC, et al. **J Gen Physiol** 1996 Jun;107(6):743-54

Identification of amino acid residues in the alpha, beta, and gamma subunits of the epithelial sodium channel (ENaC) involved in amiloride block and ion permeation. Schild L, et al. **J Gen Physiol** 1997 Jan;109(1):15-26

Effect of alkali metal cations on slow inactivation of cardiac Na+ channels. Townsend C, et al. **J Gen Physiol** 1997 Jul;110(1):23-33

Dual role of prostaglandins (PGE2) in regulation of channel density and open probability of epithelial Na+ channels in frog skin (R. pipiens). Els WJ, et al. **J Membr Biol** 1997 Jan 1;155(1):75-87

Associated proteins and renal epithelial Na+ channel function. Ismailov II, et al. **J Membr Biol** 1996 Jan; 149(2):123-32

Ca2+ channel antagonist U-92032 inhibits both T-type Ca2+ channels and Na+ channels in hippocampal CA1 pyramidal neurons. Avery RB, et al. **J Neurophysiol** 1997 Feb;77(2):1023-8

Characterization of TTX-resistant persistent Na+ current underlying pacemaker potentials of fish gonadotropin-releasing hormone (GnRH) neurons. Oka Y. **J Neurophysiol** 1996 Jun;75(6):2397-404

Late sodium channel openings underlying epileptiform activity are preferentially diminished by the anticonvulsant phenytoin. Segal MM, et al. **J Neurophysiol** 1997 Jun; 77(6):3021-34

MicroO-conotoxin MrVIA inhibits mammalian sodium channels, but not through site I. Terlau H, et al. **J Neurophysiol** 1996 Sep;76(3):1423-9

5HT4 receptors couple positively to tetrodotoxin-insensitive sodium channels in a subpopulation of capsaicin-sensitive rat sensory neurons. Cardenas CG, et al. **J Neurosci** 1997 Oct 1;17(19):7181-9

Evaluation of the antimyotonic activity of mexiletine and some new analogs on sodium currents of single muscle fibers and on the abnormal excitability of the myotonic ADR mouse. De Luca A, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):93-100

Solvent-dependent rate-limiting steps in the conformational change of sodium channel gating in squid giant axon [published erratum appears in J Physiol (Lond) 1997 Mar 15;499(Pt 3):849] Kukita F. **J Physiol (Lond)** 1997 Jan 1; 498 (Pt 1):109-33

Application of physiologically active substances isolated from natural resources to pharmacological studies. Ohizumi Y. **Jpn J Pharmacol** 1997 Apr;73(4):263-89 (142 ref.)

Kinetic mechanism of Na+ channel depression by taurine in guinea pig ventricular myocytes. Sada H, et al. **Jpn J Pharmacol** 1996 Jun;71(2):147-59

Diversity and regulation of amiloride-sensitive Na+ channels. Benos DJ, et al. **Kidney Int** 1996 Jun;49(6):1632-7 (35 ref.)

Potassium and magnesium retaining potency and efficacy of triamterene and analogues in conscious saline-loaded rats. Priewer H, et al. **Magnes Res** 1996 Mar;9(1):33-40

A possible role of the redox interactions in the dual, activatory and inhibitory, action of DPI 201-106 on the potential-dependent Na+ channels. Marinov BS. **Membr Cell Biol** 1997;10(6):707-15

Further validation of a simple biochemical method for evaluation of local anesthetic effects at sodium channels. Tiger G, et al. **Methods Find Exp Clin Pharmacol** 1996 Sep;18(7):431-5

Stereoselective effects of mexiletine enantiomers on sodium currents and excitability characteristics of adult skeletal muscle fibers. De Luca A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 352(6):653-61

The effects of catechol on various membrane conductances in lumbar sympathetic postganglionic neurones of the guinea-pig. Inokuchi H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):609-18

Electrophysiological properties of the propafenone-analogue GE 68 (1-[3-(phenylethyl)-2-benzofuryl]-2-(propylamino)-ethanol) in isolated preparations and ventricular myocytes of guinea-pig hearts. Lemmens-Gruber R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):230-8

Blockade of voltage-sensitive sodium channels by NS-7, a novel neuroprotective compound, in the rat brain. Shimidzu T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 May; 355(5):601-8

Effect of a sodium-channel activator (BDF 9148) on insulin secretion in mouse pancreatic islets. Wahl MA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Mar; 355(3):417-21

Interactions between a pore-blocking peptide and the voltage sensor of the sodium channel: an electrostatic approach to channel geometry. French RJ, et al. **Neuron** 1996 Feb; 16(2):407-13

The beta 1 sodium channel subunit modifies the interactions of neurotoxins and local anesthetics with the rat brain IIA alpha sodium channel in isolated membranes but not in intact cells. Bonhaus DW, et al. **Neuropharmacology** 1996 May;35(5):605-13

NGF has opposing effects on Na+ channel III and SNS gene expression in spinal sensory neurons. Black JA, et al. **Neuroreport** 1997 Jul 7;8(9-10):2331-5

Kainic acid blocks a TTX-sensitive sodium channel in retinal horizontal cells of the turtle (Pseudemys scripta elegans). Martin DK, et al. **Neuroreport** 1996 Nov 4; 7(15-17):2429-33

Glutathione-induced sodium currents in neocortex. Shaw CA, et al. **Neuroreport** 1996 Apr 26;7(6):1149-52

DAMGO inhibits prostaglandin E2-induced potentiation of a TTX-resistant Na+ current in rat sensory neurons in vitro. Gold MS, et al. **Neurosci Lett** 1996 Jul 12;212(2):83-6

Chronic cocaine intoxication alters hippocampal sodium channel function. Zhai J, et al. **Neurosci Lett** 1997 Jun 27; 229(2):121-4

Veratridine-enhanced persistent sodium current induces bursting in CA1 pyramidal neurons. Alkadhi KA, et al. **Neuroscience** 1996 Apr;71(3):625-32

Activation of voltage-dependent sodium channels in cultured cerebellar poffule cells induces neurotoxicity that is not mediated by glutamate release. Dargent B, et al. **Neuroscience** 1996 Jul;73(1):209-16

Characterization of hormone-stimulated Na+ transport in a high-resistance clone of the MDCK cell line. Blazer-Yost BL, et al. **Pflugers Arch** 1996 Aug;432(4):685-91

Excitatory sodium currents of NH15-CA2 neuroblastoma x glioma hybrid cells are differently affected by interleukin-2 and interleukin-1beta. Hamm S, et al. **Pflugers Arch** 1996 Nov-Dec;433(1-2):160-5

Tetrodotoxin-sensitive inactivation-resistant sodium channels in pacemaker cells influence heart rate. Ju Y, et al. **Pflugers Arch** 1996 Apr;431(6):868-75

cAMP-activation of amiloride-sensitive Na+ channels from guinea-pig colon expressed in Xenopus oocytes. Liebold KM, et al. **Pflugers Arch** 1996 Apr;431(6):913-22

Amiloride-inhibitable Na+ conductance in rat proximal tubule. Willmann JK, et al. **Pflugers Arch** 1997 Jun; 434(2):173-8

Kinetics of grayanotoxin evoked modification of sodium channels in squid giant axons. Yakehiro M, et al. **Pflugers Arch** 1997 Feb;433(4):403-12

Neuronal ion channels as the target sites of insecticides. Narahashi T. **Pharmacol Toxicol** 1996 Jul;79(1):1-14 (146 ref.)

Common molecular determinants of local anesthetic, antiarrhythmic, and anticonvulsant block of voltage-gated Na+ channels. Ragsdale DS, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9270-5

Selective alteration of sodium channel gating by Australian funnel-web spider toxins. Nicholson GM, et al. **Toxicon** 1996 Nov-Dec;34(11-12):1443-53

[Aldosterone increases the activity level of Na+-conducting channels in chronic myeloid leukemia K562 cells] Neguliaev IuA, et al. **Dokl Akad Nauk** 1996 Aug; 349(5):701-3 **(Rus)**

GENETICS

Molecular biology of Na+ absorption. Barbry P, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G571-85 (155 ref.)

Cell-specific expression of amiloride-sensitive, Na(+)-conducting ion channels in the kidney. Ciampolillo F, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):C1303-15

Aldosterone regulation of sodium channel gamma-subunit mRNA in cortical collecting duct cells. Denault DL, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):C423-8

Noncoordinate regulation of epithelial Na channel and Na pump subunit mRNAs in kidney and colon by aldosterone. Escoubet B, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1482-91

Noncoordinated expression of alpha-, beta-, and gamma-subunit mRNAs of epithelial Na+ channel along rat respiratory tract. Farman N, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C131-41

Cloning and induction by low NaCl intake of avian intestine Na+ channel subunits. Goldstein O, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C270-7

Glucocorticosteroids increase sodium transport in middle ear epithelium. Herman P, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C184-90

Localization of epithelial sodium channel subunit mRNAs in adult rat lung by in situ hybridization. Matsushita K, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):L332-9

Structure and function of cardiac sodium and potassium channels. Roden DM, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H511-25 (166 ref.)

Evidence for a single pedigree source of the hyperkalemic periodic paralysis susceptibility gene in quarter horses. Bowling AT, et al. **Anim Genet** 1996 Aug;27(4):279-81

Identification of a Thr-to-Met mutation in the skeletal muscle sodium channel gene in hyperkalemic periodic paralysis of a Japanese family. Arahata K, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:342-5

Ion channel mutations in periodic paralysis and related myotonic diseases. Brown RH Jr. **Ann N Y Acad Sci** 1993 Dec 20;707:305-16 (51 ref.)

A proposed mutation, Val781Ile, associated with hyperkalemic periodic paralysis and cardiac dysrhythmia is a benign polymorphism. Green DS, et al. **Ann Neurol** 1997 Aug;42(2):253-6

Sodium channel defects in myotonia and periodic paralysis. Cannon SC. **Annu Rev Neurosci** 1996;19:141-64 (78 ref.)

Genes controlling ion permeability in both motorneurons and muscle. Shreffler W, et al. **Behav Genet** 1997 May; 27(3):211-21

Antisense oligonucleotides discriminating between two muscular Na+ channel isoforms. Brinkmeier H, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):235-41

Restoration of fast inactivation in an inactivation-defective human heart sodium channel by the cysteine modifying reagent benzyl-MTS: analysis of IFM-ICM mutation. Chahine M, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):606-10

Isolation of chicken alpha ENaC splice variants from a cochlear cDNA library. Killick R, et al. **Biochim Biophys Acta** 1997 Jan 3;1350(1):33-7

Impaired slow inactivation in mutant sodium channels [see

comments] Cummins TR, et al. **Biophys J** 1996 Jul; 71(1):227–36. Comment in: Biophys J 1996 Jul;71(1):5–7.

Point mutations in alpha bENaC regulate channel gating, ion selectivity, and sensitivity to amiloride. Fuller CM, et al. **Biophys J** 1997 Apr;72(4):1622–32

Slow inactivation differs among mutant Na channels associated with myotonia and periodic paralysis. Hayward LJ, et al. **Biophys J** 1997 Mar;72(3):1204–19

Single-channel analysis of inactivation-defective rat skeletal muscle sodium channels containing the F1304Q mutation. Lawrence JH, et al. **Biophys J** 1996 Sep;71(3):1285–94

A mutation in segment I–S6 alters slow inactivation of sodium channels. Wang SY, et al. **Biophys J** 1997 Apr; 72(4):1633–40

Type II brain sodium channel expression in non-neuronal cells: embryonic rat osteoblasts. Black JA, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):89–98

Increase in mRNAs encoding neonatal II and III sodium channel alpha-isoforms during kainate-induced seizures in adult rat hippocampus. Gastaldi M, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):179–90

Lidocaine block of LQT-3 mutant human Na+ channels. An RH, et al. **Circ Res** 1996 Jul;79(1):103–8

Regulation of sodium channel gene expression by transcriptional silencing. Eggen BJ, et al. **Dev Neurosci** 1997;19(1):25–6

Cloning and tissue distribution of the Aplysia Na+ channel alpha-subunit cDNA. Dyer JR, et al. **DNA Cell Biol** 1997 Mar;16(3):347–56

Chromatin structure of the rat somatotropin gene locus and physical linkage of the rat somatotropin gene and skeletal-muscle sodium-channel gene. Kazahari K, et al. **Eur J Biochem** 1997 Mar 1;244(2):494–500

Structure and distribution of a broadly expressed atypical sodium channel. Akopian AN, et al. **FEBS Lett** 1997 Jan 3;400(2):183–7

Hyperkalemic periodic paralysis caused by recurring mutation in the adult muscle sodium channel alpha-subunit gene. Sillén A, et al. **Genet Couns** 1996;7(4):267–75

Molecular characterization of neurally expressing genes in the para sodium channel gene cluster of drosophila. Hong CS, et al. **Genetics** 1996 Mar;142(3):879–92

A new sodium channel alpha-subunit gene (Scn9a) from Schwann cells maps to the Scn1a, Scn2a, Scn3a cluster of mouse chromosome 2. Beckers MC, et al. **Genomics** 1996 Aug 15;36(1):202–5

Scn2b, a voltage-gated sodium channel beta2 gene on mouse chromosome 9. Jones JM, et al. **Genomics** 1996 Jun 1; 34(2):258–9

Cloning and characterization of a mouse sensory neuron tetrodotoxin-resistant voltage-gated sodium channel gene, Scn10a. Souslova VA, et al. **Genomics** 1997 Apr 15; 41(2):201–9

Assignment of the human amiloride-sensitive Na+ channel delta isoform to chromosome 1p36.3–p36.2. Waldmann R, et al. **Genomics** 1996 Jun 1;34(2):262–3

Genomic organization of the human SCN5A gene encoding the cardiac sodium channel. Wang Q, et al. **Genomics** 1996 May 15;34(1):9–16

Role of the alpha-, beta-, and gamma-subunits of epithelial sodium channel in a model of polygenic hypertension. Kreutz R, et al. **Hypertension** 1997 Jan;29(1 Pt 1):131–6

A single amino acid change in the para sodium channel protein is associated with knockdown-resistance (kdr) to pyrethroid insecticides in German cockroach. Dong K. **Insect Biochem Mol Biol** 1997 Feb;27(2):93–100

A novel mutation L1029H in sodium channel gene hscp associated with pyrethroid resistance for Heliothis virescens (Lepidoptera:Noctuidae). Park Y, et al. **Insect Biochem Mol Biol** 1997 Jan;27(1):9–13

Reduced expression of voltage-gated sodium channels in neurons cultured from trisomy 16 mouse hippocampus. Stoll J, et al. **Int J Dev Neurosci** 1996 Oct;14(6):749–60

A novel variant of the beta-subunit of the amiloride-sensitive sodium channel in African Americans. Su YR, et al. **J Am Soc Nephrol** 1996 Dec;7(12):2543–9

Polymorphism in the beta subunit and Na+ transport [editorial] Warnock DG. **J Am Soc Nephrol** 1996 Dec; 7(12):2490–4 (62 ref.)

Putative channel components for the fast-rotating sodium-driven flagellar motor of a marine bacterium. Asai Y, et al. **J Bacteriol** 1997 Aug;179(16):5104–10

Cloning of a third mammalian Na+–Ca2+ exchanger, NCX3. Nicoll DA, et al. **J Biol Chem** 1996 Oct 4; 271(40):24914–21

Alternative splicing of the sodium channel SCN8A predicts a truncated two-domain protein in fetal brain and non-neuronal cells. Plummer NW, et al. **J Biol Chem** 1997 Sep 19;272(38):24008–15

Genomic organization and the 5' flanking region of the gamma subunit of the human amiloride-sensitive epithelial sodium channel. Thomas CP, et al. **J Biol Chem** 1996 Oct 18;271(42):26062–6

Molecular cloning of a non-inactivating proton-gated Na+ channel specific for sensory neurons. Waldmann R, et al. **J Biol Chem** 1997 Aug 22;272(34):20975–8

Liddle's syndrome: heritable human hypertension caused by mutations in the Beta subunit of the epithelial sodium channel. Corvol P. **J Endocrinol Invest** 1995 Jul-Aug; 18(7):592–4

A unique role for the S4 segment of domain 4 in the inactivation of sodium channels. Chen LQ, et al. **J Gen Physiol** 1996 Dec;108(6):549–56

Paramyotonia congenita mutations reveal different roles for segments S3 and S4 of domain D4 in hSkM1 sodium channel gating. Ji S, et al. **J Gen Physiol** 1996 Feb; 107(2):183–94

Phosphorylation of S1505 in the cardiac Na+ channel inactivation gate is required for modulation by protein kinase C. Qu Y, et al. **J Gen Physiol** 1996 Nov;108(5):375–9

P-loop flexibility in Na+ channel pores revealed by single- and double-cysteine replacements. Tsushima RG, et al. **J Gen Physiol** 1997 Jul;110(1):59–72

Lack of mutations in epithelial sodium channel beta-subunit gene in human subjects with hypertension. Chang H, et al. **J Hypertens** 1996 Dec;14(12):1417–9

Mapping and sequence analysis of the gene encoding the beta subunit of the epithelial sodium channel in experimental models of hypertension. Huang H, et al. **J Hypertens** 1995 Nov;13(11):1247–51

Up-regulation of sodium channel subunit mRNAs and their cell surface expression by antiepileptic valproic acid: activation of calcium channel and catecholamine secretion in adrenal chromaffin cells. Yamamoto R, et al. **J Neurochem** 1997 Apr;68(4):1655–62

Paramyotonia congenita: genotype to phenotype correlations in two families and report of a new mutation in the sodium channel gene. Plassart E, et al. **J Neurol Sci** 1996 Oct; 142(1–2):126–33

A missense mutation in the sodium channel Scn8a is responsible for cerebellar ataxia in the mouse mutant jolting. Kohrman DC, et al. **J Neurosci** 1996 Oct 1; 16(19):5993–9

Phosphorylation at a single site in the rat brain sodium channel is necessary and sufficient for current reduction by protein kinase A. Smith RD, et al. **J Neurosci** 1997 Aug 15;17(16):6086–93

The equine periodic paralysis Na+ channel mutation alters molecular transitions between the open and inactivated states. Hanna WJ, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):349–64

Genetic mapping of the peripheral sodium channel genes, Scn9a and Scn10a, in the mouse. Kozak CA, et al. **Mamm Genome** 1996 Oct;7(10):787–8

Cloning and sequencing of the para-type sodium channel gene from susceptible and kdr-resistant German cockroaches (Blattella germanica) and house fly (Musca domestica). Miyazaki M, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):61–8

Identification of mutations in the housefly para-type sodium channel gene associated with knockdown resistance (kdr) to pyrethroid insecticides. Williamson MS, et al. **Mol Gen Genet** 1996 Aug 27;252(1–2):51–60

Hereditary dysfunction of voltage-gated sodium channels: from clinical phenotype to molecular mechanisms. George AL Jr. **Nephrol Dial Transplant** 1996 Sep;11(9):1730–7 (71 ref.)

The ENaC channel as the primary determinant of two human diseases: Liddle syndrome and pseudohypoaldosteronism. Schild L. **Nephrologie** 1996;17(7):395–400 (27 ref.)

Expression of mRNA for a sodium channel in subfamily 2 in spinal sensory neurons. Waxman SG, et al. **Neurochem Res** 1996 Apr;21(4):395–401

C4342T-mutation in the SCN4A gene on chromosome 17q in a Swedish family with paramyotonia congenita (Eulenburg)--correlations with clinical, neurophysiological and muscle biopsy data. Borg K, et al. **Neuromuscul Disord** 1997 Jun;7(4):231–3

From mutation to myotonia in sodium channel disorders. Cannon SC. **Neuromuscul Disord** 1997 Jun;7(4):241–9 (44 ref.)

Paramyotonia congenita and hyperkalemic periodic paralysis associated with a Met 1592 Val substitution in the skeletal muscle sodium channel alpha subunit--a large kindred with a novel phenotype. Kelly P, et al. **Neuromuscul Disord** 1997 Mar;7(2):105–11

Downregulation of Na+ channel mRNA in olfactory bulb tufted cells following deafferentation. Sashihara S, et al. **Neuroreport** 1997 Mar 24;8(5):1289–93

Role in fast inactivation of conserved amino acids in the IV/S4–S5 loop of the human muscle Na+ channel. Mitrovic N, et al. **Neurosci Lett** 1996 Aug 16;214(1):9–12

A quantitative and specific method for measuring transcript levels of highly homologous genes. Lombardo AJ, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4812–6

Modulation of Na+ channel inactivation by the beta 1 subunit: a deletion analysis. Chen C, et al. **Pflugers Arch** 1995 Dec;431(2):186–95

Epithelial sodium channels: function, structure, and regulation. Garty H, et al. **Physiol Rev** 1997 Apr; 77(2):359–96 (451 ref.)

Molecular characterization of the sodium channel subunits expressed in mammalian cerebellar Purkinje cells. de Miera EVS, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):7059–64

BNaC1 and BNaC2 constitute a new family of human neuronal sodium channels related to degenerins and epithelial sodium channels. García-Añoveros J, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1459–64

Reconstitution of stretch-activated cation channels by expression of the alpha-subunit of the epithelial sodium channel cloned from osteoblasts. Kizer N, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):1013–8

A single zinc finger motif in the silencing factor REST represses the neural-specific type II sodium channel promoter. Tapia-Ramírez J, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1177–82

Identification of PN1, a predominant voltage-dependent sodium channel expressed principally in peripheral neurons. Toledo-Aral JJ, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1527–32

Characterization of human cardiac Na+ channel mutations in the congenital long QT syndrome. Wang DW, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13200–5

Tissue distribution and subcellular localization of Na+ channel mRNA in the nervous system of the squid, Loligo opalescens. Liu TI, et al. **Receptors Channels** 1995; 3(4):243–54

U1-mediated exon definition interactions between AT-AC and GT-AG introns. Wu Q, et al. **Science** 1996 Nov 8; 274(5289):1005–8

[Long QT syndrome] Nakajima T, et al. **Nippon Rinsho** 1996 Mar;54(3):776–81 (10 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

The renal epithelial sodium channel: new insights in understanding hypertension. Rossier BC. **Adv Nephrol Necker Hosp** 1996;25:275–86 (38 ref.)

Aldosterone-induced increase in the abundance of Na+ channel subunits. Asher C, et al. **Am J Physiol** 1996 Aug; 271(2 Pt 1):C605–11

Mechanism of modulation of the voltage-gated skeletal and cardiac muscle sodium channels by fatty acids. Bendahhou S, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C592–600

Protein kinase A phosphorylation and G protein regulation of type II pneumocyte Na+ channels in lipid bilayers. Berdiev BK, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1262–70

Feedback regulation of Na channels in rat CCT. IV. Mediation by activation of protein kinase C. Frindt G, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):F371–6

Regulation of Na channels in the rat cortical collecting tubule: effects of cAMP and methyl donors. Frindt G, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1086–92

Role of actin in regulation of epithelial sodium channels by CFTR. Ismailov II, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1077–86

Immunolocalization of the mNav2.3 Na+ channel in mouse heart: upregulation in myometrium during pregnancy. Knittle TJ, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C688–96

Localization of amiloride-sensitive sodium channels in A6 cells by atomic force microscopy. Smith PR, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):C1295–8

Cardiac sodium channels expressed in a peripheral neurotumor-derived cell line, RT4-B8. Zeng D, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1522–31

Na+/Ca2+ exchange currents and SR Ca2+ contents in postinfarction myocytes. Zhang XQ, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C1800–7

Sodium channel in human malignant hyperthermia. Fletcher JE, et al. **Anesthesiology** 1997 May;86(5):1023–32

Dilazep inhibits binding of batrachotoxin to sodium channels in canine sarcolemmal vesicles. Chiba K, et al. **Arch Int Pharmacodyn Ther** 1995 Sep-Oct;330(2):138–50

Conductive Na+ transport in fetal lung alveolar apical membrane vesicles is regulated by fatty acids and G proteins. Fyfe GK, et al. **Biochim Biophys Acta** 1997 Jan 10;1355(1):33–42

The peptide pQFYRFamide is encoded on the FMRFamide precursor of the snail Helix aspersa but does not activate the FMRFamide-gated sodium current. Price DA, et al. **Biol Bull** 1996 Dec;191(3):341–52

Modal behavior of the mu 1 Na+ channel and effects of coexpression of the beta 1-subunit. Chang SY, et al. **Biophys J** 1996 Jun;70(6):2581–92

Impaired slow inactivation in mutant sodium channels [see comments] Cummins TR, et al. **Biophys J** 1996 Jul; 71(1):227–36. Comment in: Biophys J 1996 Jul;71(1):5–7.

Point mutations in alpha bENaC regulate channel gating, ion selectivity, and sensitivity to amiloride. Fuller CM, et al. **Biophys J** 1997 Apr;72(4):1622–32

A mutation in segment I–S6 alters slow inactivation of sodium channels. Wang SY, et al. **Biophys J** 1997 Apr; 72(4):1633–40

Inhibition by propofol of [3H]-batrachotoxinin-A 20-alpha-benzoate binding to voltage-dependent sodium channels in rat cortical synaptosomes. Ratnakumari L, et al. **Br J Pharmacol** 1996 Dec;119(7):1498–504

The kinetic parameters of sodium currents in maturing acutely isolated rat hippocampal CA1 neurones. Costa PF. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):29–40

Spinal sensory neurons express multiple sodium channel alpha-subunit mRNAs. Black JA, et al. **Brain Res Mol Brain Res** 1996 Dec 31;43(1–2):117–31

Unusual behavior of ion transport mediated by polyene antibiotics. Activation energies for the exchange of Na+ ions through liposomal membranes studied by 23Na-NMR spectroscopy. Kimura A, et al. **Chem Pharm Bull (Tokyo)** 1997 Mar;45(3):431–6

A novel tetrodotoxin-sensitive Na+ current in cultured human coronary myocytes. Quignard JF, et al. **Circ Res** 1997 Mar;80(3):377–82

Lysophosphatidylcholine modulates cardiac I(Na) via multiple protein kinase pathways. Watson CL, et al. **Circ Res** 1997 Sep;81(3):387–95

SODIUM CHANNELS

Immunocytochemical localization of rH1 sodium channel in adult rat heart atria and ventricle. Presence in terminal intercalated disks. Cohen SA. **Circulation** 1996 Dec 15; 94(12):3083–6

Sodium transporters in health and disease. Warnock DG. **Curr Opin Nephrol Hypertens** 1997 Jul;6(4):372–6 (32 ref.)

Sodium channel expression: a dynamic process in neurons and non–neuronal cells. Black JA, et al. **Dev Neurosci** 1996; 18(3):139–52 (101 ref.)

Structure and distribution of a broadly expressed atypical sodium channel. Akopian AN, et al. **FEBS Lett** 1997 Jan 3;400(2):183–7

Bot IT2: a new scorpion toxin to study receptor site on insect sodium channels. Cestèle S, et al. **FEBS Lett** 1997 Mar 17;405(1):77–80

Toxin III from Leiurus quinquestriatus quinquestriatus: a specific probe for receptor site 3 on insect sodium channels. Cestèle S, et al. **Insect Biochem Mol Biol** 1997 Jun; 27(6):523–8

Structure and regulation of the amiloride–sensitive epithelial sodium channel. Barbry P, et al. **Ion Channels** 1996;4:115–67 (255 ref.)

1996 Homer Smith Award Lecture. Cum grano salis: the epithelial sodium channel and the control of blood pressure. Rossier BC. **J Am Soc Nephrol** 1997 Jun;8(6):980–92 (81 ref.)

Polymorphism in the beta subunit and Na+ transport [editorial] Warnock DG. **J Am Soc Nephrol** 1996 Dec; 7(12):2490–4 (62 ref.)

Na+ channel and acetylcholine receptor changes in muscle at sites distant from burns do not simulate denervation. Nosek MT, et al. **J Appl Physiol** 1997 Apr;82(4):1333–9

Depolarization of rat brain synaptosomes increases phosphorylation of voltage–sensitive sodium channels. Kondratyuk T, et al. **J Biol Chem** 1997 Jul 4; 272(27):16978–83

cAMP–dependent phosphorylation of two sites in the alpha subunit of the cardiac sodium channel. Murphy BJ, et al. **J Biol Chem** 1996 Nov 15;271(46):28837–43

Nonhydrolyzable analogues of GTP activate a new Na+ current in a rat mast cell line. Parekh AB. **J Biol Chem** 1996 Sep 20;271(38):23161–8

Differential expression of epithelial sodium channel subunit mRNAs in rat skin. Roudier–Pujol C, et al. **J Cell Sci** 1996 Feb;109 (Pt 2):379–85

Local anesthetics as effectors of allosteric gating. Lidocaine effects on inactivation–deficient rat skeletal muscle Na channels. Balser JR, et al. **J Clin Invest** 1996 Dec 15; 98(12):2874–86

Keeping it simple: kinetic models for the sodium pump [comment] De Weer P. **J Gen Physiol** 1997 May; 109(5):525–6. Comment on: J Gen Physiol 1997 May;109(5):537–54. Comment on: J Gen Physiol 1997 May;109(5):555–70.

Molecular analysis of the putative inactivation particle in the inactivation gate of brain type IIA Na+ channels. Kellenberger S, et al. **J Gen Physiol** 1997 May; 109(5):589–605

Molecular analysis of potential hinge residues in the inactivation gate of brain type IIA Na+ channels. Kellenberger S, et al. **J Gen Physiol** 1997 May; 109(5):607–17

Multiple open channel states revealed by lidocaine and QX–314 on rat brain voltage–dependent sodium channels. Salazar BC, et al. **J Gen Physiol** 1996 Jun;107(6):743–54

Identification of amino acid residues in the alpha, beta, and gamma subunits of the epithelial sodium channel (ENaC) involved in amiloride block and ion permeation. Schild L, et al. **J Gen Physiol** 1997 Jan;109(1):15–26

Anomalous effect of permeant ion concentration on peak open probability of cardiac Na+ channels. Townsend C, et al. **J Gen Physiol** 1997 Jul;110(1):11–21

Altered ionic selectivity of the sodium channel revealed by cysteine mutations within the pore. Tsushima RG, et al. **J Gen Physiol** 1997 Apr;109(4):463–75

Functional expression of Drosophila para sodium channels. Modulation by the membrane protein TipE and toxin pharmacology. Warmke JW, et al. **J Gen Physiol** 1997 Aug; 110(2):119–33

Effects of log P and phenyl ring conformation on the binding of 5–phenylhydantoins to the voltage–dependent sodium channel. Brown ML, et al. **J Med Chem** 1997 Feb 14; 40(4):602–7

Cysteine mapping in the ion selectivity and toxin binding region of the cardiac Na+ channel pore [published erratum appears in J Membr Biol 1997 Mar 1;156(1):98] Chen S, et al. **J Membr Biol** 1997 Jan 1;155(1):11–25

The basis of higher Na+ transport by inner medullary collecting duct cells from Dahl salt–sensitive rats: implicating the apical membrane Na+ channel. Husted RF, et al. **J Membr Biol** 1997 Mar 1;156(1):9–18

Nerve growth factor increases sodium current in pancreatic beta cells. Rosenbaum T, et al. **J Membr Biol** 1996 Sep; 153(1):53–8

Rapid onset of lysophosphatidylcholine–induced modification of whole cell cardiac sodium current kinetics. Shander GS, et al. **J Mol Cell Cardiol** 1996 Apr; 28(4):743–53

Interactions of delta–conotoxins with alkaloid neurotoxins reveal differences between the silent and effective binding sites on voltage–sensitive sodium channels. Shichor I, et al. **J Neurochem** 1996 Dec;67(6):2451–60

Clusters of axonal Na+ channels adjacent to remyelinating Schwann cells. Novakovic SD, et al. **J Neurocytol** 1996 Jun;25(6):403–12

Low–threshold, persistent sodium current in rat large dorsal root ganglion neurons in culture. Baker MD, et al. **J Neurophysiol** 1997 Mar;77(3):1503–13

Kinetics of slow inactivation of persistent sodium current in layer V neurons of mouse neocortical slices. Fleidervish IA, et al. **J Neurophysiol** 1996 Sep;76(3):2125–30

TTX–sensitive and –resistant Na+ currents, and mRNA for the TTX–resistant rH1 channel, are expressed in B104 neuroblastoma cells. Gu XQ, et al. **J Neurophysiol** 1997 Jan;77(1):236–46

Dopaminergic modulation of sodium current in hippocampal neurons via cAMP–dependent phosphorylation of specific sites in the sodium channel alpha subunit. Cantrell AR, et al. **J Neurosci** 1997 Oct 1;17(19):7330–8

5HT4 receptors couple positively to tetrodotoxin–insensitive sodium channels in a subpopulation of capsaicin–sensitive rat sensory neurons. Cardenas CG, et al. **J Neurosci** 1997 Oct 1;17(19):7181–9

Morphogenesis of the node of Ranvier: co–clusters of ankyrin and ankyrin–binding integral proteins define early developmental intermediates. Lambert S, et al. **J Neurosci** 1997 Sep 15;17(18):7025–36

Aggregation of sodium channels induced by a postnatally upregulated isoform of agrin. Sharp AA, et al. **J Neurosci** 1996 Nov 1;16(21):6775–83

Phosphorylation at a single site in the rat brain sodium channel is necessary and sufficient for current reduction by protein kinase A. Smith RD, et al. **J Neurosci** 1997 Aug 15;17(16):6086–93

The newborn rabbit sino–atrial node expresses a neuronal type I–like Na+ channel. Baruscotti M, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):641–8

Spatiotemporal gradients of intra–axonal [Na+] after transection and resealing in lizard peripheral myelinated axons. David G, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):295–307

PGE2 modulates the tetrodotoxin–resistant sodium current in neonatal rat dorsal root ganglion neurones via the cyclic AMP–protein kinase A cascade. England S, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):429–40

Two human paramyotonia congenita mutations have opposite effects on lidocaine block of Na+ channels expressed in a mammalian cell line. Fan Z, et al. **J Physiol (Lond)** 1996 Oct 1;496 (Pt 1):275–86

Modulation of the human cardiac sodium channel alpha–subunit by cAMP–dependent protein kinase and the responsible sequence domain. Frohnwieser B, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):309–18

Sodium channel distribution within the rabbit atrioventricular node as analysed by confocal microscopy. Petrecca K, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):263–74

Human Na+ channel fast and slow inactivation in paramyotonia congenita mutants expressed in Xenopus laevis oocytes [see comments] Richmond JE, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):589–600. Comment in: J Physiol (Lond) 1997 Mar 15;499 (Pt 3):571.

Alterations of Na+ channel gating in myotonia [comment] Ruff RL. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):571. Comment on: J Physiol (Lond) 1997 Mar 15;499 (Pt 3):589–600.

Effects of extracellular pH on voltage–gated Na+, K+ and Ca2+ currents in isolated rat CA1 neurons. Tombaugh GC, et al. **J Physiol (Lond)** 1996 Jun 15;493 (Pt 3):719–32

Effects of sodium and calcium channel blockade on cytosolic calcium oscillations and phasic contractions of myometrial tissue. Phillippe M, et al. **J Soc Gynecol Investig** 1997 Mar–Apr;4(2):72–7

The guanidinium toxin binding site on the sodium channel. Fozzard HA, et al. **Jpn Heart J** 1996 Sep;37(5):683–92 (29 ref.)

Regulation and amiloride–binding site of epithelial Na+ channels. Kunzelmann K. **Kidney Blood Press Res** 1997; 20(3):151–3

Antikaliuretic action of trimethoprim is minimized by raising urine pH. Schreiber M, et al. **Kidney Int** 1996 Jan;49(1):82–7

Potassium and magnesium retaining potency and efficacy of triamterene and analogues in conscious saline–loaded rats. Priewer H, et al. **Magnes Res** 1996 Mar;9(1):33–40

High affinity binding of pyrethroids to the alpha subunit of brain sodium channels. Trainer VL, et al. **Mol Pharmacol** 1997 Apr;51(4):651–7

Complex association and dissociation kinetics of brevetoxin binding to voltage–sensitive rat brain sodium channels. Whitney PL, et al. **Nat Toxins** 1996;4(6):261–70

Induction of sodium channel clustering by oligodendrocytes. Kaplan MR, et al. **Nature** 1997 Apr 17;386(6626):724–8

Inhibition of rat hippocampal excitability by the plant alkaloid 3–acetylaconitine mediated by interaction with voltage–dependent sodium channels. Ameri A. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):273–80

Hereditary dysfunction of voltage–gated sodium channels: from clinical phenotype to molecular mechanisms. George AL Jr. **Nephrol Dial Transplant** 1996 Sep;11(9):1730–7 (71 ref.)

Differential block of two types of sodium channels by anticonvulsants. Song JH, et al. **Neuroreport** 1996 Nov 25; 7(18):3031–6

No evidence for specific opioid effects on batrachotoxin–modified sodium channels from human brain synaptosomes. Frenkel C, et al. **Neurosci Lett** 1997 Jun 20;229(1):41–4

Corticosteroid effects on sodium and calcium currents in acutely dissociated rat CA1 hippocampal neurons. Werkman TR, et al. **Neuroscience** 1997 Jun;78(3):663–72

Influence of cardiac dysfunction on fast sodium current regulation by Forskolin. Kirstein M, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):2018–22

Modulation of Na+ channel inactivation by the beta 1 subunit: a deletion analysis. Chen C, et al. **Pflugers Arch** 1995 Dec;431(2):186–95

Depolarization shifts the voltage dependence of cardiac sodium channel and calcium channel gating charge movements. Josephson IR. **Pflugers Arch** 1996 Apr; 431(6):895–904

Low–amiloride–affinity Na+ channel in the epithelial cells isolated from the endolymphatic sac of guinea–pigs. Mori N, et al. **Pflugers Arch** 1996 Nov–Dec;433(1–2):58–64

Single–channel analysis of two types of Na+ currents in rat dorsal root ganglia. Motomura H, et al. **Pflugers Arch** 1995 Dec;431(2):221–9

Slow inactivation of muscle mu1 Na+ channels in permanently transfected mammalian cells. Wang S, et al. **Pflugers Arch** 1996 Aug;432(4):692–9

Loss of protein kinase C inhibition in the beta–T594M variant of the amiloride–sensitive Na+ channel. Cui Y, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9962–6

Down–regulation of transcripts for Na channel alpha–SNS in spinal sensory neurons following axotomy. Dib–Hajj S, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14950–4

Polyunsaturated fatty acids modulate sodium and calcium currents in CA1 neurons. Vreugdenhil M, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12559–63

The temperature dependence of conductance of the sodium channel: implications for mechanisms of ion permeation. Milburn T, et al. **Receptors Channels** 1995;3(3):201–211

ATP–induced Cl– secretion with suppressed Na+ absorption in rabbit tracheal epithelium. Iwase N, et al. **Respir Physiol** 1997 Feb;107(2):173–80

Effects of drugs interfering with sodium channels and calcium channels on the release of endogenous dopamine from superfused substantia nigra slices. Elverfors A, et al. **Synapse** 1997 Aug;26(4):359–69

A polypeptide toxin in the sea anemone Actinia equina homologous with other sea anemone sodium channel toxins: isolation and amino acid sequence. Lin XY, et al. **Toxicon** 1996 Jan;34(1):57–65

11–Oxo–tetrodotoxin and a specifically labelled 3H–tetrodotoxin. Wu BQ, et al. **Toxicon** 1996 Apr; 34(4):407–16

Identification of sodium channel subtypes induced in cultured retinal pigment epithelium cells. Dawes H, et al. **Vis Neurosci** 1995 Sep–Oct;12(5):1001–5

[Transmembrane sodium transport systems in various forms of hyperlipoproteinemia] Saitta A, et al. **Minerva Med** 1996 Oct;87(10):449–54 (Eng. Abstr.) **(Ita)**

[Liddle syndrome] Tamura H, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):612–5 (13 ref.) **(Jpn)**

PHARMACOLOGY

Expression and functional analysis of voltage–activated Na+ channels in human prostate cancer cell lines and their contribution to invasion in vitro. Laniado ME, et al. **Am J Pathol** 1997 Apr;150(4):1213–21

PHYSIOLOGY

The role of Na+ channels in twitch generation during exposure of the frog rectus abdominis to Ca–free Ringer solution with Na2EDTA. Seçilmiş A, et al. **Acta Med Okayama** 1997 Jun;51(3):115–20

Sodium channels and therapy of central nervous system diseases. Taylor CP, et al. **Adv Pharmacol** 1997;39:47–98 (300 ref.)

Inhibition of amiloride–sensitive Na+ channel by isothiouronium derivatives. Avigdor A, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1457–62

Molecular biology of Na+ absorption. Barbry P, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G571–85 (155 ref.)

The amiloride–sensitive epithelial Na+ channel: binding sites and channel densities. Blazer–Yost BL, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):C761–9 (87 ref.)

Liddle's disease: abnormal regulation of amiloride–sensitive Na+ channels by beta–subunit mutation. Bubien JK, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):C208–13

Electrophysiological characteristics of cloned skeletal and cardiac muscle sodium channels. Chahine M, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H498–506

Regulation of epithelial Na+ channels from M–1 cortical collecting duct cells. Chalfant ML, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F861–70

Ca2+ permeation through Na+ channels in guinea pig ventricular myocytes. Cole WC, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H128–37

Role of Na(+)–K+ pump and Na+ channel concentrations in the contractility of rat soleus muscle. Harrison AP, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1402–8

An analogue of cAMP mimics developmental change in neonatal rat ventricular myocyte sodium current kinetics. Lipka LJ, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H194–9

Nitric oxide-induced hyperpolarization stimulates low-conductance Na+ channel of rat CCD. Lu M, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F498-504

Biophysical and molecular properties of amiloride-inhibitable Na+ channels in alveolar epithelial cells. Matalon S, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):L1-22 (152 ref.)

Structure and function of cardiac sodium and potassium channels. Roden DM, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H511-25 (166 ref.)

Single-channel basis of slow inactivation of Na+ channels in rat skeletal muscle. Ruff RL. **Am J Physiol** 1996 Sep; 271(3 Pt 1):C971-81

Apical Na+ conductance in maturing rabbit principal cell. Satlin LM, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F391-7

Modulation of K+ and Ca2+ currents in cultured neurons by an angiotensin II type 1a receptor peptide. Zhu M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C1040-8

Voltage-dependent effects of volatile anesthetics on cardiac sodium current. Weigt HU, et al. **Anesth Analg** 1997 Feb; 84(2):285-93

Structure and modulation of Na+ and Ca2+ channels. Catterall WA. **Ann N Y Acad Sci** 1993 Dec 20;707:1-19 (79 ref.)

Inhibition of sodium channel currents by antineuronal autoantibody from autoimmune mice. Crimando J, et al. **Ann N Y Acad Sci** 1997 Aug 14;823:303-7

Patch-clamp study of developmental changes in voltage-dependent ion channels of mouse skeletal muscle fibers. Gonoi T. **Ann N Y Acad Sci** 1993 Dec 20;707:352-5

Molecular aspects of ion permeation through channels. Imoto K. **Ann N Y Acad Sci** 1993 Dec 20;707:38-50 (28 ref.)

Effect of PACAP on ion channels involved in stimulating growth hormone secretion from the somatotrophs. Murakami Y, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:666-9

Structure and function of sodium channels. Noda M. **Ann N Y Acad Sci** 1993 Dec 20;707:20-37 (32 ref.)

Electrical properties of periglomerular cells in the frog olfactory bulb. Magherini PC, et al. **Arch Ital Biol** 1997 Mar;135(2):195-203

Amiloride-sensitive Na+ channels in human nasal epithelium are different from classical epithelial Na+ channels. Rückes C, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):488-91

All-or-none contraction and sodium channels in a subset of circular muscle fibers of squid mantle. Gilly WF, et al. **Biol Bull** 1996 Dec;191(3):337-40

Tail currents in the myelinated axon of Xenopus laevis suggest a two-open-state Na channel. Elinder F, et al. **Biophys J** 1997 Jul;73(1):179-85

On the structural basis for ionic selectivity among Na+, K+, and Ca2+ in the voltage-gated sodium channel [see comments] Favre I, et al. **Biophys J** 1996 Dec;71(6):3110-25 . Comment in: Biophys J 1996 Dec;71(6):2916-8.

Interaction between fast and slow inactivation in Skm1 sodium channels. Featherstone DE, et al. **Biophys J** 1996 Dec;71(6):3098-109

Slow inactivation differs among mutant Na channels associated with myotonia and periodic paralysis. Hayward LJ, et al. **Biophys J** 1997 Mar;72(3):1204-19

Revisiting the ionic selectivity of Na+ channels [comment] Heginbotham L. **Biophys J** 1996 Dec;71(6):2916-8 (11 ref.) . Comment on: Biophys J 1996 Dec;71(6):3110-25.

Mechanosensitivity of an epithelial Na+ channel in planar lipid bilayers: release from Ca2+ block. Ismailov II, et al. **Biophys J** 1997 Mar;72(3):1182-92

Mechanisms of sodium/calcium selectivity in sodium channels probed by cysteine mutagenesis and sulfhydryl modification. Pérez-García MT, et al. **Biophys J** 1997 Mar; 72(3):989-96

Solvation, water permeation, and ionic selectivity of a putative model for the pore region of the voltage-gated sodium channel. Singh C, et al. **Biophys J** 1996 Nov; 71(5):2276-88

Differences in steady-state inactivation between Na channel isoforms affect local anesthetic binding affinity. Wright SN, et al. **Biophys J** 1997 Aug;73(2):779-88

Topology of the P segments in the sodium channel pore revealed by cysteine mutagenesis. Yamagishi T, et al. **Biophys J** 1997 Jul;73(1):195-204

Faster voltage-dependent activation of Na+ channels in growth cones versus somata of neuroblastoma N1E-115 cells. Zhang J, et al. **Biophys J** 1996 Nov;71(5):2501-8

Evidence for direct and indirect mechanisms in the potent modulatory action of interleukin-2 on the release of acetylcholine in rat hippocampal slices. Seto D, et al. **Br J Pharmacol** 1997 Mar;120(6):1151-7

Slow sodium-dependent potential oscillations contribute to ectopic firing in mammalian demyelinated axons. Kapoor R, et al. **Brain** 1997 Apr;120 (Pt 4):647-52

Altered Na(+)-channel function as an in vitro model of the ischemic penumbra: action of lubeluzole and other neuroprotective drugs. Ashton D, et al. **Brain Res** 1997 Jan 16;745(1-2):210-21

Sodium current in periglomerular cells of frog olfactory bulb in vitro. Bardoni R, et al. **Brain Res** 1995 Dec 12; 703(1-2):19-25

Anemone toxin II unmasks two conductance states in neuronal sodium channels. Castillo C, et al. **Brain Res** 1996 Sep 16;733(2):231-42

Interactions between anemone toxin II and veratridine on single neuronal sodium channels. Castillo C, et al. **Brain Res** 1996 Sep 16;733(2):243-52

Slow Na+ channel inactivation and bursting discharge in a simple model axon: implications for neuropathic pain. Elliott JR. **Brain Res** 1997 Apr 18;754(1-2):221-6

Anoxia-induced depolarization in CA1 hippocampal neurons: role of Na+-dependent mechanisms. Fung ML, et al. **Brain Res** 1997 Jul 11;762(1-2):97-102

Voltage-gated currents in identified parasympathetic cardiac neurons in the nucleus ambiguus. Mihalevich M, et al. **Brain Res** 1996 Nov 11;739(1-2):258-62

Up-regulation of functional voltage-dependent sodium channels by cyclic AMP-dependent protein kinase in adrenal medulla [published erratum appears in Brain Res 1996 Aug 12;729(2):297] Yuhi T, et al. **Brain Res** 1996 Feb 12;709(1):37-43

Two distinct Na+ currents control cytosolic Ca2+ pulsing in Xenopus laevis pituitary melanotrophs. Valentijn JA, et al. **Cell Calcium** 1997 Mar;21(3):241-51

Role of the epithelial sodium channel in lung liquid clearance. Hummler E, et al. **Chest** 1997 Jun;111(6 Suppl):113S

Termination of reentry by lidocaine in the tricuspid ring in vitro. Role of cycle-length oscillation, fast use-dependent kinetics, and fixed block. Fei H, et al. **Circ Res** 1997 Feb; 80(2):242-52

Effects of Tityus serrulatus scorpion toxin gamma on voltage-gated Na+ channels. Marcotte P, et al. **Circ Res** 1997 Mar;80(3):363-9

Functional effects of protein kinase C activation on the human cardiac Na+ channel. Murray KT, et al. **Circ Res** 1997 Mar;80(3):370-6

A reappraisal of aldosterone effects on the kidney: new insights provided by epithelial sodium channel cloning. Gründer S, et al. **Curr Opin Nephrol Hypertens** 1997 Jan; 6(1):35-9 (50 ref.)

Two types of modified cardiac Na+ channels after cytosolic interventions at the alpha-subunit capable of removing Na+ inactivation. Benz I, et al. **Eur Biophys J** 1997; 25(3):189-200

Investigating synthetic P-regions from voltage-gated sodium channel at the conformational and functional levels. Cosette P, et al. **Eur Biophys J** 1997;25(4):275-84

Pore properties of rat brain II sodium channels mutated in the selectivity filter domain. Schlief T, et al. **Eur Biophys J** 1996;25(2):75-91

Hyperactive channels and inherited hypertension: Liddle's syndrome--an epithelial sodium channelopathy. Holbauer LC, et al. **Eur J Endocrinol** 1997 Jun;136(6):588-9

Muscarinic activation of a novel voltage-sensitive inward current in rabbit prevertebral sympathetic neurons. Delmas P, et al. **Eur J Neurosci** 1996 Mar;8(3):598-610

The local anesthetic, n-butyl-p-aminobenzoate, reduces rat sensory neuron excitability by differential actions on fast and slow Na+ current components. Van den Berg RJ, et al. **Eur J Pharmacol** 1996 Nov 28;316(1):87-95

Mechanisms of paresthesiae, dysesthesiae, and hyperesthesiae: role of Na+ channel heterogeneity. Rizzo MA, et al. **Eur Neurol** 1996;36(1):3-12 (44 ref.)

Molecular biology of the amiloride-sensitive epithelial Na+ channel. Lingueglia E, et al. **Exp Physiol** 1996 May; 81(3):483-92 (30 ref.)

Myotonic dystrophy kinase modulates skeletal muscle but not cardiac voltage-gated sodium channels. Chahine M, et al. **FEBS Lett** 1997 Aug 4;412(3):621-4

Ca-dependent regulation of Na+-selective channels via actin cytoskeleton modification in leukemia cells. Maximov AV, et al. **FEBS Lett** 1997 Jul 21;412(1):94-6

Functional analysis of a rat sodium channel carrying a mutation for insect knock-down resistance (kdr) to pyrethroids. Vais H, et al. **FEBS Lett** 1997 Aug 18; 413(2):327-32

Electrophysiological properties of human carcinoid cells of the gut. Glassmeier G, et al. **Gastroenterology** 1997 Jul; 113(1):90-100

Different voltage-gated sodium currents are expressed by human neuroblastoma NB69 cells when cultured in defined serum-free and in astroglial-conditioned media. Urbano FJ, et al. **Glia** 1997 Feb;19(2):161-70

Dendritic electrogenesis in rat hippocampal CA1 pyramidal neurons: functional aspects of Na+ and Ca2+ currents in apical dendrites. Andreasen M, et al. **Hippocampus** 1996; 6(1):79-95

In vitro electrophysiology of rat subicular bursting neurons. Mattia D, et al. **Hippocampus** 1997;7(1):48-57

Molecular properties of sodium and calcium channels. Catterall WA. **J Bioenerg Biomembr** 1996 Jun;28(3):219-30 (63 ref.)

Expression of the cystic fibrosis phenotype in a renal amphibian epithelial cell line. Ling BN, et al. **J Biol Chem** 1997 Jan 3;272(1):594-600

Cystic fibrosis transmembrane conductance regulator inverts protein kinase A-mediated regulation of epithelial sodium channel single channel kinetics. Stutts MJ, et al. **J Biol Chem** 1997 May 30;272(22):14037-40

Azimilide (NE-10064) can prolong or shorten the action potential duration in canine ventricular myocytes: dependence on blockade of K, Ca, and Na channels. Yao JA, et al. **J Cardiovasc Electrophysiol** 1997 Feb;8(2):184-98

Contribution of sialic acid to the voltage dependence of sodium channel gating. A possible electrostatic mechanism. Bennett E, et al. **J Gen Physiol** 1997 Mar;109(3):327-43

A unique role for the S4 segment of domain 4 in the inactivation of sodium channels. Chen LQ, et al. **J Gen Physiol** 1996 Dec;108(6):549-56

Distribution and characterization of functional amiloride-sensitive sodium channels in rat tongue. Doolin RE, et al. **J Gen Physiol** 1996 Apr;107(4):545-54

Diversity of channels generated by different combinations of epithelial sodium channel subunits. McNicholas CM, et al. **J Gen Physiol** 1997 Jun;109(6):681-92

The long pore gets molecular. Miller C. **J Gen Physiol** 1996 Apr;107(4):445-7

Epithelial Na channels. Why all the subunits? Palmer LG. **J Gen Physiol** 1997 Jun;109(6):675-6

Role of an S4-S5 linker in sodium channel inactivation probed by mutagenesis and a peptide blocker. Tang L, et al. **J Gen Physiol** 1996 Aug;108(2):89-104

P-loop flexibility in Na+ channel pores revealed by single- and double-cysteine replacements. Tsushima RG, et al. **J Gen Physiol** 1997 Jul;110(1):59-72

Epithelial sodium channels and hypertension [editorial] Fuller PJ. **J Hypertens** 1996 Dec;14(12):1383-6 (32 ref.)

Rapid onset of lysophosphatidylcholine-induced modification of whole cell cardiac sodium current kinetics. Shander GS, et al. **J Mol Cell Cardiol** 1996 Apr; 28(4):743-53

The role of the Na+ channel in the accumulation of intracellular Na+ during myocardial ischemia: consequences for post-ischemic recovery. van Emous JG, et al. **J Mol Cell Cardiol** 1997 Jan;29(1):85-96

Analysis of spontaneous electrical activity in cerebellar Purkinje cells acutely isolated from postnatal rats. Nam SC, et al. **J Neurobiol** 1997 Jul;33(1):18-32

Na+ and Ca2+ channel expression in cultured newt retinal pigment epithelial cells: comparison with neuronal types of ion channels. Sakai H, et al. **J Neurobiol** 1997 Apr; 32(4):377-90

Protein kinase C-mediated down-regulation of voltage-dependent sodium channels in adrenal chromaffin cells. Yanagita T, et al. **J Neurochem** 1996 Mar; 66(3):1249-53

Fast and slow activation kinetics of voltage-gated sodium channels in molluscan neurons. Gilly WF, et al. **J Neurophysiol** 1997 May;77(5):2373-84

A cardiac-like sodium current in motor neurons of a jellyfish. Grigoriev NG, et al. **J Neurophysiol** 1996 Oct;76(4):2240-9

Dendritic Na+ channels amplify EPSPs in hippocampal CA1 pyramidal cells. Lipowsky R, et al. **J Neurophysiol** 1996 Oct;76(4):2181-91

Evidence for persistent Na+ current in apical dendrites of rat neocortical neurons from imaging of Na+-sensitive dye. Mittmann T, et al. **J Neurophysiol** 1997 Aug; 78(2):1188-92

Functional changes in sodium conductances in the human neuroblastoma cell line SH-SY5Y during in vitro differentiation. Toselli M, et al. **J Neurophysiol** 1996 Dec; 76(6):3920-7

Characterization of voltage-sensitive Na+ and K+ currents recorded from acutely dissociated pelvic ganglion neurons of the adult rat. Yoshimura N, et al. **J Neurophysiol** 1996 Oct;76(4):2508-21

Axonal action-potential initiation and Na+ channel densities in the soma and axon initial segment of subicular pyramidal neurons. Colbert CM, et al. **J Neurosci** 1996 Nov 1; 16(21):6676-86

Slow recovery from inactivation of Na+ channels underlies the activity-dependent attenuation of dendritic action potentials in hippocampal CA1 pyramidal neurons. Colbert CM, et al. **J Neurosci** 1997 Sep 1;17(17):6512-21

Downregulation of tetrodotoxin-resistant sodium currents and upregulation of a rapidly repriming tetrodotoxin-sensitive sodium current in small spinal sensory neurons after nerve injury. Cummins TR, et al. **J Neurosci** 1997 May 15;17(10):3503-14

Comparison of N- and P/Q-type voltage-gated calcium channel current inhibition. Currie KP, et al. **J Neurosci** 1997 Jun 15;17(12):4570-9

Clustering of voltage-sensitive sodium channels on axons is independent of direct Schwann cell contact in the dystrophic mouse. Deerinck TJ, et al. **J Neurosci** 1997 Jul 1;17(13):5080-8

Estrogen modifies an electrocommunication signal by altering the electrocyte sodium current in an electric fish, Sternopygus. Dunlap KD, et al. **J Neurosci** 1997 Apr 15; 17(8):2869-75

Clustered voltage-gated Na+ channels in Aplysia axons. Johnston WL, et al. **J Neurosci** 1996 Mar 1;16(5):1730-9

Prolonged sodium channel inactivation contributes to dendritic action potential attenuation in hippocampal pyramidal neurons. Jung HY, et al. **J Neurosci** 1997 Sep 1;17(17):6639-46

Molecular determinants of beta 1 subunit-induced gating modulation in voltage-dependent Na+ channels. Makita N, et al. **J Neurosci** 1996 Nov 15;16(22):7117-27

Resurgent sodium current and action potential formation in dissociated cerebellar Purkinje neurons. Raman IM, et al. **J Neurosci** 1997 Jun 15;17(12):4517-26

Vicious cycle involving Na+ channels, glutamate release, and NMDA receptors mediates delayed neurodegeneration through nitric oxide formation. Strijbos PJ, et al. **J Neurosci** 1996 Aug 15;16(16):5004-13

The clustering of axonal sodium channels during development of the peripheral nervous system. Vabnick I, et al. **J Neurosci** 1996 Aug 15;16(16):4914-22

Effects of clamp rise-time on rat brain IIA sodium channels

in Xenopus oocytes. Ruben PC, et al. **J Neurosci Methods** 1997 May 16;73(2):113–22

Voltage-dependent Na+/K+ ion channel blockade fails to ameliorate behavioral deficits after traumatic brain injury in the rat. Di X, et al. **J Neurotrauma** 1996 Sep; 13(9):497–504

Direct block of voltage-sensitive sodium channels by genistein, a tyrosine kinase inhibitor. Paillart C, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):521–6

External pore residue mediates slow inactivation in mu 1 rat skeletal muscle sodium channels. Balser JR, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):431–42

Control of ion flux and selectivity by negatively charged residues in the outer mouth of rat sodium channels. Chiamvimonvat N, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):51–9

Exotoxin-insensitive G proteins mediate synaptically evoked muscarinic sodium current in rabbit sympathetic neurones. Delmas P, et al. **J Physiol (Lond)** 1997 Feb 1;498 (Pt 3):627–40

Tetrodotoxin-sensitive sodium current in sheep lymphatic smooth muscle. Hollywood MA, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):13–20

Coupling between fast and slow inactivation revealed by analysis of a point mutation (F1304Q) in mu 1 rat skeletal muscle sodium channels. Nuss HB, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):411–29

Different types of Na+ and A-type K+ currents in dorsal root ganglion neurones innervating the rat urinary bladder. Yoshimura N, et al. **J Physiol (Lond)** 1996 Jul 1;494 (Pt 1):1–16

Effect of Na+ current on excitation-contraction coupling in ventricular myocytes of guinea pig heart. Janiak R, et al. **J Physiol Pharmacol** 1997 Jun;48(2):159–77

The heart sodium channel phenotype for inactivation and lidocaine block. Makielski JC. **Jpn Heart J** 1996 Sep; 37(5):733–9

Physiological and pathophysiological role of the epithelial sodium channel in the control of blood pressure. Hummler E, et al. **Kidney Blood Press Res** 1996;19(3–4):160–5 (49 ref.)

Diversity and regulation of amiloride-sensitive Na+ channels. Benos DJ, et al. **Kidney Int** 1996 Jun;49(6):1632–7 (35 ref.)

Disruption of actin filaments increases the activity of sodium-conducting channels in human myeloid leukemia cells. Negulyaev YA, et al. **Mol Biol Cell** 1996 Dec; 7(12):1857–64

Analysis of mutant platelet-derived growth factor receptors expressed in PC12 cells identifies signals governing sodium channel induction during neuronal differentiation. Fanger GR, et al. **Mol Cell Biol** 1997 Jan;17(1):89–99

The sodium-driven polar flagellar motor of marine Vibrio as the mechanosensor that regulates lateral flagellar expression. Kawagishi I, et al. **Mol Microbiol** 1996 May; 20(4):693–9

Carbamazepine inhibition of neuronal Na+ currents: quantitative distinction from phenytoin and possible therapeutic implications. Kuo CC, et al. **Mol Pharmacol** 1997 Jun;51(6):1077–83

Increase in the proliferative capacity of human myoblasts by using the T antigen under the vimentin promoter control. Deschênes I, et al. **Muscle Nerve** 1997 Apr; 20(4):437–45

Effects of length changes on Na+ current amplitude and excitability near and far from the end-plate. Ruff RL. **Muscle Nerve** 1996 Sep;19(9):1084–92

Na+ channel modulation and force-frequency relationship in human myocardium. Müller-Ehmsen J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jun; 355(6):727–32

Selective loss of slow and enhancement of fast Na+ currents in cutaneous afferent dorsal root ganglion neurones following axotomy. Rizzo MA, et al. **Neurobiol Dis** 1995 Apr;2(2):87–96

Interactions between a pore-blocking peptide and the voltage sensor of the sodium channel: an electrostatic approach to channel geometry. French RJ, et al. **Neuron** 1996 Feb; 16(2):407–13

Persistent sodium currents through brain sodium channels induced by G protein betagamma subunits. Ma JY, et al. **Neuron** 1997 Aug;19(2):443–52

Clustering sodium channels at the node of Ranvier: close encounters of the axon-glia kind. Salzer JL. **Neuron** 1997 Jun;18(6):843–6 (24 ref.)

Voltage-activated sodium currents in acutely isolated mouse vestibular ganglion neurones. Chabbert C, et al. **Neuroreport** 1997 Mar 24;8(5):1253–6

Sodium current in periglomerular cells of rat olfactory bulb in vitro. Puopolo M, et al. **Neuroreport** 1996 Jul 29; 7(11):1846–50

Developmental regulation of voltage-activated Na+ and Ca2+ currents in rat retinal ganglion cells. Schmid S, et al. **Neuroreport** 1996 Jan 31;7(2):677–81

A neural influence on the appearance of sodium current in Xenopus embryonic myocytes. Prabhakar E, et al. **Neurosci Lett** 1996 Apr 5;207(3):203–5

Voltage-dependent Na+ and Ca2+ currents in human pancreatic islet beta-cells: evidence for roles in the generation of action potentials and insulin secretion. Barnett DW, et al. **Pflugers Arch** 1995 Dec;431(2):272–82

The membrane transporters regulating epithelial NaCl secretion. Greger R. **Pflugers Arch** 1996 Aug;432(4):579–88 (97 ref.)

Excitatory sodium currents of NH15-CA2 neuroblastoma x glioma hybrid cells are differently affected by interleukin-2 and interleukin-1beta. Hamm S, et al. **Pflugers Arch** 1996 Nov-Dec;433(1–2):160–5

Epithelial sodium channels: function, structure, and regulation. Garty H, et al. **Physiol Rev** 1997 Apr; 77(2):359–96 (451 ref.)

Cell surface expression of the epithelial Na channel and a mutant causing Liddle syndrome: a quantitative approach. Firsov D, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24; 93(26):15370–5

Streaming potential measurements in alphabetagamma-rat epithelial Na+ channel in planar lipid bilayers. Ismailov II, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7651–4

Reconstitution of stretch-activated cation channels by expression of the alpha-subunit of the epithelial sodium channel cloned from osteoblasts. Kizer N, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):1013–8

Cytosolic Na+ controls and epithelial Na+ channel via the Go guanine nucleotide-binding regulatory protein. Komwatana P, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8107–11

Novel isoforms of the beta and gamma subunits of the Xenopus epithelial Na channel provide information about the amiloride binding site and extracellular sodium sensing. Puoti A, et al. **Proc Natl Acad Sci U S A** 1997 May 27; 94(11):5949–54

Characterization of human cardiac Na+ channel mutations in the congenital long QT syndrome. Wang DW, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13200–5

Thyroid hormone regulates Na+ currents in cultured hippocampal neurons from postnatal rats. Potthoff O, et al. **Proc R Soc Lond B Biol Sci** 1997 Mar 22; 264(1380):367–73

Voltage-gated Na+ channels in glia: properties and possible functions. Sontheimer H, et al. **Trends Neurosci** 1996 Aug; 19(8):325–31 (67 ref.)

[CFTR as cAMP-dependent chloride channels and as cAMP-dependent regulator of sodium channels] Tohyama M. **Nippon Rinsho** 1996 Feb;54(2):429–33 (17 ref.) (Eng. Abstr.) **(Jpn)**

[The kinetics of sodium channel inactivation in the sensory neurons depends on the type of hydrogen ion buffer] Krylov BV, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul; 82(7):1–10 (Eng. Abstr.) **(Rus)**

SODIUM CHLORIDE

see related

DIET, SODIUM-RESTRICTED

Renal P450 metabolites of arachidonic acid and the development of hypertension in Dahl salt-sensitive rats. Roman RJ, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):63S–67S (33 ref.)

Introduction to the Dahl symposium. Tobian L Jr. **Am J Hypertens** 1997 May;10(5 Pt 2):27S–28S

Forebrain angiotensin type 1 receptors and parabrachial serotonin in the control of NaCl and water intake. Colombari DS, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1470–6

Rapid elicitation of salt appetite by an intravenous infusion of angiotensin II in rats. Fitts DA, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1092–8

Lateral parabrachial nucleus and serotonergic mechanisms in the control of salt appetite in rats. Menani JV, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R162–8

Role of renal nerves in sodium depletion-induced salt appetite. Thunhorst RL, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R806–12

Adrenalectomy decreases NaCl intake of rats fed low-calcium diets. Tordoff MG. **Am J Physiol** 1996 Jan; 270(1 Pt 2):R11–21

Use of hypertonic saline-dextran solution to resuscitate hypovolemic calves with diarrhea. Constable PD, et al. **Am J Vet Res** 1996 Jan;57(1):97–104

Laryngeal mask lubrication. A comparative study of saline versus 2% lignocaine gel with cuff pressure control. Keller C, et al. **Anaesthesia** 1997 Jun;52(6):592–7

Spontaneous autoinflation of saline mammary implants. Robinson OG Jr, et al. **Ann Plast Surg** 1997 Aug; 39(2):114–8; discussion 118–21

Testing a community level research utilization intervention. Shively M, et al. **Appl Nurs Res** 1997 Aug;10(3):121–7

Hydrodissection: an easy way to dissect anatomical planes and complex adhesions. Bokey EL, et al. **Aust N Z J Surg** 1997 Sep;67(9):643–4

Oxidative stress and responses in Arabidopsis thaliana and Oryza sativa subjected to chilling and salinity stress. Burdon RH, et al. **Biochem Soc Trans** 1996 May; 24(2):469–72 (17 ref.)

beta-Agarase from Pseudomonas sp. W7: purification of the recombinant enzyme from Escherichia coli and the effects of salt on its activity. Ha JC, et al. **Biotechnol Appl Biochem** 1997 Aug;26 (Pt 1):1–6

Distinguishing cerebrospinal fluid from saline used to identify the extradural space. el-Behesy BA, et al. **Br J Anaesth** 1996 Dec;77(6):784–5

Successful 14-day preservation of rat skin using a two-layer cold-storage method. Chi L, et al. **Burns** 1996 Feb; 22(1):22–5

A comparison of simple tests to distinguish cerebrospinal fluid from saline. Walker DS, et al. **Can J Anaesth** 1997 May; 44(5 Pt 1):494–7

Abnormal regulation of cytosolic calcium and pH in platelets of Sabra rats in early phases of salt hypertension development. Zicha J, et al. **Can J Physiol Pharmacol** 1996 Nov;74(11):1222–8

Cosegregation of the new region on chromosome 3 with salt-induced hypertension in female F2 progeny from stroke-prone spontaneously hypertensive and Wistar-Kyoto rats. Matsumoto C, et al. **Clin Exp Pharmacol Physiol** 1996 Dec;23(12):1028–34

Use of a saline breast implant to cover the pelvic floor. Van Le L, et al. **Gynecol Oncol** 1997 Apr;65(1):188–91

Saline corrosion of International Equipment Company (IEC) and Organon Teknika Centra-W cell washing centrifuges. **Health Devices** 1997 Feb;26(2):77–9

Calcitonin gene-related peptide is a depressor of deoxycorticosterone-salt hypertension in the rat. Supowit SC, et al. **Hypertension** 1997 Apr;29(4):945–50

Growth of Clostridium perfringens from spore inocula in sous-vide turkey products. Juneja VK, et al. **Int J Food Microbiol** 1996 Sep;32(1–2):115–23

Effectiveness of salt versus glass bead sterilizers. Haddad AJ, et al. **J Can Dent Assoc** 1997 Jun;63(6):448–53

Preparative desalting of bovine serum albumin by continuous annular chromatography. Reissner K, et al. **J Chromatogr A** 1997 Feb 28;763(1–2):49–56

Salt tolerance of EMRSA-16 and its effect on the sensitivity of screening cultures. Jones EM, et al. **J Hosp Infect** 1997 Jan;35(1):59–62

Amiloride disrupts NaCl versus KCl discrimination performance: implications for salt taste coding in rats. Spector AC, et al. **J Neurosci** 1996 Dec 15;16(24):8115–22

Effects of sodium chloride, Triton X-100, and alkaline pH on the measurable contents and sedimentability of the nerve growth factor (NGF) antigen in adult rat hippocampal tissue extracts. Hoener MC, et al. **J Neurosci Res** 1997 Aug 15;49(4):508–14

Serial transabdominal amnioinfusion in the management of gastroschisis with severe oligohydramnios. Dommergues M, et al. **J Pediatr Surg** 1996 Sep;31(9):1297–9

Evaluation of canine red blood cells stored in a saline, adenine, and glucose solution for 35 days. Wardrop KJ, et al. **J Vet Intern Med** 1997 Jan-Feb;11(1):5–8

Immunomapping of basement membrane zone macromolecules in canine salt-split skin. Iwasaki T, et al. **J Vet Med Sci** 1997 May;59(5):391–3

Clinical evaluation of taste dysfunction using a salt-impregnated taste strip. Nishimoto K, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Sep-Oct; 58(5):258–61

Saline made viscous with polyethylene glycol: a new alternate breast implant filler material. Friedman RM, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1208–13; discussion 1214–5

Saline-filled breast implants: a Plastic Surgery Educational Foundation multicenter outcomes study. Gutowski KA, et al. **Plast Reconstr Surg** 1997 Sep;100(4):1019–27

Anaplastic T-cell lymphoma in proximity to a saline-filled breast implant [letter] Keech JA Jr, et al. **Plast Reconstr Surg** 1997 Aug;100(2):554–5

Paecilomyces variotii contamination in the lumen of a saline-filled breast implant [letter; comment] Niazi ZB, et al. **Plast Reconstr Surg** 1996 Dec;98(7):1323. Comment on: Plast Reconstr Surg 1995 Nov;96(6):1430–4.

Incidence and natural history of saline-filled breast implant deflations: comparison of blunt-tipped versus cutting and tapered needles. Rapaport DP, et al. **Plast Reconstr Surg** 1997 Sep;100(4):1028–32

Effect of airway surface liquid composition on laryngeal muscle activation. Kuna ST, et al. **Sleep** 1996 Dec;19(10 Suppl):S180–3

A comparison of epidural saline, morphine, and bupivacaine for pain relief after abdominal surgery in goats. Hendrickson DA, et al. **Vet Surg** 1996 Jan-Feb;25(1):83–7

Postoperative analgesia for stifle surgery: a comparison of intra-articular bupivacaine, morphine, or saline. Sammarco JL, et al. **Vet Surg** 1996 Jan-Feb;25(1):59–69

[Effect of postoperative endonasal mucous membrane care on nasal bacterial flora: prospective study of 2 irrigation methods with NaCl solution after paranasal sinus surgery] Johannssen V, et al. **Laryngorhinootologie** 1996 Oct; 75(10):580–3 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Reduction of intussusception by ultrasound-guided saline enema. Soun DS, et al. **Acta Paediatr Sin** 1996 Jul-Aug; 37(4):257–62

Palpation-directed (non-fluoroscopically guided) saline-enhanced MR arthrography of the shoulder. DeMouy EH, et al. **AJR Am J Roentgenol** 1997 Jul; 169(1):229–31

Salt intake and reductions in arterial pressure and proteinuria. Is there a direct link? Bakris GL, et al. **Am J Hypertens** 1996 Dec;9(12 Pt 2):200S–206S (75 ref.)

A prospective randomized trial of two solutions for intrapartum amnioinfusion: effects on fetal electrolytes, osmolality, and acid-base status. Pressman EK, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):945–9

Amniotic fluid index predicts the relief of variable decelerations after amnioinfusion bolus. Spong CY, et al.

Am J Obstet Gynecol 1996 Oct;175(4 Pt 1):1066–7

Transabdominal amnioinfusion in oligohydramnios at term before induction of labor with intact membranes: a randomized clinical trial. Vergani P, et al. **Am J Obstet Gynecol** 1996 Aug;175(2):465–70

Adrenergic, respiratory, and cardiovascular effects of core cooling in humans. Frank SM, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R557–62

Spinal bupivacaine in ambulatory surgery: the effect of saline dilution. Ben-David B, et al. **Anesth Analg** 1996 Oct; 83(4):716–20

Injection volume of saline with loss of resistance method may affect the spread of epidural anesthesia [letter] Iwama H. **Anesthesiology** 1997 Feb;86(2):507–8

Balloon catheter with extra-amniotic saline instillation: a method of induction in pregnancies at 41 or more gestational weeks. Fait G, et al. **Aust N Z J Obstet Gynaecol** 1997 May;37(2):174–6

Intake of ethanol, sodium chloride, sucrose, citric acid, and quinine hydrochloride solutions by mice: a genetic analysis. Bachmanov AA, et al. **Behav Genet** 1996 Nov;26(6):563–73

Circulating kallikreins during sodium chloride infusion in normal and hypertensive humans. Ohman KP, et al. **Blood Press** 1997 May;6(3):154–60

Bowel preparation at home in elderly people. Give a simultaneous infusion of saline in frail patients [letter; comment] Hanning CD. **BMJ** 1997 Jan 4;314(7073):74. Comment on: BMJ 1996 Sep 21;313(7059):727–8.

Renal effects of intrathecally injected tachykinins in the conscious saline-loaded rat: receptor and mechanism of action. Yuan YD, et al. **Br J Pharmacol** 1997 Jul; 121(6):1141–9

Baroreceptor regulation of salt intake. Rocha MJ, et al. **Brain Res Bull** 1997;42(2):147–51

Responses of gull kidneys and salt glands to NaCl loading. Hughes MR. **Can J Physiol Pharmacol** 1995 Dec; 73(12):1727–32

Anterior tongue stimulation with amiloride suppresses NaCl saltiness, but not citric acid sourness in humans. Tennissen AM, et al. **Chem Senses** 1996 Apr;21(2):113–20

Stimulation of gastric osmoreceptors but not the sodium monitor increases renal angiotensin-converting enzyme activity. Ye VZ, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):463–4

Strategies for voluntary rehydration in horses during endurance exercise. Nyman S, et al. **Equine Vet J Suppl** 1996 Jul;(22):99–106

Acute saline infusion induces extracellular acidification and activation of the Na+/H+ exchanger in man [see comments] Kessler R, et al. **Eur J Clin Invest** 1997 Jul; 27(7):558–65. Comment in: Eur J Clin Invest 1997 Jul;27(7):566–7.

Endoscopic resection of large sessile colorectal polyps using a submucosal saline injection technique. Iishi H, et al. **Hepatogastroenterology** 1997 May-Jun;44(15):698–702

Effect of rapid intra-atrial saline infusion on atrial pressures and atrial natriuretic hormone secretion. Shenker Y, et al. **Horm Metab Res** 1997 Jan;29(1):33–7

Prevention of cardiac hypertrophy by a sub-antihypertensive dose of the alpha 1-adrenergic antagonist bunazosin in Dahl salt-sensitive rats. Izumi Y, et al. **Hypertens Res** 1996 Sep;19(3):147–50

Different effects of alcohol and salt on 24-hour blood pressure and heart rate in hypertensive patients. Kawano Y, et al. **Hypertens Res** 1996 Dec;19(4):255–61

Modulation of target tissue response to angiotensin II and sodium sensitivity in Japanese patients with essential hypertension. Ozono R, et al. **Hypertens Res** 1996 Sep; 19(3):141–5

Normal saline instillation before suctioning: helpful or harmful? Singhi S. **Indian Pediatr** 1996 Sep;33(9):796–8

Influence of sodium replacement on fluid ingestion following exercise-induced dehydration. Wemple RD, et al. **Int J Sport Nutr** 1997 Jun;7(2):104–16

Surgical pearl: bacteriostatic sodium chloride injection USP 0.9%. Daniel CR 3rd, et al. **J Am Acad Dermatol** 1997 Jan;36(1):92

Conjunctival wound closure by saline injection in sutureless, scleral tunnel incision phacoemulsification. Meacock WR, et al. **J Cataract Refract Surg** 1996 Nov;22(9):1240–1

Effects of carbidopa and of intravenous saline infusion into normal and hypertensive subjects on urinary free and conjugated dopamine. Stokes GS, et al. **J Hypertens** 1997 Jul;15(7):761–8

Effect of chronic salt loading on kidney function in early and established diabetes mellitus in rats. Vallon V, et al. **J Lab Clin Med** 1997 Jul;130(1):76–82

Topical application of lidocaine-prilocaine (EMLA) cream reduces the pain of intramuscular infiltration of saline solution. Himelstein BP, et al. **J Pediatr** 1996 Nov; 129(5):718–21

Neonatal electrolyte response to amnioinfusion with lactated Ringer's solution vs. normal saline. A prospective study. Washburne JF, et al. **J Reprod Med** 1996 Oct;41(10):741–4

Infusion of hot crystalloid during operative burn wound debridement. Gore DC, et al. **J Trauma** 1997 Jun; 42(6):1112–5

Comparative study of 18 gauge and 20 gauge intravenous catheters during transcranial Doppler ultrasonography with saline solution contrast. Khan KA, et al. **J Ultrasound Med** 1997 May;16(5):341–4

Partial ureteral obstruction: effect of intravenous normal saline and furosemide upon the renal resistive index. Shokeir AA, et al. **J Urol** 1997 Mar;157(3):1074–7

Renal Doppler ultrasound in children with obstructive uropathy: effect of intravenous normal saline fluid load and furosemide. Shokeir AA, et al. **J Urol** 1996 Oct; 156(4):1455–8

Saline injection into the perirectal space to assist transgluteal drainage of deep pelvic abscesses. Shah H, et al. **J Vasc Interv Radiol** 1997 Jan-Feb;8(1 Pt 1):119–21

Inhibition by bosentan, an endothelin antagonist, of the hypersensitivity to Ca2+ channel activator evoked by salt-loading in basilar artery of stroke-prone spontaneously hypertensive rats. Salomone S, et al. **Life Sci** 1996; 59(16):PL247–53

Salt and water in nutritional support [editorial; comment] Allison S. **Nutrition** 1997 Jan;13(1):54–5. Comment on: Nutrition 1997 Jan;13(1):26–31.

Effect of capsaicin on airway responsiveness to hypertonic saline challenge in asthmatic and non-asthmatic children. Chang AB, et al. **Pediatr Pulmonol** 1997 Jun;23(6):412–6

Transient emotional changes elicited by intraperitoneal saline injection: effect of naloxone and flumazenil. Saldivar-González A, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):211–20

Central alpha-adrenergic agonists and need-induced 3% NaCl and water intake. Yada MM, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1–2):137–43

Thoracic spiral CT: delivery of contrast material pushed with injectable saline solution in a power injector. Hopper KD, et al. **Radiology** 1997 Oct;205(1):269–71

Saline-enhanced radio-frequency tissue ablation in the treatment of liver metastases. Livraghi T, et al. **Radiology** 1997 Jan;202(1):205–10

Identification of the epidural space: loss of resistance to air or saline? [editorial; comment] Scott DB. **Reg Anesth** 1997 Jan-Feb;22(1):1–2. Comment on: Reg Anesth 1997 Jan-Feb;22(1):3–15.

Changes of blood pressure responsiveness in rats exposed in utero and perinatally to a high-salt environment. Argüelles J, et al. **Regul Pept** 1996 Oct 8;66(1–2):113–5

Increased sodium appetite and thirst in rat induced by the ingredients of liquorice, glycyrrhizic acid and glycyrrhetinic acid. Cooney AS, et al. **Regul Pept** 1996 Oct 8;66(1–2):127–33

Blockade of central angiotensin II type 1 and type 2 receptors suppresses adrenalectomy-induced NaCl intake in rats. Galaverna O, et al. **Regul Pept** 1996 Oct 8;66(1–2):47–50

Angiotensin II receptor subtype antagonists can both stimulate and inhibit salt appetite in rats. Liénard F, et al. **Regul Pept** 1996 Oct 8;66(1–2):87–94

Effects of the selective tachykinin NK3 receptor agonist NH2-senktide on intraoral intake and taste reactivity responses elicited by NaCl in sodium-replete rats. Polidori C, et al. **Regul Pept** 1996 Oct 8;66(1–2):101–4

Increased salt preference in adult offspring raised by mother rats consuming excessive amounts of salt and water. Vijande M, et al. **Regul Pept** 1996 Oct 8;66(1–2):105–8

Adverse haemodynamic effects of the rapid intravenous injection of hypotonic solutions in sheep. Huang YF, et al. **Res Vet Sci** 1996 May;60(3):209–12

Shift in sodium chloride sources in past 10 years of salt reduction campaign in Japan. Shimbo S, et al. **Tohoku J Exp Med** 1996 Nov;180(3):249–59

[Direct effects of the intrathecal administration of normal saline for the brain expansion after the removal of subdural hematoma] Zderkiewicz E, et al. **Neurol Neurochir Pol** 1996 May-Jun;30(3):457–65 (Eng. Abstr.) **(Pol)**

[Experimental validation of using ozonized physiological solutions in intraocular infection] Gundarova RA, et al. **Vestn Oftalmol** 1996 Sep-Oct;112(5):9–11 (Eng. Abstr.) **(Rus)**

[Albumin is still administered on doubtful indications. The results are not better than those of common salt or colloid solutions (see comments)] Zetterström H. **Lakartidningen** 1997 Feb 26;94(9):711–3. Comment in: Lakartidningen 1997 Jun 18;94(25):2355. **(Swe)**

ADVERSE EFFECTS

Salt--more adverse effects. MacGregor GA. **Am J Hypertens** 1997 May;10(5 Pt 2):37S–41S (23 ref.)

Sodium status, corticosteroid metabolism and blood pressure in normal human subjects and in a patient with abnormal salt appetite. Ingram MC, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):375–8

Risk of submucosal saline injection for colonic polypectomy [letter] Zarchy T. **Gastrointest Endosc** 1997 Jul;46(1):89–90

Heritability of salt sensitivity in black Americans. Svetkey LP, et al. **Hypertension** 1996 Nov;28(5):854–8

Saline-lavaged lung injury and pressure support ventilation [letter; comment] Guery BP, et al. **Intensive Care Med** 1997 May;23(5):600–1. Comment on: Intensive Care Med 1996 Dec;22(12):1445–52.

Fatal hypernatremia in a dog from salt ingestion. Khanna C, et al. **J Am Anim Hosp Assoc** 1997 Mar-Apr;33(2):113–7

Normal saline in microsurgery may not be all it seems [letter] Ruttmann TG, et al. **Plast Reconstr Surg** 1997 Apr; 99(4):1196–7

ANALYSIS

Comparison of spot testing kit with iodometric titration method in the estimation of iodine content of salt [letter] Kapil U, et al. **Indian J Physiol Pharmacol** 1996 Jul; 40(3):279–80

BLOOD

Altered erythrocyte sodium-lithium counter-transport and Na+/K(+)-ATPase activity in cystic fibrosis. Luczay A, et al. **Acta Paediatr** 1997 Mar;86(3):245–7

CHEMISTRY

Accuracy of filled elastomeric infusion device after long-term storage [letter; comment] Dasher T. **Am J Health Syst Pharm** 1996 Sep 1;53(17):2099. Comment on: Am J Health Syst Pharm 1996 Apr 1;53(7):794–5.

Improvement of PrPSc-detection in mouse spleen early at the preclinical stage of scrapie with collagenase-completed tissue homogenization and Sarkosyl-NaCl extraction of PrPSc. Grathwohl KU, et al. **Arch Virol** 1996; 141(10):1863–74

Natural and synthetic betaines counter the effects of high NaCl and urea concentrations. Randall K, et al. **Biochim Biophys Acta** 1996 Dec 6;1291(3):189–94

Effects of NaCl on the linkages between O2 binding and subunit assembly in human hemoglobin: titration of the quaternary enhancement effect. Doyle ML, et al. **Biophys Chem** 1997 Feb 28;64(1–3):271–87

Theory of electric characteristics of the lipid/PVC/DOPP membrane and PVC/DOPP membrane in response to taste stimuli. Oohira K, et al. **Biophys Chem** 1996 Aug 30; 61(1):29–35

Reduction of NaCl increases survival of mammalian spinal neurons subjected to dendrite transection injury. Rosenberg LJ, et al. **Brain Res** 1996 Sep 23;734(1–2):349–53

Peptide stacking by acetonitrile-salt mixtures for capillary zone electrophoresis. Shihabi ZK. **J Chromatogr A** 1996 Sep 13;744(1–2):231–40

Dissolution media for in vitro testing of water-insoluble drugs: effect of surfactant purity and electrolyte on in vitro dissolution of carbamazepine in aqueous solutions of sodium lauryl sulfate. Crison JR, et al. **J Pharm Sci** 1997 Mar; 86(3):384–8

Two related rolling circle replication plasmids from salt-tolerant bacteria. Hasnain S, et al. **Plasmid** 1996 Nov; 36(3):191–9

DIAGNOSTIC USE

Saline versus gadolinium-enhanced magnetic resonance arthrography of porcine cartilage. Yao L, et al. **Acad Radiol** 1997 Feb;4(2):127–31

Clinical utility of saline solution infusion sonohysterography in a primary care obstetric-gynecologic practice. Laughead MK, et al. **Am J Obstet Gynecol** 1997 Jun;176(6):1313–6; discussion 1316–8

Diagnostic value of indirect immunofluorescence on sodium chloride-split skin in differential diagnosis of subepidermal autoimmune bullous dermatoses [see comments] Ghohestani RF, et al. **Arch Dermatol** 1997 Sep; 133(9):1102–7. Comment in: Arch Dermatol 1997 Sep;133(9):1158–60.

The accuracy of indirect immunofluorescence on sodium chloride-split skin in differentiating subepidermal bullous diseases [editorial; comment] Mutasim DF. **Arch Dermatol** 1997 Sep;133(9):1158–60 (23 ref.). Comment on: Arch Dermatol 1997 Sep;133(9):1102–7.

Saline infusion sonohysterosalpingography, an underutilized technique. de Crespigny L, et al. **Aust N Z J Obstet Gynaecol** 1997 May;37(2):206–9

Contrast media in MR arthrography of the glenohumeral joint: intra-articular gadopentetate vs saline: preliminary results. Zanetti M, et al. **Eur Radiol** 1997;7(4):498–502

Endoscopic ultrasonography for colorectal cancer using submucosal saline solution injection. Watanabe H, et al. **Gastrointest Endosc** 1997 Jun;45(6):508–11

Provoking nonepileptic seizures: the ethics of deceptive diagnostic testing. Burack JH, et al. **Hastings Cent Rep** 1997 Jul-Aug;27(4):24–33 (25 ref.)

Improved demonstration of endometrial polyps and submucous myomas using saline-enhanced vaginal sonohysterography. Turner RT, et al. **J Am Assoc Gynecol Laparosc** 1995 Aug;2(4):421–5

Saline load test for penetration of periarticular lacerations. Voit GA, et al. **J Bone Joint Surg Br** 1996 Sep;78(5):732–3

Uterine cavity assessment prior to in vitro fertilization: comparison of transvaginal scanning, saline contrast hysterosonography and hysteroscopy. Ayida G, et al. **Ultrasound Obstet Gynecol** 1997 Jul;10(1):59–62

Saline contrast sonohysterography as first-line investigation for women with uterine bleeding. Bernard JP, et al. **Ultrasound Obstet Gynecol** 1997 Aug;10(2):121–5

The value of transvaginal sonography with and without saline instillation in the diagnosis of uterine pathology in pre- and postmenopausal women with abnormal bleeding or suspect sonographic findings. Bronz L, et al. **Ultrasound Obstet Gynecol** 1997 Jan;9(1):53–8

Three-dimensional saline contrast hysterosonography and surface rendering of uterine cavity pathology. Weinraub Z, et al. **Ultrasound Obstet Gynecol** 1996 Oct;8(4):277–82 (16 ref.)

[Experiment in ultra-rapid injection of isotonic sodium chloride after injection of contrast medium: time-density analysis of the aorta and portal vein] Itou N, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Jul;57(8):523–5

(Eng. Abstr.) **(Jpn)**
[Saline infusion test] Niimura S, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:337–40 (5 ref.) **(Jpn)**

HISTORY

The symbolism of salt in paintings. Bisaccia C, et al. **Am J Nephrol** 1997;17(3–4):318–39
A contribution to the history of common salt. DeSanto NG, et al. **Kidney Int Suppl** 1997 Jun;59:S127–34
The history of salt – aspects of interest to the nephrologist. Ritz E. **Nephrol Dial Transplant** 1996 Jun;11(6):969–75 (7 ref.)

IMMUNOLOGY

Different T helper cell types and antibody isotypes generated by saline and gene gun DNA immunization. Feltquate DM, et al. **J Immunol** 1997 Mar 1;158(5):2278–84

METABOLISM

Salt and water transport across alveolar and distal airway epithelia in the adult lung. Matthay MA, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):L487–503 (145 ref.)
Evidence that aquaporin-1 mediates NaCl-induced water flux across descending vasa recta. Pallone TL, et al. **Am J Physiol** 1997 May;272(5 Pt 2):F587–96
The effects of collecting duct active NaCl reabsorption and inner medulla anatomy on renal concentrating mechanism. Wang X, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F900–11
Adaptive response of Haloferax mediterranei to low concentrations of NaCl (< 20%) in the growth medium. D'Souza SE, et al. **Arch Microbiol** 1997 Jul;168(1):68–71
Characterization of a glucosylglycerol-phosphate-accumulating, salt-sensitive mutant of the cyanobacterium Synechocystis sp. strain PCC 6803. Hagemann M, et al. **Arch Microbiol** 1996 Aug; 166(2):83–91
High salt and solvent induced Z-conformation in native calf thymus DNA. Ali N, et al. **Biochem Mol Biol Int** 1997 May;41(6):1227–35
Dissociation of Ca2+ from sarcoplasmic reticulum Ca2+-ATPase and changes in fluorescence of optically selected Trp residues. Effects of KCl and NaCl and implications for substeps in Ca2+ dissociation. Champeil P, et al. **Biochemistry** 1997 Oct 7;36(40):12383–93
P450 arachidonate metabolites mediate bradykinin-dependent inhibition of NaCl transport in the rat thick ascending limb. Grider JS, et al. **Can J Physiol Pharmacol** 1997 Feb;75(2):91–6
Effective role of the renin-angiotensin system in the control of prostanoid synthesis and renal function in healthy women with moderate salt depletion. Agnoli GC, et al. **Clin Physiol** 1996 Jan;16(1):41–59
Elevated plasma and urinary endothelin-I levels in human salt-sensitive hypertension. Ferri C, et al. **Clin Sci (Colch)** 1997 Jul;93(1):35–41
Salt and water balance in the toad Bufo viridis during recovery from two different osmotically stressful conditions. Hoffman J, et al. **Comp Biochem Physiol A Physiol** 1997 May;117(1):147–54
Hyponatraemia secondary to cerebral salt wasting syndrome following routine pituitary surgery. Atkin SL, et al. **Eur J Endocrinol** 1996 Aug;135(2):245–7
The effect of L-glutamine on salt and water absorption: a jejunal perfusion study in cholera in humans. van Loon FP, et al. **Eur J Gastroenterol Hepatol** 1996 May;8(5):443–8
Role of mitochondria-rich cells in epithelial chloride uptake. Larsen EH, et al. **Exp Physiol** 1996 May;81(3):525–34 (25 ref.)
Tubular effects of insulin. Takahashi N, et al. **Hypertens Res** 1996 Jun;19 Suppl 1:S41–5
Osmoprotectants in Halomonas elongata: high-affinity betaine transport system and choline-betaine pathway. Cánovas D, et al. **J Bacteriol** 1996 Dec;178(24):7221–6
Inhibition of goby posterior intestinal NaCl absorption by natriuretic peptides and by cardiac extracts. Loretz CA. **J Comp Physiol [B]** 1996;166(8):484–91
Mn-superoxide dismutase from the halophilic halotolerant bacterium Ba1—isolation and active site spectroscopic studies. Yorkovsky Y, et al. **J Inorg Biochem** 1997 Jan; 65(1):35–43
Improving the palatability of oral rehydration solutions has implications for salt and water transport: a study in animal models. Dias JA, et al. **J Pediatr Gastroenterol Nutr** 1996 Oct;23(3):275–9
Role of ion exchangers in mediating NaCl transport in the proximal tubule. Aronson PS. **Kidney Int** 1996 Jun; 49(6):1665–70 (58 ref.)
Plants as a source of salt. Aliotta G, et al. **Kidney Int Suppl** 1997 Jun;59:S114–7 (16 ref.)
Medullary thick limbs: renal concentrating segments. Reeves WB, et al. **Kidney Int Suppl** 1996 Dec;57:S154–64
Sphingomyelin metabolism is linked to salt transport in the gills of euryhaline fish. el Babili M, et al. **Lipids** 1996 Apr; 31(4):385–92
A sensitive defense: salt and cystic fibrosis [news] Wine JJ. **Nat Med** 1997 May;3(5):494–5
Why is salt-sensitive hypertension so common in blacks? Campese VM. **Nephrol Dial Transplant** 1997 Mar; 12(3):399–403
Decrease in intravesical saline volume during isovolumetric cystometry in the rat. Sugaya K, et al. **Neurourol Urodyn** 1997;16(2):125–32
The membrane transporters regulating epithelial NaCl secretion. Greger R. **Pflugers Arch** 1996 Aug;432(4):579–88 (97 ref.)
Increased salt retention and hypertension from non-steroidal agents in the elderly. Mulkerrin EC, et al. **QJM** 1997 Jun; 90(6):411–5
Kidney ATPase response in seawater-transferred rainbow trout (Oncorhynchus mykiss). Effect of salinity and fish size. Fuentes J, et al. **Rev Esp Fisiol** 1996 Dec;52(4):231–8
Ion exchangers mediating NaCl transport in the proximal tubule. Aronson PS. **Wien Klin Wochenschr** 1997 Jun 27; 109(12–13):435–40 (58 ref.)

PHARMACOKINETICS

Abnormal reabsorption of Na+/Cl- by the thiazide-inhibitable transporter of the distal convoluted tubule in Gitelman's syndrome. Colussi G, et al. **Am J Nephrol** 1997;17(2):103–11
Salt and water balance in the toad Bufo viridis during recovery from two different osmotically stressful conditions. Hoffman J, et al. **Comp Biochem Physiol A Physiol** 1997 May;117(1):147–54
Effect of luminal vasopressin on NaCl transport in the medullary thick ascending limb of the rat. Grider J, et al. **Eur J Pharmacol** 1996 Oct 10;313(1–2):115–8

PHARMACOLOGY

Short-term treatment with ramipril normalizes renal haemodynamics and the natriuretic response to a sodium load in type 1 diabetic patients with early nephropathy. Stenvinkel P, et al. **Acta Diabetol** 1997 Mar;34(1):10–7
Comparison of cocaine-induced vasoconstriction of left and right coronary arterial systems. Vongpatanasin W, et al. **Am J Cardiol** 1997 Feb 15;79(4):492–3
Calciuric effects of protein and potassium bicarbonate but not of sodium chloride or phosphate can be detected acutely in adult women and men. Whiting SJ, et al. **Am J Clin Nutr** 1997 May;65(5):1465–72
Buffer may be the critical factor in measurement of anti-prothrombin antibody on a gamma-ray-irradiated plate by enzyme-linked immunosorbent assay. Matsuda J, et al. **Am J Hematol** 1996 Dec;53(4):242–4
Effect of cilazapril and salt on Ca2+ extrusion in arterial smooth muscle of Dahl rats. Ashida T, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):107S–111S
Vitamin E ameliorates the renal injury of Dahl salt-sensitive rats. Atarashi K, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):116S–119S
Dietary L-arginine supplementation normalizes regional blood flow in Dahl-Iwai salt-sensitive rats. He H, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):89S–93S
The implication of renin-angiotensin system on renal injury seen in Dahl salt-sensitive rats. Hirawa N, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):102S–106S (19 ref.)
Transition from compensatory hypertrophy to dilated failing left ventricle in Dahl-Iwai salt-sensitive rats. Kihara Y, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):78S–82S
Salt and blood pressure: population and individual perspectives. Kuller LH. **Am J Hypertens** 1997 May;10(5 Pt 2):29S–36S (35 ref.)
Epidemiologic evidence on salt and blood pressure. Law MR. **Am J Hypertens** 1997 May;10(5 Pt 2):42S–45S (19 ref.)
Enhanced electrical activity in mesenteric arteries from salt-loaded Dahl salt-sensitive rats: actions of prostaglandin H2 on membrane channels. Ohya Y, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):112S–115S
Long-term infusion of kallikrein attenuates renal injury in Dahl salt-sensitive rats. Uehara Y, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):83S–88S (23 ref.)
Analysis of molecular heterogeneity of Dahl/Iwai salt-sensitive rats and salt-resistant rats. Umemura S, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):98S–101S
Insulin resistance and salt sensitivity. A renal hemodynamic abnormality? Weir MR. **Am J Hypertens** 1996 Dec;9(12 Pt 2):193S–199S (74 ref.)
Genetic profiles of newly inbred Dahl/Iwai salt-sensitive and salt-resistant rats. Yamazaki K, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):94S–97S
Urinary kallikrein in Dahl-Iwai salt-sensitive and -resistant rats. Yoshida H, et al. **Am J Hypertens** 1997 May;10(5 Pt 2):73S–77S
Endogenous angiotensin II inhibits natriuresis after acute volume expansion in the neonatal rat. Chevalier RL, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):R393–7
IMCD cells cultured from Dahl S rats absorb more Na+ than Dahl R rats. Husted RF, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):F1029–36
Hemodilution, central blood volume, and renal responses after an isotonic saline infusion in humans. Johansen LB, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R549–56
Increased renal atrial natriuretic peptide synthesis in rats with deoxycorticosterone acetate-salt treatment. Lee YJ, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F779–89
Role of paraventricular angiotensin AT1 receptors in salt-sensitive hypertension in mRen-2 transgenic rats. Li P, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R1178–81
Fos induction in rat brain neurons after stimulation of the hepatoportal Na-sensitive mechanism. Morita H, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R913–23
NaCl and/or urea infusion fails to increase renal inner medullary myo-inositol in protein-deprived rats. Nakanishi T, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1255–63
Time course of saline-induced recovery of the gustatory system in sodium-restricted rats. Stewart RE, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):R704–12
Effect of NaCl load administered to the fetus on the bidirectional movement of 51Cr-EDTA across rat placenta [see comments] Stulc J, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R984–9. Comment in: Am J Physiol 1997 Jan;272(1 Pt 2):R438–40.
High-salt diet upregulates kininogen and downregulates tissue kallikrein expression in Dahl-SS and SHR rats. Wang C, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F824–30
NaCl but not urea activates p38 and jun kinase in mIMCD3 murine inner medullary cells. Zhang Z, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):F1234–8
Oncotic, hemodilutional, and hemostatic effects of isotonic saline and hydroxyethyl starch solutions in clinically normal ponies. Jones PA, et al. **Am J Vet Res** 1997 May; 58(5):541–8
Use of salt to isolate Legionella pneumophila mutants unable to replicate in macrophages. Vogel JP, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:271–2
Effect of salt on the killer phenotype of yeasts from olive brines. Llorente P, et al. **Appl Environ Microbiol** 1997 Mar; 63(3):1165–7
Salt concentration determines 1,25-dihydroxyvitamin D3 dependency of vitamin D receptor-retinoid X receptor—vitamin D-responsive element complex formation. Kimmel-Jehan C, et al. **Arch Biochem Biophys** 1997 May 1;341(1):75–80
Salinity tolerance of Daphnia magna and potential use for estuarine sediment toxicity tests. Schuytema GS, et al. **Arch Environ Contam Toxicol** 1997 Aug;33(2):194–8
Influence of the medium on the assessment of LDL resistance to oxidation: lag time in phosphate buffered saline is longer than in sodium chloride solution [letter] Schreier L, et al. **Atherosclerosis** 1997 Feb 28;129(1):127–8
Three unrelated perturbations similarly uncouple fluid, bulk-membrane, and receptor endosomal flow in rat fetal fibroblasts. Cupers P, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):661–4
Molecular cloning of a novel rat salt-tolerant protein by functional complementation in yeast. Tsuji E, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):134–8
Role of PM-ATPase, amino acid transport and free amino acid pool in the salt stress of, Candida membranefaciens [corrected and republished article originally printed in Biochem Mol Biol Int 1996 Mar;38(3): 635–43] Khaware RK, et al. **Biochem Mol Biol Int** 1996 May;39(2):421–9
Proton gradients during salt adaptation of Synechococcus. Nitschmann WH, et al. **Biochem Mol Biol Int** 1996 Dec; 40(6):1201–9
Salt sensitivity and arginase activity in Aspergillus nidulans. Attwell NA, et al. **Biochem Soc Trans** 1997 Feb;25(1):98S
Effects of hyperosmotic NaCl and glycerol stress on stress response of human HeLa cells. Hatayama T, et al. **Biol Pharm Bull** 1997 Jun;20(6):605–12
Normal saline i.v. fluid load decreases uterine activity in active labour. Cheek TG, et al. **Br J Anaesth** 1996 Nov; 77(5):632–5
Reduction of NaCl increases survival of mammalian spinal neurons subjected to dendrite transection injury. Rosenberg LJ, et al. **Brain Res** 1996 Sep 23;734(1–2):349–53
Contribution of chorda tympani and glossopharyngeal nerves to taste preferences of rat for amino acids and NaCl. Tabuchi E, et al. **Brain Res** 1996 Nov 11;739(1–2):139–55
Receptor-mediated effects of clonidine on need-induced 3% NaCl and water intake. Yada MM, et al. **Brain Res Bull** 1997;42(3):205–9
Effect of sodium chloride solutions on mineralized and unmineralized turkey leg tendon. Lees S, et al. **Calcif Tissue Int** 1997 Jul;61(1):74–6
Responses of gull kidneys and salt glands to NaCl loading. Hughes MR. **Can J Physiol Pharmacol** 1995 Dec; 73(12):1727–32
Sympathetic nervous system in salt-sensitive and obese hypertension: amelioration of multiple abnormalities by a central sympatholytic agent. Ernsberger P, et al. **Cardiovasc Drugs Ther** 1996 Jun;10 Suppl 1:275–82
Human beta-defensin-1 is a salt-sensitive antibiotic in lung that is inactivated in cystic fibrosis. Goldman MJ, et al. **Cell** 1997 Feb 21;88(4):553–60
Influence of stimulus duration on a regional measure of NaCl taste sensitivity. Bagla R, et al. **Chem Senses** 1997 Apr; 22(2):171–5
Capsaicin modifies responses of rat chorda tympani nerve fibers to NaCl. Osada K, et al. **Chem Senses** 1997 Jun; 22(3):249–55
Rapid microvessel rarefaction with elevated salt intake and reduced renal mass hypertension in rats. Hansen-Smith FM, et al. **Circ Res** 1996 Aug;79(2):324–30
Renal afferents responsive to chemical and mechanical pelvic stimuli in the rabbit. Genovesi S, et al. **Clin Sci (Colch)** 1997 May;92(5):505–10
Behaviour of adrenomedullin during acute and chronic salt loading in normotensive and hypertensive subjects. Ishimitsu T, et al. **Clin Sci (Colch)** 1996 Sep;91(3):293–8
Drinking in Atlantic salmon presmolts and smolts in response to growth hormone and salinity. Fuentes J, et al. **Comp Biochem Physiol A Physiol** 1997 Aug;117(4):487–91
A genetic analysis of the role of calcineurin and calmodulin

in Ca++-dependent improvement of NaCl tolerance of Saccharomyces cerevisiae. Danielsson A, et al. **Curr Genet** 1996 Dec;30(6):476–84

Salt sensitivity: does it play an important role in the pathogenesis and treatment of hypertension? Weinberger MH. **Curr Opin Nephrol Hypertens** 1996 May;5(3):205–8 (20 ref.)

Expression of several muscle-specific genes during differentiation of cultured quail pineal body cells under artificial (high NaCl) conditions. Yoshimi T, et al. **Differentiation** 1995 Dec;59(5):307–19

The effect of ambient temperature and saline loading on changes in plasma and urine electrolytes (Na+ and K+) following exercise. Jansson A, et al. **Equine Vet J Suppl** 1995 Nov;(20):147–52

A possible role of trehalose in osmotolerance and ethanol tolerance in Saccharomyces cerevisiae. Sharma SC. **FEMS Microbiol Lett** 1997 Jul 1;152(1):11–5

The neuroendocrinology of thirst and salt appetite: visceral sensory signals and mechanisms of central integration. Johnson AK, et al. **Front Neuroendocrinol** 1997 Jul; 18(3):292–353 (369 ref.)

A group 3 LEA cDNA of rice, responsive to abscisic acid, but not to jasmonic acid, shows variety-specific differences in salt stress response. Moons A, et al. **Gene** 1997 Jun 3; 191(2):197–204

Nocturnal decline in blood pressure is attenuated by NaCl loading in salt-sensitive patients with essential hypertension: noninvasive 24-hour ambulatory blood pressure monitoring. Higashi Y, et al. **Hypertension** 1997 Aug;30(2 Pt 1):163–7

Role of natriuretic peptide receptor type C in Dahl salt-sensitive hypertensive rats. Nagase M, et al. **Hypertension** 1997 Aug;30(2 Pt 1):177–83

Preliminary evidence of linkage of salt sensitivity in black Americans at the beta 2-adrenergic receptor locus. Svetkey LP, et al. **Hypertension** 1997 Apr;29(4):918–22

Elevation of ouabainlike compound levels with hypertonic sodium chloride load in rat plasma and tissues. Yamada K, et al. **Hypertension** 1997 Jul;30(1 Pt 1):94–8

Blood pressure sensitivity to salt in rats with low urinary kallikrein excretion. Madeddu P, et al. **Immunopharmacology** 1996 Jun;33(1-3):301–4

Participation of interleukin-5 and interleukin-8 in the eosinophil migration induced by a large volume of saline. Oliveira SH, et al. **Int Arch Allergy Immunol** 1996 Nov; 111(3):244–52

Mathematically modeling the repair of heat-injured Listeria monocytogenes as affected by temperature, pH, and salt concentration. Chawla CS, et al. **Int J Food Microbiol** 1996 Jul;30(3):231–42

Predictive model of the effect of CO2, pH, temperature and NaCl on the growth of Listeria monocytogenes. Fernández PS, et al. **Int J Food Microbiol** 1997 Jun 17;37(1):37–45

Predictive model of the effect of temperature, pH and sodium chloride on growth from spores of non-proteolytic Clostridium botulinum. Graham AF, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):69–85

Predictive modelling of growth of Listeria monocytogenes. The effects on growth of NaCl, pH, storage temperature and NaNO2. McClure PJ, et al. **Int J Food Microbiol** 1997 Mar 3;34(3):221–32

Growth of yeasts in milk and associated changes to milk composition. Roostita R, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):205–19

The combined effects of temperature, pH and NaCl on growth of Debaryomyces hansenii analyzed by flow cytometry and predictive microbiology [published erratum appears in Int J Food Microbiol 1997 Apr 29;36(1):83–4] Sørensen BB, et al. **Int J Food Microbiol** 1997 Mar 3; 34(3):209–20

Preparation and validation of a growth model for Bacillus cereus: the effects of temperature, pH, sodium chloride and carbon dioxide. Sutherland JP, et al. **Int J Food Microbiol** 1996 Jul;30(3):359–72

Model for the survival of Staphylococcus aureus in nongrowth environments. Whiting RC, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):231–43

Salt tolerance in plants and microorganisms: toxicity targets and defense responses. Serrano R. **Int Rev Cytol** 1996; 165:1–52 (264 ref.)

Swelling of collagen intracanalicular implants. Lowther GE, et al. **J Am Optom Assoc** 1997 Jan;68(1):38–42

Effects of sodium bicarbonate and sodium chloride on the elimination of etorphine in equine urine. Lloyd DR, et al. **J Anal Toxicol** 1996 Mar-Apr;20(2):81–8

Intravenous vs. oral rehydration: effects on subsequent exercise-heat stress. Castellani JW, et al. **J Appl Physiol** 1997 Mar;82(3):799–806

Sodium chloride, osmolyte, and osmolarity effects on blastocyst formation in bovine embryos produced by in vitro fertilization (IVF) and cultured in simple serum-free media. Liu Z, et al. **J Assist Reprod Genet** 1996 Aug; 13(7):562–8

Nonuniform sympathetic nerve responses to intravenous hypertonic saline infusion. Weiss ML, et al. **J Auton Nerv Syst** 1996 Feb 5;57(1-2):109–15

An Escherichia coli host strain useful for efficient overproduction of cloned gene products with NaCl as the inducer. Bhandari P, et al. **J Bacteriol** 1997 Jul; 179(13):4403–6

Expression of bacterial mtlD in Saccharomyces cerevisiae results in mannitol synthesis and protects a glycerol-defective mutant from high-salt and oxidative stress. Chaturvedi V, et al. **J Bacteriol** 1997 Jan; 179(1):157–62

The stpA gene form synechocystis sp. strain PCC 6803 encodes the glucosylglycerol-phosphate phosphatase involved in cyanobacterial osmotic response to salt shock. Hagemann M, et al. **J Bacteriol** 1997 Mar;179(5):1727–33

Osmotically induced response in representatives of halophilic prokaryotes: the bacterium Halomonas elongata and the archaeon Haloferax volcanii. Mojica FJ, et al. **J Bacteriol** 1997 Sep;179(17):5471–81

Effect of salt concentration on the pKa of acidic residues in lysozyme. Abe Y, et al. **J Biochem (Tokyo)** 1995 Nov; 118(5):946–52

Metabolic and regulatory changes associated with growth of Saccharomyces cerevisiae in 1.4 M NaCl. Evidence for osmotic induction of glycerol dissimilation via the dihydroxyacetone pathway. Norbeck J, et al. **J Biol Chem** 1997 Feb 28;272(9):5544–54

Conformational change of cytochrome P450 1A2 induced by sodium chloride. Yun CH, et al. **J Biol Chem** 1996 Dec 6;271(49):31312–6

Calcium buffering is required to maintain bone stiffness in saline solution. Gustafson MB, et al. **J Biomech** 1996 Sep; 29(9):1191–4

Sodium chloride increases the ciliary transportability of cystic fibrosis and bronchiectasis sputum on the mucus-depleted bovine trachea. Wills PJ, et al. **J Clin Invest** 1997 Jan 1;99(1):9–13

Dietary mixtures of sodium bicarbonate, sodium chloride, and potassium chloride: effects on lactational performance, acid-base status, and mineral metabolism of Holstein cows. Sanchez WK, et al. **J Dairy Sci** 1997 Jun;80(6):1207–16

Factors affecting production of haemolysin by strains of Vibrio fluvialis. Rahim Z, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):113–6

Microalbuminuria is associated with salt sensitivity in hypertensive patients. Nešović M, et al. **J Hum Hypertens** 1996 Sep;10(9):573–6

Psychophysiological reactivity of salt-sensitive normotensive subjects. Deter HC, et al. **J Hypertens** 1997 Aug; 15(8):839–44

Development, genotype and phenotype of a new colony of the Sabra hypertension prone (SBH/y) and resistant (SBN/y) rat model of slat sensitivity and resistance. Yagil C, et al. **J Hypertens** 1996 Oct;14(10):1175–82

Opposite effect of counterions on the persistence length of nicked and non-nicked DNA. Furrer P, et al. **J Mol Biol** 1997 Mar 7;266(4):711–21

Effects of Na+ and Mg2+ on the structures of supercoiled DNAs: comparison of simulations with experiments. Gebe JA, et al. **J Mol Biol** 1996 Sep 20;262(2):105–28

The effect of ionic conditions on the conformations of supercoiled DNA. I. Sedimentation analysis. Rybenkov VV, et al. **J Mol Biol** 1997 Mar 28;267(2):299–311

The effect of ionic conditions on the conformations of supercoiled DNA. II. Equilibrium catenation. Rybenkov VV, et al. **J Mol Biol** 1997 Mar 28;267(2):312–23

Salt taste responses of mouse chorda tympani neurons: evidence for existence of two different amiloride-sensitive receptor components for NaCl with different temperature dependencies. Ninomiya Y. **J Neurophysiol** 1996 Nov; 76(5):3550–4

Responses of gustatory cells in the nucleus of the solitary tract of the hamster after NaCl or amiloride adaptation. Smith DV, et al. **J Neurophysiol** 1996 Jul;76(1):47–58

Influence of moderate haemodilution with fluosol or normal saline on carbaryl disposition in Sprague-Dawley rats. Shrewsbury RP, et al. **J Pharm Pharmacol** 1997 Mar; 49(3):236–40

Odor discrimination of 'cAMP-' and 'IP3-increasing' odorants at high temperature and at high NaCl concentration in turtle olfactory system. Kashiwayanagi M, et al. **J Physiol Paris** 1997 Feb;91(1):1–6

Differential sensitivity of one-cell and two-cell rabbit embryos to sodium chloride and total osmolarity during culture into blastocysts. Li J, et al. **J Reprod Fertil** 1996 Nov;108(2):307–12

A method to estimate the transient interstitial osmolarity change upon application of osmotic stress in perfused rat submandibular gland. Yoshida H, et al. **Jpn J Physiol** 1997 Jun;47(3):311–6

The glomerular filtration rate during pregnancy: saline infusion enhances the glomerular filtration rate in the pregnant rat. Faas MM, et al. **Kidney Blood Press Res** 1996; 19(2):121–7

Calcium-binding protein regucalcin mRNA expression in the kidney cortex is suppressed by saline ingestion in rats. Shinya N, et al. **Mol Cell Biochem** 1996 Sep 20; 162(2):139–44

Multiple phosphorylated forms of the Saccharomyces cerevisiae Mcm1 protein include an isoform induced in response to high salt concentrations. Kuo MH, et al. **Mol Cell Biol** 1997 Feb;17(2):819–32

Somatostatin5 receptor-mediated [35S]guanosine-5'-O-(3-thio)triphosphate binding: agonist potencies and the influence of sodium chloride on intrinsic activity. Williams AJ, et al. **Mol Pharmacol** 1997 Jun; 51(6):1060–9

Effect of low concentrations of K+ and Cl- on the Na(+)-dependent neuronal uptake of [3H] dopamine. Corera AT, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 May; 353(6):610–5

Salt sensitivity as a phenotype for genetic studies of human hypertension [editorial] Sharma AM. **Nephrol Dial Transplant** 1996 Jun;11(6):927–9 (14 ref.)

The functional relevance of medial parabrachial nucleus in intragastric sodium chloride-induced short-term (concurrent) aversion learning. Agüero A, et al. **Neurobiol Learn Mem** 1997 Mar;67(2):161–6

Regional differences in NaCl-induced increase of the potency of bicuculline to displace [3H]muscimol binding. Bujas M, et al. **Neurochem Int** 1997 Feb;30(2):199–202

Baroreceptor input regulates osmotic control of central vasopressin secretion. Callahan MF, et al. **Neuroendocrinology** 1997 Apr;65(4):238–45

Inhibition of nitric oxide synthase induces ultrastructural changes in the neurohypophysis of dehydrated rats. Beagley GH, et al. **Neurosci Lett** 1997 Feb 7;222(3):143–6

Central c-Fos expression in neonatal and adult rats after subcutaneous injection of hypertonic saline. Rinaman L, et al. **Neuroscience** 1997 Aug;79(4):1165–75

The effect of ionic conditions on DNA helical repeat, effective diameter and free energy of supercoiling. Rybenkov VV, et al. **Nucleic Acids Res** 1997 Apr 1; 25(7):1412–8

Case-control study on influence of methionine, nitrite, and salt on gastric carcinogenesis in northern Italy. La Vecchia C, et al. **Nutr Cancer** 1997;27(1):65–8

Acute effects on systemic and pulmonary hemodynamics of intratracheal instillation of porcine surfactant or saline in surfactant-depleted newborn piglets. Moen A, et al. **Pediatr Res** 1997 Apr;41(4 Pt 1):486–92

Amiloride suppresses the sourness of NaCl and LiCl. Ossebaard CA, et al. **Physiol Behav** 1996 Nov;60(5):1317–22

Respiratory, blood-gas transport, and acid-base response of Leptograpsus variegatus to long-term immersion and hyposaline exposure. Cooper AR, et al. **Physiol Zool** 1997 Mar-Apr;70(2):181–92

Characterization of the gene for delta1-pyrroline-5-carboxylate synthetase and correlation between the expression of the gene and salt tolerance in Oryza sativa L. Igarashi Y, et al. **Plant Mol Biol** 1997 Mar; 33(5):857–65

Salt stress induces an increased expression of V-type H(+)-ATPase in mature sugar beet leaves. Kirsch M, et al. **Plant Mol Biol** 1996 Nov;32(3):543–7

Tissue-specific activation of the osmotin gene by ABA, C2H4 and NaCl involves the same promoter region. Raghothama KG, et al. **Plant Mol Biol** 1997 Jun; 34(3):393–402

Proline accumulation and salt-stress-induced gene expression in a salt-hypersensitive mutant of Arabidopsis. Liu J, et al. **Plant Physiol** 1997 Jun;114(2):591–6

Directed evolution of a type I antifreeze protein expressed in Escherichia coli with sodium chloride as selective pressure and its effect on antifreeze tolerance. Meijer PJ, et al. **Protein Eng** 1996 Nov;9(11):1051–4

Plasma levels of atrial natriuretic peptide and brain natriuretic peptide following intravenous saline infusion in oedematous chronic obstructive pulmonary disease and non-oedematous chronic obstructive pulmonary disease. Sheedy W, et al. **Respiration** 1996;63(6):376–80

Analysis of a salt stable mutant of cowpea chlorotic mottle virus. Fox JM, et al. **Virology** 1996 Aug 1;222(1):115–22

The osmotic hypersensitivity of the yeast Saccharomyces cerevisiae is strain and growth media dependent: quantitative aspects of the phenomenon. Blomberg A. **Yeast** 1997 May;13(6):529–39

Mechanisms of salt tolerance conferred by overexpression of the HAL1 gene in Saccharomyces cerevisiae. Rios G, et al. **Yeast** 1997 May;13(6):515–28

[Preclinical study of the action of a calcium channel blocker during salt load] Godfraind T, et al. **Bull Acad Natl Med** 1997 Feb;181(2):289–98; discussion 299–300 (Eng. Abstr.) **(Fre)**

[Antibacterial actin of vinegar against food-borne pathogenic bacteria including Escherichia coli O157:H7 (Part 2). Effect of sodium chloride and temperature on bactericidal activity] Entani E, et al. **Kansenshogaku Zasshi** 1997 May; 71(5):451–8 (Eng. Abstr.) **(Jpn)**

[Direct effects of the intrathecal administration of normal saline for the brain expansion after the removal of subdural hematoma] Zderkiewicz E, et al. **Neurol Neurochir Pol** 1996 May-Jun;30(3):457–65 (Eng. Abstr.) **(Pol)**

[The relation of the degree of water salinity to oviposition by female blood-sucking mosquitoes] Iasiukevich VV. **Med Parazitol (Mosk)** 1997 Apr-Jun;(2):32–5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Radiation chemistry of physiological saline reinvestigated: evidence that chloride-derived intermediates play a key role in cytotoxicity. Saran M, et al. **Radiat Res** 1997 Jan; 147(1):70–7

THERAPEUTIC USE

Alkali therapy versus sodium chloride supplement in low birthweight infants with incipient late metabolic acidosis. Kalhoff H, et al. **Acta Paediatr** 1997 Jan;86(1):96–101

Comparison of heparinized and nonheparinized solutions for

maintaining patency of arterial and pulmonary artery catheters. Zevola DR, et al. **Am J Crit Care** 1997 Jan; 6(1):52–5

Postoperative hyponatremia despite near–isotonic saline infusion: a phenomenon of desalination [see comments] Steele A, et al. **Ann Intern Med** 1997 Jan 1;126(1):20–5. Comment in: Ann Intern Med 1997 Jun 15;126(12):1005–6.

Extra–amniotic saline infusion for induction of labour in antepartum fetal death: a cost effective method worthy of wider use. Mahomed K, et al. **Br J Obstet Gynaecol** 1997 Sep;104(9):1058–61

Comparison of efficacy of sulbactam: ampicillin to ampicillin and saline for treatment of experimentally induced Escherichia coli diarrhea in neonatal calves. Lofstedt J, et al. **Can J Vet Res** 1996 Jul;60(3):210–5

Effects of formalin, chloramine–T, and low salinity dip on the behavior and hemolymph biochemistry of the American lobster. Speare DJ, et al. **Can Vet J** 1996 Dec;37(12):729–34

A comparison of the effects of an alpha–agonist, an anti–muscarinic agent and placebo on intranasal histamine challenge in allergic rhinitis. Birchall MA, et al. **Clin Otolaryngol** 1996 Jun;21(3):212–7

A double blind, prospective trial of topical ciprofloxacin versus normal saline solution in the treatment of otorrhoea. Kasemsuwan L, et al. **Clin Otolaryngol** 1997 Feb;22(1):44–6

Lung lavage with a saline volume similar to functional residual capacity followed by surfactant administration in newborns with severe meconium aspiration syndrome. Mosca F, et al. **Intensive Care Med** 1996 Dec;22(12):1412–3

Endometrial ablation by hysteroscopic instillation of hot saline solution. Goldrath MH, et al. **J Am Assoc Gynecol Laparosc** 1997 Feb;4(2):235–40 (13 ref.)

High–sodium crystalloid solution for treatment of hypernatremia in a Vietnamese pot–bellied pig. Banks P, et al. **J Am Vet Med Assoc** 1996 Oct 1;209(7):1268–70

Saline wound irrigation reduces the postoperative infection rate in guinea pigs. Badia JM, et al. **J Surg Res** 1996 Jul 1;63(2):457–9

Effect of hypertonic saline/dextran on post–stenotic myocardial perfusion, metabolism, and function during resuscitation from hemorrhagic shock in anesthetized pigs. Welte M, et al. **Shock** 1997 Feb;7(2):119–30

[The use of sodium chloride baths in patients with chronic bronchitis] Anisimkina AN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 May–Jun; (3):14–8 (Eng. Abstr.) **(Rus)**

[The use of sodium chloride baths in children with a heart lesion subjected to long–term exposure to low radiation doses] Poberskaia VA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Jan–Feb;(1):4–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Adaptation to sublethal environmental stresses protects Listeria monocytogenes against lethal preservation factors. Lou Y, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1252–5

Salinity tolerances of selected macroinvertebrates of the Sabie River, Kruger National Park, South Africa. Goetsch P, et al. **Arch Environ Contam Toxicol** 1997 Jan;32(1):32–41

Tolerance of the nematode Caenorhabditis elegans to pH, salinity, and hardness in aquatic media. Khanna N, et al. **Arch Environ Contam Toxicol** 1997 Jan;32(1):110–4

Tolerance of Chironomus riparius larvae (Diptera: Chironomidae) to salinity. Bervoets L, et al. **Bull Environ Contam Toxicol** 1996 Nov;57(5):829–35

Reduction in NaCl–enhanced gastric carcinogenesis in rats fed a high–protein diet. Tatsuta M, et al. **Cancer Lett** 1997 Jun 24;116(2):247–52

Evidence for a depressive–like state induced by repeated saline injections in Fischer 344 rats. Izumi J, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):883–8

The effect of amiloride and sodium chloride on rat renal and hepatic 11 beta–hydroxysteroid dehydrogenase activities. Niepel T, et al. **Pharmacol Toxicol** 1997 Mar; 80(3):127–31

Histologic lesions associated with intravenous infusions of large volumes of isotonic saline solution in rats for 30 days. Morton D, et al. **Toxicol Pathol** 1997 Jul–Aug;25(4):390–4

SODIUM CHLORIDE, DIETARY

The taste for salt in humans. Mattes RD. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):692S–697S (73 ref.)

Increased liking for salty foods in adolescents exposed during infancy to a chloride–deficient feeding formula. Stein LJ, et al. **Appetite** 1996 Aug;27(1):65–77

Lipid metabolism and renal protection by chronic cicletanine treatment in Dahl salt–sensitive rats with salt–induced hypertension. Uehara Y, et al. **Blood Press** 1997 May; 6(3):180–7

Sodium balance of hyper– and hypo–natriophilic rats under basal conditions and during sodium deprivation. Glass H, et al. **Braz J Med Biol Res** 1996 Dec;29(12):1667–70

Antagonism of clonidine injected intracerebroventricularly in different models of salt intake. Sato MA, et al. **Braz J Med Biol Res** 1996 Dec;29(12):1663–6

Full expression of the exaggerated salt appetite of the spontaneously hypertensive rat requires a prenatal factor. Erkadius E, et al. **Clin Exp Pharmacol Physiol** 1996 Jun–Jul; 23(6–7):619–20

Increased left ventricular mass in salt–sensitive hypertensive patients. de la Sierra A, et al. **J Hum Hypertens** 1996 Dec; 10(12):795–9

An epidemic of hyperthyroidism following salt iodination in Lebanon. Macaron C. **J Med Liban** 1996;44(4):200–2

The Hobart Salt Study 1995: few meet national sodium intake target [see comments] Beard TC, et al. **Med J Aust** 1997 Apr 21;166(8):404–7. Comment in: Med J Aust 1997 Apr 21;166(8):396–7.

Mammalian bombesin–like peptides suppress sham drinking of salt by sodium–deficient rats. Flynn FW. **Peptides** 1996; 17(6):951–6

Natriuretic peptides in water–deprived and in salt–loaded rats. Makino Y, et al. **Peptides** 1996;17(6):1031–9

ADMINISTRATION & DOSAGE

Blood pressure response to sodium in children and adolescents. Falkner B, et al. **Am J Clin Nutr** 1997 Feb; 65(2 Suppl):618S–621S (27 ref.)

Salt and blood pressure in community–based intervention trials. Staessen JA, et al. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):661S–670S (99 ref.)

Evaluation of a rapid protocol for the assessment of salt sensitivity against the blood pressure response to dietary sodium chloride restriction. Galletti F, et al. **Am J Hypertens** 1997 Apr;10(4 Pt 1):462–6

Blood pressure and metabolic responses to moderate sodium restriction in isradipine–treated hypertensive patients. McCarron DA, et al. **Am J Hypertens** 1997 Jan;10(1):68–76

The influence of dietary salt on the antiproteinuric effect of calcium channel blockers. Weir MR. **Am J Kidney Dis** 1997 May;29(5):800–5

Salt intake modulates the developmental expression of renal kallikrein and bradykinin B2 receptors. el–Dahr S, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F425–31

Salt: an ineffective vehicle for iodine delivery to young children in rural Sarawak. Foo LC, et al. **Ann Endocrinol (Paris)** 1996;57(6):470–5

Salt–loading induces decreased POMC mRNA levels, increased alpha–MSH immunoreactivity, and sustained elevated fos expression in rat pituitary intermediate lobe melanotropes. Sharma P, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:295–9

Cold–induced salt intake in mice and catecholamine, renin and thermogenesis mechanisms. Dejima Y, et al. **Appetite** 1996 Jun;26(3):203–19

Defining cooking salt intakes for patient counselling and policy making. Sánchez–Castillo CP, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):259–64

Delayed increase in blood pressure induced by spontaneously hypertensive rat plasma after high sodium intake. Tikkanen I, et al. **Blood Press** 1997 May;6(3):188–91

Central interaction between atrial natriuretic peptide and angiotensin II in the control of sodium intake and excretion in female rats. De–Angelis PR, et al. **Braz J Med Biol Res** 1996 Dec;29(12):1671–4

Differences in pituitary expression of proopiomelanocortin in Dahl salt–resistant and salt–sensitive rats on a high salt diet. Hao J, et al. **Can J Physiol Pharmacol** 1996 Jun; 74(6):657–62

Effects of MaxEPA on salt–induced hypertension: relationship to [3H]nitrobenzylthioinosine binding sites [published erratum appears in Clin Exp Hypertens 1996 Jul;18(5):729] Bayorh MA, et al. **Clin Exp Hypertens** 1996 Jan;18(1):37–49

Adrenomedullin: changes in circulating and cardiac tissue concentration in Dahl salt–sensitive rats on a high–salt diet. Shimokubo T, et al. **Clin Exp Hypertens** 1996 Oct; 18(7):949–61

Dietary salt restriction increases vascular insulin resistance. Feldman RD, et al. **Clin Pharmacol Ther** 1996 Oct; 60(4):444–51

Behaviour of adrenomedullin during acute and chronic salt loading in normotensive and hypertensive subjects. Ishimitsu T, et al. **Clin Sci (Colch)** 1996 Sep;91(3):293–8

Change in blood pressure during altered sodium intake is not associated with calciotropic hormone level. Ozono R, et al. **Clin Sci (Colch)** 1997 Aug;93(2):153–7

Caries prevalence and salt fluoridation among 9–year–old schoolchildren in Strasbourg, France. Fabien V, et al. **Community Dent Oral Epidemiol** 1996 Dec;24(6):408–11

Adrenomedullin inhibits salt appetite. Samson WK, et al. **Endocrinology** 1997 Feb;138(2):613–6

Salt enhances responsiveness of terminal aortic vascular bed to sympathetic activity. Shimamoto H, et al. **Eur J Clin Pharmacol** 1997;52(5):343–9

Low salt intake down–regulates the guanylin signaling pathway in rat distal colon. Li Z, et al. **Gastroenterology** 1996 Dec;111(6):1714–21

Dietary NaCl loading increases platelet Ca2+ discharge capacity in salt resistant essential hypertension. Watanabe M. **Hiroshima J Med Sci** 1996 Mar;45(1):23–30

Cyclooxygenase–2 mediates increased renal renin content induced by low–sodium diet. Harding P, et al. **Hypertension** 1997 Jan;29(1 Pt 2):297–302

Aging, acculturation, salt intake, and hypertension in the Kuna of Panama. Hollenberg NK, et al. **Hypertension** 1997 Jan;29(1 Pt 2):171–6

Kallikrein–kinin system and blood pressure sensitivity to salt. Madeddu P, et al. **Hypertension** 1997 Jan;29(1 Pt 2):471–7

Intrarenal dopamine production and distribution in the rat. Physiological control of sodium excretion. Wang ZQ, et al. **Hypertension** 1997 Jan;29(1 Pt 2):228–34

Sodium intake, angiotensin II receptor blockade, and baroreflex function in conscious rats. Xu L, et al. **Hypertension** 1997 Jan;29(1 Pt 2):450–7

Salt intake and hyperfiltration [letter; comment] Zoccali C, et al. **Hypertension** 1996 Dec;28(6):1100–2. Comment on: Hypertension 1996 May;27(5):1160–4.

Salt intake and blood pressure in Nigerian hypertensive patients. Olubodun JO, et al. **Int J Cardiol** 1997 Apr 18; 59(2):185–8

Effects of age on the role of atrial natriuretic factor in renal adaptation to physiologic variations of dietary salt intake. Leosco D, et al. **J Am Soc Nephrol** 1996 Jul;7(7):1045–51

Progress against endemic goiter in Croatia—mandatory salt iodination increased after 40 years of implementation [letter] Kusić Z, et al. **J Endocrinol Invest** 1997 Jun; 20(6):346–7

Case report: moderate salt restriction for the management of hypertension and hypercalciuria. Saggar–Malik AK, et al. **J Hum Hypertens** 1996 Dec;10(12):811–3

Clinical versus experimental utility of salt–sensitivity testing [letter; comment] Sharma AM. **J Hypertens** 1997 Apr; 15(4):457–8. Comment on: J Hypertens 1996 Dec;14(12):1455–9. Comment on: J Hypertens 1996 Dec;14(12):1461–2.

Is salt–sensitivity of blood pressure a reproducible phenomenon–commentary [see comments] Weinberger MH. **J Hypertens** 1996 Dec;14(12):1461–2. Comment in: J Hypertens 1997 Jan;15(1):100–1. Comment in: J Hypertens 1997 Apr;15(4):457–8.

Reproducibility of the response to short–term low salt intake in essential hypertension [see comments] Zoccali C, et al. **J Hypertens** 1996 Dec;14(12):1455–9. Comment in: J Hypertens 1997 Apr;15(4):457–8. Comment in: J Hypertens 1997 Apr;15(4):458.

Salt, resting arterial pressure and 24 h monitoring [letter; comment] Zoccali C. **J Hypertens** 1997 Apr;15(4):458. Comment on: J Hypertens 1996 Dec;14(12):1455–9.

Cardiovascular and renal effects of the combination of felodipine and metoprolol during a high–salt and a moderate–salt diet in spontaneously hypertensive rats. Mervaala EM, et al. **Jpn Circ J** 1997 May;61(5):421–31

Double–blind randomised trial of modest salt restriction in older people [see comments] Cappuccio FP, et al. **Lancet** 1997 Sep 20;350(9081):850–4. Comment in: Lancet 1997 Sep 20;350(9081):825–6.

Lower sodium for all [comment] Elliott P. **Lancet** 1997 Sep 20;350(9081):825–6. Comment on: Lancet 1997 Sep 20;350(9081):850–4.

Dietary salt intake and left ventricular hypertrophy [editorial] Schmieder RE. **Nephrol Dial Transplant** 1997 Feb; 12(2):245–8

Pattern changes of pituitary peptides in rat after salt–loading as detected by means of direct, semiquantitative mass spectrometric profiling. Jiménez CR, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9481–6

Age–related decline in thirst and sodium appetite in rats related to kininase II inhibition. Rowland NE, et al. **Regul Pept** 1996 Oct 22;66(3):163–7

Central inhibition of salt appetite by oxytocin in rats. Stricker EM, et al. **Regul Pept** 1996 Oct 8;66(1–2):83–5 (25 ref.)

The role of angiotensin II in ingestive behaviour: a brief review of angiotensin II, thirst and Na appetite. Weisinger RS, et al. **Regul Pept** 1996 Oct 8;66(1–2):73–81 (100 ref.)

[Salt—an analysis of the connection between intake and health] Pedersen OB, et al. **Ugeskr Laeger** 1996 Nov 4; 158(45):6415–20 (40 ref.) (Eng. Abstr.) **(Dan)**

[Endothelial dysfunction in salt sensitive hypertension] Ferri C, et al. **Arch Mal Coeur Vaiss** 1996 Aug;89(8):971–4 (Eng. Abstr.) **(Fre)**

[Salt–sensitive hypertension] Suzuki H, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(12):59–62 (21 ref.) **(Jpn)**

[The reaction of the sympathoadrenal system to an acute peroral salt load in young persons with arterial hypertension] Berezniakov IG. **Lik Sprava** 1995 Sep–Dec; (9–12):114–7 (Eng. Abstr.) **(Rus)**

[The disinfection of fish in the family Cyprinidae of Opisthorchis felineus Riv. metacercariae by the combined use of acetic acid and table salt] Zviagina VV, et al. **Med Parazitol (Mosk)** 1997 Jan–Mar;(1):9–12 (Eng. Abstr.) **(Rus)**

[The effect of chemical sympathectomy on the adrenergic innervation of the blood vessels belonging to different organs in salt–sensitive and salt–resistant Dahl–strain rats] Leont'eva GR, et al. **Morfologiia** 1996;110(4):105–8 (Eng. Abstr.) **(Rus)**

[New Croatian regulations on iodized salt (letter)] Kusić Z. **Lijec Vjesn** 1996 Nov–Dec;118(11–12):306 **(Scr)**

ADVERSE EFFECTS

Genetic and nongenetic determinants of salt sensitivity and blood pressure. Cowley AW Jr. **Am J Clin Nutr** 1997 Feb; 65(2 Suppl):587S–593S (50 ref.)

Overview of dietary sodium effects on and interactions with cardiovascular and neuroendocrine functions. Ely DL. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):594S–605S (163 ref.)

Nature and role of observational studies in public health policy concerning the effects of dietary salt intake on blood pressure. Haynes RB. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):622S–625S (7 ref.)

Dietary sodium and blood pressure: interactions with other nutrients. Kotchen TA, et al. **Am J Clin Nutr** 1997 Feb;

65(2 Suppl):708S–711S (61 ref.)
Heterogeneous responses to changes in dietary salt intake: the salt-sensitivity paradigm. Luft FC, et al. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):612S–617S (49 ref.)
Role of adequate dietary calcium intake in the prevention and management of salt-sensitive hypertension. McCarron DA. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):712S–716S (24 ref.)
The INTERSALT Study: background, methods, findings, and implications. Stamler J. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):626S–642S (153 ref.)
Dietary sodium chloride and potassium have effects on the pathophysiology of hypertension in humans and animals. Tobian L. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):606S–611S (21 ref.)
Clustering of cardiovascular risk factors in salt-sensitive patients with essential hypertension: role of insulin. Bigazzi R, et al. **Am J Hypertens** 1996 Jan;9(1):24–32
Salt sensitivity of hypertension and responses to angiotensin converting enzyme inhibition with benazepril. Moore TJ, et al. **Am J Hypertens** 1996 Jan;9(1):54–60
Predominance of nocturnal sympathetic nervous activity in salt-sensitive normotensive subjects. Yo Y, et al. **Am J Hypertens** 1996 Aug;9(8):726–31
Platelet calcium handling is different in rats with salt-dependent and spontaneous forms of genetic hypertension. Zicha J, et al. **Am J Hypertens** 1996 Aug; 9(8):812–8
Salt-sensitive hypertension: lessons from animal models. Sanders PW. **Am J Kidney Dis** 1996 Nov;28(5):775–82 (79 ref.)
Interrelationships between salt and fish oil in stroke-prone spontaneously hypertensive rat. Vaskonen T, et al. **Blood Press** 1996 May;5(3):178–89
Evaluation of the aetiological role of dietary salt exposure in gastric and other cancers in humans. Cohen AJ, et al. **Food Chem Toxicol** 1997 Feb;35(2):271–93 (161 ref.)
Impaired inactive to active kallikrein conversion in human salt-sensitive hypertension. Bellini C, et al. **J Am Soc Nephrol** 1996 Dec;7(12):2565–77
Transforming growth factor-beta 1 in hypertensive renal injury in Dahl salt-sensitive rats. Tamaki K, et al. **J Am Soc Nephrol** 1996 Dec;7(12):2578–89
Association between salt intake, heart rate and blood pressure. Rastenyte D, et al. **J Hum Hypertens** 1997 Jan; 11(1):57–62
Does ambulatory monitoring make saltier salt sensitivity studies? [letter; comment] Zoccali C, et al. **J Hypertens** 1997 Jan;15(1):100–1. Comment on: J Hypertens 1996 Dec;14(12):1461–2.
Polymorphisms of alpha-adducin and salt sensitivity in patients with essential hypertension [see comments] Cusi D, et al. **Lancet** 1997 May 10;349(9062):1353–7. Comment in: Lancet 1997 May 10;349(9062):1338–9.
Pep(pery) talk on salt [letter; comment] MacGregor G, et al. **Lancet** 1996 Nov 23;348(9039):1453. Comment on: Lancet 1996 Sep 7;348(9028):690–1.
Dietary salt and renal stone disease [letter; comment] Stamler J, et al. **Lancet** 1997 Feb 15;349(9050):506–7. Comment on: Lancet 1996 Dec 7;348(9041):1561–5.
Salt intake, cardiovascular disease and public health [editorial; comment] Beilin LJ. **Med J Aust** 1997 Apr 21; 166(8):396–7 (12 ref.). Comment on: Med J Aust 1997 Apr 21;166(8):404–7.

ANALYSIS

Iodine content of salt consumed and iodine status of school children in Delhi. Kapil U, et al. **Indian Pediatr** 1996 Jul; 33(7):585–7
[Evaluation of potassium iodide in Polish dietary salt] Andrzejewska E, et al. **Rocz Panstw Zakl Hig** 1996; 47(4):395–400 (Eng. Abstr.) **(Pol)**

CHEMISTRY see SODIUM CHLORIDE/chemistry

METABOLISM

Daily rhythm of NaCl intake in rats fed low-Ca2+ diet: relation to plasma and urinary minerals and hormones. Tordoff MG, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R505–17
Correlations between ANP concentrations in atria, plasma and cerebral structures and sodium chloride preference in Wistar rats. Glass H, et al. **Braz J Med Biol Res** 1997 Jan; 30(1):65–8
Intracerebral administration of mineralocorticoid receptor antisense oligonucleotides attenuate adrenal steroid-induced salt appetite in rats. Sakai RR, et al. **Neuroendocrinology** 1996 Dec;64(6):425–9

PHARMACOLOGY

Chronic salt overload increases blood pressure and improves glucose metabolism without changing insulin sensitivity. da Costa Lima NK, et al. **Am J Hypertens** 1997 Jul;10(7 Pt 1):720–7
NaCl ingestion ameliorates plasma indexes of calcium deficiency. Tordoff MG. **Am J Physiol** 1997 Jul;273(1 Pt 2):R423–32
Expression of Fos in rat brain in relation to sodium appetite: furosemide and cerebroventricular renin. Rowland NE, et al. **Brain Res** 1996 Jul 22;728(1):90–6
Circulating Na+/K+-ATPase inhibitors: effects of neuropeptides, volume expansion and salt loading in conscious rats. Schmitt BM, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):131–8
Role of nitric oxide in tubuloglomerular feedback: effects of dietary salt. Welch WJ, et al. **Clin Exp Pharmacol Physiol** 1997 Aug;24(8):582–6
Dietary salt restriction increases vascular insulin resistance. Feldman RD, et al. **Clin Pharmacol Ther** 1996 Oct; 60(4):444–51
Dietary salt aggravates cyclosporin A-induced hypertension and nephrotoxicity in spontaneously hypertensive rats: protection by oral magnesium supplementation. Mervaala EM, et al. **Contrib Nephrol** 1996;119:121–4
Effect of high salt intake in mutant mice lacking bradykinin-B2 receptors. Alfie ME, et al. **Hypertension** 1997 Jan;29(1 Pt 2):483–7
Losartan blocks aldosterone and renal vascular responses to angiotensin II in humans. Gandhi SK, et al. **Hypertension** 1996 Dec;28(6):961–6
Brain "ouabain" and angiotensin II in salt-sensitive hypertension in spontaneously hypertensive rats. Huang BS, et al. **Hypertension** 1996 Dec;28(6):1005–12
Differential central modulation of the baroreflex by salt loading in normotensive and spontaneously hypertensive rats. Ono A, et al. **Hypertension** 1997 Mar;29(3):808–14
Dietary salt intake modulates angiotensin II type 1 receptor gene expression. Schmid C, et al. **Hypertension** 1997 Apr; 29(4):923–9
Effect of supplemental sodium chloride, sodium phosphate, or hydrochloric acid in starter pig diets containing dried whey. Mahan DC, et al. **J Anim Sci** 1996 Jun;74(6):1217–22
Effect of iodized salt on thyroid volume of children living in an area previously characterized by moderate iodine deficiency. Aghini-Lombardi F, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1136–9
Interval mapping and congenic strains for a blood pressure QTL on rat chromosome 13. Zhang QY, et al. **Mamm Genome** 1997 Sep;8(9):636–41
Influence of different dietary salts on the cardiovascular and renal effects of moxonidine in spontaneously hypertensive rats. Mervaala EM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jul; 356(1):107–14
Amiloride inhibits taste nerve responses to NaCl and KCl in Sprague-Dawley and Fischer 344 rats. Minear MM, et al. **Physiol Behav** 1996 Aug;60(2):507–16
Body fluid alterations and organ hypertrophy in age-dependent salt hypertension of Dahl rats. Dobešová Z, et al. **Physiol Res** 1995;44(6):377–87
Influence of dietary sodium on the renal isoforms of 11 beta-hydroxysteroid dehydrogenase. Brem AS, et al. **Proc Soc Exp Biol Med** 1997 Apr;214(4):340–5

SODIUM CHLORIDE SOLUTION, HYPERTONIC see **SALINE SOLUTION, HYPERTONIC**

SODIUM CLOXACILLIN see **CLOXACILLIN**

SODIUM COMPOUNDS

Non enzymatic liver cells isolation: citrate-perchlorate technique. Camberos MC, et al. **Acta Physiol Pharmacol Ther Latinoam** 1996;46(2):144–8

DIAGNOSTIC USE

Bromide dilution in adults: optimal equilibration time after oral administration. Van Marken Lichtenbelt WD, et al. **J Appl Physiol** 1996 Aug;81(2):653–6
[In vivo test of thyroid radioactive iodide uptake, pertechnetate 99m uptake and thyroid scintigraphy] Ochi Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:317–20 (5 ref.) **(Jpn)**
[Significance of bromide levels in evaluation of the hemato-encephalic barrier during acute viral meningitis] Nikolić S, et al. **Srp Arh Celok Lek** 1996 Nov-Dec; 124(11-12):297–301 (Eng. Abstr.) **(Scc)**

PHARMACOLOGY

Perchlorate differentially potentiates excitation-contraction coupling of diaphragm muscle from mdx and control mice. Péréon Y, et al. **Acta Physiol Scand** 1996 Nov;158(3):287–94
BAY K 8644 and ClO4- potentiate caffeine contracture without Ca2+ release channel activation. Oba T, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C41–7
p70 S6 kinase is activated by sodium arsenite in adult rat cardiomyocytes: roles for phosphatidylinositol 3-kinase and p38 MAP kinase. Wang X, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):207–12
Thermal stability of human serum albumin by sodium halide salts. Pico GA. **Biochem Mol Biol Int** 1996 Feb;38(1):1–6
Molecular weight determination of lipoprotein(a) [Lp(a)] in solutions containing either NaBr or D2O: relevance to the number of apolipoprotein(a) subunits in Lp(a). Fless GM, et al. **Biochemistry** 1997 Jan 7;36(1):233–8
Oxidative and chemical stress mimic insulin by selectively inhibiting the expression of phosphoenolpyruvate carboxykinase in hepatoma cells. Sutherland C, et al. **Diabetes** 1997 Jan;46(1):17–22
Arsenic induces oxidant stress and NF-kappa B activation in cultured aortic endothelial cells. Barchowsky A, et al. **Free Radic Biol Med** 1996;21(6):783–90
Differential activation of ERK, JNK/SAPK and P38/CSBP/RK map kinase family members during the cellular response to arsenite. Liu Y, et al. **Free Radic Biol Med** 1996;21(6):771–81
Mechanisms involved in sodium arsenite-induced apoptosis of human neutrophils. Watson RW, et al. **J Leukoc Biol** 1996 Nov;60(5):625–32
Transkinetoplastidy in arsenite-resistant Leishmania major. Chiang SC, et al. **Mol Biochem Parasitol** 1996 Nov 12; 82(1):121–4

TOXICITY

Contribution to the mechanism of chromate nephrotoxicity in developing rats: EPR investigations. Appenroth D, et al. **Arch Toxicol** 1996;71(1-2):25–30
Prenatal exposure to sodium bromide affects the postnatal growth and brain development. Disse M, et al. **J Hirnforsch** 1996;37(1):127–34
Inhibition of clastogenic effects of arsenic through continued oral administration of garlic extract in mice in vivo. Choudhury AR, et al. **Mutat Res** 1997 Aug 14; 392(3):237–42
Polymerase chain reaction-based deletion analysis of spontaneous and arsenite-enhanced gpt mutants in CHO-AS52 cells. Meng Z, et al. **Mutat Res** 1996 Sep 23; 356(2):255–9
Disruption of microtubule assembly and spindle formation as a mechanism for the induction of aneuploid cells by sodium arsenite and vanadium pentoxide. Ramírez P, et al. **Mutat Res** 1997 Jun;386(3):291–8
Effect of hepatic methyl donor status on urinary excretion and DNA damage in B6C3F1 mice treated with sodium arsenite. Tice RR, et al. **Mutat Res** 1997 Jun;386(3):315–34
Influence of maternal stress on the effects of prenatal exposure to methylmercury and arsenic on postnatal development and behavior in mice: a preliminary evaluation. Colomina MT, et al. **Physiol Behav** 1997 Mar; 61(3):455–9
Arsenic induces overexpression of growth factors in human keratinocytes. Germolec DR, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):308–18
Expression of the 25-kDa heat-shock protein (HSP27) correlates with resistance to the toxicity of cadmium chloride, mercuric chloride, cis-platinum(II)-diammine dichloride, or sodium arsenite in mouse embryonic stem cells transfected with sense or antisense HSP27 cDNA. Wu W, et al. **Toxicol Appl Pharmacol** 1996 Nov; 141(1):330–9
Glutathione peroxidase and catalase modulate the genotoxicity of arsenite. Wang TS, et al. **Toxicology** 1997 Sep 5;121(3):229–37

SODIUM CROMOGLYCATE see **CROMOLYN SODIUM**

SODIUM CYANIDE

CHEMISTRY

Temperature effects in cyanolysis using elemental sulfur. Lieske CN, et al. **J Appl Toxicol** 1996 Mar-Apr;16(2):171–5

PHARMACOLOGY

Metabolic inhibitors affect the conductance of low voltage-activated calcium channels in brain capillary endothelial cells. Delpiano MA. **Adv Exp Med Biol** 1996; 410:109–13
Pituitary and adrenals are required for hyperglycemic reflex initiated by stimulation of CBR with cyanide. Alvarez-Buylla R, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R392–9
Thermoregulatory effects of cyanide and azide in the toad, Bufo marinus. Branco LG, et al. **Am J Physiol** 1996 Jan; 270(1 Pt 2):R169–73
Blocking ATP-sensitive K+ channel during metabolic inhibition impairs muscle contractility. Gramolini A, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1936–46
Cyanide suppression of inwardly rectifying K+ channels in guinea pig chromaffin cells involves dephosphorylation. Inoue M, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):C137–47
Survival of metabolically inhibited ventricular myocytes is enhanced by inhibition of rigor and SR Ca2+ cycling. Koyama T, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H643–50
NADH levels and cell morphology in isolated cardiomyocytes exposed to chemical hypoxia. Griffiths EJ. **Biochem Soc Trans** 1997 Feb;25(1):61S
Antagonism of relaxing responses to nitrovasodilators by cyanide in rabbit isolated aortic preparation. Nakanishi H, et al. **Fukushima J Med Sci** 1995 Dec;41(2):125–34
Reflex cardiac dromotropic responses to stimulation of the carotid and aortic chemoreceptors in the anaesthetized cat. Jones JF, et al. **J Physiol (Lond)** 1997 Jul 15;502 (Pt 2):461–7
Suppression of potassium currents by cyanide on the mouse motor nerve terminals. Chao KF, et al. **Neurosci Lett** 1996 Jan 19;203(2):105–8
Cardioventilatory responses to hypoxia and NaCN in the neotenous axolotl. McKenzie DJ, et al. **Respir Physiol** 1996 Dec;106(3):255–62

SODIUM CYANIDE

TOXICITY

Determination of intracellular Ca2+ concentration can be a useful tool to predict neuronal damage and neuroprotective properties of drugs. Ferger D, et al. **Brain Res** 1996 Sep 2;732(1–2):87–94

Different response of cerebral and non–cerebral endothelial cells to cytotoxic hypoxia. Ahlemeyer B, et al. **Neurochem Int** 1997 Jul;31(1):39–44

SODIUM DEXTRAN SULFATE see **DEXTRAN SULFATE**

SODIUM, DIETARY

Endogenous inhibitor of Na–K–Cl cotransport system in inbred Dahl rats. Alvarez–Guerra M, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):F356–63

Effect of sympathetic and angiotensin–aldosterone systems on renal salt conservation in the rat. Honrath U, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F538–44

Regional blood flow in Dahl–Iwai salt–sensitive rats and the effects of dietary L–arginine supplementation. Tomohiro A, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1013–9

Resistance to mineralocorticoids in Wistar–Furth rats. Ullian ME, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1454–61

Role of brain angiotensin II in thirst and sodium appetite of sheep. Weisinger RS, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R187–96

Absence of a salt (NaCl) preference or appetite in sodium–replete or depleted kittens. Yu S, et al. **Appetite** 1997 Aug;29(1):1–10

Chronic intermittent salt loading enhances functional recovery from polydipsia and survival of vasopressinergic cells in the hypothalamic supraoptic nucleus following transection of the hypophysial stalk. Huang YS, et al. **Brain Res** 1996 Sep 2;732(1–2):95–105

Fat, cholesterol, fiber and sodium intakes of US population: evaluation of diets reported in 1987–88 Nationwide Food Consumption Survey. Ganji V, et al. **Eur J Clin Nutr** 1995 Dec;49(12):915–20

Salt sensitivity and insulin resistance in normotensives. Gruska S, et al. **Exp Clin Endocrinol Diabetes** 1997;105 Suppl 2:22–6

Long–term effects of neonatal sodium restriction on blood pressure [published erratum appears in Hypertension 1997 May;29(5):1211] Geleijnse JM, et al. **Hypertension** 1997 Apr;29(4):913–7

Ibotenate lesion of the medial hypothalamus alters the salt intake and pressor responses to activation of the median preoptic nucleus in rats. do Vale CF, et al. **J Physiol Paris** 1997 Feb;91(1):31–7

More on dietary sodium and blood pressure [letter; comment] Stamler J, et al. **JAMA** 1997 May 28;277(20):1594–6. Comment on: JAMA 1996 Nov 13;276(18):1467; discussion 1469–70. Comment on: JAMA 1996 Nov 13;276(18):1467–8; discussion 1469–70. Comment on: JAMA 1996 Nov 13;276(18):1468–9; discussion 1469–70. Comment on: JAMA 1996 Nov 13;276(18):1469; discussion 1469–70.

Deoxycorticosterone acetate (DOCA)–induced sodium appetite in group–housed mice. Rodd ZA, et al. **Physiol Behav** 1996 Nov;60(5):1387–9

[Sodium and hypertension] de Wardener HE. **Arch Mal Coeur Vaiss** 1996 Sep;89 Spec No 4:9–15 (27 ref.) (Eng. Abstr.) **(Fre)**

ADMINISTRATION & DOSAGE

The effects of enalapril on the natriuretic response evoked by an oral sodium load in sodium deprived normotensive and hypertensive rats. Mu JY, et al. **Acta Physiol Scand** 1997 Jun;160(2):157–64

Sodium intake trends and food choices. Engstrom A, et al. **Am J Clin Nutr** 1997 Feb;65(2 Suppl):704S–707S

Dietary sodium and blood pressure: interactions with other nutrients. Kotchen TA, et al. **Am J Clin Nutr** 1997 Feb; 65(2 Suppl):708S–711S (61 ref.)

Angiotensin II: a humoral mediator for the gastric sodium monitor. Duggan KA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F406–10

Effects of timing of salt intake to 24–hour blood pressure and its circadian rhythm. Itoh K, et al. **Ann N Y Acad Sci** 1996 Aug 15;783:324–5

Dietary sodium and potassium, socioeconomic status and blood pressure in a Chinese population. Tian HG, et al. **Appetite** 1996 Jun;26(3):235–46

Effect of physical exercise on renal response to head–out water immersion. Rim H, et al. **Appl Human Sci** 1997 Jan; 16(1):35–43

Effects of weight loss and sodium reduction intervention on blood pressure and hypertension incidence in overweight people with high–normal blood pressure. The Trials of Hypertension Prevention, phase II. The Trials of Hypertension Prevention Collaborative Research Group [see comments] **Arch Intern Med** 1997 Mar 24; 157(6):657–67. Comment in: Arch Intern Med 1997 Mar 24;157(6):596–7.

Lessons from the Trials of Hypertension Prevention, phase II. Energy intake is more important than dietary sodium in the prevention of hypertension [editorial; comment] Pickering TG. **Arch Intern Med** 1997 Mar 24;157(6):596–7 . Comment on: Arch Intern Med 1997 Mar 24;157(6):657–67.

Salt intake and blood pressure in rural and metropolitan Mexico. Sánchez–Castillo CP, et al. **Arch Med Res** 1996 Winter;27(4):559–66

Gustatory functions, sodium appetite, and conditioned taste aversion survive excitotoxic lesions of the thalamic taste area. Scalera G, et al. **Behav Neurosci** 1997 Jun; 111(3):633–45

The neuronal role of angiotensin II in thirst, sodium appetite, cognition and memory. Mosimann R, et al. **Biol Rev Camb Philos Soc** 1996 Nov;71(4):545–59 (117 ref.)

Intersalt data. Data linking sodium intake to subsequent morbid and fatal outcomes must be studied [letter] Alderman M. **BMJ** 1997 Aug 23;315(7106):484–5; discussion 487

Intersalt data. Correction for regression dilution bias in Intersalt study was misleading [letter] Davey Smith G, et al. **BMJ** 1997 Aug 23;315(7106):485–6; discussion 487

Intersalt data. Epidemiological studies should be designed to reduce correction needed for measurement error to a minimum [letter] Day NE. **BMJ** 1997 Aug 23; 315(7106):485; discussion 487

Intersalt data. Collaborative efforts must be made to reduce sodium in diet [letter] Grimm RH. **BMJ** 1997 Aug 23; 315(7106):487

Intersalt data. Cross cultural studies such as Intersalt study cannot be used to infer causality [letter] Le Fanu J. **BMJ** 1997 Aug 23;315(7106):484; discussion 487

Intersalt data sodium contents of restaurant foods in United States are high [letter] Liebman BF, et al. **BMJ** 1997 Aug 23;315(7106):488

Intersalt data. Conclusions drawn in paper "revisiting" Intersalt data are of questionable validity [letter] Macnalr A. **BMJ** 1997 Aug 23;315(7106):485; discussion 487

Intersalt data. Science demands data sharing [letter] Rennolls K. **BMJ** 1997 Aug 23;315(7106):486–7

Intersalt data. Slow decremental change in dietary sodium load in whole populations is needed [letter] Watt G, et al. **BMJ** 1997 Aug 23;315(7106):486; discussion 487

Short–term effects of dietary sodium intake on bone metabolism in postmenopausal women measured using urinary deoxypyridinoline excretion. Lietz G, et al. **Br J Nutr** 1997 Jul;78(1):73–82

Low–sodium diet in pregnancy: effects on blood pressure and maternal nutritional status. van der Maten GD, et al. **Br J Nutr** 1997 May;77(5):703–20

Paraventricular nucleus administration of DuP753 or PD123319 inhibits the effects of angiotensin on water and sodium intake. do–Prado MH, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1499–502

Effect of salt intake on excretion of endogenous ouabain–like substance, measured by RIA. Semra YK, et al. **Clin Chem** 1996 Dec;42(12):1949–54

Effects of dietary salt and angiotensin–converting enzyme inhibitor on ATP–driven Ca pump and Na/Ca exchange in aortic rings of Dahl rats. Ashida T, et al. **Clin Exp Hypertens** 1996 Aug;18(6):851–71

Aldosterone, salt and cardiac fibrosis. Funder JW. **Clin Exp Hypertens** 1997 Jul–Aug;19(5–6):885–99 (25 ref.)

Stimulation of gastric osmoreceptors but not the sodium monitor increases renal angiotensin–converting enzyme activity. Ye VZ, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):463–4

Dietary salt increases first–pass elimination of oral quinidine. Darbar D, et al. **Clin Pharmacol Ther** 1997 Mar; 61(3):292–300

The role of L–aromatic amino acid decarboxylase in serotonin–stimulated aldosterone secretion in response to salt intake. Burns N, et al. **Endocr Res** 1996 Nov;22(4):577–8

AT1 receptors and cell proliferation in rat adrenals: effects of angiotensin infusion, low sodium diet and losartan. McEwan PE, et al. **Endocr Res** 1996 Nov;22(4):369–71

Sexual dimorphism of sodium–sensitive renal–wrap hypertension. Haywood JR, et al. **Hypertension** 1997 Sep; 30(3 Pt 2):667–71

Role of endothelin in mediating the attenuated renal hemodynamics in Dahl salt–sensitive hypertension. Kassab S, et al. **Hypertension** 1997 Sep;30(3 Pt 2):682–6

Effects of dietary sodium and magnesium on cyclosporin A–induced hypertension and nephrotoxicity in spontaneously hypertensive rats. Mervaala EM, et al. **Hypertension** 1997 Mar;29(3):822–7

Angiotensin II blockade does not prevent renal effects of L–NAME in sodium–repleted humans. Montanari A, et al. **Hypertension** 1997 Sep;30(3 Pt 2):557–62

Energy and macronutrient consumption of elementary school children served modified lower fat and sodium lunches or standard higher fat and sodium lunches. Whatley JE, et al. **J Am Coll Nutr** 1996 Dec;15(6):602–7

Profitability and acceptability of fat– and sodium–modified hot entrees in a worksite cafeteria. Perlmutter CA, et al. **J Am Diet Assoc** 1997 Apr;97(4):391–5

Commonly prescribed salt intake in continuous ambulatory peritoneal dialysis patients is too restrictive: results of a double–blind crossover study. Fine A, et al. **J Am Soc Nephrol** 1997 Aug;8(8):1311–4

Urinary dopamine outputs do not rise in healthy Chinese subjects during gradually increasing oral sodium intake over 8 days. Chan TY, et al. **J Auton Pharmacol** 1996 Jun; 16(3):155–9

Effects of changes in dietary sodium intake on plasma brain natriuretic peptide levels in patients with autosomal dominant polycystic kidney disease. Buckley MG, et al. **J Hum Hypertens** 1996 Jun;10(6):415–6

Sodium, potassium and blood pressure [letter; comment] Alderman M. **J Hypertens** 1996 Dec;14(12):1491. Comment on: J Hypertens 1996 Jun;14(6):737–41.

High end tidal CO2 association with blood pressure response to sodium loading in older adults. Anderson DE, et al. **J Hypertens** 1996 Sep;14(9):1073–9

High sodium sensitivity and glomerular hypertension/hyperfiltration in primary aldosteronism. Kimura G, et al. **J Hypertens** 1996 Dec;14(12):1463–8

Sodium intake regulates renin gene expression differently in the hypothalamus and kidney of rats. Nishimura M, et al. **J Hypertens** 1997 May;15(5):509–16

Hpa II polymorphism of the atrial natriuretic peptide gene and the blood pressure response to salt intake in normotensive men. Schorr U, et al. **J Hypertens** 1997 Jul; 15(7):715–8

Regulation of type 1 angiotensin II receptor and its subtype gene expression in kidney by sodium loading and angiotensin II infusion. Wang DH, et al. **J Hypertens** 1996 Dec;14(12):1409–15

The minimum sodium requirement of growing kittens defined on the basis of plasma aldosterone concentration. Yu S, et al. **J Nutr** 1997 Mar;127(3):494–501

Changes of the plasma endothelin in adaptation to increased salt intake in rats. Oh HS, et al. **Korean J Intern Med** 1997 Jan;12(1):62–6

Increased urinary calcium excretion potentiates bone turnover in oophorectomized rats. Mason RA, et al. **Miner Electrolyte Metab** 1997;23(1):38–42

Hemodialysis increases the preference for salt in soup. Leshem M, et al. **Physiol Behav** 1997 Jan;61(1):65–9

Na depletion–induced Na appetite of sheep is independent of brain angiotensin II. Weisinger RS, et al. **Physiol Behav** 1997 Jul;62(1):43–51

Idazoxan and the effect of intracerebroventricular oxytocin or vasopressin on sodium intake of sodium–depleted rats. Sato MA, et al. **Regul Pept** 1997 Apr 30;69(3):137–42

Dietary sodium and plasma volume levels with exercise. Luetkemeier MJ, et al. **Sports Med** 1997 May;23(5):279–86 (37 ref.)

ADVERSE EFFECTS

The great salt war [editorial] Alderman MH. **Am J Hypertens** 1997 May;10(5 Pt 1):584–5

Factors influencing LVM in hypertensive type–1 diabetic patients. Gerdts E, et al. **Blood Press** 1997 Jul;6(4):197–202

Salt sensitivity in hypertensive type–1 diabetes mellitus. Gerdts E, et al. **Blood Press** 1996 Mar;5(2):78–85

Benidipine counteracts sodium–induced alterations in systemic and regional hemodynamics. Shimamoto H, et al. **Blood Press** 1997 Jan;6(1):18–23

Salt sensitivity and insulin resistance: Is there a link? Sharma AM, et al. **Blood Press Suppl** 1996;1:59–63 (33 ref.)

Race and physical activity: cardiovascular and renal response to sodium loading. Thompson GD, et al. **Ethn Dis** 1996 Autumn;6(3–4):255–65

Baroreflex impairment by low sodium diet in mild or moderate essential hypertension. Grassi G, et al. **Hypertension** 1997 Mar;29(3):802–7

Heart rate and blood pressure variabilities in salt–sensitive hypertension. Piccirillo G, et al. **Hypertension** 1996 Dec; 28(6):944–52

Dietary salt, urinary calcium, and bone loss [see comments] Massey LK, et al. **J Bone Miner Res** 1996 Jun;11(6):731–6 (50 ref.). Comment in: J Bone Miner Res 1997 Feb;12(2):298–9.

Effects of dietary sodium substitution with potassium and magnesium in hypertensive type II diabetics: a randomised blind controlled parallel study. Gilleran G, et al. **J Hum Hypertens** 1996 Aug;10(8):517–21

Does high salt intake cause hyperfiltration in patients with essential hypertension? Mallamaci F, et al. **J Hum Hypertens** 1996 Mar;10(3):157–61

Blunted parasympathetic modulation in salt–sensitive patients with essential hypertension: evaluation by power–spectral analysis of heart–rate variability. Minami J, et al. **J Hypertens** 1997 Jul;15(7):727–35

Asthma and consumption of salt [letter] Matthews J, et al. **Lancet** 1997 Sep 27;350(9082):957

ANTAGONISTS & INHIBITORS

Benidipine counteracts sodium–induced alterations in systemic and regional hemodynamics. Shimamoto H, et al. **Blood Press** 1997 Jan;6(1):18–23

BLOOD

Evidence that high dose cortisol–induced Na+ retention in man is not mediated by the mineralocorticoid receptor. Whitworth JA, et al. **J Endocrinol Invest** 1995 Jul–Aug; 18(7):586–91

CHEMISTRY see SODIUM/chemistry

METABOLISM

Sodium induced regulation of angiotensin receptor 1A and 1B in rat kidney. Wang DH, et al. **Adv Exp Med Biol** 1996; 396:33–7

Modulation by low sodium intake of glomerular response to cicletanine and atrial natriuretic factor. Kalinowski L,

et al. **Br J Pharmacol** 1997 Jun;121(4):635–42

PHARMACOLOGY

Synergistic vascular effects of dietary sodium supplementation and angiotensin II administration. Csiky B, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1275–82

Dietary sodium effects on renin and angiotensinogen gene expression in preweanling WKY and SHR. Kirby RF, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1439–46

Role of nitric oxide in the arterial pressure and renal adaptations to long-term changes in sodium intake. Manning RD Jr, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1162–9

Factors and molecular mechanisms involved in the regulation of chicken colonic luminal membrane Na(+)-linked transport systems. Wood IS, et al. **Biochem Soc Trans** 1996 May;24(2):248S

Salt supplementation, growth, and nephrocalcinosis in the furosemide-treated weanling rat. Gratny LL, et al. **Biol Neonate** 1997;71(1):37–45

Pressor and sympathetic responses to excitatory amino acids are not augmented in the ventrolateral medulla of Dahl salt-sensitive rats. Tsuchihashi T, et al. **Brain Res** 1997 Mar 7;750(1-2):195–200

Dietary sodium intake and cardiac nerve cell hypertrophy in Wistar rats. Gama EF, et al. **Braz J Med Biol Res** 1996 Mar;29(3):363–5

Incidence of nursing sickness and biochemical observations in lactating mink with and without dietary salt supplementation. Clausen TN, et al. **Can J Vet Res** 1996 Oct;60(4):271–6

Sodium restriction shifts circadian rhythm of blood pressure from nondipper to dipper in essential hypertension. Uzu T, et al. **Circulation** 1997 Sep 16;96(6):1859–62

The effect of dietary sodium on calcium metabolism in premenopausal and postmenopausal women. Evans CE, et al. **Eur J Clin Nutr** 1997 Jun;51(6):394–9

Restriction of dietary sodium may enhance nitric oxide production in rats. Nishimura M, et al. **Hypertens Res** 1997 Mar;20(1):57–60

Regulation of angiotensin II receptor AT1 subtypes in renal afferent arterioles during chronic changes in sodium diet. Ruan X, et al. **J Clin Invest** 1997 Mar 1;99(5):1072–81

Effect of a chronic high-salt diet on whole-body and organ sodium contents of Dahl rats. Tsunooka K, et al. **J Hypertens** 1997 Aug;15(8):851–6

Dietary sodium and blood pressure [letter; comment] Kotchen TA, et al. **JAMA** 1996 Nov 13;276(18):1468; discussion 1469–70. Comment on: JAMA 1996 May 22–29;275(20):1590–7.

Dietary sodium and blood pressure [letter; comment] [see comments] MacGregor GA, et al. **JAMA** 1996 Nov 13; 276(18):1468–9; discussion 1469–70. Comment on: JAMA 1996 May 22–29;275(20):1590–7. Comment in: JAMA 1997 May 28;277(20):1594–6.

Dietary sodium and blood pressure [letter; comment] [see comments] Messerli FH, et al. **JAMA** 1996 Nov 13; 276(18):1469; discussion 1469–70. Comment on: JAMA 1996 May 22–29;275(20):1590–7. Comment in: JAMA 1997 May 28;277(20):1594–6.

Dietary sodium and blood pressure [letter; comment] [see comments] Stamler J. **JAMA** 1996 Nov 13;276(18):1467; discussion 1469–70. Comment on: JAMA 1996 May 22–29;275(20):1590–7. Comment in: JAMA 1997 May 28;277(20):1594–6.

Dietary sodium and blood pressure [letter; comment] [see comments] Whelton PK, et al. **JAMA** 1996 Nov 13; 276(18):1467–8; discussion 1469–70. Comment on: JAMA 1996 May 22–29;275(20):1590–7. Comment in: JAMA 1997 May 28;277(20):1594–6.

Kidney, salt, and hypertension: how and why. Kurokawa K. **Kidney Int Suppl** 1996 Jun;55:S46–51 (27 ref.)

TGF and nitric oxide: effects of salt intake and salt-sensitive hypertension. Wilcox CS, et al. **Kidney Int Suppl** 1996 Jun; 55:S9–13

Alterations in Ca2+-ATPase activity and calcium-binding protein regucalcin mRNA expression in the kidney cortex of rats with saline ingestion. Shinya N, et al. **Mol Cell Biochem** 1997 May;170(1-2):17–22

Renal functional response to protein loading in type 1 (insulin-dependent) diabetic patients on normal or high salt intake. Lopes de Faria JB, et al. **Nephron** 1997;76(4):411–7

The dopaminuric response to high salt diet in insulin-dependent diabetes mellitus and in family history of hypertension. Rudberg S, et al. **Pediatr Nephrol** 1997 Apr;11(2):169–73

Regulation of the renal response to atrial natriuretic peptide by sodium intake in preweaned rats. Chevalier RL, et al. **Pediatr Res** 1996 Aug;40(2):294–9

Influence of salt intake on atrial natriuretic peptide gene expression in rats. Wolf K, et al. **Pflugers Arch** 1997 Apr; 433(6):809–16

Gene expression of central and peripheral renin-angiotensin system components upon dietary sodium intake in rats. Jo H, et al. **Regul Pept** 1996 Dec 3;67(2):115–21

Influence of increased sodium intake on cerebral excitability. Uluitu M, et al. **Rom J Physiol** 1995 Jan-Dec;32(1-4):11–33

THERAPEUTIC USE

Baroreflex impairment by low sodium diet in mild or moderate essential hypertension. Grassi G, et al. **Hypertension** 1997 Mar;29(3):802–7

TOXICITY

Effects of dietary sodium and magnesium on cyclosporin A-induced hypertension and nephrotoxicity in spontaneously hypertensive rats. Mervaala EM, et al. **Hypertension** 1997 Mar;29(3):822–7

SODIUM DODECYL SULFATE

Modification of the Laemmli sodium dodecyl sulfate-polyacrylamide gel electrophoresis procedure to eliminate artifacts on reducing and nonreducing gels. Cannon-Carlson S, et al. **Anal Biochem** 1997 Mar 1; 246(1):146–8

Recovery of biologically active proteins detected with imidazole-sodium dodecyl sulfate-zinc (reverse stain) on sodium dodecyl sulfate gels. Hardy E, et al. **Anal Biochem** 1996 Aug 15;240(1):150–2

The accessibility of proteins in protein-SDS complexes. Law CJ, et al. **Biochem Soc Trans** 1996 May;24(2):323S

Effect of temperature and viscosity of sieving medium on electrophoretic behavior of sodium dodecyl sulfate-proteins on capillary electrophoresis in presence of pullulan. Nakatani M, et al. **Electrophoresis** 1996 Jul; 17(7):1210–3

Separation mechanism of pullulan solution-filled capillary electrophoresis of sodium dodecyl sulfate-proteins. Nakatani M, et al. **Electrophoresis** 1996 Oct;17(10):1584–6

Optimization of selectivity and resolution in micellar electrokinetic capillary chromatography with a mixed micellar system of sodium dodecyl sulfate and sodium cholate. Wiedmer SK, et al. **Electrophoresis** 1996 Dec; 17(12):1931–7

High yield elution of proteins from sodium dodecyl sulfate-polyacrylamide gels at the low-picomole level. Application to N-terminal sequencing of a scarce protein and to in-solution biological activity analysis of on-gel renatured proteins. Castellanos-Serra LR, et al. **J Protein Chem** 1997 Jul;16(5):415–9

SDS polyacrylamide gel electrophoresis for N-terminal protein sequencing. Smith BJ. **Methods Mol Biol** 1997; 64:17–24

Interference by cellular melanin with assay of DNA-protein crosslinks by the potassium dodecyl sulfate precipitation method. Goodman RM, et al. **Pigment Cell Res** 1996 Apr; 9(2):68–71

[Detection of protein kinase activities toward oligopeptides in sodium dodecyl sulfate-polyacrylamide gel] Kameshita I, et al. **Seikagaku** 1996 Sep;68(9):1564–8 **(Jpn)**

[Effect of formation of surface complex between hydroxypropylcellulose and sodium dodecylsulfate on dispersion/flocculation of O/W-type emulsion of soybean oil] Shimabayashi S, et al. **Yakugaku Zasshi** 1996 Nov; 116(11):892–9 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Measurement of sodium lauryl sulfate-induced skin irritation. Treffel P, et al. **Acta Derm Venereol** 1996 Sep;76(5):341–3

Differential irritant skin responses to tandem application of topical retinoic acid and sodium lauryl sulphate: II. Effect of time between first and second exposure. Ale SI, et al. **Br J Dermatol** 1997 Aug;137(2):226–33

An outbreak of hand dermatitis among workers using sodium lauryl sulfate for skin cleansing. Dihoom M, et al. **Contact Dermatitis** 1996 May;34(5):366–7

Different pathways in irritant contact eczema? Early differences in the epidermal elemental content and expression of cytokines after application of 2 different irritants. Grängsjö A, et al. **Contact Dermatitis** 1996 Dec; 35(6):355–60

Effect of a topical corticosteroid, a retinoid and a vitamin D3 derivative on sodium dodecyl sulphate induced skin irritation. Le TK, et al. **Contact Dermatitis** 1997 Jul; 37(1):19–26

Crescendo reactions to sodium lauryl sulfate and retinoic acid in irritant patch tests. Löffler H, et al. **Contact Dermatitis** 1997 Jul;37(1):47–8

Human barrier formation and reaction to irritation. Fartasch M. **Curr Probl Dermatol** 1995;23:95–103

Efficacy of barrier creams. Grunewald AM, et al. **Curr Probl Dermatol** 1995;23:187–97

Barrier recompensation mechanisms. Grunewald AM, et al. **Curr Probl Dermatol** 1996;25:206–13

An immunohistochemical study on mild skin irritation induced by a single application of a low-molarity sodium dodecyl sulfate solution: keys to the prevention of irritant contact dermatitis. Le M, et al. **Curr Probl Dermatol** 1996; 25:67–77

Modulation of integrins on epidermal keratinocytes in vivo and on in vitro reconstructed epidermis. von den Driesch P, et al. **Curr Probl Dermatol** 1995;23:114–20

Horny layer thickness as assessed functionally does not predict sodium lauryl sulphate skin irritation. Zarafonitis G, et al. **Curr Probl Dermatol** 1995;23:176–9

Irritant reactivity in noncutaneous atopy [letter; comment] Hanifin JM, et al. **J Am Acad Dermatol** 1997 Jul;37(1):139 . Comment on: J Am Acad Dermatol 1996 Jul;35(1):47–52.

Increased human gingival blood flow induced by sodium lauryl sulfate. Herlofson BB, et al. **J Clin Periodontol** 1996 Nov;23(11):1004–7

Oral mucosal desquamation of pre- and post-menopausal women. A comparison of response to sodium lauryl sulphate in toothpastes. Herlofson BB, et al. **J Clin Periodontol** 1996 Jun;23(6):567–71

ANALYSIS

Concentration of, and SDS removal from proteins isolated from multiple two-dimensional electrophoresis gels. Dainese Hatt P, et al. **Eur J Biochem** 1997 Jun 1; 246(2):336–43

Clearance of sodium lauryl sulphate from the oral cavity. Fakhry-Smith S, et al. **J Clin Periodontol** 1997 May; 24(5):313–7

CHEMISTRY

An effect of polyethylene glycol 8000 on protein mobility in sodium dodecyl sulfate-polyacrylamide gel electrophoresis and a method for eliminating this effect. Odom OW, et al. **Anal Biochem** 1997 Feb 15;245(2):249–52

Refolding of SDS- and thermally denatured MM-creatine kinase using cyclodextrins. Couthon F, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):854–60

Structural determinants of cobrotoxin affect its mobility on sodium dodecyl sulfate polyacrylamide gel. Chang LS, et al. **Biochem Mol Biol Int** 1996 Dec;40(6):1227–32

Three-dimensional structure and position of porcine motilin in sodium dodecyl sulfate micelles determined by 1H NMR. Jarvet J, et al. **Biochemistry** 1997 Jul 1;36(26):8153–63

Reversed-phase chromatographic study of the binding of polychlorinated biphenyls to cyclodextrins and sodium dodecylsulphate. Forgács E, et al. **Biomed Chromatogr** 1996 Mar-Apr;10(2):92–4

Sodium dodecyl sulfate-polyacrylamide gel electrophoretic method for assessing the quaternary state and comparative thermostability of avidin and streptavidin. Bayer EA, et al. **Electrophoresis** 1996 Aug;17(8):1319–24

Subunit c from the sodium-ion-translocating F1F0-ATPase of Propionigenium modestum--production, purification and properties of the protein in dodecylsulfate solution. Matthey U, et al. **Eur J Biochem** 1997 Aug 1;247(3):820–5

Antigen retrieval in cryostat tissue sections and cultured cells by treatment with sodium dodecyl sulfate (SDS). Brown D, et al. **Histochem Cell Biol** 1996 Apr;105(4):261–7

Comparison of inactivation and conformational changes of aminoacylase during denaturation in lithium dodecylsulphate solutions. He B, et al. **Int J Biol Macromol** 1997 Feb;20(1):53–62

Kinetics and thermodynamics studies on the interaction of D-amino acid oxidase and sodium n-dodecyl sulphate in the presence and absence of flavin adenine dinucleotide. Shareghi B, et al. **Int J Biol Macromol** 1996 Jul;19(1):9–13

Apparent formation of sodium dodecyl sulfate-stable complexes between serpins and 3,4-dichloroisocoumarin-inactivated proteinases is due to regeneration of active proteinase from the inactivated enzyme. Olson ST, et al. **J Biol Chem** 1997 May 16; 272(20):13338–42

Rheological studies on the solubilization by the surfactant SDS of complexes between three acidic polysaccharides and an organic base chloride. Roig MG, et al. **J Biomater Sci Polym Ed** 1997;8(7):493–516

Semipreparative isolation of collagen types I, II, III and V by sodium dodecyl sulfate-polyacrylamide gel electrophoresis and electroelution. Açil Y, et al. **J Chromatogr A** 1997 Jan 17;758(2):313–8

Chromatographic behaviour in reversed-phase high-performance liquid chromatography with micellar and submicellar mobile phases: effects of the organic modifier. Fischer J, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):3–19

Charge-transfer chromatographic study of the interaction of antibiotics with sodium dodecylsulfate. Forgács E, et al. **J Pharm Biomed Anal** 1997 Jun;15(9-10):1295–302

Study on the fluorescence system of chlortetracycline-Eu-TOPO-sodium dodecyl sulfonate and the determination of chlortetracycline. Yang J, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1833–8

Dissolution media for in vitro testing of water-insoluble drugs: effect of surfactant purity and electrolyte on in vitro dissolution of carbamazepine in aqueous solutions of sodium lauryl sulfate. Crison JR, et al. **J Pharm Sci** 1997 Mar; 86(3):384–8

Dissolution behaviour of sulphonamides into sodium dodecyl sulfate micelles: a thermodynamic approach. Mall S, et al. **J Pharm Sci** 1996 Jan;85(1):75–8

Denaturation of MM-creatine kinase by sodium dodecyl sulfate. Couthon F, et al. **J Protein Chem** 1996 Aug; 15(6):527–37

Perturbation of conformational dynamics, enzymatic activity, and thermostability of beta-glycosidase from archaeon Sulfolobus solfataricus by pH and sodium dodecyl sulfate detergent. D'Auria S, et al. **Proteins** 1997 Jan;27(1):71–9

DIAGNOSTIC USE

Comparison of 2 different methods for enhancing the reaction to nickel sulfate patch tests in negative reactors. Seidenari S, et al. **Contact Dermatitis** 1996 Nov;35(5):308

[The sodium lauryl sulfate test. A noninvasive functional evaluation of skin hypersensitivity] Löffler H, et al. **Hautarzt** 1996 Nov;47(11):832–8 (Eng. Abstr.) **(Ger)**

SODIUM DODECYL SULFATE

ISOLATION & PURIFICATION

Complete removal and exchange of sodium dodecyl sulfate bound to soluble and membrane proteins and restoration of their activities, using ceramic hydroxyapatite chromatography. Dong M, et al. **Anal Biochem** 1997 May 1;247(2):333–41

Automated on-line ionic detergent removal from minute protein/peptide samples prior to liquid chromatography-electrospray mass spectrometry. Vissers JP, et al. **J Chromatogr B Biomed Appl** 1996 Nov 15; 686(2):119–28

METABOLISM

Effect of topical laurocapram (Azone) on the in vitro percutaneous permeation of sodium lauryl sulfate using human skin. Szolar-Platzer C, et al. **Acta Derm Venereol** 1996 May;76(3):182–5

Intestinal absorption of sodium dodecyl sulfate in the rodent: evidence for paracellular absorption. Amelsberg A, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G498–506

Stream periphytic biodegradation of the anionic surfactant C12-alkyl sulfate at environmentally relevant concentrations. Lee DM, et al. **Ecotoxicol Environ Saf** 1997 Apr;36(3):288–96

PHARMACOLOGY

The effect of two toothpaste detergents on the frequency of recurrent aphthous ulcers. Herlofson BB, et al. **Acta Odontol Scand** 1996 Jun;54(3):150–3

In vitro calcium ion turnover in otoconia of the guinea pig. Takumida M, et al. **Auris Nasus Larynx** 1997 Apr; 24(2):119–24

Effects of temperature and SDS on the structure of beta-glycosidase from the thermophilic archaeon Sulfolobus solfataricus. D'auria S, et al. **Biochem J** 1997 May 1;323 (Pt 3):833–40

Differences in mechanisms for cell-free NADPH oxidase activation between arachidonate and sodium dodecyl sulfate. Okamura N, et al. **Biol Pharm Bull** 1996 Sep; 19(9):1130–5

Effects of all-trans retinoic acid and sodium lauryl sulphate on the permeability of human skin in vitro. Effendy I, et al. **Br J Dermatol** 1996 Sep;135(3):428–32

Sodium lauryl sulfate (SLS) induced irritant contact dermatitis: a correlation study between ceramides and in vivo parameters of irritation. di Nardo A, et al. **Contact Dermatitis** 1996 Aug;35(2):86–91

Sodium lauryl sulfate effect on the density of epidermal Langerhans cells. Evaluation of different test models. Mikulowska A, et al. **Contact Dermatitis** 1996 Jun; 34(6):397–401

Are sodium lauryl sulfate-containing toothpastes suitable vehicles for xylitol? Assev S, et al. **Eur J Oral Sci** 1997 Apr;105(2):178–82

Changes in the permeability of the blood-brain barrier following sodium dodecyl sulphate administration in the rat. Saija A, et al. **Exp Brain Res** 1997 Jul;115(3):546–51

Skin roughness is negatively correlated to irritation with DMSO, but not with NaOH and SLS. Iliev D, et al. **Exp Dermatol** 1997 Aug;6(4):157–60

Immunomodulatory effect of some amphiphilic detergents on the human promyelocytic HL-60 cells. Kačáni L, et al. **Folia Biol (Praha)** 1996;42(1-2):11–6

DSC studies on bovine serum albumin denaturation. Effects of ionic strength and SDS concentration. Giancola C, et al. **Int J Biol Macromol** 1997 Jun;20(3):193–204

Effect of anionic surfactant on the reaction of 2,2(1)-dithiobispyridine with bovine oxyhemoglobin as a function of temperature. Aboluwoye CO, et al. **Ital J Biochem** 1996 Sep;45(3):135–42

Pretreatment of clinical specimens with sodium dodecyl (lauryl) sulfate is not suitable for the mycobacteria growth indicator tube cultivation method. Pfyffer GE, et al. **J Clin Microbiol** 1997 Aug;35(8):2142–4

The effect of sodium lauryl sulphate on the expression of cytokeratin mRNA in hamster cheek pouch epithelium. Baert JH, et al. **J Oral Pathol Med** 1996 Oct;25(9):497–501

Inactivation of brain Na+,K(+)-ATPase catalytic subunit isoforms by sodium dodecyl sulfate. Kaplya A, et al. **Membr Cell Biol** 1997;11(1):87–99

Effect of iontophoresis in combination with ionic enhancers on the lipid structure of the stratum corneum: an X-ray diffraction study. Chesnoy S, et al. **Pharm Res** 1996 Oct; 13(10):1581–4

[Activity of Na+, K+-ATP-ase isoenzymes in the cerebral cortex and their sensitivity to sodium dodecyl sulfate in rat postnatal ontogenesis] Kaplia AA, et al. **Ukr Biokhim Zh** 1996 Jan-Feb;68(1):32–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Irritancy testing in occupational dermatology: comparison between two quick tests and the acute irritation induced by sodium lauryl sulphate. Bangha E, et al. **Acta Derm Venereol** 1996 Nov;76(6):450–2

Changes in keratinocyte differentiation following mild irritation by sodium dodecyl sulphate. Le M, et al. **Arch Dermatol Res** 1996 Oct;288(11):684–90

Laser Doppler image scanning for assessment of skin irritation. Fullerton A, et al. **Curr Probl Dermatol** 1995; 23:159–68

Prolonged adverse effects of benzalkonium chloride and sodium dodecyl sulfate in a primary culture system of rabbit corneal epithelial cells. Grant RL, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):71–82

The effects of sodium lauryl sulfate on the phrenic nerve diaphragm preparation from the rat. Herlofson BB, et al. **Pharmacol Toxicol** 1996 Nov;79(5):217–24

Sodium lauryl sulfate and triclosan: in vitro cytotoxicity studies with gingival cells. Babich H, et al. **Toxicol Lett** 1997 May 16;91(3):189–96

SODIUM ETIDRONATE see **ETIDRONATE DISODIUM**

SODIUM FLUORIDE

Influence of processing conditions on the release of sodium fluoride from oligomeric L-lactic acid matrices. Dittrich M, et al. **Biomaterials** 1996 Aug;17(16):1591–7

ADMINISTRATION & DOSAGE

Fluoridated etching on orthodontic bonding. Meng CL, et al. **Am J Orthod Dentofacial Orthop** 1997 Sep;112(3):259–62

Salivary fluoride concentration and plaque pH after using a fluoride-containing chewing gum. Sjögren K, et al. **Caries Res** 1997;31(5):366–72

Variability in cytotoxicity and fluoride release of resin-modified glass-ionomer cements. Kan KC, et al. **J Dent Res** 1997 Aug;76(8):1502–7

ADVERSE EFFECTS

Fluoride mouthrinse [letter] Fayle S, et al. **Br Dent J** 1996 Feb 24;180(4):129

ANALYSIS

Spectrophotometric determination of fluoride in dosage forms and dental preparations. Săndulescu R, et al. **J Pharm Biomed Anal** 1996 Jun;14(8-10):951–8

CHEMISTRY

Uptake and release of fluoride by saliva-coated glass ionomer cement. Damen JJ, et al. **Caries Res** 1996;30(6):454–7

PHARMACOKINETICS

Bioavailability of fluoride administered as sodium fluoride or sodium monofluorophosphate to human volunteers. Rigalli A, et al. **Arzneimittelforschung** 1996 May; 46(5):531–3

Absolute bioavailability of fluoride from disodium monofluorophosphate and enteric-coated sodium fluoride tablets. van Asten P, et al. **Eur J Clin Pharmacol** 1996; 50(4):321–6

Fluoride uptake into the developing enamel and dentine of sheep incisors following daily ingestion of fluoridated milk or water. Cutress TW, et al. **N Z Dent J** 1996 Sep; 92(409):68–72

[Concentration and distribution of fluorine in hen's eggs as an aspect of selected biological parameters] Machaliński B. **Ann Acad Med Stetin** 1996;42:25–38 (Eng. Abstr.) **(Pol)**

PHARMACOLOGY

Inorganic fluoride. Divergent effects on human proximal tubular cell viability. Zager RA, et al. **Am J Pathol** 1997 Feb;150(2):735–45

Sodium fluoride inhibits the antisecretory effect of peptide YY and its analog in rabbit jejunum. Eto B, et al. **Arch Physiol Biochem** 1996;104(2):180–4

The nucleolar phosphoprotein P130 is a GTPase/ATPase with intrinsic property to form large complexes triggered by F- and Mg2+. Chen HK, et al. **Biochem Biophys Res Commun** 1997 Jan 13;230(2):370–5

Mineralization of cancellous bone after alendronate and sodium fluoride treatment: a quantitative backscattered electron imaging study on minipig ribs. Roschger P, et al. **Bone** 1997 May;20(5):393–7

A comparison of the effects of two anabolic agents (fluoride and PTH) on ash density and bone strength assessed in an osteopenic rat model. Søgaard CH, et al. **Bone** 1997 May;20(5):439–49

Effects of low-dose long-term sodium fluoride preventive treatment on rat bone mass and biomechanical properties. Jiang Y, et al. **Calcif Tissue Int** 1996 Jan;58(1):30–9

Secretagogue-induced apocrine secretion in the Harderian gland of the rat. Gesase AP, et al. **Cell Tissue Res** 1996 Sep;285(3):501–7

The influence of fluoridation of drinking water on the long-term hearing results of stapedectomy. Vartiainen E, et al. **Clin Otolaryngol** 1997 Feb;22(1):34–6

Attenuation of high-voltage-activated Ca2+ current run-down in rat hippocampal CA1 pyramidal cells by NaF. Breakwell NA, et al. **Exp Brain Res** 1995;106(3):505–8

Role of protein kinase C alpha, Arf, and cytoplasmic calcium transients in phospholipase D activation by sodium fluoride in osteoblast-like cells. Bourgoin SG, et al. **J Bone Miner Res** 1996 Nov;11(11):1655–65

Effects of sodium fluoride and alendronate on the bone mineral in minipigs: a small-angle X-ray scattering and backscattered electron imaging study. Fratzl P, et al. **J Bone Miner Res** 1996 Feb;11(2):248–53

Characteristics of NaF-induced differentiation of HL-60 cells. Kawase T, et al. **J Bone Miner Res** 1996 Nov; 11(11):1676–87

Inhibition of ethanol production by Saccharomyces cerevisiae in human blood by sodium fluoride. Amick GD, et al. **J Forensic Sci** 1997 Jul;42(4):690–2

Potentiation of stimulus-induced phosphoinositide breakdown by calmodulin antagonists in C6 glioma cells. Lin WW. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec;352(6):679–84

Changes of dentinal tubules following fluoride iontophoresis. Huang GF, et al. **Proc Natl Sci Counc Repub China B** 1995 Oct;19(4):246–52

The inhibitory effect of fluoride on carbachol-induced bovine bronchial contraction. Zhao W, et al. **Respir Physiol** 1997 May;108(2):171–9

THERAPEUTIC USE

Sustained-release sodium fluoride in the management of established postmenopausal osteoporosis. Pak CY, et al. **Am J Med Sci** 1997 Jan;313(1):23–32 (30 ref.)

Is addition of sodium fluoride to cyclical etidronate beneficial in the treatment of corticosteroid induced osteoporosis? Lems WF, et al. **Ann Rheum Dis** 1997 Jun;56(6):357–63

Sodium fluoride treatment is a major protector against vertebral and nonvertebral fractures when compared with other common treatments of osteoporosis: a longitudinal, observational study. Farrerons J, et al. **Calcif Tissue Int** 1997 Mar;60(3):250–4

Comparative three-year caries protection from an aluminum-containing and a fluoride-containing toothpaste. Heidmann J, et al. **Caries Res** 1997;31(2):85–90

Effect of a fluoridated toothpaste on lesion development in plaque-filled dentine grooves: an intra-oral study. Lagerweij MD, et al. **Caries Res** 1997;31(2):141–7

Effectiveness of visible light fissure sealant (Delton) versus fluoride varnish (Duraphat): 24-month clinical trial. Bravo M, et al. **Community Dent Oral Epidemiol** 1996 Feb; 24(1):42–6

Etidronate versus fluoride for treatment of osteopenia in primary biliary cirrhosis: preliminary results after 2 years. Guañabens N, et al. **Gastroenterology** 1997 Jul; 113(1):219–24

Fluoride: the verdict is in, but the controversy lingers [editorial] Kleerekoper M. **J Bone Miner Res** 1996 May; 11(5):565–7

Slow-release sodium fluoride in osteoporosis. Pak CY, et al. **J Bone Miner Res** 1996 May;11(5):561–4 (16 ref.)

Comparison of nonrandomized trials with slow-release sodium fluoride with a randomized placebo-controlled trial in postmenopausal osteoporosis. Pak CY, et al. **J Bone Miner Res** 1996 Feb;11(2):160–8

Fluoride and the FDA: a curious case [letter] Turner CH. **J Bone Miner Res** 1996 Sep;11(9):1369–71

Comparative study of plaque and gingivitis prevention by AmF/SnF2 and NaF. A clinical and microbiological 9-month study. Mengel R, et al. **J Clin Periodontol** 1996 Apr;23(4):372–8

Update on pharmacologic therapies for osteoporosis. Kessenich CR. **Nurse Pract** 1996 Aug;21(8):19–24 (19 ref.)

Study of NaF effects on transiliac bone [letter; comment] Gutteridge DH, et al. **Osteoporos Int** 1996;6(5):416–7. Comment on: Osteoporos Int 1995 Mar;5(2):115–29.

TOXICITY

Apoptotic cell death following exposure to fluoride in rat alveolar macrophages. Hirano S, et al. **Arch Toxicol** 1996; 70(3-4):249–51

Evaluation of mutagenic and cytotoxic effects of sodium fluoride on mammalian cells influenced by an acid environment. Slameňová D, et al. **Cell Biol Toxicol** 1996 Feb;12(1):11–7

SODIUM GAMMA-HYDROXYBUTYRATE see **SODIUM OXYBATE**

SODIUM-GLUCOSE TRANSPORT SYSTEM see **MONOSACCHARIDE TRANSPORT PROTEINS**

SODIUM GLUTAMATE

ADMINISTRATION & DOSAGE

[A study of lipid peroxidation in patients with chronic gastritis during administration of a food additive monosodium glutamate] Shirina LI, et al. **Vopr Pitan** 1996; (4):34–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

The monosodium glutamate symptom complex: assessment in a double-blind, placebo-controlled, randomized study. Yang WH, et al. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 1):757–62

'We think your son has Lennox-Gastaut syndrome'—a case study of monosodium glutamate's possible effect on a child. Shovic A, et al. **J Am Diet Assoc** 1997 Jul;97(7):793–4

Update on monosodium glutamate: sensory properties and safety [editorial] Schiffman SS. **Nutrition** 1996 Jun; 12(6):451–2

ISOLATION & PURIFICATION

Study on the column process of adsorption decolorization for monosodium glutamate solution in fluidized beds. Shen J, et al. **Chin J Biotechnol** 1996;12(2):137–46

PHARMACOLOGY

Monosodium glutamate affects mealtime food selection in diabetic patients. Bellisle F, et al. **Appetite** 1996 Jun; 26(3):267–75

Consumption of a high dietary dose of monosodium glutamate fails to affect extracellular glutamate levels in the hypothalamic arcuate nucleus of adult rats. Bogdanov MB, et al. **Brain Res** 1996 Oct 14;736(1–2):76–81

Effects of maternal oral administration of monosodium glutamate at a late stage of pregnancy on developing mouse fetal brain. Yu T, et al. **Brain Res** 1997 Feb 7;747(2):195–206

Decrease of (+)-3-[125I]MK-801 binding to NMDA brain receptors revealed at puberty in rats treated neonatally with monosodium glutamate. Otoya RE, et al. **Brain Res Dev Brain Res** 1996 Sep 2;95(2):149–56

Are the tastes of polycose and monosodium glutamate unique? Hettinger TP, et al. **Chem Senses** 1996 Jun; 21(3):341–7

Neonatal MSG reduces hypothalamic DA, beta-endorphin, and delays weight gain in genetically obese (A viable yellow/alpha) mice. Caputo FA, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):425–32

Deficits in water escape performance and alterations in hippocampal cholinergic mechanisms associated with neonatal monosodium glutamate treatment in mice. Wong PT, et al. **Pharmacol Biochem Behav** 1997 May–Jun; 57(1–2):383–8

Effect of umami taste on pleasantness of low-salt soups during repeated testing. Roininen K, et al. **Physiol Behav** 1996 Sep;60(3):953–8

Regulation of adipsin and body composition in the monosodium glutamate (MSG)-treated mouse. Spurlock ME, et al. **Physiol Behav** 1996 Nov;60(5):1217–21

[Excitation of hypothalamic nucleus arcuatus neuron induced decrease of plasma sialic acid level in rats] Chen WF, et al. **Sheng Li Hsueh Pao** 1995 Dec;47(6):597–600 (Eng. Abstr.) **(Chi)**

[THe characteristics of the action of Khi-Mi on gastric and hepatic secretion] Rymshina MV, et al. **Vopr Pitan** 1996; (1):9–11 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[Lipid peroxidation and various parameters of mineral metabolism in patients with alimentary obesity during therapy with monosodium glutamate] Popova IuP, et al. **Vopr Pitan** 1997;(3):8–10 (Eng. Abstr.) **(Rus)**

TOXICITY

Attenuation of leptin-mediated effects by monosodium glutamate-induced arcuate nucleus damage. Dawson R, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E202–6

Effects of monosodium glutamate wastewater on the fish Ctenopharyngodon idellus and the cabbage Brassica capestris. Cheng SP, et al. **Bull Environ Contam Toxicol** 1996 Dec;57(6):972–8

The neonatal neurotoxicity of monosodium L-glutamate on the sexually dimorphic nucleus of the preoptic area in rats. Hsieh YL, et al. **Dev Neurosci** 1997;19(4):342–7

Dietary preferences in monosodium glutamate-lesioned rats: age-variable influence of hypothalamic neuropeptide Y. Beck B, et al. **Neurosci Lett** 1997 Apr 11;225(3):153–6

Changes of exploratory behaviour and its habituation in rats neonatally treated with monosodium glutamate. Dubovicky M, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):565–9

Studies on the effects of monosodium glutamate on hepatic microsomal lipid peroxidation, calcium, ascorbic acid and glutathione and its dependent enzymes in adult male mice. Choudhary P, et al. **Toxicol Lett** 1996 Dec;89(1):71–6

SODIUM GOLD THIOMALATE see **GOLD SODIUM THIOMALATE**

SODIUM GOLD THIOSULFATE see **GOLD SODIUM THIOSULFATE**

SODIUM-HYDROGEN ANTIPORTER

[Na+/H+ exchanger] Kuro-o M. **Nippon Rinsho** 1996 Mar; 54(3):607–11 (8 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Coimmunoprecipitation of a 24-kDa protein with NHE1, the ubiquitous isoform of the Na+/H+ exchanger. Goss G, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1493–502

Identification and localization of the sod2 gene product in fission yeast. Dibrov P, et al. **FEBS Lett** 1997 Mar 17; 405(1):119–24

Differential localization of Na+/H+ exchanger isoforms (NHE1 and NHE3) in polarized epithelial cell lines. Noel J, et al. **J Cell Sci** 1996 May;109 (Pt 5):929–39

Sodium/proton antiporter in the euryhaline crab Carcinus maenas: molecular cloning, expression and tissue distribution. Towle DW, et al. **J Exp Biol** 1997 Mar;200 (Pt 6):1003–14

Platelet sodium/hydrogen ion exchange in normal pregnancy and non-proteinuric pre-eclampsia. Graham D, et al. **J Hum Hypertens** 1997 Jul;11(7):453–8

ANTAGONISTS & INHIBITORS

Impact of extracellular buffer composition on cardioprotective efficacy of Na+/H+ exchanger inhibitors. Shimada Y, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H692–700

Effects of specific sodium/hydrogen exchange inhibitor during cardioplegic arrest. Choy IO, et al. **Ann Thorac Surg** 1997 Jul;64(1):94–9

Reduced infarct size in the rabbit heart in vivo by ethylisopropyl-amiloride. A role for Na+/H+ exchange. Bugge E, et al. **Basic Res Cardiol** 1996 May–Jun; 91(3):203–9

Effect of the Na+/H+ antiport inhibitor Hoe 694 on the angiotensin II-induced vascular smooth muscle cell growth. Sachinidis A, et al. **Br J Pharmacol** 1996 Nov; 119(5):787–96

The sodium-hydrogen exchange system in the heart: its role in ischemic and reperfusion injury and therapeutic implications. Karmazyn M. **Can J Cardiol** 1996 Oct; 12(10):1074–82 (73 ref.)

Effect of sodium-hydrogen exchange inhibition on functional and metabolic impairment produced by oxidative stress in the isolated rat heart. Hoque AN, et al. **Can J Physiol Pharmacol** 1997 Apr;75(4):326–34

Effects of Na(+)-H+ exchange blocker amiloride on left ventricular remodeling after anterior myocardial infarction in rats. Hasegawa S, et al. **Cardiovasc Drugs Ther** 1995 Dec;9(6):823–6

Prevention of ischemic rigor contracture during coronary occlusion by inhibition of Na(+)-H+ exchange. Garcia-Dorado D, et al. **Cardiovasc Res** 1997 Jul;35(1):80–9

Short-term inhibition of the Na-H exchanger limits acidosis and reduces ischemic injury in the rat heart. Schaefer S, et al. **Cardiovasc Res** 1997 May;34(2):329–36

Na(+)-H+ exchange inhibition protects against mechanical, ultrastructural, and biochemical impairment induced by low concentrations of lysophosphatidylcholine in isolated rat hearts. Hoque AN, et al. **Circ Res** 1997 Jan;80(1):95–102

Low-density lipoproteins inhibit the Na+/H+ antiport in human platelets. A novel mechanism enhancing platelet activity in hypercholesterolemia [see comments] Nofer JR, et al. **Circulation** 1997 Mar 18;95(6):1370–7. Comment in: Circulation 1997 Mar 18;95(6):1347–8.

Antiarrhythmic effects of HOE642, a novel Na(+)-H+ exchange inhibitor, on ventricular arrhythmias in animal hearts. Xue YX, et al. **Eur J Pharmacol** 1996 Dec 19; 317(2–3):309–16

HOE 694 affords protection versus veratrine contractures in rat atria by Na+ channel blockade. Le Grand B, et al. **Fundam Clin Pharmacol** 1996;10(5):467–73

Infarct size limitation by a new Na(+)-H+ exchange inhibitor, Hoe 642: difference from preconditioning in the role of protein kinase C. Miura T, et al. **J Am Coll Cardiol** 1997 Mar 1;29(3):693–701

Protective effect of the sodium/hydrogen exchange inhibitors during global low-flow ischemia. Khandoudi N, et al. **J Cardiovasc Pharmacol** 1996 Oct;28(4):540–6

Time delay of cell death by Na+/H+-exchange inhibition in regionally ischemic, reperfused porcine hearts. Klein HH, et al. **J Cardiovasc Pharmacol** 1997 Aug;30(2):235–40

Effect of methylisobutyl amiloride on [Na+]i, reperfusion arrhythmias, and function in ischemic rat hearts. Tani M, et al. **J Cardiovasc Pharmacol** 1996 Jun;27(6):794–801

(2-Methyl-5-(methylsulfonyl)benzoyl)guanidine Na+/H+ antiporter inhibitors. Baumgarth M, et al. **J Med Chem** 1997 Jun 20;40(13):2017–34

Cyclic GMP inhibits a pharmacologically distinct Na+/H+ exchanger variant in cultured rat astrocytes via an extracellular site of action. Touyz RM, et al. **J Neurochem** 1997 Apr;68(4):1451–61

Inhibition of the sodium/hydrogen antiport by ammonium ion. Stampfer DS, et al. **J Urol** 1997 Jan;157(1):362–5

Effects of the Na+/H+-exchange inhibitor Hoe 642 on intracellular pH, calcium and sodium in isolated rat ventricular myocytes. Russ U, et al. **Pflugers Arch** 1996 Nov-Dec;433(1–2):26–34

A calcineurin homologous protein inhibits GTPase-stimulated Na-H exchange. Lin X, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12631–6

cAMP-mediated inhibition of the epithelial brush border Na+/H+ exchanger, NHE3, requires an associated regulatory protein. Yun CH, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3010–5

BIOSYNTHESIS

Angiotensin converting enzyme inhibition corrects Na+/H+ exchanger overactivity in essential hypertension. Fortuño A, et al. **Am J Hypertens** 1997 Jan; 10(1):84–93

Evidence for an amiloride-insensitive Na+/H+ exchanger in rat renal cortical tubules. Chambrey R, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C1064–74

Biosynthesis and cell surface delivery of the NHE1 isoform of Na+/H+ exchanger in A6 cells. Coupaye-Gerard B, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1639–45

Epithelial localization of a reptilian Na+/H+ exchanger homologous to NHE-1. Harris SP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1594–606

Sodium-hydrogen exchange isoform expression in blood cells: implications for studies in diabetes mellitus. Rutherford P, et al. **Exp Clin Endocrinol Diabetes** 1997;105 Suppl 2:13–6

Galpha12 differentially regulates Na+-H+ exchanger isoforms. Lin X, et al. **J Biol Chem** 1996 Sep 13; 271(37):22604–10

NHE-3 isoform of the Na+/H+ exchanger in human gallbladder. Localization of specific mRNA by in situ hybridization. Silviani V, et al. **J Hepatol** 1997 Jun; 26(6):1281–6

BLOOD

Protein kinase C and insulin regulation of red blood cell Na+/H+ exchange. Ceolotto G, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):C818–26

Na(+)-K(+)-2Cl- cotransport, Na+/H+ exchange, and cell volume in ferret erythrocytes. Mairbäurl H, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1603–11

Regulation of human erythrocyte Na+/H+ exchange by soluble and particulate guanylate cyclase. Petrov V, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1556–64

Posttranslational effects of protein kinase C and insulin on red cell membrane phosphorylation and cation heteroexchange in hypertension. Semplicini A, et al. **Blood Press Suppl** 1996;1:55–8 (25 ref.)

Low-density lipoproteins inhibit the Na+/H+ antiport in human platelets. A novel mechanism enhancing platelet activity in hypercholesterolemia [see comments] Nofer JR, et al. **Circulation** 1997 Mar 18;95(6):1370–7. Comment in: Circulation 1997 Mar 18;95(6):1347–8.

Sodium pump and Na+/H+ activities in uremic erythrocytes. A microcalorimetric and pH-metric study. Kovacic H, et al. **Clin Chim Acta** 1997 Mar 18; 259(1–2):31–40

Erythrocyte sodium-hydrogen exchange and microalbuminuria in type I diabetes. Giampietro O, et al. **Diabetes Care** 1996 Sep;19(9):995–7

Amiloride-sensitive Na+/H+ exchange in erythrocytes of patients with NIDDM: a prospective study. Koren W, et al. **Diabetologia** 1997 Mar;40(3):302–6

Sodium-hydrogen exchange isoform expression in blood cells: implications for studies in diabetes mellitus. Rutherford P, et al. **Exp Clin Endocrinol Diabetes** 1997;105 Suppl 2:13–6

Increased Na(+)-H+ exchange in red blood cells of patients with primary aldosteronism. Koren W, et al. **Hypertension** 1997 Feb;29(2):587–91

Regulation of Na+/H+ antiporter in trout red blood cells. Malapert M, et al. **J Exp Biol** 1997 Jan;200 (Pt 2):353–60 (48 ref.)

Common variable immunodeficiency associated with myelocathexis and altered membrane sodium-proton antiport. Gur H, et al. **Pathobiology** 1997;65(1):46–50

[Red cell Na+/H+ exchange and role of protein kinase C in its stimulation in diabetes mellitus, essential hypertension and nephropathy] Koren V, et al. **Harefuah** 1997 May 1; 132(9):609–14, 680 (Eng. Abstr.) **(Heb)**

CHEMISTRY

Epithelial localization of a reptilian Na+/H+ exchanger homologous to NHE-1. Harris SP, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1594–606

Random mutagenesis reveals a novel site involved in inhibitor interaction within the fourth transmembrane segment of the Na+/H+ exchanger-1. Counillon L, et al. **Biochemistry** 1997 Mar 11;36(10):2951–9

Histidine 225, a residue of the NhaA-Na+/H+ antiporter of Escherichia coli is exposed and faces the cell exterior. Olami Y, et al. **J Biol Chem** 1997 Jan 17;272(3):1761–8

Topological analysis of NhaA, a Na+/H+ antiporter from Escherichia coli. Rothman A, et al. **J Biol Chem** 1996 Dec 13;271(50):32288–92

DRUG EFFECTS

Effect of Hoe 694, a novel Na(+)-H+ exchange inhibitor, on intracellular pH regulation in the guinea-pig ventricular myocyte. Loh SH, et al. **Br J Pharmacol** 1996 Aug; 118(8):1905–12

Sodium, hydrogen antiporter activation by extracellular adenosine triphosphate in biliary epithelial cells. Elsing C, et al. **Gastroenterology** 1996 Nov;111(5):1321–32

Chelerythrine inhibits Na(+)-H+ exchange in platelets from spontaneously hypertensive rats. Gende OA. **Hypertension** 1996 Dec;28(6):1013–7

Regulation of rat proximal tubule Na/H exchange by protein kinase C. Rebouças NA, et al. **Kidney Blood Press Res** 1996;19(2):87–93

Effect of angiotensin-converting enzyme inhibition on Na+/H(+)-exchange and Ca(2+)-efflux in human erythrocytes. Lijnen P, et al. **Methods Find Exp Clin Pharmacol** 1997 Mar;19(2):125–8

Regulation of the transfected Na+/H+-exchanger NHE3 in MDCK cells by vasotocin. Helmle-Kolb C, et al. **Pflugers Arch** 1997 May;434(1):123–31

High density lipoproteins enhance the Na+/H+ antiport in human platelets. Nofer JR, et al. **Thromb Haemost** 1996 Apr;75(4):635–41

SODIUM-HYDROGEN ANTIPORTER

GENETICS

Glucocorticoids regulate NHE-3 transcription in OKP cells. Baum M, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):F164-9

Characterization of the rat NHE3 promoter. Cano A. **Am J Physiol** 1996 Sep;271(3 Pt 2):F629-36

Regulation of NHE-1 promoter in mammalian myocardium. Yang W, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H259-66

Cloning and sequencing of the cDNA encoding for a Na+/H+ exchanger from Xenopus laevis oocytes (X1-NHE). Busch S. **Biochim Biophys Acta** 1997 Apr 3; 1325(1):13-6

Genetic factors associated with altered sodium transport in human hypertension: a twin study. Nowson CA, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):424-6

Can the Na+/H+ exchange serve as an intermediate phenotype for essential hypertension? [see comments] Aviv A. **Eur J Clin Invest** 1997 Jul;27(7):566-7 (8 ref.). Comment in: Eur J Clin Invest 1997 Jul;27(7):558-65.

Mouse chromosomal location of four Na/H exchanger isoform genes. Pathak BG, et al. **Genomics** 1996 Jan 15; 31(2):261-3

Na+-induced transcription of nhaA, which encodes an Na+/H+ antiporter in Escherichia coli, is positively regulated by nhaR and affected by hns. Dover N, et al. **J Bacteriol** 1996 Nov;178(22):6508-17

Identification and characterization of functional residues in a Na+/H+ antiporter (NhaA) from Escherichia coli by random mutagenesis. Noumi T, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):661-70

Sodium/proton antiporter in the euryhaline crab Carcinus maenas: molecular cloning, expression and tissue distribution. Towle DW, et al. **J Exp Biol** 1997 Mar;200 (Pt 6):1003-14

Differential expression of Na+,H(+)-antiporter mRNA in biliary epithelial cells and in hepatocytes. Marti U, et al. **J Hepatol** 1996 Apr;24(4):498-502

Na+/H+-exchanger 3 activity and its gene in the spontaneously hypertensive rat kidney. Hayashi M, et al. **J Hypertens** 1997 Jan;15(1):43-8

Cardiac Na+-H+ exchanger during postnatal development in the rat: changes in mRNA expression and sarcolemmal activity. Haworth RS, et al. **J Mol Cell Cardiol** 1997 Jan; 29(1):321-32

A NHE3-related pseudogene is on human chromosome 10; the functional gene maps to 5p15.3. Kokke FT, et al. **Mamm Genome** 1996 Mar;7(3):235-6

Cloning and sequencing of the spore germination gene of Bacillus megaterium ATCC 12872: similarities to the NaH-antiporter gene of Enterococcus hirae. Tani K, et al. **Microbiol Immunol** 1996;40(2):99-105

Structure and analysis of the mouse Na+/H+ exchanger (NHE1) gene: homology and conservation of splice sites. Wang H, et al. **Mol Cell Biochem** 1996 Dec 20;165(2):155-9

METABOLISM

Effects of protein kinase C on the Na(+)-H+ exchange in the cochlear outer hair cell. Ikeda K, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):828-32

The links between cellular Ca2+ and Na+/H+ exchange in the pathophysiology of essential hypertension. Aviv A. **Am J Hypertens** 1996 Jul;9(7):703-7 (21 ref.)

Spironolactone prevents Na+/H+ exchange enhancement in primary aldosteronism. Koren W, et al. **Am J Hypertens** 1997 Mar;10(3):341-5

Effects of parathyroid hormone on hepatocyte pHi and Na(+)-H+ exchanger activity. Michnowska M, et al. **Am J Nephrol** 1996;16(5):431-41

Chronic metabolic acidosis increases NHE3 protein abundance in rat kidney. Ambühl PM, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F917-25

Renal Na+/H+ exchanger isoforms and their regulation by thyroid hormone. Azuma KK, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C585-92

Monoclonal antibodies for high-resolution localization of NHE3 in adult and neonatal rat kidney. Biemesderfer D, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):F289-99

Characterization of the rat Na+/H+ exchanger isoform NHE4 and localization in rat hippocampus. Bookstein C, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):C1629-38

Heterologous expression of rat NHE4: a highly amiloride-resistant Na+/H+ exchanger isoform. Chambrey R, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):C90-8

Role of tyrosine kinase pathways in ETB receptor activation of NHE3. Chu TS, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):C763-71

Differential effect of three commercial heparins on Na+/H+ exchange and growth of PASMC. Dahlberg CG, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):L260-5

Intestinal distribution of human Na+/H+ exchanger isoforms NHE-1, NHE-2, and NHE-3 mRNA. Dudeja PK, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):G483-93

Effect of surface and intracellular pH on hepatocellular fatty acid uptake. Elsing C, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1067-73

Different effect of cold storage and rewarming on three pH regulating transporters in isolated rat hepatocytes. Forestal DA, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G638-45

Control of cytosolic pH in two-cell mouse embryos: roles of H(+)-lactate cotransport and Na+/H+ exchange. Gibb CA, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C404-19

Functional roles of apical membrane Na+/H+ exchange in rat medullary thick ascending limb. Good DW, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):F691-9

Angiotensin II and the maturation of renal cortical Na+/H+ exchanger activity during fetal life in sheep. Guillery EN, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1507-13

NHE2 and NHE3 are human and rabbit intestinal brush-border proteins. Hoogerwerf WA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G29-41

Insulin-like growth factor I stimulates apical sodium/hydrogen exchange in human proximal tubule cells. Johnson DW, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):F484-90

ATP-activated basolateral Na+/H+ exchange in human normal and cystic fibrosis airway epithelium. Paradiso AM. **Am J Physiol** 1997 Jul;273(1 Pt 1):L148-58

Ion transport systems in human labial acinar cells. Paulais M, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G213-9

Hypoxic pHi and function modulation by Na+/H+ exchange and alpha-adrenoreceptor inhibition in heart in vivo. Portman MA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2664-70

Dual modulation of Na/H antiport by atrial natriuretic factor in rat aortic smooth muscle cells. Ricci R, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):C643-52

Shrinkage-induced activation of Na+/H+ exchange: role of cell density and myosin light chain phosphorylation. Shrode LD, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):C1968-79

Effects of high-density lipoproteins on intracellular pH and proliferation of human vascular endothelial cells. Tamagaki T, et al. **Atherosclerosis** 1996 Jun;123(1-2):73-82

Na+/H+ exchange in hypertension and in diabetes mellitus--facts and hypotheses. Siffert W, et al. **Basic Res Cardiol** 1996 May-Jun;91(3):179-90 (99 ref.)

Activation of Na+/H+ exchanger is not involved in the PDGF-BB-induced DNA-synthesis in vascular smooth muscle cells. Sachinidis A, et al. **Biochem Biophys Res Commun** 1996 Oct 14;227(2):468-72

Arachidonic acid activates a proton conductance pathway and the Na+/H+ exchanger in platelets. Cavallini L, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):567-74

Role of Ca2+ and protein kinase C in the receptor-mediated activation of Na+/H+ exchange in isolated liver cells. Martín-Requero A, et al. **Biochem J** 1997 Aug 1;325 (Pt 3):631-6

Factors and molecular mechanisms involved in the regulation of chicken colonic luminal membrane Na(+)-linked transport systems. Wood IS, et al. **Biochem Soc Trans** 1996 May;24(2):248S

Na(+)-H+ and Na(+)-Li+ exchange are mediated by the same membrane transport protein in human red blood cells: an NMR investigation. Chi Y, et al. **Biochemistry** 1996 Sep 24;35(38):12433-42

Random mutagenesis reveals a novel site involved in inhibitor interaction within the fourth transmembrane segment of the Na+/H+ exchanger-1. Counillon L, et al. **Biochemistry** 1997 Mar 11;36(10):2951-9

Phosphorylation and regulation of the Na+/H+ exchanger through mitogen-activated protein kinase. Wang H, et al. **Biochemistry** 1997 Jul 29;36(30):9151-8

Na+-H+ exchange and intracellular pH regulation in colonocytes from the chick. Calonge ML, et al. **Biochim Biophys Acta** 1997 Apr 26;1325(2):263-71

Na+(Li+)/H+ antiporter in Pseudomonas aeruginosa and effect of Li+ on cell growth. Inaba K, et al. **Biol Pharm Bull** 1997 Jun;20(6):621-4

Cellular distribution and regulation of NHE-1 isoform of the NA-H exchanger in the avian osteoclast. Gupta A, et al. **Bone** 1996 Feb;18(2):87-95

Increased Na(+)-H+ exchanger activity in the ileal brush-border membrane of spontaneously hypertensive rats. Vázquez CM, et al. **Cell Mol Life Sci** 1997 May; 53(5):442-6

Activity and expression of Na(+)-H+ exchanger isoforms 1 and 3 in kidney proximal tubules of hypertensive rats. Kelly MP, et al. **Circ Res** 1997 Jun;80(6):853-60

Angiotensin II stimulates p90rsk in vascular smooth muscle cells. A potential Na(+)-H+ exchanger kinase. Takahashi E, et al. **Circ Res** 1997 Aug;81(2):268-73

Thrombin activates the sarcolemmal Na(+)-H+ exchanger. Evidence for a receptor-mediated mechanism involving protein kinase C. Yasutake M, et al. **Circ Res** 1996 Oct; 79(4):705-15

Sodium-lithium countertransport, sodium-hydrogen exchange and membrane microviscosity in patients with hyperlipidaemia. MacLeod MJ, et al. **Clin Sci (Colch)** 1997 Mar;92(3):237-46

Recent advances in cellular Ca2+ homeostasis: implications to altered regulations of cellular Ca2+ and Na(+)-H+ exchange in essential hypertension. Aviv A. **Curr Opin Cardiol** 1996 Sep;11(5):477-82 (63 ref.)

Abnormal Na+/H+ antiport activity in cultured fibroblasts from NIDDM patients with hypertension and microalbuminuria. Trevisan R, et al. **Diabetologia** 1996 Jun; 39(6):717-24

Role of Na(+)-H(+)-antiport in restitution of isolated guinea pig gastric epithelium after superficial injury. Joutsi T, et al. **Dig Dis Sci** 1996 Nov;41(11):2187-94

Activation of Na+/H(+)-exchanger by transforming Ha-ras requires stimulated cellular calcium influx and is associated with rearrangement of the actin cytoskeleton. Ritter M, et al. **Eur J Cell Biol** 1997 Mar;72(3):222-8

Acute saline infusion induces extracellular acidification and activation of the Na+/H+ exchanger in man [see comments] Kessler R, et al. **Eur J Clin Invest** 1997 Jul; 27(7):558-65. Comment in: Eur J Clin Invest 1997 Jul;27(7):566-7.

Sodium-hydrogen exchange in myocardial ischemia and reperfusion: a critical determinant of injury? Avkiran M. **EXS** 1996;76:299-311 (60 ref.)

Diacylglycerol mediates the thrombin-induced, protein kinase C and Ca2+ independent activation of the Na+/H+ exchanger in platelets. Cavallini L, et al. **FEBS Lett** 1997 Jan 2;400(1):99-102

Voltage-dependent Na(+)-HCO3- cotransporter and Na+/H+ exchanger are involved in intracellular pH regulation of cultured mature rat cerebellar oligodendrocytes. Boussouf A, et al. **Glia** 1997 Jan; 19(1):74-84

Vestibular dark cells contain the Na+/H+ exchanger NHE-1 in the basolateral membrane. Wangemann P, et al. **Hear Res** 1996 May;94(1-2):94-106

Erythrocyte sodium-hydrogen antiport activity is not a predictor of diabetic nephropathy. Matteucci E, et al. **Horm Metab Res** 1996 Aug;28(8):388-93

A 90-kD Na(+)-H+ exchanger kinase has increased activity in spontaneously hypertensive rat vascular smooth muscle cells. Phan VN, et al. **Hypertension** 1997 Jun;29(6):1265-72

Impaired Na(+)-H+ exchanger activity of hepatocytes in chronic renal failure. Michnowska M, et al. **J Am Soc Nephrol** 1997 Jun;8(6):929-34

Identification of cytoplasmic subdomains that control pH-sensing of the Na+/H+ exchanger (NHE1): pH-maintenance, ATP-sensitive, and flexible loop domains. Ikeda T, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):295-303

Identification and characterization of functional residues in a Na+/H+ antiporter (NhaA) from Escherichia coli by random mutagenesis. Noumi T, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):661-70

The p42/p44 mitogen-activated protein kinase cascade is determinant in mediating activation of the Na+/H+ exchanger (NHE1 isoform) in response to growth factors. Bianchini L, et al. **J Biol Chem** 1997 Jan 3;272(1):271-9

5-HT1A receptor activates Na+/H+ exchange in CHO-K1 cells through Gialpha2 and Gialpha3. Garnovskaya MN, et al. **J Biol Chem** 1997 Mar 21;272(12):7770-6

Induction of tyrosine phosphorylation and Na+/H+ exchanger activation during shrinkage of human neutrophils. Krump E, et al. **J Biol Chem** 1997 Jul 11; 272(28):17303-11

Na+/H+ exchangers of mammalian cells. Orlowski J, et al. **J Biol Chem** 1997 Sep 5;272(36):22373-6 (67 ref.)

Muscarinic agonists induce phosphorylation-independent activation of the NHE-1 isoform of the Na+/H+ antiporter in salivary acinar cells. Robertson MA, et al. **J Biol Chem** 1997 Jan 3;272(1):287-94

Identification of a chloroquine importer in Plasmodium falciparum. Differences in import kinetics are genetically linked with the chloroquine-resistant phenotype. Sanchez CP, et al. **J Biol Chem** 1997 Jan 31;272(5):2652-8

Cytosolic alkalinization increases stress-activated protein kinase/c-Jun NH2-terminal kinase (SAPK/JNK) activity and p38 mitogen-activated protein kinase activity by a calcium-independent mechanism. Shrode LD, et al. **J Biol Chem** 1997 May 23;272(21):13653-9

Activation of Na+-H+ exchange is necessary for RhoA-induced stress fiber formation. Vexler ZS, et al. **J Biol Chem** 1996 Sep 13;271(37):22281-4

Role of NHE3 in mediating renal brush border Na+-H+ exchange. Adaptation to metabolic acidosis. Wu MS, et al. **J Biol Chem** 1996 Dec 20;271(51):32749-52

Regulation of the epithelial brush border Na+/H+ exchanger isoform 3 stably expressed in fibroblasts by fibroblast growth factor and phorbol esters is not through changes in phosphorylation of the exchanger. Yip JW, et al. **J Biol Chem** 1997 Jul 18;272(29):18473-80

Na+/H+ exchanger (NHE) in the basolateral membrane is encoded by NHE-1 mRNA in LLC-PK1 clone 4 cells. Hanai JI, et al. **J Cell Physiol** 1997 Jun;171(3):318-24

Insulin stimulation of Na/H antiport in L-6 cells: a different mechanism in myoblasts and myotubes. Incerpi S, et al. **J Cell Physiol** 1997 Jun;171(3):235-42

Chronic metabolic acidosis enhances NHE-3 protein abundance and transport activity in the rat thick ascending limb by increasing NHE-3 mRNA. Laghmani K, et al. **J Clin Invest** 1997 Jan 1;99(1):24-30

ATP dependence of Na+/H+ exchange. Nucleotide specificity and assessment of the role of phospholipids. Demaurex N, et al. **J Gen Physiol** 1997 Feb;109(2):117-28

Ion transport in hepatocytes: mechanisms and correlations to cell volume, hormone actions and metabolism. Graf J, et al. **J Hepatol** 1996;24 Suppl 1:53-77 (315 ref.)

Na+/H+-exchanger 3 activity and its gene in the spontaneously hypertensive rat kidney. Hayashi M, et al. **J Hypertens** 1997 Jan;15(1):43-8

Kinetic properties of erythrocyte Na+-Li+ and Na+-H+ exchange in hypertensive patients. Semplicini A, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1566-70

Shrinkage-induced activation of the Na+/H+ exchanger in Ehrlich ascites tumor cells: mechanisms involved in the activation and a role for the exchanger in cell volume

regulation. Pedersen SF, et al. **J Membr Biol** 1996 Jan; 149(2):141–59

The relation between cellular sodium, pH and volumes and the activity of Na/H antiport during hypothermic ischemia: multinuclear NMR studies of rat hearts. Askenasy N, et al. **J Mol Cell Cardiol** 1996 Mar;28(3):589–601

Interaction between Na+ and H+ ions on Na–H exchange in sheep cardiac Purkinje fibers. Wu ML, et al. **J Mol Cell Cardiol** 1997 Apr;29(4):1131–40

Protective effects of extracellular acidosis and blockade of sodium/hydrogen ion exchange during recovery from metabolic inhibition in neuronal tissue culture. Vornov JJ, et al. **J Neurochem** 1996 Dec;67(6):2379–89

Intracellular pH regulation in cultured microglial cells from mouse brain. Faff L, et al. **J Neurosci Res** 1996 Nov 1; 46(3):294–304

Role of de novo protein synthesis and calmodulin in rapid activation of Na(+)–H+ exchange of aldosterone in frog diluting segment. Cooper GJ, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):219–23

Genetically fixed enhanced G protein activation in essential hypertension. Siffert W. **Kidney Blood Press Res** 1996; 19(3–4):172–3 (16 ref.)

Growth phenotype of cultured skin fibroblasts from IDDM patients with and without nephropathy and overactivity of the Na+/H+ antiporter. Lurbe A, et al. **Kidney Int** 1996 Nov;50(5):1684–93

Ischemic–reperfusion injury in the kidney: overexpression of colonic H+–K+–ATPase and suppression of NHE–3. Wang Z, et al. **Kidney Int** 1997 Apr;51(4):1106–15

Ionic effects of angiotensin II and their role in the activation of the Na+/H+ antiporter. Flores G, et al. **Kidney Int Suppl** 1996 Jun;55:S122–5

Increased lymphocytic Na+/H+ exchange activity after hemodialysis: evidence for an endogenous inhibitor of Na+/H+ exchange in patients with end-stage renal failure. Tepel M, et al. **Life Sci** 1996;59(18):1545–52

Calcium–induced activation of the rat vascular myocyte Na+/H+ exchanger isoform–1. Siczkowski M, et al. **Metabolism** 1997 Mar;46(3):250–6

Enhanced mitogen–activated protein kinase activity and phosphorylation of the Na+/H+ exchanger isoform–1 of human lymphoblasts in hypertension. Sweeney FP, et al. **Metabolism** 1997 Mar;46(3):297–302

Expression of Na(+)–H+ exchanger isoforms in the kidney—implications for renal function and disease [editorial] Rutherford PA. **Nephrol Dial Transplant** 1996 Sep;11(9):1711–3 (18 ref.)

Sodium–hydrogen antiporter: its possible role in the genesis of diabetic nephropathy [editorial] Trevisan R, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):643–5 (21 ref.)

Na+/H+ exchange in patients with mild chronic renal failure. Tepel M, et al. **Nephron** 1996;74(1):114–9

Nigericin–induced Na+/H+ and K+/H+ exchange in synaptosomes: effect on [3H]GABA release. Rodríguez R, et al. **Neurochem Res** 1996 Aug;21(8):889–95

Expression and localization of Na+/H+ exchangers in rat central nervous system. Ma E, et al. **Neuroscience** 1997 Jul;79(2):591–603

Characterization of the Na+/H+ exchanger in human choriocarcinoma (BeWo) cells. Silva NL, et al. **Pflugers Arch** 1997 Apr;433(6):792–802

The purified Bacillus subtilis tetracycline efflux protein TetA(L) reconstitutes both tetracycline–cobalt/H+ and Na+(K+)/H+ exchange. Cheng J, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14446–51

Characterization of Na+/H+ exchange in sheep rumen epithelial cells kept in primary culture. Gäbel G, et al. **Zentralbl Veterinarmed A** 1996 Aug;43(6):365–75

[Molecular aspects of Na+/H+ exchange in the renal tubule: localization and adaptation to the acid–base state] Borensztein P, et al. **Nephrologie** 1996;17(7):377–81 (21 ref.) (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Signaling pathways in the biphasic effect of angiotensin II on apical Na/H antiport activity in proximal tubule. Houillier P, et al. **Kidney Int** 1996 Nov;50(5):1496–505

PHYSIOLOGY

The contribution of Na+/H+ exchange to ischemia–reperfusion injury after hypothermic cardioplegic arrest. Yamauchi T, et al. **Ann Thorac Surg** 1997 Apr; 63(4):1107–12

The role of Na+/H+ exchange in ischemia–reperfusion. Piper HM, et al. **Basic Res Cardiol** 1996 May–Jun; 91(3):191–202 (91 ref.)

The amiloride–sensitive Na+/H+ exchange antiporter and control of intracellular pH in hippocampal brain slices. Lin CW, et al. **Brain Res** 1996 Aug 26;731(1–2):108–13

The sodium–hydrogen exchange system in the heart: its role in ischemic and reperfusion injury and therapeutic implications. Karmazyn M. **Can J Cardiol** 1996 Oct; 12(10):1074–82 (73 ref.)

Electrophysiological approach of the role of Na+/H+ exchange in low–flow global ischemia and in ischemic preconditioning. Perchenet L, et al. **Can J Physiol Pharmacol** 1997 Feb;75(2):120–7

Role of extracellular and intracellular pH in carp sperm motility and modifications by hyperosmosis of regulation of the Na+/H+ exchanger. Márián T, et al. **Cytometry** 1997 Apr 1;27(4):374–82

Role of the Na(+)–Ca2+ and Na(+)–H+ antiporters in prolactin release from anterior pituitary cells in primary culture. Di Renzo G, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):11–5

Na+/H+ exchanger subtypes in the renal tubule: function and regulation in physiology and disease. Paillard M. **Exp Nephrol** 1997 Jul–Aug;5(4):277–84 (59 ref.)

The Na+/H+ exchange isoform NHE3 regulates basal canine ileal Na+ absorption in vivo. Maher MM, et al. **Gastroenterology** 1997 Jan;112(1):174–83

Role of the nhaC–encoded Na+/H+ antiporter of alkaliphilic Bacillus firmus OF4. Ito M, et al. **J Bacteriol** 1997 Jun;179(12):3851–7

Cytoprotective effect of epidermal growth factor on acid– and pepsin–induced damage to rat gastric epithelial cells: roles of Na+/H+ exchangers. Furukawa O, et al. **J Gastroenterol Hepatol** 1997 May;12(5):353–9

Sodium–lithium countertransport [letter; comment] Siffert W, et al. **J Hypertens** 1996 Sep;14(9):1153–4. Comment on: J Hypertens 1996 Jun;14(6):695–703.

Effect of hyperoxia and exogenous oxidant stress on pulmonary artery endothelial cell Na+/H+ antiport activity. Cutaia M, et al. **J Lab Clin Med** 1996 Aug; 128(2):154–64

The role of Na+–H+ exchange occurring during hypoxia in the genesis of reoxygenation–induced myocardial oedema. Inserte J, et al. **J Mol Cell Cardiol** 1997 Apr; 29(4):1167–75

Pharmacological differentiation of synergistic contribution of L–type Ca2+ channels and Na+/H+ exchange to the positive inotropic effect of phenylephrine, endothelin–3 and angiotensin II in rabbit ventricular myocardium. Talukder MA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Jan;355(1):87–96

Molecular physiology of vertebrate Na+/H+ exchangers. Wakabayashi S, et al. **Physiol Rev** 1997 Jan;77(1):51–74 (310 ref.)

The relationship between thermosensitivity and intracellular pH in cells deficient in Na+/H+ antiport function. Liu FF, et al. **Radiother Oncol** 1996 Jul;40(1):75–83

Nitric oxide–induced hyperpermeability of human intestinal epithelial monolayers is augmented by inhibition of the amiloride–sensitive Na(+)–H+ antiport: potential role of peroxynitrous acid. Unno N, et al. **Surgery** 1997 Aug; 122(2):485–91; discussion 491–2

[Effect of amiloride on the early and late stage of postischemic recovery in isolated perfused rat hearts—possible involvement of Na+/H+ and Na+/Ca2+ exchange] Yoshizumi M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1735–41 (Eng. Abstr.) **(Jpn)**

SODIUM HYDROXIDE

The collagen skeleton of the cat testis. A scanning electron microscopy study after 2N–NaOH maceration. Heyn R, et al. **Ital J Anat Embryol** 1996 Jul–Sep;101(3):133–40

ADVERSE EFFECTS

Thermal effects of neutralization therapy and water dilution for acute alkali exposure in canines. Homan CS, et al. **Acad Emerg Med** 1997 Jan;4(1):27–32

Caustic soda burns to the extremities: difficulties in management. O'Donoghue JM, et al. **Br J Clin Pract** 1996 Mar;50(2):108–10

CHEMISTRY

Stability of fluorouracil in polypropylene syringes and ethylene vinyl acetate infusion–pump reservoirs [letter] Baud–Camus F, et al. **Am J Health Syst Pharm** 1996 Jun 15;53(12):1457, 1461

Development of a generalized phenomenological model describing the kinetics of the enzymatic hydrolysis of NaOH–treated pine wood. Parajó JC, et al. **Appl Biochem Biotechnol** 1996 Mar;56(3):289–99

Effects of liming on uptake of lead and cadmium by Raphanus sativa. Han DH, et al. **Arch Environ Contam Toxicol** 1996 Nov;31(4):488–93

Alkaline–fermented foods: a review with emphasis on pidan fermentation. Wang J, et al. **Crit Rev Microbiol** 1996; 22(2):101–38 (81 ref.)

[Production of carbon monoxide in soda lime (letter) (see comments)] Ponz L. **Rev Esp Anestesiol Reanim** 1996 Jan; 43(1):42. Comment in: Rev Esp Anestesiol Reanim 1996 Aug;Sep;43(7):261–2. **(Spa)**

[Clinical circumstances of desiccation of soda lime (letter; comment)] Soro M, et al. **Rev Esp Anestesiol Reanim** 1996 Aug–Sep;43(7):261–2. Comment on: Rev Esp Anestesiol Reanim 1996 Jan;43(1):42. **(Spa)**

[Quantification of dehydration of soda lime in clinical circumstances] Soro–Domingo M, et al. **Rev Esp Anestesiol Reanim** 1997 May;44(5):186–90 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Baralyme dehydration increases and soda lime dehydration decreases the concentration of compound A resulting from sevoflurane degradation in a standard anesthetic circuit. Eger EI 2nd, et al. **Anesth Analg** 1997 Oct;85(4):892–8

Two modes of tunic cuticle formation in a colonial ascidian Aplidium yamazii, responding to wounding. Hirose E, et al. **Dev Comp Immunol** 1997 Jan–Feb;21(1):25–34

Skin roughness is negatively correlated to irritation with DMSO, but not with NaOH and SLS. Iliev D, et al. **Exp Dermatol** 1997 Aug;6(4):157–60

Digestibility by dairy cows of monosaccharide components in diets containing either ground sorghum or sorghum grain treated with sodium hydroxide. Miron J, et al. **J Dairy Sci** 1997 Jan;80(1):144–51

Effects of quaternary ammonium compounds with 0.1% sodium hydroxide on swine vesicular disease virus. Shirai J, et al. **J Vet Med Sci** 1997 May;59(5):323–8

Effectiveness of sodium hydroxide as a pleural sclerosing agent in rabbits: influence of concomitant intrapleural lidocaine. Teixeira LR, et al. **Lung** 1996;174(5):325–32

POISONING

Pulmonary effects of household bleach ingestion in children. Karnak I, et al. **Clin Pediatr (Phila)** 1996 Sep;35(9):471–2

TOXICITY

Collagen types in healing alkali–burned corneal stroma in rabbits. Saika S, et al. **Jpn J Ophthalmol** 1996;40(3):303–9

SODIUM HYPOCHLORITE

Increasing the use of bleach and condoms among injecting drug users in Denver: outcomes of a targeted, community–level HIV prevention program. Rietmeijer CA, et al. **AIDS** 1996 Mar;10(3):291–8

ADMINISTRATION & DOSAGE

[The correction of the metabolic disorders in diabetic coma] Bitsunov NS, et al. **Anesteziol Reanimatol** 1996 May–Jun; (3):50–3 **(Rus)**

[Indirect electrochemical oxidation of blood in multimodal intensive therapy of pneumonia in critical patients] Dolina OA, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):52–6 (Eng. Abstr.) **(Rus)**

[Endogenous intoxication and its treatment with sodium hypochlorite in neurosurgical patients] Parfenov AL, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):62–5 (Eng. Abstr.) **(Rus)**

[Use of sodium hypochlorite in diabetic ketoacidic coma] Shilova NA, et al. **Anesteziol Reanimatol** 1996 Jul–Aug; (4):81–3 **(Rus)**

[Experience in using sodium hypochlorite in the combined treatment of peritonitis] Rudakov SIu, et al. **Vestn Khir Im I I Grek** 1996;155(3):78–9 **(Rus)**

ADVERSE EFFECTS

Linear IgA bullous dermatosis after contact with sodium hypochlorite. Pellicano R, et al. **Dermatology** 1997; 194(3):284–6

Association between drinking water disinfection and somatic parameters at birth. Kanitz S, et al. **Environ Health Perspect** 1996 May;104(5):516–20

CHEMISTRY

Characterization of sodium hypochlorite degradation of beta–glucan in relation to its metabolism in vivo. Miura NN, et al. **Chem Pharm Bull (Tokyo)** 1996 Nov; 44(11):2137–41

[Analytic evaluation of Clorox household bleach from the viewpoint of its value in the use in endodontics] Veszprémi E, et al. **Fogorv Sz** 1997 Jan;90(1):13–8 (Eng. Abstr.) **(Hun)**

[Influence of the container and environmental factors in the stability of sodium hypochlorite] Aparecida Nicoletti M, et al. **Bol Oficina Sanit Panam** 1996 Oct;121(4):301–9 (Eng. Abstr.) **(Spa)**

HISTORY

Dakin's solution revisited. McDonnell KJ, et al. **Am J Orthop** 1997 Jul;26(7):471–3

PHARMACOLOGY

Beta–blockers inhibit the modification of low–density lipoproteins by sodium hypochlorite in vitro. Seifert T, et al. **Chem Phys Lipids** 1997 Jan 17;85(1):13–21

The effects of a sodium hypochlorite treatment on demineralized root dentin. Inaba D, et al. **Eur J Oral Sci** 1995 Dec;103(6):368–74

Oxidative modifications of apoB–100 by exposure of low density lipoproteins to HOCL in vitro. Yang CY, et al. **Free Radic Biol Med** 1997;23(1):82–9

In vitro function of pig islets isolated from bleach–treated pancreata. Tze WJ, et al. **Transplant Proc** 1997 Jun; 29(4):1992–3

[Participation of cholesterol in hypochlorite–induced oxidation of cholesterol–phosphatidylcholine liposomes] Momynaliev KT, et al. **Biull Eksp Biol Med** 1996 May; 121(5):516–9 **(Rus)**

[The suppressive action of a magnetic–laser ray and of an electrolytic solution of sodium hypochlorite on the factors of causative agent persistence] Usviatsov BIa, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug; (4):102–5 (Eng. Abstr.) **(Rus)**

[Water disinfection: comparative activities of ozone and

chlorine on a wide spectrum of bacteria] Korol S, et al. **Rev Argent Microbiol** 1995 Oct-Dec;27(4):175-83 (Eng. Abstr.) **(Spa)**

POISONING

Pulmonary effects of household bleach ingestion in children. Karnak I, et al. **Clin Pediatr (Phila)** 1996 Sep;35(9):471-2

THERAPEUTIC USE

Effect of sodium hypochlorite treatment on remineralization of human root dentine in vitro. Inaba D, et al. **Caries Res** 1996;30(3):218-24

[Effect of Sodium hypochlorite on indices of immune status and endotoxemia of patients with infectious endocarditis] Boiarinov GA, et al. **Anesteziol Reanimatol** 1996 Jul-Aug; (4):80-1 **(Rus)**

SODIUM IODIDE

Iodization of village water supply in the control of endemic iodine deficiency in rural Sarawak, Malaysia. Foo LC, et al. **Biomed Environ Sci** 1996 Sep;9(2-3):236-41

ADMINISTRATION & DOSAGE

Control of iodine deficiency using iodination of water in a goitre endemic area. Elnagar B, et al. **Int J Food Sci Nutr** 1997 Mar;48(2):119-27

ANALYSIS

Behavior of Na131I and meta(131I) iodobenzylguanidine (MIBG) in municipal sewerage. Fenner FD, et al. **Health Phys** 1997 Aug;73(2):333-9

PHARMACOLOGY

The effect of proteases and iodination on the adherent behaviour of Plasmodium falciparum-infected erythrocytes. Crandall I, et al. **Parasitology** 1996 Oct;113 (Pt 4):317-22

SODIUM IODOHIPPURATE see **IODOHIPPURIC ACID**

SODIUM IPODATE see **IPODATE**

SODIUM ISOTOPES

1H, 29Si and 1H, 23Na heteronuclear shift correlation in octosilicate via cross-polarisation. Almond GG, et al. **Solid State Nucl Magn Reson** 1996 Feb;6(1):31-8

SODIUM LACTATE

ADMINISTRATION & DOSAGE

Effect of lactate on hepatic insulin clearance in perfused rat liver. Pagano C, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R682-7

Metabolic and respiratory effects of sodium lactate during short i.v. nutrition in critically ill patients. Chioléro R, et al. **JPEN J Parenter Enteral Nutr** 1996 Jul-Aug; 20(4):257-63

ADVERSE EFFECTS

Behavioral and plasma cortisol responses to sodium lactate infusion in posttraumatic stress disorder. Jensen CF, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:444-8

ANALOGS & DERIVATIVES see LACTATES

DIAGNOSTIC USE

Panic response to sodium lactate infusion in patients with multiple chemical sensitivity syndrome [see comments] Binkley KE, et al. **J Allergy Clin Immunol** 1997 Apr; 99(4):570-4. Comment in: J Allergy Clin Immunol 1997 Apr;99(4):434-7.

METABOLISM

Metabolic activities of Listeria monocytogenes in the presence of sodium propionate, acetate, lactate and citrate. Kouassi Y, et al. **J Appl Bacteriol** 1996 Aug;81(2):147-53

PHARMACOLOGY

Behavioral and neuroendocrine responses to sodium lactate infusion in subjects with posttraumatic stress disorder. Jensen CF, et al. **Am J Psychiatry** 1997 Feb;154(2):266-8

Effects of sodium lactate on ventilation and acid-base balance in healthy humans. Tappy L, et al. **Clin Physiol** 1996 Jul; 16(4):393-401

Stimulation of pulmonary C fibres by lactic acid in rats: contributions of H+ and lactate ions. Hong JL, et al. **J Physiol (Lond)** 1997 Apr 15;500 (Pt 2):319-29

SODIUM LAURYL SULFATE see **SODIUM DODECYL SULFATE**

SODIUM MORRHUATE

PHARMACOLOGY

Peritracheal fibrosis induced by sclerosing agents: a putative treatment for tracheomalacia. Abu-Dalu K, et al. **J Invest Surg** 1996 Nov-Dec;9(6):433-7

SODIUM NAFCILLIN see **NAFCILLIN**

SODIUM NITRITE

The enhancing effect of sodium nitrite on virus-induced leukemia in mice. Ilnitsky AP, et al. **Cancer Detect Prev** 1997;21(4):312-8

ADVERSE EFFECTS

Fatal methemoglobinemia caused by liniment solutions containing sodium nitrite. Saito T, et al. **J Forensic Sci** 1996 Jan;41(1):169-71

BLOOD

ESR demonstration of nitric oxide production from nitroglycerin and sodium nitrite in the blood of rats. Kohno M, et al. **Free Radic Biol Med** 1995 Mar;18(3):451-7

PHARMACOKINETICS

Evidence for endogenous formation of tobacco-specific nitrosamines in rats treated with tobacco alkaloids and sodium nitrite. Carmella SG, et al. **Carcinogenesis** 1997 Mar; 18(3):587-92

PHARMACOLOGY

Effector molecules of the host defence mechanism against Mycobacterium avium complex: the evidence showing that reactive oxygen intermediates, reactive nitrogen intermediates, and free fatty acids each alone are not decisive in expression of macrophage antimicrobial activity against the parasites. Tomioka H, et al. **Clin Exp Immunol** 1997 Aug;109(2):248-54

Effect of nitrite on blood pressure in anaesthetized and free-moving rats. Vleeming W, et al. **Food Chem Toxicol** 1997 Jun;35(6):615-9

Sodium nitrite and potassium nitrate in control of nonproteolytic Clostridium botulinum outgrowth and toxigenesis in vacuum-packed cold-smoked rainbow trout. Hyytiä E, et al. **Int J Food Microbiol** 1997 Jun 17; 37(1):63-72

Predictive modelling of growth of Listeria monocytogenes. The effects on growth of NaCl, pH, storage temperature and NaNO2. McClure PJ, et al. **Int J Food Microbiol** 1997 Mar 3;34(3):221-32

Model for the survival of Staphylococcus aureus in nongrowth environments. Whiting RC, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):231-43

Widespread dissemination of a drug-susceptible strain of Mycobacterium tuberculosis. Friedman CR, et al. **J Infect Dis** 1997 Aug;176(2):478-84

[The effect of sodium nitrite on the functions of the gastrointestinal tract] Gozhenko AI, et al. **Gig Sanit** 1997 Mar-Apr;(2):39-41 **(Rus)**

[The effect of sodium nitrite on the realization of defensive and inhibitory conditioned reflexes] Shul'gina GI. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan-Feb; 47(1):70-7 (Eng. Abstr.) **(Rus)**

POISONING

Faulty sausage production causing methaemoglobinaemia. Kennedy N, et al. **Arch Dis Child** 1997 Apr;76(4):367-8

Nitrate preserved sausage meat causes an unusual food poisoning incident. Bacon R. **Commun Dis Rep CDR Rev** 1997 Mar 7;7(3):R45-7

[Effect of L-carnitine on lipid peroxidation and lipid composition in blood serum in hemic hypoxia] Sidoriak NG, et al. **Ukr Biokhim Zh** 1996 Sep-Oct;68(5):54-8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Hydrogen sulfide poisoning: an antidotal role for sodium nitrite? Hall AH, et al. **Vet Hum Toxicol** 1997 Jun; 39(3):152-4 (25 ref.)

Treatment of cyanide poisoning in an industrial setting. Wurzburg H. **Vet Hum Toxicol** 1996 Feb;38(1):44-7

TOXICITY

Nitrite mediated T lymphocyte responses in the intestinal immune system of mice infected with Trichinella spiralis nematode. Grudzinski IP, et al. **Arch Environ Contam Toxicol** 1997 May;32(4):462-6

Reproductive toxicology. Sodium nitrite. **Environ Health Perspect** 1997 Feb;105 Suppl 1:345-6

Effects of age on endometrial carcinogenesis induced by concurrent oral administration of ethylenethiourea and sodium nitrite in mice. Yoshida A, et al. **Exp Toxicol Pathol** 1996 Jun;48(4):289-98

Nitrite-induced adrenal effects in rats and the consequences for the no-observed-effect level. Til HP, et al. **Food Chem Toxicol** 1997 Mar-Apr;35(3-4):349-55

Nitrite-induced photo-oxidation of thiol and its implications in smog toxicity to the eye: prevention by ascorbate. Varma SD, et al. **J Ocul Pharmacol Ther** 1997 Apr;13(2):179-87

Experimental studies of methemoglobinemia due to percutaneous absorption of sodium nitrite. Saito T, et al. **J Toxicol Clin Toxicol** 1997;35(1):41-8

[Evaluation of the combined effect of lead and sodium nitrite on some blood biochemical parameters in blood of rats during subchronic exposure.Influence on levels of methemoglobin, sulfhydryl groups and tryptophan] Dudka J, et al. **Rocz Panstw Zakl Hig** 1997;48(1):23-9 (Eng. Abstr.) **(Pol)**

[An EPR study of the joint action of sodium nitrite and whole-body irradiation on animal tissues] Kudriavtsev ME, et al. **Izv Akad Nauk Ser Biol** 1996 Jul-Aug;(4):453-9 (Eng. Abstr.) **(Rus)**

SODIUM NITROPRUSSIDE see **NITROPRUSSIDE**

SODIUM OXACILLIN see **OXACILLIN**

SODIUM OXYBATE

Gamma-hydroxybutyrate: an emerging drug of abuse that causes physical dependence. Galloway GP, et al. **Addiction** 1997 Jan;92(1):89-96

Coma-inducing drug GHB may be reclassified [news] Marwick C. **JAMA** 1997 May 21;277(19):1505-6

ADMINISTRATION & DOSAGE

Manageability and tolerability of gamma-hydroxybutyric acid in the medium term outpatient treatment of alcoholism [letter; comment] Addolorato G, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):380. Comment on: Alcohol Clin Exp Res 1996 Aug;20(5):859-76.

Simultaneous stimulation of slow-wave sleep and growth hormone secretion by gamma-hydroxybutyrate in normal young Men. Van Cauter E, et al. **J Clin Invest** 1997 Aug 1;100(3):745-53

Effects of gamma-hydroxybutyric acid (GHB) in opioid-dependent patients. Rosen MI, et al. **J Subst Abuse Treat** 1997 Mar-Apr;14(2):149-54

ANTAGONISTS & INHIBITORS

The GABAB-receptor antagonist, CGP 35348, antagonises gamma-hydroxybutyrate- and baclofen-induced alterations in locomotor activity and forebrain dopamine levels in mice. Nissbrandt H, et al. **J Neural Transm** 1996; 103(11):1255-63

METABOLISM

Relation of the [3H] gamma-hydroxybutyric acid (GHB) binding site to the gamma-aminobutyric acidB (GABAB) receptor in rat brain. Snead OC 3rd. **Biochem Pharmacol** 1996 Oct 25;52(8):1235-43

Evidence that a specific succinic semialdehyde reductase is responsible for gamma-hydroxybutyrate synthesis in brain tissue slices. Rumigny JF, et al. **FEBS Lett** 1981 Nov 2; 134(1):96-8

Biosynthesis of poly(4-hydroxybutyric acid) by recombinant strains of Escherichia coli. Hein S, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):411-8

gamma-Hydroxybutyrate conversion into GABA induces displacement of GABAB binding that is blocked by valproate and ethosuximide. Hechler V, et al. **J Pharmacol Exp Ther** 1997 May;281(2):753-60

PHARMACOLOGY

In vitro modulation of hippocampal pyramidal cell response by quinolones: effects of HA 966 and gamma-hydroxybutyric acid. Dimpfel W, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2573-6

Effect of gamma-hydroxybutyrate on central dopamine release in vivo. A microdialysis study in awake and anesthetized animals. Howard SG, et al. **Biochem Pharmacol** 1997 Jan 10;53(1):103-10

Does gamma-hydroxybutyrate inhibit or stimulate central DA release? Feigenbaum JJ, et al. **Int J Neurosci** 1996 Nov;88(1-2):53-69 (99 ref.)

Grievous bodily harm [letter; comment] Carrazana EJ. **Neurology** 1996 Nov;47(5):1351. Comment on: Neurology 1996 Feb;46(2):469-71.

Presynaptic GABAB-and gamma-hydroxybutyric acid-mediated mechanisms in generalized absence seizures. Snead OC 3rd. **Neuropharmacology** 1996 Mar;35(3):359-67

Gamma-hydroxybutyric acid decreases thalamic sensory excitatory postsynaptic potentials by an action on presynaptic GABAB receptors. Emri Z, et al. **Neurosci Lett** 1996 Sep 27;216(2):121-4

Lack of effect of gamma-hydroxybutyrate on mu, delta and kappa opioid receptor binding. Feigenbaum JJ, et al. **Neurosci Lett** 1996 Jul 5;212(1):5-8

Naloxone reverses the inhibitory effect of gamma-hydroxybutyrate on central DA release in vivo in awake animals: a microdialysis study. Feigenbaum JJ, et al. **Neurosci Lett** 1997 Mar 7;224(1):71-4

Naloxone reverses the inhibitory effect of gamma-hydroxybutyrate on central DA release in vivo in awake animals: a microdialysis study. Feigenbaum JJ, et al. **Neurosci Lett** 1996 Oct 25;218(1):5-8

Gamma hydroxybutyrate is not a GABA agonist. Feigenbaum JJ, et al. **Prog Neurobiol** 1996 Sep;50(1):1-7 (94 ref.)

Evaluation of the discriminative stimulus and reinforcing effects of gammahydroxybutyrate (GHB). Beardsley PM, et al. **Psychopharmacology (Berl)** 1996 Oct;127(4):315-22

Rewarding properties of gamma-hydroxybutyric acid: an evaluation through place preference paradigm. Martellotta MC, et al. **Psychopharmacology (Berl)** 1997 Jul;132(1):1-5

[Binding ability of rat serum albumin during tetrachloromethane intoxication and administration of anti-oxidants, anti-hypoia agents, and actoprotectors] Dubovaia TK, et al. **Biull Eksp Biol Med** 1996 Dec; 122(12):635-7 **(Rus)**

POISONING

Coma induced by abuse of gamma-hydroxybutyrate (GBH or liquid ecstasy): a case report. Thomas G, et al. **BMJ** 1997 Jan 4;314(7073):35-6

Gamma hydroxybutyrate--a coma inducing recreational drug. Ryan JM, et al. **J Accid Emerg Med** 1997 Jul; 14(4):259-61

From the Centers for Disease Control and Prevention. Gamma hydroxy butyrate use--New York and Texas, 1995-1996. **JAMA** 1997 May 21;277(19):1511

Gamma hydroxy butyrate use--New York and Texas, 1995-1996. **MMWR Morb Mortal Wkly Rep** 1997 Apr 4; 46(13):281-3

Gamma butyrolactone poisoning and its similarities to gamma hydroxybutyric acid: two case reports. Rambourg-Schepens MO, et al. **Vet Hum Toxicol** 1997 Aug;39(4):234-5 (8 ref.)

THERAPEUTIC USE

An open multicentric study evaluating 4-hydroxybutyric acid sodium salt in the medium-term treatment of 179 alcohol dependent subjects. GHB Study Group. Addolorato G, et al. **Alcohol Alcohol** 1996 Jul;31(4):341-5

[The action of piracetam and its complex with sodium oxybutyrate in the neuropathic pain syndrome] Danilova EI, et al. **Eksp Klin Farmakol** 1996 Jul-Aug;59(4):8-10 (Eng. Abstr.) **(Rus)**

[Changes in the morphofunctional status of the liver in rats with acute tetrachloromethane poisoning and their correction with antihypoxants, antioxidants and actoprotectors] Dubovaia TK, et al. **Eksp Klin Farmakol** 1996 Jul-Aug;59(4):51-4 (Eng. Abstr.) **(Rus)**

URINE

The clinical phenotype of succinic semialdehyde dehydrogenase deficiency (4-hydroxybutyric aciduria): case reports of 23 new patients. Gibson KM, et al. **Pediatrics** 1997 Apr;99(4):567-74

SODIUM OXYBUTYRATE see **SODIUM OXYBATE**

SODIUM PERTECHNETATE TC 99M

Labeling cyclic glycoprotein IIb/IIIa receptor antagonists with 99mTc by the preformed chelate approach: effects of chelators on properties of [99mTc]chelator-peptide conjugates. Liu S, et al. **Bioconjug Chem** 1996 Mar-Apr; 7(2):196-202

Radioactivity in breast milk following the administration of 99mTc MAA from different manufacturers, with and without prior administration of Technegas [letter] Rose MR, et al. **Eur J Nucl Med** 1997 Jan;24(1):89-90

The transition from technegas to pertechnegas [letter; comment] Burch WM, et al. **J Nucl Med** 1996 Nov; 37(11):1917-8. Comment on: J Nucl Med 1995 Feb;36(2):267-9.

A study of Technegas employing X-ray photoelectron spectroscopy, scanning transmission electron microscopy and wet-chemical methods. Jackson P, et al. **Nucl Med Commun** 1996 Jun;17(6):504-13

[Improvement of a filter and the effect on the TECHNEGAS leakage] Komatani A, et al. **Kaku Igaku** 1997 Jun; 34(6):385-8 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Evaluation of solid-phase labels for gastric emptying studies in cats. Hoskinson JJ, et al. **J Nucl Med** 1997 Mar; 38(3):495-9

ANALYSIS

[Simplified analytical method of 99mTc-labeled phosphonate] Okamoto YM, et al. **Kaku Igaku** 1997 Jun; 34(6):379-84 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Metal ion separations in polyethylene glycol-based aqueous biphasic systems: correlation of partitioning behavior with available thermodynamic hydration data. Rogers RD, et al. **J Chromatogr B Biomed Appl** 1996 May 17; 680(1-2):221-9

Effects of increasing polymer hydrophobicity on distribution ratios of TcO_4^- in polyethylene/poly(propylene glycol)-based aqueous biphasic systems. Rogers RD, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):231-6

The physical and chemical nature of technegas. Senden TJ, et al. **J Nucl Med** 1997 Aug;38(8):1327-33

High-resolution electron microscopy of technegas and pertechnegas [letter; comment] Lloyd JJ, et al. **Nucl Med Commun** 1996 Sep;17(9):822-3. Comment on: Nucl Med Commun 1996 Feb;17(2):147-52.

DIAGNOSTIC USE

Role of radioisotope penile plethysmography in the evaluation of penile hemodynamics in impotent patients. Tsai SC, et al. **Abdom Imaging** 1997 May-Jun;22(3):354-6

Activity in the gastrointestinal tract after administration of bone-seeking radiopharmaceuticals. Experimental studies in mice. Cronhjort M, et al. **Acta Radiol** 1996 Sep; 37(5):785-90

Assessment of technetium-99m Technegas scintigraphy for ventilatory impairment in pulmonary emphysema: comparison of planar and SPECT images. Satoh K, et al. **Ann Nucl Med** 1997 May;11(2):109-13

Value of technetium-99m pertechnetate imaging in the differential of salivary gland lesions. Bongers V, et al. **Ann Otol Rhinol Laryngol** 1997 May;106(5):432-4

Biological evaluation of 99mTc-labeled cyclic glycoprotein IIb/IIIa receptor antagonists in the canine arteriovenous shunt and deep vein thrombosis models: effects of chelators on biological properties of [99mTc]chelator-peptide conjugates. Barrett JA, et al. **Bioconjug Chem** 1996 Mar-Apr;7(2):203-8

Upper extremity DVT. Correlation of MR and nuclear medicine flow imaging. Fielding JR, et al. **Clin Imaging** 1997 Jul-Aug;21(4):260-3

Comparison of Tc-99m pertechnetate with Tl-201 and Ga-67 scintigraphy of malignant soft-tissue tumors. Abe H, et al. **Clin Nucl Med** 1997 Jan;22(1):38-41

Scrotal cellulitis simulating testicular infarction by Tc-99m pertechnetate imaging. Appelbaum A. **Clin Nucl Med** 1997 Jul;22(7):499-500

Sites of abnormal tracer accumulation on a radionuclide cystogram. Bhattathiry MM, et al. **Clin Nucl Med** 1996 Jul;21(7):578

Renal hemorrhage detection with Tc-99m labeled erythrocytes in a patient with polycystic disease. Cesani F, et al. **Clin Nucl Med** 1996 Aug;21(8):658-9

Malignant stromal tumor: a rare cause of gastrointestinal bleeding discovered by Tc-99m labeled red cells. Hamlin J, et al. **Clin Nucl Med** 1996 Dec;21(12):1002-4

Use of whole-body imaging using Tc-99m RBC in patients with soft-tissue vascular lesions. Inoue Y, et al. **Clin Nucl Med** 1996 Dec;21(12):958-9

Thyroid lymphoma and Hashimoto's thyroiditis: Tc-99m pertechnetate and Ga-67 citrate imaging in two cases. Jung WK, et al. **Clin Nucl Med** 1996 Nov;21(11):894-6

Tc-99m pertechnetate imaging and CT show bilateral huge cervical and intrathoracic goiter extending to the posterior mediastinum. Lahr B, et al. **Clin Nucl Med** 1996 Nov; 21(11):905-6

Comparison of Tc-99m MIBI and Tl-201/Tc-99m pertechnetate for diagnosis of primary hyperparathyroidism. Rauth JD, et al. **Clin Nucl Med** 1996 Aug;21(8):602-8

Pertechnetate thyroid uptake is not always suppressed in patients with subacute thyroiditis. Shigemasa C, et al. **Clin Nucl Med** 1997 Feb;22(2):109-14

Tc-99m pertechnetate thyroid images in hyperthyroidism. Size, distribution, and presence of a pyramidal lobe. Spencer RP, et al. **Clin Nucl Med** 1997 Aug;22(8):519-22

Intestinal duplication: imaging with Tc-99m sodium pertechnetate. Torgerson CL, et al. **Clin Nucl Med** 1996 Dec;21(12):968

Predictive value of technetium Tc 99m-labeled red blood cell scintigraphy for positive angiogram in massive lower gastrointestinal hemorrhage. Ng DA, et al. **Dis Colon Rectum** 1997 Apr;40(4):471-7

Prediction of remission in Graves' disease treated with long-term carbimazole therapy: evaluation of technetium-99m thyroid uptake and TSH concentrations as prognostic indicators. Prakash R. **Eur J Nucl Med** 1996 Feb;23(2):118-22

Technetium-99m labelling of the anti-tumour antibody PR1A3 by photoactivation. Stalteri MA, et al. **Eur J Nucl Med** 1996 Feb;23(2):178-87

Failure of in vivo labelling of erythrocytes with technetium-99m: it is not Teflon that is the problem but rather the injection technique [letter] Verbeke K, et al. **Eur J Nucl Med** 1997 Apr;24(4):448

Procedure guideline for thyroid scintigraphy: 1.0. Society of Nuclear Medicine. Becker D, et al. **J Nucl Med** 1996 Jul;37(7):1264-6

Comparison of parathyroid imaging with technetium-99m-pertechnetate/sestamibi subtraction, double-phase technetium-99m-sestamibi and technetium-99m-sestamibi SPECT [see comments] Chen CC, et al. **J Nucl Med** 1997 Jun;38(6):834-9. Comment in: J Nucl Med 1997 Jun;38(6):840-1.

Disseminated islands of gastric mucosa in jejunum and ileum detected by technetium-99m-pertechnetate scintigraphy. Heinrichs VM, et al. **J Nucl Med** 1997 May;38(5):818-20

Physical properties and use of pertechnegas as a ventilation agent. Mackey DW, et al. **J Nucl Med** 1997 Jan;38(1):163-7

Intrapancreatic accessory spleen diagnosed by technetium-99m heat-damaged red blood cell SPECT. Ota T, et al. **J Nucl Med** 1997 Mar;38(3):494-5

Utility of preoperative radionuclide scanning for primary hyperparathyroidism. Sinha CK, et al. **Laryngoscope** 1997 Jun;107(6):753-8

High-resolution electron microscopy of technegas and pertechnegas [letter; comment] Lloyd JJ, et al. **Nucl Med Commun** 1996 Sep;17(9):822-3. Comment on: Nucl Med Commun 1996 Feb;17(2):147-52.

201Tl scintigraphy does not allow visualization of the thyroid in euthyroid and hyperthyroid patients treated with amiodarone. van de Wiele C, et al. **Nucl Med Commun** 1997 Jun;18(6):513-6

Quantitative 99mTc-pertechnetate thyroid scintigraphy in normal beagles. Adams WH, et al. **Vet Radiol Ultrasound** 1997 Jul-Aug;38(4):323-8

[Diagnosis of achalasia using 99m-Tc pertechnetate scintigraphy. Mikosch P, et al. **Nuklearmedizin** 1997 Jun; 36(4):142-5 (Eng. Abstr.) **(Ger)**

[Comparison between high-resolution computed tomography and 99mTc-technegas SPECT pulmonary emphysema] Nakano S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 May;34(5):511-9 (Eng. Abstr.) **(Jpn)**

[Regional evaluation of ventilation by RI] Kawakami K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:42-4 (3 ref.) **(Jpn)**

PHARMACOKINETICS

A compartmental model for alveolar clearance of pertechnegas. Kotzerke J, et al. **J Nucl Med** 1996 Dec; 37(12):2066-71

Direct interaction between S-methyl dithiocarbazate and pertechnetate-99m. Liu G. **Nucl Med Biol** 1997 Jan; 24(1):119-22

Uptake index and stimulated salivary gland response in 99Tcm-pertechnetate salivary gland scintigraphy in normal subjects. Vigh L, et al. **Nucl Med Commun** 1997 Apr; 18(4):363-6

SODIUM, POTASSIUM ADENOSINETRIPHOSPHATASE see **NA(+)-K(+)-EXCHANGING ATPASE**

SODIUM, POTASSIUM ATPASE see **NA(+)-K(+)-EXCHANGING ATPASE**

SODIUM-POTASSIUM PUMP see **NA(+)-K(+)-EXCHANGING ATPASE**

SODIUM PUMP see **NA(+)-K(+)-EXCHANGING ATPASE**

SODIUM RADIOISOTOPES

METABOLISM

Active 22Na+ transport by the intact lung during early postnatal life. O'Brodovich HM, et al. **Can J Physiol Pharmacol** 1997 May;75(5):431-5

SODIUM SALICYLATE

IMMUNOLOGY

Acetaminophen anaphylaxis with aspirin and sodium salicylate sensitivity: a case report. Schwarz N, et al. **Ann Allergy Asthma Immunol** 1996 Dec;77(6):473-4

PHARMACOKINETICS

Effects of excipients on the bioavailability of sodium salicylate from orally administered, oily suspensions. al-Hammami OM, et al. **Pharm Acta Helv** 1996 Oct; 71(4):297-303

PHARMACOLOGY

Iron-salicylate complex induces peroxidation, alters hepatic lipid profile and affects plasma lipoprotein composition. Brunet S, et al. **Atherosclerosis** 1997 Mar 21;129(2):159-68

The anti-inflammatory drug sodium salicylate inhibits nitric oxide formation induced by interleukin-1beta at a translational step, but not at a transcriptional step, in hepatocytes. Sakitani K, et al. **Hepatology** 1997 Feb; 25(2):416-20

Sodium salicylate decreases intracellular ATP, induces both heat shock factor binding and chromosomal puffing, but does not induce hsp 70 gene transcription in Drosophila. Winegarden NA, et al. **J Biol Chem** 1996 Oct 25; 271(43):26971-80

Sodium salicylate inhibits cyclo-oxygenase-2 activity independently of transcription factor (nuclear factor kappaB) activation: role of arachidonic acid. Mitchell JA, et al. **Mol Pharmacol** 1997 Jun;51(6):907-12

Salicylate evokes c-fos expression in the brain stem: implications for tinnitus. Wallhäusser-Franke E. **Neuroreport** 1997 Feb 10;8(3):725-8

Sodium salicylate induces apoptosis via p38 mitogen-activated protein kinase but inhibits tumor necrosis factor-induced c-Jun N-terminal kinase/stress-activated protein kinase activation. Schwenger P, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2869-73

Neuroprotection by aspirin and sodium salicylate through blockade of NF-kappaB activation. Grilli M, et al. **Science** 1996 Nov 22;274(5291):1383-5

Acetylsalicylic acid and sodium salicylate inhibit LPS-induced NF-kappa B/c-Rel nuclear translocation, and synthesis of tissue factor (TF) and tumor necrosis factor alfa (TNF-alpha) in human monocytes. Osnes LT, et al. **Thromb Haemost** 1996 Dec;76(6):970-6

Transcriptional induction of multiple cytokines by human

SODIUM SALICYLATE

respiratory syncytial virus requires activation of NF-kappa B and is inhibited by sodium salicylate and aspirin. Bitko V, et al. **Virology** 1997 Jun 9;232(2):369-78

TOXICITY

Effect of leukotriene inhibitor on salicylate induced morphologic changes of isolated cochlear outer hair cells. Jung TT, et al. **Acta Otolaryngol (Stockh)** 1997 Mar; 117(2):258-64

Effects of salicylate on neural activity in cat primary auditory cortex. Ochi K, et al. **Hear Res** 1996 May;95(1-2):63-76

SODIUM SELENITE

ADMINISTRATION & DOSAGE

Conventional cell culture media do not adequately supply cells with antioxidants and thus facilitate peroxide-induced genotoxicity. Leist M, et al. **Free Radic Biol Med** 1996; 21(3):297-306

Human selenium supplementation as assessed by changes in blood selenium concentration and glutathione peroxidase activity. Nève J. **J Trace Elem Med Biol** 1995 Jul;9(2):65-73 (32 ref.)

Selenite supplementation decreases expression of MAZ in HT29 human colon adenocarcinoma cells. Nelson KK, et al. **Nutr Cancer** 1996;26(1):73-81

ANALYSIS

Colorimetric determination of selenium in mineral premixes. Hurlbut JA, et al. **J AOAC Int** 1997 Jul-Aug;80(4):709-16

ANTAGONISTS & INHIBITORS

Inhibition of selenite-catalyzed superoxide generation and formation of elemental selenium (Se(o)) by copper, zinc, and aurintricarboxylic acid (ATA). Davis RL, et al. **Biochem Pharmacol** 1996 Apr 26;51(8):1015-20

BLOOD

Metabolism of selenite labelled with enriched stable isotope in the bloodstream. Suzuki KT, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):15-22

METABOLISM

Newly found selenium-containing proteins in the tissues of the rat. Behne D, et al. **Biol Trace Elem Res** 1996 Oct-Nov; 55(1-2):99-110

Bioavailability of selenium accumulated by selenite-reducing bacteria. Combs GF Jr, et al. **Biol Trace Elem Res** 1996 Jun;52(3):209-25

Intracellular distribution of selenium and the growth of mammary cells in culture. Hwang K, et al. **Biol Trace Elem Res** 1996 Feb;51(2):133-47

The metabolism of [75Se]selenite in patients with short bowel syndrome. Rannem T, et al. **JPEN J Parenter Enteral Nutr** 1996 Nov-Dec;20(6):412-6

PHARMACOKINETICS

Influences of fulvic acid on bioavailability and toxicity of selenite for wheat seedling and growth. Wang Z, et al. **Biol Trace Elem Res** 1996 Oct-Nov;55(1-2):147-62

Incorporation of selenium into egg proteins from dietary selenite. Davis RH, et al. **Br Poult Sci** 1996 Mar; 37(1):197-211

PHARMACOLOGY

Oxidants increase intracellular free Zn2+ concentration in rabbit ventricular myocytes. Turan B, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2095-106

Immunomodulating efficacy of combined administration of galactoside-specific lectin standardized mistletoe extract and sodium selenite in BALB/c-mice. Stoffel B, et al. **Anticancer Res** 1997 May-Jun;17(3C):1893-6

The inhibitory effect of selenium on induction of tetraploidy by dimethylarsinic acid in Chinese hamster cells. Ueda H, et al. **Anticancer Res** 1997 May-Jun;17(3C):1939-43

Murine thymocyte proliferation, maturation and emigration in response to selenium. Stoffel B, et al. **Arzneimittelforschung** 1996 Aug;46(8):829-31

Chemical form of selenium greatly affects metal uptake and responses by cultured human lymphocytes. Borella P, et al. **Biol Trace Elem Res** 1996 Jan;51(1):43-54

Supplementation with selenium augments the functions of natural killer and lymphokine-activated killer cells. Kiremidjian-Schumacher L, et al. **Biol Trace Elem Res** 1996 Jun;52(3):227-39

Protective effects of GSH, vitamin E, and selenium on lipid peroxidation in cadmium-fed rats. Rana SV, et al. **Biol Trace Elem Res** 1996 Feb;51(2):161-8

Se-mediated domain-domain communication in band 3 of human erythrocytes. Yang FY, et al. **Biol Trace Elem Res** 1996 Dec;55(3):279-95

Interactions between dietary selenium, copper and sodium nitroprusside, a source of cyanide in growing chicks and laying hens. Davis RH, et al. **Br Poult Sci** 1996 Mar; 37(1):87-94

Effect of selenite and selenate on plant uptake of cadmium by maize (Zea mays). Shanker K, et al. **Bull Environ Contam Toxicol** 1996 Mar;56(3):419-24

Induction of differentiation and apoptosis by sodium selenite in human colonic carcinoma cells (HT29). Stewart MS, et al. **Cancer Lett** 1997 Jul 15;117(1):35-40

Selenite and selenate inhibit human lymphocyte growth via different mechanisms. Spyrou G, et al. **Cancer Res** 1996 Oct 1;56(19):4407-12

Oxidative effects of selenite on rat ventricular contractility and Ca movements. Turan B, et al. **Cardiovasc Res** 1996 Aug;32(2):351-61

Effect of cadmium and selenium on the antioxidant defense system in rat kidneys. Stajn A, et al. **Comp Biochem Physiol C Pharmacol Toxicol Endocrinol** 1997 Jun;117(2):167-72

Antinucleolar autoantibody induced by mercuric chloride in mice: does sodium selenite inhibit autoantibody production? Saegusa J, et al. **Ind Health** 1996;34(2):139-42

Evaluating the efficacy of selenium-enriched yeast and sodium selenite on tissue selenium retention and serum glutathione peroxidase activity in grower and finisher swine. Mahan DC, et al. **J Anim Sci** 1996 Dec; 74(12):2967-74

Effect of selenium supplementation on the glutathione redox system in the kidney of mice after chronic cadmium exposures. Nehru LB, et al. **J Appl Toxicol** 1997 Jan-Feb; 17(1):81-4

Thiols and selenium: protective effect on human skin fibroblasts exposed to UVA radiation. Emonet N, et al. **J Photochem Photobiol B** 1997 Aug;40(1):84-90

Cadmium-induced lipid peroxidation and the antioxidant system in rat erythrocytes: the role of antioxidants. Sarkar S, et al. **J Trace Elem Med Biol** 1997 Apr;11(1):8-13

Garlic powder and allyl sulfur compounds enhance the ability of dietary selenite to inhibit 7,12-dimethylbenz[a]anthracene-induced mammary DNA adducts. Schaffer EM, et al. **Nutr Cancer** 1997;27(2):162-8

Selenite suppression of cadmium-induced testicular apoptosis. Jones MM, et al. **Toxicology** 1997 Jan 15; 116(1-3):169-75

[Effects of selenium and germanium on lipid peroxidation in rats fed with low-selenium grain] Xie W, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1996 Mar; 30(2):88-90 (Eng. Abstr.) **(Chi)**

[Selenium in the cytotoxicity of cisplatin] Olas B, et al. **Postepy Hig Med Dosw** 1997;51(1):95-108 (82 ref.) (Eng. Abstr.) **(Pol)**

[The study of the in vitro effect of selenium on formation of active oxygen species and lipid peroxidation in rat liver microsomes] Lashneva NV, et al. **Vopr Med Khim** 1996 Apr-Jun;42(2):119-24 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Inhibitory effect of selenite and other antioxidants on complement-mediated tissue injury in patients with epidemic hemorrhagic fever. Hou JC. **Biol Trace Elem Res** 1997 Jan;56(1):125-30

Organic and inorganic selenium compounds inhibit mouse mammary cell growth in vitro by different cellular pathways. Sinha R, et al. **Cancer Lett** 1996 Oct 22; 107(2):277-84

TOXICITY

Influences of fulvic acid on bioavailability and toxicity of selenite for wheat seedling and growth. Wang Z, et al. **Biol Trace Elem Res** 1996 Oct-Nov;55(1-2):147-62

Selenium salts and chromosome damage. Biswas S, et al. **Mutat Res** 1997 May 23;390(3):201-5

Precataractous changes affect lens transparency in the selenite cataract. Hess JL, et al. **Ophthalmic Res** 1996;28 Suppl 2:45-53

SODIUM STIBOGLUCONATE see **ANTIMONY SODIUM GLUCONATE**

SODIUM TETRADECYL SULFATE

ADMINISTRATION & DOSAGE

Symptomatic hemangiomas and venous malformations in infants, children, and young adults: treatment with percutaneous injection of sodium tetradecyl sulfate. O'Donovan JC, et al. **AJR Am J Roentgenol** 1997 Sep; 169(3):723-9

Endoscopic injection sclerotherapy with 1.5% Sotradecol for bleeding cardiac varices. Chiu KW, et al. **J Clin Gastroenterol** 1997 Apr;24(3):161-4

Scrutinizing sclerotherapy [letter; comment] Bowman WE Jr. **N C Med J** 1996 May-Jun;57(3):127-8. Comment on: N C Med J 1996 Jan-Feb;57(1):42-6.

Cirsoid aneurysm treatment by percutaneous injection of sodium tetradecyl sulfate. Hendrix LE, et al. **Surg Neurol** 1996 Dec;46(6):557-60; discussion 560-1

ADVERSE EFFECTS

Nefazodone- and/or sodium tetradecyl sulfate-associated leukopenia, fever, and shaking chills in a patient with premenstrual dysphoric disorder [letter] Fogelson DL. **J Clin Psychopharmacol** 1997 Jun;17(3):222-3

PHARMACOLOGY

Chemical ablation of the gallbladder. Majeed AW, et al. **Br J Surg** 1997 May;84(5):638-41

THERAPEUTIC USE

Sclerotherapy in noncirrhotic portal fibrosis. Chawla YK, et al. **Dig Dis Sci** 1997 Jul;42(7):1449-53

Prospective, randomized trial of hypertonic glucose water and sodium tetradecyl sulfate for gastric variceal bleeding in patients with advanced liver cirrhosis. Chang KY, et al. **Endoscopy** 1996 Aug;28(6):481-6

Eleven-year survey of safety and efficacy of endoscopic injection sclerotherapy using 2% sodium tetradecyl sulfate and contrast medium. Iwase H, et al. **J Clin Gastroenterol** 1996 Jan;22(1):58-65

Sclerotherapy of telangiectases using sodium tetradecyl sulfate (Sotradecol) [see comments] Hren C, et al. **N C Med J** 1996 Jan-Feb;57(1):42-6 (8 ref.). Comment in: N C Med J 1996 May-Jun;57(3):127-8.

Percutaneous sclerotherapy of venous malformations of the head and neck using sodium tetradecyl sulphate (sotradecol). Siniluoto TM, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Jun; 31(2):145-50

Long-term outcome of patients treated for hydrocele with the sclerosant agent sodium tetradecyl sulphate. Stattin P, et al. **Scand J Urol Nephrol** 1996 Apr;30(2):109-13

[Sclerosing agents in clinical practice] Labaš P, et al. **Cas Lek Cesk** 1996 Dec 18;135(24):796-8 (Eng. Abstr.) **(Slo)**

SODIUM TETRATHIONATE see **TETRATHIONIC ACID**

SODIUM VALPROATE see **VALPROIC ACID**

SOFT CONTACT LENSES see **CONTACT LENSES, HYDROPHILIC**

SOFT TISSUE INFECTIONS

see related
SKIN DISEASES, INFECTIOUS

Deep infection of the hand with Mycobacterium avium-intracellulare: two case reports. Darrow M, et al. **Am J Orthop** 1995 Dec;24(12):914-7

Necrotizing soft tissue infections of the chest wall. Urschel JD, et al. **Ann Thorac Surg** 1997 Jul;64(1):276-9 (28 ref.)

The resonant shoulder; gas abscess of the deltoid bursa. Bowditch MG, et al. **J Shoulder Elbow Surg** 1997 Jan-Feb; 6(1):70-1

[Anaerobic infections of the soft tissues] Mathieu D, et al. **Ann Chir** 1997;51(3):272-87 (120 ref.) (Eng. Abstr.) **(Fre)**

[Soft tissue necrotising infections: rapid diagnosis, early surgical treatment and less hyperbaric oxygen (letter; comment)] Sánchez Porto A. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):627. Comment on: Enferm Infecc Microbiol Clin 1996 Jan;14(1):16-20. **(Spa)**

COMPLICATIONS

Isolated subcutaneous candidal abscess and HIV disease [letter] Manfredi R, et al. **Br J Dermatol** 1997 Apr; 136(4):647-9

Surgical morbidity and the risk of amputation due to infected puncture wounds in diabetic versus nondiabetic adults. Armstrong DG, et al. **J Am Podiatr Med Assoc** 1997 Jul; 87(7):321-6

Human immunodeficiency virus infection in an emergency hand service. Ching V, et al. **J Hand Surg [Am]** 1996 Jul; 21(4):696-9

[A comprehensive method for the early detection and differential diagnosis of the intracranial complications of suppurative diseases of the face and neck] Chevardov NI, et al. **Stomatologiia (Mosk)** 1996;Spec No:89-90 **(Rus)**

DIAGNOSIS

Complicated bone and soft-tissue infections. Imaging with 0.1 T MR and 99mTc-HMPAO-labeled leukocytes. ff Hovi I. **Acta Radiol** 1996 Nov;37(6):870-6

Deep fascial hyperintensity in soft-tissue abnormalities as revealed by T2-weighted MR imaging. Loh NN, et al. **AJR Am J Roentgenol** 1997 May;168(5):1301-4

Use of the rapid streptococcus test in extrapharyngeal sites. Bourgeois SD, et al. **Am Fam Physician** 1996 Oct; 54(5):1634-6

Traumatic myositis ossificans simulating soft tissue infection. Adderson EE, et al. **Pediatr Infect Dis J** 1996 Jun; 15(6):551-3

Severe soft-tissue infections--a diagnostic challenge. The need for early recognition and aggressive therapy. Leong WC, et al. **S Afr Med J** 1997 May;87(5 Suppl):648-52, 654

The use of intravenous contrast in MRI of extremity infection. Towers JD. **Semin Ultrasound CT MR** 1997 Aug; 18(4):269-75 (14 ref.)

[Clinical judgement and decision making in clinical practice. A patient with fever and neck pain (letter; comment)] van der Meer JW, et al. **Ned Tijdschr Geneeskd** 1996 Dec 21; 140(51):2588. Comment on: Ned Tijdschr Geneeskd 1996 Oct 26;140(43):2122-7. **(Dut)**

[Soft tissue infection] Schneider U, et al. **Unfallchirurg** 1997 Feb;100(2):146-53 (8 ref.) **(Ger)**

[The clinico-immunological diagnosis, prognosis and

treatment follow-up in odontogenic abscesses, phlegmons and lymphadenitis] Kazimirskii VA, et al. **Stomatologiia (Mosk)** 1996;Spec No:60 **(Rus)**

DRUG THERAPY

Soft tissue infections and the diabetic foot. Smith AJ, et al. **Am J Surg** 1996 Dec;172(6A):7S-12S (26 ref.)

Drug treatment of skin and soft tissue infections in elderly long-term care residents. Lertzman BH, et al. **Drugs Aging** 1996 Aug;9(2):109-21 (41 ref.)

Risk factors leading to clinical failure in the treatment of intra-abdominal or skin/soft tissue infections. Falagas ME, et al. **Eur J Clin Microbiol Infect Dis** 1996 Dec; 15(12):913-21

Local treatment of bone and soft tissue infections with the collagen-gentamicin sponge. Stemberger A, et al. **Eur J Surg Suppl** 1997;(578):17-26 (80 ref.)

A comparative study of the efficacy, safety and tolerability of azithromycin and cefaclor in the treatment of children with acute skin and/or soft tissue infections. Montero L. **J Antimicrob Chemother** 1996 Jun;37 Suppl C:125-31

Microbiological and clinical studies on cefpodoxime proxetil for bacterial skin and soft tissue infections in pediatric patients. Ito K, et al. **J Chemother** 1995 Nov;7 Suppl 4:124-6

Ceftriaxone versus cefazolin with probenecid for severe skin and soft tissue infections. Brown G, et al. **J Emerg Med** 1996 Sep-Oct;14(5):547-51

Clinical efficacy of ampicillin, pivampicillin and procaine penicillin G in a soft tissue infection model in ponies. Ensink JM, et al. **J Vet Pharmacol Ther** 1996 Dec;19(6):445-53

[Clinico-laboratory study of piperacillin/tazobactam in the treatment of patients with would infection] Iakovlev VP, et al. **Antibiot Khimioter** 1997;42(2):21-5 (Eng. Abstr.) **(Rus)**

[Use of cefpirome in the treatment of patients with skin and soft tissue infections] Iakovlev VP, et al. **Antibiot Khimioter** 1996;41(12):24-9 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Hand and foot sepsis in Libyan diabetic patients [editorial; comment] Lester FT. **Trop Doct** 1997 Oct;27(4):195. Comment on: Trop Doct 1997 Oct;27(4):232-3.

ETIOLOGY

Incidence of infections requiring hospitalization associated with partially erupted third molars. Berge TI. **Acta Odontol Scand** 1996 Oct;54(5):309-13

Descending necrotizing mediastinitis: complication of a simple dental infection. Haraden BM, et al. **Ann Emerg Med** 1997 May;29(5):683-6

Invasive soft tissue infections with Streptococcus pneumoniae in patients with systemic lupus erythematosus: case report and review of the literature. Hill MD, et al. **Arthritis Rheum** 1997 Sep;40(9):1716-9 (16 ref.)

Lymphocutaneous sporotrichosis associated with a squirrel bite: case report and review. Saravanakumar PS, et al. **Clin Infect Dis** 1996 Sep;23(3):647-8

Complicated soft tissue infection with prepatellar bursitis caused by Paecilomyces lilacinus in an immunocompetent host: case report and review. Westenfeld F, et al. **J Clin Microbiol** 1996 Jun;34(6):1559-62 (29 ref.)

Soft tissue and bone infections from puncture wounds in children. Laughlin TJ, et al. **West J Med** 1997 Feb; 166(2):126-8

[Mycobacterium marinum as the rare cause of a chronic skin and soft-tissue infection (letter)] Hunfeld KP, et al. **Dtsch Med Wochenschr** 1997 Jul 11;122(28-29):917 **(Ger)**

[Dentogenous infections: from harmless to life-threatening (editorial)] Hammer B. **Schweiz Rundsch Med Prax** 1996 Dec 10;85(50):1601-2 **(Ger)**

[The structural and etiological characteristics of inflammatory diseases of the maxillofacial area] Kislykh FI, et al. **Stomatologiia (Mosk)** 1996;Spec No:61-2 **(Rus)**

MICROBIOLOGY

Rhinosporidiosis. Report of a case with an unusual presentation with bony involvement. Adiga BK, et al. **Acta Cytol** 1997 May-Jun;41(3):889-91

Metastatic abscess formation of the pelvis. Bauze AJ, et al. **Aust N Z J Surg** 1997 Sep;67(9):668-9

Bacteriology of necrotizing infections of soft tissues. Singh G, et al. **Aust N Z J Surg** 1996 Nov;66(11):747-50

Atypical eumycetoma caused by Phialophora parasitica successfully treated with itraconazole and flucytosine. Hood SV, et al. **Br J Dermatol** 1997 Jun;136(6):953-6

A 4-year-old girl with right elbow erythema, warmth, and induration. Porter GA, et al. **Curr Opin Pediatr** 1997 Feb; 9(1):31-4

An outbreak of fatal nosocomial infections due to group A streptococcus on a medical ward. Ramage L, et al. **Infect Control Hosp Epidemiol** 1996 Jul;17(7):429-31

Necrotizing fasciitis: flesh-eating microbes [editorial; comment] Moses AE. **Isr J Med Sci** 1996 Sep;32(9):781-4 (26 ref.). Comment on: Isr J Med Sci 1996 Sep;32(9):745-9.

A fresh water pathogen and its pedal manifestations [letter] Albreski DA, et al. **J Am Podiatr Med Assoc** 1996 Mar; 86(3):135-7

Actinomycosis of the foot. Vogen KW. **J Am Podiatr Med Assoc** 1996 May;86(5):238-40

Localized soft tissue infection of the upper limb in two immunocompetent patients caused by Mycobacterium avium-intracellulare [letter] Turner P, et al. **J Infect** 1997 Mar;34(2):156-7

Orthopaedic manifestations of invasive group A streptococcal infections complicating primary varicella. Mills WJ, et al. **J Pediatr Orthop** 1996 Jul-Aug;16(4):522-8

[The dynamics of the antiseptic resistance of the causative agents of soft-tissue suppurative-inflammatory diseases in children] Abaev IuK, et al. **Vestn Khir Im I I Grek** 1996; 155(4):35-7 (Eng. Abstr.) **(Rus)**

[The connection between the duration of the course of postinjection abscesses and the biological characteristics of the causative microorganisms] Kurlaev PP, et al. **Vestn Khir Im I I Grek** 1996;155(6):54-6 (Eng. Abstr.) **(Rus)**

[The dynamics of the species composition, antilysozyme activity and antibiotic resistance of the causative agents of soft-tissue surgical infection] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug;(4):51-4 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Musculoskeletal involvement in cystic echinococcosis: report of eight cases and review of the literature. Merkle EM, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1531-4 (12 ref.)

Bone and soft tissue manifestations of alveolar echinococcosis. Merkle EM, et al. **Skeletal Radiol** 1997 May;26(5):289-92

PREVENTION & CONTROL

[The status and outlook in the prevention and treatment of suppurative inflammatory diseases of the maxillofacial area] Bazhanov NN, et al. **Stomatologiia (Mosk)** 1997;76(2):15-9 **(Rus)**

RADIOGRAPHY

[Infection of soft tissues of the trunk: diagnosis using CT (letter)] Fernández-Fernández FJ, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):577-8 **(Spa)**

RADIONUCLIDE IMAGING

Importance of dressing removal before radiolabeled WBC imaging for musculoskeletal infection. Ghesani M, et al. **Clin Nucl Med** 1996 Jul;21(7):537-40

Radionuclide imaging of infection in soft tissue and bone. Strauss HW, et al. **Curr Clin Top Infect Dis** 1997;17:95-109 (64 ref.)

Localization of radiolabeled chemotactic peptide at focal sites of Escherichia coli infection in rabbits: evidence for a receptor-specific mechanism [see comments] Babich JW, et al. **J Nucl Med** 1997 Aug;38(8):1316-22. Comment in: J Nucl Med 1997 Aug;38(8):1322-6.

Evaluation of infections of the locomotor system with indium-111-labeled human IgG scintigraphy. Nijhof MW, et al. **J Nucl Med** 1997 Aug;38(8):1300-5

Technetium-99m-labeled chemotactic peptides: specific for imaging infection? [editorial; comment] Vallabhajosula S. **J Nucl Med** 1997 Aug;38(8):1322-6. Comment on: J Nucl Med 1997 Aug;38(8):1310-5. Comment on: J Nucl Med 1997 Aug;38(8):1316-22.

Technetium-99m-labeled chemotactic peptides in acute infection and sterile inflammation [see comments] van der Laken CJ, et al. **J Nucl Med** 1997 Aug;38(8):1310-5. Comment in: J Nucl Med 1997 Aug;38(8):1322-6.

REHABILITATION

[The use of physiotherapeutic factors in the combined treatment of patients with diseases of the maxillofacial area] Ivasenko PI, et al. **Stomatologiia (Mosk)** 1996;Spec No:59-60 **(Rus)**

SURGERY

Soft tissue infections and the diabetic foot. Smith AJ, et al. **Am J Surg** 1996 Dec;172(6A):7S-12S (26 ref.)

Delayed primary wound closure in upper extremity soft tissue infections. Schnall SB, et al. **Clin Orthop** 1997 Feb; (335):286-91

Extensive necrotizing soft tissue infection of the perineum [see comments] Ben-Aharon U, et al. **Isr J Med Sci** 1996 Sep;32(9):745-9. Comment in: Isr J Med Sci 1996 Sep;32(9):781-4.

Primary skin infections secondary to Vibrio vulnificus: the role of operative intervention. Halow KD, et al. **J Am Coll Surg** 1996 Oct;183(4):329-34

Free-muscle-flap coverage of exposed knee joints following fulminant meningococcemia. Yuen JC. **Plast Reconstr Surg** 1997 Mar;99(3):880-4

[Active surgical treatment of non-Clostridial infection of soft tissues] Shapoval SD. **Klin Khir** 1996;(5):8-9 **(Rus)**

THERAPY

Is instillation drainage for the treatment of infected joints, bones and soft tissues still up to date? Schmidt J, et al. **Arch Orthop Trauma Surg** 1996;115(3-4):149-52 (16 ref.)

The use of negative pressure to promote the healing of tissue defects: a clinical trial using the vacuum sealing technique. Müllner T, et al. **Br J Plast Surg** 1997 Apr;50(3):194-9

[Local treatment in anaerobic infections of soft tissues] Tamm TI. **Klin Khir** 1996;(5):5-7 **(Rus)**

ULTRASONOGRAPHY

[Subcutaneous and soft tissue involvement associated with AIDS: ultrasonographic aspects. Apropos of 3 cases] N'Gbesso RD, et al. **Sante** 1996 Jul-Aug;6(4):245-8 (Eng. Abstr.) **(Fre)**

VETERINARY

Characterization of a sterile soft-tissue inflammation model in thoroughbred horses. Guthrie AJ, et al. **J Vet Pharmacol Ther** 1996 Feb;19(1):44-9

SOFT TISSUE INJURIES

Soft-tissue injuries and muscle tears. Best TM. **Clin Sports Med** 1997 Jul;16(3):419-34 (44 ref.)

Sports-related and other soft-tissue injuries, tendinitis, bursitis, and occupation-related syndromes [see comments] Biundo JJ Jr, et al. **Curr Opin Rheumatol** 1997 Mar; 9(2):151-4 (20 ref.). Comment in: Curr Opin Rheumatol 1997 Mar;9(2):133-43.

Soft-tissue injuries of the cervical spine. 15-year follow-up. Squires B, et al. **J Bone Joint Surg Br** 1996 Nov;78(6):955-7

Occupational soft-tissue and tendon disorders. Kasdan ML, et al. **Orthop Clin North Am** 1996 Oct;27(4):795-803 (20 ref.)

CLASSIFICATION

Lack of concordance between the ICD-9 classification of soft tissue disorders of the neck and upper limb and chart review diagnosis: one steel mill's experience. Buchbinder R, et al. **Am J Ind Med** 1996 Feb;29(2):171-82

COMPLICATIONS

Acute non-traumatic compartment syndrome related to soft tissue injury. Williams P, et al. **Injury** 1996 Sep;27(7):507-8

DIAGNOSIS

Wound care. Howell JM, et al. **Emerg Med Clin North Am** 1997 May;15(2):417-25 (33 ref.)

Assessment of exercise-induced minor muscle lesions: the accuracy of Cyriax's diagnosis by selective tension paradigm. Franklin ME, et al. **J Orthop Sports Phys Ther** 1996 Sep;24(3):122-9

Diagnosis and management of closed internal degloving injuries associated with pelvic and acetabular fractures: the Morel-Lavallée lesion. Hak DJ, et al. **J Trauma** 1997 Jun; 42(6):1046-51

MR imaging of soft-tissue masses in children. Bissett GS 3rd. **Magn Reson Imaging Clin N Am** 1996 Nov; 4(4):697-719 (39 ref.)

Imaging of skeletal and soft tissue injuries in and around the knee. Walker CW, et al. **Radiol Clin North Am** 1997 May; 35(3):631-53 (61 ref.)

DRUG THERAPY

Comparison of ketoprofen, piroxicam, and diclofenac gels in the treatment of acute soft-tissue injury in general practice. General Practice Study Group. Patel RK, et al. **Clin Ther** 1996 May-Jun;18(3):497-507

Injecting soft tissue lesions of the hand and wrist. Wadsworth TG. **Practitioner** 1996 Aug;240(1565):482-5

ETIOLOGY

Impingement syndrome of the ankle caused by a medial meniscoid lesion. Egol KA, et al. **Arthroscopy** 1997 Aug; 13(4):522-5 (10 ref.)

Arterial injury in the lower limb from blunt trauma. Faris IB, et al. **Aust N Z J Surg** 1997 Jan;67(1):25-30

Inflammatory reaction dependence on implant localization in rat soft tissue models. Rosengren A, et al. **Biomaterials** 1997 Jul;18(14):979-87

Orthopedic aspects of child abuse. Beaty JH. **Curr Opin Pediatr** 1997 Feb;9(1):100-3 (17 ref.)

Bicycle-spoke injuries: a prospective study. Segers MJ, et al. **Injury** 1997 May;28(4):267-9

Ring avulsion injuries in a field environment. Varela CD. **Mil Med** 1996 May;161(5):308-10 (9 ref.)

Radiation-induced changes in the central nervous system and head and neck. Rabin BM, et al. **Radiographics** 1996 Sep; 16(5):1055-72 (24 ref.)

IMMUNOLOGY

C-reactive protein levels determine the severity of soft-tissue injuries. Pritchett JW. **Am J Orthop** 1996 Nov; 25(11):759-61

Mechanism of immunosuppression in males following trauma-hemorrhage. Critical role of testosterone. Wichmann MW, et al. **Arch Surg** 1996 Nov; 131(11):1186-91; discussion 1191-2

The immune microenvironment of human fracture/soft-tissue hematomas and its relationship to systemic immunity. Hauser CJ, et al. **J Trauma** 1997 May; 42(5):895-903; discussion 903-4

SOFT TISSUE INJURIES

PHYSIOPATHOLOGY

Thigh pain in a 22-year-old man [clinical conference] Wilson SC, et al. **Clin Orthop** 1997 Apr;(337):302-5, 310-2

Integrated processes responsible for soft tissue healing. Wong ME, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Nov;82(5):475-92 (109 ref.)

General principles in treating soft-tissue injuries. Bernhardt DT. **Pediatr Ann** 1997 Jan;26(1):20-5

Effect of transfusion on physiologic changes after resuscitated trauma. Lyden SP, et al. **Surgery** 1997 Sep;122(3):534-45

PREVENTION & CONTROL

Seat cushion design for elderly wheelchair users based on minimization of soft tissue deformation using stiffness and pressure measurements. Brienza DM, et al.
IEEE Trans Rehabil Eng 1996 Dec;4(4):320-7 (27 ref.)

RADIOGRAPHY

Radiographic detection of gravel in soft tissue. Chisholm CD, et al. **Ann Emerg Med** 1997 Jun;29(6):725-30

REHABILITATION

The effects of soft tissue mobilization on the immature burn scar: results of a pilot study. Silverberg R, et al.
J Burn Care Rehabil 1996 May-Jun;17(3):252-9

Self-directed patient education in soft-tissue rehabilitation: rationale and analysis of a pilot project. Piccininni JJ, et al. **J Manipulative Physiol Ther** 1997 Jan;20(1):41-6

SURGERY

Reconstruction of a complex midfacial defect with the folded fibular free flap and osseointegrated implants. Anthony JP, et al. **Ann Plast Surg** 1996 Aug;37(2):204-10

Case report: upper extremity soft-tissue reconstruction by alloplastic implant: long-term result and follow-up. Bonnecarrere ER, et al. **Ann Plast Surg** 1997 Jan;38(1):74-6

Use of Mitek suture anchors in head and neck reconstruction. Dzwierzynski WW, et al. **Ann Plast Surg** 1997 May; 38(5):449-54

What you see is what you get: lack of significant postoperative contour change in muscle transplants to the lower leg. Isenberg JS. **Ann Plast Surg** 1997 Jan;38(1):46-9

The reverse lateral arm adipofascial flap for elbow coverage. Lai CS, et al. **Ann Plast Surg** 1997 Aug;39(2):196-200

Brachioradialis musculocutaneous flap closure of the elbow utilizing a distal skin island: a case report. Lalikos JF, et al. **Ann Plast Surg** 1997 Aug;39(2):201-4

Treatment of a degloved hand injury by arteriovenous anastomosis: a case report. Takeuchi M, et al.
Ann Plast Surg 1997 Aug;39(2):174-7

Reverse pedicled lateral arm flap for reconstruction of posterior soft-tissue defects of the elbow. Tung TC, et al. **Ann Plast Surg** 1997 Jun;38(6):635-41

Arthroscopic treatment of soft-tissue impingement of the ankle in athletes. DeBerardino TM, et al. **Arthroscopy** 1997 Aug;13(4):492-8

Current treatment of post-traumatic deformities. Residual orbital, adnexal, and soft-tissue abnormalities. Spinelli HM, et al. **Clin Plast Surg** 1997 Jul;24(3):519-30 (47 ref.)

The distally based ulnar artery island flap in hand reconstruction. Grobbelaar AO, et al. **J Hand Surg [Br]** 1997 Apr;22(2):204-11

Closure of wounds in the upper extremity using a skin stretching device. Stahl S, et al. **J Hand Surg [Br]** 1996 Aug;21(4):534-7

Simplified external fixation for primary management of severe musculoskeletal injuries under war and peace time conditions. Hammer RR, et al. **J Orthop Trauma** 1996; 10(8):545-54

Cross leg flap in a bilateral traumatic amputee. Thomas SJ, et al. **J Orthop Trauma** 1996;10(7):510-3

Diagnosis and management of closed internal degloving injuries associated with pelvic and acetabular fractures: the Morel-Lavallée lesion. Hak DJ, et al. **J Trauma** 1997 Jun; 42(6):1046-51

Arterialized venous flaps from the thenar and hypothenar regions for repairing finger pulp tissue losses. Iwasawa M, et al. **Plast Reconstr Surg** 1997 May;99(6):1765-70

The reversed-flow temporoparietal fascial flap. Kivanç O, et al. **Plast Reconstr Surg** 1997 May;99(6):1727-9

Free composite serratus anterior and rib flaps for tibial composite bone and soft-tissue defect. Lin CH, et al.
Plast Reconstr Surg 1997 May;99(6):1656-65

[Surgical development in free flaps as exemplified by repair of tissue defects of the skull] Frey M.
Handchir Mikrochir Plast Chir 1996 Nov;28(6):283-91 (Eng. Abstr.) **(Ger)**

[Experiences with the lateral upper arm flap] Stober VR. **Handchir Mikrochir Plast Chir** 1996 Jan;28(1):22-7 (Eng. Abstr.) **(Ger)**

[New developments in covering post-traumatic soft tissue defects] Berger A, et al. **Orthopade** 1997 May;26(5):470-80 (34 ref.) (Eng. Abstr.) **(Ger)**

[Closure of defect wounds by combined vacuum sealing with instrumental skin expansion] Fleischmann W, et al.
Unfallchirurg 1996 Dec;99(12):970-4 (Eng. Abstr.) **(Ger)**

[No need to fear radical debridement (editorial)] Kinzl L.
Unfallchirurg 1996 Oct;99(10):713 **(Ger)**

[Covering soft tissue defects] Kinzl L, et al. **Unfallchirurg** 1996 Oct;99(10):714-26 (29 ref.) (Eng. Abstr.) **(Ger)**

[Complex trauma of the knee joint. Diagnosis--management--therapeutic principles] Krettek C, et al. **Unfallchirurg** 1996 Sep;99(9):616-27 (56 ref.) (Eng. Abstr.) **(Ger)**

[Traumatic axial dislocation injury of the carpus and metacarpus with triquetrum fracture. Rare entity or typical injury] Richter D, et al. **Unfallchirurg** 1997 Jun; 100(6):502-5 (Eng. Abstr.) **(Ger)**

[Results of primary unreamed tibial nailing of tibial fractures with severe open or closed soft tissue injuries] Runkel M, et al. **Unfallchirurg** 1996 Oct;99(10):771-7 (Eng. Abstr.) **(Ger)**

[Surgical treatment concept in traumatic sphincter lesions] Ecker KW, et al. **Zentralbl Chir** 1996;121(8):681-7 (Eng. Abstr.) **(Ger)**

[The surgical treatment of gunshot wounds] Grinev MV, et al. **Vestn Khir Im I I Grek** 1996;155(6):57-60 (Eng. Abstr.) **(Rus)**

[A method for extrafocal controllable wound closure and an adaptable repositioning device] Izmailov GA, et al.
Vestn Khir Im I I Grek 1996;155(3):59-60 (Eng. Abstr.) **(Rus)**

[The surgical procedure in neck wounds] Sazhin VP, et al.
Vestn Khir Im I I Grek 1996;155(5):50-2 (Eng. Abstr.) **(Rus)**

THERAPY

In vivo tissue temperature comparison of cryotherapy with and without external compression. Barlas D, et al.
Ann Emerg Med 1996 Oct;28(4):436-9

Physiotherapy for patients with soft tissue shoulder disorders: a systematic review of randomised clinical trials. van der Heijden GJ, et al. **BMJ** 1997 Jul 5;315(7099):25-30 (45 ref.)

The use of negative pressure to promote the healing of tissue defects: a clinical trial using the vacuum sealing technique. Müllner T, et al. **Br J Plast Surg** 1997 Apr;50(3):194-9

Wound care. Howell JM, et al.
Emerg Med Clin North Am 1997 May;15(2):417-25 (33 ref.)

General principles in treating soft-tissue injuries. Bernhardt DT. **Pediatr Ann** 1997 Jan;26(1):20-5

The treatment of acute soft tissue trauma in Danish emergency rooms. Johannsen F, et al.
Scand J Med Sci Sports 1997 Jun;7(3):178-81

Hyperbaric oxygen chambers and the treatment of sports injuries. Staples J, et al. **Sports Med** 1996 Oct;22(4):219-27 (78 ref.)

Effect of transfusion on physiologic changes after resuscitated trauma. Lyden SP, et al. **Surgery** 1997 Sep;122(3):534-45

ULTRASONOGRAPHY

Ultrasound retrieval of foreign bodies [editorial; comment] Storrow AB, et al. **Ann Emerg Med** 1997 Jun;29(6):779-8 . Comment on: Ann Emerg Med 1997 Jun;29(6):731-4.

Ultrasound-guided retrieval of small foreign objects in subcutaneous tissue [see comments] Turner J, et al.
Ann Emerg Med 1997 Jun;29(6):731-4. Comment in: Ann Emerg Med 1997 Jun;29(6):779-80.

[Value of ultrasound in diagnosis of post-traumatic heterotopic ossifications] Grechenig W, et al.
Biomed Tech (Berl) 1996 Oct;41(10):273-7 (Eng. Abstr.) **(Ger)**

[The role of ultrasound in identification and localization of foreign bodies in the soft tissues] Barzilai M. **Harefuah** 1996 Sep;131(5-6):209-11 **(Heb)**

SOFT TISSUE NEOPLASMS

A 63-year-old woman with right small finger pain. Lopes TD, et al. **Am J Orthop** 1997 Feb;26(2):169-71

Soft tissue sarcomas. Lewis JJ, et al. **Curr Probl Surg** 1996 Oct;33(10):817-72 (202 ref.)

Angioleiomyoma of the lower extremity. Hanft JR, et al. **J Am Podiatr Med Assoc** 1997 Aug;87(8):388-91

Fibrosarcoma of the foot: a case presentation and review of the literature. Blume PA, et al. **J Foot Ankle Surg** 1997 Jan-Feb;36(1):51-4 (17 ref.)

Fibromyxoid sarcoma in a four-year-old child: case report and review of the literature. Canpolat C, et al.
Med Pediatr Oncol 1996 Dec;27(6):561-4

Society of Surgical Oncology practice guidelines. Soft-tissue sarcoma surgical practice guidelines. Pollack R, et al.
Oncology (Huntingt) 1997 Sep;11(9):1327-32

Hibernoma. Alvine G, et al. **Skeletal Radiol** 1996 Jul; 25(5):493-6

[Proceeding of the 30th annual musculoskeletal tumor meeting of the Japanese Orthopedic Association. Nagoya, Japan. July 18-19, 1997. Abstracts]
Nippon Seikeigeka Gakkai Zasshi 1997 Jun;71(6):S927-1287 **(Jpn)**

[Primary tumors of the thoracic wall (1991-1994)] Arrabal Sánchez R, et al. **Arch Bronconeumol** 1996 Oct;32(8):384-7 (Eng. Abstr.) **(Spa)**

BLOOD

Prognostic value of the doubling time of serum C-reactive protein and alkaline phosphatase levels in primary bone and soft tissue tumors. Yudoh K, et al.
Jpn J Cancer Res 1996 Dec;87(12):1288-95

BLOOD SUPPLY

Hypervascular tumor of the buccal space in an adult as a late recurrence of juvenile angiofibroma. Berger SB, et al.
AJNR Am J Neuroradiol 1996 Aug;17(7):1384-7

CHEMISTRY

Elevation of glutathione and related enzyme activities in high-grade and metastatic extremity soft tissue sarcoma. Hochwald SN, et al. **Ann Surg Oncol** 1997 Jun;4(4):303-9

Overexpression of bcl-2 protein in synovial sarcoma: a comparative study of other soft tissue spindle cell sarcomas and an additional analysis by fluorescence in situ hybridization. Hirakawa N, et al. **Hum Pathol** 1996 Oct; 27(10):1060-5

Pleomorphic hyalinizing angiectatic tumor of soft parts: immunohistochemical case study shows cellular composition by CD34+ fibroblasts and factor XIIIa+ dendrophages. Silverman JS, et al. **J Cutan Pathol** 1997 Jul;24(6):377-83

Myofibroblastic tumor of soft tissue displaying desmin-positive and actin-negative immunophenotypes. Yang P, et al. **Pathol Int** 1996 Sep;46(9):696-703

S-100 protein expression in a case of elastofibroma dorsi. Magro G, et al. **Pathologica** 1995 Oct;87(5):528-30

CLASSIFICATION

Recent developments in soft tissue tumors. Goodlad JR, et al. **Histopathology** 1995 Aug;27(2):103-20 (111 ref.)

Collagenous fibroma (desmoplastic fibroblastoma): a report of seven cases. Nielsen GP, et al. **Mod Pathol** 1996 Jul; 9(7):781-5

Malignant fibrous histiocytoma: histomorphological pattern or tumor type. Meister P. **Pathol Res Pract** 1996 Aug; 192(8):877-81 (36 ref.)

The role of cytogenetics in the classification of soft tissue tumours. Dei Tos AP, et al. **Virchows Arch** 1997 Aug; 431(2):83-94 (110 ref.)

[TNM classification of bone and soft tissue sarcomas] Fukuma H, et al. **Gan To Kagaku Ryoho** 1997 Jun;24(8):1035-40 (9 ref.) (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Hemangiopericytoma: an unusual cause of upper gastrointestinal hemorrhage. Grimsley BR, et al.
Am Surg 1997 Mar;63(3):248-51

Progressive fetal axillary cystic lymphangioma with coexistent naevus flammeus. Chen CP, et al.
Br J Dermatol 1997 Jan;136(1):102-4

Extradigital glomus tumour causing thigh pain: a case report. Amillo S, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):104-6

Macrodactylia fibrolipomatosis complicated by multiple small bowel lipomas and intussusception. Gates LK Jr, et al. **J Clin Gastroenterol** 1996 Oct;23(3):241-2

Extraneural hemangioma: a case report of acute cubital tunnel syndrome. Nakamura I, et al. **J Hand Surg [Br]** 1996 Nov; 21(6):1097-8

Compression of the lateral cutaneous nerve of the forearm by a glomus tumour. van der Lei B, et al.
J Hand Surg [Br] 1997 Feb;22(1):71-2

Paranoid psychosis due to flecainide toxicity in malignant neuropathic pain. Bennett MI. **Pain** 1997 Mar;70(1):93-4

Well-differentiated liposarcoma (atypical lipoma) of the lower extremity in a patient with bilateral leg lipodystrophy and lymphedema. Wyatt LE, et al. **Plast Reconstr Surg** 1996 Nov;98(6):1076-9

Sciatica as the first manifestation of a leiomyosarcoma of the buttock. Benyahya E, et al. **Rev Rhum Engl Ed** 1997 Feb;64(2):135-7

Soft tissues sarcoma with acute paraneoplastic hepatic dysfunction: case report. Bisagni G, et al. **Tumori** 1996 Sep-Oct;82(5):499-501

[Capillary and cavernous hemangioma disclosed by painful amyotrophy of the thigh] Dematteis M, et al.
Rev Neurol (Paris) 1996 Jun-Jul;152(6-7):473-5 (Eng. Abstr.) **(Fre)**

[Spinal cord compression as the presenting form of non-Hodgkin's lymphoma] Amigo ML, et al.
Sangre (Barc) 1995 Dec;40(6):505-7 (Eng. Abstr.) **(Spa)**

CONGENITAL

Solid tumours in newborns and infants. Chakova L, et al.
Folia Med (Plovdiv) 1996;38(3-4):39-43

Haemangioendothelioma in an infant's wrist. Chia J, et al.
J Hand Surg [Br] 1997 Feb;22(1):119-21

Clonal analysis of sacrococcygeal "teratomas". Sinnock KL, et al. **Pediatr Pathol Lab Med** 1996 Nov-Dec;16(6):865-75

[Recurrent soft tissue tumor of the mandible. Extensive congenital lymphangioma in the area of the mandible] Stroszczynski C, et al. **Radiologe** 1997 May;37(5):421-3 **(Ger)**

DIAGNOSIS

Cytomorphology of giant cell tumor of tendon sheath. A report of two cases. Agarwal PK, et al. **Acta Cytol** 1997 Mar-Apr;41(2):587-9

Cytodiagnosis of a herniated disk presenting as a soft tissue mass. A case report. Chen KT. **Acta Cytol** 1997 May-Jun; 41(3):880-2

Progressive approach to the cytologic diagnosis of

retroperitoneal spindle cell tumors. Ferretti M, et al. **Acta Cytol** 1997 Mar-Apr;41(2):450-60

Atypical lipoma as a potential pitfall in the cytodiagnosis of subcutaneous tumors. A report of two cases. Woyke S, et al. **Acta Cytol** 1997 May-Jun;41(3):897-902

Immunohistochemical study of epithelioid hemangioendothelioma in the leg: a case report. Liang S, et al. **Acta Med Okayama** 1996 Oct;50(5):279-83

Benign fibrous lesions masquerading as sarcomas. Clinical and morphological pitfalls. Akerman M. **Acta Orthop Scand Suppl** 1997 Feb;273:37-40

Hypervascular tumor of the buccal space in an adult as a late recurrence of juvenile angiofibroma. Berger SB, et al. **AJNR Am J Neuroradiol** 1996 Aug;17(7):1384-7

Myxoid liposarcoma of the retropatellar fat pad. Lundy DW, et al. **Am J Orthop** 1997 Apr;26(4):287-9

Parachordomas [letter] O'Connell JX, et al. **Am J Surg Pathol** 1997 Sep;21(9):1120-1

Soft tissue sarcoma of the extremity. Cooper TM, et al. **Ann R Coll Surg Engl** 1996 Sep;78(5):453-6

Core needle biopsy for diagnosis of extremity soft tissue sarcoma. Heslin MJ, et al. **Ann Surg Oncol** 1997 Jul-Aug; 4(5):425-31

Surgical management of primary pulmonary artery sarcoma [letter; comment] Luciani GB, et al. **Ann Thorac Surg** 1997 Feb;63(2):601-2. Comment on: Ann Thorac Surg 1996 May;61(5):1536-8.

Diagnostic difficulties in extraosseous Ewing's sarcoma: a proposal for diagnostic criteria. Christie DR, et al. **Australas Radiol** 1997 Feb;41(1):22-8 (19 ref.)

Flow cytometric S-phase fraction in soft-tissue sarcoma: prognostic importance analysed in 160 patients. Gustafson P, et al. **Br J Cancer** 1997;75(1):94-100

Tear of the distal biceps tendon presenting as an antecubital mass: magnetic resonance imaging appearances. Logan PM, et al. **Can Assoc Radiol J** 1996 Oct;47(5):342-6

Cytogenetics as an adjunct in establishing a definitive diagnosis of synovial sarcoma by fine-needle aspiration. Saboorian MH, et al. **Cancer** 1997 Jun 25;81(3):187-92

MRI and scintigraphic features of extraabdominal desmoid tumors. Kobayashi H, et al. **Clin Imaging** 1997 Jan-Feb; 21(1):35-9

Thigh mass in a 75-year-old man [clin conference] Horowitz SM, et al. **Clin Orthop** 1997 Feb;(335):331-4, 343-4

Thigh pain in a 22-year-old man [clinical conference] Wilson SC, et al. **Clin Orthop** 1997 Apr;(337):302-5, 310-2

Value of MR findings in predicting the nature of the soft tissue lesions: benign, malignant or undetermined lesion? Soler R, et al. **Comput Med Imaging Graph** 1996 May-Jun; 20(3):163-9

Gouty tophus presenting as a soft-tissue mass diagnosed by fine-needle aspiration: a case report. Liu K, et al. **Diagn Cytopathol** 1996 Sep;15(3):246-9

Compression of the peripheral branches of the sciatic nerve by lipoma. Resende LA, et al. **Electromyogr Clin Neurophysiol** 1997 Jun-Jul;37(4):251-5

Large iliac venous aneurysm simulating a retroperitoneal soft tissue tumour. Petrunić M, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):221-2

New concepts in understanding evolution of desmoid tumors: MR imaging of 30 lesions. Vandevenne JE, et al. **Eur Radiol** 1997;7(7):1013-9

Malignancy after retinoblastoma: secondary cancer or recurrence? Dickman PS, et al. **Hum Pathol** 1997 Feb; 28(2):200-5

Relevance of cytogenetic and fluorescent in situ hybridization analyses in the clinical assessment of soft tissue sarcoma. Sozzi G, et al. **Hum Pathol** 1997 Feb;28(2):134-42

Diagnostic strategy for bone and soft-tissue tumors. Simon MA, et al. **Instr Course Lect** 1994;43:527-36 (57 ref.)

Clinical image. Malignant mesenchymoma of the buttock. Johnson GL, et al. **J Comput Assist Tomogr** 1996 Nov-Dec; 20(6):999-1001 (13 ref.)

Clinical image. Lipoblastoma of the thigh: MR appearance. Katz DS, et al. **J Comput Assist Tomogr** 1996 Nov-Dec; 20(6):1002-3 (8 ref.)

Spindle cell hemangioendothelioma: a case presentation and literature review of a rare lower extremity tumor. Patel SV, et al. **J Foot Ankle Surg** 1996 Jul-Aug;35(4):309-11 (8 ref.)

Assessment of diagnostic utility of anti-CD34 in soft tissue tumors. Park HR, et al. **J Korean Med Sci** 1995 Dec; 10(6):436-41

MRI of elephantiasis neuromatosa [letter] Münte TF, et al. **J Neurol** 1996 Aug;243(8):619

Plantar fibromatosis of the heel in children: a report of 14 cases. Godette GA, et al. **J Pediatr Orthop** 1997 Jan-Feb; 17(1):16-7 (5 ref.)

Subscapular elastofibroma: a reactive pseudotumor. Nielsen T, et al. **J Shoulder Elbow Surg** 1996 May-Jun;5(3):209-13

Assessment of molecular genetic detection of chromosome translocations in the differential diagnosis of pediatric sarcomas. Dockhorn-Dworniczak B, et al. **Klin Padiatr** 1997 Jul-Aug;209(4):156-64

MR imaging of soft-tissue masses in children. Bissett GS 3rd. **Magn Reson Imaging Clin N Am** 1996 Nov; 4(4):697-719 (39 ref.)

MR imaging of musculoskeletal tumors in the elbow region. Steinbach LS, et al. **Magn Reson Imaging Clin N Am** 1997 Aug;5(3):619-53 (194 ref.)

Imaging findings of lipomas in the orofacial region with CT, US, and MRI. Chikui T, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):88-95

Use of MRI in evaluating postoperative changes in patients with bone and soft tissue tumors. Griffiths HJ, et al. **Orthopedics** 1997 Mar;20(3):215-20

Extraskeletal chondroma of the foot. O'Malley MJ, et al. **Orthopedics** 1996 Mar;19(3):256-8

Fine-needle aspiration of soft tissue lesions. Epstein HD. **Pathology (Phila)** 1996;4(2):463-92 (69 ref.)

Orthopedic soft-tissue tumors. Concepts for the primary care physician. Randall RL, et al. **Prim Care** 1996 Jun; 23(2):241-61 (51 ref.)

Diffuse mineralization of extraskeletal chondroma: a case report. Nakamura R, et al. **Radiat Med** 1997 Jan-Feb; 15(1):51-3

Case report: MR appearance of hemangiopericytoma of the thigh. Tanaka H, et al. **Radiat Med** 1996 Sep-Oct; 14(5):275-8

Primary tumors of the musculoskeletal system. Vanel D, et al. **Radiol Clin North Am** 1997 Jan;35(1):213-37 (48 ref.)

Morton neuroma and fluid in the intermetatarsal bursae on MR images of 70 asymptomatic volunteers. Zanetti M, et al. **Radiology** 1997 May;203(2):516-20

Differential diagnosis of small round cell tumors. Meis-Kindblom JM, et al. **Semin Diagn Pathol** 1996 Aug; 13(3):213-41 (196 ref.)

The use of gadolinium in the MR evaluation of soft tissue tumors. Kransdorf MJ, et al. **Semin Ultrasound CT MR** 1997 Aug;18(4):251-68 (25 ref.)

Giant degenerative perineurial cell tumor. Aoki T, et al. **Skeletal Radiol** 1996 Nov;25(8):757-61

Chondroid lipoma: MRI appearances with clinical and histologic correlation. Logan PM, et al. **Skeletal Radiol** 1996 Aug;25(6):592-5

MR imaging findings in hibernoma [letter] Peer S, et al. **Skeletal Radiol** 1997 Aug;26(8):507

Embryonal rhabdomyosarcoma of foot with expansive growth between metatarsals. Suzuki Y, et al. **Skeletal Radiol** 1997 Feb;26(2):128-30

The use of gadolinium in the MR evaluation of musculoskeletal tumors. Kransdorf MJ. **Top Magn Reson Imaging** 1996 Feb;8(1):15-23 (25 ref.)

Differentiating small round cell sarcomas of the soft parts by an innovative immunogold labeling method: an ultrastructural study. Kawauchi S, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):549-61

[Fibrous dysplasia associated with intramuscular myxoma] Limouzy F, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):336-9 (Eng. Abstr.) **(Fre)**

[Synovial sarcoma of the foot] Beus J, et al. **Aktuelle Radiol** 1996 Sep;6(5):261-3 (Eng. Abstr.) **(Ger)**

[Detection of translocation t(8;14)(q24;132) in pediatric Burkitt's lymphomas using "long distance" polymerase chain reaction: a new method for diagnosis of Burkitt's lymphomas] zur Stadt U, et al. **Klin Padiatr** 1997 Jul-Aug; 209(4):165-71 (Eng. Abstr.) **(Ger)**

[Isolated extracranial meningioma of the facial soft tissues] Gunkel AR, et al. **Laryngorhinootologie** 1997 Jan;76(1):50-2 (Eng. Abstr.) **(Ger)**

[A comparison between GE and SE sequences in MRT after the i.v. application of superparamagnetic iron particles in the assessment of experimentally induced soft-tissue osteosarcomas] Axmann C, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Feb;166(2):146-52 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of liposarcoma] Uhl M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Aug;165(2):144-7 (Eng. Abstr.) **(Ger)**

[Aggressive fibromatosis] Kolokythas O, et al. **Rontgenpraxis** 1996 Nov;49(11):279-80 **(Ger)**

[Anatomopathology, computerized tomography, and magnetic resonance correlations in soft tissue liposarcoma] Battaglia M, et al. **Radiol Med (Torino)** 1996 Dec; 92(6):687-92 (Eng. Abstr.) **(Ita)**

[Diagnostic imaging of bone and soft tissue tumors] Saotome K. **Nippon Seikeigeka Gakkai Zasshi** 1996 Sep;70(9):559-72 (26 ref.) **(Jpn)**

[A giant histiocytoma of the occipital area] Makhmudov UB, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr-Jun; (2):29-31 (12 ref.) **(Rus)**

[Granulocytic sarcoma: unusual form of presentation for acute nonlymphoblastic leukemia (see comments)] Buxó J, et al. **Sangre (Barc)** 1997 Feb;42(1):73-5 (Eng. Abstr.). Comment in: Sangre (Barc) 1997 Feb;42(1):5-6. **(Spa)**

DRUG THERAPY

Chemotherapy for soft tissue sarcomas. Indications and advances. Phillips KA, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:133-8 (42 ref.)

Chemotherapy for adult soft tissue sarcoma. Does it work? Saeter G. **Acta Orthop Scand Suppl** 1997 Feb;273:139-44 (35 ref.)

Establishment and characterization of an epithelioid sarcoma cell line with an autocrine response to interleukin-6. Kusakabe H, et al. **Arch Dermatol Res** 1997 Mar; 289(4):224-33

Chemotherapy for metastatic soft tissue sarcomas. Steward WP. **Cancer Treat Res** 1997;91:157-72 (71 ref.)

Adjuvant chemotherapy of soft tissue sarcomas. Verweij J, et al. **Cancer Treat Res** 1997;91:173-87 (27 ref.)

Randomised study of high-dose epirubicin versus high-dose epirubicin-cisplatin chemotherapy for advanced soft tissue sarcoma. Jelić S, et al. **Eur J Cancer** 1997 Feb;33(2):220-5

The outcome of advanced soft tissue sarcoma patients with complete tumour regression after either chemotherapy alone or chemotherapy plus surgery. The Scandinavian Sarcoma Group experience. Wiklund T, et al. **Eur J Cancer** 1997 Mar;33(3):357-61

The use of recombinant human granulocyte colony-stimulating factor in combination with single or fractionated doses of ifosfamide and doxorubicin in patients with advanced soft tissue sarcoma. Erkisi M, et al. **J Chemother** 1996 Jun;8(3):224-8

High-dose ifosfamide in bone and soft tissue sarcomas: results of phase II and pilot studies--dose-response and schedule dependence. Patel SR, et al. **J Clin Oncol** 1997 Jun; 15(6):2378-84

Does megatherapy contribute to survival in metastatic neuroblastoma? A retrospective analysis. German Cooperative Neuroblastoma Study Group. Hero B, et al. **Klin Padiatr** 1997 Jul-Aug;209(4):196-200

In vivo 31P NMR spectroscopy of human musculoskeletal tumors as a measure of response to chemotherapy. Möller HE, et al. **NMR Biomed** 1996 Dec;9(8):347-58

[High dose ifosfamide at 15 g/m2/cycle: a feasibility study in 10 patients] Baranzelli MC, et al. **Bull Cancer** 1997 Feb; 84(2):141-6 (Eng. Abstr.) **(Fre)**

[Role of adjuvant chemotherapy in the treatment of soft tissue sarcoma] Debled M, et al. **Bull Cancer** 1997 Jun; 84(6):653-63 (Eng. Abstr.) **(Fre)**

[A pilot study of high-dose zorubicin in advanced stages of soft tissue sarcoma in adults] Jelić S, et al. **Bull Cancer** 1996 Dec;83(12):1002-7 (Eng. Abstr.) **(Fre)**

[Isolated hyperthermic extremity perfusion in soft tissue sarcoma (letter; comment)] Eigler FW, et al. **Chirurg** 1997 Jun;68(6):649. Comment on: Chirurg 1996 Dec;67(12):1237-43. **(Ger)**

ENZYMOLOGY

Role of protein phosphatase in malignant osteogenic and soft tissue tumors. Sogawa K, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jul;93(1):33-42

EPIDEMIOLOGY

Extragonadal germ cell tumours in Mangalore with review of the literature. Pai MR, et al. **J Indian Med Assoc** 1996 Aug;94(8):294-5, 310

ETIOLOGY

Radiation-associated malignant tumors of the chest wall. Schwarz RE, et al. **Ann Surg Oncol** 1996 Jul;3(4):387-92

Radiation-induced bone and soft tissue sarcomas: clinical aspects and molecular biology. Spiro IJ, et al. **Cancer Treat Res** 1997;91:143-55 (107 ref.)

Intracapsular chondroma [letter] Pope TL Jr. **J South Orthop Assoc** 1997 Summer;6(2):115

[Incidence of malignant soft tissue tumors (sarcomas) after previous radiotherapy] Hernandez-Richter T, et al. **Langenbecks Arch Chir** 1996;381(5):295-8 (19 ref.) (Eng. Abstr.) **(Ger)**

GENETICS

Molecular and cytogenetics of soft tissue sarcomas. Nilbert M. **Acta Orthop Scand Suppl** 1997 Feb;273:60-7 (53 ref.)

Amplification of the t(2; 13) and t(1; 13) translocations of alveolar rhabdomyosarcoma in small formalin-fixed biopsies using a modified reverse transcriptase polymerase chain reaction. Anderson J, et al. **Am J Pathol** 1997 Feb; 150(2):477-82

Single somatic ras gene point mutation in soft tissue malignant fibrous histiocytomas. Bohle RM, et al. **Am J Pathol** 1996 Mar;148(3):731-8

Molecular analysis of the fusion of EWS to an orphan nuclear receptor gene in extraskeletal myxoid chondrosarcoma. Brody RI, et al. **Am J Pathol** 1997 Mar;150(3):1049-58

Li-Fraumeni syndrome in pediatric patients with soft tissue sarcoma or osteosarcoma. Carnevale A, et al. **Arch Med Res** 1997 Autumn;28(3):383-6

p53 gene mutations and p53 protein expression in human soft tissue sarcomas. Yoo J, et al. **Arch Pathol Lab Med** 1997 Apr;121(4):395-9

Interphase cytogenetic analysis of myxoid soft tissue tumors by fluorescence in situ hybridization and DNA flow cytometry using paraffin-embedded tissue. Aoki T, et al. **Cancer** 1997 Jan 15;79(2):284-93

Genetic transmission of susceptibility to cancer in families of children with soft tissue sarcomas. Moutou C, et al. **Cancer** 1996 Oct 1;78(7):1483-91

Involvement of chromosomes 6 and 11 in a soft tissue chondroma. Dal Cin P, et al. **Cancer Genet Cytogenet** 1997 Feb;93(2):177-8

Cytogenetic support for early malignant change in a diffuse neurofibroma not associated with neurofibromatosis. Molenaar WM, et al. **Cancer Genet Cytogenet** 1997 Aug; 97(1):70-2

The clinical role of molecular genetics in soft tissue tumor pathology. Busam KJ, et al. **Cancer Metastasis Rev** 1997 Jun;16(1-2):207-27 (138 ref.)

Expression of transduced carcinoembryonic antigen gene in human rhabdomyosarcoma inhibits metastasis. Landuzzi L,

et al. **Cancer Res** 1996 Oct 1;56(19):4503–8
Molecular genetics of soft tissue sarcomas. Cooper CS, et al. **Cancer Treat Res** 1997;91:31–50 (93 ref.)
Cytogenetics of soft tissue tumors. Fletcher JA. **Cancer Treat Res** 1997;91:9–29 (114 ref.)
Aggressive fibromatosis (desmoid tumor) is a monoclonal disorder. Alman BA, et al. **Diagn Mol Pathol** 1997 Apr; 6(2):98–101
The marriage of pathology and genetics in soft tissue tumours: EACR—Mühlbock Memorial Lecture. Van den Berghe H. **Eur J Cancer** 1996 Oct;32A(11):1849–56 (39 ref.)
Congenital hemangiopericytoma: two cases of familiar presentation. Margarit J, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):245–7
Alterations of p53 gene in soft tissue and bone tumors. Roessner A, et al. **Gen Diagn Pathol** 1997 Jul;143(1):1–13 (61 ref.)
Gains and losses of DNA sequences in liposarcomas evaluated by comparative genomic hybridization. Szymanska J, et al. **Genes Chromosomes Cancer** 1996 Feb; 15(2):89–94
Argyrophilic nucleolar organizer regions in soft tissue tumors. Arora HL, et al. **Indian J Pathol Microbiol** 1996 Oct;39(4):257–63
p53 gene mutations in soft-tissue sarcomas—correlations with p53 immunohistochemistry and DNA ploidy. Schneider-Stock R, et al. **J Cancer Res Clin Oncol** 1997; 123(4):211–8
Advances in the understanding of the molecular pathology of connective tissue neoplasms [editorial; comment] McClure J. **J Pathol** 1997 Apr;181(4):357–8. Comment on: J Pathol 1997 Apr;181(4):362–7.
Chromosomal rearrangement t(11;22) in extraskeletal Ewing's sarcoma and primitive neuroectodermal tumour analysed by fluorescence in situ hybridization using paraffin-embedded tissue. Nagao K, et al. **J Pathol** 1997 Jan;181(1):62–6
New genetic loci in neuroblastoma. Schwab M, et al. **Klin Padiatr** 1997 Jul–Aug;209(4):147–9 (21 ref.)
Molecular and immunohistochemical identification of p53 alterations in bone and soft tissue sarcomas. Mousses S, et al. **Mod Pathol** 1996 Jan;9(1):1–6
Malignant melanoma of the soft parts (clear-cell sarcoma): confirmation of EWS and ATF-1 gene fusion caused by a t(12;22) translocation. Speleman F, et al. **Mod Pathol** 1997 May;10(5):496–9
Chromosomal translocations in human soft tissue sarcomas by interphase fluorescence in situ hybridization. Yoshida H, et al. **Pathol Int** 1997 Apr;47(4):222–9
Gene alterations and apoptosis in rhabdomyosarcoma. Boman F, et al. **Pediatr Pathol Lab Med** 1997 Mar–Apr; 17(2):233–47
Molecular genetics of small round cell tumors. López-Terrada D. **Semin Diagn Pathol** 1996 Aug; 13(3):242–9 (93 ref.)
Cytogenetics and tissue culture of small round cell tumors of bone and soft tissue. Noguera R. **Semin Diagn Pathol** 1996 Aug;13(3):171–83 (134 ref.)
The role of cytogenetics in the classification of soft tissue tumours. Dei Tos AP, et al. **Virchows Arch** 1997 Aug; 431(2):83–94 (110 ref.)
Establishment of a new continuous clear cell sarcoma cell line. Morphological and cytogenetic characterization and detection of chimaeric EWS/ATF-1 transcripts. Hiraga H, et al. **Virchows Arch** 1997 Jul;431(1):45–51
[Juvenile hyaline fibromatosis] Schaller M, et al. **Hautarzt** 1997 Apr;48(4):253–7 (Eng. Abstr.) **(Ger)**
[Genetic studies of differential fatty tissue tumor diagnosis] Belge G, et al. **Pathologe** 1997 Mar;18(2):160–6 (Eng. Abstr.) **(Ger)**
[Synopsis of unbalanced chromosome aberrations in neuroblastoma by comparative genomic hybridization] Brinkschmidt C, et al. **Pathologe** 1996 Sep;17(5):368–73 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Angiomatoid malignant fibrous histiocytoma revisited. An immunohistochemical and DNA ploidy analysis. Morgan MB, et al. **Am J Dermatopathol** 1997 Jun;19(3):223–7
Small round cell tumors of bone and soft tissue. Introduction. Llombart-Bosch A. **Semin Diagn Pathol** 1996 Aug; 13(3):149–52 (47 ref.)

METABOLISM

The association between nm23 gene expression and survival in patients with sarcomas. Royds JA, et al. **Br J Cancer** 1997;75(8):1195–200
Assessment of proliferative activity, DNA values and some clinicopathologic parameters in mesenchymal tumors. Immunohistochemical and flow cytometric study. Niezabitowski A, et al. **Gen Diagn Pathol** 1997 Jun; 142(5–6):327–33
MIB-1 expression and iododeoxyuridine labelling in soft tissue sarcomas: an immunohistochemical study including correlations with p53, bcl-2 and histological characteristics. Jensen V, et al. **Histopathology** 1996 May;28(5):437–44
p53, proliferating cell nuclear antigen, and Ki-67 expression in extrauterine leiomyosarcomas. O'Reilly PE, et al. **Mod Pathol** 1997 Feb;10(2):91–7 (28 ref.)
Synovial sarcoma: immunohistochemical expression of P-glycoprotein and glutathione S transferase-pi and clinical drug resistance. Lopes JM, et al. **Pathol Res Pract** 1997;193(1):21–36
Cellular expression of adhesion factors in childhood rhabdomyosarcoma. Saxon BR, et al. **Pediatr Pathol Lab Med** 1997 Mar–Apr;17(2):259–66
Quantification of phosphorus metabolites in human calf muscle and soft-tissue tumours from localized MR spectra acquired using surface coils. Doyle VL, et al. **Phys Med Biol** 1997 Apr;42(4):691–706
Alteration of tissue oxygen partial pressure during isolated, hyperthermic limb perfusion with cytostatic drugs or recombinant human tumor necrosis factor alpha combined with melphalan. Hohenberger P, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:14–5
Immunohistochemical and clinical evaluation of cathepsin expression in soft tissue sarcomas. Würl P, et al. **Virchows Arch** 1997 Mar;430(3):221–5

MORTALITY

Assessing prognosis for high-grade soft-tissue sarcomas: search for a marker. Li XQ, et al. **Ann Surg Oncol** 1996 Nov;3(6):550–7
Influence of local recurrence on the prognosis of soft-tissue sarcomas. Ueda T, et al. **J Bone Joint Surg Br** 1997 Jul; 79(4):553–7
Association of local recurrence with subsequent survival in extremity soft tissue sarcoma. Lewis JJ, et al. **J Clin Oncol** 1997 Feb;15(2):646–52

PATHOLOGY

Cytomorphology of giant cell tumor of tendon sheath. A report of two cases. Agarwal PK, et al. **Acta Cytol** 1997 Mar–Apr;41(2):587–9
Antimacrophage monoclonal antibody D11 in the diagnosis of tumors of histiocytic origin. Petrovichev NN, et al. **Acta Cytol** 1997 Mar–Apr;41(2):357–63
Excisional biopsy of impalpable soft tissue tumors. US-guided preoperative localization in 12 cases. Rutten MJ, et al. **Acta Orthop Scand** 1997 Aug;68(4):384–6
Malignant fibrous histiocytoma—the commonest soft tissue sarcoma or a nonexistent entity? Akerman M. **Acta Orthop Scand Suppl** 1997 Feb;273:41–6
The cytology of soft tissue tumours. Akerman M. **Acta Orthop Scand Suppl** 1997 Feb;273:54–9
The role of pulmonary metastasectomy for soft tissue sarcoma. Alvegård TA, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:145–7
The role of magnetic resonance imaging. When to use it and what to look for. McKenzie AF. **Acta Orthop Scand Suppl** 1997 Feb;273:21–4
Prognostic factors in soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:148–55 (36 ref.)
Solitary fibrous tumor of the soft tissue. An immunohistochemical and ultrastructural study. Hasegawa T, et al. **Am J Clin Pathol** 1996 Sep;106(3):325–31
Fine-needle aspiration biopsy of synovial sarcoma. A cytomorphologic analysis of primary, recurrent, and metastatic tumors. Kilpatrick SE, et al. **Am J Clin Pathol** 1996 Dec;106(6):769–75
Genital angiomyofibroblastoma. Comparison with aggressive angiomyxoma and other myxoid neoplasms of skin and soft tissue. Ockner DM, et al. **Am J Clin Pathol** 1997 Jan; 107(1):36–44
CD30-positive multilobated peripheral T-cell lymphoma primarily involving the subcutaneous tissue. Marzano AV, et al. **Am J Dermatopathol** 1997 Jun;19(3):284–8
Angiomatoid malignant fibrous histiocytoma revisited. An immunohistochemical and DNA ploidy analysis. Morgan MB, et al. **Am J Dermatopathol** 1997 Jun;19(3):223–7
Apoptosis in atypical fibroxanthoma and pleomorphic malignant fibrous histiocytoma. Westermann FN, et al. **Am J Dermatopathol** 1997 Jun;19(3):228–31
Expression of HMGI-C and HMGI(Y) in ordinary lipoma and atypical lipomatous tumors: immunohistochemical reactivity correlates with karyotypic alterations. Tallini G, et al. **Am J Pathol** 1997 Jul;151(1):37–43
Desmoplastic small round cell tumors of the paratesticular region. A report of six cases. Cummings OW, et al. **Am J Surg Pathol** 1997 Feb;21(2):219–25
"Proximal-type" epithelioid sarcoma, a distinctive aggressive neoplasm showing rhabdoid features. Clinicopathologic, immunohistochemical, and ultrastructural study of a series. Guillou L, et al. **Am J Surg Pathol** 1997 Feb;21(2):130–46 (70 ref.)
Dedifferentiated liposarcoma: a clinicopathological analysis of 155 cases with a proposal for an expanded definition of dedifferentiation. Henricks WH, et al. **Am J Surg Pathol** 1997 Mar;21(3):271–81
Mixed tumors and myoepitheliomas of soft tissue: a clinicopathologic study of 19 cases with a unifying concept. Kilpatrick SE, et al. **Am J Surg Pathol** 1997 Jan;21(1):13–22
Well-differentiated inflammatory liposarcoma: an uncommon and easily overlooked variant of a common sarcoma. Kraus MD, et al. **Am J Surg Pathol** 1997 May;21(5):518–27
Epithelioid hemangioendothelioma of skin and soft tissues: clinicopathologic and immunohistochemical study of 30 cases. Mentzel T, et al. **Am J Surg Pathol** 1997 Apr; 21(4):363–74
Polymorphous hemangioendothelioma: a report of two cases, one affecting extranodal soft tissues, and review of the literature. Nascimento AG, et al. **Am J Surg Pathol** 1997 Sep;21(9):1083–9 (8 ref.)
Clear cell dermatofibroma [letter; comment] Paties C, et al. **Am J Surg Pathol** 1997 Feb;21(2):250–2. Comment on: Am J Surg Pathol 1996 Apr;20(4):483–91.
Plexiform fibrohistiocytic tumor with systemic metastases: a case report. Salomao DR, et al. **Am J Surg Pathol** 1997 Apr;21(4):469–76
Small round cell tumors of bone and soft tissue. A morphometric and stereometric comparative analysis of 119 cases. Callaghan RC, et al. **Anal Quant Cytol Histol** 1995 Dec;17(6):374–82
Granular cell tumor of uncertain malignant potential. Menaker GM, et al. **Ann Plast Surg** 1997 Jun;38(6):658–60
Cutaneous fibrous histiocytoma with osteoclast-like giant cells. Steinthorsson G, et al. **Ann Plast Surg** 1996 Aug; 37(2):217–9
In vitro characterisation of soft tissue tumor chemosensitivity. Remmelink M, et al. **Anticancer Res** 1997 May–Jun; 17(3C):2009–17
Giant hemangioma in infant. A case presentation and literature review. Malamou-Mitsi VD, et al. **Arch Anat Cytol Pathol** 1996;44(4):199–201 (14 ref.)
Pathological case of the month. Granular cell tumor. Buchino JJ, et al. **Arch Pediatr Adolesc Med** 1997 Feb;151(2):205–6
Breast metastases from primary leiomyosarcoma. Tulasi NR, et al. **Aust N Z J Surg** 1997 Jan;67(1):71–2
The clinical role of molecular genetics in soft tissue tumor pathology. Busam KJ, et al. **Cancer Metastasis Rev** 1997 Jun;16(1–2):207–27 (138 ref.)
Value of peer review of pathology in soft tissue sarcomas. Harris M, et al. **Cancer Treat Res** 1997;91:1–8 (13 ref.)
Soft tissue sarcomas in children. Pappo AS, et al. **Cancer Treat Res** 1997;91:205–22
Bilateral elastofibroma: a case report and review of the literature. Hoffman JK, et al. **Clin Orthop** 1996 Apr; (325):245–50 (49 ref.)
Soft tissue mass in the foot of a 39-year-old woman [clinical conference] Johnston JO, et al. **Clin Orthop** 1997 May; (338):271–4, 288
Primary and metastatic malignant tumors in soft tissue of skin. Diagnostic, surgical, and prognostic considerations for the foot. Potter GK, et al. **Clin Podiatr Med Surg** 1996 Jan;13(1):155–72 (85 ref.)
Flow cytometric analysis of P-glycoprotein expression and drug efflux in human soft tissue and bone sarcomas. Kunikane H, et al. **Cytometry** 1997 Aug 15;30(4):197–203
Fine needle aspiration (FNA) of synovial sarcoma—a comparative histological-cytological study of 15 cases, including immunohistochemical, electron microscopic and cytogenetic examination and DNA-ploidy analysis. Akerman M, et al. **Cytopathology** 1996 Jun;7(3):187–200
Extraskeletal myxoid chondrosarcoma: a case report with fine needle aspiration (FNA) cytology. Gonidi M, et al. **Cytopathology** 1997 Apr;8(2):130–3
Cytologic characteristics of peripheral neuroectodermal tumors in fine-needle aspiration smears: a retrospective study of three pediatric cases. Cohen MC, et al. **Diagn Cytopathol** 1997 Jun;16(6):513–7
Fine-needle aspiration cytology of sarcoma: retrospective review of diagnostic utility and specificity. Costa MJ, et al. **Diagn Cytopathol** 1996 Jul;15(1):23–32
Fine-needle biopsy of pediatric lesions: a three-year study in an outpatient biopsy clinic. Eisenhut CC, et al. **Diagn Cytopathol** 1996 Feb;14(1):43–50
Cutaneous and subcutaneous masses of the chest wall: a fine-needle aspiration study. Gattuso P, et al. **Diagn Cytopathol** 1996 Dec;15(5):374–6
Fine-needle aspiration of leiomyosarcoma metastatic to the pancreas [letter] Holmes GF, et al. **Diagn Cytopathol** 1997 Feb;16(2):189–90
Cytologic findings in tenosynovial giant cell tumors investigated by fine-needle aspiration cytology. Layfield LJ, et al. **Diagn Cytopathol** 1997 Apr;16(4):317–25
Aggressive fibromatosis (desmoid tumor) is a monoclonal disorder. Alman BA, et al. **Diagn Mol Pathol** 1997 Apr; 6(2):98–101
Hypertrophic pulmonary osteoarthropathy in pulmonary metastasis--a case report. Aderaye G. **Ethiop Med J** 1996 Oct;34(4):251–4 (13 ref.)
The marriage of pathology and genetics in soft tissue tumours: EACR--Mühlbock Memorial Lecture. Van den Berghe H. **Eur J Cancer** 1996 Oct;32A(11):1849–56 (39 ref.)
Recurring desmoid tumor of the foot: a case study [letter; comment] Callahan DJ. **Foot Ankle Int** 1997 May;18(5):314 . Comment on: Foot Ankle Int 1996 Apr;17(4):221–5.
Primary extraskeletal mesenchymal chondrosarcoma in fossa poplitea of a 93-year-old woman. Guschmann M, et al. **Gen Diagn Pathol** 1996 Oct;142(2):119–24
Renal perineurioma in childhood. Val-Bernal JF, et al. **Gen Diagn Pathol** 1997 Jul;143(1):75–81
Low grade fibromyxoid sarcoma. Dvornik G, et al. **Histopathology** 1997 Mar;30(3):274–6
MIB-1 expression and iododeoxyuridine labelling in soft tissue sarcomas: an immunohistochemical study including correlations with p53, bcl-2 and histological characteristics. Jensen V, et al. **Histopathology** 1996 May;28(5):437–44
Sclerosing epithelioid fibrosarcoma. Reid R, et al. **Histopathology** 1996 May;28(5):451–5
Dermal spindle cell lipoma: plexiform and nodular variants. Zelger BW, et al. **Histopathology** 1995 Dec;27(6):533–40
Progression of inflammatory myofibroblastic tumor (inflammatory pseudotumor) of soft tissue into sarcoma

after several recurrences. Donner LR, et al. **Hum Pathol** 1996 Oct;27(10):1095–8

P–53 positivity and high proliferative index: factors of bad prognosis in malignant fibrous histiocytomas. Brinck U, et al. **In Vivo** 1995 Sep–Oct;9(5):475–8

Diffuse venous synovial haemangioma arising from the knee joint. Munshi PK, et al. **Indian J Med Sci** 1995 Jun; 49(6):142–3

Staging systems for musculoskeletal neoplasia. Springfield DS. **Instr Course Lect** 1994;43:537–42 (11 ref.)

Establishment, characterization and drug sensitivity of four new human soft tissue sarcoma cell lines. Li WW, et al. **Int J Cancer** 1996 Nov 15;68(4):514–9

Ki–67 immunostaining as a tool in the diagnosis of central cartilage lesions. Weinstein LJ, et al. **Iowa Orthop J** 1996; 16:39–45

Ossifying fibromyxoid tumour of soft parts. McCormack D, et al. **Ir J Med Sci** 1997 Jul–Sep;166(3):130–1

Skeletal metastases from soft–tissue sarcomas. Incidence, patterns, and radiological features. Yoshikawa H, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):548–52

Association of local recurrence with subsequent survival in extremity soft tissue sarcoma. Lewis JJ, et al. **J Clin Oncol** 1997 Feb;15(2):646–52

Ewing's sarcoma of soft tissues in childhood: a report from the Intergroup Rhabdomyosarcoma Study, 1972 to 1991. Raney RB, et al. **J Clin Oncol** 1997 Feb;15(2):574–82

Assessment of fibromyxoma cell proliferation in a tench (Tinca tinca L.) by the silver staining nucleolar organizer region (AgNOR) technique. Manera M, et al. **J Comp Pathol** 1997 Jan;116(1):107–12

Ossifying fibromyxoid tumor of soft parts: a case report and review. Barrett TL, et al. **J Cutan Pathol** 1996 Aug; 23(4):378–80 (8 ref.)

Calcifying and ossifying soft tissue lesions presenting in the skin [editorial] Fletcher CD. **J Cutan Pathol** 1996 Aug; 23(4):297

Extra–acral calcifying aponeurotic fibroma: a distinctive case with 23–year follow–up. Murphy BA, et al. **J Cutan Pathol** 1996 Aug;23(4):369–72

Ossifying fibromyxoid tumor of soft parts of the back. Nakayama F, et al. **J Cutan Pathol** 1996 Aug;23(4):385–8

Spindle cell lipoma is strongly CD34 positive. An immunohistochemical study. Templeton SF, et al. **J Cutan Pathol** 1996 Dec;23(6):546–50

Ossifying fibromyxoid tumor of soft parts. Velasco–Pastor AM, et al. **J Cutan Pathol** 1996 Aug;23(4):381–4

Synchronous glomus tumors in a distal digit: a case report. Noor MA, et al. **J Hand Surg [Am]** 1997 May;22(3):508–10

Epithelioid sarcoma of the temporomandibular region: a case report. Vadmal M, et al. **J Oral Maxillofac Surg** 1997 Jul; 55(7):754–8

Disseminated intrathoracic desmoplastic small round–cell tumor: a case report. Venkateswaran L, et al. **J Pediatr Hematol Oncol** 1997 Mar–Apr;19(2):172–5

Tumor size as a prognostic indicator of histologic grade of soft tissue sarcoma. Nakanishi H, et al. **J Surg Oncol** 1997 Jul;65(3):183–7

Extremity soft tissue sarcoma with metastases to abdominopelvic surfaces. Zanarini D, et al. **J Surg Oncol** 1997 Jan;64(1):68–72; discussion 72–3

Predictive value of proliferation–related markers, p53, and DNA ploidy for survival in patients with soft tissue spindle–cell sarcomas. Golouh R, et al. **Mod Pathol** 1996 Sep;9(9):919–24

Ancient hematoma: a unifying concept for a post–traumatic lesion mimicking an aggressive soft tissue neoplasm. Mentzel T, et al. **Mod Pathol** 1997 Apr;10(4):334–40

Molecular and immunohistochemical identification of p53 alterations in bone and soft tissue sarcomas. Mousses S, et al. **Mod Pathol** 1996 Jan;9(1):1–6

Collagenous fibroma (desmoplastic fibroblastoma): a report of seven cases. Nielsen GP, et al. **Mod Pathol** 1996 Jul; 9(7):781–5

Parachordoma. A case report of a very rare soft tissue tumor. Karabela–Bouropoulou V, et al. **Pathol Res Pract** 1996 Sep; 192(9):972–8; discussion 979–81

Malignant fibrous histiocytoma: histomorphological pattern or tumor type. Meister P. **Pathol Res Pract** 1996 Aug; 192(8):877–81 (36 ref.)

An unusual soft tissue tumor with features of angiomatoid malignant fibrous histiocytoma composed of bimodal CD34 and factor XIIIa positive dendritic cell subsets. CD34 and factor XIIIa in angiomatoid MFH. Silverman JS, et al. **Pathol Res Pract** 1997;193(1):51–8; discussion 59–60

Soft tissue. Kempson RL. **Pathology (Phila)** 1996;3(2):545–53 (11 ref.)

Gene alterations and apoptosis in rhabdomyosarcoma. Boman F, et al. **Pediatr Pathol Lab Med** 1997 Mar–Apr; 17(2):233–47

Cellular expression of adhesion factors in childhood rhabdomyosarcoma. Saxon BR, et al. **Pediatr Pathol Lab Med** 1997 Mar–Apr;17(2):259–66

Clonal analysis of sacrococcygeal "teratomas". Sinnock KL, et al. **Pediatr Pathol Lab Med** 1996 Nov–Dec;16(6):865–75

Symmetrical multifocal liposarcoma. Kulhavy M, et al. **S Afr J Surg** 1997 May;35(2):68–9 (14 ref.)

Soft tissue small round cell tumors: morphological parameters. d'Amore ES, et al. **Semin Diagn Pathol** 1996 Aug;13(3):184–203 (105 ref.)

Small round cell tumors of bone and soft tissue. Introduction. Llombart–Bosch A. **Semin Diagn Pathol** 1996 Aug; 13(3):149–52 (47 ref.)

Cytogenetics and tissue culture of small round cell tumors of bone and soft tissue. Noguera R. **Semin Diagn Pathol** 1996 Aug;13(3):171–83 (134 ref.)

Liposarcoma of soft tissue: MRI findings with pathologic correlation. Arkun R, et al. **Skeletal Radiol** 1997 Mar; 26(3):167–72

Soft tissue sarcoma nodal metastases: biologic significance and therapeutic considerations. Skinner KA, et al. **Surg Oncol Clin N Am** 1996 Jan;5(1):121–7 (14 ref.)

A paratesticular localization of desmoplastic small cell tumor. A case report. Bertoldin R, et al. **Tumori** 1996 Sep–Oct; 82(5):497–8

Low–grade fibromyxoid sarcoma. Fukunaga M, et al. **Virchows Arch** 1996 Nov;429(4–5):301–3 (1 ref.)

Establishment of a new continuous clear cell sarcoma cell line. Morphological and cytogenetic characterization and detection of chimaeric EWS/ATF–1 transcripts. Hiraga H, et al. **Virchows Arch** 1997 Jul;431(1):45–51

Solitary fibrous tumour: clinicopathological, immunohistochemical, and ultrastructural analysis of 12 cases arising in soft tissues, nasal cavity and nasopharynx, urinary bladder and prostate. Mentzel T, et al. **Virchows Arch** 1997 Jun;430(6):445–53

[Dermatofibrosarcoma protuberans––a ciinico–anatomical and immunohistochemical study] Popkhristova E. **Khirurgiia (Sofiia)** 1996;49(6):42–5 (Eng. Abstr.) **(Bul)**

[A malignant rhabdoid tumor of the soft tissues] Popkhristova E. **Khirurgiia (Sofiia)** 1996;49(6):53–4 **(Bul)**

[A tumorous lesion of the thumb in an adolescent] Brel D, et al. **Ann Pathol** 1997 Apr;17(2):125–6 **(Fre)**

[Undifferentiated soft tissue tumor with rhabdoid phenotype (extra–renal rhabdoid tumor). Report of a congenital case associated with medulloblastoma in a brother] Costes V, et al. **Ann Pathol** 1997 Mar;17(1):41–3 (Eng. Abstr.) **(Fre)**

[A recurrent subcutaneous nodule in an infant] Moukassa D, et al. **Ann Pathol** 1997 Mar;17(1):55–6 **(Fre)**

[Malignant granular cell tumor. Report of a clinico–pathologic case] Rochaix P, et al. **Ann Pathol** 1996 Sep;16(4):292–5 (32 ref.) (Eng. Abstr.) **(Fre)**

[Glomus tumors. Clinical, histological and immunohistochemical study. Apropos of 29 cases] Arkwright S, et al. **Arch Anat Cytol Pathol** 1996; 44(4):160–5 (Eng. Abstr.) **(Fre)**

[Neurosarcoma associated with neurofibromatosis 1. Apropos of a case and review of the literature] Ligneau B, et al. **Presse Med** 1997 Mar 29;26(10):458–63 (24 ref.) (Eng. Abstr.) **(Fre)**

[Intramuscular hemangioma. Report of a case] Cristallini EG, et al. **Pathologica** 1997 Feb;89(1):59–61 (Eng. Abstr.) **(Ita)**

[Extraosseus osteogenic sarcoma: report of a case with atypical secondary involvement of the lung] Pezzullo L, et al. **Radiol Med (Torino)** 1997 Mar;93(3):296–8 (16 ref.) **(Ita)**

[Histopathological studies of temporal bones of patients with malignant melanoma] Kojima C, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jun;100(6):655–62 (Eng. Abstr.) **(Jpn)**

[On the histogenesis and classification of fibrous, lipomatous, fibrohistiocytic and related tumors of bone and soft tissues] Hizawa K. **Nippon Seikeigeka Gakkai Zasshi** 1996 Oct; 70(10):685–95 (30 ref.) **(Jpn)**

[Pathologic diagnosis on bone and soft tissue tumors by molecular biological methods] Nojima T, et al. **Rinsho Byori** 1997 Jul;45(7):661–6 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Dependence of tumor metastasis on the pH of tissues in the tumor–host] Abakarova OR. **Biull Eksp Biol Med** 1995 Dec;120(12):613–5 **(Rus)**

[Chondroid lipoma] Zámečník M, et al. **Cesk Patol** 1996 Aug; 32(3):115–7 (Eng. Abstr.) **(Slo)**

[Epithelioid sarcoma of the right arm with brain metastases (letter)] Ulla Anes M, et al. **An Med Interna** 1997 Feb; 14(2):105 **(Spa)**

PHYSIOPATHOLOGY

The emerging role of myofibroblasts in soft tissue neoplasia [editorial] Menzel T, et al. **Am J Clin Pathol** 1997 Jan; 107(1):2–5

PSYCHOLOGY

Observations from a survivor of childhood cancer. Dorfman E. **J Pediatr Oncol Nurs** 1996 Oct;13(4):235–6

A psychosocial intervention for patients with soft tissue sarcoma. Payne DK, et al. **Psychooncology** 1997 Mar; 6(1):65–71

RADIOGRAPHY

Infiltrative subcutaneous metastases from ovarian carcinoma after paracentesis: CT findings. La Fianza A, et al. **Abdom Imaging** 1997 Sep–Oct;22(5):522–3

Fine–needle aspiration biopsy of mesenchymal lesions: the value of clinicoradiologic correlation and the importance of histogenetic subtyping [letter; comment] Kilpatrick SE, et al. **Am J Clin Pathol** 1997 Aug;108(2):237. Comment on: Am J Clin Pathol 1996 Nov;106(5):561–4.

Epithelioid sarcoma of the forearm. Hanley SD, et al. **Australas Radiol** 1996 Aug;40(3):254–6

Unifocal Langerhans' cell histiocytosis [letter; comment] Hoeffel C, et al. **Australas Radiol** 1996 Aug;40(3):369–70 . Comment on: Australas Radiol 1994 Nov;38(4):313–4.

Symptomatic forearm mass in a 48–year–old man [clinical conference] Hanlon MM, et al. **Clin Orthop** 1996 Oct; (331):308–9, 312–4

Enlarging dorsal hand mass in a 64–year–old man. Magid D, et al. **Clin Orthop** 1997 Jan;(334):380–2, 388

Paraarticular osteochondroma of the knee: report of 2 cases and review of the literature. Reith JD, et al. **Clin Orthop** 1997 Jan;(334):225–32 (17 ref.)

Intracapsular chondroma of the knee. Bendall SP, et al. **J South Orthop Assoc** 1997 Spring;6(1):69–72

[What is your diagnosis? Glomus tumor] Braunschweig M. **Schweiz Rundsch Med Prax** 1997 Apr 9;86(15):603–4 **(Ger)**

RADIONUCLIDE IMAGING

Nuclear medicine techniques provide unique physiologic characterization of suspected and known soft tissue and bone sarcomas. Hicks RJ. **Acta Orthop Scand Suppl** 1997 Feb;273:25–36 (38 ref.)

PET imaging in soft tissue sarcomas. Miraldi F, et al. **Cancer Treat Res** 1997;91:51–64 (40 ref.)

Comparison of Tc–99m pertechnetate with Tl–201 and Ga–67 scintigraphy of malignant soft–tissue tumors. Abe H, et al. **Clin Nucl Med** 1997 Jan;22(1):38–41

Soft–tissue involvement by adenocarcinoma imaged during bone scintigraphy. Bordy Z, et al. **Clin Nucl Med** 1997 Jul;22(7):508

Use of whole–body imaging using Tc–99m RBC in patients with soft–tissue vascular lesions. Inoue Y, et al. **Clin Nucl Med** 1996 Dec;21(12):958–9

The use of three–phase scintigraphy for diagnosing hemangiomas of the extremities. A clinical evaluation. Murata Y, et al. **Clin Nucl Med** 1997 Jun;22(6):372–5

Lipomas as a potential cause for uptake of In–111 MAb72.3 (Oncoscint CR). Sakow NK, et al. **Clin Nucl Med** 1996 Apr;21(4):332–3

Correlation of the findings of thallium–201 chloride scans with those of other imaging modalities and histology following therapy in patients with bone and soft tissue sarcomas [letter] Kostakoglu L, et al. **Eur J Nucl Med** 1996 Nov;23(11):1558

Bone scans in neurofibromatosis: neurofibroma, plexiform neuroma and neurofibrosarcoma. Kloos RT, et al. **J Nucl Med** 1996 Nov;37(11):1778–83

Evaluating benign and malignant bone and soft–tissue lesions with technetium–99m–MIBI scintigraphy. Taki J, et al. **J Nucl Med** 1997 Apr;38(4):501–6

[Evaluation of bone and soft tissue lesion using 99mTc–MIBI: comparison with 201Tl and the relation to chemotherapeutic effect] Sumiya H, et al. **Kaku Igaku** 1997 Feb;34(2):105–11 (Eng. Abstr.) **(Jpn)**

[Initial trial of tumor imaging using 123I–BMIPP: evaluation in soft tissue tumors] Tanabe Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Nov; 56(13):982–4 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Soft tissue sarcomas. Alvegård T. **Acta Oncol** 1996;35 Suppl 7:117–22

Radiotherapy in soft tissue sarcoma of the extremities. Ngan SY. **Acta Orthop Scand Suppl** 1997 Feb;273:112–6

Intra–operative implant brachytherapy in the management of soft–tissue sarcomas. Burmeister BH, et al. **Aust N Z J Surg** 1997 Jan;67(1):5–8

Radiotherapy in the treatment of solitary plasmacytoma. Jyothirmayi R, et al. **Br J Radiol** 1997 May;70(833):511–6

Neutrontherapy in soft tissue sarcomas: a review of European results. Schwarz R, et al. **Bull Cancer Radiother** 1996;83 Suppl:110s–4s

Fast neutron therapy in treatment of soft tissue sarcoma––the Berlin–Buch study. Steingräber M, et al. **Bull Cancer Radiother** 1996;83 Suppl:122s–4s

Brachytherapy for soft tissue sarcomas. Devlin PM, et al. **Cancer Treat Res** 1997;91:107–28 (41 ref.)

Three–dimensional planning and conformal radiotherapy. Harmer C, et al. **Cancer Treat Res** 1997;91:129–41 (24 ref.)

Benign and low–grade tumors of the soft tissues: role for radiation therapy. Suit HD, et al. **Cancer Treat Res** 1997; 91:95–105 (34 ref.)

Solitary plasmacytoma of bone and soft tissue. Bolek TW, et al. **Int J Radiat Oncol Biol Phys** 1996 Sep 1;36(2):329–33

Radiotherapy vs. radiotherapy and razoxane in the treatment of soft tissue sarcomas: final results of a randomized study. Rhomberg W, et al. **Int J Radiat Oncol Biol Phys** 1996 Dec 1;36(5):1077–84

Complications of combined radiotherapy and isolated limb perfusion with tumor necrosis factor alpha +/– interferon gamma and melphalan in patients with irresectable soft tissue tumors. Vrouenraets BC, et al. **J Surg Oncol** 1997 Jun;65(2):88–94

Whole–limb irradiation of the lower calf using a six–field electron technique. Wooden KK, et al. **Med Dosim** 1996 Winter;21(4):211–8

[Clinical significance of heavy particle therapy for malignant tumor of the bone and soft tissues] Morita K. **Nippon Seikeigeka Gakkai Zasshi** 1997 Jan;71(1):11–7 (17 ref.) **(Jpn)**

SOFT TISSUE NEOPLASMS

SECONDARY

Infiltrative subcutaneous metastases from ovarian carcinoma after paracentesis: CT findings. La Fianza A, et al. **Abdom Imaging** 1997 Sep–Oct;22(5):522–3

Metastatic malignant chondroblastoma. Rodgers WB, et al. **Am J Orthop** 1996 Dec;25(12):846–9

Malignant blue naevus with distant subcutaneous metastasis. Böni R, et al. **Clin Exp Dermatol** 1996 Nov;21(6):427–30

Human breast cancer cell metastasis to long bone and soft organs of nude mice: a quantitative assay. Sung V, et al. **Clin Exp Metastasis** 1997 Mar;15(2):173–83

Soft-tissue involvement by adenocarcinoma imaged during bone scintigraphy. Bordy Z, et al. **Clin Nucl Med** 1997 Jul;22(7):508

Metastatic chondrosarcoma in soft tissue diagnosed by fine needle aspiration (FNA) cytology. Bansal R, et al. **Cytopathology** 1996 Feb;7(1):70–2

Metastatic tumours of the hand. Report of six additional cases. Castelló JR, et al. **J Hand Surg [Br]** 1996 Aug; 21(4):547–50

Chondroblastoma with multiple distant soft tissue metastases. Khalili K, et al. **Skeletal Radiol** 1997 Aug;26(8):493–6

[Subcutaneous dorsal tumefaction] Sriha B, et al. **Ann Pathol** 1997 Apr;17(2):123–4 **(Fre)**

[Case of renal cell carcinoma metastasis to the muscles with secondary amyloidosis] Nakajima K, et al. **Nippon Naika Gakkai Zasshi** 1994 Jan 10;83(1):130–2 **(Jpn)**

[The diagnosis and treatment of bladder cancer metastases] Kariakin OB, et al. **Urol Nefrol (Mosk)** 1997 Mar–Apr; (2):22–5 (Eng. Abstr.) **(Rus)**

SURGERY

Malignant bone and soft tissue tumors of the shoulder girdle. A retrospective analysis of 30 operated cases. Meller I, et al. **Acta Orthop Scand** 1997 Aug;68(4):374–80

Excisional biopsy of impalpable soft tissue tumors. US-guided preoperative localization in 12 cases. Rutten MJ, et al. **Acta Orthop Scand** 1997 Aug;68(4):384–6

Malignant soft tissue tumours of the trunk and retroperitoneum. Henderson MA. **Acta Orthop Scand Suppl** 1997 Feb;273:108–11

Microsurgery—its role in soft tissue and bone tumour reconstruction. Rostek M, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:95–100 (50 ref.)

Surgical margins for soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:81–5

Centralization of soft tissue sarcoma. The southern Sweden experience. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:4–8

Surgery without radiotherapy in soft tissue sarcoma. Rydholm A. **Acta Orthop Scand Suppl** 1997 Feb;273:117–9

Adjuvant therapy: the effects on microvascular lower extremity reconstruction. Evans GR, et al. **Ann Plast Surg** 1997 Aug;39(2):141–4

Benign giant schwannoma located in the upper arm. Kececi Y, et al. **Ann Plast Surg** 1997 Jul;39(1):100–2

Endoscopic extraction of lipomas using an ultrasonic suction scalpel. Sawaizumi M, et al. **Ann Plast Surg** 1996 Feb; 36(2):124–8

Isolated limb perfusion with tumor necrosis factor and melphalan for limb salvage in 186 patients with locally advanced soft tissue extremity sarcomas. The cumulative multicenter European experience. Eggermont AM, et al. **Ann Surg** 1996 Dec;224(6):756–64; discussion 764–5

Forequarter amputation with fasciocutaneous deltoid flap reconstruction for malignant tumors of the upper extremity. Volpe CM, et al. **Ann Surg Oncol** 1997 Jun;4(4):298–302

Limb-salvage strategies to optimize quality of life: the M.D. Anderson Cancer Center experience. Yasko AW, et al. **CA Cancer J Clin** 1997 Jul–Aug;47(4):226–38

Metastasectomy for soft tissue sarcomas. Pastorino U. **Cancer Treat Res** 1997;91:65–75 (32 ref.)

Vascular reconstruction in limb salvage operations for soft tissue tumors of the extremities. Kawai A, et al. **Clin Orthop** 1996 Nov;(332):215–22

Cystic hygroma of the shoulder region. A case report. Wever DJ, et al. **Clin Orthop** 1997 May;(338):215–8

Primary resection of soft-tissue sarcomas: yes and no. Frey E, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):227–9

Correlation of pain with temperature and blood-flow changes in the lower limb following chemical lumbar sympathectomy in reflex sympathetic dystrophy. A case report. Cooke ED, et al. **Int Angiol** 1995 Sep;14(3):226–8

Oncological outcomes of operative treatment of subcutaneous soft-tissue sarcomas of the extremities. Gibbs CP, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):888–97

Surgical resection of primary soft-tissue sarcoma [letter; comment] Grimer RJ, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):171–2. Comment on: J Bone Joint Surg Br 1996 Jul;78(4):658–61.

Lymphangioma of the ankle region. Wu KK. **J Foot Ankle Surg** 1996 May–Jun;35(3):263–5

Limb salvage surgery and adjuvant radiotherapy for soft tissue sarcomas of the forearm and hand. Bray PW, et al. **J Hand Surg [Am]** 1997 May;22(3):495–503

Subungual melanoma of the hand. Quinn MJ, et al. **J Hand Surg [Am]** 1996 May;21(3):506–11

Recurrent intravascular papillary endothelial hyperplasia. Katzman B, et al. **J Hand Surg [Br]** 1997 Feb;22(1):113–5

Eccrine spiradenoma of the hand clinically mimicking a lipoma. Al-Qattan MM. **J Hand Surg [Br]** 1996 Aug; 21(4):551–2

Extravascular papillary endothelial hyperplasia following surgery for De Quervain's disease. Rampoldi M, et al. **J Hand Surg [Br]** 1997 Feb;22(1):116–8

Closure of wounds in the upper extremity using a skin stretching device. Stahl S, et al. **J Hand Surg [Br]** 1996 Aug;21(4):534–7

Outcome of treatment for pediatric sarcoma of the foot: a retrospective review over a 20-year period. Gross E, et al. **J Pediatr Surg** 1997 Aug;32(8):1181–4

Large myofascial fibromatosis involving the shoulder girdle. Bhaskar AR, et al. **J Postgrad Med** 1994 Oct–Dec; 40(4):225–7

Surgery of sarcomas in the multimodality era [editorial; comment] Karakousis CP. **J Surg Oncol** 1996 Sep;63(1):1–2. Comment on: J Surg Oncol 1996 Sep;63(1):3–8.

Limb-sparing treatment for soft tissue sarcomas: influence of prognostic factors [see comments] Rossi CR, et al. **J Surg Oncol** 1996 Sep;63(1):3–8. Comment in: J Surg Oncol 1996 Sep;63(1):1–2.

Predictive factors for complete removal in soft tissue sarcomas: a retrospective analysis in a series of 592 cases. Sastre-Garau X, et al. **J Surg Oncol** 1997 Jul;65(3):175–82

Modifications to surgical practise [letter] Anderson PJ, et al. **Microsurgery** 1996;17(4):243

Soft tissue. Kempson RL. **Pathology (Phila)** 1996;3(2):545–53 (11 ref.)

Chest-wall reconstruction: an account of 500 consecutive patients. Arnold PG, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):804–10

Giant vascular leiomyoma in the hand. Kataoka M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar; 31(1):91–3

A flap to monitor a temporoparietal fascial flap. Case report. Ueda K, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Sep;30(3):235–7

Hemipelvectomy for soft tissue sarcoma: clinical results in fifty-three patients. Prewitt TW, et al. **Surg Oncol** 1995; 4(5):261–9

Radical scapulectomy with limb salvage for shoulder girdle soft tissue sarcoma. Volpe CM, et al. **Surg Oncol** 1996 Feb; 5(1):43–8 (20 ref.)

Major vessel resection during limb-preserving surgery for soft tissue sarcomas. Karakousis CP, et al. **World J Surg** 1996 Mar–Apr;20(3):345–9; discussion 350

[Treatment and prognosis of soft tissue sarcoma] Wang Y, et al. **Chung Hua Wai Ko Tsa Chih** 1996 Jan;34(1):29–32 (Eng. Abstr.) **(Chi)**

[Benign tumors of the bones and soft tissues of the mouth area. A report on the annual meeting of the Swiss Association for Oral Surgery and Mouth Diseases 8 March 1997 in Basel] Vauthier T. **Schweiz Monatsschr Zahnmed** 1997;107(6):529–30 **(Fre)**

[Infiltrating intramuscular lipoma] Schellong H, et al. **Chirurg** 1997 Mar;68(3):279–82 (Eng. Abstr.) **(Ger)**

[Neurinoma in the area of an episiotomy scar. A case report] Lefhalm B, et al. **Geburtshilfe Frauenheilkd** 1996 Oct; 56(10):566–8 (Eng. Abstr.) **(Ger)**

[Experiences with the lateral upper arm flap] Stober VR. **Handchir Mikrochir Plast Chir** 1996 Jan;28(1):22–7 (Eng. Abstr.) **(Ger)**

[Are expanded tumor resection and reconstruction of soft tissue sarcoma justified by recurrence rate and survival time?] Hohenberger P, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:229–31 (Eng. Abstr.) **(Ger)**

[Intraoperative radiotherapy in advanced soft tissue sarcoma of the extremities] Schwarzbach M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:214–7 (Eng. Abstr.) **(Ger)**

[Primary malignant bone and soft tissue tumors of the pelvis—oncologic and functional outcome] Wirbel RJ, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:914–7 (Eng. Abstr.) **(Ger)**

[Benign tumors of the bones and soft tissues of the mouth area. The annual meeting of the Swiss Association for Oral Surgery and Mouth Diseases, 8 March 1997, Basel] Stäuble F. **Schweiz Monatsschr Zahnmed** 1997;107(8):714–6 **(Ger)**

[Surgical amputation and prosthetic management in congenital fibrosarcoma of the lower extremity] Zembsch A, et al. **Z Orthop Ihre Grenzgeb** 1996 Nov–Dec; 134(6):517–9 (Eng. Abstr.) **(Ger)**

THERAPY

A clinical analysis of malignant schwannoma. Kunisada T, et al. **Acta Med Okayama** 1997 Apr;51(2):87–92

Preoperative multidisciplinary treatment with hyperthermia for soft tissue sarcoma. Makihata E, et al. **Acta Med Okayama** 1997 Apr;51(2):93–9

The Scandinavian—Australian Symposium on the Management of Bone and Soft Tissue Sarcomas. **Acta Orthop Scand Suppl** 1997 Feb;273:1–160

The Scandinavian Sarcoma Group. Background, organization and the Central Registry—the first 17 years. Alvegård TA. **Acta Orthop Scand Suppl** 1997 Feb;273:9–13

Outcomes after multi-modality treatment of musculoskeletal tumours. Marsden FW, et al. **Acta Orthop Scand Suppl** 1997 Feb;273:101–5

Antegrade catheterization of the brachial artery for embolizing a sarcoma of the forearm. Daly CA, et al. **Br J Radiol** 1997 Jan;70:99–101

The National Cancer Data Base report on soft tissue sarcoma. Pollock RE, et al. **Cancer** 1996 Nov 15;78(10):2247–57

Isolated limb perfusion with high-dose tumor necrosis factor-alpha for locally advanced extremity soft tissue sarcomas. Eggermont AM, et al. **Cancer Treat Res** 1997; 91:189–203

Post-treatment limb function in soft tissue sarcomas. Robinson MH. **Cancer Treat Res** 1997;91:77–93 (38 ref.)

Squamous cell carcinoma of the nail bed. Lai CS, et al. **Cutis** 1996 May;57(5):341–5 (25 ref.)

Hyperthermic isolated limb perfusion with cisplatin in four patients with sarcomas of soft tissue and bone. van Ginkel RJ, et al. **Eur J Surg Oncol** 1996 Oct;22(5):528–31

The success of TNF alpha in isolated limb perfusion for irresectable extremity soft tissue sarcomas, melanoma and carcinomas: observations in patients and preclinical perfusion models. Eggermont AM. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1357–70 (74 ref.)

Ewing's sarcoma of soft tissues in childhood: a report from the Intergroup Rhabdomyosarcoma Study, 1972 to 1991. Raney RB, et al. **J Clin Oncol** 1997 Feb;15(2):574–82

Endodermal sinus tumor in children. Davidoff AM, et al. **J Pediatr Surg** 1996 Aug;31(8):1075–8; discussion 1078–9

Epithelioid sarcoma in children. Gross E, et al. **J Pediatr Surg** 1996 Dec;31(12):1663–5

Management of soft tissue sarcomas of the extremity in adults. Valle AA, et al. **J Surg Oncol** 1996 Dec;63(4):271–9 (80 ref.)

Complications of combined radiotherapy and isolated limb perfusion with tumor necrosis factor alpha +/– interferon gamma and melphalan in patients with irresectable soft tissue tumors. Vrouenraets BC, et al. **J Surg Oncol** 1997 Jun;65(2):88–94

Alteration of tissue oxygen partial pressure during isolated, hyperthermic limb perfusion with cytostatic drugs or recombinant human tumor necrosis factor alpha combined with melphalan. Hohenberger P, et al. **Strahlenther Onkol** 1996 Nov;172 Suppl 2:14–5

[Results of isolated hyperthermic extremity perfusion in soft tissue sarcomas within the scope of a multimodality treatment concept (see comments)] Schwarzbach M, et al. **Chirurg** 1996 Dec;67(12):1237–43 (Eng. Abstr.). Comment in: Chirurg 1997 Jun;68(6):649. **(Ger)**

[Primitive neuroectodermal tumor] Zimmermann T, et al. **Chirurg** 1997 Jul;68(7):732–7 (Eng. Abstr.) **(Ger)**

[Kinetics of myelopoietic regeneration and mobilization of CD34-positive cells within the scope of the NB90 Neuroblastoma Therapy Study] Sauter S, et al. **Klin Padiatr** 1997 Jul–Aug;209(4):191–5 (Eng. Abstr.) **(Ger)**

[O2 utilization during hyperthermic extremity perfusion with rhTNF alpha and melphalan] Haier J, et al. **Langenbecks Arch Chir** 1997;382(3):128–33 (Eng. Abstr.) **(Ger)**

[Aggressive fibromatosis in childhood] Barthel M, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1108–11 (Eng. Abstr.) **(Ger)**

[Primary neuroectodermal tumor (PNET): a rare highly malignant soft tissue tumor in children and young adults] Zimmermann T, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1095–9 (Eng. Abstr.) **(Ger)**

[A phase-I/II study on the local hyperthermia of cervical N2/N3 lymph node metastases] Stahl H, et al. **Strahlenther Onkol** 1997 Apr;173(4):219–29 (Eng. Abstr.) **(Ger)**

ULTRASONOGRAPHY

Ultrasound diagnosis of soft-tissue tumours in the hand and forearm. A prospective study. Höglund M. **Acta Radiol** 1997 Jul;38(4 Pt 1):508–13

Ultrasound characteristics of five common soft-tissue tumours in the hand and forearm. Höglund M, et al. **Acta Radiol** 1997 May;38(3):348–54

A statistical model for ultrasound diagnosis of soft-tissue tumours in the hand and forearm. Höglund M, et al. **Acta Radiol** 1997 May;38(3):355–8

Elastofibroma dorsi: sonographic findings. Bianchi S, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1113–5

Synovial sarcoma: an unexpected ultrasound finding in a post-partum patient. Acton CM, et al. **Australas Radiol** 1996 Nov;40(4):452–3

Sonographic evaluation of soft tissue chondroma. Bianchi S, et al. **J Clin Ultrasound** 1996 Mar–Apr;24(3):148–50

Unusual sonographic appearance with color Doppler imaging of bilateral breast metastases in a patient with alveolar rhabdomyosarcoma of an extremity. Yang WT, et al. **J Ultrasound Med** 1996 Jul;15(7):531–3

[The differential diagnosis of lymphangiomas of the maxillofacial area in children based on echographic data] Nadtochiĭ AG, et al. **Stomatologiia (Mosk)** 1997;76(2):49–53 **(Rus)**

ULTRASTRUCTURE

Fine needle aspiration (FNA) of synovial sarcoma—a comparative histological-cytological study of 15 cases, including immunohistochemical, electron microscopic and cytogenetic examination and DNA-ploidy analysis. Akerman M, et al. **Cytopathology** 1996 Jun;7(3):187–200

Study on the nucleolar organiser regions in soft tissue liposarcoma. Vasiu R, et al. **Rom J Morphol Embryol** 1996

Jul-Dec;42(3-4):219-23
Soft tissue small round cell tumors: morphological parameters. d'Amore ES, et al. **Semin Diagn Pathol** 1996 Aug;13(3):184-203 (105 ref.)
Differentiating small round cell sarcomas of the soft parts by an innovative immunogold labeling method: an ultrastructural study. Kawauchi S, et al. **Ultrastruct Pathol** 1996 Nov-Dec;20(6):549-61
Head and neck fibromyxoid sarcoma: clinicopathological correlation with emphasis on peculiar ultrastructural features related to collagen processing. Papadimitriou JC, et al. **Ultrastruct Pathol** 1997 Jan-Feb;21(1):81-7

VETERINARY

Do postvaccinal sarcomas occur in Australian cats? Burton G, et al. **Aust Vet J** 1997 Feb;75(2):102-6
Tumours of soft tissues. Berman LD. **IARC Sci Publ** 1996;(126):321-49 (79 ref.)
Tumours of the skin. Ghadially FN, et al. **IARC Sci Publ** 1996;(126):1-43 (111 ref.)
Ultrastructure of virus-induced soft-tissue tumours. Levenbook IS, et al. **IARC Sci Publ** 1996;(126):351-63 (27 ref.)
Tumours of the pancreas. Pour PM, et al. **IARC Sci Publ** 1996;(126):149-73 (29 ref.)
Tumours of the intestine. Takahashi M, et al. **IARC Sci Publ** 1996;(126):137-47 (29 ref.)
Tumours of the glandular stomach. Takahashi M, et al. **IARC Sci Publ** 1996;(126):127-35 (29 ref.)
Tumours of the gallbladder. Turusov VS, et al. **IARC Sci Publ** 1996;(126):109-25 (21 ref.)
Assessment of fibromyxoma cell proliferation in a tench (Tinca tinca L.) by the silver staining nucleolar organizer region (AgNOR) technique. Manera M, et al. **J Comp Pathol** 1997 Jan;116(1):107-12
The potential role of inflammation in the development of postvaccinal sarcomas in cats. Macy DW, et al. **Vet Clin North Am Small Anim Pract** 1996 Jan;26(1):103-9 (36 ref.)
Soft tissue sarcomas. Mauldin GN. **Vet Clin North Am Small Anim Pract** 1997 Jan;27(1):139-48 (32 ref.)
Malignant fibrous histiocytoma in a puppy. Pires MA. **Vet Rec** 1997 Mar 1;140(9):234-5
Surgical excision of soft tissue fibrosarcomas in cats. Davidson EB, et al. **Vet Surg** 1997 Jul-Aug;26(4):265-9

VIROLOGY

Soft tissue sarcomas in HIV-infected adult patients. Fizazi K, et al. **Eur J Cancer** 1996 Sep;32A(10):1812-4

SOFTBALL see **BASEBALL**

SOFTWARE

Study of physicians' use of a software program to create a portfolio of their self-directed learning. Campbell CM, et al. **Acad Med** 1996 Oct;71(10 Suppl):S49-51
Interactive multimedia software for training and education in neurosurgery. Batschkus MM. **Acta Neurochir Suppl (Wien)** 1997;69:156-7
A deterministic method to calculate the radiation spectra of nuclides. Stepanek J. **Acta Oncol** 1997;36(3):331-6
Dynamic three-dimensional display of common congenital cardiac defects from reconstruction of two-dimensional echocardiographic images. Hsieh KS, et al. **Acta Paediatr Sin** 1996 Jan-Feb;37(1):27-30
Software upgrading in a CT scanner. Influence on quantitative CT. Kalef-Ezra JA, et al. **Acta Radiol** 1996 Nov;37(6):855-7
An independent software system for the analysis of dynamic MR images. Torheim G, et al. **Acta Radiol** 1997 Jan; 38(1):165-72
Computerized urea kinetic modeling to prescribe and monitor delivered Kt/V (pKt/V, dKt/V) in peritoneal dialysis. Fresenius Randomized Dialysis Prescriptions and Clinical Outcome Study (RDP/CO). Gotch FA, et al. **Adv Perit Dial** 1996;12:43-5
Cost-effective poster and print production with digital camera and computer technology. Chen MY, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):955-7
An interactive computer-based tool for teaching the segmental anatomy of the liver: usefulness in the education of residents and fellows. Kuszyk BS, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):631-4
A PC-based software test for measuring alcohol and drug effects in human subjects. Mills KC, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1582-91
A computer program based on parallel line assay for analysis of skin tests. Martín S, et al. **Allergy** 1997 Jan;52(1):97-100
Evaluation of five QT correction formulas using a software-assisted method of continuous QT measurement from 24-hour Holter recordings. Molnar J, et al. **Am J Cardiol** 1996 Oct 15;78(8):920-6
Validation of the EINTHOVEN model-based computerized electrocardiogram rhythm analysis system with three classes of clinical arrhythmias. Widman LE, et al. **Am J Cardiol** 1996 Oct 15;78(8):927-31
Utility of a software assistant in critical care case review. Samuels L, et al. **Am J Emerg Med** 1997 Jan;15(1):43-8
Computer program for tracking incidence of intravascular-device-related infections in patients receiving parenteral nutrition [letter] Chan JH, et al. **Am J Health Syst Pharm** 1997 Aug 15;54(16):1897-8
Building the clinical workstation: software for the health-system pharmacist [see comments] Felkey BG. **Am J Health Syst Pharm** 1997 Jul 1;54(13):1505-9. Comment in: Am J Health Syst Pharm 1997 Jul 1;54(13):1501.
Making software work for pharmacy [editorial; comment] Talley CR. **Am J Health Syst Pharm** 1997 Jul 1;54(13):1501. Comment on: Am J Health Syst Pharm 1997 Jul 1;54(13):1505-9. Comment on: Am J Health Syst Pharm 1997 Jul 1;54(13):1510-5. Comment on: Am J Health Syst Pharm 1997 Jul 1;54(13):1515-20.
Identifying marker typing incompatibilities in linkage analysis. Stringham HM, et al. **Am J Hum Genet** 1996 Oct; 59(4):946-50
Designing prevention-oriented software for workplace health and safety. Maizlish N. **Am J Ind Med** 1997 Jan; 31(1):64-74
Windows 95: troubles and trouble shooting. **Am J Orthod Dentofacial Orthop** 1997 May;111(5):583-5
Windows 95 —- first impression. **Am J Orthod Dentofacial Orthop** 1997 Apr;111(4):453-4
Use of World Wide Web server and browser software to support a first-year medical physiology course. Davis MJ, et al. **Am J Physiol** 1997 Jun;272(6 Pt 3):S1-14
SCHISTOSIM: a microsimulation model for the epidemiology and control of schistosomiasis. Vlas SJ, et al. **Am J Trop Med Hyg** 1996 Nov;55(5 Suppl):170-5 (16 ref.)
Reproducibility of Bayesian belief network assessment of breast fine needle aspirates. Whimster WF, et al. **Anal Quant Cytol Histol** 1996 Aug;18(4):267-74
A comparison of traditional textbook and interactive computer learning of neuromuscular block. Ohrn MA, et al. **Anesth Analg** 1997 Mar;84(3):657-61
Real time validation of paediatric biochemical reports using the Valab-Biochem system. Marchand M, et al. **Ann Clin Biochem** 1997 Jul;34 (Pt 4):389-95
Predicting survival from ruptured abdominal aortic aneurysm. Computer modeling with AIM versus clinical judgment. Cloutier L, et al. **Ann N Y Acad Sci** 1996 Nov 18;800:234-5
Use of a commercial computer program for continuous audit of surgical complications [see comments] Brydon HL, et al. **Ann R Coll Surg Engl** 1996 Sep;78(5 Suppl):230-1. Comment in: Ann R Coll Surg Engl 1997 Jan;79(1 Suppl):40.
Use of a commercial computer program for continuous audit of surgical complications [letter; comment] Holt JG. **Ann R Coll Surg Engl** 1997 Jan;79(1 Suppl):40. Comment on: Ann R Coll Surg Engl 1996 Sep;78(5 Suppl):230-1.
A new computational method for detection of chimeric 16S rRNA artifacts generated by PCR amplification from mixed bacterial populations. Komatsoulis GA, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2338-46
BANTER: a Bayesian network tutoring shell. Haddawy P, et al. **Artif Intell Med** 1997 Jun;10(2):177-200
Clinical monitoring using regression-based trend templates. Haimowitz IJ, et al. **Artif Intell Med** 1995 Dec;7(6):473-96
Coevolutionary computation. Paredis J. **Artif Life** 1995 Summer;2(4):355-75
Transferring electronic medical records. Walker D. **Aust Fam Physician** 1997 Jan;26(1):48-55
Computer-based surgical audit programs: a review of three current options. Colledge DN, et al. **Aust N Z J Surg** 1997 Apr;67(4):206-10
Modeling the structure of the ribosome. Easterwood TR, et al. **Biochem Cell Biol** 1995 Nov-Dec;73(11-12):751-6 (35 ref.)
Fully automated genome analysis that reflects user needs and preferences. A detailed introduction to the MAGPIE system architecture. Gaasterland T, et al. **Biochimie** 1996; 78(5):302-10
Computer program to predict likelihood of finding and HLA-matched donor: methodology, validation, and application. Mori M, et al. **Biol Blood Marrow Transplant** 1996 Oct;2(3):134-44
A computer program using disposition decomposition analysis in pharmacodynamics. Cheng H, et al. **Biopharm Drug Dispos** 1997 Jan;18(1):9-15
Reduced surface: an efficient way to compute molecular surfaces. Sanner MF, et al. **Biopolymers** 1996 Mar; 38(3):305-20
XNBC: a simulation tool. Application to the study of neural coding using hybrid networks. Vibert JF, et al. **Biosystems** 1997;40(1-2):211-8
Visual Genome Explorer: a comparative visual interface to genome data. Archer ES, et al. **Biotechniques** 1997 Jun; 22(6):1164-5
Computer program for calculating the melting temperature of degenerate oligonucleotides used in PCR or hybridization. Chen H, et al. **Biotechniques** 1997 Jun; 22(6):1158-60
Analysis of differential display RT-PCR products using fluorescent primers and GENESCAN software. Luehrsen KR, et al. **Biotechniques** 1997 Jan;22(1):168-74
Rescuing corrupted gel files from Model 377 and 373 DNA Sequencers. O'Brien KM, et al. **Biotechniques** 1997 Jun; 22(6):1162-3
Methods and applications of three-color confocal imaging. Paddock SW, et al. **Biotechniques** 1997 Jan;22(1):120-2, 124-6
Publication-quality labeling of gels using transparency-mounted photographs and word processing software. Pavlik EJ, et al. **Biotechniques** 1996 Dec; 21(6):1126-7
GELSTATS: a computer program for population genetics analyses using VNTR multilocus probe data. Rogstad SH, et al. **Biotechniques** 1996 Dec;21(6):1128-31
Spreadsheet macro for setting up PCR assay tubes. Stowe RP, et al. **Biotechniques** 1996 Jun;20(6):1088-9
Database searches with multiple oligopeptides containing ambiguous residues. Vodkin MH, et al. **Biotechniques** 1996 Dec;21(6):1116-7
Introducing Selfcite 2.0--career enhancing software [see comments] Craddock N, et al. **BMJ** 1996 Dec 21-28; 313(7072):1659-60. Comment in: BMJ 1997 Mar 15;314(7083):832.
A study of the accuracy of predicted soft tissue changes produced by a computer software package (COG 3.4) in a series of patients treated by the Le Fort I osteotomy. Eales EA, et al. **Br J Oral Maxillofac Surg** 1995 Dec; 33(6):362-9
Concurrent validity of the OPCRIT diagnostic system. Comparison of OPCRIT diagnoses with consensus best-estimate lifetime diagnoses. Craddock M, et al. **Br J Psychiatry** 1996 Jul;169(1):58-63
Recommissioning of treatment planning software [letter] Mott D. **Br J Radiol** 1997 Mar;70:319-20
A role in cyberspace for prospective indexing [letter] Schell CL. **Bull Med Libr Assoc** 1996 Jul;84(3):437
Medical software and information technology transfer methods. Schertzer RM. **Can J Ophthalmol** 1996 Feb; 31(1):45-50 (11 ref.)
Issues to consider when choosing a computer program to assist Native American collection of accurate cancer data. Wiggins CL. **Cancer** 1996 Oct 1;78(7 Suppl):1569-73
Validation of a new UNIX-based quantitative coronary angiographic system for the measurement of coronary artery lesions. Bell MR, et al. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):66-74
Use of transcranial real-time ultrasonography for programming a shunt valve system. Mursch K, et al. **Childs Nerv Syst** 1996 Jul;12(7):392-5
Programming of implantable cardioverter-defibrillators on the basis of the upper limit of vulnerability. Swerdlow CD, et al. **Circulation** 1997 Mar 18;95(6):1497-504
Automated selection of statistical quality-control procedures to assure meeting clinical or analytical quality requirements. Westgard JO, et al. **Clin Chem** 1997 Feb;43(2):400-3 (32 ref.)
Update: microcomputer statistics packages. A personal view. Ludbrook J. **Clin Exp Pharmacol Physiol** 1997 Mar-Apr; 24(3-4):294-6
'TransMem': a neural network implemented in Excel spreadsheets for predicting transmembrane domains of proteins. Aloy P, et al. **Comput Appl Biosci** 1997 Jun; 13(3):231-4
Sequence analysis of the Methanococcus jannaschii genome and the prediction of protein function. Andrade M, et al. **Comput Appl Biosci** 1997 Aug;13(4):481-3
A bank of protein family patterns for rapid identification of possible functions of amino acid sequences. Bachinsky AG, et al. **Comput Appl Biosci** 1997 Apr;13(2):115-22
Software for DNA sequencing by hybridization. Belyi I, et al. **Comput Appl Biosci** 1997 Apr;13(2):205-10
PROFILER: a tool for automatic searching of internally maintained databases. Blevins R, et al. **Comput Appl Biosci** 1995 Dec;11(6):667-73
Comparison of side chain interactions performed by structurally equivalent residues in homologous protein structures. Bordo D. **Comput Appl Biosci** 1995 Dec; 11(6):577-81
A qualitative ecological model to support mariculture pond water quality management. Brown DJ. **Comput Appl Biosci** 1995 Dec;11(6):595-602
TAXOKEY: a universal taxonomic key program using DOS text files and graphics. Byers JA. **Comput Appl Biosci** 1996 Jun;12(3):185-9
An algorithm to analyse the hydrolysis pathway of peptides and proteins by sequence analyses of unfractionated digestion mixtures. Caporale C, et al. **Comput Appl Biosci** 1996 Apr;12(2):81-8
A tool for aligning very similar DNA sequences. Chao KM, et al. **Comput Appl Biosci** 1997 Feb;13(1):75-80
PromFD 1.0: a computer program that predicts eukaryotic pol II promoters using strings and IMD matrices. Chen QK, et al. **Comput Appl Biosci** 1997 Feb;13(1):29-35
Regional assignment of genetic markers using a somatic cell hybrid panel: a WWW interactive program available for the pig genome. Chevalet C, et al. **Comput Appl Biosci** 1997 Feb;13(1):69-73
The statistical significance of nucleotide position-weight matrix matches. Claverie JM, et al. **Comput Appl Biosci** 1996 Oct;12(5):431-9
Match-Box--server: a multiple sequence alignment tool placing emphasis on reliability. Depiereux E, et al. **Comput Appl Biosci** 1997 Jun;13(3):249-56
A new index to find regions showing an unexpected variability or conservation in sequence alignments. Dopazo J. **Comput Appl Biosci** 1997 Jun;13(3):313-7
Visual BLAST and visual FASTA: graphic workbenches

for interactive analysis of full BLAST and FASTA outputs under MICROSOFT WINDOWS 95/NT. Durand P, et al. **Comput Appl Biosci** 1997 Aug;13(4):407–13

LALNVIEW: a graphical viewer for pairwise sequence alignments. Duret L, et al. **Comput Appl Biosci** 1996 Dec; 12(6):507–10

The role of long-range interactions in defining the secondary structure of proteins is overestimated. Fiser A, et al. **Comput Appl Biosci** 1997 Jun;13(3):297–301

ConsInspector 3.0: new library and enhanced functionality. Frech K, et al. **Comput Appl Biosci** 1997 Feb;13(1):109–10

Software for the analysis of DNA sequence elements of transcription. Frech K, et al. **Comput Appl Biosci** 1997 Feb; 13(1):89–97

ProMSED: protein multiple sequence editor for Windows 3.11/95. Frolov AS, et al. **Comput Appl Biosci** 1997 Jun; 13(3):243–8

Grouper—creation of marker sets for multiplexed genotyping. Fuchs R. **Comput Appl Biosci** 1997 Jun; 13(3):239–41

SOPMA: significant improvements in protein secondary structure prediction by consensus prediction from multiple alignments. Geourjon C, et al. **Comput Appl Biosci** 1995 Dec;11(6):681–4

A new dynamic tool to perform assembly of expressed sequence tags (ESTs). Gill RW, et al. **Comput Appl Biosci** 1997 Aug;13(4):453–7

LASSAP, a LArge Scale Sequence compArison Package. Glémet E, et al. **Comput Appl Biosci** 1997 Apr;13(2):137–43

LITTLE KEVIN: a program for the estimation of protein homology by analysing the amino acid compositions and sequences. Grillasca JP, et al. **Comput Appl Biosci** 1996 Aug;12(4):347–51

ParaMEME: a parallel implementation and a web interface for a DNA and protein motif discovery tool. Grundy WN, et al. **Comput Appl Biosci** 1996 Aug;12(4):303–10

Meta-MEME: motif-based hidden Markov models of protein families. Grundy WN, et al. **Comput Appl Biosci** 1997 Aug; 13(4):397–406

A simple method for the removal of mains interference from pre-recorded electrophysiological data. Heitler WJ. **Comput Appl Biosci** 1996 Dec;12(6):539–42

CONRAD: a method for identification of variable and conserved regions within proteins by scale-space filtering. Herrmann G, et al. **Comput Appl Biosci** 1996 Jun; 12(3):197–203

Objectively judging the quality of a protein structure from a Ramachandran plot. Hooft RW, et al. **Comput Appl Biosci** 1997 Aug;13(4):425–30

Methods for comparing a DNA sequence with a protein sequence. Huang X, et al. **Comput Appl Biosci** 1996 Dec; 12(6):497–506

ONIX: an interactive PC program for the examination of protein 3D structure from PDB. Ivanov AS, et al. **Comput Appl Biosci** 1997 Feb;13(1):111–3

A program for calculating and displaying compatibility matrices as an aid in determining reticulate evolution in molecular sequences. Jakobsen IB, et al. **Comput Appl Biosci** 1996 Aug;12(4):291–5

DSC: public domain protein secondary structure predication. King RD, et al. **Comput Appl Biosci** 1997 Aug;13(4):473–4

PM—protein music. King RD, et al. **Comput Appl Biosci** 1996 Jun;12(3):251–2

GEOMETRY: a software package for nucleotide sequence analysis using statistical geometry in sequence space. Kuznetsov I, et al. **Comput Appl Biosci** 1996 Aug; 12(4):297–301

P-SEA: a new efficient assignment of secondary structure from C alpha trace of proteins. Labesse G, et al. **Comput Appl Biosci** 1997 Jun;13(3):291–5

MulBlast 1.0: a multiple alignment of BLAST output to boost protein sequence similarity analysis. Labesse G. **Comput Appl Biosci** 1996 Dec;12(6):463–7

qValue—a program to calculate comparative measures of genomic reorganisation from cytogenetic and/or linkage information. Law AS, et al. **Comput Appl Biosci** 1996 Jun; 12(3):181–3

A computer program for the analysis of protein complex formation. Lay S, et al. **Comput Appl Biosci** 1997 Aug; 13(4):439–44

HBexplore—a new tool for identifying and analysing hydrogen bonding patterns in biological macromolecules. Lindauer K, et al. **Comput Appl Biosci** 1996 Aug; 12(4):281–9

A simple method for sizing large fragments of bacterial DNA separated by PFGE. Lorenz E, et al. **Comput Appl Biosci** 1997 Aug;13(4):485–6

Software for microbial fingerprinting by means of the infrared spectra. Maradona MP. **Comput Appl Biosci** 1996 Aug;12(4):353–6

RNAdraw: an integrated program for RNA secondary structure calculation and analysis under 32-bit Microsoft Windows. Matzura O, et al. **Comput Appl Biosci** 1996 Jun; 12(3):247–9

Post-processing of BLAST results using databases of clustered sequences. Miller GS, et al. **Comput Appl Biosci** 1997 Feb;13(1):81–7

EST—GENOME: a program to align spliced DNA sequences to unspliced genomic DNA. Mott R. **Comput Appl Biosci** 1997 Aug;13(4):477–8

Rule-based system for the fast identification of species of Indian Anopheline mosquitoes. Murty US, et al. **Comput Appl Biosci** 1996 Dec;12(6):491–5

Mapdiff: determining differences between two genomic maps. Nadkarni PM. **Comput Appl Biosci** 1997 Jun;13(3):217–25

RNA secondary structure prediction using highly parallel computers. Nakaya A, et al. **Comput Appl Biosci** 1995 Dec; 11(6):685–92

Three sets of Macintosh AppleScripts for the automatic submission of sequence data to the Internet BLAST server. Osborne BI. **Comput Appl Biosci** 1996 Jun;12(3):257–8

TreeView: an application to display phylogenetic trees on personal computers. Page RD. **Comput Appl Biosci** 1996 Aug;12(4):357–8

Object-oriented developmental environment for image-analysis applications: implementation for 2D gel electrophoretogram analysis. Pánek J, et al. **Comput Appl Biosci** 1997 Jun;13(3):257–62

Miropeats: graphical DNA sequence comparisons. Parsons JD. **Comput Appl Biosci** 1995 Dec;11(6):615–9

Improved tools for DNA comparison and clustering. Parsons JD. **Comput Appl Biosci** 1995 Dec;11(6):603–13

XFINGER: a tool for searching and visualising protein fingerprints and patterns. Perkins DN, et al. **Comput Appl Biosci** 1996 Apr;12(2):89–94

Correspondence discriminant analysis: a multivariate method for comparing classes of protein and nucleic acid sequences. Perrière G, et al. **Comput Appl Biosci** 1996 Dec; 12(6):519–24

SIGNAL SCAN 4.0: additional databases and sequence formats. Prestridge DS. **Comput Appl Biosci** 1996 Apr; 12(2):157–60

Primer Master: a new program for the design and analysis of PCR primers. Proutski V, et al. **Comput Appl Biosci** 1996 Jun;12(3):253–5

Object-oriented data handler for sequence analysis software development. Ptitsyn AA, et al. **Comput Appl Biosci** 1995 Dec;11(6):583–9

GenomeInspector: a new approach to detect correlation patterns of elements on genomic sequences. Quandt K, et al. **Comput Appl Biosci** 1996 Oct;12(5):405–13

Seq-Gen: an application for the Monte Carlo simulation of DNA sequence evolution along phylogenetic trees. Rambaut A, et al. **Comput Appl Biosci** 1997 Jun;13(3):235–8

End-Epi: an application for inferring phylogenetic and population dynamical processes from molecular sequences. Rambaut A, et al. **Comput Appl Biosci** 1997 Jun;13(3):303–6

Bi-De: an application for simulating phylogenetic processes. Rambaut A, et al. **Comput Appl Biosci** 1996 Dec; 12(6):469–71

IBIS version 3: an OSF/Motif-based interface for IBIS—integrated biological imaging system. Rolland JP, et al. **Comput Appl Biosci** 1996 Jun;12(3):241–5

DnaSP version 2.0: a novel software package for extensive molecular population genetics analysis. Rozas J, et al. **Comput Appl Biosci** 1997 Jun;13(3):307–11

DnaSP, DNA sequence polymorphism: an interactive program for estimating population genetics parameters from DNA sequence data. Rozas J, et al. **Comput Appl Biosci** 1995 Dec;11(6):621–5

Recognition of 3'-processing sites of human mRNA precursors. Salamov AA, et al. **Comput Appl Biosci** 1997 Feb;13(1):23–8

DISTREE: a tool for estimating genetic distances between aligned DNA sequences. Schäfer J, et al. **Comput Appl Biosci** 1997 Aug;13(4):445–51

EMBL sequence submission system—an object-oriented approach to developing interactive data collection systems through the WWW. Shomer B. **Comput Appl Biosci** 1997 Feb;13(1):55–60

BioSCAN: a network sharable computational resource for searching biosequence databases. Singh RK, et al. **Comput Appl Biosci** 1996 Jun;12(3):191–6

Hopper: software for automating data tracking and flow in DNA sequencing. Smith TM, et al. **Comput Appl Biosci** 1997 Apr;13(2):175–82

SAM: a system for iteratively building marker maps. Soderlund C, et al. **Comput Appl Biosci** 1995 Dec; 11(6):645–55

Searching for protein loops in parallel. Sudarsanam S, et al. **Comput Appl Biosci** 1995 Dec;11(6):591–3

Prediction of probable genes by Fourier analysis of genomic sequences. Tiwari S, et al. **Comput Appl Biosci** 1997 Jun; 13(3):263–70

JaMBW 1.1: Java-based Molecular Biologists' Workbench. Toldo LI. **Comput Appl Biosci** 1997 Aug;13(4):475–6

Construction of evolutionary distance trees with TREECON for Windows: accounting for variation in nucleotide substitution rate among sites. Van de Peer Y, et al. **Comput Appl Biosci** 1997 Jun;13(3):227–30

Computer program for the equations describing the steady state of enzyme reactions. Varon R, et al. **Comput Appl Biosci** 1997 Apr;13(2):159–67

Software tool for gene mapping: gRanch. Wada Y, et al. **Comput Appl Biosci** 1997 Jun;13(3):323–4

Automatic analysis of the control of metabolic networks. Bayram M. **Comput Biol Med** 1996 Sep;26(5):401–8

A sequential procedure to test the progressive decrease of rare adverse events. Boëlle PY, et al. **Comput Biol Med** 1996 Nov;26(6):513–23

A data management software for the Sysmex NE 8000 haematology analyser. Cambus JP, et al. **Comput Biol Med** 1996 Jul;26(4):355–9

Left ventricular pressure and volume data acquisition and analysis using LabVIEW. Cassidy SC, et al. **Comput Biol Med** 1997 Mar;27(2):141–9

A program for analyzing the morphological organization of tessellated cellular mosaics. Dilts DM, et al. **Comput Biol Med** 1996 Sep;26(5):409–18

SCATPLOT: a computer program for determination of binding parameters of non-linear non-cooperative ligand-substrate interactions. Ray A, et al. **Comput Biol Med** 1996 Nov;26(6):497–503

An efficient SAS program for extract stratification of person-years. Sun J, et al. **Comput Biol Med** 1997 Jan; 27(1):49–53

A VISUAL BASIC program to pre-process MRI data for finite element modeling. Todd BA, et al. **Comput Biol Med** 1996 Nov;26(6):489–95

AFNI: software for analysis and visualization of functional magnetic resonance neuroimages. Cox RW. **Comput Biomed Res** 1996 Jun;29(3):162–73

EMBASE remains EMBASE—on every host? A comparative analysis of EMBASE on the hosts DATA-STAR, DIALOG, DIMDI, and STN. Gretz M, et al. **Comput Biomed Res** 1996 Dec;29(6):494–506

Multifarious system for quantitative analysis of histologic compartments. Klencki M, et al. **Comput Biomed Res** 1997 Apr;30(2):165–9

A large-scale processing of kinetic data files with derivation of the inhibitory constant Ki: an application to proline isomerases. Galat A. **Comput Chem** 1996 Jun;20(2):279–81

Ion channels—analysis and simulation embedded in a flexible environment. Kukol A. **Comput Chem** 1997;21(3):181–4

WHNMR—a universal NMR application package. Xiaodong Z, et al. **Comput Chem** 1996 Jun;20(2):271–3

The visible embryo project: embedded program objects for knowledge access, creation and management through the World Wide Web. Doyle MD, et al. **Comput Med Imaging Graph** 1996 Nov-Dec;20(6):423–31

An efficient and robust PC program to calculate MR based regional cerebral blood volume maps. Hackländer T, et al. **Comput Med Imaging Graph** 1997 Jan-Feb;21(1):51–62

A computer program for the analysis of over-dispersed counts and proportions. Ahn C, et al. **Comput Methods Programs Biomed** 1997 Mar;52(3):195–202

Comprehensive life table of computer-assisted predictive mathematical relationship between age and life expectancy, survival probability or death rate in US adults. Chung SJ. **Comput Methods Programs Biomed** 1997 Jan;52(1):67–73

A novel tool for rapid prototyping and development of simple 3D medical image processing applications on PCs. Colin A, et al. **Comput Methods Programs Biomed** 1997 Jun;53(2):87–92

EasyMA: a program for the meta-analysis of clinical trials. Cucherat M, et al. **Comput Methods Programs Biomed** 1997 Jul;53(3):187–90

CXT-MAIN: a software package for determination of the analytical form of the pharmacokinetic system weighting function. Dedík L, et al. **Comput Methods Programs Biomed** 1996 Nov;51(3):183–92

MIXOR: a computer program for mixed-effects ordinal regression analysis. Hedeker D, et al. **Comput Methods Programs Biomed** 1996 Mar;49(2):157–76

MIXREG: a computer program for mixed-effects regression analysis with autocorrelated errors. Hedeker D, et al. **Comput Methods Programs Biomed** 1996 May;49(3):229–52

A computer program for constructing multivariate reference models. Hekking M, et al. **Comput Methods Programs Biomed** 1997 Jul;53(3):191–200

ISEC: a program to calculate insulin secretion. Hovorka R, et al. **Comput Methods Programs Biomed** 1996 Aug; 50(3):253–64

A PC program for automatic analysis of NMR spectrum series. Järvi J, et al. **Comput Methods Programs Biomed** 1997 Mar;52(3):213–22

Automated generation of a World Wide Web-based data entry and check program for medical applications. Kiuchi T, et al. **Comput Methods Programs Biomed** 1997 Feb; 52(2):129–38

A tool for balancing activity from isotopes used for the radioactive microsphere method. Kleen M, et al. **Comput Methods Programs Biomed** 1997 Jun;53(2):81–6

NEUROLAB, a PC-program for the processing of neurobiological data. Knepper M, et al. **Comput Methods Programs Biomed** 1997 Jan;52(1):75–7

Efficient exponential regression with exact fiducial limits to fit cardiac pressure data. Langer SF. **Comput Methods Programs Biomed** 1997 May;53(1):57–64

A computer model and program for xenobiotic disposition during pregnancy. Luecke RH, et al. **Comput Methods Programs Biomed** 1997 Jul;53(3):201–24

ENZEDUC 1.0: a user-friendly software package for computation of hyperbolic enzyme kinetic data in biochemical education. Marino A, et al. **Comput Methods Programs Biomed** 1996 Mar;49(2):131–5

A software for the description of workplaces in the PRS system. Martin JM, et al. **Comput Methods Programs Biomed** 1997 Jan;52(1):53–66

A SAS macro for constructing simultaneous confidence intervals for multinomial proportions. May WL, et al. **Comput Methods Programs Biomed** 1997 Jul;53(3):153–62

A software program based on robust linear regression methods for instrumental calibration in biochemical analysis. Mecozzi M. **Comput Methods Programs Biomed** 1997 May;53(1):27–32

Survival curve fitting using the Gompertz function: a methodology for conducting cost-effectiveness analyses on mortality data. Messori A.
Comput Methods Programs Biomed 1997 Mar;52(3):157-64

A computer program for sample size and power calculations in the design of multi-arm and factorial clinical trials with survival time endpoints. Natarajan R, et al.
Comput Methods Programs Biomed 1996 Mar;49(2):137-47

GISEpi: a simple geographical information system to support public health surveillance and epidemiological investigations. Nobre FF, et al.
Comput Methods Programs Biomed 1997 May;53(1):33-45

A SAS macro for stepwise correlated binary regression. Nuamah IF, et al. **Comput Methods Programs Biomed** 1996 May;49(3):199-210

SWEEPS: a program for the acquisition and analysis of neurophysiological data. Pollack GS.
Comput Methods Programs Biomed 1997 Jul;53(3):163-73

Computer aided data acquisition and analysis of acetlycholinesterase velocity sedimentation profiles. Ribarič S, et al. **Comput Methods Programs Biomed** 1996 Mar;49(2):149-56

MedCalc: a new computer program for medical statistics. Schoonjans F, et al. **Comput Methods Programs Biomed** 1995 Dec;48(3):257-62

The biological toolbox: a computer program for simulating basic biological and pathological processes. Vawer A, et al. **Comput Methods Programs Biomed** 1997 Mar; 52(3):203-11

A computer program to aid in visual concept development in dentistry. Wallen ES, et al.
Comput Methods Programs Biomed 1997 Feb;52(2):105-15

QC Validator 2.0: a computer program for automatic selection of statistical QC procedures for applications in healthcare laboratories. Westgard JO, et al.
Comput Methods Programs Biomed 1997 Jul;53(3):175-86

On the statistical analysis of bioassays. Wong MY.
Comput Methods Programs Biomed 1996 May;49(3):191-7

Computerized NCLEX-RN preparation programs. A comparative review. Billings D, et al. **Comput Nurs** 1996 Sep-Oct;14(5):272-86 (27 ref.)

Healthy Lifestyle Check. A computerized health screening program. Martin K, et al. **Comput Nurs** 1997 Mar-Apr; 15(2):77-81

Reaching consensus through electronic brainstorming. Scordo KA. **Comput Nurs** 1997 Mar-Apr;15(2 Suppl):S33-7

A user's review of commercial sample size software for design of biomedical studies using survival data. Iwane M, et al. **Control Clin Trials** 1997 Feb;18(1):65-83 (18 ref.)

Sample size calculation for complex clinical trials with survival endpoints. Shih JH. **Control Clin Trials** 1995 Dec; 16(6):395-407

Concepts, properties, and applications of linear systems to describe distribution, identify input, and control endogenous substances and drugs in biological systems. Verotta D. **Crit Rev Biomed Eng** 1996;24(2-3):73-139 (119 ref.)

Bilingual telephone-assisted computerized speech-recognition assessment: is a voice-activated computer program a culturally and linguistically appropriate tool for screening depression in English and Spanish? González GM, et al. **Cult Divers Ment Health** 1997;3(2):93-111

Let's all go to the movies. **Curr Biol** 1996 Jul 1;6(7):766-7

A networked computer program for managing a national external quality assurance scheme in cytopathology. Rashbass J, et al. **Cytopathology** 1996 Dec;7(6):377-85

Quantitative DNA ploidy analysis of breast carcinoma: a study of the effects of joint photographer experts group (JPEG) compression on DNA ploidy images. Phillips LA, et al. **Diagn Cytopathol** 1996 Sep;15(3):231-6

WHONET: removing obstacles to the full use of information about antimicrobial resistance. O'Brien TF, et al.
Diagn Microbiol Infect Dis 1996 Aug;25(4):162-8 (21 ref.)

Identification of the coding region of Saccharomyces cerevisiae chromosome VI using the computer program GenMark. Hagiwara H, et al. **DNA Res** 1995 Dec 31; 2(6):247-53

Computer survey for likely genes in the one megabase contiguous genomic sequence data of Synechocystis sp. strain PCC6803. Hirosawa M, et al. **DNA Res** 1995 Dec 31;2(6):239-46

Detection of short protein coding regions within the cyanobacterium genome: application of the hidden Markov model. Yada T, et al. **DNA Res** 1996 Dec 31;3(6):355-61

Experiment files and their application during large-scale sequencing projects. Bonfield JK, et al. **DNA Seq** 1996; 6(2):109-17

Extensible biosignal (EBS) file format: simple method for EEG data exchange. Hellmann G, et al.
Electroencephalogr Clin Neurophysiol 1996 Nov; 99(5):426-31

Training software for electrophoresis. Reijenga JC, et al.
Electrophoresis 1995 Nov;16(11):2008-15

Quick and easy molecular weight determination with Macintosh computers and public domain image analysis software. Seebacher T, et al. **Electrophoresis** 1996 Oct; 17(10):1573-4

Quantitative densitometry of proteins stained with coomassie blue using a Hewlett Packard scanjet scanner and Scanplot software. Vincent SG, et al. **Electrophoresis** 1997 Jan; 18(1):67-71

Detailed peptide characterization using PEPTIDEMASS--a World-Wide-Web-accessible tool. Wilkins MR, et al.
Electrophoresis 1997 Mar-Apr;18(3-4):403-8

Database and software for the analysis of mutations at the lacI gene in both transgenic rodents and bacteria. Cariello NF, et al. **Environ Mol Mutagen** 1996;28(4):397-404

Software for optimal matching in observational studies [letter; comment] Bergstralh EJ, et al. **Epidemiology** 1996 May; 7(3):331-2. Comment on: Epidemiology 1995 May;6(3):271-5.

A SAS program calculating three measures of interaction with confidence intervals [letter] Lundberg M, et al.
Epidemiology 1996 Nov;7(6):655-6

Expert-novice knowledge of computer programming at different levels of abstraction. Ye N, et al. **Ergonomics** 1996 Mar;39(3):461-81 (28 ref.)

SOLPRO: theory and computer program for the prediction of SOLution PROperties of rigid macromolecules and bioparticles. García de la Torre J, et al. **Eur Biophys J** 1997;25(5-6):361-72

The ELLIPS suite of macromolecular conformation algorithms. Harding SE, et al. **Eur Biophys J** 1997; 25(5-6):347-59

Modeling development: using covariance structure models in longitudinal research. Jöreskog KG.
Eur Child Adolesc Psychiatry 1996;5 Suppl 1:8-10

Comparative study of four different pharmacokinetic computer programs: case study of a factor VIII preparation. Pascual B, et al. **Eur J Clin Pharmacol** 1997; 52(1):59-64

Assignment of protein disulphides by a computer method using mass spectrometric data. Caporale C, et al.
FEBS Lett 1996 Sep 16;393(2-3):241-7

Evaluation of "ELF" program usefulness in metrologic examinations of fetal brain. Kędzia A, et al.
Folia Morphol (Warsz) 1996;55(4):318-20

RNA secondary structure as a reusable interface to biological information resources. Felciano RM, et al. **Gene** 1997 May 6;190(2):GC59-70

Symbolic kinship program. Brenner CH. **Genetics** 1997 Feb; 145(2):535-42

Lane tracking software for four-color fluorescence-based electrophoretic gel images. Cooper ML, et al.
Genome Res 1996 Nov;6(11):1110-7

Sequence mapping by electronic PCR. Schuler GD.
Genome Res 1997 May;7(5):541-50

BEAUTY: an enhanced BLAST-based search tool that integrates multiple biological information resources into sequence similarity search results. Worley KC, et al.
Genome Res 1995 Sep;5(2):173-84

Linkage map integration. Collins A, et al. **Genomics** 1996 Aug 15;36(1):157-62

PRIMO: A primer design program that applies base quality statistics for automated large-scale DNA sequencing. Li P, et al. **Genomics** 1997 Mar 15;40(3):476-85

GenomeInspector: basic software tools for analysis of spatial correlations between genomic structures within megabase sequences. Quandt K, et al. **Genomics** 1996 Apr 15; 33(2):301-4

Sensitivity and selectivity in protein similarity searches: a comparison of Smith-Waterman in hardware to BLAST and FASTA. Shpaer EG, et al. **Genomics** 1996 Dec 1; 38(2):179-91

Spotlight on HECS 4.0 for Windows. **Health Devices** 1997 Jan;26(1):25

Interactive multimedia software design: concepts, process, and evaluation. Hardin PC, et al. **Health Educ Behav** 1997 Feb;24(1):35-53 (36 ref.)

Technology. Family planning [news] **Hosp Health Netw** 1997 Mar 5;71(5):16

Accreditation. Making outcomes standard-issue. Appleby C.
Hosp Health Netw 1997 Sep 5;71(17):86-7

Automated selection of short tandem repeat polymorphism markers for whole genome screening for segmental aneusomy. Biesecker LG, et al. **Hum Hered** 1997 Mar-Apr; 47(2):76-85

Linkage analyses in type I diabetes mellitus using CASPAR, a software and statistical program for conditional analysis of polygenic diseases. Buhler J, et al. **Hum Hered** 1997 Jul-Aug;47(4):211-22

Faster linkage analysis computations for pedigrees with loops or unused alleles. Schäffer AA. **Hum Hered** 1996 Jul-Aug; 46(4):226-35

A computerized method to predict the discriminatory properties for class II sequencing based typing. Rozemuller EH, et al. **Hum Immunol** 1996 Mar;46(1):27-34

Feature extraction in image analysis. A program for facilitating data reduction in medical image classification. Umbaugh SE, et al. **IEEE Eng Med Biol Mag** 1997 Jul-Aug;16(4):62-73

SIGIF: a digital signal interchange format with application in neurophysiology. Cunha MB, et al.
IEEE Trans Biomed Eng 1997 May;44(5):413-8

A memory efficient method of calculating specific absorption rate in CW FDTD simulations. Furse CM, et al.
IEEE Trans Biomed Eng 1996 May;43(5):558-60

A system for converting print into braille. Blenkhorn P.
IEEE Trans Rehabil Eng 1997 Jun;5(2):121-9

A quantitative method for comparing and evaluating manual prosthetic socket modifications. Lemaire ED, et al.
IEEE Trans Rehabil Eng 1996 Dec;4(4):303-9

A quantitative approach in the treatment of hemiplegic patients using an electropneumatic platform. Pepino A, et al. **IEEE Trans Rehabil Eng** 1996 Dec;4(4):410-5 (9 ref.)

Automatic visual to tactile translation--Part I: Human factors, access methods, and image manipulation. Way TP, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):81-94 (90 ref.)

GENOLYTE: a PC-based computer program for visualisation of genomic DNA sequences. Gupta SK, et al. **Indian J Biochem Biophys** 1996 Apr;33(2):152-5

A computer program for calculation of sample size. Raveendran R. **Indian J Physiol Pharmacol** 1996 Oct; 40(4):359-62

A Dutch medical language processor. Spyns P, et al.
Int J Biomed Comput 1996 Jun;41(3):181-205

Management software for a universal device communication controller: application to monitoring and computerized infusions. Coussaert EJ, et al. **Int J Clin Monit Comput** 1996 Nov;13(4):225-33

A macro-driven Excel template for determining the anaerobic capacity using an air-braked ergometer. Finn JP, et al. **Int J Clin Monit Comput** 1996 Aug;13(3):179-89

Prediction of blood cyclosporine concentrations in haematological patients with multidrug resistance by means of total, lean and different adipose factors dosing body weight using Bayesian and non-linear least squares methods. Wu G, et al. **Int J Clin Pharmacol Res** 1996; 16(4-5):89-97

A simple program to create exact person-time data in cohort analyses. Wood J, et al. **Int J Epidemiol** 1997 Apr; 26(2):395-9

Newly developed software for capillary blood pressure analysis in microcirculatory research. Hahn M, et al.
Int J Microcirc Clin Exp 1996 May-Jun;16(3):129-36

An analysis program for occupational cohort mortality and update cancer risk in copper miners. Chen R.
Int J Occup Med Environ Health 1996;9(4):301-8

Initial clinical assessment of CT-MRI image fusion software in localization of the prostate for 3D conformal radiation therapy. Kagawa K, et al.
Int J Radiat Oncol Biol Phys 1997 May 1;38(2):319-25

Prism: a new approach to radiotherapy planning software. Kalet IJ, et al. **Int J Radiat Oncol Biol Phys** 1996 Sep 1;36(2):451-61

Catoptric properties of eyes with misaligned surfaces studied by exact ray tracing. Barry JC, et al.
Invest Ophthalmol Vis Sci 1997 Jul;38(8):1476-84

The megaprior heuristic for discovering protein sequence patterns. Bailey TL, et al. **Ismb** 1996;4:15-24 (12 ref.)

GeneFisher--software support for the detection of postulated genes. Giegerich R, et al. **Ismb** 1996;4:68-77

Refining neural network predictions for helical transmembrane proteins by dynamic programming. Rost B, et al. **Ismb** 1996;4:192-200

Finding genes in DNA using decision trees and dynamic programming. Salzberg S, et al. **Ismb** 1996;4:201-10

A computerized interactive menu selector system for hospitals. Jamison J, et al. **J Am Diet Assoc** 1996 Oct; 96(10):1046-7

Computerized PN ordering optimizes timely nutrition therapy in a neonatal intensive care unit. Puangco MA, et al. **J Am Diet Assoc** 1997 Mar;97(3):258-61

Understanding and using DICOM, the data interchange standard for biomedical imaging [see comments] Bidgood WD Jr, et al. **J Am Med Inform Assoc** 1997 May-Jun; 4(3):199-212 (21 ref.). Comment in: J Am Med Inform Assoc 1997 May-Jun;4(3):252-3.

The Digital Anatomist distributed framework and its applications to knowledge-based medical imaging [see comments] Brinkley JF, et al. **J Am Med Inform Assoc** 1997 May-Jun;4(3):165-83 (55 ref.). Comment in: J Am Med Inform Assoc 1997 May-Jun;4(3):252-3.

Quality assurance in anatomic pathology: automated SNOMED coding. Carter KJ, et al.
J Am Med Inform Assoc 1996 Jul-Aug;3(4):270-2

Digital storage of echocardiograms offers superior image quality to analog storage, even with 20:1 digital compression: results of the Digital Echo Record Access Study. Karson TH, et al. **J Am Soc Echocardiogr** 1996 Nov-Dec;9(6):769-78

Should clinical lecturers produce their own CAL material? Walmsley AD, et al. **J Audiov Media Med** 1997 Mar; 20(1):22-5

A survey of genes expressed in mouse embryonal carcinoma F9 cells: characterization of expressed sequence tags matching no known genes. Nomura M, et al.
J Biochem (Tokyo) 1997 Jul;122(1):129-47

Automated finite element analysis of excised human femora based on precision -QCT. Merz B, et al.
J Biomech Eng 1996 Aug;118(3):387-90

Numerical analysis of three-dimensional Björk-Shiley valvular flow in an aorta. Shim EB, et al.
J Biomech Eng 1997 Feb;119(1):45-51

AQUA and PROCHECK-NMR: programs for checking the quality of protein structures solved by NMR. Laskowski RA, et al. **J Biomol NMR** 1996 Dec;8(4):477-86

The new program OPAL for molecular dynamics simulations and energy refinements of biological macromolecules. Luginbühl P, et al. **J Biomol NMR** 1996 Sep;8(2):136-46

BBReader: a computer program for the combined use of the BioMagResBank and PDB databases. Wimmer R, et al.
J Biomol NMR 1997 Jan;9(1):101-4

SOFTWARE

CICADA interface with AMBER. An application on oligonucleotides and their fragments. Fadrná E, et al. **J Biomol Struct Dyn** 1996 Aug;14(1):137–52

The study of possible A and B conformations of alternating DNA using a new program for conformational analysis of duplexes (CONAN). Nesterova EN, et al. **J Biomol Struct Dyn** 1997 Feb;14(4):459–74

Etrank: a ranking procedure for handling missing data in clinical trials: application to venlafaxine extended-release depression clinical trial. Entsuah R. **J Biopharm Stat** 1996 Nov;6(4):457–75 (30 ref.)

Automated resonance assignment of proteins using heteronuclear 3D NMR. 2. Side chain and sequence-specific assignment. Li KB, et al. **J Chem Inf Comput Sci** 1997 May–Jun;37(3):467–77

Review of the Observer 3.0. Hall S. **J Child Psychol Psychiatry** 1995 Nov;36(8):1495–8

Computerized optimization of the high-performance liquid chromatographic enantioseparation of a mixture of 4-dinitrophenyl amino acids on a quinine carbamate-type chiral stationary phase using DRYLAB. Lämmerhofer M, et al. **J Chromatogr B Biomed Appl** 1997 Feb 7; 689(1):123–35

Drug identification in biological matrices using capillary electrophoresis and chemometric software. Lilley KA, et al. **J Chromatogr B Biomed Appl** 1996 Aug 9;683(1):67–76

Diagnostic interpretation of electrocardiograms in population-based research: computer program research physicians, or cardiologists? de Bruyne MC, et al. **J Clin Epidemiol** 1997 Aug;50(8):947–52

Technology and equipment review. Report generators and databases for electromyography. **J Clin Neurophysiol** 1996 Jan;13(1):93–103

Active-site-directed 3D database searching: pharmacophore extraction and validation of hits. Clark DE, et al. **J Comput Aided Mol Des** 1996 Oct;10(5):397–416

CORCEMA evaluation of the potential role of intermolecular transferred NOESY in the characterization of ligand-receptor complexes. Curto EV, et al. **J Comput Aided Mol Des** 1996 Oct;10(5):361–71

Development of a common 3D pharmacophore for delta-opioid recognition from peptides and non-peptides using a novel computer program. Huang P, et al. **J Comput Aided Mol Des** 1997 Jan;11(1):21–8

Reconstruction of the 3D coordinates of alpha-carbon atoms of proteins from a pair of stereographic figures. Iwata Y, et al. **J Comput Aided Mol Des** 1996 Dec;10(6):558–66

Distributed automated docking of flexible ligands to proteins: parallel applications of AutoDock 2.4. Morris GM, et al. **J Comput Aided Mol Des** 1996 Aug;10(4):293–304

ANLIZE: a molecular mechanics force field visualization tool and its application to 18-crown-6. Stolworthy LD, et al. **J Comput Aided Mol Des** 1997 Mar;11(2):129–34

CAMDAS: an automated conformational analysis system using molecular dynamics. Conformational Analyzer with Molecular Dynamics And Sampling. Tsujishita H, et al. **J Comput Aided Mol Des** 1997 May;11(3):305–15

PRODRG, a program for generating molecular topologies and unique molecular descriptors from coordinates of small molecules. van Aalten DM, et al. **J Comput Aided Mol Des** 1996 Jun;10(3):255–62

Recognition of genes in human DNA sequences. Gelfand MS, et al. **J Comput Biol** 1996 Summer;3(2):223–34

A quantitative comparison of DNA sequence assembly programs. Miller MJ, et al. **J Comput Biol** 1994 Winter; 1(4):257–69

Improved splice site detection in Genie. Reese MG, et al. **J Comput Biol** 1997 Fall;4(3):311–23

A portable search engine and browser for the Entrez database. Rioux PA, et al. **J Comput Biol** 1994 Winter; 1(4):293–5

A segment-based dynamic programming algorithm for predicting gene structure. Wu TD. **J Comput Biol** 1996 Fall;3(3):375–94

Automated gene identification in large-scale genomic sequences. Xu Y, et al. **J Comput Biol** 1997 Fall;4(3):325–38

Optimization of a low-cost truly preemptive multitasking PC diagnostic workstation. Ghosh S, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):171–4

Viewport: an object-oriented approach to integrate workstation software for tile and stack mode display. Ghosh S, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):177–9

New software toolkits for comprehensive visualization and analysis of three-dimensional multimodal biomedical images. Hanson DP, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):229–30

Methodology of serial ECG classification using an adaptation of the NOVACODE for Q wave myocardial infarction in the Bypass Angioplasty Revascularization Investigation (BARI). Chaitman BR, et al. **J Electrocardiol** 1996 Oct; 29(4):265–77

Automated serial ECG comparison based on the Minnesota code. Macfarlane PW, et al. **J Electrocardiol** 1996;29 Suppl:29–34 (22 ref.)

Aerobiologia 2.0: a software program for processing aeropollen data. Mercuri AM, et al. **J Environ Pathol Toxicol Oncol** 1997;16(2–3):191–4

Quantifying videotaped activity patterns: video translation software and training methodologies. Zartarian VG, et al. **J Expo Anal Environ Epidemiol** 1997 Oct–Dec;7(4):535–42

Family physicians' preferences for computerized decision-support hardware and software [see comments] Ebell MH, et al. **J Fam Pract** 1997 Aug;45(2):137–41. Comment in: J Fam Pract 1997 Aug;45(2):127–8.

Drug interactions program [letter] Rizack MA. **J Fam Pract** 1997 Jan;44(1):18–9

Strategy for designing specific antisense oligonucleotide sequences. Mitsuhashi M. **J Gastroenterol** 1997 Apr; 32(2):282–7 (37 ref.)

Multianalytical system (MAS): software for enzyme-linked immunosorbent assay (ELISA) data processing with applications to screening and diagnostic tests. Iznaga Escobar N, et al. **J Immunol Methods** 1996 Sep 13; 196(1):97–9

The potentials of virtual environments in the education and training of people with learning disabilities. Cromby JJ, et al. **J Intellect Disabil Res** 1996 Dec;40 (Pt 6):489–501 (80 ref.)

Credentialing of research surgeons: can computers help in the process? [editorial] Othersen HB Jr, et al. **J Invest Surg** 1996 May–Jun;9(3):159–60

Relax, a flexible program for the back calculation of NOESY spectra based on complete-relaxation-matrix formalism. Görler A, et al. **J Magn Reson** 1997 Jan;124(1):177–88

Probing tumor microvascularity by measurement, analysis and display of contrast agent uptake kinetics. Parker GJ, et al. **J Magn Reson Imaging** 1997 May–Jun;7(3):564–74

Effects of narcotic and non-narcotic continuous epidural anesthesia on intrapartum fetal heart rate tracings as measured by computer analysis. Hoffman CT 3rd, et al. **J Matern Fetal Med** 1997 Jul–Aug;6(4):200–5

GRID/GOLPE 3D quantitative structure-activity relationship study on a set of benzamides and naphthamides, with affinity for the dopamine D3 receptor subtype. Nilsson J, et al. **J Med Chem** 1997 Mar 14;40(6):833–40

Automated oesophageal reflux sampler--a new device used to monitor bile acid reflux in patients with gastro-oesophageal reflux disease. Nehra D, et al. **J Med Eng Technol** 1997 Jan–Feb;21(1):1–9

Direct comparison of two commercially available computer programs for analysing DNA fingerprinting gels. Seward RJ, et al. **J Med Microbiol** 1997 Apr;46(4):314–20

Prediction of complete gene structures in human genomic DNA. Burge C, et al. **J Mol Biol** 1997 Apr 25;268(1):78–94

Analysis of domain structural class using an automated class assignment protocol. Michie AD, et al. **J Mol Biol** 1996 Sep 20;262(2):168–85

BOOMSLANG: a program for combinatorial structure generation [published erratum appears in J Mol Graph 1996 Apr;14(2):118] Cosgrove DA, et al. **J Mol Graph** 1996 Feb; 14(1):1–5, 23

Eadfrith: a molecular rendering program for Silicon Graphics workstations. Goodman JM. **J Mol Graph** 1996 Apr; 14(2):59–61, 91

MDMovie: a molecular dynamics viewing tool. Greenberg JP. **J Mol Graph** 1996 Oct;14(5):287–90, 279

Stages in the construction of stereograms of molecular models. Miranowicz N, et al. **J Mol Graph** 1996 Apr; 14(2):73–7, 94

HOLE: a program for the analysis of the pore dimensions of ion channel structural models. Smart OS, et al. **J Mol Graph** 1996 Dec;14(6):354–60, 376

Computational gene identification. Guigó R. **J Mol Med** 1997 Jun;75(6):389–93

Automated docking of flexible ligands: applications of AutoDock. Goodsell DS, et al. **J Mol Recognit** 1996 Jan–Feb;9(1):1–5 (23 ref.)

Molecular docking towards drug discovery. Gschwend DA, et al. **J Mol Recognit** 1996 Mar–Apr;9(2):175–86 (112 ref.)

Automatic decomposition electromyography in idiopathic inflammatory myopathies. Jongen PJ, et al. **J Neurol** 1996 Jan;243(1):79–85

Analysis of neuro-behavioral Discovery data on the Macintosh computer. Akhavein R, et al. **J Neurosci Methods** 1996 Dec 28;70(2):131–40

AVERAGE: a Windows program for automated analysis of event related cerebral blood flow. Deppe M, et al. **J Neurosci Methods** 1997 Aug 22;75(2):147–54

A simple computer based system to analyze Morris water maze trials on-line. Grossmann M, et al. **J Neurosci Methods** 1996 Dec 28;70(2):171–5

A low-cost method to analyse footprint patterns. Klapdor K, et al. **J Neurosci Methods** 1997 Jul 18;75(1):49–54

Maxsim, software for the analysis of multiple axonal arbors and their simulated activation. Tettoni L, et al. **J Neurosci Methods** 1996 Jul;67(1):1–9

DAPAS, a computerised workplace for Digital Acquisition and Processing of Analog Signals, with up to two gigabytes data per registration. Widman G, et al. **J Neurosci Methods** 1996 Jul;67(1):71–81

Fluoroscopy of programmable cerebrospinal fluid shunt valve settings. Technical illustration. Kaufman BA, et al. **J Neurosurg** 1997 Apr;86(4):735

MIRDOSE: personal computer software for internal dose assessment in nuclear medicine. Stabin MG. **J Nucl Med** 1996 Mar;37(3):538–46

Tumor quantitation and monitoring in whole-body planar technetium-99m-sestamibi imaging. Van Kriekinge SD, et al. **J Nucl Med** 1997 Mar;38(3):356–61

Linking computer applications for performance improvement projects. Johnson DI. **J Nurs Care Qual** 1996 Oct;11(1):3–5

Automation: keeping it all together. Johnson DI. **J Nurs Care Qual** 1997 Jun;11(5):3–4, 8

Dependability of esophageal pH monitoring data on software [letter] Vandenplas Y, et al. **J Pediatr Gastroenterol Nutr** 1996 Aug;23(2):203–4

NCOMP--a windows-based computer program for noncompartmental analysis of pharmacokinetic data. Laub PB, et al. **J Pharm Sci** 1996 Apr;85(4):393–5

A comparison of a Bayesian population method with two methods as implemented in commercially available software. Bennett JE, et al. **J Pharmacokinet Biopharm** 1996 Aug;24(4):403–32

Comparison of habitual masticatory patterns in men and women using a custom computer program. Youssef RE, et al. **J Prosthet Dent** 1997 Aug;78(2):179–86

Interactive computer-based cognitive training in patients with Alzheimer's disease. Hofmann M, et al. **J Psychiatr Res** 1996 Nov–Dec;30(6):493–501

Laser in situ keratomileusis for hyperopia: new software. Chayet AS, et al. **J Refract Surg** 1997 Aug;13(5 Suppl):S434–5

Image transfer and computer-supported cooperative diagnosis. Handels H, et al. **J Telemed Telecare** 1997; 3(2):103–7

When Hadlock's methodology to determine menstrual age and weight are used in combination in obstetrical calculation programs, the results are not valid at term. Cadkin AV. **J Ultrasound Med** 1996 Mar;15(3):264–6

The correlation between the new RigiScan plus software and the final diagnosis in the evaluation of erectile dysfunction. Benet AE, et al. **J Urol** 1996 Dec;156(6):1947–50

Researchers hope techno-teaching will improve cancer pain treatment [news] Stephenson J. **JAMA** 1996 Dec 11; 276(22):1783, 1785–6

Medical education gets wired: interactive media laboratory targets patients and physicians [news] Stephenson J. **JAMA** 1996 Dec 11;276(22):1788–9

A software system for interactive MR signal processing. Hess CP, et al. **Magn Reson Imaging** 1997;15(1):127–30

HOSEpipe--a WWW-hosted data management and analysis system for STS content mapping projects. Strivens MA, et al. **Mamm Genome** 1997 Jul;8(7):467–71

The sixth level of electronic health records: a look beyond the screen [see comments] Cacy J, et al. **MD Comput** 1997 Jan–Feb;14(1):46–9. Comment in: MD Comput 1997 Jan–Feb;14(1):6–7.

Implications of java technology. Gage JS. **MD Comput** 1997 Jul–Aug;14(4):283–5

Java's abstract window toolkit and the automated anesthesia record. Gage JS. **MD Comput** 1997 Mar–Apr;14(2):94–6, 99

EndNote Plus 2.2, including an add-in for Microsoft Word. Miller MC. **MD Comput** 1997 Jul–Aug;14(4):302–5

Recording pediatric patient telephone calls. Simonian MM. **MD Comput** 1996 Sep–Oct;13(5):432–4, 436–7, 439–41

A manual on pediatric telephone triage. Simonian MM. **MD Comput** 1996 May–Jun;13(3):271–3

CHD risk: a program predicting symptomatic coronary heart disease. Tetrault GA. **MD Comput** 1996 May–Jun; 13(3):274–6

The Australian Medicines Handbook and its controlling vocabularies. Walker D, et al. **MD Comput** 1997 Mar–Apr; 14(2):107–13

Kabisa: an interactive computer-assisted training program for tropical diseases. Van den Ende J, et al. **Med Educ** 1997 May;31(3):202–9

From SAW to Comspec. Colven D, et al. **Med Eng Phys** 1996 Apr;18(3):181–6

Evaluation of VoiceType Dictation for Windows for the radiologist. Zemmel NJ, et al. **Med Prog Technol** 1996–97; 21(4):177–80

Multiwavelength anomalous diffraction phasing of macromolecular structures: analysis of MAD data as single isomorphous replacement with anomalous scattering data using the MADMRG Program. Terwilliger TC. **Methods Enzymol** 1997;276:530–7

Rotation function calculations with GLRF program. Tong L, et al. **Methods Enzymol** 1997;276:594–611

From ABI sequence data to LASERGENE's EDITSEQ. Arnold C, et al. **Methods Mol Biol** 1997;70:65–74

Software for genetic linkage analysis. An update. Bryant SP. **Methods Mol Biol** 1997;68:261–82

Computer analysis of cloned sequences. Caron PR. **Methods Mol Biol** 1997;69:247–60

MEGALIGN. The multiple alignment module of LASERGENE. Clewley JP, et al. **Methods Mol Biol** 1997; 70:119–29

GENEMAN of LASERGENE. Clewley JP. **Methods Mol Biol** 1997;70:189–96

The Genetic Data Environment. A user modifiable and expandable multiple sequence analysis package. Eisen JA. **Methods Mol Biol** 1997;70:13–38

OLIGO. Primer selection. Estruch JJ. **Methods Mol Biol** 1997;70:279–85

PRIME. Primer selection. Estruch JJ. **Methods Mol Biol** 1997;70:287–90

ABI analysis. Manipulation of sequence data from the ABI DNA sequencer. Hagemann TL, et al. **Methods Mol Biol** 1997;70:39–54

SeqEd. Manipulation of sequence data and chromatograms from the ABI DNA sequencer analysis files. Hagemann TL, et al. **Methods Mol Biol** 1997;70:55–63

Computational approaches to the identification of ribozyme target sites. James W, et al. **Methods Mol Biol** 1997;

74:17–26
Sequence Navigator. Multiple sequence alignment software. Parker SR. **Methods Mol Biol** 1997;70:145–54
AutoAssembler sequence assembly software. Parker SR. **Methods Mol Biol** 1997;70:107–17
Data processing in multidimensional NMR. Pelczer I, et al. **Methods Mol Biol** 1997;60:71–155 (388 ref.)
PROTEAN. Protein sequence analysis and prediction. Plasterer TN. **Methods Mol Biol** 1997;70:227–39
MAPDRAW. Restriction mapping and analysis. Plasterer TN. **Methods Mol Biol** 1997;70:241–56
PRIMERSELECT. Primer and probe design. Plasterer TN. **Methods Mol Biol** 1997;70:291–302
Searching the dbEST database. Rodriguez-Tomé P. **Methods Mol Biol** 1997;69:269–83
GeneAssist. Smith-Waterman and other database similarity searches and identification of motifs. Shpaer EG. **Methods Mol Biol** 1997;70:173–87
SEQMAN. Contig assembly. Swindell SR, et al. **Methods Mol Biol** 1997;70:75–89
GeneJockeyII. DNA sequencing and fragment assembly. Taylor P. **Methods Mol Biol** 1997;70:91–106
GeneJockeyII. Primer design. Taylor P. **Methods Mol Biol** 1997;70:273–8
GeneJockeyII. Database searching. Taylor P. **Methods Mol Biol** 1997;70:197–212
GeneJockeyII. Pairwise sequence comparison. Taylor P. **Methods Mol Biol** 1997;70:131–6
GeneJockeyII. Multiple alignment of homologous sequences. Taylor P. **Methods Mol Biol** 1997;70:137–43
GeneJockeyII. Restriction analysis. Taylor P. **Methods Mol Biol** 1997;70:213–9
GeneJockeyII. Translation and open reading frame analysis. Taylor P. **Methods Mol Biol** 1997;70:221–5
GeneJockeyII. Entering and Editing sequences. Taylor P. **Methods Mol Biol** 1997;70:1–11
The Gene Construction Kit. DNA sequence analysis and presentation. Troen BR. **Methods Mol Biol** 1997;70:257–72
New browser enhances communication. DeCourcy WR Jr. **Mich Med** 1997 Feb;96(2):10
Software for genetic linkage analysis: an update. Bryant SP. **Mol Biotechnol** 1996 Feb;5(1):49–61 (58 ref.)
Personal references. Roberts W, et al. **Mol Med Today** 1997 Feb;3(2):52–3
Prediction of Salmonella mutagenicity. Zeiger E, et al. **Mutagenesis** 1996 Sep;11(5):471–84
Divided by a common language [letter; comment] Moulder DS. **Nature** 1996 Dec 12;384(6609):508. Comment on: Nature 1996 Aug 22;382(6593):666.
Multicompartmental modeling of hippocampal pyramidal cells and interneurons with the GENESIS software tool. Adorján P, et al. **Neurobiology (Bp)** 1996;4(3):247–9
Automatic SCSB analysis of motor and autonomic nervous functions compared with sleep stages. Kaartinen J, et al. **Neuroreport** 1996 Apr 10;7(5):1102–6
Transcutaneous pressure-adjustable valves and magnetic resonance imaging: an ex vivo examination of the Codman-Medos programmable valve and the Sophy adjustable pressure valve. Ortler M, et al. **Neurosurgery** 1997 May;40(5):1050–7; discussion 1057–8
Automated DNA typing of ACTBP2: a comparison of allelic ladder with GS 2500 as internal marker. Harashima N, et al. **Nippon Hoigaku Zasshi** 1996 Feb;50(1):27–9
The virtual gamma camera room. Penrose JM, et al. **Nucl Med Commun** 1996 May;17(5):367–72
Gapped BLAST and PSI-BLAST: a new generation of protein database search programs. Altschul SF, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3389–402 (90 ref.)
p53 and APC gene mutations: software and databases. Béroud C, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):138
Databases and software for the analysis of mutations in the human p53 gene, the human hprt gene and both the lacI and lacZ gene in transgenic rodents. Cariello NF, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):136–7
ESSA: an integrated and interactive computer tool for analysing RNA secondary structure. Chetouani F, et al. **Nucleic Acids Res** 1997 Sep 1;25(17):3514–22
Marfan Database (second edition): software and database for the analysis of mutations in the human FBN1 gene. Collod-Béroud G, et al. **Nucleic Acids Res** 1997 Jan 1; 25(1):147–50
tRNAscan-SE: a program for improved detection of transfer RNA genes in genomic sequence. Lowe TM, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):955–64
PolyPhred: automating the detection and genotyping of single nucleotide substitutions using fluorescence-based resequencing. Nickerson DA, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2745–51
Software and database for the analysis of mutations in the human LDL receptor gene. Varret M, et al. **Nucleic Acids Res** 1997 Jan 1;25(1):172–80
Technological advances in data entry and verification: is teleform for you? Davidson LJ, et al. **Nurs Res** 1996 Nov-Dec;45(6):373–6
Use of a computerized digitizer tablet to score and enter visual analogue scale data. Huang HY, et al. **Nurs Res** 1996 Nov-Dec;45(6):370–2
Statistics for the Residency Review Committee: a clear windows approach. Duff P, et al. **Obstet Gynecol** 1997 Jun; 89(6):1031–4
Managing the MSDS mess. Helmrich DM. **Occup Health Saf** 1996 Mar;65(3):47–8
Online help with PPE choices. Check out some software from your favorite suppliers. Krasowska F. **Occup Health Saf** 1996 Mar;65(3):22
Clinical evaluation of a topographically based contact lens fitting software. Szczotka LB. **Optom Vis Sci** 1997 Jan; 74(1):14–9
A–OK by Y2K? Pennsylvanians cope with a computer bug. Baldwin FD. **Pa Med** 1997 Feb;100(2):12–3
Computer help with medical diagnosis and procedure codes. Mercando AD. **Pacing Clin Electrophysiol** 1997 Feb;20(2 Pt 1):349–53
Appointment scheduling on computer. Mercando AD. **Pacing Clin Electrophysiol** 1997 Jul;20(7):1860–2
Can software be used to predict antigenic regions in Plasmodium falciparum peptides? Ferreira-da-Cruz M de F, et al. **Parasite Immunol** 1996 Mar;18(3):159–61
Improved performances of spot multiple peptide synthesis. Molina F, et al. **Pept Res** 1996 May-Jun;9(3):151–5
A method of detecting the muscle pain threshold using an objective software-mediated technique. Edwards T, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):955–60
Comparison of two computer animated imaging programs for quantifying facial profile preference. Giddon DB, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1251–64
Psychology of computer use: XLVI. Age-related differences in the mapping of auditory icons to visual icons in computer interfaces for children. Jacko JA, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1223–33
PACK PD: a urea kinetic modeling computer program for peritoneal dialysis. Gotch FA, et al. **Perit Dial Int** 1997; 17 Suppl 2:S126–30
Applications in kinetic modeling using PD ADEQUEST. Vonesh EF, et al. **Perit Dial Int** 1997;17 Suppl 2:S119–25
Theory and computer programs for calculating solution pH, buffer formula, and buffer capacity for multiple component system at a given ionic strength and temperature. Okamoto H, et al. **Pharm Res** 1997 Mar;14(3):299–302
Choosing $FUDGEMS in EGS4 Monte Carlo. Werner BL. **Phys Med Biol** 1997 Apr;42(4):735–43
An atlas of surgical supplies for communication in overseas material assistance programs [letter] Rosenblatt WH, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1202–3
Get the most from your browser. And fly, don't crawl, through the Web. Potts JF. **Postgrad Med** 1997 May; 101(5):21–2, 27–8
Maintaining patient confidentiality in the public domain Internet Autopsy Database (IAD). Berman JJ, et al. **Proc AMIA Annu Fall Symp** 1996;:328–32
Extraction and anonymity protocol of medical file. Bouzelat H, et al. **Proc AMIA Annu Fall Symp** 1996;:323–7
A component-based, distributed object services architecture for a clinical workstation. Chueh HC, et al. **Proc AMIA Annu Fall Symp** 1996;:638–42
Lamprey: tracking users on the World Wide Web. Felciano RM, et al. **Proc AMIA Annu Fall Symp** 1996;:757–61
A Web-based repository manager for brain mapping data. Jakobovits RM, et al. **Proc AMIA Annu Fall Symp** 1996; :309–13
OzCare: a workflow automation system for care plans. Lee W, et al. **Proc AMIA Annu Fall Symp** 1996;:577–81
Designing a low cost bedside workstation for intensive care units. Michel A, et al. **Proc AMIA Annu Fall Symp** 1996; :777–81
IMM/Serve: a rule-based program for childhood immunization. Miller PL, et al. **Proc AMIA Annu Fall Symp** 1996;:184–8
Achieving automated narrative text interpretation using phrases in the electronic medical record. Murphy SN, et al. **Proc AMIA Annu Fall Symp** 1996;:532–6
Beyond the Web: building information systems with clinical context. Narus SP, et al. **Proc AMIA Annu Fall Symp** 1996; :767–71
A Web-based architecture for the intelligent management of chronic patients. Riva A. **Proc AMIA Annu Fall Symp** 1996;:179–83
Medical language processing with SGML display. Sager N, et al. **Proc AMIA Annu Fall Symp** 1996;:547–51
Finding the findings: identification of findings in medical literature using restricted natural language processing. Sneiderman CA, et al. **Proc AMIA Annu Fall Symp** 1996; :239–43
Optimizing physician access to surgical intensive care unit laboratory information through mobile computing. Strain JJ, et al. **Proc AMIA Annu Fall Symp** 1996;:812–6
An evaluation of the TransFER model for sharing clinical decision-support applications. Sujansky W, et al. **Proc AMIA Annu Fall Symp** 1996;:468–72
Toward reusable software components at the point of care. Tuttle MS, et al. **Proc AMIA Annu Fall Symp** 1996;:150–4
Using HL7 and the World Wide Web for unifying patient data from remote databases. van Wingerde FJ, et al. **Proc AMIA Annu Fall Symp** 1996;:643–7
Computational tools for structure-based ligand design. Böhm HJ. **Prog Biophys Mol Biol** 1996;66(3):197–210 (106 ref.)
SARFing the PDB. Alexandrov NN. **Protein Eng** 1996 Sep; 9(9):727–32
Predicting leucine zipper structures from sequence. Hirst JD, et al. **Protein Eng** 1996 Aug;9(8):657–62
An automated approach for clustering an ensemble of NMR-derived protein structures into conformationally related subfamilies. Kelley LA, et al. **Protein Eng** 1996 Nov; 9(11):1063–5
Searching for common sequence patterns among distantly related proteins. Suyama M, et al. **Protein Eng** 1995 Nov; 8(11):1075–80
MultiCoil: a program for predicting two- and three-stranded coiled coils. Wolf E, et al. **Protein Sci** 1997 Jun;6(6):1179–89
ESCHER: a new docking procedure applied to the reconstruction of protein tertiary structure. Ausiello G, et al. **Proteins** 1997 Aug;28(4):556–67
Molecular docking using surface complementarity. Sobolev V, et al. **Proteins** 1996 May;25(1):120–9
A computerized system to measure treatment outcomes and cost. Marks I. **Psychiatr Serv** 1996 Aug;47(8):811–2
Comparing a sample proportion with a specified population proportion based on the mid-P method. Tai BC, et al. **Psychiatry Res** 1997 Aug 8;71(3):201–3
Radiology information and image management system: new approach to PACS with hypermedia capabilities of personal computers. Pavone P, et al. **Radiographics** 1996 Mar;16(2):421–7
Medical statistics—what, when, why, how, which [editorial] Dunne T, et al. **S Afr Med J** 1996 Sep;86(9):1079–80
Digital photogrammetric quantification of surface area and volume on scanning electron micrographs of frozen hydrated lung tissue. Poinar HN, et al. **Scanning** 1996 Sep; 18(6):456–9
Drug firms back move to link databases [news] Williams N. **Science** 1997 Aug 15;277(5328):902
The use of computers in cancer pain management. Frandsen JL. **Semin Oncol Nurs** 1997 Feb;13(1):49–56 (21 ref.)
Determination of sleep and wakefulness with the actigraph data analysis software (ADAS). Jean-Louis G, et al. **Sleep** 1996 Nov;19(9):739–43
Assessing the economic impact of a rapid on-site malaria diagnostic test. Kaewsonthi S, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):210–5
The Psychophysics Toolbox. Brainard DH. **Spat Vis** 1997; 10(4):433–6
An introduction to accurate display timing for PCs under 'Windows'. Gofen A, et al. **Spat Vis** 1997;10(4):361–8
PXL: a library for psychological experiments on IBM PC type computers. Irtel H. **Spat Vis** 1997;10(4):467–9
FORPXL—a Fortran interface to PXL, the Psychological Experiments Library. Jüttner M, et al. **Spat Vis** 1997; 10(4):491–3
Programs for diagnosis and therapy of visual field deficits in vision rehabilitation. Kasten E, et al. **Spat Vis** 1997; 10(4):499–503
XPIP 2.2: X Portable Interface Package. Lesher GW. **Spat Vis** 1997;10(4):429–31
The VideoToolbox software for visual psychophysics: transforming numbers into movies. Pelli DG. **Spat Vis** 1997; 10(4):437–42
R—Contrast: rapid measurement of recognition contrast thresholds. Strasburger H. **Spat Vis** 1997;10(4):495–8
The use of VisionWorks in visual psychophysics research. Swift D, et al. **Spat Vis** 1997;10(4):471–7
The Morphonome image psychophysics software and a calibrator for Macintosh systems. Tyler CW, et al. **Spat Vis** 1997;10(4):479–84
Dots & Pixels: a C++ library for the display of random dot patterns. Verlinde R. **Spat Vis** 1997;10(4):423–7
Psychophysica: Mathematica notebooks for psychophysical experiments (cinematica—psychometrica—quest). Watson AB, et al. **Spat Vis** 1997;10(4):447–66
Cluster: a software system for epidemiologic cluster analysis. Hall HI, et al. **Stat Med** 1996 Apr 15–May 15; 15(7–9):943–50
Childhood leukaemia in Sweden: using GIS and a spatial scan statistic for cluster detection. Hjalmars U, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):707–15
Statistical software for the clustering of health events. Jacquez GM. **Stat Med** 1996 Apr 15–May 15;15(7–9):951–2
Sorting variables for each case: a new algorithm to calculate injury severity score (ISS) using SPSS-PC. Linn S. **Stat Med** 1996 Apr 15–May 15;15(7–9):933–7
Covariate adjusted mixture models and disease mapping with the program DismapWin [see comments] Schlattmann P, et al. **Stat Med** 1996 Apr 15–May 15;15(7–9):919–29. Comment in: Stat Med 1996 Apr 15–May 15;15(7–9):931.
The computer package DismapWin [comment] Schlattmann P. **Stat Med** 1996 Apr 15–May 15;15(7–9):931. Comment on: Stat Med 1996 Apr 15–May 15;15(7–9):919–29.
Quadrat analysis software for the detection of spatial or temporal clustering. Skelton AG. **Stat Med** 1996 Apr 15–May 15;15(7–9):939–41
Innovative strategies using SUDAAN for analysis of health surveys with complex samples. LaVange LM, et al. **Stat Methods Med Res** 1996 Sep;5(3):311–29
Clinical experience with stereotactic digital subtraction angiography with distortion correction software. Ericson K, et al. **Stereotact Funct Neurosurg** 1996;66 Suppl 1:63–70
An introductory tour of the Internet (AANS course). Neurosurgery (CD-ROM). Slavin KV. **Surg Neurol** 1997 Sep;48(3):305–6
A novel tele-medical environment appropriate for use in tele-advisory and tele-surgery cases. Chatzipapadopoulos F, et al. **Technol Health Care** 1996 Aug;4(2):187–91
Metlis-CD. Merck Thyroid Literature Service on CD-ROM. Mariash CN. **Thyroid** 1996 Oct;6(5):495–6
Computational predictive programs (expert systems) in toxicology. Benfenati E, et al. **Toxicology** 1997 May 16;

119(3):213-25 (41 ref.)
Remote electronic blood release system. Cox C, et al. **Transfusion** 1997 Sep;37(9):960-4
Application of a computer program to exclude additional unexpected antibodies. Rondeel JM, et al. **Transfusion** 1997 Mar;37(3):298-303
New PC versions of the kinetic-simulation and fitting programs, KINSIM and FITSIM. Dang Q, et al. **Trends Biochem Sci** 1997 Aug;22(8):317 (6 ref.)
Finding protein-binding sites in DNA sequences: the next generation. Frech K, et al. **Trends Biochem Sci** 1997 Mar; 22(3):103-4
Cn3D: a new generation of three-dimensional molecular structure viewer. Hogue CW. **Trends Biochem Sci** 1997 Aug;22(8):314-6 (9 ref.)
A shortcut to interesting human genes: peptide sequence tags, expressed-sequence tags and computers. Mann M. **Trends Biochem Sci** 1996 Dec;21(12):494-5
EndNote Plus 2 and EndLink 2. Miller P. **Trends Biochem Sci** 1996 Aug;21(8):316
WebMol—a Java-based PDB viewer. Walther D. **Trends Biochem Sci** 1997 Jul;22(7):274-5
Integrating two-dimensional gel databases using the Melanie II software. Wilkins MR, et al. **Trends Biochem Sci** 1996 Dec;21(12):496-7
MAGPIE: automated genome interpretation. Gaasterland T, et al. **Trends Genet** 1996 Feb;12(2):76-8
International workshop tackles promoter recognition problem. Hutchinson G. **Trends Genet** 1996 Apr;12(4):159
Web applets: Java, JavaScript and ActiveX. Stein L. **Trends Genet** 1996 Nov;12(11):484-5
Neurosim [letter; comment] Heitler WJ. **Trends Neurosci** 1996 Jul;19(7):279. Comment on: Trends Neurosci 1996 May;19(5):190.
[Statistical software—review of current products] Hladíková M, et al. **Cas Lek Cesk** 1997 May 14;136(10):304-6 (Eng. Abstr.) **(Cze)**
[Neuropsychologic rehabilitation of mental functions using computers] Preiss M. **Ceska Slov Psychiatr** 1996 May; 92(2):104-8 (Eng. Abstr.) **(Cze)**
[Optimization of coronary angiographic views. Qualitative and quantitative evaluation of a new system] Finet G, et al. **Arch Mal Coeur Vaiss** 1996 Dec;89(12):1617-25 (Eng. Abstr.) **(Fre)**
[Evaluation of a computer graphic representation of echo-Doppler (Echotrace) in the assessment of atherosclerosis of the legs] Fauvel G, et al. **J Mal Vasc** 1996;21(3):136-40 (Eng. Abstr.) **(Fre)**
[Selection criteria for dental software] Poppelsdorf D. **Rev Belge Med Dent** 1996;51(4):227-38 (Eng. Abstr.) **(Fre)**
[A new cardiac pacemaker stimulation technology (autocapture) allows, with unchanged life expectancy, reduction of generator size by half] Antretter H, et al. **Acta Med Austriaca** 1996;23(5):159-64 (Eng. Abstr.) **(Ger)**
[Computer-assisted evaluation of a "medium resolution" HLA-DRB oligotyping of bone marrow donors] Helmberg W, et al. **Beitr Infusionsther Transfusionsmed** 1996;33:66-71 (Eng. Abstr.) **(Ger)**
[Computer-based training--a new method in surgical education and continuing education] Kallinowski F, et al. **Chirurg** 1997 Apr;68(4):433-8 (Eng. Abstr.) **(Ger)**
[Preoperative planning in hip endoprosthetics: presenting a computer-assisted system using CAD software] Ramsperger R, et al. **Chirurg** 1996 Jul;67(7):734-9 (Eng. Abstr.) **(Ger)**
[A computer-assisted patient databank for the ENT field] Apaydin F, et al. **HNO** 1996 Jun;44(6):333-8 (Eng. Abstr.) **(Ger)**
[Visual image in high ametropia. Computer-assisted simulation with optic ray calculation] Fink W, et al. **Klin Monatsbl Augenheilkd** 1996 Jun;208(6):472-6 (Eng. Abstr.) **(Ger)**
[Computer-assisted determination of indications and follow-up in strabismus surgery] Rüssmann W. **Klin Monatsbl Augenheilkd** 1996 Jan;208(1):27-32 (Eng. Abstr.) **(Ger)**
[Analysis program for quantitative detection of chromosome aberrations using comparative genomic hybridization] Roth K, et al. **Pathologe** 1996 Sep;17(5):342-8 (Eng. Abstr.) **(Ger)**
[Strategy for securing medical documents by electronic signature and encryption] Willenberg C. **Radiologe** 1997 Apr;37(4):305-12 (Eng. Abstr.) **(Ger)**
[CT-supported virtual intra-arterial endoscopy after stent implantation: phantom studies and the initial clinical results] Rodenwaldt J, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Mar;166(3):180-4 (Eng. Abstr.) **(Ger)**
[Definition and evaluation of a documentation standard for intensive care medicine: the ASDI(Working Group for Standardization of a documentation system for Intensive care medicine) pilot project] Metnitz PG, et al. **Wien Klin Wochenschr** 1997 Feb 28;109(4):132-8 (Eng. Abstr.) **(Ger)**
[Computer-assisted analysis of sleep stages using the laboratory software package "Spike 2"] Schäfer T, et al. **Wien Med Wochenschr** 1996;146(13-14):377-8 (Eng. Abstr.) **(Ger)**
[Calibration of clinical databanks with "virtual patients"] Vahl CF, et al. **Z Kardiol** 1997 Jan;86(1):35-41 (Eng. Abstr.) **(Ger)**
[Computerized assessment of electric heart signals and cardiovascular images] De Biase L, et al. **Cardiologia** 1995 Dec;40(12 Suppl 1):491-9 (34 ref.) **(Ita)**
[A computer system for the systematization of MR findings in knee joint diseases] Sparacia G, et al. **Radiol Med (Torino)** 1996 Jul-Aug;92(1-2):122-7 (Eng. Abstr.) **(Ita)**
[A human cell line panel for screening anti-cancer drugs] Yamori T. **Gan To Kagaku Ryoho** 1997 Jan;24(2):129-35 (Eng. Abstr.) **(Jpn)**
[Attempt to create a HPN database] Yoneyama K, et al. **Gan To Kagaku Ryoho** 1996 Dec;23 Suppl 3:228-31 (Eng. Abstr.) **(Jpn)**
[Automated analysis of all-night records of tracheal sound to detect sleep disordered breathing] Nakano H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Jul;34(7):765-70 (Eng. Abstr.) **(Jpn)**
[Software for image processing and its practical use] Matsumoto S. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):936-42 (13 ref.) **(Jpn)**
[3-D softwares and their practice] Sakai T, et al. **Tanpakushitsu Kakusan Koso** 1997 May;42(7 Suppl):943-8 (10 ref.) **(Jpn)**
[Computer program SAGE as a tool of standard assessment of patients on intensive care] Gol'dberg SI, et al. **Anesteziol Reanimatol** 1997 Jan-Feb;(1):11-5 **(Rus)**
[An attempt to adopt computer technology in the pathology bureau] Dygalo II, et al. **Arkh Patol** 1996 Sep-Oct; 58(5):68-9 (Eng. Abstr.) **(Rus)**
[Software for education and control of knowledge in pathology using 16- and 256-color graphics] Rybakova MG, et al. **Arkh Patol** 1996 May-Jun;58(3):38-42 (Eng. Abstr.) **(Rus)**
[Analysis of pathologic activity in the EEG of patients with a brain tumor using three-dimensional "source" localization] Grindel' OM, et al. **Fiziol Cheloveka** 1997 Jul-Aug; 23(4):36-45 **(Rus)**
[A computer-assisted approach to the study of nucleic acid polymorphism] Evsiukov AN, et al. **Genetika** 1996 Oct; 32(10):1417-20 (Eng. Abstr.) **(Rus)**
[Computer programs for clinical laboratories] Balakhovskii IS. **Klin Lab Diagn** 1997 Jan;(1):17-9 (Eng. Abstr.) **(Rus)**
[Development and application of software for clinical-laboratory diagnosis] Roĭtman EV. **Klin Lab Diagn** 1997 Jul;(7):46-7 **(Rus)**
[Automatization of statistical processing of the cardiac information] Balybin DN, et al. **Med Tekh** 1996 Nov-Dec; (6):23-5 **(Rus)**
[A diagnostic-therapeutic complex with changeable structure] Knorring VG, et al. **Med Tekh** 1997 Jan-Feb; (1):17-20 (Eng. Abstr.) **(Rus)**
[Conception and implementation of the federal computer system for families with hereditary diseases] Kobrinskiĭ BA, et al. **Med Tekh** 1997 May-Jun;(3):37-9 (Eng. Abstr.) **(Rus)**
[A novel version of PROF—PAT 1.0 data bank of protein families: technology of formation nad rapid search programs] Bachinskiĭ AG, et al. **Mol Biol (Mosk)** 1996 Nov-Dec;30(6):1409-19 **(Rus)**
[Use of data bank on tuberculosis patients and of computer program for clinical and immunological analysis] Markov AN, et al. **Probl Tuberk** 1997;(3):11-4 (Eng. Abstr.) **(Rus)**
["Music of the Brain" in the treatment of insomnia patients] Levin IaI. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(4):39-43 (Eng. Abstr.) **(Rus)**
[A software-hardware package for studying the coordination of human eye, head and hand movements] Baziian BKh, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Mar-Apr; 46(2):396-9 **(Rus)**
[Use of spreadsheets as decision support systems in health care] Sabanović Z, et al. **Med Arh** 1995;49(1-2):45-8 (Eng. Abstr.) **(Scr)**
[Development of a computer program to assess nutritional status of infants and preschool children] Rodríguez MC, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):274-80 (Eng. Abstr.) **(Spa)**
[Description of a computer program and results of its application to the follow up of enteral nutrition] Hidalgo Correas FJ, et al. **Nutr Hosp** 1996 Sep-Oct;11(5):291-9 (Eng. Abstr.) **(Spa)**
[Abnormally broad confidence intervals in logistic regression: interpretation of results of statistical programs] de Irala J, et al. **Rev Panam Salud Publica** 1997 Mar;1(3):230-4 (Eng. Abstr.) **(Spa)**

LEGISLATION & JURISPRUDENCE

US Food and Drug Administration's regulation of software and picture archiving and communication systems. Anderson MP, et al. **J Digit Imaging** 1997 Aug;10(3 Suppl 1):19

STANDARDS

Treatment guidelines, national formulary take shape in VA system [news] **Am J Health Syst Pharm** 1996 Dec 15; 53(24):2950
Enhancing practice management with management software systems. Matthew B. **Can Vet J** 1996 Oct;37(10):627-30 **(Eng, Fre)**
Validation of a new computer program for Minnesota coding. Kors JA, et al. **J Electrocardiol** 1996;29 Suppl:83-8
A tool for software and hardware evaluation. Kokol P. **J Med Syst** 1996 Jun;20(3):167-72
HL7 with CORBA and OLE: software components for healthcare. Rishel W. **Proc AMIA Annu Fall Symp** 1996; :95-9
Development and multi-institutional implementation of coding and transmission standards for health outcomes data. Ward RE, et al. **Proc AMIA Annu Fall Symp** 1996; :438-42
Private matters. Will electronic medical records doom confidentiality? Jones TL, et al. **Tex Med** 1996 May; 92(5):46-50
[Service (computer) program for selecting magnifying means] Avetisov SÉ, et al. **Vestn Oftalmol** 1997 May-Jun; 113(3):30-2 (Eng. Abstr.) **(Rus)**

SOFTWARE DESIGN

HIV care in the community: creation of a flowchart to assist in coordinating patient care and data management. Stamford HIV/AIDS Care Community Needs Team [letter] Parry MF, et al. **AIDS** 1997 Jun;11(7):933-4
HIV databases and flowcharts are useful tools ... but [editorial; comment] Sadovsky R. **Am Fam Physician** 1997 May 1;55(6):2063-4. Comment on: Am Fam Physician 1997 May 1;55(6):2166-72, 2182-4. Comment on: Am Fam Physician 1997 May 1;55(6):2182-4.
Dynamic circular buffering: a technique for equilibrium gated blood pool imaging. Vaquero JJ, et al. **Comput Biol Med** 1996 Mar;26(2):113-21
Design methods and architectural issues of integrated medical image data base systems. Wong ST, et al. **Comput Med Imaging Graph** 1996 Jul-Aug;20(4):285-99
Temporal image database design for outcome analysis of lung nodule. Zhu X, et al. **Comput Med Imaging Graph** 1996 Jul-Aug;20(4):347-56
Design of crossover microcomputer program and application on drug bioequivalence data. Abdullah ME, et al. **Comput Methods Programs Biomed** 1995 Dec;48(3):237-9
A computer program for comprehensive ST-segment depression/heart rate analysis of the exercise ECG test. Lehtinen R, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):63-71
Microsoft Windows 95 should you upgrade? Johnson DI. **Comput Nurs** 1996 Mar-Apr;14(2):78-9, 86
Nursing students' use of collaborative computer technology to create family and community assessment instruments. Krothe JS, et al. **Comput Nurs** 1996 Mar-Apr;14(2):101-7
Information systems. Ghost in the machine. Appleby C. **Hosp Health Netw** 1997 Jan 5;71(1):43-4
Constructing algorithm flowcharts for clinical performance measurement. Banks NJ. **Int J Qual Health Care** 1996 Aug; 8(4):395-400
Willow: a uniform search interface. Ketchell DS, et al. **J Am Med Inform Assoc** 1996 Jan-Feb;3(1):27-37
Evaluating evaluations of medical diagnostic systems [editorial; comment] Miller RA. **J Am Med Inform Assoc** 1996 Nov-Dec;3(6):429-31. Comment on: J Am Med Inform Assoc 1996 Nov-Dec;3(6):422-8.
A comparison of heuristic search algorithms for molecular docking. Westhead DR, et al. **J Comput Aided Mol Des** 1997 May;11(3):209-28
Processes involved in reading imaging studies: workflow analysis and implications for workstation development. Gay SB, et al. **J Digit Imaging** 1997 Feb;10(1):40-5
Development of a Dietary Exposure Potential Model for evaluating dietary exposure to chemical residues in food. Tomerlin JR, et al. **J Expo Anal Environ Epidemiol** 1997 Jan-Mar;7(1):81-101
Generation of hypermedia documents for medical education. Garcia O, et al. **MD Comput** 1996 Nov-Dec;13(6):578-83
The design and development of hypertext courseware for CAL in diagnostic radiography. Cole PR, et al. **Med Inf (Lond)** 1995 Jul-Sep;20(3):241-50
Design and implementation of secure medical database systems. Pangalos GJ. **Med Inf (Lond)** 1995 Jul-Sep; 20(3):265-77
Discovering objects in a blood recipient information system. Qiu D, et al. **Med Inf (Lond)** 1995 Jul-Sep;20(3):209-28
An object-oriented class library for medical software development. O'Kane KC, et al. **Methods Inf Med** 1996 Dec;35(4-5):343-7
Cardiological database management system as a mediator to clinical decision support. Pappas C, et al. **Methods Inf Med** 1996 Mar;35(1):52-8
Assessing immunization rates and improving practices. CASA and the 'key steps' model. Anderson TA, et al. **Minn Med** 1996 Sep;79(9):50-4
Assessment of a knowledge-acquisition tool for writing Medical Logic Modules in the Arden Syntax. Jenders RA, et al. **Proc AMIA Annu Fall Symp** 1996;:567-71
Knowledge acquisition for temporal abstraction. Stein A, et al. **Proc AMIA Annu Fall Symp** 1996;:204-8
A comprehensive strategy for designing a Web-based medical curriculum. Zucker J, et al. **Proc AMIA Annu Fall Symp** 1996;:41-5
RadNotes: a novel software development tool for radiology education. Baxter AB, et al. **Radiographics** 1997 May-Jun; 17(3):761-7

Development of cross-platform computer-based tutorials. Cooper JA, et al. **Radiographics** 1996 Nov;16(6):1489-94

CD-ROM technology: building a computer-based reference set. Turecek D. **Wis Med J** 1996 Apr;95(4):252-3

[Initial experience with the PCDiary: software for physicians for documenting and evaluating individual learning] Parboosingh J, et al. **Z Arztl Fortbild (Jena)** 1996 Aug; 90(5):382-4 (Eng. Abstr.) **(Ger)**

[Computer softwares for DNA diagnosis: GeneViewPLUS and Mutation View] Shimizu N, et al. **Rinsho Byori** 1997 Mar;45(3):209-12 (4 ref.) (Eng. Abstr.) **(Jpn)**

[A unified methodological approach in the algorithmic construction and design of expert systems of the health-pathology type in medicine] Belousov VA, et al. **Med Tekh** 1996 May-Jun;(3):6-7 (Eng. Abstr.) **(Rus)**

[Software for automated follow-up of chronic outpatients] Lapochkin VI, et al. **Vestn Oftalmol** 1997 May-Jun; 113(3):30-2 (0 ref.) (Eng. Abstr.) **(Rus)**

SOFTWARE ENGINEERING see **SOFTWARE**

SOFTWARE TOOLS see **SOFTWARE**

SOFTWARE VALIDATION

Computerized scoring of abnormal human sleep: a validation. Sangal RB, et al. **Clin Electroencephalogr** 1997 Apr; 28(2):64-7

Dynamic circular buffering: a technique for equilibrium gated blood pool imaging. Vaquero JJ, et al. **Comput Biol Med** 1996 Mar;26(2):113-21

A dual approach to structural texture analysis in microscopic cell images. Beil M, et al. **Comput Methods Programs Biomed** 1995 Dec;48(3):211-9

Mathematical model for chemically induced lipid peroxidation in precision-cut liver slices: computer simulation and experimental calibration. Byczkowski JZ, et al. **Comput Methods Programs Biomed** 1996 Jun; 50(1):73-84

Analysis of pressurized resistance vessel diameter changes with a low cost digital image processing device. Fischer JG, et al. **Comput Methods Programs Biomed** 1996 Jun; 50(1):23-30

A software oscilloscope for DOS computers with an integrated remote control for a video tape recorder. The assignment of acoustic events to behavioural observations. Höller P. **Comput Methods Programs Biomed** 1995 Dec; 48(3):229-35

A computer program for comprehensive ST-segment depression/heart rate analysis of the exercise ECG test. Lehtinen R, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):63-71

Prediction of polypeptide secondary structures analysing the oscillation of the hydropathy profile. Rauch G, et al. **Comput Methods Programs Biomed** 1995 Dec;48(3):193-200

Add-in macros for rapid and versatile calculation of non-compartmental pharmacokinetic parameters on Microsoft Excel spreadsheets. Sato H, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):43-52

Implementation of a reference management system, MacRefer, under HyperCard. Sato H, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):53-61

Computer program for performing whole-cell voltage-clamp experiments. Shkodrov GB. **Comput Methods Programs Biomed** 1995 Dec;48(3):241-6

RefVal: a program implementing the recommendations of the International Federation of Clinical Chemistry on the statistical treatment of reference values. Solberg HE. **Comput Methods Programs Biomed** 1995 Dec;48(3):247-56

Implementation of OSPOP, an algorithm for the estimation of optimal sampling times in pharmacokinetics by the ED, EID and API criteria. Tod M, et al. **Comput Methods Programs Biomed** 1996 Jun;50(1):13-22

Microsoft Windows 95 should you upgrade? Johnson DI. **Comput Nurs** 1996 Mar-Apr;14(2):78-9, 86

Computerized test development software a comparative review. Kirkpatrick JM, et al. **Comput Nurs** 1996 Mar-Apr; 14(2):113-5 (12 ref.)

High touch meets high tech. Distance mental health screening for rural youth using Teleform. Puskar KR, et al. **Comput Nurs** 1996 Nov-Dec;14(6):323-9; quiz 330-2 (31 ref.)

A computerized method of describing phase-related interactive events: infant feeding as an example. Stephenson GR, et al. **Comput Nurs** 1996 Mar-Apr;14(2):89-98; quiz 99-100

Automatic visual to tactile translation--Part II: Evaluation of the TACTile Image Creation System. Way TP, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):95-105

Medical imaging informatics: challenges of definition and integration [editorial; comment] Kulikowski CA. **J Am Med Inform Assoc** 1997 May-Jun;4(3):252-3. Comment on: J Am Med Inform Assoc 1997 May-Jun;4(3):165-83. Comment on: J Am Med Inform Assoc 1997 May-Jun;4(3):184-98. Comment on: J Am Med Inform Assoc 1997 May-Jun;4(3):199-212.

Use of commercial record linkage software and vital statistics to identify patient deaths. Newman TB, et al. **J Am Med Inform Assoc** 1997 May-Jun;4(3):233-7

Software safety in medical applications. Knight JC, et al. **J Image Guid Surg** 1995;1(3):121-32

Experimental validation of dose distributions predicted by a treatment planning system for complex models. Gallant GA, et al. **Med Dosim** 1997 Spring;22(1):23-9

Electron beam dose calculations with the VMC algorithm and the verification data of the NCI working group. Fippel M, et al. **Phys Med Biol** 1997 Mar;42(3):501-20

Validation procedures for the Hamilton Thorne Integrated Visual Optical System sperm and cell analyzer. Douglas-Hamilton DH. **Qual Assur** 1995 Dec;4(4):340-7

Biologically based validation of PC electrophysiology data collection systems utilizing the Good Automated Laboratory Practices. Jones RD, et al. **Qual Assur** 1997 Jan-Mar;5(1):1-17

Evolution of a companywide validation program. Platt KJ. **Qual Assur** 1995 Dec;4(4):336-9

[Validation of a new interactive software monitoring a controlled-flow infusion pump for cisplatin dosage regimen adjustment] Cupissol D, et al. **Bull Cancer** 1996 Aug; 83(8):664-76 (36 ref.) (Eng. Abstr.) **(Fre)**

SOFTWARE VERIFICATION see **SOFTWARE VALIDATION**

SOIL

Phytolith analysis on dental calculus, enamel surface, and burial soil: information about diet and paleoenvironment. Fox CL, et al. **Am J Phys Anthropol** 1996 Sep;101(1):101-13

DNA in soil: adsorption, genetic transformation, molecular evolution and genetic microchip. Trevors JT. **Antonie Van Leeuwenhoek** 1996 Jul;70(1):1-10 (62 ref.)

Mineralization kinetics of chemicals in soils in relation to environmental conditions. Dörfler U, et al. **Ecotoxicol Environ Saf** 1996 Aug;34(3):216-22

Development and testing of an assay for soil ecosystem health using the bacterial-feeding nematode Cruznema tripartitum. Lau SS, et al. **Ecotoxicol Environ Saf** 1997 Mar; 36(2):133-9

The influence of soil moisture content on the bioavailability and toxicity of cadmium for Folsomia candida Willem (Collembola: Isotomidae). van Gestel CA, et al. **Ecotoxicol Environ Saf** 1997 Mar;36(2):123-32

Soil derived dust as a source of silica: aerosol properties, emissions, deposition, and transport. Gillette D. **J Expo Anal Environ Epidemiol** 1997 Jul-Sep;7(3):303-11

The possible role of manganese poisoning in enzootic geophagia and hepatitis of calves and lambs [letter] Neser JA, et al. **J S Afr Vet Assoc** 1997 Mar;68(1):4-6

Studies of soil-water transport by MRI. Amin MH, et al. **Magn Reson Imaging** 1996;14(7-8):879-82

Relations between nasopharyngeal carcinoma and magnesium and other alkaline earth elements in soils in China. Bølviken B, et al. **Med Hypotheses** 1997 Jan;48(1):21-5

Response to John Kissels' letter to the editor "Characterization of soil adherence to skin: impact of historical misinterpretation of the Que Hee et al. data" [letter] Finley B, et al. **Risk Anal** 1996 Aug;16(4):443-4

Indicators of the sustainability of heavy-metal management in agro-ecosystems. Moolenaar SW, et al. **Sci Total Environ** 1997 Aug 10;201(2):155-69

Geophagy (soil consumption) and iron supplementation in Uganda [see comments] Abrahams PW. **Trop Med Int Health** 1997 Jul;2(7):617-23. Comment in: Trop Med Int Health 1997 Jul;2(7):609-11.

Geophagy among school children in western Kenya [see comments] Geissler PW, et al. **Trop Med Int Health** 1997 Jul;2(7):624-30. Comment in: Trop Med Int Health 1997 Jul;2(7):609-11.

Geophagy: a vestige of palaeonutrition? [editorial; comment] Ziegler JL. **Trop Med Int Health** 1997 Jul;2(7):609-11. Comment on: Trop Med Int Health 1997 Jul;2(7):617-23. Comment on: Trop Med Int Health 1997 Jul;2(7):624-30.

[The effectiveness of using biohumus for growing plants under autonomous conditions] Geodakian RO, et al. **Aviakosm Ekolog Med** 1996;30(3):39-43 (Eng. Abstr.) **(Rus)**

[137Cs accumulation by grasses from peat soil under increasing amounts of potassium and nitrogen fertilizers] Drichko VF, et al. **Radiats Biol Radioecol** 1996 Jul-Aug; 36(4):524-30 (Eng. Abstr.) **(Rus)**

ANALYSIS

ELPAT program report: background and current status (January 1997). Environmental Lead Proficiency Analytical Testing program. Esche CA, et al. **Am Ind Hyg Assoc J** 1997 Apr;58(4):302-6

Laboratory and analytical method performance of lead measurements in paint chips, soils, and dusts. Schlecht PC, et al. **Am Ind Hyg Assoc J** 1996 Nov;57(11):1035-43

Rickets and soil strontium. Ozgür S, et al. **Arch Dis Child** 1996 Dec;75(6):524-6

Trace metal biomonitoring in the soil and the leaves of Quercus ilex in the urban area of Naples. Alfani A, et al. **Biol Trace Elem Res** 1996 Jan;51(1):117-31

Biodegradation of fenitrothion in soil. Roy S, et al. **Biomed Chromatogr** 1996 Mar-Apr;10(2):60-4

Sorption of herbicides butachlor, thiobencarb, and chlomethoxyfen in soils. Chiang HC, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):758-63

Concentrations of Cu, growth, and chlorophyll content of field-cultivated wheat growing in naturally enriched Cu soil. Cook CM, et al. **Bull Environ Contam Toxicol** 1997 Feb;58(2):248-53

Sorption of carbaryl (1-napthyl N-methyl carbamate) by soil. Jana TK, et al. **Bull Environ Contam Toxicol** 1997 Jul; 59(1):65-71

Comparison of an enzyme immunoassay with gas chromatography for atrazine determination in water and soil. Jenks BM, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):696-703

Extraction of metribuzin from soil using supercritical CO2 (SFE). Malone RW, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):46-52

Heavy metals and acid-volatile sulfides in sediments of the Tijuana Estuary. Meyer SF, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):113-9

Purgeable aromatic hydrocarbons in water and sediment from the river Morava catchment (Slovakia). Al-Rekabi H, et al. **Bull Environ Contam Toxicol** 1996 Jan;56(1):90-7

Carbon mineralization potential of soils amended with sludge from olive processing. Riffaldi R, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):30-7

Soil dissipation of the post-emergence herbicide sulcotrione in maize crops treated with organic fertilizers. Rouchaud J, et al. **Bull Environ Contam Toxicol** 1996 Sep; 57(3):398-405

Imidacloprid insecticide soil metabolism in sugar beet field crops. Rouchaud J, et al. **Bull Environ Contam Toxicol** 1996 Jan;56(1):29-36

Kinetics of the sequential dechlorination of chloroorganics in an anaerobic sediment. Susarla S, et al. **Bull Environ Contam Toxicol** 1997 Feb;58(2):227-33

Nitrate losses in runoff and subsurface drain effluent from controlled-water-table plots. Willis GH, et al. **Bull Environ Contam Toxicol** 1997 Apr;58(4):566-73

Soil ingestion estimates for children residing on a superfund site. Calabrese EJ, et al. **Ecotoxicol Environ Saf** 1997 Apr; 36(3):258-68

Soil ingestion in adults--results of a second pilot study. Stanek EJ 3rd, et al. **Ecotoxicol Environ Saf** 1997 Apr; 36(3):249-57

Bioextraction of selenium by forage and selected field legume species in selenium-laden soils under minimal field management conditions. Van Mantgem PJ, et al. **Ecotoxicol Environ Saf** 1996 Aug;34(3):228-38

Toxicity of acid-sulfate soil leachate and aluminum to embryos of the Sydney Rock oyster. Wilson SP, et al. **Ecotoxicol Environ Saf** 1997 Jun;37(1):30-6

Behaviour of Chimassorb 81 in the recycling process of agricultural films used as soil covers. Nerín C, et al. **Food Addit Contam** 1996 Feb-Mar;13(2):243-50

Characterization and solubility measurements of uranium-contaminated soils to support risk assessment. Elless MP, et al. **Health Phys** 1997 May;72(5):716-26

Relationship between soil type and Mycobacterium paratuberculosis. Johnson-Ifearulundu YJ, et al. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1735-40 (44 ref.)

Gas chromatographic determination of chlorothalonil in leaves and roots of Scrophularia and in soil. Zhao L, et al. **J AOAC Int** 1996 Mar-Apr;79(2):587-8

Dietary selenium repletion may reduce cancer incidence in people at high risk who live in areas with low soil selenium. Fleet JC. **Nutr Rev** 1997 Jul;55(7):277-9 (9 ref.)

Relationship between soil zinc, dietary zinc and zinc nutritional status of humans. Sunanda L, et al. **Plant Foods Hum Nutr** 1995 Oct;48(3):201-07

GLP soil characterization--the laboratory. Isaman V. **Qual Assur** 1997 Jan-Mar;5(1):49-53

Potential for respirable quartz exposure from North Carolina farm soils. Stopford CM, et al. **Scand J Work Environ Health** 1995;21 Suppl 2:44-6

Transfer of radiocaesium in sensitive agricultural environments after the Chernobyl fallout in Sweden. II. Marginal and semi-natural areas in the county of Jamtland. Rosen K. **Sci Total Environ** 1996 Apr 5;182(1-3):135-45

The role of ions in goitre prevalence in two local government areas of Plateau State, Nigeria. Banwo AI, et al. **West Afr J Med** 1996 Oct-Dec;15(4):215-8

MICROBIOLOGY see SOIL MICROBIOLOGY

PARASITOLOGY

Relationships between soil-transmitted helminthiases and growth in urban slum schoolchildren in Ujung Pandang, Indonesia. Hadju V, et al. **Int J Food Sci Nutr** 1997 Mar; 48(2):85-93

Effects of albendazole on growth of primary school children and the prevalence and intensity of soil-transmitted helminths in Sierra Leone [letter] Koroma MM, et al. **J Trop Pediatr** 1996 Dec;42(6):371-2

Entomopathogenic nematode (Heterorhabditidae and Steinernematidae) spatial distribution in turfgrass. Campbell JF, et al. **Parasitology** 1996 Nov;113 (Pt 5):473-82

Ascaris, people and pigs in a rural community of Jiangxi Province, China. Peng W, et al. **Parasitology** 1996 Dec;113 (Pt 6):545-57

Contamination of soil with parasite eggs in Surabaya, Indonesia. Uga S, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):730-4

[Treatment of sludge from purification stations with the purpose of ameliorating soils intended for agriculture: parasitic contamination and model development with a view to managing the sanitation risk] Gaspard P, et al. **Bull Acad Natl Med** 1997 Jan;181(1):43-56; discussion 57

(Eng. Abstr.) (Fre)

STANDARDS

The effect of feeding piglets up to the 100th day of their life with peat preparation on their growth and physiological and biochemical indices. Fuchs B, et al. **Arch Vet Pol** 1995; 35(1–2):97–107

A probabilistic model for deriving soil quality criteria based on secondary poisoning of top predators. I. Model description and uncertainty analysis. Traas TP, et al. **Ecotoxicol Environ Saf** 1996 Aug;34(3):264–78

VIROLOGY see SOIL MICROBIOLOGY

SOIL MICROBIOLOGY

Characteristics of Streptomyces strains isolated from soils in two landfill areas in north Jordan. Abussaud MJ. **Acta Microbiol Immunol Hung** 1996;43(1):47–53

Isolation and identification of bacteria from petroleum derivatives contaminated soil. Lebkowska M, et al. **Acta Microbiol Pol** 1995;44(3–4):297–303

Osmoadaptation by rhizosphere bacteria. Miller KJ, et al. **Annu Rev Microbiol** 1996;50:101–36 (167 ref.)

Advances in soil microbial ecology and the biodiversity. Hattori T, et al. **Antonie Van Leeuwenhoek** 1997 Jul; 72(1):21–8

Phylogenetic and physiological comparisons of PAH-degrading bacteria from geographically diverse soils. Mueller JG, et al. **Antonie Van Leeuwenhoek** 1997 May; 71(4):329–43

Characterization of a lactate oxidase from a strain of gram negative bacterium from soil. Xu P, et al. **Appl Biochem Biotechnol** 1996 Mar;56(3):277–88

Death of the Escherichia coli K-12 strain W3110 in soil and water. Bogosian G, et al. **Appl Environ Microbiol** 1996 Nov; 62(11):4114–20

Molecular microbial diversity in soils from eastern Amazonia: evidence for unusual microorganisms and microbial population shifts associated with deforestation. Borneman J, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2647–53

Rapid and sensitive method for the detection of Mycobacterium chlorophenolicum PCP-1 in soil based on 16S rRNA gene-targeted PCR. Briglia M, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1478–80

PCR-mediated detection of acidophilic, bioleaching-associated bacteria. De Wulf-Durand P, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2944–8

Introduction of anaerobic dechlorinating bacteria into soil slurry microcosms and nested-PCR monitoring. el Fantroussi S, et al. **Appl Environ Microbiol** 1997 Feb; 63(2):806–11

Direct ribosome isolation from soil to extract bacterial rRNA for community analysis. Felske A, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4162–7

Plasmid-mediated mineralization of carbofuran by Sphingomonas sp. strain CF06. Feng X, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1332–7

Genetic exchange in soil between introduced chlorobenzoate degraders and indigenous biphenyl degraders. Focht DD, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3910–3

Pristine soils mineralize 3-chlorobenzoate and 2,4-dichlorophenoxyacetate via different microbial populations. Fulthorpe RR, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1159–66

Molecular detection of streptomycin-producing streptomycetes in Brazilian soils. Huddleston AS, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1288–97

Novel anaerobic ultramicrobacteria belonging to the Verrucomicrobiales lineage of bacterial descent isolated by dilution culture from anoxic rice paddy soil. Janssen PH, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1382–8

Phenotypic and genotypic characterization of phenanthrene-degrading fluorescent Pseudomonas biovars. Johnsen K, et al. **Appl Environ Microbiol** 1996 Oct; 62(10):3818–25

Novel group within the kingdom Crenarchaeota from boreal forest soil. Jurgens G, et al. **Appl Environ Microbiol** 1997 Feb;63(2):803–5

Diverse uncultivated bacterial groups from soils of the arid southwestern United States that are present in many geographic regions. Kuske CR, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3614–21

Estimation of the abundance of an uncultured soil bacterial strain by a competitive quantitative PCR method. Lee SY, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3787–93

Aerobic biodegradation of biphenyl and polychlorinated biphenyls by Arctic soil microorganisms. Mohn WW, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3378–84

Natural transformation and availability of transforming DNA to Acinetobacter calcoaceticus in soil microcosms. Nielsen KM, et al. **Appl Environ Microbiol** 1997 May;63(5):1945–52

Biodegradation of dimethylsilanediol in soils. Sabourin CL, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4352–60

Characterization of Desulfitobacterium chlororespirans sp. nov., which grows by coupling the oxidation of lactate to the reductive dechlorination of 3-chloro-4-hydroxybenzoate. Sanford RA, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3800–8

Priming effect of substrate addition in soil-based biodegradation tests. Shen J, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1428–30

Infection of Tetrahymena pyriformis by Legionella longbeachae and other Legionella species found in potting mixes. Steele TW, et al. **Appl Environ Microbiol** 1996 Mar; 62(3):1081–3

Isolation and characterization of an attenuated strain of Pseudomonas aeruginosa AC869, a 3,5-dichlorobenzoate degrader. Zhou X, et al. **Appl Environ Microbiol** 1997 Apr; 63(4):1389–95

Optimization of environmental factors for the biological treatment of trinitrotoluene-contaminated soil. Boopathy R, et al. **Arch Environ Contam Toxicol** 1997 Jan;32(1):94–8

Effects of fertilizer on insecticides adsorption and biodegradation in crop soils. Rouchaud J, et al. **Arch Environ Contam Toxicol** 1996 Jul;31(1):98–106

Methylosulfonomonas methylovora gen. nov., sp. nov., and Marinosulfonomonas methylotropha gen. nov., sp. nov.: novel methylotrophs able to grow on methanesulfonic acid. Holmes AJ, et al. **Arch Microbiol** 1997 Jan;167(1):46–53

Recurrent Legionella longbeachae pneumonia associated with re-exposure to potting soil? [letter] DeWit D, et al. **Aust N Z J Med** 1996 Dec;26(6):856–7

Simultaneous detection of microorganisms in soil suspension based on PCR amplification of bacterial 16S rRNA fragments. McGregor DP, et al. **Biotechniques** 1996 Sep; 21(3):463–6, 468, 470–1

Toxicological assessment of biodegraded malathion in albino mice. Barlas NE. **Bull Environ Contam Toxicol** 1996 Nov; 57(5):705–12

Impact of lead and sewage sludge on soil microbial biomass and carbon and nitrogen mineralization. Dar GH. **Bull Environ Contam Toxicol** 1997 Feb;58(2):234–40

Fate of vinclozolin in creeping bentgrass turf under two application frequencies. Frederick EK, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):391–7

Rapid toxicity estimation using soil ciliates: sensitivity and bioavailability. Pratt JR, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):387–93

Enhanced soil biodegradation of prosulfocarb herbicide in barley crop. Rouchaud J, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):752–7

Comparative study of five polycyclic aromatic hydrocarbon degrading bacterial strains isolated from contaminated soils. Dagher F, et al. **Can J Microbiol** 1997 Apr;43(4):368–77

Denitration of 2,4,6-trinitrotoluene by Pseudomonas savastanoi. Martin JL, et al. **Can J Microbiol** 1997 May; 43(5):447–55

Soil isolates of Pseudomonas spp. that utilize inositol phosphates. Richardson AE, et al. **Can J Microbiol** 1997 Jun;43(6):509–16

Isolation and characterization of soil microorganisms capable of utilizing the herbicide diclofop-methyl as a sole source of carbon and energy. Smith-Greeier LL, et al. **Can J Microbiol** 1996 Mar;42(3):221–6

Degradation of diclofop-methyl by pure cultures of bacteria isolated from Manitoban soils. Smith-Greenier LL, et al. **Can J Microbiol** 1996 Mar;42(3):227–33

In vitro degradation of dicyclopentadiene by microbial consortia isolated from hydrocarbon-contaminated soil. Stehmeier LG, et al. **Can J Microbiol** 1996 Oct; 42(10):1051–60

Modulation of carbohydrate-binding capacities and attachment ability of Bradyrhizobium sp. (lupinus) to white lupin roots. Wisniewski JP, et al. **Can J Microbiol** 1996 Mar;42(3):234–42

A simple method for enumerating bacteriophages in soil. Yin X, et al. **Can J Microbiol** 1997 May;43(5):461–6

Genetic variability of the common nod gene in soybean bradyrhizobia isolated in Thailand and Japan. Yokoyama T, et al. **Can J Microbiol** 1996 Dec;42(12):1209–18

Fungal microflora biodiversity as a function of pollution in Oued Sebou (Morocco). Sage L, et al. **Chemosphere** 1997 Aug;35(4):751–9

Species-specific selection on soil fungal population after olive mill waste-water treatment. Tardioli S, et al. **Chemosphere** 1997 Jun;34(11):2329–36

Biodegradation of three substituted phenylurea herbicides (chlortoluron, diuron, and isoproturon) by soil fungi. A comparative study. Vroumsia T, et al. **Chemosphere** 1996 Nov;33(10):2045–56

Phospholipid fatty acid profiles in selected members of soil microbial communities. Zelles L. **Chemosphere** 1997 Jul; 35(1–2):275–94

Quantitative flow cytometric detection of specific microorganisms in soil samples using rRNA targeted fluorescent probes and ethidium bromide. Thomas JC, et al. **Cytometry** 1997 Mar 1;27(3):224–32

Effective concentrations of nitrophenolics toward growth yield of selected microalgae and cyanobacteria isolated from soil. Madhavi DR, et al. **Ecotoxicol Environ Saf** 1995 Dec;32(3):205–8

Effects of terbuthylazine on soil fauna and decomposition processes. Salminen J, et al. **Ecotoxicol Environ Saf** 1996 Jul;34(2):184–9

Toxicity of increased amounts of chemicals and the dose-response curves for heterogeneous microbial populations in soil. Welp G, et al. **Ecotoxicol Environ Saf** 1997 Jun;37(1):37–44

Anaerobic degradation of halogenated benzoic acids coupled to denitrification observed in a variety of sediment and soil samples. Häggblom MM, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2–3):213–9

Phylogenetic analysis of tnpR genes in mercury resistant soil bacteria: the relationship between DNA sequencing and RFLP typing approaches. Holt RJ, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):95–102

Isolation of Rhodococcus rhodochrous NCIMB13064 derivatives with new biodegradative abilities. Kulakova AN, et al. **FEMS Microbiol Lett** 1996 Dec 1;145(2):227–31

Detection and in situ identification of representatives of a widely distributed new bacterial phylum. Ludwig W, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):181–90

Methanoplanus petrolearius sp. nov., a novel methanogenic bacterium from an oil-producing well. Ollivier B, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):51–6

Haloanaerobium congolense sp. nov., an anaerobic, moderately halophilic, thiosulfate- and sulfur-reducing bacterium from an African oil field. Ravot G, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):81–8

Bioavailability and biodegradation of polycyclic aromatic hydrocarbons in soils. Smith MJ, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):141–7

Characterisation and identification of broad spectrum antibiotic producing Streptomyces hygroscopicus D 1.5. Chakraborty D, et al. **Hindustan Antibiot Bull** 1995 Feb-Nov;37(1–4):37–43

Characterization and application of a strain-specific monoclonal antibody against the rhizosphere bacterium Azospirillum brasilense Wa5. Schloter M, et al. **Hybridoma** 1997 Apr;16(2):183–7

Novel Psychrobacter species from Antarctic ornithogenic soils. Cavanagh J, et al. **Int J Syst Bacteriol** 1996 Oct; 46(4):841–8

Bacillus salexigens sp. nov., a new moderately halophilic Bacillus species. Garabito MJ, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):735–41

Reclassification of a polycyclic aromatic hydrocarbon-metabolizing bacterium, Beijerinckia sp. strain B1, as Sphingomonas yanoikuyae by fatty acid analysis, protein pattern analysis, DNA-DNA hybridization, and 16S ribosomal DNA sequencing. Khan AA, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):466–9

Bacillus vallismortis sp. nov., a close relative of Bacillus subtilis, isolated from soil in Death Valley, California. Roberts MS, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):470–5

Isolation and characterization of a new gram-negative, acetone-degrading, nitrate-reducing bacterium from soil, Paracoccus solventivorans sp. nov. Siller H, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):1125–30

Relationship between soil type and Mycobacterium paratuberculosis. Johnson-Ifearulundu YJ, et al. **J Am Vet Med Assoc** 1997 Jun 15;210(12):1735–40 (44 ref.)

The incidence and level of Listeria monocytogenes contamination of food sources at primary production and initial processing. Fenlon DR, et al. **J Appl Bacteriol** 1996 Dec;81(6):641–50

Degradation of crude oil by Acinetobacter calcoaceticus and Alcaligenes odorans. Lal B, et al. **J Appl Bacteriol** 1996 Oct;81(4):355–62

Isolation and identification of Burkholderia pseudomallei from soil using selective culture techniques and the polymerase chain reaction. Brook MD, et al. **J Appl Microbiol** 1997 May;82(5):589–96

A longitudinal study of environmental mycobacteria on a farm in south-west England. Donoghue HD, et al. **J Appl Microbiol** 1997 Jan;82(1):57–67

Isolation and characterization of a novel gamma-hexachlorocyclohexane-degrading bacterium. Thomas JC, et al. **J Bacteriol** 1996 Oct;178(20):6049–55

Diversity of microfungi in the sandy soil of Ipanema Beach, Rio de Janeiro, Brazil. de Moura Sarquis MI, et al. **J Basic Microbiol** 1996;36(1):51–8

Effect of inactivation by sunlight on the larvicidal activities of mosquitocidal Bacillus thuringiensis H-14 isolates from Nigerian soils. Obeta JA. **J Commun Dis** 1996 Jun; 28(2):94–100

Degradation of pentachlorophenol in soil by Streptomyces rochei 303. Zaborina O, et al. **J Environ Sci Health B** 1997 Jan;32(1):55–70

Potted plants as a potential reservoir of Fusarium species [letter] Rogues AM, et al. **J Hosp Infect** 1997 Feb; 35(2):163–4

Effect of nematode-trapping fungi on an entomopathogenic nematode originating from the same field site in California. Koppenhöfer AM, et al. **J Invertebr Pathol** 1996 Nov; 68(3):246–52

Ribotype differences between clinical and environmental isolates of Burkholderia pseudomallei. Trakulsomboon S, et al. **J Med Microbiol** 1997 Jul;46(7):565–70

Biochemical characteristics of clinical and environmental isolates of Burkholderia pseudomallei. Wuthiekanun V, et al. **J Med Microbiol** 1996 Dec;45(6):408–12

The lung and the world about it. The Tudor Edwards Lecture 1996. Seaton A. **J R Coll Physicians Lond** 1996 May-Jun;30(3):232–7 (33 ref.)

Isolation of virulent and intermediately virulent Rhodococcus equi from soil and sand on parks and yards in Japan. Takai S, et al. **J Vet Med Sci** 1996 Jul;58(7):669–72

Legionella longbeachae in Western Australian potting mix [letter] Ross IS, et al. **Med J Aust** 1997 Apr 7;166(7):387

Isolation and identification of yeasts from natural habitats. Spencer JF, et al. **Methods Mol Biol** 1996;53:1–4 (8 ref.)

Fate and activity of microorganisms introduced into soil. van Veen JA, et al. **Microbiol Mol Biol Rev** 1997 Jun; 61(2):121–35 (173 ref.)

Influence of the herbicide bentazon on soil microbial community. Allievi L, et al. **Microbiol Res** 1996 Mar; 151(1):105–11

Isolation and characterization of a new arsenic methylating bacterium from soil. Honschopp S, et al. **Microbiol Res** 1996 Mar;151(1):37–41

Soil microorganisms as controllers of atmospheric trace gases (H2, CO, CH4, OCS, N2O, and NO). Conrad R. **Microbiol Rev** 1996 Dec;60(4):609–40 (602 ref.)

Extracellular bacterial mineralization within the context of geomicrobiology. Ben Omar N, et al. **Microbiologia** 1997 Jun;13(2):161–72 (40 ref.)

Effect of heavy metals on soil denitrification and CO2 production after short term incubation. Probanza A, et al. **Microbiologia** 1996 Sep;12(3):417–24

Use of Percoll gradient centrifugation for the isolation of diatoms from Wadden Sea sediments; diatom yields, species recoveries and population diversity. Sevecke S, et al. **Microbiologia** 1997 Jun;13(2):173–84

Molecular biological evidence for the occurrence of uncultured members of the actinomycete linc of descent in different environments and geographical locations. Rheims H, et al. **Microbiology** 1996 Oct;142 (Pt 10):2863–70

Further studies on Egyptian soil fungi: succession of sugar and osmophilic fungi in soil amended with five organic substrates. Shaban GM. **Mycopathologia** 1996;136(1):33–40

Molecular phylogeny of Archaea from soil. Bintrim SB, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):277–82

A preliminary study on the occurrence of keratinolytic fungi in the street sweepings from Chorzów. Ulfig K, et al. **Rocz Panstw Zakl Hig** 1996;47(2):143–9

First isolation of Microsporum racemosum Borelli in Poland. Ulfig K, et al. **Rocz Panstw Zakl Hig** 1996;47(3):313–8

Geographical distribution of Pseudomonas pseudomallei in China. Yang S, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):636–8

Nuclear magnetic resonance timecourse studies of glyphosate metabolism by microbial soil isolates. Gard JK, et al. **Xenobiotica** 1997 Jul;27(7):633–44

Examination of soils from residential garbage in Betul, India, for fungi by the keratin baiting technique. Sharma B, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):139–45

Fungi in biowaste and compost—medical-mycological aspects and proposals [editorial] Staib F. **Zentralbl Bakteriol** 1996 Sep;285(1):1–4

Environment, incidence, aetiology, epizootiology and immunoprophylaxis of soil-borne diseases in north-east Mexico. Seifert HS, et al. **Zentralbl Veterinarmed [B]** 1996 Dec;43(10):593–605

[Effects of residues of anti-infective agents in animal excretions on slurry treatment and the soil] Böhm R. **DTW Dtsch Tierarztl Wochenschr** 1996 Jul;103(7):264–8 (12 ref.) (Eng. Abstr.) **(Ger)**

[Divergence between "early" genes from defective phages of various strains of soil bacilli, close to Bacillus subtilis 168] Lotareva OV, et al. **Genetika** 1997 Jun;33(6):752–6 (Eng. Abstr.) **(Rus)**

[The effect of long-acting radiation on the diversity of heterotrophic bacteria in the soils of a 10-kilometer area around the Chernobyl Atomic Electric Power Station] Romanovskaia VA, et al. **Mikrobiol Z** 1996 Sep–Oct; 58(5):3–12 (Eng. Abstr.) **(Rus)**

[Pathogenic Listeria in the soil and in association with algae: a reversible transition into a nonculturable state] Pushkareva VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 May–Jun;(3):3–6 (Eng. Abstr.) **(Rus)**

[The possibility of preserving the causative agent of plague in soil in resting (nonculturable) form] Suchkov IuG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug; (4):42–6 (Eng. Abstr.) **(Rus)**

[Nonculturable forms of Yersinia pseudotuberculosis in the soils of a natural focus of pseudotuberculosis] Troitskaia VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):13–5 (Eng. Abstr.) **(Rus)**

[Inoculation of chickpeas with Rhizobium sp. native to the province of Córdoba, Argentina] Abril A, et al. **Rev Argent Microbiol** 1997 Jan–Mar;29(1):24–31 (Eng. Abstr.) **(Spa)**

STANDARDS

Soil and solid poultry waste nutrient management and water quality. Chapman SL. **Poult Sci** 1996 Jul;75(7):862–6 (26 ref.)

SOIL POLLUTANTS

Isolation and identification of bacteria from petroleum derivatives contaminated soil. Lebkowska M, et al. **Acta Microbiol Pol** 1995;44(3–4):297–303

Effects of sediment homogenization on interstitial water PCB geochemistry. Burgess RM, et al. **Arch Environ Contam Toxicol** 1997 Aug;33(2):125–9

Effect of the nature of exogenous organic matter on pesticide sorption by the soil. Iglesias-Jiménez E, et al. **Arch Environ Contam Toxicol** 1997 Aug;33(2):117–24

Impact of lead and sewage sludge on soil microbial biomass and carbon and nitrogen mineralization. Dar GH. **Bull Environ Contam Toxicol** 1997 Feb;58(2):234–40

New laws on landfills [news] **Environ Health Perspect** 1996 Jul;104(7):685–6

The beauty of biosolids. Tenenbaum D. **Environ Health Perspect** 1997 Jan;105(1):32–6

Refined exposure assessment for ingestion of tapwater contaminated with hexavalent chromium: consideration of exogenous and endogenous reducing agents. Kerger BD, et al. **J Expo Anal Environ Epidemiol** 1996 Apr–Jun; 6(2):163–79

Human lead absorption — Texas. **MMWR Morb Mortal Wkly Rep** 1997 Sep 19;46(37):871–7

Modeling the environmental fate of atrazine. Devillers J, et al. **SAR QSAR Environ Res** 1997;6(1–2):63–79

Fungi in biowaste and compost—medical-mycological aspects and proposals [editorial] Staib F. **Zentralbl Bakteriol** 1996 Sep;285(1):1–4

ADVERSE EFFECTS

Polychlorinated biphenyl (PCB) and dichlorodiphenyl dichloroethylene (DDE) exposure among Native American men from contaminated Great Lakes fish and wildlife. Fitzgerald EF, et al. **Toxicol Ind Health** 1996 May–Aug; 12(3–4):361–8

Breast-feeding exposure of infants to environmental contaminants—a public health risk assessment viewpoint: chlorinated dibenzodioxins and chlorinated dibenzofurans. Pohl HR, et al. **Toxicol Ind Health** 1996 Sep–Oct; 12(5):593–611 (98 ref.)

ANALYSIS

Psyllids as a potential source of heavy metals for predators. Glowacka E, et al. **Arch Environ Contam Toxicol** 1997 May; 32(4):376–82

Polychlorinated dibenzofurans and dibenzo-p-dioxins in subsurface soil, superficial dust, and air extracts from a contaminated landfill. Hansen LG, et al. **Arch Environ Contam Toxicol** 1996 Aug;31(2):271–6

Monitoring and estimating concentrations of polychlorinated biphenyls, dioxins, and furans in cattle milk and soils of Rhine-Delta floodplains. Hendriks AJ, et al. **Arch Environ Contam Toxicol** 1996 Aug;31(2):263–70

Dissipation and distribution of atrazine, simazine, chlorpyrifos, and tetradifon residues in citrus orchard soil. Redondo MJ, et al. **Arch Environ Contam Toxicol** 1997 May;32(4):346–52

Bioindication of heavy metals in soil by liverworts. Samecka-Cymerman A, et al. **Arch Environ Contam Toxicol** 1997 Aug;33(2):162–71

Heavy metals and organic hydrocarbons in sediments from the Waikareao Estuary, Tauranga Harbour, New Zealand. Burggraaf S, et al. **Bull Environ Contam Toxicol** 1997 Jun; 58(6):871–8

Closed-ampule digestion procedure for the determination of mercury in soil and tissue using cold vapor atomic fluorescence spectrometry. Jones RD, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):29–34

Screening of volatile organic compounds in river sediment. Kawata K, et al. **Bull Environ Contam Toxicol** 1997 Jun; 58(6):893–900

DDT and HCH compounds in soils, ponds, and drinking water of Haryana, India. Kumari B, et al. **Bull Environ Contam Toxicol** 1996 Nov;57(5):787–93

Identification of mixed O-phenyl alkyl phthalate esters in an agricultural land. Muszkat L, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):348–55

Effects of mercury release from amalgam dental restorations during cremation on soil mercury levels of three New Zealand crematoria. Nieschmidt AK, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):744–51

Purgeable aromatic hydrocarbons in water and sediment from the river Morava catchment (Slovakia). Al-Rekabi H, et al. **Bull Environ Contam Toxicol** 1996 Jan;56(1):90–7

Carbon mineralization potential of soils amended with sludge from olive processing. Riffaldi R, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):30–7

Spectroscopic study of soil particle surface redox reactions. Risser JA, et al. **Bull Environ Contam Toxicol** 1997 Mar; 58(3):356–63

Influence of storage on sediment characteristics and of drying sediment on sorption coefficients of organic contaminants. Sijm RT, et al. **Bull Environ Contam Toxicol** 1997 Jun; 58(6):961–8

Contamination of soil with copper, chromium, and arsenic under decks built from pressure treated wood. Stilwell DE, et al. **Bull Environ Contam Toxicol** 1997 Jan;58(1):22–9

Kinetics of the sequential dechlorination of chloroorganics in an anaerobic sediment. Susarla S, et al. **Bull Environ Contam Toxicol** 1997 Feb;58(2):227–33

Degradation of dimethoate in chrysanthemums and soil. Wu J, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):564–9

Comparative analyses of soil contaminant levels and plant species diversity at developing and disused oil well sites in Qianjiang oilfield, China. Xiong ZT, et al. **Bull Environ Contam Toxicol** 1997 Apr;58(4):667–72

Polychlorinated dibenzo-p-dioxins and dibenzofurans in lake sediments from Chinese schistosomiasis areas. Zheng M, et al. **Bull Environ Contam Toxicol** 1997 Oct;59(4):653–6

Polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDD/PCDF) in food samples collected in southern Mississippi, USA. Fiedler H, et al. **Chemosphere** 1997 Mar–Apr;34(5–7):1411–9

Evaluation of a terrestrial food chain model for estimating foodstuff concentrations of PCDD/Fs. Harrad SJ, et al. **Chemosphere** 1997 Apr;34(8):1723–37

Determination of polychlorinated dibenzo-p-dioxin and dibenzofuran background in milk and cheese by quadrupole ion storage collision induced dissociation MS/MS. Hayward DG. **Chemosphere** 1997 Mar–Apr;34(5–7):929–39

Behaviour and ecotoxicology of aluminium in soil and water—review of the scientific literature. Klöppel H, et al. **Chemosphere** 1997 Jul;35(1–2):353–63 (33 ref.)

PCB and PCDD/DF congeners in locally grown fruit and vegetable samples in Wales and England. Lovett AA, et al. **Chemosphere** 1997 Mar–Apr;34(5–7):1421–36

Calculation of soil-water and benthic sediment partition coefficients for mercury. Lyon BF, et al. **Chemosphere** 1997 Aug;35(4):791–808 (30 ref.)

PCDD/F and other chlorinated hydrocarbons in matrices of the Federal Environmental Specimen Bank. Oxynos SK, et al. **Chemosphere** 1997 May;34(9–10):2153–8

Determination of PCDF/PCDD in sludges from a drinking water treatment plant influence of chlorination treatment. Rivera J, et al. **Chemosphere** 1997 Mar–Apr;34(5–7):989–97

PCDD, PCDF, and PCB concentrations in human milk from two areas in Finland. Vartiainen T, et al. **Chemosphere** 1997 Jun;34(12):2571–83

Biological monitoring for mercury within a community with soil and fish contamination. Harnly M, et al. **Environ Health Perspect** 1997 Apr;105(4):424–9

Latex allergens in tire dust and airborne particles. Miguel AG, et al. **Environ Health Perspect** 1996 Nov; 104(11):1180–6

Drosophila melanogaster, Vicia faba and Arabidopsis thaliana short-term bioassays in genotoxicity evaluation of air and soil samples from sites surrounding two industrial factories in the Czech Republic. Chroust K, et al. **Folia Biol (Praha)** 1997;43(2):71–8

Bioavailability of lead to juvenile swine dosed with soil from the Smuggler Mountain NPL Site of Aspen, Colorado. Casteel SW, et al. **Fundam Appl Toxicol** 1997 Apr; 36(2):177–87

Identification of an accurate soil suspension/dispersion modeling method for use in estimating health-based soil cleanup levels of hexavalent chromium in chromite ore processing residues. Scott PK, et al. **J Air Waste Manag Assoc** 1997 Jul;47(7):753–65

Background air concentrations of Cr(VI) in Hudson County, New Jersey: implications for setting health-based standards for Cr(VI) in soil. Scott PK, et al. **J Air Waste Manag Assoc** 1997 May;47(5):592–600

Modular methodology for determination of polychlorinated biphenyls in soil as Aroclors and individual congeners. Donnelly JR, et al. **J AOAC Int** 1996 Jul–Aug;79(4):953–61

Official multiresidue methods of pesticide analysis in vegetables, fruits and soil. Motohashi N, et al. **J Chromatogr A** 1996 Nov 22;754(1–2):333–46 (64 ref.)

In-line respeciation: an ion-exchange ion chromatographic method applied to the separation of degradation products of chemical warfare nerve agents in soil. Vermillion WD, et al. **J Chromatogr A** 1997 May 16;770(1–2):253–60

High-performance liquid chromatographic study of the aromatic nitrile metabolism in soil bacteria. Gabriel J, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):191–5

Residue levels of pyrethrins and piperonyl butoxide in soil and runoff water. Antonious GF, et al. **J Environ Sci Health B** 1997 Sep;32(5):621–44

Evaluation of atrazine positive and false positive immunoassay detections in ground water. Watts DW, et al. **J Environ Sci Health B** 1997 Sep;32(5):659–71

Methodology to estimate the amount and particle size of soil ingested by children: implications for exposure assessment at waste sites [published erratum appears in Regul Toxicol Pharmacol 1997 Feb;25(1):87] Calabrese EJ, et al. **Regul Toxicol Pharmacol** 1996 Dec;24(3):264–8

Factors affecting atrazine fate in north central U.S. soils. Koskinen WC, et al. **Rev Environ Contam Toxicol** 1997; 151:117–65 (225 ref.)

Chemical composition of sediments, suspended matter, river water and ground water of the Nile (Aswan-Sohag traverse). Dekov VM, et al. **Sci Total Environ** 1997 Aug 18;201(3):195–210

Hazards for the Rostock water supply from a tar-contaminated sediment in the river Warnow. Randow FF, et al. **Toxicol Lett** 1996 Nov;88(1–3):355–8

[Introduction: soil pollution, agriculture and public health] Molina C. **Bull Acad Natl Med** 1997 Jan;181(1):17–9 **(Fre)**

[Degradation of soil quality: health and environmental risks] Robert M. **Bull Acad Natl Med** 1997 Jan;181(1):21–40; discussion 40–2 (29 ref.) (Eng. Abstr.) **(Fre)**

[Blood PCDD/F levels in blood of residents of a former cable incineration facility] Ewers U, et al. **Gesundheitswesen** 1996 Aug–Sep;58(8–9):465–9 (Eng. Abstr.) **(Ger)**

[Limit values for polycyclic aromatic hydrocarbons in soil of children's playgrounds—basic criteria and recommendations] Roscher E, et al. **Gesundheitswesen** 1996 Aug–Sep;58(8–9):470–6 (Eng. Abstr.) **(Ger)**

[Mineral oil hydrocarbons as ground water contaminants] Schewe C, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1996; 98:III–XVI, 1–92 (72 ref.) **(Ger)**

[The bioindication of mutagens in the soil of rural districts] Nechkina MA, et al. **Gig Sanit** 1997 Mar–Apr;(2):11–2 (Eng. Abstr.) **(Rus)**

SOIL POLLUTANTS

[The effect of petrochemical and oil-refining enterprises on the sanitary state of the soil cover] Suleimanov RA, et al. **Gig Sanit** 1996 May-Jun;(3):12-5 (Eng. Abstr.) **(Rus)**

BLOOD

Evaluation of lead levels in children living near a Los Angeles county battery recycling facility. Wohl AR, et al. **Environ Health Perspect** 1996 Mar;104(3):314-7

Selected analytical methods used at the Centers for Disease Control and Prevention for measuring environmental pollutants in serum. Burse VW, et al. **Toxicol Ind Health** 1996 May-Aug;12(3-4):481-98

Reference range data for assessing exposure to selected environmental toxicants. Needham LL, et al. **Toxicol Ind Health** 1996 May-Aug;12(3-4):507-13

Levels of PCDD/PCDF in blood fat as indices of the PCDD/PCDF body burden in humans. Ewers U, et al. **Toxicol Lett** 1996 Nov;88(1-3):327-34

ISOLATION & PURIFICATION

Phytoremediation of soil metals. Chaney RL, et al. **Curr Opin Biotechnol** 1997 Jun;8(3):279-84 (63 ref.)

METABOLISM

Isolation and characterization of a novel toluene-degrading, sulfate-reducing bacterium. Beller HR, et al. **Appl Environ Microbiol** 1996 Apr;62(4):1188-96

Expression of lip genes during growth in soil and oxidation of anthracene by Phanerochaete chrysosporium. Bogan BW, et al. **Appl Environ Microbiol** 1996 Oct; 62(10):3697-703

Aerobic biodegradation of biphenyl and polychlorinated biphenyls by Arctic soil microorganisms. Mohn WW, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3378-84

Biodegradation of petroleum hydrocarbons by psychrotrophic Pseudomonas strains possessing both alkane (alk) and naphthalene (nah) catabolic pathways. Whyte LG, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3719-23

Optimization of environmental factors for the biological treatment of trinitrotoluene-contaminated soil. Boopathy R, et al. **Arch Environ Contam Toxicol** 1997 Jan;32(1):94-8

Effects of liming on uptake of lead and cadmium by Raphanus sativa. Han DH, et al. **Arch Environ Contam Toxicol** 1996 Nov;31(4):488-93

Effects of fertilizer on insecticides adsorption and biodegradation in crop soils. Rouchaud J, et al. **Arch Environ Contam Toxicol** 1996 Jul;31(1):98-106

Effect of subsurface drains on runoff losses of metolachlor and trifluralin from Mississippi River alluvial soil. Southwick LM, et al. **Arch Environ Contam Toxicol** 1997 Jan;32(1):106-9

Accumulation of some heavy metals in various environments and organisms at Göksu Delta, Türkiye, 1991-1993. Ayas Z, et al. **Bull Environ Contam Toxicol** 1996 Jan;56(1):65-72

Accumulation of chlorinated benzenes in earthworms. Beyer WN. **Bull Environ Contam Toxicol** 1996 Nov;57(5):729-36

Influence of chromium (VI) and acidic conditions on removal of pentachlorophenol from soil by Arthrobacter strain ATCC 33790. Edgehill RU. **Bull Environ Contam Toxicol** 1996 Nov;57(5):737-42

Fate of toxic compounds during composting. Eitzer BD, et al. **Bull Environ Contam Toxicol** 1997 Jun;58(6):953-60

Liming, reacidification, and the mobilization of cadmium from sediments. Fimreite N, et al. **Bull Environ Contam Toxicol** 1996 Dec;57(6):888-94

Factors affecting the fate of urea peroxide added to soil. Frankenberger WT Jr. **Bull Environ Contam Toxicol** 1997 Jul;59(1):50-7

Fate of vinclozolin in creeping bentgrass turf under two application frequencies. Frederick EK, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):391-7

Studies on degradation of 14C-nitrofen in soils under moist and flooded conditions using a continuous flow system in the laboratory. Kale SP, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):72-5

Mineralization, volatilization, and degradation of carbofuran in soil samples from Kenya. Lalah JO, et al. **Bull Environ Contam Toxicol** 1996 Jan;56(1):37-41

Subsurface losses of surface-applied metribuzin as influenced by yard waste compost amendments, no-tillage, and conventional-tillage. Malone RW, et al. **Bull Environ Contam Toxicol** 1996 Nov;57(5):751-8

Effect of root metabolism on the post-depositional mobilization of mercury in salt marsh soils. Marins RV, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):733-8

Enhanced soil biodegradation of prosulfocarb herbicide in barley crop. Rouchaud J, et al. **Bull Environ Contam Toxicol** 1997 May;58(5):752-7

Soil dissipation of the post-emergence herbicide sulcotrione in maize crops treated with organic fertilizers. Rouchaud J, et al. **Bull Environ Contam Toxicol** 1996 Sep; 57(3):398-405

Atrazine movement and dissipation in a sandy loam soil under irrigation: an immunoenzymatic study. Tasli S, et al. **Bull Environ Contam Toxicol** 1996 Mar;56(3):359-66

Toxic elements in environmental samples from selected regions in Slovakia. Ursínyová M, et al. **Bull Environ Contam Toxicol** 1997 Jun;58(6):985-92

Movement of three s-triazine herbicides atrazine, simazine, and ametryn in subtropical soils. Wang Y, et al. **Bull Environ Contam Toxicol** 1996 Nov;57(5):743-50

Detection and induction of cytochrome P450IA (CYP 1A)-like proteins in Julus scandinavius (Diplopoda) and Oniscus asellus (Isopoda): a first analysis. Zanger M, et al. **Bull Environ Contam Toxicol** 1997 Apr;58(4):511-7

Denitration of 2,4,6-trinitrotoluene by Pseudomonas savastanoi. Martin JL, et al. **Can J Microbiol** 1997 May; 43(5):447-55

Pyridine degradation and heterocyclic nitrification by Bacillus coagulans. Uma B, et al. **Can J Microbiol** 1997 Jun;43(6):595-8

Dioxins and furans in the Jordanian environment. Part 2: Levels of PCDD and PCDF in human milk samples from Jordan. Alawi MA, et al. **Chemosphere** 1996 Dec; 33(12):2469-74

Biodegradation of sucrose poly fatty acid esters in soils. Figge K, et al. **Chemosphere** 1997 Jun;34(12):2621-36

Estimated intake of PCDDs, PCDFs and co-planar PCBs in individuals from Madrid (Spain) eating an average diet. Jiménez B, et al. **Chemosphere** 1996 Oct;33(8):1465-74

Polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) in Baikal seal. Tarasova EN, et al. **Chemosphere** 1997 Jun;34(11):2419-27

Effect of oligochaete bioturbation on sediment accumulation of 2,2',4,4'-tetrachlorobiphenyl. Ewald G, et al. **Ecotoxicol Environ Saf** 1997 Feb;36(1):66-71

Earthworm and food interactions on bioaccumulation and disappearance in soil of polycyclic aromatic hydrocarbons: studies on phenanthrene and fluoranthene. Ma WC, et al. **Ecotoxicol Environ Saf** 1995 Dec;32(3):226-32

Cu accumulation in Lumbricus rubellus under laboratory conditions compared with accumulation under field conditions. Marinussen MP, et al. **Ecotoxicol Environ Saf** 1997 Feb;36(1):17-26

Availability and persistence of isoproturon under field and laboratory conditions. Perrin-Ganier C, et al. **Ecotoxicol Environ Saf** 1996 Dec;35(3):226-30

A probabilistic model for deriving soil quality criteria based on secondary poisoning of top predators. I. Model description and uncertainty analysis. Traas TP, et al. **Ecotoxicol Environ Saf** 1996 Aug;34(3):264-78

Bioextraction of selenium by forage and selected field legume species in selenium-laden soils under minimal field management conditions. Van Mantgem PJ, et al. **Ecotoxicol Environ Saf** 1996 Aug;34(3):228-38

Bacteria breakfast. Frazer L. **Environ Health Perspect** 1996 Nov;104(11):1162-4

Anaerobic degradation of halogenated benzoic acids coupled to denitrification observed in a variety of sediment and soil samples. Häggblom MM, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2-3):213-9

Enhanced degradation of deethylatrazine in an atrazine-history soil of Iowa. Arthur EL, et al. **J Environ Sci Health B** 1997 Sep;32(5):599-620

Acetochlor-a comparative study on parameters governing the potential for water pollution. Balinova AM. **J Environ Sci Health B** 1997 Sep;32(5):645-58

Degradation of pentachlorophenol in soil by Streptomyces rochei 303. Zaborina O, et al. **J Environ Sci Health B** 1997 Jan;32(1):55-70

Environmental contamination and seasonal variation of metals in soils, plants and waters in the paddy fields around a Pb-Zn mine in Korea. Jung MC, et al. **Sci Total Environ** 1997 May 30;198(2):105-21

Mobilization of PAH and PCB from contaminated soil using a digestive tract model. Hack A, et al. **Toxicol Lett** 1996 Nov;88(1-3):199-210

[Mathematical modeling of biological disintegration of hard synthetic surfactants in soil] Antomonov MIu, et al. **Gig Sanit** 1997 Jan-Feb;(1):49-50 **(Rus)**

PHARMACOKINETICS

Uptake of 134Cs from a sandy soil by two earthworm species: the effects of temperature. Janssen MP, et al. **Arch Environ Contam Toxicol** 1996 Aug;31(2):184-91

Sorption of carbaryl (1-napthyl N-methyl carbamate) by soil. Jana TK, et al. **Bull Environ Contam Toxicol** 1997 Jul; 59(1):65-71

14C-Residues of trifluralin in a soil and their uptake by carrots. Tiryaki O, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):58-64

Pharmacokinetic model of dioxin and furan levels in adipose tissue from sawmill work involving chlorophenate fungicides. Campbell CA, et al. **Chemosphere** 1996 Dec; 33(12):2373-81

Phytoremediation of soil metals. Chaney RL, et al. **Curr Opin Biotechnol** 1997 Jun;8(3):279-84 (63 ref.)

Bioavailability of soil-adsorbed cadmium in orally exposed male rats. Schilderman PA, et al. **Environ Health Perspect** 1997 Feb;105(2):234-8

Comparative absorption of lead from contaminated soil and lead salts by weanling Fischer 344 rats. Freeman GB, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):109-19

Bioavailability of TNT residues in composts of TNT-contaminated soil. Palmer WG, et al. **J Toxicol Environ Health** 1997 Jun 6;51(2):97-108

Field measurement of dermal soil loading attributable to various activities: implications for exposure assessment. Kissel JC, et al. **Risk Anal** 1996 Feb;16(1):115-25

[Human biomonitoring--studies of arsenic, lead and PCDD/F in inhabitants of a contaminated residential area] Ewers U, et al. **Gesundheitswesen** 1997 Jan;59(1):41-50 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Combined non-invasive cell isolation and neutral-red retention assay for measuring the effects of copper on the lumbricid Aporrectodea rosea (Savigny). Harreus D, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):44-9

Antiestrogenic activities of alternate-substituted polychlorinated dibenzofurans in MCF-7 human breast cancer cells. Sun G, et al. **Cancer Chemother Pharmacol** 1997;40(3):239-44

POISONING

A probabilistic model for deriving soil quality criteria based on secondary poisoning of top predators. II. Calculations for dichlorodiphenyltrichloroethane (DDT) and cadmium. Jongbloed RH, et al. **Ecotoxicol Environ Saf** 1996 Aug; 34(3):279-306

TOXICITY

Comparative and environmental genotoxicity of antimony and arsenic. Gebel T, et al. **Anticancer Res** 1997 Jul-Aug; 17(4A):2603-7

Patterns, trends, and toxicological significance of chlorinated hydrocarbon and mercury contaminants in bald eagle eggs from the Pacific coast of Canada, 1990-1994. Elliott JE, et al. **Arch Environ Contam Toxicol** 1996 Oct;31(3):354-67

Life-table evaluation of sediment-associated chlorpyrifos chronic toxicity to the benthic copepod, Amphiascus tenuiremis. Green AS, et al. **Arch Environ Contam Toxicol** 1996 Jul;31(1):77-83

Bioavailability and effect of pirimicarb on Daphnia magna in a laboratory freshwater/sediment system. Kusk KO. **Arch Environ Contam Toxicol** 1996 Aug;31(2):252-5

The effects of used motor oil, silt, and the water mold Saprolegnia parasitica on the growth and survival of mole salamanders (genus Ambystoma). Lefcort H, et al. **Arch Environ Contam Toxicol** 1997 May;32(4):383-8

Salinity tolerance of Daphnia magna and potential use for estuarine sediment toxicity tests. Schuytema GS, et al. **Arch Environ Contam Toxicol** 1997 Aug;33(2):194-8

Trace metals in populations of freshwater isopods: influence of biotic and abiotic variables. van Hattum B, et al. **Arch Environ Contam Toxicol** 1996 Oct;31(3):303-18

An assessment of the tumorigenic properties of a Hudson County soil sample heavily contaminated with hexavalent chromium. Snyder CA, et al. **Arch Environ Health** 1997 May-Jun;52(3):220-6

Sulfide tolerance of four marine species used to evaluate sediment and pore-water toxicity. Knezovich JP, et al. **Bull Environ Contam Toxicol** 1996 Sep;57(3):450-7

Aluminum toxicity and nutrient utilization in the mycorrhizal fungus Hebeloma mesophacus. Kong F, et al. **Bull Environ Contam Toxicol** 1997 Jul;59(1):125-31

Rapid toxicity estimation using soil ciliates: sensitivity and bioavailability. Pratt JR, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):387-93

Influence of temperature on the toxicity of zinc to the earthworm Eisenia fetida. Spurgeon DJ, et al. **Bull Environ Contam Toxicol** 1997 Feb;58(2):283-90

Chlorinated dibenzodioxins and dibenzofurans (PCDD/F) in blood and human milk of non occupationally exposed persons living in the vicinity of a municipal waste incinerator. Deml E, et al. **Chemosphere** 1996 Nov; 33(10):1941-50

Behaviour and ecotoxicology of aluminium in soil and water--review of the scientific literature. Klöppel H, et al. **Chemosphere** 1997 Jul;35(1-2):353-63 (33 ref.)

Approach to risk assessment of chlorinated dioxins from Yusho PCB poisoning. Masuda Y. **Chemosphere** 1996 Feb; 32(3):583-94

Characterization of Lake Ladoga sediments. I. Toxicity to Chironomus riparius and Daphnia magna. Ristola T, et al. **Chemosphere** 1996 Mar;32(6):1165-78

Effects of pH on the toxicity of cadmium, copper, lead and zinc to Folsomia candida Willem, 1902 (Collembola) in a standard laboratory test system. Sandifer RD, et al. **Chemosphere** 1996 Dec;33(12):2475-86

Physiological basis in the assessment of ecotoxicity of pesticides to soil organisms. Viswanathan R. **Chemosphere** 1997 Jul;35(1-2):323-34

Metabolic degradation, inducing potency, and metabolites of fluorinated and chlorinated-fluorinated dibenzodioxins and dibenzofurans. Weber R, et al. **Chemosphere** 1997 Jan; 34(1):29-40

Selenium-induced growth reduction in Brassica land races considered for phytoremediation. Bañuelos GS, et al. **Ecotoxicol Environ Saf** 1997 Apr;36(3):282-7

Ecotoxicity hazard assessment of styrene. Cushman JR, et al. **Ecotoxicol Environ Saf** 1997 Jul;37(2):173-80

Effect of dimethoate on body growth of representatives of the soil living mesofauna. Folker-Hansen P, et al. **Ecotoxicol Environ Saf** 1996 Apr;33(3):207-16

Cytotoxicity and mutagenicity of 2,4,6-trinitrotoluene and its metabolites. Honeycutt ME, et al. **Ecotoxicol Environ Saf** 1996 Dec;35(3):282-7

Environmental quality objectives for 10 polycyclic aromatic hydrocarbons (PAHs). Kalf DF, et al. **Ecotoxicol Environ Saf** 1997 Feb;36(1):89-97 (46 ref.)

Ecological effects assessment of industrial sludge for microarthropods and decomposition in a spruce plantation. Krogh PH, et al. **Ecotoxicol Environ Saf** 1997 Mar; 36(2):162-8

PAH content and mutagenicity of marine sediments from the Venice lagoon. La Rocca C, et al. **Ecotoxicol Environ Saf** 1996 Apr;33(3):236–45

Development and testing of an assay for soil ecosystem health using the bacterial-feeding nematode Cruznema tripartitum. Lau SS, et al. **Ecotoxicol Environ Saf** 1997 Mar; 36(2):133–9

Effects of terbuthylazine on soil fauna and decomposition processes. Salminen J, et al. **Ecotoxicol Environ Saf** 1996 Jul;34(2):184–9

Effects of metal-contaminated soils on the growth, sexual development, and early cocoon production of the earthworm Eisenia fetida, with particular reference to zinc. Spurgeon DJ, et al. **Ecotoxicol Environ Saf** 1996 Oct; 35(1):86–95

Relevance and applicability of a simple earthworm biomarker of copper exposure. I. Links to ecological effects in a laboratory study with Eisenia andrei. Svendsen C, et al. **Ecotoxicol Environ Saf** 1997 Feb;36(1):72–9

Relevance and applicability of a simple earthworm biomarker of copper exposure. II. Validation and applicability under field conditions in a mesocosm experiment with Lumbricus rubellus. Svendsen C, et al. **Ecotoxicol Environ Saf** 1997 Feb;36(1):80–8

Toxicity of increased amounts of chemicals and the dose-response curves for heterogeneous microbial populations in soil. Welp G, et al. **Ecotoxicol Environ Saf** 1997 Jun;37(1):37–44

Toxicity of acid-sulfate soil leachate and aluminum to embryos of the Sydney Rock oyster. Wilson SP, et al. **Ecotoxicol Environ Saf** 1997 Jun;37(1):30–6

Enzyme induction and acute endocrine effects in prepubertal female rats receiving environmental PCB/PCDF/PCDD mixtures. Li MH, et al. **Environ Health Perspect** 1996 Jul; 104(7):712–22

Bioavailability of arsenic in soil and house dust impacted by smelter activities following oral administration in cynomolgus monkeys. Freeman GB, et al. **Fundam Appl Toxicol** 1995 Dec;28(2):215–22

Effect of heavy metals on soil denitrification and CO2 production after short term incubation. Probanza A, et al. **Microbiologia** 1996 Sep;12(3):417–24

Hexavalent chromium-contaminated soils: options for risk assessment and risk management. Felter SP, et al. **Regul Toxicol Pharmacol** 1997 Feb;25(1):43–59 (65 ref.)

Estimating relative potency for receptor-mediated toxicity: reevaluating the toxicity equivalence factor (TEF) model. Putzrath RM. **Regul Toxicol Pharmacol** 1997 Feb; 25(1):68–78 (45 ref.)

Health risk assessment of an industrial site contaminated with polycyclic aromatic hydrocarbons using CalTOX, an environmental fate/exposure model. Loranger S, et al. **SAR QSAR Environ Res** 1997;6(1–2):81–104

[Effects of heavy metals on snail development. Use of snails as bio-indicators of heavy metal pollution for the preservation of human health] Gomot A. **Bull Acad Natl Med** 1997 Jan;181(1):59–74; discussion 74–5 (Eng. Abstr.) **(Fre)**

[Heavy metals in the soil-plant-man system (review)] Mudryĭ IV. **Gig Sanit** 1997 Jan–Feb;(1):14–7 (23 ref.) **(Rus)**

[Procedure of biological indication of soil mutagens] Nechkina MA, et al. **Gig Sanit** 1997 Jan–Feb;(1):48–9 **(Rus)**

SOIL POLLUTANTS, RADIOACTIVE

Characterization and solubility measurements of uranium-contaminated soils to support risk assessment. Elless MP, et al. **Health Phys** 1997 May;72(5):716–26

Variation in transfer factors for stochastic models: soil-to-plant transfer. Sheppard SC, et al. **Health Phys** 1997 May;72(5):727–33

Sorption/desorption of radioactive contaminants by sediment from the Kara Sea. Fuhrmann M, et al. **Sci Total Environ** 1997 Aug 25;202(1–3):5–24

[The quantitative parameters of the vertical migration of radionuclides in the soils in different types of meadows] Sanzharova NI, et al. **Radiats Biol Radioecol** 1996 Jul–Aug; 36(4):488–97 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Computerization of the research into radionuclide dynamics in the forest ecosystems contaminated as a result of the Chernobyl accident (1986–1995)] Mamikhin SV, et al. **Radiats Biol Radioecol** 1996 Jul–Aug;36(4):516–23 (Eng. Abstr.) **(Rus)**

ANALYSIS

Comparison of in situ and laboratory gamma spectroscopy of natural radionuclides in desert soil. Benke RR, et al. **Health Phys** 1997 Aug;73(2):350–61

Plutonium distribution in the environs of Rocky Flats [letter; comment] Beyea J, et al. **Health Phys** 1997 Jul;73(1):271–2 . Comment on: Health Phys 1996 Nov;71(5):796–7.

Data quality objectives for surface-soil cleanup operation using in situ gamma spectrometry for concentration measurements. Fong SH, et al. **Health Phys** 1997 Feb; 72(2):286–95

In-situ measurements of 137Cs in soil by unfolding method. Fülöp M, et al. **Health Phys** 1997 Jun;72(6):923–30

Plutonium in the environs of the former Rocky Flats Plant [letter] [see comments] Hardy EP, et al. **Health Phys** 1996 Nov;71(5):796–7. Comment in: Health Phys 1997 Jul;73(1):271–2.

Contributions of Rocky Flats releases to the total plutonium in regional soils. Ibrahim SA, et al. **Health Phys** 1997 Jan; 72(1):42–8

Study of 222Rn permeation through polymer membranes II: calibration curves of a new device equipped with a polyethylene membrane, for continuous measurement of 222Rn in water-saturated soils. Labed V, et al. **Health Phys** 1997 May;72(5):762–5

137Cs content in the fruit bodies of various Tuber species. Lorenzelli R, et al. **Health Phys** 1996 Dec;71(6):956–9

Plutonium release from the 903 pad at Rocky Flats. Mongan TR, et al. **Health Phys** 1996 Oct;71(4):522–31

An estimate by two methods of thyroid absorbed doses due to BRAVO fallout in several Northern Marshall Islands. Musolino SV, et al. **Health Phys** 1997 Oct;73(4):651–62

Modeling the resuspension of radionuclides in Ukrainian regions impacted by Chernobyl fallout. Nair SK, et al. **Health Phys** 1997 Jan;72(1):77–85

Resuspension studies in the Marshall Islands. Shinn JH, et al. **Health Phys** 1997 Jul;73(1):248–57

Reconstruction of doses and deposition in the western trace from the Chernobyl accident. Sikkeland T, et al. **Health Phys** 1997 May;72(5):750–8

The feasibility of using 129I to reconstruct 131I deposition from the Chernobyl reactor accident. Straume T, et al. **Health Phys** 1996 Nov;71(5):733–40

Survey of the 137Cs contamination in Belgium by in-situ gamma spectrometry, a decade after the Chernobyl accident. Uyttenhove J, et al. **Health Phys** 1997 Oct; 73(4):644–6

The ecosystem study on Rongelap Atoll. Walker RB, et al. **Health Phys** 1997 Jul;73(1):223–33

A three-dimensional spatial model of plutonium in soil near Rocky Flats, Colorado. Webb SB, et al. **Health Phys** 1997 Aug;73(2):340–9

Association of fallout radiocesium with soil constituents: effect of sterilization of forest soils by fumigation with chloroform. Baumann A, et al. **Radiat Environ Biophys** 1996 Aug;35(3):229–33

137Cs mobility in soils and its long-term effect on the external radiation exposure. Bunzl K, et al. **Radiat Environ Biophys** 1997 Feb;36(1):31–7

Thyroid dose reconstruction for the population of Belarus after the Chernobyl accident. Drozdovitch VV, et al. **Radiat Environ Biophys** 1997 Feb;36(1):17–23

In situ gamma-spectrometry several years after deposition of radiocesium. Part I. Approximation of depth distributions by the Lorentz function. Hillmann U, et al. **Radiat Environ Biophys** 1996 Nov;35(4):297–303

Mobility of Chernobyl-derived 137Cs in a peatbog system within the catchment of the Pripyat River, Belarus [published erratum appears in Sci Total Environ 1996 Dec 13;193(1):75] Kudelsky AV, et al. **Sci Total Environ** 1996 Oct 11;188(2–3):101–13

Transfer of radiocaesium in sensitive agricultural environments after the Chernobyl fallout in Sweden. I. County of Gavleborg. Rosen K, et al. **Sci Total Environ** 1996 Apr 5;182(1–3):117–33

Transfer of radiocaesium in sensitive agricultural environments after the Chernobyl fallout in Sweden. II. Marginal and semi-natural areas in the county of Jamtland. Rosen K. **Sci Total Environ** 1996 Apr 5;182(1–3):135–45

The history and source of particulate 137Cs and 239,240Pu deposition in sediments of the Ob River Delta, Siberia. Sayles FL, et al. **Sci Total Environ** 1997 Aug 25; 202(1–3):25–41

137Cs-migration in soils and its transfer to roe deer in an Austrian forest stand. Strebl F, et al. **Sci Total Environ** 1996 Mar 29;181(3):237–47

[An estimation of the half-life periods of 137Cs content in the root-inhabited soil layer of meadow ecosystems] Fesenko SV, et al. **Radiats Biol Radioecol** 1997 Mar–Apr; 37(2):267–80 (Eng. Abstr.) **(Rus)**

METABOLISM

Vertical migration of Chernobyl-derived radiocesium in Bavarian grassland soils. Schimmack W, et al. **Naturwissenschaften** 1997 May;84(5):204–7

Absorption of radiocaesium by sheep after ingestion of contaminated soils. Cooke AI, et al. **Sci Total Environ** 1996 Nov 29;192(1):21–9

Factors affecting the transfer of radiocaesium from soil to roe deer in forest ecosystems of southern Germany. Kiefer P, et al. **Sci Total Environ** 1996 Nov 29;192(1):49–61

PHARMACOKINETICS

137Cs-migration in soils and its transfer to roe deer in an Austrian forest stand. Strebl F, et al. **Sci Total Environ** 1996 Mar 29;181(3):237–47

[137Cs accumulation by grasses from peat soil under increasing amounts of potassium and nitrogen fertilizers] Drichko VF, et al. **Radiats Biol Radioecol** 1996 Jul–Aug; 36(4):524–30 (Eng. Abstr.) **(Rus)**

[Modelling of the biological availability of 137Cs in soils subjected to contamination after the accident at the Chernobyl Atomic Electric Power Station] Fesenko SV, et al. **Radiats Biol Radioecol** 1996 Jul–Aug;36(4):479–87 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

[The effect of long-acting radiation on the diversity of heterotrophic bacteria in the soils of a 10-kilometer area around the Chernobyl Atomic Electric Power Station] Romanovskaia VA, et al. **Mikrobiol Z** 1996 Sep–Oct; 58(5):3–12 (Eng. Abstr.) **(Rus)**

SOLANACEOUS ALKALOIDS

see related
PARASYMPATHOLYTICS

ADMINISTRATION & DOSAGE

[Solanum dulcamara L.—a "plant cortisone"?] Niedner R. **Med Monatsschr Pharm** 1996 Nov;19(11):339–40 **(Ger)**

ADVERSE EFFECTS

Natural inhibitors of cholinesterases: implications for adverse drug reactions. Krasowski MD, et al. **Can J Anaesth** 1997 May;44(5 Pt 1):525–34 (69 ref.)

ANALYSIS

A simple determination of steroidal alkaloid glycosides by thin-layer chromatography immunostaining using monoclonal antibody against solamargine. Tanaka H, et al. **FEBS Lett** 1997 Mar 10;404(2–3):279–82

Glycoalkaloid content of potatoes sold in Czechia. Panovská Z, et al. **Nahrung** 1997 Jun;41(3):146–9

ISOLATION & PURIFICATION

Bioactive steroidal alkaloids from Solanum umbelliferum. Kim YC, et al. **J Nat Prod** 1996 Mar;59(3):283–5

PHARMACOLOGY

Bioactive saponins from solanaceous and leguminous plants. Nohara T, et al. **Adv Exp Med Biol** 1996;404:263–76 (22 ref.)

Solamargine purified from Solanum incanum Chinese herb triggers gene expression of human TNFR I which may lead to cell apoptosis. Hsu SH, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):1–5

The effect of anisodamine on cerebral resuscitation of rats in acute cerebral ischemia from cardiac arrest. Peng X, et al. **Chin Med Sci J** 1995 Dec;10(4):237–9

POISONING

Cerebellar degeneration in goats grazing Solanum cinereum (Narrawa burr). Bourke CA. **Aust Vet J** 1997 May; 75(5):363–5

Anticholinergic toxicity from nightshade berry poisoning responsive to physostigmine. Ceha LJ, et al. **J Emerg Med** 1997 Jan–Feb;15(1):65–9

THERAPEUTIC USE

Anisodamine restores bowel circulation in burn shock. Sheng CY, et al. **Burns** 1997 Mar;23(2):142–6

The beneficial effects of anisodamine for CyA hepatotoxicity in the rat and in renal-transplant recipients. Wang X, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):286–7

[An experimental study on the treatment of fetal rabbits with intrauterine growth retardation] Zhang X, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Feb;31(2):97–9 (Eng. Abstr.) **(Chi)**

TOXICITY

Induction of terata in hamsters by solanidane alkaloids derived from Solanum tuberosum. Gaffield W, et al. **Chem Res Toxicol** 1996 Mar;9(2):426–33

SOLANINE

ANALOGS & DERIVATIVES

Inhibition of human plasma and serum butyrylcholinesterase (EC 3.1.1.8) by alpha-chaconine and alpha-solanine. Nigg HN, et al. **Fundam Appl Toxicol** 1996 Oct;33(2):272–81

Liquid chromatographic determination of the glycoalkaloids alpha-solanine and alpha-chaconine in potato tubers: NMKL Interlaboratory Study. Nordic Committee on Food Analysis. Hellenäs KE, et al. **J AOAC Int** 1997 May–Jun; 80(3):549–54

ANALYSIS

Liquid chromatographic determination of the glycoalkaloids alpha-solanine and alpha-chaconine in potato tubers: NMKL Interlaboratory Study. Nordic Committee on Food Analysis. Hellenäs KE, et al. **J AOAC Int** 1997 May–Jun; 80(3):549–54

PHARMACOLOGY

Inhibition of human plasma and serum butyrylcholinesterase (EC 3.1.1.8) by alpha-chaconine and alpha-solanine. Nigg HN, et al. **Fundam Appl Toxicol** 1996 Oct;33(2):272–81

SOLANUM ALKALOIDS see **SOLANACEOUS ALKALOIDS**

SOLANUM TUBEROSUM

SOLANUM TUBEROSUM see **POTATOES**

SOLAR ACTIVITY

Lunisolar tidal waves, geomagnetic activity and epilepsy in the light of multivariate coherence. Mikulecky M, et al. **Braz J Med Biol Res** 1996 Aug;29(8):1069–72

[The multiyear changes in the epidemic activity of the foci of zoonotic cutaneous leishmaniasis at the Murgab oasis. I. An analysis of the relations of morbidity to heliogeophysical factors] Neronov VV, et al. **Med Parazitol (Mosk)** 1996 Jul–Sep;(3):3–7 (Eng. Abstr.) **(Rus)**

SOLAR AGING OF SKIN see **SKIN AGING**

SOLAR ENERGY

Solar energy and rural health care. **Indian Pediatr** 1996 Oct; 33(10):883–5

Adequacy of solar energy to keep babies warm. Daga SR, et al. **Indian Pediatr** 1996 Feb;33(2):102–4

[The relationship of the indices of solar–geomagnetic activity and the autofluctuations in the biological properties of Staphylococcus aureus 209 subcultures in vitro] Polikarpov NA. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb; (1):27–30 (Eng. Abstr.) **(Rus)**

SOLAR FLARES see **SOLAR ACTIVITY**

SOLAR PARTICLE EVENTS see **SOLAR ACTIVITY**

SOLAR PLEXUS see **CELIAC PLEXUS**

SOLAR SYSTEM

Backup compass mechanisms in pigeon orientation with the sun in the zenith. Ranvaud RD, et al. **Braz J Med Biol Res** 1996 Oct;29(10):1341–7

Space proton flux and the temporal distribution of cardiovascular deaths. Stoupel E, et al. **Int J Biometeorol** 1997 Apr;40(2):113–6

Hippocampal participation in the sun compass orientation of phase-shifted homing pigeons. Bingman VP, et al. **J Comp Physiol [A]** 1996 Nov;179(5):695–702

Origins of life. A left-handed solar system? [news; comment] Chyba CF. **Nature** 1997 Sep 18;389(6648):234–5. Comment on: Nature 1997 Sep 18;389(6648):265–8.

Solar system. Pipelines to the planets [news; comment] Hunten DM. **Nature** 1997 Sep 11;389(6647):125–6. Comment on: Nature 1997 Sep 11;389(6647):159–62.

The early solar system. Gaffey MJ. **Orig Life Evol Biosph** 1997 Jun;27(1–3):185–203 (39 ref.)

Analogs of the early solar system. Koerner DW. **Orig Life Evol Biosph** 1997 Jun;27(1–3):157–84 (178 ref.)

Physics and chemistry of the solar nebula. Lunine JI. **Orig Life Evol Biosph** 1997 Jun;27(1–3):205–24 (46 ref.)

Living and working in the sun: a symposium held as part of the XVIth International Pigment Cell Conference. Cochran AJ, et al. **Pigment Cell Res** 1997 Feb–Apr; 10(1–2):74–6

Solar radiation and human health. **West Indian Med J** 1996 Dec;45(4):129–30

SOLCOSERYL see **ACTIHAEMYL**

SOLE see **FLATFISHES**

SOLEUS MUSCLE see **MUSCLE, SKELETAL**

SOLITARY CYSTS see **BONE CYSTS**

SOLITARY NUCLEUS

ANATOMY & HISTOLOGY

Mapping of carotid baroreceptor subtype projections to the nucleus tractus solitarius using c–fos immunohistochemistry. Dean C, et al. **Brain Res** 1997 May 30;758(1–2):201–8

Immunohistochemical localization of neuropeptides and neurotransmitters in the nucleus solitarius. Maley BE. **Chem Senses** 1996 Jun;21(3):367–76 (67 ref.)

Monosynaptic projections from the nucleus tractus solitarii to C1 adrenergic neurons in the rostral ventrolateral medulla: comparison with input from the caudal ventrolateral medulla. Aicher SA, et al. **J Comp Neurol** 1996 Sep 9;373(1):62–75

Organization of excitatory and inhibitory local networks in the caudal nucleus of tractus solitarius of rats revealed in in vitro slice preparation. Kawai Y, et al. **J Comp Neurol** 1996 Sep 23;373(3):309–21

GABAergic neurons in rat nuclei of solitary tracts receive inhibitory-type synapses from amygdaloid efferents lacking detectable GABA-immunoreactivity. Pickel VM, et al. **J Neurosci Res** 1996 Jun 1;44(5):446–58

Contralateral projections of barosensitive neurons of the nucleus tractus solitarii. Ezure K, et al. **Neurosci Lett** 1996 Nov 15;219(1):37–40

Anatomical evidence for a bi-neuronal pathway connecting the nucleus tractus solitarius to caudal ventrolateral medulla to rostral ventrolateral medulla in the rat. Yu D, et al. **Neurosci Lett** 1996 Feb 16;205(1):21–4

CHEMISTRY

CREB phosphorylation in the nucleus of the solitary tract and parabrachial nucleus is not altered by peripheral cholecystokinin that induces c–Fos. Houpt TA. **Brain Res** 1997 Mar 14;751(1):143–7

Distribution of GABA and glycine in the lamb nucleus of the solitary tract. Sweazey RD. **Brain Res** 1996 Oct 21; 737(1–2):275–86

Demonstration of glutamate immunoreactivity in vagal sensory afferents in the nucleus tractus solitarius of the rat. Sykes RM, et al. **Brain Res** 1997 Jul 11;762(1–2):1–11

The endothelin ETA receptor exists in the caudal solitary tract nucleus of the rat brain. Shibata S, et al. **Cell Mol Neurobiol** 1997 Feb;17(1):151–6

Activation of purinergic receptor subtypes in the nucleus tractus solitarius elicits specific regional vascular response patterns. Barraco RA, et al. **J Auton Nerv Syst** 1996 Jul 5;59(3):113–24

Immunolabeling of Mu opioid receptors in the rat nucleus of the solitary tract: extrasynaptic plasmalemmal localization and association with Leu5-enkephalin. Cheng PY, et al. **J Comp Neurol** 1996 Aug 5;371(4):522–36

The effects of 5'-N-ethylcarboxamidoadenosine on evoked release of [3H]serotonin in the rat nucleus tractus solitarius. Helfman CC, et al. **Neurosci Lett** 1996 Jul 26;213(1):61–5

GABAergic synapses upon neurons expressing substance P receptors in the nucleus of the solitary tract: an immunocytochemical electron microscope study in the rat. Jia HG, et al. **Neurosci Lett** 1996 May 24;210(1):49–52

Distribution of glucagon-like peptide-1 and other preproglucagon-derived peptides in the rat hypothalamus and brainstem. Larsen PJ, et al. **Neuroscience** 1997 Mar; 77(1):257–70

CYTOLOGY

Transfer of information about taste from the nucleus of the solitary tract to the parabrachial nucleus of the pons. Di Lorenzo PM, et al. **Brain Res** 1997 Jul 25;763(2):167–81

Demonstration of a bilateral projection from the rostral nucleus of the solitary tract to the medial parabrachial nucleus in rat. Williams JB, et al. **Brain Res** 1996 Oct 21; 737(1–2):231–7

Medullary respiratory neuronal activity modulated by stimulation of the fastigial nucleus of the cerebellum. Xu F, et al. **Brain Res** 1995 Dec 24;705(1–2):53–64

Direct synaptic projections to esophageal motoneurons in the nucleus ambiguus from the nucleus of the solitary tract of the rat. Hayakawa T, et al. **J Comp Neurol** 1997 Apr 28;381(1):18–30

Anterior and posterior oral cavity responsive neurons are differentially distributed among parabrachial subnuclei in rat. Halsell CB, et al. **J Neurophysiol** 1997 Aug;78(2):920–38

In vivo effects of 5-hydroxytryptamine receptor activation on rat nucleus tractus solitarius neurones excited by vagal C-fibre afferents. Wang Y, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):489–98

Pump neurons of the nucleus of the solitary tract project widely to the medulla. Ezure K, et al. **Neurosci Lett** 1996 Sep 6;215(2):123–6

The sites of origin and termination of afferent and efferent components in the lingual and pharyngeal branches of the glossopharyngeal nerve in the Japanese monkey (Macaca fuscata). Satoda T, et al. **Neurosci Res** 1996 Mar; 24(4):385–92

Neurons in rostral ventrolateral medulla mediate vestibular inhibition of locus coeruleus in rats. Nishiike S, et al. **Neuroscience** 1997 Mar;77(1):219–32

[The spatial organization of the hypothalamic neurons that project into the "stomach" area of the vagosolitary complex] Pluzhnichenko EB. **Morfologiia** 1996;110(5):34–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

5-HT in DVC: disparate effects on TRH analogue-stimulated gastric acid secretion, motility, and cytoprotection. Chi J, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R368–72

Medullary pathways mediating depressor responses from Na(+)-sensitive sites in nucleus of the solitary tract. Hochstenbach SL, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R126–33

c–Fos induction in the nucleus of the solitary tract of sodium-depleted rats by salt intake, peripheral bombesin, and the combination. Frankmann SP, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:292–4

Inhibition of glycine currents by dextromethorphan in neurones dissociated from the guinea-pig nucleus tractus solitarii. Takahama K, et al. **Br J Pharmacol** 1997 Feb; 120(4):690–4

The increased satiating potency of CCK-8 by estradiol is not mediated by upregulation of NTS CCK receptors. Geary N, et al. **Brain Res** 1996 May 6;719(1–2):179–86

Cerebral extracellular lactate concentration and blood flow during chemical stimulation of the nucleus tractus solitarii in anesthetized rats. Ikegami Y, et al. **Brain Res** 1997 May 30;758(1–2):33–8

Actions of S-nitrosocysteine in the nucleus tractus solitarii are unrelated to release of nitric oxide. Ohta H, et al. **Brain Res** 1997 Jan 23;746(1–2):98–104

Lack of effect of age on the cardiovascular response to neuropeptide Y injection in the rat nucleus tractus solitarius. Morris MJ, et al. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):162–5

Developmental study of N-methyl-D-aspartate-induced firing activity and whole-cell currents in nucleus tractus solitarii neurons. Vincent A, et al. **Eur J Neurosci** 1996 Dec;8(12):2748–52

Neuronal responses to delta 9-tetrahydrocannabinol in the solitary tract nucleus. Himmi T, et al. **Eur J Pharmacol** 1996 Oct 3;312(3):273–9

Regional differentiation of blood flow responses to microinjection of sodium nitroprusside into the nucleus tractus solitarius of anesthetized rats. Inoue M, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):172–8

Activation of P2x-purinoceptors in the nucleus tractus solitarius elicits differential inhibition of lumbar and renal sympathetic nerve activity. Scislo TJ, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):103–10

Glutamate receptor antagonists block gustatory afferent input to the nucleus of the solitary tract. Li CS, et al. **J Neurophysiol** 1997 Mar;77(3):1514–25

Responses of gustatory cells in the nucleus of the solitary tract of the hamster after NaCl or amiloride adaptation. Smith DV, et al. **J Neurophysiol** 1996 Jul;76(1):47–58

Chronic morphine treatment of guinea pigs induces nonspecific sensitivity changes in the nucleus tractus solitarius in vitro. Malanga CJ, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):16–23

Influences of excitatory amino acid receptor agonists on nucleus of the solitary tract neurons receiving aortic depressor nerve inputs. Zhang J, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):639–47

Involvement of nitric oxide in cardiorespiratory regulation in the nucleus tractus solitarii. Vitagliano S, et al. **Neuropharmacology** 1996 May;35(5):625–31

Substance P modulates taste responses in the nucleus of the solitary tract of the hamster. Davis BJ, et al. **Neuroreport** 1997 May 6;8(7):1723–7

Medullary pathways of cardiovascular responses to 5-HT2 and 5-HT3 receptor stimulation in the rat nucleus tractus solitarius. Sévoz C, et al. **Neuroreport** 1996 Aug 12; 7(12):1965–9

The non-peptide neuropeptide Y Y1 receptor antagonist BIBP3226 blocks the [Leu31,Pro34]neuropeptide Y-induced modulation of alpha 2-adrenoceptors in the nucleus tractus solitarii of the rat. Yang SN, et al. **Neuroreport** 1996 Nov 4;7(15–17):2701–5

Morphine microinjected into the nucleus tractus solitarius and rostral ventrolateral medullary nucleus enhances somatosympathetic A– and C– reflexes in anesthetized rats. Li WM, et al. **Neurosci Lett** 1996 Dec 27;221(1):53–6

Nitric oxide modulates in vitro intrinsic optical signal and neural activity in the nucleus tractus solitarius of the rat. Torres JE, et al. **Neurosci Lett** 1997 Sep 5;232(3):175–8

Spinal cord lactate concentration during chemical stimulation of the nucleus tractus solitarii in anesthetized rats. Ikegami Y, et al. **Neurosci Res** 1996 Mar;24(4):319–27

Spinal cord blood flow decreases following microinjection of sodium nitroprusside into the nucleus tractus solitarii of anesthetized rats. Takao S, et al. **Neurosci Res** 1996 Jul; 25(3):285–91

Central c–Fos expression in neonatal and adult rats after subcutaneous injection of hypertonic saline. Rinaman L, et al. **Neuroscience** 1997 Aug;79(4):1165–75

Effect of sinus denervation and vagotomy on c–fos expression in the nucleus tractus solitarius after exposure to CO2 Jansen AH, et al. **Pflugers Arch** 1996 Apr;431(6):876–81

Effect of insulin and clonidine on the evoked release of norepinephrine and serotonin from the nucleus tractus solitarius of the diabetic rat. Dunbar JC, et al. **Pharmacology** 1995 Dec;51(6):370–80

c–Fos induction in the rat nucleus of the solitary tract by intraoral quinine infusion depends on prior contingent pairing of quinine and lithium chloride. Houpt TA, et al. **Physiol Behav** 1996 Dec;60(6):1535–41

Enhanced water intake after asymmetric hindbrain lesions. Wang T, et al. **Physiol Behav** 1996 Sep;60(3):733–9

ENZYMOLOGY

Plasticity of tyrosine hydroxylase gene expression in the rat nucleus tractus solitarius after ventilatory acclimatization to hypoxia. Dumas S, et al. **Brain Res Mol Brain Res** 1996 Sep 1;40(2):188–94

Nitric oxide synthesising neurons in the central subnucleus of the nucleus tractus solitarius in humans. Gai WP, et al. **Neurosci Lett** 1996 Feb 9;204(3):189–92

GROWTH & DEVELOPMENT

Postnatal ontogeny of glutamate receptors in the rat nucleus tractus solitarii and ventrolateral medulla. Rao H, et al. **J Auton Nerv Syst** 1997 Jul 14;65(1):25–32

METABOLISM

Gastric distension-induced c–fos expression in catecholaminergic neurons of rat dorsal vagal complex. Willing AE, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R59–67

c–Fos induction in the nucleus of the solitary tract of sodium-depleted rats by salt intake, peripheral bombesin, and the combination. Frankmann SP, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:292–4

Mechanism of inhibition of calcium channels in rat nucleus tractus solitarius by neurotransmitters. Rhim H, et al.

Br J Pharmacol 1996 Jul;118(6):1341–50

Immunocytochemical localisation of NK3 receptors in the dorsal vagal complex of rat. Carpentier C, et al. **Brain Res** 1996 Sep 23;734(1–2):327–31

Subdiaphragmatic vagotomy does not attenuate c-Fos induction in the nucleus of the solitary tract after conditioned taste aversion expression. Houpt TA, et al. **Brain Res** 1997 Jan 30;747(1):85–91

Immunohistochemical localization of neuropeptides and neurotransmitters in the nucleus solitarius. Maley BE. **Chem Senses** 1996 Jun;21(3):367–76 (67 ref.)

Altered basal release and depressor effect of L-DOPA in the nucleus tractus solitarii of spontaneously hypertensive rats. Misu Y, et al. **Clin Exp Pharmacol Physiol Suppl** 1995; 1:S34–6

Curtailed respiration by repeated vs. isolated hypoxia in maturing piglets is unrelated to NTS ME or SP levels. Waters KA, et al. **J Appl Physiol** 1997 Aug;83(2):522–9

Distribution of bombesin-like immunoreactivity in the nucleus of the solitary tract and dorsal motor nucleus of the rat and human: colocalization with tyrosine hydroxylase. Lynn RB, et al. **J Comp Neurol** 1996 Jun 10; 369(4):552–70

c-fos expression in the parabrachial nucleus following cardiovascular and blood volume changes. Rocha MJ, et al. **J Hirnforsch** 1996;37(3):389–97

In vivo effects of 5-hydroxytryptamine receptor activation on rat nucleus tractus solitarius neurones excited by vagal C-fibre afferents. Wang Y, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):489–98

Inhibition of stimulated cyclic AMP production by multiple neuropeptide Y receptors in the rat brainstem. Ny L, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):113–6

Alterations in the central nervous alpha 2-adrenoceptor system under chronic psychosocial stress. Flügge G. **Neuroscience** 1996 Nov;75(1):187–96

Release of glutamate in the nucleus tractus solitarii in response to baroreflex activation in rats. Ohta H, et al. **Neuroscience** 1996 Sep;74(1):29–37

Glutamate immunoreactivity of insular cortex afferents to the nucleus tractus solitarius in the rat: a quantitative electron microscopic study. Torrealba F, et al. **Neuroscience** 1996 Mar;71(1):77–87

Increased potency of neuropeptide Y to antagonize alpha2-adrenoceptor function in the nucleus tractus solitarii of the spontaneously hypertensive rat. Yang SN, et al. **Neuroscience** 1997 Jun;78(3):803–13

PATHOLOGY

Reaction of the paraventricular nucleus of the hypothalamus and the dorsal nucleus of the vagus of rats to change in the gravitational environment. Fidelina OV, et al. **Neurosci Behav Physiol** 1996 Sep–Dec;26(5):387–91

PHYSIOLOGY

Carotid chemoreflex. Neural pathways and transmitters. Sapru HN. **Adv Exp Med Biol** 1996;410:357–64 (22 ref.)

Cardiovascular effects of microinjection of low doses of serotonin into the NTS of unanesthetized rats. Callera JC, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1135–42

5-HT in DVC: disparate effects on TRH analogue-stimulated gastric acid secretion, motility, and cytoprotection. Chi J, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):R368–72

Acute depressor actions of angiotensin II in the nucleus of the solitary tract are mediated by substance P. Diz DI, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R28–34

Vasopressin and V1-receptor antagonists modulate the activity of NTS neurons receiving baroreceptor input. Hegarty AA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R143–52

Influence of circulating angiotensin II and vasopressin on neurons of the nucleus of the solitary tract. Hegarty AA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R675–81

Medullary pathways mediating depressor responses from Na(+)-sensitive sites in nucleus of the solitary tract. Hochstenbach SL, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R126–33

Opioids in the nucleus of the solitary tract are involved in feeding in the rat. Kotz CM, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1028–32

Convergent carotid sinus nerve and superior laryngeal nerve afferent inputs to neurons in the NTS. Mifflin SW. **Am J Physiol** 1996 Oct;271(4 Pt 2):R870–80

Neuroanatomic organization of the parasympathetic bronchomotor system in developing sheep. Pérez Fontán JJ, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R121–33

Administration of AVP to the area postrema alters response of NTS neurons to afferent inputs. Qu L, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):R519–25

Influence of GABAergic mechanisms on baroreceptor inputs to nucleus tractus solitarii of rats. Ruggeri P, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):H931–6

The kidneys stimulate vasopressin release during hemorrhage in rats with chronic NTS lesions. Schreihofer AM, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1540–51

Role of serotonin3 receptors in the nucleus tractus solitarii on the carotid chemoreflex. Sévoz C, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1250–9

Possible nicotinic receptor-mediated modulation of synaptic transmission in nucleus of the solitary tract. Shiraki T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R869–73

Interactions between sympathetic and vagal cardiac afferents in nucleus tractus solitarii. Tjen-A-Looi S, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2843–51

Three types of postsynaptic glutamatergic receptors are activated in DMNX neurons upon stimulation of NTS. Willis A, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):R1614–9

Substance P in the dorsal vagal complex inhibits medullary TRH-induced gastric acid secretion in rats. Yang H, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G987–93

Brainstem lesions and gustatory function: II. The role of the nucleus of the solitary tract in Na+ appetite, conditioned taste aversion, and conditioned odor aversion in rats. Grigson PS, et al. **Behav Neurosci** 1997 Feb;111(1):169–79

Brainstem lesions and gustatory function: III. The role of the nucleus of the solitary tract and the parabrachial nucleus in retention of a conditioned taste aversion in rats. Grigson PS, et al. **Behav Neurosci** 1997 Feb;111(1):180–7

Brainstem lesions and gustatory function: I. The role of the nucleus of the solitary tract during a brief intake test in rats. Shimura T, et al. **Behav Neurosci** 1997 Feb; 111(1):155–68

Functional characterization of adenosine receptors in the nucleus tractus solitarius mediating hypotensive responses in the rat. White PJ, et al. **Br J Pharmacol** 1996 Jan; 117(2):305–8

Augmented release of serotonin by adenosine A2a receptor activation and desensitization by CGS 21680 in the rat nucleus tractus solitarius. Barraco RA, et al. **Brain Res** 1996 Sep 16;733(2):155–61

Synaptic connections and interactions between area postrema and nucleus tractus solitarius. Cai Y, et al. **Brain Res** 1996 Jun 10;724(1):121–4

Cardiovascular effects produced by bradykinin microinjection into the nucleus tractus solitarii of anesthetized rats. Caligiorne SM, et al. **Brain Res** 1996 May 13;720(1–2):183–90

Immunocytochemical localisation of NK3 receptors in the dorsal vagal complex of rat. Carpentier C, et al. **Brain Res** 1996 Sep 23;734(1–2):327–31

Neurotransmission of the Bezold-Jarisch reflex in the nucleus tractus solitarii of sino-aortic deafferentated rats. Chianca DA Jr, et al. **Brain Res** 1997 May 9;756(1–2):46–51

Microinjection of NMDA antagonist into the NTS of conscious rats blocks the Bezold-Jarisch reflex. Chianca DA Jr, et al. **Brain Res** 1996 Apr 29;718(1–2):185–8

Cardiovascular effects of neurotensin microinjections into the nucleus of the solitary tract. Ciriello J, et al. **Brain Res** 1997 Feb 21;749(1):35–43

Direct projections to subfornical organ from catecholaminergic neurons in the caudal nucleus of the solitary tract. Ciriello J, et al. **Brain Res** 1996 Jul 8; 726(1–2):227–32

NMDA receptor antagonist blocks the bradycardic but not the pressor response to L-glutamate microinjected into the nucleus tractus solitarius (NTS) of unanesthetized rats. Colombari E, et al. **Brain Res** 1997 Feb 28;749(2):209–13

Transfer of information about taste from the nucleus of the solitary tract to the parabrachial nucleus of the pons. Di Lorenzo PM, et al. **Brain Res** 1997 Jul 25;763(2):167–81

Elevated hypothalamic neuropeptide Y levels in rats with dorsomedial hindbrain lesions. Edwards GL, et al. **Brain Res** 1997 Apr 25;755(1):84–90

Periaqueductal gray matter projection to vagal preganglionic neurons and the nucleus tractus solitarius. Farkas E, et al. **Brain Res** 1997 Aug 1;764(1–2):257–61

Cardiovascular effects of Leu-enkephalin in the nucleus tractus solitarius of the rat. Feldman PD, et al. **Brain Res** 1996 Feb 19;709(2):331–36

Synaptic contacts of substance P-immunoreactive axon terminals in the nucleus tractus solitarius onto neurons projecting to the caudal ventrolateral medulla oblongata in the rat. Kawano H, et al. **Brain Res** 1997 Apr 18; 754(1–2):315–20

Commissural nucleus of the solitary tract lesions reduce food intake and body weight gain in rats. Menani JV, et al. **Brain Res** 1996 Nov 18;740(1–2):102–8

Vestibular afferents to the dorsal vagal complex: substrate for vestibular-autonomic interactions in the rat. Ruggiero DA, et al. **Brain Res** 1996 Dec 16;743(1–2):294–302

Participation of Fos protein at the nucleus tractus solitarius in inhibitory modulation of baroreceptor reflex response in the rat. Shih CD, et al. **Brain Res** 1996 Oct 28; 738(1):39–47

Localization of neuronal nitric oxide synthase-immunoreactivity within sub-populations of noradrenergic A1 and A2 neurons in the rat. Simonian SX, et al. **Brain Res** 1996 Sep 2;732(1–2):247–52

Intracerebroventricular CRF inhibits cold restraint-induced c-fos expression in the dorsal motor nucleus of the vagus and gastric erosions in rats. Wang L, et al. **Brain Res** 1996 Oct 14;736(1–2):44–53

Localization of GABAA alpha 1 mRNA subunit in the brainstem nuclei controlling esophageal peristalsis. Broussard DL, et al. **Brain Res Mol Brain Res** 1996 Aug; 40(1):143–7

Glutamatergic transmission in the nucleus tractus solitarii: from server to peripherals in the cardiovascular information superhighway. Talman WT. **Braz J Med Biol Res** 1997 Jan;30(1):1–7 (66 ref.)

Sensory afferent neurotransmission in caudal nucleus tractus solitarius--common denominators. Andresen MC, et al. **Chem Senses** 1996 Jun;21(3):387–95 (68 ref.)

Neurotransmitter and neuromodulator activity in the gustatory zone of the nucleus tractus solitarius. Bradley RM, et al. **Chem Senses** 1996 Jun;21(3):377–85 (55 ref.)

Electrophysiological and morphological properties of neurons acutely isolated from the rostral gustatory zone of the rat nucleus of the solitary tract. Du J, et al. **Chem Senses** 1996 Dec;21(6):729–37

Taste responses in the nucleus of the solitary tract in saccharin-preferring and saccharin-averse rats. Giza BK, et al. **Chem Senses** 1996 Apr;21(2):147–57

Evolution of dose-related cardiovascular responses to L-glutamate microinjected into the nucleus tractus solitarii after removal of the nodose ganglion in rat. Talman WT, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S37–9

Postnatal changes in electrophysiological properties of rat nucleus tractus solitarii neurons. Vincent A, et al. **Eur J Neurosci** 1997 Aug;9(8):1612–24

Developmental study of N-methyl-D-aspartate-induced firing activity and whole-cell currents in nucleus tractus solitarii neurons. Vincent A, et al. **Eur J Neurosci** 1996 Dec;8(12):2748–52

An electrophysiological study of the medial prefrontal cortical projection to the nucleus of the solitary tract in rat. Owens NC, et al. **Exp Brain Res** 1996 Jun;110(1):55–61

Blockade of glutamate receptors in CVLM and NTS attenuates airway dilation evoked from parabrachial region. Motekaitis AM, et al. **J Appl Physiol** 1996 Jul;81(1):400–7

Activation of purinergic receptor subtypes in the nucleus tractus solitarius elicits specific regional vascular response patterns. Barraco RA, et al. **J Auton Nerv Syst** 1996 Jul 5;59(3):113–24

Insulin microinjection into the nucleus tractus solitarii of the rat attenuates the baroreceptor reflex. McKernan AM, et al. **J Auton Nerv Syst** 1996 Nov 6;61(2):128–38

Postnatal ontogeny of glutamate receptors in the rat nucleus tractus solitarii and ventrolateral medulla. Rao H, et al. **J Auton Nerv Syst** 1997 Jul 14;65(1):25–32

Dynamics of sensory afferent synaptic transmission in aortic baroreceptor regions on nucleus tractus solitarius. Andresen MC, et al. **J Neurophysiol** 1995 Oct;74(4):1518–28

NMDA receptors contribute to primary visceral afferent transmission in the nucleus of the solitary tract. Aylwin ML, et al. **J Neurophysiol** 1997 May;77(5):2539–48

Synaptic interactions due to convergent input from gustatory afferent fibers in the rostral nucleus of the solitary tract. Grabauskas G, et al. **J Neurophysiol** 1996 Nov; 76(5):2919–27

Presynaptic or postsynaptic location of receptors for angiotensin II and substance P in the medial solitary tract nucleus. Qu L, et al. **J Neurophysiol** 1996 Jun;75(6):2220–8

Simultaneous encoding of carotid sinus pressure and dP/dt by NTS target neurons of myelinated baroreceptors. Rogers RF, et al. **J Neurophysiol** 1996 Oct;76(4):2644–60

Temporal processing of aortic nerve evoked activity in the nucleus of the solitary tract. Scheuer DA, et al. **J Neurophysiol** 1996 Dec;76(6):3750–7

Afferent synaptic drive of rat medial nucleus tractus solitarius neurons: dynamic simulation of graded vesicular mobilization, release, and non-NMDA receptor kinetics. Schild JH, et al. **J Neurophysiol** 1995 Oct;74(4):1529–48

Intracellular activity of motoneurons of the rostral nucleus ambiguus during swallowing in sheep. Zoungrana OR, et al. **J Neurophysiol** 1997 Feb;77(2):909–22

Phasic and long-term depression in brainstem nucleus tractus solitarius neurons: differing roles of AMPA receptor desensitization. Zhou Z, et al. **J Neurosci** 1997 Jul 15; 17(14):5349–56

Non-NMDA receptors transmit cardiopulmonary C fibre input in nucleus tractus solitarii in rats. Wilson CG, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):773–85

Role of selected peptides in the vagal regulation of gastric motor and endocrine pancreatic function. Krowicki ZK. **J Physiol Pharmacol** 1996 Sep;47(3):399–409 (55 ref.)

Expression of c-fos in bulbar nuclei involved in cardiovascular control following the electrical stimulation of sensorimotor cortex in the rat. Doutrelant-Viltart O, et al. **Neurosci Lett** 1997 May 16;227(2):71–4

Spinal cord blood flow decreases following microinjection of sodium nitroprusside into the nucleus tractus solitarii of anesthetized rats. Takao S, et al. **Neurosci Res** 1996 Jul; 25(3):285–91

Aortic barodenervation up-regulates alpha2-adrenoceptors in the nucleus tractus solitarius and rostral ventrolateral medulla: an autoradiographic study. El-Mas MM, et al. **Neuroscience** 1997 Jul;79(2):581–90

Cholecystokinin, dopamine D2 and N-methyl-D-aspartate binding sites in the nucleus of the solitary tract of the rat: possible relationship to ingestive behavior. Qian M, et al. **Neuroscience** 1997 Apr;77(4):1077–89

Differential c-fos expression in the nucleus of the solitary tract and spinal cord following noxious gastric distention in the rat. Traub RJ, et al. **Neuroscience** 1996 Oct; 74(3):873–84

Effect of sinus denervation and vagotomy on c-fos expression in the nucleus tractus solitarius after exposure to CO2 Jansen AH, et al. **Pflugers Arch** 1996 Apr;431(6):876–81

Extinction of a conditioned taste aversion in rats: II. Neural effects in the nucleus of the solitary tract. McCaughey SA, et al. **Physiol Behav** 1997 Mar;61(3):373–9

Activity in rat nucleus tractus solitarius after recovery from sodium deprivation. McCaughey SA, et al. **Physiol Behav** 1996 Aug;60(2):501–6

SOLITARY NUCLEUS

Characteristics of glycemia-sensitive neurons in the nucleus tractus solitarii: possible involvement in nutritional regulation. Yettefti K, et al. **Physiol Behav** 1997 Jan; 61(1):93-100

[The afferent link in the system of the bulbar regulation of gastric motor function] Bagaev VA, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun;82(5-6):121-31 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Effects of long-term hypoxia on tyrosine hydroxylase protein content in catecholaminergic rat brainstem areas: a quantitative autoradiographic study. Pépin JL, et al. **Brain Res** 1996 Sep 9;733(1):1-8

Comparison of the effects of nucleus tractus solitarius and ventral medial medulla lesions on illness-induced and subcutaneous formalin-induced hyperalgesias. Wiertelak EP, et al. **Brain Res** 1997 Feb 14;748(1-2):143-50

Altered cardiovascular responses to purinergic A2 stimulation in the nucleus tractus solitarius of spontaneously hypertensive rats. Tanaka M, et al. **J Hypertens** 1995 Nov; 13(11):1285-90

Altered expression of delayed excitation in medial NTS neurons of spontaneously hypertensive rats. Sundaram K, et al. **Neurosci Lett** 1997 Apr 11;225(3):205-9

ULTRASTRUCTURE

Ultrastructure of bombesin-like immunoreactive nerve terminals in the nucleus of the solitary tract and the dorsal motor nucleus. Lynn RB, et al. **J Auton Nerv Syst** 1997 Feb 17;62(3):174-82

Neurons in the caudal ventrolateral medulla projecting to the paraventricular hypothalamic nucleus receive synaptic inputs from the nucleus of the solitary tract: a light and electron microscopic double-labeling study in the rat. Kawano H, et al. **Neurosci Lett** 1996 Oct 25;218(1):33-6

SOLO PRACTICE see **PRIVATE PRACTICE**

SOLUBILITY

Novel approach for determination of correlation between in vivo and in vitro dissolution using the optimization technique. Ishii K, et al. **Chem Pharm Bull (Tokyo)** 1996 Aug;44(8):1550-5

Efficacy of lipid soluble, membrane-protective agents against hydrogen peroxide cytotoxicity in cardiac myocytes. Horwitz LD, et al. **Free Radic Biol Med** 1996;21(6):743-53

Multiple-time-point dissolution specifications for a sampling acceptance plan. Chen JJ, et al. **J Biopharm Stat** 1997 May; 7(2):259-70

Statistical comparison between dissolution profiles of drug products. Chow SC, et al. **J Biopharm Stat** 1997 May; 7(2):241-58

Two methods for the measurement of the dissociation pressure of a crystalline hydrate. Crocker LS, et al. **J Pharm Biomed Anal** 1997 Jul;15(11):1661-5

Study of morphology of reactive dissolution interface using fractal geometry. Tromelin A, et al. **J Pharm Sci** 1996 Sep; 85(9):924-8

Hydrotropic solubilization--mechanistic studies. Coffman RE, et al. **Pharm Res** 1996 Oct;13(10):1460-3

Modeling in frequency domain used for assessment of in vivo dissolution profile. Durisová M, et al. **Pharm Res** 1997 Jul; 14(7):860-4

Differential molar heat capacities to test ideal solubility estimations. Neau SH, et al. **Pharm Res** 1997 May; 14(5):601-5

In-vitro dissolution profile comparison: statistics and analysis, model dependent approach. Sathe PM, et al. **Pharm Res** 1996 Dec;13(12):1799-803

SOLUBLE INDIGO BLUE see **INDIGO CARMINE**

SOLUTIONS

Cellular fixation. A study of CytoRich Red and Cytospin Collection Fluid. Weidmann J, et al. **Acta Cytol** 1997 Jan-Feb;41(1):182-7

Use of a physiologic oral glucose solution for screening for impaired glucose tolerance and non-insulin-dependent diabetes mellitus. Phillips WT, et al. **Arch Pathol Lab Med** 1996 Sep;120(9):842-6

Collective properties of hydration: long range and specificity of hydrophobic interactions. Martorana V, et al. **Biophys J** 1997 Jul;73(1):31-7

Lymph-node revealing solution: a new method for detecting minute lymph nodes in cystectomy specimens. Koren R, et al. **Br J Urol** 1997 Jul;80(1):40-3

Type of solution and PCO2 measurement errors during tonometry. Kolkman JJ, et al. **Intensive Care Med** 1997 Jun;23(6):658-63

Luminescence optical tomography of dense scattering media. Chang J, et al. **J Opt Soc Am A** 1997 Jan;14(1):288-99

Regularized progressive expansion algorithm for recovery of scattering media from time-resolved data. Chang J, et al. **J Opt Soc Am A** 1997 Jan;14(1):306-12

Improved solutions of the steady-state and the time-resolved diffusion equations for reflectance from a semi-infinite turbid medium. Kienle A, et al. **J Opt Soc Am A** 1997 Jan;14(1):246-54

Perturbation theory for diffuse light transport in complex biological tissues. Ostermeyer MR, et al. **J Opt Soc Am A** 1997 Jan;14(1):255-61

Convolution picture of the boundary conditions in photon migration and its implications in time-resolved optical imaging of biological tissues. Wu J. **J Opt Soc Am A** 1997 Jan;14(1):280-7

Frequency-domain optical imaging of absorption and scattering distributions by a Born iterative method. Yao Y, et al. **J Opt Soc Am A** 1997 Jan;14(1):325-42

Dose distribution of proton beams with NMR measurements of Fricke-agarose gels. Di Capua S, et al. **Magn Reson Imaging** 1997;15(4):489-95

Cellulose derivatives and intestinal absorption of water and electrolytes: potential role in oral rehydration solutions. Wapnir RA, et al. **Proc Soc Exp Biol Med** 1997 Jul; 215(3):275-80

Carolina rinse solution reduces myeloperoxidase activity in small bowel grafts after reperfusion. Anveden-Hertzberg L, et al. **Transplant Proc** 1996 Oct;28(5):2602

Pilot study: Carolina Rinse Solution improves graft function after orthotopic liver transplantation in humans. Bachmann S, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):390-2

Hepatic nucleotide triphosphate regeneration after hypothermic reperfusion in the pig model: an in vitro P-NMR study. Changani KK, et al. **Transplantation** 1996 Sep 27;62(6):787-93

ADMINISTRATION & DOSAGE

An automated gravitational system for delivery of low-viscosity media during continuous-flow hysteroscopy. Tomazevic T, et al. **J Am Assoc Gynecol Laparosc** 1996 Aug;3(4):617-21

Amelioration of pulmonary allograft injury by administering a second rinse solution. Serrick CJ, et al. **J Thorac Cardiovasc Surg** 1996 Oct;112(4):1010-6

ADVERSE EFFECTS

The utility of preliminary surveys to detect the cause of acute metalworking fluid hazards. Popendorf W, et al. **Am J Ind Med** 1996 Dec;30(6):744-9

Metalworking fluid dermatitis: a comparative follow-up study in patients with irritant and non-irritant hand dermatitis. Elsner P, et al. **Curr Probl Dermatol** 1995; 23:77-86

Prevention by exposure assessment. Flyvholm MA. **Curr Probl Dermatol** 1996;25:97-105 (29 ref.)

Dilutional hypocalcaemia from urological irrigating fluids. Hahn RG. **Int Urol Nephrol** 1997;29(2):201-6

[Urologic irrigation solutions are not safe. Serious adverse effects are documented] Hahn R. **Lakartidningen** 1997 Feb 5;94(6):437-8 (32 ref.) **(Swe)**

ANALYSIS

[Incorrect caloric-nitrogen composition of parenteral nutrition solutions as a factor for causing liver damage--an animal model] Spodaryk M, et al. **Przegl Lek** 1997; 54(2):96-102 (Eng. Abstr.) **(Pol)**

CHEMISTRY

Extent of trace-element contamination from simulated compounding of total parenteral nutrient solutions. Pluhator-Murton MM, et al. **Am J Health Syst Pharm** 1996 Oct 1;53(19):2299-303

Compatibility of parenteral nutrient solutions with selected drugs during simulated Y-site administration. Trissel LA, et al. **Am J Health Syst Pharm** 1997 Jun 1;54(11):1295-300

Enzymatic method for measuring subnanomolar concentrations of oxygen in gaseous or aqueous solutions. O'Fallon JV, et al. **Anal Biochem** 1996 Aug 1;239(2):193-9

Compatibility of nebulizer solution admixtures. Joseph JC. **Ann Pharmacother** 1997 Apr;31(4):487-9 (17 ref.)

Association of cyclic peptides in aqueous solution measured by fluorescence quenching. Karlström A, et al. **Biopolymers** 1997 Jan;41(1):1-4

Modeling the DNA-solvent interface. Rudnicki WR, et al. **Biopolymers** 1997 Jan;41(1):107-19

Detection of insulin-like growth factor-I and transforming growth factor-beta in whole gut lavage fluid: a novel method of studying intestinal fibrosis. Ghosh S, et al. **Eur J Gastroenterol Hepatol** 1997 May;9(5):505-8

Investigation of the effects of solution composition and container material type on the loss of 11-nor-delta 9-THC-9-carboxylic acid. Roth KD, et al. **J Anal Toxicol** 1996 Sep;20(5):291-300

A cellular automata model of diffusion in aqueous systems. Kier LB, et al. **J Pharm Sci** 1997 Jul;86(7):774-8

Effect of pH on domoic acid toxicity in mice. Nijjar MS, et al. **Mol Cell Biochem** 1997 Feb;167(1-2):179-85

Applications of the ion-pair concept to hydrophilic substances with special emphasis on peptides. Quintanar-Guerrero D, et al. **Pharm Res** 1997 Feb; 14(2):119-27 (53 ref.)

PHARMACOKINETICS

Bolus contaminant dispersion for oscillatory flow in a curved tube. Jiang Y, et al. **J Biomech Eng** 1996 Aug;118(3):333-40

PHARMACOLOGY

Effect of crystalloid and colloid solutions on blood rheology in sepsis. Castro VJ, et al. **Shock** 1997 Aug;8(2):104-7

More on the comparison of Plasma-Lyte A and PAS 2 as platelet additive solutions [letter; comment] Turner VS, et al. **Transfusion** 1996 Nov-Dec;36(11-12):1033-4. Comment on: Transfusion 1995 Jan;35(1):50-3.

Retrograde oxygen persufflation in combination with UW solution enhances adenine nucleotide contents in ischemically damaged rat kidney during cold storage. Yin M, et al. **Transpl Int** 1996;9(4):396-402

Protection by Carolina rinse solution, acidotic pH, and glycine against lethal reperfusion injury to sinusoidal endothelial cells of rat livers stored for transplantation. Currin RT, et al. **Transplantation** 1996 Dec 15; 62(11):1549-58

[The effect of a disinfecting solution on the technical quality of reversible hydrocolloid impressions] Bochet G, et al. **Schweiz Monatsschr Zahnmed** 1996;106(11):998-1005 **(Fre, Ger)**

STANDARDS

The palatability of five colonic lavage solutions. Diab FH, et al. **Aliment Pharmacol Ther** 1996 Oct;10(5):815-9

THERAPEUTIC USE

Tolerance, effectiveness, and acceptability of sulfate-free electrolyte lavage solution for colon cleaning before colonoscopy. Raymond JM, et al. **Endoscopy** 1996 Sep; 28(7):555-8

SOLUTIONS, HEMODIALYSIS see **HEMODIALYSIS SOLUTIONS**

SOLUTIONS, ORGAN PRESERVATION see **ORGAN PRESERVATION SOLUTIONS**

SOLVENTS

Organic solvent systems for 31P nuclear magnetic resonance analysis of lecithin phospholipids: applications to two-dimensional gradient-enhanced 1H-detected heteronuclear multiple quantum coherence experiments. Bosco M, et al. **Anal Biochem** 1997 Feb 1;245(1):38-47

Behavior and use of nonaqueous media without supporting electrolyte in capillary electrophoresis and capillary electrochromatography. Wright PB, et al. **Anal Chem** 1997 Aug 15;69(16):3251-9

Proton MR spectroscopy in solvent abusers. Noda S, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:441-4

Separation of alpha-amylase by reversed micellar extraction. Effect of solvent type and cosolvent concentration on the transfer process. Chang QL, et al. **Appl Biochem Biotechnol** 1997 Feb-Mar;62(2-3):119-29

Kinetics of enzymes with iso-mechanisms: solvent isotope effects. Northrop DB, et al. **Arch Biochem Biophys** 1997 Jun 15;342(2):317-21

Predicting the behaviour of lipases in low-water media. Halling PJ. **Biochem Soc Trans** 1997 Feb;25(1):170-4 (31 ref.)

Preferential solvation changes upon lysozyme heat denaturation in mixed solvents. Kovrigin EL, et al. **Biochemistry** 1997 Jul 29;36(30):9195-9

Organic solvents induce interdigitated gel structures in multilamellar vesicles of dipalmitoylphosphatidylcholine. Kinoshita K, et al. **Biochim Biophys Acta** 1996 Oct 23; 1284(2):233-9

Collective properties of hydration: long range and specificity of hydrophobic interactions. Martorana V, et al. **Biophys J** 1997 Jul;73(1):31-7

On the origins of the hydrophobic effect: observations from simulations of n-dodecane in model solvents. Wallqvist A, et al. **Biophys J** 1996 Aug;71(2):600-8

Modification of the acid guanidinium thiocyanate-phenol-chloroform method for nuclear RNA isolation. Vareli K, et al. **Biotechniques** 1996 Aug; 21(2):236-7

Rosenthal fiber encephalopathy presenting with demyelination and Rosenthal fibers in a solvent abuser: adult Alexander's disease? Wilson SP, et al. **Clin Neuropathol** 1996 Jan-Feb;15(1):13-6

Cigarette smoking and solvent use among Japanese adolescents. Wada K, et al. **Drug Alcohol Depend** 1997 Jul 4;46(3):137-45

Uptake of organochlorine pesticides by solvent-filled cellulose and polyethylene membranes. Sabaliunas D, et al. **Ecotoxicol Environ Saf** 1996 Nov;35(2):150-5

Conformational flexibility in enkephalins: solvent dependent transitions in peptides with Gly-Gly segments detected by circular dichroism. Sudha TS, et al. **FEBS Lett** 1981 Nov 2;134(1):32-6

Lymphocyte subpopulations of workers in a plant producing plastic materials (preliminary study). Boscolo P, et al. **G Ital Med Lav** 1995 Jan-Nov;17(1-6):27-31

Dry cleaning, some chlorinated solvents and other industrial chemicals. Lyon, France, 7-14 February 1995. **IARC Monogr Eval Carcinog Risks Hum** 1995;63:33-477

Dry cleaning. **IARC Monogr Eval Carcinog Risks Hum** 1995; 63:33-71 (119 ref.)

Trichloroethylene. **IARC Monogr Eval Carcinog Risks Hum** 1995;63:75-158

(374 ref.)
Tetrachloroethylene.
IARC Monogr Eval Carcinog Risks Hum 1995;63:159–221 (272 ref.)
Evaluation of an activated carbon felt passive sampler in monitoring organic vapors. Byeon SH, et al. **Ind Health** 1997 Jul;35(3):404–14
Multiple exposure to solvents in the workplace. Alessio L. **Int Arch Occup Environ Health** 1996;69(1):1–4 (29 ref.)
Mechanisms for solvent tolerance in bacteria. Ramos JL, et al. **J Biol Chem** 1997 Feb 14;272(7):3887–90
Water immiscible solvent based immunoassay. Aston JP, et al. **J Immunoassay** 1997 Aug;18(3):235–46
Proton exchange rates measured by saturation transfer using delayed randomization of the solvent magnetization. Leijon M. **J Magn Reson B** 1996 Aug;112(2):181–5
Octanol–, chloroform–, and propylene glycol dipelargonat–water partitioning of morphine–6–glucuronide and other related opiates. Avdeef A, et al. **J Med Chem** 1996 Oct 25;39(22):4377–81
Introduction of solvent–accessible surface area in the calculation of the hydrophobicity parameter log P from an atomistic approach. Masuda T, et al. **J Pharm Sci** 1997 Jan;86(1):57–63
Clinical studies with solvent detergent–treated products. Pehta JC. **Transfus Med Rev** 1996 Oct;10(4):303–11 (39 ref.)
[Equilibrium solubility of new potential drugs in water, 1–octanol and cyclohexane] Józan M, et al. **Acta Pharm Hung** 1996 May;66(3):141–6 (Eng. Abstr.) **(Hun)**
[Drug abuse in 1997 in Poland (editorial)] Chruściel TL. **Przegl Lek** 1997;54(6):379–83 **(Pol)**
[Auditory evoked potentials in addicts to organic solvent inhalation (see comments)] Lope–Huerta M, et al. **Rev Invest Clin** 1996 Sep–Oct;48(5):369–72 (Eng. Abstr.) . Comment in: Arch Med Res 1997 Summer;28(2):307–9. **(Spa)**

ADMINISTRATION & DOSAGE

Ethanol injection for the treatment of hepatic tumours. Bartolozzi C, et al. **Eur Radiol** 1996;6(5):682–96 (99 ref.)
Transcatheter arterial renal and adrenal embolization with iohexol–ethanol solutions. Animal experimental study and clinical application. Miyazono N, et al. **Invest Radiol** 1996 Dec;31(12):755–60
Dilute ethanol versus mechanical debridement before photorefractive keratectomy. Abad JC, et al. **J Cataract Refract Surg** 1996 Dec;22(10):1427–33
A large, nonfunctioning parathyroid cyst recurring after aspiration and subsequently cured by percutaneous ethanol injection. Zingrillo M, et al. **J Clin Ultrasound** 1996 Sep; 24(7):378–82
Successful treatment of a bleeding renal tumor with ethanol [letter] Machan LS, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):152–3
Relationship between solvent inhalation and antisocial behavior: special emphasis on two types of violence seen in solvent abusers. Morita N, et al. **Psychiatry Clin Neurosci** 1996 Feb;50(1):21–30

ADVERSE EFFECTS

Effects of MRI abnormalities on WAIS–R performance in solvent abusers. Yamanouchi N, et al. **Acta Neurol Scand** 1997 Jul;96(1):34–9
Reactive airways dysfunction syndrome induced by exposure to a mixture containing isocyanate: functional and histopathologic behaviour. Lemière C, et al. **Allergy** 1996 Apr;51(4):262–5
Liver cancer among employees in Denmark. Døssing M, et al. **Am J Ind Med** 1997 Sep;32(3):248–54
Neurobehavioral and health–related deficits in solvent–exposed painters. Grosch JW, et al. **Am J Ind Med** 1996 Nov;30(5):623–32
Exposure to organic solvents and breast cancer in women: a hypothesis. Labrèche FP, et al. **Am J Ind Med** 1997 Jul; 32(1):1–14 (125 ref.)
Flawed estimates of methylene chloride exposures [letter; comment] Norman WC 3rd, et al. **Am J Ind Med** 1996 Oct;30(4):504–9. Comment on: Am J Ind Med 1994 Aug;26(2):155–69. Comment on: Am J Ind Med 1994 Aug;26(2):171–83.
Brainstem auditory evoked potentials in individuals exposed to long–term low concentrations of toluene. Vrca A, et al. **Am J Ind Med** 1996 Jul;30(1):62–6
Chlorinated hydrocarbon solvents and biliary–pancreatic cancer: report of three cases. Zarchy TM. **Am J Ind Med** 1996 Sep;30(3):341–2
Effects of occupational and nonoccupational factors on liver function tests in workers exposed to solvent mixtures. Chen JD, et al. **Arch Environ Health** 1997 Jul–Aug;52(4):270–4
Influence of polymorphisms of GSTM1 and GSTT1 for risk of renal cell cancer in workers with long–term high occupational exposure to trichloroethene. Brüning T, et al. **Arch Toxicol** 1997;71(9):596–9
The effect of cigarettes smoking on the blood counts of T and NK cells in subjects with occupational exposure to organic solvents. Moszczyński P, et al. **Cent Eur J Public Health** 1996 Sep;4(3):164–8
t(9;13)(q34;q12) chromosomal translocation persisting 4 years post autologous bone marrow transplantation for secondary AML despite morphological remission. Mahendra P, et al. **Clin Lab Haematol** 1996 Jun;18(2):121–2
Scleroderma–like disease following occupational exposure to organic solvents [letter] Altomonte A, et al. **Clin Rheumatol** 1996 Jul;15(4):416–7
Occupational sensitization to epoxy resin and reactive diluents in marble workers. Angelini G, et al. **Contact Dermatitis** 1996 Jul;35(1):11–6
Transient re–emergence of oil of turpentine allergy in the pottery industry. Lear JT, et al. **Contact Dermatitis** 1996 Sep;35(3):169–72
Trichloroethylene and concomitant contact dermatitis in an art painter. Puerschei WC, et al. **Contact Dermatitis** 1996 Jun;34(6):430–1
Skin disorders in ship's engineers exposed to oils and solvents. Svendsen K, et al. **Contact Dermatitis** 1997 Apr; 36(4):216–20
Prevention of contact dermatitis from solvents. Wahlberg JE, et al. **Curr Probl Dermatol** 1996;25:57–66
Behavioral methods and organic solvents: questions and consequences. Iregren A. **Environ Health Perspect** 1996 Apr;104 Suppl 2:361–6 (56 ref.)
Cancer mortality among workers with benzene exposure. Ireland B, et al. **Epidemiology** 1997 May;8(3):318–20
Organic solvents and multiple sclerosis: a synthesis of the current evidence. Landtblom AM, et al. **Epidemiology** 1996 Jul;7(4):429–33
In search of dose–response relationships of solvent mixtures to neurobehavioural effects in paint manufacturing and painters. Seeber A, et al. **Food Chem Toxicol** 1996 Nov–Dec;34(11–12):1113–20 (22 ref.)
Angioedema from oral polyethylene glycol electrolyte lavage solution [letter] Stollman N, et al. **Gastrointest Endosc** 1996 Aug;44(2):209–10
Positron emission tomography studies of healthy volunteers—no effects on the dopamine terminals and synthesis after short–term exposure to toluene. Edling C, et al. **Hum Exp Toxicol** 1997 Mar;16(3):171–6
Genotoxic effects in workers exposed to benzene: with special reference to exposure biomarkers and confounding factors. Bogadi–Sare A, et al. **Ind Health** 1997 Jul; 35(3):367–73
Assessment of the health effects of trichloroethylene. Kaneko T, et al. **Ind Health** 1997 Jul;35(3):301–24 (97 ref.)
Risk of spontaneous abortion and maternal exposure to organic solvents in the shoe industry. Agnesi R, et al. **Int Arch Occup Environ Health** 1997;69(5):311–6
The influence of cognitive bias on the perceived odor, irritation and health symptoms from chemical exposure. Dalton P, et al. **Int Arch Occup Environ Health** 1997; 69(6):407–17
Individual serum bile acids in apprentice spray painters in association with solvent exposure. Liu JJ, et al. **Int Arch Occup Environ Health** 1996;69(1):21–6
Relationship between acetone exposure concentration and health effects in acetate fiber plant workers. Satoh T, et al. **Int Arch Occup Environ Health** 1996;68(3):147–53
Memory deficits and industrial toxicant exposure: a comparative study of hard metal, solvent and asbestos workers. Jordan CM, et al. **Int J Neurosci** 1997 Jun; 90(1–2):113–28
Solvents and hearing loss [letter; comment] Henderson D. **J Am Acad Audiol** 1996 Oct;7(5):375. Comment on: J Am Acad Audiol 1995 Sep;6(5):351–7.
Neurobehavioural changes in workshop painters of a public transport network. Tripathi SR, et al. **J Hum Ergol (Tokyo)** 1995 Dec;24(2):153–60
Neuropsychological performance of journeymen painters under acute solvent exposure and exposure–free conditions. Morrow LA, et al. **J Int Neuropsychol Soc** 1997 May; 3(3):269–75
Differential associations of P300 amplitude and latency with cognitive and psychiatric function in solvent–exposed adults. Morrow LA, et al. **J Neuropsychiatry Clin Neurosci** 1996 Fall;8(4):446–9
Exposure to isocyanates and organic solvents, and pulmonary–function changes in workers in a polyurethane molding process [published erratum appears in J Occup Environ Med 1997 Apr;39(4):338] Akbar–Khanzadeh F, et al. **J Occup Environ Med** 1996 Dec;38(12):1205–12
Evaluation of lymphopenia among workers with low–level benzene exposure and the utility of routine data collection. Collins JJ, et al. **J Occup Environ Med** 1997 Mar; 39(3):232–7
Postural stability assessment in sewer workers. Kuo W, et al. **J Occup Environ Med** 1996 Jan;38(1):27–34
Determination of o–cresol by gas chromatography and comparison with hippuric acid levels in urine samples of individuals exposed to toluene. Amorim LC, et al. **J Toxicol Environ Health** 1997 Mar;50(4):401–7
Solvents and neurotoxicity. White RF, et al. **Lancet** 1997 Apr 26;349(9060):1239–43 (39 ref.)
Bilateral optic neuritis in occupational exposure to trichloroethylene. Abecia E, et al. **Med Lav** 1996 Sep–Oct; 87(5):432–6 (25 ref.)
Exposure to organic solvents and multiple sclerosis. Landtblom AM. **Neurology** 1997 Aug;49(2 Suppl 2):S70–4 (26 ref.)
Behavioral effects of exposure to organic solvents in carpet layers. Muijser H, et al. **Neurotoxicol Teratol** 1996 Jul–Aug; 18(4):455–62
Long–term cognitive sequelae of solvent intoxication. Stollery BT. **Neurotoxicol Teratol** 1996 Jul–Aug; 18(4):471–6
Color vision loss among styrene–exposed workers neurotoxicological threshold assessment. Campagna D, et al. **Neurotoxicology** 1996 Summer;17(2):367–73
Criminal responsibility and solvent exposure. Lemmen CA, et al. **New Dir Ment Health Serv** 1996 Spring;(69):59–66
Evaluation of the Q16 questionnaire on neurotoxic symptoms and a review of its use. Lundberg I, et al. **Occup Environ Med** 1997 May;54(5):343–50
Glioma and occupational exposure in Sweden, a case–control study. Rodvall Y, et al. **Occup Environ Med** 1996 Aug; 53(8):526–37
A meta–analysis of mortality among workers exposed to organic solvents. Chen R, et al. **Occup Med (Oxf)** 1996 Oct;46(5):337–44
Semen parameters in workers exposed to trichloroethylene. Chia SE, et al. **Reprod Toxicol** 1996 Jul–Aug;10(4):295–9
Exposure to organic solvents during pregnancy and oral clefts: a case–control study [published erratum appears in Reprod Toxicol 1996 May–Jun;10(3):vi] Laumon B, et al. **Reprod Toxicol** 1996 Jan–Feb;10(1):15–9
Hematopoietic and reproductive hazards of Korean electronic workers exposed to solvents containing 2–bromopropane [published erratum appears in Scand J Work Environ Health 1997 Feb;23(1):80] Kim Y, et al. **Scand J Work Environ Health** 1996 Oct;22(5):387–91
Neuropsychiatric function of housepainters with previous long–term heavy exposure to organic solvents. Lundberg I, et al. **Scand J Work Environ Health** 1995;21 Suppl 1:1–44
Occupational and environmental renal disease. Wedeen RP. **Semin Nephrol** 1997 Jan;17(1):46–53 (35 ref.)
The potential for bias due to attrition in the National Exposure Registry: an examination of reasons for nonresponse, nonrespondent characteristics, and the response rate. Burg JA, et al. **Toxicol Ind Health** 1997 Jan–Feb;13(1):1–13
Battery of neurobehavioral tests recommended to ATSDR: solvent–induced deficits in microelectronic workers. Hudnell HK, et al. **Toxicol Ind Health** 1996 Mar–Apr; 12(2):235–43 (6 ref.)
Use of computational models to reconstruct and predict trichloroethylene exposure. Maslia ML, et al. **Toxicol Ind Health** 1996 Mar–Apr;12(2):139–52
[Glomerular nephropathies and exposure to organic solvents—a case–control study] Stengel B, et al. **Bull Acad Natl Med** 1996 Apr;180(4):871–9; discussion 879–83 (Eng. Abstr.) **(Fre)**
[Cough or asthma crisis induced by propylene glycol (letter)] Spreux A, et al. **Therapie** 1996 Sep–Oct;51(5):561–2 **(Fre)**
[Nephropathy induced by non–drug chemical agents] Miyazaki K, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):577–9 (15 ref.) **(Jpn)**
[Effect of cigarette smoking on T and NK cell count in blood of persons occupationally exposed to organic solvents] Moszczyński P, et al. **Med Pr** 1995;46(6):541–7 (Eng. Abstr.) **(Pol)**
[Influence of vapours of paint and toxic dusts on mucous membranes of the upper airways in paint and varnish factory workers] Pośpiech L, et al. **Med Pr** 1996; 47(5):445–53 (Eng. Abstr.) **(Pol)**
[Alcohol and stomach] Makolkin VI, et al. **Klin Med (Mosk)** 1997;75(4):14–8 (39 ref.) **(Rus)**
[Russian–Swedish symposium, "Occupational medicine in production and use of solvents"] Mogiliantseva VI, et al. **Med Tr Prom Ekol** 1996;(5):45–7 **(Rus)**
[Occupational bronchial asthma due to organic solvents] Ozhiganova VN, et al. **Med Tr Prom Ekol** 1997;(3):24–6 (Eng. Abstr.) **(Rus)**
[The effect of organic solvents on the child–bearing function of women painters (an epidemiological hygiene study] Tikhonova GI, et al. **Med Tr Prom Ekol** 1997;(3):20–4 (Eng. Abstr.) **(Rus)**
[Optimization of the diagnosis and treatment of anemias under exposure to aromatic–type organic solvents] Shpagina LA, et al. **Ter Arkh** 1996;68(12):15–9 (Eng. Abstr.) **(Rus)**
[The characteristics of cardiac diastolic function in myocardiodystrophy in persons subjected to aromatic hydrocarbon exposure] Tret'iakov SV, et al. **Ter Arkh** 1997; 69(1):47–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Prototype instrument employing a microsensor array for the analysis of organic vapors in exhaled breath. Groves WA, et al. **Am Ind Hyg Assoc J** 1996 Dec;57(12):1103–8
Unacceptable "occupational" exposure to toxic agents among children in Ecuador. Harari R, et al. **Am J Ind Med** 1997 Sep;32(3):185–9
FIOH external quality assurance scheme for organic solvent metabolites. Valkonen S, et al. **Ann Ist Super Sanita** 1996; 32(2):225–31
Second moment method for evaluating human health risks from groundwater contaminated by trichloroethylene. Jacobs TL, et al. **Environ Health Perspect** 1996 Aug; 104(8):866–70
Migration studies from paper and board food packaging materials. 1. Compositional analysis. Castle L, et al. **Food Addit Contam** 1997 Jan;14(1):35–44
Occupational chronic exposure to organic solvents. XVI. Ambient and biological monitoring of workers exposed to toluene. Angerer J, et al. **Int Arch Occup Environ Health** 1997;69(2):91–6 (38 ref.)

Low-level chemical sensitivity: current perspectives. Ashford NA, et al. **Int Arch Occup Environ Health** 1996; 68(6):367-76 (28 ref.)

Biological monitoring of vehicle mechanics and other workers exposed to low concentrations of benzene. Hotz P, et al. **Int Arch Occup Environ Health** 1997;70(1):29-40

Biological monitoring of styrene exposure and possible interference of acetone co-exposure. Marhuenda D, et al. **Int Arch Occup Environ Health** 1997;69(6):455-60

Occupational exposure in Polish paint and lacquer industry. Wesołowski W, et al. **Int J Occup Med Environ Health** 1997;10(1):79-88

HPLC and GLC determination of residual solvents in busulphan. Kalchenko OI, et al. **J Pharm Biomed Anal** 1995 Dec;14(1-2):107-11

Driving under the influence of acetone [letter] Jones AW. **J Toxicol Clin Toxicol** 1997;35(4):419-21

Headspace analysis of solvents in cocaine and heroin samples. Cartier J, et al. **Sci Justice** 1997 Jul-Sep;37(3):175-81

A novel device for capturing breath samples for solvent analysis. Dyne D, et al. **Sci Total Environ** 1997 Jun 20; 199(1-2):83-9

Trichloroethene and tetrachloroethene in ground waters of Zagreb, Croatia. Vedrina-Dragojević I, et al. **Sci Total Environ** 1997 Sep 15;203(3):253-9

[Total environmental exposure to chlorinated solvents: studies of exposure markers] Pregliasco F, et al. **Ann Ig** 1996 May-Jun;8(3):361-75 (56 ref.) (Eng. Abstr.) **(Ita)**

[Method for analyzing urinary organic solvents by solid-phase microextraction (SPME) for biological monitoring of exposure to these solvents] Asakawa F, et al. **Sangyo Eiseigaku Zasshi** 1996 Nov;38(6):258-9 **(Jpn)**

[Comparison of standard methods for determination of pseudocumene in urine using gas chromatography with the headspace technique and a new method using a headspace automatic sampler] Kostrzewski P, et al. **Med Pr** 1996; 47(6):605-13 (Eng. Abstr.) **(Pol)**

[Use of biological monitoring for evaluating occupational exposure in the paint and varnish industry] Kostrzewski P. **Med Pr** 1995;46(6):549-55 (Eng. Abstr.) **(Pol)**

[Occupational exposure to organic solvent vapors among workers in industrial enterprises of Estonia] Veimer S, et al. **Med Pr** 1996;47(5):455-60 (Eng. Abstr.) **(Pol)**

CHEMISTRY

Reclamation of acetone in plastination laboratories: a simple and inexpensive method. Grondin G, et al. **Acta Anat (Basel)** 1997;158(1):26-9

Accuracy of empirical correlations for estimating diffusion coefficients in aqueous organic mixtures. Li J, et al. **Anal Chem** 1997 Jul 1;69(13):2530-6

Estimating diffusion coefficients for alkylbenzenes and alkylphenones in aqueous mixtures with acetonitrile and methanol. Li J, et al. **Anal Chem** 1997 Jul 1;69(13):2550-3

Solvation: how to obtain microscopic energies from partitioning and solvation experiments. Chan HS, et al. **Annu Rev Biophys Biomol Struct** 1997;26:425-59 (119 ref.)

Novel approach to fabricate porous sponges of poly(D,L-lactic-co-glycolic acid) without the use of organic solvents. Mooney DJ, et al. **Biomaterials** 1996 Jul; 17(14):1417-22

Separation and identification of some cephalosporins on impregnated TLC plates. Bhushan R, et al. **Biomed Chromatogr** 1996 Sep-Oct;10(5):258-60

Replacement of chloroform throughout glycosphingolipid isolation. Heitmann D, et al. **Biomed Chromatogr** 1996 Sep-Oct;10(5):245-50

Formation, solvolysis, and transcarbamoylation reactions of bis(S-glutathionyl) adducts of 2,4- and 2,6-diisocyanatotoluene. Day BW, et al. **Chem Res Toxicol** 1997 Apr;10(4):424-31

Breakthrough times for vapors of organic solvents with low boiling points in steady-state and pulsating flows on respirator cartridges. Tanaka S, et al. **Ind Health** 1996; 34(2):125-31

An effective organic solvent system for the dissolution of amino acids. Mitin YV. **Int J Pept Protein Res** 1996 Oct; 48(4):374-6

Computation of the solvent-accessible surface area of monomer nonionic contrast media. Consequences for used probe radius in the study of hydrophilic characteristics. Violon D. **Invest Radiol** 1997 Feb;32(2):126-30

Comparison of methods for extracting linear solvent strength gradient parameters from gradient chromatographic data. Ford JC, et al. **J Chromatogr A** 1996 Mar 8;727(1):1-11

Description and prediction of retention in normal-phase high-performance liquid chromatography with binary and ternary mobile phase. Jandera P, et al. **J Chromatogr A** 1997 Feb 21;762(1-2):15-26

Gradient chromatofocusing high-performance liquid chromatography. I. Practical aspects. Liu Y, et al. **J Chromatogr A** 1997 Feb 21;762(1-2):207-17

Theory of phase formation in aqueous two-phase systems. Cabezas H Jr. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):3-30 (98 ref.)

Chromatographic behaviour in reversed-phase high-performance liquid chromatography with micellar and submicellar mobile phases: effects of the organic modifier. Fischer J, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):3-19

Protein partition between the different phases comprising poly(ethylene glycol)-salt aqueous two-phase systems, hydrophobic interaction chromatography and precipitation: a generic description in terms of salting-out effects. Huddleston J, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):31-41

RNA partitioning accompanied by adsorption: high-molecular-mass RNA adsorbed at the interface like a particle. Kimura K, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):213-9

Use of aqueous two-phase systems in sample preparation for polymerase chain reaction-based detection of microorganisms. Lantz PG, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):165-70

Metal ion separations in polyethylene glycol-based aqueous biphasic systems: correlation of partitioning behavior with available thermodynamic hydration data. Rogers RD, et al. **J Chromatogr B Biomed Appl** 1996 May 17; 680(1-2):221-9

Effects of increasing polymer hydrophobicity on distribution ratios of TcO_4^- in polyethylene/poly(propylene glycol)-based aqueous biphasic systems. Rogers RD, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):231-6

Enzyme purification with aqueous two-phase systems: comparison between systems composed of pure polymers and systems composed of crude polymers. Venâncio A, et al. **J Chromatogr B Biomed Appl** 1996 May 17; 680(1-2):131-6

Does the nature of the solvent affect the anti-inflammatory capacity of triclosan? An experimental study. Skaare AB, et al. **J Clin Periodontol** 1997 Feb;24(2):124-8

Calculation of the dielectric properties of a protein and its solvent: theory and a case study. Löffler G, et al. **J Mol Biol** 1997 Jul 18;270(3):520-34

Physical stability of solid dispersions containing triamterene or temazepam in polyethylene glycols. Dordunoo SK, et al. **J Pharm Pharmacol** 1997 Apr;49(4):390-6

Residual solvents in biodegradable microparticles. Influence of process parameters on the residual solvent in microparticles produced by the aerosol solvent extraction system (ASES) process. Ruchatz F, et al. **J Pharm Sci** 1997 Jan;86(1):101-5

Organic solvents identify specific ligand binding sites on protein surfaces. Liepinsh E, et al. **Nat Biotechnol** 1997 Mar;15(3):264-8

Hydrophobic regions on protein surfaces. Derivation of the solvation energy from their area distribution in crystallographic protein structures. Eisenhaber F. **Protein Sci** 1996 Aug;5(8):1676-86

Thermal denaturation of iso-1-cytochrome c variants: comparison with solvent denaturation. Herrmann LM, et al. **Protein Sci** 1997 Mar;6(3):657-65

Temperature dependence of the preferential interactions of ribonuclease A in aqueous co-solvent systems: thermodynamic analysis. Xie G, et al. **Protein Sci** 1997 Jan; 6(1):222-32

Solvent structure at a hydrophobic protein surface. Kovacs H, et al. **Proteins** 1997 Mar;27(3):395-404

Molecular dynamics simulations of synthetic peptide folding. Sung SS, et al. **Proteins** 1996 Jun;25(2):202-14

[Sequential attachment of arginine residues to peptides catalyzed by subtilisin. II. Effect of the nature of acylating and nucleophilic components and small amounts of water in organic solvents] Iusupova MP, et al. **Bioorg Khim** 1996 Aug;22(8):589-95 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Class distinctions. Those who don't distinguish their flammable liquids' flashpoint classes, storage specifications and compliance codes can wind up trying to extinguish a blaze. Buric A. **Occup Health Saf** 1994 Nov;63(11):42-4, 50

METABOLISM

Evaluation of exposure to mixed solvents by analysis of urinary metabolites and solvents: content ranges. Ogata M. **Acta Med Okayama** 1997 Aug;51(4):179-94

Three-way curve resolution applied to the study of solvent effect on the thermodynamic and conformational transitions related to the protonation of polycytidylic acid. de Juan A, et al. **Anal Biochem** 1997 Jul 1;249(2):174-83

A freshwater anaerobe coupling acetate oxidation to tetrachloroethylene dehalogenation. Krumholz LR, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4108-13

Role of cytochromes P450 in the metabolism of methyl tert-butyl ether in human livers. Hong JY, et al. **Arch Toxicol** 1997;71(4):266-9

High salt and solvent induced Z-conformation in native calf thymus DNA. Ali N, et al. **Biochem Mol Biol Int** 1997 May;41(6):1227-35

Strategies for the aerobic co-metabolism of chlorinated solvents. Semprini L. **Curr Opin Biotechnol** 1997 Jun; 8(3):296-308 (63 ref.)

Antioxidant activity of reduced menadione in solvent solution and in model membranes. Fiorentini D, et al. **Free Radic Res** 1997 May;26(5):419-29

Ethnic differences in biological monitoring of several organic solvents. I. Human exposure experiment. Jang JY, et al. **Int Arch Occup Environ Health** 1997;69(5):343-9

Identification and quantitative determination of 3-chloro-2-hydroxypropylmercapturic acid and alpha-chlorohydrin in urine of rats treated with epichlorohydrin. De Rooij BM, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):241-50

Analysis of some metabolites of organic solvents in urine by high-performance liquid chromatography with beta-cyclodextrin. Moon DH, et al. **J Chromatogr B Biomed Appl** 1997 Jul 4;694(2):367-74

Nonoxidative metabolism of 2-butoxyethanol via fatty acid conjugation in Fischer 344 rats. Kaphalia BS, et al. **J Toxicol Environ Health** 1996 Dec 6;49(5):463-79

The urinary excretion of solvents and gases for the biological monitoring of occupational exposure: a review. Gobba F, et al. **Sci Total Environ** 1997 Jun 20;199(1-2):3-12 (46 ref.)

Large-scale biological monitoring in Japan. Ogata M, et al. **Sci Total Environ** 1997 Jun 20;199(1-2):197-204

Breathing with chlorinated solvents [news; comment] McCarty PL. **Science** 1997 Jun 6;276(5318):1521-2. Comment on: Science 1997 Jun 6;276(5318):1568-71.

Cytochrome P450-dependent metabolism of trichloroethylene: interindividual differences in humans. Lipscomb JC, et al. **Toxicol Appl Pharmacol** 1997 Feb; 142(2):311-8

Physiologically based pharmacodynamic modeling of an interaction threshold between trichloroethylene and 1,1-dichloroethylene in Fischer 344 rats. el-Masri HA, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):124-32

[Uptake of the irrigating fluid during surgical endoscopy. Measure the absorption by ethanol indication] Hahn R. **Lakartidningen** 1997 Feb 5;94(6):440-3 (33 ref.) **(Swe)**

PHARMACOKINETICS

Cutaneous microdialysis for the measurement in vivo of the percutaneous absorption of organic solvents. Anderson C, et al. **Curr Probl Dermatol** 1996;25:37-46

Influence of evaporation and repeated exposure on the percutaneous absorption of organic solvents. Boman A, et al. **Curr Probl Dermatol** 1996;25:47-56

Skin absorption of solvent mixtures--effect of vehicles on skin absorption of toluene. Tsuruta H. **Ind Health** 1996; 34(4):369-78

Ethnic differences in biological monitoring of several organic solvents. II. A simulation study with a physiologically based pharmacokinetic model. Jang JY, et al. **Int Arch Occup Environ Health** 1997;70(1):41-50

Dermal absorption of vaporous and liquid 2-methoxyethanol and 2-ethoxyethanol in volunteers. Kežić S, et al. **Occup Environ Med** 1997 Jan;54(1):38-43

Inhalation toxicokinetics of 1,2,4-trimethylbenzene in volunteers: comparison between exposure to white spirit and 1,2,4-trimethylbenzene alone. Järnberg J, et al. **Sci Total Environ** 1997 Jun 20;199(1-2):65-71

Characterization of presystemic elimination of trichloroethylene and its nonlinear kinetics in rats. Lee KM, et al. **Toxicol Appl Pharmacol** 1996 Aug;139(2):262-71

A comparison of physiologically based pharmacokinetic model predictions and experimental data for inhaled ethanol in male and female B6C3F1 mice, F344 rats, and humans. Pastino GM, et al. **Toxicol Appl Pharmacol** 1997 Jul;145(1):147-57

Vehicle-dependent oral absorption and target tissue dosimetry of chloroform in male rats and female mice. Dix KJ, et al. **Toxicol Lett** 1997 May 16;91(3):197-209

Pharmacokinetics of and CYP1A induction by pyridine and acetone in the rat: interactions and effects of route of exposure. Scholl HR, et al. **Xenobiotica** 1997 Mar; 27(3):265-77

PHARMACOLOGY

Comparison of single photon emission computed tomography findings in cases of healthy adults and solvent-exposed adults. Fincher CE, et al. **Am J Ind Med** 1997 Jan; 31(1):4-14

Inhibition of coumarin 7-hydroxylase activity in human liver microsomes. Draper AJ, et al. **Arch Biochem Biophys** 1997 May 1;341(1):47-61

Induction of cytochromes P450 1A, 2B and 2E in hamster tissues by acetone. Chen RM, et al. **Arch Toxicol** 1997; 71(8):489-95

Local alcohol delivery may reduce phenotype conversion of smooth muscle cells and neointimal formation in rabbit iliac arteries after balloon injury. Liu MW, et al. **Atherosclerosis** 1996 Dec 20;127(2):221-7

Influence of sex, diabetes and ethanol on intrinsic contractile performance of isolated rat myocardium. Brown RA, et al. **Basic Res Cardiol** 1996 Sep-Oct;91(5):353-60

Reactivation strategies by unfolding/refolding of chymotrypsin derivatives after inactivation by organic solvents. Soler G, et al. **Biochim Biophys Acta** 1997 Apr 25;1339(1):167-75

Adaptation mechanisms of microorganisms to the toxic effects of organic solvents on membranes. Weber FJ, et al. **Biochim Biophys Acta** 1996 Oct 29;1286(3):225-45 (214 ref.)

Practical considerations in acquiring biological signals from confocal microscope: solvent effect and temperature effect. Lee MF, et al. **Biol Signals** 1996 Sep-Oct;5(5):291-300

Lipid peroxidation of mitochondrial membrane induced by D1: an organic solvent extractable component isolated from a crude extract of burn eschar. Chen Z, et al. **Burns** 1996 Aug;22(5):369-75

Effects of 50% ethanol and mechanical epithelial debridement on corneal structure before and after excimer photorefractive keratectomy. Helena MC, et al. **Cornea**

1997 Sep;16(5):571–9
Enhanced interleukin-8 production by cultured Chang liver cells subjected to ethanol exposure and subsequent stimulation with tumor necrosis factor-alpha. Ohira H, et al. **Digestion** 1997;58(1):72–7
Evaluation of the acute behavioral effects and abuse potential of a C8–C9 isoparaffin solvent. Balster RL, et al. **Drug Alcohol Depend** 1997 Jul 4;46(3):125–35
Spectroscopic probes of the individual and combined effects of Triton X-100 and chloroform on serum albumins and serum-albumin.bilirubin complexes. Patra SK, et al. **Eur J Biochem** 1997 Jun 15;246(3):658–64
The effects of abused inhalants on mouse behavior in an elevated plus-maze. Bowen SE, et al. **Eur J Pharmacol** 1996 Sep 26;312(2):131–6
Enzymes and antibodies in organic media: analytical applications. Stöcklein WF, et al. **EXS** 1997;80:83–96
Influence of sample preparation on analytical results: drug analysis [GC/MS] on hair snippets versus hair powder using various extraction methods. Eser HP, et al. **Forensic Sci Int** 1997 Jan 17;84(1–3):271–9
Modulation of the development of humoral immunity by topically applied acetone, ethanol, and 12-O-tetradecanoylphorbol-13-acetate. Singh KP, et al. **Fundam Appl Toxicol** 1996 Sep;33(1):129–39
Solvent exposed side chains of peptides bound to HLA A*1101 have similar effects on the reactivity of alloantibodies and specific TCR. Zhang QJ, et al. **Int Immunol** 1996 Jun;8(6):927–38
Alcohol liberates dye of syringes. Kayikcioğlu O, et al. **Int Ophthalmol** 1996–97;20(6):291–2
In vitro study comparing the ability of mono-octanoin and mono-octanoin plus methyl tert-butyl ether to dissolve biliary stones. Tritapepe R, et al. **Ital J Gastroenterol** 1996 Jan;28(1):20–4
Phospholipid biosynthesis and solvent tolerance in Pseudomonas putida strains. Pinkart HC, et al. **J Bacteriol** 1997 Jul;179(13):4219–26
The effects of acetone, ethanol, HEMA, and air on the stiffness of human decalcified dentin matrix. Maciel KT, et al. **J Dent Res** 1996 Nov;75(11):1851–8
Thermodynamics of a reverse turn motif. Solvent effects and side-chain packing. Demchuk E, et al. **J Mol Biol** 1997 Jul 11;270(2):305–17
Force-relaxant actions of dimethyl sulfoxide on guinea-pig and rabbit papillary muscles. Ogura T, et al. **J Mol Cell Cardiol** 1996 Aug;28(8):1777–88
Solvent-dependent rate-limiting steps in the conformational change of sodium channel gating in squid giant axon [published erratum appears in J Physiol (Lond) 1997 Mar 15;499(Pt 3):849] Kukita F. **J Physiol (Lond)** 1997 Jan 1; 498 (Pt 1):109–33
Percutaneous permeation of N,N-diethyl-m-toluamide (DEET) from commercial mosquito repellents and the effect of solvent. Stinecipher J, et al. **J Toxicol Environ Health** 1997 Oct 10;52(2):119–35
Inhibition of human lymphocyte function by organic solvents. Shoker AS, et al. **Mol Cell Biochem** 1997 Jun; 171(1–2):49–58
A molecular dynamics study of the effect of carbon tetrachloride on enzyme structure and dynamics: subtilisin. Zheng YJ, et al. **Protein Eng** 1996 Jun;9(6):485–92
Water-mediated protein-DNA interactions: the relationship of thermodynamics to structural detail. Morton CJ, et al. **Protein Sci** 1996 Oct;5(10):2115–8
Participation of water in Hin recombinase—DNA recognition. Robinson CR, et al. **Protein Sci** 1996 Oct; 5(10):2119–24
Physiologically based pharmacodynamic modeling of an interaction threshold between trichloroethylene and 1,1-dichloroethylene in Fischer 344 rats. el-Masri HA, et al. **Toxicol Appl Pharmacol** 1996 Nov;141(1):124–32
Pharmacokinetics of and CYP1A induction by pyridine and acetone in the rat: interactions and effects of route of exposure. Scholl HR, et al. **Xenobiotica** 1997 Mar; 27(3):265–77
[The effect of membrane-transport inhibitors on the vacuolization of skeletal muscle fibers induced by glycerin removal from them] Krolenko SA, et al. **Tsitologiia** 1996; 38(7):751–7 (Eng. Abstr.) **(Rus)**
[Development and characterization of a high-purity human factor VIII concentrate submitted to 2 specific virus inactivation treatments (FANDHI) (see comments)] Ristol P, et al. **Sangre (Barc)** 1996 Apr;41(2):125–30 (Eng. Abstr.) . Comment in: Sangre (Barc) 1996 Apr;41(2):97–100. **(Spa)**
[Evaluation of viral safety of a high-purity human factor VIII concentrate submitted to 2 specific virus inactivation treatments (FANDHI) (see comments)] Ristol P, et al. **Sangre (Barc)** 1996 Apr;41(2):131–6 (Eng. Abstr.). Comment in: Sangre (Barc) 1996 Apr;41(2):97–100. **(Spa)**

POISONING

MR in trichloroethane poisoning. del Amo M, et al. **AJNR Am J Neuroradiol** 1996 Jun-Jul;17(6):1180–2
Epidemiological update on solvent neurotoxicity. Mikkelsen S. **Environ Res** 1997;73(1–2):101–12
Solvent exposure and ratings of well-being: dose-effect relationships and consistency of data. Seeber A, et al. **Environ Res** 1997;73(1–2):81–91
Neurobehavioral effects of occupational exposure to low-level organic solvents among Taiwanese workers in paint factories. Tsai SY, et al. **Environ Res** 1997; 73(1–2):146–55
Fatal inhalation of 1,1,1-trichloroethane. Winek CL, et al. **Forensic Sci Int** 1997 Jun 6;87(2):161–5
Symptoms, lung and liver function, blood counts, and genotoxic effects in coastal tanker crews. Nilsson R, et al. **Int Arch Occup Environ Health** 1997;69(6):392–8
Coma and respiratory arrest after exposure to butyrolactone. Higgins TF Jr, et al. **J Emerg Med** 1996 Jul-Aug; 14(4):435–7
Fatal intoxication with 1,1-dichloro-1-fluoroethane [letter] Astier A, et al. **N Engl J Med** 1997 Sep 25;337(13):940
Are deficits in the equilibrium system relevant to the clinical investigation of solvent-induced neurotoxicity? Niklasson M, et al. **Scand J Work Environ Health** 1997 Jun; 23(3):206–13
Glutathione S-transferase M1 null genotype as a risk modifier for solvent-induced chronic toxic encephalopathy. Söderkvist P, et al. **Scand J Work Environ Health** 1996 Oct;22(5):360–3
Acute intoxication and recovery following massive turpentine ingestion: clinical and toxicological data. Troulakis G, et al. **Vet Hum Toxicol** 1997 Jun;39(3):155–7 (10 ref.)
[Toxic hepatitis due to dimethylformamide: case reports and literature review] Poelmans L, et al. **Acta Clin Belg** 1996; 51(5):360–6 (Eng. Abstr.) **(Dut)**
[A case report of volatile solvent psychosis] Saito T, et al. **Nihon Arukoru Yakubutsu Igakkai Zasshi** 1996 Oct; 31(5):475–82 (Eng. Abstr.) **(Jpn)**
[The pathogenesis, clinical picture and treatment of poisonings by organic solvents, derivatives of chlorinated hydrocarbons (trichloroethylene, carbon tetrachloride)] Sidorin GI, et al. **Med Tr Prom Ekol** 1997;(3):8–11 (Eng. Abstr.) **(Rus)**
[The clinico-pathogenetic aspects of chronic exposure to organic solvents] Tarasova LA, et al. **Med Tr Prom Ekol** 1997;(3):6–8 (Eng. Abstr.) **(Rus)**
[The toxicological, hygienic and clinical aspects of the action of low levels of organic solvents] Ulanova IP, et al. **Med Tr Prom Ekol** 1997;(3):11–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Successful topical dissolution of cholesterol gallbladder stones using ethyl propionate. Hofmann AF, et al. **Dig Dis Sci** 1997 Jun;42(6):1274–82
Chemolysis of gallbladder debris left over after contact litholysis with methyl tert-butyl ether. Wosiewitz U, et al. **Dig Dis Sci** 1997 Jan;42(1):146–53
Ethyl propionate is more effective and less cytotoxic than methyl tert-butyl ether for topical gallstone dissolution. Zakko SF, et al. **Gastroenterology** 1997 Jul;113(1):232–7
Epinephrine or epinephrine plus alcohol for injection of bleeding ulcers: a prospective randomized trial. Chung SC, et al. **Gastrointest Endosc** 1996 Jun;43(6):591–5
Percutaneous transcatheter renal ablation with absolute ethanol for uncontrolled hypertension or nephrotic syndrome: results in 11 patients with end-stage renal disease. Golwyn DH Jr, et al. **J Vasc Interv Radiol** 1997 Jul-Aug;8(4):527–33
Treatment of small hepatocellular carcinoma associated with cirrhosis by percutaneous ethanol injection. A trial with a comparison group. Orlando A, et al. **Scand J Gastroenterol** 1997 Jun;32(6):598–603

TOXICITY

Cell surface properties of organic solvent-tolerant mutants of Escherichia coli K-12. Aono R, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3637–42
Effects of organic solvents and solvent-atrazine interactions on two algae, Chlorella vulgaris and Selenastrum capricornutum. El Jay A. **Arch Environ Contam Toxicol** 1996 Jul;31(1):84–90
Developmental toxicity of three carrier solvents using embryos of the grass shrimp, Palaemonetes pugio. Rayburn JR, et al. **Arch Environ Contam Toxicol** 1997 Aug; 33(2):217–21
Neuronal changes induced by chronic toluene exposure in the cat. Saavedra H, et al. **Arch Ital Biol** 1996 Jul; 134(3):217–25
Pattern-visual evoked potentials in thinner abusers [see comments] Poblano A, et al. **Arch Med Res** 1996 Winter; 27(4):531–3. Comment in: Arch Med Res 1997 Summer;28(2):307–9.
Interactive effect of combined exposure to glycol ethers and alcohols on toxicodynamic and toxicokinetic parameters. Morel G, et al. **Arch Toxicol** 1996;70(8):519–25
Postnatal development and behaviour of Wistar rats after prenatal toluene exposure. Thiel R, et al. **Arch Toxicol** 1997; 71(4):258–65
Mechanisms and models of neurotoxicity of n-hexane and related solvents. Tähti H, et al. **Arch Toxicol Suppl** 1997; 19:337–45 (40 ref.)
Interactions of radiofrequency radiation-induced hyperthermia and 2-methoxyethanol teratogenicity in rats. Nelson BK, et al. **Bioelectromagnetics** 1997;18(5):349–59
Pattern of inhalation exposure: blood levels and acute subnarcotic effects of toluene and acetone in rats. Frantik E, et al. **Cent Eur J Public Health** 1996 Dec;4(4):226–32
Lack of evidence for the involvement of formaldehyde in the hepatocarcinogenicity of methyl tertiary-butyl ether in CD-1 mice. Casanova M, et al. **Chem Biol Interact** 1997 Jul 11;105(2):131–43
Dimethyl formamide (DMFA) and ethylene glycol (EG) are estrogenic in rainbow trout. Ren L, et al. **Chem Biol Interact** 1996 Sep 27;102(1):63–7 (6 ref.)
Local and systemic effects of intraduodenal exposure to topical gallstone solvents ethyl propionate and methyl tert-butyl ether in the rabbit. Clerici C, et al. **Dig Dis Sci** 1997 Mar;42(3):497–502
Geographical distribution of benzene in air in northwestern Italy and personal exposure. Gilli G, et al. **Environ Health Perspect** 1996 Dec;104 Suppl 6:1137–40
Toxicity of chronic ethanol ingestion and superoxide radical formation on seminal vesicle of rats. Novelli EL, et al. **Food Chem Toxicol** 1996 Oct;34(10):1003–7
Alterations of hepatic drug metabolising system due to dimethylformamide (DMF). Fujishiro K, et al. **Fukuoka Igaku Zasshi** 1996 Jul;87(7):162–8
Trichloroethylene-induced mouse lung tumors: studies of the mode of action and comparisons between species. Green T, et al. **Fundam Appl Toxicol** 1997 Jun;37(2):125–30
Ethyl propionate is more effective and less cytotoxic than methyl tert-butyl ether for topical gallstone dissolution. Zakko SF, et al. **Gastroenterology** 1997 Jul;113(1):232–7
LC50 of 2-bromopropane. Kim HY, et al. **Ind Health** 1996; 34(4):403–7
Ethanol intake may modify gossypol toxicosis in the rat. Akingbemi BT, et al. **J Appl Toxicol** 1996 Sep-Oct; 16(5):375–80
Perchloroethylene-induced alterations in glucose metabolism and their prevention by 2-deoxy-D-glucose and vitamin E in mice. Ebrahim AS, et al. **J Appl Toxicol** 1996 Jul-Aug; 16(4):339–48
Effect of a single administration of benzene, toluene or m-xylene on carboxyhaemoglobin elevation and metabolism of dichloromethane in rats. Kim SK, et al. **J Appl Toxicol** 1996 Sep-Oct;16(5):437–44
Screening toxic effects of volatile organic compounds using Drosophila melanogaster. Wasserkort R, et al. **J Appl Toxicol** 1997 Mar-Apr;17(2):119–25
Preliminary characterization of phospholipid adducts formed by [14C]-CHCl3 reactive intermediates in hepatocyte suspensions. Guastadisegni C, et al. **J Biochem Toxicol** 1996;11(1):21–5
Potential biomarkers of benzene exposure. Medeiros AM, et al. **J Toxicol Environ Health** 1997 Aug 29;51(6):519–39 (73 ref.)
Low activity of aldehyde dehydrogenase (ALDH) in liver of Suncus murinus: possible explanation for high sensitivity to alcohol. Itoh S, et al. **J Toxicol Sci** 1997 May;22(2):111–5
Behavioral changes following 4-week inhalation exposure to pseudocumene (1,2,4-trimethylbenzene) in the rat. Gralewicz S, et al. **Neurotoxicol Teratol** 1997 Jul-Aug; 19(4):327–33
Neurobehavioral consequences of intermittent prenatal exposure to high concentrations of toluene. Jones HE, et al. **Neurotoxicol Teratol** 1997 Jul-Aug;19(4):305–13
Symptom base rates after chemical exposure for white, Hispanic and African-Americans. Bowler RM, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):793–802
Neurobehavioral effects of solvents and circadian rhythms. Kiesswetter E, et al. **Neurotoxicology** 1996 Fall-Winter; 17(3–4):777–84
Neuronal loss in hippocampus in rats exposed to toluene. Korbo L, et al. **Neurotoxicology** 1996 Summer;17(2):359–66
The role of confounding variables in the assessment of neurobehavioural effects of chronic solvent exposure. Williamson AM. **Neurotoxicology** 1996 Fall-Winter; 17(3–4):761–7
Regeneration of olfactory mucosa in mice after inhalation exposure to perchloroethylene. Suzaki H, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Mar-Apr; 59(2):91–6
Developmental consequences of intermittent and continuous prenatal exposure to 1,1,1-trichloroethane in mice. Jones HE, et al. **Pharmacol Biochem Behav** 1996 Dec;55(4):635–46
Ethanol interference with morphine metabolism in isolated guinea pig hepatocytes. Aasmundstad TA, et al. **Pharmacol Toxicol** 1996 Sep;79(3):114–9
Effects of ethanol and acetate on adenosine production in rat hippocampal slices. Fredholm BB, et al. **Pharmacol Toxicol** 1996 Sep;79(3):120–3
Trichloroethylene cancer risk: simplified calculation of PBPK-based MCLs for cytotoxic end points. Bogen KT, et al. **Regul Toxicol Pharmacol** 1997 Feb;25(1):26–42 (121 ref.)
A new concept for risk assessment of the hazards of non-genotoxic chemicals—electronmicroscopic studies of the cell surface. Evidence for the action of lipophilic chemicals on the Ca2+ signaling system. Gartzke J, et al. **Sci Total Environ** 1997 Jun 20;199(1–2):213–26
Ovarian luteal cell toxicity of ethylene glycol monomethyl ether and methoxy acetic acid in vivo and in vitro. Davis BJ, et al. **Toxicol Appl Pharmacol** 1997 Feb;142(2):328–37
Acute lung injury induced by a commercial leather conditioner. Hubbs AF, et al. **Toxicol Appl Pharmacol** 1997 Mar;143(1):37–46
Effects of benzene on splenic, thymic, and femoral lymphocytes in mice. Farris GM, et al. **Toxicology** 1997 Mar 28;118(2–3):137–48
Comparative study of the damage produced by acute ethanol

and acetaldehyde treatment in a human fetal hepatic cell line. Olivares IP, et al. **Toxicology** 1997 Jun 27; 120(2):133–44

[Environmental and biological monitoring of occupational exposure to perchloroethylene in dry cleaning shops] Gobba F, et al. **Med Lav** 1997 Jan–Feb;88(1):24–36 (Eng. Abstr.) **(Ita)**

[Clinical manifestation of volatile solvent psychosis] Saito T, et al. **Nihon Arukoru Yakubutsu Igakkai Zasshi** 1997 Jun;32(3):189–96 (Eng. Abstr.) **(Jpn)**

[The late sequelae of exposure to solvents (the gonadotropic, embryotropic, mutagenic and gerontogenic actions)] Sanotskii IV. **Med Tr Prom Ekol** 1997;(3):17–20 (Eng. Abstr.) **(Rus)**

[The toxicological, hygienic and clinical aspects of the action of low levels of organic solvents] Ulanova IP, et al. **Med Tr Prom Ekol** 1997;(3):11–7 (Eng. Abstr.) **(Rus)**

SOMAN

Anatomical localization and time course of Fos expression following soman-induced seizures. Zimmer LA, et al. **J Comp Neurol** 1997 Feb 24;378(4):468–81

Soman-induced seizures rapidly activate astrocytes and microglia in discrete brain regions. Zimmer LA, et al. **J Comp Neurol** 1997 Feb 24;378(4):482–92

Structural and functional diversity of paraoxonases [news] La Du BN. **Nat Med** 1996 Nov;2(11):1186–7

ANTAGONISTS & INHIBITORS

Antidotal efficacy of quinuclidinium oximes against soman poisoning. Lucić A, et al. **Arch Toxicol** 1997;71(7):467–70

Protection of guinea pigs against soman poisoning by pretreatment with p-nitrophenyl phosphoramidates. Langenberg JP, et al. **Toxicol Appl Pharmacol** 1996 Oct; 140(2):444–50

BLOOD

The effect of the calcium antagonist nimodipine on the detoxification of soman in anaesthetized rabbits. Karlsson BM, et al. **J Pharm Pharmacol** 1997 Mar;49(3):296–300

CHEMISTRY

Aging of somanyl-acetylcholinesterase adducts: facts and models [letter] Shafferman A, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):996–8

METABOLISM

The effect of the human serum paraoxonase polymorphism is reversed with diazoxon, soman and sarin. Davies HG, et al. **Nat Genet** 1996 Nov;14(3):334–6

PHARMACOLOGY

A self-consistent mechanism for dealkylation in soman-inhibited acetylcholinesterase [letter] Kovach IM, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):995–6

Unique push-pull mechanism of dealkylation in soman-inhibited cholinesterases. Viragh C, et al. **Biochemistry** 1997 Jul 8;36(27):8243–52

Mapping of cortical metabolic activation in soman-induced convulsions in rats. Scremin OU, et al. **Brain Res Bull** 1997; 43(4):425–34

The role of nitric oxide in soman-induced seizures, neuropathology, and lethality. Lallement G, et al. **Pharmacol Biochem Behav** 1996 Aug;54(4):731–7

POISONING

Present views on toxidynamics of soman poisoning. Bajgar J. **Acta Medica (Hradec Kralove)** 1996;39(3):101–5 (76 ref.)

Antidotal efficacy of quinuclidinium oximes against soman poisoning. Lucić A, et al. **Arch Toxicol** 1997;71(7):467–70

The influence of pharmacological pretreatment on efficacy of HI-6 oxime in combination with benactyzine in soman poisoning in rats. Kassa J, et al. **Hum Exp Toxicol** 1996 May;15(5):383–8

Efficacy of atropine/pralidoxime/diazepam or atropine/HI-6/prodiazepam in primates intoxicated by soman. Lallement G, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):325–32

Protection of guinea pigs against soman poisoning by pretreatment with p-nitrophenyl phosphoramidates. Langenberg JP, et al. **Toxicol Appl Pharmacol** 1996 Oct; 140(2):444–50

[Acute poisoning by neuroparalytic agents and its long-term effects] Ianno LV, et al. **Med Tr Prom Ekol** 1997;(6):5–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Development of a physiologically based model for the toxicokinetics of C(+/–)P(+/–)-soman in the atropinized guinea pig. Langenberg JP, et al. **Arch Toxicol** 1997; 71(5):320–31

Blockade of hippocampal long-term potentiation following soman pretreatment in the rat. Armstrong DL, et al. **Brain Res Bull** 1997;43(1):117–20

Effects of soman (pinacolyl methylphosphonofluoridate) on coronary blood flow and cardiac function in swine. McKenzie JE, et al. **Fundam Appl Toxicol** 1996 Jan; 29(1):140–6

Evaluation of the therapeutic efficacy of some antimuscarinics against soman in vivo. Lau WM, et al. **J Appl Toxicol** 1996 Sep–Oct;16(5):423–30

Neurochemical mechanisms in soman-induced seizures. Shih TM, et al. **J Appl Toxicol** 1997 Jul–Aug;17(4):255–64

Compared effects of extracellular K+ ions and soman, a neurotoxic, on cerebral astrocyte morphology. An in vitro study. Grange-Messent V, et al. **J Submicrosc Cytol Pathol** 1996 Apr;28(2):151–9

Effect of pretreatment with felbamate on toxicity of soman in mice. Nyberg AG, et al. **Pharmacol Toxicol** 1997 May; 80(5):251–3

The stoichiometry of protection against soman and VX toxicity in monkeys pretreated with human butyrylcholinesterase. Raveh L, et al. **Toxicol Appl Pharmacol** 1997 Jul;145(1):43–53

Early histopathologic and ultrastructural changes in the heart of Sprague-Dawley rats following administration of soman. Tryphonas L, et al. **Toxicol Pathol** 1996 Mar–Apr; 24(2):190–8

Comparison of the efficacy of single or repeated HI-6 treatment following soman poisoning in guinea pigs and marmoset monkeys. Busker RW, et al. **Toxicology** 1996 Sep 2;112(3):183–94

Importance of cholinolytic drug selection for the efficacy of HI-6 against soman in rats. Kassa J. **Toxicology** 1997 Jan 15;116(1–3):147–52

SOMATIC CELL HYBRIDS see **HYBRID CELLS**

SOMATIC GENE THERAPY see **GENE THERAPY**

SOMATIZATION DISORDER see **SOMATOFORM DISORDERS**

SOMATOCRININ see **SOMATOTROPIN-RELEASING HORMONE**

SOMATOFORM DISORDERS

Rethinking somatization. McWhinney IR, et al. **Ann Intern Med** 1997 May 1;126(9):747–50 (26 ref.)

Somatization and chronic pain in historic perspective. Shorter E. **Clin Orthop** 1997 Mar;(336):52–60

Somatization and the vocabulary of everyday bodily experiences and concerns: a community study of adolescents. Taylor DC, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Apr;35(4):491–9

A 37-year-old man with multiple somatic complaints [clinical conference] Barsky AJ. **JAMA** 1997 Aug 27;278(8):673–9

CLASSIFICATION

ICD-10 checklists--a tool for clinicians' use of the ICD-10 classification of mental and behavioral disorders. Janca A, et al. **Compr Psychiatry** 1996 May–Jun;37(3):180–7

Body dysmorphic disorder by proxy [letter] Josephson SC, et al. **J Clin Psychiatry** 1997 Feb;58(2):86–7

The classification of multiple somatoform symptoms. Rief W, et al. **J Nerv Ment Dis** 1996 Nov;184(11):680–7

Diagnostic criteria and classification in psychosomatic research [editorial] Pilowsky I. **Psychother Psychosom** 1996;65(3):115–6

[Debatable issues in the problem of somatoform and related disorders] Zharikov NM, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):5–11 (45 ref.) (Eng. Abstr.) **(Rus)**

[The complexity of somatization phenomena (letter; comment)] Claraco Vega LM, et al. **Aten Primaria** 1997 Jul–Aug;20(3):154–5. Comment on: Aten Primaria 1997 Feb 28;19(3):152–3, 155. **(Spa)**

COMPLICATIONS

Somatization and somatosensory amplification in psychiatric outpatients: an explorative study. Spinhoven P, et al. **Compr Psychiatry** 1997 Mar–Apr;38(2):93–7

Physical fatigability and exercise capacity in chronic fatigue syndrome: association with disability, somatization and psychopathology. Fischler B, et al. **J Psychosom Res** 1997 Apr;42(4):369–78

How are alexithymia and physical illness linked? A review and critique of pathways. Lumley MA, et al. **J Psychosom Res** 1996 Dec;41(6):505–18 (101 ref.)

Alexithymia in somatoform disorder and somatic disease: a comparative study. Bach M, et al. **Psychother Psychosom** 1996;65(3):150–2

A scale for predicting nonphysiological contributions to pain. Dirks HF, et al. **Psychother Psychosom** 1996;65(3):153–7

Multiple chemical sensitivities: distinguishing between psychogenic and toxicodynamic. Gots RE. **Regul Toxicol Pharmacol** 1996 Aug;24(1 Pt 2):S8–15

Comorbidity of personality disorders and major depression in patients with somatoform pain disorders or medical illnesses with long-standing work disability. Ekselius L, et al. **Scand J Rehabil Med** 1997 Jun;29(2):91–6

[Somatization, sleep and depression. Proceedings of the 11th International Thematic Meeting. Nice, France, June 16, 1995] **Encephale** 1995 Dec;21 Spec No 7:1–47 **(Fre)**

DIAGNOSIS

Clinical study of the relation of borderline personality disorder to Briquet's syndrome (hysteria), somatization disorder, antisocial personality disorder, and substance abuse disorders [published erratum appears in Am J Psychiatry 1997 Jan;154(1):139] Hudziak JJ, et al. **Am J Psychiatry** 1996 Dec;153(12):1598–606

Multisomatoform disorder. An alternative to undifferentiated somatoform disorder for the somatizing patient in primary care. Kroenke K, et al. **Arch Gen Psychiatry** 1997 Apr; 54(4):352–8

Somatoform disorders [letter] Synnott IH. **Aust N Z J Psychiatry** 1996 Dec;30(6):876–7

Diagnosis of functional neurological disease. Hawkes CH. **Br J Hosp Med** 1997 Apr 16–May 6;57(8):373–7 (2 ref.)

Personality factors related to the prevalence of somatic symptoms and medical complaints in a healthy student population. Neitzert CS, et al. **Br J Med Psychol** 1997 Mar; 70 (Pt 1):93–101

Reporting of psychosocial distress [letter; comment] Garcia-Campayo J, et al. **Br J Psychiatry** 1996 Jun; 168(6):790. Comment on: Br J Psychiatry 1996 Jan;168(1):116–20.

Psychosocial study of depression in early pregnancy. Kitamura T, et al. **Br J Psychiatry** 1996 Jun;168(6):732–8

Nonpsychotic thought disorder: objective clinical identification of somatization and antisocial personality in language patterns. North CS, et al. **Compr Psychiatry** 1997 May–Jun;38(3):171–8

Body dysmorphic disorder. Cotterill JA. **Dermatol Clin** 1996 Jul;14(3):457–63 (13 ref.)

General principles in child liaison consultation service: a literature review. Ortiz P. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):1–6 (46 ref.)

Psychiatric illness in patients referred to a dermatology-psychiatry clinic. Woodruff PW, et al. **Gen Hosp Psychiatry** 1997 Jan;19(1):29–35

Gratteurs de papier. III: Doctors through the looking-glass. A topsy-turvy world. Koblenzer CS. **Int J Dermatol** 1996 Aug;35(8):545–7

Anorexia nervosa presenting as a somatic delusional disorder responsive to pharmacotherapy. Wenokur B, et al. **J Am Osteopath Assoc** 1997 Apr;97(4):231–2

Body dysmorphic disorder by proxy [letter] Josephson SC, et al. **J Clin Psychiatry** 1997 Feb;58(2):86–7

Somatic dysfunction and the phenomenon of visceral disease simulation: a probable explanation for the apparent effectiveness of somatic therapy in patients presumed to be suffering from true visceral disease [letter; comment] Lavine R. **J Manipulative Physiol Ther** 1996 Feb; 19(2):147–9. Comment on: J Manipulative Physiol Ther 1995 Jul–Aug;18(6):379–97.

Psychological distress and bereavement. Middleton W, et al. **J Nerv Ment Dis** 1997 Jul;185(7):447–53

The development and psychometric characteristics of the Somatoform Dissociation Questionnaire (SDQ-20). Nijenhuis ER, et al. **J Nerv Ment Dis** 1996 Nov; 184(11):688–94

The classification of multiple somatoform symptoms. Rief W, et al. **J Nerv Ment Dis** 1996 Nov;184(11):680–7

Developing practical indexes of somatization for use in primary care [editorial] Escobar JI. **J Psychosom Res** 1997 Apr;42(4):323–8

Frequent attender profiles: different clinical subgroups among frequent attender patients in primary care. Karlsson H, et al. **J Psychosom Res** 1997 Feb;42(2):157–66

Medically unexplained physical symptoms in primary care: a comparison of self-report screening questionnaires and clinical opinion. Peveler R, et al. **J Psychosom Res** 1997 Mar;42(3):245–52

From conversion hysteria to somatisation to abnormal illness behaviour? [editorial] Pilowsky I. **J Psychosom Res** 1996 Apr;40(4):345–50

Wheelchairs as a sign of functional abdominal pain [letter; comment] Kumar D. **J R Soc Med** 1997 Jan;90(1):59–60 . Comment on: J R Soc Med 1996 Sep;89(9):490–2.

Claudication with normal pulses [letter; comment] Michlowski TJ. **N Engl J Med** 1996 Nov 28;335(22):1686; discussion 1687. Comment on: N Engl J Med 1996 Jul 4;335(1):46–8.

Screening for abnormal illness behaviour. Chaturvedi SK, et al. **Psychopathology** 1996 Nov–Dec;29(6):325–30

Symptoms of neuroses: profile patterns and factor structure of clinic attenders with non-psychotic functional psychiatric disorders. Kitamura T, et al. **Psychopathology** 1997;30(4):191–9

The timing of psychiatric consultation requests. Utilization, liaison, and diagnostic considerations. Ormont MA, et al. **Psychosomatics** 1997 Jan–Feb;38(1):38–44

Using successful models of care to guide the teaching of psychiatry in primary care. Rand EH, et al. **Psychosomatics** 1997 Mar–Apr;38(2):140–7

Age differences among Japanese on the Center for Epidemiologic Studies Depression Scale: an ethnocultural perspective on somatization. Iwata N, et al. **Soc Sci Med** 1996 Sep;43(6):967–74

[Somatization as a clinical problem] Karlsson H, et al. **Duodecim** 1995;111(18):1791–7 (42 ref.) **(Fin)**

[Paroxysmal anxiety crisis, viewpoint of the general practitioner] Bourgeois M. **Encephale** 1996 Dec;22 Spec No 5:9–10 (Eng. Abstr.) **(Fre)**

[Somatic illnesses in psychiatric patients. 9 case reports] Haberfellner EM, et al. **Nervenarzt** 1996 Sep;67(9):789–93 (Eng. Abstr.) **(Ger)**

[Diagnosis and treatment of affective disorders] Vanoni C,

et al. **Ther Umsch** 1997 Jul;54(7):386–9 (Eng. Abstr.) **(Ger)**

[Somatoform disorders in urology] Csef H. **Urologe A** 1997 Jan;36(1):87–99; quiz 97–8 (9 ref.) **(Ger)**

[The "cognitive pupillary oscillation hypothesis" in patients with neurotic disorders and organic psychosyndrome: reliability and validity of a new psychophysiologic method] Grünberger J, et al. **Wien Klin Wochenschr** 1996; 108(3):69–74 (Eng. Abstr.) **(Ger)**

[To be sick and having a disease] Nessa J. **Tidsskr Nor Laegeforen** 1997 Jun 30;117(17):2433 **(Nor)**

[Somatization mental disorders based on data on the dispensary care of the employees of a large industrial enterprise] Gindikin VIa, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):54–8 (Eng. Abstr.) **(Rus)**

[Physical manifestations of anxiety during group psychotherapy] Gregurek R, et al. **Lijec Vjesn** 1996 Mar–Apr;118(3–4):63–7 (Eng. Abstr.) **(Scr)**

[The reason for medical consultations in patients with psychiatric diseases: somatization phenomena and suicide attempts (see comments)] García–Campayo J, et al. **Med Clin (Barc)** 1997 Mar 8;108(9):321–4 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Mar 8;108(9):341–3. **(Spa)**

[Somatization disorder in primary health care (letter; comment)] Vieta E, et al. **Med Clin (Barc)** 1996 Jun 15; 107(3):116–7. Comment on: Med Clin (Barc) 1995 Dec 2;105(19):728–33. **(Spa)**

DRUG THERAPY

Alprazolam–induced hypomania. Reddy J, et al. **Aust N Z J Psychiatry** 1996 Aug;30(4):550–2

Fluvoxamine in the treatment of body dysmorphic disorder (dysmorphophobia). Perugi G, et al. **Int Clin Psychopharmacol** 1996 Dec;11(4):247–54

What we don't know about over–the–counter analgesics [editorial] Abbott FV. **J Psychiatry Neurosci** 1997 May; 22(3):165–7

Overview of somatization: diagnosis, epidemiology, and management. Escobar JI. **Psychopharmacol Bull** 1996; 32(4):589–96 (37 ref.)

Pharmacologic treatment of body dysmorphic disorder. Phillips KA. **Psychopharmacol Bull** 1996;32(4):597–605 (52 ref.)

[The role of testosterone undecanoate in correcting disorders of the copulative function] Tiktinskiĭ OL, et al. **Urol Nefrol (Mosk)** 1996 Sep–Oct;(5):47–8 (Eng. Abstr.) **(Rus)**

ECONOMICS

[Economic sequelae of failed treatments of psychosomatic and somato–psychic illnesses] Lamprecht F. **Psychother Psychosom Med Psychol** 1996 Aug;46(8):283–91 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Generalized anxiety disorder in chronic fatigue syndrome. Fischler B, et al. **Acta Psychiatr Scand** 1997 May; 95(5):405–13

Screening of somatization disorder: validation of the Spanish version of the Othmer and DeSouza test. García–Campayo JJ, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):411–5

The 'Dhat syndrome': a culturally determined symptom of depression? Mumford DB. **Acta Psychiatr Scand** 1996 Sep; 94(3):163–7

Psychiatric morbidity in primary public health care: a multicentre investigation. Part II. Hidden morbidity and choice of treatment. Munk–Jørgensen P, et al. **Acta Psychiatr Scand** 1997 Jan;95(1):6–12

Screening for depression in older persons with low vision. Somatic eye symptoms and the Geriatric Depression Scale. Shmuely–Dulitzki Y, et al. **Am J Geriatr Psychiatry** 1997 Summer;5(3):216–20

Somatization in cross–cultural perspective: a World Health Organization study in primary care. Gureje O, et al. **Am J Psychiatry** 1997 Jul;154(7):989–95

Unemployment and health. Goldney RD. **Aust N Z J Psychiatry** 1996 Jun;30(3):309–11

Psychological morbidity in obstetric–gynaecology patients: testing the need for expanded psychiatry services in obstetric–gynaecology facilities [published erratum appears in Aust N Z J Psychiatry 1996 Apr;30(2):308] Phillips N, et al. **Aust N Z J Psychiatry** 1996 Feb;30(1):74–81

Somatisation in primary care in Spain: II. Differences between somatisers and psychologisers. Working Group for the Study of the Psychiatric and Psychosomatic Morbidity in Zaragoza. Garcia–Campayo J, et al. **Br J Psychiatry** 1996 Mar;168(3):348–53

Somatisation in primary care in Spain: I. Estimates of prevalence and clinical characteristics. Working Group for the Study of the Psychiatric and Psychosomatic Morbidity in Zaragoza. Lobo A, et al. **Br J Psychiatry** 1996 Mar; 168(3):344–8

Physical symptoms and illness attitudes in adolescents: an epidemiological study. Eminson M, et al. **J Child Psychol Psychiatry** 1996 Jul;37(5):519–28

Somatoform disorders in Caucasian and Chinese Americans. Hsu LK, et al. **J Nerv Ment Dis** 1997 Jun;185(6):382–7

Gender–related differences in body dysmorphic disorder (dysmorphophobia). Perugi G, et al. **J Nerv Ment Dis** 1997 Sep;185(9):578–82

Gender differences in body dysmorphic disorder. Phillips KA, et al. **J Nerv Ment Dis** 1997 Sep;185(9):570–7

Sociopsychological factors in chronic pelvic pain: a review. Fry RP, et al. **J Psychosom Res** 1997 Jan;42(1):1–15 (53 ref.)

Patients who somatize in primary care: a longitudinal study of cognitive and social characteristics. Kirmayer LJ, et al. **Psychol Med** 1996 Sep;26(5):937–51

Structural factor analyses for medically unexplained somatic symptoms of somatization disorder in the Epidemiologic Catchment Area study. Liu G, et al. **Psychol Med** 1997 May;27(3):617–26

Gender and cross–cultural differences in somatic symptoms associated with emotional distress. An international study in primary care. Piccinelli M, et al. **Psychol Med** 1997 Mar; 27(2):433–44

Utilization of medical specialists by anxiety disorder patients. Kennedy BL, et al. **Psychosomatics** 1997 Mar–Apr; 38(2):109–12

Psychosomatic symptoms in human service work. A study on Swedish social workers and social insurance personnel. Söderfeldt B, et al. **Scand J Soc Med** 1996 Mar;24(1):43–9

Epidemiology of somatoform disorders: a community survey in Florence. Faravelli C, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jan;32(1):24–9

Somatization in frequent attenders of general practice. Portegijs PJ, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Jan;31(1):29–37

[Incidence of comorbid anxiety disorders in outpatient primary care] Buddeberg C. **Schweiz Rundsch Med Prax** 1997 Jun 11;86(24):1034 **(Ger)**

ETHNOLOGY

Neurasthenia, depression and somatoform disorder in a Chinese–Vietnamese woman migrant. Cheung F, et al. **Cult Med Psychiatry** 1997 Jun;21(2):247–58

Deboleza: culturally determined behaviour in Istria. Pavlovic E, et al. **Psychopathology** 1997;30(4):215–22

Age differences among Japanese on the Center for Epidemiologic Studies Depression Scale: an ethnocultural perspective on somatization. Iwata N, et al. **Soc Sci Med** 1996 Sep;43(6):967–74

ETIOLOGY

Somatic dysfunction increase during caffeine withdrawal. Reeves RR, et al. **J Am Osteopath Assoc** 1997 Aug; 97(8):454–6

Recognizing and treating the patient with somatic manifestations of depression. De Wester JN. **J Fam Pract** 1996 Dec;43(6 Suppl):S3–15 (109 ref.)

Dissociation, somatization, substance abuse, and coping in women with chronic pelvic pain. Badura AS, et al. **Obstet Gynecol** 1997 Sep;90(3):405–10

HISTORY

Somatic symptoms and psychological distress in the Iliad of Homer. Mumford DB. **J Psychosom Res** 1996 Aug; 41(2):139–48

The notion of somatization: an artefact of the conceptualization of body and mind. van der Feltz–Cornelis CM, et al. **Psychother Psychosom** 1997; 66(3):117–27

METABOLISM

Alterations of benzodiazepine receptor binding potential in anxiety and somatoform disorders measured by 123I–iomazenil SPECT. Tokunaga M, et al. **Radiat Med** 1997 May–Jun;15(3):163–9

PHYSIOPATHOLOGY

Raised blood albumin levels are associated with trait anxiety [letter] Stones A, et al. **Depress Anxiety** 1996–97;4(3):151–2

Somatic symptoms in anxious–depressed school refusers. Bernstein GA, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):661–8

Somatic symptoms of distress: an international primary care study. Simon G, et al. **Psychosom Med** 1996 Sep–Oct; 58(5):481–8

Plasma neurotransmitters and functional illness. Lechin F, et al. **Psychother Psychosom** 1996;65(6):293–318 (203 ref.)

PSYCHOLOGY

Children with malignant disorders: the health and life situation of their parents examined over a 7–year interval. Lähteenmäki PM, et al. **Acta Paediatr** 1996 Jan;85(1):70–5

Attribution in somatizers: stability and relationship to outcome at 1–year follow–up. Grupo Morbilidad Psiquica y Psicosomática de Zaragoza (GMPPZ). García–Campayo J, et al. **Acta Psychiatr Scand** 1997 May;95(5):433–8

Sex–of–sibling effects: a review. Part II. Personality and mental and physical health. Wagner ME, et al. **Adv Child Dev Behav** 1996;26:137–79

Health psychology: what is an unhealthy environment and how does it get under the skin? Taylor SE, et al. **Annu Rev Psychol** 1997;48:411–47 (215 ref.)

Social, blood/injury, and agoraphobic fears in patients with physically unexplained chronic pain: are they clinically significant? Asmundson GJ, et al. **Anxiety** 1996;2(1):28–33

Cardio–respiratory and other symptom clusters in panic disorder. Bandelow B, et al. **Anxiety** 1996;2(2):99–101

The meaning of symptoms in 10 women with somatization disorder and a history of childhood abuse. Morse DS, et al. **Arch Fam Med** 1997 Sep–Oct;6(5):468–76

Habits, tics, and stuttering. Prevalence and relation to anxiety and somatic awareness. Woods DW, et al. **Behav Modif** 1996 Apr;20(2):216–25

Daily events and somatic symptoms: evidence of a lagged relationship. Sheffield D, et al. **Br J Med Psychol** 1996 Sep;69 (Pt 3):267–9

Somatisation in primary care in Spain: I. Estimates of prevalence and clinical characteristics. Working Group for the Study of the Psychiatric and Psychosomatic Morbidity in Zaragoza. Lobo A, et al. **Br J Psychiatry** 1996 Mar; 168(3):344–8

Miserable minority: emotional risk factors that influence the outcome of a mild traumatic brain injury. Ruff RM, et al. **Brain Inj** 1996 Aug;10(8):551–65

Paruresis and urine drug testing [letter] Labbate LA. **Depress Anxiety** 1996–97;4(5):249–52

A comparative study of psychological aspects of recurring and non–recurring functional aphonias. Günther V, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):240–4

Effects of psychiatric consultation on medical consumption in medical outpatients with low back pain. Koopmans GT, et al. **Gen Hosp Psychiatry** 1996 May;18(3):145–54

Patients' influence on doctors' behavior: a case study of patient strategies in somatization. Salmon P, et al. **Int J Psychiatry Med** 1995;25(4):319–29

Children's cognitive responses to the somatic symptoms of panic. Mattis SG, et al. **J Abnorm Child Psychol** 1997 Feb; 25(1):47–57

Of healing and human suffering. Katon W, et al. **J Am Board Fam Pract** 1997 Jan–Feb;10(1):62–5

Casual dimensions of college students' perceptions of physical symptoms. Swartzman LC, et al. **J Behav Med** 1996 Apr; 19(2):95–110

Somatic function, mental health, and psychosocial adjustment of adolescents with anorectal anomalies. Diseth TH, et al. **J Pediatr Surg** 1996 May;31(5):638–43

Does unhappiness make you sick? The role of affect and neuroticism in the experience of common physical symptoms. Brown KW, et al. **J Pers Soc Psychol** 1997 Apr; 72(4):907–17

Emotional expression and physical health: revising traumatic memories or fostering self–regulation? Greenberg MA, et al. **J Pers Soc Psychol** 1996 Sep;71(3):588–602

How not to miss a somatic needle in the haystack of chronic pain. Adler RH, et al. **J Psychosom Res** 1997 May; 42(5):499–505

Psychological and physical factors involved in chronic idiopathic prostatitis. Berghuis JP, et al. **J Psychosom Res** 1996 Oct;41(4):313–25

Factors related to dissociation among patients with gastrointestinal complaints. Engel CC Jr, et al. **J Psychosom Res** 1996 Jun;40(6):643–53

Physical fatigability and exercise capacity in chronic fatigue syndrome: association with disability, somatization and psychopathology. Fischler B, et al. **J Psychosom Res** 1997 Apr;42(4):369–78

Are abnormal gastrofiberscopic findings related to hostility with poor social support or to negative responses to stress? Fukunishi I, et al. **J Psychosom Res** 1996 Oct;41(4):337–42

Beliefs about mood moderate the relationship of stress to illness and symptom reporting. Goldman SL, et al. **J Psychosom Res** 1996 Aug;41(2):115–28

"Psychosomatic medicine" not "psychosomatic disorders" [editorial; comment] Lask B. **J Psychosom Res** 1996 May; 40(5):457–60. Comment on: J Psychosom Res 1995 Feb;39(2):115–8.

The postconcussional syndrome: a rose by any other name [editorial] McClelland RJ. **J Psychosom Res** 1996 Jun; 40(6):563–8 (41 ref.)

Assessment of the multiple dimensions of nausea: the Nausea Profile (NP). Muth ER, et al. **J Psychosom Res** 1996 May; 40(5):511–20

Psychiatric aspects of food–related physical symptoms: a community study. Peveler R, et al. **J Psychosom Res** 1996 Aug;41(2):149–59

Illness behavior and somatization in general practice. Scicchitano J, et al. **J Psychosom Res** 1996 Sep;41(3):247–54

Empirical psychological modeling of chest pain: a comparative study. Serlie AW, et al. **J Psychosom Res** 1996 Jun;40(6):625–35

A developmental perspective on family risk factors in somatization. Terre L, et al. **J Psychosom Res** 1997 Feb; 42(2):197–208

Psychosocial factors and physical illness in primary care: promoting the biopsychosocial model in medical practice [editorial] Zimmermann C, et al. **J Psychosom Res** 1996 Apr;40(4):351–8 (60 ref.)

Psychodynamic factors in the aetiology of compensation neurosis. Hodges A, et al. **Med Sci Law** 1996 Jan;36(1):77–9

Non–organic symptom reporting in patients with chronic non–malignant pain [published erratum appears in Pain 1997 May;71(1):117] Ciccone DS, et al. **Pain** 1996 Dec; 68(2–3):329–41

Symptom reporting and interoceptive attention in panic patients. Kroeze S, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):1019–26

The mind and the butt. Symonds A. **Psychiatr Serv** 1996 Feb;47(2):141–2

Somatoform pain disorder in a case of Klinefelter's syndrome with multiply operated lower back. Akimoto M, et al. **Psychiatry Clin Neurosci** 1995 Dec:49(5–6):267–71

Somatization in adolescence with reference to dysmorphophobia. Ohya D, et al. **Psychiatry Clin Neurosci** 1996 Feb;50(1):31–4

Motherhood, motherliness, and psychogenic infertility. Allison GH. **Psychoanal Q** 1997 Jan;66(1):1–17

A meta–analytic review of research on hostility and physical health. Miller TQ, et al. **Psychol Bull** 1996 Mar; 119(2):322–48

Unexplained physical symptoms: outcome, utilization of medical care and associated factors. Speckens AE, et al. **Psychol Med** 1996 Jul;26(4):745–52

Provisional statistics for MMPI–2 Dependency Prejudice, Social Status, Control, and Low Back Pain Scales. Brophy AL. **Psychol Rep** 1996 Jun;78(3 Pt 2):1075–8

Elements of neuroticism in relation to headache symptomatology. Kentle RL. **Psychol Rep** 1997 Feb; 80(1):227–35

Possession by the 'Zar' among Ethiopian immigrants to Israel: psychopathology or culture–bound syndrome? Grisaru N, et al. **Psychopathology** 1997;30(4):223–33

Laterality in somatization. Min SK, et al. **Psychosom Med** 1997 May–Jun;59(3):236–40

Independency of alexithymia and somatization. A factor analytic study. Bach M, et al. **Psychosomatics** 1996 Sep–Oct;37(5):451–8

Coping style and social support in women suffering from cluster headache or migraine. Blomkvist V, et al. **Psychother Psychosom** 1997;66(3):150–4

Somatization, dissociation, and tension–reducing behaviors in psychiatric outpatients. Farley M, et al. **Psychother Psychosom** 1997;66(3):133–40

Hypochondriasis and symptom reporting––the effect of attention versus distraction. Haenen MA, et al. **Psychother Psychosom** 1996;65(1):43–48

Psychological assessment of patients with idiopathic pruritus ani. Laurent A, et al. **Psychother Psychosom** 1997; 66(3):163–6

Glossodynia: personality characteristics and psychopathology. Trikkas G, et al. **Psychother Psychosom** 1996;65(3):163–8

Physical symptoms, somatization, and dissociation in women survivors of childhood sexual assault. Farley M, et al. **Women Health** 1997;25(3):33–45

[Stress theories and the somatization process] Dantzer R. **Encephale** 1995 Dec;21 Spec No 7:3–9 (21 ref.) (Eng. Abstr.) **(Fre)**

[Phenomenologic analysis of somatic symptoms in melancholia] Kraus A. **Encephale** 1995 Dec;21 Spec No 7:11–5 (37 ref.) (Eng. Abstr.) **(Fre)**

[Summary report of psychosomatic workshops] Bitzer J. **Arch Gynecol Obstet** 1996;259 Suppl 1:S80–3 **(Ger)**

[The "problem patient" in gynecologic consultation. From the "difficult patient personality" to dysfunctional patient–physician relations] Bitzer J. **Geburtshilfe Frauenheilkd** 1996 Jul;56(7):M95–9 **(Ger)**

[Multiple chemical sensitivity (MCS)–syndrome (letter)] Vieregge P, et al. **Gesundheitswesen** 1997 Jun;59(6):413–4 **(Ger)**

[Psychophysiologic and psychoneuroimmunologic studies in neurodermatitis. Overview and critical evaluation] Buhk H, et al. **Hautarzt** 1997 Jan;48(1):5–11 (24 ref.) (Eng. Abstr.) **(Ger)**

[Correlation between chronic urticaria and depression/somatization disorder] Hein UR, et al. **Hautarzt** 1996 Jan;47(1):20–3 (Eng. Abstr.) **(Ger)**

[Vertigo and anxiety disorders––results of interdisciplinary evaluation] Eckhardt A, et al. **Laryngorhinootologie** 1996 Sep;75(9):517–22 (Eng. Abstr.) **(Ger)**

[Psychological factors in spasmodic dysphonia] Kiese–Himmel C, et al. **Laryngorhinootologie** 1996 Jul; 75(7):397–402 (Eng. Abstr.) **(Ger)**

[Physically experienced ego disturbances] Erkwoh R. **Nervenarzt** 1996 Jul;67(7):552–7 (Eng. Abstr.) **(Ger)**

[Autistic–undisciplined thinking in medicine and overcoming it by Eugen Bleuler] Kruse G. **Psychiatr Prax** 1996 Sep; 23(5):255–6 **(Ger)**

[Alexithymia––psychometric phantom or psychophysiologic reality?] Franz M, et al. **Psychother Psychosom Med Psychol** 1996 Jan;46(1):1–10 (Eng. Abstr.) **(Ger)**

[Psychological classification of functional voice disorders] Kiese–Himmel C, et al. **Psychother Psychosom Med Psychol** 1997 Jan;47(1):27–33 (Eng. Abstr.) **(Ger)**

[Coping with stress and self–awareness in idiopathic sudden deafness] Kröger F, et al. **Psychother Psychosom Med Psychol** 1996 Aug; 46(8):298–303 (Eng. Abstr.) **(Ger)**

[Confounding effects in social science studies and their control. The examples of personality, social support, psychiatric disease] Manz R. **Psychother Psychosom Med Psychol** 1997 Jun; 47(6):198–205 (Eng. Abstr.) **(Ger)**

[Does unemployment cause illness? (editorial; comment)] Eder A. **Wien Klin Wochenschr** 1997 Mar 28;109(6):177–9 . Comment on: Wien Klin Wochenschr 1997 Mar 28;109(6):202–10. **(Ger)**

[Cardiovascular diseases caused by unemployment? An analysis from the viewpoint of social medicine (see comments)] Weber A, et al. **Wien Klin Wochenschr** 1997 Mar 28;109(6):202–10 (50 ref.) (Eng. Abstr.). Comment in: Wien Klin Wochenschr 1997 Mar 28;109(6):177–9. **(Ger)**

[Psychosomatic disorders in the area of environmental medicine. Environmental medicine––environmental psychology] Plassmann R. **Z Arztl Fortbild Qualitatssich** 1997 Feb;91(1):43–9 (Eng. Abstr.) **(Ger)**

[Different lay etiologic attributions of psychogenically ill probrands from an epidemiologic field study] Thebaldi B, et al. **Z Psychosom Med Psychoanal** 1996;42(1):71–87 (Eng. Abstr.) **(Ger)**

[The psychopathology of a depressive somato–autonomic symptom complex] Zelenina EV. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(4):25–9 (Eng. Abstr.) **(Rus)**

[The induction of psychopathology by somatic disorders, medications, toxins and drugs after systemic disorders] García Toro M, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1997 Jan–Feb;25(1):50–60 (93 ref.) (Eng. Abstr.) **(Spa)**

[Amplification: somatosensory or cognitive?] Jimenez Moron D, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jan–Feb;24(1):1–6 (Eng. Abstr.) **(Spa)**

REHABILITATION

[Psychosomatic rehabilitation in musculoskeletal disorders––an exploratory study of an indicative therapy program] Schneider E, et al. **Rehabilitation (Stuttg)** 1996 Nov;35(4):215–23 (Eng. Abstr.) **(Ger)**

[Rehabilitation hospitalism] Barolin GS. **Wien Med Wochenschr** 1996;146(17):472–7 (Eng. Abstr.) **(Ger)**

[Psychosomatic rehabilitation] Lamprecht F. **Z Arztl Fortbild (Jena)** 1996 Oct;90(6):511–7 (13 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Group therapy for somatization disorders in general practice: effectiveness of a short cognitive–behavioural treatment model. Lidbeck J. **Acta Psychiatr Scand** 1997 Jul; 96(1):14–24

Adapting the three–step approach (Rossi, 1986/1993) for use with two young children. Pratt MS. **Am J Clin Hypn** 1996 Jul;39(1):48–61

Treating medically unexplained physical symptoms [editorial] Mayou R, et al. **BMJ** 1997 Sep 6;315(7108):561–2

Emotional disorder in chronic illness: psychotherapeutic interventions. Guthrie E. **Br J Psychiatry** 1996 Mar; 168(3):265–73

Psychiatric consultation for somatizing patients in the family practice setting: a feasibility study. van der Feltz–Cornelis CM, et al. **Int J Psychiatry Med** 1996;26(2):223–39

The use of contingency management in the treatment of a geriatric nursing home patient with psychogenic vomiting. Sloan DM, et al. **J Behav Ther Exp Psychiatry** 1996 Mar; 27(1):57–65

Reappraising reassurance––the role of investigations [editorial] Howard LM, et al. **J Psychosom Res** 1996 Oct; 41(4):307–11 (26 ref.)

Application of the relaxation technique in general hospital psychiatry. Hosaka T, et al. **Psychiatry Clin Neurosci** 1995 Dec;49(5–6):259–62

Morita therapy: 1919 to 1995. Kitanishi K, et al. **Psychiatry Clin Neurosci** 1995 Dec;49(5–6):245–54 (142 ref.)

Cognitive behavior therapy for functional somatic complaints. The example of chronic fatigue syndrome. Sharpe M. **Psychosomatics** 1997 Jul–Aug;38(4):356–62

[Management of somatization in depression] Azorin JM. **Encephale** 1995 Dec;21 Spec No 7:17–22 (47 ref.) (Eng. Abstr.) **(Fre)**

[Concept for a behavior therapy treatment program in primary insomnia] Zschintzsch A, et al. **Nervenarzt** 1996 Mar;67(3):244–8 (Eng. Abstr.) **(Ger)**

[Body–centered psychotherapy IKP (Institute of Body–Centered Psychotherapy): holistic psychotherapy] Maurer–Groeli Y. **Ther Umsch** 1996 Mar;53(3):217–24 (Eng. Abstr.) **(Ger)**

[Somatoform disorders and their therapy] Radanov BP, et al. **Ther Umsch** 1997 Jul;54(7):405–9 (Eng. Abstr.) **(Ger)**

[Report of experiences in psychological consultation in a gynecologic clinic] Jurack JR. **Z Geburtshilfe Neonatol** 1996 Jul–Aug;200(4):144–50 (Eng. Abstr.) **(Ger)**

SOMATOMAMMOTROPIN, CHORIONIC see **PLACENTAL LACTOGEN**

SOMATOMAMMOTROPIN RECEPTORS see **RECEPTORS, SOMATOTROPIN**

SOMATOMEDIN-BINDING PROTEINS see **INSULIN–LIKE GROWTH–FACTOR–BINDING PROTEINS**

SOMATOMEDIN C see **INSULIN–LIKE GROWTH FACTOR I**

SOMATOMEDIN C RECEPTORS see **RECEPTORS, INSULIN–LIKE–GROWTH FACTOR I**

SOMATOMEDIN MSA see **INSULIN–LIKE GROWTH FACTOR II**

SOMATOMEDIN RECEPTORS see **RECEPTORS, SOMATOMEDIN**

SOMATOMEDINS

see related
RECEPTORS, SOMATOMEDIN

[Insulin–like growth factor in normalcy and in osteogenic sarcoma] KushlinskiiNE, et al. **Vopr Onkol** 1996;42(6):7–12 (39 ref.) **(Rus)**

ANALYSIS

Biological characteristics of adrenocortical carcinoma: a study of p53, IGF, EGF–r, Ki–67 and PCNA in 17 adrenocortical carcinomas. Edgren M, et al. **Anticancer Res** 1997 Mar–Apr;17(2B):1303–9

Associations between insulin–like growth factors and their binding proteins and other prognostic indicators in breast cancer. Yu H, et al. **Br J Cancer** 1996 Oct;74(8):1242–7

Effects of oral and transdermal oestrogen replacement therapy on plasma levels of insulin–like growth factors and IGF binding proteins 1 and 3: a cross–over study. Helle SI, et al. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):727–32

Nutritional regulation of circulating insulin–like growth factors (IGFs) and their binding proteins in the ovine fetus. Lee WH, et al. **Endocr J** 1997 Feb;44(1):163–73

Ontogeny of IGFs and IGFBPs mRNA levels and tissue concentrations in liver, kidney and skeletal muscle of pig. Peng M, et al. **Growth Dev Aging** 1996 Autumn–Winter; 60(3–4):171–87

Multiple endocrine abnormalities of the growth hormone and insulin–like growth factor axis in prepubertal children with exogenous obesity: effect of short– and long–term weight reduction. Argente J, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2076–83

Multiple endocrine abnormalities of the growth hormone and insulin–like growth factor axis in patients with anorexia nervosa: effect of short– and long–term weight recuperation. Argente J, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2084–92

[Reduced concentration of insulin–like growth factor I in patients with cystic fibrosis] Laursen EM, et al. **Ugeskr Laeger** 1996 Sep 16;158(38):5300–2 (Eng. Abstr.) **(Dan)**

BIOSYNTHESIS

Evolution of insulin–like growth factor (IGF) function: production and characterization of recombinant hagfish IGF. Upton Z, et al. **Gen Comp Endocrinol** 1997 Jan; 105(1):79–90

Insulin–like growth factor (IGF) and IGF binding protein gene expression in multicystic renal dysplasia. Matsell DG, et al. **J Am Soc Nephrol** 1997 Jan;8(1):85–94

DEFICIENCY

Biochemical diagnostic strategies in the evaluation of short stature: the diagnosis of insulin–like growth factor deficiency. Rosenfeld RG. **Horm Res** 1996;46(4–5):170–3 (17 ref.)

GENETICS

Simultaneous detection of multiple gene expression in mouse and human individual preimplantation embryos. Liu HC, et al. **Fertil Steril** 1997 Apr;67(4):733–41

Expression of insulin–like growth factor (IGF), IGF–binding protein, and IGF receptor messenger ribonucleic acids in normal and polycystic ovaries. Voutilainen R, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1003–8

Changes in some troponin and insulin–like growth factor messenger ribonucleic acids in regenerating and denervated skeletal muscles. Krishan K, et al. **J Muscle Res Cell Motil** 1996 Oct;17(5):513–21

Autonomous control of expression of genes for insulin–like growth factors during the proliferation and differentiation of C2C12 mouse myoblasts in serum–free culture. Yoshiko Y, et al. **Life Sci** 1996;59(23):1961–8

The pattern of expression of insulin–like growth factor (IGF). IGF–I receptor and IGF binding protein (IGFBP) mRNAs in the rhesus monkey placenta suggests a paracrine mode of IGF–IGFBP interaction in placental development. Coulter CL, et al. **Placenta** 1996 Sep;17(7):451–60

METABOLISM

Insulin–like growth factors in breast cancer. Helle SI, et al. **Acta Oncol** 1996;35 Suppl 5:19–22 (29 ref.)

Effects of refeeding of undernourished and insulin treatment of diabetic neonatal rats on IGF and IGFBP. Goya L, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E223–31

Changes in growth hormone, insulin, insulinlike growth factors (IGFs), and IGF–binding protein–1 in chronic fatigue syndrome. Allain TJ, et al. **Biol Psychiatry** 1997 Mar 1;41(5):567–73

Insulin–like growth factors and their binding proteins in human colonocytes: preferential degradation of insulin–like growth factor binding protein 2 in colonic cancers. Michell

NP, et al. **Br J Cancer** 1997;76(1):60–6

Coordinate expression of the insulin–like growth factor system after microembolisation in porcine heart. Kluge A, et al. **Cardiovasc Res** 1997 Feb;33(2):324–31

Pregnancy–specific alterations in the expression of the insulin–like growth factor system during early placental development in the ewe. Reynolds TS, et al. **Endocrinology** 1997 Mar;138(3):886–97

Insulin–like growth factor binding protein (IGFBP)–3 protease activity secreted by MCF–7 breast cancer cells: inhibition by IGFs does not require IGF–IGFBP interaction. Salahifar H, et al. **Endocrinology** 1997 Apr; 138(4):1683–90

Spatial and temporal changes in the insulin–like growth factor (IGF) axis indicate autocrine/paracrine actions of IGF–I within wounds of the rat brain. Walter HJ, et al. **Endocrinology** 1997 Jul;138(7):3024–34

Effect of the somatostatin analog, octreotide, and of other hormones on the release of the acid–labile subunit of the 150 kDa complex by rat hepatocyte in primary culture. Barreca AM, et al. **Eur J Endocrinol** 1997 Aug;137(2):193–9

The yin and the yang of the IGF system: immunological manifestations of GH resistance [comment] Le Roith D, et al. **Eur J Endocrinol** 1997 Jan;136(1):33–4. Comment on: Eur J Endocrinol 1997 Jan;136(1):92–5.

Total and free IGF serum levels. Zapf J. **Eur J Endocrinol** 1997 Feb;136(2):146–7

Neuroblastoma and insulin–like growth factor system. New insights and clinical perspectives. Cianfarani S, et al. **Eur J Pediatr** 1997 Apr;156(4):256–61 (65 ref.)

The glycosaminoglycan binding site governs ligand binding to the somatomedin B domain of vitronectin. Seiffert D. **J Biol Chem** 1997 Apr 11;272(15):9971–8

Effects of treatment with megestrol acetate, aminoglutethimide, or formestane on insulin–like growth factor (IGF) I and II, IGF–binding proteins (IGFBPs), and IGFBP–3 protease status in patients with advanced breast cancer. Frost VJ, et al. **J Clin Endocrinol Metab** 1996 Jun; 81(6):2216–21

The effect of growth hormone treatment on the insulin–like growth factor axis in a child with nonislet cell tumor hypoglycemia. Katz LE, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1141–6

Kinetics of insulin–like growth factor (IGF) and IGF–binding protein responses to a single dose of growth hormone. Lee PD, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2266–74

The interface between diabetic retinopathy, diabetes management, and insulin–like growth factors [editorial; comment] Merimee T. **J Clin Endocrinol Metab** 1997 Sep; 82(9):2806–8. Comment on: J Clin Endocrinol Metab 1997 Sep;82(9):2809–15.

Growth hormone (GH) treatment of GH–deficient children increases serum levels of insulin–like growth factors (IGFs), IGF–binding protein–3 and –5, and bone alkaline phosphatase isoenzyme. Ono T, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2111–6

Dual hormonal replacement therapy with insulin and recombinant human insulin–like growth factor (IGF)–I in insulin–dependent diabetes mellitus: effects on the growth hormone/IGF/IGF–binding protein system. Thrailkill K, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1181–7

IGF–binding protein–6 is involved in growth inhibition in SH–SY5Y human neuroblastoma cells: its production is both IGF– and cell density–dependent. Babajko S, et al. **J Endocrinol** 1997 Feb;152(2):221–7

Solid–phase assay for insulin–like growth factor (IGF) binding to IGF–binding protein–3: application to the study of the effects of antibodies and heparin. Koedam JA, et al. **J Endocrinol** 1997 Apr;153(1):87–97

Differential effects of GH stimulation on fasting and prandial metabolism and plasma IGFs and IGF–binding proteins in lean and obese sheep. McCann JP, et al. **J Endocrinol** 1997 Aug;154(2):329–46

Insulin–like growth factors and their binding proteins in the ovine oviduct during the oestrous cycle. Stevenson KR, et al. **J Reprod Fertil** 1996 Sep;108(1):31–40

Insulin–like growth factors (IGFs) and IGF binding proteins, serum acid–labile subunit and growth hormone binding protein in nephrotic children. Haffner D, et al. **Kidney Int** 1997 Sep;52(3):802–10

IGFs and their binding proteins. Gourmelen M, et al. **Nucl Med Biol** 1994 Apr;21(3):297–302 (20 ref.)

Characterization of insulin–like growth factors and their binding proteins in peritoneal dialysate. Kale AS, et al. **Pediatr Nephrol** 1996 Aug;10(4):467–73

Serum insulin–like growth factors and their binding proteins in children with end–stage renal disease. Tönshoff B, et al. **Pediatr Nephrol** 1996 Jun;10(3):269–74

Effects of growth hormone on insulin–like growth factors and binding proteins before and after renal transplantation. van Renen MJ, et al. **Pediatr Nephrol** 1996 Aug;10(4):483–7

Characterisation of the rat acid–labile subunit gene. Delhanty PJ, et al. **Prog Growth Factor Res** 1995;6(2–4):141–9

A proteolytic fragment of insulin–like growth factor (IGF) binding protein–3 that fails to bind IGF is a cell growth inhibitor. Lalou C, et al. **Prog Growth Factor Res** 1995; 6(2–4):311–6

Formation of 150–kDa binary complexes of insulin–like growth factor binding protein–3 and the acid–labile subunit in vitro and in vivo. Lee CY, et al. **Prog Growth Factor Res** 1995;6(2–4):241–51 (12 ref.)

Cellular localization and hormonal regulation of biosynthesis of insulin–like growth factor binding proteins and of the acid–labile subunit within rat liver. Scharf JG, et al. **Prog Growth Factor Res** 1995;6(2–4):175–80 (23 ref.)

Insulin–like growth factors (IGF) and IGF binding proteins in children with chronic renal failure. Tönshoff B, et al. **Prog Growth Factor Res** 1995;6(2–4):481–91 (49 ref.)

[Insulin–like growth factors (IGFs) and their binding proteins (IGFBPs)in physiologic and pathologic states] Marek B, et al. **Pol Arch Med Wewn** 1996 Sep;96(3):290–6 (82 ref.) **(Pol)**

PHARMACOLOGY

The effects of insulin–like growth factor analogues on survival of cultured cerebral cortex and cerebellar granule neurones. Harper SJ, et al. **Brain Res** 1996 Feb 19; 709(2):303–10

Wortmannin inhibits IGF–dependent differentiation in the mouse myogenic cell line C2. Pinset C, et al. **C R Acad Sci III** 1997 May;320(5):367–74

Synergistic growth stimulation of mouse fibroblasts by tumor–derived adhesion factor with insulin–like growth factors and insulin. Akaogi K, et al. **Cell Growth Differ** 1996 Dec;7(12):1671–7

Effects of insulin, insulin–like growth factors and epidermal growth factor on mitogenesis and disaccharidase activity in rat (IEC–6) and human (FHs 74 Int) intestinal cells. Chao JC, et al. **Chin J Physiol** 1996;39(4):253–63

Impact of growth factors on morphometric corneal endothelial cell parameters and cell density in culture–preserved human corneas. Barisani–Asenbauer T, et al. **Cornea** 1997 Sep;16(5):537–40

Effects of insulin–like growth factors (IGF) on pancreatic islet function in IGF binding protein–1 transgenic mice. Dheen ST, et al. **Diabetologia** 1996 Nov;39(11):1249–54

Human simple renal cyst fluid contains a cyst formation–promoting activity for Madin–Darby canine kidney cells cultured in collagen gel. Taide M, et al. **Eur J Clin Invest** 1996 Jun;26(6):506–13

IGF enhancement of FGF–induced fibre differentiation and DNA synthesis in lens explants. Liu J, et al. **Exp Eye Res** 1996 Dec;63(6):621–9

Multifactorial regulation of DNA synthesis in goldfish ovarian follicles. Kumar Srivastava R, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):397–403

Influence of insulin–like growth factors and insulin on the [35S]sulfate uptake by cartilage of the axolotl (Ambystoma mexicanum). Schneider A, et al. **Gen Comp Endocrinol** 1996 Oct;104(1):92–102

Induction of cell proliferation by fibroblast and insulin–like growth factors in pure rat inner ear epithelial cell cultures. Zheng JL, et al. **J Neurosci** 1997 Jan 1;17(1):216–26

Effects of insulin–like growth factors and binding protein 1 on bovine granulosa cell division in anchorage–independent culture. Lavranos TC, et al. **J Reprod Fertil** 1996 Jul;107(2):221–8

Insulin–like growth factors prevent apoptosis in cortical neurons isolated from stroke–prone spontaneously hypertensive rats. Tagami M, et al. **Lab Invest** 1997 May; 76(5):603–12

Components of the IGF system mediate the opposing effects of tamoxifen on endometrial and breast cancer cell growth. Karas M, et al. **Prog Growth Factor Res** 1995;6(2–4):513–20

[Somatomedins—structure, mechanism of action and clinical significance] Zdrojewicz Z, et al. **Pol Arch Med Wewn** 1997 Jan;97(1):78–84 (47 ref.) **(Pol)**

PHYSIOLOGY

Fetal growth retardation: underlying endocrine mechanisms and postnatal consequences. Gluckman PD, et al. **Acta Paediatr Suppl** 1997 Jul;422:69–72 (32 ref.)

Growth factors for bone growth and repair: IGF, TGF beta and BMP. Linkhart TA, et al. **Bone** 1996 Jul;19(1 Suppl):1S–12S (96 ref.)

Up and down the growth hormone cascade. Clark RG, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):65–80 (128 ref.)

Insulin–like growth factors (IGFs) and IGF binding proteins–1, –2, and –3 in newborn serum: relationships to fetoplacental growth at term. Osorio M, et al. **Early Hum Dev** 1996 Sep 20;46(1–2):15–26

Growth hormone, the insulin–like growth factor system, and the kidney. Feld S, et al. **Endocr Rev** 1996 Oct;17(5):423–80 (725 ref.)

Growth hormone and the insulin–like growth factor system in myogenesis. Florini JR, et al. **Endocr Rev** 1996 Oct; 17(5):481–517 (465 ref.)

The role of the insulin–like growth factor binding proteins and the IGFBP proteases in modulating IGF action. Collett–Solberg PF, et al. **Endocrinol Metab Clin North Am** 1996 Sep;25(3):591–614 (114 ref.)

Insulin–like growth factors and their receptors in growth. D'Ercole AJ. **Endocrinol Metab Clin North Am** 1996 Sep; 25(3):573–90 (44 ref.)

The mechanisms by which growth hormone brings about growth. The relative contributions of growth hormone and insulin–like growth factors. Spagnoli A, et al. **Endocrinol Metab Clin North Am** 1996 Sep;25(3):615–31 (94 ref.)

Functional maturation of the primate fetal adrenal in vivo: I. Role of insulin–like growth factors (IGFs), IGF–I receptor, and IGF binding proteins in growth regulation. Coulter CL, et al. **Endocrinology** 1996 Oct;137(10):4487–98

Growth inhibition by insulin–like growth factor (IGF) binding protein–3—what's IGF got to do with it? [editorial] Rechler MM. **Endocrinology** 1997 Jul;138(7):2645–7

Growth hormone, insulin–like growth factors and bone remodelling. Eriksen EF, et al. **Eur J Clin Invest** 1996 Jul; 26(7):525–34 (90 ref.)

Use of transgenic mice for understanding the physiology of insulin–like growth factors. D'Ercole AJ, et al. **Horm Res** 1996;45 Suppl 1:5–7 (11 ref.)

Insulin–like growth factor system components and the coupling of bone formation to resorption. Mohan S, et al. **Horm Res** 1996;45 Suppl 1:59–62 (15 ref.)

The role of insulin–like growth factors in prostate biology. Peehl DM, et al. **J Androl** 1996 Jan–Feb;17(1):2–4 (14 ref.)

The mitogenic and myogenic actions of insulin–like growth factors utilize distinct signaling pathways. Coolican SA, et al. **J Biol Chem** 1997 Mar 7;272(10):6653–62

Insulin–like growth factor (IGF)–binding proteins in serum—do they have additional roles besides modulating the endocrine IGF actions? [editorial] Mohan S, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3817–20 (34 ref.)

The effect on the insulin–like growth factor system in human prostate epithelial cells of immortalization and transformation by simian virus–40 T antigen. Plymate SR, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3709–16

Effects of renal failure on the growth hormone–insulin–like growth factor axis. Powell DR. **J Pediatr** 1997 Jul;131(1 Pt 2):S13–6 (21 ref.)

The role of the insulin–like growth factors in the central nervous system. D'Ercole AJ, et al. **Mol Neurobiol** 1996 Dec;13(3):227–55 (190 ref.)

The early intracellular signaling pathway for the insulin/insulin–like growth factor receptor family in the mammalian central nervous system. Folli F, et al. **Mol Neurobiol** 1996 Oct;13(2):155–83 (162 ref.)

Androstenedione synergizes with stress or prenatal drug exposure to retard fetal growth: role of IGF. McGivern RF, et al. **Pharmacol Biochem Behav** 1996 Dec;55(4):549–57

Functions and regulation of the acid–labile subunit of the 150 K complex. Barreca A, et al. **Prog Growth Factor Res** 1995;6(2–4):231–9

Role of insulin–like growth factor binding proteins in the control of IGF actions. Clemmons DR, et al. **Prog Growth Factor Res** 1995;6(2–4):357–66 (23 ref.)

Cell migration: interactions among integrins, IGFs and IGFBPs. Jones JI, et al. **Prog Growth Factor Res** 1995; 6(2–4):319–27 (25 ref.)

Structure and regulation of the ALS gene. Ooi GT, et al. **Prog Growth Factor Res** 1995;6(2–4):151–7 (30 ref.)

Growth factors in normal ovarian follicle development. Giudice LC, et al. **Semin Reprod Endocrinol** 1996 Aug; 14(3):179–96 (255 ref.)

[Current achievements in the study of the signal mechanisms of the action of insulin and related peptides] Pertseva MN, et al. **Zh Evol Biokhim Fiziol** 1996 May–Jun;32(3):318–40 (109 ref.) **(Rus)**

[Growth factors—particular aspects of insulin–like growth factors] Svrzić DD, et al. **Srp Arh Celok Lek** 1996 Sep–Oct; 124(9–10):271–5 (39 ref.) (Eng. Abstr.) **(Scc)**

SOMATOSENSORY CORTEX

Barrels VIII: Proceedings of a satellite symposium of the 1995 Society for Neuroscience meeting. Bowlus TH, et al. **Somatosens Mot Res** 1996;13(3–4):169–80

ANATOMY & HISTOLOGY

The anatomy of manual dexterity. The new connectivity of the primate sensorimotor thalamus and cerebral cortex. Darian–Smith I, et al. **Adv Anat Embryol Cell Biol** 1996; 133:1–140 (400 ref.)

Projections from the renal nerve to the cat's lateral somatosensory thalamus. Horn AC, et al. **Brain Res** 1997 Jul 18;763(1):47–55

Correlating cytoarchitecture and function in cat primary somatosensory cortex: the challenge of individual differences. Myasnikov AA, et al. **Brain Res** 1997 Mar 7; 750(1–2):95–108

Regional differences of callosal connections in the granular zones of the primary somatosensory cortex in rats. Hayama T, et al. **Brain Res Bull** 1997;43(3):341–7

Neuronal composition and morphology in layer IV of two vibrissal barrel subfields of rat cortex. Elston GN, et al. **Cereb Cortex** 1997 Jul–Aug;7(5):422–31

Structure of the human sensorimotor system. II: Lateral symmetry. White LE, et al. **Cereb Cortex** 1997 Jan–Feb; 7(1):31–47

Structure of the human sensorimotor system. I: Morphology and cytoarchitecture of the central sulcus. White LE, et al. **Cereb Cortex** 1997 Jan–Feb;7(1):18–30

Topography, architecture, and connections of somatosensory cortex in opossums: evidence for five somatosensory areas. Beck PD, et al. **J Comp Neurol** 1996 Feb 26;366(1):109–33

Organization of sensory cortex in a Madagascan insectivore, the tenrec (Echinops telfairi). Krubitzer L, et al. **J Comp Neurol** 1997 Mar 17;379(3):399–414

Representation of face and intra–oral structures in area 3b of macaque monkey somatosensory cortex. Manger PR, et al. **J Comp Neurol** 1996 Aug 5;371(4):513–21

Size of somatosensory cortex and of somatosensory thalamic nuclei of the naturally blind mole rat, Spalax ehrenbergi. Mann MD, et al. **J Hirnforsch** 1997;38(1):47–59

The callosal connections of the hierarchically organized somatosensory areas of primates. Manzoni T. **J Neurosurg Sci** 1997 Mar;41(1):1–22 (247 ref.)

Cortical and medullary somatosensory projections to the cochlear nuclear complex in the hedgehog tenrec. Wolff A, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):125–8

Functional magnetic resonance imaging of the somatosensory cortex. Mueller WM, et al. **Neurosurg Clin N Am** 1997 Jul;8(3):373–81 (49 ref.)

Contributions of raphe–cortical and thalamocortical axons to the transient somatotopic pattern of serotonin immunoreactivity in rat cortex. Bennett–Clarke CA, et al. **Somatosens Mot Res** 1997;14(1):27–33

The mole nose instructs the brain. Catania KC, et al. **Somatosens Mot Res** 1997;14(1):56–8

Expression of nerve growth factor, p75, and trk in the somatosensory and motor cortices of mature rats: evidence for local trophic support circuits. Pitts AF, et al. **Somatosens Mot Res** 1995;12(3–4):329–42

[Somatotopical mapping of the human somatosensory cortex with echo–planar MRI] Onodera Y, et al. **Nippon Rinsho** 1997 Jul;55(7):1694–8 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Excessive oxygen or glucose supply does not alter the blood flow response to somatosensory stimulation or spreading depression in rats. Wolf T, et al. **Brain Res** 1997 Jul 4; 761(2):290–9

LCBF changes in rat somatosensory cortex during whisker stimulation monitored by dynamic H2 clearance. Moskalenko YE, et al. **Int J Psychophysiol** 1996 Jan; 21(1):45–59

[Surgical strategy of the AVM on the sensori motor cortex] Sano H, et al. **No Shinkei Geka** 1997 Jun;25(6):505–13 **(Jpn)**

CHEMISTRY

Synaptic distribution of the AMPA–GluR2 subunit and its colocalization with calcium–binding proteins in rat cerebral cortex: an immunohistochemical study using a GluR2–specific monoclonal antibody. Vissavajjhala P, et al. **Exp Neurol** 1996 Dec;142(2):296–312

Changes in glutamate immunoreactivity in the somatic sensory cortex of adult monkeys induced by nerve cuts. Conti F, et al. **J Comp Neurol** 1996 May 13;368(4):503–15

Differential synaptic vesicle protein expression in the barrel field of developing cortex. Stettler O, et al. **J Comp Neurol** 1996 Nov 11;375(2):321–32

CYTOLOGY

Recurrent axon collaterals of corticothalamic projection neurons in rat primary somatosensory cortex contribute to excitatory and inhibitory feedback–loops. Staiger JF, et al. **Anat Embryol (Berl)** 1996 Dec;194(6):533–43

Structure of the synaptic junctions in the rat sensorimotor cortex. Freeze–etching study of axodendritic synapses. Bozhilova–Pastirova A, et al. **Eur J Morphol** 1996 Dec; 34(5):363–73

Morphology, electrophysiology and pathophysiology of supragranular neurons in rat primary somatosensory cortex. Schröder R, et al. **Eur J Neurosci** 1997 Jan;9(1):163–76

Distribution of GABAergic elements postsynaptic to ventroposteromedial thalamic projections in layer IV of rat barrel cortex. Staiger JF, et al. **Eur J Neurosci** 1996 Nov;8(11):2273–85

Calcium–binding protein phenotype defines metabolically distinct groups of neurons in barrel cortex of behaving hamsters. Maier DL, et al. **Exp Neurol** 1997 May; 145(1):71–80

Comparison of the distribution of parvalbumin–immunoreactive and other synapses onto the somata of callosal projection neurons in mouse visual and somatosensory cortex. Czeiger D, et al. **J Comp Neurol** 1997 Mar 10;379(2):198–210

Corticospinal tract neurons are radially malpositioned in the sensory–motor cortex of the Shaking rat Kawasaki. Ikeda Y, et al. **J Comp Neurol** 1997 Jul 7;383(3):370–80

Differential survival of Cajal–Retzius cells in organotypic cultures of hippocampus and neocortex. Del Río JA, et al. **J Neurosci** 1996 Nov 1;16(21):6896–907

Intracortical axonal projections of lamina VI cells of the primary somatosensory cortex in the rat: a single–cell labeling study. Zhang ZW, et al. **J Neurosci** 1997 Aug 15; 17(16):6365–79

Light microscopic image analysis system to quantify immunoreactive terminal area apposed to nerve cells. Wu LC, et al. **J Neurosci Methods** 1997 Jun 6;74(1):89–96

Lack of barrels in the somatosensory cortex of monoamine oxidase A–deficient mice: role of a serotonin excess during the critical period. Cases O, et al. **Neuron** 1996 Feb; 16(2):297–307

Reaction of sensorimotor cortex neurons to stimulation of the lateral hypothalamus in conditions of microiontophoretic application of tetragastrin and bradykinin: the role of food reinforcement. Kravtsov AN, et al. **Neurosci Behav Physiol** 1996 Nov–Dec;26(6):493–9

A survey of morphogenesis during the early postnatal period in PMBSF barrels of mouse SmI cortex with emphasis on barrel D4. White EL, et al. **Somatosens Mot Res** 1997; 14(1):34–55

DRUG EFFECTS

Propofol anesthesia increases dopamine and serotonin activities at the somatosensory cortex in rats: a microdialysis study. Shyr MH, et al. **Anesth Analg** 1997 Jun;84(6):1344–8

Gangliosides minimize motor disabilities and histopathological changes in cortical lesioned and transplanted rats. García JD, et al. **Arch Med Res** 1996 Winter;27(4):465–71

Action of 5–hydroxytryptamine in facilitating N–methyl–D–aspartate depolarization of cortical neurones mimicked by calcimycin, cyclopiazonic acid and thapsigargin. Rahman S, et al. **Br J Pharmacol** 1996 Nov; 119(5):877–84

Neonatal capsaicin treatment alters the metabolic activity of subcortical somatosensory structures of developing rats in response to whisker stimulation. Wu CC. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):295–8

Transient and long–lasting effects of iontophoretically administered norepinephrine on somatosensory cortical neurons in halothane–anesthetized cats. Warren RA, et al. **Can J Physiol Pharmacol** 1996 Jan;74(1):38–57

Effects of NMDA receptor blockade in the developing rat somatosensory cortex on the expression of the glia–derived extracellular matrix glycoprotein tenascin–C. Mitrovic N, et al. **Eur J Neurosci** 1996 Sep;8(9):1793–802

Monoaminergic substrates underlying cocaine–induced enhancement of somatosensory–evoked discharges in rat barrel field cortical neurons. Waterhouse BD, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):582–92

Effect of subchronic mercury exposure on electrocorticogram of rats. Dési I, et al. **Neurotoxicology** 1996 Fall–Winter;17(3–4):719–23

Electrocorticogram changes caused by subchronic lead treatment of rats. Nagymajtényi L, et al. **Neurotoxicology** 1996 Fall–Winter;17(3–4):713–7

Picrotoxin produces a "central" pain–like syndrome when microinjected into the somato–motor cortex of the rat. Oliveras JL, et al. **Physiol Behav** 1996 Dec;60(6):1425–34

Effect of methamphetamine on glutamate–positive neurons in the adult and developing rat somatosensory cortex. Pu C, et al. **Synapse** 1996 Aug;23(4):328–34

ENZYMOLOGY

Effects of cholinergic depletion on glutamic acid decarboxylase immunoreactivity in the somatosensory cortex of rats. Herron P, et al. **Anat Embryol (Berl)** 1997 Jul;196(1):27–38

Transient expression of NADPH diaphorase activity in the mouse whisker to barrel field pathway. Mitrovic N, et al. **J Neurocytol** 1996 Aug;25(8):429–37

GROWTH & DEVELOPMENT

MRI findings and sensorimotor development in infants with bilateral spastic cerebral palsy. Cioni G, et al. **Brain Dev** 1997 Jun;19(4):245–53

In vivo effects of insulin–like growth factor–I on the development of sensory pathways: analysis of the primary somatic sensory cortex (S1) of transgenic mice. Gutiérrez–Ospina G, et al. **Endocrinology** 1996 Dec; 137(12):5484–92

Laminar development of the mouse barrel cortex: effects of neurotoxins against monoamines. Osterheld–Haas MC, et al. **Exp Brain Res** 1996 Jul;110(2):183–95

Developmental expression of GABA(A) receptor subunit and GAD genes in mouse somatosensory barrel cortex. Golshani P, et al. **J Comp Neurol** 1997 Jun 30; 383(2):199–219

Development of local connections in ferret somatosensory cortex. Juliano SL, et al. **J Comp Neurol** 1996 Oct 14; 374(2):259–77

Development and plasticity of local intracortical projections within the vibrissae representation of the rat primary somatosensory cortex. Rhoades RW, et al. **J Comp Neurol** 1996 Jul 8;370(4):524–35

Development of intrinsic connections in cat somatosensory cortex. Sonty RV, et al. **J Comp Neurol** 1997 Aug 11; 384(4):501–16

Active tactile exploration influences the functional maturation of the somatosensory system. Nicolelis MA, et al. **J Neurophysiol** 1996 May;75(5):2192–6

Neonatal serotonin depletion modifies development but not plasticity in rat barrel cortex. Turlejski K, et al. **Neuroreport** 1997 May 27;8(8):1823–8

Congenital hypothyroidism delays the formation and retards the growth of the mouse primary somatic sensory cortex (S1). Calikoglu AS, et al. **Neurosci Lett** 1996 Aug 2; 213(2):132–6

INJURIES

Traumatic brain injury of the forelimb and hindlimb sensorimotor areas in the rat: physiological, histological and behavioral correlates. Soblosky JS, et al. **Behav Brain Res** 1996 Sep;79(1–2):79–92

Ethanol consumption following recovery from unilateral damage to the forelimb area of the sensorimotor cortex: reinstatement of deficits and prevention of dendritic pruning. Kozlowski DA, et al. **Brain Res** 1997 Jul 25; 763(2):159–66

Temporally changing patterns of hippocampal cerebral glucose utilization following sensorimotor cortical contusion in rats. Queen SA, et al. **Brain Res** 1996 Jun 17;724(2):246–50

METABOLISM

Propofol anesthesia increases dopamine and serotonin activities at the somatosensory cortex in rats: a microdialysis study. Shyr MH, et al. **Anesth Analg** 1997 Jun;84(6):1344–8

Perineuronal sulfated proteoglycans in the human brain are identical to Golgi's reticular coating. Murakami T, et al. **Arch Histol Cytol** 1996 Aug;59(3):233–7

Functional preservation of benzodiazepine receptors of the primary somatosensory cortex in Creutzfeldt–Jakob disease: a pharmacologic–evoked potential study. Aguglia U, et al. **Clin Neuropharmacol** 1996 Feb;19(1):87–91

Coupling of cortical and thalamic metabolism in experimentally induced visual and somatosensory focal epilepsy. Redecker C, et al. **Epilepsy Res** 1997 May; 27(2):127–37

Plasticity of metabolic whisker maps in somatosensory brainstem and thalamus of mice with neonatal lesions of whisker follicles. Melzer P, et al. **Eur J Neurosci** 1996 Sep; 8(9):1853–64

Developmental expression of GABA(A) receptor subunit and GAD genes in mouse somatosensory barrel cortex. Golshani P, et al. **J Comp Neurol** 1997 Jun 30; 383(2):199–219

Stimulus–dependent expression of immediate–early genes in rat somatosensory cortex. Melzer P, et al. **J Comp Neurol** 1997 Mar 31;380(1):145–53

GABAergic neurons in barrel cortex show strong, whisker–dependent metabolic activation during normal behavior. McCasland JS, et al. **J Neurosci** 1997 Jul 15; 17(14):5509–27

Metabolic activity in antigenically identified neurons: a double labeling method for high–resolution 2–deoxyglucose and immunohistochemistry. McCasland JS. **J Neurosci Methods** 1996 Sep;68(1):113–23

Quantitative changes of GABA–immunoreactive cells in the hindlimb representation of the rat somatosensory cortex after 14–day hindlimb unloading by tail suspension. D'Amelio F, et al. **J Neurosci Res** 1996 Jun 15;44(6):532–9

Changes in extracellular levels of dopamine metabolites in somatosensor cortex after peripheral denervation. Jiménez–Capdeville ME, et al. **Neurochem Res** 1996 Jan; 21(1):1–6

BDNF and trkB mRNA expression in neurons of the neonatal mouse barrel field cortex: normal development and plasticity after cauterizing facial vibrissae. Singh TD, et al. **Neurochem Res** 1997 Jul;22(7):791–7

Pyramidal cells ensheathed by perineuronal nets in human motor and somatosensory cortex. Hausen D, et al. **Neuroreport** 1996 Jul 29;7(11):1725–9

Changes in cortical acetylcholine release in the rat during day and night: differences between motor and sensory areas. Jiménez–Capdeville ME, et al. **Neuroscience** 1996 Mar;71(2):567–79

Agrin gene expression in mouse somatosensory cortical neurons during development in vivo and in cell culture. Li Z, et al. **Neuroscience** 1997 Jul;79(1):191–201

PATHOLOGY

Synaptogenesis and dendritic growth in the cortex opposite unilateral sensorimotor cortex damage in adult rats: a quantitative electron microscopic examination. Jones TA, et al. **Brain Res** 1996 Sep 9;733(1):142–8

Cerebral microgyria, thalamic cell size and auditory temporal processing in male and female rats. Herman AE, et al. **Cereb Cortex** 1997 Jul–Aug;7(5):453–64

Primary sensory and forebrain motor systems in the newborn brain are preferentially damaged by hypoxia–ischemia. Martin LJ, et al. **J Comp Neurol** 1997 Jan 13;377(2):262–85

Structural basis of information capacity changes of sensory–motor cerebral cortex of rat brain during post–resuscitation period. Semchenko VV, et al. **Resuscitation** 1996 Apr;31(2):151–8

[Functional mapping of the motor and primary sensorial cortex using magnetic resonance techniques. II. Image analysis techniques] Cettolo V, et al. **Radiol Med (Torino)** 1996 Nov;92(5):554–61 (Eng. Abstr.) **(Ita)**

[Functional mapping of the motor and primary sensorial cortex using magnetic resonance techniques. I. Preliminary data] Francescato MP, et al. **Radiol Med (Torino)** 1996 Nov; 92(5):548–53 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Muscarinic cholinergic effects on stimulus–evoked responses in rat primary somatosensory cortex. An electrophysiological study. Farkas T, et al. **Acta Biol Hung** 1996;47(1–4):113–8

Mechanisms of compensatory plasticity in the cerebral cortex. Rauschecker JP. **Adv Neurol** 1997;73:137–46 (58 ref.)

Estimation of shear and flow rates in pial arterioles during somatosensory stimulation. Ngai AC, et al. **Am J Physiol** 1996 May;270(5 Pt 2):H1712–7

Ipsilateral connections between the gustatory cortex, amygdala and parabrachial nucleus are necessary for acquisition and retrieval of conditioned taste aversion in rats. Bielavska E, et al. **Behav Brain Res** 1996 Nov; 81(1-2):25-31

Somatosensory evoked potentials modified by laser-induced lesions of the rat cortex. Schmitz F, et al. **Behav Brain Res** 1997 Mar;84(1-2):161-6

Varieties of paw and digit movement during spontaneous food handling in rats: postures, bimanual coordination, preferences, and the effect of forelimb cortex lesions. Whishaw IQ, et al. **Behav Brain Res** 1996 May; 77(1-2):135-48

A columnar model of somatosensory reorganizational plasticity based on Hebbian and non-Hebbian learning rules. Joublin F, et al. **Biol Cybern** 1996 Mar;74(3):275-86

On the calculation of magnetic fields based on multipole modeling of focal biological current sources. Nolte G, et al. **Biophys J** 1997 Sep;73(3):1253-62

Viscero-somatic neurons in the primary somatosensory cortex (SI) of the squirrel monkey. Brüggemann J, et al. **Brain Res** 1997 May 9;756(1-2):297-300

Chaotic and phase-locked responses of the somatosensory cortex to a periodic medial lemniscus stimulation in the anesthetized rat. Ishizuka S, et al. **Brain Res** 1996 Jun 3; 723(1-2):46-60

Long-term potentiation and depression in layer III and V pyramidal neurons of the cat sensorimotor cortex in vitro. Kitagawa H, et al. **Brain Res** 1997 Mar 21;751(2):339-43

Corticostriatal projections from layer V cells in rat are collaterals of long-range corticofugal axons. Levesque M, et al. **Brain Res** 1996 Feb 19;709(2):311-5

High frequency (gamma-band) oscillating potentials in rat somatosensory and auditory cortex. MacDonald KD, et al. **Brain Res** 1995 Oct 2;694(1-2):1-12

Recognition of temporally structured activity in spontaneously discharging neurons in the somatosensory cortex in waking cats. Martinson J, et al. **Brain Res** 1997 Mar 7;750(1-2):129-40

Correlating cytoarchitecture and function in cat primary somatosensory cortex: the challenge of individual differences. Myasnikov AA, et al. **Brain Res** 1997 Mar 7; 750(1-2):95-108

Regulation of cerebral blood flow response to somatosensory stimulation through the cholinergic system: a positron emission tomography study in unanesthetized monkeys. Tsukada H, et al. **Brain Res** 1997 Feb 21;749(1):10-7

Sensorimotor gating in rats is regulated by different dopamine-glutamate interactions in the nucleus accumbens core and shell subregions. Wan FJ, et al. **Brain Res** 1996 May 25;722(1-2):168-76

The effects of peripheral deafferentation on spontaneously bursting neurons in the somatosensory cortex of waking cats. Webster HH, et al. **Brain Res** 1997 Mar 7; 750(1-2):109-21

A non-thalamic pathway contributes to a whole body map in the brain of the budgerigar. Wild JM, et al. **Brain Res** 1997 Apr 25;755(1):137-41

The avian somatosensory system: the pathway from wing to Wulst in a passerine (Chloris chloris). Wild JM. **Brain Res** 1997 Jun 6;759(1):122-34

Excessive oxygen or glucose supply does not alter the blood flow response to somatosensory stimulation or spreading depression in rats. Wolf T, et al. **Brain Res** 1997 Jul 4; 761(2):290-9

Innervation of the caudate nucleus, thalamus and red nucleus by the remaining sensorimotor cortex in cats with fetal or neonatal unilateral frontal cortex removal. Carlson-Kuhta P, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):234-46

Cooperative structures for visually guided reach. MacKay WA. **Can J Physiol Pharmacol** 1996 Apr;74(4):463-8 (46 ref.)

The premotor cortex and nonstandard sensorimotor mapping. Wise SP, et al. **Can J Physiol Pharmacol** 1996 Apr; 74(4):469-82 (92 ref.)

Interhemispheric modulation of somatosensory receptive fields: evidence for plasticity in primary somatosensory cortex. Clarey JC, et al. **Cereb Cortex** 1996 Mar-Apr; 6(2):196-206

Axonal processes and neural plasticity. II: Adult somatosensory maps. Elliott T, et al. **Cereb Cortex** 1996 Nov-Dec;6(6):789-93

Axonal arborizations of corticostriatal and corticothalamic fibers arising from the second somatosensory area in the rat. Lévesque M, et al. **Cereb Cortex** 1996 Nov-Dec; 6(6):759-70

Top-down modulation of early sensory cortex. Shulman GL, et al. **Cereb Cortex** 1997 Apr-May;7(3):193-206

Parallel organization of somatosensory cortical areas I and II for tactile processing. Rowe MJ, et al. **Clin Exp Pharmacol Physiol** 1996 Oct-Nov;23(10-11):931-8 (30 ref.)

Interactions between motor commands and somatic perception in sensorimotor cortex. Nelson RJ. **Curr Opin Neurobiol** 1996 Dec;6(6):801-10 (79 ref.)

Ipsilateral median somatosensory evoked potentials recorded from human somatosensory cortex. Noachtar S, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 104(3):189-98

Suppression of spatial localization of a cutaneous stimulus following transcranial magnetic pulse stimulation of the sensorimotor cortex. Seyal M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb;105(1):24-8

The effects of external load on movement-related changes of the sensorimotor EEG rhythms. Stančák A Jr, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jun; 102(6):495-504

Effects of interstimulus interval on somatosensory evoked magnetic fields (SEFs): a hypothesis concerning SEF generation at the primary sensorimotor cortex. Wikström H, et al. **Electroencephalogr Clin Neurophysiol** 1996 Nov; 100(6):479-87

Evaluation of the functional state of the somato-motor system using SEP and interfering stimuli. Buchner H, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996; 46:351-62

Neuromagnetic study of movement-related somatosensory gating. Kristeva-Feige R, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;46:337-42

Functional organization of the primary sensory cortex in humans: a neuromagnetic study. Kristeva-Feige R, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;46:215-20

Locating the cortical sources of somatosensory evoked responses by integration of EEG and MEG. Ossenblok P, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996; 46:183-91

Somatosensory cortical and dermatome evoked potentials: a study conducted on 60 normal subjects. Results and their correlation relative to height and age. Gagnard-Landra C. **Electromyogr Clin Neurophysiol** 1996 Apr-May; 36(3):131-44

Electrophysiological effects of temporary deafferentation on two characterized cell types in the nucleus gracilis of the rat. Panetsos F, et al. **Eur J Neurosci** 1997 Mar;9(3):563-72

Serotonin regulates gap junction coupling in the developing rat somatosensory cortex. Rörig B, et al. **Eur J Neurosci** 1996 Aug;8(8):1685-95

Distribution of GABAergic elements postsynaptic to ventroposteromedial thalamic projections in layer IV of rat barrel cortex. Staiger JF, et al. **Eur J Neurosci** 1996 Nov;8(11):2273-85

Short-term plasticity in primary somatosensory cortex of the rat: rapid changes in magnitudes and latencies of neuronal responses following digit denervation. Doetsch GS, et al. **Exp Brain Res** 1996 Dec;112(3):505-12

Intrinsic circuitry and physiological properties of pyramidal neurons in rat barrel cortex. Gottlieb JP, et al. **Exp Brain Res** 1997 Jun;115(1):47-60

Identification of motor and sensory brain activities during unilateral finger movement: spatiotemporal source analysis of movement-associated magnetic fields. Hoshiyama M, et al. **Exp Brain Res** 1997 Jun;115(1):6-14

Coupling of fingertip somatosensory information to head and body sway. Jeka JJ, et al. **Exp Brain Res** 1997 Mar; 113(3):475-83

A neuromagnetic study of movement-related somatosensory gating in the human brain. Kristeva-Feige R, et al. **Exp Brain Res** 1996;107(3):504-14

High-frequency vibratory sensitive neurons in monkey primary somatosensory cortex: entrained and nonentrained responses to vibration during the performance of vibratory-cued hand movements. Lebedev MA, et al. **Exp Brain Res** 1996 Oct;111(3):313-25

Effects of a dorsal column lesion on temporal processing within the somatosensory system of primates. Makous JC, et al. **Exp Brain Res** 1996 Nov;112(2):253-67

Contribution of somatosensory cortex to responses in the rat cerebellar granule cell layer following peripheral tactile stimulation. Morissette J, et al. **Exp Brain Res** 1996 May; 109(2):240-50

The role of the left somatosensory cortex in human hand movement. Okuda B, et al. **Exp Brain Res** 1995; 106(3):493-8

Microglial reactions to retrograde degeneration of tracer-identified thalamic neurons after frontal sensorimotor cortex lesions in adult rats. Sørensen JC, et al. **Exp Brain Res** 1996 Nov;112(2):203-12

Movement-induced gain modulation of somatosensory potentials and soleus H-reflexes evoked from the leg. II. Correlation with rate of stretch of extensor muscles of the leg. Staines WR, et al. **Exp Brain Res** 1997 Jun; 115(1):156-64

Movement-induced gain modulation of somatosensory potentials and soleus H-reflexes evoked from the leg. I. Kinaesthetic task demands. Staines WR, et al. **Exp Brain Res** 1997 Jun;115(1):147-55

The significance of somatosensory stimulations to the human foot in the control of postural reflexes. Wu G, et al. **Exp Brain Res** 1997 Mar;114(1):163-9

Role of primary somatic sensory cortex in the categorization of tactile stimuli: effects of lesions. Zainos A, et al. **Exp Brain Res** 1997 Jun;115(2):357-60

The medullary raphe nuclei: a system for integration and gain control in autonomic and somatomotor responsiveness? Lovick TA. **Exp Physiol** 1997 Jan; 82(1):31-41 (32 ref.)

Neurons of the claustrum projecting to the motor and somatosensory cortex in the rabbit--assessment with the method of retrograde transport of fluorescent tracers. Kowiański P, et al. **Folia Morphol (Warsz)** 1996;55(4):350-2

Testing peripheral somatosensory neuroprostheses by recording from raccoon cortex. Robinson CJ, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):75-80

Low-frequency oscillations of visual, auditory and somatosensory cortical neurons evoked by sensory stimulation. Dinse HR, et al. **Int J Psychophysiol** 1997 Jun; 26(1-3):205-27 (31 ref.)

LCBF changes in rat somatosensory cortex during whisker stimulation monitored by dynamic H2 clearance. Moskalenko YE, et al. **Int J Psychophysiol** 1996 Jan; 21(1):45-59

Scalp topography of the short-latency components of the respiratory-related evoked potential in children. Davenport PW, et al. **J Appl Physiol** 1996 May; 80(5):1785-91

Convergence of visceral and somatic afferents on single neurones in the reticular formation of the lower brain stem in dogs. Langhorst P, et al. **J Auton Nerv Syst** 1996 Mar 7;57(3):149-57

Acetylcholine innervation of sensory and motor neocortical areas in adult cat: a choline acetyltransferase immunohistochemical study. Avendaño C, et al. **J Chem Neuroanat** 1996 Aug;11(2):113-30

Organization of somatosensory cortex and distribution of corticospinal neurons in the eastern mole (Scalopus aquaticus). Catania KC, et al. **J Comp Neurol** 1997 Feb 17;378(3):337-53

Differential control of cortical activity by the basal forebrain in rats: a role for both cholinergic and inhibitory influences. Jiménez-Capdeville ME, et al. **J Comp Neurol** 1997 Apr 28;381(1):53-67

Distributed representation of vibrissa movement in the upper layers of somatosensory cortex revealed with voltage-sensitive dyes [published erratum appears in J Comp Neurol 1997 Feb 24;378(4):594] Kleinfeld D, et al. **J Comp Neurol** 1996 Nov 4;375(1):89-108

Quantitative aspects of synaptogenesis in the rat barrel field cortex with special reference to GABA circuitry. Micheva KD, et al. **J Comp Neurol** 1996 Sep 23;373(3):340-54

Differential expression of brain-derived neurotrophic factor and neurotrophin 3 mRNA in lingual papillae and taste buds indicates roles in gustatory and somatosensory innervation. Nosrat CA, et al. **J Comp Neurol** 1996 Dec 23;376(4):587-602

Transneuronal changes of the inhibitory circuitry in the macaque somatosensory thalamus following lesions of the dorsal column nuclei. Ralston HJ 3rd, et al. **J Comp Neurol** 1996 Jul 22;371(2):325-35

Lateralization and functional organization of the locus coeruleus projection to the trigeminal somatosensory pathway in rat. Simpson KL, et al. **J Comp Neurol** 1997 Aug 18;385(1):135-47

Functional development of the vibrissae somatosensory system of the rat: (14C) 2-deoxyglucose metabolic mapping study. Wu CC, et al. **J Comp Neurol** 1997 Aug 4; 384(3):323-36

A quantitative population model of whisker barrels: re-examining the Wilson-Cowan equations. Pinto DJ, et al. **J Comput Neurosci** 1996 Sep;3(3):247-64

Central nervous system pathways for pain transmission and pain control: issues relevant to the practicing clinician. Robinson AJ. **J Hand Ther** 1997 Apr-Jun;10(2):64-77 (66 ref.)

Size of somatosensory cortex and of somatosensory thalamic nuclei of the naturally blind mole rat, Spalax ehrenbergi. Mann MD, et al. **J Hirnforsch** 1997;38(1):47-59

Correlation of functional magnetic source imaging with intraoperative cortical stimulation in neurosurgical patients. Roberts TP, et al. **J Image Guid Surg** 1995;1(6):339-47

Functional MRI in human somatosensory cortex activated by touching textured surfaces. Lin W, et al. **J Magn Reson Imaging** 1996 Jul-Aug;6(4):565-72

Spatial gradients and inhibitory summation in the rat whisker barrel system. Brumberg JC, et al. **J Neurophysiol** 1996 Jul;76(1):130-40

Functional organization of the projection from area 2 to area 4gamma in the cat. Caria MA, et al. **J Neurophysiol** 1997 Jun;77(6):3107-14

Effects of somatosensory and parallel-fiber stimulation on neurons in dorsal cochlear nucleus. Davis KA, et al. **J Neurophysiol** 1996 Nov;76(5):3012-24

Variability of extracellular spike waveforms of cortical neurons. Fee MS, et al. **J Neurophysiol** 1996 Dec; 76(6):3823-33

Central versus peripheral determinants of patterned spike activity in rat vibrissa cortex during whisking. Fee MS, et al. **J Neurophysiol** 1997 Aug;78(2):1144-9

Coding of peripersonal space in inferior premotor cortex (area F4). Fogassi L, et al. **J Neurophysiol** 1996 Jul; 76(1):141-57

Saccades to somatosensory targets. III. eye-position-dependent somatosensory activity in primate superior colliculus. Groh JM, et al. **J Neurophysiol** 1996 Jan;75(1):439-53

Saccades to somatosensory targets. I. behavioral characteristics. Groh JM, et al. **J Neurophysiol** 1996 Jan; 75(1):412-27

Saccades to somatosensory targets. II. motor convergence in primate superior colliculus. Groh JM, et al. **J Neurophysiol** 1996 Jan;75(1):428-38

Neuronal encoding of texture changes in the primary and the secondary somatosensory cortical areas of monkeys during passive texture discrimination. Jiang W, et al. **J Neurophysiol** 1997 Mar;77(3):1656-62

Two types of BK channels in immature rat neocortical

pyramidal neurons. Kang J, et al. **J Neurophysiol** 1996 Dec; 76(6):4194–7

Physiology and pharmacology of corticothalamic stimulation–evoked responses in rat somatosensory thalamic neurons in vitro. Kao CQ, et al. **J Neurophysiol** 1997 May;77(5):2661–76

Abnormal access of axial vibrotactile input to deafferented somatosensory cortex in human upper limb amputees. Kew JJ, et al. **J Neurophysiol** 1997 May;77(5):2753–64

Inhibitory control of excitable dendrites in neocortex. Kim HG, et al. **J Neurophysiol** 1995 Oct;74(4):1810–4

Blockade of GABAergic inhibition reveals reordered cortical somatotopic maps in rats that sustained neonatal forelimb removal. Lane RD, et al. **J Neurophysiol** 1997 May; 77(5):2723–35

Oscillatory activity in sensorimotor cortex of awake monkeys: synchronization of local field potentials and relation to behavior. Murthy VN, et al. **J Neurophysiol** 1996 Dec;76(6):3949–67

Synchronization of neurons during local field potential oscillations in sensorimotor cortex of awake monkeys. Murthy VN, et al. **J Neurophysiol** 1996 Dec;76(6):3968–82

Active tactile exploration influences the functional maturation of the somatosensory system. Nicolelis MA, et al. **J Neurophysiol** 1996 May;75(5):2192–6

Generation of high-frequency oscillations in local circuits of rat somatosensory cortex cultures. Plenz D, et al. **J Neurophysiol** 1996 Dec;76(6):4180–4

Emergence of radial nerve dominance in median nerve cortex after median nerve transection in an adult squirrel monkey. Schroeder CE, et al. **J Neurophysiol** 1997 Jan;77(1):522–6

Quantitative analysis of firing properties of pyramidal neurons from layer 5 of rat sensorimotor cortex. Schwindt P, et al. **J Neurophysiol** 1997 May;77(5):2484–98

Somatosensory cortical activity in relation to arm posture: nonuniform spatial tuning. Tillery SI, et al. **J Neurophysiol** 1996 Oct;76(4):2423–38

Cortical mechanisms underlying tactile discrimination in the monkey. I. Role of primary somatosensory cortex in passive texture discrimination. Tremblay F, et al. **J Neurophysiol** 1996 Nov;76(5):3382–403

Effects on muscle activity from microstimuli applied to somatosensory and motor cortex during voluntary movement in the monkey. Widener GL, et al. **J Neurophysiol** 1997 May;77(5):2446–65

Networks with lateral connectivity. I. dynamic properties mediated by the balance of intrinsic excitation and inhibition. Xing J, et al. **J Neurophysiol** 1996 Jan; 75(1):184–99

Networks with lateral connectivity. II. Development of neuronal grouping and corresponding receptive field changes. Xing J, et al. **J Neurophysiol** 1996 Jan;75(1):200–16

Networks with lateral connectivity. III. Plasticity and reorganization of somatosensory cortex. Xing J, et al. **J Neurophysiol** 1996 Jan;75(1):217–32

Parallel processing in cerebral cortex of the marmoset monkey: effect of reversible SI inactivation on tactile responses in SII. Zhang HQ, et al. **J Neurophysiol** 1996 Dec;76(6):3633–55

Cortical systems for the recognition of emotion in facial expressions. Adolphs R, et al. **J Neurosci** 1996 Dec 1; 16(23):7678–87

Visual and somatosensory information about object shape control manipulative fingertip forces. Jenmalm P, et al. **J Neurosci** 1997 Jun 1;17(11):4486–99

Hand/face border as a limiting boundary in the body representation in monkey somatosensory cortex. Manger PR, et al. **J Neurosci** 1997 Aug 15;17(16):6338–51

Primary motor and sensory cortex activation during motor performance and motor imagery: a functional magnetic resonance imaging study. Porro CA, et al. **J Neurosci** 1996 Dec 1;16(23):7688–98

Areal extent quantification of functional representations using intrinsic signal optical imaging. Chen–Bee CH, et al. **J Neurosci Methods** 1996 Sep;68(1):27–37

Rapid optical imaging of whisker responses in the rat barrel cortex. Dowling JL, et al. **J Neurosci Methods** 1996 Jun; 66(2):113–22

Differentiation of receptive fields in the sensory cortex following stimulation of various nerves of the lower limb in humans: a magnetoencephalographic study. Shimojo M, et al. **J Neurosurg** 1996 Aug;85(2):255–62

Parallel organization of proprioceptive inputs from joint receptors to cortical somatosensory areas I and II in the cat. Mackie PD, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):529–37

Mechanisms underlying experience–dependent potentiation and depression of vibrissae responses in barrel cortex. Fox K, et al. **J Physiol Paris** 1996;90(3–4):263–9

Experience–induced plasticity of cutaneous maps in the primary somatosensory cortex of adult monkeys and rats. Xerri C, et al. **J Physiol Paris** 1996;90(3–4):277–87

Changes in central motor–sensory system following voluntary movement of stimulated finger. Nishihira Y, et al. **J Sports Med Phys Fitness** 1997 Mar;37(1):65–71

Effect of electrical stimulation of the central amygdaloid nucleus on the nociceptive neuron of the cortex (SI) in the cat. Kawarada K, et al. **Jpn J Physiol** 1996 Dec; 46(6):485–90

EEG–based brain computer interface (BCI). Search for optimal electrode positions and frequency components. Pfurtscheller G, et al. **Med Prog Technol** 1995–96; 21(3):111–21

Deactivation and reactivation of somatosensory cortex after dorsal spinal cord injury. Jain N, et al. **Nature** 1997 Apr 3;386(6624):495–8

Multiunit normalized cross correlation differs from the average single–unit normalized correlation. Bedenbaugh P, et al. **Neural Comput** 1997 Aug 15;9(6):1265–75

Silent synapses during development of thalamocortical inputs. Isaac JT, et al. **Neuron** 1997 Feb;18(2):269–80

Barrels in the desert: The Sde Boker Workshop on Neocortical Circuits. Yuste R, et al. **Neuron** 1997 Aug; 19(2):231–7

Functional MR imaging of the human sensorimotor cortex during haptic discrimination. Anton JL, et al. **Neuroreport** 1996 Nov 25;7(18):2849–52

Intrinsic inhibitory pathways in mouse barrel cortex. Aroniadou–Anderjaska V, et al. **Neuroreport** 1996 Oct 2; 7(14):2363–8

Neurobiological basis of motor learning in mammals. Asanuma H, et al. **Neuroreport** 1997 Mar 3;8(4):i–vi (59 ref.)

The spread of excitation in neocortical columns visualized with infrared–darkfield videomicroscopy. Dodt HU, et al. **Neuroreport** 1996 Jul 8;7(10):1553–8

Melatonin–dopamine interaction in the striatal projection area of sensorimotor cortex in the rat. Escames G, et al. **Neuroreport** 1996 Jan 31;7(2):597–600

Associative pairing of tactile stimulation induces somatosensory cortical reorganization in rats and humans. Godde B, et al. **Neuroreport** 1996 Dec 20;8(1):281–5

Cortical processing mechanism for vocalization with auditory verbal feedback. Hirano S, et al. **Neuroreport** 1997 Jul 7; 8(9–10):2379–82

Significance of the second somatosensory cortex in sensorimotor integration: enhancement of sensory responses during finger movements. Huttunen J, et al. **Neuroreport** 1996 Apr 10;7(5):1009–12

Electrical stimulation of a forepaw digit increases the physiological representation of that digit in layer IV of SI cortex in rat. Li CX, et al. **Neuroreport** 1996 Oct 2; 7(14):2395–400

In vivo intracellular recording and labeling of neurons in the forepaw barrel subfield (FBS) of rat somatosensory cortex: possible physiological and morphological substrates for reorganization. Li CX, et al. **Neuroreport** 1996 Oct 2; 7(14):2261–72

The 'functional connection' of neurones in relation to behavioural states in rats. Miyashita E, et al. **Neuroreport** 1996 Oct 2;7(14):2407–11

The ipsilateral and contralateral connections of the fifth somatosensory area (SV) in the cat cerebral cortex. Mori A, et al. **Neuroreport** 1996 Oct 2;7(14):2385–7

Relationship between representation of hindpaw and hindpaw barrel subfield (HBS) in layer IV of rat somatosensory cortex. Pearson PP, et al. **Neuroreport** 1996 Oct 2;7(14):2317–23

Somatosensory input onto pyramidal tract neurons in rodent motor cortex. Porter LL. **Neuroreport** 1996 Oct 2; 7(14):2309–15

Categorization of somaesthetic stimuli: sensorimotor performance and neuronal activity in primary somatic sensory cortex of awake monkeys. Romo R, et al. **Neuroreport** 1996 May 17;7(7):1273–9

Neonatal serotonin depletion modifies development but not plasticity in rat barrel cortex. Turlejski K, et al. **Neuroreport** 1997 May 27;8(8):1823–8

Magnetic imaging in human classical conditioning. Wik G, et al. **Neuroreport** 1996 Feb 29;7(3):737–40

Hypothermia–induced changes of afferent sensory transmission to the SI cortex of rats and hamsters. Won CK, et al. **Neuroreport** 1996 Dec 20;8(1):41–4

Ipsilateral and bilateral receptive fields in rat primary somatosensory cortex. Zarei M, et al. **Neuroreport** 1996 Jan 31;7(2):647–51

Influence of "animal hypnosis" on the motor polarizational dominant in rabbits. Rusinova EV. **Neurosci Behav Physiol** 1996 Mar–Apr;26(2):125–32

Effect of stimulation of the medial geniculate body on the motor polarization dominant in rabbits. Rusinova EV. **Neurosci Behav Physiol** 1997 Mar–Apr;27(2):117–23

On the existence of different alpha band rhythms in the hand area of man. Andrew C, et al. **Neurosci Lett** 1997 Jan 31; 222(2):103–6

Expression of c–fos in bulbar nuclei involved in cardiovascular control following the electrical stimulation of sensorimotor cortex in the rat. Doutrelant–Viltart O, et al. **Neurosci Lett** 1997 May 16;227(2):71–4

Stimulus–dependent muscarinic effects on evoked unit activity in the rat barrel cortex. Farkas T, et al. **Neurosci Lett** 1996 Jul 5;212(1):61–4

Interhemispheric modulation of sensory transmission in the primary somatosensory cortex of rats. Shin HC, et al. **Neurosci Lett** 1997 Jul 18;230(2):137–9

Laser–evoked potentials after painful hand and foot stimulation in humans: evidence for generation of the middle–latency component in the secondary somatosensory cortex. Spiegel J, et al. **Neurosci Lett** 1996 Oct 4; 216(3):179–82

Pre–attentive processing of spectrally complex sounds with asynchronous onsets: an event–related potential study with human subjects. Tervaniemi M, et al. **Neurosci Lett** 1997 May 23;227(3):197–200

Transient deafferentation in humans induces rapid modulation of primary sensory cortex not associated with subcortical changes: a somatosensory evoked potential study. Tinazzi M, et al. **Neurosci Lett** 1997 Feb 14;223(1):21–4

Sensory characterization of somatic parietal tissues in humans with chronic fatigue syndrome. Vecchiet L, et al. **Neurosci Lett** 1996 Apr 19;208(2):117–20

Attention–induced neuronal activity in the monkey somatosensory cortex revealed by pupillometrics. Iriki A, et al. **Neurosci Res** 1996 Jun;25(2):173–81

Effects of cholinergic depletion on experience–dependent plasticity in the cortex of the rat. Baskerville KA, et al. **Neuroscience** 1997 Oct;80(4):1159–69

Representation of a single vibrissa in the rat neostriatum: peaks of energy metabolism reveal a distributed functional module. Brown LL, et al. **Neuroscience** 1996 Dec; 75(3):717–28

Long–lasting potentiation in the secondary somatosensory cortex affects motor control: assessment by H–reflex. Kawakami Y, et al. **Neuroscience** 1996 Oct;74(4):1125–33

The nitric oxide–cyclic GMP pathway is required for nociceptive signalling at specific loci within the somatosensory pathway. Salter M, et al. **Neuroscience** 1996 Aug;73(3):649–55

Can somatosensory system generate frequency following response? Prevec TS, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R301–2

A primate model for studying focal dystonia and repetitive strain injury: effects on the primary somatosensory cortex. Byl NN, et al. **Phys Ther** 1997 Mar;77(3):269–84

Adaptive behavioral reactions of reaching in rats following discrete somatosensorimotor cortex lesions. Saling M, et al. **Physiol Behav** 1996 Feb;59(2):255–63

Immediate and simultaneous sensory reorganization at cortical and subcortical levels of the somatosensory system. Faggin BM, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9428–33

Mnemonic neuronal activity in somatosensory cortex. Zhou YD, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17; 93(19):10533–7

Somatosensory and visceral input to the hypothalamus and limbic system. Burstein R. **Prog Brain Res** 1996;107:257–67 (92 ref.)

Extensive cortical reorganization following sciatic nerve injury in adult rats versus restricted reorganization after neonatal injury: implications for spatial and temporal limits on somatosensory plasticity. Cusick CG. **Prog Brain Res** 1996;108:379–90 (75 ref.)

The role of excitatory amino acid transmission in development and plasticity of SI barrel cortex. Fox K. **Prog Brain Res** 1996;108:219–34 (56 ref.)

The somatic motor system. Holstege G. **Prog Brain Res** 1996; 107:9–26 (81 ref.)

The vestibular system as a model of sensorimotor transformations. A combined in vivo and in vitro approach to study the cellular mechanisms of gaze and posture stabilization in mammals. Vibert N, et al. **Prog Neurobiol** 1997 Feb;51(3):243–86 (269 ref.)

Pain affect encoded in human anterior cingulate but not somatosensory cortex. Rainville P, et al. **Science** 1997 Aug 15;277(5328):968–71

Conditioned whisking in the rat. Bermejo R, et al. **Somatosens Mot Res** 1996;13(3–4):225–33

Evidence for synchronous activation of neurons located in different layers of primary somatosensory cortex. Johnson MJ, et al. **Somatosens Mot Res** 1995;12(3–4):235–47

Widespread activation of barrel cortex by small numbers of neonatally spared whiskers. Maier DL, et al. **Somatosens Mot Res** 1996;13(3–4):245–53

Responses in primary somatosensory cortex of rhesus monkey to controlled application of embossed grating and bar patterns. Sinclair RJ, et al. **Somatosens Mot Res** 1996; 13(3–4):287–306

Barrels: 25 years later. Woolsey TA. **Somatosens Mot Res** 1996;13(3–4):181–6

Cutaneous representations of the hand and other body parts in the cuneate nucleus of a primate, and some relationships to previously described cortical representations. Xu J, et al. **Somatosens Mot Res** 1996;13(3–4):187–97

Sensorimotor stimulation to improve locomotor recovery after spinal cord injury. Muir GD, et al. **Trends Neurosci** 1997 Feb;20(2):72–7 (60 ref.)

[Functional brain mapping in motor task and somatosensory stimulation using echo planar MRI] Higuchi T, et al. **Nippon Rinsho** 1997 Jul;55(7):1688–93 (Eng. Abstr.) **(Jpn)**

[Clinical application of functional mapping; the present state of the art and its future prospects: (series 2) Identification of motor, sensory, visual and speech cortex by functional MRI] Ito T, et al. **No Shinkei Geka** 1996 Feb;24(2):109–18 (23 ref.) **(Jpn)**

[Differences in the anti–arrhythmia effect of dalargin and beta–endorphin in severe myocardial ischemia during stimulation of the sensorimotor cortex] Mikhailova SD, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):28–31 **(Rus)**

[Use of ultraviolet irradiation of the cerebrospinal fluid to stimulate compensatory processes after unilateral injury of the central nervous system] Perelygin BG, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):17–20 **(Rus)**

PHYSIOPATHOLOGY

Supplementary sensorimotor area epilepsy. Seizure

localization, cortical propagation and subcortical activation pathways using ictal SPECT. Laich E, et al. **Brain** 1997 May;120 (Pt 5):855–64

Event-related potentials during auditory and somatosensory discrimination in sighted and blind human subjects. Röder B, et al. **Brain Res Cogn Brain Res** 1996 Sep;4(2):77–93

Somatosensory evoked potential identification of sensorimotor cortex in removal of intracranial neoplasms. Rowed DW, et al. **Can J Neurol Sci** 1997 May;24(2):116–20

Cortical myoclonus: an insight into the organization of normal movement in man. Brown P. **Clin Neurosci** 1995–96; 3(4):193–7 (44 ref.)

Pathophysiology of sensorimotor cortex in cortical myoclonus. Ugawa Y, et al. **Clin Neurosci** 1995–96; 3(4):198–202 (21 ref.)

Motor cortical reflex myoclonus: a case study with MEG. Terao Y, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jun;102(6):505–11

SEF-MEG localization of somatosensory cortex as a method for presurgical assessment of functional brain area. Ganslandt O, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;46:209–13

Physiological properties of immature neocortical neurons relevant to pathophysiology of infantile epileptic encephalopathies. Avanzini G, et al. **Epilepsy Res Suppl** 1996;12:53–61

Somatosensory assessment: can seeing produce feeling? Halligan PW, et al. **J Neurol** 1997 Mar;244(3):199–203

Variation of functional MRI signal in response to frequency of somatosensory stimulation in alpha-chloralose anesthetized rats. Gyngell ML, et al. **Magn Reson Med** 1996 Jul;36(1):13–5

Parallel and serial processing of haptic information in man: effects of parietal lesions on sensorimotor hand function. Knecht S, et al. **Neuropsychologia** 1996 Jul;34(7):669–87

Effects of lesions invading the postcentral gyrus on somatosensory thresholds on the face. Taylor L, et al. **Neuropsychologia** 1997 Jul;35(7):953–61

Implicit processing of somatosensory stimuli disclosed by a perceptual after-effect. Maravita A. **Neuroreport** 1997 May 6;8(7):1671–4

Congenital hypothyroidism delays the formation and retards the growth of the mouse primary somatic sensory cortex (S1). Calikoglu AS, et al. **Neurosci Lett** 1996 Aug 2; 213(2):132–6

Extensive reorganization of primary somatosensory cortex in chronic back pain patients. Flor H, et al. **Neurosci Lett** 1997 Mar 7;224(1):5–8

Cerebral vascular malformations adjacent to sensorimotor and visual cortex. Functional magnetic resonance imaging studies before and after therapeutic intervention. Schlosser MJ, et al. **Stroke** 1997 Jun;28(6):1130–7

[Changes in pain sensitivity and neuronal activity of the sensorimotor cortex in experimental motion sickness in animals] Kozlov SB, et al. **Aviakosm Ekolog Med** 1996; 30(2):58–61 **(Rus)**

[Spike activity of the neurons in sensomotor cortex of rabbits with experimental diabetes mellitus] Lukashev AO, et al. **Biull Eksp Biol Med** 1994 May;117(5):465–7 **(Rus)**

[The perception of targeted signals in the auditory and somatosensory systems with a lesion of the brain stem] Lytaev SA. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan-Feb;47(1):38–48 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Thumb-pointing is humans after damage to somatic sensory cortex. Aglioti S, et al. **Exp Brain Res** 1996 Apr; 109(1):92–100

Influence of spinal cord injury on cerebral sensorimotor systems: a PET study. Roelcke U, et al. **J Neurol Neurosurg Psychiatry** 1997 Jan;62(1):61–5

SURGERY

Integration of functional brain mapping in image-guided neurosurgery. Rezai AR, et al. **Acta Neurochir Suppl (Wien)** 1997;68:85–9

Activation PET scanning in pretreatment evaluation of patients with cerebral tumours or vascular lesions in or close to the sensorimotor cortex. Nyberg G, et al. **Acta Neurochir (Wien)** 1996;138(6):684–94

Somatosensory evoked potential identification of sensorimotor cortex in removal of intracranial neoplasms. Rowed DW, et al. **Can J Neurol Sci** 1997 May;24(2):116–20

The interactive use of magnetoencephalography in stereotactic image-guided neurosurgery. Rezai AR, et al. **Neurosurgery** 1996 Jul;39(1):92–102

ULTRASTRUCTURE

Individual axon morphology and thalamocortical topography in developing rat somatosensory cortex. Catalano SM, et al. **J Comp Neurol** 1996 Mar 25;367(1):36–53

SOMATOSENSORY EVOKED POTENTIALS see **EVOKED POTENTIALS, SOMATOSENSORY**

SOMATOSTATIN

see related
RECEPTORS, SOMATOSTATIN

Somatostatin-like immunoreactivity, its molecular forms and monoaminergic metabolites in aged and demented patients with Parkinson's disease—effect of L-Dopa. Strittmatter M, et al. **J Neural Transm Gen Sect** 1996;103(5):591–602

[Somatostatin and its receptors] Yamada Y, et al. **Nippon Rinsho** 1996 Apr;54(4):1109–14 (12 ref.) (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Central trigeminal effects of somatostatin and etorphine on adrenal and autonomic function in the cat. Bereiter DA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R636–44

Local production of oxygen free radicals and nitric oxide in rat diaphragm during sepsis: effects of pentoxifylline and somatostatin. Arias-Díaz J, et al. **Eur J Surg** 1997 Aug; 163(8):619–25

Quantification of insulin release from implantable polymer-based delivery systems and augmentation of therapeutic effect with simultaneous release of somatostatin. Edelman ER, et al. **J Pharm Sci** 1996 Dec; 85(12):1271–5

Improved analogs and novel delivery systems for somatostatin octapeptides. Moreau JP, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):24–6 (7 ref.)

Terlipressin (glypressin) versus somatostatin in the treatment of bleeding esophageal varices—final report of a placebo-controlled, double-blind study. Walker S, et al. **Z Gastroenterol** 1996 Oct;34(10):692–8

[Indications for the use of somatostatin and octreotide in digestive pathology] Zan S, et al. **Minerva Gastroenterol Dietol** 1996 Jun;42(2):107–14 (38 ref.) (Eng. Abstr.) **(Ita)**

[Analgesic effects of natural growth hormone release inhibitors and their synthetic analogs. Intraspinal administration] Beltrutti D, et al. **Minerva Med** 1997 Jan-Feb;88(1-2):39–47 (86 ref.) (Eng. Abstr.) **(Ita)**

[Local administration of somatostatin in joint diseases in athletes] Russo S, et al. **Minerva Med** 1997 Jun;88(6):265–70 (Eng. Abstr.) **(Ita)**

[Effects of somatostatin and glucagon on secretion of bile lipids in man] Nakamura T, et al. **Klin Med (Mosk)** 1996; 74(9):23–6 **(Rus)**

ADVERSE EFFECTS

Somatostatin impairs sleep in elderly human subjects. Frieboes RM, et al. **Neuropsychopharmacology** 1997 May; 16(5):339–45

AGONISTS

The role of somatostatin agonistic analogs in the treatment of acromegaly. Tolis G. **Metabolism** 1996 Aug;45(8 Suppl 1):109–10 (16 ref.)

ANALOGS & DERIVATIVES

111In octreotide scintigraphy in the evaluation of head and neck lesions. Whiteman ML, et al. **AJNR Am J Neuroradiol** 1997 Jun-Jul;18(6):1073–80

Metastatic carcinoid tumor imaged with CT and a radiolabeled somatostatin analog: a case report. Lobrano MB, et al. **Am J Gastroenterol** 1997 Mar;92(3):513–5

Early massive accumulation of In-111 pentetreotide in a metastatic liver tumor of islet cell carcinoma. Tsukamoto E, et al. **Ann Nucl Med** 1996 Aug;10(3):339–42

Radiolabelled somatostatin analogue scintigraphy in oncology. O'Byrne KJ, et al. **Anticancer Drugs** 1996 Jan; 7 Suppl 1:33–44 (79 ref.)

Clinical aspects of local and regional tumor therapy with 188Re-RC-160. Bender H, et al. **Anticancer Res** 1997 May-Jun;17(3B):1705–12 (31 ref.)

Comparison of MIBG and pentetreotide scintigraphy in children with neuroblastoma. Is the expression of somatostatin receptors a prognostic factor? Kropp J, et al. **Anticancer Res** 1997 May-Jun;17(3B):1583–8

Comparison of In-111 pentetreotide, Tc-99m (V)DMSA and I-123 mIBG scintimaging in neural crest tumors. Limouris GS, et al. **Anticancer Res** 1997 May-Jun;17(3B):1589–92

Somatostatin receptor scintigraphy of non-neuroendocrine malignancies with 111In-pentetreotide. Limouris GS, et al. **Anticancer Res** 1997 May-Jun;17(3B):1593–7

Single photon emission computerized tomography increases the sensitivity of indium-111-pentetreotide scintigraphy in detecting abdominal carcinoids. Schillaci O, et al. **Anticancer Res** 1997 May-Jun;17(3B):1753–6

111In-pentetreotide detection of gastrinoma before and after surgery. Scopinaro F, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1757–60

Pre-clinical experience with Re-188-RC-160, a radiolabeled somatostatin analog for use in peptide-targeted radiotherapy. Zamora PO, et al. **Anticancer Res** 1997 May-Jun;17(3B):1803–8 (33 ref.)

Preparation of 188Re-RC-160 somatostatin analog: a peptide for local/regional radiotherapy. Zamora PO, et al. **Appl Radiat Isot** 1997 Mar;48(3):305–9

Preferential localization of regional metastases from gastroenteropancreatic endocrine tumors with somatostatin-receptor scintigraphy. MacGillivray DC, et al. **Arch Surg** 1996 Dec;131(12):1338–42

Effects of lanreotide, a somatostatin analogue, on postprandial gastric functions and biliopancreatic secretions in humans. Lamrani A, et al. **Br J Clin Pharmacol** 1997 Jan;43(1):65–70

Lanreotide inhibits human jejunal secretion induced by prostaglandin E1 in healthy volunteers. Sobhani I, et al. **Br J Clin Pharmacol** 1996 Feb;41(2):109–14

Somatostatin analogs and receptors. Diagnostic and therapeutic applications. Hofland LJ, et al. **Cancer Treat Res** 1997;89:365–82 (91 ref.)

Lanreotide reduces serum free and total insulin-like growth factor-I after angioplasty. Frystyk J, et al. **Circulation** 1996 Nov 15;94(10):2465–71

Continuous subcutaneous angiopeptin treatment significantly reduces neointimal hyperplasia in a porcine coronary in-stent restenosis model. Hong MK, et al. **Circulation** 1997 Jan 21;95(2):449–54

The effect of a new slow-release, long-acting somatostatin analogue, lanreotide, in acromegaly. al-Maskari M, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):415–21

Somatostatin receptor imaging: fatty meal-induced clearance of gallbladder activity. Katz N, et al. **Clin Nucl Med** 1997 Jan;22(1):58–9

Could somatostatin scintigraphy be superior to MIBG scan in the staging of stage IVs neuroblastoma (Pepper's syndrome)? Manil L, et al. **Clin Nucl Med** 1996 Jul; 21(7):530–3

In-111 pentetreotide scintigraphy in patients with neuroblastoma. Comparison with I-131 MIBG, N-Myc oncogene amplification, and patient outcome. Shalaby-Rana E, et al. **Clin Nucl Med** 1997 May; 22(5):315–9

Single-dose intramuscular administration of sustained-release Angiopeptin reduces neointimal hyperplasia in a porcine coronary in-stent restenosis model. Hong MK, et al. **Coron Artery Dis** 1997 Feb;8(2):101–4

Effect of long-acting somatostatin analog (Somatulin) on renal hyperfiltration in patients with IDDM. Jacobs ML, et al. **Diabetes Care** 1997 Apr;20(4):632–6

Somatostatin Analogues: Basic and Clinical Perspectives. Proceedings of a meeting. Sorrento, Italy, 16–19 November 1995. **Digestion** 1996;57 Suppl 1:1–120

Clinical use of somatostatin analogues in paediatric oncology. Albers AR, et al. **Digestion** 1996;57 Suppl 1:38–41 (32 ref.)

The role of somatostatin analogues in the treatment of gastro-enteropancreatic endocrine tumours. Bajetta E, et al. **Digestion** 1996;57 Suppl 1:72–6 (11 ref.)

Somatostatin analogues and pancreatic fistulas. Bassi C, et al. **Digestion** 1996;57 Suppl 1:94–6 (9 ref.)

The use of new somatostatin analogues, lanreotide and octastatin, in neuroendocrine gastro-intestinal tumours. Eriksson B, et al. **Digestion** 1996;57 Suppl 1:77–80

Interferon-alpha versus somatostatin or the combination of both in metastatic neuroendocrine gut and pancreatic tumours. Faiss S, et al. **Digestion** 1996;57 Suppl 1:84–5

The role of somatostatin analogues in the treatment of refractory diarrhoea. Farthing MJ. **Digestion** 1996;57 Suppl 1:107–13 (52 ref.)

Efficacy of somatostatin and its analogues in pancreatic surgery and pancreatic disorders. Friess H, et al. **Digestion** 1996;57 Suppl 1:97–102

Somatostatin analogues and exocrine pancreatic secretion. Gullo L. **Digestion** 1996;57 Suppl 1:93

Internalisation of isotope-coupled somatostatin analogues. Hofland LJ, et al. **Digestion** 1996;57 Suppl 1:2–6 (32 ref.)

Enhancement of the anti-neoplastic effects of tamoxifen by somatostatin analogues. Pollak M. **Digestion** 1996;57 Suppl 1:29–33 (37 ref.)

Somatostatin analogues for somatostatin-receptor-mediated radiotherapy of cancer. Stolz B, et al. **Digestion** 1996;57 Suppl 1:17–21

Somatostatin receptor manipulation. Visser-Wisselaar HA, et al. **Digestion** 1996;57 Suppl 1:7–10 (32 ref.)

Comparative analysis of somatostatin analog peptides by capillary electrophoresis and micellar elektrokinetic chromatography. Idei M, et al. **Electrophoresis** 1996 Apr; 17(4):758–61

Combined diagnostic imaging with 131I-metaiodobenzylguanidine and 111In-pentetreotide in carcinoid tumours. Taal BG, et al. **Eur J Cancer** 1996 Oct; 32A(11):1924–32

Clinical results of long-term slow-release lanreotide treatment of acromegaly. Giusti M, et al. **Eur J Clin Invest** 1997 Apr;27(4):277–84

Effect of the somatostatin analog, octreotide, and of other hormones on the release of the acid-labile subunit of the 150 kDa complex by rat hepatocyte in primary culture. Barreca AM, et al. **Eur J Endocrinol** 1997 Aug;137(2):193–9

Predicting the effects of long-term medical treatment in acromegaly. At what cost? For what benefits? [comment] Chanson P. **Eur J Endocrinol** 1997 Apr;136(4):359–61. Comment on: Eur J Endocrinol 1997 Apr;136(4):369–76.

Lanreotide in the treatment of patients with thyroid eye disease. Krassas GE, et al. **Eur J Endocrinol** 1997 Apr; 136(4):416–22

Use of In-111 pentetreotide scintigraphy in the diagnosis of a midgut carcinoid causing Cushing's syndrome. Segu VB, et al. **Eur J Endocrinol** 1997 Jul;137(1):79–83

Enhanced bilateral somatostatin receptor expression in mediastinal lymph nodes ("chimney sign") in occult metastatic medullary thyroid cancer: a typical site of tumour manifestation? Behr TM, et al. **Eur J Nucl Med** 1997 Feb;24(2):184–91 (20 ref.)

Breast cancer staging using technetium-99m sestamibi and indium-111 pentetreotide single-photon emission tomography. Chiti A, et al. **Eur J Nucl Med** 1997 Feb; 24(2):192–6

SOMATOSTATIN

Indium-111 pentetreotide single-photon emission tomography in patients with TSH-secreting pituitary adenomas: correlation with the effect of a single administration of octreotide on serum TSH levels. Losa M, et al. **Eur J Nucl Med** 1997 Jul;24(7):728-31

Increased uptake of indium-111 pentetreotide up to 10 years after external thoracic irradiation: report of two cases. Stoffel M, et al. **Eur J Nucl Med** 1996 Jun;23(6):723-6

A 7-year-old child with primary tumour localisation in the distal duodenum--new imaging procedures for an improved diagnosis. Cholewa D, et al. **Eur J Pediatr** 1997 Jul;156(7):568-71

Pharmacological profiles of two bombesin analogues in cells transfected with human neuromedin B receptors. Ryan RR, et al. **Eur J Pharmacol** 1996 Jun 13;306(1-3):307-14

Effect of lanreotide on local kidney IGF-I and renal growth in experimental diabetes in the rat. Grønbaek H, et al. **Exp Nephrol** 1996 Sep-Oct;4(5):295-303

A somatostatin analogue inhibits MAP kinase activation and cell proliferation in human neuroblastoma and in human small cell lung carcinoma cell lines. Cattaneo MG, et al. **FEBS Lett** 1996 Nov 18;397(2-3):164-8

Treatment of the carcinoid syndrome with the longacting somatostatin analogue lanreotide: a prospective study in 39 patients. Ruszniewski P, et al. **Gut** 1996 Aug; 39(2):279-83

Incomplete analgesic effect of lanreotide in acromegaly [letter] Maffei P, et al. **Headache** 1997 May;37(5):299-300

Receptor scintigraphy of non-neuroendocrine cancers with In-111 pentetreotide. Limouris GS, et al. **Hybridoma** 1997 Feb;16(1):133-7

Targeting peptides for pleural cavity tumor radiotherapy: specificity and dosimetry of Re-188-RC-160. Zamora PO, et al. **Hybridoma** 1997 Feb;16(1):85-91

Somatostatin analogs: angiogenesis inhibitors with novel mechanisms of action. Woltering EA, et al. **Invest New Drugs** 1997;15(1):77-86 (03 ref.)

Changing approach to gastroenteropancreatic tumours. Case report of a gastrinoma metastasis localized by somatostatin-receptor scintigraphy. Fries W, et al. **Ital J Gastroenterol** 1996 May;28(4):220-4

Angiopeptin inhibits thymidine incorporation by explants of porcine coronary arteries. Vargas R, et al. **J Cardiovasc Pharmacol** 1997 Feb;29(2):278-83

Octreotide and lanreotide treatment in active acromegaly [letter; comment] Cannavò S, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2376-7. Comment on: J Clin Endocrinol Metab 1996 Dec;81(12):4502-3.

Three year follow-up of acromegalic patients treated with intramuscular slow-release lanreotide [see comments] Caron P, et al. **J Clin Endocrinol Metab** 1997 Jan; 82(1):18-22. Comment in: J Clin Endocrinol Metab 1997 Jan;82(1):15-7.

Effectiveness and tolerability of slow release lanreotide treatment in active acromegaly: six-month report on an Italian multicenter study. Italian Multicenter Slow Release Lanreotide Study Group [see comments] Giusti M, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2089-97. Comment in: J Clin Endocrinol Metab 1996 Dec;81(12):4502-3.

Dissociation between the effects of somatostatin (SS) and octapeptide SS-analogs on hormone release in a small subgroup of pituitary- and islet cell tumors. Hofland LJ, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):3011-8

Depot somatostatin analogs--a new first line therapy for acromegaly [editorial; comment] Robbins RJ. **J Clin Endocrinol Metab** 1997 Jan;82(1):15-7. Comment on: J Clin Endocrinol Metab 1997 Jan;82(1):18-22. Comment on: J Clin Endocrinol Metab 1997 Jan;82(1):23-8.

Effectiveness and tolerability of slow release lanreotide treatment in active acromegaly: six-month report on an Italian multicentre study [letter; comment] [see comments] Soule S, et al. **J Clin Endocrinol Metab** 1996 Dec; 81(12):4502-3. Comment on: J Clin Endocrinol Metab 1996 Jun;81(6):2089-97. Comment in: J Clin Endocrinol Metab 1997 Jul;82(7):2376-7.

Lanthionine-somatostatin analogs: synthesis, characterization, biological activity, and enzymatic stability studies. Osapay G, et al. **J Med Chem** 1997 Jul 4; 40(14):2241-51

Clinical impact of somatostatin receptor scintigraphy in the management of patients with neuroendocrine gastroenteropancreatic tumors. Lebtahi R, et al. **J Nucl Med** 1997 Jun;38(6):853-8

First impressions. A 21-yr-old woman with adenocarcinoma of the pelvis. What is the radiopharmaceutical? What are the findings? Yeung H, et al. **J Nucl Med** 1996 Dec; 37(12):7A, 1994

Evaluation of somatostatin analogues for the detection and treatment of gastrinoma in a dog. Altschul M, et al. **J Small Anim Pract** 1997 Jul;38(7):286-91

Indium In-111 pentetreotide scintigraphy: application to carotid body tumors. Hammond SL, et al. **J Vasc Surg** 1997 May;25(5):905-8

Receptor-specific somatostatin analogs: correlations with biological activity. Coy DH, et al. **Metabolism** 1996 Aug; 45(8 Suppl 1):21-3 (14 ref.)

Is there a role for somatostatin and its analogs in Cushing's syndrome? de Herder WW, et al. **Metabolism** 1996 Aug; 45(8 Suppl 1):83-5 (17 ref.)

Blockade of growth factor synthesis and growth factor action: two possible sites of interference in allograft vessel disease and coronary bypass or balloon injury. Häyry P, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):101-3

Somatostatin analogs: future directions. Lamberts SW, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):104-6

Improved analogs and novel delivery systems for somatostatin octapeptides. Moreau JP, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):24-6 (7 ref.)

The role of somatostatin agonistic analogs in the treatment of acromegaly. Tolis G. **Metabolism** 1996 Aug;45(8 Suppl 1):109-10 (16 ref.)

Somatostatin analogs in ectopic corticotropin production. von Werder K, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):129-31 (16 ref.)

Somatostatin acts by inhibiting the cyclic 3',5'-adenosine monophosphate (cAMP)/protein kinase A pathway, cAMP response element-binding protein (CREB) phosphorylation, and CREB transcription potency. Tentler JJ, et al. **Mol Endocrinol** 1997 Jun;11(7):859-66

Identification and characterization of novel somatostatin antagonists [published erratum appears in Mol Pharmacol 1997 Jan;51(1):170] Bass RT, et al. **Mol Pharmacol** 1996 Oct;50(4):709-15

The mu-opioid receptor antagonist D-Phe-Cys-Tyr-D-Trp-Orn-Thr-Pen-Thr-NH2 (CTOP) [but not D-Phe-Cys-Tyr-D-Trp-Arg-Thr-Pen-Thr-NH2 (CTAP)] produces a nonopioid receptor-mediated increase in K+ conductance of rat locus ceruleus neurons. Chieng B, et al. **Mol Pharmacol** 1996 Sep;50(3):650-5

An unusual case of multiple endocrine neoplasia type 1 and the role of 111In-pentetreotide scintigraphy. Ponssen HH, et al. **Neth J Med** 1996 Sep;49(3):112-5

Anti-inflammatory and antinociceptive effect of different somatostatin-analogs. Helyes Z, et al. **Neurobiology (Bp)** 1996;4(1-2):115-7

Effects of intrathecal nonnarcotic analgesics on chronic tactile allodynia in rats: alpha 2-agonists versus somatostatin analog. Ono N, et al. **Neurol Med Chir (Tokyo)** 1997 Jan;37(1):6-10; discussion 10-1

The role of radiolabeled somatostatin analogs in adrenal imaging. Maurea S, et al. **Nucl Med Biol** 1996 Aug; 23(6):677-80

Radiolabeled somatostatin analogs in prostate cancer. Thakur ML, et al. **Nucl Med Biol** 1997 Jan;24(1):105-13

Somatostatin and somatostatin analogues in medullary thyroid carcinoma. O'Byrne KJ, et al. **Nucl Med Commun** 1996 Sep;17(9):810-6

Opioid peptides: simultaneous delta agonism and mu antagonism in somatostatin analogues. Bonner GG, et al. **Peptides** 1997;18(1):93-100

Occurrence of two somatostatin variants in the frog brain: characterization of the cDNAs, distribution of the mRNAs, and receptor-binding affinities of the peptides. Tostivint H, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12605-10

The somatostatin analog angiopeptin does not reduce chronic hypoxic pulmonary hypertension in rats. Sidney EJ, et al. **Proc Soc Exp Biol Med** 1996 Oct;213(1):43-9

111In-pentetreotide scintigraphy in the post-thyroidectomy follow-up of patients with medullary thyroid carcinoma. Celentano L, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):131-3

111In-octreotide scintigraphy in endocrine tumors. Preliminary data. Cremonini N, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):116-20

Somatostatin receptor imaging: a preliminary experience in forty-nine patients. Giammarile F, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):121-3

Whole body and tomographic scan with 111In-pentetreotide: preliminary data. Gregianin M, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):124-6

MIBG and radiolabeled octreotide in neuroendocrine tumors. Hoefnagel CA. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):137-9

Radiolabeled somatostatin analog scintigraphy in medullary thyroid carcinoma and carcinoid tumor. Rufini V, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):140-4

Scintigraphic assessment of pituitary adenomas and several diseases by indium-111-pentetreotide. Tumiati MN, et al. **Q J Nucl Med** 1995 Dec;39(4 Suppl 1):98-100

Angiopeptin--an immunological review. Motomura N, et al. **Transpl Immunol** 1996 Jun;4(2):99-104 (72 ref.)

Immunomodulatory activities of the somatostatin receptor subtype analogues on human peripheral blood lymphocytes. Atiya A, et al. **Transplant Proc** 1997 Jun;29(4):2151

Angiopeptin induces beneficial vascular remodeling after balloon injury. Foegh ML, et al. **Transplant Proc** 1997 Sep; 29(6):2605-8

Effect of locally and systemically administered angiopeptin on growth factor expression in syngeneic deendothelialized heterotopic aorta grafts in the rat. Motomura N, et al. **Transplant Proc** 1997 Sep;29(6):2563-4

Somatostatin and its analogues in G.I. tract, liver and pancreatic disorders. Dhar A, et al. **Trop Gastroenterol** 1995 Jul-Sep;16(3):3-7 (22 ref.)

Axillary node metastasis detection in breast cancer with 99mTc-sestaMIBI and 111In-pentetreotide. Chiti A, et al. **Tumori** 1997 Mar-Apr;83(2):537-8

[Angiopeptin versus placebo for reductin of restenosis after PTCA treatment. A randomized, double-blind study] Eriksen UH, et al. **Ugeskr Laeger** 1996 Nov 11; 158(46):6605-8 (Eng. Abstr.) **(Dan)**

[Could delayed action flanreotide be used as substitute for octreotide in the treatment of dumping syndrome? (letter)] Bouché O, et al. **Gastroenterol Clin Biol** 1997;21(1):84-5 **(Fre)**

[Partial regression of a desmoid tumor after prolonged treatment with lanreotide (letter)] Mannant PR, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1072-3 **(Fre)**

[Hepatic encephalopathy after injection of lanreotide, a somatostatin analog] Robin E, et al. **Gastroenterol Clin Biol** 1996;20(11):1014-6 (Eng. Abstr.) **(Fre)**

[Prediction of pharmacological effect of octreotide in acromegaly by means of 111In-pentetreotide scintigraphy and calculation of a pituitary uptake index] Görges R, et al. **Nuklearmedizin** 1997 Jun;36(4):117-24 (Eng. Abstr.) **(Ger)**

[Useful treatment modality for postoperative duodenal fistula with somatostatin analogue] Kikuchi M, et al. **Nippon Geka Gakkai Zasshi** 1997 Apr;98(4):466-9 (Eng. Abstr.) **(Jpn)**

[Successful treatment of a large pancreatic pseudocyst with a percutaneous catheter drainage and a somatostatin analogue--report of a case] Yamao K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Dec;93(12):942-6 **(Jpn)**

[Lanreotide++: a new therapeutic option in acromegaly] Díez JJ. **Med Clin (Barc)** 1996 Sep 7;107(7):257-69 (200 ref.) **(Spa)**

ANALYSIS

Development of somatostatin radioimmunoassay for the measurement of plasma and tissue contents of hormone. Németh J, et al. **Acta Physiol Hung** 1996;84(3):313-5

Colocalization of somatostatin, neuropeptide Y, neuronal nitric oxide synthase and NADPH-diaphorase in striatal interneurons in rats. Figueredo-Cardenas G, et al. **Brain Res** 1996 Oct 7;735(2):317-24

Somatostatin-like immunoreactive cells in the ground squirrel retina. Lugo N, et al. **Cell Biol Int** 1997 Jul; 21(7):447-53

Neuropeptide Y, somatostatin, and cholecystokinin of the anterior piriform cortex. Cummings SL. **Cell Tissue Res** 1997 Jul;289(1):39-51

The somatostatin system of the brain and hibernation in the European hamster (Cricetus cricetus). Nürnberger F, et al. **Cell Tissue Res** 1997 Jun;288(3):441-7

Unique distribution of somatostatin-immunoreactive cells in the retina of the tree shrew (Tupaia belangeri). Engelmann R, et al. **Eur J Neurosci** 1996 Jan;8(1):220-8

Ischemia changes the coexpression of somatostatin and neuropeptide Y in hippocampal interneurons. Bering R, et al. **Exp Brain Res** 1997 Jul;115(3):423-9

Expression of NMDA receptor-1 (NR1) and huntingtin in striatal neurons which colocalize somatostatin, neuropeptide Y, and NADPH diaphorase: a double-label histochemical and immunohistochemical study. Kumar U, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):412-24

Occurrence of somatostatin and insulin immunoreactivities in the stomach of sea bass (Dicentrarchus labrax L.): light and electron microscopic studies. Visus IG, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):16-27

Ontogeny of somatostatin immunoreactive neurons in the medial cerebral cortex and other cortical areas of the lizard Podarcis hispanica. Nacher J, et al. **J Comp Neurol** 1996 Oct 7;374(1):118-35

Somatostatin-immunoreactive neurons in the adult rabbit retina. Rickman DW, et al. **J Comp Neurol** 1996 Feb 12; 365(3):491-503

Estimation of the number of somatostatin neurons in the striatum: an in situ hybridization study using the optical fractionator method. West MJ, et al. **J Comp Neurol** 1996 Jun 17;370(1):11-22

Colocalization of progesterone receptor and somatostatin immunoreactivities in the hypothalamus of the male and female guinea pig. Dufourny L, et al. **Neuroendocrinology** 1996 Sep;64(3):215-24

Expression of somatostatin in neurons of the central posterior/prepacemaker nucleus projecting to the preglomerular nucleus: immunohistochemical evidence for a non-synaptic function. Zupanc GK, et al. **Neurosci Lett** 1997 Mar 14;224(2):123-6

ANTAGONISTS & INHIBITORS

Identification and characterization of novel somatostatin antagonists [published erratum appears in Mol Pharmacol 1997 Jan;51(1):170] Bass RT, et al. **Mol Pharmacol** 1996 Oct;50(4):709-15

BIOSYNTHESIS

Somatostatin and brain-derived neurotrophic factor mRNA expression in the primate brain: decreased levels of mRNAs during aging. Hayashi M, et al. **Brain Res** 1997 Feb 28; 749(2):283-9

The kindling-activated neuronal network: recruitment of somatostatin-synthesizing neurons. Pretel S, et al. **Brain Res Bull** 1996;41(4):237-47

Meningeal cells are targets and inactivation sites for the neuropeptide somatostatin. Feindt J, et al. **Brain Res Mol Brain Res** 1997 Mar;44(2):293-300

Effects of pituitary adenylate cyclase-activating polypeptide (PACAP) on gonadotropin-releasing hormone and

somatostatin gene expression in the rat brain. Li S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):157-62

Effect of chronic antipsychotic drug treatment on preprosomatostatin and preprotachykinin A mRNA levels in the medial prefrontal cortex, the nucleus accumbens and the caudate putamen of the rat. Marcus MM, et al. **Brain Res Mol Brain Res** 1997 May;45(2):275-82

Expression of the somatostatin gene in human astrocytoma cell lines. Mercure L, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):151-5

Functional changes in somatostatin and neuropeptide Y containing neurons in the rat hippocampus in chronic models of limbic seizures. Vezzani A, et al. **Epilepsy Res** 1996 Dec;26(1):267-79

Endocrine cell carcinoma (carcinoid tumour) of the gallbladder producing pancreatic polypeptide and somatostatin [letter] Heymann MF, et al. **Histopathology** 1997 Jun;30(6):606-7

Oscillatory Ca2+ signaling in somatostatin-producing cells from the human pancreas. Berts A, et al. **Metabolism** 1997 Apr;46(4):366-9

Somatostatin expression in human renal cortex and mesangial cells. Turman MA, et al. **Regul Pept** 1997 Jan 15; 68(1):15-21

BLOOD

Plasma somatostatin and cholecystokinin levels in sick preterm infants during their first six weeks of life. Törnhage CJ, et al. **Acta Paediatr** 1997 Aug;86(8):847-50

Development of somatostatin radioimmunoassay for the measurement of plasma and tissue contents of hormone. Németh J, et al. **Acta Physiol Hung** 1996;84(3):313-5

Small duodenal somatostatinoma with high plasma somatostatin level. Takizawa H, et al. **Am J Gastroenterol** 1997 Jun;92(6):1063-4

Plasma somatostatin correlates with blunted thyrotropin secretion after stimulation by thyrotropin-releasing hormone in critical illness. Sumita S, et al. **Anaesth Intensive Care** 1997 Jun;25(3):267-71

Plasma somatostatin and cholecystokinin levels in preterm infants during the first day of life. Törnhage CJ, et al. **Biol Neonate** 1996;70(6):311-21

Estradiol inhibits plasma somatostatin 14 (SRIF-14) levels and inhibits the response of somatotrophic cells to SRIF-14 challenge in vitro in rainbow trout, Oncorhynchus mykiss. Holloway AC, et al. **Gen Comp Endocrinol** 1997 Jun; 106(3):407-14

Circadian rhythmicity of plasma somatostatin, gastrin and cortisol in colon cancer patients. Payer J Jr, et al. **Hepatogastroenterology** 1997 Jan-Feb;44(13):72-7

Exocrine pancreatic secretion and plasma levels of cholecystokinin, pancreatic polypeptide, and somatostatin after single and combined intraduodenal application of different bile salts in man. Riepl RL, et al. **Ital J Gastroenterol** 1996 Oct-Nov;28(8):421-9

Solid-phase radioimmunoassay and chemiluminoimmunoassay for somatostatin in unextracted rat plasma. Leidy JW Jr, et al. **J Neurosci Methods** 1996 Sep;68(1):7-13

Plasma somatostatin response to an oral test meal in liver transplant patients. Barreca T, et al. **Metabolism** 1997 Sep; 46(9):1003-7

Neural monitoring system for circulating somatostatin in the hepatoportal area. Nakabayashi H. **Nutrition** 1997 Mar; 13(3):225-9 (17 ref.)

[Responses of somatostatin, beta-endorphin and dynorphin A to A glucose load in two groups of women with polycystic ovarian syndrome] Wu X, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1995 Dec;30(12):728-31 (Eng. Abstr.) **(Chi)**

CEREBROSPINAL FLUID

GH response to GH-releasing hormone (GHRH) in Alzheimer and vascular dementia. Relation with somatostatin cerebrospinal levels. Gómez IM, et al. **Ann Endocrinol (Paris)** 1996;57(2):107-10

Molecular forms of somatostatin-like immunoreactivity in the cerebrospinal fluid of patients with senile dementia of the Alzheimer type. Strittmatter M, et al. **Biol Psychiatry** 1997 Jun 1;41(11):1124-30

Somatostatin and neuropeptide Y in cerebrospinal fluid: correlations with severity of disease and clinical signs in Alzheimer's disease and frontotemporal dementia. Minthon L, et al. **Dement Geriatr Cogn Disord** 1997 Jul-Aug; 8(4):232-9

Somatostatin, its molecular forms and monoaminergic transmitter metabolites in Binswanger's disease. Neurochemical-neuropathological considerations. Strittmatter M, et al. **Neurodegeneration** 1996 Dec; 5(4):359-66

Low cerebrospinal fluid concentrations of peptide histidine valine and somatostatin-28 in Alzheimer's disease: altered processing of prepro-vasoactive intestinal peptide and prepro-somatostatin. Yasuda M, et al. **Neuropeptides** 1995 Dec;29(6):325-30

CSF substance P somatostatin and monoaminergic transmitter metabolites in patients with narcolepsy. Strittmatter M, et al. **Neurosci Lett** 1996 Nov 1; 218(2):99-102

CHEMICAL SYNTHESIS

Lanthionine-somatostatin analogs: synthesis, characterization, biological activity, and enzymatic stability studies. Osapay G, et al. **J Med Chem** 1997 Jul 4; 40(14):2241-51

CHEMISTRY

Canine prosomatostatin: isolation of a cDNA, regulation of gene expression, and characterization of post-translational processing intermediates. Dickinson CJ, et al. **Regul Pept** 1996 Dec 17;67(3):145-52

DIAGNOSTIC USE

Radiolabelled somatostatin analogue scintigraphy in oncology. O'Byrne KJ, et al. **Anticancer Drugs** 1996 Jan; 7 Suppl 1:33-44 (79 ref.)

Somatostatin receptor imaging: predictive and prognostic considerations. Anthony LB, et al. **Digestion** 1996;57 Suppl 1:50-3

Somatostatin and cancer. Robbins RJ. **Metabolism** 1996 Aug; 45(8 Suppl 1):98-100 (41 ref.)

The role of radiolabeled somatostatin analogs in adrenal imaging. Maurea S, et al. **Nucl Med Biol** 1996 Aug; 23(6):677-80

[Somatostatin stimulation test] Sakai Y, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:428-31 (6 ref.) **(Jpn)**

DRUG EFFECTS

Bowel resection and neurotensin treatment. Histochemical study of neurotensin-like and somatostatin-like immunoreactivities and receptors. Toledano A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Dec;42(8):1145-58

Effects of GH and IGF-I administration on GHRH and somatostatin mRNA levels: I. A study on ad libitum fed and starved adult male rats. Ghigo MC, et al. **J Endocrinol Invest** 1997 Mar;20(3):144-50

Effects of GH and IGF-I administration on GHRH and somatostatin mRNA levels: II. A study in the infant rat. Grilli R, et al. **J Endocrinol Invest** 1997 Mar;20(3):151-4

The oxytocin receptor antagonist 1-deamino-2-D-Tyr-(OEt)-4-Thr-8-Orn-oxytocin inhibits effects of the 5-HT1A receptor agonist 8-OH-DPAT on plasma levels of insulin, cholecystokinin and somatostatin. Björkstrand E, et al. **Regul Pept** 1996 May 7;63(1):47-52

GENETICS

Regulation of somatostatin gene transcription by cAMP. Montminy M, et al. **Adv Pharmacol** 1996;36:1-13 (20 ref.)

Effects of fasting on the expression of gastrin, cholecystokinin, and somatostatin genes and of various housekeeping genes in the pancreas and upper digestive tract of rats. Yamada H, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):835-8

Topogenic effect of positively charged N-terminal amino acid in ER translocation of yeast alpha-factor precursor. Lee MA, et al. **Cell Struct Funct** 1996 Jun;21(3):175-81

Expression of the somatostatin gene in human astrocytoma cell lines. Mercure L, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):151-5

Growth hormone induces somatostatin and insulin-like growth factor I gene expression in the cerebral hemispheres of aging rats. López-Fernández J, et al. **Endocrinology** 1996 Oct;137(10):4384-91

Transforming growth factor-betas inhibit somatostatin messenger ribonucleic acid levels and somatostatin secretion in hypothalamic cells in culture. Quintela M, et al. **Endocrinology** 1997 Oct;138(10):4401-9

Regulation of hypothalamic somatostatin, growth hormone-releasing hormone, and growth hormone receptor messenger ribonucleic acid by glucocorticoids. Señarís RM, et al. **Endocrinology** 1996 Dec;137(12):5236-41

Differential activation of viral and cellular promoters by human T-cell lymphotropic virus-1 tax and cAMP-responsive element modulator isoforms. Laurance ME, et al. **J Biol Chem** 1997 Jan 31;272(5):2646-51

Chromosome localization of the genes for growth hormone, somatostatin peptide, ornithine transcarbamylase, and prion protein in silver fox (Vulpes fulvus). Koroleva IV, et al. **Mamm Genome** 1996 Nov;7(11):860-2

Regulation of somatostatin gene transcription by cyclic adenosine monophosphate. Montminy M, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):4-7 (12 ref.)

Expression of the somatostatin gene and receptors in the rat harderian gland. Mato ME, et al. **Microsc Res Tech** 1996 Jun 1;34(2):118-22

Gene expression of hypothalamic somatostatin and growth hormone-releasing hormone in dexamethasone-treated rats. Lam KS, et al. **Neuroendocrinology** 1997 Jul;66(1):2-8

Somatostatin neurons form a distinct peptidergic neuronal group in the rat suprachiasmatic nucleus: a double labeling in situ hybridization study. Tanaka M, et al. **Neurosci Lett** 1996 Sep 6;215(2):119-22

Decreased neuronal nitric oxide synthase messenger RNA and somatostatin messenger RNA in the striatum of Huntington's disease. Norris PJ, et al. **Neuroscience** 1996 Jun;72(4):1037-47

Occurrence of two somatostatin variants in the frog brain: characterization of the cDNAs, distribution of the mRNAs, and receptor-binding affinities of the peptides. Tostivint H, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12605-10

Molecular control of peptide hormone and receptor expression. Dimaline R. **Proc Nutr Soc** 1996 Mar; 55(1B):265-77 (77 ref.)

[Expression of corticoliberin (CRF) and somatostatin (SRIF) genes in accessory nonapeptidergic (magnocellular) neurosecretory nuclei in rat hypothalamus] Grinevich VV, et al. **Dokl Akad Nauk** 1996 Nov;351(2):275-7 **(Rus)**

IMMUNOLOGY

The postembryonic development of somatostatin immunoreactivity in the central posterior/prepacemaker nucleus of weakly electric fish, Apteronotus leptorhynchus: a double-labelling study. Stroh T, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1-2):76-87

Lower density of antral somatostatin-immunoreactive cells in the digestive form of chronic Chagas' disease. Troncon LE, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1449-54

Seizure-induced damage to somatostatin-immunoreactive neurons in the rat hippocampus is regulated by fimbria-fornix transection. Jolkkonen J, et al. **Exp Neurol** 1997 May;145(1):141-53

Somatostatin and substance P-like immunoreactivity in the auditory brainstem of the adult rat. Wynne B, et al. **J Chem Neuroanat** 1997 May;12(4):259-66

Distribution of somatostatin-immunoreactive structures in the central nervous system of the frog, Rana esculenta. Petkó M, et al. **J Hirnforsch** 1996;37(1):109-20

Comparison of NADPH diaphorase histochemistry, somatostatin immunohistochemistry, and silver impregnation in detecting structural and functional impairment in experimental status epilepticus. Kotti T, et al. **Neuroscience** 1997 Sep;80(1):105-17

Anti-somatostatin antisera, but neither a somatostatin agonist (octreotide) nor antagonist (CYCAM), attenuates hyperalgesia in the rat. Traub RJ, et al. **Peptides** 1996; 17(5):769-73

ISOLATION & PURIFICATION

Proinsulin and somatostatin from the islet organ of the southern-hemisphere lamprey Geotria australis. Conlon JM, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):413-22

METABOLISM

Effect of fetal ethanol exposure on the in vitro release of growth hormone, somatostatin and growth hormone-releasing factor induced by clonidine and growth hormone feedback in male and female rats. Conway S, et al. **Alcohol Clin Exp Res** 1997 Aug;21(5):826-39

Inhibition of acid secretion by electrical acupuncture is mediated via beta-endorphin and somatostatin. Jin HO, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):G524-30

Ontogeny of GABA-immunoreactive cells in the primate cerebellar cortex: comparison with somatostatin-immunoreactivity. Yamashita A, et al. **Anat Embryol (Berl)** 1996 Sep;194(3):215-22

Target tissue influence on somatostatin expression in the avian ciliary ganglion. Coulombe JN, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:209-25 (54 ref.)

Possible effects of placental leucine aminopeptidase on the regulation of brain-gut hormones in the fetoplacental unit. Mizutani S, et al. **Biol Neonate** 1996;69(5):307-17

Somatostatin-positive neurons in the different parts of the brain in normal aging and Alzheimer's disease. Li WP, et al. **Biol Signals** 1996 Nov-Dec;5(6):343-8

Human brain somatostatin release from isolated cortical nerve endings and its modulation through GABAB receptors. Bonanno G, et al. **Br J Pharmacol** 1996 Jul;118(6):1441-6

Effect of (8-32) salmon calcitonin, an amylin antagonist, on insulin, glucagon and somatostatin release: study in the perfused pancreas of the rat. Silvestre RA, et al. **Br J Pharmacol** 1996 Jan;117(2):347-50

Age-related changes of VIP, NPY and somatostatin-immunoreactive neurons in the cerebral cortex of aged rats. Cha CI, et al. **Brain Res** 1997 Apr 11;753(2):235-44

Long-term effects of cysteamine on cognitive and locomotor behavior in rats: relationship to hippocampal glial pathology and somatostatin levels. Justino L, et al. **Brain Res** 1997 Jun 27;761(1):127-34

Brain somatostatin depletion by cysteamine attenuates the penile erection induced by serotonergic and dopaminergic, but not by cholinergic, activation in rats. Matsuoka N, et al. **Brain Res** 1996 Aug 5;729(1):132-6

Ultrastructural localization of inhibin beta- and somatostatin-28-immunoreactivities in the paraventricular and supraoptic nuclei. Sawchenko PE, et al. **Brain Res** 1995 Oct 2;694(1-2):233-45

Somatostatin 1-12 immunoreactivity is decreased in the hypothalamic lateral tuberal nucleus of Huntington's disease patients. Timmers HJ, et al. **Brain Res** 1996 Jul 29;728(2):141-8

Prolonged induction of c-fos in neuropeptide Y- and somatostatin-immunoreactive neurons of the rat dentate gyrus after electroconvulsive stimulation. Woldbye DP, et al. **Brain Res** 1996 May 13;720(1-2):111-9

Modulation by 5-hydroxytryptamine of the somatostatin receptor-effector system and somatostatin levels in rat brain. Muñoz-Acedo G, et al.

Brain Res Mol Brain Res 1996 Apr;37(1-2):259-66

Immunocytochemical analysis of peptide hormone processing: importance of the positively charged N-terminal domain of signal peptide in correct ER targeting in yeast cells. Cheong KH, et al. **Cell Struct Funct** 1997 Jun;22(3):365-77

Effects of adrenalectomy on serotonin-, somatostatin-, and gastrin-immunoreactive cells in rat gastrointestinal tract. Glória H, et al. **Dig Dis Sci** 1997 Jun;42(6):1216-20

Endocytosis of the rat somatostatin receptors: subtype discrimination, ligand specificity, and delineation of carboxy-terminal positive and negative sequence motifs. Roth A, et al. **DNA Cell Biol** 1997 Jan;16(1):111-9

Truncated and full-length glucagon-like peptide-1 (GLP-1) differentially stimulate intestinal somatostatin release. Brubaker PL, et al. **Endocrine** 1997 Feb;6(1):91-5

Differential internalization of somatostatin in COS-7 cells transfected with SST1 and SST2 receptor subtypes: a confocal microscopic study using novel fluorescent somatostatin derivatives. Nouel D, et al. **Endocrinology** 1997 Jan;138(1):296-306

Decrease in somatostatin-immunoreactive neurons in the rat amygdaloid complex in a kindling model of temporal lobe epilepsy. Tuunanen J, et al. **Epilepsy Res** 1997 Jan; 26(2):315-27

Correlations between water maze performance and cortical somatostatin mRNA and high-affinity binding sites during ageing in rats. Dournaud P, et al. **Eur J Neurosci** 1996 Mar;8(3):476-85

Presynaptic modulation by VIP, secretin and isoproterenol of somatostatin release from enriched enteric synaptosomes: role of cAMP. Kurjak M, et al. **Eur J Pharmacol** 1996 Oct 24;314(1-2):165-73

Rapid and opposite effects of dexamethasone on in vivo and in vitro hypothalamic somatostatin release. Estupina C, et al. **Exp Brain Res** 1997 Feb;113(2):337-42

Age-dependent differences in survival of striatal somatostatin-NPY-NADPH-diaphorase-containing interneurons versus striatal projection neurons after intrastriatal injection of quinolinic acid in rats. Figueredo-Cardenas G, et al. **Exp Neurol** 1997 Aug; 146(2):444-57

Effect of transforming growth factor alpha and interleukin 8 on somatostatin release from canine fundic D cells. Beales I, et al. **Gastroenterology** 1997 Jan;112(1):136-43

The effect of gastrin-releasing peptide on gastrin and somatostatin messenger RNAs in humans infected with Helicobacter pylori. Gibbons AH, et al. **Gastroenterology** 1997 Jun;112(6):1940-7

Cytology and microenvironment of somatostatin (D) cells in the gastric fundic mucosa of rodents. Kusumoto Y, et al. **Hiroshima J Med Sci** 1995 Dec;44(4):105-12

Suppression of TRH-stimulated TSH secretion by glucose-induced hypothalamic somatostatin release. Yang I, et al. **Horm Metab Res** 1996 Oct;28(10):553-7

Responses of somatostatin, beta-endorphin and dynorphin A to a glucose load in two groups of women with polycystic ovarian syndrome. Wu XK, et al. **Horm Res** 1996;46(2):59-63

Somatostatin and growth hormone-releasing hormone in normal and tumoral human breast tissue: endogenous content, in vitro pulsatile release, and regulation. Benlot C, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):690-6

Fasting alters somatostatin binding to liver membranes of rainbow trout (Oncorhynchus mykiss). Pesek MJ, et al. **J Endocrinol** 1996 Aug;150(2):179-86

Platelet-activating factor and somatostatin activate mitogen-activated protein kinase (MAP kinase) and arachidonate release. Shimizu T, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1-3):103-8 (22 ref.)

Acute and chronic treatments with citalopram lower somatostatin levels in rat brain striatum through different mechanisms. Prosperini E, et al. **J Neurochem** 1997 Jul; 69(1):206-13

Involvement of presynaptic histamine H3 receptors in the modulation of somatostatin binding and its effects on adenylyl cyclase activity in the rat frontoparietal cortex. Puebla L, et al. **J Neurochem** 1996 Mar;66(3):1051-9

Neurodegeneration of somatostatin-immunoreactive neurons in HIV encephalitis. Fox L, et al. **J Neuropathol Exp Neurol** 1997 Apr;56(4):360-8

Central administration of a growth hormone (GH) receptor mRNA antisense increases GH pulsatility and decreases hypothalamic somatostatin expression in rats. Pellegrini E, et al. **J Neurosci** 1996 Dec 15;16(24):8140-8

Antibody-coated electrodes for detecting somatic exocytosis of somatostatin-like material in Helix neurones. Darbon P, et al. **J Neurosci Methods** 1996 Aug;67(2):197-201

Solid-phase radioimmunoassay and chemiluminoimmunoassay for somatostatin in unextracted rat plasma. Leidy JW Jr, et al. **J Neurosci Methods** 1996 Sep;68(1):7-13

Activation of human somatostatin receptor type 2 causes inhibition of cell growth in transfected HEK293 but not in transfected CHO cells. Ren J, et al. **J Surg Res** 1997 Jul 15;71(1):13-8

Receptor-specific somatostatin analogs: correlations with biological activity. Coy DH, et al. **Metabolism** 1996 Aug; 45(8 Suppl 1):21-3 (14 ref.)

Somatostatin-14, somatostatin-28, and prosomatostatin[1-10] are independently and efficiently processed from prosomatostatin in the constitutive secretory pathway in islet somatostatin tumor cells (1027B2). Patel YC, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):183-94

Identification and characterisation of heterogeneous somatostatin binding sites in rat distal colonic mucosa. McKeen ES, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Nov; 354(5):543-9

Neuropeptide Y and somatostatin immunoreactivity in the rat hippocampus after moderate hypoxia. Schwarzer C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jun; 354(1):67-71

Response of rat cerebral somatostatinergic system to a high ammonia diet. Boyano-Adánez MC, et al. **Neurochem Int** 1996 Nov;29(5):469-76

Effects of food deprivation on the GH axis: immunocytochemical and molecular analysis. Brogan RS, et al. **Neuroendocrinology** 1997 Feb;65(2):129-35

Variations in hypothalamic somatostatin release and content during the estrous cycle in the rat. Effects of ovariectomy and estrogen supplementation. Estupina C, et al. **Neuroendocrinology** 1996 Feb;63(2):181-7

Androgen receptor-immunoreactive cells in ram hypothalamus: distribution and co-localization patterns with gonadotropin-releasing hormone, somatostatin and tyrosine hydroxylase. Herbison AE, et al. **Neuroendocrinology** 1996 Feb;63(2):120-31

Hypophysiotropic somatostatin expression during postnatal development in growth hormone-deficient Ames dwarf mice: mRNA in situ hybridization. Hurley DL, et al. **Neuroendocrinology** 1997 Feb;65(2):98-106

Hypophysiotropic somatostatin expression during postnatal development in growth hormone-deficient Ames dwarf mice: peptide immunocytochemistry. Phelps CJ, et al. **Neuroendocrinology** 1996 Nov;64(5):364-78

Somatostatin-14 mainly binds the somatostatin receptor subtype 2 in human neuroblastoma tumors. Prevost G, et al. **Neuroendocrinology** 1996 Feb;63(2):188-97

Identification of growth hormone-releasing hormone and somatostatin neurons projecting to the median eminence in normal and growth hormone-deficient Ames dwarf mice. Romero MI, et al. **Neuroendocrinology** 1997 Feb; 65(2):107-16

Low cerebrospinal fluid concentrations of peptide histidine valine and somatostatin-28 in Alzheimer's disease: altered processing of prepro-vasoactive intestinal peptide and prepro-somatostatin. Yasuda M, et al. **Neuropeptides** 1995 Dec;29(6):325-30

N-methyl-D-aspartate receptor involvement in dexamethasone and stress-induced hypothalamic somatostatin release in rats. Estupina C, et al. **Neurosci Lett** 1996 Nov 29;219(3):203-6

Localization of somatostatin-like immunoreactive neurons in the vestibular ganglion of the rabbit. Won MH, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):129-32

Cholinergic deafferentation exacerbates seizure-induced loss of somatostatin-immunoreactive neurons in the rat hippocampus. Jolkkonen J, et al. **Neuroscience** 1997 Sep; 80(2):401-11

The expression pattern of somatostatin and calretinin by postnatal hippocampal interneurons is regulated by activity-dependent and -independent determinants. Marty S, et al. **Neuroscience** 1997 Sep;80(1):79-88

Functional activation of somatostatin- and neuropeptide Y-containing neurons in the entorhinal cortex of chronically epileptic rats. Vezzani A, et al. **Neuroscience** 1996 Nov;75(2):551-7

Somatostatin and somatostatin analogues in medullary thyroid carcinoma. O'Byrne KJ, et al. **Nucl Med Commun** 1996 Sep;17(9):810-6

Real-time evaluation of somatostatin subtype 2 receptor activity employing the technique of cytosensor microphysiometry. Taylor JE, et al. **Peptides** 1996; 17(7):1257-9

Defective prohormone processing and altered pancreatic islet morphology in mice lacking active SPC2. Furuta M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6646-51

Cholecystokinin, neuropeptide Y and galanin modulate the release of pancreatic somatostatin-25 and somatostatin-14 in vitro. Eilertson CD, et al. **Regul Pept** 1996 Jul 5; 63(2-3):105-12

Study of the secretion of substance P, neurotensin and somatostatin in patients with cholelithiasis. Ortega López D, et al. **Rev Esp Enferm Dig** 1997 Jun;89(6):425-34 **(Eng, Spa)**

Alteration of enteroendocrine and neuropeptides in graft after intestinal transplantation in dogs. Lai HS, et al. **Transplant Proc** 1996 Oct;28(5):2561-3

Cysteamine-induced depletion of somatostatinergic systems alters potentials evoked from the rat visual cortex. Fontanesi G, et al. **Vis Neurosci** 1996 Mar-Apr; 13(2):327-34

PHARMACOKINETICS

Internalisation of isotope-coupled somatostatin analogues. Hofland LJ, et al. **Digestion** 1996;57 Suppl 1:2-6 (32 ref.)

PHARMACOLOGY

Effect of glucagon and somatostatin on pancreatic secretion in dogs. Arkosy P, et al. **Acta Physiol Hung** 1996; 84(2):139-46

Somatostatin-stimulated growth hormone-releasing factor secretion in vitro is modified by fetal ethanol exposure. Conway S, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):703-9

Somatostatin inhibits gastrin release and acid secretion by activating sst2 in dogs. Lloyd KC, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1481-8

Central somatostatin prevents vagal efferent nerve excitation produced by TRH but not by 2-deoxy-D-glucose. Masuda M, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):G351-6

Nitric oxide-dependent opposite effects of somatostatin on arterial and venous caliber in situ. Szentiványi M Jr, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2238-45

Molecular mechanisms for somatostatin inhibition of c-fos gene expression. Todisco A, et al. **Am J Physiol** 1997 Apr; 272(4 Pt 1):G721-6

Reciprocal inhibitory paracrine pathways link histamine and somatostatin secretion in the fundus of the stomach. Vuyyuru L, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G106-11

Involvement of MAP kinase and c-fos signaling in the inhibition of cell growth by somatostatin. Yoshitomi H, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E769-74

Somatostatin inhibits interleukin 6 release from rat cortical type I astrocytes via the inhibition of adenylyl cyclase. Grimaldi M, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):242-8

Operational characteristics of somatostatin receptors mediating inhibitory actions on rat locus coeruleus neurones. Chessell IP, et al. **Br J Pharmacol** 1996 Apr; 117(8):1673-8

Potent antagonism by BIM-23056 at the human recombinant somatostatin sst5 receptor. Wilkinson GF, et al. **Br J Pharmacol** 1996 Jun;118(3):445-7

Interaction of cholecystokinin and somatostatin with a selective mu-opioid agonist and mu- and kappa-antagonists in thermoregulation. Ghosh S, et al. **Brain Res** 1997 Jan 16;745(1-2):152-7

Facilitatory role of somatostatin via muscarinic cholinergic system in the generation of long-term potentiation in the rat dentate gyrus in vivo. Nakata A, et al. **Brain Res** 1996 Jun 3;723(1-2):135-40

Influence of the neuropeptide somatostatin on the development of dendritic morphology: a cysteamine-depletion study in the rat auditory brainstem. Kungel M, et al. **Brain Res Dev Brain Res** 1997 Jul 18; 101(1-2):107-14

Intracellular calcium ion responses to somatostatin in cells from human somatotroph adenomas. Chen ZP, et al. **Clin Endocrinol (Oxf)** 1997 Jan;46(1):45-53

G(o)2 and Gi3 proteins mediate the action of somatostatin on membrane Ca2+ and K+ currents in ovine pituitary somatotrophs. Chen C. **Clin Exp Pharmacol Physiol** 1997 Aug;24(8):639-45

Somatostatin reduces gastric mucosal blood flow in patients with portal hypertensive gastropathy: a randomized, double-blind crossover study. Li MK, et al. **Dig Dis Sci** 1996 Dec;41(12):2440-6

Effects of somatostatin analogues on human gastrointestinal motility. Camilleri M. **Digestion** 1996;57 Suppl 1:90-2 (10 ref.)

Somatostatin analogues and exocrine pancreatic secretion. Gullo L. **Digestion** 1996;57 Suppl 1:93

Enhancement of the anti-neoplastic effects of tamoxifen by somatostatin analogues. Pollak M. **Digestion** 1996;57 Suppl 1:29-33 (37 ref.)

Somatostatin receptor manipulation. Visser-Wisselaar HA, et al. **Digestion** 1996;57 Suppl 1:7-10 (32 ref.)

Effects of atipamezole, an alpha 2-adrenergic antagonist, and somatostatin on xylazine-induced growth hormone release in calves. Kasuya E, et al. **Endocr J** 1996 Oct;43(5):551-6

Short-term inhibitory effect of somatostatin on gastric histamine synthesis. Hollande F, et al. **Endocrinology** 1997 Mar;138(3):955-62

Gi3 mediates somatostatin-induced activation of an inwardly rectifying K+ current in human growth hormone-secreting adenoma cells. Takano K, et al. **Endocrinology** 1997 Jun;138(6):2405-9

Intracerebroventricular injection of somatostatin sst5 receptor agonist inhibits gastric acid secretion in rats. Martínez V, et al. **Eur J Pharmacol** 1996 Jan 25; 296(2):153-60

Effects of cyclosporin and somatostatin on liver regeneration after partial hepatectomy in rats. Kapan M, et al. **Eur Surg Res** 1996 Jul-Aug;28(4):262-9

Somatostatin treatment reduces the exaggerated response of adrenocorticotropin hormone and cortisol to corticotropin-releasing hormone in polycystic ovary syndrome. Lanzone A, et al. **Fertil Steril** 1997 Jan; 67(1):34-9

Somatostatin and octreotide interfere with calcium signalling in pancreatic beta-cells but not in normal and pathological parathyroid cells. Ridefelt P, et al. **Horm Metab Res** 1996 Nov;28(11):588-91

Immunoreactive growth hormone-releasing hormone (IR-GHRH) in the feto-placental circulation and differential effects of L-dopa, L-arginine and somatostatin-14 on the plasma levels of IR-GHRH in normal adults. Saito H, et al. **Horm Metab Res** 1997 Apr; 29(4):184-9

Inhibition by somatostatin of the growth hormone, but not corticotropin response to angiotensin II in normal men. Volpi R, et al. **Horm Res** 1996;45(6):269-72

In vitro effect of glucagon-like peptide-1 (7-36)amide,

oxyntomodulin, vasoactive intestinal peptide and somatostatin on gastric acid and pepsinogen secretion. Ben-Hamida A, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S105-6

Agonist-induced desensitization, internalization, and phosphorylation of the sst2A somatostatin receptor. Hipkin RW, et al. **J Biol Chem** 1997 May 23;272(21):13869-76

Preferential suppression of insulin-stimulated proliferation of cultured hepatocytes by somatostatin: evidence for receptor-mediated growth regulation. Kothary PC, et al. **J Cell Biochem** 1995 Oct;59(2):258-65

Dissociation between the effects of somatostatin (SS) and octapeptide SS-analogs on hormone release in a small subgroup of pituitary- and islet cell tumors. Hofland LJ, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):3011-8

Effects of somatostatin-28 on circulating concentrations of insulin and gut hormones in sheep. Martin PA, et al. **J Endocrinol** 1996 Oct;151(1):107-12

Responsiveness of chicken embryonic somatotropes to somatostatin (SRIF) and IGF-I. Piper MM, et al. **J Endocrinol** 1997 Aug;154(2):303-10

Somatostatin blocks the potentiation of TRH-induced TSH secretion from perifused pituitary fragments and the change in intracellular calcium concentrations from dispersed pituitary cells elicited by prepro-TRH (PS4) or by tri-iodothyronine. Roussel JP, et al. **J Mol Endocrinol** 1997 Aug;19(1):87-97

Neuroprotective effect of somatostatin on nonapoptotic NMDA-induced neuronal death: role of cyclic GMP. Forloni G, et al. **J Neurochem** 1997 Jan;68(1):319-27

Different effects of somatostatin on in vitro growth hormone release in two porcine breeds with different growth rates. Torronteras R, et al. **J Neuroendocrinol** 1996 Dec; 8(12):891-900

Differential effects of gastrin-releasing peptide, neuropeptide Y, somatostatin and vasoactive intestinal peptide on interleukin-1 beta, interleukin-6 and tumor necrosis factor-alpha production by whole blood cells from healthy young and old subjects. Hernanz A, et al. **J Neuroimmunol** 1996 Dec;71(1-2):25-30

Neuronal diversity in the subiculum: correlations with the effects of somatostatin on intrinsic properties and on GABA-mediated IPSPs in vitro. Greene JR, et al. **J Neurophysiol** 1996 Sep;76(3):1657-66

Somatostatin inhibits excitatory transmission at rat hippocampal synapses via presynaptic receptors. Boehm S, et al. **J Neurosci** 1997 Jun 1;17(11):4066-75

Modulation of high voltage-activated calcium channels by somatostatin in acutely isolated rat amygdaloid neurons. Viana F, et al. **J Neurosci** 1996 Oct 1;16(19):6000-11

Developmental changes in calcium current pharmacology and somatostatin inhibition in chick parasympathetic neurons. White MG, et al. **J Neurosci** 1997 Aug 15; 17(16):6302-13

Somatostatin inhibition of acid and histamine release by activation of somatostatin receptor subtype 2 receptors in rats. Aurang K, et al. **J Pharmacol Exp Ther** 1997 Apr; 281(1):245-52

G(o)-2 protein mediates the reduction in Ca2+ currents by somatostatin in cultured ovine somatotrophs. Chen C, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):21-9

Measles virus modulates human T-cell somatostatin receptors and their coupling to adenylyl cyclase. Krantic S, et al. **J Virol** 1997 Oct;71(10):7470-7

5-hydroxytryptamine decreases somatostatin receptors and somatostatin-responsive adenylyl cyclase in rat pancreatic acinar membranes. Muñoz-Acedo G, et al. **Life Sci** 1997; 60(22):1965-76

Molecular mechanisms of antiproliferative effect of somatostatin: involvement of a tyrosine phosphatase. Lopez F, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):14-6 (24 ref.)

Evaluation of intestinal antisecretory peptides coefficient of dissociation: a functional approach. Eto B. **Methods Find Exp Clin Pharmacol** 1995 Dec;17(10):685-91

Somatostatin acts by inhibiting the cyclic 3',5'-adenosine monophosphate (cAMP)/protein kinase A pathway, cAMP response element-binding protein (CREB) phosphorylation, and CREB transcription potency. Tentler JJ, et al. **Mol Endocrinol** 1997 Jun;11(7):859-66

Inhibition of cyclic AMP-dependent chloride secretion by PP receptors and alpha 2-adrenoceptors in a human colonic epithelial cell line. Holliday ND, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Feb; 355(2):183-9

Anti-inflammatory and antinociceptive effect of different somatostatin-analogs. Helyes Z, et al. **Neurobiology (Bp)** 1996;4(1-2):115-7

Somatostatin withdrawal as generator of pulsatile GH release in the dog: a possible tool to evaluate the endogenous GHRH tone? Cella SG, et al. **Neuroendocrinology** 1996 Jun; 63(6):481-8

Differential effects of gonadotropin-releasing hormone, dopamine and somatostatin and their second messengers on the mRNA levels of gonadotropin II beta subunit and growth hormone in the teleost fish, tilapia. Melamed P, et al. **Neuroendocrinology** 1996 Oct;64(4):320-8

Effect of somatostatin-28 on growth hormone response to growth hormone-releasing hormone--impact of aging and lifelong dietary restriction. Shimokawa I, et al. **Neuroendocrinology** 1997 May;65(5):369-76

Control of growth hormone secretion from porcine fetal and neonatal pituitary tissue in vitro by growth hormone-releasing hormone, somatostatin, and insulin-like growth factor. Torronteras R, et al. **Neuroendocrinology** 1997 Feb;65(2):117-28

Modulation of cytokine production in activated human monocytes by somatostatin. Peluso G, et al. **Neuropeptides** 1996 Oct;30(5):443-51

Somatostatin stimulates BKCa channels in rat pituitary tumor cells through lipoxygenase metabolites of arachidonic acid. Duerson K, et al. **Neuropharmacology** 1996;35(7):949-61

Localization and pharmacological characterization of somatostatin recognition sites in the human cerebellum. Piwko C, et al. **Neuropharmacology** 1996 Jun;35(6):713-23

A somatostatin receptor inhibits noradrenaline release from chick sympathetic neurons through pertussis toxin-sensitive mechanisms: comparison with the action of alpha 2-adrenoceptors. Boehm S, et al. **Neuroscience** 1996 Jul; 73(2):595-604

Evidence that a novel somatostatin receptor couples to an inward rectifier potassium current in AtT-20 cells. Tallent M, et al. **Neuroscience** 1996 Aug;73(3):855-64

Effect of somatostatin and octreotide acetate on OP-CCK-stimulated exocrine secretion in the denervated canine pancreas. Garvin PJ, et al. **Pancreas** 1996 Oct; 13(3):304-10

Somatostatin does not affect multiplication of granule cells in the rat cerebellum. Bodenant C, et al. **Peptides** 1997; 18(2):257-62

Adrenaline-, not somatostatin-induced hyperpolarization is accompanied by a sustained inhibition of insulin secretion in INS-1 cells. Activation of sulphonylurea K+ATP channels is not involved. Abel KB, et al. **Pflugers Arch** 1996 May;432(1):89-96

Somatostatin induces vasodilatation in the cat mesenteric artery via endothelium-derived nitric oxide and prostaglandins. Dézsi L, et al. **Pflugers Arch** 1997 Feb; 433(4):536-8

Inhibitory effects of centrally administered somatostatin on the adrenal zona glomerulosa in male rats. Milošević V, et al. **Pharmacology** 1996 Dec;53(6):369-75

Regional differences in nitric oxide-dependent vascular responses to somatostatin. Dézsi L, et al. **Physiol Res** 1996; 45(4):291-6

Comparison of somatostatin and pancreastatin on secretion of gastrin, pancreatic polypeptide, and peptide YY. Gomez G, et al. **Proc Soc Exp Biol Med** 1997 Jun;215(2):165-7

Effect of somatostatin on the release of gonadotropins in male rats. Yu WH, et al. **Proc Soc Exp Biol Med** 1997 Jan; 214(1):83-6

Somatostatin modulates the function of Kupffer cells. Chao TC, et al. **Regul Pept** 1997 Apr 30;69(3):143-9

Simultaneous observation of endocrine and exocrine functions of the pancreas responding to somatostatin in man. Emoto T, et al. **Regul Pept** 1997 Jan 15;68(1):1-8

LHRH and somatostatin effects on the cell proliferation of the gastric epithelium of suckling and weaning rats. Gama P, et al. **Regul Pept** 1996 Jul 5;63(2-3):73-8

Effects of pancreastatin and somatostatin on secretagogues-induced rise in intracellular free calcium in single rat pancreatic islet cells. Ma HT, et al. **Regul Pept** 1996 Feb 22;61(2):143-8

Direct renovascular effect of somatostatin in the dog. Tóth-Heyn P, et al. **Regul Pept** 1996 Dec 3;67(2):103-6

Effects of somatostatin and somatotropin on the in vitro testicular steroidogenesis in hamster. Oh SS, et al. **Rev Esp Fisiol** 1995 Dec;51(4):187-92

Immunomodulatory activities of the somatostatin receptor subtype analogues on human peripheral blood lymphocytes. Atiya A, et al. **Transplant Proc** 1997 Jun;29(4):2151

[Secretory reactions to somatoliberin and somatostatin of cultured cells of human pituitary adenomas producing growth hormone] Komolov IS, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):323-6 **(Rus)**

PHYSIOLOGY

Stress and nutritional influences on GnRH and somatostatin neuronal systems in the ewe. Polkowska J. **Acta Neurobiol Exp (Warsz)** 1996;56(3):797-806 (38 ref.)

Effects of cholecystokinine on the gallbladder motility: interaction with somatostatin and vasoactive intestinal peptide. Milenov K, et al. **Acta Physiol Pharmacol Bulg** 1995;21(3):67-76

No loss of somatostatin-immunoreactive neurons in the hippocampal dentate hilus of alcohol-withdrawal-kindled rats. Ulrichsen J, et al. **Alcohol Alcohol** 1996 Jul;31(4):411-9

Cholecystokinin-induced protection against gastric injury is independent of endogenous somatostatin. Mercer DW, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):G692-700

Role of endogenous somatostatin in postprandial hypersecretion of neurotensin in patients after gastrectomy. Sakamoto T, et al. **Ann Surg** 1997 Apr;225(4):377-81

No loss of hippocampal hilar somatostatinergic neurons after repeated electroconvulsive shock: a combined stereological and in situ hybridization study. Dalby NO, et al. **Biol Psychiatry** 1996 Jul 1;40(1):54-60

Development of the enkephalin-, neurotensin- and somatostatin-like (ENSLI) amacrine cells in the chicken retina. Yang DS, et al. **Brain Res Dev Brain Res** 1997 Jul 18;101(1-2):57-65

The insulinotropic region of gastric inhibitory polypeptide; fragment analysis suggests the bioactive site lies between residues 19 and 30. Morrow GW, et al. **Can J Physiol Pharmacol** 1996 Jan;74(1):65-72

Regulation of growth hormone (GH) gene expression and secretion during pregnancy and lactation in the rat: role of insulin-like growth factor-I, somatostatin, and GH-releasing hormone. Escalada J, et al. **Endocrinology** 1997 Aug;138(8):3435-43

Functional activation of somatostatin and neuropeptide Y containing neurons in experimental models of limbic seizures. Vezzani A, et al. **Epilepsy Res Suppl** 1996; 12:187-95

Synergistic rise in Ca2+ produced by somatostatin and acetylcholine in ciliary body epithelial cells. Xia SL, et al. **Exp Eye Res** 1997 Apr;64(4):627-35

Interrelationships between tyrosine hydroxylase-immunoreactive dopaminergic afferents and somatostatinergic neurons in the rat central amygdaloid nucleus. Asan E. **Histochem Cell Biol** 1997 Jan;107(1):65-79

Growth hormone response to the hypothalamic somatostatinergic activity in acromegalic patients. Yang I, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2492-6

GHRP-2, GHRH and SRIF interrelationships during chronic administration of GHRP-2 to humans. Bowers CY, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:261-70

Influence of growth hormone on cysteamine-induced gastro-duodenal lesions in rats: the involvement of somatostatin. Drago F, et al. **Life Sci** 1997;61(1):21-8

Granulomas in murine schistosomiasis mansoni have a somatostatin immunoregulatory circuit. Elliott DE, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):88-90 (37 ref.)

Somatostatin, growth hormone, insulin-like growth factor-1, and diabetes: friends or foes? Orskov H. **Metabolism** 1996 Aug;45(8 Suppl 1):91-5 (67 ref.)

Peptides, sleep and cortistatin [news] de Lecea L, et al. **Mol Psychiatry** 1996 Nov;1(5):349-51

Sex-related alterations in hypothalamic growth hormone-releasing hormone mRNA-but not somatostatin mRNA-expressing cells in genetically obese Zucker rats. Tannenbaum GS, et al. **Neuroendocrinology** 1996 Sep; 64(3):186-93

Cholinergic and GABAergic interneurons in the striatum. Kawaguchi Y, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1997 Apr; 17(2):87-90

Somatostatin receptors in the central nervous system. Schindler M, et al. **Prog Neurobiol** 1996 Sep;50(1):9-47 (255 ref.)

Dopamine-somatostatin interactions in the rat striatum: an in vivo microdialysis study. Thermos K, et al. **Synapse** 1996 Mar;22(3):209-16

Somatostatin: the neuroendocrine story. Gillies G. **Trends Pharmacol Sci** 1997 Mar;18(3):87-95 (45 ref.)

SECRETION

Characterization of a beta 3-adrenoceptor stimulating gastrin and somatostatin secretions in rat antrum. Levasseur S, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1000-6

Bombesin-like peptides stimulate somatostatin release from rat fundic D cells in primary culture. Schaffer K, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G686-95

Reciprocal inhibitory paracrine pathways link histamine and somatostatin secretion in the fundus of the stomach. Vuyyuru L, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G106-11

Somatostatin release as measured by in vivo microdialysis: circadian variation and effect of prolonged food deprivation. Ishikawa M, et al. **Brain Res** 1997 Feb 28; 749(2):226-31

Immunocytochemical and morphometric studies of gastrin-, somatostatin- and serotonin-producing cells in the stomach and duodenum of patients with acid peptic disorders. Yacoub WR, et al. **Can J Gastroenterol** 1996 Oct; 10(6):395-400

Sex steroid effects on the development and functioning of the growth hormone axis. Chowen JA, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):297-310 (31 ref.)

Effects of thyroidectomy on thyrotropin-releasing hormone (TRH) and somatotropin release-inhibiting factor (SRIF) patterns in intrahypophysial microdialysates in rats. Mizobuchi M, et al. **Endocr J** 1996 Dec;43(6):679-87

Transforming growth factor-betas inhibit somatostatin messenger ribonucleic acid levels and somatostatin secretion in hypothalamic cells in culture. Quintela M, et al. **Endocrinology** 1997 Oct;138(10):4401-9

Truncated glucagon-like peptide-1 and oxyntomodulin stimulate somatostatin release from rabbit fundic D-cells in primary culture. Beales IL, et al. **Exp Physiol** 1996 Nov; 81(6):1039-41

RIN14B: a pancreatic delta-cell line that maintains functional ATP-dependent K+ channels and capability to secrete insulin under conditions where it no longer secretes somatostatin. Bränström R, et al. **FEBS Lett** 1997 Jul 14; 411(2-3):301-7

Stimulation of somatostatin secretion by 3-O-methylglucose in the perfused dog pancreas. Hermansen K, et al. **Int J Pancreatol** 1996 Oct;20(2):103-7

Differential effects of neuroactive steroids on somatostatin and dopamine secretion from primary hypothalamic cell cultures. Murray HE, et al. **J Neuroendocrinol** 1997 Apr; 9(4):287-95

The effect of bradykinin on secretion of insulin, glucagon, and somatostatin from the perfused rat pancreas. Yang C, et al. **Metabolism** 1997 Oct;46(10):1113-5

Somatostatin-14, somatostatin-28, and prosomatostatin[1-10]

are independently and efficiently processed from prosomatostatin in the constitutive secretory pathway in islet somatostatin tumor cells (1027B2). Patel YC, et al. **Mol Cell Endocrinol** 1997 Aug 8;131(2):183–94

Bombesin inhibits histamine release from the rat oxyntic mucosa by a somatostatin–dependent mechanism. Sandvik AK, et al. **Scand J Gastroenterol** 1997 May;32(5):427–32

THERAPEUTIC USE

Somatostatin receptor scintigraphy and therapy of neuroendocrine (APUD) tumors of the head and neck. Kau R, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):345–9

Somatostatin in pancreatic disease. Russell RC. **Br J Surg** 1996 Dec;83(12):1665–7

Hemodynamic effects of intravenous somatostatin administered in the postoperative period. Petru A, et al. **Crit Care Med** 1997 Sep;25(9):1468–71

Advances in the use of somatostatins in the management of endocrine tumors [see comments] Chaudhry A, et al. **Curr Opin Oncol** 1996 Jan;8(1):44–8 (34 ref.). Comment in: Curr Opin Oncol 1996 Jan;8(1):29.

Clinical use of somatostatin analogues in paediatric oncology. Albers AR, et al. **Digestion** 1996;57 Suppl 1:38–41 (32 ref.)

Somatostatin receptor imaging: predictive and prognostic considerations. Anthony LB, et al. **Digestion** 1996;57 Suppl 1:50–3

The role of somatostatin analogues in the treatment of gastro–enteropancreatic endocrine tumours. Bajetta E, et al. **Digestion** 1996;57 Suppl 1:72–6 (11 ref.)

Somatostatin analogues and pancreatic fistulas. Bassi C, et al. **Digestion** 1996;57 Suppl 1:94–6 (9 ref.)

The role of somatostatin analogues in the treatment of refractory diarrhoea. Farthing MJ. **Digestion** 1996;57 Suppl 1:107–13 (52 ref.)

Efficacy of somatostatin and its analogues in pancreatic surgery and pancreatic disorders. Friess H, et al. **Digestion** 1996;57 Suppl 1:97–102

Interferon–alpha versus somatostatin or the combination of both in gastro–enteropancreatic tumours. Oberg K. **Digestion** 1996;57 Suppl 1:81–3

Somatostatin analogues for somatostatin–receptor–mediated radiotherapy of cancer. Stolz B, et al. **Digestion** 1996;57 Suppl 1:17–21

Double–blind randomized controlled trial comparing terlipressin and somatostatin for acute variceal hemorrhage. Variceal Bleeding Study Group [see comments] Feu F, et al. **Gastroenterology** 1996 Nov;111(5):1291–9. Comment in: Gastroenterology 1997 May;112(5):1777.

Terlipressin or somatostatin for acute variceal hemorrhage [letter; comment] Walker S, et al. **Gastroenterology** 1997 May;112(5):1777. Comment on: Gastroenterology 1996 Nov;111(5):1291–9.

Treatment of the carcinoid syndrome with the longacting somatostatin analogue lanreotide: a prospective study in 39 patients. Ruszniewski P, et al. **Gut** 1996 Aug; 39(2):279–83

Somatostatin reduces bile secretion and loss of bile constituents in patients with external biliary drainage. Andersen HB, et al. **HPB Surg** 1996;9(4):229–33

Somatostatin analogs: angiogenesis inhibitors with novel mechanisms of action. Woltering EA, et al. **Invest New Drugs** 1997;15(1):77–86 (03 ref.)

Depot somatostatin analogs—a new first line therapy for acromegaly [editorial; comment] Robbins RJ. **J Clin Endocrinol Metab** 1997 Jan;82(1):15–7. Comment on: J Clin Endocrinol Metab 1997 Jan;82(1):18–22. Comment on: J Clin Endocrinol Metab 1997 Jan;82(1):23–8.

Recurrent pericardial effusion as a result of chronic pancreatitis. Successful treatment with somatostatin. Schoonjans R, et al. **J Clin Gastroenterol** 1996 Oct; 23(3):224–7 (20 ref.)

The role of somatostatin analogues in complete antiandrogen treatment in patients with prostatic carcinoma. Vainas G, et al. **J Exp Clin Cancer Res** 1997 Mar;16(1):119–26

Somatostatin in the treatment of a pancreatic pseudocyst in a child. Bosman–Vermeeren JM, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov;23(4):422–5

Is there a role for somatostatin and its analogs in Cushing's syndrome? de Herder WW, et al. **Metabolism** 1996 Aug; 45(8 Suppl 1):83–5 (17 ref.)

Somatostatin and cancer. Robbins RJ. **Metabolism** 1996 Aug; 45(8 Suppl 1):98–100 (41 ref.)

Hormone treatment may help some cases of pancreatic cancer [news] **Oncology (Huntingt)** 1996 Mar;10(3):424–5

Somatostatin analogue treatment of neuroendocrine tumours. de Herder WW, et al. **Postgrad Med J** 1996 Jul; 72(849):403–8 (32 ref.)

Somatostatin in the treatment of gastrointestinal bleeding caused by angiodysplasia. Andersen MR, et al. **Scand J Gastroenterol** 1996 Oct;31(10):1037–9

Somatostatin therapy and Graves' ophthalmopathy [letter; comment] Krassas G, et al. **Thyroid** 1997 Jun;7(3):489. Comment on: Thyroid 1996 Oct;6(5):381–4.

Somatostatin and its analogues in G.I. tract, liver and pancreatic disorders. Dhar A, et al. **Trop Gastroenterol** 1995 Jul–Sep;16(3):3–7 (22 ref.)

[Acute pancreatitis: clinical and therapeutic study with somatostatin] Sánchez Rodríguez A, et al. **Rev Clin Esp** 1997 Feb;197(2):96–9 (Eng. Abstr.) **(Spa)**

SOMATOSTATIN RECEPTORS see **RECEPTORS, SOMATOSTATIN**

SOMATOSTATIN–14 see **SOMATOSTATIN**

SOMATOSTATINOMA

COMPLICATIONS

[Duodenal somatostatinoma associated with von Recklinghausen's neurofibromatosis] Vezzadini P, et al. **Minerva Med** 1996 Jul–Aug;87(7–8):363–8 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Somatostatinoma in a horseshoe kidney. Walsh IK, et al. **Br J Urol** 1996 Dec;78(6):958–9

Neuroendocrine tumors: common presentations of uncommon diseases. Kirkwood KS, et al. **Compr Ther** 1995 Dec;21(12):719–25

[Somatostatinoma. Apropos of a case] Masson B, et al. **J Chir (Paris)** 1997 May;134(1):22–6 (28 ref.) (Eng. Abstr.) **(Fre)**

[A case of pancreatic somatostatinoma] Barbato A, et al. **Minerva Chir** 1996 Jun;51(6):475–9 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Small duodenal somatostatinoma with high plasma somatostatin level. Takizawa H, et al. **Am J Gastroenterol** 1997 Jun;92(6):1063–4

Somatostatinoma of the ampulla of Vater. Mahajan SK, et al. **Gastrointest Endosc** 1996 Nov;44(5):612–4

Brain metastasis from malignant pancreatic somatostatinoma. Case report. Abe T, et al. **J Neurosurg** 1996 Oct;85(4):681–4

[Pancreatic and duodenal somatostatinoma. Two clinico–pathologic entities] Mathoulin–Portier MP, et al. **Ann Pathol** 1996 Sep;16(4):299–302 (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Somatostatin receptor scintigraphy of malignant somatostatinoma with indium–111–pentetreotide. Schillaci O, et al. **J Nucl Med** 1997 Jun;38(6):886–7

SURGERY

[Somatostatinoma. Apropos of a case] Masson B, et al. **J Chir (Paris)** 1997 May;134(1):22–6 (28 ref.) (Eng. Abstr.) **(Fre)**

SOMATOTROPIN

see related

RECEPTORS, SOMATOTROPIN

Serum IGF–I and IGF binding proteins 2 and 3 as potential markers of doping with human GH. Kicman AT, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):43–50

Proceedings of the 8th Tokyo Symposium on Growth Hormone and Related Factors. February 17, 1996. **Endocr J** 1996 Oct;43 Suppl:S1–146

Microbial sterility testing of oil–formulated bovine somatotropin using Tween 80 dispersion. Workman WE, et al. **J Pharm Biomed Anal** 1996 Nov;15(2):193–200

Effects of bovine somatotropin (rbSt) concentration at different moisture levels on the physical stability of sucrose in freeze–dried rbSt/sucrose mixtures. Sarciaux JM, et al. **J Pharm Sci** 1997 Mar;86(3):365–71

Immunoregulatory properties of growth hormone and prolactin. Weigent DA. **Pharmacol Ther** 1996;69(3):237–57 (258 ref.)

ADMINISTRATION & DOSAGE

Growth hormone in combination with anabolic steroids in patients with Turner syndrome: effect on bone maturation and final height. Haeusler G, et al. **Acta Paediatr** 1996 Dec; 85(12):1408–14

Growth hormone and corticosteroid treatment of children after kidney transplantation [comment] Mehls O. **Acta Paediatr Suppl** 1996 Oct;417:80. Comment on: Acta Paediatr Suppl 1996 Oct;417 :69–71. Comment on: Acta Paediatr Suppl 1996 Oct;417 :72–5. Comment on: Acta Paediatr Suppl 1996 Oct;417 :76–9.

Acute growth hormone injection reduced gastrointestinal and increased hepatic oleic acid oxidation in swine. Unneberg K, et al. **Acta Physiol Scand** 1996 Nov;158(3):261–8

Growth hormone treatment without a needle using the Preci–Jet 50 transjector. Bareille P, et al. **Arch Dis Child** 1997 Jan;76(1):65–7

Growth response and levels of growth factors after two years growth hormone treatment are similar for a once and twice daily injection regimen in girls with Turner syndrome. (Dutch Working Group on Growth Hormone). van Teunenbroek A, et al. **Clin Endocrinol (Oxf)** 1997 Apr; 46(4):451–9

Effect of resistance exercise and growth hormone on bone density in older men. Yarasheski KE, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):223–9

Endocrine and metabolite responses to porcine growth hormone administered by sustained release implant for different lengths of time in male pigs. Klindt J, et al. **Endocrinology** 1996 Sep;137(9):3689–95

Improved controlled ovarian hyperstimulation in poor responder in vitro fertilization patients with a microdose follicle–stimulating hormone flare, growth hormone protocol. Schoolcraft W, et al. **Fertil Steril** 1997 Jan; 67(1):93–7

Why retest young adults with childhood–onset growth hormone deficiency? [editorial] de Boer H, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2032–6

Production and composition of milk from Jersey cows administered bovine somatotropin and fed ruminally protected amino acids. Bremmer DR, et al. **J Dairy Sci** 1997 Jul;80(7):1374–80

Bovine somatotropin dose titration in lactating dairy ewes. 2. Dose determination and factors affecting the response. Fernandez N, et al. **J Dairy Sci** 1997 May;80(5):818–29

Mode of growth hormone administration influences triacylglycerol synthesis and assembly of apolipoprotein B–containing lipoproteins in cultured rat hepatocytes. Sjöberg A, et al. **J Lipid Res** 1996 Feb;37(2):275–89

Contrasting acute in vivo nuclear actions of growth hormone and prolactin. Le Stunff C, et al. **Mol Cell Endocrinol** 1996 Aug 9;121(2):109–17

Controlled delivery of somatotropins. Cady SM, et al. **Pharm Biotechnol** 1997;10:289–317 (70 ref.)

[Soft tissue changes in adults with acquired growth hormone deficiency during substitution treatment. A double–blind, randomized, placebo–controlled study after a year of treatment] Hansen TB, et al. **Ugeskr Laeger** 1997 Jul 7; 159(28):4394–9 (Eng. Abstr.) **(Dan)**

ADVERSE EFFECTS

Results and side–effects of treating children with growth hormone after kidney transplantation—a preliminary report. Pharmacia & Upjohn Study Group [see comments] Broyer M. **Acta Paediatr Suppl** 1996 Oct;417:76–9. Comment in: Acta Paediatr Suppl 1996 Oct;417 :80.

Left ventricular volume and mass in children on growth hormone therapy compared with untreated children. Heuschmann D, et al. **Eur J Pediatr** 1996 Feb;155(2):77–80

Unlabeled milk from cows treated with biosynthetic growth hormones: a case of regulatory abdication. Epstein SS. **Int J Health Serv** 1996;26(1):173–85 (66 ref.)

An estimate of the upper limit for the rate of adverse cardiac effects in children treated with growth hormone. Bienkowski RS. **J Pediatr Endocrinol Metab** 1995 Oct–Dec; 8(4):309

Adverse events during growth hormone therapy. Cowell CT, et al. **J Pediatr Endocrinol Metab** 1995 Oct–Dec; 8(4):243–52

Bone disease in patients receiving growth hormone. Watkins SL. **Kidney Int Suppl** 1996 Jan;53:S126–7 (17 ref.)

Testicular neoplasm in patient treated with growth hormone [letter] Sakai Y, et al. **Lancet** 1996 Sep 21;348(9030):832

The human growth hormone Creutzfeld Jakob disease litigation. Owen R. **Med Leg J** 1997;65 (Pt 2):46–64

Relapse of intracranial germinoma 23 years postirradiation in a patient given growth hormone replacement. Kiltie AE, et al. **Med Pediatr Oncol** 1997 Jul;29(1):41–4

Papilledema in 15 renally compromised patients treated with growth hormone. Koller EA, et al. **Pediatr Nephrol** 1997 Aug;11(4):451–4

[Growth hormone and Creutzfeldt–Jakob disease (letter)] Christiansen JS, et al. **Ugeskr Laeger** 1997 Jun 23; 159(26):4141–2 **(Dan)**

[Benign intracranial hypertension as a secondary effect of treatment with a biosynthetic growth hormone] Bermúdez de la Vega JA, et al. **An Esp Pediatr** 1996 May;44(5):507–8 (6 ref.) **(Spa)**

ANALOGS & DERIVATIVES

Glycosylated human growth hormone (hGH): a novel 24 kDa hGH–N variant. Haro LS, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):549–56

Crystal structure of an antagonist mutant of human growth hormone, G120R, in complex with its receptor at 2.9 A resolution. Sundström M, et al. **J Biol Chem** 1996 Dec 13; 271(50):32197–203

ANALYSIS

Prolactin, growth hormone, and insulin–like growth factor–I in the immune system. Kooijman R, et al. **Adv Immunol** 1996;63:377–454 (364 ref.)

Two–dimensional analysis of recombinant E. coli proteins using capillary isoelectric focusing electrospray ionization mass spectrometry. Tang W, et al. **Anal Chem** 1997 Aug 15;69(16):3177–82

Immunocytochemical and ultrastructural characterization of prolactin, growth hormone, and somatolactin cells from the Mediterranean yellowtail (Seriola dumerilii, Risso 1810). García–Ayala A, et al. **Anat Rec** 1997 Mar; 247(3):395–404

Measurement of human growth hormone using a chemiluminescence assay and a "glow" luminometer. Guidon PT Jr, et al. **Biotechniques** 1996 Jan;20(1):48–50

Long–term growth hormone–releasing factor administration on growth hormone, insulin–like growth factor–I concentrations, and bone healing in the Beagle. Dubreuil P, et al. **Can J Vet Res** 1996 Jan;60(1):7–13

The effects of a duplication in the ovine growth hormone (GH) gene on GH expression in the pituitaries of ram lambs from lean and fat–selected sheep lines. Fleming JS, et al. **Domest Anim Endocrinol** 1997 Jan;14(1):17–24

Competitive enzyme immunoassay for bovine growth hormone. Roh SG, et al. **Endocr J** 1997 Feb;44(1):195–8

A radioimmunoassay for African catfish growth hormone:

validation and effects of substances modulating the release of growth hormone. Lescroart O, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):147–55

Evidence for a local action of growth hormone in embryonic tooth development in the rat. Zhang CZ, et al. **Growth Factors** 1997;14(2–3):131–43

The use of intermediate electron acceptors to enhance MTT bioreduction in a microculture tetrazolium assay for human growth hormone. Goodwin CJ, et al. **Life Sci** 1996; 59(20):1745–53

[Scientific rationale for the replacement of an in vivo bioassay for protein drugs with a physico-chemical assay] Hayakawa T. **Eisei Shikenjo Hokoku** 1994;(112):202–3 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Co-expression of bovine growth hormone (GH) and human GH antagonist genes in transgenic mice. Chen NY, et al. **Endocrinology** 1997 Feb;138(2):851–4

Inhibition of diabetic nephropathy by a GH antagonist: a molecular analysis. Esposito C, et al. **Kidney Int** 1996 Aug; 50(2):506–14

Antiserum to growth hormone decreases sleep in the rat. Obál F Jr, et al. **Neuroendocrinology** 1997 Jul;66(1):9–16

Inhibition of GH in maternal separation may be mediated through altered serotonergic activity at 5-HT2A and 5-HT2C receptors. Katz LM, et al. **Psychoneuroendocrinology** 1996 Feb;21(2):219–35

[Inhibition of growth hormone secretion by theophylline in asthmatic children] Baum WF, et al. **Pneumologie** 1996 Mar; 50(3):238–41 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Expression of growth hormone in canine mammary tissue and mammary tumors. Evidence for a potential autocrine/paracrine stimulatory loop. van Garderen E, et al. **Am J Pathol** 1997 Mar;150(3):1037–47

Growth hormone-binding protein enhances growth hormone activity in vivo. Turyn D, et al. **Am J Physiol** 1997 Sep; 273(3 Pt 1):E549–56

Effect of pituitary adenylate cyclase-activating polypeptide on GH gene expression in rat pituitary cells. Shuto Y, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:684–91

An efficient expression of human growth hormone (hGH) in the milk of transgenic mice using rat beta-casein/hGH fusion genes. Lee CS, et al. **Appl Biochem Biotechnol** 1996 Mar;56(3):211–22

Histone acetylation influences thyroid hormone and retinoic acid–mediated gene expression. Garcia-Villalba P, et al. **DNA Cell Biol** 1997 Apr;16(4):421–31

Role of Pit-1 in the gene expression of growth hormone, prolactin, and thyrotropin. Cohen LE, et al. **Endocrinol Metab Clin North Am** 1996 Sep;25(3):523–40 (94 ref.)

A growth hormone antagonist protects mice against streptozotocin induced glomerulosclerosis even in the presence of elevated levels of glucose and glycated hemoglobin. Chen NY, et al. **Endocrinology** 1996 Nov; 137(11):5163–5

Dual expression of p80 type I and p68 type II interleukin-1 receptors on anterior pituitary cells synthesizing growth hormone. French RA, et al. **Endocrinology** 1996 Sep; 137(9):4027–36 (84 ref.)

Phenotypic correction of dwarfism by constitutive expression of growth hormone. Hahn TM, et al. **Endocrinology** 1996 Nov;137(11):4988–93

Human neutrophils express GH-N gene transcripts and the pituitary transcription factor Pit-1b. Kooijman R, et al. **Endocrinology** 1997 Oct;138(10):4481–4

Expression of the growth hormone gene in ovine placenta: detection and cellular localization of the protein. Lacroix MC, et al. **Endocrinology** 1996 Nov;137(11):4886–92

Early effects of streptozotocin-induced diabetes on insulin-like growth factor-I in the kidneys of growth hormone–transgenic and growth hormone–deficient dwarf mice. Jacobs ML, et al. **Exp Nephrol** 1997 Jul–Aug; 5(4):337–44

Estradiol stimulates growth hormone production in female goldfish. Zou JJ, et al. **Gen Comp Endocrinol** 1997 Apr; 106(1):102–12

Ontogeny of pituitary transcription factor-1 (Pit-1), growth hormone (GH) and prolactin (PRL) mRNA levels in male and female rats and the differential expression of Pit-1 in lactotrophs and somatotrophs. González-Parra S, et al. **J Neuroendocrinol** 1996 Mar;8(3):211–25

Mesangial cells from transgenic mice with progressive glomerulosclerosis exhibit stable, phenotypic changes including undetectable MMP-9 and increased type IV collagen. Jacot TA, et al. **Lab Invest** 1996 Dec;75(6):791–9

Growth hormone secretion and synthesis are depressed in obesity-susceptible compared with obesity-resistant rats. Lauterio TJ, et al. **Metabolism** 1997 Feb;46(2):210–6

Heterogeneity of growth hormone (GH)-producing cells in aging male rats: in vitro GH releasing activity of somatotrope subpopulations. Dobado-Berrios PM, et al. **Mol Cell Endocrinol** 1996 Oct 30;123(2):127–37

Effects of food deprivation on the GH axis: immunocytochemical and molecular analysis. Brogan RS, et al. **Neuroendocrinology** 1997 Feb;65(2):129–35

Functional growth hormone (GH) receptors and GH are expressed by preimplantation mouse embryos: a role for GH in early embryogenesis? Pantaleon M, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5125–30

Intracellular misrouting and abnormal secretion of adrenocorticotropin and growth hormone in cpefat mice associated with a carboxypeptidase E mutation. Shen FS, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5314–9

Long-term expression of human growth hormone (hGH) in mice containing allogeneic yolk sac cell derived neovascular implants expressing hGH. Wei Y, et al. **Stem Cells** 1996 Mar;14(2):232–8

Diabetes mellitus in a dog with a growth hormone–producing acidophilic adenoma of the adenohypophysis. van Keulen LJ, et al. **Vet Pathol** 1996 Jul;33(4):451–3

BLOOD

Improved long-term bone-implant integration. Experiments in transgenic mice overexpressing bovine growth hormone. Morberg PH, et al. **Acta Orthop Scand** 1997 Aug; 68(4):344–8

Growth hormone status in six children with fetal alcohol syndrome [see comments] Hellström A, et al. **Acta Paediatr** 1996 Dec;85(12):1456–62. Comment in: Acta Paediatr 1997 Jun;86(6):673.

Effect of fetal alcohol exposure on postnatal pituitary adenosine 3', 5'-cyclic phosphate content and growth hormone release. Conway S, et al. **Alcohol Clin Exp Res** 1996 Oct;20(7):1212–20

Hormonal responses during tilt-table test in neurally mediated syncope. Theodorakis GN, et al. **Am J Cardiol** 1997 Jun 15;79(12):1692–5

The somatotropic axis in neonatal calves can be modulated by nutrition, growth hormone, and Long-R3-IGF-I. Hammon H, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E130–8

Effects of acute endotoxemia on serum somatotropin and insulin-like growth factor I concentrations in prepubertal gilts. Hevener W, et al. **Am J Vet Res** 1997 Sep;58(9):1010–3

Ovulation rate and the concentrations of LH, FSH, GH, prolactin and insulin in ewes infused with tryptophan, tyrosine or tyrosine plus phenylalanine during the luteal phase of the oestrous cycle. Downing JA, et al. **Anim Reprod Sci** 1997 Jan;45(4):283–97

Growth hormone response to clonidine in the nervous pointer dog model of anxiety. Uhde TW, et al. **Anxiety** 1994; 1(2):45–9

Reduced levels of growth hormone, insulin-like growth factor-I and binding protein-3 in patients with shunted hydrocephalus. Löppönen T, et al. **Arch Dis Child** 1997 Jul;77(1):32–7

LDL subfractions in acromegaly: relation to growth hormone and insulin-like growth factor-I. Tan KC, et al. **Atherosclerosis** 1997 Feb 28;129(1):59–65

Evaluation of stress induced by flight activity by measuring the hormonal response. Farrace S, et al. **Biofeedback Self Regul** 1996 Sep;21(3):217–28

Serum prolactin, growth hormone, total corticoids, thyroid hormones and thyrotropine during serial therapeutic sleep deprivation. Kuhs H, et al. **Biol Psychiatry** 1996 May 15; 39(10):857–64

Reduced dopaminergic function in alcoholics is related to severe dependence. Schmidt LG, et al. **Biol Psychiatry** 1996 Feb 1;39(3):193–8

Stressful life events influence nocturnal growth hormone secretion in depressed children. Williamson DE, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1176–80

Effects of clonidine on the pituitary hormonal response to pelvic surgery. Lyons FM, et al. **Br J Anaesth** 1997 Feb; 78(2):134–7

Role of dopamine in the inhibitory control of growth hormone and prolactin release by gastrin-releasing peptide. Kentroti S, et al. **Brain Res Bull** 1996;39(4):201–4

Hormonal responses of multiset versus single-set heavy-resistance exercise protocols. Gotshalk LA, et al. **Can J Appl Physiol** 1997 Jun;22(3):244–55

Acromegaly with normal basal growth hormone levels. Mohr G, et al. **Can J Neurol Sci** 1997 Aug;24(3):250–3

The relationship between overnight GH levels and insulin concentrations in adolescents with insulin-dependent diabetes mellitus (IDDM) and the impact of recombinant human insulin-like growth factor I (rhIGF-I). Cheetham TD, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):415–24

Insulin-like growth factor-I raises serum procollagen levels in children and adults with Laron syndrome. Klinger B, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):423–9

Growth hormone, insulin-like growth factor I and its binding proteins 1 and 3 in last trimester intrauterine growth retardation with increased pulsatility index in the umbilical artery. Larsen T, et al. **Clin Endocrinol (Oxf)** 1996 Sep; 45(3):315–9

Influence of endogenous cholinergic tone and growth hormone-releasing peptide-6 on exercise induced growth hormone release. Nooitgedagt A, et al. **Clin Endocrinol (Oxf)** 1997 Feb;46(2):195–202

Outcome of transsphenoidal surgery for acromegaly using strict criteria for surgical cure. Sheaves R, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):407–13

Acromegaly or chronic renal failure: a diagnostic dilemma. Wong NA, et al. **Clin Endocrinol (Oxf)** 1997 Feb; 46(2):221–6

Lack of effect of methylphenidate on serum growth hormone (GH), GH-binding protein, and insulin-like growth factor I. Toren P, et al. **Clin Neuropharmacol** 1997 Jun;20(3):264–9

Development of an ELISA for chum salmon (Oncorhynchus keta) growth hormone. Fukada H, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jul; 117(3):387–92

Luteinizing hormone, growth hormone, insulin-like growth factor-I, insulin and metabolites before puberty in heifers fed to gain at two rates. Yelich JV, et al. **Domest Anim Endocrinol** 1996 Jul;13(4):325–38

The effects of xylazine on plasma concentrations of growth hormone, insulin-like growth factor-I, glucose and insulin in calves. Kasuya E, et al. **Endocr J** 1996 Apr;43(2):145–9

Effects of atipamezole, an alpha 2-adrenergic antagonist, and somatostatin on xylazine-induced growth hormone release in calves. Kasuya E, et al. **Endocr J** 1996 Oct;43(5):551–6

Characteristics of growth hormone secretion responsiveness to growth hormone-releasing peptide-2 (GHRP-2 or KP102) in calves. Roh SG, et al. **Endocr J** 1996 Jun; 43(3):291–8

The impact of cocaine on plasma growth hormone levels in the adult male rat. Emanuele NV, et al. **Endocr Res** 1996 May;22(2):139–45

Elevated levels of growth hormone increase bone mineral content in normal young mice, but not in ovariectomized mice. Sandstedt J, et al. **Endocrinology** 1996 Aug; 137(8):3368–74

Effect of octreotide on blood glucose and counterregulatory hormones in insulin-dependent diabetic patients: the role of dose and route of administration. Lunetta M, et al. **Eur J Clin Pharmacol** 1996;51(2):139–44

Evaluation of growth hormone (GH) responses to pulsed GH-releasing hormone administration using the MTT-ESTA bioassay. Dattani MT, et al. **Eur J Endocrinol** 1996 Jul;135(1):87–95

Growth hormone binding protein and growth hormone availability in acromegalic patients treated with long-acting octreotide (Sandostatin-LAR). Fisker S, et al. **Eur J Endocrinol** 1997 Jan;136(1):61–6

Acute stress attenuates but does not abolish circadian rhythmicity of serum thyrotrophin and growth hormone in the rat. Martí O, et al. **Eur J Endocrinol** 1996 Dec; 135(6):703–8

Testosterone-induced increase of insulin-like growth factor I levels depends upon normal levels of growth hormone. Saggese G, et al. **Eur J Endocrinol** 1996 Aug;135(2):211–5

The effect of food intake from two weeks of age to sexual maturity on plasma growth hormone, insulin-like growth factor-I, insulin-like growth factor-binding proteins, and thyroid hormones in female broiler breeder chickens. Bruggeman V, et al. **Gen Comp Endocrinol** 1997 Aug; 107(2):212–20

Individual diurnal plasma profiles of thyroid hormones in rainbow trout (Oncorhynchus mykiss) in relation to cortisol, growth hormone, and growth rate. Gomez JM, et al. **Gen Comp Endocrinol** 1997 Jul;107(1):74–83

Effect of gonadal steroid hormones on plasma growth hormone concentrations in sexually immature rainbow trout, Oncorhynchus mykiss. Holloway AC, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):246–54

Is the growth hormone concentration regulated by the morning rise in the plasma cortisol concentration? Samra JS, et al. **Horm Metab Res** 1996 May;28(5):237–40

Nutritional regulation of the growth hormone and insulin-like growth factor-binding proteins. Ketelslegers JM, et al. **Horm Res** 1996;45(3–5):252–7 (48 ref.)

Growth hormone in birth asphyxia. Kapoor RK, et al. **Indian Pediatr** 1997 Feb;34(2):133–5

Acute hormonal responses to heavy resistance exercise in men and women at different ages. Häkkinen K, et al. **Int J Sports Med** 1995 Nov;16(8):507–13

Stress hormones in accident patients studied before admission to hospital. Hetz W, et al. **J Accid Emerg Med** 1996 Jul; 13(4):243–7

Plasma concentrations of prolactin, growth hormone, and luteinizing hormone in steers administered ergotamine or ergonovine. Browning R Jr, et al. **J Anim Sci** 1997 Mar; 75(3):796–802

Acute effects of short-term feed deprivation and refeeding on circulating concentrations of metabolites, insulin-like growth factor I, insulin-like growth factor binding proteins, somatotropin, and thyroid hormones in adult geldings. Christensen RA, et al. **J Anim Sci** 1997 May; 75(5):1351–8

Sexual dimorphism of circulating somatotropin, insulin-like growth factor I and II, insulin-like growth factor binding proteins, and insulin: relationships to growth rate and carcass characteristics in growing lambs. Gatford KL, et al. **J Anim Sci** 1996 Jun;74(6):1314–25

Effect of selection for lifetime production of lamb weaned on hormonal factors that affect growth in Targhee ewes and lambs. Head WA Jr, et al. **J Anim Sci** 1996 Sep; 74(9):2152–7

Physiological and hormonal responses of lambs repeatedly implanted with zeranol and provided two levels of feed intake. Hufstedler GD, et al. **J Anim Sci** 1996 Oct; 74(10):2376–84

Ardacin for steers grazing endophyte-free fescue pasture: effects on live weight gain, forage intake, nitrogen and fiber digestion, ruminal fluid kinetics, ruminal fermentation, and serum hormones and metabolites. Judkins MB, et al. **J Anim Sci** 1997 Apr;75(4):1100–11

Effect of feeding and feed deprivation on plasma concentrations of prolactin, insulin, growth hormone, and

metabolites in horses. Nadal MR, et al. **J Anim Sci** 1997 Mar;75(3):736–44

Circulating insulin–like growth factor I, insulin–like growth factor binding proteins, growth hormone, and resumption of estrus in postpartum cows subjected to dietary energy restriction. Roberts AJ, et al. **J Anim Sci** 1997 Jul; 75(7):1909–17

Effect of glucose administration during the estrous cycle on serum hormone profiles, mRNA for steroidogenic enzymes, and breeding performance of ewes. Rubio JM, et al. **J Anim Sci** 1997 Mar;75(3):775–80

Time dependency of pyridostigmine–induced growth hormone response. Thakore JH, et al. **J Basic Clin Physiol Pharmacol** 1994 Apr–Jun;5(2):117–23

Multiple endocrine abnormalities of the growth hormone and insulin–like growth factor axis in patients with anorexia nervosa: effect of short– and long–term weight recuperation. Argente J, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2084–92

Multiple endocrine abnormalities of the growth hormone and insulin–like growth factor axis in prepubertal children with exogenous obesity: effect of short– and long–term weight reduction. Argente J, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2076–83

Effects of oral versus transdermal estrogen on the growth hormone/insulin–like growth factor I axis in younger and older postmenopausal women: a clinical research center study. Bellantoni MF, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2848–53

Growth hormone testing for the diagnosis of growth hormone deficiency in childhood: a population register–based study. Carel JC, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2117–21

Changes in serum immunoreactive and bioactive growth hormone concentrations in boys with advancing puberty and in response to a 20–hour estradiol infusion. Cemeroglu AP, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2166–71

Effects of a 7–day treatment with a novel, orally active, growth hormone (GH) secretagogue, MK–677, on 24–hour GH profiles, insulin–like growth factor I, and adrenocortical function in normal young men [see comments] Copinschi G, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2776–82. Comment in: J Clin Endocrinol Metab 1996 Aug;81(8):2773–5.

Peak and trough growth hormone concentrations have different associations with the insulin–like growth factor axis, body composition, and metabolic parameters. Hindmarsh PC, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2172–6

Evidence for an inhibitory effect of physiological levels of insulin on the growth hormone (GH) response to GH–releasing hormone in healthy subjects. Lanzi R, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2239–43

Overnight growth hormone concentrations are usually normal in pubertal children with idiopathic short stature—a Clinical Research Center study. Rose SR, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1063–8

Marital conflict and endocrine function: are men really more physiologically affected than women? Kiecolt–Glaser JK, et al. **J Consult Clin Psychol** 1996 Apr;64(2):324–32

Effect of selenium and lodine supplementation on growth rate and on thyroid and somatotropic function in dairy calves at pasture. Wichtel JJ, et al. **J Dairy Sci** 1996 Oct; 79(10):1865–72

Effect of chronic ethanol on reproductive and growth hormones in the peripubertal male rat. Steiner JC, et al. **J Endocrinol** 1997 Aug;154(2):363–70

Ethanol, growth hormone and testosterone in peripubertal rats. Tentler JJ, et al. **J Endocrinol** 1997 Mar;152(3):477–87

Administration of IGF–I affects the GH axis and adolescent growth in normal monkeys. Wilson ME. **J Endocrinol** 1997 May;153(2):327–35

Influence of beta–adrenergic agonists and antagonists on the GH–releasing effect of Hexarelin in man. Arvat E, et al. **J Endocrinol Invest** 1996 Jan;19(1):25–9

Effect of chronic treatment with biosynthetic growth hormone (GH) on the GH response to double GH–releasing hormone administration in children with short stature. Scacchi M, et al. **J Endocrinol Invest** 1997 Feb;20(2):72–6

Characterization of growth hormone nycthemeral plasma profiles in catheterized rainbow trout (Oncorhynchus mykiss). Gomez JM, et al. **J Exp Zool** 1996 Feb 15; 274(3):171–80

Effect of sleep deprivation on the growth hormone response to the alpha–3 adrenergic receptor agonist, clonidine, in normal subjects. Lal S, et al. **J Neural Transm** 1997; 104(2–3):291–8

Roasted soybeans and an estrogenic growth promoter affect growth hormone status and performance of beef steers. Rumsey TS, et al. **J Nutr** 1996 Nov;126(11):2880–7

Growth hormone response to apomorphine in obsessive–compulsive disorder. Pitchot W, et al. **J Psychiatry Neurosci** 1996 Nov;21(5):343–5

Investigation of the reproductive and growth hormone status of dogs affected by idiopathic recurrent flank alopecia. Curtis CF, et al. **J Small Anim Pract** 1996 Sep;37(9):417–22

Leucine supplementation and serum amino acids, testosterone, cortisol and growth hormone in male power athletes during training. Mero A, et al. **J Sports Med Phys Fitness** 1997 Jun;37(2):137–45

Growth parameters, growth hormone (GH) response to clonidine and circulating insulin–like growth factor–I (IGF–I), free thyroxine (FT4) and cortisol concentrations in relation to glycaemic control in children with insulin–dependent diabetes mellitus. Soliman AT, et al. **J Trop Pediatr** 1996 Aug;42(4):228–32

Effect of route and frequency of administration of apomorphine on growth hormone release in African catfish (Clarias gariepinus). Lescroart O, et al. **Life Sci** 1997; 60(20):1771–9

Acromegaly. Melmed S. **Metabolism** 1996 Aug;45(8 Suppl 1):51–2 (5 ref.)

Early changes in plasma glucagon and growth hormone response to oral glucose in experimental hyperthyroidism. Tosi F, et al. **Metabolism** 1996 Aug;45(8):1029–33

Effects of chronically elevated growth hormone levels on polyamine metabolism in elderly transgenic mice. Gritli–Linde A, et al. **Mol Cell Endocrinol** 1997 Jan 3; 126(1):49–58

Feminization of hepatic cytochrome P450s by nominal levels of growth hormone in the feminine plasma profile. Pampori NA, et al. **Mol Pharmacol** 1996 Nov;50(5):1148–56

Inhibitory avoidance and appetitive learning in aged normal mice: comparison with transgenic mice having elevated plasma growth hormone levels. Meliska CJ, et al. **Neurobiol Learn Mem** 1997 Jul;68(1):1–12

Increased galanin and neuropeptide–Y immunoreactivity within the hypothalamus of ovariectomised ewes following a prolonged period of reduced body weight is associated with changes in plasma growth hormone but not gonadotropin levels. Barker–Gibb ML, et al. **Neuroendocrinology** 1996 Sep;64(3):194–207

Growth hormone binding protein and free growth hormone in chronic renal failure. Baumann G. **Pediatr Nephrol** 1996 Jun;10(3):328–30 (32 ref.)

Longtime administration of growth hormone–releasing hormone (GHRH) does not restore the reduced efficiency of GHRH on sleep endocrine activity in 2 old–aged subjects—a preliminary study. Murck H, et al. **Pharmacopsychiatry** 1997 Jul;30(4):122–4

Effect of feeding time on hepatic nucleic acid, plasma T3, T4, and GH concentrations in rainbow trout. Gélineau A, et al. **Physiol Behav** 1996 Jun;59(6):1061–7

Effects of blood pH and blood lactate on growth hormone, prolactin, and gonadotropin release after acute exercise in male volunteers. Elias AN, et al. **Proc Soc Exp Biol Med** 1997 Feb;214(2):156–60

A view on noradrenergic, hypothalamic–pituitary–adrenal axis and extrahypothalamic corticotrophin–releasing factor function in anxiety and affective disorders: the reduced growth hormone response to clonidine. Coplan JD, et al. **Psychopharmacol Bull** 1997;33(2):193–204 (93 ref.)

The effect of chronic fluvoxamine on hormonal and psychological responses to buspirone in normal volunteers. Anderson IM, et al. **Psychopharmacology (Berl)** 1996 Nov; 128(1):74–82

Effects of cyclosporine on circulating levels of prolactin, LH, FSH, TSH and GH in chronic hyperprolactinemic male rats. Lafuente A, et al. **Rev Esp Fisiol** 1996 Sep;52(3):161–6

A quantitative evaluation of the relationships between growth hormone secretion and delta wave electroencephalographic activity during normal sleep and after enrichment in delta waves. Gronfier C, et al. **Sleep** 1996 Dec;19(10):817–24

[Influence of environmental and genetic factors on levels of testosterone, estradiol and somatotropic hormones in mountaineers of the Pamir] Spitsyn VA, et al. **Vestn Ross Akad Med Nauk** 1997;(7):46–51 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Glycosylated human growth hormone (hGH): a novel 24 kDa hGH–N variant. Haro LS, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):549–56

Characterization of immunochemical reaction for human growth hormone with its monoclonal antibody by perfusion protein G affinity chromatography and capillary zone electrophoresis. Zou H, et al. **Biomed Chromatogr** 1996 Mar–Apr;10(2):78–82

Sequence–function relationships within the expanding family of prolactin, growth hormone, placental lactogen, and related proteins in mammals. Goffin V, et al. **Endocr Rev** 1996 Aug;17(4):385–410 (244 ref.)

Simultaneous ultrastructural identification of growth hormone and its messenger ribonucleic acid using combined immunohistochemistry and non–radioisotopic in situ hybridization: a technical note. Matsuno A, et al. **Histochem J** 1996 Oct;28(10):703–7

Conformational analysis of human growth hormone [6–13] peptide analogues. Higgins KA, et al. **Int J Pept Protein Res** 1996 Jul;48(1):1–11

Identification of a motif associated with the lactogenic actions of human growth hormone. Peterson FC, et al. **J Biol Chem** 1997 Aug 22;272(34):21444–8

Structure and function of bovine growth hormone. Bovine growth hormone as an experimental model for studies of protein–protein interactions. Secchi C, et al. **J Chromatogr B Biomed Appl** 1997 Jan 24;688(2):161–77 (88 ref.)

Conformational stability of a type II' beta–turn motif in human growth hormone [6–13] peptide analogues at hydrophobic surfaces. Lee TH, et al. **J Pept Res** 1997 May; 49(5):394–403

Use of a model to understand prolactin and growth hormone specificities. Goffin V, et al. **Protein Eng** 1995 Dec; 8(12):1215–31

DEFICIENCY

Adult height after cranial irradiation with 24 Gy: factors and markers of height loss. Adan L, et al. **Acta Paediatr** 1996 Sep;85(9):1096–101

Final height outcome of growth hormone–deficient patients treated since less than five years of age. De Luca F, et al. **Acta Paediatr** 1996 Oct;85(10):1167–71

A case of dyshormonogenetic goiter complicated with growth hormone deficiency. Kaji M, et al. **Acta Paediatr Jpn** 1997 Feb;39(1):83–7

Rapid decrease of urinary pyridinoline excretion in growth hormone deficient children following discontinuation of growth hormone therapy. Kuno T, et al. **Acta Paediatr Jpn** 1997 Feb;39(1):18–20

Effect of GH/IGF–I deficiency on long–term renal changes and urinary albumin excretion in diabetic dwarf rats. Grønbaek H, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E918–24

Increased serum lipoprotein(a) concentrations after growth hormone (GH) treatment in patients with isolated GH deficiency. O'Halloran DJ, et al. **Ann Clin Biochem** 1996 Jul;33 (Pt 4):330–4

A specific loss of growth hormone abolished sex–dependent expression of hepatic cytochrome P450 in dwarf rats: reversal of the profiles by growth hormone–treatment. Shimada M, et al. **Arch Biochem Biophys** 1997 Jan 1; 337(1):34–42

Urinary growth hormone estimation in diagnosing severe growth hormone deficiency. Pirazzoli P, et al. **Arch Dis Child** 1996 Sep;75(3):228–31

Divergence between growth hormone responses to insulin–induced hypoglycaemia and growth hormone–releasing hormone in patients with non–functioning pituitary macroadenomas and hyperprolactinaemia. Beentjes JA, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):391–8

Growth hormone substitution in adult growth hormone–deficient men augments androgen effects on the skin. Blok GJ, et al. **Clin Endocrinol (Oxf)** 1997 Jul; 47(1):29–36

The safety profile of GH replacement therapy in adults. Chipman JJ, et al. **Clin Endocrinol (Oxf)** 1997 Apr; 46(4):473–81

Endocrine outcome in long–term survivors of low–grade hypothalamic/chiasmatic glioma. Collet–Solberg PF, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):79–85

Impaired reproductive function in women treated for growth hormone deficiency during childhood. de Boer JA, et al. **Clin Endocrinol (Oxf)** 1997 Jun;46(6):681–9

Urinary growth hormone following exercise to assess growth hormone production in adults. Flanagan DE, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):425–9

Low–dose growth hormone replacement lowers plasma leptin and fat stores without affecting body mass index in adults with growth hormone deficiency. Florkowski CM, et al. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):769–73

Relationship between growth hormone (GH) status, serum leptin and body composition in healthy and GH deficient elderly subjects. Gill MS, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):161–7

Long–term cardiovascular effects of growth hormone treatment in GH–deficient adults. Preliminary data in a small group of patients. Johannsson G, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):305–14

Growth hormone deficiency and quality of life in hypopituitary adults [comment] Johnston DG. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):407–8. Comment on: Clin Endocrinol (Oxf) 1997 Apr;46(4):401–6.

Growth hormone versus placebo treatment for one year in growth hormone deficient adults: increase in exercise capacity and normalization of body composition. Jørgensen JO, et al. **Clin Endocrinol (Oxf)** 1996 Dec;45(6):681–8

Bioavailability and bioactivity of intravenous vs subcutaneous infusion of growth hormone in GH–deficient patients. Laursen T, et al. **Clin Endocrinol (Oxf)** 1996 Sep; 45(3):333–9

Measuring quality of life in adults with growth hormone deficiency [letter; comment] McKenna S, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):507–8. Comment on: Clin Endocrinol (Oxf) 1996 Apr;44(4):403–11.

Dynamic MRI in the congenital agenesis of the neural pituitary stalk syndrome: the role of the vascular pituitary stalk in predicting residual anterior pituitary function. Maghnie M, et al. **Clin Endocrinol (Oxf)** 1996 Sep; 45(3):281–90

Serum leptin concentrations in a normal population and in GH deficiency: negative correlation with testosterone in men and effects of GH treatment. Nyström F, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):191–8

Treatment of radiation–induced growth hormone deficiency with growth hormone–releasing hormone. Ogilvy–Stuart AL, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):571–8

Diurnal variation in serum insulin–like growth factor (IGF)–I and IGF binding protein–3 concentrations during daily subcutaneous injections of recombinant human growth hormone in GH–deficient adults. Oscarsson J, et al. **Clin Endocrinol (Oxf)** 1997 Jan;46(1):63–8

An account of the quality of life of patients after treatment

for non-functioning pituitary tumours [see comments] Page RC, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):401–6. Comment in: Clin Endocrinol (Oxf) 1997 Apr;46(4):407–8.
The investigation of growth hormone insensitivity. Savage MO, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):257–60
Elevated leptin concentrations in growth hormone–deficient hypopituitary adults. al–Shoumer KA, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):153–9
Insulin–like growth factor–I in growth hormone–deficient adults: relationship to population–based normal values, body composition and insulin tolerance test. Svensson J, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):579–86
Body composition in growth hormone deficient adults over the age of 60 years. Toogood AA, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):399–405
Normal growth hormone secretion in growth hormone insufficient children retested after completion of linear growth. Wacharasindhu S, et al. **Clin Endocrinol (Oxf)** 1996 Nov;45(5):553–6
Interstitial deletion of long arm of chromosome no. 5 with growth hormone deficiency—an emerging syndrome? Krishna J, et al. **Clin Genet** 1997 Jan;51(1):48–51 (3 ref.)
Growth hormone insensitivity. Rosenfeld RG, et al. **Curr Ther Endocrinol Metab** 1997;6:68–70 (4 ref.)
Growth hormone deficiency in the elderly. Toogood AA, et al. **Curr Ther Endocrinol Metab** 1997;6:645–9 (11 ref.)
Recombinant human growth hormone acts on intermediate–sized follicles and rescues growing follicles from atresia. Ozawa K, et al. **Endocr J** 1996 Feb;43(1):87–92
Growth hormone (GH) therapy markedly increases the motility of spermatozoa and the concentration of insulin–like growth factor–I in seminal vesicle fluid in the male GH–deficient dwarf rat. Breier BH, et al. **Endocrinology** 1996 Sep;137(9):4061–4
Phenotypic correction of dwarfism by constitutive expression of growth hormone. Hahn TM, et al. **Endocrinology** 1996 Nov;137(11):4988–93
The tyrosine hydroxylase–human growth hormone (GH) transgenic mouse as a model of hypothalamic GH deficiency: growth retardation is the result of a selective reduction in somatotrope numbers despite normal somatotrope function. Kineman RD, et al. **Endocrinology** 1996 Nov;137(11):4630–6
Diagnosis of growth hormone deficiency in adulthood. Casanueva FF. **Eur J Endocrinol** 1996 Aug;135(2):168–70 (13 ref.)
High–affinity growth hormone binding protein, insulin–like growth factor I and insulin–like growth factor binding protein 3 in adults with growth hormone deficiency. Roelen CA, et al. **Eur J Endocrinol** 1996 Jul;135(1):82–6
Growth hormone increases serum 1,25–dihydroxyvitamin D levels and decreases 24,25–dihydroxyvitamin D levels in children with growth hormone deficiency [see comments] Wei S, et al. **Eur J Endocrinol** 1997 Jan;136(1):45–51. Comment in: Eur J Endocrinol 1997 Jan;136(1):30–2.
Empty sella, growth hormone deficiency and pseudotumour cerebri: effect of initiation, withdrawal and resumption of growth hormone therapy. Francois I, et al. **Eur J Pediatr** 1997 Jan;156(1):69–70
Congenital microgastria, growth hormone deficiency and diabetes insipidus. Hernáiz Driever P, et al. **Eur J Pediatr** 1997 Jan;156(1):37–40
Worsening of ischemic damage in hearts from rats with selective growth hormone deficiency. De Gennaro Colonna V, et al. **Eur J Pharmacol** 1996 Oct 31; 314(3):333–8
Pituitary GH and prolactin deficiency and testis enlargement in hypothyroid rats caused by goitrogen methimazole. Kimura T, et al. **Exp Anim** 1996 Oct;45(4):369–75
Early effects of streptozotocin–induced diabetes on insulin–like growth factor–I in the kidneys of growth hormone–transgenic and growth hormone–deficient dwarf mice. Jacobs ML, et al. **Exp Nephrol** 1997 Jul–Aug; 5(4):337–44
Adult growth hormone deficiency and bone mass. Holmes SJ, et al. **Horm Res** 1996;45 Suppl 1:69–71 (16 ref.)
Bone mineral density and biochemical parameters of bone turnover in children with growth hormone deficiency. Saggese G, et al. **Horm Res** 1996;45 Suppl 1:67–8 (10 ref.)
The effect of growth hormone (GH) on histomorphometric indices of bone structure and bone turnover in GH–deficient men. Bravenboer N, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1818–22
Growth hormone testing for the diagnosis of growth hormone deficiency in childhood: a population register–based study. Carel JC, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2117–21
Why retest young adults with childhood–onset growth hormone deficiency? [editorial] de Boer H, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2032–6
Long–term growth hormone deficiency as a cause of cardiomyopathy and its reversibility with specific replacement therapy. Fazio S, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):887–90 (19 ref.)
Short–term growth hormone (GH) treatment of GH–deficient adults increases body sodium and extracellular water, but not blood pressure. Hoffman DM, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1123–8
Two years of growth hormone (GH) treatment increases bone mineral content and density in hypopituitary patients with adult–onset GH deficiency [see comments] Johannsson G, et al. **J Clin Endocrinol Metab** 1996 Aug; 81(8):2865–73. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):1304–6.
Two years of growth hormone (GH) treatment increase isometric and isokinetic muscle strength in GH–deficient adults. Johannsson G, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2877–84
Reevaluation of growth hormone (GH) secretion in 69 adults diagnosed as GH–deficient patients during childhood. Longobardi S, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1244–7
Growth hormone (GH) treatment of GH–deficient children increases serum levels of insulin–like growth factors (IGFs), IGF–binding protein–3 and –5, and bone alkaline phosphatase isoenzyme. Ono T, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2111–6
The effect of long–term growth hormone (GH) treatment on bone mineral density in children with GH deficiency. Role of GH in the attainment of peak bone mass. Saggese G, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3077–83
Once daily subcutaneous growth hormone–releasing hormone therapy accelerates growth in growth hormone–deficient children during the first year of therapy. Geref International Study Group. Thorner M, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1189–96
Serum bone alkaline phosphatase isoenzyme levels in normal children and children with growth hormone (GH) deficiency: a potential marker for bone formation and response to GH therapy. Tobiume H, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2056–61
Nitric oxide may mediate the hemodynamic effects of recombinant growth hormone in patients with acquired growth hormone deficiency. A double–blind, placebo–controlled study. Böger RH, et al. **J Clin Invest** 1996 Dec 15;98(12):2706–13
Evolution of growth hormone neurosecretory disturbance after cranial irradiation for childhood brain tumours: a prospective study. Spoudeas HA, et al. **J Endocrinol** 1996 Aug;150(2):329–42
Normogonadotropic primary amenorrhea in a growth hormone–deficient woman with ectopic posterior pituitary: gonadotropin pulsatility and follicle–stimulating hormone bioactivity. Crottaz B, et al. **J Endocrinol Invest** 1996 Jan; 19(1):48–53
Insulin–like growth factor–I (IGF–I) screening for the diagnosis of growth hormone (GH) deficiency. Sriphrapradang A, et al. **J Med Assoc Thai** 1997 Jan; 80(1):51–5
Jacobsen syndrome: report of a patient with severe eye anomalies, growth hormone deficiency, and hypothyroidism associated with deletion 11 (q23q25) and review of 52 cases. Pivnick EK, et al. **J Med Genet** 1996 Sep;33(9):772–8 (61 ref.)
Nephropathy and growth hormone deficiency in a patient with mitochondrial tRNA(Leu(UUR)) mutation. Yorifuji T, et al. **J Med Genet** 1996 Jul;33(7):621–2
Contribution of growth hormone deficiency to the growth failure that follows bone marrow transplantation. Brauner R, et al. **J Pediatr** 1997 May;130(5):785–92
Maroteaux–Lamy syndrome associated with growth hormone deficiency. Büyükgebiz B, et al. **J Pediatr Endocrinol Metab** 1995 Oct–Dec;8(4):305–7
Growth parameters and predictors of growth in short children with and without growth hormone (GH) deficiency treated with human GH: a randomized controlled study. Soliman AT, et al. **J Trop Pediatr** 1996 Oct;42(5):281–6
Is testing for growth hormone release necessary? Wilson DM. **Kidney Int Suppl** 1996 Jan;53:s123–5 (20 ref.)
Observations on the stimulation of growth hormone secretion in patients with growth hormone deficiency. Kendall–Taylor P, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):127–8
Hypophysiotropic somatostatin expression during postnatal development in growth hormone–deficient Ames dwarf mice: mRNA in situ hybridization. Hurley DL, et al. **Neuroendocrinology** 1997 Feb;65(2):98–106
Chronic administration of a new potent agonist of growth hormone– releasing hormone induces compensatory linear growth in growth hormone–deficient rats: mechanism of action. Kovács M, et al. **Neuroendocrinology** 1996 Sep; 64(3):169–76
Hypophysiotropic somatostatin expression during postnatal development in growth hormone–deficient Ames dwarf mice: peptide immunocytochemistry. Phelps CJ, et al. **Neuroendocrinology** 1996 Nov;64(5):364–78
The clinical, neuroradiographic, and endocrinologic profile of patients with bilateral optic nerve hypoplasia. Siatkowski RM, et al. **Ophthalmology** 1997 Mar;104(3):493–6
Carbohydrate metabolism in children receiving growth hormone for 5 years. Chronic renal insufficiency compared with growth hormone deficiency, Turner syndrome, and idiopathic short stature. Genentech Collaborative Group. Saenger P, et al. **Pediatr Nephrol** 1996 Jun;10(3):261–3
Spontaneous growth and response to growth hormone treatment in children with growth hormone deficiency and idiopathic short stature. Wit JM, et al. **Pediatr Res** 1996 Feb;39(2):295–302 (79 ref.)
Cognitive impairments and mood disturbances in growth hormone deficient men. Deijen JB, et al. **Psychoneuroendocrinology** 1996 Apr;21(3):313–22
Long–term treatment with growth hormone decreases plasminogen activator inhibitor–1 and tissue plasminogen activator in growth hormone–deficient adults. Johansson JO, et al. **Thromb Haemost** 1996 Sep;76(3):422–8
Suppression of lymphocytic choriomeningitis virus—induced growth hormone deficiency syndrome by disease–negative virus variants. Teng MN, et al. **Virology** 1996 Sep 1; 223(1):113–9
[Isolated congenital growth hormone deficiency. Severe hypoglycemia and neonatal giant cell hepatitis] Esberg BH, et al. **Ugeskr Laeger** 1996 Nov 4;158(45):6467–9 (Eng. Abstr.) **(Dan)**
[Growth hormone treatment in adults (editorial)] Välimäki MJ. **Duodecim** 1995;111(11):999–1001 (20 ref.) **(Fin)**
[Contribution of osteo–densitometry in Turner syndrome and in somatotropin deficiencies] Battin J, et al. **Arch Pediatr** 1997;4(2 Suppl 2):95s–101s **(Fre)**
[Recombinant human growth hormone (rhGH) administration in a patient with chronic renal insufficiency: renal and metabolic effects] Fouque D, et al. **Nephrologie** 1996;17(3):171–4 (Eng. Abstr.) **(Fre)**
[Magnetic resonance tomography studies of the hypophysis in children with growth hormone deficiency, born with umbilical cord entanglement] Butenandt O, et al. **Klin Padiatr** 1996 Jan–Feb;208(1):26–8 (Eng. Abstr.) **(Ger)**
[Behavior of growth hormone after stimulation with growth hormone releasing hormone (GHRH) in children with disorders of the hypothalamo–hypophyseal axis and girls with Turner syndrome] Schmitt K, et al. **Klin Padiatr** 1996 Jan–Feb;208(1):29–34 (Eng. Abstr.) **(Ger)**
[Growth hormone deficiency in adults] Meling TR, et al. **Tidsskr Nor Laegeforen** 1996 Nov 30;116(29):3476–80 (73 ref.) (Eng. Abstr.) **(Nor)**
[Towards a concept of growth hormone deficiency syndrome in adults] Diez JJ, et al. **Med Clin (Barc)** 1996 Jul 6; 107(6):218–23 (111 ref.) **(Spa)**

DRUG EFFECTS

Effect of testosterone on growth hormone gene expression in the goldfish pituitary. Huggard D, et al. **Can J Physiol Pharmacol** 1996 Sep;74(9):1039–46
Twenty–four hour rhythms of serum prolactin, growth hormone and luteinizing hormone levels, and of medial basal hypothalamic corticotropin–releasing hormone levels and dopamine and serotonin metabolism in rats neonatally administered melatonin. Esquifino AI, et al. **J Pineal Res** 1997 Jan;22(1):52–8
Influence of L–triiodothyronine on rat somatotroph cells. Bonaterra M, et al. **Medicina (B Aires)** 1996;56(3):273–6
mu–Opioid agonists stimulate growth hormone secretion in immature rats. Eason MG, et al. **Neuroendocrinology** 1996 Jun;63(6):489–97

GENETICS

Identification of a growth hormone mutation responsible for short stature. Chihara K. **Acta Paediatr Suppl** 1996 Oct; 417:49–50
Relationship of growth hormone and insulin–like growth factor–1 genotypes with growth and carcass traits in swine. Casas–Carrillo E, et al. **Anim Genet** 1997 Apr;28(2):88–93
Variants within the 5'–flanking region and the intron I of the bovine growth hormone gene. Hecht C, et al. **Anim Genet** 1996 Oct;27(5):329–32
Associations of GH gene variants with performance traits in F2 generations of European wild boar, Piétrain and Meishan pigs. Knorr C, et al. **Anim Genet** 1997 Apr; 28(2):124–8
DNA polymorphisms in the chicken growth hormone gene: response to selection for disease resistance and association with egg production. Kuhnlein U, et al. **Anim Genet** 1997 Apr;28(2):116–23
Characterization of rainbow trout (Oncorhynchus mykiss) growth hormone 1 gene and the promoter region of growth hormone 2 gene. Yang BY, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):359–68
Negative regulation of bovine growth hormone gene by YY1 binding to NRE's. Park KY, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):745–51
Amplification, cloning, and sequence comparison of the growth hormone gene for carp (Cyprinus carpio) by the polymerase chain reaction. Zhao X, et al. **Chin J Biotechnol** 1996;12(3):161–7
The rat growth hormone and human cellular retinol binding protein 1 genes share homologous NF1–like binding sites that exert either positive or negative influences on gene expression in vitro. Leclerc S, et al. **DNA Cell Biol** 1997 Aug;16(8):951–67
The effects of a duplication in the ovine growth hormone (GH) gene on GH expression in the pituitaries of ram lambs from lean and fat–selected sheep lines. Fleming JS, et al. **Domest Anim Endocrinol** 1997 Jan;14(1):17–24
Association of somatotropin (BST) gene polymorphism at the 5th exon with selection for milk yield in Holstein cows. Lee BK, et al. **Domest Anim Endocrinol** 1996 Jul; 13(4):373–81
Deletion of the thyroid hormone beta1 receptor increases basal and triiodothyronine–induced growth hormone messenger ribonucleic acid in GH3 cells. Ball SG, et al. **Endocrinology** 1997 Aug;138(8):3125–32
Co–expression of bovine growth hormone (GH) and human GH antagonist genes in transgenic mice. Chen NY, et al. **Endocrinology** 1997 Feb;138(2):851–4

Regulation of growth hormone (GH) gene expression and secretion during pregnancy and lactation in the rat: role of insulin-like growth factor-I, somatostatin, and GH-releasing hormone. Escalada J, et al. **Endocrinology** 1997 Aug;138(8):3435-43

Growth hormone expression in murine bone marrow cells is independent of the pituitary transcription factor Pit-1. Kooijman R, et al. **Endocrinology** 1997 Sep;138(9):3949-55

Human neutrophils express GH-N gene transcripts and the pituitary transcription factor Pit-1b. Kooijman R, et al. **Endocrinology** 1997 Oct;138(10):4481-4

Involvement of glucocorticoid-induced factor(s) in the stimulation of growth hormone expression in the fetal rat pituitary gland in vitro. Nogami H, et al. **Endocrinology** 1997 May;138(5):1810-5

Effects of growth hormone secretagogues in the transgenic growth-retarded (Tgr) rat. Wells T, et al. **Endocrinology** 1997 Feb;138(2):580-7

Chromatin structure of the rat somatotropin gene locus and physical linkage of the rat somatotropin gene and skeletal-muscle sodium-channel gene. Kazahari K, et al. **Eur J Biochem** 1997 Mar 1;244(2):494-500

Expression of GH, TSH beta, LH beta and FSH beta genes during fetal pituitary development in the pig. Ma E, et al. **Exp Clin Endocrinol Diabetes** 1996;104(6):464-72

Genomic structure and sequence of the pufferfish (Fugu rubripes) growth hormone-encoding gene: a comparative analysis of teleost growth hormone genes. Venkatesh B, et al. **Gene** 1997 Mar 18;187(2):211-5

Increased production of peptide deformylase eliminates retention of formylmethionine in bovine somatotropin overproduced in Escherichia coli. Warren WC, et al. **Gene** 1996 Oct 3;174(2):235-8

Quantitative genetics of transgenic mice: components of phenotypic variation in body weights and weight gains. Clutter AC, et al. **Genetics** 1996 Aug;143(4):1753-60

Association between SSCP haplotypes at the bovine growth hormone gene and milk protein percentage [published erratum appears in Genetics 1997 May;146(1):442] Lagziel A, et al. **Genetics** 1996 Mar;142(3):945-51

Sequence variations in the bovine growth hormone gene characterized by single-strand conformation polymorphism (SSCP) analysis and their association with milk production traits in Holsteins. Yao J, et al. **Genetics** 1996 Dec; 144(4):1809-16

A minisatellite polymorphism in intron III of the barramundi (Lates calcarifer) growth hormone gene. Yowe DL, et al. **Genome** 1996 Oct;39(5):934-40

A high-resolution whole genome radiation hybrid map of human chromosome 17q22-q25.3 across the genes for GH and TK. Foster JW, et al. **Genomics** 1996 Apr 15; 33(2):185-92

Chromosome localization of the gene for growth hormone in the common shrew (Sorex araneus). Malchenko SN, et al. **Hereditas** 1996;125(2-3):243-5

Detection of an aberrant fragment in growth hormone gene cluster in a girl with congenital generalized lipodystrophy. Nakagawa Y, et al. **Horm Metab Res** 1996 Jan;28(1):23-6

Growth retardation--an unexpected outcome from growth hormone gene therapy in normal mice with microencapsulated myoblasts. Al-Hendy A, et al. **Hum Gene Ther** 1996 Jan;7(1):61-70

Long-term culture of primary B cells and in vitro expression of an exogenous gene. Kumar A, et al. **Immunol Lett** 1995 Sep;47(3):193-7

Localization of growth hormone messenger ribonucleic acid in the human immune system--a Clinical Research Center study. Wu H, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1278-82

Relationships of growth hormone gene and milk protein polymorphisms to milk production traits in Simmental cattle. Falaki M, et al. **J Dairy Res** 1997 Feb;64(1):47-56

Relationships of polymorphisms for growth hormone and growth hormone receptor genes with milk production traits for Italian Holstein-Friesian bulls. Falaki M, et al. **J Dairy Sci** 1996 Aug;79(8):1446-53

Enterotoxin septic shock protection and deficient T helper 2 cytokine production in growth hormone transgenic mice. Gonzalo JA, et al. **J Immunol** 1996 Oct 15;157(8):3298-304

The molecular evolution of vertebrate growth hormones: a pattern of near-stasis interrupted by sustained bursts of rapid change. Wallis M. **J Mol Evol** 1996 Aug;43(2):93-100

Function switching as a basis for bursts of rapid change during the evolution of pituitary growth hormone [letter] Wallis M. **J Mol Evol** 1997 Mar;44(3):348-50

Ontogeny of growth hormone and LH beta-, FSH beta- and alpha-subunit mRNA levels in the porcine fetal and neonatal anterior pituitary. Granz S, et al. **J Neuroendocrinol** 1997 Jun;9(6):439-49

Overexpression of bovine growth hormone in transgenic mice is associated with changes in hepatic insulin receptors and in their kinase activity. Balbis A, et al. **Life Sci** 1996; 59(16):1363-71

Increased hepatic delta 6-desaturase activity with growth hormone expression in the MG101 transgenic mouse. Nakamura MT, et al. **Lipids** 1996 Feb;31(2):139-43

Chromosome localization of the genes for growth hormone, somatostatin peptide, ornithine transcarbamylase, and prion protein in silver fox (Vulpes fulvus). Koroleva IV, et al. **Mamm Genome** 1996 Nov;7(11):860-2

Heterogeneity of growth hormone (GH)-producing cells in aging male rats: ultrastructure and GH gene expression in somatotrope subpopulations. Dobado-Berrios PM, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1-2):181-91

Lovastatin decreases prolactin and growth hormone gene expression in GH4C1 cells through a cAMP dependent mechanism. Lasa M, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1-2):93-100

Nuclease sensitivity of the human growth hormone-chorionic somatomammotropin locus in pituitary and placenta suggest different mechanisms for tissue-specific regulation. Nickel BE, et al. **Mol Cell Endocrinol** 1996 Apr 19; 118(1-2):155-62

Growth enhancement in transgenic tilapia by ectopic expression of tilapia growth hormone. Martínez R, et al. **Mol Mar Biol Biotechnol** 1996 Mar;5(1):62-70

The molecular basis of increased glomerulosclerosis after blockade of the renin angiotensin system in growth hormone transgenic mice. Peten EP, et al. **Mol Med** 1994 Nov;1(1):104-15

Transgene expression in mammary glands of newborn rats. Hirabayashi M, et al. **Mol Reprod Dev** 1996 Feb;43(2):145-9

In vivo and in vitro regulation of pituitary transcription factor-1 (Pit-1) by changes in the hormone environment. González-Parra S, et al. **Neuroendocrinology** 1996 Jan; 63(1):3-15

Long-term alterations in growth factor mRNA expression following seizures. Garcia ML, et al. **Neuroreport** 1997 Apr 14;8(6):1445-9

Hormonal and cell-specific regulation of the human growth hormone and chorionic somatomammotropin genes. Eberhardt NL, et al. **Prog Nucleic Acid Res Mol Biol** 1996; 54:127-63 (180 ref.)

Expression of human growth hormone in silkworm larvae through recombinant Bombyx mori nuclear polyhedrosis virus. Sumathy S, et al. **Protein Expr Purif** 1996 May; 7(3):262-8

Changes in expression of the prolactin and growth hormone gene during different reproductive stages in the pituitary gland of turkeys. Karatzas CN, et al. **Reprod Nutr Dev** 1997;37(1):69-79

Actions and interactions of growth hormone and insulin-like growth factor-II: body and organ growth of transgenic mice. Blackburn A, et al. **Transgenic Res** 1997 May; 6(3):213-22

[Growth hormone resistance. Genetic defects and therapy in Laron syndrome and similar conditions] Vesterhus P. **Tidsskr Nor Laegeforen** 1997 Mar 10;117(7):948-51 (Eng. Abstr.) **(Nor)**

HISTORY

A history of growth hormone. Tattersall R. **Horm Res** 1996; 46(4-5):236-47

IMMUNOLOGY

Enterotoxin septic shock protection and deficient T helper 2 cytokine production in growth hormone transgenic mice. Gonzalo JA, et al. **J Immunol** 1996 Oct 15;157(8):3298-304

Immunostimulating effect of growth hormone: in-vivo administration of growth hormone in rainbow trout enhances resistance to Vibrio anguillarum infection. Sakai M, et al. **Vet Immunol Immunopathol** 1997 Jun; 57(1-2):147-52

ISOLATION & PURIFICATION

Perfusion immunoaffinity chromatography and its application in analysis and purification of biomolecules. Zou H, et al. **Biomed Chromatogr** 1996 May-Jun;10(3):122-6

One-step immunoaffinity purification and partial characterization of hypophyseal growth hormone from the African catfish, Clarias gariepinus (Burchell). Berghman LR, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Apr;113(4):773-80

Isolation and characterization of a trisulfide variant of recombinant human growth hormone formed during expression in Escherichia coli. Andersson C, et al. **Int J Pept Protein Res** 1996 Apr;47(4):311-21

METABOLISM

Growth hormone-binding proteins--an overview. Baumann G. **Acta Paediatr Suppl** 1996 Oct;417:95-7 (25 ref.)

Growth hormone-binding protein in short children. Carlsson L. **Acta Paediatr Suppl** 1996 Oct;417:105-7 (27 ref.)

Transformed alpha 2-macroglobulin as a low-affinity growth hormone-binding protein. Kratzsch J, et al. **Acta Paediatr Suppl** 1996 Oct;417:108-10

Regulation of growth hormone-binding protein. Massa GG. **Acta Paediatr Suppl** 1996 Oct;417:102-4 (40 ref.)

Growth hormone-binding protein: biological significance. Postel-Vinay MC. **Acta Paediatr Suppl** 1996 Oct; 417:98-101 (28 ref.)

Effect of fetal ethanol exposure on the in vitro release of growth hormone, somatostatin and growth hormone-releasing factor induced by clonidine and growth hormone feedback in male and female rats. Conway S, et al. **Alcohol Clin Exp Res** 1997 Aug;21(5):826-39

Growth hormone upregulates gastrin and peptide YY gene expression. Gomez G, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E582-6

Identity of bovine growth hormone and peptidylglycine monooxygenase. Downey E, et al. **Arch Biochem Biophys** 1997 Sep 15;345(2):193-8

Identification and initial characterization of serum growth hormone binding protein in the turtle Chrysemys dorbigni. Sotelo AI, et al. **Arch Physiol Biochem** 1997 Apr; 105(2):167-74

Acquired growth hormone resistance in catabolic states. Jenkins RC, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):411-9 (39 ref.)

Localization and quantification of binding sites for follicle-stimulating hormone, luteinizing hormone, growth hormone, and insulin-like growth factor I in sheep ovarian follicles. Eckery DC, et al. **Biol Reprod** 1997 Sep; 57(3):507-13

Enhanced growth hormone responses to pyridostigmine challenge in patients with panic disorder. Cooney JM, et al. **Br J Psychiatry** 1997 Feb;170:159-61

Leptin--fat messenger or fat controller? Qureshi A, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):169-71

Influences of somatotropin on Na(+)-K(+)-ATPase, Mg(2+)-ATPase and Ca(2+)-ATPases of Porcine visceral tissues. Caperna TJ, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Sep; 115(1):13-8

Regulation of somatic growth and the somatotropic axis by gonadal steroids: primary effect on insulin-like growth factor I gene expression and secretion. Borski RJ, et al. **Endocrinology** 1996 Aug;137(8):3253-9

Liver and kidney growth hormone (GH) receptors are regulated differently in diabetic GH and GH antagonist transgenic mice. Chen NY, et al. **Endocrinology** 1997 May; 138(5):1988-94

Expression of thyrotropin-releasing hormone (TRH) receptor mRNA in somatotrophs in the rat anterior pituitary. Konaka S, et al. **Endocrinology** 1997 Feb; 138(2):827-30

Decreases in cerebral microvasculature with age are associated with the decline in growth hormone and insulin-like growth factor 1. Sonntag WE, et al. **Endocrinology** 1997 Aug;138(8):3515-20

Growth hormone-releasing peptides. Ghigo E, et al. **Eur J Endocrinol** 1997 May;136(5):445-60 (183 ref.)

Growth hormone response to growth hormone-releasing hormone varies with the hypothalamic-pituitary abnormalities. Maghnie M, et al. **Eur J Endocrinol** 1996 Aug;135(2):198-204

Mechanism of action of Hexarelin. I. Growth hormone-releasing activity in the rat. Torsello A, et al. **Eur J Endocrinol** 1996 Oct;135(4):481-8

Age-dependent influence of octreotide on stimulated pancreatic growth in the postnatal period of rats. Kisfalvi K, et al. **Eur J Gastroenterol Hepatol** 1996 Jan;8(1):69-74

Thyrotropin releasing hormone stimulates metabolism of phosphatidyl inositol in GH3 cells. A possible mechanism in stimulus-response coupling. Schlegel W, et al. **FEBS Lett** 1981 Nov 2;134(1):47-9

Changes in pituitary somatotroph and lactotroph distribution in laying and incubating turkey hens. Ramesh R, et al. **Gen Comp Endocrinol** 1996 Oct;104(1):67-75

Increased production of peptide deformylase eliminates retention of formylmethionine in bovine somatotropin overproduced in Escherichia coli. Warren WC, et al. **Gene** 1996 Oct 3;174(2):235-8

Growth hormone as a function of age and dietary protein: energy ratio in a marine teleost, the gilthead sea bream (Sparus aurata). Martí-Palanca H, et al. **Growth Regul** 1996 Dec;6(4):253-9

In vitro effects of estradiol on pituitary GH-immunoreactive cells. Carretero J, et al. **Histol Histopathol** 1997 Jul; 12(3):631-6

Dominance, nutritional state, and growth hormone levels in rainbow trout (Oncorhynchus mykiss). Johnsson JI, et al. **Horm Behav** 1996 Mar;30(1):13-21

Methscopolamine bromide blocks hypothalamic-stimulated release of growth hormone in ewes. Daniel JA, et al. **J Anim Sci** 1997 May;75(5):1359-62

Experimental modification of rat pituitary growth hormone cell function during and after spaceflight. Hymer WC, et al. **J Appl Physiol** 1996 Mar;80(3):955-70

The role of receptor dimerization domain residues in growth hormone signaling. Chen C, et al. **J Biol Chem** 1997 Feb 21;272(8):5133-40

Real-time kinetic measurements of the interactions between lactogenic hormones and prolactin-receptor extracellular domains from several species support the model of hormone-induced transient receptor dimerization. Gertler A, et al. **J Biol Chem** 1996 Oct 4;271(40):24482-91

Monkey growth hormone (GH) receptor gene expression. Evidence for two mechanisms for the generation of the GH binding protein. Martini JF, et al. **J Biol Chem** 1997 Jul 25;272(30):18951-8

Interaction of a novel sex-dependent, growth hormone-regulated liver nuclear factor with CYP2C12 promoter. Waxman DJ, et al. **J Biol Chem** 1996 Nov 22; 271(47):29978-87

Both oral and transdermal estrogen increase growth hormone release in postmenopausal women--a clinical research center study. Friend KE, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2250-6

Elevated blood pressure and enhanced myocardial contractility in mice with severe IGF-1 deficiency. Lembo G, et al. **J Clin Invest** 1996 Dec 1;98(11):2648-55

The effect of bovine somatotropin and diet on somatotropin binding sites in hepatic tissue of lactating dairy cows.

Newbold JA, et al. **J Dairy Sci** 1997 Jun;80(6):1085–91

The serum growth hormone binding protein: pregnant with possibilities. Barnard R, et al. **J Endocrinol** 1997 Apr; 153(1):1–14 (151 ref.)

Growth hormone binds to a single high affinity receptor site on mouse osteoblasts: modulation by retinoic acid and cell differentiation. Slootweg MC, et al. **J Endocrinol** 1996 Sep; 150(3):465–72

Growth hormone (GH)–releasing peptide and GH releasing hormone stimulate GH release from subpopulations of somatotrophs in rats. Mitani M, et al. **J Neuroendocrinol** 1996 Nov;8(11):825–30

Different effects of somatostatin on in vitro growth hormone release in two porcine breeds with different growth rates. Torronteras R, et al. **J Neuroendocrinol** 1996 Dec; 8(12):891–900

Central administration of a growth hormone (GH) receptor mRNA antisense increases GH pulsatility and decreases hypothalamic somatostatin expression in rats. Pellegrini E, et al. **J Neurosci** 1996 Dec 15;16(24):8140–8

Growth hormone receptor/binding protein--clinical implications. Postel-Vinay MC. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:279–83 (38 ref.)

In vivo characterization of sustained-release formulations of human growth hormone. Lee HJ, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1431–9

Growth hormone–releasing hormone triggers pacemaker activity and persistent Ca2+ oscillations in rat somatotrophs. Kwiecien R, et al. **J Physiol (Lond)** 1997 Mar 15;499 (Pt 3):613–23

The effect of Yohimbine, an alpha2 adrenergic receptor antagonist, on the growth hormone response to apomorphine in normal subjects. Lal S, et al. **J Psychiatry Neurosci** 1996 Mar;21(2):96–100

Use of growth hormone for non-growth hormone deficient children [letter; comment] Voron DA. **JAMA** 1996 Dec 18;276(23):1878; discussion 1878. Comment on: JAMA 1996 Aug 21;276(7):567–8.

The hypothalamo-pituitary-growth hormone insulin-like growth factor 1 axis in children with chronic renal failure. Rees L, et al. **Kidney Int Suppl** 1996 Jan;53:S109–14 (16 ref.)

Mechanisms underlying the negative growth hormone (GH) autofeedback on the GH-releasing effect of hexarelin in man. Arvat E, et al. **Metabolism** 1997 Jan;46(1):83–8

Growth hormone stimulates the secretion of insulin-like growth factor binding protein-2 (IGFBP-2) by monolayer cultures of sheep costal growth plate chondrocytes. Borromeo V, et al. **Mol Cell Biochem** 1996 Sep 20; 162(2):145–51

Characterization of prolactin- and growth hormone-binding proteins in milk and their diversity among species. Amit T, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1-2):167–80

A novel growth hormone response element unrelated to STAT (signal transducer and activator of transcription)-binding sites is a bifunctional enhancer. Legraverend C, et al. **Mol Endocrinol** 1996 Dec; 10(12):1507–18

Identification of growth hormone receptor (GHR) tyrosine residues required for GHR phosphorylation and JAK2 and STAT5 activation. Wang X, et al. **Mol Endocrinol** 1996 Oct;10(10):1249–60

Function of the GH/IGF-1 axis in healthy middle-aged male runners. Ambrosio MR, et al. **Neuroendocrinology** 1996 Jun; 63(6):498–503

Somatostatin withdrawal as generator of pulsatile GH release in the dog: a possible tool to evaluate the endogenous GHRH tone? Cella SG, et al. **Neuroendocrinology** 1996 Jun; 63(6):481–8

Immunocytochemical and molecular analysis of the effects of glucocorticoid treatment on the hypothalamic-somatotropic axis in the rat. Fife SK, et al. **Neuroendocrinology** 1996 Aug;64(2):131–8

Differential effects of gonadotropin-releasing hormone, dopamine and somatostatin and their second messengers on the mRNA levels of gonadotropin II beta subunit and growth hormone in the teleost fish, tilapia. Melamed P, et al. **Neuroendocrinology** 1996 Oct;64(4):320–8

Effects of neonatal administration of octreotide, a long-lasting somatostatin analogue, on growth hormone regulation in the adult rat. Slama A, et al. **Neuroendocrinology** 1996 Feb;63(2):173–80

Hexarelin stimulation of growth hormone release and mRNA levels in an infant and adult rat model of impaired GHRH function. Torsello A, et al. **Neuroendocrinology** 1997 Feb; 65(2):91–7

Effect of intravenous or intracerebroventricular injections of His-D-Trp-Ala-Trp-D-Phe-Lys-NH2 on GH release in conscious, freely moving male rats. Yagi H, et al. **Neuroendocrinology** 1996 Feb;63(2):198–206

Overnight growth hormone secretion in achondroplasia: deconvolution analysis, correlation with sleep state, and changes after treatment of obstructive sleep apnea. Waters KA, et al. **Pediatr Res** 1996 Mar;39(3):547–53

Long-term antidepressant treatment restores clonidine's effect on growth hormone secretion in a genetic animal model of depression. Aulakh CS, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):265–8

Purification and characterization of recombinant mouse growth hormone binding protein produced in the baculovirus expression system. Thordarson G, et al. **Protein Expr Purif** 1996 Feb;7(1):74–80

Growth hormone response to baclofen: a comparison of 10-mg and 20-mg doses in healthy men. Davis LL, et al. **Psychiatry Res** 1996 Feb 28;60(1):41–7

Growth hormone response to clonidine and the cortisol response to dexamethasone in depressive patients. Valdivieso S, et al. **Psychiatry Res** 1996 Feb 28;60(1):23–32

Hexarelin, a novel GHRP-6 analog, stimulates growth hormone (GH) release in a GH-secreting rat cell line (GH1) insensitive to GH-releasing hormone. Giustina A, et al. **Regul Pept** 1997 May 14;70(1):49–54

[Growth hormone, IGF and bone metabolism in adults] Bonjour JP, et al. **Ann Endocrinol (Paris)** 1996;57(3):147–9 (36 ref.) **(Fre)**

[Effect of superior cervical sympathetic ganglionectomy on FSH, LH and GH cells of hypophyseal gland in female rats: a quantitative immunohistochemical study] Tan Y, et al. **Masui** 1996 Oct;45(10):1223–34 (Eng. Abstr.) **(Jpn)**

[Heart disease in acromegaly. Study of 27 patients] Marín F, et al. **Med Clin (Barc)** 1996 Sep 21;107(9):326–30 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Bioavailability and bioactivity of intravenous vs subcutaneous infusion of growth hormone in GH-deficient patients. Laursen T, et al. **Clin Endocrinol (Oxf)** 1996 Sep; 45(3):333–9

Inhibition of GH release of rats by new potent antagonists of growth hormone-releasing hormone (GH-RH). Kovács M, et al. **Peptides** 1997;18(3):431–8

PHARMACOLOGY

Interaction between insulin-like growth factor I, growth hormone, parathyroid hormone, 1 alpha,25-dihydroxyvitamin D3 and steroids on epiphyseal chondrocytes [see comments] Klaus G, et al. **Acta Paediatr Suppl** 1996 Oct;417:69–71 (28 ref.). Comment in: Acta Paediatr Suppl 1996 Oct;417 :80.

Renal calcitriol synthesis and serum phosphorus in response to dietary phosphorus restriction and anabolic agents. Grieff M, et al. **Am J Kidney Dis** 1996 Oct;28(4):589–95

Effects of pulsatile delivery of basal growth hormone on lipolysis in humans. Cersosimo E, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E123–6

Growth hormone regulates cytosolic free calcium in rat fat cells by maintaining L-type calcium channels. Gaur S, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1478–84

Growth hormone increases calcium uptake in rat fat cells by a mechanism dependent on protein kinase C. Gaur S, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1485–92

The somatotropic axis in neonatal calves can be modulated by nutrition, growth hormone, and Long-R3-IGF-I. Hammon H, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E130–8

Cortical bone growth and maturational changes in dwarf rats induced by recombinant human growth hormone. Martinez DA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):E51–9

Effects of growth hormone and IGF-I on glucocorticoid-induced protein catabolism in humans. Oehri M, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):E552–8

GH replacement fails to improve ventricular function in hypophysectomized rats with myocardial infarction. Shen YT, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):H1721–7

Growth hormone–induced insulin resistance: role of the insulin receptor, IRS-1, GLUT-1, and GLUT-4. Smith TR, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E1071–9

Growth hormone–induced nuclear translocation of Stat-3 decreases with age: modulation by caloric restriction. Xu X, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E903–9

Effect of growth hormone or chromium picolinate on swine metabolism and inflammatory cytokine production after endotoxin challenge exposure. Myers MJ, et al. **Am J Vet Res** 1997 Jun;58(6):594–600

Metabolic and histologic effects of recombinant canine somatotropin on bone healing in dogs, using an unstable ostectomy gap model. Wilkens BE, et al. **Am J Vet Res** 1996 Sep;57(9):1395–401

Lack of effects of growth hormone administration on ovarian function of lactating goats. Driancourt MA, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):123–32

Direct action of growth hormone on bovine ovarian cells: effects on estradiol, oxytocin, vasopressin release by granulosa cells and on oocyte maturation and cleavage in vitro. Sirotkin AV. **Ann Endocrinol (Paris)** 1996; 57(3):219–24

Growth hormone–responsive DT-diaphorase–mediated bioreduction of tetrazolium salts. Goodwin CJ, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):935–41

Regulation of renal vitamin D-24-hydroxylase by phosphate: effects of hypophysectomy, growth hormone and insulin-like growth factor I. Wu S, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):813–7

Growth hormone and phorbol esters require specific protein kinase C isoforms to activate mitogen-activated protein kinases in 3T3-F442A cells. MacKenzie S, et al. **Biochem J** 1997 May 15;324 (Pt 1):159–65

Molecular cloning and growth hormone-regulated gene expression of carp insulin-like growth factor-I. Hashimoto H, et al. **Biochem Mol Biol Int** 1997 Apr;41(5):877–86

Growth hormone and insulin-like growth factor-I do not activate identical genes in normal human osteoblasts. Melhus H, et al. **Biochem Mol Biol Int** 1996 Feb; 38(2):425–28

Effect of plane of nutrition and growth hormone treatment on insulin receptor gene expression and kinase activity of sheep muscle and adipose tissue. Wilson LA, et al. **Biochem Soc Trans** 1996 May;24(2):222S

Effects of growth hormone and pregnancy on expression of growth hormone receptor, insulin-like growth factor-I, and insulin-like growth factor binding protein-2 and -3 genes in bovine uterus, ovary, and oviduct. Kirby CJ, et al. **Biol Reprod** 1996 Nov;55(5):996–1002

Growth hormone is not able to counteract osteopenia of rat cortical bone induced by glucocorticoid with protracted effect. Ortoft G, et al. **Bone** 1995 Dec;17(6):543–48

Effects of chronic growth hormone treatment in aged rats on the biophysical and pharmacological properties of skeletal muscle chloride channels. De Luca A, et al. **Br J Pharmacol** 1997 Jun;121(3):369–74

Involvement of intracellular Ca2+ during growth hormone-induced priming of human neutrophils. Ryu H, et al. **Brain Behav Immun** 1997 Mar;11(1):39–46

Comparison of in vitro response to growth hormone by chondrocytes from mandibular condyle cartilage of young and old mice. Livne E, et al. **Calcif Tissue Int** 1997 Jul; 61(1):62–7

Effect of exogenous growth hormone on in vitro proliferation of thymic lymphocytes from the hypophysectomized rats. Fukushima R, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jun;43(4):567–79

Exogenously administered growth hormone and insulin-like growth factor-I alter intracellular Ca2+ handling and enhance cardiac performance. In vitro evaluation in the isolated isovolumic buffer-perfused rat heart. Strömer H, et al. **Circ Res** 1996 Aug;79(2):227–36

Cardiovascular effects of insulin-like growth factor-1 and growth hormone in chronic left ventricular failure in the rat. Duerr RL, et al. **Circulation** 1996 Jun 15;93(12):2188–96

Drinking in Atlantic salmon presmolts and smolts in response to growth hormone and salinity. Fuentes J, et al. **Comp Biochem Physiol A Physiol** 1997 Aug;117(4):487–91

Paradoxical increases of circulating nonesterified fatty acids in somatotropin treated cattle undergoing mild disturbances. Boisclair YR, et al. **Domest Anim Endocrinol** 1997 Jul;14(4):251–62

Growth hormone–binding protein in the goat: characterization, evolution under exogenous growth hormone treatment, and correlation with liver growth hormone receptor levels. Jammes H, et al. **Domest Anim Endocrinol** 1996 Nov;13(6):477–89

Enhancement of the insulin antagonistic effect of porcine somatotropin in swine using a monoclonal antibody. Kraft LA, et al. **Domest Anim Endocrinol** 1996 Nov;13(6):529–37

Suppression of somatotroph function induced by growth hormone treatment in neonatal pigs. Matteri RL, et al. **Domest Anim Endocrinol** 1997 Mar;14(2):109–18

Effects of growth hormone and insulin-like growth factor I on testosterone secretion in premature male rats. Ohyama K, et al. **Endocr J** 1995 Dec;42(6):817–20

Plasma concentrations of hormones and metabolic substrates in growing pigs after bovine growth hormone injections under various nutritional conditions. Ozawa A, et al. **Endocr J** 1996 Aug;43(4):357–62

Recombinant human growth hormone acts on intermediate-sized follicles and rescues growing follicles from atresia. Ozawa K, et al. **Endocr J** 1996 Feb;43(1):87–92

Growth hormone (GH) therapy markedly increases the motility of spermatozoa and the concentration of insulin-like growth factor-I in seminal vesicle fluid in the male GH-deficient dwarf rat. Breier BH, et al. **Endocrinology** 1996 Sep;137(9):4061–4

Growth hormone and prolactin stimulate the expression of rat preadipocyte factor-1/delta-like protein in pancreatic islets: molecular cloning and expression pattern during development and growth of the endocrine pancreas. Carlsson C, et al. **Endocrinology** 1997 Sep;138(9):3940–8

Growth hormone secretagogues stimulate the hypothalamic-pituitary-adrenal axis and are diabetogenic in the Zucker diabetic fatty rat. Clark RG, et al. **Endocrinology** 1997 Oct;138(10):4316–23

Human skin fibroblasts as a model of growth hormone (GH) action in GH receptor-positive Laron's syndrome. Freeth JS, et al. **Endocrinology** 1997 Jan;138(1):55–61

Growth hormone–induced reorganization of the actin cytoskeleton is not required for STAT5 (signal transducer and activator of transcription-5)-mediated transcription. Goh EL, et al. **Endocrinology** 1997 Aug;138(8):3207–15

The effect of hypophysectomy and growth hormone replacement on sst1 and sst2 somatostatin receptor subtype messenger ribonucleic acids in the arcuate nucleus. Guo F, et al. **Endocrinology** 1996 Sep;137(9):3928–35

Growth hormone modulates insulin regulation of hepatic insulin-like growth factor binding protein-1 transcription. Hu M, et al. **Endocrinology** 1996 Sep;137(9):3702–9

Contrasting effects of growth hormone and insulin-like growth factor I on the biological activities of endotoxin in the rat. Liao W, et al. **Endocrinology** 1997 Jan; 138(1):289–95

Basal and growth hormone–induced hepatic messenger ribonucleic acid expression of insulin-like growth factor-I (IGF-I) and IGF-binding protein-3 is independent of hyperinsulinemia and increased energy status in the genetically obese Zucker rat. Melián E, et al.

Endocrinology 1997 Mar;138(3):1066–71
Growth hormone stimulates the proliferation of activated mouse T lymphocytes. Postel-Vinay MC, et al. **Endocrinology** 1997 May;138(5):1816–20
Growth hormone–induced tyrosyl phosphorylation and deoxyribonucleic acid binding activity of Stat5A and Stat5B. Smit LS, et al. **Endocrinology** 1997 Aug; 138(8):3426–34
Inhibition by interleukin–1 beta and tumor necrosis factor–alpha of the insulin–like growth factor I messenger ribonucleic acid response to growth hormone in rat hepatocyte primary culture. Thissen JP, et al. **Endocrinology** 1997 Mar;138(3):1078–84
Growth hormone regulates AT–1a angiotensin receptors in astrocytes. Wyse B, et al. **Endocrinology** 1997 Oct; 138(10):4176–80
Growth hormone release of interleukin–1 alpha, interferon–gamma and interleukin–4 from murine splenocytes stimulated with staphylococcal protein A, toxic shock syndrome toxin–1 and streptococcal lysin S. Galdiero M, et al. **Eur Cytokine Netw** 1997 Mar;8(1):83–90
Growth hormone potentiates the in vivo biological activities of endotoxin in the rat. Liao W, et al. **Eur J Clin Invest** 1996 Mar;26(3):254–8
Growth hormone increases and insulin–like growth factor–I decreases circulating lipoprotein(a). Laron Z, et al. **Eur J Endocrinol** 1997 Apr;136(4):377–81
Growth hormone increases serum 1,25–dihydroxyvitamin D levels and decreases 24,25–dihydroxyvitamin D levels in children with growth hormone deficiency [see comments] Wei S, et al. **Eur J Endocrinol** 1997 Jan;136(1):45–51. Comment in: Eur J Endocrinol 1997 Jan;136(1):30–2.
Growth hormone does not affect non–insulin–mediated glucose uptake in sheep. Rose MT, et al. **Exp Physiol** 1997 Jul;82(4):749–60
Growth hormone inhibits the hypophysectomy–induced expression of galanin in hypothalamic neurons of the toad (Bufo arenarum hensel). González Nicolini MV, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):323–32
Potentiating effect of growth hormone on vitellogenin synthesis induced by 17 beta–estradiol in primary culture of female silver eel (Anguilla anguilla L.) hepatocytes. Peyon P, et al. **Gen Comp Endocrinol** 1996 May; 102(2):263–73
Differential effects of maternal ovine placental lactogen and growth hormone (GH) administration on GH receptor, insulin–like growth factor (IGF)–1 and IGF binding protein–3 gene expression in the pregnant and fetal sheep. Currie MJ, et al. **Growth Regul** 1996 Sep;6(3):123–9
Growth hormone (GH)–binding proteins in GH–resistant guinea pigs. Hull KL, et al. **Growth Regul** 1996 Sep; 6(3):165–75
Growth–promoting effects of ovine placental lactogen (oPL) in young lambs: comparison with bovine growth hormone provides evidence for a distinct effect of oPL on food intake. Min SH, et al. **Growth Regul** 1996 Sep;6(3):144–51
Clinical applications of growth hormone for ovarian stimulation. Homburg R, et al. **Hum Reprod Update** 1995 May;1(3):264–75 (42 ref.)
Bovine mammary explant versus primary cell cultures: effect of bovine somatotropin and insulin–like growth factor–I on DNA content and protein synthesis. Keys JE, et al. **In Vitro Cell Dev Biol Anim** 1997 Mar;33(3):206–11
Proliferation and differentiation of progeny of ovine unilocular fat cells (adipofibroblasts). Vierck JL, et al. **In Vitro Cell Dev Biol Anim** 1996 Oct;32(9):564–72
Beneficial effects of chromium on glucose and lipid variables in control and somatotropin–treated pigs are associated with increased tissue chromium and altered tissue copper, iron, and zinc. Anderson RA, et al. **J Anim Sci** 1997 Mar; 75(3):657–61
Effects of growth hormone administration and dietary protein intake on insulin–like growth factor I and growth hormone receptor mRNA Expression in porcine liver, skeletal muscle, and adipose tissue. Brameld JM, et al. **J Anim Sci** 1996 Aug;74(8):1832–41
The effect of abomasal infusion of casein and recombinant somatotropin hormone injection on nitrogen balance and amino acid fluxes in portal–drained viscera and net hepatic and total splanchnic blood in Holstein steers. Bruckental I, et al. **J Anim Sci** 1997 Apr;75(4):1119–29
Growth, reproductive performance, mammary development, and milk production of beef heifers as influenced by prepubertal dietary energy and administration of bovine somatotropin. Buskirk DD, et al. **J Anim Sci** 1996 Nov; 74(11):2649–62
Effects of bovine somatotropin treatment and intermittent growth pattern on mammary gland development in heifers. Carstens GE, et al. **J Anim Sci** 1997 Sep;75(9):2378–88
Hormonal regulation of insulin–like growth factor binding proteins and insulin–like growth factor I (IGF–I) secretion in porcine stromal–vascular cultures. Chen NX, et al. **J Anim Sci** 1996 Oct;74(10):2369–75
Effects of an endotoxin challenge on growth performance, carcass accretion rates, and serum hormone and metabolite concentrations in control pigs and those treated with recombinant porcine somatotropin. Evock–Clover CM, et al. **J Anim Sci** 1997 Jul;75(7):1784–90
Effects of somatotropin and salbutamol in three genotypes of finishing barrows: growth, carcass, and calorimeter criteria. Hansen JA, et al. **J Anim Sci** 1997 Jul; 75(7):1798–809
Effects of somatotropin and salbutamol in three genotypes of finishing barrows: blood hormones and metabolites and muscle characteristics. Hansen JA, et al. **J Anim Sci** 1997 Jul;75(7):1810–21
Feed intake, body weight, body condition score, musculation, and immunocompetence in aged mares given equine somatotropin. Malinowski K, et al. **J Anim Sci** 1997 Mar; 75(3):755–60
Effects of Synovex–S and recombinant bovine growth hormone (Somavubove) on growth responses of steers: II. Muscle morphology and proximate composition of muscles. Ono Y, et al. **J Anim Sci** 1996 Dec;74(12):2929–34
Effects of Synovex–S and recombinant bovine growth hormone (Somavubove) on growth responses of steers: I. Performance and composition of gain. Rumsey TS, et al. **J Anim Sci** 1996 Dec;74(12):2917–28
Thymic, gonadal, and endocrine relationships in gilts and boars administered porcine somatotropin. Wise T, et al. **J Anim Sci** 1996 Dec;74(12):2992–3000
Effects of porcine somatotropin on circulating testosterone concentrations in boars and mechanism of action. Wise T, et al. **J Anim Sci** 1996 Dec;74(12):3001–11
Effect of energy balance and somatotropin on insulin–like growth factor I in serum and on weight and progesterone of corpus luteum in heifers. Yung MC, et al. **J Anim Sci** 1996 Sep;74(9):2239–44
IGF–I, growth hormone, and/or exercise effects on non–weight–bearing soleus of hypophysectomized rats. Roy RR, et al. **J Appl Physiol** 1996 Jul;81(1):302–11
Mapping of a cytoplasmic domain of the human growth hormone receptor that regulates rates of inactivation of Jak2 and Stat proteins. Hackett RH, et al. **J Biol Chem** 1997 Apr 25;272(17):11128–32
Interaction of growth hormone–activated STATs with SH2–containing phosphotyrosine phosphatase SHP–1 and nuclear JAK2 tyrosine kinase. Ram PA, et al. **J Biol Chem** 1997 Jul 11;272(28):17694–702
Kinetics of insulin–like growth factor (IGF) and IGF–binding protein responses to a single dose of growth hormone. Lee PD, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2266–74
Recombinant human insulin–like growth factor I, recombinant human growth hormone, and sex steroids: effects on markers of bone turnover in humans. Mauras N, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2222–6
Growth hormone increases interleukin–6 produced by human osteoblast–like cells. Swolin D, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4329–33
Modification of feed intake response to a beta 2–agonist by bovine somatotropin in lactating or dry dairy cows. Bareille N, et al. **J Dairy Sci** 1997 Jan;80(1):52–66
Effect of exogenous somatotropin on hematological variables of lactating cows and their offspring. Eppard PJ, et al. **J Dairy Sci** 1997 Aug;80(8):1582–91
Effect of slow–release somatotropin on the pattern of milk yield between and within injection intervals. Gallo L, et al. **J Dairy Sci** 1997 Jan;80(1):46–51
Effect of somatotropin and insulin–like growth factor–I on milk lipid and protein synthesis in vitro. Keys JE, et al. **J Dairy Sci** 1997 Jan;80(1):37–45
Follicular function in lactating dairy cows treated with sustained–release bovine somatotropin. Kirby CJ, et al. **J Dairy Sci** 1997 Feb;80(2):273–85
Response of dairy cows treated with bovine somatotropin to a luteolytic dose of prostaglandin F2 alpha. Kirby CJ, et al. **J Dairy Sci** 1997 Feb;80(2):286–94
Effects on nutrient and hormonal profile of long–term infusions of glucose or insulin plus glucose in cows treated with recombinant bovine somatotropin before peak milk yield. Léonard M, et al. **J Dairy Sci** 1997 Jan;80(1):127–43
Comparative effects of recombinant ovine placental lactogen and bovine growth hormone on galactopoiesis in ewes. Min SH, et al. **J Dairy Sci** 1997 Apr;80(4):640–5
The effect of bovine somatotropin and diet on somatotropin binding sites in hepatic tissue of lactating dairy cows. Newbold JA, et al. **J Dairy Sci** 1997 Jun;80(6):1085–91
Use of bovine somatotropin in the tropics: the effect of sometribove on milk production in western, eastern, and southern Africa. Phipps RH, et al. **J Dairy Sci** 1997 Mar; 80(3):504–10
Interaction among bovine somatotropin, insulin, and gonadotropins on steroid production by bovine granulosa and thecal cells. Spicer LJ, et al. **J Dairy Sci** 1996 May; 79(5):813–21
The empirical impact of bovine somatotropin on New York dairy farms. Tauer LW, et al. **J Dairy Sci** 1997 Jun; 80(6):1092–7
Regulation of the gene expression of glucose transporter in liver and kidney of lactating cows by bovine growth hormone and bovine growth hormone–releasing factor. Zhao FQ, et al. **J Dairy Sci** 1996 Sep;79(9):1537–42
Regulation of lipolysis by somatotropin: functional alteration of adrenergic and adenosine signaling in bovine adipose tissue. Houseknecht KL, et al. **J Endocrinol** 1997 Mar; 152(3):465–75
Microinjection of rat GH but not human IGF–I into a defined area of the hypothalamus inhibits endogenous GH secretion in rats. Minami S, et al. **J Endocrinol** 1997 May; 153(2):283–90
Effects of growth hormone on cholesterol metabolism in the lactating rat mammary gland. Shand JH, et al. **J Endocrinol** 1997 Mar;152(3):447–54
Growth hormone as an amplifier of insulin–like growth factor–I action: potentiated oestradiol accumulation. Xu YP, et al. **J Endocrinol** 1997 Feb;152(2):201–9
Differential effect of insulin–like growth factor–1 and growth hormone on hypothalamic regulation of growth hormone secretion in the rat. Gil Ad I, et al. **J Endocrinol Invest** 1996 Sep;19(8):542–7
Effects of short–term insulin–like growth factor–I or growth hormone treatment on bone turnover, renal phosphate reabsorption and 1,25 dihydroxyvitamin D3 production in healthy man. Bianda T, et al. **J Intern Med** 1997 Feb; 241(2):143–50
Stimulation of sulfate and thymidine incorporation into hypophysectomized rat cartilage by growth hormone and insulin–like growth factor–I in vitro: the somatomedin hypothesis revisited [see comments] [published erratum appears in J Lab Clin Med 1997 Jul;130(1):4] Salmon WD Jr, et al. **J Lab Clin Med** 1997 Apr;129(4):430–8. Comment in: J Lab Clin Med 1997 Apr;129(4):398–9.
Cortical elasticity in aging rats with and without growth hormone treatments. Kohles SS, et al. **J Med Eng Technol** 1996 Jul–Oct;20(4–5):157–63
Growth hormone, insulin–like growth factor I, and motoneuron size. Chen L, et al. **J Neurobiol** 1997 Feb; 32(2):202–12
Pituitary hormones modulate cell–cell interactions between thymocytes and thymic epithelial cells. de Mello–Coelho V, et al. **J Neuroimmunol** 1997 Jun;76(1–2):39–49
Porcine somatotrophin differentially down–regulates expression of the GLUT4 and fatty acid synthase genes in pig adipose tissue. Donkin SS, et al. **J Nutr** 1996 Oct; 126(10):2568–77
Growth hormone and glutamine do not stimulate intestinal adaptation following massive small bowel resection in the rat. Vanderhoof JA, et al. **J Pediatr Gastroenterol Nutr** 1997 Sep;25(3):327–31
Distinct regulation of two hydroxysteroid sulfotransferases, ST2A1 and ST2A2, by growth hormone: a unique type of growth hormone regulation in rats. Ueda R, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):1117–21
Influence of growth hormone on the uterine response to oestradiol in rats. Gunin AG. **J Reprod Fertil** 1997 Jul; 110(2):299–306
Effects of luteotrophic and luteolytic hormones on expression of mRNA encoding insulin–like growth factor I and growth hormone receptor in the ovine corpus luteum. Juengel JL, et al. **J Reprod Fertil** 1997 Jul;110(2):291–8
The cDNA sequence of porcine vitronectin and its expression in liver and skeletal muscle of GH–supplemented pigs. Hanazono M, et al. **J Vet Med Sci** 1996 Oct;58(10):989–94
Insulin–like growth factor 1 has beneficial effects, whereas growth hormone has limited effects on postoperative protein metabolism, gut integrity, and splenic weight in rats with chronic mild liver injury. Inaba T, et al. **JPEN J Parenter Enteral Nutr** 1997 Mar–Apr;21(2):55–62
Response of the intrarenal insulin–like growth factor–I axis to acute ischemic injury and treatment with growth hormone and epidermal growth factor. Fervenza FC, et al. **Kidney Int** 1996 Feb;49(2):344–54
End–organ resistance to growth hormone and IGF–I in epiphyseal chondrocytes of rats with chronic renal failure. Mak RH, et al. **Kidney Int** 1996 Aug;50(2):400–6
Influence of growth hormone on cysteamine–induced gastro–duodenal lesions in rats: the involvement of somatostatin. Drago F, et al. **Life Sci** 1997;61(1):21–8
Sex–specific effects of growth hormone on hepatic 11beta–hydroxysteroid dehydrogenase activity and gene expression in hypothyroid rats. Liu YJ, et al. **Life Sci** 1997; 61(3):325–34
Hyaluronan synthesis by epiphysial chondrocytes is regulated by growth hormone, insulin–like growth factor–1, parathyroid hormone and transforming growth factor–beta 1. Pavasant P, et al. **Matrix Biol** 1996 Dec;15(6):423–32
Growth hormone modulates amino acid oxidation in the surgical patient: leucine kinetics during the fasted and fed state using moderate nitrogenous and caloric diet and recombinant human growth hormone. Carli F, et al. **Metabolism** 1997 Jan;46(1):23–8
The effect of growth hormone on low–density lipoprotein cholesterol and lipoprotein (a) levels in familial hypercholesterolemia. Tonstad S, et al. **Metabolism** 1996 Nov;45(11):1415–21
Effects of growth hormone on serum lipids and lipoproteins: possible significance of increased peripheral conversion of thyroxine to triiodothyronine. Wolthers T, et al. **Metabolism** 1996 Aug;45(8):1016–20
Growth hormone stimulates androsterone synthesis by rat theca–interstitial cells. Apa R, et al. **Mol Cell Endocrinol** 1996 Apr 19;118(1–2):95–101
Involvement of both calcium influx and calcium mobilization in growth hormone–induced [Ca2+]i increases in Chinese hamster ovary cells. Boquet G, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):109–20
Selective modification at the N–terminal region of human growth hormone that shows antagonistic activity. Tchelet A, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1–2):141–52
Regulation of interleukin (IL)–1alpha, IL–1beta, and IL–6 expression by growth hormone and prolactin in bovine thymic stromal cells. Tseng YH, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):117–27
CYP2C7 expression in rat liver and hepatocytes: regulation by retinoids. Westin S, et al. **Mol Cell Endocrinol** 1997 May

16;129(2):169–79
Growth hormone increases IGF-I, collagen I and collagen III gene expression in dwarf rat skeletal muscle. Wilson VJ, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):187–97
Identification of a growth hormone–responsive STAT5-binding element in the rat insulin 1 gene. Galsgaard ED, et al. **Mol Endocrinol** 1996 Jun;10(6):652–60
Phosphoinositide 3–kinase is required for insulin–induced but not for growth hormone– or hyperosmolarity–induced glucose uptake in 3T3–L1 adipocytes. Sakaue H, et al. **Mol Endocrinol** 1997 Sep;11(10):1552–62
Stimulatory effect of growth hormone on in vitro maturation of bovine oocytes is exerted through cumulus cells and not mediated by IGF–I. Izadyar F, et al. **Mol Reprod Dev** 1997 Jun;47(2):175–80
In vitro maturation of bovine oocytes in the presence of growth hormone accelerates nuclear maturation and promotes subsequent embryonic development. Izadyar F, et al. **Mol Reprod Dev** 1996 Nov;45(3):372–7
Growth hormone treatment of hypophysectomized rats increases catecholamine–induced lipolysis and the number of beta–adrenergic receptors in adipocytes: no differences in the effects of growth hormone on different fat depots. Yang S, et al. **Obes Res** 1996 Sep;4(5):471–8
Effect of recombinant growth hormone and chromium picolinate on cytokine production and growth performance in swine. Myers MJ, et al. **Pathobiology** 1995;63(5):283–7
Somatotropic actions of the homologous growth hormone and prolactins in the euryhaline teleost, the tilapia, Oreochromis mossambicus. Shepherd BS, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):2068–72
Effect of chronic administration of a new potent agonist of GH–RH(1–29)NH2 on linear growth and GH responsiveness in rats. Pinski J, et al. **Regul Pept** 1996 Sep 16;65(3):197–201
Effects of bovine somatotrophin (bST) on ovarian function in post–partum beef cows. Andrade LP, et al. **Reprod Fertil Dev** 1996;8(6):951–60
Effects of somatostatin and somatotropin on the in vitro testicular steroidogenesis in hamster. Oh SS, et al. **Rev Esp Fisiol** 1995 Dec;51(4):187–92
Body fluids, circadian blood pressure and plasma renin during growth hormone administration: a placebo–controlled study with two growth hormone doses in healthy adults. Moller J, et al. **Scand J Clin Lab Invest** 1995 Dec; 55(8):663–9
Growth hormone and insulin–like growth factor I augment Escherichia coli–killing activity of murine peritoneal exudative cells. Inoue T, et al. **Shock** 1996 Nov;6(5):345–50
Effects of exogenous growth hormone on skeletal muscle of young female rats. Aroniadou–Anderjaska V, et al. **Tissue Cell** 1996 Dec;28(6):719–24
Mitogenic effect of growth hormone and prolactin on chum salmon Oncorhynchus keta leukocytes in vitro. Sakai M, et al. **Vet Immunol Immunopathol** 1996 Sep;53(1–2):185–9
Immunostimulating effect of growth hormone: in–vivo administration of growth hormone in rainbow trout enhances resistance to Vibrio anguillarum infection. Sakai M, et al. **Vet Immunol Immunopathol** 1997 Jun; 57(1–2):147–52

PHYSIOLOGY

Effects of growth hormone on neuroendocrine function. Bartke A, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(3):833–42 (66 ref.)
Modifications of growth hormone secretion during female puberty. Toublanc JE. **Ann N Y Acad Sci** 1997 Jun 17; 816:60–75 (73 ref.)
Differential effect of hypophysectomy and growth hormone treatment on hepatic glucuronosyltransferases in male rats: evidence for an action at a pretranslational level for isoforms glucuronidating bilirubin. Gueraud F, et al. **Biochem Pharmacol** 1997 Jun 1;53(11):1637–47
Involvement of growth hormone as a regulating factor in sex differences of mouse hepatic aldehyde oxidase. Yoshihara S, et al. **Biochem Pharmacol** 1997 Apr 25; 53(8):1099–105
Growth hormone and the maintenance of adult bone mineral density. Inzucchi SE, et al. **Clin Endocrinol (Oxf)** 1996 Dec; 45(6):665–73 (80 ref.)
Up and down the growth hormone cascade. Clark RG, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):65–80 (128 ref.)
Suppression of somatotroph function induced by growth hormone treatment in neonatal pigs. Matteri RL, et al. **Domest Anim Endocrinol** 1997 Mar;14(2):109–18
Growth hormone and the insulin–like growth factor system in myogenesis. Florini JR, et al. **Endocr Rev** 1996 Oct; 17(5):481–517 (465 ref.)
Growth without a pituitary?—Lessons from the guinea pig [editorial; comment] Baumann G. **Endocrinology** 1997 Sep; 138(9):3575–6. Comment on: Endocrinology 1997 Sep;138(9):3577–86.
The role of growth hormone in fetal mouse reproductive tract differentiation. Nguyen AP, et al. **Endocrinology** 1996 Sep;137(9):3659–66
Stimulatory effect of human, but not bovine, growth hormone expression on numbers of tuberoinfundibular dopaminergic neurons in transgenic mice. Phelps CJ, et al. **Endocrinology** 1997 Jul;138(7):2849–55
Growth hormone and heart performance. A novel mechanism of cardiac wall stress regulation in humans [see comments] Fazio S, et al. **Eur Heart J** 1997 Feb;18(2):340–7 . Comment in: Eur Heart J 1997 Feb;18(2):181–4.
Growth hormone, insulin–like growth factors and bone remodelling. Eriksen EF, et al. **Eur J Clin Invest** 1996 Jul; 26(7):525–34 (90 ref.)
Thermal regulatory dysfunction of growth hormone in classical heat stroke. Alzeer A, et al. **Eur J Endocrinol** 1996 Jun;134(6):727–30
Another view of GH neuroregulation: lessons from the sheep. Dutour A, et al. **Eur J Endocrinol** 1997 Jun;136(6):553–65 (133 ref.)
The yin and the yang of the IGF system: immunological manifestations of GH resistance [comment] Le Roith D, et al. **Eur J Endocrinol** 1997 Jan;136(1):33–4. Comment on: Eur J Endocrinol 1997 Jan;136(1):92–5.
GH and bone metabolism: the role of the vitamin D system [comment] Pfeilschifter J. **Eur J Endocrinol** 1997 Jan; 136(1):30–2. Comment on: Eur J Endocrinol 1997 Jan;136(1):45–51.
Osmoregulatory actions of growth hormone and prolactin in an advanced teleost. Sakamoto T, et al. **Gen Comp Endocrinol** 1997 Apr;106(1):95–101
The growth hormone axis: control and effects. Argente J, et al. **Horm Res** 1996;45 Suppl 1:9–11 (10 ref.)
Growth hormone signalling mechanisms: involvement of the tyrosine kinase JAK2. Argetsinger LS, et al. **Horm Res** 1996;45 Suppl 1:22–4 (19 ref.)
Role of NPY neurones in GH–dependent feedback signalling to the brain. Chan YY, et al. **Horm Res** 1996;45 Suppl 1:12–4 (10 ref.)
Evidence for a mammogenic role of growth hormone in ewes: effects of growth hormone–releasing factor during artificial induction of lactation. Kann G. **J Anim Sci** 1997 Sep;75(9):2541–9
Anabolic influences of insulin–like growth factor I and/or growth hormone on the diaphragm of young rats. Lewis MI, et al. **J Appl Physiol** 1997 Jun;82(6):1972–8
The role of hypertrophy and growth factors in heart failure. Ross J Jr, et al. **J Card Fail** 1996 Dec;2(4 Suppl):S121–8
Clinical review 89: Small as fetus and short as child: from endogenous to exogenous growth hormone. de Zegher F, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2021–6
Growth hormone and bile acid synthesis. Key role for the activity of hepatic microsomal cholesterol 7alpha–hydroxylase in the rat. Rudling M, et al. **J Clin Invest** 1997 May 1;99(9):2239–45
Cardiovascular effects of GH. Bengtsson BA, et al. **J Endocrinol** 1997 Jan;152(1):1–3
Repartitioning of maternal muscle protein towards the foetus induced by a polyclonal antiserum to rat GH. Palmer RM, et al. **J Endocrinol** 1996 Dec;151(3):395–400
Concentration of free growth hormone–binding protein in the serum of mice is not regulated by growth hormone. Sotelo AI, et al. **J Endocrinol** 1997 May;153(2):319–25
Papers presented at International Novo Nordisk Symposium on Growth. Santiago de Compostela, Spain, October 1995. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:233–374
Human aging and the GH–IGF–I axis. Ghigo E, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:271–8 (74 ref.)
Unwanted effects of growth hormone excess in the adult. Melmed S. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:369–74 (31 ref.)
G(o)–2 protein mediates the reduction in Ca2+ currents by somatostatin in cultured ovine somatotrophs. Chen C, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):21–9
Growth hormone and insulin–like growth factor in non–uremic acidosis and uremic acidosis. Kuemmerle N, et al. **Kidney Int Suppl** 1997 Mar;58:S102–5 (39 ref.)
Mechanisms underlying the negative growth hormone (GH) autofeedback on the GH–releasing effect of hexarelin in man. Arvat E, et al. **Metabolism** 1997 Jan;46(1):83–8
Somatostatin, growth hormone, insulin–like growth factor–1, and diabetes: friends or foes? Orskov H. **Metabolism** 1996 Aug;45(8 Suppl 1):91–5 (67 ref.)
Specific inhibition of the cGMP–inhibited cAMP phosphodiesterase blocks the insulin–like antilipolytic effect of growth hormone in rat adipocytes. Eriksson H, et al. **Mol Cell Biochem** 1997 Apr;169(1–2):37–42
Growth hormone down–regulates growth hormone receptor mRNA in chickens but developmental increases in growth hormone receptor mRNA occur independently of growth hormone action. Mao JN, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):135–43
Antiserum to growth hormone decreases sleep in the rat. Obál F Jr, et al. **Neuroendocrinology** 1997 Jul;66(1):9–16
Control of the thymic microenvironment by growth hormone/insulin–like growth factor–I–mediated circuits. Savino W, et al. **Neuroimmunomodulation** 1995 Nov–Dec; 2(6):313–8 (38 ref.)
Growth hormone insensitivity. Rosenbloom AL, et al. **Pediatr Clin North Am** 1997 Apr;44(2):423–42 (65 ref.)
Regulation of postnatal intestinal maturation by growth hormone: studies in rats with isolated growth hormone deficiency. Durant M, et al. **Pediatr Res** 1996 Jul; 40(1):88–93
Stimulation of kinase cascades by growth hormone: a paradigm for cytokine signaling. Wood TJ, et al. **Prog Nucleic Acid Res Mol Biol** 1997;57:73–94 (107 ref.)
Aspects of the neuroendocrine control of somatotropic function in calorically restricted dogs and patients with eating disorders: studies with cholinergic drugs. Müller EE, et al. **Psychiatry Res** 1996 Apr 16;62(1):51–63
Essential role of growth hormone in ischemia–induced retinal neovascularization. Smith LE, et al. **Science** 1997 Jun 13; 276(5319):1706–9
Physiological regulation of the human growth hormone (GH)–insulin–like growth factor type I (IGF–I) axis: predominant impact of age, obesity, gonadal function, and sleep. Veldhuis JD, et al. **Sleep** 1996 Dec;19(10 Suppl):S221–4 (17 ref.)
[Growth hormone: effect on bone metabolism and bone density] Kann P, et al. **Med Klin** 1996 Feb 15;91 Suppl 1:46–9 **(Ger)**
[The dynamics of the somatotropin content in the follicular fluid during maturation and atresia of the antral follicles in bovine ovaries] Lebedeva IIu, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct–Nov;82(10–11):91–7 (Eng. Abstr.) **(Rus)**

SECRETION

A case of pituitary somatotroph adenoma with concomitant secretion of growth hormone, prolactin, and adrenocorticotropic hormone—an adenoma derived from primordial stem cell, studied by immunohistochemistry, in situ hybridization, and cell culture. Matsuno A, et al. **Acta Neurochir (Wien)** 1996;138(8):1002–7
Reduced growth hormone secretion improves insulin sensitivity in adolescent girls with type 1 diabetes. Aman J, et al. **Acta Paediatr** 1996 Jan;85(1):31–7
Growth hormone neurosecretory dysfunction associated with ring chromosome 18. Aritaki S, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):544–8
Interaction between glucocorticoids and the somatotrophic axis [see comments] Tönshoff B, et al. **Acta Paediatr Suppl** 1996 Oct;417:72–5 (30 ref.). Comment in: Acta Paediatr Suppl 1996 Oct;417 :80.
Females secrete growth hormone with more process irregularity than males in both humans and rats. Pincus SM, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):E107–15
Endotoxin stimulates in vitro pituitary growth hormone release in eicosanoid–dependent manner. Coleman ES, et al. **Am J Vet Res** 1996 Nov;57(11):1662–7
Postoperative alpha 2–adrenergic stimulation attenuates protein catabolism: effects of clonidine on growth hormone secretion [letter; comment] De Kock M. **Anesth Analg** 1996 Nov;83(5):1134; discussion 1135. Comment on: Anesth Analg 1996 Feb;82(2):258–63.
Postoperative alpha 2–adrenergic stimulation attenuates protein catabolism: effects of clonidine on growth hormone secretion [letter; comment] Klis R, et al. **Anesth Analg** 1996 Nov;83(5):1135. Comment on: Anesth Analg 1996 Feb;82(2):258–63.
Modifications of growth hormone secretion during female puberty. Toublanc JE. **Ann N Y Acad Sci** 1997 Jun 17; 816:60–75 (73 ref.)
Defective growth hormone secretion in children with pycnodysostosis and improved linear growth after growth hormone treatment. Soliman AT, et al. **Arch Dis Child** 1996 Sep;75(3):242–4
Primary treatment of a combined somatotropin– and thyrotropin–secreting pituitary tumour with octreotide [letter] Walsh JP, et al. **Aust N Z J Med** 1996 Feb; 26(1):124–5
Giant growth–hormone secreting pituitary tumour with extracranial extension. Ip TP, et al. **Australas Radiol** 1996 Feb;40(1):88–90
GnRH signaling in goldfish pituitary cells. Chang JP, et al. **Biol Signals** 1996 Mar–Apr;5(2):70–80 (33 ref.)
Can provocative growth hormone testing predict the response to recombinant human growth hormone (rhGH) treatment? Greco M, et al. **Br J Clin Pract Symp Suppl** 1996 Aug;85:38–40
Results of the lateral rhinotomy approach in transsphenoidal microsurgery for growth hormone–secreting pituitary adenoma. Jakobsson KE, et al. **Br J Neurosurg** 1995; 9(6):763–8
Bilateral recurrent phaeochromocytoma associated with a growth hormone–secreting pituitary tumour. Teh BT, et al. **Br J Surg** 1996 Aug;83(8):1132
Compensatory growth of broiler chickens is associated with an enhanced pulsatile growth hormone (GH) secretion: preferential amplification of GH secretory burst mass. Buyse J, et al. **Br Poult Sci** 1997 Jul;38(3):291–6
The role of GRH mediated AC–cAMP system in the pathogenesis of human pituitary GH–secreting adenomas. Shi Y, et al. **Chin Med J (Engl)** 1996 Aug;109(8):603–8
Methionine potentiates both basal and GHRH–induced GH secretion in children. Bellone J, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):61–4
Different effects of growth hormone releasing peptide (GHRP–6) and GH–releasing hormone on GH release in endogenous and exogenous hypercortisolism. Borges MH, et al. **Clin Endocrinol (Oxf)** 1997 Jun;46(6):713–8
Growth deficiency in polytransfused beta–thalassaemia patients is not growth hormone dependent. Cavallo L, et al. **Clin Endocrinol (Oxf)** 1997 Jun;46(6):701–6
Intracellular calcium ion responses to somatostatin in cells from human somatotroph adenomas. Chen ZP, et al. **Clin Endocrinol (Oxf)** 1997 Jan;46(1):45–53
Acute administration of hexarelin stimulates GH secretion during day and night in normal men. Loche S, et al. **Clin Endocrinol (Oxf)** 1997 Mar;46(3):275–9
The sequential administration of growth hormone–releasing

hormone followed 120 minutes later by hexarelin, as an effective test to assess the pituitary GH reserve in man. Micic D, et al. **Clin Endocrinol (Oxf)** 1996 Nov; 45(5):543–51

Growth hormone response to GHRH, GHRP-6 and GHRH + GHRP-6 in patients with polycystic ovary syndrome. Micić D, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):385–90

Growth hormone responses to GH-releasing peptide (GHRP-6) in hypothyroidism. Pimentel-Filho FR, et al. **Clin Endocrinol (Oxf)** 1997 Mar;46(3):295–300

Absence of desensitization by hexarelin to subsequent GH releasing hormone–mediated GH secretion in patients with anorexia nervosa. Popovic V, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):539–43

The assessment of growth hormone status in normal young adult males using a variety of provocative agents. Rahim A, et al. **Clin Endocrinol (Oxf)** 1996 Nov;45(5):557–62

Non-parametric deconvolution provides an objective assessment of GH responsiveness to GH-releasing stimuli in normal subjects [see comments] Sartorio A, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):387–95. Comment in: Clin Endocrinol (Oxf) 1997 Apr;46(4):397–400.

Normal growth hormone secretion in growth hormone insufficient children retested after completion of linear growth. Wacharasindhu S, et al. **Clin Endocrinol (Oxf)** 1996 Nov;45(5):553–6

Growth, short stature, and the use of growth hormone: considerations for the practicing pediatrician--an update. Schwartz ID, et al. **Curr Probl Pediatr** 1997 Jan;27(1):14–40 (177 ref.)

Somatotroph function in the neonatal pig. Matteri RL, et al. **Domest Anim Endocrinol** 1997 Jul;14(4):241–9

Growth hormone release induced by an amino acid mixture from primary cultured anterior pituitary cells of goats. Ohata Y, et al. **Domest Anim Endocrinol** 1997 Mar; 14(2):99–107

Effects of growth hormone (GH)–releasing hormone and its analogs on GH secretion from cultured adenohypophysial cells in cattle. Soliman EB, et al. **Domest Anim Endocrinol** 1997 Jan;14(1):39–46

Inhibition of GH releasing factor (GRF)–induced GH secretion by intraruminal infusion of volatile fatty acids (VFA) in sheep. Matsunaga N, et al. **Endocr J** 1997 Feb; 44(1):133–40

Diverse effects of glucocorticoids on the hypothalamic pituitary axis in rat growth hormone secretion. Ohyama T, et al. **Endocr J** 1996 Oct;43 Suppl:S115–7

24-hour secretion of growth hormone (GH), insulin-like growth factors–I and –II (IGF-I, -II), prolactin (PRL) and thyrotropin (TSH) in young adults of normal and tall stature. Stratakis CA, et al. **Endocr Res** 1996 Aug; 22(3):261–76

Regulation of in vivo growth hormone secretion by leptin. Carro E, et al. **Endocrinology** 1997 May;138(5):2203–6

The role of galanin and its receptor in the feedback regulation of growth hormone secretion. Chan YY, et al. **Endocrinology** 1996 Dec;137(12):5303–10

Growth hormone (GH) and insulin-like growth factor I responses after treatments with an orally active GH secretagogue L-163,255 in swine. Chang CH, et al. **Endocrinology** 1996 Nov;137(11):4851–6

Regulation of growth hormone (GH) gene expression and secretion during pregnancy and lactation in the rat: role of insulin-like growth factor-I, somatostatin, and GH-releasing hormone. Escalada J, et al. **Endocrinology** 1997 Aug;138(8):3435–43

MK-0677, a potent, novel, orally active growth hormone (GH) secretagogue: GH, insulin-like growth factor I, and other hormonal responses in beagles. Jacks T, et al. **Endocrinology** 1996 Dec;137(12):5284–9

Enrichment of type I and type II rat somatotrophs: characterization of growth hormone secretion in vitro. Lindström P, et al. **Endocrinology** 1996 Oct;137(10):4174–80

Exon skipping in the gene encoding pituitary adenylate cyclase-activating polypeptide in salmon alters the expression of two hormones that stimulate growth hormone release. Parker DB, et al. **Endocrinology** 1997 Jan; 138(1):414–23

cis-unsaturated free fatty acids block growth hormone and prolactin secretion in thyrotropin-releasing hormone–stimulated GH3 cells by perturbing the function of plasma membrane integral proteins. Pérez FR, et al. **Endocrinology** 1997 Jan;138(1):264–72

Effects of growth hormone secretagogues in the transgenic growth-retarded (Tgr) rat. Wells T, et al. **Endocrinology** 1997 Feb;138(2):580–7

Cloning of the growth hormone secretagogues receptor cDNA: new evidence for a third endocrine pathway controlling growth hormone release. Bertherat J. **Eur J Endocrinol** 1997 Jan;136(1):37–8

Effects of glucose load and/or arginine on insulin and growth hormone secretion in hyperprolactinemia and obesity. Maccario M, et al. **Eur J Endocrinol** 1996 Aug; 135(2):205–10

Characteristics of gsp-positive growth hormone–secreting pituitary tumors in Korean acromegalic patients. Yang I, et al. **Eur J Endocrinol** 1996 Jun;134(6):720–6

Role of arachidonic acid and calmodulin in mediating dopamine D1- and GnRH-stimulated growth hormone release in goldfish pituitary cells. Chang JP, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):88–101

The effects of N-methyl-D,L-aspartate and gonadotropin–releasing hormone on in vitro growth hormone release in steroid-primed immature rainbow trout, Oncorhynchus mykiss. Holloway AC, et al. **Gen Comp Endocrinol** 1997 Jul;107(1):32–43

Regulation of growth hormone secretion by amino acid neurotransmitters in the goldfish (I): Inhibition by N-methyl-D, L-aspartic acid. Trudeau VL, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):129–37

Occurrence of immunoreactive activin/inhibin beta(B) in gonadotrophs, thyrotrophs, and somatotrophs of the Xenopus pituitary. Uchiyama H, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):1–10

Effects of glucose or insulin infusions on growth hormone secretion in male red deer. Webster JR, et al. **Gen Comp Endocrinol** 1996 Sep;103(3):257–63

Potentiating effect of galanin on GHRH-induced GH release. Comparison between old and young subjects. Cremagnani L, et al. **Horm Metab Res** 1996 Feb;28(2):101–4

Effect of glucocorticoids on the secretion of growth hormone in man [letter] Hollenstein U, et al. **Horm Metab Res** 1996 Feb;28(2):114–5

Growth hormone-releasing peptides: clinical and basic aspects. Argente J, et al. **Horm Res** 1996;46(4–5):155–9 (36 ref.)

Regulation of growth hormone secretion. Scanlon MF, et al. **Horm Res** 1996;46(4–5):149–54 (41 ref.)

Acromegaly associated with Chiari-I malformation and polycystic ovary syndrome. Hara M, et al. **Intern Med** 1996 Oct;35(10):803–7

Severe uremia depresses the ability of perifused rat pituitary cells to secrete growth hormone in response to growth hormone releasing hormone. Rodríguez J, et al. **J Am Soc Nephrol** 1997 May;8(5):742–8

Stimulation of the growth hormone (GH)–insulin-like growth factor I axis by daily oral administration of a GH secretogogue (MK-677) in healthy elderly subjects. Chapman IM, et al. **J Clin Endocrinol Metab** 1996 Dec; 81(12):4249–57

Enhancement of pulsatile growth hormone secretion by continuous infusion of a growth hormone–releasing peptide mimetic, L-692,429, in older adults--a clinical research center study. Chapman IM, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2874–80

Impaired growth hormone secretion in obese subjects is partially reversed by acipimox–mediated plasma free fatty acid depression. Cordido F, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):914–8

Vitamin A and retinoic acid stimulate within minutes cAMP release and growth hormone secretion in human pituitary cells. Djakoure C, et al. **J Clin Endocrinol Metab** 1996 Aug; 81(8):3123–6

The effects of testosterone and dihydrotestosterone on hypothalamic regulation of growth hormone secretion. Eakman GD, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1217–23

In obesity, glucose load loses its early inhibitory, but maintains its late stimulatory, effect on somatotrope secretion. Grottoli S, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2261–5

Reevaluation of growth hormone (GH) secretion in 69 adults diagnosed as GH-deficient patients during childhood. Longobardi S, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1244–7

Hexarelin-induced growth hormone, cortisol, and prolactin release: a dose-response study. Massoud AF, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4338–41

Nocturnal growth hormone (GH) secretion is eliminated by infusion of GH-releasing hormone antagonist. Ocampo-Lim B, et al. **J Clin Endocrinol Metab** 1996 Dec; 81(12):4396–9

Development of acromegaly during treatment of hyperprolactinemia with bromocriptine: an unusual acidophil stem cell adenoma. Page MD, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4484–7

Acipimox–mediated plasma free fatty acid depression per se stimulates growth hormone (GH) secretion in normal subjects and potentiates the response to other GH-releasing stimuli. Peino R, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):909–13

Oral growth hormone secretagogues--better than Alice in Wonderland's growth elixir? [editorial; comment] Saenger P. **J Clin Endocrinol Metab** 1996 Aug;81(8):2773–5 (28 ref.) . Comment on: J Clin Endocrinol Metab 1996 Aug;81(8):2776–82.

Preservation of growth hormone pulsatility despite pituitary pathology, surgery, and irradiation. Toogood AA, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2215–21

Abdominal adiposity and physical fitness are major determinants of the age associated decline in stimulated GH secretion in healthy adults. Vahl N, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2209–15

Demonstration of a lack of racial difference in secretion of growth hormone despite a racial difference in bone mineral density in premenopausal women--a Clinical Research Center study. Wright NM, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1023–6

Gonadotrophs but not somatotrophs carry gonadotrophin-releasing hormone receptors: receptor localisation, intracellular calcium, and gonadotrophin and GH release. Bosma PT, et al. **J Endocrinol** 1997 Mar; 152(3):437–46

Inhibition of L-692,429-stimulated rat growth hormone release by a weak substance P antagonist: L-756,867. Cheng K, et al. **J Endocrinol** 1997 Jan;152(1):155–8

Role of the neuronal histaminergic system in the regulation of somatotropic function: comparison between the neonatal and the adult rat. Grilli R, et al. **J Endocrinol** 1996 Nov; 151(2):195–201

Cryptic peptides of prepro-TRH antagonize TRH-induced GH secretion in chickens at extrapituitary sites. Harvey S, et al. **J Endocrinol** 1996 Dec;151(3):359–64

Repeat administration of the GH secretagogue MK-0677 increases and maintains elevated IGF-I levels in beagles. Hickey GJ, et al. **J Endocrinol** 1997 Feb;152(2):183–92

Microinjection of rat GH but not human IGF-I into a defined area of the hypothalamus inhibits endogenous GH secretion in rats. Minami S, et al. **J Endocrinol** 1997 May; 153(2):283–90

Continuous intracerebroventricular administration of a corticotropin releasing hormone antagonist amplifies spontaneous growth hormone pulses in the rat. Mounier F, et al. **J Endocrinol** 1997 Mar;152(3):431–6

Tyrosine kinase inhibitors enhance GHRH-stimulated cAMP accumulation and GH release in rat anterior pituitary cells. Ogiwara T, et al. **J Endocrinol** 1997 Feb;152(2):193–9

Responsiveness of chicken embryonic somatotropes to somatostatin (SRIF) and IGF-I. Piper MM, et al. **J Endocrinol** 1997 Aug;154(2):303–10

Mitogenic effects of thyroxine and TRH on thyrotrophs and somatotrophs of the anterior pituitary gland in thyroidectomized rats. Quintanar-Stephano A, et al. **J Endocrinol** 1997 Jul;154(1):149–53

The role of protein kinase C in GH secretion induced by GH-releasing factor and GH-releasing peptides in cultured ovine somatotrophs. Wu D, et al. **J Endocrinol** 1997 Aug; 154(2):219–30

The effects of clonidine on blood pressure, catecholamine and growth hormone release in hypogonadal men is preserved and not influenced by testosterone replacement therapy. Del Rio G, et al. **J Endocrinol Invest** 1996 Sep; 19(8):505–10

Positive role of non-N-methyl-D-aspartate receptors in the control of growth hormone secretion in male rats. Pinilla L, et al. **J Endocrinol Invest** 1996 Jun;19(6):353–8

Sixteen weeks of hexarelin therapy in aged dogs: effects on the somatotropic axis, muscle morphology, and bone metabolism. Cella SG, et al. **J Gerontol A Biol Sci Med Sci** 1996 Nov;51(6):B439–47

Effects of lifelong dietary restriction on somatotropes: immunohistochemical and functional aspects. Shimokawa I, et al. **J Gerontol A Biol Sci Med Sci** 1996 Nov; 51(6):B396–402

GHRP6-stimulated hormone secretion in somatotrophs: involvement of intracellular and extracellular calcium sources. Bresson-Bepoldin L, et al. **J Neuroendocrinol** 1996 Apr;8(4):309–14

Activation of locus coeruleus somatostatin receptors induces an increase of growth hormone release in male rats. Mounier F, et al. **J Neuroendocrinol** 1996 Oct;8(10):761–4

Acetylcholine stimulates growth hormone secretion in the neonatal rat pituitary. Pintér I, et al. **J Neuroendocrinol** 1996 Dec;8(12):935–9

Extracellular sodium dependence of GnRH-stimulated growth hormone release in goldfish pituitary cells. Van Goor F, et al. **J Neuroendocrinol** 1997 Mar;9(3):207–16

Small peptides as potent releasers of growth hormone. Deghenghi R, et al. **J Pediatr Endocrinol Metab** 1995 Oct-Dec;8(4):311–3

Role of glucocorticoids in the neuroregulation of growth hormone secretion. Dieguez C, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:255–60 (26 ref.)

The effect of arginine supplementation on growth hormone release and intestinal mucosal growth after massive small bowel resection in growing rats. Hebiguchi T, et al. **J Pediatr Surg** 1997 Aug;32(8):1149–53

The pattern of testosterone replacement influences the recovery of the stimulatory effect of clonidine on growth hormone (GH) secretion in orchidectomized rats. Tena-Sempere M, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5–6):533–8

Impaired secretion of growth hormone in experimental uremia: relevance of caloric deficiency. García E, et al. **Kidney Int** 1997 Sep;52(3):648–53

Growth hormone releasing peptides: a comparison of the growth hormone releasing activities of GHRP-2 and GHRP-6 in rat primary pituitary cells. Cheng J, et al. **Life Sci** 1997;60(16):1385–92

Effect of route and frequency of administration of apomorphine on growth hormone release in African catfish (Clarias gariepinus). Lescroart O, et al. **Life Sci** 1997; 60(20):1771–9

Growth and growth hormone secretion after treatment for childhood non-Hodgkin's lymphoma. Samuelsson BO, et al. **Med Pediatr Oncol** 1997 Jan;28(1):27–34

New insights into the regulation of somatotrope function using genetic and transgenic models. Frohman LA. **Metabolism** 1996 Aug;45(8 Suppl 1):1–3 (14 ref.)

Observations on the stimulation of growth hormone secretion in patients with growth hormone deficiency. Kendall-Taylor P, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):127–8

Growth hormone secretion and synthesis are depressed in obesity-susceptible compared with obesity-resistant rats.

Lauterio TJ, et al. **Metabolism** 1997 Feb;46(2):210-6

GH3 cells expressing constitutively active Gs alpha (Q227L) show enhanced hormone secretion and proliferation. Ham J, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):41-7

Involvement of nitric oxide in the interferon-gamma-induced inhibition of growth hormone and prolactin secretion in anterior pituitary cell cultures. Vankelecom H, et al. **Mol Cell Endocrinol** 1997 May 16;129(2):157-67

Identification of a new G-protein-linked receptor for growth hormone secretagogues. Pong SS, et al. **Mol Endocrinol** 1996 Jan;10(1):57-61

Effect of CRF injected into the median eminence on GH secretion in female rats under different steroid status. Puertas A, et al. **Neurochem Res** 1996 Aug;21(8):897-901

The increase in growth hormone secretion in experimentally induced arthritic rats is an adaptive process involved in the regulation of inflammation. Bluet-Pajot MT, et al. **Neuroendocrinology** 1996 Jan;63(1):85-92

Pituitary growth hormone-releasing factor receptor expression in normal and dwarf rats. Carmignac DF, et al. **Neuroendocrinology** 1996 Sep;64(3):177-85

Effect of somatostatin-28 on growth hormone response to growth hormone-releasing hormone--impact of aging and lifelong dietary restriction. Shimokawa I, et al. **Neuroendocrinology** 1997 May;65(5):369-76

Involvement of endogneous nitric oxide in the control of pituitary responsiveness to different elicitors of growth hormone release in prepubertal rats. Tena-Sempere M, et al. **Neuroendocrinology** 1996 Aug;64(2):146-52

Control of growth hormone secretion from porcine fetal and neonatal pituitary tissue in vitro by growth hormone-releasing hormone, somatostatin, and insulin-like growth factor. Torronteras R, et al. **Neuroendocrinology** 1997 Feb;65(2):117-28

Effects of rat galanin and galanin message associated peptide (GMAP) on rat growth hormone secretion and stimulating effect of gamma-aminobutyric acid on galanin release from rat hypothalamus. Nishiki M, et al. **Neurosci Lett** 1997 May 2;226(3):199-202

Growth hormone release induced by growth hormone-releasing hexapeptide is not mediated by thyrotropin-releasing hormone in neonatal rats. Kacsóh B, et al. **Pediatr Res** 1997 Feb;41(2):249-57

Neuroendocrine effects of dexmedetomidine: evidence of cross-tolerance between a mu-opioid agonist and an alpha 2-adrenoceptor agonist in growth hormone secretion of the male rat. Idänpään-Heikkilä JJ, et al. **Pharmacol Toxicol** 1996 Mar;78(3):136-42

Effects of sumatriptan on growth hormone releasing hormone-stimulated growth hormone secretion in acromegaly. Cuttica CM, et al. **Recenti Prog Med** 1997 Jun;88(6):264-8

Evidence for a dual function of oxytocin in the control of growth hormone secretion in rats. Björkstrand E, et al. **Regul Pept** 1997 Mar 12;69(1):1-5

Effect of oxytocin on growth hormone release in vitro. Hulting AL, et al. **Regul Pept** 1996 Dec 3;67(2):69-73

Inhibitory effect of neuropeptide Y on growth hormone secretion in rats is mediated by both Y1- and Y2-receptor subtypes and abolished after anterolateral deafferentation of the medial basal hypothalamus. Suzuki N, et al. **Regul Pept** 1996 Sep 9;65(2):145-51

[The role of Ca2+ in the pathogenesis of human pituitary GH-secreting adenomas] Yin J, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Feb; 18(1):23-8 (Eng. Abstr.) **(Chi)**

[Transsphenoidal surgery for a case of empty sella syndrome associated with GH secreting pituitary adenoma] Aihara H, et al. **No Shinkei Geka** 1996 Dec;24(12):1119-23 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Variable effect of growth hormone on growth and final adult height in Scottish patients with Turner's syndrome. Chu CE, et al. **Acta Paediatr** 1997 Feb;86(2):160-4

Iron status of children with short stature during accelerated growth due to growth hormone treatment. Vihervuori E, et al. **Acta Paediatr** 1997 Jun;86(6):588-93

Growth hormone treatment in Noonan syndrome. Tanaka T. **Acta Paediatr Jpn** 1996 Feb;38(1):99-101

Growth hormone treatment of short children born small for gestational age: metanalysis of four independent, randomized, controlled, multicentre studies. de Zegher F, et al. **Acta Paediatr Suppl** 1996 Oct;417:27-31

Effect of growth hormone treatment in children with craniopharyngioma with reference to the KIGS (Kabi International Growth Study) database. Price DA, et al. **Acta Paediatr Suppl** 1996 Oct;417:83-5

Approach to predicting the growth response during growth hormone treatment. Ranke MB, et al. **Acta Paediatr Suppl** 1996 Oct;417:64-5

Preliminary validation of a prediction model for the short-term growth response to growth hormone therapy in children with idiopathic short stature. Spagnoli A, et al. **Acta Paediatr Suppl** 1996 Oct;417:66-8

Growth and growth hormone therapy in children with achondroplasia: a two-year experience. Stamoyannou L, et al. **Am J Med Genet** 1997 Oct 3;72(1):71-6

Human growth hormone treatment in prepubertal children with achondroplasia. Weber G, et al. **Am J Med Genet** 1996 Feb 2;61(4):396-400

Growth hormone: panacea or punishment for short stature? [editorial; comment] Brook CG. **BMJ** 1997 Sep 20; 315(7110):692-3. Comment on: BMJ 1997 Sep 20;315(7110):708-13.

Long-term results of growth hormone treatment in France in children of short stature: population, register based study [see comments] Coste J, et al. **BMJ** 1997 Sep 20; 315(7110):708-13. Comment in: BMJ 1997 Sep 20;315(7110):692-3.

Does growth hormone treatment prevent corticosteroid-induced osteoporosis? Tanaka H, et al. **Bone** 1996 Jun;18(6):493-4 (28 ref.)

Growth hormone therapy may benefit protein metabolism in mitochondrial encephalomyopathy. Carroll PV, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):113-7

Long-term cardiovascular effects of growth hormone treatment in GH-deficient adults. Preliminary data in a small group of patients. Johannsson G, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):305-14

Growth hormone therapy in two patients with hereditary multiple exostosis. Galasso C, et al. **Clin Pediatr (Phila)** 1996 Dec;35(12):657-61

Treatment of male infertility with growth hormone. Ng SC, et al. **Clin Sci (Colch)** 1996 Sep;91(3):254-5 (18 ref.)

The influence of growth hormone substitution therapy on erythroid and myeloid progenitor cells and on peripheral blood cells in adult patients with growth hormone deficiency. Kotzmann H, et al. **Eur J Clin Invest** 1996 Dec; 26(12):1175-81

Growth hormone therapy in Silver Russell syndrome: 5 years experience of the Australian and New Zealand Growth database (OZGROW). Rakover Y, et al. **Eur J Pediatr** 1996 Oct;155(10):851-7

The influence of growth hormone monotherapy and growth hormone in combination with oxandrolone or testosterone on thyroxid hormone parameters and thyroxine binding globulin in patients with Ullrich-Turner syndrome. Schmitt K, et al. **Eur J Pediatr** 1997 Feb;156(2):99-103

Evaluation of clinical and laboratory parameters during 2 years of growth hormone treatment in prepubertal children with chronic renal failure. Simon D, et al. **Eur J Pediatr** 1996 Aug;155(8):688-94

The potential for growth hormone in the management of heart failure [editorial] Monson JP, et al. **Heart** 1997 Jan; 77(1):1-2

Clinical utility of adjuvant growth hormone in the treatment of patients with polycystic ovaries undergoing in vitro fertilization. Artini PG, et al. **J Assist Reprod Genet** 1997 Jan;14(1):4-7 (24 ref.)

The place of cotreatment with growth hormone and human menopausal gonadotropin (hMG) in ovarian stimulation. Homburg R, et al. **J Assist Reprod Genet** 1996 May; 13(5):371-3

Growth hormone does not increase thyroid size in the absence of thyrotropin: a study in adults with hypopituitarism. Cheung NW, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1179-83

The short-term effects of growth hormone therapy on height velocity and cardiac ventricular wall thickness in children with Noonan's syndrome. Cotterill AM et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2291-7

Changes in body composition of human immunodeficiency virus-infected males receiving insulin-like growth factor I and growth hormone. Ellis KJ, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3033-8

Long-term growth hormone deficiency as a cause of cardiomyopathy and its reversibility with specific replacement therapy. Fazio S, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):887-90 (19 ref.)

Short-term growth hormone (GH) treatment of GH-deficient adults increases body sodium and extracellular water, but not blood pressure. Hoffman DM, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1123-8

Two years of growth hormone (GH) treatment increases bone mineral content and density in hypopituitary patients with adult-onset GH deficiency [see comments] Johannsson G, et al. **J Clin Endocrinol Metab** 1996 Aug; 81(8):2865-73. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):1304-6.

Two years of growth hormone (GH) treatment increase isometric and isokinetic muscle strength in GH-deficient adults. Johannsson G, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2877-84

The effect of growth hormone treatment on the insulin-like growth factor axis in a child with nonislet cell tumor hypoglycemia. Katz LE, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1141-6

A randomized, placebo-controlled trial of combined insulin-like growth factor I and low dose growth hormone therapy for wasting associated with human immunodeficiency virus infection [published erratum appears in J Clin Endocrinol Metab 1996 Oct;81(10):3696] Lee PD, et al. **J Clin Endocrinol Metab** 1996 Aug; 81(8):2968-75

Growth hormone (GH) treatment of GH-deficient children increases serum levels of insulin-like growth factors (IGFs), IGF-binding protein-3 and -5, and bone alkaline phosphatase isoenzyme. Ono T, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2111-6

Combined treatment with gonadotropin-releasing hormone analog and growth hormone in central precocious puberty. Pasquino AM, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):948-51

The effect of long-term growth hormone (GH) treatment on bone mineral density in children with GH deficiency. Role of GH in the attainment of peak bone mass. Saggese G, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):3077-83

Effect of bovine somatotropin administered to periparturient dairy cows on the incidence of metabolic disease. Eppard PJ, et al. **J Dairy Sci** 1996 Dec;79(12):2170-81

Growth hormone therapy for 3 years: the OZGROW experience. Cowell CT, et al. **J Paediatr Child Health** 1996 Apr;32(2):86-93

Efficacy and safety of one year of growth hormone therapy in steroid-dependent nephrotic syndrome. Loke KY, et al. **J Pediatr** 1997 May;130(5):793-9

Adverse events during growth hormone therapy. Cowell CT, et al. **J Pediatr Endocrinol Metab** 1995 Oct-Dec; 8(4):243-52

Growth hormone for adults [editorial] Hadden DR. **J R Soc Med** 1997 Mar;90(3):122-3

Combined insulin-like growth factor-1 and growth hormone improves weight loss and wound healing in burned rats. Meyer NA, et al. **J Trauma** 1996 Dec;41(6):1008-12

Recombinant human growth hormone in children with chronic renal insufficiency--clinical update: 1995. Fine RN. **Kidney Int Suppl** 1996 Jan;53:S115-8 (22 ref.)

A placebo-controlled, double-blind trial of growth hormone treatment in prepubertal children after renal transplant. Hokken-Koelega AC, et al. **Kidney Int Suppl** 1996 Jan; 53:S128-34

Testing for growth hormone release is not necessary prior to treatment of children with chronic renal insufficiency with recombinant human growth hormone. Kohaut EC, et al. **Kidney Int Suppl** 1996 Jan;53:S119-22 (26 ref.)

The safety and effectiveness of human growth hormone using pharmacological dosing. Slyper A. **Med Hypotheses** 1995 Dec;45(6):523-8 (59 ref.)

Response to nutritional and growth hormone treatment in progeria. Abdenur JE, et al. **Metabolism** 1997 Aug; 46(8):851-6

Follow-up of three years of treatment with growth hormone and of one post-treatment year, in children with severe growth retardation of intrauterine onset. Job JC, et al. **Pediatr Res** 1996 Feb;39(2):354-9

Spontaneous growth and response to growth hormone treatment in children with growth hormone deficiency and idiopathic short stature. Wit JM, et al. **Pediatr Res** 1996 Feb;39(2):295-302 (79 ref.)

Growth hormone therapy for protein catabolism. Jenkins RC, et al. **QJM** 1996 Nov;89(11):813-9 (47 ref.)

[Recombinant human growth hormone (rhGH) administration in a patient with chronic renal insufficiency: renal and metabolic effects] Fouque D, et al. **Nephrologie** 1996;17(3):171-4 (Eng. Abstr.) **(Fre)**

[Growth hormone for severely burnt patients] **Unfallchirurg** 1996 Mar;99(3 Suppl):1-4 **(Ger)**

[Possibilities to increase the efficacy of growth hormone therapy in Turner syndrome] Ságodi L, et al. **Orv Hetil** 1997 Jun 8;138(23):1501-5 (36 ref.) (Eng. Abstr.) **(Hun)**

[Final body height affecting factors in Turner syndrome] Ságodi L, et al. **Orv Hetil** 1997 Aug 3;138(31):1953-6 (Eng. Abstr.) **(Hun)**

[Knemometry in the assessment of short term effects of growth hormone therapy in children with several growth disorders] Guzzaloni G, et al. **Minerva Pediatr** 1997 Apr; 49(4):139-45 (Eng. Abstr.) **(Ita)**

[Final height in patients with Turner syndrome treated by growth hormone (GH) (letter)] Ruibal Francisco JL, et al. **An Esp Pediatr** 1997 May;46(5):526-8 **(Spa)**

[New indication for growth hormone in adults and its implications in parenteral nutrition (letter)] Sanz París A, et al. **Nutr Hosp** 1996 May-Jun;11(3):208-9 **(Spa)**

URINE

Urinary growth hormone following exercise to assess growth hormone production in adults. Flanagan DE, et al. **Clin Endocrinol (Oxf)** 1997 Apr;46(4):425-9

Effect of asthma treatment on urinary growth hormone excretion in children [letter; comment] Nikolaizik WH. **Pediatr Pulmonol** 1997 Feb;23(2):126-7. Comment on: Pediatr Pulmonol 1996 Jun;21(6):361-6.

[Influence of growth hormone (GH) and nutrition on neonatal growth] Díaz-Gómez NM, et al. **An Esp Pediatr** 1997 Jan;46(1):41-6 (Eng. Abstr.) **(Spa)**

SOMATOTROPIN (HUMAN) see **SOMATROPIN**

SOMATOTROPIN RECEPTORS see **RECEPTORS, SOMATOTROPIN**

SOMATOTROPIN RELEASE-INHIBITING HORMONE see **SOMATOSTATIN**

SOMATOTROPIN-RELEASING FACTOR 44 see **SOMATOTROPIN-RELEASING HORMONE**

SOMATOTROPIN-RELEASING HORMONE

Influence of endogenous cholinergic tone and growth hormone-releasing peptide-6 on exercise induced growth hormone release. Nooitgedagt A, et al.

Clin Endocrinol (Oxf) 1997 Feb;46(2):195-202

Retrogradely labelled neurosecretory neurones of the rat hypothalamic arcuate nucleus express Fos protein following systemic injection of GH-releasing peptide-6. Dickson SL, et al. **J Endocrinol** 1996 Nov;151(2):323-31

ADMINISTRATION & DOSAGE

Greater efficacy of episodic than continuous growth hormone-releasing hormone (GHRH) administration in promoting slow-wave sleep (SWS). Marshall L, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1009-13

Changes in sleep-endocrine activity after growth hormone-releasing hormone depend on time of administration. Schier T, et al. **J Neuroendocrinol** 1997 Mar; 9(3):201-5

Preparation, characterization, and in vivo evaluation of an oil suspension of a bovine growth hormone releasing factor analog. Yu LX, et al. **J Pharm Sci** 1996 Apr;85(4):396-401

ANALOGS & DERIVATIVES

Investigation of the chemical stability of a new growth hormone-releasing hormone (GHRH) analogue by HPLC. Idei M, et al. **Biomed Chromatogr** 1996 Mar-Apr; 10(2):89-91

Immunodetection approaches and high-performance immunoaffinity chromatography for an analogue of bovine growth hormone releasing factor at trace levels. Strong RA, et al. **Biomed Chromatogr** 1996 Nov-Dec;10(6):337-45

Role of the new growth hormone-releasing secretagogues in the diagnosis of some hypothalamopituitary pathologies. Casanueva FF, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):123-6 (25 ref.)

Effect of chronic administration of a new potent agonist of GH-RH(1-29)NH2 on linear growth and GH responsiveness in rats. Pinski J, et al. **Regul Pept** 1996 Sep 16;65(3):197-201

[Growth hormone-releasing peptides (GHRP) and their analogues] Korbonits M, et al. **Orv Hetil** 1996 Nov 10; 137(45):2503-9 (73 ref.) (Eng. Abstr.) **(Hun)**

[Evaluation of bone loss in patient treated with Gn-Rh analogs] Cassese E, et al. **Minerva Ginecol** 1997 Jun; 49(6):255-9 (Eng. Abstr.) **(Ita)**

ANALYSIS

Immunochromatographic analysis of bovine growth hormone releasing factor involving reversed-phase high-performance liquid chromatography-immunodetection. Cho BY, et al. **J Chromatogr A** 1996 Aug 30;743(1):181-94

Intracerebral expression of gonadotropin-releasing hormone and growth hormone-releasing hormone is delayed until smoltification in the salmon. Parhar IS, et al. **Neurosci Res** 1996 Nov;26(3):299-308

ANTAGONISTS & INHIBITORS

Inhibition of in vivo proliferation of androgen-independent prostate cancers by an antagonist of growth hormone-releasing hormone. Jungwirth A, et al. **Br J Cancer** 1997;75(11):1585-92

Effects of acute and chronic administration of a new potent antagonist of growth hormone-releasing hormone in rats: mechanisms of action. Kovacs M, et al. **Endocrinology** 1996 Dec;137(12):5364-9

Suppression of growth hormone (GH) hypersecretion due to ectopic GH-releasing hormone (GHRH) by a selective GHRH antagonist. Jaffe CA, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):634-7

Nocturnal growth hormone (GH) secretion is eliminated by infusion of GH-releasing hormone antagonist. Ocampo-Lim B, et al. **J Clin Endocrinol Metab** 1996 Dec; 81(12):4396-9

Inhibition of GH release of rats by new potent antagonists of growth hormone-releasing hormone (GH-RH). Kovács M, et al. **Peptides** 1997;18(3):431-8

Synthesis and in vitro evaluation of new potent antagonists of growth hormone-releasing hormone (GH-RH). Zarandi M, et al. **Peptides** 1997;18(3):423-30

Growth hormone-releasing hormone antagonist MZ-4-71 inhibits in vivo proliferation of Caki-I renal adenocarcinoma. Jungwirth A, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5810-3

[Analgesic effects of natural growth hormone release inhibitors and their synthetic analogs. Intraspinal administration] Beltrutti D, et al. **Minerva Med** 1997 Jan-Feb;88(1-2):39-47 (86 ref.) (Eng. Abstr.) **(Ita)**

BIOSYNTHESIS

Differential splicing of the growth hormone-releasing hormone gene in rat placenta generates a novel pre-proGHRH mRNA that encodes a different C-terminal flanking peptide. Pérez-Riba M, et al. **FEBS Lett** 1997 Feb 3;402(2-3):273-6

A growth hormone-releasing hormone-producing pancreatic islet cell tumor metastasized to the pituitary is associated with pituitary somatotroph hyperplasia and acromegaly. Sanno N, et al. **J Clin Endocrinol Metab** 1997 Aug; 82(8):2731-7

Immunohistochemical characterization of "hyperplasia-adenoma sequence" in the pituitaries of transgenic mice expressing a human growth hormone-releasing factor gene. Umemura S, et al. **Tokai J Exp Clin Med** 1995 Jul;20(2):71-9

BLOOD

Immunoreactive growth hormone-releasing hormone (IR-GHRH) in the feto-placental circulation and differential effects of L-dopa, L-arginine and somatostatin-14 on the plasma levels of IR-GHRH in normal adults. Saito H, et al. **Horm Metab Res** 1997 Apr; 29(4):184-9

CHEMICAL SYNTHESIS

Synthesis and in vitro evaluation of new potent antagonists of growth hormone-releasing hormone (GH-RH). Zarandi M, et al. **Peptides** 1997;18(3):423-30

CHEMISTRY

Structural simplification of potent growth hormone-releasing hormone analogs: implications for other members of the VIP/GHRH/PACAP family. Coy DH, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:149-58 (15 ref.)

Investigation of the chemical stability of a new growth hormone-releasing hormone (GHRH) analogue by HPLC. Idei M, et al. **Biomed Chromatogr** 1996 Mar-Apr; 10(2):89-91

Preparation, characterization, and in vivo evaluation of an oil suspension of a bovine growth hormone releasing factor analog. Yu LX, et al. **J Pharm Sci** 1996 Apr;85(4):396-401

DEFICIENCY

Non-rapid eye movement sleep is suppressed in transgenic mice with a deficiency in the somatotropic system. Zhang J, et al. **Neurosci Lett** 1996 Dec 13;220(2):97-100

DIAGNOSTIC USE

Can provocative growth hormone testing predict the response to recombinant human growth hormone (rhGH) treatment? Greco M, et al. **Br J Clin Pract Symp Suppl** 1996 Aug;85:38-40

Divergence between growth hormone responses to insulin-induced hypoglycaemia and growth hormone-releasing hormone in patients with non-functioning pituitary macroadenomas and hyperprolactinaemia. Beentjes JA, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):391-8

Different effects of growth hormone releasing peptide (GHRP-6) and GH-releasing hormone on GH release in endogenous and exogenous hypercortisolism. Borges MH, et al. **Clin Endocrinol (Oxf)** 1997 Jun;46(6):713-8

The sequential administration of growth hormone-releasing hormone followed 120 minutes later by hexarelin, as an effective test to assess the pituitary GH reserve in man. Micic D, et al. **Clin Endocrinol (Oxf)** 1996 Nov; 45(5):543-51

Growth hormone response to GHRH, GHRP-6 and GHRH + GHRP-6 in patients with polycystic ovary syndrome. Micić D, et al. **Clin Endocrinol (Oxf)** 1996 Oct;45(4):385-90

Absence of desensitization by hexarelin to subsequent GH releasing hormone-mediated GH secretion in patients with anorexia nervosa. Popovic V, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):539-43

Effects of estradiol valerate on growth hormone and prolactin response to growth hormone-releasing hormone stimulation in pre- and postmenopausal women. Hartmann BW, et al. **Gynecol Endocrinol** 1997 Feb;11(1):43-50

Evaluation of pituitary function in children using growth hormone secretagogues. Bercu BB, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:325-32 (12 ref.)

Pituitary enlargement due to primary hypothyroidism: growth hormone response to GHRH, GHRP-6 and GHRH plus GHRP-6. Damjanović S, et al. **J Pediatr Endocrinol Metab** 1996 Sep-Oct;9(5):549-53

Growth hormone releasing hexapeptide-6 (GHRP-6) test in the diagnosis of GH-deficiency. Pombo M, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:333-8 (35 ref.)

Evaluation of pituitary GH reserve with GHRP-6. Popovic V, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:289-98 (23 ref.)

Altered growth hormone (GH) secretion in women gaining weight during hormone replacement therapy (HRT). Hartmann BW, et al. **Maturitas** 1996 Aug;25(1):29-34

Pre- and postprandial pyridostigmine and oxiracetam effects on growth hormone secretion in anorexia nervosa. Mancini A, et al. **Psychoneuroendocrinology** 1996 Oct;21(7):621-9

[Behavior of growth hormone after stimulation with growth hormone releasing hormone (GHRH) in children with disorders of the hypothalamo-hypophyseal axis and girls with Turner syndrome] Schmitt K, et al. **Klin Padiatr** 1996 Jan-Feb;208(1):29-34 (Eng. Abstr.) **(Ger)**

[GRH test] Inoue K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:217-8 (7 ref.) **(Jpn)**

DRUG EFFECTS

Effects of GH and IGF-I administration on GHRH and somatostatin mRNA levels: I. A study on ad libitum fed and starved adult male rats. Ghigo MC, et al. **J Endocrinol Invest** 1997 Mar;20(3):144-50

Effects of GH and IGF-I administration on GHRH and somatostatin mRNA levels: II. A study in the infant rat. Grilli R, et al. **J Endocrinol Invest** 1997 Mar;20(3):151-4

Effects of sumatriptan on growth hormone releasing hormone-stimulated growth hormone secretion in acromegaly. Cuttica CM, et al. **Recenti Prog Med** 1997 Jun;88(6):264-8

GENETICS

Overexpression of the growth-hormone-releasing hormone gene in acromegaly-associated pituitary tumors. An event associated with neoplastic progression and aggressive behavior. Thapar K, et al. **Am J Pathol** 1997 Sep; 151(3):769-84

RFLPs at the porcine growth hormone releasing hormone (GHRH) gene. Nielsen VH, et al. **Anim Genet** 1997 Apr; 28(2):152

Expression and alternative processing of a chicken gene encoding both growth hormone-releasing hormone and pituitary adenylate cyclase-activating polypeptide. McRory JE, et al. **DNA Cell Biol** 1997 Jan;16(1):95-102

Placenta-specific expression of the rat growth hormone-releasing hormone gene promoter in transgenic mice. Nogués N, et al. **Endocrinology** 1997 Aug; 138(8):3222-7

Exon skipping in the gene encoding pituitary adenylate cyclase-activating polypeptide in salmon alters the expression of two hormones that stimulate growth hormone release. Parker DB, et al. **Endocrinology** 1997 Jan; 138(1):414-23

Regulation of hypothalamic somatostatin, growth hormone-releasing hormone, and growth hormone receptor messenger ribonucleic acid by glucocorticoids. Señarís RM, et al. **Endocrinology** 1996 Dec;137(12):5236-41

Continuous intracerebroventricular administration of a corticotropin releasing hormone antagonist amplifies spontaneous growth hormone pulses in the rat. Mounier F, et al. **J Endocrinol** 1997 Mar;152(3):431-6

Vasoactive intestinal polypeptide mRNA and peptide levels are decreased in the anterior pituitary of the human growth hormone-releasing hormone transgenic mouse. Hyde JF, et al. **J Neuroendocrinol** 1996 Jan;8(1):9-15

Gene expression of hypothalamic somatostatin and growth hormone-releasing hormone in dexamethasone-treated rats. Lam KS, et al. **Neuroendocrinology** 1997 Jul;66(1):2-8

Occurrence of a growth hormone-releasing hormone-like messenger ribonucleic acid and immunoreactive peptide in the sheep placenta. Lacroix MC, et al. **Reprod Fertil Dev** 1996;8(3):449-56

IMMUNOLOGY

Hexarelin stimulation of growth hormone release and mRNA levels in an infant and adult rat model of impaired GHRH function. Torsello A, et al. **Neuroendocrinology** 1997 Feb; 65(2):91-7

METABOLISM

Effect of fetal ethanol exposure on the in vitro release of growth hormone, somatostatin and growth hormone-releasing factor induced by clonidine and growth hormone feedback in male and female rats. Conway S, et al. **Alcohol Clin Exp Res** 1997 Aug;21(5):826-39

Use of the HIV-1 protease for excision of growth-hormone-releasing factor from synthetic and recombinant peptide precursors. Tomasselli AG, et al. **Biotechnol Appl Biochem** 1997 Aug;26 (Pt 1):39-49

Increased pituitary growth hormone-releasing factor (GRF) receptor messenger ribonucleic acid expression in food-deprived rats. Sugihara H, et al. **Brain Res** 1996 Dec 2;742(1-2):355-8

Induction of c-fos messenger ribonucleic acid in neuropeptide Y and growth hormone (GH)-releasing factor neurons in the rat arcuate nucleus following systemic injection of the GH secretagogue, GH-releasing peptide-6. Dickson SL, et al. **Endocrinology** 1997 Feb;138(2):771-7

Growth hormone-releasing hormone immunoreactivity in the brain, pituitary, and pineal of the goldfish, Carassius auratus. Rao SD, et al. **Gen Comp Endocrinol** 1996 May; 102(2):210-20

Insulin-like growth factor-I and- II in combination inhibit the release of growth hormone-releasing hormone from the rat hypothalamus in vitro. Korbonits M, et al. **Growth Regul** 1996 Jun;6(2):110-20

Somatostatin and growth hormone-releasing hormone in normal and tumoral human breast tissue: endogenous content, in vitro pulsatile release, and regulation. Benlot C, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):690-6

Defective hypothalamic growth hormone (GH)-releasing hormone activity may contribute to declining GH secretion with age in man. degli Uberti EC, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2885-8

Characterization of the ovine LH beta-subunit gene: the promoter is regulated by GnRH and gonadal steroids in transgenic mice. McNeilly JR, et al. **J Endocrinol** 1996 Dec; 151(3):481-9

Effects of food deprivation on the GH axis: immunocytochemical and molecular analysis. Brogan RS, et al. **Neuroendocrinology** 1997 Feb;65(2):129-35

Pituitary growth hormone-releasing factor receptor expression in normal and dwarf rats. Carmignac DF, et al. **Neuroendocrinology** 1996 Sep;64(3):177-85

Somatostatin withdrawal as generator of pulsatile GH release in the dog: a possible tool to evaluate the endogenous GHRH tone? Cella SG, et al. **Neuroendocrinology** 1996 Jun; 63(6):481–8

Identification of growth hormone-releasing hormone and somatostatin neurons projecting to the median eminence in normal and growth hormone-deficient Ames dwarf mice. Romero MI, et al. **Neuroendocrinology** 1997 Feb; 65(2):107–16

Hypothalamic growth hormone-releasing hormone mRNA varies across the day in rats. Bredow S, et al. **Neuroreport** 1996 Nov 4;7(15–17):2501–5

PHARMACOLOGY

Growth hormone-releasing hormone augments voltage-gated Na+ current in cultured rat pituitary cells. Kato M. **Am J Physiol** 1996 Jan;270(1 Pt 1):C125–30

Effects of systemic GHRH on sleep in intact and hypophysectomized rats. Obál F Jr, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):E230–7

Enhancement of Ca2+ currents by GHRH and its relation to PKA and [Ca2+]i in human GH-secreting adenoma cells. Takei T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E801–7

GH response to GH-releasing hormone (GHRH) in Alzheimer and vascular dementia. Relation with somatostatin cerebrospinal levels. Gómez IM, et al. **Ann Endocrinol (Paris)** 1996;57(2):107–10

The growth hormone-releasing peptide KP-102 induces c-fos expression in the arcuate nucleus. Kamegai J, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1–2):153–9

Long-term growth hormone-releasing factor administration on growth hormone, insulin-like growth factor-I concentrations, and bone healing in the Beagle. Dubreuil P, et al. **Can J Vet Res** 1996 Jan;60(1):7–13

Growth hormone responses to GH-releasing peptide (GHRP-6) in hypothyroidism. Pimentel-Filho FR, et al. **Clin Endocrinol (Oxf)** 1997 Mar;46(3):295–300

Cardiovascular effects of intracerebroventricularly administered growth hormone-releasing factor in spontaneously hypertensive rat. Watanabe M, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S58–9

Effects of growth hormone (GH)-releasing hormone and its analogs on GH secretion from cultured adenohypophysial cells in cattle. Soliman EB, et al. **Domest Anim Endocrinol** 1997 Jan;14(1):39–46

Inhibition of GH releasing factor (GRF)-induced GH secretion by intraruminal infusion of volatile fatty acids (VFA) in sheep. Matsunaga N, et al. **Endocr J** 1997 Feb; 44(1):133–40

Characteristics of growth hormone secretion responsiveness to growth hormone-releasing peptide-2 (GHRP-2 or KP102) in calves. Roh SG, et al. **Endocr J** 1996 Jun; 43(3):291–8

Hypothalamic control of growth hormone (GH) secretion in type I diabetic men: effect of the combined administration of GH-releasing hormone and hexarelin, a novel GHRP-6 analog. Giustina A, et al. **Endocr Res** 1996 May;22(2):159–74

Growth hormone secretagogues stimulate the hypothalamic-pituitary-adrenal axis and are diabetogenic in the Zucker diabetic fatty rat. Clark RG, et al. **Endocrinology** 1997 Oct;138(10):4316–23

Intracerebroventricular administration of the growth hormone-releasing peptide KP-102 increases food intake in free-feeding rats. Okada K, et al. **Endocrinology** 1996 Nov;137(11):5155–8

Acute administration of recombinant human growth hormone inhibits the somatotrope responsiveness to growth hormone-releasing hormone in childhood. Bellone J, et al. **Eur J Endocrinol** 1996 Oct;135(4):421–4

Diagnosis of growth hormone deficiency in adulthood. Casanueva FF. **Eur J Endocrinol** 1996 Aug;135(2):168–70 (13 ref.)

Evaluation of growth hormone (GH) responses to pulsed GH-releasing hormone administration using the MTT-ESTA bioassay. Dattani MT, et al. **Eur J Endocrinol** 1996 Jul;135(1):87–95

Growth hormone response to growth hormone-releasing hormone varies with the hypothalamic-pituitary abnormalities. Maghnie M, et al. **Eur J Endocrinol** 1996 Aug;135(2):198–204

Reproducibility of the growth hormone response to stimulation with growth hormone-releasing hormone plus arginine during lifespan. Valetto MR, et al. **Eur J Endocrinol** 1996 Nov;135(5):568–72

Potentiating effect of galanin on GHRH-induced GH release. Comparison between old and young subjects. Cremagnani L, et al. **Horm Metab Res** 1996 Feb;28(2):101–4

Repeated administration of growth hormone-releasing hormone with or without previous administration of pyridostigmine in insulin-dependent diabetes mellitus. Martina V, et al. **Horm Metab Res** 1997 Apr;29(4):180–3

Severe uremia depresses the ability of perifused rat pituitary cells to secrete growth hormone in response to growth hormone releasing hormone. Rodríguez J, et al. **J Am Soc Nephrol** 1997 May;8(5):742–8

Lactation performance of sows fed a bulky diet during gestation and receiving growth hormone-releasing factor during lactation. Farmer C, et al. **J Anim Sci** 1996 Jun; 74(6):1298–306

Evidence for a mammogenic role of growth hormone in ewes: effects of growth hormone-releasing factor during artificial induction of lactation. Kann G. **J Anim Sci** 1997 Sep;75(9):2541–9

Defective hypothalamic growth hormone (GH)-releasing hormone activity may contribute to declining GH secretion with age in man. degli Uberti EC, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2885–8

Evidence for an inhibitory effect of physiological levels of insulin on the growth hormone (GH) response to GH-releasing hormone in healthy subjects. Lanzi R, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2239–43

Oral growth hormone secretagogues--better than Alice in Wonderland's growth elixir? [editorial; comment] Saenger P. **J Clin Endocrinol Metab** 1996 Aug;81(8):2773–5 (28 ref.) . Comment on: J Clin Endocrinol Metab 1996 Aug;81(8):2776–82.

Effect of growth hormone-releasing factor on the response to insulin of cows during early and late lactation. Rose MT, et al. **J Dairy Sci** 1996 Oct;79(10):1734–45

Tyrosine kinase inhibitors enhance GHRH-stimulated cAMP accumulation and GH release in rat anterior pituitary cells. Ogiwara T, et al. **J Endocrinol** 1997 Feb;152(2):193–9

The role of protein kinase C in GH secretion induced by GH-releasing factor and GH-releasing peptides in cultured ovine somatotrophs. Wu D, et al. **J Endocrinol** 1997 Aug; 154(2):219–30

Effects of histaminergic antagonists on the GH-releasing activity of GHRH or hexarelin, a synthetic hexapeptide, in man. Arvat E, et al. **J Endocrinol Invest** 1997 Mar; 20(3):122–7

Growth hormone (GH) response to GH-releasing hormone in short children: lack of correlation with endogenous nocturnal GH secretion. Seminara S, et al. **J Endocrinol Invest** 1997 Mar;20(3):118–21

Growth hormone (GH)-releasing peptide and GH releasing hormone stimulate GH release from subpopulations of somatotrophs in rats. Mitani M, et al. **J Neuroendocrinol** 1996 Nov;8(11):825–30

GH secretion in Prader-Labhard-Willi syndrome: somatotrope responsiveness to GHRH is enhanced by arginine but not by pyridostigmine. Beccaria L, et al. **J Pediatr Endocrinol Metab** 1996 Nov-Dec;9(6):577–83

Effects of phenylalanine, histidine, and leucine on basal and GHRH-stimulated GH secretion and on PRL, insulin, and glucose levels in short children. Comparison with the effects of arginine. Bellone J, et al. **J Pediatr Endocrinol Metab** 1996 Sep-Oct;9(5):523–31

Pegylated peptides. V. Carboxy-terminal PEGylated analogs of growth hormone-releasing factor (GRF) display enhanced duration of biological activity in vivo. Campbell RM, et al. **J Pept Res** 1997 Jun;49(6):527–37

Growth acceleration in children with chronic renal failure treated with growth-hormone-releasing hormone (GHRH). Pasqualini T, et al. **Medicina (B Aires)** 1996; 56(3):241–6

Growth hormone (GH) response to GH-releasing peptide-6 in patients with insulin-dependent diabetes mellitus. Villas-Boas Weffort RF, et al. **Metabolism** 1997 Jun; 46(6):706–10

Effects of single nightly injections of growth hormone-releasing hormone (GHRH 1-29) in healthy elderly men. Vittone J, et al. **Metabolism** 1997 Jan; 46(1):89–96

Growth hormone responses to growth hormone-releasing hormone and clonidine before and after erythropoietin therapy in CAPD patients. Díez J, et al. **Nephron** 1996; 74(3):548–54

Chronic administration of a new potent agonist of growth hormone- releasing hormone induces compensatory linear growth in growth hormone-deficient rats: mechanism of action. Kovács M, et al. **Neuroendocrinology** 1996 Sep; 64(3):169–76

Effect of somatostatin-28 on growth hormone response to growth hormone-releasing hormone--impact of aging and lifelong dietary restriction. Shimokawa I, et al. **Neuroendocrinology** 1997 May;65(5):369–76

Control of growth hormone secretion from porcine fetal and neonatal pituitary tissue in vitro by growth hormone-releasing hormone, somatostatin, and insulin-like growth factor. Torronteras R, et al. **Neuroendocrinology** 1997 Feb;65(2):117–28

Longtime administration of growth hormone-releasing hormone (GHRH) does not restore the reduced efficiency of GHRH on sleep endocrine activity in 2 old-aged subjects--a preliminary study. Murck H, et al. **Pharmacopsychiatry** 1997 Jul;30(4):122–4

Noradrenergic receptor sensitivity in obsessive-compulsive disorders: I. Growth hormone response to clonidine stimulation. Brambilla F, et al. **Psychiatry Res** 1997 Mar 24;69(2-3):155–62

Hexarelin, a novel GHRP-6 analog, stimulates growth hormone (GH) release in a GH-secreting rat cell line (GH1) insensitive to GH-releasing hormone. Giustina A, et al. **Regul Pept** 1997 May 14;70(1):49–54

Effect of chronic administration of a new potent agonist of GH-RH(1-29)NH2 on linear growth and GH responsiveness in rats. Pinski J, et al. **Regul Pept** 1996 Sep 16;65(3):197–201

[Effect of sex on the increase of GH induced by galanin, alone or in combination with GHRH with or without pyridostigmine in pubescent subjects] Guzzaloni G, et al. **Minerva Endocrinol** 1996 Jun;21(2):53–7 (Eng. Abstr.) **(Ita)**

[Secretory reactions to somatoliberin and somatostatin of cultured cells of human pituitary adenomas producing growth hormone] Komolov IS, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):323–6 **(Rus)**

PHYSIOLOGY

Structural simplification of potent growth hormone-releasing hormone analogs: implications for other members of the VIP/GHRH/PACAP family. Coy DH, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:149–58 (15 ref.)

The growth-hormone-releasing hormone receptor: signal transduction, gene expression, and physiological function in growth regulation. Mayo KE, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:184–203 (35 ref.)

Immunization against growth hormone releasing factor or chronic feed restriction initiated at 3.5 months of age reduces ovarian response to pulsatile administration of gonadotropin-releasing hormone at 6 months of age and delays onset of puberty in heifers. Schoppee PD, et al. **Biol Reprod** 1996 Jul;55(1):87–98

The role of GRH mediated AC-cAMP system in the pathogenesis of human pituitary GH-secreting adenomas. Shi Y, et al. **Chin Med J (Engl)** 1996 Aug;109(8):603–8

Up and down the growth hormone cascade. Clark RG, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):65–80 (128 ref.)

Regulation of growth hormone (GH) gene expression and secretion during pregnancy and lactation in the rat: role of insulin-like growth factor-I, somatostatin, and GH-releasing hormone. Escalada J, et al. **Endocrinology** 1997 Aug;138(8):3435–43

Suppression of growth hormone (GH) hypersecretion due to ectopic GH-releasing hormone (GHRH) by a selective GHRH antagonist. Jaffe CA, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):634–7

Acute pharmacological reduction of plasma free fatty acids enhances the growth hormone (GH)-releasing hormone-mediated GH secretion in patients with Cushing's syndrome. Leal-Cerro A, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):3165–8

Growth hormone-releasing hormone (GHRH)-GH-somatic growth and luteinizing hormone (LH)RH-LH-ovarian axes in adult female transgenic mice expressing human GH gene. Sasaki F, et al. **J Neuroendocrinol** 1997 Aug; 9(8):615–26

Sex-related alterations in hypothalamic growth hormone-releasing hormone mRNA-but not somatostatin mRNA-expressing cells in genetically obese Zucker rats. Tannenbaum GS, et al. **Neuroendocrinology** 1996 Sep; 64(3):186–93

Physiological regulation of the human growth hormone (GH)-insulin-like growth factor type I (IGF-I) axis: predominant impact of age, obesity, gonadal function, and sleep. Veldhuis JD, et al. **Sleep** 1996 Dec;19(10 Suppl):S221–4 (17 ref.)

[The role of neuropeptides in normal and disordered sleep regulation] Steiger A, et al. **Wien Med Wochenschr** 1996; 146(13–14):291–3 (Eng. Abstr.) **(Ger)**

SECRETION

Somatostatin-stimulated growth hormone-releasing factor secretion in vitro is modified by fetal ethanol exposure. Conway S, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):703–9

Growth hormone- and growth-hormone-releasing hormone-producing tumors. Shimon I, et al. **Cancer Treat Res** 1997;89:1–24 (78 ref.)

Sex steroid effects on the development and functioning of the growth hormone axis. Chowen JA, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):297–310 (31 ref.)

Pathophysiology and clinical aspects of the ectopic GH-releasing hormone syndrome. Losa M, et al. **Clin Endocrinol (Oxf)** 1997 Aug;47(2):123–35 (93 ref.)

Growth hormone-releasing hormone (GRH)-producing pancreatic tumor with no evidence of multiple endocrine neoplasia type 1. Kawa S, et al. **Dig Dis Sci** 1997 Jul; 42(7):1480–5

Desensitisation of somatostatin, TRH and GHRH responses to glucose in the diabetic (Goto-Kakizaki) rat hypothalamus. Lewis BM, et al. **J Endocrinol** 1996 Oct; 151(1):13–7

THERAPEUTIC USE

Methionine potentiates both basal and GHRH-induced GH secretion in children. Bellone J, et al. **Clin Endocrinol (Oxf)** 1997 Jul;47(1):61–4

Pituitary responsiveness to GH-releasing hormone, GH-releasing peptide-2 and thyrotrophin-releasing hormone in critical illness. Van den Berghe G, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):341–51

The enhancing effect of pyridostigmine on the GH response to GHRH undergoes an accelerated age-related reduction in Down syndrome. Arvat E, et al. **Dementia** 1996 Sep-Oct; 7(5):288–92

Success in inducing ovulation in a case of premature ovarian failure using growth hormone-releasing hormone. Busacca M, et al. **Gynecol Endocrinol** 1996 Aug;10(4):277–9

Maturation of the regulation of growth hormone secretion in young males with hypogonadotropic hypogonadism pharmacologically exposed to progressive increments in serum testosterone. Giustina A, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1210–9

Once daily subcutaneous growth hormone-releasing hormone therapy accelerates growth in growth hormone-deficient children during the first year of therapy. Geref International Study Group. Thorner M, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1189-96

The somatotropic axis in critical illness: effect of continuous growth hormone (GH)-releasing hormone and GH-releasing peptide-2 infusion. Van den Berghe G, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):590-9

Use of growth hormone-releasing factor in ovulation induction in poor responders. Busacca M, et al. **J Reprod Med** 1996 Sep;41(9):699-703

SOMATOTROPIN-RELEASING-HORMONE(1-29) AMIDE see **SERMORELIN**

SOMATOTROPINS, RECOMBINANT

Legislative and legal restrictions on labeling information regarding the use of recombinant bovine somatotropin. Centner TJ, et al. **J Dairy Sci** 1997 Jan;80(1):215-9

ADMINISTRATION & DOSAGE

Low-dose recombinant human growth hormone increases body weight and lean body mass in patients with short bowel syndrome. Ellegård L, et al. **Ann Surg** 1997 Jan; 225(1):88-96

Investigation into the release of bioactive recombinant human growth hormone from normal and low-viscosity poly(methylmethacrylate) bone cements. Goodwin CJ, et al. **J Biomed Mater Res** 1997 Jan;34(1):47-55

Insulin-like growth factor-I liposomal gene transfer and systemic growth hormone stimulate wound healing. Pierre EJ, et al. **J Burn Care Rehabil** 1997 Jul-Aug;18(4):287-91

Responses of dairy cows supplemented with somatotropin during weeks 5 through 43 of lactation. Chalupa W, et al. **J Dairy Sci** 1996 May;79(5):800-12

Growth hormone in end-stage heart failure [letter; comment] Khardori R, et al. **Lancet** 1997 Jun 21;349(9068):1842; discussion 1843. Comment on: Lancet 1997 Apr 12;349(9058):1067-8. Comment on: Lancet 1997 Apr 12;349(9058):1068.

Growth hormone in end-stage heart failure [letter; comment] Wilmshurst P. **Lancet** 1997 Jun 21;349(9068):1842-3. Comment on: Lancet 1997 Apr 12;349(9058):1067-8.

ADVERSE EFFECTS

Hypercalcemia in an AIDS patient treated with growth hormone. Sakoulas G, et al. **AIDS** 1997 Sep;11(11):1353-6

Replay to Sasaki et al [letter; comment] Trachtman H. **Clin Nephrol** 1997 Mar;47(3):210. Comment on: Clin Nephrol 1996 Jul;46(1):6-9.

Childhood lichen planus in a patient receiving growth hormone for dwarfism [letter]. Oono T, et al. **Dermatology** 1996;192(1):87-8

Empty sella, growth hormone deficiency and pseudotumour cerebri: effect of initiation, withdrawal and resumption of growth hormone therapy. Francois I, et al. **Eur J Pediatr** 1997 Jan;156(1):69-70

Naevocyte triggering by recombinant human growth hormone. Piérard GE, et al. **J Pathol** 1996 Sep;180(1):74-9

Unfavorable effects of growth hormone therapy on the final height of boys with short stature not caused by growth hormone deficiency [see comments] Kawai M, et al. **J Pediatr** 1997 Feb;130(2):205-9. Comment in: J Pediatr 1997 Feb;130(2):172-4.

Unwanted effects of growth hormone excess in the adult. Melmed S. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:369-74 (31 ref.)

The effect of recombinant human growth hormone on responses to alloantigens in the pediatric transplant patient. Benfield MR, et al. **Pediatr Nephrol** 1996 Jun;10(3):280-2

Carbohydrate metabolism in children receiving growth hormone for 5 years. Chronic renal insufficiency compared with growth hormone deficiency, Turner syndrome, and idiopathic short stature. Genentech Collaborative Group. Saenger P, et al. **Pediatr Nephrol** 1996 Jun;10(3):261-3

Considerations related to the use of recombinant human growth hormone in children. American Academy of Pediatrics Committee on Drugs and Committee on Bioethics. **Pediatrics** 1997 Jan;99(1):122-9

Acute graft rejection after treatment with human growth hormone [letter] Tydén G, et al. **Transplantation** 1997 Jan 15;63(1):174-6

BIOSYNTHESIS

Baculovirus-mediated expression of chicken growth hormone. Foster DN, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):233-9

CHEMISTRY

Confirmation by mass spectrometry of a trisulfide variant in methionyl human growth hormone biosynthesized in Escherichia coli. Canova-Davis E, et al. **Anal Chem** 1996 Nov 15;68(22):4044-51

Stable formulations of recombinant human growth hormone and interferon-gamma for microencapsulation in biodegradable microspheres. Cleland JL, et al. **Pharm Res** 1996 Oct;13(10):1464-75

Separation and characterization of the tryptic peptide mapping of recombinant bovine growth hormone by reversed-phase high-performance liquid chromatography electrospray mass spectrometry. Chang JP, et al. **Rapid Commun Mass Spectrom** 1997;11(12):1266-70

CONTRAINDICATIONS

Is severe renal osteodystrophy a contraindication for recombinant human growth hormone treatment? Watkins SL. **Pediatr Nephrol** 1996 Jun;10(3):351-4 (22 ref.)

GENETICS

Tissue-engineered skeletal muscle organoids for reversible gene therapy. Vandenburgh H, et al. **Hum Gene Ther** 1996 Nov 10;7(17):2195-200

IMMUNOLOGY

Molecular interaction of growth hormone with two monoclonal antibodies recognizing distinct epitopes. Wang BS, et al. **Immunol Cell Biol** 1997 Feb;75(1):29-34

An immunoligand assay for quantitation of process specific Escherichia coli host cell contaminant proteins in a recombinant bovine somatotropin. Whitmire ML, et al. **J Immunoassay** 1997 Feb;18(1):49-65

PHARMACOLOGY

Effects of recombinant human insulin-like growth factor-1 and recombinant human growth hormone on anabolism and immunity in calorie-restricted alcoholic rats. Mendenhall CL, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):1-10

Effect of a growth hormone treatment on bone orthotropic elasticity in dwarf rats. Kohles SS, et al. **Ann Biomed Eng** 1997 Jan-Feb;25(1):77-85

Human growth hormone fragment (hGH44-91) produces insulin resistance and hyperinsulinemia but is less potent than 22 kDa hGH in the rat. Hettiarachchi M, et al. **Endocrine** 1997 Feb;6(1):47-52

Chronic administration of growth hormone (GH) to adult chickens exerts marked effects on circulating concentrations of insulin-like growth factor-I (IGF-I), IGF binding proteins, hepatic GH regulated gene I, and hepatic GH receptor mRNA. Radecki SV, et al. **Endocrine** 1997 Apr;6(2):117-24

Manipulation of adult body composition by treatment of the neonatal rat with growth hormone and prolactin. Kadim IT, et al. **Growth Regul** 1996 Dec;6(4):201-5

The role of growth hormone in the regulation of body composition in the adult. Russell-Jones DL, et al. **Growth Regul** 1996 Dec;6(4):247-52 (42 ref.)

The trophic action of growth hormone, insulin-like growth factor-I, and insulin on human duodenal mucosa cultured in vitro. Wheeler EE, et al. **Gut** 1997 Jan;40(1):57-60

Growth hormone attenuates early left ventricular remodeling and improves cardiac function in rats with large myocardial infarction. Cittadini A, et al. **J Am Coll Cardiol** 1997 Apr; 29(5):1109-16

Effect of insulin-like growth factor I and/or growth hormone on diaphragm of malnourished adolescent rats. Lewis MI, et al. **J Appl Physiol** 1997 Apr;82(4):1064-70

The growth hormone-dependent decrease in hepatic fatty acid synthase mRNA is the result of a decrease in gene transcription. Donkin SS, et al. **J Mol Endocrinol** 1996 Apr; 16(2):151-8

Enhancement of ovarian follicle development in heifers by treatment with recombinant bovine somatotrophin: a dose-response study. Gong JG, et al. **J Reprod Fertil** 1997 May;110(1):91-7

Effects of supplementary treatment with bovine growth hormone on hormonal and ovulatory responses to inhibin immunization in ewes. Tannetta DS, et al. **J Reprod Fertil** 1997 Jul;110(2):255-62

Growth hormone impaired compensation of hemorrhagic shock after trauma and sepsis in swine. Unneberg K, et al. **J Trauma** 1996 Nov;41(5):775-80

Effects of recombinant human growth hormone on plasma and dialysate amino acid profiles in CAPD patients. Ikizler TA, et al. **Kidney Int** 1996 Jul;50(1):229-34

Somatic and renal effects of growth hormone in rats with chronic renal failure. Kawaguchi H, et al. **Pediatr Nephrol** 1997 Jun;11(3):280-4

Acidosis prevents growth hormone-induced growth in experimental uremia. Kleinknecht C, et al. **Pediatr Nephrol** 1996 Jun;10(3):256-60

Growth hormone and insulin-like growth factor-I and mesangial matrix in uremic rats. Lin JJ, et al. **Pediatr Nephrol** 1996 Jun;10(3):299-303

Metabolic effects of recombinant human insulin-like growth factor-I in humans: comparison with recombinant human growth hormone. Mauras N, et al. **Pediatr Nephrol** 1996 Jun;10(3):318-23 (70 ref.)

Effect of growth hormone on urine calcium and serum vitamin D metabolites in renal failure. Strife CF, et al. **Pediatr Nephrol** 1996 Oct;10(5):648-50

Behavioral and endocrine effects of growth hormone administration in aged female rats. Drago F, et al. **Psychoneuroendocrinology** 1996 May;21(4):401-10

Optimization of the cycling of clonogenic and primitive cord blood progenitors by various growth factors. Movassagh M, et al. **Stem Cells** 1997;15(3):214-22

THERAPEUTIC USE

Hypercalcemia in an AIDS patient treated with growth hormone. Sakoulas G, et al. **AIDS** 1997 Sep;11(11):1353-6

Recombinant growth hormone: a new cardiovascular drug therapy. Gomberg-Maitland M, et al. **Am Heart J** 1996 Dec;132(6):1244-62 (145 ref.)

Nutritional hope or hype for short bowel syndrome? Weireiter L. **Am J Gastroenterol** 1996 Oct;91(10):2246-7

Effect of growth hormone on fatty liver in panhypopituitarism. Takano S, et al. **Arch Dis Child** 1997 Jun;76(6):537-8

Juvenile rheumatoid arthritis. Effects of disease activity and recombinant human growth hormone on insulin-like growth factor 1, insulin-like growth factor binding proteins 1 and 3, and osteocalcin. Davies UM, et al. **Arthritis Rheum** 1997 Feb;40(2):332-40

Dynamic muscle strength alterations to detraining and retraining in elderly men. Taaffe DR, et al. **Clin Physiol** 1997 May;17(3):311-24

Short stature. Underwood LE. **Curr Ther Endocrinol Metab** 1997;6:66-8 (4 ref.)

Growth hormone in the treatment of heart failure: a new tool for the future? [editorial; comment] Jonkman FA, et al. **Eur Heart J** 1997 Feb;18(2):181-4. Comment on: Eur Heart J 1997 Feb;18(2):340-7.

Therapy with recombinant growth hormone in children with Crohn disease and growth failure [letter] Henker J. **Eur J Pediatr** 1996 Dec;155(12):1066-7

Serum lipids, lipoprotein lp(a), and plasminogen activator inhibitor-1 in patients with Turner's syndrome before and during growth hormone and estrogen therapy. Lanes R, et al. **Fertil Steril** 1997 Sep;68(3):473-7

Growth hormone treatment for burned children. Herndon DN, et al. **Horm Res** 1996;45 Suppl 1:29-31 (9 ref.)

Systemically and locally administered growth hormone stimulates bone healing in combination with osteopromotive membranes: an experimental study in rats. Hedner E, et al. **J Bone Miner Res** 1996 Dec;11(12):1952-60

Growth hormone treatment for growth hormone deficient adults. Clark W, et al. **J Clin Pharm Ther** 1996 Dec; 21(6):367-72 (24 ref.)

Effects of recombinant growth hormone (GH) treatment on bone mineral density and body composition in adults with childhood onset growth hormone deficiency. Sartorio A, et al. **J Endocrinol Invest** 1996 Sep;19(8):524-9

Effect of chronic treatment with biosynthetic growth hormone (GH) on the GH response to double GH-releasing hormone administration in children with short stature. Scacchi M, et al. **J Endocrinol Invest** 1997 Feb;20(2):72-6

Is growth hormone just a tall story? [editorial; comment] Rosenfeld RG. **J Pediatr** 1997 Feb;130(2):172-4. Comment on: J Pediatr 1997 Feb;130(2):197-204. Comment on: J Pediatr 1997 Feb;130(2):205-9.

Growth hormone treatment in short normal children. Bernasconi S, et al. **J Pediatr Endocrinol Metab** 1996 Jun; 9 Suppl 3:339-43

Growth hormone and body composition. Christiansen JS. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:365-8 (24 ref.)

Constitutional delay in growth and puberty: a comparison of final height achieved between treated and untreated children. Ferrández Longás A, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:345-57 (39 ref.)

Growth hormone treatment in children before and after renal transplantation. Hokken-Koelega AC. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:359-64 (41 ref.)

Reprioritization of liver protein synthesis resulting from recombinant human growth hormone supplementation in parenterally fed trauma patients: the effect of growth hormone on the acute-phase response. Petersen SR, et al. **J Trauma** 1997 Jun;42(6):987-95; discussion 995-6

Use of growth hormone for non-growth hormone deficient children [letter; comment] Diller L. **JAMA** 1996 Dec 18; 276(23):1877-8; discussion 1878. Comment on: JAMA 1996 Aug 21;276(7):531-7. Comment on: JAMA 1996 Aug 21;276(7):567-8.

Use of growth hormone for non-growth hormone deficient children [letter; comment] Voron DA. **JAMA** 1996 Dec 18;276(23):1878; discussion 1878. Comment on: JAMA 1996 Aug 21;276(7):567-8.

Growth hormone in end-stage heart failure [letter; comment] Dreifuss PM. **Lancet** 1997 Jun 21;349(9068):1841-2; discussion 1843. Comment on: Lancet 1997 Apr 12;349(9058):1967-8. Comment on: Lancet 1997 Apr 12;349(9058):1068.

Secondary hyperparathyroidism is not always an obstacle to improved growth during recombinant human growth hormone treatment [letter] Picca S, et al. **Nephron** 1997; 75(2):239-40

Factors influencing the response to growth hormone in children with renal disease. Rees L, et al. **Pediatr Nephrol** 1996 Jun;10(3):337-9

Effects of growth hormone on insulin-like growth factors and binding proteins before and after renal transplantation. van Renen MJ, et al. **Pediatr Nephrol** 1996 Aug;10(4):483-7

Growth preservation after brief growth hormone therapy in chronic renal insufficiency. Warshaw BL, et al. **Pediatr Nephrol** 1997 Feb;11(1):82-3

Growth hormone treatment increases kidney size in a woman

with growth hormone deficiency--a case report [letter] Westman K, et al. **Pediatr Nephrol** 1997 Aug;11(4):528–9
Short dialyzed children respond less to growth hormone than patients prior to dialysis. German Study Group for Growth Hormone Treatment in Chronic Renal Failure. Wühl E, et al. **Pediatr Nephrol** 1996 Jun;10(3):294–8
Growth of growth hormone–treated and nontreated children before and after tethered spinal cord release. Rotenstein D, et al. **Pediatr Neurosurg** 1996;24(5):238–41
Anabolic effect of biosynthetic growth hormone in cystic fibrosis patients. Huseman CA, et al. **Pediatr Pulmonol** 1996 Aug;22(2):90–5
Considerations related to the use of recombinant human growth hormone in children. American Academy of Pediatrics Committee on Drugs and Committee on Bioethics. **Pediatrics** 1997 Jan;99(1):122–9
[Growth hormone after burns and multiple trauma. Immunologic effects of growth hormone] **Unfallchirurg** 1997 Mar;100(3 Suppl):1–4 **(Ger)**

SOMATOTYPES

Relationship between anthropometric indices of body fat distribution and basal energy metabolism in healthy Maltese women. Pullicino E, et al. **Acta Diabetol** 1996 Sep; 33(3):198–204
Influence of players' physique on rugby football injuries. Lee AJ, et al. **Br J Sports Med** 1997 Jun;31(2):135–8
Body habitus and coronary heart disease in men. A review with reference to methods of body habitus assessment. Williams SR, et al. **Eur Heart J** 1997 Mar;18(3):376–93 (114 ref.)
Differential fertility and body build in !Kung San and Kavango females from northern Namibia. Kirchengast S, et al. **J Biosoc Sci** 1996 Apr;28(2):193–210
Sports injuries in footballers related to defects of posture and body mechanics. Watson AW.
J Sports Med Phys Fitness 1995 Dec;35(4):289–94
Perceived somatotype as indicator of accuracy of body image, a method using somatotype attitudinal distance. Sobral F, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1107–10
[Relationship between body type, subjective symptoms and health awareness in junior high school students] Monden S. **Nippon Koshu Eisei Zasshi** 1997 Feb;44(2):131–8 (Eng. Abstr.) **(Jpn)**
[Somatotypes and the paradigm of individual constitutions. The development of the theory of human constitutions in Russia in the 2nd half of the 20th century] Kliorin AI. **Fiziol Zh Im I M Sechenova** 1996 Mar;82(3):151–65 (50 ref.) **(Rus)**

GENETICS

Somatotype in panic patients. Bulbena A, et al. **Anxiety** 1996; 2(2):80–5

PHYSIOLOGY

Somatotype in high performance female netball players may influence player position and the incidence of lower limb and back injuries. Hopper DM. **Br J Sports Med** 1997 Sep; 31(3):197–9
Echocardiography in fraternal twin bodybuilders with one abusing anabolic steroids [letter] Dickerman RD, et al. **Cardiology** 1997 Jan–Feb;88(1):50–1
Relationship between somatotype and some risk factors for ischemic heart disease. Valkov J, et al.
Folia Med (Plovdiv) 1996;38(1):17–21
Decreased sexual interest and its relationship to body build in postmenopausal women. Kirchengast S, et al.
Maturitas 1996 Feb;23(1):63–71
[Correlation between energy exchange in skeletal muscles of 6–11 year–old boys and development of somatotypologic characteristics] Kornienko IA, et al. **Fiziol Cheloveka** 1996 Nov–Dec;22(6):10–6 **(Rus)**

SOMATREM

ADVERSE EFFECTS

Sleep apnea in patients receiving growth hormone. Gerard JM, et al. **Clin Pediatr (Phila)** 1997 Jun;36(6):321–6

THERAPEUTIC USE

Adult height in growth hormone (GH)–deficient children treated with biosynthetic GH. The Genentech Growth Study Group. Blethen SL, et al.
J Clin Endocrinol Metab 1997 Feb;82(2):418–20

SOMATROPIN

Expression of a recombinant human growth hormone binding protein in baculovirus/insect cell system. Cholin S, et al. **Biochimie** 1996;78(10):882–6
Hormone scandal hits France [news] Dorozynski A. **BMJ** 1997 Jan 18;314(7075):166
Proceedings of the 7th hGH Symposium. Madrid, April 11–14, 1996. **Horm Res** 1996;46(4–5):147–248
Appeal court grants Genentech's growth market to Novo Nordisk [news] Kling J. **Nat Biotechnol** 1997 May;15(5):403
Insulin–like growth factor I, its binding proteins 1 and 3, and growth hormone–binding protein in children and adolescents with insulin–dependent diabetes mellitus: clinical implications. Muñoz MT, et al. **Pediatr Res** 1996 Jun;39(6):992–8

ADMINISTRATION & DOSAGE

Effects of physiologic growth hormone therapy on bone density and body composition in patients with adult–onset growth hormone deficiency. A randomized, placebo–controlled trial [see comments] Baum HB, et al. **Ann Intern Med** 1996 Dec 1;125(11):883–90. Comment in: Ann Intern Med 1996 Dec 1;125(11):932–4.
Diurnal variation in serum insulin–like growth factor (IGF)–I and IGF binding protein–3 concentrations during daily subcutaneous injections of recombinant human growth hormone in GH–deficient adults. Oscarsson J, et al.
Clin Endocrinol (Oxf) 1997 Jan;46(1):63–8
The effect of sequential administration of octreotide alone and octreotide/growth hormone simultaneously on buserelin stimulated ovarian steroid secretion in women with polycystic ovary syndrome. Piaditis GP, et al.
Clin Endocrinol (Oxf) 1996 Nov;45(5):595–604
Effects of low dose of recombinant human growth hormone on renal excretion of insulin–like growth factor–I (IGF–I) in humans: an inverse relation between serum and urinary IGF–I level. Uemasu J, et al. **Clin Nephrol** 1996 Jul; 46(1):1–5
hGH transgenic rats expressing severe obesity and effect of treatment with hGH in a pulsatile manner. Ikeda A, et al. **Endocr J** 1996 Oct;43 Suppl:S99–101
Short–term treatment with different doses of human growth hormone in adult patients with growth hormone deficiency. Kato Y, et al. **Endocr J** 1996 Apr;43(2):177–83
The effects of two doses of replacement growth hormone on the biochemical, body composition and psychological profiles of growth hormone–deficient adults. Carroll PV, et al. **Eur J Endocrinol** 1997 Aug;137(2):146–53
Bioavailability and bioactivity of three different doses of nasal growth hormone (GH) administered to GH–deficient patients: comparison with intravenous and subcutaneous administration. Laursen T, et al. **Eur J Endocrinol** 1996 Sep;135(3):309–15
Which route of growth hormone administration serves best? An invited commentary. Strasburger CJ, et al.
Eur J Endocrinol 1996 Sep;135(3):289–90
Morphometric analysis of gastrocnemius muscle fiber size and fiber proportions in the hypophysectomized rat after prolonged administration of growth hormone or thyroxine. Everitt AV, et al. **Growth Dev Aging** 1996 Summer; 60(2):85–93
Growth promotion and Turner–specific bone age after therapy with growth hormone and in combination with oxandrolone: when should therapy be started in Turner syndrome? Joss EE, et al. **Horm Res** 1997;47(3):102–9
Growth hormone treatment induces a dose–dependent catch–up growth in short children born small for gestational age: a summary of four clinical trials. Wilton P, et al. **Horm Res** 1997;48 Suppl 1:67–71
Effect of co–monomer composition on the integrity of bioactive growth hormone released from novel PEMA based polymers. Goodwin CJ, et al.
J Biomed Mater Res 1996 Dec;32(4):635–43
Apatite as carrier for growth hormone: in vitro characterization of loading and release. Guicheux J, et al.
J Biomed Mater Res 1997 Feb;34(2):165–70
Growth hormone therapy in GH–deficient adults: the problem of the dose [letter; comment] Amato G, et al.
J Clin Endocrinol Metab 1997 Apr;82(4):1304–6. Comment on: J Clin Endocrinol Metab 1996 Aug;81(8):2865–73.
Skeletal effects of cyclic recombinant human growth hormone and salmon calcitonin in osteopenic postmenopausal women. Holloway L, et al.
J Clin Endocrinol Metab 1997 Apr;82(4):1111–7
A low starting dose of genotropin in growth hormone–deficient adults. Janssen YJ, et al.
J Clin Endocrinol Metab 1997 Jan;82(1):129–35
Yearly stepwise increments of the growth hormone dose results in a better growth response after four years in girls with Turner syndrome. Dutch Working Group on Growth Hormone. van Teunenbroek A, et al.
J Clin Endocrinol Metab 1996 Nov;81(11):4013–21
Effects of growth hormone and insulin–like growth factor 1 (IGF–1) treatments on the nitrogen metabolism and hepatic IGF–1–messenger RNA expression in postoperative parenterally fed rats [see comments] Inaba T, et al. **JPEN J Parenter Enteral Nutr** 1996 Sep–Oct; 20(5):325–31. Comment in: JPEN J Parenter Enteral Nutr 1996 Sep–Oct;20(5):315.
New treatment for patients with short–bowel syndrome: growth hormone, glutamine and a modified diet. Sax HC.
JPEN J Parenter Enteral Nutr 1996 Sep–Oct;20(5):375–6
Long–term use of recombinant human growth hormone in children with chronic renal insufficiency. Yadin O, et al.
Kidney Int Suppl 1997 Mar;58:S114–7 (30 ref.)
[Growth hormone prevents the steroid myopathy in rats] Matsushita T, et al. **Rinsho Shinkeigaku** 1996 Jun; 36(6):752–6 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Hormones, immunology, nevi, and melanoma [editorial; comment] McLean DI, et al. **Arch Dermatol** 1997 Jun; 133(6):783–4. Comment on: Arch Dermatol 1997 Jun;133(6):795–6.
Effect of growth hormone therapy on melanocytic nevi in survivors of childhood neoplasia [letter] [see comments] Zvulunov A, et al. **Arch Dermatol** 1997 Jun;133(6):795–6 . Comment in: Arch Dermatol 1997 Jun;133(6):783–4.
Can glucose intolerance and/or diabetes be predicted in patients treated with rhGH? Hokken–Koelega AC.
Br J Clin Pract Symp Suppl 1996 Aug;85:56–8
Is the impact of recombinant human growth hormone (rhGH) on the plasma lipid profile beneficial or harmful? Querfeld U. **Br J Clin Pract Symp Suppl** 1996 Aug;85:54–5
Benign intracranial hypertension (pseudotumour cerebri) during rhGH therapy. Querfeld U.
Br J Clin Pract Symp Suppl 1996 Aug;85:68
The influence of growth hormone treatment on bone metabolism in dialysis patients. Sieniawska M, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:61–3
Diabetes mellitus after therapy with recombinant human growth hormone (rhGH). Stefanidis CJ, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:66–7
Does renal osteodystrophy develop and/or progress during the course of rhGH treatment? Watkins SL.
Br J Clin Pract Symp Suppl 1996 Aug;85:59–60
Creutzfeldt–Jakob disease:another avenue? [editorial] Williamson K. **Br J Hosp Med** 1994 Jan 19–Feb 1; 51(1–2):7–8
Creutzfeldt–Jakob disease and growth hormone therapy [letter] Dean HJ. **Can J Public Health** 1997 Mar–Apr; 88(2):138
The safety profile of GH replacement therapy in adults. Chipman JJ, et al. **Clin Endocrinol (Oxf)** 1997 Apr; 46(4):473–81
Mechanical properties of skin in recombinant human growth factor abusers among adult bodybuilders.
Piérard–Franchimont C, et al. **Dermatology** 1996; 192(4):389–92
Polyradiculoneuropathy in boy with pituitary dwarfism treated with recombinant growth hormone. Sakurai T, et al. **Endocr J** 1996 Oct;43 Suppl:S127–8
A case of syringomyelia with type I Arnold–Chiari malformation (ACM): growth hormone (GH) therapy and the size of syrinx on serial MR images. Takakuwa S, et al. **Endocr J** 1996 Oct;43 Suppl:S129–30
Super hype for super hormones [editorial] Butler RN.
Geriatrics 1997 Feb;52(2):13–4
Slipped capital femoral epiphysis in children treated with growth hormone. A summary of the National Cooperative Growth Study experience. Blethen SL, et al. **Horm Res** 1996;46(3):113–6
Risk of leukemia in children treated with human growth hormone: review and reanalysis. Allen DB, et al.
J Pediatr 1997 Jul;131(1 Pt 2):S32–6
Effect of growth hormone (GH) therapy on parathyroid hormone metabolism in a girl with GH deficient short stature and chronic renal failure. Fujisawa Y, et al.
J Pediatr Endocrinol Metab 1996 Sep–Oct;9(5):555–8
Growth hormone treatment increases circulating lipoprotein(a) in children with chronic renal failure. Laron Z, et al. **J Pediatr Endocrinol Metab** 1996 Sep–Oct; 9(5):533–7
Creutzfeldt–Jakob disease from contaminated growth hormone extracts in France. Billette de Villemeur T, et al. **Neurology** 1996 Sep;47(3):690–5
Myelodysplastic syndrome during recombinant human growth hormone supplementation after treatment for neuroblastoma. Miyabayashi M, et al.
Pediatr Hematol Oncol 1996 Nov–Dec;13(6):571–5

ANALOGS & DERIVATIVES

Structure and in vivo activity of hypoglycaemic analogues of human growth hormone (6–13). Thompson P, et al.
Drug Des Discov 1995 Aug;13(1):55–72
Conformational stability of a type II' beta–turn motif in human growth hormone [6–13] peptide analogues at hydrophobic surfaces. Lee TH, et al. **J Pept Res** 1997 May; 49(5):394–403
Selective modification at the N–terminal region of human growth hormone that shows antagonistic activity. Tchelet A, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1–2):141–52

ANALYSIS

Accurate topological comparison of two recombinant human growth hormones by optical surface plasmon resonance. Mani JC, et al. **Anal Biochem** 1997 May 15;248(1):50–62
What have we learned so far from ultrasensitive growth hormone (GH) assays? [editorial; comment] Veldhuis JD.
Clin Chem 1996 Nov;42(11):1731–2. Comment on: Clin Chem 1996 Nov;42(11):1789–95.
The influence of salts on the reaction between hGH and several of its monoclonal antibodies in fixed, paraffin–embedded human pituitary as a model system. Montero C, et al. **Eur J Histochem** 1996;40(2):153–8
Apparent growth hormone levels in plasma and urine. Methodological "artefacts". Girard J. **Nucl Med Biol** 1994 Apr;21(3):381–92 (31 ref.)

ANTAGONISTS & INHIBITORS

Short stature caused by a mutant growth hormone with an antagonistic effect. Takahashi Y, et al. **Endocr J** 1996 Oct; 43 Suppl:S27–32
Selective modification at the N–terminal region of human

growth hormone that shows antagonistic activity. Tchelet A, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1–2):141–52

[Effect of the beta-2 mimetic drug terbutaline of growth hormone secretion in prepubertal asthmatic children] Baum WF, et al. **Pneumologie** 1997 May;51(5):513–6 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Immunohistochemical and in situ hybridization detection of growth-hormone-producing cells in human thymoma. Lauriola L, et al. **Am J Pathol** 1997 Jul;151(1):55–61

Growth hormone-binding protein enhances growth hormone activity in vivo. Turyn D, et al. **Am J Physiol** 1997 Sep; 273(3 Pt 1):E549–56

A growth hormone antagonist protects mice against streptozotocin induced glomerulosclerosis even in the presence of elevated levels of glucose and glycated hemoglobin. Chen NY, et al. **Endocrinology** 1996 Nov; 137(11):5163–5

Role of high-performance liquid chromatographic protein analysis in developing fermentation processes for recombinant human growth hormone, relaxin, antibody fragments and lymphotoxin. Jacobson FS, et al. **J Chromatogr A** 1997 Feb 28;763(1–2):31–48

Growth hormone-producing pituitary tumours: clinical profile and results of surgery. Modi KD, et al. **Natl Med J India** 1996 Nov–Dec;9(6):262–5

Transgenic studies with a keratin promoter-driven growth hormone transgene: prospects for gene therapy. Wang X, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):219–26

[The testis as eutopic production site of human growth hormone, placental lactogen and prolactin: possible autocrine/paracrine effects on testicular function (see comments)] Untergasser G, et al. **Wien Klin Wochenschr** 1996;108(17):541–6 (Eng. Abstr.). Comment in: Wien Klin Wochenschr 1996;108(17):530–1. **(Ger)**

BLOOD

Determinants of age-associated changes in os calcis ultrasonic indices in elderly women: potential involvement of geriatric hyposomatotropism in bone fragility. Boonen S, et al. **Age Ageing** 1997 Mar;26(2):139–46

Function of GH/IGF-I axis in aging: multicenter study in 152 healthy elderly subjects with different degrees of physical activity. Italian Association for Research on Brain Aging (AIRIC) Multicenter Study Group. **Aging (Milano)** 1997 Jun;9(3):185–92

Disorders of somatotrophic axis in HIV-infected patients [letter] Rabaud C, et al. **AIDS** 1996 Jul;10(8):920–2

Persistence of defective serotonergic and GABAergic controls of growth hormone secretion in long-term abstinent alcoholics. Vescovi PP, et al. **Alcohol Alcohol** 1997 Jan–Feb;32(1):85–90

Acute alterations in growth hormone-insulin-like growth factor axis in humans injected with endotoxin. Lang CH, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R371–8

Interassay differences in growth hormone measurement in acromegaly. Barth JH, et al. **Ann Clin Biochem** 1997 Mar; 34 (Pt 2):156–9

GH response to GH-releasing hormone (GHRH) in Alzheimer and vascular dementia. Relation with somatostatin cerebrospinal levels. Gómez IM, et al. **Ann Endocrinol (Paris)** 1996;57(2):107–10

Growth hormone response to clonidine and L-dopa in normal volunteers. Bebchuk JM, et al. **Anxiety** 1994–95; 1(6):278–81

Postnatal variations of growth hormone bioactivity and of growth hormone-dependent factors. Bozzola M, et al. **Arch Pediatr Adolesc Med** 1996 Oct;150(10):1068–71

Growth hormone bioactivity and levels of growth hormone, growth hormone-binding protein, insulinlike growth factor I, and insulinlike growth factor-binding proteins in premature and full-term newborns during the first month of life. Radetti G, et al. **Arch Pediatr Adolesc Med** 1997 Feb;151(2):170–5

Changes in growth hormone, insulin, insulinlike growth factors (IGFs), and IGF-binding protein-1 in chronic fatigue syndrome. Allain TJ, et al. **Biol Psychiatry** 1997 Mar 1;41(5):567–73

Effects of light and chronotherapy on human circadian rhythms in delayed sleep phase syndrome: cytokines, cortisol, growth hormone, and the sleep-wake cycle. Weyerbrock A, et al. **Biol Psychiatry** 1996 Oct 15; 40(8):794–7

Growth hormone response to sumatriptan (5-HT1D agonist) challenge in seasonal affective disorder: effects of light therapy. Yatham LN, et al. **Biol Psychiatry** 1997 Jul 1; 42(1):24–9

Different female reproductive phenotypes determined by human growth hormone (hGH) levels in hGH-transgenic rats. Ikeda A, et al. **Biol Reprod** 1997 Apr;56(4):847–51

Net fluxes over working thigh of hormones, growth factors and biomarkers of bone metabolism during short lasting dynamic exercise. Brahm H, et al. **Calcif Tissue Int** 1997 Feb;60(2):175–80

Computation of time-specified tolerance intervals for hybrid time series with nonequidistant sampling, illustrated for plasma growth hormone. Hermida RC, et al. **Chronobiol Int** 1997 Jul;14(4):409–25

Growth hormone (GH) assays: influence of standard preparations, GH isoforms, assay characteristics, and GH-binding protein. Jansson C, et al. **Clin Chem** 1997 Jun; 43(6 Pt 1):950–6

Growth hormone assays: early to latest test generations compared [see comments] L'Hermite-Balériaux M, et al. **Clin Chem** 1996 Nov;42(11):1789–95. Comment in: Clin Chem 1996 Nov;42(11):1731–2.

Trimipramine and imipramine exert different effects on the sleep EEG and on nocturnal hormone secretion during treatment of major depression. Sonntag A, et al. **Depression** 1996;4(1):1–13

Plasma GH, TSH, and PRL responses to recombinant human insulin-like growth factor-I (IGF-I) in normal and acromegalic subjects. Hanew K, et al. **Endocr J** 1996 Oct; 43 Suppl:S81–3

Effects of surgery on testosterone secretion in male patients with pituitary adenomas. Tominaga A, et al. **Endocr J** 1996 Jun;43(3):307–12

Threshold increases in plasma growth hormone in relation to plasma catecholamine and blood lactate concentrations during progressive exercise in endurance-trained athletes. Chwalbinska-Moneta J, et al. **Eur J Appl Physiol** 1996; 73(1–2):117–20

Growth hormone responses to treadmill sprinting in sprint- and endurance-trained athletes. Nevill ME, et al. **Eur J Appl Physiol** 1996;72(5–6):460–7

A simple, rapid immunometric assay for determination of functional and growth hormone-occupied growth hormone-binding protein in human serum. Fisker S, et al. **Eur J Clin Invest** 1996 Sep;26(9):779–85

22-kD growth hormone exclusion assay: a new approach to measurement of non-22-kD growth hormone isoforms in human blood [comment] Boguszewski CL, et al. **Eur J Endocrinol** 1996 Nov;135(5):573–82. Comment on: Eur J Endocrinol 1996 Nov;135(5):536–7.

Somatotrope responsiveness to Hexarelin, a synthetic hexapeptide, is refractory to the inhibitory effect of glucose in obesity. Grottoli S, et al. **Eur J Endocrinol** 1996 Dec; 135(6):678–82

Recognizing minorities: the 22-kD growth hormone exclusion assay (GHEA)—an invited commentary [comment] Strasburger CJ. **Eur J Endocrinol** 1996 Nov; 135(5):536–7. Comment on: Eur J Endocrinol 1996 Nov;135(5):573–82.

Reproducibility of the growth hormone response to stimulation with growth hormone-releasing hormone plus arginine during lifespan. Valetto MR, et al. **Eur J Endocrinol** 1996 Nov;135(5):568–72

Effects of estradiol valerate on growth hormone and prolactin response to growth hormone-releasing hormone stimulation in pre- and postmenopausal women. Hartmann BW, et al. **Gynecol Endocrinol** 1997 Feb;11(1):43–50

Do changes in growth hormone levels correlate with IGF-I levels in patients undergoing IVF-ET? Yohay D, et al. **Gynecol Endocrinol** 1997 Aug;11(4):269–74

Repeated administration of growth hormone-releasing hormone with or without previous administration of pyridostigmine in insulin-dependent diabetes mellitus. Martina V, et al. **Horm Metab Res** 1997 Apr;29(4):180–3

The effects of the degree of surgical trauma and glucose load on concentration of thyrotropin, growth hormone and prolactin under enflurane anaesthesia. Redondo M, et al. **Horm Metab Res** 1997 Feb;29(2):66–9

Immunoreactive growth hormone-releasing hormone (IR-GHRH) in the feto-placental circulation and differential effects of L-dopa, L-arginine and somatostatin-14 on the plasma levels of IR-GHRH in normal adults. Saito H, et al. **Horm Metab Res** 1997 Apr; 29(4):184–9

Reproducibility of growth hormone and cortisol responses to the insulin tolerance test and the short ACTH test in normal adults. Vestergaard P, et al. **Horm Metab Res** 1997 Mar;29(3):106–10

An investigation into the lability of the bioactivity of human growth hormone using the ESTA bioassay. Dattani MT, et al. **Horm Res** 1996;46(2):64–73

Factors modifying growth hormone estimates in immunoassays. Fisker S, et al. **Horm Res** 1996; 46(4–5):183–7 (35 ref.)

Influence of gender on the correlation between plasma growth hormone profiles and urinary growth hormone excretion. Main KM, et al. **Horm Res** 1997;48(1):16–22

Vitamin A levels and growth hormone axis. Raifen R, et al. **Horm Res** 1996;46(6):279–81

Changes of plasma levels of human growth hormone with age in relation to mammary tumour appearance in whey acidic protein/human growth hormone (mWAP/hGH) transgenic female and male mice. Nagasawa H, et al. **In Vivo** 1996 Sep–Oct;10(5):503–5

Effect of obesity on total and free insulin-like growth factor (IGF)-1, and their relationship to IGF-binding protein (BP)-1, IGFBP-2, IGFBP-3, insulin, and growth hormone. Nam SY, et al. **Int J Obes Relat Metab Disord** 1997 May; 21(5):355–9

Acute effect of amino acid ingestion and resistance exercise on plasma growth hormone concentration in young men. Suminski RR, et al. **Int J Sport Nutr** 1997 Mar;7(1):48–60

Growth hormone and insulin-like growth factor I responses to moderate submaximal acute physical exercise in man: effects of octreotide, a somatostatin analogue, administration. Di Luigi L, et al. **Int J Sports Med** 1997 May;18(4):257–63

Plasma insulin-like growth factor-I and high affinity growth hormone-binding protein levels increase after two weeks of strenuous physical training. Roelen CA, et al. **Int J Sports Med** 1997 May;18(4):238–41

The growth hormone response to apomorphine at 4 days postpartum in women with a history of major depression. Mc Ivor RJ, et al. **J Affect Disord** 1996 Oct 14;40(3):131–6

Circulating non-22-kilodalton growth hormone isoforms in acromegalic men before and after transsphenoidal surgery. Boguszewski CL, et al. **J Clin Endocrinol Metab** 1997 May; 82(5):1516–21

Increased proportion of circulating non-22-kilodalton growth hormone isoforms in short children: a possible mechanism for growth failure. Boguszewski CL, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2944–9

Physical fitness, endurance training, and the growth hormone-insulin-like growth factor I system in adolescent females. Eliakim A, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3986–92

Abdominal fat determines growth hormone-binding protein levels in healthy nonobese adults. Fisker S, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):123–8

Growth hormone (GH) provocative retesting of 108 young adults with childhood-onset GH deficiency and the diagnostic value of insulin-like growth factor I (IGF-I) and IGF-binding protein-3. Juul A, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1195–201

The growth hormone response to hexarelin in children: reproducibility and effect of sex steroids. Loche S, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):861–4

Growth hormone (GH) retesting and auxological data in 131 GH-deficient patients after completion of treatment [see comments] Tauber M, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):352–6. Comment in: J Clin Endocrinol Metab 1997 Feb;82(2):349–51.

Dual hormonal replacement therapy with insulin and recombinant human insulin-like growth factor (IGF)-I in insulin-dependent diabetes mellitus: effects on the growth hormone/IGF/IGF-binding protein system. Thrailkill K, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1181–7

Growth hormone response to the hypothalamic somatostatinergic activity in acromegalic patients. Yang I, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2492–6

Impairment of growth hormone responsiveness to growth hormone releasing hormone and pyridostigmine in patients affected by Prader-Labhardt-Willi syndrome. Beccaria L, et al. **J Endocrinol Invest** 1996 Nov;19(10):687–92

Effect of chronic treatment with octreotide nasal powder on serum levels of growth hormone, insulin-like growth factor I, insulin-like growth factor binding proteins 1 and 3 in acromegalic patients. Invitti C, et al. **J Endocrinol Invest** 1996 Sep;19(8):548–55

The effect of long-term prednisone treatment on growth hormone and insulin-like growth factor-1. Prummel MF, et al. **J Endocrinol Invest** 1996 Oct;19(9):620–3

Effect of glycemic control on growth hormone and IGFBP-1 secretion in patients with type I diabetes mellitus. Salgado LR, et al. **J Endocrinol Invest** 1996 Jul–Aug;19(7):433–40

Effects of ovary suppression by a long-acting GnRH-agonist on circulating GH, insulin-like growth factor I and insulin levels in women with polycystic ovary syndrome. Tropeano G, et al. **J Endocrinol Invest** 1997 Apr; 20(4):220–4

Changes in sleep-endocrine activity after growth hormone-releasing hormone depend on time of administration. Schier T, et al. **J Neuroendocrinol** 1997 Mar; 9(3):201–5

National Cooperative Growth Study substudy VI: the clinical utility of growth-hormone-binding protein, insulin-like growth factor I, and insulin-like growth factor-binding protein 3 measurements. Attie KM, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S56–60

Growth hormone secretion assessment in the diagnosis of short stature. Audí L, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:313–24 (74 ref.)

Pituitary enlargement due to primary hypothyroidism: growth hormone response to GHRH, GHRP-6 and GHRH plus GHRP-6. Damjanović S, et al. **J Pediatr Endocrinol Metab** 1996 Sep–Oct;9(5):549–53

The hormonal response to intravenous 5-hydroxytryptophan in bulimia nervosa. Goldbloom DS, et al. **J Psychosom Res** 1996 Mar;40(3):289–97

Growth hormone secretion and serum insulin-like growth factor-I concentration in X-linked hypophosphatemic rickets before and after treatment. Soliman AT, et al. **J Trop Pediatr** 1997 Aug;43(4):236–41

Derangements of the somatotropic hormone axis in chronic renal failure. Tönshoff B, et al. **Kidney Int Suppl** 1997 Mar; 58:S106–13 (66 ref.)

Distinction of idiopathic Parkinson's disease from multiple-system atrophy by stimulation of growth-hormone release with clonidine. Kimber JR, et al. **Lancet** 1997 Jun 28;349(9069):1877–81

Altered growth hormone (GH) secretion in women gaining weight during hormone replacement therapy (HRT). Hartmann BW, et al. **Maturitas** 1996 Aug;25(1):29–34

Basal growth hormone levels are positively correlated with high-density lipoprotein cholesterol levels in women. Bänsch D, et al. **Metabolism** 1997 Sep;46(9):1039–43

How (not) to diagnose growth hormone deficiency in adults: stimulated serum concentrations of growth hormone in

healthy subjects and in patients with pituitary macroadenomas. Vierhapper H, et al. **Metabolism** 1997 Jun; 46(6):680–3

Growth hormone responses to growth hormone–releasing hormone and clonidine before and after erythropoietin therapy in CAPD patients. Diez J, et al. **Nephron** 1996; 74(3):548–54

Influence of nitric oxide on hypoglycemia–-or angiotensin II–stimulated ACTH and GH secretion in normal men. Volpi R, et al. **Neuropeptides** 1996 Dec;30(6):528–32

Defective 5–HT 1–receptor–mediated neurotransmission in the control of growth hormone secretion in Parkinson's disease. Volpi R, et al. **Neuropsychobiology** 1997; 35(2):79–83

Factors predicting pituitary adenoma invasiveness in acromegalic patients. Rieger A, et al. **Neurosurg Rev** 1997; 20(3):182–7

Heterogeneity of circulating growth hormone. Baumann G, et al. **Nucl Med Biol** 1994 Apr;21(3):369–79 (36 ref.)

The use of an automated microsampling system for the characterization of growth hormone pulsatility in newborn babies. Adcock CJ, et al. **Pediatr Res** 1997 Jul;42(1):66–71

Growth factors and intrauterine growth retardation. II. Serum growth hormone, insulin–like growth factor (IGF) I, and IGF–binding protein 3 levels in children with intrauterine growth retardation compared with normal control subjects: prospective study from birth to two years of age. Study Group of IUGR. Leger J, et al. **Pediatr Res** 1996 Jul;40(1):101–7

Plasma somatostatin and cholecystokinin levels in preterm infants during their first two years of life. Törnhage CJ, et al. **Pediatr Res** 1997 Jun;41(6):902–8

A comparison of resting metabolic rate, self–rated food intake, growth hormone, and insulin levels in obese and nonobese preadolescents. Laessle RG, et al. **Physiol Behav** 1997 May;61(5):725–9

Potentially predictive and manipulable blood serum correlates of aging in the healthy human male: progressive decreases in bioavailable testosterone, dehydroepiandrosterone sulfate, and the ratio of insulin–like growth factor 1 to growth hormone. Morley JE, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8; 94(14):7537–42

Noradrenergic receptor sensitivity in obsessive–compulsive disorders: I. Growth hormone response to clonidine stimulation. Brambilla F, et al. **Psychiatry Res** 1997 Mar 24;69(2–3):155–62

Neurohormonal and behavioral response to methylphenidate in cocaine abstinence. Elangovan N, et al. **Psychiatry Res** 1996 Nov 15;65(2):65–71

Assessment of noradrenergic functioning in patients with non–combat–related posttraumatic stress disorder: a study with desmethylimipramine and orthostatic challenges. Yatham LN, et al. **Psychiatry Res** 1996 Jun 26;63(1):1–6

Effects of the Transcendental Meditation program on adaptive mechanisms: changes in hormone levels and responses to stress after 4 months of practice. MacLean CR, et al. **Psychoneuroendocrinology** 1997 May; 22(4):277–95

Pre– and postprandial pyridostigmine and oxiracetam effects on growth hormone secretion in anorexia nervosa. Mancini A, et al. **Psychoneuroendocrinology** 1996 Oct;21(7):621–9

Blunted dexamethasone–induced growth hormone responses in acute mania. Thakore JH, et al. **Psychoneuroendocrinology** 1996 Nov;21(8):695–701

The stability of plasma growth hormone and MHPG responses to repeated clonidine challenge in normal males. Trestman RL, et al. **Psychoneuroendocrinology** 1994; 19(1):13–20

Sumatriptan decreases food intake and increases plasma growth hormone in healthy women. Boeles S, et al. **Psychopharmacology (Berl)** 1997 Jan;129(2):179–82

[The role of neuropeptides in normal and disordered sleep regulation] Steiger A, et al. **Wien Med Wochenschr** 1996; 146(13–14):291–3 (Eng. Abstr.) **(Ger)**

[Proliferative effect of prolactin and growth hormone from human serum in cultured rat lymphoma Nb2 cells] Bulatov AA, et al. **Biull Eksp Biol Med** 1996 Nov;122(11):559–63 **(Rus)**

[Sensitivity of the clonidine and guanfacine tests (alpha–2–adrenergic agonists) as pharmacologic stimulants of growth hormone. Effects on plasma cortisol] Durá Travé T, et al. **An Esp Pediatr** 1996 Dec;45(6):575–8 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

Structure and in vivo activity of hypoglycaemic analogues of human growth hormone (6–13). Thompson P, et al. **Drug Des Discov** 1995 Aug;13(1):55–72

CHEMISTRY

Conformational analysis of cyclo(2,9)–Ac–QCRSVEGSCG–OH from the C–terminal loop of human growth hormone. Jois DS, et al. **J Pept Res** 1997 Jan;49(1):15–22

Conformational stability of a type II' beta–turn motif in human growth hormone [6–13] peptide analogues at hydrophobic surfaces. Lee TH, et al. **J Pept Res** 1997 May; 49(5):394–403

Nuclear magnetic resonance studies of the C–terminal human growth hormone fragment I179–C182–[SS]–C189–P191 and the related trisulfide peptide I179–C182–[SSS]–C189–P191. Strandberg E, et al. **J Pept Res** 1997 Mar;49(3):254–60

Degradation pathways, analytical characterization and formulation strategies of a peptide and a protein. Calcitonine and human growth hormone in comparison. Cholewinski M, et al. **Pharm Acta Helv** 1996 Dec; 71(6):405–19

The stability of recombinant human growth hormone in poly(lactic–co–glycolic acid) (PLGA) microspheres. Cleland JL, et al. **Pharm Res** 1997 Apr;14(4):420–5

The stabilization and encapsulation of human growth hormone into biodegradable microspheres. Johnson OL, et al. **Pharm Res** 1997 Jun;14(6):730–5

DEFICIENCY

Restricted catch–up growth after cessation of steroid treatment in a growth–hormone–deficient child. Boersma B, et al. **Acta Paediatr** 1996 Aug;85(8):998–1002

Body composition, atherogenic risk factors and apolipoproteins following growth hormone treatment. Hassan HM, et al. **Acta Paediatr** 1996 Aug;85(8):899–901

Growth hormone insufficiency associated with haploinsufficiency at 18q23. Cody JD, et al. **Am J Med Genet** 1997 Sep 5;71(4):420–5

Growth hormone deficiency associated in the 18q deletion syndrome. Ghidoni PD, et al. **Am J Med Genet** 1997 Mar 3;69(1):7–12

Familial X–linked mental retardation and isolated growth hormone deficiency: clinical and molecular findings. Hamel BC, et al. **Am J Med Genet** 1996 Jul 12;64(1):35–41

Effects of physiologic growth hormone therapy on bone density and body composition in patients with adult–onset growth hormone deficiency. A randomized, placebo–controlled trial [see comments] Baum HB, et al. **Ann Intern Med** 1996 Dec 1;125(11):883–90. Comment in: Ann Intern Med 1996 Dec 1;125(11):932–4.

Evidence for social phobia and other psychiatric disorders in adults who were growth hormone deficient during childhood. Stabler B, et al. **Anxiety** 1996;2(2):86–9

Replacement therapy should be offered to adults with severe growth hormone deficiency [letter; comment] Shalet S. **BMJ** 1997 Feb 22;314(7080):600. Comment on: BMJ 1996 Aug 10;313(7053):314.

Histomorphometric analysis of bone mass and bone metabolism in growth hormone deficient adult men. Bravenboer N, et al. **Bone** 1996 Jun;18(6):551–7

Growth, growth hormone and final height after BMT. Possible recovery of irradiation–induced growth hormone insufficiency. Holm K, et al. **Bone Marrow Transplant** 1996 Jul;18(1):163–70

A case of pycnodysostosis with growth hormone deficiency. Darcan S, et al. **Clin Genet** 1996 Nov;50(5):422–5

Effects of growth hormone (GH) and insulin–like growth factor–I on serum leptin in GH–deficient adults [letter] Bianda TL, et al. **Diabetologia** 1997 Mar;40(3):363–4

Growth response to growth hormone therapy in patients with different degrees of growth hormone deficiency. Fujieda K, et al. **Endocr J** 1996 Oct;43 Suppl:S19–25

Clinical utility of insulin–like growth factor–I (IGF–I) and IGF binding protein–3 levels in the diagnosis of GH deficiency (GHD) during childhood. Hasegawa Y, et al. **Endocr J** 1996 Oct;43 Suppl:S1–4

Short–term treatment with different doses of human growth hormone in adult patients with growth hormone deficiency. Kato Y, et al. **Endocr J** 1996 Apr;43(2):177–83

Detection of growth hormone gene defects by dideoxy fingerprinting (ddF). Miyata I, et al. **Endocr J** 1997 Feb; 44(1):149–54

Management of puberty in growth hormone deficient children. Rogol AD. **Endocr J** 1996 Oct;43 Suppl:S5–11 (28 ref.)

Serum Insulin–like growth factor–II (IGF–II) levels in patients with acromegaly and growth hormone deficiency: correlation with IGF–I and IGF binding protein–3. Shimatsu A, et al. **Endocr J** 1996 Oct;43 Suppl:S71–3

A case of syringomyelia with type I Arnold–Chiari malformation (ACM): growth hormone (GH) therapy and the size of syrinx on serial MR images. Takakuwa S, et al. **Endocr J** 1996 Oct;43 Suppl:S129–30

Spontaneous growth in growth hormone–treated short children. Tanaka T, et al. **Endocr J** 1996 Oct;43 Suppl:S135–6

Insulin–like growth factor I is an independent coregulatory modulator of natural killer (NK) cell activity. Auernhammer CJ, et al. **Endocrinology** 1996 Dec; 137(12):5332–6

Insulin–like growth factor–I and its binding protein–3 in serum: are they good screening properties for the diagnosis of growth hormone deficiency? Koch A, et al. **Eur J Clin Chem Clin Biochem** 1997 May;35(5):379–85

Dose–dependent effects of recombinant human growth hormone on biochemical markers of bone and collagen metabolism in adult growth hormone deficiency. Bollerslev J, et al. **Eur J Endocrinol** 1996 Dec;135(6):666–71

Final height of patients treated for isolated GH deficiency: examination of 83 patients. Cacciari E, et al. **Eur J Endocrinol** 1997 Jul;137(1):53–60

The effects of two doses of replacement growth hormone on the biochemical, body composition and psychological profiles of growth hormone–deficient adults. Carroll PV, et al. **Eur J Endocrinol** 1997 Aug;137(2):146–53

Effects of growth hormone (GH) replacement on bone metabolism and mineral density in adult onset of GH deficiency: results of a double–blind placebo–controlled study with open follow–up. Finkenstedt G, et al. **Eur J Endocrinol** 1997 Mar;136(3):282–9

Lung volumes and respiratory muscle strength in adult patients with childhood– or adult–onset growth hormone deficiency: effect of 12 months' growth hormone replacement therapy. Merola B, et al. **Eur J Endocrinol** 1996 Nov;135(5):553–8

GH deficiency and vascular disease: in search of the linking mechanism [comment] Saccà L. **Eur J Endocrinol** 1997 Feb; 136(2):148–9. Comment on: Eur J Endocrinol 1997 Feb;136(2):157–64.

Serum free insulin–like growth factor–I in growth hormone–deficient adults before and after growth hormone replacement. Skjaerbaek C, et al. **Eur J Endocrinol** 1997 Aug;137(2):132–7

Differential growth and maturation in idiopathic growth–hormone–deficient children. Cantu G, et al. **Eur J Orthod** 1997 Apr;19(2):131–9

Auxological and endocrinological evaluation of children with hydrocephalus and/or meningomyelocele. Hochhaus F, et al. **Eur J Pediatr** 1997 Aug;156(8):597–601

Effect of growth hormone therapy on bone metabolism of growth hormone deficient children. Stamoyannou L, et al. **Eur J Pediatr** 1997 Aug;156(8):592–6

Growth hormone substitution in growth hormone–deficient adults: effects on collagen type I synthesis and skin thickness. Kann P, et al. **Exp Clin Endocrinol Diabetes** 1996; 104(4):327–33

Use of insulin–like growth factor–I (IGF–I) and IGF–binding protein–3 in the diagnosis of acromegaly and growth hormone deficiency in adults. Thissen JP, et al. **Growth Regul** 1996 Dec;6(4):222–9

Short stature due to growth hormone deficiency associated with Cushing's disease and ulcerative colitis. Kotake M, et al. **Horm Metab Res** 1996 Oct;28(10):565–9

Muscle force and endurance in untreated and human growth hormone or insulin–like growth factor–I–treated patients with growth hormone deficiency or Laron syndrome. Brat O, et al. **Horm Res** 1997;47(2):45–8

A case of Robinow syndrome accompanied by partial growth hormone insufficiency treated with growth hormone. Kawai M, et al. **Horm Res** 1997;48(1):41–3

Diagnosis of growth hormone deficiency in adults. Korbonits M, et al. **Horm Res** 1996;46(4–5):174–82 (62 ref.)

Assessment of red blood cell indices in growth–hormone–treated children. Valerio G, et al. **Horm Res** 1997;47(2):62–6

Evidence for gene conversion in the generation of extensive polymorphism in the promoter of the growth hormone gene. Giordano M, et al. **Hum Genet** 1997 Aug; 100(2):249–55

A novel mechanism of aberrant pre–mRNA splicing in humans. Cogan JD, et al. **Hum Mol Genet** 1997 Jun; 6(6):909–12

Different responses of bone alkaline phosphatase isoforms during recombinant insulin–like growth factor–I (IGF–I) and during growth hormone therapy in adults with growth hormone deficiency. Magnusson P, et al. **J Bone Miner Res** 1997 Feb;12(2):210–20

Adult height in 24 patients treated for growth hormone deficiency and early puberty. Adan L, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):229–33

Growth hormone therapy in GH–deficient adults: the problem of the dose [letter; comment] Amato G, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1304–6. Comment on: J Clin Endocrinol Metab 1996 Aug;81(8):2865–73.

Adult growth hormone (GH)–deficient patients demonstrate heterogeneity between childhood onset and adult onset before and during human GH treatment. Adult Growth Hormone Deficiency Study Group. Attanasio AF, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):82–8

Adult height in growth hormone (GH)–deficient children treated with biosynthetic GH. The Genentech Growth Study Group. Blethen SL, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):418–20

Changes in bone mineral density, body composition, and lipid metabolism during growth hormone (GH) treatment in children with GH deficiency. Boot AM, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2423–8

Growth hormone (GH)–deficient men are more responsive to GH replacement therapy than women. Burman P, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):550–5

Increased arterial intima–media thickness in childhood–onset growth hormone deficiency. Capaldo B, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1378–81

The importance of growth hormone in the regulation of erythropoiesis, red cell mass, and plasma volume in adults with growth hormone deficiency. C[illegible]rist ER, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2985–90

Abnormalities of very low density lipoprotein apolipoprotein B–100 metabolism contribute to the dyslipidaemia of adult growth hormone deficiency. Cummings MH, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):2010–3

Body composition derived from whole body counting of potassium in GH deficient adults [letter; comment] Forbes GB. **J Clin Endocrinol Metab** 1996 Nov;81(11):4182–3. Comment on: J Clin Endocrinol Metab 1996 May;81(5):1720–3.

Activity of the renin–angiotensin–aldosterone axis is

dependent on the occurrence of edema in growth hormone (GH)-deficient adults treated with GH [letter] Hayes FJ, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):322–3

A low starting dose of genotropin in growth hormone-deficient adults. Janssen YJ, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):129–35

Free insulin-like growth factor I serum levels in 1430 healthy children and adults, and its diagnostic value in patients suspected of growth hormone deficiency. Juul A, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2497–502

Growth hormone (GH) provocative retesting of 108 young adults with childhood-onset GH deficiency and the diagnostic value of insulin-like growth factor I (IGF-I) and IGF-binding protein-3. Juul A, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1195–201

A 5-year prospective study of growth hormone (GH)-deficient children treated with GH before the age of 3 years. French Serono Study Group. Rappaport R, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):452–6

Visceral adipose tissue is associated with circulating high affinity growth hormone-binding protein. Roelen CA, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):760–4

Is growth hormone deficiency a viable diagnosis? [editorial; comment] Rosenfeld RG. **J Clin Endocrinol Metab** 1997 Feb;82(2):349–51. Comment on: J Clin Endocrinol Metab 1997 Feb;82(2):352–6.

Urinary pyridinium collagen cross-links predict growth performance in children with idiopathic short stature and with growth hormone (GH) deficiency treated with GH. Skeletal metabolism during GH treatment. Spagnoli A, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3589–93

Diurnal variations in twenty-four-hour energy expenditure during growth hormone treatment of adults with pituitary deficiency. Stenlöf K, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1255–60

Growth hormone (GH) retesting and auxological data in 131 GH-deficient patients after completion of treatment [see comments] Tauber M, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):352–6. Comment in: J Clin Endocrinol Metab 1997 Feb;82(2):349–51.

Serum insulin-like growth factor I (IGF-I), IGF-binding protein-1 and -3, and the acid-labile subunit as serum markers of body composition during growth hormone (GH) therapy in adults with GH deficiency. Thorén M, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):223–8

Biochemical tests in the diagnosis of childhood growth hormone deficiency. Tillmann V, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):531–5

Elderly patients with adult-onset growth hormone deficiency are not osteopenic. Toogood AA, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1462–6

Deuterium and bromide dilution, and bioimpedance spectrometry independently show that growth hormone-deficient adults have an enlarged extracellular water compartment related to intracellular water. van Marken Lichtenbelt WD, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):907–11

Circadian variation of growth hormone secretion in normal prepubertal children. Comparison to constitutional growth delay and growth hormone deficiency. Hermida RC, et al. **J Endocrinol Invest** 1996 May;19(5):273–83

Thymulin, zinc and insulin-like growth factor-I (IGF-I) activity before and during recombinant growth hormone (rec-GH) therapy in children and adults with GH deficiency. Mocchegiani E, et al. **J Endocrinol Invest** 1996 Oct;19(9):630–7

Effects of recombinant growth hormone (GH) treatment on bone mineral density and body composition in adults with childhood onset growth hormone deficiency. Sartorio A, et al. **J Endocrinol Invest** 1996 Sep;19(8):524–9

Is the persistence of isolated GH deficiency in adulthood predicted by anatomical hypothalamic-pituitary alterations? Vannelli S, et al. **J Endocrinol Invest** 1997 Jun; 20(6):312–8

Hypothalamic versus pituitary dysfunction in Down's syndrome as cause of growth retardation. Castells S, et al. **J Intellect Disabil Res** 1996 Dec;40 (Pt 6):509–17

Unfavorable effects of growth hormone therapy on the final height of boys with short stature not caused by growth hormone deficiency [see comments] Kawai M, et al. **J Pediatr** 1997 Feb;130(2):205–9. Comment in: J Pediatr 1997 Feb;130(2):172–4.

Making a rational diagnosis of growth-hormone deficiency. Preece MA. **J Pediatr** 1997 Jul;131(1 Pt 2):S61–4 (20 ref.)

Evolving growth hormone deficiency in children with a subnormal secretion of growth hormone. Zadik Z, et al. **J Pediatr** 1997 Mar;130(3):481–4

Growth hormone and body composition. Christiansen JS. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:365–8 (24 ref.)

Effect of growth hormone (GH) therapy on parathyroid hormone metabolism in a girl with GH deficient short stature and chronic renal failure. Fujisawa Y, et al. **J Pediatr Endocrinol Metab** 1996 Sep–Oct;9(5):555–8

Serum levels of IGFBP-3: usefulness in diagnosis of GH deficiency and relationship to measurements of GH secretion in children. Karachaliou F, et al. **J Pediatr Endocrinol Metab** 1996 Mar–Apr;9(2):169–74

Growth hormone releasing hexapeptide-6 (GHRP-6) test in the diagnosis of GH-deficiency. Pombo M, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:333–8 (35 ref.)

Two brothers with a 7.0 kb gene deletion associated with isolated growth hormone deficiency type 1A. Sercan OH, et al. **J Pediatr Endocrinol Metab** 1996 May–Jun;9(3):423–7

Serum leptin is increased in growth hormone-deficient adults: relationship to body composition and effects of placebo-controlled growth hormone therapy for 1 year. Fisker S, et al. **Metabolism** 1997 Jul;46(7):812–7

How (not) to diagnose growth hormone deficiency in adults: stimulated serum concentrations of growth hormone in healthy subjects and in patients with pituitary macroadenomas. Vierhapper H, et al. **Metabolism** 1997 Jun; 46(6):680–3

Superoxide anion release from neutrophils in growth hormone deficient adults before and after replacement therapy with recombinant human growth hormone. Reinisch N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):369–73

Growth hormone treatment increases kidney size in a woman with growth hormone deficiency—a case report [letter] Westman K, et al. **Pediatr Nephrol** 1997 Aug;11(4):528–9

Pulsatile release and circadian rhythms of thyrotropin and prolactin in children with growth hormone deficiency. Villares SM, et al. **Pediatr Res** 1996 Jun;39(6):1006–11

Endocrinologic disorders and optic pathway gliomas in children with neurofibromatosis type 1. Cnossen MH, et al. **Pediatrics** 1997 Oct;100(4):667–70 (24 ref.)

Clinical information on serum IGFBP-3 levels and IGFBP-3 proteolytic activity in childhood. Hasegawa Y, et al. **Prog Growth Factor Res** 1995;6(2–4):457–63 (19 ref.)

Short stature, growth hormone deficiency, and social anxiety. Nicholas LM, et al. **Psychosom Med** 1997 Jul–Aug; 59(4):372–5

[The Wolfram syndrome: diabetes mellitus, hypacusis, optic atrophy and short stature in STH deficiency] Hofmann M, et al. **Dtsch Med Wochenschr** 1997 Jan 24;122(4):86–90 (13 ref.) (Eng. Abstr.) **(Ger)**

[Diagnostic criteria for the indication of growth hormone substitution in adults. The Hypophysis and Hypophyseal Tumor Working Group of the German Society for Endocrinology] Strasburger CJ, et al. **Dtsch Med Wochenschr** 1997 Jul 4;122(27):861–3 (12 ref.) **(Ger)**

[Empty sella syndrome: 2 cases to show its polymorphism] Zamboni G, et al. **Pediatr Med Chir** 1997 Jan–Feb; 19(1):65–7 (Eng. Abstr.) **(Ita)**

[Metabolic syndrome X—growth hormone deficiency—controversies] Kotłowska M. **Przegl Lek** 1996; 53(9):700 **(Pol)**

DRUG EFFECTS

Effect of hormone replacement therapy on growth hormone stimulation in women with premature ovarian failure. Hartmann BW, et al. **Fertil Steril** 1997 Jul;68(1):103–7

Effects of histaminergic antagonists on the GH-releasing activity of GHRH or hexarelin, a synthetic hexapeptide, in man. Arvat E, et al. **J Endocrinol Invest** 1997 Mar; 20(3):122–7

Prediction of the outcome of growth hormone provocative testing in short children by measurement of serum levels of insulin-like growth factor I and insulin-like growth factor binding protein 3 [see comments] Juul A, et al. **J Pediatr** 1997 Feb;130(2):197–204. Comment in: J Pediatr 1997 Feb;130(2):172–4.

Are blunted dexamethasone-induced growth hormone responses unique to depression? Thakore JH, et al. **Psychol Med** 1996 Sep;26(5):1053–9

GENETICS

Molecular biology of growth-hormone-secreting human pituitary tumours: biochemical consequences and potential clinical significance. Adams EF, et al. **Acta Neurochir Suppl (Wien)** 1996;65:7–10 (18 ref.)

Site-directed mutagenesis at 134/135 in human growth hormone alters its in vivo half-life in the rat. Morimoto M, et al. **Biochem Mol Biol Int** 1996 Apr;38(5):981–6

hGH transgenic rats expressing severe obesity and effect of treatment with hGH in a pulsatile manner. Ikeda A, et al. **Endocr J** 1996 Oct;43 Suppl:S99–101

Detection of growth hormone gene defects by dideoxy fingerprinting (ddF). Miyata I, et al. **Endocr J** 1997 Feb; 44(1):149–54

Short stature caused by a mutant growth hormone with an antagonistic effect. Takahashi Y, et al. **Endocr J** 1996 Oct; 43 Suppl:S27–32

The tyrosine hydroxylase-human growth hormone (GH) transgenic mouse as a model of hypothalamic GH deficiency: growth retardation is the result of a selective reduction in somatotrope numbers despite normal somatotrope function. Kineman RD, et al. **Endocrinology** 1996 Nov;137(11):4630–6

Expression of the human growth hormone normal gene (hGH-N) in proliferating and differentiated HL-60 cells. Costoya JA, et al. **Exp Cell Res** 1996 Oct 10;228(1):164–7

Rat lactase-phlorizin hydrolase/human growth hormone transgene is expressed on small intestinal villi in transgenic mice. Krasinski SD, et al. **Gastroenterology** 1997 Sep; 113(3):844–55

Systemic delivery of human growth hormone or human factor IX in dogs by reintroduced genetically modified autologous bone marrow stromal cells. Hurwitz DR, et al. **Hum Gene Ther** 1997 Jan 20;8(2):137–56

Evidence for gene conversion in the generation of extensive polymorphism in the promoter of the growth hormone gene. Giordano M, et al. **Hum Genet** 1997 Aug; 100(2):249–55

A novel mechanism of aberrant pre-mRNA splicing in humans. Cogan JD, et al. **Hum Mol Genet** 1997 Jun; 6(6):909–12

Copulatory behavior and fertility in transgenic male mice expressing human placental growth hormone gene. Meliska CJ, et al. **J Androl** 1997 May–Jun;18(3):305–11

Retinoic acid stimulates growth hormone synthesis in human somatotropic adenoma cells: characterization of its nuclear receptors. Guibourdenche J, et al. **J Cell Biochem** 1997 Apr;65(1):25–31

Mechanisms responsible for dominant expression of human growth hormone gene mutations. Binder G, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4047–50

Biologically inactive growth hormone caused by an amino acid substitution. Takahashi Y, et al. **J Clin Invest** 1997 Sep 1;100(5):1159–65

Monitoring the transfection efficiency of the human follicle-stimulating hormone receptor cDNA in COS-7 cells: evaluation of the growth hormone transient gene expression assay system. Simoni M, et al. **J Endocrinol Invest** 1996 Jun;19(6):359–64

Growth hormone-releasing hormone (GHRH)-GH-somatic growth and luteinizing hormone (LH)RH-LH-ovarian axes in adult female transgenic mice expressing human GH gene. Sasaki F, et al. **J Neuroendocrinol** 1997 Aug; 9(8):615–26

Partial growth-hormone insensitivity: the role of growth-hormone receptor mutations in idiopathic short stature. Goddard AD, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S51–5

The spectrum of growth-hormone insensitivity. Parks JS, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S45–50 (20 ref.)

Two brothers with a 7.0 kb gene deletion associated with isolated growth hormone deficiency type 1A. Sercan OH, et al. **J Pediatr Endocrinol Metab** 1996 May–Jun;9(3):423–7

Normal pituitary size in two patients with growth hormone gene deletion. Zucchini S, et al. **J Pediatr Endocrinol Metab** 1996 Sep–Oct;9(5):545–8

Chemiluminescent immunoassay for the detection of chloramphenicol acetyltransferase and human growth hormone reporter proteins. Olesen CE, et al. **Methods Mol Biol** 1997;63:71–6

Transcriptional activation of the human growth hormone gene by ras oncogene. Petersenn S, et al. **Mol Cell Endocrinol** 1997 Apr 25;129(1):47–54

Organ-specific expression pattern of the human growth hormone/placental lactogen gene-cluster in the testis. Untergasser G, et al. **Mol Cell Endocrinol** 1997 Jun 20; 130(1–2):53–60

Combinatorial thinking in chemistry and biology. Ellman J, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):2779–82

HISTORY

A history of growth hormone. Tattersall R. **Horm Res** 1996; 46(4–5):236–47

Pioneering recombinant growth hormone manufacturing: pounds produced per mile of height. Cronin MJ. **J Pediatr** 1997 Jul;131(1 Pt 2):S5–7

The not-so-good old days: working with pituitary growth hormone in North America, 1956 to 1985. Frasier SD. **J Pediatr** 1997 Jul;131(1 Pt 2):S1–4

IMMUNOLOGY

Monoclonal antibodies against recombinant human growth hormone as probes to study immune function. Lattuada D, et al. **Hybridoma** 1996 Jun;15(3):211–7

ISOLATION & PURIFICATION

Immobilized metal affinity chromatography of human growth hormone. Effect of ligand density. Liesienė J, et al. **J Chromatogr A** 1997 Mar 7;764(1):27–33

Separation of recombinant human growth hormone from Escherichia coli cell pellet extract by capillary zone electrophoresis. McNerney TM, et al. **J Chromatogr A** 1996 Sep 13;744(1–2):223–9

METABOLISM

Proximal tubular reabsorption of growth hormone and sodium/fluid in normo- and microalbuminuric insulin-dependent diabetes mellitus. Turner G, et al. **Acta Diabetol** 1997 Mar;34(1):27–32

Metal-catalyzed photooxidation of histidine in human growth hormone. Chang SH, et al. **Anal Biochem** 1997 Jan 15; 244(2):221–27

Growth hormone therapy transiently increases apolipoprotein(a) in short beta-thalassaemia major children with normal growth hormone reserve. Tam SC, et al. **Atherosclerosis** 1997 Feb 10;128(2):175–82

Molecular basis of inherited growth hormone resistance in childhood. Amselem S, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):353–69 (63 ref.)

Metabolic actions of growth hormone: direct and indirect. Berneis K, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul; 10(3):337–52 (78 ref.)

Partial growth hormone insensitivity in childhood. Carlsson LM. **Baillieres Clin Endocrinol Metab** 1996 Jul; 10(3):389–400 (49 ref.)

Insulin–like growth factor bioactivity and its modification in growth hormone resistant states. Donaghy AJ, et al. **Baillieres Clin Endocrinol Metab** 1996 Jul;10(3):421–46 (101 ref.)

Is rhGH anabolic in patients undergoing peritoneal dialysis? Stefanidis CJ. **Br J Clin Pract Symp Suppl** 1996 Aug; 85:44–6

Effect of intraperitoneal insulin delivery on growth hormone binding protein, insulin–like growth factor (IGF)–I, and IGF–binding protein–3 in IDDM. Hanaire–Broutin H, et al. **Diabetologia** 1996 Dec;39(12):1498–504

Oestrogen replacement does not restore the reduced GH–releasing activity of Hexarelin, a synthetic hexapeptide, in post–menopausal women. Arvat E, et al. **Eur J Endocrinol** 1997 May;136(5):483–7

Growth hormone–releasing peptides. Ghigo E, et al. **Eur J Endocrinol** 1997 May;136(5):445–60 (183 ref.)

The influence of salts on the reaction between hGH and several of its monoclonal antibodies in fixed, paraffin–embedded human pituitary as a model system. Montero C, et al. **Eur J Histochem** 1996;40(2):153–8

Growth hormone and insulin–like growth factors in critical illness. Gibson FA, et al. **Intensive Care Med** 1997 Apr; 23(4):369–78 (84 ref.)

Growth hormone, interferon–gamma, and leukemia inhibitory factor utilize insulin receptor substrate–2 in intracellular signaling. Argetsinger LS, et al. **J Biol Chem** 1996 Nov 15;271(46):29415–21

Conformational changes required in the human growth hormone receptor for growth hormone signaling. Mellado M, et al. **J Biol Chem** 1997 Apr 4;272(14):9189–96

Metal–catalyzed oxidation of histidine in human growth hormone. Mechanism, isotope effects, and inhibition by a mild denaturing alcohol. Zhao F, et al. **J Biol Chem** 1997 Apr 4;272(14):9019–29

Association of human growth hormone and calcium phosphate by dynamic compaction: in vitro biocompatibility and bioactivity. Guicheux J, et al. **J Biomed Mater Res** 1997 Aug;36(2):258–64

Visceral adipose tissue is associated with circulating high affinity growth hormone–binding protein. Roelen CA, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):760–4

Somatostatin receptor subtype specificity in human fetal pituitary cultures. Differential role of SSTR2 and SSTR5 for growth hormone, thyroid–stimulating hormone, and prolactin regulation. Shimon I, et al. **J Clin Invest** 1997 Feb 15;99(4):789–98

Evaluation of pituitary function in children using growth hormone secretagogues. Bercu BB, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:325–32 (12 ref.)

Evaluation of pituitary GH reserve with GHRP–6. Popovic V, et al. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:289–98 (23 ref.)

Effect of chronic metabolic acidosis on the growth hormone/IGF–1 endocrine axis: new cause of growth hormone insensitivity in humans. Brüngger M, et al. **Kidney Int** 1997 Jan;51(1):216–21

Regulation of human growth hormone receptor gene transcription by human growth hormone binding protein. Mullis PE, et al. **Mol Cell Endocrinol** 1997 Jul 4; 131(1):89–96

[Receptor–mediated transport of biologically active substances into cells using recombinant human growth hormone] Belousova IuV, et al. **Mol Biol (Mosk)** 1997 Jan–Feb;31(1):118–23 **(Rus)**

PHARMACOKINETICS

Bioavailability and bioactivity of three different doses of nasal growth hormone (GH) administered to GH–deficient patients: comparison with intravenous and subcutaneous administration. Laursen T, et al. **Eur J Endocrinol** 1996 Sep;135(3):309–15

Bioavailability of recombinant human growth hormone in different concentrations and formulations. Vahl N, et al. **Pharmacol Toxicol** 1996 Sep;79(3):144–9

PHARMACOLOGY

Growth hormone secretion and sensitivity in children born small for gestational age. Chatelain PG, et al. **Acta Paediatr Suppl** 1996 Oct;417:15–6; discussion 17

Effects of six–month administration of recombinant human growth hormone to healthy elderly subjects. Cuttica CM, et al. **Aging (Milano)** 1997 Jun;9(3):193–7

Growth hormone or insulin–like growth factor I increases fat oxidation and decreases protein oxidation without altering energy expenditure in parenterally fed rats. Lo HC, et al. **Am J Clin Nutr** 1997 May;65(5):1384–90

Effect of rhGH and rhIGF–I treatment on protein utilization in elderly women. Butterfield GE, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):E94–9

GH and IGF–I differentially increase protein synthesis in skeletal muscle and jejunum of parenterally fed rats. Lo HC, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E872–8

Blockade of the renin–angiotensin–aldosterone system prevents growth hormone–induced fluid retention in humans. Møller J, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E803–8

GH elevates serum IGF–I levels but does not alter mucosal atrophy in parenterally fed rats. Peterson CA, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1100–8

Growth hormone restores hepatic lipase mRNA levels but the translation is impaired in hepatocytes of hypothyroid rats. Neve BP, et al. **Biochim Biophys Acta** 1997 Apr 1; 1345(2):172–9

Increased serum 1,25–dihydroxyvitamin D after growth hormone administration is not parathyroid hormone–mediated. Wright NM, et al. **Calcif Tissue Int** 1997 Aug;61(2):101–3

Enhancement of DNA synthetic activity of thymic lymphocytes by the culture supernatant of thymus epithelial cells stimulated by growth hormone. Lin B, et al. **Cell Mol Biol (Noisy–le–grand)** 1997 May;43(3):351–9

Recombinant human growth hormone modifies the inherent partition of nutrients in growing female and male BALB/c mice. Agis–Torres A, et al. **Comp Biochem Physiol A Physiol** 1996 Dec;115(4):317–22

Insulin–like growth factor–I in man enhances lipid mobilization and oxidation induced by a growth hormone pulse. Bianda TL, et al. **Diabetologia** 1996 Aug;39(8):961–9

Effects of growth hormone (GH) and insulin–like growth factor–I on serum leptin in GH–deficient adults [letter] Bianda TL, et al. **Diabetologia** 1997 Mar;40(3):363–4

Effects of human growth hormone on lipid metabolism in hypophysectomized rats. Sekine M, et al. **Endocr J** 1996 Oct;43 Suppl:S103–5

Recombinant human growth hormone (GH)–binding protein enhances the growth–promoting activity of human GH in the rat. Clark RG, et al. **Endocrinology** 1996 Oct; 137(10):4308–15

Growth hormone induces somatostatin and insulin–like growth factor I gene expression in the cerebral hemispheres of aging rats. López–Fernández J, et al. **Endocrinology** 1996 Oct;137(10):4384–91

Effects of tyrosine kinase inhibitors on tyrosine phosphorylations and the insulin–like effects in response to human growth hormone in isolated rat adipocytes. Ridderstråle M, et al. **Endocrinology** 1996 Nov; 137(11):4650–6

Growth hormone induces tyrosine phosphorylation of annexin I in rat osteosarcoma cells. Salles JP, et al. **Endocrinology** 1996 Oct;137(10):4358–62

Acute administration of recombinant human growth hormone inhibits the somatotrope responsiveness to growth hormone–releasing hormone in childhood. Bellone J, et al. **Eur J Endocrinol** 1996 Oct;135(4):421–4

Effects of glucocorticoids and of growth hormone on serum leptin concentrations in man [see comments] Berneis K, et al. **Eur J Endocrinol** 1996 Dec;135(6):663–5. Comment in: Eur J Endocrinol 1996 Dec;135(6):649–50.

Dose–dependent effects of recombinant human growth hormone on biochemical markers of bone and collagen metabolism in adult growth hormone deficiency. Bollerslev J, et al. **Eur J Endocrinol** 1996 Dec;135(6):666–71

Free and total insulin–like growth factors and insulin–like growth factor binding proteins during 14 days of growth hormone administration in healthy adults. Skjaerbaek C, et al. **Eur J Endocrinol** 1996 Dec;135(6):672–7

Proinflammatory cytokines interleukin 1 beta and tumor necrosis factor alpha inhibit growth hormone stimulation of insulin–like growth factor I synthesis and growth hormone receptor mRNA levels in cultured rat liver cells. Wolf M, et al. **Eur J Endocrinol** 1996 Dec;135(6):729–37

Growth hormone substitution in growth hormone–deficient adults: effects on collagen type I synthesis and skin thickness. Kann P, et al. **Exp Clin Endocrinol Diabetes** 1996; 104(4):327–33

Growth hormone enhances estradiol production follicle–stimulating hormone–induced in the early stage of the follicular maturation. Lanzone A, et al. **Fertil Steril** 1996 Dec;66(6):948–53

Effects of growth hormone and insulin–like growth factor–I singly and in combination on in vivo capacity of urea synthesis, gene expression of urea cycle enzymes, and organ nitrogen contents in rats. Grøfte T, et al. **Hepatology** 1997 Apr;25(4):964–9

The lipolytic effects of thyrotropin and isoprenaline are not affected by growth hormone in infant adipocytes. Janson A, et al. **Horm Metab Res** 1997 Apr;29(4):164–7

The role of insulin, insulin–like growth factor–I and growth hormone in counteracting dexamethasone induced nitrogen wasting in rats. Malmlöf K, et al. **Horm Metab Res** 1997 Jan;29(1):20–4

Changes in bone mineral density, growth velocity and renal function of prepubertal uremic children during growth hormone treatment. Lanes R, et al. **Horm Res** 1996; 46(6):263–8

Growth hormone stimulates production of interferon–gamma by human peripheral mononuclear cells. Mustafa A, et al. **Horm Res** 1997;48(1):11–5

Chronic renal failure and human growth hormone treatment do not modify endothelium–dependent reactions in the rat aorta in vitro. Garcia de Boto MJ, et al. **J Auton Pharmacol** 1996 Apr;16(2):97–103

The influence of growth hormone on cancellous and cortical bone of the vertebral body in aged rats. Andreassen TT, et al. **J Bone Miner Res** 1996 Aug;11(8):1094–102

Single cell enzyme activity and proliferation in the growth plate: effects of growth hormone. Gevers EF, et al. **J Bone Miner Res** 1996 Aug;11(8):1103–11

Effects of recombinant human growth hormone and insulin–like growth factor–I, with or without 17 beta–estradiol, on bone and mineral homeostasis of aged ovariectomized rats. Verhaeghe J, et al. **J Bone Miner Res** 1996 Nov;11(11):1723–35

Growth hormone attenuation of epidermal growth factor–induced mitogenesis. Wiepz GJ, et al. **J Cell Physiol** 1997 Oct;173(1):44–53

Effects of insulin–like growth factor I combined with growth hormone on glucocorticoid–induced whole–body protein catabolism in man. Berneis K, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2528–34

Adjunctive growth hormone during ovarian hyperstimulation increases levels of insulin–like growth factor binding proteins in follicular fluid: a randomized, placebo–controlled, cross–over study. Rabinovici J, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1171–6

Short–term effects of growth hormone and insulin–like growth factor I on cancellous bone in rhesus macaque monkeys. Sass DA, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1202–9

Effects of recombinant human growth hormone on muscle protein turnover in malnourished hemodialysis patients. Garibotto G, et al. **J Clin Invest** 1997 Jan 1;99(1):97–105

Differential effects of GH stimulation on fasting and prandial metabolism and plasma IGFs and IGF–binding proteins in lean and obese sheep. McCann JP, et al. **J Endocrinol** 1997 Aug;154(2):329–46

Effects of GH and IGF–I administration on GHRH and somatostatin mRNA levels: I. A study on ad libitum fed and starved adult male rats. Ghigo MC, et al. **J Endocrinol Invest** 1997 Mar;20(3):144–50

Effects of GH and IGF–I administration on GHRH and somatostatin mRNA levels: II. A study in the infant rat. Grilli R, et al. **J Endocrinol Invest** 1997 Mar;20(3):151–4

Effects of growth hormone in vitro on the glucose metabolism of fetal rat islet beta–cells. Svensson C. **J Mol Endocrinol** 1996 Oct;17(2):131–8

Is growth hormone good for the heart? Silverman BL, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S70–4 (23 ref.)

Human growth hormone induces system B transport in short bowel syndrome. Iannoli P, et al. **J Surg Res** 1997 Apr; 69(1):150–8

Growth hormone improves immune function and survival in burned mice infected with herpes simplex virus type 1. Takagi K, et al. **J Surg Res** 1997 Apr;69(1):166–70

Insulin–like growth factor–I but not growth hormone attenuates dexamethasone–induced catabolism in parenterally fed rats. Lo HC, et al. **JPEN J Parenter Enteral Nutr** 1996 May–Jun;20(3):171–7

Effect of chronic growth hormone treatment on insulin signal transduction in rat tissues. Thirone AC, et al. **Mol Cell Endocrinol** 1997 Jun 20;130(1–2):33–42

Growth hormone stimulates transcription of the gene encoding the acid–labile subunit (ALS) of the circulating insulin–like growth factor–binding protein complex and ALS promoter activity in rat liver. Ooi GT, et al. **Mol Endocrinol** 1997 Jun;11(7):997–1007

Mitogenic and antiadipogenic properties of human growth hormone in differentiating human adipocyte precursor cells in primary culture. Wabitsch M, et al. **Pediatr Res** 1996 Sep;40(3):450–6

Functional growth hormone (GH) receptors and GH are expressed by preimplantation mouse embryos: a role for GH in early embryogenesis? Pantaleon M, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5125–30

Glucose toxicity alters growth hormone–induced potentiation of insulin secretion in isolated human fetal islets: a reversible effect. Lalić NM, et al. **Transplant Proc** 1997 Jun;29(4):2035–6

Response of human chondrocytes cultured in vitro to human somatotropin, triiodothyronine, and thyroxine. Malinin TI, et al. **Transplant Proc** 1997 Jun;29(4):2037–9

PHYSIOLOGY

Effects of recombinant human insulin–like growth factor–1 and recombinant human growth hormone on anabolism and immunity in calorie–restricted alcoholic rats. Mendenhall CL, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):1–10

Up and down the growth hormone cascade. Clark RG, et al. **Cytokine Growth Factor Rev** 1996 Jun;7(1):65–80 (128 ref.)

Signalling pathway of GH. Carter–Su C, et al. **Endocr J** 1996 Oct;43 Suppl:S65–70 (33 ref.)

Metabolic actions of growth hormone in man. Ho KK, et al. **Endocr J** 1996 Oct;43 Suppl:S57–63 (38 ref.)

Role of growth hormone in the regulation of insulin sensitivity and lipid metabolism in patients with non insulin dependent diabetes mellitus. Iizuka T, et al. **Endocr J** 1996 Oct;43 Suppl:S107–10

Growth hormone, the insulin–like growth factor system, and the kidney. Feld S, et al. **Endocr Rev** 1996 Oct;17(5):423–80 (725 ref.)

Growth hormones and sex steroid interactions at puberty. Clark PA, et al. **Endocrinol Metab Clin North Am** 1996 Sep;25(3):665–81 (94 ref.)

The growth without growth hormone syndrome. Geffner ME. **Endocrinol Metab Clin North Am** 1996 Sep; 25(3):649–63 (90 ref.)

The mechanisms by which growth hormone brings about growth. The relative contributions of growth hormone and insulin–like growth factors. Spagnoli A, et al.

Endocrinol Metab Clin North Am 1996 Sep;25(3):615–31 (94 ref.)

Evidence for insulin–like growth factor (IGF)–independent transcriptional regulation of IGF binding protein–3 by growth hormone in SKHEP–1 human hepatocarcinoma cells. Gucev ZS, et al. **Endocrinology** 1997 Apr; 138(4):1464–70

Stimulatory effect of human, but not bovine, growth hormone expression on numbers of tuberoinfundibular dopaminergic neurons in transgenic mice. Phelps CJ, et al. **Endocrinology** 1997 Jul;138(7):2849–55

Dissociation of systemic GH–IGF–I axis from a genetic basis for short stature in African Pygmies. Dulloo AG, et al. **Eur J Clin Nutr** 1996 Jun;50(6):371–80

Short–term administration of intranasal or oral Hexarelin, a synthetic hexapeptide, does not desensitize the growth hormone responsiveness in human aging. Ghigo E, et al. **Eur J Endocrinol** 1996 Oct;135(4):407–12

Protein anabolic action of insulin, growth hormone and insulin–like growth factor I. Russell–Jones DL, et al. **Eur J Endocrinol** 1996 Dec;135(6):631–42 (144 ref.)

The role of growth hormone in the regulation of body composition in the adult. Russell–Jones DL, et al. **Growth Regul** 1996 Dec;6(4):247–52 (42 ref.)

Growth hormone, insulin–like growth factor–I and lipid metabolism: interactions with sex steroids. Björntorp P. **Horm Res** 1996;46(4–5):188–91 (12 ref.)

Role of growth hormone in glucose counterregulation. Cryer PE. **Horm Res** 1996;46(4–5):192–4 (18 ref.)

Clinical, biochemical, and molecular investigations of a genetic isolate of growth hormone insensitivity (Laron's syndrome). Baumbach L, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):444–51

The importance of growth hormone in the regulation of erythropoiesis, red cell mass, and plasma volume in adults with growth hormone deficiency. Christ ER, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2985–90

Body composition and physical fitness are major determinants of the growth hormone–insulin–like growth factor axis aberrations in adult Turner's syndrome, with important modulations by treatment with 17 beta–estradiol. Gravholt CH, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2570–7

Reduced serum levels of the growth hormone–dependent insulin–like growth factor binding protein and a negative bone balance at the level of individual remodeling units in idiopathic osteoporosis in men [comment] Johansson AG, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2795–8 . Comment on: J Clin Endocrinol Metab 1997 Sep;82(9):2792–4.

Nine novel growth hormone receptor gene mutations in patients with Laron syndrome. Sobrier ML, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):435–7

Inhibitory effect of growth hormone on TNF–alpha secretion and nuclear factor–kappaB translocation in lipopolysaccharide–stimulated human monocytes. Haeffner A, et al. **J Immunol** 1997 Feb 1;158(3):1310–4

Growth–hormone signal transduction. Campbell GS. **J Pediatr** 1997 Jul;131(1 Pt 2):S42–4 (22 ref.)

Effects of renal failure on the growth hormone–insulin–like growth factor axis. Powell DR. **J Pediatr** 1997 Jul;131(1 Pt 2):S13–6 (21 ref.)

Exercise and growth hormone: does one affect the other? Roemmich JN, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S75–80 (44 ref.)

Growth hormone treatment in short normal children. Bernasconi S, et al. **J Pediatr Endocrinol Metab** 1996 Jun; 9 Suppl 3:339–43

The role of growth hormone (GH), GH–receptor and GH–binding protein in reproduction and ovulation induction. Blumenfeld Z, et al. **J Pediatr Endocrinol Metab** 1996 Mar–Apr;9(2):145–62 (82 ref.)

Growth hormone physiology in health and disease: insights using genetic and transgenic models. Frohman LA. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:233–6 (19 ref.)

New modalities for understanding dynamic regulation of the somatotropic (GH) axis: explication of gender differences in GH neuroregulation in the human. Veldhuis JD. **J Pediatr Endocrinol Metab** 1996 Jun;9 Suppl 3:237–53 (81 ref.)

Role of growth hormone in ovarian physiology and onset of puberty. Sharara FI, et al. **J Soc Gynecol Investig** 1997 Jan–Feb;4(1):2–7 (82 ref.)

Exercise training decreases the growth hormone (GH) response to acute constant–load exercise. Weltman A, et al. **Med Sci Sports Exerc** 1997 May;29(5):669–76

Regulation of signal transducer and activator of transcription (STAT) 5b activation by the temporal pattern of growth hormone stimulation. Gebert CA, et al. **Mol Endocrinol** 1997 Apr;11(4):400–14

Growth factors and intrauterine growth retardation. I. Serum growth hormone, insulin–like growth factor (IGF)–I, IGF–II, and IGF binding protein 3 levels in normally grown and growth–retarded human fetuses during the second half of gestation. Leger J, et al. **Pediatr Res** 1996 Jul;40(1):94–100

Role of growth hormone in polycystic ovarian syndrome. Morales AJ. **Semin Reprod Endocrinol** 1997 May; 15(2):177–82 (50 ref.)

[Growth hormone—a pathogenetic factor in chronic congestive heart failure? (letter)] Dreifuss PM. **Dtsch Med Wochenschr** 1996 Oct 11;121(41):1279 **(Ger)**

SECRETION

Specific abnormalities in a visual motor psychological test in short children with abnormal growth hormone secretion. Andronikof–Sanglade A, et al. **Acta Paediatr** 1997 Feb; 86(2):154–9

Growth hormone secretion and sensitivity in children born small for gestational age. Chatelain PG, et al. **Acta Paediatr Suppl** 1996 Oct;417:15–6; discussion 17

Long–term octreotide therapy in growth hormone–secreting pituitary adenomas: evaluation with serial MR. Lundin P, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):765–72

Enhancement of Ca2+ currents by GHRH and its relation to PKA and [Ca2+]i in human GH–secreting adenoma cells. Takei T, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E801–7

Abdominal adiposity rather than age and sex predicts mass and regularity of GH secretion in healthy adults. Vahl N, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):E1108–16

Effect of PACAP on ion channels involved in stimulating growth hormone secretion from the somatotrophs. Murakami Y, et al. **Ann N Y Acad Sci** 1996 Dec 26; 805:666–9

Self–organized segmentation of time series: separating growth hormone secretion in acromegaly from normal controls. Prank K, et al. **Biophys J** 1996 Jun;70(6):2540–7

Growth hormone– and growth–hormone–releasing hormone–producing tumors. Shimon I, et al. **Cancer Treat Res** 1997;89:1–24 (78 ref.)

Growth hormone secretion in night workers. Weibel L, et al. **Chronobiol Int** 1997 Jan;14(1):49–60

The enhancing effect of pyridostigmine on the GH response to GHRH undergoes an accelerated age–related reduction in Down syndrome. Arvat E, et al. **Dementia** 1996 Sep–Oct; 7(5):288–92

rhIGF–I administration reduces insulin requirements, decreases growth hormone secretion, and improves the lipid profile in adults with IDDM. Carroll PV, et al. **Diabetes** 1997 Sep;46(9):1453–8

The effect of growth hormone secreted by mild exercise on fatty acid mobilization in patients with diabetes mellitus. Miyashita Y, et al. **Endocr J** 1996 Oct;43 Suppl:S111–3

A case of abnormal growth hormone secretion possibly caused by low somatomedin production of unknown origin: is the unresponsiveness of GH receptor responsible for it? Shiratsuchi M, et al. **Endocr J** 1996 Oct;43 Suppl:S85–7

Hypothalamic control of growth hormone (GH) secretion in type I diabetic men: effect of the combined administration of GH–releasing hormone and hexarelin, a novel GHRP–6 analog. Giustina A, et al. **Endocr Res** 1996 May;22(2):159–74

The regulation of growth hormone secretion. Cuttler L. **Endocrinol Metab Clin North Am** 1996 Sep;25(3):541–71 (206 ref.)

Gi3 mediates somatostatin–induced activation of an inwardly rectifying K+ current in human growth hormone–secreting adenoma cells. Takano K, et al. **Endocrinology** 1997 Jun;138(6):2405–9

The pubertal spurt: effects of sex steroids on growth hormone and insulin–like growth factor I. Caufriez A. **Eur J Obstet Gynecol Reprod Biol** 1997 Feb;71(2):215–7

Nuclear effects of the cAMP pathway activation in somatotrophs. Bertherat J. **Horm Res** 1997;47(4–6):245–50 (48 ref.)

Effect of low–dose oral and intravenous dexamethasone administration on growth hormone secretion in children. Pinto AC, et al. **Horm Res** 1997;48(1):5–10

Measurement of spontaneous, 12–hour sleep–associated GH secretion in prepubertal children with short stature: clinical relevance and practicability? Schmidt H, et al. **Horm Res** 1996 Jul;46(1):33–7

Short– and long–term (final height) growth responses to growth hormone (GH) therapy in patients with Turner syndrome: correlation of growth response to stimulated GH levels, spontaneous GH secretion, and karyotype. Schmitt K, et al. **Horm Res** 1997;47(2):67–72

Inhibition by somatostatin of the growth hormone, but not corticotropin response to angiotensin II in normal men. Volpi R, et al. **Horm Res** 1996;45(6):269–72

Maximal secretory capacity of somatotrope cells in obesity: comparison with GH deficiency. Maccario M, et al. **Int J Obes Relat Metab Disord** 1997 Jan;21(1):27–32

Growth hormone secretion in HIV–positive versus HIV–negative hemophilic males with abnormal growth and pubertal development. The Hemophilia Growth and Development Study. Ratner Kaufman F, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Jun 1;15(2):137–44

Nocturnal ACTH, cortisol, growth hormone, and prolactin secretion in prepubertal depression. De Bellis MD, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Sep;35(9):1130–8

Determination of a novel growth hormone secretagogue (MK–677) in human plasma at picogram levels by liquid chromatography with atmospheric pressure chemical ionization tandem mass spectrometry. Constanzer ML, et al. **J Chromatogr B Biomed Appl** 1997 May 23;693(1):131–7

An unusual treatment–related complication in a patient with growth hormone–secreting pituitary tumor. Ahmed M, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2816–20 (19 ref.)

Effect of aging on the sensitivity of growth hormone secretion to insulin–like growth factor–I negative feedback. Chapman IM, et al. **J Clin Endocrinol Metab** 1997 Sep; 82(9):2996–3004

Defective hypothalamic growth hormone (GH)–releasing hormone activity may contribute to declining GH secretion with age in man. degli Uberti EC, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2885–8

The orderliness of the growth hormone (GH) release process and the mean mass of GH secreted per burst are highly conserved in individual men on successive days. Friend K, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3746–53

Maturation of the regulation of growth hormone secretion in young males with hypogonadotropic hypogonadism pharmacologically exposed to progressive increments in serum testosterone. Giustina A, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1210–9

Circadian growth hormone secretion in asymptomatic human immune deficiency virus infection and acquired immunodeficiency syndrome. Heijligenberg R, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4028–32

Suppression of growth hormone (GH) hypersecretion due to ectopic GH–releasing hormone (GHRH) by a selective GHRH antagonist. Jaffe CA, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):634–7

Endocrine and metabolic effects of long–term administration of [Nle27]growth hormone–releasing hormone–(1–29)–NH2 in age–advanced men and women. Khorram O, et al. **J Clin Endocrinol Metab** 1997 May; 82(5):1472–9

Effect of obesity and feeding on the growth hormone (GH) response to the GH secretagogue L–692,429 in young men. Kirk SE, et al. **J Clin Endocrinol Metab** 1997 Apr; 82(4):1154–9

Growth response to growth hormone (GH) treatment relates to serum insulin–like growth factor I (IGF–I) and IGF–binding protein–3 in short children with various GH secretion capacities. Swedish Study Group for Growth Hormone Treatment. Kriström B, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2889–98

Acute pharmacological reduction of plasma free fatty acids enhances the growth hormone (GH)–releasing hormone–mediated GH secretion in patients with Cushing's syndrome. Leal–Cerro A, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):3165–8

A longitudinal assessment of hormonal and physical alterations during normal puberty in boys. III. The neuroendocrine growth hormone axis during late prepuberty. Martha PM Jr, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4068–74

Restoration of growth hormone (GH) response to GH–releasing hormone in elderly and obese subjects by acute pharmacological reduction of plasma free fatty acids. Pontiroli AE, et al. **J Clin Endocrinol Metab** 1996 Nov; 81(11):3998–4001

The somatotropic axis in critical illness: effect of continuous growth hormone (GH)–releasing hormone and GH–releasing peptide–2 infusion. Van den Berghe G, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):590–9

Cytokine–dependent gp130 receptor subunit regulates human fetal pituitary adrenocorticotropin hormone and growth hormone secretion. Shimon I, et al. **J Clin Invest** 1997 Jul 15;100(2):357–63

Simultaneous stimulation of slow–wave sleep and growth hormone secretion by gamma–hydroxybutyrate in normal young Men. Van Cauter E, et al. **J Clin Invest** 1997 Aug 1;100(3):745–53

Circadian variation of growth hormone secretion in normal prepubertal children. Comparison to constitutional growth delay and growth hormone deficiency. Hermida RC, et al. **J Endocrinol Invest** 1996 May;19(5):273–83

Dexfenfluramine effect on ACTH and GH in obese subjects [letter; comment] Medeiros–Neto G. **J Endocrinol Invest** 1996 Oct;19(9):646. Comment on: J Endocrinol Invest 1995 Nov;18(10):780–8.

Growth hormone (GH) response to GH–releasing hormone in short children: lack of correlation with endogenous nocturnal GH secretion. Seminara S, et al. **J Endocrinol Invest** 1997 Mar;20(3):118–21

Oral glucose tolerance test: an inhibitory or a stimulatory input to growth hormone secretion? Valcavi R. **J Endocrinol Invest** 1996 Apr;19(4):253–5 (24 ref.)

Altered neuroendocrine control of GH secretion in normal women of advanced reproductive age. Coiro V, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jul;52(4):M254–8

COMT inhibition by entacapone does not affect growth hormone or prolactin secretion in healthy volunteers. Keränen T, et al. **J Neural Transm Gen Sect** 1996; 103(6):729–36

Growth and growth hormone secretion in children with cancer treated with chemotherapy. Roman J, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):105–12

Growth hormone secretion and effects of growth hormone therapy on growth velocity and weight gain in children with Prader–Willi syndrome. Angulo M, et al. **J Pediatr Endocrinol Metab** 1996 May–Jun;9(3):393–400

GH secretion in Prader–Labhard–Willi syndrome: somatotrope responsiveness to GHRH is enhanced by arginine but not by pyridostigmine. Beccaria L, et al. **J Pediatr Endocrinol Metab** 1996 Nov–Dec;9(6):577–83

Effects of phenylalanine, histidine, and leucine on basal and GHRH–stimulated GH secretion and on PRL, insulin, and glucose levels in short children. Comparison with the

effects of arginine. Bellone J, et al.
J Pediatr Endocrinol Metab 1996 Sep–Oct;9(5):523–31
Short stature and low IGF–1 and IGFBP–3 despite normal growth hormone secretion in a 4 year–old girl with primary empty sella syndrome. Dötsch J, et al.
J Pediatr Endocrinol Metab 1996 May–Jun;9(3):415–8
Serum levels of IGFBP–3: usefulness in diagnosis of GH deficiency and relationship to measurements of GH secretion in children. Karachaliou F, et al.
J Pediatr Endocrinol Metab 1996 Mar–Apr;9(2):169–74
Two types of growth hormone rhythm in boys with constitutional short stature. Keret R, et al.
J Pediatr Endocrinol Metab 1996 Nov–Dec;9(6):599–607
Reproducibility and comparison of growth hormone secretion tests. Ropelato MG, et al.
J Pediatr Endocrinol Metab 1996 Jan–Feb;9(1):41–50
Nutrition, body composition, physical activity and growth hormone secretion. Vance ML.
J Pediatr Endocrinol Metab 1996 Jun;9 Suppl 3:299–301 (22 ref.)
Physiological role of the opioid–cholinergic interaction in growth hormone neuroregulation: effect of sex and food intake. De Marinis L, et al. **Metabolism** 1997 Jul;46(7):740–4
Glutamate decarboxylase autoimmunity and growth hormone secretion in type I diabetes mellitus. Giustina A, et al.
Metabolism 1997 Apr;46(4):382–7
Impact of long–term naltrexone treatment on growth hormone and insulin secretion in hyperandrogenic and normal obese patients. Villa P, et al. **Metabolism** 1997 May; 46(5):538–43
Growth hormone (GH) response to GH–releasing peptide–6 in patients with insulin–dependent diabetes mellitus. Villas–Boas Weffort RF, et al. **Metabolism** 1997 Jun; 46(6):706–10
Age–dependent suppression of nocturnal growth hormone levels during sleep deprivation. Mullington J, et al.
Neuroendocrinology 1996 Sep;64(3):233–41
Stimulation by neuropeptide Y of growth hormone secretion in prolactinoma in vivo. Watanobe H, et al.
Neuropeptides 1996 Oct;30(5):429–32
Relationship between protein kinase C and adenylyl cyclase activity in the regulation of growth hormone secretion by human pituitary somatotrophinomas. Lei T, et al.
Neurosurgery 1996 Sep;39(3):569–75; discussion 575–6
The use of an automated microsampling system for the characterization of growth hormone pulsatility in newborn babies. Adcock CJ, et al. **Pediatr Res** 1997 Jul;42(1):66–71
Growth hormone–releasing hormone and growth hormone–releasing peptide as therapeutic agents to enhance growth hormone secretion in disease and aging. Thorner MO, et al. **Recent Prog Horm Res** 1997;52:215–44; discussion 244–6 (63 ref.)
Theodore R. Woodward Award. Age–related decline in growth hormone secretion: clinical significance and potential reversibility. Thorner MO.
Trans Am Clin Climatol Assoc 1996;108:99–105; discussion 105–8
[Strategy of exploration of states of growth hormone hypersecretion] Sassolas G, et al. **Nucl Med Biol** 1994 Apr; 21(3):393–400 (12 ref.) (Eng. Abstr.) **(Fre)**
[Effect of sex on the increase of GH induced by galanin, alone or in combination with GHRH with or without pyridostigmine in pubescent subjects] Guzzaloni G, et al.
Minerva Endocrinol 1996 Jun;21(2):53–7 (Eng. Abstr.) **(Ita)**
[GRH test] Inoue K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:217–8 (7 ref.) **(Jpn)**
[Secretory reactions to somatoliberin and somatostatin of cultured cells of human pituitary adenomas producing growth hormone] Komolov IS, et al.
Biull Eksp Biol Med 1997 Mar;123(3):323–6 **(Rus)**
[The paradoxical regulation of growth hormone release in syringomyelia patients] Elaev NR, et al.
Zh Nevropatol Psikhiatr Im S S Korsakova 1996;96(4):103–4 **(Rus)**

STANDARDS

[The Somatropin Reference Standard (Control 951) of the National Institute of Health Sciences] Yomota C, et al.
Eisei Shikenjo Hokoku 1996;(114):130–5 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Restricted catch–up growth after cessation of steroid treatment in a growth–hormone–deficient child. Boersma B, et al. **Acta Paediatr** 1996 Aug;85(8):998–1002
Final height outcome of growth hormone–deficient patients treated since less than five years of age. De Luca F, et al. **Acta Paediatr** 1996 Oct;85(10):1167–71
Body composition, atherogenic risk factors and apolipoproteins following growth hormone treatment. Hassan HM, et al. **Acta Paediatr** 1996 Aug;85(8):899–901
Growth hormone treatment of short children born small for gestational age or with Silver–Russell syndrome: results from KIGS (Kabi International Growth Study), including the first report on final height. Ranke MB, et al.
Acta Paediatr Suppl 1996 Oct;417:18–26
Reversing idiopathic dilated cardiomyopathy with growth hormone: is this possible? [letter] de Luis Román D, et al. **Ann Intern Med** 1997 May 15;126(10):834
Whither recombinant human growth hormone? [editorial; comment] Mantzoros CS, et al. **Ann Intern Med** 1996 Dec 1;125(11):932–4. Comment on: Ann Intern Med 1996 Dec 1;125(11):865–72. Comment on: Ann Intern Med 1996 Dec 1;125(11):873–80. Comment on: Ann Intern Med 1996 Dec 1;125(11):883–90.
Recombinant human growth hormone in patients with HIV–associated wasting. A randomized, placebo–controlled trial. Serostim Study Group [see comments] Schambelan M, et al. **Ann Intern Med** 1996 Dec 1;125(11):873–82. Comment in: Ann Intern Med 1996 Dec 1;125(11):932–4.
Recombinant human growth hormone, insulin–like growth factor 1, and combination therapy in AIDS–associated wasting. A randomized, double–blind, placebo–controlled trial [see comments] Waters D, et al. **Ann Intern Med** 1996 Dec 1;125(11):865–72. Comment in: Ann Intern Med 1996 Dec 1;125(11):932–4.
Both growth hormone and exogenous glutamine increase gastrointestinal glutamine uptake in trauma. Unneberg K, et al. **Ann Surg** 1997 Jan;225(1):97–102
Growth hormone therapy transiently increases apolipoprotein(a) in short beta–thalassaemia major children with normal growth hormone reserve. Tam SC, et al.
Atherosclerosis 1997 Feb 10;128(2):175–82
The effect of growth hormone replacement therapy for up to 12 months on lipoprotein composition and lipoprotein(a) in growth hormone–deficient adults. Webster JM, et al.
Atherosclerosis 1997 Aug;133(1):115–21
Growth hormone and IGF–I therapy in the hypercatabolic patient. Wolf SE, et al.
Baillieres Clin Endocrinol Metab 1996 Jul;10(3):447–63 (75 ref.)
Replacement therapy should be offered to adults with severe growth hormone deficiency [letter; comment] Shalet S.
BMJ 1997 Feb 22;314(7080):600. Comment on: BMJ 1996 Aug 10;313(7053):314.
Qualitative alterations of cortical bone in female rats after long–term administration of growth hormone and glucocorticoid. Ortoft G, et al. **Bone** 1996 Jun;18(6):581–90
Collagen formation and degradation increase during growth hormone therapy in children. Vihervuori E, et al. **Bone** 1997 Feb;20(2):133–8
Proceedings of the 2nd Novo Nordisk workshop on chronic renal insufficiency. Rome, Italy, October 26–28, 1995.
Br J Clin Pract Symp Suppl 1996 Aug;85:1–68
Is the response to rhGH in haemodialysis patients less effective than in patients with chronic renal failure? Société de Néphrologie Pédiatrique. Cochat P, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:21–2
Can recombinant human growth hormone (rhGH) improve the adequacy of dialysis (KT/V)? Fischbach M.
Br J Clin Pract Symp Suppl 1996 Aug;85:52–3
Can provocative growth hormone testing predict the response to recombinant human growth hormone (rhGH) treatment? Greco M, et al. **Br J Clin Pract Symp Suppl** 1996 Aug;85:38–40
Effect of growth hormone treatment on pubertal growth in a boy with cystinosis and growth failure after renal transplantation. Haffner D, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:7–9
Use of recombinant human growth hormone (rhGH) in pubertal patients with CRI/dialysis/post–transplant: Dutch data. Dutch Study Group on Growth in Children with Chronic Renal Disease. Hokken–Koelega AC, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:5–6
Recombinant human growth hormone (rhGH) is effective in pubertal patients. Hokken–Koelega AC.
Br J Clin Pract Symp Suppl 1996 Aug;85:12–3
What are the clinical benefits of correcting the catabolic state in haemodialysis patients? Jensen PB, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:47–51
rhGH use in children with CRI and undergoing dialysis post–transplant in Japan: a multicentre study. MultiCenter Study Group Japan. Kawaguchi H, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:26–31
Use of recombinant human growth hormone (rhGH) in pubertal patients with renal disease. Maxwell H.
Br J Clin Pract Symp Suppl 1996 Aug;85:10–1
Recombinant human growth hormone (rhGH) treatment of infants and young children with chronic renal failure. Maxwell H. **Br J Clin Pract Symp Suppl** 1996 Aug;85:64–5
Is the response to rhGH in peritoneal dialysis patients less effective than in patients with chronic renal insufficiency. Perfumo F, et al. **Br J Clin Pract Symp Suppl** 1996 Aug; 85:18–20
The role of recombinant human growth hormone (rhGH) in pubertal patients. Rees L.
Br J Clin Pract Symp Suppl 1996 Aug;85:14–7
Causes of failure to respond to recombinant human growth hormone (rhGH). Rees L. **Br J Clin Pract Symp Suppl** 1996 Aug;85:32–3
Provocative growth hormone testing is not required before initiation of rhGH treatment in children with renal and liver transplants. Sarna S, et al.
Br J Clin Pract Symp Suppl 1996 Aug;85:41–3
Pathogenic mechanisms underlying the variable response to recombinant human growth hormone in children with chronic renal failure. Schaefer F.
Br J Clin Pract Symp Suppl 1996 Aug;85:23–5
Predictors of the response to growth hormone in short prepubertal children post–renal transplant. German Study Group for Growth Hormone Treatment in Children Post Renal Transplantation Study Group Members. Tönshoff B, et al. **Br J Clin Pract Symp Suppl** 1996 Aug;85:34–7
Growth hormone, osteoblasts, and marrow adipocytes: a case report. Kröger H, et al. **Calcif Tissue Int** 1997 Jul;61(1):33–5
Treatment of post–menopausal osteoporosis with recombinant human growth hormone and salmon calcitonin: a placebo controlled study. Gonnelli S, et al.
Clin Endocrinol (Oxf) 1997 Jan;46(1):55–61
Growth hormone action is blunted by acidosis in experimental uremia or acid load. Maniar S, et al.
Clin Nephrol 1996 Jul;46(1):72–6
Urinary albumin excretion in short children treated with recombinant human growth hormone [see comments] Sasaki H, et al. **Clin Nephrol** 1996 Jul;46(1):6–9. Comment in: Clin Nephrol 1997 Mar;47(3):210.
Dynamic muscle strength alterations to detraining and retraining in elderly men. Taaffe DR, et al.
Clin Physiol 1997 May;17(3):311–24
Ethical and cross cultural questions concerning pediatric clinical trials. Pilpel D, et al. **Control Clin Trials** 1996 Jun; 17(3):201–8
Ethical issues in emerging new treatments such as growth hormone therapy for children with Down syndrome and Prader–Willi syndrome. Kodish E, et al.
Curr Opin Pediatr 1996 Aug;8(4):401–5 (28 ref.)
Growth response to growth hormone therapy in patients with different degrees of growth hormone deficiency. Fujieda K, et al. **Endocr J** 1996 Oct;43 Suppl:S19–25
Defective response of body height to growth hormone treatment in resistance to thyroid hormone with short stature. Takamatsu J, et al. **Endocr J** 1996 Oct;43 Suppl:S131–3
Combined GH and LHRH analog treatment in short children. Tanaka T, et al. **Endocr J** 1996 Oct;43 Suppl:S13–7 (8 ref.)
Spontaneous growth in growth hormone–treated short children. Tanaka T, et al. **Endocr J** 1996 Oct;43 Suppl:S135–6
Current and potential therapeutic uses of growth hormone and insulin–like growth factor I. Hintz RL.
Endocrinol Metab Clin North Am 1996 Sep;25(3):759–73 (75 ref.)
Growth hormone improves cardiac function in rats with experimental myocardial infarction. Isgaard J, et al.
Eur J Clin Invest 1997 Jun;27(6):517–25
Final height of patients treated for isolated GH deficiency: examination of 83 patients. Cacciari E, et al.
Eur J Endocrinol 1997 Jul;137(1):53–60
Effects of growth hormone (GH) replacement on bone metabolism and mineral density in adult onset of GH deficiency: results of a double–blind placebo–controlled study with open follow–up. Finkenstedt G, et al.
Eur J Endocrinol 1997 Mar;136(3):282–9
Lung volumes and respiratory muscle strength in adult patients with childhood– or adult–onset growth hormone deficiency: effect of 12 months' growth hormone replacement therapy. Merola B, et al. **Eur J Endocrinol** 1996 Nov;135(5):553–8
Effects of four years' treatment with biosynthetic human growth hormone (GH) on body composition in GH–deficient hypopituitary adults. Al–Shoumer KA, et al.
Eur J Endocrinol 1996 Nov;135(5):559–67
Serum free insulin–like growth factor–I in growth hormone–deficient adults before and after growth hormone replacement. Skjaerbaek C, et al. **Eur J Endocrinol** 1997 Aug;137(2):132–7
Clinical trials of GH treatment in patients with Turner's syndrome in Japan—a consideration of final height. The Committee for the Treatment of Turner's Syndrome. Takano K, et al. **Eur J Endocrinol** 1997 Aug;137(2):138–45
Catch–up growth induced by growth hormone in the craniofacial skeleton of the Snell strain of the hypopituitary dwarf mouse. Rice DP, et al. **Eur J Orthod** 1997 Apr; 19(2):141–50
Treatment with growth hormone increases lipoprotein(a) serum levels in children with chronic renal insufficiency [letter] Querfeld U, et al. **Eur J Pediatr** 1996 Oct; 155(10):913
Effect of growth hormone therapy on bone metabolism of growth hormone deficient children. Stamoyannou L, et al.
Eur J Pediatr 1997 Aug;156(8):592–6
Growth hormone therapy in elderly people: an age–delaying drug? Bouillanne O, et al. **Fundam Clin Pharmacol** 1996; 10(5):416–30 (168 ref.)
Effect of growth hormone, glutamine, and diet on adaptation in short–bowel syndrome: a randomized, controlled study [see comments] Scolapio JS, et al. **Gastroenterology** 1997 Oct;113(4):1074–81. Comment in: Gastroenterology 1997 Oct;113(4):1402–5.
Short stature due to growth hormone deficiency associated with Cushing's disease and ulcerative colitis. Kotake M, et al. **Horm Metab Res** 1996 Oct;28(10):565–9
Persistent short stature in children with intrauterine growth retardation: use of growth hormone treatment. Albanese A, et al. **Horm Res** 1997;48 Suppl 1:63–6 (21 ref.)
Muscle force and endurance in untreated and human growth hormone or insulin–like growth factor–I–treated patients with growth hormone deficiency or Laron syndrome. Brat O, et al. **Horm Res** 1997;47(2):45–8
The rationale for the use of recombinant human growth hormone and insulin–like growth factor–I for catabolic conditions in humans. Haymond MW, et al. **Horm Res** 1996;

46(4–5):202–7 (28 ref.)
Short-term growth hormone therapy increases serum lipoprotein (a) levels in normal short children without growth hormone deficiency. Hershkovitz E, et al. **Horm Res** 1996 Jul;46(1):38–40
Growth hormone treatment of idiopathic short stature. Hintz RL. **Horm Res** 1996;46(4–5):208–14 (35 ref.)
Use of human recombinant growth hormone and human recombinant insulin-like growth factor-I in patients with human immunodeficiency virus infection. Hirschfeld S. **Horm Res** 1996;46(4–5):215–21 (105 ref.)
A case of Robinow syndrome accompanied by partial growth hormone insufficiency treated with growth hormone. Kawai M, et al. **Horm Res** 1997;48(1):41–3
Growth hormone as a new treatment modality for short children with chronic renal failure. The German Study Group for Growth Hormone Treatment in Chronic Renal Failure. Mehls O, et al. **Horm Res** 1996;46(4–5):230–5 (54 ref.)
Final height in Turner syndrome patients treated with growth hormone. Pasquino AM, et al. **Horm Res** 1996;46(6):269–72
Recombinant human growth hormone in chronic and acute respiratory insufficiency. Pichard C, et al. **Horm Res** 1996; 46(4–5):222–9 (72 ref.)
Growth hormone treatment in short children born small for gestational age: from controversy towards consensus. Ranke MB, et al. **Horm Res** 1997;48 Suppl 1:72–4 (8 ref.)
Factors determining pubertal growth and final height in growth hormone treatment of idiopathic growth hormone deficiency. Analysis of 195 Patients of the Kabi Pharmacia International Growth Study. Ranke MB, et al. **Horm Res** 1997;48(2):62–71
Short- and long-term (final height) growth responses to growth hormone (GH) therapy in patients with Turner syndrome: correlation of growth response to stimulated GH levels, spontaneous GH secretion, and karyotype. Schmitt K, et al. **Horm Res** 1997;47(2):67–72
Assessment of red blood cell indices in growth-hormone-treated children. Valerio G, et al. **Horm Res** 1997;47(2):62–6
Self-concept before and after two years of growth hormone treatment in intrauterine growth-retarded children. van der Reijden-Lakeman I, et al. **Horm Res** 1996;46(2):88–94
Growth hormone treatment induces a dose-dependent catch-up growth in short children born small for gestational age: a summary of four clinical trials. Wilton P, et al. **Horm Res** 1997;48 Suppl 1:67–71
Growth hormone in adults: indications and implications. Inzucchi SE. **Hosp Pract (Off Ed)** 1997 Jan 15;32(1):79–86, 90–1, 95–6 (15 ref.)
Body weight in children with Turner syndrome treated with growth hormone. Corel LJ, et al. **Int J Obes Relat Metab Disord** 1996 Oct;20(10):957–62
Growth hormone and insulin-like growth factors in critical illness. Gibson FA, et al. **Intensive Care Med** 1997 Apr; 23(4):369–78 (84 ref.)
Systemically and locally administered growth hormone stimulates bone healing in combination with osteopromotive membranes: an experimental study in rats. Hedner E, et al. **J Bone Miner Res** 1996 Dec;11(12):1952–60
Different responses of bone alkaline phosphatase isoforms during recombinant insulin-like growth factor-I (IGF-I) and during growth hormone therapy in adults with growth hormone deficiency. Magnusson P, et al. **J Bone Miner Res** 1997 Feb;12(2):210–20
Adult height in 24 patients treated for growth hormone deficiency and early puberty. Adan L, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):229–33
Adult growth hormone (GH)-deficient patients demonstrate heterogeneity between childhood onset and adult onset before and during human GH treatment. Adult Growth Hormone Deficiency Study Group. Attanasio AF, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):82–8
Changes in serum insulin-like growth factor I (IGF-I) and IGF-binding protein-3 levels during growth hormone treatment in prepubertal short children born small for gestational age. Boguszewski M, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3902–8
Growth hormone (GH)-binding protein in prepubertal short children born small for gestational age: effects of growth hormone treatment. Swedish Study Group for Growth Hormone Treatment. Boguszewski M, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1014–9
Changes in bone mineral density, body composition, and lipid metabolism during growth hormone (GH) treatment in children with GH deficiency. Boot AM, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2423–8
The effect of recombinant human growth hormone on glucose and leucine metabolism in Cushing's syndrome. Bowes SB, et al. **J Clin Endocrinol Metab** 1997 Jan; 82(1):243–6
The effect of growth hormone (GH) on histomorphometric indices of bone structure and bone turnover in GH-deficient men. Bravenboer N, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1818–22
Growth hormone (GH)-deficient men are more responsive to GH replacement therapy than women. Burman P, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):550–5
Activity of the renin-angiotensin-aldosterone axis is dependent on the occurrence of edema in growth hormone (GH)-deficient adults treated with GH [letter] Hayes FJ, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):322–3
Growth hormone treatment of abdominally obese men reduces abdominal fat mass, improves glucose and lipoprotein metabolism, and reduces diastolic blood pressure [see comments] Johannsson G, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):727–34. Comment in: J Clin Endocrinol Metab 1997 Mar;82(3):725–6.
Growth response to growth hormone (GH) treatment relates to serum insulin-like growth factor I (IGF-I) and IGF-binding protein-3 in short children with various GH secretion capacities. Swedish Study Group for Growth Hormone Treatment. Kriström B, et al. **J Clin Endocrinol Metab** 1997 Sep;82(9):2889–98
Growth hormone—ready for prime time? [editorial; comment] Marcus R, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):725–6. Comment on: J Clin Endocrinol Metab 1997 Mar;82(3):727–34.
A 5-year prospective study of growth hormone (GH)-deficient children treated with GH before the age of 3 years. French Serono Study Group. Rappaport R, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):452–6
Absence of growth hormone effects on cognitive function in girls with Turner syndrome. Ross JL, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1814–7
Short-term recombinant human growth hormone treatment increases growth rate in achondroplasia. Shohat M, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4033–7
Urinary pyridinium collagen cross-links predict growth performance in children with idiopathic short stature and with growth hormone (GH) deficiency treated with GH. Skeletal metabolism during GH treatment. Spagnoli A, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3589–93
Diurnal variations in twenty-four-hour energy expenditure during growth hormone treatment of adults with pituitary deficiency. Stenlöf K, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1255–60
Serum insulin-like growth factor I (IGF-I), IGF-binding protein-1 and -3, and the acid-labile subunit as serum markers of body composition during growth hormone (GH) therapy in adults with GH deficiency. Thorén M, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):223–8
Reduced concentration of serum growth hormone (GH)-binding protein in children with chronic renal failure: correlation with GH insensitivity. The European Study Group for Nutritional Treatment of Chronic Renal Failure in Childhood. The German Study Group for Growth Hormone Treatment in Chronic Renal Failure. Tönshoff B, et al. **J Clin Endocrinol Metab** 1997 Apr; 82(4):1007–13
Growth of short children during and after discontinuation of growth hormone therapy. Zadik Z, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3668–70
Recombinant human growth hormone treatment at low doses does not significantly change thyroid function in growth hormone deficient adults. Amato G, et al. **J Endocrinol Invest** 1996 Sep;19(8):563–6
Growth hormone cotreatment with gonadotropins in ovulation induction. Artini PG, et al. **J Endocrinol Invest** 1996 Dec;19(11):763–79 (128 ref.)
Thymulin, zinc and insulin-like growth factor-I (IGF-I) activity before and during recombinant growth hormone (rec-GH) therapy in children and adults with GH deficiency. Mocchegiani E, et al. **J Endocrinol Invest** 1996 Oct;19(9):630–7
The value of human growth hormone as an adjuvant for ovarian stimulation in a human in vitro fertilization program. Wu MY, et al. **J Obstet Gynaecol Res** 1996 Oct; 22(5):443–50
Proceedings of the National Cooperative Growth Study 10th Annual Investigators Meeting. San Francisco, California, October 17–20, 1996. Dedicated to the memory of Dr. Michael J. Cronin. **J Pediatr** 1997 Jul;131(1 Pt 2):S1–82
Growth hormone is safe in children after renal transplantation. Benfield MR, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S28–31 (26 ref.)
Growth after discontinuation of recombinant human growth hormone therapy in children with chronic renal insufficiency. The Genentech Cooperative Study Group. Fine RN, et al. **J Pediatr** 1996 Dec;129(6):883–91
Growth hormone is not safe for children with renal transplants. Friedman AL. **J Pediatr** 1997 Jul;131(1 Pt 2):S25–7 (38 ref.)
Growth hormone treatment of children with neural tube defects [letter; comment] Gold JT. **J Pediatr** 1996 Nov; 129(5):771. Comment on: J Pediatr 1996 Feb;128(2):184–9.
Effects of growth hormone and insulin-like growth factor I on renal growth and function. Hammerman MR, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S17–9 (16 ref.)
Effects of growth hormone treatment in children with cystic fibrosis: the National Cooperative Growth Study experience. Hardin DS, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S65–9
Growth-hormone treatment of renal transplant recipients: the National Cooperative Growth Study experience--a report of the National Cooperative Growth Study and the North American Pediatric Renal Transplant Cooperative Study. Mentser M, et al. **J Pediatr** 1997 Jul;131(1 Pt 2):S20–4
Growth hormone secretion and effects of growth hormone therapy on growth velocity and weight gain in children with Prader-Willi syndrome. Angulo M, et al. **J Pediatr Endocrinol Metab** 1996 May-Jun;9(3):393–400
Skeletal dysplasias: response to growth hormone therapy. Burren CP, et al. **J Pediatr Endocrinol Metab** 1996 Jan-Feb; 9(1):31–40
An early rise in urine N-telopeptide predicts the growth response of normal prepubertal short children to growth hormone therapy. Phillip M, et al. **J Pediatr Endocrinol Metab** 1996 Sep-Oct;9(5):519–21
Growth hormone treatment in Léri-Weill syndrome. Thuestad IJ, et al. **J Pediatr Endocrinol Metab** 1996 Mar-Apr;9(2):201–4
Growth hormone insensitivity in children with biliary atresia. Bucuvalas JC, et al. **J Pediatr Gastroenterol Nutr** 1996 Aug; 23(2):135–40
Neonatal lipid utilization increases with injury severity: recombinant human growth hormone versus placebo. Letton RW, et al. **J Pediatr Surg** 1996 Aug;31(8):1068–72; discussion 1072–4
Growth parameters and predictors of growth in short children with and without growth hormone (GH) deficiency treated with human GH: a randomized controlled study. Soliman AT, et al. **J Trop Pediatr** 1996 Oct;42(5):281–6
Modulation of growth factors by growth hormone in children with chronic renal failure. The Southwest Pediatric Nephrology Study Group. Powell DR, et al. **Kidney Int** 1997 Jun;51(6):1970–9
Rationing of growth hormone: who reviews the experts? [letter] Nussey SS. **Lancet** 1997 Sep 6;350(9079):743
Treatment of end-stage cardiac failure with growth hormone [letter] [see comments] O'Driscoll JG, et al. **Lancet** 1997 Apr 12;349(9058):1068. Comment in: Lancet 1997 Jun 21;349(9068):1841–2; discussion 1843. Comment in: Lancet 1997 Jun 21;349(9068):1842; discussion 1843.
Haemodynamic effects of intravenous growth hormone in congestive heart failure [letter] [see comments] Volterrani M, et al. **Lancet** 1997 Apr 12;349(9058):1067–8. Comment in: Lancet 1997 Jun 21;349(9068):1841–2; discussion 1843. Comment in: Lancet 1997 Jun 21;349(9068):1842; discussion 1843. Comment in: Lancet 1997 Jun 21;349(9068):1842–3.
The use of anti-aging hormones. Melatonin, growth hormone, testosterone, and dehydroepiandrosterone: consumer enthusiasm for unproven therapies. Shomali ME. **Md Med J** 1997 Apr;46(4):181–6 (45 ref.)
A nitrogen-free hypocaloric diet and recombinant human growth hormone stimulate postoperative protein synthesis: fasted and fed leucine kinetics in the surgical patient. Carli F, et al. **Metabolism** 1997 Jul;46(7):796–800
Serum leptin is increased in growth hormone-deficient adults: relationship to body composition and effects of placebo-controlled growth hormone therapy for 1 year. Fisker S, et al. **Metabolism** 1997 Jul;46(7):812–7
The case for growth hormone replacement in adult hypopituitarism. Florkowski CM, et al. **N Z Med J** 1996 Sep 27;109(1030):349–51 (30 ref.)
Superoxide anion release from neutrophils in growth hormone deficient adults before and after replacement therapy with recombinant human growth hormone. Reinisch N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug-Sep; 354(3):369–73
Growth hormone treatment of short children with chronic renal failure before and after renal transplantation: rationale and recent results. Mehls O, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1747–50 (39 ref.)
Growth retardation in children with chronic renal insufficiency [editorial] Fine RN. **Nephron** 1997;76(2):125–9 (45 ref.)
Expansion and shrinkage of central nervous system tumor coinciding with human growth hormone therapy: case report. Connors MH, et al. **Neurosurgery** 1996 Dec; 39(6):1243–5; discussion 1245–6
Present and potential uses of growth hormone in therapeutics. Job JC, et al. **Nucl Med Biol** 1994 Apr;21(3):401–6
Integrated nutritional, hormonal, and metabolic effects of recombinant human growth hormone (rhGH) supplementation in trauma patients. Jeevanandam M, et al. **Nutrition** 1996 Nov-Dec;12(11–12):777–87
Should growth hormone be used in dialysis-dependent children? [editorial] Geary DF. **Perit Dial Int** 1996 Nov-Dec;16(6):551–2
New peptide and protein drugs. Vermeij P, et al. **Pharm World Sci** 1996 Jun;18(3):87–93 (81 ref.)
Growth hormone research and therapy [letter; comment] Grunfield C, et al. **Science** 1997 Jan 24;275(5299):465. Comment on: Science 1996 Aug 16;273(5277):923.
Beneficial effects of growth hormone combined with parenteral nutrition in the management of inflammatory bowel disease: an experimental study. Chen K, et al. **Surgery** 1997 Feb;121(2):212–8
Mechanisms and treatment of growth retardation in children with liver transplants. Sarna S, et al. **Transplant Proc** 1997 Feb-Mar;29(1–2):447–8
[Growth hormone treatment in adults (editorial)] Välimäki MJ. **Duodecim** 1995;111(11):999–1001 (20 ref.) **(Fin)**
[Diagnostic criteria for the indication of growth hormone substitution in adults. The Hypophysis and Hypophyseal Tumor Working Group of the German Society for Endocrinology] Strasburger CJ, et al. **Dtsch Med Wochenschr** 1997 Jul 4;122(27):861–3 (12 ref.) **(Ger)**

URINE

Low urinary GH levels in normal statured obese children.

Sartorio A, et al. **Acta Paediatr** 1996 Aug;85(8):894–8
Short-term changes in urinary growth hormone excretion and lower leg length in healthy children. Ahmed SF, et al. **Horm Res** 1997;48(2):72–5
Urinary growth hormone excretion in children and adolescents with insulin-dependent diabetes mellitus. Bognetti E, et al. **Horm Res** 1996;46(6):273–8
Urinary growth hormone excretion: results of a multicenter study in France [published erratum appears in Horm Res 1997;48(1):22] Georges P, et al. **Horm Res** 1997;47(1):30–7
Influence of gender on the correlation between plasma growth hormone profiles and urinary growth hormone excretion. Main KM, et al. **Horm Res** 1997;48(1):16–22
Detection of human growth hormone doping in urine: out of competition tests are necessary. Saugy M, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):201–11
GH-IGF axis during catch up growth in small for gestational age (SGA) infants. Garcia H, et al. **J Pediatr Endocrinol Metab** 1996 Nov–Dec;9(6):561–7
Controlled study on serum insulin-like growth factor I and urinary excretion of growth hormone in fibromyalgia [letter; comment] Romano TJ. **J Rheumatol** 1996 Jan; 23(1):194. Comment on: J Rheumatol 1995 Jun;22(6):1138–40.
Effect of asthma treatment on urinary growth hormone excretion in children [see comments] O'Leary PC, et al. **Pediatr Pulmonol** 1996 Jun;21(6):361–6. Comment in: Pediatr Pulmonol 1997 Feb;23(2):126–7.

SOMITES

The expression and regulation of follistatin and a follistatin-like gene during avian somite compartmentalization and myogenesis. Amthor H, et al. **Dev Biol** 1996 Sep 15;178(2):343–62

CHEMISTRY

Acceleration of somitic myogenesis in embryos of myogenin promoter-MRF4 transgenic mice. Block NE, et al. **Dev Dyn** 1996 Dec;207(4):382–94
Three zebrafish MEF2 genes delineate somitic and cardiac muscle development in wild-type and mutant embryos. Ticho BS, et al. **Mech Dev** 1996 Oct;59(2):205–18

CYTOLOGY

Identification of a chick homologue of Fringe and C-Fringe 1: involvement in the neurogenesis and the somitogenesis. Sakamoto K, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):754–9
The PDGF alpha receptor is required for neural crest cell development and for normal patterning of the somites. Soriano P. **Development** 1997 Jul;124(14):2691–700
Requirement of the paraxis gene for somite formation and musculoskeletal patterning. Burgess R, et al. **Nature** 1996 Dec 12;384(6609):570–3
Eph family transmembrane ligands can mediate repulsive guidance of trunk neural crest migration and motor axon outgrowth. Wang HU, et al. **Neuron** 1997 Mar;18(3):383–96

DRUG EFFECTS

Valproic acid-induced somite teratogenesis in the chick embryo: relationship with Pax-1 gene expression. Barnes GL Jr, et al. **Teratology** 1996 Aug;54(2):93–102

METABOLISM

Distinct signal/response mechanisms regulate pax1 and QmyoD activation in sclerotomal and myotomal lineages of quail somites. Borycki AG, et al. **Dev Biol** 1997 May 15;185(2):185–200
Perturbation of BMP signaling in somitogenesis resulted in vertebral and rib malformations in the axial skeletal formation [see comments] Nifuji A, et al. **J Bone Miner Res** 1997 Mar;12(3):332–42. Comment in: J Bone Miner Res 1997 Mar;12(3):343–6.
MURCS association: case report and review. Braun-Quentin C, et al. **J Med Genet** 1996 Jul;33(7):618–20
Spatial and temporal effects of axial structures on myogenesis of developing somites. Xue XJ, et al. **Mech Dev** 1996 Nov; 60(1):73–82

PHYSIOLOGY

Function of somite and somitocoele cells in the formation of the vertebral motion segment in avian embryos. Huang R, et al. **Acta Anat (Basel)** 1996;155(4):231–41
The fate of the first avian somite. Huang R, et al. **Anat Embryol (Berl)** 1997 May;195(5):435–49
Participation of individual brachial somites in skeletal muscles of the avian distal wing. Zhi Q, et al. **Anat Embryol (Berl)** 1996 Oct;194(4):327–39
Cloning and characterization of chicken Paraxis: a regulator of paraxial mesoderm development and somite formation. Barnes GL, et al. **Dev Biol** 1997 Sep 1;189(1):95–111
Regulation of paraxis expression and somite formation by ectoderm- and neural tube-derived signals. Sosić D, et al. **Dev Biol** 1997 May 15;185(2):229–43
Ventral neural cadherin, a novel cadherin expressed in a subset of neural tissues in the zebrafish embryo. Franklin JI, et al. **Dev Dyn** 1996 Jun;206(2):121–30
Mutations affecting somite formation and patterning in the zebrafish, Danio rerio. van Eeden FJ, et al. **Development** 1996 Dec;123:153–64
HSP90alpha gene expression may be a conserved feature of vertebrate somitogenesis. Sass JB, et al. **Exp Cell Res** 1997 Jun 15;233(2):391–4

TRANSPLANTATION

Diastematomyelia and spina bifida can be caused by the intraspinal grafting of somites in early avian embryos. Klessinger S, et al. **Neurosurgery** 1996 Dec;39(6):1215–23

SOMNAMBULISM

Sleep and sexual offending. Fenwick P. **Med Sci Law** 1996 Apr;36(2):122–34
Evaluating night wakings in sleep-disturbed infants: a methodological study of parental reports and actigraphy. Sadeh A. **Sleep** 1996 Dec;19(10):757–62

EPIDEMIOLOGY

Prevalence and genetics of sleepwalking: a population-based twin study. Hublin C, et al. **Neurology** 1997 Jan; 48(1):177–81

GENETICS

Prevalence and genetics of sleepwalking: a population-based twin study. Hublin C, et al. **Neurology** 1997 Jan; 48(1):177–81

PHYSIOPATHOLOGY

Sleepwalking disorder and mens rea: a review and case report. Maricopa County Superior Court. Thomas TN. **J Forensic Sci** 1997 Jan;42(1):17–24 (51 ref.)
The sleepwalking/night terrors syndrome in adults. Crisp AH. **Postgrad Med J** 1996 Oct;72(852):599–604 (16 ref.)

PSYCHOLOGY

Epilepsy, aggression, and criminal responsibility. Borum R, et al. **Psychiatr Serv** 1996 Jul;47(7):762–3
Fear of suicide during sleepwalking. Lauerma H. **Psychiatry** 1996 Summer;59(2):206–11
[Elpenor's syndrome or somnambulistic murder?] Bornstein S, et al. **Ann Med Psychol (Paris)** 1996 Jun;154(3):195–200; discussion 201 **(Fre)**

THERAPY

The use of scheduled awakenings to eliminate childhood sleepwalking. Frank NC, et al. **J Pediatr Psychol** 1997 Jun; 22(3):345–53

SOMNOGRAPHY see **POLYSOMNOGRAPHY**

SONICATION

Sonification as a means of enhancing the detection of gene expression levels from formalin-fixed, paraffin-embedded biopsies. Houze TA, et al. **Biotechniques** 1996 Dec; 21(6):1074–8, 1080, 1082
Use of the two-hybrid system and random sonicated DNA to identify the interaction domain of a protein. Stagljar I, et al. **Biotechniques** 1996 Sep;21(3):430–2
Interactions between microbubbles and ultrasound: in vitro and in vivo observations. Wei K, et al. **J Am Coll Cardiol** 1997 Apr;29(5):1081–8
Critical steps in instrument cleaning: removing debris after sonication. Burkhart NW, et al. **J Am Dent Assoc** 1997 Apr;128(4):456–63
In vitro response of Escherichia coli to antibiotics and ultrasound at various insonation intensities. Williams RG, et al. **J Biomater Appl** 1997 Jul;12(1):20–30
Activity of asynchronous flight muscle from two bee families during sonication (buzzing). King MJ, et al. **J Exp Biol** 1996 Oct;199 (Pt 10):2317–21
Protective efficacy of sodium hyaluronate on the corneal endothelium against the damage induced by sonication. Miyauchi S, et al. **J Ocul Pharmacol Ther** 1996 Spring; 12(1):27–34
Sonication: a useful adjunct to the microbial assessment of central venous catheters. Cozzaglio L, et al. **Nutrition** 1997 Jan;13(1):37–9
The use of sonication for the efficient delivery of plasmid DNA into cells. Wyber JA, et al. **Pharm Res** 1997 Jun; 14(6):750–6
In vitro evaluation of the hemostatic effectiveness of non viable platelet preparations: studies with frozen-thawed, sonicated or lyophilized platelets. Alemany M, et al. **Vox Sang** 1997;73(1):36–42

SONOGRAPHY, SPEECH see **SOUND SPECTROGRAPHY**

SONOGRAPHY, TRANSCRANIAL DOPPLER see **ULTRASONOGRAPHY, DOPPLER, TRANSCRANIAL**

SOOTY MANGABEY see **CERCOCEBUS ATYS**

SOR GENE PRODUCTS see **GENE PRODUCTS, VIF**

SOR GENES see **GENES, VIF**

SORBIC ACID

Prolongation of the keeping quality of Mozzarella cheese by treatment with sorbate. Aly ME. **Nahrung** 1996 Aug; 40(4):194–200

ADVERSE EFFECTS

Systemic contact dermatitis from sorbic acid. Giordano-Labadie F, et al. **Contact Dermatitis** 1996 Jan; 34(1):61–2

ANALOGS & DERIVATIVES

15N NMR relaxation studies of free and inhibitor-bound 4-oxalocrotonate tautomerase: backbone dynamics and entropy changes of an enzyme upon inhibitor binding. Stivers JT, et al. **Biochemistry** 1996 Dec 17;35(50):16036–47
Suitability of S-phenyl mercapturic acid and trans-trans-muconic acid as biomarkers for exposure to low concentrations of benzene. Boogaard PJ, et al. **Environ Health Perspect** 1996 Dec;104 Suppl 6:1151–7
Benzene exposure, assessed by urinary trans,trans-muconic acid, in urban children with elevated blood lead levels. Weaver VM, et al. **Environ Health Perspect** 1996 Mar; 104(3):318–23
trans,trans-muconic acid as a biomarker of non-occupational environmental exposure to benzene. Ruppert T, et al. **Int Arch Occup Environ Health** 1997;69(4):247–51
2-chloromuconate and ClcR-mediated activation of the clcABD operon: in vitro transcriptional and DNase I footprint analyses. McFall SM, et al. **J Bacteriol** 1997 Jun; 179(11):3655–63
mucK, a gene in Acinetobacter calcoaceticus ADP1 (BD413), encodes the ability to grow on exogenous cis,cis-muconate as the sole carbon source. Williams PA, et al. **J Bacteriol** 1997 Sep;179(18):5935–42
Biomarkers of exposure to low concentrations of benzene: a field assessment [letter; comment] Johnson ES. **Occup Environ Med** 1997 Jan;54(1):68. Comment on: Occup Environ Med 1996 May;53(5):328–33.
Inter-individual variability of benzene metabolism to trans,trans-muconic acid and its implications in the biological monitoring of occupational exposure. Gobba F, et al. **Sci Total Environ** 1997 Jun 20;199(1–2):41–8
Biological monitoring of exposure to benzene in the production of benzene and in a cokery. Kivistö H, et al. **Sci Total Environ** 1997 Jun 20;199(1–2):49–63
[Urine level of trans, trans-muconic acid used as an index of internal dose of exposure to benzene] Liu L, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1996 May; 30(3):148–50 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Control of microbiological quality and shelf-life of catfish (Clarias gariepinus) by chemical preservatives and smoking. Efiuvwevwere BJ, et al. **J Appl Bacteriol** 1996 May; 80(5):465–70

THERAPEUTIC USE

[The effect of the blood corrective agent Lactosorbal on liver functional activity in dogs with a model of severe hemorrhagic shock] Oborin AN, et al. **Lik Sprava** 1995 Mar-Apr;(3-4):152-4 (Eng. Abstr.) **(Rus)**

SORBITAN DERIVATIVES see **POLYSORBATES**

SORBITOL

Comparison of sorbitol MacConkey and hemorrhagic coli agars for recovery of Escherichia coli O157:H7 from brie, ice cream, and whole milk. Hammack TS, et al. **J AOAC Int** 1997 Mar-Apr;80(2):335–40

ADMINISTRATION & DOSAGE

Sorbitol 2.5% mannitol 0.54% irrigation solution for hysteroscopic endometrial ablation surgery. Moir CL, et al. **Can J Anaesth** 1997 May;44(5 Pt 1):473–8

ADVERSE EFFECTS

Sorbitol-based elixirs, diarrhea and enteral tube feeding [letter] Henley E. **Am Fam Physician** 1997 May 1; 55(6):2084, 2086
Dilutional hyponatremia during hysteroscopic myomectomy with sorbitol-mannitol distention medium. Kim AH, et al. **J Am Assoc Gynecol Laparosc** 1995 Feb;2(2):237–42
Sorbitol is a possible risk factor for diarrhea in young children. Payne ML, et al. **J Am Diet Assoc** 1997 May; 97(5):532–4
Metabolic consequences of a sorbitol overdose during neurosurgery. Buijs EJ, et al. **J Neurosurg Anesthesiol** 1997 Jan;9(1):17–20
An air stewardess with puzzling diarrhoea [published erratum appears in Lancet 1996 Dec 14;348(9042):1670] Greaves RR, et al. **Lancet** 1996 Nov 30;348(9040):1488
Medication-induced pneumatosis intestinalis. Duncan B, et al. **Pediatrics** 1997 Apr;99(4):633–6
[Effect of resorption of Purisole (mannitol/sorbitol solution) as a distention medium in hysteroscopic operations on cardiovascular and laboratory parameters and energy metabolism--a prospective non-randomized observational study] Aydeniz B, et al. **Zentralbl Gynakol** 1996;

118(2):73–82 (Eng. Abstr.) (Ger)

ANALOGS & DERIVATIVES

Complexes of Fe2+ with diethyldithiocarbamate or N–methyl–D–glucamine dithiocarbamate as traps of nitric oxide in animal tissues: comparative investigations. Mikoyan VD, et al. **Biochim Biophys Acta** 1997 Aug 29; 1336(2):225–34

Combined treatment with a new biscarbodithioate C9G2DTC and BGDTC for mobilizing cadmium deposits in rats. Kostial K, et al. **J Appl Toxicol** 1996 Mar–Apr; 16(2):157–8

Mechanism of mobilization of cadmium by dithiocarbamates in rat primary hepatocyte cultures. Funakoshi T, et al. **Res Commun Mol Pathol Pharmacol** 1996 Aug;93(2):177–86

Effects of dithiocarbamates on toxicity of cadmium in rat primary hepatocyte cultures. Funakoshi T, et al. **Toxicology** 1997 Jan 15;116(1–3):99–107

ANALYSIS

Effects of fructose ingestion on sorbitol and fructose 3–phosphate contents of erythrocytes from healthy men. Kawaguchi M, et al. **Acta Diabetol** 1996 Jul;33(2):100–2

Sensitive, selective gas chromatographic–mass spectrometric analysis with trifluoroacetyl derivatives and a stable isotope for studying tissue sorbitol–producing activity. Kishimoto M, et al. **J Chromatogr B Biomed Appl** 1997 Jan 10; 688(1):1–10

BLOOD

In vitro and in vivo effects of selenium and selenium with vitamin E on platelet functions in diabetic rats relationship to platelet sorbitol and fatty acid distribution. Douillet C, et al. **Biol Trace Elem Res** 1996 Dec;55(3):263–77

Diagnostic performance of red cell sorbitol assay in a Nigerian teaching hospital. Anaja HP. **Clin Chim Acta** 1997 Jun 27;262(1–2):1–11

The effect of acute glutathione treatment on sorbitol level in erythrocytes from diabetic patients. Ciuchi E, et al. **Diabetes Metab** 1997 Feb;23(1):58–60

A simple and rapid method for the determination of D–sorbitol in plasma using the Cobas Mira S. Huebner GH, et al. **Ther Drug Monit** 1996 Oct;18(5):620–3

CHEMISTRY

The influence of glycerol, propylene glycol and sorbitol on surface tension, partition coefficient and diffusion of pyrrolidinoethylester of 3–heptyloxy phenylcarbamic acid (drug XX Z). Vitková Z, et al. **Acta Pol Pharm** 1995 Nov–Dec;52(6):483–5

METABOLISM

Osmotic regulation of sorbitol in the thick ascending limb of Henle's loop. Eckstein A, et al. **Am J Physiol** 1996 Feb; 270(2 Pt 2):F275–82

Rapid formation of advanced glycation end products by intermediate metabolites of glycolytic pathway and polyol pathway. Hamada Y, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):539–43

Impaired myelinated fiber regeneration following freeze–injury in rats with streptozotocin–induced diabetes: involvement of the polyol pathway. Love A, et al. **Brain Res** 1995 Dec 12;703(1–2):105–10

Preparation of D–sorbose from L–glucitol by bioconversion with Pseudomonas sp. Ac. Huwig A, et al. **Carbohydr Res** 1996 Feb 7;281(1):183–6

Comparison of the effects of inhibitors of aldose reductase and sorbitol dehydrogenase on neurovascular function, nerve conduction and tissue polyol pathway metabolites in streptozotocin–diabetic rats. Cameron NE, et al. **Diabetologia** 1997 Mar;40(3):271–81

Glucose dependence of glycolysis, hexose monophosphate shunt activity, energy status, and the polyol pathway in retinas isolated from normal (nondiabetic) rats [see comments] Winkler BS, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):62–71. Comment in: Invest Ophthalmol Vis Sci 1997 Jul;38(8):1467–70.

Interactions between the sorbitol pathway, non–enzymatic glycation, and diabetic vascular dysfunction. Ido Y, et al. **Nephrol Dial Transplant** 1996;11 Suppl 5:72–5

Sorbitol accumulation and transmembrane efflux in osmotically stressed JS1 schwannoma cells. Mizisin AP, et al. **Neurosci Lett** 1997 Jun 20;229(1):53–6

PHARMACOKINETICS

Intrarenal distribution of organic osmolytes in human kidney. Schmolke M, et al. **Eur J Clin Chem Clin Biochem** 1996 Jun;34(6):499–501

Glucose does not facilitate the absorption of sorbitol perfused in situ in the human small intestine. Beaugerie L, et al. **J Nutr** 1997 Feb;127(2):341–4

Facilitating effect of amino acids on fructose and sorbitol absorption in children. Hoekstra JH, et al. **J Pediatr Gastroenterol Nutr** 1996 Aug;23(2):118–24

Effect of glucose and lipids on intestinal absorption of sorbitol: role of gastric emptying. Beaugerie L, et al. **Neurogastroenterol Motil** 1996 Sep;8(3):235–9

[Distribution of irrigating fluid to intracellular and extracellular fluid space during transurethral prostatectomy I--Estimation of irrigating fluid absorbed by measuring serum osmolality] Miyao H, et al. **Masui** 1996 Jun; 45(6):681–8 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Influence of a methanogenic flora on the breath H2 and symptom response to ingestion of sorbitol or oat fiber. Kajs TM, et al. **Am J Gastroenterol** 1997 Jan;92(1):89–94

Properties of whole saliva and dental plaque in relation to 40–month consumption of chewing gums containing xylitol, sorbitol of sucrose. Mäkinen KK, et al. **Caries Res** 1996;30(3):180–8

Effects of xylitol, xylitol–sorbitol, and placebo chewing gums on the plaque of habitual xylitol consumers. Söderling E, et al. **Eur J Oral Sci** 1997 Apr;105(2):170–7

Mechanism of the stabilization of ribonuclease A by sorbitol: preferential hydration is greater for the denatured then for the native protein. Xie G, et al. **Protein Sci** 1997 Jan; 6(1):211–21

Effect of erythrocytes and prostacyclin production in the effect of fructose and sorbitol on platelet activation in human whole blood in vitro. De la Cruz JP, et al. **Thromb Res** 1997 Jun 15;86(6):515–24

THERAPEUTIC USE

Polyol chewing gums and caries rates in primary dentition: a 24–month cohort study. Mäkinen KK, et al. **Caries Res** 1996;30(6):408–17

SORBITOL DEHYDROGENASE see **IDITOL DEHYDROGENASE**

SORBOSE

CHEMICAL SYNTHESIS

Preparation of D–sorbose from L–glucitol by bioconversion with Pseudomonas sp. Ac. Huwig A, et al. **Carbohydr Res** 1996 Feb 7;281(1):183–6

METABOLISM

Evidence from studies of temperature–dependent changes of D–glucose, D–mannose and L–sorbose permeability that different states of activation of the human erythrocyte hexose transporter exist for good and bad substrates. Naftalin RJ. **Biochim Biophys Acta** 1997 Aug 14; 1328(1):13–29

SORCERY see **WITCHCRAFT**

SORE THROAT see **PHARYNGITIS**

SORPTION DETOXIFICATION

[Complications after administration of contrast media in high–risk patients. Is a prophylactic dialysis meaningful?] Liebl R, et al. **Dtsch Med Wochenschr** 1996 Nov 22; 121(47):1475–9 (47 ref.) (Ger)

[The use of xenospleen for body detoxification and immunocorrection in thermal injury] Boiarinov GA, et al. **Anesteziol Reanimatol** 1996 May–Jun;(3):70–1 (Rus)

[Use of hemodialysis in intensive care of organophosphorus insecticide poisoning] Novikova OV, et al. **Anesteziol Reanimatol** 1997 Jan–Feb;(1):74–6 (Eng. Abstr.) (Rus)

[Wound sorption] Bondarchuk OI, et al. **Klin Khir** 1996; (9):41–4 (50 ref.) (Rus)

[The comparative efficacy of hemosorption and xenosorption in bronchial asthma patients] Kovalenko NN, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):159–62 (Eng. Abstr.) (Rus)

[The endogenous intoxication syndrome and the procedure for detoxication therapy in the treatment of suppurative diseases of the face and neck] Gubin MA, et al. **Stomatologiia (Mosk)** 1996;75(4):23–7 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

[The prevention of the hemorrhagic and pulmonary complications of extracorporeal detoxification in the multiple organ failure syndrome] Sadchikov DV, et al. **Vestn Khir Im I I Grek** 1996;155(2):79–81 (Eng. Abstr.) (Rus)

INSTRUMENTATION

[Study of a plate apparatus for membrane extraction in detoxication of biological fluids] Iurtov EV, et al. **Med Tekh** 1996 Nov–Dec;(6):4–6 (Eng. Abstr.) (Rus)

METHODS

Continuous plasma resin perfusion for detoxification of methotrexate. Greil J, et al. **Eur J Pediatr** 1997 Jul; 156(7):533–6

[Indirect electrochemical detoxication] Fedorovskii NM. **Anesteziol Reanimatol** 1995 Nov–Dec;(6):46–51 (54 ref.) (Rus)

[Efferent therapy in the combined treatment of diffuse suppurative peritonitis] Neĭmark MI, et al. **Anesteziol Reanimatol** 1996 May–Jun;(3):73–4 (Rus)

[Endogenous intoxication and its treatment with sodium hypochlorite in neurosurgical patients] Parfenov AL, et al. **Anesteziol Reanimatol** 1997 May–Jun;(3):62–5 (Eng. Abstr.) (Rus)

[Direct administration of sorbent into the peritoneal cavity in diffuse purulent peritonitis] Maĭborodin IV, et al. **Arkh Patol** 1996 Jan–Feb;58(1):54–5 (Eng. Abstr.) (Rus)

[Enteral detoxication in patients with liver cirrhosis and bleeding from the esophageal and gastric varices] Shertsinger AG, et al. **Khirurgiia (Mosk)** 1997;(2):31–4 (Eng. Abstr.) (Rus)

[The initial experience of using fraxiparin in extracorporeal detoxication in clinical cardiology] Sirenko IuN, et al. **Klin Khir** 1994;(12):23–5 (Eng. Abstr.) (Rus)

[The clinico–immunological characteristics of the treatment of patients with a severe course of bronchial asthma using the method of the extracorporeal incorporation of pig donor spleen] Kovalenko NN, et al. **Lik Sprava** 1996 Oct–Dec;(10–12):88–91 (Eng. Abstr.) (Rus)

[The use of plasmosorption on SKN IK sorbent in a severe course of leptospirosis] Matiash VI. **Lik Sprava** 1997 Mar–Apr;(2):105–7 (Eng. Abstr.) (Rus)

[Experience in using extracorporeal detoxication in the intensive therapy of autoimmune pathology] Starikov AV. **Lik Sprava** 1995 Sep–Dec;(9–12):155–7 (Eng. Abstr.) (Rus)

[Active detoxication methods in the combined treatment of torpid and chronic suppurative–inflammatory diseases of the maxillofacial area] Fomichev EV, et al. **Stomatologiia (Mosk)** 1996;Spec No:85 (Rus)

[Continuous detoxication methods in acute kidney failure] von Appen K, et al. **Urol Nefrol (Mosk)** 1997 Jan–Feb; (1):16–9 (Eng. Abstr.) (Rus)

[Endolymphatic therapy and current detoxication methods in the treatment of peritonitis] Petrov SV, et al. **Vestn Khir Im I I Grek** 1996;155(5):30–2 (Eng. Abstr.) (Rus)

[Extracorporeal blood correction in the therapy of drug–resistant mental disorders] Davydov AT, et al. **Zh Nevrol Psikhiatr Im S S Korsakova** 1997;97(8):29–32 (Eng. Abstr.) (Rus)

[A method for quantum hemotherapy during the performance of extracorporeal detoxication operations] Il'ko AA. **Klin Khir** 1995;(1):41–2 (Ukr)

STANDARDS

Qualitative assessment of blood washing with the continuous autologous transfusion system (CATS). Walpoth BH, et al. **Int J Artif Organs** 1997 Apr;20(4):234–9

SOS RESPONSE (GENETICS)

Replication of M13 single–stranded viral DNA bearing single site–specific adducts by escherichia coli cell extracts: differential efficiency of translesion DNA synthesis for SOS–dependent and SOS–independent lesions. Wang G, et al. **Biochemistry** 1997 Aug 5;36(31):9486–92

7–Methoxy–2–nitronaphtho[2,1–b]furan (R7000)–induced mutation spectrum in the lacI gene of Escherichia coli: influence of SOS mutagenesis. Touati E, et al. **Carcinogenesis** 1996 Dec;17(12):2543–50

Overexpression of the hslVU operon suppresses SOS–mediated inhibition of cell division in Escherichia coli. Khattar MM. **FEBS Lett** 1997 Sep 8;414(2):402–4

Production of radiation–resistant E. coli strains by daily X–irradiation. Ewing D. **Int J Radiat Biol** 1997 Mar; 71(3):253–8

sfi–independent filamentation in Escherichia coli Is lexA dependent and requires DNA damage for induction. Hill TM, et al. **J Bacteriol** 1997 Mar;179(6):1931–9

Interaction of Escherichia coli RecA protein with LexA repressor. II. Inhibition of DNA strand exchange by the uncleavable LexA S119A repressor argues that recombination and SOS induction are competitive processes. Harmon FG, et al. **J Biol Chem** 1996 Sep 27; 271(39):23874–83

Mathematical model of the SOS response regulation of an excision repair deficient mutant of Escherichia coli after ultraviolet light irradiation. Aksenov SV, et al. **J Theor Biol** 1997 May 21;186(2):251–60

Adducts formed by the food mutagen 2–amino–3–methylimidazo(4,5–f) quinoline induce frameshift mutations at hot spots through an SOS–independent pathway. Maenhaut–Michel G, et al. **Mol Gen Genet** 1997 Feb 20;253(5):634–41

Analysis of ssb mutations in vivo implicates SSB protein in two distinct pathways of SOS induction and in recombinational DNA repair. Carlini LE, et al. **Mol Microbiol** 1997 Apr;24(1):129–39

Overlapping functions for recF and priA in cell viability and UV–inducible SOS expression are distinguished by dnaC809 in Escherichia coli K–12. Sandler SJ. **Mol Microbiol** 1996 Feb;19(4):871–80

Genotoxicity of selected metal compounds in the SOS chromotest. Lantzsch H, et al. **Mutat Res** 1997 Mar 17; 389(2–3):191–7

Genotoxicity of six pesticides by Salmonella mutagenicity test and SOS chromotest. Ruiz MJ, et al. **Mutat Res** 1997 May 23;390(3):245–55

Induction of SOS–independent mutations by benzo[a]pyrene treatment in Escherichia coli cells deficient in MutY or MutM DNA glycosylases: possible role of oxidative lesions. Urios A, et al. **Mutat Res** 1996 Sep 23;356(2):229–35

The VITOTOX test, an SOS bioluminescence Salmonella

typhimurium test to measure genotoxicity kinetics. van der Lelie D, et al. **Mutat Res** 1997 Mar 17;389(2-3):279-90
Detection of genotoxic substances in bivalve molluscs from the Saguenay Fjord (Canada), using the SOS chromotest. White PA, et al. **Mutat Res** 1997 Aug 14;392(3):277-300
Regulation of SOS mutagenesis by proteolysis. Frank EG, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10291-6
Cellular strategies for accommodating replication-hindering adducts in DNA: control by the SOS response in Escherichia coli. Koffel-Schwartz N, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7805-10
SOS factors involved in translesion synthesis. Napolitano RL, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5733-8

DRUG EFFECTS

Antimutagenic effect of resveratrol against Trp-P-1. Uenobe F, et al. **Mutat Res** 1997 Feb 3;373(2):197-200

GENETICS

SOS response as an adaptive response to DNA damage in prokaryotes. Shinagawa H. **EXS** 1996;77:221-35 (64 ref.)
Characterization of DinR, the Bacillus subtilis SOS repressor. Winterling KW, et al. **J Bacteriol** 1997 Mar;179(5):1698-703
Regulated expression of the dinR and recA genes during competence development and SOS induction in Bacillus subtilis. Haijema BJ, et al. **Mol Microbiol** 1996 Oct; 22(1):75-85

RADIATION EFFECTS

The X-ray induction of SOS repair activity in E. coli: euoxic vs. anoxic DNA damage. Ewing D, et al. **Biochem Mol Biol Int** 1996 Feb;38(2):267-73

SOTALOL

[Zocor and Sotacor (letter)] Tonstad S. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1187 **(Nor)**

ADMINISTRATION & DOSAGE

Electrophysiologic mechanisms of antiarrhythmic efficacy of a sotalol and class Ia drug combination: elimination of reverse use dependence. Lee SD, et al. **J Am Coll Cardiol** 1997 Jan;29(1):100-5
Antiarrhythmic and electrophysiologic effects of intravenous ibutilide and sotalol in the canine sterile pericarditis model. Buchanan LV, et al. **J Cardiovasc Electrophysiol** 1996 Feb; 7(2):113-9
d-Sotalol decreases defibrillation energy requirements in humans: a novel indication for drug therapy. Dorian P, et al. **J Cardiovasc Electrophysiol** 1996 Oct;7(10):952-61
Frequency-dependent electrophysiologic effects of d,l-sotalol and quinidine and modulation by beta-adrenergic stimulation. Sager PT, et al. **J Cardiovasc Electrophysiol** 1996 Feb;7(2):102-12
[The effect of sotalol hydrochloride therapy on atrial signal-averaged ECG in patients with paroxysmal atrial fibrillation] Telichowski A, et al. **Pol Merkuriusz Lek** 1996 Nov;1(5):303-9 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Sotalol-induced torsades de pointes in patients with renal failure. Dancey D, et al. **Can J Cardiol** 1997 Jan;13(1):55-8
Sex difference in risk of torsade de pointes with d,l-sotalol. Lehmann MH, et al. **Circulation** 1996 Nov 15; 94(10):2535-41
SWORD trial of d-sotalol [letter; comment] Ghali JK. **Lancet** 1996 Sep 21;348(9030):827. Comment on: Lancet 1996 Jul 6;348(9019):7-12.
SWORD trial of d-sotalol [letter; comment] Tan LB. **Lancet** 1996 Sep 21;348(9030):827-8. Comment on: Lancet 1996 Jul 6;348(9019):2-3. Comment on: Lancet 1996 Jul 6;348(9019):7-12.
Torsades de pointes during low-dosage sotalol therapy in haemodialysis patients [see comments] Huynh-Do U, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1153-4. Comment in: Nephrol Dial Transplant 1997 Feb;12(2):365.
Successful haemodialysis in sotalol-induced torsade de pointes in a patient with progressive renal failure. van Uum SH, et al. **Nephrol Dial Transplant** 1997 Feb;12(2):331-3
Torsades de pointes from terfenadine and sotalol given in combination. Feroze H, et al. **Pacing Clin Electrophysiol** 1996 Oct;19(10):1519-21
Sotalol-induced Torsade de pointes in a CAPD patient--successful treatment with intermittent peritoneal dialysis [letter] Tang S, et al. **Perit Dial Int** 1997 Mar-Apr; 17(2):207-8
Torsades de pointes with administration of high-dose intravenous d-sotalol to a patient with congestive heart failure. Gottlieb SS, et al. **Pharmacotherapy** 1997 Jul-Aug; 17(4):830-1

ANALOGS & DERIVATIVES

The in-vivo cardiovascular effects of a putative class III anti-arrhythmic drug, AM 92016. Hagerty MJ, et al. **J Pharm Pharmacol** 1996 Apr;48(4):417-21

ANALYSIS

Determination of sotalol in human cardiac tissue by high-performance liquid chromatography. Läer S, et al. **J Chromatogr B Biomed Appl** 1996 Jun 7;681(2):291-8

BLOOD

Enantioselective determination of sotalol enantiomers in biological fluids using high-performance liquid chromatography. Shimizu T, et al. **J Chromatogr B Biomed Appl** 1995 Dec 1;674(1):77-83

PHARMACOKINETICS

Pharmacokinetic evaluation of a case of massive sotalol intoxication. Gustavsson CG, et al. **Ann Pharmacother** 1997 Jul-Aug;31(7-8):856-9
Influence of cimetidine coadministration on the pharmacokinetics of sotalol enantiomers in an anaesthetized rat model: evidence supporting active renal excretion of sotalol. Carr RA, et al. **Biopharm Drug Dispos** 1996 Jan; 17(1):55-69
Renal, biliary and intestinal clearance of sotalol enantiomers in rat model: evidence of intestinal exsorption. Carr RA, et al. **Biopharm Drug Dispos** 1996 Nov;17(8):725-35
Pharmacokinetics and pharmacodynamics of (+/-)-sotalol in healthy male volunteers. Kimura M, et al. **Br J Clin Pharmacol** 1996 Nov;42(5):583-8
Interaction between sotalol and an antacid preparation. Läer S, et al. **Br J Clin Pharmacol** 1997 Mar;43(3):269-72

PHARMACOLOGY

Hemodynamic effects of the class III antiarrhythmic drug, d-sotalol, in patients with congestive heart failure. Gottlieb SS, et al. **Am J Cardiol** 1996 Dec 15;78(12):1411-5
Magnesium abolishes inadequate kinetics of frequency adaptation of the Q-aT interval in the presence of sotalol. Stark G, et al. **Cardiovasc Res** 1997 Jul;35(1):43-51
Oxygen uptake kinetics and cardiopulmonary performance in lone atrial fibrillation and the effects of sotalol. Lok NS, et al. **Chest** 1997 Apr;111(4):934-40
The protective effect of D-sotalol against hypoxia-induced myocardial uncoupling. Manoach M, et al. **Heart Vessels** 1996;11(6):281-8
Developmental effects of d-sotalol on anterograde and retrograde atrioventricular conduction in the rabbit. Case CL, et al. **J Cardiovasc Electrophysiol** 1996 May;7(5):406-14
Early afterdepolarizations produced by d,l-sotalol and clofilium. Patterson E, et al. **J Cardiovasc Electrophysiol** 1997 Jun;8(6):667-78
Facilitation of epinephrine-induced afterdepolarizations by class III antiarrhythmic drugs. Patterson E, et al. **J Electrocardiol** 1997 Jul;30(3):217-24
Interaction of class III antiarrhythmic drugs with muscarinic M2 and M3 receptors: radioligand binding and functional studies. Uemura H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec; 353(1):73-9
Indirect parasympathomimetic activity of the class III antiarrhythmic substance D/L-sotalol in vitro: reversible inhibition of cholinesterase isoenzymes from blood and the human central nervous system. Chemnitius JM, et al. **Pharmacol Res** 1996 Nov-Dec;34(5-6):193-200
[Sotalol, propafenone, and flecainide: compared multiparametric analysis of ventricular repolarization in subjects without organic cardiopathy] Sarubbi B, et al. **Cardiologia** 1996 Jul;41(7):645-51 (Eng. Abstr.) **(Ita)**

POISONING

Pharmacokinetic evaluation of a case of massive sotalol intoxication. Gustavsson CG, et al. **Ann Pharmacother** 1997 Jul-Aug;31(7-8):856-9
Torsade de pointes and prolonged QT interval from surreptitious use of sotalol: use of drug levels in diagnosis. Link MS, et al. **Chest** 1997 Aug;112(2):556-7

THERAPEUTIC USE

Efficacy and safety of sotalol in patients with refractory atrial fibrillation or flutter. Gallik DM, et al. **Am Heart J** 1997 Aug;134(2 Pt 1):155-60
Long-term results of electrophysiologically guided sotalol therapy for life-threatening ventricular arrhythmias. Lee RJ, et al. **Am Heart J** 1996 Nov;132(5):973-8
Multicenter comparative study of the efficacy and safety of sotalol in the prophylactic treatment of patients with paroxysmal supraventricular tachyarrhythmias. Wanless RS, et al. **Am Heart J** 1997 Apr;133(4):441-6
Effectiveness of sotalol for atrial flutter in children after surgery for congenital heart disease. Beaufort-Krol GC, et al. **Am J Cardiol** 1997 Jan 1;79(1):92-4
Risk stratification and clinical outcome of minimally symptomatic and asymptomatic patients with nonsustained ventricular tachycardia and coronary disease: a prospective single-center study [see comments] Giorgberidze I, et al. **Am J Cardiol** 1997 Sep 11;80(5B):3F-9F. Comment in: Am J Cardiol 1997 Sep 11;80(5B):1F-2F.
Comparisons of oral propafenone and sotalol as an initial treatment in patients with symptomatic paroxysmal atrial fibrillation. Lee SH, et al. **Am J Cardiol** 1997 Apr 1; 79(7):905-8
Sotalol for ventricular tachyarrhythmias: beta-blocking and class III contributions, and relative efficacy versus class I drugs after prior drug failure. ESVEM Investigators. Electrophysiologic Study Versus Electrocardiographic Monitoring. Reiffel JA, et al. **Am J Cardiol** 1997 Apr 15; 79(8):1048-53
Beta-blockers for ventricular arrhythmias: have we underestimated their value? Campbell TJ. **Aust N Z J Med** 1996 Oct;26(5):689-96 (59 ref.)
Differential effects of d-sotalol on normal and infarcted myocardium: an experimental study using epicardial mapping. Freigang KD, et al. **Cardiovasc Res** 1997 Jul; 35(1):52-9
Long-term efficacy of d/l sotalol in patients with sustained ventricular tachycardia refractory to class I antiarrhythmic drugs. Kühlkamp V, et al. **Eur Heart J** 1995 Nov; 16(11):1625-31
Reversal of heart failure with sotalol in a case of incessant supraventricular tachycardia. Passaretti B, et al. **Int J Cardiol** 1996 Apr 19;54(1):1-4
Efficacy and safety of d,l-sotalol in patients with ventricular tachycardia and in survivors of cardiac arrest. Haverkamp W, et al. **J Am Coll Cardiol** 1997 Aug;30(2):487-95
Efficacy and proarrhythmia with the use of d,l-sotalol for sustained ventricular tachyarrhythmias. Kühlkamp V, et al. **J Cardiovasc Pharmacol** 1997 Mar;29(3):373-81
Sotalol for atrial tachycardias after surgery for congenital heart disease. Beaufort-Krol GC, et al. **Pacing Clin Electrophysiol** 1997 Aug;20(8 Pt 2):2125-9
New antiarrhythmic drug in pediatric use: sotalol. Pfammatter JP, et al. **Pediatr Cardiol** 1997 Jan-Feb; 18(1):28-34 (62 ref.)
Class III antiarrhythmic agents: the next wave. Bauman JL. **Pharmacotherapy** 1997 Mar-Apr;17(2 Pt 2):76S-83S; discussion 89S-91S (28 ref.)
[Prevention of sudden death in myocardial infarct: do experimental results help to understand the clinical reality? The case of the clinical trial SWORD (Survival With ORal D-sotalol)] Schwartz PJ. **Cardiologia** 1996 Aug; 41(8):739-45 **(Ita)**
[Brazilian multicenter study of sotalol effectiveness in ventricular arrhythmias] Maia IG, et al. **Arq Bras Cardiol** 1996 Mar;66(3):173-8 (Eng. Abstr.) **(Por)**
[Experience with dl-sotalol in the treatment of supraventricular arrhythmia] Trabulo M, et al. **Rev Port Cardiol** 1996 Oct;15(10):725-9, 696 (Eng. Abstr.) **(Por)**

URINE

Enantioselective determination of sotalol enantiomers in biological fluids using high-performance liquid chromatography. Shimizu T, et al. **J Chromatogr B Biomed Appl** 1995 Dec 1;674(1):77-83

SOUND

consider also terms at PHON-

see related
ACOUSTIC STIMULATION
NOISE

Some ideas on the origin of otoacoustic emissions. Fritze W, et al. **Biochem Biophys Res Commun** 1996 Oct 14; 227(2):494-8
Mauthner system discrimination of stimulus direction from the acceleration and pressure components at sound onset. Eaton RC, et al. **Biol Bull** 1997 Feb;192(1):146-9
Neurotensin inhibits the activation of midbrain serotonergic neurons produced by random inescapable sound. Dilts RP, et al. **Brain Res** 1996 Dec 2;742(1-2):294-8
Protection against noise trauma by sound conditioning. Canlon B. **Ear Nose Throat J** 1997 Apr;76(4):248-50, 253-5 (23 ref.)
Auditory and visual interactions in postural stabilization. Sakellari V, et al. **Ergonomics** 1996 Apr;39(4):634-48
Auditory cues and inhibition of return: the importance of oculomotor activation. Reuter-Lorenz PA, et al. **Exp Brain Res** 1996 Nov;112(1):119-26
Infrasound in the occupational and general environment: a three-element microphone measuring method for locating distant sources of infrasound. Pawlaczyk-Luszczyńska M. **Int J Occup Med Environ Health** 1996;9(1):17-27
The effect of sound intensity on f1-sweep and f2-sweep distortion product otoacoustic emissions phase delay estimates in human adults. Bowman DM, et al. **J Acoust Soc Am** 1997 Mar;101(3):1550-9
Linearity of sound transmission through the human skull in vivo. Håkansson B, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2239-43
Analytical method for describing the paraxial region of finite amplitude sound beams. Hamilton MF, et al. **J Acoust Soc Am** 1997 Mar;101(3):1298-308
Classification by multiple-resolution statistical analysis with application to automated recognition of marine mammal sounds. Hayward TJ. **J Acoust Soc Am** 1997 Mar; 101(3):1516-26
Focusing and imaging using eigenfunctions of the scattering operator. Mast TD, et al. **J Acoust Soc Am** 1997 Aug;102(2 Pt 1):715-25
Attraction of male mosquitoes to sound. Belton P. **J Am Mosq Control Assoc** 1994 Jun;10(2 Pt 2):297-301 (27 ref.)
Acoustical detection of Aedes taeniorhynchus swarms and emergence exoduses in remote salt marshes. Mankin RW. **J Am Mosq Control Assoc** 1994 Jun;10(2 Pt 2):302-8
Sound and vibration sensitivity of VIIIth nerve fibers in the

grassfrog, Rana temporaria. Christensen-Dalsgaard J, et al. **J Comp Physiol [A]** 1996 Oct;179(4):437-45

Discrimination of phase spectra in complex sounds by the bullfrog (Rana catesbeiana). Hainfeld CA, et al. **J Comp Physiol [A]** 1996;179(1):75-87

Sound localization after transection of the commissure of Probst in the albino rat. Ito M, et al. **J Neurophysiol** 1996 Nov;76(5):3493-502

Effects of click intensity and frequency on the brain-stem auditory evoked potentials in the common marmoset (Callithrix jacchus). Harada T, et al. **J Vet Med Sci** 1997 Jul;59(7):561-7

Asymmetry of respiratory sounds and thoracic transmission. Pasterkamp H, et al. **Med Biol Eng Comput** 1997 Mar; 35(2):103-6

Time and frequency domain analysis of acoustic signals from a human muscle. Chen D, et al. **Muscle Nerve** 1997 Aug; 20(8):991-1001

Sound alters visual motion perception [letter] Sekuler R, et al. **Nature** 1997 Jan 23;385(6614):308

Lateralization of pectoral stridulation sound production in the channel catfish. Fine ML, et al. **Physiol Behav** 1996 Sep;60(3):753-7

The whistle and the rattle: the design of sound producing muscles. Rome LC, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8095-100

The effect of variations in transducer position and sound speed in intravascular ultrasound: a theoretical study. Thompson RS, et al. **Ultrasound Med Biol** 1996; 22(6):719-34

[Dynamics of immune response to single exposure to low-frequency acoustic oscillations] Voblikov IV, et al. **Gig Sanit** 1996 Jul-Aug;(4):39-40 **(Rus)**

[Experience of clinical use infrasound pneumomassage in the treatment of progressive myopia in schoolchildren] Sidorenko EI, et al. **Vestn Oftalmol** 1997 May-Jun; 113(3):18-20 (Eng. Abstr.) **(Rus)**

[Critical bands and the analysis of biologically important sound parameters in the auditory system of different representatives of the animal world] Vartanian IA, et al. **Zh Evol Biokhim Fiziol** 1996 Sep-Oct;32(5):642-50 (48 ref.) **(Rus)**

ADVERSE EFFECTS

Behavioral and adrenocortical responses to stress in neonates and the stabilizing effects of maternal heartbeat on them. Kurihara H, et al. **Early Hum Dev** 1996 Sep 20; 46(1-2):117-27

Combined effects of acute lead acetate exposure and tone exposure of the guinea pig cochlea. Hotta S, et al. **Eur Arch Otorhinolaryngol** 1996;253(8):488-93

[Hygienic and biomedical aspects of the effects of infrasound] Kuralesin NA. **Med Tr Prom Ekol** 1997;(5):8-14 (Eng. Abstr.) **(Rus)**

[Infrasound: body's effects and hygienic regulation] Izmerov NF, et al. **Vestn Ross Akad Med Nauk** 1997;(7):39-46 (26 ref.) (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Characterization of sounds emanating from the human temporomandibular joints. Prinz JF, et al. **Arch Oral Biol** 1996 Jul;41(7):631-9

Audio signal feedback light source-guided endotracheal intubation. Yang S. **J Clin Monit** 1997 Jul;13(4):229-32

Analysis of the cough sound: an overview. Korpáš J, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):261-8

Methods of recording and analysing cough sounds. Subburaj S, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):269-79

[The use of lumbar sound blockade in the differential diagnosis of acute appendicitis and right-sided renal colic] Polous IuM, et al. **Klin Khir** 1995;(2):22-3 **(Rus)**

SOUND LOCALIZATION

see related

ECHOLOCATION

Roles of GABAergic inhibition for the binaural processing of multiple sound sources in the inferior colliculus. Pollak GD. **Ann Otol Rhinol Laryngol Suppl** 1997 May;168:44-54

Intersensory experience and early perceptual development: the role of spatial contiguity in Bobwhite quail chicks' responsiveness to multimodal maternal cues. Lickliter R, et al. **Dev Psychobiol** 1996 Jul;29(5):403-16

Effects of earmold type on ability to locate sounds when wearing hearing aids. Byrne D, et al. **Ear Hear** 1996 Jun; 17(3):218-28

Monaural and binaural spectral cues created by the external ears of the pallid bat. Fuzessery ZM. **Hear Res** 1996 May; 95(1-2):1-17

Sound localization in chinchillas, III: Effect of pinna removal. Heffner RS, et al. **Hear Res** 1996 Sep 15;99(1-2):13-21

Audiogram of the big brown bat (Eptesicus fuscus). Koay G, et al. **Hear Res** 1997 Mar;105(1-2):202-10

Azimuthal sensitivity of rat pinna reflex: EMG recordings from cervicoauricular muscles. Li L, et al. **Hear Res** 1996 Oct;100(1-2):192-200

Sound lateralization in patients with lesions including the auditory cortex: comparison of interaural time difference (ITD) discrimination and interaural intensity difference (IID) discrimination. Yamada K, et al. **Hear Res** 1996 Nov 1;101(1-2):173-80

Processing of modulation frequency in the dorsal cochlear nucleus of the guinea pig: sinusoidal frequency-modulated tones. Zhao HB, et al. **Hear Res** 1996 May;95(1-2):120-34

Effects of frequency on free-field masking. Gilkey RH, et al. **Hum Factors** 1995 Dec;37(4):835-43

Use of an acoustic orientation system by two adolescents with blindness and mental retardation: a 12-month follow-up. Lancioni GE, et al. **Int J Rehabil Res** 1997 Jun; 20(2):217-20

Spectral cues for sound localization in cats: effects of frequency domain on minimum audible angles in the median and horizontal planes. Huang AY, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2341-8

Monaural sound localization revisited. Wightman FL, et al. **J Acoust Soc Am** 1997 Feb;101(2):1050-63

Sound movement detection deficit due to a brainstem lesion. Griffiths TD, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):522-6

Dynamic temporal processing of nonspeech acoustic information by children with specific language impairment. Visto JC, et al. **J Speech Hear Res** 1996 Jun;39(3):510-7

Sound localization in egocentric space following hemispheric lesions. Haeske-Dewick H, et al. **Neuropsychologia** 1996 Sep;34(9):937-42

PHYSIOLOGY

An auditory localization model based on high-frequency spectral cues. Nandy D, et al. **Ann Biomed Eng** 1996 Nov-Dec;24(6):621-38

Sound localization after kainic acid lesions of the dorsal nucleus of the lateral lemniscus in the albino rat. Kelly JB, et al. **Behav Neurosci** 1996 Dec;110(6):1445-55

Effects of lateralized cues on the processing of lateralized auditory stimuli. Schröger E, et al. **Biol Psychol** 1996 Jun 28;43(3):203-26

Contribution of the forebrain archistriatal gaze fields to auditory orienting behavior in the barn owl. Knudsen EI, et al. **Exp Brain Res** 1996 Feb;108(1):23-32

Effects of tectal grafts on sound localization deficits induced by inferior colliculus lesions in hooded rats. Zrull MC, et al. **Exp Neurol** 1997 May;145(1):16-23

Evidence for separate processing in the human brainstem of interaural intensity and temporal disparities for sound lateralization. Pratt H, et al. **Hear Res** 1997 Jun; 108(1-2):1-8

Optimal head related transfer functions for hearing and monaural localization in elevation: a signal processing design perspective. Rao KR, et al. **IEEE Trans Biomed Eng** 1996 Nov;43(11):1093-105

Evidence of the origin of specific spontaneous head turns during intertrial intervals. Korhonen T, et al. **Integr Physiol Behav Sci** 1997 Apr-Jun;32(2):123-30

Spectral cues for sound localization in cats: a model for discharge rate representations in the auditory nerve. May BJ, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2705-19

Electrophysiological evidence of a sound localizing binaural subsystem in the human auditory brainstem. Pratt H, et al. **J Basic Clin Physiol Pharmacol** 1996;7(3):235-44

Spatial tuning of neurons in the inferior colliculus of the big brown bat: effects of sound level, stimulus type and multiple sound sources. Grothe B, et al. **J Comp Physiol [A]** 1996; 179(1):89-102

Directionality of auditory nerve fiber responses to pure tone stimuli in the grassfrog, Rana temporaria. I. Spike rate responses. Jørgensen MB, et al. **J Comp Physiol [A]** 1997 May;180(5):493-502

Directionality of auditory nerve fiber responses to pure tone stimuli in the grassfrog, Rana temporaria. II. Spike timing. Jørgensen MB, et al. **J Comp Physiol [A]** 1997 May; 180(5):503-11

Directional hearing by mechanical coupling in the parasitoid fly Ormia ochracea. Robert D, et al. **J Comp Physiol [A]** 1996;179(1):29-44

Sensitivity to interaural intensity differences of neurons in primary auditory cortex of the cat. I. types of sensitivity and effects of variations in sound pressure level. Irvine DR, et al. **J Neurophysiol** 1996 Jan;75(1):75-96

Envelope coding in the lateral superior olive. II. Characteristic delays and comparison with responses in the medial superior olive. Joris PX. **J Neurophysiol** 1996 Oct; 76(4):2137-56

Psychophysical and physiological evidence for a precedence effect in the median sagittal plane. Litovsky RY, et al. **J Neurophysiol** 1997 Apr;77(4):2223-6

Eye-centered, head-centered, and intermediate coding of remembered sound locations in area LIP. Stricanne B, et al. **J Neurophysiol** 1996 Sep;76(3):2071-6

Neuronal encoding of sound direction in the auditory midbrain of the rainbow trout. Wubbels RJ, et al. **J Neurophysiol** 1997 Jun;77(6):3060-74

Binaural cross-correlation predicts the responses of neurons in the owl's auditory space map under conditions simulating summing localization. Keller CH, et al. **J Neurosci** 1996 Jul 1;16(13):4300-9

Tolerance to sound intensity of binaural coincidence detection in the nucleus laminaris of the owl. Peña JL, et al. **J Neurosci** 1996 Nov 1;16(21):7046-54

A neuronal population code for sound localization. Fitzpatrick DC, et al. **Nature** 1997 Aug 28;388(6645):871-4

Auditory inattention in right-hemisphere-damaged patients with and without visual neglect. Soroker N, et al. **Neuropsychologia** 1997 Mar;35(3):249-56

Quantitative analysis of sound localization with ocular positioning. Fuse T, et al. **Neuroreport** 1996 Jul 8; 7(10):1589-92

Mismatch response of the human brain to changes in sound location. Schröger E, et al. **Neuroreport** 1996 Nov 25; 7(18):3005-8

Fast preattentive processing of location: a functional basis for selective listening in humans. Schröger E, et al. **Neurosci Lett** 1997 Aug 22;232(1):5-8

SOUND SPECTROGRAPHY

Peculiar snoring in patients with multiple system atrophy: its sound source, acoustic characteristics, and diagnostic significance. Kakitsuba N, et al. **Ann Otol Rhinol Laryngol** 1997 May;106(5):380-4

Using artificial bat sonar neural networks for complex pattern recognition: recognizing faces and the speed of a moving target. Dror IE, et al. **Biol Cybern** 1996 Apr;74(4):331-8

Treatment of motor aprosodia with pitch biofeedback and expression modelling. Stringer AY. **Brain Inj** 1996 Aug; 10(8):583-90

Spectral properties and quantitative evaluation of hypernasality in vowels. Kataoka R, et al. **Cleft Palate Craniofac J** 1996 Jan;33(1):43-50

The acoustic properties of capsaicin-induced cough in healthy subjects. Doherty MJ, et al. **Eur Respir J** 1997 Jan;10(1):202-7

Formant frequency characteristics of elderly speakers in contextual speech. Rastatter MP, et al. **Folia Phoniatr Logop** 1997;49(1):1-8

An acoustic template of newborn infant crying. Robb MP, et al. **Folia Phoniatr Logop** 1997;49(1):35-41

Neuronal networks and self-organizing maps: new computer techniques in the acoustic evaluation of the infant cry. Schönweiler R, et al. **Int J Pediatr Otorhinolaryngol** 1996 Dec 5;38(1):1-11

Classification by multiple-resolution statistical analysis with application to automated recognition of marine mammal sounds. Hayward TJ. **J Acoust Soc Am** 1997 Mar; 101(3):1516-26

Comparison between subjective and objective measures of active hearing protector and communication headset attenuation. Zera J, et al. **J Acoust Soc Am** 1997 Jun; 101(6):3486-97

Linear and nonlinear spectral integration in type IV neurons of the dorsal cochlear nucleus. I. Regions of linear interaction. Nelken I, et al. **J Neurophysiol** 1997 Aug; 78(2):790-9

Linear and nonlinear spectral integration in type IV neurons of the dorsal cochlear nucleus. II. Predicting responses with the use of nonlinear models. Nelken I, et al. **J Neurophysiol** 1997 Aug;78(2):800-11

Comparisons among aerodynamic, electroglottographic, and acoustic spectral measures of female voice. Holmberg EB, et al. **J Speech Hear Res** 1995 Dec;38(6):1212-23

Coarticulation in slow speech: durational and spectral analysis. Hertrich I, et al. **Lang Speech** 1995 Apr-Jun;38 (Pt 2):159-87

Perceptual and acoustical analysis of alaryngeal speech: determinants of intelligibility. Drummond S, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):801-2

Instrumental and perceptual evidence for tracheoesophageal speech. Drummond SS, et al. **Percept Mot Skills** 1996 Oct; 83(2):658

Spectrum analysis, aliasing, and the perception of musical tones. Adelson RM, et al. **Perception** 1996;25(5):609-17

Assessment of the antitussive efficacy of codeine using cough sound pressure levels as a means of measuring cough. Freestone C, et al. **Pulm Pharmacol** 1996 Oct-Dec; 9(5-6):365

Analysis of the cough sound: an overview. Korpáš J, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):261-8

Methods of recording and analysing cough sounds. Subburaj S, et al. **Pulm Pharmacol** 1996 Oct-Dec;9(5-6):269-79

[Transitory evoked otoacoustic emissions and distortion product emissions in disorders of middle ear ventilation] Schmuziger N, et al. **HNO** 1996 Jun;44(6):319-23 (Eng. Abstr.) **(Ger)**

[Acoustic voice analysis. On documentation of voice rehabilitation after laser surgery laryngeal carcinoma resection] Zwirner P, et al. **HNO** 1996 Sep;44(9):514-20 (Eng. Abstr.) **(Ger)**

[In situ sound pressure measurement in a professional violinist with bilateral tinnitus] Rosanowski F, et al. **Laryngorhinootologie** 1996 Sep;75(9):514-6 (Eng. Abstr.) **(Ger)**

[Use of recording methods and sound analysis of cough in the study of sound phenomena associated with respiration] Vrabec M, et al. **Bratisl Lek Listy** 1997 Mar;98(3):141-5 (Eng. Abstr.) **(Slo)**

INSTRUMENTATION

Spectrum analysis, aliasing, and the perception of musical tones. Adelson RM, et al. **Perception** 1996;25(5):609-17

[Computer-assisted 3D phonetography] Neuschaefer-Rube C, et al. **HNO** 1996 Oct;44(10):585-9 (Eng. Abstr.) **(Ger)**

METHODS

Spectral and cepstral properties of vowels as a means for

characterizing velopharyngeal impairment in children. Garnier S, et al. **Cleft Palate Craniofac J** 1996 Nov; 33(6):507–12

SOUTHERN BLOTTING see **BLOTTING, SOUTHERN**

SOY BEANS see **SOYBEANS**

SOY PROTEINS

Brewery waste as a substitute for soy protein in soy–brewer's yeast mixtures to feed broiler chickens. Carías D, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):67–70

Effect of the type of dietary fat on cholesterolemia in rabbits fed brewer's yeast. Millán N, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):71–4

Stimulatory influence of soy protein isolate on breast secretion in pre- and postmenopausal women. Petrakis NL, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Oct; 5(10):785–94

In vivo rat assay for true protein digestibility and protein quality of beef and meat products extended with soy protein. Abdel–Aziz S, et al. **Int J Food Sci Nutr** 1997 Jan;48(1):51–6

Soybeans versus animal sources of rumen–undergradable protein and fat for early lactation dairy cows. Grummer RR, et al. **J Dairy Sci** 1996 Oct;79(10):1809–16

Dietary soy protein and estrogen replacement therapy improve cardiovascular risk factors and decrease aortic cholesteryl ester content in ovariectomized cynomolgus monkeys. Wagner JD, et al. **Metabolism** 1997 Jun; 46(6):698–705

[Fatal and severe food hypersensitivity. Peanut and soya underestimated allergens] Foucard T, et al. **Lakartidningen** 1997 Jul 23;94(30–31):2635–8 (Eng. Abstr.) **(Swe)**

ADMINISTRATION & DOSAGE

Association of soy and fiber consumption with the risk of endometrial cancer. Goodman MT, et al. **Am J Epidemiol** 1997 Aug 15;146(4):294–306

Effects of substituting dietary soybean protein and oil for milk protein and fat in subjects with hypercholesterolemia. Kurowska EM, et al. **Clin Invest Med** 1997 Jun; 20(3):162–70

Whole–body protein turnover in humans fed a soy protein–rich vegetable diet. Gausserès N, et al. **Eur J Clin Nutr** 1997 May;51(5):308–11

An extract of soy flour influences serum cholesterol and thyroid hormones in rats and hamsters. Balmir F, et al. **J Nutr** 1996 Dec;126(12):3046–53

Supplementation of methionine to a low soybean protein diet strikingly increases pancreatic amylase activity in rats. Hara H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1997 Feb;43(1):161–6

Evaluation of pancreatic function development after hydrolyzed protein–based and soy–based formulas in unweaned infants. Carroccio A, et al. **Scand J Gastroenterol** 1997 Mar;32(3):273–7

ADVERSE EFFECTS

Abnormal thyroid function tests in infants with congenital hypothyroidism: the influence of soy–based formula. Jabbar MA, et al. **J Am Coll Nutr** 1997 Jun;16(3):280–2

Soy allergy and DSCG in atopic eczema: "much ado about nothing"? Ventura A, et al. **Pediatr Med Chir** 1996 May–Jun;18(3):283–8

[Hypocalcemic tetany in 'alternative' soy milk nutrition in the first months of life] Anil M, et al. **Klin Padiatr** 1996 Nov–Dec;208(6):323–6 (Eng. Abstr.) **(Ger)**

ANALYSIS

Composition and characterization of soyabean and related products. García MC, et al. **Crit Rev Food Sci Nutr** 1997 Jun;37(4):361–91 (240 ref.)

Polymerase chain reaction (PCR) in the quality and safety assurance of food: detection of soya in processed meat products. Meyer R, et al. **Z Lebensm Unters Forsch** 1996 Oct;203(4):339–44

[Immunologic analysis of milk, hen egg, and soybean proteins in butter and margarine, and clinical assessment for availability of hypoallergenic margarine (HAM)] Yokota S, et al. **Arerugi** 1996 Dec;45(12):1237–43 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

Enzymatic modification of food proteins to improve the functional properties. Kamata Y. **Adv Exp Med Biol** 1997; 415:47–65 (52 ref.)

Effect of non–meat proteins, soy protein isolate and sodium caseinate, on the textural properties of chicken bologna. Yusof SC, et al. **Int J Food Sci Nutr** 1996 Jul;47(4):323–9

Rapid separation of soybean globulins by reversed–phase high–performance liquid chromatography. García MC, et al. **J Chromatogr A** 1997 Jan 10;758(1):75–83

pH–dependent microspheres from modified soybean protein hydrolysate. Milstein SJ, et al. **J Microencapsul** 1996 Nov–Dec;13(6):651–65

Influence of isoflavones in soy protein isolates on development of induced prostate–related cancers in L–W rats. Pollard M, et al. **Nutr Cancer** 1997;28(1):41–5

ISOLATION & PURIFICATION

Simultaneous separation of soya bean and animal whey proteins by reversed–phase high–performance liquid chromatography. Quantitative analysis in edible samples. García MC, et al. **Anal Chem** 1997 Jun 1;69(11):2217–20

METABOLISM

Molecular design of soybean glycinins with enhanced food qualities and development of crops producing such glycinins. Utsumi S, et al. **Adv Exp Med Biol** 1997;415:1–15 (54 ref.)

Urinary isoflavonoid excretion in humans is dose dependent at low to moderate levels of soy–protein consumption. Karr SC, et al. **Am J Clin Nutr** 1997 Jul;66(1):46–51

Soy protein and serum lipids. Potter SM. **Curr Opin Lipidol** 1996 Aug;7(4):260–4 (32 ref.)

PHARMACOKINETICS

pH–dependent microspheres from modified soybean protein hydrolysate. Milstein SJ, et al. **J Microencapsul** 1996 Nov–Dec;13(6):651–65

PHARMACOLOGY

Role of isoflavones in the cholesterol reduction by soy proteins in the clinic [letter] Sirtori CR, et al. **Am J Clin Nutr** 1997 Jan;65(1):166–7

Simvastatin further enhances the hypocholesterolemic effect of soy protein in rabbits. Giroux I, et al. **J Am Coll Nutr** 1997 Apr;16(2):166–74

An extract of soy flour influences serum cholesterol and thyroid hormones in rats and hamsters. Balmir F, et al. **J Nutr** 1996 Dec;126(12):3046–53

Dietary soybean protein increases insulin receptor gene expression in Wistar fatty rats when dietary polyunsaturated fatty acid level is low. Iritani N, et al. **J Nutr** 1997 Jun;127(6):1077–83

Partially purified soy hydrolysates retard proliferation and inhibit bacterial translocation in cultured C2BBe cells. Kops SK, et al. **J Nutr** 1997 Sep;127(9):1744–51

Dietary skim milk powder increases ionized calcium in the small intestine of piglets compared to dietary defatted soybean flour. Matsui T, et al. **J Nutr** 1997 Jul; 127(7):1357–61

Cholesterol–lowering effects of soybean, potato and rice proteins depend on their low methionine contents in rats fed a cholesterol–free purified diet. Morita T, et al. **J Nutr** 1997 Mar;127(3):470–7

THERAPEUTIC USE

[The use of diets incorporating soy products in the treatment of experimental alimentary dystrophy] Bul'on VV, et al. **Vopr Pitan** 1996;(3):38–40 **(Rus)**

SOYA OIL see **SOYBEAN OIL**

SOYBEAN OIL

Red blood cell and tissue phospholipid fatty acid profiles of weanling rats fed infant formula fat blends containing soy and/or corn oil. Boyle FG, et al. **Ann Nutr Metab** 1996;40(4):234–42

Effect of added soyabean oil and dietary energy on metabolisable and net energy of broiler diets. Nitsan Z, et al. **Br Poult Sci** 1997 Mar;38(1):101–6

Plasma lipoproteins in preruminant calves fed diets containing tallow or soybean oil with and without cholesterol. Leplaix–Charlat L, et al. **J Dairy Sci** 1996 Jul;79(7):1267–77

ADMINISTRATION & DOSAGE

Effects of substituting dietary soybean protein and oil for milk protein and fat in subjects with hypercholesterolemia. Kurowska EM, et al. **Clin Invest Med** 1997 Jun; 20(3):162–70

Psyllium husk fiber supplementation to the diets rich in soybean or coconut oil: hypocholesterolemic effect in healthy humans. Ganji V, et al. **Int J Food Sci Nutr** 1996 Mar;47(2):103–10

Long–term effects in two generations of enriched soybean and olive oil diets on some cardiovascular and biochemical parameters in male rats. Fernández S, et al. **Int J Vitam Nutr Res** 1996;66(4):393–9

Effects of diets containing tallow and soybean oil with and without cholesterol on hepatic metabolism of lipids and lipoproteins in the preruminant calf. Leplaix–Charlat L, et al. **J Dairy Sci** 1996 Oct;79(10):1826–35

Highly hydrogenated dietary soybean oil modifies the responses to polychlorinated biphenyls in rats. Kamei M, et al. **Lipids** 1996 Nov;31(11):1151–6

Oil enriched diets and behavioral parameters in rats' recovery from early undernutrition. Fernandez S, et al. **Physiol Behav** 1997 Jul;62(1):113–9

ADVERSE EFFECTS

Contact dermatitis from jojoba oil and myristyl lactate/maleated soybean oil. Wantke F, et al. **Contact Dermatitis** 1996 Jan;34(1):71–2

METABOLISM

Preileal digestibility of coconut fat and soybean oil in horses and their influence on metabolites of microbial origin of the proximal digestive tract. Meyer H, et al. **Arch Tierernahr** 1997;50(1):63–74

Triglyceride hydrolysis of soy oil vs fish oil emulsions. Oliveira FL, et al. **JPEN J Parenter Enteral Nutr** 1997 Jul–Aug;21(4):224–9

Plasma fatty acids in sheep fed hydroxyethylsoyamide, a fatty acyl amide that resists biohydrogenation. Jenkins TC, et al. **Lipids** 1997 Feb;32(2):173–8

Influence of pH on lipolysis and biohydrogenation of soybean oil by rumen contents in vitro. Van Nevel CJ, et al. **Reprod Nutr Dev** 1996;36(1):53–63

PHARMACOLOGY

Comparison of fullfat soybean, sunflower seed and protected fat as fat supplements for their effect on the performance of growing–finishing bulls and carcass fatty acid composition. Eweedah N, et al. **Acta Vet Hung** 1997; 45(2):151–63

Effects of partially hydrogenated fish oil, partially hydrogenated soybean oil and butter on the susceptibility of low density lipoprotein to oxidative modification in men. Halvorsen B, et al. **Eur J Clin Nutr** 1996 Jun;50(6):364–70

Effect of L–carnitine and soybean oil on growth performance and body composition of early–weaned pigs. Owen KQ, et al. **J Anim Sci** 1996 Jul;74(7):1612–9

Dietary oxidized frying oil enhances tissue alpha–tocopherol depletion and radioisotope tracer excretion in vitamin E–deficient rats. Liu JF, et al. **J Nutr** 1996 Sep; 126(9):2227–35

Effect of dietary soybean phospholipid and fats differing in the degree of unsaturation on fatty acid synthesis and oxidation in rat liver. Kabir Y, et al. **J Nutr Sci Vitaminol (Tokyo)** 1995 Dec;41(6):635–45

SOYBEAN PROTEINS see **SOY PROTEINS**

SOYBEANS

Should soybean agglutinin purging be performed in breast cancer patients undergoing autologous stem cell transplantation? A retrospective analysis of 48 patients. Ben–Yosef R, et al. **Am J Clin Oncol** 1997 Aug;20(4):419–23

Bean bag allergy revisited: a case of allergy to inhaled soybean dust. Falleroni AE, et al. **Ann Allergy Asthma Immunol** 1996 Oct;77(4):298–302

Inhibition of N–methyl–N–nitrosourea–induced mammary tumors in rats by the soybean isoflavones. Constantinou AI, et al. **Anticancer Res** 1996 Nov–Dec;16(6A):3293–8

Effects of processing on antinutritional factors in legumes: the soybean case. Liener IE. **Arch Latinoam Nutr** 1996 Dec; 44(4 Suppl 1):48S–54S

Soybean hull and its effect on atherosclerosis in non–human primates (Macaca fascicularis). Piliang WG, et al. **Biomed Environ Sci** 1996 Sep;9(2–3):137–43

Replacement of inorganic phosphorus by microbial phytase for young pigs fed on a maize–soyabean–meal diet. Kornegay ET, et al. **Br J Nutr** 1996 Oct;76(4):563–78

Novel dietary strategy for overcoming the antinutritional effects of soyabean whey of high agglutinin content. Pusztai A, et al. **Br J Nutr** 1997 Jun;77(6):933–45

Tofu and risk of breast cancer in Asian–Americans. Wu AH, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Nov; 5(11):901–6

Soy and rye diets inhibit the development of Dunning R3327 prostatic adenocarcinoma in rats. Zhang JX, et al. **Cancer Lett** 1997 Mar 19;114(1–2):313–4

Isoflavone content of breast milk and soy formulas: benefits and risks [letter; comment] Bluck LJ, et al. **Clin Chem** 1997 May;43(5):851–2. Comment on: Clin Chem 1996 Jun;42(6 Pt 1):841–2. Comment on: Clin Chem 1996 Jun;42(6 Pt 1):955–64.

Isoflavone content of breast milk and soy formulas: benefits and risks [letter; comment] Franke A. **Clin Chem** 1997 May; 43(5):850–1; discussion 852. Comment on: Clin Chem 1996 Jun;42(6 Pt 1):841–2.

Isoflavone content of breast milk and soy formulas: benefits and risks [letter; comment] Sheehan DM. **Clin Chem** 1997 May;43(5):850; discussion 852. Comment on: Clin Chem 1996 Jun;42(6 Pt 1):841–2. Comment on: Clin Chem 1996 Jun;42(6 Pt 1):955–64.

Inhibition of benzo[a]pyrene–induced mouse forestomach neoplasia and reduction of H2O2 concentration in human polymorphonuclear leucocytes by flavour components of Japanese–style fermented soy sauce. Kataoka S, et al. **Food Chem Toxicol** 1997 May;35(5):449–57

Development, acceptability, nutritional and physical characteristics of protein improved Nigerian abari (maize meal) prepared from soya and maize flours. Omueti O, et al. **Int J Food Sci Nutr** 1996 Sep;47(5):369–75

Behavior of horses is affected by soy lecithin and corn oil in the diet. Holland JL, et al. **J Anim Sci** 1996 Jun; 74(6):1252–5

Effect of beta–glucanase supplementation to hulless barley– or wheat–soybean meal diets on the digestibilities of energy, protein, beta–glucans, and amino acids in young pigs. Li S, et al. **J Anim Sci** 1996 Jul;74(7):1649–56

Whole cottonseeds or a combination of soybeans and soybeans hulls in the diets of lactating dairy cows. Abel–Caines SF, et al. **J Dairy Sci** 1997 Jul;80(7):1353–7

Characteristics of milk and reduced fat cheddar cheese from cows fed extruded soybeans and niacin. Baer RJ, et al.

J Dairy Sci 1996 Jul;79(7):1127-36

Performance and profiles of milk fatty acids of cows fed full fat, heat-treated soybeans using various processing methods. Chouinard PY, et al. **J Dairy Sci** 1997 Feb; 80(2):334-42

Particle size of roasted soybeans and the effect on milk production of dairy cows. Dhiman TR, et al. **J Dairy Sci** 1997 Aug;80(8):1722-7

A blend of animal and cereal protein or fish meal as partial replacement for soybean meal in the diets of lactating Holstein cows. Polan CE, et al. **J Dairy Sci** 1997 Jan; 80(1):160-6

Lactational responses of dairy cows fed unsaturated fat from extruded soybeans or sunflower seeds. Schingoethe DJ, et al. **J Dairy Sci** 1996 Jul;79(7):1244-9

Roasted soybeans and an estrogenic growth promoter affect growth hormone status and performance of beef steers. Rumsey TS, et al. **J Nutr** 1996 Nov;126(11):2880-7

Roasted soybeans and an estrogenic growth promoter affect the thyroid status of beef steers. Rumsey TS, et al. **J Nutr** 1997 Feb;127(2):352-8

Effect of dietary soybean phospholipid and fats differing in the degree of unsaturation on fatty acid synthesis and oxidation in rat liver. Kabir Y, et al. **J Nutr Sci Vitaminol (Tokyo)** 1995 Dec;41(6):635-45

Five-year follow-up of high-risk infants with family history of allergy who were exclusively breast-fed or fed partial whey hydrolysate, soy, and conventional cow's milk formulas [see comments] Chandra RK. **J Pediatr Gastroenterol Nutr** 1997 Apr;24(4):380-8. Comment in: J Pediatr Gastroenterol Nutr 1997 Apr;24(4):442-6.

Genetic resistance spreads to consumers [news] Wadman M. **Nature** 1996 Oct 17;383(6601):564

Altered kinetics and extent of urinary daidzein and genistein excretion in women during chronic soya exposure. Lu LJ, et al. **Nutr Cancer** 1996;26(3):289-302

Beneficial effects of tempeh in disease prevention and treatment. Karyadi D, et al. **Nutr Rev** 1996 Nov;54(11 Pt 2):S94-8 (19 ref.)

Microbial phytase improves amino acid utilization in young chicks fed diets based on soybean meal but not diets based on peanut meal. Biehl RR, et al. **Poult Sci** 1997 Feb; 76(2):355-60

Polymerase chain reaction (PCR) in the quality and safety assurance of food: detection of soya in processed meat products. Meyer R, et al. **Z Lebensm Unters Forsch** 1996 Oct;203(4):339-44

[Physico-chemical characterization and application for drug carrier of soybean-derived sterols and their glucosides-containing liposomes] Maitani Y. **Yakugaku Zasshi** 1996 Dec;116(12):901-10 (28 ref.) (Eng. Abstr.) **(Jpn)**

[Effect of Glycine max lectin on the interaction of prothrombin and erythrocytes] Zubairov DM, et al. **Vopr Med Khim** 1997 Jul-Aug;43(4):226-32 (Eng. Abstr.) **(Rus)**

[Effect of soybean products on the reproductive system of sexually mature female albino rats] Goncharova EN, et al. **Vopr Pitan** 1997;(1):17-20 (Eng. Abstr.) **(Rus)**

[Development of an intermediate moisture product for the elderly based on texturized soybeans] Morales de León JC, et al. **Arch Latinoam Nutr** 1995 Dec;45(4):329-35 (Eng. Abstr.) **(Spa)**

[Allergic reactions to peanuts and soya. The life-threatening/fatal cases can be prevented] Kjellman NI, et al. **Lakartidningen** 1997 Jul 23;94(30-31):2633-4 (11 ref.) **(Swe)**

ADVERSE EFFECTS

Reexamination of epidemic asthma in New Orleans, Louisiana, in relation to the presence of soy at the harbor. White MC, et al. **Am J Epidemiol** 1997 Mar 1;145(5):432-8

Major allergens in soybean and clinical significance of IgG4 antibodies investigated by IgE- and IgG4-immunoblotting with sera from soybean-sensitive patients. Awazuhara H, et al. **Clin Exp Allergy** 1997 Mar;27(3):325-32

Immunopathology of fatal soybean dust-induced asthma. Synek M, et al. **Eur Respir J** 1996 Jan;9(1):54-7

Comparison of soybean epidemic asthma and occupational asthma. Antó JM, et al. **Thorax** 1996 Jul;51(7):743-9 (39 ref.)

[Soy-seed asthma epidemics in small cities (letter)] García-Ortega P, et al. **Med Clin (Barc)** 1997 May 3; 108(17):677 **(Spa)**

ANATOMY & HISTOLOGY

Retention in situ and spectral analysis of fluorescent vacuole components in sections of plant tissues. Bayliss C, et al. **Biotech Histochem** 1997 May;72(3):123-8

CHEMISTRY

Soy isoflavonoids and cancer prevention. Underlying biochemical and pharmacological issues. Barnes S, et al. **Adv Exp Med Biol** 1996;401:87-100

Oxygen-radical-scavenging activity of DDMP-conjugated saponins and physiological role in leguminous plant. Okubo K, et al. **Adv Exp Med Biol** 1996;405:141-54 (27 ref.)

Sampling and analytical quality control of the determination of aluminium in soybean leaves. Dong D, et al. **Analyst** 1997 May;122(5):421-4

Eating to beat breast cancer: potential role for soy supplements. Stoll BA. **Ann Oncol** 1997 Mar;8(3):223-5

Effects of dehulling and storage conditions on cooking requirements and chemical composition of soybeans. Cabral LC, et al. **Arch Latinoam Nutr** 1995 Mar;45(1):36-40

Biochemical determinants of food iron availability: soya fibre and iron interactions. Latunde-Dada GO. **Biochem Soc Trans** 1996 Aug;24(3):506S

Biochemical determinants of food iron availability: soyabean iron characteristics. Latunde-Dada GO. **Biochem Soc Trans** 1996 Aug;24(3):505S

Inhibition of liposomal lipid peroxidation by isoflavonoid type phyto-oestrogens from soybeans of different countries of origin. Wiseman H, et al. **Biochem Soc Trans** 1996 Aug; 24(3):392S

The use of enzyme-digested soybean residue for feeding common carp. Wong MH, et al. **Biomed Environ Sci** 1996 Dec;9(4):418-23

A simplified method to quantify isoflavones in commercial soybean diets and human urine after legume consumption [letter] Franke A. **Cancer Epidemiol Biomarkers Prev** 1996 May;5(5):407-8

Composition and characterization of soyabean and related products. García MC, et al. **Crit Rev Food Sci Nutr** 1997 Jun;37(4):361-91 (240 ref.)

Soyacystatin, a novel cysteine proteinase inhibitor in soybean, is distinct in protein structure and gene organization from other cystatins of animal and plant origin. Misaka T, et al. **Eur J Biochem** 1996 Sep 15;240(3):609-14

Limited proteolysis of beta-conglycinin and glycinin, the 7S and 11S storage globulins from soybean [Glycine max (L.) Merr.]. Structural and evolutionary implications. Shutov AD, et al. **Eur J Biochem** 1996 Oct 1;241(1):221-8

Gene synthesis, high-level expression and assignment of backbone 15N and 13C resonances of soybean leghemoglobin. Prytulla S, et al. **FEBS Lett** 1996 Dec 16; 399(3):283-9

Bioavailability of tryptophan in soybean meal for 10-kg pigs using slope-ratio assay. Adeola O. **J Anim Sci** 1996 Oct; 74(10):2411-9

Development of an experimental diet for determining bioavailable choline concentration and its application in studies with soybean lecithin. Emmert JL, et al. **J Anim Sci** 1996 Nov;74(11):2738-44

Digestion responses to low oligosaccharide soybean meal by ileally-cannulated dogs. Zuo Y, et al. **J Anim Sci** 1996 Oct; 74(10):2441-9

Plant clathrin heavy chain: sequence analysis and restricted localisation in growing pollen tubes. Blackbourn HD, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):777-86

Evaluation of dipalmitoylphosphatidylcholine liposomes containing a soybean-derived sterylglucoside mixture for liver targeting. Shimizu K, et al. **J Drug Target** 1996; 4(4):245-53

A chick bioassay approach for determining the bioavailable choline concentration in normal and overheated soybean meal, canola meal and peanut meal. Emmert JL, et al. **J Nutr** 1997 May;127(5):745-52

Antioxidative mechanism and apoptosis induction by 3-hydroxyanthranilic acid, an antioxidant in Indonesian food Tempeh, in the human hepatoma-derived cell line, HuH-7. Matsuo M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1997 Apr;43(2):249-59

Soy-polysaccharide-supplemented soy formula enhances mucosal disaccharidase levels following massive small intestinal resection in rats. Michail S, et al. **J Pediatr Gastroenterol Nutr** 1997 Feb;24(2):140-5

An investigation on the extraction and concentration of isoflavones in soy-based products. Nguyenle T, et al. **J Pharm Biomed Anal** 1995 Dec;14(1-2):221-32

Effect of bacterial galactosidase treatment on the nutritional status of soybean seeds and its milk derivative. Sanni AI, et al. **Nahrung** 1997 Feb;41(1):18-21

Hypoglycemic effect and protein nutritive quality of soy and methionine-supplemented whole durum pasta products. Taha SA, et al. **Nahrung** 1996 Oct;40(5):281-7

Effect of soya bean saponins on azoxymethane-induced preneoplastic lesions in the colon of mice. Koratkar R, et al. **Nutr Cancer** 1997;27(2):206-9

Effect of pH and temperature on the immunogenicity of glycinin (Glycine max L.). Demonte A, et al. **Plant Foods Hum Nutr** 1997;50(1):63-9

Evaluation of selected food characteristics of three advanced lines of Nigerian soybean (Glycine max (L.) Merr.). Giami SY. **Plant Foods Hum Nutr** 1997;50(1):17-25

Characterization of a new lectin of soybean vegetative tissues. Spilatro SR, et al. **Plant Physiol** 1996 Mar;110(3):825-34

Improving phytate phosphorus availability in corn and soybean meal for broilers using microbial phytase and calculation of phosphorus equivalency values for phytase. Yi Z, et al. **Poult Sci** 1996 Feb;75(2):240-9

CLASSIFICATION

Phylogenetic and genomic relationships in the genus Glycine Willd. based on sequences from the ITS region of nuclear rDNA. Kollipara KP, et al. **Genome** 1997 Feb;40(1):57-68

CYTOLOGY

Programmed cell death in the root cortex of soybean root necrosis mutants. Kosslak RM, et al. **Plant J** 1997 Apr; 11(4):729-45

DRUG EFFECTS

Effect of in vivo iron supplementation on oxygen radical production by soybean roots. Caro A, et al. **Biochim Biophys Acta** 1996 Dec 6;1291(3):245-51

ENZYMOLOGY

Activity of nitrogen fixation and nitrogen assimilation enzymes in soybean plants inoculated with Bradyrhizobium japonicum strains. Milić V, et al. **Acta Microbiol Immunol Hung** 1996;43(2-3):135-41

Phosphoenolpyruvate carboxylase protein kinase from soybean root nodules: partial purification, characterization, and up/down-regulation by photosynthate supply from the shoots. Zhang XQ, et al. **Arch Biochem Biophys** 1997 Jul 15;343(2):260-8

Purification and molecular analysis of an extracellular gamma-glutamyl hydrolase present in young tissues of the soybean plant. Huangpu J, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):1-6

Kinetic mechanism and cofactor content of soybean root nodule urate oxidase. Kahn K, et al. **Biochemistry** 1997 Apr 22;36(16):4731-8

Purification of phosphoglycerate kinase and glyceraldehyde phosphate dehydrogenase by DEAE-sepharose fast flow chromatography. Tan T, et al. **Chin J Biotechnol** 1996; 12(4):257-61

The activity of a blood type B specific exoglycosidase from Glycine max. Hobbs L, et al. **Clin Chim Acta** 1996 Mar 29;247(1-2):7-21

Plant monooxygenases: participation in xenobiotic oxidation. Khatisashvili G, et al. **Ecotoxicol Environ Saf** 1997 Mar; 36(2):118-22

Rapid stimulation of a soybean protein-serine kinase that phosphorylates a novel bZIP DNA-binding protein, G/HBF-1, during the induction of early transcription-dependent defenses. Dröge-Laser W, et al. **EMBO J** 1997 Feb 17;16(4):726-38

Functional analysis of Glu380 and Leu383 of soybean beta-amylase. A proposed action mechanism. Totsuka A, et al. **Eur J Biochem** 1996 Sep 15;240(3):655-9

Nitric oxide inhibits the cytochrome oxidase but not the alternative oxidase of plant mitochondria. Millar AH, et al. **FEBS Lett** 1996 Dec 2;398(2-3):155-8

Construction and characterization of the soybean leaf metalloproteinase cDNA. Pak JH, et al. **FEBS Lett** 1997 Mar 10;404(2-3):283-8

Substrate and thiol specificity of a stress-inducible glutathione transferase from soybean. Skipsey M, et al. **FEBS Lett** 1997 Jun 16;409(3):370-4

Rapid method to separate the domains of soybean lipoxygenase-1: identification of the interdomain interactions. Sudharshan E, et al. **FEBS Lett** 1997 Apr 7; 406(1-2):184-8

Seryl-phosphorylation of soybean nodule sucrose synthase (nodulin-100) by a Ca2+-dependent protein kinase. Zhang XQ, et al. **FEBS Lett** 1997 Jun 30;410(2-3):126-30

Oxidation of human low-density lipoprotein by soybean 15-lipoxygenase in combination with copper (II) or met-myoglobin. O'Leary VJ, et al. **Free Radic Biol Med** 1996;20(4):525-32

Identification of radical adducts formed in the reactions of unsaturated fatty acids with soybean lipoxygenase using continuous flow fast atom bombardment with tandem mass spectrometry. Iwahashi H, et al. **Free Radic Res** 1996 Sep; 25(3):255-74

The N-glycosylation sites of soybean seed coat peroxidase. Gray JS, et al. **Glycobiology** 1997 Jul;7(5):679-85

The glycans of soybean peroxidase. Gray JS, et al. **Glycobiology** 1996 Jan;6(1):23-32

Substrate specificity of a novel serine protease from soybean [Glycine max (L.) Merrill] Morita S, et al. **J Biochem (Tokyo)** 1996 Jun;119(6):1094-9

Isolation and reconstitution of the heme-thiolate protein obtusifoliol 14alpha-demethylase from Sorghum bicolor (L.) Moench. Kahn RA, et al. **J Biol Chem** 1996 Dec 20; 271(51):32944-50

The reaction of the soybean cotyledon mitochondrial cyanide-resistant oxidase with sulfhydryl reagents suggests that alpha-keto acid activation involves the formation of a thiohemiacetal. Umbach AL, et al. **J Biol Chem** 1996 Oct 4;271(40):25019-26

Purification and antifungal activity of a basic 34 kDa beta-1,3-glucanase from soybean hypocotyls inoculated with Phytophthora sojae f. sp. glycines. Yi SY, et al. **Mol Cells** 1997 Jun 30;7(3):408-13

Two distinct uricase II (nodulin 35) genes are differentially expressed in soybean plants. Takane K, et al. **Mol Plant Microbe Interact** 1997 Aug;10(6):735-41

Preparation of a monoclonal antibody against soybean nodule uricase (nod-35), and immunoblot analysis of the expression of nod-35 in tissues of various legumes. Tajima S, et al. **Plant Cell Physiol** 1996 Dec;37(8):1188-92

Expression of a gene for uricase II (nodulin-35) in cotyledons of soybean plants. Takane K, et al. **Plant Cell Physiol** 1997 Feb;38(2):149-54

Molecular cloning and expression of two cDNAs encoding asparagine synthetase in soybean. Hughes CA, et al. **Plant Mol Biol** 1997 Jan;33(2):301-11

Secretion of active recombinant phytase from soybean cell-suspension cultures. Li J, et al. **Plant Physiol** 1997 Jul; 114(3):1103-11

Soybean root nodule acid phosphatase. Penheiter AR, et al. **Plant Physiol** 1997 Jun;114(2):597–604

Cloning of an enzyme that synthesizes a key nucleotide-sugar precursor of hemicellulose biosynthesis from soybean: UDP-glucose dehydrogenase. Tenhaken R, et al. **Plant Physiol** 1996 Nov;112(3):1127–34

Oxygenation reactions of prostaglandins endoperoxide synthase and soybean lipoxygenase. Surprising stoichiometry in the formation of hydroperoxy and hydroxy derivatives of cis,cis-eicosa-11,14-dienoic acid. Bakovic M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1995 Dec; 53(6):423–31

Structure of soybean lipoxygenase L3 and a comparison with its L1 isoenzyme. Skrzypczak-Jankun E, et al. **Proteins** 1997 Sep;29(1):15–31

Co-oxidation of all-trans retinol acetate by human term placental lipoxygenase and soybean lipoxygenase. Datta K, et al. **Reprod Toxicol** 1996 Mar-Apr;10(2):105–12

GENETICS

The upstream domain of soybean oleosin genes contains regulatory elements similar to those of legume storage proteins. Rowley DL, et al. **Biochim Biophys Acta** 1997 Mar 10;1345(1):1–4

Soyacystatin, a novel cysteine proteinase inhibitor in soybean, is distinct in protein structure and gene organization from other cystatins of animal and plant origin. Misaka T, et al. **Eur J Biochem** 1996 Sep 15;240(3):609–14

Genepool variation in genus Glycine subgenus Soja revealed by polymorphic nuclear and chloroplast microsatellites. Powell W, et al. **Genetics** 1996 Oct;144(2):793–803

Genome duplication in soybean (Glycine subgenus soja). Shoemaker RC, et al. **Genetics** 1996 Sep;144(1):329–38

Phylogenetic and genomic relationships in the genus Glycine Willd. based on sequences from the ITS region of nuclear rDNA. Kollipara KP, et al. **Genome** 1997 Feb;40(1):57–68

Soybean chromosome painting: a strategy for somatic cytogenetics. Shi L, et al. **J Hered** 1996 Jul-Aug; 87(4):308–13

Plant cell transfection by electroporation. Terzaghi WB, et al. **Methods Mol Biol** 1997;62:453–62

Map order and linkage distances of molecular markers close to the supernodulation (nts-1) locus of soybean. Kolchinsky A, et al. **Mol Gen Genet** 1997 Mar 18;254(1):29–36

Differential expression of two functional serine/threonine protein kinases from soybean that have an unusual acidic domain at the carboxy terminus. Yoon HW, et al. **Mol Gen Genet** 1997 Jul;255(4):359–71

Characterization and application of soybean YACs to molecular cytogenetics. Zhu T, et al. **Mol Gen Genet** 1996 Sep 25;252(4):483–8

A TnphoA insertion within the Bradyrhizobium japonicum sipS gene, homologous to prokaryotic signal peptidases, results in extensive changes in the expression of PBM-specific nodulins of infected soybean (Glycine max) cells. Müller P, et al. **Mol Microbiol** 1995 Dec;18(5):831–40

Intronic and exonic sequences modulate 5'splice site selection in plant nuclei. McCullough AJ, et al. **Nucleic Acids Res** 1997 Mar 1;25(5):1071–7

Expression of a gene for uricase II (nodulin-35) in cotyledons of soybean plants. Takane K, et al. **Plant Cell Physiol** 1997 Feb;38(2):149–54

Isolation and characterization of cDNAs encoding transcription factor IIB from Arabidopsis and soybean. Baldwin DA, et al. **Plant J** 1996 Sep;10(3):561–8

Programmed cell death in the root cortex of soybean root necrosis mutants. Kosslak RM, et al. **Plant J** 1997 Apr; 11(4):729–45

Expression and subcellular targeting of a soybean oleosin in transgenic rapeseed. Implications for the mechanism of oil-body formation in seeds. Sarmiento C, et al. **Plant J** 1997 Apr;11(4):783–96

A copia-like retrotransposon Tgmr closely linked to the Rps1-k allele that confers race-specific resistance of soybean to Phytophthora sojae. Bhattacharyya MK, et al. **Plant Mol Biol** 1997 May;34(2):255–64

Isolation and analysis of the soybean SGA2 gene (cDNA), encoding a new member of the plant G-protein family of signal transducers. Gotor C, et al. **Plant Mol Biol** 1996 Dec;32(6):1227–34

Isolation of an additional soybean cDNA encoding Ypt/Rab-related small GTP-binding protein and its functional comparison to Sypt using a yeast ypt1-1 mutant. Kim WY, et al. **Plant Mol Biol** 1996 Jul;31(4):783–92

Isolation of cDNAs encoding two purine biosynthetic enzymes of soybean and expression of the corresponding transcripts in roots and root nodules. Schnorr KM, et al. **Plant Mol Biol** 1996 Nov;32(4):751–7

A novel plasma membrane-bound thioredoxin from soybean. Shi J, et al. **Plant Mol Biol** 1996 Nov;32(4):653–62

Soybean DapA mutations encoding lysine-insensitive dihydrodipicolinate synthase. Silk GW, et al. **Plant Mol Biol** 1997 Mar;33(5):931–3

Induced new mutation of D1 serine-268 in soybean photosynthetic cell cultures produced atrazine resistance, increased stability of S2QB- and S3QB- states, and increased sensitivity to light stress. Alfonso M, et al. **Plant Physiol** 1996 Dec;112(4):1499–508

Differential expression of the multigene family encoding the soybean mitochondrial alternative oxidase. Finnegan PM, et al. **Plant Physiol** 1997 Jun;114(2):455–66

Characterization of soybean choline kinase cDNAs and their expression in yeast and Escherichia coli. Monks DE, et al. **Plant Physiol** 1996 Apr;110(4):1197–205

Resistance gene analogs are conserved and clustered in soybean. Kanazin V, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11746–50

The structure and function of a soybean beta-glucan-elicitor-binding protein. Umemoto N, et al. **Proc Natl Acad Sci U S A** 1997 Feb 4;94(3):1029–34

Isolation of a superfamily of candidate disease-resistance genes in soybean based on a conserved nucleotide-binding site. Yu YG, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11751–6

[Cloning, sequencing and characterizing repetitive DNA of Glycine max] Hui D, et al. **I Chuan Hsueh Pao** 1995; 22(6):455–62 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Characterization of soybean allergens causing sensitization of occupationally exposed bakers. Baur X, et al. **Allergy** 1996 May;51(5):326–30

Specific immunoglobulins to soybean hull allergens in soybean asthma. Codina RM, et al. **Chest** 1997 Jan; 111(1):75–80

Purification and characterization of a soybean hull allergen responsible for the Barcelona asthma outbreaks. II. Purification and sequencing of the Gly m 2 allergen. Codina R, et al. **Clin Exp Allergy** 1997 Apr;27(4):424–30

Identification of unique peanut and soy allergens in sera adsorbed with cross-reacting antibodies. Eigenmann PA, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):969–78

Absence of modification of endogenous soy allergens [letter; comment] Moneret-Vautrin DA, et al. **J Allergy Clin Immunol** 1996 Oct;98(4):854–5. Comment on: J Allergy Clin Immunol 1995 Dec;96(6 Pt 1):1008–10.

Reduction of the allergenicity of soybean by treatment with proteases. Yamanishi R, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Dec;42(6):581–7

The ribosomal protein P0 of soybean (Glycine max L. Merr.) has antigenic cross-reactivity to soybean seed lectin. Wycoff KL, et al. **Plant Mol Biol** 1997 May;34(2):295–306

Feeding heated soyabean flour increases the density of B and T lymphocytes in the small intestine of calves. Lallès JP, et al. **Vet Immunol Immunopathol** 1996 Jun 15; 52(1-2):105–15

METABOLISM

Molecular design of soybean glycinins with enhanced food qualities and development of crops producing such glycinins. Utsumi S, et al. **Adv Exp Med Biol** 1997;415:1–15 (54 ref.)

Carbaryl washoff from soybean plants. Willis GH, et al. **Arch Environ Contam Toxicol** 1996 Aug;31(2):239–43

Effects of dehulling, cooking and storage conditions on protein quality and digestibility of soybeans. Cabral LC, et al. **Arch Latinoam Nutr** 1995 Mar;45(1):41–5

The effect of soaking time on water absorption and solid losses of whole and dehulled soybeans. Cabral LC, et al. **Arch Latinoam Nutr** 1995 Mar;45(1):46–9

Oxygenation of (3Z)-alkenal to (2E)-4-hydroxy-2-alkenal in soybean seed (Glycine max L.). Takamura H, et al. **Biochim Biophys Acta** 1996 Sep 27;1303(2):83–91

Measurement and metabolism of isoflavonoids and lignans in the human male. Morton MS, et al. **Cancer Lett** 1997 Mar 19;114(1-2):145–51

Evidence for channeling of intermediates in the oxidative pentose phosphate pathway by soybean and pea nodule extracts, yeast extracts, and purified yeast enzymes. Debnam PM, et al. **Eur J Biochem** 1997 Jun 1;246(2):283–90

Complexes of iron with phenolic compounds from soybean nodules and other legume tissues: prooxidant and antioxidant properties. Moran JF, et al. **Free Radic Biol Med** 1997;22(5):861–70

Supplemental chromium picolinate influences nitrogen balance, dry matter digestibility, and carcass traits in growing-finishing pigs. Kornegay ET, et al. **J Anim Sci** 1997 May;75(5):1319–23

The effect of microbial phytase in a pearl millet-soybean meal diet on apparent digestibility and retention of nutrients, serum mineral concentration, and bone mineral density of nursery pigs. Murry AC, et al. **J Anim Sci** 1997 May;75(5):1284–91

Effectiveness of Natuphos phytase in improving the bioavailabilities of phosphorus and other nutrients in soybean meal-based semipurified diets for young pigs. Yi Z, et al. **J Anim Sci** 1996 Jul;74(7):1601–11

Functional analysis of nodulin 26, an aquaporin in soybean root nodule symbiosomes. Rivers RL, et al. **J Biol Chem** 1997 Jun 27;272(26):16256–61

Characterization of recombinant soybean leghemoglobin a and apolar distal histidine mutants. Hargrove MS, et al. **J Mol Biol** 1997 Mar 14;266(5):1032–42

7S globulin from soybean is metabolized in human cell cultures by a specific uptake and degradation system. Lovati MR, et al. **J Nutr** 1996 Nov;126(11):2831–42

An application of NMR microimaging to investigate nitrogen fixing root nodules. Chudek JA, et al. **Magn Reson Imaging** 1997;15(3):361–8

Additivity of apparent and true ileal amino acid digestibilities in soybean meal, sunflower meal, and meat and bone meal for broilers. Angkanaporn K, et al. **Poult Sci** 1996 Sep; 75(9):1098–103

Bioavailability of the digestible lysine and vilaine in cottonseed and soybean minerals. Fernandez SR, et al. **Poult Sci** 1996 Feb;75(2):216–23

Bioavailability of digestible lysine in heat-damaged soybean meal for chick growth. Fernandez SR, et al. **Poult Sci** 1996 Feb;75(2):224–31

Effect of microbial phytase on nitrogen and amino acid digestibility and nitrogen retention of turkey poults fed corn-soybean meal diets. Yi Z, et al. **Poult Sci** 1996 Aug; 75(8):979–90

MICROBIOLOGY

Digestion of staphylococcal enterotoxin by Bacillus natto. Osawa R, et al. **Antonie Van Leeuwenhoek** 1997 May; 71(4):307–11

Genetic variability of the common nod gene in soybean bradyrhizobia isolated in Thailand and Japan. Yokoyama T, et al. **Can J Microbiol** 1996 Dec;42(12):1209–18

Characterization of the biosynthesis of beta(1-2) cyclic glucan in R. Fredii. Beta(1-2) glucan has no apparent role in nodule invasion of Mc Call and Peking soybean cultivars. Iñón de Iannino N, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jul;42(5):617–29

Characterization of two epiphytic bacteria from soybean leaves with antagonistic activities against Pseudomonas syringae pv. glycinea. Völksch B, et al. **J Basic Microbiol** 1996;36(6):453–62

The soybean cultivar specificity gene nolX is present, expressed in a nodD-dependent manner, and of symbiotic significance in cultivar-nonspecific strains of Rhizobium (Sinorhizobium) fredii. Bellato C, et al. **Microbiology** 1997 Apr;143 (Pt 4):1381–8

Purification and antifungal activity of a basic 34 kDa beta-1,3-glucanase from soybean hypocotyls inoculated with Phytophthora sojae f. sp. glycines. Yi SY, et al. **Mol Cells** 1997 Jun 30;7(3):408–13

Nodule development induced by mutants of Bradyrhizobium japonicum defective in cyclic B-glucan synthesis. Dunlap J, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):546–55

PARASITOLOGY

Characterization of two cDNAs encoding cysteine proteinases from the soybean cyst nematode Heterodera glycines. Urwin PE, et al. **Parasitology** 1997 Jun;114 (Pt 6):605–13

PHYSIOLOGY

Phospholipase D involvement in the plant oxidative burst. Schroeder Taylor AT, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):10–5

Development and applications of new technology for two-dimensional space-time characterization and correlation analysis of ultraweak biophoton information. Kobayashi M, et al. **Front Med Biol Eng** 1996;7(4):299–309

Cooperative action of lipo-chitin nodulation signals on the induction of the early nodulin, ENOD2, in soybean roots. Minami E, et al. **Mol Plant Microbe Interact** 1996 Sep; 9(7):574–83

Differential expression of soybean cysteine proteinase inhibitor genes during development and in response to wounding and methyl jasmonate. Botella MA, et al. **Plant Physiol** 1996 Nov;112(3):1201–10

Genetic transformation, recovery, and characterization of fertile soybean transgenic for a synthetic Bacillus thuringiensis cryIAc gene. Stewart CN Jr, et al. **Plant Physiol** 1996 Sep;112(1):121–9

STANDARDS

Efficacy of supplemental 1 alpha-hydroxycholecalciferol and microbial phytase for young pigs fed phosphorus- or amino acid-deficient corn-soybean meal diets. Biehl RR, et al. **J Anim Sci** 1996 Dec;74(12):2960–6

Soaking increases the efficacy of supplemental microbial phytase in a low-phosphorus corn-soybean meal diet for growing pigs. Liu J, et al. **J Anim Sci** 1997 May; 75(5):1292–8

Effect of feeding raw soybeans on polyamine metabolism in chicks and the therapeutic effect of exogenous putrescine. Mogridge JL, et al. **J Anim Sci** 1996 Aug; 74(8):1897–904

Nutritional value for swine of soybean meal produced by isopropyl alcohol extraction. O'Quinn PR, et al. **J Anim Sci** 1997 Mar;75(3):714–9

Effect of processed grain sorghum and expeller soybean meal on performance of lactating cows. Titgemeyer EC, et al. **J Dairy Sci** 1997 Apr;80(4):714–21

The effect of thermal processing and enzyme treatments of soybean meal on growth performance, ileal nutrient digestibilities, and chyme characteristics in broiler chicks. Marsman GJ, et al. **Poult Sci** 1997 Jun;76(6):864–72

TOXICITY

Characterization of soybean allergens causing sensitization of occupationally exposed bakers. Baur X, et al. **Allergy** 1996 May;51(5):326–30

SP1-BINDING SITE, HIV see **HIV LONG TERMINAL REPEAT**

SP1 PREGNANCY PROTEIN

SP1 PREGNANCY PROTEIN see **PREGNANCY-SPECIFIC BETA 1-GLYCOPROTEIN**

SP1 TRANSCRIPTION FACTOR see **TRANSCRIPTION FACTOR, SP1**

SP3 see **PREGNANCY ZONE PROTEINS**

SP-K RECEPTORS see **RECEPTORS, NEUROKININ-2**

SP-P RECEPTORS see **RECEPTORS, NEUROKININ-1**

SPACE ADAPTATION SYNDROME see **SPACE MOTION SICKNESS**

SPACE (ASTRONOMY) see **EXTRATERRESTRIAL ENVIRONMENT**

SPACE CLOSURE, ORTHODONTIC see **ORTHODONTIC SPACE CLOSURE**

SPACE CRAFT see **SPACECRAFT**

SPACE EXPLORATION see **SPACE FLIGHT**

SPACE FLIGHT

see related
ASTRONAUTS
ECOLOGICAL SYSTEMS, CLOSED
EXTRATERRESTRIAL ENVIRONMENT
SPACECRAFT
WEIGHTLESSNESS

Influence of spaceflight on succinate dehydrogenase activity and soma size of rat ventral horn neurons. Ishihara A, et al. **Acta Anat (Basel)** 1996;157(4):303–8

Histology and histochemistry of intervertebral discs of rats participated in spaceflight. Földes I, et al. **Acta Biol Hung** 1996;47(1–4):145–56

Eye movements and motion perception induced by off-vertical axis rotation (OVAR) at small angles of tilt after spaceflight. Clement G, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):603–9

Medical monitoring in long-term space missions. Grigoriev AI, et al. **Adv Space Biol Med** 1997;6:167–91 (36 ref.)

Frog experiment onboard space station Mir. Izumi-Kurotani A, et al. **Adv Space Biol Med** 1997;6:193–211

Psychosocial value of space simulation for extended spaceflight. Kanas N. **Adv Space Biol Med** 1997;6:81–91 (38 ref.)

Vestibular function and sensory interaction in altered gravity. Kornilova LN. **Adv Space Biol Med** 1997;6:275–313 (73 ref.)

Plant gravitropic response. Merkys A, et al. **Adv Space Biol Med** 1997;6:213–30 (56 ref.)

Pharmacology in space: pharmacotherapy. Pavy-Le Traon A, et al. **Adv Space Biol Med** 1997;6:93–105

Pharmacology in space: pharmacokinetics. Saivin S, et al. **Adv Space Biol Med** 1997;6:107–21 (26 ref.)

Human life support for advanced space exploration. Schwartzkopf SH. **Adv Space Biol Med** 1997;6:231–53 (23 ref.)

Regulation of body fluid volume and electrolyte concentrations in spaceflight. Smith SM, et al. **Adv Space Biol Med** 1997;6:123–65 (87 ref.)

Changes in the immune system during and after spaceflight. Taylor GR, et al. **Adv Space Biol Med** 1997;6:1–32 (92 ref.)

Bioregeneration with maltose excreting Chlorella: system concept, technological development, and experiments. Wolf L. **Adv Space Biol Med** 1997;6:255–74 (16 ref.)

Validity of a heart rate monitor during work in the laboratory and on the Space Shuttle. Moore AD Jr, et al. **Am Ind Hyg Assoc J** 1997 Apr;58(4):299–301

Evaluation of cardiac rhythm disturbances during extravehicular activity. Rossum AC, et al. **Am J Cardiol** 1997 Apr 15;79(8):1153–5

Comparison of ground-based and space flight energy expenditure and water turnover in middle-aged healthy male US astronauts. Lane HW, et al. **Am J Clin Nutr** 1997 Jan;65(1):4–12

Effects of an eight-day space flight on microvibration and physiological tremor. Gallasch E, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R86–92

Human skeletal muscle protein breakdown during spaceflight. Stein TP, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E688–95

Children's thinking in the wake of Challenger. Terr LC, et al. **Am J Psychiatry** 1997 Jun;154(6):744–51

Cytogenetic effects of space radiation in lymphocytes of MIR-18 crews. Yang TC, et al. **Aviakosm Ekolog Med** 1997;31(2):8–14

Pointing arm movements in short- and long-term spaceflights. Berger M, et al. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):781–7

A probabilistic model of hypobaric decompression sickness based on 66 chamber tests. Conkin J, et al. **Aviat Space Environ Med** 1996 Feb;67(2):176–83

Submaximal exercise VO2 and Qc during 30-day 6 degrees head-down bed rest with isotonic and isokinetic exercise training. Greenleaf JE, et al. **Aviat Space Environ Med** 1996 Apr;67(4):314–9

Microgravity effect on the vestibulo-ocular reflex is dependent on otolith and vision contributions. Grigorova VK, et al. **Aviat Space Environ Med** 1996 Oct;67(10):947–54

Theoretical considerations concerning the effect of relativistic velocities on the rate of biological processes. Heneine IF. **Aviat Space Environ Med** 1997 Jun; 68(6):538–41

Psychological reactions during polar expeditions and isolation in hyperbaric chambers. Sandal GM, et al. **Aviat Space Environ Med** 1996 Mar;67(3):227–34

Exercise capacity during and after spaceflight. Stegemann J, et al. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):812–7

Investigations of immune parameters in a cosmonaut after a long-duration flight [letter] Tuschl H, et al. **Aviat Space Environ Med** 1997 Jun;68(6):552

Remote ergonomic research in space: spacelab findings and a proposal. Wichman HA, et al. **Aviat Space Environ Med** 1996 Feb;67(2):171–5

Human physiology in space. Vernikos J. **Bioessays** 1996 Dec; 18(12):1029–37 (50 ref.)

Effects of 1- and 6-month spaceflight on bone mass and biochemistry in two humans. Collet P, et al. **Bone** 1997 Jun;20(6):547–51

Demonstration of feasibility of automated osteoblastic line culture in space flight. Guignandon A, et al. **Bone** 1997 Feb;20(2):109–16

Changes in apical organization of choroidal cells in rats adapted to spaceflight or head-down tilt. Gabrion J, et al. **Brain Res** 1996 Sep 23;734(1–2):301–15

Effects of an 11-day spaceflight on the choroid plexus of developing rats. Mani-Ponset L, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):187–200

Assessment of electrophysiological state of heart in astronauts in terms of decartographic and conventional electrocardiographic characteristics. Baevskii RM, et al. **Bratisl Lek Listy** 1996 Sep;97(9):516–20

Space doctor. Similarities of medicine and astronautics. Thirsk R. **Can Fam Physician** 1997 May;43:833–5, 836–8 **(Eng, Fre)**

Assessment of a portable clinical blood analyzer during space flight. Smith SM, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1056–65

Modulation of vergence by off-vertical yaw axis rotation in the monkey: normal characteristics and effects of space flight. Dai M, et al. **Exp Brain Res** 1996 Sep;111(1):21–9

Neuromuscular activation patterns during treadmill walking after space flight. Layne CS, et al. **Exp Brain Res** 1997 Jan;113(1):104–16

Lower limb kinematics during treadmill walking after space flight: implications for gaze stabilization. McDonald PV, et al. **Exp Brain Res** 1996 Nov;112(2):325–34

Is the erect posture in microgravity based on the control of trunk orientation or center of mass position? Massion J, et al. **Exp Brain Res** 1997 Apr;114(2):384–9

Epidemiology of Staphylococcus aureus during space flight. Pierson DL, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31;16(3–4):273–81

Dual-task performance in space: results from a single-case study during a short-term space mission. Manzey D, et al. **Hum Factors** 1995 Dec;37(4):667–81

Radiation-induced chromosome damage in astronauts' lymphocytes. Testard I, et al. **Int J Radiat Biol** 1996 Oct; 70(4):403–11

Animal rights groups target NASA's Bion projects [news] Walker E. **J Am Vet Med Assoc** 1996 Dec 15; 209(12):1988–9

Control of red blood cell mass in spaceflight. Alfrey CP, et al. **J Appl Physiol** 1996 Jul;81(1):98–104

Effects of spaceflight on rat erythroid parameters. Allebban Z, et al. **J Appl Physiol** 1996 Jul;81(1):117–22

Myonuclear number and myosin heavy chain expression in rat soleus single muscle fibers after spaceflight. Allen DL, et al. **J Appl Physiol** 1996 Jul;81(1):145–51

Central venous pressure in space. Buckey JC Jr, et al. **J Appl Physiol** 1996 Jul;81(1):19–25

Orthostatic intolerance after spaceflight. Buckey JC Jr, et al. **J Appl Physiol** 1996 Jul;81(1):7–18

Lymphatic tissue changes in rats flown on Spacelab Life Sciences-2. Congdon CC, et al. **J Appl Physiol** 1996 Jul; 81(1):172–7

Forced expirations and maximum expiratory flow-volume curves during sustained microgravity on SLS-1. Elliott AR, et al. **J Appl Physiol** 1996 Jul;81(1):33–43

Subnormal norepinephrine release relates to presyncope in astronauts after spaceflight. Fritsch-Yelle JM, et al. **J Appl Physiol** 1996 Nov;81(5):2134–41

Primate circadian rhythms during spaceflight: results from Cosmos 2044 and 2229. Fuller CA, et al. **J Appl Physiol** 1996 Jul;81(1):188–93

Erythropoietin under real and simulated microgravity conditions in humans. Gunga HC, et al. **J Appl Physiol** 1996 Aug;81(2):761–73

Vertebral growth disturbance in rapidly growing rats during 14 days of spaceflight. Kitajima I, et al. **J Appl Physiol** 1996 Jul;81(1):156–63

Cosmos 2229 mission. Overview. Korolkov V, et al. **J Appl Physiol** 1996 Jul;81(1):186–7

Regulation of body fluid compartments during short-term spaceflight. Leach CS, et al. **J Appl Physiol** 1996 Jul; 81(1):105–16

Effect of SLS-2 spaceflight on immunologic parameters of rats. Lesnyak A, et al. **J Appl Physiol** 1996 Jul;81(1):178–82

Effect of spaceflight on ability to sense and control roll tilt: human neurovestibular studies on SLS-2. Merfeld DM. **J Appl Physiol** 1996 Jul;81(1):50–7

Perceptual responses to linear acceleration after spaceflight: human neurovestibular studies on SLS-2. Merfeld DM, et al. **J Appl Physiol** 1996 Jul;81(1):58–68

Spaceflight effects on beta-adrenoceptor and metabolic properties in rat plantaris. Ohira Y, et al. **J Appl Physiol** 1996 Jul;81(1):152–5

Cellular content of p53 protein in rat skin after exposure to the space environment. Ohnishi T, et al. **J Appl Physiol** 1996 Jul;81(1):183–5

Horizontal angular VOR changes in orbital and parabolic flight: human neurovestibular studies on SLS-2. Oman CM, et al. **J Appl Physiol** 1996 Jul;81(1):69–81

In-flight and postflight changes in skeletal muscles of SLS-1 and SLS-2 spaceflown rats. Riley DA, et al. **J Appl Physiol** 1996 Jul;81(1):133–44

Energy expenditure in rhesus monkeys (Macaca mulatta) during spaceflight using doubly labeled water (2H2(18)O). Stein TP, et al. **J Appl Physiol** 1996 Jul;81(1):201–7

Diet and nitrogen metabolism during spaceflight on the shuttle. Stein TP, et al. **J Appl Physiol** 1996 Jul;81(1):82–97

Life sciences space missions. Overview. Sulzman FM. **J Appl Physiol** 1996 Jul;81(1):3–6 (26 ref.)

Tactile influences on astronaut visual spatial orientation: human neurovestibular studies on SLS-2. Young LR, et al. **J Appl Physiol** 1996 Jul;81(1):44–9

Effects of spaceflight on bone mineralization in the rhesus monkey. Zerath E, et al. **J Appl Physiol** 1996 Jul; 81(1):194–200

Effects of spaceflight and recovery on rat humeri and vertebrae: histological and cell culture studies. Zerath E, et al. **J Appl Physiol** 1996 Jul;81(1):164–71

Development of an antimicrobial susceptibility testing method suitable for performance during space flight. Jorgensen JH, et al. **J Clin Microbiol** 1997 Aug; 35(8):2093–7

Effect of space flight on cytokine production and other immunologic parameters of rhesus monkeys. Sonnenfeld G, et al. **J Interferon Cytokine Res** 1996 May;16(5):409–15

Effects of space flight on ovarian-hypophyseal function in postpartum rats. Burden HW, et al. **J Reprod Fertil** 1997 Mar;109(2):193–7

The alteration of human sleep and circadian rhythms during spaceflight. Gundel A, et al. **J Sleep Res** 1997 Mar;6(1):1–8

Locomotor head-trunk coordination strategies following space flight. Bloomberg JJ, et al. **J Vestib Res** 1997 Mar-Jun;7(2–3):161–77

A review of adaptive change in musculoskeletal impedance during space flight and associated implications for postflight head movement control. McDonald PV, et al. **J Vestib Res** 1997 Mar-Jun;7(2–3):239–50 (63 ref.)

Pulmonary function in space. West JB, et al. **JAMA** 1997 Jun 25;277(24):1957–61

Neocytolysis: physiological down-regulator of red-cell mass. Alfrey CP, et al. **Lancet** 1997 May 10;349(9062):1389–90 (18 ref.)

Trace element composition and histological analysis of rat bones from the space shuttle. Yamada G, et al. **Life Sci** 1997;60(9):635–42

Physical examination during space flight. Harris BA Jr, et al. **Mayo Clin Proc** 1997 Apr;72(4):301–8

Destruction of newly released red blood cells in space flight. Alfrey CP, et al. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S42–4

Effect of spaceflight on the functional, biochemical, and metabolic properties of skeletal muscle. Baldwin KM. **Med Sci Sports Exerc** 1996 Aug;28(8):983–7 (25 ref.)

Regulation of the systemic circulation at microgravity and during readaptation to 1G. Blomqvist GC. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S9–13 (24 ref.)

Lessons from operational cardiovascular studies in space. Charles JB, et al. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S18–22 (28 ref.)

Clinical aspects of the control of plasma volume at microgravity and during return to one gravity. Convertino VA. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S45–52 (44 ref.)

Exercise as a countermeasure for physiological adaptation to prolonged spaceflight. Convertino VA. **Med Sci Sports Exerc** 1996 Aug;28(8):999–1014 (99 ref.)

Critical discussion of integrated physiology of microG. Edgerton R. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S107–8; discussion S108–10

Space research activities during missions of the past. Frey MA. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S3–8 (28 ref.)

Cardiovascular adaptation to spaceflight. Hargens AR, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):977–82 (57 ref.)

Upright exercise or supine lower body negative pressure exercise maintains exercise responses after bed rest. Lee SM, et al. **Med Sci Sports Exerc** 1997 Jul;29(7):892–900

Pulmonary function and cardiopulmonary interactions at microgravity. Linnarsson D. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S14–7 (21 ref.)

Role of arginine vasopressin in the regulation of extracellular fluid volume. Norsk P. **Med Sci Sports Exerc** 1996 Oct; 28(10 Suppl):S36–41 (25 ref.)

Physiological adaptations and countermeasures associated with long-duration spaceflights. Tipton CM, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):974–6

Neuroendocrine and immune system responses with spaceflights. Tipton CM, et al. **Med Sci Sports Exerc** 1996

Aug;28(8):988–98 (78 ref.)
Orthostatic hypotension and the role of changes in venous capacitance. Tyberg JV, et al. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S29–31
Investigation of space flight effects on Escherichia coli and a proposed model of underlying physical mechanisms. Klaus D, et al. **Microbiology** 1997 Feb;143 (Pt 2):449–55
Spaceflight monkey's death 'raises new safety issues' [news] Reichhardt T. **Nature** 1997 May 1;387(6628):4
US space programme 'should not centre on Mars life claims' [news] Reichhardt T. **Nature** 1996 Dec 12;384(6609):502
The search for life on Mars. McKay CP.
Orig Life Evol Biosph 1997 Jun;27(1–3):263–89 (123 ref.)
Spaceflight exposure effects on transcription, activity, and localization of alcohol dehydrogenase in the roots of Arabidopsis thaliana. Porterfield DM, et al.
Plant Physiol 1997 Mar;113(3):685–93
Building a bridge between the big bang and biology [news] Lawler A. **Science** 1996 Nov 8;274(5289):912
[Bion–11 project: preliminary results and outlook for the future (news)] **Aviakosm Ekolog Med** 1997;31(2):57–8 **(Rus)**
[Assessment of the risk factors for urolithiasis in cosmonauts during long flights] Arzamazov GS, et al.
Aviakosm Ekolog Med 1996;30(3):24–32 (Eng. Abstr.) **(Rus)**
[Geocentric orientation of rats after space flight] Bokhov BB, et al. **Aviakosm Ekolog Med** 1996;30(1):62–4 **(Rus)**
[The Second Symposium: Science–NASA] Buravkova LB. **Aviakosm Ekolog Med** 1997;31(2):58–60 **(Rus)**
[Qualification of human body reactions to microgravity] Egorov AD. **Aviakosm Ekolog Med** 1996;30(4):14–20 (Eng. Abstr.) **(Rus)**
[Man, cosmos, medicine (35th anniversary of space flight by Iu. A. Gagarin) (editorial)] Giurdzhian AA.
Aviakosm Ekolog Med 1996;30(2):4–5 **(Rus)**
[The theory and practice of medical support of long–term space missions] Grigoriev AI, et al.
Aviakosm Ekolog Med 1997;31(1):14–25 (21 ref.) (Eng. Abstr.) **(Rus)**
[Experimental morphological studies of stress–inducing effects of weightlessness in rats flown aboard Spacelab–2] Kaplanskii AS, et al. **Aviakosm Ekolog Med** 1996; 30(2):16–20 (Eng. Abstr.) **(Rus)**
[Experience in diagnosis and treatment of dental caries and its complications in persons on space mission and in long–term hypokinesia] Kolikov SI.
Aviakosm Ekolog Med 1997;31(1):74–5 **(Rus)**
[Awareness of the subjective vertical in weightlessness (results of Austrian–Russian experiment Optovert performed within the framework of the program Austromir, part III)] Kornilova LN, et al.
Aviakosm Ekolog Med 1996;30(2):11–5 (Eng. Abstr.) **(Rus)**
[Tolerance of +Gz loads by space physician Poliakov VV during the active phases of his 438–days space mission] Kotovskaia AR, et al. **Aviakosm Ekolog Med** 1997; 31(1):29–34 (Eng. Abstr.) **(Rus)**
[Effects of microgravity on indices of hemodynamics in monkeys during postural tests] Krotov VP, et al.
Aviakosm Ekolog Med 1997;31(2):14–20 (Eng. Abstr.) **(Rus)**
[Evolution of methodical approaches to solve problem of evaluating and predicting the thermal status of cosmonauts in the real flight] Kuznets EI, et al.
Aviakosm Ekolog Med 1996;30(5):52–4 (7 ref.) (Eng. Abstr.) **(Rus)**
[The problem of adaptation to space flight] Malkin VB, et al. **Aviakosm Ekolog Med** 1996;30(6):64–6 (14 ref.) (Eng. Abstr.) **(Rus)**
[Lipid peroxidation and activity of diagnostically significant enzymes in cosmonauts after flights of various durations] Markin AA, et al. **Aviakosm Ekolog Med** 1997;31(3):14–8 (Eng. Abstr.) **(Rus)**
[Biochemical evaluation of various respiration conditions during simulation of extended flight] Nagornev SN, et al. **Aviakosm Ekolog Med** 1996;30(2):20–6 (Eng. Abstr.) **(Rus)**
[Cytological features of human lymphocytes after long space flights] Novoderzhkina IK, et al. **Aviakosm Ekolog Med** 1996;30(5):66–9 **(Rus)**
[Adaptive potentials of mammals under conditions of weightlessness] Serova LV. **Aviakosm Ekolog Med** 1996; 30(2):5–11 (69 ref.) (Eng. Abstr.) **(Rus)**
[Physiologic effects of weightlessness on man under spaceflight conditions] Gazenko OG, et al.
Fiziol Cheloveka 1997 Mar–Apr;23(2):138–46 (29 ref.) **(Rus)**
[Medico–biological aspects of a Mars expedition] Grigor'ev AI, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):88–92 (30 ref.) **(Rus)**
[Organ and tissue regeneration in lower vertebrate animals during space flight and after its completion] Brushilinskaia NV, et al. **Ontogenez** 1997 May–Jun;28(3):198–210 (Eng. Abstr.) **(Rus)**
[The characteristics of the structural organization of Chlorella cells cultured over 1 year under space flight conditions] Popova AF, et al. **Tsitol Genet** 1997 May–Jun; 31(3):3–9 (Eng. Abstr.) **(Rus)**
[Developmental stages of inflight medical monitoring of space crew health status and medical studies] Bednenko VS, et al. **Vestn Ross Akad Med Nauk** 1996;(7):41–5 (Eng. Abstr.) **(Rus)**
[Aerospace toxicology: basic stages of formation and prospects of development] Kustov VV, et al.
Vestn Ross Akad Med Nauk 1996;(7):37–40 (Eng. Abstr.) **(Rus)**
[Microenvironmental aspects of space flights] Liz'ko NN. **Vestn Ross Akad Med Nauk** 1996;(8):31–4 **(Rus)**
[Work experience of the pediatric polyclinic in a closed garrison of the Military Space Forces (news)] Gatych VN, et al. **Voen Med Zh** 1996 Sep;317(9):76–7 **(Rus)**
[Determination of the content of common protein in biological samples using chemical stabilizers] Iarmol'chuk HM. **Ukr Biokhim Zh** 1996 Sep–Oct;68(5):103–5 (Eng. Abstr.) **(Ukr)**

EDUCATION

[Training with a simulator—experiences in space flight] Müller M. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:533–6 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

[Optico–electronic medical equipment and perspectives of its use in space medicine and biology] Baranov VM, et al. **Aviakosm Ekolog Med** 1996;30(4):21–5 (Eng. Abstr.) **(Rus)**

SPACE MAINTENANCE

INSTRUMENTATION

Space maintainer for the loss of a permanent molar in the adolescent patient: report of case. Lindemeyer RG, et al. **ASDC J Dent Child** 1996 May–Jun;63(3):213–5
Effect of heat treatment on stainless steel lingual arch appliances. Nagatani SS, et al. **ASDC J Dent Child** 1996 Sep–Oct;63(5):346–9

SPACE MEDICINE see **AEROSPACE MEDICINE**

SPACE MOTION SICKNESS

ETIOLOGY

A ground–based animal model of space adaptation syndrome. Takeda N, et al. **J Vestib Res** 1996 Nov–Dec;6(6):403–9

METABOLISM

Histamine release from the hypothalamus induced by gravity change in rats and space motion sickness. Uno A, et al. **Physiol Behav** 1997 Jun;61(6):883–7

PHYSIOPATHOLOGY

Evidence of sensory conflict and recovery in carp exposed to prolonged weightlessness. Mori S, et al.
Aviat Space Environ Med 1996 Mar;67(3):256–61

SPACE PERCEPTION

Subjective vertical and postural activity. Luyat M, et al.
Acta Psychol (Amst) 1997 Feb;95(2):181–93
Scoring procedure, performance factors, and magnitude of sex differences in spatial performance. Voyer D.
Am J Psychol 1997 Summer;110(2):259–76
Selective processing of superimposed objects: an electrophysiological analysis of object–based attentional selection. Weber TA, et al. **Biol Psychol** 1997 Mar 21; 45(1–3):159–82
Do agoraphobics interpret the environment in large shops and supermarkets differently? Jones RB, et al.
Br J Clin Psychol 1996 Nov;35 (Pt 4):635–7
Spatial and temporal auditory processing deficits following right hemisphere infarction. A psychophysical study. Griffiths TD, et al. **Brain** 1997 May;120 (Pt 5):785–94
Spatial nonuniformities in visual search. Efron R, et al.
Brain Cogn 1996 Aug;31(3):331–68
Effects of stimulus number and target–to–distractor ratio on the performance of random array letter cancellation tasks. Geldmacher DS. **Brain Cogn** 1996 Dec;32(3):405–15
Hemispheric asymmetries for spatial frequency discrimination in a selective attention task. Proverbio AM, et al.
Brain Cogn 1997 Jul;34(2):311–20
Homogeneity of effect sizes for sex across spatial tests and cultures: implications for hormonal theories. Silverman I, et al. **Brain Cogn** 1996 Jun;31(1):90–4
The bailiwick of visuo–spatial working memory: evidence from unilateral spatial neglect. Ellis AX, et al.
Brain Res Cogn Brain Res 1996 Mar;3(2):71–8 (39 ref.)
Translating between orthogonally oriented stimulus and response arrays in four–choice reaction tasks. Proctor RW, et al. **Can J Exp Psychol** 1997 Jun;51(2):85–98
From here and now to there and then: the development of displaced reference in homesign and English. Morford JP, et al. **Child Dev** 1997 Jun;68(3):420–35
Angles and distances: children's and adults' reconstruction and scaling of spatial configurations. Uttal DH.
Child Dev 1996 Dec;67(6):2763–79
Spatiotemporal integration and object perception in infancy: perceiving unity versus form. Van de Walle GA, et al.
Child Dev 1996 Dec;67(6):2621–40
Unilateral neglect and space constancy during passive locomotion. Bisiach E, et al. **Cortex** 1997 Jun;33(2):313–22
Mediators of gender differences in mathematics college entrance test scores: a comparison of spatial skills with internalized beliefs and anxieties. Casey MB, et al.
Dev Psychol 1997 Jul;33(4):669–80
Verbal and spatial working memory in school–age children: developmental differences in susceptibility to interference. Hale S, et al. **Dev Psychol** 1997 Mar;33(2):364–71
Balint's syndrome arising from bilateral posterior cortical atrophy or infarction: rehabilitation strategies and their limitation. Perez FM, et al. **Disabil Rehabil** 1996 Jun; 18(6):300–4
The perception of spatial layout in real and virtual worlds. Arthur EJ, et al. **Ergonomics** 1997 Jan;40(1):69–77
Effects of retention interval length on young and elderly adults' memory for spatial information. Rutledge PC, et al. **Exp Aging Res** 1997 Apr–Jun;23(2):163–77
Influence of object position and size on human prehension movements. Paulignan Y, et al. **Exp Brain Res** 1997 Apr; 114(2):226–34
Effects of spatial attention on directional manual and ocular responses. Sheliga BM, et al. **Exp Brain Res** 1997 Apr; 114(2):339–51
Sex–related engagement of the hemispheres in visuospatial processing. Heider B. **Int J Neurosci** 1996 Nov; 88(1–2):83–95
Peripheral cuing of covert spatial attention before and after emotional conditioning of the cue. Stormark KM, et al.
Int J Neurosci 1996 Sep;86(3–4):225–40
Modeling spatial integration and contrast invariance in visual pattern discrimination. Näsänen RE, et al.
Invest Ophthalmol Vis Sci 1997 Jan;38(1):260–6
Dissociation in the recovery from neglect dyslexia and visuospatial unilateral neglect: a case report. Cantoni C, et al. **Ital J Neurol Sci** 1997 Feb;18(1):41–3
Motivational factors in vision therapy: comparison of computerized vs. manipulative techniques. Groffman S.
J Am Optom Assoc 1996 Jun;67(6):344–9
Children's analysis of hierarchical patterns: evidence from a similarity judgment task. Dukette D, et al.
J Exp Child Psychol 1996 Oct;63(1):103–40
Development of size modification of human figure drawings in spatial axes systems of varying complexity. Lange–Küttner C. **J Exp Child Psychol** 1997 Aug; 66(2):264–78
Effects of repeated disorientation on the acquisition of spatial tasks in rats: dissociation between the appetitive radial arm maze and aversive water maze. Dudchenko PA, et al.
J Exp Psychol Anim Behav Process 1997 Apr;23(2):194–210
Spatial encoding in domestic cats (Felis catus). Fiset S, et al. **J Exp Psychol Anim Behav Process** 1996 Oct; 22(4):420–37
Spatial disorientation blocks reliable goal location on a plus maze but does not prevent goal location in the Morris maze. Martin GM, et al. **J Exp Psychol Anim Behav Process** 1997 Apr;23(2):183–93
Spatially diffuse inhibition affects multiple locations: a reply to Tipper, Weaver, and Watson (1996) [comment] Abrams RA, et al. **J Exp Psychol Hum Percept Perform** 1996 Oct; 22(5):1294–8. Comment on: J Exp Psychol Hum Percept Perform 1996 Oct;22(5):1289–93.
Evidence of limited capacity and noise reduction with single–element displays in the location–cuing paradigm. Cheal ML, et al. **J Exp Psychol Hum Percept Perform** 1997 Feb;23(1):51–71
Semantic and spatial components of selective attention. Dark VJ, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb; 22(1):63–81
If it's not there, where is it? Locating illusory conjunctions. Hazeltine RE, et al.
J Exp Psychol Hum Percept Perform 1997 Feb;23(1):263–77
Distance and distraction effects in the apprehension of spatial relations. Logan GD, et al.
J Exp Psychol Hum Percept Perform 1996 Feb;22(1):159–72
Temporal and spatial repetition blindness: effects of presentation mode and repetition lag on the perception of repeated items. Luo CR, et al.
J Exp Psychol Hum Percept Perform 1996 Feb;22(1):95–113
Parallel processing in visual short–term memory. Magnussen S, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb; 22(1):202–12
Role of coarse and fine spatial information in face and object processing. Parker DM, et al.
J Exp Psychol Hum Percept Perform 1996 Dec; 22(6):1448–66
Inhibition of return to successively cued spatial locations: commentary on Pratt and Abrams (1995) [see comments] Tipper SP, et al. **J Exp Psychol Hum Percept Perform** 1996 Oct;22(5):1289–93. Comment in: J Exp Psychol Hum Percept Perform 1996 Oct122(5):1294–8.
Inattention magnifies perceived length: the attentional receptive field hypothesis. Tsal Y, et al.
J Exp Psychol Hum Percept Perform 1996 Feb;22(1):233–43
Impairment of visuospatial function in idiopathic spasmodic torticollis. Hinse P, et al. **J Neurol** 1996 Jan;243(1):29–33 (39 ref.)
Diverse patterns of performance in copying and severity of unilateral spatial neglect. Seki K, et al. **J Neurol** 1996 Jan; 243(1):1–8
Disappearance of unilateral spatial neglect following a simple instruction. Ishiai S, et al.
J Neurol Neurosurg Psychiatry 1997 Jul;63(1):23–7
Role of knowledge in human visual temporal integration in

spatiotemporal noise. Eckstein MP, et al. **J Opt Soc Am A** 1996 Oct;13(10):1960–8

How big is a Gabor patch, and why should we care? Fredericksen RE, et al. **J Opt Soc Am A** 1997 Jan; 14(1):1–12

Contrast perception across changes in luminance and spatial frequency. Peli E, et al. **J Opt Soc Am A** 1996 Oct; 13(10):1953–9

Effects of picture size and placement on memory for written words. Blischak DM, et al. **J Speech Hear Res** 1995 Dec; 38(6):1356–62

Tactile perception of spatial stimuli on the lip surface by young and older adults. Wohlert AB. **J Speech Hear Res** 1996 Dec;39(6):1191–8

Spatial location memory in amnesia: binding item and location information under incidental and intentional encoding conditions. Chalfonte BL, et al. **Memory** 1996 Nov;4(6):591–614

Describing places: what strategies are used? Peron E, et al. **Memory** 1996 Sep;4(5):535–54

Pieces of the true crossover effect in neglect. Anderson B. **Neurology** 1997 Sep;49(3):809–12

The complex interaction of normal biases in line bisection. Kashmere JL, et al. **Neurology** 1997 Sep;49(3):887–9

Spatial bias: attentional and intentional influence in normal subjects. Schwartz RL, et al. **Neurology** 1997 Jan; 48(1):234–42

Lateral and radial neglect as a function of spatial position: a case study. Halligan PW, et al. **Neuropsychologia** 1995 Dec;33(12):1697–702

A case of 'sign blindness' following left occipital damage in a deaf signer. Hickok G, et al. **Neuropsychologia** 1995 Dec;33(12):1597–606

Strobe frequency in the rod and frame effect. Cian C, et al. **Percept Mot Skills** 1997 Aug;85(1):43–50

Evidence of nonverbal learning disability among learning disabled boys with sensory integrative dysfunction. Humphries T, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):979–87

Comparing scores on spatial–perception tests for intercollegiate athletes and nonathletes. Lord T, et al. **Percept Mot Skills** 1997 Feb;84(1):299–306

On mental rotation in three dimensions. McWilliams W, et al. **Percept Mot Skills** 1997 Aug;85(1):297–8

Differences in map representation by Indian and American adolescents. Parameswaran G, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1232–4

Lack of sex differences among east Ecuadorian school children on geometric figure rotation and face drawings. Pontius AA. **Percept Mot Skills** 1997 Aug;85(1):72–4

Mean differences among subcomponents of Vandenberg's Mental Rotation Test. Qubeck WJ 4th. **Percept Mot Skills** 1997 Aug;85(1):323–32

Enhanced spatial performance following 10 minutes exposure to music: a replication. Rideout BE, et al. **Percept Mot Skills** 1997 Aug;85(1):112–4

Surface gradients, contours and the perception of surface attitude in images of complex scenes. Christou C, et al. **Perception** 1996;25(6):701–13

Spatial filtering and the Zöllner–Judd geometrical illusion: further studies. Earle DC, et al. **Perception** 1995; 24(12):1397–406

Early–blind subjects' spatial abilities in the locomotor space: exploratory strategies and reaction–to–change performance. Gaunet F, et al. **Perception** 1996;25(8):967–81

Decay and interference effects in visuospatial short–term memory. Hole GJ. **Perception** 1996;25(1):53–64

Capacity limitations in memory for visual locations. Lachter J, et al. **Perception** 1995;24(12):1427–41

Visually perceived eye level is influenced identically by lines from erect and pitched planes. Li W, et al. **Perception** 1996; 25(7):831–52

The role of retinal versus perceived size in the effects of pitched displays on visually perceived eye level. Post RB, et al. **Perception** 1996;25(7):853–9

Semantic and visual factors affecting the representation of map information. Rossano MJ, et al. **Perception** 1996; 25(6):677–700

A general model for the perception of space and motion. Wade NJ, et al. **Perception** 1996;25(2):187–94

Cholinergic drug resistance and impaired spatial learning in transgenic mice overexpressing human brain acetylcholinesterase. Andres C, et al. **Prog Brain Res** 1996; 109:265–72

Representation of space in blind persons: vision as a spatial sense? Thinus–Blanc C, et al. **Psychol Bull** 1997 Jan; 121(1):20–42 (150 ref.)

Learning spatial sequences in unilateral neglect. Cohen A, et al. **Psychol Res** 1997;60(1–2):42–52

Interference in immediate spatial memory: shifts of spatial attention or central–executive involvement? Klauer KC, et al. **Q J Exp Psychol A** 1997 Feb;50(1):79–99

Landmark stability: further studies pointing to a role in spatial learning. Biegler R, et al. **Q J Exp Psychol B** 1996 Nov; 49(4):307–45

The effects of hippocampal and area parahippocampalis lesions in pigeons: II. Concurrent discrimination and spatial memory. Colombo M, et al. **Q J Exp Psychol B** 1997 May; 50(2):172–89

Spatial learning by rats across visually disconnected environments. Schenk F, et al. **Q J Exp Psychol B** 1997 Feb;50(1):54–78

Coding the locations of objects in the dark [see comments] Graziano MS, et al. **Science** 1997 Jul 11;277(5323):239–41 . Comment in: Science 1997 Jul 11;277(5323):190–1.

The space around us [see comments] Rizzolatti G, et al. **Science** 1997 Jul 11;277(5323):190–1. Comment in: Science 1997 Jul 11;277(5323):239–41.

Raster–scan cathode–ray tubes for vision research––limits of resolution in space, time and intensity, and some solutions. Bach M, et al. **Spat Vis** 1997;10(4):403–14 (48 ref.)

Influence of unattended features on the processing of a single line segment. Dufour A, et al. **Spat Vis** 1995;9(3):307–24

Mechanisms specialized for the perception of image geometry. Heeley DW, et al. **Vision Res** 1996 Nov; 36(22):3607–27

[The disturbance of reversible operation in space in the early stage of Alzheimer's disease] Utsumi K, et al. **Seishin Shinkeigaku Zasshi** 1997;99(5):304–20 (Eng. Abstr.) **(Jpn)**

[The use of geometrical information and featural information in fimbria–fornix–lesioned rats] Sakamoto T, et al. **Shinrigaku Kenkyu** 1996 Jun;67(2):110–7 (Eng. Abstr.) **(Jpn)**

[The estimation of the curvature of visual space with a visual triangle] Watanabe T. **Shinrigaku Kenkyu** 1996 Oct; 67(4):278–84 (Eng. Abstr.) **(Jpn)**

[Spatial contrast sensitivity in patients with high myopia after refraction lamellar keratoplasty] Shpak AA, et al. **Vestn Oftalmol** 1997 Jan–Feb;113(1):12–3 (Eng. Abstr.) **(Rus)**

[The 'clock drawing test' in healthy elderly people] Cacho J, et al. **Rev Neurol** 1996 Dec;24(136):1525–8 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Oxotremorine infusions into the medial septal area of middle–aged rats affect spatial reference memory and ChAT activity. Frick KM, et al. **Behav Brain Res** 1996 Oct;80(1–2):99–109

Effect of active fragments of arginine–vasopressin on the disturbance of spatial cognition in rats. Fujiwara M, et al. **Behav Brain Res** 1997 Feb;83(1–2):91–6

SDZ ENA 713 facilitates central cholinergic function and ameliorates spatial memory impairment in rats. Ohara T, et al. **Behav Brain Res** 1997 Feb;83(1–2):229–33

Contrasting effects of systemic and intracerebral infusions of the 5–HT1A receptor agonist 8–OH–DPAT on spatial short–term working memory in rats. Warburton EC, et al. **Behav Brain Res** 1997 Mar;84(1–2):247–58

Effects of discrete kainic acid–induced hippocampal lesions on spatial and contextual learning and memory in rats. Stubley–Weatherly L, et al. **Brain Res** 1996 Apr 15; 716(1–2):29–38

MK–801 neurotoxicity in male mice: histologic effects and chronic impairment in spatial learning. Wozniak DF, et al. **Brain Res** 1996 Jan 29;707(2):165–79

Effects of combined chronic nimodipine and acute metrifonate treatment on spatial and avoidance behavior. Riekkinen M, et al. **Eur J Pharmacol** 1997 Mar 12; 322(1):1–9

The effects of D–cycloserine and MK–801 on the performance of rats in two spatial learning and memory tasks. Pitkänen M, et al. **Eur Neuropsychopharmacol** 1995 Dec;5(4):457–63

Effects of lorazepam on the distribution of spatial attention. Post RB, et al. **Exp Clin Psychopharmacol** 1997 May; 5(2):143–9

The influence of Cerebrolysin and E021 on spatial navigation of young rats. Gschanes A, et al. **J Neural Transm Suppl** 1996;47:278

The effects of novel, selective 5–hydroxytryptamine (5–HT)4 receptor ligands in rat spatial navigation. Fontana DJ, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):689–96

Delta 9–tetrahydrocannabinol increases prefrontal cortical catecholaminergic utilization and impairs spatial working memory in the rat: blockade of dopaminergic effects with HA966. Jentsch JD, et al. **Neuropsychopharmacology** 1997 Jun;16(6):426–32

Clozapine reverses the spatial working memory deficits induced by FG7142 in monkeys. Murphy BL, et al. **Neuropsychopharmacology** 1997 Jun;16(6):433–7

Effect of acetyl–L–carnitine on hyperactivity and spatial memory deficits of rats exposed to neonatal anoxia. Dell'Anna E, et al. **Neurosci Lett** 1997 Feb 28;223(3):201–5

The chronic administration of docosahexaenoic acid reduces the spatial cognitive deficit following transient forebrain ischemia in rats. Okada M, et al. **Neuroscience** 1996 Mar; 71(1):17–25

Effects of postnatal exposure to a PCB mixture in monkeys on nonspatial discrimination reversal and delayed alternation performance. Rice DC, et al. **Neurotoxicology** 1997;18(2):479–94

The alpha–1 adrenergic agonist, cirazoline, impairs spatial working memory performance in aged monkeys. Arnsten AF, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):55–9

Effect of aging on the spatial learning deficit produced by diazepam in rats. McNamara RK, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jul; 20(5):873–81

PHYSIOLOGY

Deviation of the subjective vertical in long–standing unilateral vestibular loss. Tabak S, et al. **Acta Otolaryngol (Stockh)** 1997 Jan;117(1):1–6

Multimodal representation of space in the posterior parietal cortex and its use in planning movements. Andersen RA, et al. **Annu Rev Neurosci** 1997;20:303–30 (72 ref.)

Introducing spatio–temporal reasoning into the inverse problem in electroencephalography. Siregar P, et al. **Artif Intell Med** 1996 May;8(2):97–122

Correlations between observability of the spatial frequency doubled illusion and a multi–region pattern electroretinogram. Bedford S, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S91–3

Development of spatial resolution, contrast sensitivity and binocularity in normal and strabismic kittens. Li XR, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S110–2

The optokinetic cervical reflex in pilots of high–performance aircraft. Merryman RF, et al. **Aviat Space Environ Med** 1997 Jun;68(6):479–87

Aviation spatial orientation in relationship to head position and attitude interpretation. Patterson FR, et al. **Aviat Space Environ Med** 1997 Jun;68(6):463–71

Aviation spatial orientation in relationship to head position, altitude interpretation, and control. Smith DR, et al. **Aviat Space Environ Med** 1997 Jun;68(6):472–8

Visual localization within single geometric planes of a space habitat. Tafforin C, et al. **Aviat Space Environ Med** 1997 Mar;68(3):192–8

The effects of selective lesions within the anterior thalamic nuclei on spatial memory in the rat. Aggleton JP, et al. **Behav Brain Res** 1996 Nov;81(1–2):189–98

Testing hypotheses of spatial learning: the role of NMDA receptors and NMDA–mediated long–term potentiation. Cain DP, et al. **Behav Brain Res** 1997 Mar;84(1–2):179–93

Spatial memory deficits in segmental trisomic Ts65Dn mice. Demas GE, et al. **Behav Brain Res** 1996 Dec;82(1):85–92

A selective role for dopamine in the nucleus accumbens of the rat in random foraging but not delayed spatial win–shift–based foraging. Floresco SB, et al. **Behav Brain Res** 1996 Oct;80(1–2):161–8

Delay–period activity in the primate prefrontal cortex encoding multiple spatial positions and their order of presentation. Funahashi S, et al. **Behav Brain Res** 1997 Mar; 84(1–2):203–23

Kindling of hippocampal field CA1 impairs spatial learning and retention in the Morris water maze. Gilbert TH, et al. **Behav Brain Res** 1996 Dec;82(1):57–66

Effortful information processing in a spontaneous spatial situation by rats with medial prefrontal lesions. Granon S, et al. **Behav Brain Res** 1996 Aug;78(2):147–54

The effect of the loss of molar teeth on spatial memory and acetylcholine release from the parietal cortex in aged rats. Kato T, et al. **Behav Brain Res** 1997 Feb;83(1–2):239–42

Perception of direction of visual motion. I. Influence of angular body acceleration and tilt. Loose R, et al. **Behav Brain Res** 1996 Nov;81(1–2):141–6

Contribution of egocentric spatial memory to place navigation of rats in the Morris water maze. Moghaddam M, et al. **Behav Brain Res** 1996 Aug;78(2):121–9

The effects of discrete cingulum bundle lesions in the rat on the acquisition and performance of two tests of spatial working memory. Neave N, et al. **Behav Brain Res** 1996 Oct;80(1–2):75–85

Comparison of effects of global cerebral ischaemia on spatial learning in the standard and radial water maze: relationship of hippocampal damage to performance. Nelson A, et al. **Behav Brain Res** 1997 Apr;85(1):93–115

Role of nitric oxide in the effect of aging on spatial memory in rats. Noda Y, et al. **Behav Brain Res** 1997 Feb; 83(1–2):153–8

Searching for spatial unit firing in the prelimbic area of the rat medial prefrontal cortex. Poucet B. **Behav Brain Res** 1997 Mar;84(1–2):151–9

Perception of direction of visual motion. II. Influence of linear body acceleration. Probst T, et al. **Behav Brain Res** 1996 Nov;81(1–2):147–54

Visuospatial attention in the rat and posterior parietal cortex lesions. Rosner AL, et al. **Behav Brain Res** 1996 Sep; 79(1–2):69–77

Telencephalic ablation in goldfish impairs performance in a 'spatial constancy' problem but not in a cued one. Salas C, et al. **Behav Brain Res** 1996 Sep;79(1–2):193–200

Spatial delayed alternation of rats in a T–maze: effects of neurotoxic lesions of the medial prefrontal cortex and of T–maze rotations. Sánchez–Santed F, et al. **Behav Brain Res** 1997 Mar;84(1–2):73–9

Subicular cells generate similar spatial firing patterns in two geometrically and visually distinctive environments: comparison with hippocampal place cells. Sharp PE. **Behav Brain Res** 1997 Apr;85(1):71–92

Reference memory and allocentric spatial localization deficits after unilateral cortical brain injury in the rat. Soblosky JS, et al. **Behav Brain Res** 1996 Oct;80(1–2):185–94

The differences shown by C57BL/6 and DBA/2 inbred mice in detecting spatial novelty are subserved by a different hippocampal and parietal cortex interplay. Thinus–Blanc C, et al. **Behav Brain Res** 1996 Oct;80(1–2):33–40

Effects of parietal cortex lesions on spatial problem solving in the rat. Thinus–Blanc C, et al. **Behav Brain Res** 1996 Nov;81(1–2):115–21

Effects of cortical ectopias on spatial delayed–matching–to–sample performance in BXSB mice. Waters NS, et al. **Behav Brain Res** 1997 Mar;84(1–2):23–9

Sex differences in performance in the Morris water maze and the effects of initial nonstationary hidden platform training. Perrot-Sinal TS, et al. **Behav Neurosci** 1996 Dec; 110(6):1309–20

Vernier and grating acuity in adult hooded rats: the influence of sex. Seymoure P, et al. **Behav Neurosci** 1997 Aug; 111(4):792–800

Uninformative symbolic cues may bias visual-spatial attention: behavioral and electrophysiological evidence. Eimer M. **Biol Psychol** 1997 Jun 20;46(1):67–71

Blindsight in hemispherectomized patients as revealed by spatial summation across the vertical meridian. Tomaiuolo F, et al. **Brain** 1997 May;120 (Pt 5):795–803

Dissociation between categorical and coordinate spatial computations: modulation by cerebral hemispheres, task properties, mode of response, and age. Bruyer R, et al. **Brain Cogn** 1997 Apr;33(3):245–77

The disruption of spatial cognition and changes in brain amino acid, monoamine and acetylcholine in rats with transient cerebral ischemia. Iwasaki K, et al. **Brain Res** 1996 Feb 19;709(2):163–72

Spatial and temporal frequency tuning and contrast sensitivity of single neurons in area 21a of the cat. Tardif E, et al. **Brain Res** 1996 Apr 15;716(1–2):219–23

Nitric oxide synthase inhibition does not impair visual or spatial discrimination learning. Tobin JR, et al. **Brain Res** 1995 Oct 2;694(1–2):177–82

Spatial representations for action in parietal cortex. Colby CL, et al. **Brain Res Cogn Brain Res** 1996 Dec; 5(1–2):105–15 (34 ref.)

Representation of object-centered space in the primate frontal lobe. Olson CR, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1–2):147–56 (32 ref.)

Stimulus-driven facilitation and inhibition of visual information processing in environmental and retinotopic representations of space. Shimojo S, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1–2):11–21 (14 ref.)

Fast and slow feedback loops for the visual correction of spatial errors in a pointing task: a reappraisal. Paillard J. **Can J Physiol Pharmacol** 1996 Apr;74(4):401–17 (136 ref.)

Impaired hippocampal representation of space in CA1-specific NMDAR1 knockout mice [see comments] McHugh TJ, et al. **Cell** 1996 Dec 27;87(7):1339–49. Comment in: Cell 1996 Dec 27;87(7):1147–8.

Mice expressing activated CaMKII lack low frequency LTP and do not form stable place cells in the CA1 region of the hippocampus [see comments] Rotenberg A, et al. **Cell** 1996 Dec 27;87(7):1351–61. Comment in: Cell 1996 Dec 27;87(7):1147–8.

The parahippocampus subserves topographical learning in man. Aguirre GK, et al. **Cereb Cortex** 1996 Nov–Dec; 6(6):823–9

Analysis of optic flow in the monkey parietal area 7a. Siegel RM, et al. **Cereb Cortex** 1997 Jun;7(4):327–46

Hippocampal CA1-region-restricted knockout of NMDAR1 gene disrupts synaptic plasticity, place fields, and spatial learning. Tonegawa S, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:225–38

What the eyes perceive, the brain ignores: a case of pure unilateral representational neglect. Beschin N, et al. **Cortex** 1997 Mar;33(1):3–26

The neuropsychology of spatial cognition in the rat. Poucet B, et al. **Crit Rev Neurobiol** 1997;11(2–3):101–20 (187 ref.)

Head direction cells: properties and functional significance. Muller RU, et al. **Curr Opin Neurobiol** 1996 Apr; 6(2):196–206 (40 ref.)

Brain representation of object-centered space. Olson CR, et al. **Curr Opin Neurobiol** 1996 Apr;6(2):165–70 (40 ref.)

New perspectives on the mechanisms for orientation selectivity. Sompolinsky H, et al. **Curr Opin Neurobiol** 1997 Aug;7(4):514–22 (50 ref.)

The disturbances of object vision and spatial vision in Alzheimer's disease. Fujimori M, et al. **Dement Geriatr Cogn Disord** 1997 Jul–Aug;8(4):228–31

Evidence of visual processing negativity with attention to orientation and color in central space. Karayanidis F, et al. **Electroencephalogr Clin Neurophysiol** 1997 Aug; 103(2):282–97

Cerebellar contribution to spatial event processing: Morris water maze and T-maze. Petrosini L, et al. **Eur J Neurosci** 1996 Sep;8(9):1882–96

Haptic localization and the internal representation of the hand in space. Dassonville P. **Exp Brain Res** 1995;106(3):434–48

The effects of disorientation on visual landmark control of head direction cell orientation. Dudchenko PA, et al. **Exp Brain Res** 1997 Jun;115(2):375–80

Mechanisms for distance reproduction in perceptual and motor tasks. Gentilucci M, et al. **Exp Brain Res** 1996 Feb; 108(1):140–6

Spatial coordination by descending vestibular signals. 2. Response properties of medial and lateral vestibulospinal tract neurons in alert and decerebrate cats. Iwamoto Y, et al. **Exp Brain Res** 1996 Feb;108(1):85–100

Reference frames in saccadic targeting. Karn KS, et al. **Exp Brain Res** 1997 Jun;115(2):267–82

Prehension of objects oriented in three-dimensional space. Mamassian P. **Exp Brain Res** 1997 Apr;114(2):235–45

The spatiotemporal structure of control variables during catching. Polman RC, et al. **Exp Brain Res** 1996 Jun; 109(3):483–94

Circular trajectory formation during blind locomotion: a test for path integration and motor memory. Takei Y, et al. **Exp Brain Res** 1997 Jun;115(2):361–8

Theory of rodent navigation based on interacting representations of space. Touretzky DS, et al. **Hippocampus** 1996;6(3):247–70

Effects of retinal eccentricity on the lateralized processing of categorical and coordinate spatial relations. Horner MD, et al. **Int J Neurosci** 1996 Jul;86(1–2):7–13

Visual evoked potentials generator model derived from different spatial frequency stimuli of visual field regions and magnetic resonance imaging coordinates of V1, V2, V3 areas in man. Onofrj M, et al. **Int J Neurosci** 1995 Dec; 83(3–4):213–39

Opposite asymmetries in blind locomotor orientation of patients with panic agoraphobia compared to those with generalized anxiety. Kállai J, et al. **Int J Psychophysiol** 1996 Oct;23(3):155–61

Spatio-temporal dynamics of alpha brain electric fields, and cognitive modes. Lehmann D, et al. **Int J Psychophysiol** 1997 Jun;26(1–3):99–112 (51 ref.)

Perceptual responses to linear acceleration after spaceflight: human neurovestibular studies on SLS-2. Merfeld DM, et al. **J Appl Physiol** 1996 Jul;81(1):58–68

Tactile influences on astronaut visual spatial orientation: human neurovestibular studies on SLS-2. Young LR, et al. **J Appl Physiol** 1996 Jul;81(1):44–9

Effect of head-centered and body-centered hemispace in unilateral neglect. Fujii T, et al. **J Clin Exp Neuropsychol** 1996 Dec;18(6):777–83

Dipole source localization by mottled sculpin. I. Approach strategies. Coombs S, et al. **J Comp Physiol [A]** 1997 Apr; 180(4):387–99

Dipole source localization by the mottled sculpin. II. The role of lateral line excitation patterns. Coombs S, et al. **J Comp Physiol [A]** 1997 Apr;180(4):401–15

Detection of jitter in intertarget spacing by the big brown bat Eptesicus fuscus. Masters WM, et al. **J Comp Physiol [A]** 1997 Sep;181(3):279–90

Young chickens learn to localize the centre of a spatial environment. Tommasi L, et al. **J Comp Physiol [A]** 1997 May;180(5):567–72

Processing time, imagery, and spatial memory. Kail R. **J Exp Child Psychol** 1997 Jan;64(1):67–78

Gradients as visual primitives. Goodenough B, et al. **J Exp Psychol Hum Percept Perform** 1997 Apr;23(2):370–87

Ineffective leftward search in line bisection and mechanisms of left unilateral spatial neglect. Ishiai S, et al. **J Neurol** 1996 May;243(5):381–7

Postural control of three-dimensional prehension movements. Desmurget M, et al. **J Neurophysiol** 1997 Jan; 77(1):452–64

Neural mechanisms of spatial selective attention in areas V1, V2, and V4 of macaque visual cortex. Luck SJ, et al. **J Neurophysiol** 1997 Jan;77(1):24–42

Spatial determinants of multisensory integration in cat superior colliculus neurons. Meredith MA, et al. **J Neurophysiol** 1996 May;75(5):1843–57

Neural correlates of a spatial sensory-to-motor transformation in primary motor cortex. Shen L, et al. **J Neurophysiol** 1997 Mar;77(3):1171–94

An anatomical basis for visual calibration of the auditory space map in the barn owl's midbrain. Feldman DE, et al. **J Neurosci** 1997 Sep 1;17(17):6820–37

Dynamics of mismatch correction in the hippocampal ensemble code for space: interaction between path integration and environmental cues. Gothard KM, et al. **J Neurosci** 1996 Dec 15;16(24):8027–40

Dopamine and spatial working memory in rats and monkeys: pharmacological reversal of stress-induced impairment. Murphy BL, et al. **J Neurosci** 1996 Dec 1;16(23):7768–75

Fine grain of the neural representation of human spatial vision. Smallman HS, et al. **J Neurosci** 1996 Mar 1; 16(5):1852–9

Brain aging: impaired coding of novel environmental cues. Tanila H, et al. **J Neurosci** 1997 Jul 1;17(13):5167–74

Effects of interaural intensity difference on the processing of interaural time difference in the owl's nucleus laminaris. Viete S, et al. **J Neurosci** 1997 Mar 1;17(5):1815–24

Aliasing in peripheral vision for counterphase gratings. Anderson RS. **J Opt Soc Am A** 1996 Nov;13(11):2288–93

Ricco's diameter for line detection increases with stimulus velocity. Chung ST, et al. **J Opt Soc Am A** 1996 Nov; 13(11):2129–34

Spatial pooling of contrast in contrast gain control. D'Zmura M, et al. **J Opt Soc Am A** 1996 Nov;13(11):2135–40

Suppressive rod-cone interactions: evidence for separate retinal (temporal) and extraretinal (spatial) mechanisms in achromatic vision. Lange G, et al. **J Opt Soc Am A** 1997 Sep;14(9):2487–98

Discrimination of the spatial derivatives of horizontal binocular disparity. Lunn PD, et al. **J Opt Soc Am A** 1997 Feb;14(2):360–71

Spectral mechanisms of spatially induced blackness: data and quantitative model. Shinomori K, et al. **J Opt Soc Am A** 1997 Feb;14(2):372–87

Contrast discrimination function: spatial cuing effects. Solomon JA, et al. **J Opt Soc Am A** 1997 Sep;14(9):2443–8

Contrast gain control and fine spatial discriminations. Thomas JP, et al. **J Opt Soc Am A** 1997 Sep;14(9):2392–405

Uncertainty experiments support the roles of second-order mechanisms in spatial frequency and orientation discriminations. Thomas JP, et al. **J Opt Soc Am A** 1996 Apr;13(4):689–96

Contrast adaptation and the spatial structure of natural images. Webster MA, et al. **J Opt Soc Am A** 1997 Sep; 14(9):2355–66

Effects of spatial frequency, duration, and contrast on discriminating motion directions. Yang J, et al. **J Opt Soc Am A** 1997 Sep;14(9):2041–8

End stopping and length tuning in psychophysical spatial filters. Yu C, et al. **J Opt Soc Am A** 1997 Sep;14(9):2346–54

Spatial and temporal frequency selectivity of cells in area 21a of the cat. Morley JW, et al. **J Physiol (Lond)** 1997 Jun 1;501 (Pt 2):405–13

LTP and spatial learning. Bliss TV. **J Physiol Paris** 1996; 90(5–6):335

An intracellular study of space and time representation in primary visual cortical receptive fields. Frégnac Y, et al. **J Physiol Paris** 1996;90(3–4):189–97 (57 ref.)

Visual object localization through vestibular and neck inputs. 2: Updating off-mid-sagittal-plane target positions. Blouin J, et al. **J Vestib Res** 1997 Mar–Jun;7(2–3):137–43

Three-dimensional baselines for perceived self-motion during acceleration and deceleration in a centrifuge. Holly JE. **J Vestib Res** 1997 Jan–Feb;7(1):45–61

Interactions within and between the spatial senses. Howard IP. **J Vestib Res** 1997 Jul–Aug;7(4):311–45 (216 ref.)

Visual object localization through vestibular and neck inputs. 1: Localization with respect to space and relative to the head and trunk mid-sagittal planes. Maurer C, et al. **J Vestib Res** 1997 Mar–Jun;7(2–3):119–35

Interaction of eye-, head-, and trunk-bound information in spatial perception and control. Mittelstaedt H. **J Vestib Res** 1997 Jul–Aug;7(4):283–302

Perception of spatial orientation in spasmodic torticollis. Part I: The postural vertical. Anastasopoulos D, et al. **Mov Disord** 1997 Jul;12(4):561–9

A vision over time and space [news; comment] Humphreys GW. **Nature** 1997 Jan 9;385(6612):120–1. Comment on: Nature 1997 Jan 9;385(6612):154–6.

Disruption of auditory spatial working memory by inactivation of the forebrain archistriatum in barn owls. Knudsen EI, et al. **Nature** 1996 Oct 3;383(6599):428–31

Neurobiology. Look but don't touch, or vice versa [news; comment] Shadlen M. **Nature** 1997 Mar 13;386(6621):122–3 . Comment on: Nature 1997 Mar 13;386(6621):167–70.

Spatio-temporal frequency domains and their relation to cytochrome oxidase staining in cat visual cortex [published erratum appears in Nature 1997 Mar 20;386(6622):302] Shoham D, et al. **Nature** 1997 Feb 6;385(6616):529–33

Adaptation of retinal processing to image contrast and spatial scale. Smirnakis SM, et al. **Nature** 1997 Mar 6; 386(6620):69–73

Learning perceptually salient visual parameters using spatiotemporal smoothness constraints. Stone JV. **Neural Comput** 1996 Oct 1;8(7):1463–92

Persistent patterns of brain activity: an EEG coherence study of the positive effect of music on spatial-temporal reasoning. Sarnthein J, et al. **Neurol Res** 1997 Apr; 19(2):107–16

Object shape processing in the visual system evaluated using functional MRI. Kraut M, et al. **Neurology** 1997 May; 48(5):1416–20

Tactile spatial acuity and roughness discrimination: impairments due to aging and Parkinson's disease. Sathian K, et al. **Neurology** 1997 Jul;49(1):168–77

Spatial memory deficits in patients with unilateral damage to the right hippocampal formation. Abrahams S, et al. **Neuropsychologia** 1997 Jan;35(1):11–24

Ignoring left and far: an investigation of tactile neglect. Beschin N, et al. **Neuropsychologia** 1996 Jan;34(1):41–9

Deficits in spatial working memory after unilateral temporal lobectomy in man. Feigenbaum JD, et al. **Neuropsychologia** 1996 Mar;34(3):163–76

PET imaging of maze processing. Flitman S, et al. **Neuropsychologia** 1997 Apr;35(4):409–20

Cognitive and perceptual influences on visual line bisection: psychophysical and chronometric analyses of pseudoneglect. McCourt ME, et al. **Neuropsychologia** 1997 Mar;35(3):369–80

Covert visual spatial attention in boys with attention deficit hyperactivity disorder: lateral effects, methylphenidate response and results for parents. Nigg JT, et al. **Neuropsychologia** 1997 Feb;35(2):165–76

Spatial and non-spatial working memory at different stages of Parkinson's disease. Owen AM, et al. **Neuropsychologia** 1997 Apr;35(4):519–32

Memory for spatial location in 'de novo' parkinsonian patients. Pillon B, et al. **Neuropsychologia** 1997 Mar; 35(3):221–8

Memory for spatial location is affected in Parkinson's disease. Pillon B, et al. **Neuropsychologia** 1996 Jan;34(1):77–85

Multiple visuospatial working memory buffers: evidence from spatiotemporal patterns of brain activity [published erratum appears in Neuropsychologia 1997 Apr;35(4):572] Ruchkin DS, et al. **Neuropsychologia** 1997 Feb; 35(2):195–209

Auditory inattention in right-hemisphere-damaged patients with and without visual neglect. Soroker N, et al. **Neuropsychologia** 1997 Mar;35(3):249–56

The development of drawing in children with congenital focal brain injury: evidence for limited functional recovery. Stiles J, et al. **Neuropsychologia** 1997 Mar;35(3):299–312

Object-based visual attention in luminance increment detection? Stuart GW, et al. **Neuropsychologia** 1997 Jun;

35(6):843–53
Spatial locations gone awry: object and spatial memory deficits in children with fetal alcohol syndrome. Uecker A, et al. **Neuropsychologia** 1996 Mar;34(3):209–23
Controlling the focus of spatial attention during visual search: effects of advanced aging and Alzheimer disease. Greenwood PM, et al. **Neuropsychology** 1997 Jan; 11(1):3–12
Spatial, but not object, delayed response is impaired in early Parkinson's disease. Postle BR, et al. **Neuropsychology** 1997 Apr;11(2):171–9
Topographic representation in human intraparietal sulcus of reaching and saccade. Kawashima R, et al. **Neuroreport** 1996 May 17;7(7):1253–6
Functional anatomy on perception of position and motion in depth. Nagahama Y, et al. **Neuroreport** 1996 Jul 29; 7(11):1717–21
Obstacle avoidance during locomotion is unaffected in a patient with visual form agnosia. Patla AE, et al. **Neuroreport** 1996 Dec 20;8(1):165–8
Visuospatial mnemonic load modulates event-related slow potentials. Rämä P, et al. **Neuroreport** 1997 Mar 3; 8(4):871–6
Impaired spatial information processing in aged monkeys with preserved recognition memory. Rapp PR, et al. **Neuroreport** 1997 May 27;8(8):1923–8
Early visual experience affects memorization and spatial representation of proprioceptive targets. Rossetti Y, et al. **Neuroreport** 1996 Apr 26;7(6):1219–23
Electrophysiological correlates of temporal and spatial information processing. Schubotz R, et al. **Neuroreport** 1997 May 27;8(8):1981–6
Selectivity of the parietal visual neurones in 3D orientation of surface of stereoscopic stimuli. Shikata E, et al. **Neuroreport** 1996 Oct 2;7(14):2389–94
Extraocular proprioception is required for spatial localization in man. Ventre-Dominey J, et al. **Neuroreport** 1996 Jun 17;7(9):1531–5
Effect of unconscious interoceptive afferentation on the spatial organization of electrical activity in the human cerebral cortex. Sviderskaya NE, et al. **Neurosci Behav Physiol** 1996 Nov-Dec;26(6):532–8
Lateralization of visual-spatial perception in man in conditions of verbal reinforcement. Tsagareli MG. **Neurosci Behav Physiol** 1996 Nov-Dec;26(6):526–31
Spatial stimulus-response compatibility in callosotomy patients and subjects with callosal agenesis. Aglioti S, et al. **Neurosci Biobehav Rev** 1996 Winter;20(4):623–9
Lateralization of brain mechanisms underlying automatic and controlled forms of spatial orienting of attention. Gainotti G. **Neurosci Biobehav Rev** 1996 Winter;20(4):617–22 (48 ref.)
Topography of brain electrical activity dissociates the retrieval of spatial versus verbal information from episodic long-term memory in humans. Heil M, et al. **Neurosci Lett** 1997 Jan 24;222(1):45–8
Transcranial Doppler assessment of cerebral blood flow velocity during visual spatial selective attention in humans. Schnittger C, et al. **Neurosci Lett** 1996 Aug 16;214(1):41–4
Spatial memory impairment induced by lesion of the mesohippocampal dopaminergic system in the rat. Gasbarri A, et al. **Neuroscience** 1996 Oct;74(4):1037–44
Ultrastructural synaptic correlates of spatial learning in rat hippocampus. Rusakov DA, et al. **Neuroscience** 1997 Sep; 80(1):69–77
Spatial cortical patterns of metabolic activity in monkeys performing a visually guided reaching task with one forelimb. Savaki HE, et al. **Neuroscience** 1997 Feb; 76(4):1007–34
Pseudoneglect of males and females on a spatial short-term memory task. Nalçaci E, et al. **Percept Mot Skills** 1997 Feb;84(1):99–105
Early-blind subjects' spatial representation of manipulatory space: exploratory strategies and reaction to change. Gaunet F, et al. **Perception** 1997;26(3):345–66
A general model for the perception of space and motion. Wade NJ, et al. **Perception** 1996;25(2):187–94
The role of vision and spatial orientation in the maintenance of posture. Wade MG, et al. **Phys Ther** 1997 Jun; 77(6):619–28 (58 ref.)
Caloric restriction and spatial learning in old mice. Bellush LL, et al. **Physiol Behav** 1996 Aug;60(2):541–7
Rats perform better on spatial than brightness delayed matching-to-sample water-escape due to an unlearned bias to use spatial cues. Means LW, et al. **Physiol Behav** 1996 Nov;60(5):1239–45
Biologically based artificial navigation systems: review and prospects. Trullier O, et al. **Prog Neurobiol** 1997 Apr; 51(5):483–544 (153 ref.)
Effect of aging on the spatial learning deficit produced by diazepam in rats. McNamara RK, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Jul; 20(5):873–81
Visual-spatial-frequency model of cerebral asymmetry: a critical survey of behavioral and electrophysiological studies. Grabowska A, et al. **Psychol Bull** 1996 Nov; 120(3):434–49
A curvilinear relationship between testosterone and spatial cognition in humans: possible influence of hand preference. Moffat SD, et al. **Psychoneuroendocrinology** 1996 Apr; 21(3):323–37
An ERP study of visual spatial attention and letter target detection for isoluminant and nonisoluminant stimuli. Wijers AA, et al. **Psychophysiology** 1997 Sep;34(5):553–65
Integration of what and where in the primate prefrontal cortex. Rao SC, et al. **Science** 1997 May 2;276(5313):821–4
To what extent can matching algorithms based on direct outputs of spatial filters account for human object recognition? Fiser J, et al. **Spat Vis** 1996;10(3):237–71
Categorical relations in shape perception. Hummel JE, et al. **Spat Vis** 1996;10(3):201–36
Texture segmentation as a function of eccentricity, spatial frequency and target size. Joffe KM, et al. **Spat Vis** 1995; 9(3):325–42
Expectancy of line segment orientation. Kurylo DD, et al. **Spat Vis** 1996;10(2):149–62
Convexity of a set of subthreshold stimuli implies a peak detector. Logvinenko AD. **Spat Vis** 1996;10(2):105–23
On cardinal directions in spatial pattern space and falsifying multi-channel detection models. Logvinenko AD. **Spat Vis** 1996;10(3):189–200
The relationship between the locations of spatial features and those of fixations made during visual examination of briefly presented images. Mannan SK, et al. **Spat Vis** 1996; 10(3):165–88
Is the input to a GABAergic synapse the sole asymmetry in turtle's retinal directional selectivity? Smith RD, et al. **Vis Neurosci** 1996 May-Jun;13(3):423–39
Topography of ganglion cells and photoreceptors in the retina of a New World monkey: the marmoset Callithrix jacchus. Wilder HD, et al. **Vis Neurosci** 1996 Mar-Apr; 13(2):335–52
The effect of attentional spread on spatial resolution. Balz GW, et al. **Vision Res** 1997 Jun;37(11):1499–510
The computation of binocular visual direction: a re-examination of Mansfield and Legge (1996) [letter; comment] Banks MS, et al. **Vision Res** 1997 Jun; 37(12):1605–13. Comment on: Vision Res 1996 Jan;36(1):27–41.
The effects of distractor elements on direction discrimination in random Gabor kinematograms. Bex PJ, et al. **Vision Res** 1997 Jul;37(13):1761–7
Different mechanisms may underlie the performance in relative localization tasks. Bocheva N, et al. **Vision Res** 1996 Aug;36(16):2531–5
Across-object relationships in perceived object orientation. Burbeck CA, et al. **Vision Res** 1997 Apr;37(7):879–84
The role of the background: texture segregation and figure-ground segmentation. Caputo G. **Vision Res** 1996 Sep;36(18):2815–26
Vernier in motion: what accounts for the threshold elevation? Chung ST, et al. **Vision Res** 1996 Aug;36(16):2395–410
Testing the Perrone and Stone (1994) model of heading estimation. Crowell JA. **Vision Res** 1997 Jun;37(12):1653–71
Comparison between spatial interactions in perceived contrast and perceived brightness. De Bonet JS, et al. **Vision Res** 1997 May;37(9):1141–55
Effect of exposure duration on spatial uncertainty in normal and amblyopic eyes. Demanins R, et al. **Vision Res** 1996 Apr;36(8):1189–93
Capture of visual direction: an unexpected phenomenon in binocular vision. Erkelens CJ, et al. **Vision Res** 1997 May; 37(9):1193–6
The effect of refractive lenses on perceived direction. Fogt N, et al. **Vision Res** 1996 Nov;36(22):3735–41
Differences between fovea and periphery in the detection and discrimination of spatial offsets. Harris JP, et al. **Vision Res** 1996 Nov;36(21):3469–77
Primitives used in the spatial localization of nonabutting stimuli: peaks or centroids. Hess RF, et al. **Vision Res** 1996 Dec;36(23):3821–6
Spatial properties of shear disparity processing. Kaneko H, et al. **Vision Res** 1997 Feb;37(3):315–23
Position acuity with opposite-contrast polarity features: evidence for a nonlinear collector mechanism for position acuity? Levi DM, et al. **Vision Res** 1996 Feb;36(4):573–88
Localization of a peripheral patch: the role of blur and spatial frequency. Levi DM, et al. **Vision Res** 1996 Dec; 36(23):3785–803
The effects of eccentricity and stimulus magnification on simultaneous performance in position and movement acuity tasks. Mäkelä P, et al. **Vision Res** 1997 May;37(10):1261–70
Spatial properties of filters underlying vernier acuity revealed by masking: evidence for collator mechanisms. Mussap AJ, et al. **Vision Res** 1996 Aug;36(16):2459–73
Simultaneous motion contrast across space: involvement of second-order motion? Nishida S, et al. **Vision Res** 1997 Jan;37(2):199–214
Extraretinal eye position signals determine perceived target location when they conflict with visual cues. Rine RM, et al. **Vision Res** 1997 Mar;37(6):775–87
Contrast detection and orientation discrimination thresholds associated with meridional amblyopia. St John R. **Vision Res** 1997 Jun;37(11):1451–7
Adaptation to the prismatic effects of refractive lenses. Tuan KM, et al. **Vision Res** 1997 Jul;37(13):1851–7
Cortical magnification, scale invariance and visual ecology. Virsu V, et al. **Vision Res** 1996 Sep;36(18):2971–7
Centroid analysis predicts visual localization of first- and second-order stimuli. Whitaker D, et al. **Vision Res** 1996 Sep;36(18):2957–70
Disentangling the role of spatial scale, separation and eccentricity in Weber's law for position. Whitaker D, et al. **Vision Res** 1997 Mar;37(5):515–24
Psychophysical end-stopping associated with line targets. Yu C, et al. **Vision Res** 1996 Sep;36(18):2883–96
Spatial scaling of end-stopped perceptive fields: differences in neural bases of end-zones, flanks and centers. Yu C, et al. **Vision Res** 1996 Oct;36(19):3129–39
Isolating excitatory and inhibitory nonlinear spatial interactions involved in contrast detection [published erratum appears in Vision Res 1997 Jan;37(2):255] Zenger B, et al. **Vision Res** 1996 Aug;36(16):2497–513
[Spatial orientation and postural regulation in patients with idiopathic scoliosis] Krödel A, et al. **Z Orthop Ihre Grenzgeb** 1997 May-Jun;135(3):203–9 (Eng. Abstr.) **(Ger)**
[The influence of long-term memory on visuo-spatial sketchpad: a test of a new factor causing recency effects] Mizuno R. **Shinrigaku Kenkyu** 1996 Dec;67(5):359–66 (Eng. Abstr.) **(Jpn)**
[The effect of verbal reinforcement on visual-space perception in chronic alcoholism] Tsagareli MG. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):105–6 **(Rus)**
[The spectral rearrangements of the EEG and the organization of the cortical connections during spatial and verbal thinking] Nikolaev AR, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep-Oct; 46(5):831–48 (Eng. Abstr.) **(Rus)**
[Generalization by the relative sign of "top" in bottlenose dolphins] Starodubtsev IuD, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov-Dec; 46(6):1032–40 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Severe spatial navigation deficit in the Morris water maze after single high dose of neonatal x-ray irradiation in the rat. Czurkó A, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2766–71

SPACE SIMULATION

see related
WEIGHTLESSNESS SIMULATION

Evidence for increased beta-adrenoreceptor responsiveness induced by 14 days of simulated microgravity in humans. Convertino VA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R93–9
Visual localization within single geometric planes of a space habitat. Tafforin C, et al. **Aviat Space Environ Med** 1997 Mar;68(3):192–8

ADVERSE EFFECTS

Frog experiment onboard space station Mir. Izumi-Kurotani A, et al. **Adv Space Biol Med** 1997;6:193–211
Changes in the immune system during and after spaceflight. Taylor GR, et al. **Adv Space Biol Med** 1997;6:1–32 (92 ref.)
Cardiovascular and hormonal changes induced by a simulation of a lunar mission. Pavy-Le Traon A, et al. **Aviat Space Environ Med** 1997 Sep;68(9 Pt 1):829–37

PSYCHOLOGY

Psychosocial value of space simulation for extended spaceflight. Kanas N. **Adv Space Biol Med** 1997;6:81–91 (38 ref.)
Crewmember interactions during a Mir space station simulation. Kanas N, et al. **Aviat Space Environ Med** 1996 Oct;67(10):969–75

SPACE SUITS

[The significance of visual analyzer in controlling the standing posture in individuals with the spastic form of child cerebral paralysis while wearing "Adel" suit] Sologubov EG, et al. **Aviakosm Ekolog Med** 1996; 30(6):8–13 (Eng. Abstr.) **(Rus)**

SPACE-TIME CLUSTERING

see related
DISEASE OUTBREAKS

Methods for investigating localized clustering of disease. A scan statistic for detecting spatial clusters. Anderson NH. **IARC Sci Publ** 1996;(135):215–8
Methods for investigating localized clustering of disease. Geostatistics for determining the risk of rare disease. Oliver MA, et al. **IARC Sci Publ** 1996;(135):227–47
Methods for investigating localized clustering of disease. Using a geographical analysis machine to detect the presence of spatial clustering and the location of clusters in synthetic data. Openshaw S. **IARC Sci Publ** 1996; (135):68–86; discussion 155–64
Latitude, coastal or interior location and the evolution of the melanoma epidemic in the United States. Lee JA. **Melanoma Res** 1997 Jun;7(3):179–88
Clustering of leukaemia cases in a city in Israel. Chen R, et al. **Stat Med** 1997 Aug 30;16(16):1873–87
A k nearest neighbour test for space-time interaction. Jacquez GM. **Stat Med** 1996 Sep 15-30;15(17-18):1935–49
Disease cluster statistics for imprecise space-time locations. Jacquez GM. **Stat Med** 1996 Apr 15-May 15; 15(7-9):873–85 (29 ref.)
Detection of overall space-time clustering in a non-uniformly distributed population. DiMe Study Group. Ranta J, et al.

Stat Med 1996 Dec 15;15(23):2561–72
Population–averaged and cluster–specific models for clustered ordinal response data. Ten Have TR, et al. **Stat Med** 1996 Dec 15;15(23):2573–88
The spatial autocorrelation coefficient Moran's I under heteroscedasticity. Waldhör T. **Stat Med** 1996 Apr 15–May 15;15(7–9):887–92
Competition in a spatially heterogeneous environment: modelling the risk of spread of a genetically engineered population. Cruywagen GC, et al. **Theor Popul Biol** 1996 Feb;49(1):1–38

SPACE–WALK see **EXTRAVEHICULAR ACTIVITY**

SPACECRAFT

NASA harvest of Mir space wheat marks first for U.S. and Russia [news] **Aviat Space Environ Med** 1997 Mar; 68(3):279–80
Crewmember interactions during a Mir space station simulation. Kanas N, et al. **Aviat Space Environ Med** 1996 Oct;67(10):969–75
Visual localization within single geometric planes of a space habitat. Tafforin C, et al. **Aviat Space Environ Med** 1997 Mar;68(3):192–8
Blunt trauma and operative care in microgravity: a review of microgravity physiology and surgical investigations with implications for critical care and operative treatment in space. Kirkpatrick AW, et al. **J Am Coll Surg** 1997 May; 184(5):441–53 (120 ref.)
Growth and photosynthetic responses of wheat plants grown in space. Tripathy BC, et al. **Plant Physiol** 1996 Mar; 110(3):801–6
NASA slices biology program on station [news] Lawler A. **Science** 1996 Oct 25;274(5287):495
[Results of integrated tests of the facility to disinfect gaseous environment of orbital stations] Balashov EV, et al. **Aviakosm Ekolog Med** 1996;30(6):37–42 (Eng. Abstr.) **(Rus)**
[Investigation of tibial bones of the rats exposed on board "Spacelab–2":histomorphometric analysis] Durnova GN, et al. **Aviakosm Ekolog Med** 1996;30(1):21–6 (Eng. Abstr.) **(Rus)**
[The indices of water–salt metabolism and of the endocrine status in monkeys after flights on the Kosmos biological satellites] Korol'kov VI, et al. **Aviakosm Ekolog Med** 1996; 30(3):32–5 (Eng. Abstr.) **(Rus)**
[Effect of weightlessness on the mother–fetus system (results of embryological experiment NIH–R1 abroad the "Space Shuttle"] Serova LV, et al. **Aviakosm Ekolog Med** 1996; 30(6):4–8 (Eng. Abstr.) **(Rus)**
[Optimal isotope composition of biogenic chemical elements on board of manned spacecrafts] Siniak IuE, et al. **Aviakosm Ekolog Med** 1996;30(4):26–30 (Eng. Abstr.) **(Rus)**

HISTORY

Of airships, space shuttles, and biological products. Beale J. **J R Soc Med** 1997 Mar;90(3):166–9

INSTRUMENTATION

[The development of a methodological approach to evaluating the operating efficiency of a system for purifying the atmosphere of harmful trace contaminants] Zlotopol'skii VM. **Aviakosm Ekolog Med** 1996;30(3):51–4 (Eng. Abstr.) **(Rus)**

SPACER DNA see **DNA, RIBOSOMAL**

SPANISH AMERICANS see **HISPANIC AMERICANS**

SPARC GLYCOPROTEIN see **OSTEONECTIN**

SPARGANOSIS

see related
DIPHYLLOBOTHRIASIS

First reports of subcutaneous sparganosis in Sri Lanka. Wijesundera MS, et al. **Ceylon Med J** 1997 Mar;42(1):30–2
Two rare parasites of the human brain––Gnathostoma spinigerum and sparganum (Spirometra). Sharma MC, et al. **J Assoc Physicians India** 1996 Nov;44(11):824–8

DIAGNOSIS

Granulomatous mastitis caused by sparganum. A case report. Moreira MA, et al. **Acta Cytol** 1997 May–Jun;41(3):859–62
Cerebral sparganosis: clinical manifestations, treatment, and outcome. Kim DG, et al. **J Neurosurg** 1996 Dec; 85(6):1066–71

PARASITOLOGY

Cutaneous sparganosis. Griffin MP, et al. **Am J Dermatopathol** 1996 Feb;18(1):70–2

PATHOLOGY

Cutaneous sparganosis. Griffin MP, et al. **Am J Dermatopathol** 1996 Feb;18(1):70–2
Cutaneous sparganosis in France: the second case described from Europe. Case report. Garin YJ, et al. **APMIS** 1997 Jan;105(1):14–6
Subcutaneous living sparganum worms [letter] Harris NR, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2120–1

RADIONUCLIDE IMAGING

Cerebral sparganosis: increased uptake of technetium–99m–HMPAO. You DL, et al. **J Nucl Med** 1997 Jun;38(6):939–41

SURGERY

[A case of Sparganosis mansoni with a painless mass in the inguinal region and the scrotum] Ishida Y, et al. **Hinyokika Kiyo** 1996 Dec;42(12):983–5 (Eng. Abstr.) **(Jpn)**

TRANSMISSION

Spargana infection of frogs in Malaysia. Mastura AB, et al. **Southeast Asian J Trop Med Public Health** 1996 Mar; 27(1):51–2

SPARGANUM

ENZYMOLOGY

A neutral cysteine protease of Spirometra mansoni plerocercoid invoking an IgE response. Kong Y, et al. **Parasitology** 1997 Mar;114 (Pt 3):263–71
[Localization and characteristics of lactate and malate dehydrogenase in the sparganum and adult worm of Spirometra erinacei] Kwak KH, et al. **Korean J Parasitol** 1996 Mar;34(1):59–68 (Eng. Abstr.) **(Kor)**

GENETICS

Three main patterns in the expression of six actin genes in the plerocercoid and adult Diphyllobothrium dendriticum tapeworm (Cestoda). Wahlberg MH. **Mol Biochem Parasitol** 1997 Jun;86(2):199–209

ISOLATION & PURIFICATION

[A case of Sparganosis mansoni with a painless mass in the inguinal region and the scrotum] Ishida Y, et al. **Hinyokika Kiyo** 1996 Dec;42(12):983–5 (Eng. Abstr.) **(Jpn)**

METABOLISM

Immunocytochemical evidence for the presence of prolactin in the plerocercoid of Ligula intestinalis (Cestoda: Pseudophyllidea). Liu B, et al. **Okajimas Folia Anat Jpn** 1995 Dec;72(5):277–83

SPARID FISH see **PERCIFORMES**

SPARSOMYCIN

ANALOGS & DERIVATIVES

The effect of ethyldeshydroxy–sparsomycin and cisplatin on the intracellular glutathione level and glutathione S–transferase activity. Hofs HP, et al. **Anticancer Drugs** 1997 Apr;8(4):349–57

BIOSYNTHESIS

Purification and preliminary characterization of (E)–3–(2,4–dioxo–6–methyl–5–pyrimidinyl)acrylic acid synthase, an enzyme involved in biosynthesis of the antitumor agent sparsomycin. Parry RJ, et al. **J Bacteriol** 1997 Feb;179(4):1385–92

PHARMACOLOGY

Peptidyl–transferase inhibitors have antiviral properties by altering programmed –1 ribosomal frameshifting efficiencies: development of model systems. Dinman JD, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6606–11

SPARTEINE

ANALOGS & DERIVATIVES

(+)–Sparteine N–16–oxide, a lupin alkaloid from Lygos raetam var. sarcocarpa. Abdel–Halim OB, et al. **Acta Pharm Hung** 1997 Jan;67(1):9–12
Use of site–specified tritium labelling to confirm the formation of 17–oxosparteine as a minor urinary metabolite of sparteine in man. Ritchie JC, et al. **Xenobiotica** 1996 Sep;26(9):977–82

METABOLISM

Sparteine metabolism in a Nigerian population. Ritchie JC, et al. **Drug Metabol Drug Interact** 1996;13(2):129–35
The sparteine/debrisoquine (CYP2D6) oxidation polymorphism and the risk of lung cancer: a meta–analysis. Christensen PM, et al. **Eur J Clin Pharmacol** 1997; 51(5):389–93
Codeine and morphine in extensive and poor metabolizers of sparteine: pharmacokinetics, analgesic effect and side effects. Poulsen L, et al. **Eur J Clin Pharmacol** 1996; 51(3–4):289–95
Metabolic ratios of four probes of CYP2D6 in Turkish subjects: a cross–over study. Bozkurt A, et al. **Eur J Drug Metab Pharmacokinet** 1996 Oct–Dec; 21(4):309–14
Imipramine metabolism in relation to the sparteine oxidation polymorphism––a family study. Madsen H, et al. **Pharmacogenetics** 1996 Dec;6(6):513–9
A new CYP2D6 allele with a nine base insertion in exon 9 in a Japanese population associated with poor metabolizer phenotype. Yokoi T, et al. **Pharmacogenetics** 1996 Oct; 6(5):395–401
[Clinical significance of the determination of oxidation and acetylation phenotype in patients with multiple sclerosis] Milejski P, et al. **Neurol Neurochir Pol** 1996 Jul–Aug; 30(4):571–9 (Eng. Abstr.) **(Pol)**
[Genetic polymorphism in sparteine oxidation––occurrence in healthy volunteers in Slovakia] Holomáň J, et al. **Bratisl Lek Listy** 1997 Feb;98(2):86–90 (Eng. Abstr.) **(Slo)**

PHARMACOKINETICS

Prediction of CYP2D6–mediated polymorphic drug metabolism (sparteine type) based on in vitro investigations. Engel G, et al. **J Chromatogr B Biomed Appl** 1996 Mar 29;678(1):93–103 (73 ref.)
Use of site–specified tritium labelling to confirm the formation of 17–oxosparteine as a minor urinary metabolite of sparteine in man. Ritchie JC, et al. **Xenobiotica** 1996 Sep;26(9):977–82

PHARMACOLOGY

The cardiac electrophysiological effects of sparteine and its analogue BRB–I–28 in the rat. Pugsley MK, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):319–27

SPARUS see **PERCIFORMES**

SPASM

see related
MUSCLE CRAMP
MYOTONIA

Adductor spasmodic dysphonia: case reports with acoustic analysis following botulinum toxin injection and acupuncture. Crevier–Buchman L, et al. **J Voice** 1997 Jun; 11(2):232–7

CHEMICALLY INDUCED

Masseter spasm and elevated creatine kinase after intravenous induction in a child. Habre W, et al. **Anaesth Intensive Care** 1996 Aug;24(4):496–9
Succinylcholine–induced "masseter spasm" [editorial] Baraka A. **Middle East J Anesthesiol** 1997 Jun;14(2):73–6
[Involvement of enhanced glutamate release in halogenated volatile anesthetic–induced excitation in mouse brain] Hirose T, et al. **Masui** 1997 Mar;46(3):338–43 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Occipital falcine meningioma presenting with ipsilateral hemifacial spasm: a case report. Bhayani R, et al. **Br J Neurosurg** 1996 Dec;10(6):603–5
Hypnosis and spasmodic torticollis––report of four cases: a brief communication. De Benedittis G. **Int J Clin Exp Hypn** 1996 Oct;44(4):292–306
Surgical treatment of spasmodic torticollis: is there a role for microvascular decompression? With an illustrative case report. Brunori A, et al. **J Neurosurg Sci** 1996 Mar; 40(1):43–51 (41 ref.)
Adductor spasmodic dysphonia: standard evaluation of symptoms and severity. Stewart CF, et al. **J Voice** 1997 Mar;11(1):95–103
A case of rest angina due to microvascular spasm. Yamagishi H, et al. **Jpn Circ J** 1997 Jan;61(1):87–9
[A case of progressive continuous muscular rigidity and painless and rhythmic muscle spasm associated with autoantibody against glutamic acid decarboxylase] Oe H, et al. **Rinsho Shinkeigaku** 1996 Oct;36(10):1166–71 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Hemifacial spasm: magnetic resonance angiography. Jespersen JH, et al. **Acta Neurol Scand** 1996 Jan;93(1):35–8
Muscle tension dysphonia and spasmodic dysphonia: the role of manual laryngeal tension reduction in diagnosis and management. Roy N, et al. **Ann Otol Rhinol Laryngol** 1996 Nov;105(11):851–6
Pitfalls in the diagnosis of hemifacial spasm. Zappia JJ, et al. **Laryngoscope** 1997 Apr;107(4):461–5
Three–dimensional MRI of hemifacial spasm with surgical correlation. Girard N, et al. **Neuroradiology** 1997 Jan; 39(1):46–51
[The contribution of "time–of–flight" MRI–angiography in the study of neurovascular interactions (hemifacial spasm and trigeminal neuralgia)] Holley P, et al. **J Neuroradiol** 1996 Dec;23(3):149–56 (Eng. Abstr.) **(Fre)**
[Hemifacial spasm] Taguchi Y, et al. **No To Shinkei** 1997 Jan;49(1):74–5 (Eng. Abstr.) **(Jpn)**
[Identification of offending vessels in trigeminal neuralgia and hemifacial spasm using SPGR–MRI and 3D–TOF–MRA] Niwa Y, et al. **Rinsho Shinkeigaku** 1996 Apr;36(4):544–50 (Eng. Abstr.) **(Jpn)**

[Painful muscle spasms] Popelianskiĭ IaIu.
Zh Nevropatol Psikhiatr Im S S Korsakova 1997;97(3):64–7 (36 ref.) **(Rus)**
[Muscle spasms] Schimrich K.
Zh Nevropatol Psikhiatr Im S S Korsakova 1997;97(3):61–3 (45 ref.) **(Rus)**

DIET THERAPY

Efficacy and tolerance of repeated oral doses of tolperisone hydrochloride in the treatment of painful reflex muscle spasm: results of a prospective placebo-controlled double-blind trial. Pratzel HG, et al. **Pain** 1996 Oct; 67(2–3):417–25

DRUG THERAPY

Botulinum toxin A injection in the treatment of hemifacial spasm. Chen RS, et al. **Acta Neurol Scand** 1996 Sep; 94(3):207–11
Diplopia following subcutaneous injections of botulinum A toxin for facial spasms. Wutthiphan S, et al.
J Pediatr Ophthalmol Strabismus 1997 Jul–Aug; 34(4):229–34
Longitudinal phonatory characteristics after botulinum toxin type A injection. Fisher KV, et al. **J Speech Hear Res** 1996 Oct;39(5):968–80
Treatment of vaginismus with botulinum toxin injections [letter] Brin MF, et al. **Lancet** 1997 Jan 25;349(9047):252–3
The variability in the clinical effect induced by botulinum toxin type A: the role of muscle activity in humans. Eleopra R, et al. **Mov Disord** 1997 Jan;12(1):89–94
Botulinum toxin treatment in the facial muscles of humans: evidence of an action in untreated near muscles by peripheral local diffusion. Eleopra R, et al. **Neurology** 1996 Apr;46(4):1158–60
Long-term changes in duration of relief with botulinum toxin treatment of essential blepharospasm and hemifacial spasm [see comments] Ainsworth JR, et al. **Ophthalmology** 1995 Dec;102(12):2036–40. Comment in: Ophthalmology 1996 Mar;103(3):348.
Blepharospasm and hemifacial spasm. Randomized trial to determine the most appropriate location for botulinum toxin injections. Price J, et al. **Ophthalmology** 1997 May; 104(5):865–8
Botulinum-A toxin in the treatment of craniocervical muscle spasms: short- and long-term, local and systemic effects. Dutton JJ. **Surv Ophthalmol** 1996 Jul–Aug;41(1):51–65 (145 ref.)
[Use of botulinum toxin in ophthalmology: current concepts and problems] Tapiero B, et al. **J Fr Ophtalmol** 1997; 20(2):134–45 (21 ref.) **(Fre)**
[Use of botulinum toxin in ophthalmology] Huber A.
Klin Monatsbl Augenheilkd 1997 May;210(5):289–92 (28 ref.) (Eng. Abstr.) **(Ger)**
[Treatment of spasms of visceral smooth muscles] Milovanović DR, et al. **Med Pregl** 1997 May–Jun; 50(5–6):194–200 (50 ref.) (Eng. Abstr.) **(Scr)**

ETIOLOGY

Vasospasm of the nipple was described in 1970 [letter; comment] Hey E. **BMJ** 1997 May 31;314(7094):1625. Comment on: BMJ 1997 Mar 1;314(7081):644–5.
Hemifacial spasm and idiopathic intracranial hypertension [letter; comment] Benegas NM, et al.
J Neuroophthalmol 1996 Mar;16(1):70. Comment on: J Neuroophthalmol 1994 Dec;14(4):196–8.
Turbo spin-echo magnetic resonance imaging depiction of facial nerve compression by a vertebral artery in a patient with hemifacial spasm--technical note. Katano H, et al. **Neurol Med Chir (Tokyo)** 1996 Oct;36(10):737–9
[Cerebellopontine angle epithelial cyst presenting as hemifacial spasm] Hotta J, et al. **No To Shinkei** 1996 Mar; 48(3):281–5 (Eng. Abstr.) **(Jpn)**
[Periodic decerebrate spasm with ocular dipping, Cheyne-Stokes respiration and hypersympathetic activity] Koyano S, et al. **Rinsho Shinkeigaku** 1996 Jul;36(7):881–5 (Eng. Abstr.) **(Jpn)**
[Hemifacial spasm as manifestation of benign intracranial hypertension. Letter] Terriza F, et al. **Rev Neurol** 1997 Jan; 25(137):148–9 **(Spa)**

GENETICS

Hereditary geniospasm: two new families. Soland VL, et al. **Mov Disord** 1996 Nov;11(6):744–6

METABOLISM

Familial spasmodic dysphonia with low arylsulphatase A (ASA) level [letter; comment] Philpot M.
Acta Neurol Scand 1996 Jun;93(6):473. Comment on: Acta Neurol Scand 1995 Mar;91(3):196–9.

PATHOLOGY

Hemifacial spasm caused by a venous angioma. Case report. Chen HJ, et al. **J Neurosurg** 1996 Oct;85(4):716–7
Spasmodic dysphonia associated with a left ventrolateral putaminal lesion. Lee MS, et al. **Neurology** 1996 Sep; 47(3):827–8

PHYSIOPATHOLOGY

Paroxysmal convergence spasm in multiple sclerosis. Postert T, et al. **Acta Neurol Scand** 1996 Jul;94(1):35–7
Occipital falcine meningioma presenting with ipsilateral hemifacial spasm: a case report. Bhayani R, et al.
Br J Neurosurg 1996 Dec;10(6):603–5
Impairment of visuospatial function in idiopathic spasmodic torticollis. Hinse P, et al. **J Neurol** 1996 Jan;243(1):29–33 (39 ref.)
Computed tomographic analysis of hemifacial spasm: narrowing of the posterior fossa as a possible facilitating factor for neurovascular compression. Kamiguchi H, et al.
J Neurol Neurosurg Psychiatry 1997 May;62(5):532–4
Abnormal muscle response (lateral spread) and F-wave in patients with hemifacial spasm. Ishikawa M, et al.
J Neurol Sci 1996 May;137(2):109–16
Effect of repetitive stimulation on lateral spreads and F-waves in hemifacial spasm. Ishikawa M, et al.
J Neurol Sci 1996 Oct;142(1–2):99–106
Longitudinal phonatory characteristics after botulinum toxin type A injection. Fisher KV, et al. **J Speech Hear Res** 1996 Oct;39(5):968–80
Pain perception in idiopathic cervical dystonia (spasmodic torticollis). Lobbezoo F, et al. **Pain** 1996 Oct; 67(2–3):483–91
Three-dimensional imaging for presentation of the causative vessels in patients with hemifacial spasm and trigeminal neuralgia. Kumon Y, et al. **Surg Neurol** 1997 Feb; 47(2):178–84
[Hemifacial spasm as manifestation of benign intracranial hypertension. Letter] Terriza F, et al. **Rev Neurol** 1997 Jan; 25(137):148–9 **(Spa)**

PSYCHOLOGY

Pain perception in idiopathic cervical dystonia (spasmodic torticollis). Lobbezoo F, et al. **Pain** 1996 Oct; 67(2–3):483–91
[Psychological factors in spasmodic dysphonia]
Kiese-Himmel C, et al. **Laryngorhinootologie** 1996 Jul; 75(7):397–402 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Possible role of neurointerventional techniques in the diagnosis of hemifacial spasm. Yamashita K, et al.
AJNR Am J Neuroradiol 1997 Feb;18(2):287–90

SURGERY

Microvascular decompression for hemifacial spasm: analysis of 266 patients at Ramathibodi Hospital. Sarnvivad P, et al. **J Med Assoc Thai** 1996 Jul;79(7):409–14
Three-dimensional MRI of hemifacial spasm with surgical correlation. Girard N, et al. **Neuroradiology** 1997 Jan; 39(1):46–51
Follow-up results of microvascular decompression in trigeminal neuralgia and hemifacial spasm. Kondo A.
Neurosurgery 1997 Jan;40(1):46–51; discussion 51–2
Prospective study of microvascular decompression in hemifacial spasm. Shin JC, et al. **Neurosurgery** 1997 Apr; 40(4):730–4; discussion 734–5
Intraoperative monitoring of microvascular decompression in hemifacial spasm. Shin JC, et al. **Yonsei Med J** 1996 Jun;37(3):209–13
[Retrosigmoid carding operation of facial nerve trunk] Ren M, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1995; 30(6):338–9 (Eng. Abstr.) **(Chi)**
[Results of treatment of hemifacial spasm by surgical and endoscopic neurovascular decompression. Analysis of 60 records] Cacès F, et al.
Ann Otolaryngol Chir Cervicofac 1996;113(3):119–31 (39 ref.) (Eng. Abstr.) **(Fre)**
[Neuro-vascular decompression in hemifacial spasm: anatomical, electrophysiological and therapeutic results apropos of 100 cases] Caces F, et al.
Rev Laryngol Otol Rhinol (Bord) 1996;117(5):347–51 (Eng. Abstr.) **(Fre)**

THERAPY

Muscle tension dysphonia and spasmodic dysphonia: the role of manual laryngeal tension reduction in diagnosis and management. Roy N, et al. **Ann Otol Rhinol Laryngol** 1996 Nov;105(11):851–6
Botulinum toxin for refractory postoperative pyloric spasm. Wiesel PH, et al. **Endoscopy** 1997 Feb;29(2):132
[Neurovascular compression syndrome--treatment of facial spasm, trigeminal neuralgia and disabling vertigo] Hashimoto T. **Ryoikibetsu Shokogun Shirizu** 1996; (14):540–4 (7 ref.) **(Jpn)**

SPASM, ESOPHAGEAL see **ESOPHAGEAL SPASM, DIFFUSE**

SPASMOLYTICS see **PARASYMPATHOLYTICS**

SPASMOPHILIA see **TETANY**

SPASMS, INFANTILE

CEREBROSPINAL FLUID

CSF ACTH and beta-endorphin in infants with West syndrome and ACTH therapy. Heiskala H. **Brain Dev** 1997 Jul;19(5):339–42

CLASSIFICATION

Interobserver variability in the classification of neonatal seizures based on medical record data. Lanska MJ, et al. **Pediatr Neurol** 1996 Sep;15(2):120–3

COMPLICATIONS

Infantile spasms in two children with Williams syndrome. Tsao CY, et al. **Am J Med Genet** 1997 Jul 11;71(1):54–6
Convergence nystagmus associated with spasmus nutans: a comment [letter; comment] Dell'Osso LF.
J Neuroophthalmol 1997 Jun;17(2):143. Comment on: J Neuroophthalmol 1996 Sep;16(3):196–8.
Convergence nystagmus associated with spasmus nutans [see comments] Massry GG, et al. **J Neuroophthalmol** 1996 Sep; 16(3):196–8. Comment in: J Neuroophthalmol 1997 Jun;17(2):143.
The association of strabismus, amblyopia, and refractive errors in spasmus nutans. Young TL, et al.
Ophthalmology 1997 Jan;104(1):112–7
[Hypertrophic myocardiopathy during the corticotropin treatment of infantile spasms] Hortelano López M, et al. **An Esp Pediatr** 1996 May;44(5):515–6 (11 ref.) **(Spa)**

CONGENITAL

Role of ocular involvement in the prediction of visual development and clinical prognosis in Aicardi syndrome. Menezes AV, et al. **Br J Ophthalmol** 1996 Sep;80(9):805–11
Positive epileptiform discharges in children with neuronal migration disorders. Otsubo H, et al. **Pediatr Neurol** 1997 Jan;16(1):23–31

DIAGNOSIS

Spasmus nutans. Aung T, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):596–8
An MRI study of the myelination pattern in West syndrome. Muroi J, et al. **Brain Dev** 1996 May–Jun;18(3):179–84
Complex brain malformation and drug resistant epilepsy. Parmeggiani A, et al. **Brain Dev** 1997 Jan;19(1):66–70
Localization of focal cortical lesions influences age of onset of infantile spasms. Koo B, et al. **Epilepsia** 1996 Nov; 37(11):1068–71
Cortical hypometabolism and delayed myelination in West syndrome. Natsume J, et al. **Epilepsia** 1996 Dec; 37(12):1180–4
Partial seizures in West syndrome. Ohtsuka Y, et al.
Epilepsia 1996 Nov;37(11):1060–7
Infantile spasms. Garg RK. **Indian Pediatr** 1997 Mar; 34(3):220–6 (31 ref.)
Neuroimaging in all cases of spasmus nutans [letter; comment] Lee A. **J Pediatr Ophthalmol Strabismus** 1996 Jan–Feb; 33(1):68–9. Comment on: J Pediatr Ophthalmol Strabismus 1995 Sep–Oct;32(5):296–301.
Infantile spasms: cerebral blood flow abnormalities correlate with EEG, neuroimaging, and pathologic findings. Hwang PA, et al. **Pediatr Neurol** 1996 Apr;14(3):220–5
Cryptogenic localization-related epilepsy of neonatal onset. Natsume J, et al. **Seizure** 1996 Dec;5(4):317–9
[Aicardi syndrome and choroid plexus papilloma: a rare association. Case report] Aguiar MD, et al.
Arq Neuropsiquiatr 1996 Jun;54(2):313–7 (16 ref.) (Eng. Abstr.) **(Por)**
[Aicardi's syndrome: agenesis of the corpus callosum, infantile flexor spasms and macular dystrophy] Badalian LO, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(5):87–90 (13 ref.) **(Rus)**
[Diagnosis of West syndrome with video in a 6-month-old child (letter)] Carmona Valera JA, et al.
An Esp Pediatr 1996 Dec;45(6):655–6 **(Spa)**
[Infantile spasms (West's syndrome): characteristics and therapeutic options] Prats-Viñas JM, et al. **Rev Neurol** 1996 Nov;24(135):1411–4 (65 ref.) **(Spa)**

DRUG THERAPY

Comment on the ACTH treatment of the West syndrome [comment] Fois A, et al. **Brain Dev** 1996 Nov-Dec; 18(6):469–70 (6 ref.). Comment on: Brain Dev 1996 Nov-Dec;18(6):456–60.
West syndrome: individualized ACTH therapy [see comments] Heiskala H, et al. **Brain Dev** 1996 Nov-Dec; 18(6):456–60. Comment in: Brain Dev 1996 Nov-Dec;18(6):466–8. Comment in: Brain Dev 1996 Nov-Dec;18(6):469–70.
CSF ACTH and beta-endorphin in infants with West syndrome and ACTH therapy. Heiskala H. **Brain Dev** 1997 Jul;19(5):339–42
Complex brain malformation and drug resistant epilepsy. Parmeggiani A, et al. **Brain Dev** 1997 Jan;19(1):66–70
West syndrome: individualized ACTH therapy, by Heiskala et al [comment] Snead OC 3rd. **Brain Dev** 1996 Nov-Dec; 18(6):466–8 (24 ref.). Comment on: Brain Dev 1996 Nov-Dec;18(6):456–60.
Adrenocorticotropic hormone and vigabatrin treatment of children with infantile spasms underlying cerebral palsy. Zafeiriou DI, et al. **Brain Dev** 1996 Nov-Dec;18(6):450–2
Randomized trial comparing vigabatrin and hydrocortisone in infantile spasms due to tuberous sclerosis. Chiron C, et al. **Epilepsy Res** 1997 Jan;26(2):389–95
The use of felbamate to treat infantile spasms. Stafstrom CE.
J Child Neurol 1996 Mar;11(2):170–1
Vigabatrin as first line therapy in infantile spasms: review

of seven patients. Kwong L. **J Paediatr Child Health** 1997 Apr;33(2):121–4

Long–term outcomes of conventional therapy for infantile spasms. Holden KR, et al. **Seizure** 1997 Jun;6(3):201–5

[Low dose ACTH in infantile spasms. Effects and adverse effects] Kvorning VG, et al. **Ugeskr Laeger** 1996 Sep 2; 158(36):5036–9 (Eng. Abstr.) **(Dan)**

[Low dose ACTH therapy in West syndrome] Gaszner A, et al. **Orv Hetil** 1997 Feb 2;138(5):281–3 (32 ref.) (Eng. Abstr.) **(Hun)**

[Treatment of West syndrome: present and future perspectives] Seki T. **No To Hattatsu** 1997 Mar;29(2):91–9 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Outcome of initial treatment with high–dose vitamin B6, valproate sodium or clonazepam in West syndrome] Suzuki Y, et al. **No To Hattatsu** 1996 Sep;28(5):398–402 (Eng. Abstr.) **(Jpn)**

[Valproate–induced pancytopenia in a patient with infantile spasms] Taniguchi Y, et al. **No To Hattatsu** 1997 Jan; 29(1):73–5 **(Jpn)**

[Hypertrophic myocardiopathy during the corticotropin treatment of infantile spasms] Hortelano López M, et al. **An Esp Pediatr** 1996 May;44(5):515–6 (11 ref.) **(Spa)**

[Infantile spasms (West's syndrome): characteristics and therapeutic options] Prats–Viñas JM, et al. **Rev Neurol** 1996 Nov;24(135):1411–4 (65 ref.) **(Spa)**

EPIDEMIOLOGY

Infantile spasms: seasonal onset differences and zeitgebers. Cortez MA, et al. **Pediatr Neurol** 1997 Apr;16(3):220–4

ETIOLOGY

Brainstem tumor with infantile spasms. Aktan G, et al. **J Child Neurol** 1997 Feb;12(2):152–4

[Ohtahara syndrome] Romann D, et al. **Geburtshilfe Frauenheilkd** 1996 Jul;56(7):393–5 (Eng. Abstr.) **(Ger)**

GENETICS

The X–linked infantile spasms syndrome (MIM 308350) maps to Xp11.4–Xpter in two pedigrees. Claes S, et al. **Ann Neurol** 1997 Sep;42(3):360–4

A case report: corpus callosum dysgenesis, microcephaly, infantile spasm, cleft lip–palate, exophthalmos and psychomotor retardation. Tütüncüoglu S, et al. **Clin Genet** 1996 Apr;49(4):220–2

Infantile spasms associated with proximal duplication of chromosome 15q. Bingham PM, et al. **Pediatr Neurol** 1996 Sep;15(2):163–5

Progressive encephalopathy with edema, hypsarrhythmia, and optic atrophy (PEHO syndrome). Shevell MI, et al. **Pediatr Neurol** 1996 Nov;15(4):337–9

Benign familial neonatal convulsions; psychosocial adjustment to the threat of recurrent seizures. Psenka TM, et al. **Seizure** 1996 Sep;5(3):243–5

[PEHO syndrome (progressive encephalopathy, edema, hypsarrhythmia. optic atrophy)] Hollódy K, et al. **Orv Hetil** 1997 Feb 16;138(7):425–8 (7 ref.) (Eng. Abstr.) **(Hun)**

METABOLISM

Pyridoxine––responsive West syndrome and gamma–aminobutyric acid [letter] Kurlemann G, et al. **Eur J Pediatr** 1997 Feb;156(2):158–9

How do cryptogenic and symptomatic infantile spasms differ? Review of biochemical studies in Finnish patients. Riikonen RS. **J Child Neurol** 1996 Sep;11(5):383–8

PATHOLOGY

Hemimegalencephaly––morphological and immunocytochemical study. Yasha TC, et al. **Clin Neuropathol** 1997 Jan–Feb;16(1):17–22

Aicardi syndrome: a morphologic description with particular reference to intracytoplasmic inclusions in cortical astrocytes. Buchino JJ, et al. **Pediatr Pathol Lab Med** 1996 Mar–Apr;16(2):285–91

PHYSIOPATHOLOGY

Long term changes in patients with hypsarrhythmia–infantile spasms: 505 patients, up to 43 years follow–up. Hughes JR, et al. **Clin Electroencephalogr** 1997 Jan;28(1):1–15

Epilepsy and disorders of neuronal migration. II: Epilepsy as a symptom of neuronal migration defects. Gordon N. **Dev Med Child Neurol** 1996 Dec;38(12):1131–4

Physiological properties of immature neocortical neurons relevant to pathophysiology of infantile epileptic encephalopathies. Avanzini G, et al. **Epilepsy Res Suppl** 1996;12:53–61

Impairment of neocortical ontogenetic program leading to severe infantile encephalopathy with burst suppression. Spreafico R, et al. **Epilepsy Res Suppl** 1996;12:79–87

Phasic motor activity reduction occurring with horizontal rapid eye movements during REM sleep is disturbed in infantile spasms. Kohyama J, et al. **J Neurol Sci** 1996 Jun; 138(1–2):82–7

Hypsarrhythmia: frequency of variant patterns and correlation with etiology and outcome. Kramer U, et al. **Neurology** 1997 Jan;48(1):197–203

Infantile spasms: cerebral blood flow abnormalities correlate with EEG, neuroimaging, and pathologic findings. Hwang PA, et al. **Pediatr Neurol** 1996 Apr;14(3):220–5

Focal features in West syndrome indicating candidacy for surgery. Kramer U, et al. **Pediatr Neurol** 1997 Apr; 16(3):213–7

PREVENTION & CONTROL

Developmental outcomes in children receiving resection surgery for medically intractable infantile spasms. Asarnow RF, et al. **Dev Med Child Neurol** 1997 Jul;39(7):430–40

RADIOGRAPHY

A case of infantile spasms: epileptic apnea as partial seizures at onset. Kamei A, et al. **Brain Dev** 1996 May–Jun; 18(3):239–41

[The neuroradiological aspects of infantile spasms] Kalinina LV, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997; 97(1):37–40 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Brain functional imaging SPECT in agyria–pachygyria. Chiron C, et al. **Epilepsy Res** 1996 Jun;24(2):109–17

[18F]–fluorodeoxyglucose–positron emission tomography findings in protein infants with severe periventricular leukomalacia and hypsarrhythmia. Higuchi Y, et al. **Eur J Pediatr** 1997 Mar;156(3):236–8

Cortical hypoperfusion in symptomatic West syndrome. A SPECT study. Sztriha L, et al. **Eur J Radiol** 1997 Jul; 25(1):20–5

SURGERY

Focal features in West syndrome indicating candidacy for surgery. Kramer U, et al. **Pediatr Neurol** 1997 Apr; 16(3):213–7

THERAPY

Infantile spasms. Garg RK. **Indian Pediatr** 1997 Mar; 34(3):220–6 (31 ref.)

VIROLOGY

Three or more infantile febrile seizures and HHV–6 [letter; comment] Westarp ME, et al. **J Neurovirol** 1995 Sep; 1(3–4):321. Comment on: J Neurovirol 1995 Mar;1(1):30–9.

SPASMUS NUTANS see **SPASMS, INFANTILE**

SPASTIC DIPLEGIA see **CEREBRAL PALSY**

SPASTIC PARAPARESIS see **PARAPARESIS, TROPICAL SPASTIC**

SPASTIC PARAPLEGIA see **PARAPLEGIA**

SPASTIC PARAPLEGIA, HEREDITARY

COMPLICATIONS

Hereditary spastic paraplegia and Evans's syndrome. Ahmed FE, et al. **Acta Paediatr** 1996 Jul;85(7):879–81

DIAGNOSIS

Advances in hereditary spastic paraplegia. Fink JK. **Curr Opin Neurol** 1997 Aug;10(4):313–8 (47 ref.)

GENETICS

Familial spastic paraparesis: evaluation of locus heterogeneity, anticipation, and haplotype mapping of the SPG4 locus on the short arm of chromosome 2. Raskind WH, et al. **Am J Med Genet** 1997 Feb 21;74(1):26–36

'Complicated' autosomal dominant familial spastic paraplegia is genetically distinct from 'pure' forms. Meierkord H, et al. **Arch Neurol** 1997 Apr;54(4):379–84

Hereditary spastic paraplegia with dementia. Pridmore S, et al. **Aust N Z J Psychiatry** 1995 Dec;29(4):678–82

Familial spastic paraplegia: evidence for a fourth locus. Bruyn RP, et al. **Clin Neurol Neurosurg** 1997 May;99(2):87–90

Hereditary spastic paraparesis with distal muscle wasting, microcephaly, mental retardation, arachnodactyly and tremors: new entity? Farah S, et al. **Clin Neurol Neurosurg** 1997 Feb;99(1):66–70

A family with hereditary spastic paraparesis and epilepsy. Webb S, et al. **Epilepsia** 1997 Apr;38(4):495–9 (40 ref.)

Evidence of a third locus in X–linked recessive spastic paraplegia [letter] Steinmüller R, et al. **Hum Genet** 1997 Aug;100(2):287–9

Molecular genetics of familial spastic paraplegia: a multitude of responsible genes. Kobayashi H, et al. **J Neurol Sci** 1996 May;137(2):131–8 (40 ref.)

Extensive genetic heterogeneity in the "pure" form of autosomal dominant familial spastic paraplegia (Strümpell's disease). Kobayashi H, et al. **Muscle Nerve** 1996 Nov; 19(11):1435–8

Familial spastic paraparesis. Is it a mitochondrial disorder? [letter] Zelnik N, et al. **Pediatr Neurosurg** 1995;23(4):225–6

PHYSIOPATHOLOGY

Advances in hereditary spastic paraplegia. Fink JK. **Curr Opin Neurol** 1997 Aug;10(4):313–8 (47 ref.)

SPASTICITY, MUSCLE see **MUSCLE SPASTICITY**

SPATIAL BEHAVIOR

Altered behaviour of hamsters by prolonged hypergravity: adaptation to 2.5 G and re–adaptation to 1 G. Sondag HN, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):192–7

Scoring procedure, performance factors, and magnitude of sex differences in spatial performance. Voyer D. **Am J Psychol** 1997 Summer;110(2):259–76

Spatial constructions by capuchin monkeys. Poti P. **Ann Ist Super Sanita** 1996;32(3):361–7

The British Army Air Corps in–flight spatial disorientation demonstration sortie. Braithwaite MG. **Aviat Space Environ Med** 1997 Apr;68(4):342–5

Involvement of entorhinal cortex or parietal cortex in long–term spatial discrimination memory in rats: retrograde amnesia. Cho YH, et al. **Behav Neurosci** 1996 Jun; 110(3):436–42

Functional localization of the system for visuospatial attention using positron emission tomography. Nobre AC, et al. **Brain** 1997 Mar;120 (Pt 3):515–33

Developmental change in spatial grouping activity among children with early focal brain injury: evidence from a modeling task. Stiles J, et al. **Brain Cogn** 1996 Jun; 31(1):46–62

Sex differences in visuo–spatial ability: task difficulty, speed–accuracy tradeoff, and other performance factors. Prinzel LJ 3rd, et al. **Can J Exp Psychol** 1995 Dec; 49(4):530–9

Intraretrosplenial cortical grafts of fetal cholinergic neurons and the restoration of spatial memory function. Li YJ, et al. **Cell Transplant** 1997 Jan–Feb;6(1):85–93

Use of proximal and distal cues in place navigation by mice changes during ontogeny. Chapillon P, et al. **Dev Psychobiol** 1996 Sep;29(6):529–45

Spatial cognition in language–impaired children. Gillies M, et al. **Eur J Disord Commun** 1997;32(2 Spec No):159–66

Hippocampal lesions cause forgetting in a spatial response task. Baylis GC, et al. **Eur J Neurosci** 1996 May;8(5):853–60

Peripheral cuing of covert spatial attention before and after emotional conditioning of the cue. Stormark KM, et al. **Int J Neurosci** 1996 Sep;86(3–4):225–40

The development and temporal dynamics of spatial orienting in infants. Johnson MH, et al. **J Exp Child Psychol** 1996 Oct;63(1):171–88

Differential effects of global ischemia on delayed matching– and non–matching–to–position tasks in the water maze and Skinner box. Nelson A, et al. **Neurobiol Learn Mem** 1997 May;67(3):228–47

Hemispheric asymmetry of arterial blood flow velocity changes during verbal and visuospatial tasks. Bulla–Hellwig M, et al. **Neuropsychologia** 1996 Oct;34(10):987–91

Topographical disorientation following unilateral temporal lobe lesions in humans. Maguire EA, et al. **Neuropsychologia** 1996 Oct;34(10):993–1001

Learning spatial sequences in unilateral neglect. Cohen A, et al. **Psychol Res** 1997;60(1–2):42–52

The effects of hippocampal and area parahippocampalis lesions in pigeons: II. Concurrent discrimination and spatial memory. Colombo M, et al. **Q J Exp Psychol B** 1997 May; 50(2):172–89

Predominance of postural imbalance in left hemiparetic patients. Rode G, et al. **Scand J Rehabil Med** 1997 Mar; 29(1):11–6

[The effects of a fimbria–fornix lesion on distance discrimination in rats] Sakamoto T, et al. **Shinrigaku Kenkyu** 1997 Apr;68(1):38–42 (Eng. Abstr.) **(Jpn)**

[Discrimination of spatial intervals between two lines: neurophysiologic substantiation of a psychophysical experiment] Glezer VD, et al. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):60–7 **(Rus)**

[The spatial relationships and social structure of gerbils in the genus Meriones (Gerbillinae, Rodentia)] Gromov VS. **Zh Obshch Biol** 1997 Mar–Apr;58(2):35–54 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of MK–801 on spatial memory in homing and nonhoming pigeon breeds. Meehan EF. **Behav Neurosci** 1996 Dec;110(6):1487–91

Deferoxamine improves spatial memory performance following experimental brain injury in rats. Long DA, et al. **Brain Res** 1996 Apr 22;717(1–2):109–17

The decrease of serotonin release induced by a tryptophan–free amino acid diet does not affect spatial and passive avoidance learning. Stancampiano R, et al. **Brain Res** 1997 Jul 11;762(1–2):269–74

Behavioral characterization of metrifonate–improved acquisition of spatial information in medial septum–lesioned rats. Riekkinen P Jr, et al. **Eur J Pharmacol** 1997 Mar 26; 323(1):11–9

Prior non–spatial pretraining eliminates sensorimotor disturbances and impairments in water maze learning caused by diazepam. Cain DP. **Psychopharmacology (Berl)** 1997 Apr;130(4):313–9

Differences in vulnerability and susceptibility to dexamphetamine in Nijmegen high and low responders to novelty: a dose–effect analysis of spatio–temporal

programming of behaviour. Cools AR, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):181-7

Effects of methylphenidate on spatial working memory and planning in healthy young adults. Elliott R, et al. **Psychopharmacology (Berl)** 1997 May;131(2):196-206

Studies on the influence of enriched-environment housing combined with systemic administration of an alpha2-adrenergic antagonist on spatial learning and hyperactivity after global ischemia in rats. Puurunen K, et al. **Stroke** 1997 Mar;28(3):623-31

[Differences in the effects of piracetam and fenazepam in emotional stress caused by the spatial reversal of a habit] Inozemtsev AN, et al. **Eksp Klin Farmakol** 1996 Nov-Dec; 59(6):3-5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Subjective postural orientation and visual vertical during slow pitch tilt for the seated human subject. Ito Y, et al. **Aviat Space Environ Med** 1997 Jan;68(1):3-12

Intact spatial learning in both young and aged rats following selective removal of hippocampal cholinergic input. Baxter MG, et al. **Behav Neurosci** 1996 Jun;110(3):460-7

Posttraining intrahippocampal estradiol injections enhance spatial memory in male rats: interaction with cholinergic systems. Packard MG, et al. **Behav Neurosci** 1996 Jun; 110(3):626-32

Developmental differences in place-learning performance between C57BL/6 and DBA/2 mice parallel the ontogeny of hippocampal protein kinase C. Paylor R, et al. **Behav Neurosci** 1996 Dec;110(6):1415-25

Identification of the nonlinear state-space dynamics of the action-perception cycle for visually induced postural sway. Giese MA, et al. **Biol Cybern** 1996 May;74(5):427-37

Exploratory-motor task to evaluate right frontal lobe damage. Maeshima S, et al. **Brain Inj** 1997 Mar;11(3):211-7

Hippocampally dependent and independent chronic spatial navigational deficits following parasagittal fluid percussion brain injury in the rat. Bramlett HM, et al. **Brain Res** 1997 Jul 11;762(1-2):195-202

Apoptotic morphology of dentate gyrus granule cells following experimental cortical impact injury in rats: possible role in spatial memory deficits. Colicos MA, et al. **Brain Res** 1996 Nov 11;739(1-2):120-31

Evidence for recovery of spatial learning following entorhinal cortex lesions in mice. Hardman R, et al. **Brain Res** 1997 May 30;758(1-2):187-200

Comparative, in vitro, studies of hippocampal tissue from homing and non-homing pigeon. Shapiro E, et al. **Brain Res** 1996 Jul 1;725(2):199-206

Spatial working memory is preserved in rats treated with anabolic-androgenic steroids. Smith ST, et al. **Brain Res** 1996 Oct 21;737(1-2):313-6

Orienting a spatial attention—its reflexive, compensatory, and voluntary mechanisms. Hikosaka O, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1-2):1-9 (32 ref.)

Spatial reasoning in the monkey. Procyk E, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1-2):131-5

A normal bias toward a pictorially defined top in line bisection. Toth C, et al. **Can J Neurol Sci** 1996 May; 23(2):110-3

Hippocampal lesions and path integration. Whishaw IQ, et al. **Curr Opin Neurobiol** 1997 Apr;7(2):228-34 (64 ref.)

Event-related potentials during memorization of spatial locations in the auditory and visual modalities. Barceló F, et al. **Electroencephalogr Clin Neurophysiol** 1997 Aug; 103(2):257-67

Effect of spatial ability and sex on inter- and intrahemispheric correlation of EEG activity. Corsi-Cabrera M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan;102(1):5-11

Evidence for the involvement of the mammillary bodies and cingulum bundle in allocentric spatial processing by rats. Neave N, et al. **Eur J Neurosci** 1997 May;9(5):941-55

Ocular exploration of space as a function of neck proprioceptive and vestibular input—observations in normal subjects and patients with spatial neglect after parietal lesions. Karnath HO, et al. **Exp Brain Res** 1996 May;109(2):333-42

On the short-term adaptation of eye saccades and its transfer to head movements. Kröller J, et al. **Exp Brain Res** 1996 Oct;111(3):477-82

Differential influence of the visual framework on end point accuracy and trajectory specification of arm movements. Toni I, et al. **Exp Brain Res** 1996 Oct;111(3):447-54

Neuronal computations underlying the firing of place cells and their role in navigation. Burgess N, et al. **Hippocampus** 1996;6(6):749-62

Hippocampal place cells connected by Hebbian synapses can solve spatial problems. Muller RU, et al. **Hippocampus** 1996;6(6):709-19

Memory for places: a navigational model in support of Marr's theory of hippocampal function. Recce M, et al. **Hippocampus** 1996;6(6):735-48

Neural network modeling of the hippocampal formation spatial signals and their possible role in navigation: a modular approach. Sharp PE, et al. **Hippocampus** 1996; 6(6):720-34

Perseveration on place reversals in spatial swimming pool tasks: further evidence for place learning in hippocampal rats. Whishaw IQ, et al. **Hippocampus** 1997;7(4):361-70

Time-varying characteristics of visually induced postural sway. Loughlin PJ, et al. **IEEE Trans Rehabil Eng** 1996 Dec;4(4):416-24 (36 ref.)

Tactile-audio diagram for blind persons. Minagawa H, et al. **IEEE Trans Rehabil Eng** 1996 Dec;4(4):431-7

A new case of atypical cerebral dominance. Posteraro L, et al. **Ital J Neurol Sci** 1996 Jun;17(3):237-40 (19 ref.)

Spatial training in a complex environment and isolation alter the spine distribution differently in rat CA1 pyramidal cells. Moser MB, et al. **J Comp Neurol** 1997 Apr 14;380(3):373-81

Spatial acuity of ultrasound hearing in flying crickets. Wyttenbach RA, et al. **J Exp Biol** 1997 Jul;200 (Pt 14):1999-2006

The metrics of spatial situation models. Rinck M, et al. **J Exp Psychol Learn Mem Cogn** 1997 May;23(3):622-37

Arm position constraints during pointing and reaching in 3-D space. Gielen CC, et al. **J Neurophysiol** 1997 Aug; 78(2):660-73

Brain-behavior relationships: evidence from practice effects in spatial stimulus-response compatibility. Iacoboni M, et al. **J Neurophysiol** 1996 Jul;76(1):321-31

Task-dependent representations in rat hippocampal place neurons. Kobayashi T, et al. **J Neurophysiol** 1997 Aug; 78(2):597-613

Systematic changes in directional tuning of motor cortex cell activity with hand location in the workspace during generation of static isometric forces in constant spatial directions. Sergio LE, et al. **J Neurophysiol** 1997 Aug; 78(2):1170-4

Somatosensory cortical activity in relation to arm posture: nonuniform spatial tuning. Tillery SI, et al. **J Neurophysiol** 1996 Oct;76(4):2423-38

Spatial attention effects in macaque area V4. Connor CE, et al. **J Neurosci** 1997 May 1;17(9):3201-14

Differential activation of the caudate nucleus in primates performing spatial and nonspatial working memory tasks. Levy R, et al. **J Neurosci** 1997 May 15;17(10):3870-82

Hippocampal tissue transplants reverse lesion-induced spatial memory deficits in zebra finches (Taeniopygia guttata). Patel SN, et al. **J Neurosci** 1997 May 15;17(10):3861-9

Spatial and nonspatial learning in mice: effects of S100 beta overexpression and age. Gerlai R, et al. **Neurobiol Learn Mem** 1996 Sep;66(2):143-54

Spatial learning and memory in calpastatin-deficient rats. Tóth E, et al. **Neurobiol Learn Mem** 1996 Sep;66(2):230-5

Internally coherent spatial memories in a mammal. Hermer L. **Neuroreport** 1997 May 6;8(7):1743-7

Spatial reversal learning in preclinical scrapie-inoculated mice. Lysons AM, et al. **Neuroreport** 1996 Apr 10; 7(5):1087-91

Contrasting effects of fetal CA1 and CA3 hippocampal grafts on deficits in spatial learning and working memory induced by global cerebral ischaemia in rats. Hodges H, et al. **Neuroscience** 1996 Jun;72(4):959-88

Correlation between hippocampal neuronal damage and spatial learning deficit due to global ischemia. Block F, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):755-61

Place cells and place navigation. Bures J, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):343-50 (63 ref.)

Head direction cells and episodic spatial information in rats without a hippocampus. Golob EJ, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7645-50

Validity of force platform measures for stance stability under varying sensory conditions. Hu MH, et al. **Proc Natl Sci Counc Repub China B** 1996 Jul;20(3):78-86

Spatial, behavioral and sensory correlates of hippocampal CA1 complex spike cell activity: implications for information processing functions. Wiener SI. **Prog Neurobiol** 1996 Jul;49(4):335-61 (104 ref.)

Attentional selection and attentional gradients: an alternative method for studying transient visual-spatial attention. Eimer M. **Psychophysiology** 1997 May;34(3):365-76

[The effects of proactive interference in the task of spatial choice in a Y maze by rats] Bakanova LA, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 Jan-Feb; 47(1):78-85 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of cerebellar granule cell depletion on spatial learning and memory and in an avoidance conditioning task: studies in postnatally X-irradiated rats. Le Marec N, et al. **Brain Res Dev Brain Res** 1997 Mar 17;99(1):20-8

Brief communication: electromagnetic fields improve visuospatial performance and reverse agraphia in a parkinsonian patient. Sandyk R. **Int J Neurosci** 1996 Nov; 87(3-4):209-17

Spatial responses to light in mice with severe retinal degeneration. Mrosovsky N, et al. **Neurosci Lett** 1997 Feb 7;222(3):204-6

SPEARMAN RANK CORRELATION COEFFICIENT see **STATISTICS, NONPARAMETRIC**

SPECIALISM

In the realm of ideas: the advent of advanced surgery of the human cerebrum and neurosurgical education. Apuzzo ML. **Acta Neurochir Suppl (Wien)** 1997;69:145-50 (29 ref.)

Subspeciality training in neurosurgery. Ostertag C. **Acta Neurochir Suppl (Wien)** 1997;69:126-9

Post residency subspecialty training in neurosurgery—the impact of subspecialty training on organized neurosurgery and resident training—benefits, responsibilities and liabilities. Piepgras DG. **Acta Neurochir Suppl (Wien)** 1997; 69:140-4

A model fellowship in pediatric neurosurgery. Raimondi AJ. **Acta Neurochir Suppl (Wien)** 1997;69:135-9

Neurosurgical spine fellowships: the Phoenix model. Sonntag VK. **Acta Neurochir Suppl (Wien)** 1997;69:130-4

Specialized journals in hypnosis: further listings. Gravitz MA. **Am J Clin Hypn** 1996 Jul;39(1):18-20

Is there still a need for the general surgical pathologist? Watts JC. **Am J Clin Pathol** 1996 Oct;106(4 Suppl 1):S74-6

Fragmentation in the pursuit of quality: the dental dilemma. Banks P. **Ann R Coll Surg Engl** 1996 Sep;78(5):434-9

UK specialists to be allowed to advertise [news] Beecham L. **BMJ** 1996 Nov 16;313(7067):1226-7

Managed care and the infectious diseases specialist. Tice AD, et al. **Clin Infect Dis** 1996 Aug;23(2):341-68 (99 ref.)

The integration of clinical and experimental work. Covino NA. **Int J Clin Exp Hypn** 1997 Apr;45(2):109-25 (70 ref.)

The concept of the specialist community nurse. Kelly A. **J Adv Nurs** 1996 Jul;24(1):42-52 (51 ref.)

Think—about tunnel vision [editorial] Burns CD. **J Ky Med Assoc** 1996 Nov;94(11):503

A rationale for family therapy specialization in early intervention. Malone DM, et al. **J Marital Fam Ther** 1997 Jan;23(1):65-79 (69 ref.)

Hygiene, army health and aphom [letter] [published erratum appears in J R Army Med Corps 1994 Oct;140(3):162] Crowdy JP. **J R Army Med Corps** 1994 Jun;140(2):100-1

Whither diplomatosis! - Whither aphom? [letter] Jefferson TO, et al. **J R Army Med Corps** 1994 Jun;140(2):100

The general physician—dinosaur or superman? [editorial] Bennett JR. **J R Coll Physicians Lond** 1997 Jan-Feb; 31(1):6-7

Acceptance of spinal cord medicine as a subspecialty by the Accreditation Council of Graduate Medical Education (ACGME) [editorial] DeLisa JA, et al. **J Spinal Cord Med** 1996 Jul;19(3):175

Generalist training in the specialist context [editorial] **Med Educ** 1996 May;30(3):155-6

Certification of specialists: the Portuguese system and future relation to European Boards. Chiado A. **Med Educ** 1997 Jan;31(1):72

Choices of careers in medicine: some theoretical and methodological issues [editorial] Dohn H. **Med Educ** 1996 May;30(3):157-60

Specialty choice and understanding of primary care among Japanese medical students. Ohtaki J, et al. **Med Educ** 1996 Sep;30(5):378-84

The road to professionalism in medical informatics: the role of training [editorial; comment] Musen MA, et al. **Methods Inf Med** 1996 Jun;35(2):148-51; discussion 152-4 . Comment on: Methods Inf Med 1995 Dec;34(5):426-33.

Postgraduate (specialist) medical training [news] **Natl Med J India** 1996 Sep-Oct;9(5):237

The bases of practice—neurological physiotherapy [see comments] Partridge C, et al. **Physiother Res Int** 1996; 1(3):205-8 (13 ref.). Comment in: Physiother Res Int 1996;1(4):265-8. Comment in: Physiother Res Int 1997;2(2):62-4.

The specialist general physician [editorial] Franklin DS, et al. **S Afr Med J** 1997 Aug;87(8):980-1

The women's health specialty: curriculum implications. Hunt L. **Womens Health Issues** 1997 Mar-Apr;7(2):116-20 (14 ref.)

[Insurance medicine as a specialty (editorial)] Tola S, et al. **Duodecim** 1995;111(17):1641-2 **(Fin)**

[Future organization of oncologic gynecology: results of an international survey] Vergote IB, et al. **Contracept Fertil Sex** 1997 Mar;25(3):XIX-XXIV **(Fre)**

[Hope for delaying demise] Wagner B. **Fortschr Med** 1997 Jun 10;115(16):66-9 **(Ger)**

[The zoo veterinarian in changing times] Hatt JM, et al. **Schweiz Arch Tierheilkd** 1996;138(12):573-8 (21 ref.) (Eng. Abstr.) **(Ger)**

[Specialization and specialties in medicine] García-Sainz M, et al. **Gac Med Mex** 1997 Mar-Apr;133(2):79-90 **(Spa)**

[Specialists in health centers (and II): a non emphasized response for an emphasis without response (letter)] Simó Miñana J, et al. **Med Clin (Barc)** 1997 Jan 25;108(3):118-9 **(Spa)**

STATISTICS & NUMERICAL DATA

Children referred for specialist care: a nationwide study in Dutch general practice. van Suijlekom-Smit LW, et al. **Br J Gen Pract** 1997 Jan;47(414):19-23

TRENDS

The age of microspecialization: is there an epidermist in the house? [letter] Weinzweig J. **Ann Plast Surg** 1997 Jan; 38(1):82-3

Transforming the present—discovering the future: the University of Pittsburgh's NLM grant on education and training of health sciences librarians. Detlefsen EG, et al. **Bull Med Libr Assoc** 1996 Oct;84(4):524-33

Rediscovering general psychiatry: creation of an academic division. Goldbloom DS, et al. **Can J Psychiatry** 1997 Feb; 42(1):58-62

Physician resource variables and their impact on the future pool of research expertise among psychiatrists: the Canadian Association of Professors of Psychiatry and Canadian Psychiatric Association Survey. el-Guebaly N, et al. **Can J Psychiatry** 1996 Apr;41(3):150-5

The explosion of neurogenetics [editorial] Hurko O. **Curr Opin Neurol** 1997 Apr;10(2):77–83 (103 ref.)
Is there a place for the specialty of hand surgeons in Europe? Mulligan PJ. **J Hand Surg [Br]** 1997 Feb;22(1):3–4
Is general surgery going the way of the dinosaur? [letter; comment] Kabra BD. **J Indian Med Assoc** 1996 Aug; 94(8):312. Comment on: J Indian Med Assoc 1995 Dec;93(12):446–7.
For the children. Walker ML. **Pediatr Neurosurg** 1996 Jun; 24(6):279–84
[Patient environment as the domain of the family physician. Organ-specific medicine is only one side of the issue] Pillau H. **Fortschr Med** 1997 Apr 30;115(12):33–4 **(Ger)**
[Quo vadis surgical ophthalmology? (editorial)] Busse H. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep;209(2–3):1 **(Ger)**
[Importance of magnetic resonance tomography in radiology. No MRI specialty for other areas! Combined position of DRG and BVDRN] Wolf KJ, et al. **Radiologe** 1997 Apr; 37(4):M57–9 **(Ger)**
[Professionalization of nursing care for elderly persons] Entzian H, et al. **Z Gerontol Geriatr** 1996 Nov–Dec; 29(6):404–10 (8 ref.) (Eng. Abstr.) **(Ger)**

SPECIALTIES, DENTAL

Burnout and stress-related factors among junior staff of three dental hospital specialties. Humphris G, et al. **Br Dent J** 1997 Jul 12;183(1):15–21
GP vs. specialist [letter] Wirth KE. **J Am Dent Assoc** 1997 Sep;128(9):1208
Disagreement about degrees [letter] Engel JD. **J Oral Maxillofac Surg** 1997 Sep;55(9):1036
Double degree members and their importance to AAOMS. American Association of Oral and Maxillofacial Surgeons [editorial] Laskin DM. **J Oral Maxillofac Surg** 1997 Sep; 55(9):911
Patient referrals. Plunkett LR. **N Y State Dent J** 1997 Jun–Jul;63(6):6–9

CLASSIFICATION

What do we actually call ourselves? [letter] Sandhu S. **Br J Oral Maxillofac Surg** 1997 Aug;35(4):299

EDUCATION

Postgraduate training for specialisation. Pollard MA, et al. **Br Dent J** 1996 Oct 19;181(8):302–4
Establishing a standard training pathway for the dental specialties in the European Community—is there a simple way forward? Whitehouse NH. **Int Dent J** 1996 Apr; 46(2):113–6
[Means for improving the training of orthodontists] Alimskiĭ AV, et al. **Stomatologiia (Mosk)** 1997;76(3):66–70 **(Rus)**
[The organization of orthodontics instruction for students and the postgraduate training of specialists in this field] Khoroshilkina FIa, et al. **Stomatologiia (Mosk)** 1996;Spec No:33–4 **(Rus)**

MANPOWER

Medical and dental staffing in the National Health Service in Scotland in 1994. Ewing DJ. **Health Bull (Edinb)** 1996 Jan;54(1):79–87

STANDARDS

[The accreditation and certification of specialists in dentistry] Kuklin GS, et al. **Stomatologiia (Mosk)** 1997;76(1):69–70 **(Rus)**

TRENDS

Some questions on specialisation [editorial] McAndrew R. **Br Dent J** 1997 Aug 9;183(3):82
Conservative dentistry and specialisation [editorial] Wilson NH, et al. **Br Dent J** 1996 Apr 6;180(7):238–9
Do we need more specialization? [editorial] Laskin DM. **J Oral Maxillofac Surg** 1997 Aug;55(8):795–6
[The level of and outlook for the development of specialized medical care in the department of maxillofacial surgery and stomatology of a central hospital] Sukachev VA, et al. **Voen Med Zh** 1997 Apr;318(4):31–3 **(Rus)**

SPECIALTIES, MEDICAL

Rate of patient workups by non-emergency medicine residents in an academic emergency department. Stone CK, et al. **Acad Emerg Med** 1996 Feb;3(2):153–6
A comparison of specialty choices, residency training, and practice locations of early-decision and regular-admission graduates. Elam CL, et al. **Acad Med** 1997 Feb;72(2):140–3
The shift to primary care: emerging influences on specialty choice. Ellsbury KE, et al. **Acad Med** 1996 Oct;71(10 Suppl):S16–8
Influence of gender on specialty choices in a Brazilian medical school. Figueiredo JF, et al. **Acad Med** 1997 Jan; 72(1):68–70
Does exposure to gender discrimination and sexual harassment impact medical students' specialty choices and residency program selections? Nora LM, et al. **Acad Med** 1996 Oct;71(10 Suppl):S22–4
Patient variety in residency, and generalist career choice [letter] O'Connell D. **Acad Med** 1997 Feb;72(2):91
Retraining specialist physicians for primary care practice. Sidorov J. **Acad Med** 1997 Apr;72(4):248–9
Determinants of specialty choice of physician assistants. Singer AM, et al. **Acad Med** 1996 Aug;71(8):917–9
Factors influencing learners' specialty decisions [letter; comment] Xu G, et al. **Acad Med** 1997 Jun;72(6):469–70 . Comment on: Acad Med 1996 Sep;71(9):963–8.
A national study of factors influencing primary care career choices among underrepresented-minority, white, and Asian American physicians. Xu G, et al. **Acad Med** 1996 Oct;71(10 Suppl):S10–2
Subspecialization of surgical pathology at the Massachusetts General Hospital. Black-Schaffer WS, et al. **Am J Clin Pathol** 1996 Oct;106(4 Suppl 1):S33–42
Subspecialization in pathology. A European perspective. Prat J. **Am J Clin Pathol** 1996 Oct;106(4 Suppl 1):S43–4
Counselling following diagnosis of a fetal abnormality: comparison of different clinical specialists in Mexico. Carnevale A, et al. **Am J Med Genet** 1997 Mar 3;69(1):23–8
The impact of gender on the choice of surgery as a career. Baxter N, et al. **Am J Surg** 1996 Oct;172(4):373–6
Publications in subspecialty journals on end-of-life ethics. Heffner JE, et al. **Arch Intern Med** 1997 Mar 24; 157(6):685–90
Appropriateness of referrals for open-access endoscopy. How do physicians in different medical specialties do? [see comments] Mahajan RJ, et al. **Arch Intern Med** 1996 Oct 14;156(18):2065–9. Comment in: Arch Intern Med 1997 Apr 28;157(8):924.
Twenty-one-year survival of primary hypertensive patients allocated to care in general practice or in specialized hypertension clinic. An observational study of 831 hypertensive patients. Strate M, et al. **Blood Press** 1997 Mar;6(2):88–95
Continuing medical education and training for associate specialists: results of a survey in Yorkshire [see comments] Macdonald R, et al. **BMJ** 1996 Oct 12;313(7062):918. Comment in: BMJ 1997 Feb 1;314(7077):374–5.
The need for specialist review of pathology in paediatric cancer. Parkes SE, et al. **Br J Cancer** 1997;75(8):1156–9
Palliative care: much more than terminal care [editorial] Doyle D. **Br J Hosp Med** 1996 Sep 18–Oct 1;56(6):252
Who owns AIDS? [editorial] [see comments] Pinching AJ. **Br J Hosp Med** 1997 Mar 5–18;57(5):186–7. Comment in: Br J Hosp Med 1997 Mar 5–18;57(5):228.
Who owns AIDS? [letter; comment] Shahmanesh M. **Br J Hosp Med** 1997 Mar 5–18;57(5):228. Comment on: Br J Hosp Med 1997 Mar 5–18;57(5):186–7.
Family physicians managing tuberculosis. Qualitative study of overcoming barriers. Jackson L, et al. **Can Fam Physician** 1997 Apr;43:649–55
Asthma: better outcome at lower cost? The role of the expert in the care system. Bartter T, et al. **Chest** 1996 Dec; 110(6):1589–96
Downsizing competence: the myth of quality or let the barber do the surgery [editorial; comment] Braunstein MS. **Chest** 1997 Jun;111(6):1478. Comment on: Chest 1997 Jun;111(6):1548–51.
Chronic disease management and managed care: specialists have an important role [editorial] Clough JD. **Cleve Clin J Med** 1997 Feb;64(2):67–8
Fever, famine, and war: William Osler as an infectious diseases specialist. Bryan CS. **Clin Infect Dis** 1996 Nov; 23(5):1139–49 (133 ref.)
A prospective study of 2,092 "curbside" questions asked of two infectious disease consultants in private practice in the midwest. Manian FA, et al. **Clin Infect Dis** 1996 Feb; 22(2):303–7
Value of the infectious diseases specialist [editorial] Wenzel RP. **Clin Infect Dis** 1997 Mar;24(3):456
Critical care in the United States. Who are we and how did we get here? Calvin JE, et al. **Crit Care Clin** 1997 Apr; 13(2):363–76 (36 ref.)
Does a full-time, 24-hour intensivist improve care and efficiency? Carlson RW, et al. **Crit Care Clin** 1996 Jul; 12(3):525–51 (63 ref.)
Intensive care in Australia and New Zealand. No nonsense "down under". Dobb GJ. **Crit Care Clin** 1997 Apr; 13(2):299–316 (18 ref.)
Critical care. A specialty without frontiers. Fisher MM. **Crit Care Clin** 1997 Apr;13(2):235–43 (16 ref.)
Critical care in Africa. North to south and the future with special reference to southern Africa. Lipman J, et al. **Crit Care Clin** 1997 Apr;13(2):255–65 (38 ref.)
Critical care in East Asia. Little dragons and sleeping giants. Mustafa I, et al. **Crit Care Clin** 1997 Apr;13(2):287–98 (17 ref.)
Critical care in Canada. The North American difference. Sibbald WJ, et al. **Crit Care Clin** 1997 Apr;13(2):347–62 (13 ref.)
Critical care in Europe. Vincent JL, et al. **Crit Care Clin** 1997 Apr;13(2):245–54 (14 ref.)
Critical care in Japan and Korea. The market of excellence. Yoshiya I, et al. **Crit Care Clin** 1997 Apr;13(2):267–85 (11 ref.)
Hillary, Bill, and you: volunteerism in the Society of Critical Care Medicine. The presidential address from the 26th Educational and Scientific Symposium of the Society of Critical Care Medicine. Nelson LD. **Crit Care Med** 1997 Apr;25(4):710–3
Union Européene des Médecins Spécialistes (UEMS) Section of Surgery Division of Vascular Surgery. European Board of Vascular Surgery Annual Report 1995. Harris PL. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):383–5
Interventional radiology: there is no need for quotation marks [comment] Adam A. **Eur Radiol** 1997;7(6):944–5. Comment on: Eur Radiol 1997 ;7(6):942–3.
The melting pot of "interventional" radiology [see comments] Amiel M. **Eur Radiol** 1997;7(6):942–3. Comment in: Eur Radiol 1997 ;7(6):944–5.
Medical school culture and generalist education: perceptions of a medical school faculty. Curtis P, et al. **Fam Med** 1997 May;29(5):353–8
Standardized examination performance and specialty choice. Lynch DC, et al. **Fam Med** 1997 Jun;29(6):421–3
Turnaround time of in-patient discharge letters: a simple system of audit. Bowie P, et al. **Health Bull (Edinb)** 1996 Nov;54(6):438–40
European Union of Medical Specialities section of gastroenterology—present status. O'Morain C, et al. **Ir J Med Sci** 1997 Jan–Mar;166(1):38–40
The state of geriatrics training programs: findings from the National Study of Internal Medicine Manpower (NASIMM) by Edward F. Lawlor, Christopher S. Lyttle, and Elisse Moldwin [letter] Luchi RJ. **J Am Geriatr Soc** 1997 Sep;45(9):1153
Physician training for specialist to generalist career change. Finley GM, et al. **J Ark Med Soc** 1997 Feb;93(9):449–51
A glimpse at physician attitudes about care of patients who suffer from depression [editorial; comment] Dietrich AJ. **J Fam Pract** 1997 Feb;44(2):145–6. Comment on: J Fam Pract 1997 Feb;44(2):161–8.
Knowledge and attitudes about depression among non-generalists and generalists [see comments] Shao WA, et al. **J Fam Pract** 1997 Feb;44(2):161–8. Comment in: J Fam Pract 1997 Feb;44(2):145–6. Comment in: J Fam Pract 1997 Jun;44(6):523.
Should we just let the anticoagulation service do it? [letter; comment] Cheng TO. **J Gen Intern Med** 1997 Apr; 12(4):258–9. Comment on: J Gen Intern Med 1996 Dec;11(12):768–70.
Effect of subspecialty training and experience on agreement with HIV guidelines [letter] Horsburgh CR Jr, et al. **J Gen Intern Med** 1997 Aug;12(8):518–9
Medicaid patients access specialists [news] **J Miss State Med Assoc** 1997 Jul;38(7):281
The need for medical beds [letter; comment] Singleton CD. **J Public Health Med** 1996 Jun;18(2):251. Comment on: J Public Health Med 1995 Sep;17(3):290–6.
The hospital general physician in the 1990s [letter; comment] Harrison BD. **J R Coll Physicians Lond** 1996 Sep–Oct; 30(5):479–80. Comment on: J R Coll Physicians Lond 1996 May–Jun;30(3):209–10.
Graduate medical education. **JAMA** 1997 Sep 3; 278(9):775–84
US graduate medical education, 1996–1997. Dunn MR, et al. **JAMA** 1997 Sep 3;278(9):750–4
Management of patients with HIV/AIDS. Who should care? Lewis CE. **JAMA** 1997 Oct 8;278(14):1133–4
Patients, primary care physicians, and payments for hospital visits [letter; comment] Paulshock BZ. **JAMA** 1997 Jan 15;277(3):213. Comment on: JAMA 1996 Jul 24–31;276(4):264.
The effects of the change in the NRMP matching algorithm. National Resident Matching Program. Roth AE, et al. **JAMA** 1997 Sep 3;278(9):729–32
The new match [editorial] Scotti MJ Jr. **JAMA** 1997 Sep 3;278(9):764
'HIV specialists': the time has come. Zuger A, et al. **JAMA** 1997 Oct 8;278(14):1131–2
Doctors and healthcare reform [editorial; comment] Duckett SJ. **Med J Aust** 1997 Aug 18;167(4):184–5. Comment on: Med J Aust 1997 Aug 18;167(4):201–4.
Injury prevention and control. An evolving role for emergency physicians and other specialists. Garrison HG, et al. **N C Med J** 1997 Jul–Aug;58(4):279–83
Outcome of acute myocardial infarction according to the specialty of the admitting physician [letter; comment] Eaton CB, et al. **N Engl J Med** 1997 May 29;336(22):1608; discussion 1608–9. Comment on: N Engl J Med 1996 Dec 19;335(25):1880–7.
The role of "hospitalists" in the health care system [letter; comment] Epstein D. **N Engl J Med** 1997 Feb 6;336(6):444; discussion 445–6. Comment on: N Engl J Med 1996 Aug 15;335(7):514–7.
The role of "hospitalists" in the health care system [letter] Guttler S. **N Engl J Med** 1997 Feb 6;336(6):444–5; discussion 445–6
Outcome of acute myocardial infarction according to the specialty of the admitting physician [letter; comment] Marciniak TA. **N Engl J Med** 1997 May 29;336(22):1607–8; discussion 1608–9. Comment on: N Engl J Med 1996 Dec 19;335(25):1880–7.
Outcome of acute myocardial infarction according to the specialty of the admitting physician [letter; comment] Starfield B. **N Engl J Med** 1997 May 29;336(22):1607; discussion 1608–9. Comment on: N Engl J Med 1996 Dec 19;335(25):1880–7.
The role of the breast physician in the multidisciplinary breast centre. Harman J, et al. **N Z Med J** 1997 Feb 14; 110(1037):39–41
Comment on Merskey (Pain 64 (1996) 205) [letter; comment] Baños JE. **Pain** 1996 Sep;67(1):227. Comment on. Pain 1996 Jan;64(1):205.

Pain specialists and pain terms [see comments] Merskey H. **Pain** 1996 Jan;64(1):205. Comment in: Pain 1996 Sep;67(1):227.
Job stress and satisfaction among palliative physicians. Graham J, et al. **Palliat Med** 1996 Jul;10(3):185–94
Prescribing analgesics: the effect of patient age and physician specialty. Hauswald M, et al. **Pediatr Emerg Care** 1997 Aug; 13(4):262–3
Consultant's role. Inaba AS, et al. **Pediatr Emerg Care** 1996 Aug;12(4):311–6
Poor feedback from specialists [letter] Marais PG. **S Afr Med J** 1997 Jun;87(6):766, 768
Survey of physicians' attitudes about risks and benefits of chest computed tomography. Renston JP, et al. **South Med J** 1996 Nov;89(11):1067–73
Pain and symptom control for cancer patients at the University Hospital in Essen: integration of specialists' knowledge into routine work. Kloke M, et al. **Support Care Cancer** 1996 Nov;4(6):404–7
Overhauling the federation of medicine. Sewell T. **Tenn Med** 1996 Sep;89(9):319–21
Of primary concern [see comments] BeSaw L. **Tex Med** 1996 Nov;92(11):36–42. Comment in: Tex Med 1997 Feb;93(2):9.
The gastroenterologist and his endoscope: the embodiment of technology and the necessity for a medical ethics. Cooper MW. **Theor Med** 1996 Dec;17(4):379–98 (56 ref.)
[The sentinel function of the family physician examined with referrals and referral cards (letter; comment)] Mol R. **Ned Tijdschr Geneeskd** 1996 Sep 21;140(38):1923. Comment on: Ned Tijdschr Geneeskd 1996 Jul 20;140(29):1499–504. **(Dut)**
[Financial limits to care; a survey among physicians] Wouters MW, et al. **Ned Tijdschr Geneeskd** 1997 Jan 25; 141(4):206–10 (Eng. Abstr.) **(Dut)**
[Role models of residents graduating in family medicine and in different specialties in Quebec] Côté L, et al. **Can Fam Physician** 1997 May;43:907–13 (Eng. Abstr.) **(Fre)**
[Thoracic surgery and certification of the specialty] Watanabe Y. **Kyobu Geka** 1997 Jan;50(1):46–4 (5 ref.) **(Jpn)**
[Rheumatology and pediatrics] Watanabe N. **Ryumachi** 1997 Apr;37(2):152–3 **(Jpn)**
[Analysis of reality in psychiatry specialty certification—viewed from experience in pediatrics (discussion)] Kajiwara K. **Seishin Shinkeigaku Zasshi** 1997; 99(5):291–4; discussion 294–300 **(Jpn)**
[Psychiatrists and their identity] Kasahara Y. **Seishin Shinkeigaku Zasshi** 1996;98(9):597–602 (4 ref.) **(Jpn)**
[Survey on physicians' attitude toward specialty certification— report by specialty board] Takagi S, et al. **Seishin Shinkeigaku Zasshi** 1997;99(5):286–90 **(Jpn)**
[Problems in establishment of psychiatry specialty certification—viewed from an experience at Musashi National Hospital in Japan] Uno S. **Seishin Shinkeigaku Zasshi** 1997;99(5):278–81 (0 ref.) **(Jpn)**
[Confusion dialogues. A critical look at the clinical development] Berg O, et al. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1163–8 **(Nor)**
[Unlimited demand for specialists?] Skoglund E. **Tidsskr Nor Laegeforen** 1996 Nov 20;116(28):3321–2 **(Nor)**
[On the scientific substantiation of specialization of family physicians practising at the resorts] Vinokurov BL, et al. **Probl Sotsialnoi Gig Istor Med** 1997 Jan–Feb;(1):43–7 **(Rus)**
[The organization of a continuous quality control of health care at a multi-specialty inpatient clinic under the system of comprehensive medical insurance] Zimin VP. **Probl Sotsialnoi Gig Istor Med** 1996 May–Jun;(3):31–6 **(Rus)**
[Coordination of general and specialized medicine. Evaluation in the Burgos area] Rivas Crespo JC, et al. **Aten Primaria** 1997 Mar 31;19(5):257–61 (Eng. Abstr.) **(Spa)**
[Specialization and specialties in medicine] García-Sainz M, et al. **Gac Med Mex** 1997 Mar–Apr;133(2):79–90 **(Spa)**
[Percutaneous treatment (letter)] Blasco Casares FJ, et al. **Med Clin (Barc)** 1997 May 31;109(1):38 **(Spa)**
[Percutaneous treatment (letter; comment)] Estevan J, et al. **Med Clin (Barc)** 1997 May 31;109(1):38–9. Comment on: Med Clin (Barc) 1996 Mar 2;106(8):294–7. **(Spa)**
[Health care management: coordination of health care assistance levels (letter; comment)] Moya Mir MS, et al. **Med Clin (Barc)** 1996 Sep 21;107(9):359. Comment on: Med Clin (Barc) 1996 Feb 10;106(5):182–4. **(Spa)**
[It's time to join efforts in favor of the accreditation in infectious diseases (letter; comment)] Muñoz Sanz A. **Med Clin (Barc)** 1997 Jun 14;109(3):115. Comment on: Med Clin (Barc) 1995 Oct 28;105(14):534–6. Comment on: Med Clin (Barc) 1996 Sep 28;107(10):399. **(Spa)**
[It's time to join efforts in favor of the accreditation in infectious diseases (letter; comment)] Pahissa Berga A. **Med Clin (Barc)** 1997 Jun 14;109(3):115; discussion 115–6 . Comment on: Med Clin (Barc) 1996 Sep 28;107(10):399. **(Spa)**
[Nuclear medicine. Now a specialty in itself] Granerus G, et al. **Lakartidningen** 1997 May 21;94(21):2001–7 **(Swe)**
[Pain relief. A new medical specialty focused on prolonged pain] Sjölund B. **Lakartidningen** 1997 May 21;94(21):1984 **(Swe)**

CLASSIFICATION

Characteristics of clinical medicine [letter] Wu CP. **Int J Urol** 1997 Jul;4(4):433
[The present and future of the specialty Microbiology and Parasitology (letter)] Baldovín G. **Enferm Infecc Microbiol Clin** 1995 Dec;13(10):640–1 **(Spa)**
[A new specialty? (letter)] Rodríguez-Torres A. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):404 **(Spa)**

ECONOMICS

CMPA fees [letter; comment] Stefanovich C. **Can Med Assoc J** 1997 May 15;156(10):1378–9. Comment on: Can Med Assoc J 1997 Mar 1;156(5):685–7.
Programmatic role of the infectious diseases physician in controlling antimicrobial costs in the hospital. John JF Jr, et al. **Clin Infect Dis** 1997 Mar;24(3):471–85 (89 ref.)
Physicians. Greater expectations [news] **Hosp Health Netw** 1997 Aug 20;71(16):19
Patient choice of physician: do health insurance and physician characteristics matter? Cooper PF, et al. **Inquiry** 1996 Fall; 33(3):237–46
Development of provider networks for specific diseases. Pristave RJ, et al. **J Health Care Finance** 1995 Winter; 22(2):27–41 (17 ref.)
An examination of cross-specialty linkage applied to the resource-based relative value scale. Glickman ME, et al. **Med Care** 1997 Aug;35(8):843–66
Specialty networks. McIntire T. **Mo Med** 1996 Jul; 93(7):352–5
The impact of managed care on the physician marketplace [see comments] Simon CJ, et al. **Public Health Rep** 1997 May–Jun;112(3):222–30. Comment in: Public Health Rep 1997 May–Jun;112(3):219–21.
[Pending EBM becomes effective 1 July 1997] Rüggeberg JA. **Chirurg** 1997 Feb;68(2):Suppl 48–52 **(Ger)**
[Survey of income and costs of general practitioners and specialists in private practice 1995] Taraldset A, et al. **Tidsskr Nor Laegeforen** 1996 Oct 20;116(25):3052–4 **(Nor)**

EDUCATION

Level I trauma certification and emergency medicine resident major trauma experience. Howell JM, et al. **Acad Emerg Med** 1996 Apr;3(4):366–70
Career characteristics of graduates of a Medical Scientist Training Program, 1970–1990. Bradford WD, et al. **Acad Med** 1996 May;71(5):484–7
A study of medical students' specialty-choice pathways: trying on possible selves. Burack JH, et al. **Acad Med** 1997 Jun;72(6):534–41
A systematic analysis of how medical school characteristics relate to graduates' choices of primary care specialties. Senf JH, et al. **Acad Med** 1997 Jun;72(6):524–33
The UEMS model—proposals for classification and training durations of specialties registered in doctors' directives. European Union of Medical Specialists. Calliauw L. **Acta Neurochir Suppl (Wien)** 1997;69:65–9
1997 ASP Leadership Conference: report on the status of subspecialty training. Blonde L, et al. **Am J Med** 1997 Aug; 103(2):87–91
Training in laparoscopic surgery—have we got it right yet? Ooi LL. **Ann Acad Med Singapore** 1996 Sep;25(5):732–6 (34 ref.)
Pediatric rheumatology: status of the subspecialty in United States medical schools. Cassidy JT, et al. **Arthritis Rheum** 1997 Jun;40(6):1182
From novice to proficient general practitioner: a critical incident study. Sim MG, et al. **Aust Fam Physician** 1996 Sep;25(9 Suppl 2):S59–64
Assessment of competence of trainees in the medical specialties. Banning AP, et al. **Br J Hosp Med** 1996 Dec 11–1997 Jan 14;56(11):588–9 (4 ref.)
Training clinical academics for the future [editorial] Paice E, et al. **Br J Hosp Med** 1996 Aug 21–Sep 3;56(4):130–1
The perfect specialty. Pietroni M. **Br J Hosp Med** 1996 Jun 5–18;55(11):693–4
The consequences of the Calman Report on academic rheumatology [editorial] Isenberg DA, et al. **Br J Rheumatol** 1996 Jul;35(7):608–10
Specialist training into the new millennium: the price of conformity with Europe [editorial] Swannell AJ. **Br J Rheumatol** 1996 Jul;35(7):607–8
Negative health care environment weighing on residents, survey reveals. Rafuse J. **Can Med Assoc J** 1997 Apr 15; 156(8):1186
Can we finally change the system? [letter; comment] Becker AB. **CMAJ** 1997 Jul 15;157(2):136; discussion 139. Comment on: Can Med Assoc J 1997 Mar 1;156(5):665–7.
Can we finally change the system? [letter; comment] Marshall DG. **CMAJ** 1997 Jul 15;157(2):138. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.
Can we finally change the system? [letter; comment] Maudsley RF. **CMAJ** 1997 Jul 15;157(2):138. Comment on: Can Med Assoc J 1997 Mar 1;156(5):665–7.
Can we finally change the system? [letter; comment] Narini P. **CMAJ** 1997 Jul 15;157(2):134, 136; discussion 139. Comment on: Can Med Assoc J 1997 Mar 1;156(5):665–7. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.
Can we finally change the system? [letter; comment] Smith DH. **CMAJ** 1997 Jul 15;157(2):136, 138; discussion 139. Comment on: Can Med Assoc J 1997 Mar 1;156(5):665–7. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.
The effects of the health reform act GSG on specialist medical training [editorial] Ratzel R. **Eur J Obstet Gynecol Reprod Biol** 1995 Dec;63(2):113–4
Guidelines for a training programme in intensive care medicine. European Society of Intensive Care Medicine, European Society of Pediatric Intensive Care. **Intensive Care Med** 1996 Feb;22(2):166–72
Assessment of care of patients with asthma in a family practice training program. Craig TJ. **J Am Osteopath Assoc** 1996 May;96(5):305–8
Communication in medical education: the future for specialist services. Morton R. **J Biocommun** 1995;22(3):8–11
Can a specialty society educate its members to think differently about clinical decisions? Results of a randomized trial. Gifford DR, et al. **J Gen Intern Med** 1996 Nov; 11(11):664–72
Effects of an inpatient geriatrics rotation on internal medicine residents' knowledge and attitudes [see comments] Lindberg MC, et al. **J Gen Intern Med** 1996 Jul; 11(7):397–400. Comment in: J Gen Intern Med 1996 Jul;11(7):435–6. Comment in: J Gen Intern Med 1996 Dec;11(12):776.
Teaching in the outpatient clinic. Practical tips. McGee SR, et al. **J Gen Intern Med** 1997 Apr;12 Suppl 2:S34–40 (29 ref.)
Calman's not for me [letter; comment] Eddleston M. **J R Coll Physicians Lond** 1997 May–Jun;31(3):342–3. Comment on: J R Coll Physicians Lond 1996 Jul–Aug;30(4):286–8.
Primary care specialty choices of University of Kansas medical students, 1982–1991. Holmes GE, et al. **Kans Med** 1995 Winter;96(4):169–75
Physician staffing in intensive care units [letter; comment] Evans TW, et al. **Lancet** 1997 Jan 18;349(9046):213. Comment on: Lancet 1996 Nov 30;348(9040):1464–5.
Specialist training. Bayley TJ. **Med Educ** 1995;29 Suppl 1:95–6
Certification in postgraduate medical education. Calman KC. **Med Educ** 1995;29 Suppl 1:100–2
Questions of training—choice or force? [see comments] Bennett MI, et al. **Palliat Med** 1996 Jan;10(1):43–7. Comment in: Palliat Med 1996 Oct;10(4):344.
Recommendations of the European Board for the Specialty Cardiology (EBSC) for education and training in basic cardiology in Europe. The Executive Committee of the European Board for the Specialty Cardiology. **Rev Port Cardiol** 1996 Dec;15(12):947–51
A survey of rheumatology training centers in France. Amor B. **Rev Rhum Engl Ed** 1996 Jul–Sep;63(7–8):493–7
New ways to teach general internal medicine—the role of ambulatory subspecialty rotations. Hellmann DB, et al. **Trans Am Clin Climatol Assoc** 1996;108:259–67; discussion 267–70
[A different college of pediatrics] Monteiro JM. **Acta Med Port** 1997 Feb–Mar;10(2–3):127–8 (Eng. Abstr.) **(Por)**
[A structural analysis of the entrance exams for specialist interns from 1994 to 1996] Morgado V, et al. **Acta Med Port** 1997 May;10(5):387–90 (Eng. Abstr.) **(Por)**
[The teaching of anesthesiology and the title of specialist in anesthesiology (editorial)] Maia JC. **Rev Bras Anestesiol** 1968 Oct–Dec;18(4):371–3 **(Por)**
[Experience in training personnel for clinical diagnostic laboratories at a medical university] Emanuél' VL, et al. **Klin Lab Diagn** 1997 Feb;(2):12–4 **(Rus)**
[Methodological bases for raising the quality of physician training in gastroenterology] Medvedev VN, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):199–201 **(Rus)**
[Methodological bases for the training of a therapist in cardiology in light of physician certification] Selivonenko VG, et al. **Lik Sprava** 1996 Jul–Sep;(7–9):195–8 (Eng. Abstr.) **(Rus)**
[The forms and methods of specialist postgraduate training] Trubilin NT. **Probl Sotsialnoi Gig Istor Med** 1995 Jan–Feb; (1):41–3 (Eng. Abstr.) **(Rus)**
[Theory and practice in medical specialization. I. An instrument for measuring learning strategies] Jiménez Ramírez JL, et al. **Rev Invest Clin** 1996 May–Jun; 48(3):179–84 (Eng. Abstr.) **(Spa)**
[Alarming reduction of specialist education (letter)] Törnqvist T. **Lakartidningen** 1997 May 28;94(22):2068 **(Swe)**
[Quality assurance in special education—which direction will the UEMS take? (European Union of Medical Specialists)] Halila H. **Nord Med** 1996 Oct;111(8):287 **(Swe)**

HISTORY

Pathology: a historical opportunity [editorial] Rosai J. **Am J Pathol** 1997 Jul;151(1):3–6
Medical directories and medical specialization in France, Britain, and the United States. Weisz G. **Bull Hist Med** 1997 Spring;71(1):23–68

LEGISLATION & JURISPRUDENCE

1995 Le Tourneau Award. An antitrust analysis of physician

specialty networks under changing market conditions. Woodhall AL. **J Leg Med** 1996 Sep;17(3):383–425
Dr RJ Rankin guilty of professional misconduct. **N Z Med J** 1997 Jul 11;110(1047):259–60
[Inspection of medical specialists from a legal perspective] Lombarts MJ, et al. **Ned Tijdschr Geneeskd** 1996 Sep 7; 140(36):1824–7 **(Dut)**
[Legal problems in the activities of the anesthesia–resuscitation specialist] Vanevskii VL. **Anesteziol Reanimatol** 1995 Nov–Dec;(6):60–3 **(Rus)**
[The certification of specialists for the physiotherapy service (news)] Sheina AN. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 May–Jun; (3):45–6 **(Rus)**

MANPOWER

Analysis of factors affecting U.S. emergency physician workforce projections. SAEM Workforce Task Force [see comments] Holliman CJ, et al. **Acad Emerg Med** 1997 Jul; 4(7):731–5. Comment in: Acad Emerg Med 1997 Jul;4(7):648–50.
A comparison of the overall NRMP match results with the results for 19 specialties for senior U.S. medical students, 1996. Andriole D, et al. **Acad Med** 1997 Sep;72(9):801–3
Results of the National Resident Matching Program for 1996. Randlett RR, et al. **Acad Med** 1996 Jun;71(6):697–9
Storm of protest greets motion to restrict specialty exams. Square D. **Can Med Assoc J** 1997 Apr 15;156(8):1188–9
Medical and dental staffing in the National Health Service in Scotland in 1994. Ewing DJ. **Health Bull (Edinb)** 1996 Jan;54(1):79–87
Forecasting the need for physicians in the United States: the Health Resources and Services Administration's physician requirements model. Greenberg L, et al. **Health Serv Res** 1997 Feb;31(6):723–37
Physicians ... specialists, brace yourselves for more future shock [news] **Hosp Health Netw** 1996 Dec 5;70(23):16
Education. Crowded fields [news] **Hosp Health Netw** 1997 Jun 20;71(12):15
Generalists vs. specialists. Doctors got a brand new bag. Montague J. **Hosp Health Netw** 1996 Nov 5;70(21):56, 58
Factors affecting specialty and location of practice of government-sponsored physicians in Taiwan. Chie WC, et al. **J Formos Med Assoc** 1997 Jul;96(7):535–41
Medical specialties face residency cutbacks [news] Kotz D. **J Nucl Med** 1997 Apr;38(4):13N–14N, 18N
Defining primary care. Empirical analysis of the National Ambulatory Medical Care Survey. Franks P, et al. **Med Care** 1997 Jul;35(7):655–68
Reap what you sow. Towns J. **Mich Med** 1996 Apr; 95(4):16–7
Ratio of specialists to family practitioners in the United States [letter; comment] Biebuyck JF. **N Engl J Med** 1997 Jul 24;337(4):281–2. Comment on: N Engl J Med 1997 Mar 20;336(12):891–5.
Downsizing the physician workforce [see comments] McClendon BJ, et al. **Public Health Rep** 1997 May–Jun; 112(3):231–9 (48 ref.). Comment in: Public Health Rep 1997 May–Jun;112(3):219–21.

METHODS

[In favor of a limitless infectious disease specialty (letter; comment) (see comments)] Alvarez Lerma F. **Med Clin (Barc)** 1996 Sep 28;107(10):399. Comment on: Med Clin (Barc) 1997 Jun 14;109(3):115. Comment in: Med Clin (Barc) 1997 Jun 14;109(3):115, discussion 115–6. **(Spa)**

ORGANIZATION & ADMINISTRATION

Long-term follow-up in outpatient clinics. 2: The view from the specialist clinic. Burkey Y, et al. **Fam Pract** 1997 Feb; 14(1):29–33
Long-term follow-up in outpatient clinics. 1: The view from general practice. Reeve H, et al. **Fam Pract** 1997 Feb; 14(1):24–8
The balancing breed. Is it time for a new class of inpatient specialists? Speer TL. **Hosp Health Netw** 1997 Feb 5; 71(3):44–6
Tumor board formats: "fascinating case" versus "working conference". Vetto JT, et al. **J Cancer Educ** 1996 Summer; 11(2):84–8
Creating a health systems department at a medical school. Sun S, et al. **N J Med** 1996 Oct;93(10):51–4
[The relationship between primary and specialized care] Gómez Moreno N, et al. **Aten Primaria** 1997 Jun 15; 20(1):25–32 (Eng. Abstr.) **(Spa)**

STANDARDS

Special qualifications in spinal cord injury medicine: a commentary [letter] Hammond MC, et al. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):82–3
The Scottish Royal Colleges: a prospective survey of continuing medical education undertaken by their examiners. Thomas JS, et al. **Health Bull (Edinb)** 1996 Jan; 54(1):66–78
Characteristics of clinical medicine [letter] Wu CP. **Int J Urol** 1997 Jul;4(4):433
In search of America's best hospitals. The promise and reality of quality assessment [see comments] Green J, et al. **JAMA** 1997 Apr 9;277(14):1152–5. Comment in: JAMA 1997 Aug 13;278(6):473; discussion 474–5. Comment in: JAMA 1997 Aug 13;278(6):473–4; discussion 474–5. Comment in: JAMA 1997 Aug 13;278(6):474; discussion 474–5.
Accreditation and certification [letter] Heyman JM. **N Engl J Med** 1997 Sep 18;337(12):857–8; discussion 859
The new surrogates for board certification — what should the standards be? [editorial] Kassirer JP. **N Engl J Med** 1997 Jul 3;337(1):43–4
Accreditation and certification [letter] Nelson AR. **N Engl J Med** 1997 Sep 18;337(12):858; discussion 859
Accreditation and certification [letter] Smoak RD Jr. **N Engl J Med** 1997 Sep 18;337(12):857; discussion 859
Accreditation and certification [letter] Volpintesta EJ. **N Engl J Med** 1997 Sep 18;337(12):859
[The certification of specialists and of state epidemiological health service entities as a means of enhancing their efficiency and readiness for action in emergency situations] Zaichenko AI, et al. **Gig Sanit** 1996 May–Jun;(3):42–4 **(Rus)**
[The certification of physiotherapists] Sheina AN. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Mar–Apr; (2):46–8 **(Rus)**

STATISTICS & NUMERICAL DATA

Career characteristics of graduates of a Medical Scientist Training Program, 1970–1990. Bradford WD, et al. **Acad Med** 1996 May;71(5):484–7
Examining which medical specialties are the most active in producing research. Gourgoulianis KI, et al. **Acad Med** 1996 May;71(5):511–2
The scope of the data available in the AMA's Physician Masterfile [letter; comment] Kenward K. **Am J Public Health** 1996 Oct;86(10):1481–2. Comment on: Am J Public Health 1995 Oct;85(10):1402–7.
Specialist and generalist physicians' adoption of antibiotic therapy to eradicate Helicobacter pylori infection. Hirth RA, et al. **Med Care** 1996 Dec;34(12):1199–204
Health service reform: the perceptions of medical specialists in Australia (New South Wales), the United Kingdom and New Zealand [see comments] Perkins RJ, et al. **Med J Aust** 1997 Aug 18;167(4):201–4. Comment in: Med J Aust 1997 Aug 18;167(4):184–5.
Medical specialty and the incidence of divorce. Rollman BL, et al. **N Engl J Med** 1997 Mar 13;336(11):800–3
Mortality of doctors in different specialties: findings from a cohort of 20000 NHS hospital consultants. Carpenter LM, et al. **Occup Environ Med** 1997 Jun;54(6):388–95
Physician attitudes toward managing obesity: differences among six specialty groups. Kristeller JL, et al. **Prev Med** 1997 Jul–Aug;26(4):542–9
Travel distance to subspecialty and general mental health services. Marcus SC, et al. **Psychiatr Serv** 1997 Jun; 48(6):775
Utilization of medical specialists by anxiety disorder patients. Kennedy BL, et al. **Psychosomatics** 1997 Mar–Apr; 38(2):109–12
[Hospitalization demand for medical specialties in a health area with 200,000 inhabitants] Cabañes Argudo M, et al. **An Med Interna** 1996 Jul;13(7):322–30 (Eng. Abstr.) **(Spa)**

TRENDS

Job security concerns and specialty choice [letter] Markham FW Jr. **Acad Med** 1996 Jun;71(6):576
Where have all the specialists gone? Sachs FL, et al. **Acad Med** 1996 Dec;71(12):1285–6
Dissolution of traditional surgical disciplinary boundaries. Galandiuk S, et al. **Am J Surg** 1997 Jan;173(1):2–8
Specialist management: needs and benefits. Stucki G. **Baillieres Clin Rheumatol** 1997 Feb;11(1):97–107 (49 ref.)
Clinical pharmacology and therapeutics—past, present and future. Reid JL. **Br J Clin Pharmacol** 1997 Jul;44(1):101–3
Our future physicians deserve better [letter; comment] Marshall DG. **CMAJ** 1997 Jun 15;156(12):1701. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.
Role of the allergist/immunologist as a subspecialist. Committee on the Role of the Allergist/Immunologist as a Subspecialist. **J Allergy Clin Immunol** 1997 Sep; 100(3):288–9
Allergy care in the next millennium: guidelines for the specialty. Kaliner M. **J Allergy Clin Immunol** 1997 Jun;99(6 Pt 1):729–34
An osteopathic prescription for medical education reform: Part 2. Specialty mix and community integration. Ross-Lee B, et al. **J Am Osteopath Assoc** 1997 Aug;97(8):463–8 (18 ref.)
In pursuit of generalism: basic factors influencing the specialty decisions of osteopathic medical school seniors in 1995. Singer AM. **J Am Osteopath Assoc** 1996 Nov; 96(11):699–703
Changes in attitude, changes in latitude [editorial] Pinsky MR. **J Crit Care** 1995 Dec;10(4):151–3
Contempo 1997. **JAMA** 1997 Jun 18;277(23):1827–905
Contempo 1997: the face of medicine [letter] Katz MH. **JAMA** 1997 Oct 8;278(14):1150
Initial employment status of resident physicians completing training in 1995. Miller RS, et al. **JAMA** 1997 Jun 4; 277(21):1699–704
[Society of Medical Specialty Professional Organizations] Holfelder G. **Chirurg** 1996 Sep;67(9):suppl 215–6 **(Ger)**
[Prevention, standards and future developments in medial specialties—research] Vosteen KH. **Z Arztl Fortbild (Jena)** 1996 Jun;90(4):325–38 **(Ger)**
[The European Cardiologist of the year 2000. II (editorial)] Ferreira R. **Rev Port Cardiol** 1996 Dec;15(12):945–6 **(Por)**
[Specialized medical education debated (letter; comment)] Losa García JE, et al. **Med Clin (Barc)** 1997 Feb 15; 108(6):237. Comment on: Med Clin (Barc) 1996 May 4;106(17):653–5. **(Spa)**
[Medical subspecialities and health policies: Health Ministry view] Carabantes J. **Rev Med Chil** 1996 Apr;124(4):501–4 (Eng. Abstr.) **(Spa)**

SPECIALTIES, NURSING

Health practices of critical care nurses: are these nurses good role models for patients? Connolly MA, et al. **Am J Crit Care** 1997 Jul;6(4):261–6
Making a profession visible: three nurses' stories [editorial] Dracup K, et al. **Am J Crit Care** 1997 Jul;6(4):256–8
Dangling practices of 51 nurses: a pilot project. Lane LD, et al. **Am J Crit Care** 1997 May;6(3):177–82
Use of the Trendelenburg position by critical care nurses: Trendelenburg survey. Ostrow CL. **Am J Crit Care** 1997 May;6(3):172–6
The "gail force winds" of healthcare reform [letter; comment] Perkins R. **Am J Crit Care** 1997 May;6(3):255. Comment on: Am J Crit Care 1997 Mar;6(2):85–7.
A SANE approach to sexual assault. Hatmaker D. **Am J Nurs** 1997 Aug;97(8):80
Job descriptions, competencies, and education for perioperative trauma nurses; standardized trauma setups. King C. **AORN J** 1996 Sep;64(3):470–2
The informatics nurse and the certification process. Newbold SK. **Comput Nurs** 1996 Mar–Apr;14(2):84–5, 88
Gynaecological nursing. McQueen A. **J Adv Nurs** 1997 Apr; 25(4):767–74
The meaning of the acronym MULTIFIT [letter; comment] Cheng TO. **J Cardiovasc Nurs** 1997 Jan;11(2):ix. Comment on: J Cardiovasc Nurs 1996 Oct;11(1):76–87.
The role and practice of the genetic nurse: report of the AGNC Working Party. Skirton H, et al. **J Med Genet** 1997 Feb;34(2):141–7
Forensic RNs as photographers. Documentation in the ED. Pasqualone GA. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):47–51
Using crime statistics in nursing. Standing Bear ZG. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):16–23
Bringing endocrine nursing to rural and outback Australia. Nery ML. **Nurs Clin North Am** 1996 Dec;31(4):689–93
American Academy of Nursing's HIV/AIDS Nursing Care Summit: the final synthesis. Portillo CJ, et al. **Nurs Outlook** 1996 Sep–Oct;44(5):229–34

EDUCATION

Baccalaureate nurse educators' and critical care nurse managers' perceptions of clinical competencies necessary for new graduate baccalaureate critical care nurses. Porte-Gendron RW, et al. **Am J Crit Care** 1997 Mar; 6(2):147–58
Conceptualizing advanced nursing practice: curriculum issues to consider in the educational preparation of advanced practice nurses in the UK. Woods LP. **J Adv Nurs** 1997 Apr;25(4):820–8 (37 ref.)
A conceptual model for an adult health masters in nursing curriculum. McSweeney JC, et al. **J Nurs Educ** 1997 Feb; 36(2):82–5
Characteristics of graduate adult health nursing programs. Stokes E, et al. **J Nurs Educ** 1997 Feb;36(2):54–9

HISTORY

Class struggles in the tubercular world: nurses, patients, and physicians, 1903–1915. Robbins JM. **Bull Hist Med** 1997 Fall;71(3):412–34

METHODS

Centering: reducing rape trauma syndrome anxiety during a gynecologic examination. Dole PJ. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):32–7
Forensic nursing implications and the forensic autopsy. Hoyt CA, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Oct; 34(10):24–31
Shared roles ensure complete care for sexual assault survivors. McNair S, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):38–41
The impact of child sexual abuse on the children of survivors. Implications for forensic nursing. Palmer L. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):42–6 (19 ref.)

ORGANIZATION & ADMINISTRATION

Adopt the singular title: advanced practice nurse [letter] Meister J. **Nurse Pract** 1995 Aug;20(8):23–4, 33

STANDARDS

Certainty [editorial] Bryan-Brown CW, et al. **Am J Crit Care** 1997 May;6(3):170–1
British studies which measure patient outcome, 1990–1994. French B. **J Adv Nurs** 1997 Aug;26(2):320–8 (27 ref.)

SPECIALTIES, NURSING

American Board of Nursing Specialties: past, present, and future. Burns K, et al. **Nurs Outlook** 1997 May–Jun; 45(3):114–7

TRENDS

The expanding role of the nurse in rheumatology [editorial] Hill J. **Br J Rheumatol** 1997 Apr;36(4):410–2
A look at nursing informatics. Saba VK. **Int J Med Inf** 1997 Mar;44(1):57–60
Advances in forensic nursing: new dimensions for the 21st century [editorial] Lynch VA.
J Psychosoc Nurs Ment Health Serv 1996 Oct;34(10):6–7
Nursing informatics in Australia. Hovenga EJ.
MD Comput 1997 Mar–Apr;14(2):119–25, 129

SPECIALTIES, SURGICAL

Careers in academic medicine. Specialist training programme in oral surgery is good model for other specialties [letter] Shepherd J. **BMJ** 1997 Sep 6;315(7108):608–9
Primary care provision of specialist services [editorial] Shanks J, et al. **Br J Gen Pract** 1997 Apr;47(417):199–200
Experience of women in a surgical specialty. Kalen V.
J Fla Med Assoc 1996 Aug–Sep;83(7):502–4
Surgical research specialist certification: it's time to expand the program [editorial] Dennis MB Jr. **J Invest Surg** 1997 May–Jun;10(3):v–vi
Disagreement about degrees [letter] Engel JD.
J Oral Maxillofac Surg 1997 Sep;55(9):1036
Double degree members and their importance to AAOMS. American Association of Oral and Maxillofacial Surgeons [editorial] Laskin DM. **J Oral Maxillofac Surg** 1997 Sep; 55(9):911
Who should treat pyloric stenosis: the general or specialist pediatric surgeon? Brain AJ, et al. **J Pediatr Surg** 1996 Nov;31(11):1535–7
Colon and rectal surgery as a specialty [letter; comment] O'Connor JJ. **J R Soc Med** 1997 Jan;90(1):59. Comment on: J R Soc Med 1996 Nov;89(11):601–3.
Impact of the in–house trauma surgeon on initial patient care, outcome, and cost. Luchette F, et al. **J Trauma** 1997 Mar; 42(3):490–5; discussion 495–7
[Role models of residents graduating in family medicine and in different specialties in Quebec] Côté L, et al.
Can Fam Physician 1997 May;43:907–13 (Eng. Abstr.) **(Fre)**
[The general surgeon in the field of specialists (editorial)] Melchler GA. **Schweiz Rundsch Med Prax** 1996 Nov 26; 85(48):1534–6 **(Ger)**

EDUCATION

So you want to train in coloproctology. Nicholls RJ.
Br J Hosp Med 1997 Jun 4–17;57(11):571–2
So you want to train in paediatric surgery. Spitz L.
Br J Hosp Med 1996 Sep 18–Oct 1;56(6):281–3
So you want to train in general surgery. Watkin D.
Br J Hosp Med 1997 Jun 4–17;57(11):569–70
World Federation of Surgical Oncology Societies Surgical Oncology Training Program Guidelines. Education Committee. **J Surg Oncol** 1996 Oct;63(2):136–7
Training of medical specialists—is there a hidden agenda? [letter] al–Jawad ST, et al. **Lancet** 1996 Dec 7; 348(9041):1590

HISTORY

The development of the specialty of oral and maxillofacial surgery in the European Union [editorial] Peiffer R.
J Craniomaxillofac Surg 1996 Aug;24(4):193–4
Reflections on a career in foot and ankle care: Basil M. Boyd, Jr., MD Miller Orthopaedic Clinic 1958–1992. Anderson RB. **J South Orthop Assoc** 1994 Winter;3(4):306–11
[The role of Soviet surgeons in the formation and development of surgical stomatology in Russia] Gubin MA, et al. **Vestn Khir Im I I Grek** 1996;155(4):92–3 **(Rus)**

MANPOWER

Defining primary care. Empirical analysis of the National Ambulatory Medical Care Survey. Franks P, et al.
Med Care 1997 Jul;35(7):655–68
Function of "nontrauma" surgeons in level I trauma centers in the United States. Pate JW. **World J Surg** 1997 Jun; 21(5):564–8

ORGANIZATION & ADMINISTRATION

Plastic and reconstructive surgery of the craniomaxillofacial and head and neck region: an interdisciplinary field [editorial] Posnick J, et al. **Plast Reconstr Surg** 1997 Jan; 99(1):208–9

STANDARDS

Leaving the nest: should vascular surgery seek board status separate from general surgery? Veith FJ.
Semin Vasc Surg 1997 Jun;10(2):81–4
[Quality assurance in trauma surgery—meaning, characteristics and methods] Ekkernkamp A.
Unfallchirurgie 1996 Dec;22(6):273–7 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

[Lack of specialists in gastroenterological surgery] Schlichting E, et al. **Tidsskr Nor Laegeforen** 1996 Nov 20; 116(28):3352–3 (Eng. Abstr.) **(Nor)**
[The application of cluster analysis in grouping hospital specialties (letter)] Sicras Mainar A, et al. **Gac Sanit** 1996 Nov–Dec;10(57):311–2 **(Spa)**

TRENDS

Postgraduate surgical training—an era of subspecialisation: qua vadis (where are you going?). Low CH.
Ann Acad Med Singapore 1997 Mar;26(2):241–3
Career opportunities for medical specialisation in the 21st century. Tan C. **Ann Acad Med Singapore** 1997 Mar; 26(2):249–50
The future of oesophageal and gastric surgery. Siewert JR.
Ann Chir Gynaecol 1996;85(3):196–200 (1 ref.)
Will the real plastic surgeon please stand up? [editorial] Krieger LM. **Plast Reconstr Surg** 1997 Sep;100(4):1059–60

SPECIALTY BOARDS

Structured emergency medicine board review and resident in–service examination scores. Gillen JP.
Acad Emerg Med 1997 Jul;4(7):715–7
Relationship between American College of Radiology in–training examination scores and American Board of Radiology written examination scores. Baumgartner BR, et al. **Acad Radiol** 1996 Oct;3(10):873–8
Stress and the boards. Kahn J, et al. **Acad Radiol** 1996 May; 3(5):445–7
Experience with the EANS examinations. Braakman R.
Acta Neurochir Suppl (Wien) 1997;69:89–92
Assessment of training progress and examinations. Hoff JT, et al. **Acta Neurochir Suppl (Wien)** 1997;69:83–8
Experience with the United Kingdom examinations in neurosurgery. Pickard JD. **Acta Neurochir Suppl (Wien)** 1997;69:93–7
American Board of Orthodontics. Why case reports do not pass the ABO Phase III clinical examination.
Am J Orthod Dentofacial Orthop 1996 Nov;110(5):559–60
Role of the American Board of Emergency Medicine in the specialty of emergency medicine. Munger BS, et al.
Ann Emerg Med 1997 Aug;30(2):219–23
The European Board of Surgery Qualification. Rutten PH.
Arch Surg 1997 Aug;132(8):892–3
The College as an educational institution. Bogduk N.
Aust N Z J Surg 1997 Oct;67(10):679–81
The perfect specialty. Pietroni M. **Br J Hosp Med** 1996 Jun 5–18;55(11):693–4
Assessment of General Dental Services orthodontic standards: the Dental Practice Board's gradings compared to PAR and IOTN. Turbill EA, et al. **Br J Orthod** 1996 Aug;23(3):211–20
The European Diploma of Gastroenterology: progress towards harmonization of standards. Beattie AD, et al.
Eur J Gastroenterol Hepatol 1996 Apr;8(4):403–6
What is a national board exam in family medicine? [editorial] Schneider FD. **Fam Med** 1996 Jun;28(6):441
1995–1996 annual report of the American Board of Psychiatry and Neurology, Inc. **J Child Neurol** 1996 Nov; 11(6):479–82
Helping our cause by getting on board [editorial] Laskin DM.
J Oral Maxillofac Surg 1997 Jun;55(6):539
Survey of candidates taking the MRCP(UK) Part 2 examination. Sanderson M. **J R Coll Physicians Lond** 1996 Nov–Dec;30(6):523–6
The American Board of Vascular Surgery: rationale for its formation. **J Vasc Surg** 1997 Feb;25(2):411–3
Accreditation and certification [letter] Smoak RD Jr.
N Engl J Med 1997 Sep 18;337(12):857; discussion 859
Conduct you own American Board of Pediatric Dentistry site visit! Nelson LP. **Pediatr Dent** 1997 Jan–Feb; 19(1):65–70
Pharmacotherapy specialty certification examination. V. Further experience and refinement. The 1996 Specialty Council on Pharmacotherapy, Board of Pharmaceutical Specialties. Bosso JA, et al. **Pharmacotherapy** 1997 Mar–Apr;17(2):399–406
Leaving the nest: should vascular surgery seek board status separate from general surgery? Veith FJ.
Semin Vasc Surg 1997 Jun;10(2):81–4
Endocrine surgical training—some ABC measures. Prinz RA.
Surgery 1996 Dec;120(6):905–12
[Psychiatry specialty board certification and graduate medical education at a university hospital in Japan] Itsushima K, et al. **Seishin Shinkeigaku Zasshi** 1997; 99(5):281–6 **(Jpn)**
[Survey on physicians' attitude toward specialty certification-- report by specialty board] Takagi S, et al.
Seishin Shinkeigaku Zasshi 1997;99(5):286–90 **(Jpn)**

HISTORY

Use of practice tracks in the medical specialties [see comments] Melanson SW, et al. **Acad Emerg Med** 1996 Oct;3(10):953–7. Comment in: Acad Emerg Med 1996 Oct;3(10):907.
A curious moment: the proposal to certify nurse anesthetists by the American Board of Anesthesiology [see comments] Bacon DR. **J Clin Anesth** 1996 Nov;8(7):614–9. Comment in: J Clin Anesth 1996 Dec;8(8):683–7.
A history of the American Board of Nuclear Medicine. Ross JF. **Semin Nucl Med** 1996 Jul;26(3):191–3

LEGISLATION & JURISPRUDENCE

Legal implications of specialty board certification. Smith JJ.
J Leg Med 1996 Mar;17(1):73–111 (201 ref.)
BMP approach deters mental illness treatment [letter; comment] **Minn Med** 1997 Apr;80(4):6. Comment on: Minn Med 1997 Jan;80(1):42–3, 45–6.
An act of courage [letter; comment] Kashtan JF.
Minn Med 1997 Apr;80(4):6. Comment on: Minn Med 1997 Jan;80(1):42–3, 45–6.
Protecting physicians and the public interest [editorial] Lentz RD. **Minn Med** 1997 Jan;80(1):44

ORGANIZATION & ADMINISTRATION

NBCOT and state regulatory agencies: allies or adversaries? [see comments] Low JF. **Am J Occup Ther** 1997 Jan; 51(1):74–5. Comment in: Am J Occup Ther 1997 May;51(5):396–7.
The European Board of Surgery Qualification (EBSQ) was born in 1996. Greenhalgh R. **Ann R Coll Surg Engl** 1997 Jan;79(1 Suppl):3–4

STANDARDS

ABEM and the practice track [editorial; comment] Rund DA.
Acad Emerg Med 1996 Oct;3(10):907. Comment on: Acad Emerg Med 1996 Oct;3(10):953–7.
What should an accountable certifying board do about training programs that are substandard? Kimball HR.
Am J Med 1997 Jan;102(1):1–5

TRENDS

ABMS–ABPS–ABOto negotiations: where we've been and where we are now [editorial] Neale HW.
Ann Plast Surg 1996 Feb;36(2):221–3
American Board of Nursing Specialties: past, present, and future. Burns K, et al. **Nurs Outlook** 1997 May–Jun; 45(3):114–7

SPECIES SPECIFICITY

Sex and strain differences of acoustic startle reaction development in adolescent albino Wistar and hooded rats. Błaszczyk J, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(4):919–25
Vive la différence: males vs females in flies vs worms. Cline TW, et al. **Annu Rev Genet** 1996;30:637–702 (241 ref.)
Interspecies comparison of liver carcinogenesis: implications for cancer risk assessment. Grisham JW. **Carcinogenesis** 1997 Jan;18(1):59–81 (418 ref.)
A comparative study of whole–blood platelet aggregation in laboratory animals: its species differences and comparison with turbidimetric method. Kurata M, et al.
Comp Biochem Physiol C Pharmacol Toxicol Endocrinol 1995 Nov;112(3):359–65
Species differences between chicks and rats in inhibition of lipoprotein hydrolysis by Triton WR–1339. Sato K, et al.
Comp Biochem Physiol C Pharmacol Toxicol Endocrinol 1995 Nov;112(3):315–9
Species–specific inhibition of homologous enzymes by modification of nonconserved amino acids residues. The cysteine residues of triosephosphate isomerase.
Garza–Ramos G, et al. **Eur J Biochem** 1996 Oct 1; 241(1):114–20
Is spin lattice relaxation time independent of species? Akber SF. **Med Hypotheses** 1996 Aug;47(2):101–5
Expression of a recombinant kringle V of human apolipoprotein(a): antibody characterization and species specificity. Chenivesse X, et al. **Protein Expr Purif** 1996 Sep;8(2):145–50
Mechanism for mouse strain differences in the protective effect of Sudan III against the in vivo genotoxicity of 7,12–dimethylbenz[a]anthracene. Hatakeyama S, et al.
Toxicol Lett 1996 Dec 31;89(3):231–9
[Cytochrome P450—its significance in the biotransformation of xenobiotics and interspecies comparisons] Hrubý K, et al. **Cesk Fysiol** 1997 Mar;46(1):34–9 (24 ref.) (Eng. Abstr.) **(Cze)**

SPECIESISM see **ANIMAL RIGHTS**

SPECIFIC GRAVITY

Use of urine specific gravity to improve screening for albuminuria. Moore RR Jr, et al. **Kidney Int** 1997 Jul; 52(1):240–3

SPECIFIC PATHOGEN–FREE ORGANISMS

Considerations of specific pathogen–free swine (SPF) in xenotransplantation. Swindle MM. **J Invest Surg** 1996 Jul–Aug;9(4):267–71 (17 ref.)
Evaluation of cecal ligation as a model of mucoid enteropathy in specific–pathogen–free rabbits. Hotchkiss CE, et al.
Lab Anim Sci 1996 Apr;46(2):174–8

PHYSIOLOGY

Cell kinetics of aortic smooth muscle cells in long–term cultures prepared from rats raised under conventional and SPF conditions. Bačáková L, et al. **Physiol Res** 1995; 44(6):389–98

SPECIFICITY see SENSITIVITY AND SPECIFICITY

SPECIMEN HANDLING

Monitoring low-dose warfarin therapy by a central laboratory and implications for clinical trials and patient care. The Coumadin Aspirin Reinfarction (CARS) Pilot Study Group. Raskob GE, et al. **Am J Cardiol** 1996 Nov 1;78(9):1074-6

The role of fetal karyotyping from unconventional sources. Teoh TG, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):873-7

Complications associated with harvesting autogenous iliac bone graft. Fowler BL, et al. **Am J Orthop** 1995 Dec; 24(12):895-903 (39 ref.)

Effect of rotation on the generation of reactive oxygen species in human semen. de Jager C, et al. **Andrologia** 1996 Sep-Oct;28(5):291-3

Effect of storage on serum vitamin B12 and folate stability. Komaromy-Hiller G, et al. **Ann Clin Lab Sci** 1997 Jul-Aug; 27(4):249-53

Pap smear reports: time for another change? [editorial] Mitchell H. **Aust Fam Physician** 1997 Jan;26 Suppl 1:S3

From delivery suite to laboratory: optimizing returns from placental examination in medico-legal defence. Khong TY. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):1-5 (46 ref.)

Stability of vitamins A, C, and E, carotenoids, lipids, and testosterone in whole blood stored at 4 degrees C for 6 and 24 hours before separation of serum and plasma. Key T, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Oct; 5(10):811-4

Usefulness of collecting routine cytologic specimens during fiberoptic bronchoscopy for endoscopically visible and nonvisible lung carcinoma [letter; comment] Chau CH, et al. **Chest** 1997 Feb;111(2):522-3. Comment on: Chest 1996 Feb;109(2):451-6.

Garbage in-garbage out [editorial] Farkas DH. **Diagn Mol Pathol** 1996 Dec;5(4):225-6

Specimen stability for DNA-based diagnostic testing. Farkas DH, et al. **Diagn Mol Pathol** 1996 Dec;5(4):227-35

Stability of herpes simplex virus DNA in cerebrospinal fluid specimens. Wiedbrauk DL, et al. **Diagn Mol Pathol** 1996 Dec;5(4):249-52

The addition of a glucocorticoid to the protocol of programmed oocyte retrieval for in-vitro fertilization--a randomized study. Bi..er D, et al. **Hum Reprod** 1996 Aug; 11(8):1606-8

Addition of kallikrein and/or human serum to a discontinuous Percoll gradient [letter; comment] Depoortere B, et al. **Hum Reprod** 1996 Feb;11(2):457-8. Comment on: Hum Reprod 1995 Dec;10(12):3183-5.

Pregnancy after intracytoplasmic sperm injection of spermatozoa extracted from frozen-thawed testicular biopsy. Fischer R, et al. **Hum Reprod** 1996 Oct; 11(10):2197-9

Post-coital sperm retrieval could lead to the wider approval of assisted conception by some religions. Hirsh A. **Hum Reprod** 1996 Feb;11(2):245-7 (26 ref.)

Natural spermatoceles in irreversible obstructive azoospermia--reservoirs of viable spermatozoa for assisted conception. Hirsh AV, et al. **Hum Reprod** 1996 Sep; 11(9):1919-22

Micromanipulation improves in-vitro fertilization results after epididymal or testicular sperm aspiration in patients with congenital absence of the vas deferens. Madgar I, et al. **Hum Reprod** 1996 Oct;11(10):2151-4

Testicular sperm recovery in nine 47,XXY Klinefelter patients. Tournaye H, et al. **Hum Reprod** 1996 Aug; 11(8):1644-9

A pseudo-outbreak of respiratory infection with Acinetobacter species. Sule O, et al. **Infect Control Hosp Epidemiol** 1997 Jul;18(7):510-2

Spermatozoa selection by the swim-up procedure and two-layer percoll gradient centrifugation. Evliyaoğlu Y, et al. **Int Urol Nephrol** 1996;28(3):409-18

Human postmortem retrieval of total hip arthroplasty. Hosip-Flor S, et al. **J Arthroplasty** 1997 Aug;12(5):562-7

The order of draw of blood specimens into additive containing tubes not affect potassium and calcium measurements. Majid A, et al. **J Clin Pathol** 1996 Dec; 49(12):1019-20

Helicobacter pylori antibody titres in serum, plasma and successively thawed specimens: implications for epidemiological and clinical studies. Pearce DC, et al. **J Clin Pathol** 1996 Dec;49(12):1017-9

Spectroscopic changes in human dentine exposed to various storage solutions--short term. Strawn SE, et al. **J Dent** 1996 Nov;24(6):417-23

Collection of biological materials in biodiversity prospecting in India: problems and solutions. Mehrotra BN. **J Ethnopharmacol** 1996 Apr;51(1-3):161-5 (0 ref.)

Transportation of lymph node biopsy specimens in selective Kirchner's liquid medium for culture of tubercle bacilli. Vanajakumar, et al. **J Med Microbiol** 1997 Mar;46(3):260-2

Stability of HIV-1 RNA in blood during specimen handling and storage prior to amplification by NASBA-QT. Bruisten SM, et al. **J Virol Methods** 1997 Sep;67(2):199-207

Testing for Chlamydia trachomatis in urine [letter; comment] Muldoon S. **Lancet** 1997 Apr 5;349(9057):1024; discussion 1025. Comment on: Lancet 1997 Feb 1;349(9048):329-30.

High failure rate of postmortem karyotyping after termination for fetal abnormality. Kyle PM, et al. **Obstet Gynecol** 1996 Nov;88(5):859-62

Influence of tissue sample dimensions on the swelling of the corneal stroma. Aakre BM, et al. **Ophthalmic Res** 1997; 29(2):67-74

Long-term stability of albumin, protein HC, immunoglobulin G, kappa- and lambda-chain-immunoreactivity, orosomucoid and alpha 1-antitrypsin in urine stored at -20 degrees C. Tencer J, et al. **Scand J Urol Nephrol** 1997 Feb; 31(1):67-71

Risk of iatrogenic human immunodeficiency virus infection through transfusion of blood tested by inappropriately stored or expired rapid antibody assays in a Zambian hospital. Consten EC, et al. **Transfusion** 1997 Sep; 37(9):930-4

[Media for transportation of specimens from gynecologic infections] Ondrovčík P, et al. **Epidemiol Mikrobiol Imunol** 1997 May;46(2):55-7 (Eng. Abstr.) **(Cze)**

[Treatment of tissues and specimens in case of suspected spongiform encephalopathy (prion's disease)] Roncaroli F, et al. **Pathologica** 1996 Jun;88(3):241-2 **(Ita)**

[Is it allowed to have a public open exhibition of human plastinated specimens in Japan?] Masuda Y, et al. **Kaibogaku Zasshi** 1997 Feb;72(1):61-71 (Eng. Abstr.) **(Jpn)**

[False tuberculosis outbreak caused by specimen contamination in a micro-bacteriology laboratory: confirmation by molecular techniques] Aznar J, et al. **Enferm Infecc Microbiol Clin** 1997 Mar;15(3):144-6 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Postmortem delay and temperature conditions affect the in situ end-labeling (ISEL) assay in brain tissue of mice. Schallock K, et al. **Clin Neuropathol** 1997 May-Jun; 16(3):133-6

Artifactual smear contamination by cancer cells caused by improper specimen expulsion during fine-needle aspiration [letter] Ascoli V. **Diagn Cytopathol** 1996 Mar;14(2):189-90

Mycobacterium avium complex endocarditis: spurious diagnosis resulting from laboratory cross contamination. Hedderwick SA, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):147-50

Acute abdomen following dermoid cyst rupture during transvaginal ultrasonographically guided retrieval of oocytes. Coccia ME, et al. **Hum Reprod** 1996 Sep; 11(9):1897-9

Effects of storage temperature and time on qualitative and quantitative detection of cytomegalovirus in blood specimens by shell vial culture and PCR. Roberts TC, et al. **J Clin Microbiol** 1997 Sep;35(9):2224-8

High levels of alpha-amylase in seminal fluid may represent a simple artifact in the collection process [letter] Hochmeister MN, et al. **J Forensic Sci** 1997 May; 42(3):535-6

Bacterial contamination of autologous bone marrow during processing [letter; comment] Wilcox MH. **J Hosp Infect** 1996 Sep;34(1):77-8. Comment on: J Hosp Infect 1996 May;33(1):71-6.

Decrease in high density lipoprotein cholesterol during prolonged storage. CELL Study Group. Ekbom T, et al. **Scand J Clin Lab Invest** 1996 Apr;56(2):97-101

Superior gluteal artery injury secondary to posterior iliac crest bone graft harvesting. A surgical technique to control hemorrhage. Shin AY, et al. **Spine** 1996 Jun 1;21(11):1371-4

ECONOMICS

DNA by mail: an inexpensive and noninvasive method for collecting DNA samples from widely dispersed populations. Freeman B, et al. **Behav Genet** 1997 May; 27(3):251-7

Collection of surgical specimens in total joint arthroplasty. Is routine pathology cost effective? Campbell ML, et al. **J Arthroplasty** 1997 Jan;12(1):60-3

INSTRUMENTATION

Comparison of the CytoRich system with conventional cervical cytology. Preliminary data on 2,032 cases from a clinical trial site. Bishop JW. **Acta Cytol** 1997 Jan-Feb; 41(1):15-23

Specimen adequacy of ThinPrep sample preparations in a direct-to-vial study. Corkill M, et al. **Acta Cytol** 1997 Jan-Feb;41(1):39-44

Clinical trials of the CytoRich specimen-preparation device for cervical cytology. Preliminary results. Wilbur DC, et al. **Acta Cytol** 1997 Jan-Feb;41(1):24-9

Evaluation of handling methods in the histological diagnosis of Helicobacter pylori: the effect of filter paper. Yokoi T, et al. **Am J Gastroenterol** 1996 Nov;91(11):2344-6

Capillary blood collection tubes may affect serum progesterone. Talbot WM, et al. **Ann Clin Biochem** 1996 Sep;33 (Pt 5):451-3

A sub-cybernetic sample handling and analytical system for the clinical chemistry laboratory. Yasuda K, et al. **Clin Biochem** 1996 Jun;29(3):273-7

Problems with salivary 17-hydroxyprogesterone determinations using the Salivette device. Krüger C, et al. **Eur J Clin Chem Clin Biochem** 1996 Nov;34(11):926-9

Fallopian tissue sampling with a cytobrush during hysteroscopy: a new approach for detecting tubal infection. Haeusler G, et al. **Fertil Steril** 1997 Mar;67(3):580-2

[A membrane filter sampling method for determining microbial air pollution] Cherneva P, et al. **Probl Khig** 1996; 21:116-22 (Eng. Abstr.) **(Bul)**

METHODS

The ThinPrep Pap test. A review of clinical studies. Linder J, et al. **Acta Cytol** 1997 Jan-Feb;41(1):30-8 (22 ref.)

Cellular fixation. A study of CytoRich Red and Cytospin Collection Fluid. Weidmann J, et al. **Acta Cytol** 1997 Jan-Feb;41(1):182-7

Indications for use of deferential sperm in IVF programs. Schoysman R, et al. **Acta Eur Fertil** 1994 Nov-Dec; 25(6):347-9

Measurement of albumin and low molecular weight proteins in the urine of newborn infants using a cotton wool ball collection method. Fell JM, et al. **Acta Paediatr** 1997 May; 86(5):518-22

Sample preparation for gas chromatography with solid-phase extraction and solid-phase microextraction. Penton ZE. **Adv Chromatogr** 1997;37:205-36 (67 ref.)

Patterns of nasal eosinophilia in allergy clinic patients as determined by swab and curette sampling. Lin RY, et al. **Allergy Asthma Proc** 1997 Jul-Aug;18(4):221-6

Assessment of urine collection technique for microbial culture. Prandoni D, et al. **Am J Infect Control** 1996 Jun; 24(3):219-21

Spontaneous oxidation of methionine: effect on the quantification of plasma methionine levels. Potgieter HC, et al. **Anal Biochem** 1997 May 15;248(1):86-93

Near-patient testing by proxy. Johnston JD, et al. **Ann Clin Biochem** 1997 Jan;34 (Pt 1):104-5

A rapid and simplified technique for analysis of archival formalin-fixed, paraffin-embedded tissue by fluorescence in situ hybridization (FISH). Köpf I, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2533-6

Slide preparation and staining procedures for reliable results using computerized morphology. Lacquet FA, et al. **Arch Androl** 1996 Mar-Apr;36(2):133-8

Dislodgeability of chlorpyrifos and fluorescent tracer residues on turf: comparison of wipe and foliar wash sampling techniques. Black KG, et al. **Arch Environ Contam Toxicol** 1996 Nov;31(4):563-70

How to submit a specimen for cutaneous pathology analysis. Using the 5 D's to get the most from biopsies. Boyd AS, et al. **Arch Fam Med** 1997 Jan-Feb;6(1):64-6 (10 ref.)

Mammographically directed breast biopsies: a College of American Pathologists Q-Probes study of clinical physician expectations and of specimen handling and reporting characteristics in 434 institutions. Nakhleh RE, et al. **Arch Pathol Lab Med** 1997 Jan;121(1):11-8

Combination of vaginal ultrasonography and pipelle sampling in the diagnosis of endometrial disease. Kavak Z, et al. **Aust N Z J Obstet Gynaecol** 1996 Feb;36(1):63-6

Comparison among different approaches for sampling cerebrospinal fluid in rats. Huang YL, et al. **Brain Res Bull** 1996;41(5):273-9

Fluorescent in situ hybridization assessment of chromosome 8 copy number in breast cancer. Afify A, et al. **Breast Cancer Res Treat** 1996;38(2):201-8

Frequent serum sampling in healthy men discloses testosterone peaks exacerbated by testosterone propionate administration. Brisson GR, et al. **Can J Appl Physiol** 1997 Feb;22(1):58-65

Stability of cytochrome P4501A-associated enzyme activity in cryogenically stored teleost liver samples. Anulacion BF, et al. **Chemosphere** 1997 May;34(9-10):2029-39

Biological and environmental specimen banking at the Centers for Disease Control and Prevention. Gunter EW. **Chemosphere** 1997 May;34(9-10):1945-53 (11 ref.)

Particle size distribution in ground biological samples. Koglin D, et al. **Chemosphere** 1997 May;34(9-10):2041-7

Specimen banking--a planning in advance. Olsson M, et al. **Chemosphere** 1997 May;34(9-10):1961-74 (23 ref.)

The relationship between the Canadian Wildlife Service Specimen Bank and the Wildlife Toxicology Program: the effect on specimen collection. Wakeford BJ, et al. **Chemosphere** 1997 May;34(9-10):1933-8

A sub-cybernetic sample handling and analytical system for the clinical chemistry laboratory. Yasuda K, et al. **Clin Biochem** 1996 Jun;29(3):273-7

A novel method of tear collection: comparison of glass capillary micropipettes with porous polyester rods. Jones DT, et al. **Cornea** 1997 Jul;16(4):450-8

The effects of different sampling techniques on smear quality and the diagnosis of cytological abnormalities in cervical screening. Williamson SL, et al. **Cytopathology** 1997 Jun; 8(3):188-95

Biliary tract cytology in specimens obtained by direct cholangiographic procedures: a study of 74 cases. de Peralta-Venturina MN, et al. **Diagn Cytopathol** 1996 Jun; 14(4):334-48

Recovery of nosocomial fecal flora from frozen stool specimens and rectal swabs: comparison of preservatives for epidemiological studies. Bonten MJ, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):103-6

Cytological vs microhistological diagnosis of hepatocellular carcinoma: comparative accuracies in the same fine-needle biopsy specimen. Caturelli E, et al. **Dig Dis Sci** 1996 Dec; 41(12):2326-31

Fiberoptic-guided CO2 laser for harvesting of the internal mammary artery. Raanani E, et al. **Eur J Cardiothorac Surg** 1997 Jun;11(6):1093-6

SPECIMEN HANDLING

Culture of Helicobacter pylori from gastric biopsies transported in biopsy urease test tubes. Rautelin H, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):380–3

Effect of specimen collection techniques, transport media, and incubation of cultures on the detection rate of Helicobacter pylori. van der Hulst RW, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar;15(3):211–5

Human glandular salivas: their separate collection and analysis. Veerman EC, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):346–52

Comparison of two methods of collecting induced sputum in asthmatic subjects [see comments] Gershman NH, et al. **Eur Respir J** 1996 Dec;9(12):2448–53. Comment in: Eur Respir J 1996 Dec;9(12):2448–53.

Optimal processing of human umbilical cord blood for clinical banking. Denning-Kendall P, et al. **Exp Hematol** 1996 Oct;24(12):1394–401

The validity of the recollection technique in micropuncture experiments on the rat kidney. Romano G, et al. **Exp Physiol** 1997 Jan;82(1):161–9

A new way to obtain contrast-free bile during ERCP [see comments] Schutz SM, et al. **Gastrointest Endosc** 1996 Mar; 43(3):231–2. Comment in: Gastrointest Endosc 1997 Jan;45(1):110–1.

Improved method for harvesting human Schwann cells from mature peripheral nerve and expansion in vitro. Casella GT, et al. **Glia** 1996 Aug;17(4):327–38

An improved analysis for chlorinated pesticides and polychlorinated biphenyls (PCBs) in human and bovine sera using solid-phase extraction. Brock JW, et al. **J Anal Toxicol** 1996 Nov–Dec;20(7):528–36

Investigation of the effects of solution composition and container material type on the loss of 11-nor-delta 9-THC-9-carboxylic acid. Roth KD, et al. **J Anal Toxicol** 1996 Sep;20(5):291–300

Influence of semen collection method on ejaculate characteristics in the common marmoset, Callithrix jacchus. Morrell JM, et al. **J Androl** 1996 Mar–Apr;17(2):164–72

Choosing sample volume to achieve maximum detection sensitivity and resolution with high-performance liquid chromatography columns of 1.0, 2.1 and 4.6 mm I.D. Bakalyar SR, et al. **J Chromatogr A** 1997 Feb 21; 762(1–2):167–85

Impinger sampling coupled to high-performance liquid chromatography by a modified autoinjector interface. Schlitt H. **J Chromatogr A** 1997 Feb 21;762(1–2):187–92

Stabilities of free and complexed human immunodeficiency virus p24 antigens during short- and long-term storage. Arens M, et al. **J Clin Microbiol** 1997 Sep;35(9):2413–6

Validity of self-obtained vaginal specimens for diagnosis of trichomoniasis. Schwebke JR, et al. **J Clin Microbiol** 1997 Jun;35(6):1618–9

Tampon sampling for diagnosis of bacterial vaginosis: a potentially useful way to detect genital infections? Wilkinson D, et al. **J Clin Microbiol** 1997 Sep;35(9):2408–9

Methodological considerations in GCF sampling with paper strips: poor recovery of uncomplexed elastase. Gustafsson A. **J Clin Periodontol** 1996 May;23(5):432–6

Urine samples from disposable diapers: an accurate method for urine cultures. Cohen HA, et al. **J Fam Pract** 1997 Mar;44(3):290–2

Preliminary practical findings on drug monitoring by a transcutaneous collection device. Skopp G, et al. **J Forensic Sci** 1996 Nov;41(6):933–7

Impact of various handling and storage conditions on quantitative detection of hepatitis C virus RNA. Halfon P, et al. **J Hepatol** 1996 Sep;25(3):307–11

Comparison between vaginal tampon and cervicovaginal lavage specimen collection for detection of human papillomavirus DNA by the polymerase chain reaction. The Canadian Women's HIV Study Group. Coutlée F, et al. **J Med Virol** 1997 Jan;51(1):42–7

Improved methods for quantification of human immunodeficiency virus type 1 RNA and hepatitis C virus RNA in blood using spin column technology and chemiluminescent assays of PCR products. Lin HJ, et al. **J Med Virol** 1997 Jan;51(1):56–63

Anti-HIV antibody in saliva: an assessment of the role of the components of saliva, testing methodologies and collection systems. Lamey PJ, et al. **J Oral Pathol Med** 1996 Mar;25(3):104–7

H2-breath tests—importance of adequate storage of breath samples [letter; comment] Bodamer OA, et al. **J Pediatr Gastroenterol Nutr** 1997 Apr;24(4):450–1. Comment on: J Pediatr Gastroenterol Nutr 1996 Feb;22(2):144–7.

Weekend versus weekday urine collections in assessment of stone-formers. Norman RW. **J R Soc Med** 1996 Oct; 89(10):561–2

Sweat analysis following pressure ischaemia in a group of debilitated subjects. Polliack A, et al. **J Rehabil Res Dev** 1997 Jul;34(3):303–8

Characteristics of koala (Phascolarctos cinereus adustus) semen collected by artificial vagina. Johnston SD, et al. **J Reprod Fertil** 1997 Mar;109(2):319–23

Testicular touch preparation cytology. Kim ED, et al. **J Urol** 1996 Oct;156(4):1412–4

Stability of hepatitis C virus RNA in serum from samples collected in a closed-tube system for serum separation and transport, as measured by a quantitative competitive PCR assay. Trabaud MA, et al. **J Viral Hepat** 1996 Jul;3(4):207–9

The effect of extraction methods. The kind of organ samples and the examination delay on the DNA yields and typing. Atmadja DS, et al. **Kobe J Med Sci** 1995 Dec;41(6):197–211

Fieldwork in the tropics: duplicate frozen samples [letter] Theakston RD. **Lancet** 1997 Jul 5;350(9070):68

The problem of gaining access to interstitial fluid. An attempt to rationalize a wicked discussion on wicks. Aukland K, et al. **Lymphology** 1997 Sep;30(3):111–5 (33 ref.)

Recovering urine from diapers: are test results accurate? Kirkpatrick JM, et al. **MCN Am J Matern Child Nurs** 1997 Mar–Apr;22(2):96–102

Sample preparation for peptide immunocytochemistry. Pogue KM, et al. **Methods Mol Biol** 1997;73:277–82

Shrinking processes in frozen sections. Dörr W, et al. **Microsc Res Tech** 1997 Jun 1–15;37(5–6):598–9

Reduction of contaminated urine specimens in pregnant women [letter] Abel L, et al. **Nurse Pract** 1996 Jul;21(7):6, 8, 11

Techniques for human temporal bone removal: information for the scientific community. Nadol JB Jr. **Otolaryngol Head Neck Surg** 1996 Oct;115(4):298–305

Recommendations for the reporting of urinary bladder specimens containing bladder neoplasms. Association of Directors of Anatomic and Surgical Pathology [see comments] **Pathol Int** 1997 May;47(5):329–31. Comment in: Pathol Int 1997 May;47(5):332.

Comments regarding the American Association of Directors of Anatomic and Surgical Pathology (ADASP) recommendations for the reporting of urinary bladder specimens containing bladder neoplasms: comparison with the Japanese General Rule for Clinical and Pathological Studies on Bladder Cancer [letter; comment] Kishi K. **Pathol Int** 1997 May;47(5):332. Comment on: Pathol Int 1997 May;47(5):329–31.

Yield of positive blood cultures in pediatric oncology patients by a new method of blood culture collection. Kaditis AG, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):615–20

The identification of hyperoxaluria in very low-birthweight infants—which urine sampling method? Sonntag J, et al. **Pediatr Nephrol** 1997 Apr;11(2):205–7

Comparison of sputum processing techniques in cystic fibrosis. Cai Y, et al. **Pediatr Pulmonol** 1996 Dec; 22(6):402–7

Neurone-specific enolase and Sangtec 100 assays during cardiac surgery: Part II—Must samples be spun within 30 min? Sapsed-Byrne S, et al. **Perfusion** 1997 May; 12(3):167–9

Scanning force microscopy of biological samples. Lekka M, et al. **Pol J Pathol** 1996;47(2):51–5 (17 ref.)

Chloroquine minimizes sampling artefacts for radioimmunological determination of thromboxane B2 in plasma. Oguogho A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 May; 56(5):385–8

Quantitative vitreous collection using a modified infusion fluid during vitrectomy. Hardwick CW Jr, et al. **Retina** 1997;17(1):51–6

Considerations in the application of selected molecular biology techniques in the clinical laboratory: preanalytical and analytical issues. Narayanan S. **Rinsho Byori** 1996 Nov; Suppl 103:262–70

Technical problems related to in vitro study of colon flora. Ballongue J. **Scand J Gastroenterol Suppl** 1997;222:14–6

Relationship between asbestos bodies in sputum and the number of specimens. Sulotto F, et al. **Scand J Work Environ Health** 1997 Feb;23(1):48–53

The use of sequential self-obtained vaginal smears for detecting changes in the vaginal flora. Schwebke JR, et al. **Sex Transm Dis** 1997 Apr;24(4):236–9

Effect of test environment on intervertebral disc hydration. Pflaster DS, et al. **Spine** 1997 Jan 15;22(2):133–9

Cotton wool swabs provide a convenient medium for the collection, transport and storage of sputum for the subsequent molecular investigation of Mycobacterium tuberculosis. Wiessler RE, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):256–7

Donor attitudes about exporting and importing blood. Bowman RJ, et al. **Transfusion** 1997 Sep;37(9):913–20

Suitability of preadmission blood samples for pretransfusion testing in elective surgery. Marosszeky S, et al. **Transfusion** 1997 Sep;37(9):910–2

Collection of peripheral blood progenitor cells after the administration of cyclophosphamide, etoposide, and granulocyte-colony-stimulating factor: an analysis of 497 patients. Weaver CH, et al. **Transfusion** 1997 Sep; 37(9):896–903

In vitro stability of free prostate-specific antigen (PSA) and prostate-specific antigen (PSA) complexed to alpha 1-antichymotrypsin in blood samples. Piironen T, et al. **Urology** 1996 Dec;48(6A Suppl):81–7

Stability of free prostate-specific antigen in serum samples under a variety of sample collection and sample storage conditions. Woodrum D, et al. **Urology** 1996 Dec;48(6A Suppl):33–9

[Self-collected and mailed samples for diagnosis of urogenital Chlamydia trachomatis infection in women] Ostergaard LJ, et al. **Ugeskr Laeger** 1997 Aug 18;159(34):5089–92 (Eng. Abstr.) **(Dan)**

[Monitoring of the margins of excision of skin tumors] Wechsler J, et al. **Ann Pathol** 1997 Mar;17(1):67–71 (Eng. Abstr.) **(Fre)**

[Evaluation of methods of sperm preparation for human in vitro fertilization] Mawissa D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(6):577–81 (Eng. Abstr.) **(Fre)**

[Comparative validation of manual and automated methods for mixing and volume control of total blood samples] Folléa G, et al. **Transfus Clin Biol** 1997 Jul;4(4):391–402 (Eng. Abstr.) **(Fre)**

[Tips and requests by microbiologists] Wüst J. **Schweiz Rundsch Med Prax** 1996 Oct 1;85(40):1253–4 (Eng. Abstr.) **(Ger)**

[Sample handling and risk prevention] Furuta I. **Rinsho Byori** 1996 Nov;Suppl 103:56–63 **(Jpn)**

[From sample collection to testing] Igari J. **Rinsho Byori** 1996 Nov;Suppl 103:1–7 **(Jpn)**

[General tests—factors responsible for errors in sampling of urine, feces, cerebrospinal fluid, saliva, and other body fluids and prevention of these errors] Ito K. **Rinsho Byori** 1996 Nov;Suppl 103:81–91 **(Jpn)**

[Methods to prevent accidental switching of samples] Murai T. **Rinsho Byori** 1996 Nov;Suppl 103:64–72 **(Jpn)**

[From sample collection to testing. G. Preanalytic phase error in health screening tests] Ohgitani S. **Rinsho Byori** 1996 Nov;Suppl 103:48–55 **(Jpn)**

[Tests related to nucleic acids and DNA: effects of time lag between sample collection and examination on HBV-DNA polymerase activity] Ohira M, et al. **Rinsho Byori** 1996 Nov;Suppl 103:258–61 **(Jpn)**

[General hematological tests. C. Sampling for bone marrow testing] Ohtake Y, et al. **Rinsho Byori** 1996 Nov;Suppl 103:134–8 **(Jpn)**

[Chemical analysis—incidence of sampling errors in clinical chemistry and their countermeasures] Sasaki M. **Rinsho Byori** 1996 Nov;Suppl 103:150–5 **(Jpn)**

[Virological tests] Shimada S, et al. **Rinsho Byori** 1996 Nov; Suppl 103:241–9 **(Jpn)**

[Tests related to nucleic acids and DNA] Yoshida H, et al. **Rinsho Byori** 1996 Nov;Suppl 103:250–7 **(Jpn)**

[A method of sampling material for the determination of chlorides in sweat] Luk'anova EG. **Klin Lab Diagn** 1997 Feb;(2):50 **(Rus)**

NURSING

Forensic nursing implications and the forensic autopsy. Hoyt CA, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Oct; 34(10):24–31

STANDARDS

Disposables as sources of preanalytical contamination and misdiagnosis. Wenk RE. **Am J Clin Pathol** 1997 Apr; 107(4):395–7

Effect of citrate concentration in specimen collection tubes on the International Normalized Ratio. Danielson CF, et al. **Arch Pathol Lab Med** 1997 Sep;121(9):956–9

Practice protocol for the examination of specimens removed from patients with cancer of the breast: a publication of the Cancer Committee, College of American Pathologists. Members of the Cancer Committee, College of American Pathologists, and the Task Force for Protocols on the Examination of Specimens from Patients with Breast Cancer. Henson DE, et al. **Arch Pathol Lab Med** 1997 Jan; 121(1):27–33

Timeliness of urinalysis: a College of American Pathologists Q-probes study of 346 small hospitals. Howanitz PJ, et al. **Arch Pathol Lab Med** 1997 Jul;121(7):667–72

Inactivation of the causal agents of Creutzfeldt-Jakob disease and other human prion diseases [letter; comment] Taylor D. **Brain Pathol** 1996 Apr;6(2):197–8. Comment on: Brain Pathol 1995 Jul;5(3):319–22.

Primary processing of specimens and isolation and cultivation of mycobacteria. Hall GS. **Clin Lab Med** 1996 Sep; 16(3):551–67 (47 ref.)

Code of Ethics for Foreign Plant Collectors, developed at the Botany 2000 Herbarium Curation Workshop held in Perth, Australia, October 13- 19, 1990. **J Ethnopharmacol** 1996 Apr;51(1–3):309

Sample collection guidelines for trace elements in blood and urine. IUPAC Commission of Toxicology. Cornelis R, et al. **J Trace Elem Med Biol** 1996 Jun;10(2):103–27

Recovering urine from diapers: are test results accurate? Kirkpatrick JM, et al. **MCN Am J Matern Child Nurs** 1997 Mar–Apr;22(2):96–102

Standards for tissue banking, June 1995. British Association of Tissue Banks. **Transfus Med** 1996 Jun;6(2):155–8

Guidelines for glove usage [letter] Kumar PD. **Trop Doct** 1997 Oct;27(4):251

VETERINARY

Effects of sample handling on total carbon dioxide concentrations in canine and feline serum and blood. James KM, et al. **Am J Vet Res** 1997 Apr;58(4):343–7

Collection of oviduct fluid in heifers Greve T, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Aug–Sep; 103(8–9):291–3

Method for collecting bile with a T-cannula in unrestrained conscious beagles. Tsutsumi H, et al. **Exp Anim** 1996 Jul; 45(3):261–3

Modified apparatus for collection of free-flow urine from mares. van den Berg IS. **J S Afr Vet Assoc** 1996 Dec; 67(4):214–6

An improved method for the recovery of mycoplasmas from the external ear canal of goats. Ribeiro VR, et al. **J Vet Diagn Invest** 1997 Apr;9(2):156–8

Collection of semen from marmoset monkeys (Callithrix jacchus) for experimental use by vaginal washing. Kuederling I, et al. **Lab Anim** 1996 Jul;30(3):260–6
Assessment of the accuracy of quantitative urine collection in mink (Mustela vison) using osmotic pumps for continuous release of p-amino-hippuric acid and inulin. Wamberg S, et al. **Lab Anim** 1996 Jul;30(3):267–72
Nonsurgical and nonlethal retrieval of mouse spermatozoa. Foxworth WB, et al. **Lab Anim Sci** 1996 Jun;46(3):352–4
Semen production by the emu (Dromaius novaehollandiae). 1. Methods for collection of semen. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):615–21
Semen production by the emu (Dromaius novaehollandiae). 2. Effect of collection frequency on the production of semen and spermatozoa. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):622–6

SPECT see **TOMOGRAPHY, EMISSION-COMPUTED, SINGLE-PHOTON**

SPECTACLES see **EYEGLASSES**

SPECTINOMYCIN

BLOOD

Easy enzyme-linked immunosorbent assay for spectinomycin in chicken plasma. Tanaka T, et al. **J AOAC Int** 1996 Mar–Apr;79(2):426–30

METABOLISM

Isolation of a gene encoding a novel spectinomycin phosphotransferase from Legionella pneumophila. Suter TM, et al. **Antimicrob Agents Chemother** 1997 Jun; 41(6):1385–8
The selection in vivo and characterization of an RNA recognition motif for spectinomycin. Thom G, et al. **Bioorg Med Chem** 1997 Jun;5(6):1081–6

PHARMACOLOGY

A eubacterial gene conferring spectinomycin resistance on Chlamydomonas reinhardtii: integration into the nuclear genome and gene expression. Cerutti H, et al. **Genetics** 1997 Jan;145(1):97–110
Evaluation of the in vitro activity of seven selected antimicrobial agents to be used for the isolation of human intestinal spirochaetes. Calderaro A, et al. **New Microbiol** 1997 Jan;20(1):35–45

SPECTRIN

[A comparative study of the properties of ouabain-sensitive phosphatase in rat erythrocyte ghosts and spectrin-free membranes] Kazennov AM, et al. **Zh Evol Biokhim Fiziol** 1996 Jul–Aug;32(4):393–401 (Eng. Abstr.) **(Rus)**

ANALYSIS

Brain beta-spectrin is a component of senile plaques in Alzheimer's disease. Sihag RK, et al. **Brain Res** 1996 Dec 16;743(1–2):249–57
Two populations of beta-spectrin in rat skeletal muscle. Porter GA, et al. **Cell Motil Cytoskeleton** 1997;37(1):7–19
Biogenesis of surface domains in fly photoreceptor cells: fine-structural analysis of the plasma membrane and immunolocalization of Na+, K+ ATPase and alpha-spectrin during cell differentiation. Baumann O. **J Comp Neurol** 1997 Jun 16;382(4):429–42
Spatial relationships of utrophin, dystrophin, beta-dystroglycan and beta-spectrin to acetylcholine receptor clusters during postnatal maturation of the rat neuromuscular junction. Bewick GS, et al. **J Neurocytol** 1996 Jul;25(7):367–79

BIOSYNTHESIS

Alpha-brain spectrin mRNA belongs to the population of intradendritically transported mRNAs. Gelot A, et al. **Neuroreport** 1996 Dec 20;8(1):113–6

CHEMISTRY

Comparison of the salt-dependent self-association of brain and erythroid spectrin. Begg GE, et al. **Biochemistry** 1997 Jun 10;36(23):6977–85
Physical properties of a single-motif erythrocyte spectrin peptide: a highly stable independently folding unit. DeSilva TM, et al. **Biochemistry** 1997 Apr 1;36(13):3991–7
Influence of network topology on the elasticity of the red blood cell membrane skeleton. Hansen JC, et al. **Biophys J** 1997 May;72(5):2369–81
Spectrin: on the path from structure to function. Viel A, et al. **Curr Opin Cell Biol** 1996 Feb;8(1):49–55 (42 ref.)
Further analysis of the role of spectrin repeat motifs in alpha-actinin dimer formation. Flood G, et al. **Eur Biophys J** 1997;25(5–6):431–5
The spectrin repeat folds into a three-helix bundle in solution. Pascual J, et al. **FEBS Lett** 1996 Apr 1;383(3):201–7
Release of spectrin-containing vesicles from human erythrocyte ghosts by dimyristoylphosphatidylcholine. Yamaguchi T, et al. **J Biochem (Tokyo)** 1996 Jan; 119(1):95–9
Identification of alpha-spectrin domains susceptible to ubiquitination. Corsi D, et al. **J Biol Chem** 1997 Jan 31; 272(5):2977–83
Peptides with more than one 106-amino acid sequence motif are needed to mimic the structural stability of spectrin. Menhart N, et al. **J Biol Chem** 1996 Nov 29;271(48):30410–6
Site-directed mutagenesis of either the highly conserved Trp-22 or the moderately conserved Trp-95 to a large, hydrophobic residue reduces the thermodynamic stability of a spectrin repeating unit. Pantazatos DP, et al. **J Biol Chem** 1997 Aug 22;272(34):21052–9
1H and 15N NMR assignment and solution structure of the SH3 domain of spectrin: comparison of unrefined and refined structure sets with the crystal structure. Blanco FJ, et al. **J Biomol NMR** 1997 Jun;9(4):347–57
Automated NOESY interpretation with ambiguous distance restraints: the refined NMR solution structure of the pleckstrin homology domain from beta-spectrin. Nilges M, et al. **J Mol Biol** 1997 Jun 13;269(3):408–22
Non-native local interactions in protein folding and stability: introducing a helical tendency in the all beta-sheet alpha-spectrin SH3 domain. Prieto J, et al. **J Mol Biol** 1997 May 16;268(4):760–78
Different folding transition states may result in the same native structure. Viguera AR, et al. **Nat Struct Biol** 1996 Oct;3(10):874–80
Some properties of spectrin-like proteins from Pisum sativum. Bisikirska B, et al. **Z Naturforsch [C]** 1997 Mar–Apr;52(3–4):180–6
[Temperature denaturation of erythrocyte spectrin: rheology, deformability and resistance to detergents] Iamalkina IV, et al. **Biofizika** 1997 May–Jun;42(3):675–9 (Eng. Abstr.) **(Rus)**
[Molecular defects of erythrocyte membrane proteins] Storozhok SA, et al. **Vopr Med Khim** 1996 Apr–Jun; 42(2):103–10 (73 ref.) **(Rus)**

DRUG EFFECTS

CS2-mediated cross-linking of erythrocyte spectrin and neurofilament protein: dose response and temporal relationship to the formation of axonal swellings. Valentine WM, et al. **Toxicol Appl Pharmacol** 1997 Jan;142(1):95–105

GENETICS

Genetic basis of the polymorphisms of the alphaI domain of spectrin. Gallagher PG, et al. **Am J Hematol** 1997 Oct; 56(2):107–11
Amino-acid substitution in alpha-spectrin commonly coinherited with nondominant hereditary spherocytosis. Tse WT, et al. **Am J Hematol** 1997 Mar;54(3):233–41
Site-directed mutagenesis of alpha II spectrin at codon 1175 modulates its mu-calpain susceptibility. Stabach PR, et al. **Biochemistry** 1997 Jan 7;36(1):57–65
Evolution of the spectrin repeat. Pascual J, et al. **Bioessays** 1997 Sep;19(9):811–7 (57 ref.)
Spectrin St Claude, a splicing mutation of the human alpha-spectrin gene associated with severe poikilocytic anemia. Fournier CM, et al. **Blood** 1997 Jun 15; 89(12):4584–90
Characterization of the underlying molecular defect in hereditary spherocytosis associated with spectrin deficiency. Hassoun H, et al. **Blood** 1997 Jul 1;90(1):398–406
Hematologically important mutations: spectrin variants in hereditary elliptocytosis and hereditary pyropoikilocytosis. Gallagher PG, et al. **Blood Cells Mol Dis** 1996;22(3):254–8
Beta-spectrin Campinas: a novel shortened beta-chain variant associated with skipping of exon 30 and hereditary elliptocytosis. Basserès DS, et al. **Br J Haematol** 1997 Jun; 97(3):579–85
Epidemiological studies of spectrin mutations related to hereditary elliptocytosis and spectrin polymorphisms in Benin. Glele-Kakai C, et al. **Br J Haematol** 1996 Oct; 95(1):57–66
Spectrin Cosenza: a novel beta chain variant associated with Sp alphaI/74 hereditary elliptocytosis. Qualtieri A, et al. **Br J Haematol** 1997 May;97(2):273–8
Stop codon in exon 30 (E2069X) of beta-spectrin gene associated with hereditary elliptocytosis in spectrin Nagoya. Maillet P, et al. **Hum Mutat** 1996;8(4):366–8
Mutation of a highly conserved residue of betaI spectrin associated with fatal and near-fatal neonatal hemolytic anemia. Gallagher PG, et al. **J Clin Invest** 1997 Jan 15; 99(2):267–77
Combination of two mutant alpha spectrin alleles underlies a severe spherocytic hemolytic anemia. Wichterle H, et al. **J Clin Invest** 1996 Nov 15;98(10):2300–7
Comparisons of the nucleotide substitution process among repetitive segments of the alpha- and beta-spectrin genes. Muse SV, et al. **J Mol Evol** 1997 May;44(5):492–500

IMMUNOLOGY

VH and VL gene complexes encoding an anti-spectrin antibody are defined by nucleotide sequencing of cDNA from a hybridoma generated from Hu-PBL-SCID mouse. Diamond M, et al. **Immunol Invest** 1996 Jul;25(4):291–305

METABOLISM

Spectrin localizations in the chicken bursa of Fabricius at different stages of development. Moriya O. **Acta Histochem** 1996 Jan;98(1):1–7
Spatial distribution of beta-spectrin in normal and dystrophic human skeletal muscle. Ehmer S, et al. **Acta Neuropathol (Berl)** 1997 Sep;94(3):240–6
Non-erythroid alpha-spectrin breakdown by calpain and interleukin 1 beta-converting-enzyme-like protease(s) in apoptotic cells: contributory roles of both protease families in neuronal apoptosis. Nath R, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):683–90
Calcium-binding mechanism of human nonerythroid alpha-spectrin EF-structures. Lundberg S, et al. **Biochemistry** 1997 Jun 10;36(23):7199–208
Expression of spectrin alpha I/65 hereditary elliptocytosis in patients from Brazil. Pranke PH, et al. **Br J Haematol** 1996 Sep;94(3):470–5
Translational suppression of calpain I reduces NMDA-induced spectrin proteolysis and pathophysiology in cultured hippocampal slices. Bednarski E, et al. **Brain Res** 1995 Oct 2;694(1–2):147–57
Hyperthermia enhances spectrin breakdown in transient focal cerebral ischemia. Morimoto T, et al. **Brain Res** 1997 Jan 23;746(1–2):43–51
Local accumulation of alpha-spectrin-related protein under plasma membrane during capping and phagocytosis in Acanthamoeba. Kwiatkowska K, et al. **Cell Motil Cytoskeleton** 1997;36(3):253–65
Distribution of actin, myosin, and spectrin during enucleation in erythroid cells of hamster embryo. Takano-Ohmuro H, et al. **Cell Motil Cytoskeleton** 1996;34(2):95–107
alpha-spectrin is required for germline cell division and differentiation in the Drosophila ovary. de Cuevas M, et al. **Development** 1996 Dec;122(12):3959–68
Further analysis of the role of spectrin repeat motifs in alpha-actinin dimer formation. Flood G, et al. **Eur Biophys J** 1997;25(5–6):431–5
Kalirin, a cytosolic protein with spectrin-like and GDP/GTP exchange factor-like domains that interacts with peptidylglycine alpha-amidating monooxygenase, an integral membrane peptide-processing enzyme. Alam MR, et al. **J Biol Chem** 1997 May 9;272(19):12667–75
Identification of alpha-spectrin domains susceptible to ubiquitination. Corsi D, et al. **J Biol Chem** 1997 Jan 31; 272(5):2977–83
Specific cleavage of alpha-fodrin during Fas- and tumor necrosis factor-induced apoptosis is mediated by an interleukin-1beta-converting enzyme/Ced-3 protease distinct from the poly(ADP-ribose) polymerase protease. Cryns VL, et al. **J Biol Chem** 1996 Dec 6;271(49):31277–82
Centractin (ARP1) associates with spectrin revealing a potential mechanism to link dynactin to intracellular organelles. Holleran EA, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1815–29
Distribution of HSP70, protein kinase C, and spectrin is altered in lymphocytes during a fever-like hyperthermia exposure. Di YP, et al. **J Cell Physiol** 1997 Jul;172(1):44–54
Automated NOESY interpretation with ambiguous distance restraints: the refined NMR solution structure of the pleckstrin homology domain from beta-spectrin. Nilges M, et al. **J Mol Biol** 1997 Jun 13;269(3):408–22
Non-native local interactions in protein folding and stability: introducing a helical tendency in the all beta-sheet alpha-spectrin SH3 domain. Prieto J, et al. **J Mol Biol** 1997 May 16;268(4):760–78
Prolonged calpain-mediated spectrin breakdown occurs regionally following experimental brain injury in the rat. Saatman KE, et al. **J Neuropathol Exp Neurol** 1996 Jul; 55(7):850–60
Immunohistochemical study of calpain-mediated breakdown products to alpha-spectrin following controlled cortical impact injury in the rat. Newcomb JK, et al. **J Neurotrauma** 1997 Jun;14(6):369–83
A calpain inhibitor attenuates cortical cytoskeletal protein loss after experimental traumatic brain injury in the rat. Posmantur R, et al. **Neuroscience** 1997 Apr;77(3):875–88
[Study of structural transitions in erythrocyte membranes during hereditary hemochromatosis] Akoev VR, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):279–84 **(Rus)**

PHYSIOLOGY

The spectrin-based membrane skeleton as a membrane protein-sorting machine. Beck KA, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1263–70 (67 ref.)
Cellular ATP depletion induces disruption of the spectrin cytoskeletal network. Molitoris BA, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):F790–8
Spectrin: on the path from structure to function. Viel A, et al. **Curr Opin Cell Biol** 1996 Feb;8(1):49–55 (42 ref.)
Alteration of cell cycle timing and induction of surface instability in starfish blastomeres microinjected with antibodies to spectrin. Wong GK, et al. **Dev Biol** 1996 Nov 25;180(1):199–212
alpha-Spectrin is required for ovarian follicle monolayer integrity in Drosophila melanogaster. Lee JK, et al. **Development** 1997 Jan;124(2):353–62
Spectrin-actin interaction is required for neurite extension in NB 2a/dl neuroblastoma cells. Sihag RK, et al. **J Neurosci Res** 1996 Jun 1;44(5):430–7
Correlation of ischemia/reperfusion or partial outlet obstruction-induced spectrin proteolysis by calpain with contractile dysfunction in rabbit bladder. Zhao Y, et al. **Urology** 1997 Feb;49(2):293–300

SPECTROFLUOROMETRY see **SPECTROMETRY,**

FLUORESCENCE

SPECTROMETRY, FLUORESCENCE

Fluorescence imaging and spectroscopy of 5-aminolevulinic acid induced protoporphyrin IX for the detection of neoplastic lesions in the oral cavity. Leunig A, et al. **Am J Surg** 1996 Dec;172(6):674-7

Fluorescence analysis of the labile iron pool of mammalian cells. Epsztejn S, et al. **Anal Biochem** 1997 May 15; 248(1):31-40

Albumin blue 580 fluorescence assay for albumin. Kessler MA, et al. **Anal Biochem** 1997 May 15;248(1):180-2

The analysis of the electron transfer rate from steady-state fluorescence spectroscopy. Nakaema MK, et al. **Arch Biochem Biophys** 1997 Aug 1;344(1):61-6

A specific assay for discriminating between peroxidase and lipoxygenase activities. Fontana M, et al. **Biochem Mol Biol Int** 1997 Jun;42(1):163-8

Selective excitation of tryptophans in OmpF: a fluorescence emission study. Pattnaik BR, et al. **Biochem Mol Biol Int** 1997 Jun;42(1):173-81

Immunosuppressor binding to the immunophilin FKBP59 affects the local structural dynamics of a surface beta-strand: time-resolved fluorescence study. Rouviere N, et al. **Biochemistry** 1997 Jun 17;36(24):7339-52

Light quenching of pyridine2 fluorescence with time-delayed pulses. Gryczynski I, et al. **Biophys Chem** 1997 May 21; 66(1):13-24

Time-resolved fluorescence spectroscopy and imaging of DNA labeled with DAPI and Hoechst 33342 using three-photon excitation. Lakowicz JR, et al. **Biophys J** 1997 Feb;72(2 Pt 1):567-78

Measurement of nucleic acid concentrations using the DyNA Quant and the GeneQuant. Teare JM, et al. **Biotechniques** 1997 Jun;22(6):1170-4

Fluorometric determination of total mRNA with oligo(dT) immobilized on microtiter plates. Miura Y, et al. **Clin Chem** 1996 Nov;42(11):1758-64

Multitryptophan-fluorescence-emission decay of beta-glycosidase from the extremely thermophilic archaeon Sulfolobus solfataricus. Bismuto E, et al. **Eur J Biochem** 1997 Feb 15;244(1):53-8

Spectrofluorimetric determination of 5-methoxypsoralen pharmacokinetic in patients' serum. Saïd A, et al. **Exp Dermatol** 1997 Apr;6(2):57-63

Time-resolved fluorescence studies on site-directed mutants of human serum albumin. Helms MK, et al. **FEBS Lett** 1997 May 12;408(1):67-70

Infrared fluorescent detection of D1S80 alleles. Roy R. **Forensic Sci Int** 1997 May 23;87(1):63-71

Fluorescence energy transfer on erythrocyte membranes. Fuchs HM, et al. **Gen Physiol Biophys** 1997 Mar; 16(1):15-28

Autofluorescence characteristics of oral mucosa. Ingrams DR, et al. **Head Neck** 1997 Jan;19(1):27-32

Fluorogenic substrates for proteases based on intramolecular fluorescence energy transfer (IFETS). Gershkovich AA, et al. **J Biochem Biophys Methods** 1996 Dec 30;33(3):135-62

Fluorescence spectrometry in studies of carbohydrate-protein interactions. Lee YC. **J Biochem (Tokyo)** 1997 May;121(5):818-25 (66 ref.)

Fluorescence-based polymerase chain reaction-single-strand conformation polymorphism analysis of p53 gene by capillary electrophoresis. Katsuragi K, et al. **J Chromatogr A** 1996 Sep 13;744(1-2):311-20

Light-induced fluorescence spectroscopy to differentiate benign and malignant uterine cervical lesions. Chen CT, et al. **J Formos Med Assoc** 1997 Apr;96(4):247-52

Relationship between intracellular free calcium concentrations and the intracellular development of Toxoplasma gondii. Pingret L, et al. **J Histochem Cytochem** 1996 Oct;44(10):1123-9

Quantification of apolipoprotein D by an immunoassay with time-resolved fluorescence spectroscopy. Knipping G, et al. **J Immunol Methods** 1997 Mar 10;202(1):85-95

Monitoring fibrinogen adsorption kinetics by interfacial TIRF rheometry. Sanders A, et al. **J Mol Recognit** 1996 Sep-Dec;9(5-6):503-8

Intermolecular chiral recognition probed by enantiodifferential excited-state quenching kinetics. Stockman TG, et al. **J Mol Recognit** 1996 Sep-Dec; 9(5-6):595-606

Binding of the activating ion Co(II) to myo-inositol monophosphatase monitored by fluorescence and phosphorescence spectroscopy. Kwon OS, et al. **J Protein Chem** 1997 Jan;16(1):1-9

Ultraviolet laser-induced fluorescence of human stomach tissues: detection of cancer tissues by imaging techniques. Chwirot BW, et al. **Lasers Surg Med** 1997;21(2):149-58

Comparison of methods to determine chromophore concentrations from fluorescence spectra of turbid samples. Durkin AJ, et al. **Lasers Surg Med** 1996;19(1):75-89

Spectroscopic diagnosis of cervical intraepithelial neoplasia (CIN) in vivo using laser-induced fluorescence spectra at multiple excitation wavelengths. Ramanujam N, et al. **Lasers Surg Med** 1996;19(1):63-74

Development of a multivariate statistical algorithm to analyze human cervical tissue fluorescence spectra acquired in vivo. Ramanujam N, et al. **Lasers Surg Med** 1996;19(1):46-62

Innate cellular fluorescence reflects alterations in cellular proliferation. Zhang JC, et al. **Lasers Surg Med** 1997; 20(3):319-31

Safety analysis: relative risks of ultraviolet exposure from fluorescence spectroscopy and colposcopy are comparable. Brookner CK, et al. **Photochem Photobiol** 1997 Jun; 65(6):1020-5

Ultraviolet and visible spectroscopies for tissue diagnostics: fluorescence spectroscopy and elastic-scattering spectroscopy. Bigio IJ, et al. **Phys Med Biol** 1997 May; 42(5):803-14 (75 ref.)

An optical phantom with tissue-like properties in the visible for use in PDT and fluorescence spectroscopy. Wagnières G, et al. **Phys Med Biol** 1997 Jul;42(7):1415-26

Light-induced fluorescence spectroscopy: a potential diagnostic tool for oral neoplasia. Chen CT, et al. **Proc Natl Sci Counc Repub China B** 1996 Oct;20(4):123-30

[In vivo fluorimetry in physiological studies and clinical practice] Samollov VO, et al. **Med Tekh** 1997 May-Jun; (3):3-7 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

All-solid-state miniaturized fluorescence sensor array for the determination of critical gases and electrolytes in blood. Bruno AE, et al. **Anal Chem** 1997 Feb 1;69(3):507-13

Construction and performance of a photobleaching recovery apparatus with microsecond time resolution. Kao HP, et al. **Biophys Chem** 1996 Mar 7;59(1-2):203-10

Physiological monitoring of optically trapped cells: assessing the effects of confinement by 1064-nm laser tweezers using microfluorometry. Liu Y, et al. **Biophys J** 1996 Oct; 71(4):2158-67

[Development and evaluation of a spectroscopy system for classification of laser-induced arterial fluorescence spectra] Morguet AJ, et al. **Biomed Tech (Berl)** 1997 Jun; 42(6):176-82 (Eng. Abstr.) **(Ger)**

[Detection of endogenous chromophore in colorectal lymph node metastases by time-delayed fluorescence measurement] Moesta KT, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:313-7 (Eng. Abstr.) **(Ger)**

METHODS

Antibiotic resistance in Streptomyces lividans: fluorescence assay for streptogramin B lyase. Bateman KP, et al. **Anal Biochem** 1997 Jun 1;248(2):297-9

Fluorescence detection of the anticancer drug topotecan in plasma and whole blood by two-photon excitation. Burke TG, et al. **Anal Biochem** 1996 Nov 15;242(2):266-70

Real-time fluorescence assay system for gene transcription: simultaneous observation of protein/DNA binding, localized DNA melting, and mRNA production. Dunkak KS, et al. **Anal Biochem** 1996 Dec 15;243(2):234-44

A novel method for determination of inorganic polyphosphates using the fluorescent dye fura-2. Lorenz B, et al. **Anal Biochem** 1997 Mar 15;246(2):176-84

Evidence and prevention of HIV-1 nucleocapsid protein adsorption onto fluorescence quartz cells. Vuilleumier C, et al. **Anal Biochem** 1997 Jan 1;244(1):183-5

On-the-fly frequency-domain fluorescence lifetime detection in capillary electrophoresis. Li LC, et al. **Anal Chem** 1996 Sep 1;68(17):2737-43

Visible diode laser-induced fluorescence detection of phenylacetic acid in plasma derivatized with Nile blue and using precolumn phase transfer catalysis. Rahavendran SV, et al. **Anal Chem** 1997 Aug 1;69(15):3022-7

Quantitative optical spectroscopy for tissue diagnosis. Richards-Kortum R, et al. **Annu Rev Phys Chem** 1996; 47:555-606 (282 ref.)

Fluorescence spectra from human semen and their relationship with sperm parameters. Amano T, et al. **Arch Androl** 1996 Jan-Feb;36(1):9-15

Early diagnosis of upper aerodigestive tract cancer by autofluorescence. Dhingra JK, et al. **Arch Otolaryngol Head Neck Surg** 1996 Nov; 122(11):1181-6

Pigment assignment in the absorption spectrum of the photosystem II reaction center by site-selection fluorescence spectroscopy. Konermann L, et al. **Biochemistry** 1997 Jun 17;36(24):7498-502

Identification of a partially rate-determining step in the catalytic mechanism of cAMP-dependent protein kinase: a transient kinetic study using stopped-flow fluorescence spectroscopy. Lew J, et al. **Biochemistry** 1997 Jun 3; 36(22):6717-24

Spectrofluorimetric determination of 1,3,5-trinitro-1,3,5-triazacyclohexane (hexogen, RDX) as a nitramine type explosive. Lapat A, et al. **Biomed Chromatogr** 1997 Mar-Apr;11(2):102-4

On-line diode laser based time-resolved fluorescence detection of labelled oligonucleotides in capillary gel electrophoresis. Sauer M, et al. **Biomed Chromatogr** 1997 Mar-Apr;11(2):81-2

Fluorescence correlation spectroscopy: new methods for detecting molecular associations [comment] Berland KM. **Biophys J** 1997 Apr;72(4):1487-8. Comment on: Biophys J 1997 Apr;72(4):1878-86.

Microspectroscopic imaging of nodulation factor-binding sites on living Vicia sativa roots using a novel bioactive fluorescent nodulation factor. Gadella TW Jr, et al. **Biophys J** 1997 May;72(5):1986-96

Photoacoustic analysis of proteins: volumetric signals and fluorescence quantum yields. Kurian E, et al. **Biophys J** 1997 Jul;73(1):466-76

Multiphoton excitation fluorescence microscopy and spectroscopy of in vivo human skin. Masters BR, et al. **Biophys J** 1997 Jun;72(6):2405-12

Dual-color fluorescence cross-correlation spectroscopy for multicomponent diffusional analysis in solution [see comments] Schwille P, et al. **Biophys J** 1997 Apr; 72(4):1878-86. Comment in: Biophys J 1997 Apr;72(4):1487-8.

Order in phospholipid Langmuir-Blodgett monolayers determined by total internal reflection fluorescence. Zhai X, et al. **Biophys J** 1997 Jun;72(6):2651-9

Retention in situ and spectral analysis of fluorescent vacuole components in sections of plant tissues. Bayliss C, et al. **Biotech Histochem** 1997 May;72(3):123-8

Continuous fluorescence monitoring of rapid cycle DNA amplification. Wittwer CT, et al. **Biotechniques** 1997 Jan; 22(1):130-1, 134-8

Fluorescence spectroscopy: a rapid, noninvasive method for measurement of skin surface thickness of topical agents. Rhodes LE, et al. **Br J Dermatol** 1997 Jan;136(1):12-7

The effects of proteins on [Ca2+] measurement: different effects on fluorescent and NMR methods. Matsuda S, et al. **Cell Calcium** 1996 Nov;20(5):425-30

Determination of in situ dissociation constant for Fura-2 and quantitation of background fluorescence in astrocyte cell line U373-MG. Petr MJ, et al. **Cell Calcium** 1997 Mar; 21(3):233-40

Shine a light, Aurora Biosciences Corporation. Wells WA. **Chem Biol** 1997 Jul;4(7):537-8

Enantiomeric perylene-glycerolipids as fluorogenic substrates for a dual wavelength assay of lipase activity and stereoselectivity. Zandonella G, et al. **Chirality** 1996; 8(7):481-89

Simple spectrofluorometric determination of p-aminobenzoic and p-aminosalicylic acids in biological fluids by use of terbium-sensitized luminescence. Lianidou ES, et al. **Clin Chem** 1996 Oct;42(10):1659-65

Activity of class I and II isoenzymes of alcohol dehydrogenase measured by a fluorometric method in the sera of patients with obstructive jaundice. Chrostek L, et al. **Clin Chim Acta** 1997 Jul 4;263(1):117-22

Total internal reflection fluorescence: applications in cellular biophysics. Thompson NL, et al. **Curr Opin Biotechnol** 1997 Feb;8(1):58-64 (64 ref.)

Time-resolved fluorescence spectroscopy. Millar DP. **Curr Opin Struct Biol** 1996 Oct;6(5):637-42 (46 ref.)

Fluorescence studies of DNA and RNA structure and dynamics. Millar DP. **Curr Opin Struct Biol** 1996 Jun; 6(3):322-6 (38 ref.)

Delivery of macromolecules into adherent cells via electroporation for use in fluorescence spectroscopic imaging and metabolic studies. Bright GR, et al. **Cytometry** 1996 Jul 1;24(3):226-33

A new indirect spectrofluorimetric determination of sub-micromolar concentrations of manganese(II) in bovine liver by means of 2-hydroxyquinoline. Ragos GC, et al. **Farmaco** 1997 Mar;52(3):199-203

Fluorescent measurement of the intracellular pH during sporulation of Saccharomyces cerevisiae. Aon JC, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):17-23

Phenolic substrates for fluorometric detection of laccase activity. Lonergan G, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):485-90

Fluorescence measurement of intracellular pH of the yeast Saccharomyces cerevisiae. Cimprich P, et al. **Folia Microbiol (Praha)** 1996;41(1):84

Detection of dysplasia at colonoscopy using laser-induced fluorescence: a blinded study. Cothren RM, et al. **Gastrointest Endosc** 1996 Aug;44(2):168-76

Ratiometric measurement of intracellular pH of cultured cells with BCECF in a fluorescence multi-well plate reader. Grant RL, et al. **In Vitro Cell Dev Biol Anim** 1997 Apr; 33(4):256-60

Fluorescence energy transfer study of troponin C-melittin complex. Sano H, et al. **J Biochem (Tokyo)** 1995 Nov; 118(5):996-1000

Nuclear pH gradient in mammalian cells revealed by laser microspectrofluorimetry. Seksek O, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):257-62

Enhanced temporal resolution for the microdialysis monitoring of catecholamines and excitatory amino acids using capillary electrophoresis with laser-induced fluorescence detection. Analytical developments and in vitro validations. Bert L, et al. **J Chromatogr A** 1996 Nov 29;755(1):99-111

Sensitive fluorimetric determination of gentamicin sulfate in biological matrices using solid-phase extraction, pre-column derivatization with 9-fluorenylmethyl chloroformate and reversed-phase high-performance liquid chromatography. Stead DA, et al. **J Chromatogr B Biomed Appl** 1996 Jan 26;675(2):295-302

Fluorescence spectroscopy as an aid to imaging latent fingermarks in the ultraviolet. Bramble SK. **J Forensic Sci** 1996 Nov;41(6):1038-41

Diagnostic potential of laser-induced autofluorescence emission in brain tissue. Chung YG, et al. **J Korean Med Sci** 1997 Apr;12(2):135-42

Fibrillogenesis of Alzheimer Abeta peptides studied by fluorescence energy transfer. Huang TH, et al. **J Mol Biol** 1997 Jun 6;269(2):214-24

Analysis of single-strand conformation polymorphisms by

capillary electrophoresis with laser induced fluorescence detection. Arakawa H, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1537–44

Interaction of small ligands with human serum albumin IIIA subdomain. How to determine the affinity constant using an easy steady state fluorescent method [letter] Bagatolli LA, et al. **J Pharm Sci** 1996 Oct;85(10):1131–2

On-line fluorescence of human tissues after oral administration of 5-aminolevulinic acid. Webber J, et al. **J Photochem Photobiol B** 1997 Apr;38(2–3):209–14

Fluorescence correlation spectroscopy (FCS)—a highly sensitive method to analyze drug/target interactions. Sterrer S, et al. **J Recept Signal Transduct Res** 1997 Jan–May;17(1–3):511–20 (10 ref.)

Single-laser approach for fluorescence guidance of excimer laser angioplasty at 308 nm: evaluation in vitro and during coronary angioplasty. Morguet AJ, et al. **Lasers Surg Med** 1997;20(4):382–93

Picosecond fluorescence decay curves collected on millisecond time scale: direct measurement of hydrodynamic radii, local/global mobility, and intramolecular distances during protein-folding reactions. Beechem JM. **Methods Enzymol** 1997;278:24–49 (13 ref.)

Fluorescence methods for studying equilibrium macromolecule-ligand interactions. Eftink MR. **Methods Enzymol** 1997;278:221–57 (67 ref.)

Fluorescence methods for studying kinetics of protein-folding reactions. Eftink MR, et al. **Methods Enzymol** 1997;278:258–86 (68 ref.)

Fluorescence studies of zinc finger peptides and proteins. Eis PS. **Methods Enzymol** 1997;278:330–43 (32 ref.)

Fluorescence approaches to study of protein–nucleic acid complexation. Hill JJ, et al. **Methods Enzymol** 1997; 278:390–416 (67 ref.)

Determination of ground-state dissociation constant by fluorescence spectroscopy. Kowalczyk A, et al. **Methods Enzymol** 1997;278:94–113 (20 ref.)

Fluorescence assays for DNA cleavage. Lee SP, et al. **Methods Enzymol** 1997;278:343–63 (49 ref.)

Applications of fluorescence resonance energy transfer to structure and mechanism of chloroplast ATP synthase. McCarty RE. **Methods Enzymol** 1997;278:528–38 (22 ref.)

Time-resolved fluorescence of constrained tryptophan derivatives: implications for protein fluorescence. McLaughlin ML, et al. **Methods Enzymol** 1997;278:190–202 (22 ref.)

Enhancement of protein spectra with tryptophan analogs: fluorescence spectroscopy of protein–protein and protein–nucleic acid interactions. Ross JB, et al. **Methods Enzymol** 1997;278:151–90 (110 ref.)

Time-resolved room temperature tryptophan phosphorescence in proteins. Schauerte JA, et al. **Methods Enzymol** 1997;278:49–71 (89 ref.)

Fluorescence line narrowing spectroscopy: a tool for studying proteins. Vanderkooi JM, et al. **Methods Enzymol** 1997;278:71–94 (76 ref.)

N-terminal modification of proteins for fluorescence measurements. Wu P, et al. **Methods Enzymol** 1997; 278:321–30 (17 ref.)

Assay of neuropeptidases using fluorogenic substrates. Williams CH. **Methods Mol Biol** 1997;73:361–8

Fluorescence and absorption contrast mechanisms for biomedical optical imaging using frequency-domain techniques. Sevick-Muraca EM, et al. **Photochem Photobiol** 1997 Jul;66(1):55–64

In vivo fluorescence imaging for tissue diagnostics. Andersson-Engels S, et al. **Phys Med Biol** 1997 May; 42(5):815–24 (100 ref.)

Real-time monitoring of hairpin ribozyme kinetics through base-specific quenching of fluorescein-labeled substrates. Walter NG, et al. **RNA** 1997 Apr;3(4):392–404

A rapid method of monitoring the acute phase response in a rat model. Moodie IM, et al. **S Afr Med J** 1997 Jan;87(1 Suppl):100–2

Spectrochemical investigations of fluorescence quenching agents. Part 5. Effect of surfactants of the ability of nitromethane to selectively quench fluorescence emission of alternant PAHs. Pandey S, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Feb; 53A(2):165–72

Protein kinase C activity and phosphoprotein pattern in stimulated alveolar macrophages. Radloff M, et al. **Toxicol Lett** 1996 Nov;88(1–3):139–45

[Practical use of luminogenic reagents specific for guanine-containing compounds] Kai M. **Tanpakushitsu Kakusan Koso** 1997 Apr;42(5):777–83 (16 ref.) **(Jpn)**

[Tissue spectroscopy. New generation of optical methods for cancer detection] Chwirot B, et al. **Pol Merkuriusz Lek** 1996 Nov;1(5):355–8 (29 ref.) (Eng. Abstr.) **(Pol)**

[Separation of the tyrosine and tryptophan components of fluorescence using synchronous scanning method] Vekshin IL. **Biofizika** 1996 Nov–Dec;41(6):1176–9 (Eng. Abstr.) **(Rus)**

STANDARDS

Standardizing flow cytometry: construction of a standardized fluorescence calibration plot using matching spectral calibrators. Schwartz A, et al. **Cytometry** 1996 Mar 15; 26(1):22–31

TRENDS

[Laser fluorescence spectroscopy in cardiology: the problems and outlook] Zaless'kyĭ VM, et al. **Lik Sprava** 1995 Sep–Dec;(9–12):7–10 (32 ref.) **(Ukr)**

VETERINARY

Binding of retinoids to beta-lactoglobulin isolated by bioselective adsorption. Wang Q, et al. **J Dairy Sci** 1997 Jun;80(6):1047–53

Binding of vitamin D and cholesterol to beta-lactoglobulin. Wang Q, et al. **J Dairy Sci** 1997 Jun;80(6):1054–9

SPECTROMETRY, GAMMA

Determination of long-life radiocesiums Cs-134 and Cs-137 in food by gamma-ray spectrometry: summary of collaborative study. Beljaars PR, et al. **J AOAC Int** 1997 May–Jun;80(3):545–8

METHODS

Rapid analysis of 226Ra in waters by gamma-ray spectrometry. Johnston A, et al. **Appl Radiat Isot** 1997 May; 48(5):631–8

An intercomparison of gamma-spectrometry on two samples of biological origin by eight laboratories in four countries. Twining JR. **Appl Radiat Isot** 1996 Aug;47(8):801–10

Computer model generated density correction factors for gamma spectroscopy counting. Darman JJ, et al. **Health Phys** 1997 Feb;72(2):313–7

Data quality objectives for surface-soil cleanup operation using in situ gamma spectrometry for concentration measurements. Fong SH, et al. **Health Phys** 1997 Feb; 72(2):286–95

In-situ measurements of 137Cs in soil by unfolding method. Fülöp M, et al. **Health Phys** 1997 Jun;72(6):923–30

SPECTROMETRY, MASS see **SPECTRUM ANALYSIS, MASS**

SPECTROMETRY, MASS, FAST ATOM BOMBARDMENT

Identification of radical adducts formed in the reactions of unsaturated fatty acids with soybean lipoxygenase using continuous flow fast atom bombardment with tandem mass spectrometry. Iwahashi H, et al. **Free Radic Res** 1996 Sep; 25(3):255–74

Analysis of urinary and faecal porphyrin excretion patterns in human porphyrias by fast atom bombardment mass spectrometry. Luo J, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1289–94

METHODS

Saponins from alfalfa, clover, and mungbeans analyzed by electrospray ionization-mass spectrometry as compared with positive and negative FAB-mass spectrometry. Lee MK, et al. **Adv Exp Med Biol** 1996;405:353–64

Identification of the glycation site of lens gamma B-crystallin by fast atom bombardment tandem mass spectrometry. Smith JB, et al. **Anal Biochem** 1996 Dec 1;243(1):186–9

Assay of adenylyl cyclase activity by quantitative mass spectrometry. el-Shazley H, et al. **Biochem Soc Trans** 1996 Aug;24(3):474S

Analysis of bile acids and bile alcohols in urine by capillary column liquid chromatography-mass spectrometry using fast atom bombardment or electrospray ionization and collision-induced dissociation. Yang Y, et al. **Biomed Chromatogr** 1997 Jul–Aug;11(4):240–55

The role of a liquid matrix in controlling FAB-induced fragmentation. Dass C. **J Mass Spectrom** 1996 Jan; 31(1):77–82

High-sensitivity mass spectrometry for analysis of posttranslational modifications. Takao T, et al. **J Protein Chem** 1997 Jul;16(5):409–13

Fast atom bombardment mass spectrometry. Seifert WE Jr, et al. **Methods Enzymol** 1996;270:453–86

Analysis of glycoproteins and glycopeptides using fast-atom bombardment. Rademaker GJ, et al. **Methods Mol Biol** 1996;61:231–41

Characterization of neuropeptide processing by fast atom bombardment mass spectrometry. Silberring J. **Methods Mol Biol** 1997;73:113–28

SPECTROMETRY, MASS-GAS CHROMATOGRAPHY see **MASS FRAGMENTOGRAPHY**

SPECTROMETRY, MASS, MATRIX-ASSISTED LASER DESORPTION-IONIZATION

Structural characterization of peptidoglycan muropeptides by matrix-assisted laser desorption ionization mass spectrometry and postsource decay analysis. Xu N, et al. **Anal Biochem** 1997 May 15;248(1):7–14

Functional wave time-lag focusing matrix-assisted laser desorption/ionization in a linear time-of-flight mass spectrometer: improved mass accuracy. Whittal RM, et al. **Anal Chem** 1997 Jun 1;69(11):2147–53

Time-lag focusing MALDI time-of-flight mass spectrometry for polymer characterization: oligomer resolution, mass accuracy, and average weight information. Whittal RM, et al. **Anal Chem** 1997 Jul 15;69(14):2734–41

An automated MALDI mass spectrometry approach for optimizing cyclosporin extraction and quantitation. Wu J, et al. **Anal Chem** 1997 Sep 15;69(18):3767–71

Comparison of in-gel and on-membrane digestion methods at low to sub-pmol level for subsequent peptide and fragment-ion mass analysis using matrix-assisted laser-desorption/ionization mass spectrometry. Courchesne PL, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):369–81

Probing protein function using a combination of gene knockout and proteome analysis by mass spectrometry. Dainese P, et al. **Electrophoresis** 1997 Mar–Apr; 18(3–4):432–42

Identification of two-dimensional gel electrophoresis resolved yeast proteins by matrix-assisted laser desorption ionization mass spectrometry. Larsson T, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):418–23

Rapid mass spectrometric identification of proteins from two-dimensional polyacrylamide gels after in gel proteolytic digestion. Li G, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):391–402

Identification of mouse liver proteins on two-dimensional electrophoresis gels by matrix-assisted laser desorption/ionization mass spectrometry of in situ enzymatic digests. O'Connell KL, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):349–59

Sensitivity and mass accuracy for proteins analyzed directly from polyacrylamide gels: implications for proteome mapping. Ogorzalek Loo RR, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):382–90

The analysis of myocardial proteins by infrared and ultraviolet laser desorption mass spectrometry. Sutton CW, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):424–31

Micropreparation of peptides by capillary electrophoresis for matrix assisted laser desorption mass spectrometry. Bergman AC, et al. **FEBS Lett** 1996 Nov 11;397(1):45–9

High-energy collision-induced fragmentation of complex oligosaccharides ionized by matrix-assisted laser desorption/ionization mass spectrometry. Harvey DJ, et al. **J Mass Spectrom** 1997 Feb;32(2):167–87

Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry as a tool to probe the reactions of trans-Hex-2-enal with proteins [letter] Houston CT, et al. **J Mass Spectrom** 1997 Jun;32(6):662–5

Identification of multiple target sites for a glutathione conjugate on glutathione-S-transferase by matrix-assisted laser desorption/ionization mass spectrometry. Jespersen S, et al. **J Mass Spectrom** 1996 Jan;31(1):101–7

Matrix-assisted laser desorption/ionization mass spectrometric peptide mapping of the neural cell adhesion protein neurolin purified by sodium dodecyl sulfate polyacrylamide gel electrophoresis or acidic precipitation. Kussmann M, et al. **J Mass Spectrom** 1997 May; 32(5):483–93

Molecular mass tagging to one strand of polymerase chain reaction products [letter] Wada Y. **J Mass Spectrom** 1997 Jan;32(1):124–5

N-terminal protein ladder sequencing. Wang R, et al. **Methods Mol Biol** 1997;64:175–82

MALDI-MS as a monitor of the purification and folding of synthetic eclosion hormone. Wang YJ, et al. **Peptides** 1997;18(3):337–46

Gas phase hydrogen/deuterium exchange reactions of peptide ions in a quadrupole ion trap mass spectrometer. Kaltashov IA, et al. **Proteins** 1997 May;28(1):53–8

Characterization of two new matrices for matrix-assisted laser desorption/ionization mass spectrometry. Bai J, et al. **Rapid Commun Mass Spectrom** 1996;10(7):839–44

Matrix-assisted laser desorption/ionization mass spectrometry: a valid analytical tool in the dairy industry. Catinella S, et al. **Rapid Commun Mass Spectrom** 1996; 10(9):1123–7

Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry as a rapid screening method to detect mutations causing Tay-Sachs disease. Srinivasan JR, et al. **Rapid Commun Mass Spectrom** 1997;11(10):1144–50

INSTRUMENTATION

A new strategy for MALDI on magnetic sector mass spectrometers with point detectors. Kolli VS, et al. **Anal Chem** 1997 Feb 1;69(3):327–32

A MALDI probe for mass spectrometers. Lennon JD 3rd, et al. **Anal Chem** 1997 Jul 1;69(13):2525–9

Peptide mass fingerprinting using MALDI-TOF mass spectrometry. Pappin DJ. **Methods Mol Biol** 1997; 64:165–73

Compact tunable Cr:LiSAF laser for infrared matrix-assisted laser desorption/ionization. Sadeghi M, et al. **Rapid Commun Mass Spectrom** 1997;11(4):393–7

Improved resolution in the detection of oligonucleotides up to 60-mers in matrix-assisted laser desorption/ionization time-of-flight mass spectrometry using pulsed-delayed extraction with a simple high voltage transistor switch. Zhu Y, et al. **Rapid Commun Mass Spectrom** 1997;11(9):987–92

METHODS

Matrix-assisted laser desorption ionization time-of-flight mass spectrometry as a rapid quality control method in oligonucleotide synthesis. Ball RW, et al. **Anal Biochem**

1997 Mar 15;246(2):185–94

The use of osazones as matrices for the matrix-assisted laser desorption/ionization mass spectrometry of carbohydrates. Chen P, et al. **Anal Biochem** 1997 Jan 1;244(1):144–51

Mass spectrometry of whole proteins eluted from sodium dodecyl sulfate-polyacrylamide gel electrophoresis gels. Cohen SL, et al. **Anal Biochem** 1997 May 1;247(2):257–67

Identification of proteins by matrix-assisted laser desorption ionization-mass spectrometry following in-gel digestion in low-salt, nonvolatile buffer and simplified peptide recovery. Fountoulakis M, et al. **Anal Biochem** 1997 Aug 1;250(2):153–6

Electrospray ionization mass spectrometry of genetically and chemically modified bacteriorhodopsins. Hufnagel P, et al. **Anal Biochem** 1996 Dec 1;243(1):46–54

BIA/MS: interfacing biomolecular interaction analysis with mass spectrometry. Krone JR, et al. **Anal Biochem** 1997 Jan 1;244(1):124–32

Oligosaccharide characterization and quantitation using 1-phenyl-3-methyl-5-pyrazolone derivatization and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. Pitt JJ, et al. **Anal Biochem** 1997 May 15;248(1):63–75

Identification of endogenous Des-Arg9-[Hyp3]-bradykinin in human plasma with post-source-decay matrix-assisted laser desorption/ionization mass spectrometry. Schlüter H, et al. **Anal Biochem** 1997 Mar 1;246(1):15–9

Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry for the detection of polymerase chain reaction products containing 7-deazapurine moieties. Siegert CW, et al. **Anal Biochem** 1996 Dec 1;243(1):55–65

Analysis of fructans from higher plants by matrix-assisted laser desorption/ionization mass spectrometry. Stahl B, et al. **Anal Biochem** 1997 Mar 15;246(2):195–204

A matrix-assisted laser desorption ionization time-of-flight mass spectrometry approach to identify the origin of the glycan heterogeneity of diptericin, an O-glycosylated antibacterial peptide from insects. Uttenweiler-Joseph S, et al. **Anal Biochem** 1997 May 1;247(2):366–75

Phosphopeptide analysis by matrix-assisted laser desorption time-of-flight mass spectrometry. Annan RS, et al. **Anal Chem** 1996 Oct 1;68(19):3413–21

Analysis of proteins by direct-scanning infrared-MALDI mass spectrometry after 2D-PAGE separation and electroblotting. Eckerskorn C, et al. **Anal Chem** 1997 Aug 1;69(15):2888–92

Automation of matrix-assisted laser desorption/ionization mass spectrometry using fuzzy logic feedback control. Jensen ON, et al. **Anal Chem** 1997 May 1;69(9):1706–14

Recovery of nucleic acids from immobilized biotin-streptavidin complexes using ammonium hydroxide and applications in MALDI-TOF mass spectrometry. Jurinke C, et al. **Anal Chem** 1997 Mar 1;69(5):904–10

Detailed characterization of antisense DNA oligonucleotides. Keough T, et al. **Anal Chem** 1996 Oct 1;68(19):3405–12

DNA analysis using an electrospray scanning mobility particle sizer. Mouradian S, et al. **Anal Chem** 1997 Mar 1;69(5):919–25

A coordinated high-performance liquid chromatographic, capillary electrophoretic, and mass spectrometric approach for the analysis of oligosaccharide mixtures derivatized with 2-aminoacridone. Okafo G, et al. **Anal Chem** 1996 Dec 15;68(24):4424–30

High-sensitivity detection and postsource decay of 2-aminopyridine-derivatized oligosaccharides with matrix-assisted laser desorption/ionization mass spectrometry. Okamoto M, et al. **Anal Chem** 1997 Aug 1; 69(15):2919–26

Matrix-assisted laser desorption ion trap mass spectrometry: efficient trapping and ejection of ions. Qin J, et al. **Anal Chem** 1996 Jul 1;68(13):2102–7

Matrix-assisted laser desorption ion trap mass spectrometry: efficient isolation and effective fragmentation of peptide ions. Qin J, et al. **Anal Chem** 1996 Jul 1;68(13):2108–12

Combining avidin-biotin chemistry with matrix-assisted laser desorption/ionization mass spectrometry. Schriemer DC, et al. **Anal Chem** 1996 Oct 1;68(19):3382–7

Calicheamicin derivatives conjugated to monoclonal antibodies: determination of loading values and distributions by infrared and UV matrix-assisted laser desorption/ionization mass spectrometry and electrospray ionization mass spectrometry. Siegel MM, et al. **Anal Chem** 1997 Jul 15;69(14):2716–26

DNA sequence analysis by matrix-assisted laser desorption ionization MS. Haff LA, et al. **Biochem Soc Trans** 1996 Aug;24(3):901–4

Identification of oligosaccharides by matrix-assisted laser desorption ionization and electrospray MS. Harvey DJ, et al. **Biochem Soc Trans** 1996 Aug;24(3):905–12 (40 ref.)

Size-selective derivatizations with polymer immobilized reagents. Szulc M, et al. **Biomed Chromatogr** 1997 Jul-Aug; 11(4):207–23

Proteome analysis of Saccharomyces cerevisiae: a methodological outline. Fey SJ, et al. **Electrophoresis** 1997 Aug;18(8):1361–72

Structural analysis and identification of gel-purified proteins, available in the femtomole range, using a novel computer program for peptide sequence assignment, by matrix-assisted laser desorption ionization-reflectron time-of-flight-mass spectrometry. Gevaert K, et al. **Electrophoresis** 1996 May;17(5):918–24

Sequence patterns produced by incomplete enzymatic digestion or one-step Edman degradation of peptide mixtures as probes for protein database searches. Jensen ON, et al. **Electrophoresis** 1996 May;17(5):938–44

Mass spectrometric characterization of glycosylated interferon-gamma variants separated by gel electrophoresis. Mørtz E, et al. **Electrophoresis** 1996 May; 17(5):925–31

Application of combined mass spectrometry and partial amino acid sequence to the identification of gel-separated proteins. Patterson SD, et al. **Electrophoresis** 1996 May; 17(5):877–91

Protease-catalyzed incorporation of 18O into peptide fragments and its application for protein sequencing by electrospray and matrix-assisted laser desorption/ionization mass spectrometry. Schnölzer M, et al. **Electrophoresis** 1996 May;17(5):945–53

Ultraviolet matrix assisted laser desorption ionization-mass spectrometry of electroblotted proteins. Schreiner M, et al. **Electrophoresis** 1996 May;17(5):954–61

C-terminal ladder sequencing by an approach combining chemical degradation with analysis by matrix-assisted-laser-desorption ionization mass spectrometry. Thiede B, et al. **Eur J Biochem** 1997 Mar 15;244(3):750–4

Identification of apolipoprotein E polymorphisms using temperature cycled primer oligo base extension and mass spectrometry. Little DP, et al. **Eur J Clin Chem Clin Biochem** 1997 Jul;35(7):545–8

Confirmation of nitric oxide synthesis in active ulcerative colitis by infra-red diode laser spectroscopy. Reynolds PD, et al. **Eur J Gastroenterol Hepatol** 1997 May;9(5):463–6

New conformational properties induced by the replacement of Tyr-64 in Desulfovibrio vulgaris Hildenborough ferricytochrome c553 using isotopic exchanges monitored by mass spectrometry. Guy P, et al. **FEBS Lett** 1996 Oct 14;395(1):53–7

Determination of site-specific modifications of glucose-6-phosphate dehydrogenase by 4-hydroxy-2-nonenal using matrix assisted laser desorption time-of-flight mass spectrometry. Grace JM, et al. **Free Radic Res** 1996 Jul;25(1):23–9

Detection of hepatitis B virus DNA in serum samples via nested PCR and MALDI-TOF mass spectrometry. Jurinke C, et al. **Genet Anal** 1996 Sep;13(3):67–71

Single-nucleotide polymorphism identification assays using a thermostable DNA polymerase and delayed extraction MALDI-TOF mass spectrometry. Haff LA, et al. **Genome Res** 1997 Apr;7(4):378–88

Application of matrix-assisted laser desorption ionization time-of-flight mass spectrometry with delayed ion extraction to ganglioside analyses. Sugiyama E, et al. **Glycobiology** 1997 Jul;7(5):719–24

Preparation of various lysogangliosides including lyso-fucosyl GM1 and delayed extraction matrix-assisted laser desorption ionization time-of-flight mass spectrometric analysis. Taketomi T, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):264–9

Investigation of glucose-dependent insulinotropic polypeptide-(1–42) and glucagon-like peptide-1-(7–36) degradation in vitro by dipeptidyl peptidase IV using matrix-assisted laser desorption/ionization-time of flight mass spectrometry. A novel kinetic approach. Pauly RP, et al. **J Biol Chem** 1996 Sep 20;271(38):23222–9

Probing protein structure using biochemical and biophysical methods. Proteolysis, matrix-assisted laser desorption/ionization mass spectrometry, high-performance liquid chromatography and size-exclusion chromatography of p21Waf1/Cip1/Sdi1. Kriwacki RW, et al. **J Chromatogr A** 1997 Aug 8; 777(1):23–30

Injection of externally generated ions into an increasing trapping field of a quadrupole ion trap mass spectrometer. Doroshenko VM, et al. **J Mass Spectrom** 1997 Jun; 32(6):602–15

Capillary electrophoresis combined with matrix-assisted laser desorption/ionization mass spectrometry; continuous sample deposition on a matrix-precoated membrane target. Zhang H, et al. **J Mass Spectrom** 1996 Sep;31(9):1039–46

Efficient peptide ladder sequencing by MALDI-TOF mass spectrometry using allyl isothiocyanate. Gu QM, et al. **J Pept Res** 1997 Jun;49(6):484–91

Combination of micropreparative capillary electrophoresis and matrix-assisted laser desorption/ionization mass spectrometry for peptide analysis. Bergman AC, et al. **J Protein Chem** 1997 Jul;16(5):421–3

C-terminal sequence determination of modified peptides by MALDI MS. Bonetto V, et al. **J Protein Chem** 1997 Jul; 16(5):371–4

High-sensitivity peptide mapping by micro-LC with on-line membrane blotting and subsequent detection by scanning-IR-MALDI mass spectrometry. Eckerskorn C, et al. **J Protein Chem** 1997 Jul;16(5):349–62

Accurate mass measurements using MALDI-TOF with delayed extraction. Takach EJ, et al. **J Protein Chem** 1997 Jul;16(5):363–9

Contact sites of peptide-oligoribonucleotide cross-links identified by a combination of peptide and nucleotide sequencing with MALDI MS. Urlaub H, et al. **J Protein Chem** 1997 Jul;16(5):375–83

Matrix-assisted laser desorption ionization mass-spectrometry of proteins. Beavis RC, et al. **Methods Enzymol** 1996;270:519–51

The identification of electrophoretically separated proteins by peptide mass fingerprinting. Cottrell JS, et al. **Methods Mol Biol** 1996;61:67–82

Identification of peptides by matrix-assisted laser desorption ionization time of flight mass spectrometry (MALDI-TOF-MS) and direct analysis of the laterobuccal nerve from the pond snail Lymnaea stagnalis. Critchley G, et al. **Methods Mol Biol** 1997;73:141–52

Identification of cleaved oligosaccharides by matrix-assisted laser desorption/ionization. Harvey DJ. **Methods Mol Biol** 1996;61:243–53

Rapid analysis of single-cysteine variants of recombinant proteins. Keough TW, et al. **Methods Mol Biol** 1996; 61:171–83

Neuropeptide expression patterns as determined by matrix-assisted laser desorption ionization mass spectrometry. Li KW, et al. **Methods Mol Biol** 1997; 72:219–23

Hydrophobic proteins and peptides analyzed by matrix-assisted laser desorption/ionization. Schey KL. **Methods Mol Biol** 1996;61:227–30

New instrumental approaches to collision-induced dissociation using a time-of-flight instrument. Spengler B. **Methods Mol Biol** 1996;61:43–56

Posttranslational modifications analyzed by automated protein ladder sequencing. Wang R, et al. **Methods Mol Biol** 1996;61:161–70

Matrix-assisted laser desorption/ionization mass spectrometry (MALDI) of endonuclease digests of RNA. Hahner S, et al. **Nucleic Acids Res** 1997 May 15; 25(10):1957–64

Mass spectrometric sequencing of synthetic peptides containing alpha, alpha-dialkylated amino acid residues by MALDI post-source decay analysis. Wenschuh H, et al. **Pept Res** 1996 May-Jun;9(3):122–6

New immobilization chemistry for probe affinity mass spectrometry. Brockman AH, et al. **Rapid Commun Mass Spectrom** 1996;10(13):1688–92

Studies on the selection of new matrices for ultraviolet matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. Krause J, et al. **Rapid Commun Mass Spectrom** 1996;10(15):1927–33

[Laser fluorescence spectroscopy in intraoperative diagnosis and staging of lung cancer] Uspenskiĭ LV, et al. **Khirurgiia (Mosk)** 1996;(3):31–3 (Eng. Abstr.) **(Rus)**

TRENDS

Matrix-assisted laser desorption ionization MS: a progress report. Karas M. **Biochem Soc Trans** 1996 Aug; 24(3):897–900 (40 ref.)

SPECTROMETRY, MASS, SECONDARY ION

Direct analysis of filter paper blood specimens for identification of Smith-Lemli-Opitz syndrome using time-of-flight secondary ion mass spectrometry. Zimmerman PA, et al. **Am J Med Genet** 1997 Jan 31; 68(3):300–4

Use of a polybrene capillary coating in capillary electrophoresis for rapid analysis of hemoglobin variants with on-line detection via an ion trap storage/reflectron time-of-flight mass spectrometer. Li MX, et al. **Anal Chem** 1997 Jul 1;69(13):2451–6

Ion microscopy imaging of 10B from p-boronophenylalanine in a brain tumor model for boron neutron capture therapy. Smith DR, et al. **Cancer Res** 1996 Oct 1;56(19):4302–6

Mutual contribution by "track" microradioautography method (MRA) and secondary ion mass spectrometry (SIMS) microscopy: prospects in technetium dosimetry at-the cellular level. Fourré C, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 May;42(3):385–93

Analysis of plasma isoflavones by reversed-phase HPLC-multiple reaction ion monitoring-mass spectrometry. Coward L, et al. **Clin Chim Acta** 1996 Mar 29;247(1-2):121–42

Ion microscopic imaging of calcium during 1,25-dihydroxyvitamin D-mediated intestinal absorption. Fullmer CS, et al. **Histochem Cell Biol** 1996 Aug; 106(2):215–22

Detection of stanozolol in hair by negative ion chemical ionization mass spectrometry. Höld KM, et al. **J Anal Toxicol** 1996 Oct;20(6):345–49

METHODS

Monitoring papain digestion of a monoclonal antibody by electrospray ionization mass spectrometry. Bennett KL, et al. **Anal Biochem** 1997 Feb 1;245(1):17–27

Ceramide profiling of complex lipid mixtures by electrospray ionization mass spectrometry. Gu M, et al. **Anal Biochem** 1997 Jan 15;244(2):347–56

Characterization and quantification of rat bile phosphatidylcholine by electrospray-tandem mass spectrometry. Lehmann WD, et al. **Anal Biochem** 1997 Mar 1;246(1):102–10

Atomic and molecular imaging at the single-cell level with TOF-SIMS. Colliver TL, et al. **Anal Chem** 1997 Jul 1; 69(13):2225–31

Subcellular distribution of a new fluorinated, biocompatible, non-ionic telomeric carrier: a study in cultured B16 melanoma and rat skin fibroblasts. Chehade F, et al.

Cell Mol Biol (Noisy-le-grand) 1996 May;42(3):335-42

Mapping the subcellular distribution of biomolecules at the ultrastructural level by ion microscopy. Galle P, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 May;42(3):325-34

Imaging and microanalysis of 14N and 15N by SIMS microscopy in yeast and plant samples. Gojon A, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 May;42(3):351-60

Advances in high resolution SIMS studies of BrdU-labelled human metaphase chromosomes. Levi-Setti R, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 May;42(3):301-24

Tandem mass spectrometric approach for determining structure of molecular species of aminophospholipids. Chen S. **Lipids** 1997 Jan;32(1):85-100

Imaging of radiocarbon-labelled tracer molecules in neural tissue using accelerator mass spectrometry. Hedges RE, et al. **Nature** 1996 Oct 31;383(6603):823-6

SPECTROMETRY, NEAR-INFRARED see **SPECTROSCOPY, NEAR-INFRARED**

SPECTROMETRY, PARTICLE-INDUCED X-RAY EMISSION see **SPECTROMETRY, X-RAY EMISSION**

SPECTROMETRY, PROTON-INDUCED X-RAY EMISSION see **SPECTROMETRY, X-RAY EMISSION**

SPECTROMETRY, X-RAY EMISSION

Present and further research in nuclear microprobe. Bara M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):133-4

A review of nuclear microscopy and applications in medicine. Thong PS, et al. **Singapore Med J** 1996 Oct;37(5):527-31 (23 ref.)

METHODS

A high resolution PIXE measurement for blood plasma ultrafiltrate. Application to loosely bound copper. Kupila-Rantala T, et al. **Biol Trace Elem Res** 1996 Oct-Nov;55(1-2):173-9

Nuclear microanalysis of the effect of magnesium and taurine on the ionic distribution in the human amniotic membrane. Bara M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb; 42(1):27-38

The use of nuclear microprobe in biology and medicine. Bara M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):i

Investigation of the uptake of drugs by individual cells using a scanning proton microprobe (SPM). Cholewa M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):69-76

Regional biological dosimetry: radiation induced changes of elemental concentrations in hair. Jaksic M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):127-31

Nuclear microprobe: a microanalytical technique in biology. Moretto P. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb; 42(1):1-16 (69 ref.)

Pixe analysis of pathological skin with special reference to psoriasis and atopic dry skin. Pallon J, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):111-8

Direct measurement of elemental distributions in insulin-producing cells using nuclear microscopy. Palsgard E, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb; 42(1):49-57

Microanalysis of calcium-rich human kidney stones at the NAC nuclear microprobe. Pineda CA, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):119-26

Nuclear microprobe applied to the study of coronary artery walls--a distinct look at atherogenesis. Pinheiro T, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):89-102

Elemental changes in atherosclerotic lesions using nuclear microscopy. Thong PS, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):103-10

Pixe microanalysis of trace elements of normoxic, ischemic and reperfused rat hearts. Verhoef BA, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):59-67

Nuclear microscope analysis in Alzheimer's and Parkinson's disease: A review. Watt F. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):17-26 (34 ref.)

Analysis of gunshot residues on human tissues and clothing by X-ray microfluorescence. Brazeau J, et al. **J Forensic Sci** 1997 May;42(3):424-8

Aspects on the physiology of human skin: studies using particle probe analysis. Forslind B, et al. **Microsc Res Tech** 1997 Aug 15;38(4):373-86 (40 ref.)

A study of Technegas employing X-ray photoelectron spectroscopy, scanning transmission electron microscopy and wet-chemical methods. Jackson P, et al. **Nucl Med Commun** 1996 Jun;17(6):504-13

SPECTROMETRY, X-RAY EMISSION, ELECTRON MICROSCOPIC see **ELECTRON PROBE MICROANALYSIS**

SPECTROMETRY, X-RAY EMISSION, ELECTRON PROBE see **ELECTRON PROBE MICROANALYSIS**

SPECTROMETRY, X-RAY FLUORESCENCE see **SPECTROMETRY, X-RAY EMISSION**

SPECTROPHOTOMETRY

Association between second-trimester bacterial invasion of amniotic fluid and spectrophotometry at 450 nm [letter; comment] Sziller I, et al. **Am J Obstet Gynecol** 1996 Oct; 175(4 Pt 1):1082-3. Comment on: Am J Obstet Gynecol 1996 Mar;174(3):839-42.

Assessment of the quality of frozen serum by spectrophotometric analysis and sperm bioassay. Hossain AM, et al. **Arch Androl** 1997 Sep-Oct;39(2):119-25

Selective spectrophotometric determination of glucose and fructose in the presence of aldoses using phenol-acetone reagent and cerium(III) chloride. Gamian A, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(4):249-54

Spectrophotometric determination of oxidative metabolism. Lokuta MA, et al. **Biotechniques** 1997 May;22(5):841-4

Cardiac output and circulating blood volume analysis by pulse dye-densitometry. Iijima T, et al. **J Clin Monit** 1997 Mar;13(2):81-9

Transcutaneous bilirubinometry decreases the need for serum bilirubin measurements and saves money. Maisels MJ, et al. **Pediatrics** 1997 Apr;99(4):599-601

INSTRUMENTATION

Laser system for measuring small changes in plasma tracer concentrations. Klaesner JW, et al. **Biomed Instrum Technol** 1996 Nov-Dec;30(6):507-16

Monitoring of flaps by measurement of intracapillary haemoglobin oxygenation with EMPHO II: experimental and clinical study. Wolff KD, et al. **Br J Oral Maxillofac Surg** 1996 Dec;34(6):524-9

Evaluation of the AVOXimeter: precision, long-term stability, linearity, and use without heparin. Bailey SR, et al. **J Clin Monit** 1997 May;13(3):191-8

The Erlanger Microlightguide Photometer: a new concept for monitoring intracapillary oxygen supply of tissue--first results and a review of the physiological basis. Kuchenreuther S, et al. **J Clin Monit** 1996 May; 12(3):211-24

Diode array detection. Rozing GP. **Methods Enzymol** 1996; 270:201-32

[Microlight-guided spectrophotometry of the cochlea] Leuwer R, et al. **HNO** 1997 May;45(5):372-7 (Eng. Abstr.) **(Ger)**

METHODS

Applications of impedance spectroscopy in biochemistry and biophysics. Janshoff A, et al. **Acta Biochim Pol** 1996; 43(2):339-48 (19 ref.)

Lightguide spectrophotometry for the assessment of skin healing viability in critical limb ischaemia. Harrison DK, et al. **Adv Exp Med Biol** 1996;388:45-51

Detection of S-nitrosothiols and other nitric oxide derivatives by photolysis-chemiluminescence spectrometry. Alpert C, et al. **Anal Biochem** 1997 Feb 1; 245(1):1-7

Spectrophotometric determination of homogentisate using Aspergillus nidulans homogentisate dioxygenase. Fernández-Cañón JM, et al. **Anal Biochem** 1997 Feb 15; 245(2):218-21

The limitations of an iodometric aerobic assay for peroxides. Gebicki JM, et al. **Anal Biochem** 1996 Sep 5;240(2):235-41

Solubilization of protein-dye complexes on nitrocellulose to quantify proteins spectrophotometrically. Goldring JP, et al. **Anal Biochem** 1996 Nov 15;242(2):197-201

A continuous spectrophotometric assay for monoamine oxidase and related enzymes in tissue homogenates. Holt A, et al. **Anal Biochem** 1997 Jan 15;244(2):384-92

A spectrophotometric assay for the enzymatic demethoxylation of pectins and the determination of pectinesterase activity. Mangos TJ, et al. **Anal Biochem** 1997 Jan 15;244(2):357-66

Effect of vanadate on protein determination by the coomassie brilliant blue microassay procedure [published erratum appears in Anal Biochem 1997 Jul 15;250(1):130] Matejovicova M, et al. **Anal Biochem** 1997 Feb 15; 245(2):252-4

Enzymatic assay for chloride ion with chloride-dependent sarcosine oxidase created by site-directed mutagenesis. Nishiya Y, et al. **Anal Biochem** 1997 Feb 15;245(2):127-32

Chemical characterization of eumelanins with special emphasis on 5,6-dihydroxyindole-2-carboxylic acid content and molecular size. Ozeki H, et al. **Anal Biochem** 1997 May 15;248(1):149-57

Label-free monitoring of DNA-ligand interactions. Piehler J, et al. **Anal Biochem** 1997 Jun 15;249(1):94-102

A continuous spectrophotometric assay for aspartate transcarbamylase and ATPases. Rieger CE, et al. **Anal Biochem** 1997 Mar 1;246(1):86-95

Spectrophotometric assay of D-aspartate and D-glutamate using D-aspartate oxidase with malate dehydrogenase and glutamate dehydrogenase. Wakayama M, et al. **Anal Biochem** 1997 Aug 1;250(2):252-3

Linearization of the Bradford protein assay increases its sensitivity: theoretical and experimental studies. Zor T, et al. **Anal Biochem** 1996 May 1;236(2):302-8

Quantitative optical spectroscopy for tissue diagnosis. Richards-Kortum R, et al. **Annu Rev Phys Chem** 1996; 47:555-606 (282 ref.)

Multichannel analysis of single-turnover kinetics of cytochrome aa3 reduction of O2. Bose S, et al. **Biochemistry** 1997 Mar 4;36(9):2439-49

Covalent complexes between serum albumin and 7-hydroxycoumarin-4-acetic acid: synthesis and applications in the spectrophotometric detection of long-chain fatty acids. Demant EJ. **Biochim Biophys Acta** 1996 Nov 11;1304(1):43-55

Teaching light scattering spectroscopy: the dimension and shape of tobacco mosaic virus [published erratum appears in Biophys J 1997 Mar;72(3):1481] Santos NC, et al. **Biophys J** 1996 Sep;71(3):1641-50

Spectrophotometric quantitation of tissue culture cell number in any medium. Mohler WA, et al. **Biotechniques** 1996 Aug; 21(2):260-2, 264, 266

Effect of pH and ionic strength on the spectrophotometric assessment of nucleic acid purity. Wilfinger WW, et al. **Biotechniques** 1997 Mar;22(3):474-6, 478-81

Use of lightguide spectrophotometry to investigate the effect of postural changes on skin oxygenation in deep venous insufficiency. Hanna GB, et al. **Br J Surg** 1997 Apr; 84(4):520-3

Spectrophotometric determination of urinary iodine by flow-injection analysis with on-line catalytic digestion. Yaping Z, et al. **Clin Chem** 1996 Dec;42(12):2021-7

Water protective effect of barrier creams and moisturizing creams: a new in vivo test method. de Fine Olivarius F, et al. **Contact Dermatitis** 1996 Oct;35(4):219-25

Continuous noninvasive measurement of cerebral arterial and venous oxygen saturation at the bedside in mechanically ventilated neonates. Wolf M, et al. **Crit Care Med** 1997 Sep;25(9):1579-82

Assay of serum/plasma beta-N-acetylhexosaminidase isoenzymes by heat inactivation using a continuous spectrophotometric method adapted to a centrifugal analyzer. Pérez LF, et al. **Eur J Clin Chem Clin Biochem** 1997 Jun;35(6):445-52

Optical properties of human meniscus. Glinkowski W, et al. **Folia Morphol (Warsz)** 1996;55(4):249-50

A spectrophotometric assay for alpha-mannosidase activity. Scaman CH, et al. **Glycobiology** 1996 Apr;6(3):265-70

Spectrophotometric determination of the morphogenetic transformation by synchronous Candida albicans: effects of antifungal agents. Hawser S, et al. **J Antimicrob Chemother** 1996 Jul;38(1):67-73

Millimeter wave-induced vibrational modes in DNA as a possible alternative to animal tests to probe for carcinogenic mutations. Woolard DL, et al. **J Appl Toxicol** 1997 Jul-Aug;17(4):243-6

Rhodamine 800 as a probe of energization of cells and tissues in the near-infrared region: a study with isolated rat liver mitochondria and hepatocytes. Sakanoue J, et al. **J Biochem (Tokyo)** 1997 Jan;121(1):29-37

Determination of carbohydrates by high-performance capillary electrophoresis with indirect absorbance detection. Lee YH, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):87-97

Potentiometric and spectroscopic study of copper (II) ion binding by 1,6-anhydro-derivatives of aminosugars. Jezowska-Bojczuk M, et al. **J Inorg Biochem** 1996 Feb 15;61(3):213-9

Stopped-flow kinetic investigation of the oxidation of ascorbic acid by iron (III) benzohydroxamic acid. Lakshmi S, et al. **J Inorg Biochem** 1996 Feb 15;61(3):155-63

Use of the MTT assay in adult ventricular cardiomyocytes to assess viability: effects of adenosine and potassium on cellular survival. Gomez LA, et al. **J Mol Cell Cardiol** 1997 Apr;29(4):1255-66

Elucidation of the structure of constrained bicyclopeptides in solution by two-dimensional cross-relaxation spectroscopy: amatoxin analogues. Isernia C, et al. **J Pept Sci** 1996 Jan-Feb;2(1):3-13

Simultaneous determination of tenoxicam and 2-aminopyridine using derivative spectrophotometry and high-performance liquid chromatography. el Walily AF, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1923-8

Rapid determination of amphotericin B in serum and urine by third-order derivative spectrophotometry. Botsoglou NA, et al. **J Pharm Sci** 1996 Apr;85(4):402-6

Characterization and application of UV detector spore films: the sensitivity curve of a new detector system provides good similarity to the action spectrum for UV-induced erythema in human skin. Quintern LE, et al. **J Photochem Photobiol B** 1997 Jan;37(1-2):158-66

A new method for the assessment of tissue hemoglobin oxygenation in patients with chronic venous insufficiency. Thum J, et al. **Microvasc Res** 1996 May;51(3):317-26

Pulsed photoacoustic study of the diffusion of chromophores in human skin. Lahjomri F, et al. **Photochem Photobiol** 1997 Feb;65(2):292-302

Fluorescence and absorption contrast mechanisms for biomedical optical imaging using frequency-domain techniques. Sevick-Muraca EM, et al. **Photochem Photobiol** 1997 Jul;66(1):55-64

Accuracy of noninvasive in vivo measurements of photosensitizer uptake based on a diffusion model of reflectance spectroscopy. Weersink RA, et al. **Photochem Photobiol** 1997 Sep;66(3):326-35

Spectrophotometric characterization of eumelanin and pheomelanin in hair. Ozeki H, et al. **Pigment Cell Res** 1996 Oct;9(5):265-70

A few selected applications of surface nonlinear optical spectroscopy. Shen YR. **Proc Natl Acad Sci U S A** 1996 Oct 29;93(22):12104-11 (74 ref.)

Amputation level assessment using lightguide spectrophotometry. Harrison DK, et al. **Prosthet Orthot Int** 1995 Dec;19(3):139-47

Methodologic considerations in the interpretation of

SPECTROPHOTOMETRY

postmortem carboxyhemoglobin concentrations. Levine B, et al. **Toxicology** 1996 Dec 31;115(1–3):129–34

Quasi-elastic light scattering spectroscopy for investigation of plasma proteins. Yanovskaya NB. **Ukr Biokhim Zh** 1996 Jul–Aug;68(4):21–2

Microspectrophotometric and immunocytochemical identification of ultraviolet photoreceptors in geckos. Loew ER, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):247–56

SPECTROPHOTOMETRY, ATOMIC ABSORPTION

Ultrastructural and electron energy loss spectroscopy studies of sequestration mechanisms of Cd and Cu in the marine diatom Skeletonema costatum. Nassiri Y, et al. **Arch Environ Contam Toxicol** 1997 Aug;33(2):147–55

An evaluation of the Ektachem serum lithium method and comparison with flame emission spectrometry. Frezzotti A, et al. **Scand J Clin Lab Invest** 1996 Nov;56(7):591–6

INSTRUMENTATION

Characterization of a tunable optical parametric oscillator laser system for multielement flame laser excited atomic fluorescence spectrometry of cobalt, copper, lead, manganese, and thallium in buffalo river sediment. Zhou JX, et al. **Anal Chem** 1997 Feb 1;69(3):490–9

[Development of a method for direct determination of selenium using electrothermal atomic absorption spectrometry in plasma, whole blood, erythrocytes, thrombocytes and leukocytes. Determination of reference values] Rükgauer M, et al. **Biomed Tech (Berl)** 1996 Sep; 41(9):236–41 **(Ger)**

[The determination of mercury in biological objects on a mercury hydride attachment to the AAS-30 atomic absorption spectrophotometer] Voznesenskaia TV, et al. **Sud Med Ekspert** 1997 Jul–Sep;40(3):32–4 (Eng. Abstr.) **(Rus)**

METHODS

Determination of zinc, magnesium and calcium in therapeutical nutrients by flameless AAS after microwave digestion. Soltyk K, et al. **Acta Pol Pharm** 1995 Nov–Dec; 52(6):437–40

Determination of silicon in breast and capsular tissue from patients with breast implants performed by inductively coupled plasma emission spectroscopy. Comparison with tissue histology. McConnell JP, et al. **Am J Clin Pathol** 1997 Feb;107(2):236–46

Assay of phosphatidylcholine in liposome suspensions by inductively coupled plasma atomic emission spectrometry with ultrasonic nebulizer. Kamidate T, et al. **Anal Biochem** 1996 Oct 15;241(2):264–6

Antimony in drinking water, red blood cells, and serum: development of analytical methodology using transversely heated graphite furnace atomization-atomic absorption spectrometry. Subramanian KS, et al. **Arch Environ Contam Toxicol** 1997 May;32(4):431–5

Validation of candidate reference methods based on ion chromatography for determination of total sodium, potassium, calcium and magnesium in serum through comparison with flame atomic emission and absorption spectrometry. Thienpont LM, et al. **Clin Biochem** 1996 Dec;29(6):501–8

Measurement of strontium in serum, urine, bone, and soft tissues by Zeeman atomic absorption spectrometry. D'Haese PC, et al. **Clin Chem** 1997 Jan;43(1):121–8

Determination of selenium in feeds and premixes: collaborative study. Palmer IS, et al. **J AOAC Int** 1997 May–Jun;80(3):469–80

A new fast and standardless method for direct determination of metals associated with particulate matter in air: avoiding errors in the determination of Pb in an urban environment. Torsi G, et al. **J Environ Pathol Toxicol Oncol** 1997; 16(2–3):253–7

Quantification of trace elements in normal human brain by inductively coupled plasma atomic emission spectrometry. Rajan MT, et al. **J Neurol Sci** 1997 Mar 10;146(2):153–66

Development and validation of a general non-digestive method for the determination of palladium in bulk pharmaceutical chemicals and their synthetic intermediates by graphite furnace atomic absorption spectroscopy. Wang T, et al. **J Pharm Biomed Anal** 1997 Feb;15(5):593–9

Direct determination of selenium in human blood serum and plasma by electrothermal atomic absorption spectrometry. Gardiner PH, et al. **J Trace Elem Med Biol** 1995 Jul; 9(2):74–81

Determination of selenium in the serum of healthy Swiss adults and correlation to dietary intake. Haldimann M, et al. **J Trace Elem Med Biol** 1996 Apr;10(1):31–45

Determination of aluminium in samples from bone and liver of elderly Norwegians. Hongve D, et al. **J Trace Elem Med Biol** 1996 Apr;10(1):6–11

Determination of copper levels in serum of healthy subjects by atomic absorption spectrometry. Terrés-Martos C, et al. **Sci Total Environ** 1997 May 9;198(1):97–103

[Mercury determination in food of plant origin by cole vapour atomic absorption spectrometry (CVAAS)] Jędrzejczak R, et al. **Rocz Panstw Zakl Hig** 1996; 47(2):223–30 (Eng. Abstr.) **(Pol)**

SPECTROPHOTOMETRY, INFRARED

Potential sources of discrepancies between living tissue near infrared spectroscopy algorithms. Macnab AJ, et al. **Anal Biochem** 1996 May 1;236(2):375–7

Infrared analysis in clinical chemistry: its use in the laboratory and in non-invasive near patient testing. Stevens JF, et al. **Ann Clin Biochem** 1997 May;34 (Pt 3):215–21 (33 ref.)

Oxygenation and blood volume changes in flaps according to near-infrared spectrophotometry. Hayden RE, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec; 122(12):1347–51

Prediction of secondary structures of proteins using the sequence and spectroscopical data. Schubach BJ, et al. **Biochim Biophys Acta** 1997 Jun 20;1340(1):72–80

Quantitation of protein, creatinine, and urea in urine by near-infrared spectroscopy. Shaw RA, et al. **Clin Biochem** 1996 Feb;29(1):11–19

Software for microbial fingerprinting by means of the infrared spectra. Maradona MP. **Comput Appl Biosci** 1996 Aug;12(4):353–6

Near-infrared monitoring of myocardial oxygenation during intermittent warm blood cardioplegia. Kawasuji M, et al. **Eur J Cardiothorac Surg** 1997 Aug;12(2):236–41

Infrared fluorescent detection of D1S80 alleles. Roy R. **Forensic Sci Int** 1997 May 23;87(1):63–71

Spectroscopic studies of a multiphasic polymer-ceramic mixture material. Nguyen TP, et al. **J Biomater Sci Polym Ed** 1996;8(2):141–9

Near-infrared spectroscopy [letter; comment] Misra M, et al. **J Neurosurg** 1996 Aug;85(2):363–4. Comment on: J Neurosurg 1995 Dec;83(6):963–70.

Comparative study of a non-radiometric BACTEC system and a conventional blood culture system in a clinical microbiology laboratory. Yew OF, et al. **Malays J Pathol** 1995 Jun;17(1):11–5

Clinical evaluation of near-infrared spectroscopy for testing cerebrovascular reactivity in patients with carotid artery disease. Smielewski P, et al. **Stroke** 1997 Feb;28(2):331–8

[Non-invasive measurement of average cerebral O2 saturation of hemoglobin] Zander R. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Aug; 31(6):378–80 **(Ger)**

[Effect of acute intestinal obstruction on infrared systems for measuring anesthetic gases (letter)] Martinéz A, et al. **Rev Esp Anestesiol Reanim** 1996 Feb;43(2):74 **(Spa)**

INSTRUMENTATION

Characterization of an erbium-doped fiber amplifier as a light source and development of a near-infrared spectrophotometer based on the EDFA and an acoustooptic tunable filter. Tran CD, et al. **Anal Chem** 1996 Jul 1;68(13):2264–9

Determination of monomethylhydrazine with a high-throughput, all-fiber near-infrared spectrometer based on an integrated acoustooptic tunable filter and an erbium-doped fiber amplifier. Tran CD, et al. **Anal Chem** 1997 Apr 1;69(7):1461–4

Cerebral oximetry in dead subjects [see comments] Schwarz G, et al. **J Neurosurg Anesthesiol** 1996 Jul;8(3):189–93. Comment in: J Neurosurg Anesthesiol 1997 Jan;9(1):76–7. Comment in: J Neurosurg Anesthesiol 1997 Apr;9(2):194–5.

METHODS

Genetic algorithm-based method for selecting wavelengths and model size for use with partial least-squares regression: application to near-infrared spectroscopy. Bangalore AS, et al. **Anal Chem** 1996 Dec 1;68(23):4200–12

The role of remote sensing in finding hydrothermal mineral deposits on earth. Huntington JF. **Ciba Found Symp** 1996; 202:214–31; discussion 231–5 (19 ref.)

Application of isotope-selective nondispersive infrared spectrometry (IRIS) for evaluation of [13C]octanoic acid gastric-emptying breath tests: comparison with isotope ratio-mass spectrometry (IRMS). Schadewaldt P, et al. **Clin Chem** 1997 Mar;43(3):518–22

Comparison of 13 published cytochrome c oxidase near-infrared spectroscopy algorithms. Gagnon RE, et al. **Eur J Appl Physiol** 1996;74(6):487–95

Multiplex amplification of STR loci with gender alleles using infrared fluorescence detection. Steffens DL, et al. **Forensic Sci Int** 1997 Mar 14;85(3):225–32

Enhanced imaging of angiodysplasias using remote endoscopic digital spectroscopy. Krevsky B, et al. **Gastrointest Endosc** 1996 Nov;44(5):598–602

Determination of glucose concentrations in an aqueous matrix from NIR spectra using optimal time-domain filtering and partial least-squares regression. Ham FM, et al. **IEEE Trans Biomed Eng** 1997 Jun;44(6):475–85

Near-infrared diffuse reflectance spectroscopic analysis of the amounts of moisture, protein, starch, amylose, and tannin in buckwheat flours. Hong JH, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Aug;42(4):359–66

Development and validation of analytical methodology for near-infrared conformance testing of pharmaceutical intermediates. Forbes RA, et al. **J Pharm Biomed Anal** 1996 Dec;15(3):315–27

Characterization of pharmaceutical solvates by combined thermogravimetric and infrared analysis. Rodriguez C, et al. **J Pharm Sci** 1997 Feb;86(2):263–6

Imaging brain injury using time-resolved near infrared light scanning. Van Houten JP, et al. **Pediatr Res** 1996 Mar; 39(3):470–6

Image reconstruction in optical tomography. Arridge SR, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):717–26

Imaging brain structure and function, infection and gene expression in the body using light. Benaron DA, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):755–61 (18 ref.)

Optical investigations of physiology: a study of intrinsic and extrinsic biomedical contrast. Chance B, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):707–16 (30 ref.)

Measurement of cytochrome oxidase and mitochondrial energetics by near-infrared spectroscopy. Cooper CE, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):669–76 (62 ref.)

Use of near-infrared spectroscopy in the adult. Kirkpatrick PJ. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):701–5 (11 ref.)

The influence of demographic factors on phase-modulated spectroscopy in adults. Levy WJ. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):751–3

Localized near-infrared spectroscopy and functional optical imaging of brain activity. Tamura M, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):737–42

Non-invasive measurements of breast tissue optical properties using frequency-domain photon migration. Tromberg BJ, et al. **Philos Trans R Soc Lond B Biol Sci** 1997 Jun 29; 352(1354):661–8

[Measurements of cerebral hemodynamic and metabolic changes by near-infrared spectroscopy] Hoshi Y. **No To Hattatsu** 1996 Mar;28(2):146–8 (Eng. Abstr.) **(Jpn)**

[The spectrophotometric determination of naphthylmaleimide and pyridylmaleimide] Isaev RN, et al. **Gig Sanit** 1997 Mar–Apr;(2):61–2 **(Rus)**

[The use of a method of solid-phase extraction for sample preparation in the identification of unknown substances by IR spectroscopy] Beliaev AV, et al. **Sud Med Ekspert** 1997 Jul–Sep;40(3):23–8 (Eng. Abstr.) **(Rus)**

UTILIZATION

A modified rebreathing technique using an infrared gas analyzer. Barazanji KW, et al. **J Appl Physiol** 1996 Apr; 80(4):1258–62

Near-infrared estimation of O2 supply and consumption in forearm muscles working at varying intensity. Homma S, et al. **J Appl Physiol** 1996 Apr;80(4):1279–84

SPECTROPHOTOMETRY, ULTRAVIOLET

Label-free monitoring of DNA-ligand interactions. Piehler J, et al. **Anal Biochem** 1997 Jun 15;249(1):94–102

Measurement of nucleic acid concentrations using the DyNA Quant and the GeneQuant. Teare JM, et al. **Biotechniques** 1997 Jun;22(6):1170–4

Continuous monitoring of intermediates and final products of oxidation of low density lipoprotein by means of UV-spectroscopy. Pinchuk I, et al. **Free Radic Res** 1996 May;24(5):351–60

A simple and rapid method for the determination of D-sorbitol in plasma using the Cobas Mira S. Huebner GH, et al. **Ther Drug Monit** 1996 Oct;18(5):620–3

Microspectrophotometric and immunocytochemical identification of ultraviolet photoreceptors in geckos. Loew ER, et al. **Vis Neurosci** 1996 Mar–Apr;13(2):247–56

METHODS

Use of UV methods for measurement of protein and nucleic acid concentrations. Manchester KL. **Biotechniques** 1996 Jun;20(6):968–70

Spectroscopic study of soil particle surface redox reactions. Risser JA, et al. **Bull Environ Contam Toxicol** 1997 Mar; 58(3):356–63

Thermal unfolding of proteins at high pH range studied by UV absorbance. Melo EP, et al. **J Biochem Biophys Methods** 1997 Feb 1;34(1):45–59

Indirect ultraviolet detection of biologically relevant organic acids by capillary electrophoresis. Chen H, et al. **J Chromatogr B Biomed Appl** 1996 Apr 26;679(1–2):49–59

Quantitation of individual phospholipid molecular species by UV absorption measurements. McHowat J, et al. **J Lipid Res** 1996 Nov;37(11):2450–60

Genetically unstable CXG repeats are structurally dynamic and have a high propensity for folding. An NMR and UV spectroscopic study. Zheng M, et al. **J Mol Biol** 1996 Nov 29;264(2):323–36

The development and evaluation of a diluter-ultraviolet spectrophotometric analysis system for the determination of drugs in solutions and suspensions. Law B, et al. **J Pharm Biomed Anal** 1997 Feb;15(5):587–92

High-performance liquid chromatography on-line derivative spectroscopy for the characterization of peptides with aromatic amino acid residues. Turck CW. **Methods Mol Biol** 1997;64:109–17

SPECTROSCOPY see **SPECTRUM ANALYSIS**

SPECTROSCOPY, FOURIER TRANSFORM INFRARED

The different molar absorptivities of the secondary structure types in the amide I region: an attenuated total reflection infrared study on globular proteins. de Jongh HH, et al. **Anal Biochem** 1996 Nov 1;242(1):95–103

Linear prediction Cholesky decomposition vs Fourier transform spectral analysis for ion cyclotron resonance mass spectrometry. Guan S, et al. **Anal Chem** 1997 Mar 15;69(6):1156–62

Mapping air contaminants indoors using a prototype computed tomography system. Samanta A, et al. **Ann Occup Hyg** 1996 Dec;40(6):675–91

Effects of nucleotides on the denaturation of F actin: a differential scanning calorimetry and FTIR spectroscopy study. Bombardier H, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):798–803

Adipocyte fatty acid–binding protein: interaction with phospholipid membranes and thermal stability studied by FTIR spectroscopy. Gericke A, et al. **Biochemistry** 1997 Jul 8;36(27):8311–7

Determination of the secondary structure of isomeric forms of human serum albumin by a particular frequency deconvolution procedure applied to Fourier transform IR analysis. Bramanti E, et al. **Biopolymers** 1996 May; 38(5):639–53

FTIR microspectroscopic analysis of human osteonal bone. Paschalis EP, et al. **Calcif Tissue Int** 1996 Dec;59(6):480–7

Evaluation of cancellous structure in the distal radius using spectral analysis. Wigderowitz CA, et al. **Clin Orthop** 1997 Feb;(335):152–61

Mineral changes in a mouse model of osteogenesis imperfecta detected by Fourier transform infrared microscopy. Camacho NP, et al. **Connect Tissue Res** 1996; 35(1–4):259–65

Polarized FT-IR microscopy of calcified turkey leg tendon. Gadaleta SJ, et al. **Connect Tissue Res** 1996;34(3):203–11

The role of type X collagen in endochondral ossification as deduced by Fourier transform infrared microscopy analysis. Paschalis EP, et al. **Connect Tissue Res** 1996; 35(1–4):371–7

Validation of a natural urinary stone data based infrared library searching system with artificial survey samples. Blijenberg BG, et al. **Eur J Clin Chem Clin Biochem** 1997 Aug;35(8):625–30

FTIR study on nucleotide analogues. 1. Spectral characterization of dinucleoside methylphosphonates and dinucleoside 5'-methylenephosphonates in solution and in solid phase. Kulinska K, et al. **J Biomol Struct Dyn** 1997 Aug;15(1):119–28

Complete structure elucidation of a globular protein by particle beam liquid chromatography–Fourier transform infrared spectrometry and electrospray liquid chromatography–mass spectrometry. Sequence and conformation of beta-lactoglobulin. Turula VE, et al. **J Chromatogr A** 1997 Feb 28;763(1–2):91–103

INSTRUMENTATION

Direct measurement of hexahydrophthalic anhydride in workplace air with a transportable Fourier transform infrared spectrometer. Lindh CH, et al. **Am Ind Hyg Assoc J** 1996 Sep;57(9):832–6

METHODS

Thiocyanate levels in human saliva: quantitation by Fourier transform infrared spectroscopy. Schultz CP, et al. **Anal Biochem** 1996 Aug 15;240(1):7–12

Quantitative analysis of mixtures of metal–carbonyl complexes by Fourier-transform infrared spectroscopy: application to the simultaneous double immunoassay of antiepileptic drugs by the nonisotopic carbonyl metalloimmunoassay method. Varenne A, et al. **Anal Biochem** 1996 Nov 15;242(2):172–9

Water (H2O and D2O) molar absorptivity in the 1000–4000 cm–1 range and quantitative infrared spectroscopy of aqueous solutions. Venyaminov SYu, et al. **Anal Biochem** 1997 Jun 1;248(2):234–45

A dual-trap design and its applications in electrospray ionization FTICR mass spectrometry. Gorshkov MV, et al. **Anal Chem** 1997 Apr 1;69(7):1307–14

Differentiation of the maturity of cataractous human lens capsules according to changes in protein secondary structures determined by Fourier-transformed infrared spectroscopy. Lee SM, et al. **Aust N Z J Ophthalmol** 1997 Aug;25(3):233–8

Determination of the amount of native structural bacteriorhodopsin in purple membrane Langmuir–Blodgett films by a spectroscopic surface denaturation quantifying technique. Sugiyama Y, et al. **Biochim Biophys Acta** 1997 May 22;1326(1):138–48

Determination of molecular order in supported lipid membranes by internal reflection Fourier transform infrared spectroscopy. Citra MJ, et al. **Biophys J** 1996 Oct; 71(4):1796–805

Fourier transform infrared microspectroscopic analysis identifies alterations in mineral properties in bones from mice transgenic for type X collagen. Paschalis EP, et al. **Bone** 1996 Aug;19(2):151–6

Fourier transform infrared microscopy of calcified turkey leg tendon. Gadaleta SJ, et al. **Calcif Tissue Int** 1996 Jan; 58(1):17–23

Fourier transform infrared spectroscopy of the solution-mediated conversion of amorphous calcium phosphate to hydroxyapatite: new correlations between X-ray diffraction and infrared data. Gadaleta SJ, et al. **Calcif Tissue Int** 1996 Jan;58(1):9–16

Effect of aging on the amide group of bone matrix, measured by FTIR spectrophotometry, in adult subjects deceased as a result of violent death. Very JM, et al. **Calcif Tissue Int** 1997 Mar;60(3):271–5

Rapid determination of fecal fat by Fourier transform infrared analysis (FTIR) with partial least-squares regression and an attenuated total reflectance accessory. Franck P, et al. **Clin Chem** 1996 Dec;42(12):2015–20

ATR-FTIR spectroscopic investigation of E. coli transconjugants beta-lactams-resistance phenotype. Bouhedja W, et al. **FEBS Lett** 1997 Jul 21;412(1):39–42

Infrared spectroscopy of normal and abnormal cervical smears: evaluation by principal component analysis. Cohenford MA, et al. **Gynecol Oncol** 1997 Jul;66(1):59–65

Quantitation of cefepime.2HCl dihydrate in cefepime.2HCl monohydrate by diffuse reflectance IR and powder X-ray diffraction techniques. Bugay DE, et al. **J Pharm Biomed Anal** 1996 Oct;15(1):49–61

Aggregation of rhDNase occurred during the compression of KBr pellets used for FTIR spectroscopy. Chan HK, et al. **Pharm Res** 1996 Feb;13(2):238–42

Direct determination of drug content in semisolid formulations using step-scan FT-IR photoacoustic spectroscopy. Neubert R, et al. **Pharm Res** 1997 Jul; 14(7):946–8

Characterization of the permeability barrier of human skin in vivo. Pirot F, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1562–7

Orientational order determination by internal reflection infrared spectroscopy. Axelsen PH, et al. **Prog Biophys Mol Biol** 1996;66(3):227–53 (107 ref.)

Fourier transform infrared spectral evidences for protein conformational changes in immature cataractous human lens capsules accelerated by myopia and/or systemic hypertension. Lin SY, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Aug; 53A(9):1507–13

SPECTROSCOPY, INFRARED, FOURIER TRANSFORM see **SPECTROSCOPY, FOURIER TRANSFORM INFRARED**

SPECTROSCOPY, MAGNETIC RESONANCE see **NUCLEAR MAGNETIC RESONANCE**

SPECTROSCOPY, MASS see **SPECTRUM ANALYSIS, MASS**

SPECTROSCOPY, MASS, FAST ATOM BOMBARDMENT see **SPECTROMETRY, MASS, FAST ATOM BOMBARDMENT**

SPECTROSCOPY, MASS, MATRIX-ASSISTED LASER DESORPTION-IONIZATION see **SPECTROMETRY, MASS, MATRIX-ASSISTED LASER DESORPTION-IONIZATION**

SPECTROSCOPY, MASS, SECONDARY ION see **SPECTROMETRY, MASS, SECONDARY ION**

SPECTROSCOPY, MOSSBAUER

Is iron involved in pathogenesis of Parkinson's disease—Mössbauer spectroscopy study of substantia nigra in control and disease brains. Friedman A, et al. **Neurol Neurochir Pol** 1996;30 Suppl 2:95–103

A 4-term energy level scheme for the high-spin ferrous hemoproteins: evidence for the 5E eta, and 5B2 terms as the ground multiplets in hemoproteins with a histidine and a cysteine protein-derived heme ligand, respectively. Oganesyan VS, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Mar; 53A(3):433–49

METHODS

Mössbauer spectroscopic study of the interaction of indole-3-acetic acid with iron(III) in aqueous solution. Kamnev AA, et al. **Biochem Mol Biol Int** 1997 Mar; 41(3):575–81

SPECTROSCOPY, NEAR-INFRARED

Comparison of changes in cerebral blood flow and cerebral oxygen saturation measured by near infrared spectroscopy (NIRS) after acetazolamide. Holzschuh M, et al. **Acta Neurochir (Wien)** 1997;139(1):58–62

Measurement of cytochrome oxidase redox state by near infrared spectroscopy. Cooper CE, et al. **Adv Exp Med Biol** 1997;413:63–73 (48 ref.)

Brain oxygenation monitoring during cardiopulmonary bypass by near infrared spectroscopy. De Blasi RA, et al. **Adv Exp Med Biol** 1997;413:97–104

Towards brain mapping combining near-infrared spectroscopy and high resolution 3D MRI. Hirth C, et al. **Adv Exp Med Biol** 1997;413:139–47

A role for near infrared spectroscopy in psychiatry? Hock C, et al. **Adv Exp Med Biol** 1997;413:105–23 (25 ref.)

Near-infrared spectroscopy in functional activation studies. Can NIRS demonstrate cortical activation? Obrig H, et al. **Adv Exp Med Biol** 1997;413:113–27 (49 ref.)

Correlation between absolute deoxyhaemoglobin [dHb] measured by near infrared spectroscopy (NIRS) and absolute R2' as determined by magnetic resonance imaging (MRI). Punwani S, et al. **Adv Exp Med Biol** 1997; 413:129–37

Towards near-infrared imaging of the brain. Shinohara Y, et al. **Adv Exp Med Biol** 1997;413:85–9

Cerebral oxygenation states as revealed by near-infrared spectrophotometry. Tamura M, et al. **Adv Exp Med Biol** 1997;413:91–6 (22 ref.)

Assessment of local brain activation. A simultaneous PET and near-infrared spectroscopy study. Villringer K, et al. **Adv Exp Med Biol** 1997;413:149–53

Near-infrared monitoring of cerebral tissue oxygen saturation and blood volume in newborn piglets. Brun NC, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):H682–6

Impaired microcirculation and tissue oxygenation in human cerebral malaria: a single photon emission computed tomography and near-infrared spectroscopy study. Kampfl A, et al. **Am J Trop Med Hyg** 1997 Jun;56(6):585–7

The contribution of extracranial blood oxygenation on near infrared spectroscopy during carotid endarterectomy [letter; comment] Chan MT, et al. **Anaesthesia** 1997 Jul; 52(7):705–6; discussion 706–7. Comment on: Anaesthesia 1997 Feb;52(2):116–20.

The contribution of extracranial blood oxygenation on near-infrared spectroscopy during carotid endarterectomy [letter; comment] Fearn SJ, et al. **Anaesthesia** 1997 Jul; 52(7):704–5. Comment on: Anaesthesia 1997 Feb;52(2):116–20.

The contribution of extracranial blood oxygenation on near-infrared spectroscopy during carotid thrombendarterectomy [see comments] Grubhofer G, et al. **Anaesthesia** 1997 Feb;52(2):116–20. Comment in: Anaesthesia 1997 Jul;52(7):704–5. Comment in: Anaesthesia 1997 Jul;52(7):705–6; discussion 706–7.

Near-infrared spectroscopy changes during hypothermic circulatory arrest with retrograde cerebral perfusion. Rigg CD, et al. **Anaesthesia** 1997 Apr;52(4):356–9

Cerebral near-infrared spectroscopy: a plea for modest expectations [editorial; comment] Pollard V, et al. **Anesth Analg** 1996 Oct;83(4):673–4. Comment on: Anesth Analg 1996 Oct;83(4):726–30.

Regional cerebral oxygen saturation during electroconvulsive therapy: monitoring by near-infrared spectrophotometry [see comments] Saito S, et al. **Anesth Analg** 1996 Oct; 83(4):726–30. Comment in: Anesth Analg 1996 Oct;83(4):673–4.

Evaluation of brain oxygenation during selective cerebral perfusion by near-infrared spectroscopy. Katoh T, et al. **Ann Thorac Surg** 1997 Aug;64(2):432–6

Cerebral hypoxia after hyperventilation causes "re-build-up" phenomenon and TIA in childhood moyamoya disease. A near-infrared spectroscopy study. Kuroda S, et al. **Childs Nerv Syst** 1996 Aug;12(8):448–52; discussion 453

Near-infrared spectroscopy. Clinical applications. Simonson SG, et al. **Crit Care Clin** 1996 Oct;12(4):1019–29 (40 ref.)

Near-infrared spectroscopy: continuous measurement of cytochrome oxidation during hemorrhagic shock. Rhee P, et al. **Crit Care Med** 1997 Jan;25(1):166–70

Near-infrared spectroscopy for the in vivo study of cerebral hemodynamics and oxygenation. du Plessis AJ. **Curr Opin Pediatr** 1995 Dec;7(6):632–9 (37 ref.)

Recent developments in cerebral monitoring—near-infrared light spectroscopy. An overview. Williams IM, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):263–71 (53 ref.)

Non-invasive blood glucose monitoring by means of near infrared spectroscopy: methods for improving the reliability of the calibration models. Müller UA, et al. **Int J Artif Organs** 1997 May;20(5):285–90

Prediction of fetal lung maturity from near-infrared spectra of amniotic fluid. Liu KZ, et al. **Int J Gynaecol Obstet** 1997 May;57(2):161–8

Noninvasive measures of oxidative metabolism on working human muscles by near-infrared spectroscopy. Hamaoka T, et al. **J Appl Physiol** 1996 Sep;81(3):1410–7

Near-infrared spectroscopy for monitoring of tissue oxygenation of exercising skeletal muscle in a chronic compartment syndrome model. Breit GA, et al. **J Bone Joint Surg Am** 1997 Jun;79(6):838–43

pH change in tissue can be detected using infra-red light reflectance spectroscopy [letter] Severinghaus JW. **J Clin Monit** 1997 Jul;13(4):279–80

Feasibility of non-invasive measurement of tissue pH using near-infrared reflectance spectroscopy. Soller BR, et al. **J Clin Monit** 1996 Sep;12(5):387–95

Identification of peripheral vascular disease in elderly subjects using optical spectroscopy. McCully KK, et al. **J Gerontol A Biol Sci Med Sci** 1997 May;52(3):B159–65

Laser Doppler perfusion imaging of skin blood flow using red and near-infrared sources. Abbot NC, et al. **J Invest Dermatol** 1996 Dec;107(6):882–6

A new method for the assessment of venous insufficiency in primary varicose veins using near-infrared spectroscopy. Hosoi Y, et al. **J Vasc Surg** 1997 Jul;26(1):53–60

Detection of ventilatory threshold using near infrared spectroscopy in men and women. Bhambhani YN, et al. **Med Sci Sports Exerc** 1997 Mar;29(3):402–9

SPECTROSCOPY, NEAR-INFRARED

Non-invasive functional mapping of the human motor cortex using near-infrared spectroscopy. Hirth C, et al. **Neuroreport** 1996 Aug 12;7(12):1977-81

Right frontal activation during the continuous performance test assessed with near-infrared spectroscopy in healthy subjects. Fallgatter AJ, et al. **Neurosci Lett** 1997 Feb 21; 223(2):89-92

Use of near-infrared spectroscopy to monitor tissue oxygenation. Taylor DE, et al. **New Horiz** 1996 Nov; 4(4):420-5

Near-infrared spectroscopy as a nondestructive alternative to conventional tablet hardness testing. Morisseau KM, et al. **Pharm Res** 1997 Jan;14(1):108-11

Internal and external carotid contributions to near-infrared spectroscopy during carotid endarterectomy. Lam JM, et al. **Stroke** 1997 May;28(5):906-11

[Spectroscopic measurement of the intracerebral cytochrome system] Krauskopf KH, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Aug; 31(6):374-8 **(Ger)**

[Brain monitoring with near infrared spectroscopy during carotid endarterectomy] Ohnishi Y, et al. **Masui** 1996 Nov; 45(11):1420-3 (Eng. Abstr.) **(Jpn)**

[Emergency internal carotid artery ligation using near infrared spectroscopy] Saitoh K, et al. **Masui** 1996 Aug; 45(8):1015-7 (Eng. Abstr.) **(Jpn)**

[Use of the CRITIKON Cerebral Redox for cerebral oximetry] Rusina OV. **Anesteziol Reanimatol** 1997 Jan-Feb; (1):69-71 **(Rus)**

INSTRUMENTATION

Effect of optode separation on brain penetration in adults. Harris DN, et al. **Adv Exp Med Biol** 1996;388:133-5

A comparison of the Invos 3100 and the Critikon 2020 near-infrared spectrophotometers as monitors of cerebral oxygenation. McKeating EG, et al. **Anaesthesia** 1997 Feb; 52(2):136-40

Feasibility study of a single- and multiple-source near-infrared phase-modulation device for characterizing biologic systems. Kang KA, et al. **Biomed Instrum Technol** 1997 Jul-Aug;31(4):373-86

Tissue and cellular oxygenation state measurement during cardiac surgery [letter; comment] Wollert HG, et al. **Thorac Cardiovasc Surg** 1996 Jun;44(3):158-60. Comment on: Thorac Cardiovasc Surg 1995 Oct;43(5):260-4.

[Noninvasive monitoring of cerebral oxygen saturation after severe craniocerebral trauma in a Jehovah's witness] Logemann F, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jun; 32(6):385-90 (Eng. Abstr.) **(Ger)**

METHODS

Measurement of cerebral venous saturation in adults using near infrared spectroscopy. Elwell CE, et al. **Adv Exp Med Biol** 1997;411:453-60

System parameter analysis of NIR-TRS spectra from homogeneous media with and without an absorbing boundary and from heterogeneous media with a single absorber. Kang KA, et al. **Adv Exp Med Biol** 1996; 388:399-413

Oxygen distribution in the vasculature of mouse tissue in vivo measured using a near infra red phosphor. Lo LW, et al. **Adv Exp Med Biol** 1997;411:577-83

Cerebral oxygenation changes during motor and somatosensory stimulation in humans, as measured by near-infrared spectroscopy. Obrig H, et al. **Adv Exp Med Biol** 1996;388:219-24

Applications of NIRS for measurements of tissue oxygenation and haemodynamics during surgery. Thorniley MS, et al. **Adv Exp Med Biol** 1997;411:481-93

Measurement of the oxygenation status of the isolated perfused rat heart using near infrared detection. van Beek JH, et al. **Adv Exp Med Biol** 1996;388:147-54

Extended porphyrins. New IR phosphors for oxygen measurements. Vinogradov SA, et al. **Adv Exp Med Biol** 1997;411:597-603

How to evaluate slow oxygenation changes to estimate absolute cerebral haemoglobin concentration by near infrared spectrophotometry in neonates. Wolf M, et al. **Adv Exp Med Biol** 1997;411:495-501

Estimation of cerebral blood volume and transit time in neonates from quick oxygen increases measured by near-infrared spectrophotometry. Wolf M, et al. **Adv Exp Med Biol** 1996;388:93-9

Cerebral hemoglobin and optical pathlength influence near-infrared spectroscopy measurement of cerebral oxygen saturation. Kurth CD, et al. **Anesth Analg** 1997 Jun;84(6):1297-305

Near-infrared imaging and spectroscopy in stroke research: lipoprotein distribution and disease. Dempsey RJ, et al. **Ann N Y Acad Sci** 1997 May 30;820:149-69 (37 ref.)

Applications of fourier transform infrared imaging microscopy in neurotoxicity. Lewis EN, et al. **Ann N Y Acad Sci** 1997 May 30;820:234-46; discussion 246-7 (26 ref.)

Near infrared spectroscopy applied to intrapartum fetal monitoring. Hamilton RJ, et al. **Baillieres Clin Obstet Gynaecol** 1996 Jun;10(2):307-24 (40 ref.)

Near infrared spectroscopy of nitrosyl haemoglobin--relevance to in vivo detection of nitric oxide. Cooper CE, et al. **Biochem Soc Trans** 1996 Aug; 24(3):448S

Application of near infrared spectroscopy to the determination of haemoglobin. Vályi-Nagy I, et al. **Clin Chim Acta** 1997 Aug 8;264(1):117-25

Noninvasive brain monitoring with near infrared spectroscopy in newborn infants. Skov L. **Dan Med Bull** 1996 Jun;43(3):277-84 (100 ref.)

Visualizing human motor activity by using non-invasive optical topography. Maki A, et al. **Front Med Biol Eng** 1996;7(4):285-97

Non-invasive monitoring of metabolites using near infrared spectroscopy: state of the art. Heise HM. **Horm Metab Res** 1996 Oct;28(10):527-34 (55 ref.)

Cerebral oxygenation changes in response to motor stimulation. Obrig H, et al. **J Appl Physiol** 1996 Sep; 81(3):1174-83

Measurement of cerebral blood flow in dogs with near infrared spectroscopy in the reflectance mode is invalid. Newton CR, et al. **J Cereb Blood Flow Metab** 1997 Jun; 17(6):695-703

Oxygen regulation of energy metabolism in isolated pig hearts: a near-IR spectroscopy study. Kupriyanov VV, et al. **J Mol Cell Cardiol** 1997 Sep;29(9):2431-9

Validation of transcranial near-infrared spectroscopy for evaluation of cerebral blood flow autoregulation. Olsen KS, et al. **J Neurosurg Anesthesiol** 1996 Oct;8(4):280-5

Near-infrared spectroscopy as a tool to improve quality. Plugge W, et al. **J Pharm Biomed Anal** 1996 Jun; 14(8-10):891-8

Dynamic changes of cerebral oxygenation measured by brain tissue oxygen pressure and near infrared spectroscopy. Holzschuh M, et al. **Neurol Res** 1997 Jun;19(3):246-8

A novel near infra-red spectrophotometry system using microprobes: its evaluation and application for monitoring neuronal activity in the visual cortex. Imamura K, et al. **Neurosci Res** 1997 Aug;28(4):299-309

Near-infrared spectroscopy in experimental pneumococcal meningitis in the rabbit: cerebral hemodynamics and metabolism. Tureen J, et al. **Pediatr Res** 1996 Nov; 40(5):759-63

The measurement of peripheral venous oxyhemoglobin saturation in newborn infants by near infrared spectroscopy with venous occlusion. Yoxall CW, et al. **Pediatr Res** 1996 Jun;39(6):1103-6

Investigation of the effect of discrete absorbers upon the measurement of blood volume with near-infrared spectroscopy. Firbank M, et al. **Phys Med Biol** 1997 Mar; 42(3):465-77

The effect of scalp ischaemia on measurement of cerebral blood volume by near-infrared spectroscopy. Owen-Reece H, et al. **Physiol Meas** 1996 Nov;17(4):279-86

O2 consumption-O2 delivery relationship and arteriolar resistance in the forearm of critically ill patients measured by near infrared spectroscopy. De Blasi RA, et al. **Shock** 1996 Nov;6(5):319-25

Feasibility of measuring blood glucose concentration by near-infrared Raman spectroscopy. Berger AJ, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Feb; 53A(2):287-92

STANDARDS

Relevant limitations of near-infrared spectroscopy [letter; comment] Cruz J. **Crit Care Med** 1997 Mar;25(3):555-6. Comment on: Crit Care Med 1996 Aug;24(8):1334-8.

SPECTROSCOPY, NMR see **NUCLEAR MAGNETIC RESONANCE**

SPECTROSCOPY, NUCLEAR MAGNETIC RESONANCE see **NUCLEAR MAGNETIC RESONANCE**

SPECTRUM ANALYSIS

Pigment assignment in the absorption spectrum of the photosystem II reaction center by site-selection fluorescence spectroscopy. Konermann L, et al. **Biochemistry** 1997 Jun 17;36(24):7498-502

Threonine-89 participates in the active site of bacteriorhodopsin: evidence for a role in color regulation and Schiff base proton transfer. Russell TS, et al. **Biochemistry** 1997 Jun 17;36(24):7490-7

The use of matrix methods in the modeling of spectroscopic data sets. Henry ER. **Biophys J** 1997 Feb;72(2 Pt 1):652-73

Tissue spectroscopy for gastrointestinal diseases. Bohorfoush AG. **Endoscopy** 1996 May;28(4):372-80 (57 ref.)

Workshop to establish databases of carbohydrate spectra [news] **Glycobiology** 1996 Jul;6(5):vii-x

Pulsed photoacoustic spectroscopy applied to the diffusion of sunscreen chromophores in human skin: the weakly absorbent regime. Puccetti G, et al. **J Photochem Photobiol B** 1997 Jun;39(2):110-20

A critical assessment of the evidence from XAFS and crystallography for the breakage of the imidazolate bridge during catalysis in CuZn superoxide dismutase. Murphy LM, et al. **Structure** 1997 Mar 15;5(3):371-9

[Diagnostic possibilities of correlative laser spectroscopy of blood in oncologic proctology] Bilenko AA, et al. **Klin Khir** 1996;(8):28-9 **(Rus)**

INSTRUMENTATION

Dielectric spectroscopy of single human erythrocytes at physiological ionic strength: dispersion of the cytoplasm. Gimsa J, et al. **Biophys J** 1996 Jul;71(1):495-506

Determination of backbone torsion angle epsilon of DNA duplexes in solution from 3JC4'P and 3JH3'P, using heteronuclear single-quantum-coherence spectroscopy. Lam SL, et al. **J Magn Reson B** 1996 Oct;113(1):59-64

METHODS

Supramolecular architectures for the functionalization of solid surfaces. Knoll W, et al. **Adv Biophys** 1997;34:231-51

Optical imaging of breast tumor by means of continuous waves. Nioka S, et al. **Adv Exp Med Biol** 1997;411:227-32

Near-field scanning optical microscopy and near-field confocal optical spectroscopy: emerging techniques in biology. Marchese-Ragona SP, et al. **Ann N Y Acad Sci** 1997 May 30;820:196-206; discussion 206-7 (6 ref.)

Multiecho approaches to spectroscopic imaging of the brain. Mulkern RV, et al. **Ann N Y Acad Sci** 1997 May 30; 820:97-122 (42 ref.)

Nanosecond time-resolved spectroscopy of biomolecular processes. Chen E, et al. **Annu Rev Biophys Biomol Struct** 1997;26:327-55 (79 ref.)

Characterizing cellular systems by means of dielectric spectroscopy. Gheorghiu E. **Bioelectromagnetics** 1996; 17(6):475-82

Scanning two-photon fluctuation correlation spectroscopy: particle counting measurements for detection of molecular aggregation. Ber KM, et al. **Biophys J** 1996 Jul;71(1):410-20

Dielectric spectroscopy of single human erythrocytes at physiological ionic strength: dispersion of the cytoplasm. Gimsa J, et al. **Biophys J** 1996 Jul;71(1):495-506

Depth profiling of mammalian cells by photoacoustic spectroscopy: localization of ligands. Narayanan K, et al. **Biophys J** 1997 May;72(5):2365-8

The use of nuclear microprobe in biology and medicine. Bara M, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Feb;42(1):i

Practical aspects of electron energy loss spectroscopy (EELS) in biology. Jeanguillaume C, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 May;42(3):439-50 (20 ref.)

Titanium identification and measurement by ICP-MS and ICP-OES in a human spleen fragment. Ducros V, et al. **Clin Chem** 1996 Nov;42(11):1875-7

Electrospray mass spectrometry for measurement of glycohemoglobin [editorial; comment] Miedema K. **Clin Chem** 1997 May;43(5):705-7. Comment on: Clin Chem 1997 May;43(5):779-85.

Analytical electron microscopy as a powerful tool in plant cell biology: examples using electron energy loss spectroscopy and X-ray microanalysis. Lichtenberger O, et al. **Eur J Cell Biol** 1997 Aug;73(4):378-86

Multicomponent spectroscopic investigations of salivary antioxidant consumption by an oral rinse preparation containing the stable free radical species chlorine dioxide (ClO2.). Lynch E, et al. **Free Radic Res** 1997 Mar; 26(3):209-34

Myoglobin oxygen dissociation by multiwavelength spectroscopy. Schenkman KA, et al. **J Appl Physiol** 1997 Jan;82(1):86-92

X-ray photoelectron spectroscopy analysis of whole cells and isolated cell walls of gram-positive bacteria: comparison with biochemical analysis. Dufrêne YF, et al. **J Bacteriol** 1997 Feb;179(4):1023-8

Optimization of a pulse laser spectrometer for the measurement of the kinetics of singlet oxygen O2(delta 1g) decay in solution. Bilski P, et al. **J Biochem Biophys Methods** 1996 Nov 15;33(2):73-80

The neural network as a tool for multispectral interpretation. Munk ME, et al. **J Chem Inf Comput Sci** 1996 Mar-Apr; 36(2):231-8

Application of ion mobility spectrometry to the rapid screening of methamphetamine incorporated in hair. Miki A, et al. **J Chromatogr B Biomed Appl** 1997 May 9; 692(2):319-28

Investigation of a pulsed-laser thermo-optical absorbance detector for the determination of food preservatives separated by capillary electrophoresis. Waldron KC, et al. **J Chromatogr B Biomed Appl** 1996 Aug 9;683(1):47-54

Chromatin condensation in erythropoiesis resolved by multipixel spectral imaging: differentiation versus apoptosis. Rothmann C, et al. **J Histochem Cytochem** 1997 Aug;45(8):1097-108

Multi-echo 31P spectroscopic imaging of ATP: a scan time reduction strategy. Chao H, et al. **J Magn Reson Imaging** 1997 Mar-Apr;7(2):425-33

Spectral methods for the characterization of polymorphs and solvates. Brittain HG. **J Pharm Sci** 1997 Apr;86(4):405-12 (71 ref.)

Spectroscopic properties of fluorescence dye fura-2 with various divalent cations. Hatae J, et al. **Jpn J Physiol** 1996 Oct;46(5):423-9

Effect of postural changes on the reliability of volume estimations from bioimpedance spectroscopy data. Scharfetter H, et al. **Kidney Int** 1997 Apr;51(4):1078-87

Treatment of multiwavelength anomalous diffraction data as a special case of multiple isomorphous replacement. Ramakrishnan V, et al. **Methods Enzymol** 1997;276:538-57

Multiwavelength anomalous diffraction phasing of

macromolecular structures: analysis of MAD data as single isomorphous replacement with anomalous scattering data using the MADMRG Program. Terwilliger TC. **Methods Enzymol** 1997;276:530–7

Analysis of sections of implanted macroporous calcium phosphate bone substitutes by proton-induced X-emission method and energy-dispersive spectrometry. Frayssinet P, et al. **Scanning** 1997 Jun;19(4):253–7

Spectroscopic investigations of dehydroepiandrosterone. Part II: Photoelectron spectrum and electronic structure. Bhacca NS, et al. **Steroids** 1996 Sep;61(9):557–9

[Laser correlation spectroscopy--a biophysical method for the differential diagnosis of jaundice of different origins] Geshelin SA, et al. **Klin Khir** 1996;(11–12):7–9 **(Rus)**

[A method of fluorescence spectral analysis of lymphocyte function in cancer patients] Sheĭko EA, et al. **Vopr Onkol** 1997;43(3):295–8 (Eng. Abstr.) **(Rus)**

STANDARDS

Comparison of the French and U.S. national 3H (tritiated H2O) standards by 4 pi beta liquid scintillation spectrometry. Zimmerman BE, et al. **Appl Radiat Isot** 1997 Apr;48(4):521–6

VETERINARY

Multi-element assay of mammary secretions and sera from periparturient mares by inductively coupled argon plasma emission spectroscopy. Rook JS, et al. **Am J Vet Res** 1997 Apr;58(4):376–8

SPECTRUM ANALYSIS, MASS

Application of high-performance liquid chromatography/mass spectrometry to drug screening. Higuchi T, et al. **Am J Forensic Med Pathol** 1996 Mar; 17(1):21–3

Linear prediction Cholesky decomposition vs Fourier transform spectral analysis for ion cyclotron resonance mass spectrometry. Guan S, et al. **Anal Chem** 1997 Mar 15;69(6):1156–62

Two-dimensional SEC/RPLC coupled to mass spectrometry for the analysis of peptides. Opiteck GJ, et al. **Anal Chem** 1997 Jul 1;69(13):2283–91

Organic SIMS of biologic tissue. Todd PJ, et al. **Anal Chem** 1997 Sep 1;69(17):529A–535A (22 ref.)

Mining genomes with MS. Yates JR 3rd, et al. **Anal Chem** 1996 Sep 1;68(17):534A–540A (35 ref.)

Characterization of unstable intermediates and oxidized products formed during cyanogen bromide cleavage of peptides and proteins by electrospray mass spectrometry. Zhang X, et al. **Anal Chem** 1996 Oct 1;68(19):3422–30

Applications of mass isotopomer analysis to nutrition research. Brunengraber H, et al. **Annu Rev Nutr** 1997; 17:559–96 (135 ref.)

Escherichia coli L-aspartate-alpha-decarboxylase: preprotein processing and observation of reaction intermediates by electrospray mass spectrometry. Ramjee MK, et al. **Biochem J** 1997 May 1;323 (Pt 3):661–9

Detection of DNA adducts by electron capture mass spectrometry. Giese RW. **Chem Res Toxicol** 1997 Mar; 10(3):255–70 (77 ref.)

Mass spectrometric characterization of nicked fragments of the beta-subunit of human chorionic gonadotropin. Liu C, et al. **Clin Chem** 1997 Jul;43(7):1172–81

Analysis of plasma isoflavones by reversed-phase HPLC-multiple reaction ion monitoring-mass spectrometry. Coward L, et al. **Clin Chim Acta** 1996 Mar 29;247(1–2):121–42

Microheterogeneity of odorant-binding proteins in the porcupine revealed by N-terminal sequencing and mass spectrometry. Ganni M, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jun; 117(2):287–91

High sensitivity identification of proteins by electrospray ionization tandem mass spectrometry: initial comparison between an ion trap mass spectrometer and a triple quadrupole mass spectrometer. Figeys D, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):360–8

High resolution two-dimensional electrophoresis (-DE) [editorial] Lottspeich F. **Electrophoresis** 1996 May; 17(5):811–2

Immobilized pH gradient two-dimensional gel electrophoresis and mass spectrometric identification of cytokine-regulated proteins in ME-180 cervical carcinoma cells. Matsui NM, et al. **Electrophoresis** 1997 Mar–Apr; 18(3–4):409–17

Identification of human myocardial proteins separated by two-dimensional electrophoresis using an effective sample preparation for mass spectrometry. Otto A, et al. **Electrophoresis** 1996 Oct;17(10):1643–50

Determination of ethylenediaminetetraacetic acid as the nickel chelate in environmental water by solid-phase extraction and capillary electrophoresis/tandem mass spectrometry. Sheppard RL, et al. **Electrophoresis** 1997 Feb;18(2):287–91

Workshop to establish databases of carbohydrate spectra [letter] Albersheim P, et al. **Glycoconj J** 1996 Aug;13(4):i–iii

beta-endorphin1-31 in the rat pituitary. Grigoriants OO, et al. **Int J Pept Protein Res** 1996 Jan–Feb;47(1–2):123–30

Spin-labeled nucleotide mobility in the boundary of the EcoRI endonuclease binding site. Keyes RS, et al. **J Biomol Struct Dyn** 1996 Oct;14(2):163–72

Analysis of bioactive peptides by liquid chromatography-high-resolution electrospray mass spectrometry. D'Agostino PA, et al. **J Chromatogr A** 1997 Apr 11;767(1–2):77–85

Characterisation of human serum albumin heterogeneity by capillary zone electrophoresis and electrospray ionization mass spectrometry. Girard M, et al. **J Chromatogr A** 1997 Jun 6;772(1–2):235–42

High-performance liquid chromatography-electrospray ionisation-tandem mass spectrometry for the analysis of 1,2,3,4-tetrahydro-beta-carboline derivatives. Gutsche B, et al. **J Chromatogr A** 1997 Apr 11;767(1–2):101–6

Speciation of chromium dyes by high-performance liquid chromatography with inductively coupled plasma mass spectrometric detection. Zoorob GK, et al. **J Chromatogr A** 1997 Jun 27;773(1–2):157–62

Determination of the muscarinic agent [(3-(3-1-butylthio)-1,2,5-thiadiazol-4-yl)-1-azabicyclo-2.2.2-oct ane], in rat, rabbit, and monkey plasma, using high-performance liquid chromatography in conjunction with tandem mass spectrometry. Cornpropst JD, et al. **J Chromatogr B Biomed Appl** 1995 Nov 3;673(1):67–74

Immunoaffinity trapping of urinary human chorionic gonadotropin and its high-performance liquid chromatographic-mass spectrometric confirmation. Liu CL, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6; 687(1):213–20

Current literature in mass spectrometry. **J Mass Spectrom** 1996 Jun;31(6):694–701

Current literature in mass spectrometry. **J Mass Spectrom** 1996 Mar;31(3):329–37

Current literature in mass spectrometry. **J Mass Spectrom** 1996 May;31(5):574–80

Current literature in mass spectrometry. **J Mass Spectrom** 1996 Sep;31(9):1065–72

Current literature in mass spectrometry. **J Mass Spectrom** 1996 Jan;31(1):119–27

Current literature in mass spectrometry. **J Mass Spectrom** 1996 Aug;31(8):941–50

Current literature in mass spectrometry. **J Mass Spectrom** 1996 Apr;31(4):434–43

Current literature in mass spectrometry. **J Mass Spectrom** 1997 Jun;32(6):667–73

Quantitative ionspray liquid chromatographic/tandem mass spectrometric determination of reserpine in equine plasma. Anderson MA, et al. **J Mass Spectrom** 1997 Feb;32(2):152–8

Electrospray tandem mass spectrometry of a novel series of amphipathic functionalized ether-linked di- and trisaccharides and cyclic oligosaccharides. Banoub J, et al. **J Mass Spectrom** 1997 Jan;32(1):109–21

Binding specificity of post-activated neocarzinostatin chromophore drug-bulged DNA complex studied using electrospray ionization mass spectrometry. Gao Q, et al. **J Mass Spectrom** 1996 Jan;31(1):31–6

Different quantification approaches for the analysis of biological and environmental samples using inductively coupled plasma mass spectrometry. Garcia Alonso JI, et al. **J Mass Spectrom** 1997 May;32(5):556–64

Characterization and differentiation of isomeric self-complementary DNA oligomers by electrospray tandem mass spectrometry. Gentil E, et al. **J Mass Spectrom** 1996 Jan;31(1):83–94

Characterization of oligonucleotide metabolism in vivo via liquid chromatography/electrospray tandem mass spectrometry with a quadrupole ion trap mass spectrometer. Griffey RH, et al. **J Mass Spectrom** 1997 Mar;32(3):305–13

High-performance liquid chromatography/NMR spectrometry/mass spectrometry: further advances in hyphenated technology. Holt RM, et al. **J Mass Spectrom** 1997 Jan;32(1):64–70

Simple detection of abnormal serum transthyretin from patients with familial amyloidotic polyneuropathy by high-performance liquid chromatography/electrospray ionization mass spectrometry using material precipitated with specific antiserum [letter] Kishikawa M, et al. **J Mass Spectrom** 1996 Jan;31(1):112–4

Isotope ratio mass spectrometric method for the on-line determination of oxygen-18 in organic matter. Koziet J. **J Mass Spectrom** 1997 Jan;32(1):103–8

Mass spectrometric characterization of the beta-subunit of human chorionic gonadotropin. Liu C, et al. **J Mass Spectrom** 1997 Jan;32(1):33–42

DNA sequencing by mass spectrometry. Murray KK. **J Mass Spectrom** 1996 Nov;31(11):1203–15 (87 ref.)

Analysis of epoxyeicosatrienoic and monohydroxyeicosatetraenoic acids esterified to phospholipids in human red blood cells by electrospray tandem mass spectrometry. Nakamura T, et al. **J Mass Spectrom** 1997 Aug;32(8):888–96

Probing the non-covalent structure of proteins by amide hydrogen exchange and mass spectrometry. Smith DL, et al. **J Mass Spectrom** 1997 Feb;32(2):135–46

Proton transfer reactivity of large multiply charged ions. Williams ER. **J Mass Spectrom** 1996 Aug;31(8):831–42 (132 ref.)

Column-switching high-performance liquid chromatography combined with ionspray tandem mass spectrometry for the simultaneous determination of the platelet inhibitor Ro 44-3888 and its pro-drug and precursor metabolite in plasma. Zell M, et al. **J Mass Spectrom** 1997 Jan;32(1):23–32

Determination of SR 49059 in human plasma and urine by LC-APCI/MS/MS. Burton R, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1913–22

Detection of bromisovalum from the bone marrow of skeletonized human remains: a case report with a comparison between gas chromatography/mass spectrometry (GC/MS) and high-performance liquid chromatography/mass spectrometry (LC/MS). Maeda H, et al. **Med Sci Law** 1997 Jul;37(3):248–53

Trace structural analysis of proteins. Swiderek KM, et al. **Methods Enzymol** 1996;271:68–86 (9 ref.)

The use of databases in searching the literature of biological mass spectrometry. Oliver RW, et al. **Methods Mol Biol** 1996;61:295–309

Probing antibody-antigen interactions by mass spectrometry. Zhao Y, et al. **Methods Mol Biol** 1996;66:129–36

Mass spectrometry analysis of the by-products of intrastromal photorefractive keratectomy. Habib MS, et al. **Ophthalmic Surg Lasers** 1995 Sep–Oct;26(5):481–3

Identification of a new diarrhoetic toxin in shellfish using liquid chromatography with fluorimetric and mass spectrometric detection. James KJ, et al. **Toxicon** 1997 Jun; 35(6):973–8

Sub-species discrimination, using pyrolysis mass spectrometry and self-organising neural networks, of Propionibacterium acnes isolated from normal human skin. Goodacre R, et al. **Zentralbl Bakteriol** 1996 Aug; 284(4):501–15

Quantitative analysis of multivariate data using artificial neural networks: a tutorial review and applications to the deconvolution of pyrolysis mass spectra. Goodacre R, et al. **Zentralbl Bakteriol** 1996 Aug;284(4):516–39 (114 ref.)

Curie-point pyrolysis mass spectrometry as a tool in clinical microbiology. Goodfellow M, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):133–56 (159 ref.)

Application of neural networks to the analysis of pyrolysis mass spectra. Kenyon RG, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):267–77

Pyrolysis mass spectrometry: data processing in classification studies. Magee JT. **Zentralbl Bakteriol** 1997 Jan; 285(2):182–94

[Mass spectrometry data of some metabolites of the amphetamine derivatives 3,4-(methylenedioxy) amphetamine (MDA) and 3,4-methylenedioxy)methylamphetamine (MDMA)] Verweij AM. **Arch Kriminol** 1996 Jan–Feb;197(1–2):27–30 (Eng. Abstr.) **(Ger)**

[Analysis of protein primary structures by mass spectrometry] Takao T. **Seikagaku** 1996 Jan;68(1):1–13 (64 ref.) **(Jpn)**

HISTORY

High precision isotope ratio monitoring techniques in mass spectrometry. Brand WA. **J Mass Spectrom** 1996 Mar; 31(3):225–35

INSTRUMENTATION

A field deployable gas chromatograph/mass spectrometer for industrial hygiene applications. Piltingsrud HV. **Am Ind Hyg Assoc J** 1997 Aug;58(8):564–77

The quadrupole ion trap mass spectrometer--a small solution to a big challenge. Jonscher KR, et al. **Anal Biochem** 1997 Jan 1;244(1):1–15 (69 ref.)

Stability enhancement for peptide analysis by electrospray using the triple quadrupole mass spectrometer. Wang H, et al. **Anal Biochem** 1997 Aug 1;250(2):162–8

Use of infrared multiphoton photodissociation with SWIFT for electrospray ionization and laser desorption applications in a quadrupole ion trap mass spectrometer. Colorado A, et al. **Anal Chem** 1996 Nov 15;68(22):4033–43

A microfabricated device for rapid protein identification by microelectrospray ion trap mass spectrometry. Figeys D, et al. **Anal Chem** 1997 Aug 15;69(16):3153–60

Correction of mass spectral drift using artificial neural networks. Goodacre R, et al. **Anal Chem** 1996 Jan 15; 68(2):271–80

Mixture analysis using a quadrupole mass filter/quadrupole ion trap mass spectrometer. Jonscher KR, et al. **Anal Chem** 1996 Feb 15;68(4):659–67

Multichannel microchip electrospray mass spectrometry. Xue Q, et al. **Anal Chem** 1997 Feb 1;69(3):426–30

Identification of proteins by capillary electrophoresis-tandem mass spectrometry. Evaluation of an on-line solid-phase extraction device. Figeys D, et al. **J Chromatogr A** 1997 Feb 28;763(1–2):295–306

Response time studies of a new, portable mass spectrometer. Delaney PA, et al. **J Clin Monit** 1997 May;13(3):181–9

Mass spectrometry. Ionization methods and instrumentation. Chapman JR. **Methods Mol Biol** 1996;61:9–28 (16 ref.)

Effect of phase locking AC and RF voltages for high mass analysis in a quadrupole ion trap mass spectrometer. Doroshenko VM, et al. **Rapid Commun Mass Spectrom** 1996;10(15):1921–6

Determination of ion magnetron radial distribution in Fourier transform ion cyclotron resonance mass spectrometry. Guan S, et al. **Rapid Commun Mass Spectrom** 1996; 10(14):1855–9

Simulation of external ion injection, cooling and extraction processes with SIMION 6.0 for the ion trap/reflectron time-of-flight mass spectrometer. He L, et al. **Rapid Commun Mass Spectrom** 1997;11(13):1467–77

Fourier transform ion cyclotron resonance mass spectrometry

in a 20 T resistive magnet. Hendrickson CL, et al. **Rapid Commun Mass Spectrom** 1996;10(14):1829–32

Laser-induced fluorescence of Ba+ ions trapped and mass-selected in a Fourier transform ion cyclotron resonance mass spectrometer. Li GZ, et al. **Rapid Commun Mass Spectrom** 1996;10(14):1850–4

Analysis of combinatorial libraries using electrospray Fourier transform ion cyclotron resonance mass spectrometry. Nawrocki JP, et al. **Rapid Commun Mass Spectrom** 1996; 10(14):1860–4

A high-performance modular data system for Fourier transform ion cyclotron resonance mass spectrometry. Senko MW, et al. **Rapid Commun Mass Spectrom** 1996; 10(14):1839–44

Electrospray ionization Fourier transform ion cyclotron resonance at 9.4 T. Senko MW, et al. **Rapid Commun Mass Spectrom** 1996;10(14):1824–8

Sequence database searches via de novo peptide sequencing by tandem mass spectrometry. Taylor JA, et al. **Rapid Commun Mass Spectrom** 1997;11(9):1067–75

Sampling error in small-bore sheathless capillary electrophoresis/electrospray-ionization mass spectrometry. Valaskovic GA, et al. **Rapid Commun Mass Spectrom** 1996; 10(7):825–8

An external source 7 T Fourier transform ion cyclotron resonance mass spectrometer with electrostatic ion guide. White FM, et al. **Rapid Commun Mass Spectrom** 1996; 10(14):1845–9

Integrated multichannel microchip electrospray ionization mass spectrometry: analysis of peptides from on-chip tryptic digestion of melittin. Xue Q, et al. **Rapid Commun Mass Spectrom** 1997;11(12):1253–6

Near the lights of Vegas, chemists are on a roll [news] Service RF. **Science** 1997 Oct 3;278(5335):32–3

METHODS

Application of tandem mass spectral approaches to structural determinations of saponins. Costello CE. **Adv Exp Med Biol** 1996;405:317–30

Mass spectrometric investigations on proteinaceous toxins and antibodies. Krishnamurthy T, et al. **Adv Exp Med Biol** 1996;391:439–63 (53 ref.)

Saponins from alfalfa, clover, and mungbeans analyzed by electrospray ionization–mass spectrometry as compared with positive and negative FAB–mass spectrometry. Lee MK, et al. **Adv Exp Med Biol** 1996;405:353–64

Structural determination of saponins from mungbean sprouts by tandem mass spectrometry. Lee MR, et al. **Adv Exp Med Biol** 1996;405:331–7

Quantitation and identification of fumonisins by liquid chromatography/mass spectrometry. Musser SM. **Adv Exp Med Biol** 1996;392:65–74

Liquid secondary ion mass spectrometry and linked scanning at constant B/ELSIMS/MS for structure confirmation of saponins in Medicago sativa (alfalfa). West PR, et al. **Adv Exp Med Biol** 1996;405:339–52

Selective detection and sequencing of phosphopeptides at the femtomole level by mass spectrometry. Carr SA, et al. **Anal Biochem** 1996 Aug 1;239(2):180–92

A high-performance liquid chromatography–electrospray-tandem mass spectrometry analysis of cortisol and metabolites in placental perfusate. Dodds HM, et al. **Anal Biochem** 1997 May 1;247(2):342–7

Assay of aldehydes from lipid peroxidation: gas chromatography–mass spectrometry compared to thiobarbituric acid. Liu J, et al. **Anal Biochem** 1997 Feb 15;245(2):161–6

Simultaneous quantitative determination method for sphingolipid metabolites by liquid chromatography/ionspray ionization tandem mass spectrometry. Mano N, et al. **Anal Biochem** 1997 Jan 15; 244(2):291–300

Rapid quantitation of a large scope of eicosanoids in two models of inflammation: development of an electrospray and tandem mass spectrometry method and application to biological studies. Margalit A, et al. **Anal Biochem** 1996 Mar 1;235(1):73–81

Use of inductively coupled plasma–mass spectrometry for the quantitation of the binding and uptake of colloidal gold–low-density lipoprotein conjugates by cultured cells. Martin de Llano JJ, et al. **Anal Biochem** 1996 Dec 15; 243(2):210–7

The structure of Silurus asotus (catfish) roe lectin (SAL): identification of a noncovalent trimer by mass spectrometry and analytical ultracentrifugation. Murayama K, et al. **Anal Biochem** 1997 May 1;247(2):319–26

Detection of modified amino acids in lantibiotic peptide mutacin II by chemical derivation and electrospray ionization–mass spectroscopic analysis. Novák J, et al. **Anal Biochem** 1996 May 1;236(2):358–60

Capillary isoelectric focusing–electrospray ionization mass spectrometry for transferrin glycoforms analysis. Yang L, et al. **Anal Biochem** 1996 Dec 1;243(1):140–9

Imaging of boron in tissue at the cellular level for boron neutron capture therapy. Arlinghaus HF, et al. **Anal Chem** 1997 Aug 15;69(16):3169–76

Evaluation of mass spectrometric methods applicable to the direct analysis of non-peptide bead-bound combinatorial libraries. Brummel CL, et al. **Anal Chem** 1996 Jan 15; 68(2):237–42

Space charge evaluation in a plasma-source mass spectrograph. Burgoyne TW, et al. **Anal Chem** 1997 Feb 1;69(3):485–9

Analysis of DNA adducts in DNA hydrolysates by capillary zone electrophoresis and capillary zone electrophoresis–electrospray mass spectrometry. Deforce DL, et al. **Anal Chem** 1996 Oct 15;68(20):3575–84

Two-way conversation with a mass spectrometer: nondestructive interactive mass spectrometry. Guan S, et al. **Anal Chem** 1997 Jan 1;69(1):1–4

Analysis of macromolecules using nanoelectrospray ionization mass spectrometry and low-energy collision activation. Guy PA, et al. **Anal Chem** 1997 Aug 15; 69(16):3188–92

A CE/ESI-MS interface for stable, low-flow operation. Kirby DP, et al. **Anal Chem** 1996 Dec 15;68(24):4451–7

Microscale epitope mapping by affinity capillary electrophoresis–mass spectrometry. Lyubarskaya YV, et al. **Anal Chem** 1997 Aug 1;69(15):3008–14

Direct analysis and identification of proteins in mixtures by LC/MS/MS and database searching at the low-femtomole level. McCormack AL, et al. **Anal Chem** 1997 Feb 15; 69(4):767–76

Quantitative comparison of global carbohydrate structures of glycoproteins using LC–MS and in-source fragmentation. Mazsaroff I, et al. **Anal Chem** 1997 Jul 1; 69(13):2517–24

Characterization of benzodiazepine "combinatorial" chemical libraries by on-line immunoaffinity extraction, coupled column HPLC–ion spray mass spectrometry–tandem mass spectrometry. Nedved ML, et al. **Anal Chem** 1996 Dec 1;68(23):4228–36

Quantification of biomolecules by external electrospray ionization Fourier transform mass spectrometry. Padley HR, et al. **Anal Chem** 1997 Aug 1;69(15):2914–8

Quantitative capillary electrophoresis/ion spray tandem mass spectrometry determination of EDTA in human plasma and urine. Sheppard RL, et al. **Anal Chem** 1997 Aug 1; 69(15):2901–7

Combined HPLC, NMR spectroscopy, and ion–trap mass spectrometry with application to the detection and characterization of xenobiotic and endogenous metabolites in human urine. Shockcor JP, et al. **Anal Chem** 1996 Dec 15;68(24):4431–5

Synchronized scanning of the first and second mass spectrometers on tandem double-focusing mass spectrometers. Strobel FH. **Anal Chem** 1997 Jan 1; 69(1):105–7

Two-dimensional analysis of recombinant E. coli proteins using capillary isoelectric focusing electrospray ionization mass spectrometry. Tang W, et al. **Anal Chem** 1997 Aug 15;69(16):3177–82

Exact mass measurement of polar organic molecules at low resolution using electrospray ionization and a quadrupole mass spectrometer. Tyler AN, et al. **Anal Chem** 1996 Oct 15;68(20):3561–9

Pulsed ultrafiltration mass spectrometry: a new method for screening combinatorial libraries. van Breemen RB, et al. **Anal Chem** 1997 Jun 1;69(11):2159–64

Development of a nanoscale liquid chromatography/electrospray mass spectrometry methodology for the detection and identification of DNA adducts. Vanhoutte K, et al. **Anal Chem** 1997 Aug 15; 69(16):3161–8

Structural analysis of permethylated oligosaccharides by electrospray tandem mass spectrometry. Viseux N, et al. **Anal Chem** 1997 Aug 15;69(16):3193–8

Protein digest analysis by pressurized capillary electrochromatography using an ion trap storage/reflectron time-of-flight mass detector. Wu JT, et al. **Anal Chem** 1997 Aug 1;69(15):2908–13

Use of an ion trap storage/reflectron time-of-flight mass spectrometer as a rapid and sensitive detector for capillary electrophoresis in protein digest analysis. Wu JT, et al. **Anal Chem** 1996 Oct 1;68(19):3388–96

On-line micellar electrokinetic chromatography–electrospray ionization mass spectrometry using anodically migrating micelles. Yang L, et al. **Anal Chem** 1997 May 15;69(10):1820–6

Direct isoform analysis of high-mannose-containing glycoproteins by on-line capillary electrophoresis electrospray mass spectrometry. Yeung B, et al. **Anal Chem** 1997 Jul 1;69(13):2510–6

Rapid determination of amphetamine stereoisomer ratios in urine by gas chromatography–mass spectroscopy. Tetlow VA, et al. **Ann Clin Biochem** 1996 Jan;33 (Pt 1):50–4

Application of ICP-MS for the assessment of thorium excretion in urine. Roth P, et al. **Appl Radiat Isot** 1996 Sep–Oct;47(9–10):1055–6

Styrene oxide DNA adducts: in vitro reaction and sensitive detection of modified oligonucleotides using capillary zone electrophoresis interfaced to electrospray mass spectrometry. Schrader W, et al. **Arch Toxicol** 1997; 71(9):588–95

Applications of sustained off-resonance irradiation (SORI) and quadrupolar excitation axialization (QEA) for the characterization of biomolecules by Fourier-transform mass spectrometry (FTMS). Dale VC, et al. **Biochem Soc Trans** 1996 Aug;24(3):943–7

Analysis of hydrophobic proteins and peptides by electrospray ionization MS. Fearnley IM, et al. **Biochem Soc Trans** 1996 Aug;24(3):912–7 (16 ref.)

The use of automated electrospray ionization tandem MS for the diagnosis of inborn errors of metabolism from dried blood spots. Johnson AW, et al. **Biochem Soc Trans** 1996 Aug;24(3):932–8

Qualitative and quantitative MS analysis of cyclic nucleotides and related enzymes. Newton RP. **Biochem Soc Trans** 1996 Aug;24(3):938–43 (38 ref.)

The use of electrospray ionization MS to determine the structure of glycans in intact glycoproteins. Oliver RW, et al. **Biochem Soc Trans** 1996 Aug;24(3):917–27 (20 ref.)

Use of HPLC with inductively coupled plasma mass spectrometry (ICP-MS) for trace element speciation studies in biological materials. Owen LM, et al. **Biochem Soc Trans** 1996 Aug;24(3):947–52

Use of continuous-flow combustion MS in studies of human metabolism. Rennie MJ, et al. **Biochem Soc Trans** 1996 Aug; 24(3):927–32 (19 ref.)

A strategy for identifying gel-separated proteins in sequence databases by MS alone. Shevchenko A, et al. **Biochem Soc Trans** 1996 Aug;24(3):893–6

Trace analysis of arthropod hormones by liquid chromatography–atmospheric pressure chemical ionization/mass spectrometry. Wainwright G, et al. **Biochem Soc Trans** 1996 Aug;24(3):476S

Selective biochemical modification of functional residues in recombinant human macrophage colony-stimulating factor beta (rhM-CSF beta): identification by mass spectrometry. Glocker MO, et al. **Biochemistry** 1996 Nov 19; 35(46):14625–33

Separation and detection of bile acid 3-glucuronides in human urine by liquid chromatography/electrospray ionization–mass spectrometry. Ikegawa S, et al. **Biomed Chromatogr** 1996 Nov–Dec;10(6):313–7

Membrane preconcentration–capillary electrophoresis–mass spectrometry in the analysis of biologically derived metabolites and biopolymers. Naylor S, et al. **Biomed Chromatogr** 1996 Nov–Dec;10(6):325–30

Determination of furosine in hair by liquid chromatography–tandem mass spectrometry. Takemura A, et al. **Biomed Chromatogr** 1997 Jan–Feb;11(1):61–2

Beyond enzyme kinetics: direct determination of mechanisms by stopped-flow mass spectrometry. Northrop DB, et al. **Bioorg Med Chem** 1997 Apr;5(4):641–4 (27 ref.)

Manual microcolumn chromatography for sample cleanup before mass spectrometry. Courchesne PL, et al. **Biotechniques** 1997 Feb;22(2):244–6, 248–50

Elemental analysis of femoral bone from patients with fractured neck of femur or osteoarthrosis. Helliwell TR, et al. **Bone** 1996 Feb;18(2):151–7

Excursions in biomedical mass spectrometry. Taylor GW, et al. **Br J Clin Pharmacol** 1996 Jul;42(1):119–26 (37 ref.)

Biochemical mass spectrometry: worth the weight? Fitzgerald MC, et al. **Chem Biol** 1996 Sep;3(9):707–15 (47 ref.)

Mass spectrometry and viral analysis. Siuzdak G, et al. **Chem Biol** 1996 Jan;3(1):45–8

Identification and localization of a stable sulfenic acid in peroxide-treated tetrachlorohydroquinone dehalogenase using electrospray mass spectrometry. Willett WS, et al. **Chem Biol** 1996 Oct;3(10):851–7

Isotope dilution—mass spectrometric quantification of specific proteins: model application with apolipoprotein A-I. Barr JR, et al. **Clin Chem** 1996 Oct;42(10):1676–82

Evaluation of selected-ion storage ion–trap mass spectrometry for detecting urinary anabolic agents [see comments] Bowers LD, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1033–9. Comment in: Clin Chem 1997 Jun;43(6 Pt 1):915.

Detecting CFTR gene mutations by using primer oligo base extension and mass spectrometry [see comments] Braun A, et al. **Clin Chem** 1997 Jul;43(7):1151–8. Comment in: Clin Chem 1997 Jul;43(7):1108–9.

Titanium identification and measurement by ICP-MS and ICP-OES in a human spleen fragment. Ducros V, et al. **Clin Chem** 1996 Nov;42(11):1875–7

Mass-spectrometric approaches for DNA-based genetic screening [editorial; comment] Fields GB. **Clin Chem** 1997 Jul;43(7):1108–9. Comment on: Clin Chem 1997 Jul;43(7):1151–8.

Trade-offs in mass spectrometry [editorial; comment] Fitzgerald RL, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):915 . Comment on: Clin Chem 1997 Jun;43(6 Pt 1):1033–9.

Accurate and precise isotope dilution mass spectrometry method for determining glucose in whole blood. Hannestad U, et al. **Clin Chem** 1997 May;43(5):794–800

Screening blood spots for inborn errors of metabolism by electrospray tandem mass spectrometry with a microplate batch process and a computer algorithm for automated flagging of abnormal profiles. Rashed MS, et al. **Clin Chem** 1997 Jul;43(7):1129–41

Potential of electrospray mass spectrometry for quantifying glycohemoglobin. Roberts NB, et al. **Clin Chem** 1997 May; 43(5):771–8

Application of isotope-selective nondispersive infrared spectrometry (IRIS) for evaluation of [13C]octanoic acid gastric-emptying breath tests: comparison with isotope ratio–mass spectrometry (IRMS). Schadewaldt P, et al. **Clin Chem** 1997 Mar;43(3):518–22

Mass spectrometry in protein studies from genome to function. Roepstorff P. **Curr Opin Biotechnol** 1997 Feb; 8(1):6–13 (96 ref.)

Replacing 14C with stable isotopes in drug metabolism studies. Abramson FP, et al. **Drug Metab Dispos** 1996 Jul; 24(7):697–701

Orally active inhibitors of human leukocyte elastase. III. Identification and characterization of metabolites of L-694,458 by liquid chromatography-tandem mass spectrometry. Luffer-Atlas D, et al. **Drug Metab Dispos** 1997 Aug;25(8):940-52

Probing the microheterogeneity of O-specific chains from Yersinia ruckeri using capillary zone electrophoresis/electrospray mass spectrometry. Bateman KP, et al. **Electrophoresis** 1996 Dec;17(12):1818-28

Characterization of human serum amyloid A protein isoforms separated by two-dimensional electrophoresis by liquid chromatography/electrospray ionization tandem mass spectrometry. Ducret A, et al. **Electrophoresis** 1996 May; 17(5):866-76

Enhanced in situ gel digestion of electrophoretically separated proteins with automated peptide elution onto mini reversed-phase columns. Eckerskorn C, et al. **Electrophoresis** 1996 May;17(5):899-906

Identification of cytokine-regulated proteins in normal and malignant cells by the combination of two-dimensional polyacrylamide gel electrophoresis, mass spectrometry, Edman degradation and immunoblotting and approaches to the analysis of their functional roles. Epstein LB, et al. **Electrophoresis** 1996 Nov;17(11):1655-70 (75 ref.)

Determination of the C-terminal form of an anemone toxin using capillary electrophoresis and mass spectrometry. Forest E, et al. **Electrophoresis** 1996 May;17(5):962-4

Electrospray interface for capillary electrophoresis-mass spectrometry with fiber-optic UV detection close to the electrospray tip. Foret F, et al. **Electrophoresis** 1996 Dec; 17(12):1829-32

S-pyridylethylation of intact polyacrylamide gels and in situ digestion of electrophoretically separated proteins: a rapid mass spectrometric method for identifying cysteine-containing peptides. Moritz RL, et al. **Electrophoresis** 1996 May;17(5):907-17

Direct isolation of proteins from sodium dodecyl sulfate-polyacrylamide gel electrophoresis and analysis by electrospray-ionization mass spectrometry. Schuhmacher M, et al. **Electrophoresis** 1996 May;17(5):848-54

The interface of capillary electrophoresis with high performance Fourier transform ion cyclotron resonance mass spectrometry for biomolecule characterization. Severs JC, et al. **Electrophoresis** 1996 Dec;17(12):1808-17

Identification of stress proteins in lysates of human cell lines separated by two-dimensional electrophoresis and electroblotted simultaneously onto two different membranes. Vogt CP, et al. **Electrophoresis** 1996 May; 17(5):892-8

Study of non-covalent enzyme-inhibitor complexes of aldose reductase by electrospray mass spectrometry. Potier N, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):274-82

Simultaneous assessment of conformation and aggregation of beta-amyloid peptide using electrospray ionization mass spectrometry. Chen XG, et al. **FASEB J** 1997 Aug; 11(10):817-23

An investigation of the binding of protein proteinase inhibitors to trypsin by electrospray ionization mass spectrometry. Kraunsoe JA, et al. **FEBS Lett** 1996 Oct 28;396(1):108-12

Determination of drugs in hair using GC/MS/MS. Uhl M. **Forensic Sci Int** 1997 Jan 17;84(1-3):281-94

New sialic acids from biological sources identified by a comprehensive and sensitive approach: liquid chromatography-electrospray ionization-mass spectrometry (LC-ESI-MS) of SIA quinoxalinones. Klein A, et al. **Glycobiology** 1997 Apr;7(3):421-32

A nuclear mass spectrometer for studying radon progeny clusters. Gong SL, et al. **Health Phys** 1996 Nov; 71(5):749-56

The determination of metals (antimony, bismuth, lead, cadmium, mercury, palladium, platinum, tellurium, thallium, tin and tungsten) in urine samples by inductively coupled plasma-mass spectrometry. Schramel P, et al. **Int Arch Occup Environ Health** 1997;69(3):219-23

High-throughput purity estimation and characterisation of synthetic peptides by electrospray mass spectrometry. Smart SS, et al. **Int J Pept Protein Res** 1996 Jan-Feb; 47(1-2):47-55

The first Japanese case of Hb Santa Ana, an unstable abnormal hemoglobin, identified rapidly by electrospray ionization mass spectrometry. Miyazaki A, et al. **Intern Med** 1997 May;36(5):365-70

Elucidation of LSD in vitro metabolism by liquid chromatography and capillary electrophoresis coupled with tandem mass spectrometry. Cai J, et al. **J Anal Toxicol** 1996 Jan-Feb;20(1):27-37

Applications of liquid chromatography--mass spectrometry in analytical toxicology: a review. Hoja H, et al. **J Anal Toxicol** 1997 Mar-Apr;21(2):116-26 (119 ref.)

Determination of methocarbamol in equine serum and urine by high-performance liquid chromatography with ultraviolet detection and atmospheric pressure ionization-mass spectrometric confirmation. Koupai-Abyazani MR, et al. **J Anal Toxicol** 1997 Jul-Aug; 21(4):301-5

Detection and identification of pyrovalerone and its hydroxylated metabolite in the rat. Shin HS, et al. **J Anal Toxicol** 1996 Nov-Dec;20(7):568-72

Simultaneous determination of illicit drugs in human urine by liquid chromatography-mass spectrometry. Tatsuno M, et al. **J Anal Toxicol** 1996 Sep;20(5):281-6

Simultaneous determination of heroin 6-monoacetylmorphine, morphine, and its glucuronides by liquid chromatography--atmospheric pressure ionspray-mass spectrometry. Zuccaro P, et al. **J Anal Toxicol** 1997 Jul-Aug;21(4):268-77

Preparation of some toxic metabolites of disulfoton, phorate, and terbufos, their separation by thin-layer chromatography and confirmation by electron impact mass spectrometry. Simonovska B. **J AOAC Int** 1997 May-Jun; 80(3):688-92

Rapid quantitative analysis of binary mixtures of Escherichia coli strains using pyrolysis mass spectrometry with multivariate calibration and artificial neural networks. Timmins EM, et al. **J Appl Microbiol** 1997 Aug; 83(2):208-18

Adaptation of the doubly labeled water method for subjects consuming isotopically enriched water. Gretebeck RJ, et al. **J Appl Physiol** 1997 Feb;82(2):563-70

Rapid protein sequencing by tandem mass spectrometry and cDNA cloning of p20-CGGBP. A novel protein that binds to the unstable triplet repeat 5'-d(CGG)n-3' in the human FMR1 gene. Deissler H, et al. **J Biol Chem** 1997 Jul 4; 272(27):16761-8

Calmodulin modulates the interaction between IQGAP1 and Cdc42. Identification of IQGAP1 by nanoelectrospray tandem mass spectrometry. Joyal JL, et al. **J Biol Chem** 1997 Jun 13;272(24):15419-25

Characterization of endogenous neuropeptide Y in rat hippocampus and its metabolism by nanospray mass spectrometry. Stenfors C, et al. **J Biol Chem** 1997 Feb 28; 272(9):5747-51

Cryptic antigenic determinants on the extracellular pyruvate dehydrogenase complex/mimeotope found in primary biliary cirrhosis. A probe by affinity mass spectrometry. Yip TT, et al. **J Biol Chem** 1996 Dec 20;271(51):32825-33

Evaluation of the uncertainty of molecular mass measurement by electrospray ionization mass spectrometry. Juneau PL, et al. **J Biopharm Stat** 1997 Jul;7(3):453-65

Application of multidimensional affinity high-performance liquid chromatography and electrospray ionization liquid chromatography-mass spectrometry to the characterization of glycosylation in single-chain plasminogen activator. Initial results. Apffel A, et al. **J Chromatogr A** 1996 Oct 25;750(1-2):35-42

Pharmacokinetic screening for the selection of new drug discovery candidates is greatly enhanced through the use of liquid chromatography-atmospheric pressure ionization tandem mass spectrometry. Bryant MS, et al. **J Chromatogr A** 1997 Aug 8;777(1):61-6

Applications of liquid chromatography-mass spectrometry interfacing systems in food analysis: pesticide, drug and toxic substance residues. Careri M, et al. **J Chromatogr A** 1996 Mar 15;727(2):153-84 (162 ref.)

Comparison of the possibilities of gas chromatography-mass spectrometry and tandem mass spectrometry systems for the analysis of anabolics in biological material. De Brabander HF, et al. **J Chromatogr A** 1996 Oct 25; 750(1-2):105-14

Determination of traces of pesticides in water by solid-phase extraction and liquid chromatography-ionspray mass spectrometry. Giraud D, et al. **J Chromatogr A** 1997 Aug 8;777(1):115-25

Rapid target analysis of microcontaminants in water by on-line single-short-column liquid chromatography combined with atmospheric pressure chemical ionization tandem mass spectrometry. Hogenboom AC, et al. **J Chromatogr A** 1997 Aug 8;777(1):81-90

Determination of staphylococcal enterotoxin B by on-line (micro) liquid chromatography-electrospray mass spectrometry. Kientz CE, et al. **J Chromatogr A** 1997 Jan 3;757(1-2):51-64

Urinary excretion of deprenyl metabolites. Lengyel J, et al. **J Chromatogr A** 1997 Feb 21;762(1-2):321-6

Quantitation of the 5HT1D agonists MK-462 and sumatriptan in plasma by liquid chromatography-atmospheric pressure chemical ionization mass spectrometry. McLoughlin DA, et al. **J Chromatogr A** 1996 Mar 1;726(1-2):115-24

Hyphenation of capillary electrophoresis to inductively coupled plasma mass spectrometry as an element-specific detection method for metal speciation. Michalke B, et al. **J Chromatogr A** 1996 Oct 25;750(1-2):51-62

Liquid chromatography-tandem mass spectrometry applied to a study of the metabolism of pentamidine. Discussion of possibilities and problems. Nordin J, et al. **J Chromatogr A** 1997 Aug 8;777(1):73-9

Liquid chromatography-atmospheric-pressure chemical ionization mass spectrometry as a routine method for the analysis of mutagenic amines in beef extracts. Pais P, et al. **J Chromatogr A** 1997 Aug 22;778(1-2):207-18

Liquid chromatography-electrospray mass spectrometry with in-source fragmentation for the identification and quantification of fourteen mutagenic amines in beef extracts. Pais P, et al. **J Chromatogr A** 1997 Jul 18; 775(1-2):125-36

Liquid chromatography and mass spectrometry for the speciation of arsenic animal feed additives. Pergantis SA, et al. **J Chromatogr A** 1997 Mar 14;764(2):211-22

Future potential of targeted component analysis by multidimensional liquid chromatography-mass spectrometry. Regnier F, et al. **J Chromatogr A** 1996 Oct 25;750(1-2):3-10 (26 ref.)

Rapid pharmacokinetic screening of salbutamol in plasma samples by column-switching high-performance liquid chromatography-electrospray mass spectrometry. Schmeer K, et al. **J Chromatogr A** 1997 Aug 8;777(1):67-72

Analysis of polar organic pollutants in the Elbe river by flow injection analysis and high-performance liquid chromatography with tandem mass spectrometry. Schröder HF. **J Chromatogr A** 1997 Aug 8;777(1):127-39

Rapid analysis of endogenous LVV-hemorphin-7 in cerebrospinal fluid by size-exclusion chromatography and electrospray ionization mass spectrometry. Silberring J, et al. **J Chromatogr A** 1997 Aug 8;777(1):41-5

Drug quantitation on a benchtop liquid chromatography-tandem mass spectrometry system. Tiller PR, et al. **J Chromatogr A** 1997 May 30;771(1-2):119-25

Complete structure elucidation of a globular protein by particle beam liquid chromatography-Fourier transform infrared spectrometry and electrospray liquid chromatography-mass spectrometry. Sequence and conformation of beta-lactoglobulin. Turula VE, et al. **J Chromatogr A** 1997 Feb 28;763(1-2):91-103

Liquid chromatography-mass spectrometry with on-line solid-phase extraction by a restricted-access C18 precolumn for direct plasma and urine injection. van der Hoeven RA, et al. **J Chromatogr A** 1997 Feb 21; 762(1-2):193-200

Determination of an in vivo metabolite of a human immunodeficiency virus protease-inhibitor in human plasma by high-performance liquid chromatography with tandem mass spectrometry. Woolf E, et al. **J Chromatogr A** 1997 Feb 21;762(1-2):311-9

Confirmatory assay for the determination of tetracycline, oxytetracycline, chlortetracycline and its isomers in muscle and kidney using liquid chromatography-mass spectrometry. Blanchflower WJ, et al. **J Chromatogr B Biomed Appl** 1997 May 9;692(2):351-60

Direct plasma liquid chromatographic-tandem mass spectrometric analysis of granisetron and its 7-hydroxy metabolite utilizing internal surface reversed-phase guard columns and automated column switching devices. Boppana VK, et al. **J Chromatogr B Biomed Appl** 1996 Apr 12;678(2):227-36

Direct measurement of steroid sulfate and glucuronide conjugates with high-performance liquid chromatography-mass spectrometry. Bowers LD, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):61-8

Picogram determination of a novel dopamine D4 receptor antagonist in human plasma and urine by liquid chromatography with atmospheric pressure chemical ionization tandem mass spectrometry. Chavez-Eng CM, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28; 691(1):77-85

Validation of a high-performance liquid chromatographic-mass spectrometric method for the measurement of 5-chloro-2',3'-dideoxy-3'-fluorouridine (935U83) in human plasma. Dunn JA, et al. **J Chromatogr B Biomed Appl** 1996 Nov 15;686(2):241-8

Use of direct-probe mass spectrometry as a toxicology confirmation method for demoxepam in urine following high-performance liquid chromatography. Essien H, et al. **J Chromatogr B Biomed Appl** 1996 Aug 30;683(2):199-208

Selective determination of haloperidol in human serum: surface ionization mass spectrometry and gas chromatography with surface ionization detection. Fujii T, et al. **J Chromatogr B Biomed Appl** 1996 Dec 13; 687(2):395-403

Determination of LSD and N-demethyl-LSD in urine by liquid chromatography coupled to electrospray ionization mass spectrometry. Hoja H, et al. **J Chromatogr B Biomed Appl** 1997 May 9;692(2):329-35

Identification and determination of pirlimycin residue in bovine milk and liver by high-performance liquid chromatography-thermospray mass spectrometry. Hornish RE, et al. **J Chromatogr B Biomed Appl** 1995 Dec 15; 674(2):219-35

Separation and detection of closely related peptides by micellar electrokinetic chromatography coupled with electrospray ionization mass spectrometry using the partial filling technique. Koezuka K, et al. **J Chromatogr B Biomed Appl** 1997 Feb 7;689(1):3-11

Purification and characterization of a recombinant hepatitis E protein vaccine candidate by liquid chromatography-mass spectrometry. McAtee CP, et al. **J Chromatogr B Biomed Appl** 1996 Oct 11;685(1):91-104

Determination of the furazolidone metabolite, 3-amino-2-oxazolidinone, in porcine tissues using liquid chromatography-thermospray mass spectrometry and the occurrence of residues in pigs produced in Northern Ireland. McCracken RJ, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):87-94

Use of electrospray ionization liquid chromatography-mass spectrometry to study the role of CYP2D6 in the in vitro metabolism of 5-hydroxytryptamine receptor antagonists. Sanwald P, et al. **J Chromatogr B Biomed Appl** 1996 Mar 29;678(1):53-61

High-performance liquid chromatography coupled to ion spray mass spectrometry for the determination of colchicine at ppb levels in human biofluids. Tracqui A, et al. **J Chromatogr B Biomed Appl** 1996 Jan 26; 675(2):235-42

Liquid chromatographic-thermospray tandem mass spectrometric quantitative analysis of some drugs with

hypnotic, sedative and tranquillising properties in whole blood. Verweij AM, et al. **J Chromatogr B Biomed Appl** 1996 Nov 8;686(1):27–34

Automated on-line ionic detergent removal from minute protein/peptide samples prior to liquid chromatography-electrospray mass spectrometry. Vissers JP, et al. **J Chromatogr B Biomed Appl** 1996 Nov 15; 686(2):119–28

Design and applications of a self-aligning liquid junction-electrospray interface for capillary electrophoresis-mass spectrometry. Wachs T, et al. **J Chromatogr B Biomed Appl** 1996 Oct 25;685(2):335–42

Determination of nicotine and cotinine in human plasma by liquid chromatography-tandem mass spectrometry with atmospheric-pressure chemical ionization interface. Xu AS, et al. **J Chromatogr B Biomed Appl** 1996 Jul 12; 682(2):249–57

High-performance liquid chromatography-thermospray mass spectrometry of 5,6-dihydroxyeicosatrienoate-1,5-lactone from tissue homogenates. Yamane M, et al. **J Chromatogr B Biomed Appl** 1996 Apr 12;678(2):339–43

Determination of the dihydropyridine aryloxypropanolamine compound Z6568 and four metabolites in plasma by liquid chromatography/negative-ion mass spectrometry. Castelnovo P, et al. **J Mass Spectrom** 1996 Jan;31(1):37–46

Combined mass spectrometric methods for the characterization of human hemoglobin variants localized within alpha T9 peptide: identification of Hb Villeurbanne alpha 89 (FG1) His-->Tyr. Déon C, et al. **J Mass Spectrom** 1997 Aug;32(8):880–7

Correction of 13C mass isotopomer distributions for natural stable isotope abundance. Fernandez CA, et al. **J Mass Spectrom** 1996 Mar;31(3):255–62

Determination of total body water by a simple and rapid mass spectrometric method. Van Kreel BK, et al. **J Mass Spectrom** 1996 Jan;31(1):108–11

Differentiation of strains of Mycoplasma fermentans from various sources by pyrolysis mass spectrometry. Hannan PC, et al. **J Med Microbiol** 1997 Apr;46(4):348–53

Pyrolysis mass spectrometry in epidemiological and population genetic studies of Haemophilus influenzae. Leaves NI, et al. **J Med Microbiol** 1997 Mar;46(3):204–7

On-line liquid chromatography coupled with high field NMR and mass spectrometry (LC-NMR-MS): a new technique for drug metabolite structure elucidation. Burton KI, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1903–12

Identification and mechanism of formation of potentially genotoxic metabolites of tamoxifen: study by LC-MS/MS. Lim CK, et al. **J Pharm Biomed Anal** 1997 Jun; 15(9–10):1335–42

A direct technique for the simultaneous determination of 10 drug candidates in plasma by liquid chromatography-atmospheric pressure chemical ionization mass spectrometry interfaced to a Prospekt solid-phase extraction system. McLoughlin DA, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1893–901

Determination of a substance P antagonist in human plasma and urine using high-performance liquid chromatography with ultraviolet absorbance and tandem mass spectrometric detection. Zagrobelny J, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1427–33

The MS-MS determination of the fragmentation pathways of some substituted 1,2,3-benzotriazin-4-ones with possible applications in metabolic studies. Woodland ED, et al. **J Pharm Pharmacol** 1996 Feb;48(2):223–7

Identification of the glucuronides of the hydroxylated metabolites of the antimalarial arteether in rat plasma and urine by thermospray high-performance liquid chromatography/mass spectrometry. Ramu K, et al. **J Pharm Sci** 1997 Aug;86(8):915–20

A multidimensional approach to protein characterization. Anderegg RJ, et al. **J Protein Chem** 1997 Jul;16(5):523–6 (25 ref.)

The essential role of mass spectrometry in characterizing protein structure: mapping posttranslational modifications. Annan RS, et al. **J Protein Chem** 1997 Jul;16(5):391–402

High-sensitivity detection of 4-(3-pyridinylmethylaminocarboxypropyl) phenylthiohydantoins by capillary liquid chromatography-microelectrospray ion trap mass spectrometry. Ducret A, et al. **J Protein Chem** 1997 Jul; 16(5):323–8

Affinity selection and mass spectrometry-based strategies to identify lead compounds in combinatorial libraries. Kaur S, et al. **J Protein Chem** 1997 Jul;16(5):505–11

A novel geometry mass spectrometer, the Q-TOF, for low-femtomole/attomole-range biopolymer sequencing. Morris HR, et al. **J Protein Chem** 1997 Jul;16(5):469–79

Peptide sequencing by mass spectrometry for homology searches and cloning of genes. Shevchenko A, et al. **J Protein Chem** 1997 Jul;16(5):481–90

Direct analysis of protein mixtures by tandem mass spectrometry. Yates JR 3rd, et al. **J Protein Chem** 1997 Jul;16(5):495–7

Use of gas chromatographic-mass spectrometric techniques in studies of androst-16-ene and androgen biosynthesis in human testis; cytosolic specific binding of 5alpha-androst-16-en-3-one. Kwan TK, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1-2):137–46

Quantitative analysis of triglycerides using atmospheric pressure chemical ionization-mass spectrometry. Byrdwell WC, et al. **Lipids** 1996 Sep;31(9):919–35

Tandem mass spectrometric approach for determining structure of molecular species of aminophospholipids. Chen S. **Lipids** 1997 Jan;32(1):85–100

The use of nicotinates and sulfoquinovosyl monoacylglycerols in the analysis of monounsaturated n-3 fatty acids by mass spectrometry. Keusgen M, et al. **Lipids** 1996 Feb;31(2):231–8

Analysis of triacylglycerols by silver-ion high-performance liquid chromatography-atmospheric pressure chemical ionization mass spectrometry. Laakso P, et al. **Lipids** 1996 Dec;31(12):1311–22

Analysis of lipoxygenase-derived fatty acid hydroperoxides by electrospray ionization tandem mass spectrometry. Schneider C, et al. **Lipids** 1997 Mar;32(3):331–6

Stable-isotope method for determining the gastrointestinal handling of [1-13C]palmitic acid. Stolinski M, et al. **Lipids** 1997 Mar;32(3):337–40

Electrospray ionization mass spectrometry. Banks JF Jr, et al. **Methods Enzymol** 1996;270:486–519

Measurement of pantothenic acid and hopantenic acid by gas chromatography-mass spectroscopy. Banno K. **Methods Enzymol** 1997;279:213–9 (16 ref.)

Gas chromatographic/mass spectrometric measurement of ascorbic acid and analysis of ascorbic acid degradation in solution. Deutsch JC. **Methods Enzymol** 1997;279:13–24 (10 ref.)

Peptide characterization by mass spectrometry. Gillece-Castro BL, et al. **Methods Enzymol** 1996; 271:427–48 (63 ref.)

Reversed-phase peptide mapping of glycoproteins using liquid chromatography/electrospray ionization-mass spectrometry. Hancock WS, et al. **Methods Enzymol** 1996; 271:403–27 (34 ref.)

Carbohydrate sequence analysis by electrospray ionization-mass spectrometry. Reinhold VN, et al. **Methods Enzymol** 1996;271:377–402 (26 ref.)

Protein phosphorylation analysis by electrospray ionization-mass spectrometry. Resing KA, et al. **Methods Enzymol** 1997;283:29–44

Quadrupole ion trap mass spectrometry. Schwartz JC, et al. **Methods Enzymol** 1996;270:552–86

Capillary electrophoresis-mass spectrometry. Smith RD, et al. **Methods Enzymol** 1996;271:448–86 (90 ref.)

Isotopically labeled precursors and mass spectrometry in elucidating biosynthesis of pyrimidine moiety of thiamin in Saccharomyces cerevisiae. Tazuya K, et al. **Methods Enzymol** 1997;279:97–108 (9 ref.)

Protein structure analysis by mass spectrometry. Yates JR. **Methods Enzymol** 1996;271:351–77 (40 ref.)

Mass spectrometry. Ionization methods and instrumentation. Chapman JR. **Methods Mol Biol** 1996;61:9–28 (16 ref.)

Liquid chromatography/mass spectrometry for the analysis of protein digests. Covey T. **Methods Mol Biol** 1996; 61:83–99

Mass spectrometric quantification of neuropeptides. Desiderio DM. **Methods Mol Biol** 1996;61:57–65

Analysis of complex protein and glycoprotein mixtures by electrospray ionization mass spectrometry with maximum entropy processing. Green BN, et al. **Methods Mol Biol** 1996;61:279–94

Fast-atom bombardment and electrospray mass spectrometry of peptides, proteins, and glycoproteins. Greer FM, et al. **Methods Mol Biol** 1997;64:147–63

The effect of detergents on proteins analyzed by electrospray ionization. Loo RR, et al. **Methods Mol Biol** 1996;61:141–60

Protein secondary structure investigated by electrospray ionization. Robinson CV. **Methods Mol Biol** 1996;61:129–39

Mass spectrometry in the analysis of peptides and proteins, past and present. Roepstorff P. **Methods Mol Biol** 1996; 61:1–7 (16 ref.)

Noncovalent interactions observed using electrospray ionization. Schwartz BL, et al. **Methods Mol Biol** 1996; 61:115–27

Structural characterization of protein glycosylation using HPLC/electrospray ionization mass spectrometry and glycosidase digestion. Settineri CA, et al. **Methods Mol Biol** 1996;61:255–78

Determination of loading values and distributions for drugs conjugated to proteins and antibodies by MALDI-MS and ESI-MS. Siegel MM. **Methods Mol Biol** 1996;61:211–26

Analysis of neuropeptides by size-exclusion HPLC linked to electrospray ionization mass spectrometry. Silberring J. **Methods Mol Biol** 1997;73:129–40

Disulfide bond location in proteins. Sun Y, et al. **Methods Mol Biol** 1996;61:185–210

Structural analysis of protein variants. Wada Y. **Methods Mol Biol** 1996;61:101–13

Charged derivatives for peptide sequencing using a magnetic sector instrument. Zaia J. **Methods Mol Biol** 1996;61:29–41 (29 ref.)

A single-bead decode strategy using electrospray ionization mass spectrometry and a new photolabile linker: 3-amino-3-(2-nitrophenyl)propionic acid. Brown BB, et al. **Mol Divers** 1995 Sep;1(1):4–12

Multidimensional chromatography coupled with mass spectrometry for target-based screening. Hsieh YF, et al. **Mol Divers** 1997 Apr;2(4):189–96

Electrospray ionization mass spectrometric analysis of phospholipids of Escherichia coli [letter] [published erratum appears in Mol Microbiol 1997 Mar;23(5):1087] Sweetman G, et al. **Mol Microbiol** 1996 Apr;20(1):233–8

High-throughput DNA analysis by time-of-flight mass spectrometry. Monforte JA, et al. **Nat Med** 1997 Mar; 3(3):360–2

Structural studies of tRNAs by capillary high performance liquid chromatography/electrospray mass spectrometry. Hayashi N, et al. **Nucleic Acids Symp Ser** 1995;(34):153–4

Liquid chromatography/mass-spectrometric characterization of sphingomyelin and dihydrosphingomyelin of human lens membranes. Byrdwell WC, et al. **Ophthalmic Res** 1997;29(4):191–206

Molecular identification of foreign inclusions in inflammatory tissue surrounding metal implants by Fourier transform laser microprobe mass spectrometry. De Nollin S, et al. **Pathol Res Pract** 1997;193(4):313–8

Identification of the proteins of the yeast U1 small nuclear ribonucleoprotein complex by mass spectrometry. Neubauer G, et al. **Proc Natl Acad Sci U S A** 1997 Jan 21;94(2):385–90

Probing the tertiary structure of proteins by limited proteolysis and mass spectrometry: the case of Minibody. Zappacosta F, et al. **Protein Sci** 1996 May;5(5):802–13

Automated sample preparation using membrane microtiter extraction for bioanalytical mass spectrometry. Janiszewski J, et al. **Rapid Commun Mass Spectrom** 1997;11(9):1033–7

Quantitative bioanalysis utilizing high-performance liquid chromatography/electrospray mass spectrometry via selected-ion monitoring of the sodium ion adduct [M+Na]+. Jemal M, et al. **Rapid Commun Mass Spectrom** 1997;11(10):1083–8

Combining electrospray ionization and the flowing afterglow method. Poutsma JC, et al. **Rapid Commun Mass Spectrom** 1997;11(5):489–93

Procedures for tandem mass spectrometry on an ion trap storage/reflectron time-of-flight mass spectrometer. Qian MG, et al. **Rapid Commun Mass Spectrom** 1996; 10(15):1911–20

Mass spectrometric gene diagnosis of one-base substitution from polymerase chain reaction amplified human DNA. Tsuneyoshi T, et al. **Rapid Commun Mass Spectrom** 1997; 11(7):719–22

Low picogram determination of Ro 48-6791 and its major metabolite, Ro 48-6792, in plasma with column-switching microbore high-performance liquid chromatography coupled to ion spray tandem mass spectrometry. Zell M, et al. **Rapid Commun Mass Spectrom** 1997;11(10):1107–14

Enhancement of the molecular ion yield in plasma desorption mass spectrometry using explosive matrices. Zubarev RA, et al. **Rapid Commun Mass Spectrom** 1997;11(1):63–70

Quantitation of cortisol and related 3-oxo-4-ene steroids in urine using gas chromatography/mass spectrometry with stable isotope-labeled internal standards. Palermo M, et al. **Steroids** 1996 Oct;61(10):583–9

Electrospray mass spectrometry of testosterone esters: potential for use in doping control. Shackleton CH, et al. **Steroids** 1997 Jul;62(7):523–9

Intact noncovalent dimer of estrogen receptor ligand-binding domain can be detected by electrospray ionization mass spectrometry. Witkowska HE, et al. **Steroids** 1996 Jul; 61(7):433–8

Domain elucidation by mass spectrometry. Cohen SL. **Structure** 1996 Sep 15;4(9):1013–6

A specific method for the measurement of tacrolimus in human whole blood by liquid chromatography/tandem mass spectrometry. Zhang Q, et al. **Ther Drug Monit** 1997 Aug;19(4):470–6

Mass spectrometric investigations on Conus peptides. Krishnamurthy T, et al. **Toxicon** 1996 Nov-Dec; 34(11-12):1345–59

[Analysis of chemically synthesized peptides by liquid secondary ion mass spectrometry (LSIMS)] Yagami T, et al. **Eisei Shikenjo Hokoku** 1994;(112):118–27 (Eng. Abstr.) **(Jpn)**

[Structural analysis of proteins by mass spectrometry] Nakayama H, et al. **Seikagaku** 1996 Oct;68(10):1615–36 (132 ref.) **(Jpn)**

[An improved method of preparing protein and peptide probes in mass spectrometry with ionization of division fragments by californium-252 (TOF-PDMS)] Chivanov VD, et al. **Bioorg Khim** 1996 Aug;22(8):585–8 (Eng. Abstr.) **(Rus)**

[Prospects for using mass spectrometric methods for analyzing biopolymer structure. Use and perspectives] Orlov VM, et al. **Mol Biol (Mosk)** 1996 Jul-Aug; 30(4):759–72 (112 ref.) **(Rus)**

SPECTRUM ANALYSIS, MASS-GAS CHROMATOGRAPHY see **MASS FRAGMENTOGRAPHY**

SPECTRUM ANALYSIS, RAMAN

Raman on the operating table [news] **Anal Chem** 1997 Jun 1;69(11):336A–337A

Raman spectra of breast tissue [news] Henry CM. **Anal Chem** 1996 Dec 1;68(23):718A–719A

Resonance Raman spectroscopic studies of cellobiose dehydrogenase from Phanerochaete chrysosporium. Cohen JD, et al. **Arch Biochem Biophys** 1997 May 15;341(2):321–8

Resonance Raman examination of the wavelength regulation mechanism in human visual pigments. Kochendoerfer GG, et al. **Biochemistry** 1997 Jun 3;36(22):6577–87

Temperature-dependent ultraviolet resonance Raman

spectroscopy of the premelting state of dA.dT DNA. Chan SS, et al. **Biophys J** 1997 Apr;72(4):1512–20
The analysis of Merino wool cuticle and cortical cells by Fourier transform Raman spectroscopy. Church JS, et al. **Biopolymers** 1997;42(1):7–17
Raman spectra of human dentin mineral. Tsuda H, et al. **Eur J Oral Sci** 1996 Apr;104(2 (Pt 1)):123–31
A UV resonant Raman spectroscopic study of the interaction of metallic derivatives of tetrakis(4–N–methylpyridyl)porphine with polynucleotides. Wheeler GV, et al. **J Biomol Struct Dyn** 1997 Aug;15(1):107–17
The design and implementation of a high–fidelity Raman imaging microscope. Goldstein SR, et al. **J Microsc** 1996 Oct;184 (Pt 1):35–45
Raman spectroscopic analysis of isomers of biliverdin dimethyl ester. Matysik J, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1319–24
Fourier–transform Raman spectroscopic study of human hair. Akhtar W, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Jul 15; 53A(7):1021–31
Resonance Raman spectroscopy of 2H–labelled spheroidenes in petroleum ether and in the Rhodobacter sphaeroides reaction centre. Kok P, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Mar; 53A(3):381–92

INSTRUMENTATION

Theory, design, and characterization of a microdialysis flow cell for Raman spectroscopy [see comments] Tuma R, et al. **Biophys J** 1996 Dec;71(6):3454–66. Comment in: Biophys J 1996 Dec;71(6):2918–9.
Characterization of acetaminophen: molecular microanalysis with Raman microprobe spectroscopy. Pestaner JP, et al. **J Forensic Sci** 1996 Nov;41(6):1060–3

METHODS

Quantitative optical spectroscopy for tissue diagnosis. Richards–Kortum R, et al. **Annu Rev Phys Chem** 1996; 47:555–606 (282 ref.)
Lipid structure of cytotoxic granules in living human killer T lymphocytes studied by Raman microspectroscopy. Takai Y, et al. **Biochim Biophys Acta** 1997 Apr 17; 1335(1–2):199–208
Want to exchange your virus? Try microdialysis and Raman [comment] Carey PR. **Biophys J** 1996 Dec;71(6):2918–9. Comment on: Biophys J 1996 Dec;71(6):3454–66.
A Raman study of the time variability for the A–to–B transition in wet–spun films of calf–thymus DNA. Szabó A, et al. **J Biomol Struct Dyn** 1996 Jun;13(6):1029–33
Quantitative FT–Raman analysis of two crystal forms of a pharmaceutical compound. Langkilde FW, et al. **J Pharm Biomed Anal** 1997 Mar;15(6):687–96
A UV resonance Raman study of hairpin dimer helices of d(A–G)10 at neutral pH containing. intercalated dA residues and alternating dG tetrads. Mukerji I, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):5013–20
Feasibility of measuring blood glucose concentration by near–infrared Raman spectroscopy. Berger AJ, et al. **Spectrochim Acta A Mol Biomol Spectrosc** 1997 Feb; 53A(2):287–92

SPEECH

see related
VERBAL BEHAVIOR

Asynchronous interleaved stimulation (AIS): a new speech coding strategy for cochlear implant. Ouayoun M, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):182–6
Effects of tonsillectomy on articulation. Hori Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:248–51
Acoustic changes in voice after tonsillectomy. Saida H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:239–41
Speech must always be taught. Yenuthog O. **Adv Otorhinolaryngol** 1997;51:8–11
Unnatural practices, unspeakable actions: a study of delayed auditory feedback in schizophrenia. Goldberg TE, et al. **Am J Psychiatry** 1997 Jun;154(6):858–60
Magnopyramidal neurons in the anterior motor speech region. Dendritic features and interhemispheric comparisons. Hayes TL, et al. **Arch Neurol** 1996 Dec; 53(12):1277–83
Effects of sinus surgery on speech. Chen MY, et al. **Arch Otolaryngol Head Neck Surg** 1997 Aug;123(8):845–52
Reversion to a previously learned foreign accent after stroke. Roth EJ, et al. **Arch Phys Med Rehabil** 1997 May; 78(5):550–2
The perils of free speech. Carefully craft your compliments! Malone R. **ASHA** 1996 Spring;38(2):56
(Un)civilized speech. Should ASHA care? [editorial] Werven G. **ASHA** 1996 Spring;38(2):8;54
Problem–based biochemistry seminars complement, but do not replace, lectures. Jervis L, et al. **Biochem Soc Trans** 1997 Feb;25(1):1S
Speech recognition and direct data entry in clinical microbiology. O'Hara SP, et al. **Br J Biomed Sci** 1996 Sep; 53(3):209–13
An objective assessment of speech and swallowing following free flap reconstruction for oral cavity cancers. Panchal J, et al. **Br J Plast Surg** 1996 Sep;49(6):363–9
Speech and language in first onset psychosis differences between people with schizophrenia, mania, and controls. Thomas P, et al. **Br J Psychiatry** 1996 Mar;168(3):337–43
Onset of speech after left hemispherectomy in a nine–year–old boy. Vargha–Khadem F, et al. **Brain** 1997 Jan;120 (Pt 1):159–82
Lateralized changes in regional cerebral blood flow during performance of verbal and facial recognition tasks: correlations with performance and "effort". Gur RC, et al. **Brain Cogn** 1997 Apr;33(3):388–414
The temporal control of repetitive articulatory movements in Parkinson's disease. Ackermann H, et al. **Brain Lang** 1997 Feb 1;56(2):312–9
Comparison between oral and written spelling in Alzheimer's disease. Croisile B, et al. **Brain Lang** 1996 Sep;54(3):361–87
Early conversations and word learning: contributions from child and adult. Bloom L, et al. **Child Dev** 1996 Dec; 67(6):3154–75
Acoustic cues to grammatical structure in infant–directed speech: cross–linguistic evidence. Fisher C, et al. **Child Dev** 1996 Dec;67(6):3192–218
The development of children's knowledge about inner speech. Flavell JH, et al. **Child Dev** 1997 Feb;68(1):39–47
Nasometric values for normal Spanish–speaking females: a preliminary report. Anderson RT. **Cleft Palate Craniofac J** 1996 Jul;33(4):333–6
Speech and velopharyngeal function in children with an open residual cleft in the hard palate, and the influence of temporary covering. Lohmander–Agerskov A, et al. **Cleft Palate Craniofac J** 1996 Jul;33(4):324–32
Evidence for multiple routes of speech production in a case of fluent aphasia. Ingles JL, et al. **Cortex** 1996 Jun; 32(2):199–219
How to prepare and present a scientific talk. A primer. Salasche SJ. **Dermatol Surg** 1997 Feb;23(2):135–43
A clinical report on speech production of cochlear implant users. Dawson PW, et al. **Ear Hear** 1995 Dec;16(6):551–61
Stuttering amelioration at various auditory feedback delays and speech rates. Kalinowski J, et al. **Eur J Disord Commun** 1996;31(3):259–69
Phonological processing skills in speech and language impaired children. Leitão S, et al. **Eur J Disord Commun** 1997;32(2 Spec No):91–111
Modulation of cerebral blood flow in the human auditory cortex during speech: role of motor–to–sensory discharges. Paus T, et al. **Eur J Neurosci** 1996 Nov;8(11):2236–46
Adult age differences in long–term semantic priming. Allen PA, et al. **Exp Aging Res** 1997 Apr–Jun;23(2):107–35
Taking charge of remembering: locus of control and older adults' memory for speech. Riggs KM, et al. **Exp Aging Res** 1997 Jul–Sep;23(3):237–56
A comparison of glottal voice source quantification parameters in breathy, normal and pressed phonation of female and male speakers. Alku P, et al. **Folia Phoniatr Logop** 1996;48(5):240–54
Three–dimensional phonetographic assessment of voice performance in professional and non–professional speakers. Neuschaefer–Rube C, et al. **Folia Phoniatr Logop** 1997; 49(2):96–104
Speaker identification using time–delay HMEs. Chen K, et al. **Int J Neural Syst** 1996 Mar;7(1):29–43 (38 ref.)
CNN: a speaker recognition system using a cascaded neural network [letter] Zaki M, et al. **Int J Neural Syst** 1996 May; 7(2):203–12 (29 ref.)
Perceptual magnet effect in the light of behavioral and psychophysiological data. Aaltonen O, et al. **J Acoust Soc Am** 1997 Feb;101(2):1090–105
Harvey Fletcher's role in the creation of communication acoustics. Allen JB. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):1825–39
Toward articulatory–acoustic models for liquid approximants based on MRI and EPG data. Part II. The rhotics. Alwan A, et al. **J Acoust Soc Am** 1997 Feb;101(2):1078–89
Quad–band excitation for low bit rate speech coding. Chiu KM, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2365–9
Effect of temporal modulation reduction on spectral contrasts in speech. Drullman R, et al. **J Acoust Soc Am** 1996 Apr; 99(4 Pt 1):2358–64
Integrality in the perception of tongue root position and voice quality in vowels. Kingston J, et al. **J Acoust Soc Am** 1997 Mar;101(3):1696–709
Role of articulation in speech perception: clues from production. Lindblom B. **J Acoust Soc Am** 1996 Mar; 99(3):1683–92
Toward articulatory–acoustic models for liquid approximants based on MRI and EPG data. Part I. The laterals. Narayanan SS, et al. **J Acoust Soc Am** 1997 Feb; 101(2):1064–77
Effect of reducing temporal intensity modulations on sentence intelligibility. Noordhoek IM, et al. **J Acoust Soc Am** 1997 Jan;101(1):498–502
The potential role of speech production models in automatic speech recognition. Rose RC, et al. **J Acoust Soc Am** 1996 Mar;99(3):1699–709
A longitudinal investigation of duration and temporal variability in children's speech production. Smith BL, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2344–9
Critique: articulatory–acoustic relations and their role in speech perception. Stevens KN. **J Acoust Soc Am** 1996 Mar;99(3):1693–4
Intraspeech spread of masking in normal–hearing and hearing–impaired listeners. Summers V, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2866–76
Intelligibility of clear and conversational speech of young and elderly talkers. Schum DJ. **J Am Acad Audiol** 1996 Jun;7(3):212–8
Brief report: the effects of typed and spoken modality combinations on the language performance of adults with autism. Forsey J, et al. **J Autism Dev Disord** 1996 Dec; 26(6):643–9
Pedantic speaking style differentiates Asperger syndrome from high–functioning autism. Ghaziuddin M, et al. **J Autism Dev Disord** 1996 Dec;26(6):585–95
Factors associated with speech–sound stimulability. Lof GL. **J Commun Disord** 1996 Jul–Aug;29(4):255–78
Speaking fundamental frequency characteristics of 8– through 10–year–old white– and African–American boys. Morris R. **J Commun Disord** 1997 Mar–Apr;30(2):101–14; quiz 115–6
Assessing stimulability in toddlers. Tyler AA. **J Commun Disord** 1996 Jul–Aug;29(4):279–97
Postural asymmetries and language lateralization in humans (Homo sapiens). Day LB, et al. **J Comp Psychol** 1996 Mar; 110(1):88–96
Status of Voicetype Dictation for Windows for the emergency physician. Zemmel NJ, et al. **J Emerg Med** 1996 Jul–Aug;14(4):511–5
Direct and indirect measures of intentional forgetting in children and adults: evidence for retrieval inhibition and reinstatement. Lehman EB, et al. **J Exp Child Psychol** 1997 Feb;64(2):295–316
The development of memory for ignored speech. Saults JS, et al. **J Exp Child Psychol** 1996 Oct;63(1):239–61
Phonological variation and inference in lexical access. Gaskell MG, et al. **J Exp Psychol Hum Percept Perform** 1996 Feb;22(1):144–58
"Why strengthen the city wall when the enemy has poisoned the well?" An assay of anti–homosexual discourse in New Zealand. McCreanor T. **J Homosex** 1996;31(4):75–105
Police discourses of homosexual men in New Zealand. Praat AC, et al. **J Homosex** 1996;31(4):57–73
Fibrinolytic parameters as an admission prognostic marker of head injury in patients who talk and deteriorate. Takahashi H, et al. **J Neurosurg** 1997 May;86(5):768–72
Speech–related visualization of laryngeal muscles with fluorine–18–FDG. Kostakoglu L, et al. **J Nucl Med** 1996 Nov;37(11):1771–3
Is free speech free in the nursing profession? Zachary MK. **J Nurs Adm** 1996 Nov;26(11):36–46
Development of phonological awareness of Chinese children in Hong Kong. Ho CS, et al. **J Psycholinguist Res** 1997 Jan;26(1):109–26
Speaking fundamental frequency characteristics of white, African American, and Hispanic kindergartners. Awan SN, et al. **J Speech Hear Res** 1996 Jun;39(3):573–7
Online sentence processing in adults who stutter and adults who do not stutter. Bosshardt HG, et al. **J Speech Hear Res** 1996 Aug;39(4):785–97
Individual differences and the reliability of 2F1–F2 distortion–product otoacoustic emissions: effects of time–of–day, stimulus variables, and gender. Cacace AT, et al. **J Speech Hear Res** 1996 Dec;39(6):1138–48
Effects of a metronome on the filled pauses of fluent speakers. Christenfeld N. **J Speech Hear Res** 1996 Dec;39(6):1232–8
Consonant confusions in amplitude–expanded speech. Freyman RL, et al. **J Speech Hear Res** 1996 Dec; 39(6):1124–37
The specific relation between perception and production errors for place of articulation in developmental apraxia of speech. Groenen P, et al. **J Speech Hear Res** 1996 Jun; 39(3):468–82
Quality ratings for frequency–shaped peak–clipped speech: results for listeners with hearing loss. Kozma–Spytek L, et al. **J Speech Hear Res** 1996 Dec;39(6):1115–23
Differences in children's sound production when speaking with a cochlear implant turned on and turned off. Tye–Murray N, et al. **J Speech Hear Res** 1996 Jun; 39(3):604–10
Microphone sensitivity as a source of variation in nasalance scores. Zajac DJ, et al. **J Speech Hear Res** 1996 Dec; 39(6):1228–31
Aerodynamic and temporal aspects of velopharyngeal function in normal speakers. Zajac DJ, et al. **J Speech Hear Res** 1996 Dec;39(6):1199–207
Stuttering and communicative suitability of speech. Franken MC, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):83–94
Maximum interlabial pressures in normal speakers. Hinton VA, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):400–4
Experimental investigation of the effects of frequency–altered auditory feedback on the speech of adults who stutter. Ingham RJ, et al. **J Speech Lang Hear Res** 1997 Apr; 40(2):361–72
Effect of speech dialect on speech naturalness ratings: a systematic replication of Martin, Haroldson, and Triden (1984). Mackey LS, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):349–60
Lexicalization in adults who stutter. Prins D, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):373–84
Language production abilities of children whose stuttering persisted or recovered. Watkins RV, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):385–99
Gender differences in children's intonational patterns. Ferrand CT, et al. **J Voice** 1996 Sep;10(3):284–91
"Stops walking when talking" as a predictor of falls in elderly

people [letter] [see comments] Lundin-Olsson L, et al. **Lancet** 1997 Mar 1;349(9052):617. Comment in: Lancet 1997 Apr 19;349(9059):1180.

Sound change in child language: a study of inter-world variation. Berg T. **Lang Speech** 1995 Oct-Dec;38 (Pt 4):331-4

Coarticulation in slow speech: durational and spectral analysis. Hertrich I, et al. **Lang Speech** 1995 Apr-Jun;38 (Pt 2):159-87

Phonotactics and syllable stress: implications for the processing of spoken nonsense words. Vitevitch MS, et al. **Lang Speech** 1997 Jan-Mar;40 (Pt 1):47-62

An update on speech recognition. Safran C, et al. **MD Comput** 1996 May-Jun;13(3):207-9

Does articulatory suppression remove the irrelevant speech effect? Hanley JR. **Memory** 1997 May;5(3):423-31

Natural atypical language dominance and language shifts from the right to the left hemisphere in right hemisphere pathology. Helmstaedter C, et al. **Naturwissenschaften** 1997 Jun;84(6):250-2

Bereitschaftspotential to inner and overt speech. Kowalski J, et al. **Neurol Neurochir Pol** 1996;30 Suppl 3:15-24

The functional anatomy of verbal initiation and suppression using the Hayling Test. Nathaniel-James DA, et al. **Neuropsychologia** 1997 Apr;35(4):559-66

The cortical processing of perceived emotion: a DC-potential study on affective speech prosody. Pihan H, et al. **Neuroreport** 1997 Feb 10;8(3):623-7

Auditory event-related potentials (ERP) reflect temporal changes in speech stimuli. Pihko E, et al. **Neuroreport** 1997 Mar 3;8(4):911-4

Localizing the lexicon for reading aloud:replication of a PET study using fMRI. Small SL, et al. **Neuroreport** 1996 Mar 22;7(4):961-5

Speech and swallowing rehabilitation for head and neck cancer patients. Logemann JA, et al. **Oncology (Huntingt)** 1997 May;11(5):651-6, 659; discussion 659, 663-4 (38 ref.)

Tonsillectomy in children with or at risk for velopharyngeal insufficiency: effects on speech. D'Antonio LL, et al. **Otolaryngol Head Neck Surg** 1996 Oct;115(4):319-23

Effect of speaking into a passive resonator on stuttering frequency. Stuart A, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1343-6

Contextual variations in trisyllabic sequences of Thai tones. Potisuk S, et al. **Phonetica** 1997;54(1):22-42

An EMMA study of segmental complexity in alveolopalatals and palatalized alveolars. Recasens D, et al. **Phonetica** 1997; 54(1):43-58

Speech outcome following palatoplasty in primary school children: do lay peer observers agree with speech pathologists? Witt PD, et al. **Plast Reconstr Surg** 1996 Nov; 98(6):958-65; discussion 966-70

On the irrelevance of phonological similarity to the irrelevant speech effect. LeCompte DC, et al. **Q J Exp Psychol A** 1997 Feb;50(1):100-18

[Subjective evaluation of voice and speech after supra-cricoid partial laryngectomy] Crevier Buchman L, et al. **Rev Laryngol Otol Rhinol (Bord)** 1995;116(4):273-6 (Eng. Abstr.) **(Fre)**

[Automatic report documentation in cardiology using a speech recognition system] Dietz U, et al. **Z Kardiol** 1996 Sep;85(9):684-8 (Eng. Abstr.) **(Ger)**

[Progressive loss of speech output with festinating speech--a case report] Satoh S, et al. **No To Shinkei** 1997 Jul; 49(7):646-9 (Eng. Abstr.) **(Jpn)**

[Tracheal deformity observed in tracheostomized Duchenne muscular dystrophy patients who can speak with appropriately inflated cuff of tracheal tube] Shinoe T, et al. **Rinsho Shinkeigaku** 1996 Feb;36(2):355-7 (Eng. Abstr.) **(Jpn)**

[Clinical study of prejudicing autochthonous speech act (thought)--acceleration of the activity in the remission process of schizophrenia] Kato S. **Seishin Shinkeigaku Zasshi** 1997;99(5):321-40 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Expressed emotion from the five-minute speech sample and relapse of out-patients with schizophrenia. Uehara T, et al. **Acta Psychiatr Scand** 1997 May;95(5):454-6

The application of computerized content analysis of speech to the diagnostic process in a psychiatric outpatient clinic. Gottschalk LA, et al. **J Clin Psychol** 1997 Aug;53(5):427-41

DRUG EFFECTS

Effects of hemisphere speech dominance and seizure focus on patterns of behavioral response errors for three types of stimuli. Rausch R, et al. **Brain Cogn** 1997 Mar; 33(2):161-77

Serial recovery of language during the intracarotid amobarbital procedure. Ravdin LD, et al. **Brain Cogn** 1997 Mar;33(2):151-60

PHYSIOLOGY

Use of functional MR to map language in multilingual volunteers. Yetkin O, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):473-7

Laryngeal adjustment in whispering magnetic resonance imaging study. Tsunoda K, et al. **Ann Otol Rhinol Laryngol** 1997 Jan;106(1):41-3

Short-term effectiveness of anticipatory guidance to reduce early childhood risks for subsequent violence [letter] Friedman EH. **Arch Pediatr Adolesc Med** 1997 Sep; 151(9):965

A control model of human tongue movements in speech. Sanguineti V, et al. **Biol Cybern** 1997 Jul;77(1):11-22

The neural correlates of inner speech and auditory verbal imagery in schizophrenia: relationship to auditory verbal hallucinations. McGuire PK, et al. **Br J Psychiatry** 1996 Aug;169(2):148-59

Altered patterns of cerebral activity during speech and language production in developmental stuttering. An H2(15)O positron emission tomography study. Braun AR, et al. **Brain** 1997 May;120 (Pt 5):761-84

Collaboration between the hemispheres of a callosotomy patient. Emerging right hemisphere speech and the left hemisphere interpreter. Gazzaniga MS, et al. **Brain** 1996 Aug;119 (Pt 4):1255-62

Patterns of language dominance in focal left and right hemisphere epilepsies: relation to MRI findings, EEG, sex, and age at onset of epilepsy. Helmstaedter C, et al. **Brain Cogn** 1997 Mar;33(2):135-50

Cerebral anesthesia for localization of speech: the contribution of W. James Gardner. Harris LJ, et al. **Brain Lang** 1997 Feb 15;56(3):377-96

Emergent control of manual and vocal-motor activity in relation to the development of speech. Locke JL, et al. **Brain Lang** 1995 Dec;51(3):498-508

PET activation of posterior temporal regions during auditory word presentation and verb generation. Fiez JA, et al. **Cereb Cortex** 1996 Jan-Feb;6(1):1-10

Dissociating verbal and spatial working memory using PET. Smith EE, et al. **Cereb Cortex** 1996 Jan-Feb;6(1):11-20

PET studies of phonetic processing of speech: review, replication, and reanalysis. Zatorre RJ, et al. **Cereb Cortex** 1996 Jan-Feb;6(1):21-30

Residual clefts in the hard palate: correlation between cleft size and speech. Lohmander-Agerskov A, et al. **Cleft Palate Craniofac J** 1997 Mar;34(2):122-8

Pressure-flow differences in performance during production of the CV syllables /pi/ and /pa/. Smith BE, et al. **Cleft Palate Craniofac J** 1996 Jan;33(1):74-6

Novel stimuli for obtaining nasalance measures from young children. Watterson T, et al. **Cleft Palate Craniofac J** 1996 Jan;33(1):67-73

What words are telling us about the brain. Raichle ME. **Cold Spring Harb Symp Quant Biol** 1996;61:9-14 (25 ref.)

Constraints on awareness, attention, processing, and memory: some recent investigations with ignored speech. Cowan N, et al. **Conscious Cogn** 1997 Jun-Sep;6(2-3):182-203 (34 ref.)

Neuroperceptual differences in consonant and vowel discrimination: as revealed by direct cortical electrical interference. Boatman D, et al. **Cortex** 1997 Mar; 33(1):83-98

Hemispheric asymmetry in the recognition of emotional attitude conveyed by facial expression, prosody and propositional speech. Schmitt JJ, et al. **Cortex** 1997 Mar; 33(1):65-81

Regional cerebral blood flow in the covert reading of kana words: a comparison with the study of reading aloud tasks. Sakurai Y, et al. **Eur Neurol** 1996;36(4):237-9

Developmental aspects of formant frequency and bandwidth in infants and toddlers. Robb MP, et al. **Folia Phoniatr Logop** 1997;49(2):88-95

Age-related differences in acoustical aspects of contrastive stress in women. Scukanec GP, et al. **Folia Phoniatr Logop** 1996;48(5):231-9

T stage and functional outcome in oral and oropharyngeal cancer patients. Colangelo LA, et al. **Head Neck** 1996 May-Jun;18(3):259-68

Automatic integrated analysis of jaw and lip movement in speech production. Borghese NA, et al. **J Acoust Soc Am** 1997 Jan;101(1):482-7

Labiovelar compensation in back vowels. de Jong KJ. **J Acoust Soc Am** 1997 Apr;101(4):2221-33

Relative spectral change and formant transitions as cues to labial and alveolar place of articulation. Dorman MF, et al. **J Acoust Soc Am** 1996 Dec;100(6):3825-30

Listeners do hear sounds, not tongues. Fowler CA. **J Acoust Soc Am** 1996 Mar;99(3):1730-41 (77 ref.)

Glottal characteristics of female speakers: acoustic correlates. Hanson HM. **J Acoust Soc Am** 1997 Jan;101(1):466-81

Articulatory control of phonological vowel length contrasts: kinematic analysis of labial gestures. Hertrich I, et al. **J Acoust Soc Am** 1997 Jul;102(1):523-36

Accurate recovery of articulator positions from acoustics: new conclusions based on human data. Hogden J, et al. **J Acoust Soc Am** 1996 Sep;100(3):1819-34

Developmental weighting shifts for noise components of fricative-vowel syllables. Nittrouer S, et al. **J Acoust Soc Am** 1997 Jul;102(1):572-80

The representation of Japanese moraic nasals. Otake T, et al. **J Acoust Soc Am** 1996 Dec;100(6):3831-42

Evaluation of various sets of acoustic cues for the perception of prevocalic stop consonants. I. Perception experiment. Smits R, et al. **J Acoust Soc Am** 1996 Dec;100(6):3852-64

Evaluation of various sets of acoustic cues for the perception of prevocalic stop consonants. II. Modeling and evaluation. Smits R, et al. **J Acoust Soc Am** 1996 Dec;100(6):3865-81

An investigation of stop place of articulation as a function of syllable position: a locus equation perspective. Sussman HM, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2826-38

Tongue surface displacement during bilabial stops. Svirsky MA, et al. **J Acoust Soc Am** 1997 Jul;102(1):562-71

Prosodic features at discourse boundaries of different strength. Swerts M. **J Acoust Soc Am** 1997 Jan; 101(1):514-21

Neural dynamics of variable-rate speech categorization. Grossberg S, et al. **J Exp Psychol Hum Percept Perform** 1997 Apr; 23(2):481-503

Seeing and hearing rotated faces: influences of facial orientation on visual and audiovisual speech recognition. Jordan TR, et al. **J Exp Psychol Hum Percept Perform** 1997 Apr;23(2):388-403

Irrelevant speech effect in aging: an assessment of inhibitory processes in working memory. Rouleau N, et al. **J Gerontol B Psychol Sci Soc Sci** 1996 Nov;51(6):P356-63

Speech-induced cerebral metabolic activation reflects recovery from aphasia. Heiss WD, et al. **J Neurol Sci** 1997 Feb 12;145(2):213-7

Reproducible sampling regimen for specific cortical regions: application to speech-associated areas. Harasty J, et al. **J Neurosci Methods** 1996 Jul;67(1):43-51

Dentistry and speech production. Correlations between the morphology of the articulation zone and acoustics exemplified in /s/ articulation. Seifert E, et al. **J Orofac Orthop** 1997;58(4):224-31 **(Eng, Ger)**

Mechanosensory modulation of perioral neuronal groups during active force dynamics. Andreatta RD, et al. **J Speech Hear Res** 1996 Oct;39(5):1006-17

Role of F0 and amplitude in the perception of intervocalic glottal stops. Hillenbrand JM, et al. **J Speech Hear Res** 1996 Dec;39(6):1182-90

Cognitive-linguistic demands and speech breathing. Mitchell HL, et al. **J Speech Hear Res** 1996 Feb;39(1):93-104

Does speech emerge from earlier appearing oral motor behaviors? Moore CA, et al. **J Speech Hear Res** 1996 Oct; 39(5):1034-47

Voice onset time in speech produced during simultaneous communication. Schiavetti N, et al. **J Speech Hear Res** 1996 Jun;39(3):565-72

From planning to articulation in speech production: what differentiates a person who stutters from a person who does not stutter? van Lieshout PH, et al. **J Speech Hear Res** 1996 Jun;39(3):546-64

Speech production in people who stutter: testing the motor plan assembly hypothesis. van Lieshout PH, et al. **J Speech Hear Res** 1996 Feb;39(1):76-92

Perioral muscle activity in young and older adults during speech and nonspeech tasks. Wohlert AB. **J Speech Hear Res** 1996 Aug;39(4):761-70

Aerodynamic and temporal aspects of velopharyngeal function in normal speakers. Zajac DJ, et al. **J Speech Hear Res** 1996 Dec;39(6):1199-207

Acoustic cues to place of articulation and the McGurk effect: the role of release bursts, aspiration, and formant transitions. Green KP, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):646-65

Velocity profiles of lip protrusion across changes in speaking rate. Shaiman S, et al. **J Speech Lang Hear Res** 1997 Feb; 40(1):144-58

Developmental changes in laryngeal and respiratory function with variations in sound pressure level. Stathopoulos ET, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):595-614

Speech breathing and the Lombard effect. Winkworth AL, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):159-69

Movement of the velum during speech and singing in classically trained singers. Austin SF. **J Voice** 1997 Jun; 11(2):212-21

Comfortable effort level revisited. Brown WS Jr, et al. **J Voice** 1996 Sep;10(3):299-305

Comparison of direct and indirect calculations of laryngeal airway resistance in connected speech. McHenry MA, et al. **J Voice** 1996 Sep;10(3):236-44

Speaking Fo and cepstral periodicity analysis of conversational speech in a 105-year-old woman: variability of aging effects. Max L, et al. **J Voice** 1996 Sep;10(3):245-51

Identification of brain region for coordinating speech articulation. Donnan GA, et al. **Lancet** 1997 Jan 25; 349(9047):221-2

Precise localisation of single-word retrieval in the left cerebral hemisphere. Hoell T, et al. **Lancet** 1997 Jan 11; 349(9045):104

Parametric and non-parametric estimation of speech formants: application to infant cry. Fort A, et al. **Med Eng Phys** 1996 Dec;18(8):677-91

A new brain region for coordinating speech articulation. Dronkers NF. **Nature** 1996 Nov 14;384(6605):159-61

Optimum stimulus parameters for lateralized suppression of speech with magnetic brain stimulation. Epstein CM, et al. **Neurology** 1996 Dec;47(6):1590-3

Cortical processing mechanism for vocalization with auditory verbal feedback. Hirano S, et al. **Neuroreport** 1997 Jul 7; 8(9-10):2379-82

Cortical speech processing mechanisms while vocalizing visually presented languages. Hirano S, et al. **Neuroreport** 1996 Dec 20;8(1):363-7

The role of the temporal coding system in the auditory cortex on speech recognition. Kojima H, et al. **Neuroreport** 1997 Jul 7;8(9-10):2395-8

Functional lateralization of speech production at primary motor cortex: a fMRI study. Wildgruber D, et al.

Neuroreport 1996 Nov 4;7(15–17):2791–5
Features of the architectonics of motor speech fields of the brain of gifted people in relation to the study of the individual variability of the structure of the human brain. Bogolepova IN. **Neurosci Behav Physiol** 1996 Mar–Apr; 26(2):189–93
The effect of vocalization on the heart rate response to mental arithmetic. Seraganian P, et al. **Physiol Behav** 1997 Aug; 62(2):221–4
The neural regions sustaining object recognition and naming. Price CJ, et al. **Proc R Soc Lond B Biol Sci** 1996 Nov 22;263(1376):1501–7
Handedness and speech: a critical reappraisal of the role of genetic and environmental factors in the cerebral lateralization of function. Provins KA. **Psychol Rev** 1997 Jul;104(3):554–71 (310 ref.)
Cardiovascular and neuroendocrine adjustment to public speaking and mental arithmetic stressors. Al'Absi M, et al. **Psychophysiology** 1997 May;34(3):266–75
Behavioral correlates of coronary risk [letter; comment] Friedman EH. **Psychother Psychosom** 1997;66(2):111. Comment on: Psychother Psychosom 1996;65(3):145–9.
The masking property of the auditory system: the masking of speech signals. Hanekom JJ.
S Afr J Commun Disord 1995;42:67–72
Normal aging and human physiology. Chodzko-Zajko WJ. **Semin Speech Lang** 1997 May;18(2):95–104; quiz 104–5 (34 ref.)
[Anticipatory labial coarticulation: an electromyographic study in Afrikaans speaking people] Theron K, et al.
S Afr J Commun Disord 1995;42:35–48 (Eng. Abstr.) **(Afr)**
[The hygienic ergonomic protection of speech communication over time] Tsaneva L, et al. **Probl Khig** 1996;21:36–43 (Eng. Abstr.) **(Bul)**
[Neuroradiologic activation studies of cerebral organization of language capacities. A review of the literature] Ackermann H, et al. **Fortschr Neurol Psychiatr** 1997 Apr; 65(4):182–94 (125 ref.) (Eng. Abstr.) **(Ger)**
[Clinical application of functional mapping; the present state of the art and its future prospects: (series 2) Identification of motor, sensory, visual and speech cortex by functional MRI] Ito T, et al. **No Shinkei Geka** 1996 Feb;24(2):109–18 (23 ref.) **(Jpn)**

SPEECH ACOUSTICS

Acoustic changes in voice after tonsillectomy. Saida H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:239–41
Acoustic measurement of change in voice quality with treatment for chronic posterior laryngitis. Hanson DG, et al. **Ann Otol Rhinol Laryngol** 1997 Apr;106(4):279–85
Coding of acoustic features for a single-channel tactile aid. Summers IR, et al. **Br J Audiol** 1996 Aug;30(4):238–48
Treatment of motor aprosodia with pitch biofeedback and expression modelling. Stringer AY. **Brain Inj** 1996 Aug; 10(8):583–90
Interaction between tone and intonation in Thai after unilateral brain damage. Gandour J, et al. **Brain Lang** 1997 Jun 1;58(1):174–96
Unilateral brain damage, prosodic comprehension deficits, and the acoustic cues to prosody. Pell MD, et al.
Brain Lang 1997 Apr;57(2):195–214
Categorical and dimensional decoding of emotional intonations in patients with focal brain lesions. Peper M, et al. **Brain Lang** 1997 Jun 15;58(2):233–64
Acoustic cues to grammatical structure in infant-directed speech: cross-linguistic evidence. Fisher C, et al.
Child Dev 1996 Dec;67(6):3192–218
Adult perception of emotion intensity in human infant cries: effects of infant age and cry acoustics. Leger DW, et al. **Child Dev** 1996 Dec;67(6):3238–49
The effects of maternal alcohol consumption and cigarette smoking during pregnancy on acoustic cry analysis. Nugent JK, et al. **Child Dev** 1996 Aug;67(4):1806–15
Acoustic characteristics of naturally occurring cries of infants with "colic". Zeskind PS, et al. **Child Dev** 1997 Jun; 68(3):394–403
Newborns discriminate the rhythm of multisyllabic stressed words. Sansavini A, et al. **Dev Psychol** 1997 Jan;33(1):3–11
Maturation of the middle and external ears: acoustic power-based responses and reflectance tympanometry. Keefe DH, et al. **Ear Hear** 1996 Oct;17(5):361–73
Articulation after uvulopalatopharyngoplasty. Nakai K, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):417–20
Objective evaluation of dysphonia: preliminary results of a device allowing simultaneous acoustic and aerodynamic measurements. Giovanni A, et al. **Folia Phoniatr Logop** 1996;48(4):175–85
Phonation into a tube as a voice training method: acoustic and physiologic observations. Laukkanen AM, et al.
Folia Phoniatr Logop 1995;47(6):331–8
Formant frequency characteristics of elderly speakers in contextual speech. Rastatter MP, et al.
Folia Phoniatr Logop 1997;49(1):1–8
Age-related differences in acoustical aspects of contrastive stress in women. Scukanec GP, et al.
Folia Phoniatr Logop 1996;48(5):231–9
Acoustic analysis of pathological voices. A voice analysis system for the screening of laryngeal diseases. Boyanov B, et al. **IEEE Eng Med Biol Mag** 1997 Jul–Aug;16(4):74–82
Acoustical Society of America 131st meeting. Indianapolis, Indiana, 13–17 May 1996. Abstracts. **J Acoust Soc Am** 1996 Apr;99(4 Pt 2):2449–608
Toward articulatory-acoustic models for liquid approximants based on MRI and EPG data. Part II. The rhotics. Alwan A, et al. **J Acoust Soc Am** 1997 Feb;101(2):1078–89
Quad-band excitation for low bit rate speech coding. Chiu KM, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2365–9
Acoustic characteristics of the human paranasal sinuses derived from transmission characteristic measurement and morphological observation. Dang J, et al.
J Acoust Soc Am 1996 Nov;100(5):3374–83
Effect of temporal modulation reduction on spectral contrasts in speech. Drullman R, et al. **J Acoust Soc Am** 1996 Apr; 99(4 Pt 1):2358–64
Glottal characteristics of female speakers: acoustic correlates. Hanson HM. **J Acoust Soc Am** 1997 Jan;101(1):466–81
Fractal dimension of sustained vowel productions in neurological dysphonias: an acoustic and electroglottographic analysis [letter] Hertrich I, et al.
J Acoust Soc Am 1997 Jul;102(1):652–4
Accurate recovery of articulator positions from acoustics: new conclusions based on human data. Hogden J, et al.
J Acoust Soc Am 1996 Sep;100(3):1819–34
The effects of decreased audibility produced by high-pass noise masking on cortical event-related potentials to speech sounds/ba/and/da. Martin BA, et al. **J Acoust Soc Am** 1997 Mar;101(3):1585–99
Toward articulatory-acoustic models for liquid approximants based on MRI and EPG data. Part I. The laterals. Narayanan SS, et al. **J Acoust Soc Am** 1997 Feb; 101(2):1064–77
Speech perception as pattern recognition. Nearey TM.
J Acoust Soc Am 1997 Jun;101(6):3241–54
The characteristics of voicing in syllable-initial fricatives in American English. Pirello K, et al. **J Acoust Soc Am** 1997 Jun;101(6):3754–65
Critique: auditory form and gestural topology in the perception of speech. Remez RE. **J Acoust Soc Am** 1996 Mar;99(3):1695–98
Spectral balance as an acoustic correlate of linguistic stress. Sluijter AM, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2471–85
A longitudinal investigation of duration and temporal variability in children's speech production. Smith BL, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2344–9
Evaluation of various sets of acoustic cues for the perception of prevocalic stop consonants. II. Modeling and evaluation. Smits R, et al. **J Acoust Soc Am** 1996 Dec;100(6):3865–81
Evaluation of various sets of acoustic cues for the perception of prevocalic stop consonants. I. Perception experiment. Smits R, et al. **J Acoust Soc Am** 1996 Dec;100(6):3852–64
Critique: articulatory-acoustic relations and their role in speech perception. Stevens KN. **J Acoust Soc Am** 1996 Mar;99(3):1693–4
Glottal volume velocity waveform characteristics in subjects with and without vocal training, related to gender, sound intensity, fundamental frequency, and age. Sulter AM, et al. **J Acoust Soc Am** 1996 Nov;100(5):3360–73
Acoustic interactions of the voice source with the lower vocal tract. Titze IR, et al. **J Acoust Soc Am** 1997 Apr; 101(4):2234–43
Prediction of acute and late responses to light therapy from vocal (pitch) and self-rated activation in seasonal affective disorder. Boenink AD, et al. **J Affect Disord** 1997 Feb; 42(2–3):117–26
Acoustic profiles in vocal emotion expression. Banse R, et al. **J Pers Soc Psychol** 1996 Mar;70(3):614–36
Spontaneous imitation of fundamental frequency and speech rate by nonstutterers and stutterers. Bosshardt HG, et al. **J Psycholinguist Res** 1997 Jul;26(4):425–48
Acoustic and articulatory measures of sibilant production with and without auditory feedback from a cochlear implant. Matthies ML, et al. **J Speech Hear Res** 1996 Oct; 39(5):936–46
Effects of length and linguistic complexity on temporal acoustic measures in apraxia of speech. Strand EA, et al. **J Speech Hear Res** 1996 Oct;39(5):1018–33
Microphone sensitivity as a source of variation in nasalance scores. Zajac DJ, et al. **J Speech Hear Res** 1996 Dec; 39(6):1228–31
Identifying the authoritative judgments of stuttering: comparisons of self-judgments and observer judgments. Ingham RJ, et al. **J Speech Lang Hear Res** 1997 Jun; 40(3):581–94
Control of children's stuttering with response-contingent time-out: behavioral, perceptual, and acoustic data. Onslow M, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):121–33
Comparative assessment of electroglottographic and acoustic measures of jitter in pathological voices. Vieira MN, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):170–82
Adductor spasmodic dysphonia: case reports with acoustic analysis following botulinum toxin injection and acupuncture. Crevier-Buchman L, et al. **J Voice** 1997 Jun; 11(2):232–7
Performance effects on the voices of 10 choral tenors: acoustic and perceptual findings. Kitch JA, et al.
J Voice 1996 Sep;10(3):217–27
Singing power ratio: quantitative evaluation of singing voice quality. Omori K, et al. **J Voice** 1996 Sep;10(3):228–35
Acoustic characteristics of rough voice: subharmonics. Omori K, et al. **J Voice** 1997 Mar;11(1):40–7
Accuracy of jitter estimates using different filter settings on Visi-Pitch: a preliminary report. Perry CK, et al.
J Voice 1996 Dec;10(4):337–41
Acoustic analysis of voice in individuals with amyotrophic lateral sclerosis and perceptually normal vocal quality. Silbergleit AK, et al. **J Voice** 1997 Jun;11(2):222–31
Interspeaker variability in emphatic accent production in French. Dahan D, et al. **Lang Speech** 1996 Oct–Dec;39 (Pt 4):341–74
Acoustic parameters in speaker height and weight identification: sex-specific behaviour. van Dommelen WA, et al. **Lang Speech** 1995 Jul–Sep;38 (Pt 3):267–87
Acoustical recognition of laryngeal pathology using the fundamental frequency and the first three formants of vowels. Perrin E, et al. **Med Biol Eng Comput** 1997 Jul; 35(4):361–8
An instrument for the non-invasive objective assessment of velar function during speech. McLean CC, et al.
Med Eng Phys 1997 Jan;19(1):7–14
Acoustic, perceptual, aerodynamic and anatomical correlations in voice pathology. Dejonckere PH, et al.
ORL J Otorhinolaryngol Relat Spec 1996 Nov–Dec; 58(6):326–32
Perceptual and acoustical analysis of alaryngeal speech: determinants of intelligibility. Drummond S, et al.
Percept Mot Skills 1996 Dec;83(3 Pt 1):801–2
Voice and advertising: effects of intonation and intensity of voice on source credibility, attitudes toward the advertised service and the intent to buy. Gélinas-Chebat C, et al.
Percept Mot Skills 1996 Aug;83(1):243–62
Does massage decrease laryngeal tension in a subject with complete tetraplegia. Sullivan SJ, et al.
Percept Mot Skills 1997 Feb;84(1):169–70
The acoustic analysis of voice in patients with multi-channel cochlear implant. Szyfter W, et al.
Rev Laryngol Otol Rhinol (Bord) 1996;117(3):225–7
[Contribution and limits of acoustic analysis of the voice and alaryngeal speech with a computerized system] Crevier-Buchman L, et al.
Ann Otolaryngol Chir Cervicofac 1996;113(2):61–8 (Eng. Abstr.) **(Fre)**
[Materials for the training of hearing based on phonetic-acoustic features of the Polish language] Surmanowicz-Demenko G, et al. **Otolaryngol Pol** 1996; 50(5):536–41 (Eng. Abstr.) **(Pol)**

SPEECH, ALARYNGEAL

see related
LARYNX, ARTIFICIAL
The Groningen, Nijdam and Provox voice prostheses: a prospective clinical comparison based on 845 replacements. Van Den Hoogen FJ, et al. **Acta Otolaryngol (Stockh)** 1996 Jan;116(1):119–24
The Nijdam voice prosthesis: a self-retaining valveless voice prosthesis for vocal rehabilitation after total laryngectomy. van den Hoogen FJ, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):913–7
Long-term results of voice rehabilitation after total laryngectomy using primary tracheoesophageal puncture in Chinese patients. Wong SH, et al. **Am J Otolaryngol** 1997 Mar–Apr;18(2):94–8
Early speech results with the Provox prosthesis after laryngectomy. Aust MR, et al.
Arch Otolaryngol Head Neck Surg 1997 Sep;123(9):966–8
In vivo measurements of indwelling tracheo-oesophageal prostheses in alaryngeal speech. Heaton JM, et al.
Clin Otolaryngol 1996 Aug;21(4):292–6
Long-term results of vocal rehabilitation after total laryngectomy with the low-resistance, indwelling Provox voice prosthesis system. Hilgers FJ, et al.
Clin Otolaryngol 1993 Dec;18(6):517–23
Functional utility and oncologic safety of near-total laryngectomy with tracheopharyngeal speech shunt in a Third World oncologic center. Shenoy AM, et al.
Eur Arch Otorhinolaryngol 1997;254(3):128–32
A source impedance compensated artificial voice for mask speech intelligibility testing: Thevenin model. Gerritsen TA, et al. **J Acoust Soc Am** 1996 Nov;100(5):3408–16
Cues for perception of synthetic and natural diphthongs in either noise or reverberation. Nábělek AK, et al.
J Acoust Soc Am 1996 Mar;99(3):1742–53
Intraoral air pressure of alaryngeal speakers during a no-air insufflation maneuver. Gorham MM, et al.
J Commun Disord 1996 Mar–Apr;29(2):141–55
Tracheoesophageal speech following transmucosal pharyngeal myotomy with the potassium-titanyl-phosphate laser. Halvorson DJ, et al.
J Laryngol Otol 1997 Jul;111(7):659–62
Speech rehabilitation after treatment of laryngeal carcinoma. Blalock D. **Otolaryngol Clin North Am** 1997 Apr; 30(2):179–88 (20 ref.)
Speech outcomes after laryngeal cancer management. Simpson CB, et al. **Otolaryngol Clin North Am** 1997 Apr; 30(2):189–205 (71 ref.)
Perceptual and acoustical analysis of alaryngeal speech: determinants of intelligibility. Drummond S, et al.
Percept Mot Skills 1996 Dec;83(3 Pt 1):801–2
[Voice rehabilitation using tissue flap of trachea and esophagus] Wang Z, et al.
Chung Hua Erh Pi Yen Hou Ko Tsa Chih 1995;30(6):359–60 (Eng. Abstr.) **(Chi)**
[Sequelae of total laryngectomy with special reference to

SPEECH, ALARYNGEAL

rehabilitation of the voice and lower airways] Ackerstaff AH, et al. **HNO** 1997 Feb;45(2):97–104 (26 ref.) **(Ger)**

METHODS

Successful tracheoesophageal puncture voice restoration in a patient with total glossectomy. Meeker SS, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):113–5

SPEECH ARTICULATION TESTS

Functional imaging of the frontal lobes in organic dementia. Regional cerebral blood flow findings in normals, in patients with frontotemporal dementia and in patients with Alzheimer's disease, performing a word fluency test. Warkentin S, et al. **Dement Geriatr Cogn Disord** 1997 Mar–Apr;8(2):105–9

Articulation after uvulopalatopharyngoplasty. Nakai K, et al. **Eur Arch Otorhinolaryngol** 1996;253(7):417–20

Diagnostic value of articulation tests with individuals having clefts. Van Demark DR. **Folia Phoniatr Logop** 1997; 49(3–4):147–57

Coarticulatory stability in American English /r/. Boyce S, et al. **J Acoust Soc Am** 1997 Jun;101(6):3741–53

Articulatory strengthening at edges of prosodic domains. Fougeron C, et al. **J Acoust Soc Am** 1997 Jun; 101(6):3728–40

The characteristics of voicing in syllable-initial fricatives in American English. Pirello K, et al. **J Acoust Soc Am** 1997 Jun;101(6):3754–65

STANDARDS

Towards a standardised assessment procedure for developmental apraxia of speech. Thoonen G, et al. **Eur J Disord Commun** 1997;32(1):37–60

A proposal for standardization of speech and hearing evaluations to assess velopharyngeal function. Hirschberg J, et al. **Folia Phoniatr Logop** 1997;49(3–4):158–67

STATISTICS & NUMERICAL DATA

Interobserver agreement of perceived intelligibility of magnitude of r in children. Carballo G, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):1099–104

SPEECH DISCRIMINATION see SPEECH PERCEPTION

SPEECH DISCRIMINATION TESTS

Speech perception and speech production skills of children with multichannel cochlear implants. Miyamoto RT, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):240–3

The field trial of the SPEAK versus MPEAK speech coding strategies in Mandarin Chinese. Liu SY, et al. **Adv Otorhinolaryngol** 1997;52:113–6

Effects of phase and level on vowel identification: data and predictions based on a nonlinear basilar-membrane model. Alcántara JI, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2382–92

A computerized adaptive testing system for speech discrimination measurement: the Speech Sound Pattern Discrimination Test. Bochner J, et al. **J Acoust Soc Am** 1997 Apr;101(4):2289–98

Initial evaluation of an interactive test of sentence gist recognition. Tye-Murray N, et al. **J Am Acad Audiol** 1996 Dec;7(6):396–405

Verbal auditory closure and the speech perception in noise (SPIN) Test. Elliott LL. **J Speech Hear Res** 1995 Dec; 38(6):1363–76 (81 ref.)

Speech-language evaluation of closed head injured subjects in South Africa: cultural applicability and ecological validity of a test battery. Watt N, et al. **S Afr J Commun Disord** 1996;43:85–92

[Cochlear implant in patients with residual hearing] Ruh S, et al. **Laryngorhinootologie** 1997 Jun;76(6):347–50 (Eng. Abstr.) **(Ger)**

[Aspects of auditory speech perception in cochlear implant and hearing aid managed children] Junge FM, et al. **Wien Med Wochenschr** 1997;147(10):255–8 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Speaking tubes for bedside use [letter] Armstrong M Jr, et al. **Otolaryngol Head Neck Surg** 1996 Dec;115(6):585

STANDARDS

The Carhart Memorial Lecture, American Auditory Society, Salt Lake City, Utah 1996. Phoneme and word recognition for words in isolation and in sentences. Olsen WO, et al. **Ear Hear** 1997 Jun;18(3):175–88

SPEECH DISORDERS

see related

LANGUAGE DISORDERS

"Echoing approval": a new speech disorder. Ghika J, et al. **J Neurol** 1996 Sep;243(9):633–7

Speech timing in apraxia of speech versus conduction aphasia. Seddoh SA, et al. **J Speech Hear Res** 1996 Jun; 39(3):590–603

CHEMICALLY INDUCED

Dysarthria and apraxia of speech associated with FK-506 (tacrolimus). Boeve BF, et al. **Mayo Clin Proc** 1996 Oct; 71(10):969–72

Ataxia and slurred speech after artesunate treatment for falciparum malaria [letter] Miller LG, et al. **N Engl J Med** 1997 May 1;336(18):1328

COMPLICATIONS

Phonological impairment in dyslexic children with and without early speech-language disorder. Plaza M. **Eur J Disord Commun** 1997;32(2):277–90

Floating-Harbor syndrome. A neuropsychological approach. Davalos IP, et al. **Genet Couns** 1996;7(4):283–8

Behaviour problems associated with lack of speech in people with learning disabilities [published erratum appears in J Intellect Disabil Res 1997 Jun;41(Pt 3):283] Bott C, et al. **J Intellect Disabil Res** 1997 Feb;41 (Pt 1):3–7

Effect of visual and inferential variables on scene descriptions by right-hemisphere-damaged and non-brain-damaged adults. Myers PS, et al. **J Speech Hear Res** 1996 Aug; 39(4):870–80

Aerodynamic mechanisms underlying treatment-related changes in vocal intensity in patients with Parkinson disease. Ramig LO, et al. **J Speech Hear Res** 1996 Aug; 39(4):798–807

Comparison of two forms of intensive speech treatment for Parkinson disease. Ramig LO, et al. **J Speech Hear Res** 1995 Dec;38(6):1232–51

Intensive speech treatment for patients with Parkinson's disease: short-and long-term comparison of two techniques. Ramig LO, et al. **Neurology** 1996 Dec; 47(6):1496–504

Specificity and developmental consequences of speech loss in children with pervasive developmental disorders. Kurita H. **Psychiatry Clin Neurosci** 1996 Aug;50(4):181–4

DIAGNOSIS

Hearing, speech, language, and vestibular disorders in the fetal alcohol syndrome: a literature review. Church MW, et al. **Alcohol Clin Exp Res** 1997 May;21(3):495–512 (163 ref.)

Bilateral perisylvian syndrome not related to malformations: report of two cases. Grasel RP, et al. **Arq Neuropsiquiatr** 1996 Jun;54(2):293–6 (10 ref.)

Auditory processing and phonologic disorder. Thyer N, et al. **Audiology** 1996 Jan–Feb;35(1):37–44

Psychopathology of catatonic speech disorders and the dilemma of catatonia: a selective review. Ungvari GS, et al. **Aust N Z J Psychiatry** 1995 Dec;29(4):653–60 (54 ref.)

Speech prosody in affective contexts in Thai patients with right hemisphere lesions. Gandour J, et al. **Brain Lang** 1995 Dec;51(3):422–43

Speech-language outcomes of hemispherectomy in children and young adults. Stark RE, et al. **Brain Lang** 1995 Dec; 51(3):406–21

Motor difficulties in children with developmental disorders of speech and language. Owen SE, et al. **Child Care Health Dev** 1997 Jul;23(4):315–25

Spectral properties and quantitative evaluation of hypernasality in vowels. Kataoka R, et al. **Cleft Palate Craniofac J** 1996 Jan;33(1):43–50

Novel stimuli for obtaining nasalance measures from young children. Watterson T, et al. **Cleft Palate Craniofac J** 1996 Jan;33(1):67–73

Towards a standardised assessment procedure for developmental apraxia of speech. Thoonen G, et al. **Eur J Disord Commun** 1997;32(1):37–60

Quality of speech correlated to craniofacial characteristics of cleft palate patients with the Pierre Robin sequence. Haapanen ML, et al. **Folia Phoniatr Logop** 1996; 48(5):215–22

Cognition, language, and speech in amyotrophic lateral sclerosis: a review. Strong MJ, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):291–303 (70 ref.)

A comparison of two phonological profiles: a tutorial. Ball MJ, et al. **J Commun Disord** 1997 May–Jun;30(3):171–203; discussion 203–4

Phonological patterns in Puerto Rican Spanish-speaking children with phonological disorders. Goldstein BA, et al. **J Commun Disord** 1996 Sep–Oct;29(5):367–86; quiz 386–7

Contextual strategy instruction: socially/emotionally maladjusted adolescents with language impairments. Ward-Lonergan JM, et al. **J Commun Disord** 1996 Mar–Apr;29(2):107–24

Effects of speech and language disorders on raters' perceptions. Williams DF, et al. **J Commun Disord** 1996 Jan–Feb;29(1):1–12

Perception of stop consonants in children with expressive and receptive-expressive language impairments. Stark RE, et al. **J Speech Hear Res** 1996 Aug;39(4):676–86

Vocal reaction times of children with CAPD, age-matched peers, and young adults to printed words. Dagenais PA, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):694–703

Developmental apraxia of speech: III. A subtype marked by inappropriate stress. Shriberg LD, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):313–37

Developmental apraxia of speech: I. Descriptive and theoretical perspectives. Shriberg LD, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):273–85

Developmental apraxia of speech: II. Toward a diagnostic marker. Shriberg LD, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):286–312

A first case of progressive supranuclear palsy and pre-clinical REM sleep behavior disorder presenting as inhibition of speech during wakefulness and somniloquy with phasic muscle twitching during REM sleep. Pareja JA, et al. **Neurologia** 1996 Oct;11(8):304–6

Screening the speech of young patients with sickle cell disease. Gentry B, et al. **Percept Mot Skills** 1997 Apr; 84(2):662

Specificity and developmental consequences of speech loss in children with pervasive developmental disorders. Kurita H. **Psychiatry Clin Neurosci** 1996 Aug;50(4):181–4

Delayed closure of the hard palate: a comparison of speech in children with open and functionally closed residual clefts. Lohmander-Agerskov A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1996 Jun; 30(2):121–7

[Logopedic diagnosis and therapy in psychiatric treatment] Neubauer K. **Ceska Slov Psychiatr** 1996 Feb;92(1):41–9 (Eng. Abstr.) **(Cze)**

[Value of the Heidelberg Language Development Test in diagnosis of children with language development disorders] Suchodoletz Wv, et al. **Z Kinder Jugenpsychiatr** 1996 Mar; 24(1):4–11 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Botulinum neurotoxin injection after total laryngectomy. Hoffman HT, et al. **Head Neck** 1997 Mar;19(2):92–7

EPIDEMIOLOGY

Prevalence of speaking and hearing disabilities among adults with traumatic brain injury from a national household survey. Lubinski R, et al. **Brain Inj** 1997 Feb;11(2):103–14

The prevalence of verbal communication disability in patients with Parkinson's disease. Coates C, et al. **Disabil Rehabil** 1997 Mar;19(3):104–7

Prevalence of speech and language disorders in a mental illness unit. Emerson J, et al. **Eur J Disord Commun** 1996; 31(3):221–36

Clinical characteristics of children referred to a child development center for evaluation of speech, language, and communication disorders. Harel S, et al. **Pediatr Neurol** 1996 Nov;15(4):305–11

ETHNOLOGY

Attitudes toward speech disorders: sampling the views of Cantonese-speaking Americans. Bebout L, et al. **J Commun Disord** 1997 May–Jun;30(3):205–28; discussion 228–9

ETIOLOGY

The foreign accent syndrome: a reconsideration. Kurowski KM, et al. **Brain Lang** 1996 Jul;54(1):1–25

Deterioration of spontaneous speech in AD patients during a 1-year follow-up: homogeneity of profiles and factors associated with progression. Romero B, et al. **Dementia** 1996 Jan–Feb;7(1):35–40

Speech, language, and the cerebellum. Gordon N. **Eur J Disord Commun** 1996;31(4):359–67

Quality of speech correlated to craniofacial characteristics of cleft palate patients with the Pierre Robin sequence. Haapanen ML, et al. **Folia Phoniatr Logop** 1996; 48(5):215–22

Case in point. Wilson's disease. Hariharan R, et al. **Hosp Pract (Off Ed)** 1996 Aug 15;31(8):22J

Speech and the dominant superior frontal gyrus: correlation of ictal symptoms, EEG, and results of surgical resection. Chee MW, et al. **J Clin Neurophysiol** 1997 May;14(3):226–9

Laryngectomy in children: a psychological and speech-language pathology 20-year follow-up report. Heeneman H, et al. **J Otolaryngol** 1996 Oct;25(5):342–5

Otolaryngologic manifestations of neurofibromatosis in children. Sobol SE, et al. **J Otolaryngol** 1997 Feb;26(1):13–9 (39 ref.)

Low grade astrocytoma in the medial part of the frontal lobe manifesting as paroxysmal speech disturbance—case report. Takano S, et al. **Neurol Med Chir (Tokyo)** 1996 Mar; 36(3):185–8

Age-related effects on speech fluency. Caruso AJ, et al. **Semin Speech Lang** 1997 May;18(2):171–9; quiz 179–80 (50 ref.)

[Palatoplasty of speech disorders and acoustical characteristics] Wang G, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Nov; 30(6):334–6, 383–4 (Eng. Abstr.) **(Chi)**

[Speech disorders in ENT practice] Seidner W. **Laryngorhinootologie** 1997 Apr;76(4):268–71 (Eng. Abstr.) **(Ger)**

GENETICS

Twin sibling differences in parental reports of ADHD, speech, reading and behaviour problems. Levy F, et al. **J Child Psychol Psychiatry** 1996 Jul;37(5):569–78

Evidence for a fourth locus in Usher syndrome type I. Gerber S, et al. **J Med Genet** 1996 Jan;33(1):77–9

PHYSIOPATHOLOGY

Speech prosody in affective contexts in Thai patients with

right hemisphere lesions. Gandour J, et al. **Brain Lang** 1995 Dec;51(3):422–43

Topography of auditory evoked long-latency potentials in children with severe language impairment: the P2 and N2 components. Tonnquist-Uhlén I. **Ear Hear** 1996 Aug; 17(4):314–26

Characteristics of cleft palate speech. Harding A, et al. **Eur J Disord Commun** 1996;31(4):331–57 (60 ref.)

Thought disorder, working memory and attention: interrelationships and the effects of neuroleptic medications. Goldberg TE, et al. **Int Clin Psychopharmacol** 1995 Sep;10 Suppl 3:99–104 (46 ref.)

Linguistic interaction: the active role of parents in speech therapy for cleft palate patients. Pamplona MC, et al. **Int J Pediatr Otorhinolaryngol** 1996 Sep;37(1):17–27

The phonological short-term store-rehearsal system: patterns of impairment and neural correlates. Vallar G, et al. **Neuropsychologia** 1997 Jun;35(6):795–812

Use of the family to facilitate communicative changes in adults with neurological impairments. Burns MS. **Semin Speech Lang** 1996 May;17(2):115–21; quiz 121–2

[The correlations of two methods in the evaluation of velopharyngeal competence] Luo Y, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Sep; 30(5):266–7 **(Chi)**

[Disfluency disorders other than stuttering] Monfrais-Pfauwadel MC. **Rev Laryngol Otol Rhinol (Bord)** 1995;116(4):267–70 (Eng. Abstr.) **(Fre)**

[Electric activity of the cerebral hemispheres in speech rhythm disorders and their correction] Lokhov MI. **Fiziol Cheloveka** 1996 Nov-Dec;22(6):35–42 **(Rus)**

[A clinico-physiological and psychological-pedagogical analysis of the structure of the defect in cognitive activity in 3 cases of different forms of speech pathology] Peresleni LI, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(2):49–53 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Current status of larynx preservation trials. Lefebvre JL, et al. **Curr Opin Oncol** 1996 May;8(3):209–14 (55 ref.)

Preschool speech and language screening: further validation of the sentence repetition screening test. Sturner RA, et al. **J Dev Behav Pediatr** 1996 Dec;17(6):405–13

PSYCHOLOGY

Audible thoughts' and 'speech defect' [letter; comment] Moncrieff J. **Br J Psychiatry** 1996 Aug;169(2):249–50. Comment on: Br J Psychiatry 1996 May;168(5):533–5; discussion 536–9.

'Audible thoughts' and 'speech defect' [letter; comment] Wilson S. **Br J Psychiatry** 1996 Aug;169(2):250. Comment on: Br J Psychiatry 1996 May;168(5):533–5; discussion 536–9.

Phonological processing skills in speech and language impaired children. Leitão S, et al. **Eur J Disord Commun** 1997;32(2 Spec No):91–111

A comparative, descriptive study of reading and writing skills among non-speaking children: a preliminary study. Sandberg AD, et al. **Eur J Disord Commun** 1996; 31(3):289–308

Seven-year follow-up of speech/language impaired and control children: psychiatric outcome. Beitchman JH, et al. **J Child Psychol Psychiatry** 1996 Nov;37(8):961–70

Nonverbal intellectual assessment of Hispanic and speech-impaired adolescents. Flemmer DD, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1115–22

[A clinico-physiological and psychological-pedagogical analysis of the structure of the defect in cognitive activity in 3 cases of different forms of speech pathology] Peresleni LI, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(2):49–53 (Eng. Abstr.) **(Rus)**

REHABILITATION

Selection of pediatric patients for use of the Passy-Muir valve for speech production. Gereau SA, et al. **Int J Pediatr Otorhinolaryngol** 1996 Mar;35(1):11–7

The role of stimulability in the assessment and treatment of Spanish-speaking children. Goldstein BA. **J Commun Disord** 1996 Jul-Aug;29(4):299–314

SURGERY

Recent progress in treating patients with cleft palate. Kawano M, et al. **Folia Phoniatr Logop** 1997;49(3–4):117–38 (17 ref.)

THERAPY

Management of speech and language disorders in a mental illness unit. Emerson J, et al. **Eur J Disord Commun** 1996; 31(3):237–44

Are your minimal pairs too neat? The dangers of phonemicisation in phonology therapy. Gardner H. **Eur J Disord Commun** 1997;32(2 Spec No):167–75

Linguistic interaction: the active role of parents in speech therapy for cleft palate patients. Pamplona MC, et al. **Int J Pediatr Otorhinolaryngol** 1996 Sep;37(1):17–27

Enhancing stimulability: a treatment program. Miccio AW, et al. **J Commun Disord** 1996 Jul-Aug;29(4):335–51

Stimulability: a useful clinical tool. Powell TW, et al. **J Commun Disord** 1996 Jul-Aug;29(4):237–53 (56 ref.)

Contextual strategy instruction: socially/emotionally maladjusted adolescents with language impairments. Ward-Lonergan JM, et al. **J Commun Disord** 1996 Mar-Apr;29(2):107–24

Individual difference variables that predict response to training in phonological awareness. Torgesen JK, et al. **J Exp Child Psychol** 1996 Oct;63(1):1–21

Speech aid prosthesis for a patient with Wegener's granulomatosis: a clinical report. Manganaro AM, et al. **J Prosthet Dent** 1997 Apr;77(4):346–7

Effects of imitative and conversational recasting treatment on the acquisition of grammar in children with specific language impairment and younger language-normal children. Nelson KE, et al. **J Speech Hear Res** 1996 Aug; 39(4):850–9

Aerodynamic mechanisms underlying treatment-related changes in vocal intensity in patients with Parkinson disease. Ramig LO, et al. **J Speech Hear Res** 1996 Aug; 39(4):798–807

Comparison of two forms of intensive speech treatment for Parkinson disease. Ramig LO, et al. **J Speech Hear Res** 1995 Dec;38(6):1232–51

Linear predictive coding parameter manipulation/synthesis of incorrectly produced /r/. Shuster LI. **J Speech Hear Res** 1996 Aug;39(4):827–32

Intensive speech treatment for patients with Parkinson's disease: short-and long-term comparison of two techniques. Ramig LO, et al. **Neurology** 1996 Dec; 47(6):1496–504

Role of intelligence tests in speech/language referrals. Sparks R, et al. **Percept Mot Skills** 1996 Aug;83(1):195–204

Use of the family to facilitate communicative changes in adults with neurological impairments. Burns MS. **Semin Speech Lang** 1996 May;17(2):115–21; quiz 121–2

Collaborative consultation: a systemic activity. Doherty KM, et al. **Semin Speech Lang** 1996 May;17(2):123–8; quiz 128–9

[Biofeedback in speech therapy after cleft palate surgery] Chen R, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Sep;30(5):314–6 (27 ref.) **(Chi)**

[Logopedic diagnosis and therapy in psychiatric treatment] Neubauer K. **Ceska Slov Psychiatr** 1996 Feb;92(1):41–9 (Eng. Abstr.) **(Cze)**

[Diagnosis and logopedic rehabilitation in mandibulofacial dysostosis: a case report] Valentino G, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2):136–9 (Eng. Abstr.) **(Ita)**

SPEECH, ESOPHAGEAL

Voicing distinction in esophageal speech. Hirose H. **Acta Otolaryngol Suppl (Stockh)** 1996;524:56–63

An unusual metastasis to the thumb in a laryngectomized tracheoesophageal speaker. Lewin JS, et al. **Arch Otolaryngol Head Neck Surg** 1997 Sep;123(9):1007–9

Assessment of tracheoesophageal speech in a tonal language. A prospective study. Wong SH, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jan;123(1):88–92

Aerodynamic characteristics of the Nijdam voice prosthesis in relation to tracheo-esophageal wall thickness. Veenstra A, et al. **Eur Arch Otorhinolaryngol** 1997;254(1):1–5

Spectrographic differences between tracheal-esophageal and esophageal voice. Bertino G, et al. **Folia Phoniatr Logop** 1996;48(5):255–61

The role of the speech and language therapist in voice restoration after laryngectomy [editorial] Perry A. **J Laryngol Otol** 1997 Jan;111(1):4–7 (33 ref.)

Factor analysis of proficient esophageal speech: toward a multidimensional model. Slavin DC, et al. **J Speech Hear Res** 1995 Dec;38(6):1224–31

Perceptual and acoustical analysis of alaryngeal speech: determinants of intelligibility. Drummond S, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):801–2

Instrumental and perceptual evidence for tracheoesophageal speech. Drummond SS, et al. **Percept Mot Skills** 1996 Oct; 83(2):658

SPEECH INTELLIGIBILITY

see related

SPEECH PRODUCTION MEASUREMENT

Speech perception and speech intelligibility in children with multichannel cochlear implants. Miyamoto RT, et al. **Adv Otorhinolaryngol** 1997;52:198–203

Teachers' ratings of the communication abilities of their deaf students. Hyde MB, et al. **Am Ann Deaf** 1996 Mar; 141(1):5–10

Speech intelligibility of children with multichannel cochlear implants. Miyamoto RT, et al. **Ann Otol Rhinol Laryngol Suppl** 1997 May;168:35–6

Speaking clearly for the hearing impaired: intelligibility differences between clear and less clear speakers. Howell P, et al. **Eur J Disord Commun** 1997;32(1):89–97

A source impedance compensated artificial voice for mask speech intelligibility testing: Thevenin model. Gerritsen TA, et al. **J Acoust Soc Am** 1996 Nov;100(5):3408–16

Effect of reducing temporal intensity modulations on sentence intelligibility. Noordhoek IM, et al. **J Acoust Soc Am** 1997 Jan;101(1):498–502

Intelligibility of clear and conversational speech of young and elderly talkers. Schum DJ. **J Am Acad Audiol** 1996 Jun;7(3):212–8

Speaking at medical meetings. Harikrishnan KM. **J Assoc Physicians India** 1996 Jul;44(7):486–7 (3 ref.)

Analysis of the articulation after glossectomy. Wakumoto M, et al. **J Oral Rehabil** 1996 Nov;23(11):764–70

Dysarthric speech: a comparison of computerized speech recognition and listener intelligibility. Doyle PC, et al. **J Rehabil Res Dev** 1997 Jul;34(3):309–16

Influence of verbal and nonverbal contexts on the sentence intelligibility of a speaker with dysarthria. Garcia JM, et al. **J Speech Hear Res** 1996 Aug;39(4):750–60

Quality ratings for frequency-shaped peak-clipped speech: results for listeners with hearing loss. Kozma-Spytek L, et al. **J Speech Hear Res** 1996 Dec;39(6):1115–23

Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. Munro MJ, et al. **Lang Speech** 1995 Jul-Sep;38 (Pt 3):289–306

Interobserver agreement of perceived intelligibility of magnitude of r in children. Carballo G, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):1099–104

Perceptual and acoustical analysis of alaryngeal speech: determinants of intelligibility. Drummond S, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):801–2

Instrumental and perceptual evidence for tracheoesophageal speech. Drummond SS, et al. **Percept Mot Skills** 1996 Oct; 83(2):658

Effects of gender on listeners' judgments of speech intelligibility. Ellis L, et al. **Percept Mot Skills** 1996 Dec; 83(3 Pt 1):771–5

Speech concerns of hard-of-hearing adults. Gilbertson M, et al. **Percept Mot Skills** 1996 Oct;83(2):377–8

Effect of visual cuing on synthetic speech intelligibility: a comparison of native and nonnative speakers of English. Reynolds ME, et al. **Percept Mot Skills** 1997 Apr; 84(2):695–8

[Aeroacoustic and pneumotachometric studies in the evaluation of vicarious voice in laryngectomy patients] Zalewski P, et al. **Otolaryngol Pol** 1996;50(3):291–9 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Speech perception skills and speech production intelligibility in French children with prelingual deafness and cochlear implants. Mondain M, et al. **Arch Otolaryngol Head Neck Surg** 1997 Feb;123(2):181–4

[Articulatory capacity and intelligibility of speech of patients with carcinomas of the mouth cavity. A comparison of pre- and postoperative results of various reconstruction techniques] Schönweiler R, et al. **HNO** 1996 Nov; 44(11):634–9 (Eng. Abstr.) **(Ger)**

SPEECH-LANGUAGE PATHOLOGY

Orofacial myofunctional disorders. **ASHA** 1996 Spring; 38(2):47–8

Treatment outcomes data for adults in health care environments. Task Force on Treatment Outcomes and Cost Effectiveness. Baum HM, et al. **ASHA** 1997 Winter; 39(1):26–31

The mind-body-spirit connection. Goldberg B. **ASHA** 1997 Summer;39(3):24–9, 31

Tooting your own horn. Hunt E. **ASHA** 1997 Summer; 39(3):32–5

Multicultural/diversity Internet resources. Kuster JM. **ASHA** 1997 Spring;39(2):46

What if a patient refuses treatment? Sharp H, et al. **ASHA** 1997 Summer;39(3):56, 52

Evaluating new training programs for language impairment. Tallal P, et al. **ASHA** 1997 Summer;39(3):12–3

Developing a culturally sensitive preschool screening tool. Wyatt T. **ASHA** 1997 Spring;39(2):50–1

Mapping the literature of speech-language pathology. Slater LG. **Bull Med Libr Assoc** 1997 Jul;85(3):297–302

ECONOMICS

Actuary data: what's in it for you? Wolf KE, et al. **ASHA** 1996 Spring;38(2):33–6

EDUCATION

For better or worse [editorial] Dancer J. **ASHA** 1996 Fall; 38(4):10

Growing the field. Who will teach future generations? Geffner D. **ASHA** 1997 Summer;39(3):37–42

Should we admit more graduate students? [editorial] Ney W. **ASHA** 1997 Spring;39(2):8

Training to meet the needs of the communicatively impaired population of South Africa: a project of the University of the Witwatersrand. Bortz MA, et al. **Eur J Disord Commun** 1996;31(4):465–75

Epidemiology: an essential science for speech-language pathology and audiology. Lubker BB. **J Commun Disord** 1997 Jul-Aug;30(4):251–65; quiz 265–7 (33 ref.)

Dysphagia evaluation and management: clinical training, clinical competency and specialty recognition. Martin BJ. **S Afr J Commun Disord** 1995;42:3–6

Moving toward a systemic training model in a university program. Harbers HM. **Semin Speech Lang** 1996 May; 17(2):143–52; quiz 153

HISTORY

[The origin and development of Polish phoniatrics. (Part II.

Jan Siestrzynski] Kierzek A. **Otolaryngol Pol** 1996; 50(5):555–60 (Eng. Abstr.) **(Pol)**
[The origin and development of Polish phoniatrics (Part I. Jan Hieronim Chrosciejwski, Jakob Falkowski] Kierzek A. **Otolaryngol Pol** 1996;50(4):451–6 (Eng. Abstr.) **(Pol)**

LEGISLATION & JURISPRUDENCE

State Tech Act projects reach out to families. Goldman AS, et al. **ASHA** 1996 Spring;38(2):4

MANPOWER

Tailoring to fit. Altering our approach to multicultural populations. Goldberg B. **ASHA** 1997 Spring;39(2):22–8
Question on gender [letter] Hooker PF Jr. **ASHA** 1996 Spring;38(2):4
Communication isn't just talking. What's new in AAC. Ratcliffe A, et al. **ASHA** 1997 Spring;39(2):30–6
A developmental conceptualization of clinical problem solving. Moses N, et al. **J Commun Disord** 1996 May–Jun; 29(3):199–221
The singing/acting child: a speech–language pathologist's perspective. Andrews ML. **J Voice** 1997 Jun;11(2):130–4
Formulating a functional model of attention deficit hyperactivity disorder for the practicing speech–language pathologist. Damico JS, et al. **Semin Speech Lang** 1996 Feb; 17(1):5–19 (88 ref.)
Ethical considerations in pediatric dysphagia. Lefton–Greif MA, et al. **Semin Speech Lang** 1997 Feb;18(1):79–86; quiz 87

METHODS

An introduction to computerised speech lab. Van Lierde K, et al. **Acta Otorhinolaryngol Belg** 1996;50(4):309–14
Research work of the Belgian Study Group on Voice Disorders 1996. Results. Wuyts FL, et al. **Acta Otorhinolaryngol Belg** 1996;50(4):331–41

ORGANIZATION & ADMINISTRATION

Theory and practice in speech–language pathology: a review of systemic principles. Andrews JR. **Semin Speech Lang** 1996 May;17(2):97–106
Systemic concepts in speech–language treatment. Andrews MA. **Semin Speech Lang** 1996 May;17(2):107–13; quiz 113–4
Working within systems that don't ... or at least not the way I thought they would! Gottfred CH. **Semin Speech Lang** 1996 May;17(2):155–64; quiz 165
Moving toward a systemic training model in a university program. Harbers HM. **Semin Speech Lang** 1996 May; 17(2):143–52; quiz 153
On becoming a team: a view from the field. Rush D, et al. **Semin Speech Lang** 1996 May;17(2):131–41; quiz 141–2

STANDARDS

Showcasing Quality. Standing out from the crowd. Davidson S, et al. **ASHA** 1997 Spring;39(2):38–44
National treatment outcomes data for professionals and consumers. Swigert NB. **ASHA** 1997 Summer;39(3):49–50
Clinical audit, related cycles and types of health care quality: a preliminary model. Redfern SJ, et al. **Int J Qual Health Care** 1996 Aug;8(4):331–40

TRENDS

Research and practice in the 21st century. Butler K. **ASHA** 1996 Fall;38(4):9
Your association, past, present, and ...future perfect? Butler K. **ASHA** 1996 Spring;38(2):7
Charlena M Seymour [interviewed by Barbara Goldberg] Seymour CM. **ASHA** 1997 Winter;39(1):18–23

SPEECH PATHOLOGY see **SPEECH–LANGUAGE PATHOLOGY**

SPEECH PERCEPTION

The relation between electric auditory brain stem and cognitive responses and speech perception in cochlear implant users. Groenen PA, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):785–90
Speech perception and speech production skills of children with multichannel cochlear implants. Miyamoto RT, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):240–3
Evaluation of the Nucleus Spectra 22 processor and new speech processing strategy (SPEAK) in postlinguistically deafened adults. Whitford LA, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):629–37
The perceptual evaluation of voice disorders. De Bodt MS, et al. **Acta Otorhinolaryngol Belg** 1996;50(4):283–91 (40 ref.)
The content and characteristics of auditory hallucinations in Saudi Arabia and the UK: a cross–cultural comparison. Kent G, et al. **Acta Psychiatr Scand** 1996 Dec;94(6):433–7
Input and learning processes in first language acquisition. Moerk EL. **Adv Child Dev Behav** 1996;26:181–228 (275 ref.)
Perception of speech--normal and abnormal. Bergman M. **Adv Otorhinolaryngol** 1997;51:93–102
Contributing factors to improved speech perception in children using the Nucleus 22–channel cochlear prosthesis. Cowan RS, et al. **Adv Otorhinolaryngol** 1997;52:193–7
Relation between vestibular function and speech recognition in patients with cochlear implant. Himi T, et al. **Adv Otorhinolaryngol** 1997;52:318–20
Speech perception performance of Mandarin–speaking cochlear implantees. Huang TS, et al. **Adv Otorhinolaryngol** 1997;52:244–9
Speech perception performance of prelingually deafened children and adolescents with Nucleus 22–channel cochlear implant. Huang WH, et al. **Adv Otorhinolaryngol** 1997; 52:224–8
Negative effect of homophones on speechreading in Japanese. Kamikubo E, et al. **Adv Otorhinolaryngol** 1997;52:327–30
Speech perception of Japanese language in patients using cochlear implants. Kawano M, et al. **Adv Otorhinolaryngol** 1997;52:240–3
Speech understanding in quiet and in noise with the CIS speech–coding strategy (MED EL Combi–40) compared to the MPEAK and SPEAK strategies (Nucleus). Kiefer J, et al. **Adv Otorhinolaryngol** 1997;52:286–90
Speech perception abilities in prelingually deafened Korean–speaking children using multichannel cochlear implants. Kim CS, et al. **Adv Otorhinolaryngol** 1997; 52:211–3
Speech discrimination scores according to the number of active electrodes in SPEAK speech processing strategy. Kim HN, et al. **Adv Otorhinolaryngol** 1997;52:218–9
Comparison of speech discrimination scores between SPEAK and MPEAK speech–processing strategies. Kim HN, et al. **Adv Otorhinolaryngol** 1997;52:110–2
Influence of preimplant experience with hearing aids on postimplant auditory perception. Kim SJ, et al. **Adv Otorhinolaryngol** 1997;52:299–301
A study on the effects of the verbo–tonal method in audition and language teaching to preschoolers with hearing impairment in Taiwan, ROC. Lin GB. **Adv Otorhinolaryngol** 1997;52:297–8
The field trial of the SPEAK versus MPEAK speech coding strategies in Mandarin Chinese. Liu SY, et al. **Adv Otorhinolaryngol** 1997;52:113–6
Evaluation of coding strategies under noisy environment by stimulating electrodes. Ma RL, et al. **Adv Otorhinolaryngol** 1997;52:100–2
Change of speech discrimination ability with reduced number of channels. Masuda S, et al. **Adv Otorhinolaryngol** 1997; 52:174–6
Speech perception and speech intelligibility in children with multichannel cochlear implants. Miyamoto RT, et al. **Adv Otorhinolaryngol** 1997;52:198–203
Central auditory processing of speech in cochlear implant users demonstrated by positron emission tomography. Naito Y, et al. **Adv Otorhinolaryngol** 1997;52:19–23
Longitudinal analysis of hearing ability and electrodes status in post–lingual deaf adult with cochlear implantation. Shintani T, et al. **Adv Otorhinolaryngol** 1997;52:229–32
Prognostic indicators of speech recognition performance in postlinguistically deafened adult cochlear implant users. Shipp D, et al. **Adv Otorhinolaryngol** 1997;52:74–7
Evaluation methods of speech perception ability through cochlear implant. Shiroma M, et al. **Adv Otorhinolaryngol** 1997;52:220–3
Speech perception in prelingually implanted children after four years. Tyler RS, et al. **Adv Otorhinolaryngol** 1997; 52:187–92
Perception and production results in children implanted between 2 and 5 years of age. Waltzman S, et al. **Adv Otorhinolaryngol** 1997;52:177–80
Hearing performance of prelinguistically deafened Chinese–speaking subjects aided with MSP. Wang ZM, et al. **Adv Otorhinolaryngol** 1997;52:250–3
Discrimination of word accent and timing by cochlear implant patients. Watanabe Y, et al. **Adv Otorhinolaryngol** 1997;52:233–5
Teachers' ratings of the communication abilities of their deaf students. Hyde MB, et al. **Am Ann Deaf** 1996 Mar; 141(1):5–10
Phonemic support in comprehension: comparisons between children with and without mild mental retardation. Kabrich M, et al. **Am J Ment Retard** 1996 Mar;100(5):510–27
Speech–perception performance in prelingually deafened French children using the nucleus multichannel cochlear implant. Uziel AS, et al. **Am J Otol** 1996 Jul;17(4):559–68
Open–set speech perception in congenitally deaf children using cochlear implants. Waltzman SB, et al. **Am J Otol** 1997 May;18(3):342–9
Speechreading supplemented with auditorily presented speech elements in the profoundly hearing impaired. Bosman AJ, et al. **Audiology** 1997 Jan–Feb;36(1):29–45
Intelligibility of Dutch CVC syllables and sentences for listeners with normal hearing and with three types of hearing impairment. Bosman AJ, et al. **Audiology** 1995 Sep–Oct;34(5):260–84
Comparison of growth of masking functions and speech discrimination abilities in younger and older adults. Cheesman MF, et al. **Audiology** 1995 Nov–Dec; 34(6):321–33
Audiovisual speech reception in noise and self–perceived hearing disability in sensorineural hearing loss. Corthals P, et al. **Audiology** 1997 Jan–Feb;36(1):46–56
Electrically evoked auditory middle latency responses versus perception abilities in cochlear implant users. Groenen P, et al. **Audiology** 1997 Mar–Apr;36(2):83–97
Objective evaluation of vowel identification with the Digisonic cochlear implant [published erratum appears in Audiology 1996 Nov–Dec;35(6):346] Serniclaes W, et al. **Audiology** 1996 Jan–Feb;35(1):23–36
Auditory processing and phonologic disorder. Thyer N, et al. **Audiology** 1996 Jan–Feb;35(1):37–44
Long–term progress in reading abilities in hearing–impaired children trained by the Kanazawa method. Notoya M, et al. **Auris Nasus Larynx** 1996;23:43–7
Auditory performance and acoustic reflexes in young adults reporting listening difficulties. Higson JM, et al. **Br J Audiol** 1996 Dec;30(6):381–7
Paired comparisons between the Classic 300 bone–anchored and conventional bone–conduction hearing aids in terms of sound quality and speech intelligibility. Ringdahl A, et al. **Br J Audiol** 1995 Dec;29(6):299–307
A note of caution for clinicians using the Paced Auditory Serial Addition Task. Ward T. **Br J Clin Psychol** 1997 May; 36 (Pt 2):303–7
Differences in susceptibility to the "blending illusion" among Native Hebrew and English speakers. Aloufy S, et al. **Brain Lang** 1996 Apr;53(1):51–7
Remediation of sentence processing deficits in aphasia using a computer–based microworld. Crerar MA, et al. **Brain Lang** 1996 Jan;52(1):229–75
Auditory illusions as evidence for a role of the syllable in adult developmental dyslexics. de Gelder B, et al. **Brain Lang** 1996 Feb;52(2):373–85
Cerebral mechanisms for suppression of inappropriate information during sentence comprehension [published erratum appears in Brain Lang 1997 Jan;56(1):159] Faust ME, et al. **Brain Lang** 1996 May;53(2):234–59
Inhibitory control during sentence comprehension in individuals with dementia of the Alzheimer type. Faust ME, et al. **Brain Lang** 1997 Apr;57(2):225–53
Auditory P3 responses to name stimuli. Folmer RL, et al. **Brain Lang** 1997 Feb 1;56(2):306–11
Judgments of concept similarity by normal and aphasic subjects: relation to naming and comprehension. Goodglass H, et al. **Brain Lang** 1997 Jan;56(1):138–58
An examination of impaired acoustic–phonetic processing in aphasia. Gow DW Jr, et al. **Brain Lang** 1996 Feb; 52(2):386–407
Comprehension of wh–questions in two Broca's aphasics. Hickok G, et al. **Brain Lang** 1996 Feb;52(2):314–27
Are subjects' perceptual asymmetries on auditory and visual language tasks correlated?: a meta–analysis. Kim H. **Brain Lang** 1997 Jun 1;58(1):61–9
Electrophysiologic manifestations of impaired temporal lobe auditory processing in verbal auditory agnosia. Klein SK, et al. **Brain Lang** 1995 Dec;51(3):383–405
Fractionating the articulatory loop: dissociations and associations in phonological recoding in aphasia. Nickels L, et al. **Brain Lang** 1997 Feb 1;56(2):161–82
A positron emission tomography study of binaurally and dichotically presented stimuli: effects of level of language and directed attention. O'Leary DS, et al. **Brain Lang** 1996 Apr;53(1):20–39
Unilateral brain damage, prosodic comprehension deficits, and the acoustic cues to prosody. Pell MD, et al. **Brain Lang** 1997 Apr;57(2):195–214
The ability to perceive and comprehend intonation in linguistic and affective contexts by brain–damaged adults. Pell MD, et al. **Brain Lang** 1997 Mar;57(1):80–99
Lateralization of affective prosody in brain and the callosal integration of hemispheric language functions. Ross ED, et al. **Brain Lang** 1997 Jan;56(1):27–54
The role of visual imagery in spelling. Shuren JE, et al. **Brain Lang** 1996 Feb;52(2):365–72
Theory of mind and pragmatic understanding following right hemisphere damage. Siegal M, et al. **Brain Lang** 1996 Apr; 53(1):40–50
Behavioral and electrophysiological indices of voicing–cue discrimination: laterality patterns and development. Simos PG, et al. **Brain Lang** 1997 Mar;57(1):122–50 (84 ref.)
Children's understanding of the meaning and functions of verbal irony. Dews S, et al. **Child Dev** 1996 Dec; 67(6):3071–85
Adult perception of emotion intensity in human infant cries: effects of infant age and cry acoustics. Leger DW, et al. **Child Dev** 1996 Dec;67(6):3238–49
Models of speech perception and phonological processing in reading. McBride–Chang C. **Child Dev** 1996 Aug; 67(4):1836–56
Speech perception of temporally reversed syllables by normally hearing adults. Li AC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Jan;57(1):1–6
The contribution of risk factors to the effect of early otitis media with effusion on later language, reading, and spelling [see comments] Peters SA, et al. **Dev Med Child Neurol** 1997 Jan;39(1):31–9. Comment in: Dev Med Child Neurol 1997 Apr;39(4):280.
Young infants' long–term auditory memory: evidence for changes in preference as a function of delay. Spence MJ. **Dev Psychobiol** 1996 Dec;29(8):685–95
The effect of talker variability on word recognition in preschool children. Ryalls BO, et al. **Dev Psychol** 1997 May;33(3):441–52
Newborns discriminate the rhythm of multisyllabic stressed words. Sansavini A, et al. **Dev Psychol** 1997 Jan;33(1):3–11
Effects of acclimatization and deprivation on non–speech auditory abilities. Byrne D, et al. **Ear Hear** 1996 Jun;17(3 Suppl):29S–37S
Audiological correlates of speech understanding deficits in elderly listeners with mild–to–moderate hearing loss. II. Correlation analysis. Divenyi PL, et al. **Ear Hear** 1997 Apr;

18(2):100–13
Audiological correlates of speech understanding deficits in elderly listeners with mild-to-moderate hearing loss. I. Age and lateral asymmetry effects. Divenyi PL, et al. **Ear Hear** 1997 Feb;18(1):42–61
Improving consonant intelligibility for Ineraid patients fit with continuous interleaved sampling (CIS) processors by enhancing contrast among channel outputs. Dorman MF, et al. **Ear Hear** 1996 Aug;17(4):308–13
Changes in speech intelligibility as a function of time and signal processing strategy for an Ineraid patient fitted with continuous interleaved sampling (CIS) processors. Dorman MF, et al. **Ear Hear** 1997 Apr;18(2):147–55
Transient evoked otoacoustic emissions recorder using maximum length sequences as a function of stimulus rate and level. Hine JE, et al. **Ear Hear** 1997 Apr;18(2):121–8
The time course of hearing aid benefit. Horwitz AR, et al. **Ear Hear** 1997 Feb;18(1):1–11
The relationship between listening conditions and alternative amplification schemes for multiple memory hearing aids. Keidser G. **Ear Hear** 1995 Dec;16(6):575–86
A procedure for testing speech intelligibility in a virtual listening environment. Koehnke J, et al. **Ear Hear** 1996 Jun;17(3):211–7
A new concept for Cochlear implant speech processing. Leisenberg M, et al. **Ear Hear** 1996 Feb;17(1):69–73
Effect of set size and method on speech reception thresholds in noise. Meyer TA, et al. **Ear Hear** 1997 Jun;18(3):202–9
Adult auditory learning and training. Robinson K, et al. **Ear Hear** 1996 Jun;17(3 Suppl):51S–65S
Identification of pseudohypacusis using speech recognition thresholds. Schlauch RS, et al. **Ear Hear** 1996 Jun; 17(3):229–36
Identification of speech by cochlear implant recipients with the Multipeak (MPEAK) and Spectral Peak (SPEAK) speech coding strategies. I. Vowels. Skinner MW, et al. **Ear Hear** 1996 Jun;17(3):182–97
Some considerations in evaluating spoken word recognition by normal-hearing, noise-masked normal-hearing, and cochlear implant listeners. I: The effects of response format. Sommers MS, et al. **Ear Hear** 1997 Apr;18(2):89–99
Measures of hearing aid gain for real speech. Stelmachowicz PG, et al. **Ear Hear** 1996 Dec;17(6):520–7
Topography of auditory evoked long-latency potentials in children with severe language impairment: the P2 and N2 components. Tonnquist-Uhlén I. **Ear Hear** 1996 Aug; 17(4):314–26
Design of two syllabic nonlinear multichannel signal processors and the results of speech tests in noise. van Harten-de Bruijn HE, et al. **Ear Hear** 1997 Feb;18(1):26–33
Comments on "compression? Yes, but for low or high frequencies, for low or high intensities, and with what response times?" Dillon, H. (1996), Ear and Hearing, 17, 287–307. Villchur E. **Ear Hear** 1997 Apr;18(2):169–71; discussion 172–3
Hidden Markov models for speech and signal recognition. Rose RC, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996;45:137–52 (43 ref.)
Phonological impairment in dyslexic children with and without early speech-language disorder. Plaza M. **Eur J Disord Commun** 1997;32(2):277–90
FO-dependence, number alteration, and non-systematic behaviour of the formants in German vowels [published erratum appears in Int J Neurosci 1996 Jul;86(1–2):167] Maurer D, et al. **Int J Neurosci** 1995 Nov;83(1–2):25–44
Reduced top-down influence in auditory perceptual organization in schizophrenia. Silverstein SM, et al. **J Abnorm Psychol** 1996 Nov;105(4):663–7
Effects of phase and level on vowel identification: data and predictions based on a nonlinear basilar-membrane model. Alcántara JI, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2382–92
The normalized correlation: accounting for binaural detection across center frequency. Bernstein LR, et al. **J Acoust Soc Am** 1996 Dec;100(6):3774–84
A computerized adaptive testing system for speech discrimination measurement: the Speech Sound Pattern Discrimination Test. Bochner J, et al. **J Acoust Soc Am** 1997 Apr;101(4):2289–98
Effects of spectral smearing on phoneme and word recognition. Boothroyd A, et al. **J Acoust Soc Am** 1996 Sep;100(3):1807–18
Training Japanese listeners to identify English /r/ and /l/: IV. Some effects of perceptual learning on speech production. Bradlow AR, et al. **J Acoust Soc Am** 1997 Apr;101(4):2299–310
Acoustic characteristics of the piriform fossa in models and humans. Dang J, et al. **J Acoust Soc Am** 1997 Jan; 101(1):456–65
Mechanisms of vowel recognition for Ineraid patients fit with continuous interleaved sampling processors. Dorman MF, et al. **J Acoust Soc Am** 1997 Jul;102(1):581–7
Perception of back vowels: effects of varying F1 – F0 Bark distance. Fahey RP, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2350–7
Listeners do hear sounds, not tongues. Fowler CA. **J Acoust Soc Am** 1996 Mar;99(3):1730–41 (77 ref.)
A source impedance compensated artificial voice for mask speech intelligibility testing: Thevenin model. Gerritsen TA, et al. **J Acoust Soc Am** 1996 Nov;100(5):3408–16
Evaluating the articulation index for auditory-visual consonant recognition. Grant KW, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2415–24
Effect of relative amplitude, presentation level, and vowel duration on perception of voiceless stop consonants by normal and hearing-impaired listeners. Hedrick MS, et al. **J Acoust Soc Am** 1996 Nov;100(5):3398–407
Speech intelligibility prediction in hearing-impaired listeners based on a psychoacoustically motivated perception model. Holube I, et al. **J Acoust Soc Am** 1996 Sep;100(3):1703–16
Acceptability for temporal modification of consecutive segments in isolated words. Kato H, et al. **J Acoust Soc Am** 1997 Apr;101(4):2311–22
The representation of concurrent vowels in the cat anesthetized ventral cochlear nucleus: evidence for a periodicity-tagged spectral representation. Keilson SE, et al. **J Acoust Soc Am** 1997 Aug;102(2 Pt 1):1056–71
Fundamental frequency effects on thresholds for vowel formant discrimination. Kewley-Port D, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2462–70
Psychoacoustical evaluation of the pitch-synchronous overlap-and-add speech-waveform manipulation technique using single-formant stimuli. Kortekaas RW, et al. **J Acoust Soc Am** 1997 Apr;101(4):2202–13
The perceptual structure of pathologic voice quality. Kreiman J, et al. **J Acoust Soc Am** 1996 Sep;100(3):1787–95
Reduced frequency selectivity and the preservation of spectral contrast in noise. Leek MR, et al. **J Acoust Soc Am** 1996 Sep;100(3):1796–806
Role of articulation in speech perception: clues from production. Lindblom B. **J Acoust Soc Am** 1996 Mar; 99(3):1683–92
A targeting-and-extracting technique to enhance hearing in the presence of competing speech. Liu C, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2877–91
Perceptual compensation for coarticulation by Japanese quail (Coturnix coturnix japonica). Lotto AJ, et al. **J Acoust Soc Am** 1997 Aug;102(2 Pt 1):1134–40
Perception of asynchronous and conflicting visual and auditory speech [published erratum appears in J Acoust Soc Am 1997 Mar;101(3):1748] Massaro DW, et al. **J Acoust Soc Am** 1996 Sep;100(3):1777–86
Vowel identification based on amplitude modulation. Moore BC, et al. **J Acoust Soc Am** 1996 Apr;99(4 Pt 1):2332–43
Perception of nonlinear and linear formant trajectories. Nábělek AK, et al. **J Acoust Soc Am** 1997 Jan;101(1):488–97
Cues for perception of synthetic and natural diphthongs in either noise or reverberation. Nábělek AK, et al. **J Acoust Soc Am** 1996 Mar;99(3):1742–53
Speech perception as pattern recognition. Nearey TM. **J Acoust Soc Am** 1997 Jun;101(6):3241–54
Simulation of the effect of threshold elevation and loudness recruitment combined with reduced frequency selectivity on the intelligibility of speech in noise. Nejime Y, et al. **J Acoust Soc Am** 1997 Jul;102(1):603–15
Predicting developmental shifts in perceptual weighting schemes. Nittrouer S, et al. **J Acoust Soc Am** 1997 Apr; 101(4):2253–66
Speech perception is hearing sounds, not tongues. Ohala JJ. **J Acoust Soc Am** 1996 Mar;99(3):1718–25
The effect of segment duration on the perceptual integration of nasals for adult and child speech. Ohde RN, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2486–99
A developmental study of vowel perception from brief synthetic consonant-vowel syllables. Ohde RN, et al. **J Acoust Soc Am** 1996 Dec;100(6):3813–24
Vowel classification in children. Palethorpe S, et al. **J Acoust Soc Am** 1996 Dec;100(6):3843–51
Detection of silent intervals between noises activating different perceptual channels: some properties of "central" auditory gap detection. Phillips DP, et al. **J Acoust Soc Am** 1997 Jun;101(6):3694–705
Consistency among speech parameter vectors: application to predicting speech intelligibility. Power MH, et al. **J Acoust Soc Am** 1996 Dec;100(6):3882–98
Critique: auditory form and gestural topology in the perception of speech. Remez RE. **J Acoust Soc Am** 1996 Mar;99(3):1695–98
The potential role of speech production models in automatic speech recognition. Rose RC, et al. **J Acoust Soc Am** 1996 Mar;99(3):1699–709
Perception of the American English liquid /ra–la/ contrast by humans and monkeys. Sinnott JM, et al. **J Acoust Soc Am** 1997 Jul;102(1):588–602
Spectral balance as an acoustic correlate of linguistic stress. Sluijter AM, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2471–85
Spectral balance as a cue in the perception of linguistic stress. Sluijter AM, et al. **J Acoust Soc Am** 1997 Jan;101(1):503–13
Evaluation of various sets of acoustic cues for the perception of prevocalic stop consonants. I. Perception experiment. Smits R, et al. **J Acoust Soc Am** 1996 Dec;100(6):3852–64
Stimulus variability and spoken word recognition. II. The effects of age and hearing impairment. Sommers MS. **J Acoust Soc Am** 1997 Apr;101(4):2278–88
Critique: articulatory-acoustic relations and their role in speech perception. Stevens KN. **J Acoust Soc Am** 1996 Mar;99(3):1693–4
Intraspeech spread of masking in normal-hearing and hearing-impaired listeners. Summers V, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2866–76
Formant transition duration and speech recognition in normal and hearing-impaired listeners. Turner CW, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2822–5
Performance over time of adult patients using the Ineraid or nucleus cochlear implant. Tyler RS, et al. **J Acoust Soc Am** 1997 Jul;102(1):508–22
Why stress position bias? van Heuven VJ, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2439–51
The vowel-sequence illusion: intrasubject stability and intersubject agreement of syllabic forms. Warren RM, et al. **J Acoust Soc Am** 1996 Oct;100(4 Pt 1):2452–61
Comparison between subjective and objective measures of active hearing protector and communication headset attenuation. Zera J, et al. **J Acoust Soc Am** 1997 Jun; 101(6):3486–97
Risk factors related to age-associated hearing loss in the speech frequencies. Brant LJ, et al. **J Am Acad Audiol** 1996 Jun;7(3):152–60
Changes in central auditory processing following temporal lobectomies in children. Cranford JL, et al. **J Am Acad Audiol** 1996 Aug;7(4):289–95
Auditory temporal processing in elderly listeners. Fitzgibbons PJ, et al. **J Am Acad Audiol** 1996 Jun;7(3):183–9
Real-ear polar patterns and aided directional sensitivity. Fortune TW. **J Am Acad Audiol** 1997 Apr;8(2):119–31
Performance norms for the VA compact disc versions of CID W-22 (Hirsh) and PB-50 (Rush Hughes) word lists. Heckendorf AL, et al. **J Am Acad Audiol** 1997 Jun; 8(3):163–72
Speech understanding in the elderly. Humes LE. **J Am Acad Audiol** 1996 Jun;7(3):161–7
Evaluation of the use of a new compact disc for auditory perceptual assessment in the elderly. Humes LE, et al. **J Am Acad Audiol** 1996 Dec;7(6):419–27
Efficacy of audiologic rehabilitation for older adults. Kricos PB, et al. **J Am Acad Audiol** 1996 Aug;7(4):219–29
Comparison of preferred frequency gain settings obtained with category rating and modified simplex procedure. Kuk FK, et al. **J Am Acad Audiol** 1996 Oct;7(5):322–31
Comprehension of time-compressed speech: effects of age and speech complexity. Letowski T, et al. **J Am Acad Audiol** 1996 Dec;7(6):447–57
Electrophysiologic indices of Stroop and Garner interference reveal linguistic influences on auditory and visual processing. Lew H, et al. **J Am Acad Audiol** 1997 Apr; 8(2):104–18
Monaural/binaural preferences: effect of hearing aid circuit on speech intelligibility and sound quality. Naidoo SV, et al. **J Am Acad Audiol** 1997 Jun;8(3):188–202
Relationship of aided speech recognition to hearing thresholds and aided speech-peak sensation levels in severely and profoundly hearing-impaired adults. Parkinson AJ, et al. **J Am Acad Audiol** 1996 Oct;7(5):305–21
Consonant recognition performance of hearing-impaired listeners using one linear and three nonlinear hearing aids. Sammeth CA, et al. **J Am Acad Audiol** 1996 Aug; 7(4):240–50
Three experimental measures of a digital beamforming signal processing algorithm. Schweitzer HC, et al. **J Am Acad Audiol** 1996 Aug;7(4):230–9
Word recognition performance in various background competitors. Sperry JL, et al. **J Am Acad Audiol** 1997 Apr; 8(2):71–80
Age-related changes in monosyllabic word recognition performance when audibility is held constant. Studebaker GA, et al. **J Am Acad Audiol** 1997 Jun;8(3):150–62
Cognitive factors in auditory performance: context, speed of processing, and constraints of memory. Wingfield A. **J Am Acad Audiol** 1996 Jun;7(3):175–82
Speech perception in older adults: the importance of speech-specific cognitive abilities. Sommers MS. **J Am Geriatr Soc** 1997 May;45(5):633–7 (23 ref.)
The behavioral treatment of auditory hallucinatory responding of a schizophrenic patient. Jimenez JM, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):299–310
An exploration of why preschoolers perform differently than do adults in audiovisual speech perception tasks. Desjardins RN, et al. **J Exp Child Psychol** 1997 Jul;66(1):85–110
Attention factors mediating syntactic deficiency in reading-disabled children. Deutsch A, et al. **J Exp Child Psychol** 1996 Nov;63(2):386–415
Are speech perception deficits associated with developmental dyslexia? Manis FR, et al. **J Exp Child Psychol** 1997 Aug; 66(2):211–35
When speech conflicts with seeing: young children's understanding of informational priority. Mitchell P, et al. **J Exp Child Psychol** 1997 Feb;64(2):276–94
Speech perception deficits in poor readers: auditory processing or phonological coding? Mody M, et al. **J Exp Child Psychol** 1997 Feb;64(2):199–231
Images, words, and questions: variables that influence beliefs about vision in children and adults. Winer GA, et al. **J Exp Child Psychol** 1996 Dec;63(3):499–525
Perceptual adjustment to highly compressed speech: effects of talker and rate changes. Dupoux E, et al. **J Exp Psychol Hum Percept Perform** 1997 Jun;23(3):914–27
Perceptual distance and competition in lexical access. Marslen-Wilson W, et al. **J Exp Psychol Hum Percept Perform** 1996 Dec; 22(6):1376–92
Talker identification based on phonetic information. Remez RF, et al. **J Exp Psychol Hum Percept Perform** 1997 Jun; 23(3):651–66
An audiovisual test of kinematic primitives for visual speech

perception. Rosenblum LD, et al.
J Exp Psychol Hum Percept Perform 1996 Apr;22(2):318–31

Words and voices: episodic traces in spoken word identification and recognition memory [published erratum appears in J Exp Psychol Learn Mem Cogn 1997 Mar;23(2):279] Goldinger SD.
J Exp Psychol Learn Mem Cogn 1996 Sep;22(5):1166–83

Irrelevant speech, serial rehearsal, and temporal distinctiveness: a new approach to the irrelevant speech effect. LeCompte DC. **J Exp Psychol Learn Mem Cogn** 1996 Sep;22(5):1154–65

Irrelevant speech and irrelevant tones: the relative importance of speech to the irrelevant speech effect. LeCompte DC, et al. **J Exp Psychol Learn Mem Cogn** 1997 Mar;23(2):472–83

Effect of face context on recognition memory for voices. Armstrong HA, et al. **J Gen Psychol** 1996 Jul;123(3):259–70

Distinguishing detection from identification in subliminal auditory perception: a review and critique of Merikle's study. Harris JL, et al. **J Gen Psychol** 1996 Jan;123(1):41–50

Effect of modality in earwitness identification: memory for verbal and nonverbal auditory stimuli presented in two contexts. Huss MT, et al. **J Gen Psychol** 1996 Oct; 123(4):277–87

Effects of temporally varied biased and unbiased story summaries on the suggestibility of preschoolers. Kidorf GA, et al. **J Genet Psychol** 1996 Dec;157(4):425–41

Bilingual hearing acquisition in Welsh and English following cochlear implantation. Osborne J, et al.
J Laryngol Otol 1996 Aug;110(8):776–8

Sound movement detection deficit due to a brainstem lesion. Griffiths TD, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):522–6

Detecting anxiety and defensiveness from visual and auditory cues. Harrigan JA, et al. **J Pers** 1996 Sep;64(3):675–709

Why listeners hear less than they are told: attentional load and the teller-listener extremity effect. Baron RS, et al.
J Pers Soc Psychol 1997 Apr;72(4):826–38

Tone perception in Cantonese and Mandarin: a cross-linguistic comparison. Lee YS, et al.
J Psycholinguist Res 1996 Sep;25(5):527–42

Effects and limitations of prosodic and semantic biases on syntactic disambiguation. Misono Y, et al.
J Psycholinguist Res 1997 Mar;26(2):229–45

Comprehension of idiomatic expressions in Japanese—auditory and visual presentations. Miura I.
J Psycholinguist Res 1996 Nov;25(6):659–76

Working memory and on-line sentence comprehension in patients with Alzheimer's disease. Waters GS, et al.
J Psycholinguist Res 1997 Jul;26(4):377–400

Dysarthric speech: a comparison of computerized speech recognition and listener intelligibility. Doyle PC, et al.
J Rehabil Res Dev 1997 Jul;34(3):309–16

Online sentence processing in adults who stutter and adults who do not stutter. Bosshardt HG, et al.
J Speech Hear Res 1996 Aug;39(4):785–97

Preference for and performance with damped and undamped hearing aids by listeners with sensorineural hearing loss. Davis LA, et al. **J Speech Hear Res** 1996 Jun;39(3):483–93

Frequency importance functions for words, sentences, and continuous discourse. DePaolis RA, et al.
J Speech Hear Res 1996 Aug;39(4):714–23

Auditory lexical decisions of children with specific language impairment. Edwards J, et al. **J Speech Hear Res** 1996 Dec; 39(6):1263–73

A longitudinal evaluation of the speech perception capabilities of children using multichannel tactile vocoders. Eilers RE, et al. **J Speech Hear Res** 1996 Jun;39(3):518–33

Verbal auditory closure and the speech perception in noise (SPIN) Test. Elliott LL. **J Speech Hear Res** 1995 Dec; 38(6):1363–76 (81 ref.)

SLI subgroups: interaction between discourse constraints and morphosyntactic deficits. Evans JL. **J Speech Hear Res** 1996 Jun;39(3):655–60

Labelling and discrimination of a synthetic fricative continuum in noise: a study of absolute duration and relative onset time cues. Formby C, et al.
J Speech Hear Res 1996 Feb;39(1):4–18

Consonant confusions in amplitude-expanded speech. Freyman RL, et al. **J Speech Hear Res** 1996 Dec; 39(6):1124–37

Influence of verbal and nonverbal contexts on the sentence intelligibility of a speaker with dysarthria. Garcia JM, et al. **J Speech Hear Res** 1996 Aug;39(4):750–60

Perception of voicing cues by children with early otitis media with and without language impairment. Groenen P, et al.
J Speech Hear Res 1996 Feb;39(1):43–54

The specific relation between perception and production errors for place of articulation in developmental apraxia of speech. Groenen P, et al. **J Speech Hear Res** 1996 Jun; 39(3):468–82

Perceptual organization of sequential stimuli in listeners with cochlear hearing loss. Grose JH, et al.
J Speech Hear Res 1996 Dec;39(6):1149–58

Role of F0 and amplitude in the perception of intervocalic glottal stops. Hillenbrand JM, et al. **J Speech Hear Res** 1996 Dec;39(6):1182–90

Quality ratings for frequency-shaped peak-clipped speech: results for listeners with hearing loss. Kozma-Spytek L, et al. **J Speech Hear Res** 1996 Dec;39(6):1115–23

Effects of age and Alzheimer's disease on recognition of gated spoken words. Marshall NB, et al.
J Speech Hear Res 1996 Aug;39(4):724–33

Acoustic and articulatory measures of sibilant production with and without auditory feedback from a cochlear implant. Matthies ML, et al. **J Speech Hear Res** 1996 Oct; 39(5):936–46

Proverb comprehension in youth: the role of concreteness and familiarity. Nippold MA, et al. **J Speech Hear Res** 1996 Feb;39(1):166–76

The relation between speech perception and phonemic awareness: evidence from low-SES children and children with chronic OM. Nittrouer S. **J Speech Hear Res** 1996 Oct;39(5):1059–70

Point-light facial displays enhance comprehension of speech in noise. Rosenblum LD, et al. **J Speech Hear Res** 1996 Dec;39(6):1159–70

Electrophysiological indices of lexical processing: the effects of verb complexity and age. Rubin SS, et al.
J Speech Hear Res 1996 Oct;39(5):1071–80

Effect of single-channel compression on temporal speech information. Souza PE, et al. **J Speech Hear Res** 1996 Oct; 39(5):901–11

Perception of stop consonants in children with expressive and receptive-expressive language impairments. Stark RE, et al. **J Speech Hear Res** 1996 Aug;39(4):676–86

Vowel perception in children with and without language impairment. Stark RE, et al. **J Speech Hear Res** 1996 Aug; 39(4):860–9

Evidence of sensitivity to structural contrasts in the literature on children's language comprehension. Sutton A.
J Speech Hear Res 1996 Dec;39(6):1304–14

Evaluation of auditory enhancement and auditory suppression in listeners with normal hearing and reduced speech recognition in noise. Thibodeau LM.
J Speech Hear Res 1996 Oct;39(5):947–56

Word frequency and age effects in normally developing children's phonological processing. Troia GA, et al.
J Speech Hear Res 1996 Oct;39(5):1099–108

Speaking clearly for the hard of hearing IV: Further studies of the role of speaking rate. Uchanski RM, et al.
J Speech Hear Res 1996 Jun;39(3):494–509

Effects of single-band syllabic amplitude compression on temporal speech information in nonsense syllables and in sentences. Van Tasell DJ, et al. **J Speech Hear Res** 1996 Oct;39(5):912–22

Effect of low-frequency gain reduction on speech recognition and its relation to upward spread of masking. Cook JA, et al. **J Speech Lang Hear Res** 1997 Apr; 40(2):410–22

Age-related and gender-related changes in monaural speech recognition. Dubno JR, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):444–52

Selected cognitive factors and speech recognition performance among young and elderly listeners. Gordon-Salant S, et al. **J Speech Lang Hear Res** 1997 Apr; 40(2):423–31

Auditory and auditory-visual perception of clear and conversational speech. Helfer KS.
J Speech Lang Hear Res 1997 Apr;40(2):432–43

A comparison of the benefit provided by well-fit linear hearing aids and instruments with automatic reductions of low-frequency gain. Humes LE, et al.
J Speech Lang Hear Res 1997 Jun;40(3):666–85

Identifying the authoritative judgments of stuttering: comparisons of self-judgments and observer judgments. Ingham RJ, et al. **J Speech Lang Hear Res** 1997 Jun; 40(3):581–94

Age of second-language acquisition and perception of speech in noise. Mayo LH, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):686–93

The frequency sampling method of digital filter design: comments on Hillenbrand and Houde (1996) [letter; comment] Roark RM. **J Speech Lang Hear Res** 1997 Apr; 40(2):405–9. Comment on: J Speech Hear Res 1996 Apr;39(2):390–5.

Recognizing famous voices: influence of stimulus duration and different types of retrieval cues. Schweinberger SR, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):453–63

Test-retest study of the GRBAS scale: influence of experience and professional background on perceptual rating of voice quality. De Bodt MS, et al. **J Voice** 1997 Mar;11(1):74–80

Effects of perceived listeners on speakers' vocal intensity. Healey EC, et al. **J Voice** 1997 Mar;11(1):67–73

Performance effects on the voices of 10 choral tenors: acoustic and perceptual findings. Kitch JA, et al.
J Voice 1996 Sep;10(3):217–27

Acoustic analysis of voice in individuals with amyotrophic lateral sclerosis and perceptually normal vocal quality. Silbergleit AK, et al. **J Voice** 1997 Jun;11(2):222–31

Morae and syllables: rhythmical basis of speech representations in neonates. Bertoncini J, et al.
Lang Speech 1995 Oct–Dec;38 (Pt 4):311–29

Focus, accent, and argument structure: effects on language comprehension. Birch S, et al. **Lang Speech** 1995 Oct–Dec; 38 (Pt 4):365–91

Interspeaker variability in emphatic accent production in French. Dahan D, et al. **Lang Speech** 1996 Oct–Dec;39 (Pt 4):341–74

The perceptual vowel spaces of American English and Modern Greek: a comparison. Hawks JW, et al.
Lang Speech 1995 Jul–Sep;38 (Pt 3):237–52

Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. Munro MJ, et al. **Lang Speech** 1995 Jul–Sep;38 (Pt 3):289–306

Do English-learning infants use syllable weight to determine stress? Turk AE, et al. **Lang Speech** 1995 Apr–Jun;38 (Pt 2):143–58

Phonotactics and syllable stress: implications for the processing of spoken nonsense words. Vitevitch MS, et al. **Lang Speech** 1997 Jan–Mar;40 (Pt 1):47–62

Language impairment. Listening out for subtle deficits [news; comment] Bishop DV. **Nature** 1997 May 8; 387(6629):129–30. Comment on: Nature 1997 May 8;387(6629):176–8.

Hemispheric asymmetry of arterial blood flow velocity changes during verbal and visuospatial tasks. Bulla-Hellwig M, et al. **Neuropsychologia** 1996 Oct;34(10):987–91

Effects of hemispheric side of injury, age at injury, and presence of seizure disorder on functional ear and hand asymmetries in hemiplegic children. Isaacs E, et al.
Neuropsychologia 1996 Feb;34(2):127–37

Unique hearing protection devices--the search for a balance. Gasaway DC. **Occup Health Saf** 1997 Jun;66(6):60–4 (4 ref.)

Speech understanding in quiet and in noise with the CIS speech coding strategy (MED-EL Combi-40) compared to the multipeak and spectral peak strategies (nucleus). Kiefer J, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 May-Jun;58(3):127–35

Speaking tubes for bedside use [letter] Armstrong M Jr, et al. **Otolaryngol Head Neck Surg** 1996 Dec;115(6):585

Speech recognition with the MPEAK and SPEAK speech-coding strategies of the Nucleus Cochlear Implant. Holden LK, et al. **Otolaryngol Head Neck Surg** 1997 Feb; 116(2):163–7

Early speech changes in children with multichannel cochlear implants. Te GO, et al. **Otolaryngol Head Neck Surg** 1996 Dec;115(6):508–12

Linguistic aspects of magnitude-estimation scaling of instrumental music, instrumental music with vocal accompaniment, and spoken lyrics. Fucci D, et al.
Percept Mot Skills 1996 Jun;82(3 Pt 2):1387–90

Selective impairment of auditory processing in chronic fatigue syndrome: a comparison with multiple sclerosis and healthy controls. Johnson SK, et al. **Percept Mot Skills** 1996 Aug;83(1):51–62

Effects of perceptual training based upon synthesized voice signals. Martin DP, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1291–8

Auditory and visual recall of forward and backward digit spans. Powell DH, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1099–103

The total-time hypothesis and the acquisition of connected discourse as a function of mode of presentation, presentation rate, and intelligence. Riley LR, et al.
Percept Mot Skills 1996 Aug;83(1):279–87

Hemispheric differences in detection of deception with content-filtered speech. Rockwell P. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1241–2

Ganzfeld perceptual field and gender effects on short-term memory as a function of rate of digit presentation. Vitulli WF, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1331–40

Lack of correlations of sense-modality-oriented indices of learning styles with each other and with classroom tasks. Westman AS, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):731–7

Stimulus uncertainty and speaker normalization processes in the perception of nasal consonants. Haley KL, et al.
Phonetica 1996;53(4):185–99

Acoustic correlates of stress in Thai. Potisuk S, et al.
Phonetica 1996;53(4):200–20

Sentence comprehension in Alzheimer's disease: effects of grammatical complexity, speech rate, and repetition. Small JA, et al. **Psychol Aging** 1997 Mar;12(1):3–11

The structural organization of the mental lexicon and its contribution to age-related declines in spoken-word recognition. Sommers MS. **Psychol Aging** 1996 Jun; 11(2):333–41

Effects of perceptual and conceptual processing on memory for words and voice: different patterns for young and old. Naveh-Benjamin M, et al. **Q J Exp Psychol A** 1996 Aug; 49(3):780–96

Rate-dependent perception of aspiration and pre-aspiration in Icelandic. Pind J. **Q J Exp Psychol A** 1996 Aug; 49(3):745–64

Place pitch discrimination and speech recognition in cochlear implant users. Hanekom JJ, et al.
S Afr J Commun Disord 1996;43:27–40

Attempts to develop an efficient speech test in fully modulated noise. Hagerman B. **Scand Audiol** 1997; 26(2):93–8

Predicting the speech recognition performance of elderly individuals with sensorineural hearing impairment. A procedure based on the Speech Intelligibility Index. Magnusson L. **Scand Audiol** 1996;25(4):215–22

Reliable clinical determination of speech recognition scores using Swedish PB words in speech-weighted noise. Magnusson L. **Scand Audiol** 1995;24(4):217–23

Evaluation of the list of numerals in the Danish speech audiometry material. Dantale. Olsen SO. **Scand Audiol** 1996;25(2):103–7

Lipreading with auditory low-frequency information. Contextual constraints. Rönnberg J, et al. **Scand Audiol** 1996;25(2):127–32

Word recognition in continuous noise, interrupted noise, and in quiet by normal-hearing listeners at two sensation levels. **Stuart A, et al. Scand Audiol** 1997;26(2):112-6

Memory effects to be considered in the design of measurements of the influence of context on speech perception. Theodoridis GC, et al. **Scand Audiol** 1996; 25(3):193-9

Working memory capacity predicts language comprehension in schizophrenic patients. Condray R, et al. **Schizophr Res** 1996 May;20(1-2):1-13

Language processing and memory in ill and well siblings from multiplex families affected with schizophrenia. Shedlack K, et al. **Schizophr Res** 1997 May 3;25(1):43-52

New insights into how babies learn language [news; comment] Barinaga M. **Science** 1997 Aug 1;277(5326):641 . Comment on: Science 1997 Aug 1;277(5326):684-6.

Learning rediscovered [comment] [see comments] Bates E, et al. **Science** 1996 Dec 13;274(5294):1849-50. Comment on: Science 1996 Dec 13;274(5294):1926-8. Comment in: Science 1997 May 23;276(5316):1177; discussion 1180-1, 1276. Comment in: Science 1997 May 23;276(5316):1178; discussion 1180-1, 1276. Comment in: Science 1997 May 23;276(5316):1178-9; discussion 1180-1, 1276. Comment in: Science 1997 May 23;276(5316):1179; discussion 1180-1, 1276.

Cross-language analysis of phonetic units in language addressed to infants [see comments] Kuhl PK, et al. **Science** 1997 Aug 1;277(5326):684-6. Comment in: Science 1997 Aug 1;277(5326):641.

Statistical learning by 8-month-old infants [see comments] Saffran JR, et al. **Science** 1996 Dec 13;274(5294):1926-8. Comment in: Science 1996 Dec 13;274(5294):1849-50. Comment in: Science 1997 May 23;276(5316):1177; discussion 1180-1, 1276. Comment in: Science 1997 May 23;276(5316):1178; discussion 1180-1, 1276. Comment in: Science 1997 May 23;276(5316):1178-9; discussion 1180-1, 1276. Comment in: Science 1997 May 23;276(5316):1179; discussion 1180-1, 1276.

[Responsible use of modern hearing aid technology. III: Improved speech discrimination in noise. Modern hearing aid technology in pediatric management] Steffens T. **HNO** 1997 May;45(5):403-14 **(Ger)**

[Processing acoustically presented time intervals of seconds duration: an expression of the phonological loop of the working memory?] Grube D. **Z Exp Psychol** 1996; 43(4):527-46 (Eng. Abstr.) **(Ger)**

[A study on the effect of slower speech rate produced by the speech rate converter] Watanabe K. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Mar;99(3):445-53 (Eng. Abstr.) **(Jpn)**

[A test of a hypothesis of automatic phonological processing of Kanji words] Mizuno R. **Shinrigaku Kenkyu** 1997 Apr; 68(1):1-8 (Eng. Abstr.) **(Jpn)**

[The effects of mood and content on sentence memory in children] Tomiyama N. **Shinrigaku Kenkyu** 1995 Dec; 66(5):336-44 (Eng. Abstr.) **(Jpn)**

[Tests of auditory perception of speech (TAPS) for children with cochlear implants] Demeńko G, et al. **Otolaryngol Pol** 1996;50(6):628-32 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Auditory event-related potentials, auditory digit span, and clinical symptoms in chronic schizophrenic men on neuroleptic medication. Stefánsson SB, et al. **Biol Psychiatry** 1996 Jul 1;40(1):19-27

Serial recovery of language during the intracarotid amobarbital procedure. Ravdin LD, et al. **Brain Cogn** 1997 Mar;33(2):151-60

PHYSIOLOGY

New computerized Finnish speech in noise test and binaural hearing. Laitakari K, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:74-6

Neurobiology of speech perception. Fitch RH, et al. **Annu Rev Neurosci** 1997;20:331-53 (103 ref.)

Understanding emotional prosody activates right hemisphere regions. George MS, et al. **Arch Neurol** 1996 Jul; 53(7):665-70

A positron emission tomographic study of impaired word recognition and phonological processing in dyslexic men. Rumsey JM, et al. **Arch Neurol** 1997 May;54(5):562-73

Speech perception skills and speech production intelligibility in French children with prelingual deafness and cochlear implants. Mondain M, et al. **Arch Otolaryngol Head Neck Surg** 1997 Feb;123(2):181-4

Assessing aspects of auditory handicap by means of pupil dilatation. Kramer SE, et al. **Audiology** 1997 May-Jun; 36(3):155-64

The effect of a headset leakage on speech intelligibility in helicopter noise. Wagstaff AS, et al. **Aviat Space Environ Med** 1996 Nov;67(11):1034-8

PET brain mapping study of auditory verbal supraspan memory versus visual fixation in schizophrenia. Ganguli R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):33-42

N400 abnormalities in late life schizophrenia and related psychoses. Olichney JM, et al. **Biol Psychiatry** 1997 Jul 1;42(1):13-23

What's in a pause: event-related potential analysis of temporal disruptions in written and spoken sentences. Besson M, et al. **Biol Psychol** 1997 Jun 20;46(1):3-23

The locus of interference in the Simon effect: an ERP study. Valle-Inclán F. **Biol Psychol** 1996 Apr 12;43(2):147-62

Patterns of language dominance in focal left and right hemisphere epilepsies: relation to MRI findings, EEG, sex, and age at onset of epilepsy. Helmstaedter C, et al. **Brain Cogn** 1997 Mar;33(2):135-50

Functional MR imaging during auditory word perception: a single-trial presentation paradigm. Hickok G, et al. **Brain Lang** 1997 Jun 1;58(1):197-201

A theory of neurolinguistic development. Locke JL. **Brain Lang** 1997 Jun 15;58(2):265-326 (405 ref.)

Categorical and dimensional decoding of emotional intonations in patients with focal brain lesions. Peper M, et al. **Brain Lang** 1997 Jun 15;58(2):233-64

Oscillatory neuromagnetic activity induced by language and non-language stimuli. Eulitz C, et al. **Brain Res Cogn Brain Res** 1996 Sep;4(2):121-32

Dissimilar age influences on two ERP waveforms (LPC and N400) reflecting semantic context effect. Juottonen K, et al. **Brain Res Cogn Brain Res** 1996 Sep;4(2):99-107

Relative alpha desynchronization and synchronization during speech perception. Krause CM, et al. **Brain Res Cogn Brain Res** 1997 Jun;5(4):295-9

Event-related potentials elicited by spoken relative clauses. Müller HM, et al. **Brain Res Cogn Brain Res** 1997 Mar; 5(3):193-203

PET activation of posterior temporal regions during auditory word presentation and verb generation. Fiez JA, et al. **Cereb Cortex** 1996 Jan-Feb;6(1):1-10

Correlated auditory asymmetries in lexical and nonlexical tasks. Boles DB, et al. **Cortex** 1996 Sep;32(3):537-45

Audiological correlates of speech understanding deficits in elderly listeners with mild-to-moderate hearing loss. III. Factor representation. Divenyi PL, et al. **Ear Hear** 1997 Jun;18(3):189-201

The Carhart Memorial Lecture, American Auditory Society, Salt Lake City, Utah 1996. Phoneme and word recognition for words in isolation and in sentences. Olsen WO, et al. **Ear Hear** 1997 Jun;18(3):175-88

Cochlear implantation of children with minimal open-set speech recognition skills. Zwolan TA, et al. **Ear Hear** 1997 Jun;18(3):240-51

Event-related potentials to Italian spoken words. Cobianchi A, et al. **Electroencephalogr Clin Neurophysiol** 1997 May; 104(3):213-21

N400 evidence of abnormal responses to speech in Alzheimer's disease. Ford JM, et al. **Electroencephalogr Clin Neurophysiol** 1996 Sep; 99(3):235-46

Is it really a mismatch negativity? An assessment of methods for determining response validity in individual subjects. McGee T, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jul;104(4):359-68

Magnetic mismatch fields elicited by vowels and consonants. Diesch E, et al. **Exp Brain Res** 1997 Aug;116(1):139-52

Cortical activation by monaural speech sound stimulation demonstrated by positron emission tomography. Hirano S, et al. **Exp Brain Res** 1997 Jan;113(1):75-80

Speech recognition in noise and presbycusis: relations to possible neural mechanisms. Frisina DR, et al. **Hear Res** 1997 Apr;106(1-2):95-104

Sound lateralization in patients with lesions including the auditory cortex: comparison of interaural time difference (ITD) discrimination and interaural intensity difference (IID) discrimination. Yamada K, et al. **Hear Res** 1996 Nov 1;101(1-2):173-80

Outcome of cognitive-behavioral therapy for depression: relation to hemispheric dominance for verbal processing. Bruder GE, et al. **J Abnorm Psychol** 1997 Feb; 106(1):138-44

ERP assessment of visual and auditory language processing in schizophrenia. Niznikiewicz MA, et al. **J Abnorm Psychol** 1997 Feb;106(1):85-94

Use of a correlational method to estimate a listener's weighting function for speech. Doherty KA, et al. **J Acoust Soc Am** 1996 Dec;100(6):3769-73

Effects of acoustic trauma on the representation of the vowel /epsilon/ in cat auditory nerve fibers. Miller RL, et al. **J Acoust Soc Am** 1997 Jun;101(6):3602-16

Speech recognition at simulated soft, conversational, and raised-to-loud vocal efforts by adults with cochlear implants. Skinner MW, et al. **J Acoust Soc Am** 1997 Jun; 101(6):3766-82

Evaluation of various sets of acoustic cues for the perception of prevocalic stop consonants. II. Modeling and evaluation. Smits R, et al. **J Acoust Soc Am** 1996 Dec;100(6):3865-81

Effect of monaural and binaural altered auditory feedback on stuttering frequency. Stuart A, et al. **J Acoust Soc Am** 1997 Jun;101(6):3806-9

Central auditory processing in an adult with congenital absence of left temporal lobe. Allen RL, et al. **J Am Acad Audiol** 1996 Aug;7(4):282-8

Late cognitive brain potentials, phonological and semantic classification of spoken words, and reading ability in children. Lovrich D, et al. **J Clin Exp Neuropsychol** 1996 Apr;18(2):161-77

Dichotic listening in children: the reflection of verbal and attentional changes with age. Lamm O, et al. **J Exp Child Psychol** 1997 Apr;65(1):25-42

Temporal structure of syntactic parsing: early and late event-related brain potential effects. Friederici AD, et al. **J Exp Psychol Learn Mem Cogn** 1996 Sep;22(5):1219-48

Functional magnetic resonance imaging assessment of the human brain auditory cortex response to increasing word presentation rates. Dhankhar A, et al. **J Neurophysiol** 1997 Jan;77(1):476-83

Human brain language areas identified by functional magnetic resonance imaging. Binder JR, et al. **J Neurosci** 1997 Jan 1;17(1):353-62

Functional anatomic studies of memory retrieval for auditory words and visual pictures. Buckner RL, et al. **J Neurosci** 1996 Oct 1;16(19):6219-35

Language-specific phoneme representations revealed by electric and magnetic brain responses. Näätänen R, et al. **Nature** 1997 Jan 30;385(6615):432-4

Infants listen for more phonetic detail in speech perception than in word-learning tasks. Stager CL, et al. **Nature** 1997 Jul 24;388(6640):381-2

Prosody impairment and associated affective and behavioral disturbances in Alzheimer's disease. Roberts VJ, et al. **Neurology** 1996 Dec;47(6):1482-8

Signed and spoken language perception studied by positron emission tomography. Söderfeldt B, et al. **Neurology** 1997 Jul;49(1):82-7

Discrimination of speech sounds in a boy with Landau-Kleffner syndrome: an intraoperative event-related potential study. Boyd SG, et al. **Neuropediatrics** 1996 Aug;27(4):211-5

A functional MRI study of mental image generation. D'Esposito M, et al. **Neuropsychologia** 1997 May; 35(5):725-30

The effect of presentation rate on the comprehension and recall of speech after anterior temporal-lobe resection. Johnsrude I, et al. **Neuropsychologia** 1994 Jan;32(1):77-84

Auditory efferents involved in speech-in-noise intelligibility. Giraud AL, et al. **Neuroreport** 1997 May 6;8(7):1779-83

Vocal identification of speaker and emotion activates different brain regions. Imaizumi S, et al. **Neuroreport** 1997 Aug 18;8(12):2809-12

Activation of left posterior cingulate gyrus by the auditory presentation of threat-related words: an fMRI study. Maddock RJ, et al. **Psychiatry Res** 1997 Aug 8;75(1):1-14

What voices can do with words: pragmatics of verbal hallucinations. Leudar I, et al. **Psychol Med** 1997 Jul; 27(4):885-98

[Speech discrimination. Regulation of amplification in the inner ear] Preyer S. **HNO** 1996 Dec;44(12):658-60 **(Ger)**

[Speech-specific cortical potentials--methodologic aspects and initial clinical results] Rosanowski F, et al. **Laryngorhinootologie** 1996 Jun;75(6):326-9 (Eng. Abstr.) **(Ger)**

[Brain processing of visually presented verbal stimuli at different levels of their integration. I. Semantic and motor aspects] Medvedev SV, et al. **Fiziol Cheloveka** 1997 Jul-Aug;23(4):5-13 **(Rus)**

SPEECH PRODUCTION MEASUREMENT

Speech perception and speech production skills of children with multichannel cochlear implants. Miyamoto RT, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):240-3

Perception and production results in children implanted between 2 and 5 years of age. Waltzman S, et al. **Adv Otorhinolaryngol** 1997;52:177-80

Fricative production in aphasia: effects of speaking rate. Baum SR. **Brain Lang** 1996 Feb;52(2):328-41

Speech prosody in affective contexts in Thai patients with right hemisphere lesions. Gandour J, et al. **Brain Lang** 1995 Dec;51(3):422-43

Production and perception of word tones (pitch accents) in patients with left and right hemisphere damage. Moen I, et al. **Brain Lang** 1996 May;53(2):267-81

Generalization from single sentence to multisentence production in severely aphasic patients. Weinrich M, et al. **Brain Lang** 1997 Jun 15;58(2):327-52

Evidence for multiple routes of speech production in a case of fluent aphasia. Ingles JL, et al. **Cortex** 1996 Jun; 32(2):199-219

A clinical report on speech production of cochlear implant users. Dawson PW, et al. **Ear Hear** 1995 Dec;16(6):551-61

A speaking task analysis of the dysarthria in cerebellar disease. Kent RD, et al. **Folia Phoniatr Logop** 1997; 49(2):63-82

Effect of acoustical, visual and tactile reverberation on speech fluency of stutterers. Kuniszyk-Jóźkowiak W, et al. **Folia Phoniatr Logop** 1997;49(1):26-34

Perceptual magnet effect in the light of behavioral and psychophysiological data. Aaltonen O, et al. **J Acoust Soc Am** 1997 Feb;101(2):1090-105

Toward articulatory-acoustic models for liquid approximants based on MRI and EPG data. Part II. The rhotics. Alwan A, et al. **J Acoust Soc Am** 1997 Feb;101(2):1078-89

Automatic integrated analysis of jaw and lip movement in speech production. Borghese NA, et al. **J Acoust Soc Am** 1997 Jan;101(1):482-7

Training Japanese listeners to identify English /r/ and /l/: IV. Some effects of perceptual learning on speech production. Bradlow AR, et al. **J Acoust Soc Am** 1997 Apr;101(4):2299-310

A source impedance compensated artificial voice for mask speech intelligibility testing: Thevenin model. Gerritsen TA, et al. **J Acoust Soc Am** 1996 Nov;100(5):3408-16

Toward articulatory-acoustic models for liquid approximants based on MRI and EPG data. Part I. The laterals.

SPEECH PRODUCTION MEASUREMENT

Narayanan SS, et al. **J Acoust Soc Am** 1997 Feb; 101(2):1064–77

The potential role of speech production models in automatic speech recognition. Rose RC, et al. **J Acoust Soc Am** 1996 Mar;99(3):1699–709

An investigation of stop place of articulation as a function of syllable position: a locus equation perspective. Sussman HM, et al. **J Acoust Soc Am** 1997 May;101(5 Pt 1):2826–38

The specific relation between perception and production errors for place of articulation in developmental apraxia of speech. Groenen P, et al. **J Speech Hear Res** 1996 Jun; 39(3):468–82

Differences in children's sound production when speaking with a cochlear implant turned on and turned off. Tye-Murray N, et al. **J Speech Hear Res** 1996 Jun; 39(3):604–10

From planning to articulation in speech production: what differentiates a person who stutters from a person who does not stutter? van Lieshout PH, et al. **J Speech Hear Res** 1996 Jun;39(3):546–64

Speech production in people who stutter: testing the motor plan assembly hypothesis. van Lieshout PH, et al. **J Speech Hear Res** 1996 Feb;39(1):76–92

Lexical learning by children with specific language impairment: effects of linguistic input presented at varying speaking rates. Weismer SE, et al. **J Speech Hear Res** 1996 Feb;39(1):177–90

Preliminary voice and speech analysis following fetal dopamine transplants in 5 individuals with Parkinson disease. Baker KK, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):615–26

Truncation patterns in English-speaking children's word productions. Kehoe M, et al. **J Speech Lang Hear Res** 1997 Jun;40(3):526–41

Speech production of normally aging adults. Benjamin BJ. **Semin Speech Lang** 1997 May;18(2):135–41 (54 ref.)

Age-related effects on speech fluency. Caruso AJ, et al. **Semin Speech Lang** 1997 May;18(2):171–9; quiz 179–80 (50 ref.)

[Language tests for the examination of nasal resonance] Gąsiorek J, et al. **Otolaryngol Pol** 1996;50(4):409–16 (Eng. Abstr.) **(Pol)**

METHODS

Phonetography in voice diagnoses. Heylen LG, et al. **Acta Otorhinolaryngol Belg** 1996;50(4):299–308 (54 ref.)

Aerodynamic measurements of voice production. Raes JP, et al. **Acta Otorhinolaryngol Belg** 1996;50(4):293–8 (22 ref.)

STATISTICS & NUMERICAL DATA

Preschool speech and language screening: further validation of the sentence repetition screening test. Sturner RA, et al. **J Dev Behav Pediatr** 1996 Dec;17(6):405–13

SPEECH RECEPTION THRESHOLD TEST

Assessing aspects of auditory handicap by means of pupil dilatation. Kramer SE, et al. **Audiology** 1997 May–Jun; 36(3):155–64

Identification of pseudohypacusis using speech recognition thresholds. Schlauch RS, et al. **Ear Hear** 1996 Jun; 17(3):229–36

Speech recognition at simulated soft, conversational, and raised-to-loud vocal efforts by adults with cochlear implants. Skinner MW, et al. **J Acoust Soc Am** 1997 Jun; 101(6):3766–82

[Aspects of auditory speech perception in cochlear implant and hearing aid managed children] Junge FM, et al. **Wien Med Wochenschr** 1997;147(10):255–8 (Eng. Abstr.) **(Ger)**

METHODS

New speech-in-noise test in different types of hearing impairment. Holma T, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:71–3

New computerized Finnish speech in noise test and binaural hearing. Laitakari K, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:74–6

Effect of set size and method on speech reception thresholds in noise. Meyer TA, et al. **Ear Hear** 1997 Jun;18(3):202–9

SPEECH SOUNDS see **PHONETICS**

SPEECH SYNTHESIZERS see **COMMUNICATION AIDS FOR DISABLED**

SPEECH THERAPY

see related
VOICE TRAINING

Speech must always be taught. Yenuthog O. **Adv Otorhinolaryngol** 1997;51:8–11

Long-term progress in reading abilities in hearing-impaired children trained by the Kanazawa method. Notoya M, et al. **Auris Nasus Larynx** 1996;23:43–7

Linguistic interaction: the active role of parents in speech therapy for cleft palate patients. Pamplona MC, et al. **Int J Pediatr Otorhinolaryngol** 1996 Sep;37(1):17–27

Multiple method validation study of facilitated communication: II. Individual differences and subgroup results. Bebko JM, et al. **J Autism Dev Disord** 1996 Feb; 26(1):19–42

Facilitated communicators' performance on a task of receptive language. Beck AR, et al. **J Autism Dev Disord** 1996 Oct;26(5):497–512

Evaluating the impact of facilitated communication on the communicative competence of fourteen students with autism. Bomba C, et al. **J Autism Dev Disord** 1996 Feb; 26(1):43–58

The validity of reading comprehension therapy materials. Thomas CA, et al. **J Commun Disord** 1997 May–Jun; 30(3):231–42; discussion 242–3

Individual difference variables that predict response to training in phonological awareness. Torgesen JK, et al. **J Exp Child Psychol** 1996 Oct;63(1):1–21

Speech and voice rehabilitation in selected patients fitted with a bone anchored hearing aid (BAHA). Thomas J. **J Laryngol Otol Suppl** 1996;21:47–51

On the importance of procedural descriptions in treatment efficacy research: a response to Snow, Swisher, McNamara, and Kiernan (1996) [letter] Camarata S, et al. **J Speech Hear Res** 1996 Feb;39(1):222–3

Comparison of two forms of intensive speech treatment for Parkinson disease. Ramig LO, et al. **J Speech Hear Res** 1995 Dec;38(6):1232–51

Facilitated communication redux: commentary on Wheeler, Jacobson, Schwartz, and Paglieri (1996) [letter] Silliman ER. **J Speech Hear Res** 1996 Feb;39(1):219–20

A potential limitation of treatment efficacy research: a comment on Camarata, Nelson, and Camarata (1994) [letter] Snow D, et al. **J Speech Hear Res** 1996 Feb; 39(1):221–2

Collaborative consultation: a systemic activity. Doherty KM, et al. **Semin Speech Lang** 1996 May;17(2):123–8; quiz 128–9

[Electric activity of the cerebral hemispheres in speech rhythm disorders and their correction] Lokhov MI. **Fiziol Cheloveka** 1996 Nov–Dec;22(6):35–42 **(Rus)**

[A clinico-physiological and psychological-pedagogical analysis of the structure of the defect in cognitive activity in 3 cases of different forms of speech pathology] Peresleni LI, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(2):49–53 (Eng. Abstr.) **(Rus)**

HISTORY

An investigation concerning the value of the oral method. 1909 [classical article] Binet A, et al. **Am Ann Deaf** 1997 Jul;142(3):35–45

Mistaken investigations concerning the value of the oral method. 1910 [classical article] Ferreri G. **Am Ann Deaf** 1997 Jul;142(3):46–8

INSTRUMENTATION

Selection of pediatric patients for use of the Passy-Muir valve for speech production. Gereau SA, et al. **Int J Pediatr Otorhinolaryngol** 1996 Mar;35(1):11–7

Speech aid prosthesis for a patient with Wegener's granulomatosis: a clinical report. Manganaro AM, et al. **J Prosthet Dent** 1997 Apr;77(4):346–7

METHODS

An evaluation of short-term group therapy for people with aphasia. Brumfitt SM, et al. **Disabil Rehabil** 1997 Jun; 19(6):221–30

Commentary on the Lidcombe Programme of early stuttering intervention [comment] Cook F, et al. **Eur J Disord Commun** 1997;32(2):250–8; discussion 261–6 . Comment on: Eur J Disord Commun 1997 ;32(2):231–50.

Are your minimal pairs too neat? The dangers of phonemicisation in phonology therapy. Gardner H. **Eur J Disord Commun** 1997;32(2 Spec No):167–75

Enhancing the phonological processing skills of children with specific reading disability. Gillon G, et al. **Eur J Disord Commun** 1997;32(2 Spec No):67–90

Commentary on Onslow, O'Brian and Harrison [comment] Hayhow R. **Eur J Disord Commun** 1997;32(2):258–66; discussion 261–6. Comment on: Eur J Disord Commun 1997 ;32(2):231–50.

The Lidcombe Programme of early stuttering intervention: methods and issues [see comments] Onslow M, et al. **Eur J Disord Commun** 1997;32(2):231–50. Comment in: Eur J Disord Commun 1997 ;32(2):250–8. Comment in: Eur J Disord Commun 1997 ;32(2):258–66; discussion 261–6.

A further application of the Fishbein and Ajzen model to therapy for adult stammerers. Stewart T. **Eur J Disord Commun** 1996;31(4):445–64

[Biofeedback in speech therapy after cleft palate surgery] Chen R, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Sep;30(5):314–6 (27 ref.) **(Chi)**

TRENDS

Recent advances in speech and language therapy. Appleton J, et al. **Br J Hosp Med** 1996 May 1–14;55(9):582–5 (19 ref.)

SPEECHREADING see **LIPREADING**

SPERM see **SPERMATOZOA**

SPERM AGGLUTINATION

Motility and agglutination of fowl spermatozoa in media of different amino acid content and pH value in vitro. Barna J, et al. **Acta Vet Hung** 1996;44(2):221–32

Contraceptive effect of sperm-agglutinating monoclonal antibodies in rabbits. Castle PE, et al. **Biol Reprod** 1997 Jan;56(1):153–9

DRUG EFFECTS

Electrophoretic characterization of boar epididymal antiagglutinin. Harayama H, et al. **Biol Reprod** 1996 Aug; 55(2):325–32

IMMUNOLOGY

Effect of sperm-agglutinating antibodies on sperm capacitation and acrosome reaction. Bathla H, et al. **Int J Fertil Menopausal Stud** 1996 Nov–Dec;41(6):528–33

SPERM BANKS

Safety during sperm banking [letter] Bahadur G, et al. **Hum Reprod** 1997 Jan;12(1):198

Current practices of commercial cryobanks in screening prospective donors for genetic disease and reproductive risk. Conrad EA, et al. **Int J Fertil Menopausal Stud** 1996 May–Jun;41(3):298–303

ORGANIZATION & ADMINISTRATION

[Evolution of the practice of sperm cryopreservation and fate of the preserved specimens : retrospective study of testicular cancer] Moutel G, et al. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):589–95 (Eng. Abstr.) **(Fre)**

STANDARDS

Reasons for rejecting potential donors from a sperm bank program. Sidhu RS, et al. **J Assist Reprod Genet** 1997 Jul; 14(6):354–60

STATISTICS & NUMERICAL DATA

Postmortem sperm procurement [see comments] Kerr SM, et al. **J Urol** 1997 Jun;157(6):2154–8. Comment in: J Urol 1997 Jun;157(6):2159.

SPERM CAPACITATION

Protein tyrosine phosphorylation and signal transduction during capacitation-acrosome reaction and zona pellucida binding in human sperm. Naz RK. **Arch Androl** 1996 Jul–Aug;37(1):47–55 (48 ref.)

Effect of sperm viability, plasmalemma integrity, and capacitation on patterns of expression of mannose-binding sites on human sperm. Youssef HM, et al. **Arch Androl** 1997 Jan–Feb;38(1):67–74

Regionalization and redistribution of membrane phospholipids and cholesterol in mouse spermatozoa during in vitro capacitation. Lin Y, et al. **Biol Reprod** 1996 Nov; 55(5):1133–46

Sperm capacitation and the acrosome reaction are compromised in teratospermic domestic cats. Long JA, et al. **Biol Reprod** 1996 Mar;54(3):638–46

Extracellular calcium negatively modulates tyrosine phosphorylation and tyrosine kinase activity during capacitation of human spermatozoa. Luconi M, et al. **Biol Reprod** 1996 Jul;55(1):207–16

Progesterone triggers a wave of increased free calcium during the human sperm acrosome reaction. Meizel S, et al. **Dev Biol** 1997 Feb 1;182(1):67–75

Bicarbonate/CO2 induces rapid activation of phospholipase A2 and renders boar spermatozoa capable of undergoing acrosomal exocytosis in response to progesterone. Roldan ER, et al. **FEBS Lett** 1996 Nov 4;396(2–3):227–32

Effect of catalase and thioredoxin addition to sperm incubation medium before in vitro fertilization on sperm capacity to support embryo development. Kuribayashi Y, et al. **Fertil Steril** 1996 Dec;66(6):1012–7

Sperm interaction with fallopian tube apical membrane enhances sperm motility and delays capacitation. Murray SC, et al. **Fertil Steril** 1997 Aug;68(2):351–7

Premature capacitation of bovine spermatozoa is initiated by cryopreservation. Cormier N, et al. **J Androl** 1997 Jul–Aug; 18(4):461–8

Compromised sperm protein phosphorylation after capacitation, swim-up, and zona pellucida exposure in teratospermic domestic cats. Pukazhenthi BS, et al. **J Androl** 1996 Jul–Aug;17(4):409–19

Capacitation-like changes occur in mouse spermatozoa cooled to low temperatures. Fuller SJ, et al. **Mol Reprod Dev** 1997 Mar;46(3):318–24

Bicarbonate/CO2, an effector of capacitation, induces a rapid and reversible change in the lipid architecture of boar sperm plasma membranes. Harrison RA, et al. **Mol Reprod Dev** 1996 Nov;45(3):378–91

Capacitation mechanisms, and the role of capacitation as seen in eutherian mammals. Harrison RA. **Reprod Fertil Dev** 1996;8(4):581–94 (106 ref.)

Capacitation and the acrosome reaction in marsupial spermatozoa. Mate KE, et al. **Reprod Fertil Dev** 1996; 8(4):595–603 (46 ref.)

Actin localization in ram spermatozoa: effect of

freezing/thawing, capacitation and calcium ionophore-induced acrosomal exocytosis. de las Heras MA, et al. **Tissue Cell** 1997 Feb;29(1):47–53
Unprotected freezing of human spermatozoa exerts a detrimental effect on their oocyte activating capacity and chromosome integrity. Rybouchkin AV, et al. **Zygote** 1996 Nov;4(4):263–8

DRUG EFFECTS

Intracellular calcium variation in heparin-capacitated bovine sperm. Córdoba M, et al. **Biochem Mol Biol Int** 1997 Apr; 41(4):725–33
In vitro capacitating effect of gamma-aminobutyric acid in ram spermatozoa. de las Heras MA, et al. **Biol Reprod** 1997 Apr;56(4):964–8
Stimulation of human sperm during capacitation in vitro by an adenosine agonist with specificity for A2 receptors. Fénichel P, et al. **Biol Reprod** 1996 Jun;54(6):1405–11
Enhancement of fertilization by piperine in hamsters. Piyachaturawat P, et al. **Cell Biol Int** 1997 Jul;21(7):405–9
Induction of capacitation in human spermatozoa in vitro by an endometrial sialic acid-binding protein. Banerjee M, et al. **Hum Reprod** 1995 Dec;10(12):3147–53
Fertilization promoting peptide, a tripeptide similar to thyrotrophin-releasing hormone, stimulates the capacitation and fertilizing ability of human spermatozoa in vitro. Green CM, et al. **Hum Reprod** 1996 Apr; 11(4):830–6
Hyaluronic acid enhances the zona pellucida-induced acrosome reaction of macaque sperm. Vandevoort CA, et al. **J Androl** 1997 Jan-Feb;18(1):1–5
Effect of cholesterol and other sterols on human sperm acrosomal responsiveness. Cross NL. **Mol Reprod Dev** 1996 Oct;45(2):212–7
Changes in lectin binding to bovine sperm during heparin-induced capacitation. Medeiros CM, et al. **Mol Reprod Dev** 1996 Aug;44(4):525–32

GENETICS

Molecular genetic analysis of sperm competition in the damselfly Ischnura elegans (Vander Linden). Cooper G, et al. **Proc R Soc Lond B Biol Sci** 1996 Oct 22; 263(1375):1343–9

IMMUNOLOGY

Monoclonal antibodies reacting against capacitated but not with freshly ejaculated boar spermatozoa. Mollova MV, et al. **Am J Reprod Immunol** 1996 Dec;36(6):301–8
Effect of sperm-agglutinating antibodies on sperm capacitation and acrosome reaction. Bathla H, et al. **Int J Fertil Menopausal Stud** 1996 Nov-Dec;41(6):528–33
Anti-bull sperm monoclonal antibodies: II. Binding changes during capacitation and influence on sperm-zona interactions in vitro. Ambrose JD, et al. **J Androl** 1996 Sep-Oct;17(5):579–86

PHYSIOLOGY

Lectin histochemistry during in vitro capacitation and acrosome reaction in boar spermatozoa: new lectins for evaluating acrosomal status of boar spermatozoa. Vazquez JM, et al. **Acta Histochem** 1996 Jan;98(1):93–100
Changes in binding of lectins to epididymal, ejaculated, and capacitated spermatozoa of the rhesus monkey. Navaneetham D, et al. **Anat Rec** 1996 Jul;245(3):500–8
The effect of sperm preparation on the timing of penetration in bovine in vitro fertilization. Rosenkranz C, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):47–53
Correlation between intact sperm acrosome assessed using the Spermac stain and sperm fertilizing capacity. Chan PJ, et al. **Arch Androl** 1996 Jan-Feb;36(1):25–7
Secretions of ovine uterus and oviduct induce in vitro capacitation of ram spermatozoa. Chavarria ME, et al. **Arch Androl** 1996 Jan-Feb;36(1):17–23
Protein tyrosine phosphorylation is associated with capacitation of human sperm in vitro but is not sufficient for its completion. Emiliozzi C, et al. **Biol Reprod** 1997 Mar;56(3):674–9
Regulation of protein tyrosine phosphorylation during bovine sperm capacitation by a cyclic adenosine 3'5'-monophosphate-dependent pathway. Galantino-Homer HL, et al. **Biol Reprod** 1997 Mar; 56(3):707–19
Cyclic adenosine 3',5'monophosphate-dependent regulation of protein tyrosine phosphorylation in relation to human sperm capacitation and motility. Leclerc P, et al. **Biol Reprod** 1996 Sep;55(3):684–92
Effect of capacitation on bull sperm binding to homologous oviductal epithelium. Lefebvre R, et al. **Biol Reprod** 1996 Mar;54(3):575–82
Oocyte penetration by fresh or stored diluted boar spermatozoa before and after in vitro capacitation treatments. Martinez EA, et al. **Biol Reprod** 1996 Jul; 55(1):134–40
Glucose participates in sperm-oocyte fusion in the mouse. Urner F, et al. **Biol Reprod** 1996 Oct;55(4):917–22
Capacitation-associated production of superoxide anion by human spermatozoa. de Lamirande E, et al. **Free Radic Biol Med** 1995 Mar;18(3):487–95
Regulation of protein-tyrosine phosphorylation and human sperm capacitation by reactive oxygen derivatives. Leclerc P, et al. **Free Radic Biol Med** 1997;22(4):643–56
Induction of capacitation in human spermatozoa in vitro by an endometrial sialic acid-binding protein. Banerjee M, et al. **Hum Reprod** 1995 Dec;10(12):3147–53
Variable kinematics of capacitating human spermatozoa. Mortimer ST, et al. **Hum Reprod** 1995 Dec;10(12):3178–82
Localization of a 25 kDa human sperm surface protein: its role in in-vitro human sperm capacitation. Banerjee M, et al. **Mol Hum Reprod** 1997 Feb;3(2):109–14
Capacitation as a regulatory event that primes spermatozoa for the acrosome reaction and fertilization. de Lamirande E, et al. **Mol Hum Reprod** 1997 Mar;3(3):175–94 (178 ref.)
Evidence for Ca(2+)-dependent ATPase activity, stimulated by decapacitation factor and calmodulin, in mouse sperm. Adeoya-Osiguwa SA, et al. **Mol Reprod Dev** 1996 May; 44(1):111–20
A possible mechanism of action for fertilization promoting peptide, a TRH-related tripeptide that promotes capacitation and fertilizing ability in mammalian spermatozoa. Green CM, et al. **Mol Reprod Dev** 1996 Oct; 45(2):244–52
Activation of mouse sperm phosphatidylinositol-4,5 bisphosphate-phospholipase C by zona pellucida is modulated by tyrosine phosphorylation. Tomes CN, et al. **Mol Reprod Dev** 1996 Feb;43(2):196–204
Methods for induction of capacitation and the acrosome reaction of stallion spermatozoa. Graham JK. **Vet Clin North Am Equine Pract** 1996 Apr;12(1):111–7 (42 ref.)

SPERM COUNT

see related

OLIGOSPERMIA

Declining sperm counts? More research is needed. Jouannet P, et al. **Andrologia** 1996 Nov-Dec;28(6):302–3
Declining sperm counts in Italy during the past 20 years. Menchini-Fabris F, et al. **Andrologia** 1996 Nov-Dec; 28(6):304
Declining sperm counts in European men--fact or fiction? Nieschlag E, et al. **Andrologia** 1996 Nov-Dec;28(6):305–6
Sperm count in ejaculates and after sperm selection with discontinuous percoll gradient centrifugation technique, as a prognostic index of IVF outcome. Hammadeh ME, et al. **Arch Gynecol Obstet** 1997;259(3):125–31
Neonatal exposure of rats to recombinant follicle stimulating hormone increases adult Sertoli and spermatogenic cell numbers. Meachem SJ, et al. **Biol Reprod** 1996 Jan; 54(1):36–44
Decreasing sperm counts? A critical (re)view. Lerchl A, et al. **Exp Clin Endocrinol Diabetes** 1996;104(4):301–7 (33 ref.)
A meta-analysis of 61 sperm count studies revisited. Becker S, et al. **Fertil Steril** 1997 Jun;67(6):1103–8
Effect of motile sperm count after swim-up on outcome of intrauterine insemination. Berg U, et al. **Fertil Steril** 1997 Apr;67(4):747–50
The endurance training on hormone and semen profiles in marathon runners [letter; comment] Miller BE, et al. **Fertil Steril** 1997 Mar;67(3):585–6; discussion 586–7. Comment on: Fertil Steril 1995 Dec;64(6):1189–96.
Seminal volume and total sperm number trends in men attending subfertility clinics in the greater Athens area during the period 1977–1993. Adamopoulos DA, et al. **Hum Reprod** 1996 Sep;11(9):1936–41
Statistical modelling reveals demography and time are the main contributing factors in global sperm count changes between 1938 and 1996. Bahadur G, et al. **Hum Reprod** 1996 Dec;11(12):2635–9
Quantitative post-coital test: sperm counts in cervical mucus after enzymatic liquefaction. de Agostini A, et al. **Hum Reprod** 1996 Feb;11(2):311–7
Sperm counts in enzymatically liquefied cervical mucus: quantitative validation using donor cervical mucus. de Agostini A, et al. **Hum Reprod** 1996 Feb;11(2):318–24
Prolonged sperm-oocyte exposure and high sperm concentration affect human embryo viability and pregnancy rate. Gianaroli L, et al. **Hum Reprod** 1996 Nov; 11(11):2507–11
Intrauterine insemination after ovarian stimulation with clomiphene citrate: predictive potential of inseminating motile count and sperm morphology. Ombelet W, et al. **Hum Reprod** 1997 Jul;12(7):1458–63
Sperm concentrations and quality in beta-thalassaemia major. Jensen CE, et al. **Int J Androl** 1996 Dec;19(6):362–4
The influence of semen analysis parameters on the fertility potential of infertile couples. Ayala C, et al. **J Androl** 1996 Nov-Dec;17(6):718–25
Testicular composition, number of A spermatogonia, germ cell ratios, and number of spermatids in three different breeds of boars. Okwun OE, et al. **J Androl** 1996 May-Jun; 17(3):301–9
Is there really a decrease in sperm parameters among healthy young men? A survey of sperm donations during 15 years. Benshushan A, et al. **J Assist Reprod Genet** 1997 Jul; 14(6):347–53
The impact of the total motile sperm count on the success of intrauterine insemination with husband's spermatozoa. Huang HY, et al. **J Assist Reprod Genet** 1996 Jan; 13(1):56–63
The relationship of sperm counts to birth rates: a population based study [see comments] Fisch H, et al. **J Urol** 1997 Mar;157(3):840–3. Comment in: J Urol 1997 Mar;157(3):847–8.
Ipsilateral testicular hypotrophy is associated with decreased sperm counts in infertile men with varicoceles. Sigman M, et al. **J Urol** 1997 Aug;158(2):605–7
Percutaneous varicocele embolization versus surgical ligation for the treatment of infertility: changes in seminal parameters and pregnancy outcomes. Shlansky-Goldberg RD, et al. **J Vasc Interv Radiol** 1997 Sep-Oct;8(5):759–67
Collection of seasonally spermatozoa-rich semen by electroejaculation of laboratory woodchucks (Marmota monax), with and without removal of bulbourethral glands. Concannon P, et al. **Lab Anim Sci** 1996 Dec;46(6):667–75
Influence of hyperthyroidism induced at prepuberty on the epididymal lipids, number and motility of spermatozoa in rats. Kumar PN, et al. **Reprod Fertil Dev** 1996;8(3):373–8
Worldwide variations in sperm counts. Fisch H, et al. **Urology** 1996 Dec;48(6):909–11 (30 ref.)
Effect of cryopreservation and sperm concentration on lipid peroxidation in human semen. Wang Y, et al. **Urology** 1997 Sep;50(3):409–13
Age and hourly related changes of serum testosterone and spermiogram of prepubertal bulls fed two levels of nutrition. Rekwot PI, et al. **Vet J** 1997 May;153(3):341–7
[Evaluation of fertilizing ability of sperm in vitro] Parinaud J, et al. **Contracept Fertil Sex** 1997 Mar;25(3):234–8 (Eng. Abstr.) **(Fre)**
[Cryptorchidism and fertility: evaluation in adult age] D'Agostino S, et al. **Pediatr Med Chir** 1996 Sep-Oct;18(5 Suppl):37–40 (Eng. Abstr.) **(Ita)**

DRUG EFFECTS

Irreversible gonadal damage in male survivors of pediatric Hodgkin's disease. Heikens J, et al. **Cancer** 1996 Nov 1; 78(9):2020–4
New evidence on sperm counts [news] **Environ Health Perspect** 1996 Sep;104(9):919–20
Influence of low corrected seminal fructose levels on sperm chromatin stability in semen from men attending an infertility service. Gonzales GF, et al. **Fertil Steril** 1997 Apr;67(4):763–8
Effect of alpha-blockers on epididymal sperm concentration, motility and testicular productivity in the rat. Hibi H, et al. **Hinyokika Kiyo** 1996 May;42(5):357–60
Spermatotoxic effects of carbaryl in rats. Pant N, et al. **Hum Exp Toxicol** 1996 Sep;15(9):736–8
Fertility after chemotherapy for testicular germ cell cancers. Lampe H, et al. **J Clin Oncol** 1997 Jan;15(1):239–45
Treatment with a luteinizing hormone-releasing hormone analogue after successful orchiopexy markedly improves the chance of fertility later in life. Hadžiselimović F, et al. **J Urol** 1997 Sep;158(3 Pt 2):1193–5

INSTRUMENTATION

Standardization of counting chambers for sperm analysis [letter; comment] Makler A. **Fertil Steril** 1997 May; 67(5):978–9. Comment on: Fertil Steril 1996 Oct;66(4):662–5.
Validation procedures for the Hamilton Thorne Integrated Visual Optical System sperm and cell analyzer. Douglas-Hamilton DH. **Qual Assur** 1995 Dec;4(4):340–7
[Value of computer-assisted sperm analysis (CASA). Reproducibility--online documentation--prognostic value] Krause W. **Fortschr Med** 1996 Dec 10;114(34):470–3 (Eng. Abstr.) **(Ger)**

METHODS

Comparison of manual microscopic and computer-assisted methods for analysis of sperm count and motility. Centola GM. **Arch Androl** 1996 Jan-Feb;36(1):1–7
The performance of 10 different methods for the estimation of sperm concentration. Mahmoud AM, et al. **Fertil Steril** 1997 Aug;68(2):340–5
Methodological issues in the analysis of human sperm concentration data. Berman NG, et al. **J Androl** 1996 Jan-Feb;17(1):68–73
Media and dilution procedures tested to minimize handling effects on human, rabbit, and bull sperm for computer-assisted sperm analysis (CASA). Farrell PB, et al. **J Androl** 1996 May-Jun;17(3):293–300
Evaluation of computer-assisted semen analysis (CASA) with IDENT stain to determine sperm concentration. Zinaman MJ, et al. **J Androl** 1996 May-Jun;17(3):288–92
Development of a novel fluorescence technique for quantifying the total number of spermatozoa stored in the uterovaginal junction of hens. McDaniel CD, et al. **J Reprod Fertil** 1997 Jan;109(1):173–9
Comparison of rat epididymal sperm counts by IVOS HTM-IDENT and hemacytometer. Strader LF, et al. **Reprod Toxicol** 1996 Nov-Dec;10(6):529–33
Quantitative and qualitative characteristics of frozen-thawed bovine spermatozoa recovered via a conventional and a standardized swim-up technique. Correa JR, et al. **Tohoku J Exp Med** 1997 Feb;181(2):267–74
[Value of a control of external quality of spermato-cytograms and perspectives] Bourguignat A, et al. **Ann Biol Clin (Paris)** 1997 Mar-Apr;55(2):155–6 **(Fre)**

RADIATION EFFECTS

A study of reproductive function in patients with seminoma treated with radiotherapy and orchidectomy:

SPERM COUNT

(SWOG-8711). Southwest Oncology Group. Gordon W Jr, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1; 38(1):83-94

VETERINARY

Influence of sperm number per straw on the post-thaw sperm viability and fertility of Swedish red and white A.I. bulls. Januskauskas A, et al. **Acta Vet Scand** 1996;37(4):461-70

Effect of sperm count on the fertility and prolificity rates of meat rabbits. Viudes-de-Castro MP, et al. **Anim Reprod Sci** 1997 Apr;46(3-4):313-9

Poor semen quality in Irish wolfhounds: a clinical, hormonal and spermatological study. Dahlbom M, et al. **J Small Anim Pract** 1995 Dec;36(12):547-52

Influence of male broiler breeder dietary energy intake on reproduction and progeny growth. Bramwell RK, et al. **Poult Sci** 1996 Jun;75(6):767-75

A new method for rapid determination of sperm concentration in turkey semen. Donoghue AM, et al. **Poult Sci** 1996 Jun;75(6):785-9

SPERM FLAGELLUM see **SPERM TAIL**

SPERM HEAD

CHEMISTRY

CP beta3, a novel isoform of an actin-binding protein, is a component of the cytoskeletal calyx of the mammalian sperm head. von Bülow M, et al. **Exp Cell Res** 1997 May 25;233(1):216-24

DRUG EFFECTS

Implication of sperm head agglutination induced by a V3 peptide (fragment 307-330, HIV-1 envelope protein gp120) solution. Ou MC, et al. **Arch Androl** 1996 Jul-Aug; 37(1):65-70

Sperm head abnormalities and dominant lethal effects of formaldehyde in albino rats. Odeigah PG. **Mutat Res** 1997 Mar 17;389(2-3):141-8

ENZYMOLOGY

A role for the disintegrin domain of cyritestin, a sperm surface protein belonging to the ADAM family, in mouse sperm-egg plasma membrane adhesion and fusion. Yuan R, et al. **J Cell Biol** 1997 Apr 7;137(1):105-12

IMMUNOLOGY

Distribution of 105-kDa sperm unique antigen on goat epididymal mature spermatozoa. Sarkar M, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):662-6

METABOLISM

Morphological differences in nuclear materials released from hamster sperm heads at an early stage of incorporation into immature oocytes, mature oocytes, or fertilized eggs. Usui N. **Mol Reprod Dev** 1996 May;44(1):132-40

PATHOLOGY

Effect of abnormal sperm head morphology on the outcome of intracytoplasmic sperm injection in humans. Taşdemir I, et al. **Hum Reprod** 1997 Jun;12(6):1214-7

PHYSIOLOGY

Unusual features of the sperm head differentiation in Mabuya quinquetaeniata. Ismail MF. **Arch Androl** 1997 Jul-Aug; 39(1):19-23

Normal mice develop from oocytes injected with spermatozoa with grossly misshapen heads. Burruel VR, et al. **Biol Reprod** 1996 Sep;55(3):709-14

Fertilization and development of mouse oocytes injected with isolated sperm heads. Kuretake S, et al. **Biol Reprod** 1996 Oct;55(4):789-95

The removal of the sperm perinuclear theca and its association with the bovine oocyte surface during fertilization. Sutovsky P, et al. **Dev Biol** 1997 Aug 1; 188(1):75-84

RADIATION EFFECTS

Radiation-induced cell death in the mouse testis: relationship to apoptosis. Hasegawa M, et al. **Radiat Res** 1997 Apr; 147(4):457-67

ULTRASTRUCTURE

Sperm head morphometry analysis of ejaculate and dismount stallion semen samples. Gravance CG, et al. **Anim Reprod Sci** 1997 May;47(1-2):149-55

Atomic force microscope analysis of chromatin volumes in human sperm with head-shape abnormalities. Lee JD 4th, et al. **Biol Reprod** 1997 Jan;56(1):42-9

The fluorescent dye 3, 3' dihexyloxacarbocyanine iodide selectively stains the midpiece and apical region of the heads of murid rodent spermatozoa. Breed WG, et al. **Biotech Histochem** 1995 Nov;70(6):294-6

Bull sperm head morphometry related to abnormal chromatin structure and fertility. Sailer BL, et al. **Cytometry** 1996 Jun 1;24(2):167-73

Selectivity of the human sperm-zona pellucida binding process to sperm head morphometry. Garrett C, et al. **Fertil Steril** 1997 Feb;67(2):362-71

Analysis of chromosome constitution of human spermatozoa with normal and aberrant head morphologies after injection into mouse oocytes. Lee JD, et al. **Hum Reprod** 1996 Sep; 11(9):1942-6

Analysis of the oocyte activating capacity and chromosomal complement of round-headed human spermatozoa by their injection into mouse oocytes. Rybouchkin A, et al. **Hum Reprod** 1996 Oct;11(10):2170-5

Quantification of normal head morphometry of stallion spermatozoa. Gravance CG, et al. **J Reprod Fertil** 1996 Sep;108(1):41-6

Studies on the structure of sperm heads of Eledone cirrhosa by means of CLSM linked to bioimage-oriented devices. Diaspro A, et al. **Microsc Res Tech** 1997 Feb 1;36(3):159-64

Ordered tandem arrangement of chromosomes in the sperm heads of monotreme mammals. Watson JM, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10200-5

SPERM IMMOBILIZING AGENTS

CHEMISTRY

Recombinant PSP94 (prostate secretory protein of 94 amino acids) demonstrates similar linear epitope structure as natural PSP94 protein. Xuan JW, et al. **J Cell Biochem** 1996 Oct;63(1):61-73

IMMUNOLOGY

Effects of sperm immobilizing antibodies on pregnancy outcome in infertile women treated with IVF-ET. Shibahara H, et al. **Am J Reprod Immunol** 1996 Aug; 36(2):96-100

ISOLATION & PURIFICATION

Nature's motility blockers: controlling human sperm motility machinery from the outside. Chemical characterization of a peritoneal fluid lipid that induces sperm immobilization. Keller F, et al. **Mol Hum Reprod** 1997 Mar;3(3):241-8

PHARMACOLOGY

Sperm transport and survival post-application of a new spermicide contraceptive. Advantage 24 Study Group. Sangi-Haghpeykar H, et al. **Contraception** 1996 Jun; 53(6):353-6

Nature's motility blockers: controlling human sperm motility machinery from the outside. Chemical characterization of a peritoneal fluid lipid that induces sperm immobilization. Keller F, et al. **Mol Hum Reprod** 1997 Mar;3(3):241-8

SPERM MATURATION

see related
ANTISPERMATOGENIC AGENTS

Sperm plasma membrane remodeling during spermiogenetic maturation in men: relationship among plasma membrane beta 1,4-galactosyltransferase, cytoplasmic creatine phosphokinase, and creatine phosphokinase isoform ratios. Huszar G, et al. **Biol Reprod** 1997 Apr;56(4):1020-4

Posttesticular development of spermatozoa of the tammar wallaby (Macropus eugenii). Setiadi D, et al. **J Anat** 1997 Feb;190 (Pt 2):275-88

Maturation of monkey spermatozoa in the epididymis with respect to their ability to undergo the acrosome reaction. Yeung CH, et al. **J Androl** 1996 Jul-Aug;17(4):427-32

Studies on [3H]palmitate-binding proteins of rat spermatozoa: a post-translational modification of membrane proteins by fatty acid acylation. Srivastava A, et al. **J Reprod Fertil** 1996 Nov;108(2):245-51

Temporal expression and localization of protein farnesyltransferase during spermiogenesis and posttesticular sperm maturation in the hamster. Olson GE, et al. **Mol Reprod Dev** 1997 Sep;48(1):71-6

DRUG EFFECTS

Cyclic AMP phosphodiesterase: a regulator of forward motility initiation during epididymal sperm maturation. Jaiswal BS, et al. **Biochem Cell Biol** 1996;74(5):669-74

PHYSIOLOGY

Changes in binding of lectins to epididymal, ejaculated, and capacitated spermatozoa of the rhesus monkey. Navaneetham D, et al. **Anat Rec** 1996 Jul;245(3):500-8

The role of the epididymis in the protection of spermatozoa. Hinton BT, et al. **Curr Top Dev Biol** 1996;33:61-102 (277 ref.)

Role of free L-carnitine and acetyl-L-carnitine in post-gonadal maturation of mammalian spermatozoa. Jeulin C, et al. **Hum Reprod Update** 1996 Mar-Apr;2(2):87-102 (119 ref.)

Epididymal sperm maturation proteins. Hegde UC. **Indian J Biochem Biophys** 1996 Apr;33(2):103-10 (93 ref.)

Regulation of mouse epididymal epithelium in vitro by androgens, temperature and fibroblasts. Carballada R, et al. **J Reprod Fertil** 1997 May;110(1):171-81

Sexual development in patients treated for cryptorchidism. Taskinen S, et al. **Scand J Urol Nephrol** 1997 Aug; 31(4):361-4

SPERM MATURATION BLOCKING AGENTS see **ANTISPERMATOGENIC AGENTS**

SPERM MOTILITY

see related
SPERM IMMOBILIZING AGENTS

Motility and agglutination of fowl spermatozoa in media of different amino acid content and pH value in vitro. Barna J, et al. **Acta Vet Hung** 1996;44(2):221-32

Effect of sperm motility on separation of bovine X- and Y-bearing spermatozoa by means of free-flow electrophoresis. Manger M, et al. **Andrologia** 1997 Jan-Feb; 29(1):9-15

Evaluation of the percentage of sperm motility at 24 h and sperm survival ratio for prediction of in vitro fertilization. Sukcharoen N, et al. **Andrologia** 1996 Jul-Aug;28(4):203-10

Combination of direct swim-up technique and discontinuous Percoll gradient centrifugation for sperm preparation of oligoasthenozoospermic samples. Chen SU, et al. **Arch Androl** 1996 Sep-Oct;37(2):103-9

Human sperm bioassay has potential in evaluating the quality of cumulus-oocyte complexes. Hossain AM, et al. **Arch Androl** 1996 Jul-Aug;37(1):7-10

Epididymal influence on acquisition of sperm motility in the gekkonid lizard Hemidactylus flaviviridis. Nirmal BK, et al. **Arch Androl** 1997 Sep-Oct;39(2):105-10

Regulation of fowl sperm flagellar motility by protein phosphatase type 1 and its relationship with dephosphorylation of axonemal and/or accessory cytoskeletal proteins. Ashizawa K, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):108-12

A method for preparation, storage, and activation of large populations of immotile sea urchin sperm. Bracho GE, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):59-62

Activation of sea-urchin sperm motility is accompanied by an increase in the creatine kinase exchange flux. Dorsten FA, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):411-6

Kinesin force generation measured using a centrifuge microscope sperm-gliding motility assay. Hall K, et al. **Biophys J** 1996 Dec;71(6):3467-76

Determination of motility forces of human spermatozoa using an 800 nm optical trap. König K, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jun;42(4):501-9

Hyaluronan mediates sperm motility by enhancing phosphorylation of proteins including hyaluronan binding protein. Ranganathan S, et al. **Cell Mol Biol Res** 1995; 41(5):467-76

Changes in flagellar movement of rat spermatozoa along the length of the epididymis: manual and computer-aided image analysis. Jeulin C, et al. **Cell Motil Cytoskeleton** 1996; 35(2):147-61

Morphological and kinetic changes of carp (Cyprinus carpio) spermatozoa after initiation of motility in distilled water. Perchec G, et al. **Cell Motil Cytoskeleton** 1996;35(2):113-20

Motility of cryopreserved mouse spermatozoa affected by temperature of collection and rate of thawing. Sztein JM, et al. **Cryobiology** 1997 Aug;35(1):46-52

Evaluation of the postcoital test for assessment of 'cervical factor' infertility. Oei SG, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Feb;64(2):217-20

Pregnancy and birth after intracytoplasmic sperm injection with totally immotile sperm recovered from the ejaculate. Barros A, et al. **Fertil Steril** 1997 Jun;67(6):1091-4

Failure of multitube sperm swim-up for sex preselection. De Jonge CJ, et al. **Fertil Steril** 1997 Jun;67(6):1109-14

Persistence or reappearance of nonmotile sperm after vasectomy: does it have clinical consequences? De Knijff DW, et al. **Fertil Steril** 1997 Feb;67(2):332-5

The effect of human papillomavirus infection on sperm cell motility. Lai YM, et al. **Fertil Steril** 1997 Jun;67(6):1152-5

An intrauterine insemination-ready cryopreservation method compared with sperm recovery after conventional freezing and post-thaw processing. Larson JM, et al. **Fertil Steril** 1997 Jul;68(1):143-8

High fertilization rate obtained after intracytoplasmic sperm injection with 100% nonmotile spermatozoa selected by using a simple modified hypo-osmotic swelling test. Liu J, et al. **Fertil Steril** 1997 Aug;68(2):373-5

The endurance training on hormone and semen profiles in marathon runners [letter; comment] Miller BE, et al. **Fertil Steril** 1997 Mar;67(3):585-6; discussion 586-7. Comment on: Fertil Steril 1995 Dec;64(6):1189-96.

Sperm interaction with fallopian tube apical membrane enhances sperm motility and delays capacitation. Murray SC, et al. **Fertil Steril** 1997 Aug;68(2):351-7

Peritoneal fluid from women with moderate or severe endometriosis inhibits sperm motility: the role of seminal fluid components. Oral E, et al. **Fertil Steril** 1996 Nov; 66(5):787-92

Seminal reactive oxygen species and sperm motility and morphology in men with spinal cord injury. Padron OF, et al. **Fertil Steril** 1997 Jun;67(6):1115-20

Therapeutic approach of immotile cilia syndrome by intracytoplasmic sperm injection: a case report. Papadimas J, et al. **Fertil Steril** 1997 Mar;67(3):562-5

A technique for standardization and quality control of subjective sperm motility assessments in semen analysis. Yeung CH, et al. **Fertil Steril** 1997 Jun;67(6):1156-8

Analysis of spermatozoa movement using a video imaging technique. Warchol W, et al. **Histochem Cell Biol** 1996 Nov;106(5):521-6

Prolonged survival of human spermatozoa when co-incubated with epididymal cell cultures. Akhondi MA, et al. **Hum Reprod** 1997 Mar;12(3):514-22

Changes in motility patterns during in-vitro culture of fresh and frozen/thawed testicular and epididymal spermatozoa: implications for planning treatment by intracytoplasmic sperm injection. Edirisinghe WR, et al. **Hum Reprod** 1996 Nov;11(11):2474-6

A simple method for recovering the motile spermatozoa from extremely low quality sperm samples. Fujii Y, et al. **Hum Reprod** 1997 Jun;12(6):1218-21

A detailed study of the effect of videoframe rates of 25, 30 and 60 Hertz on human sperm movement characteristics. Morris AR, et al. **Hum Reprod** 1996 Feb;11(2):304-10

Fertilizing ability of immotile spermatozoa after intracytoplasmic sperm injection. Nijs M, et al. **Hum Reprod** 1996 Oct;11(10):2180-5

The acrosome reaction response assay: a new way to identify patients in whom pentoxifylline would improve the human follicular fluid-induced acrosome reaction. Briggiler CI, et al. **Int J Androl** 1997 Apr;20(2):96-103

Influence of Escherichia coli on motility parameters of human spermatozoa in vitro. Diemer T, et al. **Int J Androl** 1996 Oct;19(5):271-7

Assessment of sperm motion characteristics in infertile renal transplant recipients using computerized analysis. Eid MM, et al. **Int J Androl** 1996 Dec;19(6):338-44

Are the characteristics of spermatozoa in the insemination medium useful for predicting in-vitro fertilization results? Parinaud J, et al. **Int J Androl** 1996 Apr;19(2):103-8

Evaluation of sperm fertilizing ability using the Sperm Quality Analyzer. Shibahara H, et al. **Int J Androl** 1997 Apr;20(2):112-7

Maturation of sperm motility in the epididymis of the common marmoset (Callithrix jacchus) and the cynomolgus monkey (Macaca fascicularis). Yeung CH, et al. **Int J Androl** 1996 Apr;19(2):113-21

The influence of semen analysis parameters on the fertility potential of infertile couples. Ayala C, et al. **J Androl** 1996 Nov-Dec;17(6):718-25

Compromised sperm protein phosphorylation after capacitation, swim-up, and zona pellucida exposure in teratospermic domestic cats. Pukazhenthi BS, et al. **J Androl** 1996 Jul-Aug;17(4):409-19

Snow leopard (Panthera uncia) spermatozoa are sensitive to alkaline pH, but motility in vitro is not influenced by protein or energy supplements. Roth TL, et al. **J Androl** 1996 Sep-Oct;17(5):558-66

Is there really a decrease in sperm parameters among healthy young men? A survey of sperm donations during 15 years. Benshushan A, et al. **J Assist Reprod Genet** 1997 Jul; 14(6):347-53

The impact of the total motile sperm count on the success of intrauterine insemination with husband's spermatozoa. Huang HY, et al. **J Assist Reprod Genet** 1996 Jan; 13(1):56-63

Calcium-dependent bidirectional power stroke of the dynein arms in sea urchin sperm axonemes. Ishijima S, et al. **J Cell Sci** 1996 Dec;109 (Pt 12):2833-42

Modulation of postthaw motility, survival, calcium uptake, and fertility of bovine sperm by female genital products. Lapointe S, et al. **J Dairy Sci** 1996 Dec;79(12):2155-62

Pregnancy after intracytoplasmic injection of immotile sperm. A case report. Wang CW, et al. **J Reprod Med** 1997 Jul;42(7):448-50

Interdoublet sliding in bovine spermatozoa: its relationship to flagellar motility and the action of inhibitory agents. Bird Z, et al. **J Struct Biol** 1996 May-Jun;116(3):418-28

The feasibility of cryopreservation of sperm harvested intraoperatively during vasectomy reversals. Belker AM, et al. **J Urol** 1997 Apr;157(4):1292-4

Sperm from spinal cord injured men lose motility faster than sperm from normal men: the effect is exacerbated at body compared to room temperature [see comments] Brackett NL, et al. **J Urol** 1997 Jun;157(6):2150-3. Comment in: J Urol 1997 Jun;157(6):2159.

Electroejaculation versus vibratory stimulation in spinal cord injured men: sperm quality and patient preference [see comments] Ohl NA, et al. **J Urol** 1997 Jun;157(6):2147-9 . Comment in: J Urol 1997 Jun;157(6):2159.

Percutaneous varicocele embolization versus surgical ligation for the treatment of infertility: changes in seminal parameters and pregnancy outcomes. Shlansky-Goldberg RD, et al. **J Vasc Interv Radiol** 1997 Sep-Oct;8(5):759-67

Cholesterol and phospholipid levels of washed and percoll gradient centrifuged mouse sperm: presence of lipids possessing inhibitory effects on sperm motility. Tanphaichitr N, et al. **Mol Reprod Dev** 1996 Feb; 43(2):187-95

Validation procedures for the Hamilton Thorne Integrated Visual Optical System sperm and cell analyzer. Douglas-Hamilton DH. **Qual Assur** 1995 Dec;4(4):340-7

Optimization of a continuous real-time computerized semen analysis system for ram sperm motility assessment, and evaluation of four methods of semen preparation. Holt WV, et al. **Reprod Fertil Dev** 1996;8(2):219-30

Regulation of the motility and metabolism of spermatozoa for storage in the epididymis of eutherian and marsupial mammals. Jones RC, et al. **Reprod Fertil Dev** 1996; 8(4):553-68 (169 ref.)

Effect of cooling and cryopreservation on sperm motility and morphology of several species of marsupial. Taggart DA, et al. **Reprod Fertil Dev** 1996;8(4):673-9

Effect of lipid peroxidation on cryopreserved semen quality in patients with testicular or nontesticular cancer. Wang Y, et al. **Urology** 1997 Sep;50(3):414-7

[Evaluation of fertilizing ability of sperm in vitro] Parinaud J, et al. **Contracept Fertil Sex** 1997 Mar;25(3):234-8 (Eng. Abstr.) **(Fre)**

[Cooling of boar spermatozoa prior to freezing and post thaw quality and evaluation of membrane state using chlortetracycline (CTC) staining] Kotzias-Bandeira E, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug; 104(8):302-6 (Eng. Abstr.) **(Ger)**

[Effect of quality markers of ejaculates of beagle dogs after frequent semen collection] Schäfer S, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Jan;104(1):26-9 (Eng. Abstr.) **(Ger)**

[The effect of complete thymic extract on motility and progressive motility of spermatozoa in asthenozoospermia] Arsenijević S, et al. **Srp Arh Celok Lek** 1996 Nov-Dec; 124(11-12):287-91 (Eng. Abstr.) **(Scc)**

DRUG EFFECTS

Elevated nitric oxide concentration in the seminal plasma of infertile males: nitric oxide inhibits sperm motility. Nobunaga T, et al. **Am J Reprod Immunol** 1996 Oct; 36(4):193-7

Influence of artificial stimulation on unprocessed and Percoll-washed cryopreserved sperm. Sharma RK, et al. **Arch Androl** 1997 May-Jun;38(3):173-9

Cyclic AMP phosphodiesterase: a regulator of forward motility initiation during epididymal sperm maturation. Jaiswal BS, et al. **Biochem Cell Biol** 1996;74(5):669-74

The motility and fertility of golden hamster sperm cultured in BSA-free medium. Uto N, et al. **Biol Cell** 1996; 88(1-2):23-8

Inhibition of flagellar beat frequency by a new anti-beta-tubulin antibody. Cosson J, et al. **Cell Motil Cytoskeleton** 1996;35(2):100-12

Synergistic effect of gramicidin and EDTA in inhibiting sperm motility and cervical mucus penetration in vitro. Bourinbaiar AS, et al. **Contraception** 1996 Dec;54(6):367-72

Alteration of human sperm kinematics in cervical mucus due to nonoxynol-9. Dunmire EN, et al. **Contraception** 1997 Apr;55(4):209-17

Sperm transport and survival post-application of a new spermicide contraceptive. Advantage 24 Study Group. Sangi-Haghpeykar H, et al. **Contraception** 1996 Jun; 53(6):353-6

Growth hormone (GH) therapy markedly increases the motility of spermatozoa and the concentration of insulin-like growth factor-I in seminal vesicle fluid in the male GH-deficient dwarf rat. Breier BH, et al. **Endocrinology** 1996 Sep;137(9):4061-4

Antibiotics: effect on cryopreserved-thawed human sperm motility in vitro. King K, et al. **Fertil Steril** 1997 Jun; 67(6):1146-51

Nitric oxide synthase inhibitor NG-monomethyl-L-arginine preserves sperm motility after swim-up. Perera DM, et al. **Fertil Steril** 1996 Nov;66(5):830-3

Mouse in vitro fertilization, embryo development and viability, and human sperm motility in substances used for human sperm preparation for assisted reproduction. Scott L, et al. **Fertil Steril** 1997 Feb;67(2):372-81

The effect of 12-myristate 13-acetate phorbol ester on human sperm hyperactivation. Zhang Z, et al. **Fertil Steril** 1997 Jun;67(6):1140-5

Effect of alpha-blockers on epididymal sperm concentration, motility and testicular productivity in the rat. Hibi H, et al. **Hinyokika Kiyo** 1996 May;42(5):357-60

Spermatotoxic effects of carbaryl in rats. Pant N, et al. **Hum Exp Toxicol** 1996 Sep;15(9):736-8

Improvement of sperm motility by the addition of progesterone to the Percoll medium during sperm purification [see comments] Andersen CY, et al. **Hum Reprod** 1995 Dec;10(12):3183-5. Comment in: Hum Reprod 1996 Feb;11(2):457-8.

The in-vitro effects of nicotine and cotinine on sperm motility. Gandini L, et al. **Hum Reprod** 1997 Apr; 12(4):727-33

Absence of glucose decreases human fertilization and sperm movement characteristics in vitro. Mahadevan MM, et al. **Hum Reprod** 1997 Jan;12(1):119-23

Factors affecting pentoxifylline stimulation of sperm kinematics in suspensions. Paul M, et al. **Hum Reprod** 1996 Sep;11(9):1929-35

Kinin-induced stimulation of bovine sperm motility and its relation to seminal plasma tissue kallikrein. Somlev B, et al. **Immunopharmacology** 1996 Jun;33(1-3):137-9

In-vitro initiation of forward motility in testicular spermatozoa. Jaiswal BS, et al. **Int J Androl** 1996 Apr; 19(2):97-102

Effect of glyceryl trinitrate on sperm motility and lipid peroxidation in normozoospermic men. Mckinney KA, et al. **Int J Androl** 1995 Dec;18(6):307-12

Stimulation of movement and acrosome reaction of human spermatozoa by PC12 liposomes encapsulating ATP. Skiba-Lahiani M, et al. **Int J Androl** 1995 Dec;18(6):287-94

The effect of bradykinin and the bradykinin antagonist Hoe 140 on kinematic parameters of human spermatozoa. Yeung CH, et al. **Int J Androl** 1996 Jun;19(3):143-9

Synchronous assessment of sperm motility and fertilizing ability in the hamster following treatment with alpha-chlorohydrin. Slott VL, et al. **J Androl** 1995 Nov-Dec;16(6):523-35

Lipid peroxidation and human sperm motility: protective role of vitamin E. Suleiman SA, et al. **J Androl** 1996 Sep-Oct; 17(5):530-7

Modulation of postthaw motility, survival, calcium uptake, and fertility of bovine sperm by magnesium and manganese. Lapointe S, et al. **J Dairy Sci** 1996 Dec;79(12):2163-9

Formation of reactive oxygen species by spermatozoa from asthenospermic patients: response to treatment with pentoxifylline. Okada H, et al. **J Urol** 1997 Jun; 157(6):2140-6

Effect of artificial stimulants on cryopreserved spermatozoa from cancer patients. Sharma RK, et al. **J Urol** 1997 Feb; 157(2):521-4

Effects of gamma-aminobutyric acid on human sperm motility and hyperactivation. Calogero AE, et al. **Mol Hum Reprod** 1996 Oct;2(10):733-8

Nature's motility blockers: controlling human sperm motility machinery from the outside. Chemical characterization of a peritoneal fluid lipid that induces sperm immobilization. Keller F, et al. **Mol Hum Reprod** 1997 Mar;3(3):241-8

Angiotensin II stimulates sperm motility. Vinson GP, et al. **Regul Pept** 1996 Dec 3;67(2):131-5

Identification of hyaluronic acid and chondroitin sulfates in human follicular fluid and their effects on human sperm motility and the outcome of in vitro fertilization. Hamamah S, et al. **Reprod Nutr Dev** 1996;36(1):43-52

Effect of prazosin on sperm transport in male rats. Solomon HM, et al. **Reprod Toxicol** 1997 Jul-Aug;11(4):627-31

Regulation of male fertility by pyrimethamine in adult mice. Kalla NR, et al. **Res Exp Med (Berl)** 1997;197(1):45-52

The inhibitory effects of gossypol on human sperm motility characteristics: possible modes of reversibility of those effects. Zavos PM, et al. **Tohoku J Exp Med** 1996 Jul; 179(3):167-75

GENETICS

Quantitative analysis of Caenorhabditis elegans sperm motility and how it is affected by mutants spe11 and unc54. Royal DC, et al. **Cell Motil Cytoskeleton** 1997;37(2):98-110

Genetic basis of sperm and testis length differences and epistatic effect on hybrid inviability and sperm motility between Drosophila simulans and D. sechellia. Joly D, et al. **Heredity** 1997 Apr;78 (Pt 4):354-62

IMMUNOLOGY

Effects of sperm immobilizing antibodies on pregnancy outcome in infertile women treated with IVF-ET. Shibahara H, et al. **Am J Reprod Immunol** 1996 Aug; 36(2):96-100

Effect of sperm-agglutinating antibodies on sperm capacitation and acrosome reaction. Bathla H, et al. **Int J Fertil Menopausal Stud** 1996 Nov-Dec;41(6):528-33

PHYSIOLOGY

Elevated nitric oxide concentration in the seminal plasma of infertile males: nitric oxide inhibits sperm motility. Nobunaga T, et al. **Am J Reprod Immunol** 1996 Oct; 36(4):193-7

Maintenance of human sperm motility and prevention of oxidative damage through co-culture incubation. Chen CS, et al. **Andrologia** 1997 Jul-Aug;29(4):227-33

Assessment of hyperactivation, acrosome reaction and motility characteristics of spermatozoa from semen of men of proven fertility and unexplained infertility. Peedicayil J, et al. **Andrologia** 1997 Jul-Aug;29(4):209-18

Fluorescence spectra from human semen and their relationship with sperm parameters. Amano T, et al. **Arch Androl** 1996 Jan-Feb;36(1):9-15

Motility stimulant effects of prostasome inclusion in swim-up medium on cryopreserved human spermatozoa. Carlsson L, et al. **Arch Androl** 1997 May-Jun;38(3):215-21

Comparison of manual microscopic and computer-assisted methods for analysis of sperm count and motility. Centola GM. **Arch Androl** 1996 Jan-Feb;36(1):1-7

Effect of peritoneal fluid on sperm motility parameters in women with endometriosis. Chen CD, et al. **Arch Androl** 1997 Jan-Feb;38(1):49-55

Comparison of motility characteristics and normal sperm morphology of human semen samples separated by percoll density gradient centrifugation. Claassens OE, et al. **Arch Androl** 1996 Mar-Apr;36(2):127-32

Effects of pentoxifylline on sperm motility in normogonadotropic asthenozoospermic men. Merino G, et al. **Arch Androl** 1997 Jul-Aug;39(1):65-9

Comparison between swim-up and glass wool column filtration of human semen in a gamete intrafallopian transfer program. Sanchez Sarmiento CA, et al. **Arch Androl** 1996 Mar-Apr;36(2):155-60

Cyclic adenosine 3',5'monophosphate-dependent regulation of protein tyrosine phosphorylation in relation to human sperm capacitation and motility. Leclerc P, et al. **Biol Reprod** 1996 Sep;55(3):684-92

Primate sperm contain protein phosphatase 1, a biochemical mediator of motility. Smith GD, et al. **Biol Reprod** 1996 Mar;54(3):719-27

Sperm motility development in the epididymis is associated with decreased glycogen synthase kinase-3 and protein phosphatase 1 activity. Vijayaraghavan S, et al. **Biol Reprod** 1996 Mar;54(3):709-18

SPERM MOTILITY

A tyrosine-phosphorylated 55-kilodalton motility-associated bovine sperm protein is regulated by cyclic adenosine 3',5'-monophosphates and calcium. Vijayaraghavan S, et al. **Biol Reprod** 1997 Jun;56(6):1450-7

Short-term inhibition of the energy metabolism affects motility but not surface properties of sperm cells. Pascual ML, et al. **Biosci Rep** 1996 Feb;16(1):35-40

Microtubule sliding, bend initiation, and bend propagation parameters of Ciona sperm flagella altered by viscous load. Brokaw CJ. **Cell Motil Cytoskeleton** 1996;33(1):6-21

Transient disruptions of axonemal structure and microtubule sliding during bend propagation by Ciona sperm flagella. Brokaw CJ. **Cell Motil Cytoskeleton** 1997;37(4):346-62

Spatially dynamic intercellular adhesion junction is coupled to a microtubule-based motility system: evidence from an in vitro binding assay. Vogl AW. **Cell Motil Cytoskeleton** 1996;34(1):1-12

Role of extracellular and intracellular pH in carp sperm motility and modifications by hyperosmosis of regulation of the Na+/H+ exchanger. Márián T, et al. **Cytometry** 1997 Apr 1;27(4):374-82

Effect of motile sperm count after swim-up on outcome of intrauterine insemination. Berg U, et al. **Fertil Steril** 1997 Apr;67(4):747-50

Oligozoospermia induced by exogenous testosterone is associated with normal functioning residual spermatozoa. Wang C, et al. **Fertil Steril** 1997 Jul;68(1):149-53

Influence of co-culture with established human endometrial epithelial and stromal cell lines on sperm movement characteristics. Guerin JF, et al. **Hum Reprod** 1997 Jun; 12(6):1197-202

Variable kinematics of capacitating human spermatozoa. Mortimer ST, et al. **Hum Reprod** 1995 Dec;10(12):3178-82

Statement on the general reduction in sperm quality. Comhaire F, et al. **Int J Androl** 1995 Dec;18 Suppl 2:1-2

Neuronal input from the inferior mesenteric ganglion (IMG) affects sperm transport within the rat cauda epididymis. Ricker DD, et al. **Int J Androl** 1996 Dec;19(6):371-6

Influence of fibronectin on the motility of human spermatozoa. Wennemuth G, et al. **Int J Androl** 1997 Feb; 20(1):10-6

Vaginal lubricants for the infertile couple: effect on sperm activity. Kutteh WH, et al. **Int J Fertil Menopausal Stud** 1996 Jul-Aug;41(4):400-4

There is no relationship between concentration, motility and vacuolated cells. Aktaş S, et al. **Int Urol Nephrol** 1996; 28(6):819-29

Evaluation of the effect of the absence of sperm with rapid and linear progressive motility on subsequent pregnancy rates following intrauterine insemination or in vitro fertilization. Bollendorf A, et al. **J Androl** 1996 Sep-Oct; 17(5):550-7

Objectively measured boar sperm motility parameters correlate with the outcomes of on-farm inseminations: results of two fertility trials. Holt C, et al. **J Androl** 1997 May-Jun;18(3):312-23

Fertilizing capacity of rat spermatozoa is correlated with decline in straight-line velocity measured by continuous computer-aided sperm analysis: epididymal rat spermatozoa from the proximal cauda have a greater fertilizing capacity in vitro than those from the distal cauda or vas deferens. Moore HD, et al. **J Androl** 1996 Jan-Feb; 17(1):50-60

How does poor motility alter sperm fertilizing ability? Olds-Clarke P. **J Androl** 1996 May-Jun;17(3):183-6 (17 ref.)

Hyperactivated motility in sperm. Suarez SS. **J Androl** 1996 Jul-Aug;17(4):331-5 (39 ref.)

Coculture of human spermatozoa with reproductive tract cell monolayers can enhance sperm functions better than coculture with Vero cell monolayers. Lai YM, et al. **J Assist Reprod Genet** 1996 May;13(5):417-22

Protein kinase A-anchoring inhibitor peptides arrest mammalian sperm motility. Vijayaraghavan S, et al. **J Biol Chem** 1997 Feb 21;272(8):4747-52

Axonemal tubulin polyglycylation probed with two monoclonal antibodies: widespread evolutionary distribution, appearance during spermatozoan maturation and possible function in motility. Bré MH, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):727-38

Motility of spermatozoa in hydrosalpingeal and follicular fluid of pigs. Nichol R, et al. **J Reprod Fertil** 1997 May; 110(1):79-86

Effects of extracellular environment on the osmotic signal transduction involved in activation of motility of carp spermatozoa. Perchec Poupard G, et al. **J Reprod Fertil** 1997 Jul;110(2):315-27

Poor semen quality in Irish wolfhounds: a clinical, hormonal and spermatological study. Dahlbom M, et al. **J Small Anim Pract** 1995 Dec;36(12):547-52

Nature's motility blockers: controlling human sperm motility machinery from the outside. Chemical characterization of a peritoneal fluid lipid that induces sperm immobilization. Keller F, et al. **Mol Hum Reprod** 1997 Mar;3(3):241-8

Nitric oxide synthase and nitrite production in human spermatozoa: evidence that endogenous nitric oxide is beneficial to sperm motility. Lewis SE, et al. **Mol Hum Reprod** 1996 Nov;2(11):873-8

The role of phosphocreatine kinase in the motility of human spermatozoa supported by different metabolic substrates. Yeung CH, et al. **Mol Hum Reprod** 1996 Aug;2(8):591-6

Changes in the motility patterns of spermatozoa from the rabbit epididymis as assessed by computer-aided sperm motion analysis. Pérez-Sánchez F, et al. **Mol Reprod Dev** 1996 Nov;45(3):364-71

Increased fecundity resulting from semen donor selection based upon in vitro sperm motility. Froman DP, et al. **Poult Sci** 1997 Jan;76(1):73-7

Objective measurement of sperm motility based upon sperm penetration of Accudenz. Froman DP, et al. **Poult Sci** 1996 Jun;75(6):776-84

Influence of hyperthyroidism induced at prepuberty on the epididymal lipids, number and motility of spermatozoa in rats. Kumar PN, et al. **Reprod Fertil Dev** 1996;8(3):373-8

Quantitative and qualitative characteristics of frozen-thawed bovine spermatozoa recovered via a conventional and a standardized swim-up technique. Correa JR, et al. **Tohoku J Exp Med** 1997 Feb;181(2):267-74

Sperm motility characteristics and pregnancy outcome of artificial insemination with husband's semen for male infertility. Terada Y, et al. **Tohoku J Exp Med** 1995 Dec; 177(4):337-41

Effect of total and ionized calcium levels of seminal fluid on sperm motility. Kiliç S, et al. **Urol Int** 1996;56(4):215-8

Effects of chronic renal failure on the sperm fertilizing capacity. Yamamoto Y, et al. **Urol Int** 1997;58(2):105-7

Age and hourly related changes of serum testosterone and spermiogram of prepubertal bulls fed two levels of nutrition. Rekwot PI, et al. **Vet J** 1997 May;153(3):341-7

RADIATION EFFECTS

Comments on "Is sperm motility maturation affected by static magnetic fields?" [letter] Lerchl A. **Environ Health Perspect** 1997 Jul;105(7):689

Is sperm motility maturation affected by static magnetic fields? Tablado L, et al. **Environ Health Perspect** 1996 Nov; 104(11):1212-6

SPERM NUMBER see **SPERM COUNT**

SPERM-OVUM INTERACTIONS

Results of intracytoplasmic sperm injection in relation to indication. Ziebe S, et al. **Acta Obstet Gynecol Scand** 1997 Apr;76(4):335-9

Analysis of pre-ovulatory changes in cervical mucus hydration and sperm penetrability. Katz DF, et al. **Adv Contracept** 1997 Jun-Sep;13(2-3):143-51

Sperm binding and ultrasound changes after operative repair of varicocele: correlation with fecundity. Hauser R, et al. **Andrologia** 1997 May-Jun;29(3):145-7

The influence of sperm/zona pellucida collision rates on zona binding. Ozgür K, et al. **Andrologia** 1996 Sep-Oct; 28(5):261-5

Correlation between sperm penetration into the human zona pellucida and in vitro fertilization rates. Yogev L, et al. **Andrologia** 1997 Mar-Apr;29(2):71-5

Human sperm bioassay has potential in evaluating the quality of cumulus-oocyte complexes. Hossain AM, et al. **Arch Androl** 1996 Jul-Aug;37(1):7-10

Adherence of human spermatozoa to trypsin-modified hamster ova. Mishima M. **Arch Androl** 1997 Mar-Apr; 38(2):113-26

The fertilization layer mediated block to polyspermy in Xenopus laevis: isolation of the cortical granule lectin ligand. Quill TA, et al. **Arch Biochem Biophys** 1996 Sep 15;333(2):326-32

The predictive value of the sperm-cervical mucus interaction test on the outcome of in vitro fertilization and ovulation induction combined with intrauterine insemination. Abu-Heija AT, et al. **Aust N Z J Obstet Gynaecol** 1997 May;37(2):232-4

Binding of mouse sperm to beta-galactose residues on egg zona pellucida and asialofetuin-coupled beads. Mori E, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):95-9

Protein involvement in the fusion between the equatorial segment of acrosome-reacted human spermatozoa and liposomes. Arts EG, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):191-8

The motility and fertility of golden hamster sperm cultured in BSA-free medium. Uto N, et al. **Biol Cell** 1996; 88(1-2):23-8

Sperm surface protein PH-20 is bifunctional: one activity is a hyaluronidase and a second, distinct activity is required in secondary sperm-zona binding. Hunnicutt GR, et al. **Biol Reprod** 1996 Jul;55(1):80-6

Developmental changes in the intracellular Ca2+ release mechanisms in porcine oocytes. Macháty Z, et al. **Biol Reprod** 1997 Apr;56(4):921-30

Oocyte penetration by fresh or stored diluted boar spermatozoa before and after in vitro capacitation treatments. Martinez EA, et al. **Biol Reprod** 1996 Jul; 55(1):134-40

Characterization of the binding of recombinant mouse sperm fertilin beta subunit to mouse eggs: evidence for adhesive activity via an egg beta1 integrin-mediated interaction. Evans JP, et al. **Dev Biol** 1997 Jul 1;187(1):79-93

Characterization of the binding of recombinant mouse sperm fertilin alpha subunit to mouse eggs: evidence for function as a cell adhesion molecule in sperm-egg binding. Evans JP, et al. **Dev Biol** 1997 Jul 1;187(1):94-106

Surface localization of the sea urchin egg receptor for sperm. Giusti AF, et al. **Dev Biol** 1997 Apr 1;184(1):10-24

Fertilization stimulates an increase in inositol trisphosphate and inositol lipid levels in Xenopus eggs. Snow P, et al. **Dev Biol** 1996 Nov 25;180(1):108-18

Structural change of the endoplasmic reticulum during fertilization: evidence for loss of membrane continuity using the green fluorescent protein. Terasaki M, et al. **Dev Biol** 1996 Nov 1;179(2):320-8

Aminopeptidase-like protease released from oocytes affects oocyte surfaces and suppresses the acrosome reaction in establishment of polyspermy block in oocytes of the mussel Mytilus edulis. Togo T, et al. **Dev Biol** 1997 Feb 15; 182(2):219-27

Effects of calcium-BAPTA buffers and the calmodulin antagonist W-7 on mouse egg activation. Xu Z, et al. **Dev Biol** 1996 Dec 15;180(2):594-604

Sperm-egg fusion is the prelude to the initial Ca2+ increase at fertilization in the mouse. Lawrence Y, et al. **Development** 1997 Jan;124(1):233-41

Clomiphene citrate challenge test in the assessment of ovarian reserve before controlled ovarian hyperstimulation for intracytoplasmic sperm injection. Kahraman S, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jun;73(2):177-82

The chemotactic attraction of human sperms to the oocyte: a maturing concept [editorial] Ben-Shlomo I, et al. **Fertil Steril** 1996 Jul;66(1):13-4

Changes in protamine 1 distribution in human sperm nucleus during in vitro sperm-oocyte interaction: an immunoelectron microscopic study. Colleu D, et al. **Fertil Steril** 1997 Jan;67(1):123-8

Inhibition of G protein in human sperm and its influence on acrosome reaction and zona pellucida binding. Franken DR, et al. **Fertil Steril** 1996 Dec;66(6):1009-11

Selectivity of the human sperm-zona pellucida binding process to sperm head morphometry. Garrett C, et al. **Fertil Steril** 1997 Feb;67(2):362-71

Polymerase chain reaction enzyme-linked immunosorbent assay detection of mycoplasma consensus gene in sperm with low oocyte penetration capacity. Kalugdan T, et al. **Fertil Steril** 1996 Nov;66(5):793-7

Induction of acrosome reaction in human spermatozoa accelerates the time of pronucleus formation of hamster oocytes after intracytoplasmic sperm injection. Lee DR, et al. **Fertil Steril** 1997 Feb;67(2):315-20

High fertilization and pregnancy rates after intracytoplasmic sperm injection in patients with disordered zona pellucida-induced acrosome reaction. Liu DY, et al. **Fertil Steril** 1997 May;67(5):955-8

Clinical significance of human sperm-zona pellucida binding. Oehninger S, et al. **Fertil Steril** 1997 Jun;67(6):1121-7

Absence of block to polyspermy at the human oolemma. Wolf JP, et al. **Fertil Steril** 1997 Jun;67(6):1095-102

Superoxide dismutase in human sperm suspensions: relationship with cellular composition, oxidative stress, and sperm function. Aitken RJ, et al. **Free Radic Biol Med** 1996; 21(4):495-504

Characterization of a human glycoprotein with a potential role in sperm-egg fusion: cDNA cloning, immunohistochemical localization, and chromosomal assignment of the gene (AEGL1). Hayashi M, et al. **Genomics** 1996 Mar 15;32(3):367-74

Sea urchin egg receptor for sperm: the oligosaccharide chains stabilize sperm binding. Dhume ST, et al. **Glycobiology** 1996 Jan;6(1):59-64

Mitosis in the human embryo: the vital role of the sperm centrosome (centriole). Sathananthan AH. **Histol Histopathol** 1997 Jul;12(3):827-56 (86 ref.)

The role of carbohydrate residues in mammalian fertilization. Shalgi R, et al. **Histol Histopathol** 1997 Jul;12(3):813-22 (105 ref.)

A comparison of three methods for detecting the acrosome reaction in human spermatozoa. Amin AH, et al. **Hum Reprod** 1996 Apr;11(4):741-5

Reducing the time of spermatozoa-oocyte interaction in human IVF improves the implantation rate [letter; comment] Bergh C, et al. **Hum Reprod** 1996 Aug; 11(8):1809; discussion 1810. Comment on: Hum Reprod 1996 Jan;11(1):166-71.

Intracytoplasmic sperm injection in Scandinavia. Hamberger L. **Hum Reprod** 1996 Sep;11 Suppl 1:77-9; discussion 81-5

Intracytoplasmic sperm injection (ICSI) and chromosomally abnormal spermatozoa. In't Veld PA, et al. **Hum Reprod** 1997 Apr;12(4):752-4

Microdeletions of the Y chromosome and intracytoplasmic sperm injection: from gene to clinic. Kremer JA, et al. **Hum Reprod** 1997 Apr;12(4):687-91

Length of the follicular phase, time of insemination, coital rate and the sex of offspring. Martin JF. **Hum Reprod** 1997 Mar;12(3):611-6 (39 ref.)

Analysis of human sperm-derived pronuclei by three-colour fluorescent in-situ hybridization. Martinez-Pasarell O, et al. **Hum Reprod** 1997 Apr;12(4):641-5

Intracytoplasmic sperm injection: results from Norfolk, USA. Oehninger S. **Hum Reprod** 1996 Sep;11 Suppl 1:73-5; discussion 81-5

Intracytoplasmic sperm injection combined with preimplantation genetic diagnosis for the prevention of recurrent gestational trophoblastic disease. Reubinoff BE, et al. **Hum Reprod** 1997 Apr;12(4):805-8

Analysis of the oocyte activating capacity and chromosomal complement of round-headed human spermatozoa by their injection into mouse oocytes. Rybouchkin A, et al. **Hum Reprod** 1996 Oct;11(10):2170-5

Determination of the parent of origin in nine cases of

prenatally detected chromosome aberrations found after intracytoplasmic sperm injection. Van Opstal D, et al. **Hum Reprod** 1997 Apr;12(4):682-6

The development of intracytoplasmic sperm injection. Van Steirteghem A, et al. **Hum Reprod** 1996 Sep;11 Suppl 1:59-72; discussion 81-5

Human follicular fluid inhibits the binding of human spermatozoa to zona pellucida in vitro. Yao YQ, et al. **Hum Reprod** 1996 Dec;11(12):2674-80

TEST-yolk media and sperm quality. Jeyendran RS, et al. **Hum Reprod Update** 1995 Jan;1(1):73-9 (60 ref.)

Nuclear and cytoplasmic dynamics of sperm penetration, pronuclear formation and microtubule organization during fertilization and early preimplantation development in the human. Van Blerkom J, et al. **Hum Reprod Update** 1995 Sep;1(5):429-61

Reactive oxygen species and human spermatozoa: physiology and pathology. Griveau JF, et al. **Int J Androl** 1997 Apr; 20(2):61-9 (79 ref.)

Stimulation of movement and acrosome reaction of human spermatozoa by PC12 liposomes encapsulating ATP. Skiba-Lahiani M, et al. **Int J Androl** 1995 Dec;18(6):287-94

Cryopreservation reduces the ability of equine spermatozoa to attach to oviductal epithelial cells and zonae pellucidae in vitro. Dobrinski I, et al. **J Androl** 1995 Nov-Dec; 16(6):536-42

Aging, hyaluronidase removal of the cumulus, and microinjection do not affect the sperm binding potential of human oocytes. Barros A, et al. **J Assist Reprod Genet** 1997 Feb;14(2):97-101

Structure of the main saccharide chain in the acrosome reaction-inducing substance of the starfish, Asterias amurensis. Koyota S, et al. **J Biol Chem** 1997 Apr 18; 272(16):10372-6

The mouse tectorins. Modular matrix proteins of the inner ear homologous to components of the sperm-egg adhesion system. Legan PK, et al. **J Biol Chem** 1997 Mar 28; 272(13):8791-801

Site-directed mutagenesis of rabbit proacrosin. Identification of residues involved in zona pellucida binding. Richardson RT, et al. **J Biol Chem** 1996 Sep 27;271(39):24069-74

Expression of a P-selectin ligand in zona pellucida of porcine oocytes and P-selectin on acrosomal membrane of porcine sperm cells. Potential implications for their involvement in sperm-egg interactions. Geng JG, et al. **J Cell Biol** 1997 May 5;137(3):743-54

In vitro penetration into bovine oocytes and zona-free hamster oocytes by bull spermatozoa treated with liposomes. Truelson SL, et al. **J Dairy Sci** 1996 Jun; 79(6):991-9

Membrane interaction of synthetic peptides related to the putative fusogenic region of PH-30 alpha, a protein in sperm-egg fusion. Niidome T, et al. **J Pept Res** 1997 Jun; 49(6):563-9

Characterization and application of an avian in vitro spermatozoa-egg interaction assay using the inner perivitelline layer from laid chicken eggs. Robertson L, et al. **J Reprod Fertil** 1997 Jul;110(2):205-11

Induction of cortical granule exocytosis of pig oocytes by spermatozoa during meiotic maturation. Wang WH, et al. **J Reprod Fertil** 1997 Mar;109(2):247-55

Influence of bovine ampullary and isthmic oviductal fluid on sperm-egg binding and fertilization in vitro. Way AL, et al. **J Reprod Fertil** 1997 Jan;109(1):95-101

Sperm-associated protein candidates for primary zona pellucida-binding molecules: structure-function correlations of boar spermadhesins. Töpfer-Petersen E, et al. **J Reprod Fertil Suppl** 1996;50:55-61 (44 ref.)

Binding of recombinant pig zona pellucida protein 1 (ZP1) to acrosome-reacted spermatozoa. Tsubamoto H, et al. **J Reprod Fertil Suppl** 1996;50:63-7

Sperm competition games: inter- and intra-species results of a continuous external fertilization model. Ball MA, et al. **J Theor Biol** 1997 Jun 21;186(4):459-66

Apoptosis in Xenopus egg extracts. Kornbluth S. **Methods Enzymol** 1997;283:600-14

Preparation of clam oocyte extracts for cell cycle studies. Ruderman JV, et al. **Methods Enzymol** 1997;283:614-22

Effects of protein kinase C activation and inhibition on sperm-, thimerosal-, and ryanodine-induced calcium responses of human oocytes. Sousa M, et al. **Mol Hum Reprod** 1996 Sep;2(9):699-708

The role of ryanodine-sensitive Ca2+ stores in the Ca2+ oscillation machine of human oocytes. Sousa M, et al. **Mol Hum Reprod** 1996 Apr;2(4):265-72

How and why spermatozoa cause calcium oscillations in mammalian oocytes. Swann K, et al. **Mol Hum Reprod** 1996 Jun;2(6):388-90 (42 ref.)

Spermatozoa lacking acrosin protein show delayed fertilization. Adham IM, et al. **Mol Reprod Dev** 1997 Mar; 46(3):370-6

Binding of boar spermatozoa to porcine oocytes: effect of low molecular weight 17-kDa protein. Capková J, et al. **Mol Reprod Dev** 1997 Feb;46(2):168-75

Molecular cloning and characterization of rat sperm surface antigen 2B1, a glycoprotein implicated in sperm-zona binding. Hou ST, et al. **Mol Reprod Dev** 1996 Oct; 45(2):193-203

Changes of intracellular free calcium during intracytoplasmic sperm injection. Leybaert L, et al. **Mol Reprod Dev** 1996 Feb;43(2):256-60

Hyaluronidase activity of macaque sperm assessed by an in vitro cumulus penetration assay. Meyers SA, et al. **Mol Reprod Dev** 1997 Mar;46(3):392-400

Analysis of fertilization and polyspermy in serotonin-spawned eggs of the zebra mussel, Dreissena polymorpha. Misamore M, et al. **Mol Reprod Dev** 1996 Feb;43(2):205-16

Trypsin-like enzymes during fertilization in the shrimp Rhynchocinetes typus. Rios M, et al. **Mol Reprod Dev** 1997 Apr;46(4):581-6

A live birth from intracytoplasmic injection of a testicular spermatozoon. Yamamoto M, et al. **Nagoya J Med Sci** 1997 Mar;60(1-2):31-5

The male contribution to broiler breeder heat-induced infertility as determined by sperm-egg penetration and sperm storage within the hen's oviduct. McDaniel CD, et al. **Poult Sci** 1996 Dec;75(12):1546-54

Misconceptions about mitochondria and mammalian fertilization: implications for theories on human evolution. Ankel-Simons F, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26;93(24):13859-63

Activation of mouse sperm T-type Ca2+ channels by adhesion to the egg zona pellucida. Arnoult C, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13004-9

Sperm nuclear envelope: breakdown of intrinsic envelope and de novo formation in hamster oocytes or eggs. Usui N, et al. **Zygote** 1997 Feb;5(1):35-46

[The intracytoplasmatic spermatozoa injection--the way out of the "male fertility crisis"?] Michelmann HW. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):384-6 (14 ref.) (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Mapping of epitopes on porcine zona pellucida-3 alpha by monoclonal antibodies inhibiting oocyte-sperm interaction. Gupta SK, et al. **Biol Reprod** 1996 Aug;55(2):410-5

Inhibition of monkey sperm hyaluronidase activity and heterologous cumulus penetration by flavonoids. Li MW, et al. **Biol Reprod** 1997 Jun;56(6):1383-9

Reactive oxygen species block sperm-egg fusion via oxidation of sperm sulfhydryl proteins in mice. Mammoto A, et al. **Biol Reprod** 1996 Nov;55(5):1063-8

Effect of casein phospho peptides and Ca2+ on penetration of boar spermatozoa into pig oocytes matured in vitro. Mori T, et al. **Biol Reprod** 1996 Aug;55(2):364-9

Enhancement of fertilization by piperine in hamsters. Piyachaturawat P, et al. **Cell Biol Int** 1997 Jul;21(7):405-9

Synergistic effect of gramicidin and EDTA in inhibiting sperm motility and cervical mucus penetration in vitro. Bourinbaiar AS, et al. **Contraception** 1996 Dec;54(6):367-72

Antibiotics: effect on cryopreserved-thawed human sperm motility in vitro. King K, et al. **Fertil Steril** 1997 Jun; 67(6):1146-51

Progesterone, acrosome reaction and the use of a CD46 antibody [letter; comment] Fénichel P, et al. **Hum Reprod** 1996 Sep;11(9):2067-8. Comment on: Hum Reprod 1996 Jan;11(1):121-6.

The paradoxical effects of pentoxifylline on the binding of spermatozoa to the human zona pellucida. Paul M, et al. **Hum Reprod** 1996 Apr;11(4):814-9

Diversity of the blocking effects of antisperm antibodies on fertilization in human and mouse. Shibahara H, et al. **Hum Reprod** 1996 Dec;11(12):2595-9

Hydrogen hexachloroplatinate induces the acrosome reaction in human spermatozoa. Köhn FM, et al. **Int J Androl** 1995 Dec;18(6):321-5

Hyaluronic acid enhances the zona pellucida-induced acrosome reaction of macaque sperm. Vandevoort CA, et al. **J Androl** 1997 Jan-Feb;18(1):1-5

Sulfated polysaccharides from the egg jelly layer are species-specific inducers of acrosomal reaction in sperms of sea urchins. Alves AP, et al. **J Biol Chem** 1997 Mar 14;272(11):6965-71

Male pronuclear formation and early embryonic development of hamster oocytes matured in vitro with gonadotrophins, amino acids and cysteamine. Kito S, et al. **J Reprod Fertil** 1997 May;110(1):35-46

Inhibition of sperm-zona binding by suramin, a potential 'lead' compound for design of new anti-fertility agents. Jones R, et al. **Mol Hum Reprod** 1996 Aug;2(8):597-605

Effects of caffeine and dbcAMP on zona pellucida penetration by epididymal spermatozoa of cynomolgus monkeys (Macaca fascicularis). Mahony MC, et al. **Mol Reprod Dev** 1996 Apr;43(4):530-5

Binding of spermatozoa to the perivitelline layer in the presence of a protease inhibitor. Kuroki M, et al. **Poult Sci** 1997 May;76(5):748-52

Penetration of concanavalin-A-treated Chinese hamster oocytes by golden hamster spermatozoa in vitro, and chromosome analysis of hybrid 1-cell zygotes. Watanabe S, et al. **Zygote** 1996 Aug;4(3):167-72

[The future of male contraception: immunocontraception by preventing gamete interaction] Hamamah S, et al. **Contracept Fertil Sex** 1997 Feb;25(2):136-40 (37 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Genomic organization of the mouse fertilin beta gene that encodes an ADAM family protein active in sperm-egg fusion. Cho C, et al. **Dev Genet** 1997;20(4):320-8

[The problem of breeding for fertility] Jansen S, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Oct;103(10):414-6 (14 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Expression of CD15 (Lewisx) antigen on human sperm and its role in sperm-egg interaction. D'Cruz OJ, et al. **Am J Reprod Immunol** 1997 Feb;37(2):172-83

Occurrence of the interference of sperm-associated antibodies on sperm fertilizing ability as evaluated by the sperm-zona pellucida binding test and by the TEST-yolk buffer enhanced sperm penetration assay. Francavilla F, et al. **Am J Reprod Immunol** 1997 Mar;37(3):267-74

Interference of antisperm antibodies with the induction of the acrosome reaction by zona pellucida (ZP) and its relationship with the inhibition of ZP binding. Francavilla F, et al. **Fertil Steril** 1997 Jun;67(6):1128-33

Anti-bull sperm monoclonal antibodies: II. Binding changes during capacitation and influence on sperm-zona interactions in vitro. Ambrose JD, et al. **J Androl** 1996 Sep-Oct;17(5):579-86

Fertilization antigen-1: cDNA cloning, testis-specific expression, and immunocontraceptive effects. Zhu X, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4704-9

[The future of male contraception: immunocontraception by preventing gamete interaction] Hamamah S, et al. **Contracept Fertil Sex** 1997 Feb;25(2):136-40 (37 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

A survey of four years of experience with intracytoplasmic sperm injection. Ubaldi F, et al. **Acta Eur Fertil** 1995 Jan-Feb;26(1):7-11

The effect of sperm preparation on the timing of penetration in bovine in vitro fertilization. Rosenkranz C, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):47-53

Fertility of sperm from a tetraparental chimeric bull. Sumantri C, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):35-45

The hemizona assay: a simplified technique. Janssen M, et al. **Arch Androl** 1997 Mar-Apr;38(2):127-31

The mammalian acrosome reaction: gateway to sperm fusion with the oocyte? Allen CA, et al. **Bioessays** 1997 Mar; 19(3):241-7 (46 ref.)

Mammalian sperm-egg fusion: the development of rat oolemma fusibility during oogenesis involves the appearance of binding sites for sperm protein "DE". Cohen DJ, et al. **Biol Reprod** 1996 Jul;55(1):200-6

Acrosome-intact boar spermatozoa initiate binding to the homologous zona pellucida in vitro. Fazeli A, et al. **Biol Reprod** 1997 Feb;56(2):430-8

Reduction of sperm cholesterol:phospholipid ratio is a possible mechanism for enhancement of human sperm binding to the zona pellucida following incubation with phosphatidylcholine liposomes. Gamzu R, et al. **Biol Reprod** 1997 Sep;57(3):539-46

Fertilization and development of mouse oocytes injected with isolated sperm heads. Kuretake S, et al. **Biol Reprod** 1996 Oct;55(4):789-95

Cell-cell interactions related to reproductive biology: report of National Institutes of Health Workshop, June 11, 1995, Bethesda, Maryland. Leszczynski DE, et al. **Biol Reprod** 1996 Jun;54(6):1430-3

Why did the sperm cross the cumulus? To get to the oocyte. Functions of the sperm surface proteins PH-20 and fertilin in arriving at, and fusing with, the egg. Myles DG, et al. **Biol Reprod** 1997 Feb;56(2):320-7 (58 ref.)

Glucose participates in sperm-oocyte fusion in the mouse. Urner F, et al. **Biol Reprod** 1996 Oct;55(4):917-22

Interaction of acrosome-reacted macaque sperm with the macaque zona pellucida. VandeVoort CA, et al. **Biol Reprod** 1997 May;56(5):1307-16

Quantified analysis of cortical granule distribution and exocytosis of porcine oocytes during meiotic maturation and activation. Wang WH, et al. **Biol Reprod** 1997 Jun; 56(6):1376-82

Biochemical and molecular characterization of bovine fertilin alpha and beta (ADAM 1 and ADAM 2): a candidate sperm-egg binding/fusion complex. Waters SI, et al. **Biol Reprod** 1997 May;56(5):1245-54

Early steps of sperm-egg interactions during mammalian fertilization. Barros C, et al. **Cell Biol Int** 1996 Jan; 20(1):33-9 (49 ref.)

Sperm competition: evolution and mechanisms. Birkhead TR. **Curr Top Dev Biol** 1996;33:103-58 (163 ref.)

Ion channels: key elements in gamete signaling. Darszon A, et al. **Curr Top Dev Biol** 1996;34:117-67 (448 ref.)

Paternal investment and intracellular sperm-egg interactions during and following fertilization in Drosophila. Karr TL. **Curr Top Dev Biol** 1996;34:89-115 (90 ref.)

Molecular mechanisms of gamete recognition in sea urchin fertilization. Ohlendieck K, et al. **Curr Top Dev Biol** 1996; 32:39-58 (67 ref.)

Transforming sperm nuclei into male pronuclei in vivo and in vitro. Poccia D, et al. **Curr Top Dev Biol** 1996;34:25-88 (250 ref.)

Fertilization and development in humans. Trounson A, et al. **Curr Top Dev Biol** 1996;32:59-101 (172 ref.)

The role of localized cell surface-associated glycoproteins during fertilization in the hydrozoan Aequorea. Freeman G. **Dev Biol** 1996 Oct 10;179(1):17-26

The ability to organize sperm DNA into functional chromatin is acquired during meiotic maturation in murine oocytes. McLay DW, et al. **Dev Biol** 1997 Jun 1;186(1):73-84

SPERM–OVUM INTERACTIONS

Mapping sperm binding domains on the sea urchin egg receptor for sperm. Stears RL, et al. **Dev Biol** 1997 Jul 15;187(2):200–8

Xenopus laevis sperm–egg adhesion is regulated by modifications in the sperm receptor and the egg vitelline envelope. Tian J, et al. **Dev Biol** 1997 Jul 15;187(2):143–53

Effects of calcium–BAPTA buffers and the calmodulin antagonist W–7 on mouse egg activation. Xu Z, et al. **Dev Biol** 1996 Dec 15;180(2):594–604

Cortical granules of the sea urchin translocate early in oocyte maturation. Berg LK, et al. **Development** 1997 May; 124(9):1845–50

Identification of an N–glycosylated region of pig zona pellucida glycoprotein ZPB that is involved in sperm binding. Yonezawa N, et al. **Eur J Biochem** 1997 Aug 15; 248(1):86–92

Ascidian interspecific fertilization. III. Ultrastructural investigations of sperm–egg interaction. Patricolo E, et al. **Eur J Morphol** 1995 Nov;33(5):433–42

The influence of sera, follicular fluids and seminal plasma on human sperm–zona pellucida binding. Huyser C, et al. **Hum Reprod** 1997 Apr;12(4):792–9

Micromorphometry and spermatozoa binding patterns of fertilized and unfertilized human oocytes after in–vitro fertilization. Michelmann HW, et al. **Hum Reprod** 1995 Dec;10(12):3154–60

Sperm–zona binding and sperm–oocyte penetration analysed by DNA fluorescence: a test for gamete quality after in–vitro fertilization. van Wissen B, et al. **Hum Reprod** 1995 Dec;10(12):3218–25

The human sperm acrosome reaction: physiology and regulatory mechanisms. An update. Brucker C, et al. **Hum Reprod Update** 1995 Jan;1(1):51–62 (103 ref.)

The acrosome reaction response assay: a new way to identify patients in whom pentoxifylline would improve the human follicular fluid–induced acrosome reaction. Briggiler CI, et al. **Int J Androl** 1997 Apr;20(2):96–103

Use of peanut agglutinin to assess the acrosomal status and the zona pellucida–induced acrosome reaction in stallion spermatozoa. Cheng FP, et al. **J Androl** 1996 Nov–Dec; 17(6):674–82

Calcium release at fertilization in starfish eggs is mediated by phospholipase Cgamma. Carroll DJ, et al. **J Cell Biol** 1997 Sep 22;138(6):1303–11

Gamete interactions in Xenopus laevis: identification of sperm binding glycoproteins in the egg vitelline envelope. Tian J, et al. **J Cell Biol** 1997 Mar 10;136(5):1099–108

A role for the disintegrin domain of cyritestin, a sperm surface protein belonging to the ADAM family, in mouse sperm–egg plasma membrane adhesion and fusion. Yuan R, et al. **J Cell Biol** 1997 Apr 7;137(1):105–12

Distinct egg membrane vesicles differing in binding and fusion properties contribute to sea urchin male pronuclear envelopes formed in vitro. Collas P, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1275–83

Role of phospholipase A2 in mammalian sperm–egg fusion: development of hamster oolemma fusibility by lysophosphatidylcholine. Riffo MS, et al. **J Exp Zool** 1997 Sep 1;279(1):81–8

Role of hypo–osmotic sperm swelling test in assisted reproduction. Datta S, et al. **J Indian Med Assoc** 1996 Dec; 94(12):440–2

Macaque sperm fusion with zona–free hamster oocytes. VandeVoort CA, et al. **J Med Primatol** 1996 Oct; 25(5):356–60

Effect of homologous and heterologous seminal plasma on the fertilizing ability of ejaculated bull spermatozoa assessed by penetration of zona–free bovine oocytes. Henault MA, et al. **J Reprod Fertil** 1996 Nov; 108(2):199–204

The role of carbohydrate in sperm–ZP3 adhesion. Chapman NR, et al. **Mol Hum Reprod** 1996 Oct;2(10):767–74 (74 ref.)

P–selectin is expressed on the oolemma of human and hamster oocytes following sperm adhesion and is also detected on the equatorial region of acrosome–reacted human spermatozoa. Fusi FM, et al. **Mol Hum Reprod** 1996 May; 2(5):341–7

Is vitronectin the velcro that binds the gametes together? Fusi FM, et al. **Mol Hum Reprod** 1996 Nov;2(11):859–66

Low expression of adhesion molecules and matrix proteins in patients showing poor penetration in zona–free hamster oocytes. Henkel R, et al. **Mol Hum Reprod** 1996 May; 2(5):335–9

Glycosidic residues involved in human sperm–zona pellucida binding in vitro. Miranda PV, et al. **Mol Hum Reprod** 1997 May;3(5):399–404

Human sperm cytosolic factor triggers Ca2+ oscillations and overcomes activation failure of mammalian oocytes. Palermo GD, et al. **Mol Hum Reprod** 1997 Apr;3(4):367–74

Calcium responses of human oocytes after intracytoplasmic injection of leukocytes, spermatocytes and round spermatids. Sousa M, et al. **Mol Hum Reprod** 1996 Nov; 2(11):853–7

Alternative pathways of acrosome reaction induction [letter] Tesarik J. **Mol Hum Reprod** 1996 Oct;2(10):813

Sperm factor: what is it and what does it do? Wilding M, et al. **Mol Hum Reprod** 1997 Mar;3(3):269–73 (74 ref.)

Sperm–egg interaction in the painted frog (Discoglossus pictus): an ultrastructural study. Campanella C, et al. **Mol Reprod Dev** 1997 Jul;47(3):323–33

Cortical granule exocytosis in hamster eggs requires microfilaments. DiMaggio AJ Jr, et al. **Mol Reprod Dev** 1997 Jul;47(3):334–40

Inadequate function of sterile tw5/tw32 spermatozoa overcome by intracytoplasmic sperm injection. Kuretake S, et al. **Mol Reprod Dev** 1996 Jun;44(2):230–3

Ascidian eggs block polyspermy by two independent mechanisms: one at the egg plasma membrane, the other involving the follicle cells. Lambert C, et al. **Mol Reprod Dev** 1997 Sep;48(1):137–43

Importance of calcium for the binding of oviductal fluid proteins to the membranes of bovine spermatozoa. Lapointe S, et al. **Mol Reprod Dev** 1996 Jun;44(2):234–40

Sperm membrane incorporation into oolemma contributes to the oolemma block to sperm penetration: evidence based on intracytoplasmic sperm injection experiments in the mouse. Maleszewski M, et al. **Mol Reprod Dev** 1996 Jun; 44(2):256–9

Species–specific effect of oviductal glycoproteins on hamster sperm binding to hamster oocytes. Schmidt A, et al. **Mol Reprod Dev** 1997 Feb;46(2):201–7

Activation of mouse sperm phosphatidylinositol–4,5 bisphosphate–phospholipase C by zona pellucida is modulated by tyrosine phosphorylation. Tomes CN, et al. **Mol Reprod Dev** 1996 Feb;43(2):196–204

Influence of male broiler breeder dietary energy intake on reproduction and progeny growth. Bramwell RK, et al. **Poult Sci** 1996 Jun;75(6):767–75

Age effect of male and female broiler breeders on sperm penetration of the perivitelline layer overlying the germinal disc. Bramwell RK, et al. **Poult Sci** 1996 Jun;75(6):755–62

The effect of twenty–four hour in vitro storage on sperm hydrolysis through the perivitelline layer of ovipositioned turkey eggs. Donoghue AM. **Poult Sci** 1996 Aug; 75(8):1035–8

Objective measurement of sperm motility based upon sperm penetration of Accudenz. Froman DP, et al. **Poult Sci** 1996 Jun;75(6):776–84

Effects of chronic renal failure on the sperm fertilizing capacity. Yamamoto Y, et al. **Urol Int** 1997;58(2):105–7

Maturation of hamster oocytes under chemically defined conditions and sperm penetration through the zona pellucida. Kito S, et al. **Zygote** 1996 Aug;4(3):199–210

Recombinant hamster sperm receptors that exhibit species–specific binding to sperm. Litscher ES, et al. **Zygote** 1996 Aug;4(3):229–36

Structure and function of asterosaps, sperm–activating peptides from the jelly coat of starfish eggs. Nishigaki T, et al. **Zygote** 1996 Aug;4(3):237–45

Mouse oocytes penetrated by sperm at GV or GVBD stage lose the ability to fuse with additional spermatozoa. Pyrzyńska B, et al. **Zygote** 1996 May;4(2):123–8

[Mini–review: oocyte activation mechanisms. Different models, comparison: marine invertebrate and mammal] Ciapa B, et al. **Contracept Fertil Sex** 1996 Jul–Aug; 24(7–8):564–70 (47 ref.) (Eng. Abstr.) **(Fre)**

[Physiological mechanisms of oocyte activation] Ozil JP. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):571–6 (38 ref.) (Eng. Abstr.) **(Fre)**

[Physiology of human gamete interaction] Wolf JP, et al. **Contracept Fertil Sex** 1997 Jan;25(1):69–78 (20 ref.) (Eng. Abstr.) **(Fre)**

SPERM PENETRATION see **SPERM–OVUM INTERACTIONS**

SPERM PRESERVATION see **SEMEN PRESERVATION**

SPERM TAIL

Slit–scan flow cytometry for consistent high resolution DNA analysis of X– and Y–chromosome bearing sperm [published erratum appears in Cytometry 1996 Dec 1;25(4):403] Rens W, et al. **Cytometry** 1996 Oct 1; 25(2):191–9

Intracytoplasmic sperm injection (ICSI) for severe semen abnormalities: dissecting the tail of spermatozoa at the tip. Chen SU, et al. **Hum Reprod** 1996 Dec;11(12):2640–4

CHEMISTRY

Inner and outer arm axonemal dyneins from the Antarctic rockcod Notothenia coriiceps. King SM, et al. **Biochemistry** 1997 Feb 11;36(6):1306–14

Interactional cloning of the 84–kDa major outer dense fiber protein Odf84. Leucine zippers mediate associations of Odf84 and Odf27. Shao X, et al. **J Biol Chem** 1997 Mar 7;272(10):6105–13

Assignment of the gene for outer dense fiber of sperm tails (ODF) to porcine chromosome 4p11–p14. Musilová P, et al. **Mamm Genome** 1997 Aug;8(8):628

Isolation and characterization of human and rabbit sperm tail fibrous sheath. Kim YH, et al. **Mol Hum Reprod** 1997 Apr;3(4):307–13

Glutamylated tubulin as a marker of microtubule heterogeneity in the human sperm flagellum. Prigent Y, et al. **Mol Hum Reprod** 1996 Aug;2(8):573–81

ENZYMOLOGY

Myristoylated and nonmyristoylated pools of sea urchin sperm flagellar creatine kinase exist side–by–side: myristoylation is necessary for efficient lipid association. Quest AF, et al. **Biochemistry** 1997 Jun 10;36(23):6993–7002

Interaction of flagellar inner arm dynein isolated from sea urchin sperm with microtubules in the presence of ATP. Yokota E, et al. **Eur J Cell Biol** 1997 Mar;72(3):214–21

Glyceraldehyde 3–phosphate dehydrogenase is bound to the fibrous sheath of mammalian spermatozoa. Westhoff D, et al. **J Cell Sci** 1997 Aug;110 (Pt 15):1821–9

IMMUNOLOGY

Comparative immunogold analysis of tubulin isoforms in the mouse sperm flagellum: unique distribution of glutamylated tubulin. Fouquet JP, et al. **Mol Reprod Dev** 1996 Mar; 43(3):358–65

METABOLISM

Regulation of fowl sperm flagellar motility by protein phosphatase type 1 and its relationship with dephosphorylation of axonemal and/or accessory cytoskeletal proteins. Ashizawa K, et al. **Biochem Biophys Res Commun** 1997 Jun 9;235(1):108–12

Axonemal tubulin polyglycylation probed with two monoclonal antibodies: widespread evolutionary distribution, appearance during spermatozoan maturation and possible function in motility. Bré MH, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):727–38

Posttranslational modifications of axonemal tubulin. Mary J, et al. **J Protein Chem** 1997 Jul;16(5):403–7

Sak57, an acidic keratin initially present in the spermatid manchette before becoming a component of paraaxonemal structures of the developing tail. Tres LL, et al. **Mol Reprod Dev** 1996 Jul;44(3):395–407

PHYSIOLOGY

Transient disruptions of axonemal structure and microtubule sliding during bend propagation by Ciona sperm flagella. Brokaw CJ. **Cell Motil Cytoskeleton** 1997;37(4):346–62

Microtubule sliding, bend initiation, and bend propagation parameters of Ciona sperm flagella altered by viscous load. Brokaw CJ. **Cell Motil Cytoskeleton** 1996;33(1):6–21

Excision and disassembly of sperm tail microtubules during sea urchin fertilization: requirements for microtubule dynamics. Fechter J, et al. **Cell Motil Cytoskeleton** 1996; 35(4):281–8

Functional significance of the outer dense fibers of mammalian sperm examined by computer simulations with the geometric clutch model. Lindemann CB. **Cell Motil Cytoskeleton** 1996;34(4):258–70

Interdoublet sliding in bovine spermatozoa: its relationship to flagellar motility and the action of inhibitory agents. Bird Z, et al. **J Struct Biol** 1996 May–Jun;116(3):418–28

ULTRASTRUCTURE

Fate of the sperm mitochondria, and the incorporation, conversion, and disassembly of the sperm tail structures during bovine fertilization. Sutovsky P, et al. **Biol Reprod** 1996 Dec;55(6):1195–205

Inhibition of flagellar beat frequency by a new anti–beta–tubulin antibody. Cosson J, et al. **Cell Motil Cytoskeleton** 1996;35(2):100–12

Changes in flagellar movement of rat spermatozoa along the length of the epididymis: manual and computer–aided image analysis. Jeulin C, et al. **Cell Motil Cytoskeleton** 1996; 35(2):147–61

Centriole behaviour during meiosis of male germ cells of Dermatobia hominis (Diptera:Cuterebridae). Quagio–Grassiotto I, et al. **Cytobios** 1996;85(341):73–80

Isolation and characterization of human and rabbit sperm tail fibrous sheath. Kim YH, et al. **Mol Hum Reprod** 1997 Apr;3(4):307–13

SPERM TRANSPORT

Localisation of carbonic anhydrase in the sperm storing regions of the domestic hen oviduct. Holm L, et al. **Acta Anat (Basel)** 1996;156(4):253–60

Posttesticular development of spermatozoa of the tammar wallaby (Macropus eugenii). Setiadi D, et al. **J Anat** 1997 Feb;190 (Pt 2):275–88

Fate and distribution of seminal plasma proteins in the genital tract of the female rat after natural mating. Carballada R, et al. **J Reprod Fertil** 1997 Mar;109(2):325–35

Blood plasma concentrations of progesterone, sperm storage and sperm viability and fertility in Gould's wattled bat (Chalinolobus gouldii). Hosken DJ, et al. **J Reprod Fertil** 1996 Nov;108(2):171–7

Development of a novel fluorescence technique for quantifying the total number of spermatozoa stored in the uterovaginal junction of hens. McDaniel CD, et al. **J Reprod Fertil** 1997 Jan;109(1):173–9

DRUG EFFECTS

Effects of oxytocin on sperm transport in the pubertal rat. Frayne J, et al. **J Reprod Fertil** 1996 Jul;107(2):299–306

PHYSIOLOGY

The role of the epididymis in the protection of spermatozoa. Hinton BT, et al. **Curr Top Dev Biol** 1996;33:61–102 (277 ref.)

Uterine hyperperistalsis and dysperistalsis as dysfunctions of the mechanism of rapid sperm transport in patients with endometriosis and infertility. Leyendecker G, et al. **Hum Reprod** 1996 Jul;11(7):1542–51

Ovulation induction and gamete transport in the female tract of the musk shrew, Suncus murinus. Bedford JM, et al. **J Reprod Fertil** 1997 May;110(1):115–25
Motility of spermatozoa in hydrosalpingeal and follicular fluid of pigs. Nichol R, et al. **J Reprod Fertil** 1997 May; 110(1):79–86
Two modifiers of sperm transport within the fallopian tube of the rat. Sultan KM, et al. **J Reprod Fertil** 1996 Nov; 108(2):179–84

SPERMATIC CORD

Malignant mesenchymoma of the spermatic cord with a brief review of the literature. Inagaki T, et al. **Int J Urol** 1997 Mar;4(2):225–8 (13 ref.)
Liposarcoma of the spermatic cord: a report of two cases. Anjum MI, et al. **Int Urol Nephrol** 1997;29(2):227–32
Primary neuroblastoma presenting as a paratesticular tumor. Encinas A, et al. **J Pediatr Surg** 1997 Apr;32(4):624–6
Papillary cystadenoma located in the spermatic cord. Geenen RW, et al. **J Urol** 1997 Aug;158(2):546 (3 ref.)
Metastatic tumor of the spermatic cord from a primary silent colorectal adenocarcinoma. Melone F, et al. **Minerva Urol Nefrol** 1997 Mar;49(1):57–61
Liposarcoma of the spermatic cord. Bulbul MA, et al. **Scand J Urol Nephrol** 1996 Aug;30(4):333–5
Metachronous renal cell carcinoma metastases to spermatic cord and penis. Fallick ML, et al. **Scand J Urol Nephrol** 1997 Jun;31(3):299–300
Primary osteosarcoma of the spermatic cord with synchronous bilateral renal cell carcinoma. Beiswanger JC, et al. **Urology** 1997 Jun;49(6):957–9 (14 ref.)
Combined myxoid liposarcoma and angiolipoma of the spermatic cord. Ikinger U, et al. **Urology** 1997 Apr; 49(4):635–7 (15 ref.)
[Cystic lymphangioma of the spermatic cord. Report of a new case] Jung JL, et al. **Prog Urol** 1996 Dec;6(6):948–9 (6 ref.) (Eng. Abstr.) **(Fre)**
[Metastatic tumor of spermatic cord and tunica vaginalis testis from gastric cancer: a case report] Kageyama Y, et al. **Hinyokika Kiyo** 1997 Jun;43(6):429–31 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Angioarchitecture of the human spermatic cord. Ergün S, et al. **Cell Tissue Res** 1997 May;288(2):391–8
Varicocele scintigraphy: a simplified screening method for the detection of spermatic vein reflux. Prenen JA, et al. **Clin Nucl Med** 1996 Dec;21(12):921–7
[Vascular organization of the pampiniformis plexus in the man and its significance for antegrade sclerosing of testicular varicocele] Ergün S, et al. **Urologe A** 1996 Nov; 35(6):463–7 (Eng. Abstr.) **(Ger)**

INJURIES

'Gut-tie' in steers [letter] Norman T. **Vet Rec** 1997 Jun 28; 140(26):687–8

INNERVATION

The incidence of post-vasectomy chronic testicular pain and the role of nerve stripping (denervation) of the spermatic cord in its management. Ahmed I, et al. **Br J Urol** 1997 Feb;79(2):269–70
Spermatic-cord block improves analgesia for day-case testicular surgery. Burden RJ, et al. **Br J Urol** 1997 Sep; 80(3):472–5

MICROBIOLOGY

Tuberculoma arising in the inguinal portion of the spermatic cord: a case report. Yamasaki S, et al. **Int J Urol** 1996 Nov;3(6):514–7

PARASITOLOGY

Ultrasound diagnosis of filarial funiculoepididymitis. Williams PB, et al. **Urology** 1996 Oct;48(4):644–6
[Dirofilaria (Nochtiella) repens in the spermatic cord: a new human case in Italy] Pampiglione S, et al. **Bull Soc Pathol Exot** 1997;90(1):22–4 (13 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Angiomyofibroblastoma of the spermatic cord. Siddiqui MT, et al. **Br J Urol** 1997 Mar;79(3):475–6
Pseudocyst of the spermatic cord of a gelding. Card CE, et al. **Can Vet J** 1997 Sep;38(9):567–9
Cystadenoma of spermatic cord resembling ovarian serous epithelial tumour of low malignant potential: immunohistochemical study suggesting Müllerian differentiation. McCluggage WG, et al. **Histopathology** 1996 Jan;28(1):77–80
Spermatic cord contamination in testicular cancer. Nazeer T, et al. **Mod Pathol** 1996 Jul;9(7):762–6
Leiomyosarcoma with osteoclast-like giant cells of the spermatic cord. A case report and review of the literature. Konety BR, et al. **Urol Int** 1996;56(4):259–62 (14 ref.)
[Systemic sarcoidosis with involvement of the spermatic cord] Nagayama M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Mar; 35(3):328–33 (Eng. Abstr.) **(Jpn)**
[Liposarcoma of the spermatic cord] Gurariĭ LL. **Urol Nefrol (Mosk)** 1996 Nov-Dec;(6):48–9 (Eng. Abstr.) **(Rus)**
[Bilateral isolated infiltration in the epididymis and sperm cord as first sign of chronic lymphatic leukemia] Pérez García FJ, et al. **Arch Esp Urol** 1997 Mar;50(2):199–201 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Varicocele testis evaluated by CT-scanning. Lund L, et al. **Scand J Urol Nephrol** 1997 Apr;31(2):179–82

SURGERY

"Gut-tie" in steers [letter] Hunter F. **Vet Rec** 1997 Jul 12; 141(2):55
'Gut-tie" in steers [letter] Scott WA. **Vet Rec** 1997 Jul 12; 141(2):55
[Leiomyosarcoma of the spermatic cord. A case report with review of the literature] Wiebel T, et al. **Urologe A** 1996 Jan;35(1):54–6 (21 ref.) (Eng. Abstr.) **(Ger)**
[Surgical treatment of varicocele. Our experience in the last 10 years] Bassi R, et al. **Minerva Chir** 1996 Jul-Aug; 51(7–8):533–6 (Eng. Abstr.) **(Ita)**
[A method for the deep plastic repair of the inguinal canal without separating the hernial sac and the spermatic cord] Zhebroskiĭ VV, et al. **Klin Khir** 1995;(2):43–4 **(Rus)**

ULTRASONOGRAPHY

Ultrasound diagnosis of filarial funiculoepididymitis. Williams PB, et al. **Urology** 1996 Oct;48(4):644–6
[Accessory spleen of the spermatic cord] Paul R, et al. **Urologe A** 1997 May;36(3):262–4 (Eng. Abstr.) **(Ger)**
[Unusual case of leiomyoma of the spermatic cord studied with ultrasonography] Battaglia F, et al. **Radiol Med (Torino)** 1996 Oct;92(4):498–9 **(Ita)**

SPERMATIC CORD TORSION

[Torsion of the spermatic cord. A clinical material on 109 patients] Daehlin L, et al. **Tidsskr Nor Laegeforen** 1997 May 10;117(12):1769–71 (Eng. Abstr.) **(Nor)**

COMPLICATIONS

Influence of experimental spermatic cord torsion on the contralateral testis in rats. Evaluation of tissue free oxygen radical scavenger enzyme levels. Sarica K, et al. **Urol Int** 1997;58(4):208–12

DIAGNOSIS

Acute pancreatitis masquerading as testicular torsion. Lin YL, et al. **Am J Emerg Med** 1996 Nov;14(7):654–5
Torsion of intraabdominal testicular tumors. A case report [letter; comment] Brown IR, et al. **Cancer** 1996 Oct 1; 78(7):1519–20. Comment on: Cancer 1996 Jan 15;77(2):339–43.
Critical analysis of the clinical presentation of acute scrotum: a 9-year experience at a single institution. Jefferson RH, et al. **J Urol** 1997 Sep;158(3 Pt 2):1198–200
Serum creatine kinase enzyme levels in the early diagnosis of spermatic cord torsion. Ulman I, et al. **Urol Res** 1996; 24(6):329–31
[Intra-abdominal torsion of the testis with seminoma (see comments)] Andreasen DA, et al. **Ugeskr Laeger** 1997 Mar 31;159(14):2103–4 (Eng. Abstr.). Comment in: Ugeskr Laeger 1997 Jun 30;159(27):4281–2. **(Dan)**
[Emergency medicine for the practitioner: urological emergencies] Wisard M, et al. **Rev Med Suisse Romande** 1997 Apr;117(4):309–12 **(Fre)**
[Testicular torsion requires rapid diagnosis (news)] Krista-Kafitz P. **Fortschr Med** 1997 Mar 30;115(9):20–2 **(Ger)**
[Acute scrotum in pediatric age: analysis of 265 consecutive cases] Campobasso P, et al. **Pediatr Med Chir** 1996 Sep-Oct;18(5 Suppl):15–20 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

A platelet activating factor antagonist attenuates the effects of testicular ischemia. Palmer JS, et al. **J Urol** 1997 Sep; 158(3 Pt 2):1186–90

ENZYMOLOGY

Serum creatine kinase enzyme levels in the early diagnosis of spermatic cord torsion. Ulman I, et al. **Urol Res** 1996; 24(6):329–31

METABOLISM

Morphological and biochemical changes following acute unilateral testicular torsion in prepubertal rats. Saba M, et al. **J Urol** 1997 Mar;157(3):1149–54

PATHOLOGY

Determination of testicular function after torsion by DNA flow cytometry of serial fine-needle aspirates. Carroll TA, et al. **Br J Urol** 1997 Mar;79(3):449–54
Testicular torsion: evaluation of contralateral testicular histology. Koşar A, et al. **Int Urol Nephrol** 1997;29(3):351–6
An enigma: contralateral effects of experimental unilateral testicular torsion. Tarhan F, et al. **Int Urol Nephrol** 1996; 28(3):359–66
Perinatal testicular torsion and the hard testicle. Baptist EC, et al. **J Perinatol** 1996 Jan-Feb;16(1):67–8
Comparison of blood flow and histological changes in rat models of testicular ischemia. Palmer JS, et al. **J Urol** 1997 Sep;158(3 Pt 2):1138–40
Morphological and biochemical changes following acute unilateral testicular torsion in prepubertal rats. Saba M, et al. **J Urol** 1997 Mar;157(3):1149–54
Increased apoptosis in the contralateral testis in patients with testicular torsion [letter] Hadziselimovic F, et al. **Lancet** 1997 Jul 12;350(9071):118

PHYSIOPATHOLOGY

The influence of temperature on changes in pH, lactate and morphology during testicular ischaemia. Kallerhoff M, et al. **Br J Urol** 1996 Sep;78(3):440–5
Unilateral testicular torsion in Lewis rats. Part I: The effect on spleen lymphocytes mitotic activity in vivo. Godlewski A, et al. **Folia Morphol (Warsz)** 1996;55(4):261–3
Unilateral testicular torsion in Lewis rats. Part II: The effect on thymocytes mitotic activities in vivo and some morphometric features of thyroid gland. Godlewski A, et al. **Folia Morphol (Warsz)** 1996;55(4):264–6
Microvascular blood flow is altered after repair of testicular torsion in the rat. Becker EJ, et al. **J Urol** 1997 Apr; 157(4):1493–8

RADIONUCLIDE IMAGING

Hydrocele mimicking testicular torsion on radionuclide and ultrasound studies. Erbay N, et al. **Clin Nucl Med** 1997 Aug;22(8):570–1
Redistribution. The sign of the successful testicular detorsion. Mrhac L, et al. **Clin Nucl Med** 1997 Jul;22(7):502

SURGERY

Bilateral testicular torsion in a neonate. Calleja R, et al. **Br J Urol** 1996 Nov;78(5):799
Microvascular blood flow is altered after repair of testicular torsion in the rat. Becker EJ, et al. **J Urol** 1997 Apr; 157(4):1493–8
Management of neonatal testicular torsion. Pinto KJ, et al. **J Urol** 1997 Sep;158(3 Pt 2):1196–7
Contralateral testicular torsion after previous unilateral orchiopexy for undescended testis. Rasmussen JS. **Scand J Urol Nephrol** 1996 Dec;30(6):513–4
Follow-up after torsion of the spermatic cord. Daehlin L, et al. **Scand J Urol Nephrol Suppl** 1996;179:139–42
[A case of bilateral testicular torsion in a neonate] Konya E, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Jul; 87(7):1004–7 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Torsion of the testicle and testicular adnexa in children] Tański Z, et al. **Wiad Lek** 1994 Nov-Dec;47(21–24):827–30 (Eng. Abstr.) **(Pol)**
[Neonatal intravaginal testicular torsion in an undescended testis] Fernández MS, et al. **Cir Pediatr** 1996 Jul;9(3):128–9 (Eng. Abstr.) **(Spa)**

THERAPY

Redistribution. The sign of the successful testicular detorsion. Mrhac L, et al. **Clin Nucl Med** 1997 Jul;22(7):502
Testicular torsion: why not cool ischemic tissue? [letter] Uner AB. **J Emerg Med** 1996 Sep-Oct;14(5):635–6
Rescue of testicular function after acute experimental torsion. Prillaman HM, et al. **J Urol** 1997 Jan;157(1):340–5

ULTRASONOGRAPHY

Bilateral intra-uterine testicular torsion in a newborn. Groisman GM, et al. **Br J Urol** 1996 Nov;78(5):800–1
Color Doppler sonogrphy in differentiation between testicular torsion and epididymoorchitis: report of three cases. Chou CC, et al. **Chang Keng I Hsueh** 1996 Mar; 19(1):90–4
Hydrocele mimicking testicular torsion on radionuclide and ultrasound studies. Erbay N, et al. **Clin Nucl Med** 1997 Aug;22(8):570–1
Ultrasound in the assessment of the acute scrotum. Herbener TE. **J Clin Ultrasound** 1996 Oct;24(8):405–21 (52 ref.)
Sonographic identification of perinatal testicular torsion. Hernanz-Schulman M, et al. **J Ultrasound Med** 1997 Jan; 16(1):65–7
Sonographic prediction of viability in testicular torsion: preliminary observations. Middleton WD, et al. **J Ultrasound Med** 1997 Jan;16(1):23–7; quiz 29–30
Torsion of the testicular appendages: sonographic appearance. Strauss S, et al. **J Ultrasound Med** 1997 Mar; 16(3):189–92; quiz 193–4
Ultrasound diagnosis of testicular torsion: beware the swollen epididymis. Older RA, et al. **J Urol** 1997 Apr; 157(4):1369–70

VETERINARY

Intra-abdominal testicular torsion in a horse without signs of colic. Parker JE, et al. **J Am Vet Med Assoc** 1997 Feb 1;210(3):375–7

SPERMATIDS

Intracytoplasmic injection with late spermatids: a successful procedure in achieving childbirth for couples in which the male partner suffers from azoospermia due to deficient

SPERMATIDS

spermatogenesis. Araki Y, et al. **Fertil Steril** 1997 Mar; 67(3):559–61

Fertilization and embryo cleavage after intracytoplasmic spermatid injection in an obstructive azoospermic patient with defective spermiogenesis. Chen SU, et al. **Fertil Steril** 1996 Jul;66(1):157–60

Sperm or spermatid conception? [editorial] Tesarik J. **Fertil Steril** 1997 Aug;68(2):214–6

Fertilization with human testicular spermatids: four successful pregnancies. Antinori S, et al. **Hum Reprod** 1997 Feb;12(2):286–91

Successful fertilization and pregnancy after injection of frozen–thawed round spermatids into human oocytes. Antinori S, et al. **Hum Reprod** 1997 Mar;12(3):554–6

Spermatid conception: a stage too early, or a time too soon? [editorial] Fishel S, et al. **Hum Reprod** 1996 Jul;11(7):1371–5 (48 ref.)

Intracytoplasmic injection of spermatids retrieved from testicular tissue: influence of testicular pathology, type of selected spermatids and oocyte activation. Vanderzwalmen P, et al. **Hum Reprod** 1997 Jun;12(6):1203–13

Spermatid–specific overexpression of the TATA–binding protein gene involves recruitment of two potent testis–specific promoters. Schmidt EE, et al. **J Biol Chem** 1997 Feb 21;272(8):5326–34

Deoxyribonucleic acid flow cytometry in the assessment of spermatogenesis. Kostakopoulos A, et al. **J Urol** 1997 Jul; 158(1):79–81

Birth of normal young by microinsemination with frozen–thawed round spermatids collected from aged azoospermic mice. Tanemura K, et al. **Lab Anim Sci** 1997 Apr;47(2):203–4

Is complete spermiogenesis failure a good indication for spermatid conception? [letter] Amer M, et al. **Lancet** 1997 Jul 12;350(9071):116

Comparison of methods for activating mouse oocytes for spermatid nucleus transfer. Sasagawa I, et al. **Zygote** 1996 Nov;4(4):269–74

CHEMISTRY

Reversible changes in the content of cellular and microtubular tubulin in spermatogenic cells after gossypol treatment. Teng CS. **Contraception** 1997 Jan;55(1):41–6

Spermatocytes and round spermatids of rat testis: the difference between in vivo and in vitro protein patterns. Cossio G, et al. **Electrophoresis** 1997 Mar–Apr; 18(3–4):548–52

Genomic organization of the mouse AZ1 gene that encodes the protein localized to preacrosomes of spermatids. Aoto H, et al. **Genomics** 1997 Feb 15;40(1):138–41

CYTOLOGY

Sertoli cell–spermatid tubulobulbar complexes in the ram. Bielli A. **Anat Histol Embryol** 1997 Jun;26(2):151–5

On stage single cell identification of rat spermatogenic cells. Reyes JG, et al. **Biol Cell** 1997 Mar;89(1):53–66

Retinoic acid receptor alpha gene expression in the rat testis: potential role during the prophase of meiosis and in the transition from round to elongating spermatids. Akmal KM, et al. **Biol Reprod** 1997 Feb;56(2):549–56

Human fertilization with round and elongated spermatids. Fishel S, et al. **Hum Reprod** 1997 Feb;12(2):336–40

Testicular composition, number of A spermatogonia, germ cell ratios, and number of spermatids in three different breeds of boars. Okwun OE, et al. **J Androl** 1996 May–Jun; 17(3):301–9

DRUG EFFECTS

Effects of carbendazim (methyl 2–benzimidazole carbamate; MBC) on meiotic spermatocytes and subsequent spermiogenesis in the rat testis. Nakai M, et al. **Anat Rec** 1997 Mar;247(3):379–87

Germ cell mutagenicity of three metabolites of 1,3–butadiene in the rat: induction of spermatid micronuclei by butadiene mono–, di–, and diolepoxides in vivo. Lähdetie J, et al. **Environ Mol Mutagen** 1997;29(3):230–9

Micronuclei induced in round spermatids of mice after stem–cell treatment with chloral hydrate: evaluations with centromeric DNA probes and kinetochore antibodies. Nutley EV, et al. **Environ Mol Mutagen** 1996;28(2):80–9

Reproductive toxicity and tissue concentrations of lindane in adult male rats. Dalsenter PR, et al. **Hum Exp Toxicol** 1996 May;15(5):406–10

Micronuclei are induced in rat spermatids in vitro by 1,2,3,4–diepoxybutane but not by 1,2–epoxy–3–butene and 1,2–dihydroxy–3,4–epoxybutane. Sjöblom T, et al. **Mutagenesis** 1996 Sep;11(5):525–8

Radioprotection of beta–carotene evaluated on mouse somatic and germ cells. Salvadori DM, et al. **Mutat Res** 1996 Sep 23;356(2):163–70

Further observations on carbendazim–induced abnormalities of spermatid morphology in rats. Nakai M, et al. **Tissue Cell** 1997 Aug;29(4):477–85

ENZYMOLOGY

Zinc dependent recognition of a human CpG island sequence by the mammalian spermatidal protein TP2. Kundu TK, et al. **Biochemistry** 1996 Dec 10;35(49):15626–32

The enzymatic activity of Cu/Zn superoxide dismutase does not fluctuate in mouse spermatogenic cells despite mRNA changes. Gu W, et al. **Exp Cell Res** 1997 May 1; 232(2):371–5

P450 aromatase messenger ribonucleic acid expression in male rat germ cells: detection by reverse transcription–polymerase chain reaction amplification. Janulis L, et al. **J Androl** 1996 Nov–Dec;17(6):651–8

NRD convertase: a putative processing endoprotease associated with the axoneme and the manchette in late spermatids. Chesneau V, et al. **J Cell Sci** 1996 Nov;109 (Pt 11):2737–45

GROWTH & DEVELOPMENT

Nuclear morphogenesis and the role of the manchette during spermiogenesis in the ostrich (Struthio camelus). Soley JT. **J Anat** 1997 May;190 (Pt 4):563–76

[From spermatid to spermatozoa : what changes are necessary for development?] Testart J. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):526–33 (Eng. Abstr.) **(Fre)**

METABOLISM

Spatially dynamic intercellular adhesion junction is coupled to a microtubule–based motility system: evidence from an in vitro binding assay. Vogl AW. **Cell Motil Cytoskeleton** 1996;34(1):1–12

Characterization of germ cell–specific expression of the orphan nuclear receptor, germ cell nuclear factor. Katz D, et al. **Endocrinology** 1997 Oct;138(10):4364–72

Hormonal dependency of neural cadherin in the binding of round spermatids to Sertoli cells in vitro. Perryman KJ, et al. **Endocrinology** 1996 Sep;137(9):3877–83

Differential effects of heat shock on translation of normal mRNAs in primary spermatocytes, elongated spermatids, and Sertoli cells in seminiferous tubule culture. Cataldo L, et al. **Exp Cell Res** 1997 Feb 25;231(1):206–13

Characterization of nerve growth factor precursor protein expression in rat round spermatids and the trophic effects of nerve growth factor in the maintenance of Sertoli cell viability. Chen Y, et al. **Mol Cell Endocrinol** 1997 Mar 28; 127(2):129–36

In postmeiotic male germ cells poly (A) shortening accompanies translation of mRNA encoding gamma enteric actin but not cytoplasmic beta and gamma actin mRNAs. Gu W, et al. **Mol Reprod Dev** 1996 Jun;44(2):141–5

Purification, partial characterization, and localization of Sak57, an acidic intermediate filament keratin present in rat spermatocytes, spermatids, and sperm. Kierszenbaum AL, et al. **Mol Reprod Dev** 1996 Jul;44(3):382–94

Actin and major sperm protein in spermatids and spermatozoa of the parasitic nematode Heligmosomoides polygyrus. Mansir A, et al. **Mol Reprod Dev** 1996 Nov; 45(3):332–41

Boar proacrosin expressed in spermatids of transgenic mice does not reach the acrosome and disrupts spermatogenesis. O'Brien DA, et al. **Mol Reprod Dev** 1996 Feb;43(2):236–47

Sak57, an acidic keratin initially present in the spermatid manchette before becoming a component of paraaxonemal structures of the developing tail. Tres LL, et al. **Mol Reprod Dev** 1996 Jul;44(3):395–407

PATHOLOGY

Spermatid injection into human oocytes. II. Clinical application in the treatment of infertility due to non–obstructive azoospermia. Tesarik J, et al. **Hum Reprod** 1996 Apr;11(4):780–3

PHYSIOLOGY

Testosterone withdrawal promotes stage–specific detachment of round spermatids from the rat seminiferous epithelium. O'Donnell L, et al. **Biol Reprod** 1996 Oct;55(4):895–901

Transcriptional promiscuity in testes [letter] Schmidt EE. **Curr Biol** 1996 Jul 1;6(7):768–9

Change of karyoskeleton during mammalian spermatogenesis: expression pattern of nuclear lamin C2 and its regulation. Alsheimer M, et al. **Exp Cell Res** 1996 Nov 1;228(2):181–8

Blastocyst formation following intracytoplasmic injection of in–vitro derived spermatids into bovine oocytes. Goto K, et al. **Hum Reprod** 1996 Apr;11(4):824–9

Spermatid injection into human oocytes. I. Laboratory techniques and special features of zygote development. Tesarik J, et al. **Hum Reprod** 1996 Apr;11(4):772–9

Spermatids from mice after cryptorchid and reversal operations can initiate normal embryo development. Sasagawa I, et al. **J Androl** 1997 Mar–Apr;18(2):203–9

Mouse oocytes injected with cryopreserved round spermatids can develop into normal offspring. Ogura A, et al. **J Assist Reprod Genet** 1996 May;13(5):431–4

Ooplasmic round spermatid nuclear injection procedures as an experimental treatment for nonobstructive azoospermia. Yamanaka K, et al. **J Assist Reprod Genet** 1997 Jan; 14(1):55–62

Evidence for a parent–of–origin effect on sperm aneuploidy in mice carrying Robertsonian translocations as analyzed by fluorescence in situ hybridization. Baulch JE, et al. **Mutat Res** 1996 Dec;372(2):269–78

A procedure to study unscheduled DNA synthesis in rat spermatogenic cells in vivo: strain differences between Fisher–344 and Sprague–Dawley rats. Sotomayor RE, et al. **Toxicol Lett** 1996 Dec;89(1):77–81

RADIATION EFFECTS

Radioprotection of beta–carotene evaluated on mouse somatic and germ cells. Salvadori DM, et al. **Mutat Res** 1996 Sep 23;356(2):163–70

TRANSPLANTATION

[Medically assisted reproduction with immature spermatozoa. Clinical examination and surgical technics] Schoysman R, et al. **Acta Urol Belg** 1997 Jun;65(2):21–6 (32 ref.) (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Identification of two types of beta–COP vesicles in the Golgi complex of rat spermatids. Martínez–Menárguez JA, et al. **Eur J Cell Biol** 1996 Oct;71(2):137–43

The occurrence and identification of round spermatids in the ejaculate of men with nonobstructive azoospermia. Mendoza C, et al. **Fertil Steril** 1996 Nov;66(5):826–9

An unexpected localization of basonuclin in the centrosome, mitochondria, and acrosome of developing spermatids. Yang Z, et al. **J Cell Biol** 1997 May 5;137(3):657–69

Spermatogenesis in the endosymbiont–bearing bivalve Loripes lucinalis (Veneroida: Lucinidae). Johnson MJ, et al. **Mol Reprod Dev** 1996 Dec;45(4):476–84

Microtubule architecture specified by a beta–tubulin isoform. Raff EC, et al. **Science** 1997 Jan 3;275(5296):70–3

Further observations on carbendazim–induced abnormalities of spermatid morphology in rats. Nakai M, et al. **Tissue Cell** 1997 Aug;29(4):477–85

SPERMATOBLASTS see **SPERMATIDS**

SPERMATOCELE

Percutaneous sperm aspiration of a spermatocele for intracytoplasmic sperm injection. Werthman P, et al. **J Urol** 1997 Oct;158(4):1524

COMPLICATIONS

Natural spermatoceles in irreversible obstructive azoospermia––reservoirs of viable spermatozoa for assisted conception. Hirsh AV, et al. **Hum Reprod** 1996 Sep; 11(9):1919–22

[Complicated spermatocele as a cause of scrotal mass with solid appearance. Ultrasonographic findings] Cozcolluela Cabrejas MR, et al. **Actas Urol Esp** 1996 Sep;20(8):750–2 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Torsion of spermatocele and aplasia of the vas deferens. A case report. Liolios N, et al. **Eur J Pediatr Surg** 1997 Apr; 7(2):118–9

VETERINARY

Sperm granuloma in the dog: complication of vasectomy. Mayenco Aguirre AM, et al. **J Small Anim Pract** 1996 Aug; 37(8):392–3

SPERMATOCIDAL AGENTS

Assessment of the anti–microbial agent C31G as a spermicide: comparison with nonoxynol–9. Thompson KA, et al. **Contraception** 1996 May;53(5):313–8

Nonoxynol–9 in lubricated condoms. Results of a study in female prostitutes. Ward H, et al. **Sex Transm Dis** 1996 Sep–Oct;23(5):413–4

[Local vaginal therapies] Cohen J. **Contracept Fertil Sex** 1997 Mar;25(3):196–201 (0 ref.) **(Fre)**

ADMINISTRATION & DOSAGE

Lea's Shield: a study of the safety and efficacy of a new vaginal barrier contraceptive used with and without spermicide. Mauck C, et al. **Contraception** 1996 Jun; 53(6):329–35

Use of spermicide and impact of prophylactic condom use among sex workers in Santa Fe de Bogota, Colombia. Farr G, et al. **Sex Transm Dis** 1996 May–Jun;23(3):206–12

Safety of a nonoxynol–9 vaginal gel in Kenyan prostitutes. A randomized clinical trial. Martin HL Jr, et al. **Sex Transm Dis** 1997 May;24(5):279–83

ADVERSE EFFECTS

Is the fetus safe when spermicides fail? Koren G. **Can Fam Physician** 1997 Mar;43:431–2

Connubial dermatitis from phenylmercuric nitrate. Bonnetblanc JM, et al. **Contact Dermatitis** 1996 May; 34(5):367

Self–reported discomfort associated with use of different nonoxynol–9 spermicides [letter] Feldblum PJ. **Genitourin Med** 1996 Dec;72(6):451–2

Acute urinary retention secondary to urethral inflammation from a vaginal contraceptive suppository in a 17–year–old boy. Saborio DV, et al. **Urol Int** 1997;58(2):128–30

ANALYSIS

Quantitation of vaginally administered nonoxynol–9 in premenopausal women. Barditch–Crovo P, et al. **Contraception** 1997 Apr;55(4):261–3

Determination of the spermicide nonoxynol-9 in vaginal lavage by high-performance liquid chromatography. McPherson JL, et al. **J Chromatogr B Biomed Appl** 1996 Feb 23;677(1):204-8

CHEMISTRY

Assessment of new formulations of nonoxynol-9 coprecipiated with polyvinylpyrrolidone and iodine as possible vaginal contraceptives. Zavos PM, et al. **Fertil Steril** 1996 Nov;66(5):729-33

PHARMACOLOGY

Alteration of human sperm kinematics in cervical mucus due to nonoxynol-9. Dunmire EN, et al. **Contraception** 1997 Apr;55(4):209-17

Review: in vitro spermicidal tests. Lee CH. **Contraception** 1996 Sep;54(3):131-47 (151 ref.)

Sperm transport and survival post-application of a new spermicide contraceptive. Advantage 24 Study Group. Sangi-Haghpeykar H, et al. **Contraception** 1996 Jun; 53(6):353-6

Mechanism of action of NIM-76: a novel vaginal contraceptive from neem oil. Sharma SK, et al. **Contraception** 1996 Dec;54(6):373-8

Comparative spermicidal performance of iodinated and non-iodinated contraceptive formulations of nonoxynol-9 co-precipitated with polyvinylpyrrolidone. Zavos PM, et al. **Contraception** 1996 Jul;54(1):39-41

Comparative in vitro spermicidal activity of chelating agents and synergistic effect with nonoxynol-9 on human sperm functionality. Lee CH, et al. **J Pharm Sci** 1996 Jan; 85(1):91-5

Effect of the spermicide, nonoxynol 9, on vaginal permeability in normal and ovariectomized rabbits. Acatürk F, et al. **Pharm Res** 1996 Jun;13(6):950-1

THERAPEUTIC USE

The efficacy of nonoxynol-9 from an in vivo point of view [letter] Wittkowski KM. **AIDS** 1997 Mar;11(3):392-4

Condom and nonoxynol-9 use and the incidence of HIV infection in serodiscordant couples in Zambia. Hira SK, et al. **Int J STD AIDS** 1997 Apr;8(4):243-50

Effects of nonoxynol-9 on vaginal microflora and chlamydial infection in a monkey model. Patton DL, et al. **Sex Transm Dis** 1996 Nov-Dec;23(6):461-4

TOXICITY

Renal and spermatozoal toxicity of alpha-bromohydrin, 3-bromolactate and 3-bromopyruvate. Jones AR, et al. **J Appl Toxicol** 1996 Jan-Feb;16(1):57-63

SPERMATOCYTES

see related

SPERM MATURATION

[Study on the synaptonemal complexes in spermatocytes of the brown rat (Rattus norvegicus caraco). II. Study on the behavior and morphology of the sex chromosomes pairing] Liu JY, et al. **Shih Yen Sheng Wu Hsueh Pao** 1996 Mar;29(1):1-11 (Eng. Abstr.) **(Chi)**

CHEMISTRY

Reversible changes in the content of cellular and microtubular tubulin in spermatogenic cells after gossypol treatment. Teng CS. **Contraception** 1997 Jan;55(1):41-6

Spermatocytes and round spermatids of rat testis: the difference between in vivo and in vitro protein patterns. Cossio G, et al. **Electrophoresis** 1997 Mar-Apr; 18(3-4):548-52

Sak 57, an intermediate filament keratin present in intercellular bridges of rat primary spermatocytes. Tres LL, et al. **Mol Reprod Dev** 1996 Sep;45(1):93-105

[Localization of RecA-like proteins in preparations of spread nuclei of mouse spermatocytes at meiotic prophase I] Loseva EF, et al. **Genetika** 1996 Apr;32(4):523-31 (Eng. Abstr.) **(Rus)**

CYTOLOGY

The meiotic pairing behaviour in human spermatocytes carrier of chromosome anomalies and their repercussions on reproductive fitness. II. Robertsonian and reciprocal translocations. A European collaborative study. Gabriel-Robez O, et al. **Ann Genet** 1996;39(1):17-25

On stage single cell identification of rat spermatogenic cells. Reyes JG, et al. **Biol Cell** 1997 Mar;89(1):53-66

Refinement of the differentiated phenotype of the spermatogenic cell line GC-2spd(ts) [published erratum appears in Biol Reprod 1996 Dec;55(6):1458] Wolkowicz MJ, et al. **Biol Reprod** 1996 Oct;55(4):923-32

Establishment of in vitro spermatogenesis from spermatocytes in the medaka, Oryzias latipes. Saiki A, et al. **Dev Growth Differ** 1997 Jun;39(3):337-44

Localization of group IIc low molecular weight phospholipase A2 mRNA to meiotic cells in the mouse. Chen J, et al. **J Cell Biochem** 1997 Mar 1;64(3):369-75

Chromosomes of mouse primary spermatocytes undergo meiotic divisions after incorporation into homologous immature oocytes. Ogura A, et al. **Zygote** 1997 May; 5(2):177-82

DRUG EFFECTS

Synaptonemal complex damage in mouse spermatocytes exposed to tequila and brandy. Piña-Calva A, et al. **Cancer Detect Prev** 1997;21(2):196-200

Effects of nanomolar taxol on crane-fly spermatocyte spindles indicate that acetylation of kinetochore microtubules can be used as a marker of poleward tubulin flux. Wilson PJ, et al. **Cell Motil Cytoskeleton** 1997; 37(1):20-32

Colchicine effects on meiosis in the male mouse. I. Meiotic prophase: synaptic arrest, univalents, loss of damaged spermatocytes and a possible checkpoint at pachytene. Tepperberg JH, et al. **Chromosoma** 1997 Aug;106(3):183-92

2-Methoxyacetic acid (MAA)-induced spermatocyte apoptosis in human and rat testes: an in vitro comparison. Li LH, et al. **J Androl** 1996 Sep-Oct;17(5):538-49

Cytogenetic effect of griseofulvin in mouse spermatocytes. Fahmy MA, et al. **J Appl Toxicol** 1996 Mar-Apr; 16(2):177-83

Biochemical and cytogenetical study of the mycoplasmal antigen and of the cyclophosphamide action in mammalians, in vivo. The action of some immunomodulatory antioxidants. Dumitrescu M, et al. **Roum Arch Microbiol Immunol** 1996 Jul-Sep;55(3):225-39

Protection against methoxyacetic-acid-induced spermatocyte apoptosis with calcium channel blockers in cultured rat seminiferous tubules: possible mechanisms. Li LH, et al. **Toxicol Appl Pharmacol** 1997 May;144(1):105-19

ENZYMOLOGY

Gossypol-induced apoptotic DNA fragmentation correlates with inhibited protein kinase C activity in spermatocytes. Teng CS. **Contraception** 1995 Dec;52(6):389-95

The enzymatic activity of Cu/Zn superoxide dismutase does not fluctuate in mouse spermatogenic cells despite mRNA changes. Gu W, et al. **Exp Cell Res** 1997 May 1; 232(2):371-5

Differentiation-dependent enhanced expression of protein phosphatase 2Cbeta in germ cells of mouse seminiferous tubules. Kato S, et al. **FEBS Lett** 1996 Nov 4; 396(2-3):293-7

An alternative splicing event which occurs in mouse pachytene spermatocytes generates a form of DNA ligase III with distinct biochemical properties that may function in meiotic recombination. Mackey ZB, et al. **Mol Cell Biol** 1997 Feb;17(2):989-98

METABOLISM

A novel Mr 77,000 protein of the XY body of mammalian spermatocytes: its localization in normal animals and in Searle's translocation carriers. Kralewski M, et al. **Chromosoma** 1997 Aug;106(3):160-7

Rad51 immunocytology in rat and mouse spermatocytes and oocytes. Moens PB, et al. **Chromosoma** 1997 Sep; 106(4):207-15

Mdes, a mouse homolog of the Drosophila degenerative spermatocyte gene is expressed during mouse spermatogenesis. Endo K, et al. **Dev Growth Differ** 1997 Jun;39(3):399-403

HSP70-2 is required for CDC2 kinase activity in meiosis I of mouse spermatocytes. Zhu D, et al. **Development** 1997 Aug;124(15):3007-14

Differential effects of heat shock on translation of normal mRNAs in primary spermatocytes, elongated spermatids, and Sertoli cells in seminiferous tubule culture. Cataldo L, et al. **Exp Cell Res** 1997 Feb 25;231(1):206-13

Purification, partial characterization, and localization of Sak57, an acidic intermediate filament keratin present in rat spermatocytes, spermatids, and sperm. Kierszenbaum AL, et al. **Mol Reprod Dev** 1996 Jul;44(3):382-94

Calmodulin content, Ca2+-dependent calmodulin binding proteins, and testis growth: identification of Ca2+-dependent calmodulin binding proteins in primary spermatocytes. Trejo R, et al. **Mol Reprod Dev** 1997 Sep; 48(1):127-36

Microtubule organization and distribution of gamma-tubulin in male meiosis of lepidoptera. Wolf KW, et al. **Mol Reprod Dev** 1996 Dec;45(4):547-59

PATHOLOGY

Effects of carbendazim (methyl 2-benzimidazole carbamate; MBC) on meiotic spermatocytes and subsequent spermiogenesis in the rat testis. Nakai M, et al. **Anat Rec** 1997 Mar;247(3):379-87

PHYSIOLOGY

A dihydropyridine-sensitive T-type Ca2+ current is the main Ca2+ current carrier in mouse primary spermatocytes. Santi CM, et al. **Am J Physiol** 1996 Nov; 271(5 Pt 1):C1583-93

Change of karyoskeleton during mammalian spermatogenesis: expression pattern of nuclear lamin C2 and its regulation. Alsheimer M, et al. **Exp Cell Res** 1996 Nov 1;228(2):181-8

Overexpression of c-myc induces apoptosis at the prophase of meiosis of rat primary spermatocytes. Kodaira K, et al. **Mol Reprod Dev** 1996 Dec;45(4):403-10

A procedure to study unscheduled DNA synthesis in rat spermatogenic cells in vivo: strain differences between Fisher-344 and Sprague-Dawley rats. Sotomayor RE, et al. **Toxicol Lett** 1996 Dec;89(1):77-81

RADIATION EFFECTS

Effects of ultraviolet-microbeam irradiation of kinetochores in crane-fly spermatocytes. Ilagan AB, et al. **Cell Motil Cytoskeleton** 1997;36(3):266-75

Ultraviolet microbeam irradiations of epithelial and spermatocyte spindles suggest that forces act on the kinetochore fibre and are not generated by its disassembly. Spurck T, et al. **Cell Motil Cytoskeleton** 1997;36(2):136-48

Coordinated movements between autosomal half-bivalents in crane-fly spermatocytes: evidence that 'stop' signals are sent between partner half-bivalents. Yin B, et al. **J Cell Sci** 1996 Jan;109 (Pt 1):155-63

ULTRASTRUCTURE

Colchicine effects on meiosis in the male mouse. I. Meiotic prophase: synaptic arrest, univalents, loss of damaged spermatocytes and a possible checkpoint at pachytene. Tepperberg JH, et al. **Chromosoma** 1997 Aug;106(3):183-92

Combined immunocytogenetic and molecular cytogenetic analysis of meiosis I human spermatocytes. Barlow AL, et al. **Chromosome Res** 1996 Dec;4(8):562-73

Mitochondrial differentiation during meiosis of male germ cells. Seitz J, et al. **Int J Androl** 1995 Dec;18 Suppl 2:7-11

Assembly of ring canals in the male germ line from structural components of the contractile ring. Hime GR, et al. **J Cell Sci** 1996 Dec;109 (Pt 12):2779-88

Tension-sensitive kinetochore phosphorylation and the chromosome distribution checkpoint in praying mantid spermatocytes. Li X, et al. **J Cell Sci** 1997 Mar;110 (Pt 5):537-45

Degeneration of spermatocytes during meiotic divisions in the golden hamster testis. Miething A. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):29-35

Spermatogenesis in the endosymbiont-bearing bivalve Loripes lucinalis (Veneroida: Lucinidae). Johnson MJ, et al. **Mol Reprod Dev** 1996 Dec;45(4):476-84

Microtubule organization and distribution of gamma-tubulin in male meiosis of lepidoptera. Wolf KW, et al. **Mol Reprod Dev** 1996 Dec;45(4):547-59

Virus-like particles, bacteria and microsporidia affect spindle-associated membranes in spermatocytes of Lepidoptera species. Wolf KW. **Zygote** 1997 Feb;5(1):21-30

SPERMATOGENESIS

see related

ANTISPERMATOGENIC AGENTS

Interactions of rat repetitive sequence MspI8 with nuclear matrix proteins during spermatogenesis. Rogoliński J, et al. **Acta Biochim Pol** 1996;43(2):319-24

Synaptic behaviour of sex chromosome in two XYY men. Gabriel-Robez O, et al. **Ann Genet** 1996;39(3):129-32

Microsurgery and changes in the testicular and epididymal production of spermatozoa. Sica GS, et al. **Ann Ital Chir** 1996 Sep-Oct;67(5):677-80; discussion 681

Germ cell development in Drosophila. Williamson A, et al. **Ann Rev Cell Dev Biol** 1996;12:365-91 (122 ref.)

Unusual features of the sperm head differentiation in Mabuya quinquetaeniata. Ismail MF. **Arch Androl** 1997 Jul-Aug; 39(1):19-23

Increased activity associated with the MAST205 protein kinase complex during mammalian spermiogenesis. Walden PD, et al. **Biol Reprod** 1996 Nov;55(5):1039-44

Variation in expression of hsp27 messenger ribonucleic acid during the cycle of the seminiferous epithelium and co-localization of hsp27 and microfilaments in Sertoli cells of the rat. Welsh MJ, et al. **Biol Reprod** 1996 Jul; 55(1):141-51

Incidence of disorders of spermatogenesis in middle aged finnish men, 1981-91: two necropsy series [see comments] Pajarinen J, et al. **BMJ** 1997 Jan 4;314(7073):13-8. Comment in: BMJ 1997 Apr 5;314(7086):1042-3.

Transcriptional checkpoints determining the fate of male germ cells. Sassone-Corsi P. **Cell** 1997 Jan 24;88(2):163-6 (22 ref.)

Ontogeny and localization of an oncostatin M-like protein in the rat testis: its possible role at the start of spermatogenesis. de Miguel MP, et al. **Cell Growth Differ** 1997 May;8(5):611-8

Male reproductive function in workers exposed to vibration. Penkov A, et al. **Cent Eur J Public Health** 1996 Sep; 4(3):185-8

Unusual segregation of t(11;22) resulting from crossing-over followed by 3:1 disjunction at meiosis I. Petković I, et al. **Clin Genet** 1996 Dec;50(6):515-9

Prediction of posttreatment spermatogenesis in patients with testicular cancer by flow cytometric sperm chromatin structure assay. Fosså SD, et al. **Cytometry** 1997 Aug 15; 30(4):192-6

Three-parameter flow cytometric analysis of rat spermatogenesis. Suter L, et al. **Cytometry** 1997 Feb 1; 27(2):161-8

Establishment of in vitro spermatogenesis from spermatocytes in the medaka, Oryzias latipes. Saiki A, et al. **Dev Growth Differ** 1997 Jun;39(3):337-44

An early and massive wave of germinal cell apoptosis is required for the development of functional spermatogenesis. Rodriguez I, et al. **EMBO J** 1997 May 1;16(9):2262-70

Change of karyoskeleton during mammalian spermatogenesis: expression pattern of nuclear lamin C2 and its regulation.

Alsheimer M, et al. **Exp Cell Res** 1996 Nov 1;228(2):181–8

The enzymatic activity of Cu/Zn superoxide dismutase does not fluctuate in mouse spermatogenic cells despite mRNA changes. Gu W, et al. **Exp Cell Res** 1997 May 1; 232(2):371–5

Fish testicular 11beta-hydroxylase: cDNA cloning and mRNA expression during spermatogenesis. Jiang JQ, et al. **FEBS Lett** 1996 Nov 18;397(2–3):250–2

Differentiation-dependent enhanced expression of protein phosphatase 2Cbeta in germ cells of mouse seminiferous tubules. Kato S, et al. **FEBS Lett** 1996 Nov 4; 396(2–3):293–7

Fertilization and embryo cleavage after intracytoplasmic spermatid injection in an obstructive azoospermic patient with defective spermiogenesis. Chen SU, et al. **Fertil Steril** 1996 Jul;66(1):157–60

Effect of increased scrotal temperature on sperm production in normal men. Wang C, et al. **Fertil Steril** 1997 Aug; 68(2):334–9

Spermatozoon and spermiogenesis in Mesocoelium monas (Platyhelminthes:Digenea): ultrastructure and epifluorescence microscopy of labelling of tubulin and nucleus. Iomini C, et al. **Folia Parasitol (Praha)** 1997; 44(1):26–32

Annual cycle of plasma testosterone in male copperheads, Agkistrodon contortrix (Serpentes, Viperidae): relationship to timing of spermatogenesis, mating, and agonistic behavior. Schuett GW, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):417–24

Xist-deficient mice are defective in dosage compensation but not spermatogenesis [see comments] Marahrens Y, et al. **Genes Dev** 1997 Jan 15;11(2):156–66. Comment in: Genes Dev 1997 Jan 15;11(2):153–5.

The pattern of histone H4 acetylation on the X chromosome during spermatogenesis of the desert locust Schistocerca gregaria. Wolf KW, et al. **Genome** 1996 Oct;39(5):854–65

Expression of the mouse testicular histone gene H1t during spermatogenesis. Drabent B, et al. **Histochem Cell Biol** 1996 Aug;106(2):247–51

Testicular needle aspiration as an alternative to biopsy for the assessment of spermatogenesis. Craft I, et al. **Hum Reprod** 1997 Jul;12(7):1483–7

Male germ cell transplantation in rats: apparent synchronization of spermatogenesis between host and donor seminiferous epithelia. Jiang FX, et al. **Int J Androl** 1995 Dec;18(6):326–30

Genesis of newt sperm axial fiber: cDNA cloning and expression of a 29 kDa protein, a major component of the axial fiber, during spermatogenesis. Furukawa K, et al. **Int J Dev Biol** 1996 Dec;40(6):1109–18

Transplantation of testis germinal cells into mouse seminiferous tubules. Ogawa T, et al. **Int J Dev Biol** 1997 Feb;41(1):111–22

Gonadotropin therapy in males with hypogonadotropic hypogonadism: factors affecting induction of spermatogenesis after gonadotropin replacement. Fuse H, et al. **Int Urol Nephrol** 1996;28(3):367–74

Decreased spermatogenesis as the result of an induced autoimmune reaction directed against the gonadotropin receptors in male rats. Graf KM, et al. **J Androl** 1997 Mar–Apr;18(2):174–85

In vitro maturation of human testicular sperm in patients with azoospermia. Zhu J, et al. **J Assist Reprod Genet** 1997 Jul; 14(6):361–3

Novel repeat elements direct rat proenkephalin transcription during spermatogenesis. Liu F, et al. **J Biol Chem** 1997 Feb 21;272(8):5056–62

Recognition of phosphatidylserine on the surface of apoptotic spermatogenic cells and subsequent phagocytosis by Sertoli cells of the rat. Shiratsuchi A, et al. **J Biol Chem** 1997 Jan 24;272(4):2354–8

An unexpected localization of basonuclin in the centrosome, mitochondria, and acrosome of developing spermatids. Yang Z, et al. **J Cell Biol** 1997 May 5;137(3):657–69

Estrogen metabolism and impaired spermatogenesis in germ cell tumors of the testis. Nakazumi H, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1289–95

Immunochemical characterization of a human sperm fibrous sheath protein, its developmental expression pattern, and morphogenetic relationships with actin. Escalier D, et al. **J Histochem Cytochem** 1997 Jul;45(7):909–22

Effects of occupational lead exposure on spermatogenesis. Aribarg A, et al. **J Med Assoc Thai** 1996 Feb;79(2):91–7

Novel spellings for the male accessory gland in which sperm mature and are stored [letter] Pöllänen P, et al. **J Reprod Immunol** 1996 Feb;30(1):75–6

Spermatogenesis in mosquitoes (Diptera: Culicidae). Ndiaye M, et al. **J Submicrosc Cytol Pathol** 1996 Jul;28(3):375–84

Ultrastructure of spermiogenesis and the spermatozoon of Nomimoscolex sp. (Cestoda, Proteocephalidea) intestinal parasite of Clarotes laticeps (Fish, Teleost) in Senegal. Sène A, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):115–24

Image cytometry for quantitative analysis of DNA in the testes of infertile men with varicocele: comparison with flow cytometry. Iwamoto T, et al. **J Urol** 1997 Jun; 157(6):2370–4

Deoxyribonucleic acid flow cytometry in the assessment of spermatogenesis. Kostakopoulos A, et al. **J Urol** 1997 Jul; 158(1):79–81

Spermatogenic cycle in the testis of the Japanese black bear (Selenarctos thibetanus japonicus). Komatsu T, et al. **J Vet Med Sci** 1996 Apr;58(4):329–35

Classification of the cycle of the seminiferous epithelium in the common tree shrew (Tupaia glis). Maeda S, et al. **J Vet Med Sci** 1996 May;58(5):481–4

Is complete spermiogenesis failure a good indication for spermatid conception? [letter] Amer M, et al. **Lancet** 1997 Jul 12;350(9071):116

In situ hybridization shows that Dazla expression in mouse testis is restricted to premeiotic stages IV–VI of spermatogenesis. Niederberger C, et al. **Mamm Genome** 1997 Apr;8(4):277–8

Evidence that Mothers-against-dpp-related 1 (Madr1) plays a role in the initiation and maintenance of spermatogenesis in the mouse. Zhao GQ, et al. **Mech Dev** 1997 Jan; 61(1–2):63–73

Cellular distribution of EGF, TGFalpha and their receptor during postnatal development and spermatogenesis of the boar testis. Caussanel V, et al. **Mol Cell Endocrinol** 1996 Oct 14;123(1):61–9

Degenerative spermatocyte, a novel gene encoding a transmembrane protein required for the initiation of meiosis in Drosophila spermatogenesis. Endo K, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):157–65

Polymerase chain reaction screening for Y chromosome microdeletions: a first step towards the diagnosis of genetically-determined spermatogenic failure in men. Qureshi SJ, et al. **Mol Hum Reprod** 1996 Oct;2(10):775–9

Boar proacrosin expressed in spermatids of transgenic mice does not reach the acrosome and disrupts spermatogenesis. O'Brien DA, et al. **Mol Reprod Dev** 1996 Feb;43(2):236–47

Temporal expression and localization of protein farnesyltransferase during spermiogenesis and posttesticular sperm maturation in the hamster. Olson GE, et al. **Mol Reprod Dev** 1997 Sep;48(1):71–6

A protein associated with the manchette during rat spermiogenesis is encoded by a gene of the TBP-1-like subfamily with highly conserved ATPase and protease domains. Rivkin E, et al. **Mol Reprod Dev** 1997 Sep; 48(1):77–89

Properties and localization of a tyrosine phosphorylated form of hexokinase in mouse sperm. Visconti PE, et al. **Mol Reprod Dev** 1996 Jan;43(1):82–93

Spermiogenesis and spermatozoon of Echinostoma caproni (Platyhelminthes, Digenea): transmission and scanning electron microscopy, and tubulin immunocytochemistry. Iomini C, et al. **Tissue Cell** 1997 Feb;29(1):107–18

Effect of diabetes mellitus upon male reproductive function. Sexton WJ, et al. **Urology** 1997 Apr;49(4):508–13 (45 ref.)

[Treatments of testicular cancer and protection of spermatogenesis] Bujan L, et al. **Contracept Fertil Sex** 1996 Jul–Aug;24(7–8):596–602 (34 ref.) (Eng. Abstr.) **(Fre)**

[Seminiferous tubule cytological pattern in infertile, azoospermic men in diagnosis and therapy] Weiss DB, et al. **Harefuah** 1997 May 1;132(9):614–8, 680 (Eng. Abstr.) **(Heb)**

[A study on testicular aromatase activity--spermatogenic damage in high testicular E2 models of rat] Akiyama H. **Nippon Hinyokika Gakkai Zasshi** 1997 Jul;88(7):649–57 (Eng. Abstr.) **(Jpn)**

[DNA synthesis in the testes of infertile men with varicocele--image cytometeric analysis of proliferating cell nuclear antigen] Tanaka H, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Jun;87(6):885–91 (Eng. Abstr.) **(Jpn)**

[Evaluation of spermatogenic function] Isurugi K, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:385–9 (11 ref.) **(Jpn)**

DRUG EFFECTS

Effect on human gamma interferon on mice testis: a quantitative analysis of the spermatogenic cells. Natwar RK, et al. **Acta Eur Fertil** 1995 Jan–Feb;26(1):45–9

Testicular function in asymptomatic chronic alcoholics: relation to ethanol intake. Villalta J, et al. **Alcohol Clin Exp Res** 1997 Feb;21(1):128–33

Effect of immunization with human SP-10 in male rodents. Sehgal S, et al. **Am J Reprod Immunol** 1996 Sep; 36(3):167–74

Effects of cis-platinum and luteinizing hormone releasing hormone analogues on rat spermatogenesis. A morphologic and flow cytometric study. Scott CA, et al. **Anal Quant Cytol Histol** 1996 Oct;18(5):361–73

Effects of carbendazim (methyl 2-benzimidazole carbamate; MBC) on meiotic spermatocytes and subsequent spermiogenesis in the rat testis. Nakai M, et al. **Anat Rec** 1997 Mar;247(3):379–87

Chronic administration of 4-tert-octylphenol to adult male rats causes shrinkage of the testes and male accessory sex organs, disrupts spermatogenesis, and increases the incidence of sperm deformities. Boockfor FR, et al. **Biol Reprod** 1997 Aug;57(2):267–77

Effects of transient prepubertal 6-N-propyl-2-thiouracil treatment on testis development and function in the domestic fowl. Kirby JD, et al. **Biol Reprod** 1996 Oct; 55(4):910–6

Changes in plasma gonadotropin II and sex steroid hormones, and sperm production of striped bass after treatment with controlled-release gonadotropin-releasing hormone agonist-delivery systems. Mylonas CC, et al. **Biol Reprod** 1997 Sep;57(3):669–75

Protecting spermatogenesis from damage induced by doxorubicin using the luteinizing hormone-releasing hormone agonist leuprorelin: an image analysis study of a rat experimental model. Manabe F, et al. **Cancer** 1997 Mar 1;79(5):1014–21

Protection from procarbazine-induced testicular damage by hormonal pretreatment does not involve arrest of spermatogonial proliferation. Meistrich ML, et al. **Cancer Res** 1997 Mar 15;57(6):1091–7

Protective effects of manidipine on spermatogenesis in stroke-prone spontaneously hypertensive rats. Akagashi K, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S342–4

Treatment of male infertility with growth hormone. Ng SC, et al. **Clin Sci (Colch)** 1996 Sep;91(3):254–5 (18 ref.)

Flow cytometric assessment of trophosphamide toxicity on mouse spermatogenesis. Spanò M, et al. **Cytometry** 1996 Jun 1;24(2):174–80

Relationship among hormonal treatments, suppression of spermatogenesis, and testicular protection from chemotherapy-induced damage. Meistrich ML, et al. **Endocrinology** 1996 Sep;137(9):3823–31

Analysis of the effects of overexpression of metallothionein-I in transgenic mice on the reproductive toxicology of cadmium. Dalton T, et al. **Environ Health Perspect** 1996 Jan;104(1):68–76

Effects of cyproterone acetate on FSH and testosterone influenced spermatogenesis, steroidogenesis and epididymis in the Indian wall lizard, Hemidactylus flaviviridis (Ruppell). Rai U, et al. **Eur J Morphol** 1995 Nov; 33(5):443–55

Fertility after chemotherapy for testicular germ cell cancer. Pont J, et al. **Fertil Steril** 1997 Jul;68(1):1–5 (45 ref.)

Efficacy of recombinant follicle-stimulating hormone [letter; comment] Quinton R, et al. **Fertil Steril** 1996 Jul;66(1):164 . Comment on: Fertil Steril 1995 Jun;63(6):1326–8.

Oligozoospermia induced by exogenous testosterone is associated with normal functioning residual spermatozoa. Wang C, et al. **Fertil Steril** 1997 Jul;68(1):149–53

Stimulation of spermatogenesis or of sex reversal according to the dose of exogenous estradiol-17 beta in juvenile males of protandrous black porgy, Acanthopagrus schlegeli. Chang CF, et al. **Gen Comp Endocrinol** 1995 Dec; 100(3):355–67

Effect of alpha-blockers on epididymal sperm concentration, motility and testicular productivity in the rat. Hibi H, et al. **Hinyokika Kiyo** 1996 May;42(5):357–60

Physiological relationships between inhibin B, follicle stimulating hormone secretion and spermatogenesis in normal men and response to gonadotrophin suppression by exogenous testosterone. Anderson RA, et al. **Hum Reprod** 1997 Apr;12(4):746–51

Induction of spermatogenesis in isolated hypogonadotrophic hypogonadism with gonadotrophins and early intervention with intracytoplasmic sperm injection. Yong EL, et al. **Hum Reprod** 1997 Jun;12(6):1230–2

Glutathione S-transferase-M1 'null' genotype and alcohol-induced disorders of human spermatogenesis. Pajarinen J, et al. **Int J Androl** 1996 Jun;19(3):155–63

Polymorphism in the cytochrome P450 2E1 gene and alcohol-induced disorders of human spermatogenesis. Pajarinen J, et al. **Int J Androl** 1996 Oct;19(5):314–22

Manidipine improves spermatogenesis in the stroke-prone spontaneously hypertensive rat. Akagashi K, et al. **J Androl** 1997 Mar–Apr;18(2):210–6

Hormone treatment after irradiation stimulates recovery of rat spermatogenesis from surviving spermatogonia. Meistrich ML, et al. **J Androl** 1997 Jan–Feb;18(1):80–7

The effects of recombinant FSH on testosterone-induced spermatogenesis in gonadotrophin-deficient (hpg) mice. Singh J, et al. **J Androl** 1996 Jul–Aug;17(4):382–93

Establishing the minimum effective dose and additive effects of depot progestin in suppression of human spermatogenesis by a testosterone depot. Handelsman DJ, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4113–21

Neonatal administration of FSH increases Sertoli cell numbers and spermatogenesis in gonadotropin-deficient (hpg) mice. Singh J, et al. **J Endocrinol** 1996 Oct; 151(1):37–48

Suppression of spermatogenesis by testosterone enanthate in Thai men. Aribarg A, et al. **J Med Assoc Thai** 1996 Oct; 79(10):624–9

Exceptionally potent antispermatogenic compounds from 8-halogenation of (4aRS,5SR,9bRS)-hexahydroindeno-[1,2-c]pyridines. Cook CE, et al. **J Med Chem** 1997 Jul 4;40(14):2111–2

The effect of anabolic-androgenic steroids on sexual behavior and reproductive tissues in male rats. Feinberg MJ, et al. **Physiol Behav** 1997 Jul;62(1):23–30

Disruption of spermatogenesis in rabbits consuming ethylene glycol monomethyl ether. Berndtson WE, et al. **Reprod Toxicol** 1997 Jan–Feb;11(1):29–36

The value of spermatology in male reproductive toxicology: do spermatologic examinations in fertility studies provide new and additional information relevant for safety assessment? [editorial] Jahn AI, et al. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):171–8

Flow cytometric evaluation of the effects of doxorubicin on rat spermatogenesis. Suter L, et al. **Reprod Toxicol** 1997 Jul–Aug;11(4):521–31

In utero and lactational exposure of the male Holtzman rat to 2,3,7,8-tetrachlorodibenzo-p-dioxin: decreased epididymal and ejaculated sperm numbers without alterations in sperm transit rate. Sommer RJ, et al. **Toxicol Appl Pharmacol** 1996 Sep;140(1):146–53

Evaluation of testicular toxicity in safety evaluation studies:

the appropriate use of spermatogenic staging. Creasy DM. **Toxicol Pathol** 1997 Mar-Apr;25(2):119-31 (61 ref.)
Evaluation of cytotoxic effects of different doses of vinblastine on mouse spermatogenesis by flow cytometry. Jagetia GC, et al. **Toxicology** 1996 Sep 2;112(3):227-36
Effect of carboplatin on rat spermatogenesis. Fuse H, et al. **Urol Int** 1996;56(4):219-23

GENETICS

The azoospermic factor on the Y chromosome. Shinka T, et al. **Acta Paediatr Jpn** 1996 Aug;38(4):399-404 (34 ref.)
The molecular genetics of male infertility. Elliott DJ, et al. **Bioessays** 1997 Sep;19(9):801-9 (73 ref.)
Regulation of hsp expression during rodent spermatogenesis. Sarge KD, et al. **Cell Mol Life Sci** 1997 Feb;53(2):191-7 (38 ref.)
Quantitative analysis of Caenorhabditis elegans sperm motility and how it is affected by mutants spe11 and unc54. Royal DC, et al. **Cell Motil Cytoskeleton** 1997;37(2):98-110
Association of RB97D, an RRM protein required for male fertility, with a Y chromosome lampbrush loop in Drosophila spermatocytes. Heatwole VM, et al. **Chromosoma** 1996 Dec;105(5):285-92
Microdeletions in interval 6 of the Y chromosome detected by STS-PCR in 6 of 33 patients with idiopathic oligo- or azoospermia. Stuppia L, et al. **Cytogenet Cell Genet** 1996; 72(2-3):155-8
Transcriptional analysis of the candidate spermatogenesis gene Ube1y and of the closely related Ube1x shows that they are coexpressed in spermatogonia and spermatids but are repressed in pachytene spermatocytes. Odorisio T, et al. **Dev Biol** 1996 Nov 25;180(1):336-43
Regulation of the Wilms' tumor gene during spermatogenesis. Del Rio-Tsonis K, et al. **Dev Dyn** 1996 Dec;207(4):372-81
Mouse ret finger protein (rfp) proto-oncogene is expressed at specific stages of mouse spermatogenesis. Cao T, et al. **Dev Genet** 1996;19(4):309-20
Mdes, a mouse homolog of the Drosophila degenerative spermatocyte gene is expressed during mouse spermatogenesis. Endo K, et al. **Dev Growth Differ** 1997 Jun;39(3):399-403
Function of untranslated regions in the mouse spermatogenesis-specific gene Tcp10 evaluated in transgenic mice. Ewulonu UK, et al. **DNA Cell Biol** 1997 May;16(5):645-51
Targeted disruption of the estrogen receptor gene in male mice causes alteration of spermatogenesis and infertility. Eddy EM, et al. **Endocrinology** 1996 Nov;137(11):4796-805
Cloning of the cDNA encoding rat homologue of the mismatch repair gene MSH2 and its expression during spermatogenesis. Vani RG, et al. **Gene** 1997 Jan 31; 185(1):19-26
Specific arrest of spermatogenesis caused by apoptotic cell death in transgenic mice. Suzuki M, et al. **Genes Cells** 1996 Dec;1(12):1077-86
The Y chromosome region essential for spermatogenesis. Nakahori Y, et al. **Horm Res** 1996;46 Suppl 1:20-3
Down-regulation of mitochondrial transcription factor A during spermatogenesis in humans. Larsson NG, et al. **Hum Mol Genet** 1997 Feb;6(2):185-91
Polymorphism in the cytochrome P450 2E1 gene and alcohol-induced disorders of human spermatogenesis. Pajarinen J, et al. **Int J Androl** 1996 Oct;19(5):314-22
Stage-specific gene expression during rat spermatogenesis: application of the mRNA differential display method. Geisinger A, et al. **Int J Dev Biol** 1996 Feb;40(1):385-8
Stage and developmental specific gene expression during mammalian spermatogenesis. Nayernia K, et al. **Int J Dev Biol** 1996 Feb;40(1):379-83 (48 ref.)
Characterization of a novel evolutionary conserved and developmentally regulated gene during mouse gametogenesis. Parraga M, et al. **Int J Dev Biol** 1996;Suppl 1:223S-224S
Spermatogenesis in the Ixodid tick Haemaphysalis (Herpetobia) sulcata (Acarina:Ixodidae). Valero A, et al. **J Parasitol** 1997 Apr;83(2):212-4
Degeneracy in human multicopy RBM (YRRM), a candidate spermatogenesis gene. Prosser J, et al. **Mamm Genome** 1996 Nov;7(11):835-42
Spx1, a novel X-linked homeobox gene expressed during spermatogenesis. Branford WW, et al. **Mech Dev** 1997 Jul; 65(1-2):87-98
Evidence that mouse Bmp8a (Op2) and Bmp8b are duplicated genes that play a role in spermatogenesis and placental development. Zhao GQ, et al. **Mech Dev** 1996 Jul; 57(2):159-68
Involvement of a tissue-specific RNA recognition motif protein in Drosophila spermatogenesis. Haynes SR, et al. **Mol Cell Biol** 1997 May;17(5):2708-15
Transcription of the TATA binding protein gene is highly up-regulated during spermatogenesis. Persengiev SP, et al. **Mol Endocrinol** 1996 Jun;10(6):742-7
Differential display to identify and isolate novel genes expressed during spermatogenesis. Catalano RD, et al. **Mol Hum Reprod** 1997 Mar;3(3):215-21
Heat-shock inducible polyubiquitin gene Ubi undergoes alternative initiation and alternative splicing in mature chicken testes. Mezquita J, et al. **Mol Reprod Dev** 1997 Apr;46(4):471-5
Characterization of a cDNA containing trinucleotide repeat sequences that is highly enriched in spermatogenic cells. Persengiev SP, et al. **Mol Reprod Dev** 1997 Apr; 46(4):476-81
A human candidate spermatogenesis gene, RBM1, is conserved and amplified on the marsupial Y chromosome [published erratum appears in Nat Genet 1997 Apr;15(4):411] Delbridge ML, et al. **Nat Genet** 1997 Feb; 15(2):131-6
Men homozygous for an inactivating mutation of the follicle-stimulating hormone (FSH) receptor gene present variable suppression of spermatogenesis and fertility. Tapanainen JS, et al. **Nat Genet** 1997 Feb;15(2):205-6
Gli family members are differentially expressed during the mitotic phase of spermatogenesis. Persengiev SP, et al. **Oncogene** 1997 May 15;14(19):2259-64
POU-domain gene expression during spermatogenesis. Zini A, et al. **World J Urol** 1996;14(5):274-7 (20 ref.)

PHYSIOLOGY

New therapeutic possibilities handling residual azoospermia. Schoysman R, et al. **Acta Eur Fertil** 1995 Jul-Aug; 26(4):131-6 (21 ref.)
Seminiferous tubule stages in the prairie dog (Cynomys ludovicianus) during the annual breeding cycle. Foreman D. **Anat Rec** 1997 Mar;247(3):355-67
On stage single cell identification of rat spermatogenic cells. Reyes JG, et al. **Biol Cell** 1997 Mar;89(1):53-66
Cellular distribution of transforming growth factor betas 1, 2, and 3 and their types I and II receptors during postnatal development and spermatogenesis in the boar testis. Caussanel V, et al. **Biol Reprod** 1997 Feb;56(2):357-67
Pituitary gonadotrophs are strongly activated at the beginning of spermatogenesis in African catfish, Clarias gariepinus. Schulz RW, et al. **Biol Reprod** 1997 Jul; 57(1):139-47
Refinement of the differentiated phenotype of the spermatogenic cell line GC-2spd(ts) [published erratum appears in Biol Reprod 1996 Dec;55(6):1458] Wolkowicz MJ, et al. **Biol Reprod** 1996 Oct;55(4):923-32
Reproductive biology of the male sheath-tailed bat, Taphozous longimanus (Emballonuridae) from India. Singh UP. **Biomed Environ Sci** 1997 Mar;10(1):14-26
Barriers to diffusion of plasma membrane proteins form early during guinea pig spermiogenesis. Cowan AE, et al. **Biophys J** 1997 Jul;73(1):507-16
Disorders of spermatogenesis in Finland. Is this a period effect, and if so, why? [letter; comment] Joffe M. **BMJ** 1997 Apr 5;314(7086):1042-3. Comment on: BMJ 1997 Jan 4;314(7073):13-8.
Sexual development of hypernatriophilic male rats up to puberty. Almeida SA, et al. **Braz J Med Biol Res** 1996 Mar;29(3):395-8
Estimation of the duration of the cycle of the seminiferous epithelium in the non-human primate Macaca mulatta using the 5-bromodeoxyuridine technique. Rosiepen G, et al. **Cell Tissue Res** 1997 May;288(2):365-9
Influence of hypertensive vascular changes in intratesticular arteries on spermatogenesis in SHRSP. Itoh N, et al. **Clin Exp Pharmacol Physiol Suppl** 1995;1:S134-5
Sertoli cell signaling by Desert hedgehog regulates the male germline. Bitgood MJ, et al. **Curr Biol** 1996 Mar 1; 6(3):298-304
Nuclear phosphoinositide-specific phospholipase C, phosphatidylinositol 4,5-bisphosphate and protein kinase C during rat spermatogenesis. Caramelli E, et al. **Eur J Cell Biol** 1996 Oct;71(2):154-64
Protein kinase C isoforms undergo quantitative variations during rat spermatogenesis and are selectively retained at specific spermatozoon sites. Zini N, et al. **Eur J Cell Biol** 1997 Feb;72(2):142-50
Spermiogenesis requires the transcription factor CREM (cyclic AMP-response element modulator). Bertherat J. **Eur J Endocrinol** 1996 Aug;135(2):171
Application of the cell and molecular biology techniques in evaluation of the local mechanisms controlling spermatogenesis. Lukaszyk A. **Folia Histochem Cytobiol** 1996;34 Suppl 1:75-6
Testicular cancer and spermatogenesis. Botchan A, et al. **Hum Reprod** 1997 Apr;12(4):755-8
Androgen action on the restoration of spermatogenesis in adult rats: effects of human chorionic gonadotrophin, testosterone and flutamide administration on germ cell number. Meachem SJ, et al. **Int J Androl** 1997 Apr; 20(2):70-9
Sertoli cell barrier dysfunction and spermatogenetic cycle breakdown in the human testis: a lanthanum tracer investigation. Meyer JM, et al. **Int J Androl** 1996 Jun; 19(3):190-8
Mitochondrial differentiation during meiosis of male germ cells. Seitz J, et al. **Int J Androl** 1995 Dec;18 Suppl 2:7-11
Spermatogenesis in Drosophila. Hennig W. **Int J Dev Biol** 1996 Feb;40(1):167-76 (64 ref.)
Nuclear morphogenesis and the role of the manchette during spermiogenesis in the ostrich (Struthio camelus). Soley JT. **J Anat** 1997 May;190 (Pt 4):563-76
Hypertensive changes in intratesticular arteries impair spermatogenesis of the stroke-prone spontaneously hypertensive rat. Akagashi K, et al. **J Androl** 1996 Jul-Aug; 17(4):367-74
Hypoprolactinemia does not prevent restoration of normal spermatogenesis in gonadotropin-suppressed, testosterone-replaced rats. Awoniji CA, et al. **J Androl** 1996 Jan-Feb;17(1):35-40
Developmental expression of glutathione peroxidase, catalase, and manganese superoxide dismutase mRNAs during spermatogenesis in the mouse. Gu W, et al. **J Androl** 1996 May-Jun;17(3):256-62
Testosterone and spermatogenesis: evidence that androgens regulate cellular secretory mechanisms in stage VI-VIII seminiferous tubules from adult rats. McKinnell C, et al. **J Androl** 1995 Nov-Dec;16(6):499-509
Ultrastructural observations of spermatogenesis following transplantation of rat testis cells into mouse seminiferous tubules. Russell LD, et al. **J Androl** 1996 Nov-Dec; 17(6):615-27
Ultrastructural observations of spermatogenesis in mice resulting from transplantation of mouse spermatogonia. Russell LD, et al. **J Androl** 1996 Nov-Dec;17(6):603-14
Detection of germ cell-derived proteins in testicular interstitial fluid: potential for monitoring spermatogenesis in vivo. Turner KJ, et al. **J Androl** 1996 Mar-Apr; 17(2):127-36
Microtubule organization and the distribution of gamma-tubulin in spermatogenesis of a beetle, Tenebrio molitor (Tenebrionidae, Coleoptera, Insecta). Wolf KW, et al. **J Cell Sci** 1995 Dec;108 (Pt 12):3855-65
Stage-specific expression of the FSH receptor gene in the prepubertal and adult rat seminiferous epithelium. Rannikko A, et al. **J Endocrinol** 1996 Oct;151(1):29-35
Seasonal spermatogenesis and testosterone production in roe deer (Capreolus capreolus). Blottner S, et al. **J Reprod Fertil** 1996 Nov;108(2):299-305
Genetic diversity affects testicular morphology in free-ranging lions (Panthera leo) of the Serengeti Plains and Ngorongoro Crater. Munson L, et al. **J Reprod Fertil** 1996 Sep;108(1):11-5
Seasonal changes in spermatogenesis and testicular steroidogenesis in the male black bear Ursus americanus. Tsubota T, et al. **J Reprod Fertil** 1997 Jan;109(1):21-7
Spermatogenesis in the vitamin A-deficient rat: possible interplay between retinoic acid receptors, androgen receptor and inhibin alpha-subunit. Zhuang YH, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1-2):67-76
Hormonal and developmental regulation of DAX-1 expression in Sertoli cells. Tamai KT, et al. **Mol Endocrinol** 1996 Dec;10(12):1561-9
Immunoelectron microscopical distribution of histones H2B and H3 and protamines during human spermiogenesis. Prigent Y, et al. **Mol Hum Reprod** 1996 Dec;2(12):929-35
Transcription and translation of the outer dense fiber gene (Odf1) during spermiogenesis in the rat. A study by in situ analyses and polysome fractionation. Burmester S, et al. **Mol Reprod Dev** 1996 Sep;45(1):10-20
Expression and localization of DNA topoisomerase II during rat spermatogenesis. Chen JL, et al. **Mol Reprod Dev** 1996 Sep;45(1):61-71
Spermatogenesis in the endosymbiont-bearing bivalve Loripes lucinalis (Veneroida: Lucinidae). Johnson MJ, et al. **Mol Reprod Dev** 1996 Dec;45(4):476-84
Fine structure of the germinating cells during the spermiogenesis of Arion rufus (Mollusca, Pulmonate Gastropoda). Pastisson C, et al. **Mol Reprod Dev** 1996 Apr; 43(4):484-94
Differential expression of bcl-2 and bcl-x during chicken spermatogenesis. Vilagrasa X, et al. **Mol Reprod Dev** 1997 May;47(1):26-9
Arrest of spermatogenesis and defective breast development in mice lacking A-myb. Toscani A, et al. **Nature** 1997 Apr 17;386(6626):713-7
Temporal patterns of A-myb and B-myb gene expression during testis development. Latham KE, et al. **Oncogene** 1996 Sep 19;13(6):1161-8
Semen production by the emu (Dromaius novaehollandiae). 2. Effect of collection frequency on the production of semen and spermatozoa. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):622-6
Growth factors and testicular function: relevance to disorders of spermatogenesis in humans. Smith EP, et al. **Semin Reprod Endocrinol** 1996 Aug;14(3):209-17 (114 ref.)
[Current aspects of hormone diagnosis in andrology--predictive values for the preservation of spermatogenesis] Schreiber G, et al. **Wien Med Wochenschr** 1997;147(4-5):84-9 (Eng. Abstr.) **(Ger)**
[The regulation of spermatogenesis in mammals] Stefanini M, et al. **Ital J Anat Embryol** 1995 Oct-Dec;100(4):73-112 (0 ref.) **(Ita)**
[Spermatogenesis and the testosterone level in young male silver foxes in their reproductive period] Osadchuk LV, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun; 82(5-6):102-8 (Eng. Abstr.) **(Rus)**
[An immunohistochemical study of the expression of transcription factor Oct3/4 in mouse spermatogenesis] Tomilin AN, et al. **Tsitologiia** 1996;38(12):1274-9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Radioprotection by DMSO against the biological effects of incorporated radionuclides in vivo--Comparison with other radioprotectors and evidence for indirect action of Auger electrons. Goddu SM, et al. **Acta Oncol** 1996; 35(7):901-7
Failure of spermatogenesis to recover despite the presence of a spermatogonia in the irradiated LBNF1 rat. Kangasniemi M, et al. **Biol Reprod** 1996 Jun;54(6):1200-8
p21WAF1 expression during spermatogenesis of the normal

SPERMATOGENESIS

and X-irradiated rat. West A, et al. **Int J Radiat Biol** 1997 Mar;71(3):283–91

External beam abdominal radiotherapy in patients with seminoma stage I: field type, testicular dose, and spermatogenesis. Jacobsen KD, et al. **Int J Radiat Oncol Biol Phys** 1997 Apr 1;38(1):95–102

Effects of a 1.5–Tesla static magnetic field on spermatogenesis and embryogenesis in mice. Narra VR, et al. **Invest Radiol** 1996 Sep;31(9):586–90

[Effect of irradiation on the vitamin status and spermatogenesis in rats] Evdokimov VV, et al. **Biull Eksp Biol Med** 1997 May;123(5):524–7 **(Rus)**

SPERMATOGONIA

CYTOLOGY

Reinitiation of spermatogonial mitotic differentiation in inactive old BDF1 mouse seminiferous tubules transplanted to W/Wv mouse testis. Tanemura K, et al. **Biol Reprod** 1996 Dec;55(6):1237–42

Isolation of highly purified type A spermatogonia from prepubertal rat testis. Morena AR, et al. **J Androl** 1996 Nov–Dec;17(6):708–17

Testicular composition, number of A spermatogonia, germ cell ratios, and number of spermatids in three different breeds of boars. Okwun OE, et al. **J Androl** 1996 May–Jun; 17(3):301–9

Histological study of the seminiferous epithelium in the Japanese rat snake, Elaphe climacophora: identification of spermatogonium. Hondo E, et al. **J Vet Med Sci** 1997 Jan; 59(1):23–9

Establishment of three monoclonal antibodies specific for prespermatogonia and intratubular malignant germ cells in humans. Hiraoka N, et al. **Lab Invest** 1997 Mar;76(3):427–38

DRUG EFFECTS

Protection from procarbazine-induced testicular damage by hormonal pretreatment does not involve arrest of spermatogonial proliferation. Meistrich ML, et al. **Cancer Res** 1997 Mar 15;57(6):1091–7

Formation of O6-ethylguanine in spermatogonial DNA of adult Syrian golden hamster by intraperitoneal injection of diethylnitrosamine. Kamino K, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):443–5

17 beta-estradiol effects on mast cell number and spermatogonial mitotic index in the testis of the frog, Rana esculenta. Minucci S, et al. **J Exp Zool** 1997 Jun 1; 278(2):93–100

The effect of the interval between dose applications on the observed specific-locus mutation rate in the mouse following fractionated treatments of spermatogonia with ethylnitrosourea. Favor J, et al. **Mutat Res** 1997 Mar 21; 374(2):193–9

GROWTH & DEVELOPMENT

[Regulation of growth and survival of germ cells] Matsui Y. **Hum Cell** 1997 Mar;10(1):63–8 (22 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

The expression of mouse gene P1A in testis does not prevent safe induction of cytolytic T cells against a P1A-encoded tumor antigen. Uyttenhove C, et al. **Int J Cancer** 1997 Jan 27;70(3):349–56

METABOLISM

Expression of DAZ, an azoospermia factor candidate, in human spermatogonia [letter] Menke DB, et al. **Am J Hum Genet** 1997 Jan;60(1):237–41

Degenerative changes in spermatogonia are associated with loss of glucose transporter (Glut 3) in abdominal testis of surgically induced unilateral cryptorchidism in rats. Farooqui SM, et al. **Biochem Biophys Res Commun** 1997 Jul 18;236(2):407–12

FGF-8 is expressed during specific phases of rodent oocyte and spermatogonium development. Valve E, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):173–7

Formation of O6-ethylguanine in spermatogonial DNA of adult Syrian golden hamster by intraperitoneal injection of diethylnitrosamine. Kamino K, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):443–5

Isolation and sequencing of the gene encoding Sp23, a structural protein of spermatophore of the mealworm beetle, Tenebrio molitor. Feng X, et al. **Gene** 1996 Nov 14;179(2):257–62

PATHOLOGY

Isolation of the synchronized A spermatogonia from adult vitamin A-deficient rat testes. van Pelt AM, et al. **Biol Reprod** 1996 Aug;55(2):439–44

Distribution of heat-shock protein 60 immunoreactivity in testes of infertile men. Werner A, et al. **Cell Tissue Res** 1997 Jun;288(3):539–44

RADIATION EFFECTS

Radioprotection by DMSO against the biological effects of incorporated radionuclides in vivo--Comparison with other radioprotectors and evidence for indirect action of Auger electrons. Goddu SM, et al. **Acta Oncol** 1996; 35(7):901–7

Failure of spermatogenesis to recover despite the presence of a spermatogonia in the irradiated LBNF1 rat. Kangasniemi M, et al. **Biol Reprod** 1996 Jun;54(6):1200–8

P53 deficiency produces fewer regenerating spermatogenic tubules after irradiation. Hendry JH, et al. **Int J Radiat Biol** 1996 Dec;70(6):677–82

Hormone treatment after irradiation stimulates recovery of rat spermatogenesis from surviving spermatogonia. Meistrich ML, et al. **J Androl** 1997 Jan–Feb;18(1):80–7

The survival of mouse spermatogonia exposed to alpha particles [letter; comment] Charlton DE. **Radiat Res** 1997 Feb;147(2):270–1. Comment on: Radiat Res 1994 Mar;137(3):352–60.

Radiation-induced cell death in the mouse testis: relationship to apoptosis. Hasegawa M, et al. **Radiat Res** 1997 Apr; 147(4):457–67

TRANSPLANTATION

Transplantation of testis germinal cells into mouse seminiferous tubules. Ogawa T, et al. **Int J Dev Biol** 1997 Feb;41(1):111–22

Ultrastructural observations of spermatogenesis in mice resulting from transplantation of mouse spermatogonia. Russell LD, et al. **J Androl** 1996 Nov–Dec;17(6):603–14

Ultrastructural observations of spermatogenesis following transplantation of rat testis cells into mouse seminiferous tubules. Russell LD, et al. **J Androl** 1996 Nov–Dec; 17(6):615–27

ULTRASTRUCTURE

Cytochemical and immunocytochemical characterization of kinetochores in the holocentric chromosomes of Graphosoma italicum. González-García JM, et al. **Eur J Cell Biol** 1996 Aug;70(4):352–60

Morphometric ultrastructural analysis of germ cells of fetal male mouse gonads. Jankowska-Steifer E, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:31–2

Ultrastructural observations of spermatogenesis following transplantation of rat testis cells into mouse seminiferous tubules. Russell LD, et al. **J Androl** 1996 Nov–Dec; 17(6):615–27

Ultrastructural observations of spermatogenesis in mice resulting from transplantation of mouse spermatogonia. Russell LD, et al. **J Androl** 1996 Nov–Dec;17(6):603–14

Statisticodynamics of pairing between homologous chromatids in mammalian spermatogonia. Matioli GT. **Med Hypotheses** 1996 Apr;46(4):315–8

SPERMATOPHORES see **SPERMATOGONIA**

SPERMATOZOA

see related
ANTISPERMATOGENIC AGENTS
OLIGOSPERMIA
SPERM BANKS
SPERMATOCIDAL AGENTS

Spermatophagy in the stallion epididymis: a scanning and transmission electron microscopy study. López Alvarez ML, et al. **Acta Anat (Basel)** 1995;153(3):181–8

Indications for use of deferential sperm in IVF programs. Schoysman R, et al. **Acta Eur Fertil** 1994 Nov–Dec; 25(6):347–9

Individual variation in recombination among human males [see comments] Yu J, et al. **Am J Hum Genet** 1996 Dec; 59(6):1186–92. Comment in: Am J Hum Genet 1996 Dec;59(6):1175–83.

Aneuploidy detection in human sperm nuclei using PRINS technique. Girardet A, et al. **Am J Med Genet** 1996 Aug 23;64(3):488–92

Incidence of aneuploid spermatozoa among infertile men studied by multicolor fluorescence in situ hybridization. Lähdetie J, et al. **Am J Med Genet** 1997 Jul 11;71(1):115–21

Andrological work-up of patients undergoing microsurgical epididymal sperm aspiration or testicular sperm extraction. Köhn FM, et al. **Andrologia** 1996;28 Suppl 1:77–81

Results of microsurgical epididymal sperm aspiration (MESA) ans testicular sperm extraction (TESE) in azoospermic men using intracytoplasmic sperm injection (ICSI). Ubaldi F, et al. **Andrologia** 1996;28 Suppl 1:71–5

Defective function of membrane potential (psi) on sperm of infertile men. Calzada L, et al. **Arch Androl** 1997 Mar–Apr; 38(2):151–5

Combination of direct swim-up technique and discontinuous Percoll gradient centrifugation for sperm preparation of oligoasthenozoospermic samples. Chen SU, et al. **Arch Androl** 1996 Sep–Oct;37(2):103–9

Storage of sperm and embryos. Cryopreservation of sperm should be offered to men with testicular cancer [letter] Foley SJ, et al. **BMJ** 1996 Oct 26;313(7064):1078

Storage of sperm and embryos. Storage facility exists for sperm from patients positive for antibody to hepatitis C virus [letter] Massey EJ, et al. **BMJ** 1996 Oct 26; 313(7064):1078

Epididymal sperm aspiration [letter; comment] Schmidt SS. **Br J Urol** 1997 Apr;79(4):661–2. Comment on: Br J Urol 1996 Sep;78(3):437–9.

Improved sperm recovery rate with Percoll gradient method in intrauterine insemination. Huang HY, et al. **Chang Keng I Hsueh** 1996 Mar;19(1):24–9

Cell recruitment to the sperm granuloma which follows vasectomy in the rat. Caldwell JC, et al. **Clin Anat** 1996; 9(5):302–8

Quail egg yolk: a novel cryoprotectant for the freeze preservation of Poitou jackass sperm. Trimeche A, et al. **Cryobiology** 1997 Jun;34(4):385–93

Effects of trehalose and sucrose, osmolality of the freezing medium, and cooling rate on viability and intactness of bull sperm after freezing and thawing. Woelders H, et al. **Cryobiology** 1997 Sep;35(2):93–105

An analysis of human sperm chromosome aneuploidy. Templado C, et al. **Cytogenet Cell Genet** 1996;74(3):194–200

Transgenic Xenopus embryos from sperm nuclear transplantations reveal FGF signaling requirements during gastrulation. Kroll KL, et al. **Development** 1996 Oct; 122(10):3173–83

Detection of aneuploidy in human spermatozoa of normal semen donors by fluorescence in situ hybridization. Lähdetie J, et al. **Environ Health Perspect** 1996 May;104 Suppl 3:629–32

Female age is an important parameter to predict treatment outcome in intracytoplasmic sperm injection. Abdelmassih R, et al. **Fertil Steril** 1996 Mar;65(3):573–7

Fertilization and pregnancy rates after intracytoplasmic sperm injection using ejaculate semen and surgically retrieved sperm. Aboulghar MA, et al. **Fertil Steril** 1997 Jul;68(1):108–11

Testicular sperm extraction and intracytoplasmic sperm injection: a simplified method for treatment of obstructive azoospermia. Abuzeid MI, et al. **Fertil Steril** 1997 Aug; 68(2):328–33

Noninvasive methods to obtain sperm [letter; comment] Belker AM. **Fertil Steril** 1997 Jun;67(6):1181. Comment on: Fertil Steril 1996 Oct;66(4):620–3. Comment on: Fertil Steril 1996 Oct;66(4):660–1.

The efficacy of "tubal sperm perfusion"? [letter; comment] [see comments] Fanchin R, et al. **Fertil Steril** 1996 Jul; 66(1):169–70. Comment on: Fertil Steril 1995 Sep;64(3):638–40. Comment in: Fertil Steril 1997 Jun;67(6):1178–9.

Reply to the reply on IUI [letter; comment] Fanchin R, et al. **Fertil Steril** 1997 Jun;67(6):1178–9. Comment on: Fertil Steril 1995 Sep;64(3):505–10. Comment on: Fertil Steril 1996 Jul;66(1):169–70.

Antoine van Leeuwenhoek and the discovery of sperm. Howards SS. **Fertil Steril** 1997 Jan;67(1):16–7

Birth after combination of cryopreservation of sperm recovered from urine and intracytoplasmic sperm injection in a case of complete retrograde ejaculation. Jimenez C, et al. **Fertil Steril** 1997 Sep;68(3):542–4

Reinsemination of one-day-old oocytes by use of intracytoplasmic sperm injection. Lundin K, et al. **Fertil Steril** 1996 Jul;66(1):118–21

Intracytoplasmic sperm injection using microsurgically retrieved epididymal and testicular sperm. Mansour RT, et al. **Fertil Steril** 1996 Mar;65(3):566–72

Has traditional sperm analysis lost its clinical relevance? [letter; comment] Moutel G, et al. **Fertil Steril** 1997 Mar; 67(3):583–4; discussion 584–5. Comment on: Fertil Steril 1996 May;65(5):899–908.

An improved treatment procedure for testicular biopsy specimens offers more efficient sperm recovery: case series. Nagy ZP, et al. **Fertil Steril** 1997 Aug;68(2):376–9

Sperm or spermatid conception? [editorial] Tesarik J. **Fertil Steril** 1997 Aug;68(2):214–6

Polymorphism in genes that influence sperm displacement. Prout T, et al. **Genetics** 1996 Sep;144(1):401–8

Discriminating between allelic and interlocus differences among human immunoglobulin VH4 sequences by analyzing single spermatozoa. Cui X, et al. **Hum Genet** 1997 Jul;100(1):96–100

Analysis of structural and numerical chromosome abnormalities in sperm of normal men and carriers of constitutional chromosome aberrations. A review. Guttenbach M, et al. **Hum Genet** 1997 Jul;100(1):1–21 (143 ref.)

Analysis of chromosomal equipment in spermatozoa of a 46,XY/47,XY/+8 male by means of multicolour fluorescent in situ hybridization: confirmation of a mosaicism and evaluation of risk for offspring. Mercier S, et al. **Hum Genet** 1997 Jan;99(1):42–6

Simultaneous detection of structural and numerical chromosome abnormalities in sperm of healthy men by multicolor fluorescence in situ hybridization. Van Hummelen P, et al. **Hum Genet** 1996 Nov;98(5):608–15

An RBM homologue maps to the mouse Y chromosome and is expressed in germ cells. Elliott DJ, et al. **Hum Mol Genet** 1996 Jul;5(7):869–74

A model for testing recombinogenic sequences in the mouse germline. Moynahan ME, et al. **Hum Mol Genet** 1996 Jul; 5(7):875–86

Pregnancy following intracytoplasmic sperm injection treatment with dead husband's spermatozoa: ethical and policy considerations. Ahuja KK, et al. **Hum Reprod** 1997 Jun;12(6):1360–3

Blastocyst development and birth after in-vitro maturation of human primary oocytes, intracytoplasmic sperm injection and assisted hatching. Barnes FL, et al. **Hum Reprod** 1995 Dec;10(12):3243–7

Efficient modification of intracytoplasmic sperm injection technique for cases with total lack of sperm movement. Barros A, et al. **Hum Reprod** 1997 Jun;12(6):1227–9

Results of cytogenetic analysis in men with severe subfertility prior to intracytoplasmic sperm injection. Baschat AA, et al. **Hum Reprod** 1996 Feb;11(2):330–3

Comparative follow–up study of 130 children born after intracytoplasmic sperm injection and 130 children born after in–vitro fertilization. Bonduelle M, et al. **Hum Reprod** 1995 Dec;10(12):3327–31

Prospective follow–up study of 423 children born after intracytoplasmic sperm injection. Bonduelle M, et al. **Hum Reprod** 1996 Jul;11(7):1558–64

Information access and donated gametes: how much do we know about who wants to know? Broderick P, et al. **Hum Reprod** 1995 Dec;10(12):3338–41 (40 ref.)

A bridge to intracytoplasmic sperm injection––high insemination concentrations benefit patients who have a reduced chance of fertilization with standard in–vitro fertilization. Cowan DB, et al. **Hum Reprod** 1996 Sep; 11(9):1985–9

Testicular sperm retrieval by percutaneous fine needle sperm aspiration compared with testicular sperm extraction by open biopsy in men with non–obstructive azoospermia. Friedler S, et al. **Hum Reprod** 1997 Jul;12(7):1488–93

Intracytoplasmic sperm injection does not overcome an oocyte defect in previous fertilization failure with conventional in–vitro fertilization and normal spermatozoa. Gabrielsen A, et al. **Hum Reprod** 1996 Sep;11(9):1963–5

Efficacy of intracytoplasmic sperm injection using testicular spermatozoa. Gil–Salom M, et al. **Hum Reprod** 1995 Dec; 10(12):3166–70

Is intracytoplasmic sperm injection (ICSI) a safe procedure? What do we learn from early pregnancy data about ICSI? Govaerts I, et al. **Hum Reprod** 1996 Feb;11(2):440–3

Post–coital sperm retrieval could lead to the wider approval of assisted conception by some religions. Hirsh A. **Hum Reprod** 1996 Feb;11(2):245–7 (26 ref.)

Vas deferens aspiration and intracytoplasmic injection of frozen–thawed spermatozoa in a case of anejaculation in a diabetic man. Hovatta O, et al. **Hum Reprod** 1996 Feb; 11(2):334–5

Intracytoplasmic sperm injection without polyvinylpyrrolidone: an essential precaution? [letter; comment] Jean M, et al. **Hum Reprod** 1996 Oct;11(10):2332 . Comment on: Hum Reprod 1993 Jul;8(7):1061–6.

Simultaneous bilateral tubal pregnancy after intracytoplasmic sperm injection. Kahraman S, et al. **Hum Reprod** 1995 Dec; 10(12):3320–1

Intracytoplasmic sperm injection without polyvinylpyrrolidone: an essential precaution? [letter; comment] McDermott A, et al. **Hum Reprod** 1996 Oct; 11(10):2332. Comment on: Hum Reprod 1995 Feb;10(2):436–8.

Micromanipulation improves in–vitro fertilization results after epididymal or testicular sperm aspiration in patients with congenital absence of the vas deferens. Madgar I, et al. **Hum Reprod** 1996 Oct;11(10):2151–4

Are there any limits to assisted conception possibilities? Pregnancy and birth following oocyte donation and intracytoplasmic injection of spermatozoa obtained by percutaneous epididymal aspiration. Meniru GI, et al. **Hum Reprod** 1997 Jul;12(7):1561–2

The influence of the site of sperm deposition and mode of oolemma breakage at intracytoplasmic sperm injection on fertilization and embryo development rates. Nagy ZP, et al. **Hum Reprod** 1995 Dec;10(12):3171–7

Fertilization and pregnancy using intentionally cryopreserved testicular tissue as the sperm source for intracytoplasmic sperm injection in 10 men with non–obstructive azoospermia. Oates RD, et al. **Hum Reprod** 1997 Apr;12(4):734–9

Endometrial thickness as a predictor of pregnancy after in–vitro fertilization but not after intracytoplasmic sperm injection. Rinaldi L, et al. **Hum Reprod** 1996 Jul; 11(7):1538–41

Extended sperm preparation: an alternative to testicular sperm extraction in non–obstructive azoospermia. Ron–El R, et al. **Hum Reprod** 1997 Jun;12(6):1222–6

Irregular chromosome segregation following ICSI? [letter; comment] Rosenbusch B, et al. **Hum Reprod** 1996 Oct; 11(10):2337–8. Comment on: Hum Reprod 1996 May;11(5):926–8.

Oocyte morphology predicts outcome of intracytoplasmic sperm injection. Serhal PF, et al. **Hum Reprod** 1997 Jun; 12(6):1267–70

A Mono–Percoll separation technique improves sperm recovery of normal and male factor specimens when compared with the swim–up technique. Shalika S, et al. **Hum Reprod** 1995 Dec;10(12):3195–7

One year's experience with elective transfer of two good quality embryos in the human in–vitro fertilization and intracytoplasmic sperm injection programmes. Staessen C, et al. **Hum Reprod** 1995 Dec;10(12):3305–12

Report on the activities of the ESHRE Task Force on intracytoplasmic sperm injection. European Society of Human Reproduction and Embryology. Tarlatzis BC. **Hum Reprod** 1996 Dec;11 Suppl 4:160–85; discussion 186

Centrifugation of bovine oocytes for nuclear micromanipulation and sperm microinjection. Tatham BG, et al. **Hum Reprod** 1996 Jul;11(7):1499–503

Testicular sperm recovery in nine 47,XXY Klinefelter patients. Tournaye H, et al. **Hum Reprod** 1996 Aug; 11(8):1644–9

Oocyte and embryo quality as well as pregnancy rate in intracytoplasmic sperm injection are not affected by high follicular phase serum progesterone. Ubaldi F, et al. **Hum Reprod** 1995 Dec;10(12):3091–6

Intracytoplasmic sperm injection using surgically retrieved epididymal and testicular spermatozoa in cases of obstructive and non–obstructive azoospermia. Fahmy I, et al. **Int J Androl** 1997 Feb;20(1):37–44

Spermatozoa selection by the swim–up procedure and two–layer percoll gradient centrifugation. Evliyaoğlu Y, et al. **Int Urol Nephrol** 1996;28(3):409–18

Microsurgical epididymal sperm aspiration. Sandlow J, et al. **Iowa Med** 1996 Nov–Dec;86(9):367–8

Successful treatment of severe oligozoospermia with sperm washing and intrauterine insemination. Centola GM. **J Androl** 1997 Jul–Aug;18(4):448–53

Microsurgical epididymal sperm aspiration: review of techniques, preoperative considerations, and results. Girardi SK, et al. **J Androl** 1996 Jan–Feb;17(1):5–9 (13 ref.)

Raising sperm from the dead [editorial] Webb SM. **J Androl** 1996 Jul–Aug;17(4):325–6

Detection of exogenous DNA in blastocysts after continuous exposure to DNA carrier sperm. Chan PJ, et al. **J Assist Reprod Genet** 1996 Aug;13(7):602–5

Pregnancy rates after intracytoplasmic sperm injection in relation to sperm recovery techniques. Egbase PE, et al. **J Assist Reprod Genet** 1997 Jul;14(6):317–20

Development of a microchamber which spontaneously selects high–quality sperm for use in in vitro fertilization or micromanipulation. Lih CH, et al. **J Assist Reprod Genet** 1996 Sep;13(8):657–62

Successful percutaneous epididymal sperm aspiration (PESA) after more than 20 years of acquired obstructive azoospermia. Meniru GI, et al. **J Assist Reprod Genet** 1996 May;13(5):449–50

Twin pregnancy following IVF treatment using frozen–thawed retrograde ejaculated sperm. Tay JI, et al. **J Assist Reprod Genet** 1996 Oct;13(9):731–2

ABO genotyping of suspects from sperm DNA isolated from postcoital samples in sex crimes. Sasaki M, et al. **J Forensic Sci** 1996 Mar;41(2):275–8

The feasibility of cryopreservation of sperm harvested intraoperatively during vasectomy reversals. Belker AM, et al. **J Urol** 1997 Apr;157(4):1292–4

Magnetic resonance imaging in hemospermia. Cho IR, et al. **J Urol** 1997 Jan;157(1):258–62

Testis biopsies frequently demonstrate sperm in men with azoospermia and significantly elevated follicle–stimulating hormone levels. Kim ED, et al. **J Urol** 1997 Jan; 157(1):144–6

Vasoepididymostomy for vasectomy reversal: a critical assessment in the era of intracytoplasmic sperm injection. Kolettis PN, et al. **J Urol** 1997 Aug;158(2):467–70

Re: A live birth from intracytoplasmic injection of a spermatozoon retrieved from testicular parenchyma [letter; comment] Plas E, et al. **J Urol** 1997 Jan;157(1):268–9. Comment on: J Urol 1995 Sep;154(3):1136–7.

Percutaneous sperm aspiration of a spermatocele for intracytoplasmic sperm injection. Werthman P, et al. **J Urol** 1997 Oct;158(4):1524

Nonsurgical and nonlethal retrieval of mouse spermatozoa. Foxworth WB, et al. **Lab Anim Sci** 1996 Jun;46(3):352–4

Mapping of bovine FcgammaR (FCGR) genes by sperm typing allows extended use of human map information. Klungland H, et al. **Mamm Genome** 1997 Aug;8(8):573–7

Evaluation of chromatin condensation in human spermatozoa: a flow cytometric assay using acridine orange staining. Golan R, et al. **Mol Hum Reprod** 1997 Jan; 3(1):47–54

Analysis of the sex chromosomal equipment in spermatozoa of a 47,XYY male using two–colour fluorescence in–situ hybridization. Mercier S, et al. **Mol Hum Reprod** 1996 Jul; 2(7):485–8

The collection of data from findings in cases of sexual assault and the significance of spermatozoa on vaginal, anal and oral swabs. Allard JE. **Sci Justice** 1997 Apr–Jun; 37(2):99–108

Microsurgical autogenous sperm reservoir with simultaneous epididymal sperm aspiration: a novel approach for the man with surgically unreconstructable obstruction. Matthews GJ, et al. **Tech Urol** 1995 Fall;1(3):120–5

Effect of sperm dose on pregnancy rate from intrauterine insemination: a retrospective analysis. Cressman BE, et al. **Tex Med** 1996 Dec;92(12):74–9

Intracytoplasmic sperm injection for treatment of the infertile male. Kim ED, et al. **Tex Med** 1997 Jul;93(7):50–6 (41 ref.)

Effect of level of anastomosis and quality of intraepididymal sperm on the outcome of end–to–side epididymovasostomy. Jarow JP, et al. **Urology** 1997 Apr;49(4):590–5

Presence of mature sperm in testicular parenchyma of men with nonobstructive azoospermia: prevalence and predictive factors. Mulhall JP, et al. **Urology** 1997 Jan; 49(1):91–5; discussion 95–6

Testicular sperm extraction with intracytoplasmic sperm injection for nonobstructive azoospermia. Schlegel PN, et al. **Urology** 1997 Mar;49(3):435–40

Systematic fine–needle aspiration of the testis: correlation to biopsy and results of organ "mapping" for mature sperm in azoospermic men. Turek PJ, et al. **Urology** 1997 May; 49(5):743–8

Intracytoplasmic sperm injection. Nachtigall RD. **West J Med** 1996 Dec;165(6):373

[Gamete donation––biological, legislative and ethical aspects] Crha I, et al. **Ceska Gynekol** 1997 Apr;62(2):72–5 **(Cze)**

[Evolution of intra–cytoplasm sperm injection activities from 1992 to 1995. FIVNAT] **Contracept Fertil Sex** 1996 Sep; 24(9):706–9 (Eng. Abstr.) **(Fre)**

[Genetic determinism of sperm production in bulls] Humblot P, et al. **Contracept Fertil Sex** 1996 Sep;24(9):617–23 (Eng. Abstr.) **(Fre)**

[Oocyte maturation and intracytoplasmic sperm injection] Mandelbaum J, et al. **Contracept Fertil Sex** 1996 Jul–Aug; 24(7–8):534–8 (Eng. Abstr.) **(Fre)**

[Genetic risks associated with intracytoplasmic sperm injection] Plachot M. **Contracept Fertil Sex** 1996 Jul–Aug; 24(7–8):577–80 (14 ref.) (Eng. Abstr.) **(Fre)**

[Intracytoplasmic sperm injection and Klinefelter syndrome] Sèle B, et al. **Contracept Fertil Sex** 1996 Jul–Aug; 24(7–8):581–4 (Eng. Abstr.) **(Fre)**

[When the needle replaces the knife: first pregnancies obtained after percutaneous testicular aspiration and intracytoplasmic sperm injection] Wittemer C, et al. **Contracept Fertil Sex** 1997 Jan;25(1):46–50 (Eng. Abstr.) **(Fre)**

[Intracytoplasmic injection of spermatozoa] Olivennes F, et al. **Presse Med** 1996 Nov 2;25(33):1599–603 (25 ref.) (Eng. Abstr.) **(Fre)**

[General characteristics of the spermatozoa in oligozoospermic men with and without clinical varicocele] Andrade–Rocha FT, et al. **Rev Assoc Med Bras** 1997 Jan–Mar;43(1):58–60 (Eng. Abstr.) **(Por)**

ABNORMALITIES

A sperm midpiece defect in a Hereford bull with variable semen quality and freezability. Andersen Berg K, et al. **Acta Vet Scand** 1996;37(3):367–73

Sperm acrosome defects in a patient with Aarskog–Scott syndrome. Meschede D, et al. **Am J Med Genet** 1996 Dec 18;66(3):340–2

Prognostic value of the strict criteria: an Argentinian experience. Hernàndez M, et al. **Arch Androl** 1996 Sep–Oct; 37(2):87–9

Assessment of the relationship of sperm morphology with seminal and other clinical conditions of semen donors. Hossain AM, et al. **Arch Androl** 1997 Sep–Oct;39(2):111–7

Chronic administration of 4–tert–octylphenol to adult male rats causes shrinkage of the testes and male accessory sex organs, disrupts spermatogenesis, and increases the incidence of sperm deformities. Boockfor FR, et al. **Biol Reprod** 1997 Aug;57(2):267–77

Male sterility caused by sperm cell–specific structural abnormalities in ebouriffé, a new mutation of the house mouse. Lalouette A, et al. **Biol Reprod** 1996 Aug; 55(2):355–63

Atomic force microscope analysis of chromatin volumes in human sperm with head–shape abnormalities. Lee JD 4th, et al. **Biol Reprod** 1997 Jan;56(1):42–9

The sperm deformity index: a reliable predictor of the outcome of oocyte fertilization in vitro. Aziz N, et al. **Fertil Steril** 1996 Dec;66(6):1000–8

Failure of oocyte activation after intracytoplasmic sperm injection using round–headed sperm. Battaglia DE, et al. **Fertil Steril** 1997 Jul;68(1):118–22

Estimation of aneuploidy levels for 8, 15, 18, X and Y chromosomes in 97 human sperm samples using fluorescence in situ hybridization. Morel F, et al. **Fertil Steril** 1997 Jun;67(6):1134–9

Therapeutic approach of immotile cilia syndrome by intracytoplasmic sperm injection: a case report. Papadimas J, et al. **Fertil Steril** 1997 Mar;67(3):562–5

Intracytoplasmic sperm injection (ICSI) for severe semen abnormalities: dissecting the tail of spermatozoa at the tip. Chen SU, et al. **Hum Reprod** 1996 Dec;11(12):2640–4

Successful intracytoplasmic sperm injection with spermatozoa from a patient with dysplasia of the fibrous sheath and chronic respiratory disease. Olmedo SB, et al. **Hum Reprod** 1997 Jul;12(7):1497–9

Effect of abnormal sperm head morphology on the outcome of intracytoplasmic sperm injection in humans. Taşdemir I, et al. **Hum Reprod** 1997 Jun;12(6):1214–7

Is there really a decrease in sperm parameters among healthy young men? A survey of sperm donations during 15 years. Benshushan A, et al. **J Assist Reprod Genet** 1997 Jul; 14(6):347–53

Abnormal sperm morphology is highly predictive of pregnancy outcome during controlled ovarian hyperstimulation and intrauterine insemination. Lindheim SR, et al. **J Assist Reprod Genet** 1996 Aug;13(7):569–72

Abnormal morphology of vervet monkey sperm. Seier JV, et al. **J Med Primatol** 1996 Dec;25(6):397–403

Detection of aneuploidy in human spermatozoa using fluorescence in situ hybridization (FISH). Hu H, et al. **Jpn J Hum Genet** 1996 Dec;41(4):381–9

Comparison of gonosomal aneuploidy in spermatozoa of normal fertile men and those with severe male factor detected by in–situ hybridization. Bernardini L, et al. **Mol Hum Reprod** 1997 May;3(5):431–8

Rapid chromosomal analysis of germ–line cells by FISH: an investigation of an infertile male with large–headed spermatozoa. Yurov YB, et al. **Mol Hum Reprod** 1996 Sep; 2(9):665–8

Sperm head abnormalities and dominant lethal effects of formaldehyde in albino rats. Odeigah PG. **Mutat Res** 1997 Mar 17;389(2–3):141–8

Radiation–induced cell death in the mouse testis: relationship

to apoptosis. Hasegawa M, et al. **Radiat Res** 1997 Apr; 147(4):457–67

Morphological abnormalities of rabbit spermatozoa studied by scanning electron microscope and quantified by light microscope. Kuzminsky G, et al. **Reprod Nutr Dev** 1996; 36(5):565–75

[Fibronectin and hyaluronic acid in seminal fluid: relationship with sperm count and percentage of typical forms] Laudat A, et al. **Pathol Biol (Paris)** 1997 Jun;45(6):462–6 (Eng. Abstr.) **(Fre)**

[Effect of quality markers of ejaculates of beagle dogs after frequent semen collection] Schäfer S, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Jan;104(1):26–9 (Eng. Abstr.) **(Ger)**

CHEMISTRY

Characterization of a sperm nuclear protein. Batova IN, et al. **Am J Reprod Immunol** 1996 Jul;36(1):49–57

Quantitative determination of IgG and IgA on sperm from infertile patients with and without antisperm antibodies. Hjort T. **Am J Reprod Immunol** 1996 Oct;36(4):211–5

Major goat sperm 105 kDa maturation antigen: purification, characterization, and effect of its antiserum on acrosin activity. Sarkar M, et al. **Am J [redacted]eprod Immunol** 1997 May; 37(5):399–407

Batch analysis of the ATP content of bovine sperm, oocytes, and early embryos using a scintillation counter to measure the chemiluminescence produced by the luciferin–luciferase reaction. Rieger D. **Anal Biochem** 1997 Mar 1;246(1):67–70

Immunohistochemical localization of androgen receptor in mouse testicular germ cells during fetal and postnatal development. Zhou X, et al. **Anat Rec** 1996 Jul; 245(3):509–18

Electrophoretic analysis of protein selectively extracted with chaotropic agents from membranes of rat sperm. Fornés MW, et al. **Biocell** 1996 Aug;20(2):111–21

Purification of P26h: a hamster sperm protein. Coutu L, et al. **Biochem Cell Biol** 1996;74(2):227–31

The human fertilin alpha gene is non-functional: implications for its proposed role in fertilization. Jury JA, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):577–81

Boar sperm proacrosin infrared investigation: secondary structure analysis after autoactivation and suramin binding. Fini C, et al. **Biochem Mol Med** 1996 Jun;58(1):37–45

Structure of a covalently cross-linked form of core histones present in the starfish sperm. Shimizu T, et al. **Biochemistry** 1997 Oct 7;36(40):12071–9

Identification by affinity chromatography of boar sperm membrane-associated proteins bound to immobilized porcine zona pellucida. Mapping of the phosphorylethanolamine-binding region of spermadhesin AWN. Ensslin M, et al. **Biol Chem Hoppe Seyler** 1995 Dec; 376(12):733–8

Structural relationship of sperm soluble hyaluronidase to the sperm membrane protein PH-20. Hunnicutt GR, et al. **Biol Reprod** 1996 Jun;54(6):1343–9

Isolation and characterization of MPM-2-reactive sperm proteins: homology to components of the outer dense fibers and segmented columns. Long CR, et al. **Biol Reprod** 1997 Aug;57(2):246–54

Reactive oxygen species block sperm–egg fusion via oxidation of sperm sulfhydryl proteins in mice. Mammoto A, et al. **Biol Reprod** 1996 Nov;55(5):1063–8

Two-dimensional gel electrophoretic analysis of vectorially labeled surface proteins of human spermatozoa. Naaby-Hansen S, et al. **Biol Reprod** 1997 Mar;56(3):771–87

Determination of activable proacrosin/acrosin in bovine sperm using an irreversible isocoumarin serine protease inhibitor. Palencia DD, et al. **Biol Reprod** 1996 Sep; 55(3):536–42

Intracellular injections of a soluble sperm factor trigger calcium oscillations and meiotic maturation in unfertilized oocytes of a marine worm. Stricker SA. **Dev Biol** 1997 Jun 15;186(2):185–201

Parthenogenetic activation of mouse eggs by microinjection of a truncated c-kit tyrosine kinase present in spermatozoa. Sette C, et al. **Development** 1997 Jun;124(11):2267–74

Transgenic sperm or deadly missiles? [letter; comment] Chen TM, et al. **Fertil Steril** 1996 Jul;66(1):167–9. Comment on: Fertil Steril 1995 May;63(5):1121–4.

Changes in protamine 1 distribution in human sperm nucleus during in vitro sperm–oocyte interaction: an immunoelectron microscopic study. Colleu D, et al. **Fertil Steril** 1997 Jan;67(1):123–8

Comparison of individual antioxidants of sperm and seminal plasma in fertile and infertile men. Lewis SE, et al. **Fertil Steril** 1997 Jan;67(1):142–7

Evaluation of human spermatozoa using video imaging technique and flow cytometry. Filipiak K, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:83–4

Isolation and identification of novel sulfated and nonsulfated oligosialyl glycosphingolipids from sea urchin sperm. Ijuin T, et al. **Glycoconj J** 1996 Jun;13(3):401–13

Chromosome segregation in a man heterozygous for a pericentric inversion, inv(9)(p11q13), analyzed by using sperm karyotyping and two-color fluorescence in situ hybridization on sperm nuclei. Colls P, et al. **Hum Genet** 1997 Jun;99(6):761–5

The value of subcellular elemental analysis in the assessment of human spermatozoa. Cottell E, et al. **Hum Reprod** 1995 Dec;10(12):3186–9

Lipids of the sperm plasma membrane: from polyunsaturated fatty acids considered as markers of sperm function to possible scavenger therapy. Lenzi A, et al. **Hum Reprod Update** 1996 May–Jun;2(3):246–56 (63 ref.)

The PH-20 protein in human spermatozoa. Sabeur K, et al. **J Androl** 1997 Mar–Apr;18(2):151–8

Transfection of the inner cell mass and lack of a unique DNA sequence affecting the uptake of exogenous DNA by sperm as shown by dideoxy sequencing analogues. Cabrera M, et al. **J Assist Reprod Genet** 1997 Feb;14(2):120–4

A soluble sperm factor gates Ca(2+)-activated K+ channels in human oocytes. Dale B, et al. **J Assist Reprod Genet** 1996 Aug;13(7):573–7

Is paternal mitochondrial DNA transferred to the offspring following intracytoplasmic sperm injection? Houshmand M, et al. **J Assist Reprod Genet** 1997 Apr;14(4):223–7

Human protamines and male infertility. Khara KK, et al. **J Assist Reprod Genet** 1997 May;14(5):282–90

Identification and characterization of new cDNAs encoding outer dense fiber proteins of rat sperm. Brohmann H, et al. **J Biol Chem** 1997 Apr 11;272(15):10327–32

Protamines of reptiles. Hunt JG, et al. **J Biol Chem** 1996 Sep 20;271(38):23547–57

Hybrid nucleoprotein particles containing a subset of male and female histone variants form during male pronucleus formation in sea urchins. Imschenetzky M, et al. **J Cell Biochem** 1996 Dec 15;63(4):385–94

Targeting of membranes to sea urchin sperm chromatin is mediated by a lamin B receptor-like integral membrane protein. Collas P, et al. **J Cell Biol** 1996 Dec;135(6 Pt 2):1715–25

Testicular biosynthesis and epididymal endoproteolytic processing of rat sperm surface antigen 2B1. Jones R, et al. **J Cell Sci** 1996 Oct;109 (Pt 10):2561–70

Reversion of thermic-shock effect on ram spermatozoa by adsorption of seminal plasma proteins revealed by partition in aqueous two-phase systems. García-López N, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1–2):137–43

Isolation of histones and related chromatin structures from spermatozoa nuclei of a dasyurid marsupial, Sminthopsis crassicaudata. Soon LL, et al. **J Exp Zool** 1997 Aug 1; 278(5):322–32

The effect of FMR1 CGG repeat interruptions on mutation frequency as measured by sperm typing. Kunst CB, et al. **J Med Genet** 1997 Aug;34(8):627–31

The primary structure of a chondrichthyan protamine: a new apparent contradiction in protamine evolution. Saperas N, et al. **J Mol Evol** 1996 Nov;43(5):528–35

Effects of dietary supplementation with alpha-linolenic acid on the phospholipid fatty acid composition and quality of spermatozoa in cockerel from 24 to 72 weeks of age. Kelso KA, et al. **J Reprod Fertil** 1997 May;110(1):53–9

Analysis of fibronectin on human sperm. Pinke LA, et al. **J Urol** 1997 Sep;158(3 Pt 1):936–41

Magnetization transfer of pure DNA and purified sperm nuclei. Virta A, et al. **MAGMA** 1996 Jun;4(2):135–8

Palindrome resolution and recombination in the mammalian germ line. Akgün E, et al. **Mol Cell Biol** 1997 Sep; 17(9):5559–70

Localization of a 25 kDa human sperm surface protein: its role in in-vitro human sperm capacitation. Banerjee M, et al. **Mol Hum Reprod** 1997 Feb;3(2):109–14

Measurement of intracellular pH in human spermatozoa by flow cytometry with the benzo[c]xanthene dye SNAFL-1: a novel, single excitation, dual emission, molecular probe. Brook PF, et al. **Mol Hum Reprod** 1996 Jan;2(1):18–25

Identification of a Gly862 to Ser substitution in the type I collagen gene from a single spermatozoon. Iida T, et al. **Mol Hum Reprod** 1996 Feb;2(2):131–4

Detection of mRNA transcripts of beta 1 integrins in ejaculated human spermatozoa by nested reverse transcription-polymerase chain reaction. Rohwedder A, et al. **Mol Hum Reprod** 1996 Jul;2(7):499–505

alpha-Tocopherol in human spermatozoa and seminal plasma: relationships with motility, antioxidant enzymes and leukocytes. Thérond P, et al. **Mol Hum Reprod** 1996 Oct;2(10):739–44

Sequence and characterization of the sperm protein Sp17 from the baboon. Adoyo PA, et al. **Mol Reprod Dev** 1997 May;47(1):66–71

Extent of sperm chromatin hydration determined by atomic force microscopy. Allen MJ, et al. **Mol Reprod Dev** 1996 Sep;45(1):87–92

Molecular cloning, structural analysis, and expression of carp ZP2 gene. Chang YS, et al. **Mol Reprod Dev** 1997 Mar; 46(3):258–67

Histone H1 variants as sperm-specific nuclear proteins of Rana catesbeiana, and their role in maintaining a unique condensed state of sperm chromatin. Itoh T, et al. **Mol Reprod Dev** 1997 Jun;47(2):181–90

Isolation and characterization of a rabbit epididymal secretory glycoprotein that associates to the spermatozoon surface. Nieto A, et al. **Mol Reprod Dev** 1997 Mar; 46(3):337–43

Molecular cloning and tissue-specific expression of the mouse homologue of the rat brain 14-3-3 theta protein: characterization of its cellular and developmental pattern of expression in the male germ line. Perego L, et al. **Mol Reprod Dev** 1997 Aug;47(4):370–9

The 26 kD protein recognized on rat cauda epididymal sperm by monoclonal antibody 4E9 has internal peptide sequence that is identical to the secreted form of epididymal protein E. Xu W, et al. **Mol Reprod Dev** 1997 Mar;46(3):377–82

Reproducibility of human sperm DNA measurements using the alkaline single cell gel electrophoresis assay. Hughes CM, et al. **Mutat Res** 1997 Mar 21;374(2):261–8

Characterization of the full fragile X syndrome mutation in fetal gametes. Malter HE, et al. **Nat Genet** 1997 Feb; 15(2):165–9

Changes in distribution of labile zinc in mouse spermatozoa during maturation in the epididymis assessed by the fluorophore Zinquin. Zalewski PD, et al. **Reprod Fertil Dev** 1996;8(7):1097–105

Sperm chromatin structure is altered in cynomolgus monkeys with environmentally relevant blood lead levels. Foster WG, et al. **Toxicol Ind Health** 1996 Sep–Oct;12(5):723–35

Localization and expression of the c-kit receptor protein in human and rodent testis and sperm. Sandlow JI, et al. **Urology** 1997 Mar;49(3):494–500

Localisation of two classes of acetylcholine receptor-like molecules in sperms of different animal species. Baccetti B, et al. **Zygote** 1995 Aug;3(3):207–17

CLASSIFICATION

Sperm morphology assessment: historical review in relation to fertility. Ombelet W, et al. **Hum Reprod Update** 1995 Nov;1(6):543–57 (152 ref.)

Discordance in sperm morphology determination by strict criteria (SC) and WHO criteria, pointing out the necessity of sperm morphology determination by SC. Molina R, et al. **J Assist Reprod Genet** 1996 Jan;13(1):85–6

Multipoint linkage map from sperm typing data. Lien S. **Reprod Nutr Dev** 1996;36(6):637–42 (16 ref.)

[The determination of the group classification of sperm by the ABO system by means of the immunofluorescence reaction in a quantitative modification] Sidorov VL, et al. **Sud Med Ekspert** 1996 Oct–Dec;39(4):47–8 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Techniques of sperm selection and in vitro fertilization results. Leonetti T, et al. **Acta Eur Fertil** 1995 Jan–Feb; 26(1):31–4

Effect on human gamma interferon on mice testis: a quantitative analysis of the spermatogenic cells. Natwar RK, et al. **Acta Eur Fertil** 1995 Jan–Feb;26(1):45–9

Azoospermia and intracytoplasmic sperm injection. Ubaldi F, et al. **Acta Eur Fertil** 1995 Jan–Feb;26(1):21–4 (16 ref.)

A survey of four years of experience with intracytoplasmic sperm injection. Ubaldi F, et al. **Acta Eur Fertil** 1995 Jan–Feb;26(1):7–11

Enhanced separation of X and Y bearing sperm cells by a combined density gradient centrifugation evaluated by fluorescence in situ hybridization of the Y-chromosome. Andersen CY, et al. **Acta Obstet Gynecol Scand** 1997 Feb; 76(2):131–4

Analysis of meiotic segregation, using single-sperm typing: meiotic drive at the myotonic dystrophy locus. Leeflang EP, et al. **Am J Hum Genet** 1996 Oct;59(4):896–904

Comparison of two staining and evaluation methods used for computerized human sperm morphology evaluations. Coetzee K, et al. **Andrologia** 1997 May–Jun;29(3):133–5

Effects of different staining and washing procedures on the results of human sperm morphology evaluation by manual and computerised methods. Menkveld R, et al. **Andrologia** 1997 Jan–Feb;29(1):1–7

The influence of sperm/zona pellucida collision rates on zona binding. Ozgür K, et al. **Andrologia** 1996 Sep–Oct; 28(5):261–5

Segmentation of sperms using the strategic Hough transform. Park KS, et al. **Ann Biomed Eng** 1997 Mar–Apr; 25(2):294–302

Fusion of sperm with prostasomes: effects on membrane fluidity. Carlini E, et al. **Arch Biochem Biophys** 1997 Jul 1;343(1):6–12

In situ demonstration of germinal cell apoptosis during diethylstilbestrol-induced testis regression in adult male Syrian hamsters. Nonclercq D, et al. **Biol Reprod** 1996 Dec; 55(6):1368–76

Expression of the c-kit gene is critical for migration of neonatal rat gonocytes in vitro. Orth JM, et al. **Biol Reprod** 1997 Sep;57(3):676–83

Distribution of mucus and sperm in bovine oviducts after artificial insemination: the physical environment of the oviductal sperm reservoir. Suarez SS, et al. **Biol Reprod** 1997 Feb;56(2):447–53

Fluorometric assessments of acrosomal integrity and viability in cryopreserved bovine spermatozoa. Thomas CA, et al. **Biol Reprod** 1997 Apr;56(4):991–8

Pre- and postmeiotic expression of male germ cell-specific genes throughout 2-week cocultures of rat germinal and Sertoli cells. Weiss M, et al. **Biol Reprod** 1997 Jul; 57(1):68–76

Barriers to diffusion of plasma membrane proteins form early during guinea pig spermiogenesis. Cowan AE, et al. **Biophys J** 1997 Jul;73(1):507–16

Physiological monitoring of optically trapped cells: assessing the effects of confinement by 1064-nm laser tweezers using microfluorometry. Liu Y, et al. **Biophys J** 1996 Oct; 71(4):2158–67

Gram staining applied to human spermatozoa: a simple method for studying chromatin condensation status. Radicioni A, et al. **Biotech Histochem** 1996 Mar;71(2):61–5

Morphological and kinetic changes of carp (Cyprinus carpio)

spermatozoa after initiation of motility in distilled water. Perchec G, et al. **Cell Motil Cytoskeleton** 1996;35(2):113–20

Entry of mouse embryonic germ cells into meiosis. McLaren A, et al. **Dev Biol** 1997 Jul 1;187(1):107–13

Morphological analysis of germ cell apoptosis during postnatal testis development in normal and Hsp 70–2 knockout mice. Mori C, et al. **Dev Dyn** 1997 Jan; 208(1):125–36

Differentiation of female chicken primordial germ cells into spermatozoa in male gonads. Tagami T, et al. **Dev Growth Differ** 1997 Jun;39(3):267–71

An early and massive wave of germinal cell apoptosis is required for the development of functional spermatogenesis. Rodriguez I, et al. **EMBO J** 1997 May 1;16(9):2262–70

The Fas system is a key regulator of germ cell apoptosis in the testis. Lee J, et al. **Endocrinology** 1997 May; 138(5):2081–8

Loss of telomerase activity during male germ cell differentiation. Ravindranath N, et al. **Endocrinology** 1997 Sep;138(9):4026–9

The meiotic segregation pattern of a reciprocal translocation t(10;12)(q26.1;p13.3) by fluorescence in situ hybridization sperm analysis. Estop AM, et al. **Eur J Hum Genet** 1997 Mar–Apr;5(2):78–82

Approaches for obtaining sperm in patients with male factor infertility. Cha KY, et al. **Fertil Steril** 1997 Jun;67(6):985–95 (86 ref.)

Failure of multitube sperm swim-up for sex preselection. De Jonge CJ, et al. **Fertil Steril** 1997 Jun;67(6):1109–14

The impact of sperm morphology evaluated by strict criteria on intrauterine insemination success. Karabinus DS, et al. **Fertil Steril** 1997 Mar;67(3):536–41

Testicular and epididymal sperm in a microinjection program: methods of retrieval and results. Watkins W, et al. **Fertil Steril** 1997 Mar;67(3):527–35

Evaluation of human spermatozoa using video imaging technique and flow cytometry. Filipiak K, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:83–4

Genetic basis of sperm and testis length differences and epistatic effect on hybrid inviability and sperm motility between Drosophila simulans and D. sechellia. Joly D, et al. **Heredity** 1997 Apr;78 (Pt 4):354–62

Growth response of adult germ cells to rat androgen-binding protein and human sex hormone-binding globulin. Gérard A, et al. **Horm Res** 1996;45(3–5):218–21

Increased incidence of disomic sperm nuclei in a 47,XYY male assessed by fluorescent in situ hybridization (FISH). Blanco J, et al. **Hum Genet** 1997 Mar;99(3):413–6

Meiotic behaviour of sex chromosomes investigated by three-colour FISH on 35,142 sperm nuclei from two 47,XYY males. Chevret E, et al. **Hum Genet** 1997 Mar; 99(3):407–12

Prolonged survival of human spermatozoa when co-incubated with epididymal cell cultures. Akhondi MA, et al. **Hum Reprod** 1997 Mar;12(3):514–22

A healthy birth after intracytoplasmic sperm injection by using immotile testicular spermatozoa in a case with totally immotile ejaculated spermatozoa before and after Percoll gradients. Kahraman S, et al. **Hum Reprod** 1997 Feb; 12(2):292–3

Intrauterine insemination after ovarian stimulation with clomiphene citrate: predictive potential of inseminating motile count and sperm morphology. Ombelet W, et al. **Hum Reprod** 1997 Jul;12(7):1458–63

Preliminary observations on polar body extrusion and pronuclear formation in human oocytes using time-lapse video cinematography. Payne D, et al. **Hum Reprod** 1997 Mar;12(3):532–41

A new concept for the extraction of testicular spermatozoa as a tool for assisted fertilization (ICSI). Salzbrunn A, et al. **Hum Reprod** 1996 Apr;11(4):752–5

Semen parameters as predictors of in-vitro fertilization: the importance of strict criteria sperm morphology. Vawda AI, et al. **Hum Reprod** 1996 Jul;11(7):1445–50

The predetermination of embryonic sex using flow cytometrically separated X and Y spermatozoa. Cran DG, et al. **Hum Reprod Update** 1996 Jul–Aug;2(4):355–63 (48 ref.)

Statement on the general reduction in sperm quality. Comhaire F, et al. **Int J Androl** 1995 Dec;18 Suppl 2:1–2

Advantages of strict (Tygerberg) criteria for evaluation of sperm morphology. Menkveld R, et al. **Int J Androl** 1995 Dec;18 Suppl 2:36–42 (43 ref.)

Minimal criteria of sperm quality for insemination and IVF therapy. Michelmann HW. **Int J Androl** 1995 Dec;18 Suppl 2:81–7

NMR spectroscopy in andrology: research uses and possible clinical applications. Rohr G, et al. **Int J Androl** 1995 Dec; 18 Suppl 2:12–9 (41 ref.)

Methodological issues in the analysis of human sperm concentration data. Berman NG, et al. **J Androl** 1996 Jan–Feb;17(1):68–73

Sperm separation for gender preference: methods and efficacy. Botchan A, et al. **J Androl** 1997 Mar–Apr; 18(2):107–8 (20 ref.)

Effect of semen dilution on bovine sperm viability as determined by dual-DNA staining and flow cytometry. Garner DL, et al. **J Androl** 1997 May–Jun;18(3):324–31

Choice of operating conditions to minimize sperm subpopulation sampling bias in the assessment of boar semen by computer-assisted semen analysis. Holt C, et al. **J Androl** 1996 Sep–Oct;17(5):587–96

Early effects of vasectomy on testicular structure and on germ cell and macrophage apoptosis in the hamster. Lue Y, et al. **J Androl** 1997 Mar–Apr;18(2):166–73

Alternative splicing of CREB and CREM mRNAs in an immortalized germ cell line. Sanborn BM, et al. **J Androl** 1997 Jan–Feb;18(1):62–70

Sperm function and choice of preparation media: comparison of Percoll and Accudenz discontinuous density gradients. Sbracia M, et al. **J Androl** 1996 Jan–Feb;17(1):61–7

Improved motile sperm recovery by a hyperosmotic Percoll gradient. Carbone DJ Jr, et al. **J Assist Reprod Genet** 1997 Aug;14(7):394–7

Comparative flow cytometric analysis of the human sperm acrosome reaction using CD46 antibody and lectins. Carver-Ward JA, et al. **J Assist Reprod Genet** 1997 Feb; 14(2):111–9

Iodixanol as a density gradient medium for the isolation of motile spermatozoa. Harrison K. **J Assist Reprod Genet** 1997 Aug;14(7):385–7

Effects of sperm viability on fertilization and embryo cleavage following intracytoplasmic sperm injection. Poe-Zeigler R, et al. **J Assist Reprod Genet** 1997 May; 14(5):277–81

Lateral mobility of plasma membrane lipids in bull spermatozoa: heterogeneity between surface domains and rigidification following cell death. Ladha S, et al. **J Cell Sci** 1997 May;110 (Pt 9):1041–50

Classification of the cycle of the seminiferous epithelium in the common tree shrew (Tupaia glis). Maeda S, et al. **J Vet Med Sci** 1996 May;58(5):481–4

Size differences between human X and Y spermatozoa and prefertilization diagnosis. Cui KH. **Mol Hum Reprod** 1997 Jan;3(1):61–7

Analysis of expression and function of topoisomerase I and II during meiosis in male mice. Cobb J, et al. **Mol Reprod Dev** 1997 Apr;46(4):489–98

Volume regulation of spermatozoa by quinine-sensitive channels. Kulkarni SB, et al. **Mol Reprod Dev** 1997 Apr; 46(4):535–50

Flow cytometric sorting of sperm: influence on fertilization and embryo/fetal development in the rabbit. McNutt TL, et al. **Mol Reprod Dev** 1996 Feb;43(2):261–7

Cryopreservation of rooster sperm using methyl cellulose. Phillips JJ, et al. **Poult Sci** 1996 Jul;75(7):915–23

Validation procedures for the Hamilton Thorne Integrated Visual Optical System sperm and cell analyzer. Douglas-Hamilton DH. **Qual Assur** 1995 Dec;4(4):340–7

Do sperm cells age? A review of the physiological changes in sperm during storage at ambient temperature. Vishwanath R, et al. **Reprod Fertil Dev** 1997;9(3):321–31 (110 ref.)

Inhibition by TGF-beta 1 of the in vitro thymulin-stimulated proliferation of gonocytes from fetal rat testes. Prépin J, et al. **Reprod Nutr Dev** 1997;37(2):203–6

Use of semen as biopsy material for assessment of health status of the stallion reproductive tract. Veeramachaneni DN, et al. **Vet Clin North Am Equine Pract** 1996 Apr; 12(1):101–10 (6 ref.)

Transformation of sperm nuclei into metaphase chromosomes in maturing pig oocytes penetrated in vitro. Wang WH, et al. **Zygote** 1997 May;5(2):183–91

[Value of a control of external quality of spermato-cytograms and perspectives] Bourguignat A, et al. **Ann Biol Clin (Paris)** 1997 Mar–Apr;55(2):155–6 **(Fre)**

[Cooling of boar spermatozoa prior to freezing and post thaw quality and evaluation of membrane state using chlortetracycline (CTC) staining] Kotzias-Bandeira E, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug; 104(8):302–6 (Eng. Abstr.) **(Ger)**

[Separation techniques ro achieve vital and reproduction competent equine spermatozoa populations—a survey] Sieme H, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug; 104(8):298–302 (61 ref.) (Eng. Abstr.) **(Ger)**

[The effect of spermatozoon morphology on the fertilization rate and on disorders in early embryonic development] Vorob'eva OA, et al. **Tsitologiia** 1996;38(12):1248–54 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of rotation on the generation of reactive oxygen species in human semen. de Jager C, et al. **Andrologia** 1996 Sep–Oct;28(5):291–3

Effects of pure human follicle-stimulating hormone (pFSH) on sperm quality correlate with the hypophyseal response to gonadotrophin-releasing hormone (GnRH). Glander HJ, et al. **Andrologia** 1997 Jan–Feb;29(1):23–8

Effects of Chinese herbal medicine on sperm motility and fluorescence spectra parameters. Amano T, et al. **Arch Androl** 1996 Nov–Dec;37(3):219–24

Sperm characteristics and hormonal profile before and after treatment with follicle-stimulating hormone in infertile patients. Merino G, et al. **Arch Androl** 1996 Nov–Dec; 37(3):197–200

Exposure of human sperm to low-calcium medium enhances fertilizing ability. Nishida S, et al. **Arch Androl** 1996 Mar–Apr;36(2):145–53

Effect of heparin-reduced glutathione on hamster sperm DNA unpacking and nuclear swelling. Reyes R, et al. **Arch Androl** 1996 Jul–Aug;37(1):33–45

Induction of apoptosis in the germ cells of adult male rats after exposure to cyclophosphamide. Cai L, et al. **Biol Reprod** 1997 Jun;56(6):1490–7

Control of human sperm intracellular pH by cholesterol and its relationship to the response of the acrosome to progesterone. Cross NL, et al. **Biol Reprod** 1997 May; 56(5):1169–74

Recombinant soluble human complement receptor type 1 inhibits antisperm antibody- and neutrophil-mediated injury to human sperm. Cruz OJ, et al. **Biol Reprod** 1996 Jun;54(6):1217–28

Developmental exposure of male germ cells to 5-azacytidine results in abnormal preimplantation development in rats. Doerksen T, et al. **Biol Reprod** 1996 Nov;55(5):1155–62

Stimulation of human sperm during capacitation in vitro by an adenosine agonist with specificity for A2 receptors. Fénichel P, et al. **Biol Reprod** 1996 Jun;54(6):1405–11

Inhibition of monkey sperm hyaluronidase activity and heterologous cumulus penetration by flavonoids. Li MW, et al. **Biol Reprod** 1997 Jun;56(6):1383–9

Effects of methoxychlor pre-exposure on sea urchin gametes. Mwatibo JM, et al. **Bull Environ Contam Toxicol** 1997 Apr; 58(4):589–95

Is the fetus safe when spermicides fail? Koren G. **Can Fam Physician** 1997 Mar;43:431–2

Hyaluronan mediates sperm motility by enhancing phosphorylation of proteins including hyaluronan binding protein. Ranganathan S, et al. **Cell Mol Biol Res** 1995; 41(5):467–76

Measurement and modulation of nonoxynol-9 diffusion and bioactivity against spermatozoa in human cervical mucus. Dunmire EN, et al. **Contraception** 1997 Feb;55(2):115–22

Alteration of human sperm kinematics in cervical mucus due to nonoxynol-9. Dunmire EN, et al. **Contraception** 1997 Apr;55(4):209–17

Orally administered gossypol has no effect on eight hamster erythrocytic enzymes. González-Garza MT, et al. **Contraception** 1995 Dec;52(6):377–9

Review: in vitro spermicidal tests. Lee CH. **Contraception** 1996 Sep;54(3):131–47 (151 ref.)

Suppression of testicular and epididymal functions in a non-human primate (bonnet monkey) by combined administration of a gonadotropin-releasing hormone antagonist and testosterone buciclate. Rajalakshmi M, et al. **Contraception** 1995 Dec;52(6):381–8

Sperm transport and survival post-application of a new spermicide contraceptive. Advantage 24 Study Group. Sangi-Haghpeykar H, et al. **Contraception** 1996 Jun; 53(6):353–6

Reversible changes in the content of cellular and microtubular tubulin in spermatogenic cells after gossypol treatment. Teng CS. **Contraception** 1997 Mar;55(3):183–8

Colcemid increases the frequency of chromosome abnormalities in human sperm. Márquez C, et al. **Cytogenet Cell Genet** 1996;72(2–3):164–70

Increased aneuploid frequency in spermatozoa from a Hodgkin's disease patient after chemotherapy and radiotherapy. Monteil M, et al. **Cytogenet Cell Genet** 1997; 76(3–4):134–8

The extragenomic action of progesterone on human spermatozoa: evidence for a ubiquitous response that is rapidly down-regulated. Aitken RJ, et al. **Endocrinology** 1996 Sep;137(9):3999–4009

Effects of the DNA topoisomerase II inhibitor merbarone in male mouse meiotic divisions in vivo: cell cycle arrest and induction of aneuploidy. Kallio M, et al. **Environ Mol Mutagen** 1997;29(1):16–27

Serum dioxin, testosterone, and gonadotropins in veterans of Operation Ranch Hand [letter; comment] Henriksen GL, et al. **Epidemiology** 1996 Jul;7(4):454–5. Comment on: Epidemiology 1996 Jul;7(4):352–7.

Effect of low dose continuous corticosteroid therapy in men with antisperm antibodies on spermatozoal quality and conception rate. Omu AE, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 Nov;69(2):129–34

The combination of testosterone undecanoate with tamoxifen citrate enhances the effects of each agent given independently on seminal parameters in men with idiopathic oligozoospermia. Adamopoulos DA, et al. **Fertil Steril** 1997 Apr;67(4):756–62

Sperm preparation substances—toxic? [letter] Correa JR. **Fertil Steril** 1997 Sep;68(3):568–9; discussion 570

Effect of catalase and thioredoxin addition to sperm incubation medium before in vitro fertilization on sperm capacity to support embryo development. Kuribayashi Y, et al. **Fertil Steril** 1996 Dec;66(6):1012–7

Sperm preparation substances—toxic? [letter] Zavos PM. **Fertil Steril** 1997 Sep;68(3):569–70

Computerized analysis of cytochemical reactions of spermatozoa in rats chronically treated with lead acetate [Pb(II)] Piasecka M, et al. **Folia Histochem Cytobiol** 1997; 35(2):129–31

Effects of ferulic acid on fertile and asthenozoospermic infertile human sperm motility, viability, lipid peroxidation, and cyclic nucleotides. Zheng RL, et al. **Free Radic Biol Med** 1997;22(4):581–6

Testicular toxicity of gallium arsenide, indium arsenide, and arsenic oxide in rats by repetitive intratracheal instillation [published erratum appears in Fundam Appl Toxicol 1997 Jan;35(1):142] Omura M, et al. **Fundam Appl Toxicol** 1996 Jul;32(1):72–8

Reproductive toxicity and tissue concentrations of lindane in adult male rats. Dalsenter PR, et al. **Hum Exp Toxicol** 1996 May;15(5):406–10

In utero and lactational exposure of carbofuran to rats: effect on testes and sperm. Pant N, et al. **Hum Exp Toxicol** 1997 May;16(5):267–72

Chromosomal abnormalities in sperm from testicular cancer patients before and after chemotherapy. Martin RH, et al. **Hum Genet** 1997 Feb;99(2):214–8

Addition of kallikrein and/or human serum to a discontinuous Percoll gradient [letter; comment] Depoortere B, et al. **Hum Reprod** 1996 Feb;11(2):457–8. Comment on: Hum Reprod 1995 Dec;10(12):3183–5.

Fertilization promoting peptide, a tripeptide similar to thyrotrophin–releasing hormone, stimulates the capacitation and fertilizing ability of human spermatozoa in vitro. Green CM, et al. **Hum Reprod** 1996 Apr; 11(4):830–6

Two functional assays of sperm responsiveness to progesterone and their predictive values in in–vitro fertilization. Krausz C, et al. **Hum Reprod** 1996 Aug; 11(8):1661–7

Induction of apoptotic cell death in the seminiferous tubule of the adult rat testis: assessment of the germ cell types that exhibit the ability to enter apoptosis after hormone suppression by oestradiol treatment. Blanco–Rodríguez J, et al. **Int J Androl** 1996 Aug;19(4):237–47

Acrosome reaction stimulated by the GTP non–hydrolizable analogue GTP gamma S is blocked by phospholipase A2 inhibitors in human spermatozoa. Domínguez L, et al. **Int J Androl** 1996 Aug;19(4):248–52

In–vitro initiation of forward motility in testicular spermatozoa. Jaiswal BS, et al. **Int J Androl** 1996 Apr; 19(2):97–102

Immunohistochemical quantitative study of the peritubular lamina propria after induction of testicular atrophy induced by epinephrine. Santamaría L, et al. **Int J Androl** 1995 Dec; 18(6):295–306

The effect of bradykinin and the bradykinin antagonist Hoe 140 on kinematic parameters of human spermatozoa. Yeung CH, et al. **Int J Androl** 1996 Jun;19(3):143–9

Effect of two anti–estrogens, clomiphene citrate and tamoxifen, on cervical mucus and sperm–cervical mucus interaction. Annapurna V, et al. **Int J Fertil Womens Med** 1997 May–Jun;42(3):215–8

Antibiotic therapy in men with leukocytospermia. Erel CT, et al. **Int J Fertil Womens Med** 1997 May–Jun;42(3):206–10

Synchronous assessment of sperm motility and fertilizing ability in the hamster following treatment with alpha–chlorohydrin. Slott VL, et al. **J Androl** 1995 Nov–Dec;16(6):523–35

The effect of follicle–stimulating hormone therapy on sperm quality: an ultrastructural mathematical evaluation. Strehler E, et al. **J Androl** 1997 Jul–Aug;18(4):439–47

Could in vitro fertilization with a modified sperm preparation technique be an option to micromanipulations? Wittemer C, et al. **J Assist Reprod Genet** 1996 Oct;13(9):726–30

Involvement of a sperm protein sensitive to sulfhydryl–depleting reagents in mouse sperm–egg fusion. Mammoto A, et al. **J Exp Zool** 1997 Jun 15;278(3):178–88

Effect of juvenile hormone and juvenile hormone mimics on sperm transfer from the testes of the male cat flea (Siphonaptera:Pulicidae). Dean SR, et al. **J Med Entomol** 1997 Jul;34(4):485–8

Comparative in vitro spermicidal activity of chelating agents and synergistic effect with nonoxynol–9 on human sperm functionality. Lee CH, et al. **J Pharm Sci** 1996 Jan; 85(1):91–5

Testicular effects of 1,3,5–trinitrobenzene (TNB). I. Dose response and reversibility studies. Chandra AM, et al. **J Toxicol Environ Health** 1997 Mar;50(4):365–78

Formation of reactive oxygen species by spermatozoa from asthenospermic patients: response to treatment with pentoxifylline. Okada H, et al. **J Urol** 1997 Jun; 157(6):2140–6

Chromosome aberrations in human spermatozoa treated with Ca2+ ionophore A23187. Alvarez R, et al. **Mol Hum Reprod** 1996 Jul;2(7):481–4

Recombinant human zona pellucida glycoprotein 3 induces calcium influx and acrosome reaction in human spermatozoa. Brewis IA, et al. **Mol Hum Reprod** 1996 Aug; 2(8):583–9

Lectins binding on human sperm surface increase membrane permeability and stimulate acrosomal exocytosis. Lassalle B, et al. **Mol Hum Reprod** 1996 Sep;2(9):651–8

Effect of gastrin–releasing peptide on sperm functions. Levy R, et al. **Mol Hum Reprod** 1996 Nov;2(11):867–72

Protein kinase C activation during progesterone–stimulated acrosomal exocytosis in human spermatozoa. O'Toole CM, et al. **Mol Hum Reprod** 1996 Dec;2(12):921–7

Analysis of the flow cytometer stain Hoechst 33342 on human spermatozoa. Watkins AM, et al. **Mol Hum Reprod** 1996 Sep;2(9):709–12

Effect of cholesterol and other sterols on human sperm acrosomal responsiveness. Cross NL. **Mol Reprod Dev** 1996 Oct;45(2):212–7

Bicarbonate/CO2, an effector of capacitation, induces a rapid and reversible change in the lipid architecture of boar sperm plasma membranes. Harrison RA, et al. **Mol Reprod Dev** 1996 Nov;45(3):378–91

Oviduct fluid and heparin induce similar surface changes in bovine sperm during capacitation: a flow cytometric study using lectins. Mahmoud AI, et al. **Mol Reprod Dev** 1996 Apr;43(4):554–60

Effects of caffeine and dbcAMP on zona pellucida penetration by epididymal spermatozoa of cynomolgus monkeys (Macaca fascicularis). Mahony MC, et al. **Mol Reprod Dev** 1996 Apr;43(4):530–5

Changes in lectin binding to bovine sperm during heparin–induced capacitation. Medeiros CM, et al. **Mol Reprod Dev** 1996 Aug;44(4):525–32

Mitochondrial sheath movement and detachment in mammalian, but not nonmammalian, sperm induced by disulfide bond reduction. Sutovsky P, et al. **Mol Reprod Dev** 1997 May;47(1):79–86

Defining oligosaccharide specificity for initial sperm–zona pellucida adhesion in the mouse. Thaler CD, et al. **Mol Reprod Dev** 1996 Dec;45(4):535–46

Somatic and germ cell effects in rats and mice after treatment with 1,3–butadiene and its metabolites, 1,2–epoxybutene and 1,2,3,4–diepoxybutane. Anderson D, et al. **Mutat Res** 1997 Jul 14;391(3):233–42

The detection of gene mutation in the tubular sperm of Muta Mice following a single intraperitoneal treatment with methyl methanesulphonate or ethylnitrosourea. Brooks TM, et al. **Mutat Res** 1997 Feb 14;388(2–3):219–22

Toward an understanding of the use of transgenic mice for the detection of gene mutations in germ cells. Douglas GR, et al. **Mutat Res** 1997 Feb 14;388(2–3):197–212

Evaluation of lacI mutation in germ cells and micronuclei in peripheral blood after treatment of male lacI transgenic mice with ethylnitrosourea, isopropylmethane sulfonate or methylmethane sulfonate. Gorelick NJ, et al. **Mutat Res** 1997 Feb 14;388(2–3):187–95

Germ cell mutagenesis in lacZ transgenic mice treated with methyl methanesulfonate. Itoh S, et al. **Mutat Res** 1997 Feb 14;388(2–3):223–8

Mutations induced in male germ cells after treatment of transgenic mice with ethylnitrosourea. Katoh M, et al. **Mutat Res** 1997 Feb 14;388(2–3):229–37

Somatic and germ cell mutagenesis in lambda lacZ transgenic mice treated with acrylamide or ethylnitrosourea. Krebs O, et al. **Mutat Res** 1997 Feb 14;388(2–3):239–48

Detection of the two germ cell mutagens ENU and iPMS using the LacZ/transgenic mouse mutation assay. Liegibel UM, et al. **Mutat Res** 1997 Feb 14;388(2–3):213–8

Preliminary results of ethylnitrosourea, isopropyl methanesulphonate and methyl methanesulphonate activity in the testis and epididymal spermatozoa of Muta Mice. Mattison JD, et al. **Mutat Res** 1997 Feb 14;388(2–3):123–7

Sources of variability in data from a positive selection lacZ transgenic mouse mutation assay: an interlaboratory study. Piegorsch WW, et al. **Mutat Res** 1997 Feb 14; 388(2–3):249–89

Evaluation of spontaneous and chemical–induced lacI mutations in germ cells from lambda/lacI transgenic mice. Putman DL, et al. **Mutat Res** 1997 Feb 14;388(2–3):137–43

Effect of ethylnitrosourea and methyl methanesulfonate on mutation frequency in Muta Mouse germ cells (seminiferous tubule cells and epididymis spermatozoa). Renault D, et al. **Mutat Res** 1997 Feb 14;388(2–3):145–53

Ethyl nitrosourea and methyl methanesulfonate mutagenicity in sperm and testicular germ cells of lacZ transgenic mice (Muta Mouse). Suzuki T, et al. **Mutat Res** 1997 Feb 14; 388(2–3):155–63

The activity of ENU, iPMS and MMS in male mouse germ cells using the Muta Mouse positive selection transgenic mutation assay. Tinwell H, et al. **Mutat Res** 1997 Feb 14; 388(2–3):179–85

Germ–cell mutagenesis in lambda lacZ transgenic mice treated with ethylating and methylating agents: comparison with specific–locus test. van Delft JH, et al. **Mutat Res** 1997 Feb 14;388(2–3):165–73

Analysis of the mutagenic potential of ENU and MMS in germ cells of male C57BL/6 lacI transgenic mice. Winegar RA, et al. **Mutat Res** 1997 Feb 14;388(2–3):175–8

Chemotherapy induces transient sex chromosomal and autosomal aneuploidy in human sperm. Robbins WA, et al. **Nat Genet** 1997 May;16(1):74–8

Ultrastructure of spermatozoa from the cauda epididymis in rat chronically treated with lead acetate [Pb(II)] Piasecka M, et al. **Pol J Pathol** 1996;47(2):65–71

Fructose stimulates shedding of cytoplasmic droplets from epididymal boar spermatozoa. Harayama H, et al. **Reprod Fertil Dev** 1996;8(7):1039–43

Liquid storage of ram semen in the absence or presence of some antioxidants. Maxwell WM, et al. **Reprod Fertil Dev** 1996;8(6):1013–20

Effect of copper ion on the motility, viability, acrosome reaction and fertilizing capacity of human spermatozoa in vitro. Roblero L, et al. **Reprod Fertil Dev** 1996;8(5):871–4

Toxicant–induced acceleration of epididymal sperm transit: androgen–dependent proteins may be involved. Klinefelter GR, et al. **Reprod Toxicol** 1997 Jul–Aug;11(4):511–9

Spermatotoxicity of dichloroacetic acid. Linder RE, et al. **Reprod Toxicol** 1997 Sep–Oct;11(5):681–8

Detection of oxidative DNA damage in human sperm and the association with cigarette smoking. Shen HM, et al. **Reprod Toxicol** 1997 Sep–Oct;11(5):675–80

Human sperm morphometry and smoking, caffeine, and alcohol consumption. Vine MF, et al. **Reprod Toxicol** 1997 Mar–Jun;11(2–3):179–84

Reprotoxic and genotoxic studies of vanadium pentoxide in male mice. Altamirano–Lozano M, et al. **Teratog Carcinog Mutagen** 1996;16(1):7–17

Effect of various genotoxins and reproductive toxins in human lymphocytes and sperm in the Comet assay. Anderson D, et al. **Teratog Carcinog Mutagen** 1997; 17(1):29–43

Modulating effects of flavonoids on food mutagens in human blood and sperm samples in the comet assay. Anderson D, et al. **Teratog Carcinog Mutagen** 1997;17(2):45–58

Lead exposure causes generation of reactive oxygen species and functional impairment in rat sperm. Hsu PC, et al. **Toxicology** 1997 Sep 26;122(1–2):133–43

Chlortetracycline fluorescence patterns and in vitro fertilisation of frozen–thawed boar spermatozoa incubated under various bicarbonate concentrations. Abeydeera LR, et al. **Zygote** 1997 May;5(2):117–25

Effects of oviductal fluid and heparin on fertility and characteristics of porcine spermatozoa. Kim NH, et al. **Zygote** 1997 Feb;5(1):61–5

In vitro fertilisation of Chinese hamster oocytes by spermatozoa that have undergone ionophore A23187–induced acrosome reaction, and their subsequent development into blastocysts. Tateno H, et al. **Zygote** 1996 May;4(2):93–9

[Therapy of male subfertility] Schill WB, et al. **Wien Med Wochenschr** 1997;147(4–5):76–80 (Eng. Abstr.) **(Ger)**

[Toxicologic effects of cadmium on gametes and embryonal kinetics of paracentrotus lividus] Arru G, et al. **G Ital Med Lav** 1995 Jan–Nov;17(1–6):61–4 (Eng. Abstr.) **(Ita)**

[Mutagenic effect of nitrosodimethylurea in male mice. Induction of dominant lethal mutations and chromosome aberrations in germ cells; genotype influence on the clastogenic effect in bone marrow cells] Malashenko AM, et al. **Genetika** 1997 Apr;33(4):524–31 (Eng. Abstr.) **(Rus)**

[Analysis of spontaneous and ethylmethanesulfonate–induced visible mutations in the genetically unstable MS, w strain of Drosophila melanogaster] Romanova NI, et al. **Genetika** 1996 Jun;32(6):759–66 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Physiological functions of proteasomes in ascidian fertilization and embryonic cell cycle. Sawada H, et al. **Adv Exp Med Biol** 1996;389:229–32 (12 ref.)

Relationship of sperm superoxide dismutase–like activity with other sperm–specific enzymes and experimentally induced lipid peroxidation in infertile men. Gavella M, et al. **Andrologia** 1996 Jul–Aug;28(4):223–9

Acrosin activity in pelleted frozen sperm does not correlate with in vitro fertilization of oocytes. Yie SM, et al. **Andrologia** 1996 Nov–Dec;28(6):349–52

Histone kinase activity of buffalo sperm chromatin. Mudgal P, et al. **Arch Androl** 1997 May–Jun;38(3):191–9

Proacrosin and acrosin determination during capacitation and acrosome reaction in rabbit spermatozoa. Sillerico T, et al. **Biocell** 1996 Aug;20(2):133–42

A nonglycosylated, 68–kDa alpha–L–fucosidase is bound to the mollusc bivalve Unio elongatulus sperm plasma membrane and differs from a glycosylated 56–kDa form present in the seminal fluid. Focarelli R, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):54–8

Immunocytochemical localization and biochemical characterization of a novel plasma membrane–associated, neutral pH optimum alpha–L–fucosidase from rat testis and epididymal spermatozoa. Avilés M, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):821–31

Activation of sea–urchin sperm motility is accompanied by an increase in the creatine kinase exchange flux. Dorsten FA, et al. **Biochem J** 1997 Jul 15;325 (Pt 2):411–6

Transfer of aminopeptidase activity from prostasomes to sperm. Arienti G, et al. **Biochim Biophys Acta** 1997 Aug 29;1336(2):269–74

Telomerase activity in female and male rat germ cells undergoing meiosis and in early embryos. Eisenhauer KM, et al. **Biol Reprod** 1997 May;56(5):1120–5

Protein tyrosine phosphorylation is associated with capacitation of human sperm in vitro but is not sufficient for its completion. Emiliozzi C, et al. **Biol Reprod** 1997 Mar;56(3):674–9

Structural relationship of sperm soluble hyaluronidase to the sperm membrane protein PH–20. Hunnicutt GR, et al. **Biol Reprod** 1996 Jun;54(6):1343–9

Sperm from a variety of mammalian species express beta1,4–galactosyltransferase on their surface. Larson JL, et al. **Biol Reprod** 1997 Aug;57(2):442–53

Subcellular distribution of protein kinase C alpha and betaI in bovine spermatozoa, and their regulation by calcium and phorbol esters. Lax Y, et al. **Biol Reprod** 1997 Feb; 56(2):454–9

Cyclic adenosine 3',5'monophosphate–dependent regulation of protein tyrosine phosphorylation in relation to human sperm capacitation and motility. Leclerc P, et al. **Biol Reprod** 1996 Sep;55(3):684–92

Inhibition of monkey sperm hyaluronidase activity and heterologous cumulus penetration by flavonoids. Li MW, et al. **Biol Reprod** 1997 Jun;56(6):1383–9

Primate sperm contain protein phosphatase 1, a biochemical mediator of motility. Smith GD, et al. **Biol Reprod** 1996 Mar;54(3):719–27

Sperm motility development in the epididymis is associated with decreased glycogen synthase kinase–3 and protein phosphatase 1 activity. Vijayaraghavan S, et al. **Biol Reprod** 1996 Mar;54(3):709–18

20 beta–hydroxysteroid dehydrogenase activity in

nonflagellated germ cells of rainbow trout testis. Vizziano D, et al. **Biol Reprod** 1996 Jan;54(1):1–7

Increased activity associated with the MAST205 protein kinase complex during mammalian spermiogenesis. Walden PD, et al. **Biol Reprod** 1996 Nov;55(5):1039–44

Loss of telomerase activity during male germ cell differentiation. Ravindranath N, et al. **Endocrinology** 1997 Sep;138(9):4026–9

In vitro mutagenesis of PH–20 hyaluronidase from human sperm. Arming S, et al. **Eur J Biochem** 1997 Aug 1; 247(3):810–4

Protein kinase C isoforms undergo quantitative variations during rat spermatogenesis and are selectively retained at specific spermatozoon sites. Zini N, et al. **Eur J Cell Biol** 1997 Feb;72(2):142–50

The nitric oxide synthase of mouse spermatozoa. Herrero MB, et al. **FEBS Lett** 1997 Jul 7;411(1):39–42

Superoxide dismutase in human sperm suspensions: relationship with cellular composition, oxidative stress, and sperm function. Aitken RJ, et al. **Free Radic Biol Med** 1996; 21(4):495–504

Intracellular immunolocalization of mouse and rat sp42 and the developmental pattern of protein expression in male germ cells. Berruti G, et al. **Int J Dev Biol** 1996;Suppl 1:231S–232S

Effects of substrate and separation method on acrosin amidase measurements. Breden TG, et al. **J Androl** 1996 Jul–Aug; 17(4):443–8

Mouse epididymal sperm contain active P450 aromatase which decreases as sperm traverse the epididymis. Janulis L, et al. **J Androl** 1996 Mar–Apr;17(2):111–6

Hexokinase present in human sperm is not tyrosine phosphorylated but its antibodies affect fertilizing capacity. Naz RK, et al. **J Androl** 1996 Mar–Apr;17(2):143–50

Compromised sperm protein phosphorylation after capacitation, swim-up, and zona pellucida exposure in teratospermic domestic cats. Pukazhenthi BS, et al. **J Androl** 1996 Jul–Aug;17(4):409–19

Analysis of the effect of nitric oxide synthase inhibition on mouse sperm employing a modified staining method for assessment of the acrosome reaction. Viggiano JM, et al. **J Androl** 1996 Nov–Dec;17(6):692–8

Site-directed mutagenesis of rabbit proacrosin. Identification of residues involved in zona pellucida binding. Richardson RT, et al. **J Biol Chem** 1996 Sep 27;271(39):24069–74

G protein-coupled receptor kinase GRK4. Molecular analysis of the four isoforms and ultrastructural localization in spermatozoa and germinal cells. Sallese M, et al. **J Biol Chem** 1997 Apr 11;272(15):10188–95

sp42, the boar sperm tyrosine kinase, is a male germ cell-specific product with a highly conserved tissue expression extending to other mammalian species. Berruti G, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):851–8

Identification of two distinctly localized mitochondrial creatine kinase isoenzymes in spermatozoa. Kaldis P, et al. **J Cell Sci** 1996 Aug;109 (Pt 8):2079–88

Role of phospholipase A2 in mammalian sperm–egg fusion: development of hamster oolemma fusibility by lysophosphatidylcholine. Riffo MS, et al. **J Exp Zool** 1997 Sep 1;279(1):81–8

Glycerol 3-phosphate dehydrogenase of boar spermatozoa: inhibition by alpha-bromohydrin phosphate. Jones AR, et al. **J Reprod Fertil** 1996 Sep;108(1):95–100

Evidence for Ca(2+)-dependent ATPase activity, stimulated by decapacitation factor and calmodulin, in mouse sperm. Adeoya-Osiguwa SA, et al. **Mol Reprod Dev** 1996 May; 44(1):111–20

Spermatozoa lacking acrosin protein show delayed fertilization. Adham IM, et al. **Mol Reprod Dev** 1997 Mar; 46(3):370–6

Expression and localization of DNA topoisomerase II during rat spermatogenesis. Chen JL, et al. **Mol Reprod Dev** 1996 Sep;45(1):61–71

Characterization of acrosin-like activity of lake sturgeon (Acipenser fulvescens) spermatozoa. Ciereszko A, et al. **Mol Reprod Dev** 1996 Sep;45(1):72–7

gamma-Glutamyl transpeptidase of spermatozoa may decrease oocyte glutathione content at fertilization in pigs. Funahashi H, et al. **Mol Reprod Dev** 1996 Dec;45(4):485–90

Biochemical markers of early and late spermatogenesis: relationship between the lactate dehydrogenase-X and creatine kinase-M isoform concentrations in human spermatozoa [published erratum appears in Mol Reprod Dev 1996 Jun;44(2):274] Lalwani S, et al. **Mol Reprod Dev** 1996 Apr;43(4):495–502

Hyaluronidase activity of macaque sperm assessed by an in vitro cumulus penetration assay. Meyers SA, et al. **Mol Reprod Dev** 1997 Mar;46(3):392–400

Sperm from mice carrying two t haplotypes do not possess a tyrosine phosphorylated form of hexokinase. Olds-Clarke P, et al. **Mol Reprod Dev** 1996 Jan;43(1):94–104

Temporal expression and localization of protein farnesyltransferase during spermiogenesis and posttesticular sperm maturation in the hamster. Olson GE, et al. **Mol Reprod Dev** 1997 Sep;48(1):71–6

Trypsin-like enzymes during fertilization in the shrimp Rhynchocinetes typus. Rios M, et al. **Mol Reprod Dev** 1997 Apr;46(4):581–6

Creatine kinase in trout male germ cells: purification, gene expression, and localization in the testis. Saudrais C, et al. **Mol Reprod Dev** 1996 Aug;44(4):433–42

Substrate specificity of ascidian sperm trypsin-like proteases, spermosin and acrosin. Sawada H, et al. **Mol Reprod Dev** 1996 Oct;45(2):240–3

Tissue and developmental distribution, dependence upon testicular factors and attachment to spermatozoa of GPX5, a murine epididymis-specific glutathione peroxidase. Vernet P, et al. **Mol Reprod Dev** 1997 May;47(1):87–98

Properties and localization of a tyrosine phosphorylated form of hexokinase in mouse sperm. Visconti PE, et al. **Mol Reprod Dev** 1996 Jan;43(1):82–93

A novel serine/threonine kinase gene, Gek1, is expressed in meiotic testicular germ cells and primordial germ cells. Yanagisawa M, et al. **Mol Reprod Dev** 1996 Dec; 45(4):411–20

Localization by indirect immunofluorescence of nitric oxide synthase in mouse and human spermatozoa. Herrero MB, et al. **Reprod Fertil Dev** 1996;8(5):931–4

[Creatine phosphokinase activity as a measure of human sperm quality (letter)] Gil ML, et al. **Med Clin (Barc)** 1996 Jan 27;106(3):118 **(Spa)**

GROWTH & DEVELOPMENT

Changes in binding of lectins to epididymal, ejaculated, and capacitated spermatozoa of the rhesus monkey. Navaneetham D, et al. **Anat Rec** 1996 Jul;245(3):500–8

Sperm maturation in rhesus monkey: changes in ultrastructure, chromatin condensation, and organization of lipid bilayer. Sivashanmugam P, et al. **Anat Rec** 1997 Jan;247(1):25–32

Intracellular immunolocalization of mouse and rat sp42 and the developmental pattern of protein expression in male germ cells. Berruti G, et al. **Int J Dev Biol** 1996;Suppl 1:231S–232S

Posttesticular development of spermatozoa of the tammar wallaby (Macropus eugenii). Setiadi D, et al. **J Anat** 1997 Feb;190 (Pt 2):275–88

Evaluation of testicular toxicity in safety evaluation studies: the appropriate use of spermatogenic staging. Creasy DM. **Toxicol Pathol** 1997 Mar–Apr;25(2):119–31 (61 ref.)

[Spermiogram findings following antegrade sclerosing of a varicocele] Johnsen N, et al. **Wien Med Wochenschr** 1997; 147(4–5):81–3 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Assisted conception and immunological infertility. Cimino C, et al. **Acta Eur Fertil** 1995 Jan–Feb;26(1):13–20 (46 ref.)

Comparison of the immunobead binding test (IBT) and immunospheres (IS) assay for detecting serum antisperm antibodies. Centola GM, et al. **Am J Reprod Immunol** 1997 Apr;37(4):300–3

Expression of CD15 (Lewisx) antigen on human sperm and its role in sperm–egg interaction. D'Cruz OJ, et al. **Am J Reprod Immunol** 1997 Feb;37(2):172–83

Sperm antigens and their use in the development of an immunocontraceptive. Diekman AB, et al. **Am J Reprod Immunol** 1997 Jan;37(1):111–7 (74 ref.)

Sperm, nuclear, phospholipid, and red blood cell antibodies and isotype RF in infertile couples and patients with autoimmune rheumatic diseases. Fichorova R, et al. **Am J Reprod Immunol** 1996 Dec;36(6):309–16

Occurrence of the interference of sperm-associated antibodies on sperm fertilizing ability as evaluated by the sperm-zona pellucida binding test and by the TEST-yolk buffer enhanced sperm penetration assay. Francavilla F, et al. **Am J Reprod Immunol** 1997 Mar;37(3):267–74

Quantitative determination of IgG and IgA on sperm from infertile patients with and without antisperm antibodies. Hjort T. **Am J Reprod Immunol** 1996 Oct;36(4):211–5

Cervical mucus anti-sperm antibodies: treatment with intrauterine insemination. Kutteh WH, et al. **Am J Reprod Immunol** 1996 Apr;35(4):429–33

Monoclonal antibodies reacting against capacitated but not with freshly ejaculated boar spermatozoa. Mollova MV, et al. **Am J Reprod Immunol** 1996 Dec;36(6):301–8

Identification of human sperm antigen recognized by serum of an immunoinfertile woman: a candidate for immunocontraception. Suri A, et al. **Am J Reprod Immunol** 1996 Dec;36(6):317–26

Does in vitro fertilization (IVF) influence the levels of sperm and zona pellucida (ZP) antibodies in infertile women? Ulčová-Gallová Z, et al. **Am J Reprod Immunol** 1996 Oct; 36(4):216–9

Sperm acrosome antigen-1, a molecule intimately involved in the regulation of the acrosome reaction: analysis of expression on spermatozoa from infertile couples. Brucker C, et al. **Andrologia** 1997 Mar–Apr;29(2):91–6

Flow cytometric determination of binding of monoclonal antibodies to human spermatozoa. Schwarzinger F, et al. **Andrologia** 1997 May–Jun;29(3):163–8

A new method for isolation of human antisperm antibodies. Shohat M, et al. **Andrologia** 1996 Sep–Oct;28(5):275–9

Presence of immunoglobulin binding factor on human sperm surface as sperm coating antigen. Hirano M, et al. **Arch Androl** 1996 Nov–Dec;37(3):163–70

Expression of human leukocyte antigens in patients with autogenic and allogenic circulating antisperm antibodies. Omu AE, et al. **Arch Androl** 1996 Nov–Dec;37(3):155–62

Characteristics of men and women with circulating antisperm antibodies in a combined infertility clinic in Kuwait. Omu AE, et al. **Arch Androl** 1997 Jul–Aug;39(1):55–64

Contraceptive vaccines. Jones WR. **Baillieres Clin Obstet Gynaecol** 1996 Apr;10(1):69–86 (65 ref.)

Contraceptive effect of sperm-agglutinating monoclonal antibodies in rabbits. Castle PE, et al. **Biol Reprod** 1997 Jan;56(1):153–9

Recombinant soluble human complement receptor type 1 inhibits antisperm antibody- and neutrophil-mediated injury to human sperm. Cruz OJ, et al. **Biol Reprod** 1996 Jun;54(6):1217–28

Expression of HLA class I genes in meiotic and post-meiotic human spermatogenic cells. Guillaudeux T, et al. **Biol Reprod** 1996 Jul;55(1):99–110

Characterization of human sperm antigens reacting with sperm antibodies from autologous serum and seminal plasma in an infertile population. Paradisi R, et al. **Biol Reprod** 1996 Jul;55(1):54–61

Reversible contraceptive effect of PH-20 immunization in male guinea pigs. Primakoff P, et al. **Biol Reprod** 1997 May; 56(5):1142–6

Antibody directed against plasma membrane components of equine spermatozoa inhibits adhesion of spermatozoa to oviduct epithelial cells in vitro. Thomas PG, et al. **Biol Reprod** 1997 Mar;56(3):720–30

Mechanism of infertility in male guinea pigs immunized with sperm PH-20. Tung KS, et al. **Biol Reprod** 1997 May; 56(5):1133–41

Sperm auto - antibodies and anti-nuclear antigen antibodies in chronic dioxin - exposed veterans. Chinh TT, et al. **Chemosphere** 1996 Feb;32(3):525–30

Characterization of fertilization-blocking monoclonal antibody 1G12 with human sperm-immobilizing activity. Komori S, et al. **Clin Exp Immunol** 1997 Sep;109(3):547–54

Body temperature (37 C) specifically down-regulates the messenger ribonucleic acid for the major sperm surface antigen CD52 in epididymal cell culture. Pera I, et al. **Endocrinology** 1996 Oct;137(10):4451–9

Indices of exposure to fetal and sperm antigens in relation to the occurrence of breast cancer. Rossing MA, et al. **Epidemiology** 1996 May;7(3):309–11

Detection of equine antisperm antibodies by indirect immunofluorescence and the tube-slide agglutination test. Day MJ. **Equine Vet J** 1996 Nov;28(6):494–6

Antimitochondrial antibody detection by indirect immunofluorescence on mouse sperms. Martinez S, et al. **Eur J Histochem** 1996;40(4):315–22

Intracytoplasmic sperm injection for treating infertility associated with sperm autoimmunity. Clarke GN, et al. **Fertil Steril** 1997 Jul;68(1):112–7

Detection using antisperm monoclonal antibodies of shared epitopes expressed by human spermatozoa and oocytes. Fusi FM, et al. **Fertil Steril** 1997 Jul;68(1):158–63

Trying to make heads or tails out of antisperm antibody data [letter; comment] Katsoff D, et al. **Fertil Steril** 1996 Mar; 65(3):675–7. Comment on: Fertil Steril 1995 Jun;63(6):1287–92.

TEST yolk buffer and antisperm antibodies--interaction? [letter; comment] Katsoff D, et al. **Fertil Steril** 1997 Mar; 67(3):590–1. Comment on: Fertil Steril 1996 Sep;66(3):454–8.

The easy formation of antisperm antibodies in prepubertal boys and the difficult humoral response in severe-combined immunodeficiency mice. Kurpisz M, et al. **Fertil Steril** 1996 Nov;66(5):805–8

Unilateral cryptorchidism corrected in prepubertal age: evaluation of sperm parameters, hormones, and antisperm antibodies in adult age. Lenzi A, et al. **Fertil Steril** 1997 May;67(5):943–8

Flow cytometry study on the effect of serum and peritoneal fluid of women on sperm-binding activity of immunoglobulin G antisperm antibodies. Nikolaeva MA, et al. **Fertil Steril** 1997 Apr;67(4):680–6

Prospective study showing that antisperm antibodies are not associated with pregnancy losses. Simpson JL, et al. **Fertil Steril** 1996 Jul;66(1):36–42

Immunosuppressive effect of uterine fluid on spermatozoa-stimulated mixed lymphocyte cultures. Halperin R, et al. **Gynecol Obstet Invest** 1996;41(2):118–21

High fertilization prediction by flow cytometric analysis of the CD46 antigen on the inner acrosomal membrane of spermatozoa. Carver-Ward JA, et al. **Hum Reprod** 1996 Sep;11(9):1923–8

Optimized assay for antisperm cell-mediated immunity. Focacci M, et al. **Hum Reprod** 1997 Jan;12(1):39–44

The indirect immunobead test for seminal antisperm antibodies and fertilization rates at in-vitro fertilization. Ford WC, et al. **Hum Reprod** 1996 Jul;11(7):1418–22

Immunosuppressive activities in the seminal plasma of infertile men: relationship to sperm antibodies and autoimmunity. Imade GE, et al. **Hum Reprod** 1997 Feb; 12(2):256–62

The 60 kDa heat shock protein in human semen: relationship with antibodies to spermatozoa and Chlamydia trachomatis. Munoz MG, et al. **Hum Reprod** 1996 Dec;11(12):2600–3

Treatment of male infertility due to sperm surface antibodies: IUI or IVF? Ombelet W, et al. **Hum Reprod** 1997 Jun; 12(6):1165–70

Diversity of the blocking effects of antisperm antibodies on fertilization in human and mouse. Shibahara H, et al. **Hum Reprod** 1996 Dec;11(12):2595–9

Circulating antibodies to Chlamydia trachomatis in women: relationship to antisperm and antichlamydial antibodies in semen of male partners. Witkin SS. **Hum Reprod** 1996 Aug; 11(8):1635–7

SPERMATOZOA

Development of contraceptive vaccines for humans using antigens derived from gametes (spermatozoa and zona pellucida) and hormones (human chorionic gonadotrophin): current status. Naz RK, et al. **Hum Reprod Update** 1995 Jan;1(1):1–18 (133 ref.)

Immunological aspects of subfertility. Eggert-Kruse W, et al. **Int J Androl** 1995 Dec;18 Suppl 2:43–52

Characterization of human sperm antigens reacting with antisperm antibodies from autologous sera and seminal plasma: comparison among infertile subpopulations. Paradisi R, et al. **Int J Androl** 1996 Dec;19(6):345–52

A placebo-controlled flow cytometric study of the effect of low-dose prednisolone treatment on sperm-bound antibody levels. Räs anen M, et al. **Int J Androl** 1996 Jun; 19(3):150–4

Antisperm antibodies in prepubertal boys treated with chemotherapy for malignant or non-malignant diseases and in boys with genital tract abnormalities. Sinisi AA, et al. **Int J Androl** 1997 Feb;20(1):23–8

Characterization of antigens specific for spermatozoa and germ cells during early gonadal development of carp (Cyprinus carpio, Cyprinidae, Teleostei) with monoclonal antibodies. Timmermans LP, et al. **Int J Dev Biol** 1996; Suppl 1:221S–222S

Effect of sperm-agglutinating antibodies on sperm capacitation and acrosome reaction. Bathla H, et al. **Int J Fertil Menopausal Stud** 1996 Nov-Dec;41(6):528–33

Anti-bull sperm monoclonal antibodies: II. Binding changes during capacitation and influence on sperm-zona interactions in vitro. Ambrose JD, et al. **J Androl** 1996 Sep-Oct;17(5):579–86

Anti-bull sperm monoclonal antibodies: I. Identification of major antigenic domains of bull sperm and manifestation of interspecies cross-reactivity. Ambrose JD, et al. **J Androl** 1996 Sep-Oct;17(5):567–78

Sperm autoantigens recognized by autoantibodies in developing rats following prepubertal obstruction of the vas deferens. Flickinger CJ, et al. **J Androl** 1996 Jul-Aug; 17(4):433–42

Evidence of proacrosin molecule abnormality as a possible cause of low acrosin activity and unexplained failure of fertilization in vitro. Shimizu Y, et al. **J Androl** 1997 May-Jun;18(3):281–8

Sperm immobilization antibodies in infertile male sera decrease the acrosome reaction: a possible mechanism for immunologic infertility. Taşdemir I, et al. **J Assist Reprod Genet** 1996 May;13(5):413–6

Characterization of a 50-kDa component of epithelial basement membranes using GDA-J/F3 monoclonal antibody. Gayraud B, et al. **J Biol Chem** 1997 Apr 4; 272(14):9531–8

A search for sex-specific antigens on bovine spermatozoa using immunological and biochemical techniques to compare the protein profiles of X and Y chromosome-bearing sperm populations separated by fluorescence-activated cell sorting. Howes EA, et al. **J Reprod Fertil** 1997 Jul;110(2):195–204

Sperm-associated and circulating IgA and IgG classes of antibodies recognise different antigens on the human sperm plasma membrane. Auer J, et al. **J Reprod Immunol** 1997 Sep;34(2):121–36

Characterization of anti-sperm antibodies and their coding cDNA sequences by Epstein-Barr virus transformed B cell lines from lymphocytes of infertile women possessing anti-sperm antibodies. Dimitrova-Dikanarova DK, et al. **J Reprod Immunol** 1996 Dec;32(2):171–91

Appearance of 'natural' antisperm autoantibodies after sexual maturation of normal Lewis rats. Flickinger CJ, et al. **J Reprod Immunol** 1997 Jun;33(2):127–45

The monoclonal antibody GZS-1 detects a maturation-associated antigen of human spermatozoa that is also present on the surface of human mononuclear blood cells. Hutter H, et al. **J Reprod Immunol** 1996 May; 30(2-3):115–32

Possible association of infertility with sperm-specific abnormality of CD46. Kitamura M, et al. **J Reprod Immunol** 1997 Apr;33(1):83–8

The role of the anti-sperm autoantibodies in the management of patients with primary infertility. Hameed N, et al. **JPMA J Pak Med Assoc** 1995 Aug;45(8):203–5

Management of rhesus isoimmunization by preimplantation genetic diagnosis. Avner R, et al. **Mol Hum Reprod** 1996 Jan;2(1):60–2

CD52 is the 'major maturation-associated' sperm membrane antigen. Kirchhoff C. **Mol Hum Reprod** 1996 Jan;2(1):9–17

Molecular cloning and characterization of rat sperm surface antigen 2B1, a glycoprotein implicated in sperm-zona binding. Hou ST, et al. **Mol Reprod Dev** 1996 Oct; 45(2):193–203

The incidence of antisperm antibodies in patients with seminal tract obstructions. Yamamoto M, et al. **Nagoya J Med Sci** 1996 Mar;59(1-2):25–9

Prostaglandins in primate semen: biasing the immune system to benefit spermatozoa and virus? Kelly RW. **Prostaglandins Leukot Essent Fatty Acids** 1997 Aug; 57(2):113–8 (71 ref.)

Immunocontraception in rodents: a review of the development of a sperm-based immunocontraceptive vaccine for the grey squirrel (Sciurus carolinensis). Moore HD, et al. **Reprod Fertil Dev** 1997;9(1):125–9 (33 ref.)

Ly-6-domain proteins--new insights and new members: a C-terminal Ly-6 domain in sperm acrosomal protein SP-10. Palfree RG. **Tissue Antigens** 1996 Aug;48(2):71–9 (77 ref.)

Antisperm antibody and Klinefelter syndrome: does autoimmunity play a role in the pathogenesis? Sengül A, et al. **Urol Int** 1996;57(2):77–9

Systemic lupus erythematosus in women and serum interleukin-6, sperm and zona pellucida antibodies. Ulčová-Gallová Z, et al. **Zentralbl Gynakol** 1996; 118(7):401–5

[Monitoring immunity factors in serum and peritoneal fluid after laparoscopy in women. II. Sperm and zona pellucida antibodies] Ulčová-Gallová Z, et al. **Ceska Gynekol** 1996 Jun;61(3):139–41 (Eng. Abstr.) **(Cze)**

[Immunologic response against spermatozoa in the human genital tract] Domagała A, et al. **Ginekol Pol** 1996 Jun; 67(6):304–8 (26 ref.) (Eng. Abstr.) **(Pol)**

[The effect of uropolinum on phagocytosis of sperm by cultured peritoneal macrophages in rats] Wenda-Różewicka L, et al. **Ginekol Pol** 1996 Aug; 67(8):377–82 (Eng. Abstr.) **(Pol)**

[Detection of antisperm antibodies in the serum of women following the use of spermatozoa from different donors] Nikolaeva MA, et al. **Biull Eksp Biol Med** 1997 Jul; 124(7):89–91 **(Rus)**

[The determination of the group classification of sperm by the ABO system by means of the immunofluorescence reaction in a quantitative modification] Sidorov VL, et al. **Sud Med Ekspert** 1996 Oct-Dec;39(4):47–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Changes in ATP level and iron-induced ultra-weak photon emission in bull spermatozoa, caused by membrane peroxidation during thermal stress. Gumińska M, et al. **Acta Biochim Pol** 1997;44(1):131–8

Cyclic ADP-ribose signaling in sea urchin gametes: metabolism in spermatozoa. Chini EN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 1):C416–20

On the use of paramagnetic beads and ferrofluids to assess and eliminate the leukocytic contribution to oxygen radical generation by human sperm suspensions. Aitken RJ, et al. **Am J Reprod Immunol** 1996 Jun;35(6):541–51

Occurrence of the interference of sperm-associated antibodies on sperm fertilizing ability as evaluated by the sperm-zona pellucida binding test and by the TEST-yolk buffer enhanced sperm penetration assay. Francavilla F, et al. **Am J Reprod Immunol** 1997 Mar;37(3):267–74

Human sperm coating antigen from seminal plasma origin. Iborra A, et al. **Am J Reprod Immunol** 1996 Aug; 36(2):118–25

Does in vitro fertilization (IVF) influence the levels of sperm and zona pellucida (ZP) antibodies in infertile women? Ulčová-Gallová Z, et al. **Am J Reprod Immunol** 1996 Oct; 36(4):216–9

Changes in binding of lectins to epididymal, ejaculated, and capacitated spermatozoa of the rhesus monkey. Navaneetham D, et al. **Anat Rec** 1996 Jul;245(3):500–8

Affinity sites for beta-glucuronidase on the surface of human spermatozoa. Barbieri MA, et al. **Andrologia** 1996 Nov-Dec;28(6):327–33

Effect of sperm preparation with TEST yolk buffer on sperm-binding capacity under hemizona assay conditions. Gamzu R, et al. **Andrologia** 1997 Jan-Feb;29(1):17–21

Paramagnetic beads coated with Pisum sativum agglutinin bind to human spermatozoa undergoing the acrosome reaction. Köhn FM, et al. **Andrologia** 1996 Jul-Aug; 28(4):231–9

Distribution of vimentin in abnormal human spermatozoa. Marinova TT, et al. **Andrologia** 1996 Sep-Oct;28(5):287–9

Immunohistochemical localization in the stallion genital tract, and topography on spermatozoa of seminal plasma protein SSP-7, a member of the spermadhesin protein family. Reinert M, et al. **Andrologia** 1997 Jul-Aug;29(4):179–86

Fluorescence spectra from human semen and their relationship with sperm parameters. Amano T, et al. **Arch Androl** 1996 Jan-Feb;36(1):9–15

Superoxide anion radical mediated dissection of rat sperm: an in vitro study. Chatterjee S, et al. **Arch Androl** 1997 Sep-Oct;39(2):101–4

Secretions of ovine uterus and oviduct induce in vitro capacitation of ram spermatozoa. Chavarría ME, et al. **Arch Androl** 1996 Jan-Feb;36(1):17–23

Centrifugation on Percoll gradient enhances fluorescent lectin binding on human sperm: a flow cytometric analysis. De Maistre E, et al. **Arch Androl** 1996 Nov-Dec; 37(3):179–87

Spermatozoal DNA flow cytometry and recurrent miscarriage. Drudy L, et al. **Arch Androl** 1996 Nov-Dec; 37(3):143–7

Feulgen-DNA content of human sperm and outcome of in vitro fertilization. Drudy L, et al. **Arch Androl** 1996 Jul-Aug;37(1):11–4

Binding of human spermatozoa to lectin-coated agarose microbeads. Gabriel LK, et al. **Arch Androl** 1997 Mar-Apr; 38(2):133–41

Characterization of a delta 5-3 beta-hydroxy pathway of testosterone synthesis in the human spermatozoa. Gunasegaram R, et al. **Arch Androl** 1997 Jan-Feb; 38(1):75–83

Synthesis of ether lipids and phosphatidylethanolamine by ejaculated human spermatozoa. Jones RE. **Arch Androl** 1997 May-Jun;38(3):181–9

Reactive oxygen species generation in human sperm: luminol and lucigenin chemiluminescence probes. McKinney KA, et al. **Arch Androl** 1996 Mar-Apr;36(2):119–25

Characteristics of calcium ion influx induced by human follicular fluid in individual human sperm. Shiomi H, et al. **Arch Androl** 1996 Sep-Oct;37(2):79–86

Generation of reactive oxygen species by leukocytes and sperm following exposure to urogenital tract infection. Wang A, et al. **Arch Androl** 1997 Jul-Aug;39(1):11–7

Effect of sperm viability, plasmalemma integrity, and capacitation on patterns of expression of mannose-binding sites on human sperm. Youssef HM, et al. **Arch Androl** 1997 Jan-Feb;38(1):67–74

[3H]-(R)-N6-Phenylisopropyladenosine agonist binding to the solubilized A1 adenosine receptor from bovine epididymal spermatozoa. Minelli A, et al. **Arch Biochem Biophys** 1997 Jan 1;337(1):54–61

Synthesis of 2-oxacortexone and its effect on Ca2+ uptake in bovine spermatozoa. Frimer AA, et al. **Arch Pharm (Weinheim)** 1997 May;330(5):117–21

Developmentally regulated expression of APG-1, a member of heat shock protein 110 family in murine male germ cells. Kaneko Y, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):113–6

Progesterone and the zona pellucida activate different transducing pathways in the sequence of events leading to diacylglycerol generation during mouse sperm acrosomal exocytosis. Murase T, et al. **Biochem J** 1996 Dec 15;320 (Pt 3):1017–23

Partition of the organochlorine insecticide lindane into the human sperm surface induces membrane depolarization and Ca2+ influx. Silvestroni L, et al. **Biochem J** 1997 Feb 1; 321 (Pt 3):691–8

Modulation of sperm acrosomal exocytosis by guanyl nucleotides and G-protein-modifier agents. Brandelli A. **Biochem Mol Biol Int** 1997 May;41(6):1217–25

Intracellular calcium variation in heparin-capacitated bovine sperm. Córdoba M, et al. **Biochem Mol Biol Int** 1997 Apr; 41(4):725–33

Characterization of high-affinity protein D binding sites on the surface of rat epididymal spermatozoa. Hall JC, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):1003–10

Cation and anion channels in rat and human spermatozoa. Chan HC, et al. **Biochim Biophys Acta** 1997 Jan 14; 1323(1):117–29

Phosphorous metabolites in boar spermatozoa. Identification of AMP by multinuclear magnetic resonance. Kalic M, et al. **Biochim Biophys Acta** 1997 Jun 13;1320(2):208–16

Retinol free and retinol complexed beta-lactoglobulin binding sites in bovine germ cells. Mansouri A, et al. **Biochim Biophys Acta** 1997 Jun 5;1357(1):107–14

Carrier-mediated gamma-aminobutyric acid uptake in human spermatozoa indicating the presence of a high-affinity gamma-aminobutyric acid transport protein. Aanesen A, et al. **Biol Reprod** 1996 Apr;54(4):841–6

Control of human sperm intracellular pH by cholesterol and its relationship to the response of the acrosome to progesterone. Cross NL, et al. **Biol Reprod** 1997 May; 56(5):1169–74

Intracellular calcium concentration in equine spermatozoa attached to oviductal epithelial cells in vitro. Dobrinski I, et al. **Biol Reprod** 1996 Apr;54(4):783–8

Reduction of sperm cholesterol:phospholipid ratio is a possible mechanism for enhancement of human sperm binding to the zona pellucida following incubation with phosphatidylcholine liposomes. Gamzu R, et al. **Biol Reprod** 1997 Sep;57(3):539–46

Bovine sperm binding to oviductal epithelium involves fucose recognition. Lefebvre R, et al. **Biol Reprod** 1997 May; 56(5):1198–204

Effect of capacitation on bull sperm binding to homologous oviductal epithelium. Lefebvre R, et al. **Biol Reprod** 1996 Mar;54(3):575–82

Extracellular calcium negatively modulates tyrosine phosphorylation and tyrosine kinase activity during capacitation of human spermatozoa. Luconi M, et al. **Biol Reprod** 1996 Jul;55(1):207–16

Diploid expression of human leukocyte antigen class I and class II molecules on spermatozoa and their cyclic inverse correlation with inhibin concentration. Martín-Villa JM, et al. **Biol Reprod** 1996 Sep;55(3):620–9

Amino acid neurotransmitter receptor/chloride channels of mammalian sperm and the acrosome reaction. Meizel S. **Biol Reprod** 1997 Mar;56(3):569–74 (86 ref.)

Expression of cdc25 phosphatases in the germ cells of the rat testis. Mizoguchi S, et al. **Biol Reprod** 1997 Jun; 56(6):1474–81

Metabolism of platelet-activating factor in rat epididymal spermatozoa. Muguruma K, et al. **Biol Reprod** 1997 Feb; 56(2):529–36

Proacrosin-acrosomal matrix binding interactions in ejaculated bovine spermatozoa. NagDas SK, et al. **Biol Reprod** 1996 Jan;54(1):111–21

Association of oviduct-specific glycoproteins with human and baboon (Papio anubis) ovarian oocytes and enhancement of human sperm binding to human hemizonae following in vitro incubation. O'Day-Bowman MB, et al. **Biol Reprod** 1996 Jan;54(1):60–9

Molecular cloning and structural analysis of the gene encoding PERF 15 protein present in the perinuclear theca of the rat spermatozoa. Pouresmaeili F, et al. **Biol Reprod** 1997 Sep;57(3):655–9

Multiple fucosyltransferases and their carbohydrate ligands are involved in spermatogenic cell–Sertoli cell adhesion in vitro in rats. Raychoudhury SS, et al. **Biol Reprod** 1997 May;56(5):1268–73

[3H]heparin binding in boar spermatozoa: characterization and correlation with routine semen quality parameters. Sánchez–Prieto J, et al. **Biol Reprod** 1996 Oct;55(4):860–7

Detection of deoxyribonucleic acid fragmentation in human sperm: correlation with fertilization in vitro. Sun JG, et al. **Biol Reprod** 1997 Mar;56(3):602–7

Depletion of glutathione during bovine oocyte maturation reversibly blocks the decondensation of the male pronucleus and pronuclear apposition during fertilization. Sutovsky P, et al. **Biol Reprod** 1997 Jun;56(6):1503–12

Glucose participates in sperm–oocyte fusion in the mouse. Urner F, et al. **Biol Reprod** 1996 Oct;55(4):917–22

A tyrosine–phosphorylated 55–kilodalton motility–associated bovine sperm protein is regulated by cyclic adenosine 3',5'–monophosphates and calcium. Vijayaraghavan S, et al. **Biol Reprod** 1997 Jun;56(6):1450–7

Pre– and postmeiotic expression of male germ cell–specific genes throughout 2–week cocultures of rat germinal and Sertoli cells. Weiss M, et al. **Biol Reprod** 1997 Jul; 57(1):68–76

Unesterified cholesterol content of human sperm regulates the response of the acrosome to the agonist, progesterone. Zarintash RJ, et al. **Biol Reprod** 1996 Jul;55(1):19–24

Transcriptional checkpoints determining the fate of male germ cells. Sassone–Corsi P. **Cell** 1997 Jan 24;88(2):163–6 (22 ref.)

Hydrolysis of extracellular adenine nucleotides by equine epidydimal spermatozoa. Minelli A, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Aug; 117(4):531–4

The unique, complex organization of the transcriptionally silent sperm chromatin. Ward WS, et al. **Crit Rev Eukaryot Gene Expr** 1996;6(2–3):139–47 (51 ref.)

Water permeability, Lp, of the mouse sperm plasma membrane and its activation energy are strongly dependent on interaction of the plasma membrane with the sperm cytoskeleton. Noiles EE, et al. **Cryobiology** 1997 Aug; 35(1):79–92

Quantification of actively transcribing RNA polymerase B molecules in human sperm chromatin and the effect of prostaglandin E1. Pironcheva GL, et al. **Cytobios** 1996; 88(352):7–10

Hypomethylation of human sperm pronuclear chromosomes. Martorell MR, et al. **Cytogenet Cell Genet** 1997; 76(3–4):123–7

Incidence of chromosome 1 disomy in human sperm estimated by the primed in situ (PRINS) labeling technique. Pellestor F, et al. **Cytogenet Cell Genet** 1997;76(3–4):192–5

DNA and total protamine masses in individual sperm from fertile mammalian subjects. Bench GS, et al. **Cytometry** 1996 Apr 1;23(4):263–71

Regulation of protein tyrosine phosphorylation in human sperm by a calcium/calmodulin–dependent mechanism: identification of A kinase anchor proteins as major substrates for tyrosine phosphorylation. Carrera A, et al. **Dev Biol** 1996 Nov 25;180(1):284–96

Esx1, a novel X chromosome–linked homeobox gene expressed in mouse extraembryonic tissues and male germ cells. Li Y, et al. **Dev Biol** 1997 Aug 1;188(1):85–95

Formation of the male pronuclear lamina in Drosophila melanogaster. Liu J, et al. **Dev Biol** 1997 Apr 15; 184(2):187–96

A soluble extract from human spermatozoa activates ascidian oocytes. Wilding M, et al. **Dev Growth Differ** 1997 Jun; 39(3):329–36

The transcriptional and translational control of diazepam binding inhibitor expression in rat male germ–line cells. Kolmer M, et al. **DNA Cell Biol** 1997 Jan;16(1):59–72

Germ cell–somatic cell dichotomy of a low–density lipoprotein receptor gene family member in testis. Lindstedt KA, et al. **DNA Cell Biol** 1997 Jan;16(1):35–43

Cloning and characterization of a testis–specific, developmentally regulated A–kinase–anchoring protein (TAKAP–80) present on the fibrous sheath of rat sperm. Mei X, et al. **Eur J Biochem** 1997 Jun 1;246(2):425–32

Nuclear phosphoinositide–specific phospholipase C, phosphatidylinositol 4,5–bisphosphate and protein kinase C during rat spermatogenesis. Caramelli E, et al. **Eur J Cell Biol** 1996 Oct;71(2):154–64

Conserved binding recognition elements of sperm chromatin, sperm lipophilic structures and nuclear envelope precursor vesicles. Collas P, et al. **Eur J Cell Biol** 1996 Sep; 71(1):22–32

The interaction of sperm cells with exogenous DNA: a role of CD4 and major histocompatibility complex class II molecules. Lavitrano M, et al. **Exp Cell Res** 1997 May 25; 233(1):56–62

Regulation of membrane stability and the acrosome reaction in mammalian sperm. Nolan JP, et al. **FASEB J** 1997 Jul; 11(8):670–82 (103 ref.)

Transfer of CD26/dipeptidyl peptidase IV (E.C. 3.5.4.4) from prostasomes to sperm. Arienti G, et al. **FEBS Lett** 1997 Jun 30;410(2–3):343–6

Inhibition of G protein in human sperm and its influence on acrosome reaction and zona pellucida binding. Franken DR, et al. **Fertil Steril** 1996 Dec;66(6):1009–11

Increased oxidative deoxyribonucleic acid damage in the spermatozoa of infertile male patients. Kodama H, et al. **Fertil Steril** 1997 Sep;68(3):519–24

Flow cytometry study on the effect of serum and peritoneal fluid of women on sperm–binding activity of immunoglobulin G antisperm antibodies. Nikolaeva MA, et al. **Fertil Steril** 1997 Apr;67(4):680–6

Topography of the changes of free calcium ions due to steroid hormone action on human spermatozoa. Kotwicka M, et al. **Folia Histochem Cytobiol** 1997;35(2):99–100

Capacitation–associated production of superoxide anion by human spermatozoa. de Lamirande E, et al. **Free Radic Biol Med** 1995 Mar;18(3):487–95

Possible role of nitric oxide on fertile and asthenozoospermic infertile human sperm functions. Zhang H, et al. **Free Radic Res** 1996 Oct;25(4):347–54

Biosynthesis of 17,20 alpha–dihydroxy–4–pregnen–3–one, 17,20 beta–dihydroxy–4–pregnen–3–one, and 11–ketotestosterone by testicular fragments and sperm of the roach, Rutilus rutilus. Ebrahimi M, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):375–84

cDNA cloning and characterization of Npap60: a novel rat nuclear pore–associated protein with an unusual subcellular localization during male germ cell differentiation. Fan F, et al. **Genomics** 1997 Mar 15;40(3):444–53

Specific repertoire of olfactory receptor genes in the male germ cells of several mammalian species. Vanderhaeghen P, et al. **Genomics** 1997 Feb 1;39(3):239–46

Sea urchin egg receptor for sperm: the oligosaccharide chains stabilize sperm binding. Dhume ST, et al. **Glycobiology** 1996 Jan;6(1):59–64

Expression of the mouse testicular histone gene H1t during spermatogenesis. Drabent B, et al. **Histochem Cell Biol** 1996 Aug;106(2):247–51

Segregation of sex chromosomes into sperm nuclei in a man with 47,XXY Klinefelter's karyotype: a FISH analysis. Guttenbach M, et al. **Hum Genet** 1997 Apr;99(4):474–7

Contribution of DNA sequence and CAG size to mutation frequencies of intermediate alleles for Huntington disease: evidence from single sperm analyses. Chong SS, et al. **Hum Mol Genet** 1997 Feb;6(2):301–9

Analysis of germline variation at the FMR1 CGG repeat shows variation in the normal–premutated borderline range. Mornet E, et al. **Hum Mol Genet** 1996 Jun;5(6):821–5

The effect of smoking and varicocele on human sperm acrosin activity and acrosome reaction. El Mulla KF, et al. **Hum Reprod** 1995 Dec;10(12):3190–4

Localization of the Drosophila male accessory gland protein Acp36DE in the mated female suggests a role in sperm storage. Bertram MJ, et al. **Insect Biochem Mol Biol** 1996 Sep–Oct;26(8–9):971–80

Are the characteristics of spermatozoa in the insemination medium useful for predicting in–vitro fertilization results? Parinaud J, et al. **Int J Androl** 1996 Apr;19(2):103–8

Molecular mechanisms of the interaction between sperm and the zona pellucida in mammals: studies on the pig. Töpfer–Petersen E, et al. **Int J Androl** 1995 Dec;18 Suppl 2:20–6 (56 ref.)

Glucose is not essential for the occurrence of sperm binding and zona pellucida–induced acrosome reaction in the mouse. Urner F, et al. **Int J Androl** 1996 Apr;19(2):91–6

Development of an image analysis system to monitor the retention of residual cytoplasm by human spermatozoa: correlation with biochemical markers of the cytoplasmic space, oxidative stress, and sperm function. Gomez E, et al. **J Androl** 1996 May–Jun;17(3):276–87

Effect of sperm lipid peroxidation on fertilization. Kodama H, et al. **J Androl** 1996 Mar–Apr;17(2):151–7

Is Leydig cell steroidogenic function affected by the germ cell content of the seminiferous tubules? Sprando RL, et al. **J Androl** 1997 Jul–Aug;18(4):424–30

Use of the guanine–cytosine (GC) specific fluorochrome, chromomycin A3, as an indicator of poor sperm morphology. Bianchi PG, et al. **J Assist Reprod Genet** 1996 Mar;13(3):246–50

Fertilization and pregnancy using metaphase I oocytes in an intracytoplasmic sperm injection program. Coetzee K, et al. **J Assist Reprod Genet** 1996 Nov;13(10):768–71

Transport intracytoplasmic sperm injection (ICSI): a cost–effective alternative. De Sutter P, et al. **J Assist Reprod Genet** 1996 Mar;13(3):234–7

Variation in recovery of motile sperm after preparation by a simple Percoll gradient technique. Miller KF, et al. **J Assist Reprod Genet** 1996 Jul;13(6):485–8

Glass wool filtration reduces reactive oxygen species by elimination of leukocytes in oligozoospermic patients with leukocytospermia. Sánchez R, et al. **J Assist Reprod Genet** 1996 Jul;13(6):489–94

Sperm selection methods for intracytoplasmic sperm injection (ICSI) in andrological patients. Sanchez R, et al. **J Assist Reprod Genet** 1996 Mar;13(3):228–33

An effective, simplified, and practical approach to intracytoplasmic sperm injection at multiple IVF centers. Schiewe MC. **J Assist Reprod Genet** 1996 Mar;13(3):238–45

Efficacy of microsurgical epididymal sperm aspiration (MESA) and intracytoplasmic sperm injection (ICSI) in obstructive azoospermia. Son IP, et al. **J Assist Reprod Genet** 1996 Jan;13(1):69–72

Production of reactive oxygen species by and hydrogen peroxide scavenging activity of spermatozoa in an IVF program. Yeung CH, et al. **J Assist Reprod Genet** 1996 Jul;13(6):495–500

Restricted expression of a member of the transcription elongation factor S–II family in testicular germ cells during and after meiosis. Umehara T, et al. **J Biochem (Tokyo)** 1997 Mar;121(3):598–603

The initial molecular interaction between mouse sperm and the zona pellucida is a complex binding event. Thaler CD, et al. **J Biol Chem** 1996 Sep 20;271(38):23289–97

Axonemal tubulin polyglycylation probed with two monoclonal antibodies: widespread evolutionary distribution, appearance during spermatozoan maturation and possible function in motility. Bré MH, et al. **J Cell Sci** 1996 Apr;109 (Pt 4):727–38

Distinct egg membrane vesicles differing in binding and fusion properties contribute to sea urchin male pronuclear envelopes formed in vitro. Collas P, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1275–83

Lateral mobility of plasma membrane lipids in bull spermatozoa: heterogeneity between surface domains and rigidification following cell death. Ladha S, et al. **J Cell Sci** 1997 May;110 (Pt 9):1041–50

Nuclear lamina and nuclear matrix organization in sperm pronuclei assembled in Xenopus egg extract. Zhang C, et al. **J Cell Sci** 1996 Sep;109 (Pt 9):2275–86

Comparative analysis of the ability of precursor germ cells and epididymal spermatozoa to generate reactive oxygen metabolites. Fisher HM, et al. **J Exp Zool** 1997 Apr 1; 277(5):390–400

Investigation of the potential role of the germ cell complement in control of the expression of transferrin mRNA in the prepubertal and adult rat testis. Maguire SM, et al. **J Mol Endocrinol** 1997 Aug;19(1):67–77

Mammalian sperm tubulin: an exceptionally large number of variants based on several posttranslational modifications. Plessmann U, et al. **J Protein Chem** 1997 Jul;16(5):385–90

Lipid and antioxidant changes in spermatozoa and seminal plasma throughout the reproductive period of bulls. Kelso KA, et al. **J Reprod Fertil** 1997 Jan;109(1):1–6

Studies on [3H]palmitate–binding proteins of rat spermatozoa: a post–translational modification of membrane proteins by fatty acid acylation. Srivastava A, et al. **J Reprod Fertil** 1996 Nov;108(2):245–51

Sperm–associated protein candidates for primary zona pellucida–binding molecules: structure–function correlations of boar spermadhesins. Töpfer–Petersen E, et al. **J Reprod Fertil Suppl** 1996;50:55–61 (44 ref.)

Reactive oxygen species production by the spermatozoa of patients with idiopathic infertility: relationship to seminal plasma antioxidants. Alkan I, et al. **J Urol** 1997 Jan; 157(1):140–3

Formation of reactive oxygen species by spermatozoa from asthenospermic patients: response to treatment with pentoxifylline. Okada H, et al. **J Urol** 1997 Jun; 157(6):2140–6

Mapping of a haploid transcribed and translated sperm–specific gene to the mouse X chromosome. Moss SB, et al. **Mamm Genome** 1997 Jan;8(1):37–8

The Drosophila don juan (dj) gene encodes a novel sperm specific protein component characterized by an unusual domain of a repetitive amino acid motif. Santel A, et al. **Mech Dev** 1997 Jun;64(1–2):19–30

ADM–1, a protein with metalloprotease– and disintegrin–like domains, is expressed in syncytial organs, sperm, and sheath cells of sensory organs in Caenorhabditis elegans. Podbilewicz B. **Mol Biol Cell** 1996 Dec;7(12):1877–93

Recombinant human zona pellucida glycoprotein 3 induces calcium influx and acrosome reaction in human spermatozoa. Brewis IA, et al. **Mol Hum Reprod** 1996 Aug; 2(8):583–9

The role of carbohydrate in sperm–ZP3 adhesion. Chapman NR, et al. **Mol Hum Reprod** 1996 Oct;2(10):767–74 (74 ref.)

The receptor encoded by the human C–MET oncogene is expressed in testicular tissue and on human spermatozoa. Depuydt CE, et al. **Mol Hum Reprod** 1996 Jan;2(1):2–8

Application of modern molecular techniques to evaluate sperm sex selection methods. Flaherty SP, et al. **Mol Hum Reprod** 1996 Dec;2(12):937–42 (52 ref.)

Calcium influx pathways in human spermatozoa. Foresta C, et al. **Mol Hum Reprod** 1997 Jan;3(1):1–4 (38 ref.)

Internal pH of human spermatozoa: effect of ions, human follicular fluid and progesterone. Hamamah S, et al. **Mol Hum Reprod** 1996 Apr;2(4):219–24

A comparison of baseline and induced DNA damage in human spermatozoa from fertile and infertile men, using a modified comet assay. Hughes CM, et al. **Mol Hum Reprod** 1996 Aug;2(8):613–9

RNA in spermatozoa: implications for the alternative haploid genome. Kramer JA, et al. **Mol Hum Reprod** 1997 Jun; 3(6):473–8 (58 ref.)

Lectins binding on human sperm surface increase membrane permeability and stimulate acrosomal exocytosis. Lassalle B, et al. **Mol Hum Reprod** 1996 Sep;2(9):651–8

Nitric oxide synthase and nitrite production in human spermatozoa: evidence that endogenous nitric oxide is beneficial to sperm motility. Lewis SE, et al. **Mol Hum Reprod** 1996 Nov;2(11):873–8

Involvement of osmo–sensitive calcium influx in human sperm activation. Rossato M, et al. **Mol Hum Reprod** 1996 Dec;2(12):903–9

Biochemistry of the induction and prevention of lipoperoxidative damage in human spermatozoa. Storey BT. **Mol Hum Reprod** 1997 Mar;3(3):203–13 (91 ref.)

Complement–binding proteins are strongly expressed by human preimplantation blastocysts and cumulus cells as well as gametes. Taylor CT, et al. **Mol Hum Reprod** 1996

Jan;2(1):52–9
Haploid transcripts persist in mature human spermatozoa. Wykes SM, et al. **Mol Hum Reprod** 1997 Jan;3(1):15–9
Reactive oxygen species generation by human spermatozoa is induced by exogenous NADPH and inhibited by the flavoprotein inhibitors diphenylene iodonium and quinacrine. Aitken RJ, et al. **Mol Reprod Dev** 1997 Aug; 47(4):468–82
Transcription and translation of the outer dense fiber gene (Odf1) during spermiogenesis in the rat. A study by in situ analyses and polysome fractionation. Burmester S, et al. **Mol Reprod Dev** 1996 Sep;45(1):10–20
Binding of boar spermatozoa to porcine oocytes: effect of low molecular weight 17-kDa protein. Capková J, et al. **Mol Reprod Dev** 1997 Feb;46(2):168–75
Developmental expression, intracellular localization, and selenium content of the cysteine-rich protein associated with the mitochondrial capsules of mouse sperm. Cataldo L, et al. **Mol Reprod Dev** 1996 Nov;45(3):320–31
Nuclear localization signal of SV40 T antigen directs import of plasmid DNA into sea urchin male pronuclei in vitro. Collas P, et al. **Mol Reprod Dev** 1996 Dec;45(4):431–8
A maturation-related differential phosphorylation of the plasma membrane proteins of the epididymal spermatozoa of the hamster by endogenous protein kinases. Devi KU, et al. **Mol Reprod Dev** 1997 Jul;47(3):341–50
Binding of rat and ovine epididymis-specific prealbumins (PES) to rat spermatozoa without effect of heterologous immunization on rat fertility. Fournier-Delpech S, et al. **Mol Reprod Dev** 1997 Aug;47(4):483–9
Association of rous sarcoma virus DNA with Xenopus laevis spermatozoa and its transfer to ova through fertilization. Habrová V, et al. **Mol Reprod Dev** 1996 Jul;44(3):332–42
Comparison of detergent-solubilized membrane and soluble proteins from flow cytometrically sorted X- and Y-chromosome bearing porcine spermatozoa by high resolution 2-D electrophoresis. Hendriksen PJ, et al. **Mol Reprod Dev** 1996 Nov;45(3):342–50
Direct evidence for the secretion of lactoferrin and its binding to sperm in the porcine epididymis. Jin YZ, et al. **Mol Reprod Dev** 1997 Aug;47(4):490–6
Purification, partial characterization, and localization of Sak57, an acidic intermediate filament keratin present in rat spermatocytes, spermatids, and sperm. Kierszenbaum AL, et al. **Mol Reprod Dev** 1996 Jul;44(3):382–94
Importance of calcium for the binding of oviductal fluid proteins to the membranes of bovine spermatozoa. Lapointe S, et al. **Mol Reprod Dev** 1996 Jun;44(2):234–40
Phosphorylation of Triton X-100 soluble and insoluble protein substrates in a demembranated/reactivated human sperm model. Leclerc P, et al. **Mol Reprod Dev** 1996 Jun; 44(2):200–11
Actin and major sperm protein in spermatids and spermatozoa of the parasitic nematode Heligmosomoides polygyrus. Mansir A, et al. **Mol Reprod Dev** 1996 Nov; 45(3):332–41
Chlortetracycline analysis of boar spermatozoa after incubation, flow cytometric sorting, cooling, or cryopreservation. Maxwell WM, et al. **Mol Reprod Dev** 1997 Mar;46(3):408–18
Germ cell-specific DNA and RNA binding proteins p48/52 are expressed at specific stages of male germ cell development and are present in the chromatoid body. Oko R, et al. **Mol Reprod Dev** 1996 May;44(1):1–13
A protein associated with the manchette during rat spermiogenesis is encoded by a gene of the TBP-1-like subfamily with highly conserved ATPase and protease domains. Rivkin E, et al. **Mol Reprod Dev** 1997 Sep; 48(1):77–89
Effects of castration on thiol status in rat spermatozoa and epididymal fluid. Seligman J, et al. **Mol Reprod Dev** 1997 Jul;47(3):295–301
Up-regulation and down-regulation of genes expressed in cocultures of rat Sertoli cells and germ cells. Syed V, et al. **Mol Reprod Dev** 1997 Aug;47(4):380–9
Cholesterol and phospholipid levels of washed and percoll gradient centrifuged mouse sperm: presence of lipids possessing inhibitory effects on sperm motility. Tanphaichitr N, et al. **Mol Reprod Dev** 1996 Feb; 43(2):187–95
Diacylglycerol species as messengers and substrates for phosphatidylcholine re-synthesis during Ca2+-dependent exocytosis in boar spermatozoa. Vazquez JM, et al. **Mol Reprod Dev** 1997 Sep;48(1):95–105
Phospholipid metabolism in boar spermatozoa and role of diacylglycerol species in the de novo formation of phosphatidylcholine. Vazquez JM, et al. **Mol Reprod Dev** 1997 May;47(1):105–12
Expression of a novel isoform of Vav, Vav-T, containing a single Src homology 3 domain in murine testicular germ cells. Okumura K, et al. **Oncogene** 1997 Feb 13;14(6):713–20
High expression of the tec gene product in murine testicular germ cells and erythroblasts. Kazama A, et al. **Pathol Int** 1996 May;46(5):341–7
Transverse mobility of aminophospholipids in the plasma membrane of ram sperm cells. Müller K, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R255–6
Identification of sulfated oligosialic acid units in the O-linked glycan of the sea urchin egg receptor for sperm. Kitazume-Kawaguchi S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3650–5
The abalone egg vitelline envelope receptor for sperm lysin is a giant multivalent molecule. Swanson WJ, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6724–9
Failure to produce transgenic offspring by intra-tubal insemination of gilts with DNA-treated sperm. Gandolfi F, et al. **Reprod Fertil Dev** 1996;8(7):1055–60
Metabolism of lactate by mature boar spermatozoa. Jones AR. **Reprod Fertil Dev** 1997;9(2):227–32
Regulation of the motility and metabolism of spermatozoa for storage in the epididymis of eutherian and marsupial mammals. Jones RC, et al. **Reprod Fertil Dev** 1996; 8(4):553–68 (169 ref.)
Mitochondrial function and ram sperm fertility. Windsor DP. **Reprod Fertil Dev** 1997;9(3):279–84
Steroid specificity of the human sperm membrane progesterone receptor. Alexander NJ, et al. **Steroids** 1996 Mar;61(3):116–25
Actin localization in ram spermatozoa: effect of freezing/thawing, capacitation and calcium ionophore-induced acrosomal exocytosis. de las Heras MA, et al. **Tissue Cell** 1997 Feb;29(1):47–53
Spermiogenesis and spermatozoon of Echinostoma caproni (Platyhelminthes, Digenea): transmission and scanning electron microscopy, and tubulin immunocytochemistry. Iomini C, et al. **Tissue Cell** 1997 Feb;29(1):107–18
Lead exposure causes generation of reactive oxygen species and functional impairment in rat sperm. Hsu PC, et al. **Toxicology** 1997 Sep 26;122(1-2):133–43
Sperm as a carrier to introduce an exogenous DNA fragment into the oocyte of Japanese abalone (Haliotis divorsicolor suportexta). Tsai HJ, et al. **Transgenic Res** 1997 Jan; 6(1):85–95
Localization and expression of the c-kit receptor protein in human and rodent testis and sperm. Sandlow JI, et al. **Urology** 1997 Mar;49(3):494–500
Ion channels from the mouse sperm plasma membrane in planar lipid bilayers. Labarca P, et al. **Zygote** 1995 Aug; 3(3):199–206
Recombinant hamster sperm receptors that exhibit species-specific binding to sperm. Litscher ES, et al. **Zygote** 1996 Aug;4(3):229–36
Sperm nuclear envelope: breakdown of intrinsic envelope and de novo formation in hamster oocytes or eggs. Usui N, et al. **Zygote** 1997 Feb;5(1):35–46
[DNA synthesis in the testes of infertile men with varicocele--image cytometeric analysis of proliferating cell nuclear antigen] Tanaka H, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Jun;87(6):885–91 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Pyospermia and preterm, prelabor, rupture of membranes. Kjaergaard N, et al. **Acta Obstet Gynecol Scand** 1997 Jul; 76(6):528–31
Possible sexual transmission of Q fever among humans. Kruszewska D, et al. **Clin Infect Dis** 1996 Jun;22(6):1087–8
Polymerase chain reaction enzyme-linked immunosorbent assay detection of mycoplasma consensus gene in sperm with low oocyte penetration capacity. Kalugdan T, et al. **Fertil Steril** 1996 Nov;66(5):793–7
[Infectious agents and treatment of infertility with IVF and ET] Dostál J, et al. **Ceska Gynekol** 1996 Jun;61(3):144–7 (Eng. Abstr.) **(Cze)**
[Hysteroscopy and sperm infection] Taylor S, et al. **Contracept Fertil Sex** 1996 Jul-Aug;24(7-8):549–51 (Eng. Abstr.) **(Fre)**
[Prevalence of Chlamydia trachomatis among men consulting in urology. Comparative study between cell culture and sperm PCR] Aynaud O, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996;25(5):479–84 (Eng. Abstr.) **(Fre)**
[Seminal obstructions of the inflammatory origin] Mantovani F, et al. **Arch Ital Urol Androl** 1996 Dec;68(5):347–52 (Eng. Abstr.) **(Ita)**

PARASITOLOGY

Ultrastructure of spermiogenesis and the spermatozoon of Nomimoscolex sp. (Cestoda, Proteocephalidea) intestinal parasite of Clarotes laticeps (Fish, Teleost) in Senegal. Sène A, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):115–24

PATHOLOGY

The evaluation of morphological abnormalities of human spermatozoa in fertile and infertile men. Matalliotakis I, et al. **Eur J Obstet Gynecol Reprod Biol** 1996 May; 66(1):65–8
Assessment of testicular spermatozoa morphology by image analysis. Gottschalk-Sabag S, et al. **Eur Urol** 1996; 30(1):77–9
Spermatotoxic effects of carbaryl in rats. Pant N, et al. **Hum Exp Toxicol** 1996 Sep;15(9):736–8
Incidence of chromosome 21 disomy in human spermatozoa as determined by fluorescent in-situ hybridization [see comments] Blanco J, et al. **Hum Reprod** 1996 Apr; 11(4):722–6. Comment in: Hum Reprod 1996 Dec;11(12):2808.
Semen analysis in HIV seropositive men and in subjects at high risk for HIV infection. Dondero F, et al. **Hum Reprod** 1996 Apr;11(4):765–8
The Acridine Orange test: a clinically relevant screening method for sperm quality during infertility investigation? Eggert-Kruse W, et al. **Hum Reprod** 1996 Apr;11(4):784–9
Fertility with testicular sperm extraction and intracytoplasmic sperm injection in non-obstructive azoospermic men. Kahraman S, et al. **Hum Reprod** 1996 Apr;11(4):756–60
Delivery following intracytoplasmic injection of mature sperm cells recovered by testicular fine needle aspiration in a case of hypergonadotropic azoospermia due to maturation arrest. Lewin A, et al. **Hum Reprod** 1996 Apr; 11(4):769–71
The difference in outcome of in-vitro culture of human testicular spermatozoa between obstructive and non-obstructive azoospermia [letter] Liu J, et al. **Hum Reprod** 1996 Jul;11(7):1587–8
Are there any predictive factors for successful testicular sperm recovery in azoospermic patients? Tournaye H, et al. **Hum Reprod** 1997 Jan;12(1):80–6
Evaluation of a cut-off value for normal sperm morphology using strict criteria to predict fertilization after conventional in-vitro fertilization and embryo transfer in asthenozoospermia. Zollner U, et al. **Hum Reprod** 1996 Oct; 11(10):2155–61
Lipids of the sperm plasma membrane: from polyunsaturated fatty acids considered as markers of sperm function to possible scavenger therapy. Lenzi A, et al. **Hum Reprod Update** 1996 May-Jun;2(3):246–56 (63 ref.)
Reactive oxygen species and human spermatozoa: physiology and pathology. Griveau JF, et al. **Int J Androl** 1997 Apr; 20(2):61–9 (79 ref.)
Sperm quality in spontaneous unilateral abdominal cryptorchid boars. Pinart E, et al. **Int J Dev Biol** 1996;Suppl 1:225S–226S
Heat stress causes testicular germ cell apoptosis in adult mice. Yin Y, et al. **J Androl** 1997 Mar-Apr;18(2):159–65
Apoptosis in human ejaculated sperm cells (notulae seminologicae 9). Baccetti B, et al. **J Submicrosc Cytol Pathol** 1996 Oct;28(4):587–96
Identifying environmental risk to male reproductive function by occupational sperm studies: logistics and design options. Bonde JP, et al. **Occup Environ Med** 1996 Aug;53(8):511–9 (56 ref.)
Separation of germ cell apoptosis from toxin-induced cell death by necrosis using in situ end-labeling histochemistry after glutaraldehyde fixation. Hikim AP, et al. **Tissue Cell** 1997 Aug;29(4):487–93
The significance to bull fertility of morphologically abnormal sperm. Johnson WH. **Vet Clin North Am Food Anim Pract** 1997 Jul;13(2):255–70 (30 ref.)
[Prognostic sperm factors in intra-uterine insemination with partner's sperm] Wainer R, et al. **Contracept Fertil Sex** 1996 Dec;24(12):897–903 (Eng. Abstr.) **(Fre)**
[Value of computer-assisted sperm analysis (CASA). Reproducibility--online documentation--prognostic value] Krause W. **Fortschr Med** 1996 Dec 10;114(34):470–3 (Eng. Abstr.) **(Ger)**
[The interrelationship of changes in the vascular bed of the testes to the status of the spermogram in the pathogenesis of infertility] Malyshkin IN. **Lik Sprava** 1996 Oct-Dec; (10-12):132–5 (Eng. Abstr.) **(Ukr)**

PHYSIOLOGY

Localisation of carbonic anhydrase in the sperm storing regions of the domestic hen oviduct. Holm L, et al. **Acta Anat (Basel)** 1996;156(4):253–60
Pentoxifylline in male-factor infertility: its therapeutic efficacy after oral administration. Faka B, et al. **Acta Eur Fertil** 1994 Nov-Dec;25(6):351–3
The testis: the witness of the mating system, the site of mutation and the engine of desire. Short RV. **Acta Paediatr Suppl** 1997 Jul;422:3–7 (26 ref.)
Induction of acrosome reaction in dog sperm by calcium ionophore. Szász F, et al. **Acta Vet Hung** 1997;45(2):177–87
Effect of 19-norandrostenololylaurate on semen characteristics of colts. Koskinen E, et al. **Acta Vet Scand** 1997;38(1):41–50
Semen quality and fertility of men employed in a South African lead acid battery plant. Robins TG, et al. **Am J Ind Med** 1997 Oct;32(4):369–76
In vitro sperm phagocytosis by human peritoneal macrophages in endometriosis-associated infertility. Jha P, et al. **Am J Reprod Immunol** 1996 Oct;36(4):235–7
Role of carbohydrates in the attachment of equine spermatozoa to uterine tubal (oviductal) epithelial cells in vitro [see comments] Dobrinski I, et al. **Am J Vet Res** 1996 Nov;57(11):1635–9. Comment in: Am J Vet Res 1997 Jan;58(1):4.
Acrosomal status of human spermatozoa after follicular fluid or calcium ionophore challenge in relation to semen parameters and fertilizing capacity in vitro. Avrech O, et al. **Andrologia** 1997 Mar-Apr;29(2):97–101
Comparative study of functional and biochemical parameters in frozen bovine sperm. Beorlegui N, et al. **Andrologia** 1997 Jan-Feb;29(1):37–42
Effect of fluctuations in temperature encountered during handling and shipment of human cryopreserved semen. Carrell DT, et al. **Andrologia** 1996 Nov-Dec;28(6):315–9
Declining sperm quality in European men. Comhaire F, et al. **Andrologia** 1996 Nov-Dec;28(6):300–1
Epididymis and sperm function. Cooper TG. **Andrologia** 1996;28 Suppl 1:57–9
Sperm binding and ultrasound changes after operative repair of varicocele: correlation with fecundity. Hauser R, et al.

Andrologia 1997 May-Jun;29(3):145-7

Severe antioxidase deficiency in human semen samples with pathological spermiogram parameters. Miesel R, et al. **Andrologia** 1997 Mar-Apr;29(2):77-83

Relationship of acrosin activity to sperm function tests. Nakagawa H, et al. **Andrologia** 1997 Mar-Apr;29(2):103-8

Hyperprolactinaemia among infertile patients and its effect on sperm functions. Okada H, et al. **Andrologia** 1996 Jul-Aug;28(4):197-202

Analysis of intra-operative aspirates taken during microsurgical refertilization in obstructive azoospermia--preliminary results. The BMFT Study Group for Microsurgery, Giessen. Schroeder-Printzen I, et al. **Andrologia** 1996;28 Suppl 1:61-5

Evaluation of the percentage of sperm motility at 24 h and sperm survival ratio for prediction of in vitro fertilization. Sukcharoen N, et al. **Andrologia** 1996 Jul-Aug;28(4):203-10

In vitro fertilization failure: identification of gamete defects by investigation of sperm-zona pellucida binding capacity of unfertilized oocytes. Windt ML, et al. **Andrologia** 1996 Jul-Aug;28(4):211-5

Changes in sperm-bound amidase activity suggest subtle damage to ram sperm acrosomes by freezing/thawing, not detected by light microscopy. de las Heras MA, et al. **Anim Reprod Sci** 1996 Dec 2;45(1-2):81-9

Distribution, number and membrane integrity of spermatozoa in the pig oviduct in relation to spontaneous ovulation. Mburu JN, et al. **Anim Reprod Sci** 1996 Dec 2; 45(1-2):109-21

The effect of sperm preparation on the timing of penetration in bovine in vitro fertilization. Rosenkranz C, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):47-53

The effect of removing surface-associated proteins from viable chicken spermatozoa on sperm function in vivo and in vitro. Steele MG, et al. **Anim Reprod Sci** 1996 Dec 2; 45(1-2):139-47

Simultaneous detection of the acrosomal status and viability of incubated ram spermatozoa using fluorescent markers. Sukardi S, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):89-96

Fertility of sperm from a tetraparental chimeric bull. Sumantri C, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):35-45

Assessment of the acrosomal status of membrane-intact ram spermatozoa after freezing and thawing, by simultaneous lectin/Hoechst 33258 staining. Valcárcel A, et al. **Anim Reprod Sci** 1997 Jan;45(4):299-309

Motility stimulant effects of prostasome inclusion in swim-up medium on cryopreserved human spermatozoa. Carlsson L, et al. **Arch Androl** 1997 May-Jun;38(3):215-21

Free radical mediated sperm-load management in the vagina of rats. Chatterjee S, et al. **Arch Androl** 1997 Sep-Oct; 39(2):127-33

Improved results of thawed sperm cryopreserved with slow stage cooling with a cellevator. Check ML, et al. **Arch Androl** 1996 Jul-Aug;37(1):61-4

Effect of sperm preincubation time on GIFT pregnancy outcome. Coetzee K, et al. **Arch Androl** 1997 Mar-Apr; 38(2):157-61

Prostasome fraction of human seminal plasma prevents sperm from becoming acrosomally responsive to the agonist progesterone. Cross NL, et al. **Arch Androl** 1997 Jul-Aug; 39(1):39-44

Use of a triple-stain technique to detect viability and acrosome reaction in deer spermatozoa. Garde JJ, et al. **Arch Androl** 1997 Jul-Aug;39(1):1-9

Human sperm bioassay has potential in evaluating the quality of cumulus-oocyte complexes. Hossain AM, et al. **Arch Androl** 1996 Jul-Aug;37(1):7-10

Assessment of the quality of frozen serum by spectrophotometric analysis and sperm bioassay. Hossain AM, et al. **Arch Androl** 1997 Sep-Oct;39(2):119-25

Fractions of Percoll eliminated sperm: increased sperm yield in percoll wash. Hossain AM, et al. **Arch Androl** 1996 Nov-Dec;37(3):189-95

The hemizona assay: a simplified technique. Janssen M, et al. **Arch Androl** 1997 Mar-Apr;38(2):127-31

Adherence of human spermatozoa to trypsin-modified hamster ova. Mishima M. **Arch Androl** 1997 Mar-Apr; 38(2):113-26

In vitro effect of Escherichia coli on human sperm acrosome reaction. el-Mulla KF, et al. **Arch Androl** 1996 Sep-Oct; 37(2):73-8

Chronobiological fluctuations in semen parameters with a constant abstinence period. Ombelet W, et al. **Arch Androl** 1996 Sep-Oct;37(2):91-6

Adherence of human prostasomes to mouse spermatozoa and their displacement by monoclonal antibodies as revealed by free zone electrophoresis. Ronquist G, et al. **Arch Androl** 1996 Mar-Apr;36(2):101-7

inheritance of sperm centrioles and centrosomes in bovine embryos. Sathananthan AH, et al. **Arch Androl** 1997 Jan-Feb;38(1):37-48

Effect of centrifuge speed, refrigeration medium, and sperm washing medium on cryopreserved sperm quality after thawing. Sharma RK, et al. **Arch Androl** 1997 Jul-Aug; 39(1):33-8

Influence of artificial stimulation on unprocessed and Percoll-washed cryopreserved sperm. Sharma RK, et al. **Arch Androl** 1997 May-Jun;38(3):173-9

Effect of acupuncture on sperm parameters of males suffering from subfertility related to low sperm quality. Siterman S, et al. **Arch Androl** 1997 Sep-Oct;39(2):155-61

The use of iodixanol as a density gradient material for separating human sperm from semen. Smith TT, et al. **Arch Androl** 1997 May-Jun;38(3):223-30

Sperm kinetics and morphology before and after fractionation on discontinuous Percoll gradient for sex preselection: computerized analyses. Watkins AM, et al. **Arch Androl** 1996 Jul-Aug;37(1):1-5

Changes in corticosterone levels and sperm functional activity by chronic stress in rats. Suárez M, et al. **Arch Physiol Biochem** 1996;104(3):351-6

A method for preparation, storage, and activation of large populations of immotile sea urchin sperm. Bracho GE, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):59-62

Protein involvement in the fusion between the equatorial segment of acrosome-reacted human spermatozoa and liposomes. Arts EG, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):191-8

On the validity of the sperm conduit model of fertilization [letter] Jaffe LF. **Bioessays** 1997 Sep;19(9):835-6

Normal mice develop from oocytes injected with spermatozoa with grossly misshapen heads. Burruel VR, et al. **Biol Reprod** 1996 Sep;55(3):709-14

Male infertility caused by epididymal dysfunction in transgenic mice expressing a dominant negative mutation of retinoic acid receptor alpha 1. Costa SL, et al. **Biol Reprod** 1997 Apr;56(4):985-90

Human seminal plasma prevents sperm from becoming acrosomally responsive to the agonist, progesterone: cholesterol is the major inhibitor. Cross NL. **Biol Reprod** 1996 Jan;54(1):138-45

In vitro capacitating effect of gamma-aminobutyric acid in ram spermatozoa. de las Heras MA, et al. **Biol Reprod** 1997 Apr;56(4):964-8

Membrane contact with oviductal epithelium modulates the intracellular calcium concentration of equine spermatozoa in vitro. Dobrinski I, et al. **Biol Reprod** 1997 Apr; 56(4):861-9

Developmental exposure of male germ cells to 5-azacytidine results in abnormal preimplantation development in rats. Doerksen T, et al. **Biol Reprod** 1996 Nov;55(5):1155-62

Protein tyrosine phosphorylation is associated with capacitation of human sperm in vitro but is not sufficient for its completion. Emiliozzi C, et al. **Biol Reprod** 1997 Mar;56(3):674-9

Acrosome-intact boar spermatozoa initiate binding to the homologous zona pellucida in vitro. Fazeli A, et al. **Biol Reprod** 1997 Feb;56(2):430-8

Expression and function of the c-kit proto-oncogene protein in mouse sperm. Feng H, et al. **Biol Reprod** 1997 Jul; 57(1):194-203

Sperm plasma membrane remodeling during spermiogenetic maturation in men: relationship among plasma membrane beta 1,4-galactosyltransferase, cytoplasmic creatine phosphokinase, and creatine phosphokinase isoform ratios. Huszar G, et al. **Biol Reprod** 1997 Apr;56(4):1020-4

Effects of transient prepubertal 6-N-propyl-2-thiouracil treatment on testis development and function in the domestic fowl. Kirby JD, et al. **Biol Reprod** 1996 Oct; 55(4):910-6

Identification of a sperm cell attribute responsible for subfertility of roosters homozygous for the rose comb allele. McLean DJ, et al. **Biol Reprod** 1996 Jan;54(1):168-72

Oocyte penetration by fresh or stored diluted boar spermatozoa before and after in vitro capacitation treatments. Martinez EA, et al. **Biol Reprod** 1996 Jul; 55(1):134-40

Expression of the c-kit gene is critical for migration of neonatal rat gonocytes in vitro. Orth JM, et al. **Biol Reprod** 1997 Sep;57(3):676-83

Role of direct contact between spermatozoa and oviductal epithelial cells in maintaining rabbit sperm viability. Smith TT, et al. **Biol Reprod** 1997 Jan;56(1):83-9

Birth of live mice resulting from oocytes fertilized in vitro with cryopreserved spermatozoa. Songsasen N, et al. **Biol Reprod** 1997 Jan;56(1):143-52

Antibody directed against plasma membrane components of equine spermatozoa inhibits adhesion of spermatozoa to oviduct epithelial cells in vitro. Thomas PG, et al. **Biol Reprod** 1997 Mar;56(3):720-30

Osmotic tolerance limits and properties of murine spermatozoa. Willoughby CE, et al. **Biol Reprod** 1996 Sep; 55(3):715-27

Cyclophilin A is present in rat germ cells and is associated with spermatocyte apoptosis. Reproductive Toxicology Group. Wine RN, et al. **Biol Reprod** 1997 Feb;56(2):439-46

Immunohistochemical localization of endothelial nitric oxide synthase in human testis, epididymis, and vas deferens suggests a possible role for nitric oxide in spermatogenesis, sperm maturation, and programmed cell death. Zini A, et al. **Biol Reprod** 1996 Nov;55(5):935-41

Barriers to diffusion of plasma membrane proteins form early during guinea pig spermiogenesis. Cowan AE, et al. **Biophys J** 1997 Jul;73(1):507-16

Physiological monitoring of optically trapped cells: assessing the effects of confinement by 1064-nm laser tweezers using microfluorometry. Liu Y, et al. **Biophys J** 1996 Oct; 71(4):2158-67

Open versus closed epididymal sperm retrieval in men with secondarily obstructed vasal systems--a preliminary report [see comments] Collins GN, et al. **Br J Urol** 1996 Sep; 78(3):437-9. Comment in: Br J Urol 1997 Apr;79(4):661-2.

Intramagnal insemination of hens can eliminate negative influence of lipofectin on fertilising ability of spermatozoa. Trefil P, et al. **Br Poult Sci** 1996 Jul;37(3):661-4

Differential effects of pharmacologically generated reactive oxygen species upon functional activity of epididymal mouse spermatozoa. Baiardi G, et al. **Can J Physiol Pharmacol** 1997 Mar;75(3):173-8

Potential salmon sperm origin of the E3 region insert of the adenovirus 5 dl309 mutant. Gingras MC, et al. **Cancer Gene Ther** 1996 May-Jun;3(3):151-4

Determination of motility forces of human spermatozoa using an 800 nm optical trap. König K, et al. **Cell Mol Biol (Noisy-le-grand)** 1996 Jun;42(4):501-9

Aneuploid epididymal sperm detected in chromosomally normal and Robertsonian translocation-bearing mice using a new three-chromosome FISH method. Lowe X, et al. **Chromosoma** 1996 Oct;105(4):204-10

Automation of human sperm cell analysis by flow cytometry. Ferrara F, et al. **Clin Chem** 1997 May;43(5):801-7

Sperm competition: evolution and mechanisms. Birkhead TR. **Curr Top Dev Biol** 1996;33:103-58 (163 ref.)

The influence of prostaglandin E1 on in vitro transcription of sperm chromatin from healthy males. Pironcheva GL, et al. **Cytobios** 1996;88(353):79-82

Role of extracellular and intracellular pH in carp sperm motility and modifications by hyperosmosis of regulation of the Na+/H+ exchanger. Márián T, et al. **Cytometry** 1997 Apr 1;27(4):374-82

Characterization of the binding of recombinant mouse sperm fertilin alpha subunit to mouse eggs: evidence for function as a cell adhesion molecule in sperm-egg binding. Evans JP, et al. **Dev Biol** 1997 Jul 1;187(1):94-106

Characterization of the binding of recombinant mouse sperm fertilin beta subunit to mouse eggs: evidence for adhesive activity via an egg beta1 integrin-mediated interaction. Evans JP, et al. **Dev Biol** 1997 Jul 1;187(1):79-93

Stage-specific signals in germ line differentiation: control of Sertoli cell phagocytic activity by spermatogenic cells. Grandjean V, et al. **Dev Biol** 1997 Apr 1;184(1):165-74

A comparison of sperm- and IP3-induced Ca2+ release in activated and aging mouse oocytes. Jones KT, et al. **Dev Biol** 1996 Sep 15;178(2):229-37

The cyclic GMP-mediated calcium release pathway in sea urchin eggs is not required for the rise in calcium during fertilization. Lee SJ, et al. **Dev Biol** 1996 Nov 25; 180(1):324-35

The ability to organize sperm DNA into functional chromatin is acquired during meiotic maturation in murine oocytes. McLay DW, et al. **Dev Biol** 1997 Jun 1;186(1):73-84

Transcriptional analysis of the candidate spermatogenesis gene Ube1y and of the closely related Ube1x shows that they are coexpressed in spermatogonia and spermatids but are repressed in pachytene spermatocytes. Odorisio T, et al. **Dev Biol** 1996 Nov 25;180(1):336-43

Sperm-egg fusion is the prelude to the initial Ca2+ increase at fertilization in the mouse. Lawrence Y, et al. **Development** 1997 Jan;124(1):233-41

Somatic sex-determining signals act on XX germ cells in Drosophila embryos. Staab S, et al. **Development** 1996 Dec; 122(12):4065-71

Dose-response relationship for the induction of chromosomal abnormalities in gamma-irradiated human spermatozoa. Alvarez R, et al. **Environ Mol Mutagen** 1997;29(4):357-66

Dissociation of protamine-DNA complexes by Xenopus nucleoplasmin and minichromosome assembly in vitro. Ruiz-Lara SA, et al. **Eur J Biochem** 1996 Aug 15; 240(1):186-94

Studies on the mechanism for Cai-transients in sea urchin zygotes caused by refertilization and external application of sperm extract. Osawa M, et al. **Exp Cell Res** 1997 Feb 25;231(1):104-11

Decreasing sperm counts? A critical (re)view. Lerchl A, et al. **Exp Clin Endocrinol Diabetes** 1996;104(4):301-7 (33 ref.)

Bicarbonate/CO2 induces rapid activation of phospholipase A2 and renders boar spermatozoa capable of undergoing acrosomal exocytosis in response to progesterone. Roldan ER, et al. **FEBS Lett** 1996 Nov 4;396(2-3):227-32

The single sperm curling test, a modified hypo-osmotic swelling test, as a potential technique for the selection of viable sperm for intracytoplasmic sperm injection. Ahmadi A, et al. **Fertil Steril** 1997 Aug;68(2):346-50

The hypo-osmotic swelling test in recurrent miscarriage. Buckett WM, et al. **Fertil Steril** 1997 Sep;68(3):506-9

Persistence or reappearance of nonmotile sperm after vasectomy: does it have clinical consequences? De Knijff DW, et al. **Fertil Steril** 1997 Feb;67(2):332-5

Suitability of the hypo-osmotic swelling test for assessing the viability of cryopreserved sperm. Esteves SC, et al. **Fertil Steril** 1996 Nov;66(5):798-804

Incubation with sperm enhances in vitro maturation of the oocyte from the germinal vesicle to the M2 stage. Farhi J, et al. **Fertil Steril** 1997 Aug;68(2):318-22

Interference of antisperm antibodies with the induction of the acrosome reaction by zona pellucida (ZP) and its relationship with the inhibition of ZP binding. Francavilla F, et al. **Fertil Steril** 1997 Jun;67(6):1128-33

Selectivity of the human sperm-zona pellucida binding process to sperm head morphometry. Garrett C, et al. **Fertil Steril** 1997 Feb;67(2):362-71

Influence of low corrected seminal fructose levels on sperm chromatin stability in semen from men attending an infertility service. Gonzales GF, et al. **Fertil Steril** 1997 Apr;67(4):763-8

Clinical outcome of cryopreserved human pronuclear stage

embryos resulting from intracytoplasmic sperm injection. Hoover L, et al. **Fertil Steril** 1997 Apr;67(4):621–4

Polymerase chain reaction enzyme–linked immunosorbent assay detection of mycoplasma consensus gene in sperm with low oocyte penetration capacity. Kalugdan T, et al. **Fertil Steril** 1996 Nov;66(5):793–7

Two methods of achieving pregnancies despite subnormal hypo–osmotic swelling test scores. Katsoff D, et al. **Fertil Steril** 1997 Sep;68(3):549–51

An intrauterine insemination–ready cryopreservation method compared with sperm recovery after conventional freezing and post–thaw processing. Larson JM, et al. **Fertil Steril** 1997 Jul;68(1):143–8

Induction of acrosome reaction in human spermatozoa accelerates the time of pronucleus formation of hamster oocytes after intracytoplasmic sperm injection. Lee DR, et al. **Fertil Steril** 1997 Feb;67(2):315–20

Unilateral cryptorchidism corrected in prepubertal age: evaluation of sperm parameters, hormones, and antisperm antibodies in adult age. Lenzi A, et al. **Fertil Steril** 1997 May;67(5):943–8

Sperm interaction with fallopian tube apical membrane enhances sperm motility and delays capacitation. Murray SC, et al. **Fertil Steril** 1997 Aug;68(2):351–7

Clinical significance of human sperm–zona pellucida binding. Oehninger S, et al. **Fertil Steril** 1997 Jun;67(6):1121–7

Radionuclide hysterosalpingography with radiolabeled spermatozoa. Ozgür K, et al. **Fertil Steril** 1997 Apr; 67(4):751–5

Seminal reactive oxygen species and sperm motility and morphology in men with spinal cord injury. Padron OF, et al. **Fertil Steril** 1997 Jun;67(6):1115–20

Effects of cancer on spermatozoa quality after cryopreservation: a 12–year experience. Padron OF, et al. **Fertil Steril** 1997 Feb;67(2):326–31

Normal pregnancies resulting from testicular sperm extraction and intracytoplasmic sperm injection for azoospermia due to maturation arrest [see comments] Silber SJ, et al. **Fertil Steril** 1996 Jul;66(1):110–7. Comment in: Fertil Steril 1997 Feb;67(2):408–11.

Quality of frozen–thawed testicular sperm and its preclinical use for intracytoplasmic sperm injection into in vitro–matured germinal–vesicle stage oocytes. Verheyen G, et al. **Fertil Steril** 1997 Jan;67(1):74–80

Oligozoospermia induced by exogenous testosterone is associated with normal functioning residual spermatozoa. Wang C, et al. **Fertil Steril** 1997 Jul;68(1):149–53

Oligospermic men: the role of karyotype analysis prior to intracytoplasmic sperm injection [editorial] Wilkins–Haug LE, et al. **Fertil Steril** 1997 Apr;67(4):612–4

Is leukocytospermia clinically relevant? Yanushpolsky EH, et al. **Fertil Steril** 1996 Nov;66(5):822–5

The effect of 12–myristate 13–acetate phorbol ester on human sperm hyperactivation. Zhang Z, et al. **Fertil Steril** 1997 Jun;67(6):1140–5

X– and Y–chromosome–bearing sperm selection and detection methods. A review. Gawęcka–Szczygieł M, et al. **Folia Histochem Cytobiol** 1995;33(4):219–27 (55 ref.)

Superoxide dismutase in human sperm suspensions: relationship with cellular composition, oxidative stress, and sperm function. Aitken RJ, et al. **Free Radic Biol Med** 1996; 21(4):495–504

Effects of ferulic acid on fertile and asthenozoospermic infertile human sperm motility, viability, lipid peroxidation, and cyclic nucleotides. Zheng RL, et al. **Free Radic Biol Med** 1997;22(4):581–6

Quantitative genetics of sperm precedence in Drosophila melanogaster. Hughes KA. **Genetics** 1997 Jan;145(1):139–51

Single sperm analysis of the CAG repeats in the gene for Machado–Joseph disease (MJD1): evidence for non–Mendelian transmission of the MJD1 gene and for the effect of the intragenic CGG/GGG polymorphism on the intergenerational instability. Takiyama Y, et al. **Hum Mol Genet** 1997 Jul;6(7):1063–8

A comparison of three methods for detecting the acrosome reaction in human spermatozoa. Amin AH, et al. **Hum Reprod** 1996 Apr;11(4):741–5

Evaluation of motility, freezing ability and embryonic development of murine epididymal sperm after coculture with epididymal epithelium. Bongso A, et al. **Hum Reprod** 1996 Jul;11(7):1451–6

Sperm quality in Hodgkin's disease versus non–Hodgkin's lymphoma. Botchan A, et al. **Hum Reprod** 1997 Jan; 12(1):73–6

Addition of kallikrein and/or human serum to a discontinuous Percoll gradient [letter; comment] Depoortere B, et al. **Hum Reprod** 1996 Feb;11(2):457–8. Comment on: Hum Reprod 1995 Dec;10(12):3183–5.

Determination of optimal cryoprotectants and procedures for their addition and removal from human spermatozoa. Gilmore JA, et al. **Hum Reprod** 1997 Jan;12(1):112–8

Insulin–like growth factor–I and alpha 2–macroglobulin in seminal plasma correlate with semen quality. Glander HJ, et al. **Hum Reprod** 1996 Nov;11(11):2454–60

Pregnancy resulting from intracytoplasmic injection of spermatozoa from a frozen–thawed testicular biopsy specimen. Hovatta O, et al. **Hum Reprod** 1996 Nov; 11(11):2472–3

Effects of ultraviolet exposure and near infrared laser tweezers on human spermatozoa. König K, et al. **Hum Reprod** 1996 Oct;11(10):2162–4

Analysis of chromosome constitution of human spermatozoa with normal and aberrant head morphologies after injection into mouse oocytes. Lee JD, et al. **Hum Reprod** 1996 Sep; 11(9):1942–6

Effects of sperm activity on zinc and fructose concentrations in seminal plasma. Lewis–Jones DI, et al. **Hum Reprod** 1996 Nov;11(11):2465–7

Direct assessment of cryopreservation of human spermatozoa using a cryomicroscope and computer–aided sperm analysis. Mohammad SN, et al. **Hum Reprod** 1996 Dec; 11(12):2687–92

Sperm interaction with human oviductal cells in vitro. Morales P, et al. **Hum Reprod** 1996 Jul;11(7):1504–9

Fertilizing ability of immotile spermatozoa after intracytoplasmic sperm injection. Nijs M, et al. **Hum Reprod** 1996 Oct;11(10):2180–5

Relationship between serum follicle stimulating hormone in the male and standard sperm parameters, and the results of intracytoplasmic sperm injection. Novero V, et al. **Hum Reprod** 1997 Jan;12(1):59–63

The paradoxical effects of pentoxifylline on the binding of spermatozoa to the human zona pellucida. Paul M, et al. **Hum Reprod** 1996 Apr;11(4):814–9

Analysis of the oocyte activating capacity and chromosomal complement of round–headed human spermatozoa by their injection into mouse oocytes. Rybouchkin A, et al. **Hum Reprod** 1996 Oct;11(10):2170–5

The sperm centriole: its inheritance, replication and perpetuation in early human embryos. Sathananthan AH, et al. **Hum Reprod** 1996 Feb;11(2):345–56

Premature chromosome condensation of the sperm nucleus after intracytoplasmic sperm injection. Schmiady H, et al. **Hum Reprod** 1996 Oct;11(10):2239–45

Intracytoplasmic sperm injection for Rhesus monkey fertilization results in unusual chromatin, cytoskeletal, and membrane events, but eventually leads to pronuclear development and sperm aster assembly. Sutovsky P, et al. **Hum Reprod** 1996 Aug;11(8):1703–12

Cytogenetics of infertile men. Van Assche E, et al. **Hum Reprod** 1996 Dec;11 Suppl 4:1–24; discussion 25–6 (114 ref.)

Deterioration of sperm quality in young healthy Belgian men. Van Waeleghem K, et al. **Hum Reprod** 1996 Feb; 11(2):325–9

The factors affecting sperm binding to the zona pellucida in the hemizona binding assay. Yao YQ, et al. **Hum Reprod** 1996 Jul;11(7):1516–9

Human semen analysis. Comhaire F, et al. **Hum Reprod Update** 1995 Jul;1(4):343–62 (59 ref.)

TEST–yolk media and sperm quality. Jeyendran RS, et al. **Hum Reprod Update** 1995 Jan;1(1):73–9 (60 ref.)

Reactive oxygen species and human spermatozoa: physiology and pathology. Griveau JF, et al. **Int J Androl** 1997 Apr; 20(2):61–9 (79 ref.)

Sperm concentrations and quality in beta–thalassaemia major. Jensen CE, et al. **Int J Androl** 1996 Dec;19(6):362–4

Hydrogen hexachloroplatinate induces the acrosome reaction in human spermatozoa. Köhn FM, et al. **Int J Androl** 1995 Dec;18(6):321–5

Computer–aided semen analysis (CASA) 10 years later: a test–bed for the European scientific andrological community [news] Lenzi A. **Int J Androl** 1997 Feb; 20(1):1–2

Effect of glyceryl trinitrate on sperm motility and lipid peroxidation in normozoospermic men. Mckinney KA, et al. **Int J Androl** 1995 Dec;18(6):307–12

Androgen action on the restoration of spermatogenesis in adult rats: effects of human chorionic gonadotrophin, testosterone and flutamide administration on germ cell number. Meachem SJ, et al. **Int J Androl** 1997 Apr; 20(2):70–9

Investigation of some biochemical and functional effects of cryopreservation of human spermatozoa using an automated freezing–quick–thawing method. Morshedi M, et al. **Int J Androl** 1995 Dec;18(6):279–86

Viability of ram spermatozoa in relation to the abstinence period and successive ejaculations. Ollero M, et al. **Int J Androl** 1996 Oct;19(5):287–92

Evaluation of sperm fertilizing ability using the Sperm Quality Analyzer. Shibahara H, et al. **Int J Androl** 1997 Apr;20(2):112–7

Influence of fibronectin on the motility of human spermatozoa. Wennemuth G, et al. **Int J Androl** 1997 Feb; 20(1):10–6

Maturation of sperm motility in the epididymis of the common marmoset (Callithrix jacchus) and the cynomolgus monkey (Macaca fascicularis). Yeung CH, et al. **Int J Androl** 1996 Apr;19(2):113–21

Conformation of nucleoplasmin and its interaction with DNA–protamine complex as a simple model of fish sperm nuclei. Iwata K, et al. **Int J Biol Macromol** 1997 Jun; 20(3):171–8

Seminal plasma effect on ram spermatozoa studied by partitioning in an aqueous two–phase system. Ollero M, et al. **Int J Dev Biol** 1996;Suppl 1:205S–206S

Sperm quality in spontaneous unilateral abdominal cryptorchid boars. Pinart E, et al. **Int J Dev Biol** 1996;Suppl 1:225S–226S

The relationship of the postcoital test and semen characteristics to pregnancy rates in 200 presumed fertile couples. Beltsos AN, et al. **Int J Fertil Menopausal Stud** 1996 Jul–Aug;41(4):405–11

Vaginal lubricants for the infertile couple: effect on sperm activity. Kutteh WH, et al. **Int J Fertil Menopausal Stud** 1996 Jul–Aug;41(4):400–4

The addition of fructose or sodium citrate does not improve recovery rates of cryopreserved human spermatozoa. Silva AL, et al. **Int J Fertil Menopausal Stud** 1996 May–Jun; 41(3):304–9

Mating behaviour of Echinostoma caproni and E. trivolvis in concurrent infections in hamsters. Nollen PM. **Int J Parasitol** 1997 Jan;27(1):71–5

There is no relationship between concentration, motility and vacuolated cells. Aktaş S, et al. **Int Urol Nephrol** 1996; 28(6):819–29

Spermatozoa selection by the swim–up procedure and two–layer percoll gradient centrifugation. Evliyaoğlu Y, et al. **Int Urol Nephrol** 1996;28(3):409–18

Impaired secretory function of the prostate in men with oligo–asthenozoospermia. Ahlgren G, et al. **J Androl** 1995 Nov–Dec;16(6):491–8

Differential expression of clusterin in the testis and epididymis of postnatal and germ cell deficient mice. Ahuja HS, et al. **J Androl** 1996 Sep–Oct;17(5):491–501

Regulation of the epididymal synthesis of P26h, a hamster sperm protein. Bérubé B, et al. **J Androl** 1996 Mar–Apr; 17(2):104–10

The impact of reactive oxygen species on bovine sperm fertilizing ability and oocyte maturation. Blondin P, et al. **J Androl** 1997 Jul–Aug;18(4):454–60

Evaluation of the effect of the absence of sperm with rapid and linear progressive motility on subsequent pregnancy rates following intrauterine insemination or in vitro fertilization. Bollendorf A, et al. **J Androl** 1996 Sep–Oct; 17(5):550–7

Premature capacitation of bovine spermatozoa is initiated by cryopreservation. Cormier N, et al. **J Androl** 1997 Jul–Aug; 18(4):461–8

Cryopreservation reduces the ability of equine spermatozoa to attach to oviductal epithelial cells and zonae pellucidae in vitro. Dobrinski I, et al. **J Androl** 1995 Nov–Dec; 16(6):536–42

Effects of psychological stress on human semen quality. Fenster L, et al. **J Androl** 1997 Mar–Apr;18(2):194–202

Transcriptional regulatory strategies in male germ cells. Goldberg E. **J Androl** 1996 Nov–Dec;17(6):628–32 (27 ref.)

Discriminant analysis indicates a single sperm protein (SP22) is predictive of fertility following exposure to epididymal toxicants. Klinefelter GR, et al. **J Androl** 1997 Mar–Apr; 18(2):139–50

Fertilizing capacity of rat spermatozoa is correlated with decline in straight–line velocity measured by continuous computer–aided sperm analysis: epididymal rat spermatozoa from the proximal cauda have a greater fertilizing capacity in vitro than those from the distal cauda or vas deferens. Moore HD, et al. **J Androl** 1996 Jan–Feb; 17(1):50–60

Structure of the rRNA genes in the hamster sperm nucleus. Nadel B, et al. **J Androl** 1995 Nov–Dec;16(6):517–22

Partial sympathetic denervation of the rat epididymis permits fertilization but inhibits embryo development. Ricker DD, et al. **J Androl** 1997 Mar–Apr;18(2):131–8

Snow leopard (Panthera uncia) spermatozoa are sensitive to alkaline pH, but motility in vitro is not influenced by protein or energy supplements. Roth TL, et al. **J Androl** 1996 Sep–Oct;17(5):558–66

The PH–20 protein in human spermatozoa. Sabeur K, et al. **J Androl** 1997 Mar–Apr;18(2):151–8

Impaired germ cell development in the testes of immature rats with neonatal hypothyroidism. Simorangkir DR, et al. **J Androl** 1997 Mar–Apr;18(2):186–93

Synchronous assessment of sperm motility and fertilizing ability in the hamster following treatment with alpha–chlorohydrin. Slott VL, et al. **J Androl** 1995 Nov–Dec;16(6):523–35

Effects of dietary energy on scrotal surface temperature, seminal quality, and sperm production in young beef bulls. Coulter GH, et al. **J Anim Sci** 1997 Apr;75(4):1048–52

Reproductive function in male endurance athletes: sperm analysis and hormonal profile. Lucía A, et al. **J Appl Physiol** 1996 Dec;81(6):2627–36

Intracytoplasmic injection of human sperm into the hamster oocyte (hamster ICSI assay) as a test for fertilizing capacity of the severe male–factor sperm. Ahmadi A, et al. **J Assist Reprod Genet** 1996 Sep;13(8):647–51

Amplification of the RB1.20 polymorphism in single spermatozoa. Girardet A, et al. **J Assist Reprod Genet** 1997 Mar;14(3):177–9

The fertilizing ability of human epididymal sperm. Kitamura M, et al. **J Assist Reprod Genet** 1996 Sep;13(8):652–6

Silane–coated silica particle colloid processing of human sperm. Perez SM, et al. **J Assist Reprod Genet** 1997 Aug; 14(7):388–93

Kinesin– and myosin–driven steps of vesicle recruitment for Ca2+–regulated exocytosis. Bi GQ, et al. **J Cell Biol** 1997 Sep 8;138(5):999–1008

A nematode gene required for sperm vesicle fusion. Achanzar WE, et al. **J Cell Sci** 1997 May;110 (Pt 9):1073–81

The mouse transcription factor Stat4 is expressed in haploid male germ cells and is present in the perinuclear theca of spermatozoa. Herrada G, et al. **J Cell Sci** 1997 Jul;110 (Pt 14):1543–53

Calcium mobilization and influx during sperm exocytosis. Spungin B, et al. **J Cell Sci** 1996 Jul;109 (Pt 7):1947–55

Reversion of thermic–shock effect on ram spermatozoa by

adsorption of seminal plasma proteins revealed by partition in aqueous two-phase systems. García-López N, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):137-43

Surface changes associated with ram sperm cryopreservation revealed by counter-current distribution in an aqueous two-phase system. Effect of different cryoprotectants. Ollero M, et al. **J Chromatogr B Biomed Appl** 1996 May 17;680(1-2):157-64

Hypo-osmotic swelling test: a reliable screening assay for routine semen specimen quality screening. Oosterhuis GJ, et al. **J Clin Lab Anal** 1996;10(4):209-12

Modulation of postthaw motility, survival, calcium uptake, and fertility of bovine sperm by female genital products. Lapointe S, et al. **J Dairy Sci** 1996 Dec;79(12):2155-62

Computer-assisted sperm analysis for assessing initial semen quality and changes during storage at 5 degrees C. Tardif AL, et al. **J Dairy Sci** 1997 Aug;80(8):1606-12

Stem cell factor and c-kit in the mammalian testis: lessons originating from Mother Nature's gene knockouts. Loveland KL, et al. **J Endocrinol** 1997 Jun;153(3):337-44 (71 ref.)

An N-terminal partial sequence of the 13 kDa Pycnopodia helianthoides sperm chemoattractant 'startrak' possesses sperm-attracting activity. Miller RL, et al. **J Exp Biol** 1996 Feb;199 (Pt 2):311-8

Novel sperm crypts and behavior of gametes in the fallopian tube of the white-toothed shrew, Crocidura russula monacha. Bedford JM, et al. **J Exp Zool** 1997 Feb 15; 277(3):262-73

Role of hypo-osmotic sperm swelling test in assisted reproduction. Datta S, et al. **J Indian Med Assoc** 1996 Dec; 94(12):440-2

Macaque sperm fusion with zona-free hamster oocytes. VandeVoort CA, et al. **J Med Primatol** 1996 Oct; 25(5):356-60

Sperm nuclear basic proteins (SNBPs) of agnathans and chondrichthyans: variability and evolution of sperm proteins in fish. Saperas N, et al. **J Mol Evol** 1997 Apr; 44(4):422-31

Comparative in vitro spermicidal activity of chelating agents and synergistic effect with nonoxynol-9 on human sperm functionality. Lee CH, et al. **J Pharm Sci** 1996 Jan; 85(1):91-5

The unusual state of the cumulus oophorus and of sperm behaviour within it, in the musk shrew, Suncus murinus. Bedford JM, et al. **J Reprod Fertil** 1997 May;110(1):127-34

Apoptosis pattern elicited by oestradiol treatment of the seminiferous epithelium of the adult rat. Blanco-Rodríguez J, et al. **J Reprod Fertil** 1997 May;110(1):61-70

Effect of cooling mouse spermatozoa to 4 degrees C on fertilization and embryonic development. Fuller SJ, et al. **J Reprod Fertil** 1996 Sep;108(1):139-45

Blood plasma concentrations of progesterone, sperm storage and sperm viability and fertility in Gould's wattled bat (Chalinolobus gouldii). Hosken DJ, et al. **J Reprod Fertil** 1996 Nov;108(2):171-7

Pregnancy after intracytoplasmic injection of immotile sperm. A case report. Wang CW, et al. **J Reprod Med** 1997 Jul;42(7):448-50

Poor semen quality in Irish wolfhounds: a clinical, hormonal and spermatological study. Dahlbom M, et al. **J Small Anim Pract** 1995 Dec;36(12):547-52

Interdoublet sliding in bovine spermatozoa: its relationship to flagellar motility and the action of inhibitory agents. Bird Z, et al. **J Struct Biol** 1996 May-Jun;116(3):418-28

Sperm from spinal cord injured men lose motility faster than sperm from normal men: the effect is exacerbated at body compared to room temperature [see comments] Brackett NL, et al. **J Urol** 1997 Jun;157(6):2150-3. Comment in: J Urol 1997 Jun;157(6):2159.

Electroejaculation versus vibratory stimulation in spinal cord injured men: sperm quality and patient preference [see comments] Ohl NA, et al. **J Urol** 1997 Jun;157(6):2147-9 . Comment in: J Urol 1997 Jun;157(6):2159.

Use of cryopreservation techniques of embryos and spermatozoa for production of transgenic (Tg) mice and for maintenance of Tg mouse lines. Nakagata N. **Lab Anim Sci** 1996 Apr;46(2):236-8

In vitro fertilization of follicular oocytes by frozen-thawed spermatozoa in Japanese monkeys (Macaca fuscata). Sankai T, et al. **Lab Anim Sci** 1997 Feb;47(1):58-62

The mouse Spam1 maps to proximal chromosome 6 and is a candidate for the sperm dysfunction in Rb(6.16)24Lub and Rb(6.15)1Ald heterozygotes. Deng X, et al. **Mamm Genome** 1997 Feb;8(2):94-7

Xenopus replication assays. Madine MA, et al. **Methods Enzymol** 1997;283:535-49

Analysis of sperm aneuploidy by PRINS. Pellestor F, et al. **Methods Mol Biol** 1997;71:23-9 (12 ref.)

Molecular mechanisms regulating human sperm function. Aitken RJ. **Mol Hum Reprod** 1997 Mar;3(3):169-73 (44 ref.)

Localization of a 25 kDa human sperm surface protein: its role in in-vitro human sperm capacitation. Banerjee M, et al. **Mol Hum Reprod** 1997 Feb;3(2):109-14

Chromatin packaging and morphology in ejaculated human spermatozoa: evidence of hidden anomalies in normal spermatozoa. Bianchi PG, et al. **Mol Hum Reprod** 1996 Mar;2(3):139-44

The expression of alpha v, alpha 5, beta 1, and beta 3 integrin chains on ejaculated human spermatozoa varies with their functional state. Fusi FM, et al. **Mol Hum Reprod** 1996 Mar;2(3):169-75

P-selectin is expressed on the oolemma of human and hamster oocytes following sperm adhesion and is also detected on the equatorial region of acrosome-reacted human spermatozoa. Fusi FM, et al. **Mol Hum Reprod** 1996 May; 2(5):341-7

Low expression of adhesion molecules and matrix proteins in patients showing poor penetration in zona-free hamster oocytes. Henkel R, et al. **Mol Hum Reprod** 1996 May; 2(5):335-9

Molecular approaches to the diagnosis of male infertility. Jeremias J, et al. **Mol Hum Reprod** 1996 Mar;2(3):195-202 (60 ref.)

Cell-to-cell transfer of glycosylphosphatidylinositol-anchored membrane proteins during sperm maturation. Kirchhoff C, et al. **Mol Hum Reprod** 1996 Mar;2(3):177-84 (77 ref.)

Characterization and isolation of SOB2, a human sperm protein with a potential role in oocyte membrane binding. Lefèvre A, et al. **Mol Hum Reprod** 1997 Jun;3(6):507-16

Structure of sperm activating protein. Leijonhufvud P, et al. **Mol Hum Reprod** 1997 Mar;3(3):249-53

Protein kinase C activation during progesterone-stimulated acrosomal exocytosis in human spermatozoa. O'Toole CM, et al. **Mol Hum Reprod** 1996 Dec;2(12):921-7

A role for diacylglycerol in human sperm acrosomal exocytosis. O'Toole CM, et al. **Mol Hum Reprod** 1996 May; 2(5):317-26

Human sperm cytosolic factor triggers Ca2+ oscillations and overcomes activation failure of mammalian oocytes. Palermo GD, et al. **Mol Hum Reprod** 1997 Apr;3(4):367-74

Involvement of protein kinases in platelet activating factor-induced acrosome reaction of human spermatozoa. Sengoku K, et al. **Mol Hum Reprod** 1996 Jun;2(6):401-4

Single cell analysis of tyrosine kinase dependent and independent Ca2+ fluxes in progesterone induced acrosome reaction. Tesarik J, et al. **Mol Hum Reprod** 1996 Apr;2(4):225-32

Sperm centrosome dysfunction: a possible new class of male factor infertility in the human. Van Blerkom J. **Mol Hum Reprod** 1996 May;2(5):349-54

Biological activity of recombinant human ZP3 produced in vitro: potential for a sperm function test. Whitmarsh AJ, et al. **Mol Hum Reprod** 1996 Dec;2(12):911-9

Sperm factor: what is it and what does it do? Wilding M, et al. **Mol Hum Reprod** 1997 Mar;3(3):269-73 (74 ref.)

A possible mechanism of action for fertilization promoting peptide, a TRH-related tripeptide that promotes capacitation and fertilizing ability in mammalian spermatozoa. Green CM, et al. **Mol Reprod Dev** 1996 Oct; 45(2):244-52

Ovarian control of very low sperm/egg ratios at the commencement of mammalian fertilisation to avoid polyspermy. Hunter RH. **Mol Reprod Dev** 1996 Jul; 44(3):417-22 (73 ref.)

Changes in microtubule structures during the first cell cycle of physiologically polyspermic newt eggs. Iwao Y, et al. **Mol Reprod Dev** 1997 Jun;47(2):210-21

Monoclonal antibodies against unfertilized zona-free mouse oocytes: characterization and effects on fertilization. Jin M, et al. **Mol Reprod Dev** 1996 Jan;43(1):47-54

Rapid and simultaneous detection of chromosome Y- and 1-bearing porcine spermatozoa by fluorescence in situ hybridization. Kawarasaki T, et al. **Mol Reprod Dev** 1996 Apr;43(4):548-53

Inadequate function of sterile tw5/tw32 spermatozoa overcome by intracytoplasmic sperm injection. Kuretake S, et al. **Mol Reprod Dev** 1996 Jun;44(2):230-3

Ascidian eggs block polyspermy by two independent mechanisms: one at the egg plasma membrane, the other involving the follicle cells. Lambert C, et al. **Mol Reprod Dev** 1997 Sep;48(1):137-43

Sperm membrane incorporation into oolemma contributes to the oolemma block to sperm penetration: evidence based on intracytoplasmic sperm injection experiments in the mouse. Maleszewski M, et al. **Mol Reprod Dev** 1996 Jun; 44(2):256-9

Developmental competence of in vivo and in vitro matured porcine oocytes after subzonal sperm injection. Nagashima H, et al. **Mol Reprod Dev** 1996 Nov;45(3):359-63

Role for Ca2+ channels in the signal transduction pathway leading to acrosomal exocytosis in human spermatozoa. O'Toole CM, et al. **Mol Reprod Dev** 1996 Oct;45(2):204-11

Changes in the motility patterns of spermatozoa from the rabbit epididymis as assessed by computer-aided sperm motion analysis. Pérez-Sánchez F, et al. **Mol Reprod Dev** 1996 Nov;45(3):364-71

Species-specific effect of oviductal glycoproteins on hamster sperm binding to hamster oocytes. Schmidt A, et al. **Mol Reprod Dev** 1997 Feb;46(2):201-7

Hypo-osmotic swelling can accurately assess the viability of nonmotile sperm. Smikle CB, et al. **Mol Reprod Dev** 1997 Jun;47(2):200-3

Cytofluorescent assay to quantify adhesion of equine spermatozoa to oviduct epithelial cells in vitro. Thomas PG, et al. **Mol Reprod Dev** 1996 Jan;43(1):55-61

Activation of mouse sperm phosphatidylinositol-4,5 bisphosphate-phospholipase C by zona pellucida is modulated by tyrosine phosphorylation. Tomes CN, et al. **Mol Reprod Dev** 1996 Feb;43(2):196-204

Injection of a porcine sperm factor triggers calcium oscillations in mouse oocytes and bovine eggs. Wu H, et al. **Mol Reprod Dev** 1997 Feb;46(2):176-89

Spontaneous rates of sex chromosomal aneuploidies in sperm and offspring of mice: a validation of the detection of aneuploid sperm by fluorescence in situ hybridization. Adler ID, et al. **Mutat Res** 1996 Dec;372(2):259-68

The putative chaperone calmegin is required for sperm fertility. Ikawa M, et al. **Nature** 1997 Jun 5; 387(6633):607-11

Conspecific sperm precedence in Drosophila. Price CS. **Nature** 1997 Aug 14;388(6643):663-6

The effect of twenty-four hour in vitro storage on sperm hydrolysis through the perivitelline layer of ovipositioned turkey eggs. Donoghue AM. **Poult Sci** 1996 Aug; 75(8):1035-8

Increased fecundity resulting from semen donor selection based upon in vitro sperm motility. Froman DP, et al. **Poult Sci** 1997 Jan;76(1):73-7

Binding of spermatozoa to the perivitelline layer in the presence of a protease inhibitor. Kuroki M, et al. **Poult Sci** 1997 May;76(5):748-52

The male contribution to broiler breeder heat-induced infertility as determined by sperm-egg penetration and sperm storage within the hen's oviduct. McDaniel CD, et al. **Poult Sci** 1996 Dec;75(12):1546-54

Semen production by the emu (Dromaius novaehollandiae). 2. Effect of collection frequency on the production of semen and spermatozoa. Malecki IA, et al. **Poult Sci** 1997 Apr;76(4):622-6

Associated effects of divergent selection for residual feed consumption on reproduction, sperm characteristics, and mitochondria of spermatozoa. Morisson M, et al. **Poult Sci** 1997 Mar;76(3):425-31

Activation of mouse sperm T-type Ca2+ channels by adhesion to the egg zona pellucida. Arnoult C, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13004-9

Increased competitiveness of nematode sperm bearing the male X chromosome. LaMunyon CW, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):185-9

XMCM7, a novel member of the Xenopus MCM family, interacts with XMCM3 and colocalizes with it throughout replication [see comments] Romanowski P, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10189-94. Comment in: Proc Natl Acad Sci U S A 1996 Sep 17;93(19):9997-10000.

The relationship between spermatozoa and epithelium of the female genital tract during sperm storage in the greater yellow bats (Scotophilus heathi): the light and electronmicroscopic observations. Krishna A. **Proc Natl Sci Counc Repub China B** 1997 Jan;21(1):31-6

Molecular genetic analysis of sperm competition in the damselfly Ischnura elegans (Vander Linden). Cooper G, et al. **Proc R Soc Lond B Biol Sci** 1996 Oct 22; 263(1375):1343-9

Sperm competition in bats. Hosken DJ. **Proc R Soc Lond B Biol Sci** 1997 Mar 22;264(1380):385-92

What marsupial gametes disclose about gamete function in eutherian mammals. Bedford JM. **Reprod Fertil Dev** 1996; 8(4):569-80 (65 ref.)

Activity of aspartate aminotransferase and acid phosphatase in cryopreserved trout sperm. Glogowski J, et al. **Reprod Fertil Dev** 1996;8(8):1179-84

Capacitation mechanisms, and the role of capacitation as seen in eutherian mammals. Harrison RA. **Reprod Fertil Dev** 1996;8(4):581-94 (106 ref.)

Capacitation and the acrosome reaction in marsupial spermatozoa. Mate KE, et al. **Reprod Fertil Dev** 1996; 8(4):595-603 (46 ref.)

Viability and membrane integrity of spermatozoa after dilution and flow cytometric sorting in the presence or absence of seminal plasma. Maxwell WM, et al. **Reprod Fertil Dev** 1996;8(8):1165-78

Pellet-freezing spermatozoa of two marsupials: the tammar wallaby, Macropus eugenii, and the brushtail possum, Trichosurus vulpecula. Molinia FC, et al. **Reprod Fertil Dev** 1996;8(4):681-4

Gamete biology of the new world marsupial, the grey short-tailed opossum, Monodelphis domestica. Moore HD. **Reprod Fertil Dev** 1996;8(4):605-15 (38 ref.)

Effect of cooling and cryopreservation on sperm motility and morphology of several species of marsupial. Taggart DA, et al. **Reprod Fertil Dev** 1996;8(4):673-9

Do sperm cells age? A review of the physiological changes in sperm during storage at ambient temperature. Vishwanath R, et al. **Reprod Fertil Dev** 1997;9(3):321-31 (110 ref.)

Fertility of ram spermatozoa pellet-frozen in zwitterion-buffered diluents. Molinia FC, et al. **Reprod Nutr Dev** 1996;36(1):21-9

Testicular aspiration of sperm for intracytoplasmic sperm injection: an alternative treatment to electro-emission: case report. Watkins W, et al. **Spinal Cord** 1996 Nov; 34(11):696-8

Methods for induction of capacitation and the acrosome reaction of stallion spermatozoa. Graham JK. **Vet Clin North Am Equine Pract** 1996 Apr;12(1):111-7 (42 ref.)

Cryopreservation of stallion spermatozoa. Graham JK. **Vet Clin North Am Equine Pract** 1996 Apr;12(1):131-47 (39 ref.)

Estimation of sperm viability in frozen-thawed semen from Swedish A.I. bulls. Januskauskas A, et al. **Zentralbl Veterinarmed A** 1996 Jul;43(5):281-7

Combined use of proacrosin immunocytochemistry and

autosomal DNA in situ hybridisation for evaluation of human ejaculated germ cells. Mendoza C, et al. **Zygote** 1996 Nov;4(4):279–83

Unprotected freezing of human spermatozoa exerts a detrimental effect on their oocyte activating capacity and chromosome integrity. Rybouchkin AV, et al. **Zygote** 1996 Nov;4(4):263–8

Beneficial effect of medium with high concentration serum for direct sperm injection into mouse oocytes using a conventional pipette. Suzuki K, et al. **Zygote** 1997 May; 5(2):111–6

[The examination of sperm in the study of male fertility] Grizard G, et al. **Prog Urol** 1997 Jun;7(3):496–504 (Eng. Abstr.) **(Fre)**

[Separation techniques ro achieve vital and reproduction competent equine spermatozoa populations––a survey] Sieme H, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Aug; 104(8):298–302 (61 ref.) (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Comments on "Is sperm motility maturation affected by static magnetic fields?" [letter] Lerchl A.
Environ Health Perspect 1997 Jul;105(7):689

Is sperm motility maturation affected by static magnetic fields? Tablado L, et al. **Environ Health Perspect** 1996 Nov; 104(11):1212–6

Dose–response relationship for the induction of chromosomal abnormalities in gamma–irradiated human spermatozoa. Alvarez R, et al. **Environ Mol Mutagen** 1997;29(4):357–66

Effects of ultraviolet exposure and near infrared laser tweezers on human spermatozoa. König K, et al.
Hum Reprod 1996 Oct;11(10):2162–4

Changes in calcium transport in mammalian sperm mitochondria and plasma membrane irradiated at 633 nm (HeNe laser). Breitbart H, et al.
J Photochem Photobiol B 1996 Jul;34(2–3):117–21

Effects of lithium chloride as a potential radioprotective agent on radiation response of DNA synthesis in mouse germinal cells. Bhattacharjee D, et al.
Radiat Environ Biophys 1997 Jun;36(2):125–8

[The "2 + 1" mechanism as the basis for synergism in the neutron–photon irradiation of the spermatozoal genome in Drosophila melanogaster] Aleksandrov ID, et al.
Radiats Biol Radioecol 1996 Nov–Dec;36(6):780–8 (Eng. Abstr.) **(Rus)**

[The status of the progeny of male rats subjected to low–dose external gamma irradiation exposure] Ovcharenko EP, et al. **Tsitol Genet** 1996 Nov–Dec;30(6):43–7 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Efficacy of intracytoplasmic sperm injection (ICSI) treatment in the immunological infertile patients. Jun JH, et al.
Am J Reprod Immunol 1997 Apr;37(4):310–4

Whose sperm is it anyway? [news] Dyer C. **BMJ** 1996 Oct 5;313(7061):837

Pregnancy and birth after intracytoplasmic sperm injection with totally immotile sperm recovered from the ejaculate. Barros A, et al. **Fertil Steril** 1997 Jun;67(6):1091–4

Absence of block to polyspermy at the human oolemma. Wolf JP, et al. **Fertil Steril** 1997 Jun;67(6):1095–102

Development of a positive method for male stem cell–mediated gene transfer in mouse and pig. Kim JH, et al. **Mol Reprod Dev** 1997 Apr;46(4):515–26

Epididymal sperm retrieval by epididymal micropuncture combined with intracytoplasmic sperm injection: difference between acquired and congenital irreparable obstructive azoospermia. Yamamoto M, et al. **Urol Int** 1997; 58(3):177–80

[Intracytoplasmic sperm injection] Hovatta O, et al.
Duodecim 1995;111(16):1542–5 **(Fin)**

[Pregnancies after in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) of testicular spermatozoa (TESE) from frozen semen] Würfel W, et al. **Zentralbl Gynakol** 1996;118(12):665–8 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Lectin histochemistry during in vitro capacitation and acrosome reaction in boar spermatozoa: new lectins for evaluating acrosomal status of boar spermatozoa. Vazquez JM, et al. **Acta Histochem** 1996 Jan;98(1):93–100

Evaluating sex chromosome content of sorted human sperm samples with use of dual–color fluorescence in situ hybridization. Richards WE, et al.
Am J Obstet Gynecol 1997 Jun;176(6):1172–8; discussion 1178–80

Probable spermatozoal diploidy in the semen of a golden retriever. Dahlbom M, et al. **Andrologia** 1997 Jan–Feb; 29(1):49–55

Effect of sperm motility on separation of bovine X– and Y–bearing spermatozoa by means of free–flow electrophoresis. Manger M, et al. **Andrologia** 1997 Jan–Feb; 29(1):9–15

Sperm head morphometry analysis of ejaculate and dismount stallion semen samples. Gravance CG, et al.
Anim Reprod Sci 1997 May;47(1–2):149–55

Changes in sperm ultrastructure and localisation in the porcine oviduct around ovulation. Mburu JN, et al.
Anim Reprod Sci 1997 May;47(1–2):137–48

A novel method for evaluating the acrosomal status of mammalian spermatozoa. Margalit I, et al. **Arch Androl** 1997 Sep–Oct;39(2):87–99

Surface area and volume measurements for ram and human spermatozoa. Curry MR, et al. **Biol Reprod** 1996 Dec; 55(6):1325–32

Epididymal maturation of chromatin in spermatozoa from control monkeys (Macaca fascicularis) and those treated with Cetrorelix, a gonadotropin–releasing hormone antagonist. Golan R, et al. **Biol Reprod** 1997 Aug; 57(2):354–9

Subcellular distribution of protein kinase C alpha and betaI in bovine spermatozoa, and their regulation by calcium and phorbol esters. Lax Y, et al. **Biol Reprod** 1997 Feb; 56(2):454–9

Regionalization and redistribution of membrane phospholipids and cholesterol in mouse spermatozoa during in vitro capacitation. Lin Y, et al. **Biol Reprod** 1996 Nov; 55(5):1133–46

Identification of hydrolase binding activities of the acrosomal matrix of hamster spermatozoa. NagDas SK, et al.
Biol Reprod 1996 Dec;55(6):1405–14

An antigenically related polypeptide family is a major structural constituent of a stable acrosomal matrix assembly in bovine spermatozoa. Olson GE, et al. **Biol Reprod** 1997 Aug;57(2):325–34

Fate of the sperm mitochondria, and the incorporation, conversion, and disassembly of the sperm tail structures during bovine fertilization. Sutovsky P, et al.
Biol Reprod 1996 Dec;55(6):1195–205

Depletion of glutathione during bovine oocyte maturation reversibly blocks the decondensation of the male pronucleus and pronuclear apposition during fertilization. Sutovsky P, et al. **Biol Reprod** 1997 Jun;56(6):1503–12

Localization of three genes in the hook–shaped hamster sperm nucleus by fluorescent in situ hybridization. Ward WS, et al. **Biol Reprod** 1996 Jun;54(6):1271–8

Scanning electron microscopy of heterochromatin in chromosome spreads of male germ cells in Schistocerca gregaria (Acrididae, Orthoptera) after trypsinization. Wolf KW, et al. **Biotech Histochem** 1996 Sep;71(5):237–44

Transforming sperm nuclei into male pronuclei in vivo and in vitro. Poccia D, et al. **Curr Top Dev Biol** 1996;34:25–88 (250 ref.)

Prediction of posttreatment spermatogenesis in patients with testicular cancer by flow cytometric sperm chromatin structure assay. Fosså SD, et al. **Cytometry** 1997 Aug 15; 30(4):192–6

Slit–scan flow cytometry for consistent high resolution DNA analysis of X– and Y–chromosome bearing sperm [published erratum appears in Cytometry 1996 Dec 1;25(4):403] Rens W, et al. **Cytometry** 1996 Oct 1; 25(2):191–9

Conserved binding recognition elements of sperm chromatin, sperm lipophilic structures and nuclear envelope precursor vesicles. Collas P, et al. **Eur J Cell Biol** 1996 Sep; 71(1):22–32

Localization of heat shock proteins in mouse male germ cells: an immunoelectron microscopical study. Biggiogera M, et al. **Exp Cell Res** 1996 Nov 25;229(1):77–85

Telomere–telomere interactions and candidate telomere binding protein(s) in mammalian sperm cells. Zalensky AO, et al. **Exp Cell Res** 1997 Apr 10;232(1):29–41

Effect of sexual abstinence on the proportion of X–bearing sperm as assessed by multicolor fluorescent in situ hybridization. Hilsenrath RE, et al. **Fertil Steril** 1997 Sep; 68(3):510–3

Prematurely condensed chromosomes and meiotic abnormalities in unfertilized human oocytes after ovarian stimulation with and without gonadotropin–releasing hormone agonist. Racowsky C, et al. **Fertil Steril** 1997 May; 67(5):932–8

Spermatozoon and spermiogenesis in Mesocoelium monas (Platyhelminthes:Digenea): ultrastructure and epifluorescence microscopy of labelling of tubulin and nucleus. Iomini C, et al. **Folia Parasitol (Praha)** 1997; 44(1):26–32

Selective loss of sperm bearing a compound chromosome in the Drosophila female. Dernburg AF, et al. **Genetics** 1996 Aug;143(4):1629–42

Mitosis in the human embryo: the vital role of the sperm centrosome (centriole). Sathananthan AH.
Histol Histopathol 1997 Jul;12(3):827–56 (86 ref.)

In–situ hybridization chromosome analysis of XYY and XXY males' spermatozoa [letter] Araki Y, et al. **Hum Reprod** 1997 Jul;12(7):1604

Changes in chromatin condensation of human spermatozoa during epididymal transit as determined by flow cytometry. Golan R, et al. **Hum Reprod** 1996 Jul;11(7):1457–62

Incidence of diploid and disomic sperm nuclei in 45 infertile men. Guttenbach M, et al. **Hum Reprod** 1997 Mar; 12(3):468–73

The effect of chromatin condensation (aniline blue staining) and morphology (strict criteria) of human spermatozoa on fertilization, cleavage and pregnancy rates in an intracytoplasmic sperm injection programme. Hammadeh ME, et al. **Hum Reprod** 1996 Nov;11(11):2468–71

Analysis of chromosome constitution of human spermatozoa with normal and aberrant head morphologies after injection into mouse oocytes. Lee JD, et al. **Hum Reprod** 1996 Sep; 11(9):1942–6

Analysis of human sperm–derived pronuclei by three–colour fluorescent in–situ hybridization. Martinez–Pasarell O, et al. **Hum Reprod** 1997 Apr;12(4):641–5

Staining of undecondensed sperm nucleii [letter; comment] Martini E. **Hum Reprod** 1996 Dec;11(12):2808. Comment on: Hum Reprod 1996 Apr;11(4):722–6.

Reliability of estimates of diploid human spermatozoa using multicolour fluorescence in–situ hybridization. Rademaker A, et al. **Hum Reprod** 1997 Jan;12(1):77–9

Analysis of the oocyte activating capacity and chromosomal complement of round–headed human spermatozoa by their injection into mouse oocytes. Rybouchkin A, et al.
Hum Reprod 1996 Oct;11(10):2170–5

Sperm chromatin anomalies can influence decondensation after intracytoplasmic sperm injection. Sakkas D, et al.
Hum Reprod 1996 Apr;11(4):837–43

Improved preservation of ultrastructural morphology in human spermatozoa using betaine in the primary fixative. Swan MA. **Int J Androl** 1997 Feb;20(1):45–54

Genesis of newt sperm axial fiber: cDNA cloning and expression of a 29 kDa protein, a major component of the axial fiber, during spermatogenesis. Furukawa K, et al.
Int J Dev Biol 1996 Dec;40(6):1109–18

Spermiogenesis and sperm ultrastructure in Troglocephalus rhinobatidis, Neoheterocotyle rhinobatidis and Merizocotyle australensis (Platyhelminthes, Monogenea, Monopisthocotylea, Monocotylidae). Watson NA.
Int J Parasitol 1997 Apr;27(4):389–401

There is no relationship between concentration, motility and vacuolated cells. Aktaş S, et al. **Int Urol Nephrol** 1996; 28(6):819–29

Spermiogenesis and spermiation in a marsupial, the tammar wallaby (Macropus eugenii). Lin M, et al. **J Anat** 1997 Apr;190 (Pt 3):377–95

Effects of heat stress on mouse testicular cells and sperm chromatin structure. Sailer BL, et al. **J Androl** 1997 May–Jun;18(3):294–301

Computerized imaging and scanning electron microscope (SEM) analysis of co–cultured fresh and frozen bovine sperm. Suzuki H, et al. **J Androl** 1997 Mar–Apr; 18(2):217–26

Rapid chromosome detection in human gametes, zygotes, and preimplantation embryos using the PRINS technique. Pellestor F, et al. **J Assist Reprod Genet** 1996 Sep; 13(8):675–80

Submicroscopic mathematical evaluation of spermatozoa in assisted reproduction. 2. In vitro fertilization. (Notulae seminologicae. 7) [published erratum appears in J Assist Reprod Genet 1997 Jan;14(1):65] Piomboni P, et al.
J Assist Reprod Genet 1996 Sep;13(8):635–46

A nematode gene required for sperm vesicle fusion. Achanzar WE, et al. **J Cell Sci** 1997 May;110 (Pt 9):1073–81

Immunochemical characterization of a human sperm fibrous sheath protein, its developmental expression pattern, and morphogenetic relationships with actin. Escalier D, et al.
J Histochem Cytochem 1997 Jul;45(7):909–22

Determination of the ratio of X and Y bearing spermatozoa after albumin gradient method using double–labelled fluorescence in situ hybridization (FISH). Aribarg A, et al. **J Med Assoc Thai** 1996 Dec;79 Suppl 1:S88–95

Investigation of the association between the presence of cytoplasmic residues on the human sperm midpiece and defective sperm function. Keating J, et al.
J Reprod Fertil 1997 May;110(1):71–7

Mapping and measuring DNA to protein ratios in mammalian sperm head by XANES imaging. Zhang X, et al.
J Struct Biol 1996 May–Jun;116(3):335–44

Apoptosis in human ejaculated sperm cells (notulae seminologicae 9). Baccetti B, et al.
J Submicrosc Cytol Pathol 1996 Oct;28(4):587–96

Spermatogenesis in mosquitoes (Diptera: Culicidae). Ndiaye M, et al. **J Submicrosc Cytol Pathol** 1996 Jul;28(3):375–84

Ultrastructure of spermiogenesis and the spermatozoon of Nomimoscolex sp. (Cestoda, Proteocephalidea) intestinal parasite of Clarotes laticeps (Fish, Teleost) in Senegal. Sène A, et al. **J Submicrosc Cytol Pathol** 1997 Jan;29(1):115–24

Submicroscopic mathematical evaluation of spermatozoa in assisted reproduction. 3. Partial zona dissection (PZD) (Notulae seminologicae 12). Strehler E, et al.
J Submicrosc Cytol Pathol 1997 Jul;29(3):387–91

Comparison of gonosomal aneuploidy in spermatozoa of normal fertile men and those with severe male factor detected by in–situ hybridization. Bernardini L, et al.
Mol Hum Reprod 1997 May;3(5):431–8

Detection of chromosomes and estimation of aneuploidy in human spermatozoa using fluorescence in–situ hybridization. Downie SE, et al. **Mol Hum Reprod** 1997 Jul;3(7):585–98 (108 ref.)

Application of modern molecular techniques to evaluate sperm sex selection methods. Flaherty SP, et al.
Mol Hum Reprod 1996 Dec;2(12):937–42 (52 ref.)

X spermatozoa larger than Y in 1973 [letter] Geraedts JP.
Mol Hum Reprod 1997 Jun;3(6):545–6

Rapid chromosomal analysis of germ–line cells by FISH: an investigation of an infertile male with large–headed spermatozoa. Yurov YB, et al. **Mol Hum Reprod** 1996 Sep; 2(9):665–8

Sperm–egg interaction in the painted frog (Discoglossus pictus): an ultrastructural study. Campanella C, et al.
Mol Reprod Dev 1997 Jul;47(3):323–33

Spermatogenesis in the endosymbiont–bearing bivalve Loripes lucinalis (Veneroida: Lucinidae). Johnson MJ, et al. **Mol Reprod Dev** 1996 Dec;45(4):476–84

Fine structure of the germinating cells during the

spermiogenesis of Arion rufus (Mollusca, Pulmonate Gastropoda). Pastisson C, et al. **Mol Reprod Dev** 1996 Apr; 43(4):484–94

Giant, accordioned sperm acrosomes of the greater bulldog bat, Noctilio leporinus. Phillips DM, et al. **Mol Reprod Dev** 1997 Sep;48(1):90–4

Ultrastructure of nuclear condensation and localization of DNA and proteins in spermatozoa of a dasyurid marsupial, Sminthopsis crassicaudata. Soon LL, et al. **Mol Reprod Dev** 1996 Feb;43(2):217–27

Detection of sperm within Gyrodactylus (Platyhelminthes, Monogenea) tissues using fluorescence and transmission electron microscopy. Harris PD, et al. **Parasitol Res** 1997; 83(6):533–8

Ultrastructure of the spermatozoon of Dipylidium caninum (Cestoda, Cyclophyllidea, Dilepididae), an intestinal parasite of Canis familiaris. Miquel J, et al. **Parasitol Res** 1997;83(4):349–55

A novel functional role for apolipoprotein B in male infertility in heterozygous apolipoprotein B knockout mice. Huang LS, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1; 93(20):10903–7

Fructose stimulates shedding of cytoplasmic droplets from epididymal boar spermatozoa. Harayama H, et al. **Reprod Fertil Dev** 1996;8(7):1039–43

Evaluation of sperm damage and techniques for sperm clean-up. Rodriguez-Martinez H, et al. **Reprod Fertil Dev** 1997;9(3):297–308 (87 ref.)

Morphological abnormalities of rabbit spermatozoa studied by scanning electron microscope and quantified by light microscope. Kuzminsky G, et al. **Reprod Nutr Dev** 1996; 36(5):565–75

Spermiogenesis and spermatozoon of Echinostoma caproni (Platyhelminthes, Digenea): transmission and scanning electron microscopy, and tubulin immunocytochemistry. Iomini C, et al. **Tissue Cell** 1997 Feb;29(1):107–18

Ultrastructural and immunocytochemical analysis of diploid germ cells isolated from fetal rabbit gonads. Moens A, et al. **Zygote** 1997 Feb;5(1):47–60

[Ultrastructural similarity of spermatozoa of some Cyclophyllidea] Ba CT, et al. **Parasite** 1994 Mar;1(1):51–5 (Eng. Abstr.) **(Fre)**

[An electron microscopic study of the structure of the spermatozoa from sterile males from a crossing of Drosophila virilis x Drosophila lummei] Falileeva LI, et al. **Ontogenez** 1997 May-Jun;28(3):223–31 (Eng. Abstr.) **(Rus)**

VIROLOGY

Is Kaposi's sarcoma--associated herpesvirus ubiquitous in urogenital and prostate tissues? Tasaka T, et al. **Blood** 1997 Mar 1;89(5):1686–9

The effect of human papillomavirus infection on sperm cell motility. Lai YM, et al. **Fertil Steril** 1997 Jun;67(6):1152–5

[Study of HIV localization in sperm] Bréchard N, et al. **Contracept Fertil Sex** 1997 May;25(5):389–91 (Eng. Abstr.) **(Fre)**

SPERMICIDAL AGENTS see **SPERMATOCIDAL AGENTS**

SPERMIDINE

ANALOGS & DERIVATIVES

Accumulation of hydroxyspermidine in red blood cells, a potential index of tumor proliferation rate. Leveque J, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3745–7

Evaluation of growth promotion and inhibition from mycobactins and nonmycobacterial siderophores (Desferrioxamine and FR160) in Mycobacterium aurum. Bosne-David S, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1837–9

Isolation and purification of glutathionyl-spermidine and trypanothione from Entamoeba histolytica. Ondarza RN, et al. **Arch Med Res** 1997;28 Spec No:73–5

Siderophore activity of chemically synthesized dihydroxybenzoyl derivatives of spermidines and cystamide. Reissbrodt R, et al. **Biometals** 1997 Apr; 10(2):95–103

Interactions of spermidine and methylspermidine with DNA studied by nuclear magnetic resonance self-diffusion measurements. Andreasson B, et al. **Biophys J** 1996 Jun; 70(6):2847–56

Glutathione and trypanothione in several strains of Trypanosoma cruzi: effect of drugs. Repetto Y, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Oct; 115(2):281–5

Spermidine acetyltransferase in rat hepatocytes cultured at different oxygen tensions. Vargiu C, et al. **Hepatology** 1996 Oct;24(4):924–7

Inhibiting effects of spermidine derivatives on Trypanosoma cruzi trypanothione reductase. O'Sullivan MC, et al. **J Enzyme Inhib** 1996 Oct;11(2):97–114

A comparison of structure-activity relationships between spermidine and spermine analogue antineoplastics. Bergeron RJ, et al. **J Med Chem** 1997 May 9;40(10):1475–94

Cytotoxic acylated Spermidine from a soft coral, Sinularia sp. Choi YH, et al. **J Nat Prod** 1997 May;60(5):495–6

Characterization of the peptide substrate specificity of glutathionylspermidine synthetase from Crithidia fasciculata. De Craecker S, et al. **Mol Biochem Parasitol** 1997 Jan;84(1):25–32

Reduction of dehydroascorbate by trypanothione. Krauth-Siegel RL, et al. **Mol Biochem Parasitol** 1996 Oct 1;80(2):203–8

Effects of nifurtimox and benznidazole upon glutathione and trypanothione content in epimastigote, trypomastigote and amastigote forms of Trypanosoma cruzi. Maya JD, et al. **Mol Biochem Parasitol** 1997 May;86(1):101–6

Identification of N-acetylspermidine in Leishmania amazonensis. Rojas-Chaves M, et al. **Mol Biochem Parasitol** 1996 Jan;75(2):261–4

Trypanothione overproduction and resistance to antimonials and arsenicals in Leishmania. Mukhopadhyay R, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10383–7

[New aminooxy analogs of biogenic polyamines] Khomutov AR, et al. **Bioorg Khim** 1996 Jul;22(7):557–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Polyamines increase in the brain stem and cerebellum following labyrinthectomy. Kim HJ, et al. **Am J Otol** 1997 Mar;18(2):214–22

Immunocytochemical localization of polyamines in the gastrointestinal tracts of rats and mice. Fujiwara K, et al. **Histochem Cell Biol** 1996 Nov;106(5):465–71

BIOSYNTHESIS

Polyamines in growth and dimorphism of Paracoccidioides brasiliensis. San-Blas G, et al. **Arch Microbiol** 1996 Dec; 166(6):411–3

Inhibition of polyamine biosynthesis alters oviposition behavior in female crickets. Cayre M, et al. **Behav Neurosci** 1996 Oct;110(5):1117–25

Spermidine biosynthesis in Saccharomyces cerevisae: polyamine requirement of a null mutant of the SPE3 gene (spermidine synthase). Hamasaki-Katagiri N, et al. **Gene** 1997 Mar 10;187(1):35–43

BLOOD

Erythrocyte spermine levels: a prognostic parameter in childhood common acute lymphoblastic leukemia. Bergeron C, et al. **Leukemia** 1997 Jan;11(1):31–6

CHEMISTRY

Interactions of spermidine and methylspermidine with DNA studied by nuclear magnetic resonance self-diffusion measurements. Andreasson B, et al. **Biophys J** 1996 Jun; 70(6):2847–56

DNA mesophases induced by spermidine: structural properties and biological implications. Pelta J Jr, et al. **Biophys J** 1996 Jul;71(1):48–63

An NMR self-diffusion study of the interactions between spermidine and oligonucleotides. Andreasson B, et al. **Biopolymers** 1996 Apr;38(4):505–13

Inhibition of zymosan-induced air-pouch inflammation by rat seminal vesicle protein and by its spermidine derivative. Mancuso F, et al. **Eur J Pharmacol** 1996 Oct 3; 312(3):327–32

Effect of glycine on DNA structural transitions induced by multivalent cationic compounds. Flock S, et al. **J Biomol Struct Dyn** 1997 Aug;15(1):53–61

Purification of human Rad51 protein by selective spermidine precipitation. Baumann P, et al. **Mutat Res** 1997 Aug; 384(2):65–72

The 1.8-A X-ray structure of the Escherichia coli PotD protein complexed with spermidine and the mechanism of polyamine binding. Sugiyama S, et al. **Protein Sci** 1996 Oct; 5(10):1984–90

IMMUNOLOGY

Astrocytes, not neurons, show most prominent staining for spermidine/spermine-like immunoreactivity in adult rat brain. Laube G, et al. **Glia** 1997 Feb;19(2):171–9

Production and characterization of a monoclonal antibody specific for the polyamine spermidine and its application in ELISA. Catcheside JA, et al. **Hybridoma** 1996 Jun; 15(3):199–204

METABOLISM

Ethanol and polyamine metabolism: physiologic and pathologic implications: a review. Sessa A, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):318–25 (121 ref.)

Accumulation of hydroxyspermidine in red blood cells, a potential index of tumor proliferation rate. Leveque J, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3745–7

The contribution of endogenous polyamines to the permeability transition of rat liver mitochondria. Tassani V, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):850–4

Expression of the human spermidine/spermine N1-acetyltransferase in spermidine acetylation-deficient Escherichia coli. Ignatenko NA, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):435–40

Substrate protection against inactivation of the mammalian polyamine-transport system by 1-ethyl-3-(3-dimethylaminopropyl)carbodi-imide. Torossian K, et al. **Biochem J** 1996 Oct 1;319 (Pt 1):21–6

Polyamine contents of human breast cancer cells treated with the cytotoxic agents chlorpheniramine and dehydrodidemnin B. Gómez-Fabre PM, et al. **Cancer Lett** 1997 Feb 26;113(1-2):141–4

Spermidine acetyltransferase in rat hepatocytes cultured at different oxygen tensions. Vargiu C, et al. **Hepatology** 1996 Oct;24(4):924–7

Efflux of the natural polyamine spermidine facilitated by the Bacillus subtilis multidrug transporter Blt. Woolridge DP, et al. **J Biol Chem** 1997 Apr 4;272(14):8864–6

Polyamine metabolism in gliomas. Ernestus RI, et al. **J Neurooncol** 1996 Aug;29(2):167–74

The STK2 gene, which encodes a putative Ser/Thr protein kinase, is required for high-affinity spermidine transport in Saccharomyces cerevisiae. Kaouass M, et al. **Mol Cell Biol** 1997 Jun;17(6):2994–3004

Dissimilar activation patterns of the carcinogen dimethylhydrazine (DMH) on intracellular polyamine metabolism in various organs. Löser C, et al. **Z Gastroenterol** 1996 Dec;34(12):801–8

PHARMACOLOGY

Spermidine-condensed DNA and cone-shaped lipids improve delivery and expression of exogenous DNA transfer by liposomes. Ibáñez M, et al. **Biochem Cell Biol** 1996;74(5):633–43

Rectification of rabbit cardiac ryanodine receptor current by endogenous polyamines. Uehara A, et al. **Biophys J** 1996 Aug;71(2):769–77

The effects of spermine and spermidine on the structure of photosystem II proteins in relation to inhibition of electron transport. Bograh A, et al. **FEBS Lett** 1997 Jan 27; 402(1):41–4

The NR2B-specific interactions of polyamines and protons with the N-methyl-D-aspartate receptor. Gallagher MJ, et al. **J Biol Chem** 1997 Oct 3;272(40):24971–9

Inhibiting effects of spermidine derivatives on Trypanosoma cruzi trypanothione reductase. O'Sullivan MC, et al. **J Enzyme Inhib** 1996 Oct;11(2):97–114

Polyamines enhance calcium pyrophosphate dihydrate crystal dissolution. Shinozaki T, et al. **J Rheumatol** 1995 Oct;22(10):1907–12

Isolation and characterization of spermidine nucleoids from Escherichia coli. Murphy LD, et al. **J Struct Biol** 1997 Aug;119(3):321–35

Stabilization of compact spermidine nucleoids from Escherichia coli under crowded conditions: implications for in vivo nucleoid structure. Murphy LD, et al. **J Struct Biol** 1997 Aug;119(3):336–46

Polyamines as modulators of microcycle conidiation in Aspergillus flavus. Khurana N, et al. **Microbiology** 1996 Mar;142 (Pt 3):517–23

TOXICITY

Evidence of difference between cytotoxicity, cell cycle and morphonuclear effects of polyamines on sensitive and multidrug resistant P388 cell lines. Berlaimont V, et al. **Anticancer Res** 1997 May-Jun;17(3C):2057–64

SPERMIDINE SYNTHASE

ANTAGONISTS & INHIBITORS

Inhibition of spermidine synthase gene expression by transforming growth factor-beta 1 in hepatoma cells. Nishikawa Y, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):537–43

GENETICS

Inhibition of spermidine synthase gene expression by transforming growth factor-beta 1 in hepatoma cells. Nishikawa Y, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):537–43

Spermidine biosynthesis in Saccharomyces cerevisae: polyamine requirement of a null mutant of the SPE3 gene (spermidine synthase). Hamasaki-Katagiri N, et al. **Gene** 1997 Mar 10;187(1):35–43

SPERMIDINE SYNTHETASE see **SPERMIDINE SYNTHASE**

SPERMINE

Retention of trypsin activity in spermine alginate microcapsules. Patil RT, et al. **J Microencapsul** 1997 Jul-Aug;14(4):469–74

ANALOGS & DERIVATIVES

Endogenous ADP-ribosylation of a G(alpha i) protein in bovine ciliary body is stimulated by nitric oxide. Pozdnyakov N, et al. **Biochem Biophys Res Commun** 1997 Jun 27;235(3):482–6

Effects of chain length modification and bis(ethyl) substitution of spermine analogs on purine-purine-pyrimidine triplex DNA stabilization, aggregation, and conformational transitions. Musso M, et al. **Biochemistry** 1997 Feb 11;36(6):1441–9

Influence of membrane-active peptides on lipospermine/DNA complex mediated gene transfer. Kichler A, et al. **Bioconjug Chem** 1997 Mar-Apr; 8(2):213–21

Synthesis and evaluation of a polyamine phosphinate and phosphonamidate as transition-state analogue inhibitors of

spermidine/spermine-N1-acetyltransferase. Wu R, et al. **Bioorg Med Chem** 1996 Jun;4(6):825-36

Effects of the polyamine analogues BE-4-4-4-4, BE-3-7-3, and BE-3-3-3 on the proliferation of three prostate cancer cell lines. Jeffers L, et al. **Cancer Chemother Pharmacol** 1997;40(2):172-9

A nitric oxide donor (spermine-NONOate) prevents the formation of neointima in rabbit carotid artery. Yin ZL, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):436-8

Mitochondrial DNA in beta-cells is a sensitive target for damage by nitric oxide. Wilson GL, et al. **Diabetes** 1997 Aug;48(8):1291-5

Metabolism and pharmacokinetics of N1,N14-diethylhomospermine. Bergeron RJ, et al. **Drug Metab Dispos** 1996 Mar;24(3):334-43

Effects of spermine and its cytotoxic analogs on nucleosome formation on topologically stressed DNA in vitro. Basu HS, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):247-58

Interaction between left-handed Z-DNA and polyamine - 3. The crystal structure of the d(CG)3 and thermospermine complex. Ohishi H, et al. **FEBS Lett** 1996 Dec 2; 398(2-3):291-6

Folding and aggregation of DNA chains induced by complexation with lipospermine: formation of a nucleosome-like structure and network assembly. Yoshikawa Y, et al. **FEBS Lett** 1996 Oct 28;396(1):71-6

Optimized galenics improve in vitro gene transfer with cationic molecules up to 1000-fold. Boussif O, et al. **Gene Ther** 1996 Dec;3(12):1074-80

2,2'-Dithiobis(N-ethyl-spermine-5-carboxamide) is a high affinity, membrane-impermeant antagonist of the mammalian polyamine transport system. Huber M, et al. **J Biol Chem** 1996 Nov 1;271(44):27556-63

Derivatization and high-performance liquid chromatographic analysis of pentaazapentacosane pentahydrochloride. Heimbecher S, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28;691(1):173-8

A comparison of structure-activity relationships between spermidine and spermine analogue antineoplastics. Bergeron RJ, et al. **J Med Chem** 1997 May 9;40(10):1475-94

Polyamine analogue regulation of NMDA MK-801 binding: a structure-activity study. Bergeron RJ, et al. **J Med Chem** 1996 Dec 20;39(26):5257-66

Lipospermine-mediated gene transfer technique into murine cultured cortical cells. Sola B, et al. **J Neurosci Methods** 1997 Feb;71(2):183-6

Use of nitric oxide-nucleophile adducts as biological sources of nitric oxide: effects on airway smooth muscle. Hirasaki A, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1269-75

N1-dansyl-spermine and N1-(n-octanesulfonyl)-spermine, novel glutamate receptor antagonists: block and permeation of N-methyl-D-aspartate receptors. Chao J, et al. **Mol Pharmacol** 1997 May;51(5):861-71

[New aminooxy analogs of biogenic polyamines] Khomutov AR, et al. **Bioorg Khim** 1996 Jul;22(7):557-9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Immunocytochemical localization of polyamines in the gastrointestinal tracts of rats and mice. Fujiwara K, et al. **Histochem Cell Biol** 1996 Nov;106(5):465-71

BLOOD

Erythrocyte spermine levels: a prognostic parameter in childhood common acute lymphoblastic leukemia. Bergeron C, et al. **Leukemia** 1997 Jan;11(1):31-6

CHEMISTRY

Effect of glycine on DNA structural transitions induced by multivalent cationic compounds. Flock S, et al. **J Biomol Struct Dyn** 1997 Aug;15(1):53-61

Cytotoxicity, DNA binding, and reactivity against nucleosides of platinum (II) and (IV) spermine compounds. Amo-Ochoa P, et al. **J Inorg Biochem** 1996 Dec; 64(4):287-99

A method to attach lectins to the surface of spermine alginate microcapsules based on the avidin biotin interaction. Sultzbaugh KJ, et al. **J Microencapsul** 1996 Jul-Aug; 13(4):363-76

Nine polymorphic crystal structures of d(CCGGGCCCGG), d(CCGGGCCm5CGG), d(Cm5CGGGCCm5CGG) and d(CCGGGCC(Br)5CGG) in three different conformations: effects of spermine binding and methylation on the bending and condensation of A-DNA. Tippin DB, et al. **J Mol Biol** 1997 Apr 18;267(5):1171-85

IMMUNOLOGY

Molecular requirements for polyamines binding to the antispermine monoclonal antibody Spm8-2. Delcros JG, et al. **Hybridoma** 1996 Jun;15(3):177-83

METABOLISM

Ethanol and polyamine metabolism: physiologic and pathologic implications: a review. Sessa A, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):318-25 (121 ref.)

A second gene encoding a putative serine/threonine protein kinase which enhances spermine uptake in Saccharomyces cerevisiae. Nozaki T, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):452-8

The contribution of endogenous polyamines to the permeability transition of rat liver mitochondria. Tassani V, et al. **Biochem Biophys Res Commun** 1996 Sep 24; 226(3):850-4

SLE autoantibodies recognize spermine induced Z-conformation of native calf thymus DNA. Ali M, et al. **Biochem Mol Biol Int** 1996 Nov;40(4):787-97

Characterization of a cyclic compound formed after spermine oxidation by lentil amine oxidase. Padiglia A, et al. **Biochem Mol Biol Int** 1997 Feb;41(2):407-13

Spermine binding to liver mitochondria. Dalla Via L, et al. **Biochim Biophys Acta** 1996 Oct 23;1284(2):247-52

Treatment with inhibitors of polyamine biosynthesis, which selectively lower intracellular spermine, does not affect the activity of alkylating agents but antagonizes the cytotoxicity of DNA topoisomerase II inhibitors. Desiderio MA, et al. **Br J Cancer** 1997;75(7):1028-34

Polyamine contents of human breast cancer cells treated with the cytotoxic agents chlorpheniramine and dehydrodidemnin B. Gómez-Fabre PM, et al. **Cancer Lett** 1997 Feb 26;113(1-2):141-4

Binding of polyamines to an autonomous domain of the regulatory subunit of protein kinase CK2 induces a conformational change in the holoenzyme. A proposed role for the kinase stimulation. Leroy D, et al. **J Biol Chem** 1997 Aug 15;272(33):20820-7

Polyamine metabolism in gliomas. Ernestus RI, et al. **J Neurooncol** 1996 Aug;29(2):167-74

Competition between Mg2+ and spermine for a cloned IRK2 channel expressed in a human cell line. Yamashita T, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):143-56

Effect of haloallylamines on polyamine oxidase activity and spermine levels in Ascaris suum. Müller S, et al. **Parasitol Res** 1996;82(6):571-3

Proton MRS of human prostatic fluid: correlations between citrate, spermine, and myo-inositol levels and changes with disease. Lynch MJ, et al. **Prostate** 1997 Mar 1;30(4):248-55

Dissimilar activation patterns of the carcinogen dimethylhydrazine (DMH) on intracellular polyamine metabolism in various organs. Löser C, et al. **Z Gastroenterol** 1996 Dec;34(12):801-8

PHARMACOLOGY

Prevention of indomethacin-induced acute gastric mucosal injury by spermine in the rat. Buzás G, et al. **Acta Physiol Hung** 1996;84(3):251-8

Effects of a single dose of orally-administered spermine on the intestinal development of unweaned rats. Wéry I, et al. **Arch Physiol Biochem** 1996;104(2):163-72

Sequence-dependent effects of spermine on the thermodynamics of the B-DNA to Z-DNA transition. Howell ML, et al. **Biochemistry** 1996 Dec 3; 35(48):15373-82

Antagonist effects of Ca2+ and spermine on phosphatidylinositol 4,5-bisphosphate-mediated transmembrane redistribution of phospholipids in large unilamellar vesicles and in erythrocytes. Sulpice JC, et al. **Biochemistry** 1996 Oct 15;35(41):13345-52

Spermine modulates calcium flux through the rat erythrocyte membrane. Kohno H, et al. **Biol Pharm Bull** 1997 Feb; 20(2):153-7

Rectification of rabbit cardiac ryanodine receptor current by endogenous polyamines. Uehara A, et al. **Biophys J** 1996 Aug;71(2):769-77

Spermine modulation of specific [3H]-gabapentin binding to the detergent-solubilized porcine cerebral cortex alpha 2 delta calcium channel subunit. Dissanayake VU, et al. **Br J Pharmacol** 1997 Mar;120(5):833-40

Investigation of the involvement of the N-methyl-D-aspartate receptor macrocomplex in the development of spermine-induced CNS excitation in vivo. Doyle KM, et al. **Br J Pharmacol** 1996 Apr;117(8):1803-8

Role of interleukin-1 beta, interleukin-6, and TNF-alpha in intestinal maturation induced by dietary spermine in rats. Kaouass M, et al. **Endocrine** 1997 Apr;6(2):187-94

Effects of spermine and its cytotoxic analogs on nucleosome formation on topologically stressed DNA in vitro. Basu HS, et al. **Eur J Biochem** 1997 Jan 15;243(1-2):247-58

Modulation of cis-diamminedichloroplatinum (II) accumulation and cytotoxicity by spermine in sensitive and resistant human ovarian carcinoma cells. Marverti G, et al. **Eur J Cancer** 1997 Apr;33(4):669-75

The effects of spermine and spermidine on the structure of photosystem II proteins in relation to inhibition of electron transport. Bograh A, et al. **FEBS Lett** 1997 Jan 27; 402(1):41-4

Spermine prevent iron accumulation and depress lipofuscin accumulation in cultured myocardial cells. Marzabadi MR, et al. **Free Radic Biol Med** 1996;21(3):375-81

Exogenous spermine induces maturation of the liver in suckling rats. Wéry I, et al. **Hepatology** 1996 Nov; 24(5):1206-10

Involvement of bombesin in spermine-induced corticosterone secretion and intestinal maturation in suckling rats. Kaouass M, et al. **J Endocrinol** 1997 Jun;153(3):429-36

Spermine inhibits proinflammatory cytokine synthesis in human mononuclear cells: a counterregulatory mechanism that restrains the immune response. Zhang M, et al. **J Exp Med** 1997 May 19;185(10):1759-68

Spermine induces maturation of the immature intestinal immune system in neonatal mice. ter Steege JC, et al. **J Pediatr Gastroenterol Nutr** 1997 Sep;25(3):332-40

The tetravalent organic cation spermine causes the gating of the IRK1 channel expressed in murine fibroblast cells. Ishihara K, et al. **J Physiol (Lond)** 1996 Mar 1;491 (Pt 2):367-81

Polyamines enhance calcium pyrophosphate dihydrate crystal dissolution. Shinozaki T, et al. **J Rheumatol** 1995 Oct;22(10):1907-12

Structural basis for differential induction of spermidine/spermine N1-acetyltransferase activity by novel spermine analogs. Fogel-Petrovic M, et al. **Mol Pharmacol** 1997 Jul;52(1):69-74

Spermine-directed immunosuppression of cervical carcinoma cell sensitivity to a majority of lymphokine-activated killer lymphocyte cytotoxicity. Evans CH, et al. **Nat Immun** 1995;14(3):157-63

Spermine partially normalizes in vivo antioxidant defense potential in certain brain regions in transiently hypoperfused rat brain. Farbiszewski R, et al. **Neurochem Res** 1996 Dec;21(12):1497-503

Spermine blocks synaptic transmission mediated by Ca(2+)-permeable AMPA receptors. Isa T, et al. **Neuroreport** 1996 Feb 29;7(3):689-92

Radioprotection against the formation of DNA double-strand breaks in cellular DNA but not native cellular chromatin by the polyamine spermine. Chiu S, et al. **Radiat Res** 1997 Aug;148(2):188-92

TOXICITY

Evidence of difference between cytotoxicity, cell cycle and morphonuclear effects of polyamines on sensitive and multidrug resistant P388 cell lines. Berlaimont V, et al. **Anticancer Res** 1997 May-Jun;17(3C):2057-64

SPERMIOCYTES see **SPERMATOCYTES**

SPERMOPHILUS see **SCIURIDAE**

SPHAERIALES

CHEMISTRY

Cochliobolic acid, a novel metabolite produced by Cochliobolus lunatus, inhibits binding of TGF-alpha to the EGF receptor in a SPA assay. Robinson N, et al. **J Nat Prod** 1997 Jan;60(1):6-8

Xylaramide, a new antifungal compound, and other secondary metabolites from Xylaria longipes. Schneider G, et al. **Z Naturforsch [C]** 1996 Nov-Dec;51(11-12):802-6

GENETICS

Successful crosses and molecular tetrad and progeny analyses demonstrate heterothallism in Mycosphaerella graminicola. Kema GHJ, et al. **Curr Genet** 1996 Aug;30(3):251-8

METABOLISM

Lack of association between cerato-ulmin production and virulence in Ophiostoma novo-ulmi. Bowden CG, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):556-64

PATHOGENICITY

Lack of association between cerato-ulmin production and virulence in Ophiostoma novo-ulmi. Bowden CG, et al. **Mol Plant Microbe Interact** 1996 Sep;9(7):556-64

Extensive alteration of fungal gene transcript accumulation and elevation of G-protein-regulated cAMP levels by a virulence-attenuating hypovirus. Chen B, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7996-8000

VIROLOGY

Extensive alteration of fungal gene transcript accumulation and elevation of G-protein-regulated cAMP levels by a virulence-attenuating hypovirus. Chen B, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7996-8000

SPHAEROPHORUS see **FUSOBACTERIUM**

SPHAEROPHORUS INFECTIONS see **FUSOBACTERIUM INFECTIONS**

SPHAEROPHORUS NECROPHORUS see **FUSOBACTERIUM NECROPHORUM**

SPHAEROTILUS see **GRAM-NEGATIVE AEROBIC BACTERIA**

SPHAGNUM see **MOSSES**

SPHENOID BONE

Precise placement of sphenoidal electrodes via fluoroscopic guidance. Fenton DS, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):776-8

Primary intraosseous hemangioma of the orbit: CT and MR appearance. Sweet C, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):379-81

Multiple primary cancer in one patient. Magu S, et al. **J Indian Med Assoc** 1995 Oct;93(10):404

An unusual sphenoid ridge tumor: cementifying fibroma. Molinari SP, et al. **J Neurol** 1996 Jan;243(1):103-4

Extradural intrasphenoidal cavernous sinus schwannoma. Case illustration. De Jesús O, et al. **J Neurosurg** 1996 Aug;

85(2):359
Pituitary ectopic adenoma [letter; comment] Goel A. **J Neurosurg** 1996 Aug;85(2):362. Comment on: J Neurosurg 1995 Dec;83(6):1092–4.
New muscle--old story? [letter] Groscurth P. **Nat Med** 1996 Nov;2(11):1162–3
The role of postoperative irradiation in the management of sphenoid wing meningiomas. A preliminary report [see comments] Peele KA, et al. **Ophthalmology** 1996 Nov; 103(11):1761–6; discussion 1766–7. Comment in: Ophthalmology 1997 Jun;104(6):898.
Primary eosinophilic granuloma invading the skull base: case report and critical review of the literature. Lunardi P, et al. **Tumori** 1996 Jul–Aug;82(4):397–400 (20 ref.)
[Temporo-sphenoidal giant cell tumors, apropos of a case] Barnabé D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1997; 118(2):133–7 (30 ref.) (Eng. Abstr.) **(Fre)**
[Characteristics of visual impairment complicated with planum sphenoidale and tuberculum sellae meningiomas and their surgical results] Uede T, et al. **No Shinkei Geka** 1996 Dec;24(12):1093–8 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

The lateral rectus spine of the superior orbital fissure [letter] Bisaria KK, et al. **J Anat** 1996 Aug;189 (Pt 1):243–5
Anterior clinoid process and optic strut in Koreans. Lee HY, et al. **Yonsei Med J** 1997 Jun;38(3):151–4
[Cephalometric study of the pterygoid process linear parameters in the human adult and child] Harnet JC, et al. **Arch Anat Histol Embryol** 1993–94;75:7–29 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Sphenoidal artery, ramus orbitalis persistens and pterygospinosus muscle--a unique cooccurrence of first branchial arch anomalies in man. Pretterklieber ML, et al. **Acta Anat (Basel)** 1996;155(2):136–44
Arterial injuries in transsphenoidal surgery for pituitary adenoma; the role of angiography and endovascular treatment. Raymond J, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):655–65

INJURIES

Traumatic chiasmal syndrome: a feature photograph. Goh KY, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):614–5
Perimortem intracranial orogastric tube insertion in a pediatric trauma patient with a basilar skull fracture. Junsanto T, et al. **J Trauma** 1997 Apr;42(4):746–7

PATHOLOGY

Giant epidermoid involving 3 cranial bones. Rumelt S, et al. **Arch Ophthalmol** 1997 Jul;115(7):922–4
Intracranial chondromyxoid fibroma. Report of a case and review of the literature. Wolf DA, et al. **Arch Pathol Lab Med** 1997 Jun;121(6):626–30 (23 ref.)
Sphenoid abcess mimicking giant cell temporal arteritis [letter] Goupille P, et al. **Clin Exp Rheumatol** 1996 Sep–Oct; 14(5):579–80
Calcified meningioma of the skull base simulating chondrosarcoma. Geirnaerdt MJ, et al. **Eur J Radiol** 1995 Dec 15;21(2):148–51
Sphenoidal ridge meningioma masquerade: glaucoma with a sphenoidal ridge meningioma [letter] Watts P, et al. **Eye** 1996;10 (Pt 5):629–34
Pterygopalatine fossa and maxillary nerve infiltration in nasopharyngeal carcinoma. Chong VF, et al. **Head Neck** 1997 Mar;19(2):121–5
The pterygoid hamulus as a pain-inducing factor. A report of a case and a radiographic study. Eyrich GK, et al. **Int J Oral Maxillofac Surg** 1997 Aug;26(4):275–7
Idiopathic hypertrophic cranial pachymeningitis: clinical–radiological–pathological correlation of bone involvement. Jacobson DM, et al. **J Neuroophthalmol** 1996 Dec;16(4):264–8
Pterygoid hamulus bursitis: one cause of craniofacial pain [letter; comment] Dias G. **J Prosthet Dent** 1997 Jul; 78(1):111–2. Comment on: J Prosthet Dent 1996 Feb;75(2):205–10.
Paraclinoid carotid artery aneurysms with the dome eroding the anterior clinoid process: preoperative depiction of topography and surgical tactics--two case reports. Nagasawa S, et al. **Neurol Med Chir (Tokyo)** 1996 Sep; 36(9):639–43
Giant cell tumor of sphenoid-diverse presentation: report of two cases. Behari S, et al. **Neurol Res** 1996 Oct;18(5):462–6
[Sphenoid ridge hyperostosis meningiomas "en plaque"] Clavel Escribano M, et al. **Neurologia** 1997 Jan;12(1):40–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Mucocele of sphenoid sinus: presentation of 3 cases] Cerqua N, et al. **Acta Otorhinolaryngol Ital** 1996 Feb;16(1):52–6 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

High-resolution CT of the pterygopalatine fossa and its communications. Kim HS, et al. **Neuroradiology** 1996 May; 38 Suppl 1:S120–6

SURGERY

Results of the lateral rhinotomy approach in transsphenoidal microsurgery for growth hormone-secreting pituitary adenoma. Jakobsson KE, et al. **Br J Neurosurg** 1995; 9(6):763–8
Nasal complications of the direct transnasal approach to the pituitary fossa. Tan LK, et al. **Br J Neurosurg** 1995; 9(6):739–42
Craniopharyngioma: transsphenoidal surgery. Laws ER Jr. **Curr Ther Endocrinol Metab** 1997;6:35–8 (6 ref.)
Transient facial palsy in sphenoidal electrode placement. Iriarte J, et al. **Epilepsia** 1996 Dec;37(12):1239–41
Selective extradural anterior clinoidectomy for supra- and parasellar processes. Technical note. Yonekawa Y, et al. **J Neurosurg** 1997 Oct;87(4):636–42
Combined transconjunctival/intranasal endoscopic approach to the optic canal in traumatic optic neuropathy. Kuppersmith RB, et al. **Laryngoscope** 1997 Mar; 107(3):311–5
The anatomical variations of sylvian veins and cisterns. Aydin IH, et al. **Minim Invasive Neurosurg** 1997 Jun;40(2):68–73
Complications of transsphenoidal surgery: results of a national survey, review of the literature, and personal experience. Ciric I, et al. **Neurosurgery** 1997 Feb; 40(2):225–36; discussion 236–7 (101 ref.)
Application of the skull base technique to the repair of transsphenoidal meningoencephaloceles. Kai Y, et al. **Pediatr Neurosurg** 1996 Jul;25(1):54–6
Transsphenoidal adenomectomy in Cushing's disease via a lateral rhinotomy approach. Petruson K, et al. **Surg Neurol** 1997 Jul;48(1):37–43; discussion 44–5
[Anterior cranio-facial resection for malignant tumors: report of 91 cases] Cantù G, et al. **Acta Otorhinolaryngol Ital** 1996 Feb;16(1):16–24 (Eng. Abstr.) **(Ita)**
[Anesthetic agents and visual evoked potentials in patients undergoing transphenoidal or breast reconstruction surgery] Damiani Cavero S, et al. **Neurologia** 1997 Feb; 12(2):51–5 (Eng. Abstr.) **(Spa)**

SPHENOID SINUS

Choanal polyp of sphenoidal origin. Report of two cases. Eloy P, et al. **Acta Otorhinolaryngol Belg** 1996;50(3):183–9 (22 ref.)
Metastatic Ewing cell sarcoma of the sinus and osteoid osteoma of the orbit. Chynn EW, et al. **Am J Ophthalmol** 1997 Apr;123(4):565–7
Sphenoid sinus localization of multiple myeloma revealing evolution from benign gammopathy. Bachmeyer C, et al. **Head Neck** 1997 Jul;19(4):347–50
Headache caused by a sphenoid mucocele but presenting as an ergotamine-induced headache. Bauer B, et al. **Headache** 1997 Jul–Aug;37(7):460–2
Metastatic follicular thyroid carcinoma to the paranasal sinuses: a case report and review. Altman KW, et al. **J Laryngol Otol** 1997 Jul;111(7):647–51 (22 ref.)
Ectopic pituitary adenoma in the sphenoid causing Nelson's syndrome. Esteban F, et al. **J Laryngol Otol** 1997 Jun; 111(6):565–7
Unilateral abducens nerve palsy: a presenting sign of sphenoid sinus mucocoeles. Muneer A, et al. **J Laryngol Otol** 1997 Jul;111(7):644–6
Sphenoid sinus mucocoele presenting with isolated oculomotor nerve palsy. Sethi DS, et al. **J Laryngol Otol** 1997 May;111(5):471–3
Spheno-occipital chondroid chordoma. Drummond DS, et al. **J Otolaryngol** 1997 Jun;26(3):197–200
Non-Hodgkin lymphoma with panhypopituitarism, hyperprolactinaemia and sixth nerve palsy. Shaw JA, et al. **J R Soc Med** 1997 May;90(5):274–5
Pituitary prolactinoma mimicking tumor originating from the sphenoid sinus or clivus. Masui T, et al. **Radiat Med** 1996 Jul–Aug;14(4):189–91
Aspergillomas of the sphenoid sinus: a series of 10 cases treated by endoscopic sinus surgery. Klossek JM, et al. **Rhinology** 1996 Sep;34(3):179–83
Chondromyxoid fibroma of paranasal sinuses: report of two cases presenting with nasal obstruction. Nazeer T, et al. **Skeletal Radiol** 1996 Nov;25(8):779–82
Dislocation of the pituitary gland by sphenocavernous meningiomas. DeMonte F, et al. **Surg Neurol** 1997 Jan; 47(1):43–6
Endoscopic pituitary surgery: an early experience. Jho HD, et al. **Surg Neurol** 1997 Mar;47(3):213–22; discussion 222–3
[Surgical treatment under endoscopic control of cerebrospinal fluid rhinorrhea of sphenoid origin. A propos of 5 cases] Righini C, et al. **Ann Otolaryngol Chir Cervicofac** 1996;113(4):188–95 (36 ref.) (Eng. Abstr.) **(Fre)**
[Malignant ethmoid-sphenoidal tumors. 130 cases. Retrospective study] Roux FX, et al. **Neurochirurgie** 1997; 43(2):100–10 (Eng. Abstr.) **(Fre)**
[Ophthalmoplegia. Ophthalmoplegia in sphenoid sinus metastasis of a laryngeal carcinoma] Keiner S, et al. **HNO** 1997 Apr;45(4):238–9 **(Ger)**
[Skull base aspergillosis granuloma originating from the sphenoid sinus: a case report] Yamamoto H, et al. **No Shinkei Geka** 1997 May;25(5):433–6 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Focal atrophy and cerebrospinal fluid rhinorrhea. Ator CB, et al. **J Am Osteopath Assoc** 1997 Jan;97(1):40–2 (15 ref.)
Agenesis of sphenoid sinus. Case report. Antoniades K, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 Nov–Dec; 58(6):347–9 (7 ref.)

ANATOMY & HISTOLOGY

[Chronological development of the sphenoidal sinus] Vallejo Valdezate LA, et al. **An Otorrinolaringol Ibero Am** 1997; 24(2):187–95 (Eng. Abstr.) **(Spa)**
[Morphological and morphometric study of sphenoidal sinus] Vallejo Valdezate LA, et al. **An Otorrinolaringol Ibero Am** 1997;24(2):169–86 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

[Endonasal coagulation of the sphenopalatine artery in severe posterior epistaxis] Rudert H, et al. **Laryngorhinootologie** 1997 Feb;76(2):77–82 (Eng. Abstr.) **(Ger)**

GROWTH & DEVELOPMENT

[Development of the spheno-ethmoid paranasal sinus system using axial computerized tomography imaging] Spaeth J, et al. **Laryngorhinootologie** 1996 Jun;75(6):344–50 (Eng. Abstr.) **(Ger)**
[Upper aerodigestive infections and their effect on sphenoidal sinus development] Vallejo Valdezate LA, et al. **An Otorrinolaringol Ibero Am** 1997;24(3):227–39 (Eng. Abstr.) **(Spa)**

INJURIES

[Intracranial complications after endonasal surgery (letter)] Figueira-Moure A, et al. **Rev Esp Anestesiol Reanim** 1996 Jun–Jul;43(6):225–7 **(Spa)**

INNERVATION

Stereotactic radiosurgical treatment of sphenopalatine neuralgia. Case report. Pollock BE, et al. **J Neurosurg** 1997 Sep;87(3):450–3

PATHOLOGY

Traumatic aneurysm of the internal carotid artery: a late finding presenting as a mass in the sphenoid sinus. Ramos A, et al. **AJNR Am J Neuroradiol** 1996 Feb;17(2):222–5
Arachnoid cysts and pneumosinus dilatans. Sener RN. **Comput Med Imaging Graph** 1997 Mar–Apr;21(2):125–9
Magnetic resonance imaging in acute optic neuropathy by sphenoidal mucocele. Yamaguchi K, et al. **Int Ophthalmol** 1997;21(1):9–11
Focal atrophy and cerebrospinal fluid rhinorrhea. Ator CB, et al. **J Am Osteopath Assoc** 1997 Jan;97(1):40–2 (15 ref.)
Giant-cell tumour of the sphenoid bone: case report. Rimmelin A, et al. **Neuroradiology** 1996 Oct;38(7):650–3
Anterior clinoid mucocele masquerading as retrobulbar neuritis. Dunya IM, et al. **Ophthal Plast Reconstr Surg** 1996 Sep;12(3):171–3
Sphenoid and sellar tumors. Isaacs RS, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1191–229 (77 ref.)
MR imaging of pituitary adenomas with sphenoid sinus invasion: characteristic MR findings indicating fibrosis. Ishii K, et al. **Radiat Med** 1996 Jul–Aug;14(4):173–8
Acute unilateral visual loss in the elderly due to retrobulbar optic neuropathy. Slavin ML, et al. **Surv Ophthalmol** 1996 Nov–Dec;41(3):261–7
[Detection of fluid in paranasal sinuses as a possible diagnostic sign of death by drowning] Hottmar P. **Arch Kriminol** 1996 Sep–Oct;198(3–4):89–94 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Endoscopic view of the recirculation phenomenon of sphenoid sinus drainage. Yanagisawa E, et al. **Ear Nose Throat J** 1996 Feb;75(2):68–70
[Morphological and morphometric study of sphenoidal sinus] Vallejo Valdezate LA, et al. **An Otorrinolaringol Ibero Am** 1997;24(2):169–86 (Eng. Abstr.) **(Spa)**
[Chronological development of the sphenoidal sinus] Vallejo Valdezate LA, et al. **An Otorrinolaringol Ibero Am** 1997; 24(2):187–95 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Nystagmus as uncommon neurological manifestation of sphenoidal sinusitis. Letter] Huezo CA. **Rev Neurol** 1997 Mar;25(139):474 **(Spa)**

RADIOGRAPHY

Radiological case of the month. Mucocele of the sphenoid sinus. Nicolino MP, et al. **Arch Pediatr Adolesc Med** 1997 Jan;151(1):93–4
Obliteration of maxillary and sphenoid sinuses in Gaucher's disease. Karabulut N, et al. **Br J Radiol** 1997 May; 70(833):533–5

SPHENOID SINUS

SURGERY

Isolated sphenoid sinus changes--history, CT and endoscopic finding. Hadar T, et al. **J Laryngol Otol** 1996 Sep; 110(9):850–3

Epidermoid tumor in the sphenoid sinus--case report. Ohta S, et al. **Neurol Med Chir (Tokyo)** 1997 Apr;37(4):350–3

Modified coronal computerized tomographic cuts for transsphenoidal surgery. Technical note. Naim-Ur-Rahman, et al. **Neurosurg Rev** 1996;19(2):85–8

Rhinological complications of sublabial transseptal transsphenoidal surgery for sellar and suprasellar lesions: prevention and management. Sharma K, et al. **Neurosurg Rev** 1996;19(3):163–7

Endoscopic transseptal transsphenoidal surgery for pituitary tumors. Yaniv E, et al. **Neurosurgery** 1997 May;40(5):944–6

Sphenoid and sellar tumors. Isaacs RS, et al. **Otolaryngol Clin North Am** 1995 Dec;28(6):1191–229 (77 ref.)

[A case of middle cranial fossa meningioma extending into the infratemporal fossa: an approach to the pterygoid extension of the sphenoid sinus via the infratemporal fossa] Nakaguchi H, et al. **No Shinkei Geka** 1996 Jul;24(7):643–8 (Eng. Abstr.) **(Jpn)**

SPHENOID SINUSITIS

COMPLICATIONS

Osteomyelitis of the orbit. el-Toukhy E, et al. **Ophthal Plast Reconstr Surg** 1997 Mar;13(1):68–71

[Complicated isolated inflammatory sphenoiditis (apropos of 23 cases)] Stoll D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1997;118(2):87–9 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

[Early signs of sphenoid sinusitis: isolated febrile headache (letter)] Charpentier P, et al. **Presse Med** 1996 Oct 12; 25(30):1389 **(Fre)**

SURGERY

Isolated sphenoid sinus changes--history, CT and endoscopic finding. Hadar T, et al. **J Laryngol Otol** 1996 Sep; 110(9):850–3

Pediatric sphenoidotomy. Smith WC, et al. **Otolaryngol Clin North Am** 1996 Feb;29(1):159–67

SPHEROCYTES

CHEMISTRY

Apparently normal ankyrin content in unsplenectomized hereditary spherocytosis patients with the inactivation of one ankyrin (ANK1) allele. Miraglia del Giudice E, et al. **Haematologica** 1997 May-Jun;82(3):332–3

CYTOLOGY

Targeted disruption of the murine erythroid band 3 gene results in spherocytosis and severe haemolytic anaemia despite a normal membrane skeleton. Southgate CD, et al. **Nat Genet** 1996 Oct;14(2):227–30

SPHEROCYTOSIS, HEREDITARY

see related
ANEMIA, SIDEROBLASTIC

Hereditary spherocytosis: a review of the clinical and molecular aspects of the disease. Hassoun H, et al. **Blood Rev** 1996 Sep;10(3):129–47 (128 ref.)

BLOOD

Membrane cation and anion transport activities in erythrocytes of hereditary spherocytosis: effects of different membrane protein defects. De Franceschi L, et al. **Am J Hematol** 1997 Jul;55(3):121–8

Assessment of the severity of hereditary spherocytosis using routine haematological data obtained with dual angle laser scattering cytometry. Ricard MP, et al. **Clin Lab Haematol** 1996 Jun;18(2):75–8

Extramedullary haematopoiesis in hereditary spherocytosis simulating mediastinal tumour [letter] Reman O, et al. **Eur J Haematol** 1997 Feb;58(2):124–6

Apparently normal ankyrin content in unsplenectomized hereditary spherocytosis patients with the inactivation of one ankyrin (ANK1) allele. Miraglia del Giudice E, et al. **Haematologica** 1997 May-Jun;82(3):332–3

[Relation between types of erythrocyte membrane defects and the clinical picture in hereditary spherocytosis] Brabec V, et al. **Vnitr Lek** 1997 Feb;43(2):91–4 (Eng. Abstr.) **(Cze)**

[Hereditary spherocytosis] Ideguchi H. **Nippon Rinsho** 1996 Sep;54(9):2478–83 (14 ref.) (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Excessive arterial thrombus in spherocytosis. A case report. Nikol S, et al. **Angiology** 1997 Aug;48(8):743–8

Gilbert's syndrome co-existing with and masking hereditary spherocytosis. Sharma S, et al. **Ann Hematol** 1997 Jun; 74(6):287–9

Pancytopenia following infection with human parvovirus B19 as a presenting feature of hereditary spherocytosis in two siblings [letter] Goss GA, et al. **Aust N Z J Med** 1997 Feb;27(1):86–7

Coarctation of aorta and hereditary spherocytosis [letter; comment] Charan VD. **J Assoc Physicians India** 1996 Apr; 44(4):290. Comment on: J Assoc Physicians India 1995 Sep;43(9):649.

Traumatic rupture of the spleen in a patient with hereditary spherocytosis. Berne JD, et al. **J Trauma** 1997 Feb; 42(2):323–6

[Anatomic correction of double-outlet right ventricle associated with hereditary spherocytosis--a case report] Kaminishi Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Dec;44(12):2164–71 (17 ref.) (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Usefulness of cryohemolysis test in the diagnosis of hereditary spherocytosis. Romero RR, et al. **Arch Med Res** 1997 Summer;28(2):247–51

Pancytopenia following infection with human parvovirus B19 as a presenting feature of hereditary spherocytosis in two siblings [letter] Goss GA, et al. **Aust N Z J Med** 1997 Feb;27(1):86–7

Extramedullary haematopoiesis in hereditary spherocytosis simulating mediastinal tumour [letter] Reman O, et al. **Eur J Haematol** 1997 Feb;58(2):124–6

Screening for hereditary spherocytosis by use of automated erythrocyte indexes. Michaels LA, et al. **J Pediatr** 1997 Jun;130(6):957–60

GENETICS

Ankyrin Bugey: a de novo deletional frameshift variant in exon 6 of the ankyrin gene associated with spherocytosis. Morlé L, et al. **Am J Hematol** 1997 Mar;54(3):242–8

Amino-acid substitution in alpha-spectrin commonly coinherited with nondominant hereditary spherocytosis. Tse WT, et al. **Am J Hematol** 1997 Mar;54(3):233–41

Molecular genetics of hereditary elliptocytosis and hereditary spherocytosis. Delaunay J, et al. **Ann Genet** 1996; 39(4):209–21 (93 ref.)

Modulation of clinical expression and band 3 deficiency in hereditary spherocytosis. Alloisio N, et al. **Blood** 1997 Jul 1;90(1):414–20

Characterization of the underlying molecular defect in hereditary spherocytosis associated with spectrin deficiency. Hassoun H, et al. **Blood** 1997 Jul 1;90(1):398–406

Characterization of 13 novel band 3 gene defects in hereditary spherocytosis with band 3 deficiency. Jarolim P, et al. **Blood** 1996 Dec 1;88(11):4366–74

A variant of the EPB3 gene of the anti-Lepore type in hereditary spherocytosis. Bianchi P, et al. **Br J Haematol** 1997 Aug;98(2):283–8

Heterogenous band 3 deficiency in hereditary spherocytosis related to different band 3 gene defects. Dhermy D, et al. **Br J Haematol** 1997 Jul;98(1):32–40

Novel band 3 variants (bands 3 Foggia, Napoli I and Napoli II) associated with hereditary spherocytosis and band 3 deficiency: status of the D38A polymorphism within the EPB3 locus. Miraglia del Giudice E, et al. **Br J Haematol** 1997 Jan;96(1):70–6

Frequent de novo mutations of the ANK1 gene mimic a recessive mode of transmission in hereditary spherocytosis: three new ANK1 variants: ankyrins Bari, Napoli II and Anzio. Randon J, et al. **Br J Haematol** 1997 Mar; 96(3):500–6

Search for the candidate genes in dominant hereditary spherocytosis using linkage analysis. Garbarz M, et al. **C R Acad Sci III** 1996 Oct;319(10):913–9

Spectrin mutations in hereditary elliptocytosis and hereditary spherocytosis. Maillet P, et al. **Hum Mutat** 1996;8(2):97–107

Combination of two mutant alpha spectrin alleles underlies a severe spherocytic hemolytic anemia. Wichterle H, et al. **J Clin Invest** 1996 Nov 15;98(10):2300–7

METABOLISM

Ankyrin deficiency is the most common defect in dominant and non dominant hereditary spherocytosis. Lanciotti M, et al. **Haematologica** 1997 Jul-Aug;82(4):460–2

Physiology: The acid test for band 3 [news] Tanner MJ. **Nature** 1996 Jul 18;382(6588):209–10

SURGERY

Concomitant laparoscopic cholecystectomy and splenectomy for surgical management of hereditary spherocytosis. Patton ML, et al. **Am Surg** 1997 Jun;63(6):536–9

The effect of splenectomy in hereditary spherocytosis by dual angle laser light cytometry. Ricard MP, et al. **Clin Lab Haematol** 1996 Dec;18(4):249–51

Effectiveness of partial splenectomy in hereditary spherocytosis. Tchernia G, et al. **Curr Opin Hematol** 1997 Mar;4(2):136–41 (37 ref.)

Laparoscopic splenectomy in childhood hematologic disorders. Hicks BA, et al. **J Laparoendosc Surg** 1996 Mar; 6 Suppl 1:S31–4

Laparoscopic splenectomy using the harmonic scalpel. Rothenberg SS. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S61–3

Case report of pediatric laparoscopic splenectomy with technical review. Fujikawa T, et al. **Surg Laparosc Endosc** 1997 Jun;7(3):202–5

[Hereditary spherocytosis. Course and value of subtotal splenectomy] Castillo B, et al. **Arch Pediatr** 1997 Jun; 4(6):515–20 (Eng. Abstr.) **(Fre)**

SPHEROIDS

Comparative amplification analysis of human glioma tissue and glioma derived fragment spheroids using reverse chromosome painting (RCP). Janka M, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2601–6

Structural and functional features of bile canaliculi in adult rat hepatocyte spheroids. Yumoto AU, et al. **Liver** 1996 Feb;16(1):61–6

Optical properties of multicellular tumour spheroids. Hargrave P, et al. **Phys Med Biol** 1996 Jun;41(6):1067–72

CYTOLOGY

Evaluation of Taxol in head and neck squamous carcinoma multicellular tumor spheroids. Griffon-Etienne G, et al. **Anticancer Drugs** 1997 Jan;8(1):48–55

Adaptation of an automated selective dissociation procedure to two novel spheroid types [letter] Kunz-Schughart LA, et al. **In Vitro Cell Dev Biol Anim** 1997 Feb;33(2):73–6

Comparisons of porcine hepatocyte spheroids and single hepatocytes in the non-woven fabric bioartificial liver module. Naruse K, et al. **Int J Artif Organs** 1996 Oct; 19(10):605–9

Large-scale preparation and function of porcine hepatocyte spheroids. Sakai Y, et al. **Int J Artif Organs** 1996 May; 19(5):294–301

DRUG EFFECTS

Effects of photodynamic therapy on glioma spheroids. Terzis AJ, et al. **Br J Neurosurg** 1997 Jun;11(3):196–205

Abrogation of taxol-induced G2-M arrest and apoptosis in human ovarian cancer cells grown as multicellular tumor spheroids. Frankel A, et al. **Cancer Res** 1997 Jun 15; 57(12):2388–93

Use of the comet assay to identify cells sensitive to tirapazamine in multicell spheroids and tumors in mice. Olive PL, et al. **Cancer Res** 1996 Oct 1;56(19):4460–3

Therapeutic effect of m-[131I]- and m-[125I]iodobenzylguanidine on neuroblastoma multicellular tumor spheroids of different sizes. Weber W, et al. **Cancer Res** 1996 Dec 1;56(23):5428–34

Influence of drug exposure parameters on the activity of paclitaxel in multicellular spheroids. Nicholson KM, et al. **Eur J Cancer** 1997 Jul;33(8):1291–8

IMMUNOLOGY

Resistance of ovarian teratocarcinoma cell spheroids to complement-mediated lysis. Bjørge L, et al. **Br J Cancer** 1997;75(9):1247–55

METABOLISM

Incorporation of iododeoxyuridine in multicellular glioma spheroids: implications for DNA-targeted radiotherapy using Auger electron emitters. Neshasteh-Riz A, et al. **Br J Cancer** 1997;75(4):493–9

Two- and three-dimensional cell structures govern epidermal growth factor survival function in human bladder carcinoma cell lines. Dangles V, et al. **Cancer Res** 1997 Aug 15;57(16):3360–4

The restoration of the functions of serially passaged calf hepatocytes by spheroid formation. Karikusa F, et al. **In Vitro Cell Dev Biol Anim** 1996 Jan;32(1):30–7

Mechanistics of formation and ultrastructural evaluation of hepatocyte spheroids. Peshwa MV, et al. **In Vitro Cell Dev Biol Anim** 1996 Apr;32(4):197–203

Comparative targeting of human colon-carcinoma multicell spheroids using one- and two-step (bispecific antibody) techniques. Devys A, et al. **Int J Cancer** 1996 Sep 17; 67(6):883–91

Release of replication-deficient retroviruses from a packaging cell line: interaction with glioma tumor spheroids in vitro. Thorsen F, et al. **Int J Cancer** 1997 May 29;71(5):874–80

PATHOLOGY

Progesterone receptors in tumor fragment spheroids of human meningiomas. Tonn JC, et al. **Acta Neurochir Suppl (Wien)** 1996;65:105–7

Two- and three-dimensional cell structures govern epidermal growth factor survival function in human bladder carcinoma cell lines. Dangles V, et al. **Cancer Res** 1997 Aug 15;57(16):3360–4

In-vitro model of uterine leiomyomas: formation of ball-like aggregates. Kobayashi Y, et al. **Hum Reprod** 1996 Aug; 11(8):1724–30

Mathematical modelling of avascular-tumour growth. Ward JP, et al. **IMA J Math Appl Med Biol** 1997 Mar;14(1):39–69 (50 ref.)

Implantation of C6 astrocytoma spheroid into collagen type I gels: invasive, proliferative, and enzymatic characterizations. Tamaki M, et al. **J Neurosurg** 1997 Oct; 87(4):602–9

In vitro confirmation of newly established lung cancer cell lines using flow cytometry and multicellular tumor spheroids. Inoue S, et al. **Lung Cancer** 1997 May; 17(1):85–101

Multicellular tumor spheroids grown from pancreatic carcinoma cell lines: use as an orthotopic xenograft in athymic nude mice. McLeod EJ, et al. **Pancreas** 1997 Apr; 14(3):237–48

Volume estimation of multicellular colon carcinoma spheroids using Cavalieri's principle. Bauer J, et al. **Pathol Res Pract** 1995 Dec;191(12):1192–7

[Interaction markers of 3-dimensional cell cultures for characterization of reproduction of in-vivo growth] String A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:69–73 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Apoptosis regulated by growth factors in multicellular spheroids of trabecular cells. Matsuo T, et al. **Jpn J Ophthalmol** 1996;40(3):356–66

RADIATION EFFECTS

Hypofractionated radiation induces a decrease in cell proliferation but no histological damage to organotypic multicellular spheroids of human glioblastomas. Kaaijk P, et al. **Eur J Cancer** 1997 Apr;33(4):645–51

Radiation response of connexin43-transfected cells in relation to the "contact effect". Luo C, et al. **Exp Cell Res** 1997 Aug 1;234(2):225–32

TRANSPLANTATION

Multicellular tumor spheroids grown from pancreatic carcinoma cell lines: use as an orthotopic xenograft in athymic nude mice. McLeod EJ, et al. **Pancreas** 1997 Apr; 14(3):237–48

SPHEROPLASTS

CHEMISTRY

Improved membrane isolation in the purification of beta 2-adrenoceptors from transgenic Escherichia coli. Hill RA, et al. **Protein Expr Purif** 1997 Jun;10(1):162–7

ENZYMOLOGY

Membrane topology of recombinant rat liver microsomal glutathione transferase expressed in E. coli. Raza H, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):165–70

METABOLISM

A new periplasmic protein of Escherichia coli which is synthesized in spheroplasts but not in intact cells. Hagenmaier S, et al. **J Bacteriol** 1997 Mar;179(6):2073–6

SPHINCTEROPLASTY, TRANSDUODENAL see **SPHINCTEROTOMY, TRANSHEPATIC**

SPHINCTEROTOMY, ENDOSCOPIC

Endoscopic pancreatic intervention. Liguory C, et al. **Abdom Imaging** 1997 Sep–Oct;22(5):489–95 (42 ref.)

Population-based study of cancer risk and relative survival following sphincterotomy for stones in the common bile duct. Karlson BM, et al. **Br J Surg** 1997 Sep;84(9):1235–8

Ultrasound-guided extracorporeal shock wave lithotripsy of pancreatic ductal stones: six years' experience. Johanns W, et al. **Can J Gastroenterol** 1996 Nov–Dec;10(7):471–5

The efficacy of endoscopic sphincterotomy in patients with sphincter of Oddi dysfunction. Hwang JS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Mar; 57(3):177–83

Biliary motility following endoscopic sphincterotomy for recurrent common bile duct stones. Ng WW, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Sep; 56(3):159–65

Effect of endoscopic sphincterotomy on gallbladder motility. Agarwal DK, et al. **Dig Dis Sci** 1997 Jul;42(7):1495–500

Biliary reflux due to sphincter of Oddi ablation: a new pathogenetic explanation for long-term major biliary symptoms after endoscopic-sphincterotomy. Bordas JM, et al. **Endoscopy** 1996 Sep;28(7):642

Therapeutic endoscopy and primary sclerosing cholangitis [editorial ; comment] Devière J. **Endoscopy** 1996 Sep; 28(7):576–7. Comment on: Endoscopy 1996 Sep;28(7):546–51.

Endoscopic sphincterotomy in pregnancy. Llach J, et al. **Endoscopy** 1997 Jan;29(1):52–3

Suprapapillary fistulosphincterotomy at ERCP: a prospective study. O'Connor HJ, et al. **Endoscopy** 1997 May; 29(4):266–70

Endoscopic management of biliary tract strictures in primary sclerosing cholangitis [see comments] Wagner S, et al. **Endoscopy** 1996 Sep;28(7):546–51. Comment in: Endoscopy 1996 Sep;28(7):576–7.

Management of bile duct stones in the era of laparoscopic cholecystectomy: appraisal of routine operative cholangiography and endoscopic treatment. Kullman E, et al. **Eur J Surg** 1996 Nov;162(11):873–80

Biliary manometry, bacterial characteristics, bile composition, and histologic changes fifteen to seventeen years after endoscopic sphincterotomy. Bergman JJ, et al. **Gastrointest Endosc** 1997 May;45(5):400–5

Long-term follow-up after endoscopic sphincterotomy for bile duct stones in patients younger than 60 years of age [see comments] Bergman JJ, et al. **Gastrointest Endosc** 1996 Dec;44(6):643–9. Comment in: Gastrointest Endosc 1996 Dec;44(6):752–5.

Is your sphincterotomy really safe--and necessary? [editorial; comment] Cotton PB. **Gastrointest Endosc** 1996 Dec; 44(6):752–5. Comment on: Gastrointest Endosc 1996 Dec;44(6):643–9.

Retained common bile duct stones after endoscopic sphincterotomy: temporary and long-term treatment with biliary stenting. DeGuide JJ, et al. **Gastrointest Endosc** 1996 Jul;44(1):105–6

Endoscopic treatment of bile duct calculi in patients with gallbladder in situ: long-term outcome and factors predictive of recurrent symptoms. Heller SJ, et al. **Gastrointest Endosc** 1996 Nov;44(5):640–1

Divergent effects of endoscopic sphincterotomy on the long-term outcome of hepatolithiasis. Tanaka M, et al. **Gastrointest Endosc** 1996 Jan;43(1):33–7

Sphincterotomy techniques and risks. Shields SJ, et al. **Gastrointest Endosc Clin N Am** 1996 Jan;6(1):17–42 (80 ref.)

Sphincterotomy and the gall bladder—a slice of luck [comment] O'Donnell LJ. **Gut** 1996 Dec;39(96):885–6. Comment on: Gut 1996 Dec;39(96):856–9.

Periampullary carcinoma detected after sphincterotomy. Bayraktar Y, et al. **Hepatogastroenterology** 1996 Nov–Dec; 43(12):1454–60

Endoscopic therapy of chronic pancreatitis. Dite P, et al. **Hepatogastroenterology** 1996 Nov–Dec;43(12):1633–7

Outcome of mechanical lithotripsy of bile duct stones in an unselected series of 704 patients. Hintze RE, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):473–6

Endoscopic retrograde cholangiopancreatography in the diagnosis and management of choledochal cysts. Akkiz H, et al. **HPB Surg** 1997;10(4):211–8; discussion 218–9

Multidisciplinary conservative treatment of difficult bile duct stones: a real alternative to surgery. Masci E, et al. **HPB Surg** 1997;10(4):229–33; discussion 234

Endoscopic management of perforation of right hepatic duct following non-surgical abdominal trauma. Sharma BC, et al. **HPB Surg** 1997;10(4):245–7

Endoscopic retrograde cholangiography in the era of laparoscopic cholecystectomy. Balsara KP, et al. **Indian J Gastroenterol** 1996 Jan;15(1):10–1

Endoscopic retrieval of a surgical gauze from the common bile duct. Cipolletta L, et al. **Ital J Gastroenterol Hepatol** 1997 Feb;29(1):58–61

Gallbladder motility and lithogenicity of bile in patients with choledocholithiasis after endoscopic sphincterotomy. Dhiman RK, et al. **J Hepatol** 1997 Jun;26(6):1300–5

Endoscopic biliary sphincterotomy and stone extraction in a child with choledocholithiasis complicating Byler's disease. Braegger CP, et al. **J Pediatr Gastroenterol Nutr** 1996 Dec;23(5):614–7

Sphincterotomy for jaundice in a neonate [letter] Wilkinson ML, et al. **J Pediatr Gastroenterol Nutr** 1996 Nov; 23(4):507–9

Endoscopic treatment of chronic idiopathic pancreatitis in children. Perrelli L, et al. **J Pediatr Surg** 1996 Oct; 31(10):1396–400

Endoscopic treatment of biliary colic resulting from hemobilia after nonoperative management of blunt hepatic injury: case report and review of the literature. Clancy TE, et al. **J Trauma** 1997 Sep;43(3):527–9 (23 ref.)

Endoscopic treatment of posttraumatic "bilhemia": case report. Gable DR, et al. **J Trauma** 1997 Sep;43(3):534–6

Randomised trial of endoscopic balloon dilation versus endoscopic sphincterotomy for removal of bileduct stones [see comments] Bergman JJ, et al. **Lancet** 1997 Apr 19; 349(9059):1124–9. Comment in: Lancet 1997 Apr 19;349(9059):1114–5.

Randomised study of endoscopic biliary endoprosthesis versus duct clearance for bileduct stones in high-risk patients. Chopra KB, et al. **Lancet** 1996 Sep 21; 348(9030):791–3

Treatment of acute biliary pancreatitis [editorial; comment] Baillie J. **N Engl J Med** 1997 Jan 23;336(4):286–7. Comment on: N Engl J Med 1997 Jan 23;336(4):237–42.

Early ERCP and papillotomy compared with conservative treatment for acute biliary pancreatitis. The German Study Group on Acute Biliary Pancreatitis [see comments] Fölsch UR, et al. **N Engl J Med** 1997 Jan 23;336(4):237–42. Comment in: N Engl J Med 1997 Jan 23;336(4):286–7. Comment in: N Engl J Med 1997 Jun 19;336(25):1835; discussion 1836. Comment in: N Engl J Med 1997 Jun 19;336(25):1836. Comment in: ACP J Club 1997 Jul–Aug;127(1):9.

Early ERCP and papillotomy for acute biliary pancreatitis [letter; comment] Tarnasky PR, et al. **N Engl J Med** 1997 Jun 19;336(25):1835; discussion 1836. Comment on: N Engl J Med 1997 Jan 23;336(4):237–42.

Endoscopic sphincterotomy and recurrence of acute pancreatitis in gallstone patients considered unfit for surgery. Uomo G, et al. **Pancreas** 1997 Jan;14(1):28–31

Endoscopic treatment of bile duct calculi in patients with gallbladder in situ: long-term outcome and factors. Hammarstrom LE, et al. **Scand J Gastroenterol** 1996 Mar; 31(3):294–301

Gallbladder function and recurrent stones of the biliary tract in patients after endoscopic sphincterotomy [see comments] Lai KH, et al. **Scand J Gastroenterol** 1996 Jun;31(6):612–5 . Comment in: Scand J Gastroenterol 1997 Jan;32(1):95–6.

Endoscopic sphincterotomy and gallbladder functions [letter; comment] Sharma BC, et al. **Scand J Gastroenterol** 1997 Jan;32(1):95–6. Comment on: Scand J Gastroenterol 1996 Jun;31(6):612–5.

Endoscopic treatment of a choledochocele in a 2-year-old child. Dohmoto M, et al. **Surg Endosc** 1996 Oct; 10(10):1016–8

Endoscopic sphincterotomy in the treatment of postoperative biliary fistulas of hepatic hydatid disease. Tekant Y, et al. **Surg Endosc** 1996 Sep;10(9):909–11

Comparison of bile duct pressures following sphincterotomy and endobiliary stenting in a canine model. Youngelman DF, et al. **Surg Endosc** 1997 Feb;11(2):126–8

Calibration of papillotomy in the surgical treatment of papillary stenosis: the "little train". Rodolico G, et al. **Surg Today** 1996;26(10):854–6

Long-term follow-up after endoscopic treatment of bile duct calculi in cholecystectomized patients. Hammarström LE, et al. **World J Surg** 1996 Mar–Apr;20(3):272–6

Endoscopic sphincterotomy: 7-year experience. Lo CY, et al. **World J Surg** 1997 Jan;21(1):67–71

[Endoscopic sphincterotomy in choledocholithiasis and an intact gallbladder] Vladimirov B, et al. **Khirurgiia (Sofiia)** 1996;49(5):13–6 (Eng. Abstr.) **(Bul)**

[Endoscopic treatment in acute biliary pancreatitis (editorial)] Prat F, et al. **Presse Med** 1996 Nov 9;25(34):1620–2 (11 ref.) (Eng. Abstr.) **(Fre)**

[Surgical therapy of hemorrhage after endoscopic sphincterotomy. Indications and technique] Sulkowski U, et al. **Chirurg** 1996 Jan;67(1):26–31 (19 ref.) (Eng. Abstr.) **(Ger)**

[Sequential therapy concept in choledocholithiasis] Müller J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:586–8 (Eng. Abstr.) **(Ger)**

[Extracorporeal shockwave lithotripsy (SWL) of common bile duct calculi without previous endoscopic papillotomy] Jakobeit C, et al. **Leber Magen Darm** 1996 Jul;26(4):201–3 (Eng. Abstr.) **(Ger)**

[Acute pancreatitis—is endoscopic papillotomy a reliable therapy?] van Husen N. **Wien Med Wochenschr** 1997; 147(1):6–9 (26 ref.) (Eng. Abstr.) **(Ger)**

[Endoscopic papillotomy with preservation of the gallbladder versus open surgery in risk patients with bile duct calculi] Neuhaus H, et al. **Z Gastroenterol** 1997 Feb;35(2):163–4 **(Ger)**

[Biliary fistula, following partial hepatectomy, treated by endoscopic papillotomy (atypical indication for endoscopic sphincterotomy)] Seress Z, et al. **Orv Hetil** 1996 Aug 25; 137(34):1871–3 (Eng. Abstr.) **(Hun)**

[The "sump syndrome": a case treated by surgical endoscopy. A discussion about biliodigestive diversions and endoscopic sphincterotomies] De Monti M, et al. **Minerva Gastroenterol Dietol** 1996 Jun;42(2):93–7 (22 ref.) (Eng. Abstr.) **(Ita)**

[A case of recurrent choledocholithiasis due to foreign bodies (fish bones) after endoscopic sphincterotomy] Sakai T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Feb;94(2):143–7 **(Jpn)**

[Extracorporeal lithotripsy in combination with endoscopic papillotomy in choledocholithiasis] Briskin BS, et al. **Vestn Khir Im I I Grek** 1997;156(1):40–5 (Eng. Abstr.) **(Rus)**

[Prevention of recurrence of acute biliary pancreatitis by endoscopic sphincterotomy (see comments)] Hervás Molina AJ, et al. **Gastroenterol Hepatol** 1996 Nov;19(9):445–7 (Eng. Abstr.). Comment in: Gastroenterol Hepatol 1997 Jun–Jul;20(6):336–7. **(Spa)**

[Concerning the article, "Prevention of the recurrence of acute pancreatitis by endoscopic sphincterotomy" (letter; comment)] Targarona EM, et al. **Gastroenterol Hepatol** 1997 Jun–Jul;20(6):336–7. Comment on: Gastroenterol Hepatol 1996 Nov;19(9):445–7. **(Spa)**

[A retroperitoneal abscess after endoscopic sphincterotomy: a severe and infrequent complication] Fernández Pérez FJ, et al. **Rev Esp Enferm Dig** 1997 Feb;89(2):139–41 (11 ref.) (Eng. Abstr.) **(Spa)**

[Precut sphincterotomy in impacted choledocholithiasis at the Vater's ampulla] Güitrón A, et al. **Rev Gastroenterol Mex** 1996 Oct–Dec;61(4):338–41 (Eng. Abstr.) **(Spa)**

[Clinical case. Choledocholithiasis] Hurtado Andrade H. **Rev Gastroenterol Mex** 1996 Oct–Dec;61(4 Suppl 2):S110 **(Spa)**

[Choledocholithiasis: sphincterotomy vs. dilatation] Suárez Morán E. **Rev Gastroenterol Mex** 1996 Oct–Dec;61(4 Suppl 2):S107–9 **(Spa)**

ADVERSE EFFECTS

Bleeding causing biliary obstruction after endoscopic sphincterotomy. Mosenkis BN, et al. **Am J Gastroenterol** 1997 Apr;92(4):708–9 (5 ref.)

Papillary injuries and duodenal perforation during endoscopic retrograde sphincterotomy (ERS): radiological findings. Catalano O, et al. **Clin Radiol** 1997 Sep; 52(9):688–91

Complications of endoscopic biliary sphincterotomy: a review. Freeman ML. **Endoscopy** 1997 May;29(4):288–97 (79 ref.)

Tension pneumothorax complicating a perforation of a duodenal ulcer during ERCP with endoscopic sphincterotomy. Morley AP, et al. **Endoscopy** 1997 May; 29(4):332

Fatal hepatic air embolism following ERCP. Kennedy C,

et al. **Gastrointest Endosc** 1997 Feb;45(2):187–8
Endoscopic sphincterotomy in the young patient: is there cause for concern? Tham TC, et al. **Gut** 1997 Jun; 40(6):697–700 (60 ref.)
Complications of endoscopic biliary sphincterotomy [letter; comment] Tulassay Z, et al. **N Engl J Med** 1997 Mar 27; 336(13):963; discussion 963–4. Comment on: N Engl J Med 1996 Sep 26;335(13):909–18.
Long-term prophylactic administration of octreotide reduces the rise in serum amylase after endoscopic procedures on Vater's papilla. Testoni PA, et al. **Pancreas** 1996 Jul; 13(1):61–5
Analysis of complications of endoscopic sphincterotomy for biliary stones in a consecutive series of 546 patients. Coppola R, et al. **Surg Endosc** 1997 Feb;11(2):129–32
[Radiologic aspects of endoscopic sphincterotomy complications] Barbier C, et al. **J Radiol** 1996 Aug; 77(8):555–62 (Eng. Abstr.) **(Fre)**
[Complications after endoscopic interventions on the major duodenal papilla] Artem'eva NN, et al. **Vestn Khir Im I I Grek** 1996;155(6):72–5 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Prospective randomized comparison of stonetome combination catheter versus conventional endoscopic clearance of common bile duct. Dean RS, et al. **Am J Gastroenterol** 1997 Jul;92(7):1121–4
Endoscopic sphincterotomy using an S-shaped sphincterotome in patients with a Billroth II or Roux-en-Y gastrojejunostomy. Hintze RE, et al. **Endoscopy** 1997 Feb; 29(2):74–8
Endoscopic retrograde cholangiopancreatography and needle-knife sphincterotomy in patients with Billroth II gastrectomy: a comparative study of the forward-viewing endoscope and the side-viewing duodenoscope. Kim MH, et al. **Endoscopy** 1997 Feb;29(2):82–5
Selective biliary opacification through the proximal opening of a sphincterotome inserted into the pancreatic duct: a new pitfall? Maroy B. **Endoscopy** 1997 Jun;29(5):S32
Simultaneous cannulation and needle-knife papillotomy using a large-channel duodenoscope. Banerjee B. **Gastrointest Endosc** 1996 Aug;44(2):189–90
Papillary roof incision using the Erlangen-type pre-cut papillotome to achieve selective bile duct cannulation. Binmoeller KF, et al. **Gastrointest Endosc** 1996 Dec; 44(6):689–95
Laparoscopic biliary guide wire: a simplified approach to choledocholithiasis. Huntington TR, et al. **Gastrointest Endosc** 1997 Mar;45(3):295–7
In vitro evaluation of wire integrity and ability to reprocess single-use sphincterotomes [see comments] Kozarek RA, et al. **Gastrointest Endosc** 1997 Feb;45(2):117–21. Comment in: Gastrointest Endosc 1997 Feb;45(2):211–3.
Current induction in a fiberglass guidewire compared to conventional wires during simulated papillotomy. O'Brien JW, et al. **Gastrointest Endosc** 1997 Jun;45(6):493–7
Simple method for making triple-lumen needle-knife papillotome [letter] Silverman WB. **Gastrointest Endosc** 1996 Mar;43(3):264
Transpapillary stenting of proximal biliary strictures: does biliary sphincterotomy reduce the risk of postprocedure pancreatitis? Tarnasky PR, et al. **Gastrointest Endosc** 1997 Jan;45(1):46–51 (27 ref.)
Removal of impacted basket during endoscopic papillotomy: a novel method using precut papillotome. Dhir V, et al. **Indian J Gastroenterol** 1996 Oct;15(4):150
Precut papillotomy using a needle knife: experience in 100 patients with malignant obstructive jaundice. Dhir V, et al. **Indian J Gastroenterol** 1997 Apr;16(2):52–3
Endoscopic stenting in the management of biliary stones. Law NM, et al. **Singapore Med J** 1996 Oct;37(5):475–8

METHODS

Endoscopic sphincterotomy assisted by percutaneous transhepatic choledochal tube: a preliminary report. Matsuoka J, et al. **Acta Med Okayama** 1997 Feb;51(1):51–4
Endoscopic treatment of bile duct stones: should we cut or dilate the sphincter? [editorial; comment] MacMathuna P. **Am J Gastroenterol** 1997 Sep;92(9):1411–2. Comment on: Am J Gastroenterol 1997 Sep;92(9):1440–3.
Endoscopic lithotomy of common bile duct stones with sublingual nitroglycerin and guidewire [see comments] Uchida N, et al. **Am J Gastroenterol** 1997 Sep;92(9):1440–3. Comment in: Am J Gastroenterol 1997 Sep;92(9):1411–2.
Management of giant common bile duct stones in high-risk patients using a combined transhepatic and endoscopic approach. Matsumoto S, et al. **Am J Surg** 1997 Feb; 173(2):115–6
Needle-knife sphincterotomy as a precut procedure: a retrospective evaluation of efficacy and complications [see comments] Bruins Slot W, et al. **Endoscopy** 1996 May; 28(4):334–9. Comment in: Endoscopy 1996 May;28(4):360–4.
Saline injection needle-knife sphincterotomy: a preliminary report [see comments] Etzkorn KP, et al. **Endoscopy** 1996 May;28(4):360–4. Comment in: Endoscopy 1996 May;28(4):365–6.
Needle-knife access papillotomy: an unfairly maligned technique? [editorial; comment] Vandervoort J, et al. **Endoscopy** 1996 May;28(4):365–6. Comment on: Endoscopy 1996 May;28(4):334–9. Comment on: Endoscopy 1996 May;28(4):360–4.
Endoscopic sphincterotomy for choledocholithiasis: a prospective single-center study on the short-term and long-term treatment results in 483 patients. Wojtun S, et al. **Endoscopy** 1997 May;29(4):258–65
Endoscopic bile duct stent placement as a predictor of outcome following endoscopic sphincterotomy in patients with suspected sphincter of Oddi dysfunction. Rolny P. **Eur J Gastroenterol Hepatol** 1997 May;9(5):467–71
Endoscopic drainage in benign pancreatic disease: immediate and medium term outcome. Hammarström LE, et al. **Eur J Surg** 1997 Aug;163(8):577–89
Endoscopic pancreatic drainage in chronic pancreatitis associated with ductal stones: long-term results [see comments] Dumonceau JM, et al. **Gastrointest Endosc** 1996 Jun;43(6):547–55. Comment in: Gastrointest Endosc 1996 Jun;43(6):625–6.
A new approach to sphincterotomy in patients with Billroth II gastrectomy. Al-Kawas FH, et al. **Gastrointest Endosc** 1996 Mar;43(3):253–5 (8 ref.)
Modification of common bile duct pre-cut sphincterotomy [letter; comment] Lehman GA, et al. **Gastrointest Endosc** 1996 Jan;43(1):80–1. Comment on: Gastrointest Endosc 1995 May;41(5):502–5.
Transpancreatic sphincter approach to biliary sphincterotomy [letter; comment] Prakash C. **Gastrointest Endosc** 1996 Oct;44(4):509–10. Comment on: Gastrointest Endosc 1995 May;41(5):502–5.
Endoscopic papillectomy: a novel approach to difficult cannulation. Rollhauser C, et al. **Gastrointest Endosc** 1997 Feb;45(2):221–3
Endoscopic treatment of pancreatic stones in patients with chronic pancreatitis [see comments] Smits ME, et al. **Gastrointest Endosc** 1996 Jun;43(6):556–60. Comment in: Gastrointest Endosc 1996 Jun;43(6):625–6.
Percutaneous transhepatic cholangioscopy for diagnosis and therapy of biliary diseases in older patients. Van Steenbergen W, et al. **J Am Geriatr Soc** 1996 Nov; 44(11):1384–7
Needle knife papillotomy in a university referral practice. Safety and efficacy of a modified technique. Gholson CF, et al. **J Clin Gastroenterol** 1996 Oct;23(3):177–80
Prospective evaluation of a minimally invasive approach for treatment of bile-duct calculi in the high-risk patient. Trias M, et al. **Surg Endosc** 1997 Jun;11(6):632–5
Sequential endoscopic-laparoscopic treatment of cholecystocholedocholithiasis. Materia A, et al. **Surg Laparosc Endosc** 1996 Aug;6(4):273–7
Endoscopic treatment of postoperative biliary leak. Sreenivas DV, et al. **Trop Gastroenterol** 1996 Oct-Dec;17(4):225–6
[Endoscopic treatment methods in patients with the postcholecystectomy syndrome] Gorbunov OM, et al. **Khirurgiia (Mosk)** 1996;(6):61–3 (Eng. Abstr.) **(Rus)**
[Precut of the Vater's ampulla: myths and realities (editorial)] Ballesteros Amozurrutia A. **Rev Gastroenterol Mex** 1996 Oct-Dec;61(4):396–7 **(Spa)**
[Safety and efficacy of sphincterotomy using guided and precut techniques. A 5-year experience] Güitrón A, et al. **Rev Gastroenterol Mex** 1996 Oct-Dec;61(4):342–7 (Eng. Abstr.) **(Spa)**

UTILIZATION

ERCP and sphincterotomy in the context of laparoscopic cholecystectomy: academic and community practice patterns and results. Davis WZ, et al. **Am J Gastroenterol** 1997 Apr;92(4):597–601

SPHINCTEROTOMY, TRANSDUODENAL see **SPHINCTEROTOMY, TRANSHEPATIC**

SPHINCTEROTOMY, TRANSHEPATIC

Transduodenal sphincteroplasty and transampullary septectomy for papillary stenosis. Kelly SB, et al. **HPB Surg** 1996;9(4):199–207
Multidisciplinary conservative treatment of difficult bile duct stones: a real alternative to surgery. Masci E, et al. **HPB Surg** 1997;10(4):229–33; discussion 234
[Severe chronic parenchymatous pancreatitis: surgical treatment by wirsungo-sphincteroclasia. Original technique: 92 cases] Vankemmel M, et al. **Chirurgie** 1996; 121(6):406–14 (Eng. Abstr.) **(Fre)**

METHODS

Management of giant common bile duct stones in high-risk patients using a combined transhepatic and endoscopic approach. Matsumoto S, et al. **Am J Surg** 1997 Feb; 173(2):115–6
Percutaneous transhepatic sphincterotomy of the major papilla and stone extraction without endoscopic control. Angelini G, et al. **Cardiovasc Intervent Radiol** 1997 May-Jun;20(3):213–5
Percutaneous transhepatic cholangioscopy for diagnosis and therapy of biliary diseases in older patients. Van Steenbergen W, et al. **J Am Geriatr Soc** 1996 Nov; 44(11):1384–7
[Surgical treatment of chronic pancreatitis with predominant cephalic involvement by double Wirsung duct diversion and restoration of permeability of the cephalic duct] Kestens PJ, et al. **Ann Chir** 1996;50(10):853–60; discussion 861–4 (Eng. Abstr.) **(Fre)**
[The use of contact impulse-periodic YAG-ND laser in surgery of major duodenal papilla] Movchun AA, et al. **Khirurgiia (Mosk)** 1996;(5):26–30 (Eng. Abstr.) **(Rus)**

VETERINARY

Experimental transduodenal diathermic sphincterotomy in pigs. Szewczyk T, et al. **Acta Vet Hung** 1996;44(3):341–8

SPHINGOGLYCOLIPIDS see **GLYCOSPHINGOLIPIDS**

SPHINGOLIPIDOSES

EPIDEMIOLOGY

Leukodystrophy incidence in Germany. Heim P, et al. **Am J Med Genet** 1997 Sep 5;71(4):475–8

SPHINGOLIPIDS

[Frontiers in sphingolipid research] Hirabayashi Y. **Seikagaku** 1996 Jun;68(6):423–30 (45 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

Importance of sphingolipids and inhibitors of sphingolipid metabolism as components of animal diets. Merrill AH Jr, et al. **J Nutr** 1997 May;127(5 Suppl):830S–833S (22 ref.)

ANALYSIS

Simultaneous quantitative determination method for sphingolipid metabolites by liquid chromatography/ionspray ionization tandem mass spectrometry. Mano N, et al. **Anal Biochem** 1997 Jan 15; 244(2):291–300
Distinct interactions among GPI-anchored, transmembrane and membrane associated intracellular proteins, and sphingolipids in lymphocyte and endothelial cell plasma membranes. Ilangumaran S, et al. **Biochim Biophys Acta** 1997 Sep 4;1328(2):227–36

ANTAGONISTS & INHIBITORS

Inhibitors of sphingolipid synthesis modulate interferon (IFN)-gamma-induced intercellular adhesion molecule (ICAM)-1 and human leukocyte antigen (HLA)-DR expression on cultured normal human keratinocytes: possible involvement of ceramide in biologic action of IFN-gamma. Wakita H, et al. **J Invest Dermatol** 1996 Sep; 107(3):336–42
Importance of sphingolipids and inhibitors of sphingolipid metabolism as components of animal diets. Merrill AH Jr, et al. **J Nutr** 1997 May;127(5 Suppl):830S–833S (22 ref.)

BIOSYNTHESIS

Fumonisin toxicity and sphingolipid biosynthesis. Merrill AH Jr, et al. **Adv Exp Med Biol** 1996;392:297–306 (39 ref.)
Viridiofungins, novel inhibitors of sphingolipid synthesis. Mandala SM, et al. **J Antibiot (Tokyo)** 1997 Apr; 50(4):339–43
Dihydroceramide biology. Structure-specific metabolism and intracellular localization. Kok JW, et al. **J Biol Chem** 1997 Aug 22;272(34):21128–36
Sphingolipid synthesis as a target for antifungal drugs. Complementation of the inositol phosphorylceramide synthase defect in a mutant strain of Saccharomyces cerevisiae by the AUR1 gene. Nagiec MM, et al. **J Biol Chem** 1997 Apr 11;272(15):9809–17
ELO2 and ELO3, homologues of the Saccharomyces cerevisiae ELO1 gene, function in fatty acid elongation and are required for sphingolipid formation. Oh CS, et al. **J Biol Chem** 1997 Jul 11;272(28):17376–84
Inhibition of carnitine palmitoyltransferase I augments sphingolipid synthesis and palmitate-induced apoptosis. Paumen MB, et al. **J Biol Chem** 1997 Feb 7;272(6):3324–9
cis-4-Methylsphingosine decreases sphingolipid biosynthesis by specifically interfering with serine palmitoyltransferase activity in primary cultured neurons. van Echten-Deckert G, et al. **J Biol Chem** 1997 Jun 20;272(25):15825–33

CHEMISTRY

An apparent association between glycosylphosphatidylinositol-anchored proteins and a sphingolipid in Tetrahymena mimbres. Zhang X, et al. **Biochem J** 1997 Apr 1;323 (Pt 1):197–206
On the origin of sphingolipid/cholesterol-rich detergent-insoluble cell membranes: physiological concentrations of cholesterol and sphingolipid induce formation of a detergent-insoluble, liquid-ordered lipid phase in model membranes. Ahmed SN, et al. **Biochemistry** 1997 Sep 9;36(36):10944–53
Sphingolipid-derived signalling modulators: interaction with phosphatidylserine. Rigby AC, et al. **Biochim Biophys Acta** 1996 Oct 23;1284(2):129–33
Formation of high-axial-ratio-microstructures from natural and synthetic sphingolipids. Goldstein AS, et al. **Chem Phys Lipids** 1997 Aug 8;88(1):21–36
Suppression of aberrant colonic crypt foci by synthetic sphingomyelins with saturated or unsaturated sphingoid base backbones. Schmelz EM, et al. **Nutr Cancer** 1997; 28(1):81–5

ISOLATION & PURIFICATION

Isolation and characterization of inositol sphingophospholipids from Phytophthora parasitica Dastur. Bruneteau M, et al. **Lipids** 1997 Apr;32(4):359–62

METABOLISM

"Cross talk" between the bioactive glycerolipids and sphingolipids in signal transduction. Brindley DN, et al. **Biochem Cell Biol** 1996;74(4):469–76 (61 ref.)

Tumor malignancy defined by aberrant glycosylation and sphingo(glyco)lipid metabolism. Hakomori S. **Cancer Res** 1996 Dec 1;56(23):5309–18 (133 ref.)

Two distinct binding sites for globotriaosyl ceramide on verotoxins: identification by molecular modelling and confirmation using deoxy analogues and a new glycolipid receptor for all verotoxins [published erratum appears in Chem Biol 1996 Jan;3(1):503] Nyholm PG, et al. **Chem Biol** 1996 Apr;3(4):263–75

Oxidation of fluorescent glycero- and sphingophospholipids in human plasma lipoproteins: alkenylacyl subclasses are preferred targets. Hofer G, et al. **Clin Biochem** 1996 Oct; 29(5):445–50

Caveolae, DIGs, and the dynamics of sphingolipid–cholesterol microdomains. Harder T, et al. **Curr Opin Cell Biol** 1997 Aug;9(4):534–42 (75 ref.)

Sphingolipid activator proteins. Suzuki K. **Essays Biochem** 1995;29:25–37 (28 ref.)

Sphingolipid metabolism and cell growth regulation. Spiegel S, et al. **FASEB J** 1996 Oct;10(12):1388–97 (130 ref.)

Molecular diversity of sphingolipid signalling. Meyer zu Heringdorf D, et al. **FEBS Lett** 1997 Jun 23;410(1):34–8 (57 ref.)

Involvement of sphingolipids metabolites in cellular proliferation modulated by ganglioside GM1. Wang F, et al. **Glycoconj J** 1996 Dec;13(6):937–45

Targeted disruption of the mouse sphingolipid activator protein gene: a complex phenotype, including severe leukodystrophy and wide-spread storage of multiple sphingolipids. Fujita N, et al. **Hum Mol Genet** 1996 Jun; 5(6):711–25

Identification of a Saccharomyces gene, LCB3, necessary for incorporation of exogenous long chain bases into sphingolipids. Qie L, et al. **J Biol Chem** 1997 Jun 27; 272(26):16110–7

Fumonisin B1–induced sphingolipid depletion inhibits vitamin uptake via the glycosylphosphatidylinositol–anchored folate receptor. Stevens VL, et al. **J Biol Chem** 1997 Jul 18;272(29):18020–5

Sphingolipid transport to the apical plasma membrane domain in human hepatoma cells is controlled by PKC and PKA activity: a correlation with cell polarity in HepG2 cells. Zegers MMP, et al. **J Cell Biol** 1997 Jul 28; 138(2):307–21

Sphingolipid–dependent signaling in regulation of cytochrome P450 expression. Morgan ET, et al. **Methods Enzymol** 1996;272:381–8

[Saposins and sphingolipid metabolisms] Hiraiwa M, et al. **Seikagaku** 1996 Jun;68(6):464–74 (67 ref.) **(Jpn)**

PHARMACOLOGY

Sphingolipids increase calcium concentration in isolated rat liver nuclei. Catalán RE, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):347–50

Multivalent ganglioside and sphingosine conjugates modulate myelin protein kinases. Mahoney JA, et al. **Biochim Biophys Acta** 1997 Aug 14;1328(1):30–40

Induction of programmed cell death and immunosuppression by exogenous sphingolipids are separate processes. Olshefski R, et al. **Eur J Biochem** 1996 Oct 1;241(1):47–55

Elevation of ceramide within distal neurites inhibits neurite growth in cultured rat sympathetic neurons. de Chaves EIP, et al. **J Biol Chem** 1997 Jan 31;272(5):3028–35

Structural requirements of sphingosylphosphocholine and sphingosine–1–phosphate for stimulation of activator protein–1 activity. Berger A, et al. **Mol Pharmacol** 1996 Sep;50(3):451–7

Calcium signalling by G protein–coupled sphingolipid receptors in bovine aortic endothelial cells. Meyer zu Heringdrof D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):397–403

A membrane network for nutrient import in red cells infected with the malaria parasite [see comments] Lauer SA, et al. **Science** 1997 May 16;276(5315):1122–5. Comment in: Science 1997 May 16;276(5315):1031.

Malaria research. How the parasite gets its food [news; comment] Vogel G. **Science** 1997 May 16;276(5315):1031 . Comment on: Science 1997 May 16;276(5315):1122–5.

PHYSIOLOGY

Sphingolipids as differential regulators of cellular signalling processes. Pyne S, et al. **Biochem Soc Trans** 1997 May; 25(2):549–56 (59 ref.)

Lipid biochemistry: functions of glycerolipids and sphingolipids in cellular signaling. Ghosh S, et al. **FASEB J** 1997 Jan;11(1):45–50 (55 ref.)

Suppressor gene analysis reveals an essential role for sphingolipids in transport of glycosylphosphatidylinositol–anchored proteins in Saccharomyces cerevisiae. Skrzypek M, et al. **J Bacteriol** 1997 Mar;179(5):1513–20

Interaction of earthworm hemolysin with lipid membranes requires sphingolipids. Lange S, et al. **J Biol Chem** 1997 Aug 15;272(33):20884–92

The role of sphingolipids in the maintenance of fibroblast morphology. The inhibition of protrusional activity, cell spreading, and cytokinesis induced by fumonisin B1 can be reversed by ganglioside GM3. Meivar–Levy I, et al. **J Biol Chem** 1997 Jan 17;272(3):1558–64

Sphingolipids—the enigmatic lipid class: biochemistry, physiology, and pathophysiology. Merrill AH Jr, et al. **Toxicol Appl Pharmacol** 1997 Jan;142(1):208–25 (168 ref.)

[Sphingolipids—a new group of lipid second messengers?] Mesarić M. **Lijec Vjesn** 1996 Jul–Aug;118(7–8):178–83 (81 ref.) (Eng. Abstr.) **(Scr)**

SPHINGOMYELIN CHOLINEPHOSPHOHYDROLASE see **SPHINGOMYELIN PHOSPHODIESTERASE**

SPHINGOMYELIN CLEAVING ENZYME see **SPHINGOMYELIN PHOSPHODIESTERASE**

SPHINGOMYELIN PHOSPHODIESTERASE

see related
NIEMANN–PICK DISEASE

ANALYSIS

In situ assay of acid sphingomyelinase and ceramidase based on LDL–mediated lysosomal targeting of ceramide–labeled sphingomyelin. Levade T, et al. **J Lipid Res** 1996 Dec; 37(12):2525–38

ANTAGONISTS & INHIBITORS

Inhibition of the neutral magnesium–dependent sphingomyelinase by glutathione. Liu B, et al. **J Biol Chem** 1997 Jun 27;272(26):16281–7

Influence of L–carnitine on CD95 cross–lining–induced apoptosis and ceramide generation in human cell lines: correlation with its effects on purified acidic and neutral sphingomyelinases in vitro. Di Marzio L, et al. **Proc Assoc Am Physicians** 1997 Mar;109(2):154–63

BLOOD

Activation of neutral sphingomyelinase in human neutrophils by polyunsaturated fatty acids. Robinson BS, et al. **Immunology** 1997 Jun;91(2):274–80

CHEMISTRY

Mutual modulation of sphingomyelinase and phospholipase A2 activities against mixed lipid monolayers by their lipid intermediates and glycosphingolipids. Fanani ML, et al. **Mol Membr Biol** 1997 Jan–Mar;14(1):25–9

DEFICIENCY

Bone marrow transplantation in acid sphingomyelinase–deficient mice: engraftment and cell migration into the brain as a function of radiation, age, and phenotype. Miranda SR, et al. **Blood** 1997 Jul 1; 90(1):444–52

Tumor necrosis factor alpha activates NF–kappaB in acid sphingomyelinase–deficient mouse embryonic fibroblasts. Zumbansen M, et al. **J Biol Chem** 1997 Apr 18; 272(16):10904–9

Two novel mutations in patients with atypical phenotypes of acid sphingomyelinase deficiency. Pavlu H, et al. **J Inherit Metab Dis** 1997 Aug;20(4):615–6

Light and electron microscopic analysis of the central and peripheral nervous systems of acid sphingomyelinase–deficient mice resulting from gene targeting. Kuemmel TA, et al. **J Neuropathol Exp Neurol** 1997 Feb;56(2):171–9

GENETICS

Light and electron microscopic analysis of the central and peripheral nervous systems of acid sphingomyelinase–deficient mice resulting from gene targeting. Kuemmel TA, et al. **J Neuropathol Exp Neurol** 1997 Feb;56(2):171–9

A distant evolutionary relationship between bacterial sphingomyelinase and mammalian DNase I. Matsuo Y, et al. **Protein Sci** 1996 Dec;5(12):2459–67

ISOLATION & PURIFICATION

Purification of acid sphingomyelinase from human placenta: characterization and N–terminal sequence. Lansmann S, et al. **FEBS Lett** 1996 Dec 16;399(3):227–31

Purification of a newly identified alkaline sphingomyelinase in human bile and effects of bile salts and phosphatidylcholine on enzyme activity. Duan RD, et al. **Hepatology** 1997 Oct;26(4):823–30

Purification of Staphylococcus aureus beta–toxin: comparison of three isoelectric focusing methods. Gaskin DK, et al. **Protein Expr Purif** 1997 Feb;9(1):76–82

METABOLISM

Inhibition of TSH–induced hydrogen peroxide production by TNF–alpha through a sphingomyelinase signaling pathway. Kimura T, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):E639–43

Comparison of the beta–toxins from Staphylococcus aureus and Staphylococcus intermedius. Dziewanowska K, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):102–8

Characterization of a sphingomyelinase activity in Saccharomyces cerevisiae. Ella KM, et al. **Arch Biochem Biophys** 1997 Apr 1;340(1):101–10

Sphingomyelinase activity is enhanced in cerebral cortex of senescence–accelerated mouse–P/10 with advancing age. Kim SS, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):583–7

Effects of Ara–C on neutral sphingomyelinase and mitogen– and stress–activated protein kinases in T–lymphocyte cell lines. Bradshaw CD, et al. **Biochem Mol Biol Int** 1996 Nov; 40(4):709–19

Ganglioside GM1 potentiates the effect of IL–1 beta on neutral sphingomyelinase activity in rat brain synaptosomes. Nalivaeva NN, et al. **Biochem Soc Trans** 1997 May;25(2):214S

Interfacial regulation of bacterial sphingomyelinase activity. Jungner M, et al. **Biochim Biophys Acta** 1997 Feb 18; 1344(3):230–40

Alkaline sphingomyelinase activity is decreased in human colorectal carcinoma. Hertervig E, et al. **Cancer** 1997 Feb 1;79(3):448–53

FAN, a novel WD–repeat protein, couples the p55 TNF–receptor to neutral sphingomyelinase. Adam–Klages S, et al. **Cell** 1996 Sep 20;86(6):937–47

Functional characterization of the N–glycosylation sites of human acid sphingomyelinase by site–directed mutagenesis. Ferlinz K, et al. **Eur J Biochem** 1997 Jan 15;243(1–2):511–7

Serine protease inhibitors block neutral sphingomyelinase activation, ceramide generation, and apoptosis triggered by daunorubicin. Mansat V, et al. **FASEB J** 1997 Jul; 11(8):695–702

The CD40–ligand stimulates T–lymphocytes via the neutral sphingomyelinase: a novel function of the CD40–ligand as signalling molecule. Koppenhoefer U, et al. **FEBS Lett** 1997 Sep 8;414(2):444–8

Activation of acidic sphingomyelinase and protein kinase C zeta is required for IL–1 induction of LIF mRNA in a Schwann cell line. Carlson CD, et al. **Glia** 1996 Sep; 18(1):49–58

Microwave incubation improves lipolytic enzyme preservation for ultrastructural cytochemistry. Rassner UA, et al. **Histochem J** 1997 May;29(5):387–92

Site–specific mutagenesis of Clostridium perfringens alpha–toxin: replacement of Asp–56, Asp–130, or Glu–152 causes loss of enzymatic and hemolytic activities. Nagahama M, et al. **Infect Immun** 1997 Aug;65(8):3489–92

Functional analysis of the glycosylation of murine acid sphingomyelinase. Newrzella D, et al. **J Biol Chem** 1996 Dec 13;271(50):32089–95

Sphingosine mediates the immediate negative inotropic effects of tumor necrosis factor–alpha in the adult mammalian cardiac myocyte. Oral H, et al. **J Biol Chem** 1997 Feb 21;272(8):4836–42

Expression of neutral sphingomyelinase identifies a distinct pool of sphingomyelin involved in apoptosis. Zhang P, et al. **J Biol Chem** 1997 Apr 11;272(15):9609–12

Rabbit aorta and human atherosclerotic lesions hydrolyze the sphingomyelin of retained low–density lipoprotein. Proposed role for arterial–wall sphingomyelinase in subendothelial retention and aggregation of atherogenic lipoproteins. Schissel SL, et al. **J Clin Invest** 1996 Sep 15; 98(6):1455–64

Induction of activator protein (AP)–1 and nuclear factor–kappaB by CD28 stimulation involves both phosphatidylinositol 3–kinase and acidic sphingomyelinase signals. Edmead CE, et al. **J Immunol** 1996 Oct 15; 157(8):3290–7

Identification of p55 tumor necrosis factor receptor–associated proteins that couple to signaling pathways not initiated by the death domain. Adam D, et al. **J Inflamm** 1995–96;47(1–2):61–6 (35 ref.)

Sphingoid bioregulators in the differentiation of cells of neural origin. Tettamanti G, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):263–75

Sphingomyelinase and phospholipase A2 regulate type I deiodinase expression in FRTL–5 cells. Pekary AE, et al. **Thyroid** 1997 Aug;7(4):647–54

PHARMACOLOGY

Ceramide: a novel cell signaling mechanism for vasodilation. Johns DG, et al. **Biochem Biophys Res Commun** 1997 Aug 8;237(1):95–7

Morphological changes induced by phospholipase C and by sphingomyelinase on large unilamellar vesicles: a cryo–transmission electron microscopy study of liposome fusion. Basáñez G, et al. **Biophys J** 1997 Jun;72(6):2630–7

Effects of ceramide and protein kinase C on the regulation of type I 5'–deiodinase in FRTL–5 rat thyroid cells. Mori K, et al. **Endocrinology** 1996 Nov;137(11):4994–9

Effects of sphingomyelinase and sphingosine on arterial vasomotor regulation. Murohara T, et al. **J Lipid Res** 1996 Jul;37(7):1601–8

PHYSIOLOGY

Chromatin neutral sphingomyelinase and its role in hepatic

SPHINGOMYELIN PHOSPHODIESTERASE

regeneration. Albi E, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):29–33

TNF-alpha enhances Toxoplasma gondii cyst formation in human fibroblasts through the sphingomyelinase pathway. Ricard J, et al. **Cell Signal** 1996 Sep;8(6):439–42

THERAPEUTIC USE

Enzyme replacement therapy [editorial; comment] Roth KS. **Clin Pediatr (Phila)** 1997 Mar;36(3):147–8. Comment on: Clin Pediatr (Phila) 1997 Mar;36(3):141–6.

SPHINGOMYELINASE see **SPHINGOMYELIN PHOSPHODIESTERASE**

SPHINGOMYELINS

ADMINISTRATION & DOSAGE

Sphingomyelin consumption suppresses aberrant colonic crypt foci and increases the proportion of adenomas versus adenocarcinomas in CF1 mice treated with 1,2-dimethylhydrazine: implications for dietary sphingolipids and colon carcinogenesis. Schmelz EM, et al. **Cancer Res** 1996 Nov 1;56(21):4936–41

ANALYSIS

Liquid chromatography/mass-spectrometric characterization of sphingomyelin and dihydrosphingomyelin of human lens membranes. Byrdwell WC, et al. **Ophthalmic Res** 1997;29(4):191–206

BIOSYNTHESIS

Inflammatory activation of arachidonic acid signaling in murine P388D1 macrophages via sphingomyelin synthesis. Balsinde J, et al. **J Biol Chem** 1997 Aug 15;272(33):20373–7

Synthesis of sphingomyelin by oligodendrocytes--how and where? Vos JP, et al. **J Lipid Mediat Cell Signal** 1996 Sep; 14(1–3):313–9

[Effect of thyroxine on synthesis of ceramide, sphingomyelin and phosphatidylcholine in rat hepatocytes] Natarova IuA, et al. **Ukr Biokhim Zh** 1996 Sep-Oct;68(5):94–7 (Eng. Abstr.) **(Rus)**

BLOOD

Identification of a new sphingolipid 3-O-acyl-D-erythro-sphingomyelin in newborn pig and infant plasma. Kramer JK, et al. **Biochim Biophys Acta** 1996 Sep 6;1303(1):47–55

CHEMISTRY

Evidence for distinct behaviour of phosphatidylcholine and sphingomyelin at the low density lipoprotein surface. Murphy HC, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):733–7

Effect of sphingomyelin composition on the phase structure of phosphatidylcholine-sphingomyelin bilayers. Bar LK, et al. **Biochemistry** 1997 Mar 4;36(9):2507–16

Lipid domains in the membrane: thermotropic properties of sphingomyelin vesicles containing GM1 ganglioside and cholesterol. Ferraretto A, et al. **Biochemistry** 1997 Jul 29; 36(30):9232–6

Identification of a new sphingolipid 3-O-acyl-D-erythro-sphingomyelin in newborn pig and infant plasma. Kramer JK, et al. **Biochim Biophys Acta** 1996 Sep 6;1303(1):47–55

Changes in the spectral properties of a plasma membrane lipid analog during the first seconds of endocytosis in living cells. Chen CS, et al. **Biophys J** 1997 Jan;72(1):37–50

Interactions of N-stearoyl sphingomyelin with cholesterol and dipalmitoylphosphatidylcholine in bilayer membranes. Maulik PR, et al. **Biophys J** 1996 May;70(5):2256–65

Dietary very long chain fatty acids directly influence the ratio of tetracosenoic (24:1) to tetracosanoic (24:0) acids of sphingomyelin in rat liver. Bettger WJ, et al. **Lipids** 1997 Jan;32(1):51–5

Suppression of aberrant colonic crypt foci by synthetic sphingomyelins with saturated or unsaturated sphingoid base backbones. Schmelz EM, et al. **Nutr Cancer** 1997; 28(1):81–5

Amniotic fluid polarization of fluorescence and lecithin/sphingomyelin ratio decision criteria assessed. Bernstein LH, et al. **Yale J Biol Med** 1995 May-Aug; 68(3–4):101–17

METABOLISM

Interference of HIV-1 Nef in the sphingomyelin transduction pathway activated by tumour necrosis factor-alpha in human glial cells. Richard A, et al. **AIDS** 1997 Jan; 11(1):F1–7

Sphingomyelin metabolism is developmentally regulated in rat lung. Longo CA, et al. **Am J Respir Cell Mol Biol** 1997 May;16(5):605–12

Effect of hyperbaric oxygen on sphingomyelinase D activity of brown recluse spider (Loxosceles reclusa) venom as studied by 31P nuclear magnetic resonance spectroscopy. Merchant ML, et al. **Am J Trop Med Hyg** 1997 Mar; 56(3):335–8

Six alternative methods to the lecithin/sphingomyelin ratio in amniotic fluid for assessing fetal lung maturity. Dilena BA, et al. **Ann Clin Biochem** 1997 Jan;34 (Pt 1):106–8

Stress-induced apoptosis and the sphingomyelin pathway. Peña LA, et al. **Biochem Pharmacol** 1997 Mar 7; 53(5):615–21 (63 ref.)

Interfacial regulation of bacterial sphingomyelinase activity. Jungner M, et al. **Biochim Biophys Acta** 1997 Feb 18; 1344(3):230–40

Influence of bile salts on molecular interactions between sphingomyelin and cholesterol: relevance to bile formation and stability. van Erpecum KJ, et al. **Biochim Biophys Acta** 1997 Apr 21;1345(3):269–82

Arachidonic acid mediates interferon-gamma-induced sphingomyelin hydrolysis and monocytic marker expression in HL-60 cell line. Višnjić D, et al. **Blood** 1997 Jan 1;89(1):81–91

Activation of the sphingomyelin cycle by brefeldin A: effects of brefeldin A on differentiation and implications for a role for ceramide in regulation of protein trafficking. Linardic CM, et al. **Cell Growth Differ** 1996 Jun;7(6):765–74

Incorporation of proteins in sphingomyelin-water gel phases. Minami H, et al. **Chem Phys Lipids** 1996 Jan 25;79(1):65–70

IgG immunoglobulins induce activation of the sphingomyelin cycle in HL-60 cells. Glick D, et al. **FEBS Lett** 1996 Oct 7;394(3):237–40

Modified low density lipoprotein delivers substrate for ceramide formation and stimulates the sphingomyelin-ceramide pathway in human macrophages. Kinscherf R, et al. **FEBS Lett** 1997 Mar 17;405(1):55–9

Effect of sphingomyelin and its metabolites on the activity of human recombinant PLC delta 1. Matecki A, et al. **Int J Biochem Cell Biol** 1997 May;29(5):815–28

Association of p75(NTR) with caveolin and localization of neurotrophin-induced sphingomyelin hydrolysis to caveolae. Bilderback TR, et al. **J Biol Chem** 1997 Apr 18; 272(16):10922–7

Ialpha,25-dihydroxyvitamin D3 induces sphingomyelin hydrolysis in HaCaT cells via tumor necrosis factor alpha. Geilen CC, et al. **J Biol Chem** 1997 Apr 4; 272(14):8997–9001

Anti-immunoglobulin-induced apoptosis in WEHI 231 cells involves the slow formation of ceramide from sphingomyelin and is blocked by bcl-XL. Wiesner DA, et al. **J Biol Chem** 1997 Apr 11;272(15):9868–76

Expression of neutral sphingomyelinase identifies a distinct pool of sphingomyelin involved in apoptosis. Zhang P, et al. **J Biol Chem** 1997 Apr 11;272(15):9609–12

Segregation of glucosylceramide and sphingomyelin occurs in the apical to basolateral transcytotic route in HepG2 cells. van IJzendoorn SC, et al. **J Cell Biol** 1997 Apr 21; 137(2):347–57

Transport of sphingomyelin to the cell surface is inhibited by brefeldin A and in mitosis, where C6-NBD-sphingomyelin is translocated across the plasma membrane by a multidrug transporter activity. van Helvoort A, et al. **J Cell Sci** 1997 Jan;110 (Pt 1):75–83

Abnormal expression of sphingomyelin acylase in atopic dermatitis: an etiologic factor for ceramide deficiency? Murata Y, et al. **J Invest Dermatol** 1996 Jun;106(6):1242–9

In situ assay of acid sphingomyelinase and ceramidase based on LDL-mediated lysosomal targeting of ceramide-labeled sphingomyelin. Levade T, et al. **J Lipid Res** 1996 Dec; 37(12):2525–38

Effects of sphingomyelinase and sphingosine on arterial vasomotor regulation. Murohara T, et al. **J Lipid Res** 1996 Jul;37(7):1601–8

Relationships between phosphatidylcholine, phosphatidylethanolamine, and sphingomyelin metabolism in cultured oligodendrocytes. Vos JP, et al. **J Neurochem** 1997 Mar;68(3):1252–60

Selective modulation of membrane sphingomyelin fatty acid turnover by nigericin. A study in the rat reticulocyte. Le Petit-Thevenin J, et al. **Life Sci** 1996;59(19):PL289–94

Topography and thermotropic properties of cannabinoids in brain sphingomyelin bilayers. Mavromoustakos T, et al. **Life Sci** 1996;59(23):1969–79

Sphingomyelin metabolism is linked to salt transport in the gills of euryhaline fish. el Babili M, et al. **Lipids** 1996 Apr; 31(4):385–92

Sphingomyelin changes in rat cerebral cortex during focal ischemia. Kubota M, et al. **Neurol Res** 1996 Aug; 18(4):337–41

Cholesterol-sphingomyelin interactions in cells--effects on lipid metabolism. Slotte JP. **Subcell Biochem** 1997; 28:277–93 (86 ref.)

[Sphingomyelin and its catabolism in cell nucleus: their possible roles in regulation mechanism of DNA replication] Tamiya-Koizumi K. **Seikagaku** 1996 Jun;68(6):453–63 (30 ref.) **(Jpn)**

[Sphingomyelin and its metabolites as an intermediate in cellular signal transduction] Dzik JM, et al. **Postepy Biochem** 1996;42(3):299–309 (109 ref.) **(Pol)**

PHARMACOKINETICS

Changes in the spectral properties of a plasma membrane lipid analog during the first seconds of endocytosis in living cells. Chen CS, et al. **Biophys J** 1997 Jan;72(1):37–50

PHARMACOLOGY

Inhibition of phospholipase C-delta 1 catalytic activity by sphingomyelin. Scarlata S, et al. **Biochemistry** 1996 Nov 26;35(47):14882–8

PHYSIOLOGY

Sphingomyelin breakdown and cell fate. Testi R. **Trends Biochem Sci** 1996 Dec;21(12):468–71 (51 ref.)

[Sphingomyelin cycle: role in cell functions inducing apoptosis] Okazaki T. **Seikagaku** 1996 Jun;68(6):431–43 (84 ref.) **(Jpn)**

THERAPEUTIC USE

Cows' milk fat components as potential anticarcinogenic agents. Parodi PW. **J Nutr** 1997 Jun;127(6):1055–60 (71 ref.)

Suppression of aberrant colonic crypt foci by synthetic sphingomyelins with saturated or unsaturated sphingoid base backbones. Schmelz EM, et al. **Nutr Cancer** 1997; 28(1):81–5

SPHINGOSINE

ANALOGS & DERIVATIVES

Cross-talk between ceramide and PKC activity in the control of apoptosis in WEHI-231. Chmura SJ, et al. **Adv Exp Med Biol** 1996;406:39–55

Characterization of sphingosine 1-phosphate-induced actions and its signaling pathways in rat hepatocytes. Im DS, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1091–9

Sphingosine 1-phosphate stimulates Na+/H+ exchange in thyroid FRTL-5 cells. Törnquist K. **Am J Physiol** 1997 Mar;272(3 Pt 1):C1052–7

Sphingolipid actions on sodium and calcium currents of rat ventricular myocytes. Yasui K, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C645–9

Induction of apoptosis by sphingosine-1-phosphate in human hepatoma cells is associated with enhanced expression of bax gene product. Hung WC, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):11–5

Sphingosine-1-phosphate mobilizes intracellular calcium and activates transcription factor NF-kappa B in U937 cells. Shatrov VA, et al. **Biochem Biophys Res Commun** 1997 May 8;234(1):121–4

Inhibitory action of sphingosine or ceramide on amylase secretion from isolated rat pancreatic acini. Shinkai M, et al. **Biochem Biophys Res Commun** 1997 Jun 9; 235(1):197–200

Activation of protein-tyrosine kinase Syk in human platelets stimulated with lysophosphatidic acid or sphingosine 1-phosphate. Yang L, et al. **Biochem Biophys Res Commun** 1996 Dec 13;229(2):440–4

N,N-dimethylsphingosine phosphorylation in human platelets. Yatomi Y, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):848–51

Sphingosylphosphocholine modulates the ryanodine receptor/calcium-release channel of cardiac sarcoplasmic reticulum membranes. Betto R, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):327–33

Sphingosine 1-phosphate stimulates rho-mediated tyrosine phosphorylation of focal adhesion kinase and paxillin in Swiss 3T3 fibroblasts. Wang F, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):481–8

Sphingosine 1-phosphate regulates melanoma cell motility through a receptor-coupled extracellular action and in a pertussis toxin-insensitive manner. Yamamura S, et al. **Biochemistry** 1997 Sep 2;36(35):10751–9

Picomole scale stereochemical analysis of sphingosines and dihydrosphingosines. Kawamura A, et al. **Bioorg Med Chem** 1996 Jul;4(7):1035–43

The identification of DL-threo dihydrosphingosine and sphingosine as novel inhibitors of extracellular signal-regulated kinase signalling in airway smooth muscle. Tolan D, et al. **Br J Pharmacol** 1996 Sep;119(2):185–6

Growth inhibition of human pancreatic cancer cells by sphingosylphosphorylcholine and influence of culture conditions. Yamada T, et al. **Cell Mol Life Sci** 1997 May; 53(5):435–41

Differential effects of synthetic sphingosine derivatives on melanoma cell motility, growth, adhesion and invasion in vitro. Helige C, et al. **Clin Exp Metastasis** 1996 Nov; 14(6):477–89

A novel membrane receptor with high affinity for lysosphingomyelin and sphingosine 1-phosphate in atrial myocytes. Bünemann M, et al. **EMBO J** 1996 Oct 15; 15(20):5527–34

Sphingosine 1-phosphate stimulates hydrogen peroxide generation through activation of phospholipase C-Ca2+ system in FRTL-5 thyroid cells: possible involvement of guanosine triphosphate-binding proteins in the lipid signaling. Okajima F, et al. **Endocrinology** 1997 Jan; 138(1):220–9

Sphingosine 1-phosphate mobilizes sequestered calcium, activates calcium entry, and stimulates deoxyribonucleic acid synthesis in thyroid FRTL-5 cells. Törnquist K, et al. **Endocrinology** 1997 Oct;138(10):4049–57

Sphingolipid metabolism and cell growth regulation. Spiegel S, et al. **FASEB J** 1996 Oct;10(12):1388–97 (130 ref.)

Phosphocholine and sphingosine-1-phosphate synergistically stimulate DNA synthesis by a MAP kinase-dependent mechanism. Kiss Z, et al. **FEBS Lett** 1997 Jul 21; 412(1):197–200

Ceramide induces apoptosis via CPP32 activation. Mizushima N, et al. **FEBS Lett** 1996 Oct 21;395(2-3):267–71

Bcl-2 antagonizes apoptotic cell death induced by two new

ceramide analogues. Wieder T, et al. **FEBS Lett** 1997 Jul 14;411(2–3):260–4
Distribution of sphingosine 1–phosphate, a bioactive sphingolipid, in rat tissues. Yatomi Y, et al. **FEBS Lett** 1997 Mar 10;404(2–3):173–4
C2–ceramide and C6–ceramide inhibited priming for enhanced release of superoxide in monocytes, but had no effect on the killing of leukaemic cells by monocytes. Nakabo Y, et al. **Immunology** 1997 Apr;90(4):477–82
Sphingosine 1–phosphate, a bioactive sphingolipid abundantly stored in platelets, is a normal constituent of human plasma and serum. Yatomi Y, et al. **J Biochem (Tokyo)** 1997 May;121(5):969–73
Sites of reaction of the gastric H,K–ATPase with extracytoplasmic thiol reagents. Besancon M, et al. **J Biol Chem** 1997 Sep 5;272(36):22438–46
Sphingosine 1–phosphate stimulates tyrosine phosphorylation of Crk. Blakesley VA, et al. **J Biol Chem** 1997 Jun 27; 272(26):16211–5
ATP–dependent choline phosphate–induced mitogenesis in fibroblasts involves activation of pp70 S6 kinase and phosphatidylinositol 3'–kinase through an extracellular site. Synergistic mitogenic effects of choline phosphate and sphingosine 1–phosphate. Chung T, et al. **J Biol Chem** 1997 Jan 31;272(5):3064–72
Direct inhibition of mitochondrial respiratory chain complex III by cell–permeable ceramide. Gudz TI, et al. **J Biol Chem** 1997 Sep 26;272(39):24154–8
Sphingosylphosphocholine reduces the calcium ion requirement for activating tissue transglutaminase. Lai TS, et al. **J Biol Chem** 1997 Jun 27;272(26):16295–300
Divergence in signal transduction pathways of platelet–derived growth factor (PDGF) and epidermal growth factor (EGF) receptors. Involvement of sphingosine 1–phosphate in PDGF but not EGF signaling. Rani CS, et al. **J Biol Chem** 1997 Apr 18;272(16):10777–83
cis–4–Methylsphingosine decreases sphingolipid biosynthesis by specifically interfering with serine palmitoyltransferase activity in primary cultured neurons. van Echten–Deckert G, et al. **J Biol Chem** 1997 Jun 20;272(25):15825–33
Sphingosine 1–phosphate induces platelet activation through an extracellular action and shares a platelet surface receptor with lysophosphatidic acid. Yatomi Y, et al. **J Biol Chem** 1997 Feb 21;272(8):5291–7
Rapid method to determine sphinganine/sphingosine in human and animal urine as a biomarker for fumonisin exposure. Solfrizzo M, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):87–93
Lysosphingomyelin–elicited Ca2+ mobilization from rat brain microsomes. Furuya S, et al. **J Lipid Mediat Cell Signal** 1996 Sep;14(1–3):303–11
Evaluation of a trans configuration for the apoptosis–inducing activity of ceramide. Kishida E, et al. **J Lipid Mediat Cell Signal** 1997 Jul;16(3):127–37
Changes of free long–chain bases in neuronal cells during differentiation and aging in culture. Valsecchi M, et al. **J Neurochem** 1996 Nov;67(5):1866–71
Ceramide selectively decreases tau levels in differentiated PC12 cells through modulation of calpain I. Xie H, et al. **J Neurochem** 1997 Sep;69(3):1020–30
Involvement of sphingosine 1–phosphate in nerve growth factor–mediated neuronal survival and differentiation. Edsall LC, et al. **J Neurosci** 1997 Sep 15;17(18):6952–60
Protein kinase C mediated anti–proliferative glucocorticoid–sphinganine synergism in cultured Pollard III prostate tumor cells. Sosnowski J, et al. **J Urol** 1997 Jul;158(1):269–74
Cell–permeable ceramide inhibits the growth of B lymphoma Raji cells lacking TNF–alpha–receptors by inducing G0/G1 arrest but not apoptosis: a new model for dissecting cell–cycle arrest and apoptosis. Kuroki J, et al. **Leukemia** 1996 Dec;10(12):1950–8
Structural requirements of sphingosylphosphocholine and sphingosine–1–phosphate for stimulation of activator protein–1 activity. Berger A, et al. **Mol Pharmacol** 1996 Sep;50(3):451–7
Development of a new method for the analysis of sphinganine and sphingosine in urine and tissues. Castegnaro M, et al. **Nat Toxins** 1996;4(6):284–90
Ceramide–mediated and isoquinolinesulfonamide–sensitive pathways of neuronal death: anything in common? Manev H, et al. **Neurochem Int** 1997 Aug;31(2):203–6
Induction of oligodendrocyte apoptosis by C2–ceramide. Larocca JN, et al. **Neurochem Res** 1997 Apr;22(4):529–34
Effects of fumonisin B1 treatment on blood–brain barrier transfer in developing rats. Kwon OS, et al. **Neurotoxicol Teratol** 1997 Mar–Apr;19(2):151–5
Fumonisin B1 in developing rats alters brain sphinganine levels and myelination. Kwon OS, et al. **Neurotoxicology** 1997;18(2):571–79
Cerebrodiene, arachidonyl–ethanolamide, and hybrid structures: potential for interaction with brain cannabinoid receptors. Boring DL, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Sep; 55(3):207–10
Disruption of sphingolipid metabolism in non–human primates consuming diets of fumonisin–containing Fusarium moniliforme culture material. Shephard GS, et al. **Toxicon** 1996 May;34(5):527–34
Effects of fusarium moniliforme isolates on tissue and serum sphingolipid concentrations in horses. Goel S, et al. **Vet Hum Toxicol** 1996 Aug;38(4):265–70

ANALYSIS

Development of a new method for the analysis of sphinganine and sphingosine in urine and tissues. Castegnaro M, et al. **Nat Toxins** 1996;4(6):284–90
Sphingosine–containing phospholipid vesicles support human factor VII autoactivation in the absence of tissue factor. Iino M, et al. **Thromb Res** 1996 Apr 15;82(2):119–27

BLOOD

Disruption of sphingolipid metabolism in non–human primates consuming diets of fumonisin–containing Fusarium moniliforme culture material. Shephard GS, et al. **Toxicon** 1996 May;34(5):527–34
Effects of fusarium moniliforme isolates on tissue and serum sphingolipid concentrations in horses. Goel S, et al. **Vet Hum Toxicol** 1996 Aug;38(4):265–70

CHEMISTRY

Picomole scale stereochemical analysis of sphingosines and dihydrosphingosines. Kawamura A, et al. **Bioorg Med Chem** 1996 Jul;4(7):1035–43

METABOLISM

Acetylation of sphingosine by PAF–dependent transacetylase. Lee T. **Adv Exp Med Biol** 1996;416:113–9
N,N–dimethylsphingosine phosphorylation in human platelets. Yatomi Y, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):848–51
Relation of biological activity of mutant forms of recombinant human tumor necrosis factor alpha and accumulation of sphingosine in murine liver. Alessenko AV, et al. **Biochem Mol Biol Int** 1997 Jun;42(1):143–54
Use of fumonisin B1 to test the intercellular transfer of sphingosine. Inooka S, et al. **Cell Signal** 1996 Sep; 8(6):449–52
Characterization of ceramide synthesis. A dihydroceramide desaturase introduces the 4,5–trans–double bond of sphingosine at the level of dihydroceramide. Michel C, et al. **J Biol Chem** 1997 Sep 5;272(36):22432–7
Sphingosine mediates the immediate negative inotropic effects of tumor necrosis factor–alpha in the adult mammalian cardiac myocyte. Oral H, et al. **J Biol Chem** 1997 Feb 21;272(8):4836–42
Changes of free long–chain bases in neuronal cells during differentiation and aging in culture. Valsecchi M, et al. **J Neurochem** 1996 Nov;67(5):1866–71
Altered ceramide and sphingosine expression during the induction phase of ischemic acute renal failure. Zager RA, et al. **Kidney Int** 1997 Jul;52(1):60–70

PHARMACOLOGY

Modulation of skeletal muscle Ca2(+)–release channel activity by sphingosine. Needleman DH, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1465–74
Sphingosine prevents diacylglycerol signaling to mitogen–activated protein kinase in airway smooth muscle. Tolan D, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C928–36
Sphingolipid actions on sodium and calcium currents of rat ventricular myocytes. Yasui K, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):C645–9
Inhibitory action of sphingosine or ceramide on amylase secretion from isolated rat pancreatic acini. Shinkai M, et al. **Biochem Biophys Res Commun** 1997 Jun 9; 235(1):197–200
Inhibition of DNA primase by sphingosine and its analogues parallels with their growth suppression of cultured human leukemic cells. Tamiya–Koizumi K, et al. **Biochem Mol Biol Int** 1997 May;41(6):1179–89
Regulation of phospholipase C delta1 by sphingosine. Matecki A, et al. **Biochim Biophys Acta** 1997 Apr 26; 1325(2):287–96
Pertussis toxin– and PMA–insensitive calcium mobilization by sphingosine in CFPAC–1 cells: evidence for a phosphatidic acid–dependent mechanism. Orlati S, et al. **Biochim Biophys Acta** 1997 Aug 21;1358(1):93–102
The identification of DL–threo dihydrosphingosine and sphingosine as novel inhibitors of extracellular signal–regulated kinase signalling in airway smooth muscle. Tolan D, et al. **Br J Pharmacol** 1996 Sep;119(2):185–6
Sphingosine–induced inhibition of capacitative calcium influx in CFPAC–1 cells. Orlati S, et al. **Cell Calcium** 1996 Nov; 20(5):399–407
Sphingosine induces apoptosis in androgen–independent human prostatic carcinoma DU–145 cells by suppression of bcl–X(L) gene expression. Shirahama T, et al. **FEBS Lett** 1997 Apr 21;407(1):97–100
Sphingosine, oleylamine and stearylamine inhibit both CD11a/CD18–dependent and –independent homotypic aggregation: demonstration by cytofluorimetry. Aussel C, et al. **Immunol Lett** 1995 Sep;47(3):175–80
Sphingosine enhances phosphatidylinositol 4–kinase activity in rabbit platelets. Hashizume T, et al. **J Biochem (Tokyo)** 1996 Jul;120(1):61–5
Sphingosine inhibition of NADPH oxidase activation in a cell–free system. Sasaki JI, et al. **J Biochem (Tokyo)** 1996 Oct;120(4):705–9
Th2 suppressor cells are more susceptible to sphingosine than Th1 cells in murine contact photosensitivity. Tokura Y, et al. **J Invest Dermatol** 1996 Jul;107(1):34–40
Evaluation of a trans configuration for the apoptosis–inducing activity of ceramide. Kishida E, et al. **J Lipid Mediat Cell Signal** 1997 Jul;16(3):127–37
Effects of sphingomyelinase and sphingosine on arterial vasomotor regulation. Murohara T, et al. **J Lipid Res** 1996 Jul;37(7):1601–8
Effect of sphingosine on rat glial cells: inhibition of prostaglandin E2 and insensitivity of nitric oxide generation. Boneh A, et al. **Neurosci Lett** 1997 Jul 4; 229(3):181–4

PHYSIOLOGY

Modulation of protein kinase C by endogenous sphingosine: inhibition of phorbol dibutyrate binding in Niemann–Pick C fibroblasts. Rodriguez–Lafrasse C, et al. **Biochem J** 1997 Aug 1;325 (Pt 3):787–91
["Sphingosine pathway": a novel apoptosis inducing pathway] Kozutsumi Y, et al. **Seikagaku** 1996 Jun;68(6):444–52 (41 ref.) **(Jpn)**

RADIATION EFFECTS

The damage to phospholipids caused by free radical attack on glycerol and sphingosine backbone. Edimecheva IP, et al. **Int J Radiat Biol** 1997 May;71(5):555–60

URINE

Rapid method to determine sphinganine/sphingosine in human and animal urine as a biomarker for fumonisin exposure. Solfrizzo M, et al. **J Chromatogr B Biomed Appl** 1997 Apr 25;692(1):87–93

SPHINGOSINE GALACTOSIDE see **PSYCHOSINE**

SPHYGMOMANOMETERS, CONTINUOUS see **BLOOD PRESSURE MONITORS**

SPICES

Mechanisms involved in the chemoprotective effects of rosemary extract studied in human liver and bronchial cells. Offord EA, et al. **Cancer Lett** 1997 Mar 19;114(1–2):275–81
Consumption of ginger (Zingiber officinale roscoe) does not affect ex vivo platelet thromboxane production in humans. Janssen PL, et al. **Eur J Clin Nutr** 1996 Nov;50(11):772–4
Murraya koenigii and Brassica juncea––alterations on lipid profile in 1–2 dimethyl hydrazine induced colon carcinogenesis. Khan BA, et al. **Invest New Drugs** 1996; 14(4):365–9
Cumin anaphylaxis: a case report. Boxer M, et al. **J Allergy Clin Immunol** 1997 May;99(5):722–3
Hypolipidaemic effect of Myristica fragrans fruit extract in rabbits. Ram A, et al. **J Ethnopharmacol** 1996 Dec; 55(1):49–53
Antiemetic efficacy of ginger (Zingiber officinale) against cisplatin–induced emesis in dogs. Sharma SS, et al. **J Ethnopharmacol** 1997 Jul;57(2):93–6
Pharmacological studies of cardamom oil in animals. al–Zuhair H, et al. **Pharmacol Res** 1996 Jul–Aug; 34(1–2):79–82
Capsaicin or feeding with red peppers during gestation changes the thermonociceptive response of rat offspring. Pellicer F, et al. **Physiol Behav** 1996 Aug;60(2):435–8
Psychophysical responses to single and multiple presentations of the oral irritant zingerone: relationship to frequency of chili consumption. Prescott J, et al. **Physiol Behav** 1996 Aug;60(2):617–24
Tissue–specific enhancement of xenobiotic detoxification enzymes in mice by dietary rosemary extract. Singletary KW, et al. **Plant Foods Hum Nutr** 1997;50(1):47–53
Protective effect of curcuminoids on epidermal skin cells under free oxygen radical stress [letter] Bonté F, et al. **Planta Med** 1997 Jun;63(3):265–6
Effect of ginger (Zingiber officinale Rosc.) and fenugreek (Trigonella foenumgraecum L.) on blood lipids, blood sugar and platelet aggregation in patients with coronary artery disease. Bordia A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 May; 56(5):379–84

ADVERSE EFFECTS

Occupational allergy in saffron workers. Feo F, et al. **Allergy** 1997 Jun;52(6):633–41
Occupational asthma induced by aniseed. Fraj J, et al. **Allergy** 1996 May;51(5):337–9
Anaphylaxis to saffron. Wüthrich B, et al. **Allergy** 1997 Apr; 52(4):476–7
Allergy to fenugreek (Trigonella foenum graecum). Patil SP, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):297–300
Occupational allergic contact dermatitis from spices. Kanerva L, et al. **Contact Dermatitis** 1996 Sep;35(3):157–62
Red pepper–induced dermatitis in breast–fed infants. Cooper RL, et al. **Dermatology** 1996;193(1):61–2
Natural occurrence of mycotoxins in different spices in Egypt. El–Kady IA, et al. **Folia Microbiol (Praha)** 1995; 40(3):297–300
Role of redchilli (Capsaicin) in the formation of colonic carcinoma. Chitra S, et al. **Indian J Pathol Microbiol** 1997 Jan;40(1):21–5

ANALYSIS

Screening of aflatoxins in Shiro and ground red pepper in

SPICES

Addis Ababa. Fufa H, et al. **Ethiop Med J** 1996 Oct; 34(4):243–9

Gas chromatographic determination of eugenol in ethanol extract of cloves. Myint S, et al.
J Chromatogr B Biomed Appl 1996 Apr 26;679(1–2):193–5

Compounds from Syzygium aromaticum possessing growth inhibitory activity against oral pathogens. Cai L, et al.
J Nat Prod 1996 Oct;59(10):987–90

Chemical composition of indigenous wild herbs, spices, fruits, nuts and leafy vegetables used as food. Achinewhu SC, et al. **Plant Foods Hum Nutr** 1995 Dec;48(4):341–8

MICROBIOLOGY

Growth and toxigenesis of Aspergillus flavus isolates on selected spices. Bartine H, et al.
J Environ Pathol Toxicol Oncol 1997;16(1):61–5

POISONING

[A case report. Poisoned by nutmeg] Sjöholm A, et al.
Lakartidningen 1997 Feb 26;94(9):731–2 **(Swe)**

RADIATION EFFECTS

Enhancing effect of UV-light on the accumulation of carthamine in dyer's saffron florets. Saito K, et al.
Z Naturforsch [C] 1996 Sep–Oct;51(9–10):667–70

TOXICITY

Genotoxic effects of crude juices from Brassica vegetables and juices and extracts from phytopharmaceutical preparations and spices of cruciferous plants origin in bacterial and mammalian cells. Kassie F, et al.
Chem Biol Interact 1996 Sep 27;102(1):1–16

Sister chromatid exchanges induced in vitro and in vivo by an extract of black pepper. Madrigal-Bujaidar E, et al.
Food Chem Toxicol 1997 Jun;35(6):567–71

VIROLOGY

Resistance to tobamoviruses in transgenic tobacco plants expressing the coat protein gene of pepper mild mottle virus (Korean isolate). Lim PO, et al. **Mol Cells** 1997 Jun 30; 7(3):313–9

SPIDER BITE see **ARACHNIDISM**

SPIDER MONKEY see **CEBIDAE**

SPIDER VENOMS

Snake and spider antivenin: risks and benefits of therapy. Weisman RS, et al. **J Fla Med Assoc** 1996 Mar;83(3):192–5

ANALYSIS

Detection of new spider toxins from a Nephilengys borbonica venom gland using on-line mu-column HPLC continuous flow (FRIT) FAB LC/MS and MS/MS. Itagaki Y, et al.
Nat Toxins 1997;5(1):1–13

ANTAGONISTS & INHIBITORS

Dihydropyridine block of omega-agatoxin IVA- and omega-conotoxin GVIA-sensitive Ca2+ channels in rat pituitary melanotropic cells. Mansvelder HD, et al.
Eur J Pharmacol 1996 Sep 12;311(2–3):293–304

CHEMICAL SYNTHESIS

Solid-phase synthesis of omega-agatoxin IVA, a P-type calcium channel blocker. Najib J, et al. **J Pept Sci** 1996 Sep–Oct;2(5):309–17

CHEMISTRY

Structural and functional studies of latrodectin from the venom of black widow spider (Latrodectus tredecimguttatus). Grasso A, et al. **Adv Exp Med Biol** 1996; 391:237–43

Neurotoxin from black widow spider venom. Structure and function. Grishin EV. **Adv Exp Med Biol** 1996;391:231–6

Synthesis and pharmacology of alkanediguanidinium compounds that block the neuronal nicotinic acetylcholine receptor. Villarroya M, et al. **Bioorg Med Chem** 1996 Aug; 4(8):1177–83

Solid-phase synthesis of omega-agatoxin IVA, a P-type calcium channel blocker. Najib J, et al. **J Pept Sci** 1996 Sep–Oct;2(5):309–17

Compared chemical properties of dermonecrotic and lethal toxins from spiders of the genus Loxosceles (Araneae). Barbaro KC, et al. **J Protein Chem** 1996 May;15(4):337–43

Proton nuclear magnetic resonance studies on huwentoxin-I from the venom of the spider Selenocosmia huwena: 2. Three-dimensional structure in solution. Qu Y, et al.
J Protein Chem 1997 Aug;16(6):565–74

The structure of a novel insecticidal neurotoxin, omega-atracotoxin-HV1, from the venom of an Australian funnel web spider. Fletcher JI, et al. **Nat Struct Biol** 1997 Jul;4(7):559–66

Mass spectrometric structure determination of spider toxins: arginine-containing acylpolyamines from venoms of Brazilian garden spider Nephilengys cruentata. Palma MS, et al. **Nat Toxins** 1997;5(2):47–57

Probing the structure-function relationship of alpha-latrotoxin-formed channels with antibodies and pronase. Chanturiya AN, et al. **Toxicon** 1996 Oct; 34(10):1157–64

ENZYMOLOGY

Effect of hyperbaric oxygen on sphingomyelinase D activity of brown recluse spider (Loxosceles reclusa) venom as studied by 31P nuclear magnetic resonance spectroscopy. Merchant ML, et al. **Am J Trop Med Hyg** 1997 Mar; 56(3):335–8

Kininase of the Latrodectus tredecimguttatus venom: a study of its enzyme substrate specificity. Akhunov AA, et al. **Immunopharmacology** 1996 May;32(1–3):160–2

IMMUNOLOGY

Antigenic cross-reactivity of venoms from medically important Loxosceles (Araneae) species in Brazil. Barbaro KC, et al. **Toxicon** 1994 Jan;32(1):113–20

[Anti-idiotypic monoclonal antibodies against latrotoxin interact with rat brain synaptosomes and modify latrotoxin-induced calcium entry into synaptosomes] Pashkov VN, et al. **Bioorg Khim** 1996 Jun;22(6):403–7 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation and partial characterization of a polypeptide from Phoneutria nigriventer spider venom that relaxes rabbit corpus cavernosum in vitro. Rego E, et al. **Toxicon** 1996 Oct;34(10):1141–7

[Isolation and partial structural characteristics of major toxic components of Latrodectus pallidus venom] Charakha AR, et al. **Bioorg Khim** 1997 Mar;23(3):163–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Spider toxin-binding protein: functional and immunohistochemical study. Shimazaki K, et al.
Ann N Y Acad Sci 1993 Dec 20;707:427–30

Isolation and biochemical characterization of a Ca2+-independent alpha-latrotoxin-binding protein. Davletov BA, et al. **J Biol Chem** 1996 Sep 20; 271(38):23239–45

Alpha-latrotoxin receptor, latrophilin, is a novel member of the secretin family of G protein-coupled receptors. Lelianova VG, et al. **J Biol Chem** 1997 Aug 22; 272(34):21504–8

Spider farming, spider venom and neurexins [news] Jack DB. **Mol Med Today** 1996 Jan;2(1):1

PHARMACOLOGY

Spider toxin-binding protein: functional and immunohistochemical study. Shimazaki K, et al.
Ann N Y Acad Sci 1993 Dec 20;707:427–30

Alteration of P-type calcium channel gating by the spider toxin omega-Aga-IVA. McDonough SI, et al.
Biophys J 1997 May;72(5):2117–28

Alpha-latrotoxin-induced transmitter release in feline oesophageal smooth muscle: focus on nitric oxide and vasoactive intestinal peptide. Ny L, et al.
Br J Pharmacol 1997 Jan;120(1):31–8

A novel type of calcium channel sensitive to omega-agatoxin-TK in cultured rat cerebral cortical neurons. Teramoto T, et al. **Brain Res** 1997 May 9; 756(1–2):225–30

Effect of Phoneutria nigriventer spider venom on gastric emptying in rats. Bucaretchi F, et al.
Braz J Med Biol Res 1996 Feb;29(2):205–11

The effect of Phoneutria nigriventer (armed spider) venom on arterial blood pressure of anaesthetised rats. Costa SK, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):113–20

Omega-agatoxin IVA blocks spinal morphine/clonidine antinociceptive synergism. Roerig SC, et al.
Eur J Pharmacol 1996 Oct 31;314(3):293–300

Distinct effects of omega-toxins and various groups of Ca(2+)-entry inhibitors on nicotinic acetylcholine receptor and Ca2+ channels of chromaffin cells. Villarroya M, et al. **Eur J Pharmacol** 1997 Feb 12;320(2–3):249–57

Calcium-independent actions of alpha-latrotoxin on spontaneous and evoked synaptic transmission in the hippocampus. Capogna M, et al. **J Neurophysiol** 1996 Nov; 76(5):3149–58

Comparison of N- and P/Q-type voltage-gated calcium channel current inhibition. Currie KP, et al. **J Neurosci** 1997 Jun 15;17(12):4570–9

Effects of omega-agatoxin-IVA and omega-conotoxin-MVIIC on perineurial Ca++ and Ca(++)-activated K+ currents of mouse motor nerve terminals. Xu YF, et al. **J Pharmacol Exp Ther** 1996 Dec; 279(3):1229–36

Voltage-dependent blockage of Ca(2+)-permeable AMPA receptors by joro spider toxin in cultured rat hippocampal neurones. Iino M, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):431–7

Heteropodatoxins: peptides isolated from spider venom that block Kv4.2 potassium channels. Sanguinetti MC, et al. **Mol Pharmacol** 1997 Mar;51(3):491–8

Heterogeneity of functional synaptic parameters among single release sites. Auger C, et al. **Neuron** 1997 Jul; 19(1):139–50

alpha-Latrotoxin stimulates exocytosis by the interaction with a neuronal G-protein-coupled receptor. Krasnoperov VG, et al. **Neuron** 1997 Jun;18(6):925–37

omega-Agatoxin IVA identifies a single calcium channel subtype which contributes to the potassium-induced release of acetylcholine, 5-hydroxytryptamine, dopamine, gamma-aminobutyric acid and glutamate from rat brain slices. Harvey J, et al. **Neuropharmacology** 1996 Apr; 35(4):385–92

omega-agatoxin IVA and excitotoxicity in cortical neuronal cultures. Lustig HS, et al. **Neurosci Lett** 1996 Aug 2; 213(2):142–4

Acetylcholine release from rat brain cortical slices evoked by the fraction P4 of the venom of the spider Phoneutria nigriventer has Ca2+ and temperature independent components. Romano-Silva MA, et al. **Neurosci Lett** 1996 Nov 29;219(3):159–62

Two types of omega-agatoxin IVA-sensitive Ca2+ channels are coupled to adrenaline and noradrenaline release in bovine adrenal chromaffin cells. Baltazar G, et al.
Pflugers Arch 1997 Sep;434(5):592–8

Single-cell measurements of quantal secretion induced by alpha-latrotoxin from rat adrenal chromaffin cells: dependence on extracellular Ca2+ Barnett DW, et al.
Pflugers Arch 1996 Oct;432(6):1039–46

Behavioural and anticonvulsant effects of Ca2+ channel toxins in DBA/2 mice. Jackson HC, et al.
Psychopharmacology (Berl) 1996 Jul;126(1):85–90

Effects of the venom of the theridiid spider, Steatoda capensis Hann, on autonomic transmission in rat isolated atria and caudal artery. Korszniak NV, et al. **Toxicon** 1994 Jan; 32(1):85–96

[Phosphorylation of rat brain synaptosomal proteins stimulated by alpha-latrotroxin] Pozdniakova NG, et al. **Biokhimiia** 1996 Sep;61(9):1600–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Brown recluse spider envenomation: a prospective trial of hyperbaric oxygen therapy [see comments] Maynor ML, et al. **Acad Emerg Med** 1997 Mar;4(3):184–92. Comment in: Acad Emerg Med 1997 Mar;4(3):165–6.

Identification and neutralization of biological activities in the venoms of Loxosceles spiders. Barbaro KC, et al.
Braz J Med Biol Res 1996 Nov;29(11):1491–7

Effects of black widow spider venom and latrocrustatoxin on crustacean nerve cells: electrophysiological and ultrastructural study. Burmistrov YM, et al.
Gen Pharmacol 1997 Jan;28(1):159–66

Neurotransmitter release evoked by alpha-latrotoxin in the smooth muscle of the female pig urethra. Werkström V, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Aug; 356(2):151–8

Mode of action of an insecticidal peptide toxin from the venom of a weaving spider (Diguetia canities). Bloomquist JR, et al. **Toxicon** 1996 Sep;34(9):1072–5

Selective alteration of sodium channel gating by Australian funnel-web spider toxins. Nicholson GM, et al. **Toxicon** 1996 Nov–Dec;34(11–12):1443–53

Venom of a six-eyed crab spider, Sicarius testaceus (Purcell, 1908), causes necrotic and haemorrhagic lesions in the rabbit. Van Aswegen G, et al. **Toxicon** 1997 Jul; 35(7):1149–52

Blockade of neuromuscular transmission by huwentoxin-I, purified from the venom of the Chinese bird spider Selenocosmia huwena. Zhou PA, et al. **Toxicon** 1997 Jan; 35(1):39–45

SPIDERS

"Tarantula eyes" [letter] Hung JC, et al. **Arch Dis Child** 1996 Nov;75(5):462–3

Vulnerability representation: the role of perceived dangerousness, uncontrollability, unpredictability and disgustingness in spider fear. Armfield JM, et al.
Behav Res Ther 1996 Nov–Dec;34(11–12):899–909

Virtual reality and tactile augmentation in the treatment of spider phobia: a case report. Carlin AS, et al.
Behav Res Ther 1997 Feb;35(2):153–8

Conditional reasoning and phobic fear: evidence for a fear-confirming reasoning pattern. de Jong PJ, et al.
Behav Res Ther 1997 Jun;35(6):507–16

Spider phobia in children: disgust and fear before and after treatment. De Jong PJ, et al. **Behav Res Ther** 1997 Jun; 35(6):559–62

Parental history, aversive exposure and the development of snake and spider phobia in women. Fredrikson M, et al.
Behav Res Ther 1997 Jan;35(1):23–8

Spider phobia questionnaire for children (SPQ-C): a psychometric study and normative data. Kindt M, et al.
Behav Res Ther 1996 Mar;34(3):277–82

Pathways to fear in spider phobic children. Merckelbach H, et al. **Behav Res Ther** 1996 Nov–Dec;34(11–12):935–8

Thought suppression in spider phobia. Muris P, et al.
Behav Res Ther 1997 Aug;35(8):769–74

One-session group therapy of spider phobia: direct versus indirect treatments. Ost LG, et al. **Behav Res Ther** 1997 Aug;35(8):721–32

One-session group treatment of spider phobia. Ost LG.
Behav Res Ther 1996 Sep;34(9):707–15

Information processing in spider phobics: the Stroop colour naming task may indicate strategic but not automatic attentional bias. Thorpe SJ, et al. **Behav Res Ther** 1997 Feb;35(2):131–44

Preconscious processing bias in specific phobia. van den Hout M, et al. **Behav Res Ther** 1997 Jan;35(1):29–34
Non-periodic lattice crystals in the hierarchical microstructure of spider (major ampullate) silk. Thiel BL, et al. **Biopolymers** 1997 Jun;41(7):703–19
Eye disease associated with handling pet tarantulas: three case reports. Blaikie AJ, et al. **BMJ** 1997 May 24; 314(7093):1524–5
The effect of one-session treatment for spider phobia on attentional bias and beliefs. Thorpe SJ, et al. **Br J Clin Psychol** 1997 May;36 (Pt 2):225–41
Identification and neutralization of biological activities in the venoms of Loxosceles spiders. Barbaro KC, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1491–7
Small-angle X-ray scattering reveals differences between the quaternary structures of oxygenated and deoxygenated tarantula hemocyanin. Decker H, et al. **FEBS Lett** 1996 Sep 16;393(2–3):226–30
Eye injury from tarantula. Waggoner TL, et al. **J Am Optom Assoc** 1997 Mar;68(3):188–90
A comparison of two spider fear questionnaires. Muris P, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):241–4
Ophthalmia nodosa caused by tarantula hairs. Lasudry JG, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun; 34(3):197–8
Near fatal envenomation from the funnel-web spider in an infant. Browne GJ. **Pediatr Emerg Care** 1997 Aug; 13(4):271–3
[Spider silk: protein science] Osaki S. **Tanpakushitsu Kakusan Koso** 1996 Nov;41(14):2108–16 (7 ref.) **(Jpn)**

CHEMISTRY

Structural studies of spider silk proteins in the fiber. Parkhe AD, et al. **J Mol Recognit** 1997 Jan–Feb;10(1):1–6
Detection of new spider toxins from a Nephilengys borbonica venom gland using on-line mu-column HPLC continuous flow (FRIT) FAB LC/MS and MS/MS. Itagaki Y, et al. **Nat Toxins** 1997;5(1):1–13

CLASSIFICATION

The tarantula--poison spider or a case of mistaken identity? **Adverse Drug React Toxicol Rev** 1996 Nov;15(4):199–202
Spider bites: a web of deception. Gold BS. **Md Med J** 1996 May;45(5):403–6

DRUG EFFECTS

Effects of azadirachtin on mortality, growth, and immunological function in the wolf spider, Schizocosa episina (Araneae: Lycosidae). Punzo F. **Bull Environ Contam Toxicol** 1997 Mar;58(3):415–21

GENETICS

Molecular cloning and sequencing of cDNAs encoding insecticidal peptides from the primitive hunting spider, Plectreurys tristis (Simon). Leisy DJ, et al. **Insect Biochem Mol Biol** 1996 May;26(5):411–7
Molecular phylogenetics at the population/species interface in cave spiders of the southern Appalachians (Araneae:Nesticidae:Nesticus). Hedin MC. **Mol Biol Evol** 1997 Mar;14(3):309–24

METABOLISM

Purification and characterization of five cuticular proteins from the spider Araneus diadematus. Norup T, et al. **Insect Biochem Mol Biol** 1996 Sep–Oct;26(8–9):907–15

PHYSIOLOGY

Threshold for detecting temperature changes in a spider thermoreceptor. Ehn R, et al. **J Neurophysiol** 1996 Oct; 76(4):2608–13

SPIN LABELS

see related
ELECTRON SPIN RESONANCE SPECTROSCOPY
SPIN TRAPPING

Histological assessment of rodent CNS tissues to EPR oximetry probe material. Hoopes PJ, et al. **Adv Exp Med Biol** 1997;411:13–21
Quantitative measurement of superoxide generation using the spin trap 5-(diethoxyphosphoryl)-5-methyl-1-pyrroline-N-oxide. Roubaud V, et al. **Anal Biochem** 1997 May 1;247(2):404–11
Evidence for a relationship between the generation of reactive intermediates and the physicochemical characteristics of nickel oxides. O'Brien P, et al. **Arch Toxicol** 1996;70(12):787–800
Quantification of peroxynitrite, superoxide, and peroxyl radicals by a new spin trap hydroxylamine 1-hydroxy-2,2,6,6-tetramethyl-4-oxo-piperidine. Dikalov S, et al. **Biochem Biophys Res Commun** 1997 Jan 3; 230(1):54–7
Synthesis and imaging of blood-brain-barrier permeable nitroxyl-probes for free radical reactions in brain of living mice. Sano H, et al. **Biochem Mol Biol Int** 1997 Jul; 42(3):641–7
Spin-label studies on the anchoring and lipid-protein interactions of avidin with N-biotinylphosphatidylethanolamines in lipid bilayer membranes. Swamy MJ, et al. **Biochemistry** 1997 Jun 17; 36(24):7403–7
In vivo spin-label murine pharmacodynamics using low-frequency electron paramagnetic resonance imaging. Halpern HJ, et al. **Biophys J** 1996 Jul;71(1):403–9
Molecular distances from dipolar coupled spin-labels: the global analysis of multifrequency continuous wave electron paramagnetic resonance data. Hustedt EJ, et al. **Biophys J** 1997 Apr;72(4):1861–77
Overall and internal dynamics of DNA as monitored by five-atom-tethered spin labels. Keyes RS, et al. **Biophys J** 1997 Jan;72(1):282–90
Nitroxide reduction with ascorbic acid in spin labeled human plasma LDL and VLDL. Kveder M, et al. **Chem Phys Lipids** 1997 Jan 17;85(1):1–12
Spin label oximetry to assess extracellular oxygen during myocardial ischemia. Baker JE, et al. **Free Radic Biol Med** 1997;22(1–2):109–15
Evidence for a novel pentyl radical adduct of the cyclic nitrone spin trap MDL 101,002. Dage JL, et al. **Free Radic Biol Med** 1997;22(5):807–12
Electron paramagnetic resonance studies on nitroxide radical 2,2,5,5-tetramethyl-4-piperidin-1-oxyl (TEMPO) redox reactions in human skin. Fuchs J, et al. **Free Radic Biol Med** 1997;22(6):967–76
Necrosis of the substantia nigra, pars reticulate, in flurothyl-induced status epilepticus is ameliorated by the spin trap alpha phenyl-N-tert-butyl nitrone. He QP, et al. **Free Radic Biol Med** 1997;22(5):917–22
Oxidation of spin-traps by chlorine dioxide (ClO_2) radical in aqueous solutions: first ESR evidence of formation of new nitroxide radicals. Ozawa T, et al. **Free Radic Biol Med** 1996;20(6):837–41
Studies on the stability of oxygen radical spin adducts of a new spin trap: 5-methyl-5-phenylpyrroline-1-oxide (MPPO). Sankuratri N, et al. **Free Radic Biol Med** 1996; 21(6):889–94
Blood chemistry changes in the rat induced by high doses of nitronyl free radical spin traps. Schaefer CF, et al. **Free Radic Biol Med** 1996;21(4):427–36
The effects of alpha-phenyl-tert-butyl nitrone (PBN) on copper-induced rat fulminant hepatitis with jaundice. Yamashita T, et al. **Free Radic Biol Med** 1996;21(6):755–61
Degradation of DMPO adducts from hydroxyl and 1-hydroxyethyl radicals by rat liver microsomes. Reinke LA, et al. **Free Radic Res** 1996 Dec;25(6):467–74
A spin decay assay for tumor necrosis factor cytotoxicity. Mishra S. **Indian J Biochem Biophys** 1995 Oct;32(5):254–60
Biological spin trapping methodology. III. Octanol-water partition coefficients of spin-trapping compounds. Janzen EG, et al. **J Biochem Biophys Methods** 1996 Jul 10; 32(3):183–90
A robust method for estimating cross-relaxation rates from simultaneous fits to build-up and decay curves. Najfeld I, et al. **J Magn Reson** 1997 Feb;124(2):372–82
Spinning sidebands in slow-magic-angle-spinning NMR spectra arising from tightly J-coupled spin pairs. Wu G, et al. **J Magn Reson** 1997 Feb;124(2):366–71
Indirect spin-spin coupling in multiple-quantum magic-angle-spinning NMR spectra of quadrupolar nuclei. Wu G, et al. **J Magn Reson** 1997 Jan;124(1):237–9
Effectiveness and toxicity of several DTPA broadening agents for biological ESR spectroscopy. Zaplatin AN, et al. **J Magn Reson B** 1996 Mar;110(3):249–54
Synthesis and conformational studies of peptides containing TOAC, a spin-labelled C alpha, alpha-disubstituted glycine. Toniolo C, et al. **J Pept Sci** 1995 Jan–Feb; 1(1):45–57
Spin-labeling analysis of structure and dynamics in octopus rhodopsin. Steinhoff HJ, et al. **J Photochem Photobiol B** 1996 Aug;35(1–2):1–6
New spin labeled analogues of podophyllotoxin as potential antitumor agents. Wang Y, et al. **Life Sci** 1997;61(5):537–42
In vivo ESR-CT imaging of the liver in mice receiving subcutaneous injection of nitric oxide-bound iron complex. Yokoyama H, et al. **Magn Reson Imaging** 1997;15(2):249–53
Dynamic electron spin resonance (ESR) imaging of the distribution of spin labeled dextran in a mouse. Kazama S, et al. **Magn Reson Med** 1996 Oct;36(4):547–50
High resolution electron paramagnetic resonance imaging of biological samples with a single line paramagnetic label. Kuppusamy P, et al. **Magn Reson Med** 1997 Apr; 37(4):479–83
The excretion mechanism of the spin label proxyl carboxylic acid (PCA) from the rat monitored by X-band ESR and PEDRI. Seimenis I, et al. **Magn Reson Med** 1997 Apr; 37(4):552–8
Evidence for the exchange of arterial spin-labeled water with tissue water in rat brain from diffusion-sensitized measurements of perfusion. Silva AC, et al. **Magn Reson Med** 1997 Aug;38(2):232–7
A model for quantification of perfusion in pulsed labelling techniques. Calamante F, et al. **NMR Biomed** 1996 Apr; 9(2):79–83
Hexafluorobenzene: a sensitive 19F NMR indicator of tumor oxygenation. Mason RP, et al. **NMR Biomed** 1996 May; 9(3):125–34
[Cu(II) complexes with biomacromolecules. The use of Cu(II) ions as a structural spin label] Chikvaidze EN, et al. **Biofizika** 1997 Jan–Feb;42(1):34–8 (Eng. Abstr.) **(Rus)**
[Study of yeast phosphoglycerate kinase by electron paramagnetic resonance. 1. Modification of protein SH-group by spin labels. Conformational changes of enzyme] Vlasova II, et al. **Biofizika** 1996 Nov–Dec; 41(6):1193–200 (Eng. Abstr.) **(Rus)**
[Establishing the time of death by the constant of the reaction rate of spin-label reduction] Pashinian GA, et al. **Sud Med Ekspert** 1996 Oct–Dec;39(4):3–4 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

New amino-nitroxide spin labels. Dragutan H, et al. **Bioorg Med Chem** 1996 Oct;4(10):1577–83
Synthesis of spin labels for ESR imaging of living rat head. Niwa R, et al. **Chem Pharm Bull (Tokyo)** 1997 May; 45(5):923–7
A new spiro[indoline-naphthoxazinic] spin trapping agent. Campredon M, et al. **Free Radic Res** 1997 Jun;26(6):529–36

SPIN TRAPPING

Segmental flexibility of cardiac myosins. Belágyi J, et al. **Acta Physiol Hung** 1995;83(4):373–87
The chemistry of perfluoroisobutylene (PFIB) with nitrone and nitroso spin traps: an EPR/Spin trapping study. Arroyo CM. **Chem Biol Interact** 1997 Jul 11;105(2):119–29
Stimulation and inhibition of nitric oxide production in macrophages and neural cells as observed by spin trapping. Norby SW, et al. **Free Radic Biol Med** 1997;22(1–2):1–9
Spin trapping study in the lungs and liver of F344 rats after exposure to ozone. Vincent R, et al. **Free Radic Res** 1996 Dec;25(6):475–88
Radical trapping and inhibition of iron-dependent CNS damage by cyclic nitrone spin traps. Thomas CE, et al. **J Neurochem** 1997 Mar;68(3):1173–82

METHODS

The copper complex of captopril is not a superoxide dismutase mimic. Artefacts in DMPO spin trapping. Bartosz M, et al. **Free Radic Res** 1996 May;24(5):391–6
A water soluble C-nitroso-aromatic spin-trap-3,5-dibromo-4-nitrosobenzenesulphonic acid. "The Perkins spin-trap". Kaur H. **Free Radic Res** 1996 Jun; 24(6):409–20 (63 ref.)
Nitrone-based free radical traps as neuroprotective agents in cerebral ischaemia and other pathologies. Hensley K, et al. **Int Rev Neurobiol** 1997;40:299–317 (105 ref.)
[The structural status of red blood cell membranes in children with insulin-dependent diabetes mellitus. Examination by spin probe] Maksina AG, et al. **Vestn Ross Akad Med Nauk** 1996;(9):34–5 (Eng. Abstr.) **(Rus)**

SPINA BIFIDA see **SPINAL DYSRAPHISM**

SPINA BIFIDA APERTA see **SPINA BIFIDA CYSTICA**

SPINA BIFIDA CYSTICA

COMPLICATIONS

[Future perspectives for children with spina bifida aperta (letter)] Beeker TW. **Ned Tijdschr Geneeskd** 1997 Mar 8; 141(10):496 **(Dut)**

EPIDEMIOLOGY

Paternal occupational exposure around conception and spina bifida in offspring. Blatter BM, et al. **Am J Ind Med** 1997 Sep;32(3):283–91
Spina bifida and parental occupation. Blatter BM, et al. **Epidemiology** 1996 Mar;7(2):188–93
[A five years surveillance on neural system birth defects in rural areas of China] Hu YH, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1996 Feb; 17(1):20–4 (Eng. Abstr.) **(Chi)**

ETIOLOGY

Spina bifida and parental occupation. Blatter BM, et al. **Epidemiology** 1996 Mar;7(2):188–93

SURGERY

[Future perspectives for children with spina bifida aperta (letter)] Beeker TW. **Ned Tijdschr Geneeskd** 1997 Mar 8; 141(10):496 **(Dut)**

THERAPY

[Future prospects for children with spina bifida aperta (letter; comment)] Rotteveel JJ, et al. **Ned Tijdschr Geneeskd** 1996 Oct 5;140(40):2009–10. Comment on: Ned Tijdschr Geneeskd 1996 Jun 15;140(24):1268–72. **(Dut)**

SPINA BIFIDA MANIFESTA see **SPINA BIFIDA CYSTICA**

SPINA BIFIDA OCCULTA

[Current status of tethered cord syndrome] Shi Z, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):734–7 (25 ref.) **(Chi)**
[Pregnancy after augmentation cystoplasty. A case report]

Yamazaki Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Jun;88(6):632–5 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Naevus comedonicus as dermatologic hallmark of occult spinal dysraphism [letter] Filosa G, et al. **Acta Derm Venereol** 1997 May;77(3):243

MR of multiple intraspinal abscesses associated with congenital dermal sinus. Dev R, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):742–3

Spinal anaesthesia and spina-bifida occulta. Davies PR, et al. **Anaesthesia** 1996 Dec;51(12):1158–60

Diastematomyelia associated with intramedullary tumour in a hemicord: a report of two cases. Sharma A, et al. **Australas Radiol** 1997 May;41(2):185–7

Injury risk for research subjects with spina bifida occulta in a repeated impact study: a case review. Albano JP, et al. **Aviat Space Environ Med** 1996 Aug;67(8):767–9 (15 ref.)

Split cervical spinal cord with Klippel–Feil syndrome: seven cases. David KM, et al. **Brain** 1996 Dec;119 (Pt 6):1859–72

Diastematomyelia in congenital scoliosis. A review of the literature and description of one clinical case. Greggi T, et al. **Chir Organi Mov** 1997 Jan–Mar;82(1):83–9 **(Eng, Ita)**

Cervical diastematomyelia and syringohydromyelia in a myelomeningocele patient. Jaeger HJ, et al. **Eur Radiol** 1997;7(4):477–9

Tethered cord syndrome. Marchiori DM, et al. **J Manipulative Physiol Ther** 1996 May;19(4):265–7

Growth of growth hormone–treated and nontreated children before and after tethered spinal cord release. Rotenstein D, et al. **Pediatr Neurosurg** 1996;24(5):238–41

Congenital spine deformity, congenital stenosis, diastematomyelia, and tight filum terminale in a workmen's compensation patient: a case report. Azhar MM, et al. **Spine** 1996 Mar 15;21(6):770–4

[A case of dermoid cyst in the posterior fossa with dermal sinus] Yoshida K. **No To Shinkei** 1997 Apr;49(4):390 **(Jpn)**

[Lobar holoprosencephaly associated with diastematomyelia as a cause of congenital paraparesis] Carrasco Marina ML, et al. **An Esp Pediatr** 1997 Jun;46(6):613–6 **(Spa)**

[Acute paraparesis associated with dorsal diastematomyelia in an adult] Carrillo F, et al. **Rev Neurol** 1996 Mar; 24(127):290–2 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

MR appearance of the retroisthmic cleft [letter] Horner CW, et al. **AJNR Am J Neuroradiol** 1996 Feb;17(2):397–8

Foramen magnum neurenteric cyst causing mollaret meningitis: MR findings. Weiss MA, et al. **AJNR Am J Neuroradiol** 1996 Feb;17(2):386–8

Split cervical spinal cord with Klippel–Feil syndrome: seven cases. David KM, et al. **Brain** 1996 Dec;119 (Pt 6):1859–72

Tethered cord syndrome presenting as a nonhealing cutaneous ulcer. Brand N, et al. **Childs Nerv Syst** 1996 Sep; 12(9):562–3

Cervico-thoracic neurenteric cyst: clinicoradiological correlation with embryogenesis. Prasad VS, et al. **Childs Nerv Syst** 1996 Jan;12(1):48–51

Long-term urological follow-up of occult spinal dysraphism in children. Capitanucci ML, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:25–6

Neurenteric cyst: antenatal diagnosis and therapeutic approach. Daher P, et al. **Eur J Pediatr Surg** 1996 Oct; 6(5):306–9

Occult spinal dysraphism—the common combination of lesions and the clinical manifestations in 50 patients. Sattar MT, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:10–4

MR imaging of a multiple component craniocervical neuroenteric cyst. Yang S, et al. **Eur J Radiol** 1996 May; 22(2):138–40

Urodynamic and neurophysiologic evaluation of patients with diastematomyelia. Kothari MJ, et al. **J Child Neurol** 1997 Feb;12(2):97–100

Spinal segmental maldevelopment with a dermal sinus. Rastogi H, et al. **Neuroradiology** 1996 Oct;38(7):658–60

Split cord malformations: report of three unusual cases. Erşahin Y, et al. **Pediatr Neurosurg** 1996;24(3):155–9

Index of suspicion. Block JL, et al. **Pediatr Rev** 1996 May; 17(5):181–4

[Tethered spinal cord syndrome in adults] Kothbauer K, et al. **Nervenarzt** 1997 Apr;68(4):285–91 (102 ref.) (Eng. Abstr.) **(Ger)**

[The tethered spinal cord: diagnosis and surgical considerations] Roszkowski M, et al. **Pediatr Pol** 1996 Feb; 71(2):135–41 (17 ref.) (Eng. Abstr.) **(Pol)**

[Methods of introscopy in diagnosis of diastematomyelia] Trofimova TN, et al. **Vestn Rentgenol Radiol** 1997 Jul–Aug; (4):41–3 **(Rus)**

[Gram-negative meningitis secondary to congenital dermal sinus demonstrated by magnetic resonance] Verdú Pérez A, et al. **An Esp Pediatr** 1996 May;44(5):491–2 (9 ref.) **(Spa)**

EMBRYOLOGY

Cervico-thoracic neurenteric cyst: clinicoradiological correlation with embryogenesis. Prasad VS, et al. **Childs Nerv Syst** 1996 Jan;12(1):48–51

EPIDEMIOLOGY

The tethered spinal cord in patients with anorectal malformations. Levitt MA, et al. **J Pediatr Surg** 1997 Mar; 32(3):462–8

ETIOLOGY

Tethered thoracic cord resulting from spinal cord herniation. Henry A, et al. **Arch Phys Med Rehabil** 1997 May; 78(5):530–3

Diastematomyelia and spina bifida can be caused by the intraspinal grafting of somites in early avian embryos. Klessinger S, et al. **Neurosurgery** 1996 Dec;39(6):1215–23

PATHOLOGY

Clinical evaluation of cutaneous lesions of the back: spinal signatures that do not go away. Humphreys RP. **Clin Neurosurg** 1996;43:175–87 (6 ref.)

The adult with a tethered cord. McLone DG. **Clin Neurosurg** 1996;43:203–9

The borderlands of the primary tethered cord syndrome. Oakes WJ. **Clin Neurosurg** 1996;43:188–202 (30 ref.)

Tethered hindbrain. Case report. Kernan JC, et al. **J Neurosurg** 1996 Oct;85(4):713–5

Dorsal midline proboscis associated with diastematomyelia and tethered cord syndrome. Case report. Yamada S, et al. **J Neurosurg** 1996 Oct;85(4):709–12

PHYSIOPATHOLOGY

The adult with a tethered cord. McLone DG. **Clin Neurosurg** 1996;43:203–9

Occult dysraphism in adulthood. A series of 24 cases. Caruso R, et al. **J Neurosurg Sci** 1996 Sep–Dec;40(3–4):221–5

Urodynamic findings in the tethered spinal cord syndrome: does surgical release improve bladder function? [see comments] Fone PD, et al. **J Urol** 1997 Feb;157(2):604–9 . Comment in: J Urol 1997 Feb;157(2):615–6.

Occult spinal dysraphism: neurogenic voiding dysfunction and long-term urologic follow-up. Silveri M, et al. **Pediatr Surg Int** 1997 Feb;12(2–3):148–50

[Urological assessment for tethered cord syndrome of delayed onset following repair of meningomyelocele] Namima T, et al. **Nippon Hinyokika Gakkai Zasshi** 1996 Oct;87(10):1158–66 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Assessment of maternal anxiety following neonatal screening and investigation for occult spinal dysraphism. Gibson PJ, et al. **Acta Paediatr** 1997 Jan;86(1):72–6

RADIOGRAPHY

Aunt Minnie's corner. Diastematomyelia. Ford KL 3rd. **J Comput Assist Tomogr** 1997 Sep–Oct;21(5):848

SURGERY

Neurenteric cyst of the anterior cranial fossa [see comments] Bavetta S, et al. **Br J Neurosurg** 1996 Apr;10(2):225–7 (24 ref.). Comment in: Br J Neurosurg 1996 Oct;10(5):526–7.

Neurenteric cyst of anterior cranial fossa [letter; comment] Catala M, et al. **Br J Neurosurg** 1996 Oct;10(5):526–7. Comment on: Br J Neurosurg 1996 Apr;10(2):225–7.

Evaluation of surgery for the tethered cord syndrome using a new grading system. Kirollos RW, et al. **Br J Neurosurg** 1996 Jun;10(3):253–60

Surgical treatment supposed natural history of the tethered cord with occult spinal dysraphism. Koyanagi I, et al. **Childs Nerv Syst** 1997 May;13(5):268–74

The borderlands of the primary tethered cord syndrome. Oakes WJ. **Clin Neurosurg** 1996;43:188–202 (30 ref.)

Electrophysiologic monitoring during tethered spinal cord release. Phillips LH 2nd, et al. **Clin Neurosurg** 1996; 43:163–74

The outcome of urological findings in operated tethered cord patients. Başar H, et al. **Int Urol Nephrol** 1997;29(2):167–71

Urodynamic findings in the tethered spinal cord syndrome: does surgical release improve bladder function? [see comments] Fone PD, et al. **J Urol** 1997 Feb;157(2):604–9 . Comment in: J Urol 1997 Feb;157(2):615–6.

The role of somatosensory evoked potentials in the evaluation of spinal cord retethering. Li V, et al. **Pediatr Neurosurg** 1996;24(3):126–33

[The tethered spinal cord: diagnosis and surgical considerations] Roszkowski M, et al. **Pediatr Pol** 1996 Feb; 71(2):135–41 (17 ref.) (Eng. Abstr.) **(Pol)**

[Are there a neuro-urological symptomatology improvement after spinal cord untethering?] López Pereira P, et al. **Cir Pediatr** 1996 Apr;9(2):81–4 (Eng. Abstr.) **(Spa)**

THERAPY

[Early management of closed dysraphism in children. Value of urodynamic and manometry studies] Kneuse G, et al. **Rev Med Suisse Romande** 1996 Dec;116(12):951–7 **(Fre)**

ULTRASONOGRAPHY

Neurenteric cyst shown by prenatal sonography. Macaulay KE, et al. **AJR Am J Roentgenol** 1997 Aug;169(2):563–5

Level of conus medullaris in term and preterm neonates. Sahin F, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jul; 77(1):F67–9

Neurenteric cyst: antenatal diagnosis by ultrasound. Perera GB, et al. **Australas Radiol** 1997 Aug;41(3):300–2

Second-trimester ultrasonographic diagnosis of segmental vertebral abnormalities associated with neurological deficit: a possible new variant of occult spinal dysraphism. Achiron R, et al. **Prenat Diagn** 1996 Aug;16(8):760–3

Prenatal diagnosis of diastematomyelia: case reports and review of the literature. Sepulveda W, et al. **Prenat Diagn** 1997 Feb;17(2):161–5 (11 ref.)

SPINA BIFIDA, OPEN see **SPINA BIFIDA CYSTICA**

SPINACH

The bioavailability of magnesium in spinach and the effect of oxalic acid on magnesium utilization examined in diets of magnesium-deficient rats. Kikunaga S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1995 Dec;41(6):671–85

ADVERSE EFFECTS

Torsade de pointes due to consumption of Sauropus androgynus as a weight-reducing vegetable. Chen IC, et al. **Am J Cardiol** 1996 Nov 15;78(10):1186–7

CHEMISTRY

The amino acid sequence of the spinach basic cupredoxin plantacyanin. Mann K, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):881–7

Clastogenic activity of pure chlorophyll and anticlastogenic effects of equivalent amounts of crude extract of Indian spinach leaf and chlorophyllin following dietary supplementation to mice. Sarkar D, et al. **Environ Mol Mutagen** 1996;28(2):121–6

Highly purified D1/D2/cyt b559 preparations from spinach do not contain the non-heme iron center. Kurreck J, et al. **FEBS Lett** 1997 Feb 24;403(3):283–6

Primary structure of the N-linked carbohydrate chains of Calreticulin from spinach leaves. Navazio L, et al. **Glycoconj J** 1996 Dec;13(6):977–83

Semi-preparative isolation of plant sulfoquinovosyldiacylglycerols by solid phase extraction and HPLC procedures. Norman HA, et al. **J Lipid Res** 1996 Jun;37(6):1372–6

Decreasing the NO3 and increasing the vitamin C contents in spinach by a nitrogen deprivation method. Mozafar A. **Plant Foods Hum Nutr** 1996 Feb;49(2):155–62

Structural homology of spinach acyl carrier protein and Escherichia coli acyl carrier protein based on NMR data. Oswood MC, et al. **Proteins** 1997 Jan;27(1):151–43

ENZYMOLOGY

Substrate specificity modification of the stromal glycerol-3-phosphate acyltransferase. Ferri SR, et al. **Arch Biochem Biophys** 1997 Jan 15;337(2):202–8

Three spinach leaf nitrate reductase-3-hydroxy-3-methylglutaryl-CoA reductase kinases that are required by reversible phosphorylation and/or Ca2+ ions. Douglas P, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):101–9

Redox modifications of spinach chloroplast fructose-1, 6-bisphosphatase. Chen Y, et al. **Biochem Mol Biol Int** 1996 Aug;39(5):941–8

The nitrate reductase gene isolated from DNA of cultured spinach cells. Tamura N, et al. **Biochim Biophys Acta** 1997 Apr 4;1338(2):151–5

Protein farnesyltransferase in plants. Skoczylas E, et al. **Biochimie** 1996;78(2):139–43

Phosphorylated nitrate reductase from spinach leaves is inhibited by 14-3-3 proteins and activated by fusicoccin. Moorhead G, et al. **Curr Biol** 1996 Sep 1;6(9):1104–13

The crystal structure of plant acetohydroxy acid isomeroreductase complexed with NADPH, two magnesium ions and a herbicidal transition state analog determined at 1.65 A resolution. Biou V, et al. **EMBO J** 1997 Jun;16(12):3405–15

Stimulation of spinach (Spinacia oleracea) chloroplast fructose-1,6-bisphosphatase by mercuric ions. Ashton AR, et al. **FEBS Lett** 1997 May 12;408(1):30–2

Kinetic modelling of the proton translocating CF0CF1-ATP synthase from spinach. Pänke O, et al. **FEBS Lett** 1996 Apr 1;383(3):196–200

Tentoxin has at least two binding sites on CF1 and epsilon-depleted CF1 ATPases isolated from spinach chloroplast. Pinet E, et al. **FEBS Lett** 1996 Oct 21; 395(2–3):217–20

Glucose-6-phosphate dehydrogenase activity in spinach as measured by image analysis: a new approach for plant enzyme histochemistry. Crèvecoeur M, et al. **Histochem J** 1996 Jan;28(1):25–32

Characterization of the bifunctional mitochondrial processing peptidase (MPP)/bc1 complex in Spinacia oleracea. Eriksson AC, et al. **J Bioenerg Biomembr** 1996 Jun; 28(3):285–92

Orderly disposition of heterogeneous small subunits in D-ribulose-1,5-bisphosphate carboxylase/oxygenase from spinach. Shibata N, et al. **J Biol Chem** 1996 Oct 25; 271(43):26449–52

Characterization of 26S proteasome alpha- and beta-type and ATPase subunits from spinach and their expression during early stages of seedling development. Ito N, et al. **Plant Mol Biol** 1997 May;34(2):307–16

Footprinting of the spinach nitrite reductase gene promoter reveals the preservation of nitrate regulatory elements between fungi and higher plants. Rastogi R, et al. **Plant Mol Biol** 1997 Jun;34(3):465–76

Molecular cloning, characterization and expression of cDNA encoding phosphoserine aminotransferase involved in phosphorylated pathway of serine biosynthesis from spinach. Saito K, et al. **Plant Mol Biol** 1997 Jan; 33(2):359–66

The ferredoxin–binding site of ferredoxin: Nitrite oxidoreductase. Differential chemical modification of the free enzyme and its complex with ferredoxin. Dose MM, et al. **Plant Physiol** 1997 Jul;114(3):1047–53

Subcellular localization of spinach cysteine synthase isoforms and regulation of their gene expression by nitrogen and sulfur. Takahashi H, et al. **Plant Physiol** 1996 Sep; 112(1):273–80

Protein phosphorylation as a mechanism for osmotic–stress activation of sucrose–phosphate synthase in spinach leaves. Toroser D, et al. **Plant Physiol** 1997 Jul;114(3):947–55

High–level expression, purification, and crystallization of recombinant spinach glycolate oxidase in Escherichia coli. Stenberg K, et al. **Protein Expr Purif** 1996 Nov;8(3):295–8

GENETICS

Transcription and processing of the gene for spinach chloroplast threonine tRNA in a homologous in vitro system. Cheng YS, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):380–5

The nitrate reductase gene isolated from DNA of cultured spinach cells. Tamura N, et al. **Biochim Biophys Acta** 1997 Apr 4;1338(2):151–5

Organ–specific transcription of the rrn operon in spinach plastids. Iratni R, et al. **J Biol Chem** 1997 May 23; 272(21):13676–82

Evidence that the plastid signal and light operate via the same cis–acting elements in the promoters of nuclear genes for plastid proteins. Kusnetsov V, et al. **Mol Gen Genet** 1996 Oct 28;252(6):631–9

Intron sequences are involved in the plastid– and light–dependent expression of the spinach PsaD gene. Bolle C, et al. **Plant J** 1996 Nov;10(5):919–24

Molecular characterization of transketolase (EC 2.2.1.1) active in the Calvin cycle of spinach chloroplasts. Flechner A, et al. **Plant Mol Biol** 1996 Nov;32(3):475–84

Footprinting of the spinach nitrite reductase gene promoter reveals the preservation of nitrate regulatory elements between fungi and higher plants. Rastogi R, et al. **Plant Mol Biol** 1997 Jun;34(3):465–76

Molecular cloning and characterization of a cDNA encoding alpha–glucosidase from spinach. Sugimoto M, et al. **Plant Mol Biol** 1997 Mar;33(4):765–8

METABOLISM

Protein prenylation in spinach––tissue specificity and greening–induced changes. Parmryd I, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):73–8

The plastocyanin binding domain of photosystem I. Hippler M, et al. **EMBO J** 1996 Dec 2;15(23):6374–84

Electron transfer between spinach plastocyanin mutants and photosystem 1. Sigfridsson K, et al. **Eur J Biochem** 1997 May 1;245(3):805–12

14–3–3 proteins associate with the regulatory phosphorylation site of spinach leaf nitrate reductase in an isoform–specific manner and reduce dephosphorylation of Ser–543 by endogenous protein phosphatases. Bachmann M, et al. **FEBS Lett** 1996 Nov 25;398(1):26–30

Identification of residues of spinach thioredoxin f that influence interactions with target enzymes. Geck MK, et al. **J Biol Chem** 1996 Oct 4;271(40):24736–40

Nearest–neighbor analysis of higher–plant photosystem I holocomplex. Jansson S, et al. **Plant Physiol** 1996 Sep; 112(1):409–20

MICROBIOLOGY

Changes in microbial populations on fresh cut spinach. Babic I, et al. **Int J Food Microbiol** 1996 Aug;31(1–3):107–19

SPINACIA OLERACEA see **SPINACH**

SPINAL ACCESSORY NERVE see **ACCESSORY NERVE**

SPINAL BIFIDA, CLOSED see **SPINA BIFIDA OCCULTA**

SPINAL CANAL

Epidural anaesthesia and spinal haematoma. Wulf H. **Can J Anaesth** 1996 Dec;43(12):1260–71 (103 ref.)

Intraspinal temperatures during regional deep hyperthermia induced by electromagnetic radiation in the Macaca mulatta. van der Zee J, et al. **Int J Hyperthermia** 1997 Mar–Apr;13(2):149–55

Nonlymphoid vertebral canal tumors in cats: 11 cases (1987–1995). Levy MS, et al. **J Am Vet Med Assoc** 1997 Mar 1;210(5):663–4

Gas in the spinal canal associated with injury of the cervical spinal cord: a diagnostic dilemma. A case report. Abraham DJ, et al. **J Bone Joint Surg Am** 1997 Apr;79(4):591–3

More help for low back pain patients [letter; comment] Meloy TS. **N C Med J** 1996 Nov–Dec;57(6):340–1. Comment on: N C Med J 1996 Jan–Feb;57(1):47–50. Comment on: N C Med J 1996 Jul–Aug;57(4):225–8.

Neurogenic claudication, a delayed complication of a retained bullet. Kuijlen JM, et al. **Spine** 1997 Apr 15; 22(8):910–4

Spinal chondroma of the lumbar tract: case report. Gaetani P, et al. **Surg Neurol** 1996 Dec;46(6):534–9 (32 ref.)

[Ectopic intraspinal extradural anaplastic ependymoma in an infant] Roubertie A, et al. **Arch Pediatr** 1997 Mar;4(3):255–9 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

The shape of the human lumbar vertebral canal. Zarzur E. **Arq Neuropsiquiatr** 1996 Sep;54(3):451–4

Soft tissue anatomy within the vertebral canal in pregnant women. Hirabayashi Y, et al. **Br J Anaesth** 1996 Aug; 77(2):153–6

Does the cervical canal to body ratio predict spinal stenosis? Moskovich R, et al. **Bull Hosp Jt Dis** 1996;55(2):61–71

Anatomical observations of the developmental and spondylotic cervical spinal canal in South African blacks and whites. Taitz C. **Clin Anat** 1996;9(6):395–400

Large vertebral body, in addition to narrow spinal canal, are risk factors for cervical myelopathy. Hukuda S, et al. **J Spinal Disord** 1996 Jun;9(3):177–86

The quantitative anatomy of the cervical nerve root groove and the intervertebral foramen. Ebraheim NA, et al. **Spine** 1996 Jul 15;21(14):1619–23

Changes in cervical canal spinal volume during in vitro flexion–extension. Holmes A, et al. **Spine** 1996 Jun 1; 21(11):1313–9

Anatomic changes of the spinal canal and intervertebral foramen associated with flexion–extension movement. Inufusa A, et al. **Spine** 1996 Nov 1;21(21):2412–20

EMBRYOLOGY

Development of the lumbar and sacral vertebral canal in utero. Ursu TR, et al. **Spine** 1996 Dec 1;21(23):2705–8

INJURIES

The effect of anterior translation of the vertebra on the canal size in the lower cervical spine: a computer–assisted anatomic study. Ebraheim NA, et al. **J Spinal Disord** 1997 Apr;10(2):162–6

Remodeling of the spinal canal deformed by trauma. Karlsson MK, et al. **J Spinal Disord** 1997 Apr;10(2):157–61

Accuracy of pedicle screw placement with the assistance of lateral plain radiography. Odgers CJ 4th, et al. **J Spinal Disord** 1996 Aug;9(4):334–8

The effect of post–injury spinal position on canal occlusion in a cervical spine burst fracture model. Ching RP, et al. **Spine** 1997 Aug 1;22(15):1710–5

The path of a wounding missile along the spinal canal: a case report. Tekavčič I, et al. **Spine** 1996 Mar 1; 21(5):639–41

Hypothesis about the etiology of unexplained painful myelopathy after minor trauma in the spinal canal. Law JD. **Stereotact Funct Neurosurg** 1995;65(1–4):117–9

PATHOLOGY

Clinical evaluation of cutaneous lesions of the back: spinal signatures that do not go away. Humphreys RP. **Clin Neurosurg** 1996;43:175–87 (6 ref.)

Stenosis of the lumbar spinal canal. Pennal GF, et al. **Clin Neurosurg** 1971;18:86–105

Central gadolinium enhancement of an acute spontaneous spinal epidural haematoma. Chen CJ, et al. **Neuroradiology** 1996 May;38 Suppl 1:S114–6

Myeloscopic observation of adhesive arachnoiditis in patients with lumbar spinal canal stenosis. Kawauchi Y, et al. **Spinal Cord** 1996 Jul;34(7):403–10

Neurological deficit in a consecutive series of vertebral fracture patients with bony fragments within spinal canal. Rosenberg N, et al. **Spinal Cord** 1997 Feb;35(2):92–5

A prospective analysis of magnetic resonance imaging findings in patients with sciatica and lumbar disc herniation. Correlation of outcomes with disc fragment and canal morphology. Carragee EJ, et al. **Spine** 1997 Jul 15; 22(14):1650–60

Lumbar nerve root compression caused by lumbar intraspinal gas. Report of three cases. Yoshida H, et al. **Spine** 1997 Feb 1;22(3):348–51

[Lumbar vertebral synovial cyst] Paci G, et al. **J Belge Radiol** 1997 Apr;80(2):73–4 (Eng. Abstr.) **(Fre)**

[A case of large arachnoid cyst of the vertebral canal] Stępniak U, et al. **Wiad Lek** 1996;49(7–12):132–5 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Evidence for rapid fluid flow from the subarachnoid space into the spinal cord central canal in the rat. Stoodley MA, et al. **Brain Res** 1996 Jan 29;707(2):155–64

Arterial pulsation–dependent perivascular cerebrospinal fluid flow into the central canal in the sheep spinal cord. Stoodley MA, et al. **J Neurosurg** 1997 Apr;86(4):686–93

Changes in cervical canal spinal volume during in vitro flexion–extension. Holmes A, et al. **Spine** 1996 Jun 1; 21(11):1313–9

[The formation of a distraction regenerate in the experimental modelling of the shape of the spinal canal] Chirkova AM, et al. **Morfologiia** 1997;111(1):94–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Spinal canal remodeling in burst fractures of the thoracolumbar spine: a computerized tomographic comparison between operative and nonoperative treatment. Yazici M, et al. **J Spinal Disord** 1996 Oct;9(5):409–13

RADIOGRAPHY

Does a spasm of vertebral canal exist? Pilarczyk M, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1995;50:103–5

Mobile tumours in the lumbar spinal canal: a diagnostic problem. Varughese G, et al. **Can J Surg** 1997 Feb; 40(1):59–63

Spinal canal obstruction detected by cerebrospinal fluid imaging [letter] Loubser PG, et al. **Spinal Cord** 1996 Dec; 34(12):755–6

[Helical CT for lumbosacral spinal] Tatsuno S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Oct; 56(12):822–7 (Eng. Abstr.) **(Jpn)**

SURGERY

Open–door laminoplasty in pediatric spinal neurosurgery. Kehrli P, et al. **Childs Nerv Syst** 1996 Sep;12(9):551–2

Neck and shoulder pain after laminoplasty [letter] Moon MS. **Spine** 1997 Jul 15;22(14):1674–6

Indirect spinal canal decompression in burst fractures treated with pedicle screw instrumentation. Sjostrom L, et al. **Spine** 1996 Jan 1;21(1):113–23

ULTRASONOGRAPHY

Alterations in spinal fluid drainage in infants with hydrocephalus. Rudas G, et al. **Pediatr Radiol** 1997 Jul; 27(7):580–2

[Ultrasound anatomy of the spinal canal of the lumbar spine. Results ofan experimental study and report of initial clinical applications of intraoperative ultrasound in nucleotomies] Küllmer K, et al. **Ultraschall Med** 1996 Aug;17(4):185–9 (Eng. Abstr.) **(Ger)**

SPINAL CORD

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CORDOTOMY
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MYELOGRAPHY

Infra–red thermographic evaluation of spinal cord electrostimulation in patients with chronic pain after failed back surgery. Devulder J, et al. **Br J Neurosurg** 1996 Aug; 10(4):379–83

Spinal cord stimulation [editorial] Simpson BA. **Br J Neurosurg** 1997 Feb;11(1):5–11 (65 ref.)

Spinal cord stimulation [letter; comment] Claeys L. **Eur J Vasc Endovasc Surg** 1996 Nov;12(4):512–3. Comment on: Eur J Vasc Endovasc Surg 1995 May;9(4):421–5.

Efficient transduction of green fluorescent protein in spinal cord neurons using adeno–associated virus vectors containing cell type–specific promoters. Peel AL, et al. **Gene Ther** 1997 Jan;4(1):16–24

Proposed specifications for a lumbar spinal cord electrode array for control of lower extremities in paraplegia. Mushahwar VK, et al. **IEEE Trans Rehabil Eng** 1997 Sep; 5(3):237–43

Occipital neuralgia secondary to exuberant callus formation. Case report. Clavel M, et al. **J Neurosurg** 1996 Dec; 85(6):1170–1

Spinal cord stimulation for premature peripheral atherosclerosis [letter; comment] Miles J. **Lancet** 1997 Feb 1;349(9048):362. Comment on: Lancet 1996 Nov 23;348(9039):1396.

'Spinal chord' [letter] Silver JR. **Paraplegia** 1996 Feb; 34(2):122

Enhanced limb salvage for peripheral vascular disease with the use of spinal cord stimulation. Huber SJ, et al. **W V Med J** 1996 Mar–Apr;92(2):89–91 (14 ref.)

Advances in spinal cord stimulation. Prager JP. **West J Med** 1997 Mar;166(3):203

[The role of spinal cord electric stimulation in critical ischemia of the extremity] Guarnera G, et al. **Minerva Cardioangiol** 1996 Dec;44(12):663–7 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

Toxoplasmosis of the spinal cord in a patient with AIDS: case report and review. Vyas R, et al. **Clin Infect Dis** 1996 Nov;23(5):1061–5 (29 ref.)

Experimentally induced Chiari–like malformation with myeloschisis in chick embryos. Sim KB, et al. **J Korean Med Sci** 1996 Dec;11(6):509–16

Special imaging casebook. Trisomy 13 and occult dysraphism with tethered cord. Herman TE, et al. **J Perinatol** 1997 Mar–Apr;17(2):172–4

The open brain (opb) mutation maps to mouse chromosome 1. Günther T, et al. **Mamm Genome** 1997 Aug;8(8):583–5

Spinal segmental maldevelopment with a dermal sinus. Rastogi H, et al. **Neuroradiology** 1996 Oct;38(7):658–60

MRI in an unusual case of congenital spinal mesenchymal proliferation. Tortori–Donati P, et al. **Neuroradiology** 1996 May;38 Suppl 1:S196–9

Three–dimensional ultrasound of the fetal spine. Johnson

DD, et al. **Obstet Gynecol** 1997 Mar;89(3):434–8

Arteriovenous malformation of the cervical spinal cord with unusual drainage into the cranial cavity. Matsko DE, et al. **Pathol Res Pract** 1996 Sep;192(9):942–7; discussion 948

Split cord malformations: report of three unusual cases. Erşahin Y, et al. **Pediatr Neurosurg** 1996;24(3):155–9

Dwarfism and age-associated spinal degeneration of heterozygote cmd mice defective in aggrecan. Watanabe H, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24; 94(13):6943–7

Magnetic resonance imaging evaluation of the adolescent patient with idiopathic scoliosis before spinal instrumentation and fusion. A prospective, double-blinded study of 140 patients. Winter RB, et al. **Spine** 1997 Apr 15;22(8):855–8

Vertebral column and spinal cord malformation in children with exstrophy of the cloaca, with emphasis on their functional correlates. Weaver KB, et al. **Teratology** 1997 Apr;55(4):241–8

ANATOMY & HISTOLOGY

Age-related changes in human spinal ventral horn cells with special reference to the loss of small neurons in the intermediate zone: a quantitative analysis. Terao S, et al. **Acta Neuropathol (Berl)** 1996 Aug;92(2):109–14

Ascending myelinated axons of primary sensory neurons of the sciatic nerve in the posterior column of the rat spinal cord. Yamamoto K, et al. **Acta Neuropathol (Berl)** 1996 Jul;92(1):27–34

High-resolution diffusion-weighted MR of fresh and fixed cat spinal cords: evaluation of diffusion coefficients and anisotropy. Pattany PM, et al. **AJNR Am J Neuroradiol** 1997 Jun-Jul;18(6):1049–56

Cyto- and myeloarchitectonic organisation of the spinal cord of an echidna (Tachyglossus aculeatus). Ashwell KW, et al. **Brain Behav Evol** 1997;49(5):276–94

Evidence for GAP-43 within descending spinal axons in the North American opossum, Didelphis virginiana. Zou XC, et al. **Brain Behav Evol** 1996;47(4):200–13

Evidence for divergent projections to the brain noradrenergic system and the spinal parasympathetic system from Barrington's nucleus. Valentino RJ, et al. **Brain Res** 1996 Sep 2;732(1–2):1–15

Localization of NADPH-diaphorase containing neurons in the spinal dorsal horn and spinal sensory ganglia of the turtle Chrysemys d'orbigny. Radmilovich M, et al. **Exp Brain Res** 1997 Mar;113(3):455–64

Comparative morphology of the spinal ganglia in the different segments of the spinal cord in sheep. Hereć S, et al. **Folia Morphol (Warsz)** 1996;55(4):276–7

Morphological and morphometric characterisation of Onuf's nucleus in the spinal cord in man. Pullen AH, et al. **J Anat** 1997 Aug;191 (Pt 2):201–13

Neuroanatomy of the pain system and of the pathways that modulate pain. Willis WD, et al. **J Clin Neurophysiol** 1997 Jan;14(1):2–31 (393 ref.)

Horseradish peroxidase study of the spatial and electrotonic distribution of group Ia synapses on type-identified ankle extensor motoneurons in the cat. Burke RE, et al. **J Comp Neurol** 1996 Aug 26;372(3):465–85

Topography of fibre organisation in the corticofugal pathways of rats. Coleman KA, et al. **J Comp Neurol** 1997 May 5;381(2):143–57

Development of differential preganglionic projections to pre- and paravertebral sympathetic ganglia. Cornbrooks EB, et al. **J Comp Neurol** 1997 May 26;382(1):1–18

The origin of brainstem-spinal pathways in the North American opossum (Didelphis virginiana). Studies using the horseradish peroxidase method. Crutcher KA, et al. **J Comp Neurol** 1978 May 1;179(1):169–93

Visceral afferent and efferent columns in the spinal cord of the teleost, Ictalurus punctatus. Goehler LE, et al. **J Comp Neurol** 1996 Jul 29;371(3):437–47

Spinal afferents to functionally distinct periaqueductal gray columns in the rat: an anterograde and retrograde tracing study. Keay KA, et al. **J Comp Neurol** 1997 Aug 25; 385(2):207–29

Projections from the thoracic cord to the cerebellar nuclei in the rat, studied by anterograde axonal tracing. Matsushita M, et al. **J Comp Neurol** 1997 Sep 29;386(3):409–21

Projections from the cervical enlargement to the cerebellar nuclei in the rat, studied by anterograde axonal tracing. Matsushita M, et al. **J Comp Neurol** 1997 Jan 13; 377(2):251–61

Projections of the marginal nuclei in the spinal cord of the pigeon. Necker R. **J Comp Neurol** 1997 Jan 6;377(1):95–104

Initial trajectories of sensory axons toward laminar targets in the developing mouse spinal cord. Ozaki S, et al. **J Comp Neurol** 1997 Apr 7;380(2):215–29

Organization of lumbosacral motoneuronal cell groups innervating hindlimb, pelvic floor, and axial muscles in the cat. Vanderhorst VG, et al. **J Comp Neurol** 1997 May 26; 382(1):46–76

Nucleus retroambiguus projections to lumbosacral motoneuronal cell groups in the male cat. Vanderhorst VG, et al. **J Comp Neurol** 1997 May 26;382(1):77–88

Spinal cord terminations of the medial wall motor areas in macaque monkeys. Dum RP, et al. **J Neurosci** 1996 Oct 15;16(20):6513–25

Diffusion anisotropy in excised normal rat spinal cord measured by NMR microscopy. Inglis BA, et al. **Magn Reson Imaging** 1997;15(4):441–50

The cervicothalamic tract terminates in Cat301-sparse regions of the cat VPL. Broman J, et al. **Neuroreport** 1996 Jun 17;7(9):1493–6

Single neurons in Barrington's nucleus projecting to both the paraventricular thalamic nucleus and the spinal cord by way of axon collaterals: a double labeling study in the rat. Otake K, et al. **Neurosci Lett** 1996 May 10; 209(2):97–100

Localization and characterization of melatonin receptors in the rabbit spinal cord. Wan Q, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):77–80

Direct evidence of an extensive GABAergic innervation of the spinal dorsal horn by fibres descending from the rostral ventromedial medulla. Antal M, et al. **Neuroscience** 1996 Jul;73(2):509–18

Distribution of vasopressin and oxytocin receptors in the rat spinal cord: sex-related differences and effect of castration in pudendal motor nuclei. Tribollet E, et al. **Neuroscience** 1997 May;78(2):499–509

Hypoglossal afferents to lamina I neurons of the cervical spinal cord projecting to the parabrachial nucleus in the cat. Takeuchi Y, et al. **Somatosens Mot Res** 1995; 12(3–4):191–8

Morphologic features of the normal human cadaveric spinal cord. Kameyama T, et al. **Spine** 1996 Jun 1;21(11):1285–90

Vertebral level of the ending of the spinal cord and its relationship to the length of the vertebral column in northern Turkish neonates. Içten N, et al. **Surg Radiol Anat** 1995;17(4):315–8

[Observations on epidural anesthesia in cats from the anatomical viewpoint] Maierl J, et al. **Tierarztl Prax** 1997 May;25(3):267–70 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Spinal cord ischemia--use of spinal-evoked potentials for intraoperative monitoring in thoraco-abdominal aortic aneurysm (TAA) repair. Freye E, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:50–3

Intrathecal oxygen concentration as a new indicator of spinal cord ischemia. Ishizaki M, et al. **Acta Med Okayama** 1997 Apr;51(2):71–7

Correlation between spinal cord blood flow and arterial diameter following acute spinal cord injury in rats. Ohashi T, et al. **Acta Neurochir (Wien)** 1996;138(3):322–9

Spinal dural arterio-venous fistula: an underdiagnosed disease? Grandin C, et al. **Acta Neurol Belg** 1997 Mar; 97(1):17–21 (6 ref.)

Varicella-zoster ventriculo-encephalitis and spinal cord infarction in a patient with AIDS. Kenyon LC, et al. **Acta Neuropathol (Berl)** 1996 Aug;92(2):202–5

Morphological characterization of the evolving rat spinal cord injury after photochemically induced ischemia. von Euler M, et al. **Acta Neuropathol (Berl)** 1997 Sep; 94(3):232–9

Treatment of spinal injuries. On relating anatomical facts to clinical practice. Crock HV. **Acta Orthop Scand** 1997 Aug; 68(4):315–8 (13 ref.)

Regional heterogeneity and differential vulnerability of cerebral and spinal vascular CO2-responsiveness during graded haemorrhagic hypotension. Komjáti K, et al. **Acta Physiol Hung** 1996;84(3):229–49

MR angiography of normal intradural vessels of the thoracolumbar spine. Bowen BC, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):483–94

Intracranial dural arteriovenous fistulas with spinal venous drainage: relation between clinical presentation and angiographic findings. Brunereau L, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1549–54

Small isolated paraspinal arteriovenous fistula. Chen CJ, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):359–61

Cervical myelopathy associated with intracranial dural arteriovenous fistula: MR findings before and after treatment. Ernst RJ, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1330–4

Identification of the feeding arteries of spinal vascular lesions via phase-contrast MR angiography with three-dimensional acquisition and phase display. Mascalchi M, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):351–8

Dural arteriovenous fistula at the craniocervical junction with perimedullary venous drainage. Mascalchi M, et al. **AJNR Am J Neuroradiol** 1996 Jun-Jul;17(6):1137–41

Giant perimedullary arteriovenous fistulas of the spine: clinical and radiologic features and endovascular treatment. Ricolfi F, et al. **AJNR Am J Neuroradiol** 1997 Apr; 18(4):677–87

A comparison of the sensitivity of epidural and myogenic transcranial motor-evoked responses in the detection of acute spinal cord ischemia in the rabbit. de Haan P, et al. **Anesth Analg** 1996 Nov;83(5):1022–7

Direct effects of ropivacaine and bupivacaine on spinal pial vessels in canine. Assessment with closed spinal window technique. Iida H, et al. **Anesthesiology** 1997 Jul;87(1):75–81

Mild and moderate hypothermia provide better protection than a burst-suppression dose of thiopental against ischemic spinal cord injury in rabbits. Matsumoto M, et al. **Anesthesiology** 1997 May;86(5):1120–7

Effect of spinal cord preconditioning on paraplegia during cross-clamping of the thoracic aorta. Matsuyama K, et al. **Ann Thorac Surg** 1997 May;63(5):1315–20

Detrimental effects of exogenous glutamate on spinal cord neurons during brief ischemia in vivo. Mori A, et al. **Ann Thorac Surg** 1997 Apr;63(4):1057–62

Intraluminal shunt for the thoracic aorta: blood flow and function in chronic studies. Van Voorst SJ, et al. **Ann Thorac Surg** 1997 Feb;63(2):419–24

Protective effect of hypothermia and left heart bypass on spinal ischemia in the dog. Rose WW 3rd, et al. **Arch Surg** 1997 Jun;132(6):633–9; discussion 639–40

N-methyl-D-aspartate receptor-mediated events contribute to neurovascular breakdown during experimental allergic encephalomyelitis. Paul C, et al. **Biochem Soc Trans** 1997 May;25(2):167S

Symptomatic lumbar foraminal epidural varix. Case report and review of the literature. Pekindil G, et al. **Br J Neurosurg** 1997 Apr;11(2):159–60 (11 ref.)

Inductions of Cu/Zn superoxide dismutase- and nitric oxide synthase-like immunoreactivities in rabbit spinal cord after transient ischemia. Watanabe M, et al. **Brain Res** 1996 Sep 2;732(1–2):69–74

Neuroprotective effect of graded postischemic reoxygenation in spinal cord ischemia in the rabbit. Lukácová N, et al. **Brain Res Bull** 1997;43(5):457–65

Spinal anaesthesia for Caesarean section in a patient with a cervical arteriovenous malformation. Ong BY, et al. **Can J Anaesth** 1996 Oct;43(10):1052–8

Spine MR angiography. Bowen BC, et al. **Clin Neurosci** 1997; 4(3):165–73 (45 ref.)

The rationale and utility of neurophysiological investigations in clinical monitoring for brain and spinal cord ischaemia during surgery and intensive care. Prior P. **Comput Methods Programs Biomed** 1996 Oct;51(1–2):13–27 (101 ref.)

Protection of the spinal cord during surgery of thoraco-abdominal aortic aneurysms. Bachet J, et al. **Eur J Cardiothorac Surg** 1996;10(10):817–25

Spinal cord protection using hypothermic cardiocirculatory arrest in extended repair of recoarctation and persistent hypoplastic aortic arch. Lange R, et al. **Eur J Cardiothorac Surg** 1997 Apr;11(4):697–702

Upper and lower extremity somatosensory evoked potential recording during surgery for aneurysms of the descending thoracic aorta. Shahin GM, et al. **Eur J Cardiothorac Surg** 1996;10(5):299–304

Local changes in vascular architecture following partial spinal cord lesion in the rat. Imperato-Kalmar EL, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):322–8

Spinal cord compression injury in guinea pigs: structural changes of endothelium and its perivascular cell associations after blood-brain barrier breakdown and repair. Jaeger CB, et al. **Exp Neurol** 1997 Apr;144(2):381–99

Spinal cord gray matter layers rich in NADPH diaphorase-positive neurons are refractory to ischemia-reperfusion-induced injury: a histochemical and silver impregnation study in rabbit. Marsala J, et al. **Exp Neurol** 1997 May;145(1):165–79

Experimental spinal cord injury: Wallerian degeneration in the dorsal column is followed by revascularization, glial proliferation, and nerve regeneration. Zhang Z, et al. **Exp Neurol** 1997 Sep;147(1):159–71

External veins of the spinal cord it the Wistar rats. Karmański A, et al. **Folia Morphol (Warsz)** 1995;54(4):231–41

Structure of the intramedullary vascular net of the spinal cord in Wistar rats. Karmański A, et al. **Folia Morphol (Warsz)** 1996;55(3):151–9

The arterial supply of the thoracic part of human fetal spinal cord SEM of vascular corrosion casts. Zawiliński J, et al. **Folia Morphol (Warsz)** 1996;55(4):467–8

The effects of nimodipine on ischemic injury of the spinal cord during thoracic aortic cross-clamping. Rhee RY, et al. **Int Angiol** 1996 Jun;15(2):153–61

The abdominal compartment syndrome: the physiological and clinical consequences of elevated intra-abdominal pressure [letter; comment] Hopgood P, et al. **J Am Coll Surg** 1996 Oct;183(4):420–2. Comment on: J Am Coll Surg 1995 Jun;180(6):745–53.

Quantitative analysis of vascularization and cytochrome oxidase following fetal transplantation in the contused rat spinal cord. Horner PJ, et al. **J Comp Neurol** 1996 Jan 22;364(4):690–703

Acute pancreatitis complicated by infarction of the spleen and spinal cord. Wei SC, et al. **J Formos Med Assoc** 1997 Sep;96(9):754–7

Experimental use of somatosensory evoked potential for intraoperative identification of spinal cord blood supply. Janusz MT, et al. **J Invest Surg** 1997 Jul-Aug;10(4):195–203

Spinal arteriovenous malformations: clinical and neurophysiological findings. Linden D, et al. **J Neurol** 1996 Jan;243(1):9–12

Electrophysiological monitoring in neurological respiratory insufficiency [letter] Zifko U, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):299–300

Spinal epidural arteriovenous fistula with intramedullary reflux. Case report. Pirouzmand F, et al. **J Neurosurg** 1997 Oct;87(4):633–5

Vascular mechanisms in the pathophysiology of human spinal cord injury. Tator CH, et al. **J Neurosurg** 1997 Mar; 86(3):483–92

Intraoperative improvement of somatosensory evoked potentials and local spinal cord blood flow in patients with syringomyelia. Milhorat TH, et al. **J Neurosurg Anesthesiol** 1996 Jul;8(3):208–15

Pathophysiological classification of human spinal cord ischemia. Castro-Moure F, et al. **J Spinal Cord Med** 1997 Jan;20(1):74–87 (178 ref.)

Spinal dural arteriovenous fistulas: recognizing the spectrum of magnetic resonance imaging findings. Jones BV, et al. **J Spinal Cord Med** 1997 Jan;20(1):43–8

Spinal cord infarction: varying degrees of upper and lower motoneuron dysfunction. Little JW, et al. **J Spinal Cord Med** 1996 Oct;19(4):242–8

Epinephrine increases the selective permeability of epidurally administered [3H]–D–mannitol and [14C]–carboxyl–inulin across the blood–spinal cord barrier. Naidu KA, et al. **J Spinal Cord Med** 1996 Jul;19(3):176–82

Critical levels of spinal cord blood flow and duration of ischemia for the acute recovery of segmental spinal cord responses in cats. Kolenda H, et al. **J Spinal Disord** 1997 Aug;10(4):288–95

Influence of short–term ischemia on segmental spinal cord reflex functions in cats. Kolenda H, et al. **J Spinal Disord** 1997 Feb;10(1):68–79

Effect of nitroglycerin and cerebrospinal fluid drainage on spinal cord perfusion pressure and paraplegia during aortic cross–clamping. Marini CP, et al. **J Surg Res** 1997 Jun; 70(1):61–5

Efficacy of transcranial motor–evoked myogenic potentials to detect spinal cord ischemia during operations for thoracoabdominal aneurysms. de Haan P, et al. **J Thorac Cardiovasc Surg** 1997 Jan;113(1):87–100; discussion 100–1

Selective motor neuron death and heat shock protein induction after spinal cord ischemia in rabbits. Sakurai M, et al. **J Thorac Cardiovasc Surg** 1997 Jan;113(1):159–64

Intraoperative identification of spinal cord blood supply during repairs of descending aorta and thoracoabdominal aorta. Svensson LG. **J Thorac Cardiovasc Surg** 1996 Dec; 112(6):1455–60; discussion 1460–1

Isolated stab wound to the artery of Adamkiewicz: case report and review of the literature. Rogers FB, et al. **J Trauma** 1997 Sep;43(3):549–51 (18 ref.)

Clinical experience with epidural cooling for spinal cord protection during thoracic and thoracoabdominal aneurysm repair. Cambria RP, et al. **J Vasc Surg** 1997 Feb; 25(2):234–41; discussion 241–3

Ischemia–reperfusion injury in the spinal cord of rabbits strongly enhances lipid peroxidation and modifies phospholipid profiles. Lukáčová N, et al. **Neurochem Res** 1996 Aug;21(8):869–73

Vertebrospinal angiography in the evaluation of vertebral and spinal cord disease. Nelson PK, et al. **Neuroimaging Clin N Am** 1996 Aug;6(3):589–605 (61 ref.)

Posterior cervical spinal cord infarction following vertebral artery dissection. Bergqvist CA, et al. **Neurology** 1997 Apr; 48(4):1112–5

Spinal cord infarction: etiology and outcome [see comments] Cheshire WP, et al. **Neurology** 1996 Aug;47(2):321–30. Comment in: Neurology 1997 May;48(5):1474–5. Comment in: Neurology 1997 May;48(5):1478.

Spinal cord watershed [letter; comment] Jellinger KA. **Neurology** 1997 May;48(5):1474–5. Comment on: Neurology 1996 Aug;47(2):321–30.

Spinal cord infarction [letter; comment] Leite I, et al. **Neurology** 1997 May;48(5):1478. Comment on: Neurology 1996 Aug;47(2):321–30.

Radiation dermatitis after spinal arteriovenous malformation embolization: case report. Carstens GJ, et al. **Neuroradiology** 1996 May;38 Suppl 1:S160–4

Contrast–enhanced MRI in spinal arteriovenous malformations and fistulae before and after embolisation therapy. Hasuo K, et al. **Neuroradiology** 1996 Oct; 38(7):609–14

Hypoxic–ischaemic injury of the spinal cord in systemic shock: MRI. Liou RJ, et al. **Neuroradiology** 1996 May;38 Suppl 1:S181–3

Multiple arteriovenous malformations of the spinal cord in an adolescent: case report. Meisel HJ, et al. **Neuroradiology** 1996 Jul;38(5):490–3

Dissociation of HSP72 and HSC73 heat shock mRNA inductions after spinal cord ischemia in rabbit. Sakurai M, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):113–6

Spinal cord blood flow decreases following microinjection of sodium nitroprusside into the nucleus tractus solitarii of anesthetized rats. Takao S, et al. **Neurosci Res** 1996 Jul; 25(3):285–91

Ultrastructural evidence for arteriolar vasospasm after spinal cord trauma. Anthes DL, et al. **Neurosurgery** 1996 Oct; 39(4):804–14

Classification and therapeutic modalities of spinal vascular malformations in 80 patients. Bao YH, et al. **Neurosurgery** 1997 Jan;40(1):75–81

Intramedullary angiographically occult vascular malformations of the spinal cord. Furuya K, et al. **Neurosurgery** 1996 Dec;39(6):1123–30; discussion 1131–2

Response of spinal cord blood flow to the nitric oxide inhibitor nitroarginine. Hitchon PW, et al. **Neurosurgery** 1996 Oct;39(4):795–803

Use of the extreme lateral approach in the surgical treatment of an intradural ventral cervical spinal cord vascular malformation: technical case report. Markert JM, et al. **Neurosurgery** 1996 Feb;38(2):412–5

Embolization of spinal dural arteriovenous fistulae: results and follow–up. Niimi Y, et al. **Neurosurgery** 1997 Apr; 40(4):675–82; discussion 682–3 (13 ref.)

Cervical spinal cord infarction after surgery for a pineal region choriocarcinoma in the sitting position: case report. Nitta H, et al. **Neurosurgery** 1997 May;40(5):1082–5; discussion 1085–6

Unusual intramedullary vascular lesion: report of two cases. Schwartz TH, et al. **Neurosurgery** 1997 Jun;40(6):1295–301

Aneurysm of the intradural artery of Adamkiewicz treated with muslin wrapping: technical case report. Vishteh AG, et al. **Neurosurgery** 1997 Jan;40(1):207–9

The reliability of evoked spinal cord potentials elicited by direct stimulation of the cord as a monitor of spinal cord ischemia during temporary occlusion of the thoracic aorta. Matsui Y, et al. **Panminerva Med** 1997 Jun;39(2):78–84

Arteriovenous malformation of the cervical spinal cord with unusual drainage into the cranial cavity. Matsko DE, et al. **Pathol Res Pract** 1996 Sep;192(9):942–7; discussion 948

Spinal vasculature thrombosis as the etiology of spinal cord injury following epidural phenol [letter; comment] Wilson S, et al. **Reg Anesth** 1996 Jul–Aug;21(4):374–5. Comment on: Reg Anesth 1995 Jul–Aug;20(4):283–90.

Ischaemic spinal cord injury following a coronary angiogram: a case report. Otom A, et al. **Spinal Cord** 1996 May;34(5):308–10

Regulation of vasomotion of arterioles and capillaries in the cat spinal cord: role of alpha actin and endothelin–1. Toribatake Y, et al. **Spinal Cord** 1997 Jan;35(1):26–32

Comparison of preoperative selective spinal angiography and somatosensory–evoked potential monitoring with temporary occlusion of segmental vessels during anterior spinal surgery. Bassett G, et al. **Spine** 1996 Sep 1; 21(17):1996–9; discussion 2000

Viscoelastic relaxation and regional blood flow response to spinal cord compression and decompression. Carlson GD, et al. **Spine** 1997 Jun 15;22(12):1285–91

Vulnerability of great medullary artery. Lu J, et al. **Spine** 1996 Aug 15;21(16):1852–5

Somatosensory– and motor–evoked potentials in a rabbit model of spinal cord ischemia and reperfusion injury. Zhao M, et al. **Spine** 1997 May 1;22(9):1013–7

Effect of proximal arterial perfusion pressure on function, spinal cord blood flow, and histopathologic changes after increasing intervals of aortic occlusion in the rat [letter; comment] Schepens MA. **Stroke** 1997 Apr;28(4):878–9. Comment on: Stroke 1996 Oct;27(10):1850–8.

Effect of proximal arterial perfusion pressure on function, spinal cord blood flow, and histopathologic changes after increasing intervals of aortic occlusion in the rat [see comments] Taira Y, et al. **Stroke** 1996 Oct;27(10):1850–8 . Comment in: Stroke 1997 Apr;28(4):878–9.

Origin of the anterior spinal artery. Gövsa F, et al. **Surg Radiol Anat** 1996;18(3):189–93

Spinal cord protection in descending and thoracoabdominal aortic surgery––the role of distal perfusion. Bonatti J, et al. **Thorac Cardiovasc Surg** 1996 Jun;44(3):136–9

Enoximone usage for experimental spinal cord protection during aortic cross–clamping. Katircioğlu SF, et al. **Thorac Cardiovasc Surg** 1996 Oct;44(5):245–7

[Effects of platelet activating factor and platelet activating factor receptor antagonist on spinal cord blood flow after spinal cord injury] Xiao J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):715–8 (Eng. Abstr.) **(Chi)**

[Clinical judgment and decision making in clinical practice. A free spirit with imminent paraplegia (see comments) (published erratum appears in Net Tijdschr Geneeskd 1997 Mar 1;141(9):456)] van Gijn J, et al. **Ned Tijdschr Geneeskd** 1997 Feb 15;141(7):322–7 (Eng. Abstr.). Comment in: Ned Tijdschr Geneeskd 1997 Mar 29;141(13):652. **(Dut)**

[Angiographic identification of spinal cord arteries before bronchial artery embolization] Mesurolle B, et al. **J Radiol** 1997 May;78(5):377–80 (Eng. Abstr.) **(Fre)**

[Ataxic crural hemiparesis caused by posterior spinal arterial infarction] Masson C, et al. **Rev Neurol (Paris)** 1997 Feb; 155(1):65–6 (Eng. Abstr.) **(Fre)**

[Intravascular lymphomatosis of the nervous system––case report and review of the literature] Heesen C, et al. **Fortschr Neurol Psychiatr** 1996 Jun;64(6):234–41 (104 ref.) (Eng. Abstr.) **(Ger)**

[Arteriovenous malformations of the cervical spinal cord] Sträter R, et al. **Klin Padiatr** 1997 Mar–Apr;209(2):84–7 (Eng. Abstr.) **(Ger)**

[The interesting case report: spinal infarct with the picture of lumbar ischialgia] Zedler A, et al. **Z Orthop Ihre Grenzgeb** 1996 Nov–Dec;134(6):488–91 (Eng. Abstr.) **(Ger)**

[Tetraplegia and acute respiratory insufficiency from an ischemic cervical medulla lesion after cocaine use. A clinical case] Laurenzi L, et al. **Minerva Anestesiol** 1995 Sep;61(9):387–91 (Eng. Abstr.) **(Ita)**

[The differences of the cerebral and spinal vessels in sensitivity to PaCO2 and vasoconstrictors] Iida H, et al. **Masui** 1997 Jan;46(1):2–9 (Eng. Abstr.) **(Jpn)**

[Monitoring for spinal cord ischemia by the use of the motor evoked potentials, the evoked spinal cord potential and the segmental evoked spinal cord potential during thoracoabdominal aortic surgery––a case report] Okada K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul; 45(7):1003–5 (Eng. Abstr.) **(Jpn)**

[Spinal cord ischemia caused by dissecting aortic aneurysm in a patient with acute exacerbation of pulmonary emphysema] Yanagisawa N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 Jan;35(1):77–81 (Eng. Abstr.) **(Jpn)**

[Autopsy findings of atheromatous embolism to the spinal cord] Wang Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Dec;33(12):935–9 (Eng. Abstr.) **(Jpn)**

[Pathological study of age–related vascular changes in the spinal cord] Wang Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Aug;33(8):563–8 (Eng. Abstr.) **(Jpn)**

[Surgical approaches to spinal arteriovenous malformations: anatomy and operative methods] Miyamoto S, et al. **No Shinkei Geka** 1997 Feb;25(2):109–15 (30 ref.) **(Jpn)**

[MRI findings of anterior spinal artery syndrome in childhood] Shimizu M, et al. **No To Hattatsu** 1996 Sep; 28(5):438–42 (Eng. Abstr.) **(Jpn)**

[A patient with spinal arteriovenous malformation] Sugai H, et al. **No To Shinkei** 1996 Nov;48(11):1058 **(Jpn)**

[Back pain, quadriplegia, dissociated sensory loss] Yoshii H. **No To Shinkei** 1997 Mar;49(3):288–9 **(Jpn)**

[The value of F–waves in an early electrodiagnosis of the lower cervical cord infarction] Oeda T, et al. **Rinsho Shinkeigaku** 1996 Apr;36(4):587–9 (Eng. Abstr.) **(Jpn)**

[A new method for recording the spinal blood circulation in spinal diseases and trauma] Tikhodeev SA, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):83–5 **(Rus)**

[The structure and hemodynamics of arteriovenous malformations of the spinal cord] Tissen TP. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr–Jun;(2):3–7 (Eng. Abstr.) **(Rus)**

[Transient cerebral and bone marrow ischemia in patients with atrioseptal aneurysm] Molina Cateriano C, et al. **Med Clin (Barc)** 1996 Jun 15;107(3):99–101 (Eng. Abstr.) **(Spa)**

CHEMISTRY

Antinociceptive action of intrathecally administered IGF–I and the expression of its receptor in rat spinal cord. Bitar MS, et al. **Brain Res** 1996 Oct 21;737(1–2):292–4

Distribution of sodium channels in chronically demyelinated spinal cord axons: immunoultrastructural localization and electrophysiological observations. Brain Research 544 (1991) 59–70 [letter; comment] Black JA, et al. **Brain Res** 1997 Jun 27;761(1):1. Comment on: Brain Res 1991 Mar 22;544(1):59–70.

Ultrastructural localization of mu–opioid receptors in the superficial layers of the rat cervical spinal cord: extrasynaptic localization and proximity to Leu5–enkephalin. Cheng PY, et al. **Brain Res** 1996 Aug 26;731(1–2):141–54

Synaptic inhibition mediated by GABAB receptors in the neonatal rat spinal cord in vitro. Lacey G. **Brain Res** 1996 Apr 22;717(1–2):76–80

Distributional characteristics of the mRNA for retinoid Z receptor beta (RZR beta), a putative nuclear melatonin receptor, in the rat brain and spinal cord. Park HT, et al. **Brain Res** 1997 Feb 7;747(2):332–7

Colocalization of GABA and glycine in the rat dorsal column nuclei. Popratiloff A, et al. **Brain Res** 1996 Jan 15; 706(2):308–12

Identification and characterization of novel developmentally regulated proteins in rat spinal cord. Geschwind DH, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):62–75

alpha 2A/D–Adrenoceptor subtype predominates also in the neonatal rat spinal cord. Savola MK, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):106–8

Distribution and levels of insulin–like growth factor (IGF–I and IGF–II) and insulin receptor binding sites in the spinal cords of amyotrophic lateral sclerosis (ALS) patients. Doré S, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1–2):128–33

alpha 2–Adrenergic receptors in human spinal cord: specific localized expression of mRNA encoding alpha 2–adrenergic receptor subtypes at four distinct levels. Smith MS, et al. **Brain Res Mol Brain Res** 1995 Dec 1; 34(1):109–17

Bovine Reissner's fiber (RF) and the central canal of the spinal cord: an immunocytochemical study using a set of monoclonal antibodies against the RF–glycoproteins. Pérez J, et al. **Cell Tissue Res** 1996 Oct;286(1):33–42

Reduction of CAG expansions in cerebellar cortex and spinal cord of DRPLA. Aoki M, et al. **Clin Genet** 1996 Oct; 50(4):199–201

Stiff–man syndrome: possible autoimmune etiology targeted against GABA–ergic cells. Warich–Kirches M, et al. **Clin Neuropathol** 1997 Jul–Aug;16(4):214–9

In situ localization of thrombospondin–1 and thrombospondin–3 transcripts in the avian embryo. Tucker RP, et al. **Dev Dyn** 1997 Mar;208(3):326–37

Distribution of alpha 1a–, alpha 1b– and alpha 1d–adrenergic receptor mRNA in the rat brain and spinal cord. Day HE, et al. **J Chem Neuroanat** 1997 Jul;13(2):115–39

Distribution of immunoreactivity for the beta 2 and beta 3 subunits of the GABAA receptor in the mammalian spinal cord. Alvarez FJ, et al. **J Comp Neurol** 1996 Feb 12; 365(3):392–412

Distribution of glycine–immunoreactive profiles in the monkey spinal cord: a light microscopic and ultrastructural study. Carlton SM, et al. **J Comp Neurol** 1996 Aug 5; 371(4):589–602

Quantification of myelin basic protein in the human fetal spinal cord during the midtrimester of gestation. Grever WE, et al. **J Comp Neurol** 1996 Dec 9;376(2):306–14

Immunocytochemical localization of the alpha 6 subunit of the gamma–aminobutyric acidA receptor in the rat nervous system. Gutiérrez A, et al. **J Comp Neurol** 1996 Feb 12;

365(3):504–10
Differential distribution of (GABA)A receptor subunits on bulbospinal serotonergic and nonserotonergic neurons of the ventromedial medulla of the rat. Hama AT, et al. **J Comp Neurol** 1997 Aug 4;384(3):337–48
Qualitative and quantitative analysis of glycine- and GABA-immunoreactive nerve terminals on motoneuron cell bodies in the cat spinal cord: a postembedding electron microscopic study. Ornung G, et al. **J Comp Neurol** 1996 Feb 12;365(3):413–26
Immunocytochemical localization of dopamine and its synthetic enzymes in the central nervous system of the lamprey Lampetra fluviatilis. Pierre J, et al. **J Comp Neurol** 1997 Mar 31;380(1):119–35
Myelin structure in proteolipid protein (PLP)-null mouse spinal cord. Rosenbluth J, et al. **J Comp Neurol** 1996 Jul 22;371(2):336–44
Biochemical analysis of myelin proteins in a novel neurological mutant: the taiep rat. Möller JR, et al. **J Neurochem** 1997 Aug;69(2):773–9
Distribution and subcellular localization of high-molecular-weight microtubule-associated protein-2 expressing exon 8 in brain and spinal cord. Shafit-Zagardo B, et al. **J Neurochem** 1997 Feb;68(2):862–73
Serotonergic neurotransmission in the spinal cord and motor cortex of patients with motor neuron disease and controls: quantitative autoradiography for 5-HT1a and 5-HT2 receptors. Forrest V, et al. **J Neurol Sci** 1996 Aug;139 Suppl:83–90
Estrogen receptor-immunoreactive neurons are present in the female rat lumbosacral spinal cord. Williams SJ, et al. **J Neurosci Res** 1996 Nov 15;46(4):492–501
M2, M3 and M4, but not M1, muscarinic receptor subtypes are present in rat spinal cord. Höglund AU, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):470–7
Autoradiography of [3H]alpha,beta-methylene-ATP binding sites in medulla oblongata and spinal cord of the rat. Tuyau M, et al. **Neurochem Int** 1997 Feb;30(2):159–69
Regional distribution of phospholipids and polyphosphatidyl inositides in the rabbit's spinal cord. Lukácová N, et al. **Neurochem Res** 1997 Jun;22(6):687–92
CGRP in the trigeminal nucleus, spinal cord and hypothalamus: effect of gonadal steroids. Moussaoul S, et al. **Neuropeptides** 1996 Dec;30(6):546–50
CI 988, an antagonist of the cholecystokinin-B receptor, potentiates endogenous opioid-mediated antinociception at spinal level. Xu XJ, et al. **Neuropeptides** 1997 Jun; 31(3):287–91
Orphanin FQ/nociceptin-immunoreactive nerve fibers parallel those containing endogenous opioids in rat spinal cord. Riedl M, et al. **Neuroreport** 1996 May 31;7(8):1369–72
Immunoelectron microscopic localization of NK-3 receptor in the rat spinal cord. Zerari F, et al. **Neuroreport** 1997 Aug 18;8(12):2661–4
GABAergic synapses on mu-opioid receptor-expressing neurons in the superficial dorsal horn: an electron microscope study in the cat spinal cord. Gong LW, et al. **Neurosci Lett** 1997 May 9;227(1):33–6
Regional study of spinal alpha 2-adrenoceptor densities after intraspinal noradrenergic-rich implants on adult rats bearing complete spinal cord transection or selective chemical noradrenergic denervation. Roudet C, et al. **Neurosci Lett** 1996 Apr 19;208(2):89–92
Determination of nociceptin-like immunoreactivity in the rat dorsal spinal cord. Schuligoi R, et al. **Neurosci Lett** 1997 Mar 14;224(2):136–8
Calcitonin gene-related peptide (8-37) does not antagonize calcitonin gene-related peptide in rat spinal cord. Xu XJ, et al. **Neurosci Lett** 1996 Feb 9;204(3):185–8
Spinal cord lactate concentration during chemical stimulation of the nucleus tractus solitarii in anesthetized rats. Ikegami Y, et al. **Neurosci Res** 1996 Mar;24(4):319–27
Persistent c-fos expression in the brains of mice with chronic social stress. Matsuda S, et al. **Neurosci Res** 1996 Oct; 26(2):157–70
mGluR5 metabotropic glutamate receptor distribution in rat and human spinal cord: a developmental study. Valerio A, et al. **Neurosci Res** 1997 May;28(1):49–57
Erythropoietin receptors are expressed in the central nervous system of mid-trimester human fetuses. Li Y, et al. **Pediatr Res** 1996 Sep;40(3):376–80

CYTOLOGY

Influence of spaceflight on succinate dehydrogenase activity and soma size of rat ventral horn neurons. Ishihara A, et al. **Acta Anat (Basel)** 1996;157(4):303–8
Axotomy induces retraction of the dendritic arbor of adult rat rubrospinal neurons. Tseng GF, et al. **Acta Anat (Basel)** 1996;155(3):184–93
Age-related changes in human spinal ventral horn cells with special reference to the loss of small neurons in the intermediate zone: a quantitative analysis. Terao S, et al. **Acta Neuropathol (Berl)** 1996 Aug;92(2):109–14
The projections to the spinal cord of the rat during development: a timetable of descent. Lakke EA. **Adv Anat Embryol Cell Biol** 1997;135:I-XIV, 1–143 (456 ref.)
The raccoon lateral cervical nucleus: mediolateral organization of GABA-positive and GABA-negative neurons and fibers. Broman J, et al. **Anat Embryol (Berl)** 1996 May;193(5):463–74
The axonal projections of the Hofmann nuclei in the spinal cord of the late stage chicken embryo. Eide AL. **Anat Embryol (Berl)** 1996 Jun;193(6):543–57
Neurons with perineuronal sulfated proteoglycans in the mouse brain and spinal cord: their distribution and reactions to lectin Vicia villosa agglutinin and Golgi's silver nitrate. Murakami T, et al. **Arch Histol Cytol** 1996 Aug; 59(3):219–31
Fluoxetine treatment alters leukocyte trafficking in the intrathecal compartment of the young primate. Coe CL, et al. **Biol Psychiatry** 1996 Sep 1;40(5):361–7
Effect of capsaicin and analogues on potassium and calcium currents and vanilloid receptors in Xenopus embryo spinal neurones. Kuenzi FM, et al. **Br J Pharmacol** 1996 Sep; 119(1):81–90
Vestibulospinal, reticulospinal and descending propriospinal nerve fibres in man. Nathan PW, et al. **Brain** 1996 Dec; 119 (Pt 6):1809–33
Cyto- and myeloarchitectonic organisation of the spinal cord of an echidna (Tachyglossus aculeatus). Ashwell KW, et al. **Brain Behav Evol** 1997;49(5):276–94
Classification of dorsal horn neurons based on somatic receptive fields in cats with intact and transected spinal cords: neural plasticity. Garrison DW, et al. **Brain Res** 1997 Jul 11;762(1-2):228–30
Direct evidence for the link between monoaminergic descending pathways and motor activity. I. A study with microdialysis probes implanted in the ventral funiculus of the spinal cord. Gerin C, et al. **Brain Res** 1995 Dec 18; 704(2):191–201
Modulation of frog spinal cord interneuronal activity by activation of 5-HT3 receptors. Holohean AM, et al. **Brain Res** 1995 Dec 18;704(2):184–90
When is the maximal effect of pre-administered systemic morphine on carrageenin evoked spinal c-Fos expression in the rat? Honoré P, et al. **Brain Res** 1995 Dec 24; 705(1-2):91–6
Parabrachial nucleus neurons providing axons to both the thalamus and the spinal cord in the rat. Li JL, et al. **Brain Res** 1997 Jan 16;745(1-2):321–7
Cell size and geometry of spinal cord motoneurons in the adult cat following the intramuscular injection of adriamycin: comparison with data from aged cats. Liu RH, et al. **Brain Res** 1996 Oct 28;738(1):121–30
Reduction of NaCl increases survival of mammalian spinal neurons subjected to dendrite transection injury. Rosenberg LJ, et al. **Brain Res** 1996 Sep 23;734(1-2):349–53
Rubral astrocytic reactions to proximal and distal axotomy of rubrospinal neurons in the rat. Tseng GF, et al. **Brain Res** 1996 Dec 2;742(1-2):115–28
Inhibitory effects of electrical stimulation of thalamic nucleus submedius on the nociceptive responses of spinal dorsal horn neurons in the rat. Zhang YQ, et al. **Brain Res** 1996 Oct 21;737(1-2):16–24
The black reaction. Pannese E. **Brain Res Bull** 1996; 41(6):343–9
Perinatal developmental changes in respiratory activity of medullary and spinal neurons: an in vitro study on fetal and newborn rats. Di Pasquale E, et al. **Brain Res Dev Brain Res** 1996 Jan 22;91(1):121–30
Evidence that intersegmental competition influences the segmental distribution of the central terminals of muscle sensory afferents in the chicken embryo. Eide AL, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):126–37
Spinocerebellar mossy fiber terminal topography in the NR2C/PKC gamma double mutant cerebellum. Ji Z, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):138–42
Growth of dorsal spinocerebellar axons through a lesion of their spinal pathway during early development in the North American opossum, Didelphis virginiana. Terman JR, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1-2):33–48
Oligodendrocytes in the adult rat spinal cord undergo radiation-induced apoptosis. Li YQ, et al. **Cancer Res** 1996 Dec 1;56(23):5417–22
Tyrosine hydroxylase-containing neurons in the spinal cord of the chicken. I. Development and analysis of catecholamine synthesis capabilities. Wallace JA, et al. **Cell Mol Neurobiol** 1996 Dec;16(6):625–48
Regulation of spinal motoneuron survival by GDNF during development and following injury. Houenou LJ, et al. **Cell Tissue Res** 1996 Nov;286(2):219–23
Fibroblast growth factor-2 (FGF-2) and FGF-receptor (FGFR-1) immunoreactivity in embryonic spinal autonomic neurons. Stapf C, et al. **Cell Tissue Res** 1997 Mar;287(3):471–80
Oxytocin innervation of spinal preganglionic neurons projecting to the superior cervical ganglion in the rat. Teclemariam-Mesbah R, et al. **Cell Tissue Res** 1997 Mar; 287(3):481–6
Neuroepithelial stem cells from the embryonic spinal cord: isolation, characterization, and clonal analysis. Kalyani A, et al. **Dev Biol** 1997 Jun 15;186(2):202–23
Neural crest-like cells originate from the spinal cord during tail regeneration in adult amphibian urodeles. Benraiss A, et al. **Dev Dyn** 1997 May;209(1):15–28
Clonal cell cultures from adult spinal cord of the amphibian urodele Pleurodeles waltl to study the identity and potentialities of cells during tail regeneration. Benraiss A, et al. **Dev Dyn** 1996 Feb;205(2):135–49
Origins of spinal cord oligodendrocytes: possible developmental and evolutionary relationships with motor neurons. Richardson WD, et al. **Dev Neurosci** 1997; 19(1):58–68 (44 ref.)
Spinal cord oligodendrocytes develop from ventrally derived progenitor cells that express PDGF alpha-receptors. Hall A, et al. **Development** 1996 Dec;122(12):4085–94
Organisation of the zebrafish spinal cord: distribution of motoneuron dendrites and 5-HT containing cells. Van Raamsdonk W, et al. **Eur J Morphol** 1996;34(2):65–77
Responses of medullary reticulospinal neurones to stimulation of cutaneous limb nerves during locomotion in intact cats. Drew T, et al. **Exp Brain Res** 1996 Sep;111(2):153–68
Patterns of connectivity of spinal interneurons with single muscle afferents. Quevedo J, et al. **Exp Brain Res** 1997 Jul;115(3):387–402
Excitatory connections between neurons of the central cervical nucleus and vestibular neurons in the cat. Sato H, et al. **Exp Brain Res** 1997 Jul;115(3):381–6
Association of spinal lamina I projections with brainstem catecholamine neurons in the monkey. Westlund KN, et al. **Exp Brain Res** 1996 Jul;110(2):151–62
Differential distribution of immunoreactivity in the adult rat spinal cord revealed by the monoclonal antibody, Py: a light and electron microscopic study. Brook GA, et al. **Exp Neurol** 1997 Jul;146(1):265–76
The central distribution of primary afferents from the external eyelids, conjunctiva, and cornea in the rabbit, studied using WGA-HRP and B-HRP as transganglionic tracers. van Ham JJ, et al. **Exp Neurol** 1996 Dec;142(2):217–25
Activation of alpha7 nicotinic acetylcholine receptor promotes survival of spinal cord motoneurons. Messi ML, et al. **FEBS Lett** 1997 Jul 7;411(1):32–8
Ex vivo gene delivery of platelet-derived growth factor increases 0-2A progenitors in adult rat spinal cord. Ijichi A, et al. **Gene Ther** 1996 May;3(5):389–95
Removal of cobalt-labeled neurons and nerve fibers by microglia from the frog's brain and spinal cord. Lazar G, et al. **Glia** 1996 Feb;16(2):101–7
A critical period for the influence of peripheral targets on the central projections of developing sensory neurons. Mears SC, et al. **Int J Dev Neurosci** 1996 Oct;14(6):731–7
Growth cone behavior in the presence of soluble chondroitin sulfate proteoglycan (CSPG), compared to behavior on CSPG bound to laminin or fibronectin. Snow DM, et al. **Int J Dev Neurosci** 1996 Jun;14(3):331–49
Cells of origin of spinal projections from the paraventricular nucleus (PVN) of the hypothalamus in the chicken. Naito J, et al. **J Auton Nerv Syst** 1996 Dec 14;61(3):321–3
Evidence for the existence of galanin receptors on cultured astrocytes of rat CNS: colocalization with cholinergic receptors. Hösli E, et al. **J Chem Neuroanat** 1997 Jul; 13(2):95–103
Cell-type specific organization of glycine receptor clusters in the mammalian spinal cord. Alvarez FJ, et al. **J Comp Neurol** 1997 Mar 3;379(1):150–70
Further evidence for the involvement of the spinoparabrachial pathway in nociceptive processes: a c-Fos study in the rat. Bester H, et al. **J Comp Neurol** 1997 Jul 14;383(4):439–58
Cells of origin, course, and termination patterns of the ventral, uncrossed component of the mature rat corticospinal tract. Brösamle C, et al. **J Comp Neurol** 1997 Sep 22;386(2):293–303
Variation of dorsal horn cell dendritic spread with map scale. Brown PB, et al. **J Comp Neurol** 1996 Oct 21;374(3):354–61
Distribution of transferrin binding protein immunoreactivity in the chicken central and peripheral nervous systems. Cho SS, et al. **J Comp Neurol** 1997 Jun 2;382(2):260–71
Development of spinal cord projections from neocortical transplants heterotopically placed in the neocortex of newborn hosts is highly dependent on the embryonic locus of origin of the graft. Ebrahimi-Gaillard A, et al. **J Comp Neurol** 1996 Jan 29;365(1):129–40
Sexual dimorphism of perineal muscles and motoneurons in spotted hyenas. Forger NG, et al. **J Comp Neurol** 1996 Nov 11;375(2):333–43
Evidence of spinocerebellar mossy fiber segregation in the juvenile staggerer cerebellum. Ji Z, et al. **J Comp Neurol** 1997 Feb 17;378(3):354–62
Multi-segmental innervation of single pontine reticulospinal axons in the cervico-thoracic region of the cat: anterograde PHA-L tracing study. Matsuyama K, et al. **J Comp Neurol** 1997 Jan 13;377(2):234–50
Morphology of single axons of tectospinal neurons in the upper cervical spinal cord. Muto N, et al. **J Comp Neurol** 1996 Aug 12;372(1):9–26
Distinct cell groups in the lumbosacral cord of the cat project to different areas in the periaqueductal gray. Vanderhorst VG, et al. **J Comp Neurol** 1996 Dec 16;376(3):361–85
Distribution of neuronal apoptosis inhibitory protein-like immunoreactivity in the rat central nervous system. Xu DG, et al. **J Comp Neurol** 1997 Jun 2;382(2):247–59
Glial fibrillary acidic protein and vimentin in radial glia of Ambystoma mexicanum and Triturus carnifex: an immunocytochemical study. Lazzari M, et al. **J Hirnforsch** 1997;38(2):187–94
Short- and long-term effects of ciliary neurotrophic factor on androgen-sensitive motoneurons in the lumbar spinal cord. Bengston L, et al. **J Neurobiol** 1996 Oct;31(2):263–73
Neurotrophin-3-like immunoreactivity and Trk C expression in human spinal motoneurons in amyotrophic lateral sclerosis. Duberley RM, et al. **J Neurol Sci** 1997 May 1; 148(1):33–40
Inhibitory synaptic transmission in isolated patches of membrane from cultured rat spinal cord and medullary

neurons. Lewis CA, et al. **J Neurophysiol** 1996 Jul; 76(1):461–70

Downregulation of tetrodotoxin–resistant sodium currents and upregulation of a rapidly repriming tetrodotoxin–sensitive sodium current in small spinal sensory neurons after nerve injury. Cummins TR, et al. **J Neurosci** 1997 May 15;17(10):3503–14

Multiple actions of 1S,3R–ACPD in modulating endogenous synaptic transmission to spinal respiratory motoneurons. Dong XW, et al. **J Neurosci** 1996 Aug 15;16(16):4971–82

Development of an identified spinal commissural interneuron population in an amniote: neurons of the avian Hofmann nuclei. Eide AL, et al. **J Neurosci** 1996 Sep 15; 16(18):5749–61

Cells in laminae III and IV of the rat spinal cord that possess the neurokinin–1 receptor and have dorsally directed dendrites receive a major synaptic input from tachykinin–containing primary afferents. Naim M, et al. **J Neurosci** 1997 Jul 15;17(14):5536–48

Multipotent CNS stem cells are present in the adult mammalian spinal cord and ventricular neuroaxis. Weiss S, et al. **J Neurosci** 1996 Dec 1;16(23):7599–609

Density–dependent feedback inhibition of oligodendrocyte precursor expansion. Zhang H, et al. **J Neurosci** 1996 Nov 1;16(21):6886–95

Persistent neuronal labeling by retrograde fluorescent tracers: a comparison between Fast Blue, Fluoro–Gold and various dextran conjugates. Novikova L, et al. **J Neurosci Methods** 1997 Jun 6;74(1):9–15

Oligodendrocyte gene expression in the human fetal spinal cord during the second trimester of gestation. Grever WE, et al. **J Neurosci Res** 1997 Feb 1;47(3):332–40

B61, a ligand for the Eck receptor protein–tyrosine kinase, exhibits neurotrophic activity in cultures of rat spinal cord neurons. Magal E, et al. **J Neurosci Res** 1996 Mar 15; 43(6):735–44

Targeting and gene expression in spinal cord motor neurons following intramuscular inoculation of an HSV–1 vector. Keir SD, et al. **J Neurovirol** 1995 Sep;1(3–4):259–67

Modulation of plateau properties in dorsal horn neurones in a slice preparation of the turtle spinal cord. Russo RE, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):459–74

Dynamics of synaptic vesicles in cultured spinal cord neurons in relationship to synaptogenesis. Dai Z, et al. **Mol Cell Neurosci** 1996 Jun;7(6):443–52

An in vitro model of the rat dorsal root entry zone reveals developmental changes in the extent of sensory axon growth into the spinal cord. Golding JP, et al. **Mol Cell Neurosci** 1996 Mar;7(3):191–203

Degeneration of cocultures of spinal muscular atrophy muscle cells and rat spinal cord explants is not due to secreted factors and cannot be prevented by neurotrophins. Braun S, et al. **Muscle Nerve** 1997 Aug;20(8):953–60

A special kind of anterior horn cell involvement in juvenile myoclonic epilepsy demonstrated by macro electromyography. Ertaş M, et al. **Muscle Nerve** 1997 Feb; 20(2):148–52

Evaluation of chick embryo spinal motoneuron cultures for the study of neurotoxicity. Guale FG, et al. **Nat Toxins** 1997;5(3):115–20

Quantitative analysis of electrotonic structure and membrane properties of NMDA–activated lamprey spinal neurons. Murphey CR, et al. **Neural Comput** 1995 May;7(3):486–506

New polyclonal antiserum against microtubule–associated protein 2 (MAP2); preparation and preliminary characterization. Jancsik V, et al. **Neurobiology (Bp)** 1996; 4(3):241–5

Gene expression and apoptosis in the spinal cord neurons after sciatic nerve injury. Gu ZZ, et al. **Neurochem Int** 1997 Apr–May;30(4–5):417–26

mu Opiate receptor immunoreactivity in rat central nervous system. Moriwaki A, et al. **Neurochem Res** 1996 Nov; 21(11):1315–31

Computer simulation of neuronal toxicity in the spinal cord. Saxena P, et al. **Neurol Res** 1997 Jun;19(3):340–8

Cardiotrophin–1, a cytokine present in embryonic muscle, supports long–term survival of spinal motoneurons. Pennica D, et al. **Neuron** 1996 Jul;17(1):63–74

Interference with axonin–1 and NrCAM interactions unmasks a floor–plate activity inhibitory for commissural axons. Stoeckli ET, et al. **Neuron** 1997 Feb;18(2):209–21

Molecular mechanisms underlying the regulation of proenkephalin gene expression in cultured spinal cord cells. Ha TS, et al. **Neuropeptides** 1996 Oct;30(5):506–13

Relation of abnormal burst activity of spinal neurons to the recurrence of autotomy in rats. Asada H, et al. **Neurosci Lett** 1996 Aug 2;213(2):99–102

Oligodendroglial sheath lengths in developing rat ventral funiculus and corpus callosum. Bjartmar C. **Neurosci Lett** 1996 Sep 27;216(2):85–8

Location of external anal sphincter motoneurons in the sacral cord of the female domestic pig. Blok BF, et al. **Neurosci Lett** 1996 Oct 4;216(3):203–6

Direct projections from the spinal cord to the trigeminal sympathetic ganglion of the puffer fish, Takifugu niphobles. Funakoshi K, et al. **Neurosci Lett** 1996 Aug 2;213(2):115–8

Frequency–dependent expression of diaphorase staining and nNOS–immunoreactivity in rat dorsal horn neurones following C–fibre stimulation. Hoheisel U, et al. **Neurosci Lett** 1997 May 23;227(3):181–4

Developmental alterations in NMDA receptor–mediated currents in neonatal rat spinal motoneurons. Hori Y, et al. **Neurosci Lett** 1996 Feb 23;205(2):99–102

Bromocriptine prevents spinal motor neuron death following sciatic nerve transection in neonatal rats. Iwasaki Y, et al. **Neurosci Lett** 1996 Aug 23;214(2–3):139–42

A variation of the tissue print technique for studying isolated spinal cord cells in situ. MacDonald SC, et al. **Neurosci Lett** 1997 Feb 21;223(2):85–8

Riluzole promotes survival of rat motoneurons in vitro by stimulating trophic activity produced by spinal astrocyte monolayers. Peluffo H, et al. **Neurosci Lett** 1997 Jun 13; 228(3):207–11

The vulnerability of spinal cord neurons to excitotoxic injury: comparison with cortical neurons. Regan FR. **Neurosci Lett** 1996 Jul 26;213(1):9–12

Axonal branching and termination of cervical reticulospinal neurons in the cat brachial segments. Sasaki S. **Neurosci Lett** 1997 Jun 6;228(2):83–6

Mechanism underlying the effect of pregnenolone sulfate on the kainate–induced current in cultured chick spinal cord neurons. Wu FS, et al. **Neurosci Lett** 1997 Jan 31; 222(2):79–82

Quantitative analysis of converging spinal and cuneate mossy fibre afferent projections to the rat cerebellar anterior lobe. Alisky JM, et al. **Neuroscience** 1997 Sep;80(2):373–88

Plateau properties in mammalian spinal interneurons during transmitter–induced locomotor activity. Kiehn O, et al. **Neuroscience** 1996 Nov;75(1):263–73

Substance P and enkephalin immunoreactivities in axonal boutons presynaptic to physiologically identified dorsal horn neurons. An ultrastructural multiple–labelling study in the cat. Ma W, et al. **Neuroscience** 1997 Apr; 77(3):793–811

Differential distribution of calcium–binding proteins in the dorsal column nuclei of rats: a combined immunohistochemical and retrograde tract tracing study. Magnusson A, et al. **Neuroscience** 1996 Jul;73(2):497–508

Nitric oxide and excitatory postsynaptic currents in immature rat spinal cord preganglionic neurons in vitro. Wu SY, et al. **Neuroscience** 1997 Jul;79(1):237–45

A novel slow excitatory postsynaptic current in substantia gelatinosa neurons of the rat spinal cord in vitro. Yajiri Y, et al. **Neuroscience** 1997 Feb;76(3):673–88

Age–related reductions in number and size of anterior horn cells at C6 level of the human spinal cord. Zhang C, et al. **Okajimas Folia Anat Jpn** 1996 Oct;73(4):171–7

Lumbar transplants of immortalized serotonergic neurons alleviate chronic neuropathic pain. Eaton MJ, et al. **Pain** 1997 Aug;72(1–2):59–69

Spinal interneurons and preganglionic neurons in sacral autonomic reflex pathways. deGroat WC, et al. **Prog Brain Res** 1996;107:97–111 (90 ref.)

The ventro–medial medullary projections to spinal motoneurons: ultrastructure, transmitters and functional aspects. Holstege JC. **Prog Brain Res** 1996;107:159–81 (167 ref.)

Morphology of single axons of tectospinal and reticulospinal neurons in the upper cervical spinal cord. Shinoda Y, et al. **Prog Brain Res** 1996;112:71–84

Neurogenesis in postnatal rat spinal cord: a study in primary culture. Kehl LJ, et al. **Science** 1997 Apr 25; 276(5312):586–9

Inhibition of hyperalgesia by ablation of lamina I spinal neurons expressing the substance P receptor [see comments] Mantyh PW, et al. **Science** 1997 Oct 10;278(5336):275–9. Comment in: Science 1997 Oct 10;278(5336):239–40.

Innervation of the spinal dura. Myth or reality? Kumar R, et al. **Spine** 1996 Jan 1;21(1):18–26

Culture, expansion, and transplantation of human fetal neural progenitor cells. Moyer MP, et al. **Transplant Proc** 1997 Jun;29(4):2040–1

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Segmental effects on motor function following different intrathecal receptor agonists and antagonists in rabbits. Borgbjerg FM, et al. **Acta Anaesthesiol Scand** 1997 May; 41(5):586–94

Differential effects of pre–treatment with intrathecal or intravenous morphine on the prevention of spinal cord hyperexcitability following sciatic nerve section in the rat. Luo L, et al. **Acta Anaesthesiol Scand** 1996 Jan;40(1):91–5

Update on spinal cord pharmacology in pain. Eisenach J. **Acta Anaesthesiol Scand Suppl** 1997;110:124–6 (21 ref.)

The perturbations of various CNS functions by anaesthetic drugs. Halsey M. **Acta Anaesthesiol Scand Suppl** 1997; 110:11–2

Spinal actions of nonsteroidal anti–inflammatory drugs [see comments] Cherng CH, et al. **Acta Anaesthesiol Sin** 1996 Jun;34(2):81–8 (55 ref.). Comment in: Acta Anaesthesiol Sin 1996 Jun;34(2):i–ii.

Comparative study of chronic aluminum–induced neurofilamentous aggregates with intracytoplasmic inclusions of amyotrophic lateral sclerosis. Wakayama I, et al. **Acta Neuropathol (Berl)** 1996 Dec;92(6):545–54

Multiple actions of iontophoretically applied serotonin on motorneurones in the turtle spinal cord in vitro. Skydsgaard M, et al. **Acta Physiol Scand** 1996 Dec;158(4):301–10

Neurotoxic effects of gadopentetate dimeglumine: behavioral disturbance and morphology after intracerebroventricular injection in rats [see comments] Ray DE, et al. **AJNR Am J Neuroradiol** 1996 Feb;17(2):365–73. Comment in: AJNR Am J Neuroradiol 1997 Apr;18(4):785–6; discussion 786–8.

Neurotoxicity after spinal anaesthesia induced by serial intrathecal injections of magnesium sulphate. An experimental study in a rat model. Chanimov M, et al. **Anaesthesia** 1997 Mar;52(3):223–8

The effect of intravenous lidocaine on intraoperative somatosensory evoked potentials during scoliosis surgery [see comments] Chaves–Vischer V, et al. **Anesth Analg** 1996 Nov;83(5):1122–5. Comment in: Anesth Analg 1997 Jul;85(1):228.

Epinephrine increases spinal cord concentrations of [3H]–clonidine hydrochloride in rabbits after epidural infusion. Fu ES, et al. **Anesth Analg** 1997 Aug;85(2):324–7

The effects of different monoaminergic antidepressants on the analgesia induced by spinal cord adrenal medullary transplants in the formalin test in rats. Ortega–Alvaro A, et al. **Anesth Analg** 1997 Apr;84(4):816–20

The effect of xenon on spinal dorsal horn neurons: a comparison with nitrous oxide. Utsumi J, et al. **Anesth Analg** 1997 Jun;84(6):1372–6

Spinal cord motoneuron excitability during isoflurane and nitrous oxide anesthesia. Zhou HH, et al. **Anesthesiology** 1997 Feb;86(2):302–7

Estimation of the relative potency of two glycine antagonists on NMDA–induced depolarizations in BRSC and ARCS. Corsi M, et al. **Ann N Y Acad Sci** 1997 May 30;812:187–8

Detrimental effects of exogenous glutamate on spinal cord neurons during brief ischemia in vivo. Mori A, et al. **Ann Thorac Surg** 1997 Apr;63(4):1057–62

Influence of 5–hydroxytryptamine on the pressor responses induced by norepinephrine and electrical sympathetic stimulation in the pithed rat. Terrón JA, et al. **Arch Med Res** 1996 Autumn;27(3):291–7

Increases in vocalization and motor reflex thresholds generated by the intrathecal administration of serotonin or norepinephrine. Borszcz GS, et al. **Behav Neurosci** 1996 Aug;110(4):809–22

L–DOPA and quipazine elicit air–stepping in neonatal rats with spinal cord transections. McEwen ML, et al. **Behav Neurosci** 1997 Aug;111(4):825–33

Effect of intrathecally administered local anesthetics on protein phosphorylation in the spinal cord. Nivarthi RN, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):979–86

Guanosine 5'–O–(3–thiotriphosphate) and cations regulate melatonin receptors, and melatonin inhibits cyclic AMP production in the spinal cord. Wan Q, et al. **Biol Signals** 1997 Mar–Apr;6(2):67–76

Synergistic interactions between midazolam and alfentanil in isolated neonatal rat spinal cord. Feng J, et al. **Br J Anaesth** 1996 Sep;77(3):375–80

Antinociception by intrathecal midazolam involves endogenous neurotransmitters acting at spinal cord delta opioid receptors. Goodchild CS, et al. **Br J Anaesth** 1996 Dec;77(6):758–63

5–HT spinal antinociception involves mu opioid receptors: cross tolerance and antagonist studies. Goodchild CS, et al. **Br J Anaesth** 1997 May;78(5):563–9

Adequate general anaesthesia––what are we trying to achieve? [letter; comment] O'Connor TC, et al. **Br J Anaesth** 1996 Aug;77(2):299–301. Comment on: Br J Anaesth 1996 Jan;76(1):1–4. Comment on: Br J Anaesth 1996 Jan;76(1):99–105.

Voltage–dependent block of NMDA responses by 5–HT agonists in ventral spinal cord neurones. Chesnoy–Marchais D, et al. **Br J Pharmacol** 1996 Jan;117(1):133–41

Potentiation of chloride responses to glycine by three 5–HT3 antagonists in rat spinal neurones. Chesnoy–Marchais D. **Br J Pharmacol** 1996 Aug;118(8):2115–25

Spinal 5–HT–receptors and tonic modulation of transmission through a withdrawal reflex pathway in the decerebrated rabbit. Clarke RW, et al. **Br J Pharmacol** 1996 Nov; 119(6):1167–76

Selective block of N–methyl–D–aspartic acid (NMDA)–evoked whole–cell currents in mouse cultured spinal neurones by CGP 40116. D'Hooge R, et al. **Br J Pharmacol** 1997 Jan;120(2):211–4

Depression of A and C fibre–evoked segmental reflexes by morphine and clonidine in the in vitro spinal cord of the neonatal rat. Faber ES, et al. **Br J Pharmacol** 1997 Apr; 120(7):1390–6

Role of opioid receptors in the spinal antinociceptive effects of neuropeptide FF analogues. Gouardères C, et al. **Br J Pharmacol** 1996 Feb;117(3):493–501

Modulation of excitatory synaptic transmission by nociceptin in superficial dorsal horn neurones of the neonatal rat spinal cord. Liebel JT, et al. **Br J Pharmacol** 1997 Jun; 121(3):425–32

Inhibitory action of nociceptin on spinal dorsal horn neurones of the rat, in vivo. Stanfa LC, et al. **Br J Pharmacol** 1996 Aug;118(8):1875–7

Bidirectional modulatory effect of orphanin FQ on morphine–induced analgesia: antagonism in brain and potentiation in spinal cord of the rat. Tian JH, et al. **Br J Pharmacol** 1997 Feb;120(4):676–80

Changes in pharmacological sensitivity of the spinal cord to potassium channel blockers following acute spinal cord injury. Fehlings MG, et al. **Brain Res** 1996 Oct 14; 736(1–2):135–45

Effect of acute stimulation on Fos expression in spinal neurons in the presence of persisting C–fiber activity. Leah JD, et al. **Brain Res** 1996 May 6;719(1–2):104–11

Cell size and geometry of spinal cord motoneurons in the adult cat following the intramuscular injection of

adriamycin: comparison with data from aged cats. Liu RH, et al. **Brain Res** 1996 Oct 28;738(1):121–30

NMDA and non–NMDA receptor antagonists protect against excitotoxic injury in the rat spinal cord. Liu S, et al. **Brain Res** 1997 May 9;756(1–2):160–7

Spinal antinociceptive effect of substance P on the responses induced by intrathecally injected NMDA in mice. Masuyama T, et al. **Brain Res** 1996 May 25;722(1–2):200–2

Microinfusion of corticotropin–releasing factor into the locus coeruleus/subcoeruleus nuclei inhibits gastric acid secretion via spinal pathways in the rat. Mönnikes H, et al. **Brain Res** 1996 Jul 29;728(2):157–65

The differential contribution of capsaicin–sensitive afferents to behavioral and cardiovascular measures of brief and persistent nociception and to Fos expression in the formalin test. Peterson MA, et al. **Brain Res** 1997 Apr 25;755(1):9–16

Roles of monoaminergic, glycinergic and GABAergic inhibitory systems in the spinal cord in rats with peripheral mononeuropathy. Satoh O, et al. **Brain Res** 1996 Jul 22; 728(1):27–36

Galanin receptor antagonists attenuate spinal antinociceptive effects of DAMGO, tramadol and non–opioid drugs in rats. Selve N, et al. **Brain Res** 1996 Oct 7;735(2):177–87

Vanilloid (capsaicin) receptors in the rat: distribution in the brain, regional differences in the spinal cord, axonal transport to the periphery, and depletion by systemic vanilloid treatment. Szallasi A, et al. **Brain Res** 1995 Dec 12;703(1–2):175–83

PAG–microinjected dipyrone (metamizol) inhibits responses of spinal dorsal horn neurons to natural noxious stimulation in rats. Vanegas H, et al. **Brain Res** 1997 Jun 6;759(1):171–4

Effects of the capsaicin analogue resiniferatoxin on spinal nociceptive mechanisms in the rat: behavioral, electrophysiological and in situ hybridization studies. Xu XJ, et al. **Brain Res** 1997 Mar 28;752(1–2):52–60

Low but not high rate noxious radiant skin heating evokes a capsaicin–sensitive increase in spinal cord dorsal horn release of substance P. Zachariou V, et al. **Brain Res** 1997 Mar 28;752(1–2):143–50

Effect of chronic treatment with morphine, midazolam, and both together on beta–endorphin levels in the rat. Rattan AK, et al. **Brain Res Bull** 1996;41(6):335–41

Descending inhibition in neonatal rat spinal cord: actions of pentobarbital and morphine. Tarasiuk A, et al. **Brain Res Bull** 1996;41(1):39–45

Chronic morphine administration enhances the expression of Kv1.5 and Kv1.6 voltage–gated K+ channels in rat spinal cord. Matus–Leibovitch N, et al. **Brain Res Mol Brain Res** 1996 Sep 1;40(2):261–70

Spinal somatosensory evoked potentials after epidural isoproterenol in awake sheep. Marcus MA, et al. **Can J Anaesth** 1997 Jan;44(1):85–9

Action of steroid hormones on growth and differentiation of CNS and spinal cord organotypic cultures. Levy A, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):445–50

Direct evidence for central sites of action of zolmitriptan (311C90): an autoradiographic study in cat [see comments] Goadsby PJ, et al. **Cephalalgia** 1997 May;17(3):153–8. Comment in: Cephalalgia 1997 May;17(3):143.

Tachycardia after glutamate injection in rat spinal cord is not blocked by kynurenate or mimicked by metabotropic agonists. Arnolda LF, et al. **Clin Exp Pharmacol Physiol** 1996 Sep;23(9):813–8

Remacemide HCl and its metabolite, FPL 12495AA, limit action potential firing frequency and block NMDA responses of mouse spinal cord neurons in cell culture. Wamil AW, et al. **Epilepsy Res** 1996 Feb;23(1):1–14

Modulation of responses of four types of feline ascending tract neurons by serotonin and noradrenaline. Jankowska E, et al. **Eur J Neurosci** 1997 Jul;9(7):1375–87

Tachykinin actions on deep dorsal horn neurons in vitro: an electrophysiological and morphological study in the immature rat. King AE, et al. **Eur J Neurosci** 1997 May; 9(5):1037–46

Pre– and post–synaptic actions of 5–hydroxytryptamine in the rat lumbar dorsal horn in vitro: implications for somatosensory transmission. Lopez–Garcia JA, et al. **Eur J Neurosci** 1996 Oct;8(10):2188–97

Nerve growth factor treatment increases stimulus–evoked release of sensory neuropeptides in the rat spinal cord. Malcangio M, et al. **Eur J Neurosci** 1997 May;9(5):1101–4

MK–801 blocks the expression but not the development of tolerance to morphine in the isolated spinal cord of the neonatal rat. Bell JA, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):289–96

Interactions between NMDA– and prostaglandin receptor–mediated events in a model of inflammatory nociception. Buritova J, et al. **Eur J Pharmacol** 1996 May 6;303(1–2):91–100

Thyrotropin–releasing hormone facilitates spinal nociceptive responses by potentiating NMDA receptor–mediated transmission. Chizh BA, et al. **Eur J Pharmacol** 1996 Apr 11;300(3):183–9

The role of spinal delta1–opioid receptors in inhibiting the formalin–induced nociceptive response in diabetic mice. Kamei J, et al. **Eur J Pharmacol** 1997 May 12;326(1):31–6

Pharmacology of N–methyl–D–aspartate–evoked [3H]noradrenaline release in adult rat spinal cord. Klarica M, et al. **Eur J Pharmacol** 1996 Jul 18;308(2):135–44

Zn2+ inhibition of [3H]MK–801 binding is different in mouse brain and spinal cord: effect of glycine and glutamate. Kovács KJ, et al. **Eur J Pharmacol** 1997 Apr 11; 324(1):117–23

Acute or prolonged exposure to 1–aminocyclopropanecarboxylic acid protects spinal neurons against NMDA toxicity. Lin Y, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):491–6

Effect of interleukin–1 beta on the release of substance P from rat isolated spinal cord. Malcangio M, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):113–8

Pretreatment with pertussis toxin spinally, but not supraspinally, blocks the cold water swimming–induced antinociception in the mouse. Mizoguchi H, et al. **Eur J Pharmacol** 1996 Aug 1;309(1):37–40

Hyperalgesia induced by pituitary adenylate cyclase–activating polypeptide in the mouse spinal cord. Narita M, et al. **Eur J Pharmacol** 1996 Sep 12; 311(2–3):121–6

Phorbol ester blocks the increase of a high affinity GTPase activity induced by delta 2–opioid receptor agonist in the mouse spinal cord. Narita M, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):R1–3

Receptor subtypes mediating spinal cardiovascular effects of angiotensin II in rat using losartan and PD 123319. Park PD, et al. **Eur J Pharmacol** 1997 May 20;326(2–3):139–45

Receptor and mechanism that mediate endothelin– and big endothelin–1–induced phosphoinositide hydrolysis in the rat spinal cord. Poulat P, et al. **Eur J Pharmacol** 1996 Nov 21;315(3):327–34

Omega–agatoxin IVA blocks spinal morphine/clonidine antinociceptive synergism. Roerig SC, et al. **Eur J Pharmacol** 1996 Oct 31;314(3):293–300

Ethanol as a general anesthetic: actions in spinal cord. Wong SM, et al. **Eur J Pharmacol** 1997 Jun 25;329(2–3):121–7

Fragments of galanin message–associated peptide (GMAP) modulate the spinal flexor reflex in rat. Xu XJ, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):301–6

Baclofen: reduction of presynaptic calcium influx in the cat spinal cord in vivo. Curtis DR, et al. **Exp Brain Res** 1997 Mar;113(3):520–33

Pharmacokinetics of intrathecally applied BDNF and effects on spinal motoneurons. Dittrich F, et al. **Exp Neurol** 1996 Oct;141(2):225–39

Potentiation of organophosphorus–induced delayed neurotoxicity following phenyl saligenin phosphate exposures in 2–, 5–, and 8–week–old chickens. Harp P, et al. **Fundam Appl Toxicol** 1997 May;37(1):64–70

Time course of the changes in central nitric oxide synthase activity following chronic treatment with morphine in the mouse: reversal by naltrexone. Kumar S, et al. **Gen Pharmacol** 1997 Aug;29(2):223–7

Androgen spares androgen–insensitive motoneurons from apoptosis in the spinal nucleus of the bulbocavernosus in rats. Freeman LM, et al. **Horm Behav** 1996 Dec; 30(4):424–33

Critical periods of sensitivity of sexually dimorphic spinal nuclei to prenatal testosterone exposure in female rats. Ward OB, et al. **Horm Behav** 1996 Dec;30(4):407–15

Spinal nicotinic receptor expression in spontaneously hypertensive rats. Khan IM, et al. **Hypertension** 1996 Dec; 28(6):1093–9

Intrathecal administration of prostaglandin E2 causes sensitization of the primary afferent neuron via the spinal release of glutamate. Ferreira SH, et al. **Inflamm Res** 1996 Oct;45(10):499–502

Cross–tolerance to acute administration of mu and kappa opioid agonists at the spinal cord level in the rat. Laurido C, et al. **Int J Neurosci** 1996 Nov;87(3–4):191–9

Cholecystokinin octapeptide reverses the inhibitory effect induced by electroacupuncture on C–fiber evoked discharges. Liu NJ, et al. **Int J Neurosci** 1996 Sep; 86(3–4):241–7

Endogenous bradykinin in the thoracic spinal cord contributes to the exercise pressor reflex. Stebbins CL, et al. **J Appl Physiol** 1996 Sep;81(3):1288–94

Activation of P2x–purinoceptors in the nucleus tractus solitarius elicits differential inhibition of lumbar and renal sympathetic nerve activity. Scislo TJ, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):103–10

Central nervous system toxicity in a patient receiving continuous intrapleural bupivacaine. Kreitzer JM, et al. **J Clin Anesth** 1996 Dec;8(8):666–8

Conus medullaris injury following both tetracaine and lidocaine spinal anesthesia. Waters JH, et al. **J Clin Anesth** 1996 Dec;8(8):656–8

Treatment with cyclosporine A promotes axonal regeneration in rats submitted to transverse section of the spinal cord—II—Recovery of function. Palladini G, et al. **J Hirnforsch** 1996;37(1):145–53

Ethanol influences on the chick embryo spinal cord motor system. II. Effects of neuromuscular blockade and period of exposure. Bradley DM, et al. **J Neurobiol** 1997 Jun 20; 32(7):684–94

Regional differences in gene expression for calcium activated neutral proteases (calpains) and their endogenous inhibitor calpastatin in mouse brain and spinal cord. Li J, et al. **J Neurobiol** 1996 Jun;30(2):177–91

5–Hydroxytryptamine–facilitated release of substance P from rat spinal cord slices is mediated by nitric oxide and cyclic GMP. Inoue A, et al. **J Neurochem** 1997 Jan;68(1):128–33

Monoclonal remyelination–promoting natural autoantibody SCH 94.03: pharmacokinetics and in vivo targets within demyelinated spinal cord in a mouse model of multiple sclerosis. Hunter SF, et al. **J Neurol Sci** 1997 Sep 10; 150(2):103–13

Neuroprotective effect of various cytokines on developing spinal motoneurons following axotomy. Ikeda K, et al. **J Neurol Sci** 1996 Feb;135(2):109–13

Effect of transforming growth factor beta 1 on spinal motor neurons after axotomy. Iwasaki Y, et al. **J Neurol Sci** 1997 Mar 20;147(1):9–12

Sensory–evoked pocket scratch motor patterns in the in vitro turtle spinal cord: reduction of excitability by an N–methyl–D–aspartate antagonist. Currie SN, et al. **J Neurophysiol** 1996 Jul;76(1):81–92

Activation of pharmacologically distinct metabotropic glutamate receptors depresses reticulospinal–evoked monosynaptic EPSPs in the lamprey spinal cord. Krieger P, et al. **J Neurophysiol** 1996 Dec;76(6):3834–41

Giant, TTX–insensitive, inhibitory postsynaptic currents in cultured rat spinal cord and medullary neurons. Lewis CA, et al. **J Neurophysiol** 1996 Nov;76(5):3341–50

Effects of N– and L–type calcium channel antagonists on the responses of nociceptive spinal cord neurons to mechanical stimulation of the normal and the inflamed knee joint. Neugebauer V, et al. **J Neurophysiol** 1996 Dec; 76(6):3740–9

Intrinsic NMDA–induced oscillations in motoneurons of an adult vertebrate spinal cord are masked by inhibition. Rioult–Pedotti MS. **J Neurophysiol** 1997 Feb;77(2):717–30

Motor patterns for two distinct rhythmic behaviors evoked by excitatory amino acid agonists in the Xenopus embryo spinal cord. Soffe SR. **J Neurophysiol** 1996 May; 75(5):1815–25

alpha–subunit of CaM–KII increases glycine currents in acutely isolated rat spinal neurons. Wang RA, et al. **J Neurophysiol** 1996 Jun;75(6):2651–3

Intraaxonal injection of neurobiotin reveals the long–ranging projections of A beta–hair follicle afferent fibers to the cat dorsal horn. Wilson P, et al. **J Neurophysiol** 1996 Jul; 76(1):242–54

ATP P2X receptors mediate fast synaptic transmission in the dorsal horn of the rat spinal cord. Bardoni R, et al. **J Neurosci** 1997 Jul 15;17(14):5297–304

Acute morphogenic and chemotropic effects of neurotrophins on cultured embryonic Xenopus spinal neurons. Ming Gl, et al. **J Neurosci** 1997 Oct 15; 17(20):7860–71

Effects of methylprednisolone on lesioned and uninjured mammalian spinal neurons: viability, ultrastructure, and network electrophysiology. Rosenberg LJ, et al. **J Neurotrauma** 1996 Aug;13(8):417–37

Potentiation of the glycine–activated Cl– current by ethanol in cultured mouse spinal neurons. Aguayo LG, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1116–22

Acute tolerance to spinally administered morphine compares mechanistically with chronically induced morphine tolerance. Fairbanks CA, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1408–17

Antinociceptive effects of RB101, a complete inhibitor of enkephalin–catabolizing enzymes, are enhanced by a cholecystokinin type B receptor antagonist, as revealed by noxiously evoked spinal c–Fos expression in rats. Honore P, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):208–17

Enhancement of analgesia from systemic opioid in humans by spinal cholinesterase inhibition. Hood DD, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):86–92

Antinociceptive properties of propofol: involvement of spinal cord gamma–aminobutyric acid(A) receptors. Nadeson R, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1181–6

Involvement of dynorphin B in the antinociceptive effects of the cannabinoid CP55,940 in the spinal cord. Pugh G Jr, et al. **J Pharmacol Exp Ther** 1997 May;281(2):730–7

The role of endogenous opioids in enhancing the antinociception produced by the combination of delta 9–tetrahydrocannabinol and morphine in the spinal cord. Pugh G Jr, et al. **J Pharmacol Exp Ther** 1996 Nov; 279(2):608–16

Inhibition of crossed caudal interneurons by lateral interneurons in lamprey spinal chord during fictive locomotion. Davis JT, et al. **J Physiol Paris** 1995; 89(4–6):235–9

delta–9–Tetrahydrocannabinol increases prodynorphin and proenkephalin gene expression in the spinal cord of the rat. Corchero J, et al. **Life Sci** 1997;61(4):PL 39–43

Peripheral noxious stimulation releases spinal PGE2 during the first phase in the formalin assay of the rat. Scheuren N, et al. **Life Sci** 1997;60(21):PL 295–300

Effect of angiotensin II on a spinal nociceptive reflex in the rat: receptor and mechanism of action. Toma N, et al. **Life Sci** 1997;61(5):503–13

Chemotherapy for acute lymphoblastic leukemia may cause subtle changes of the spinal cord detectable by somatosensory evoked potentials. Vainionpää L, et al. **Med Pediatr Oncol** 1997 Jan;28(1):41–7

The neurokinin–1 receptor antagonist LY306,740 blocks nociception–induced increases in dorsal horn neurokinin–1 receptor gene expression. McCarson KE, et al. **Mol Pharmacol** 1996 Nov;50(5):1189–99

Chronic intrathecal morphine treatment does not cause down–regulation of spinal adenosine A1 receptors in rats. Tao PL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul;354(2):187–91

Acute neurotoxicity of L–glutamate induced by impairment of the glutamate uptake system. Okazaki S, et al. **Neurochem Res** 1996 Oct;21(10):1201–7

Deprenyl and pergolide rescue spinal motor neurons from axotomy-induced neuronal death in the neonatal rat. Iwasaki Y, et al. **Neurol Res** 1996 Apr;18(2):168-70

Intrathecally injected nicotine enhances the antinociception induced by morphine but not beta-endorphin, D-Pen2,5-enkephalin and U50,488H administered intrathecally in the mouse. Suh HW, et al. **Neuropeptides** 1996 Aug;30(4):373-8

Antagonism of mGlu receptors and potentiation of EPSCs at rat spinal motoneurones in vitro. Cao CQ, et al. **Neuropharmacology** 1997 Mar;36(3):313-8

N-methyl-D-aspartate receptor activation by guanidinosuccinate but not by methylguanidine: behavioural and electrophysiological evidence. D'Hooge R, et al. **Neuropharmacology** 1996 Apr;35(4):433-40

Met-enkephalin inhibits 5-hydroxytryptamine release from the rat ventral spinal cord via delta opioid receptors. Franck J, et al. **Neuropharmacology** 1996 Jun;35(6):743-9

Modification of the characteristics of dopamine transporter in brain regions and spinal cord of morphine tolerant and abstinent rats. Gudehithlu KP, et al. **Neuropharmacology** 1996 Feb;35(2):169-74

The effects of neurokinin-1 receptor agonists on spinal motoneurones of the neonatal rat. Lepre M, et al. **Neuropharmacology** 1996 Apr;35(4):511-22

Sumatriptan inhibits the release of CGRP and substance P from the rat spinal cord. Arvieu L, et al. **Neuroreport** 1996 Aug 12;7(12):1973-6

Inflammation reveals inhibition of noxious responses of rat spinal neurones by carbamazepine. Chapman V, et al. **Neuroreport** 1997 Apr 14;8(6):1399-404

Evidence for functional co-activation of N-methyl-D-aspartate receptors by glycine. Fern R, et al. **Neuroreport** 1996 Aug 12;7(12):1953-6

Neonatal capsaicin treatment abolishes formalin-induced spinal PGE2 release. Hua XY, et al. **Neuroreport** 1997 Jul 7;8(9-10):2325-9

Chronic morphine increases biosynthesis of nitric oxide synthase in the rat spinal cord. Machelska H, et al. **Neuroreport** 1997 Aug 18;8(12):2743-7

DC-Chol liposome-mediated gene transfer in rat spinal cord. Yang K, et al. **Neuroreport** 1997 Jul 7;8(9-10):2355-8

The role of 5HT3 in nociceptive processing in the rat spinal cord: results from behavioural and electrophysiological studies. Ali Z, et al. **Neurosci Lett** 1996 Apr 26;208(3):203-7

Propofol potentiates the depressant effect of alfentanil in isolated neonatal rat spinal cord and blocks naloxone-precipitated hyperresponsiveness. Feng JQ, et al. **Neurosci Lett** 1997 Jun 20;229(1):9-12

Spinal analgesic activity of orphanin FQ/nociceptin and its fragments. King MA, et al. **Neurosci Lett** 1997 Feb 21; 223(2):113-6

Involvement of spinal adenosine A1 and A2 receptors in fentanyl-induced muscular rigidity in the rat. Lui PW. **Neurosci Lett** 1997 Mar 21;224(3):189-92

Cytosine arabinoside is neurotoxic to chick embryo spinal cord motoneurons in culture. Sanz-Rodriguez C, et al. **Neurosci Lett** 1997 Feb 28;223(3):141-4

Knee joint inflammation attenuates spinal FOS expression after unilateral paw formalin injection in rat. Yang LC, et al. **Neurosci Lett** 1997 Apr 4;225(2):89-92

Dual effect of serotonin on formalin-induced nociception in the rat spinal cord. Oyama T, et al. **Neurosci Res** 1996 Jun;25(2):129-35

Presence of neuropeptide FF receptors on primary afferent fibres of the rat spinal cord. Gouardères C, et al. **Neuroscience** 1996 Sep;74(1):21-7

Brain-derived neurotrophic factor promotes axonal regeneration and long-term survival of adult rat spinal motoneurons in vivo. Novikov L, et al. **Neuroscience** 1997 Aug;79(3):765-74

Independent depressive mechanisms of GABA and (+/-)-8-hydroxy-dipropylaminotetralin hydrobromide on young rat spinal axons. Sakuma J, et al. **Neuroscience** 1996 Dec;75(3):927-38

Susceptibility of various areas of the nervous system of hens to TOCP-induced delayed neuropathy. Classen W, et al. **Neurotoxicology** 1996 Fall-Winter;17(3-4):597-604

Distinct electrophysiological effects of two spinally administered membrane stabilising drugs, bupivacaine and lamotrigine. Chapman V, et al. **Pain** 1997 Jul;71(3):285-95

Estrogen and progesterone activate spinal kappa-opiate receptor analgesic mechanisms. Dawson-Basoa ME, et al. **Pain** 1996 Mar;64(3):607-15

Inhibition of substance P release from spinal cord tissue after pretreatment with capsaicin does not mediate the antinociceptive effect of capsaicin in adult mice. Goettl VM, et al. **Pain** 1997 Jul;71(3):271-8

Myositis-induced functional reorganisation of the rat dorsal horn: effects of spinal superfusion with antagonists to neurokinin and glutamate receptors. Hoheisel U, et al. **Pain** 1997 Feb;69(3):219-30

Lignocaine selectively reduces C fibre-evoked neuronal activity in rat spinal cord in vitro by decreasing N-methyl-D-aspartate and neurokinin receptor-mediated post-synaptic depolarizations; implications for the development of novel centrally acting analgesics. Nagy I, et al. **Pain** 1996 Jan;64(1):59-70

Tetrodotoxin inhibits neuropathic ectopic activity in neuromas, dorsal root ganglia and dorsal horn neurons. Omana-Zapata I, et al. **Pain** 1997 Aug;72(1-2):41-9

Reversal of spinal cord non-opiate analgesia by conditioned anti-analgesia in the rat. Watkins LR, et al. **Pain** 1997 Jul; 71(3):237-47

Peptidase inhibitors improve recovery of substance P and calcitonin gene-related peptide release from rat spinal cord slices. Chen JJ, et al. **Peptides** 1996;17(1):31-7

Thyrotropin-releasing hormone (TRH) has independent excitatory and modulatory actions on lamina IX neurons of lumbosacral spinal cord slices from adult rats. Kow LM, et al. **Peptides** 1996;17(1):131-8

Differential effects of activation of lumbar and thoracic 5-HT2A/2C receptors on nociception in rats. Kjørsvik A, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):523-7

Spinal delta opioid receptor subtype activity of 6-monoacetylmorphine in Swiss Webster mice. Rady JJ, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):243-9

Supraspinal delta 2 opioid agonist analgesia in Swiss-Webster mice involves spinal GABAA receptors. Rady JJ, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):363-9

Pharmacology of reticulospinal vasomotor neurons in cardiovascular regulation. Sun MK. **Pharmacol Rev** 1996 Dec;48(4):465-94 (408 ref.)

Chronic blockade of opioid receptors alters the binding of [3H]GBR 12935 to dopamine transporter in rat brain regions and spinal cord. Bhargava HN, et al. **Pharmacology** 1996 Apr;52(4):243-51

Antagonistic effect of MR2266 and MR2267 on morphine or nalbuphine analgesia at the spinal levels in rats. Kmieciak-Kolada K, et al. **Pol J Pharmacol** 1995 Nov-Dec;47(6):509-18

Serotonin, norepinephrine and associated neuropeptides: effects on somatic motoneuron excitability. White SR, et al. **Prog Brain Res** 1996;107:183-99 (111 ref.)

Associative and non-associative mechanisms of morphine analgesic tolerance are neurochemically distinct in the rat spinal cord. Grisel JE, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):248-55

Comment on peroneal afferent nerve discharges and the formalin test [letter; comment] Davidson E. **Reg Anesth** 1997 Jul-Aug;22(4):385-6. Comment on: Reg Anesth 1996 May-Jun;21(3):226-33.

Capsaicin-evoked release of pituitary adenylate cyclase activating peptide (PACAP) and calcitonin gene-related peptide (CGRP) from rat spinal cord in vivo. Zhang Y, et al. **Regul Pept** 1997 Mar 26;69(2):83-7

Influence of nitrous oxide on motor-evoked potentials. Zentner J, et al. **Spine** 1997 May 1;22(9):1002-6

Pathogenesis of caudal dysgenesis/sirenomelia induced by ochratoxin A in chick embryos. Wei X, et al. **Teratology** 1996 Jun;53(6):378-91

Diisopropylfluorophosphate-induced depression of segmental monosynaptic transmission in neonatal rat spinal cord is also mediated by increased axonal activity. Deshpande SB, et al. **Toxicol Lett** 1997 Feb 7; 90(2-3):177-82

[Neurotoxicity of intrathecally administrated agents] Malinovsky JM, et al. **Ann Fr Anesth Reanim** 1996; 15(5):647-58 (128 ref.) (Eng. Abstr.) **(Fre)**

[Effects of halothane, isoflurane, enflurane, and sevoflurane on the monosynaptic reflex response in the isolated spinal cord of newborn rats] Tsutahara S, et al. **Masui** 1996 Jul; 45(7):829-36 (Eng. Abstr.) **(Jpn)**

[The effect of guanfacine on the background and nociceptive stimulation-induced activity of spinal cord neurons in rats] Ivanov VE. **Eksp Klin Farmakol** 1997 May-Jun;60(3):12-5 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Central synapses of spinal motoneurons innervating the trunk swimming muscles of Xenopus laevis embryos. Roberts A, et al. **Acta Biol Hung** 1996;47(1-4):371-84

The projections to the spinal cord of the rat during development: a timetable of descent. Lakke EA. **Adv Anat Embryol Cell Biol** 1997;135:I-XIV, 1-143 (456 ref.)

Ethanol exposure alters the development of serotonergic neurons in chick spinal cord. Mendelson B, et al. **Alcohol** 1996 Sep-Oct;13(5):431-41

Developmental expression of the CD15-epitope in the brainstem and spinal cord of the mouse. Ashwell KW, et al. **Anat Embryol (Berl)** 1997 Jul;196(1):13-25

Developmental dynamics of functionally specific primary sensory afferent projections in the chicken embryo. Eide AL, et al. **Anat Embryol (Berl)** 1997 Mar;195(3):237-50

The axonal projections of the Hofmann nuclei in the spinal cord of the late stage chicken embryo. Eide AL. **Anat Embryol (Berl)** 1996 Jun;193(6):543-57

Regional differences in morphogenesis of the neuroepithelium suggest multiple mechanisms of spinal neurulation in the mouse. Shum AS, et al. **Anat Embryol (Berl)** 1996 Jul;194(1):65-73

Intrauterine position affects motoneuron number and muscle size in a sexually dimorphic neuromuscular system. Forger NG, et al. **Brain Res** 1996 Sep 30;735(1):119-24

Neuronal bungarotoxin displaces [125I] alpha-bungarotoxin binding at the neuromuscular junction as well as to the spinal cord during embryogenesis. Renshaw GM, et al. **Brain Res** 1996 Feb 19;709(2):316-8

Preproinsulin I and II mRNAs and insulin electron microscopic immunoreaction are present within the rat fetal nervous system. Schechter R, et al. **Brain Res** 1996 Oct 14;736(1-2):16-27

Interactions of neurotrophic factors GDNF and NT-3, but not BDNF, with the immune system following fetal spinal cord transplantation. Shinoda M, et al. **Brain Res** 1996 May 25;722(1-2):153-67

Evidence that intersegmental competition influences the segmental distribution of the central terminals of muscle sensory afferents in the chicken embryo. Eide AL, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):126-37

Identification and characterization of novel developmentally regulated proteins in rat spinal cord. Geschwind DH, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):62-75

Altered development of spinal cord in the mouse mutant (Patch) lacking the PDGF receptor alpha-subunit gene. Li L, et al. **Brain Res Dev Brain Res** 1996 Oct 23; 96(1-2):204-9

Development of locomotor activity induced by NMDA receptor activation in the lumbar spinal cord of the rat fetus studied in vitro. Ozaki S, et al. **Brain Res Dev Brain Res** 1996 Nov 22;97(1):118-25

Netrin-1 is required for commissural axon guidance in the developing vertebrate nervous system. Serafini T, et al. **Cell** 1996 Dec 13;87(6):1001-14

Temporal separation in the specification of primary and secondary motoneurons in zebrafish. Beattie CE, et al. **Dev Biol** 1997 Jul 15;187(2):171-82

Neuroepithelial stem cells from the embryonic spinal cord: isolation, characterization, and clonal analysis. Kalyani A, et al. **Dev Biol** 1997 Jun 15;186(2):202-23

Glial-restricted precursors are derived from multipotent neuroepithelial stem cells. Rao MS, et al. **Dev Biol** 1997 Aug 1;188(1):48-63

Cues intrinsic to the spinal cord determine the pattern and timing of primary afferent growth. Redmond L, et al. **Dev Biol** 1997 Feb 15;182(2):205-18

Dorsal-ventral patterning during neural induction in Xenopus: assessment of spinal cord regionalization with xHB9, a marker for the motor neuron region. Saha MS, et al. **Dev Biol** 1997 Jul 15;187(2):209-23

A spinal cord fate map in the avian embryo: while regressing, Hensen's node lays down the notochord and floor plate thus joining the spinal cord lateral walls. Catala M, et al. **Development** 1996 Sep;122(9):2599-610

A sensory axon repellent secreted from ventral spinal cord explants is neutralized by antibodies raised against collapsin-1. Shepherd IT, et al. **Development** 1997 Apr; 124(7):1377-85

Preventing the loss of competence for neural induction: HGF/SF, L5 and Sox-2. Streit A, et al. **Development** 1997 Mar;124(6):1191-202

Immunocytochemical localization of neurofilaments in the fibre systems of the developing rat spinal cord white matter. Oudega M, et al. **Eur J Morphol** 1996 Dec;34(5):329-46

Ultrastructural study on axonal and dendritic growth cones in the human embryonic spinal cord. Woźniak W, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:89-90

Meninx primitiva of the spinal cord in human embryos at stage 13 (28 postovulatory days). Guźniczak L, et al. **Folia Morphol (Warsz)** 1996;55(4):274-5

Supraspinal influence on the development of motor behavior in the fetal lamb. Berger PJ, et al. **J Neurobiol** 1997 Sep; 33(3):276-88

Expression of microtubule-associated protein-2a and other novel microtubule-associated protein-2 transcripts in human fetal spinal cord. Kalcheva N, et al. **J Neurochem** 1997 Jan;68(1):383-91

Properties of spontaneous inhibitory synaptic currents in cultured rat spinal cord and medullary neurons. Lewis CA, et al. **J Neurophysiol** 1996 Jul;76(1):448-60

Restriction in cell fates of developing spinal cord cells transplanted to neural crest pathways. Korade Z, et al. **J Neurosci** 1996 Dec 1;16(23):7638-48

Oligodendrocyte gene expression in the human fetal spinal cord during the second trimester of gestation. Grever WE, et al. **J Neurosci Res** 1997 Feb 1;47(3):332-40

Notochord is essential for oligodendrocyte development in Xenopus spinal cord. Maier CE, et al. **J Neurosci Res** 1997 Feb 15;47(4):361-71

Spontaneous motoneuronal activity mediated by glycine and GABA in the spinal cord of rat fetuses in vitro. Nishimaru H, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):131-43

The receptor tyrosine kinase, Cek8, is transiently expressed on subtypes of motoneurons in the spinal cord during development. Ohta K, et al. **Mech Dev** 1996 Jan;54(1):59-69

Target contact regulates expression of synaptotagmin genes in spinal motor neurons in vivo. Campagna JA, et al. **Mol Cell Neurosci** 1997;8(6):377-88

The sensory innervation of the mouse spinal cord may be patterned by differential expression of and differential responsiveness to semaphorins. Püschel AW, et al. **Mol Cell Neurosci** 1996 May;7(5):419-31

TWH regulates the development of subsets of spinal cord neurons. Dou C, et al. **Neuron** 1997 Apr;18(4):539-51

Oligodendrocyte progenitors in the embryonic spinal cord express DM-20. Dickinson PJ, et al. **Neuropathol Appl Neurobiol** 1996 Jun;22(3):188-98

Developmental changes in the effects of serotonin and N-methyl-D-aspartate on intrinsic membrane properties of embryonic chick motoneurons. Muramoto T, et al. **Neuroscience** 1996 Nov;75(2):607-18

Diastematomyelia and spina bifida can be caused by the intraspinal grafting of somites in early avian embryos. Klessinger S, et al. **Neurosurgery** 1996 Dec;39(6):1215-23

The fetal spinal cord does not regenerate after in utero

transection in a large mammalian model. Meuli-Simmen C, et al. **Neurosurgery** 1996 Sep;39(3):555-60; discussion 560-1

Interactions between vasopressin and mu-opioid systems in the rat fetus. Petrov ES, et al. **Physiol Behav** 1996 Jul; 60(1):217-30

A binding site for Pax proteins regulates expression of the gene for the neural cell adhesion molecule in the embryonic spinal cord. Holst BD, et al.
Proc Natl Acad Sci U S A 1997 Feb 18;94(4):1465-70

Diversity and pattern in the developing spinal cord [published erratum appears in Science 1997 Apr 4;276(5309):21] Tanabe Y, et al. **Science** 1996 Nov 15;274(5290):1115-23 (114 ref.)

[The development of human embryonic spinal cord transplants in the spinal cord of adult rats] Gilerovich EG, et al. **Morfologiia** 1996;110(5):43-6 (Eng. Abstr.) **(Rus)**

[The reactions of different sections of human embryonic neuroepithelium to damage to the ventricular surface during explantation] Smirnov EB, et al. **Morfologiia** 1997; 111(1):15-8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Quantitative enzyme- and immunohistochemistry of hexokinase and cytochrome c oxidase of spinal neurons in the zebrafish. van Raamsdonk W, et al.
Acta Histochem 1996 Apr;98(2):143-55

Increased 3-nitrotyrosine and oxidative damage in mice with a human copper/zinc superoxide dismutase mutation. Ferrante RJ, et al. **Ann Neurol** 1997 Sep;42(3):326-34

Nitric oxide synthase in the brain of a urodele amphibian (Pleurodeles waltl) and its relation to catecholaminergic neuronal structures. González A, et al. **Brain Res** 1996 Jul 15;727(1-2):49-64

Protein kinase C isozyme expression in sciatic nerves and spinal cords of experimentally diabetic rats. Roberts RE, et al. **Brain Res** 1997 Apr 18;754(1-2):147-56

Organization of NADPH-diaphorase-reactive neurons and catecholaminergic fibers in human intermediolateral cell column. Smithson IL, et al. **Brain Res** 1996 Jun 3; 723(1-2):218-22

Inductions of Cu/Zn superoxide dismutase- and nitric oxide synthase-like immunoreactivities in rabbit spinal cord after transient ischemia. Watanabe M, et al. **Brain Res** 1996 Sep 2;732(1-2):69-74

Zinc protoporphyrin IX, an inhibitor of the enzyme that produces carbon monoxide, blocks spinal nociceptive transmission evoked by formalin injection in the rat. Yamamoto T, et al. **Brain Res** 1995 Dec 18;704(2):256-62

Changes of NADPH-diaphorase activity in the lumbosacral intermediolateral neurons of the rat after pelvic axotomy. Ando A, et al. **Brain Res Bull** 1996;40(1):37-42

1,25-Dihydroxyvitamin D3 inhibits the expression of inducible nitric oxide synthase in rat central nervous system during experimental allergic encephalomyelitis. Garcion E, et al. **Brain Res Mol Brain Res** 1997 May;45(2):255-67

Immunohistochemical study on superoxide dismutases in spinal cords from autopsied patients with amyotrophic lateral sclerosis. Shibata N, et al. **Dev Neurosci** 1996; 18(5-6):492-8

Involvement of protein kinase C in responses of rat dorsal horn neurons to mechanical stimuli and periaqueductal gray descending inhibition. Peng YB, et al. **Exp Brain Res** 1997 May;114(3):561-70

Comparative analysis of nitric oxide synthase immunoreactivity in the sacral spinal cord of the cat, macaque and human. Pullen AH, et al. **J Anat** 1997 Aug; 191 (Pt 2):161-75

Localization of NADPH diaphorase in the thoracolumbar and sacrococcygeal spinal cord of the dog. Vizzard MA, et al. **J Auton Nerv Syst** 1997 Jun 6;64(2-3):128-42

Expression of nitric oxide synthase type II in the spinal cord under conditions producing thermal hyperalgesia. Grzybicki D, et al. **J Chem Neuroanat** 1996 Jun; 10(3-4):221-9 (55 ref.)

Quantitative immunocytochemical analysis of the spinal cord in G86R superoxide dismutase transgenic mice: neurochemical correlates of selective vulnerability. Morrison BM, et al. **J Comp Neurol** 1996 Sep 30; 373(4):619-31

Localization of the calcium/calmodulin-dependent protein phosphatase, calcineurin, in the hindbrain and spinal cord of the rat. Strack S, et al. **J Comp Neurol** 1996 Nov 4; 375(1):66-76

Chromatographic discrimination of soluble neuropathy target esterase isoenzymes and related phenyl valerate esterases from chicken brain, spinal cord, and sciatic nerve. Escudero MA, et al. **J Neurochem** 1997 May;68(5):2170-6

Glycine effects on glutamate-receptor elicited acetylcholinesterase release from slices and synaptosomes of the spinal ventral horn. Rodríguez-Ithurralde D, et al. **J Neurol Sci** 1996 Aug;139 Suppl:76-82

Cytoplasmic, lysosomal and matrix protease activities in spinal cord tissue from amyotrophic lateral sclerosis (ALS) and control patients. Shaw PJ, et al. **J Neurol Sci** 1996 Aug;139 Suppl:71-5

Immunocytochemical study of the distribution of the free radical scavenging enzymes Cu/Zn superoxide dismutase (SOD1); MN superoxide dismutase (MN SOD) and catalase in the normal human spinal cord and in motor neuron disease. Shaw PJ, et al. **J Neurol Sci** 1997 Apr 15; 147(2):115-25

Immunocytochemical characterization of the expression of inducible and constitutive isoforms of nitric oxide synthase in demyelinating multiple sclerosis lesions. De Groot CJ, et al. **J Neuropathol Exp Neurol** 1997 Jan;56(1):10-20

Calmodulin-dependent cyclic nucleotide phosphodiesterase in adult and developing chick spinal cord. Caniglia C, et al. **J Neurosci Res** 1997 Jul 15;49(2):186-96

Decreased cytochrome c oxidase activity but unchanged superoxide dismutase and glutathione peroxidase activities in the spinal cords of patients with amyotrophic lateral sclerosis. Fujita K, et al. **J Neurosci Res** 1996 Aug 1; 45(3):276-81

Immunohistochemical localization of nitric oxide synthases. Förstermann U, et al. **Methods Enzymol** 1996;268:510-5

Alterations in the neutral proteinase activities of central and peripheral nervous systems of acrylamide-, carbon disulfide-, or 2,5-hexanedione-treated rats. Gupta RP, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):53-66

Role of calpain in spinal cord injury: increased calpain immunoreactivity in rat spinal cord after impact trauma. Li Z, et al. **Neurochem Res** 1996 Apr;21(4):441-8

Cyclin-dependent kinase 5 in Lewy body-like inclusions in anterior horn cells of a patient with sporadic amyotrophic lateral sclerosis. Nakamura S, et al. **Neurology** 1997 Jan; 48(1):267-70

Nitric oxide synthase distribution in the goldfish Mauthner cell. Bell TD, et al. **Neurosci Lett** 1997 May 2;226(3):187-90

Enzymatic inactivation of enkephalin neurotransmitters in the spinal cord of the neonatal rat. Suzuki H, et al.
Neurosci Res 1997 Jul;28(3):261-7

Upregulation of nicotinamide adenine dinucleotide phosphate-diaphorase reactivity in the ventral horn motoneurons of lumbosacral spinal cord after urethral obstruction in the guinea pig. Zhou Y, et al.
Neurosci Res 1997 Feb;27(2):169-74

The potential role of spinal cord cyclooxygenase-2 in the development of Freund's complete adjuvant-induced changes in hyperalgesia and allodynia. Hay CH, et al.
Neuroscience 1997 Jun;78(3):843-50

Immunohistochemical study on choline acetyltransferase in the spinal cord of patients with amyotrophic lateral sclerosis. Oda Y, et al. **Pathol Int** 1995 Dec;45(12):933-9

Kyotorphin synthetase activity in rat adrenal glands and spinal cord. Kawabata A, et al. **Peptides** 1996;17(3):407-11

Purification and characterization of substance P endopeptidase activities in the rat spinal cord. Karlsson K, et al. **Prep Biochem Biotechnol** 1997 Feb;27(1):59-78

Acetylcholinesterase-transgenic mice display embryonic modulations in spinal cord choline acetyltransferase and neurexin Ibeta gene expression followed by late-onset neuromotor deterioration. Andres C, et al.
Proc Natl Acad Sci U S A 1997 Jul 22;94(15):8173-8

Preserved acute pain and reduced neuropathic pain in mice lacking PKCgamma [see comments] Malmberg AB, et al. **Science** 1997 Oct 10;278(5336):279-83. Comment in: Science 1997 Oct 10;278(5336):239-40.

GROWTH & DEVELOPMENT

The vestibular primary afferents and the vestibulospinal projections in the developing and adult opossum, Monodelphis domestica. Pflieger JF, et al.
Anat Embryol (Berl) 1996 Jul;194(1):75-88

Perinatal developmental changes in respiratory activity of medullary and spinal neurons: an in vitro study on fetal and newborn rats. Di Pasquale E, et al.
Brain Res Dev Brain Res 1996 Jan 22;91(1):121-30

Antinociceptive effects of intrathecally administered 2-methylserotonin in developing rats. Giordano J.
Brain Res Dev Brain Res 1997 Jan 2;98(1):142-4

Development of locomotor activity induced by NMDA receptor activation in the lumbar spinal cord of the rat fetus studied in vitro. Ozaki S, et al.
Brain Res Dev Brain Res 1996 Nov 22;97(1):118-25

Growth of dorsal spinocerebellar axons through a lesion of their spinal pathway during early development in the North American opossum, Didelphis virginiana. Terman JR, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1-2):33-48

Developmental change of the nestin-immunoreactive midline raphe glial structure in human brainstem and spinal cord. Takano T, et al. **Dev Neurosci** 1997;19(2):202-9

The developmental and circadian variation of melatonin receptors in the chicken spinal cord. Wan Q, et al.
Dev Neurosci 1997;19(2):196-201

A critical period for the influence of peripheral targets on the central projections of developing sensory neurons. Mears SC, et al. **Int J Dev Neurosci** 1996 Oct;14(6):731-7

Role of glutamate in the regulation of the outgrowth and motility of neurites from mouse spinal cord neurons in culture. Owen AD, et al. **J Anat** 1997 Aug;191 (Pt 2):301-7

Attempts to facilitate dorsal column axonal regeneration in a neonatal spinal environment. Dent LJ, et al.
J Comp Neurol 1996 Aug 26;372(3):435-56

Ontogeny of androgen receptor immunoreactivity in lumbar motoneurons and in the sexually dimorphic levator ani muscle of male rats. Jordan CL, et al. **J Comp Neurol** 1997 Mar 3;379(1):88-98

Synchronized overproduction of AMPA, kainate, and NMDA glutamate receptors during human spinal cord development. Kalb RG, et al. **J Comp Neurol** 1997 Jul 28; 384(2):200-10

Myelination of the ventral and dorsal roots of the C8 and L4 segments of the spinal cord at different stages of development in the gray opossum, Monodelphis domestica. Leblond H, et al. **J Comp Neurol** 1997 Sep 22;386(2):203-16

Initial trajectories of sensory axons toward laminar targets in the developing mouse spinal cord. Ozaki S, et al.
J Comp Neurol 1997 Apr 7;380(2):215-29

Regional differences of serotonin-mediated synaptic plasticity in the chicken spinal cord with development and aging. Chen L, et al. **J Neural Transplant Plast** 1997 Jan-Mar;6(1):41-8

The regional distribution of myelin oligodendrocyte glycoprotein (MOG) in the developing rat CNS: an in vivo immunohistochemical study. Coffey JC, et al.
J Neurocytol 1997 Mar;26(3):149-61

IMMUNOLOGY

Spinal NK2 receptors contribute to the increased excitability of the nociceptive flexor reflex during persistent peripheral inflammation. Jia YP, et al. **Brain Res** 1997 Mar 14; 751(1):169-74

Localization of dopamine D2 receptor in rat spinal cord identified with immunocytochemistry and in situ hybridization. van Dijken H, et al. **Eur J Neurosci** 1996 Mar;8(3):621-8

The level of tumor necrosis factor-alpha producing cells in the spinal cord correlates with the degree of Theiler's murine encephalomyelitis virus-induced demyelinating disease. Inoue A, et al. **Int Immunol** 1996 Jul;8(7):1001-8

Fas and Fas ligand enhance the pathogenesis of experimental allergic encephalomyelitis, but are not essential for immune privilege in the central nervous system. Sabelko KA, et al. **J Immunol** 1997 Oct 1;159(7):3096-9

Analysis of the systemic and intrathecal humoral immune response in progressive multifocal leukoencephalopathy. Weber T, et al. **J Infect Dis** 1997 Jul;176(1):250-4

Characterization of a unique T-cell clone established from a patient with HAM/TSP which recognized HTLV-I-infected T-cell antigens as well as spinal cord tissue antigens. Nagai M, et al. **J Neuroimmunol** 1996 Apr; 65(2):97-105

Apoptosis of V beta 8.2+ T lymphocytes in the spinal cord during recovery from experimental autoimmune encephalomyelitis induced in Lewis rats by inoculation with myelin basic protein. McCombe PA, et al.
J Neurol Sci 1996 Jul;139(1):1-6

Monoclonal antiphosphatidylserine antibodies react directly with feline and murine central nervous system. Kent M, et al. **J Rheumatol** 1997 Sep;24(9):1725-33

Mouse hepatitis virus is cleared from the central nervous systems of mice lacking perforin-mediated cytolysis. Lin MT, et al. **J Virol** 1997 Jan;71(1):383-91

Immunologic analysis of a spinal cord-biopsy specimen from a patient with human T-cell lymphotropic virus type I-associated neurologic disease. Levin MC, et al.
N Engl J Med 1997 Mar 20;336(12):839-45

INJURIES see SPINAL CORD INJURIES

METABOLISM

Distribution of cholecystokinin-8-like immunoreactivity in the frog brain and spinal cord. Petkó M, et al.
Acta Biol Hung 1996;47(1-4):355-69

Immunocytochemical localization of glycine in the lamprey spinal cord with reference to GABAergic and glutamatergic synapses: a light and electron microscopic study. Shupliakov O, et al. **Acta Biol Hung** 1996; 47(1-4):393-410

Multiple sclerosis and intrathecal IgA synthesis. Sena A, et al. **Acta Neurol Belg** 1997 Mar;97(1):36-8

The neurotoxin quinolinic acid is increased in spinal cords of mice with herpes simplex virus encephalitis. Reinhard JF Jr, et al. **Adv Exp Med Biol** 1996;398:241-6

Sex differences in endogenous retinoid release in the post-embryonic spinal cord of the western mosquitofish, Gambusia affinis affinis. Rosa-Molinar E, et al.
Adv Exp Med Biol 1997;414:95-108

Postoperative cerebrospinal fluid leaks of the lumbosacral spine: management with percutaneous fibrin glue. Patel MR, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):495-500

NMDA as well as non-NMDA receptors in phrenic nucleus mediate respiratory effects of carotid chemoreflex. Chitravanshi VC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R302-10

NMDA receptor blockade in cat dorsal horn blunts reflex pressor response to muscle contraction and stretch. Hand GA, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H500-8

Role of NMDA and AMPA glutamatergic transmission in spinal c-fos expression after urinary tract irritation. Kakizaki H, et al. **Am J Physiol** 1996 May;270(5 Pt 2):R990-6

Annexin VI modulates Ca2+ and K+ conductances of spinal cord and dorsal root ganglion neurons. Naciff JM, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):C2004-15

Spinal Fos labeling and penile erection elicited by stimulation of dorsal nerve of the rat penis. Rampin O, et al.
Am J Physiol 1997 May;272(5 Pt 2):R1425-31

Synaptophysin expression in the human spinal cord. Diagnostic implications of an immunohistochemical study. Zhang PJ, et al. **Am J Surg Pathol** 1996 Mar;20(3):273-6

Developmental expression of the CD15-epitope in the brainstem and spinal cord of the mouse. Ashwell KW, et al. **Anat Embryol (Berl)** 1997 Jul;196(1):13-25

The raccoon lateral cervical nucleus: mediolateral organization of GABA-positive and GABA-negative neurons and fibers. Broman J, et al. **Anat Embryol (Berl)** 1996 May;193(5):463–74

Hyperbaric dye solution distribution characteristics after pencil-point needle injection in a spinal cord model. Holman SJ, et al. **Anesthesiology** 1997 Apr;86(4):966–73

Ascorbic acid inhibits spinal meningeal catechol-o-methyl transferase in vitro, markedly increasing epinephrine bioavailability. Kern C, et al. **Anesthesiology** 1997 Feb; 86(2):405–9

Intrathecal alpha 2-adrenergic agonists stimulate acetylcholine and norepinephrine release from the spinal cord dorsal horn in sheep. An in vivo microdialysis study. Klimscha W, et al. **Anesthesiology** 1997 Jul;87(1):110–6

Acylcarnitine chain length influences carnitine-enhanced drug flux through the spinal meninges in vitro. Ummenhofer WC, et al. **Anesthesiology** 1997 Mar; 86(3):642–8

Altered expression of bcl-2 and bax mRNA in amyotrophic lateral sclerosis spinal cord motor neurons. Mu X, et al. **Ann Neurol** 1996 Sep;40(3):379–86

Calcium-permeable alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid receptors: a molecular determinant of selective vulnerability in amyotrophic lateral sclerosis. Williams TL, et al. **Ann Neurol** 1997 Aug;42(2):200–7

Reactive oxygen species in experimental allergic encephalomyelitis. Scott GS, et al. **Biochem Soc Trans** 1997 May;25(2):166S

Guanosine 5'-O-(3-thiotriphosphate) and cations regulate melatonin receptors, and melatonin inhibits cyclic AMP production in the spinal cord. Wan Q, et al. **Biol Signals** 1997 Mar-Apr;6(2):67–76

The influence of membrane cholesterol on the GABAA receptor. Bennett PJ, et al. **Br J Pharmacol** 1996 Jan; 117(1):87–92

The excitatory and inhibitory modulation of primary afferent fibre-evoked responses of ventral roots in the neonatal rat spinal cord exerted by nitric oxide. Kurihara T, et al. **Br J Pharmacol** 1996 Aug;118(7):1743–53

Differential antinociceptive effects of spinal opioids on foot withdrawal responses evoked by C fibre or A delta nociceptor activation. Lu Y, et al. **Br J Pharmacol** 1997 Jul;121(6):1210–6

Role of protein kinase C in desensitization of spinal delta-opioid-mediated antinociception in the mouse. Narita M, et al. **Br J Pharmacol** 1996 Aug;118(7):1829–35

Pharmacological characterization of the vanilloid receptor in the rat dorsal spinal cord. Wardle KA, et al. **Br J Pharmacol** 1997 Jul;121(5):1012–6

Modification of the binding of [3H]MK-801 to brain regions and spinal cord of rats treated chronically with U-50,488H, a kappa-opioid receptor agonist. Bhargava HN, et al. **Brain Res** 1997 Feb 28;749(2):347–50

Selective cyclooxygenase-2 inhibition reduces carrageenan oedema and associated spinal c-Fos expression in the rat. Buritova J, et al. **Brain Res** 1996 Apr 9;715(1-2):217–20

Increased brain-derived neurotrophic factor immunoreactivity in rat dorsal root ganglia and spinal cord following peripheral inflammation. Cho HJ, et al. **Brain Res** 1997 Aug 1;764(1-2):269–72

Cytokine and growth factor immunohistochemical spinal profiles in two animal models of mononeuropathy. DeLeo JA, et al. **Brain Res** 1997 Jun 6;759(1):50–7

Changes in receptor levels for thyrotropin releasing hormone, serotonin, and substance P in cervical spinal cord of Wobbler mouse: a quantitative autoradiography study during early and late stages of the motoneuron disease. Deng YP, et al. **Brain Res** 1996 Jun 24;725(1):49–60

Pituitary adenylate cyclase activating polypeptide-immunoreactivity in human spinal cord and dorsal root ganglia. Dun EC, et al. **Brain Res** 1996 May 20;721(1-2):233–7

Ureteral ligation induces Fos expression in the dorsal horn. Fitch GK, et al. **Brain Res** 1996 Jun 3;723(1-2):199–205

Increased renal interstitial hydrostatic pressure causes c-fos expression in the rat's spinal cord dorsal horn. Fitch GK, et al. **Brain Res** 1997 Apr 11;753(2):340–7

Inhalation anesthetics suppress the expression of c-Fos protein evoked by noxious somatic stimulation in the deeper layer of the spinal cord in the rat. Hagihira S, et al. **Brain Res** 1997 Mar 14;751(1):124–30

Somatostatin and brain-derived neurotrophic factor mRNA expression in the primate brain: decreased levels of mRNAs during aging. Hayashi M, et al. **Brain Res** 1997 Feb 28; 749(2):283–9

Astrocytes in the aged rat spinal cord fail to increase GFAP mRNA following sciatic nerve axotomy. Kane CJ, et al. **Brain Res** 1997 Jun 6;759(1):163–5

Epibatidine binding sites and activity in the spinal cord. Khan IM, et al. **Brain Res** 1997 Apr 11;753(2):269–82

Cuneiform nucleus stimulation-induced sympathoexcitation: role of adrenoceptors, excitatory amino acid and serotonin receptors in rat spinal cord. Lam W, et al. **Brain Res** 1997 May 23;757(2):191–201

Developmental and stimulus-specific expression of the immediate-early gene zif268 in rat spinal cord. Liang F, et al. **Brain Res** 1996 Aug 12;729(2):246–52

Unique properties of [3H]MK-801 binding in membranes from the rat spinal cord. Liu Y, et al. **Brain Res** 1997 May 23;757(2):167–75

Evidence for the presence of neurokinin-1 receptors on dorsal horn spinocerebellar tract cells in the rat. McGonigle DJ, et al. **Brain Res** 1996 Dec 2;742(1-2):1–9

The effect of alpha-trinositol (D-myo-inositol 1,2,6-trisphosphate) on formalin-evoked spinal amino acid and prostaglandin E2 levels. Malmberg AB, et al. **Brain Res** 1997 Jan 30;747(1):160–4

Increased c-fos expression in spinal neurons induced by electrical stimulation of the ureter in the rat. Matsumoto G, et al. **Brain Res** 1996 Feb 19;709(2):197–204

Localization of angiotensin IV binding sites to motor and sensory neurons in the sheep spinal cord and hindbrain. Moeller I, et al. **Brain Res** 1995 Dec 1;701(1-2):301–6

Neuropeptide changes persist in spinal cord despite resolving hyperalgesia in a rat model of mononeuropathy. Munglani R, et al. **Brain Res** 1996 Dec 16;743(1-2):102–8

Absence of co-localized glutamic acid decarboxylase and neuropeptides in noradrenergic axons of the rat spinal cord. Patel R, et al. **Brain Res** 1997 Feb 21;749(1):164–9

Effect of chronic treatment with morphine, midazolam and both together on dynorphin(1-13) levels in the rat. Rattan AK, et al. **Brain Res** 1997 Apr 18;754(1-2):239–44

Spinal release of immunoreactive dynorphin A(1-8) with the development of peripheral inflammation in the rat. Riley RC, et al. **Brain Res** 1996 Feb 26;710(1-2):131–42

Effects of peripheral axotomy on neuropeptides and nitric oxide synthase in dorsal root ganglia and spinal cord of the guinea pig: an immunohistochemical study. Rydh-Rinder M, et al. **Brain Res** 1996 Jan 29;707(2):180–8

Distribution of the N-methyl-D-aspartate glutamate receptor subunit NR2A in control and amyotrophic lateral sclerosis spinal cord. Samarasinghe S, et al. **Brain Res** 1996 Jul 15;727(1-2):233–7

Attenuation of c-Fos expression in the rat lumbosacral spinal cord by morphine or tramadol following noxious colorectal distention. Traub RJ, et al. **Brain Res** 1995 Dec 1; 701(1-2):175–82

Effect of muscle denervation on the expression of substance P in the ventral raphe-spinal pathway of the rat. Van den Bergh P, et al. **Brain Res** 1996 Jan 29;707(2):206–12

Abnormal expression of the proliferating cell nuclear antigen (PCNA) in the spinal cord of the hypomyelinated Jimpy mutant mice. Vela Hernández JM, et al. **Brain Res** 1997 Jan 30;747(1):130–9

Cholinergic deficits in aged rat spinal cord: restoration by GM1 ganglioside. Vogelsberg V, et al. **Brain Res** 1997 Jul 4;761(2):250–6

Low but not high rate noxious radiant skin heating evokes a capsaicin-sensitive increase in spinal cord dorsal horn release of substance P. Zachariou V, et al. **Brain Res** 1997 Mar 28;752(1-2):143–50

Receptor localization in the mammalian dorsal horn and primary afferent neurons. Coggeshall RE, et al. **Brain Res Brain Res Rev** 1997 Jun;24(1):28–66 (341 ref.)

Autoradiographic characterization of rat spinal neuropeptide FF receptors by using [125I][D.Tyr1, (NMe)Phe3]NPFF. Gouardères C, et al. **Brain Res Bull** 1997;42(3):231–8

The effects of aging on spinal neurochemistry in the rat. Ko ML, et al. **Brain Res Bull** 1997;42(2):95–8

alpha 2A subtype of presynaptic alpha 2-adrenoceptors modulates the release of [3H]-noradrenaline from rat spinal cord. Umeda E, et al. **Brain Res Bull** 1997;42(2):129–32

A target of the HoxB5 gene from the mouse nervous system. Safaei R. **Brain Res Dev Brain Res** 1997 May 20;100(1):5–12

Sodium channel alpha-subunit mRNAs I, II, III, NaG, Na6 and hNE (PN1): different expression patterns in developing rat nervous system. Felts PA, et al. **Brain Res Mol Brain Res** 1997 Apr;45(1):71–82

Differential distribution of synapsin IIa and IIb mRNAs in various brain structures and the effect of chronic morphine administration on the regional expression of these isoforms. Matus-Leibovitch N, et al. **Brain Res Mol Brain Res** 1997 May;45(2):301–16

Early upregulation of medium neurofilament gene expression in developing spinal cord of the wobbler mouse mutant. Pernas-Alonso R, et al. **Brain Res Mol Brain Res** 1996 Jun;38(2):267–75

Coincident induction of K rev-1/rap 1A, rap 1B and H-ras mRNAs in the rat spinal cord by noxious stimulation. Urayama O, et al. **Brain Res Mol Brain Res** 1997 May; 45(2):331–4

Immunolocalization of Bcl-xL/S in the central nervous system of neonatal and adult rats. Alonso G, et al. **Cell Tissue Res** 1997 Apr;288(1):59–68

Effect of 5-HT on pain modulation of substance P in spinal cord of rats. Ruan HZ, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):512–6

Developmental change of the nestin-immunoreactive midline raphe glial structure in human brainstem and spinal cord. Takano T, et al. **Dev Neurosci** 1997;19(2):202–9

The developmental and circadian variation of melatonin receptors in the chicken spinal cord. Wan Q, et al. **Dev Neurosci** 1997;19(2):196–201

Morphine tolerance-induced modulation of [3H]glyburide binding to mouse brain and spinal cord. Welch SP, et al. **Drug Alcohol Depend** 1997 Apr 14;45(1-2):47–53

Increased severity of experimental autoimmune encephalomyelitis, chronic macrophage/microglial reactivity, and demyelination in transgenic mice producing tumor necrosis factor-alpha in the central nervous system. Taupin V, et al. **Eur J Immunol** 1997 Apr;27(4):905–13

Organisation of the zebrafish spinal cord: distribution of motoneuron dendrites and 5-HT containing cells. Van Raamsdonk W, et al. **Eur J Morphol** 1996;34(2):65–77

Colocalization of oestrogen receptor immunoreactivity and preproenkephalin mRNA expression to neurons in the superficial laminae of the spinal and medullary dorsal horn of rats. Amandusson A, et al. **Eur J Neurosci** 1996 Nov; 8(11):2440–5

Localization, differential expression and retrograde axonal transport suggest physiological role of FGF-2 in spinal autonomic neurons of the rat. Blottner D, et al. **Eur J Neurosci** 1997 Feb;9(2):368–77

Cloning and characterization of a neural cell recognition molecule on axons of the retinotectal system and spinal cord. Brümmendorf T, et al. **Eur J Neurosci** 1997 Jun; 9(6):1105–16

Decreased expression of TrkB and TrkC mRNAs in spinal motoneurons of aged rats. Johnson H, et al. **Eur J Neurosci** 1996 Mar;8(3):494–9

Distribution and sites of synthesis of NTT4, an orphan member of the Na+/Cl(-)-dependent neurotransmitter transporter family, in the rat CNS. Luque JM, et al. **Eur J Neurosci** 1996 Jan;8(1):127–37

Localization of the serotonin transporter in rat spinal cord. Sur C, et al. **Eur J Neurosci** 1996 Dec;8(12):2753–7

GABA and glycine in synaptic glomeruli of the rat spinal dorsal horn. Todd AJ. **Eur J Neurosci** 1996 Dec; 8(12):2492–8

The contribution of peripheral bradykinin B2 receptors to carrageenan-evoked oedema and spinal c-Fos expression in rats. Buritova J, et al. **Eur J Pharmacol** 1997 Feb 5; 320(1):73–80

Interactions between NMDA- and prostaglandin receptor-mediated events in a model of inflammatory nociception. Buritova J, et al. **Eur J Pharmacol** 1996 May 6;303(1-2):91–100

Interaction of thiocolchicoside with [3H]strychnine binding sites in rat spinal cord and brainstem. Cimino M, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):201–4

Adenosine kinase inhibitors augment release of adenosine from spinal cord slices. Golembiowska K, et al. **Eur J Pharmacol** 1996 Jun 27;307(2):157–62

Supraspinal delta 1-opioid receptor-mediated antinociceptive properties of (-)-TAN-67 in diabetic mice. Kamei J, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):27–30

[3H]dexmedetomidine, an alpha 2-adrenoceptor agonist, detects a novel imidazole binding site in adult rat spinal cord. Savola MK, et al. **Eur J Pharmacol** 1996 Jun 13; 306(1-3):315–23

Pharmacological characterization of [3H]MK-801 binding in the rat spinal cord. Souverbie F, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):347–53

A novel agonist, phorbol 12-phenylacetate 13-acetate 20-homovanillate, abolishes positive cooperativity of binding by the vanilloid receptor. Szallasi A, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):221–8

Evidence for release of glutamic acid, aspartic acid and substance P but not gamma-aminobutyric acid from primary afferent fibres in rat spinal cord. Teoh H, et al. **Eur J Pharmacol** 1996 Apr 29;302(1-3):27–36

Characterization of alpha 1-adrenoceptor subtypes in rat spinal cord. Wada T, et al. **Eur J Pharmacol** 1996 Sep 26; 312(2):263–6

Dynorphin-(1-8) inhibits the release of substance P-like immunoreactivity in the spinal cord of rats following a noxious mechanical stimulus. Zachariou V, et al. **Eur J Pharmacol** 1997 Apr 4;323(2-3):159–65

Peripheral nerve stimulation increases Fos immunoreactivity without affecting type II Ca2+/calmodulin-dependent protein kinase, glutamic acid decarboxylase, or GABAA receptor gene expression in cat spinal cord. Liang F, et al. **Exp Brain Res** 1996 Oct;111(3):326–36

Expression of Fos-like immunoreactivity in the brain and spinal cord of rats following middle cerebral artery occlusion. Wu YP, et al. **Exp Brain Res** 1997 Jun; 115(1):129–36

A differential and time-dependent decrease in AMPA-type glutamate receptor subunits in spinal motoneurons after sciatic nerve injury. Kennis JH, et al. **Exp Neurol** 1997 Sep;147(1):18–27

FAC1 expression and localization in motor neurons of developing, adult, and amyotrophic lateral sclerosis spinal cord. Mu X, et al. **Exp Neurol** 1997 Jul;146(1):17–24

Potential roles of gene expression change in adult rat spinal motoneurons following axonal injury: a comparison among c-jun, off-affinity nerve growth factor receptor (LNGFR), and nitric oxide synthase (NOS). Wu W. **Exp Neurol** 1996 Oct;141(2):190–200

Effects of electrical stimulation and morphine microinjection into periaqueductal gray on 5-hydroxyindole oxidation current in spinal cord of cats. Kato M, et al. **Gen Pharmacol** 1996 Oct;27(7):1195–201

The reduction of antinociceptive effect of morphine administered intraventricularly is correlated with the decrease of serotonin release from the spinal cord in streptozotocin-induced diabetic rats. Suh HW, et al. **Gen Pharmacol** 1996 Apr;27(3):445–50

Glutamate metabolism is down-regulated in astrocytes during experimental allergic encephalomyelitis. Hardin-Pouzet H, et al. **Glia** 1997 May;20(1):79–85

Bovine serum albumin and lysophosphatidic acid stimulate calcium mobilization and reversal of cAMP-induced stellation in rat spinal cord astrocytes. Manning TJ Jr, et

al. **Glia** 1997 Jun;20(2):163–72
Phosphorus–31 magnetic resonance spectroscopy studies of pig spinal cord injury. Myelin changes, intracellular pH, and bioenergetics. Akino M, et al. **Invest Radiol** 1997 Jul; 32(7):382–8
Excitatory amino acid concentrations in the spinal dorsal horn of cats during muscle contraction. Hand GA, et al. **J Appl Physiol** 1996 Jul;81(1):368–73
Corticotropin releasing factor–like immunoreactivity in afferent projections to the sacral spinal cord of the cat. Kawatani M, et al. **J Auton Nerv Syst** 1996 Dec 14; 61(3):218–26
cDNA cloning, genomic organization, and in vivo expression of rat N–syndecan. Carey DJ, et al. **J Biol Chem** 1997 Jan 31;272(5):2873–9
Identification and characterization of a retinoic acid–regulated human homologue of the unc–33–like phosphoprotein gene (hUlip) from neuroblastoma cells. Gaetano C, et al. **J Biol Chem** 1997 May 2; 272(18):12195–201
Transgenic analyses reveal developmentally regulated neuron– and muscle–specific elements in the murine neurofilament light chain gene promoter. Yaworsky PJ, et al. **J Biol Chem** 1997 Oct 3;272(40):25112–20
Induction of the intronic enhancer of the human ciliary neurotrophic factor receptor (CNTFRalpha) gene by the TR4 orphan receptor. A member of steroid receptor superfamily. Young WJ, et al. **J Biol Chem** 1997 Jan 31; 272(5):3109–16
Immunocytochemical distribution of ionotropic glutamate receptor subunits in the spinal cord of the rabbit. Bonnot A, et al. **J Chem Neuroanat** 1996 Oct;11(4):267–78
Calreticulin expression in spinal motoneurons of the rat. Copray JC, et al. **J Chem Neuroanat** 1996 Jul;11(1):57–65
Autoradiographic mapping of serotonin 5–HT1A, 5–HT1D, 5–HT2A and 5–HT3 receptors in the aged human spinal cord. Laporte AM, et al. **J Chem Neuroanat** 1996 Jul; 11(1):67–75
Spinal cord adenosine receptor stimulation in rats inhibits peripheral neutrophil accumulation. The role of N–methyl–D–aspartate receptors. Bong GW, et al. **J Clin Invest** 1996 Dec 15;98(12):2779–85
Cell–type specific organization of glycine receptor clusters in the mammalian spinal cord. Alvarez FJ, et al. **J Comp Neurol** 1997 Mar 3;379(1):150–70
Distribution of dopamine immunoreactivity in the rat, cat and monkey spinal cord. Holstege JC, et al. **J Comp Neurol** 1996 Dec 23;376(4):631–52
Ontogeny of androgen receptor immunoreactivity in lumbar motoneurons and in the sexually dimorphic levator ani muscle of male rats. Jordan CL, et al. **J Comp Neurol** 1997 Mar 3;379(1):88–98
Synchronized overproduction of AMPA, kainate, and NMDA glutamate receptors during human spinal cord development. Kalb RG, et al. **J Comp Neurol** 1997 Jul 28; 384(2):200–10
Expression of the cell adhesion proteins BEN/SC1/DM–GRASP and TAG–1 defines early steps of axonogenesis in the human spinal cord. Karagogeos D, et al. **J Comp Neurol** 1997 Mar 17;379(3):415–27
Quantitative analysis of substance P–immunoreactive boutons on physiologically characterized dorsal horn neurons in the cat lumbar spinal cord. Ma W, et al. **J Comp Neurol** 1996 Dec 2;376(1):45–64
Distribution of bradykinin B2 receptors in sheep brain and spinal cord visualized by in vitro autoradiography. Murone C, et al. **J Comp Neurol** 1997 May 5;381(2):203–18
Relationship of NK3 receptor–immunoreactivity to subpopulations of neurons in rat spinal cord. Seybold VS, et al. **J Comp Neurol** 1997 May 19;381(4):439–48
Rostrocaudal distribution of 5–HT innervation in the lamprey spinal cord and differential effects of 5–HT on fictive locomotion. Zhang W, et al. **J Comp Neurol** 1996 Oct 14; 374(2):278–90
Evidence for an alternative direct route of access for the scrapie agent to the brain bypassing the spinal cord. Baldauf E, et al. **J Gen Virol** 1997 May;78 (Pt 5):1187–97
Interleukin–6–mediated hyperalgesia/allodynia and increased spinal IL–6 expression in a rat mononeuropathy model. DeLeo JA, et al. **J Interferon Cytokine Res** 1996 Sep; 16(9):695–700
Synthesis of sphingomyelin by oligodendrocytes—how and where? Vos JP, et al. **J Lipid Mediat Cell Signal** 1996 Sep; 14(1–3):313–9
Synaptophysin in spinal anterior horn in aging and ALS: an immunohistological study. Cruz–Sánchez FF, et al. **J Neural Transm** 1996;103(11):1317–29
Expression, localization, and function of transforming growth factor–beta s in embryonic chick spinal cord, hindbrain, and dorsal root ganglia. Unsicker K, et al. **J Neurobiol** 1996 Feb;29(2):262–76
Brain and spinal cord distribution of biphalin: correlation with opioid receptor density and mechanism of CNS entry. Abbruscato TJ, et al. **J Neurochem** 1997 Sep;69(3):1236–45
5–Hydroxytryptamine–facilitated release of substance P from rat spinal cord slices is mediated by nitric oxide and cyclic GMP. Inoue A, et al. **J Neurochem** 1997 Jan;68(1):128–33
Characterisation and molecular identification of adrenomedullin binding sites in the rat spinal cord: a comparison with calcitonin gene–related peptide receptors. Owji AA, et al. **J Neurochem** 1996 Nov;67(5):2172–9
Androgenic regulation of androgen receptor immunoreactivity in motoneurons of the spinal nucleus of the bulbocavernosus of male rats. Matsumoto A, et al. **J Neuroendocrinol** 1996 Jul;8(7):553–9
Fibrin deposition in the central nervous system correlates with the degree of Theiler's murine encephalomyelitis virus–induced demyelinating disease. Inoue A, et al. **J Neuroimmunol** 1997 Aug;77(2):185–94
Cytokines in relapsing experimental autoimmune encephalomyelitis in DA rats: persistent mRNA expression of proinflammatory cytokines and absent expression of interleukin–10 and transforming growth factor–beta. Issazadeh S, et al. **J Neuroimmunol** 1996 Sep;69(1–2):103–15
Permeability of the blood–brain and blood–spinal cord barriers to interferons. Pan W, et al. **J Neuroimmunol** 1997 Jun;76(1–2):105–11
Central nervous system cytokine mRNA expression following Theiler's murine encephalomyelitis virus infection. Sato S, et al. **J Neuroimmunol** 1997 Jun; 76(1–2):213–23
Production of tumor necrosis factor in spinal cord following traumatic injury in rats. Wang CX, et al. **J Neuroimmunol** 1996 Sep;69(1–2):151–6
Cellular localization of tumor necrosis factor mRNA in neurological tissue from HIV–infected patients by combined reverse transcriptase/polymerase chain reaction in situ hybridization and immunohistochemistry. Wesselingh SL, et al. **J Neuroimmunol** 1997 Apr; 74(1–2):1–8
Expression of different metallothionein messenger ribonucleic acids in motor cortex, spinal cord and liver from patients with amyotrophic lateral sclerosis. Blaauwgeers HG, et al. **J Neurol Sci** 1996 Oct;142(1–2):39–44
Expression of ciliary neurotrophic factor is maintained in spinal motor neurons of amyotrophic lateral sclerosis. Schorr M, et al. **J Neurol Sci** 1996 Sep 1;140(1–2):117–22
Physiological contributions of neurokinin 1 receptor activation, and interactions with NMDA receptors, to inflammatory–evoked spinal c–Fos expression. Chapman V, et al. **J Neurophysiol** 1996 Sep;76(3):1817–27
Inflammation increases the distribution of dorsal horn neurons that internalize the neurokinin–1 receptor in response to noxious and non–noxious stimulation. Abbadie C, et al. **J Neurosci** 1997 Oct 15;17(20):8049–60
Noxious cutaneous thermal stimuli induce a graded release of endogenous substance P in the spinal cord: imaging peptide action in vivo. Allen BJ, et al. **J Neurosci** 1997 Aug 1;17(15):5921–7
Temperature dependency of basal and evoked release of amino acids and calcitonin gene–related peptide from rat dorsal spinal cord. Dirig DM, et al. **J Neurosci** 1997 Jun 1;17(11):4406–14
Recovery of neurofilament expression selectively in regenerating reticulospinal neurons. Jacobs AJ, et al. **J Neurosci** 1997 Jul 1;17(13):5206–20
Phosphorylation of transcription factor CREB in rat spinal cord after formalin–induced hyperalgesia: relationship to c–fos induction. Ji RR, et al. **J Neurosci** 1997 Mar 1; 17(5):1776–85
Neurotrophic factors increase neuregulin expression in embryonic ventral spinal cord neurons. Loeb JA, et al. **J Neurosci** 1997 Feb 15;17(4):1416–24
Effects of FGF–1 and FGF–2 on GD3 immunoreactive spinal neuroepithelial cells. Bannerman PG, et al. **J Neurosci Res** 1996 Sep 1;45(5):549–57
V beta CDR3 motifs associated with BP recognition are enriched in OX–40+ spinal cord T cells of Lewis rats with EAE. Buenafe AC, et al. **J Neurosci Res** 1996 Jun 15; 44(6):562–7
Substance P and neurokinin A variations throughout the rat estrous cycle; comparison with ovariectomized and male rats: II. Trigeminal nucleus and cervical spinal cord. Duval P, et al. **J Neurosci Res** 1996 Sep 1;45(5):610–6
Differential regulation of adrenocorticoid receptors in the hippocampus and spinal cord of adrenalectomized rats. Marlier LN, et al. **J Neurosci Res** 1996 Mar 1;43(5):526–34
Expression of TNF alpha in central neurons of Lewis rat spinal cord after EAE induction. Villarroya H, et al. **J Neurosci Res** 1997 Sep 1;49(5):592–9
Nicotinic actions on neurones of the central autonomic area in rat spinal cord slices. Bordey A, et al. **J Physiol (Lond)** 1996 Nov 15;497 (Pt 1):175–87
Ca(2+)–dependent inactivation of NMDA receptors: fast kinetics and high Ca2+ sensitivity in rat dorsal horn neurons. Kyrozis A, et al. **J Physiol (Lond)** 1996 Sep 1;495 (Pt 2):449–63
Plateau–generating neurones in the dorsal horn in an in vitro preparation of the turtle spinal cord. Russo RE, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):39–54
Burst–generating neurones in the dorsal horn in an in vitro preparation of the turtle spinal cord. Russo RE, et al. **J Physiol (Lond)** 1996 May 15;493 (Pt 1):55–66
Interstitial PCO2 and pH, and their role as chemostimulants in the isolated respiratory network of neonatal rats. Voipio J, et al. **J Physiol (Lond)** 1997 Mar 1;499 (Pt 2):527–42
Substance P receptor expression and cellular responses to substance P in prenatal rat spinal cord cells. St. John PA, et al. **J Recept Signal Transduct Res** 1997 Jul;17(4):569–83
Ultrastructural characteristics of glutamatergic and GABAergic terminals in cat lamina IX before and after spinal cord injury. Tai Q, et al. **J Spinal Cord Med** 1997 Jul;20(3):311–8
Glucocorticoid receptors and actions in the spinal cord of the Wobbler mouse, a model for neurodegenerative diseases. González Deniselle MC, et al. **J Steroid Biochem Mol Biol** 1997 Feb;60(3–4):205–13
Interactions of glycine and strychnine with their receptor recognition sites in mouse spinal cord. O'Connor V, et al. **Neurochem Int** 1996 Oct;29(4):423–34
Levels of dynorphin peptides in the central nervous system and pituitary gland of the spontaneously hypertensive rat. Tan–No K, et al. **Neurochem Int** 1997 Jul;31(1):27–32
Ischemia–reperfusion injury in the spinal cord of rabbits strongly enhances lipid peroxidation and modifies phospholipid profiles. Lukáčová N, et al. **Neurochem Res** 1996 Aug;21(8):869–73
Expression of mRNA for a sodium channel in subfamily 2 in spinal sensory neurons. Waxman SG, et al. **Neurochem Res** 1996 Apr;21(4):395–401
Constitutive expression of calmodulin–binding phosphoprotein GAP–43 in rat serotonergic and noradrenergic cell groups which project to the spinal cord. Wotherspoon G, et al. **Neurochem Res** 1997 Aug; 22(8):985–93
Ganglioside spinal cord changes in chronic relapsing experimental allergic encephalomyelitis induced in the Lewis rats. Zaprianova E, et al. **Neurochem Res** 1997 Feb; 22(2):175–9
Upregulation of protein–tyrosine nitration in the anterior horn cells of amyotrophic lateral sclerosis. Abe K, et al. **Neurol Res** 1997 Apr;19(2):124–8
Impairment of fast axonal transport in the proximal axons of anterior horn neurons in amyotrophic lateral sclerosis. Sasaki S, et al. **Neurology** 1996 Aug;47(2):535–40
Overexpression of nestin and vimentin in the ependyma of spinal cords from hydrocephalic infants. Takano T, et al. **Neuropathol Appl Neurobiol** 1997 Feb;23(1):3–15
The regulation of prodynorphin gene expression in cultured spinal cord cells: involvement of second messengers. Ha TS, et al. **Neuropeptides** 1997 Apr;31(2):125–30
Differential distribution of [3H]sumatriptan binding sites (5–HT1B, 5–HT1D and 5–HT1F receptors) in human brain: focus on brainstem and spinal cord. Castro ME, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):535–42
Potent antagonists at the L–AP4– and (1S,3S)–ACPD–sensitive presynaptic metabotropic glutamate receptors in the neonatal rat spinal cord. Jane DE, et al. **Neuropharmacology** 1996;35(8):1029–35
CGRP expression increases in the ventral horn rostral to spinal cord transection. Krenz NR, et al. **Neuroreport** 1996 Nov 25;7(18):2859–62
Metabotropic glutamate receptor mRNA expression in rat spinal cord. Valerio A, et al. **Neuroreport** 1997 Aug 18; 8(12):2695–9
Analysis of AMPA receptor subunit mRNA expression in control and ALS spinal cord. Virgo L, et al. **Neuroreport** 1996 Nov 4;7(15–17):2507–11
The synaptic structure of PACAP immunoreactive axons in the intermediolateral nucleus of the rat. Chiba T, et al. **Neurosci Lett** 1996 Aug 16;214(1):65–8
Expression of nitric oxide synthase by motor neurones in the spinal cord of the mutant mouse wobbler. Clowry GJ, et al. **Neurosci Lett** 1996 Sep 13;215(3):177–80
The d– and l–isomers of methadone bind to the non–competitive site on the N–methyl–D–aspartate (NMDA) receptor in rat forebrain and spinal cord. Gorman AL, et al. **Neurosci Lett** 1997 Feb 14;223(1):5–8
Induction of c–Jun immunoreactivity in spinal cord and brainstem neurons in a transgenic mouse model for amyotrophic lateral sclerosis. Jaarsma D, et al. **Neurosci Lett** 1996 Nov 29;219(3):179–82
Expression of neuronal nitric oxide synthase in spinal motoneurons in aged rats. Kanda K. **Neurosci Lett** 1996 Nov 15;219(1):41–4
mu–Opioid receptor–mediated reduction of alpha–amino–3–hydroxy–5–methyl–4–isoxazolepropionic acid–activated current in dorsal horn neurons. Kolaj M, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):133–7
Localization of a metabotropic glutamate receptor, mGluR7, in axon terminals of presumed nociceptive, primary afferent fibers in the superficial layers of the spinal dorsal horn: an electron microscope study in the rat. Li H, et al. **Neurosci Lett** 1997 Feb 28;223(3):153–6
Histochemistry in rat brain and spinal cord with an antibody directed at the cholecystokininA receptor. Mercer LD, et al. **Neurosci Lett** 1997 Apr 4;225(2):97–100
Motor neurons in human and rat spinal cord synthesize fibroblast growth factor–9. Nakamura S, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):181–4
Induction of Fos protein expression in spinal cord neurons by herpes simplex virus infections in the mouse. Ozaki N, et al. **Neurosci Lett** 1996 Sep 20;216(1):61–4
NMDA receptor–mediated calcium entry in the absence of AMPA receptor activation in rat dorsal horn neurons. Reichling DB, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):17–20
Dissociation of HSP72 and HSC73 heat shock mRNA inductions after spinal cord ischemia in rabbit. Sakurai M, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):113–6
Alterations in rat spinal cord cGMP by peripheral nerve injury and adrenal medullary transplantation. Siegan JB, et al. **Neurosci Lett** 1996 Aug 30;215(1):49–52
Metabotropic glutamate receptor subtype–1 alpha (mGluR1 alpha) immunoreactivity in ependymal cells of the rat caudal medulla oblongata and spinal cord. Tang FR, et

al. **Neurosci Lett** 1997 Apr 11;225(3):177–80

A contribution of neurokinin–1 receptor to formalin–induced c–fos expression in the rat spinal dorsal horn. Tao YX, et al. **Neurosci Lett** 1997 Jan 17;221(2–3):105–8

Kinectin distribution in chicken nervous system. Toyoshima I, et al. **Neurosci Lett** 1996 Jun 28;211(3):171–4

Induction of Fos–like immunoreactivity in the lower brainstem and the spinal cord of the rat by intraperitoneal administration of an endogenous satiety substance, 2–buten–4–olide. Uemura N, et al. **Neurosci Lett** 1997 May 16;227(2):131–4

Localization and characterization of melatonin receptors in the rabbit spinal cord. Wan Q, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):77–80

Expression of glial cell line–derived growth factor mRNA in the spinal cord and muscle in amyotrophic lateral sclerosis. Yamamoto M, et al. **Neurosci Lett** 1996 Feb 2; 204(1–2):117–20

Immunocytochemical localization of muscarinic m2 receptor in the rat spinal cord. Yung KK, et al. **Neurosci Lett** 1997 Jun 27;229(2):81–4

Visualization of glutamate release from rat spinal cord with a confocal laser scanning microscope. Tohda C, et al. **Neurosci Res** 1996 Jun;24(2):183–7

Anabolic–androgenic steroid induced alterations in choline acetyltransferase messenger RNA levels of spinal cord motoneurons in the male rat. Blanco CE, et al. **Neuroscience** 1997 Jun;78(3):873–82

Pituitary adenylate cyclase activating polypeptide immunoreactivity in the rat spinal cord and medulla: implication of sensory and autonomic functions. Dun NJ, et al. **Neuroscience** 1996 Aug;73(3):677–86

Stabilizing neuromuscular contacts increases motoneuron survival after neonatal nerve injury in rats. Harding DI, et al. **Neuroscience** 1996 Feb;70(3):799–805

Upregulation of spinal glutamate receptors in chronic pain. Harris JA, et al. **Neuroscience** 1996 Sep;74(1):7–12

Loss of GABA–immunoreactivity in the spinal dorsal horn of rats with peripheral nerve injury and promotion of recovery by adrenal medullary grafts. Ibuki T, et al. **Neuroscience** 1997 Feb;76(3):845–58

Expression of neurotransmitter genes in rat spinal motoneurons after chemodenervation with botulinum toxin. Jung HH, et al. **Neuroscience** 1997 May;78(2):469–79

Vaginocervical stimulation suppresses the expression of c–fos induced by mating in thoracic, lumbar and sacral segments of the female rat. Lee JW, et al. **Neuroscience** 1996 Sep; 74(1):237–49

Localization of bradykinin–like immunoreactivity in the rat spinal cord: effects of capsaicin, melittin, dorsal rhizotomy and peripheral axotomy. Lopes P, et al. **Neuroscience** 1997 May;78(2):481–97

Expression of alpha–, beta–, and gamma–subspecies of protein kinase C in the motor neurons in the embryonic and postnatal rat spinal cord. Miki A. **Neuroscience** 1996 Jun; 72(3):805–14

Connexin–43 in rat spinal cord: localization in astrocytes and identification of heterotypic astro–oligodendrocytic gap junctions. Ochalski PA, et al. **Neuroscience** 1997 Feb; 76(3):931–45

Glutamate receptors in spinal motoneurons after sciatic nerve transection. Popratiloff A, et al. **Neuroscience** 1996 Oct; 74(4):953–8

The massive expression of c–fos protein in spinal dorsal horn neurons is not followed by long–term changes in spinal nociception. Sandkühler J, et al. **Neuroscience** 1996 Aug; 73(3):657–66

Immunohistochemical localization of the somatostatin SST2(A) receptor in the rat brain and spinal cord. Schindler M, et al. **Neuroscience** 1997 Jan;76(1):225–40

Co–localization of secretoneurin immunoreactivity and macrophage infiltration in the lesions of experimental autoimmune encephalomyelitis. Storch MK, et al. **Neuroscience** 1996 Apr;71(3):885–93

Differential regional distribution of AMPA receptor subunit messenger RNAs in the human spinal cord as visualized by in situ hybridization. Tomiyama M, et al. **Neuroscience** 1996 Dec;75(3):901–15

Distribution of vasopressin and oxytocin receptors in the rat spinal cord: sex–related differences and effect of castration in pudendal motor nuclei. Tribollet E, et al. **Neuroscience** 1997 May;78(2):499–509

Compartmentalization of calbindin and parvalbumin in different parts of rat rubrospinal neurons. Wang YJ, et al. **Neuroscience** 1996 Sep;74(2):427–34

Blockade of capsaicin–induced reduction of GABA–immunoreactivity by spantide in cat spinal superficial dorsal horn. Wei F, et al. **Neuroscience** 1996 Mar;71(1):277–83

An immunocytochemical study of the distribution of AMPA selective glutamate receptor subunits in the normal human motor system. Williams TL, et al. **Neuroscience** 1996 Sep; 74(1):185–98

Effect of spinal kainic acid receptor activation on spinal amino acid and prostaglandin E2 release in rat. Yang LC, et al. **Neuroscience** 1996 Nov;75(2):453–61

Gender differences in the uptake of inorganic mercury by motor neurons. Pamphlett R, et al. **Neurotoxicol Teratol** 1997 Jul–Aug;19(4):287–93

Effects of spinal alpha 1–adrenoceptor antagonism on bladder activity induced by apomorphine in conscious rats with and without bladder outlet obstruction. Ishizuka O, et al. **Neurourol Urodyn** 1997;16(3):191–200

Molecular characterization of ALK, a receptor tyrosine kinase expressed specifically in the nervous system. Iwahara T, et al. **Oncogene** 1997 Jan 30;14(4):439–49

Rat maf related genes: specific expression in chondrocytes, lens and spinal cord. Sakai M, et al. **Oncogene** 1997 Feb 13;14(6):745–50

Differential contribution of the two phases of the formalin test to the pattern of c–fos expression in the rat spinal cord: studies with remifentanil and lidocaine. Abbadie C, et al. **Pain** 1997 Jan;69(1–2):101–10

Ketoprofen produces profound inhibition of spinal c–Fos protein expression resulting from an inflammatory stimulus but not from noxious heat. Buritova J, et al. **Pain** 1996 Oct;67(2–3):379–89

Changes in formalin–evoked spinal Fos expression and nociceptive behaviour after oral administration of Bufferin A (aspirin) and L–5409709 (ibuprofen + caffeine + paracetamol). Carrive P, et al. **Pain** 1997 Apr; 70(2–3):253–66

Desensitization follows excitation of bladder primary afferents by intravesical capsaicin, as shown by c–fos activation in the rat spinal cord. Cruz F, et al. **Pain** 1996 Mar;64(3):553–7

Estrogen and progesterone activate spinal kappa–opiate receptor analgesic mechanisms. Dawson–Basoa ME, et al. **Pain** 1996 Jan;64(1):169–77

Inhibition of noxious stimulus–evoked pain behaviors and neuronal fos–like immunoreactivity in the spinal cord of the rat by supraspinal morphine. Gogas KR, et al. **Pain** 1996 Apr;65(1):9–15

Chronic treatment with systemic morphine induced tolerance to the systemic and peripheral antinociceptive effects of morphine on both carrageenin induced mechanical hyperalgesia and spinal c–Fos expression in awake rats. Honoré P, et al. **Pain** 1997 May;71(1):99–108

C–fos can be induced in the neonatal rat spinal cord by both noxious and innocuous peripheral stimulation. Jennings E, et al. **Pain** 1996 Dec;68(2–3):301–6

Calcitonin gene–related peptide content, basal outflow and electrically–evoked release from monoarthritic rat spinal cord in vitro. Malcangio M, et al. **Pain** 1996 Aug; 66(2–3):351–8

A nitric oxide synthesis inhibitor (L–NAME) reduces licking behavior and Fos–labeling in the spinal cord of rats during formalin–induced inflammation. Roche AK, et al. **Pain** 1996 Aug;66(2–3):331–41

Chromic gut suture reduces calcitonin–gene–related peptide and substance P levels in the spinal cord following chronic constriction injury in the rat. Xu J, et al. **Pain** 1996 Mar; 64(3):503–9

Characterization of time course of spinal amino acids, citrulline and PGE2 release after carrageenan/kaolin–induced knee joint inflammation: a chronic microdialysis study. Yang LC, et al. **Pain** 1996 Oct; 67(2–3):345–54

Effect of low pH treatment on opioid peptides binding to their receptors and functional coupling of G–proteins to adenylyl cyclase in the rat spinal cord. Reddy PL, et al. **Peptides** 1996;17(4):625–8

Functional relevance of anaerobic metabolism in the isolated respiratory network of newborn rats. Ballanyi K, et al. **Pflugers Arch** 1996 Aug;432(4):741–8

Suckling and sucrose ingestion suppress persistent hyperalgesia and spinal Fos expression after forepaw inflammation in infant rats. Ren K, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1471–5

Glial cell line–derived neurotrophic factor–dependent RET activation can be mediated by two different cell–surface accessory proteins. Sanicola M, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6238–43

Studies of the release of immunoreactive galanin and dynorphin A(1–8) in the spinal cord of the rat. Duggan AW, et al. **Prog Brain Res** 1996;110:137–47 (74 ref.)

Acute mechanical hyperalgesia in the rat can be produced by coactivation of spinal ionotropic AMPA and metabotropic glutamate receptors, activation of phospholipase A2 and generation of cyclooxygenase products. Meller ST, et al. **Prog Brain Res** 1996;110:177–92 (69 ref.)

Lithium distribution in experimental inflammation of brain and spinal cord. Levine S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Aug; 20(6):1011–7

Comparative study of prostaglandin E2 production in chick spinal cord and meninges. Billotte C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1997 Mar; 56(3):169–75

Calcitonin gene–related peptide induces the formation of second messengers in primary cultures of neonatal rat spinal cord. Parsons AM, et al. **Synapse** 1997 Jul;26(3):235–42

Distribution of the 5–hydroxytryptamine2C receptor protein in adult rat brain and spinal cord determined using a receptor–directed antibody: effect of 5,7–dihydroxytryptamine. Sharma A, et al. **Synapse** 1997 Sep;27(1):45–56

Characterization of substance P release from the intermediate area of rat thoracic spinal cord. Yang L, et al. **Synapse** 1996 Aug;23(4):265–73

[Changes in opioid receptor binding nature in rat brain and spinal cord following formalin or carrageenan–induced nociception] Ohta S, et al. **Masui** 1997 May;46(5):644–9 (Eng. Abstr.) **(Jpn)**

[The influence of intrathecal NMDA receptor antagonist on the isoflurane MAC and on the motor function] Yamazaki M. **Masui** 1996 Jan;45(1):70–6 (Eng. Abstr.) **(Jpn)**

[Excitatory amino acids and prostanoids release in spinal cord injury] Ishikawa T, et al. **No To Shinkei** 1996 Mar; 48(3):259–63 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Intramedullary abscess of the spinal cord in a patient with a right–to–left shunt: case report. David C, et al. **Clin Infect Dis** 1997 Jan;24(1):89–90

Cervical epidural abscess due to actinomycosis: demonstration by MRI. Maeder PP, et al. **Eur Neurol** 1996; 36(1):56–7

PATHOLOGY

Experimental hydrocephalus and hydromyelia: a new insight in mechanism of their development. Miše B, et al. **Acta Neurochir (Wien)** 1996;138(7):862–8; discussion 868–9

Comparative immunohistochemical study on synaptophysin expression in the anterior horn of post–poliomyelitis and sporadic amyotrophic lateral sclerosis. Ikemoto A, et al. **Acta Neuropathol (Berl)** 1996 Nov;92(5):473–8

Immunohistochemical studies on clustered pericapillary bodies in the spinal cord of post–poliomyelitis patients. Ikemoto A, et al. **Acta Neuropathol (Berl)** 1996 Aug; 92(2):164–9

Traumatic spinal cord injury: a neuropathological study on the longitudinal spreading of the lesions. Ito T, et al. **Acta Neuropathol (Berl)** 1997 Jan;93(1):13–8

Varicella–zoster ventriculo–encephalitis and spinal cord infarction in a patient with AIDS. Kenyon LC, et al. **Acta Neuropathol (Berl)** 1996 Aug;92(2):202–5

Neuropathology of murine mucopolysaccharidosis type VII. Levy B, et al. **Acta Neuropathol (Berl)** 1996 Dec; 92(6):562–8

Synaptic loss in anterior horn neurons in lower motor neuron disease. Sasaki S, et al. **Acta Neuropathol (Berl)** 1996; 91(4):416–21

Nuclear and mitochondrial changes of co–cultivated spinal cord, spinal ganglia and muscle fibers following treatment with various doses of zidovudine. Schröder JM, et al. **Acta Neuropathol (Berl)** 1996 Aug;92(2):138–49

Amyotrophic lateral sclerosis with numerous axonal spheroids in the corticospinal tract and massive degeneration of the cortex. Takahashi T, et al. **Acta Neuropathol (Berl)** 1997 Sep;94(3):294–9

The intermediolateral nucleus and Clarke's column in Parkinson's disease. Wakabayashi K, et al. **Acta Neuropathol (Berl)** 1997 Sep;94(3):287–9

Comparative study of chronic aluminum–induced neurofilamentous aggregates with intracytoplasmic inclusions of amyotrophic lateral sclerosis. Wakayama I, et al. **Acta Neuropathol (Berl)** 1996 Dec;92(6):545–54

Nontraumatic spinal epidural hematomas. MR features. Lövblad KO, et al. **Acta Radiol** 1997 Jan;38(1):8–13

The low sensitivity of fluid–attenuated inversion–recovery MR in the detection of multiple sclerosis of the spinal cord. Keiper MD, et al. **AJNR Am J Neuroradiol** 1997 Jun–Jul; 18(6):1035–9

MR of the spinal cord in multiple sclerosis: relation to clinical subtype and disability. Lycklama à Nijeholt GJ, et al. **AJNR Am J Neuroradiol** 1997 Jun–Jul;18(6):1041–8

Comparison of two MR sequences for the detection of multiple sclerosis lesions in the spinal cord. Lycklama à Nijeholt GJ, et al. **AJNR Am J Neuroradiol** 1996 Sep; 17(8):1533–8

In the area of MR imaging, do we still need to teach our residents in neuroradiology how to perform the lateral cervical C1–C2 puncture to reach the intrathecal space? Hesselink JR. **AJR Am J Roentgenol** 1996 Nov; 167(5):1338–9

Multifocal neurocytoma/gangliocytoma with extensive leptomeningeal dissemination in the brain and spinal cord [see comments] Yamamoto T, et al. **Am J Surg Pathol** 1996 Mar;20(3):363–70. Comment in: Am J Surg Pathol 1997 Feb;21(2):258–9.

Influence of two weeks of non–weight bearing on rat soleus motoneurons and muscle fibers. Ishihara A, et al. **Aviat Space Environ Med** 1997 May;68(5):421–5

Central nervous system pathology in patients with the Guillain–Barré syndrome. Maier H, et al. **Brain** 1997 Mar; 120 (Pt 3):451–64

Serial MRI findings of benign poliomyelitis. Kibe T, et al. **Brain Dev** 1996 Mar–Apr;18(2):147–9

Mouse inoculation studies reveal no transmissible agent in amyotrophic lateral sclerosis [see comments] Fraser H. et al. **Brain Pathol** 1996 Apr;6(2):89–99. Comment in: Brain Pathol 1996 Apr;6(2):99–100.

Enkephalinergic and dynorphinergic neurons in the spinal cord and dorsal root ganglia of the polyarthritic rat – in vivo release and cDNA hybridization studies. Pohl M, et al. **Brain Res** 1997 Feb 21;749(1):18–28

Diagnostic discrepancies and their clinical impact in a neuropathology referral practice [see comments] Bruner JM, et al. **Cancer** 1997 Feb 15;79(4):796–803. Comment in: Cancer 1996 Feb 15;79(4):665–7.

A ruptured spinal AVM in a patient with migraine [letter; comment] Ravishankar K. **Cephalalgia** 1996 Jun;16(4):280 . Comment on: Cephalalgia 1995 Jun;15(3):237–40.

SPINAL CORD

Primary intramedullary spinal cord primitive neuroectodermal tumor with intracranial seeding in an infant. Kwon OK, et al. **Childs Nerv Syst** 1996 Oct; 12(10):633–6

Solitary spinal cord sarcoidosis without other manifestations of systemic sarcoidosis. Jaster JH, et al. **Clin Imaging** 1997 Jan–Feb;21(1):17–22

Neurogenic intermittent claudication. Wilson CB, et al. **Clin Neurosurg** 1971;18:62–85

Spinal muscular atrophy gene wobbler of the mouse: evidence from chimeric spinal cord and testis for cell–autonomous function. Augustin M, et al. **Dev Dyn** 1997 Jul;209(3):286–95

A case of syringomyelia with type I Arnold–Chiari malformation (ACM): growth hormone (GH) therapy and the size of syrinx on serial MR images. Takakuwa S, et al. **Endocr J** 1996 Oct;43 Suppl:S129–30

A case of acute transverse myelitis affecting the entire length of the spinal cord. Imai T, et al. **Eur Neurol** 1997; 37(4):247–8

MRI diagnosis of intramedullary metastases from extra–CNS tumors. Crasto S, et al. **Eur Radiol** 1997;7(5):732–6

Brain and spinal cord MR imaging in a case of acute disseminated encephalomyelitis. Feydy A, et al. **Eur Radiol** 1997;7(3):415–7

Experimental determination of the effect of progressive sharp–angle spinal deformity on the spinal cord. Masini M, et al. **Eur Spine J** 1997;6(2):89–92

Enhanced levels of biochemical markers for cobalamin deficiency in totally gastrectomized rats: uncoupling of the enhancement from the severity of spongy vacuolation in spinal cord. Scalabrino G, et al. **Exp Neurol** 1997 Apr; 144(2):258–65

Differential vulnerability of two subsets of spinal motor neurons in amyotrophic lateral sclerosis. Wetts R, et al. **Exp Neurol** 1996 Oct;141(2):248–55

Experimental spinal cord injury: Wallerian degeneration in the dorsal column is followed by revascularization, glial proliferation, and nerve regeneration. Zhang Z, et al. **Exp Neurol** 1997 Sep;147(1):159–71

Age related changes in the motoneurons of the spinal cord of the rat. Karmańska W, et al. **Folia Morphol (Warsz)** 1996; 55(4):309–11

The level of tumor necrosis factor–alpha producing cells in the spinal cord correlates with the degree of Theiler's murine encephalomyelitis virus–induced demyelinating disease. Inoue A, et al. **Int Immunol** 1996 Jul;8(7):1001–8

Evaluation of the temporal evolution of acute spinal cord injury. Runge VM, et al. **Invest Radiol** 1997 Feb; 32(2):105–10

Phosphorus–31 chemical shift imaging of metastatic tumors located in the spine region. Sijens PE, et al. **Invest Radiol** 1997 Jun;32(6):344–50

Neuron volume in the ventral horn in Wobbler mouse motoneuron disease: a light microscope stereological study. Dockery P, et al. **J Anat** 1997 Jul;191 (Pt 1):89–98

The value of gadolinium–chelates enhancement in neuroradiology. Cosnard G, et al. **J Belge Radiol** 1997 Feb; 80(1):30–2

Connexin43 and astrocytic gap junctions in the rat spinal cord after acute compression injury. Theriault E, et al. **J Comp Neurol** 1997 Jun 2;382(2):199–214

Decreased developmental cell death in sympathetic and spinal sensory nervous systems of the Kyoto spontaneously hypertensive rat. Messina A, et al. **J Hypertens** 1996 Sep; 14(9):1111–5

Primary demyelination and regeneration of ascending axons in the dorsal funiculus of the rat spinal cord following photochemically induced injury. Olby NJ, et al. **J Neurocytol** 1996 Aug;25(8):465–80

A longitudinal magnetic resonance imaging study of the cervical cord in multiple sclerosis. Filippi M, et al. **J Neuroimaging** 1997 Apr;7(2):78–80

Lordotic alignment and posterior migration of the spinal cord following en bloc open–door laminoplasty for cervical myelopathy: a magnetic resonance imaging study. Baba H, et al. **J Neurol** 1996 Sep;243(9):626–32

Plasticity of the spinal cord contributes to neurological improvement after treatment by cervical decompression. A magnetic resonance imaging study. Baba H, et al. **J Neurol** 1997 Jul;244(7):455–60

Acute infectious disorders of the spinal cord and its roots with gadolinium–DTPA enhancement in magnetic resonance imaging. Engelter S, et al. **J Neurol** 1996 Feb; 243(2):191–5

A spinal cord MRI study of benign and secondary progressive multiple sclerosis. Filippi M, et al. **J Neurol** 1996 Jul;243(7):502–5

Imaging of the spinal cord and brain in multiple sclerosis: a comparative study between fast FLAIR and fast spin echo. Stevenson VL, et al. **J Neurol** 1997 Feb;244(2):119–24

Spinal cord MRI in multiple sclerosis with multicoil arrays: a comparison between fast spin echo and fast FLAIR. Filippi M, et al. **J Neurol Neurosurg Psychiatry** 1996 Dec; 61(6):632–5

MRI demonstration of reversible impairment of the blood–CNS barrier function in subacute combined degeneration of the spinal cord [letter] Küker W, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):298–9

MRI appearances in subacute combined degeneration of the spinal cord due to vitamin B12 deficiency [letter] Larner AJ, et al. **J Neurol Neurosurg Psychiatry** 1997 Jan; 62(1):99–100

High signal intensity on T1 weighted MRI of the anterolateral column of the spinal cord in amyotrophic lateral sclerosis. Waragai M, et al. **J Neurol Neurosurg Psychiatry** 1997 Jan;62(1):88–91

Cell death and birth in multiple sclerosis brain. Dowling P, et al. **J Neurol Sci** 1997 Jul;149(1):1–11

Quantitative study of intermediolateral column cell counts in Machado–Joseph disease. Sakajiri K, et al. **J Neurol Sci** 1996 Dec;144(1–2):156–9

Reactive astrogliosis of the spinal cord in amyotrophic lateral sclerosis. Schiffer D, et al. **J Neurol Sci** 1996 Aug;139 Suppl:27–33

Cytoplasmic, lysosomal and matrix protease activities in spinal cord tissue from amyotrophic lateral sclerosis (ALS) and control patients. Shaw PJ, et al. **J Neurol Sci** 1996 Aug;139 Suppl:71–5

Ultrastructural study of the synapses of central chromatolytic anterior horn cells in motor neuron disease. Sasaki S, et al. **J Neuropathol Exp Neurol** 1996 Aug;55(8):932–9

Establishment of human adult astrocyte cultures derived from postmortem multiple sclerosis and control brain and spinal cord regions: immunophenotypical and functional characterization. De Groot CJ, et al. **J Neurosci Res** 1997 Aug 1;49(3):342–54

OX–40 antibody enhances for autoantigen specific V beta 8.2+ T cells within the spinal cord of Lewis rats with autoimmune encephalomyelitis. Weinberg AD, et al. **J Neurosci Res** 1996 Jan 1;43(1):42–9

Deformation of the cervicomedullary junction and spinal cord in a surgically treated adult Chiari I hindbrain hernia associated with syringomyelia: a magnetic resonance microscopic and neuropathological study. Case report. Beuls EA, et al. **J Neurosurg** 1996 Oct;85(4):701–8

Atlantoaxial degenerative articular cysts. Birch BD, et al. **J Neurosurg** 1996 Nov;85(5):810–6

Neuropathology of human spinal cord injury sustained in sports–related activities. Hayes KC, et al. **J Neurotrauma** 1997 Apr;14(4):235–48

Membrane leakage in spinal ganglion nerve cells induced by experimental whiplash extension motion: a study in pigs. Ortengren T, et al. **J Neurotrauma** 1996 Mar;13(3):171–80

The role of CD4+ and CD8+ T cells in demyelinating disease following Theiler's virus infection: a model for multiple sclerosis. Rodriguez M, et al. **J Neurovirol** 1997 May;3 Suppl 1:S43–5

The spinal cord lesion in human fetuses with myelomeningocele: implications for fetal surgery. Meuli M, et al. **J Pediatr Surg** 1997 Mar;32(3):448–52

Value of magnetic resonance imaging of the lumbosacral spinal cord in patients with voiding dysfunction. Mak V, et al. **J Urol** 1996 Oct;156(4):1421–3

Histopathology of enzootic ataxia in Sika deer (Cervus nippon Temminck). Yoshikawa H, et al. **J Vet Med Sci** 1996 Sep;58(9):849–54

Experimental autoimmune encephalomyelitis: the antigen specificity of T lymphocytes determines the topography of lesions in the central and peripheral nervous system. Berger T, et al. **Lab Invest** 1997 Mar;76(3):355–64

Neuropathology of HTLV–1–associated myelopathy (HAM/TSP). Izumo S, et al. **Leukemia** 1997 Apr;11 Suppl 3:82–4

HTLV–I induced myeloneuropathy in WKAH rats: apoptosis and local activation of the HTLV–I pX and TNF–alpha genes implicated in the pathogenesis. Ohya O, et al. **Leukemia** 1997 Apr;11 Suppl 3:255–7

Localized 1H NMR spectroscopy of rat spinal cord in vivo. Zelaya FO, et al. **Magn Reson Med** 1996 Apr;35(4):443–8

Intramedullary spinal cord and brain metastases from thyroid carcinoma detected 11 years after initial diagnosis––case report. Honma Y, et al. **Neurol Med Chir (Tokyo)** 1996 Aug;36(8):593–7

Intramedullary spinal cord meningioma––a case report. Moriuchi S, et al. **Neurol Med Chir (Tokyo)** 1996 Dec; 36(12):888–92

High resolution magnetic resonance imaging of the rat spinal cord. LeMay DR, et al. **Neurol Res** 1996 Oct;18(5):471–4

Machado–Joseph disease, spinopontine atrophy, and SCA3 [letter; comment] Genis D, et al. **Neurology** 1997 Apr; 48(4):1137–9. Comment on: Neurology 1996 Jan;46(1):208–13.

GFAP is necessary for the integrity of CNS white matter architecture and long–term maintenance of myelination. Liedtke W, et al. **Neuron** 1996 Oct;17(4):607–15

Microglia–derived macrophages in early multiple sclerosis plaques. Li H, et al. **Neuropathol Appl Neurobiol** 1996 Jun; 22(3):207–15

MRI of the spine in cobalamin deficiency: the value of examining both spinal cord and bone marrow. Duprez TP, et al. **Neuroradiology** 1996 Aug;38(6):511–5

MRI in acute poliomyelitis. Kornreich L, et al. **Neuroradiology** 1996 May;38(4):371–2

Magnetisation transfer ratio measurement in the cervical spinal cord: a preliminary study in multiple sclerosis. Silver NC, et al. **Neuroradiology** 1997 Jun;39(6):441–5

MRI in an unusual case of congenital spinal mesenchymal proliferation. Tortori–Donati P, et al. **Neuroradiology** 1996 May;38 Suppl 1:S196–9

Spinal MRI in progressive myeloneuropathy associated with vitamin E deficiency. Vorgerd M, et al. **Neuroradiology** 1996 May;38 Suppl 1:S111–3

Treatment with genetically engineered fibroblasts producing NGF or BDNF can accelerate recovery from traumatic spinal cord injury in the adult rat. Kim DH, et al. **Neuroreport** 1996 Sep 2;7(13):2221–5

Heads–up intraoperative endoscopic imaging: a prospective evaluation of techniques and limitations. Levy ML, et al. **Neurosurgery** 1997 Mar;40(3):526–30; discussion 530–1

Aluminum–induced neuropathology: transient changes in microtubule–associated proteins. Muma NA, et al. **Neurotoxicol Teratol** 1996 Nov–Dec;18(6):679–90

Morphometric analyses and aging process of nerve fibers in the human spinal posterior funiculus. Zhang C, et al. **Okajimas Folia Anat Jpn** 1995 Dec;72(5):259–64

Changes of extracellular space volume and tortuosity in the spinal cord of Lewis rats with experimental autoimmune encephalomyelitis. Simonová Z, et al. **Physiol Res** 1996; 45(1):11–22

New view of spinal cord injury [news] Barinaga M. **Science** 1996 Nov 29;274(5292):1466

Atypical idiopathic scoliosis in childhood. Barnes PD. **Semin Pediatr Neurol** 1996 Sep;3(3):207–11

Progressive spasticity in an infant. Phillips JP, et al. **Semin Pediatr Neurol** 1996 Sep;3(3):202–6

Management of spinal epidural hematoma after tissue plasminogen activator. A case report. Connolly ES Jr, et al. **Spine** 1996 Jul 15;21(14):1694–8 (29 ref.)

Spontaneous thoracic spinal cord herniation. A case report. Sioutos P, et al. **Spine** 1996 Jul 15;21(14):1710–3 (13 ref.)

Effect of proximal arterial perfusion pressure on function, spinal cord blood flow, and histopathologic changes after increasing intervals of aortic occlusion in the rat [letter; comment] Schepens MA. **Stroke** 1997 Apr;28(4):878–9. Comment on: Stroke 1996 Oct;27(10):1850–8.

Congenital cleft vertebral centrum and intra– and extraspinal cyst in a foal. Doige CE. **Vet Pathol** 1996 Jan;33(1):87–9

Hydromyelia in the dog. Kirberger RM, et al. **Vet Radiol Ultrasound** 1997 Jan–Feb;38(1):30–8

[Inflammatory diseases of the spinal cord and spinal nerve roots in the MRI] Sartoretti–Schefer S, et al. **Radiologe** 1996 Nov;36(11):897–913 (159 ref.) (Eng. Abstr.) **(Ger)**

[Spinal pathology in spinal muscular atrophy in comparison with amyotrophic lateral sclerosis] Urbanits S, et al. **Wien Med Wochenschr** 1996;146(9–10):199–200 (Eng. Abstr.) **(Ger)**

[Serial magnetic resonance imaging of acute disseminated encephalomyelitis, including evaluation of the contrast–enhancing effect of lesions by Gd–DTPA] Tanaka Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Jan; 56(1):25–31 (Eng. Abstr.) **(Jpn)**

[Spinal intramedullary cavernous angioma associated with hematomyelia: case report with sequential MRI follow–up and histological verification of hematoidin deposits] Nagashima C, et al. **No Shinkei Geka** 1996 Dec; 24(12):1125–32 (Eng. Abstr.) **(Jpn)**

[An autopsy case of an extensive epidural spinal abscess demonstrating necrotizing poliomyelopathy] Yamashita M, et al. **No To Shinkei** 1996 Sep;48(9):839–44 (Eng. Abstr.) **(Jpn)**

[Dorsal subdural spinal abscess after epidural anesthesia] Barón M, et al. **Neurologia** 1997 Jun–Jul;12(6):262–4 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Opioid receptors: electrophysiological and neurophysiological approaches. Dickenson AH. **Acta Anaesthesiol Belg** 1996;47(3):101–4

Nonpharmacological neuronal protection. Dumitrescu RV, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:59–60

Receptors mediating tachykinin–evoked depolarisations of neurons in the neonatal rat spinal cord. Fox AJ, et al. **Acta Biol Hung** 1996;47(1–4):129–44

Mechanisms underlying spinal neuromodulation of the exercise pressor reflex. Stebbins CL. **Adv Exp Med Biol** 1995;381:209–13

Endogenous kynurenine derivatives and pain. Weil–Fugazza J. **Adv Exp Med Biol** 1996;398:83–7 (27 ref.)

Exercise pressor reflex: studies on the effect of skeletal muscle fiber type and spinal cord transmission. Wilson LB, et al. **Adv Exp Med Biol** 1995;381:187–97 (34 ref.)

Use–dependent plasticity in spinal stepping and standing. Edgerton VR, et al. **Adv Neurol** 1997;72:233–47

Postural orientation, equilibrium, and the spinal cord. Macpherson JM, et al. **Adv Neurol** 1997;72:227–32 (21 ref.)

NMDA as well as non–NMDA receptors in phrenic nucleus mediate respiratory effects of carotid chemoreflex. Chitravanshi VC, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R302–10

Cutaneous vasodilation during dorsal column stimulation is mediated by dorsal roots and CGRP. Croom JE, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H950–7

Responses of T2–4 spinal cord neurons to irritation of the lower airways in the rat. Hummel T, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1147–57

Activation of GABAB receptors increases a potassium conductance in rat bulbospinal neurons of the C1 area. Li YW, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1304–10

Lactic acid potentiates bradykinin– and low–pH–induced release of CGRP from rat spinal cord slices. Wang X, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):E92–8

Spinal conduction block by intrathecal ketamine in dogs. Iida H, et al. **Anesth Analg** 1997 Jul;85(1):106–10

Characterization of muscarinic receptor subtypes that mediate antinociception in the rat spinal cord. Naguib M,

et al. **Anesth Analg** 1997 Oct;85(4):847–53

Characterization of adenosine receptors mediating spinal sensory transmission related to nociceptive information in the rat. Nakamura I, et al. **Anesthesiology** 1997 Sep; 87(3):577–84

Capsaicin–evoked mechanical allodynia and hyperalgesia cross nerve territories. Evidence for a central mechanism. Sang CN, et al. **Anesthesiology** 1996 Sep;85(3):491–6

Development of inhibitory synaptic currents in rat spinal neurons. Momiyama A, et al. **Ann N Y Acad Sci** 1993 Dec 20;707:447–8

Properties of spinal neuronal thermosensitivity in vivo and in vitro. Pehl U, et al. **Ann N Y Acad Sci** 1997 Mar 15; 813:139–45

Endogenous NO–synthase is effective as a modulator of spinal thermosensitive neurons. Schmid HA, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:166–75

Speech–induced changes in corticospinal excitability. Tokimura H, et al. **Ann Neurol** 1996 Oct;40(4):628–34

Descending pathways from the medial longitudinal fasciculus and lateral vestibular nucleus to tail motoneurons in the decerebrate cat. Wada N, et al. **Arch Ital Biol** 1996 Jul; 134(3):207–15

Improvement of microcirculatory blood flow under epidural spinal cord stimulation in patients with nonreconstructible peripheral arterial occlusive disease. Claeys LG. **Artif Organs** 1997 Mar;21(3):201–6 (36 ref.)

Role of the BioMedicus pump and distal aortic perfusion in thoracoabdominal aortic aneurysm repair. Safi HJ. **Artif Organs** 1996 Jun;20(6):694–9

Mechanisms of Pavlovian conditioning: role of protection from habituation in spinal conditioning. Joynes RL, et al. **Behav Neurosci** 1996 Dec;110(6):1375–87

Tail–flick test: II. The role of supraspinal systems and avoidance learning. King TE, et al. **Behav Neurosci** 1997 Aug;111(4):754–67

Impact of shock on pain reactivity: III. The magnitude of hypoalgesia observed depends on test location. Prentice TW, et al. **Behav Neurosci** 1996 Jun;110(3):528–41

Neural computations underlying the exertion of force: a model. Lukashin AV, et al. **Biol Cybern** 1996 May; 74(5):469–78

The activation of bulbo–spinal controls by peripheral nociceptive inputs: diffuse noxious inhibitory controls. Villanueva L, et al. **Biol Res** 1995;28(1):113–25 (96 ref.)

A clinical and neurophysiological study of a patient with an extensive transection of the spinal cord sparing only a part of one anterolateral quadrant. Danziger N, et al. **Brain** 1996 Dec;119 (Pt 6):1835–48

Comparison of activation of corticospinal neurons and spinal motor neurons by magnetic and electrical transcranial stimulation in the lumbosacral cord of the anaesthetized monkey. Edgley SA, et al. **Brain** 1997 May;120 (Pt 5):839–53

Involvement of spinal recurrent inhibition in spasticity. Further insight into the regulation of Renshaw cell activity. Mazzocchio R, et al. **Brain** 1997 Jun;120 (Pt 6):991–1003

Substance P analogues potentiate the pressor response to microinjection of L–glutamate into laminas I and II of the cat dorsal horn. Beyaert CA, et al. **Brain Res** 1997 Jun 6;759(1):175–9

N(G)–nitro–L–arginine reverses L–arginine induced changes in morphine antinociception and distribution of morphine in brain regions and spinal cord of the mouse. Bhargava HN, et al. **Brain Res** 1997 Feb 28;749(2):351–3

Role of substance P in the modulation of C–fiber–evoked responses of spinal dorsal horn neurons. Budai D, et al. **Brain Res** 1996 Feb 26;710(1–2):197–203

Time–related roles of excitatory amino acid receptors during persistent noxiously evoked responses of rat dorsal horn neurones. Chapman V, et al. **Brain Res** 1995 Dec 12; 703(1–2):45–50

The organization of acromiodeltoid and spinodeltoid motor nuclei in rat spinal cord. Choi JY, et al. **Brain Res** 1996 Oct 28;738(1):146–9

Cutaneous blood flow increases in the rat hindpaw during dorsal column stimulation. Croom JE, et al. **Brain Res** 1996 Jul 29;728(2):281–6

Involvement of spinal cord delta opiate receptors in the antinociception of gestation and its hormonal simulation. Dawson–Basoa M, et al. **Brain Res** 1997 May 16; 757(1):37–42

Nociceptin (Orphanin FQ) abolishes gestational and ovarian sex steroid–induced antinociception and induces hyperalgesia. Dawson–Basoa M, et al. **Brain Res** 1997 Mar 7;750(1–2):48–52

Possible participation of spinal nitric oxide in the control of the blood pressure in anesthetized rats. del Carmen García M, et al. **Brain Res** 1997 Aug 1;764(1–2):67–74

Spinal cholinergic and monoamine receptors mediate the antinociceptive effect of morphine microinjected in the periaqueductal gray on the rat tail, but not the feet. Fang F, et al. **Brain Res** 1996 May 25;722(1–2):95–108

Physiological adjustments in a reflex pathway following partial loss of target neurons. Holmberg P, et al. **Brain Res** 1996 Aug 26;731(1–2):155–60

The effects of morphine on carrageenin–induced spinal c–Fos expression are completely blocked by beta–funaltrexamine, a selective mu–opioid receptor antagonist. Honoré P, et al. **Brain Res** 1996 Sep 2;732(1–2):242–6

Synaptic inhibition mediated by GABAB receptors in the neonatal rat spinal cord in vitro. Lacey G. **Brain Res** 1996 Apr 22;717(1–2):76–80

Axotomy transiently down–regulates androgen receptors in motoneurons of the spinal nucleus of the bulbocavernosus. Lubischer JL, et al. **Brain Res** 1995 Oct 2;694(1–2):61–8

The release of immunoreactive neuropeptide Y in the spinal cord of the anaesthetized rat and cat. Mark MA, et al. **Brain Res** 1997 Apr 18;754(1–2):195–203

Voltage–dependent potassium currents of sympathetic preganglionic neurons in neonatal rat spinal cord thin slices. Miyazaki T, et al. **Brain Res** 1996 Dec 16;743(1–2):1–10

Glial cell reactions in the spinal cord after sensory nerve stimulation are associated with axonal injury. Molander C, et al. **Brain Res** 1997 Jan 30;747(1):122–9

Spinal NK1 receptors contribute to the increased excitability of the nociceptive flexor reflex during persistent peripheral inflammation. Parsons AM, et al. **Brain Res** 1996 Nov 11; 739(1–2):263–75

Effects of GABA and glycine receptor antagonists on the activity and PAG–induced inhibition of rat dorsal horn neurons. Peng YB, et al. **Brain Res** 1996 Oct 14; 736(1–2):189–201

Intense peripheral electrical stimulation evokes brief and persistent inhibition of the nociceptive tail withdrawal reflex in the rat. Romita VV, et al. **Brain Res** 1997 Jul 4;761(2):192–202

Spinally–mediated behavioural responses evoked by intrathecal high–dose morphine: possible involvement of substance P in the mouse spinal cord. Sakurada T, et al. **Brain Res** 1996 Jun 17;724(2):213–21

Cutaneous reflex activity of the cat forelimb during fictive locomotion. Seki K, et al. **Brain Res** 1997 Apr 4; 753(1):56–62

Amplification of spinal nociceptive transmission depends on the generation of nitric oxide in normal and carrageenan rats. Stanfa LC, et al. **Brain Res** 1996 Oct 21;737(1–2):92–8

Paired pulse facilitation of GABAergic IPSCs in ventral horn neurons in neonatal rat spinal cord. Tanabe M, et al. **Brain Res** 1996 Apr 15;716(1–2):101–6

Direct vasoactive intestinal polypeptide–containing projection from the suprachiasmatic nucleus to spinal projecting hypothalamic paraventricular neurons. Teclemariam–Mesbah R, et al. **Brain Res** 1997 Feb 14; 748(1–2):71–6

Antinociception produced by systemic R(+)–baclofen hydrochloride is attenuated by CGP 35348 administered to the spinal cord or ventromedial medulla of rats. Thomas DA, et al. **Brain Res** 1996 Apr 29;718(1–2):129–37

Perineuronal microglial reactivity following proximal and distal axotomy of rat rubrospinal neurons. Tseng GF, et al. **Brain Res** 1996 Apr 9;715(1–2):32–43

PAG–microinjected dipyrone (metamizol) inhibits responses of spinal dorsal horn neurons to natural noxious stimulation in rats. Vanegas H, et al. **Brain Res** 1997 Jun 6;759(1):171–4

Microglial cell reaction in the gray and white matter in spinal cords from jimpy mice. An enzyme histochemical study at the light and electron microscope level. Vela JM, et al. **Brain Res** 1995 Oct 2;694(1–2):287–98

Inhibitory effects evoked from both the lateral and ventrolateral periaqueductal grey are selective for the nociceptive responses of rat dorsal horn neurones. Waters AJ, et al. **Brain Res** 1997 Mar 28;752(1–2):239–49

Intrathecal neuropeptide Y exacerbates nerve injury–induced mechanical hyperalgesia. White DM. **Brain Res** 1997 Mar 7;750(1–2):141–6

Competitive inhibition of the glycine–induced current by pregnenolone sulfate in cultured chick spinal cord neurons. Wu FS, et al. **Brain Res** 1997 Mar 7;750(1–2):318–20

Effects of intrathecally administered nociceptin, an opioid receptor–like1 (ORL1) receptor agonist, on the thermal hyperalgesia induced by carageenan injection into the rat paw. Yamamoto T, et al. **Brain Res** 1997 Apr 18; 754(1–2):329–32

Delta–Opioid receptor modulation of the release of substance P–like immunoreactivity in the dorsal horn of the rat following mechanical or thermal noxious stimulation. Zachariou V, et al. **Brain Res** 1996 Oct 14;736(1–2):305–14

Thoracic visceral inputs use upper cervical segments to inhibit lumbar spinal neurons in rats. Zhang J, et al. **Brain Res** 1996 Feb 19;709(2):337–42

A mesencephalic relay for visual inputs to reticulospinal neurones in lampreys. Zompa IC, et al. **Brain Res** 1996 Apr 29;718(1–2):221–7

Supraspinal influence on hindlimb withdrawal thresholds and mustard oil–induced secondary allodynia in rats. Mansikka H, et al. **Brain Res Bull** 1997;42(5):359–65

Spectral features of central pattern generation in the in vitro brain stem spinal cord preparation of the newborn rat. Tarasiuk A, et al. **Brain Res Bull** 1997;42(2):105–10

Mental simulation of an action modulates the excitability of spinal reflex pathways in man. Bonnet M, et al. **Brain Res Cogn Brain Res** 1997 Mar;5(3):221–8

On the translation of directional motor cortical commands to activation of muscles via spinal interneuronal systems. Georgopoulos AP. **Brain Res Cogn Brain Res** 1996 Mar; 3(2):151–5 (23 ref.)

Preparatory inhibition of cortico–spinal excitability: a transcranial magnetic stimulation study in man. Hasbroucq T, et al. **Brain Res Cogn Brain Res** 1997 Mar;5(3):185–92

Evidence that large myelinated primary afferent fibers make synaptic contacts in lamina II of neonatal rats. Coggeshall RE, et al. **Brain Res Dev Brain Res** 1996 Mar 29;92(1):81–90

Neonatal paralysis of the rat soleus muscle selectively affects motoneurones from more caudal segments of the spinal cord. Greensmith L, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):281–6

The Engrailed–2 homeobox gene and patterning of spinocerebellar mossy fiber afferents. Vogel MW, et al. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):210–8

Early development and developmental plasticity of the fasciculus gracilis in the North American opossum (Didelphis virginiana). Wang XM, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):151–63

Autoradiographic ultrastructural observation on the meninges of the regenerating tail of lizards. Alibardi L. **Bull Assoc Anat (Nancy)** 1996 Jun;80(249):5–9

Response patterns and postspike effects of premotor neurons in cervical spinal cord of behaving monkeys. Fetz EE, et al. **Can J Physiol Pharmacol** 1996 Apr;74(4):531–46

Modulation of corticospinal influence over hand muscles during gripping tasks in man and monkey. Lemon RN, et al. **Can J Physiol Pharmacol** 1996 Apr;74(4):547–58 (67 ref.)

Supraspinal and segmental interactions. McCrea DA. **Can J Physiol Pharmacol** 1996 Apr;74(4):513–7 (50 ref.)

Motoneuronal projection pattern of single C3–C4 propriospinal neurones. Tantisira B, et al. **Can J Physiol Pharmacol** 1996 Apr;74(4):518–30

Sequelae of spinal cord stimulation for refractory angina pectoris. Reliability and safety profile of long–term clinical application. Jessurun GA, et al. **Coron Artery Dis** 1997 Jan; 8(1):33–8

Neuronal progenitors as tools for cell replacement in the nervous system. Brüstle O, et al. **Curr Opin Neurobiol** 1996 Oct;6(5):688–95 (81 ref.)

Escape behavior – brainstem and spinal cord circuitry and function. Korn H, et al. **Curr Opin Neurobiol** 1996 Dec; 6(6):826–32 (50 ref.)

Intermediate zone and intermediate zone neurons. Do IZ neurons acts as pioneers for layer V neurons in rats? Tamamaki N, et al. **Dev Neurosci** 1997;19(1):112–6

Effects of spinal cord ischemia on the refractory period of descending spinal cord evoked potential. Ishikawa M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jan; 102(1):54–63

The effect of current direction induced by transcranial magnetic stimulation on the corticospinal excitability in human brain. Kaneko K, et al. **Electroencephalogr Clin Neurophysiol** 1996 Dec; 101(6):478–82

Mapping of tibial nerve evoked magnetic fields over the lower spine. Mackert BM, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jul;104(4):322–7

A novel sensory evoked potential for selective monitoring of the ventral spinal cord: from bench to bedside. Hurlbert RJ, et al. **Electroencephalogr Clin Neurophysiol Suppl** 1996; 46:221–31

Immunocytochemical and ultrastructural changes in the caudal neurosecretory system of a seawater fish Boops boops L. (teleostei:sparidae) in relation to the osmotic stress. Minniti F, et al. **Eur J Morphol** 1995 Nov; 33(5):473–83

Activation by cutaneous or visceral noxious stimulation of spinal neurons projecting to the medullary dorsal reticular nucleus in the rat: a c–fos study. Almeida A, et al. **Eur J Neurosci** 1997 Apr;9(4):686–95

Interaction between neurons in different laminae of the dorsal horn of the spinal cord. A correlation study in normal and neuropathic rats. Biella G, et al. **Eur J Neurosci** 1997 May; 9(5):1017–25

TGF–beta rescues target–deprived preganglionic sympathetic neurons in the spinal cord. Blottner D, et al. **Eur J Neurosci** 1996 Jan;8(1):202–10

Biphasic response of spinal GABAergic neurons after a lumbar rhizotomy in the adult rat. Dumoulin A, et al. **Eur J Neurosci** 1996 Dec;8(12):2553–63

Relative changes in regional cerebral blood flow during spinal cord stimulation in patients with refractory angina pectoris. Hautvast RW, et al. **Eur J Neurosci** 1997 Jun; 9(6):1178–83

Modulation of responses of four types of feline ascending tract neurons by serotonin and noradrenaline. Jankowska E, et al. **Eur J Neurosci** 1997 Jul;9(7):1375–87

Evidence that spinal interneurons undergo programmed cell death postnatally in the rat. Lawson SJ, et al. **Eur J Neurosci** 1997 Apr;9(4):794–9

Maintenance of modality–specific connections in the spinal cord after neonatal nerve growth factor deprivation. Lewin GR, et al. **Eur J Neurosci** 1996 Aug;8(8):1677–84

Locomotor–related presynaptic modulation of primary afferents in the lamprey. El Manira A, et al. **Eur J Neurosci** 1997 Apr;9(4):696–705

The projections of the lateral reticular nucleus to the deep cerebellar nuclei. An experimental analysis in the rat. Parenti R, et al. **Eur J Neurosci** 1996 Oct;8(10):2157–67

Voltage oscillations in Xenopus spinal cord neurons: developmental onset and dependence on co–activation of NMDA and 5HT receptors. Scrymgeour–Wedderburn JF, et al. **Eur J Neurosci** 1997 Jul;9(7):1473–82

Visual potentiation of vestibular responses in lamprey reticulospinal neurons. Ullén F, et al. **Eur J Neurosci** 1996 Nov;8(11):2298–307

The effect of 5–HT1A receptor stimulation on nociceptive dorsal horn neurones in rats. Gjerstad J, et al. **Eur J Pharmacol** 1996 Dec 30;318(2–3):315–21

Serotonergic modulation of central respiratory activity in the neonatal mouse: an in vitro study. Hilaire G, et al. **Eur J Pharmacol** 1997 Jun 25;329(2-3):115-20

Altered sensory behaviors in mice following manipulation of endogenous spinal adenosine neurotransmission. Keil GJ 2nd, et al. **Eur J Pharmacol** 1996 Sep 19;312(1):7-14

Modulation of the spinal network for locomotion by substance P in the neonatal rat. Barthe JY, et al. **Exp Brain Res** 1997 Jul;115(3):485-92

An in vivo electrophysiological investigation of group Ia afferent fibres and ventral horn terminations in the cat spinal cord. Curtis DR, et al. **Exp Brain Res** 1995; 106(3):403-17

The lack of effect of baclofen on action potentials of spinal motor axon collateral terminations in vivo. Curtis DR, et al. **Exp Brain Res** 1997 Mar;114(1):184-7

Input-output properties and gain changes in the human corticospinal pathway. Devanne H, et al. **Exp Brain Res** 1997 Apr;114(2):329-38

Interactions between medullary and spinal respiratory rhythm generators in the in vitro brainstem spinal cord preparation from newborn rats. Dubayle D, et al. **Exp Brain Res** 1996 Apr;109(1):1-8

The possible role of C5 segment inspiratory interneurons investigated by cross-correlation with phrenic motoneurons in decerebrate cats. Duffin J, et al. **Exp Brain Res** 1996 Nov;112(1):35-40

Selective cortical and segmental control of primary afferent depolarization of single muscle afferents in the cat spinal cord. Eguibar JR, et al. **Exp Brain Res** 1997 Mar; 113(3):411-30

Segmental and supraspinal control of synaptic effectiveness of functionally identified muscle afferents in the cat. Enríquez M, et al. **Exp Brain Res** 1996;107(3):391-404

Disynaptic vestibulospinal and reticulospinal excitation in cat lumbosacral motoneurons: modulation during fictive locomotion. Gossard JP, et al. **Exp Brain Res** 1996 May; 109(2):277-88

Weak short-latency spinal projections to the long flexor of the human thumb. Inglis JT, et al. **Exp Brain Res** 1997 Jun;115(1):165-8

Spatial coordination by descending vestibular signals. 2. Response properties of medial and lateral vestibulospinal tract neurons in alert and decerebrate cats. Iwamoto Y, et al. **Exp Brain Res** 1996 Feb;108(1):85-100

Serotonergic modulation of the mudpuppy (Necturus maculatus) locomotor pattern in vitro. Jovanović K, et al. **Exp Brain Res** 1996 Sep;111(1):57-67

Supraspinal and segmental signals can be transmitted through separate spinal cord pathways to enhance locomotor activity in extensor muscles in the cat. Leblond H, et al. **Exp Brain Res** 1997 Mar;114(1):188-92

Effects of a dorsal column lesion on temporal processing within the somatosensory system of primates. Makous JC, et al. **Exp Brain Res** 1996 Nov;112(2):253-67

A propriospinal-like contribution to electromyographic responses evoked in wrist extensor muscles by transcranial stimulation of the motor cortex in man. Mazevet D, et al. **Exp Brain Res** 1996 Jun;109(3):495-9

Dorsal border periaqueductal gray neurons project to the area directly adjacent to the central canal ependyma of the C4-T8 spinal cord in the cat. Mouton LJ, et al. **Exp Brain Res** 1996 Nov;112(1):11-23

Properties of utricular nerve-activated vestibulospinal neurons in cats. Sato H, et al. **Exp Brain Res** 1996 Nov; 112(2):197-202

Corticospinal input in human gait: modulation of magnetically evoked motor responses. Schubert M, et al. **Exp Brain Res** 1997 Jun;115(2):234-46

Inhibitors of G-proteins and protein kinases reduce the sensitization to mechanical stimulation and the desensitization to heat of spinothalamic tract neurons induced by intradermal injection of capsaicin in the primate. Sluka KA, et al. **Exp Brain Res** 1997 Jun; 115(1):15-24

Connections from upper cervical inspiratory neurons to phrenic and intercostal motoneurons studied with cross-correlation in the decerebrate rat. Tian GF, et al. **Exp Brain Res** 1996 Jul;110(2):196-204

Spinal connections of ventral-group bulbospinal inspiratory neurons studied with cross-correlation in the decerebrate rat. Tian GF, et al. **Exp Brain Res** 1996 Sep;111(2):178-86

The responses of mammalian spinal axons to an applied DC voltage gradient. Borgens RB, et al. **Exp Neurol** 1997 Jun; 145(2 Pt 1):376-89

Myelination following transplantation of EGF-responsive neural stem cells into a myelin-deficient environment. Hammang JP, et al. **Exp Neurol** 1997 Sep;147(1):84-95

A quantitative spatial analysis of the blood-spinal cord barrier. II. Permeability after intraspinal fetal transplantation. Horner PJ, et al. **Exp Neurol** 1996 Dec; 142(2):226-43

A quantitative spatial analysis of the blood-spinal cord barrier. I. Permeability changes after experimental spinal contusion injury. Popovich PG, et al. **Exp Neurol** 1996 Dec;142(2):258-75

Descending propriospinal neurons in normal and spinal cord-transected lamprey. Rouse DT Jr, et al. **Exp Neurol** 1997 Jul;146(1):113-24

Sacral glutamatergic transmission in the descending limb of the micturition reflex in the cat. Iwabuchi N. **Fukuoka Igaku Zasshi** 1997 Feb;88(2):30-8

Cell-cell interactions during the migration of myelin-forming cells transplanted in the demyelinated spinal cord. Baron-Van Evercooren A, et al. **Glia** 1996 Feb; 16(2):147-64

Removal of retrogradely transported material from rat lumbosacral alpha-motor axons by paranodal axon-Schwann cell networks. Gatzinsky KP, et al. **Glia** 1997 Jun;20(2):115-26

Hyperpolarization-activated ion currents in cultured rat cortical and spinal cord astrocytes. Guatteo E, et al. **Glia** 1996 Mar;16(3):196-209

A combination of insulin-like growth factor-I and platelet-derived growth factor enhances myelination but diminishes axonal regeneration into Schwann cell grafts in the adult rat spinal cord. Oudega M, et al. **Glia** 1997 Mar;19(3):247-58

Neuronal dependency of the glycine transporter GLYT1 expression in glial cells. Zafra F, et al. **Glia** 1997 Jun; 20(2):155-62

The role of N-methyl-D-aspartate (NMDA) receptors in wind-up: a mathematical model. Britton NF, et al. **IMA J Math Appl Med Biol** 1996 Sep;13(3):193-205

Transcutaneous oxygen pressure as predictive parameter for ulcer healing in endstage vascular patients treated with spinal cord stimulation. Claeys LG, et al. **Int Angiol** 1996 Dec;15(4):344-9

Spinal cord regeneration: a phenomenon unique to urodeles? Chernoff EA. **Int J Dev Biol** 1996 Aug;40(4):823-31 (78 ref.)

Human leptomeningeal-derived cells express GFAP and HLADR when grafted into rat spinal cord. Bernstein JJ, et al. **Int J Dev Neurosci** 1996 Aug;14(5):681-7

Nerve fibre regeneration across the peripheral-central transitional zone. Carlstedt T. **J Anat** 1997 Jan;190 (Pt 1):51-6 (40 ref.)

Increased activity of bulbospinal cardiovascular neurons in the rat rostral ventrolateral medulla upon emergence from anaesthesia. Frugière A, et al. **J Auton Nerv Syst** 1996 Oct 7;61(1):87-95

Spinal cord monitoring in operations for neuromuscular scoliosis. Noordeen MH, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):53-7

Regional specific effects of nitric oxide donors and cGMP on the electrical activity of neurons in the rat spinal cord. Schmid HA, et al. **J Chem Neuroanat** 1996 Jun; 10(3-4):197-201

Sacral cord conduction time of the soleus H-reflex. Ertekin C, et al. **J Clin Neurophysiol** 1996 Jan;13(1):77-83

Axonal regrowth after spinal cord transection in adult zebrafish. Becker T, et al. **J Comp Neurol** 1997 Jan 27; 377(4):577-95

Distinct lateral and medial projections of the spinohypothalamic tract of the rat. Burstein R, et al. **J Comp Neurol** 1996 Sep 30;373(4):549-74

Organization of somatosensory cortex and distribution of corticospinal neurons in the eastern mole (Scalopus aquaticus). Catania KC, et al. **J Comp Neurol** 1997 Feb 17;378(3):337-53

Neurogenesis of subpopulations of rat lumbar dorsal root ganglion neurons including neurons projecting to the dorsal column nuclei. Kitao Y, et al. **J Comp Neurol** 1996 Jul 22;371(2):249-57

Efferents from the lateral frontal cortex to spinomedullary target areas, trigeminal nuclei, and spinally projecting brainstem regions in the hedgehog tenrec. Künzle H, et al. **J Comp Neurol** 1996 Aug 12;372(1):88-110

CNS cell groups involved in the control of the ischiocavernosus and bulbospongiosus muscles: a transneuronal tracing study using pseudorabies virus. Marson L, et al. **J Comp Neurol** 1996 Oct 14;374(2):161-79

Projections from the thoracic cord to the cerebellar nuclei in the rat, studied by anterograde axonal tracing. Matsushita M, et al. **J Comp Neurol** 1997 Sep 29;386(3):409-21

Synaptic connections of dorsal horn group II spinal interneurons: synapses formed with the interneurons and by their axon collaterals. Maxwell DJ, et al. **J Comp Neurol** 1997 Mar 31;380(1):51-69

Spinal ascending pathways in amphibians: cells of origin and main targets. Muñoz A, et al. **J Comp Neurol** 1997 Feb 10;378(2):205-28

Transneuronal changes of the inhibitory circuitry in the macaque somatosensory thalamus following lesions of the dorsal column nuclei. Ralston HJ 3rd, et al. **J Comp Neurol** 1996 Jul 22;371(2):325-35

Organization of hindlimb nerve projections to the rat spinal cord: a choleragenoid horseradish peroxidase study. Rivero-Melián C. **J Comp Neurol** 1996 Jan 22; 364(4):651-63

Distribution of alpha 2C-adrenergic receptor-like immunoreactivity in the rat central nervous system. Rosin DL, et al. **J Comp Neurol** 1996 Aug 12;372(1):135-65

The ventrolateral medulla of the rat is connected with the spinal cord dorsal horn by an indirect descending pathway relayed in the A5 noradrenergic cell group. Tavares I, et al. **J Comp Neurol** 1996 Oct 7;374(1):84-95

Nucleus retroambiguus projections to lumbosacral motoneuronal cell groups in the male cat. Vanderhorst VG, et al. **J Comp Neurol** 1997 May 26;382(1):77-88

Organization of lumbosacral motoneuronal cell groups innervating hindlimb, pelvic floor, and axial muscles in the cat. Vanderhorst VG, et al. **J Comp Neurol** 1997 May 26; 382(1):46-76

Evidence for growth of supraspinal axons through the lesion after transection of the thoracic spinal cord in the developing opossum Didelphis virginiana. Wang XM, et al. **J Comp Neurol** 1996 Jul 15;371(1):104-15

Organization of the descending projections from the parabrachial nucleus to the trigeminal sensory nuclear complex and spinal dorsal horn in the rat. Yoshida A, et al. **J Comp Neurol** 1997 Jun 23;383(1):94-111

The pattern of sensory discharge can determine the motor response in young Xenopus tadpoles. Soffe SR. **J Comp Physiol [A]** 1997 Jun;180(6):711-5

Intersegmental phase lags in the lamprey spinal cord: experimental confirmation of the existence of a boundary region. Williams TL, et al. **J Comput Neurosci** 1994 Jun; 1(1-2):61-7

The calculation of frequency-shift functions for chains of coupled oscillators, with application to a network model of the lamprey locomotor pattern generator. Williams TL, et al. **J Comput Neurosci** 1997 Jan;4(1):47-55

Central nervous system pathways for pain transmission and pain control: issues relevant to the practicing clinician. Robinson AJ. **J Hand Ther** 1997 Apr-Jun;10(2):64-77 (66 ref.)

Bulbospinal sympatho-excitatory neurons in the rat caudal raphe. Pilowsky PM, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1618-23

Regional differences of serotonin-mediated synaptic plasticity in the chicken spinal cord with development and aging. Chen L, et al. **J Neural Transplant Plast** 1997 Jan-Mar;6(1):41-8

Synergistic effects of testosterone metabolites on the development of motoneuron morphology in a sexually dimorphic rat spinal nucleus. Burke KA, et al. **J Neurobiol** 1997 Jul;33(1):1-10

Axonal regrowth upregulates beta-actin and Jun D mRNA expression. Lund LM, et al. **J Neurobiol** 1996 Dec; 31(4):476-86

Embryonic rat spinal cord neurons change expression of glycine receptor subtypes during development in vitro. Withers MD, et al. **J Neurobiol** 1997 Jun 5;32(6):579-92

Oligodendroglial signal transduction systems are regulated by neuronal contact. He M, et al. **J Neurochem** 1996 Oct; 67(4):1491-9

Ultrastructural view of central catecholaminergic transmission: immunocytochemical localization of synthesizing enzymes, transporters and receptors. Pickel VM, et al. **J Neurocytol** 1996 Dec;25(12):843-56 (141 ref.)

Bridging Schwann cell transplants promote axonal regeneration from both the rostral and caudal stumps of transected adult rat spinal cord. Xu XM, et al. **J Neurocytol** 1997 Jan;26(1):1-16

Androgenic regulation of androgen receptor immunoreactivity in motoneurons of the spinal nucleus of the bulbocavernosus of male rats. Matsumoto A, et al. **J Neuroendocrinol** 1996 Jul;8(7):553-9

Plasticity of the spinal cord contributes to neurological improvement after treatment by cervical decompression. A magnetic resonance imaging study. Baba H, et al. **J Neurol** 1997 Jul;244(7):455-60

Motor evoked potentials recorded from external anal sphincter by cortical and lumbo-sacral magnetic stimulation: normative data. Pelliccioni G, et al. **J Neurol Sci** 1997 Jul;149(1):69-72

Unitary excitatory synaptic currents in preganglionic neurons mediated by two distinct groups of interneurons in neonatal rat sacral parasympathetic nucleus. Araki I, et al. **J Neurophysiol** 1996 Jul;76(1):215-26

Pharmacological block of the electrogenic sodium pump disrupts rhythmic bursting induced by strychnine and bicuculline in the neonatal rat spinal cord. Ballerini L, et al. **J Neurophysiol** 1997 Jan;77(1):17-23

Afferent inputs modulate the activity of a rhythmic burst generator in the rat disinhibited spinal cord in vitro. Bracci E, et al. **J Neurophysiol** 1997 Jun;77(6):3157-67

Locomotion of the hindlimbs after neurectomy of ankle flexors in intact and spinal cats: model for the study of locomotor plasticity. Carrier L, et al. **J Neurophysiol** 1997 Apr;77(4):1979-93

Visceral nociceptive input into the ventral posterolateral nucleus of the thalamus: a new function for the dorsal column pathway. Al-Chaer ED, et al. **J Neurophysiol** 1996 Oct;76(4):2661-74

Pelvic visceral input into the nucleus gracilis is largely mediated by the postsynaptic dorsal column pathway. Al-Chaer ED, et al. **J Neurophysiol** 1996 Oct;76(4):2675-90

Sympathetically correlated activity of dorsal horn neurons in spinally transected rats. Chau D, et al. **J Neurophysiol** 1997 Jun;77(6):2966-74

Regional distribution of the locomotor pattern-generating network in the neonatal rat spinal cord. Cowley KC, et al. **J Neurophysiol** 1997 Jan;77(1):247-59

Reliability of spike propagation in arborizations of dorsal root fibers studied by analysis of postsynaptic potentials mediated by electrotonic coupling in the frog spinal cord. Dityatev AE, et al. **J Neurophysiol** 1996 Nov;76(5):3451-9

Cooling-specific spinothalamic neurons in the monkey. Dostrovsky JO, et al. **J Neurophysiol** 1996 Dec; 76(6):3656-65

Responses of rat sacral spinal neurons to mechanical and noxious thermal stimulation of the tail. Douglass DK, et al. **J Neurophysiol** 1997 Feb;77(2):611-20

Dorsal horn projection targets of ON and OFF cells in the

rostral ventromedial medulla. Fields HL, et al. **J Neurophysiol** 1995 Oct;74(4):1742–59

Control of transmission in muscle group IA afferents during fictive locomotion in the cat. Gossard JP. **J Neurophysiol** 1996 Dec;76(6):4104–12

Human lumbosacral spinal cord interprets loading during stepping. Harkema SJ, et al. **J Neurophysiol** 1997 Feb; 77(2):797–811

Cutaneous responsiveness of lumbar spinal neurons in awake and halothane–anesthetized sheep. Herrero JF, et al. **J Neurophysiol** 1995 Oct;74(4):1549–62

Vestibulospinal effects on neurons in different regions of the gray matter of the cat upper cervical cord. Isu N, et al. **J Neurophysiol** 1996 Oct;76(4):2439–46

Spinothalamic and spinohypothalamic tract neurons in the sacral spinal cord of rats. II. Responses to cutaneous and visceral stimuli. Katter JT, et al. **J Neurophysiol** 1996 Jun; 75(6):2606–28

Spinothalamic and spinohypothalamic tract neurons in the sacral spinal cord of rats. I. Locations of antidromically identified axons in the cervical cord and diencephalon. Katter JT, et al. **J Neurophysiol** 1996 Jun;75(6):2581–605

Dopaminergic modulation of spinal neurons and synaptic potentials in the lamprey spinal cord. Kemnitz CP. **J Neurophysiol** 1997 Jan;77(1):289–98

Plasticity of dorsal horn cell receptive fields after peripheral nerve regeneration. Koerber HR, et al. **J Neurophysiol** 1996 Jun;75(6):2255–67

Modulation of spinal visceral nociceptive transmission by NMDA receptor activation in the rat. Kolhekar R, et al. **J Neurophysiol** 1996 Jun;75(6):2344–53

Spinohypothalamic tract neurons in the cervical enlargement of rats: locations of antidromically identified ascending axons and their collateral branches in the contralateral brain. Kostarczyk E, et al. **J Neurophysiol** 1997 Jan; 77(1):435–51

Localization of the spinal network associated with generation of hindlimb locomotion in the neonatal rat and organization of its transverse coupling system. Kremer E, et al. **J Neurophysiol** 1997 Mar;77(3):1155–70

Spinal dorsal horn neurons responding to noxious distension of the ureter in anesthetized rats. Laird JM, et al. **J Neurophysiol** 1996 Nov;76(5):3239–48

Propagation of action potentials in the dendrites of neurons from rat spinal cord slice cultures. Larkum ME, et al. **J Neurophysiol** 1996 Jan;75(1):154–70

Influence of voltage–sensitive dendritic conductances on bistable firing and effective synaptic current in cat spinal motoneurons in vivo. Lee RH, et al. **J Neurophysiol** 1996 Sep;76(3):2107–10

Role of GABA receptor subtypes in inhibition of primate spinothalamic tract neurons: difference between spinal and periaqueductal gray inhibition. Lin Q, et al. **J Neurophysiol** 1996 Jan;75(1):109–23

Locomotor rhythm evoked by ventrolateral funiculus stimulation in the neonatal rat spinal cord in vitro. Magnuson DS, et al. **J Neurophysiol** 1997 Jan;77(1):200–6

Glutamate–mediated slow synaptic currents in neonatal rat deep dorsal horn neurons in vitro. Miller BA, et al. **J Neurophysiol** 1996 Sep;76(3):1465–76

Mechanisms within the spinal cord are involved in the movement–induced attenuation of an H reflex in the dog. Misiaszek JE, et al. **J Neurophysiol** 1996 Nov;76(5):3589–92

Modulation of regenerative membrane properties by stimulation of metabotropic glutamate receptors in rat deep dorsal horn neurons. Morisset V, et al. **J Neurophysiol** 1996 Oct;76(4):2794–8

Tachykinin–mediated modulation of sensory neurons, interneurons, and synaptic transmission in the lamprey spinal cord. Parker D, et al. **J Neurophysiol** 1996 Dec; 76(6):4031–9

Experimental evaluation of input–output models of motoneuron discharge. Powers RK, et al. **J Neurophysiol** 1996 Jan;75(1):367–79

Astrocytic inwardly rectifying potassium currents are dependent on external sodium ions. Ransom CB, et al. **J Neurophysiol** 1996 Jul;76(1):626–30

Maturation in properties of motoneurons and their segmental input in the neonatal rat. Seebach BS, et al. **J Neurophysiol** 1996 Dec;76(6):3875–85

Role of ventral respiratory group bulbospinal expiratory neurons in vestibular–respiratory reflexes. Shiba K, et al. **J Neurophysiol** 1996 Oct;76(4):2271–9

Effects of local oscillator frequency on intersegmental coordination in the lamprey locomotor CPG: theory and experiment. Sigvardt KA, et al. **J Neurophysiol** 1996 Dec; 76(6):4094–103

Low–voltage–activated calcium channels in the lamprey locomotor network: simulation and experiment. Tegnér J, et al. **J Neurophysiol** 1997 Apr;77(4):1795–812

Effect of MLF transection on the vertical vestibulocollic reflex in decerebrate cats. Thomson DB, et al. **J Neurophysiol** 1995 Oct;74(4):1815–8

Visual pathways for postural control and negative phototaxis in lamprey. Ullén F, et al. **J Neurophysiol** 1997 Aug; 78(2):960–76

Five sources of a dorsal root potential: their interactions and origins in the superficial dorsal horn. Wall PD, et al. **J Neurophysiol** 1997 Aug;78(2):860–71

Correlation of peripheral innervation density and dorsal horn map scale. Wang L, et al. **J Neurophysiol** 1997 Aug; 78(2):689–702

Biphasic modulation of spinal nociceptive transmission from the medullary raphe nuclei in the rat. Zhuo M, et al. **J Neurophysiol** 1997 Aug;78(2):746–58

Evoked excitability changes at the terminals of midlumbar premotor interneurons in the cat spinal cord. Aggelopoulos NC, et al. **J Neurosci** 1997 Feb 15;17(4):1512–8

Localization of rhythmogenic networks responsible for spontaneous bursts induced by strychnine and bicuculline in the rat isolated spinal cord. Bracci E, et al. **J Neurosci** 1996 Nov 1;16(21):7063–76

Glycinergic inhibition contributes to the generation of rostral scratch motor patterns in the turtle spinal cord. Currie SN, et al. **J Neurosci** 1997 May 1;17(9):3322–33

Multiple actions of 1S,3R–ACPD in modulating endogenous synaptic transmission to spinal respiratory motoneurons. Dong XW, et al. **J Neurosci** 1996 Aug 15;16(16):4971–82

Parallel medullary gustatospinal pathways in a catfish: possible neural substrates for taste–mediated food search. Kanwal JS, et al. **J Neurosci** 1997 Jun 15;17(12):4873–85

Distribution of networks generating and coordinating locomotor activity in the neonatal rat spinal cord in vitro: a lesion study. Kjaerulff O, et al. **J Neurosci** 1996 Sep 15; 16(18):5777–94

Collateral sprouting of uninjured primary afferent A–fibers into the superficial dorsal horn of the adult rat spinal cord after topical capsaicin treatment to the sciatic nerve. Mannion RJ, et al. **J Neurosci** 1996 Aug 15;16(16):5189–95

Expression patterns of developmental control genes in normal and Engrailed–1 mutant mouse spinal cord reveal early diversity in developing interneurons. Matise MP, et al. **J Neurosci** 1997 Oct 15;17(20):7805–16

Fetal transplants alter the development of function after spinal cord transection in newborn rats. Miya D, et al. **J Neurosci** 1997 Jun 15;17(12):4856–72

The development of excitatory synapses in cultured spinal neurons. O'Brien RJ, et al. **J Neurosci** 1997 Oct 1; 17(19):7339–50

Labeling blastomeres with a calcium indicator: a non–invasive method of visualizing neuronal activity in zebrafish. Cox KJ, et al. **J Neurosci Methods** 1996 Oct; 68(2):185–91

Analysis of neural bursting: nonrhythmic and rhythmic activity in isolated spinal cord. Dekhuijzen AJ, et al. **J Neurosci Methods** 1996 Aug;67(2):141–7

Evaluation of the function of microdialysis probes permanently implanted into the rat CNS and coupled to an on–line HPLC system of analysis. Gerin C, et al. **J Neurosci Methods** 1996 Jun;66(2):81–92

Technique of selective spinal cord cooling in rat: methodology and application. Marsala M, et al. **J Neurosci Methods** 1997 Jun 6;74(1):97–106

Voltage–sensitive dye recording using retrogradely transported dye in the chicken spinal cord: staining and signal characteristics. Wenner P, et al. **J Neurosci Methods** 1996 Dec 28;70(2):111–20

Inhibition of carrageenan–induced spinal c–Fos activation by systemically administered c–fos antisense oligodeoxynucleotides may be facilitated by local opening of the blood–spinal cord barrier. Gillardon F, et al. **J Neurosci Res** 1997 Mar 15;47(6):582–9

Waveform changes due to conduction block and their underlying mechanism in spinal somatosensory evoked potential: a computer simulation. Technical note. Tani T, et al. **J Neurosurg** 1997 Feb;86(2):303–10

Intraspinal opioid therapy for chronic nonmalignant pain: current practice and clinical guidelines. Krames ES. **J Pain Symptom Manage** 1996 Jun;11(6):333–52 (78 ref.)

Efficacy of spinal NMDA receptor antagonism in formalin hyperalgesia and nerve injury evoked allodynia in the rat. Chaplan SR, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):829–38

Spinal muscarinic, glutamatergic and GABAergic receptor systems in cardiovascular regulation. Feldman DS, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):274–83

Manipulations of zinc in the spinal cord, by intrathecal injection of zinc chloride, disodium–calcium–EDTA, or dipicolinic acid, alter nociceptive activity in mice. Larson AA, et al. **J Pharmacol Exp Ther** 1997 Sep;282(3):1319–25

Delta–1 opioid receptor–mediated antinociceptive properties of a nonpeptidic delta opioid receptor agonist, (–)TAN–67, in the mouse spinal cord. Tseng LF, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):600–5

Effects of LY215490, a competitive alpha–amino–3–hydroxy–5–methylisoxazole–4–propionic acid (AMPA) receptor antagonist, on the micturition reflex in the rat. Yoshiyama M, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):894–904

Gain of the triceps surae stretch reflex in decerebrate and spinal cats during postural and locomotor activities. Bennett DJ, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):837–50

Evidence for cutaneous and corticospinal modulation of presynaptic inhibition of Ia afferents from the human lower limb. Iles JF. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):197–207

Aminergic modulation of glycine release in a spinal network controlling swimming in Xenopus laevis. McDearmid JR, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):111–7

Identification of a native low–conductance NMDA channel with reduced sensitivity to Mg2+ in rat central neurones. Momiyama A, et al. **J Physiol (Lond)** 1996 Jul 15;494 (Pt 2):479–92

Temperature sensitivity of neurones in slices of the rat spinal cord. Pehl U, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):483–95

Protein kinase C–mediated enhancement of glycine response in rat sacral dorsal commissural neurones by serotonin. Xu TL, et al. **J Physiol (Lond)** 1996 Oct 15;496 (Pt 2):491–501

The neuronal network for locomotion in the lamprey spinal cord: evidence for the involvement of commissural interneurons. Buchanan JT, et al. **J Physiol Paris** 1995; 89(4–6):221–33 (54 ref.)

Monitoring of anterior cervical spinal cord function. Shinomiya K, et al. **J Spinal Disord** 1996 Jun;9(3):187–94

Spinal cord protection with the use of prostacyclin during aortic occlusion. Katircioğlu SF, et al. **J Surg Res** 1996 Sep;65(1):77–81

Changes in gain and spatiotemporal properties of the vestibulospinal reflex after injection of a GABA–A agonist in the cerebellar anterior vermis. Manzoni D, et al. **J Vestib Res** 1997 Jan–Feb;7(1):7–20

[Met5]enkephalin and delta2–opioid receptors in the spinal cord are involved in the cold water swimming–induced antinociception in the mouse. Mizoguchi H, et al. **Life Sci** 1997;61(7):PL81–6

A Distal–less–like gene is induced in the regenerating central nervous system of the urodele Pleurodeles waltl. Nicolas S, et al. **Mech Dev** 1996 May;56(1–2):209–20

Transverse tripolar spinal cord stimulation: theoretical performance of a dual channel system. Struijk JJ, et al. **Med Biol Eng Comput** 1996 Jul;34(4):273–9

The relationship among brain, spinal cord and anesthetic requirements. Antognini JF. **Med Hypotheses** 1997 Jan; 48(1):83–7

Spinal cord myelin is vulnerable to decompression. Bond JP, et al. **Mol Chem Neuropathol** 1997 Apr;30(3):273–88

Spinal cord neurons in which interaction between N–methyl–D–aspartate and neurokinin–1 receptors may occur. Szúcs P, et al. **Neurobiology (Bp)** 1996;4(3):281–2

Involvement of nitric oxide in spinally mediated capsaicin– and glutamate–induced behavioural responses in the mouse. Sakurada T, et al. **Neurochem Int** 1996 Sep;29(3):271–8

Alteration of transglutaminase activity in rat and human spinal cord after neuronal degeneration. Fujita K, et al. **Neurochem Res** 1995 Oct;20(10):1195–201

Somatosensory afferent inputs release 5–HT and NA from the spinal cord. Men D, et al. **Neurochem Res** 1996 Dec; 21(12):1515–9

Retrospinal tract [letter; comment] Kennedy PR. **Neurology** 1997 May;48(5):1472–3. Comment on: Neurology 1996 Aug;47(2):588–91.

Hepatocyte growth factor/scatter factor is an axonal chemoattractant and a neurotrophic factor for spinal motor neurons. Ebens A, et al. **Neuron** 1996 Dec;17(6):1157–72

The number of postsynaptic currents necessary to produce locomotor–related cyclic information in neurons in the neonatal rat spinal cord. Raastad M, et al. **Neuron** 1996 Oct;17(4):729–38

Evidence for roles of vasoactive intestinal polypeptide (VIP) and pituitary adenylate cyclase activating polypeptide (PACAP) receptors in modulating the responses of rat dorsal horn neurons to sensory inputs. Dickinson T, et al. **Neuropeptides** 1997 Apr;31(2):175–85

Involvement of supraspinal and spinal CCK receptors in the modulation of antinociception induced by cold water swimming stress in the mouse. Suh HW, et al. **Neuropeptides** 1996 Aug;30(4):379–84

NMDA–receptor contribution to spinal nociceptive reflexes: influence of stimulus parameters and of preparatory surgery. Hartell NA, et al. **Neuropharmacology** 1996; 35(11):1567–72

Dual action of metabotropic glutamate receptor agonists on neuronal excitability and synaptic transmission in spinal ventral horn neurons in vitro. King AE, et al. **Neuropharmacology** 1996;35(12):1673–80

Stereoselective effects–of 2,3–benzodiazepines in vivo: electrophysiology and neuroprotection studies. Lodge D, et al. **Neuropharmacology** 1996;35(12):1681–8

Localization of the spinal respiratory rhythm generator by an in vitro electrophysiological approach. Dubayle D, et al. **Neuroreport** 1996 Apr 26;7(6):1175–80

Remyelination in the CNS of the hypothyroid rat. Franklin RJ, et al. **Neuroreport** 1996 Jun 17;7(9):1526–30

Involvement of the presynaptic dopamine D2 receptor in the depression of spinal reflex by apomorphine. Gajendiran M, et al. **Neuroreport** 1996 Jan 31;7(2):513–6

Orphanin FQ acts as a supraspinal, but not a spinal, anti–opioid peptide. Grisel JE, et al. **Neuroreport** 1996 Sep 2;7(13):2125–9

How effective is integration of information from muscle afferents in spinal pathways? Jankowska E, et al. **Neuroreport** 1996 Oct 2;7(14):2337–40

Descending modulation of Fos expression after persistent peripheral inflammation. Ren K, et al. **Neuroreport** 1996 Sep 2;7(13):2186–90

NMDA receptor involvement in spinal inhibitory controls of nociception in the rat. Romita VV, et al. **Neuroreport** 1996 Jul 29;7(11):1705–8

Gabapentin, ineffective in normal rats, markedly reduces C–fibre evoked responses after inflammation. Stanfa LC, et al. **Neuroreport** 1997 Feb 10;8(3):587–90

Role of the NMDA receptor complex in DMCM–induced seizure in mice. Tsuda M, et al. **Neuroreport** 1997 Feb 10; 8(3):603–6

Nociceptin or antinociceptin: potent spinal antinociceptive effect of orphanin FQ/nociceptin in the rat. Xu XJ, et al. **Neuroreport** 1996 Sep 2;7(13):2092–4

Distribution of the metabotropic glutamate receptor subtype mGluR5 in rat midbrain periaqueductal grey and relationship with ascending spinofugal afferents. Azkue JJ, et al. **Neurosci Lett** 1997 May 30;228(1):1–4

Studies of synaptic transmission in vivo: indirect versus direct effects of (RS)-alpha-amino-3-hydroxy-5-methyl-4-isoxazole-propionic acid/kainate antagonists on rat spinal sensory responses. Cumberbatch MJ, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):33–6

Glycinergic inhibition in the turtle spinal cord regulates the intensity and pattern of fictive flexion reflex motor output. Currie SN, et al. **Neurosci Lett** 1996 Feb 23;205(2):75–8

Serotonergic inhibition of phrenic motoneuron activity: an in vitro study in neonatal rat. Di Pasquale E, et al. **Neurosci Lett** 1997 Jul 11;230(1):29–32

Primary afferent-evoked synaptic plasticity in deep dorsal horn neurons from neonatal rat spinal cord in vitro. Garraway SM, et al. **Neurosci Lett** 1997 Jul 11;230(1):61–4

Effects of transcutaneous electrical nerve stimulation (TENS) on spontaneous and noxiously evoked dorsal horn cell activity in cats with transected spinal cords. Garrison DW, et al. **Neurosci Lett** 1996 Sep 27;216(2):125–8

Depressor pathway involved in somatosympathetic reflex in cats. Goo YS, et al. **Neurosci Lett** 1996 Jan 26;203(3):187–90

The role of the spinal cord as a reflex center for the somatically induced reflex responses of splenic sympathetic and natural killer cell activity in anesthetized rats. Kagitani F, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):109–12

Modification of cardiovascular response of adenosine A1 receptor agonist by cyclic AMP in the spinal cord of the rats. Koh HC, et al. **Neurosci Lett** 1996 Nov 29; 219(3):195–8

N-methyl-D-aspartate (NMDA) and non-NMDA glutamate receptor antagonists differentially suppress dorsal horn neuron responses to mechanical stimuli in rats with peripheral nerve injury. Leem JW, et al. **Neurosci Lett** 1996 Jun 14;211(1):37–40

Collateral projections from single neurons in the dorsal column nuclei to the inferior colliculus and the ventrobasal thalamus: a retrograde double-labeling study in the rat. Li H, et al. **Neurosci Lett** 1997 Mar 28;225(1):21–4

Age-related changes in soma size of neurons in the spinal cord motor column of the cat. Liu RH, et al. **Neurosci Lett** 1996 Jun 28;211(3):163–6

A variation of the tissue print technique for studying isolated spinal cord cells in situ. MacDonald SC, et al. **Neurosci Lett** 1997 Feb 21;223(2):85–8

The intermediate cerebellum may function as a wave-variable processor. Massaquoi SG, et al. **Neurosci Lett** 1996 Aug 30;215(1):60–4

Afferent and efferent branching axons from the rat lumbo-sacral spinal cord project both to the urinary bladder and the urethra as demonstrated by double retrograde neuronal labeling. Russo A, et al. **Neurosci Lett** 1996 Nov 29;219(3):155–8

The central neural pathways involved in micturition in the neonatal rat as revealed by the injection of pseudorabies virus into the urinary bladder. Sugaya K, et al. **Neurosci Lett** 1997 Feb 28;223(3):197–200

Gaba-like immunoreactive terminals on lumbar motoneurons of the adult cat. A quantitative ultrastructural study. Destombes J, et al. **Neurosci Res** 1996 Jan;24(2):123–30

A- and C-reflexes elicited in cardiac sympathetic nerves by single shock to a somatic afferent nerve include spinal and supraspinal components in anesthetized rats. Kimura A, et al. **Neurosci Res** 1996 May;25(1):91–6

Remyelination in the rat dorsal funiculus following demyelination by laser irradiation. Sato K, et al. **Neurosci Res** 1997 Aug;28(4):325–35

Exaggerated C-fiber activation prevents peripheral nerve injury-induced hyperinducibility of c-Fos in partially deafferented spinal dorsal horn. Sugimoto T, et al. **Neurosci Res** 1997 Feb;27(2):161–7

Inhibition of spinal monosynaptic reflex in newborn rats by aurintricarboxylic acid. Sun X, et al. **Neurosci Res** 1997 Apr;27(4):371–6

Low-affinity nerve growth factor receptor is associated with motoneuron axonal pathways. Tanaka H, et al. **Neurosci Res** 1997 Jan;27(1):21–7

Large dorsal horn neurons which receive inputs from numerous substance P-like immunoreactive axon terminals in the laminae I and II of the chicken spinal cord. Zhai XY, et al. **Neurosci Res** 1997 Jun;28(2):147–54

Antibodies directed against the beta 1-integrin subunit and peptides containing the IKVAV sequence of laminin perturb neurite outgrowth of peripheral neurons on immature spinal cord substrata. Agius E, et al. **Neuroscience** 1996 Apr;71(3):773–86

Direct evidence of an extensive GABAergic innervation of the spinal dorsal horn by fibres descending from the rostral ventromedial medulla. Antal M, et al. **Neuroscience** 1996 Jul;73(2):509–18

Dorsal rhizotomy induces transient expression of the highly sialylated isoform of the neural cell adhesion molecule in neurons and astrocytes of the adult rat spinal cord. Bonfanti L, et al. **Neuroscience** 1996 Oct;74(3):619–23

Metabotropic glutamate receptor activation contributes to nociceptive reflex activity in the rat spinal cord in vitro. Boxall SJ, et al. **Neuroscience** 1996 Sep;74(1):13–20

The contribution of GABAB receptor-mediated events to inflammatory pain processing: carrageenan oedema and associated spinal c-Fos expression in the rat. Buritova J, et al. **Neuroscience** 1996 Jul;73(2):487–96

Expression of a developmentally regulated, phosphorylated isoform of microtubule-associated protein 1B in regenerating axons of the sciatic nerve. Bush MS, et al. **Neuroscience** 1996 Jul;73(2):553–63

Metabotropic glutamate receptor antagonists, like GABA(B) antagonists, potentiate dorsal root-evoked excitatory synaptic transmission at neonatal rat spinal motoneurons in vitro. Cao CQ, et al. **Neuroscience** 1997 May; 78(1):243–50

Membrane properties and inhibitory connections of normal and upper cervically axotomized rubrospinal neurons in the rat. Chen JR, et al. **Neuroscience** 1997 Jul;79(2):449–62

Stimulus intensity, cell excitation and the N-methyl-D-aspartate receptor component of sensory responses in the rat spinal cord in vivo. Chizh BA, et al. **Neuroscience** 1997 Sep;80(1):251–65

Interaction between the caudal brainstem and the lamprey central pattern generator for locomotion. Cohen AH, et al. **Neuroscience** 1996 Oct;74(4):1161–73

Synchronicity of nociceptive and non-nociceptive adjacent neurons in the spinal dorsal horn of the rat: stimulus-induced plasticity. Eblen-Zajjur AA, et al. **Neuroscience** 1997 Jan;76(1):39–54

Thalamic-projecting preprocholecystokinin messenger RNA-expressing neurons in the dorsal column nuclei of the rat. Farnebo S, et al. **Neuroscience** 1997 Jun; 78(4):1051–7

Daily spinal cord stimulation suppresses autotomy behavior in rats following peripheral deafferentation. Gao XX, et al. **Neuroscience** 1996 Nov;75(2):463–70

The burst-like firing of spinal neurons in rats with peripheral inflammation is reduced by an antagonist of N-methyl-D-aspartate. Grubb BD, et al. **Neuroscience** 1996 Oct;74(4):1077–86

Evidence for a periaqueductal gray-nucleus retroambiguus-spinal cord pathway in the rat. Holstege G, et al. **Neuroscience** 1997 Sep;80(2):587–98

Neurons lying in the white matter of the upper cervical spinal cord project to the intermediolateral cell column. Jansen AS, et al. **Neuroscience** 1997 Apr;77(3):889–98

Long-lasting potentiation in the secondary somatosensory cortex affects motor control: assessment by H-reflex. Kawakami Y, et al. **Neuroscience** 1996 Oct;74(4):1125–33

The mu-opioid receptor (MOR1) is mainly restricted to neurons that do not contain GABA or glycine in the superficial dorsal horn of the rat spinal cord. Kemp T, et al. **Neuroscience** 1996 Dec;75(4):1231–8

Skin blood flow disturbances in the contralateral limb in a peripheral mononeuropathy in the rat. Kurvers HA, et al. **Neuroscience** 1996 Oct;74(3):935–43

Glutamate- and GABA-immunoreactive synapses on sympathetic preganglionic neurons caudal to a spinal cord transection in rats. Llewellyn-Smith IJ, et al. **Neuroscience** 1997 Oct;80(4):1225–35

Substance P and enkephalin immunoreactivities in axonal boutons presynaptic to physiologically identified dorsal horn neurons. An ultrastructural multiple-labelling study in the cat. Ma W, et al. **Neuroscience** 1997 Apr; 77(3):793–811

A confocal microscopic survey of serotoninergic axons in the lumbar spinal cord of the rat: co-localization with glutamate decarboxylase and neuropeptides. Maxwell L, et al. **Neuroscience** 1996 Nov;75(2):471–80

The contribution of supraspinal, peripheral and intrinsic spinal circuits to the pattern and magnitude of Fos-like immunoreactivity in the lumbar spinal cord of the rat withdrawing from morphine. Rohde DS, et al. **Neuroscience** 1997 Sep;80(2):599–612

Endogenous opioids acting at a medullary mu-opioid receptor contribute to the behavioral antinociception produced by GABA antagonism in the midbrain periaqueductal gray. Roychowdhury SM, et al. **Neuroscience** 1996 Oct;74(3):863–72

Evidence for serotonin sensitivity of adult rat spinal axons: studies using randomized double pulse stimulation. Saruhashi Y, et al. **Neuroscience** 1997 Sep;80(2):559–66

Differential c-fos expression in the nucleus of the solitary tract and spinal cord following noxious gastric distention in the rat. Traub RJ, et al. **Neuroscience** 1996 Oct; 74(3):873–84

Glutamate hyperexcitability and seizure-like activity throughout the brain and spinal cord upon relief from chronic glutamate receptor blockade in culture. Van Den Pol AN, et al. **Neuroscience** 1996 Oct;74(3):653–74

[Met]enkephalin in the spinal cord is involved in the antinociception induced by intracerebroventricularly-administered etorphine in the mouse. Xu JY, et al. **Neuroscience** 1997 Sep;80(2):579–85

Time dependent variation of stimulus requirements in spinal cord stimulation for angina pectoris. Andersen C. **Pacing Clin Electrophysiol** 1997 Feb;20(2 Pt 1):359–63

The effect of lesions of the dorsolateral funiculus on formalin pain and morphine analgesia: a dose-response analysis. Abbott FV, et al. **Pain** 1996 Apr;65(1):17–23

The role of spinal cord activation before neurectomy in the development of autotomy. Asada H, et al. **Pain** 1996 Jan; 64(1):161–7

Effects of spinal cord stimulation on touch-evoked allodynia involve GABAergic mechanisms. An experimental study in the mononeuropathic rat. Cui JG, et al. **Pain** 1996 Aug; 66(2–3):287–95

Spinal cord stimulation in severe angina pectoris--presentation of current studies, indications and clinical experience. Eliasson T, et al. **Pain** 1996 May-Jun; 65(2–3):169–79 (137 ref.)

The NMDA receptor antagonist MK-801 differentially modulates mu and kappa opioid actions in spinal cord in vitro. Feng J, et al. **Pain** 1996 Aug;66(2–3):343–9

Relationship between mechano-receptive fields of dorsal horn convergent neurons and the response to noxious immersion of the ipsilateral hindpaw in rats. McGaraughty S, et al. **Pain** 1997 Apr;70(2–3):133–40

Behavioral analysis of diffuse noxious inhibitory controls (DNIC): antinociception and escape reactions. Morgan MM, et al. **Pain** 1996 Aug;66(2–3):307–12

Modulation of cutaneous nociceptor activity by electrical stimulation in the brain stem does not inhibit the nociceptive excitation of dorsal horn neurons. Morton CR, et al. **Pain** 1997 May;71(1):65–70

Facilitation of spinal cord stimulator implantation with epidural analgesia [see comments] Richardson J. **Pain** 1996 May-Jun;65(2–3):277–8. Comment in: Pain 1997 Apr;70(2–3):291–2.

Strychnine-sensitive modulation is selective for non-noxious somatosensory input in the spinal cord of the rat. Sherman SE, et al. **Pain** 1996 Aug;66(2–3):321–30

Behavioral and electrophysiological assessment of hyperalgesia and changes in dorsal horn responses following partial sciatic nerve ligation in rats. Takaishi K, et al. **Pain** 1996 Aug;66(2–3):297–306

Evidence for the involvement of spinal cord glia in subcutaneous formalin induced hyperalgesia in the rat. Watkins LR, et al. **Pain** 1997 Jul;71(3):225–35

The reliability of evoked spinal cord potentials elicited by direct stimulation of the cord as a monitor of spinal cord ischemia during temporary occlusion of the thoracic aorta. Matsui Y, et al. **Panminerva Med** 1997 Jun;39(2):78–84

Evidence for a spinal stepping generator in man. Bussel B, et al. **Paraplegia** 1996 Feb;34(2):91–2 (24 ref.)

Intracisternal TRH and RX 77368 potently activate gastric vagal efferent discharge in rats. O-Lee TJ, et al. **Peptides** 1997;18(2):213–9

An increase in cortical excitability with no change in spinal excitability during motor imagery. Yahagi S, et al. **Percept Mot Skills** 1996 Aug;83(1):288–90

Mechanically evoked bulbocavernosus reflex and pudendal somatosensory responses in children. Podnar S, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R293–4

Differential effects of intrathecal thyrotropin-releasing hormone (TRH) on perineal reflexes in male rats. Holmes GM, et al. **Physiol Behav** 1997 Jan;61(1):57–63

Antinociceptive action of vaginocervical stimulation in rat spinal cord: 2-DG analysis. Johnson BM, et al. **Physiol Behav** 1996 Sep;60(3):979–83

Functional breakdown of the lipid bilayer of the myelin membrane in central and peripheral nervous system by disrupted galactocerebroside synthesis. Bosio A, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13280–5

Differential distribution of two ATP-gated channels (P2X receptors) determined by immunocytochemistry. Vulchanova L, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):8063–7

Contribution of NMDA and non-NMDA glutamate receptors to locomotor pattern generation in the neonatal rat spinal cord. Beato M, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):877–84

Involvement of the spino-parabrachio -amygdaloid and -hypothalamic pathways in the autonomic and affective emotional aspects of pain. Bernard JF, et al. **Prog Brain Res** 1996;107:243–55 (80 ref.)

Some principles of the spinal organization of the sympathetic preganglionic outflow. Cabot JB. **Prog Brain Res** 1996; 107:29–42 (81 ref.)

Spinal cord mechanisms of hyperalgesia and allodynia: role of peripheral input from nociceptors. Cervero F. **Prog Brain Res** 1996;113:413–22 (32 ref.)

An ascending general homeostatic afferent pathway originating in lamina I. Craig AD. **Prog Brain Res** 1996; 107:225–42 (78 ref.)

Spinal cord reflex organization of sympathetic systems. Jänig W. **Prog Brain Res** 1996;107:43–77 (131 ref.)

Plasticity of excitatory synaptic transmission in the spinal cord dorsal horn. Randić M. **Prog Brain Res** 1996; 113:463–506 (338 ref.)

On the role of tachykinins and calcitonin gene-related peptide in the spinal mechanisms of nociception and in the induction and maintenance of inflammation-evoked hyperexcitability in spinal cord neurons (with special reference to nociception in joints). Schaible HG. **Prog Brain Res** 1996;113:423–41 (152 ref.)

Neurophysiology of chronic inflammatory pain: electrophysiological recordings from spinal cord neurons in rats with prolonged acute and chronic unilateral inflammation at the ankle. Schaible HG, et al. **Prog Brain Res** 1996;110:167–76 (56 ref.)

Spinal organization of C-fiber afferents related with nociception or non-nociception. Sugiura Y. **Prog Brain Res** 1996;113:320–39 (116 ref.)

Involvement of glutamatergic neurotransmission and protein

kinase C in spinal plasticity and the development of chronic pain. Tölle TR, et al. **Prog Brain Res** 1996;110:193–206 (54 ref.)

Slow synaptic transmission in the spinal dorsal horn. Yoshimura M. **Prog Brain Res** 1996;113:443–62 (149 ref.)

Sensori-sensory afferent conditioning with leg movement: gain control in spinal reflex and ascending paths. Brooke JD, et al. **Prog Neurobiol** 1997 Mar;51(4):393–421 (180 ref.)

Primary motor cortex influences on the descending and ascending systems. Canedo A. **Prog Neurobiol** 1997 Feb; 51(3):287–335 (531 ref.)

Transmission of the cortical command for human voluntary movement through cervical propriospinal premotoneurons. Pierrot-Deseilligny E. **Prog Neurobiol** 1996 Mar–Apr; 48(4–5):489–517 (60 ref.)

The spinal cord and its brain: representations and models. To what extent do forebrain mechanisms appear at brainstem spinal cord levels? Windhorst U. **Prog Neurobiol** 1996 Aug;49(5):381–414 (251 ref.)

On the role of recurrent inhibitory feedback in motor control. Windhorst U. **Prog Neurobiol** 1996 Aug;49(6):517–87 (367 ref.)

Effects of operantly conditioning the amplitude of the P200 peak of the SEP on pain sensitivity and the spinal nociceptive withdrawal reflex in humans. Dowman R. **Psychophysiology** 1996 May;33(3):252–61

Respiratory muscle coordination in acute spinal dogs. Reinoso MA, et al. **Respir Physiol** 1996 Apr–May; 104(1):29–37

Steps to recovery. Researchers finding ways of coaxing spinal nerves to grow [news] Beardsley T. **Sci Am** 1997 Jan; 276(1):26, 28

Repair of adult rat corticospinal tract by transplants of olfactory ensheathing cells [see comments] Li Y, et al. **Science** 1997 Sep 26;277(5334):2000–2. Comment in: Science 1997 Sep 26;277(5334):1907.

Are pushy axons a key to spinal cord repair? [news] Roush W. **Science** 1997 Jun 27;276(5321):1971–2

The origin and significance of spinal cord pulsation. Matsuzaki H, et al. **Spinal Cord** 1996 Jul;34(7):422–6

Regeneration of lesioned corticospinal tract fibers in the adult rat spinal cord under experimental conditions. Schwab ME, et al. **Spinal Cord** 1997 Jul;35(7):469–73 (52 ref.)

Historical perspective Brown-Sequard and his work on the spinal cord. Aminoff MJ. **Spine** 1996 Jan 1;21(1):133–40

Effects of hypoxia on the ventral root motor-evoked potential in the in vitro spinal cord preparation. Ataka H, et al. **Spine** 1996 Sep 15;21(18):2095–100

A new method for estimating spinal cord function. Refractory period of conductive spinal cord evoked potentials. Ishikawa M, et al. **Spine** 1997 May 1; 22(9):1007–12

Assessment of regional cerebral blood flow during spinal cord stimulation in humans. Mazzone P, et al. **Stereotact Funct Neurosurg** 1995;64(4):197–201

Maturation of the mammalian dorsal root entry zone—from entry to no entry. Golding J, et al. **Trends Neurosci** 1997 Jul;20(7):303–8 (53 ref.)

GABA and its receptors in the spinal cord. Malcangio M, et al. **Trends Pharmacol Sci** 1996 Dec;17(12):457–62 (59 ref.)

Spinal control of penile erection. Rampin O, et al. **World J Urol** 1997;15(1):2–13 (181 ref.)

[Central mechanism of an extensive analgesic effect due to strong electroacupuncture of acupoint on spinal dorsal horn neurons] He XL, et al. **Sheng Li Hsueh Pao** 1995 Dec; 47(6):605–9 (Eng. Abstr.) **(Chi)**

[Morphologic plasticity as a component of cognition] Prochiantz A. **Encephale** 1997 Jun;23 Spec No 3:15–8 (Eng. Abstr.) **(Fre)**

[Visual, auditory and somatosensory potentials in the diagnosis of vitamin B12 deficiency] Chéliout-Héraut F, et al. **Neurophysiol Clin** 1997;27(1):59–65 (Eng. Abstr.) **(Fre)**

[The effects of cervical epidural anesthesia on epidural somatosensory evoked potentials and phrenic nerve activities] Kasaba T, et al. **Masui** 1997 Mar;46(3):321–5 (Eng. Abstr.) **(Jpn)**

[Spinal neural mechanisms in voluntary movements] Shindo M. **Rinsho Shinkeigaku** 1995 Dec;35(12):1509–11 (7 ref.) (Eng. Abstr.) **(Jpn)**

[A new model of allodynia] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):258–61 **(Rus)**

[Spinal cord: afferent interactions] Pleshchinskiĭ IN, et al. **Fiziol Cheloveka** 1996 Jan–Feb;22(1):123–30 (97 ref.) **(Rus)**

[Potential-gated currents in isolated spinal cord neurons of the river lamprey Lampetra fluviatilis] Batueva IV, et al. **Zh Evol Biokhim Fiziol** 1996 May–Jun;32(3):267–83 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Extranodal sinus histiocytosis with massive lymphadenopathy presenting as an intramedullary spinal cord tumor: a case report. Jones MP, et al. **Am J Hematol** 1997 Mar; 54(3):253–7

Role of spinal NMDA and AMPA receptors in episodic hypertension in conscious spinal rats. Maiorov DN, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1266–74

A comparison of the sensitivity of epidural and myogenic transcranial motor-evoked responses in the detection of acute spinal cord ischemia in the rabbit. de Haan P, et al. **Anesth Analg** 1996 Nov;83(5):1022–7

Instrumented artificial spinal cord for human cervical pressure measurement. Pintar FA, et al. **Biomed Mater Eng** 1996;6(3):219–29

Central and peripheral respiratory electrophysiological studies in myotonic dystrophy. Zifko UA, et al. **Brain** 1996 Dec;119 (Pt 6):1911–22

Intracolonic zymosan produces visceral hyperalgesia in the rat that is mediated by spinal NMDA and non-NMDA receptors. Coutinho SV, et al. **Brain Res** 1996 Oct 14; 736(1–2):7–15

Effects of intrathecal vs. systemic clonidine in treating chronic allodynia-like response in spinally injured rats. Hao JX, et al. **Brain Res** 1996 Oct 14;736(1–2):28–34

Spinal NK2 receptors contribute to the increased excitability of the nociceptive flexor reflex during persistent peripheral inflammation. Jia YP, et al. **Brain Res** 1997 Mar 14; 751(1):169–74

Noradrenergic neurotransmission in the ventral spinal cord: basic characteristics and effects of denervating lesions, as studied in the awake rat by microdialysis. Leanza G, et al. **Brain Res** 1996 Nov 4;738(2):281–91

Contribution of sacral spinal cord neurons to the autonomic and somatic consequences of withdrawal from morphine in the rat. Rohde DS, et al. **Brain Res** 1997 Jan 16; 745(1–2):83–95

Sequential mediation of norepinephrine-and dopamine-induced antinociception at the spinal level: involvement of different local neuroactive substances. Yang SW, et al. **Brain Res Bull** 1996;41(2):105–9

Propriospinal myoclonus. Chokroverty S. **Clin Neurosci** 1995–96;3(4):219–22 (19 ref.)

The usefulness of the spinal and subcortical components of the posterior tibial nerve SEPs for spinal cord monitoring during aortic coarctation repair. Guérit JM, et al. **Electroencephalogr Clin Neurophysiol** 1997 Mar; 104(2):115–21

Cortico-spinal pathways and inhibitory mechanisms in hepatic encephalopathy. Nolano M, et al. **Electroencephalogr Clin Neurophysiol** 1997 Feb;105(1):72–8

Spinal tracts producing slow components of spinal cord potentials evoked by descending volleys in man. Tomita M, et al. **Electroencephalogr Clin Neurophysiol** 1996 Jan; 100(1):68–73

Co-treatment with MK-801 potentiates naloxone-precipitated morphine withdrawal in the isolated spinal cord of the neonatal rat. Bell JA, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):297–301

Different roles of alpha 2-adrenoceptors of the medulla versus the spinal cord in modulation of mustard oil-induced central hyperalgesia in rats. Mansikka H, et al. **Eur J Pharmacol** 1996 Feb 15;297(1–2):19–26

Neurophysiological mechanism of the unloading reflex as a prognostic factor in the early stages of idiopathic adolescent scoliosis. Dobosiewicz K. **Eur Spine J** 1997; 6(2):93–7

The pharmacology of excitatory and inhibitory amino acid-mediated events in the transmission and modulation of pain in the spinal cord. Dickenson AH, et al. **Gen Pharmacol** 1997 May;28(5):633–8 (62 ref.)

Electromyographic identification of spinal oscillator patterns and recouplings in a patient with incomplete spinal cord lesion: oscillator formation training as a method to improve motor activities. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:121–220

Does astrocytic glycogen benefit axon function and survival in CNS white matter during glucose deprivation? Ransom BR, et al. **Glia** 1997 Sep;21(1):134–41 (53 ref.)

Spinal cord dysmyelination induced in vivo by IgM antibodies to three different myelin glycolipids. Rosenbluth J, et al. **Glia** 1997 Jan;19(1):58–66

Primary demyelination and regeneration of ascending axons in the dorsal funiculus of the rat spinal cord following photochemically induced injury. Olby NJ, et al. **J Neurocytol** 1996 Aug;25(8):465–80

Endothelial-derived adhesion molecules in bacterial meningitis; association to cytokine release and intrathecal leukocyte-recruitment. Fassbender K, et al. **J Neuroimmunol** 1997 Apr;74(1–2):130–4

Changes in spinal cord excitability in a patient with rhythmic segmental myoclonus. Di Lazzaro V, et al. **J Neurol Neurosurg Psychiatry** 1996 Dec;61(6):641–4

Brain and spinal cord MRI in motor neuron disease [letter; comment] Testa D, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):546. Comment on: J Neurol Neurosurg Psychiatry 1996 Sep;61(3):314–7.

Electric shock-like sensations in 42 cancer patients: clinical characteristics and distinct etiologies. Lossos A, et al. **J Neurooncol** 1996 Aug;29(2):175–81

Lhermitte's sign as a presenting symptom of primary spinal cord tumor. Newton HB, et al. **J Neurooncol** 1996 Aug; 29(2):183–8

New assessment techniques for evaluation of posttraumatic spinal cord function in the rat. van de Meent H, et al. **J Neurotrauma** 1996 Dec;13(12):741–54

Cost-effectiveness analysis of spinal cord stimulation in treatment of failed back surgery syndrome. Bell GK, et al. **J Pain Symptom Manage** 1997 May;13(5):286–95

Spinal cord stimulation: a valuable treatment for chronic failed back surgery patients. Devulder J, et al. **J Pain Symptom Manage** 1997 May;13(5):296–301

Adverse effects of epidural spinal cord stimulation on bladder function in a patient with chronic spinal cord injury pain [letter] Loubser PG. **J Pain Symptom Manage** 1997 May; 13(5):251–2

Role of spinal gamma-aminobutyric acidA receptors in formalin-induced nociception in the rat. Kaneko M, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):928–38

Inhibition of nitric oxide synthase enhances antinociception mediated by mu, delta and kappa opioid receptors in acute and prolonged pain in the rat spinal cord. Machelska H, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):977–84

The role of glycine in spinal shock. Simpson RK Jr, et al. **J Spinal Cord Med** 1996 Oct;19(4):215–24

Efficacy of spinal cord monitoring in scoliosis surgery in patients with cerebral palsy. Ecker ML, et al. **J Spinal Disord** 1996 Apr;9(2):159–64

Intraoperative monitoring of spinal cord function using motor evoked potentials via transcutaneous epidural electrode during anterior cervical spinal surgery. Gokaslan ZL, et al. **J Spinal Disord** 1997 Aug;10(4):299–303

Critical levels of spinal cord blood flow and duration of ischemia for the acute recovery of segmental spinal cord responses in cats. Kolenda H, et al. **J Spinal Disord** 1997 Aug;10(4):288–95

Influence of short-term ischemia on segmental spinal cord reflex functions in cats. Kolenda H, et al. **J Spinal Disord** 1997 Feb;10(1):68–79

Validity and reliability of spinal cord monitoring in neuromuscular spinal deformity surgery. Padberg AM, et al. **J Spinal Disord** 1996 Apr;9(2):150–8

Stimulus artefact in somatosensory evoked potential measurement. Scott RN, et al. **Med Biol Eng Comput** 1997 May;35(3):211–5

NGF but not NT-3 or BDNF prevents the A fiber sprouting into lamina II of the spinal cord that occurs following axotomy. Bennett DL, et al. **Mol Cell Neurosci** 1996; 8(4):211–20

Dystonin expression in the developing nervous system predominates in the neurons that degenerate in dystonia musculorum mutant mice. Bernier G, et al. **Mol Cell Neurosci** 1995 Dec;6(6):509–20

Paroxysmal kinesigenic dystonia and spinal cord lesion. Cosentino C, et al. **Mov Disord** 1996 Jul;11(4):453–5

Long-lasting depression of soleus motoneurons excitability following repetitive magnetic stimuli of the spinal cord in multiple sclerosis patients. Nielsen JF, et al. **Mult Scler** 1997 Feb;3(1):18–30

Growth factors and myelin regeneration in multiple sclerosis. Webster HD. **Mult Scler** 1997 Apr;3(2):113–20 (128 ref.)

Behavior of the H-reflex in humans following mechanical perturbation or injury to rostral spinal cord. Leis AA, et al. **Muscle Nerve** 1996 Nov;19(11):1373–82

Evidence for spinal conditioning in intact rats. Joynes RL, et al. **Neurobiol Learn Mem** 1997 Jan;67(1):64–8

Recurrent inhibition [letter; comment] Mazzocchio R, et al. **Neurology** 1996 Dec;47(6):1606–8. Comment on: Neurology 1994 Nov;44(11 Suppl 9):S12–20.

Early onset autosomal dominant myopathy with rigidity of the spine: a possible role for laminin beta 1? Taylor J, et al. **Neuromuscul Disord** 1997 Jun;7(4):211–6

Effects of intrathecally injected histamine receptor antagonists on the antinociception induced by morphine, beta-endorphin, and U50, 488H administered intrathecally in the mouse. Suh HW, et al. **Neuropeptides** 1996 Oct; 30(5):485–90

Interferon-gamma receptors in nociceptive pathways: role in neuropathic pain-related behaviour. Robertson B, et al. **Neuroreport** 1997 Mar 24;8(5):1311–6

Injured nerve block alters adjacent nerves spinal interaction in neuropathic rats. Sotgiu ML, et al. **Neuroreport** 1996 May 31;7(8):1385–8

Adenosine receptor activation suppresses tactile hypersensitivity and potentiates spinal cord stimulation in mononeuropathic rats. Cui JG, et al. **Neurosci Lett** 1997 Feb 28;223(3):173–6

Thermal hyperalgesia in rat evoked by intrathecal substance P at multiple stimulus intensities reflects an increase in the gain of nociceptive processing. Dirig DM, et al. **Neurosci Lett** 1996 Dec 13;220(2):93–6

Changes in activity of spinal cells with muscular input in rats with referred muscular hyperalgesia from ureteral calculosis. Giamberardino MA, et al. **Neurosci Lett** 1996 Jan 19;203(2):89–92

Role of input from saphenous afferents in altered spinal processing of noxious signal that follows sciatic nerve constriction in rats. Sotgiu ML, et al. **Neurosci Lett** 1997 Feb 21;223(2):101–4

The potential role of spinal cord cyclooxygenase-2 in the development of Freund's complete adjuvant-induced changes in hyperalgesia and allodynia. Hay CH, et al. **Neuroscience** 1997 Jun;78(3):843–50

Effectiveness of spinal cord stimulation in the management of chronic pain: analysis of technical drawbacks and solutions. Holsheimer J. **Neurosurgery** 1997 May; 40(5):990–6; discussions 996–9

Functional magnetic resonance imaging: a potential tool for the evaluation of spinal cord stimulation: technical case report. Kiriakopoulos ET, et al. **Neurosurgery** 1997 Aug; 41(2):501–4

Spinal cord stimulation is effective in the management of reflex sympathetic dystrophy. Kumar K, et al. **Neurosurgery** 1997 Mar;40(3):503–8; discussion 508–9

Dysesthetic pain in patients with syringomyelia. Milhorat TH, et al. **Neurosurgery** 1996 May;38(5):940–6; discussion 946–7

Prognostic value of psychological testing in patients undergoing spinal cord stimulation: a prospective study [letter; comment] Miller RP, et al. **Neurosurgery** 1997 Jun; 40(6):1341. Comment on: Neurosurgery 1996 Aug;39(2):301–10; discussion 310–1.

Prognostic value of psychological testing in patients undergoing spinal cord stimulation: a prospective study [see comments] North RB, et al. **Neurosurgery** 1996 Aug; 39(2):301–10; discussion 310–1. Comment in: Neurosurgery 1997 Jun;40(6):1341.

Is there a pathway in the posterior funiculus that signals visceral pain? Hirshberg RM, et al. **Pain** 1996 Oct; 67(2–3):291–305

Comments on Berkley, Pain 70 (1997) 103–107 [letter] Hubscher CH. **Pain** 1997 Aug;72(1–2):283

The effect of spinal GABA receptor agonists on tactile allodynia in a surgically-induced neuropathic pain model in the rat. Hwang JH, et al. **Pain** 1997 Mar;70(1):15–22

Involvement of increased excitatory amino acids and intracellular Ca2+ concentration in the spinal dorsal horn in an animal model of neuropathic pain. Kawamata M, et al. **Pain** 1996 Nov;68(1):85–96

Post-sympathectomy neuralgia: hypotheses on peripheral and central neuronal mechanisms [see comments] Kramis RC, et al. **Pain** 1996 Jan;64(1):1–9 (66 ref.). Comment in: Pain 1996 Sep;67(1):218–20. Comment in: Pain 1997 Apr;70(2–3):290–1.

Progressive tactile hypersensitivity: an inflammation-induced incremental increase in the excitability of the spinal cord [see comments] Ma QP, et al. **Pain** 1996 Sep;67(1):97–106 . Comment in: Pain 1996 Sep;67(1):1–2.

The spinal contribution of substance P to the generation and maintenance of inflammatory hyperalgesia in the rat. Traub RJ. **Pain** 1996 Sep;67(1):151–61

Failure of convergence of two lines of research: buried treasure [editorial] Wall PD. **Pain** 1997 May;71(1):1–3

Spinal cord evoked potential monitoring for cervical and thoracic compressive myelopathy. Baba H, et al. **Paraplegia** 1996 Feb;34(2):100–6

Neuropeptide FF in the rat spinal cord during carrageenan inflammation. Kontinen VK, et al. **Peptides** 1997; 18(2):287–92

Signal changes in the spinal cord of the rat after injection of formalin into the hindpaw: characterization using functional magnetic resonance imaging. Pórszász R, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5034–9

Balances between excitatory and inhibitory events in the spinal cord and chronic pain. Dickenson AH. **Prog Brain Res** 1996;110:225–31 (31 ref.)

The possible role of substance P in eliciting and modulating deep somatic pain. Mense S, et al. **Prog Brain Res** 1996; 110:125–35 (55 ref.)

Neurobiology of spinal nociception: new concepts. Sandkühler J. **Prog Brain Res** 1996;110:207–24 (50 ref.)

The organization and function of endogenous antinociceptive systems. Sandkühler J. **Prog Neurobiol** 1996 Sep; 50(1):49–81 (172 ref.)

Central pain of spinal origin. Bowsher D. **Spinal Cord** 1996 Dec;34(12):707–10 (38 ref.)

Comparison of preoperative selective spinal angiography and somatosensory-evoked potential monitoring with temporary occlusion of segmental vessels during anterior spinal surgery. Bassett G, et al. **Spine** 1996 Sep 1; 21(17):1996–9; discussion 2000

Prospective, multicenter study of spinal cord stimulation for relief of chronic back and extremity pain. Burchiel KJ, et al. **Spine** 1996 Dec 1;21(23):2786–94

Changes in responses of wide dynamic range neurons in the spinal dorsal horn after dorsal root or dorsal root ganglion compression. Hanai F, et al. **Spine** 1996 Jun 15; 21(12):1408–14; discussion 1414–5

Prospective outcome evaluation of spinal cord stimulation in patients with intractable leg pain. Ohnmeiss DD, et al. **Spine** 1996 Jun 1;21(11):1344–50; discussion 1351

Chondroitinase ABC (pharmaceutical grade) for chemonucleolysis. Functional and structural evaluation after local application on intraspinal nerve structures and blood vessels. Olmarker K, et al. **Spine** 1996 Sep 1; 21(17):1952–6

Spine and scalp recordings as a function of intensity. A model for changes during spinal cord monitoring. Slimp JC, et al. **Spine** 1996 Jan 1;21(1):99–103

Spinal cord stimulation in severe angina pectoris. Augustinsson LE, et al. **Stereotact Funct Neurosurg** 1995; 65(1–4):136–41

Spinal cord stimulation for chronic pain in peripheral neuropathy. Kumar K, et al. **Surg Neurol** 1996 Oct; 46(4):363–9

Spinal cord stimulation in refractory angina pectoris--clinical results and mechanisms. Oosterga M, et al. **Z Kardiol** 1997; 86 Suppl 1:107–13 (36 ref.)

[Monitoring for spinal cord ischemia by the use of the motor evoked potentials, the evoked spinal cord potential and the segmental evoked spinal cord potential during thoracoabdominal aortic surgery--a case report] Okada K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul; 45(7):1003–5 (Eng. Abstr.) **(Jpn)**

[Favorable effects of human immunoglobulin in severe forms of chronic inflammatory demyelinating polyneuropathy] Wiszniewska M, et al. **Neurol Neurochir Pol** 1996 May–Jun; 30(3):489–93 (Eng. Abstr.) **(Pol)**

[Spinal cord trauma: the current concepts of the mechanisms of the damage, regeneration and means for its correction] Grishenkova LN, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr–Jun; (2):37–44 (173 ref.) **(Rus)**

[Investigation of corticospinal dysfunction in multiple sclerosis and motoneuron diseases using motor evoked potentials] Gómez-Fernández L, et al. **Rev Neurol** 1996 Dec;24(136):1507–12 (Eng. Abstr.) **(Spa)**

[Spinal epidural hematoma in anticoagulated patient. Letter] Rodríguez J, et al. **Rev Neurol** 1997 Feb;25(138):308–9 **(Spa)**

RADIATION EFFECTS

Specification of the dose to organs at risk in external beam radiotherapy. Dale E, et al. **Acta Oncol** 1997;36(2):129–35

The post-irradiation lower motor neuron syndrome neuronopathy or radiculopathy? Bowen J, et al. **Brain** 1996 Oct;119 (Pt 5):1429–39

Somatosensory evoked potential study in cervical radiation myelopathy. Wang PY, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Sep; 56(3):179–85

Microglial development is altered in immature spinal cord by exposure to radiation. Gilmore SA, et al. **Int J Dev Neurosci** 1997 Feb;15(1):1–14

Radiation-induced apoptosis in the rat spinal cord: lack of equal effect per fraction. Li YQ, et al. **Int J Radiat Biol** 1997 Apr;71(4):413–20

Response of the central nervous system to fractionated boron neutron capture irradiation: studies with borocaptate sodium. Morris GM, et al. **Int J Radiat Biol** 1997 Feb; 71(2):185–92

Potential role of proton therapy in the treatment of pediatric medulloblastoma/primitive neuro-ectodermal tumors: spinal theca irradiation. Miralbell R, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):805–11

Cellular and secretory mechanisms related to delayed radiation-induced microvessel dysfunction in the spinal cord of rats. Siegal T, et al. **Int J Radiat Oncol Biol Phys** 1996 Oct 1;36(3):649–59

Long-term recovery kinetics of radiation damage in rat spinal cord. Wong CS, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 1;37(1):171–9

Glial-glial and glial-neuronal interfaces in radiation-induced, glia-depleted spinal cord. Gilmore SA, et al. **J Anat** 1997 Jan;190 (Pt 1):5–21 (51 ref.)

Glioblastoma multiforme arising in the irradiated spinal cord of a rhesus monkey (Macaca mulatta). Price RE, et al. **J Med Primatol** 1996 Apr;25(2):140–5

Anaplastic ependymoma: treatment of pediatric patients with or without craniospinal radiation therapy. Merchant TE, et al. **J Neurosurg** 1997 Jun;86(6):943–9

Survival and late effects in medulloblastoma patients treated with craniospinal irradiation under three years old. Kiltie AE, et al. **Med Pediatr Oncol** 1997 May;28(5):348–54

Lack of influence of sequence of top-up doses on repair kinetics in rat spinal cord. Kim JJ, et al. **Radiother Oncol** 1997 May;43(2):211–7

Boron neutron capture irradiation of the rat spinal cord: effects of variable doses of borocaptate sodium. Morris GM, et al. **Radiother Oncol** 1996 Jun;39(3):253–9

High dose rate (HDR) and low dose rate (LDR) interstitial irradiation (IRT) of the rat spinal cord. Pop LA, et al. **Radiother Oncol** 1997 Jan;42(1):59–67

[A simple device for improving the reproducibility of patient positioning in craniospinal irradiation] Geyer P. **Strahlenther Onkol** 1997 Jan;173(1):23–6 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Impact of spinal degenerative changes on the evaluation of bone mineral density with dual energy X-ray absorptiometry (DXA). Rand T, et al. **Calcif Tissue Int** 1997 May;60(5):430–3

RADIONUCLIDE IMAGING

Rapid transit of tracer to the kidneys and urinary bladder in radionuclide cisternography. A sign of CSF leak. Halkar R, et al. **Clin Nucl Med** 1997 Feb;22(2):121–3

SECRETION

Synergy between mu/delta-opioid receptors mediates adenosine release from spinal cord synaptosomes. Cahill CM, et al. **Eur J Pharmacol** 1996 Feb 29;298(1):45–9

Peptidase inhibitors improve recovery of substance P and calcitonin gene-related peptide release from rat spinal cord slices. Chen JJ, et al. **Peptides** 1996;17(1):31–7

SURGERY

Spinal cord surgery and galactorrhea: a case report. Faubion WA, et al. **Am J Obstet Gynecol** 1997 Aug;177(2):465–6 (2 ref.)

The effects of oligohydramnios and cervical cord transection on lung growth in experimental pulmonary hypoplasia in rabbits. Yoshimura S, et al. **Am J Obstet Gynecol** 1997 Jul; 177(1):72–7

Axotomy affects the retrograde labeling of cervical and lumbar-cord-projecting rubrospinal neurons differently. Tseng GF, et al. **Anat Embryol (Berl)** 1996 Nov; 194(5):457–64

The utility of motor-evoked potential monitoring during intramedullary surgery. Lang EW, et al. **Anesth Analg** 1996 Dec;83(6):1337–41

Effect of cranial surgery and brain tumor size on emergence from anesthesia. Schubert A, et al. **Anesthesiology** 1996 Sep; 85(3):513–21

"Tethered cord syndrome"--recent clinical experience. Sharif S, et al. **Br J Neurosurg** 1997 Feb;11(1):49–51

MAP2 expression in the developing human fetal spinal cord and following xenotransplantation. Giovanini MA, et al. **Cell Transplant** 1997 May–Jun;6(3):339–46

Altered differentiation of CNS neural progenitor cells after transplantation into the injured adult rat spinal cord. Onifer SM, et al. **Cell Transplant** 1997 May–Jun;6(3):327–38

Motor evoked potential monitoring during spinal surgery: responses of distal limb muscles to transcranial cortical stimulation with pulse trains. Jones SJ, et al. **Electroencephalogr Clin Neurophysiol** 1996 Sep; 100(5):375–83

Local changes in vascular architecture following partial spinal cord lesion in the rat. Imperato-Kalmar EL, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):322–8

Nerve grafting from spinal cord to spinal nerve: a microsurgical technique in cats. Holtzer CA, et al. **J Neurosci Methods** 1996 Dec 28;70(2):163–9

Axonal regrowth through collagen tubes bridging the spinal cord to nerve roots. Liu S, et al. **J Neurosci Res** 1997 Aug 15;49(4):425–32

Transcondylar approach [letter; comment] Ciappetta P. **J Neurosurg** 1996 Oct;85(4):735–6. Comment on: J Neurosurg 1996 Jan;84(1):1–6.

History of spinal cord stereotaxy. Gabriel EM, et al. **J Neurosurg** 1996 Oct;85(4):725–31

Surgical interruption of a midline dorsal column visceral pain pathway. Case report and review of the literature. Nauta HJ, et al. **J Neurosurg** 1997 Mar;86(3):538–42 (20 ref.)

Video-assisted thoracic corpectomy and spinal reconstruction: a biomechanical analysis of open versus endoscopic technique. Connolly PJ, et al. **J Spinal Disord** 1996 Dec;9(6):453–9

Dorsal shift and expansion of the spinal cord after expansive open-door laminoplasty. Fujimura Y, et al. **J Spinal Disord** 1997 Aug;10(4):282–7

Intraoperative monitoring of spinal cord function using motor evoked potentials via transcutaneous epidural electrode during anterior cervical spinal surgery. Gokaslan ZL, et al. **J Spinal Disord** 1997 Aug;10(4):299–303

Patient outcomes after spinal reconstructive surgery in patients > or = 40 years of age. Hu SS, et al. **J Spinal Disord** 1996 Dec;9(6):460–9

Anterior cervical plate used in degenerative disease can maintain cervical lordosis. Katsuura A, et al. **J Spinal Disord** 1996 Dec;9(6):470–6

Arachnoid-trabeculae tenting as a self-retaining retractor in resecting ventrally located spinal meningioma--technical note. Yamakawa Y, et al. **Neurol Med Chir (Tokyo)** 1996 Dec;36(12):901–2

Intraoperative monitoring of motor evoked potentials: a review of 116 cases. Nagle KJ, et al. **Neurology** 1996 Oct; 47(4):999–1004 (32 ref.)

Special radiofrequency electrode system for computed tomography-guided pain-relieving procedures. Kanpolat Y, et al. **Neurosurgery** 1996 Mar;38(3):600–2; discussion 602–3

On the dorsal columns: translating basic research hypotheses to the clinic [editorial] Berkley KJ. **Pain** 1997 Apr; 70(2–3):103–7 (35 ref.)

Comments on Richardson, PAIN, 65 (1996) 277–278 [letter; comment] Devulder J. **Pain** 1997 Apr;70(2–3):291–2. Comment on: Pain 1996 May–Jun;65(2–3):277–8.

Commissural myelotomy revisited [editorial] Gybels J. **Pain** 1997 Mar;70(1):1–2 (12 ref.)

The effect of spinal GABA receptor agonists on tactile allodynia in a surgically-induced neuropathic pain model in the rat. Hwang JH, et al. **Pain** 1997 Mar;70(1):15–22

Magnetic resonance imaging and spinal cord stimulation systems. Liem LA, et al. **Pain** 1997 Mar;70(1):95–7

Attenuation of formalin pain responses in the rat by adrenal medullary transplants in the spinal subarachnoid space. Siegan JB, et al. **Pain** 1997 Apr;70(2–3):279–85

Development of hydrocephalus after cervical laminoplasty for ossification of the posterior longitudinal ligament: case report. Maezawa Y, et al. **Spinal Cord** 1996 Nov; 34(11):699–702

Presidential address. Changing world of health care competition and the spinal neurosurgeon. Menezes AH. **Spine** 1997 Mar 15;22(6):587–8

Spontaneous and evoked dysesthesias observed in the rat after spinal cordotomies. Ovelmen-Levitt J, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):157–60

[Surgical treatment for syringomyelia] Iwasaki Y, et al. **No Shinkei Geka** 1996 Aug;24(8):709–16 (28 ref.) **(Jpn)**

[A method for an approach to the spinal cord] Kushkhabiev VI, et al. **Vestn Khir Im I I Grek** 1997;156(3):55–6 (Eng. Abstr.) **(Rus)**

[Are there a neuro-urological symptomatology improvement after spinal cord untethering?] López Pereira P, et al. **Cir Pediatr** 1996 Apr;9(2):81–4 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

Electrophysiological investigations of neurotransplant-mediated recovery after spinal cord injury. Skinner RD, et al. **Adv Neurol** 1997;72:277-90

Embryonic spinal cord transplants enhance locomotor performance in spinalized newborn rats. Tessler A, et al. **Adv Neurol** 1997;72:291-303 (52 ref.)

Effects of exercise and fetal spinal cord implants on the H-reflex in chronically spinalized adult rats. Skinner RD, et al. **Brain Res** 1996 Aug 5;729(1):127-31

A special issue based on the third annual conference of the American Society for Neural Transplantation, 1996. Freed WJ, et al. **Cell Transplant** 1997 May-Jun;6(3):201-2

Recovery of locomotor activity in the adult chronic spinal rat after sublesional transplantation of embryonic nervous cells: specific role of serotonergic neurons. Feraboli-Lohnherr D, et al. **Exp Brain Res** 1997 Mar; 113(3):443-54

Differential immune responses to fetal intracameral spinal cord and cortex cerebri grafts. Shinoda M, et al. **Exp Brain Res** 1996 Jul;110(2):223-34

A quantitative spatial analysis of the blood-spinal cord barrier. II. Permeability after intraspinal fetal transplantation. Horner PJ, et al. **Exp Neurol** 1996 Dec; 142(2):226-43

Fetal spinal cord transplants rescue some axotomized rubrospinal neurons from retrograde cell death in adult rats. Mori F, et al. **Exp Neurol** 1997 Jan;143(1):45-60

Comparison of the growth and fate of fetal spinal iso- and allografts in the adult rat injured spinal cord. Theele DP, et al. **Exp Neurol** 1996 Nov;142(1):128-43

Functional interactions between spinal cord grafts suggest asymmetries dictated by graft maturity. Trok K, et al. **Exp Neurol** 1997 May;145(1):268-77

Schwann cell-like myelination following transplantation of an olfactory bulb-ensheathing cell line into areas of demyelination in the adult CNS. Franklin RJ, et al. **Glia** 1996 Jul;17(3):217-24

Quantitative analysis of vascularization and cytochrome oxidase following fetal transplantation in the contused rat spinal cord. Horner PJ, et al. **J Comp Neurol** 1996 Jan 22;364(4):690-703

Restriction in cell fates of developing spinal cord cells transplanted to neural crest pathways. Korade Z, et al. **J Neurosci** 1996 Dec 1;16(23):7638-48

Fetal transplants alter the development of function after spinal cord transection in newborn rats. Miya D, et al. **J Neurosci** 1997 Jun 15;17(12):4856-72

Reinnervation of denervated hindlimb muscles by axons of grafted motoneurons via the reimplanted L4 ventral root. Nógrádi A, et al. **Neurobiology (Bp)** 1996;4(3):231-2

Electrophysiological improvement after co-implantation of carbon filaments and fetal tissue in the contused rat spinal cord. Liu LS, et al. **Neurosci Lett** 1995 Nov 24; 200(3):199-202

Glial cell line-derived neurotrophic factor enhances survival and growth of prenatal and postnatal spinal cord transplants. Trok K, et al. **Neuroscience** 1996 Mar; 71(1):231-41

Improvement of host-graft adhesion by enzymatic manipulation of the subacute spinal cord contusion area in the rat. Grijalva I, et al. **Transplant Proc** 1996 Dec; 28(6):3340-2

[The development of human embryonic spinal cord transplants in the spinal cord of adult rats] Gilerovich EG, et al. **Morfologiia** 1996;110(5):43-6 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

Ventriculus terminalis of the spinal cord in the neonate: a normal variant on sonography [letter; comment] Unsinn KM, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1341. Comment on: AJR Am J Roentgenol 1995 Dec;165(6):1491-3.

Sonographic determination of the position of the conus medullaris in premature and term infants. Beek FJ, et al. **Neuroradiology** 1996 May;38 Suppl 1:S174-7

Three-dimensional ultrasound of the fetal spine. Johnson DD, et al. **Obstet Gynecol** 1997 Mar;89(3):434-8

Alterations in spinal fluid drainage in infants with hydrocephalus. Rudas G, et al. **Pediatr Radiol** 1997 Jul; 27(7):580-2

ULTRASTRUCTURE

Immunocytochemical localization of glycine in the lamprey spinal cord with reference to GABAergic and glutamatergic synapses: a light and electron microscopic study. Shupliakov O, et al. **Acta Biol Hung** 1996; 47(1-4):393-410

Immunohistochemical studies on clustered pericapillary bodies in the spinal cord of post-poliomyelitis patients. Ikemoto A, et al. **Acta Neuropathol (Berl)** 1996 Aug; 92(2):164-9

Lesion-induced neuronal reorganization in the spinal cord: morphological aspects. Nacimiento W, et al. **Adv Neurol** 1997;73:37-59 (102 ref.)

Central projections and entries of capsaicin-sensitive muscle afferents. Della Torre G, et al. **Brain Res** 1996 Mar 25; 713(1-2):223-31

Spinal muscarinic cholinergic and nitric oxide systems in cardiovascular regulation. Feldman DS, et al. **Eur J Pharmacol** 1996 Oct 17;313(3):211-20

Ultrastructural study on axonal and dendritic growth cones in the human embryonic spinal cord. Woźniak W, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:89-90

Schwann cell-neuron relationships in spinal cord gray matter. Gilmore SA, et al. **Glia** 1996 Dec;18(4):261-8

Ultrastructural localization of substance P-like immunoreactivity in the intermediolateral column of spontaneously hypertensive rats and Wistar-Kyoto rats. Tan CK, et al. **Histol Histopathol** 1996 Apr;11(2):303-11

Synaptic and nonsynaptic monoaminergic neuron systems in the lamprey spinal cord. Schotland JL, et al. **J Comp Neurol** 1996 Aug 19;372(2):229-44

Axon-glial relationships in early CNS-PNS transitional zone development: an ultrastructural study. Fraher JP. **J Neurocytol** 1997 Jan;26(1):41-52

Node distribution and packing density in the rat CNS-PNS transitional zone. Fraher J. **Microsc Res Tech** 1996 Aug 15;34(6):507-21

The neurokinin-1 receptor antagonist LY306,740 blocks nociception-induced increases in dorsal horn neurokinin-1 receptor gene expression. McCarson KE, et al. **Mol Pharmacol** 1996 Nov;50(5):1189-99

Sprouting of A beta fibers into lamina II of the rat dorsal horn in peripheral neuropathy. Lekan HA, et al. **Neurosci Lett** 1996 Apr 26;208(3):147-50

Developmental expression of alpha-, beta- and gamma-subspecies of protein kinase C in the dorsal corticospinal tract in the rat spinal cord. Miki A. **Neuroscience** 1996 Dec;75(3):939-48

Operant conditioning of H-reflex changes synaptic terminals on primate motoneurons. Feng-Chen KC, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20;93(17):9206-11

Experimental syringomyelia: late ultrastructural changes of spinal cord tissue and magnetic resonance imaging evaluation. Chakrabortty S, et al. **Surg Neurol** 1997 Sep; 48(3):246-54

[The ultrastructural characteristics of the sensorimotor synapses in the amphibian spinal cord] Motorina MV. **Morfologiia** 1996;110(4):48-55 (Eng. Abstr.) **(Rus)**

[The comparative morphological aspect of the formation of the macroglial environment of the spinal cord motor neurons] Savro VA. **Morfologiia** 1996;110(6):55-9 (Eng. Abstr.) **(Rus)**

VIROLOGY

Distribution of Aujeszky's disease virus in experimentally infected mink (Mustela vison). Quiroga MI, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Apr;104(4):147-50

Neurons in the rat brain and spinal cord labeled after pseudorabies virus injected into the external urethral sphincter. Nadelhaft I, et al. **J Comp Neurol** 1996 Nov 18; 375(3):502-17

The course of disease and persistence of virus in the central nervous system varies between individual CBA mice infected with the BeAn strain of Theiler's murine encephalomyelitis virus. Simas JP, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2701-11

Tumor necrosis factor alpha expression in the spinal cord of human T-cell lymphotrophic virus type I associated myelopathy/tropical spastic paraparesis patients [see comments] Fox RJ, et al. **J Neurovirol** 1996 Oct;2(5):323-9 . Comment in: J Neurovirol 1996 Oct;2(5):297-8.

Role of VP2 amino acid 141 in tropism of Theiler's virus within the central nervous system. Jarousse N, et al. **J Virol** 1996 Nov;70(11):8213-7

Cytotoxic T-cell-resistant variants arise at early times after infection in C57BL/6 but not in SCID mice infected with a neurotropic coronavirus. Pewe L, et al. **J Virol** 1997 Oct; 71(10):7640-7

Macrophage antigen-1 positive cells are essential in the defense against Theiler's virus strain GD VII infection in the spinal cord. Kohanawa M, et al. **Microb Pathog** 1997 Jul;23(1):33-8

Apoptosis induced in the spinal cord and dorsal root ganglion by infection of herpes simplex virus type 2 in the mouse. Ozaki N, et al. **Neurosci Lett** 1997 Jun 6;228(2):99-102

SPINAL CORD COMPRESSION

CHEMICALLY INDUCED

Conus medullaris injury following both tetracaine and lidocaine spinal anesthesia. Waters JH, et al. **J Clin Anesth** 1996 Dec;8(8):656-8

COMPLICATIONS

Paraparesis caused by a bilateral cervical synovial cyst. Kotilainen E, et al. **Acta Neurol Scand** 1997 Jul;96(1):59-61

Cervical myelo-radiculopathy in athetoid cerebral palsy. Mikawa Y, et al. **Arch Orthop Trauma Surg** 1997; 116(1-2):116-8

Tethered thoracic cord resulting from spinal cord herniation. Henry A, et al. **Arch Phys Med Rehabil** 1997 May; 78(5):530-3

Arthritis of shoulder and spinal cord compression due to Brucella disc infection [clinical conference] Ibero I, et al. **Br J Rheumatol** 1997 Mar;36(3):377-81

Gabexate mesilate, a synthetic protease inhibitor, prevents compression-induced spinal cord injury by inhibiting activation of leukocytes in rats [see comments] Taoka Y, et al. **Crit Care Med** 1997 May;25(5):874-9. Comment in: Crit Care Med 1997 May;25(5):725.

Spinal cord compression due to concomitant primary lymphoma and Mycobacterium avium-intracellulare infection of the paravertebral muscles in an AIDS patient [letter] Moulignier A, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):891-3 (15 ref.)

Acute paraplegia in the absence of trauma. Maloy AL, et al. **Hosp Pract (Off Ed)** 1997 May 15;32(5):225-6, 231

Imaging findings of spontaneous spinal epidural hematoma. Chen CJ, et al. **J Formos Med Assoc** 1997 Apr;96(4):283-7

High cervical myelopathy presenting with the numb clumsy hand syndrome. Romano JG, et al. **J Neurol Sci** 1996 Sep 1;140(1-2):137-40

An 89-year-old woman with urinary incontinence, 1 year later [comment] Daley J, et al. **JAMA** 1997 Aug 27; 278(8):679. Comment on: JAMA 1996 Dec 11;276(22):1832-40.

Sleep-related periodic leg movements associated with spinal cord lesions. Lee MS, et al. **Mov Disord** 1996 Nov; 11(6):719-22

Spinal abscess with cord compression complicating infected subclavian cannula. Nawaz M, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):842

Neurological impairment during long-term intrathecal infusion of bupivacaine in cancer patients: a sign of spinal cord compression. van Dongen RT, et al. **Pain** 1997 Jan; 69(1-2):205-9

Delayed post-traumatic syringohydromyelia after an uncomplicated fracture of the spine: case report and literature review. Güler-Uysal F, et al. **Spinal Cord** 1996 May;34(5):301-4 (14 ref.)

Coexisting peripheral nerve and cervical cord compression. Kaneko K, et al. **Spine** 1997 Mar 15;22(6):636-40

Nonfunctioning malignant paraganglioma of the posterior mediastinum with spinal cord compression. A case report. Noorda RJ, et al. **Spine** 1996 Jul 15;21(14):1703-9 (61 ref.)

DIAGNOSIS

MR of thoracic cord compression caused by epidural extramedullary hematopoiesis in myelodysplastic syndrome. Dibbern DA Jr, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):363-6

Cervical myelopathy associated with intracranial dural arteriovenous fistula: MR findings before and after treatment. Ernst RJ, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1330-4

Failure of magnetic resonance imaging to reveal the cause of a progressive cervical myelopathy related to postoperative spinal deformity: a case report. Stein J. **Am J Phys Med Rehabil** 1997 Jan-Feb;76(1):73-5

Case report: sclerotic skeletal haemangiomatosis presenting with spinal cord compression—CT and MRI findings [see comments] Chrysikopoulos H, et al. **Br J Radiol** 1996 Oct; 69(826):965-7. Comment in: Br J Radiol 1997 Apr;70:429-31.

Magnetic resonance imaging of vertebral compression fractures. Shih TT, et al. **J Formos Med Assoc** 1996 Apr; 95(4):313-9

Hyperactive pectoralis reflex as an indicator of upper cervical spinal cord compression. Report of 15 cases. Watson JC, et al. **J Neurosurg** 1997 Jan;86(1):159-61

Usefulness and reliability of neurological signs for level diagnosis in cervical myelopathy caused by soft disc herniation. Matsumoto M, et al. **J Spinal Disord** 1996 Aug; 9(4):317-21

Compressive myelopathy in fluorosis: MRI. Gupta RK, et al. **Neuroradiology** 1996 May;38(4):338-42

Giant lumbar meningioma: a common tumour in an unusual location. Tolias CM, et al. **Neuroradiology** 1997 Apr; 39(4):276-7

Cine magnetic resonance imaging of spinal intradural arachnoid cysts. Shimizu H, et al. **Neurosurgery** 1997 Jul; 41(1):95-100

False localizing signs in upper cervical spinal cord compression [see comments] Sonstein WJ, et al. **Neurosurgery** 1996 Mar;38(3):445-8; discussion 448-9. Comment in: Neurosurgery 1997 Jan;40(1):217-8.

The floppy infant: a new manifestation of nonaccidental injury. Thomas NH, et al. **Pediatr Neurosurg** 1995; 23(4):188-91

[Spinal cord compression in systemic hydatidosis: study of a case with magnetic resonance and computerized tomography] Tedeschi E, et al. **Radiol Med (Torino)** 1996 Sep;92(3):315-7 **(Ita)**

[A combined lesion of the cervical spinal cord with a posterior herniated disk and an extramedullary tumor] Neretin VIa, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):80-3 **(Rus)**

DRUG THERAPY

Effect of 21-aminosteroid on extracellular energy-related metabolites and amino acids after compression injury of rat spinal cord. Farooque M, et al. **Exp Brain Res** 1997 Jan;113(1):1-4

The effect of riluzole on post-traumatic spinal cord injury in the rat. Stutzmann JM, et al. **Neuroreport** 1996 Jan 31; 7(2):387-92

Effect of dietary vitamin C on compression injury of the spinal cord in a rat mutant unable to synthesize ascorbic

acid and its correlation with that of vitamin E. Katoh D, et al. **Spinal Cord** 1996 Apr;34(4):234–8

Ketoconazole–induced adrenal crisis in a patient with metastatic prostatic adenocarcinoma: case report and review of the literature. Sarver RG, et al. **Urology** 1997 May;49(5):781–5 (27 ref.)

ETIOLOGY

Spinal cord compression due to extramedullary hematopoiesis in the proliferative phase of polycythemia vera. de Morais JC, et al. **Acta Haematol** 1996;96(4):242–4

Paraparesis caused by a bilateral cervical synovial cyst. Kotilainen E, et al. **Acta Neurol Scand** 1997 Jul;96(1):59–61

Frequency of unexpected multifocal metastasis in patients with acute spinal cord compression. Evaluation by low–field MR imaging in cancer patients. Heldmann U, et al. **Acta Radiol** 1997 May;38(3):372–5

MR of thoracic cord compression caused by epidural extramedullary hematopoiesis in myelodysplastic syndrome. Dibbern DA Jr, et al.
AJNR Am J Neuroradiol 1997 Feb;18(2):363–6

Spinal canal compromise in Proteus syndrome: case report and review of the literature. Ring D, et al.
Am J Orthop 1997 Apr;26(4):275–8 (14 ref.)

Ossification of the ligamentum flavum causing thoracic myelopathy: a case report. Shenoi RM, et al.
Am J Phys Med Rehabil 1997 Jan–Feb;76(1):68–72

Combined acute aortic thrombosis and metastatic spinal cord compression causing paraplegia in a patient with small–cell lung carcinoma (SCLC) [letter] Mermershtain W, et al. **Ann Oncol** 1996 Mar;7(3):321–2

Cervical spinal cord compression in hereditary multiple exostoses. Report of a case and a review of the literature. Mikawa Y, et al. **Arch Orthop Trauma Surg** 1997; 116(1–2):112–5 (18 ref.)

Role of surgical treatment in 70 patients with vertebral metastasis causing cord or root compression. Turgut M, et al. **Arch Orthop Trauma Surg** 1997;116(6–7):415–9

Re–inventing the wheel: assessing malignant spinal cord compression outcomes [editorial; comment] Graham P.
Australas Radiol 1997 May;41(2):91–2. Comment on: Australas Radiol 1997 May;41(2):137–42.

The efficacy of treatment for malignant epidural spinal cord compression [see comments] Milross CG, et al.
Australas Radiol 1997 May;41(2):137–42. Comment in: Australas Radiol 1997 May;41(2):91–2.

Listeria monocytogenes meningitis complicated by symptomatic spinal subarachnoid cysts. Abduljabbar T, et al. **Br J Neurosurg** 1996 Jun;10(3):317–9

Disintegration of cervical intervertebral BOP grafts with neurological sequelae: a report of two cases. Dorward NL, et al. **Br J Neurosurg** 1997 Feb;11(1):65–8

Spinal cord compression caused by ossification of the transverse ligament of the atlas. Perera S, et al.
Br J Neurosurg 1995;9(6):787–8

Infarction of a vertebral pedicle causing acute spinal cord compression. Sochart DH, et al. **Br J Neurosurg** 1997 Apr; 11(2):152–5

Intradural tuberculous granuloma [letter; comment] Turgut M. **Br J Neurosurg** 1997 Jun;11(3):264. Comment on: Br J Neurosurg 1996 Feb;10(1):93–5.

Skeletal haemangiomatosis presenting with spinal cord compression––postoperative management of progressive disease [letter; comment] Plowman PN. **Br J Radiol** 1997 Apr;70:429–31. Comment on: Br J Radiol 1996 Oct;69(826):965–7.

Unusual complications of cervical spine surgery for cervical myelopathy in rheumatoid arthritis. Munro R, et al.
Br J Rheumatol 1996 Jul;35(7):682–5

Periodontoid synovial cyst causing cervico–medullary compression. Kaufmann AM, et al. **Can J Neurol Sci** 1996 Aug;23(3):227–30

Complete fracture–dislocation of the thoracic spine with spontaneous neurologic decompression: a case report. Huang TJ, et al. **Chang Keng I Hsueh** 1995 Dec; 18(4):387–91

Spinal cord compression resulting from Burkitt's lymphoma in children. Dechambenoit G, et al. **Childs Nerv Syst** 1996 Apr;12(4):210–4

Eosinophilic granuloma of C4 causing spinal cord compression. Maggi G, et al. **Childs Nerv Syst** 1996 Oct; 12(10):630–2

Myelopathy due to hypoplasia of the atlas. A case report. Yamashita K, et al. **Clin Orthop** 1997 May;(338):90–3

Case report: granulocytic sarcoma (GS) presenting as acute cord compression in a previously undiagnosed patient. Sajjad Z, et al. **Clin Radiol** 1997 Jan;52(1):69–71

Thoracic spinal cord compression caused by hypophosphataemic rickets: a case report and review of the world literature. Dunlop DJ, et al. **Eur Spine J** 1996; 5(4):272–4 (7 ref.)

Spinal cord compression caused by the rod of a Harrington instrumentation device: a late complication in scoliosis surgery. Krödel A, et al. **Eur Spine J** 1997;6(3):208–10

Spinal cord compression in renal osteodystrophy. Macfarlane JD, et al. **Eur Spine J** 1995;4(6):362–5

Spinal cord compression by primary non–Hodgkin's lymphoma. Lakshmaiah KC, et al. **Indian J Cancer** 1995 Jun;32(2):81–4

Spontaneous, extra–dural haematoma causing spinal cord compression. Mustafa M, et al. **Int Orthop** 1996;20(6):383–4

Cervical cord compression due to atypical primary neuroectodermal tumor (PNET): one–stage removal and combined cervical spine stabilization. Case report. Visocchi M, et al. **Ital J Neurol Sci** 1997 Jun;18(3):177–81

Compression of the spinal cord due to destructive spondyloarthropathy of the atlanto–axial joints. Mikawa Y, et al. **J Bone Joint Surg Am** 1996 Dec;78(12):1911–4

Endodermal sinus tumor and spinal cord compression [letter] Colak A, et al. **J Neurosurg** 1997 Oct;87(4):652–3

Primary endodermal sinus tumor presenting with spinal cord compression. Case report. Resnick DK, et al.
J Neurosurg 1997 Jan;86(1):151–3

Spinal epidural metastasis: implications for spinal analgesia to treat "refractory" cancer pain. Appelgren L, et al.
J Pain Symptom Manage 1997 Jan;13(1):25–42

Cervical cord compression complicating atlantoaxial subluxation in ankylosing spondylitis [letter; comment] Dellestable F, et al. **J Rheumatol** 1996 Sep;23(9):1668–70. Comment on: J Rheumatol 1995 Nov;22(11):2120–5.

Comparison of neurologic deficits with atlanto–dens intervals in patients with Down syndrome. Ferguson RL, et al.
J Spinal Disord 1997 Jun;10(3):246–52 (30 ref.)

Acute spontaneous spinal epidural hematoma––a life–threatening emergency. Rahman NU, et al.
JPMA J Pak Med Assoc 1997 May;47(5):148–50 (17 ref.)

Embolization as treatment for spinal cord compression from renal cell carcinoma: case report. Kuether TA, et al.
Neurosurgery 1996 Dec;39(6):1260–2; discussion 1262–3

Myelopathy caused by retro–odontoid disc hernia: case report. Nishizawa S, et al. **Neurosurgery** 1996 Dec; 39(6):1256–9

False localizing signs in upper cervical spinal cord compression [letter; comment] Rafael H. **Neurosurgery** 1997 Jan;40(1):217–8. Comment on: Neurosurgery 1996 Mar;38(3):445–8; discussion 448–9.

Spinal cord compression from metastatic Leydig's cell tumor of the testis: case report. Sawin PD, et al.
Neurosurgery 1996 Feb;38(2):407–11 (53 ref.)

Atypical mycobacterial vertebral osteomyelitis in an immunocompetent patient. Igram CM, et al. **Orthopedics** 1997 Feb;20(2):163–6

Unusual case of inflammatory spinal epidural mass (Castleman syndrome). Alper G, et al. **Pediatr Neurol** 1996 Jul;15(1):60–2 (15 ref.)

Myeloradicular features as the initial presentation of sarcomas of childhood. Geller TJ, et al. **Pediatr Neurol** 1996 May; 14(4):297–300

Spontaneous regression of intraspinal neuroblastoma. Kullendorff CM, et al. **Pediatr Surg Int** 1997 Apr; 12(4):305–7

Local control and survival in spinal cord compression from lymphoma and myeloma. Wallington M, et al.
Radiother Oncol 1997 Jan;42(1):43–7

Cervical myelopathy in psoriatic spondylitis. Akagi S, et al.
Scand J Rheumatol 1996;25(5):337–9

Thoracic myelopathy due to intraspinal rheumatoid nodules. Sasaki S, et al. **Scand J Rheumatol** 1997;26(3):227–8

Spinal epidural non–Hodgkin's lymphoma: case reports of three patients presenting with spinal cord compression. Lim CC, et al. **Singapore Med J** 1996 Oct;37(5):497–500 (19 ref.)

Hydatid disease of the spine. Baysefer A, et al.
Spinal Cord 1996 May;34(5):297–300

Acute paraplegia due to an extradural spinal lipoma: case report. Meisheri YV, et al. **Spinal Cord** 1996 Oct; 34(10):633–4

The effect of post–injury spinal position on canal occlusion in a cervical spine burst fracture model. Ching RP, et al. **Spine** 1997 Aug 1;22(15):1710–5

Cervical myelopathy caused by the anomalous vertebral artery. A case report. Furumoto T, et al. **Spine** 1996 Oct 1;21(19):2280–3 (7 ref.)

Atlantoaxial fusion and retrodental pannus in rheumatoid arthritis. Grob D, et al. **Spine** 1997 Jul 15;22(14):1580–3; discussion 1584

[Metastatic spinal cord compression in patients with lung cancer] Bach F, et al. **Ugeskr Laeger** 1996 Sep 30; 158(40):5606–10 (Eng. Abstr.) **(Dan)**

[Back pain and medullary compression in patients with cancer (editorial)] Hansen HH. **Ugeskr Laeger** 1996 Sep 30; 158(40):5588 **(Dan)**

[Back pain, bone metastases and medullary compression] Ottesen SS, et al. **Ugeskr Laeger** 1996 Sep 30; 158(40):5632–3 (Eng. Abstr.) **(Dan)**

[Os odontoideum. A neurologic syndrome after orthopedic reduction of a C1–C2 subluxation] Himmer O, et al.
Acta Orthop Belg 1997 Jun;63(2):118–21 (Eng. Abstr.) **(Fre)**

[Thoracic spondylotic myelopathies. Apropos of 4 new cases] Stecken J, et al. **Neurochirurgie** 1996;42(3):147–52 (40 ref.) (Eng. Abstr.) **(Fre)**

[Spinal cord compression of sarcoidosis origin: a case] Tieulie N, et al. **Rev Med Interne** 1997 Jul;18(7):578–81 (18 ref.) (Eng. Abstr.) **(Fre)**

[Spinal cord compression by extramedullary hematopoiesis in thalassemia major] Müller–Lisse GU, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1996 Nov;165(5):505–7 (8 ref.) **(Ger)**

[Cervical myelopathy: anatomopathology, clinical aspects and therapy] Benini A. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1383–6 (Eng. Abstr.) **(Ger)**

[Radiotherapy of epidural metastases with spinal cord compression] Wagner W, et al. **Strahlenther Onkol** 1996 Nov;172(11):604–9 (Eng. Abstr.) **(Ger)**

[Malignant epidural cord compression] Loven D, et al.
Harefuah 1996 Dec 1;131(11):457–62, 536 (Eng. Abstr.) **(Heb)**

[Myelopathy caused by hypertrophy of the posterior longitudinal ligament of the cervical spine in a patient with long–term hemodialysis] Mizuno J, et al.
No Shinkei Geka 1996 Jul;24(7):655–9 (Eng. Abstr.) **(Jpn)**

[Chondromyxoid fibroma of the thoracic spine: a case report and review of the literature] Leal Filho MB, et al.
Arq Neuropsiquiatr 1995 Dec;53(4):837–40 (12 ref.) (Eng. Abstr.) **(Por)**

[Pulmonary hydatidosis as a cause of spinal cord compression] Senar Calderón A, et al.
Arch Bronconeumol 1996 Feb;32(2):108–10 (Eng. Abstr.) **(Spa)**

[Spinal cord compression as the presenting form of non–Hodgkin's lymphoma] Amigo ML, et al.
Sangre (Barc) 1995 Dec;40(6):505–7 (Eng. Abstr.) **(Spa)**

GENETICS

Focal dermal hypoplasia (Goltz syndrome) with vertebral solid aneurysmal bone cyst variant. A case report. D'Alise MD, et al. **Pediatr Neurosurg** 1996;24(3):151–4

METABOLISM

Increased expression of growth–associated protein 43 immunoreactivity in axons following compression trauma to rat spinal cord. Li GL, et al.
Acta Neuropathol (Berl) 1996 Jul;92(1):19–26

Expression of the ubiquitin carboxyl–terminal hydrolase PGP 9.5 in axons following spinal cord compression trauma. An immunohistochemical study in the rat. Li GL, et al.
APMIS 1997 May;105(5):384–90

Roles of nitric oxide in compression injury of rat spinal cord. Hamada Y, et al. **Free Radic Biol Med** 1996;20(1):1–9

Effects of methylprednisolone on extracellular lactic acidosis and amino acids after severe compression injury of rat spinal cord. Farooque M, et al. **J Neurochem** 1996 Mar; 66(3):1125–30

Effects of moderate hypothermia on extracellular lactic acid and amino acids after severe compression injury of rat spinal cord. Farooque M, et al. **J Neurotrauma** 1997 Jan; 14(1):63–9

Changes of extracellular levels of amino acids after graded compression trauma to the spinal cord: an experimental study in the rat using microdialysis. Farooque M, et al. **J Neurotrauma** 1996 Sep;13(9):537–48

PARASITOLOGY

Quadriplegia with cervical cord compression. Tammam A, et al. **Postgrad Med J** 1997 Jun;73(860):381–2

[Spinal cord compression in systemic hydatidosis: study of a case with magnetic resonance and computerized tomography] Tedeschi E, et al. **Radiol Med (Torino)** 1996 Sep;92(3):315–7 **(Ita)**

PATHOLOGY

Increased expression of growth–associated protein 43 immunoreactivity in axons following compression trauma to rat spinal cord. Li GL, et al.
Acta Neuropathol (Berl) 1996 Jul;92(1):19–26

Histological and functional evaluation of experimental spinal cord injury: evidence of a stepwise response to graded compression. Gruner JA, et al. **Brain Res** 1996 Aug 5; 729(1):90–101

Spinal cord compression injury in guinea pigs: structural changes of endothelium and its perivascular cell associations after blood–brain barrier breakdown and repair. Jaeger CB, et al. **Exp Neurol** 1997 Apr;144(2):381–99

Ultrastructure of the glial cells after spinal cord compression in rabbits. Orkisz S, et al. **Folia Morphol (Warsz)** 1996; 55(4):403–5

Three–dimensional topographic analysis of spinal accessory motoneurons under chronic mechanical compression: an experimental study in the mouse. Baba H, et al.
J Neurol 1997 Apr;244(4):222–9

Quantitative analysis of the spinal cord motoneuron under chronic compression: an experimental observation in the mouse. Baba H, et al. **J Neurol** 1996 Feb;243(2):109–16

Multiple–level compression myelopathy: concomitant asymptomatic cervical compression adversely affects surgical outcome for thoracic compression myelopathy. Nakamura K, et al. **J Spinal Disord** 1996 Dec;9(6):500–4

Increasing irritability with sudden onset of flaccid weakness. Patel H, et al. **Semin Pediatr Neurol** 1996 Sep;3(3):192–7

Transforaminal and posterior decompressions of the lumbar spine. A comparative study of stability and intervertebral foramen area. Osman SG, et al. **Spine** 1997 Aug 1; 22(15):1690–5

PHYSIOPATHOLOGY

Correlation between spinal cord blood flow and arterial diameter following acute spinal cord injury in rats. Ohashi T, et al. **Acta Neurochir (Wien)** 1996;138(3):322–9

Clinical outcome in metastatic spinal cord compression. A prospective study of 153 patients. Helweg–Larsen S.
Acta Neurol Scand 1996 Oct;94(4):269–75

Short–latency somatosensory evoked potentials in patients with cervical compressive lesions: morphological versus

functional examination. Miyoshi T, et al. **Electromyogr Clin Neurophysiol** 1996 Sep;36(6):323–32

Mechanical and biochemical injury of spinal nerve roots: a morphological and neurophysiological study. Cornefjord M, et al. **Eur Spine J** 1996;5(3):187–92

Clip compression injury in the spinal cord: a correlative study of neurological and morphological alterations. von Euler M, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):502–10

Plasticity of the spinal cord contributes to neurological improvement after treatment by cervical decompression. A magnetic resonance imaging study. Baba H, et al. **J Neurol** 1997 Jul;244(7):455–60

Spinal cord compression due to extramedullary haematopoiesis in thalassaemia: a case report and review of the literature [letter] Martina IS, et al. **J Neurol** 1996 Apr;243(4):364–6

Compression injury of mammalian spinal cord in vitro and the dynamics of action potential conduction failure. Shi R, et al. **J Neurophysiol** 1996 Sep;76(3):1572–80

A new model of acute compressive spinal cord injury in vitro. Fehlings MG, et al. **J Neurosci Methods** 1997 Feb; 71(2):215–24

Spinal cord evoked potential monitoring for cervical and thoracic compressive myelopathy. Baba H, et al. **Paraplegia** 1996 Feb;34(2):100–6

Viscoelastic relaxation and regional blood flow response to spinal cord compression and decompression. Carlson GD, et al. **Spine** 1997 Jun 15;22(12):1285–91

Experimental acute dorsal compression of cat spinal cord: correlation of magnetic resonance signal intensity with spinal cord evoked potentials and morphology. Takahashi T, et al. **Spine** 1996 Jan 15;21(2):166–73

[Left hand clumsiness due to disturbance of kinesthesia after damage to the dorsal column of the high cervical cord] Hashimoto R, et al. **Rinsho Shinkeigaku** 1997 Apr; 37(4):319–25 (22 ref.) (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

A case of non-Hodgkin's lymphoma with bone involvement. Das T, et al. **J Indian Med Assoc** 1996 Apr;94(4):152–3

Epidural lipomatosis: case report and literature review. Hierholzer J, et al. **Neuroradiology** 1996 May;38(4):343–8 (25 ref.)

RADIOTHERAPY

Radiologic features compared to clinical findings in a prospective study of 153 patients with metastatic spinal cord compression treated by radiotherapy. Helweg-Larsen S, et al. **Acta Neurochir (Wien)** 1997;139(2):105–11

Extramedullary haematopoiesis in thalassaemia: results of radiotherapy: a report of three patients. Pistevou-Gompaki K, et al. **Clin Oncol (R Coll Radiol)** 1996;8(2):120–2

Short-course radiotherapy (8 Gy x 2) in metastatic spinal cord compression: an effective and feasible treatment. Maranzano E, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15;38(5):1037–44

REHABILITATION

Nonoperative management of herniated cervical intervertebral disc with radiculopathy. Saal JS, et al. **Spine** 1996 Aug 15;21(16):1877–83

SURGERY

Expanding laminoplasty for cervical myelopathy-spinous process roofing technique. Morimoto T, et al. **Acta Neurochir (Wien)** 1996;138(6):720–5

Unilateral laminotomy for bilateral decompression of lumbar spinal stenosis. Part I: Anatomical and surgical considerations. Spetzger U, et al. **Acta Neurochir (Wien)** 1997;139(5):392–6

Unilateral laminotomy for bilateral decompression of lumbar spinal stenosis. Part II: Clinical experiences. Spetzger U, et al. **Acta Neurochir (Wien)** 1997;139(5):397–403

Spinal epidural abscess—review of 10 cases. Tacconi L, et al. **Acta Neurochir (Wien)** 1996;138(5):520–3 (17 ref.)

Dumbbell hydatid cyst of the spine. Parvaresh M, et al. **Br J Neurosurg** 1996 Apr;10(2):211–3

Unusual complications of cervical spine surgery for cervical myelopathy in rheumatoid arthritis. Munro R, et al. **Br J Rheumatol** 1996 Jul;35(7):682–5

Cervical decompression in mild mucopolysaccharidosis type II (Hunter syndrome). O'Brien DP, et al. **Childs Nerv Syst** 1997 Feb;13(2):87–90

Surgical management of cervicomedullary compression in achondroplasia. Yamada Y, et al. **Childs Nerv Syst** 1996 Dec;12(12):737–41

Monitoring of median nerve somatosensory evoked potentials during cervical spinal cord decompression. Dennis GC, et al. **J Clin Neurophysiol** 1996 Jan;13(1):51–9

Lordotic alignment and posterior migration of the spinal cord following en bloc open-door laminoplasty for cervical myelopathy: a magnetic resonance imaging study. Baba H, et al. **J Neurol** 1996 Sep;243(9):626–32

Anterior cervical foraminotomy [letter] George B. **J Neurosurg** 1997 Oct;87(4):653–4

Long-term follow-up review of suspension laminotomy for cervical compression myelopathy. Inoue H, et al. **J Neurosurg** 1996 Nov;85(5):817–23

Modified open-door cervical expansive laminoplasty for spondylotic myelopathy: operative technique, outcome, and predictors for gait improvement. Lee TT, et al. **J Neurosurg** 1997 Jan;86(1):64–8

Thoracic ossification of the posterior longitudinal ligament, ossification of the yellow ligament from T9–T12 with superimposed acute T10/T11 disc herniation: controversies in surgical management. Epstein N. **J Spinal Disord** 1996 Oct;9(5):446–7; discussion 447–50

Thoracic dumbbell-shaped neurinoma treated by unilateral hemilaminectomy with partial costotransversectomy—case report. Takamura Y, et al. **Neurol Med Chir (Tokyo)** 1997 Apr;37(4):354–7

Vertebral haemangiomas with spinal cord compression: the place of preoperative percutaneous vertebroplasty with methyl methacrylate. Ide C, et al. **Neuroradiology** 1996 Aug;38(6):585–9

Granulocytic sarcoma of the spine in nonleukemic patients: report of three cases. Deme S, et al. **Neurosurgery** 1997 Jun;40(6):1283–7

Operative treatment of spontaneous spinal epidural hematomas: a study of the factors determining postoperative outcome. Groen RJ, et al. **Neurosurgery** 1996 Sep;39(3):494–508; discussion 508–9 (22 ref.)

Intradural extramedullary xanthoma of the spine: a rare lesion arising from the dura mater of the spine: case report. Kim DS, et al. **Neurosurgery** 1996 Jul;39(1):182–5

Idiopathic spinal epidural lipomatosis. Robertson SC, et al. **Neurosurgery** 1997 Jul;41(1):68–74; discussion 74–5 (41 ref.)

Partial pediculectomy in the treatment of lumbar spinal stenosis: technical note. Sheehan JM, et al. **Neurosurgery** 1997 Jul;41(1):308–10

Lateral extracavitary approach to the thoracic and thoracolumbar spine. Graham AW 3rd, et al. **Orthopedics** 1997 Jul;20(7):605–10

Recurrent compression of Chiari malformation [letter; comment] Cochrane DD. **Pediatr Neurosurg** 1996;24(5):277 . Comment on: Pediatr Neurosurg 1995;23(6):323–7.

Posterior limbus vertebral lesions causing lumbosacral radiculopathy and the cauda equina syndrome. Baba H, et al. **Spinal Cord** 1996 Jul;34(7):427–32

Cervical myelopathy in elderly patients: clinical results and MRI findings before and after decompression surgery. Nagata K, et al. **Spinal Cord** 1996 Apr;34(4):220–6

Laminoplasty with foraminotomy for coexisting cervical myelopathy and unilateral radiculopathy: a preliminary report. Baba H, et al. **Spine** 1996 Jan 15;21(2):196–202

Extradural tethering effects as one mechanism of radiculopathy complicating posterior decompression of the cervical spinal cord [letter; comment] Epstein JA. **Spine** 1996 Aug 1;21(15):1839–40. Comment on: Spine 1996 Jan 15;21(2):203–11.

Neck and shoulder pain after laminoplasty [letter] Moon MS. **Spine** 1997 Jul 15;22(14):1674–6

Extradural tethering effect as one mechanism of radiculopathy complicating posterior decompression of the cervical spinal cord [see comments] Tsuzuki N, et al. **Spine** 1996 Jan 15;21(2):203–11 (14 ref.). Comment in: Spine 1996 Aug 1;21(15):1839–40.

A long-term outcome study of 170 surgically treated patients with compressive cervical radiculopathy. Davis RA. **Surg Neurol** 1996 Dec;46(6):523–30; discussion 530–3

[Spontaneous elimination by the natural tracts of screws of anterior cervical osteosynthesis. Apropos of a case] Chataigner H, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(1):78–82 (Eng. Abstr.) **(Fre)**

[Spinal stabilization in extradural metastatic disease. Indications and follow-up of 32 cases] Seiler H, et al. **Unfallchirurg** 1997 Apr;100(4):294–300 (Eng. Abstr.) **(Ger)**

THERAPY

Re-inventing the wheel: assessing malignant spinal cord compression outcomes [editorial; comment] Graham P. **Australas Radiol** 1997 May;41(2):91–2. Comment on: Australas Radiol 1997 May;41(2):137–42.

The efficacy of treatment for malignant epidural spinal cord compression [see comments] Milross CG, et al. **Australas Radiol** 1997 May;41(2):137–42. Comment in: Australas Radiol 1997 May;41(2):91–2.

VETERINARY

High resolution protein electrophoresis of equine cerebrospinal fluid. Furr M, et al. **Am J Vet Res** 1997 Sep; 58(9):939–41

Auriculotherapy in canine thoracolumbar disc disease [letter; comment] Lubbe AM. **J S Afr Vet Assoc** 1990 Dec; 61(4):187. Comment on: J S Afr Vet Assoc 1990 Sep;61(3):102–5.

VIROLOGY

Non-compressive myelopathy—is human T-cell lymphotropic virus type 1 (HTLV-1) the cause in Indian context? Thussu A, et al. **Aust N Z J Med** 1996 Oct; 26(5):705–6

SPINAL CORD DISEASES

Central nervous system abscesses due to Coccidioides species. Bañuelos AF, et al. **Clin Infect Dis** 1996 Feb;22(2):240–50 (26 ref.)

Spinal cord syndromes. Wagner R, et al. **Emerg Med Clin North Am** 1997 Aug;15(3):699–711 (56 ref.)

BLOOD

The determination of vasoactive substances during autonomic dysreflexia. Zhou GC, et al. **Spinal Cord** 1997 Jun; 35(6):390–3

CHEMICALLY INDUCED

Severe cervical dysplasia and nasal cartilage calcification following prenatal warfarin exposure. Howe AM, et al. **Am J Med Genet** 1997 Sep 5;71(4):391–6

Tizanidine. A review of its pharmacology, clinical efficacy and tolerability in the management of spasticity associated with cerebral and spinal disorders. Wagstaff AJ, et al. **Drugs** 1997 Mar;53(3):435–52 (112 ref.)

Spinal myoclonus following intrathecal administration of diatrizoate meglumine. Sam MC, et al. **J Neuroimaging** 1996 Oct;6(4):256–8

Spinal cord toxicity of epidural and subarachnoid analgesics. Abram SE. **Reg Anesth** 1996 Nov-Dec;21(6 Suppl):84–8 (44 ref.)

Neurotoxicity of subarachnoid bupivacaine [letter; comment] Sakura S, et al. **Reg Anesth** 1997 Mar-Apr;22(2):198–9. Comment on: Reg Anesth 1996 May-Jun;21(3):234–8.

[Necrotizing myelopathy after intrathecal methotrexate (letter)] Sanhes L, et al. **Presse Med** 1997 May 3–10; 26(15):719 **(Fre)**

[Tetraplegia and acute respiratory insufficiency from an ischemic cervical medulla lesion after cocaine use. A clinical case] Laurenzi L, et al. **Minerva Anestesiol** 1995 Sep;61(9):387–91 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Tethered thoracic cord resulting from spinal cord herniation. Henry A, et al. **Arch Phys Med Rehabil** 1997 May; 78(5):530–3

Gynecomastia following spinal cord disorder. Heruti RJ, et al. **Arch Phys Med Rehabil** 1997 May;78(5):534–7

Acute myelitis associated with hyperIgEemia and atopic dermatitis. Kira J, et al. **J Neurol Sci** 1997 May 29; 148(2):199–203

AIDS-associated vacuolar myelopathy and tumor necrosis factor-alpha (TNF alpha). Tan SV, et al. **J Neurol Sci** 1996 Jun;138(1-2):134–44

Autonomic gastroenteric disorders in children due to lesions of cranial nerve nuclei, spinal cord and peripheral innervation. Guzzetta F, et al. **J Pediatr Gastroenterol Nutr** 1997;25 Suppl 1:S24–5

Cervical spine pseudogout with myelopathy and Charcot joints. Fidler WK, et al. **J Rheumatol** 1996 Aug; 23(8):1445–8

Urodynamic and electrophysiologic study of the urinary disturbances caused by cervical myelopathy. Mochida K, et al. **J Spinal Disord** 1996 Apr;9(2):141–5

Bladder dysfunction secondary to spinal cord amyloidosis. Sakamoto K, et al. **J Urol** 1997 Mar;157(3):949

Propriospinal myoclonus upon relaxation and drowsiness: a cause of severe insomnia. Montagna P, et al. **Mov Disord** 1997 Jan;12(1):66–72

Membranous nephropathy associated with an inflammatory myelopathy. Crowe AV, et al. **Nephrol Dial Transplant** 1996 Aug;11(8):1625–6

Forecasting motor recovery after cervical spinal cord injury: value of MR imaging [see comments] Flanders AE, et al. **Radiology** 1996 Dec;201(3):649–55. Comment in: Radiology 1996 Dec;201(3):617–8.

Adult-onset Klippel-Feil syndrome with inaugural neurologic symptoms: two case reports. Guggenbuhl P, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):802–4

Central pain of spinal origin. Bowsher D. **Spinal Cord** 1996 Dec;34(12):707–10 (38 ref.)

Spinal deformity following surgery for spinal cord tumors and tumorous lesions: analysis based on an assessment of the spinal functional curve. Inoue A, et al. **Spinal Cord** 1996 Sep;34(9):536–42

Balloon dilatation of the external urethral sphincter in the treatment of detrusor-sphincter dyssynergia. McFarlane JP, et al. **Spinal Cord** 1997 Feb;35(2):96–8

Schistosomal myelopathy as a cause of neurogenic bladder dysfunction. Razdan S, et al. **Urology** 1997 May; 49(5):777–80

[A 56-year-old man with fever, backache and tetraparesis (clinical conference)] Hattori T, et al. **No To Shinkei** 1996 Feb;48(2):183–93 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Spinal intradural neuroepithelial cyst associated with multiple congenital anomalies in a child. Ceviz A, et al. **Childs Nerv Syst** 1996 Dec;12(12):781–4

DIAGNOSIS

Intraspinal ependymal cyst. Matsuyama T, et al. **Acta Neurochir (Wien)** 1996;138(11):1366–7

Spinal cord lesions in patients with multiple sclerosis: comparison of MR pulse sequences. Hittmair K, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1555–65

Comparison of two MR sequences for the detection of multiple sclerosis lesions in the spinal cord. Lycklama à Nijeholt GJ, et al. **AJNR Am J Neuroradiol** 1996 Sep;

17(8):1533–8
Thoracic intraspinal Paracoccidioidomycosis. Case report. Pacheco RA, et al. **Arq Neuropsiquiatr** 1996 Sep; 54(3):474–8 (10 ref.)
The inter-observer reproducibility of Lasègue's sign in patients with low back pain in general practice. van den Hoogen HJ, et al. **Br J Gen Pract** 1996 Dec;46(413):727–30
Cervical mass lesion presenting as reflex sympathetic dystrophy of the hand. Bhatnagar A, et al. **Clin Exp Rheumatol** 1997 Jan-Feb;15(1):101–4
Solitary spinal cord sarcoidosis without other manifestations of systemic sarcoidosis. Jaster JH, et al. **Clin Imaging** 1997 Jan-Feb;21(1):17–22
Spine MR angiography. Bowen BC, et al. **Clin Neurosci** 1997; 4(3):165–73 (45 ref.)
Case report: spinal cord schistosomiasis: MRI findings. Grand S, et al. **Clin Radiol** 1996 Oct;51(10):739–40
Case report: MR appearances in vitamin B12 neuropathy. Ng VW, et al. **Clin Radiol** 1997 May;52(5):394–6
The rationale and utility of neurophysiological investigations in clinical monitoring for brain and spinal cord ischaemia during surgery and intensive care. Prior P. **Comput Methods Programs Biomed** 1996 Oct;51(1–2):13–27 (101 ref.)
MR monitoring of a medically treated spinal cord abscess presumptively due to Listeria monocytogenes. Duprez TP, et al. **Eur Neurol** 1997;37(4):249–51
Spinal cord herniation: report of two cases and review of the literature. Uchino A, et al. **Eur Radiol** 1997;7(2):289–92 (11 ref.)
Intramedullary cysticerci. Agarwal V, et al. **J Assoc Physicians India** 1995 Feb;43(2):138
Intraspinal extradural arachnoid cyst with spinal cord herniation. Cheng MH. **J Formos Med Assoc** 1996 Sep; 95(9):712–4
Use of gadolinium chelates in MR imaging of the spine. Bradley WG. **J Magn Reson Imaging** 1997 Jan-Feb; 7(1):38–46 (24 ref.)
Spontaneous spinal extradural hematoma during pregnancy. Carroll SG, et al. **J Matern Fetal Med** 1997 Jul-Aug; 6(4):218–9
Brain and spinal cord MR in benign multiple sclerosis: a follow-up study. Filippi M, et al. **J Neurol Sci** 1996 Nov; 143(1–2):143–9
Simultaneous spinal and intracranial chronic subdural hematoma. Case illustration. Leber KA, et al. **J Neurosurg** 1997 Oct;87(4):644
Urologic manifestation of spinal cord sarcoidosis. Fitzpatrick KJ, et al. **J Spinal Cord Med** 1996 Jul;19(3):201–3
Magnetic resonance findings in scuba diving-related spinal cord decompression sickness. Sparacia G, et al. **MAGMA** 1997 Jun;5(2):111–5
Spinal cord lesions in patients with AIDS. Quencer RM, et al. **Neuroimaging Clin N Am** 1997 May;7(2):359–73 (14 ref.)
Diagnostic imaging of infections and neoplasms affecting the spine in patients with AIDS. Thurnher MM, et al. **Neuroimaging Clin N Am** 1997 May;7(2):341–57 (86 ref.)
A case of spinal cord decompression sickness presenting as partial Brown-Sequard syndrome. Kimbro T, et al. **Neurology** 1997 May;48(5):1454–6
Multiple sclerosis presenting as transverse myelopathy: clinical and MRI features. Simnad VI, et al. **Neurology** 1997 Jan;48(1):65–73
Epidermoid cyst of the conus medullaris: atypical MRI and angiographic features. Debray MP, et al. **Neuroradiology** 1996 Aug;38(6):526–8
MRI of the spine in cobalamin deficiency: the value of examining both spinal cord and bone marrow. Duprez TP, et al. **Neuroradiology** 1996 Aug;38(6):511–5
MRI of cervical cord lesions and their resolution in Toxocara canis myelopathy. Duprez TP, et al. **Neuroradiology** 1996 Nov;38(8):792–5
Idiopathic dural herniation of the thoracic spinal cord. Hausmann ON, et al. **Neuroradiology** 1996 Aug; 38(6):503–10
MRI of intramedullary sarcoidosis: follow-up of a case. Waubant E, et al. **Neuroradiology** 1997 May;39(5):357–60
Spinal cord MRI in neuro-Behçet's disease. Yoshioka H, et al. **Neuroradiology** 1996 Oct;38(7):661–2
Langerhans cell histiocytosis presenting as a lumbosacral intradural-extramedullary mass. Tortori-Donati P, et al. **Pediatr Radiol** 1996 Oct;26(10):731–3
Brain and spine imaging findings in AIDS patients. Provenzale JM, et al. **Radiol Clin North Am** 1997 Sep; 35(5):1127–66 (146 ref.)
Low-grade spinal epidural infection. Report of a case. Berthelot JM, et al. **Rev Rhum Engl Ed** 1996 Jan; 63(1):59–61 (17 ref.)
Intraradicular, intervertebral disc herniation. A case report. Finkel HZ. **Spine** 1997 May 1;22(9):1028–9 (8 ref.)
Spontaneous thoracic spinal cord herniation. A case report. Sioutos P, et al. **Spine** 1996 Jul 15;21(14):1710–3 (13 ref.)
[Thoracic medullary epidermoid cyst. Apropos of a case with MRI and review of the literature] Elazhari A, et al. **Neurochirurgie** 1996;42(6):309–11 (10 ref.) (Eng. Abstr.) **(Fre)**
[Clinical and technical assessment of the cervical spine] Dvorak J. **Orthopade** 1996 Nov;25(6):505–11 (Eng. Abstr.) **(Ger)**
[Diagnosis and treatment of thoracic myelopathy] Fujimura Y. **Nippon Seikeigeka Gakkai Zasshi** 1997 Feb;71(2):91–105 (30 ref.) **(Jpn)**
[Transverse myelopathy] Kondo M. **No To Shinkei** 1996 Oct; 48(10):960–1 **(Jpn)**
[Spinal epidural empyemas] Evangelista T, et al. **Acta Med Port** 1995 Nov;8(11):643–7 (Eng. Abstr.) **(Por)**
[Myelographic diagnosis of an epidural arterio-venous fistula] Muñoz A, et al. **Rev Neurol** 1997 Aug;25(144):1203–6 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Oral methionine may improve neuropsychological function in patients with AIDS myelopathy: results of an open-label trial [letter] Dorfman D, et al. **AIDS** 1997 Jul;11(8):1066–7
Tizanidine. A review of its pharmacology, clinical efficacy and tolerability in the management of spasticity associated with cerebral and spinal disorders. Wagstaff AJ, et al. **Drugs** 1997 Mar;53(3):435–52 (112 ref.)
Inhibition of nitric oxide synthesis accelerates the recovery of polysynaptic reflex potentials after transient spinal cord ischemia in cats. Nemoto T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr; 355(4):447–51
Intramedullary cysticercosis cured with drug treatment. A case report. Corral I, et al. **Spine** 1996 Oct 1;21(19):2284–7

EPIDEMIOLOGY

[Selected diseases of the spine and spinal cord as a cause of work disability] Szubert Z, et al. **Med Pr** 1996; 47(6):597–604 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Extradural abscess complicating lumbar extradural anaesthesia and analgesia in an obstetric patient. Kindler C, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):858–61
Pseudocervical cord syndrome: a deceptive flumazenil reversible manifestation of hepatic encephalopathy [letter] McDonald JW, et al. **Arch Neurol** 1996 Oct;53(10):956
Fulminating encephalopathy with perivenular demyelination and vacuolar myelopathy as the initial presentation of human immunodeficiency virus infection. Silver B, et al. **Arch Neurol** 1997 May;54(5):647–50
Cervical myelopathy caused by ossification of the posterior longitudinal ligament in ankylosing spondylitis. Olivieri I, et al. **Arthritis Rheum** 1996 Dec;39(12):2074–7
Spinal cord herniation after stabbing injury. Lee ST, et al. **Br J Neurosurg** 1997 Feb;11(1):84–6
Anterior cervical myelopathy in the early postoperative period. Muñoz Corsini L, et al. **Can J Anaesth** 1997 Aug; 44(8):872–6
Delayed radiation myelopathy: serial MR-imaging and pathology. Koehler PJ, et al. **Clin Neurol Neurosurg** 1996 May;98(2):197–201
Radiation myelopathy: estimates of risk in 1048 patients in three randomized trials of palliative radiotherapy for non-small cell lung cancer. The Medical Research Council Lung Cancer Working Party. Macbeth FR, et al. **Clin Oncol (R Coll Radiol)** 1996;8(3):176–81
Comments on A case of radiation myelopathy after 2 x 8.5 Gy for inoperable non-small cell lung cancer, Dardoufas et al., European Journal of Cancer, 31A, Nos 13/14, pp.2418–2419, 1995 [letter; comment] Hocking M. **Eur J Cancer** 1996 Aug;32A(9):1616. Comment on: Eur J Cancer 1995 Dec;31A(13–14):2418–9.
Comments on A case of radiation myelopathy after 2 x 8.5 Gy for inoperable non-small cell lung cancer, Dardoufas et al., European Journal of Cancer, 31A, Nos 13/14, pp. 2418–2419, 1995 [letter; comment] Macbeth F. **Eur J Cancer** 1996 Aug;32A(9):1616–7. Comment on: Eur J Cancer 1995 Dec;31A(13–14):2418–9.
Radiation myelopathy after chemotherapy and radiation therapy for fallopian tube carcinoma. Higgins RV, et al. **Gynecol Oncol** 1997 Feb;64(2):285–7
Possible implication of leukocytes in secondary pathological changes after spinal cord injury. Katoh S, et al. **Injury** 1997 Apr;28(3):215–7
Cervical myelopathy caused by bilateral fibrosis of the dorsal root ganglion in a patient who had rheumatoid arthritis. A case report. Goldberg BA, et al. **J Bone Joint Surg Am** 1997 Jul;79(7):1069–72
MRI appearances in subacute combined degeneration of the spinal cord due to vitamin B12 deficiency [letter] Larner AJ, et al. **J Neurol Neurosurg Psychiatry** 1997 Jan; 62(1):99–100
Synovial cyst and degeneration of the transverse ligament: an unusual cause of high cervical myelopathy. Case report. Fransen P, et al. **J Neurosurg** 1997 Jun;86(6):1027–30 (17 ref.)
Progressive posttraumatic myelomalacic myelopathy: treatment with untethering and expansive duraplasty. Lee TT, et al. **J Neurosurg** 1997 Apr;86(4):624–8
The dialysis patient with cystic bone defects and spinal cord symptoms. Mourad G, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1870–3
Spinal cord venous infarction following endoscopic sclerotherapy for esophageal varices. Heller SL, et al. **Neurology** 1996 Oct;47(4):1081–5
Group B streptococcal meningitis: a case of transverse myelitis with spinal cord and posterior fossa cysts. Puvabanditsin S, et al. **Pediatr Radiol** 1997 Apr;27(4):317–8
Dural arteriovenous fistula of the spinal cord: an uncommon cause of myelopathy. Wityk RJ. **Semin Neurol** 1996 Mar; 16(1):27–32 (29 ref.)
Spinal cord dysfunction caused by non-traumatic hematomyelia. Karavelis A, et al. **Spinal Cord** 1996 May; 34(5):268–71 (20 ref.)
Expansive laminoplasty for cervical radiculomyelopathy due to soft disc herniation. Iwasaki M, et al. **Spine** 1996 Jan 1;21(1):32–8
Selecting a surgical method for thoracic myelopathy caused by ossification of the posterior longitudinal ligament. Kurosa Y, et al. **Spine** 1996 Jun 15;21(12):1458–66
Myelopathy resulting from the atlantodental hypertrophic osteoarthritis accompanying the dens hypertrophy. Two case reports. Sato K, et al. **Spine** 1996 Jun 15;21(12):1467–71
Atlantoaxial instability in os odontoideum with myelopathy. Watanabe M, et al. **Spine** 1996 Jun 15;21(12):1435–9
Hypothesis about the etiology of unexplained painful myelopathy after minor trauma in the spinal canal. Law JD. **Stereotact Funct Neurosurg** 1995;65(1–4):117–9
[Peripheral nerve and spinal cord complication in intravenous heroin addiction] Bernasconi A, et al. **Rev Neurol (Paris)** 1996 Nov;152(11):688–94 (53 ref.) (Eng. Abstr.) **(Fre)**
[Lupic spinal cord diseases and antiphospholipid antibodies] Feki I, et al. **Rev Neurol (Paris)** 1997 Mar;153(2):138–40 (Eng. Abstr.) **(Fre)**
[A case of spinal epidermoid caused by lumbar punctures] Kohama Y, et al. **No Shinkei Geka** 1996 Apr;24(4):375–8 (Eng. Abstr.) **(Jpn)**
[Myelopathy due to vitamin B12 deficiency presenting only sensory disturbances in upper extremities: a case report] Imaiso Y, et al. **Rinsho Shinkeigaku** 1997 Feb;37(2):135–8 (Eng. Abstr.) **(Jpn)**
[Delayed exacerbation of cervical myelopathy in a case of juvenile muscular atrophy of unilateral distal upper extremity] Kameyama T, et al. **Rinsho Shinkeigaku** 1997 Jan;37(1):60–3 (Eng. Abstr.) **(Jpn)**
[Transverse myelitis as initial symptom of disseminated non-Hodgkin lymphoma and HIV-associated vacuolar myelopathy: case report] Moura LP, et al. **Arq Neuropsiquiatr** 1996 Jun;54(2):318–23 (Eng. Abstr.) **(Por)**
[Subacute combined degeneration of the spinal cord: manifestations of esophageal epidermoid carcinoma] Madrid A, et al. **Rev Neurol** 1997 Jul;25(143):1098–101 (Eng. Abstr.) **(Spa)**

GENETICS

Isolated bilateral masseter atrophy in X-linked recessive bulbospinal neuronopathy. Suzuki T, et al. **Neurology** 1997 Feb;48(2):539–40

IMMUNOLOGY

[A case of myeloradiculoneuropathy associated with persistent high titers of anti-GM1 and anti-GD1b antibodies] Niwa K, et al. **Rinsho Shinkeigaku** 1997 Jan; 37(1):26–30 (Eng. Abstr.) **(Jpn)**

METABOLISM

Glucose availability alters ischaemia-induced changes in intracellular pH and calcium of isolated rat spinal roots. Wächtler J, et al. **Brain Res** 1996 Jun 24;725(1):30–6
[Similarities in calcium and magnesium metabolism between amyotrophic lateral sclerosis and calcification of the spinal cord in the Kii Peninsula ALS focus] Yasui M, et al. **No To Shinkei** 1997 Aug;49(8):745–51 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

A case of varicella-zoster myelopathy. Aizawa H, et al. **Acta Neurol Scand** 1996 Jun;93(6):470–2
MR of multiple intraspinal abscesses associated with congenital dermal sinus. Dev R, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):742–3
Intraspinal mycetoma: report of two cases. Arbab MA, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):27–9
Epidural spinal infection. Variability of clinical and magnetic resonance imaging findings. Küker W, et al. **Spine** 1997 Mar 1;22(5):544–50; discussion 551
[Streptococcus milleri subacute spinal cord abscess. Apropos of a case] Lahdou JB, et al. **Neurochirurgie** 1996;42(2):100–4 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Schistosomal myelopathy as a cause of neurogenic bladder dysfunction. Razdan S, et al. **Urology** 1997 May; 49(5):777–80
[Hydatid cyst of the spine and spinal cord. Study of 24 cases] Sami A, et al. **Neurochirurgie** 1996;42(6):281–7 (36 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Spinal cord injury due to haematomyelia [letter; comment] Tan J, et al. **Anaesthesia** 1997 Jul;52(7):716. Comment on: Anaesthesia 1997 Feb;52(2):150–4.
Cervical myelopathy with false localizing sensory levels. Adams KK, et al. **Arch Neurol** 1996 Nov;53(11):1155–8
Fulminating encephalopathy with perivenular demyelination and vacuolar myelopathy as the initial presentation of human immunodeficiency virus infection. Silver B, et al.

Arch Neurol 1997 May;54(5):647–50

Neuroschistosomiasis. Pittella JE. **Brain Pathol** 1997 Jan; 7(1):649–62 (134 ref.)

Listeria spinal cord abscess––clinical and MRI findings. Chu JY, et al. **Can J Neurol Sci** 1996 Aug;23(3):220–3

Ossification of the posterior longitudinal ligament of the cervical spine in Asian Indians––a multiracial comparison. Jayakumar PN, et al. **Clin Neurol Neurosurg** 1996 May; 98(2):142–8

MRI detection of epidural spinal abscesses at noncontiguous sites. Pfister HW, et al. **J Neurol** 1996 Apr;243(4):315–7

Currarino triad: anorectal malformation, sacral bony abnormality, and presacral mass––a review of 11 cases. Lee SC, et al. **J Pediatr Surg** 1997 Jan;32(1):58–61

Intrinsic cervical spinal cord deformation on MRI: "the distorted 'H' sign". Ahmad I, et al. **J Spinal Disord** 1996 Dec;9(6):494–9

A cadaveric study on the stability of lumbar segment after partial laminotomy and facetectomy with intact posterior ligaments. Okawa A, et al. **J Spinal Disord** 1996 Dec; 9(6):518–26

Magnetic resonance findings in scuba diving–related spinal cord decompression sickness. Sparacia G, et al. **MAGMA** 1997 Jun;5(2):111–5

Spinal A–V fistula [letter; comment] Nacimiento W, et al. **Neurology** 1996 Oct;47(4):1108–9. Comment on: Neurology 1995 Jul;45(7):1309–13.

Increasing irritability with sudden onset of flaccid weakness. Patel H, et al. **Semin Pediatr Neurol** 1996 Sep;3(3):192–7

[Symptoms and pathological anatomy of the degenerative cervical spine] Ohwada T, et al. **Orthopade** 1996 Nov; 25(6):496–504 (31 ref.) (Eng. Abstr.) **(Ger)**

[Comparative assessment of conventional spin echo sequences and turbo spin echo in the study with magnetic resonance of the lesions of the spinal cord] Aprile I, et al. **Radiol Med (Torino)** 1996 Oct;92(4):377–80 (Eng. Abstr.) **(Ita)**

[Subacute combined degeneration of the spinal cord: manifestations of esophageal epidermoid carcinoma] Madrid A, et al. **Rev Neurol** 1997 Jul;25(143):1098–101 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Giant repeater F–wave in patients with anterior horn cell disorders. Role of motor unit size. Ibrahim IK, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug;76(4):281–7

Human T–cell lymphotropic virus type II–associated myelopathy: clinical and immunologic profiles. Lehky TJ, et al. **Ann Neurol** 1996 Nov;40(5):714–23

Locomotor deficits induced by experimental spinal cord demyelination are abolished by spontaneous remyelination. Jeffery ND, et al. **Brain** 1997 Jan;120 (Pt 1):27–37

Somatosensory evoked potential study in cervical radiation myelopathy. Wang PY, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Sep; 56(3):179–85

Fast dynamics of voluntary muscle strength and motor evoked potentials after traction therapy in patient with lumbosacral root lesion. Guechev G, et al. **Electromyogr Clin Neurophysiol** 1996 Jun;36(4):195–7

Scapuloperoneal muscular atrophy: Davidenkow's syndrome. Family report. Milanov I, et al. **Electromyogr Clin Neurophysiol** 1996 Jul–Aug;36(5):259–63

Fetal spinal cord transplants rescue some axotomized rubrospinal neurons from retrograde cell death in adult rats. Mori F, et al. **Exp Neurol** 1997 Jan;143(1):45–60

Cerebral haemodynamic changes induced by spinal cord stimulation in man. Mazzone P, et al. **Ital J Neurol Sci** 1996 Feb;17(1):55–7

MRI demonstration of reversible impairment of the blood–CNS barrier function in subacute combined degeneration of the spinal cord [letter] Küker W, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):298–9

Conduction in segmentally demyelinated mammalian central axons. Felts PA, et al. **J Neurosci** 1997 Oct 1;17(19):7267–77

Stretch hyperreflexia of triceps surae muscles in the conscious cat after dorsolateral spinal lesions. Taylor JS, et al. **J Neurosci** 1997 Jul 1;17(13):5004–15

Somatosensory evoked potential monitoring in cervical surgery: identification of pre– and intraoperative risk factors associated with neurological deterioration. May DM, et al. **J Neurosurg** 1996 Oct;85(4):566–73

Spinal pseudoathetosis: a rare, forgotten syndrome, with a review of old and recent descriptions. Ghika J, et al. **Neurology** 1997 Aug;49(2):432–7

Postural hypotension and abnormalities of salt and water metabolism in myelopathy patients. Frisbie JH, et al. **Spinal Cord** 1997 May;35(5):303–7

The determination of vasoactive substances during autonomic dysreflexia. Zhou GC, et al. **Spinal Cord** 1997 Jun; 35(6):390–3

Factors related to the severity of myelopathy in atlantoaxial instability. Nakajima K, et al. **Spine** 1996 Jun 15; 21(12):1440–5

Hypothesis about the etiology of unexplained painful myelopathy after minor trauma in the spinal canal. Law JD. **Stereotact Funct Neurosurg** 1995;65(1–4):117–9

[Clinical aspects of spasticity in adults] De Reuck J, et al. **J Belge Med Phys Rehabil** 1980;3(2):100–4 **(Dut)**

[Case of myelomeningeal neurosyphilis (letter)] Kanzaki A. **No To Shinkei** 1997 Jul;49(7):661 **(Jpn)**

[Gait disturbance without motor and sensory involvement in cervical myelopathy––clinical course and radiological findings] Yaguchi H, et al. **No To Shinkei** 1997 Jul; 49(7):627–31 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

MMPI–2 profiles in traumatic and non–traumatic spinal cord injured patients. Fow NR, et al. **J Clin Psychol** 1996 Sep; 52(5):573–9

RADIOGRAPHY

Intramedullary spinal cord paracoccidioidomycosis. Report of two cases. Colli BO, et al. **Arq Neuropsiquiatr** 1996 Sep; 54(3):466–73

Cervical myelopathy caused by ossification of the posterior longitudinal ligament in ankylosing spondylitis. Olivieri I, et al. **Arthritis Rheum** 1996 Dec;39(12):2074–7

Ossification of the posterior longitudinal ligament of the cervical spine in Asian Indians––a multiracial comparison. Jayakumar PN, et al. **Clin Neurol Neurosurg** 1996 May; 98(2):142–8

Post–traumatic progressive cervical myelopathy in patient with congenital spinal stenosis. Ducker TB. **J Spinal Disord** 1996 Feb;9(1):76; discussion 77–81

Vertebrospinal angiography in the evaluation of vertebral and spinal cord disease. Nelson PK, et al. **Neuroimaging Clin N Am** 1996 Aug;6(3):589–605 (61 ref.)

[Gait disturbance without motor and sensory involvement in cervical myelopathy––clinical course and radiological findings] Yaguchi H, et al. **No To Shinkei** 1997 Jul; 49(7):627–31 (Eng. Abstr.) **(Jpn)**

REHABILITATION

The use of environmental control units by occupational therapists in spinal cord injury and disease services. Holme SA, et al. **Am J Occup Ther** 1997 Jan;51(1):42–8

Special qualifications in spinal cord injury medicine: a commentary [letter] Hammond MC, et al. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):82–3

Intravesical capsaicin in neurologic impaired patients with detrusor hyperreflexia. Das A, et al. **J Spinal Cord Med** 1996 Jul;19(3):190–3

[Electrostimulation of the spinal cord as a method of inducing locomotor activity in children (clinical aspects and technical problems)] Shapkov IuT, et al. **Med Tekh** 1996 Jul–Aug;(4):3–5 (Eng. Abstr.) **(Rus)**

SURGERY

Magnetic resonance imaging of the postoperative spine. Genant HK. **Instr Course Lect** 1994;43:471–3 (12 ref.)

Progressive posttraumatic myelomalacic myelopathy: treatment with untethering and expansive duraplasty. Lee TT, et al. **J Neurosurg** 1997 Apr;86(4):624–8

Multilevel anterior cervical corpectomy and fibular allograft fusion for cervical myelopathy. Macdonald RL, et al. **J Neurosurg** 1997 Jun;86(6):990–7

A series of 60 juxtafacet cysts: clinical presentation, the role of spinal instability, and treatment. Sabo RA, et al. **J Neurosurg** 1996 Oct;85(4):560–5

Impact of urodynamic studies on the surgical management of spinal cord tethering. Vernet O, et al. **J Neurosurg** 1996 Oct;85(4):555–9

Dorsal endodermal cyst of the upper cervical spine. Zahos PA, et al. **J Spinal Disord** 1996 Dec;9(6):536–9

Intraoperative recording of the bulbocavernosus reflex. Deletis V, et al. **Neurosurgery** 1997 Jan;40(1):88–92; discussion 92–3

Intradural extramedullary xanthoma of the spine: a rare lesion arising from the dura mater of the spine: case report. Kim DS, et al. **Neurosurgery** 1996 Jul;39(1):182–5

Spinal intramedullary cysticercosis. Mohanty A, et al. **Neurosurgery** 1997 Jan;40(1):82–7

Idiopathic spinal epidural lipomatosis. Robertson SC, et al. **Neurosurgery** 1997 Jul;41(1):68–74; discussion 74–5 (41 ref.)

Intraspinal epidural sarcoidosis: case report. Weissman MN, et al. **Neurosurgery** 1996 Jul;39(1):179–81

Endoscopic evacuation of sacral hydatid cysts: case report. Açikgöz B, et al. **Spinal Cord** 1996 Jun;34(6):361–4

Anterior decompression and fusion for ossification of the posterior longitudinal ligament of the upper thoracic spine causing myelopathy: using the manubrium splitting approach. Fujimura Y, et al. **Spinal Cord** 1996 Jul; 34(7):387–93

Four year experience with the AO Anterior Thoracolumbar Locking Plate. Thalgott JS, et al. **Spinal Cord** 1997 May; 35(5):286–91

Expansive laminoplasty for cervical radiculomyelopathy due to soft disc herniation. Iwasaki M, et al. **Spine** 1996 Jan 1;21(1):32–8

[Anterior and antero–lateral surgery of the lower cervical spine (25 years after H. Verbiest). 2: Indications, results, complications)] Brunon J, et al. **Neurochirurgie** 1996; 42(4–5):229–48 (93 ref.) (Eng. Abstr.) **(Fre)**

[Surgical therapy of spondylogenic cervical myelopathy. Indications and techniques] Hohmann D, et al. **Orthopade** 1996 Nov;25(6):558–66 (51 ref.) (Eng. Abstr.) **(Ger)**

[The dorsal approach in degeneratively changed cervical spine] Yonenobu K, et al. **Orthopade** 1996 Nov;25(6):533–41 (34 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis and treatment of thoracic myelopathy] Fujimura Y. **Nippon Seikeigeka Gakkai Zasshi** 1997 Feb;71(2):91–105 (30 ref.) **(Jpn)**

[A case of idiopathic spinal cord herniation] Matsumura T, et al. **Rinsho Shinkeigaku** 1996 Apr;36(4):566–70 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Double–cross repair in spinal hernias in children] Kononov VS, et al. **Khirurgiia (Mosk)** 1996;(4):46–9 (Eng. Abstr.) **(Rus)**

THERAPY

Percutaneous fibrin glue therapy of meningeal cysts of the sacral spine. Patel MR, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):367–70

Trends in the treatment of patients with spinal cord lesions seen within a period of 20 years in German centers. Exner G, et al. **Spinal Cord** 1997 Jul;35(7):415–9

Degenerative disease of the thoracic spine in central India. Mitra SR, et al. **Spinal Cord** 1996 Jun;34(6):333–7

Bladder autoaugmentation in adult patients with neurogenic voiding dysfunction. Stöhrer M, et al. **Spinal Cord** 1997 Jul;35(7):456–62

VETERINARY

Fibrocartilaginous embolism of the spinal cord in dogs: review of 36 histologically confirmed cases and retrospective study of 26 suspected cases. Cauzinille L, et al. **J Vet Intern Med** 1996 Jul–Aug;10(4):241–5

The diagnostic utility of cerebrospinal fluid creatine kinase activity in the horse. Jackson C, et al. **J Vet Intern Med** 1996 Jul–Aug;10(4):246–51

Acute neurologic decompression illness in pigs: lesions of the spinal cord and brain. Dick EJ Jr, et al. **Lab Anim Sci** 1997 Feb;47(1):50–7

Selenium toxicosis with focal symmetrical poliomyelomalacia in postweaning pigs in South Africa. Penrith ML, et al. **Onderstepoort J Vet Res** 1996 Jun;63(2):171–9

Conditions of the lumbosacral spinal cord and cauda equina. Ferguson HR. **Semin Vet Med Surg (Small Anim)** 1996 Nov; 11(4):254–8 (15 ref.)

Conditions of the thoracolumbar spine. Seim HB 3rd. **Semin Vet Med Surg (Small Anim)** 1996 Nov;11(4):235–53 (24 ref.)

Postanesthetic hemorrhagic myelopathy or myelomalacia. Trim CM. **Vet Clin North Am Equine Pract** 1997 Apr; 13(1):73–7 (23 ref.)

Posterior paralysis in a lamb caused by a Coeneurus cerebralis cyst in the lumbar spinal cord. Bussell KM, et al. **Vet Rec** 1997 May 24;140(21):560

[A new hereditary disease in Braunvieh cattle in Switzerland: spinal demyelinization (SDM) in calves that remain in lateral recumbency] Stocker H, et al. **Schweiz Arch Tierheilkd** 1996;138(6):295–300 (Eng. Abstr.) **(Ger)**

VIROLOGY

HTLV–I/II as a common etiology of myelopathies in Bahia, Brazil. Andrade–Filho AS, et al. **Braz J Med Biol Res** 1996 Jun;29(6):757–61

SPINAL CORD INJURIES

Inpatient hospital utilization among veterans with traumatic spinal cord injury. Samsa GP, et al. **Arch Phys Med Rehabil** 1996 Oct;77(10):1037–43

The Cochrane Brain and Spinal Cord Injury Group [editorial] Schierhout G, et al. **J Neurol Neurosurg Psychiatry** 1997 Jul;63(1):1–3

Factors associated with life satisfaction among a sample of persons with neurotrauma. Warren L, et al. **J Rehabil Res Dev** 1996 Oct;33(4):404–8

American Spinal Injury Association annual meeting abstracts. **J Spinal Cord Med** 1997 Jan;20(1):139–78

Isolated stab wound to the artery of Adamkiewicz: case report and review of the literature. Rogers FB, et al. **J Trauma** 1997 Sep;43(3):549–51 (18 ref.)

Semen quality of spinal cord injured men is better when obtained by vibratory stimulation versus electroejaculation. Brackett NL, et al. **J Urol** 1997 Jan;157(1):151–7

Stingers, transient quadriplegia, and cervical spinal stenosis: return to play criteria. Cantu RC. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S233–5

Spinal cord injury questions [letter; comment] Friedman H. **Mil Med** 1997 May;162(5):iii–iv. Comment on: Mil Med 1997 Feb;162(2):141–8.

Deactivation and reactivation of somatosensory cortex after dorsal spinal cord injury. Jain N, et al. **Nature** 1997 Apr 3;386(6624):495–8

The functional independence measure in spinal cord injured patients: comparison of questioning with observational rating. Karamehmetoğlu SS, et al. **Spinal Cord** 1997 Jan; 35(1):22–5

Plaque and gingivitis in spinal paralysed individuals [letter] Lancashire P, et al. **Spinal Cord** 1996 Aug;34(8):498–9

Conservative and surgical semen retrieval in patients with spinal cord injury. Löchner–Ernst D, et al. **Spinal Cord** 1997 Jul;35(7):463–8

Traumatic spinal cord injuries in Istanbul [letter; comment] [see comments] Pringle RG. **Spinal Cord** 1996 Aug; 34(8):498. Comment on: Paraplegia 1995 Aug;33(8):469–71. Comment in: Spinal Cord 1997 Mar;35(3):189.

The injured spinal cord: imaging, histopathologic clinical

correlates, and basic science approaches to enhancing neural function after spinal cord injury. Quencer RM, et al. **Spine** 1996 Sep 15;21(18):2064–6

BLOOD

Parathyroid hormone suppression in spinal cord injury patients is associated with the degree of neurologic impairment and not the level of injury. Mechanick JI, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):692–6

Circulating levels of IL–2R, ICAM–1, and IL–6 in spinal cord injuries. Segal JL, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):44–7

Plasma leptin is directly related to body adiposity in subjects with spinal cord injury. Bauman WA, et al. **Horm Metab Res** 1996 Dec;28(12):732–6

Possible implication of leukocytes in secondary pathological changes after spinal cord injury. Katoh S, et al. **Injury** 1997 Apr;28(3):215–7

Insulin resistance in paraplegics--effect of one bout of acute exercise. Burstein R, et al. **Int J Sports Med** 1996 May; 17(4):272–6

Adhesion molecules and wound healing in spinal cord injury. Cruse JM, et al. **Pathobiology** 1996;64(4):193–7

CEREBROSPINAL FLUID

Experimental and clinical studies of eicosanoids in cerebrospinal fluid after spinal cord injury. Nishisho T, et al. **Neurosurgery** 1996 Nov;39(5):950–6; discussion 956–7

CLASSIFICATION

Parathyroid hormone suppression in spinal cord injury patients is associated with the degree of neurologic impairment and not the level of injury. Mechanick JI, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):692–6

Neurological issues. Donovan WH, et al. **Spinal Cord** 1997 May;35(5):275–81

International Standards for Neurological and Functional Classification of Spinal Cord Injury. American Spinal Injury Association. Maynard FM Jr, et al. **Spinal Cord** 1997 May;35(5):266–74

Athletes with cervical spine injury. Maroon JC, et al. **Spine** 1996 Oct 1;21(19):2294–9 (21 ref.)

[The classification of the late period in closed spinal trauma] Makarov AIu, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):18–21 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Effect of radionuclide renograms on treatment of patients with spinal cord injuries. Phillips JR, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1045–7

Rotator cuff repairs in individuals with paraplegia. Goldstein B, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug;76(4):316–22

Enoxaparin for thromboembolism prophylaxis in spinal injury: preliminary report on experience with 105 patients. Harris S, et al. **Am J Phys Med Rehabil** 1996 Sep–Oct; 75(5):326–7

Clenbuterol, a beta2–adrenoceptor agonist, reduces scoliosis due to partial transection of rat spinal cord. Zeman RJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E712–5

The neurogenic bladder in spinal cord injury—pattern and management. Chua HC, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):553–7

Relationship between level of spinal cord injury and posttraumatic stress disorder symptoms. Binks TM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:430–2

Peripheral vascular disease in spinal cord injury patients: a difficult diagnosis. Yokoo KM, et al. **Ann Plast Surg** 1996 Nov;37(5):495–9

Spinal myoclonus complicating spasticity in spinal cord injury: a case study. Andary MT, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):1007–9

Spinal cord injury rehabilitation. 2. Medical complications. Bergman SB, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S53–8 (100 ref.)

Relapsing significant bacteriuria: effect on urinary tract infection in patients with spinal cord injury. Elden H, et al. **Arch Phys Med Rehabil** 1997 May;78(5):468–70

Gynecomastia following spinal cord disorder. Heruti RJ, et al. **Arch Phys Med Rehabil** 1997 May;78(5):534–7

Coronary heart disease risk indicators, aerobic power, and physical activity in men with spinal cord injuries. Janssen TW, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):697–705

Social and functional variables associated with urinary tract infections in persons with spinal cord injury. Liguori PA, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):156–60

Prostaglandin E2 measurements: their value in the early diagnosis of heterotopic ossification in spinal cord injury patients. Schurch B, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):687–91

Calf vein thrombosis in spinal cord injured patients: conservative management of two cases. Scott MP, et al. **Arch Phys Med Rehabil** 1997 May;78(5):538–9

Comparison of long–term renal function after spinal cord injury using different urinary management methods. Sekar P, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):992–7

Management of traumatic optic neuropathy with coexistent spinal cord injury: a case report. Sherman AL, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):1012–4

Charcot spine as a late complication of traumatic spinal cord injury. Standaert C, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):221–5

Unilateral nail dystrophy after C4 complete spinal cord injury [letter] Harris AJ, et al. **Br J Dermatol** 1996 Nov; 135(5):855–7

Long–term outcome of permanent urethral stents in the treatment of detrusor–sphincter dyssynergia. McFarlane IP, et al. **Br J Urol** 1996 Nov;78(5):729–32

The ice–water test in the diagnosis and treatment of the neurogenic bladder. Ronzoni G, et al. **Br J Urol** 1997 May; 79(5):698–701

The female tetraplegic: an admission of urological failure. Singh G, et al. **Br J Urol** 1997 May;79(5):708–12

Pitfalls in managing routine medical problems of patients with spinal cord injury. Frost F. **Cleve Clin J Med** 1997 Jul–Aug; 64(7):352–4

Posttraumatic syringomyelia: a review of 21 cases. Kramer KM, et al. **Clin Orthop** 1997 Jan;(334):190–9

Transfer movement strategies of individuals with spinal cord injuries. Allison GT, et al. **Disabil Rehabil** 1996 Jan; 18(1):35–41

Spinal cord compression injury in guinea pigs: structural changes of endothelium and its perivascular cell associations after blood–brain barrier breakdown and repair. Jaeger CB, et al. **Exp Neurol** 1997 Apr;144(2):381–99

Spinal cord injures in children observed over many years. Yoshimura O, et al. **Hiroshima J Med Sci** 1996 Mar; 45(1):37–41

Assisted ejaculation and in–vitro fertilization in the treatment of infertile spinal cord–injured men: the role of intracytoplasmic sperm injection. Hultling C, et al. **Hum Reprod** 1997 Mar;12(3):499–502

External vacuum device therapy for spinal cord injured males with erectile dysfunction. Seckin B, et al. **Int Urol Nephrol** 1996;28(2):235–40

Gas in the spinal canal associated with injury of the cervical spinal cord: a diagnostic dilemma. A case report. Abraham DJ, et al. **J Bone Joint Surg Am** 1997 Apr;79(4):591–3

Tendon transfers and functional electrical stimulation for restoration of hand function in spinal cord injury. Keith MW, et al. **J Hand Surg [Am]** 1996 Jan;21(1):89–99

Assessment of autonomic dysreflexia in patients with spinal cord injury. Curt A, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):473–7

Treatment of syringomyelia associated with arachnoid scarring caused by arachnoiditis or trauma. Klekamp J, et al. **J Neurosurg** 1997 Feb;86(2):233–40

Progressive posttraumatic myelomalacic myelopathy: treatment with untethering and expansive duraplasty. Lee TT, et al. **J Neurosurg** 1997 Apr;86(4):624–8

Management and outcome of posttraumatic syringomyelia. Sgouros S, et al. **J Neurosurg** 1996 Aug;85(2):197–205

Effects of intrathecal baclofen on chronic spinal cord injury pain. Loubser PG, et al. **J Pain Symptom Manage** 1996 Oct;12(4):241–7

Biomechanical properties of human tibias in long–term spinal cord injury. Lee TQ, et al. **J Rehabil Res Dev** 1997 Jul; 34(3):295–302

Acute management of autonomic dysreflexia: adults with spinal cord injury presenting to health–care facilities. Consortium for spinal cord. **J Spinal Cord Med** 1997 Jul; 20(3):284–308

Effect of timing of stabilization on length of stay and medical complications following spinal cord injury. Campagnolo DI, et al. **J Spinal Cord Med** 1997 Jul;20(3):331–4

Autonomic hyperreflexia associated with exacerbation of reflex sympathetic dystrophy. Clinchot DM, et al. **J Spinal Cord Med** 1996 Oct;19(4):255–7

Surgical aspects of autonomic dysreflexia. Eltorai IM, et al. **J Spinal Cord Med** 1997 Jul:20(3):361–4

Anemia and serum protein deficiencies in patients with traumatic spinal cord injury. Lipetz JS, et al. **J Spinal Cord Med** 1997 Jul;20(3):335–40

Autonomic dysreflexia: pharmacological management of hypertensive crises in spinal cord injured patients. Naftchi NE, et al. **J Spinal Cord Med** 1997 Jul;20(3):355–60 (34 ref.)

Thigh hematoma in the active and aging person with spinal cord injury. Odderson IR, et al. **J Spinal Cord Med** 1997 Jan;20(1):70–3

Autonomic dysreflexia and detrusor–sphincter dyssynergia in spinal cord injury patients. Perkash I. **J Spinal Cord Med** 1997 Jul;20(3):365–70

The effect of urethral introducer tip catheters on the incidence of urinary tract infection outcomes in spinal cord injured patients. Bennett CJ, et al. **J Urol** 1997 Aug; 158(2):519–21

Sperm from spinal cord injured men lose motility faster than sperm from normal men: the effect is exacerbated at body compared to room temperature [see comments] Brackett NL, et al. **J Urol** 1997 Jun;157(6):2150–3. Comment in: J Urol 1997 Jun;157(6):2159.

The role of renal scintigraphy in the evaluation of spinal cord injury patients with presumed urosepsis. Fabrizio MD, et al. **J Urol** 1996 Nov;156(5):1730–4

Screening cystoscopy and survival of spinal cord injured patients with squamous cell cancer of the bladder [see comments] Navon JD, et al. **J Urol** 1997 Jun;157(6):2109–11 . Comment in: J Urol 1997 Jun;157(6):2115.

Selective detrusor activation by electrical sacral nerve root stimulation in spinal cord injury [see comments] Rijkhoff NJ, et al. **J Urol** 1997 Apr;157(4):1504–8. Comment in: J Urol 1997 Apr;157(4):1196.

Posterior sacral rhizotomy and intradural anterior sacral root stimulation for treatment of the spastic bladder in spinal cord injured patients [see comments] Schurch B, et al. **J Urol** 1997 Feb;157(2):610–4. Comment in: J Urol 1997 Feb;157(2):615–6.

The use of urine cytology for diagnosing bladder cancer in spinal cord injured patients [see comments] Stonehill WH, et al. **J Urol** 1997 Jun;157(6):2112–4 (12 ref.). Comment in: J Urol 1997 Jun;157(6):2115.

Intermittent self–catheterization by quadriplegic patients via a catheterizable Mitrofanoff channel. Sylora JA, et al. **J Urol** 1997 Jan;157(1):48–50

Does cervical spinal cord injury induce a higher incidence of complications after prophylactic Greenfield filter usage? [letter; comment] Greenfield LJ. **J Vasc Interv Radiol** 1997 Jul–Aug;8(4):719–20. Comment on: J Vasc Interv Radiol 1996 Nov–Dec;7(6):907–15.

Does cervical spinal cord injury induce a higher incidence of complications after prophylactic Greenfield inferior vena cava filter usage? [see comments] Kinney TB, et al. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):907–15. Comment in: J Vasc Interv Radiol 1997 Jul–Aug;8(4):719–20.

Comorbid illness is associated with survival and length of hospital stay in patients with chronic disability. A prospective comparison of three comorbidity indices. Rochon PA, et al. **Med Care** 1996 Nov;34(11):1093–101

Spinal cord injury: a 25–year morbidity and mortality study [see comments] Rish BL, et al. **Mil Med** 1997 Feb; 162(2):141–8. Comment in: Mil Med 1997 May;162(5):iii–iv.

The influence of glycine and related compounds on spinal cord injury–induced spasticity. Simpson RK Jr, et al. **Neurochem Res** 1995 Oct;20(10):1203–10

Mechanical and thermal allodynia in chronic central pain following spinal cord injury. Christensen MD, et al. **Pain** 1996 Nov;68(1):97–107

Treatment of a chronic allodynia–like response in spinally injured rats: effects of systemically administered nitric oxide synthase inhibitors. Hao JX, et al. **Pain** 1996 Aug; 66(2–3):313–9

Treatment of a chronic allodynia–like response in spinally injured rats: effects of systemically administered excitatory amino acid receptor antagonists. Hao JX, et al. **Pain** 1996 Aug;66(2–3):279–85

Pain following spinal cord injury: the clinical problem and experimental studies. Yezierski RP. **Pain** 1996 Dec; 68(2–3):185–94 (76 ref.)

The acute abdomen in spinal cord injury individuals. Bar–On Z, et al. **Paraplegia** 1995 Dec;33(12):704–6

The reflex sympathetic dystrophy syndrome in patients who have had a spinal cord injury. Gallien P, et al. **Paraplegia** 1995 Dec;33(12):715–20

Suprapubic catheterisation with urethral closure (the Feneley procedure) in spinal cord injured men. Grundy DJ, et al. **Paraplegia** 1996 Feb;34(2):93–4

External fixation in patients with panvertebral osteomyelitis and paraplegia. Hurley ME, et al. **Paraplegia** 1996 Feb; 34(2):113–5

The Stockholm Spinal Cord Injury Study. 3. Health–related issues of the Swedish annual level–of–living survey in SCI subjects and controls. Levi R, et al. **Paraplegia** 1995 Dec; 33(12):726–30

Short–term effect of pudendal nerve electrical stimulation on detrusor hyperreflexia in spinal cord injury patients: importance of current strength. Prévinaire JG, et al. **Paraplegia** 1996 Feb;34(2):95–9

The reduced urinary output after spinal cord injury: a review. Silver JR, et al. **Paraplegia** 1995 Dec;33(12):721–5

Intracavernous injection of prostaglandin E1 in spinal cord injured patients with erectile dysfunction. A preliminary report. Tang SF, et al. **Paraplegia** 1995 Dec;33(12):731–3

Misoprostol associated autonomic dysreflexia in a traumatic tetraplegic patient [letter] Vaidyanathan S, et al. **Paraplegia** 1996 Feb;34(2):121–2

Forecasting motor recovery after cervical spinal cord injury: value of MR imaging [see comments] Flanders AE, et al. **Radiology** 1996 Dec;201(3):649–55. Comment in: Radiology 1996 Dec;201(3):617–8.

MR imaging and cervical spine injury [editorial; comment] Lee RR. **Radiology** 1996 Dec;201(3):617–8. Comment on: Radiology 1996 Dec;201(3):649–55.

Does osteolysis of the distal clavicle occur following spinal cord injury? Roach NA, et al. **Skeletal Radiol** 1997 Jan; 26(1):16–9

Evaluation and management of heterotopic ossification in patients with spinal cord injury. Banovac K, et al. **Spinal Cord** 1997 Mar;35(3):158–62

Endothelial fibrinolytic reactivity and the risk of deep venous thrombosis after spinal cord injury. Boudaoud L, et al. **Spinal Cord** 1997 Mar;35(3):151–7

Major risk factors for pressure ulcers in the spinal cord disabled: a literature review. Byrne DW, et al. **Spinal Cord** 1996 May;34(5):255–63 (190 ref.)

Assessment of the effect of increased dietary fibre intake on bowel function in patients with spinal cord injury. Cameron KJ, et al. **Spinal Cord** 1996 May;34(5):277–83

The possible value of ascorbic acid as a prophylactic agent for urinary tract infection. Castelló T, et al. **Spinal Cord** 1996 Oct;34(10):592–3

The role of external sphincterotomy for patients with a spinal cord lesion. Catz A, et al. **Spinal Cord** 1997 Jan;35(1):48–52

Gracilis urethromyoplasty--an autologous urinary sphincter

for neurologically impaired patients with stress incontinence. Chancellor MB, et al. **Spinal Cord** 1997 Aug; 35(8):546–9

Limited vs full microbiological investigation for the management of symptomatic polymicrobial urinary tract infection in adult spinal cord–injured patients. Darouiche RO, et al. **Spinal Cord** 1997 Aug;35(8):534–9

Analysis of gram negative recolonization of the neuropathic bladder among patients with spinal cord injuries. Donovan WH, et al. **Spinal Cord** 1996 Oct;34(10):587–91

Endoscopic treatment of vesicoureteric reflux in adults with a neuropathic bladder. Foley SJ, et al. **Spinal Cord** 1996 Nov;34(11):657–8

Prevention of urinary tract infection in patients with spinal cord injury—a microbiological review. Galloway A. **Spinal Cord** 1997 Apr;35(4):198–204 (87 ref.)

The inter rater reliability of the original and of the modified Ashworth scale for the assessment of spasticity in patients with spinal cord injury [see comments] Haas BM, et al. **Spinal Cord** 1996 Sep;34(9):560–4. Comment in: Spinal Cord 1997 Jan;35(1):64.

Constipation–related symptoms and bowel program concerning individuals with spinal cord injury. Harari D, et al. **Spinal Cord** 1997 Jun;35(6):394–401

Electrical pelvic floor stimulation: a possible alternative treatment for reflex urinary incontinence in patients with spinal cord injury. Ishigooka M, et al. **Spinal Cord** 1996 Jul;34(7):411–5

Importance of bladder biopsies in spinal paralysed individuals (SPI) [letter; comment] Janzen J. **Spinal Cord** 1996 Aug; 34(8):499. Comment on: Paraplegia 1995 Oct;33(10):565–72.

Regression of pyuria during the treatment of symptomatic urinary tract infection in patients with spinal cord injury. Joshi A, et al. **Spinal Cord** 1996 Dec;34(12):742–4

Technetium–99m–MAG3 renal studies in spinal cord injury patients: normal range, reproducibility, and change as a function of duration and level of injury. Klingensmith WC 3rd, et al. **Spinal Cord** 1996 Jun;34(6):338–45

Resection of heterotopic ossification of the hip in spinal cord injured patients. Meiners T, et al. **Spinal Cord** 1997 Jul; 35(7):443–5

Methicillin–resistant Staphylococcus aureus: a four–year experience in a spinal cord injury unit in Spain. Olona–Cabases M, et al. **Spinal Cord** 1996 Jun;34(6):315–9

Contact laser sphincterotomy: further experience and longer follow–up. Perkash I. **Spinal Cord** 1996 Apr;34(4):227–33

Voiding dysfunction in patients with spinal cord lesions at the thoracolumbar vertebral junction. Pesce F, et al. **Spinal Cord** 1997 Jan;35(1):37–9

Effectiveness of gabapentin in controlling spasticity: a quantitative study. Priebe MM, et al. **Spinal Cord** 1997 Mar; 35(3):171–5

Comparison of transdermal nitroglycerin and intracavernous injection of papaverine in the treatment of erectile dysfunction in patients with spinal cord lesions. Renganathan R, et al. **Spinal Cord** 1997 Feb;35(2):99–103

Acute acalculous cholecystitis in patients with acute traumatic spinal cord injury. Romero Ganuza FJ, et al. **Spinal Cord** 1997 Feb;35(2):124–8

The effects of therapy on spasticity utilizing a motorized exercise–cycle. Rösche J, et al. **Spinal Cord** 1997 Mar; 35(3):176–8

Psychological defenses and psychiatric symptoms in adults with pediatric spinal cord injuries. Sammallahti P, et al. **Spinal Cord** 1996 Nov;34(11):669–72

Classification of pain following spinal cord injury. Siddall PJ, et al. **Spinal Cord** 1997 Feb;35(2):69–75 (44 ref.)

Association between muscle trauma and heterotopic ossification in spinal cord injured patients [letter; comment] Silver JR. **Spinal Cord** 1996 Aug;34(8):499–500. Comment on: Paraplegia 1995 Aug;33(8):464–8.

Chronic pain/dysaesthesiae in spinal cord injury patients: results of a multicentre study. Störmer S, et al. **Spinal Cord** 1997 Jul;35(7):446–55

Relationship between surgery and pain following spinal cord injury. Sved P, et al. **Spinal Cord** 1997 Aug;35(8):526–30

Intravesical oxybutynin for spinal cord injury patients. Szollar SM, et al. **Spinal Cord** 1996 May;34(5):284–7

Demineralization in tetraplegic and paraplegic man over time. Szollar SM, et al. **Spinal Cord** 1997 Apr;35(4):223–8

Endoscopic management of urethral trauma in male spinal cord injury patients. Vaidyanathan S, et al. **Spinal Cord** 1996 Nov;34(11):651–6

Unusual complications of intermittent self–catheterisation in spinal cord injury patients. Vaidyanathan S, et al. **Spinal Cord** 1996 Dec;34(12):745–7

Myocardial infarction associated with intra–cavernosal administration of alprostadil in a patient with spinal cord injury and paraplegia [letter] Vaidyanathan S, et al. **Spinal Cord** 1996 Dec;34(12):754–5

A molecular biological approach to neuropathy of the urinary bladder/prostate in patients with spinal cord injury [letter] Vaidyanathan S, et al. **Spinal Cord** 1997 Aug;35(8):557–8

Special precautions to be observed while using alprostadil in patients with spinal cord injury [letter] Vaidyanathan S, et al. **Spinal Cord** 1997 Jun;35(6):402–3

T–cell predominant balanitis in a traumatic tetraplegic patient: a case report. Van Velzen D, et al. **Spinal Cord** 1996 Apr;34(4):243–6

Cough in spinal cord injured patients: the relationship between motor level and peak expiratory flow. Wang AY, et al. **Spinal Cord** 1997 May;35(5):299–302

Motor recovery following spinal cord injury associated with cervical spondylosis: a collaborative study. Waters RL, et al. **Spinal Cord** 1996 Dec;34(12):711–5

Correlation between clinical neurological data and urodynamic function in spinal cord injured patients. Wyndaele JJ. **Spinal Cord** 1997 Apr;35(4):213–6

Fathering of a child with the assistance of electroejaculation in conjunction with intracytoplasmic sperm injection: case report. Yamamoto M, et al. **Spinal Cord** 1997 Mar; 35(3):179–80

Post–traumatic syringomyelia. Asano M, et al. **Spine** 1996 Jun 15;21(12):1446–53

Spine update. Urological management in patients with spinal cord injuries. Nygaard IE, et al. **Spine** 1996 Jan 1; 21(1):128–32 (18 ref.)

Retrospective analysis of urologic complications in male patients with spinal cord injury managed with and without indwelling urinary catheters. Larsen LD, et al. **Urology** 1997 Sep;50(3):418–22

Osteoporosis in men with spinal cord injuries. Szollar SM. **West J Med** 1997 Apr;166(4):270

[Prevention of sterility in spinal cord injured men] Tollon C, et al. **Prog Urol** 1997 Apr;7(2):203–8 (43 ref.) (Eng. Abstr.) **(Fre)**

[Bladder cancer in patients with spinal cord injury: report of two cases] Sugimoto K, et al. **Hinyokika Kiyo** 1997 May; 43(5):359–62 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Long–term follow–up of female tetraplegic patients with cutaneous vesicostomy] Yamamoto M, et al. **Hinyokika Kiyo** 1997 Apr;43(4):263–6 (Eng. Abstr.) **(Jpn)**

[Central nervous pain in patients with spinal cord injury. Medical and surgical treatment] Grønning M, et al. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1904–7 (Eng. Abstr.) **(Nor)**

[The diagnosis and treatment of chronic osteomyelitis in patients with spinal cord trauma] Lokhvitskiĭ SV, et al. **Vestn Khir Im I I Grek** 1996;(1):60–2 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Pediatric cervical spine injury sustained in falls from low heights. Schwartz GR, et al. **Ann Emerg Med** 1997 Sep; 30(3):249–52

Cervical spine MRI in abused infants. Feldman KW, et al. **Child Abuse Negl** 1997 Feb;21(2):199–205

Gd–DTPA–enhanced MR imaging of injured spinal cord. Terae S, et al. **Clin Imaging** 1997 Mar–Apr;21(2):82–9

Evaluation of the temporal evolution of acute spinal cord injury. Runge VM, et al. **Invest Radiol** 1997 Feb; 32(2):105–10

Significance of sympathetic skin response in the assessment of autonomic failure in patients with spinal cord injury. Curt A, et al. **J Auton Nerv Syst** 1996 Nov 6;61(2):175–80

The ankle clonus test for assessment of the integrity of the spinal cord during operations for scoliosis. Hoppenfeld S, et al. **J Bone Joint Surg Am** 1997 Feb;79(2):208–12

Intraspinal extradural arachnoid cyst with spinal cord herniation. Cheng MH. **J Formos Med Assoc** 1996 Sep; 95(9):712–4

Prognostic significance of the delayed plantar reflex following spinal cord injury. Weinstein DE, et al. **J Spinal Cord Med** 1997 Apr;20(2):207–11

Preservation of reflex movement in a pediatric patient with a complete spinal cord injury: case report. Maliner LI, et al. **J Trauma** 1997 Jul;43(1):134–6

Cervical spine injuries. Etzwiler LS, et al. **Pediatr Emerg Care** 1996 Jun;12(3):233–5

Validation of the American Spinal Injury Association (ASIA) motor score and the National Acute Spinal Cord Injury Study (NASCIS) motor score. El Masry WS, et al. **Spine** 1996 Mar 1;21(5):614–9

Muscle damping measured with a modified pendulum test in patients with fibromyalgia, lumbago, and cervical syndrome. Wachter KC, et al. **Spine** 1996 Sep 15; 21(18):2137–42

[Surgical treatment of thoracoabdominal aortic aneurysm: detection and prevention of spinal cord injury] Yamashita K, et al. **Rinsho Kyobu Geka** 1989 Oct;9(5):452–5 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Oral paracetamol bioavailability in rats subjected to experimental spinal cord injury. García–López P, et al. **Biopharm Drug Dispos** 1997 Apr;18(3):203–11

Delayed antagonism of AMPA/kainate receptors reduces long–term functional deficits resulting from spinal cord trauma. Wrathall JR, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):565–73

Treatment of the chronically injured spinal cord with neurotrophic factors can promote axonal regeneration from supraspinal neurons. Ye JH, et al. **Exp Neurol** 1997 Jan; 143(1):70–81

Elective neurotraumatology and therapeutic strategies in early post–trauma. Borromei A, et al. **Funct Neurol** 1997 Mar–Apr;12(2):89–99

Development of the NMDA ion–channel blocker, aptiganel hydrochloride, as a neuroprotective agent for acute CNS injury. McBurney RN. **Int Rev Neurobiol** 1997;40:173–95 (28 ref.)

Metoclopramide increases the bioavailability of dantrolene in spinal cord injury. Gilman TM, et al. **J Clin Pharmacol** 1996 Jan;36(1):64–71

Cellular delivery of neurotrophin–3 promotes corticospinal axonal growth and partial functional recovery after spinal cord injury. Grill R, et al. **J Neurosci** 1997 Jul 15; 17(14):5560–72

Local blockade of sodium channels by tetrodotoxin ameliorates tissue loss and long–term functional deficits resulting from experimental spinal cord injury. Teng YD, et al. **J Neurosci** 1997 Jun 1;17(11):4359–66

Reduction of spinal cord injury by administration of iloprost, a stable prostacyclin analog. Taoka Y, et al. **J Neurosurg** 1997 Jun;86(6):1007–11

The effect of the sodium channel blocker QX–314 on recovery after acute spinal cord injury. Agrawal SK, et al. **J Neurotrauma** 1997 Feb;14(2):81–8

Pretreatment with alpha–phenyl–N–tert–butyl–nitrone (PBN) improves energy metabolism after spinal cord injury in rats. Farooque M, et al. **J Neurotrauma** 1997 Jul; 14(7):469–76

Use of cyclosporin–A in experimental spinal cord injury: design of a dosing strategy to maintain therapeutic levels. Ibarra A, et al. **J Neurotrauma** 1996 Oct;13(10):569–72

The role of GM1–ganglioside in the injured spinal cord of rats: an immunohistochemical study using GM1–antisera. Imanaka T, et al. **J Neurotrauma** 1996 Mar;13(3):163–70

Effects of lecithinized superoxide dismutase on rat spinal cord injury. Nakauchi K, et al. **J Neurotrauma** 1996 Oct; 13(10):573–82

Effects of 4–aminopyridine on motor evoked potentials in patients with spinal cord injury. Qiao J, et al. **J Neurotrauma** 1997 Mar;14(3):135–49

No protective effect of the NMDA antagonist memantine in experimental spinal cord injuries. von Euler M, et al. **J Neurotrauma** 1997 Jan;14(1):53–61

Gene therapy for central nervous system injury: the use of cationic liposomes: an invited review. Yang K, et al. **J Neurotrauma** 1997 May;14(5):281–97 (118 ref.)

Medical treatment in spinal cord injuries [editorial] Ducker TB. **J Spinal Disord** 1996 Oct;9(5):381

Pharmacological management of spinal cord injury: current status of drugs designed to augment functional recovery of the injured human spinal cord. Greene KA, et al. **J Spinal Disord** 1996 Oct;9(5):355–66 (130 ref.)

Clinical applications of pharmacologic therapies for spinal cord injury. Zeidman SM, et al. **J Spinal Disord** 1996 Oct; 9(5):367–80 (72 ref.)

Consequences of high–dose steroid therapy for acute spinal cord injury. Gerndt SJ, et al. **J Trauma** 1997 Feb; 42(2):279–84

Administration of methylprednisolone for 24 or 48 hours or tirilazad mesylate for 48 hours in the treatment of acute spinal cord injury. Results of the Third National Acute Spinal Cord Injury Randomized Controlled Trial. National Acute Spinal Cord Injury Study. Bracken MB, et al. **JAMA** 1997 May 28;277(20):1597–604

Pharmacology of the aminosteroids in brain diseases. Jakobsen M. **Methods Find Exp Clin Pharmacol** 1996;18 Suppl B:81–2

The effects of interleukin–1 receptor antagonist protein (IRAP) infusion following spinal cord transection in rats. Gelderd JB, et al. **Mol Chem Neuropathol** 1996 Feb; 27(2):167–83

Pretreatment with NMDA receptor antagonist MK801 improves neurophysiological outcome after an acute spinal cord injury. Haghighi SS, et al. **Neurol Res** 1996 Dec; 18(6):509–15

Effect of a single huge dose of methylprednisolone on blood flow, evoked potentials, and histology after acute spinal cord injury in the rat. Koyanagi I, et al. **Neurol Res** 1997 Jun;19(3):289–99 (49 ref.)

Dexamethasone up–regulates mRNA for Na+,K(+)–ATPase in some spinal cord neurones after cord transection. Gonzalez S, et al. **Neuroreport** 1996 Apr 10;7(5):1041–4

Effects of exogenous transforming growth factor–beta 1 on spinal cord injury in rats. Hamada Y, et al. **Neurosci Lett** 1996 Jan 19;203(2):97–100

Use of methylprednisolone as an adjunct in the management of patients with penetrating spinal cord injury: outcome analysis. Levy ML, et al. **Neurosurgery** 1996 Dec; 39(6):1141–8; discussion 1148–9

The effect of the platelet derived wound healing formula and the nerve growth factor on the experimentally injured spinal cord. Hiraizumi Y, et al. **Spinal Cord** 1996 Jul; 34(7):394–402

The effects of taxol, methylprednisolone, and 4–aminopyridine in compressive spinal cord injury: a qualitative experimental study. Perez–Espejo MA, et al. **Surg Neurol** 1996 Oct;46(4):350–7

New drugs for improving injury outcome in spinal cord injuries. Werner PC. **West J Med** 1997 Apr;166(4):271–2

[Expression of neurotrophin and IL–1 beta mRNAs following spinal cord injury and the effects of methylprednisolone treatment] Hayashi M, et al. **Kaibogaku Zasshi** 1997 Jun; 72(3):209–13 (Eng. Abstr.) **(Jpn)**

ECONOMICS

Spinal cord injury. A preventable public burden. Tyroch AH, et al. **Arch Surg** 1997 Jul;132(7):778–81

Functional outcomes in spinal cord injury (SCI): quality care versus cost containment. Ditunno JF Jr.

J Spinal Cord Med 1997 Jan;20(1):1–7 (36 ref.)

The cost of ventilator–dependent spinal cord injuries–patients in the hospital and at home. Bötel U, et al. **Spinal Cord** 1997 Jan;35(1):40–2

Cost of traumatic spinal cord injury in a population–based registry. Johnson RL, et al. **Spinal Cord** 1996 Aug; 34(8):470–80

EMBRYOLOGY

The fetal spinal cord does not regenerate after in utero transection in a large mammalian model. Meuli–Simmen C, et al. **Neurosurgery** 1996 Sep;39(3):555–60; discussion 560–1

[The reactions of different sections of human embryonic neuroepithelium to damage to the ventricular surface during explantation] Smirnov EB, et al. **Morfologiia** 1997; 111(1):15–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Transient decrease of acetylcholinesterase in ventral horn neurons caudal to a low thoracic spinal cord hemisection in the adult rat. Nacimiento W, et al. **Brain Res** 1996 Apr 1;714(1–2):177–84

Neuropathic pain in rats is associated with altered nitric oxide synthase activity in neural tissue. Choi Y, et al. **J Neurol Sci** 1996 Jun;138(1–2):14–20

Alteration of complex IV and acetylcholine–related enzymes in experimental spinal cord injury. Brambilla G, et al. **J Neurosurg Sci** 1996 Sep–Dec;40(3–4):213–9

Role of calpain in spinal cord injury: increased calpain immunoreactivity in rat spinal cord after impact trauma. Li Z, et al. **Neurochem Res** 1996 Apr;21(4):441–8

Changes in choline acetyltransferase activity and distribution following incomplete cervical spinal cord injury in the rat. Nakamura M, et al. **Neuroscience** 1996 Nov;75(2):481–94

EPIDEMIOLOGY

Evaluating sources of traumatic spinal cord injury surveillance data in Colorado. Johnson RL, et al. **Am J Epidemiol** 1997 Aug 1;146(3):266–72

Spinal cord injuries have fallen in rugby union players in New South Wales [letter; comment] Wilson SP, et al. **BMJ** 1996 Dec 14;313(7071):1550. Comment on: BMJ 1995 May 27;310(6991):1345–6.

New spinal injuries in hockey. Tator CH, et al. **Clin J Sport Med** 1997 Jan;7(1):17–21

ATV–related central nervous system injuries in Louisiana. Gibbs L, et al. **J La State Med Soc** 1997 Aug;149(8):276–8

Spinal cord injuries in Louisiana due to falls from deer stands, 1985–1994. Lawrence DW, et al. **J La State Med Soc** 1996 Feb;148(2):77–9

Fractures after myelopathy: the risk quantified. Frisbie JH. **J Spinal Cord Med** 1997 Jan;20(1):66–9

Bull riding–related brain and spinal cord injuries—Louisiana, 1994–1995. **MMWR Morb Mortal Wkly Rep** 1996 Sep 20; 45(37):796–8

Surveillance of traumatic spinal cord injury in Australia: the identification of information needs. Blumer CE, et al. **Spinal Cord** 1996 Nov;34(11):639–43

Spinal cord injuries in Arkansas due to violence: 1980–1989. Carroll CM. **Spinal Cord** 1997 Jun;35(6):341–8

Survival and cause of death after traumatic spinal cord injury. A long–term epidemiological survey from Denmark. Hartkopp A, et al. **Spinal Cord** 1997 Feb;35(2):76–85

Traumatic spinal cord injuries in southeast Turkey: an epidemiological study. Karamehmetoğlu SS, et al. **Spinal Cord** 1997 Aug;35(8):531–3

Sports–related spinal cord injury in Japan (from the nationwide spinal cord injury registry between 1990 and 1992). Katoh S, et al. **Spinal Cord** 1996 Jul;34(7):416–21

Epidemiology of spinal cord paralysis in Fiji: 1985–1994. Maharaj JC. **Spinal Cord** 1996 Sep;34(9):549–59

Traumatic spinal cord injuries in Jordan—an epidemiological study. Otom AS, et al. **Spinal Cord** 1997 Apr;35(4):253–5

Traumatic spinal cord injuries in Thailand: an epidemiologic study in Siriraj Hospital, 1989–1994. Pajareya K. **Spinal Cord** 1996 Oct;34(10):608–10

Rehabilitation of patients with spinal cord lesions in The Netherlands: an epidemiological study. Schönherr MC, et al. **Spinal Cord** 1996 Nov;34(11):679–83

Intermediate–term outcome of cervical spinal cord–injured patients older than 50 years of age. Alander DH, et al. **Spine** 1997 Jun 1;22(11):1189–92

[Injuries of the spine and the spinal cord in sports] Shingu H, et al. **Nippon Seikeigeka Gakkai Zasshi** 1996 Jul; 70(7):353–65 **(Jpn)**

ETHNOLOGY

Firearm versus motor vehicle related spinal cord injury: preinjury factors, injury characteristics, and initial outcome comparisons among ethnically diverse groups. Waters RL, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):150–5

Vertebral fracture prevalence in women in Hiroshima compared to Caucasians or Japanese in the US. Ross PD, et al. **Int J Epidemiol** 1995 Dec;24(6):1171–7

ETIOLOGY

Serious spinal cord injury due to haematomyelia caused by spinal anaesthesia in a patient treated with low–dose heparin [see comments] Greaves JD. **Anaesthesia** 1997 Feb; 52(2):150–4. Comment in: Anaesthesia 1997 Jul;52(7):716.

Spinal cord injury as a result of endotracheal intubation in patients with undiagnosed cervical spine fractures. Muckart DJ, et al. **Anesthesiology** 1997 Aug;87(2):418–20

Firearm versus motor vehicle related spinal cord injury: preinjury factors, injury characteristics, and initial outcome comparisons among ethnically diverse groups. Waters RL, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):150–5

Spinal injuries in the pediatric age group: a review of 82 cases of spinal cord and vertebral column injuries. Turgut M, et al. **Eur Spine J** 1996;5(3):148–52 (31 ref.)

Major neurological sequelae of lumbar epidural anesthesia. Report of three cases [see comments] Barontini F, et al. **Ital J Neurol Sci** 1996 Oct;17(5):333–9. Comment in: Ital J Neurol Sci 1997 Feb;18(1);63.

Animal model for investigation of spinal cord injury caused by aortic cross–clamping. Qayumi AK, et al. **J Invest Surg** 1997 Jan–Apr;10(1–2):47–52

The role of excitatory amino acids in hypothermic injury to mammalian spinal cord neurons. Craenen G, et al. **J Neurotrauma** 1996 Dec;13(12):809–18

Quadraplegia in a patient with an undiagnosed odontoid peg fracture. The importance of cervical spine immobilisation in patients with head injuries. Powell RM, et al. **J R Army Med Corps** 1996 Jun;142(2):79–81

Unique management needs of pediatric spinal cord injury patients: etiology and pathophysiology. Vogel LC. **J Spinal Cord Med** 1997 Jan;20(1):10–3 (31 ref.)

A case of central cord syndrome caused by intubation: a case report. Yan K, et al. **J Spinal Cord Med** 1997 Apr; 20(2):230–2

Chiari I malformation and spinal cord injury: cause for concern in contact athletes? Callaway GH, et al. **Med Sci Sports Exerc** 1996 Oct;28(10):1218–20 (17 ref.)

Accidental penetrating cervical cord injury in a young child. Vadasz AG, et al. **Pediatr Emerg Care** 1996 Dec; 12(6):428–31

Acquired spinal cord injury in human fetuses with myelomeningocele. Hutchins GM, et al. **Pediatr Pathol Lab Med** 1996 Sep–Oct;16(5):701–12

Spinal vasculature thrombosis as the etiology of spinal cord injury following epidural phenol [letter; comment] Wilson S, et al. **Reg Anesth** 1996 Jul–Aug;21(4):374–5. Comment on: Reg Anesth 1995 Jul–Aug;20(4):283–90.

New and future approaches for spinal cord protection. Svensson LG. **Semin Thorac Cardiovasc Surg** 1997 Jul; 9(3):206–21 (104 ref.)

Traumatic spinal cord injuries in Istanbul [letter; comment] Acikgoz B. **Spinal Cord** 1997 Mar;35(3):189. Comment on: Paraplegia 1995 Aug;33(8):469–71. Comment on: Spinal Cord 1996 Aug;34(8):498.

An unusual cause of traumatic spinal cord injury: case report. Clinchot DM, et al. **Spinal Cord** 1997 Mar;35(3):181–2

Ischaemic spinal cord injury following a coronary angiogram: a case report. Otom A, et al. **Spinal Cord** 1996 May;34(5):308–10

Neurological outcome in a porcine model of descending thoracic aortic surgery. Left atrial–femoral artery bypass versus clamp/repair. Maharajh GS, et al. **Stroke** 1996 Nov; 27(11):2095–100; discussion 2101

[Spinal cord trauma: the current concepts of the mechanisms of the damage, regeneration and means for its correction] Grishenkova LN, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr–Jun; (2):37–44 (173 ref.) **(Rus)**

GENETICS

Genetic influences on cellular reactions to spinal cord injury: activation of macrophages/microglia and astrocytes is delayed in mice carrying a mutation (WldS) that causes delayed Wallerian degeneration. Fujiki M, et al. **J Comp Neurol** 1996 Jul 29;371(3):469–84

Genetic influences on cellular reactions to spinal cord injury: a wound–healing response present in normal mice is impaired in mice carrying a mutation (WldS) that causes delayed Wallerian degeneration. Zhang Z, et al. **J Comp Neurol** 1996 Jul 29;371(3):485–95

HISTORY

Injuries of the nervous system: on railway and other injuries of the nervous system [classical article] Erichsen JE. **Clin Orthop** 1997 Mar;(336):4–10

IMMUNOLOGY

Impaired phagocytosis of Staphylococcus aureus in complete tetraplegics. Campagnolo DI, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug;76(4):276–80

Effects of pro–inflammatory cytokines in experimental spinal cord injury. Klusman I, et al. **Brain Res** 1997 Jul 11; 762(1–2):173–84

Immune system–neuroendocrine dysregulation in spinal cord injury. Cruse JM, et al. **Immunol Res** 1996;15(4):306–14 (46 ref.)

Concept of autoimmunity following spinal cord injury: possible roles for T lymphocytes in the traumatized central nervous system. Popovich PG, et al. **J Neurosci Res** 1996 Aug 15;45(4):349–63 (120 ref.)

Restoration of depressed immune function in spinal cord injury patients receiving rehabilitation therapy. Kliesch WF, et al. **Paraplegia** 1996 Feb;34(2):82–90

Demonstration of a novel circulating anti–prostacyclin receptor antibody. Kahn NN, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8779–82

METABOLISM

Expression of adhesion molecules and monocyte chemoattractant protein –1 (MCP–1) in the spinal cord lesions in HTLV–I–associated myelopathy. Umehara F, et al. **Acta Neuropathol (Berl)** 1996;91(4):343–50

A sampling artifact in the microdialysis study of changes in extracellular [Mg2+] upon spinal cord injury. Yang J, et al. **Anal Biochem** 1997 Feb 15;245(2):203–6

Expression of the ubiquitin carboxyl–terminal hydrolase PGP 9.5 in axons following spinal cord compression trauma. An immunohistochemical study in the rat. Li GL, et al. **APMIS** 1997 May;105(5):384–90

A simple method for administering vancomycin in the spinal cord injured population. Griver AR, et al. **Arch Phys Med Rehabil** 1997 May;78(5):459–62

Increased calpain content and progressive degradation of neurofilament protein in spinal cord injury. Banik NL, et al. **Brain Res** 1997 Mar 28;752(1–2):301–6

Induction of c–fos gene expression by spinal cord transection in the rat. Ruggiero DA, et al. **Brain Res** 1997 Jul 18; 763(1):21–9

Endogenous endothelin–1 initiates astrocytic growth after spinal cord injury. Uesugi M, et al. **Brain Res** 1996 Jul 29;728(2):255–9

Increased expression of neuronal nitric oxide synthase in bladder afferent and spinal neurons following spinal cord injury. Vizzard MA. **Dev Neurosci** 1997;19(3):232–46

Expression of pro–inflammatory cytokine and chemokine mRNA upon experimental spinal cord injury in mouse: an in situ hybridization study. Bartholdi D, et al. **Eur J Neurosci** 1997 Jul;9(7):1422–38

Changes of intracellular free calcium following mechanical injury in a spinal cord slice preparation. Leybaert L, et al. **Exp Brain Res** 1996 Dec;112(3):392–402

Altered immunoreactivity for glial fibrillary acidic protein in astrocytes within 1 h after cervical spinal cord injury. Hadley SD, et al. **Exp Neurol** 1997 Aug;146(2):380–7

Increased basic fibroblast growth factor expression following contusive spinal cord injury. Mocchetti I, et al. **Exp Neurol** 1996 Sep;141(1):154–64

Blood–brain barrier permeability to ebiratide and TNF in acute spinal cord injury. Pan W, et al. **Exp Neurol** 1997 Aug;146(2):367–73

Changes in phospholipids and acetylcholinesterase during early phase of injury to spinal cord—an experimental study in rats. Cherian L, et al. **Indian J Physiol Pharmacol** 1996 Apr;40(2):134–8

Phosphorus–31 magnetic resonance spectroscopy studies of pig spinal cord injury. Myelin changes, intracellular pH, and bioenergetics. Akino M, et al. **Invest Radiol** 1997 Jul; 32(7):382–8

The effects of spinal cord injury on the status of messenger ribonucleic acid for TRPM 2 and androgen receptor in the prostate of the rat. Huang HF, et al. **J Androl** 1997 May–Jun;18(3):250–6

Metoclopramide increases the bioavailability of dantrolene in spinal cord injury. Gilman TM, et al. **J Clin Pharmacol** 1996 Jan;36(1):64–71

Connexin43 and astrocytic gap junctions in the rat spinal cord after acute compression injury. Theriault E, et al. **J Comp Neurol** 1997 Jun 2;382(2):199–214

Changes in expression of ciliary neurotrophic factor (CNTF) and CNTF–receptor alpha after spinal cord injury. Oyesiku NM, et al. **J Neurobiol** 1997 Mar;32(3):251–61

4–hydroxynonenal, a lipid peroxidation product, rapidly accumulates following traumatic spinal cord injury and inhibits glutamate uptake. Springer JE, et al. **J Neurochem** 1997 Jun;68(6):2469–76

Production of tumor necrosis factor in spinal cord following traumatic injury in rats. Wang CX, et al. **J Neuroimmunol** 1996 Sep;69(1–2):151–6

Changes in dynamin and actin mRNA expression in the dorsal column–medial lemniscal system following dorsal column lesion. Riley LA, et al. **J Neurosci Res** 1996 Apr 1;44(1):47–51

Tenascin–C expression and axonal sprouting following injury to the spinal dorsal columns in the adult rat. Zhang Y, et al. **J Neurosci Res** 1997 Aug 15;49(4):433–50

Quinolinic acid accumulation in injured spinal cord: time course, distribution, and species differences between rat and guinea pig. Blight AR, et al. **J Neurotrauma** 1997 Feb; 14(2):89–98

Alteration of cyclosporin–A pharmacokinetics after experimental spinal cord injury. Ibarra A, et al. **J Neurotrauma** 1996 May;13(5):267–72

Spinal endothelin content is elevated after moderate local trauma in the rat to levels associated with locomotor dysfunction after intrathecal injection. Salzman SK, et al. **J Neurotrauma** 1996 Feb;13(2):93–101

Characterization of the bone mineral density of children with spinal cord injury. Moynahan M, et al. **J Spinal Cord Med** 1996 Oct;19(4):249–54

Ultrastructural characteristics of glutamatergic and GABAergic terminals in cat lamina IX before and after spinal cord injury. Tai Q, et al. **J Spinal Cord Med** 1997 Jul;20(3):311–8

Numerical model for calculation of apparent diffusion coefficients (ADC) in permeable cylinders—comparison with measured ADC in spinal cord white matter. Ford

JC, et al. **Magn Reson Med** 1997 Mar;37(3):387–94

Regulation of lipolysis by the sympathetic nervous system: a microdialysis study in normal and spinal cord–injured subjects. Karlsson AK, et al. **Metabolism** 1997 Apr; 46(4):388–94

CGRP expression increases in the ventral horn rostral to spinal cord transection. Krenz NR, et al. **Neuroreport** 1996 Nov 25;7(18):2859–62

Regional study of spinal alpha 2–adrenoceptor densities after intraspinal noradrenergic–rich implants on adult rats bearing complete spinal cord transection or selective chemical noradrenergic denervation. Roudet C, et al. **Neurosci Lett** 1996 Apr 19;208(2):89–92

Catecholamine enzymes and neuropeptides are expressed in fibres and somata in the intermediate gray matter in chronic spinal rats. Cassam AK, et al. **Neuroscience** 1997 Jun; 78(3):829–41

Role of neutrophils in spinal cord injury in the rat. Taoka Y, et al. **Neuroscience** 1997 Aug;79(4):1177–82

[Changes of NGF in injured spinal cord following treatment with a single large dose of methylprednisolone sodium succinate] Zhang J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):727–30 (Eng. Abstr.) **(Chi)**

[Expression of neurotrophin and IL–1 beta mRNAs following spinal cord injury and the effects of methylprednisolone treatment] Hayashi M, et al. **Kaibogaku Zasshi** 1997 Jun; 72(3):209–13 (Eng. Abstr.) **(Jpn)**

[Excitatory amino acids and prostanoids release in spinal cord injury] Ishikawa T, et al. **No To Shinkei** 1996 Mar; 48(3):259–63 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Urethral cultures in female patients with a spinal cord injury. Montgomerie JZ, et al. **Spinal Cord** 1997 May;35(5):282–5

Methicillin–resistant Staphylococcus aureus: a four–year experience in a spinal cord injury unit in Spain. Olona–Cabases M, et al. **Spinal Cord** 1996 Jun;34(6):315–9

MORTALITY

Comorbid illness is associated with survival and length of hospital stay in patients with chronic disability. A prospective comparison of three comorbidity indices. Rochon PA, et al. **Med Care** 1996 Nov;34(11):1093–101

Spinal cord injury: a 25–year morbidity and mortality study [see comments] Rish BL, et al. **Mil Med** 1997 Feb; 162(2):141–8. Comment in: Mil Med 1997 May;162(5):iii–iv.

NURSING

Relationships between disability measures and nursing effort during medical rehabilitation for patients with traumatic brain and spinal cord injury. Heinemann AW, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):143–9

PATHOLOGY

Accumulation of beta–amyloid precursor protein and ubiquitin in axons after spinal cord trauma in humans: immunohistochemical observations on autopsy material. Ahlgren S, et al. **Acta Neuropathol (Berl)** 1996 Jul; 92(1):49–55

Traumatic spinal cord injury: a neuropathological study on the longitudinal spreading of the lesions. Ito T, et al. **Acta Neuropathol (Berl)** 1997 Jan;93(1):13–8

Morphological characterization of the evolving rat spinal cord injury after photochemically induced ischemia. von Euler M, et al. **Acta Neuropathol (Berl)** 1997 Sep; 94(3):232–9

Long–term changes in spinal motor neurons after injury. Bowe CM, et al. **Adv Neurol** 1997;72:201–17 (86 ref.)

Observations on the pathology of several types of human spinal cord injury, with emphasis on the astrocyte response to penetrating injuries. Bunge RP, et al. **Adv Neurol** 1997; 72:305–15

Neuropathology of human spinal cord injury. Croul SE, et al. **Adv Neurol** 1997;72:317–23 (31 ref.)

Update on the pathophysiology and pathology of acute spinal cord injury. Tator CH. **Brain Pathol** 1995 Oct;5(4):407–13 (46 ref.)

Classification of dorsal horn neurons based on somatic receptive fields in cats with intact and transected spinal cords: neural plasticity. Garrison DW, et al. **Brain Res** 1997 Jul 11;762(1–2):228–30

Histological and functional evaluation of experimental spinal cord injury: evidence of a stepwise response to graded compression. Gruner JA, et al. **Brain Res** 1996 Aug 5; 729(1):90–101

MR of post traumatic spinal cord lesions. Unexpected improvement of hemorrhagic lesions. Wasenko JJ, et al. **Clin Imaging** 1997 Jul–Aug;21(4):246–51

Experimental analysis of progressive necrosis after spinal cord trauma in the rat: etiological role of the inflammatory response. Zhang Z, et al. **Exp Neurol** 1997 Jan; 143(1):141–52

Experimental spinal cord injury: Wallerian degeneration in the dorsal column is followed by revascularization, glial proliferation, and nerve regeneration. Zhang Z, et al. **Exp Neurol** 1997 Sep;147(1):159–71

Ultrastructure of the glial cells after spinal cord compression in rabbits. Orkisz S, et al. **Folia Morphol (Warsz)** 1996; 55(4):403–5

Characterization of the microvascular glycocalyx in normal and injured spinal cord in the rat. Noble LJ, et al. **J Comp Neurol** 1996 Dec 23;376(4):542–56

Ultrastructural quantitative analysis of glutamatergic and GABAergic synaptic terminals in the phrenic nucleus after spinal cord injury. Tai Q, et al. **J Comp Neurol** 1996 Aug 26;372(3):343–55

Connexin43 and astrocytic gap junctions in the rat spinal cord after acute compression injury. Theriault E, et al. **J Comp Neurol** 1997 Jun 2;382(2):199–214

Primary demyelination and regeneration of ascending axons in the dorsal funiculus of the rat spinal cord following photochemically induced injury. Olby NJ, et al. **J Neurocytol** 1996 Aug;25(8):465–80

Neuronal and glial apoptosis after traumatic spinal cord injury. Liu XZ, et al. **J Neurosci** 1997 Jul 15; 17(14):5395–406

Grafting of cultured microglial cells into the lesioned spinal cord of adult rats enhances neurite outgrowth. Rabchevsky AG, et al. **J Neurosci Res** 1997 Jan 1;47(1):34–48

Magnetic resonance imaging for the evaluation of patients with occult cervical spine injury. Benzel EC, et al. **J Neurosurg** 1996 Nov;85(5):824–9

Intrathecal infusion of the nitric oxide synthase inhibitor N–methyl L–arginine after experimental spinal cord injury in guinea pigs. Cohen TI, et al. **J Neurotrauma** 1996 Jul; 13(7):361–9

Neuropathology of human spinal cord injury sustained in sports–related activities. Hayes KC, et al. **J Neurotrauma** 1997 Apr;14(4):235–48

Effects of methylprednisolone on lesioned and uninjured mammalian spinal neurons: viability, ultrastructure, and network electrophysiology. Rosenberg LJ, et al. **J Neurotrauma** 1996 Aug;13(8):417–37

Axonal sprouting following incomplete spinal cord injury: an experimental model. Goldstein B, et al. **J Spinal Cord Med** 1997 Apr;20(2):200–6

Ultrastructural characteristics of glutamatergic and GABAergic terminals in cat lamina IX before and after spinal cord injury. Tai Q, et al. **J Spinal Cord Med** 1997 Jul;20(3):311–8

Magnetic resonance imaging: utilization in the management of central nervous system trauma. Nichols JS, et al. **J Trauma** 1997 Mar;42(3):520–3; discussion 523–4

Apoptosis and delayed degeneration after spinal cord injury in rats and monkeys [published erratum appears in Nat Med 1997 Feb;3(2):240] Crowe MJ, et al. **Nat Med** 1997 Jan; 3(1):73–6

Regeneration of hemisectioned spinal cords with and without supporting materials. Inoue HK, et al. **Neurol Med Chir (Tokyo)** 1997 Aug;37(8):600–5

Pathophysiology of spinal cord trauma: observations on vasogenic oedema and axonal injuries in human and experimental material. Olsson Y, et al. **Neuropathol Appl Neurobiol** 1996 Dec;22(6):518–20

Induction and its spread of apoptosis in rat spinal cord after mechanical trauma. Katoh K, et al. **Neurosci Lett** 1996 Sep 20;216(1):9–12

Brain–derived neurotrophic factor reduces necrotic zone and supports neuronal survival after spinal cord hemisection in adult rats. Novikova L, et al. **Neurosci Lett** 1996 Dec 20;220(3):203–6

Ultrastructural evidence for arteriolar vasospasm after spinal cord trauma. Anthes DL, et al. **Neurosurgery** 1996 Oct; 39(4):804–14

A clinical magnetic resonance imaging study of the traumatised spinal cord more than 20 years following injury. Wang D, et al. **Paraplegia** 1996 Feb;34(2):65–81

Fatal air bag mediated craniocervical trauma in a child. Willis BK, et al. **Pediatr Neurosurg** 1996 Jun;24(6):323–7

New view of spinal cord injury [news] Barinaga M. **Science** 1996 Nov 29;274(5292):1466

Axotomy–induced alterations in the red nucleus revealed by monoclonal antibody, Py, following a low thoracic spinal cord lesion in the adult rat. Brook GA, et al. **Spinal Cord** 1997 Jul;35(7):474–81

Skeletal muscle fibre type transformation following spinal cord injury. Burnham R, et al. **Spinal Cord** 1997 Feb; 35(2):86–91

Neurographic assessment of intramedullary motoneurone lesions in cervical spinal cord injury: consequences for hand function. Curt A, et al. **Spinal Cord** 1996 Jun;34(6):326–32

Radiofrequency as a lesioning model in experimental spinal cord injury. Haghighi SS, et al. **Spinal Cord** 1996 Apr; 34(4):214–9

Motoneurons of the injured spinal cord of the adult dog can grow lengthy axons into an autologous peripheral nerve graft. A retrograde axonal tracing study. Moissonnier P, et al. **Spinal Cord** 1996 Jun;34(6):320–5

The epiconus syndrome presenting with radicular–type neurological features. Toribatake Y, et al. **Spinal Cord** 1997 Mar;35(3):163–70

Characterization of an experimental spinal cord injury model using waveform and morphometric analysis. Falconer JC, et al. **Spine** 1996 Jan 1;21(1):104–12

Cervical central cord syndrome [letter; comment] Rossier AB. **Surg Neurol** 1996 Dec;46(6):606–7. Comment on: Surg Neurol 1995 Sep;44(3):236–9; discussion 239–40.

Regeneration of immature mammalian spinal cord after injury. Nicholls J, et al. **Trends Neurosci** 1996 Jun; 19(6):229–34 (56 ref.)

PHYSIOPATHOLOGY

Modification of urinary bladder function after spinal cord injury. de Groat WC, et al. **Adv Neurol** 1997;72:347–64 (65 ref.)

Motor control physiology below spinal cord injury: residual volitional control of motor units in paretic and paralyzed muscles. Dimitrijevic MR, et al. **Adv Neurol** 1997;72:335–45 (32 ref.)

Neurological assessment in spinal cord injury. Ditunno JF Jr, et al. **Adv Neurol** 1997;72:325–33 (53 ref.)

Strategies and mechanisms of recovery after spinal cord injury. Murray M. **Adv Neurol** 1997;72:219–25 (43 ref.)

Electrophysiological investigations of neurotransplant–mediated recovery after spinal cord injury. Skinner RD, et al. **Adv Neurol** 1997;72:277–90

Colonic motility and tone after spinal cord and cauda equina injury. Bruninga K, et al. **Am J Gastroenterol** 1997 May; 92(5):891–4

Ventilatory function in cervical and high thoracic spinal cord injury. Relationship to level of injury and tone. Roth EJ, et al. **Am J Phys Med Rehabil** 1997 Jul–Aug;76(4):262–7

Esophageal sensation in spinal cord–injured patients: balloon distension and cerebral evoked potential recording. DeVault KR, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G937–41

Sympathovagal balance of the heart in subjects with spinal cord injury. Grimm DR, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H835–42

Relationship between sympathetic activity and arterial pressure in conscious spinal rats. Maiorov DN, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H625–31

Comparison between Sprague–Dawley and Wistar rats as an experimental model of pharmacokinetic alterations induced by spinal cord injury. García–López P, et al. **Arch Med Res** 1996 Winter;27(4):453–7

Ambulatory capacity in spinal cord injury: significance of somatosensory evoked potentials and ASIA protocol in predicting outcome. Curt A, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):39–43

Clinical measurement of spasticity using the pendulum test: comparison of electrogoniometric and videotape analyses. Jamshidi M, et al. **Arch Phys Med Rehabil** 1996 Nov; 77(11):1129–32

Gallstones in chronic spinal cord injury: is impaired gallbladder emptying a risk factor? Ketover SR, et al. **Arch Phys Med Rehabil** 1996 Nov;77(11):1136–8

Assessment of isokinetic and hand–held dynamometer measures of shoulder rotator strength among individuals with spinal cord injury. May LA, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):251–5

Physiologic responses during functional electrical stimulation leg cycling and hybrid exercise in spinal cord injured subjects. Mutton DL, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):712–8

Cyclical etidronate: its effect on bone density in patients with acute spinal cord injury. Pearson EG, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):269–72

Physiologic parameters associated with sexual arousal in women with incomplete spinal cord injuries. Sipski ML, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):305–13

Neurogenic bowel dysfunction after spinal cord injury: clinical evaluation and rehabilitative management. Stiens SA, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S86–102 (131 ref.)

Nocturnal polyuria and antidiuretic hormone levels in spinal cord injury. Szollar SM, et al. **Arch Phys Med Rehabil** 1997 May;78(5):455–8

Spinal cord injury and bladder recovery. Weiss DJ, et al. **Arch Phys Med Rehabil** 1996 Nov;77(11):1133–5

Instrumented artificial spinal cord for human cervical pressure measurement. Pintar FA, et al. **Biomed Mater Eng** 1996;6(3):219–29

A critical appraisal of pediculated omental graft transposition in progressive spinal cord failure. Sgouros S, et al. **Br J Neurosurg** 1996 Dec;10(6):547–53

A clinical and neurophysiological study of a patient with an extensive transection of the spinal cord sparing only a part of one anterolateral quadrant. Danziger N, et al. **Brain** 1996 Dec;119 (Pt 6):1835–48

Update on the pathophysiology and pathology of acute spinal cord injury. Tator CH. **Brain Pathol** 1995 Oct;5(4):407–13 (46 ref.)

Changes in pharmacological sensitivity of the spinal cord to potassium channel blockers following acute spinal cord injury. Fehlings MG, et al. **Brain Res** 1996 Oct 14; 736(1–2):135–45

Effects of intrathecal vs. systemic clonidine in treating chronic allodynia–like response in spinally injured rats. Hao JX, et al. **Brain Res** 1996 Oct 14;736(1–2):28–34

Capsaicin–sensitive afferents mediate chronic cold, but not mechanical, allodynia–like behavior in spinally injured rats. Hao JX, et al. **Brain Res** 1996 May 25;722(1–2):177–80

Schwann cells can misdirect regrowing neuronal processes. Sims TJ, et al. **Brain Res** 1997 Jul 18;763(1):141–4

Influence of spondylopathy on bone densitometry using dual energy X–ray absorptiometry. Jaovisidha S, et al. **Calcif Tissue Int** 1997 May;60(5):424–9

Increased bone mineral density after prolonged electrically induced cycle training of paralyzed limbs in spinal cord injured man. Mohr T, et al. **Calcif Tissue Int** 1997 Jul; 61(1):22–5

Effects of spinal dorsal column transection on the response

of monkey anterior parietal cortex to repetitive skin stimulation. Tommerdahl M, et al. **Cereb Cortex** 1996 Mar-Apr;6(2):131-55

Airway hyperresponsiveness to methacholine in subjects with spinal cord injury. Singas E, et al. **Chest** 1996 Oct; 110(4):911-5

Maximal expiratory pressures in spinal cord injury using two mouthpieces. Tully K, et al. **Chest** 1997 Jul;112(1):113-6

Cardiovascular and hormonal responses to food ingestion in humans with spinal cord transection. Baliga RR, et al. **Clin Auton Res** 1997 Jun;7(3):137-41

SCIWORA (spinal cord injury without radiographic abnormality) in infants and children. Kriss VM, et al. **Clin Pediatr (Phila)** 1996 Mar;35(3):119-24 (18 ref.)

The child with a spinal cord injury. Vogel L, et al. **Dev Med Child Neurol** 1997 Mar;39(3):202-7 (82 ref.)

Clinical value of F-wave recordings in traumatic cervical spinal cord injury. Curt A, et al. **Electroencephalogr Clin Neurophysiol** 1997 Jun; 105(3):189-93

Effect of maximal arm exercise on skin blood flux in the paralyzed lower limbs in persons with spinal cord injury. Muraki S, et al. **Eur J Appl Physiol** 1996;74(5):481-3

Cardiovascular and respiratory responses to passive leg cycle exercise in people with spinal cord injuries. Muraki S, et al. **Eur J Appl Physiol** 1996;74(1-2):23-8

Relationship between core temperature and skin blood flux in lower limbs during prolonged arm exercise in persons with spinal cord injury. Muraki S, et al. **Eur J Appl Physiol** 1996;72(4):330-4

Lymphocyte recruitment following spinal cord injury in mice is altered by prior viral exposure. Schnell L, et al. **Eur J Neurosci** 1997 May;9(5):1000-7

Sacral rhizotomies and electrical bladder stimulation in spinal cord injury. Part I: Clinical and urodynamic analysis. Dutch Study Group on Sacral Anterior Root Stimulation. Van Kerrebroeck EV, et al. **Eur Urol** 1997;31(3):263-71

A quantitative spatial analysis of the blood-spinal cord barrier. I. Permeability changes after experimental spinal contusion injury. Popovich PG, et al. **Exp Neurol** 1996 Dec;142(2):258-75

Delayed antagonism of AMPA/kainate receptors reduces long-term functional deficits resulting from spinal cord trauma. Wrathall JR, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):565-73

Experimental spinal cord injury: Wallerian degeneration in the dorsal column is followed by revascularization, glial proliferation, and nerve regeneration. Zhang Z, et al. **Exp Neurol** 1997 Sep;147(1):159-71

Seminal reactive oxygen species and sperm motility and morphology in men with spinal cord injury. Padron OF, et al. **Fertil Steril** 1997 Jun;67(6):1115-20

External loops of human premotor spinal oscillators identified by simultaneous measurements of interspike intervals and phase relations. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:95-119

Electromyographic identification of spinal oscillator patterns and recouplings in a patient with incomplete spinal cord lesion: oscillator formation training as a method to improve motor activities. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:121-220

Classification, oscillatory and alternating oscillatory firing of alpha 1 (FF) and alpha 2-motoneurons (FR) in patients with spinal cord lesion. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:5-56

Mono- and polysynaptic drive of oscillatory firing alpha 1 (FF) and alpha 2-motoneurons (FR) in a patient with spinal cord lesion. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:57-74

Reflex stimulation of continuously oscillatory firing alpha and gamma-motoneurons in patients with spinal cord lesion. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug; 15 Suppl 1:75-93

Spinal locomotion: an approach to human neurophysiology and treatment in spinal cord lesion. New results obtained with basic methods. Schalow G. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:1-3

Urinary bladder response to hypogastric nerve stimulation after bilateral resection of the pelvic nerve or spinal cord injury in rats. Kontani H, et al. **Int J Urol** 1997 Jul; 4(4):394-400

Cellular inflammatory response after spinal cord injury in Sprague-Dawley and Lewis rats. Popovich PG, et al. **J Comp Neurol** 1997 Jan 20;377(3):443-64

Neurite outgrowth through lesions of neonatal opossum spinal cord in culture. Varga ZM, et al. **J Comp Neurol** 1996 Mar 18;366(4):600-12

Experimental use of somatosensory evoked potential for intraoperative identification of spinal cord blood supply. Janusz MT, et al. **J Invest Surg** 1997 Jul-Aug;10(4):195-203

Primary demyelination and regeneration of ascending axons in the dorsal funiculus of the rat spinal cord following photochemically induced injury. Olby NJ, et al. **J Neurocytol** 1996 Aug;25(8):465-80

Reconstruction of the glial environment of a photochemically induced lesion in the rat spinal cord by transplantation of mixed glial cells. Olby NJ, et al. **J Neurocytol** 1996 Aug; 25(8):481-98

Effect of stimulus intensity and voluntary contraction on corticospinal potentials following transcranial magnetic stimulation. Kaneko K, et al. **J Neurol Sci** 1996 Jul; 139(1):131-6

Distinct patterns of motor unit behavior during muscle spasms in spinal cord injured subjects. Thomas CK, et al. **J Neurophysiol** 1997 May;77(5):2847-50

Role of NMDA and non-NMDA ionotropic glutamate receptors in traumatic spinal cord axonal injury. Agrawal SK, et al. **J Neurosci** 1997 Feb 1;17(3):1055-63

Local blockade of sodium channels by tetrodotoxin ameliorates tissue loss and long-term functional deficits resulting from experimental spinal cord injury. Teng YD, et al. **J Neurosci** 1997 Jun 1;17(11):4359-66

Vascular mechanisms in the pathophysiology of human spinal cord injury. Tator CH, et al. **J Neurosurg** 1997 Mar; 86(3):483-92

MASCIS evaluation of open field locomotor scores: effects of experience and teamwork on reliability. Multicenter Animal Spinal Cord Injury Study. Basso DM, et al. **J Neurotrauma** 1996 Jul;13(7):343-59

Operant conditioning of H-reflex in spinal cord-injured rats. Chen XY, et al. **J Neurotrauma** 1996 Dec;13(12):755-66

Anoxic injury in the rat spinal cord: pharmacological evidence for multiple steps in Ca(2+)-dependent injury of the dorsal columns. Imaizumi T, et al. **J Neurotrauma** 1997 May;14(5):299-311

Serial recording of somatosensory and myoelectric motor evoked potentials: role in assessing functional recovery after graded spinal cord injury in the rat. Nashmi R, et al. **J Neurotrauma** 1997 Mar;14(3):151-9

Effects of methylprednisolone on lesioned and uninjured mammalian spinal neurons: viability, ultrastructure, and network electrophysiology. Rosenberg LJ, et al. **J Neurotrauma** 1996 Aug;13(8):417-37

New assessment techniques for evaluation of posttraumatic spinal cord function in the rat. van de Meent H, et al. **J Neurotrauma** 1996 Dec;13(12):741-54

Conditioning lower limb H-reflexes by transcranial magnetic stimulation of motor cortex reveals preserved innervation in SCI patients. Wolfe DL, et al. **J Neurotrauma** 1996 Jun; 13(6):281-91

Adverse effects of epidural spinal cord stimulation on bladder function in a patient with chronic spinal cord injury pain [letter] Loubser PG. **J Pain Symptom Manage** 1997 May; 13(5):251-2

Menstruation and pediatric spinal cord injury. Anderson CJ, et al. **J Spinal Cord Med** 1997 Jan;20(1):56-9

Assessment of stature in spinal cord injury. Garshick E, et al. **J Spinal Cord Med** 1997 Jan;20(1):36-42

Do direct current electric fields enhance micturition in the spinal cat? Kerns JM, et al. **J Spinal Cord Med** 1996 Oct; 19(4):225-33

Testicular blood flow following spinal cord injury in the Sprague Dawley rat. Linsenmeyer TA, et al. **J Spinal Cord Med** 1996 Jul;19(3):183-5

Manual muscle test score and force comparisons after cervical spinal cord injury. Needham-Shropshire BM, et al. **J Spinal Cord Med** 1997 Jul;20(3):324-30

Management of pain in persons with spinal cord injury. Ragnarsson KT. **J Spinal Cord Med** 1997 Apr;20(2):186-99 (79 ref.)

In-vivo whole bladder response to anticholinergic and musculotropic agents in spinal cord injured rats. Shenot PJ, et al. **J Spinal Cord Med** 1997 Jan;20(1):31-5

The role of glycine in spinal shock. Simpson RK Jr, et al. **J Spinal Cord Med** 1996 Oct;19(4):215-24

Experimental and clinical studies of the pathophysiology and management of acute spinal cord injury. Tator CH. **J Spinal Cord Med** 1996 Oct;19(4):206-14 (87 ref.)

Seat-belt use and relation to neurologic injury in motor vehicle crashes. Sasso RC, et al. **J Spinal Disord** 1997 Aug; 10(4):325-8

Reorganization of somato-urethral reflexes following spinal cord injury in the rat. Kakizaki H, et al. **J Urol** 1997 Oct; 158(4):1562-7

Electroejaculation versus vibratory stimulation in spinal cord injured men: sperm quality and patient preference [see comments] Ohl NA, et al. **J Urol** 1997 Jun;157(6):2147-9 . Comment in: J Urol 1997 Jun;157(6):2159.

The value of sympathetic skin response recordings in the assessment of the vesicourethral autonomic nervous dysfunction in spinal cord injured patients. Schurch B, et al. **J Urol** 1997 Jun;157(6):2230-3

This month in investigative urology. Commentary on selective detrusor activation by electrical sacral nerve root stimulation in spinal cord injury [comment] Tanagho EA. **J Urol** 1997 Apr;157(4):1196. Comment on: J Urol 1997 Apr;157(4):1504-8.

Effects of GABA-B agonist baclofen on bronchial hyperreactivity to inhaled histamine in subjects with cervical spinal cord injury. Grimm DR, et al. **Lung** 1997; 175(5):333-41

Changes in gas exchange kinetics with training in patients with spinal cord injury. Barstow TJ, et al. **Med Sci Sports Exerc** 1996 Oct;28(10):1221-8

Plasma catecholamine and lactate relationship during graded exercise in men with spinal cord injury. Frey GC, et al. **Med Sci Sports Exerc** 1997 Apr;29(4):451-6

Changes in physical strain and physical capacity in men with spinal cord injuries. Janssen TW, et al. **Med Sci Sports Exerc** 1996 May;28(5):551-9

Behavior of the H-reflex in humans following mechanical perturbation or injury to rostral spinal cord. Leis AA, et al. **Muscle Nerve** 1996 Nov;19(11):1373-82

Contractile properties of human thenar muscles paralyzed by spinal cord injury. Thomas CK. **Muscle Nerve** 1997 Jul; 20(7):788-99

Motor unit forces and recruitment patterns after cervical spinal cord injury. Thomas CK, et al. **Muscle Nerve** 1997 Feb;20(2):212-20

Role of fibroblast growth factors in neural trauma. Cuevas P, et al. **Neurol Res** 1997 Jun;19(3):254-6 (24 ref.)

Treatment with genetically engineered fibroblasts producing NGF or BDNF can accelerate recovery from traumatic spinal cord injury in the adult rat. Kim DH, et al. **Neuroreport** 1996 Sep 2;7(13):2221-5

Effects of transcutaneous electrical nerve stimulation (TENS) on spontaneous and noxiously evoked dorsal horn cell activity in cats with transected spinal cords. Garrison DW, et al. **Neurosci Lett** 1996 Sep 27;216(2):125-8

Involvement of nitric oxide in acute spinal cord injury: an immunocytochemical study using light and electron microscopy in the rat. Sharma HS, et al. **Neurosci Res** 1996 Mar;24(4):373-84

Glutamate- and GABA-immunoreactive synapses on sympathetic preganglionic neurons caudal to a spinal cord transection in rats. Llewellyn-Smith IJ, et al. **Neuroscience** 1997 Oct;80(4):1225-35

Neurotransmission by neurons that use serotonin, noradrenaline, glutamate, glycine, and gamma-aminobutyric acid in the normal and injured spinal cord. Shapiro S. **Neurosurgery** 1997 Jan;40(1):168-76; discussion 177 (109 ref.)

Regeneration of injured axons in the adult mammalian central nervous system. Tatagiba M, et al. **Neurosurgery** 1997 Mar; 40(3):541-6; discussion 546-7 (45 ref.)

Beneficial effects of the melanocortin alpha-melanocyte-stimulating hormone on clinical and neurophysiological recovery after experimental spinal cord injury. van de Meent H, et al. **Neurosurgery** 1997 Jan; 40(1):122-30; discussion 130-1

Role of the transversus perinei profundus muscle on voiding: the meaning of UPmax in patients with paralyzed urethral sphincter. Iwatsubo E, et al. **Neurourol Urodyn** 1996; 15(3):169-75

Bone mineral density in patients with spinal cord injuries. Changlai SP, et al. **Nucl Med Commun** 1996 May; 17(5):385-8

Changes in the P300 component of the tactile event-related potential following spinal cord injury. Cohen MJ, et al. **Paraplegia** 1996 Feb;34(2):107-12

Central pattern generator [letter; comment] Dietz V. **Paraplegia** 1995 Dec;33(12):739. Comment on: Paraplegia 1995 May;33(5):239-40.

Residual urine following intermittent catheterisation in patients with spinal cord injuries. Jensen AE, et al. **Paraplegia** 1995 Dec;33(12):693-6

Bowel function in adults who have sustained spinal cord injury in childhood. Kannisto M, et al. **Paraplegia** 1995 Dec;33(12):701-3

4-Aminopyridine improves pulmonary function in quadriplegic humans with longstanding spinal cord injury. Segal JL, et al. **Pharmacotherapy** 1997 May-Jun; 17(3):415-23

Male fertility following spinal cord injury: facts and fiction. Brackett NL, et al. **Phys Ther** 1996 Nov;76(11):1221-31 (95 ref.)

Locomotion in patients with spinal cord injuries. Dietz V, et al. **Phys Ther** 1997 May;77(5):508-16 (52 ref.)

Beta-endorphin and cortisol levels in plasma and CSF following acute experimental spinal traumas. De Riu PL, et al. **Physiol Behav** 1997 Jul;62(1):1-5

Comparative study of the effects of capsaicin on the contractility of normal and spinal cord injured human bladders. Kuo HC. **Proc Natl Sci Counc Repub China B** 1997 Jan;21(1):13-9

Sex and the spinal cord. A new pathway for orgasm [news] DeKoker B. **Sci Am** 1996 Dec;275(6):30-2

Sensory detection and pain thresholds in spinal cord injury patients with and without dysesthetic pain, and in chronic low back pain patients. Cohen MJ, et al. **Somatosens Mot Res** 1996;13(1):29-37

Motor cortical mapping of proximal upper extremity muscles following spinal cord injury. Brouwer B, et al. **Spinal Cord** 1997 Apr;35(4):205-12

Sensory deprivation in spinal cord injury--an essay. Crossman MW. **Spinal Cord** 1996 Oct;34(10):573-7 (28 ref.)

Recovery of bladder function in patients with acute spinal cord injury: significance of ASIA scores and somatosensory evoked potentials. Curt A, et al. **Spinal Cord** 1997 Jun; 35(6):368-73

Neurographic assessment of intramedullary motoneurone lesions in cervical spinal cord injury: consequences for hand function. Curt A, et al. **Spinal Cord** 1996 Jun;34(6):326-32

Static respiratory pressures in patients with post-traumatic tetraplegia. Gounden P. **Spinal Cord** 1997 Jan;35(1):43-7

Strength post-spinal cord injury: myometer vs manual muscle test. Herbison GJ, et al. **Spinal Cord** 1996 Sep;34(9):543-8

Spinal cord injuries: a shortened measure of function and mood. Lundqvist C, et al. **Spinal Cord** 1997 Jan;35(1):17-21

Thermoregulation in spinal cord injury: the challenge of the Atlanta Paralympics. McCann BC. **Spinal Cord** 1996 Jul; 34(7):433-6 (19 ref.)

Motor, sensory and functional recovery in patients with spinal cord lesions. Müslümanoğlu L, et al. **Spinal Cord** 1997 Jun;35(6):386-9

Functional assessment of patients with spinal cord injury:

measured by the motor score and the Functional Independence Measure. Ota T, et al. **Spinal Cord** 1996 Sep; 34(9):531–5

Electromyographical evidence for exercise–induced diaphragm fatigue in patients with chronic cervical cord injury or prior poliomyelitis infection. Sinderby C, et al. **Spinal Cord** 1996 Oct;34(10):594–601

Diaphragm function in patients with cervical cord injury or prior poliomyelitis infection. Sinderby C, et al. **Spinal Cord** 1996 Apr;34(4):204–13

Energy expenditure of walking for adult patients with spinal cord lesions using the reciprocating gait orthosis and functional electrical stimulation. Sykes L, et al. **Spinal Cord** 1996 Nov;34(11):659–65

Densitometric patterns of spinal cord injury associated bone loss. Szollar SM, et al. **Spinal Cord** 1997 Jun;35(6):374–82

Intravenous salbutamol treatment for penile erection arising during cystoscopy of cervical spinal cord injury patients. Vaidyanathan S, et al. **Spinal Cord** 1996 Nov;34(11):691–5

Scope and limitations of the manual assessment of muscle tone [letter; comment] Walsh EG, et al. **Spinal Cord** 1997 Jan;35(1):64. Comment on: Spinal Cord 1996 Sep;34(9):560–4.

Cough in spinal cord injured patients: the relationship between motor level and peak expiratory flow. Wang AY, et al. **Spinal Cord** 1997 May;35(5):299–302

Testicular aspiration of sperm for intracytoplasmic sperm injection: an alternative treatment to electro–emission: case report. Watkins W, et al. **Spinal Cord** 1996 Nov; 34(11):696–8

Sexuality and women with complete spinal cord injury. Whipple B, et al. **Spinal Cord** 1997 Mar;35(3):136–8 (22 ref.)

Viscoelastic relaxation and regional blood flow response to spinal cord compression and decompression. Carlson GD, et al. **Spine** 1997 Jun 15;22(12):1285–91

Characterization of an experimental spinal cord injury model using waveform and morphometric analysis. Falconer JC, et al. **Spine** 1996 Jan 1;21(1):104–12

Differences in sensitivity between magnetic motor–evoked potentials and somatosensory–evoked potentials in experimental spinal cord lesions. Hiraizumi Y, et al. **Spine** 1996 Oct 1;21(19):2190–6

A new method for estimating spinal cord function. Refractory period of conductive spinal cord evoked potentials. Ishikawa M, et al. **Spine** 1997 May 1; 22(9):1007–12

Body composition of spinal cord injured adults. Kocina P. **Sports Med** 1997 Jan;23(1):48–60 (87 ref.)

Sensorimotor stimulation to improve locomotor recovery after spinal cord injury. Muir GD, et al. **Trends Neurosci** 1997 Feb;20(2):72–7 (60 ref.)

Autonomic hyperreflexia revisited. Schurch B, et al. **Urol Int** 1997;58(3):148–52

[Effects of platelet activating factor and platelet activating factor receptor antagonist on spinal cord blood flow after spinal cord injury] Xiao J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):715–8 (Eng. Abstr.) **(Chi)**

[Electroejaculation and assisted reproductive techniques in the patients with spinal cord injury] Yamamoto M, et al. **Nippon Hinyokika Gakkai Zasshi** 1997 Mar;88(3):420–6 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Factors related to quadriplegia in football and the implications for intervention strategies. Bishop PJ. **Am J Sports Med** 1996 Mar–Apr;24(2):235–9

Spinal cord injury. A preventable public burden. Tyroch AH, et al. **Arch Surg** 1997 Jul;132(7):778–81

Safe depths for teaching children to dive. Blanksby BA, et al. **Aust J Sci Med Sport** 1996 Sep;28(3):79–85

Gabexate mesilate, a synthetic protease inhibitor, prevents compression–induced spinal cord injury by inhibiting activation of leukocytes in rats [see comments] Taoka Y, et al. **Crit Care Med** 1997 May;25(5):874–9. Comment in: Crit Care Med 1997 May;25(5):725.

Gabexate mesilate prevents compression–induced spinal cord injury [editorial; comment] Young W. **Crit Care Med** 1997 May;25(5):725. Comment on: Crit Care Med 1997 May;25(5):874–9.

Use and abuse of spinal boards [letter; comment] Cocks RA. **J Accid Emerg Med** 1997 Mar;14(2):131. Comment on: J Accid Emerg Med 1996 Jan;13(1):34–7. Comment on: J Accid Emerg Med 1996 Jul;13(4):302.

A review of seven support surfaces with emphasis on their protection of the spinally injured [see comments] Main PW, et al. **J Accid Emerg Med** 1996 Jan;13(1):34–7. Comment in: J Accid Emerg Med 1996 Jul;13(4):302. Comment in: J Accid Emerg Med 1996 Nov;13(6):433. Comment in: J Accid Emerg Med 1997 Mar;14(2):131.

High school football–related cervical spinal cord injuries in Louisiana: the athlete's perspective. Lawrence DW, et al. **J La State Med Soc** 1997 Jan;149(1):27–31

Accuracy of pedicle screw placement with the assistance of lateral plain radiography. Odgers CJ 4th, et al. **J Spinal Disord** 1996 Aug;9(4):334–8

Seat–belt use and relation to neurologic injury in motor vehicle crashes. Sasso RC, et al. **J Spinal Disord** 1997 Aug; 10(4):325–8

New and future approaches for spinal cord protection. Svensson LG. **Semin Thorac Cardiovasc Surg** 1997 Jul; 9(3):206–21 (104 ref.)

Prevention of spinal cord injuries that occur in swimming pools. DeVivo MJ, et al. **Spinal Cord** 1997 Aug; 35(8):509–15

Enoximone usage for experimental spinal cord protection during aortic cross–clamping. Katircioğlu SF, et al. **Thorac Cardiovasc Surg** 1996 Oct;44(5):245–7

Catastrophic injury of the brain and spinal cord. Cantu RC. **Va Med Q** 1996 Spring;123(2):98–102

[Spinal cord protection in surgery of the thoracic, descending, and thoraco–abdominal aorta. Comparison of methods] Zanetti PP, et al. **Minerva Chir** 1996 Sep; 51(9):681–9 (Eng. Abstr.) **(Ita)**

[Surgical treatment of thoracoabdominal aortic aneurysm: detection and prevention of spinal cord injury] Yamashita K, et al. **Rinsho Kyobu Geka** 1989 Oct;9(5):452–5 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Long–term psychological outcomes in spinal cord injured persons: results of a controlled trial using cognitive behavior therapy. Craig AR, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):33–8

Adjustment after spinal cord injury: a 9–year longitudinal study. Krause JS. **Arch Phys Med Rehabil** 1997 Jun; 78(6):651–7

Sexual adjustment and quality of relationship in spinal paraplegia: a controlled study. Kreuter M, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):541–8

Spinal cord injury rehabilitation. 4. Individual experience, personal adaptation, and social perspectives. Stiens SA, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S65–72 (97 ref.)

Depression following a spinal cord injury. Boekamp JR, et al. **Int J Psychiatry Med** 1996;26(3):329–49 (97 ref.)

Work, non–work and consequent satisfaction after spinal cord injury. Ville I, et al. **Int J Rehabil Res** 1996 Sep; 19(3):241–52

MMPI–2 profiles in traumatic and non–traumatic spinal cord injured patients. Fow NR, et al. **J Clin Psychol** 1996 Sep; 52(5):573–9

Profiles of cognitive functioning in chronic spinal cord injury and the role of moderating variables. Dowler RN, et al. **J Int Neuropsychol Soc** 1997 Sep;3(5):464–72

Suicidal plans following spinal cord injury: a six month study. Kishi Y, et al. **J Neuropsychiatry Clin Neurosci** 1996 Fall; 8(4):442–5

Unique management needs of pediatric spinal cord injury patients: psychosocial issues. Anderson CJ. **J Spinal Cord Med** 1997 Jan;20(1):21–4 (35 ref.)

Factors associated with sexual functioning in women following spinal cord injury. Harrison J, et al. **Paraplegia** 1995 Dec;33(12):687–92

Exploring quality of life of adults with spinal cord injuries. Boswell BB. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1149–50

Predicting compliance with annual follow–up evaluations in persons with spinal cord injury. Canupp KC, et al. **Spinal Cord** 1997 May;35(5):314–9

Estimating social adjustment following spinal trauma—I: Who is more realistic—patient or spouse? A statistical justification. Glass CA, et al. **Spinal Cord** 1997 May; 35(5):320–5

Estimating social adjustment following spinal trauma—II: Population trends and effects of compensation on adjustment. Glass CA, et al. **Spinal Cord** 1997 Jun; 35(6):349–57

Attempted suicide and completed suicide in traumatic spinal cord injury. Case reports. Harris EC, et al. **Spinal Cord** 1996 Dec;34(12):752–3

Spinal cord injuries: a shortened measure of function and mood. Lundqvist C, et al. **Spinal Cord** 1997 Jan;35(1):17–21

Psychological defenses and psychiatric symptoms in adults with pediatric spinal cord injuries. Sammallahti P, et al. **Spinal Cord** 1996 Nov;34(11):669–72

Psychological investigation of spinal cord injury patients. Scivoletto G, et al. **Spinal Cord** 1997 Aug;35(8):516–20

Neuropsychological aspects of the rehabilitation of patients with paralysis from a spinal injury who also have a brain injury. Strubreither W, et al. **Spinal Cord** 1997 Aug; 35(8):487–92

Sexuality and women with complete spinal cord injury. Whipple B, et al. **Spinal Cord** 1997 Mar;35(3):136–8 (22 ref.)

RADIOGRAPHY

SCIWORA (spinal cord injury without radiographic abnormality) in infants and children. Kriss VM, et al. **Clin Pediatr (Phila)** 1996 Mar;35(3):119–24 (18 ref.)

Cervical spine injuries from high–velocity forces: a pathoanatomic and radiologic study. Cusick JF, et al. **J Spinal Disord** 1996 Feb;9(1):1–7

Ultrasound bone densitometry and dual energy X–ray absorptiometry in patients with spinal cord injury: a cross–sectional study. Chow YW, et al. **Spinal Cord** 1996 Dec;34(12):736–41

[Computerized tomography in craniocerebral, maxillofacial, cervical, and spinal gunshot wounds. Part II—Clinical contribution and medico– legal aspects] Scialpi M, et al. **Radiol Med (Torino)** 1996 Dec;92(6):693–9 (Eng. Abstr.) **(Ita)**

RADIONUCLIDE IMAGING

Influence of spinal cord injury on cerebral sensorimotor systems: a PET study. Roelcke U, et al. **J Neurol Neurosurg Psychiatry** 1997 Jan;62(1):61–5

Bone mineral density in patients with spinal cord injuries. Changlai SP, et al. **Nucl Med Commun** 1996 May; 17(5):385–8

99Tcm–MAG3 renal studies: effective renal plasma flow in patients with spinal cord injuries. Kao CH, et al. **Nucl Med Commun** 1996 Dec;17(12):1068–71

RADIOTHERAPY

Structural recovery in lesioned adult mammalian spinal cord by x–irradiation of the lesion site [published erratum appears in Proc Natl Acad Sci U S A 1996 Dec 10;93(25):14992] Kalderon N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11179–84

Severed corticospinal axons recover electrophysiologic control of muscle activity after x–ray therapy in lesioned adult spinal cord [published erratum appears in Proc Natl Acad Sci U S A 1996 Dec 10;93(25):14993] Kalderon N, et al. **Proc Natl Acad Sci U S A** 1996 Oct 1;93(20):11185–90

REHABILITATION

Outcomes of upper–extremity tendon transfers and functional electrical stimulation in an adolescent with C–5 tetraplegia. Davis SE, et al. **Am J Occup Ther** 1997 Apr;51(4):307–12

Educational participation of children with spinal cord injury. Dudgeon BJ, et al. **Am J Occup Ther** 1997 Jul–Aug; 51(7):553–61

The use of environmental control units by occupational therapists in spinal cord injury and disease services. Holme SA, et al. **Am J Occup Ther** 1997 Jan;51(1):42–8

Use of electronic music as an occupational therapy modality in spinal cord injury rehabilitation: an occupational performance model. Lee B, et al. **Am J Occup Ther** 1996 May;50(5):362–9

Improving sexual rehabilitation services: the patient's perspective. McAlonan S. **Am J Occup Ther** 1996 Nov–Dec;50(10):826–34

Primary care for persons with disabilities. A fragmented model of care for persons with spinal cord injuries. Bockenek WL. **Am J Phys Med Rehabil** 1997 May–Jun; 76(3 Suppl):S43–6

Special qualifications in spinal cord injury medicine: a commentary [letter] Hammond MC, et al. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):82–3

Rehabilitation challenges in craniospinal injury: two case reports. Nam AM, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):873–7 (19 ref.)

Spinal cord injury rehabilitation. 2. Medical complications. Bergman SB, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S53–8 (100 ref.)

Spinal cord injury rehabilitation. 5. Through the lifespan. Cawley MF, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S73–8 (75 ref.)

Long–term psychological outcomes in spinal cord injured persons: results of a controlled trial using cognitive behavior therapy. Craig AR, et al. **Arch Phys Med Rehabil** 1997 Jan;78(1):33–8

Spinal cord injury rehabilitation. 3. Functional outcomes. Formal CS, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S59–64 (58 ref.)

Reciprocating gait orthoses: a multicenter study of their use by spinal cord injured patients. Franceschini M, et al. **Arch Phys Med Rehabil** 1997 Jun;78(6):582–6

Relationships between disability measures and nursing effort during medical rehabilitation for patients with traumatic brain and spinal cord injury. Heinemann AW, et al. **Arch Phys Med Rehabil** 1997 Feb;78(2):143–9

Educational performance and vocational participation after spinal cord injury in childhood. Massagli TL, et al. **Arch Phys Med Rehabil** 1996 Oct;77(10):995–9

Home use of a functional electrical stimulation system for standing and mobility in adolescents with spinal cord injury. Moynahan M, et al. **Arch Phys Med Rehabil** 1996 Oct;77(10):1005–13

Implanted functional electrical stimulation hand system in adolescents with spinal injuries: an evaluation. Mulcahey MJ, et al. **Arch Phys Med Rehabil** 1997 Jun;78(6):597–607

Physiologic responses during functional electrical stimulation leg cycling and hybrid exercise in spinal cord injured subjects. Mutton DL, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):712–8

The bionic glove: an electrical stimulator garment that provides controlled grasp and hand opening in quadriplegia. Prochazka A, et al. **Arch Phys Med Rehabil** 1997 Jun;78(6):608–14

Early predictors of functional independence 2 years after spinal cord injury. Saboe LA, et al. **Arch Phys Med Rehabil** 1997 Jun;78(6):644–50

Spinal cord injury rehabilitation. 4. Individual experience, personal adaptation, and social perspectives. Stiens SA, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3 Suppl):S65–72 (97 ref.)

Implanted Functional Neuromuscular Stimulation systems for individuals with cervical spinal cord injuries: clinical case reports. Triolo RJ, et al. **Arch Phys Med Rehabil** 1996 Nov; 77(11):1119–28

Spinal cord injury rehabilitation. 1. Assessment and management during acute care. Yarkony GM, et al.

Arch Phys Med Rehabil 1997 Mar;78(3 Suppl):S48–52 (43 ref.)

Restoration of lateral hand grasp using natural sensors. Haugland M, et al. **Artif Organs** 1997 Mar;21(3):250–3

Useful applications and limits of battery powered implants in functional electrical stimulations. Lanmüller H, et al. **Artif Organs** 1997 Mar;21(3):210–2

Wireless control of functional electrical stimulation systems. Matjačić Z, et al. **Artif Organs** 1997 Mar;21(3):197–200

Comparison of simulation and experiments of different closed-loop strategies for functional electrical stimulation: experiments in paraplegics. Quintern J, et al. **Artif Organs** 1997 Mar;21(3):232–5

Selective detrusor activation by electrical stimulation of the human sacral nerve roots. Rijkhoff NJ, et al. **Artif Organs** 1997 Mar;21(3):223–6

Implantable volume monitor and miniaturized stimulator dedicated to bladder control. Sawan M, et al. **Artif Organs** 1997 Mar;21(3):219–22

Effect of long-term implanted nerve cuff electrodes on the electrophysiological properties of human sensory nerves. Slot PJ, et al. **Artif Organs** 1997 Mar;21(3):207–9 (7 ref.)

Bone mass and endocrine adaptations to training in spinal cord injured individuals. Bloomfield SA, et al. **Bone** 1996 Jul;19(1):61–8

Vocational achievements following spinal cord injury in Australia. Athanasou JA, et al. **Disabil Rehabil** 1996 Apr; 18(4):191–6

Electromyographic identification of spinal oscillator patterns and recouplings in a patient with incomplete spinal cord lesion: oscillator formation training as a method to improve motor activities. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:121–220

Experimental evaluation of an adaptive feedforward controller for use in functional neuromuscular stimulation systems. Abbas JJ, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):12–22

A methodology for definition of neuromuscular electrical stimulation sequences: an application toward overcoming small obstacles. Quevedo AA, et al. **IEEE Trans Rehabil Eng** 1997 Mar;5(1):30–9

Sports participation in individuals with spinal cord injury: demographic and psychological correlates. Foreman PE, et al. **Int J Rehabil Res** 1997 Jun;20(2):159–68

Arkansas State Spinal Cord Commission. Brown PS. **J Ark Med Soc** 1994 Aug;91(3):122–5

Rehabilitation of incomplete spinal cord pathology: factors affecting prognosis and outcome. Stevenson VL, et al. **J Neurol** 1996 Sep;243(9):644–7

Treatment of heterotopic ossification after spinal cord injury. Banovac K, et al. **J Spinal Cord Med** 1997 Jan;20(1):60–5

Unique management needs of pediatric spinal cord injury patients: orthopedic problems in the child with spinal cord injury. Betz RR. **J Spinal Cord Med** 1997 Jan;20(1):14–6 (15 ref.)

Intermittent catheterization the right way! (Volume vs. time-directed). Binard JE, et al. **J Spinal Cord Med** 1996 Jul;19(3):194–6

Orthostatic hypotension in spinal cord injured patients. Blackmer J. **J Spinal Cord Med** 1997 Apr;20(2):212–7 (46 ref.)

Intravesical capsaicin in neurologic impaired patients with detrusor hyperreflexia. Das A, et al. **J Spinal Cord Med** 1996 Jul;19(3):190–3

Acceptance of spinal cord medicine as a subspecialty by the Accreditation Council of Graduate Medical Education (ACGME) [editorial] DeLisa JA, et al. **J Spinal Cord Med** 1996 Jul;19(3):175

Improved bowel care with a polyethylene glycol based bisacadyl suppository. Frisbie JH. **J Spinal Cord Med** 1997 Apr;20(2):227–9

Unique management needs of pediatric spinal cord injury patients: rehabilitation. Mulcahey MJ. **J Spinal Cord Med** 1997 Jan;20(1):25–30 (49 ref.)

Improved motor function in tetraplegics following neuromuscular stimulation-assisted arm ergometry. Needham-Shropshire BM, et al. **J Spinal Cord Med** 1997 Jan;20(1):49–55

Unique management needs of pediatric spinal cord injury patients: medical issues. Vogel LC. **J Spinal Cord Med** 1997 Jan;20(1):17–20 (49 ref.)

Unique management needs of pediatric spinal cord injury patients: introduction. Vogel LC. **J Spinal Cord Med** 1997 Jan;20(1):9

Epidemiology of current treatment for sexual dysfunction in spinal cord injured men in the USA model spinal cord injury centers. Watanabe T, et al. **J Spinal Cord Med** 1996 Jul;19(3):186–9

Evaluating outcome after spinal cord injury: what determines success? 1996 Donald Munro Lecture. Whiteneck GG. **J Spinal Cord Med** 1997 Apr;20(2):179–85

Neuroprostheses for leg function after spinal-cord injury [letter] Donaldson N, et al. **Lancet** 1997 Sep 6;350(9079):711

Virtual reality for patients with spinal cord injury. Meredith W. **MD Comput** 1996 Sep-Oct;13(5):400–5

Improvement in step clearance via calf muscle stimulation. Bajd T, et al. **Med Biol Eng Comput** 1997 Mar;35(2):113–6

Good news for people with spinal cord injuries. Clarke AM. **N Z Med J** 1997 Sep 12;110(1051):325–6

Transcutaneous functional neuromuscular stimulation of certain traumatic complete thoracic paraplegics for independent short-distance ambulation. Graupe D, et al. **Neurol Res** 1997 Jun;19(3):323–33 (16 ref.)

Restoration of depressed immune function in spinal cord injury patients receiving rehabilitation therapy. Kliesch WF, et al. **Paraplegia** 1996 Feb;34(2):82–90

Adhesion molecules and wound healing in spinal cord injury. Cruse JM, et al. **Pathobiology** 1996;64(4):193–7

Objective measurement of use of the reciprocating gait orthosis (RGO) and the electrically augmented RGO in adult patients with spinal cord lesions. Sykes L, et al. **Prosthet Orthot Int** 1996 Dec;20(3):182–90

Test-retest reliability of information about employment provided in surveys by people with spinal cord injuries. Murphy GC, et al. **Psychol Rep** 1997 Aug;81(1):25–6

Effects of transcutaneous electrical nerve stimulation on H-reflex and spinal spasticity. Goulet C, et al. **Scand J Rehabil Med** 1996 Sep;28(3):169–76

Assisted reach and transfers in individuals with tetraplegia: towards a solution. Allison GT, et al. **Spinal Cord** 1997 Apr;35(4):217–22

Management of patients with an incomplete cervical spinal cord injury. Asazuma T, et al. **Spinal Cord** 1996 Oct; 34(10):620–5

Audit of a British Centre for spinal injury. Aung TS, et al. **Spinal Cord** 1997 Mar;35(3):147–50

Obesity and spinal cord injury: an observational study. Blackmer J, et al. **Spinal Cord** 1997 Apr;35(4):245–7

Incidence of periodic leg movements and of the restless legs syndrome during sleep following acute physical activity in spinal cord injury subjects. de Mello MT, et al. **Spinal Cord** 1996 May;34(5):294–6

Evaluation of client and staff satisfaction with a Goal Planning project implemented with people with spinal cord injuries. MacLeod GM, et al. **Spinal Cord** 1996 Sep; 34(9):525–30

Memorial lecture in honour of Dr Ailie Key. Meyer C. **Spinal Cord** 1996 Aug;34(8):466–9

Long-term adaptation to electrically induced cycle training in severe spinal cord injured individuals. Mohr T, et al. **Spinal Cord** 1997 Jan;35(1):1–16

Labour force participation and employment among a sample of Australian patients with a spinal cord injury. Murphy G, et al. **Spinal Cord** 1997 Apr;35(4):238–44

Motor, sensory and functional recovery in patients with spinal cord lesions. Müslümanoğlu L, et al. **Spinal Cord** 1997 Jun;35(6):386–9

Rehabilitation of patients with spinal cord lesions in The Netherlands: an epidemiological study. Schönherr MC, et al. **Spinal Cord** 1996 Nov;34(11):679–83

Neuropsychological aspects of the rehabilitation of patients with paralysis from a spinal injury who also have a brain injury. Strubreither W, et al. **Spinal Cord** 1997 Aug; 35(8):487–92

The importance of osmolality in hydrophilic urethral catheters: a crossover study. Waller L, et al. **Spinal Cord** 1997 Apr;35(4):229–33

Hormonal responses to graded-resistance, FES-assisted strength training in spinal cord-injured. Wheeler GD, et al. **Spinal Cord** 1996 May;34(5):264–7

Neurologic outcome in conservatively treated patients with incomplete closed traumatic cervical spinal cord injuries. Katoh S, et al. **Spine** 1996 Oct 15;21(20):2345–51

Locomotor recovery after spinal cord injury [letter] Dietz V. **Trends Neurosci** 1997 Aug;20(8):346–7

[Prognosis of traumatic spinal cord lesions. Significance of clinical and electrophysiological findings] Curt A, et al. **Nervenarzt** 1997 Jun;68(6):485–95 (154 ref.) (Eng. Abstr.) **(Ger)**

[Treatment and rehabilitation of post-traumatic tetraplegia in advanced age. A report of experiences] Badke A, et al. **Unfallchirurgie** 1997 Jun;23(3):100–4 (Eng. Abstr.) **(Ger)**

[Analysis of primary management of bladder malfunction in traumatic paraplegic patients] Zermann DH, et al. **Zentralbl Chir** 1997;122(3):177–80 (Eng. Abstr.) **(Ger)**

[Importance of fever in the rehabilitation of spinal cord injuries] Békési M. **Orv Hetil** 1996 Sep 29;137(39):2149–52 (Eng. Abstr.) **(Hun)**

[Electrostimulation of the spinal cord as a method of inducing locomotor activity in children (clinical aspects and technical problems)] Shapkov IuT, et al. **Med Tekh** 1996 Jul-Aug;(4):3–5 (Eng. Abstr.) **(Rus)**

SURGERY

Results of DREZ coagulations for pain related to plexus lesions, spinal cord injuries and postherpetic neuralgia. Rath SA, et al. **Acta Neurochir (Wien)** 1996;138(4):364–9

The omentum—has it a place in the treatment of spinal cord injury? [editorial] [see comments] Neil-Dwyer G, et al. **Br J Neurosurg** 1996 Apr;10(2):133–5. Comment in: Br J Neurosurg 1996 Oct;10(5):525–6.

A critical appraisal of pediculated omental graft transposition in progressive spinal cord failure. Sgouros S, et al. **Br J Neurosurg** 1996 Dec;10(6):547–53

Omental transfer in the treatment of spinal cord injury [letter; comment] Teddy PJ. **Br J Neurosurg** 1996 Oct;10(5):525–6 . Comment on: Br J Neurosurg 1996 Apr;10(2):133–5.

Fetal neural grafts and repair of the injured spinal cord. Anderson DK, et al. **Brain Pathol** 1995 Oct;5(4):451–57 (58 ref.)

Transplantation of embryonic noradrenergic neurons in two models of adult rat spinal cord injury: ultrastructural immunocytochemical study. Gimenez y Ribotta MG, et al. **Brain Res** 1996 Jan 29;707(2):245–55

Functional characterization of NGF-secreting cell grafts to the acutely injured spinal cord. Tuszynski MH, et al. **Cell Transplant** 1997 May-Jun;6(3):361–8

Xenotransplantation of transgenic oligodendrocyte-lineage cells into spinal cord-injured adult rats. Rosenbluth J, et al. **Exp Neurol** 1997 Sep;147(1):172–82

Comparison of the growth and fate of fetal spinal iso- and allografts in the adult rat injured spinal cord. Theele DP, et al. **Exp Neurol** 1996 Nov;142(1):128–43

Early management of war missile spine and spinal cord injuries: experience with 21 cases. Šplavski B, et al. **Injury** 1996 Dec;27(10):699–702

Fetal transplants alter the development of function after spinal cord transection in newborn rats. Miya D, et al. **J Neurosci** 1997 Jun 15;17(12):4856–72

Combined medical and surgical treatment after acute spinal cord injury: results of a prospective pilot study to assess the merits of aggressive medical resuscitation and blood pressure management. Vale FL, et al. **J Neurosurg** 1997 Aug;87(2):239–46

Trauma systems and the neurosurgeon. Brain Trauma Foundation. **J Neurotrauma** 1996 Nov;13(11):647–51 (13 ref.)

Surgical aspects of autonomic dysreflexia. Eltorai IM, et al. **J Spinal Cord Med** 1997 Jul;20(3):361–4

Selecting the appropriate urinary diversion procedure in the spinal cord injured: a poignant reminder. Razi SS, et al. **J Spinal Cord Med** 1996 Jul;19(3):197–200

Comparative study of functional recovery for surgically explored and conservatively managed spinal cord missile injuries. Aarabi B, et al. **Neurosurgery** 1996 Dec; 39(6):1133–40

Use of methylprednisolone as an adjunct in the management of patients with penetrating spinal cord injury: outcome analysis. Levy ML, et al. **Neurosurgery** 1996 Dec; 39(6):1141–8; discussion 1148–9

False localizing signs in upper cervical spinal cord compression [letter; comment] Rafael H. **Neurosurgery** 1997 Jan;40(1):217–8. Comment on: Neurosurgery 1996 Mar;38(3):445–8; discussion 448–9.

Repair of adult rat corticospinal tract by transplants of olfactory ensheathing cells [see comments] Li Y, et al. **Science** 1997 Sep 26;277(5334):2000–2. Comment in: Science 1997 Sep 26;277(5334):1907.

The surgical treatment of acute spinal paralysed patients. Bötel U, et al. **Spinal Cord** 1997 Jul;35(7):420–8

Omental transposition in chronic spinal cord injury [see comments] Clifton GL, et al. **Spinal Cord** 1996 Apr; 34(4):193–203. Comment in: Spinal Cord 1997 Mar;35(3):189–90.

Omental transposition in chronic spinal cord injury [letter; comment] Goldsmith HS. **Spinal Cord** 1997 Mar; 35(3):189–90. Comment on: Spinal Cord 1996 Apr;34(4):193–203.

Relationship between surgery and pain following spinal cord injury. Sved P, et al. **Spinal Cord** 1997 Aug;35(8):526–30

Four year experience with the AO Anterior Thoracolumbar Locking Plate. Thalgott JS, et al. **Spinal Cord** 1997 May; 35(5):286–91

Effect of surgery on motor recovery following traumatic spinal cord injury. Waters RL, et al. **Spinal Cord** 1996 Apr; 34(4):188–92

Perioperative nutrition and postoperative complications in patients undergoing spinal surgery. Klein JD, et al. **Spine** 1996 Nov 15;21(22):2676–82

Fracture-dislocation at the thoracolumbar junction in an infant with locked vertebrae. A case report. Phaltankar PM, et al. **Spine** 1997 Aug 15;22(16):1933–5

Neurosurgical management of penetrating spinal injury. Jallo GI. **Surg Neurol** 1997 Apr;47(4):328–30

Improvement of host-graft adhesion by enzymatic manipulation of the subacute spinal cord contusion area in the rat. Grijalva I, et al. **Transplant Proc** 1996 Dec; 28(6):3340–2

[Combat injuries to the spine and spinal cord] Gaĭdar BV, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr-Jun; (2):44–6 **(Rus)**

[Motor neurons regenerate axons after CNS-injury. Surgery in cases of rotavulsion restore motor functions] Cullheim S, et al. **Lakartidningen** 1996 Dec 4;93(49):4537–41 (20 ref.) **(Swe)**

[The surgical treatment of complicated lesions of the spine and spinal cord in the system of medical rehabilitation for spinal patients] Stashkevych AT. **Klin Khir** 1995;(2):26–8 **(Ukr)**

THERAPY

Intervention strategies to enhance anatomical plasticity and recovery of function after spinal cord injury. Bregman BS, et al. **Adv Neurol** 1997;72:257–75 (78 ref.)

Therapeutic approaches to spinal cord injury. Faden AI. **Adv Neurol** 1997;72:377–86 (111 ref.)

Recovery of walking after spinal cord injury. Ladouceur M, et al. **Adv Neurol** 1997;72:249–55 (33 ref.)

Strategies and mechanisms of recovery after spinal cord injury. Murray M. **Adv Neurol** 1997;72:219–25 (43 ref.)

Electrophysiological investigations of neurotransplant-mediated recovery after spinal cord injury. Skinner RD, et al. **Adv Neurol** 1997;72:277–90

Embryonic spinal cord transplants enhance locomotor performance in spinalized newborn rats. Tessler A, et al.

Adv Neurol 1997;72:291–303 (52 ref.)
Influence of electrically stimulated ankle plantar flexors on the swinging leg. Bajd T, et al. **Artif Organs** 1997 Mar; 21(3):176–9
Lumbar root stimulation for restoring leg function: results in paraplegia. Rushton DN, et al. **Artif Organs** 1997 Mar; 21(3):180–2
Ex vivo gene therapy for Alzheimer's disease and spinal cord injury. Blesch A, et al. **Clin Neurosci** 1995–96;3(5):268–74 (51 ref.)
The child with a spinal cord injury. Vogel L, et al. **Dev Med Child Neurol** 1997 Mar;39(3):202–7 (82 ref.)
Sacral rhizotomies and electrical bladder stimulation in spinal cord injury. 2. Cost–effectiveness and quality of life analysis. Dutch Study Group on Sacral Anterior Root Stimulation. Wielink G, et al. **Eur Urol** 1997;31(4):441–6
The management of acute spinal trauma: prehospital and in–hospital emergency care. Vaccaro AR, et al. **Instr Course Lect** 1997;46:113–25 (59 ref.)
Emergency department approach to acute thoracolumbar spine injury. Savitsky E, et al. **J Emerg Med** 1997 Jan–Feb; 15(1):49–60 (72 ref.)
Effects of Schwann cell transplantation in a contusion model of rat spinal cord injury. Martin D, et al. **J Neurosci Res** 1996 Sep 1;45(5):588–97
Combined medical and surgical treatment after acute spinal cord injury: results of a prospective pilot study to assess the merits of aggressive medical resuscitation and blood pressure management. Vale FL, et al. **J Neurosurg** 1997 Aug;87(2):239–46
Adverse effects of epidural spinal cord stimulation on bladder function in a patient with chronic spinal cord injury pain [letter] Loubser PG. **J Pain Symptom Manage** 1997 May; 13(5):251–2
Neural signals for command control and feedback in functional neuromuscular stimulation: a review. Hoffer JA, et al. **J Rehabil Res Dev** 1996 Apr;33(2):145–57 (48 ref.)
Prevention of thromboembolism in spinal cord injury. Consortium for Spinal Cord Medicine. **J Spinal Cord Med** 1997 Jul;20(3):259–83
Effect of timing of stabilization on length of stay and medical complications following spinal cord injury. Campagnolo DI, et al. **J Spinal Cord Med** 1997 Jul;20(3):331–4
Do direct current electric fields enhance micturition in the spinal cat? Kerns JM, et al. **J Spinal Cord Med** 1996 Oct; 19(4):225–33
Impact of peripherally inserted central catheters on phlebitic complications of peripheral intravenous therapy in spinal cord injury patients. Paz–Fumagalli R, et al. **J Spinal Cord Med** 1997 Jul;20(3):341–4
Experimental and clinical studies of the pathophysiology and management of acute spinal cord injury. Tator CH. **J Spinal Cord Med** 1996 Oct;19(4):206–14 (87 ref.)
Hypertonic saline administration attenuates spinal cord injury. Tuma RF, et al. **J Trauma** 1997 May;42(5 Suppl):S54–60
Two artificial neural systems for generation of gait swing by means of neuromuscular electrical stimulation. Sepulveda F, et al. **Med Eng Phys** 1997 Jan;19(1):21–8
Treatment with genetically engineered fibroblasts producing NGF or BDNF can accelerate recovery from traumatic spinal cord injury in the adult rat. Kim DH, et al. **Neuroreport** 1996 Sep 2;7(13):2221–5
Electrophysiological improvement after co–implantation of carbon filaments and fetal tissue in the contused rat spinal cord. Liu LS, et al. **Neurosci Lett** 1995 Nov 24; 200(3):199–202
Vibration–induced finger flexion reflex and inhibitory effect of acupuncture on this reflex in cervical spinal cord injury patients. Takakura N, et al. **Neurosci Res** 1996 Dec; 26(4):391–4
Comparative study of functional recovery for surgically explored and conservatively managed spinal cord missile injuries. Aarabi B, et al. **Neurosurgery** 1996 Dec; 39(6):1133–40
Urodynamically controlled management of spinal cord injury in children. Pannek J, et al. **Neurourol Urodyn** 1997; 16(4):285–92
Urinary bladder control by electrical stimulation: review of electrical stimulation techniques in spinal cord injury. Rijkhoff NJ, et al. **Neurourol Urodyn** 1997;16(1):39–53 (82 ref.)
Severe thoracic spinal fracture–dislocation: good neurological outcome without reduction. Case report. Derry F, et al. **Paraplegia** 1995 Dec;33(12):734–6
Fear of hope [editorial; comment] Young W. **Science** 1997 Sep 26;277(5334):1907. Comment on: Science 1997 Sep 26;277(5334):2000–2.
Trends in the treatment of patients with spinal cord lesions seen within a period of 20 years in German centers. Exner G, et al. **Spinal Cord** 1997 Jul;35(7):415–9
The International Spinal Research Trust's strategic approach to the development of treatments for the repair of spinal cord injury. Harper GP, et al. **Spinal Cord** 1996 Aug; 34(8):449–59 (57 ref.)
Treatment of patients with spinal cord lesions in Germany 1996—state of the art. Meinecke FW, et al. **Spinal Cord** 1997 Jul;35(7):411–4 (8 ref.)
Services for spinal cord injured: availability and satisfaction. Post MW, et al. **Spinal Cord** 1997 Feb;35(2):109–15
The prognosis and the treatment of patients with a C3/4 spinal cord injury. Sannohe A, et al. **Spinal Cord** 1996 Aug; 34(8):486–7
Bladder autoaugmentation in adult patients with neurogenic voiding dysfunction. Stöhrer M, et al. **Spinal Cord** 1997 Jul;35(7):456–62
Motor recovery following spinal cord injury associated with cervical spondylosis: a collaborative study. Waters RL, et al. **Spinal Cord** 1996 Dec;34(12):711–5
Athletes with cervical spine injury. Maroon JC, et al. **Spine** 1996 Oct 1;21(19):2294–9 (21 ref.)
Management of the pregnant patient with acute spinal cord injury. Nunn CR, et al. **Tenn Med** 1996 Sep;89(9):335–7
Improvement of host–graft adhesion by enzymatic manipulation of the subacute spinal cord contusion area in the rat. Grijalva I, et al. **Transplant Proc** 1996 Dec; 28(6):3340–2
Recent advances in the management of spinal cord injury. Morris GF, et al. **West J Med** 1997 Jun;166(6):413–4
[Effect of antiserum against dynorphin A administered intrathecally on spinal cord injury (SCI) of rats and its significance] Li M, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):723–6 (Eng. Abstr.) **(Chi)**

ULTRASONOGRAPHY

Neurotraumatology: ultrasonic evaluation of the central nervous system. Dohrmann GJ, et al. **Neurol Res** 1997 Jun; 19(3):317–22
Ultrasound bone densitometry and dual energy X–ray absorptiometry in patients with spinal cord injury: a cross–sectional study. Chow YW, et al. **Spinal Cord** 1996 Dec;34(12):736–41

URINE

Nocturnal polyuria and antidiuretic hormone levels in spinal cord injury. Szollar SM, et al. **Arch Phys Med Rehabil** 1997 May;78(5):455–8
Urinary catheter blockage depends on urine pH, calcium and rate of flow. Burr RG, et al. **Spinal Cord** 1997 Aug; 35(8):521–5

VETERINARY

Axotomy affects the retrograde labeling of cervical and lumbar–cord–projecting rubrospinal neurons differently. Tseng GF, et al. **Anat Embryol (Berl)** 1996 Nov; 194(5):457–64
Placement of colonic manometric catheters and electrodes in cats. Riedy L, et al. **Lab Anim Sci** 1997 Feb;47(1):78–81
The pathophysiology of spinal cord injury and its clinical implications. Kraus KH. **Semin Vet Med Surg (Small Anim)** 1996 Nov;11(4):201–7 (42 ref.)
An analysis of the posterior epidural ligament role on the cervical spinal cord. Shinomiya K, et al. **Spine** 1996 Sep 15;21(18):2081–8

SPINAL CORD NEOPLASMS

Cobb syndrome [letter] Basappa. **J Assoc Physicians India** 1996 Nov;44(11):846
Cervical intramedullary lipoma with intracranial extension in an infant. Case illustration. Chaskis C, et al. **J Neurosurg** 1997 Sep;87(3):472
Intramedullary subependymoma of the spinal cord [see comments] Jallo GI, et al. **Neurosurgery** 1996 Feb; 38(2):251–7 (27 ref.). Comment in: Neurosurgery 1996 Oct;39(4):879.
Intramedullary teratoma: case report and review of the literature. Caruso R, et al. **Tumori** 1996 Nov–Dec; 82(6):616–20 (34 ref.)

BLOOD

Pregnancy associated highly vascularized tumours negatively correlate with the levels of anti–angiogenic 17 alpha–hydroxy–progesterone. Rao BR. **Anticancer Res** 1997 Mar–Apr;17(2A):1019–21

BLOOD SUPPLY

Infarcted spinal schwannoma: an unusual MR finding. Shrier DA, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1566–8

COMPLICATIONS

Diastematomyelia associated with intramedullary tumour in a hemicord: a report of two cases. Sharma A, et al. **Australas Radiol** 1997 May;41(2):185–7
Granular cell tumour of the spinal cord in a patient with Rubenstein–Taybi syndrome. Burton BJ, et al. **Br J Neurosurg** 1997 Jun;11(3):257–9
Galactorrhoea and amenorrhoea due to an intradural neurinoma originating from a thoracic intercostal nerve radicle. Katsuren E, et al. **Clin Endocrinol (Oxf)** 1997 May; 46(5):631–6
Chronic compulsive foot rubbing. Breningstall GN, et al. **Clin Pediatr (Phila)** 1996 Aug;35(8):411–3
A case of Cobb syndrome associated with lymphangioma circumscriptum. Shim JH, et al. **Dermatology** 1996; 193(1):45–7 (11 ref.)
Sleep–related periodic leg movements associated with spinal cord lesions. Lee MS, et al. **Mov Disord** 1996 Nov; 11(6):719–22
Myeloneuropathy in POEMS syndrome. Mandler RN, et al. **Muscle Nerve** 1996 Dec;19(12):1614–6
Embolization as treatment for spinal cord compression from renal cell carcinoma: case report. Kuether TA, et al. **Neurosurgery** 1996 Dec;39(6):1260–2; discussion 1262–3
Spinal deformity following surgery for spinal cord tumors and tumorous lesions: analysis based on an assessment of the spinal functional curve. Inoue A, et al. **Spinal Cord** 1996 Sep;34(9):536–42
Acute paraplegia due to an extradural spinal lipoma: case report. Meisheri YV, et al. **Spinal Cord** 1996 Oct; 34(10):633–4
[Two cases of ossified spinal meningioma] Nakayama N, et al. **No Shinkei Geka** 1996 Apr;24(4):351–5 (Eng. Abstr.) **(Jpn)**
[Chondromyxoid fibroma of the thoracic spine: a case report and review of the literature] Leal Filho MB, et al. **Arq Neuropsiquiatr** 1995 Dec;53(4):837–40 (12 ref.) (Eng. Abstr.) **(Por)**
[Multiple radicular tumors in von Recklinghausen disease assessed by magnetic resonance] Oliván M, et al. **Rev Neurol** 1996 Mar;24(127):300–2 (Eng. Abstr.) **(Spa)**

CONGENITAL

Operative resection of 100 spinal lipomas in infants less than 1 year of age. Byrne RW, et al. **Pediatr Neurosurg** 1995; 23(4):182–6; discussion 186–7
Multiple intradural spinal lipomata with intracranial extension. Wilson JT, et al. **Pediatr Neurosurg** 1996; 24(1):5–7

DIAGNOSIS

Infarcted spinal schwannoma: an unusual MR finding. Shrier DA, et al. **AJNR Am J Neuroradiol** 1996 Sep;17(8):1566–8
Extranodal sinus histiocytosis with massive lymphadenopathy presenting as an intramedullary spinal cord tumor: a case report. Jones MP, et al. **Am J Hematol** 1997 Mar; 54(3):253–7
Extramedullary thoracic myxopapillary ependymoma—a case report of a rare tumour. Cheng CH, et al. **Ann Acad Med Singapore** 1996 Nov;25(6):869–72
Difficulties in diagnosing intrinsic spinal cord tumours. Parker AP, et al. **Arch Dis Child** 1996 Sep;75(3):204–7
Problems in differentiating intradural lipoma from dermoid on magnetic resonance imaging. Behari S, et al. **Australas Radiol** 1997 May;41(2):196–8
Intradural lipoma. Schubert F. **Australas Radiol** 1996 Feb; 40(1):61–4
Cervical mass lesion presenting as reflex sympathetic dystrophy of the hand. Bhatnagar A, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):101–4
Magnetic resonance imaging of intramedullary spinal cord metastases. Markus JB. **Clin Imaging** 1996 Oct–Dec; 20(4):238–42
Spinal meningiomas in pregnancy: report of two cases and review of the literature. Cioffi F, et al. **Eur J Gynaecol Oncol** 1996;17(5):384–8 (40 ref.)
MRI diagnosis of intramedullary metastases from extra–CNS tumors. Crasto S, et al. **Eur Radiol** 1997;7(5):732–6
Morphological and immunohistochemical characterization of granular cells in non–hypophyseal tumours of the central nervous system. Rickert CH, et al. **Histopathology** 1997 May;30(5):464–71
A spinal cord tumor masquerading as deconditioning [letter] Guida CV. **J Am Geriatr Soc** 1997 Feb;45(2):254
Multiple primary cancer in one patient. Magu S, et al. **J Indian Med Assoc** 1995 Oct;93(10):404
Dual dynamic contrast–enhanced MR imaging. Miyati T, et al. **J Magn Reson Imaging** 1997 Jan–Feb;7(1):230–5
Pain, paresthesias, and weakness of the extremities in a young man [clinical conference] Pansing SS, et al. **J Neuroimaging** 1997 Apr;7(2):92–7
Neurothekeoma of the cauda equina [letter] Kaar GF, et al. **J Neurol Neurosurg Psychiatry** 1996 Nov;61(5):530–1
Central neurocytoma of the cervical spinal cord [letter] Stapleton SR, et al. **J Neurol Neurosurg Psychiatry** 1997 Jul;63(1):119
Lhermitte's sign as a presenting symptom of primary spinal cord tumor. Newton HB, et al. **J Neurooncol** 1996 Aug; 29(2):183–8
Primary extramedullary ependymoma of the thoracic spine. Case illustration. Wolfla CE, et al. **J Neurosurg** 1997 Oct; 87(4):643
Giant spinal cord ependymoma in a child. Case report. Gangemi M, et al. **J Neurosurg Sci** 1996 Mar;40(1):71–5 (23 ref.)
Images in clinical medicine. Intramedullary spinal cord metastases. Ijaz T, et al. **N Engl J Med** 1997 Mar 13; 336(11):768
Spinal meningeal melanocytoma. Case report and analysis of diagnostic criteria. Ruelle A, et al. **Neurosurg Rev** 1996; 19(1):39–42
Solitary fibrous tumor presenting as a symptomatic intraspinal mass: case report. Malek AM, et al. **Neurosurgery** 1997 Apr;40(4):844–7; discussion 847
Cerebral and spinal cord myxopapillary ependymomas: a case report. al Moutaery K, et al. **Pathology** 1996 Nov; 28(4):373–6
A serial CT scan and MRI verification of diffuse cerebrospinal gliomatosis: a case report with stereotactic diagnosis and radiological confirmation. Onal C, et al. **Pediatr Neurosurg** 1996 Aug;25(2):94–9 (50 ref.)
[Ectopic intraspinal extradural anaplastic ependymoma in an

infant] Roubertie A, et al. **Arch Pediatr** 1997 Mar;4(3):255–9 (Eng. Abstr.) **(Fre)**

[The value of magnetic resonance imaging in the diagnosis of spinal cord hemangioblastoma. Apropos of 12 cases] Sonier CB, et al. **J Neuroradiol** 1994 Apr;21(3):194–204 (Eng. Abstr.) **(Fre)**

[Exploration of intraspinal tumors using evoked motor potentials (EMP): correlations with data of evoked somatosensory potentials] André-Obadia N, et al. **Neurophysiol Clin** 1996;26(4):236–46 (Eng. Abstr.) **(Fre)**

[What is your diagnosis? Recklinghausen's neurofibromatosis with left-sided C2 spinal root neurinoma with spinal cord compression] Haegeli L, et al. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1343–5 **(Ger)**

[Sacrococcygeal chordoma simulating pilonidal cyst] Del Buono G, et al. **Minerva Chir** 1997 Jan–Feb;52(1–2):131–7 (30 ref.) (Eng. Abstr.) **(Ita)**

[Intramedullary cervical neurinoma. A case report and review of the literature] Innocenzi G, et al. **Minerva Chir** 1997 May;52(5):679–82 (15 ref.) (Eng. Abstr.) **(Ita)**

[Spinal intramedullary cavernous angioma associated with hematomyelia: case report with sequential MRI follow-up and histological verification of hematoidin deposits] Nagashima C, et al. **No Shinkei Geka** 1996 Dec; 24(12):1125–32 (Eng. Abstr.) **(Jpn)**

[Clinical study of intraspinal neoplasms in children] Takahashi I, et al. **No Shinkei Geka** 1996 Jul;24(7):605–11 (Eng. Abstr.) **(Jpn)**

[Spinal cord schwannoma: case report] Botelho CH, et al. **Arq Neuropsiquiatr** 1996 Sep;54(3):498–504 (Eng. Abstr.) **(Por)**

[Experience in clinical use of paramagnetic agent magnevist in the diagnosis of spine and spinal cord metastases] Gunicheva NV, et al. **Vestn Rentgenol Radiol** 1996 Nov–Dec;(6):15–8 (Eng. Abstr.) **(Rus)**

[Multiple radicular tumors in von Recklinghausen disease assessed by magnetic resonance] Oliván M, et al. **Rev Neurol** 1996 Mar;24(127):300–2 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Intraspinal high-grade astrocytoma in a child--rationale for chemotherapy and more intensive radiotherapy? Weiss E, et al. **Childs Nerv Syst** 1997 Feb;13(2):108–12 (42 ref.)

Chemotherapy for spinal cord astrocytoma. Bouffet E, et al. **Med Pediatr Oncol** 1997 Dec;29(6):560–2

EPIDEMIOLOGY

An analysis of intraspinal tumors in south Taiwan. Cheang CM, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Apr;13(4):229–36

ETIOLOGY

[A 29-year-old man with diabetes insipidus and cerebellar ataxia and development of spinal cord swelling 15 years after the onset (clinical conference)] Ohkuma Y, et al. **No To Shinkei** 1997 May;49(5):473–81 (Eng. Abstr.) **(Jpn)**

[The role of dysembryogenesis in the development of spinal cord tumors] Perederko IH, et al. **Klin Khir** 1994;(12):18–20 (Eng. Abstr.) **(Ukr)**

GENETICS

Expression of vascular endothelial growth factor and its receptors in pilocytic astrocytoma. Leung SY, et al. **Am J Surg Pathol** 1997 Aug;21(8):941–50

Molecular genetic analysis of chromosome arm 17p and chromosome arm 22q DNA sequences in sporadic pediatric ependymomas. von Haken MS, et al. **Genes Chromosomes Cancer** 1996 Sep;17(1):37–44

Frequent type 2 neurofibromatosis gene transcript mutations in sporadic intramedullary spinal cord ependymomas. Birch BD, et al. **Neurosurgery** 1996 Jul;39(1):135–40

[Familial multiple cavernous angioma in the brain and spinal cord] Kimura T, et al. **No To Shinkei** 1996 Oct;48(10):955–9 (21 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Immunohistochemical demonstration of Wilms tumour gene product WT1 in a canine "neuroepithelioma" providing evidence for its classification as an extrarenal nephroblastoma. Pearson GR, et al. **J Comp Pathol** 1997 Apr;116(3):321–7

Myxopapillary ependymomas: a clinicopathologic study of 14 cases including MIB-1 and p53 immunoreactivity. Prayson RA. **Mod Pathol** 1997 Apr;10(4):304–10

NURSING

Transoral resection of spinal cord tumors and posterior cervical spine stabilization. Walton PG, et al. **AORN J** 1997 Jan;65(1):48–50, 52–9, 62–8; quiz 69–74 (45 ref.)

PATHOLOGY

Solitary fibrous tumor of the spinal cord. Alston SR, et al. **Am J Surg Pathol** 1997 Apr;21(4):477–83

Spinal intradural extramedullary cavernous angiomas: report of four cases and review of the literature. Rao GP, et al. **Br J Neurosurg** 1997 Jun;11(3):228–32 (17 ref.)

Paraganglioma of the thoracic spinal cord. Fitzgerald LF, et al. **Clin Neurol Neurosurg** 1996 May;98(2):183–5

Primary melanocytomas of the spinal cord: a report of seven cases. Glick R, et al. **Clin Neuropathol** 1997 May–Jun; 16(3):127–32 (11 ref.)

Central neurocytoma of the cervical spinal cord [letter] Stapleton SR, et al. **J Neurol Neurosurg Psychiatry** 1997 Jul;63(1):119

Assessment of laminin-mediated glioma invasion in vitro and by glioma tumors engrafted within rat spinal cord. Muir D, et al. **J Neurooncol** 1996 Dec;30(3):199–211

Craniospinal dissemination of central neurocytoma. Report of two cases. Eng DY, et al. **J Neurosurg** 1997 Mar; 86(3):547–52

Isolated extranodal sinus histiocytosis presenting as an intramedullary spinal cord tumor with paraplegia. Case report. Osenbach RK. **J Neurosurg** 1996 Oct;85(4):692–6

Disseminated ependymomas of the central nervous system. Rezai AR, et al. **J Neurosurg** 1996 Oct;85(4):618–24

Significance of MIB-1, PCNA indices, and p53 protein over-expression in intramedullary tumors of the spinal cord. Iwata K, et al. **Noshuyo Byori** 1996 Apr;13(1):73–8

Low cervical chordoma: case report. Inci S, et al. **Spinal Cord** 1996 Jun;34(6):358–60

Intramedullary spinal cord metastasis: report of three cases and review of the literature. Connolly ES Jr, et al. **Surg Neurol** 1996 Oct;46(4):329–37; discussion 337–8

Extradural granulocytic sarcoma of the thoracic spine in acute myelogenous leukemia with 8; 21 chromosome translocation. Aizawa T, et al. **Tohoku J Exp Med** 1996 Apr;178(4):431–6

[Biopsy examination in neurosurgical operations] Feiden W, et al. **Pathologe** 1997 Jan;18(1):107–10 **(Ger)**

[A clinico-pathological study of cystic spinal Schwannomas] Asano K, et al. **No To Shinkei** 1996 Mar;48(3):245–51 (Eng. Abstr.) **(Jpn)**

[Clinical aspects and therapeutic follow-up of a girl with lumbosacral teratoma] Cuartas SA. **An Esp Pediatr** 1997 Apr;46(4):394–6 **(Spa)**

[Intracranial dissemination of intramedullary malignant glioma. Report of a pediatric case] Orejón de Luna G, et al. **An Esp Pediatr** 1996 Sep;45(3):293–5 (23 ref.) **(Spa)**

PHYSIOPATHOLOGY

Examinations of the motor conduction time between the motor cortex and the Erb point in patients suffering from tumors of the central nervous system. Székely G Jr, et al. **Acta Biol Hung** 1996;47(1–4):419–26

Effect of stimulus intensity and voluntary contraction on corticospinal potentials following transcranial magnetic stimulation. Kaneko K, et al. **J Neurol Sci** 1996 Jul; 139(1):131–6

RADIOGRAPHY

[Intraspinal neurinoma: spinal tumor diagnosis in computerized tomography] Burchardt D. **Aktuelle Radiol** 1997 May;7(3):152–3 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Radiologic features compared to clinical findings in a prospective study of 153 patients with metastatic spinal cord compression treated by radiotherapy. Helweg-Larsen S, et al. **Acta Neurochir (Wien)** 1997;139(2):105–11

Radiotherapy in recurrent malignant meningiomas with multiple spinal manifestations. Schiebe ME, et al. **Acta Oncol** 1997;36(1):88–90 (18 ref.)

[Is radiotherapy still the first choice treatment in spinal metastases from breast cancer?] Micheletti E, et al. **Radiol Med (Torino)** 1996 Oct;92(4):470–4 (Eng. Abstr.) **(Ita)**

SECONDARY

Metastasis in meningioma. Enam SA, et al. **Acta Neurochir (Wien)** 1996;138(10):1172–7; discussion 1177–8

Radiologic features compared to clinical findings in a prospective study of 153 patients with metastatic spinal cord compression treated by radiotherapy. Helweg-Larsen S, et al. **Acta Neurochir (Wien)** 1997;139(2):105–11

Cauda equina paraganglioma with subsequent intracranial and intraspinal metastases. Roche PH, et al. **Acta Neurochir (Wien)** 1996;138(4):475–9

Frequency of unexpected multifocal metastasis in patients with acute spinal cord compression. Evaluation by low-field MR imaging in cancer patients. Heldmann U, et al. **Acta Radiol** 1997 May;38(3):372–5

Intrathecal metastatic pituitary prolactinoma. Rockwell BH, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1295–6

Magnetic resonance imaging of intramedullary spinal cord metastases. Markus JB. **Clin Imaging** 1996 Oct–Dec; 20(4):238–42

Intramedullary spinal cord metastasis from carcinoma of the lung: detection by positron emission tomography [letter] Jayasundera MV, et al. **Eur J Cancer** 1997 Mar;33(3):508–9

MRI diagnosis of intramedullary metastases from extra-CNS tumors. Crasto S, et al. **Eur Radiol** 1997;7(5):732–6

Images in clinical medicine. Intramedullary spinal cord metastases. Ijaz T, et al. **N Engl J Med** 1997 Mar 13; 336(11):768

Intramedullary spinal cord and brain metastases from thyroid carcinoma detected 11 years after initial diagnosis--case report. Honma Y, et al. **Neurol Med Chir (Tokyo)** 1996 Aug;36(8):593–7

Intramedullary spinal cord metastases: clinical features and treatment outcome. Schiff D, et al. **Neurology** 1996 Oct; 47(4):906–12

Spinal magnetic resonance imaging immediately after craniotomy for detection of metastatic disease. Kaufman BA, et al. **Pediatr Neurosurg** 1995;23(4):171–81

[Back pain and medullary compression in patients with cancer (editorial)] Hansen HH. **Ugeskr Laeger** 1996 Sep 30; 158(40):5588 **(Dan)**

[Intramedullary spinal metastasis of bronchial carcinoma coincident with intramedullary spinal angioma] Dietl RH, et al. **Zentralbl Neurochir** 1996;57(1):25–9 (Eng. Abstr.) **(Ger)**

[Is radiotherapy still the first choice treatment in spinal metastases from breast cancer?] Micheletti E, et al. **Radiol Med (Torino)** 1996 Oct;92(4):470–4 (Eng. Abstr.) **(Ita)**

[Suprasellar and pineal germinoma with spinal dissemination] Roganović Z, et al. **Vojnosanit Pregl** 1996 Jul–Aug; 53(4):331–4 **(Scr)**

SURGERY

Surgical results of spinal meningiomas. Klekamp J, et al. **Acta Neurochir Suppl (Wien)** 1996;65:77–81

Exophytic cavernous malformation of the cervical spinal cord. Balousek P, et al. **Acta Neurochir (Wien)** 1996; 138(7):890–2

Spinal chordomas--results of treatment over a 17-year period. Klekamp J, et al. **Acta Neurochir (Wien)** 1996; 138(5):514–9

The utility of motor-evoked potential monitoring during intramedullary surgery. Lang EW, et al. **Anesth Analg** 1996 Dec;83(6):1337–41

Transoral resection of spinal cord tumors and posterior cervical spine stabilization. Walton PG, et al. **AORN J** 1997 Jan;65(1):48–50, 52–9, 62–8; quiz 69–74 (45 ref.)

Posterior inter-body fusion after spinal tumour resection [see comments] Goel A. **Br J Neurosurg** 1996 Apr;10(2):201–3 . Comment in: Br J Neurosurg 1997 Feb;11(1):87.

Intramedullary astrocytomas and ependymomas in the pediatric age group: a retrospective study. Innocenzi G, et al. **Childs Nerv Syst** 1996 Dec;12(12):776–80

Microsurgery of intramedullary cervical cord tumor. Xu Q, et al. **Chin Med J (Engl)** 1996 Oct;109(10):756–61

Prognostic factors in intramedullary astrocytomas. Innocenzi G, et al. **Clin Neurol Neurosurg** 1997 Feb;99(1):1–5

Surgery of intramedullary spinal cord tumors. Zileli M, et al. **Eur Spine J** 1996;5(4):243–50

Expansive laminoplasty for lumbar intradural lipoma. Matsui H, et al. **Int Orthop** 1997;21(3):185–7

Intramedullary spinal cord tumors in children under the age of 3 years. Constantini S, et al. **J Neurosurg** 1996 Dec; 85(6):1036–43

Preoperative embolization in surgical treatment of spinal thoracic dumbbell schwannoma. A case report. Fiumara E, et al. **J Neurosurg Sci** 1996 Jun;40(2):153–6

Late effects of early surgery on lipoma and lipomeningocele in children less than 1 year old. Satar N, et al. **J Urol** 1997 Apr;157(4):1434–7

The role of intraoperative sonography in reducing invasiveness during surgery for spinal tumors. Maiuri F, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):8–12

Unilateral hemilaminectomy for the removal of the spinal space-occupying lesions. Sario-glu AC, et al. **Minim Invasive Neurosurg** 1997 Jun;40(2):74–7

Preoperative embolization of solid cervicomedullary junction hemangioblastomas: report of two cases. Vázquez-Añón V, et al. **Neuroradiology** 1997 Feb;39(2):86–9

Intraparenchymal schwannomas of the central nervous system: an additional case report and review. Beşkonakli E, et al. **Neurosurg Rev** 1997;20(2):139–44 (62 ref.)

Ganglioglioma of conus medullaris: a case report. Kurtsoy A, et al. **Neurosurg Rev** 1997;20(1):55–8

Hemangioblastomas of the spinal cord and the brainstem: diagnostic and therapeutic features. Spetzger U, et al. **Neurosurg Rev** 1996;19(3):147–51

Pediatric intracranial hemangioendotheliomas: case report. Chen TC, et al. **Neurosurgery** 1997 Feb;40(2):410–4 (22 ref.)

Surgical management of dumbbell tumors of the cervical spine. McCormick PC. **Neurosurgery** 1996 Feb; 38(2):294–300

Intramedullary subependymoma of the spinal cord [letter; comment] Matsumura A, et al. **Neurosurgery** 1996 Oct; 39(4):879. Comment on: Neurosurgery 1996 Feb;38(2):251–7.

Intramedullary neuroma of the cervical spinal cord: case report. Melancia JL, et al. **Neurosurgery** 1996 Sep; 39(3):594–8 (45 ref.)

T-cell type primary spinal intramedullary lymphoma associated with human T-cell lymphotropic virus type I after a renal transplant: case report. Urasaki E, et al. **Neurosurgery** 1996 May;38(5):1036–9

A report on the safety of unilateral vertebral artery ligation during cervical spine surgery. Hoshino Y, et al. **Spine** 1996 Jun 15;21(12):1454–7

Radical resection of intramedullary spinal cord tumors without cavitron ultrasonic aspirator or CO2 laser: a "two stage" technique. Kalangu KK, et al. **Surg Neurol** 1996 Oct;

46(4):310–4; discussing 314–6
Intraspinal meningiomas: review of 54 cases with discussion of poor prognosis factors and modern therapeutic management. Roux FX, et al. **Surg Neurol** 1996 Nov; 46(5):458–63; discussion 463–4 (28 ref.)
Aggressive surgery for intramedullary tumor of cervical spinal cord. Xu QW, et al. **Surg Neurol** 1996 Oct; 46(4):322–8
[Progresses in neurosurgery in China, 1996] Zhao Y. **Chung Hua I Hsueh Tsa Chih** 1996 Dec;76(12):900–2 (0 ref.) **(Chi)**
[Spinal cord hemangioblastomas and pseudotumors: therapeutic strategy] Brotchi J. **Chirurgie** 1997;122(2):130–1 **(Fre)**
[Spinal cord astrocytomas and ependymomas: therapeutic strategy] Fischer G. **Chirurgie** 1997;122(2):127–9 (Eng. Abstr.) **(Fre)**
[Intramedullary spinal metastasis of bronchial carcinoma coincident with intramedullary spinal angioma] Dietl RH, et al. **Zentralbl Neurochir** 1996;57(1):25–9 (Eng. Abstr.) **(Ger)**

THERAPY

Primary spinal epidural non-Hodgkin's lymphomas in childhood: a review of 6 cases. Raco A, et al. **Acta Neurochir (Wien)** 1997;139(6):526–8
Trisacryl gelatin microspheres for therapeutic embolization, II: preliminary clinical evaluation in tumors and arteriovenous malformations. Beaujeux R, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):541–8
Conservative surgery and radiotherapy in the treatment of spinal cord astrocytoma. Jyothirmayi R, et al. **J Neurooncol** 1997 Jul;33(3):205–11
Treatment of spinal cord tumors in children. Mottl H, et al. **Med Pediatr Oncol** 1997 Oct;29(4):293–5
Embolization as treatment for spinal cord compression from renal cell carcinoma: case report. Kuether TA, et al. **Neurosurgery** 1996 Dec;39(6):1260–2; discussion 1262–3

ULTRASONOGRAPHY

Sonographic detection of lipomyelomeningocele: a retrospective documentation. Chreston J, et al. **J Clin Ultrasound** 1997 Jan;25(1):50–1 (5 ref.)
The role of intraoperative sonography in reducing invasiveness during surgery for spinal tumors. Maiuri F, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):8–12
Prenatal identification of a completely cystic internal sacrococcygeal teratoma (type IV). Winderl LM, et al. **Ultrasound Obstet Gynecol** 1997 Jun;9(6):425–8

ULTRASTRUCTURE

Tanycytic ependymoma. Langford LA, et al. **Ultrastruct Pathol** 1997 Mar–Apr;21(2):135–42

VETERINARY

Spinal tumors in 37 dogs: clinical outcome and long-term survival (1987–1994). Levy MS, et al. **J Am Anim Hosp Assoc** 1997 Jul–Aug;33(4):307–12
Canine spinal nephroblastoma. Macri NP, et al. **J Am Anim Hosp Assoc** 1997 Jul–Aug;33(4):302–6
Immunohistochemical demonstration of Wilms tumour gene product WT1 in a canine "neuroepithelioma" providing evidence for its classification as an extrarenal nephroblastoma. Pearson GR, et al. **J Comp Pathol** 1997 Apr;116(3):321–7
Glioblastoma multiforme arising in the irradiated spinal cord of a rhesus monkey (Macaca mulatta). Price RE, et al. **J Med Primatol** 1996 Apr;25(2):140–5
Surgical treatment of intramedullary spinal cord neoplasia in two dogs. Jeffery ND, et al. **J Small Anim Pract** 1995 Dec;36(12):553–7
Surgical conditions of the cervical spine. Tomlinson J. **Semin Vet Med Surg (Small Anim)** 1996 Nov;11(4):225–34 (28 ref.)

SPINAL CORD SYPHILIS see **TABES DORSALIS**

SPINAL DISEASES

Camptocormia or cormoptosis? The etymology of the word [letter; comment] Karras D, et al. **Ann Rheum Dis** 1996 Nov;55(11):858. Comment on: Ann Rheum Dis 1996 Jan;55(1):21–3.
Three familial cases presenting with an immobile spine. Rigid spine or Emery–Dreifuss syndrome? Spranger M, et al. **Clin Genet** 1996 Oct;50(4):229–31
Spondyloarthropathies. **Curr Opin Rheumatol** 1997 Jul; 9(4):B127–34
Diagnostic and classification criteria, clinical and functional assessment, and therapeutic advances for spondyloarthropathies. Olivieri I, et al. **Curr Opin Rheumatol** 1997 Jul;9(4):284–90 (85 ref.)
The Cochrane Collaboration Back Review Group for spinal disorders [editorial] Bombardier C, et al. **Spine** 1997 Apr 15;22(8):837–40
Spine update. Administrative databases in spine research. Faciszewski T. **Spine** 1997 Jun 1;22(11):1270–5 (35 ref.)
Spine update. Clinical pathways. Ibarra VL. **Spine** 1997 Feb 1;22(3):352–7 (11 ref.)
1996 North American Spine Society presidential address. Saal JA. **Spine** 1997 Jul 15;22(14):1545–52
[Rigid spine syndrome] Yonesaka S. **Ryoikibetsu Shokogun Shirizu** 1996;(15):339–41 (16 ref.) **(Jpn)**

CHEMICALLY INDUCED

Thoracic spinal Pantopaque cyst and associated syrinx resulting in progressive spastic paraparesis: case report. Tabor EN, et al. **Neurosurgery** 1996 Nov;39(5):1040–2
[Spinal para-medullary conduction anesthesia in therapy with anticoagulant drugs] Hesse T, et al. **Anaesthesiol Reanim** 1996;21(5):116–21 (74 ref.) (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Evaluation of the European Spondylarthropathy Study Group (ESSG) preliminary classification criteria in Brazilian patients. Cury SE, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):79–82
A system for reporting the size and location of lesions in the spine. Wiltse LL, et al. **Spine** 1997 Jul 1;22(13):1534–7

COMPLICATIONS

Paraparesis caused by a bilateral cervical synovial cyst. Kotilainen E, et al. **Acta Neurol Scand** 1997 Jul;96(1):59–61
Infected abdominal aortic aneurysm caused by spinal brucellar infection [letter] Yee N, et al. **AJR Am J Roentgenol** 1996 Oct;167(4):1068–9
Anesthetic implications of chronic disease of the cervical spine. Popitz MD. **Anesth Analg** 1997 Mar;84(3):672–83 (78 ref.)
Transient paraparesis after postdural puncture spinal hematoma in a patient receiving ketorolac. Gerancher JC, et al. **Anesthesiology** 1997 Feb;86(2):490–4 (26 ref.)
Back pain in the older patient. Baumgartner E, et al. **Ann Rheum Dis** 1996 Sep;55(9):600–2
Chest pain of spinal origin. Taylor MD. **Aust Fam Physician** 1997 Jan;26(1):64
The influence of family history of hip fracture on the risk of vertebral deformity in men and women: the European Vertebral Osteoporosis Study. Diaz MN, et al. **Bone** 1997 Feb;20(2):145–9
Back pain in children. Hollingworth P. **Br J Rheumatol** 1996 Oct;35(10):1022–8 (64 ref.)
Back pain: can we make a contribution? [editorial] Cook GJR, et al. **Eur J Nucl Med** 1997 Apr;24(4):363–7 (41 ref.)
The effects of simple trauma on patients with cervical spine neurofibromatosis: two case reports. Lam KS, et al. **Eur Spine J** 1997;6(1):77–80
Long-term evolution of gut inflammation in patients with spondyloarthropathy. De Vos M, et al. **Gastroenterology** 1996 Jun;110(6):1696–703
Spinal epidural hematoma progressing to Brown-Sequard syndrome: report of a case. Hancock JB, et al. **J Emerg Med** 1997 May–Jun;15(3):309–12
Abnormalities of the spine in Goldenhar's syndrome. Gibson JN, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):344–9
Toe dactylitis in patients with spondyloarthropathy: assessment by magnetic resonance imaging. Olivieri I, et al. **J Rheumatol** 1997 May;24(5):926–30
Diskitis associated with transpedicular screw fixation. Hamilton W, et al. **J Spinal Disord** 1996 Feb;9(1):68–71
Painful scoliosis. Hoeffel C, et al. **Klin Padiatr** 1997 Mar–Apr; 209(2):78–83 (6 ref.)
Spinal abscess with cord compression complicating infected subclavian cannula. Nawaz M, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):842
Charcot spinal arthropathy in congenital insensitivity to pain. Igram CM, et al. **Orthopedics** 1996 Mar;19(3):251–55 (44 ref.)
Osteopenia occurs in a minority of patients with acromegaly and is predominant in the spine. Kayath MJ, et al. **Osteoporos Int** 1997;7(3):226–30
Specificity of diagnostic nerve blocks: a prospective, randomized study of sciatica due to lumbosacral spine disease. North RB, et al. **Pain** 1996 Apr;65(1):77–85
Intervertebral disk calcification: an unusual cause of acquired torticollis in childhood. Causey AL, et al. **Pediatr Emerg Care** 1996 Oct;12(5):356–9
Evaluation of magnetic resonance imaging for the detection of sacroiliitis in patients with early seronegative spondylarthropathy. Rémy M, et al. **Rev Rhum Engl Ed** 1996 Oct;63(9):577–83
Spondylarthropathy with distal joint involvement. de Saint Pierre V, et al. **Scand J Rheumatol** 1996;25(5):331–3
Thoracic myelopathy due to intraspinal rheumatoid nodules. Sasaki S, et al. **Scand J Rheumatol** 1997;26(3):227–8
Computed tomography of sternoclavicular joint lesions in spondylarthropathies. Louvel JP, et al. **Skeletal Radiol** 1997 Jul;26(7):419–23
Temporomandibular and cervical spine disorders. Self-reported signs and symptoms. de Wijer A, et al. **Spine** 1996 Jul 15;21(14):1638–46
Destructive spondyloarthropathy of the cervical spine in patients with chronic renal failure. Kumar A, et al. **Spine** 1997 Mar 1;22(5):573–7; discussion 578
[Headache and the cervical spine. A critical review] Pöllmann W, et al. **Nervenarzt** 1996 Oct;67(10):821–36 (202 ref.) (Eng. Abstr.) **(Ger)**
[The spine in elderly patients (editorial)] Benini A. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1346 **(Ger)**
[A case of tracheal rupture caused by blunt trauma associated with pneumoretroperitoneum and intraspinal gas] Romano L, et al. **Radiol Med (Torino)** 1996 Nov;92(5):642–4 **(Ita)**
[Rigid spine syndrome associated with marked hypoxemia and hypercapnia] Toh Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 May; 34(5):605–9 (10 ref.) (Eng. Abstr.) **(Jpn)**
[A case of acromegaly associated with variegated spinal disorders] Suga T, et al. **No Shinkei Geka** 1996 Oct; 24(10):927–32 (Eng. Abstr.) **(Jpn)**
[Poems syndrome: a case report] Tellería A, et al. **Rev Neurol** 1997 Apr;25(140):565–8 (Eng. Abstr.) **(Spa)**

CONGENITAL

Suggested management guidelines for participation in collision activities with congenital, developmental, or postinjury lesions involving the cervical spine. Torg JS, et al. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S256–72

DIAGNOSIS

Quantitative analysis of signal intensities and contrast after fat suppression in contrast-enhanced magnetic resonance imaging of the spine. Georgy BA, et al. **Acad Radiol** 1996 Sep;3(9):731–4
MR of the spine with a fast T1-weighted fluid-attenuated inversion recovery sequence. Melhem ER, et al. **AJNR Am J Neuroradiol** 1997 Mar;18(3):447–54
Ionic versus nonionic paramagnetic contrast media in differentiating between scar and herniated disk. Nguyen CM, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):501–5
MR imaging of vertebral osteomyelitis revisited. Dagirmanjian A, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1539–43
The overdiagnosis of fibromyalgia syndrome. Fitzcharles MA, et al. **Am J Med** 1997 Jul;103(1):44–50
Spinal meningitis masquerading as postdural puncture headache [letter] Liu SS, et al. **Anesthesiology** 1996 Dec; 85(6):1493–4
You're the flight surgeon. Intervertebral disk protrusion. Campbell J. **Aviat Space Environ Med** 1996 Mar;67(3):284–5
Chronic recurrent multifocal osteomyelitis: spinal involvement and radiological appearances. Martin JC, et al. **Br J Rheumatol** 1996 Oct;35(10):1019–21
Shadows of the truth in patients with spinal pain: a review. Giles LG, et al. **Can J Psychiatry** 1997 Feb;42(1):44–8 (80 ref.)
Extradural spinal tophaceous gout: evolution with medical treatment. Dhôte R, et al. **Clin Exp Rheumatol** 1997 Jul–Aug;15(4):421–3
Magnetic resonance imaging of the musculoskeletal system. Part 8. The spine, section 1. Gundry CR, et al. **Clin Orthop** 1997 May;(338):275–87
Integrating and presenting clinical and treatment outcome data for cost-effective case management. Westberg EE, et al. **Comput Biol Med** 1997 Jan;27(1):31–47
Radiologic interpretation of vacuum phenomena. Balkissoon AR. **Crit Rev Diagn Imaging** 1996 Oct;37(5):435–60 (25 ref.)
Vertebral osteomyelitis and meningitis due to a penicillin-resistant pneumococcal strain [letter] Chemlal K, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov; 15(11):893–5
Spinal epidural abscess: the nurse's role in early detection and intervention. Hoppe B. **Heart Lung** 1996 Nov-Dec; 25(6):463–6 (34 ref.)
Spinal epidural abscess associated with epidural anesthesia: gadolinium-enhanced magnetic resonance imaging and its usefulness in diagnosis and treatment. Higuchi T, et al. **Intern Med** 1996 Nov;35(11):902–4
Intraspinal synovial cyst. Zapletal J, et al. **J Belge Radiol** 1996 Dec;79(6):286
MR prediction of benign and malignant vertebral compression fractures. Moulopoulos LA, et al. **J Magn Reson Imaging** 1996 Jul–Aug;6(4):667–74
The anatomical basis for spinal pain syndromes. Bogduk N. **J Manipulative Physiol Ther** 1995 Nov–Dec;18(9):603–5 (27 ref.)
Stiffness judgments are affected by visual occlusion. Maher CG, et al. **J Manipulative Physiol Ther** 1996 May; 19(4):250–6
Suture granuloma mimicking a lumbar disc recurrence. Case illustration. Ziyal IM, et al. **J Neurosurg** 1997 Sep;87(3):473
Symptoms of the stomatognathic system in temporomandibular and cervical spine disorders. de Wijer A, et al. **J Oral Rehabil** 1996 Nov;23(11):733–41
Symptoms of the cervical spine in temporomandibular and cervical spine disorders. de Wijer A, et al. **J Oral Rehabil** 1996 Nov;23(11):742–50
Flexion and extension cervical MRI in a pediatric population. Weng MS, et al. **J Pediatr Orthop** 1996 May–Jun; 16(3):359–63
SAPHO syndrome and spondyloarthropathy [letter; comment] Goupille P, et al. **J Rheumatol** 1996 Sep; 23(9):1667–8. Comment on: J Rheumatol 1995 Nov;22(11):2135–41.
Diagnosis and indications for elective spinal surgery. McGuire RA Jr. **J South Orthop Assoc** 1996 Fall; 5(3):213–20 (20 ref.)
Spinal epidural abscess--a case report. Chang CZ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jul; 13(7):457–61

Solid variant of an aneurysmal bone cyst (giant cell reparative granuloma) of the 3rd lumbar vertebra. Sato K, et al. **Nagoya J Med Sci** 1996 Dec;59(3-4):159-65 (22 ref.)
Diagnostic imaging of infections and neoplasms affecting the spine in patients with AIDS. Thurnher MM, et al. **Neuroimaging Clin N Am** 1997 May;7(2):341-57 (86 ref.)
Compressive myelopathy in fluorosis: MRI. Gupta RK, et al. **Neuroradiology** 1996 May;38(4):338-42
Diagnostic and therapeutic spinal arthroscopy. Kambin P. **Neurosurg Clin N Am** 1996 Jan;7(1):65-76 (49 ref.)
Epidural lipomatosis with lumbar radiculopathy in one obese patient. Case report and review of the literature. Qasho R, et al. **Neurosurg Rev** 1997;20(3):206-9 (28 ref.)
False localizing signs in upper cervical spinal cord compression [see comments] Sonstein WJ, et al. **Neurosurgery** 1996 Mar;38(3):445-8; discussion 448-9. Comment in: Neurosurgery 1997 Jan;40(1):217-8.
Primary bone tumors of the pelvis presenting as spinal disease. Thompson RC Jr, et al. **Orthopedics** 1996 Dec; 19(12):1011-6
Early diagnosis of rheumatoid cervical myelopathy. Babić-Naglić D, et al. **Scand J Rheumatol** 1997; 26(4):247-52
Cervicofacial actinomycosis with paravertebral spread: a case report. Abisheganaden J, et al. **Singapore Med J** 1996 Apr; 37(2):229-32
Candida osteomyelitis and disc space infection of the lumbar spine. Munk PL, et al. **Skeletal Radiol** 1997 Jan;26(1):42-6 (17 ref.)
The clinical use of magnetic resonance imaging in pyogenic vertebral osteomyelitis. Carragee EJ. **Spine** 1997 Apr 1; 22(7):780-5
Spinoscope's performance [letter; comment] Gracovetsky SA, et al. **Spine** 1997 Feb 1;22(3):360-1. Comment on: Spine 1996 Jun 1;21(11):1325-30; discussion 1331.
Spinal osteomyelitis presenting with a life-threatening pleural empyema. Jari S, et al. **Spine** 1996 Dec 1;21(23):2806-8
A comparison of methods for measuring trunk list. A simple plumbline is the best. McLean IP, et al. **Spine** 1996 Jul 15;21(14):1667-70
Spinal epidural abscess in a liver transplant recipient. Wszolek ZK, et al. **Transplant Proc** 1996 Oct;28(5):2978-9
[Aneurysmal bone cyst: imaging diagnosis and evaluation of therapeutic methods] Guo Y, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Sep;76(9):676-9 (Eng. Abstr.) **(Chi)**
[Intraspinal epidermoid cyst] Carré S, et al. **J Neuroradiol** 1997 Jun;24(1):65-7 (Eng. Abstr.) **(Fre)**
[Clinical and technical assessment of the cervical spine] Dvorak J. **Orthopade** 1996 Nov;25(6):505-11 (Eng. Abstr.) **(Ger)**
[Vertebral pain in advanced age: radiological diagnosis] Zanetti M, et al. **Schweiz Rundsch Med Prax** 1996 Oct 22; 85(43):1360-72 (29 ref.) (Eng. Abstr.) **(Ger)**
[Backache--orthopedic diagnosis and special therapeutic possibilities] Fengler H, et al. **Z Arztl Fortbild (Jena)** 1997 Jan;90(8):677-85 (Eng. Abstr.) **(Ger)**
[Lumbar syndrome as an occupational disease and preventive measures] Schmidt J. **Z Arztl Fortbild (Jena)** 1997 Jan; 90(8):687-91 (Eng. Abstr.) **(Ger)**
[Juridical and professional requirements for the acknowledgement of occupational diseases (news)] Brandenburg S. **Z Orthop Ihre Grenzgeb** 1997 Jan-Feb; 135(1):Oa9-11 **(Ger)**
[Vertebral echinococcosis. A case studied with computerized tomography and magnetic resonance] Bulleri A, et al. **Radiol Med (Torino)** 1996 Jul-Aug;92(1-2):130-2 **(Ita)**
[A case of acute cervical epidural abscess] Kimura T, et al. **No To Shinkei** 1997 Apr;49(4):359-63 (Eng. Abstr.) **(Jpn)**
[Clinical and myopathological studies on rigid spine syndrome] Isozaki E, et al. **Rinsho Shinkeigaku** 1996 Oct; 36(10):1136-42 (Eng. Abstr.) **(Jpn)**
[K"ummell-Verneuille's disease] Malawski S. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):553-8 (Eng. Abstr.) **(Pol)**
[Our clinical experience with the diagnosis and treatment of Kummell-Verneuille disease] Malawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(6):559-65 (Eng. Abstr.) **(Pol)**
[Diagnostic problems and prophylaxis of paraoccupational diseases of the spine] Iżycki J. **Med Pr** 1996;47(6):651-5 (31 ref.) (Eng. Abstr.) **(Pol)**
[Spinal epidural empyemas] Evangelista T, et al. **Acta Med Port** 1995 Nov;8(11):643-7 (Eng. Abstr.) **(Por)**
[Endoscopic method for the diagnosis and treatment of spinal pain syndromes] Shutse G, et al. **Anesteziol Reanimatol** 1996 Jul-Aug;(4):62-4 (Eng. Abstr.) **(Rus)**
[Clinical and X-ray diagnosis of initial degenerative changes in the lumbar section of the spine in flight personnel] Vasil'ev AIu, et al. **Aviakosm Ekolog Med** 1996;30(2):55-8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Sulphasalazine in the treatment of HIV-related spondyloarthropathy [letter] Njobvu PD, et al. **Br J Rheumatol** 1997 Mar;36(3):403-4
Multidrug-resistant Pneumococcus causing vertebral osteomyelitis. Antony SJ. **J Natl Med Assoc** 1997 Sep; 89(9):634-5
Reduction of peridural fibrosis after lumbar laminotomy and discectomy in dogs by a resorbable gel (ADCON-L). Einhaus SL, et al. **Spine** 1997 Jul 1;22(13):1440-6; discussion 1446-7
Medical decompression of vertebral hydatidosis. Lam KS, et al. **Spine** 1997 Sep 1;22(17):2050-5

ECONOMICS

Cost-effectiveness of magnetic resonance imaging in specific situations in India. Shah VC, et al. **Acad Radiol** 1996 Apr; 3 Suppl 1:S113-5
Spine update: understanding cost-effectiveness [see comments] Clark RE. **Spine** 1996 Mar 1;21(5):646-50. Comment in: Spine 1996 Mar 1;21(5):651-2.
Spine update [editorial; comment] Weinstein MC. **Spine** 1996 Mar 1;21(5):651-2. Comment on: Spine 1996 Mar 1;21(5):646-50.

EPIDEMIOLOGY

Comparison of acceleration subjects to other populations: spinal anomaly distribution. Popper SE, et al. **Aviat Space Environ Med** 1997 May;68(5):426-31
Predisposing factors to spondyloarthropathies. Brown M, et al. **Curr Opin Rheumatol** 1997 Jul;9(4):308-14 (91 ref.)
The prevalence of vertebral deformity in european men and women: the European Vertebral Osteoporosis Study. O'Neill TW, et al. **J Bone Miner Res** 1996 Jul;11(7):1010-8
Adjacent-segment degeneration after lumbar fusion with instrumentation: a retrospective study. Rahm MD, et al. **J Spinal Disord** 1996 Oct;9(5):392-400
Disorders of the back and spine in construction workers. Prevalence and prognostic value for disability. Rothenbacher D, et al. **Spine** 1997 Jul 1;22(13):1481-6
[Spinal diseases in a rheumatology hospital unit in Lomé (Togo)] Mijiyawa M, et al. **Ann Med Interne (Paris)** 1996; 147(6):397-401 (Eng. Abstr.) **(Fre)**
[Spinal diseases in the nursing profession--a cross-sectional study] Nübling M, et al. **Gesundheitswesen** 1997 Apr; 59(4):271-4 (Eng. Abstr.) **(Ger)**
[Postoperative complications of anterior and middle skull base surgery] Tokutomi T, et al. **No Shinkei Geka** 1997 Jan;25(1):29-34 (Eng. Abstr.) **(Jpn)**
[Selected diseases of the spine and spinal cord as a cause of work disability] Szubert Z, et al. **Med Pr** 1996; 47(6):597-604 (Eng. Abstr.) **(Pol)**

ETHNOLOGY

Spondyloarthropathies in circumpolar populations: II. Characterization of the populations. Boyer GS, et al. **Arctic Med Res** 1996 Oct;55(4):195-203
Spondyloarthropathies in circumpolar populations: I. Design and methods of United States and Russian studies. Lawrence RC, et al. **Arctic Med Res** 1996 Oct;55(4):187-94

ETIOLOGY

Prevalence of spinal disc disease among interventional cardiologists. Ross AM, et al. **Am J Cardiol** 1997 Jan 1; 79(1):68-70
Atypical presentations of epidural abscess in intravenous drug abusers. Prendergast H, et al. **Am J Emerg Med** 1997 Mar; 15(2):158-60
An epidural abscess due to resistant Staphylococcus aureus following epidural catheterisation. Yuste M, et al. **Anaesthesia** 1997 Feb;52(2):163-5
An association between the flat back and postpolio syndromes: a report of three cases. Ring D, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):324-6
Severe osteoporosis due to systemic mast cell disease: successful treatment with interferon alpha-2B. Lehmann T, et al. **Br J Rheumatol** 1996 Sep;35(9):898-900
Spinal pseudoarthrosis complicating ankylosing spondylitis: a report of two patients. Pettersson T, et al. **Br J Rheumatol** 1996 Dec;35(12):1319-23
Vertebral osteomyelitis presenting with bilateral pleural effusions in a leprous patient. Shimada T, et al. **Diagn Microbiol Infect Dis** 1996 Feb;24(2):101-3
Iatrogenic spinal epidural abscesses: early diagnosis essential for good outcome. Lindner A, et al. **Eur J Med Res** 1997 May 28;2(5):201-5
Vertebral osteomyelitis caused by thoracic empyema, or vice versa? Liesker KR, et al. **Eur Respir J** 1996 Nov; 9(11):2426-8
Cervical spine involvement in rheumatoid arthritis: prevalence and relationship with overall disease severity. Aggarwal A, et al. **J Assoc Physicians India** 1996 Jul; 44(7):468-71
Spinal problems in mucopolysaccharidosis I (Hurler syndrome). Tandon V, et al. **J Bone Joint Surg Br** 1996 Nov;78(6):938-44
Increasing frequency of vertebral osteomyelitis following Staphylococcus aureus bacteraemia in Denmark 1980-1990. Jensen AG, et al. **J Infect** 1997 Mar;34(2):113-8
Suture granuloma mimicking a lumbar disc recurrence. Case illustration. Ziyal IM, et al. **J Neurosurg** 1997 Sep;87(3):473
Iatrogenic spinopelvic cerebro-spinal fluid fistula. Case report. Maleci A, et al. **J Neurosurg Sci** 1995 Dec; 39(4):261-3
Crohn's disease and sacroiliac pain: not always sacroiliitis [letter] Barr SG, et al. **J Rheumatol** 1996 Mar;23(3):572
The effect of postlaminectomy spinal instability on the outcome of lumbar spinal stenosis patients. Mullin BB, et al. **J Spinal Disord** 1996 Apr;9(2):107-16
Could sudden increases in physical activity cause degeneration of intervertebral discs? Adams MA, et al. **Lancet** 1997 Sep 6;350(9079):734-5
The dialysis patient with cystic bone defects and spinal cord symptoms. Mourad G, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1870-3
Pyoderma gangrenosum and spinal epidural abscess after subcutaneous administration of recombinant human erythropoietin. Park CW, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1506-8
Epidural emphysema in children with asthma [letter] Pifferi M, et al. **Pediatr Pulmonol** 1997 Aug;24(2):125-6
Epidural lipomatosis not induced by corticosteroid therapy. Three cases including one in a patient with primary Cushing's disease (review of the literature). Benamou PH, et al. **Rev Rhum Engl Ed** 1996 Mar;63(3):207-12 (18 ref.)
Warfarin-induced spondyloarthropathy with pseudotumor-like appearance. A case report. Awwad EE, et al. **Spine** 1996 Aug 15;21(16):1936-8
Intrathecal granuloma after implantation of a morphine pump: case report and review of the literature. Bejjani GK, et al. **Surg Neurol** 1997 Sep;48(3):288-91 (23 ref.)
[Spinal pseudarthroses] Räber D, et al. **Orthopade** 1996 Sep; 25(5):435-40 (53 ref.) (Eng. Abstr.) **(Ger)**
[Analysis of the occurrence of degenerative changes in the spinal column in military tank personnel in relation their body height] Maksimović M. **Vojnosanit Pregl** 1996 Jul-Aug;53(4):275-9 (Eng. Abstr.) **(Scr)**
[Epidural abscess: a complication of the use of corticoids in the treatment for back pain] de Andrés J, et al. **Rev Esp Anestesiol Reanim** 1997 Apr;44(4):164-5 **(Spa)**

GENETICS

Comparative cytokine gene expression in synovial tissue of early rheumatoid arthritis and seronegative spondyloarthropathies. Cañete JD, et al. **Br J Rheumatol** 1997 Jan;36(1):38-42
Predisposing factors to spondyloarthropathies. Brown M, et al. **Curr Opin Rheumatol** 1997 Jul;9(4):308-14 (91 ref.)
Focal dermal hypoplasia (Goltz syndrome) with vertebral solid aneurysmal bone cyst variant. A case report. D'Alise MD, et al. **Pediatr Neurosurg** 1996;24(3):151-4

HISTORY

Etiopathogenesis of skeletal hyperostosis. A study of a European population that lived 7700 years ago. Crubézy E. **Rev Rhum Engl Ed** 1996 Jul-Sep;63(7-8):481-4
[Epigenetic variations and pathologic changes in the cervical vertebrae of the protoneolithic population in Panonia] Hoshovski E. **Srp Arh Celok Lek** 1996 Jan-Feb; 124(1-2):6-10 (Eng. Abstr.) **(Scc)**

IMMUNOLOGY

HLA-B27, rheumatoid factor and spondyloarthritis [editorial] Calin A. **Clin Exp Rheumatol** 1997 May-Jun; 15(3):229-31
Coincident seronegative spondarthritis: a case report. Speed CA, et al. **Clin Rheumatol** 1996 May;15(3):301-2
Pathogenic role of gut inflammation in the spondyloarthropathies. Gaston JS. **Curr Opin Rheumatol** 1997 Jul;9(4):302-7 (62 ref.)
The B7 cross reactive group and spondyloarthropathies: an epidemiological approach. Cedoz JP, et al. **J Rheumatol** 1995 Oct;22(10):1884-90
Evaluation of magnetic resonance imaging for the detection of sacroiliitis in patients with early seronegative spondylarthropathy. Rémy M, et al. **Rev Rhum Engl Ed** 1996 Oct;63(9):577-83

METABOLISM

Different cytokine profiles in the synovial fluid of patients with osteoarthritis, rheumatoid arthritis and seronegative spondylarthropathies. Schlaak JF, et al. **Clin Exp Rheumatol** 1996 Mar-Apr;14(2):155-62
Discrimination ability of pyridinoline crosslinks related markers for bone resorption in postmenopause and osteoporosis. Takahashi M, et al. **Endocr Res** 1997 Feb-May;23(1-2):105-17
Immunohistological characteristics of T cell infiltrates in different forms of childhood onset chronic arthritis. Murray KJ, et al. **J Rheumatol** 1996 Dec;23(12):2116-24

MICROBIOLOGY

Clinical, bacteriological, and serological aspects of Klebsiella infections and their spondylarthropathic sequelae. Sahly H, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):393-9 (104 ref.)
Iatrogenically induced vertebral osteomyelitis due to Pseudomonas aeruginosa. Chevalier X, et al. **Clin Exp Rheumatol** 1996 Mar-Apr;14(2):191-4
Torulopsis (Candida) glabrata: a new pathogen found in spinal epidural abscess. Bonomo RA, et al. **Clin Infect Dis** 1996 Mar;22(3):588-9
Vertebral osteomyelitis due to Capnocytophaga species in immunocompetent patients: report of two cases and review. Duong M, et al. **Clin Infect Dis** 1996 Jun;22(6):1099-101 (15 ref.)
Spinal osteomyelitis caused by Proteus mirabilis in a child. de Weerd W, et al. **Eur J Pediatr** 1997 Jan;156(1):33-4

Iatrogenic spinal infection following epidural anaesthesia: case report. Dunn LT, et al. **Eur Spine J** 1996;5(6):418–20

Streptococcus faecalis disc space infection following transurethral resection of prostate. Faraj AA. **Eur Spine J** 1996;5(3):204–6

Spinal epidural abscess: an unusual cause of sciatica. Kotilainen E, et al. **Eur Spine J** 1996;5(3):201–3

Pyogenic vertebral osteomyelitis. Carragee EJ. **J Bone Joint Surg Am** 1997 Jun;79(6):874–80

Vertebral osteomyelitis due to Pseudallescheria boydii. Gatto J, et al. **Pathology** 1997 May;29(2):238–40

Spinal brucellosis in a southern California resident. Applebaum GD, et al. **West J Med** 1997 Jan;166(1):61–5

PARASITOLOGY

Vertebral hydatid disease. Paşaoğlu E, et al. **Australas Radiol** 1997 May;41(2):188–9

Medical decompression of vertebral hydatidosis. Lam KS, et al. **Spine** 1997 Sep 1;22(17):2050–5

[Hydatid cyst of the spine and spinal cord. Study of 24 cases] Sami A, et al. **Neurochirurgie** 1996;42(6):281–7 (36 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Anthropometric measurements and vertebral deformities. European Vertebral Osteoporosis Study (EVOS) Group. Johnell O, et al. **Am J Epidemiol** 1997 Aug 15;146(4):287–93

Fibrous dysplasia of the spine with sarcomatous transformation: a case report and review of the literature. Yalniz E, et al. **Eur Spine J** 1995;4(6):372–4 (21 ref.)

Spinal abscess. Louvel JP, et al. **J Belge Radiol** 1996 Dec; 79(6):271

Clinical grading of spinal osteoporosis: quality of life components and spinal deformity in women with chronic low back pain and women with vertebral osteoporosis. Leidig-Bruckner G, et al. **J Bone Miner Res** 1997 Apr; 12(4):663–75

Progression of cervical spine changes in patients with early rheumatoid arthritis. Paimela L, et al. **J Rheumatol** 1997 Jul;24(7):1280–4

Neurologic complications of lumbar epidural analgesia: spinal and paraspinal abscess. Bertol V, et al. **Neurology** 1997 Jun; 48(6):1732–3

Internally stabilized spine: optimal choice of frequency-encoding gradient direction during MR imaging minimizes susceptibility artifact from titanium vertebral body screws. Frazzini VI, et al. **Radiology** 1997 Jul; 204(1):268–72

Hypertrophic spinal pachymeningitis. A case report. Kanamori M, et al. **Spine** 1997 Aug 1;22(15):1787–90 (22 ref.)

[Degenerative changes of the cervical spine. Imaging] Holder J. **Orthopade** 1996 Nov;25(6):512–8 (Eng. Abstr.) **(Ger)**

[Spinal hemorrhagic synovial cyst: magnetic resonance features of a case] Petruzzi P, et al. **Radiol Med (Torino)** 1996 Dec;92(6):815–7 **(Ita)**

PHYSIOPATHOLOGY

Development of a functional scoring system for rheumatoid arthritis patients with cervical myelopathy. Casey AT, et al. **Ann Rheum Dis** 1996 Dec;55(12):901–6

A relationship between TGF-beta 1 or IL-6 plasma levels and clinical features of spondyloarthropathies [letter] Claudepierre P, et al. **Br J Rheumatol** 1997 Mar;36(3):400–1

Influence of spondylopathy on bone densitometry using dual energy X-ray absorptiometry. Jaovisidha S, et al. **Calcif Tissue Int** 1997 May;60(5):424–9

Spondyloarthropathies [editorial] Khan MA. **Curr Opin Rheumatol** 1997 Jul;9(4):281–3 (4 ref.)

Determination of trunk motion patterns associated with permanent or transient stenosis of the lumbar spine. Szpalski M, et al. **Eur Spine J** 1996;5(5):332–7

Influence of physical activity on vertebral deformity in men and women: results from the European Vertebral Osteoporosis Study. Silman AJ, et al. **J Bone Miner Res** 1997 May;12(5):813–9

Evaluation of pedicle screw insertion monitored by intraoperative evoked electromyography. Darden BV 2nd, et al. **J Spinal Disord** 1996 Feb;9(1):8–16

Familial mixed congenital myopathy with rigid spine phenotype. Reichmann H, et al. **Muscle Nerve** 1997 Apr; 20(4):411–7

Neural generators of tibial nerve P30 somatosensory evoked potential studied in patients with a focal lesion of the cervicomedullary junction. Tinazzi M, et al. **Muscle Nerve** 1996 Dec;19(12):1538–48

Smoking and the human vertebral column: a review of the impact of cigarette use on vertebral bone metabolism and spinal fusion. Hadley MN, et al. **Neurosurgery** 1997 Jul; 41(1):116–24 (138 ref.)

The development of a European questionnaire for quality of life in patients with vertebral osteoporosis. Lips P, et al. **Scand J Rheumatol Suppl** 1996;103:84–5; discussion 86–8

Spinal deformity following surgery for spinal cord tumors and tumorous lesions: analysis based on an assessment of the spinal functional curve. Inoue A, et al. **Spinal Cord** 1996 Sep;34(9):536–42

Instantaneous center of rotation and instability of the cervical spine. A clinical study. Lee SW, et al. **Spine** 1997 Mar 15;22(6):641–7; discussion 647–8

In vivo stress measurement can predict pain on discography. McNally DS, et al. **Spine** 1996 Nov 15;21(22):2580–7

The relative importance of vertebral bone density and disc degeneration in spinal flexibility and interbody implant performance. An in vitro study. Oxland TR, et al. **Spine** 1996 Nov 15;21(22):2558–69

[Spinal disease—prevention] Sylvest J, et al. **Ugeskr Laeger** 1997 Aug 25;159(35):5222–4 **(Dan)**

[Sagittal balance of the spine] Mangione P, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(1):22–32 (Eng. Abstr.) **(Fre)**

[Biomechanics of lumbar instability] Krismer M, et al. **Orthopade** 1997 Jun;26(6):516–20 (37 ref.) (Eng. Abstr.) **(Ger)**

[A new method for recording the spinal blood circulation in spinal diseases and trauma] Tikhodeev SA, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):83–5 **(Rus)**

PREVENTION & CONTROL

A double blind, placebo-controlled trial of ipriflavone for prevention of postmenopausal spinal bone loss. Agnusdei D, et al. **Calcif Tissue Int** 1997 Aug;61(2):142–7

Cervical laminar exostosis in multiple hereditary osteochondromatosis: anterior stabilization and fusion technique for preventing instability. Ergün R, et al. **Eur Spine J** 1997;6(4):267–9

The influence of alcohol consumption on the risk of vertebral deformity. European Vertebral Osteoporosis Study Group. Naves Diaz M, et al. **Osteoporos Int** 1997;7(1):65–71

Influence of hormonal and reproductive factors on the risk of vertebral deformity in European women. European Vertebral Osteoporosis Study Group. O'Neill TW, et al. **Osteoporos Int** 1997;7(1):72–8

The effect of pulsed electromagnetic fields on instrumented posterolateral spinal fusion and device-related stress shielding. Ito M, et al. **Spine** 1997 Feb 15;22(4):382–8

PSYCHOLOGY

[Choose the words carefully! Information with a positive content may affect the patients with spinal problems so they dare to live a normal life] Udén A. **Lakartidningen** 1996 Oct 30;93(44):3923–5 **(Swe)**

RADIOGRAPHY

Interventional radiology techniques in musculoskeletal disease. Gibbon WW. **Baillieres Clin Rheumatol** 1996 Nov; 10(4):711–27 (22 ref.)

CT evaluation of symptomatic ossification of the ligamentum flavum in thoracic spine. Zhu L. **Chin Med J (Engl)** 1996 Jun;109(6):489–90

Inverse relation between vertebral body deformity and intervertebral disk narrowing in lumbar spine of elderly women. Okawa A, et al. **J Spinal Disord** 1996 Feb; 9(1):23–31

Vertebrospinal angiography in the evaluation of vertebral and spinal cord disease. Nelson PK, et al. **Neuroimaging Clin N Am** 1996 Aug;6(3):589–605 (61 ref.)

Plain film evaluation of degenerative disk disease at the lumbosacral junction. Cohn EL, et al. **Skeletal Radiol** 1997 Mar;26(3):161–6

C2-3 facet joint "pseudo-fusion": anatomic basis of a normal variant. Massengill AD, et al. **Skeletal Radiol** 1997 Jan; 26(1):27–30

Spinal canal obstruction detected by cerebrospinal fluid imaging [letter] Loubser PG, et al. **Spinal Cord** 1996 Dec; 34(12):755–6

Standardized radiologic protocol for the study of common coccygodynia and characteristics of the lesions observed in the sitting position. Clinical elements differentiating luxation, hypermobility, and normal mobility. Maigne JY, et al. **Spine** 1996 Nov 15;21(22):2588–93

Limited usefulness of traction-compression films in the radiographic diagnosis of lumbar spinal instability. Comparison with flexion-extension films. Pitkänen M, et al. **Spine** 1997 Jan 15;22(2):193–7

[Incidence of postmyelography syndrome and postmyelography complaints after lumbar puncture with the Sprotte pencil-like needle in comparison with the Quincke needle] Fox RG, et al. **Radiologe** 1996 Nov; 36(11):921–7 (Eng. Abstr.) **(Ger)**

[Routine thoracic image of an 86-year-old patient with tracheobronchitis. Scalloping--pressure-induced ventral vertebral erosions caused by a thoracic aortic aneurysm] Zenzius RP. **Radiologe** 1997 Jun;37(6):483–5 **(Ger)**

[Helical CT for lumbosacral spinal] Tatsuno S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Oct; 56(12):822–7 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Bone SPECT imaging of the painful back. Gates GF. **Clin Nucl Med** 1996 Jul;21(7):560–71 (33 ref.)

The 'mouse face' appearance of the vertebrae in Paget's disease. Kim CK, et al. **Clin Nucl Med** 1997 Feb;22(2):104–8

Photopenia in chronic vertebral osteomyelitis with technetium-99m-antigranulocyte antibody (BW 250/183). Gratz S, et al. **J Nucl Med** 1997 Feb;38(2):211–6

REHABILITATION

Rehabilitation and chiropractic practice. Liebenson C. **J Manipulative Physiol Ther** 1996 Feb;19(2):134–40 (50 ref.)

The physics of spinal manipulation: a critical review of four articles by Haas. Solinger AB. **J Manipulative Physiol Ther** 1996 Feb;19(2):141–5 (21 ref.)

An update on orthotic devices for the lumbar spine based on a review of the literature. Calmels P, et al. **Rev Rhum Engl Ed** 1996 Apr;63(4):285–91 (52 ref.)

Rehabilitating patients with chronic back pain [letter; comment] Brand JL, et al. **Spine** 1997 Feb 1;22(3):358–60 . Comment on: Spine 1996 Apr 1;21(7):844–7.

Objectification of functional improvement after nonoperative care. Flores L, et al. **Spine** 1997 Jul 15;22(14):1622–33 (128 ref.)

Spinal manipulation for low back pain. An updated systematic review of randomized clinical trials. Koes BW, et al. **Spine** 1996 Dec 15;21(24):2860–71; discussion 2872–3 (72 ref.)

[Description of a patient profile of ambulatory physical medicine facilities] Wiesinger GF, et al. **Acta Med Austriaca** 1996;23(5):147–51 (Eng. Abstr.) **(Ger)**

SURGERY

Justification for decreasing the number of views taken in radiologic follow-up of Casper plate cervical spine hardware. Doyle AJ, et al. **Acad Radiol** 1996 Jun; 3(6):479–85

Spinal epidural abscess--review of 10 cases. Tacconi L, et al. **Acta Neurochir (Wien)** 1996;138(5):520–3 (17 ref.)

Anterior approaches to non-traumatic lesions of the thoracic spine. Trindade AM, et al. **Adv Tech Stand Neurosurg** 1997; 23:205–48 (82 ref.)

Airway management and rigid spine syndrome. Kitayama M, et al. **Anesth Analg** 1997 Mar;84(3):690–1

Dumbbell hydatid cyst of the spine. Parvaresh M, et al. **Br J Neurosurg** 1996 Apr;10(2):211–3

Reoperations on the spine--outcome studies. Fraser RD. **Bull Hosp Jt Dis** 1996;55(4):217–20 (54 ref.)

Basic science of spinal instrumentation. Goel VK, et al. **Clin Orthop** 1997 Feb;(335):10–31 (118 ref.)

Intervertebral disc replacement. Experimental study. Kostuik JP. **Clin Orthop** 1997 Apr;(337):27–41

Endoscopic techniques in spinal surgery. Regan JJ, et al. **Clin Orthop** 1997 Feb;(335):122–39 (45 ref.)

Spinal instrumentation in the management of degenerative disorders of the lumbar spine. Sidhu KS, et al. **Clin Orthop** 1997 Feb;(335):39–53 (41 ref.)

Pedicle screw fixation in spinal disorders: a European view. Boos N, et al. **Eur Spine J** 1997;6(1):2–18 (195 ref.)

In vitro testing of a new transpedicular stabilization technique. Pfeiffer M, et al. **Eur Spine J** 1997;6(4):249–55

Standardized evaluation of long-term results after anterior lumbar interbody fusion. Pfeiffer M, et al. **Eur Spine J** 1996; 5(5):299–307

Magnetic resonance imaging of the postoperative spine. Genant HK. **Instr Course Lect** 1994;43:471–3 (12 ref.)

Minimally invasive approaches to the spine. Regan JJ, et al. **Instr Course Lect** 1997;46:127–41 (44 ref.)

The causes of failure of lumbar transpedicular spinal instrumentation and fusion: a prospective study. Hadjipavlou A, et al. **Int Orthop** 1996;20(1):35–42 (53 ref.)

Relationship between mortality rates and hospital patient volume for Medicare patients undergoing major orthopaedic surgery of the hip, knee, spine, and femur. Taylor HD, et al. **J Arthroplasty** 1997 Apr;12(3):235–42

Failed anterior cervical discectomy and arthrodesis. Analysis and treatment of thirty-five patients. Zdeblick TA, et al. **J Bone Joint Surg Am** 1997 Apr;79(4):523–32

Vertebral osteopenia: a new indication for surgery in primary hyperparathyroidism. Silverberg SJ, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4007–12

Perceived self-care information needs and information--seeking behaviors before and after elective spinal procedures. Holmes KL, et al. **J Neurosci Nurs** 1997 Apr;29(2):79–85

Primary reconstruction for spinal infections. Dietze DD Jr, et al. **J Neurosurg** 1997 Jun;86(6):981–9

Use of an adjustable, transportable, radiolucent spinal immobilization device in the comprehensive management of cervical spine instability. Technical note. Tuite GF, et al. **J Neurosurg** 1996 Dec;85(6):1177–80

Anterior exposure of spinal deformities and tumors: a 20-year experience. Janik JS, et al. **J Pediatr Surg** 1997 Jun; 32(6):852–9

Operative treatment of degenerative cervical disk disease. Heller JG, et al. **J South Orthop Assoc** 1996 Fall; 5(3):188–206 (44 ref.)

Diagnosis and indications for elective spinal surgery. McGuire RA Jr. **J South Orthop Assoc** 1996 Fall; 5(3):213–20 (20 ref.)

Instrumentation of the infected and unstable spine: a review of 17 cases from the thoracic and lumbar spine with pyogenic infections. Carragee EJ. **J Spinal Disord** 1997 Aug;10(4):317–24

Lateral intertransverse process single-level fusion for salvage of the unstable failed posterior lumbar interbody fusion. Highhouse ME, et al. **J Spinal Disord** 1996 Feb;9(1):59–63

Validity and reliability of spinal cord monitoring in neuromuscular spinal deformity surgery. Padberg AM, et al. **J Spinal Disord** 1996 Apr;9(2):150–8

Posterior pedicular screw instrumentation and anterior interbody fusion in adult lumbar spondylolysis or grade I spondylolisthesis with segmental instability. Wang JM, et al. **J Spinal Disord** 1996 Apr;9(2):83–8

SPINAL DISEASES

Short test-period spinal cord stimulation for failed back surgery syndrome. Rainov NG, et al. **Minim Invasive Neurosurg** 1996 Jun;39(2):41–4

Instrumentation for intraoperative measurement of cervical spine stiffness. Frank EH, et al. **Neurol Res** 1996 Jun; 18(3):217–9

Diagnostic and therapeutic spinal arthroscopy. Kambin P. **Neurosurg Clin N Am** 1996 Jan;7(1):65–76 (49 ref.)

Percutaneous lumbosacral fixation and fusion: anatomic study and two-year experience with a new method. MacMillan M, et al. **Neurosurg Clin N Am** 1996 Jan;7(1):99–106

Anterior decompression and fusion using bone grafts obtained from cervical vertebral bodies for ossification of the posterior longitudinal ligament of the cervical spine: technical note. Isu T, et al. **Neurosurgery** 1997 Apr; 40(4):866–9; discussion 869–70

Primary hydatid cyst of sacral spinal canal: case report. Pandey M, et al. **Neurosurgery** 1997 Feb;40(2):407–9

An innovative method using the Leeds–Keio artificial ligament in the unstable spine. Mochida J, et al. **Orthopedics** 1997 Jan;20(1):17–23

Bone registration method for robot assisted surgery: pedicle screw insertion. Abdel-Malek K, et al. **Proc Inst Mech Eng [H]** 1997;211(3):221–33

Large symptomatic sacral intraspinal cyst successfully treated by surgical excision [letter] Kalfon JP, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):204–6

The surgical management of patients with rheumatoid cervical spine disease. Gurley JP, et al. **Rheum Dis Clin North Am** 1997 May;23(2):317–32 (49 ref.)

Reconstructive spinal surgery: assessment of outcome. Bossons CR, et al. **South Med J** 1996 Nov;89(11):1045–52

Pedicle screw fixation for nontraumatic lesions of the cervical spine. Abumi K, et al. **Spine** 1997 Aug 15;22(16):1853–63

The BWM spinal fixator system. A preliminary report of a 2-year prospective, international multicenter study in a range of indications requiring surgical intervention for bone grafting and pedicle screw fixation. Bailey SI, et al. **Spine** 1996 Sep 1;21(17):2006–15

Chronic osteomyelitis of the spine managed with a free flap of latissimus dorsi. A case report. Chen HC, et al. **Spine** 1996 Sep 1;21(17):2016–8

Long-term follow-up study of anterior decompression and fusion for thoracic myelopathy resulting from ossification of the posterior longitudinal ligament. Fujimura Y, et al. **Spine** 1997 Feb 1;22(3):305–11

Intraoperative transligamentous ultrasound in the evaluation of thoracic intraspinal disease. Technique. Henegar MM, et al. **Spine** 1996 Jan 1;21(1):124–7

Perioperative nutrition and postoperative complications in patients undergoing spinal surgery. Klein JD, et al. **Spine** 1996 Nov 15;21(22):2676–82

Anterior extraoral surgery to the upper cervical spine. Laus M, et al. **Spine** 1996 Jul 15;21(14):1687–93

Lumbar disc disease with discogenic pain. What surgical treatment is most effective? Nachemson A, et al. **Spine** 1996 Aug 1;21(15):1835–8 (21 ref.)

Comparison of lumbar sagittal alignment produced by different operative positions. Stephens GC, et al. **Spine** 1996 Aug 1;21(15):1802–6; discussion 1807

Neurologic safety in spinal deformity surgery. Winter RB. **Spine** 1997 Jul 1;22(13):1527–33 (49 ref.)

48th Annual Meeting of The Neurosurgical Society of America June 4–7, 1995; Sea Island, Georgia. **Surg Neurol** 1996 Nov;46(5):509–12

Technique of video-assisted thoracoscopic surgery for the spine: new approach. Huang TJ, et al. **World J Surg** 1997 May;21(4):358–62

[Orthopedic spinal surgery] Bünger CE, et al. **Ugeskr Laeger** 1997 Aug 25;159(35):5227–33 **(Dan)**

[Spinal surgery, neurosurgical aspects] Gjerris F, et al. **Ugeskr Laeger** 1997 Aug 25;159(35):5234–9 **(Dan)**

[Percutaneous drainage of a presacral and spinal extra-dural abscess complicating Crohn's disease] Cassagnou M, et al. **Gastroenterol Clin Biol** 1996;20(8–9):689–92 (13 ref.) (Eng. Abstr.) **(Fre)**

[Percutaneous vertebral surgery. Technics and indications] Chiras J, et al. **J Neuroradiol** 1997 Jun;24(1):45–59 (Eng. Abstr.) **(Fre)**

[Anterior and anterolateral surgery of the lower cervical spine (25 years after H. Verbiest). I: Technical bases] Brunon J, et al. **Neurochirurgie** 1996;42(2):105–22 (67 ref.) (Eng. Abstr.) **(Fre)**

[Surgical therapy of spondylogenic cervical myelopathy. Indications and techniques] Hohmann D, et al. **Orthopade** 1996 Nov;25(6):558–66 (51 ref.) (Eng. Abstr.) **(Ger)**

[SICOT '95. Current developments in spinal surgery. Amsterdam 8–18–23, 1996] Mayer HM, et al. **Orthopade** 1997 Jan;26(1):81–4 **(Ger)**

[Spinal surgery in elderly patients] Benini A. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1373–6 (Eng. Abstr.) **(Ger)**

[Vertebral body replacement with a rib segment block in transthoracic intervention] Vieweg U, et al. **Zentralbl Neurochir** 1996;57(3):136–42 (Eng. Abstr.) **(Ger)**

[New surgical technique of anterior decompression for cervical disc disease: vertebral column autograft with the intervertebral disc after anterior cervical decompression] Isu T, et al. **No Shinkei Geka** 1996 Sep;24(9):823–7 (Eng. Abstr.) **(Jpn)**

THERAPY

Interventional radiology techniques in musculoskeletal disease. Gibbon WW. **Baillieres Clin Rheumatol** 1996 Nov; 10(4):711–27 (22 ref.)

Severe osteoporosis due to systemic mast cell disease: successful treatment with interferon alpha-2B. Lehmann T, et al. **Br J Rheumatol** 1996 Sep;35(9):898–900

Integrating and presenting clinical and treatment outcome data for cost-effective case management. Westberg EE, et al. **Comput Biol Med** 1997 Jan;27(1):31–47

A manipulative technique of Andrew Taylor Still as reported by Charles Hazzard, DO, in 1905. Van Buskirk RL. **J Am Osteopath Assoc** 1996 Oct;96(10):597–602

Aneurysmal bone cyst of cervical vertebra. Anand KS, et al. **J Indian Med Assoc** 1996 Jan;94(1):26,30

Arterial tonometry and assessment of cardiovascular alterations with chiropractic spinal manipulative therapy. Driscoll MD. **J Manipulative Physiol Ther** 1997 Jan; 20(1):47–55 (95 ref.)

Conservative management of spinal osteoarthritis with glucosamine sulfate and chiropractic treatment. Gottlieb MS. **J Manipulative Physiol Ther** 1997 Jul–Aug; 20(6):400–14 (157 ref.)

Short-term responsiveness of manual thoracic end-play assessment to spinal manipulation: a randomized controlled trial of construct validity. Haas M, et al. **J Manipulative Physiol Ther** 1995 Nov–Dec;18(9):582–9

Establishment of total and intraservice work by chiropractic physicians in providing spinal manipulative therapy and evaluation and management services. Hess JA, et al. **J Manipulative Physiol Ther** 1997 Jan;20(1):13–23

Chiropractic correction of atlantoaxial rotatory fixation. Knutson GA. **J Manipulative Physiol Ther** 1996 May; 19(4):268–72

Equations of motion for the "Flopping Doctor" model of spinal manipulative therapy. Solinger AB. **J Manipulative Physiol Ther** 1996 Jan;19(1):26–31

Flexion and extension cervical MRI in a pediatric population. Weng MS, et al. **J Pediatr Orthop** 1996 May–Jun; 16(3):359–63

Nonoperative treatment of degenerative cervical disk disease. Schimandle JH, et al. **J South Orthop Assoc** 1996 Fall; 5(3):207–12

Cervical spine manipulation: summary report of a systematic review of the literature and a multidisciplinary expert panel. Shekelle PG, et al. **J Spinal Disord** 1997 Jun;10(3):223–8 (21 ref.)

Embolisation of vascular lesions of the spinal column in childhood: a report of three cases. Silva ML, et al. **Neuroradiology** 1996 Nov;38(8):809–11

Objectification of functional improvement after nonoperative care. Flores L, et al. **Spine** 1997 Jul 15;22(14):1622–33 (128 ref.)

Pseudomeningocele/CSF fistula in a patient with lumbar spinal implants treated with epidural blood patch and a brief course of closed subarachnoid drainage. A case report. McCormack BM, et al. **Spine** 1996 Oct 1;21(19):2273–6

Successful management of a giant spinal arteriovenous malformation with multiple communications between primitive arterial and venous structures by embolization: report of a case. Kuga T, et al. **Surg Today** 1996;26(9):756–9

[The management of back problems among the population. I. Contact patterns and therapeutic routines] Lønnberg F. **Ugeskr Laeger** 1997 Apr 7;159(15):2207–14 (Eng. Abstr.) **(Dan)**

[Functional treatment of diseases and injuries of the cervical spine] Schneider W, et al. **Orthopade** 1996 Nov; 25(6):519–23 (Eng. Abstr.) **(Ger)**

[Therapy of arthritis patients with spinal lesions] Nishibayashi Y. **Ryumachi** 1997 Apr;37(2):157–8 **(Jpn)**

[Results of treatment for infective osteomyelitis of the spine with neurological impairment] Lukawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(3):251–7 (Eng. Abstr.) **(Pol)**

ULTRASONOGRAPHY

A review of diagnostic ultrasound of the spine and soft tissue. Rhodes DW, et al. **J Manipulative Physiol Ther** 1997 May; 20(4):267–73 (92 ref.)

Intraoperative transligamentous ultrasound in the evaluation of thoracic intraspinal disease. Technique. Henegar MM, et al. **Spine** 1996 Jan 1;21(1):124–7

[Focus on peroperative ultrasonography] Couillard P, et al. **Neurochirurgie** 1996;42(2):91–4 (Eng. Abstr.) **(Fre)**

VETERINARY

Calcification of intervertebral discs in the dachshund: a radiographic study of 115 dogs at 1 and 5 years of age. Stigen O. **Acta Vet Scand** 1996;37(3):229–37

Naturally occurring inflammatory arthritis of the spondyloarthropathy variety in Cayo Santiago rhesus macaques (Macaca mulatta). Rothschild BM, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):45–51

Dorsal laminectomy [letter; comment] Lyman R. **J Am Anim Hosp Assoc** 1996 Sep–Oct;32(5):377–8. Comment on: J Am Anim Hosp Assoc 1996 Jan–Feb;32(1):77–80. Comment on: J Am Anim Hosp Assoc 1996 May–Jun;32(3):186–7.

Intervertebral disk disease in dogs with signs of back pain alone: 25 cases (1986–1993). Sukhiani HR, et al. **J Am Vet Med Assoc** 1996 Oct 1;209(7):1275–9

Vertebral disk changes in B6C3F1 mice. Yamasaki K. **Lab Anim Sci** 1996 Oct;46(5):576–8

Surgical conditions of the cervical spine. Tomlinson J. **Semin Vet Med Surg (Small Anim)** 1996 Nov;11(4):225–34 (28 ref.)

SPINAL DYSRAPHISM

The orthopaedic history of spinal dysraphism. II. The modern surgical treatment. Banta JV. **Dev Med Child Neurol** 1996 Oct;38(10):954–60

Proceedings of the Utrecht Meeting of the Society for Research into Hydrocephalus and Spina Bifida, 1996. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:1–51

Terminal myelocystocele--a case report. Sim KB, et al. **J Korean Med Sci** 1996 Apr;11(2):197–202

Cebocephaly, alobar holoprosencephaly, spina bifida, and sirenomelia in a stillbirth. Chen CP, et al. **J Med Genet** 1997 Mar;34(3):252–5

[Closed spinal dysraphism. Apropos of 3 cases] Benzekri L, et al. **Ann Dermatol Venereol** 1996;123(6–7):378–81 (12 ref.) (Eng. Abstr.) **(Fre)**

[The concept of spina bifida occulta (letter; comment)] Czeizel E. **Orv Hetil** 1997 Jul 13;138(28):1833. Comment on: Orv Hetil 1997 Mar 2;138(9):547–50. **(Hun)**

BLOOD

Reproductive understanding, sexual functioning and testosterone levels in men with spina bifida. Decter RM, et al. **J Urol** 1997 Apr;157(4):1466–8

CHEMICALLY INDUCED

Spina bifida and cleft lip among newborns of Norwegian women with epilepsy: changes related to the use of anticonvulsants. King PB, et al. **Am J Public Health** 1996 Oct;86(10):1454–6

Arnold-Chiari-like malformation associated with a valproate model of spina bifida in the rat. Briner W, et al. **Teratology** 1995 Nov;52(5):306–11

[Example of teratogen detection using a birth defects registry: depakine and spina bifida] Robert E. **Rev Epidemiol Sante Publique** 1996;44 Suppl 1:S78–81 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

Heterogeneity of spina bifida. Blatter BM, et al. **Teratology** 1997 Apr;55(4):224–30

COMPLICATIONS

The renal axes in spina bifida: issues of confusion and fusion. Mandell GA, et al. **Abdom Imaging** 1996 Nov–Dec; 21(6):541–5

Latex allergy correlates with operation. Chen Z, et al. **Allergy** 1997 Aug;52(8):873

Latex sensitivity in children with spina bifida: implications for occupational therapy practitioners. Scoggin AE, et al. **Am J Occup Ther** 1997 Jul–Aug;51(7):608–11 (21 ref.)

Simultaneous treatment of faecal and urinary incontinence in children with spina bifida using double dynamic graciloplasty. Geerdes BP, et al. **Br J Surg** 1997 Jul; 84(7):1002–3

Neurological and medico-social problems of spina bifida patients in adolescence and adulthood. Oi S, et al. **Childs Nerv Syst** 1996 Apr;12(4):181–7

Neuroradiological assessment of visuoperceptual disturbance in children with spina bifida and hydrocephalus. Ito J, et al. **Dev Med Child Neurol** 1997 Jun;39(6):385–92

Factors that influence the presence of symptoms caused by latex allergy in children with spina bifida. Mazón A, et al. **J Allergy Clin Immunol** 1997 May;99(5):600–4

Intradermal dermoid cyst associated with occult spinal dysraphism. Misago N, et al. **J Dermatol** 1996 Apr; 23(4):275–8

Frankie's story--spina bifida from the parents' perspective [editorial] Cerniglia FR Jr. **J Urol** 1997 Sep;158(3 Pt 2):1291

Atopy and latex allergy in spina bifida: what's chicken, what's egg? [letter] Niggemann B. **Pediatr Allergy Immunol** 1997 Feb;8(1):51

Pearl jam [letter] Cohen AR. **Surg Neurol** 1997 Sep; 48(3):313–4

DIAGNOSIS

Structure of a combination of Functional Independence Measure and Instrumental Activity Measure items in community-living persons: a study of individuals with cerebral palsy and spina bifida. Grimby G, et al. **Arch Phys Med Rehabil** 1996 Nov;77(11):1109–14

MR imaging of the pediatric spine. Byrd SE, et al. **Magn Reson Imaging Clin N Am** 1996 Nov;4(4):797–833 (31 ref.)

Spinal segmental maldevelopment with a dermal sinus. Rastogi H, et al. **Neuroradiology** 1996 Oct;38(7):658–60

ECONOMICS

The cost of preventable conditions in adults with spina bifida. Kinsman SL, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:17–20

EMBRYOLOGY

Embryogenesis. Why do we need a new explanation for the emergence of spina bifida with lipoma? Catala M. **Childs Nerv Syst** 1997 Jun;13(6):336–40 (28 ref.)

Lumbosacral spina bifida and myeloschizis in a female foetus with de novo X/autosomal translocation (t(X;22)(q27;q121)) [letter] Fryns JP, et al. **Genet Couns** 1996;7(2):159–60

EPIDEMIOLOGY

Spina bifida and cleft lip among newborns of Norwegian women with epilepsy: changes related to the use of anticonvulsants. King PB, et al. **Am J Public Health** 1996 Oct;86(10):1454–6

A study of level of lesion, associated malformations and sib occurrence risks in spina bifida. Hunter AG, et al. **Teratology** 1996 Nov;54(5):213–8

ETIOLOGY

Is maternal obesity a risk factor for anencephaly and spina bifida? Watkins ML, et al. **Epidemiology** 1996 Sep; 7(5):507–12

Diastematomyelia and spina bifida can be caused by the intraspinal grafting of somites in early avian embryos. Klessinger S, et al. **Neurosurgery** 1996 Dec;39(6):1215–23

Spina bifida and parental occupation in a Swedish register-based study. Blatter BM, et al. **Scand J Work Environ Health** 1996 Dec;22(6):433–7

[Congenital hip dislocation associated with spina bifida] Jorquera P, et al. **Rev Med Chil** 1996 Jan;124(1):57–60 (Eng. Abstr.) **(Spa)**

[The main etiopathogenic mechanisms of neurocutaneous diseases] Vicente FJ, et al. **Rev Neurol** 1997 Sep;25 Suppl 3:S214–21 (63 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Spina bifida occulta in homozygous Patch mouse embryos. Payne J, et al. **Dev Dyn** 1997 May;209(1):105–16

The role of genetics in understanding hydrocephalus and spina bifida. An update. Jouet M. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:35–6

Genetic mapping of the human homologue (T) of mouse T(Brachyury) and a search for allele association between human T and spina bifida. Morrison K, et al. **Hum Mol Genet** 1996 May;5(5):669–74

[The first year of life of children with myelodysplasia: a multicenter study of 393 cases] García Mérida M, et al. **Cir Pediatr** 1996 Jan;9(1):3–9 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Association between latex sensitization and repeated latex exposure in children. Porri F, et al. **Anesthesiology** 1997 Mar;86(3):599–602

Risk factors for latex allergy in patients with spina bifida. Michael T, et al. **Clin Exp Allergy** 1996 Aug;26(8):934–9

Allergy to latex in spina bifida: a multivariate study of associated factors in 100 consecutive patients. Nieto A, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):501–7

The 14.6 kd rubber elongation factor (Hev b 1) and 24 kd (Hev b 3) rubber particle proteins are recognized by IgE from patients with spina bifida and latex allergy. Yeang HY, et al. **J Allergy Clin Immunol** 1996 Sep;98(3):628–39

Comparison of three immunoassays for diagnosing sensitization to latex in children with spina bifida. Niggemann B, et al. **Pediatr Allergy Immunol** 1996 Nov; 7(4):164–6

METABOLISM

Decreased methylene tetrahydrofolate reductase activity due to the 677C—>T mutation in families with spina bifida offspring [published erratum appears in J Mol Med 1997 Jan;75(1):69] van der Put NM, et al. **J Mol Med** 1996 Nov; 74(11):691–4

Altered folate and vitamin B12 metabolism in families with spina bifida offspring. van der Put NM, et al. **QJM** 1997 Aug;90(8):505–10

MORTALITY

Sex differences in prevalence of congenital neural defects after periconceptional famine exposure. Brown AS, et al. **Epidemiology** 1997 Jan;8(1):55–8

PATHOLOGY

Axial skeleton and pituitary gland in human fetuses with spina bifida and cranial encephalocele. Kjaer I, et al. **Pediatr Pathol Lab Med** 1996 Nov–Dec;16(6):909–26

PHYSIOPATHOLOGY

Neurovesical dysfunction due to spinal dysraphism in anorectal anomalies. Capitanucci ML, et al. **Eur J Pediatr Surg** 1996 Jun;6(3):159–62

Prolonged recording of intravesical pressure (vesical "Holter") in the child with spina bifida. Di Rovasenda E, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:43–4

Cognitive dysfunction in patients with congenital hydrocephalus and spina bifida: evidence for a dysexecutive syndrome? Iddon JL, et al. **Eur J Pediatr Surg** 1996 Dec; 6 Suppl 1:41

Occult dysraphism in adulthood. A series of 24 cases. Caruso R, et al. **J Neurosurg Sci** 1996 Sep–Dec;40(3–4):221–5

Three-dimensional gait analysis in spina bifida. Duffy CM, et al. **J Pediatr Orthop** 1996 Nov–Dec;16(6):786–91

PREVENTION & CONTROL

Knowledge about folic acid and the prevention of neural tube defects in two general practice populations. Krischer J. **Br J Gen Pract** 1997 Apr;47(417):231–2

Periconception folic acid supplementation. Knowledge and practice of Canadian family physicians. Koren G. **Can Fam Physician** 1997 May;43:851–2

The way to prevent spina bifida [news] **Ir Med J** 1996 Jul–Aug;89(4):136

Child bearing age women and folic acid—what's the connection? **J Okla State Med Assoc** 1996 Mar;89(3):110–1

Doubling the number of women consuming vitamin supplement pills containing folic acid: an urgently needed birth defect prevention complement to the folic acid fortification of cereal grains. Oakley GP Jr. **Reprod Toxicol** 1997 Jul–Aug;11(4):579–81

Comparison of national policies on periconceptional use of folic acid to prevent spina bifida and anencephaly (SBA). Cornel MC, et al. **Teratology** 1997 Feb;55(2):134–7

PSYCHOLOGY

Neurological and medico-social problems of spina bifida patients in adolescence and adulthood. Oi S, et al. **Childs Nerv Syst** 1996 Apr;12(4):181–7

Sexuality disability and abuse. Research into practice? Blackburn M, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:45–6

Self-perceptions of preschool children with spina bifida [letter; comment] Hazlett RA. **J Pediatr Nurs** 1997 Apr; 12(2):130–1. Comment on: J Pediatr Nurs 1996 Aug;11(4):217–24.

Maternal, paternal, and marital functioning in families of preadolescents with spina bifida. Holmbeck GN, et al. **J Pediatr Psychol** 1997 Apr;22(2):167–81

Reproductive understanding, sexual functioning and testosterone levels in men with spina bifida. Decter RM, et al. **J Urol** 1997 Apr;157(4):1466–8

Development of a health-related quality of life instrument for use in children with spina bifida. Parkin PC, et al. **Qual Life Res** 1997 Mar;6(2):123–32

[Neuropsychic development in children born with spina bifida] Piazza F, et al. **Pediatr Med Chir** 1996 Nov–Dec; 18(6):597–600 (Eng. Abstr.) **(Ita)**

REHABILITATION

Next steps: the Oregon Spina Bifida Project: community based services for children with chronic health conditions. Merkens MJ. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:36

Treatment of defecation disorders by colonic enemas in children with spina bifida. Schöller-Gyüre M, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:32–4

SURGERY

Latex allergy correlates with operation. Chen Z, et al. **Allergy** 1997 Aug;52(8):873

"Tethered cord syndrome"—recent clinical experience. Sharif S, et al. **Br J Neurosurg** 1997 Feb;11(1):49–51

Latex allergy in patients with spinal dysraphism: the role of multiple surgery. Ziylan HO, et al. **Br J Urol** 1996 Nov; 78(5):777–9

Surgical treatment of syringomyelia associated with spinal dysraphism. Koyanagi I, et al. **Childs Nerv Syst** 1997 Apr; 13(4):194–200

The benefits of team treatment and control of adult patients with spinal dysraphism. Begeer IH, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:15–6

Third ventriculostomy for hydrocephalus associated with spinal dysraphism: indications and contraindications. Jones RF, et al. **Eur J Pediatr Surg** 1996 Dec;6 Suppl 1:5–6

Impact of urodynamic studies on the surgical management of spinal cord tethering. Vernet O, et al. **J Neurosurg** 1996 Oct;85(4):555–9

Tibialis anterior transfer for calcaneal deformity: a postoperative gait analysis. Stott NS, et al. **J Pediatr Orthop** 1996 Nov–Dec;16(6):792–8

Successful staged surgical correction of congenital segmental spinal dysgenesis and complete rotary subluxation of the thoracolumbar spine in an infant. Ford EG, et al. **J Pediatr Surg** 1996 Jul;31(7):960–4

The role of somatosensory evoked potentials in the evaluation of spinal cord retethering. Li V, et al. **Pediatr Neurosurg** 1996;24(3):126–33

[Successful management of malum perforans resulting from spina bifida (see comments)] Somogyi T, et al. **Orv Hetil** 1997 Mar 2;138(9):547–50 (Eng. Abstr.). Comment in: Orv Hetil 1997 Jul 13;138(28):1833. **(Hun)**

THERAPY

Spina bifida. Sarwark JF. **Pediatr Clin North Am** 1996 Oct; 43(5):1151–8 (21 ref.)

ULTRASONOGRAPHY

Dorsal tethering bands of the meningocele manque: sonographic findings. Kriss VM, et al. **AJR Am J Roentgenol** 1996 Nov;167(5):1293–4

False-positive diagnosis of spina bifida in a fetus with triploidy. Johnson DD, et al. **Obstet Gynecol** 1997 May; 89(5 Pt 2):809–11

VETERINARY

Cervical meningomyelocele associated with spina bifida in a hydrocephalic miniature colt. Rivas LJ, et al. **J Am Vet Med Assoc** 1996 Sep 1;209(5):950–3

SPINAL FLUID PRESSURE see **CEREBROSPINAL FLUID PRESSURE**

SPINAL FRACTURES

Brief communication: when Adam delved ... an activity-related lesion in three human skeletal populations. Knüsel CJ, et al. **Am J Phys Anthropol** 1996 Jul; 100(3):427–34

Vertebral fracture and other predictors of physical impairment and health care utilization. Huang C, et al. **Arch Intern Med** 1996 Nov 25;156(21):2469–75

Thoracolumbar burst fracture with horizontal fracture of the posterior column. Abe E, et al. **Spine** 1997 Jan 1;22(1):83–7

Cervical spine fractures in the elderly. Weller SJ, et al. **Surg Neurol** 1997 Mar;47(3):274–80; discussion 280–1

[Recent fractures of the thoracic and lumbar spine with or without neurologic disorders] **Rev Chir Orthop Reparatrice Appar Mot** 1996;82 Suppl 1:61–127 **(Fre)**

[Vertebral crushing in a non osteoporosis postmenopausal woman (letter)] Bruscas Izú C, et al. **An Med Interna** 1997 Jan;14(1):51–2 **(Spa)**

BLOOD

A comparison of the effects of alfacalcidol treatment and vitamin D2 supplementation on calcium absorption in elderly women with vertebral fractures. Francis RM, et al. **Osteoporos Int** 1996;6(4):284–90

CHEMICALLY INDUCED

Osteoporosis and vertebral collapse following low-dose, low molecular weight heparin therapy in a young patient. Sivakumaran M, et al. **Clin Lab Haematol** 1996 Mar; 18(1):55–7

CLASSIFICATION

Emergency department approach to acute thoracolumbar spine injury. Savitsky E, et al. **J Emerg Med** 1997 Jan–Feb; 15(1):49–60 (72 ref.)

COMPLICATIONS

Clinical consequences of vertebral fractures. Ross PD. **Am J Med** 1997 Aug 18;103(2A):30S–42S; discussion 42S–43S (97 ref.)

Spinal cord injury as a result of endotracheal intubation in patients with undiagnosed cervical spine fractures. Muckart DJ, et al. **Anesthesiology** 1997 Aug;87(2):418–20

Intraosseous schwannoma of T12 with burst fracture of L1. Nooraie H, et al. **Arch Orthop Trauma Surg** 1997; 116(6–7):440–2

Concomitant presentation and resolution of a post-traumatic pneumothorax and pneumopericardium. Van Gelderen WF, et al. **Australas Radiol** 1996 Nov;40(4):450–1

Pneumocephalus associated with fracture of thoracic spine: case report. Uemura K, et al. **Br J Neurosurg** 1997 Jun; 11(3):253–6 (16 ref.)

Thoracolumbar burst fractures: correlation between post-traumatic spinal canal stenosis and initial neurological deficit. Sapkas G, et al. **Bull Hosp Jt Dis** 1996;55(1):36–9

Fracture of the thoracic spine with paralysis and esophageal perforation. Brouwers MA, et al. **Eur Spine J** 1997; 6(3):211–3

Exogenous lumbar spondylodiscitis following a stabwound injury and vertebral fracture. A case report and review of the literature. Schulze CJ, et al. **Eur Spine J** 1995; 4(6):357–9 (16 ref.)

Vertebral fractures and other predictors of back pain among older women. Huang C, et al. **J Bone Miner Res** 1996 Jul; 11(7):1026–32

Traumatic interdural arachnoid cyst in the upper cervical spine. Case report. Chen HJ, et al. **J Neurosurg** 1996 Aug; 85(2):351–3

Spondyloptotic fracture of the cervical spine in a pregnant, anemic Jehovah's Witness: technical and ethical considerations. Case report. Feigenbaum F, et al. **J Neurosurg** 1997 Sep;87(3):458–63

Spontaneous correction of a traumatic kyphosis after posterior spinal fusion in an infant. Horsley MW, et al. **J Spinal Disord** 1997 Jun;10(3):256–9

Randomised trial of effect of alendronate on risk of fracture in women with existing vertebral fractures. Fracture Intervention Trial Research Group [see comments] Black DM, et al. **Lancet** 1996 Dec 7;348(9041):1535–41. Comment in: Lancet 1997 Feb 15;349(9050):505–6. Comment in: ACP J Club 1997 May–Jun;126(3):73.

Fracture dislocation of the spine at the thoracolumbar junction. Fischer BW, et al. **Nebr Med J** 1996 Dec; 81(12):429–31

MR imaging and cervical spine injury [editorial; comment]

Lee RR. **Radiology** 1996 Dec;201(3):617–8. Comment on: Radiology 1996 Dec;201(3):649–55.
Clinical case of the month. Cervical vertebral fracture: orthopaedic issues [clinical conference] Barros TE, et al. **Spinal Cord** 1997 Jun;35(6):358–60
Delayed post-traumatic syringohydromyelia after an uncomplicated fracture of the spine: case report and literature review. Güler-Uysal F, et al. **Spinal Cord** 1996 May;34(5):301–4 (14 ref.)
Traumatic spondylopelvic dissociation. A case report and literature review [see comments] Bents RT, et al. **Spine** 1996 Aug 1;21(15):1814–9 (25 ref.). Comment in: Spine 1997 Jun 1;22(11):1276.
The effect of post-injury spinal position on canal occlusion in a cervical spine burst fracture model. Ching RP, et al. **Spine** 1997 Aug 1;22(15):1710–5
Management of rigid post-traumatic kyphosis. Wu SS, et al. **Spine** 1996 Oct 1;21(19):2260–6; discussion 2267
[Os odontoideum. A neurologic syndrome after orthopedic reduction of a C1–C2 subluxation] Himmer O, et al. **Acta Orthop Belg** 1997 Jun;63(2):118–21 (Eng. Abstr.) **(Fre)**
[Massive hemorrhage caused by musculoskeletal trauma in the dorsal region (letter)] Güemes M, et al. **Rev Esp Anestesiol Reanim** 1996 Jun-Jul;43(6):228–9 **(Spa)**
[Cases of myeloma of the spine complicated by fractures] Palamar OI. **Klin Khir** 1996;(8):45–6 **(Ukr)**

DIAGNOSIS

Delayed diagnosis of thoracolumbar fractures in multiple-trauma patients. Anderson S, et al. **Acad Emerg Med** 1996 Sep;3(9):832–9
Prospective validation of out-of-hospital spinal clearance criteria: a preliminary report [letter] Domeier RM, et al. **Acad Emerg Med** 1997 Jun;4(6):643–6
Vertical fractures of the dens. Castillo M, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1627–30
Vertebral fluid collection associated with vertebral collapse. Dupuy DE, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1535–8
Pediatric cervical spine injury sustained in falls from low heights. Schwartz GR, et al. **Ann Emerg Med** 1997 Sep; 30(3):249–52
Sagittal vertebral body fractures: magnetic resonance imaging features. Harvey CJ, et al. **Br J Radiol** 1997 Jun; 70(834):645–9
Reactive arthritis with a severe lesion of the cervical spine. Fox B, et al. **Br J Rheumatol** 1997 Jan;36(1):126–9
Atlantoaxial subluxation in an ankylosing spondylitis patient with cervical spine ossification [letter] Toussirot E, et al. **Br J Rheumatol** 1997 Feb;36(2):293–5
Posterior element pain in a adolescent schoolgirl. Batt ME, et al. **Br J Sports Med** 1996 Dec;30(4):356–8
Foraminal changes with distraction and compression of the L4/5 and L5/S1 segments. Humke T, et al. **Eur Spine J** 1996;5(3):183–6
Comparison of semiquantitative visual and quantitative morphometric assessment of prevalent and incident vertebral fractures in osteoporosis The Study of Osteoporotic Fractures Research Group. Genant HK, et al. **J Bone Miner Res** 1996 Jul;11(7):984–96
Magnetic resonance imaging of vertebral compression fractures. Shih TT, et al. **J Formos Med Assoc** 1996 Apr; 95(4):313–9
Radiology case of the month. Hip and back pain in the elderly. Stress injury of bone. McCarthy K, et al. **J La State Med Soc** 1997 Jan;149(1):10–1
MR prediction of benign and malignant vertebral compression fractures. Moulopoulos LA, et al. **J Magn Reson Imaging** 1996 Jul-Aug;6(4):667–74
Definition and diagnosis of vertebral fracture. O'Neill TW, et al. **J Rheumatol** 1997 Jun;24(6):1208–11
The floppy infant: a new manifestation of nonaccidental injury. Thomas NH, et al. **Pediatr Neurosurg** 1995; 23(4):188–91
Single vertebral compression and involvement of the posterior elements in tuberculous spondylitis: observation on MR imaging. Ehara S, et al. **Radiat Med** 1997 May-Jun; 15(3):143–7
Imaging of pelvic insufficiency fractures. Peh WC, et al. **Radiographics** 1996 Mar;16(2):335–48
Vertebral compression fractures in multiple myeloma. Part I. Distribution and appearance at MR imaging. Lecouvet FE, et al. **Radiology** 1997 Jul;204(1):195–9
The role of imaging in the diagnosis and management of thoracolumbar burst fractures: current concepts and a review of the literature. Saifuddin A, et al. **Skeletal Radiol** 1996 Oct;25(7):603–13 (49 ref.)
Late displacement of a fracture dislocation at the lumbosacral junction. A case study. Steinitz DK, et al. **Spine** 1997 May 1;22(9):1024–7 (9 ref.)

DRUG THERAPY

Androgen supplementation in eugonadal men with osteoporosis–effects of 6 months of treatment on bone mineral density and cardiovascular risk factors. Anderson FH, et al. **Bone** 1996 Feb;18(2):171–7
Equivalence of nasal spray and subcutaneous formulations of salmon calcitonin. Combe B, et al. **Calcif Tissue Int** 1997 Jul;61(1):10–5
Androgen supplementation in eugonadal men with osteoporosis: effects of six months' treatment on markers of bone formation and resorption. Anderson FH, et al. **J Bone Miner Res** 1997 Mar;12(3):472–8
A comparison of the effects of alfacalcidol treatment and vitamin D2 supplementation on calcium absorption in elderly women with vertebral fractures. Francis RM, et al. **Osteoporos Int** 1996;6(4):284–90
Fluoride therapy for bone disease. Orcel P, et al. **Rev Rhum Engl Ed** 1997 Jun 30;64(6 Suppl):63S–69S (47 ref.)

EPIDEMIOLOGY

The relationship between anthropometric measurements and fractures in women. Gunnes M, et al. **Bone** 1996 Oct; 19(4):407–13
Determinants of vertebral fracture prevalence among native Japanese women and women of Japanese descent living in Hawaii. Huang C, et al. **Bone** 1996 May;18(5):437–42
In vivo trabecular microcracks in human vertebral bone. Wenzel TE, et al. **Bone** 1996 Aug;19(2):89–95
Total body bone measurements in spinal osteoporosis by dual-energy X-ray absorptiometry. Revilla RM, et al. **Calcif Tissue Int** 1997 Jul;61(1):44–7
Prevalence of vertebral fractures in chinese men and women in urban Taiwanese communities. Tsai K, et al. **Calcif Tissue Int** 1996 Oct;59(4):249–53
Contributions of vertebral fractures to stature loss among elderly Japanese-American women in Hawaii. Huang C, et al. **J Bone Miner Res** 1996 Mar;11(3):408–11
Normal ranges for vertebral height ratios and prevalence of vertebral fracture in Hong Kong Chinese: a comparison with American Caucasians. Lau EM, et al. **J Bone Miner Res** 1996 Sep;11(9):1364–8
Correcting calcium nutritional deficiency prevents spine fractures in elderly women. Recker RR, et al. **J Bone Miner Res** 1996 Dec;11(12):1961–6
Dietary calcium intake, physical activity and the risk of vertebral fracture in Chinese. Chan HH, et al. **Osteoporos Int** 1996;6(3):228–32
The hospital burden of vertebral fracture in Europe: a study of national register sources. Johnell O, et al. **Osteoporos Int** 1997;7(2):138–44
Prevalent vertebral deformities: relationship to bone mineral density and spinal osteophytosis in elderly men and women. Jones G, et al. **Osteoporos Int** 1996;6(3):233–9
Differences in the characteristics of responders and non-responders in a prevalence survey of vertebral osteoporosis [letter; comment] Melton LJ 3rd, et al. **Osteoporos Int** 1996;6(3):262. Comment on: Osteoporos Int 1995;5(5):327–34.
Spinal fractures resulting from the 1995 Great Hanshin Earthquake of the Kobe-Osaka area of Japan. Maruo S, et al. **Spinal Cord** 1996 Jul;34(7):382–6
Vacuum phenomena in the sacroiliac joints and in association with sacral insufficiency fractures. Incidence and significance. Peh WC, et al. **Spine** 1997 Sep 1;22(17):2005–8

ETHNOLOGY

Spinal trabecular bone loss and fracture in American and Japanese women. Ito M, et al. **Calcif Tissue Int** 1997 Aug; 61(2):123–8
Vertebral fracture prevalence in women in Hiroshima compared to Caucasians or Japanese in the US. Ross PD, et al. **Int J Epidemiol** 1995 Dec;24(6):1171–7

ETIOLOGY

Cervical seat belt sign after motor vehicle collision [letter] Riviello RJ, et al. **Acad Emerg Med** 1997 Apr;4(4):335–7
Osteoporotic vertebral fractures in postmenopausal women. Millard PS, et al. **Am Fam Physician** 1997 Mar; 55(4):1315–22 (26 ref.)
Human body surfing: a new way to incur injury at spectator events [letter] Wolfe JM, et al. **Am J Emerg Med** 1997 Jan;15(1):97–8
Vertebral fractures associated with osteoporosis: patient management. Tamayo-Orozco J, et al. **Am J Med** 1997 Aug 18;103(2A):44S–48S; discussion 48S–50S (20 ref.)
Pediatric seat belt injuries. Smith MD 2nd, et al. **Am Surg** 1997 Mar;63(3):294–8
Nocturnal vertebral compression fracture. A presenting feature of unrecognized epileptic seizures. Aboukasm AG, et al. **Arch Fam Med** 1997 Mar-Apr;6(2):185–7
Vertebral fracture after aircraft ejection during Operation Desert Storm. Osborne RG, et al. **Aviat Space Environ Med** 1997 Apr;68(4):337–41
Case management study: osteoporotic fracture. Broy SB. **Bull Rheum Dis** 1996 Feb;45(1):6–8
Relationship of spinal fracture to bone density, textural, and anthropometric parameters. Ito M, et al. **Calcif Tissue Int** 1997 Mar;60(3):240–4
Discrimination of spinal fracture with various bone mineral measurements. Ito M, et al. **Calcif Tissue Int** 1997 Jan; 60(1):11–5
High bone turnover is associated with low bone mass and spinal fracture in postmenopausal women. Ravn P, et al. **Calcif Tissue Int** 1997 Mar;60(3):255–60
Thoracic spinal fracture in a rugby league footballer. Geffen S, et al. **Clin J Sport Med** 1997 Apr;7(2):144–6
Assessment of bone involvement in patients with multiple myeloma using bone densitometry. Abildgaard N, et al. **Eur J Haematol** 1996 Nov;57(5):370–6
Vertebral compression fractures in pediatric patients with Crohn's disease. Semeao EJ, et al. **Gastroenterology** 1997 May;112(5):1710–3
Injuries from hovercraft racing. Cattermole HR. **Injury** 1997 Jan;28(1):25–7 (0 ref.)
Biomechanical considerations of hip and spine fractures in osteoporotic bone. Hayes WC, et al. **Instr Course Lect** 1997; 46:431–8 (59 ref.)
Preventing osteoporotic fractures with alendronate. Maughan KL. **J Fam Pract** 1997 Apr;44(4):336
Pediatric chance fractures from lapbelts: unique case report of three in one accident. Voss L, et al. **J Orthop Trauma** 1996;10(6):421–8
The role of fractures of neck structures in hanging [letter] Terazawa K. **Med Sci Law** 1997 Jul;37(3):271
Spontaneous multiple vertebral fractures revealed primary haemochromatosis. Duquenne M, et al. **Osteoporos Int** 1996;6(4):338–40
The European Prospective Osteoporosis Study. Reeve J. **Osteoporos Int** 1996;6 Suppl 3:16–8
Osteoporotic vertebral fractures in a man under high-dose inhaled glucocorticoid therapy. A case-report with a review of the literature. Laroche M, et al. **Rev Rhum Engl Ed** 1997 Apr;64(4):267–70 (16 ref.)
Lactose intolerance and osteoporosis in men [see comments] Laroche M, et al. **Rev Rhum Engl Ed** 1995 Dec; 62(11):766–9. Comment in: Rev Rhum Engl Ed 1996 Jun;63(6):460.
Extension injury of the thoracolumbar spine. Nabeshima Y, et al. **Spine** 1997 Jul 1;22(13):1522–5; discussion 1525–6
Fracture-dislocation at the thoracolumbar junction in an infant with locked vertebrae. A case report. Phaltankar PM, et al. **Spine** 1997 Aug 15;22(16):1933–5
[Clonidine for intrathecal pain therapy] Zenz M. **Dtsch Med Wochenschr** 1996 Oct 25;121(43):1345 **(Ger)**
[Dens axis fracture, spinal pain and hematemesis] Rexroth G, et al. **Internist (Berl)** 1997 Feb;38(2):160–4 **(Ger)**
[Bilateral acetabulum fractures of the anterior column and vertebral body fracture after alcohol-induced seizure] Rommens PM, et al. **Unfallchirurg** 1996 Sep;99(9):704–7 (Eng. Abstr.) **(Ger)**

METABOLISM

Differential induction of cell-mediated mineralization in rat marrow stroma by sera from women of low and high risk for vertebral fracture. Klein BY, et al. **J Cell Biochem** 1996 Oct;63(1):115–22
Evaluation of bone turnover in postmenopause, vertebral fracture, and hip fracture using biochemical markers for bone formation and resorption. Takahashi M, et al. **J Endocrinol Invest** 1997 Mar;20(3):112–7

PATHOLOGY

Architecture and distribution of cancellous bone yield vertebral fracture clues. A histomorphometric analysis of the complete spinal column from 40 autopsy specimens. Amling M, et al. **Arch Orthop Trauma Surg** 1996; 115(5):262–9
Methods to score vertebral deformities in patients with rheumatoid arthritis. Lems WF, et al. **Br J Rheumatol** 1997 Feb;36(2):220–4
Age-related changes in vertebral height ratios and vertebral fracture. Sone T, et al. **Osteoporos Int** 1997;7(2):113–8
Neurological deficit in a consecutive series of vertebral fracture patients with bony fragments within spinal canal. Rosenberg N, et al. **Spinal Cord** 1997 Feb;35(2):92–5
Idiopathic avascular necrosis of a vertebral body. Case report and literature review. Chou LH, et al. **Spine** 1997 Aug 15;22(16):1928–32 (18 ref.)
The intravertebral vacuum phenomenon ("vertebral osteonecrosis"). Migration of intradiscal gas in a fractured vertebral body? Lafforgue P, et al. **Spine** 1997 Aug 15; 22(16):1885–91
Traumatic vertical atlantoaxial instability in a case of atlanto-occipital coalition. Weiner BK, et al. **Spine** 1997 May 1;22(9):1033–5

PHYSIOPATHOLOGY

In vivo measurement of implant loads in a patient with a fractured vertebral body. Rohlmann A, et al. **Eur Spine J** 1995;4(6):347–53
Bone mass, areal, and volumetric bone density are equally accurate, sensitive, and specific surrogates of the breaking strength of the vertebral body: an in vitro study. Tabensky AD, et al. **J Bone Miner Res** 1996 Dec;11(12):1981–8
Spinal canal remodeling in burst fractures of the thoracolumbar spine: a computerized tomographic comparison between operative and nonoperative treatment. Yazici M, et al. **J Spinal Disord** 1996 Oct;9(5):409–13
Measurement of bone mineral density in osteoporotic fractures of the spine using dual energy X-ray absorptiometry. Jahng JS, et al. **Orthopedics** 1996 Nov; 19(11):951–4
Ex vivo estimation of thoracolumbar vertebral body compressive strength: the relative contributions of bone densitometry and vertebral morphometry. Edmondston SJ, et al. **Osteoporos Int** 1997;7(2):142–8
Correlations of dual-energy X-ray absorptiometry, quantitative computed tomography, and single photon absorptiometry with spinal and non-spinal fractures [see

comments] Lafferty FW, et al. **Osteoporos Int** 1996; 6(5):407–15. Comment in: Osteoporos Int 1997;7(3):238–40.
Bone mineral density & T-scores [letter; comment] Mazess RB. **Osteoporos Int** 1997;7(3):238–40. Comment on: Osteoporos Int 1996;6(5):407–15.
Neurological deficit in a consecutive series of vertebral fracture patients with bony fragments within spinal canal. Rosenberg N, et al. **Spinal Cord** 1997 Feb;35(2):92–5

PREVENTION & CONTROL

Cyclical intravenous clodronate in postmenopausal osteoporosis: results of a long-term clinical trial. Filipponi P, et al. **Bone** 1996 Feb;18(2):179–84
Sodium fluoride treatment is a major protector against vertebral and nonvertebral fractures when compared with other common treatments of osteoporosis: a longitudinal, observational study. Farrerons J, et al. **Calcif Tissue Int** 1997 Mar;60(3):250–4
Alendronate useful in treating osteoporosis [letter] Rubin BR. **J Am Osteopath Assoc** 1997 Feb;97(2):77
Preventing osteoporotic fractures with alendronate. Maughan KL. **J Fam Pract** 1997 Apr;44(4):336
Can strong back extensors prevent vertebral fractures in women with osteoporosis? Sinaki M, et al. **Mayo Clin Proc** 1996 Oct;71(10):951–6
[Bisphosphonates in osteoporosis; a reevaluation (letter; comment)] Ek JW. **Ned Tijdschr Geneeskd** 1997 Feb 22; 141(8):399. Comment on: Ned Tijdschr Geneeskd 1996 Nov 30;140(48):2394–8. **(Dut)**

RADIOGRAPHY

Body composition and bone mineral density of Chinese women with vertebral fracture. Lau EM, et al. **Bone** 1996 Dec;19(6):657–62
Diagnostic value of 3D CT surface reconstruction in spinal fractures. Kösling S, et al. **Eur Radiol** 1997;7(1):61–4
Time-dependent changes of insufficiency fractures of the sacrum: intraosseous vacuum phenomenon as an early sign. Stäbler A, et al. **Eur Radiol** 1996;6(5):655–7
Significant roentgenographic parameters for evaluating the flexibility of acute thoracolumbar burst fractures. An in vitro study. Lin RM, et al. **Int Orthop** 1997;21(2):109–14
Missed cervical spine injury following barflying. Taylor M, et al. **J Accid Emerg Med** 1996 May;13(3):222–3
Blinded reading of radiographs increases the frequency of errors in vertebral fracture detection. Ross PD, et al. **J Bone Miner Res** 1996 Nov;11(11):1793–800
A new trabecular region of interest for femoral dual X-ray absorptiometry: short-term precision, age-related bone loss, and fracture discrimination compared with current femoral regions of interest. Takada M, et al. **J Bone Miner Res** 1997 May;12(5):832–8
Discriminability of fracture and nonfracture cases based on the spatial distribution of spinal bone mineral. Sandor T, et al. **J Comput Assist Tomogr** 1997 May-Jun;21(3):498–505
Posterior bow and vanishing line signs in diagnosis of burst fractures of the spine on plain radiographs. Huang TJ, et al. **J Formos Med Assoc** 1996 Dec;95(12):929–32
Missed sacral fracture before chiropractic adjustment. Plaugher G, et al. **J Manipulative Physiol Ther** 1996 Sep; 19(7):480–3
Complete vertebral fracture/dislocation of the cervical spine with minimal neurologic deficit. Jenis LG, et al. **J Orthop Trauma** 1996;10(2):123–7
Assessment of vertebral fractures in osteoporosis research. Genant HK. **J Rheumatol** 1997 Jun;24(6):1212–4
Three-dimensional computed tomographic imaging in the diagnosis of vertebral column trauma: experience based on 21 patients and review of the literature. Domenicucci M, et al. **J Trauma** 1997 Feb;42(2):254–9
Radiology quiz #11. Jefferson fracture (burst fracture of C-1). Francis RA. **Mo Med** 1997 Apr;94(4):171–2
Low thoracic fracture dislocation of the spine. McClellan JW 3rd, et al. **Nebr Med J** 1996 Sep;81(9):310–2
Cervical spine trauma: how much more do we learn by routinely using helical CT? Nuñez DB Jr, et al. **Radiographics** 1996 Nov;16(6):1307–18; discussion 1318–21
The double outline sign. Burke TJ. **Radiol Technol** 1997 May-Jun;68(5):426
Lumbosacral junction injury associated with unstable pelvic fracture: classification and diagnosis. Leone A, et al. **Radiology** 1997 Oct;205(1):253–9
Acute cervical spine trauma: diagnostic performance of single-view versus three-view radiographic screening. West OC, et al. **Radiology** 1997 Sep;204(3):819–23
Severe fracture-dislocation of S1 in a 12-year-old boy. A case report. Novkov HV, et al. **Spine** 1996 Nov 1; 21(21):2500–3
Fatal transdental posterior rotary subluxation of the cervical spine. A case report. Sim E, et al. **Spine** 1996 Jul 1; 21(13):1578–83
Upper cervical spine trauma. Abla AA, et al. **Surg Neurol** 1997 May;47(5):432–4
[Unstable Jefferson variant atlas fractures: an unrecognized cervical injury] Yang H, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):707–10 (Eng. Abstr.) **(Chi)**
[What is your diagnosis? Retroversion of the dens axis: normal variant simulating a fracture] Sadri H, et al. **Schweiz Rundsch Med Prax** 1996 Sep 17;85(38):1157–8 **(Fre)**
[Effendi fracture] **Rontgenpraxis** 1996 Jul;49(7):178–9 **(Ger)**
[Diagnostic problems in fractures of the occipital condyles] Heinz BC, et al. **Unfallchirurg** 1997 Feb;100(2):100–4 (Eng. Abstr.) **(Ger)**
[C6 fatal trans-vertebral dislocation fracture with tracheal lesion in Bechterew disease. A case presentation] Kessler T, et al. **Unfallchirurg** 1996 Jul;99(7):525–9 (Eng. Abstr.) **(Ger)**
[Traumatic damage to the lower cervical spine--a diagnostic problem?] Volkmann R, et al. **Unfallchirurg** 1996 Jul; 99(7):466–9 (Eng. Abstr.) **(Ger)**
[Dens fracture and multiple fracture of the thoracic spine after fall from great height. Diagnostic standard] Weisskopf M, et al. **Unfallchirurg** 1996 Jul;99(7):520–4 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Long-term effects of localized spinal radiation therapy on vertebral fractures and focal lesions appearance in patients with multiple myeloma. Lecouvet F, et al. **Br J Haematol** 1997 Mar;96(4):743–5

REHABILITATION

Nonoperative management of Types II and III odontoid fractures: the Philadelphia collar versus the halo vest. Polin RS, et al. **Neurosurgery** 1996 Mar;38(3):450–6; discussion 456–7

SURGERY

Typical and atypical fractures of the odontoid process in young children. Report of two cases and a review of the literature. Schippers N, et al. **Acta Neurochir (Wien)** 1996; 138(5):524–30 (38 ref.)
Multifocal extra-abdominal desmoid tumor--diagnostic and therapeutic problems. Maurer F, et al. **Arch Orthop Trauma Surg** 1996;115(6):359–62
Multiple myeloma. Surgery is often more effective than analgesia for mechanical pain [letter; comment] Krikler SJ. **BMJ** 1997 Jul 19;315(7101):186. Comment on: BMJ 1997 Mar 29;314(7085):960–3.
Pharyngo-cutaneous fistula following anterior cervical fusion. Jamjoom ZA. **Br J Neurosurg** 1997 Feb;11(1):69–74
Complete fracture-dislocation of the thoracic spine with spontaneous neurologic decompression: a case report. Huang TJ, et al. **Chang Keng I Hsueh** 1995 Dec; 18(4):387–91
Odontoid fractures in the child with neurological injury. Direct anterior osteosynthesis with a cortico-spongious screw and literature review. Godard J, et al. **Childs Nerv Syst** 1997 Feb;13(2):105–7 (14 ref.)
Posterior cervical fixation for fracture and degenerative disc disease. An HS, et al. **Clin Orthop** 1997 Feb;(335):101–11 (33 ref.)
Anterior instrumentation in the management of thoracolumbar burst fractures. Ghanayem AJ, et al. **Clin Orthop** 1997 Feb;(335):89–100 (38 ref.)
Posterior instrumentation for thoracolumbar trauma. Stambough JL. **Clin Orthop** 1997 Feb;(335):73–88 (131 ref.)
New possibilities in L2-L5 lumbar arthrodesis using a lateral retroperitoneal approach assisted by laparoscopy: preliminary results. de Peretti F, et al. **Eur Spine J** 1996; 5(3):210–6
Fusion or stabilization alone for acute distractive flexion injuries in the mid to lower cervical spine? Feldborg Nielsen C, et al. **Eur Spine J** 1997;6(3):197–202
Lumbosacral fracture dislocation in a lumberjack. Halm H, et al. **Eur Spine J** 1995;4(6):354–6
Pitfalls in the surgical management of cervical spine injuries. Rao S, et al. **Eur Spine J** 1996;5(3):153–60
In vivo measurement of implant loads in a patient with a fractured vertebral body. Rohlmann A, et al. **Eur Spine J** 1995;4(6):347–53
Unstable vertebral fractures in the lower third of the spine treated with closed reduction and transpedicular posterior fixation: a retrospective analysis of 82 fractures in 78 patients. Strømsøe K, et al. **Eur Spine J** 1997;6(4):239–44
Complications from the Gardner-Wells tongs. Choo JH, et al. **Injury** 1996 Sep;27(7):512–3
Missed cervical spine injury following barflying. Taylor M, et al. **J Accid Emerg Med** 1996 May;13(3):222–3
Anterior decompression and stabilization with the Kaneda device for thoracolumbar burst fractures associated with neurological deficits. Kaneda K, et al. **J Bone Joint Surg Am** 1997 Jan;79(1):69–83
Osteosynthesis without instrumentation for vertebral pseudarthrosis in the osteoporotic spine. Hasegawa K, et al. **J Bone Joint Surg Br** 1997 May;79(3):452–6
Triple anterior screw fixation of an acute combination atlas-axis fracture. Case report. Apostolides PJ, et al. **J Neurosurg** 1997 Jul;87(1):96–9
Treatment of traumatic spondylolisthesis of the axis with nonrigid immobilization: a review of 64 cases. Coric D, et al. **J Neurosurg** 1996 Oct;85(4):550–4
Spondyloptotic fracture of the cervical spine in a pregnant, anemic Jehovah's Witness: technical and ethical considerations. Case report. Feigenbaum F, et al. **J Neurosurg** 1997 Sep;87(3):458–63
Selection criteria and outcome of operative approaches for thoracolumbar burst fractures with and without neurological deficit. Schnee CL, et al. **J Neurosurg** 1997 Jan;86(1):48–55
Percutaneous dilational tracheostomy after anterior cervical spine fixation. Mazzon D, et al. **J Neurosurg Anesthesiol** 1996 Oct;8(4):293–5
Functional outcome of thoracolumbar burst fractures without neurological deficit. Kraemer WJ, et al. **J Orthop Trauma** 1996;10(8):541–4
Timing of surgical decompression and fixation of acute spinal fractures. Schlegel J, et al. **J Orthop Trauma** 1996; 10(5):323–30
Cervical spine fractures [letter; comment] Johnston RA. **J R Coll Surg Edinb** 1996 Oct;41(5):355. Comment on: J R Coll Surg Edinb 1995 Oct;40(5):337–41.
Pedicle screw instrumentation for unstable thoracolumbar fractures. Stovall DO Jr, et al. **J South Orthop Assoc** 1996 Fall;5(3):165–73
Remodeling of the spinal canal deformed by trauma. Karlsson MK, et al. **J Spinal Disord** 1997 Apr;10(2):157–61
Rigix plate system for anterior fixation of thoracolumbar vertebrae. Matsuzaki H, et al. **J Spinal Disord** 1997 Aug; 10(4):339–47
Overdistraction of cervical spine injuries with the use of skull traction: a report of two cases. Gruenberg MF, et al. **J Trauma** 1997 Jun;42(6):1152–6
Spinal stability after war missile injuries of the spine. Splavski B, et al. **J Trauma** 1996 Nov;41(5):850–3
Unstable fractures of the upper thoracic spine. Schweighofer F, et al. **Langenbecks Arch Chir** 1997;382(1):25–8
Screw fixation for odontoid fracture; a comparison of the anterior and posterior technique. Hacker RJ. **Nebr Med J** 1996 Aug;81(8):275–8
Posterior fusion for odontoid fracture in an infant--case report. Uemura K, et al. **Neurol Med Chir (Tokyo)** 1996 Mar;36(3):175–8
Frameless stereotactic guidance for surgery of the upper cervical spine. Welch WC, et al. **Neurosurgery** 1997 May; 40(5):958–63; discussion 963–4
Clinical case of the month. Cervical vertebral fracture: orthopaedic issues [clinical conference] Barros TE, et al. **Spinal Cord** 1997 Jun;35(6):358–60
Anterolateral dynamized instrumentation and fusion for unstable thoracolumbar and lumbar burst fractures. Carl AL, et al. **Spine** 1997 Mar 15;22(6):686–90
The removal of a transdural pedicle screw placed for thoracolumbar spine fracture. Donovan DJ, et al. **Spine** 1996 Nov 1;21(21):2495–8; discussion 2499
Use of the Texas Scottish Rite Hospital instrumentation in the treatment of thoracolumbar injuries. Korovessis PG, et al. **Spine** 1997 Apr 15;22(8):882–8
Outcome of anterior decompression and stabilization for thoracolumbar unstable burst fractures in the absence of neurologic deficits. Okuyama K, et al. **Spine** 1996 Mar 1; 21(5):620–5
Indirect spinal canal decompression in burst fractures treated with pedicle screw instrumentation. Sjostrom L, et al. **Spine** 1996 Jan 1;21(1):113–23
Anterior instrumentation of the spine in thoracic and thoracolumbar fractures: the single rod versus the double rod Slot-Zielke device. van Loon JL, et al. **Spine** 1996 Mar 15;21(6):734–40
Internal fixation of the spine in traumatic and scoliotic cases. The potential of pedicle screws. Van Brussel K, et al. **Technol Health Care** 1996 Dec;4(4):365–84 (44 ref.)
[Anterior spinal fusion by thoracoscopy. A non-traumatic technique] Baulot E, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(3):203–9 (Eng. Abstr.) **(Fre)**
[New developments in surgery of the injured spine] Blauth M, et al. **Orthopade** 1997 May;26(5):437–49 (49 ref.) (Eng. Abstr.) **(Ger)**
[Long-term outcome of 57 patients after ventral interbody spondylodesis of the lower cervical spine] Blauth M, et al. **Unfallchirurg** 1996 Dec;99(12):925–39 (Eng. Abstr.) **(Ger)**
[Magnetic resonance tomography examination of thoracolumbar spinal fractures after fixateur interne stabilization] Rudig L, et al. **Unfallchirurg** 1997 Jul; 100(7):524–30 (Eng. Abstr.) **(Ger)**
[The use of intervertebral spondylodesis in treating trauma to the thoracic spine] Shymon VM, et al. **Klin Khir** 1995; (1):24–5 **(Ukr)**
[The surgical treatment of complicated lesions of the spine and spinal cord in the system of medical rehabilitation for spinal patients] Stashkevych AT. **Klin Khir** 1995;(2):26–8 **(Ukr)**

THERAPY

Multiple noncontiguous injuries of the spine in a child: atlantooccipital dislocation and seat-belt injury of the lumbar spine. Vedantam R, et al. **Acta Orthop Belg** 1997 Mar;63(1):23–7
Management of a patient with a lamina fracture of the sixth cervical vertebra and concomitant subluxation. Alcantara J, et al. **J Manipulative Physiol Ther** 1997 Feb;20(2):113–23
Management of the patient with a Chance fracture of the lumbar spine and concomitant subluxation. Plaugher G, et al. **J Manipulative Physiol Ther** 1996 Oct;19(8):539–51
Thoracolumbar fractures without neurosurgical involvement: surgical or conservative treatment? Domenicucci M, et al. **J Neurosurg Sci** 1996 Mar;40(1):1–10
Classification and treatment of axis body fractures. Fujimura Y, et al. **J Orthop Trauma** 1996;10(8):536–40
Vertebral growth after thoracic or lumbar fracture of the

spine in children. Pouliquen JC, et al. **J Pediatr Orthop** 1997 Jan-Feb;17(1):115-20

Treatment protocol for fractures of the odontoid process. Chiba K, et al. **J Spinal Disord** 1996 Aug;9(4):267-76 (25 ref.)

Multiple noncontiguous spine fractures at four levels in a neurologically intact patient. Jorgensen DR, et al. **J Trauma** 1996 Oct;41(4):750-3

Severe thoracic spinal fracture-dislocation: good neurological outcome without reduction. Case report. Derry F, et al. **Paraplegia** 1995 Dec;33(12):734-6

Managing osteoporotic fractures: minimizing pain and disability. Von Feldt JM. **Rev Rhum Engl Ed** 1997 Jun 30;64(6 Suppl):78S-80S (13 ref.)

Functional outcome of thoracolumbar burst fractures managed with hyperextension casting or bracing and early mobilization [see comments] Chow GH, et al. **Spine** 1996 Sep 15;21(18):2170-5. Comment in: Spine 1997 Jun 15;22(12):1421-2.

Acute axis fractures. Analysis of management and outcome in 340 consecutive cases. Greene KA, et al. **Spine** 1997 Aug 15;22(16):1843-52

Functional outcome of thoracolumbar burst fractures managed with hyperextension casting or bracing and early mobilization [letter; comment] Mirza SK, et al. **Spine** 1997 Jun 15;22(12):1421-2. Comment on: Spine 1996 Sep 15;21(18):2170-5.

Clinical, radiographic, and kinematic results from an adjustable four-pad halovest. Tomonaga T, et al. **Spine** 1997 Jun 1;22(11):1199-208

Management of Hangman's fracture. Calatayud Maldonado V, et al. **Surg Neurol** 1997 Apr;47(4):326-7

Management of the pregnant patient with acute spinal cord injury. Nunn CR, et al. **Tenn Med** 1996 Sep;89(9):335-7

[A case of atlanto-axial rotatory fixation associated with Jefferson's fracture] Kurimoto M, et al. **No Shinkei Geka** 1996 Jul;24(7):671-4 (Eng. Abstr.) **(Jpn)**

[Early results of vertebral body fracture reduction with the Watson-Jones method in personal material] Palczewski D, et al. **Chir Narzadow Ruchu Ortop Pol** 1996;61(5):443-7 (Eng. Abstr.) **(Pol)**

ULTRASONOGRAPHY

The combined use of ultrasound and densitometry in the prediction of vertebral fracture. Cepollaro C, et al. **Br J Radiol** 1997 Jul;70(835):691-6

Ultrasound analyses of the calcaneus predict relative risk of the presence of at least one vertebral fracture and reflect different physical qualities of bone in different regions of the skeleton. Pfeifer M, et al. **Horm Metab Res** 1997 Feb; 29(2):76-9

VETERINARY

What is your diagnosis? Compression fracture of the 12th thoracic vertebra. Rhoads WS, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):755-6

Principles of vertebral fracture management. Bruecker KA. **Semin Vet Med Surg (Small Anim)** 1996 Nov;11(4):259-72 (27 ref.)

Fracture and displacement of cranial coccygeal vertebrae resulting in rectal perforation in a beef bull. Scott PR, et al. **Vet Rec** 1996 Jun 22;138(25):625

[Chylothorax in a calf] Pusterla N, et al. **Tierarztl Prax** 1996 Dec;24(6):554-8 (Eng. Abstr.) **(Ger)**

SPINAL FUSION

see related

LAMINECTOMY

Spondylodesis in the treatment of segmental instability of the lumbar spine with special reference to clinically verified instability. Kotilainen E, et al. **Acta Neurochir (Wien)** 1997; 139(7):629-35

AP-translation in the proximal disc adjacent to lumbar spine fusion. A retrospective comparison of mono- and polysegmental fusion in 120 patients. Wimmer C, et al. **Acta Orthop Scand** 1997 Jun;68(3):269-72

Outcomes research in Washington state workers' compensation. Franklin GM, et al. **Am J Ind Med** 1996 Jun;29(6):642-8

Painful adult thoracic Scheuermann's disease. Diagnosis by discography and treatment by combined arthrodesis. Winter RB, et al. **Am J Orthop** 1996 Nov;25(11):783-6

Sense of coherence and outcome of anterior low-back fusion. A 5- to 13-year follow-up of 85 patients. Santavirta N, et al. **Arch Orthop Trauma Surg** 1996;115(5):280-5

Pott's disease of the spine. Parmar M, et al. **Br J Hosp Med** 1996 Jun 19-Jul 9;56(1):52

Extrusion of BOP-B graft orally following anterior cervical discectomy and fusion. Cavanagh SP, et al. **Br J Neurosurg** 1996 Aug;10(4):417-8

Pharyngo-cutaneous fistula following anterior cervical fusion. Jamjoom ZA. **Br J Neurosurg** 1997 Feb;11(1):69-74

Posterior interbody fusion after spinal tumour surgery [letter; comment] Sridhar K. **Br J Neurosurg** 1997 Feb;11(1):87. Comment on: Br J Neurosurg 1996 Apr;10(2):201-3.

Indications for fusion in the lumbar spine. Hanley EN Jr. **Bull Hosp Jt Dis** 1996;55(3):154-7 (38 ref.)

Percutaneous disc surgery at Balgrist since 1979--from discotomy to interbody fusion. Leu HF, et al. **Bull Hosp Jt Dis** 1996;54(3):190-7

Chylothorax as a complication of anterior thoracic interbody fusion: a case report. Huan SK, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Feb;59(2):141-3

Occlusion of the left iliac artery after retroperitoneal exposure of the spine. Raskas DS, et al. **Clin Orthop** 1997 May;(338):86-9

Vertebral body MRI related to lumbar fusion results. Buttermann GR, et al. **Eur Spine J** 1997;6(2):115-20

Temporary external fixation for low back pain: is it worth doing? Faraj AA, et al. **Eur Spine J** 1997;6(3):187-90

Fusion or stabilization alone for acute distractive flexion injuries in the mid to lower cervical spine? Feldborg Nielsen C, et al. **Eur Spine J** 1997;6(3):197-202

Verification of the position of pedicle screws in lumbar spinal fusion. Haaker RG, et al. **Eur Spine J** 1997;6(2):125-8

Posterolateral lumbar fusion using facet joint fixation with biodegradable rods: a pilot study. Johnsson R, et al. **Eur Spine J** 1997;6(2):144-8

Expansive lumbar laminoplasty for degenerative spinal stenosis in patients below 70 years of age. Matsui H, et al. **Eur Spine J** 1997;6(3):191-6

In vivo measurement of implant loads in a patient with a fractured vertebral body. Rohlmann A, et al. **Eur Spine J** 1995;4(6):347-53

Patient-controlled analgesia after spinal fusion for idiopathic scoliosis. Beaulieu P, et al. **Int Orthop** 1996;20(5):295-9

The causes of failure of lumbar transpedicular spinal instrumentation and fusion: a prospective study. Hadjipavlou A, et al. **Int Orthop** 1996;20(1):35-42 (53 ref.)

Materials and design of spinal implants--a review. Martz EO, et al. **J Biomed Mater Res** 1997 Fall;38(3):267-88 (130 ref.)

Prediction of correction of scoliosis with use of the fulcrum bending radiograph. Cheung KM, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1144-50

The ankle clonus test for assessment of the integrity of the spinal cord during operations for scoliosis. Hoppenfeld S, et al. **J Bone Joint Surg Am** 1997 Feb;79(2):208-12

Management of Jehovah's Witness patients for scoliosis surgery: the use of platelet and plasmapheresis. Safwat AM, et al. **J Clin Anesth** 1997 Sep;9(6):510-3

Anterior cervical interbody fusion using autogeneic and allogeneic bone graft substrate: a prospective comparative analysis. Bishop RC, et al. **J Neurosurg** 1996 Aug; 85(2):206-10

Revision of anterior cervical pseudoarthrosis with anterior allograft fusion and plating. Coric D, et al. **J Neurosurg** 1997 Jun;86(6):969-74

Banked fibula and anterior cervical locking plate [letter; comment] Hadley MN. **J Neurosurg** 1996 Oct;85(4):736-7 . Comment on: J Neurosurg 1996 Feb;84(2):161-5.

Multilevel anterior cervical corpectomy and fibular allograft fusion for cervical myelopathy. Macdonald RL, et al. **J Neurosurg** 1997 Jun;86(6):990-7

Comparison of C1-2 posterior fusion and decompression of the vertebral artery in the treatment of bow hunter's stroke. Matsuyama T, et al. **J Neurosurg** 1997 Apr;86(4):619-23

The anatomical suitability of the C1-2 complex for transarticular screw fixation. Paramore CG, et al. **J Neurosurg** 1996 Aug;85(2):221-4

Spinal fusion in Duchenne's muscular dystrophy. Brook PD, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):324-31

Progression of scoliosis [letter; comment] Galasko CS. **J Pediatr Orthop** 1997 May-Jun;17(3):407. Comment on: J Pediatr Orthop 1996 May-Jun;16(3):332-5.

Complications after posterior spinal fusion in Duchenne's muscular dystrophy. Ramirez N, et al. **J Pediatr Orthop** 1997 Jan-Feb;17(1):109-14

The safety of continuous epidural infusion for postoperative analgesia in pediatric spine surgery. Shaw BA, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):374-7

Posterior instrumentation and fusion of the thoracolumbar spine for treatment of neuromuscular scoliosis. Sussman MD, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):304-13

Nicardipine for controlled hypotension during spinal surgery. Tobias JD, et al. **J Pediatr Orthop** 1996 May-Jun; 16(3):370-3

Results of a trial of anterior or circumferential lumbar fusion in the treatment of severe isthmic spondylolisthesis in young patients. Tiusanen H, et al. **J Pediatr Orthop B** 1996 Summer;5(3):190-4

Deep vein thrombosis in lumbar spinal fusion: a prospective study of antiembolic and pneumatic compression stockings. Nelson LD Jr, et al. **J South Orthop Assoc** 1996 Fall; 5(3):181-4

An in vivo analysis of the dimensional changes of the neuroforamen after anterior cervical diskectomy and fusion: a radiologic investigation. Albert TJ, et al. **J Spinal Disord** 1997 Jun;10(3):229-33

Revision spine surgery in children with cerebral palsy. Dias RC, et al. **J Spinal Disord** 1997 Apr;10(2):132-44

Lateral intertransverse process single-level fusion for salvage of the unstable failed posterior lumbar interbody fusion. Highhouse ME, et al. **J Spinal Disord** 1996 Feb;9(1):59-63

Morphology of the lumbar intertransverse process fusion mass in the rabbit model: a comparison between two bone graft materials--rhBMP-2 and autograft. Holliger EH, et al. **J Spinal Disord** 1996 Apr;9(2):125-8

Spontaneous correction of a traumatic kyphosis after posterior spinal fusion in an infant. Horsley MW, et al. **J Spinal Disord** 1997 Jun;10(3):256-9

Relapsing pancreatitis after combined anterior and posterior instrumentation for neuropathic scoliosis. Korovessis PG, et al. **J Spinal Disord** 1996 Aug;9(4):347-50

Assessment of pseudarthrosis in pedicle screw fusion: a prospective study comparing plain radiographs, flexion/extension radiographs, CT scanning, and bone scintigraphy with operative findings. Larsen JM, et al. **J Spinal Disord** 1996 Apr;9(2):117-20

Adjacent-segment degeneration after lumbar fusion with instrumentation: a retrospective study. Rahm MD, et al. **J Spinal Disord** 1996 Oct;9(5):392-400

Influence of rigid spinal instrumentation on the neurogenic motor evoked potential. Schwartz DM, et al. **J Spinal Disord** 1996 Oct;9(5):439-45

Carbon monoxide levels in cell saver salvaged blood exposed to electrocautery during lumbar spine surgery. Slucky AV, et al. **J Spinal Disord** 1996 Oct;9(5):404-8

Adult spondylolisthesis treated with posterolateral lumbar fusion and pedicular instrumentation with AO DC plates. Thalgott JS, et al. **J Spinal Disord** 1997 Jun;10(3):204-8 (15 ref.)

Posterior pedicular screw instrumentation and anterior interbody fusion in adult lumbar spondylolysis or grade I spondylolisthesis with segmental instability. Wang JM, et al. **J Spinal Disord** 1996 Apr;9(2):83-8

Screw fixation for odontoid fracture; a comparison of the anterior and posterior technique. Hacker RJ. **Nebr Med J** 1996 Aug;81(8):275-8

Posterior fusion for odontoid fracture in an infant--case report. Uemura K, et al. **Neurol Med Chir (Tokyo)** 1996 Mar;36(3):175-8

An atypical infectious complication of anterior cervical surgery. Violon P, et al. **Neuroradiology** 1997 Apr; 39(4):278-81

Smoking and the human vertebral column: a review of the impact of cigarette use on vertebral bone metabolism and spinal fusion. Hadley MN, et al. **Neurosurgery** 1997 Jul; 41(1):116-24 (138 ref.)

Internally stabilized spine: optimal choice of frequency-encoding gradient direction during MR imaging minimizes susceptibility artifact from titanium vertebral body screws. Frazzini VI, et al. **Radiology** 1997 Jul; 204(1):268-72

Pseudarthrosis: US evaluation after posterolateral spinal fusion: work in progress. Jacobson JA, et al. **Radiology** 1997 Sep;204(3):853-8

When is spinal fusion warranted in degenerative lumbar spinal stenosis? Brunon J, et al. **Rev Rhum Engl Ed** 1996 Jan; 63(1):44-50 (35 ref.)

The spondylolytic vertebra and its adjacent segment. Mobility measured before and after posterolateral fusion. Axelsson P, et al. **Spine** 1997 Feb 15;22(4):414-7

Allograft bone use during instrumentation and fusion in the treatment of adolescent idiopathic scoliosis. Blanco JS, et al. **Spine** 1997 Jun 15;22(12):1338-42

Posterior lumbar interbody fusion. A biomechanical comparison, including a new threaded cage. Brodke DS, et al. **Spine** 1997 Jan 1;22(1):26-31

Anterolateral dynamized instrumentation and fusion for unstable thoracolumbar and lumbar burst fractures. Carl AL, et al. **Spine** 1997 Mar 15;22(6):686-90

Postoperative pain control after lumbar spine fusion. Patient-controlled analgesia versus continuous epidural analgesia. Cohen BE, et al. **Spine** 1997 Aug 15; 22(16):1892-6; discussion 1896-7

Influence of local environment on incorporation of ceramic for lumbar fusion. Comparison of laminar and intertransverse sites in a canine model. Delécrin J, et al. **Spine** 1997 Aug 1;22(15):1683-9

A rabbit model for nonunion of lumbar intertransverse process spine arthrodesis. Feiertag MA, et al. **Spine** 1996 Jan 1;21(1):27-31

Long-term follow-up study of anterior decompression and fusion for thoracic myelopathy resulting from ossification of the posterior longitudinal ligament. Fujimura Y, et al. **Spine** 1997 Feb 1;22(3):305-11

Effect of intrathecal opioids on somatosensory-evoked potentials during spinal fusion in children. Goodarzi M, et al. **Spine** 1996 Jul 1;21(13):1565-8

Atlantoaxial fusion and retrodental pannus in rheumatoid arthritis. Grob D, et al. **Spine** 1997 Jul 15;22(14):1580-3; discussion 1584

Posterior arthrodesis in the skeletally immature patient. Assessing the risk for crankshaft: is an open triradiate cartilage the answer? Hamill CL, et al. **Spine** 1997 Jun 15; 22(12):1343-51

The success of anterior cervical arthrodesis adjacent to a previous fusion. Hilibrand AS, et al. **Spine** 1997 Jul 15; 22(14):1574-9

Effects of 360-degree lumbar fusion in a workers' compensation population. Hinkley BS, et al. **Spine** 1997 Feb 1;22(3):312-22; discussion 323

Neck and shoulder pain after laminoplasty. A noticeable complication. Hosono N, et al. **Spine** 1996 Sep 1; 21(17):1969-73

Ureteral injury after anterior lumbar interbody fusion. A case report. Isiklar ZU, et al. **Spine** 1996 Oct 15;21(20):2379-82

The effect of pulsed electromagnetic fields on instrumented posterolateral spinal fusion and device-related stress shielding. Ito M, et al. **Spine** 1997 Feb 15;22(4):382-8

The effect of fibrin sealant on spinal fusions using allograft in dogs. Jarzem P, et al. **Spine** 1996 Jun 1;21(11):1307-12

Juvenile amyotrophy of the distal upper extremity:

pathologic findings of the dura mater and surgical management. Konno S, et al. **Spine** 1997 Mar 1;22(5):486–92

The crankshaft phenomenon after posterior Harrington fusion in skeletally immature patients with thoracic or thoracolumbar idiopathic scoliosis followed to maturity. Lee CS, et al. **Spine** 1997 Jan 1;22(1):58–67

Superior gluteal artery injury during iliac bone grafting for spinal fusion. A case report and literature review. Lim EV, et al. **Spine** 1996 Oct 15;21(20):2376–8 (10 ref.)

Biomechanical analysis of buckling alignment of the cervical spine. Predictive value for subaxial subluxation after occipitocervical fusion. Matsunaga S, et al. **Spine** 1997 Apr 1;22(7):765–71

Delayed postoperative paraparesis in scoliosis surgery. A case report. Mineiro J, et al. **Spine** 1997 Jul 15;22(14):1668–72

One piece cervical device for cervical spine surgery. Mitsui H. **Spine** 1996 Jan 1;21(1):39–44

The outcome of posterolateral fusion in highly selected patients with discogenic low back pain [letter; comment] Moon MS. **Spine** 1997 Jun 15;22(12):1419–20. Comment on: Spine 1996 Aug 15;21(16):1909–16; discussion 1916–7.

Restoration of pedicle screw fixation with an in situ setting calcium phosphate cement. Moore DC, et al. **Spine** 1997 Aug 1;22(15):1696–705

Hypomagnesemia in postoperative spine fusion patients. Place HM, et al. **Spine** 1996 Oct 1;21(19):2268–72

Persistently electrified pedicle stimulation instruments in spinal instrumentation. Technique and protocol development. Rose RD, et al. **Spine** 1997 Feb 1; 22(3):334–43

Prediction of the crankshaft phenomenon by peak height velocity. Sanders JO, et al. **Spine** 1997 Jun 15; 22(12):1352–6; discussion 1356–7

Effective doses of recombinant human bone morphogenetic protein-2 in experimental spinal fusion. Sandhu HS, et al. **Spine** 1996 Sep 15;21(18):2115–22

Lumbar motion segment pathology adjacent to thoracolumbar, lumbar, and lumbosacral fusions. Schlegel JD, et al. **Spine** 1996 Apr 15;21(8):970–81

Accuracy of computer-assisted pedicle screw placement. An in vivo computed tomography analysis. Schwarzenbach O, et al. **Spine** 1997 Feb 15;22(4):452–8

Performing anterior cervical fusion with either autograft or allograft [letter] Segal HD. **Spine** 1996 May 15; 21(10):1276–7

Atlanto-occipital fusion for dislocation in children with neurologic preservation. A case report. Sponseller PD, et al. **Spine** 1997 Feb 1;22(3):344–7

The treatment of progressive kyphoscoliosis in camptomelic dysplasia. Thomas S, et al. **Spine** 1997 Jun 15;22(12):1330–7

Predictors of outcome in patients with chronic back pain and low-grade spondylolisthesis. Vaccaro AR, et al. **Spine** 1997 Sep 1;22(17):2030–4; discussion 2035

Comparison of the use of supine bending and traction radiographs in the selection of the fusion area in adolescent idiopathic scoliosis. Vaughan JJ, et al. **Spine** 1996 Nov 1; 21(21):2469–73

A study of functional spinal motion in women after instrumentation and fusion for deformity or trauma. Winter RB, et al. **Spine** 1997 Aug 1;22(15):1760–4

Pelvic fractures after long lumbosacral spine fusions. Wood KB, et al. **Spine** 1996 Jun 1;21(11):1357–62

Indication of fusion for lumbar spinal stenosis in elderly patients and its significance. Yone K, et al. **Spine** 1996 Jan 15;21(2):242–8

First experience with laparoscopic spine fusion in an experimental model in the pig. Hildebrandt U, et al. **Surg Endosc** 1996 Feb;10(2):143–6

Laparoscopic fusion of the lumbar spine in a multicenter series of the first 34 consecutive patients. Regan JJ, et al. **Surg Laparosc Endosc** 1996 Dec;6(6):459–68

[Destabilization after surgical treatment of narrow lumbar canal: when should arthrodesis be performed?] Saillant G, et al. **Chirurgie** 1996;121(8):597–600 (Eng. Abstr.) **(Fre)**

[Indications for braces and surgery in scoliosis] Rüdiger F, et al. **Z Orthop Ihre Grenzgeb** 1996 Sep–Oct;134(5):Oa12, Oa14 **(Ger)**

[The effects of spinal fusion on respiratory function and quality of life in Duchenne muscular dystrophy] Matsumura T, et al. **Rinsho Shinkeigaku** 1997 Feb; 37(2):87–92 (Eng. Abstr.) **(Jpn)**

[The use of intervertebral spondylodesis in treating trauma to the thoracic spine] Shymon VM, et al. **Klin Khir** 1995; (1):24–5 **(Ukr)**

ADVERSE EFFECTS

Complications of cervical spine fusion: imaging features. Karasick D, et al. **AJR Am J Roentgenol** 1997 Sep; 169(3):869–74

Massive chylothorax after anterior fusion of the thoracic spine. Verhoeven W, et al. **Ann Acad Med Singapore** 1996 Mar;25(2):286–8

Wound infections following spinal fusion with posterior segmental spinal instrumentation. Perry JW, et al. **Clin Infect Dis** 1997 Apr;24(4):558–61

Density of lumbar muscles 4 years after decompressive spinal surgery. Airaksinen O, et al. **Eur Spine J** 1996;5(3):193–7

Retrograde ejaculation after anterior interbody lumbar fusion. Tiusanen H, et al. **Eur Spine J** 1995;4(6):339–42

Retrograde ejaculation after retroperitoneal lower lumbar interbody fusion. Christensen FB, et al. **Int Orthop** 1997; 21(3):176–80

Complications of transpedicular lumbosacral fixation for non-traumatic disorders. Pihlajämaki H, et al. **J Bone Joint Surg Br** 1997 Mar;79(2):183–9

Complications of anterior spinal surgery in children. Grossfeld S, et al. **J Pediatr Orthop** 1997 Jan–Feb; 17(1):89–95

Effects of short anterior lumbar interbody fusion on biomechanics of neighboring unfused segments. Chow DH, et al. **Spine** 1996 Mar 1;21(5):549–55

Extradural tethering effects as one mechanism of radiculopathy complicating posterior decompression of the cervical spinal cord [letter; comment] Epstein JA. **Spine** 1996 Aug 1;21(15):1839–40. Comment on: Spine 1996 Jan 15;21(2):203–11.

Overpowering the crankshaft mechanism. The effect of posterior spinal fusion with and without stiff transpedicular fixation on anterior spinal column growth in immature canines. Kioschos HC, et al. **Spine** 1996 May 15; 21(10):1168–73

Vertebral body osteopenia associated with posterolateral spine fusion in humans. Myers MA, et al. **Spine** 1996 Oct 15;21(20):2368–71

The effect of intraoperative blood loss on serum cefazolin level in patients undergoing instrumented spinal fusion. A prospective, controlled study. Polly DW Jr, et al. **Spine** 1996 Oct 15;21(20):2363–7

Neurologic safety in spinal deformity surgery. Winter RB. **Spine** 1997 Jul 1;22(13):1527–33 (49 ref.)

[Spontaneous elimination by the natural tracts of screws of anterior cervical osteosynthesis. Apropos of a case] Chataigner H, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(1):78–82 (Eng. Abstr.) **(Fre)**

ECONOMICS

Impact of a worker's compensation practice guideline on lumbar spine fusion in Washington State. Elam K, et al. **Med Care** 1997 May;35(5):417–24

Threaded fusion cages for lumbar interbody fusions. An economic comparison with 360 degrees fusions. Ray CD. **Spine** 1997 Mar 15;22(6):681–5

HISTORY

Method of spinal fusion [classical article] Boucher HH. **Clin Orthop** 1997 Feb;(335):4–9

INSTRUMENTATION

Justification for decreasing the number of views taken in radiologic follow-up of Casper plate cervical spine hardware. Doyle AJ, et al. **Acad Radiol** 1996 Jun; 3(6):479–85

Posterolateral decompression and stabilization of thoracolumbar injuries using Diapason instrumentation. Ciappetta P, et al. **Acta Neurochir (Wien)** 1996; 138(3):314–21

Results and complications after posterior lumbar spondylodesis with the "Variable Screw Placement Spinal Fixation System". Bohnen IM, et al. **Acta Orthop Belg** 1997 Jun;63(2):67–73

Extrusion of osteoconductive biosynthetic polymer dowels after cervicalfusion surgery [letter] Hynes JE, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):792–3

Lumbar spine fusion and pedicle fixation with C-D screws for lumbar iatrogenic instability. Nooraie H, et al. **Arch Orthop Trauma Surg** 1997;116(4):236–8

Biomechanical evaluation of hydroxyapatite intervertebral graft and anterior cervical plating in a porcine cadaveric model. Takahashi T, et al. **Biomed Mater Eng** 1997; 7(2):121–7

Preliminary experience of carbon fibre cage prostheses for treatment of cervical spine disorders. Brooke NS, et al. **Br J Neurosurg** 1997 Jun;11(3):221–7

Spinal instrumentation in the management of adolescent scoliosis. Bridwell KH. **Clin Orthop** 1997 Feb;(335):64–72 (29 ref.)

Survivorship analysis of DKS instrumentation in the treatment of spondylolisthesis. Chen WJ, et al. **Clin Orthop** 1997 Jun;(339):113–20

Anterior instrumentation in the management of thoracolumbar burst fractures. Ghanayem AJ, et al. **Clin Orthop** 1997 Feb;(335):89–100 (38 ref.)

Basic science of spinal instrumentation. Goel VK, et al. **Clin Orthop** 1997 Feb;(335):10–31 (118 ref.)

Transpedicle instrumentation in the degenerative spine. Heim SE. **Clin Orthop** 1997 Apr;(337):97–110 (146 ref.)

Posterior instrumentation for thoracolumbar trauma. Stambough JL. **Clin Orthop** 1997 Feb;(335):73–88 (131 ref.)

Anterior plate instrumentation for disorders of the subaxial cervical spine. Vaccaro AR, et al. **Clin Orthop** 1997 Feb; (335):112–21 (31 ref.)

In-vitro biomechanical study of a dorso-lumbo-sacral posterior supple instrumentation with variable section. Gayet LE, et al. **Eur J Pediatr Surg** 1996 Oct;6(5):294–300

Neurological complications in segmental spinal instrumentation: analysis of 750 patients. Cervellati S, et al. **Eur Spine J** 1996;5(3):161–6 (25 ref.)

Correction of idiopathic scoliosis using the H-frame system. Hosman AJ, et al. **Eur Spine J** 1996;5(3):172–7

Posterior rod system of the cervical spine: a new implant allowing optimal screw insertion. Jeanneret B. **Eur Spine J** 1996;5(5):350–6

Spinal cord compression caused by the rod of a Harrington instrumentation device: a late complication in scoliosis surgery. Krödel A, et al. **Eur Spine J** 1997;6(3):208–10

Fusion rate after posterior lumbar interbody fusion with carbon fiber implant: 1-year follow-up of 51 patients. Tullberg T, et al. **Eur Spine J** 1996;5(3):178–82

The segmental effect of Cotrel-Dubousset instrumentation on vertebral rotation, rib hump and the thoracic cage in idiopathic scoliosis. Willers U, et al. **Eur Spine J** 1996; 5(6):387–93

RF heating of implanted spinal fusion stimulator during magnetic resonance imaging. Chou CK, et al. **IEEE Trans Biomed Eng** 1997 May;44(5):367–73

Lumbar spinal stenosis: indications for arthrodesis and spinal instrumentation. Herkowitz HN. **Instr Course Lect** 1994; 43:425–33 (35 ref.)

A protocol to evaluate semi-rigid pedicle screw systems. Clausen JD, et al. **J Biomech Eng** 1997 Aug;119(3):364–6

Anterior decompression and stabilization with the Kaneda device for thoracolumbar burst fractures associated with neurological deficits. Kaneda K, et al. **J Bone Joint Surg Am** 1997 Jan;79(1):69–83

Doppler color imaging recognition of CSF leakages after spinal surgery. Meuwly JY, et al. **J Clin Ultrasound** 1996 Mar–Apr;24(3):151–3

Evaluation with evoked and spontaneous electromyography during lumbar instrumentation: a prospective study. Welch WC, et al. **J Neurosurg** 1997 Sep;87(3):397–402

Posterior spinal fusion for scoliosis in patients with cerebral palsy: a comparison of Luque rod and Unit Rod instrumentation. Bulman WA, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):314–23

Pedicle screw instrumentation for unstable thoracolumbar fractures. Stovall DO Jr, et al. **J South Orthop Assoc** 1996 Fall;5(3):165–73

Multidirectional stabilizing potential of BAK interbody spinal fusion system for anterior surgery. Nibu K, et al. **J Spinal Disord** 1997 Aug;10(4):357–62

Accuracy of pedicle screw placement with the assistance of lateral plain radiography. Odgers CJ 4th, et al. **J Spinal Disord** 1996 Aug;9(4):334–8

The efficacy of pedicle screw/plate fixation on lumbar/lumbosacral autogenous bone graft fusion in adult patients with degenerative spondylolisthesis. Rechtine GR, et al. **J Spinal Disord** 1996 Oct;9(5):382–91

The role of external transpedicular fixation in anterior interbody lumbar fusion. Tiusanen H, et al. **J Spinal Disord** 1996 Oct;9(5):433–8

Transfacet screws with lumbar interbody reconstruction: biomechanical study of motion segment stiffness. Volkman T, et al. **J Spinal Disord** 1996 Oct;9(5):425–32

From the Food and Drug Administration. Nightingale SL. **JAMA** 1996 Dec 4;276(21):1710

The Axis Fixation System for posterior instrumentation of the cervical spine. Cooper PR. **Neurosurgery** 1996 Sep; 39(3):612–4

Internal fixation of the spine using a braided titanium cable: clinical results and postoperative magnetic resonance imaging. Doran SE, et al. **Neurosurgery** 1996 Mar; 38(3):493–6; discussion 496–7

Lumbar pedicle screws versus hooks. Results in double major curves in adolescent idiopathic scoliosis. Barr SJ, et al. **Spine** 1997 Jun 15;22(12):1369–79

Anatomic consideration of C2 pedicle screw placement [see comments] Ebraheim N, et al. **Spine** 1996 Mar 15; 21(6):691–5. Comment in: Spine 1996 Oct 1;21(19):2301–2.

Kinematic evaluation of lumbar fusion techniques. Esses SI, et al. **Spine** 1996 Mar 15;21(6):676–84

Semirigid instrumentation in the management of lumbar spinal conditions combined with circumferential fusion. A multicenter study. Gertzbein SD, et al. **Spine** 1996 Aug 15;21(16):1918–25; discussion 1925–6

Salvage of instrumental lumbar fusions complicated by surgical wound infection. Glassman SD, et al. **Spine** 1996 Sep 15;21(18):2163–9

Management of iatrogenic spinal stenosis complicating placement of a fusion cage. A case report. Glassman SD, et al. **Spine** 1996 Oct 15;21(20):2383–6 (16 ref.)

Biomechanical analysis of multilevel fixation methods in the lumbar spine. Glazer PA, et al. **Spine** 1997 Jan 15; 22(2):171–82

Biomechanical evaluation of posterior cervical stabilization after a wide laminectomy. Grubb MR, et al. **Spine** 1997 Sep 1;22(17):1948–54

The safety and efficacy of the Isola Spinal Implant System for the surgical treatment of degenerative disc disease. A prospective study. Hall BB, et al. **Spine** 1996 Apr 15; 21(8):982–94

The use of pedicle screw fixation to improve correction in the lumbar spine of patients with idiopathic scoliosis. Is it warranted? Hamill CL, et al. **Spine** 1996 May 15; 21(10):1241–9

An experimental study of a combination method using a pedicle screw and laminar hook for the osteoporotic spine. Hasegawa K, et al. **Spine** 1997 May 1;22(9):958–62; discussion 963

Anterior correction of thoracic scoliosis with Kaneda anterior spinal system. A preliminary report. Kaneda K, et al. **Spine** 1997 Jun 15;22(12):1358–68

New anterior instrumentation for the management of thoracolumbar and lumbar scoliosis. Application of the Kaneda two-rod system. Kaneda K, et al. **Spine** 1996 May

15;21(10):1250–61; discussion 1261–2
Use of the Texas Scottish Rite Hospital instrumentation in the treatment of thoracolumbar injuries. Korovessis PG, et al. **Spine** 1997 Apr 15;22(8):882–8
The effect of pedicle morphometry on pedicle screw loading. A synthetic model. McKinley TO, et al. **Spine** 1997 Feb 1;22(3):246–52
Lumbar disc disease with discogenic pain. What surgical treatment is most effective? Nachemson A, et al. **Spine** 1996 Aug 1;21(15):1835–8 (21 ref.)
Comparison between single-screw and triangulated, double-screw fixation in anterior spine surgery. A biomechanical test. Ogon M, et al. **Spine** 1996 Dec 1; 21(23):2728–34
The biomechanical analysis of sublaminar wires and cables using luque segmental spinal instrumentation. Parsons JR, et al. **Spine** 1997 Feb 1;22(3):267–73
Threaded titanium cages for lumbar interbody fusions. Ray CD. **Spine** 1997 Mar 15;22(6):667–79; discussion 679–80
Distractive properties of a threaded interbody fusion device. An in vivo model. Sandhu HS, et al. **Spine** 1996 May 15; 21(10):1201–10
Changes in the unfused lumbar spine in patients with idiopathic scoliosis. A 5- to 9-year assessment after cotrel-dubousset instrumentation. Takahashi S, et al. **Spine** 1997 Mar 1;22(5):517–23; discussion 524
Anterior instrumentation of the spine in thoracic and thoracolumbar fractures: the single rod versus the double rod Slot–Zielke device. van Loon JL, et al. **Spine** 1996 Mar 15;21(6):734–40
Telemeterized load measurement using instrumented spinal internal fixators in a patient with degenerative instability [letter; comment] Werner JG Jr. **Spine** 1996 Aug 1; 21(15):1839. Comment on: Spine 1995 Dec 15;20(24):2683–9.
Performance of ventral spondylodesis screws in cervical vertebrae of varying bone mineral density. Zink PM. **Spine** 1996 Jan 1;21(1):45–52
[Video laparoscopic transperitoneal exposure of the lumbar spine for ventral fusion] Scholz-Jäger A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:956–9 (Eng. Abstr.) **(Ger)**
[Computer-assisted orthopedic surgery. From pedicle screw insertion to further applications] Berlemann U, et al. **Orthopade** 1997 May;26(5):463–9 (34 ref.) (Eng. Abstr.) **(Ger)**
[New developments in surgery of the injured spine] Blauth M, et al. **Orthopade** 1997 May;26(5):437–49 (49 ref.) (Eng. Abstr.) **(Ger)**
[Minimally invasive approach and surgical procedures in the lumbar spine] Ogon M, et al. **Orthopade** 1997 Jun; 26(6):553–61 (49 ref.) (Eng. Abstr.) **(Ger)**
[Comparison of radiological procedures in preoperative assessment of anchorage strength of spinal implants] Schwitalle M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):535–8 (Eng. Abstr.) **(Ger)**
[Is instrumented pedicle fixation of the lumbar vertebrae used on too large a scale?—thoughts on indication] Schulitz KP. **Z Orthop Ihre Grenzgeb** 1996 Sep–Oct;134(5):472–6; discussion 476–8 (29 ref.) (Eng. Abstr.) **(Ger)**
[Determination of bone quality before spinal instrumentation—value of different in vivo methods] Schwitalle M, et al. **Z Orthop Ihre Grenzgeb** 1997 May–Jun; 135(3):217–21 (Eng. Abstr.) **(Ger)**

METHODS

Reduction-fixation spinal system in spondylolisthesis. Niu CC, et al. **Am J Orthop** 1996 Jun;25(6):418–24
Salvage anterior C1–C2 screw fixation and arthrodesis through the lateral approach in a patient with a symptomatic pseudoarthrosis. Vaccaro AR, et al. **Am J Orthop** 1997 May;26(5):349–53
Nicardipine versus nitroprusside for controlled hypotension during spinal surgery in adolescents. Hersey SL, et al. **Anesth Analg** 1997 Jun;84(6):1239–44
A study of desmopressin and blood loss during spinal fusion for neuromuscular scoliosis: a randomized, controlled, double-blinded study. Theroux MC, et al. **Anesthesiology** 1997 Aug;87(2):260–7
Use of coral grafts in anterior interbody fusion of the rabbit spine. Tho KS, et al. **Ann Acad Med Singapore** 1996 Nov; 25(6):824–7
Posterior inter-body fusion after spinal tumour resection [see comments] Goel A. **Br J Neurosurg** 1996 Apr;10(2):201–3 . Comment in: Br J Neurosurg 1997 Feb;11(1):87.
Extended anterior cervical discectomy without fusion: a simple and sufficient operation for most cases of cervical degenerative disease. Maurice-Williams RS, et al. **Br J Neurosurg** 1996 Jun;10(3):261–6
How to fuse the lumbar spine. Fraser RD. **Bull Hosp Jt Dis** 1996;55(3):158–61 (10 ref.)
Outcome of fusion: assessment techniques and comparison of anterior fusion with posterolateral fusion. Greenough CG. **Bull Hosp Jt Dis** 1996;55(3):162–5 (14 ref.)
The case for posterior lumbar interbody fusion. Branch CL Jr. **Clin Neurosurg** 1996;43:252–67 (62 ref.)
Spinal instrumentation for degenerative disease. Fessler RG. **Clin Neurosurg** 1996;43:268–74 (8 ref.)
Percutaneous lumbosacral fixation and fusion: anatomical study and two-year experience with a new method. Mac Millan M, et al. **Clin Neurosurg** 1996;43:423–36
Anterior and posterior fusion for children with tuberculosis of the spine. Altman GT, et al. **Clin Orthop** 1996 Apr; (325):225–31
Posterior cervical fixation for fracture and degenerative disc disease. An HS, et al. **Clin Orthop** 1997 Feb;(335):101–11 (33 ref.)
Evaluation of collagen ceramic composite graft materials in a spinal fusion model [letter; comment] Harner CF. **Clin Orthop** 1997 Jun;(339):285–7. Comment on: Clin Orthop 1996 Jul;(328):250–60.
Lumbar percutaneous endoscopic interbody fusion. Leu HF, et al. **Clin Orthop** 1997 Apr;(337):58–63
Computer assisted spine surgery. Merloz P, et al. **Clin Orthop** 1997 Apr;(337):86–96
Radiological and functional outcome after anterior lumbar interbody spinal fusion. Christensen FB, et al. **Eur Spine J** 1996;5(5):293–8
Cervical laminar exostosis in multiple hereditary osteochondromatosis: anterior stabilization and fusion technique for preventing instability. Ergün R, et al. **Eur Spine J** 1997;6(4):267–9
Primary stable anterior instrumentation or dorsoventral spondylodesis in spondylodiscitis? Results of a comparative study. Eysel P, et al. **Eur Spine J** 1997;6(3):152–7
Spinal fusion: a combined anterior and supplementary interspinous technique. Fidler MW. **Eur Spine J** 1997; 6(3):214–8
Direct peduculo-body fixation in cases of spondylolisthesis with advanced intervertebral disc degeneration. Grob D, et al. **Eur Spine J** 1996;5(4):281–5
Rip hump correction and rotation of the lumbar spine after selective thoracic fusion. Hosman AJ, et al. **Eur Spine J** 1996;5(6):394–9
Standardized evaluation of long-term results after anterior lumbar interbody fusion. Pfeiffer M, et al. **Eur Spine J** 1996; 5(5):299–307
Pitfalls in the surgical management of cervical spine injuries. Rao S, et al. **Eur Spine J** 1996;5(3):153–60
Development of an instrument for clinical evaluation after surgery for neuromuscular scoliosis. Samuelsson K, et al. **Eur Spine J** 1996;5(6):400–6
Functional and clinical results after anterior interbody lumbar fusion. Tiusanen H, et al. **Eur Spine J** 1996;5(5):288–92
Retrograde ejaculation after retroperitoneal lower lumbar interbody fusion. Christensen FB, et al. **Int Orthop** 1997; 21(3):176–80
Cervical spondylotic radiculopathy involving two adjacent nerve roots. Anterior decompression through a single level intervertebral approach. Iwasaki M, et al. **Int Orthop** 1996; 20(3):137–41
Spinal fusion in situ in osteogenesis imperfecta. Livesley PJ, et al. **Int Orthop** 1996;20(1):43–6 (19 ref.)
Expansive laminoplasty for lumbar intradural lipoma. Matsui H, et al. **Int Orthop** 1997;21(3):185–7
Comparing Mersilene tape and stainless steel wire as sublaminar spinal fixation in the Chagma baboon (Papio ursinus). Grobler LJ, et al. **Iowa Orthop J** 1997;17:20–31
Single-level posterolateral arthrodesis, with or without posterior decompression, for the treatment of isthmic spondylolisthesis in adults. A prospective, randomized study. Carragee EJ. **J Bone Joint Surg Am** 1997 Aug; 79(8):1175–80
Free vascularised fibular strut graft for anterior spinal fusion. Minami A, et al. **J Bone Joint Surg Br** 1997 Jan;79(1):43–7
Utilization of type I collagen gel, demineralized bone matrix, and bone morphogenetic protein-2 to enhance autologous bone lumbar spinal fusion. Helm GA, et al. **J Neurosurg** 1997 Jan;86(1):93–100
Outcome analysis for adults with spondylolisthesis treated with posterolateral fusion and transpedicular screw fixation. Schnee CL, et al. **J Neurosurg** 1997 Jan; 86(1):56–63
Same-day versus staged anterior-posterior spinal surgery in a neuromuscular scoliosis population: the evaluation of medical complications. Ferguson RL, et al. **J Pediatr Orthop** 1996 May–Jun;16(3):293–303
In vivo evaluation of a resorbable osteoinductive composite as a graft substitute for lumbar spinal fusion. Boden SD, et al. **J Spinal Disord** 1997 Feb;10(1):1–11
Anterior cervical fusion: outcome analysis of patients fused with and without anterior cervical plates. Connolly PJ, et al. **J Spinal Disord** 1996 Jun;9(3):202–6
Thoracic ossification of the posterior longitudinal ligament, ossification of the yellow ligament from T9–T12 with superimposed acute T10/T11 disc herniation: controversies in surgical management. Epstein N. **J Spinal Disord** 1996 Oct;9(5):446–7; discussion 447–50
Posterior stabilization in L5–S1 isthmic spondylolisthesis with paralaminar screw fixation: anatomical and clinical results. Jeanneret B, et al. **J Spinal Disord** 1996 Jun;9(3):223–33
Multidirectional stabilizing potential of BAK interbody spinal fusion system for anterior surgery. Nibu K, et al. **J Spinal Disord** 1997 Aug;10(4):357–62
Day surgery for cervical microdiscectomy: is it safe and effective? Silvers HR, et al. **J Spinal Disord** 1996 Aug; 9(4):287–93
Management of postoperative wound infection in posterior spinal fusion with instrumentation. Wimmer C, et al. **J Spinal Disord** 1996 Dec;9(6):505–8
Unstable fractures of the upper thoracic spine. Schweighofer F, et al. **Langenbecks Arch Chir** 1997;382(1):25–8
Percutaneous endoscopic lumbar spine fusion. Leu HF, et al. **Neurosurg Clin N Am** 1996 Jan;7(1):107–17 (20 ref.)
Percutaneous lumbosacral fixation and fusion: anatomic study and two-year experience with a new method. MacMillan M, et al. **Neurosurg Clin N Am** 1996 Jan;7(1):99–106
Anterior decompression and fusion using bone grafts obtained from cervical vertebral bodies for ossification of the posterior longitudinal ligament of the cervical spine: technical note. Isu T, et al. **Neurosurgery** 1997 Apr; 40(4):866–9; discussion 869–70
Molecular methods of enhancing lumbar spine fusion. Sheehan JP, et al. **Neurosurgery** 1996 Sep;39(3):548–54
Lateral extracavitary approach to the thoracic and thoracolumbar spine. Graham AW 3rd, et al. **Orthopedics** 1997 Jul;20(7):605–10
An innovative method using the Leeds-Keio artificial ligament in the unstable spine. Mochida J, et al. **Orthopedics** 1997 Jan;20(1):17–23
Cervical disk disease and the keyhole foraminotomy: proven efficacy at extended long-term follow up. Silveri CP, et al. **Orthopedics** 1997 Aug;20(8):687–92
Bone registration method for robot assisted surgery: pedicle screw insertion. Abdel-Malek K, et al. **Proc Inst Mech Eng [H]** 1997;211(3):221–33
Anterior decompression and fusion for ossification of the posterior longitudinal ligament of the upper thoracic spine causing myelopathy: using the manubrium splitting approach. Fujimura Y, et al. **Spinal Cord** 1996 Jul; 34(7):387–93
Threaded steinmann pin fusion of the craniovertebral junction. Apostolides PJ, et al. **Spine** 1996 Jul 15; 21(14):1630–7
Video-assisted lateral intertransverse process arthrodesis. Validation of a new minimally invasive lumbar spinal fusion technique in the rabbit and nonhuman primate (rhesus) models. Boden SD, et al. **Spine** 1996 Nov 15;21(22):2689–97
Vertebral column resection for the treatment of rigid coronal decompensation. Bradford DS, et al. **Spine** 1997 Jul 15; 22(14):1590–9
Is pathology examination of disc specimens necessary after routine anterior cervical discectomy and fusion? Daftari TK, et al. **Spine** 1996 Sep 15;21(18):2156–9
Ceramic anterior spinal fusion. Biologic and biomechanical comparison in a canine model. Emery SE, et al. **Spine** 1996 Dec 1;21(23):2713–9
Biomechanical analysis of lumbosacral fixation. Glazer PA, et al. **Spine** 1996 May 15;21(10):1211–22
Lumbar lordosis in spinal fusion. A comparison of intraoperative results of patient positioning on two different operative table frame types. Guanciale AF, et al. **Spine** 1996 Apr 15;21(8):964–9
Posterior instrumentation and anterior interbody fusion for tuberculous kyphosis of dorsal and lumbar spines [letter; comment] Güven O. **Spine** 1996 Aug 1;21(15):1840–1. Comment on: Spine 1995 Sep 1;20(17):1910–6.
Comparison of interbody fusion approaches for disabling low back pain. Hacker RJ. **Spine** 1997 Mar 15;22(6):660–5; discussion 665–6
Controversy. Fusion of L5–S1 in adult scoliosis. Horton WC, et al. **Spine** 1996 Nov 1;21(21):2520–2 (8 ref.)
Strength and stability of posterior lumbar interbody fusion. Comparison of titanium fiber mesh implant and tricortical bone graft. Hoshijima K, et al. **Spine** 1997 Jun 1; 22(11):1181–8
Spine update. The use of adjunctive electrical stimulation to enhance the healing of spine fusions. Kahanovitz N. **Spine** 1996 Nov 1;21(21):2523–5 (16 ref.)
Lumbar laminectomy alone or with instrumented or noninstrumented arthrodesis in degenerative lumbar spinal stenosis. Patient selection, costs, and surgical outcomes. Katz JN, et al. **Spine** 1997 May 15;22(10):1123–31
Improved accuracy of pedicle screw insertion with computer-assisted surgery. A prospective clinical trial of 30 patients. Laine T, et al. **Spine** 1997 Jun 1;22(11):1254–8
Convex spinal epiphysiodesis in the management of progressive infantile idiopathic scoliosis. Marks DS, et al. **Spine** 1996 Aug 15;21(16):1884–8
A new microsurgical technique for minimally invasive anterior lumbar interbody fusion. Mayer HM. **Spine** 1997 Mar 15;22(6):691–9; discussion 700
Anatomic consideration of transpedicular screw placement in the cervical spine. An analysis of two approaches. Miller RM, et al. **Spine** 1996 Oct 15;21(20):2317–22
Preliminary design and experimental studies of a novel soft implant for correcting sagittal plane instability in the lumbar spine. Minns RJ, et al. **Spine** 1997 Aug 15; 22(16):1819–25; discussion 1826–7
Surgical management of severe spondylolisthesis in children and adolescents. Anterior fusion in situ versus anterior spondylodesis with posterior transpedicular instrumentation and reduction. Muschik M, et al. **Spine** 1997 Sep 1;22(17):2036–42; discussion 2043
Occipitocervical fusion with C1 laminectomy in children. Nakagawa T, et al. **Spine** 1997 Jun 1;22(11):1209–14
Anterior release and fusion in pediatric spinal deformity. A comparison of early outcome and cost of thoracoscopic and open thoracotomy approaches. Newton PO, et al. **Spine** 1997 Jun 15;22(12):1398–406
Extraperitoneal approach to the lumbar spine with video assistance. Onimus M, et al. **Spine** 1996 Nov 1;21(21):2491–4
The outcome of posterolateral fusion in highly selected patients with discogenic low back pain [see comments] Parker LM, et al. **Spine** 1996 Aug 15;21(16):1909–16;

discussion 1916–7. Comment in: Spine 1997 Jun 15;22(12):1419–20.
Threaded titanium cages for lumbar interbody fusions. Ray CD. **Spine** 1997 Mar 15;22(6):667–79; discussion 679–80
Laparoscopic assisted fusion of the lumbosacral spine. A biomechanical and histologic analysis of the open versus laparoscopic technique in an animal model. Riley LH 3rd, et al. **Spine** 1997 Jun 15;22(12):1407–12
Efficacy of implanted bone growth stimulation in instrumented lumbosacral spinal fusion. Rogozinski A, et al. **Spine** 1996 Nov 1;21(21):2479–83
Distractive properties of a threaded interbody fusion device. An in vivo model. Sandhu HS, et al. **Spine** 1996 May 15; 21(10):1201–10
Experimental spinal fusion with recombinant human bone morphogenetic protein–2 without decortication of osseous elements. Sandhu HS, et al. **Spine** 1997 Jun 1; 22(11):1171–80
Growth changes of solidly fused kyphotic bloc after surgery for tuberculosis. Comparison of four procedures. Schulitz KP, et al. **Spine** 1997 May 15;22(10):1150–5
Comparison of lumbar sagittal alignment produced by different operative positions. Stephens GC, et al. **Spine** 1996 Aug 1;21(15):1802–6; discussion 1807
Sacral fixation technique in lumbosacral fusion. Stovall DO Jr, et al. **Spine** 1997 Jan 1;22(1):32–7
Adding posterior lumbar interbody fusion to pedicle screw fixation and posterolateral fusion after decompression in spondylolytic spondylolisthesis. Suk SI, et al. **Spine** 1997 Jan 15;22(2):210–9; discussion 219–20
Rigid internal fixation with lateral mass plates in multilevel anterior and posterior reconstruction of the cervical spine. Swank ML, et al. **Spine** 1997 Feb 1;22(3):274–82
The use of implantable direct current stimulation in multilevel spinal fusion without instrumentation. A prospective clinical and radiographic evaluation with long–term follow–up. Tejano NA, et al. **Spine** 1996 Aug 15; 21(16):1904–8
Posterior surgical approach to the lumbar spine and its effect on the multifidus muscle. Weber BR, et al. **Spine** 1997 Aug 1;22(15):1765–72
In vitro biomechanical comparison of multistrand cables with conventional cervical stabilization. Weis JC, et al. **Spine** 1996 Sep 15;21(18):2108–14
Evaluation of cervical posterior lateral mass screw placement by oblique radiographs. Xu R, et al. **Spine** 1996 Mar 15; 21(6):696–701
Freeze–dried allograft for posterior spinal fusion in patients with neuromuscular spinal deformities. Yazici M, et al. **Spine** 1997 Jul 1;22(13):1467–71
Laparoscopic discectomy with anterior interbody fusion of L5–S1. Olsen D, et al. **Surg Endosc** 1996 Dec; 10(12):1158–63
[Giant cell tumors of the spine. Report of a case, literature review] Laffargue P, et al. **Acta Orthop Belg** 1997 Mar; 63(1):28–34 (32 ref.) (Eng. Abstr.) **(Fre)**
[Recent fractures of the thoracic and lumbar spine with or without neurologic disorders]
Rev Chir Orthop Reparatrice Appar Mot 1996;82 Suppl 1:61–127 **(Fre)**
[Anterior spinal fusion by thoracoscopy. A non–traumatic technique] Baulot E, et al.
Rev Chir Orthop Reparatrice Appar Mot 1997;83(3):203–9 (Eng. Abstr.) **(Fre)**
[Surgery of the upper cervical spine in rheumatoid arthritis. Indications and results apropos of 28 cases] Bénazet JP, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996; 82(8):681–90 (Eng. Abstr.) **(Fre)**
[Results of posterior lumbar intersomatic fusion in the treatment of isthmic spondylolisthesis. Apropos of 27 cases followed over more than 10 years] Lerat JL, et al.
Rev Chir Orthop Reparatrice Appar Mot 1996;82(6):475–89 (Eng. Abstr.) **(Fre)**
[Transperitoneal laparoscopic approach to the L5–S1 disk. Value of computed x–ray tomography] Norotte G, et al.
Rev Chir Orthop Reparatrice Appar Mot 1996;82(7):615–9 (Eng. Abstr.) **(Fre)**
[Perforation of the cervical esophagus after ventral fusion of the cervical spine. Defect coverage by muscle–plasty with the sternocleidomastoid muscle: case report and review of the literature] Lamesch P, et al. **Chirurg** 1997 May;68(5):543–7 (30 ref.) (Eng. Abstr.) **(Ger)**
[Post–traumatic atlanto–axial arthrosis] Ehrat C, et al.
Orthopade 1996 Nov;25(6):542–5 (Eng. Abstr.) **(Ger)**
[Lumbar fusion in adults—dorsal or combined ventral/dorsal approach?] Krismer M, et al. **Orthopade** 1997 Jun; 26(6):568–71 (Eng. Abstr.) **(Ger)**
[Advantages and disadvantages of retro– and transperitoneal approach for fusion of the presacral intervertebral disk] Wimmer C, et al. **Orthopade** 1997 Jun;26(6):563–7 (Eng. Abstr.) **(Ger)**
[The plain–film radiological changes in the cervical spine following a ventral fusion operation with bone cement] Hutzelmann A, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1997 Jan;166(1):40–3 (Eng. Abstr.) **(Ger)**
[The Harrington scoliosis operation: the anesthesiological problems in the perioperative phase] Koch HJ.
Rom J Intern Med 1996 Jan–Jun;34(1–2):127–36 (Eng. Abstr.) **(Ger)**
[Long–term outcome of 57 patients after ventral interbody spondylodesis of the lower cervical spine] Blauth M, et al. **Unfallchirurg** 1996 Dec;99(12):925–39 (Eng. Abstr.) **(Ger)**
[Spinal stabilization in extradural metastatic disease. Indications and follow–up of 32 cases] Seiler H, et al.
Unfallchirurg 1997 Apr;100(4):294–300 (Eng. Abstr.) **(Ger)**
[The most frequent errors during use of the surgical techniques of Cotrela–Dubousset (C–D) and Texas Scottish Rite Hospital (TSRH) for surgical treatment of idiopathic scoliosis] Nowakowski A, et al.
Chir Narzadow Ruchu Ortop Pol 1996;61(6):543–51 (Eng. Abstr.) **(Pol)**
[Range of distal spondylodesis in surgical treatment of idiopathic scoliosis using multisegmental instrumentation] Nowakowski A, et al. **Chir Narzadow Ruchu Ortop Pol** 1997;62(1):27–37 (Eng. Abstr.) **(Pol)**
[Multistage surgical treatment for idiopathic infantile scoliosis using C–D instrumentation and TSRH—preliminary report] Przybylski J, et al.
Chir Narzadow Ruchu Ortop Pol 1996;61(6):535–41 (Eng. Abstr.) **(Pol)**

REHABILITATION

Return to work after posterolateral fusion with transpedicular instrumentation for spondylarthrosis of the lumbosacral spine. Pihlajamäki H, et al. **Ann Chir Gynaecol** 1996; 85(1):63–6
Suggested management guidelines for participation in collision activities with congenital, developmental, or postinjury lesions involving the cervical spine. Torg JS, et al. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S256–72

UTILIZATION

Appropriateness of indications for surgery of lumbar disc hernia and spinal stenosis. Larequi–Lauber T, et al.
Spine 1997 Jan 15;22(2):203–9

SPINAL GANGLIA see **GANGLIA, SPINAL**

SPINAL INJURIES

Cervical spine alignment in the immobilized football player. Radiographic analysis before and after helmet removal. Swenson TM, et al. **Am J Sports Med** 1997 Mar–Apr; 25(2):226–30
American Spinal Injury Association annual meeting abstracts. **J Spinal Cord Med** 1997 Jan;20(1):139–78
Suggested management guidelines for participation in collision activities with congenital, developmental, or postinjury lesions involving the cervical spine. Torg JS, et al. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S256–72

BLOOD

Evaluation of prognostic significance of circulating interleukin–6 in patients with accident spine injuries. Honorati MC, et al. **Chir Organi Mov** 1996 Jan–Mar; 81(1):55–61 **(Eng, Ita)**

CLASSIFICATION

Epidemiology, classification, mechanism, and tolerance of human cervical spine injuries. Myers BS, et al.
Crit Rev Biomed Eng 1995;23(5–6):307–409 (365 ref.)
Athletes with cervical spine injury. Maroon JC, et al.
Spine 1996 Oct 1;21(19):2294–9 (21 ref.)

COMPLICATIONS

Increased rates of fibromyalgia following cervical spine injury. A controlled study of 161 cases of traumatic injury. Buskila D, et al. **Arthritis Rheum** 1997 Mar;40(3):446–52
Cervical spine injury in maxillofacial trauma. Lalani Z, et al. **Br J Oral Maxillofac Surg** 1997 Aug;35(4):243–5
Vesico–ureteric reflux in adult patients with spinal injury. Foley SJ, et al. **Br J Urol** 1997 Jun;79(6):888–91
Complicated urinary infection in spinal injury patients: fleroxacin compared with ciprofloxacin. Whitby M, et al.
Chemotherapy 1996 Nov–Dec;42(6):468–72
Case report: post–traumatic thoracolumbar pseudomeningocoele—an unusual cause of upper lumbar pain. Johnson DB, et al. **Clin Radiol** 1997 Sep;52(9):715–7
Exogenous lumbar spondylodiscitis following a stabwound injury and vertebral fracture. A case report and review of the literature. Schulze CJ, et al. **Eur Spine J** 1995; 4(6):357–9 (16 ref.)
Unusual foreign body causing quadriparesis: case report. Tomaras CR, et al. **Neurosurgery** 1997 Jun;40(6):1291–3; discussion 1293–4
Posttraumatic cervical osteophytosis causing progressive dysphagia. McGarrah PD, et al. **South Med J** 1997 Aug; 90(8):858–60
Congenital spine deformity, congenital stenosis, diastematomyelia, and tight filum terminale in a workmen's compensation patient: a case report. Azhar MM, et al.
Spine 1996 Mar 15;21(6):770–4
Vertebral artery occlusion associated with cervical spine trauma. A prospective analysis. Giacobetti FB, et al.
Spine 1997 Jan 15;22(2):188–92
Bilateral vertebral artery lesion after dislocating cervical spine trauma. A case report. Wirbel R, et al. **Spine** 1996 Jun 1;21(11):1375–9; discussion 1380 (22 ref.)
Traumatic spinal subarachnoid hematoma: report of a case with MRI. Gupta SK, et al. **Surg Neurol** 1997 Aug; 48(2):189–92 (36 ref.)

DIAGNOSIS

The extremities and spine. Graeme KA, et al.
Emerg Med Clin North Am 1997 May;15(2):365–79 (42 ref.)
MRI of cervical facet dislocation. Leite CC, et al.
Neuroradiology 1997 Aug;39(8):583–8
Cervical spine injuries. Etzwiler LS, et al.
Pediatr Emerg Care 1996 Jun;12(3):233–5
[Injuries of the spine: current concepts in radiologic diagnosis] du Mesnil de Rochemont R, et al.
Aktuelle Radiol 1997 Jan;7(1):1–13 (51 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

New pharmacologic strategies for acute neuronal injury. Luer MS, et al. **Pharmacotherapy** 1996 Sep–Oct; 16(5):830–48 (242 ref.)

EPIDEMIOLOGY

Factors affecting first return to work following a compensable occupational back injury. Oleinick A, et al.
Am J Ind Med 1996 Nov;30(5):540–55
New spinal injuries in hockey. Tator CH, et al.
Clin J Sport Med 1997 Jan;7(1):17–21
Epidemiology, classification, mechanism, and tolerance of human cervical spine injuries. Myers BS, et al.
Crit Rev Biomed Eng 1995;23(5–6):307–409 (365 ref.)
[Injuries of the spine and the spinal cord in sports] Shingu H, et al. **Nippon Seikeigeka Gakkai Zasshi** 1996 Jul; 70(7):353–65 **(Jpn)**

ETIOLOGY

Impact loading of the lumbar spine during football blocking. Gatt CJ Jr, et al. **Am J Sports Med** 1997 May–Jun; 25(3):317–21
Stress fractures in the pediatric athlete. Coady CM, et al.
Clin Sports Med 1997 Apr;16(2):225–38 (43 ref.)
Spinal injuries in the pediatric age group: a review of 82 cases of spinal cord and vertebral column injuries. Turgut M, et al. **Eur Spine J** 1996;5(3):148–52 (31 ref.)
Traumatic intervertebral incarceration of ileum: a unique lap belt injury. Patterson R, et al. **Injury** 1996 Oct;27(8):596–8
Safety in chiropractic practice. Part I: The occurrence of cerebrovascular accidents after manipulation to the neck in Denmark from 1978–1988. Klougart N, et al.
J Manipulative Physiol Ther 1996 Jul–Aug;19(6):371–7
Misuse of the literature by medical authors in discussing spinal manipulative therapy injury [letter] Lauretti WJ.
J Manipulative Physiol Ther 1995 Nov–Dec;18(9):636
Locked–in syndrome resulting from cervical spine gunshot wound. Fitzgerald LF, et al. **J Trauma** 1997 Jan;42(1):147–9
Spine problems in the athlete. Stinson JT. **Md Med J** 1996 Aug;45(8):655–8 (25 ref.)
Chronic cervical zygapophysial joint pain after whiplash. A placebo–controlled prevalence study [see comments] Lord SM, et al. **Spine** 1996 Aug 1;21(15):1737–44; discussion 1744–5. Comment in: Spine 1997 Jun 15;22(12):1420–1.
[Vertebral lesions due to being expelled with an ejection seat. The mechanism, diagnosis and prevention results and means] Rotondo G. **Riv Med Aeronaut Spaz** 1975 Jan–Mar; 38(1):62–77 concl (Eng. Abstr.) **(Ita)**
[Biodynamic response to the windblast in expulsions with an ejection seat: the pathogenetic mechanism, analysis and prevention of lesions due to aerodynamic wind pressure] Rotondo G. **Riv Med Aeronaut Spaz** 1975 Apr–Sep; 38(2–3):209–34 (Eng. Abstr.) **(Ita)**
[Osteoporosis in men under 65 years old presenting as vertebral crushing: idiopathic or secondary? Study of 9 cases] Pumarino H, et al. **Rev Med Chil** 1996 Jul; 124(7):829–35 (Eng. Abstr.) **(Spa)**

GENETICS

A familial predisposition toward lumbar disc injury. Richardson JK, et al. **Spine** 1997 Jul 1;22(13):1487–92; discussion 1493

HISTORY

The rise and fall of Erichsen's disease (railroad spine). Keller T, et al. **Spine** 1996 Jul 1;21(13):1597–601

PATHOLOGY

The intravertebral vacuum phenomenon ("vertebral osteonecrosis"). Migration of intradiscal gas in a fractured vertebral body? Lafforgue P, et al. **Spine** 1997 Aug 15; 22(16):1885–91

PHYSIOPATHOLOGY

The biomechanics of cervical spine injury and implications for injury prevention. Winkelstein BA, et al.
Med Sci Sports Exerc 1997 Jul;29(7 Suppl):S246–55
A study of functional spinal motion in women after instrumentation and fusion for deformity or trauma. Winter RB, et al. **Spine** 1997 Aug 1;22(15):1760–4
[Characteristics of hypophyseal–adrenal and sympathetic–adrenal systems in patients with complicated spinal trauma] Goncharov NP, et al.
Biull Eksp Biol Med 1996 Nov;122(11):568–70 **(Rus)**

SPINAL INJURIES

[A new method for recording the spinal blood circulation in spinal diseases and trauma] Tikhodeev SA, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):83–5 **(Rus)**

PREVENTION & CONTROL

A correlative investigation of simulated occupant motion and accident report in a helicopter crash. Beale DG, et al. **Aviat Space Environ Med** 1996 Jan;67(1):23–9

Study provides new evidence of back belts' effectiveness. McIntyre DR, et al. **Occup Health Saf** 1996 Dec; 65(12):39–41

Job re-design, not 'quick fixes,' thwarts many back injury hazards. Mahone DB. **Occup Health Saf** 1994 Jan; 63(1):51–4

[Examination methods for the prevention of traumatic and nontraumatic osteoarthropathies related to flying activity] Rotondo G. **Riv Med Aeronaut Spaz** 1975 Oct–Dec; 38(4):375–91 (25 ref.) (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Cervical spine imaging in trauma patients: a simple scheme of rationalising arm traction using zonal divisions of the vertebral bodies. Ohiorenoya D, et al. **J Accid Emerg Med** 1996 May;13(3):175–6

Radiographic cervical spine evaluation in the alert asymptomatic blunt trauma victim: much ado about nothing? [letter] Cohn SM. **J Trauma** 1997 Jan;42(1):152–3

Traumatic thoracolumbar facet instability: characteristic imaging findings. Lund PJ, et al. **Skeletal Radiol** 1997 Jun; 26(6):360–5

C2–3 facet joint "pseudo-fusion": anatomic basis of a normal variant. Massengill AD, et al. **Skeletal Radiol** 1997 Jan; 26(1):27–30

[Traumatic damage to the lower cervical spine—a diagnostic problem?] Volkmann R, et al. **Unfallchirurg** 1996 Jul; 99(7):466–9 (Eng. Abstr.) **(Ger)**

[Computerized tomography in craniocerebral, maxillofacial, cervical, and spinal gunshot wounds. Part II—Clinical contribution and medico- legal aspects] Scialpi M, et al. **Radiol Med (Torino)** 1996 Dec;92(6):693–9 (Eng. Abstr.) **(Ita)**

REHABILITATION

Social adjustment and rehabilitation in international competitors with spinal injuries sustained in military service. Lovell ME, et al. **Disabil Rehabil** 1997 Mar; 19(3):92–6

Self-directed patient education in soft-tissue rehabilitation: rationale and analysis of a pilot project. Piccininni JJ, et al. **J Manipulative Physiol Ther** 1997 Jan;20(1):41–6

The effect of a soft collar, used as normally recommended or reversed, on three planes of cervical range of motion. Carter VM, et al. **J Orthop Sports Phys Ther** 1996 Mar; 23(3):209–15

Factors related to successful work hardening outcomes. Beissner KL, et al. **Phys Ther** 1996 Nov;76(11):1188–201

Recurrent or new injury outcomes after return to work in chronic disabling spinal disorders. Tertiary prevention efficacy of functional restoration treatment. Garcy P, et al. **Spine** 1996 Apr 15;21(8):952–9

[Treatment and rehabilitation of post-traumatic tetraplegia in advanced age. A report of experiences] Badke A, et al. **Unfallchirurgie** 1997 Jun;23(3):100–4 (Eng. Abstr.) **(Ger)**

[Dynamic spinal traction in the combined treatment of the pain syndrome in posttraumatic osteochondrosis] Fomchenkov SV, et al. **Voen Med Zh** 1997 Jul;318(7):23–7 **(Rus)**

SURGERY

Treatment of spinal injuries. On relating anatomical facts to clinical practice. Crock HV. **Acta Orthop Scand** 1997 Aug; 68(4):315–8 (13 ref.)

Posterior instrumentation for thoracolumbar trauma. Stambough JL. **Clin Orthop** 1997 Feb;(335):73–88 (131 ref.)

Multiple non-contiguous injuries of the spine. Dai LY, et al. **Injury** 1996 Oct;27(8):573–5

Early management of war missile spine and spinal cord injuries: experience with 21 cases. Šplavski B, et al. **Injury** 1996 Dec;27(10):699–702

Cervical locked facet: operative management. Agrillo U, et al. **J Neurosurg Sci** 1995 Dec;39(4):219–25

Timing of surgical decompression and fixation of acute spinal fractures. Schlegel J, et al. **J Orthop Trauma** 1996; 10(5):323–30

Cervical spine injury in a boxer: should mandatory screening be instituted? Place HM, et al. **J Spinal Disord** 1996 Feb; 9(1):64–7

In vitro load measurement using an instrumented spinal fixation device. Rohlmann A, et al. **Med Eng Phys** 1996 Sep;18(6):485–8

Indications for surgery in upper cervical spine injury. Pospiech J, et al. **Neurosurg Rev** 1996;19(2):73–9 (30 ref.)

Injuries involving the transverse atlantal ligament: classification and treatment guidelines based upon experience with 39 injuries [letter; comment] [see comments] Findlay JM. **Neurosurgery** 1996 Jul;39(1):210. Comment on: Neurosurgery 1996 Jan;38(1):44–50. Comment in: Neurosurgery 1997 Apr;40(4):886–7.

A study of functional spinal motion in women after instrumentation and fusion for deformity or trauma. Winter RB, et al. **Spine** 1997 Aug 1;22(15):1760–4

[Impalement injury of the colon, iliac vein and sacrum—a rare combination in penetrating abdominal trauma. A case report] Funke M, et al. **Chirurg** 1996 Nov;67(11):1184–7 (27 ref.) (Eng. Abstr.) **(Ger)**

[New developments in surgery of the injured spine] Blauth M, et al. **Orthopade** 1997 May;26(5):437–49 (49 ref.) (Eng. Abstr.) **(Ger)**

[Long-term outcome of 57 patients after ventral interbody spondylodesis of the lower cervical spine] Blauth M, et al. **Unfallchirurg** 1996 Dec;99(12):925–39 (Eng. Abstr.) **(Ger)**

[Penetrating injury of the head, neck and chest by a nail-gun: a case report] Sasaoka Y, et al. **No Shinkei Geka** 1995 Dec; 23(12):1099–104 (Eng. Abstr.) **(Jpn)**

[Combat injuries to the spine and spinal cord] Gaidar BV, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Apr–Jun; (2):44–6 **(Rus)**

THERAPY

Management guidelines for participation in collision activities with congenital, developmental, or post-injury lesions involving the cervical spine. Torg JS, et al. **Clin Sports Med** 1997 Jul;16(3):501–30 (18 ref.)

The extremities and spine. Graeme KA, et al. **Emerg Med Clin North Am** 1997 May;15(2):365–79 (42 ref.)

Spinal boards [letter; comment] Cooke M. **J Accid Emerg Med** 1996 Nov;13(6):433. Comment on: J Accid Emerg Med 1996 Jan;13(1):34–7.

Backboard versus mattress splint immobilization: a comparison of symptoms generated. Chan D, et al. **J Emerg Med** 1996 May–Jun;14(3):293–8

A review of spinal immobilization techniques. De Lorenzo RA. **J Emerg Med** 1996 Sep–Oct;14(5):603–13 (91 ref.)

The efficacy and comfort of full-body vacuum splints for cervical-spine immobilization. Hamilton RS, et al. **J Emerg Med** 1996 Sep–Oct;14(5):553–9

Fluoroscopy-assisted intubation of a child with an unstable subluxation of C1/C2. Morell RC, et al. **J Neurosurg Anesthesiol** 1997 Jan;9(1):25–8

Athletes with cervical spine injury. Maroon JC, et al. **Spine** 1996 Oct 1;21(19):2294–9 (21 ref.)

Stabilizing properties of the halo apparatus. Mirza SK, et al. **Spine** 1997 Apr 1;22(7):727–33

SPINAL MUSCULAR ATROPHY see **MUSCULAR ATROPHY, SPINAL**

SPINAL MUSCULAR ATROPHY, INFANTILE see **WERDNIG-HOFFMANN DISEASE**

SPINAL NEOPLASMS

Spinal chondroma of the lumbar tract: case report. Gaetani P, et al. **Surg Neurol** 1996 Dec;46(6):534–9 (32 ref.)

[Primary spinal osteosarcomas] Khalfallah M, et al. **Neurochirurgie** 1997;43(1):28–34 (56 ref.) (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Preoperative embolization of cervical spine tumors. Vetter SC, et al. **Cardiovasc Intervent Radiol** 1997 Sep–Oct; 20(5):343–7

CLASSIFICATION

Chordoma: a case report. Jallo J, et al. **Surg Neurol** 1997 Jul;48(1):46–8 (14 ref.)

COMPLICATIONS

Intraosseous schwannoma of T12 with burst fracture of L1. Nooraie H, et al. **Arch Orthop Trauma Surg** 1997; 116(6–7):440–2

Skeletal haemangiomatosis presenting with spinal cord compression—postoperative management of progressive disease [letter; comment] Plowman PN. **Br J Radiol** 1997 Apr;70:429–31. Comment on: Br J Radiol 1996 Oct;69(826):965–7.

Shoulder pain relieved by abduction. A sign of cervical radicular compression. Tandeter H, et al. **Can Fam Physician** 1997 Mar;43:511–2

Lymphangiolipoma of the thoracic spine in a pediatric patient with Proteus syndrome. Whitley JM, et al. **Childs Nerv Syst** 1996 Apr;12(4):224–7

Primary osteosarcoma of the L2 lamina presenting as "silent" paraplegia: case report and review of the literature. Korovessis P, et al. **Eur Spine J** 1995;4(6):375–8 (18 ref.)

Multiple endocrine neoplasia type 1 associated with spinal ependymoma. Kato H, et al. **Intern Med** 1996 Apr; 35(4):285–9 (18 ref.)

Spontaneous regression of intraspinal neuroblastoma. Kullendorff CM, et al. **Pediatr Surg Int** 1997 Apr; 12(4):305–7

A rare cause of osteomalacia: osteosarcoma [letter] Crognier L, et al. **Rev Rhum Engl Ed** 1996 Oct;63(9):630–1

Fibrous dysplasia of the spine, costae and hemipelvis with sarcomatous transformation. Rodenberg J, et al. **Skeletal Radiol** 1996 Oct;25(7):682–4

Spinal osteoblastoma: relationship between paravertebral muscle abnormalities and scoliosis. Saifuddin A, et al. **Skeletal Radiol** 1996 Aug;25(6):531–5

[An uncommon cause of cervicobrachial neuralgia: osteoid osteoma (letter)] Renard JL, et al. **Ann Med Interne (Paris)** 1997;148(1):110–2 **(Fre)**

[Hydrocephalus caused by intraspinal tumor (letter)] Sarrot-Reynauld F, et al. **Presse Med** 1997 Feb 22;26(5):213 **(Fre)**

[Extra osseous tumors of the spine in children and adolescents. Spinal complications] Ghanem I, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(4):313–20 (Eng. Abstr.) **(Fre)**

[A case of acromegaly associated with variegated spinal disorders] Suga T, et al. **No Shinkei Geka** 1996 Oct; 24(10):927–32 (Eng. Abstr.) **(Jpn)**

[Scoliosis of sudden evolution due to lumbar osteoblastoma] Amaral J de S, et al. **Acta Med Port** 1997 May;10(5):417–22 (16 ref.) (Eng. Abstr.) **(Por)**

[Spinal cord compression as the presenting form of non-Hodgkin's lymphoma] Amigo ML, et al. **Sangre (Barc)** 1995 Dec;40(6):505–7 (Eng. Abstr.) **(Spa)**

[Cases of myeloma of the spine complicated by fractures] Palamar OI. **Klin Khir** 1996;(8):45–6 **(Ukr)**

DIAGNOSIS

Thoracic spine mass in a 34-year-old man. Meador T, et al. **Acad Radiol** 1997 Feb;4(2):157–8

Primary spinal column sarcomas. Tasdemiroglu E, et al. **Acta Neurochir (Wien)** 1996;138(11):1261–6

Spinal angiolipomas revisited: two case reports. Trabulo A, et al. **Acta Neurochir (Wien)** 1996;138(11):1311–9 (21 ref.)

Ectopic extraspinal meningioma: CT and MR appearance. Christopherson LA, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1335–7

Myelolipoma of the thoracic spine. Omdal DG, et al. **AJNR Am J Neuroradiol** 1997 May;18(5):977–9

Spinal canal compromise in Proteus syndrome: case report and review of the literature. Ring D, et al. **Am J Orthop** 1997 Apr;26(4):275–8 (14 ref.)

Case report: sclerotic skeletal haemangiomatosis presenting with spinal cord compression—CT and MRI findings [see comments] Chrysikopoulos H, et al. **Br J Radiol** 1996 Oct; 69(826):965–7. Comment in: Br J Radiol 1997 Apr;70:429–31.

Spinal intramedullary angiolipoma. Maggi G, et al. **Childs Nerv Syst** 1996 Jun;12(6):346–9

The impact on treatment planning of MRI of the spine in patients suspected of vertebral metastasis: an efficacy study. Colletti PM, et al. **Comput Med Imaging Graph** 1996 May-Jun;20(3):159–62

Fulminant disseminated intravascular coagulation revealing an advanced stage IV poorly differenciated rhabdomyosarcoma [letter] Stéphan JL, et al. **Eur J Pediatr** 1996 Jul;155(7):622–3

Chondrosarcoma causing cervical neural foramen widening. Yünten N, et al. **Eur Radiol** 1997;7(7):1028–30

Phosphorus-31 chemical shift imaging of metastatic tumors located in the spine region. Sijens PE, et al. **Invest Radiol** 1997 Jun;32(6):344–50

Imaging of primary tumors and tumor-like conditions of the lumbosacral osseous spine. De Beuckeleer L, et al. **J Belge Radiol** 1997 Feb;80(1):21–5

MR prediction of benign and malignant vertebral compression fractures. Moulopoulos LA, et al. **J Magn Reson Imaging** 1996 Jul–Aug;6(4):667–74

Determination of 1H relaxation times of water in human bone marrow by fat-suppressed turbo spin echo in comparison to MR spectroscopic methods. Träber F, et al. **J Magn Reson Imaging** 1996 May–Jun;6(3):541–8

Spinal and cutaneous schwannomatosis is a variant form of type 2 neurofibromatosis: a clinical and molecular study. Evans DG, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr; 62(4):361–6

Increased phantom limb pain as an initial symptom of spinal-neoplasia [published erratum appears in J Pain Symptom Manage 1997 Sep;14(3):135] Chang VT, et al. **J Pain Symptom Manage** 1997 Jun;13(6):362–4 (18 ref.)

Paravertebral inflammation mistaken for neoplasm or abscess by MRI. Klekamp JW, et al. **J South Orthop Assoc** 1997 Summer;6(2):81–7

False positive MIBG scan. Frappaz D, et al. **Med Pediatr Oncol** 1997 Dec;29(6):589–92

An unusual cervical chordoma: CT and MRI. Anegawa T, et al. **Neuroradiology** 1996 Jul;38(5):466–7

Problems in distinguishing spinal tuberculosis from neoplasia on MRI. Gupta RK, et al. **Neuroradiology** 1996 May;38 Suppl 1:S97–104

Intraosseous vertebral haemangioblastoma: MRI. Higgins JN, et al. **Neuroradiology** 1996 May;38 Suppl 1:S107–10

MRI in an unusual case of congenital spinal mesenchymal proliferation. Tortori-Donati P, et al. **Neuroradiology** 1996 May;38 Suppl 1:S196–9

Epithelioid hemangioendothelioma of the lumbar vertebral column: case report and review of literature. Ellis TS, et al. **Neurosurgery** 1996 Feb;38(2):402–7 (51 ref.)

General case of the day. Chordoma. Beecham RP, et al. **Radiographics** 1996 Nov;16(6):1514–6

Multifocal malignant fibrous histiocytoma of the spine. Maillefert JF, et al. **Rev Rhum Engl Ed** 1997 Apr; 64(4):274–7

Epithelioid sarcoma of the spine: a case report. Steib JP, et al. **Spine** 1996 Mar 1;21(5):634–8

Primary spinal epidural non-Hodgkin's lymphomas: a clinical

study. Salvati M, et al. **Surg Neurol** 1996 Oct;46(4):339–43; discussion 343–4

Neuroectodermal cyst may be a rare differential diagnosis of fetal sacrococcygeal teratoma: first case report of a prenatally observed neuroectodermal cyst. Bloechle M, et al. **Ultrasound Obstet Gynecol** 1996 Jan;7(1):64–7 (11 ref.)

[Giant cell tumors of the spine. Report of a case, literature review] Laffargue P, et al. **Acta Orthop Belg** 1997 Mar; 63(1):28–34 (32 ref.) (Eng. Abstr.) **(Fre)**

[Vertebral hemangioma symptomatic during pregnancy. A case report and review of the literature] Abi-Fadel W, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(1):90–4 (20 ref.) (Eng. Abstr.) **(Fre)**

[Primary spinal osteosarcoma. Apropos of a case] Khalfallah M, et al. **Neurochirurgie** 1997;43(1):39–44 (Eng. Abstr.) **(Fre)**

[Unusual spinal and pulmonary metastases] Moreau E, et al. **Rev Mal Respir** 1996 Oct;13(5):523–5 (Eng. Abstr.) **(Fre)**

[Epithelioid sarcoma. Diagnostic and therapeutic aspects apropos of a coccygeal localization] Tournigand C, et al. **Rev Med Interne** 1997;18(1):50–3 (16 ref.) (Eng. Abstr.) **(Fre)**

[Secondary osteosarcoma in Paget disease] Dieckmann C, et al. **Aktuelle Radiol** 1996 Jul;6(4):191–3 (Eng. Abstr.) **(Ger)**

[Thoracic manifestations of osteosarcoma] Brinkmann G, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):567–9 **(Ger)**

[Orthopedic foot abnormalities as a important sign of lumbosacral spinal lipoma in an 11-year-old boy] Prandota J, et al. **Pediatr Pol** 1996 Feb;71(2):153–6 (Eng. Abstr.) **(Pol)**

[Experience in clinical use of paramagnetic agent magnevist in the diagnosis of spine and spinal cord metastases] Gunicheva NV, et al. **Vestn Rentgenol Radiol** 1996 Nov-Dec;(6):15–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Burkitt's lymphoma-leukemia in patients treated for Hodgkin's disease. Salloum E, et al. **Cancer Invest** 1996; 14(6):527–33 (47 ref.)

Markedly improved survival in malignant sacro-coccygeal teratomas--16 years, experience. Misra D, et al. **Eur J Pediatr Surg** 1997 Jun;7(3):152–5

Sclerosis of lytic metastatic bone lesions during treatment with pamidronate in a patient with adenocarcinoma of unknown primary site. Tanaka M, et al. **Eur Spine J** 1996; 5(3):198–200

Osteoblastoma response to radiotherapy and chemotherapy. Berberoglu S, et al. **Med Pediatr Oncol** 1997 Apr; 28(4):305–9

Individualized use of methadone and opioid rotation in the comprehensive management of cancer pain associated with poor prognostic indicators. Vigano A, et al. **Pain** 1996 Sep; 67(1):115–9

Severe necrosis due to paclitaxel extravasation. Herrington JD, et al. **Pharmacotherapy** 1997 Jan-Feb;17(1):163–5

EMBRYOLOGY

Embryogenesis. Why do we need a new explanation for the emergence of spina bifida with lipoma? Catala M. **Childs Nerv Syst** 1997 Jun;13(6):336–40 (28 ref.)

EPIDEMIOLOGY

Risk factors and probability of vertebral body collapse in metastases of the thoracic and lumbar spine. Taneichi H, et al. **Spine** 1997 Feb 1;22(3):239–45

ETIOLOGY

[Extensive pseudotumoral lumbar spine lesions of vascular origin] Husson JL, et al. **Chirurgie** 1996;121(3):223–4 (Eng. Abstr.) **(Fre)**

GENETICS

In vitro proliferative advantage of bone marrow cells with tetrasomy 8 in Ewing sarcoma. Trakhtenbrot L, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):176–8

Congenital lumbosacral lipomas. Pierre-Kahn A, et al. **Childs Nerv Syst** 1997 Jun;13(6):298–334; discussion 335 (199 ref.)

Hereditary spinal neurofibromatosis: a rare form of NF1? Poyhonen M, et al. **J Med Genet** 1997 Mar;34(3):184–7

METABOLISM

Oncoproteins and tumor suppressor proteins in congenital sacrococcygeal teratomas. Kruślin B, et al. **Pediatr Pathol Lab Med** 1997 Jan-Feb;17(1):43–52

MORTALITY

Survival rates of patients with metastatic spinal cancer after scintigraphic detection of abnormal radioactive accumulation. Tatsui H, et al. **Spine** 1996 Sep 15; 21(18):2143–8

NURSING

[Visiting nurse support for patients wishing to die at home] Naito A, et al. **Gan To Kagaku Ryoho** 1996 Dec;23 Suppl 3:262–5 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Exfoliative cytology of metastatic chordoma appearing in the sputum. A case report. Kawahara E, et al. **Acta Cytol** 1997 Mar-Apr;41(2):513–8

In vitro proliferative advantage of bone marrow cells with tetrasomy 8 in Ewing sarcoma. Trakhtenbrot L, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):176–8

Tracheal deviation from an atypical mediastinal mass [see comments] Cury JD, et al. **Chest** 1997 Feb;111(2):503–5. Comment in: Chest 1997 Jun;111(6):1786.

Concurrent occurrence of solitary spinal epidural osteochondroma and angiolipoma. Shuangshoti S, et al. **Clin Neuropathol** 1997 Mar-Apr;16(2):107–10

Sacral chordoma, gas gangrene and bilateral renal cell carcinomas. Harrington KJ, et al. **Clin Oncol (R Coll Radiol)** 1996;8(2):123–4

Fibrous dysplasia of the spine with sarcomatous transformation: a case report and review of the literature. Yalniz E, et al. **Eur Spine J** 1995;4(6):372–4 (21 ref.)

Primary spinal paragangliomas: a clinicopathological and immunohistochemical study of 30 cases. Moran CA, et al. **Histopathology** 1997 Aug;31(2):167–73

Widespread neuroendocrine malignancy within the central nervous system: a diagnostic conundrum. Hopster DJ, et al. **J Clin Pathol** 1997 May;50(5):440–2

Osteoid osteoma of the vertebral body with extension across the intervertebral disc. Hurtgen KL, et al. **J Manipulative Physiol Ther** 1996 Feb;19(2):118–23 (31 ref.)

Epithelioid hemangioendothelioma of the lumbar vertebral column: case report and review of literature. Ellis TS, et al. **Neurosurgery** 1996 Feb;38(2):402–7 (51 ref.)

From the archives of the AFIP. Primary tumors of the spine: radiologic pathologic correlation. Murphey MD, et al. **Radiographics** 1996 Sep;16(5):1131–58 (70 ref.)

Percutaneous vertebroplasty in patients with osteolytic metastases or multiple myeloma [see comments] Cortet B, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):177–83. Comment in: Rev Rhum Engl Ed 1997 Mar;64(3):145–6.

Primary bone tumors of the spine. Terminology and surgical staging. Boriani S, et al. **Spine** 1997 May 1;22(9):1036–44 (28 ref.)

Local spread of metastatic vertebral tumors. A histologic study. Fujita T, et al. **Spine** 1997 Aug 15;22(16):1905–12

[A clinicopathological and immunohistochemical study of 34 cases of chordoma] Hu Y, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1996 Jun;25(3):142–4 (Eng. Abstr.) **(Chi)**

[Fast spin echo imaging of vertebral metastasis: comparison of fat suppression techniques (FSE-CHESS, STIR-FSE) Scarabino T, et al. **Radiol Med (Torino)** 1996 Sep; 92(3):180–5 (Eng. Abstr.) **(Ita)**

[Intramedullary cavernous angioma in a 10-year-old child: a case report] Bastida Eizaguirre M, et al. **An Esp Pediatr** 1997 Apr;46(4):403–5 **(Spa)**

PHYSIOPATHOLOGY

Primary tumors of the spine in children. Natural history, management, and long-term follow-up. Beer SJ, et al. **Spine** 1997 Mar 15;22(6):649–58; discussion 658–9

RADIOGRAPHY

Case quiz. Peh WC, et al. **Australas Radiol** 1996 Feb; 40(1):91–3

Percutaneous extraction of vertebral osteoid osteoma under computed tomography guidance. Labbé JL, et al. **Eur Spine J** 1995;4(6):368–71

A case of non-Hodgkin's lymphoma with bone involvement. Das T, et al. **J Indian Med Assoc** 1996 Apr;94(4):152–3

Chondrosarcoma of the spine and thyroid carcinoma following radiation therapy for Hodgkin's lymphoma. Leis AA, et al. **Neurology** 1997 Jun;48(6):1710–2

From the archives of the AFIP. Primary tumors of the spine: radiologic pathologic correlation. Murphey MD, et al. **Radiographics** 1996 Sep;16(5):1131–58 (70 ref.)

Clinics in diagnostic imaging (25). Aggressive vertebral haemangioma. Griffith JF, et al. **Singapore Med J** 1997 May;38(5):226–30

Clinics in diagnostic imaging (6). Peh WC, et al. **Singapore Med J** 1995 Oct;36(5):551–3

Chondromyxoid fibroma of the lumbar spine. Cabral CE, et al. **Skeletal Radiol** 1997 Aug;26(8):488–92 (24 ref.)

Sacral chordoma with unusual posterior radiographic presentation. Coombs RJ, et al. **Skeletal Radiol** 1996 Oct; 25(7):679–81

A system for surgical staging and management of spine tumors. A clinical outcome study of giant cell tumors of the spine. Hart RA, et al. **Spine** 1997 Aug 1;22(15):1773–82; discussion 1783

Multifocal giant cell tumors in the spine. A case report. Kos CB, et al. **Spine** 1997 Apr 1;22(7):821–2

[Osteoid osteoma] **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):578–80 **(Ger)**

RADIONUCLIDE IMAGING

Primary malignant lymphoma of the spine diagnosed by Tc-99m MDP and Ga-67 imaging. Young TH, et al. **Clin Nucl Med** 1997 Apr;22(4):274–6

RADIOTHERAPY

Case report: acute segmental radiation nephritis on bone scintigraphy. Flanagan FL, et al. **Br J Radiol** 1996 Dec; 69(828):1175–7

Fast neutron therapy for inoperable or recurrent sacrococcygeal chordomas. Breteau N, et al. **Bull Cancer Radiother** 1996;83 Suppl:142s–5s (19 ref.)

Radiation induced malignant schwannoma arising in a neurofibroma. Isler MH, et al. **Clin Orthop** 1996 Apr; (325):251–5

Short-course radiotherapy (8 Gy x 2) in metastatic spinal cord compression: an effective and feasible treatment. Maranzano E, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 15;38(5):1037–44

Post-operative radiotherapy for recurrent dermoid cysts of the spine: a report of 3 cases. Bristow RG, et al. **J Neurooncol** 1997 Jul;33(3):251–6

Osteoblastoma response to radiotherapy and chemotherapy. Berberoglu S, et al. **Med Pediatr Oncol** 1997 Apr; 28(4):305–9

Radiotherapy in the treatment of symptomatic vertebral hemangiomas: technical case report. Bremnes RM, et al. **Neurosurgery** 1996 Nov;39(5):1054–8 (37 ref.)

Dedifferentiated chordoma arising in irradiated sacral chordoma. Ikeda H, et al. **Radiat Med** 1997 Mar-Apr; 15(2):109–11

Chordoma: long-term follow-up after radical photon irradiation. Catton C, et al. **Radiother Oncol** 1996 Oct; 41(1):67–72

Chordoma of the spine above the sacrum. Treatment and outcome in 21 cases. Boriani S, et al. **Spine** 1996 Jul 1; 21(13):1569–77

Primary spinal epidural non-Hodgkin's lymphomas: a clinical study. Salvati M, et al. **Surg Neurol** 1996 Oct;46(4):339–43; discussion 343–4

Radionuclide therapy for prostate cancer lumbar metastasis prolongs symptom-free survival in a rat model. Geldof AA, et al. **Urology** 1997 May;49(5):795–801

[Radiotherapy of spinal metastases in breast cancer. Apropos of a series of 108 patients] Prié L, et al. **Cancer Radiother** 1997;1(3):234–9 (30 ref.) (Eng. Abstr.) **(Fre)**

[The efficacy of radiotherapy in vertebral hemangiomas] Winkler C, et al. **Strahlenther Onkol** 1996 Dec; 172(12):681–4 (Eng. Abstr.) **(Ger)**

SECONDARY

Metastasis in meningioma. Enam SA, et al. **Acta Neurochir (Wien)** 1996;138(10):1172–7; discussion 1177–8

Clinical outcome in metastatic spinal cord compression. A prospective study of 153 patients. Helweg-Larsen S. **Acta Neurol Scand** 1996 Oct;94(4):269–75

Metastatic lesion of the cervical spine secondary to an extraocular sebaceous carcinoma. Antuña SA, et al. **Acta Orthop Belg** 1996 Dec;62(4):229–32

Surgical palliation of symptomatic spinal metastases. Olerud C, et al. **Acta Orthop Scand** 1996 Oct;67(5):513–22

Frequency of unexpected multifocal metastasis in patients with acute spinal cord compression. Evaluation by low-field MR imaging in cancer patients. Heldmann U, et al. **Acta Radiol** 1997 May;38(3):372–5

Acute renal failure in a patient receiving treatment with suramin. Smith A, et al. **Am J Clin Oncol** 1997 Aug; 20(4):433–4

Models for cancer skeletal metastasis: a reappraisal of Batson's plexus. Geldof AA. **Anticancer Res** 1997 May-Jun; 17(3A):1535–9 (45 ref.)

Use of preoperative vascular embolisation in spinal metastasis resection. Hess T, et al. **Arch Orthop Trauma Surg** 1997; 116(5):279–82

Role of surgical treatment in 70 patients with vertebral metastasis causing cord or root compression. Turgut M, et al. **Arch Orthop Trauma Surg** 1997;116(6-7):415–9

Case report: acute segmental radiation nephritis on bone scintigraphy. Flanagan FL, et al. **Br J Radiol** 1996 Dec; 69(828):1175–7

Case report: malignant mesothelioma of tunica vaginalis testis presenting with spinal metastasis--report of two cases. Mathew BS, et al. **Br J Radiol** 1996 Nov;69(827):1067–8

Spinal metastases as a first presentation of malignant astrocytoma. Dubé M, et al. **Can Assoc Radiol J** 1996 Oct; 47(5):370–3

The management of spinal metastasis in children. Sinha AK, et al. **Can J Surg** 1997 Jun;40(3):218–26

Low-back pain and a vertebral lesion. Mitjavila M, et al. **Clin Nucl Med** 1996 Apr;21(4):321

Metastatic disease to the thoracic spine. Simultaneous In-III WBC and bone scan findings after radiation therapy. Moser AS, et al. **Clin Nucl Med** 1997 May;22(5):333–4

Spine surgery for cancer. Gokaslan ZL. **Curr Opin Oncol** 1996 May;8(3):178–81 (19 ref.)

Sclerosis of lytic metastatic bone lesions during treatment with pamidronate in a patient with adenocarcinoma of unknown primary site. Tanaka M, et al. **Eur Spine J** 1996; 5(3):198–200

Carcinoma gallbladder presenting with skeletal metastases. Misra S, et al. **Indian J Gastroenterol** 1997 Apr;16(2):74

Short-course radiotherapy (8 Gy x 2) in metastatic spinal cord compression: an effective and feasible treatment. Maranzano E, et al. **Int J Radiat Oncol Biol Phys** 1997

Jul 15;38(5):1037–44

Posterior decompression and stabilization for spinal metastases. Analysis of sixty-seven consecutive patients. Bauer HC. **J Bone Joint Surg Am** 1997 Apr;79(4):514–22

Increased phantom limb pain as an initial symptom of spinal-neoplasia [published erratum appears in J Pain Symptom Manage 1997 Sep;14(3):135] Chang VT, et al. **J Pain Symptom Manage** 1997 Jun;13(6):362–4 (18 ref.)

Metastases to the upper cervical spine. Nakamura M, et al. **J Spinal Disord** 1996 Jun;9(3):195–201

Spinal epidural metastasis as the initial manifestation of malignancy: clinical features and diagnostic approach. Schiff D, et al. **Neurology** 1997 Aug;49(2):452–6

Spinal metastases of cerebral glioma. Case report. Koch D. **Neurosurg Rev** 1996;19(3):201–3

Surgical indications and prognosis in spinal metastases. Nanassis K, et al. **Neurosurg Rev** 1997;20(2):99–103 (32 ref.)

Dorsal approach to presacral biopsy: technical case report. Rapport RL 2nd, et al. **Neurosurgery** 1997 May; 40(5):1087–8

Percutaneous vertebroplasty in patients with osteolytic metastases or multiple myeloma [see comments] Cortet B, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):177–83. Comment in: Rev Rhum Engl Ed 1997 Mar;64(3):145–6.

Local spread of metastatic vertebral tumors. A histologic study. Fujita T, et al. **Spine** 1997 Aug 15;22(16):1905–12

Risk factors and probability of vertebral body collapse in metastases of the thoracic and lumbar spine. Taneichi H, et al. **Spine** 1997 Feb 1;22(3):239–45

Survival rates of patients with metastatic spinal cancer after scintigraphic detection of abnormal radioactive accumulation. Tatsui H, et al. **Spine** 1996 Sep 15; 21(18):2143–8

Anatomic distribution of metastases in the vertebral body and modes of hematogenous spread. Yuh WT, et al. **Spine** 1996 Oct 1;21(19):2243–50

Radionuclide therapy for prostate cancer lumbar metastasis prolongs symptom-free survival in a rat model. Geldof AA, et al. **Urology** 1997 May;49(5):795–801

[Metastatic spine disease: surgical treatment by anterior corpectomy and Ziekel's VDS fixation] Chen LH, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):320–4 (Eng. Abstr.) **(Chi)**

[Treatment of bone metastases] Kantor G, et al. **Bull Cancer Radiother** 1996;83(4):275–6 **(Fre)**

[Radiotherapy of spinal metastases in breast cancer. Apropos of a series of 108 patients] Prié L, et al. **Cancer Radiother** 1997;1(3):234–9 (30 ref.) (Eng. Abstr.) **(Fre)**

[Unusual spinal and pulmonary metastases] Moreau E, et al. **Rev Mal Respir** 1996 Oct;13(5):523–5 (Eng. Abstr.) **(Fre)**

[Vertebral body metastases: characteristic MRI findings in epidural infiltration] Hutzelmann A, et al. **Aktuelle Radiol** 1997 Jul;7(4):169–72 (Eng. Abstr.) **(Ger)**

[Dens axis fracture, spinal pain and hematemesis] Rexroth G, et al. **Internist (Berl)** 1997 Feb;38(2):160–4 **(Ger)**

[Partial median sternotomy in resection of metastases of the upper thoracic spine] Prokop A, et al. **Unfallchirurg** 1996 Dec;99(12):986–8 (Eng. Abstr.) **(Ger)**

[Spinal stabilization in extradural metastatic disease. Indications and follow-up of 32 cases] Seiler H, et al. **Unfallchirurg** 1997 Apr;100(4):294–300 (Eng. Abstr.) **(Ger)**

[Fast spin echo imaging of vertebral metastasis: comparison of fat suppression techniques (FSE-CHESS, STIR-FSE) Scarabino T, et al. **Radiol Med (Torino)** 1996 Sep; 92(3):180–5 (Eng. Abstr.) **(Ita)**

[Surgery for bone metastasis of testicular tumor: a case report] Machida T, et al. **Hinyokika Kiyo** 1996 Jul; 42(7):539–41 (Eng. Abstr.) **(Jpn)**

[Diagnostic imaging of bone and soft tissue tumors] Saotome K. **Nippon Seikeigeka Gakkai Zasshi** 1996 Sep;70(9):559–72 (26 ref.) **(Jpn)**

[Tumoral collision: cancer metastases within a second neoplasm] Artazkoz del Toro JJ, et al. **An Otorrinolaringol Ibero Am** 1996;23(5):525–32 (Eng. Abstr.) **(Spa)**

SECRETION

Late relapse of metastatic teratoma invading a vertebral body: a combined surgical approach. Elkabir JJ, et al. **Br J Urol** 1997 Jun;79(6):999–1000

SURGERY

Surgical palliation of symptomatic spinal metastases. Olerud C, et al. **Acta Orthop Scand** 1996 Oct;67(5):513–22

Mesenchymal chondrosarcoma of the cervical spine in a child [published erratum appears in Am J Orthop 1997 May;26(5):334] Kruse R, et al. **Am J Orthop** 1997 Apr; 26(4):279–82

Use of preoperative vascular embolisation in spinal metastasis resection. Hess T, et al. **Arch Orthop Trauma Surg** 1997; 116(5):279–82

The results of surgery on primary malignant tumors of the spine. Takaishi H, et al. **Arch Orthop Trauma Surg** 1996; 115(1):49–52

Role of surgical treatment in 70 patients with vertebral metastasis causing cord or root compression. Turgut M, et al. **Arch Orthop Trauma Surg** 1997;116(6–7):415–9

Sacrococcygeal teratoma and anorectal malformation. Ng WT, et al. **Aust N Z J Surg** 1997 Apr;67(4):218–20 (28 ref.)

Giant sacral schwannoma: removal by an anterior, transabdominal approach. Acciarri N, et al. **Br J Neurosurg** 1996 Oct;10(5):489–92

Interactive image-guided surgery of the spine--use of the ISG/Elekta Viewing Wand to aid intraoperative localization of a sacral osteoblastoma. Patel N, et al. **Br J Neurosurg** 1997 Feb;11(1):60–4

Posterior interbody fusion after spinal tumour surgery [letter; comment] Sridhar K. **Br J Neurosurg** 1997 Feb;11(1):87. Comment on: Br J Neurosurg 1996 Apr;10(2):201–3.

Giant cell tumor of the vertebral column. Boriani S, et al. **Chir Organi Mov** 1996 Jul–Sep;81(3):233–45 **(Eng, Ita)**

Surgical treatment of spinal tumors. Bell GR. **Clin Orthop** 1997 Feb;(335):54–63 (31 ref.)

Spine surgery for cancer. Gokaslan ZL. **Curr Opin Oncol** 1996 May;8(3):178–81 (19 ref.)

Percutaneous extraction of vertebral osteoid osteoma under computed tomography guidance. Labbé JL, et al. **Eur Spine J** 1995;4(6):368–71

Results of surgical treatment of spinal thoracic and lumbar metastases. Önimus M, et al. **Eur Spine J** 1996;5(6):407–11

Posterior approach for radical excision of sacral chordoma. Waisman M, et al. **Int Orthop** 1997;21(3):181–4

Posterolateral approach for anterior resection and posterior stabilization of the upper cervical spine: a case report. Hart RA, et al. **Iowa Orthop J** 1996;16:157–60

Posterior decompression and stabilization for spinal metastases. Analysis of sixty-seven consecutive patients. Bauer HC. **J Bone Joint Surg Am** 1997 Apr;79(4):514–22

Osteosarcoma of the thoracolumbar spine: total en bloc spondylectomy. A case report. Kawahara N, et al. **J Bone Joint Surg Am** 1997 Mar;79(3):453–8

Single-stage posterior vertebrectomy and replacement combined with posterior instrumentation for spinal metastasis. Akeyson EW, et al. **J Neurosurg** 1996 Aug; 85(2):211–20 (52 ref.)

The surgical treatment of metastatic spinal tumors within the intradural extramedullary compartment [see comments] Chow TS, et al. **J Neurosurg** 1996 Aug;85(2):225–30 (46 ref.). Comment in: J Neurosurg 1997 Mar;86(3):576–7.

Tumoral calcinosis of the cervical spine in an infant. Case illustration. Mooney JF 3rd, et al. **J Neurosurg** 1997 Jan; 86(1):162

Intraosseous glomus tumor of the spine. Case report and review of the literature. Robinson JC, et al. **J Neurosurg** 1996 Aug;85(2):344–7 (20 ref.)

Massive sacrococcygeal teratoma using hypothermic perfusion with extracorporeal membrane oxygenation [letter; comment] Raffensperger JG. **J Pediatr Surg** 1996 Oct;31(10):1467. Comment on: J Pediatr Surg 1995 Nov;30(11):1557–9.

Metastases to the upper cervical spine. Nakamura M, et al. **J Spinal Disord** 1996 Jun;9(3):195–201

Surgical Treatment of sacrococcygeal chordoma. Ozaki T, et al. **J Surg Oncol** 1997 Apr;64(4):274–9

The role of intraoperative sonography in reducing invasiveness during surgery for spinal tumors. Maiuri F, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):8–12

Unilateral hemilaminectomy for the removal of the spinal space-occupying lesions. Sario-glu AC, et al. **Minim Invasive Neurosurg** 1997 Jun;40(2):74–7

Biomechanics of cervical spine surgery for tumor and degenerative diseases. Benzel EC. **Neurol Med Chir (Tokyo)** 1997 Aug;37(8):583–93 (44 ref.)

Thoracic dumbbell-shaped neurinoma treated by unilateral hemilaminectomy with partial costotransversectomy--case report. Takamura Y, et al. **Neurol Med Chir (Tokyo)** 1997 Apr;37(4):354–7

Vertebral haemangiomas with spinal cord compression: the place of preoperative percutaneous vertebroplasty with methyl methacrylate. Ide C, et al. **Neuroradiology** 1996 Aug;38(6):585–9

CNS involvement of Langerhans cell histiocytosis. Report of 23 surgically treated cases. Belen D, et al. **Neurosurg Rev** 1996;19(4):247–52

Primary hemangiopericytoma in the axis bone: case report and review of literature. Lin YJ, et al. **Neurosurgery** 1996 Aug;39(2):397–9; discussion 399–400 (32 ref.)

Frameless stereotactic guidance for surgery of the upper cervical spine. Welch WC, et al. **Neurosurgery** 1997 May; 40(5):958–63; discussion 963–4

Spontaneous regression of intraspinal neuroblastoma. Kullendorff CM, et al. **Pediatr Surg Int** 1997 Apr; 12(4):305–7

Strategy for the treatment of patients with spinal neoplasms. Kluger P, et al. **Spinal Cord** 1997 Jul;35(7):429–36

Primary tumors of the spine in children. Natural history, management, and long-term follow-up. Beer SJ, et al. **Spine** 1997 Mar 15;22(6):649–58; discussion 658–9

Chordoma of the spine above the sacrum. Treatment and outcome in 21 cases. Boriani S, et al. **Spine** 1996 Jul 1; 21(13):1569–77

A system for surgical staging and management of spine tumors. A clinical outcome study of giant cell tumors of the spine. Hart RA, et al. **Spine** 1997 Aug 1;22(15):1773–82; discussion 1783

A report on the safety of unilateral vertebral artery ligation during cervical spine surgery. Hoshino Y, et al. **Spine** 1996 Jun 15;21(12):1454–7

Cadaveric vascular anatomy for total en bloc spondylectomy in malignant vertebral tumors. Kawahara N, et al. **Spine** 1996 Jun 15;21(12):1401–7

Spinal column deformity and instability after lumbar or thoracolumbar laminectomy for intraspinal tumors in children and young adults. Papagelopoulos PJ, et al. **Spine** 1997 Feb 15;22(4):442–51

Total en bloc spondylectomy. A new surgical technique for primary malignant vertebral tumors. Tomita K, et al. **Spine** 1997 Feb 1;22(3):324–33

LINAC-based spinal stereotactic radiosurgery. Hamilton AJ, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):1–9

[Metastatic spine disease: surgical treatment by anterior corpectomy and Ziekel's VDS fixation] Chen LH, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):320–4 (Eng. Abstr.) **(Chi)**

[Surgical treatment of spinal tumors: a report of 30 cases] Shen J, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1995 Dec; 17(6):443–7 (Eng. Abstr.) **(Chi)**

[Giant sacral schwannoma with pelvic extension. Therapeutic strategy. Apropos of a case] Stecken J, et al. **Neurochirurgie** 1996;42(6):294–9 (16 ref.) (Eng. Abstr.) **(Fre)**

[Surgery for bone metastasis of testicular tumor: a case report] Machida T, et al. **Hinyokika Kiyo** 1996 Jul; 42(7):539–41 (Eng. Abstr.) **(Jpn)**

[Surgical approach for cervical dumbbell type neurinoma: posterior approach by partial hemilaminectomy with preservation of a facet joint] Uede T, et al. **No Shinkei Geka** 1996 Jul;24(7):675–9 (Eng. Abstr.) **(Jpn)**

THERAPY

Preoperative endovascular embolization of craniospinal hemangioblastomas. Eskridge JM, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):525–31

Preoperative embolization of cervical spine tumors. Vetter SC, et al. **Cardiovasc Intervent Radiol** 1997 Sep–Oct; 20(5):343–7

Ewing's tumor of the spine: report on seven cases including one with a 10-year follow-up. Villas C, et al. **Eur Spine J** 1996;5(6):412–7

Preoperative embolization of spinal tumors. Breslau J, et al. **J Vasc Interv Radiol** 1995 Nov–Dec;6(6):871–5

Preoperative transarterial embolization of spinal column neoplasms. Smith TP, et al. **J Vasc Interv Radiol** 1995 Nov–Dec;6(6):863–9

Extracranial non-testicular teratoma in childhood and adolescence: introduction of a risk score for stratification of therapy. Göbel U, et al. **Klin Padiatr** 1997 Jul–Aug; 209(4):228–34

Asymptomatic cervical haemangioma treated by percutaneous vertebroplasty. Dousset V, et al. **Neuroradiology** 1996 May;38(4):392–4

Acrylic vertebroplasty in symptomatic cervical vertebral haemangiomas: report of 2 cases. Feydy A, et al. **Neuroradiology** 1996 May;38(4):389–91

Successful treatment of spinal osteosarcoma with radiation and chemotherapy. Hershey A, et al. **Orthopedics** 1996 Jul; 19(7):617–8 (7 ref.)

[Clinico-diagnostic aspects and therapeutic considerations of the combined surgical and radiotherapeutic approach in 2 cases of sacrococcygeal chordoma: our experience] Zoppi S, et al. **G Chir** 1997 Mar;18(3):107–10 (Eng. Abstr.) **(Ita)**

ULTRASONOGRAPHY

Color Doppler aided prenatal diagnosis of a type 1 cystic sacrococcygeal teratoma simulating a meningomyelocele. Sherer DM, et al. **Am J Perinatol** 1997 Jan;14(1):13–5

The role of intraoperative sonography in reducing invasiveness during surgery for spinal tumors. Maiuri F, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):8–12

[Prenatal diagnosis of an intraspinal lipoma. A case report] Chatelet-Cheront C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(1):85–9 (Eng. Abstr.) **(Fre)**

VETERINARY

Spinal tumors in 37 dogs: clinical outcome and long-term survival (1987–1994). Levy MS, et al. **J Am Anim Hosp Assoc** 1997 Jul–Aug;33(4):307–12

Nonlymphoid vertebral canal tumors in cats: 11 cases (1987–1995). Levy MS, et al. **J Am Vet Med Assoc** 1997 Mar 1;210(5):663–4

Dermoid sinus in a crossbred Rhodesian ridgeback dog involving the second cervical vertebra. Lambrechts N. **J S Afr Vet Assoc** 1996 Sep;67(3):155–7

What is your diagnosis? Ferguson JF. **J Small Anim Pract** 1996 Aug;37(8):391, 402–3

Paroseal osteosarcoma of the cervical vertebra in a dog. Thomas WB, et al. **Vet Radiol Ultrasound** 1997 Mar–Apr; 38(2):120–3

SPINAL NERVE ROOTS

see related
POLYRADICULITIS
RADICULITIS
RHIZOTOMY

Vertebral artery loop causing cervical compression [letter]

Yousry TA, et al. **AJNR Am J Neuroradiol** 1996 Oct; 17(9):1800–1

Role of surgical treatment in 70 patients with vertebral metastasis causing cord or root compression. Turgut M, et al. **Arch Orthop Trauma Surg** 1997;116(6–7):415–9

Coiling of the vertebral artery presenting with neuralgic pain. Maiuri F, et al. **Clin Neurol Neurosurg** 1997 Feb;99(1):56–9

The importance of paraspinal muscle EMG in cervical and lumbosacral radiculopathy: review of 100 cases. Czyrny JJ, et al. **Electromyogr Clin Neurophysiol** 1996 Dec; 36(8):503–8

Polyradiculoneuropathy in boy with pituitary dwarfism treated with recombinant growth hormone. Sakurai T, et al. **Endocr J** 1996 Oct;43 Suppl:S127–8

Cervical radiculopathy: pain, muscle weakness and sensory loss in patients with cervical radiculopathy treated with surgery, physiotherapy or cervical collar. A prospective, controlled study. Persson LC, et al. **Eur Spine J** 1997; 6(4):256–66

A novel paraspinal surgical approach for lumbar lateral extraforaminal root entrapment. Pointillart V, et al. **Eur Spine J** 1997;6(2):102–5

Cervical root entrapment. An HS. **Hand Clin** 1996 Nov; 12(4):719–30 (27 ref.)

Cervical spondylotic radiculopathy involving two adjacent nerve roots. Anterior decompression through a single level intervertebral approach. Iwasaki M, et al. **Int Orthop** 1996; 20(3):137–41

Lumbosacral radiculopathy and hemophilia. Bhatia B, et al. **J Assoc Physicians India** 1996 Aug;44(8):561–2

Immunological investigation of chronic inflammatory demyelinating polyradiculoneuropathy. Meléndez-Vásquez C, et al. **J Neuroimmunol** 1997 Mar;73(1–2):124–34

An in vivo analysis of the dimensional changes of the neuroforamen after anterior cervical diskectomy and fusion: a radiologic investigation. Albert TJ, et al. **J Spinal Disord** 1997 Jun;10(3):229–33

Selective detrusor activation by electrical sacral nerve root stimulation in spinal cord injury [see comments] Rijkhoff NJ, et al. **J Urol** 1997 Apr;157(4):1504–8. Comment in: J Urol 1997 Apr;157(4):1196.

This month in investigative urology. Commentary on selective detrusor activation by electrical sacral nerve root stimulation in spinal cord injury [comment] Tanagho EA. **J Urol** 1997 Apr;157(4):1196. Comment on: J Urol 1997 Apr;157(4):1504–8.

The diagnosis and treatment of cervical radiculopathy. Malanga GA. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S236–45 (88 ref.)

Foot dystonia and lumbar canal stenosis. Blunt SB, et al. **Mov Disord** 1996 Nov;11(6):723–5

Neurogenic muscle hypertrophy [letter; comment] Hawley RJ. **Muscle Nerve** 1997 Mar;20(3):390–1. Comment on: Muscle Nerve 1996 Jul;19(7):811–8.

Dermatomal/segmental somatosensory evoked potential evaluation of L5/S1 radiculopathies [letter; comment] Scelsa SN. **Muscle Nerve** 1996 Nov;19(11):1505–7. Comment on: Muscle Nerve 1996 Apr;19(4):442–9.

Cervical radiculopathies [letter; comment] Cuetter A. **Neurology** 1997 Jan;48(1):295. Comment on: Neurology 1996 Apr;46(4):1022–5.

Cervical radiculopathies: comparison of surgical and EMG localization of single-root lesions [see comments] Levin KH, et al. **Neurology** 1996 Apr;46(4):1022–5. Comment in: Neurology 1997 Jan;48(1):295.

Lumbar cerebrospinal fluid drainage for symptomatic sacral nerve root cysts: an adjuvant diagnostic procedure and/or alternative treatment? Technical case report. Bartels RH, et al. **Neurosurgery** 1997 Apr;40(4):861–4; discussion 864–5

Third cervical nerve root and ganglion compression: clinical syndrome, surgical anatomy, and pathological findings. Poletti CE. **Neurosurgery** 1996 Nov;39(5):941–8; discussion 948–9 (63 ref.)

Lymphoma of the lumbar nerve root: case report. Viswanathan R, et al. **Neurosurgery** 1997 Aug;41(2):479–81; discussion 481–2

Psammomatous melanotic schwannoma of a spinal nerve root. Relationship with the Carney complex. Léger F, et al. **Pathol Res Pract** 1996 Nov;192(11):1142–6; discussion 1147

Recent data on the pathophysiology of nerve root compression and pain. Boulu P, et al. **Rev Rhum Engl Ed** 1996 May;63(5):358–63 (33 ref.)

Adult-onset Klippel-Feil syndrome with inaugural neurologic symptoms: two case reports. Guggenbuhl P, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):802–4

Expansive laminoplasty for cervical radiculomyelopathy due to soft disc herniation. Iwasaki M, et al. **Spine** 1996 Jan 1;21(1):32–8

The natural history of herniated nucleus pulposus with radiculopathy. Komori H, et al. **Spine** 1996 Jan 15; 21(2):225–9

Giant intrasacral schwannoma forming a presacral mass: a report of an unusual cause of lumbosacral radiculopathy. Turgut M, et al. **Zentralbl Neurochir** 1996;57(4):201–5 (19 ref.)

[Incarceration of spinal nerve roots] Møller CM, et al. **Ugeskr Laeger** 1997 Feb 17;159(8):1098–9 (Eng. Abstr.) **(Dan)**

[Consensus on diagnosis and treatment of the lumbosacral radicular syndrome. Dutch Society for Neurology] Stam J. **Ned Tijdschr Geneeskd** 1996 Dec 28;140(52):2621–7 (31 ref.) (Eng. Abstr.) **(Dut)**

[Juxta-facet cysts as space-occupying intraspinal processes] Antoniadis G, et al. **Nervenarzt** 1997 Jun;68(6):515–20 (Eng. Abstr.) **(Ger)**

[Cyst of the ligamentum flavum of the lumbar spine: description of 6 cases] Bloch J, et al. **Schweiz Med Wochenschr** 1997 Apr 26;127(17):728–32 (Eng. Abstr.) **(Ger)**

[What is your diagnosis? Recklinghausen's neurofibromatosis with left-sided C2 spinal root neurinoma with spinal cord compression] Haegeli L, et al. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1343–5 **(Ger)**

[Acute lumbar disk displacement with nerve root compression. Indications for peridural steroid injection] Schlumpf U, et al. **Schweiz Rundsch Med Prax** 1997 Feb 18;86(8):292–5 (29 ref.) (Eng. Abstr.) **(Ger)**

[Variety in radicular symptoms and signs at the lumbosacral region] Hasue M. **Nippon Seikeigeka Gakkai Zasshi** 1996 Jan;70(1):1–6 (28 ref.) **(Jpn)**

[A case of myeloradiculoneuropathy associated with persistent high titers of anti-GM1 and anti-GD1b antibodies] Niwa K, et al. **Rinsho Shinkeigaku** 1997 Jan; 37(1):26–30 (Eng. Abstr.) **(Jpn)**

[The epidural administration of steroids and local anesthetics as the basis for the pathogenetic therapy of a radicular pain syndrome in the stages of its development] Gnezdilov AV, et al. **Anesteziol Reanimatol** 1996 May-Jun;(3):28–32 (Eng. Abstr.) **(Rus)**

[The mechanisms of pain in root compression] Karlov VA. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(3):4–6 (Eng. Abstr.) **(Rus)**

[Neuropathy of the superior cutaneous nerve of the ischium] Popelianskii IaIu. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996; 96(4):99–100 **(Rus)**

[Surgical treatment of compressive lumbar radiculopathy] Cigić T, et al. **Med Pregl** 1996;49(9–10):389–93 (Eng. Abstr.) **(Scr)**

ABNORMALITIES

An anomaly in the nerve supply of the trapezius muscle. Stacey RJ, et al. **Clin Anat** 1996;9(6):414–6

Presurgical identification of extradural nerve root anomalies by coronal fat-suppressed magnetic resonance imaging: a report of six cases and a review of the literature. Aota Y, et al. **J Spinal Disord** 1997 Apr;10(2):167–75 (19 ref.)

Anomalies and malformations of lumbar spinal nerve roots. Prestar FJ. **Minim Invasive Neurosurg** 1996 Dec; 39(4):133–7

ANATOMY & HISTOLOGY

Anatomy of the posterolateral disc region. Jaskwhich D, et al. **Am J Orthop** 1996 Sep;25(9):628–30

Neurological and osteological definitions of cervical vertebrae in mammals. Giffin EB, et al. **Brain Behav Evol** 1996;47(4):214–8

Surface localization of sacral foramina for neuromodulation of bladder function. An anatomical study. Hasan ST, et al. **Eur Urol** 1996;29(1):90–8

Surgical anatomy of the anterior cervical spine: the disc space, vertebral artery, and associated bony structures [see comments] Pait TG, et al. **Neurosurgery** 1996 Oct; 39(4):769–76. Comment in: Neurosurgery 1997 Jul;41(1):325.

The quantitative anatomy of the cervical nerve root groove and the intervertebral foramen. Ebraheim NA, et al. **Spine** 1996 Jul 15;21(14):1619–23

Anatomic relations of the thoracic pedicle to the adjacent neural structures. Ebraheim NA, et al. **Spine** 1997 Jul 15; 22(14):1553–6; discussion 1557

BLOOD SUPPLY

Lumbosacral radiculitis (Elsberg's syndrome) with isolated angiitis of the central nervous system [letter] Börnke C, et al. **J Neurol** 1996 Sep;243(9):662–4

Postmyelographic computerized tomographic scan in the differential diagnosis of radiculomeningeal arteriovenous malformation: technical note. Kohno M, et al. **Surg Neurol** 1997 Jan;47(1):68–71

CYTOLOGY

Populations of myelinated nerve fibers in the C8 and L4 ventral and dorsal roots in the opossum, Monodelphis domestica. Leblond H, et al. **Acta Anat (Basel)** 1996; 155(3):194–9

Monosialoganglioside (GM1) immunofluorescence in rat spinal roots studied with a monoclonal antibody. Molander M, et al. **J Neurocytol** 1997 Feb;26(2):101–11

Central changes in primary afferent fibers following peripheral nerve lesions. Coggeshall RE, et al. **Neuroscience** 1997 Apr;77(4):1115–22

DRUG EFFECTS

Transient radicular irritation after spinal anaesthesia [letter; comment] Van Elstraete AC, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):864–5. Comment on: Acta Anaesthesiol Scand 1995 Oct;39(7):881–4.

A stereological study of dorsal root ganglion cells and nerve root fibers from rats treated with inorganic mercury. Schiønning JD, et al. **Acta Neuropathol (Berl)** 1997 Sep; 94(3):280–6

Transient radicular irritation: a misnomer? [letter; comment] Hartrick CT. **Anesth Analg** 1997 Jun;84(6):1392–3. Comment on: Anesth Analg 1996 Nov;83(5):1051–4.

A comparison of the local anesthetic effects of meperidine, fentanyl, and sufentanil on dorsal root axons. Jaffe RA, et al. **Anesth Analg** 1996 Oct;83(4):776–81

Transient radicular irritation after spinal anesthesia with hyperbaric 4% mepivacaine. Lynch J, et al. **Anesth Analg** 1997 Oct;85(4):872–3

Bupivacaine preferentially blocks ventral root axons in rats. Dietz FB, et al. **Anesthesiology** 1997 Jan;86(1):172–80

Pregnancy does not increase susceptibility to bupivacaine in spinal root axons. Dietz FB, et al. **Anesthesiology** 1997 Sep; 87(3):610–6

Depression of glutamatergic transmission by nociceptin in the neonatal rat hemisected spinal cord preparation in vitro. Faber ES, et al. **Br J Pharmacol** 1996 Sep;119(2):189–90

The action of prostaglandin E2 and triamcinolone acetonide on the firing activity of lumbar nerve roots. Muramoto T, et al. **Int Orthop** 1997;21(3):172–5

Bilateral radicular pain after epidural lidocaine [letter] Wong CA, et al. **Reg Anesth** 1996 Nov-Dec;21(6):600–1

Effects of phospholipase A2 on lumbar nerve root structure and function. Chen C, et al. **Spine** 1997 May 15; 22(10):1057–64

[Neurotoxicity of 5% hyperbaric lidocaine in subarachnoid anesthesia? (editorial)] de Andrés JA. **Rev Esp Anestesiol Reanim** 1996 Nov;43(9):303–4 **(Spa)**

INJURIES

Intra-operative electrophysiological diagnosis of spinal root avulsion during surgical repair of brachial plexus stretch injuries. Oberle J, et al. **Acta Neurochir (Wien)** 1997; 139(3):238–9

Detection of nerve rootlet avulsion on CT myelography in patients with birth palsy and brachial plexus injury after trauma. Walker AT, et al. **AJR Am J Roentgenol** 1996 Nov; 167(5):1283–7

Synergistic antinociceptive interactions of morphine and clonidine in rats with nerve-ligation injury. Ossipov MH, et al. **Anesthesiology** 1997 Jan;86(1):196–204

The effects of remaining axons on motoneuron survival and NOS expression following axotomy in the adult rat. Gu Y, et al. **Dev Neurosci** 1997;19(3):255–9

Distal, "Tinel-like" percussion paresthesiae, with proximal nerve lesions. Jabre JF. **Electromyogr Clin Neurophysiol** 1996 Apr-May;36(3):175–8 (16 ref.)

Mechanical and biochemical injury of spinal nerve roots: a morphological and neurophysiological study. Cornefjord M, et al. **Eur Spine J** 1996;5(3):187–92

BDNF prevents and reverses adult rat motor neuron degeneration and induces axonal outgrowth. Kishino A, et al. **Exp Neurol** 1997 Apr;144(2):273–86

Nerve fibre regeneration across the peripheral-central transitional zone. Carlstedt T. **J Anat** 1997 Jan;190 (Pt 1):51–6 (40 ref.)

Traction injuries of the brachial plexus: signal intensity changes of the posterior cervical paraspinal muscles on MRI. Uetani M, et al. **J Comput Assist Tomogr** 1997 Sep-Oct;21(5):790–5

Restoration of sensibility in the hand after complete brachial plexus injury. Ihara K, et al. **J Hand Surg [Am]** 1996 May; 21(3):381–6

Diagnosis of root avulsions in traumatic brachial plexus injuries: value of computerized tomography myelography and magnetic resonance imaging [see comments] Carvalho GA, et al. **J Neurosurg** 1997 Jan;86(1):69–76. Comment in: J Neurosurg 1997 Sep;87(3):483–4.

Diagnosis of root avulsions [letter; comment] Kline DG, et al. **J Neurosurg** 1997 Sep;87(3):483–4. Comment on: J Neurosurg 1997 Jan;86(1):69–76.

Evaluation with evoked and spontaneous electromyography during lumbar instrumentation: a prospective study. Welch WC, et al. **J Neurosurg** 1997 Sep;87(3):397–402

Accuracy of pedicle screw placement with the assistance of lateral plain radiography. Odgers CJ 4th, et al. **J Spinal Disord** 1996 Aug;9(4):334–8

Magnetic nerve root stimulation in two types of brachial plexus injury: segmental demyelination and axonal degeneration. Oge AE, et al. **Muscle Nerve** 1997 Jul; 20(7):823–32

An unusual presentation of acute lumbar nerve root pain. A case report. Carr CS, et al. **Spine** 1996 Oct 15; 21(20):2387–9

Zone III fractures of the sacrum. A case report. Ebraheim NA, et al. **Spine** 1996 Oct 15;21(20):2390–6

Risk of manipulative cervical treatment [letter] Padua L, et al. **Spine** 1997 Jul 15;22(14):1676–7

Extradural tethering effect as one mechanism of radiculopathy complicating posterior decompression of the cervical spinal cord [see comments] Tsuzuki N, et al. **Spine** 1996 Jan 15;21(2):203–11 (14 ref.). Comment in: Spine 1996 Aug 1;21(15):1839–40.

[Pain management after post-traumatic brachial plexus lesions. Conservative and surgical therapy possibilities] Carvalho GA, et al. **Orthopade** 1997 Jul;26(7):621–5 (30 ref.) (Eng. Abstr.) **(Ger)**

[Nerve transfer (neurotization) for functional reconstruction of arm functions in cervical root avulsions] Nikkhah G, et al. **Orthopade** 1997 Jul;26(7):606–11 (21 ref.) (Eng.

Abstr.) **(Ger)**

[Significance of MRI diagnosis for imaging traumatically-induced cervical root avulsions. Case report] Muth CP, et al. **Rontgenpraxis** 1996 Nov;49(11):283-5 **(Ger)**

METABOLISM

Redistribution of axoplasm in the motor root in experimental diabetes. Bömers K, et al. **Acta Neuropathol (Berl)** 1996 Jul;92(1):98-101

Intracellular calcium transients mediated by P2 receptors in the paranodal Schwann cell region of myelinated rat spinal root axons. Mayer C, et al. **Neurosci Lett** 1997 Mar 7; 224(1):49-52

PATHOLOGY

Redistribution of axoplasm in the motor root in experimental diabetes. Bömers K, et al. **Acta Neuropathol (Berl)** 1996 Jul;92(1):98-101

Neuropathology and blood flow of nerve, spinal roots and dorsal root ganglia in longstanding diabetic rats. Sasaki H, et al. **Acta Neuropathol (Berl)** 1997 Feb;93(2):118-28

Lumbosacral nerve root enhancement with disk herniation on contrast-enhanced MR. Itoh R, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1619-25

MR screening for brain stem compression in hypertension [see comments] Watters MR, et al. **AJNR Am J Neuroradiol** 1996 Feb;17(2):217-21. Comment in: AJNR Am J Neuroradiol 1997 Apr;18(4):788-9; discussion 789-90.

Three-dimensional MR myelography of the lumbar spine: comparative case study to X-ray myelography. Eberhardt KE, et al. **Eur Radiol** 1997;7(5):737-42

Massive nerve root hypertrophy in chronic inflammatory demyelinating polyradiculoneuropathy. Kitakule MM, et al. **J Assoc Acad Minor Phys** 1997;8(3):55-7

Dissection of the vertebral artery with cervical nerve root lesions. Hetzel A, et al. **J Neurol** 1996 Feb;243(2):121-5

Diagnosis of root avulsions [letter; comment] Kline DG, et al. **J Neurosurg** 1997 Sep;87(3):483-4. Comment on: J Neurosurg 1997 Jan;86(1):69-76.

Electromyographic and lower extremity short time to inversion recovery magnetic resonance imaging findings in lumbar radiculopathy. Carter GT, et al. **Muscle Nerve** 1997 Sep;20(9):1191-3

Nerve root hypertrophy as the cause of lumbar stenosis in chronic inflammatory demyelinating polyradiculoneuropathy. Goldstein JM, et al. **Muscle Nerve** 1996 Jul;19(7):892-6

Prospective evaluation of MRI lumbosacral nerve root enhancement in acute Guillain-Barré syndrome [see comments] Gorson KC, et al. **Neurology** 1996 Sep; 47(3):813-7. Comment in: Neurology 1997 May;48(5):1477.

MRI of enlarged dorsal ganglia, lumbar nerve roots, and cranial nerves in polyradiculoneuropathies. Castillo M, et al. **Neuroradiology** 1996 Aug;38(6):516-20

Optimising the image of the intradural nerve root: the value of MR radiculography. Hofman PA, et al. **Neuroradiology** 1996 Oct;38(7):654-7

Magnetic resonance neurography for cervical radiculopathy: a preliminary report. Dailey AT, et al. **Neurosurgery** 1996 Mar;38(3):488-92 discussion 492

Myeloradicular features as the initial presentation of sarcomas of childhood. Geller TJ, et al. **Pediatr Neurol** 1996 May; 14(4):297-300

MR imaging in Guillain-Barré syndrome. Iwata F, et al. **Pediatr Radiol** 1997 Jan;27(1):36-8

A model for chronic nerve root compression studies. Presentation of a porcine model for controlled, slow-onset compression with analyses of anatomic aspects, compression onset rate, and morphologic and neurophysiologic effects. Cornefjord M, et al. **Spine** 1997 May 1;22(9):946-57

Neurophysiologic tests in diagnosis of nerve root compression caused by disc herniation. Dvořák J. **Spine** 1996 Dec 15;21(24 Suppl):39S-44S (33 ref.)

Incision of the anulus fibrosus induces nerve root morphologic, vascular, and functional changes. An experimental study. Kayama S, et al. **Spine** 1996 Nov 15; 21(22):2539-43

Nonoperative management of herniated cervical intervertebral disc with radiculopathy. Saal JS, et al. **Spine** 1996 Aug 15;21(16):1877-83

Clinical analysis of two-level compression of the cauda equina and the nerve roots in lumbar spinal canal stenosis. Sato K, et al. **Spine** 1997 Aug 15;22(16):1898-903; discussion 1904

Histologic analysis of the lumbosacral nerve roots after compression in young and aged rabbits. Toh E, et al. **Spine** 1997 Apr 1;22(7):721-6

[Inflammatory diseases of the spinal cord and spinal nerve roots in the MRI] Sartoretti-Schefer S, et al. **Radiologe** 1996 Nov;36(11):897-913 (159 ref.) (Eng. Abstr.) **(Ger)**

[Lumbar MR myelography in the prone position: evaluation of nerve root sleeve delineation] Shiono T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Mar; 56(4):215-6 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study of the Guillain-Barré syndrome--fifteen Japanese postmortem cases] Sobue G. **Rinsho Shinkeigaku** 1995 Dec;35(12):1362-4 (Eng. Abstr.) **(Jpn)**

[The morphological validation of the pathogenetic prerequisites for analgesic operations in the area of the foramina of the posterior roots] Dreval' ON, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1996 Oct-Dec; (4):22-5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cutaneous vasodilation during dorsal column stimulation is mediated by dorsal roots and CGRP. Croom JE, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H950-7

Roots of the lateral cord of the brachial plexus in man. Urbanowicz Z. **Ann Univ Mariae Curie Sklodowska [Med]** 1995;50:13-8

Lumbar root stimulation for restoring leg function: stimulator and measurement of muscle actions. Donaldson ND, et al. **Artif Organs** 1997 Mar;21(3):247-9

Selective detrusor activation by electrical stimulation of the human sacral nerve roots. Rijkhoff NJ, et al. **Artif Organs** 1997 Mar;21(3):223-6

Lumbar root stimulation for restoring leg function: results in paraplegia. Rushton DN, et al. **Artif Organs** 1997 Mar; 21(3):180-2

Depression of glutamatergic transmission by nociceptin in the neonatal rat hemisected spinal cord preparation in vitro. Faber ES, et al. **Br J Pharmacol** 1996 Sep;119(2):189-90

Neurostimulation for bladder evacuation: is sacral root stimulation a substitute for microstimulation? Probst M, et al. **Br J Urol** 1997 Apr;79(4):554-66

NMDA receptor-independent mechanisms responsible for the rate of rise of cumulative depolarization evoked by trains of dorsal root stimuli on rat spinal motoneurones. Baranauskas G, et al. **Brain Res** 1996 Nov 4;738(2):329-32

Neonatal paralysis of the rat soleus muscle selectively affects motoneurones from more caudal segments of the spinal cord. Greensmith L, et al. **Brain Res Dev Brain Res** 1997 Feb 20;98(2):281-6

Innervation and anesthesia of the antler pedicle in wapiti and fallow deer. Woodbury MR, et al. **Can Vet J** 1996 Aug;37(8):486-9

The effects of neonatal dorsal root section on the survival and dendritic development of lumbar motoneurons in the rat. O'Hanlon GM, et al. **Eur J Neurosci** 1996 Jun; 8(6):1072-7

Removal of retrogradely transported material from rat lumbosacral alpha-motor axons by paranodal axon-Schwann cell networks. Gatzinsky KP, et al. **Glia** 1997 Jun;20(2):115-26

How lesioning the nucleus praeeminentialis affects electrolocation behavior in the weakly electric fish, Apteronotus leptorhynchus. Green RL. **J Comp Physiol [A]** 1996 Sep;179(3):353-61

Functional motor innervation of brachial plexus roots. An intraoperative electrophysiological study. Gu YD. **J Hand Surg [Br]** 1997 Apr;22(2):258-60

Dorsal root reflexes in articular afferents occur bilaterally in a chronic model of arthritis in rats. Rees H, et al. **J Neurophysiol** 1996 Dec;76(6):4190-3

Effects of local oscillator frequency on intersegmental coordination in the lamprey locomotor CPG: theory and experiment. Sigvardt KA, et al. **J Neurophysiol** 1996 Dec; 76(6):4094-103

Effects of kappa opioid receptor-selective agonists on responses of pelvic nerve afferents to noxious colorectal distension. Su X, et al. **J Neurophysiol** 1997 Aug; 78(2):1003-12

Five sources of a dorsal root potential: their interactions and origins in the superficial dorsal horn. Wall PD, et al. **J Neurophysiol** 1997 Aug;78(2):860-71

Lack of specificity in electrophysiological identification of lower sacral roots during selective dorsal rhizotomy. Ojemann JG, et al. **J Neurosurg** 1997 Jan;86(1):28-33

Developmental changes in innervation of rat extensor digitorum longus muscle. Cuppini R, et al. **Mech Ageing Dev** 1996 Dec 20;92(2-3):211-25

Reinnervation of denervated hindlimb muscles by axons of grafted motoneurons via the reimplanted L4 ventral root. Nógrádi A, et al. **Neurobiology (Bp)** 1996;4(3):231-2

Primary afferent-evoked synaptic plasticity in deep dorsal horn neurons from neonatal rat spinal cord in vitro. Garraway SM, et al. **Neurosci Lett** 1997 Jul 11;230(1):61-4

Synchronous inherent oscillations of potentials within the rat lumbar spinal cord. Lidierth M, et al. **Neurosci Lett** 1996 Dec 6;220(1):25-8

The effect of GABA and 5-HT receptor antagonists on rat dorsal root potentials. Thompson SW, et al. **Neurosci Lett** 1996 Oct 18;217(2-3):153-6

Morphometric data of canine sacral nerve roots with reference to electrical sacral root stimulation. Rijkhoff NJ, et al. **Neurourol Urodyn** 1996;15(3):235-48

Intraoperative electroneurodiagnostics (transcranial electrical motor evoked potentials) to evaluate the functional status of anterior spinal roots and spinal nerves during brachial plexus surgery. Turkof E, et al. **Plast Reconstr Surg** 1997 May;99(6):1632-41

Contribution of NMDA and non-NMDA glutamate receptors to locomotor pattern generation in the neonatal rat spinal cord. Beato M, et al. **Proc R Soc Lond B Biol Sci** 1997 Jun 22;264(1383):877-84

Crossed femoral stretching test. A case report. Kreitz BG, et al. **Spine** 1996 Jul 1;21(13):1584-6

Maturation of the mammalian dorsal root entry zone--from entry to no entry. Golding J, et al. **Trends Neurosci** 1997 Jul;20(7):303-8 (53 ref.)

PHYSIOPATHOLOGY

H reflex amplitude. Effect of leg muscle activity. McHugh DJ, et al. **Am J Phys Med Rehabil** 1997 May-Jun; 76(3):185-7

Central loop of the H reflex. Normal value and use in S1 radiculopathy. Pease WS, et al. **Am J Phys Med Rehabil** 1997 May-Jun;76(3):182-4

Diagnostic value of different neurophysiological methods in the assessment of lumbar nerve root lesions. Braune HJ, et al. **Arch Phys Med Rehabil** 1997 May;78(5):518-20

Electrodiagnostic evidence for cervical radiculopathy and suprascapular neuropathy in shoulder pain. Date ES, et al. **Electromyogr Clin Neurophysiol** 1996 Sep;36(6):333-9

A study on new diagnostic criteria of H reflex. Han TR, et al. **Electromyogr Clin Neurophysiol** 1997 Jun-Jul; 37(4):241-50

F-persistence studies in L5-S1 lumbosacral radiculopathies. Voulgaris AN, et al. **Electromyogr Clin Neurophysiol** 1996 Oct-Nov;36(7):387-93

Classification, oscillatory and alternating oscillatory firing of alpha 1 (FF) and alpha 2-motoneurons (FR) in patients with spinal cord lesion. Schalow G, et al. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:5-56

Dermatomal somatosensory evoked potentials in the diagnosis of lumbosacral radiculopathies. Righetti CA, et al. **Ital J Neurol Sci** 1996 Jun;17(3):193-9

Evaluation with evoked and spontaneous electromyography during lumbar instrumentation: a prospective study. Welch WC, et al. **J Neurosurg** 1997 Sep;87(3):397-402

Effects of different treatments on postural performance in patients with cervical root compression. A randomized prospective study assessing the importance of the neck in postural control. Persson L, et al. **J Vestib Res** 1996 Nov-Dec;6(6):439-53

Dermatomal/segmental somatosensory evoked potential evaluation of L5/S1 unilateral/unilevel radiculopathies [letter; comment] Fisher MA. **Muscle Nerve** 1997 Mar; 20(3):392-3. Comment on: Muscle Nerve 1996 Apr;19(4):442-9.

H reflex in S-1 radiculopathy: latency versus amplitude controversy revisited. Nishida T, et al. **Muscle Nerve** 1996 Jul;19(7):915-7

Needle cervical root stimulation may be complicated by pneumothorax. Sander HW, et al. **Neurology** 1997 Jan; 48(1):288-9

Root enhancement in GBS [letter; comment] Weiss MD. **Neurology** 1997 May;48(5):1477. Comment on: Neurology 1996 Sep;47(3):813-7.

Referred pain distribution of the cervical zygapophyseal joints and cervical dorsal rami. Fukui S, et al. **Pain** 1996 Nov;68(1):79-83

Drooping of the big toe: another diagnostic marker for L-5 radiculopathy. Madden PJ, et al. **South Med J** 1997 Feb; 90(2):209-10

Effects of hypoxia on the ventral root motor-evoked potential in the in vitro spinal cord preparation. Ataka H, et al. **Spine** 1996 Sep 15;21(18):2095-100

Changes in responses of wide dynamic range neurons in the spinal dorsal horn after dorsal root or dorsal root ganglion compression. Hanai F, et al. **Spine** 1996 Jun 15; 21(12):1408-14; discussion 1414-5

The effects of mechanical compression and hypoxia on nerve root and dorsal root ganglia. An analysis of ectopic firing using an in vitro model. Sugawara O, et al. **Spine** 1996 Sep 15;21(18):2089-94

Intraoperative dermatomal evoked potential monitoring fails to predict outcome from lumbar decompression surgery. Tsai RY, et al. **Spine** 1997 Sep 1;22(17):1970-5

Neurophysiologic changes in lumbar nerve root inflammation in the rat after treatment with cytokine inhibitors. Evidence for a role of interleukin-1. Wehling P, et al. **Spine** 1996 Apr 15;21(8):931-5

RADIOGRAPHY

Radiculopathy versus referred pain in diskography [letter; comment] [published erratum appears in AJNR Am J Neuroradiol 1996 Oct;17(9):A9] Olivero WC. **AJNR Am J Neuroradiol** 1996 Jun-Jul;17(6):1195-7. Comment on: AJNR Am J Neuroradiol 1995 Sep;16(8):1605-13; discussion 1614-5.

Mobile tumours in the lumbar spinal canal: a diagnostic problem. Varughese G, et al. **Can J Surg** 1997 Feb; 40(1):59-63

Radiologic evaluation of the relation of the screw tip to the nerve root in the intervertebral foramen. Ebraheim NA, et al. **J Spinal Disord** 1997 Jun;10(3):234-9

Femoral neuralgia due to degenerative spinal disease. A retrospective clinical and radio-anatomical study of one hundred cases. Asquier C, et al. **Rev Rhum Engl Ed** 1996 Apr;63(4):278-84

Risk of manipulative cervical treatment [letter] Padua L, et al. **Spine** 1997 Jul 15;22(14):1676-7

Malignant triton tumour of the spine: a case report. Crandon IW, et al. **West Indian Med J** 1995 Dec;44(4):143-5

[Epidural abscess with Staphylococcus aureus meningitis and septicemia following saccoradiculography (letter)] Parola P, et al. **Presse Med** 1996 Oct 26;25(32):1561 **(Fre)**

SURGERY

Developmental skills of children with spastic diplegia: functional and qualitative changes after selective dorsal rhizotomy. Buckon CE, et al. **Arch Phys Med Rehabil** 1997 Sep;78(9):946–51

Giant sacral schwannoma: removal by an anterior, transabdominal approach. Acciarri N, et al. **Br J Neurosurg** 1996 Oct;10(5):489–92

Spinal meningeal melanocytoma: a case report and review of the literature. Sankhla SK, et al. **Br J Neurosurg** 1996 Apr;10(2):205–9 (28 ref.)

Dorsal root entry zone lesion performed with Nd:YAG laser. Stranjalis G, et al. **Br J Neurosurg** 1997 Jun;11(3):238–40

Evaluation of laser and radiofrequency induced dorsal root entry zone lesion for pain control in rats. Wang YC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Dec; 58(6):421–7

Follow-up study on F-wave in patients with lumbosacral radiculopathy. Comparison between before and after surgery. Toyokura M, et al. **Electromyogr Clin Neurophysiol** 1996 Jun;36(4):207–14

Nerve grafting in brachial plexus injuries. Results of free grafts in 90 patients. Ochiai N, et al. **J Bone Joint Surg Br** 1996 Sep;78(5):754–8

Functional motor innervation of brachial plexus roots. An intraoperative electrophysiological study. Gu YD. **J Hand Surg [Br]** 1997 Apr;22(2):258–60

Axonal regrowth through collagen tubes bridging the spinal cord to nerve roots. Liu S, et al. **J Neurosci Res** 1997 Aug 15;49(4):425–32

Selective motor hyperreinnervation using motor rootlet transfer: an experimental study in rat brachial plexus. Bertelli JA, et al. **J Neurosurg** 1997 Jul;87(1):79–84

Minimalist versus maximalist approach to the degenerative spine [letter; comment] Birsner HA. **J Neurosurg** 1997 Jun; 86(6):1069–70. Comment on: J Neurosurg 1996 Oct;85(4):582–5.

Outpatient surgical treatment of cervical radiculopathy. Tomaras CR, et al. **J Neurosurg** 1997 Jul;87(1):41–3

Gait changes in children with spastic diplegia after selective dorsal rhizotomy. Thomas SS, et al. **J Pediatr Orthop** 1996 Nov–Dec;16(6):747–52

Does gait continue to improve 2 years after selective dorsal rhizotomy? Thomas SS, et al. **J Pediatr Orthop** 1997 May–Jun;17(3):387–91

Neurologic deficit and recovery in the donor limb following cross-C7 transfer in brachial-plexus injury. Liu J, et al. **J Reconstr Microsurg** 1997 May;13(4):237–42; discussion 242–3

Intraoperative electrodiagnostic testing during cross-chest C7 nerve root transfer. Holland NR, et al. **Muscle Nerve** 1997 Jul;20(7):903–5

Postoperative intraradicular lumbar disc herniation: a case report. Akdemir H, et al. **Neurosurg Rev** 1997;20(1):71–4

Preservation of pudendal afferents in sacral rhizotomies. Huang JC, et al. **Neurosurgery** 1997 Aug;41(2):411–5

Outcome of surgical decompression of the second cervical root for cervicogenic headache [see comments] Pikus HJ, et al. **Neurosurgery** 1996 Jul;39(1):63–70; discussion 70–1. Comment in: Neurosurgery 1997 May;40(5):1105–6.

Partial pediculectomy in the treatment of lumbar spinal stenosis: technical note. Sheehan JM, et al. **Neurosurgery** 1997 Jul;41(1):308–10

Outcome of surgical decompression of the second cervical root for cervicogenic headache [letter; comment] Stechison MT. **Neurosurgery** 1997 May;40(5):1105–6. Comment on: Neurosurgery 1996 Jul;39(1):63–70; discussion 70–1.

Microsurgical nerve root canal widening without fusion for lumbosacral intervertebral foraminal stenosis: technical notes and early results. Baba H, et al. **Spinal Cord** 1996 Nov;34(11):644–50

Laminoplasty with foraminotomy for coexisting cervical myelopathy and unilateral radiculopathy: a preliminary report. Baba H, et al. **Spine** 1996 Jan 15;21(2):196–202

Intraradicular, intervertebral disc herniation. A case report. Finkel HZ. **Spine** 1997 May 1;22(9):1028–9 (8 ref.)

Incision of the anulus fibrosus induces nerve root morphologic, vascular, and functional changes. An experimental study. Kayama S, et al. **Spine** 1996 Nov 15; 21(22):2539–43

The effects of normal, frozen, and hyaluronidase-digested nucleus pulposus on nerve root structure and function. Olmarker K, et al. **Spine** 1997 Mar 1;22(5):471–5; discussion 476

Long-lasting cervical radicular pain managed with surgery, physiotherapy, or a cervical collar. A prospective, randomized study. Persson LC, et al. **Spine** 1997 Apr 1; 22(7):751–8

Lumbar nerve root compression caused by lumbar intraspinal gas. Report of three cases. Yoshida H, et al. **Spine** 1997 Feb 1;22(3):348–51

A long-term outcome study of 170 surgically treated patients with compressive cervical radiculopathy. Davis RA. **Surg Neurol** 1996 Dec;46(6):523–30; discussion 530–3

[The morphological validation of the pathogenetic prerequisites for analgesic operations in the area of the foramina of the posterior roots] Dreval' ON, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1996 Oct-Dec; (4):22–5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

A stereological study of dorsal root ganglion cells and nerve root fibers from rats treated with inorganic mercury. Schiønning JD, et al. **Acta Neuropathol (Berl)** 1997 Sep; 94(3):280–6

Axon–glial relationships in early CNS–PNS transitional zone development: an ultrastructural study. Fraher JP. **J Neurocytol** 1997 Jan;26(1):41–52

Development of nodes of Ranvier in feline nerves: an ultrastructural presentation. Berthold CH. **Microsc Res Tech** 1996 Aug 1;34(5):399–421 (95 ref.)

Myelin-containing corpora amylacea in vestibular root entry zone. Sbarbati A, et al. **Ultrastruct Pathol** 1996 Sep–Oct; 20(5):437–42

SPINAL NERVES

Microanatomy of the structures contributing to abdominal cutaneous nerve entrapment syndrome. Applegate WV, et al. **J Am Board Fam Pract** 1997 Sep–Oct;10(5):329–32

Both motor and sensory abnormalities contribute to changes in foot posture in an experimental rat neuropathic model. Na HS, et al. **Pain** 1996 Sep;67(1):173–8

Spinal nerves and acupuncture. Yamamura Y, et al. **Rev Assoc Med Bras** 1996 Apr–Jun;42(2):115–8 (118 ref.)

Specificity of lumbar medial branch and L5 dorsal ramus blocks. A computed tomography study. Dreyfuss P, et al. **Spine** 1997 Apr 15;22(8):895–902

Entrapment neuropathy of the medial superior cluneal nerve. Nineteen cases surgically treated, with a minimum of 2 years' follow-up. Maigne JY, et al. **Spine** 1997 May 15; 22(10):1156–9

ANATOMY & HISTOLOGY

Innervation of posterior structures in the lumbar spine of the rat. Budgell B, et al. **J Manipulative Physiol Ther** 1997 Jul–Aug;20(6):359–68

An anatomic evaluation of L5 nerve stretch in spondylolisthesis reduction. Petraco DM, et al. **Spine** 1996 May 15;21(10):1133–8; discussion 1139

DRUG EFFECTS

A similar incidence of transient neurologic symptoms after spinal anesthesia with 2% and 5% lidocaine [see comments] Hampl KF, et al. **Anesth Analg** 1996 Nov;83(5):1051–4. Comment in: Anesth Analg 1997 Jun;84(6):1392–3.

Pharmacological properties of peripherally induced postsynaptic potentials in bulbar respiratory neurons of decerebrate cats. Haji A, et al. **Neurosci Lett** 1996 Jun 14; 211(1):17–20

Neomycin and gadolinium applied to an L5 spinal nerve lesion prevent mechanical allodynia-like behaviour in rats. Blenk KH, et al. **Pain** 1997 Apr;70(2–3):155–65

EMBRYOLOGY

Variations in the formation of the cardiac plexus--a study in human foetuses. Than M, et al. **Z Morphol Anthropol** 1996 Sep;81(2):179–88

INJURIES

Sprouting sympathetic fibers form synaptic varicosities in the dorsal root ganglion of the rat with neuropathic injury. Chung K, et al. **Brain Res** 1997 Mar 21;751(2):275–80

Sympathetic sprouting in the dorsal root ganglia of the injured peripheral nerve in a rat neuropathic pain model. Chung K, et al. **J Comp Neurol** 1996 Dec 9;376(2):241–52

Stingers, transient quadriplegia, and cervical spinal stenosis: return to play criteria. Cantu RC. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S233–5

Dextrorphan attenuates responses of spinothalamic tract cells in normal and nerve-injured monkeys. Carlton SM, et al. **Neurosci Lett** 1997 Jul 4;229(3):169–72

Contributions of injured and intact afferents to neuropathic pain in an experimental rat model. Yoon YW, et al. **Pain** 1996 Jan;64(1):27–36

PATHOLOGY

Spinal nerves are most commonly involved in herpes zoster [letter] Monz W. **Aust Fam Physician** 1996 May;25(5):798

Variations in the lumbosacral ligament and associated changes in the lumbosacral region resulting in compression of the fifth dorsal root ganglion and spinal nerve [letter; comment] Hardy PA. **Clin Anat** 1996;9(4):278–9. Comment on: Clin Anat 1995;8(5):339–46.

PHYSIOLOGY

Innervation of posterior structures in the lumbar spine of the rat. Budgell B, et al. **J Manipulative Physiol Ther** 1997 Jul–Aug;20(6):359–68

Efficacy of spinal NMDA receptor antagonism in formalin hyperalgesia and nerve injury evoked allodynia in the rat. Chaplan SR, et al. **J Pharmacol Exp Ther** 1997 Feb; 280(2):829–38

Expression of a developmentally regulated, phosphorylated isoform of microtubule-associated protein 1B in sprouting and regenerating axons in vitro. Tonge DA, et al. **Neuroscience** 1996 Jul;73(2):541–51

Distribution of vasopressin and oxytocin receptors in the rat spinal cord: sex-related differences and effect of castration in pudendal motor nuclei. Tribollet E, et al. **Neuroscience** 1997 May;78(2):499–509

Dermatomes in the rat limbs as determined by antidromic stimulation of sensory C-fibers in spinal nerves. Takahashi Y, et al. **Pain** 1996 Sep;67(1):197–202

Intraoperative electroneurodiagnostics (transcranial electrical motor evoked potentials) to evaluate the functional status of anterior spinal roots and spinal nerves during brachial plexus surgery. Turkof E, et al. **Plast Reconstr Surg** 1997 May;99(6):1632–41

PHYSIOPATHOLOGY

Occult lumbar lateral spinal stenosis in neural foramina subjected to physiologic loading [see comments] Nowicki BH, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1605–14 . Comment in: AJNR Am J Neuroradiol 1996 Oct;17(9):1615–7.

Electrophysiologic assessments in pudendal and sacral motor nerves after ileal J-pouch-anal anastomosis for patients with ulcerative colitis and adenomatosis coli. Tomita R, et al. **Dis Colon Rectum** 1996 Apr;39(4):410–5

Contributions of injured and intact afferents to neuropathic pain in an experimental rat model. Yoon YW, et al. **Pain** 1996 Jan;64(1):27–36

RADIATION EFFECTS

Effect of pulsed Nd:YAG laser radiation on action potential conduction in isolated mammalian spinal nerves. Orchardson R, et al. **Lasers Surg Med** 1997;21(2):142–8

SURGERY

Restoration of laryngopharyngeal sensation by neural anastomosis. Aviv JE, et al. **Arch Otolaryngol Head Neck Surg** 1997 Feb;123(2):154–60

Commissural myelotomy for intractable cancer pain: report of two cases. Watling CJ, et al. **Clin J Pain** 1996 Jun; 12(2):151–6

Thoracoscopic sympathicolysis for essential hyperhidrosis: effects on pulmonary function. Noppen M, et al. **Eur Respir J** 1996 Aug;9(8):1660–4

Nerve grafting from spinal cord to spinal nerve: a microsurgical technique in cats. Holtzer CA, et al. **J Neurosci Methods** 1996 Dec 28;70(2):163–9

Anterior decompression of foraminal stenosis below a lumbosacral transitional vertebra. A case report. Abe E, et al. **Spine** 1997 Apr 1;22(7):823–6

An anatomic evaluation of L5 nerve stretch in spondylolisthesis reduction. Petraco DM, et al. **Spine** 1996 May 15;21(10):1133–8; discussion 1139

TRANSPLANTATION

[Paralysis of the brachial plexus caused by supraclavicular injuries in the adult. Long-term comparative results of nerve grafts and transfers] Allieu Y, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(1):51–9 (Eng. Abstr.) **(Fre)**

SPINAL OSTEOPHYTOSIS

CEREBROSPINAL FLUID

Increased cerebrospinal fluid nitrite and nitrate levels in patients with lumbar spondylosis. Asahara H, et al. **Res Commun Mol Pathol Pharmacol** 1996 Jan;91(1):77–83

COMPLICATIONS

Current opinions in etiopathogenesis of headaches caused by cervical spine pathology. Wojczal J. **Ann Univ Mariae Curie Sklodowska [Med]** 1995;50:95–101 (16 ref.)

Cervical spondylotic myelopathy with syringomyelia. Kaar GF, et al. **Br J Neurosurg** 1996 Aug;10(4):413–5

Anterior cervical osteophytes: a rare cause of dysphagia. Sudhakar CB, et al. **Conn Med** 1997 Jun;61(6):323–5

Cervical spondylotic radiculopathy involving two adjacent nerve roots. Anterior decompression through a single level intervertebral approach. Iwasaki M, et al. **Int Orthop** 1996; 20(3):137–41

Hypertrophic cervical osteophyte causing dysphagia in a case of diffuse idiopathic skeletal hyperostosis (DISH) [letter] Varma M, et al. **J Assoc Physicians India** 1995 May; 43(5):377

An 89-year-old woman with urinary incontinence, 1 year later [comment] Daley J, et al. **JAMA** 1997 Aug 27; 278(8):679. Comment on: JAMA 1996 Dec 11;276(22):1832–40.

An unusual cause of dysphagia. Tung MY, et al. **Singapore Med J** 1996 Jun;37(3):315–7 (10 ref.)

Posttraumatic cervical osteophytosis causing progressive dysphagia. McGarrah PD, et al. **South Med J** 1997 Aug; 90(8):858–60

Motor recovery following spinal cord injury associated with cervical spondylosis: a collaborative study. Waters RL, et al. **Spinal Cord** 1996 Dec;34(12):711–5

The cross-sectional area of the cervical spinal canal in patients with cervical spondylotic myelopathy. Correlation of preoperative and postoperative area with clinical symptoms. Hamburger C, et al. **Spine** 1997 Sep 1; 22(17):1990–4; discussion 1995

[Cervical myelopathy: anatomopathology, clinical aspects

and therapy] Benini A. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1383–6 (Eng. Abstr.) **(Ger)**

[Late-onset adrenomyeloneuropathy perplexed with spondylosis. A case report] Sakai H, et al. **Rinsho Shinkeigaku** 1996 Feb;36(2):352–4 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Failure of magnetic resonance imaging to reveal the cause of a progressive cervical myelopathy related to postoperative spinal deformity: a case report. Stein J. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):73–5

A comparison of 2–D and 3–D FSE imaging in MR of the cervical spine. Swainson CJ, et al. **Clin Radiol** 1997 Mar; 52(3):194–7

Magnetic resonance neurography for cervical radiculopathy: a preliminary report. Dailey AT, et al. **Neurosurgery** 1996 Mar;38(3):488–92 discussion 492

[Case of tetanus initially presenting a problem in differentiating from cervical spondylosis deformans] Nakamura T, et al. **Nippon Naika Gakkai Zasshi** 1997 Jan 10;86(1):133–4 **(Jpn)**

EPIDEMIOLOGY

Prevalent vertebral deformities: relationship to bone mineral density and spinal osteophytosis in elderly men and women. Jones G, et al. **Osteoporos Int** 1996;6(3):233–9

ETIOLOGY

Neck injury after repeated flexions due to parachuting. Mäkelä JP, et al. **Aviat Space Environ Med** 1997 Mar; 68(3):228–9

[Destructive spondyloarthropathy of the cervical spine in hemodialyzed patients] Fukutake T, et al. **No To Shinkei** 1997 Aug;49(8):713–22 (18 ref.) (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Degenerative changes following anterior cervical discectomy and fusion evaluated by fast spin–echo MR imaging. Wu W, et al. **Acta Radiol** 1996 Sep;37(5):614–7

Anatomical observations of the developmental and spondylotic cervical spinal canal in South African blacks and whites. Taitz C. **Clin Anat** 1996;9(6):395–400

Anatomic considerations for uncovertebral involvement in cervical spondylosis. Ebraheim NA, et al. **Clin Orthop** 1997 Jan;(334):200–6

Correlation between ossification of the stylohyoid ligament and osteophytes of the cervical spine. Guo B, et al. **J Rheumatol** 1997 Aug;24(8):1575–81

Large vertebral body, in addition to narrow spinal canal, are risk factors for cervical myelopathy. Hukuda S, et al. **J Spinal Disord** 1996 Jun;9(3):177–86

[Imaging with magnetic resonance imaging of the operated cervical spine] Scarabino T, et al. **Radiol Med (Torino)** 1996 Dec;92(6):671–6 (Eng. Abstr.) **(Ita)**

[Neuropathology of cervical spondylotic myelopathy] Ito T, et al. **No To Shinkei** 1996 Aug;48(8):697–702 (19 ref.) **(Jpn)**

PHYSIOPATHOLOGY

Diagnostic utility of somatosensory evoked potentials (SEPs) in presurgical assessment of cervical spondylotic myelopathy. Berthier E, et al. **Neurophysiol Clin** 1996; 26(5):300–10

RADIOGRAPHY

Influence of osteophytic size on bone mineral density measured by dual X–ray absorptiometry. Rand T, et al. **Acta Radiol** 1997 Mar;38(2):210–3

Lateral spine dual–energy X–ray absorptiometry bone mineral measurement with fan–beam design: effect of osteophytic calcifications on lateral and anteroposterior spine BMD. Franck H, et al. **Rheumatol Int** 1995; 15(4):151–4

Apophysial joint degeneration, disc degeneration, and sagittal curve of the cervical spine. Can they be measured reliably on radiographs? Côté P, et al. **Spine** 1997 Apr 15; 22(8):859–64

[Occupationally–induced degenerative discopathies in the area of the lumbar spine] Elsner G, et al. **Soz Praventivmed** 1997;42(3):144–54 (Eng. Abstr.) **(Ger)**

SURGERY

Degenerative changes following anterior cervical discectomy and fusion evaluated by fast spin–echo MR imaging. Wu W, et al. **Acta Radiol** 1996 Sep;37(5):614–7

Preliminary experience of carbon fibre cage prostheses for treatment of cervical spine disorders. Brooke NS, et al. **Br J Neurosurg** 1997 Jun;11(3):221–7

Extrusion of BOP–B graft orally following anterior cervical discectomy and fusion. Cavanagh SP, et al. **Br J Neurosurg** 1996 Aug;10(4):417–8

Extended anterior cervical discectomy without fusion: a simple and sufficient operation for most cases of cervical degenerative disease. Maurice–Williams RS, et al. **Br J Neurosurg** 1996 Jun;10(3):261–6

Anterior cervical foraminotomy [letter] George B. **J Neurosurg** 1997 Oct;87(4):653–4

Decompression via microsurgical anterior foraminotomy for cervical spondylotic myelopathy. Technical note. Jho HD. **J Neurosurg** 1997 Feb;86(2):297–302

Modified open–door cervical expansive laminoplasty for spondylotic myelopathy: operative technique, outcome, and predictors for gait improvement. Lee TT, et al. **J Neurosurg** 1997 Jan;86(1):64–8

Anterior cervical fusion: outcome analysis of patients fused with and without anterior cervical plates. Connolly PJ, et al. **J Spinal Disord** 1996 Jun;9(3):202–6

Neurogenic motor evoked–potential monitoring in anterior cervical surgery. Darden BV 2nd, et al. **J Spinal Disord** 1996 Dec;9(6):485–93

Advanced cervical spondylosis with ossification into the posterior longitudinal ligament and resultant neurologic sequelae. Epstein NE. **J Spinal Disord** 1996 Dec; 9(6):477–84

Anterior cervical plate used in degenerative disease can maintain cervical lordosis. Katsuura A, et al. **J Spinal Disord** 1996 Dec;9(6):470–6

The prognosis of patients with cervical spondylotic myelopathy. Wang YL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jul; 13(7):425–31

Corpectomy for multi–level cervical spondylosis and ossification of the posterior longitudinal ligament. Banerji D, et al. **Neurosurg Rev** 1997;20(1):25–31

Unusual complications at iliac crest bone graft donor site: experience with two cases. Porchet F, et al. **Neurosurgery** 1996 Oct;39(4):856–9

[Surgical treatment of cervical spondylotic myelopathy in the Czech and Slovak Republic in 1994] Kadaňka Z, et al. **Rozhl Chir** 1996 Nov;75(11):535–40 (Eng. Abstr.) **(Cze)**

[Imaging with magnetic resonance imaging of the operated cervical spine] Scarabino T, et al. **Radiol Med (Torino)** 1996 Dec;92(6):671–6 (Eng. Abstr.) **(Ita)**

THERAPY

Cervical spondylosis. An update. McCormack BM, et al. **West J Med** 1996 Jul–Aug;165(1–2):43–51 (116 ref.)

SPINAL PUNCTURE

Subarachnoid hemorrhage diagnosis: lumbar puncture is still needed when the computed tomography scan is normal [see comments] Sidman R, et al. **Acad Emerg Med** 1996 Sep;3(9):827–31. Comment in: Acad Emerg Med 1996 Sep;3(9):823.

A tap in time? [editorial; comment] Singal BM. **Acad Emerg Med** 1996 Sep;3(9):823. Comment on: Acad Emerg Med 1996 Sep;3(9):827–31.

Dural puncture with a 26–gauge spinal needle affects spread of epidural anesthesia [letter] Walker S, et al. **Anesth Analg** 1997 Jan;84(1):228

Reduced frequency of memory CD8+ T lymphocytes in cerebrospinal fluid and blood of patients with multiple sclerosis [letter; comment] Hughes RA. **Autoimmunity** 1995;21(4):283. Comment on: Autoimmunity 1995;21(4):231–9.

Is post–lumbar–puncture headache influenced by the menstrual cycle? [letter] Nordin C, et al. **Biol Psychiatry** 1996 Aug 15;40(4):310–1

Simultaneous lumbar and intraventricular manometry to evaluate the role and safety of lumbar puncture in raised intracranial pressure following subarachnoid haemorrhage. Kapadia FN, et al. **Br J Neurosurg** 1996 Dec;10(6):585–7

When to scan, when to operate [letter; comment] Workman S. **CMAJ** 1997 Jul 1;157(1):18, 20. Comment on: Can Med Assoc J 1997 Jan 1;156(1):49–51.

Alpha–hemolytic streptococci: a major pathogen of iatrogenic meningitis following lumbar puncture. Case reports and a review of the literature. Schneeberger PM, et al. **Infection** 1996 Jan–Feb;24(1):29–33 (38 ref.)

Ketamine–midazolam versus meperidine–midazolam for painful procedures in pediatric oncology patients. Marx CM, et al. **J Clin Oncol** 1997 Jan;15(1):94–102

Acid monoamine metabolites in the CSF of healthy controls punctured without preceding strict bedrest: a retrospective study. Nordin C, et al. **J Psychiatr Res** 1996 Mar–Apr; 30(2):127–33

Multiple communicating intradural arachnoid cysts: usefulness of myelography and myelo–computed tomography using both lumbar and cervical punctures. Case report. Osuka K, et al. **Neurosurg Rev** 1997;20(2):94–8

"Hamburger sign" in aseptic meningitis [letter] Schlager TA, et al. **Pediatr Infect Dis J** 1997 May;16(5):540

Lumbar puncture and the first simple febrile seizure [letter] Nozicka C. **Pediatrics** 1997 Feb;99(2):306–7

Comparison of two application techniques of EMLA and pain assessment in pediatric oncology patients. Calamandrei M, et al. **Reg Anesth** 1996 Nov–Dec;21(6):557–60

Microscopic analysis of the tips of thin spinal needles after subarachnoid puncture [see comments] Rosenberg H, et al. **Reg Anesth** 1996 Jan–Feb;21(1):35–40. Comment in: Reg Anesth 1997 Jan–Feb;22(1):105–6.

EMLA cream effectively reduces the pain of spinal needle insertion. Sharma SK, et al. **Reg Anesth** 1996 Nov–Dec; 21(6):561–4

[Neonatal meningitis: value of the systematic lumbar puncture (letter)] Aujard Y. **Arch Pediatr** 1997 Jun;4(6):587 **(Fre)**

ADVERSE EFFECTS

Grading of severity of postdural puncture headache after 27–gauge Quincke and Whitacre needles. Corbey MP, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):779–84

The incidence of post dural puncture headache in Taiwanese patients undergoing cesarean section. Hwang JJ, et al. **Acta Anaesthesiol Sin** 1997 Mar;35(1):1–6

Post dural puncture headache in cesarean section: comparison of 25–gauge Whitacre with 25– and 26–gauge Quincke needles. Hwang JJ, et al. **Acta Anaesthesiol Sin** 1997 Mar; 35(1):33–7

MMPI profiles in post–lumbar puncture headache. Vilming ST, et al. **Acta Neurol Scand** 1997 Mar;95(3):184–8

Recurrence of post dural puncture headache [letter] Francis PH. **Anaesth Intensive Care** 1997 Feb;25(1):93

Recurrence of post dural puncture headache [letter] Shah JL. **Anaesth Intensive Care** 1997 Aug;25(4):432

The incidence of post dural puncture headache in children. Wee LH, et al. **Anaesthesia** 1996 Dec;51(12):1164–6

Epidural fibrin glue injection stops persistent cerebrospinal fluid leak during long–term intrathecal catheterization. Gerritse BM, et al. **Anesth Analg** 1997 May;84(5):1140–1

Postpartum dural venous sinus thrombosis after postdural puncture headache and epidural blood patch. Borum SE, et al. **Anesthesiology** 1997 Feb;86(2):487–90

Pharmacologic management of postdural puncture headache. Choi A, et al. **Ann Pharmacother** 1996 Jul–Aug; 30(7–8):831–9 (62 ref.)

Anesthetic efficacy of eutectic prilocaine–lidocaine cream in pediatric oncology patients undergoing lumbar puncture. Juárez Gimenez JC, et al. **Ann Pharmacother** 1996 Nov; 30(11):1235–7

Epidural blood patch. Hardman JG, et al. **Br J Hosp Med** 1996 Sep 18–Oct 1;56(6):268–9

Pontine haemorrhage following iohexol lumbar myelography [letter; comment] Hoeffel C. **Br J Radiol** 1997 May; 70(833):546–7. Comment on: Br J Radiol 1996 Apr;69(820):368–70.

Chronic CSF leak into the peritoneal cavity shown by radionuclide cisternography. Successful treatment with an epidural blood patch. Ashley DM, et al. **Clin Nucl Med** 1997 Jun;22(6):390–2

Central nervous side effects after lumbar puncture. A review of the possible pathogenesis of the syndrome of postdural puncture headache and associated symptoms. Wang LP, et al. **Dan Med Bull** 1997 Feb;44(1):79–81 (40 ref.)

Postdural puncture headache and ACTH [letter] Gupta S, et al. **J Clin Anesth** 1997 May;9(3):258

Post–dural puncture headache and epidural blood patch in an AIDS patient [letter] Parris WC. **J Clin Anesth** 1997 Feb;9(1):87–8

Postlumbar puncture headache [letter; comment] Toyka KV. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):429. Comment on: J Neurol Neurosurg Psychiatry 1996 Jun;60(6):681–3.

Cognitive behavioral pain and anxiety interventions in pediatric oncology centers and bone marrow transplant units. McCarthy AM, et al. **J Pediatr Oncol Nurs** 1996 Jan;13(1):3–12; discussion 13–4

Promoting parental use of nonpharmacologic techniques with children during lumbar punctures. Pederson C. **J Pediatr Oncol Nurs** 1996 Jan;13(1):21–30

Neurologic complications of lumbar epidural analgesia: spinal and paraspinal abscess. Bertol V, et al. **Neurology** 1997 Jun; 48(6):1732–3

Clostridium perfringens meningitis in a newborn infant. Motz RA, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):708–10

MRI meningeal enhancement with intracranial hypotension caused by lumbar puncture. Krause I, et al. **Pediatr Neurol** 1997 Feb;16(2):163–5

Post–dural puncture headache [letter; comment] Hoeffel CC. **Radiology** 1997 May;203(2):579–80. Comment on: Radiology 1996 Sep;200(3):765–70. Comment on: Radiology 1996 Sep;200(3):771–8.

Postmyelographic headaches [letter] Seibert CE. **Radiology** 1997 Oct;205(1):286–7

Incidence of tissue coring with the 25–gauge Quincke and Whitacre spinal needles. Campbell DC, et al. **Reg Anesth** 1996 Nov–Dec;21(6):582–5

Postdural puncture headache [letter; comment] Glazener EL. **Reg Anesth** 1996 Jul–Aug;21(4):375. Comment on: Reg Anesth 1995 Jul–Aug;20(4):329–36.

Postdural puncture headache: the betadine factor [letter] [see comments] Gurmarnik S, et al. **Reg Anesth** 1996 Jul–Aug; 21(4):375–6. Comment in: Reg Anesth 1997 May–Jun;22(3):297.

Role of needle gauge and tip configuration in the production of lumbar puncture headache. Lambert DH, et al. **Reg Anesth** 1997 Jan–Feb;22(1):66–72

Successful use of epidural blood patch for postdural puncture headache following lumbar sympathetic block. Lehmann LJ, et al. **Reg Anesth** 1996 Jul–Aug;21(4):347–9

Postdural puncture headache and back pain after spinal anesthesia with 27–gauge Quincke and 26–gauge Atraucan needles. Schultz AM, et al. **Reg Anesth** 1996 Sep–Oct; 21(5):461–4

Late recurrence of postdural puncture headache. Sidebotham D, et al. **Reg Anesth** 1997 Jul–Aug;22(4):382–4

How to reduce the risk for contamination of the central nervous system by spinal needles [letter; comment] Simsa J. **Reg Anesth** 1997 May–Jun;22(3):297. Comment on: Reg Anesth 1996 Jul–Aug;21(4);375–6.

Symptomatic spinal intradural arachnoid cyst development after lumbar myelography. Case report and review of the literature. Kriss TC, et al. **Spine** 1997 Mar 1;22(5):568–72 (50 ref.)
[Post dural puncture headache (PDPH) which occurred after the removal of an epidural catheter] Kaetsu H, et al. **Masui** 1996 Oct;45(10):1285–8 (Eng. Abstr.) **(Jpn)**
[Sudden syncope during spinal block under sitting position: a report of three cases] Masuda R, et al. **Masui** 1996 Jul; 45(7):876–9 (Eng. Abstr.) **(Jpn)**
[A case of spinal epidermoid caused by lumbar punctures] Kohama Y, et al. **No Shinkei Geka** 1996 Apr;24(4):375–8 (Eng. Abstr.) **(Jpn)**
[Deafness secondary to lumbar puncture] Conde M, et al. **Rev Neurol** 1997 Aug;25(144):1218–20 (11 ref.) (Eng. Abstr.) **(Spa)**

CONTRAINDICATIONS

Cerebral syphilitic gumma [letter; comment] Quinn P, et al. **N Engl J Med** 1997 Apr 3;336(14):1027; discussion 1027–8 . Comment on: N Engl J Med 1996 Oct 10;335(15):1123.

INSTRUMENTATION

Significant reduction of post-lumbar puncture headaches by the use of a 29-gauge spinal needle. McConaha C, et al. **Biol Psychiatry** 1996 Jun 15;39(12):1058–60
Dural puncture with arrow Flex Tip plus catheter [letter] [see comments] Cherala SR. **Reg Anesth** 1996 Jan–Feb; 21(1):75–7. Comment in: Reg Anesth 1996 Nov–Dec;21(6):607.
Role of needle gauge and tip configuration in the production of lumbar puncture headache. Lambert DH, et al. **Reg Anesth** 1997 Jan–Feb;22(1):66–72
[Incidence of postmyelography syndrome and postmyelography complaints after lumbar puncture with the Sprotte pencil-like needle in comparison with the Quincke needle] Fox RG, et al. **Radiologe** 1996 Nov; 36(11):921–7 (Eng. Abstr.) **(Ger)**

METHODS

Lidocaine for lumbar punctures. A help not a hindrance. Carraccio C, et al. **Arch Pediatr Adolesc Med** 1996 Oct; 150(10):1044–6
Should one reinsert the stylet during lumbar puncture? [letter] Strupp M, et al. **N Engl J Med** 1997 Apr 17;336(16):1190
Bevel direction, dura geometry, and hole size in membrane puncture: laboratory report. Kempen PM, et al. **Reg Anesth** 1997 May–Jun;22(3):267–72

PSYCHOLOGY

Parental presence during lumbar puncture: anxiety and attitude toward the procedure. Haimi-Cohen Y, et al. **Clin Pediatr (Phila)** 1996 Jan;35(1):2–4
The Perception of Procedures Questionnaire: psychometric properties of a brief parent report measure of procedural distress. Kazak AE, et al. **J Pediatr Psychol** 1996 Apr; 21(2):195–207
A randomized controlled prospective outcome study of a psychological and pharmacological intervention protocol for procedural distress in pediatric leukemia. Kazak AE, et al. **J Pediatr Psychol** 1996 Oct;21(5):615–31

STANDARDS

The value of lumbar puncture in the evaluation of critically ill, non-immunosuppressed, surgical patients: a retrospective analysis of 70 cases. Adelson-Mitty J, et al. **Intensive Care Med** 1997 Jul;23(7):749–52
Evaluation of febrile infants under 3 months of age: is routine lumbar puncture warranted? Brik R, et al. **Isr J Med Sci** 1997 Feb;33(2):93–7

SPINAL ROOTS see **SPINAL NERVE ROOTS**

SPINAL STENOSIS

Management of lumbar spinal stenosis. Postacchini F. **J Bone Joint Surg Br** 1996 Jan;78(1):154–64 (35 ref.)

CLASSIFICATION

The Quebec Task Force classification for Spinal Disorders and the severity, treatment, and outcomes of sciatica and lumbar spinal stenosis. Atlas SJ, et al. **Spine** 1996 Dec 15; 21(24):2885–92

COMPLICATIONS

Successful treatment of intermittent claudication due to spinal canal stenosis using beraprost sodium, a stable prostaglandin I2 analogue. A case report. Kato H, et al. **Angiology** 1997 May;48(5):457–61
Patterns of chronic adhesive arachnoiditis following Myodil myelography: the significance of spinal canal stenosis and previous surgery. Laitt R, et al. **Br J Radiol** 1996 Aug; 69(824):693–8
Lumbar disc herniation in patients with developmental spinal stenosis. Dai LY, et al. **Eur Spine J** 1996;5(5):308–11
Case report: renal osteodystrophy in association with spinal stenosis in achondroplasia. Ong JS, et al. **Ir J Med Sci** 1996 Jul–Sep;165(3):155–6
Spinal stenosis. A common cause of podiatric symptoms. Goldman SM, et al. **J Am Podiatr Med Assoc** 1997 Mar; 87(3):117–24
Thoracic ossification of the posterior longitudinal ligament, ossification of the yellow ligament from T9–T12 with superimposed acute T10/T11 disc herniation: controversies in surgical management. Epstein N. **J Spinal Disord** 1996 Oct;9(5):446–7; discussion 447–50
Foot dystonia and lumbar canal stenosis. Blunt SB, et al. **Mov Disord** 1996 Nov;11(6):723–5
[Thoracic spondylotic myelopathies. Apropos of 4 new cases] Stecken J, et al. **Neurochirurgie** 1996;42(3):147–52 (40 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Extraforaminal stenosis in the lumbosacral spine. Efficacy of MR imaging in the coronal plane. Hashimoto M, et al. **Acta Radiol** 1996 Sep;37(5):610–3
Does the cervical canal to body ratio predict spinal stenosis? Moskovich R, et al. **Bull Hosp Jt Dis** 1996;55(2):61–71
Three-dimensional MR myelography of the lumbar spine: comparative case study to X-ray myelography. Eberhardt KE, et al. **Eur Radiol** 1997;7(5):737–42
Spinal stenosis: history and physical examination. Mirkovic S, et al. **Instr Course Lect** 1994;43:435–40 (41 ref.)
Stingers, transient quadriplegia, and cervical spinal stenosis: return to play criteria. Cantu RC. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S233–5
Claudication with normal pulses [letter; comment] Panoskaltsis N. **N Engl J Med** 1996 Nov 28;335(22):1686; discussion 1687. Comment on: N Engl J Med 1996 Jul 4;335(1):46–8.
Lumbar spinal stenosis: a review. Berthelot JM, et al. **Rev Rhum Engl Ed** 1997 May;64(5):315–25 (83 ref.)
Spinal stenosis and neurogenic claudication. Porter RW. **Spine** 1996 Sep 1;21(17):2046–52 (12 ref.)
[Consensus on diagnosis and treatment of the lumbosacral radicular syndrome. Dutch Society for Neurology] Stam J. **Ned Tijdschr Geneeskd** 1996 Dec 28;140(52):2621–7 (31 ref.) (Eng. Abstr.) **(Dut)**
[Radiology of lumbar spinal canal stenosis] Hähnel S, et al. **Aktuelle Radiol** 1996 Jul;6(4):165–70 (38 ref.) (Eng. Abstr.) **(Ger)**
[Unilateral, nocturnal lower leg pain] Gürke T. **Schweiz Rundsch Med Prax** 1997 Jul 2;86(27–28):1129–30 **(Ger)**

ETIOLOGY

Ossification of the ligamentum flavum causing thoracic myelopathy: a case report. Shenoi RM, et al. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):68–72
Thoracolumbar burst fractures: correlation between post-traumatic spinal canal stenosis and initial neurological deficit. Sapkas G, et al. **Bull Hosp Jt Dis** 1996;55(1):36–9
Recurrent spinal stenosis caused by tophaceous gout: a case report and review of literature. Ko PJ, et al. **Chang Keng I Hsueh** 1996 Sep;19(3):272–6
Causes and management of unstable degenerative spinal stenosis. Fellrath RF Jr, et al. **J South Orthop Assoc** 1996 Fall;5(3):221–8 (24 ref.)
Nerve root hypertrophy as the cause of lumbar stenosis in chronic inflammatory demyelinating polyradiculoneuropathy. Goldstein JM, et al. **Muscle Nerve** 1996 Jul;19(7):892–6
Significant antenatal factors in the development of lumbar spinal stenosis. Papp T, et al. **Spine** 1997 Aug 15; 22(16):1805–10
Lumbar motion segment pathology adjacent to thoracolumbar, lumbar, and lumbosacral fusions. Schlegel JD, et al. **Spine** 1996 Apr 15;21(8):970–81

NURSING

Use of caudal epidural blocks to relieve lumbar canal stenotic pain in elderly patients. Galindo-Ciocon D. **AORN J** 1996 Jan;63(1):254–7

PATHOLOGY

Lumbar facet joint tropism does not accelerate degeneration of the facet joints. Grogan J, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1325–9
Amyloid deposits of immunohistochemically different classes in the ligamentum flavum in biopsies from patients with herniated discs or lumbar spinal stenosis. Gies U, et al. **Clin Neuropathol** 1996 Jan–Feb;15(1):54–9
Acquired lumbar spinal stenosis. Jane JA Sr, et al. **Clin Neurosurg** 1996;43:275–99 (89 ref.)
Stenosis of the lumbar spinal canal. Pennal GF, et al. **Clin Neurosurg** 1971;18:86–105
Intrinsic cervical spinal cord deformation on MRI: "the distorted 'H' sign". Ahmad I, et al. **J Spinal Disord** 1996 Dec;9(6):494–9
Myeloscopic observation of adhesive arachnoiditis in patients with lumbar spinal canal stenosis. Kawauchi Y, et al. **Spinal Cord** 1996 Jul;34(7):403–10
Transforaminal and posterior decompressions of the lumbar spine. A comparative study of stability and intervertebral foramen area. Osman SG, et al. **Spine** 1997 Aug 1; 22(15):1690–5
Clinical analysis of two-level compression of the cauda equina and the nerve roots in lumbar spinal canal stenosis. Sato K, et al. **Spine** 1997 Aug 15;22(16):1898–903; discussion 1904
[Image and clinical correlative studies on cervical spinal canal stenosis] Tan J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Nov;33(11):690–4 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Relation of foraminal (lateral) stenosis to radicular pain [comment] Devor M. **AJNR Am J Neuroradiol** 1996 Oct; 17(9):1615–7. Comment on: AJNR Am J Neuroradiol 1996 Oct;17(9):1605–14.
Occult lumbar lateral spinal stenosis in neural foramina subjected to physiologic loading [see comments] Nowicki BH, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1605–14 . Comment in: AJNR Am J Neuroradiol 1996 Oct;17(9):1615–7.
Determination of trunk motion patterns associated with permanent or transient stenosis of the lumbar spine. Szpalski M, et al. **Eur Spine J** 1996;5(5):332–7
Measurements of epidural pressures that occur during walking in patients with or without spinal stenosis [letter; comment] Blau WS, et al. **Spine** 1997 May 1;22(9):1045–6 . Comment on: Spine 1995 Dec 15;20(24):2746–9.
[Stenosis of the lumbar spinal canal. Pathophysiology, clinical aspects and therapy] Benini A. **Orthopade** 1997 May; 26(5):503–14 (6 ref.) **(Ger)**

RADIOGRAPHY

Distribution and incidence of degenerative spine changes in patients with a lumbo-sacral transitional vertebra. Vergauwen S, et al. **Eur Spine J** 1997;6(3):168–72
Post-traumatic progressive cervical myelopathy in patient with congenital spinal stenosis. Ducker TB. **J Spinal Disord** 1996 Feb;9(1):76; discussion 77–81
Femoral neuralgia due to degenerative spinal disease. A retrospective clinical and radio-anatomical study of one hundred cases. Asquier C, et al. **Rev Rhum Engl Ed** 1996 Apr;63(4):278–84

REHABILITATION

Suggested management guidelines for participation in collision activities with congenital, developmental, or postinjury lesions involving the cervical spine. Torg JS, et al. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S256–72
A nonsurgical treatment approach for patients with lumbar spinal stenosis. Fritz JM, et al. **Phys Ther** 1997 Sep; 77(9):962–73
Management of iatrogenic spinal stenosis complicating placement of a fusion cage. A case report. Glassman SD, et al. **Spine** 1996 Oct 15;21(20):2383–6 (16 ref.)

SURGERY

The effect of prior back surgery on surgical outcome in patients operated on for lumbar spinal stenosis. A matched-pair study. Herno A, et al. **Acta Neurochir (Wien)** 1996;138(4):357–63
Unilateral laminotomy for bilateral decompression of lumbar spinal stenosis. Part I: Anatomical and surgical considerations. Spetzger U, et al. **Acta Neurochir (Wien)** 1997;139(5):392–6
Unilateral laminotomy for bilateral decompression of lumbar spinal stenosis. Part II: Clinical experiences. Spetzger U, et al. **Acta Neurochir (Wien)** 1997;139(5):397–403
Pre- and postoperative factors associated with return to work following surgery for lumbar spinal stenosis. Herno A, et al. **Am J Ind Med** 1996 Oct;30(4):473–8
Spinous process-plasty following lumbar laminectomy as a contributing factor to spine stability. Vrankovic D, et al. **Arch Orthop Trauma Surg** 1996;115(3–4):211–5
Lumbar spinal stenosis: a matched-pair study of operated and non-operated patients. Herno A, et al. **Br J Neurosurg** 1996 Oct;10(5):461–5
A biomechanical evaluation of internal lumbar laminoplasty: the preservation of spinal stability during laminectomy for degenerative spinal stenosis. Efstathiou P, et al. **Bull Hosp Jt Dis** 1996;55(1):7–11
Indications for fusion in the lumbar spine. Hanley EN Jr. **Bull Hosp Jt Dis** 1996;55(3):154–7 (38 ref.)
Acquired lumbar spinal stenosis. Jane JA Sr, et al. **Clin Neurosurg** 1996;43:275–99 (89 ref.)
Density of lumbar muscles 4 years after decompressive spinal surgery. Airaksinen O, et al. **Eur Spine J** 1996;5(3):193–7
Expansive lumbar laminoplasty for degenerative spinal stenosis in patients below 70 years of age. Matsui H, et al. **Eur Spine J** 1997;6(3):191–6
The surgery of spinal stenosis. Booth RE Jr, et al. **Instr Course Lect** 1994;43:441–9 (31 ref.)
Spinal stenosis: indications for laminectomy. Garfin SR, et al. **Instr Course Lect** 1994;43:411–4 (24 ref.)
Lumbar spinal stenosis: indications for arthrodesis and spinal instrumentation. Herkowitz HN. **Instr Course Lect** 1994; 43:425–33 (35 ref.)
Minimally invasive arthroscopic spinal surgery. Kambin P, et al. **Instr Course Lect** 1997;46:143–61 (79 ref.)
Pre-incisional caudal epidural blockade and the relief of pain after lumbar spine operations. Kakiuchi M, et al. **Int Orthop** 1997;21(1):62–6
The size of the vertebral canal and the significance of epidural fat in lumbar spinal stenosis. Prasartritha T, et al. **J Med Assoc Thai** 1997 Apr;80(4):247–56
Clinical outcomes and radiological instability following

decompressive lumbar laminectomy for degenerative spinal stenosis: a comparison of patients undergoing concomitant arthrodesis versus decompression alone. Fox MW, et al. **J Neurosurg** 1996 Nov;85(5):793–802

Patient outcomes after spinal reconstructive surgery in patients > or = 40 years of age. Hu SS, et al. **J Spinal Disord** 1996 Dec;9(6):460–9

The effect of postlaminectomy spinal instability on the outcome of lumbar spinal stenosis patients. Mullin BB, et al. **J Spinal Disord** 1996 Apr;9(2):107–16

Upper abdominal aortic injury during spinal surgery. Smythe WR, et al. **J Vasc Surg** 1997 Apr;25(4):774–7

The use of high power drills for laminectomy in spinal stenosis: technical report. Dujovny M, et al. **Neurol Res** 1997 Apr;19(2):219–21

Partial pediculectomy in the treatment of lumbar spinal stenosis: technical note. Sheehan JM, et al. **Neurosurgery** 1997 Jul;41(1):308–10

Spinal stenosis after total lumbar laminectomy for selective dorsal rhizotomy. Gooch JL, et al. **Pediatr Neurosurg** 1996 Jul;25(1):28–30

When is spinal fusion warranted in degenerative lumbar spinal stenosis? Brunon J, et al. **Rev Rhum Engl Ed** 1996 Jan; 63(1):44–50 (35 ref.)

Results of surgery for lumbar spinal stenosis in patients aged 80 years or more. A retrospective study of thirty-four cases. Ishac R, et al. **Rev Rhum Engl Ed** 1996 Mar; 63(3):196–200

Microsurgical nerve root canal widening without fusion for lumbosacral intervertebral foraminal stenosis: technical notes and early results. Baba H, et al. **Spinal Cord** 1996 Nov;34(11):644–50

Associations between spinal deformity and outcomes after decompression for spinal stenosis. Frazier DD, et al. **Spine** 1997 Sep 1;22(17):2025–9

Lumbar laminectomy alone or with instrumented or noninstrumented arthrodesis in degenerative lumbar spinal stenosis. Patient selection, costs, and surgical outcomes. Katz JN, et al. **Spine** 1997 May 15;22(10):1123–31

Seven- to 10-year outcome of decompressive surgery for degenerative lumbar spinal stenosis. Katz JN, et al. **Spine** 1996 Jan 1;21(1):92–8

Appropriateness of indications for surgery of lumbar disc hernia and spinal stenosis. Larequi-Lauber T, et al. **Spine** 1997 Jan 15;22(2):203–9

Long-term results of partial undercutting facetectomy for lumbar lateral recess stenosis. Sanderson PL, et al. **Spine** 1996 Jun 1;21(11):1352–6

Degenerative lumbar spondylolisthesis with spinal stenosis, a prospective study comparing decompression with decompression and intertransverse process arthrodesis: a critical analysis. Vaccaro AR, et al. **Spine** 1997 Feb 15; 22(4):368–9

Indication of fusion for lumbar spinal stenosis in elderly patients and its significance. Yone K, et al. **Spine** 1996 Jan 15;21(2):242–8

Evaluation of prognostic factors following expansive laminoplasty for cervical spinal stenotic myelopathy. Kohno K, et al. **Surg Neurol** 1997 Sep;48(3):237–45

[Management and surgical treatment of prolapsed disk and spinal stenosis (letter)] Jensen OK. **Ugeskr Laeger** 1996 Dec 2;158(49):7111 **(Dan)**

[Destabilization after surgical treatment of narrow lumbar canal: when should arthrodesis be performed?] Saillant G, et al. **Chirurgie** 1996;121(8):597–600 (Eng. Abstr.) **(Fre)**

[Stenosis of the lumbar spine in elderly persons. Surgical decompression] Grob D, et al. **Schweiz Rundsch Med Prax** 1996 Oct 22;85(43):1377–82 (Eng. Abstr.) **(Ger)**

[Factors determining results of surgical treatment for lumbar spine pain syndromes] Kiwerski J. **Chir Narzadow Ruchu Ortop Pol** 1996;61(3):229–36 (Eng. Abstr.) **(Pol)**

THERAPY

Use of caudal epidural blocks to relieve lumbar canal stenotic pain in elderly patients. Galindo-Ciocon D. **AORN J** 1996 Jan;63(1):254–7

Causes and management of unstable degenerative spinal stenosis. Fellrath RF Jr, et al. **J South Orthop Assoc** 1996 Fall;5(3):221–8 (24 ref.)

Lumbar spinal stenosis: a review. Berthelot JM, et al. **Rev Rhum Engl Ed** 1997 May;64(5):315–25 (83 ref.)

The Main Lumbar Spine Study, Part II. 1-year outcomes of surgical and nonsurgical management of sciatica. Atlas SJ, et al. **Spine** 1996 Aug 1;21(15):1777–86

The Maine Lumbar Spine Study, Part III. 1-year outcomes of surgical and nonsurgical management of lumbar spinal stenosis [see comments] Atlas SJ, et al. **Spine** 1996 Aug 1;21(15):1787–94; discussion 1794–5. Comment in: Spine 1997 Feb 15;22(4):463–4. Comment in: Spine 1997 Mar 1;22(5):579–80.

The Maine Lumbar Spine Study, Part I. Background and concepts. Keller RB, et al. **Spine** 1996 Aug 1;21(15):1769–76

[Consensus on diagnosis and treatment of the lumbosacral radicular syndrome. Dutch Society for Neurology] Stam J. **Ned Tijdschr Geneeskd** 1996 Dec 28;140(52):2621–7 (31 ref.) (Eng. Abstr.) **(Dut)**

SPINDLE APPARATUS, MITOTIC see **MITOTIC SPINDLE APPARATUS**

SPINE

consider also terms at SPONDYL- and VERTEBRAL

see related

LAMINECTOMY

Lumbar facet joint infection associated with epidural and paraspinal abscess. Baltz MS, et al. **Clin Orthop** 1997 Jun; (339):109–12

Lumbar paraspinal muscle fatigability in repetitive isoinertial loading: EMG spectral indices, Borg scale and endurance time. Kankaanpää M, et al. **Eur J Appl Physiol** 1997; 76(3):236–42

Presidential lecture, European Spine Society, 1995. The role of Europe in the spine--past and future perspectives. Postacchini F. **Eur Spine J** 1995;4(6):323–6

The use of tertiary collimation for spinal irradiation with extended SSD electron fields. Roback DM, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1187–92

The bone called luz. Reichman E, et al. **J Hist Med Allied Sci** 1996 Jan;51(1):52–65

Basic science research in chiropractic: the state of the art and recommendations for a research agenda. Brennan PC, et al. **J Manipulative Physiol Ther** 1997 Mar-Apr; 20(3):150–68 (182 ref.)

Human anterior and posterior cervical longitudinal ligaments possess similar tensile properties. Przybylski GJ, et al. **J Orthop Res** 1996 Nov;14(6):1005–8

Clamping stiffness and its influence on load distribution between paired internal spinal fixation devices. Rohlmann A, et al. **J Spinal Disord** 1996 Jun;9(3):234–40

Spinal stability after war missile injuries of the spine. Splavski B, et al. **J Trauma** 1996 Nov;41(5):850–3

The rigid spine syndrome due to acid maltase deficiency. Fadic R, et al. **Muscle Nerve** 1997 Mar;20(3):364–6

Acrylic bone cement injection for the treatment of bone metastases [editorial; comment] Laredo JD, et al. **Rev Rhum Engl Ed** 1997 Mar;64(3):145–6. Comment on: Rev Rhum Engl Ed 1997 Mar;64(3):177–83.

Identification of the location, extent, and pathway of sensory neurologic feedback after mechanical stimulation of a lateral spinal ligament in chickens. Jiang H, et al. **Spine** 1997 Jan 1;22(1):17–25

Frequency and characteristics of side effects of spinal manipulative therapy. Senstad O, et al. **Spine** 1997 Feb 15; 22(4):435–40; discussion 440–1

[3-D evaluation of posture in normal and scoliotic adolescents] Le Blanc R, et al. **Ann Chir** 1996;50(8):631–6 (Eng. Abstr.) **(Fre)**

[Costosternal swelling and diffuse bone pain in tubercular osteomyelitis] Hemmen T, et al. **Dtsch Med Wochenschr** 1997 May 9;122(19):610–4 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

Pattern of malformations in the axial skeleton in human trisomy 18 fetuses. Kjaer I, et al. **Am J Med Genet** 1996 Nov 11;65(4):332–6

Pattern of malformations in the axial skeleton in human trisomy 13 fetuses. Kjaer I, et al. **Am J Med Genet** 1997 Jun 27;70(4):421–6

Multiple vertebral segmentation defects and rib anomalies [letter; comment] Martínez-Frías ML. **Am J Med Genet** 1996 Dec 2;66(1):91. Comment on: Am J Med Genet 1996 Feb 2;61(4):310–9.

Perinatal features of omphalocele-exstrophy-imperforate anus-spinal defects (OEIS complex) associated with large meningomyeloceles and severe limb defects. Chen CP, et al. **Am J Perinatol** 1997 May;14(5):275–9

Morphological and morphometric features of the deformed cervical and caudal vertebrae in a new mutant knotty-tail (knt/knt) mouse. Matsuura T, et al. **Anat Anz** 1997 Jun; 179(3):277–83

Spinal abnormalities in classic bladder exstrophy. Cadeddu JA, et al. **Br J Urol** 1997 Jun;79(6):975–8

The surgical treatment of vertebral deformities in achondroplastic dwarfism. Parisini P, et al. **Chir Organi Mov** 1996 Apr-Jun;81(2):129–37 **(Eng, Ita)**

Report of a new case of axial mesodermal dysplasia complex. Bini R, et al. **Clin Genet** 1996 Nov;50(5):407–10

Branchio-oto (BO) syndrome and oculo-auriculo-vertebral phenotype: overlapping clinical findings in a child from a BO family. Sensi A, et al. **Clin Genet** 1996 Jun;49(6):300–2

Prevalence and risk factors for asymmetric posture in preschool children aged 6-7 years. Juskeliene V, et al. **Int J Epidemiol** 1996 Oct;25(5):1053–9

Perturbation of BMP signaling in somitogenesis resulted in vertebral and rib malformations in the axial skeletal formation [see comments] Nifuji A, et al. **J Bone Miner Res** 1997 Mar;12(3):332–42. Comment in: J Bone Miner Res 1997 Mar;12(3):343–6.

Chromosome 18q22.2-->qter deletion and a congenital anomaly syndrome with multiple vertebral segmentation defects. Dowton SB, et al. **J Med Genet** 1997 May; 34(5):414–7

Abnormalities of the spine in Goldenhar's syndrome. Gibson JN, et al. **J Pediatr Orthop** 1996 May-Jun;16(3):344–9

Humero-spinal dysostosis: report of the fourth case with emphasis on generalized skeletal involvement, abnormal craniofacial features, and mitral valve thickening. Hall BD. **J Pediatr Orthop B** 1997 Jan;6(1):11–4 (3 ref.)

Focal nodular hyperplasia of the liver with the lumbo-costovertebral syndrome. al-Salem AH, et al. **J Pediatr Surg** 1996 Sep;31(9):1282–4

Chest wall and spinal deformities in adults with congenital diaphragmatic defects. Vanamo K, et al. **J Pediatr Surg** 1996 Jun;31(6):851–4

MURCS association: ultrasonographic findings and pathologic correlation. Fernandez CO, et al. **J Ultrasound Med** 1996 Dec;15(12):867–70

Genital malformations and coexistent urinary tract or spinal anomalies in patients with imperforate anus. Metts JC 3rd, et al. **J Urol** 1997 Sep;158(3 Pt 2):1298–300

Vertebral anomalies in Larsen's syndrome. Weisenbach J, et al. **Pediatr Radiol** 1996 Sep;26(9):682–3

Second-trimester ultrasonographic diagnosis of segmental vertebral abnormalities associated with neurological deficit: a possible new variant of occult spinal dysraphism. Achiron R, et al. **Prenat Diagn** 1996 Aug;16(8):760–3

Anencephaly, dorsal hypermelia, and duplication of the vertebral column: a rare type of rachipagus conjoined twins. Spencer R, et al. **Teratology** 1996 Apr;53(4):253–60

Vertebral column and spinal cord malformation in children with exstrophy of the cloaca, with emphasis on their functional correlates. Weaver KB, et al. **Teratology** 1997 Apr;55(4):241–8

Spondylocostal dysplasia and cardiac anomalies in one dizygotic twin. Ozkinay F, et al. **Turk J Pediatr** 1996 Jul-Sep;38(3):381–4

Early sonographic diagnosis of Jarcho-Levin syndrome: a prospective screening program in one family. Eliyahu S, et al. **Ultrasound Obstet Gynecol** 1997 May;9(5):314–8

Persistent cloaca and caudal spinal agenesis in calves: three cases. Dean CE, et al. **Vet Pathol** 1996 Nov;33(6):711–2

[Fusion of vertebrae and the sacroiliac joint by cartilaginous tissue in HLA-B27 transgenic rats] Kriegsmann J, et al. **Verh Dtsch Ges Pathol** 1996;80:334 **(Ger)**

ANATOMY & HISTOLOGY

Anatomy of the iliolumbar ligament: a review of its anatomy and a magnetic resonance study. Rucco V, et al. **Am J Phys Med Rehabil** 1996 Nov-Dec;75(6):451–5

Anatomy of the sheep spine and its comparison to the human spine. Wilke HJ, et al. **Anat Rec** 1997 Apr;247(4):542–55

The usefulness of parts of the body [classical article] Galen. **Clin Orthop** 1997 Apr;(337):3–12

Finite element methods in spine biomechanics research. Gilbertson LG, et al. **Crit Rev Biomed Eng** 1995; 23(5-6):411–73 (123 ref.)

Stability of the human spine in neutral postures. Kiefer A, et al. **Eur Spine J** 1997;6(1):45–53

The length of the vertebral column of primates: an allometric study. Majoral M, et al. **Folia Primatol (Basel)** 1997; 68(2):57–76

Adaptation in the vertebral column: a comparative study of patterns of metameric variation in mice and men. O'Higgins P, et al. **J Anat** 1997 Jan;190 (Pt 1):105–13

Changes in the surface of the superior articular joint from the lower thoracic to the upper lumbar vertebrae. Shinohara H. **J Anat** 1997 Apr;190 (Pt 3):461–5

Effects of spaceflight and recovery on rat humeri and vertebrae: histological and cell culture studies. Zerath E, et al. **J Appl Physiol** 1996 Jul;81(1):164–71

A normal sagittal spinal configuration: a desirable clinical outcome [letter; comment] Cooperstein R. **J Manipulative Physiol Ther** 1997 Feb;20(2):136–7; discussion 137–9. Comment on: J Manipulative Physiol Ther 1996 Jul-Aug;19(6):398–405.

Evaluation of the assumptions used to derive an ideal normal cervical spine model. Harrison DD, et al. **J Manipulative Physiol Ther** 1997 May;20(4):246–56

A normal sagittal spinal configuration: a desirable clinical outcome [see comments] Harrison DD, et al. **J Manipulative Physiol Ther** 1996 Jul-Aug;19(6):398–405 (57 ref.). Comment in: J Manipulative Physiol Ther 1997 Feb;20(2):130–1; discussion 131–3. Comment in: J Manipulative Physiol Ther 1997 Feb;20(2):133–4; discussion 134–5. Comment in: J Manipulative Physiol Ther 1997 Feb;20(2):136–7; discussion 137–9. Comment in: J Manipulative Physiol Ther 1997 May;20(4):288–93.

A normal sagittal spinal configuration: a desirable clinical outcome [letter; comment] Jutkowitz J. **J Manipulative Physiol Ther** 1997 May;20(4):288–93. Comment on: J Manipulative Physiol Ther 1996 Jul-Aug;19(6):398–405.

A normal sagittal spinal configuration: a desirable clinical outcome [letter; comment] Morgan L. **J Manipulative Physiol Ther** 1997 Feb;20(2):130–1; discussion 131–3. Comment on: J Manipulative Physiol Ther 1996 Jul-Aug;19(6):398–405.

A normal sagittal spinal configuration: a desirable clinical outcome [letter; comment] Owens EF Jr. **J Manipulative Physiol Ther** 1997 Feb;20(2):133–4; discussion 134–5. Comment on: J Manipulative Physiol Ther 1996 Jul-Aug;19(6):398–405.

Estimation of gestational age by the length of the dorsal spine. Martell M, et al. **J Perinat Med** 1997;25(2):168–72

Large vertebral body, in addition to narrow spinal canal, are risk factors for cervical myelopathy. Hukuda S, et al. **J Spinal Disord** 1996 Jun;9(3):177–86

A CAD CAM digitizing adapter for spinal casts. Lemaire ED, et al. **Prosthet Orthot Int** 1996 Aug;20(2):138–41

Construction of local vertebral coordinate systems using a digitizing probe. Technical note. Crawford NR, et al. **Spine** 1997 Mar 1;22(5):559–63

The location of the vertebral artery foramen and its relation to posterior lateral mass screw fixation. Ebraheim NA, et al. **Spine** 1996 Jun 1;21(11):1291–5

Comparisons of lordotic cervical spine curvatures to a theoretical ideal model of the static sagittal cervical spine [letter; comment] Owens EF Jr, et al. **Spine** 1996 Nov 15; 21(22):2698–701. Comment on: Spine 1996 Mar 15;21(6):667–75.

Vertebral level of the ending of the spinal cord and its relationship to the length of the vertebral column in northern Turkish neonates. Içten N, et al. **Surg Radiol Anat** 1995;17(4):315–8

[Comparative study of static curves of the human spine in vivo during exercise and stretching in men and women] Vanneuville G, et al. **Bull Assoc Anat (Nancy)** 1996 Mar; 80(248):37–9 (Eng. Abstr.) **(Fre)**

[Preliminary analysis of the modifications of spinal curves, in extreme amplitudes, observed in rhythmic and athletic gymnastics] Vanneuville G, et al. **Bull Assoc Anat (Nancy)** 1996 Mar;80(248):33–5 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

The lumbar anterior epidural cavity: the posterior longitudinal ligament, the anterior ligaments of the dura mater and the anterior internal vertebral venous plexus. Plaisant O, et al. **Acta Anat (Basel)** 1996;155(4):274–81

Identification of the feeding arteries of spinal vascular lesions via phase-contrast MR angiography with three-dimensional acquisition and phase display. Mascalchi M, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):351–8

Spinal cord infarct after arterial switch associated with an umbilical artery catheter. Lemke RP, et al. **Ann Thorac Surg** 1996 Nov;62(5):1532–4

The architecture of internal blood vessels in human fetal vertebral bodies. Skawina A, et al. **J Anat** 1997 Aug;191 (Pt 2):259–67

Vertebrospinal angiography in the evaluation of vertebral and spinal cord disease. Nelson PK, et al. **Neuroimaging Clin N Am** 1996 Aug;6(3):589–605 (61 ref.)

Spinal epidural venous plexus: its MR enhancement patterns and their clinical significance. Morikawa M, et al. **Radiat Med** 1996 Sep-Oct;14(5):221–7

The location of the vertebral artery foramen and its relation to posterior lateral mass screw fixation. Ebraheim NA, et al. **Spine** 1996 Jun 1;21(11):1291–5

Chondroitinase ABC (pharmaceutical grade) for chemonucleolysis. Functional and structural evaluation after local application on intraspinal nerve structures and blood vessels. Olmarker K, et al. **Spine** 1996 Sep 1; 21(17):1952–6

Paraplegia resulting from vessel ligation. Winter RB, et al. **Spine** 1996 May 15;21(10):1232–3; discussion 1233–4

Anatomic distribution of metastases in the vertebral body and modes of hematogenous spread. Yuh WT, et al. **Spine** 1996 Oct 1;21(19):2243–50

[Opening of the middle thyroid vein into the vertebral vein in the fetus] Oszukowski P, et al. **Przegl Lek** 1996; 53(8):634–5 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Effects of parathyroid hormone treatment in rats [letter; comment] Turner CH. **Bone** 1996 Jul;19(1):73–4. Comment on: Bone 1995 Dec;17(6):507–11.

RS-66271, a C-terminally substituted analog of human parathyroid hormone-related protein (1–34), increases trabecular and cortical bone in ovariectomized, osteopenic rats. Vickery BH, et al. **J Bone Miner Res** 1996 Dec; 11(12):1943–51

High dose medroxyprogesterone, rates of bone resorption, and changes in spinal bone density [letter; comment] Prior JC. **J Clin Endocrinol Metab** 1996 Dec;81(12):4500–1. Comment on: J Clin Endocrinol Metab 1996 Mar;81(3):1014–7.

EMBRYOLOGY

Function of somite and somitocoele cells in the formation of the vertebral motion segment in avian embryos. Huang R, et al. **Acta Anat (Basel)** 1996;155(4):231–41

Expression pattern of type II collagen mRNA during early vertebral development in the human embryo. Krengel S, et al. **Anat Embryol (Berl)** 1996 Jan;193(1):43–51

Three dimensional ultrasound: display modalities in the fetal spine and thorax. Riccabona M, et al. **Eur J Radiol** 1996 May;22(2):141–5

The architecture of internal blood vessels in human fetal vertebral bodies. Skawina A, et al. **J Anat** 1997 Aug;191 (Pt 2):259–67

A role for BMP-4 in the development of subcutaneous cartilage. Watanabe Y, et al. **Mech Dev** 1996 Jun; 57(1):69–78

Persistent cloaca and caudal spinal agenesis in calves: three cases. Dean CE, et al. **Vet Pathol** 1996 Nov;33(6):711–2

[Subdivision of the mesoderm along the dorso-ventral axis] Takahashi Y, et al. **Tanpakushitsu Kakusan Koso** 1996 Dec; 41(16):2532–41 (29 ref.) **(Jpn)**

GROWTH & DEVELOPMENT

The outcome of walking in stable neuromuscular deficiencies. Commare MC, et al. **Dev Med Child Neurol** 1997 Apr; 39(4):253–8

Spinal and femoral bone mass accumulation during normal adolescence: comparison with female patients with sexual precocity and with hypogonadism. Takahashi Y, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1248–53

Vertebral growth after thoracic or lumbar fracture of the spine in children. Pouliquen JC, et al. **J Pediatr Orthop** 1997 Jan-Feb;17(1):115–20

Growth of the cervical spine with special reference to its lordosis and mobility. Kasai T, et al. **Spine** 1996 Sep 15; 21(18):2067–73

Overpowering the crankshaft mechanism. The effect of posterior spinal fusion with and without stiff transpedicular fixation on anterior spinal column growth in immature canines. Kioschos HC, et al. **Spine** 1996 May 15; 21(10):1168–73

A new method using top views of the spine to predict the progression of curves in idiopathic scoliosis during growth. Kohashi Y, et al. **Spine** 1996 Jan 15;21(2):212–7

In situ rigidity of a new sliding rod for management of the growing spine in Duchenne muscular dystrophy. Wilke HJ, et al. **Spine** 1996 Sep 1;21(17):1957–61

INJURIES see SPINAL INJURIES

INNERVATION

The spatiotemporal development of innervation in spinal ligaments of chickens. Jiang H, et al. **J Anat** 1996 Aug;189 (Pt 1):57–64

METABOLISM

Vitamin D stores of urban women in Taipei: effect on bone density and bone turnover, and seasonal variation. Tsai KS, et al. **Bone** 1997 Apr;20(4):371–4

Bone mineral density of vertebrae, proximal femur and os calcis in normal Greek subjects as assessed by dual-energy X-ray absorptiometry: comparison with other populations. Hadjidakis D, et al. **Eur J Clin Invest** 1997 Mar; 27(3):219–27

Effects of growth hormone (GH) replacement on bone metabolism and mineral density in adult onset of GH deficiency: results of a double-blind placebo-controlled study with open follow-up. Finkenstedt G, et al. **Eur J Endocrinol** 1997 Mar;136(3):282–9

Influence of exercise and degenerative vertebral changes on BMD: a cross-sectional study in Japanese men. Sone T, et al. **Gerontology** 1996;42 Suppl 1:57–66

Age-related normal uptake of 99mTc-MDP in the lower spine. Sundkvist GM, et al. **Nuklearmedizin** 1997 Mar; 36(2):52–5

Variability of vertebral and femoral postmenopausal bone loss: a longitudinal study. Pouillès JM, et al. **Osteoporos Int** 1996;6(4):320–4

Vertebral morphometry studies using dual-energy x-ray absorptiometry. Blake GM, et al. **Semin Nucl Med** 1997 Jul;27(3):276–90 (47 ref.)

MICROBIOLOGY

Torulopsis (Candida) glabrata: a new pathogen found in spinal epidural abscess. Bonomo RA, et al. **Clin Infect Dis** 1996 Mar;22(3):588–9

North American blastomycosis of the vertebrae in an adolescent [letter; comment] Challapalli M, et al. **Clin Infect Dis** 1996 Oct;23(4):853–4. Comment on: Clin Infect Dis 1996 Mar;22(3):496–502.

Brucellosis of the spine with a synchronous Staphylococcus aureus pyogenic elbow infection. Velan GJ, et al. **Eur Spine J** 1997;6(4):284–5

Increasing frequency of vertebral osteomyelitis following Staphylococcus aureus bacteraemia in Denmark 1980–1990. Jensen AG, et al. **J Infect** 1997 Mar;34(2):113–8

PATHOLOGY

Quantitative analysis of signal intensities and contrast after fat suppression in contrast-enhanced magnetic resonance imaging of the spine. Georgy BA, et al. **Acad Radiol** 1996 Sep;3(9):731–4

Juvenile fibromatosis of the posterior mediastinum with intraspinal extension. Ko SF, et al. **AJNR Am J Neuroradiol** 1996 Mar;17(3):522–4

Vertebral fluid collection associated with vertebral collapse. Dupuy DE, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1535–8

Contrast enhancement and quantitative signal analysis in MR imaging of multiple myeloma: assessment of focal and diffuse growth patterns in marrow correlated with biopsies and survival rates. Stäbler A, et al. **AJR Am J Roentgenol** 1996 Oct;167(4):1029–36

Comparative degenerative joint disease of the vertebral column in the medieval monastic cemetery of the Gilbertine priory of St. Andrew, Fishergate, York, England. Knüsel CJ, et al. **Am J Phys Anthropol** 1997 Aug;103(4):481–95

Mycobacteriosis in the Pliocene [letter] Rothschild BM, et al. **Ann Intern Med** 1997 Jul 15;127(2):168–9

Architecture and distribution of cancellous bone yield vertebral fracture clues. A histomorphometric analysis of the complete spinal column from 40 autopsy specimens. Amling M, et al. **Arch Orthop Trauma Surg** 1996; 115(5):262–9

Prevalence of trabecular microcallus formation in the vertebral body and the femoral neck. Cheng XG, et al. **Calcif Tissue Int** 1997 May;60(5):479–84

Intertrabecular pattern of tumors metastatic to bone. Yamaguchi T, et al. **Cancer** 1996 Oct 1;78(7):1388–94

Magnetic resonance imaging of the musculoskeletal system. Part 8. The spine, section 1. Gundry CR, et al. **Clin Orthop** 1997 May;(338):275–87

3-dimensional computed tomography of ossification of the spinal ligament. Terada A, et al. **Clin Orthop** 1997 Mar; (336):137–42

The outcome of walking in stable neuromuscular deficiencies. Commare MC, et al. **Dev Med Child Neurol** 1997 Apr; 39(4):253–8

Assessment of bone involvement in patients with multiple myeloma using bone densitometry. Abildgaard N, et al. **Eur J Haematol** 1996 Nov;57(5):370–6

Vertebral lesions associated with palmoplantar pustulosis. Baba H, et al. **Int Orthop** 1997;21(1):19–24

Clinical grading of spinal osteoporosis: quality of life components and spinal deformity in women with chronic low back pain and women with vertebral osteoporosis. Leidig-Bruckner G, et al. **J Bone Miner Res** 1997 Apr; 12(4):663–75

The association between visual incompetence and spinal derangement: an instructive case history. Stephens D, et al. **J Manipulative Physiol Ther** 1997 Jun;20(5):343–50

Neuropathology of human spinal cord injury sustained in sports-related activities. Hayes KC, et al. **J Neurotrauma** 1997 Apr;14(4):235–48

The value of magnetic resonance imaging of the postoperative spine with titanium implants. Rupp RE, et al. **J Spinal Disord** 1996 Aug;9(4):342–6

MR parameters for imaging titanium spinal instrumentation. Wang JC, et al. **J Spinal Disord** 1997 Feb;10(1):27–32

Direct spinal curvature digitization in scoliosis screening--a comparative study with Moiré contourgraphy. Wong HK, et al. **J Spinal Disord** 1997 Jun;10(3):185–92

MR imaging of the pediatric spine. Byrd SE, et al. **Magn Reson Imaging Clin N Am** 1996 Nov;4(4):797–833 (31 ref.)

Age-related changes in vertebral height ratios and vertebral fracture. Sone T, et al. **Osteoporos Int** 1997;7(2):113–8

Axial skeleton and pituitary gland in human fetuses with spina bifida and cranial encephalocele. Kjaer I, et al. **Pediatr Pathol Lab Med** 1996 Nov-Dec;16(6):909–26

From the archives of the AFIP. Primary tumors of the spine: radiologic pathologic correlation. Murphey MD, et al. **Radiographics** 1996 Sep;16(5):1131–58 (70 ref.)

Psoriatic arthritis with spinal involvement in a patient receiving alpha-interferon for chronic hepatitis C. Lombardini F, et al. **Scand J Rheumatol** 1997;26(1):58–60

Primary bone tumors of the spine. Terminology and surgical staging. Boriani S, et al. **Spine** 1997 May 1;22(9):1036–44 (28 ref.)

Spinal shortening in scoliosis surgery, A case with transitory paraplegia. Pedrals JG. **Spine** 1996 Nov 1;21(21):2515–9

[Use of a stimulated echo sequence in the MRI study of the brain and spine] Yapo P, et al. **J Neuroradiol** 1996 Sep; 23(2):56–61 (Eng. Abstr.) **(Fre)**

[Dysphagia as a symptom of diffuse idiopathic skeletal hyperostosis (Forestier-Rotes disease). A case report and literature review] Escobar C, et al. **Acta Otorrinolaringol Esp** 1997 Mar;48(2):161–3 (16 ref.) (Eng. Abstr.) **(Spa)**

[Intramedullary cavernous angioma in a 10-year-old child: a case report] Bastida Eizaguirre M, et al. **An Esp Pediatr** 1997 Apr;46(4):403–5 **(Spa)**

[Osterosclerotic myeloma and polyneuropathy] Fernández-Torre JL, et al. **Rev Neurol** 1997 Jun; 25(142):883–6 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Changes in spine height throughout 32 hours of bedrest. McGill SM, et al. **Arch Phys Med Rehabil** 1996 Oct; 77(10):1071–3

Computer-aided video analysis of vertebrofemoral motion during toe touching in healthy subjects. Tully EA, et al. **Arch Phys Med Rehabil** 1997 Jul;78(7):759–66

Estimation of spine forces under whole-body vibration by means of a biomechanical model and transfer functions. Fritz M. **Aviat Space Environ Med** 1997 Jun;68(6):512–9

Spinal shrinkage due to +Gz forces. Hämäläinen O, et al. **Aviat Space Environ Med** 1996 Jul;67(7):659–61

Investigation of video techniques for dynamic measurements of relative vertebral-body motion in vitro. Moeini SM, et al. **Biomed Instrum Technol** 1996 Jan-Feb;30(1):62–70

Three-year controlled, randomized trial of the effect of dose-specified loading and strengthening exercises on bone mineral density of spine and femur in nonathletic, physically active women. Sinaki M, et al. **Bone** 1996 Sep; 19(3):233–44

Finite element methods in spine biomechanics research. Gilbertson LG, et al. **Crit Rev Biomed Eng** 1995; 23(5–6):411–73 (123 ref.)

Posteroanterior spinal mobilization: state of the art review and discussion. Björnsdóttir SV, et al. **Disabil Rehabil** 1997 Feb;19(2):39–46 (40 ref.)

Studies of spinal shrinkage to evaluate low-back loading in the workplace. McGill SM, et al. **Ergonomics** 1996 Jan; 39(1):92–102

Stability of the human spine in neutral postures. Kiefer A, et al. **Eur Spine J** 1997;6(1):45–53

Load-displacement properties of the thoracolumbar calf spine: experimental results and comparison to known human data. Wilke HJ, et al. **Eur Spine J** 1997;6(2):129–37

Spinal manipulative therapy: no evidence for neurovascular trauma. Esposito V, et al. **Int J Neurosci** 1996 Jul; 86(1–2):1–6

A method for measuring external spinal loads during unconstrained free-dynamic lifting. Fathallah FA, et al. **J Biomech** 1997 Sep;30(9):975–8

Measures of paraspinal muscle performance do not predict initial trunk kinematics after tripping. Grabiner MD, et al. **J Biomech** 1996 Jun;29(6):735–44

Spine loading during trunk lateral bending motions. Marras WS, et al. **J Biomech** 1997 Jul;30(7):697–703

Loads on an internal spinal fixation device during walking. Rohlmann A, et al. **J Biomech** 1997 Jan;30(1):41–7

The control of non-twisting somersaults using configuration changes. Yeadon MR, et al. **J Biomech** 1996 Oct; 29(10):1341–8

Stabilizing role of moments and pelvic rotation on the human spine in compression. Shirazi-Adi A, et al. **J Biomech Eng** 1996 Feb;118(1):26–31

Long-term changes in bone mineral and biomechanical properties of vertebrae and femur in aging, dietary calcium restricted, and/or estrogen-deprived/-replaced rats. Jiang Y, et al. **J Bone Miner Res** 1997 May;12(5):820–31

Muscle activity in autotomized tails of a lizard (Gekko gecko): a naturally occurring spinal preparation. Rumping JM, et al. **J Comp Physiol [A]** 1996 Oct;179(4):525–38

Locomotor design of dolphin vertebral columns: bending mechanics and morphology of Delphinus delphis. Long JH Jr, et al. **J Exp Biol** 1997 Jan;200 (Pt 1):65–81

Balance and skeletal alignment in a group of elderly female fallers and nonfallers. O'Brien K, et al. **J Gerontol A Biol Sci Med Sci** 1997 Jul;52(4):B221–6

Movements of vertebrae during manipulative thrusts to unembalmed human cadavers. Gál J, et al. **J Manipulative Physiol Ther** 1997 Jan;20(1):30–40

Torque: an appraisal of misuse of terminology in chiropractic literature and technique. Harrison DD, et al. **J Manipulative Physiol Ther** 1996 Sep;19(7):454–62 (57 ref.)

Chiropractic biophysics technique: a linear algebra approach to posture in chiropractic. Harrison DD, et al. **J Manipulative Physiol Ther** 1996 Oct;19(8):525–35

Oscillations of the vertebrae in spinal manipulative therapy. Solinger AB. **J Manipulative Physiol Ther** 1996 May; 19(4):238–43

Neuromuscular trunk performance and spinal loading during a fatiguing isometric trunk extension with varying torque requirements. Sparto PJ, et al. **J Spinal Disord** 1997 Apr; 10(2):145–56

Role of spinal and peripheral alpha 2 adrenoceptors in micturition in normal conscious rats. Ishizuka O, et al. **J Urol** 1996 Nov;156(5):1853–7

Clarification of the mechanical behaviour of spinal motion segments through a three-dimensional poroelastic mixed finite element model. Wu JS, et al. **Med Eng Phys** 1996 Apr;18(3):215–24

Biomechanical analysis of the lumbar spine. Božić B, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):24–6

The history of spinal biomechanics. Sanan A, et al. **Neurosurgery** 1996 Oct;39(4):657–68; discussion 668–9

The validity and reliability of the back saver sit-and-reach test in middle school girls and boys. Patterson P, et al. **Res Q Exerc Sport** 1996 Dec;67(4):448–51

Intra- and interobserver reproducibility of Cybex EDI 320 measuring spinal mobility. Bø K, et al. **Scand J Med Sci Sports** 1997 Jun;7(3):140–3

The influence of different sitting positions on cervical and lumbar posture. Black KM, et al. **Spine** 1996 Jan 1; 21(1):65–70

Construction of local vertebral coordinate systems using a digitizing probe. Technical note. Crawford NR, et al. **Spine** 1997 Mar 1;22(5):559–63

Trunk extensor and flexor strength measured by the Cybex 6000 dynamometer. Assessment of short-term and long-term reproducibility of several strength variables. Madsen OR. **Spine** 1996 Dec 1;21(23):2770–6

Asymmetry of erector spinae muscle activity in twisted postures and consistency of muscle activation patterns across subjects. van Dieën JH. **Spine** 1996 Nov 15; 21(22):2651–61

[Effects of preliminary loading on dynamic strength of the spine] Moiseev IuB, et al. **Aviakosm Ekolog Med** 1996; 30(4):31–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Modeling the mechanical behavior of vertebral trabecular bone: effects of age-related changes in microstructure. Silva MJ, et al. **Bone** 1997 Aug;21(2):191–9

What happens in the motion segment? Panjabi MM. **Bull Hosp Jt Dis** 1996;55(3):149–53 (14 ref.)

The mysteries of segmental instability. Szpalski M. **Bull Hosp Jt Dis** 1996;55(3):147–8 (10 ref.)

Rates of bone loss in peri- and postmenopausal women: a 4 year, prospective, population-based study. Young R, et al. **Clin Sci (Colch)** 1996 Sep;91(3):307–12

Spinal locomotion: an approach to human neurophysiology and treatment in spinal cord lesion. New results obtained with basic methods. Schalow G. **Gen Physiol Biophys** 1996 Aug;15 Suppl 1:1–3

Somatic dysfunction and the phenomenon of visceral disease simulation: a probable explanation for the apparent effectiveness of somatic therapy in patients presumed to be suffering from true visceral disease [letter; comment] Lavine R. **J Manipulative Physiol Ther** 1996 Feb; 19(2):147–9. Comment on: J Manipulative Physiol Ther 1995 Jul-Aug;18(6):379–97.

Stiffness judgments are affected by visual occlusion. Maher CG, et al. **J Manipulative Physiol Ther** 1996 May; 19(4):250–6

A new technique for the three-dimensional study of the spine in vitro and in vivo by using a motion-analysis system. Liu XC, et al. **J Spinal Disord** 1997 Aug;10(4):329–38

Effect of patient position on the sagittal-plane profile of the thoracolumbar spine. Wood KB, et al. **J Spinal Disord** 1996 Apr;9(2):165–9

Spinal muscular atrophy combined with congenital heart disease: a report of two cases [letter] Mulleners WM, et al. **Neuropediatrics** 1996 Dec;27(6):333–4

Correlations of dual-energy X-ray absorptiometry, quantitative computed tomography, and single photon absorptiometry with spinal and non-spinal fractures [see comments] Lafferty FW, et al. **Osteoporos Int** 1996; 6(5):407–15. Comment in: Osteoporos Int 1997;7(3):238–40.

Rib cage-spine coupling patterns involved in brace treatment of adolescent idiopathic scoliosis. Aubin CE, et al. **Spine** 1997 Mar 15;22(6):629–35

Biomechanical effects of transthoracic microdiscectomy. Broc GG, et al. **Spine** 1997 Mar 15;22(6):605–12

Analysis of lumbar spine and hip motion during forward bending in subjects with and without a history of low back pain. Esola MA, et al. **Spine** 1996 Jan 1;21(1):71–8

Inefficient muscular stabilization of the lumbar spine associated with low back pain. A motor control evaluation of transversus abdominis. Hodges PW, et al. **Spine** 1996 Nov 15;21(22):2640–50

Effects of chondroitinase ABC and chymopapain on spinal motion segment biomechanics. An in vivo biomechanical, radiologic, and histologic canine study. Lü DS, et al. **Spine** 1997 Aug 15;22(16):1828–34; discussion 1834–5

A comparison of methods for measuring trunk list. A simple plumbline is the best. McLean IP, et al. **Spine** 1996 Jul 15;21(14):1667–70

Hyperextension and spine height changes. Magnusson ML, et al. **Spine** 1996 Nov 15;21(22):2670–5

Spinal pain mechanisms. Siddall PJ, et al. **Spine** 1997 Jan 1;22(1):98–104 (20 ref.)

Spine and scalp recordings as a function of intensity. A model for changes during spinal cord monitoring. Slimp JC, et al. **Spine** 1996 Jan 1;21(1):99–103

Rotational changes of the vertebral pelvic axis after sublaminar instrumentation in adolescent idiopathic scoliosis. Wood KB, et al. **Spine** 1997 Jan 1;22(1):51–7

[A study of biomechanical coupling between spine and rib cage in the treatment by orthosis of scoliosis] Aubin CE, et al. **Ann Chir** 1996;50(8):641–50 (Eng. Abstr.) **(Fre)**

[Movement training in the prevention of postural weakness] Schmitz A, et al. **Z Orthop Ihre Grenzgeb** 1997 Mar-Apr; 135(2):Oa22-3 **(Ger)**

RADIATION EFFECTS

Potential role of proton therapy in the treatment of pediatric medulloblastoma/primitive neuro-ectodermal tumors: spinal theca irradiation. Miralbell R, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):805–11

Radiotherapy effects on vertebral bone marrow: easily recognizable changes in T2 relaxation times. Argiris A, et al. **Magn Reson Imaging** 1996;14(6):633–8

[Reduction of radiation exposure in full spine images in youth] Bernau A, et al. **Z Orthop Ihre Grenzgeb** 1996 Jul-Aug;134(4):302–4 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Vertebral morphometry derived from digital images. Rosol MS, et al. **AJR Am J Roentgenol** 1996 Dec;167(6):1545–9

Bone mineral density in normal Swedish women. Löfman O, et al. **Bone** 1997 Feb;20(2):167–74

Influence of spondylopathy on bone densitometry using dual energy X-ray absorptiometry. Jaovisidha S, et al. **Calcif Tissue Int** 1997 May;60(5):424–9

Vertebral and metacarpal morphometry as indicators of nutritional improvement. Revilla M, et al. **Clin Rheumatol** 1997 May;16(3):279–83

A multicenter comparison of dual-energy X-ray absorptiometers: in vivo and in vitro measurements of bone mineral content and density. Economos CD, et al. **J Bone Miner Res** 1996 Feb;11(2):275–85

Natural history of upper cervical lesions in rheumatoid arthritis. Fujiwara K, et al. **J Spinal Disord** 1997 Aug; 10(4):275–81

The increase in spinal bone density that occurs in response to fluoride therapy for osteoporosis is not maintained after the therapy is discontinued. Talbot JR, et al. **Osteoporos Int** 1996;6(6):442–7

From the archives of the AFIP. Primary tumors of the spine: radiologic pathologic correlation. Murphey MD, et al. **Radiographics** 1996 Sep;16(5):1131–58 (70 ref.)

Time course of radiologic lesions in spinal hyperostosis: an osteoradiometric study. Ciocci A, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):770–3

Vertebral morphometry studies using dual-energy x-ray absorptiometry. Blake GM, et al. **Semin Nucl Med** 1997 Jul;27(3):276–90 (47 ref.)

Video-assisted lateral intertransverse process arthrodesis. Validation of a new minimally invasive lumbar spinal fusion technique in the rabbit and nonhuman primate (rhesus) models. Boden SD, et al. **Spine** 1996 Nov 15;21(22):2689–97

Reducing the lifetime risk of cancer from spinal radiographs among people with adolescent idiopathic scoliosis. Levy AR, et al. **Spine** 1996 Jul 1;21(13):1540–7; discussion 1548

Measurement of rib vertebral angle difference. Intraobserver error and interobserver variation. McAlindon RJ, et al. **Spine** 1997 Jan 15;22(2):198–9

Intraspinal cross-section areas measured on myelography--computed tomography. The relation to outcome in nonoperated lumbar disc herniation. Oland G, et al. **Spine** 1996 Sep 1;21(17):1985–9; discussion 1990

Spinal column deformity and instability after lumbar or thoracolumbar laminectomy for intraspinal tumors in children and young adults. Papagelopoulos PJ, et al. **Spine** 1997 Feb 15;22(4):442–51

Accuracy of computer-assisted pedicle screw placement. An in vivo computed tomography analysis. Schwarzenbach O, et al. **Spine** 1997 Feb 15;22(4):452–8

Spinal radiographic findings and nonspecific low back pain. A systematic review of observational studies. van Tulder MW, et al. **Spine** 1997 Feb 15;22(4):427–34 (58 ref.)

Radiology corner. Sagittal computed tomography of the feline spine. Kneissl S, et al. **Vet Radiol Ultrasound** 1997 Jul-Aug;38(4):282–3

[Vertebral morphometry with DXA/MXA equipment--an equipment comparison. Dual x-ray absorptiometry/morphometric x-ray absorptiometry] Gowin W, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Feb;166(2):140–5 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

The 'mouse face' appearance of the vertebrae in Paget's disease. Kim CK, et al. **Clin Nucl Med** 1997 Feb;22(2):104–8

Survival rates of patients with metastatic spinal cancer after scintigraphic detection of abnormal radioactive accumulation. Tatsui H, et al. **Spine** 1996 Sep 15; 21(18):2143–8

SURGERY

Neurosurgical spine fellowships: the Phoenix model. Sonntag VK. **Acta Neurochir Suppl (Wien)** 1997;69:130–4

Comparison of the effects of ketamine-midazolam with those of fentanyl-midazolam on cortical somatosensory evoked potentials during major spine surgery. Langeron O, et al. **Br J Anaesth** 1997 Jun;78(6):701–6

Open-door laminoplasty in pediatric spinal neurosurgery. Kehrli P, et al. **Childs Nerv Syst** 1996 Sep;12(9):551–2

The surgical treatment of vertebral deformities in achondroplastic dwarfism. Parisini P, et al. **Chir Organi Mov** 1996 Apr-Jun;81(2):129–37 **(Eng, Ita)**

Thoracoscopic spinal surgery. Dickman CA, et al. **Clin Neurosurg** 1996;43:392–422 (42 ref.)

Food and Drug Administration regulation of spinal implant fixation devices. Garfin SR, et al. **Clin Orthop** 1997 Feb; (335):32–8

Is surgery a science? [editorial] Aebi M, et al. **Eur Spine J** 1996;5(5):287

Chylous injury following anterior spinal surgery: case reports. Bhat AL, et al. **Eur Spine J** 1997;6(4):270–2

Suction/irrigation for deep wound infection after spinal instrumentation: a case study. Ido K, et al. **Eur Spine J** 1996;5(5):345–9

The mechanical role of laminar hook protection of pedicle screws at the caudal end vertebra. Margulies JY, et al. **Eur Spine J** 1997;6(4):245–8

Severe sciatica: a 13-year follow-up of 342 patients. Nykvist F, et al. **Eur Spine J** 1995;4(6):335–8

Anterior instrumentation in idiopathic scoliosis: a minimum follow-up of 10 years. Otani K, et al. **Int Orthop** 1997; 21(1):4–8

Loads on an internal spinal fixation device during walking. Rohlmann A, et al. **J Biomech** 1997 Jan;30(1):41–7

The short form-36 health survey questionnaire in spine surgery. Grevitt M, et al. **J Bone Joint Surg Br** 1997 Jan; 79(1):48–52

Computer-assisted spine surgery: a technique for accurate transpedicular screw fixation using CT data and a 3-D optical localizer. Lavallée S, et al. **J Image Guid Surg** 1995; 1(1):65–73

Computer-aided fixation of spinal implants. Nolte LP, et al. **J Image Guid Surg** 1995;1(2):88–93

Management of postoperative infections after spinal instrumentation. Levi AD, et al. **J Neurosurg** 1997 Jun; 86(6):975–80

Anterior exposure of spinal deformities and tumors: a 20-year experience. Janik JS, et al. **J Pediatr Surg** 1997 Jun; 32(6):852–9

Instrumentation of the infected and unstable spine: a review of 17 cases from the thoracic and lumbar spine with pyogenic infections. Carragee EJ. **J Spinal Disord** 1997 Aug;10(4):317–24

Anterior approach to the cervicothoracic junction: an anatomic dissection. Lehman RM, et al. **J Spinal Disord** 1997 Feb;10(1):33–9

Massive tongue swelling as a complication after spinal surgery. Miura Y, et al. **J Spinal Disord** 1996 Aug;

9(4):339–41
MR parameters for imaging titanium spinal instrumentation. Wang JC, et al. **J Spinal Disord** 1997 Feb;10(1):27–32
Prevention of deep-vein thrombosis after major spinal surgery: a comparison study of external devices. Wood KB, et al. **J Spinal Disord** 1997 Jun;10(3):209–14
Sensory component of cervically evoked motor potentials. Rose RD. **Med Hypotheses** 1996 Jun;46(6):577–9
The prone-oblique surgical position. Radna RJ, et al. **Mt Sinai J Med** 1997 May;64(3):213–6
Efficiency and safety of early spinal instrumentation [letter; comment] Bellen P. **Neuromuscul Disord** 1996 Oct;6(5):393 . Comment on: Neuromuscul Disord 1996 Jan;6(1):61–8.
Recurrent compression of Chiari malformation [letter; comment] Cochrane DD. **Pediatr Neurosurg** 1996;24(5):277 . Comment on: Pediatr Neurosurg 1995;23(6):323–7.
Application of polyvinyl alcohol hydrogel membrane as anti-adhesive interposition after spinal surgery [letter; comment] Bao C. **Spine** 1997 Jun 15;22(12):1418–9. Comment on: Spine 1995 Nov 1;20(21):2272–7.
Comparison of preoperative selective spinal angiography and somatosensory-evoked potential monitoring with temporary occlusion of segmental vessels during anterior spinal surgery. Bassett G, et al. **Spine** 1996 Sep 1; 21(17):1996–9; discussion 2000
Efficacy of autotransfusion in spine surgery: comparison of autotransfusion alone and with hemodilution and apheresis. Blais RE, et al. **Spine** 1996 Dec 1;21(23):2795–800
Wound care after posterior spinal surgery. Does early bathing affect the rate of wound complications? Carragee EJ, et al. **Spine** 1996 Sep 15;21(18):2160–2
Comparative mechanical properties of spinal cable and wire fixation systems. Dickman CA, et al. **Spine** 1997 Mar 15; 22(6):596–604
Computer-aided pedicle screw placement using frameless stereotaxis. Glossop ND, et al. **Spine** 1996 Sep 1; 21(17):2026–34
Intermittent distracting rod for correction of high neurologic risk congenital scoliosis. Grass PJ, et al. **Spine** 1997 Aug 15;22(16):1922–7
Neck and shoulder pain after laminoplasty. A noticeable complication. Hosono N, et al. **Spine** 1996 Sep 1; 21(17):1969–73
Back muscle injury after posterior lumbar spine surgery. Topographic evaluation of intramuscular pressure and blood flow in the porcine back muscle during surgery. Kawaguchi Y, et al. **Spine** 1996 Nov 15;21(22):2683–8
Overpowering the crankshaft mechanism. The effect of posterior spinal fusion with and without stiff transpedicular fixation on anterior spinal column growth in immature canines. Kioschos HC, et al. **Spine** 1996 May 15; 21(10):1168–73
Myogenic motor-evoked potential monitoring using partial neuromuscular blockade in surgery of the spine. Lang EW, et al. **Spine** 1996 Jul 15;21(14):1676–86
Convex spinal epiphysiodesis in the management of progressive infantile idiopathic scoliosis. Marks DS, et al. **Spine** 1996 Aug 15;21(16):1884–8
Anatomic consideration of transpedicular screw placement in the cervical spine. An analysis of two approaches. Miller RM, et al. **Spine** 1996 Oct 15;21(20):2317–22
Visual loss as a complication of spine surgery. A review of 37 cases. Myers MA, et al. **Spine** 1997 Jun 15;22(12):1325–9
Long-term results of partial undercutting facetectomy for lumbar lateral recess stenosis. Sanderson PL, et al. **Spine** 1996 Jun 1;21(11):1352–6
A biomechanical study of a cervical spine stabilization device: Roy-Camille plates. Smith ME, et al. **Spine** 1997 Jan 1; 22(1):38–43
Cotrel-dubousset instrumentation in children using simultaneous motor and somatosensory evoked potential monitoring. Stephen JP, et al. **Spine** 1996 Nov 1; 21(21):2450–7
Ophthalmic complications after spinal surgery. Stevens WR, et al. **Spine** 1997 Jun 15;22(12):1319–24
The effect of age on the change in deformity after anterior débridement surgery for tuberculosis of the spine. Upadhyay SS, et al. **Spine** 1996 Oct 15;21(20):2356–62
Neurologic safety in spinal deformity surgery. Winter RB. **Spine** 1997 Jul 1;22(13):1527–33 (49 ref.)
Paraplegia resulting from vessel ligation. Winter RB, et al. **Spine** 1996 May 15;21(10):1232–3; discussion 1233–4
LINAC-based spinal stereotactic radiosurgery. Hamilton AJ, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):1–9
Image-guided computer-assisted spine surgery: a pilot study on pedicle screw fixation. Nolte L, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):108–17
Vertebral body procurement from multiorgan donors for bone marrow harvest. Olson LC, et al. **Transplant Proc** 1997 Jun;29(4):2243–5
[Metastatic spine disease: surgical treatment by anterior corpectomy and Ziekel's VDS fixation] Chen LH, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):320–4 (Eng. Abstr.) **(Chi)**
[Spinal cord monitoring during spinal surgery] Hu J, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Feb; 18(1):72–5 (30 ref.) **(Chi)**
[SICOT '95. Current developments in spinal surgery. Amsterdam 8–18–23, 1996] Mayer HM, et al. **Orthopade** 1997 Jan;26(1):81–4 **(Ger)**
[Postoperative spinal peridural fibrosis] Spaić M, et al. **Vojnosanit Pregl** 1997 Mar-Apr;54(2):139–44 **(Scr)**

ULTRASONOGRAPHY

Spinal level of fetal myelomeningocele: does it influence ventricular size? Babcook CJ, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):207–10
Reductions in bone strength after fluoride treatment are not reflected in tissue-level acoustic measurements. Turner CH, et al. **Bone** 1996 Dec;19(6):603–7

ULTRASTRUCTURE

Modeling the mechanical behavior of vertebral trabecular bone: effects of age-related changes in microstructure. Silva MJ, et al. **Bone** 1997 Aug;21(2):191–9
Spatial training in a complex environment and isolation alter the spine distribution differently in rat CA1 pyramidal cells. Moser MB, et al. **J Comp Neurol** 1997 Apr 14;380(3):373–81

SPINOCEREBELLAR ATAXIAS see **SPINOCEREBELLAR DEGENERATION**

SPINOCEREBELLAR DEGENERATION

[Striatonigral degeneration] Mochizuki A, et al. **Nippon Rinsho** 1997 Jan;55(1):123–6 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Spinocerebellar degeneration] Iwasaki Y, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):96–9 (5 ref.) **(Jpn)**

CLASSIFICATION

[Classification and clinical topics on familial spinocerebellar degeneration] Abe K. **No To Shinkei** 1997 Jul;49(7):591–601 (51 ref.) **(Jpn)**

COMPLICATIONS

Ocular changes in patients with spinocerebellar degeneration and repeated trinucleotide expansion of spinocerebellar ataxia type 1 gene. Abe T, et al. **Arch Ophthalmol** 1997 Feb;115(2):231–6
Marinesco–Sjögren syndrome associated with acute myeloblastic leukemia. Fukuda S, et al. **Clin Genet** 1997 Apr;51(4):278–80
Slow saccades and other eye movement disorders in spinocerebellar atrophy type 1. Klostermann W, et al. **J Neurol** 1997 Feb;244(2):105–11
Molecular and clinical analysis on muscle wasting in patients with spinocerebellar ataxia type 1. Abe K, et al. **Muscle Nerve** 1996 Jul;19(7):900–2
Hereditary ataxia with sensory neuronopathy: Biemond's ataxia. Nachmanoff DB, et al. **Neurology** 1997 Jan; 48(1):273–5
[Image diagnosis and functional tests—vertigo due to cerebellar and brain stem disorders] Kitamura T. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Jul;99(7):1036–9 (9 ref.) **(Jpn)**
[Malignant syndrome in multiple system atrophy] Konagaya M, et al. **No To Shinkei** 1997 Jun;49(6):516–20 (Eng. Abstr.) **(Jpn)**
[Cardiovascular changes in a group of patients with heredoataxia. Clinical, electrocardiographic and echocardiographic findings] Hernández-González E, et al. **Rev Neurol** 1997 Jun;25(142):847–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Acanthocytosis and spinocerebellar degeneration: a new association? Tsai CH, et al. **Mov Disord** 1997 May; 12(3):456–9
Marinesco–Sjogren syndrome: can the diagnosis be made prior to cataract formation? [letter] Shimizu T, et al. **Muscle Nerve** 1997 Jul;20(7):909–10
A family with Machado-Joseph disease, previously diagnosed as dentatorubral-pallidoluysian atrophy. Sakai T, et al. **Neurology** 1996 Apr;46(4):1154–6
[Cerebellar atrophy in Minamata disease: comparison with spino-cerebellar degeneration on MR images] Ikeda O, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1997 Feb; 57(3):99–103 (Eng. Abstr.) **(Jpn)**
[Image diagnosis and functional tests—vertigo due to cerebellar and brain stem disorders] Kitamura T. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Jul;99(7):1036–9 (9 ref.) **(Jpn)**
[Cortico-basal degeneration] Morimatsu M. **Nippon Rinsho** 1997 Jan;55(1):139–43 (12 ref.) (Eng. Abstr.) **(Jpn)**
[Presymptomatic DNA diagnosis of spinocerebellar ataxia type 1] Illarioshkin SN, et al. **Genetika** 1997 May; 33(5):693–8 (Eng. Abstr.) **(Rus)**
[Cardiovascular changes in a group of patients with heredoataxia. Clinical, electrocardiographic and echocardiographic findings] Hernández-González E, et al. **Rev Neurol** 1997 Jun;25(142):847–9 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

EEG findings in acetazolamide-responsive hereditary paroxysmal ataxia. Van Bogaert P, et al. **Neurophysiol Clin** 1996;26(5):335–40
[Treatment of spinocerebellar degeneration with emphasis on TRH] Takayanagi T. **Rinsho Shinkeigaku** 1996 Dec; 36(12):1331–2 **(Jpn)**

ETIOLOGY

Molecular and clinical correlations in spinocerebellar ataxia 2: a study of 32 families. Cancel G, et al. **Hum Mol Genet** 1997 May;6(5):709–15
Isolated vitamin E deficiency. Jackson CE, et al. **Muscle Nerve** 1996 Sep;19(9):1161–5

GENETICS

Clinical features and natural history of spinocerebellar ataxia type 1. Sasaki H, et al. **Acta Neurol Scand** 1996 Jan; 93(1):64–71
Spinocerebellar ataxia type 1: Clinical and neurophysiological characteristics in German kindreds. Schöls L, et al. **Acta Neurol Scand** 1995 Dec;92(6):478–85
Mosaicism of the CAG repeat in CNS tissue in relation to age at death in spinocerebellar ataxia type 1 and Machado-Joseph disease patients [letter] Maciel P, et al. **Am J Hum Genet** 1997 Apr;60(4):993–6
The sword of Damocles: the psychosocial impact of familial spinocerebellar ataxia in South Africa. de Villiers C, et al. **Am J Med Genet** 1997 May 31;74(3):270–4
Genetic fitness in Huntington's Disease and Spinocerebellar Ataxia 1: a population genetics model for CAG repeat expansions. Frontali M, et al. **Ann Hum Genet** 1996 Sep; 60 (Pt 5):423–35
Brain regional differences in the expansion of a CAG repeat in the spinocerebellar ataxias: dentatorubral-pallidoluysian atrophy, Machado-Joseph disease, and spinocerebellar ataxia type 1. Hashida H, et al. **Ann Neurol** 1997 Apr; 41(4):505–11
Regional and cellular expression of the dentatorubral-pallidoluysian atrophy gene in brains of normal and affected individuals. Nishiyama K, et al. **Ann Neurol** 1997 May;41(5):599–605
Spinocerebellar ataxia type 2. Genotype and phenotype in German kindreds. Schöls L, et al. **Arch Neurol** 1997 Sep; 54(9):1073–80
Ocular changes in patients with spinocerebellar degeneration and repeated trinucleotide expansion of spinocerebellar ataxia type 1 gene. Abe T, et al. **Arch Ophthalmol** 1997 Feb;115(2):231–6
Clinical and molecular characteristics of a Brazilian family with spinocerebellar ataxia type 1. Lopes-Cendes I, et al. **Arq Neuropsiquiatr** 1996 Sep;54(3):412–8
Inherited neurodegenerative diseases and transgenic models. Price DL, et al. **Brain Pathol** 1996 Oct;6(4):467–80 (220 ref.)
A case of cranial meningocele associated with Joubert syndrome. Suzuki T, et al. **Childs Nerv Syst** 1996 May; 12(5):280–2
Cerebellar ataxia, dementia, pyramidal signs, cortical cataract of the posterior pole and a raised IgG index in a patient with a sporadic form of olivopontocerebellar atrophy. Schelhaas HJ, et al. **Clin Neurol Neurosurg** 1997 May; 99(2):99–101
Toward understanding polyglutamine-induced neurological disease in spinocerebellar ataxia type 1. Orr HT, et al. **Cold Spring Harb Symp Quant Biol** 1996;61:649–57 (47 ref.)
Transgenic models of neurodegenerative diseases. Lee MK, et al. **Curr Opin Neurobiol** 1996 Oct;6(5):651–60 (115 ref.)
Trinucleotide repeat disorders in humans: discussions of mechanisms and medical issues. Timchenko LT, et al. **FASEB J** 1996 Dec;10(14):1589–97 (70 ref.)
Predictive and prenatal genetic testing in hereditary ataxia's. Report of a workshop. van den Kerchove M, et al. **Genet Couns** 1996;7(4):325–7
An expanded CAG repeat sequence in spinocerebellar ataxia type 7. Lindblad K, et al. **Genome Res** 1996 Oct; 6(10):965–71
Tracing an ancestral mutation: genealogical and haplotype analysis of the infantile onset spinocerebellar ataxia locus. Varilo T, et al. **Genome Res** 1996 Sep;6(9):870–5
Toward cloning of a novel ataxia gene: refined assignment and physical map of the IOSCA locus (SCA8) on 10q24. Nikali K, et al. **Genomics** 1997 Jan 15;39(2):185–91
Identification of three new microsatellite markers in the spinocerebellar ataxia type 2 (SCA2) region and 1.2 Mb physical map. Nechiporuk T, et al. **Hum Genet** 1996 Apr; 97(4):462–7
Expanded CAG repeats in spinocerebellar ataxia (SCA1) segregate with distinct haplotypes in South african families. Ramesar RS, et al. **Hum Genet** 1997 Jul;100(1):131–7
Transmission distortion of the mutant alleles in spinocerebellar ataxia. Riess O, et al. **Hum Genet** 1997 Feb; 99(2):282–4
CAG repeat analyses in frozen and formalin-fixed tissues following primer extension preamplification for evaluation of mitotic instability of expanded SCA1 alleles. Zühlke C, et al. **Hum Genet** 1997 Sep;100(3–4):339–44
A simple and rapid nonisotopic method for sizing CAG repeats in the SCA1 gene. Annesi G, et al. **Hum Hered** 1997 Jan-Feb;47(1):47–51
Spinocerebellar ataxia type-1 and spinobulbar muscular atrophy gene products interact with glyceraldehyde-3-phosphate dehydrogenase. Koshy B, et al. **Hum Mol Genet** 1996 Sep;5(9):1311–8
Symposium on gene abnormalities in medical diseases. 4. Neurodegenerative diseases: molecular mechanisms of spinocerebellar ataxia. Tsuji S. **Intern Med** 1997 Feb; 36(2):154–6
Spinocerebellar ataxia type 1 in Russia. Illarioshkin SN, et

al. **J Neurol** 1996 Jul;243(7):506–10

Central phenotype and related varieties of spinocerebellar ataxia 2 (SCA2): a clinical and genetic study with a pedigree in the Japanese. Sasaki H, et al. **J Neurol Sci** 1996 Dec;144(1–2):176–81

Purkinje cell expression of a mutant allele of SCA1 in transgenic mice leads to disparate effects on motor behaviors, followed by a progressive cerebellar dysfunction and histological alterations. Clark HB, et al. **J Neurosci** 1997 Oct 1;17(19):7385–95

Evidence for a new spinocerebellar ataxia locus. Higgins JJ, et al. **Mov Disord** 1997 May;12(3):412–7

Beneficial effect of alcohol in hereditary cerebellar ataxia with myoclonus (progressive myoclonic ataxia): report of two siblings. Jain S, et al. **Mov Disord** 1996 Nov;11(6):751–2

Molecular and clinical analysis on muscle wasting in patients with spinocerebellar ataxia type 1. Abe K, et al. **Muscle Nerve** 1996 Jul;19(7):900–2

Cloning of the SCA7 gene reveals a highly unstable CAG repeat expansion. David G, et al. **Nat Genet** 1997 Sep; 17(1):65–70

Cloning of the gene for spinocerebellar ataxia 2 reveals a locus with high sensitivity to expanded CAG/glutamine repeats [see comments] Imbert G, et al. **Nat Genet** 1996 Nov;14(3):285–91. Comment in: Nat Genet 1996 Nov;14(3):237–8.

Moderate expansion of a normally biallelic trinucleotide repeat in spinocerebellar ataxia type 2 [see comments] Pulst SM, et al. **Nat Genet** 1996 Nov;14(3):269–76. Comment in: Nat Genet 1996 Nov;14(3):237–8.

Identification of the spinocerebellar ataxia type 2 gene using a direct identification of repeat expansion and cloning technique, DIRECT [see comments] Sanpei K, et al. **Nat Genet** 1996 Nov;14(3):277–84. Comment in: Nat Genet 1996 Nov;14(3):237–8.

The expanding world of ataxins [news; comment] Zoghbi HY. **Nat Genet** 1996 Nov;14(3):237–8. Comment on: Nat Genet 1996 Nov;14(3):269–76. Comment on: Nat Genet 1996 Nov;14(3):277–84. Comment on: Nat Genet 1996 Nov;14(3):285–91.

Nine families with the SCA3/Machado–Joseph disease type of inherited ataxia. Greenstein PE, et al. **Neurology** 1996 Oct;47(4):1106–7

Atypical parkinsonism in a family of Portuguese ancestry: absence of CAG repeat expansion in the MJD1 gene. Sutton JP, et al. **Neurology** 1997 May;48(5):1285–90

Cloning (CAG/GTC)n STSs by an Alu–(CAG/GTC)n PCR method: an approach to human chromosome 12 and spinocerebellar ataxia 2 (SCA2). Pujana MA, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3651–2

Clinicopathology of spinocerebellar degeneration: its correlation to the unstable CAG repeat of the affected gene. Yagishita S, et al. **Pathol Int** 1997 Jan;47(1):1–15 (114 ref.)

Molecular genetics and neurobiology of neurodegenerative and neurodevelopmental disorders. Zoghbi HY. **Pediatr Res** 1997 May;41(5):722–6 (33 ref.)

[Genetic diagnosis, classification and clinical hereditary ataxia disease entities] Schöls L, et al. **Fortschr Neurol Psychiatr** 1997 Feb;65(2):79–89 (139 ref.) (Eng. Abstr.) **(Ger)**

[Spinocerebellar ataxia: advances in genetic research and its clinical implication] Sasaki H. **Hokkaido Igaku Zasshi** 1997 Jan;72(1):13–20 (36 ref.) (Eng. Abstr.) **(Jpn)**

[Diseases in the field of internal medicine and gene abnormalities. 5. Nervous system diseases—molecular genetics of hereditary spinocerebellar degeneration] Tsuji S. **Nippon Naika Gakkai Zasshi** 1996 Sep 10;85(9):1514–9 (20 ref.) **(Jpn)**

[Variable clinical manifestations of familial amyloid polyneuropathy and living related liver transplantation] Ikeda S, et al. **Rinsho Shinkeigaku** 1995 Dec;35(12):1433–5 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Dissociated adduction nystagmus in a patient with hereditary spinocerebellar degeneration] Takaya Y, et al. **Rinsho Shinkeigaku** 1996 Aug;36(8):996–9 (Eng. Abstr.) **(Jpn)**

HISTORY

Should spinocerebellar ataxia type 5 be called Lincoln ataxia? Nee LE, et al. **Neurology** 1997 Jul;49(1):298–302

METABOLISM

Role of nitric oxide in the cerebellar degeneration during methylmercury intoxication. Yamashita T, et al. **Biochim Biophys Acta** 1997 Mar 15;1334(2–3):303–11

Characterization of dentatorubral–pallidoluysian atrophy proteins using two-dimensional electrophoretic analysis. Yazawa I, et al. **Brain Res** 1996 Sep 2;732(1–2):154–8

Striatal dopamine nerve terminal markers but not nigral cellularity are reduced in spinocerebellar ataxia type 1. Kish SJ, et al. **Neurology** 1997 Apr;48(4):1109–11

PATHOLOGY

Childhood-onset spinocerebellar syndrome associated with massive polyglucosan body deposition. Felice KJ, et al. **Acta Neurol Scand** 1997 Jan;95(1):60–4

Spinocerebellar ataxia type 1 with multiple system degeneration and glial cytoplasmic inclusions. Gilman S, et al. **Ann Neurol** 1996 Feb;39(2):241–55

Autosomal dominant cerebellar ataxia type I clinical features and MRI in families with SCA1, SCA2 and SCA3. Bürk K, et al. **Brain** 1996 Oct;119 (Pt 5):1497–505

Muscle pathology in Marinesco–Sjogren syndrome: a unique ultrastructural feature. Sasaki K, et al. **Brain Dev** 1996 Jan–Feb;18(1):64–7

Brain MRI, lumbar CSF monoamine concentrations, and clinical descriptors of patients with spinocerebellar ataxia mutations. Higgins JJ, et al. **J Neurol Neurosurg Psychiatry** 1996 Dec;61(6):591–5

Brain levels of thiamine and its phosphate esters in Friedreich's ataxia and spinocerebellar ataxia type 1. Bettendorff L, et al. **Mov Disord** 1996 Jul;11(4):437–9

Striatal dopamine nerve terminal markers but not nigral cellularity are reduced in spinocerebellar ataxia type 1. Kish SJ, et al. **Neurology** 1997 Apr;48(4):1109–11

Hereditary ataxia with sensory neuronopathy: Biemond's ataxia. Nachmanoff DB, et al. **Neurology** 1997 Jan; 48(1):273–5

Tau protein in the glial cytoplasmic inclusions of multiple system atrophy can be distinguished from abnormal tau in Alzheimer's disease. Cairns NJ, et al. **Neurosci Lett** 1997 Jul 11;230(1):49–52

Clinicopathology of spinocerebellar degeneration: its correlation to the unstable CAG repeat of the affected gene. Yagishita S, et al. **Pathol Int** 1997 Jan;47(1):1–15 (114 ref.)

Neuronal vacuolation and spinocerebellar degeneration in young Rottweiler dogs. Kortz GD, et al. **Vet Pathol** 1997 Jul;34(4):296–302

[Glial cytoskeletal abnormality in neurodegenerative diseases: multiple system atrophy] Mizusawa H. **No To Shinkei** 1996 Oct;48(10):915–24 (55 ref.) **(Jpn)**

PHYSIOPATHOLOGY

Spinocerebellar ataxia type 1: Clinical and neurophysiological characteristics in German kindreds. Schöls L, et al. **Acta Neurol Scand** 1995 Dec;92(6):478–85

Neurological basis of skill learning. Yamadori A, et al. **Brain Res Cogn Brain Res** 1996 Dec;5(1–2):49–54

Motor evoked potentials in the spinocerebellar ataxias type 1 and type 3. Schöls L, et al. **Muscle Nerve** 1997 Feb; 20(2):226–8

Molecular genetics and neurobiology of neurodegenerative and neurodevelopmental disorders. Zoghbi HY. **Pediatr Res** 1997 May;41(5):722–6 (33 ref.)

Effect of thyrotropin-releasing hormone (TRH) on cerebral blood flow in spinocerebellar degeneration and cerebrovascular disease. Izumi Y, et al. **Tokai J Exp Clin Med** 1995 Dec;20(4–6):203–8

[Vertical oculomotor disorders in progressive supranuclear palsy and spino-cerebellar degeneration] Nawata Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jul;100(7):770–81 (Eng. Abstr.) **(Jpn)**

[The relationship between ocular abnormalities and MRI findings in patients with spinocerebellar degeneration] Ohki M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jan; 100(1):27–35 (Eng. Abstr.) **(Jpn)**

[Dissociated adduction nystagmus in a patient with hereditary spinocerebellar degeneration] Takaya Y, et al. **Rinsho Shinkeigaku** 1996 Aug;36(8):996–9 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

The sword of Damocles: the psychosocial impact of familial spinocerebellar ataxia in South Africa. de Villiers C, et al. **Am J Med Genet** 1997 May 31;74(3):270–4

RADIOGRAPHY

Skeletal findings in Marinesco–Sjögren syndrome. Brogdon BG, et al. **Skeletal Radiol** 1996 Jul;25(5):461–5

RADIONUCLIDE IMAGING

Nasal mucosal thickening simulating a tumor: potential for misdiagnosis in brain perfusion imaging. Flores LG 2nd, et al. **Ann Nucl Med** 1996 Aug;10(3):343–6

VETERINARY

Neuronal vacuolation and spinocerebellar degeneration in young Rottweiler dogs. Kortz GD, et al. **Vet Pathol** 1997 Jul;34(4):296–302

SPINOTHALAMIC TRACTS

ANATOMY & HISTOLOGY

Evidence for an anuran homologue of the mammalian spinocervicothalamic system: an in vitro tract-tracing study in Xenopus laevis. Muñoz A, et al. **Eur J Neurosci** 1996 Jul;8(7):1390–400

Morphology and distribution of spinothalamic lamina I neurons in the monkey. Zhang ET, et al. **J Neurosci** 1997 May 1;17(9):3274–84

CHEMISTRY

Distribution of trigeminothalamic and spinothalamic-tract neurons showing substance P receptor-like immunoreactivity in the rat. Li JL, et al. **Brain Res** 1996 May 6;719(1–2):207–12

CYTOLOGY

Vagal, sympathetic and somatic sensory inputs to upper cervical (C1–C3) spinothalamic tract neurons in monkeys. Chandler MJ, et al. **J Neurophysiol** 1996 Oct;76(4):2555–67

Dextrorphan attenuates responses of spinothalamic tract cells in normal and nerve-injured monkeys. Carlton SM, et al. **Neurosci Lett** 1997 Jul 4;229(3):169–72

METABOLISM

Distribution of trigeminohypothalamic and spinohypothalamic tract neurons displaying substance P receptor-like immunoreactivity in the rat. Li JL, et al. **J Comp Neurol** 1997 Feb 24;378(4):508–21

PATHOLOGY

Location of pyramidal and spinothalamic tracts [letter; comment] Yagishita A, et al. **AJNR Am J Neuroradiol** 1997 Jan;18(1):195–6. Comment on: AJNR Am J Neuroradiol 1995 Jun–Jul;16(6):1227–37.

[Brain stem glioma presenting with contralateral sensory impairment of ascending nature] Ikeda T, et al. **No To Shinkei** 1997 Jun;49(6):547–51 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Evidence for glutamate as a neurotransmitter in spinothalamic tract terminals in the posterior region of owl monkeys. Blomqvist A, et al. **Exp Brain Res** 1996 Feb; 108(1):33–44

Central nervous system pathways for pain transmission and pain control: issues relevant to the practicing clinician. Robinson AJ. **J Hand Ther** 1997 Apr–Jun;10(2):64–77 (66 ref.)

Cooling-specific spinothalamic neurons in the monkey. Dostrovsky JO, et al. **J Neurophysiol** 1996 Dec; 76(6):3656–65

Physiology and pharmacology of corticothalamic stimulation-evoked responses in rat somatosensory thalamic neurons in vitro. Kao CQ, et al. **J Neurophysiol** 1997 May;77(5):2661–76

Role of GABA receptor subtypes in inhibition of primate spinothalamic tract neurons: difference between spinal and periaqueductal gray inhibition. Lin Q, et al. **J Neurophysiol** 1996 Jan;75(1):109–23

Involvement of cGMP in nociceptive processing by and sensitization of spinothalamic neurons in primates. Lin Q, et al. **J Neurosci** 1997 May 1;17(9):3293–302

PHYSIOPATHOLOGY

Recovery from brain-stem lesions involving the nociceptive pathways: comparison of clinical findings with laser-evoked potentials. Hansen HC, et al. **J Clin Neurophysiol** 1996 Jul;13(4):330–8

[A case of central pain observed in medical medullary infarction] Hashimoto Y, et al. **Rinsho Shinkeigaku** 1996 Sep;36(9):1079–82 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Fine structural organization of spinothalamic and trigeminothalamic lamina I terminations in the nucleus submedius of the cat. Ericson AC, et al. **J Comp Neurol** 1996 Aug 5;371(4):497–512

Ultrastructural localization of glutamate receptor subunits (NMDAR1, AMPA GluR1 and GluR2/3) and spinothalamic tract cells. Ye Z, et al. **Neuroreport** 1996 Nov 4;7(15–17):2581–5

SPINY ANT-EATER see **ECHIDNA**

SPIPERONE

ANALOGS & DERIVATIVES

Difference in response of D2 receptor binding between 11C-N-methylspiperone and 11C-raclopride against anesthetics in rhesus monkey brain. Kobayashi K, et al. **J Neural Transm Gen Sect** 1995;100(2):147–51

PET measurement of neuroreceptor occupancy by typical and atypical neuroleptics. Goyer PF, et al. **J Nucl Med** 1996 Jul;37(7):1122–7

Pharmacokinetics of the three radioiodinated dopamine D2 receptor ligands [123I]IBF, [123I]epidepride and [123I]2'-ISP in nonhuman primates. Baldwin RM, et al. **Nucl Med Biol** 1994 Oct;21(7):969–76

Measuring age-related changes in dopamine D2 receptors with 11C-raclopride and 18F-N-methylspiroperidol. Volkow ND, et al. **Psychiatry Res** 1996 May 31;67(1):11–6

[Striatal dopamine D2 receptor in Parkinson disease and its related disorders assessed by C-11 NMSP and PET] Momose T, et al. **Nippon Rinsho** 1997 Jan;55(1):227–32 (4 ref.) (Eng. Abstr.) **(Jpn)**

BLOOD

Determination of timiperone in rat plasma by high-performance liquid chromatography with electrochemical detection. Takayasu T, et al. **J Chromatogr B Biomed Appl** 1996 Apr 26;679(1–2):161–5

METABOLISM

Critical reevaluation of spiperone and benzamide binding to dopamine D2 receptors: evidence for identical binding sites. Malmberg A, et al. **Eur J Pharmacol** 1996 May 6; 303(1–2):123–8

Distinct binding patterns of [3H]raclopride and [3H]spiperone at dopamine D2 receptors in vivo in rat brain. Implications for pet studies. Bischoff S, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):419–31

Imipramine–induced changes in 5–HT2 receptor sites and inositoltrisphosphate levels in rat brain. Subhash MN, et al. **Neurochem Res** 1997 Sep;22(9):1095–9

[The binding of 3H–spiperone to lymphocytes in patients with schizophrenia and first–degree relatives: in search of a genetic marker] Heinze G, et al. **Gac Med Mex** 1994 Jul–Aug;130(4):241–5 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Elevated lymphocyte spiperone binding: a vulnerability factor for affective psychosis? Fartaçek R, et al. **Biol Psychiatry** 1997 Jan 1;41(1):107–10

PHARMACOLOGY

Inhibition of the constitutive activity of human 5–HT1A receptors by the inverse agonist, spiperone but not the neutral antagonist, WAY 100,635. Newman–Tancredi A, et al. **Br J Pharmacol** 1997 Mar;120(5):737–9

Dopamine D1 and D2 antagonists block L–DOPA–induced air–stepping in decerebrate neonatal rats. McCrea AE, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):130–2

Haloperidol and spiperone potentiate murine splenic B cell proliferation. Liu Y, et al. **Immunopharmacology** 1996 Sep; 34(2–3):147–59

Postweaning lead exposure enhances the stimulus properties of N–methyl–D–aspartate: possible dopaminergic involvement? Cory–Slechta DA, et al. **Neurotoxicology** 1996 Summer;17(2):509–21

3H–spiperone binding to peripheral mononuclear cells in psychiatric in–patients. Wodarz N, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Apr; 20(3):459–70

SPIRAL GANGLION

ANATOMY & HISTOLOGY

Quantitative analysis of spiral ganglion projections to the cat cochlear nucleus. Snyder RL, et al. **J Comp Neurol** 1997 Mar 3;379(1):133–49

CYTOLOGY

A contribution to the structural pattern differences between the apical and basal spiral ganglions in mammals. Sánchez–Fernández JM, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):250–3

Quantitative evaluation of cochlear neurons and computer–aided three–dimensional reconstruction of spiral ganglion cells in humans with a peripheral loss of nerve fibres. Felder E, et al. **Hear Res** 1997 Mar;105(1–2):183–90

Characterization and development of an inner ear type I fibrocyte cell culture. Gratton MA, et al. **Hear Res** 1996 Sep 15;99(1–2):71–8

Generators of the brainstem auditory evoked potential in cat. III: Identified cell populations. Melcher JR, et al. **Hear Res** 1996 Apr;93(1–2):52–71

Effect of vestibular nerve section on cytochrome oxidase activity in the vestibular ganglion cells of the squirrel monkey. Naito Y, et al. **Hear Res** 1995 Oct;90(1–2):72–8

Morphologic evidence for three cell types in the human spiral ganglion. Rosbe KW, et al. **Hear Res** 1996 Apr; 93(1–2):120–7

The fine structure of spiral ligament cells relates to ion return to the stria and varies with place–frequency. Spicer SS, et al. **Hear Res** 1996 Oct;100(1–2):80–100

Neurotrophins can enhance spiral ganglion cell survival after inner hair cell loss. Miller JM, et al. **Int J Dev Neurosci** 1997 Jul;15(4–5):631–43

Topography of spiral ganglion projections to cochlear nucleus during postnatal development in cats. Snyder RL, et al. **J Comp Neurol** 1997 Jul 28;384(2):293–311

A simple technique to efficiently dissociate primary auditory neurons from 5 day–old rat cochleas. Ripoll C, et al. **J Neurosci Methods** 1997 May 16;73(2):123–8

Intermediate cells detected in electron microscopic observation of the rat spiral ganglion. Hayran M, et al. **Okajimas Folia Anat Jpn** 1996 Aug;73(2–3):109–11

Fine structures of perikaryal myelin sheaths on statoacoustic ganglion cells in 3–day–old chicks. Sun YJ, et al. **Tohoku J Exp Med** 1996 Dec;180(4):309–17

DRUG EFFECTS

Protection of both auditory hair cells and auditory neurons from cisplatin induced damage. Gabaizadeh R, et al. **Acta Otolaryngol (Stockh)** 1997 Mar;117(2):232–8

Trophic support of cultured spiral ganglion neurons by depolarization exceeds and is additive with that by neurotrophins or cAMP and requires elevation of [Ca2+]i within a set range. Hegarty JL, et al. **J Neurosci** 1997 Mar 15;17(6):1959–70

Effects of neurotrophins on early auditory neurones in cell culture. Malgrange B, et al. **Neuroreport** 1996 Mar 22; 7(4):913–7

LIF potentiates the NT–3–mediated survival of spiral ganglia neurones in vitro. Marzella PL, et al. **Neuroreport** 1997 May 6;8(7):1641–4

Toluene disrupts outer hair cell morphometry and intracellular calcium homeostasis in cochlear cells of guinea pigs. Liu Y, et al. **Toxicol Appl Pharmacol** 1997 Feb; 142(2):270–7

EMBRYOLOGY

Glutamate receptors in the developing cochlear ganglion. Jiménez C, et al. **Int J Dev Biol** 1996;Suppl 1:159S–160S

ENZYMOLOGY

Detection and regulation of Cu/Zn–SOD and Mn–SOD in rat cochlear tissues. Yao X, et al. **Hear Res** 1996 Jul; 96(1–2):199–203

IMMUNOLOGY

Changes in the immunoreactivity of protein gene product (PGP) 9.5 in the cochlea of spontaneously diabetic WBN/Kob rats. Ishikawa T, et al. **Diabetologia** 1997 Feb; 40(2):173–8

METABOLISM

Comparison of the effects of trimethyltin on the intracellular calcium levels in spiral ganglion cells and outer hair cells. Liu Y, et al. **Acta Otolaryngol (Stockh)** 1996 May; 116(3):417–21

Sodium and potassium currents of type I spiral ganglion cells from rat. Moore EJ, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):552–60

Pre– and postsynaptic M3 muscarinic receptor mRNAs in the rodent peripheral auditory system. Safieddine S, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):127–35

Localization of actin in basal cells of stria vascularis. Nakazawa K, et al. **Hear Res** 1996 Jul;96(1–2):13–9

Glutamate receptors in the developing cochlear ganglion. Jiménez C, et al. **Int J Dev Biol** 1996;Suppl 1:159S–160S

PATHOLOGY

The effect of inflammation on blood vessel area in Rosenthal's canal in the cat cochlea. Moralee SJ. **Clin Otolaryngol** 1997 Apr;22(2):115–6

The effects of moderate and low levels of acoustic overstimulation on stereocilia and their tip links in the guinea pig. Clark JA, et al. **Hear Res** 1996 Sep 15; 99(1–2):119–28

Cochlear spiral ganglion cell degeneration in wild–caught mice as a function of age. Dazert S, et al. **Hear Res** 1996 Oct;100(1–2):101–6

Patterns of degeneration in the human cochlear nerve. Zimmermann CE, et al. **Hear Res** 1995 Oct;90(1–2):192–201

PHYSIOLOGY

Tuning, spontaneous activity and tonotopic map in chicken cochlear ganglion neurons following sound–induced hair cell loss and regeneration. Chen L, et al. **Hear Res** 1996 Sep 1;98(1–2):152–64

Action potentials and underlying voltage–dependent currents studied in cultured spiral ganglion neurons of the postnatal gerbil. Lin X. **Hear Res** 1997 Jun;108(1–2):157–79

Osmotic water permeability of capillaries from the isolated spiral ligament: new in–vitro techniques for the study of vascular permeability and diameter. Wangemann P, et al. **Hear Res** 1996 May;95(1–2):49–56

Endogenous firing patterns of murine spiral ganglion neurons. Mo ZL, et al. **J Neurophysiol** 1997 Mar;77(3):1294–305

Diazepam–insensitive GABAA receptors on postnatal spiral ganglion neurones in culture. Malgrange B, et al. **Neuroreport** 1997 Feb 10;8(3):591–6

ULTRASTRUCTURE

Aging rat vestibular ganglion: II. Quantitative electron microscopic evaluation. Lyon MJ, et al. **Ann Otol Rhinol Laryngol** 1997 Sep;106(9):753–8

Nerve fibre interaction with large ganglion cells in the human spiral ganglion. A TEM study. Rask–Andersen H, et al. **Auris Nasus Larynx** 1997;24(1):1–11

Morphological subclasses of lateral olivocochlear terminals? Ultrastructural analysis of inner spiral bundle in cat and guinea pig. Satake M, et al. **J Comp Neurol** 1996 Aug 5; 371(4):621–32

Characteristics of the myelin sheath membrane of the spiral ganglion cell and the cochlear nerve of guinea pig. Tatsuoka H, et al. **J Electron Microsc (Tokyo)** 1997; 46(1):103–6

Intermediate cells detected in electron microscopic observation of the rat spiral ganglion. Hayran M, et al. **Okajimas Folia Anat Jpn** 1996 Aug;73(2–3):109–11

Fine structures of perikaryal myelin sheaths on statoacoustic ganglion cells in 3–day–old chicks. Sun YJ, et al. **Tohoku J Exp Med** 1996 Dec;180(4):309–17

VIROLOGY

Detection of latent varicella–zoster virus infection in human vestibular and spiral ganglia. Furuta Y, et al. **J Med Virol** 1997 Mar;51(3):214–6

SPIRAL LAMINA

BLOOD SUPPLY

Effects of Ginkgo biloba extract (EGb 761) on cochlear vasculature in the guinea pig: morphometric measurements and laser Doppler flowmetry. Didier A, et al. **Eur Arch Otorhinolaryngol** 1996;253(1–2):25–30

SPIRAL ORGAN see **ORGAN OF CORTI**

SPIRAMYCIN

ADVERSE EFFECTS

QT interval prolongation and risk of life–threatening arrhythmias during toxoplasmosis prophylaxis with spiramycin in neonates. Stramba–Badiale M, et al. **Am Heart J** 1997 Jan;133(1):108–11

Spiramycin–associated acute dystonia during neuroleptic treatment [letter] Benazzi F. **Can J Psychiatry** 1997 Aug; 42(6):665–6

[Torsades de pointe with spiramycine and metiquazine therapy. Apropos of a case] Verdun F, et al. **Arch Mal Coeur Vaiss** 1997 Jan;90(1):103–6 (10 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Analysis of macrolide antibiotics by capillary electrophoresis. Flurer CL. **Electrophoresis** 1996 Feb;17(2):359–66

PHARMACOKINETICS

The use of an experimental metritis model to study antibiotic distribution in genital tract secretions in the ewe. Cester CC, et al. **Vet Res** 1996;27(4–5):479–89

PHARMACOLOGY

Evaluation of the in vitro activity of seven selected antimicrobial agents to be used for the isolation of human intestinal spirochaetes. Calderaro A, et al. **New Microbiol** 1997 Jan;20(1):35–45

Therapeutic efficacy of halofuginone and spiramycin treatment against Cryptosporidium serpentis (Apicomplexa: Cryptosporidiidae) infections in captive snakes. Graczyk TK, et al. **Parasitol Res** 1996;82(2):143–8

THERAPEUTIC USE

Pharmacokinetic–pharmacodynamic model for spiramycin in staphylococcal mastitis. Renard L, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):95–103

[Prevention of congenital toxoplasmosis with spiramycin; value and limits of levels in amniotic fluid (letter)] Bourget P, et al. **Therapie** 1996 Nov–Dec;51(6):685–7 **(Fre)**

[The efficacy of the macrolide antibiotic rovamycin in treating acute pneumonia] Aleksanian LA, et al. **Ter Arkh** 1997;69(1):60–1 **(Rus)**

[The macrolide antibiotic rovamycin in the treatment of pneumonias] Gel'tser BI, et al. **Ter Arkh** 1996;68(12):22–5 (Eng. Abstr.) **(Rus)**

SPIRAMYCIN ADIPATE see **SPIRAMYCIN**

SPIRITUAL HEALING see **MENTAL HEALING**

SPIRITUALISM

Finding meaning in life [letter] Chin M. **Am J Occup Ther** 1997 Jun;51(6):467

Acknowledging a spiritual dimension in occupational therapy practice. Christiansen C. **Am J Occup Ther** 1997 Mar; 51(3):169–72 (34 ref.)

Occupational therapists' beliefs and practices with regard to spirituality and therapy. Engquist DE, et al. **Am J Occup Ther** 1997 Mar;51(3):173–80

Jewish spirituality through actions in time: daily occupations of young Orthodox Jewish couples in Los Angeles. Frank G, et al. **Am J Occup Ther** 1997 Mar;51(3):199–206

Occupation as spiritual activity. Howard BS, et al. **Am J Occup Ther** 1997 Mar;51(3):181–5 (31 ref.)

Occupational meanings and spirituality: the quest for sobriety. Moyers PA. **Am J Occup Ther** 1997 Mar;51(3):207–14

The spiritual depth of occupation: making worlds and making lives. Peloquin SM. **Am J Occup Ther** 1997 Mar;51(3):167–8

A Copernican revolution in clinical ethics: engagement versus disengagement. Van Amburg R. **Am J Occup Ther** 1997 Mar;51(3):186–90 (20 ref.)

Parental bereavement: spiritual connections with deceased children. Sormanti M, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):460–9

Roles of religiousness and spirituality in medical rehabilitation and the lives of persons with disabilities. A commentary. Underwood–Gordon L, et al. **Am J Phys Med Rehabil** 1997 May–Jun;76(3):255–7

Recovery from anorexia nervosa: a sociological perspective. Garrett CJ. **Int J Eat Disord** 1997 Apr;21(3):261–72

Difficulties in integrating spirituality into psychotherapy. Schultz–Ross RA, et al. **J Psychother Pract Res** 1997 Spring;6(2):130–8

The ideology and organization of spiritual care: three

SPIRITUALISM

approaches. Walter T. **Palliat Med** 1997 Jan;11(1):21–30

SPIRO COMPOUNDS

ADMINISTRATION & DOSAGE

Effects of a 7–day treatment with a novel, orally active, growth hormone (GH) secretagogue, MK–677, on 24–hour GH profiles, insulin–like growth factor I, and adrenocortical function in normal young men [see comments] Copinschi G, et al. **J Clin Endocrinol Metab** 1996 Aug;81(8):2776–82. Comment in: J Clin Endocrinol Metab 1996 Aug;81(8):2773–5.

BLOOD

Determination of a novel growth hormone secretagogue (MK–677) in human plasma at picogram levels by liquid chromatography with atmospheric pressure chemical ionization tandem mass spectrometry. Constanzer ML, et al. **J Chromatogr B Biomed Appl** 1997 May 23;693(1):131–7

CHEMICAL SYNTHESIS

Activity of 2–azaspiro[4.5]decane–6–carboxylates as GABA–uptake inhibitors. Fleischhacker W, et al. **Arch Pharm (Weinheim)** 1996 Mar;329(3):149–54

Chemistry of indoles carrying a basic function, Part 3. Synthesis of spiro[cyclopropane–1,3'[3H]indol]–2'(1'H)–ones with antihypoxic effects. Moldvai I, et al. **Arch Pharm (Weinheim)** 1996 Dec;329(12):541–9

2–(Substituted)amino–2,8–diazaspiro[4,5]decan–1,3–diones as potential muscarinic agonists: synthesis, modeling and binding studies. Barlocco D, et al. **Drug Des Discov** 1996 Oct;14(2):129–43

Structure–activity relationships of a series of novel (piperazinylbutyl)thiazolidinone antipsychotic agents related to 3–[4–[4–(6–fluorobenzo[b]thien–3–yl)–1–piperazinyl]butyl]–2,5,5– trimethyl–4–thiazolidinone maleate. Hrib NJ, et al. **J Med Chem** 1996 Sep 27; 39(20):4044–57

7–Spiroindanyl derivatives of naltrexone and oxymorphone as selective ligands for delta opioid receptors. Ohkawa S, et al. **J Med Chem** 1997 May 23;40(11):1720–5

CHEMISTRY

Inclusion of the main pheromone component of Dacus oleae, 1,7–dioxaspiro[5,5]undecane, in beta–cyclodextrin. Rysanek N, et al. **Acta Crystallogr C** 1996 Nov 15;52 (Pt 11):2932–6

Inhibitors of myo–inositol monophosphatase, ATCC 20928 factors A and C. Isolation, physico–chemical characterization and biological properties. Stefanelli S, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):611–6

Comparison of cyclic delta–opioid peptides with non–peptide delta–agonist spiroindanyloxymorphone (SIOM) using the message–address concept: a molecular modeling study. Gao P. **J Comput Aided Mol Des** 1996 Aug;10(4):327–36

IMMUNOLOGY

Production and characterization of polyclonal anti–S 20499 antibodies: influence of the hapten structure on stereospecificity. Got PA, et al. **J Pharm Sci** 1997 Jun; 86(6):654–9

ISOLATION & PURIFICATION

Potent immunosuppressive principles, dimeric sesquiterpene thioalkaloids, isolated from nupharis rhizoma, the rhizoma of Nuphar pumilum (nymphaeaceae): structure–requirement of nuphar–alkaloid for immunosuppressive activity. Yamahara J, et al. **Biol Pharm Bull** 1996 Sep;19(9):1241–3

Spirotryprostatin B, a novel mammalian cell cycle inhibitor produced by Aspergillus fumigatus [letter] Cui CB, et al. **J Antibiot (Tokyo)** 1996 Aug;49(8):832–5

Psammaplysin F, a new bromotyrosine derivative from a sponge, Aplysinella sp. Liu S, et al. **J Nat Prod** 1997 Jun; 60(6):614–5

Sclerotiamide: a new member of the paraherquamide class with potent antiinsectan activity from the sclerotia of Aspergillus sclerotiorum. Whyte AC, et al. **J Nat Prod** 1996 Nov;59(11):1093–5

METABOLISM

Biosynthesis of marcfortine A. Kuo MS, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1006–13

3–amino–3,4–dihydro–2H–1–benzopyran derivatives as 5–HT1A receptor ligands and potential anxiolytic agents. 2. Synthesis and quantitative structure–activity relationship studies of spiro[pyrrolidine– and piperidine–2,3'(2'H)–benzopyrans] Comoy C, et al. **J Med Chem** 1996 Oct 11;39(21):4285–98

Identification of a new G–protein–linked receptor for growth hormone secretagogues. Pong SS, et al. **Mol Endocrinol** 1996 Jan;10(1):57–61

PHARMACOKINETICS

Enantiomeric toxicokinetics of the new isoindoline anxiolytic pazinaclone in rats and dogs. Kondo T, et al. **Arzneimittelforschung** 1996 Jan;46(1):11–14

Absorption of the anxiolytic pazinaclone in animals as a criterion for species selection for toxicity studies. Kondo T, et al. **Arzneimittelforschung** 1996 Sep;46(9):839–43

Prediction of in vivo hepatic metabolic clearance of YM796 from in vitro data by use of human liver microsomes and recombinant P–450 isozymes. Iwatsubo T, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):909–19

PHARMACOLOGY

Effect of dexloxiglumide and spiroglumide, two new CCK–receptor antagonists, on gastric emptying and secretion in the rat: evaluation of their receptor selectivity in vivo. Scarpignato C, et al. **Aliment Pharmacol Ther** 1996 Jun;10(3):411–9

Novel L–lyxo and 5'–deoxy–5'–modified TSAO–T analogs: synthesis and anti–HIV–1 activity. Ingate S, et al. **Antiviral Res** 1996 Nov;32(3):149–64

Activity of 2–azaspiro[4.5]decane–6–carboxylates as GABA–uptake inhibitors. Fleischhacker W, et al. **Arch Pharm (Weinheim)** 1996 Mar;329(3):149–54

Fenspiride and membrane transduction signals in rat alveolar macrophages. Féray JC, et al. **Biochem Pharmacol** 1997 Jul 15;54(2):293–7

Inhibition of HIV–1 replication by uridine–3'–spiroxirane, a new type of reverse transcriptase inhibitor. Bailey JM, et al. **Biochem Soc Trans** 1996 May;24(2):245S

Antinociceptive profile of the pseudopeptide B2 bradykinin receptor antagonist NPC 18688 in mice. Corrêa CR, et al. **Br J Pharmacol** 1996 Feb;117(3):552–558

Beneficial effects of TDN–345, a novel Ca2+ antagonist, on ischemic brain injury and cerebral glucose metabolism in experimental animal models with cerebrovascular lesions. Nakayama T, et al. **Brain Res** 1997 Jul 11; 762(1–2):203–10

Growth hormone (GH) and insulin–like growth factor I responses after treatments with an orally active GH secretagogue L–163,255 in swine. Chang CH, et al. **Endocrinology** 1996 Nov;137(11):4851–6

MK–0677, a potent, novel, orally active growth hormone (GH) secretagogue: GH, insulin–like growth factor I, and other hormonal responses in beagles. Jacks T, et al. **Endocrinology** 1996 Dec;137(12):5284–9

Antioedematogenic and antinociceptive actions of NPC 18521, a novel bradykinin B2 receptor antagonist. De Campos RO, et al. **Eur J Pharmacol** 1996 Dec 5; 316(2–3):277–86

Pre– and postjunctional inhibitory effects of fenspiride on guinea–pig bronchi. Girard V, et al. **Eur Respir J** 1997 May;10(5):1015–20

Nidulal, a novel inducer of differentiation of human promyelocytic leukemia cells from Nidula candida. Erkel G, et al. **J Antibiot (Tokyo)** 1996 Dec;49(12):1189–95

Dechlorogeodin and its new dihydro derivatives, fungal metabolites with herbicidal activity. Tanaka Y, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1056–9

In–vitro activity of purpuromycin and MDL 63,604 against microorganisms that cause vaginitis and vaginosis. Goldstein BP, et al. **J Antimicrob Chemother** 1995 Dec; 36(6):1061–5

Stimulation of the growth hormone (GH)–insulin–like growth factor I axis by daily oral administration of a GH secretogogue (MK–677) in healthy elderly subjects. Chapman IM, et al. **J Clin Endocrinol Metab** 1996 Dec; 81(12):4249–57

Characterization of SR 121463A, a highly potent and selective, orally active vasopressin V2 receptor antagonist. Serradeil–Le Gal C, et al. **J Clin Invest** 1996 Dec 15; 98(12):2729–38

Repeat administration of the GH secretagogue MK–0677 increases and maintains elevated IGF–I levels in beagles. Hickey GJ, et al. **J Endocrinol** 1997 Feb;152(2):183–92

7–Spiroindanyl derivatives of naltrexone and oxymorphone as selective ligands for delta opioid receptors. Ohkawa S, et al. **J Med Chem** 1997 May 23;40(11):1720–5

Inhibition of growth and metastasis of ovarian carcinoma by administering a drug capable of interfering with vascular endothelial growth factor activity. Mu J, et al. **Jpn J Cancer Res** 1996 Sep;87(9):963–71

Differences in the inhibition of human immunodeficiency virus type 1 reverse transcriptase DNA polymerase activity by analogs of nevirapine and [2',5'–bis–O–(tert–butyldimethylsilyl)–3'–spiro–5"–(4"–amino–1", 2"–oxathiole–2",2"–dioxide] (TSAO). Arion D, et al. **Mol Pharmacol** 1996 Nov;50(5):1057–64

RS–102221: a novel high affinity and selective, 5–HT2C receptor antagonist. Bonhaus DW, et al. **Neuropharmacology** 1997 Apr–May;36(4–5):621–9

Inhibitory action of reveromycin A on TGF–alpha–dependent growth of ovarian carcinoma BG–1 in vitro and in vivo. Takahashi H, et al. **Oncol Res** 1997; 9(1):7–11

An ethopharmacological analysis of selective activation of 5–HT1A receptors: the mouse 5–HT1A syndrome. Blanchard RJ, et al. **Pharmacol Biochem Behav** 1997 Aug; 57(4):897–908

The new muscarinic M1–receptor agonist YM796 evokes yawning and increases oxytocin secretion from the posterior pituitary gland in rats. Fujikawa M, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):55–60

Antifungal activity from Alpinia galanga and the competition for incorporation of unsaturated fatty acids in cell growth. Haraguchi H, et al. **Planta Med** 1996 Aug;62(4):308–13

A nonbenzodiazepine partial agonist, S–(+)–DN–2327, has minimal physical dependence–producing liability, but shows cross–dependence on barbital in rats. Inui Y, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Oct; 20(7):1197–211

[Effects of Cuban analog (SWR–104SA), a new histamine H2 receptor antagonist, on gastric acid secretion and experimental ulcer formation] Shinkawa R, et al. **Yakugaku Zasshi** 1996 Oct;116(10):783–91 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

[Inhibition of corneal neovascularization by a new analog of fungal product] Nii S, et al. **Nippon Ganka Gakkai Zasshi** 1997 Jun;101(6):465–9 (Eng. Abstr.) **(Jpn)**

TOXICITY

Enantiomeric toxicokinetics of the new isoindoline anxiolytic pazinaclone in rats and dogs. Kondo T, et al. **Arzneimittelforschung** 1996 Jan;46(1):11–14

Effects found in a one–year oral toxicity study in Sprague–Dawley rats of a novel 5–HT1A receptor partial agonist for the treatment of anxiety in humans. Zwicker GM, et al. **Toxicol Pathol** 1996 Mar–Apr;24(2):207–13

SPIROCERCA see **THELAZIOIDEA**

SPIROCHAETACEAE

CLASSIFICATION

Phylogenetic analysis of pathogen–related oral spirochetes. Choi BK, et al. **J Clin Microbiol** 1996 Aug;34(8):1922–5

Unification of the genera Serpulina and Brachyspira, and proposals of Brachyspira hyodysenteriae Comb. Nov., Brachyspira innocens Comb. Nov. and Brachyspira pilosicoli Comb. Nov. Ochiai S, et al. **Microbiol Immunol** 1997;41(6):445–52

SPIROCHAETALES

CLASSIFICATION

Phylogenetic position of the spirochetal genus Cristispira. Paster BJ, et al. **Appl Environ Microbiol** 1996 Mar; 62(3):942–6

Genetic and phenotypic characterization of intestinal spirochetes colonizing chickens and allocation of known pathogenic isolates to three distinct genetic groups. McLaren AJ, et al. **J Clin Microbiol** 1997 Feb;35(2):412–7

DRUG EFFECTS

Azithromycin in the treatment of periodontal disease. Effect on microbial flora. Sefton AM, et al. **J Clin Periodontol** 1996 Nov;23(11):998–1003

Evaluation of the in vitro activity of seven selected antimicrobial agents to be used for the isolation of human intestinal spirochaetes. Calderaro A, et al. **New Microbiol** 1997 Jan;20(1):35–45

ENZYMOLOGY

The peptidolytic capacity of the spirochete system. Mäkinen KK, et al. **Med Microbiol Immunol (Berl)** 1996 May; 185(1):1–10 (78 ref.)

GROWTH & DEVELOPMENT

The challenge of growing oral spirochaetes. Wardle HM. **J Med Microbiol** 1997 Feb;46(2):104–16 (77 ref.)

Comparative growth of pure cultures of human intestinal spirochaetes on six selective media. Calderaro A, et al. **New Microbiol** 1997 Jan;20(1):47–54

ISOLATION & PURIFICATION

Humoral response of dairy cattle to spirochetes isolated from papillomatous digital dermatitis lesions. Walker RL, et al. **Am J Vet Res** 1997 Jul;58(7):744–8

Spirochetal non–Borrelia–microorganism isolated from Ixodes ricinus. Schwarzová K, et al. **Folia Microbiol (Praha)** 1996;41(2):175–80

Free–living spirochetes from Cape Cod microbial mats detected by electron microscopy. Teal TH, et al. **Microbiologia** 1996 Dec;12(4):571–84

Evaluation of the in vitro activity of seven selected antimicrobial agents to be used for the isolation of human intestinal spirochaetes. Calderaro A, et al. **New Microbiol** 1997 Jan;20(1):35–45

ULTRASTRUCTURE

Intestinal spirochetosis: first cases reported in Brazil and the use of immunohistochemistry as an aid in histopathological diagnosis. De Brito T, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jan–Feb;38(1):45–52

SPIROCHAETALES INFECTIONS

COMPLICATIONS

[A case of hemorrhagic rectocolitis associated with the presence of intestinal spirochetes] Zerpa PR, et al.

Bull Soc Pathol Exot 1996;89(4):287–90 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Immunoblot reactivity of polyclonal and monoclonal antibodies with periplasmic flagellar proteins FlaA1 and FlaB of porcine Serpulina species. Fisher LN, et al. **Clin Diagn Lab Immunol** 1997 Jul;4(4):400–4

Invasive intestinal spirochetosis: a report of three cases. Padmanabhan V, et al. **Pathology** 1996 Aug;28(3):283–6

Intestinal spirochetosis: first cases reported in Brazil and the use of immunohistochemistry as an aid in histopathological diagnosis. De Brito T, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jan–Feb;38(1):45–52

[Necrotizing mucosal ulcers cause by anaerobic bacteria. Fusiform bacterial and spirochete infections] Hollandt JH, et al. **HNO** 1996 Dec;44(12):694–8 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Appendiceal spirochetosis. Yang M, et al. **South Med J** 1997 Jan;90(1):30–2

ETIOLOGY

Dual flaA1 flaB1 mutant of Serpulina hyodysenteriae expressing periplasmic flagella is severely attenuated in a murine model of swine dysentery. Rosey EL, et al. **Infect Immun** 1996 Oct;64(10):4154–62

MICROBIOLOGY

Phenotypic and genotypic profiles of human, canine, and porcine spirochetes associated with colonic spirochetosis correlates with in vivo brush border attachment. Muniappa N, et al. **Adv Exp Med Biol** 1997;412:159–66

Phenotypic characteristics of Serpulina pilosicoli the agent of intestinal spirochaetosis. Trott DJ, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):209–14

Experimental infection of newly weaned pigs with human and porcine strains of Serpulina pilosicoli. Trott DJ, et al. **Infect Immun** 1996 Nov;64(11):4648–54

Identification and characterization of Serpulina pilosicoli isolates recovered from the blood of critically ill patients. Trott DJ, et al. **J Clin Microbiol** 1997 Feb;35(2):482–5

Histological and bacteriological evaluation of digital dermatitis in cattle, with special reference to spirochaetes and Campylobacter faecalis. Döpfer D, et al. **Vet Rec** 1997 Jun 14;140(24):620–3

PATHOLOGY

Light microscopic and ultrastructural changes in the ceca of chicks inoculated with human and canine Serpulina pilosicoli. Muniappa N, et al. **Vet Pathol** 1996 Sep; 33(5):542–50

VETERINARY

Humoral response of dairy cattle to spirochetes isolated from papillomatous digital dermatitis lesions. Walker RL, et al. **Am J Vet Res** 1997 Jul;58(7):744–8

The prevalence of intestinal spirochaetes in dogs. Lee JI, et al. **Aust Vet J** 1996 Dec;74(6):466–7

The prevalence of intestinal spirochaetes in poultry flocks in Western Australia. McLaren AJ, et al. **Aust Vet J** 1996 Oct;74(4):319–21

Digital dermatitis in a Friesian cow. McLennan MW, et al. **Aust Vet J** 1996 Oct;74(4):314–5

Cases of spirochete-associated necrotizing typhlitis in captive common rheas (Rhea americana). Buckles EL, et al. **Avian Dis** 1997 Jan–Mar;41(1):144–8

Cell membrane permeability and mitochondrial dysfunction-inducing activities in cell-free supernatants from Serpulina hyodysenteriae serotypes 1 and 2. Witters NA, et al. **Comp Immunol Microbiol Infect Dis** 1996 Jun; 19(3):233–44

Differentiation of intestinal spirochaetes by multilocus enzyme electrophoresis analysis and 16S rRNA sequence comparisons. Stanton TB, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):181–6

Identification of Serpulina species associated with porcine colitis by biochemical analysis and PCR. Fellström C, et al. **J Clin Microbiol** 1997 Feb;35(2):462–7

Enhanced isolation of Serpulina hyodysenteriae by using sliced agar media. Olson LD. **J Clin Microbiol** 1996 Dec; 34(12):2937–41

Multiplex polymerase chain reaction for simultaneous detection of Lawsonia intracellularis, Serpulina hyodysenteriae, and salmonellae in porcine intestinal specimens. Elder RO, et al. **J Vet Diagn Invest** 1997 Jul; 9(3):281–6

Laboratory identification and enteropathogenicity testing of Serpulina pilosicoli associated with porcine colonic spirochetosis. Muniappa N, et al. **J Vet Diagn Invest** 1997 Apr;9(2):165–71

Identification of the swine pathogen Serpulina hyodysenteriae in rheas (Rhea americana). Jensen NS, et al. **Vet Microbiol** 1996 Oct;52(3–4):259–69

Rapid identification of porcine Serpulina species by colony blot assay using a genus-specific monoclonal antibody [see comments] Achacha M, et al. **Vet Rec** 1996 Nov 30; 139(22):539–41. Comment in: Vet Rec 1997 Jan 11;140(2):51–2.

Histological and bacteriological evaluation of digital dermatitis in cattle, with special reference to spirochaetes and Campylobacter faecalis. Döpfer D, et al. **Vet Rec** 1997 Jun 14;140(24):620–3

Rapid identification of porcine Serpulina species [letter; comment] Hampson D. **Vet Rec** 1997 Jan 11;140(2):51–2. Comment on: Vet Rec 1996 Nov 30;139(22):539–41.

SPIROCHETE INFECTIONS see **SPIROCHAETALES INFECTIONS**

SPIRODIFLAMINE see **FLUSPIRILENE**

SPIROLACTONE see **SPIRONOLACTONE**

SPIROMETRA

Cutaneous sparganosis in France: the second case described from Europe. Case report. Garin YJ, et al. **APMIS** 1997 Jan;105(1):14–6

ENZYMOLOGY

[Localization and characteristics of lactate and malate dehydrogenase in the sparganum and adult worm of Spirometra erinacei] Kwak KH, et al. **Korean J Parasitol** 1996 Mar;34(1):59–68 (Eng. Abstr.) **(Kor)**

[Characteristics of alkaline and acid phosphatase in Spirometra erinacei] Kwak KH, et al. **Korean J Parasitol** 1996 Mar;34(1):69–77 (Eng. Abstr.) **(Kor)**

GENETICS

The nucleotide sequence and predicted secondary structure of small subunit (18S) ribosomal RNA from Spirometra erinaceieuropaei. Liu DW, et al. **Gene** 1997 Jan 15; 184(2):221–7

Molecular cloning and expression of the gene encoding a cysteine proteinase of Spirometra erinacei. Liu DW, et al. **Mol Biochem Parasitol** 1996 Feb–Mar;76(1–2):11–21

IMMUNOLOGY

Excretory/secretory products from plerocercoids of Spirometra erinacei reduce iNOS and chemokine mRNA levels in peritoneal macrophages stimulated with cytokines and/or LPS. Fukumoto S, et al. **Parasite Immunol** 1997 Jul;19(7):325–32

PHYSIOLOGY

An unusual host-parasite relationship: the growth hormone-like factor from plerocercoids of spirometrid tapeworms. Phares K. **Int J Parasitol** 1996 Jun;26(6):575–88 (80 ref.)

Excretory/secretory products of plerocercoids of Spirometra erinaceieuropaei induce the expression of inducible nitric oxide synthase mRNA in murine hepatocytes. Wang H, et al. **Int J Parasitol** 1997 Apr;27(4):367–75

SPIROMETRY

Spirometric findings and cardiovascular risk [letter] Singh R. **Am Fam Physician** 1997 Sep 15;56(4):1071

Respiratory symptoms and spirometry in experienced coal miners: effects of both distant and recent coal mine dust exposures. Henneberger PK, et al. **Am J Ind Med** 1997 Sep;32(3):268–74

Spirometry values in stable lung transplant recipients. Martinez JA, et al. **Am J Respir Crit Care Med** 1997 Jan; 155(1):285–90

The current dilemma with spirometric inclusion criteria for asthma drug trials [see comments] Cockcroft DW, et al. **Ann Allergy Asthma Immunol** 1997 Sep;79(3):226–8. Comment in: Ann Allergy Asthma Immunol 1997 Sep;79(3):173–5.

Spirometric testing in acute asthma [letter] Ben Zemenick R. **Ann Emerg Med** 1997 Sep;30(3):356

Cardiopulmonary function and autologous bone marrow transplantation: results and predictive value for respiratory failure and mortality. The University of Nebraska Medical Center Bone Marrow Transplantation Pulmonary Study Group. Jain B, et al. **Bone Marrow Transplant** 1996 Apr; 17(4):561–8

Spirometry in general practice [letter; comment] Upton M. **Br J Gen Pract** 1997 Apr;47(417):252–3. Comment on: Br J Gen Pract 1997 Jan;47(414):41–2.

Incentive spirometry performance. A reliable indicator of pulmonary function in the early postoperative period after lobectomy? Bastin R, et al. **Chest** 1997 Mar;111(3):559–63

Spirometry reference values for healthy elderly blacks. The Cardiovascular Health Study Research Group. Enright PL, et al. **Chest** 1996 Dec;110(6):1416–24

Pneumothorax risk prediction in lung needle biopsy by pulmonary function tests [letter; comment] García-Río F, et al. **Chest** 1997 Apr;111(4):1141–2. Comment on: Chest 1996 Mar;109(3):612–5.

Granulocyte proteins in serum in childhood asthma: relation to spirometry and therapy. Scher H, et al. **Clin Exp Allergy** 1996 Oct;26(10):1131–41

Controversies in spirometry [letter] Ham Pong AJ. **CMAJ** 1997 Aug 15;157(4):366–7

Peak flow meters and spirometers in general practice. **Drug Ther Bull** 1997 Jul;35(7):52–5 (20 ref.)

Pulmonary function and symptoms of welders. Wolf C, et al. **Int Arch Occup Environ Health** 1997;69(5):350–3

Biphasic spirogram in unilateral mainstem bronchus obstruction—the "two can" filling effect. Joshi JM. **J Assoc Physicians India** 1996 Aug;44(8):583

Prognostic value of pulmonary hypertension in patients with chronic interstitial lung disease referred for lung or heart-lung transplantation. Harari S, et al. **J Heart Lung Transplant** 1997 Apr;16(4):460–3

Partial effective time (teffp7): a new spirometric parameter for lung function assessment [published erratum appears in J Int Med Res 1996 Jul–Aug;24(4):387] Tatsis G, et al. **J Int Med Res** 1996 May–Jun;24(3):284–90

Breath-holding in healthy and pulmonary-compromised populations: effects of hyperventilation and oxygen inspiration. Marks B, et al. **J Magn Reson Imaging** 1997 May–Jun;7(3):595–7

Improvement in lung function measurements using a flow spirometer that emphasizes computer assessment of test quality. Banks DE, et al. **J Occup Environ Med** 1996 Mar; 38(3):279–83

Evaluation of the utility of spirometry in a regional public health screening program for workers exposed to welding fumes. Rossignol M, et al. **J Occup Environ Med** 1996 Dec; 38(12):1259–63

Incentive spirometry as screening pulmonary test. Dewan AK, et al. **J Surg Oncol** 1996 Nov;63(3):209

Routine pulmonary function tests in young adolescents with asthma in general practice [see comments] Hewson PH, et al. **Med J Aust** 1996 Nov 4;165(9):469–72. Comment in: Med J Aust 1996 Nov 4;165(9):463–4.

Clinical spirometry. Pierce RJ, et al. **Med J Aust** 1997 Jun 16;166(12):658–63

The effectiveness of incentive spirometry with physical therapy for high-risk patients after coronary artery bypass surgery. Crowe JM, et al. **Phys Ther** 1997 Mar;77(3):260–8

Value of preoperative spirometry to predict postoperative pulmonary complications. Kocabas A, et al. **Respir Med** 1996 Jan;90(1):25–33

Analysis of variability in interpretation of spirometric tests. Quadrelli SA, et al. **Respiration** 1996;63(3):131–6 (28 ref.)

Spirometry of healthy adult South African men. Part II. Interrelationship between socio-environmental factors and 'race' as determinants of spirometry. Goldin JG, et al. **S Afr Med J** 1996 Jul;86(7):820–6

Spirometry of healthy adult South African men. Part I. Normative values. Louw SJ, et al. **S Afr Med J** 1996 Jul; 86(7):814–9

A guide to spirometry as applied to occupational health. White N, et al. **S Afr Med J** 1996 Jul;86(7):807–13 (39 ref.)

[Aeroacoustic and pneumotachometric studies in the evaluation of vicarious voice in laryngectomy patients] Zalewski P, et al. **Otolaryngol Pol** 1996;50(3):291–9 (Eng. Abstr.) **(Pol)**

[The effect of fiberoptic bronchoscopy and bronchoalveolar lavage (BAL) on results of spirometric measurements] Michnar M, et al. **Pneumonol Alergol Pol** 1996;64 Suppl 1:97–103 (Eng. Abstr.) **(Pol)**

[Spirometry and bicycle ergometry in the evaluation of work capacity of coal miners with ischemic heart disease] Kobets GP, et al. **Med Tr Prom Ekol** 1996;(7):29–32 (Eng. Abstr.) **(Rus)**

[Spirometry interpretation: where are we? (published erratum appears in Arch Bronconeumol 1997 Feb;33(2):68)] Díez Herranz A, et al. **Arch Bronconeumol** 1996 Nov; 32(9):475–82 **(Spa)**

[Agreement between reference values for spirometry recommended by the pneumology Spanish and European societies] Díez Herranz A. **Arch Bronconeumol** 1996 Nov; 32(9):459–62 (Eng. Abstr.) **(Spa)**

[Estimation of initial interobserver variability of forced spirometry in the multicenter epidemiological study IBERPOC. Scientific Committee of the IBERPOC study] Gabriel Sánchez R, et al. **Arch Bronconeumol** 1997 Jun; 33(6):300–5 (Eng. Abstr.) **(Spa)**

ECONOMICS

Preoperative spirometry and laparotomy: blowing away dollars. De Nino LA, et al. **Chest** 1997 Jun;111(6):1536–41

HISTORY

Ergospirometry and its history. Hollmann W, et al. **Sports Med** 1997 Feb;23(2):93–105

INSTRUMENTATION

Pocket-sized spirometer for monitoring bronchial challenge procedures. Keskinen H, et al. **Clin Physiol** 1996 Nov; 16(6):633–43

Bacterial colonization as a potential source of nosocomial respiratory infections in two types of spirometer [see comments] Burgos F, et al. **Eur Respir J** 1996 Dec; 9(12):2612–7. Comment in: Eur Respir J 1997 Jul;10(7):1694–5.

Method to produce American Thoracic Society flow-time waveforms using a mechanical pump. Hankinson JL, et al. **Eur Respir J** 1997 Mar;10(3):690–4

Bacterial colonization as a potential source of nosocomial respiratory infections in spirometers [letter; comment] Kendrick AH, et al. **Eur Respir J** 1997 Jul;10(7):1694–5. Comment on: Eur Respir J 1996 Dec;9(12):2612–7.

SPIROMETRY

Gas compression artefacts when testing peak expiratory flow meters with mechanically-driven syringes. Navajas D, et al. **Eur Respir J** 1997 Apr;10(4):901-4

Spirometry with a Fleisch pneumotachograph: upstream heat exchanger replaces heating requirement. Miller MR, et al. **J Appl Physiol** 1997 Apr;82(4):1053-7

Office spirometry: equipment selection and training of staff in the private practice setting. Wanger J, et al. **J Asthma** 1997;34(2):93-104 (24 ref.)

Lung function testing: methods and reference values for forced expiratory volume (FEV1) and transfer factor (TL). Cotes JE, et al. **Occup Environ Med** 1997 Jul;54(7):457-65

Assessment of accuracy and applicability of a portable electronic diary card spirometer for asthma treatment. Godschalk I, et al. **Respir Med** 1996 Nov;90(10):619-22

Evaluation of a pocket-sized turbine spirometer for clinical use with children. Paul KP, et al. **Respir Med** 1997 Jul; 91(6):369-72

Calibrating the calibrators [editorial] Burge PS. **Thorax** 1996 Oct;51(10):969

Long-term performance of a hand held spirometer. Dirksen A, et al. **Thorax** 1996 Oct;51(10):973-6

METHODS

Respiratory resistance by the forced oscillation technique in asthmatic children and cystic fibrosis patients. Lebecque P, et al. **Eur Respir J** 1997 Apr;10(4):891-5

A comprehensive graphic approach to peak flow "traffic light system" -interpretation [letter] Rothe TB. **Eur Respir J** 1997 Apr;10(4):961-2

Detection of acute rejection by 133Xe radiospirometry after single lung transplantation in an experimental porcine model. Ikonen T, et al. **Eur Surg Res** 1997;29(1):12-9

Lung function testing: methods and reference values for forced expiratory volume (FEV1) and transfer factor (TL). Cotes JE, et al. **Occup Environ Med** 1997 Jul;54(7):457-65

[Evaluation of the validity of spiroergometric parameters in the differentiation of circulatory and ventilatory physical limitation] Reuter M, et al. **Pneumologie** 1997 Apr; 51(4):353-8 (Eng. Abstr.) **(Ger)**

STANDARDS

Quality control of spirometry testing in the registry for patients with severe alpha1-antitrypsin deficiency. alpha1-Antitrypsin Deficiency Registry Study Group. Stoller JK, et al. **Chest** 1997 Apr;111(4):899-909

Controversies in spirometry [letter] Haddon RW. **CMAJ** 1997 Aug 15;157(4):367

Office spirometry: equipment selection and training of staff in the private practice setting. Wanger J, et al. **J Asthma** 1997;34(2):93-104 (24 ref.)

Spirometric nomograms for normal children and adolescents in Puerto Rico. Chen-Mok M, et al. **Salud Publica Mex** 1997 Jan-Feb;39(1):11-5

STATISTICS & NUMERICAL DATA

Spirometric prediction equations for male Italians 7-18 years of age. Parma A, et al. **Eur J Epidemiol** 1996 Jun; 12(3):263-77

[Normal values for spirometry lung function values and peak flow for 7-18-year-old probands] Luttmann H, et al. **Pneumologie** 1997 Jan;51(1):47-54 (Eng. Abstr.) **(Ger)**

UTILIZATION

Spirometric testing: how much is enough? [editorial; comment] Anthonisen NR. **Can Med Assoc J** 1997 Jan 15; 156(2):202-4. Comment on: Can Med Assoc J 1997 Jan 15;156(2):169-76.

Spirometry utilization in Ontario: practice patterns and policy implications [see comments] Chan B, et al. **Can Med Assoc J** 1997 Jan 15;156(2):169-76. Comment in: Can Med Assoc J 1997 Jan 15;156(2):202-4.

Preoperative spirometry and laparotomy: blowing away dollars. De Nino LA, et al. **Chest** 1997 Jun;111(6):1536-41

[Compliance with the "recommendations SEPAR" on spirometry] Giner J, et al. **Arch Bronconeumol** 1996 Dec; 32(10):516-22 (Eng. Abstr.) **(Spa)**

SPIRONOLACTONE

ADMINISTRATION & DOSAGE

Chronic splanchnic hemodynamic effects of low-dose transdermal nitroglycerin versus low-dose transdermal nitroglycerin plus spironolactone in patients with cirrhosis. Sugano S, et al. **Dig Dis Sci** 1997 Mar;42(3):529-35

Intestinal safety of water-soluble beta-cyclodextrins in paediatric oral solutions of spironolactone: effects on human intestinal epithelial Caco-2 cells. Tötterman AM, et al. **J Pharm Pharmacol** 1997 Jan;49(1):43-8

[Effect of dexamethasone and spironolactone therapy on diuresis and creatine clearance in premature infants with a birth weight below 1,500 g] Sonntag J. **Klin Padiatr** 1996 Nov-Dec;208(6):319-22 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Spironolactone-induced agranulocytosis. Whitling AM, et al. **Ann Pharmacother** 1997 May;31(5):582-5

Allergic contact dermatitis from spironolactone. Corazza M, et al. **Contact Dermatitis** 1996 Dec;35(6):365-6

[Type 4 renal tubular acidosis caused by spironolactone. A case report] Bruno CM, et al. **Minerva Med** 1997 Mar; 88(3):93-5 (Eng. Abstr.) **(Ita)**

ANALOGS & DERIVATIVES

Stimulation of microsomal spironolactone metabolism by reduced glutathione. Colby HD, et al. **Pharmacology** 1996 Jan;52(1):30-4

The memory-facilitating effects of the competitive NMDA-receptor antagonist CGP 37849 are steroid-sensitive, whereas its memory-impairing effects are not. Mondadori C, et al. **Psychopharmacology (Berl)** 1996 Apr;124(4):380-3

BLOOD

Simultaneous determination of spironolactone and its metabolites in human plasma. Jankowski A, et al. **J Pharm Biomed Anal** 1996 Jun;14(8-10):1359-65

CHEMISTRY

Variable mapping of structure-activity relationships: application to 17-spirolactone derivatives with mineralocorticoid activity. Grassy G, et al. **J Mol Graph** 1995 Dec;13(6):356-67

CONTRAINDICATIONS

Heart failure in the elderly [letter; comment] Jolobe OM. **Postgrad Med J** 1997 Mar;73(857):189-90. Comment on: Postgrad Med J 1996 Oct;72(852):577-80.

METABOLISM

Mineralocorticoid (type I) receptors in the olfactory mucosa of the mammal: studies with [3H]aldosterone and the anti-mineralocorticoid spironolactone. Kern RC, et al. **Chem Senses** 1997 Apr;22(2):141-8

Analysis of metabolites--a new approach to bioequivalence studies of spironolactone formulations. Vergin H, et al. **Int J Clin Pharmacol Ther** 1997 Aug;35(8):334-40

Stimulation of microsomal spironolactone metabolism by reduced glutathione. Colby HD, et al. **Pharmacology** 1996 Jan;52(1):30-4

PHARMACOKINETICS

Improved bioavailability and clinical response in patients with chronic liver disease following the administration of a spironolactone: beta-cyclodextrin complex. Abosehmah-Albidy AZ, et al. **Br J Clin Pharmacol** 1997 Jul;44(1):35-9

Analysis of metabolites--a new approach to bioequivalence studies of spironolactone formulations. Vergin H, et al. **Int J Clin Pharmacol Ther** 1997 Aug;35(8):334-40

PHARMACOLOGY

Spironolactone prevents Na+/H+ exchange enhancement in primary aldosteronism. Koren W, et al. **Am J Hypertens** 1997 Mar;10(3):341-5

New activity of spironolactone. Inhibition of angiogenesis in vitro and in vivo. Klauber N, et al. **Circulation** 1996 Nov 15;94(10):2566-71

Effect of fludrocortisone and spironolactone on sodium and potassium losses in secretory diarrhea. Wenzl HH, et al. **Dig Dis Sci** 1997 Jan;42(1):119-28

Effects of varying doses of spironolactone without and with nitrates on portal vein pressure and kidney function in partial portal vein ligated rats. Van de Casteele M, et al. **Hepatology** 1996 Dec;24(6):1492-6

Increase in the basal tone of guinea pig thoracic aorta induced by ouabain is inhibited by spironolactone canrenone and potassium canrenoate. Sorrentino R, et al. **J Cardiovasc Pharmacol** 1996 Oct;28(4):519-25

Topical spironolactone reduces sebum secretion rates in young adults. Yamamoto A, et al. **J Dermatol** 1996 Apr; 23(4):243-6

Effects of simvastatin, pentoxifylline and spironolactone on hepatic fibrosis and portal hypertension in rats with bile duct ligation. Oberti F, et al. **J Hepatol** 1997 Jun; 26(6):1363-71

Variable mapping of structure-activity relationships: application to 17-spirolactone derivatives with mineralocorticoid activity. Grassy G, et al. **J Mol Graph** 1995 Dec;13(6):356-67

Cell-specific, promoter-dependent mineralocorticoid agonist activity of spironolactone. Massaad C, et al. **Mol Pharmacol** 1997 Feb;51(2):285-92

Interactions of aldosterone antagonist diuretics with human serum proteins. Takamura N, et al. **Pharm Res** 1997 Apr; 14(4):522-6

Hippocampal mineralocorticoid, but not glucocorticoid, receptors modulate anxiety-like behavior in rats. Smythe JW, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):507-13

Cognitive dysfunctions induced by scopolamine are reduced by systemic or intrahippocampal mineralocorticoid receptor blockade. Smythe JW, et al. **Pharmacol Biochem Behav** 1997 Apr;56(4):613-21

Effects of aldosterone and spironolactone on the isolated perfused rat heart. Moreau D, et al. **Pharmacology** 1996 Jul;53(1):28-36

Effect of spironolactone on antipyrine metabolism in calves. Janus K, et al. **Res Vet Sci** 1996 Jul;61(1):87-8

THERAPEUTIC USE

Effectiveness of spironolactone added to an angiotensin-converting enzyme inhibitor and a loop diuretic for severe chronic congestive heart failure (the Randomized Aldactone Evaluation Study [RALES]). **Am J Cardiol** 1996 Oct 15;78(8):902-7

Successful treatment of hirsutism in HAIR-AN syndrome using flutamide, spironolactone, and birth control therapy. Zemtsov A, et al. **Arch Dermatol** 1997 Apr;133(4):431-3

Prevention of aortic fibrosis by spironolactone in spontaneously hypertensive rats. Benetos A, et al. **Arterioscler Thromb Vasc Biol** 1997 Jun;17(6):1152-6

Aldosterone blockade reduces vascular collagen turnover, improves heart rate variability and reduces early morning rise in heart rate in heart failure patients. MacFadyen RJ, et al. **Cardiovasc Res** 1997 Jul;35(1):30-4

Spironolactone therapy in hypertrichosis. Darendeliler F, et al. **Eur J Endocrinol** 1996 Nov;135(5):604-8

Comparison of four different treatment regimes in hirsutism related to polycystic ovary syndrome. Gökmen O, et al. **Gynecol Endocrinol** 1996 Aug;10(4):249-55

Therapeutic effects of diuretics and paracentesis on lung function in patients with non-alcoholic cirrhosis and tense ascites. Chang SC, et al. **J Hepatol** 1997 Apr;26(4):833-8

Diuretic requirements after therapeutic paracentesis in non-azotemic patients with cirrhosis. A randomized double-blind trial of spironolactone versus placebo [published erratum appears in J Hepatol 1997 Jun;26(6):1430] Fernández-Esparrach G, et al. **J Hepatol** 1997 Mar;26(3):614-20

Prevention of portal hypertension by propranolol and spironolactone in rats with bile duct ligation. Oberti F, et al. **J Hepatol** 1997 Jan;26(1):167-73

[Treatment of refractory ascites with clonidine and spironolactone (letter)] Lenaerts A, et al. **Gastroenterol Clin Biol** 1997;21(6-7):524-5 **(Fre)**

[Spironolactone: renaissance of anti-aldosterone therapy in heart failure?] Brilla CG, et al. **Schweiz Rundsch Med Prax** 1997 Apr 2;86(14):566-74 (38 ref.) (Eng. Abstr.) **(Ger)**

[Potassium-sparing diuretics (spironolactone, triamterene, amylorid)] Haris A, et al. **Orv Hetil** 1996 Sep 1; 137(35):1907-14 (72 ref.) (Eng. Abstr.) **(Hun)**

[Hyperaldosteronism, spironolactone and liver cirrhosis] Sort P, et al. **Gastroenterol Hepatol** 1997 Mar;20(3):151-9 (80 ref.) **(Spa)**

SPIROPERIDOL see **SPIPERONE**

SPIROPERONE see **SPIPERONE**

SPIROPLASMA

Spiroplasmas: infectious agents of plants, arthropods and vertebrates. Bové JM. **Wien Klin Wochenschr** 1997 Aug 8;109(14-15):604-12 (70 ref.)

CHEMISTRY

Proteome analysis of Spiroplasma melliferum (A56) and protein characterisation across species boundaries. Cordwell SJ, et al. **Electrophoresis** 1997 Aug;18(8):1335-46

Characterisation of basic proteins from Spiroplasma melliferum using novel immobilised pH gradients. Cordwell SJ, et al. **Electrophoresis** 1997 Aug;18(8):1393-8

CLASSIFICATION

Spiroplasma diabroticae sp. nov., from the southern corn rootworm beetle, Diabrotica undecimpunctata (Coleoptera:Chrysomelidae). Carle P, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):78-80

Spiroplasma corruscae sp. nov., from a firefly beetle (Coleoptera: Lampyridae) and tabanid flies (Diptera: Tabanidae). Hackett KJ, et al. **Int J Syst Bacteriol** 1996 Oct;46(4):947-50

GENETICS

Extensive chromosome aberrations in Spiroplasma citri Strain BR3. Ye F, et al. **Biochem Genet** 1996 Aug;34(7-8):269-86

Characterisation of basic proteins from Spiroplasma melliferum using novel immobilised pH gradients. Cordwell SJ, et al. **Electrophoresis** 1997 Aug;18(8):1393-8

Proteome analysis of Spiroplasma melliferum (A56) and protein characterisation across species boundaries. Cordwell SJ, et al. **Electrophoresis** 1997 Aug;18(8):1335-46

Molecular characterization of a gene encoding a membrane protein of Spiroplasma citri. Ye F, et al. **Gene** 1997 Apr 11;189(1):95-100

Spiroplasma platyhelix sp. nov., a new mollicute with unusual morphology and genome size from the dragonfly Pachydiplax longipennis. Williamson DL, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):763-6

Isolation, characterization, and complementation of a motility mutant of Spiroplasma citri. Jacob C, et al. **J Bacteriol** 1997 Aug;179(15):4802-10

Characterization of the recA gene regions of Spiroplasma citri and Spiroplasma melliferum. Marais A, et al. **J Bacteriol** 1996 Dec;178(23):7003-9

Random insertion of transposon Tn4001 in the genome of Spiroplasma citri strain GII3. Foissac X, et al. **Plasmid** 1997;37(1):80-6

IMMUNOLOGY

Spiroplasma platyhelix sp. nov., a new mollicute with unusual morphology and genome size from the dragonfly Pachydiplax longipennis. Williamson DL, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):763–6

ISOLATION & PURIFICATION

Three spiroplasmas isolated from Haematopota sp. (Diptera:Tabanidae) in France. Vazeille–Falcoz M, et al. **J Med Entomol** 1997 Mar;34(2):238–41

SPIROSTANS

CHEMISTRY

Differential behavior of (25R)–5,6–epoxyspirostan–22 alpha–O–3 beta–ol and (25R)–5,6–epoxyspirostan–22 alpha–O–3 beta, 4 beta–diol toward Dowex. Korde SS, et al. **Steroids** 1996 May;61(5):290–5

PHARMACOLOGY

Antineoplastic agents; I. Three spirostanol glycosides from rhizomes of Dioscorea collettii var. hypoglauca. Hu K, et al. **Planta Med** 1996 Dec;62(6):573–5

SPIRURIDA INFECTIONS

Two rare parasites of the human brain––Gnathostoma spinigerum and sparganum (Spirometra). Sharma MC, et al. **J Assoc Physicians India** 1996 Nov;44(11):824–8

ETIOLOGY

Eye infestation with Thelazia species. Mahanta J, et al. **Indian J Ophthalmol** 1996 Jun;44(2):99–101 (6 ref.)

Thelazia californiensis conjunctival infestation. Doezie AM, et al. **Ophthalmic Surg Lasers** 1996 Aug;27(8):716–9

PARASITOLOGY

Immunohistochemical localization of Gnathostoma spinigerum larval antigens by monoclonal antibodies: II. Electron microscopy. Rojekittikhun W, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):570–3

PREVENTION & CONTROL

A survey of Gnathostoma larvae in fresh water fish in the valley of the Yangtze River and morphological characteristics of the recovered larvae. Koga M, et al. **Southeast Asian J Trop Med Public Health** 1996 Sep; 27(3):542–7

VETERINARY

Gongylonema madeleinensis N. sp. (Nematoda:Spiruroidea), from Mastomys erythroleucus (Rodentia) from a Senegalese island. Diouf M, et al. **J Parasitol** 1997 Aug; 83(4):706–8

Improved diagnosis of low intensity Spirocerca lupi infection by the sugar flotation method. Markovics A, et al. **J Vet Diagn Invest** 1996 Jul;8(3):400–1

Discovery of mammalian hosts to Gnathostoma nipponicum larvae and prevalence of the larvae in rodents and insectivores. Oyamada T, et al. **J Vet Med Sci** 1996 Sep; 58(9):839–43

Infectious keratoconjunctivitis in free–ranging mule deer (Odocoileus hemionus) from Zion National Park, Utah. Taylor SK, et al. **J Wildl Dis** 1996 Apr;32(2):326–30

Gongylonematiasis in the common marmoset (Callithrix jacchus). Brack M. **Lab Anim Sci** 1996 Jun;46(3):266–70

Geographic distribution of Gongylonema pulchrum and Gongylonema macrogubernaculum from Macaca fuscata in Japan. Uni S, et al. **Parasite** 1994 Jun;1(2):127–30

Thelazia lacrymalis (Nematoda, Spirurida, Thelaziidae): report in a horse in Germany and contribution to the morphology of adult worms. Beelitz P, et al. **Parasitol Res** 1997;83(6):627–31

Changes in gas composition in the swimbladder of the European eel (Anguilla anguilla) infected with Anguillicola crassus (Nematoda). Würtz J, et al. **Parasitology** 1996 Feb; 112 (Pt 2):233–8

A new type of advanced third–stage larvae of the genus Gnathostoma in freshwater eels, Fluta alba, from Nakhon Nayok, central Thailand. Akahane H, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):743–7

Thelazia rhodesii (Desmarest, 1828) infections in cattle in Mindanao, Philippines. Van Aken D, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):125–9

SPIRUROIDEA

ANATOMY & HISTOLOGY

On Physaloptera sibirica Petrow et Gorbunow, 1931 (Nematoda: Physalopteridae) parasitizing Iberian mammals. Miquel J, et al. **Wiad Parazytol** 1996;42(4):435–42

CLASSIFICATION

Gongylonema madeleinensis N. sp. (Nematoda:Spiruroidea), from Mastomys erythroleucus (Rodentia) from a Senegalese island. Diouf M, et al. **J Parasitol** 1997 Aug; 83(4):706–8

ISOLATION & PURIFICATION

Gongylonematiasis in the common marmoset (Callithrix jacchus). Brack M. **Lab Anim Sci** 1996 Jun;46(3):266–70

Geographic distribution of Gongylonema pulchrum and Gongylonema macrogubernaculum from Macaca fuscata in Japan. Uni S, et al. **Parasite** 1994 Jun;1(2):127–30

SPITZ NEVUS see **NEVUS, EPITHELIOID AND SPINDLE CELL**

SPLANCHNIC CIRCULATION

Effects of nitric oxide synthesis inhibition on mesenteric perfusion in young pigs. Alemany CA, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G612–6

Effects of oral vs. i.v. glucose administration on splanchnic and extrasplanchnic O2 uptake and blood flow. Brundin T, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):E496–504

Increased histamine and 5–HT in portal vein plasma and mesenteric lymph during brief ischemia and reperfusion. Fu LW, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1135–41

Oxidized low–density lipoproteins and microvascular responses to ischemia–reperfusion. Liao L, et al. **Am J Physiol** 1996 Dec;271(6 Pt 2):H2508–14

Relationship between structural and hemodynamic heterogeneity in microvascular networks. Pries AR, et al. **Am J Physiol** 1996 Feb;270(2 Pt 2):H545–53

Nitric oxide synthase inhibition reduces venous return in porcine endotoxemia. Saetre T, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1325–32

Control of renal and mesenteric conductance during hemorrhage in conscious hypertensive rabbits. Weichert G, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1531–40

Effects of dopexamine on creatinine clearance, systemic inflammation, and splanchnic oxygenation in patients undergoing coronary artery bypass grafting. Berendes E, et al. **Anesth Analg** 1997 May;84(5):950–7

Splanchnic and renal deterioration during and after laparoscopic cholecystectomy: a comparison of the carbon dioxide pneumoperitoneum and the abdominal wall lift method. Koivusalo AM, et al. **Anesth Analg** 1997 Oct; 85(4):886–91

Uncommon splanchnic artery aneurysms: pancreaticoduodenal, gastroduodenal, superior mesenteric, inferior mesenteric, and colic. Shanley CJ, et al. **Ann Vasc Surg** 1996 Sep;10(5):506–15 (147 ref.)

Effect of the ACAT inhibitor CL 277,082 on apolipoprotein B48 transport in mesenteric lymph and on plasma clearance of chylomicrons and remnants. Martins IJ, et al. **Arterioscler Thromb Vasc Biol** 1997 Jan;17(1):211–6

Aneurysm of the coeliac artery. Saliou C, et al. **Cardiovasc Surg** 1996 Aug;4(4):552–5

Liver function and splanchnic ischemia in critically ill patients. Maynard ND, et al. **Chest** 1997 Jan;111(1):180–7

The role of splanchnic glucose appearance in determining carbohydrate tolerance. Rizza R. **Diabet Med** 1996 Sep;13(9 Suppl 5):S23–7 (13 ref.)

Effects of free fatty acids and glucose on splanchnic insulin dynamics. Hennes MM, et al. **Diabetes** 1997 Jan;46(1):57–62

Dyspepsia as initial symptom of splanchnic vascular insufficiency. de Widt–Levert LM, et al. **Eur J Gastroenterol Hepatol** 1996 Aug;8(8):815–8

Leukocyte integrin very late antigen–4/vascular cell adhesion molecule–1 adhesion pathway in splanchnic artery occlusion shock. Squadrito F, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):153–60

Chronic splanchnic ischaemia: is tonometry a useful test? Geelkerken RH, et al. **Eur J Surg** 1997 Feb;163(2):115–21

Successful management of eleven splanchnic artery aneurysms. Røkke O, et al. **Eur J Surg** 1997 Jun; 163(6):411–7

Role of endothelium in the abnormal response of mesenteric vessels in rats with portal hypertension and liver cirrhosis. Atucha NM, et al. **Gastroenterology** 1996 Dec; 111(6):1627–32

Blood in the gastric lumen increases splanchnic blood flow and portal pressure in portal–hypertensive rats. Chen L, et al. **Gastroenterology** 1996 Oct;111(4):1103–10

Doppler ultrasonographic evaluation of splanchnic blood flow in coeliac disease. Arienti V, et al. **Gut** 1996 Sep; 39(3):369–73

Massive extra–enteric gastrointestinal hemorrhage secondary to splanchnic artery aneurysms. Yeh TS, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1152–6

Splanchnic hypoxia after cardiac surgery [editorial; comment] Gutierrez G. **Intensive Care Med** 1996 Jan; 22(1):1–2. Comment on: Intensive Care Med 1996 Jan;22(1):26–33.

Splanchnic microcirculatory changes during CO2 laparoscopy. Schilling MK, et al. **J Am Coll Surg** 1997 Apr;184(4):378–82

Downstream effects of splanchnic ischemia–reperfusion injury on renal function and eicosanoid release. Rothenbach P, et al. **J Appl Physiol** 1997 Aug;83(2):530–6

Effects of positive end–expiratory pressure ventilation on splanchnic oxygenation in humans. Berendes E, et al. **J Cardiothorac Vasc Anesth** 1996 Aug;10(5):598–602

Delayed intravenous contrast medium washout from the small bowel in patients with pancreatic carcinoma and splanchnic venous invasion. Sheiman RG, et al. **J Comput Assist Tomogr** 1996 Nov–Dec;20(6):924–9

Systemic and regional effects of experimental gradual splanchnic ischemia [see comments] Heino A, et al. **J Crit Care** 1997 Jun;12(2):92–8. Comment in: J Crit Care 1997 Jun;12(2):49–50.

Splanchnic buffering of metabolic acid during early endotoxemia. Kellum JA, et al. **J Crit Care** 1997 Mar; 12(1):7–12

Nutrient fluxes in splanchnic tissue of dairy cows: influence of grass quality. De Visser H, et al. **J Dairy Sci** 1997 Aug; 80(8):1666–73

Portal and splanchnic blood flow measurements in vivo: US Doppler or MR angiography? [editorial; comment] Denys A, et al. **J Hepatol** 1997 Feb;26(2):437–8. Comment on: J Hepatol 1997 Feb;26(2):298–304.

Variability of splanchnic blood flow measurements using MR velocity mapping under fasting and post–prandial conditions––comparison with echo–Doppler [see comments] Lycklama à Nijeholt GJ, et al. **J Hepatol** 1997 Feb;26(2):298–304. Comment in: J Hepatol 1997 Feb;26(2):437–8.

Endothelial function of the mesenteric arteriole and mechanical behaviour of the carotid artery in rats with insulin resistance and hypercholesterolaemia. Zanchi A, et al. **J Hypertens** 1995 Dec;13(12 Pt 1):1463–70

Dexamethasone inhibits leukocyte emigration in rat mesenteric post–capillary venules: an intravital microscopy study. Tailor A, et al. **J Leukoc Biol** 1997 Sep;62(3):301–8

Gadolinium–enhanced MR angiography of visceral arteries in patients with suspected chronic mesenteric ischemia. Meaney JF, et al. **J Magn Reson Imaging** 1997 Jan–Feb; 7(1):171–6

Splanchnic artery pseudo–aneurysms secondary to blunt abdominal trauma in children. Gow KW, et al. **J Pediatr Surg** 1996 Jun;31(6):812–5

Xanthine oxidase inhibition prevents mesenteric blood flow deficits after resuscitated hemorrhagic shock by preserving endothelial function. Flynn WJ Jr, et al. **J Surg Res** 1997 Mar;68(2):175–80

Cardiac preload, splanchnic perfusion, and their relationship during resuscitation in trauma patients. Chang MC, et al. **J Trauma** 1997 Apr;42(4):577–82; discussion 582–4

Splanchnic erythrocyte content decreases during hemodialysis: a new compensatory mechanism for hypovolemia. Yu AW, et al. **Kidney Int** 1997 Jun; 51(6):1986–90

Laser Doppler perfusion imaging: new technique for determination of perfusion and reperfusion of splanchnic organs and tumor tissue. Liu DL, et al. **Lasers Surg Med** 1997;20(4):473–9

Systemic inflammatory response and the splanchnic bed in cardiopulmonary bypass. Ohri SK. **Perfusion** 1996 May; 11(3):200–12 (68 ref.)

Differential effects of acute thermal injury on rat splanchnic and renal blood flow and prostanoid release. Myers SI, et al. **Prostaglandins Leukot Essent Fatty Acids** 1995 Dec; 53(6):439–44

Evidence that adenosine contributes to maintenance of hepatosplanchnic blood flow during peritoneal sepsis in rats. Motew SJ, et al. **Shock** 1997 Jun;7(6):439–46

Mesenteric tumor emboli manifested as recurrent abdominal pain. Duckworth C, et al. **South Med J** 1997 Apr; 90(4):419–22

Mesenteric revascularization during aneurysmectomy. Donaldson MC, et al. **Surg Clin North Am** 1997 Apr; 77(2):443–59 (51 ref.)

Duplex ultrasonography in evaluation of splanchnic artery stenosis. Nicoloff AD, et al. **Surg Clin North Am** 1997 Apr; 77(2):339–55 (18 ref.)

The mesenteric circulation. Anatomy and physiology. Rosenblum JD, et al. **Surg Clin North Am** 1997 Apr; 77(2):289–306 (23 ref.)

Long–term results after surgery for acute mesenteric ischemia. Klempnauer J, et al. **Surgery** 1997 Mar; 121(3):239–43

Adult liver transplantation and abnormalities of splanchnic veins: experience in 53 patients. Lerut JP, et al. **Transpl Int** 1997;10(2):125–32

[Radioisotope study of portal blood flow in extrahepatic portal hypertension in children] Razumovskiĭ AI, et al. **Khirurgiia (Mosk)** 1996;(4):31–4 (Eng. Abstr.) **(Rus)**

[Effects of percutaneous intrahepatic portosystemic shunt on splanchnic and systemic hemodynamics in patients with portal hypertension] François E, et al. **Gastroenterol Hepatol** 1997 Jan;20(1):1–4 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Sodium nitroprusside after cardiac surgery: systemic and splanchnic blood flow and oxygen transport. Parviainen I, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):606–11

Use of octreotide in the treatment of mesenteric angina. Anderson SH, et al. **Am J Gastroenterol** 1997 Jul; 92(7):1222–3

L–arginine augments nitric oxide production and mesenteric blood flow in ovine endotoxemia. Allman KG, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1296–301

Whole body and splanchnic metabolic and circulatory effects of glucose during beta–adrenergic receptor inhibition. Brundin T, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E678–87

Ischemia/reperfusion-induced microvascular dysfunction: role of oxidants and lipid mediators. Kurose I, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2976-82

Lysophosphatidylcholine stimulates leukocyte rolling and adherence in rat mesenteric microvasculature. Scalia R, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2584-90

Systemic, pulmonary and mesenteric perfusion and oxygenation effects of dopamine and epinephrine. Cheung PY, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):32-7

The effects of desflurane on splanchnic hemodynamics and oxygenation in the anesthetized pig. Armbruster K, et al. **Anesth Analg** 1997 Feb;84(2):271-7

Effects of a dobutamine-induced increase in splanchnic blood flow on hepatic metabolic activity in patients with septic shock. Reinelt H, et al. **Anesthesiology** 1997 Apr; 86(4):818-24

Regional perfusion abnormalities with phenylephrine during normothermic bypass. O'Dwyer C, et al. **Ann Thorac Surg** 1997 Mar;63(3):728-35

Effects of desflurane and isoflurane on splanchnic microcirculation during major surgery. O'Riordan J, et al. **Br J Anaesth** 1997 Jan;78(1):95-6

Anisodamine restores bowel circulation in burn shock. Sheng CY, et al. **Burns** 1997 Mar;23(2):142-6

Endothelin-1 produces heterogeneous regional haemodynamic effects in conscious rabbits. Roberts-Thomson P, et al. **Clin Exp Hypertens** 1996 Feb; 18(2):145-69

Effects of 17 beta-oestradiol on vascular responses in the in situ blood-perfused mesentery of Wistar-Kyoto rats. Chu ZM, et al. **Clin Exp Pharmacol Physiol** 1997 Jun; 24(6):430-2

Increasing resting vascular tone in conscious dogs does not alter the mesenteric vasoconstrictor responses to ANP. Woods RL, et al. **Clin Exp Pharmacol Physiol** 1996 Jan; 23(1):95-7

Effects of the stable prostacyclin analogue iloprost on mesenteric blood flow in porcine endotoxic shock. Manasia A, et al. **Crit Care Med** 1997 Jul;25(7):1222-7

Epinephrine impairs splanchnic perfusion in septic shock. Meier-Hellmann A, et al. **Crit Care Med** 1997 Mar; 25(3):399-404

Chronic splanchnic hemodynamic effects of low-dose transdermal nitroglycerin versus low-dose transdermal nitroglycerin plus spironolactone in patients with cirrhosis. Sugano S, et al. **Dig Dis Sci** 1997 Mar;42(3):529-35

Inhibition of lipopolysaccharide-induced bowel erythrocyte extravasation in rats, and of mesenteric hypoperfusion in dogs, by phosphodiesterase inhibitors. Cardelús I, et al. **Eur J Pharmacol** 1996 Mar 28;299(1-3):153-9

Analysis of responses to angiotensin I and angiotensin I-(3-10) in the mesenteric vascular bed of the cat. Champion HC, et al. **Eur J Pharmacol** 1996 Aug 15; 309(3):251-9

Effect of verapamil on portal and splanchnic hemodynamics in patients with advanced posthepatitic cirrhosis using duplex Doppler ultrasound. Dinç H, et al. **Eur J Radiol** 1996 Sep;23(2):97-101

Pharmacological manipulation of human gastrointestinal blood flow. Mathias CJ. **Fundam Clin Pharmacol** 1997; 11(1):29-34 (47 ref.)

The effects of diltiazem on superior mesenteric artery ligation. An experimental study. Topaloğlu U, et al. **Int Surg** 1996 Oct-Dec;81(4):374-6

Aerosolized prostacyclin and inhaled nitric oxide in septic shock--different effects on splanchnic oxygenation? Eichelbrönner O, et al. **Intensive Care Med** 1996 Sep; 22(9):880-7

Influence of enoximone on systemic and splanchnic oxygen utilization and endotoxin release following cardiopulmonary bypass. Loick HM, et al. **Intensive Care Med** 1997 Mar;23(3):267-75

Splanchnic blood flow is greater in septic shock treated with norepinephrine than in severe sepsis. Meier-Hellmann A, et al. **Intensive Care Med** 1996 Dec;22(12):1354-9

The effects of low-dose dopamine on splanchnic blood flow and oxygen uptake in patients with septic shock. Meier-Hellmann A, et al. **Intensive Care Med** 1997 Jan; 23(1):31-7

The effect of dobutamine infusion on splanchnic blood flow and oxygen transport in patients with acute pancreatitis [see comments] Ruokonen E, et al. **Intensive Care Med** 1997 Jul;23(7):732-7. Comment in: Intensive Care Med 1997 Jul;23(7):715-7.

Splanchnic oxygen transport after cardiac surgery: evidence for inadequate tissue perfusion after stabilization of hemodynamics [see comments] Uusaro A, et al. **Intensive Care Med** 1996 Jan;22(1):26-33. Comment in: Intensive Care Med 1996 Jan;22(1):1-2.

Dobutamine and the oxygen uptake/supply relationship in sepsis: from global to regional--nothing is simple and easy [comment] Vogt J, et al. **Intensive Care Med** 1997 Jul; 23(7):715-7 (33 ref.). Comment on: Intensive Care Med 1997 Jul;23(7):732-7.

Effects of enflurane and isoflurane on splanchnic oxygenation in humans. Berendes E, et al. **J Clin Anesth** 1996 Sep; 8(6):456-68

Effects of isosorbide-5-mononitrate on variceal pressure and systemic and splanchnic haemodynamics in patients with cirrhosis. Escorsell A, et al. **J Hepatol** 1996 Apr;24(4):423-9

Effect of oxygen inhalation on systemic, central, and splanchnic haemodynamics in cirrhosis. Møller S, et al. **J Hepatol** 1996 Sep;25(3):316-28

Effect of octreotide on systemic, central, and splanchnic haemodynamics in cirrhosis. Møller S, et al. **J Hepatol** 1997 May;26(5):1026-33

Immunohistochemical and molecular characterization of the differential response of the rat mesenteric microvasculature to angiotensin-II infusion. Wiener J, et al. **J Vasc Res** 1996 May-Jun;33(3):195-208

Effects of defibrotide on leukocyte-endothelial cell interaction in the rat mesenteric vascular bed: role of P-selectin. Scalia R, et al. **Methods Find Exp Clin Pharmacol** 1996 Dec;18(10):669-76

The hemodynamic effects of AT-112, an analog of ketanserin, in portal hypertensive rats. Lin HC, et al. **Pharmacology** 1997 Jan;54(1):16-23

Lipoxin A4 stable analogs inhibit leukocyte rolling and adherence in the rat mesenteric microvasculature: role of P-selectin. Scalia R, et al. **Proc Natl Acad Sci U S A** 1997 Sep 2;94(18):9967-72

Effects of the angiotensin converting enzyme inhibitor enalapril on bacterial translocation after thermal injury and bacterial challenge. Gennari R, et al. **Shock** 1996 Aug; 6(2):95-100

Dopexamine prevents depression of mesenteric blood flow caused by positive end-expiratory pressure in rats. Steinberg S, et al. **Surgery** 1996 Oct;120(4):597-601; discussion 601-2

PHYSIOLOGY

The changes of skin and mesenteric microvascular permeability in adaptation to hypoxia in rats. Dubina MV, et al. **Adv Exp Med Biol** 1996;388:363-6

Doppler sonography evaluation of superior mesenteric artery flow to assess Crohn's disease activity: correlation with clinical evaluation, Crohn's disease activity index, and alpha 1-antitrypsin clearance in feces. van Oostayen JA, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):429-33

Nitrovasodilators relax mesenteric microvessels by cGMP-induced stimulation of Ca-activated K channels. Carrier GO, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H76-84

Synergistic vascular effects of dietary sodium supplementation and angiotensin II administration. Csiky B, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):H1275-82

Ischemia/reperfusion-induced microvascular dysfunction: role of oxidants and lipid mediators. Kurose I, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):H2976-82

Thyroid, renal, and splanchnic circulation in horses at rest and during short-term exercise. Manohar M, et al. **Am J Vet Res** 1995 Oct;56(10):1356-61

Gastric tonometry [letter; comment] Gomersall CD, et al. **Anaesthesia** 1996 Nov;51(11):1074-5. Comment on: Anaesthesia 1996 Feb;51(2):161-70.

Dopaminergic receptor-mediated effects in the mesenteric vasculature and renal vasculature of the chronically instrumented newborn piglet. Pearson RJ, et al. **Crit Care Med** 1996 Oct;24(10):1706-12

Effects of pneumoperitoneum on splanchnic hemodynamics: an experimental study in pigs. Rasmussen IB, et al. **Eur J Surg** 1995 Nov;161(11):819-26

Does tissue acidosis in sepsis indicate tissue hypoperfusion? [editorial] Fink MP. **Intensive Care Med** 1996 Nov; 22(11):1144-6

Regulation of atrial natriuretic factor receptors in portal hypertensive rabbits [see comments] Cahill PA, et al. **J Hepatol** 1996 Feb;24(2):185-93. Comment in: J Hepatol 1997 Feb;26(2):450-1.

Natriuretic response to the combination of atrial natriuretic peptide and terlipressin in patients with cirrhosis and refractory ascites. Gadano A, et al. **J Hepatol** 1997 Jun; 26(6):1229-34

Transdermal nitroglycerin in cirrhosis. A 24-hour echo-Doppler study of splanchnic hemodynamics. Zoli M, et al. **J Hepatol** 1996 Oct;25(4):498-503

Systemic and splanchnic hemodynamic changes in patients with hepatic schistosomiasis. Denié C, et al. **Liver** 1996 Oct;16(5):309-12

Glutamine metabolism in very low birth weight infants. Darmaun D, et al. **Pediatr Res** 1997 Mar;41(3):391-6

Mesenteric blood flow velocity and its relation to transitional circulatory adaptation in appropriate for gestational age preterm infants. Martinussen M, et al. **Pediatr Res** 1996 Feb;39(2):275-80

Postprandial splanchnic hemodynamic response in patients with cirrhosis of the liver: evaluation with "triple-vessel" duplex US. Iwao T, et al. **Radiology** 1996 Dec;201(3):711-5

Doppler ultrasound measurement of intestinal blood flow in inflammatory bowel disease. Maconi G, et al. **Scand J Gastroenterol** 1996 Jun;31(6):590-3

Splanchnic homeostasis during endotoxin challenge in the pig as assessed by microdialysis and tonometry. Öldner A, et al. **Shock** 1996 Sep;6(3):188-93

Impairment of endothelial-dependent pulmonary vasorelaxation after mesenteric ischemia/reperfusion. Fullerton DA, et al. **Surgery** 1996 Nov;120(5):879-84

RADIATION EFFECTS

[A comparative study of the effects of laser and light-emitting diode radiations in the red spectrum on the clinical course of periodontal diseases and on microcirculatory processes in an experiment] Iantareva LI, et al. **Stomatologiia (Mosk)** 1996;Spec No:95-6 **(Rus)**

SPLANCHNIC NERVES

ANATOMY & HISTOLOGY

Development of differential preganglionic projections to pre- and paravertebral sympathetic ganglia. Cornbrooks EB, et al. **J Comp Neurol** 1997 May 26;382(1):1-18

DRUG EFFECTS

The depletion of monoamines blocks the sympathoinhibitory response to cocaine. Abrahams TP, et al. **J Auton Nerv Syst** 1996 May 6;58(3):170-6

H2O2 sensitivity of afferent splanchnic C fiber units in vitro. Adelson DW, et al. **J Neurophysiol** 1996 Jul;76(1):371-80

PHYSIOLOGY

Adrenal vasoactive intestinal peptide participates in neonatal corticosteroid production in the rat. Bodnar M, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1163-72

Splanchnicotomy increases adrenal sensitivity to ACTH in nonstressed rats. Jasper MS, et al. **Am J Physiol** 1997 Aug; 273(2 Pt 1):E363-8

ANG II prolongs splanchnic nerve-mediated inhibition of duodenal mucosal alkaline secretion in the rat. Johansson B, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R942-6

Respiratory modulation of sympathetic nerve activity: effect of MK-801. Morrison SF. **Am J Physiol** 1996 Mar;270(3 Pt 2):R645-51

Role of summation of afferent input in cardiovascular reflexes from splanchnic nerve stimulation. Pan HL, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):H849-56

Sympathetic drive to liver and nonhepatic splanchnic tissue during heavy exercise. Coker RH, et al. **J Appl Physiol** 1997 Apr;82(4):1244-9

Sympathetic and VIP-ergic control of calcium and bicarbonate transport in the feline gall bladder mucosa in vivo. Nilsson B, et al. **J Auton Nerv Syst** 1996 Aug 27; 60(1-2):49-55

Warm-sensitive afferent splanchnic C-fiber units in vitro. Adelson DW, et al. **J Neurophysiol** 1997 Jun; 77(6):2989-3002

Neural stimulation of Egr-1 messenger RNA expression in rat adrenal gland: possible relation to phenylethanolamine N-methyltransferase gene regulation. Morita K, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):379-85

Prolonged intestinal afferent nerve discharge in response to cholecystokinin-58 compared to cholecystokinin-8 in rats. Kreis ME, et al. **Neurosci Lett** 1997 Jul 18;230(2):89-92

SURGERY

Effect of splanchnic nerve section and compensatory adrenal hypertrophy on rat adrenal neuropeptide content. Hinson JP, et al. **Regul Pept** 1996 Feb 22;61(2):105-9

Thoracoscopic thoracic splanchnicectomy for chronic pancreatitis with intractable abdominal pain. Kusano T, et al. **Surg Laparosc Endosc** 1997 Jun;7(3):213-8

Thoracoscopic splanchnicectomy: technique and case report. Olak J, et al. **Surg Laparosc Endosc** 1996 Jun;6(3):228-30

Thoracoscopic splanchnicectomy for chronic pancreatitis pain. Maher JW, et al. **Surgery** 1996 Oct;120(4):603-9; discussion 609-10

[Splanchnicectomy under videothoracoscopy (letter)] Le Pimpec Barthes F, et al. **Presse Med** 1997 Apr 26;26(14):667 **(Fre)**

[Thoracoscopic splanchniectomy for pain management in inoperable pancreatic carcinoma] Cierpka K, et al. **Schweiz Med Wochenschr** 1997 Jul 22;127(29-30):1251 **(Ger)**

[Left splanchicectomy with videothoracoscopy for the control of pain in cancer of the esophagogastric union with invasion of the celiac plexus] Loscertales J, et al. **Arch Bronconeumol** 1996 Feb;32(2):103-4 (Eng. Abstr.) **(Spa)**

SPLEEN

see related
SPLENECTOMY

Upper gastrointestinal hemorrhage secondary to ectopic spleen. Laszewicz W, et al. **Endoscopy** 1997 Jan;29(1):56-7

Neoplasia distal to the splenic flexure in patients with proximal colon cancer [see comments] Lemmel GT, et al. **Gastrointest Endosc** 1996 Aug;44(2):109-11. Comment in: Gastroenterology 1996 Aug;44(2):203-4.

Infectivity in extraneural tissues following intraocular scrapie infection. Fraser JR. **J Gen Virol** 1996 Oct;77 (Pt 10):2663-8

Combined malignant testicular tumor and splenogonadal fusion. A case story. Thomsen BM, et al. **Scand J Urol Nephrol** 1997 Aug;31(4):393-5

Expression of chloramphenicol acetyl transferase activity in the spleen after transplantation of hepatocytes transfected with pSV2CAT plasmid by electroporation. Inagaki M, et al. **Transplant Proc** 1997 Jun;29(4):2214-5

[Accessory spleen of the spermatic cord] Paul R, et al. **Urologe A** 1997 May;36(3):262-4 (Eng. Abstr.) **(Ger)**

[The use of xenospleen for body detoxification and immunocorrection in thermal injury] Boiarinov GA, et al. **Anesteziol Reanimatol** 1996 May-Jun;(3):70-1 **(Rus)**

[The immunological and morphological aspects of hemoperfusion with pig donor spleen in treating psoriasis patients] Korol' VN, et al. **Lik Sprava** 1996 Oct–Dec; (10–12):138–42 (Eng. Abstr.) **(Rus)**

[The clinico–immunological characteristics of the treatment of patients with a severe course of bronchial asthma using the method of the extracorporeal incorporation of pig donor spleen] Kovalenko NN, et al. **Lik Sprava** 1996 Oct–Dec;(10–12):88–91 (Eng. Abstr.) **(Rus)**

[The efficacy of immunomodulating therapy in patients with chronic cholestatic liver diseases] Petrunia AM, et al. **Lik Sprava** 1996 Mar–Apr;(3–4):125–7 (Eng. Abstr.) **(Rus)**

[Ectopic spleen--2 case reports] Popović M, et al. **Acta Chir Iugosl** 1995;42(1):59–62 (Eng. Abstr.) **(Scr)**

ABNORMALITIES

Aortic outflow obstruction in visceral heterotaxy: a study based on twenty postmortem cases. Van Praagh S, et al. **Am Heart J** 1997 May;133(5):558–69

Agenesis of corpus callosum and anophthalmia in the asplenia syndrome. A recognisable association? Devriendt K, et al. **Ann Genet** 1997;40(1):14–7

Functional asplenia and microscopic (collagenous) colitis. Freeman HJ. **Can J Gastroenterol** 1996 Nov–Dec; 10(7):443–6

Ivemark syndrome: a case report [letter] de Silva D, et al. **Ceylon Med J** 1997 Jun;42(2):112

Failure to detect connexin43 mutations in 38 cases of sporadic and familial heterotaxy. Gebbia M, et al. **Circulation** 1996 Oct 15;94(8):1909–12

Incidental finding of accessory spleen on bone scintigraphy. Castellani M, et al. **Clin Nucl Med** 1996 Dec;21(12):967

A wandering spleen. Detection by In–111 leukocyte imaging. Posillico LF, et al. **Clin Nucl Med** 1996 Apr;21(4):287–9

SPECT with In–111 autologous platelets to detect residual splenic tissue in two patients with relapsed thrombocytopenia. Suga K, et al. **Clin Nucl Med** 1997 Mar; 22(3):141–6

The wandering spleen. Lopez Menendez C, et al. **Eur J Radiol** 1995 Dec 15;21(2):89–91

The wandering spleen with collateral vessels containing gastric varices: color Doppler ultrasound imaging. Koda M, et al. **J Clin Ultrasound** 1996 Nov–Dec;24(9):528–32

Laparoscopic resection of accessory spleen for recurrent immune thrombocytopenic purpura 19 years after splenectomy. Diaz J, et al. **J Laparoendosc Surg** 1996 Oct; 6(5):337–9

Intrapancreatic accessory spleen diagnosed by technetium–99m heat–damaged red blood cell SPECT. Ota T, et al. **J Nucl Med** 1997 Mar;38(3):494–5

Splenogonadal fusion diagnosed by spleen scintigraphy. Steinmetz AP, et al. **J Nucl Med** 1997 Jul;38(7):1153–5

Ivemark syndrome with asplenia in siblings. Cesko I, et al. **J Pediatr** 1997 May;130(5):822–4

Digestive tract disorders associated with asplenia/polysplenia syndrome. Nakada K, et al. **J Pediatr Surg** 1997 Jan; 32(1):91–4

Reduplication of swine spleen lobes. Mochizuki S, et al. **Kaibogaku Zasshi** 1996 Apr;71(2):115–21

A case report; trilobular spleen? Usta A, et al. **Okajimas Folia Anat Jpn** 1996 Aug;73(2–3):145–9

A male fetus with aqueductal stenosis and four accessory spleens. A case report with a tentative genetic explanation. Catala M, et al. **Pediatr Neurosurg** 1996 Jul;25(1):36–40

A horseshoe adrenal gland in an infant with asplenia. Shafaie FF, et al. **Pediatr Radiol** 1997 Jul;27(7):591–3

Prophylactic gastropexy in the asplenia syndrome. Okoye BO, et al. **Pediatr Surg Int** 1997;12(1):28–9

Ivemark syndrome. A case with successful surgical intervention. Tkebuchava T, et al. **Scand Cardiovasc J** 1997; 31(3):173–5 (8 ref.)

Wandering spleen: a challenging diagnosis. Desai DC, et al. **South Med J** 1997 Apr;90(4):439–43 (41 ref.)

Laparoscopic accessory splenectomy for recurrent idiopathic thrombocytopenic purpura. Amaral JF, et al. **Surg Laparosc Endosc** 1997 Aug;7(4):340–4 (15 ref.)

Laparoscopic treatment of accessory splenic tissue. Mercan S, et al. **Surg Laparosc Endosc** 1996 Aug;6(4):330–1

Laparoscopic evaluation and management of a child with ambiguous genitalia, ectopic spleen, and Meckel's diverticulum. Martin TV, et al. **Tech Urol** 1997 Spring; 3(1):49–50

[Chronic torsion of an ectopic spleen in the differential diagnosis of abdominal pain in a child. Case report] Machart M, et al. **Rozhl Chir** 1996 Oct;75(10):480–1 (Eng. Abstr.) **(Cze)**

[Congenital asplenia. A childhood immune deficit often detected too late] Ferlicot S, et al. **Ann Pathol** 1997 Mar; 17(1):44–6 (Eng. Abstr.) **(Fre)**

[Intrapancreatic accessory spleen. X–ray computed tomographic and MRI imaging] Mizrahi D, et al. **J Radiol** 1997 Feb;78(2):145–7 (Eng. Abstr.) **(Fre)**

[40–year–old patient without previous illness with acute shock symptoms and disseminated intravascular coagulation] König G, et al. **Internist (Berl)** 1996 Jan; 37(1):74–7 **(Ger)**

[Two cases of the successful treatment of TAPVR with asplenia syndrome in neonates and infants] Suzuki Y, et al. **Kyobu Geka** 1996 May;49(5):400–4 (Eng. Abstr.) **(Jpn)**

[A successful Konno's operation for subaortic stenosis progressed after total correction of partial atrioventricular septal defect associated with polysplenia] Matsuo K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul;45(7):1049–54 (Eng. Abstr.) **(Jpn)**

[A case report of a fenestrated Fontan operation after bivalvation of the common atrioventricular valve in right isomerism] Noma M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jan;45(1):88–91 (Eng. Abstr.) **(Jpn)**

[Torsion of an accessory spleen] Nakazawa K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jun;94(6):407–12 **(Jpn)**

[Polysplenia syndrome] Abukawa T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):328–30 (15 ref.) **(Jpn)**

[Asplenia syndrome (Ivemark syndrome)] Ohashi H, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):334–6 (25 ref.) **(Jpn)**

[Radiation diagnosis of spleen diseases] Vlasov PV, et al. **Vestn Rentgenol Radiol** 1997 May–Jun;(3):27–34 (28 ref.) (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Magnetic resonance imaging of the spleen: influence of the dose of a gadolinium chelate on the degree of parenchymal enhancement. Soyer P, et al. **Acad Radiol** 1996 Mar; 3(3):197–201

Abdominal SPECT/MRI fusion applied to the study of splenic and hepatic uptake of radiolabeled thrombocytes and colloids. Pohjonen HK, et al. **Ann Nucl Med** 1996 Nov; 10(4):409–17

Linoleic and alpha–linolenic acids differently modify the effects of elaidic acid on polyunsaturated fatty acid metabolism and some immune indices in rats. Koga T, et al. **Br J Nutr** 1997 Apr;77(4):645–56

Lymphotoxin but not tumor necrosis factor functions to maintain splenic architecture and humoral responsiveness in adult mice. Mackay F, et al. **Eur J Immunol** 1997 Aug; 27(8):2033–42

The weight of the normal spleen. Sprogøe–Jakobsen S, et al. **Forensic Sci Int** 1997 Aug 22;88(3):215–23

Dietary n–3 fatty acids increase spleen size and postendotoxin circulating TNF in mice; role of macrophages, macrophage precursors, and colony–stimulating factor–1. Blok WL, et al. **J Immunol** 1996 Dec 15;157(12):5569–73

Effect of oxygen inhalation on relaxation times in various tissues. Tadamura E, et al. **J Magn Reson Imaging** 1997 Jan–Feb;7(1):220–5

Normal splenic size in a Chinese population. Loftus WK, et al. **J Ultrasound Med** 1997 May;16(5):345–7

Liver and spleen enhancement after intravenous injection of carboxydextran magnetite: effect of dose, delay of imaging, and field strength in an ex vivo model. Caramella D, et al. **MAGMA** 1996 Sep–Dec;4(3–4):225–30

A case report; trilobular spleen? Usta A, et al. **Okajimas Folia Anat Jpn** 1996 Aug;73(2–3):145–9

Standard splenic volume in children and young adults measured from CT images. Watanabe Y, et al. **Surg Today** 1997;27(8):726–8

[Structural changes in the thymus and spleen of white rats during the recovery after long–term physical loading] Tkachuk MG, et al. **Morfologiia** 1996;110(6):89–92 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Splenic blood flow: evaluation with computed tomography. Blomley MJ, et al. **Acad Radiol** 1997 Jan;4(1):13–20

Colloidal gold particles as a marker of plasma perfusion and endocytosis in kidney, liver, and spleen. König MF, et al. **Adv Exp Med Biol** 1997;411:295–301

Endotoxin impedes vasoconstriction in the spleen: role of endogenous interleukin–1 and sympathetic innervation. Rogausch H, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R2048–54

Validation of a flow–differential technique for the recording of splenic blood–volume changes to vasoactive agents. Xavier F, et al. **J Cardiovasc Pharmacol** 1996 Nov; 28(5):605–10

Acute pancreatitis complicated by infarction of the spleen and spinal cord. Wei SC, et al. **J Formos Med Assoc** 1997 Sep;96(9):754–7

Splenic blood flow and fluid efflux from the intravascular space in the rat. Chen A, et al. **J Physiol (Lond)** 1996 Jan 15;490 (Pt 2):493–9

Influence of atrial natriuretic factor on fluid efflux from the splenic circulation of the rat. Deng Y, et al. **J Physiol (Lond)** 1996 Feb 15;491 (Pt 1):225–30

Simultaneous measurement of metabolic flux in portally–drained viscera, liver, spleen, kidney and hindquarter in the conscious pig. Ten Have GA, et al. **Lab Anim** 1996 Oct;30(4):347–58

Development of the spleen as a red blood cell reservoir in lambs. Potocnik SJ, et al. **Reprod Fertil Dev** 1996;8(3):311–5

[Embolic splenic infarction: a rare complication of atrial fibrillation] Merims D, et al. **Harefuah** 1997 Jun 15; 132(12):844–6, 911 (Eng. Abstr.) **(Heb)**

[Distal pancreatectomy with conservation of the spleen] Machado MC, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1996 May–Jun; 51(3):90–2 (Eng. Abstr.) **(Por)**

CHEMISTRY

Detection of serum amyloid A–derived proteins in formalin–fixed paraffin–embedded tissues: reliability of the method and expansion of its spectrum. Shtrasburg S, et al. **Am J Clin Pathol** 1997 Sep;108(3):289–94

Use of monoclonal antibodies for immunohistochemical study of bovine spleen on frozen sections. Delverdier M, et al. **Anat Histol Embryol** 1996 Dec;25(4):243–7

Titanium identification and measurement by ICP–MS and ICP–OES in a human spleen fragment. Ducros V, et al. **Clin Chem** 1996 Nov;42(11):1875–7

Isolation and partial characterization of two porcine spleen ferritin fractions with different electrophoretic mobility. van Gelder W, et al. **Comp Biochem Physiol B Biochem Mol Biol** 1996 Oct; 115(2):191–9

Galectin–1 from bovine spleen: biochemical characterization, carbohydrate specificity and tissue–specific isoform profiles. Ahmed H, et al. **J Biochem (Tokyo)** 1996 Nov; 120(5):1007–19

Immunodetection of PrPSc in spleens of some scrapie–infected sheep but not BSE–infected cows. Somerville RA, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2389–96

Differential localization of three distinct binding sites for sigma receptor ligands in rat spleen. Wolfe SA Jr, et al. **J Neuroimmunol** 1997 Jan;72(1):45–58

Detection of viral genome in non–neural tissues of cattle experimentally infected with bovine herpesvirus 1. Mweene AS, et al. **Jpn J Vet Res** 1996 Dec;44(3):165–74

CYTOLOGY

Effects of centrally administered opioid agonists on macrophage nitric oxide production and splenic lymphocyte proliferation. Schneider GM, et al. **Adv Exp Med Biol** 1996;402:81–8

Identification of avian dendritic cells in the spleen using a monoclonal antibody specific for chicken follicular dendritic cells. Gallego M, et al. **Anat Rec** 1997 Sep; 249(1):81–5

Bacterial immunomodulators affect programmed cell death of mouse spleen lymphocytes. Sinkora M, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:492–5

Functional comparison of spleen dendritic cells and dendritic cells cultured in vitro from bone marrow precursors. Garrigan K, et al. **Blood** 1996 Nov 1;88(9):3508–12

Tumor necrosis factor–alpha– and interleukin–6–triggered mast cell development from mouse spleen cells. Hu ZQ, et al. **Blood** 1997 Jan 15;89(2):526–33

Dissection of tumour and host cells from target organs of metastasis for testing gene expression directly ex vivo. Rocha M, et al. **Br J Cancer** 1996 Oct;74(8):1216–22

Changes in blood and spleen lymphocyte populations following antigen challenge in immature male chickens. Trout JM, et al. **Br Poult Sci** 1996 Sep;37(4):819–27

A putative chemokine receptor, BLR1, directs B cell migration to defined lymphoid organs and specific anatomic compartments of the spleen. Förster R, et al. **Cell** 1996 Dec 13;87(6):1037–47

Differential Thy–1 expression by splenic fibroblasts defines functionally distinct subsets. Borrello MA, et al. **Cell Immunol** 1996 Nov 1;173(2):198–206

Stimulator of proliferation of spleen colony–forming cells in acute sterile inflammation. Milenković P, et al. **Cell Prolif** 1993 Nov;26(6):503–10

Junctions between the sinus endothelial cells of rat spleen. Uehara K, et al. **Cell Tissue Res** 1997 Jan;287(1):187–92

Radiation damage and immune suppression in splenic mononuclear cell populations. Harrington NP, et al. **Clin Exp Immunol** 1997 Feb;107(2):417–24

Increase of murine splenic natural antibody–secreting cells after cyclophosphamide treatment. Portiansky EL, et al. **Clin Immunol Immunopathol** 1996 Nov;81(2):215–7

In vitro characterization of a novel avian haemopoietic growth factor derived from stromal cells. Siatskas C, et al. **Dev Comp Immunol** 1996 Mar–Apr;20(2):139–56

Immunological aspects of nutritional diabetes prevention in NOD mice: a pilot study for the cow's milk–based IDDM prevention trial. Karges W, et al. **Diabetes** 1997 Apr; 46(4):557–64

Splenic macrophages can modify steroidogenesis of Leydig cells. Onami S, et al. **Endocr J** 1996 Oct;43(5):477–85

The influence of granulocyte/macrophage colony–stimulating factor on dendritic cell levels in mouse lymphoid organs. Vremec D, et al. **Eur J Immunol** 1997 Jan;27(1):40–4

The role of splenic macrophages in plasma tumor necrosis factor levels in endotoxemia. Kohno H, et al. **Eur Surg Res** 1997;29(3):176–86

Murine splenocyte proliferation by porin of Shigella dysenteriae type 1 and inhibition of bacterial invasion of HeLa cell by anti–porin antibody. Roy S, et al. **FEMS Microbiol Lett** 1996 Jul 15;141(1):25–9

Thymocyte and splenocyte subpopulations in normal and leukemia–bearing mice after adrenalectomy. Kawiak J, et al. **Folia Histochem Cytobiol** 1996;34(2):75–8

Unilateral testicular torsion in Lewis rats. Part I: The effect on spleen lymphocytes mitotic activity in vivo. Godlewski A, et al. **Folia Morphol (Warsz)** 1996;55(4):261–3

Effect of culture supernatants of endometriotic lesions, uterine endometrium and peritoneum from rats with

experimental endometriosis on the natural killer activity of spleen cells. Mizumoto Y, et al. **Gynecol Obstet Invest** 1996;41(2):122–7

Stereological study of tissue compartments of the human spleen. Milićević Z, et al. **Histol Histopathol** 1996 Oct; 11(4):833–6

Critical roles for the Bcl–3 oncoprotein in T cell–mediated immunity, splenic microarchitecture, and germinal center reactions. Franzoso G, et al. **Immunity** 1997 Apr; 6(4):479–90

Dendritic cell presentation of PPD and 19 kDa protein of Mycobacterium tuberculosis and emergent T helper cell phenotype. Baird MA, et al. **Immunol Cell Biol** 1995 Dec; 73(6):537–43

Long–term culture of primary B cells and in vitro expression of an exogenous gene. Kumar A, et al. **Immunol Lett** 1995 Sep;47(3):193–7

Aging and lymphocyte subsets in the spleen and peripheral blood of the Sprague–Dawley rat. Flaherty DK, et al. **Immunopharmacol Immunotoxicol** 1997 May;19(2):185–95

Beta–adrenoceptor responsiveness of splenic macrophages in normotensive and hypertensive rats. Serio M, et al. **Immunopharmacol Immunotoxicol** 1996 May;18(2):247–65

Facilitation of apoptosis by autologous serum and related immunosuppression in the splenocyte culture. Kim HM, et al. **Immunopharmacology** 1996 Aug;34(1):39–50

Hair cycle–associated changes in splenocyte proliferation. Slominski A, et al. **In Vivo** 1997 Jan–Feb;11(1):101–2

Evidence for selection of a population of multi–reactive B cells into the splenic marginal zone. Chen X, et al. **Int Immunol** 1997 Jan;9(1):27–41

In vivo effects of fluconazole on lymphocyte subpopulations of the thymus and spleen in mice: flow cytometry analysis. Liu J, et al. **Int J Immunopharmacol** 1996 Aug–Sep; 18(8–9):449–57

Effect of a maternal injection of 239Pu on the number of CFU–S in the foetal liver of the C3H and BDF1 mouse. Kubota Y, et al. **Int J Radiat Biol** 1997 Jul;72(1):71–8

Cytogenetic effect of some insecticides in mouse spleen. Amer SM, et al. **J Appl Toxicol** 1996 Jan–Feb;16(1):1–3

Differences between normal and autoimmune T cell responses to autologous erythrocytes and haemoglobin: impairment of haptoglobin–mediated inhibition in NZB spleen cells. Calkins CE, et al. **J Autoimmun** 1996 Aug; 9(4):453–62

Human fetal liver cells induce colonies in spleen of lethally irradiated mice. Rezzoug F, et al. **J Clin Immunol** 1997 May;17(3):205–11

Studies on transient graft–versus–host disease in BALB/c nude mice injected with allogeneic C57BL/6 splenocytes. Kihara T, et al. **J Dermatol Sci** 1996 Jan;11(1):76–83

Expression and presentation of endogenous mouse mammary tumor virus superantigens by thymic and splenic dendritic cells and B cells. Ardavín C, et al. **J Immunol** 1996 Oct 1;157(7):2789–94

Mechanisms of tolerance induction: splenocytes from total lymphoid irradiated mice inhibit the IL–2 pathway in TCR–activated CD4 cells. Field EH, et al. **J Immunol** 1996 Nov 1;157(9):3796–803

Dendritic cell subtypes in mouse lymphoid organs: cross–correlation of surface markers, changes with incubation, and differences among thymus, spleen, and lymph nodes. Vremec D, et al. **J Immunol** 1997 Jul 15; 159(2):565–73

An antisense oligodeoxynucleotide complementary to corticotropin–releasing hormone mRNA inhibits rat splenocyte proliferation in vitro. Jessop DS, et al. **J Neuroimmunol** 1997 May;75(1–2):135–40

Prevention and treatment of relapsing autoimmune encephalomyelitis with myelin peptide–coupled splenocytes. Vandenbark AA, et al. **J Neurosci Res** 1996 Aug 15;45(4):430–8

Expression of heat shock protein 70 in rat spleen lymphocytes is affected by age but not by food restriction. Pahlavani MA, et al. **J Nutr** 1996 Sep;126(9):2069–75

The effects of noxious mechanical stimulation on heart rate, mean arterial blood pressure and cytotoxic activity of splenic natural killer cells in anesthetized rats. Ohashi–Kimura A. **Jpn J Vet Res** 1996 Aug;44(2):129–30

Experimental infection of murine splenic lymphocytes and granulocytes with Toxoplasma gondii RH tachyzoites. Chai JY, et al. **Korean J Parasitol** 1997 Jun;35(2):79–85

A new type–II membrane protein in erythropoietic organs enhances erythropoiesis. Yanai N, et al. **Leukemia** 1997 Apr;11 Suppl 3:484–5

Evidence that a mitogen–inducible prolactin–immunoreactive protein in rat spleen lymphocytes is aldolase A. Masten SA, et al. **Life Sci** 1997; 60(24):2173–82

Effects of uncontrollable and controllable electric shocks on T lymphocyte subpopulations in the peripheral blood, spleen, and thymus of rats. Nakata A, et al. **Neuroimmunomodulation** 1996 Nov–Dec;3(6):336–41

Prolactin regulates IL–1 alpha, IFN–gamma and IL–4 release from mouse splenocytes stimulated with some staphylococcal and streptococcal toxins. Scarfogliero P, et al. **New Microbiol** 1996 Oct;19(4):301–8

Stressor–induced alterations of the splenic plaque–forming cell response: strain differences and modification by propranolol. Kerr L, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):235–41

Inhibition of chemiluminescence response of human mononuclear cells and suppression of mitogen–induced proliferation of spleen lymphocytes of mice by hispolon and hispidin. Ali NA, et al. **Pharmazie** 1996 Sep; 51(9):667–70

Electron microscopic evidence for infection of splenic dendritic cells by adenovirus in psittacine birds. Gómez–Villamandos JC, et al. **Res Virol** 1995 Nov–Dec; 146(6):389–395

Induction of specific inhibition of alloreactivity in beagle dogs by intrathymic injection of donor splenocytes. Marquet RL, et al. **Transpl Int** 1996;9 Suppl 1:S379–81

Total lymphoid irradiation, without intrathymic injection of donor cells, induces indefinite acceptance of heart but not islet or skin allografts in rats. Papalois BE, et al. **Transpl Int** 1996;9 Suppl 1:S372–8

Allograft tolerance by intrathymic donor splenocyte transfer: an age–dependent, species–specific phenomenon? Wahoff DC, et al. **Transpl Int** 1996;9 Suppl 1:S368–71

Genetically determined leukotriene B4 production is not required for cytotoxic effector cell development during allograft rejection. Gignac MR, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1052

Recipient–donor microchimerism is not a prerequisite for the maintenance of allograft tolerance. Shirwan H, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1182–3

Intrasplenic hepatocyte allotransplantation in dalmation dogs with and without cyclosporine immunosuppression. Benedetti E, et al. **Transplantation** 1997 May 15; 63(9):1206–9

Prolonged survival of mouse skin allografts in recipients treated with donor splenocytes and antibody to CD40 ligand. Markees TG, et al. **Transplantation** 1997 Jul 27; 64(2):329–35

Bone marrow and splenocyte coculture–generated cells enhance allograft survival. Valente JF, et al. **Transplantation** 1997 Jul 15;64(1):114–23

Fractionated dosing of cyclophosphamide for establishing long–lasting skin allograft survival, stable mixed chimerism, and intrathymic clonal deletion in mice primed with allogeneic spleen cells. Zhang QW, et al. **Transplantation** 1997 Jun 15;63(11):1667–73

Interferon activity of mitogen–induced chicken splenic lymphocytes which do not express interferon mRNA. Agarwal SK, et al. **Vet Immunol Immunopathol** 1996 Oct; 53(3–4):269–75

[Cytogenetic properties of the spleen lymphoid cells of mice shortly after bilateral nephrectomy] Babaeva AG, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):109–10 **(Rus)**

[The similar capacity for self–maintenance of clonogenic hemopoietic cells (CFU–S–11) from the liver and peripheral blood of sexually mature mice] Starostin VI, et al. **Izv Akad Nauk Ser Biol** 1997 Jan–Feb;(1):100–2 (Eng. Abstr.) **(Rus)**

[Effects of a permanent magnetic field on 45Ca2+ ion influx in excitable and inexcitable cells and proliferative activity of rat spleen cells] Garibova LS, et al. **Radiats Biol Radioecol** 1996 Sep–Oct;36(5):718–21 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Precancerous pathology evoked by hexachlorobenzene treatment. Ríos de Molina MC, et al. **Acta Physiol Pharmacol Ther Latinoam** 1996;46(2):71–81

Protective effects of Gynostemma pentaphyllum in gamma–irradiated mice. Chen WC, et al. **Am J Chin Med** 1996;24(1):83–92

Effects of Glycyrrhizae and Glycyrrhizic acid on radiation injury in mice. Lin IH, et al. **Am J Chin Med** 1996; 24(3–4):279–88

Bryostatin 1 activates splenic lymphocytes and induces sustained depletion of splenocyte protein kinase C activity in vivo after a single intravenous administration. Bear HD, et al. **Anticancer Drugs** 1996 May;7(3):299–306

Effects of aging and diet on the accumulation of dolichol in rat tissues. Ishinaga M. **Biochem Cell Biol** 1996; 74(2):265–70

Molecular mechanisms of immunomodulating effect of chorionic gonadotropin on T– and B–lymphocytes of intact spleen. Shirshev SV. **Biochemistry (Mosc)** 1997 May; 62(5):514–22

Effects of varying the type of saturated fatty acid in the rat diet upon serum lipid levels and spleen lymphocyte functions. Jeffery NM, et al. **Biochim Biophys Acta** 1997 Apr 21;1345(3):223–36

Activation by high potassium of a novel voltage–operated Ca2+ channel in rat spleen. Ko FN, et al. **Br J Pharmacol** 1997 Feb;120(4):565–70

Evidence that cyclic AMP phosphodiesterase inhibitors suppress interleukin–2 release from murine splenocytes by interacting with a 'low–affinity' phosphodiesterase 4 conformer. Souness JE, et al. **Br J Pharmacol** 1997 Jun; 121(4):743–50

Kappa opioid receptor agonists inhibit sigma–1 (sigma 1) receptor binding in guinea–pig brain, liver and spleen: autoradiographical evidence. Brent PJ. **Brain Res** 1996 Jul 1;725(2):155–65

Adrenalectomy enhances pro–inflammatory cytokines gene expression, in the spleen, pituitary and brain of mice in response to lipopolysaccharide. Goujon E, et al. **Brain Res Mol Brain Res** 1996 Feb;36(1):53–62

Stress–related changes in cunner, Tautogolabrus adspersus, living near a paper mill. Mercer IR, et al. **Bull Environ Contam Toxicol** 1997 Mar;58(3):442–7

Effects of tris(4–chlorophenyl)methanol on the rat following short–term oral exposure. Poon R, et al. **Chemosphere** 1997 Jan;34(1):1–12

In heme catabolism C2 and C4 vinyl groups reduction of cobalt protoporphyrin forms cobalt mesoporphyrin and alters the nature of action of the metalloporphyrin in vivo. Chandra R, et al. **Eur J Drug Metab Pharmacokinet** 1996 Jul–Sep;21(3):269–74

Functional evidence for an alpha 1B–adrenoceptor mediating contraction of the mouse spleen. Eltze M. **Eur J Pharmacol** 1996 Sep 12;311(2–3):187–98

In functional experiments, risperidone is selective, not for the B, but for the A subtype of alpha 1–adrenoceptors. Eltze M. **Eur J Pharmacol** 1996 Jan 4;295(1):69–73

The effects of 4–chloro–ortho–toluidine (fast red TB) acute intoxication on rats and guinea pigs. Part III: The effect in vitro on viability of rat thymic and splenic lymphocytes, and on guinea pig granulocyte adherence, chemotaxis and phagocytosis. Godlewski A, et al. **Folia Morphol (Warsz)** 1996;55(4):259–60

Oxidative stress in the splenotoxicity of aniline. Khan MF, et al. **Fundam Appl Toxicol** 1997 Jan;35(1):22–30

Experimental studies on multiorgan toxicity of cyclosporine–A in rats using a radiopharmaceutical and comparison with histopathological findings. Shihab–Eldeen A, et al. **Hum Exp Toxicol** 1996 Nov;15(11):867–71

Immune responsiveness of splenocytes after chronic daily melatonin administration in male Syrian hamsters. Champney TH, et al. **Immunol Lett** 1997 Jul;58(2):95–100

Production of IL–1 beta and IL–6 by adherent spleen cells after the stimulation with lipopolysaccharides from Salmonella enteritidis strain. Kollárová Z, et al. **Immunopharmacol Immunotoxicol** 1996 Aug;18(3):433–41

Mirfentanil antagonizes morphine–induced suppression of splenic NK activity in mice. Carr DJ, et al. **Immunopharmacology** 1996 Aug;34(1):9–16

Photofrin II induces cytokine secretion by mouse spleen cells and human peripheral mononuclear cells. Herman S, et al. **Immunopharmacology** 1996 Mar;31(2–3):195–204

In vitro effects of MOCA and dapsone on rat hepatic and splenic immune cells. Kelso JM, et al. **Immunopharmacology** 1997 Jan;35(3):183–93

Effects of in vivo thyroid hormone treatment on the expression of interleukin–2 receptors on avian splenocytes. Chandratilleke D, et al. **Int J Immunopharmacol** 1996 Mar; 18(3):203–10

Induction of apoptotic cell death in rat thymus and spleen after a bolus injection of methamphetamine. Ivasa M, et al. **Int J Legal Med** 1996;109(1):23–8

Upregulation of reactive oxygen and nitrogen intermediates in Plasmodium berghei infected mice after rescue therapy with chloroquine or artemether. Prada J, et al. **J Antimicrob Chemother** 1996 Jul;38(1):95–102

Validation of a flow–differential technique for the recording of splenic blood–volume changes to vasoactive agents. Xavier F, et al. **J Cardiovasc Pharmacol** 1996 Nov; 28(5):605–10

Effects of FK–506 on the course of murine salmonellosis. Nichterlein T, et al. **J Chemother** 1996 Dec;8(6):449–56

Effects of vitamin E on the blastogenic response of splenocytes and lipofuscin contents in the hearts and brains of aged mice. Ma XY, et al. **J Environ Pathol Toxicol Oncol** 1996;15(1):51–3

In vitro cytotoxicity and immunomodulating property of Rhaphidophora korthalsii. Wong KT, et al. **J Ethnopharmacol** 1996 May;52(1):53–7

An antisense oligodeoxynucleotide complementary to corticotropin–releasing hormone mRNA inhibits rat splenocyte proliferation in vitro. Jessop DS, et al. **J Neuroimmunol** 1997 May;75(1–2):135–40

Splenocyte glutathione and CD3–mediated cell proliferation are reduced in mice fed a protein–deficient diet. Taylor CG, et al. **J Nutr** 1997 Jan;127(1):44–50

The effect of methyl linoleate hydroperoxides and radical initiator 2,2'–azobis (2–amidinopropane) dihydrochloride on antibody production by mouse spleen cells. Oarada M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1997 Jun;43(3):377–85

Short–chain fatty acid–supplemented total parenteral nutrition improves nonspecific immunity after intestinal resection in rats. Pratt VC, et al. **JPEN J Parenter Enteral Nutr** 1996 Jul–Aug;20(4):264–71

Suppression of splenic T lymphocyte proliferation by acute cocaine administration. Piccotti JR, et al. **Life Sci** 1997; 61(10):967–76

Nerve growth factor enhances antigen–specific antibody production in ascorbate–stimulated murine splenocytes. Yanagida M, et al. **Life Sci** 1996;59(24):2075–81

Termination by early deletion of V beta 8 + T cells of aged mice in response to staphylococcal enterotoxin B. Hosono M, et al. **Mech Ageing Dev** 1996 Jun 7;87(2):99–114

Radioprotection of beta–carotene evaluated on mouse somatic and germ cells. Salvadori DM, et al. **Mutat Res** 1996 Sep 23;356(2):163–70

Is alpha1D–adrenoceptor protein detectable in rat tissues? Yang M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1997 Apr;355(4):438–46

A factor in lymph node and spleen induced by restraint stress in mice and rats suppresses lymphocyte proliferation. Fan SG, et al. **Neuroimmunomodulation** 1995 Sep–Oct; 2(5):274–81

Interleukin–1 receptor accessory protein transcripts in the

brain and spleen: kinetics after peripheral administration of bacterial lipopolysaccharide in mice. Gabellec MM, et al. **Neuroimmunomodulation** 1996 Sep–Oct;3(5):304–9

Effect of isoenzyme selective phosphodiesterase inhibitors on the proliferation of murine thymus and spleen cells. Banner KH, et al. **Pulm Pharmacol** 1996 Feb;9(1):35–41

Stress proteins (HSP) and chemical–induced autoimmunity. Albers R, et al. **Toxicol Appl Pharmacol** 1996 Sep; 140(1):70–6

Toxic effects of octylphenol on cultured rat and murine splenocytes. Nair–Menon JU, et al. **Toxicol Appl Pharmacol** 1996 Aug;139(2):437–44

Exposure of tilapian fish to the pesticide lindane results in hypocellularity of the primary hematopoietic organ (pronephros) and the spleen without altering activity of phagocytic cells in these organs. Hart LJ, et al. **Toxicology** 1997 Mar 28;118(2–3):211–21

[Disruption of phospholipid metabolism and intensity of free radical oxidation of lipids in rat splenic lymphocyte membranes exposed to the mycotoxin zearalenone and the role of sodium thiosulfate in their leveling and correction] Karagezian MK, et al. **Dokl Akad Nauk** 1997 Jun; 354(6):825–8 **(Rus)**

[Isolation and study of the effect of zosterin, a pectin in sea grass from the White Sea, on the endocrine and immune systems] Korneichev ON, et al. **Dokl Akad Nauk** 1997 Jan; 352(1):121–3 **(Rus)**

[The combined effect of ionizing radiation and benzene on immunoreactivity indices in the spleen and lymph nodes] Sharetskiĭ AN, et al. **Radiats Biol Radioecol** 1997 May–Jun; 37(3):387–94 (Eng. Abstr.) **(Rus)**

[The effect of carbophos on the immunocompetent cells and structure of the spleen in the carp Cyprinus carpio] Zabotkina EA, et al. **Tsitologiia** 1996;38(4–5):551–4 (Eng. Abstr.) **(Rus)**

[Effect of adenosine triphosphate on the cleavage of H1 histones in nuclei of rat spleen and liver] Tiulenev VI, et al. **Ukr Biokhim Zh** 1996 Nov–Dec;68(6):23–9 (Eng. Abstr.) **(Rus)**

[The effect of immunomodulating doses of purified staphylococcal anatoxin on the spontaneous and mitogen–induced proliferation of mouse splenocytes] Semenova IB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Mar–Apr; (2):57–60 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Sympathetic innervation of the amphibian spleen: developmental studies in Xenopus laevis. Kinney KS, et al. **Dev Comp Immunol** 1996 Jan–Feb;20(1):51–9

Cytokine production in the serum and spleen of mice from day 6 to 14 of gestation: cytokines/placenta/spleen/serum. Athanassakis I, et al. **Dev Immunol** 1996;4(4):247–55

Assessment of the contribution of the spleen to granulocytopoiesis and erythropoiesis of the mid–gestation human fetus. Calhoun DA, et al. **Early Hum Dev** 1996 Nov 21;46(3):217–27

ENZYMOLOGY

Involvement of bovine spleen NAD+ glycohydrolase in the metabolism of cyclic ADP–ribose–mechanism of the cyclization reaction. Muller–Steffner H, et al. **Adv Exp Med Biol** 1997;419:399–409

A newly identified glycosylphosphatidylinositol–anchored arginine–specific ADP–ribosyltransferase in chicken spleen. Tsuchiya M, et al. **Adv Exp Med Biol** 1997; 419:245–8

Age–related and dexamethasone–induced changes in cathepsins E and D in rat thymic and splenic cells. Nishishita K, et al. **Arch Biochem Biophys** 1996 Sep 15; 333(2):349–58

Photodependent inhibition of bovine spleen NAD+ glycohydrolase by 8–azido carbocyclic analogs of NAD+. Muller–Steffner H, et al. **Biochem Biophys Res Commun** 1996 Nov 1;228(1):128–33

Evidence for ubiquitin–mediated degradation of the DNA repair enzyme for O6–methylguanine in non–tumour derived human cell and tissue extracts. Major GN, et al. **Biochem Soc Trans** 1997 May;25(2):359S

Detection and identification of NAD–catabolizing activities in rat tissue homogenates. Hagen T, et al. **Biochim Biophys Acta** 1997 Jun 20;1340(1):7–12

The spleen protein–tyrosine kinase TPK–IIB is highly similar to the catalytic domain of p72syk. Brunati AM, et al. **Eur J Biochem** 1996 Sep 1;240(2):400–7

Serum phospholipase A2 in patients after splenectomy. Laine VJ, et al. **Eur J Clin Chem Clin Biochem** 1996 May; 34(5):419–22

Purification of ADAM 10 from bovine spleen as a TNFalpha convertase. Lunn CA, et al. **FEBS Lett** 1997 Jan 6; 400(3):333–5

The thiol enzyme from rat spleen that produces bradykinin potentiating peptide from rat plasma. Yamafuji K, et al. **Immunopharmacology** 1996 May;32(1–3):157–9

Bovine spleen multicatalytic proteinase complex (proteasome). Replacement of X, Y, and Z subunits by LMP7, LMP2, and MECL1 and changes in properties and specificity. Eleuteri AM, et al. **J Biol Chem** 1997 May 2; 272(18):11824–31

Effect of pinealectomy, superior cervical ganglionectomy, or melatonin treatment on 24–hour rhythms in ornithine decarboxylase and tyrosine hydroxylase activities of rat spleen. Cardinali DP, et al. **J Pineal Res** 1997 May; 22(4):210–20

Coenzyme A dependent myristoylation and demyristoylation in the regulation of bovine spleen N–myristoyltransferase. Raju RV, et al. **Mol Cell Biochem** 1996 May 24; 158(2):107–13

[Identification and some properties of cattle splenocyte nucleus phosphoprotein phosphatase activatorin various tissues] Reziapkin VI, et al. **Biokhimiia** 1996 Jun; 61(6):1037–40 (Eng. Abstr.) **(Rus)**

[Hydrolases of the digestive and nondigestive organs in rhesus macaque monkeys] Gordova LA, et al. **Fiziol Zh Im I M Sechenova** 1996 Dec;82(12):100–5 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Splenic regrowth in sickle cell anaemia following hypertransfusion. Campbell PJ, et al. **Br J Haematol** 1997 Jan;96(1):77–9

Disrupted splenic architecture, but normal lymph node development in mice expressing a soluble lymphotoxin–beta receptor–IgG1 fusion protein. Ettinger R, et al. **Proc Natl Acad Sci U S A** 1996 Nov 12;93(23):13102–7

Transforming growth factor–beta isoforms in the developing chicken intestine and spleen: increase in transforming growth factor–beta 4 with coccidia infection. Jakowlew SB, et al. **Vet Immunol Immunopathol** 1997 Mar; 55(4):321–39

IMMUNOLOGY

Changes in spleen and thymus cell phenotypes in mice vaccinated with the Coxiella burnetii phase I whole–cell vaccine or the chloroform–methanol residue subunit vaccine. Waag DM, et al. **Acta Virol** 1996 Apr;40(2):87–94

Preliminary findings of an in vitro human spleen mononuclear cell culture system for primary isolates of HIV type 1. Tsai WP, et al. **AIDS Res Hum Retroviruses** 1997 Jul 20; 13(11):967–77

Specific stabilization of the 4F7 molecule on dendritic cells by contact allergens. Jonuleit H, et al. **Arch Dermatol Res** 1996 Nov;288(12):745–52

Cytokine expression and antigen–presenting capacity of 4F7+ dendritic cells derived from dermis, spleen, and lymph nodes. Mohamadzadeh M, et al. **Arch Dermatol Res** 1997 Jul;289(8):435–9

Interleukin 12 and direct cytotoxicity of spleen lymphocytes to Listeria innocua–phagocyting syngeneic macrophages in C57BL/6 and BALB/c mice. Szeliga J, et al. **Arch Immunol Ther Exp (Warsz)** 1997;45(1):49–54

Depressed splenic function after hemorrhage results from gastrointestinal tract stimulation of hepatic–mediator release. Correction with portacaval shunt. Ayala A, et al. **Arch Surg** 1996 Nov;131(11):1209–14; discussion 1215

Subchronic and chronic exposure to d–fenfluramine dose–dependently enhances splenic immune functions in young and old male Fischer–344 rats. Clancy J Jr, et al. **Behav Brain Res** 1996;73(1–2):355–8

Novel gene expressed in spleen cells mediating acquired testosterone–resistant immunity to Plasmodium chabaudi malaria. Krücken J, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):167–70

Ouchterlony double immunodiffusion method demonstrates absence of ferritin immunoreactivity in visceral organs from nine patients with Niemann–Pick disease type C. Christomanou H, et al. **Biochem Mol Med** 1996 Aug; 58(2):176–83

Age–dependent effect of pituitary transplants on immune responses in rat spleen: modulatory effect of cyclosporine. Arce A, et al. **Biol Signals** 1997 Jan–Feb;6(1):11–20

Effects of variations in the proportions of saturated, monounsaturated and polyunsaturated fatty acids in the rat diet on spleen lymphocyte functions. Jeffery NM, et al. **Br J Nutr** 1997 May;77(5):805–23

Evidence for the involvement of catecholamines in the 2–DG–induced immunomodulatory effects in spleen. Chou SH, et al. **Brain Behav Immun** 1997 Jun;11(2):79–93

Twenty–four–hour rhythms in immune responses in rat submaxillary lymph nodes and spleen: effect of cyclosporine. Esquifino AI, et al. **Brain Behav Immun** 1996 Jun;10(2):92–102

Tumor–peptide–pulsed dendritic cells isolated from spleen or cultured in vitro from bone marrow precursors can provide protection against tumor challenge. Hermans IF, et al. **Cancer Immunol Immunother** 1997 Aug;44(6):341–7

Interleukin–4 is effective in restoring cytotoxic T cell activity that declines during in vivo progression of a murine B lymphoma. Santra S, et al. **Cancer Immunol Immunother** 1997 Jul;44(5):291–300

Nutritional influences on in vitro splenic lymphocyte proliferation in Psammomys obesus (Rodentia Gerbillidae). Lahfa FB, et al. **Cell Mol Biol Res** 1995;41(5):387–90

Surface antigen expression in spleen cells of C57B1/6 mice during ageing: influence of sex and parity. Barrat F, et al. **Clin Exp Immunol** 1997 Mar;107(3):593–600

Multiple antigens are altered on T and B lymphocytes from peripheral blood and spleen of patients with Wiskott–Aldrich syndrome. Gerwin N, et al. **Clin Exp Immunol** 1996 Nov;106(2):208–17

IL–3 derived from CD4+ T cells is essential for the in vitro expansion of mast cells from the normal adult mouse spleen. Harada M, et al. **Clin Exp Immunol** 1996 Oct;106(1):149–55

Synergism of IL–2–stimulated splenocytes and Pentostam enhances the killing of Leishmania donovani in vitro. Eslami Z, et al. **Clin Immunol Immunopathol** 1996 Oct; 81(1):74–81

Females in proestrus state maintain splenic immune functions and tolerate sepsis better than males. Zellweger R, et al. **Crit Care Med** 1997 Jan;25(1):106–10

Cytokine production in the serum and spleen of mice from day 6 to 14 of gestation: cytokines/placenta/spleen/serum. Athanassakis I, et al. **Dev Immunol** 1996;4(4):247–55

Lymphotoxin but not tumor necrosis factor functions to maintain splenic architecture and humoral responsiveness in adult mice. Mackay F, et al. **Eur J Immunol** 1997 Aug; 27(8):2033–42

Comparison of T cell cytokines in resistant and susceptible mice infected with virulent Brucella abortus strain 2308. Fernandes DM, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31;16(3–4):193–203

A comparison of the performance in vitro of precision cut tissue slices and suspensions of human spleen with special reference to immunoglobulin and cytokine production. James K, et al. **Hum Antibodies Hybridomas** 1996; 7(4):138–50 (30 ref.)

NK–like activity against allogeneic tumour cells demonstrated in the spleen of control and thymectomized Xenopus. Horton TL, et al. **Immunol Cell Biol** 1996 Aug; 74(4):365–73

The spleen, IgG antibody subsets and immunity to Plasmodium berghei in rats. Smith NC, et al. **Immunol Cell Biol** 1997 Jun;75(3):318–23

Effect of tumor growth on the blastogenic response of splenocytes: a role of macrophage–derived nitric oxide. Kumar A, et al. **Immunol Invest** 1996 Sep–Nov; 25(5–6):413–23

Comparison between the phenotype and function of maturing dendritic cells from spleen and lymph nodes [published erratum appears in Immunology 1997 Mar;90(3):461] Coates JP, et al. **Immunology** 1996 Nov;89(3):457–62

Correlation between natural killer cell activation in the bone marrow and haemopoietic dysfunction following cytomegalovirus infection of mice. Gibbons AE, et al. **Immunology** 1997 Jun;91(2):227–33

Cytotoxic activity against tumour cells mediated by intermediate TCR cells in the liver and spleen. Kawamura T, et al. **Immunology** 1996 Sep;89(1):68–75

In vitro effects of MOCA and dapsone on rat hepatic and splenic immune cells. Kelso JM, et al. **Immunopharmacology** 1997 Jan;35(3):183–93

Facilitation of apoptosis by autologous serum and related immunosuppression in the splenocyte culture. Kim HM, et al. **Immunopharmacology** 1996 Aug;34(1):39–50

Cellular basis of decreased immune responses to pneumococcal vaccines in aged mice. Garg M, et al. **Infect Immun** 1996 Nov;64(11):4456–62

Elimination of resident macrophages from the livers and spleens of immune mice impairs acquired resistance against a secondary Listeria monocytogenes infection. Samsom JN, et al. **Infect Immun** 1997 Mar;65(3):986–93

Evidence for selection of a population of multi–reactive B cells into the splenic marginal zone. Chen X, et al. **Int Immunol** 1997 Jan;9(1):27–41

In vivo analysis of Fas antigen–mediated apoptosis: effects of agonistic anti–mouse Fas mAb on thymus, spleen and liver. Nishimura Y, et al. **Int Immunol** 1997 Feb;9(2):307–16

The appearance of Thy–1– donor T cells in the peripheral circulation 3–6 weeks after bone marrow transplantation suggests an extrathymic origin. Zhong RK, et al. **Int Immunol** 1996 Feb;8(2):171–6

Natural cell–mediated cytotoxicity (NCMC) against NK–sensitive tumours in vitro by murine spleen Ly–6C+ natural T cells. Martiniello R, et al. **Int J Cancer** 1997 Feb 7;70(4):450–60

Splenic and intestinal lymphocyte proliferation response in mice fed milk or yogurt and challenged with Salmonella typhimurium. Puri P, et al. **Int J Food Sci Nutr** 1996 Sep; 47(5):391–8

Inhibition of spleen cell proliferative response to mitogens by excretory–secretory antigens of Fasciola hepatica. Cervi L, et al. **Int J Parasitol** 1997 May;27(5):573–9

The role of the spleen in the leucocytosis of exercise: consequences for physiology and pathophysiology. Baum M, et al. **Int J Sports Med** 1996 Nov;17(8):604–7

Phenotypic characteristics and significance of reticular meshwork surrounding splenic white pulp of mice. Tanaka H, et al. **J Electron Microsc (Tokyo)** 1996 Oct;45(5):407–16

Outer periarteriolar lymphoid sheath arrest and subsequent differentiation of both naive and tolerant immunoglobulin transgenic B cells is determined by B cell receptor occupancy. Cook MC, et al. **J Exp Med** 1997 Aug 29; 186(5):631–43

Regulation of dendritic cell numbers and maturation by lipopolysaccharide in vivo. De Smedt T, et al. **J Exp Med** 1996 Oct 1;184(4):1413–24

Sites of B lymphocyte selection, activation, and tolerance in spleen. Liu YJ. **J Exp Med** 1997 Aug 29;186(5):625–9 (42 ref.)

Mucosal and systemic immune responses to measles virus haemagglutinin in mice immunized with a recombinant vaccinia virus. Etchart N, et al. **J Gen Virol** 1996 Oct;77 (Pt 10):2471–8

Non–replicating recombinant vaccinia virus encoding murine

B-7 molecules elicits effective costimulation of naive CD4+ splenocytes in vitro. Oertli D, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3121-5

T cell priming against vesicular stomatitis virus analyzed in situ: red pulp macrophages, but neither marginal metallophilic nor marginal zone macrophages, are required for priming CD4+ and CD8+ T cells. Ciavarra RP, et al. **J Immunol** 1997 Feb 15;158(4):1749-55

Signals through 4-1BB are costimulatory to previously activated splenic T cells and inhibit activation-induced cell death. Hurtado JC, et al. **J Immunol** 1997 Mar 15; 158(6):2600-9

NK cell trafficking and cytokine expression in splenic compartments after IFN induction and viral infection. Salazar-Mather TP, et al. **J Immunol** 1996 Oct 1; 157(7):3054-64

Homing of naive and memory T lymphocyte subsets to Peyer's patches, lymph nodes, and spleen. Williams MB, et al. **J Immunol** 1997 Aug 15;159(4):1746-52

Organ culture of human lymphoid tissue. II. Marked differences in cytokine production and proliferation between slice and suspension cultures of human spleen. Skibinski G, et al. **J Immunol Methods** 1997 Jul 14; 205(2):115-25

TH1 pattern of cytokine secretion by splenic cells from pyelonephritic mice after in-vitro stimulation with hsp-65 of Escherichia coli. Chopra U, et al. **J Med Microbiol** 1997 Feb;46(2):139-44

Sensory neurons regulate immunoglobulin secretion of spleen cells: cellular analysis of bidirectional communications between neurons and immune cells. Hikawa N, et al. **J Neuroimmunol** 1996 Nov;70(2):191-8

Induction of thymic hyperplasia and suppression of splenic T cells by lesioning of the anterior hypothalamus in aging Wistar rats. Utsuyama M, et al. **J Neuroimmunol** 1997 Aug; 77(2):174-80

Phenotype and function of hematopoietic-derived cells in the CNS of SCID mouse-Lewis rat bone marrow chimeras. Jones RE, et al. **J Neurosci Res** 1996 Sep 15;45(6):723-34

Parasite antigen-induced IFN-gamma and IL-4 production by cells from pathopermissive and pathoresistant strains of mice infected with Trypanosoma cruzi. Humphrey JS, et al. **J Parasitol** 1997 Jun;83(3):533-6

The lymphocyte and macrophage profile in the pancreas and spleen of NOD mice: percentage of interleukin-2 and prolactin receptors on immunocompetent cell subsets. Hawkins TA, et al. **J Reprod Immunol** 1996 Nov; 32(1):55-71

Mechanism of splenic immunosuppression during sepsis: key role of Kupffer cell mediators. Ayala A, et al. **J Trauma** 1997 May;42(5):882-8

CD4- CD8- TCR alpha/beta+ suppressor T cells demonstrated in mice 1 day after thermal injury. Matsuo R, et al. **J Trauma** 1997 Apr;42(4):635-40

Susceptibility of nude mice carrying the Fv-4 gene to Friend murine leukemia virus infection. Higo K, et al. **J Virol** 1997 Jan;71(1):750-4

Distinct organ-dependent mechanisms for the control of murine cytomegalovirus infection by natural killer cells. Tay CH, et al. **J Virol** 1997 Jan;71(1):267-75

Short-chain fatty acid-supplemented total parenteral nutrition improves nonspecific immunity after intestinal resection in rats. Pratt VC, et al. **JPEN J Parenter Enteral Nutr** 1996 Jul-Aug;20(4):264-71

Enhancement of splenic interferon-gamma, interleukin-2, and NK cytotoxicity by S36 acupoint acupuncture in F344 rats. Yu Y, et al. **Jpn J Physiol** 1997 Apr;47(2):173-8

TCR gamma delta+ cells expressing Vgamma 9V delta2, which normally predominate the blood, are found in the spleens of patients with hairy cell leukemia. van de Corput L, et al. **Leukemia** 1997 Jan;11(1):106-9

Enhanced expression of nucleobindin in lymphatic organs of lupus-prone mice. Iizuka H, et al. **Lupus** 1997; 6(4):365-70

Retardation of the age-associated decline of immune functions in aging rats under dietary restriction and daily physical exercise. Utsuyama M, et al. **Mech Ageing Dev** 1996 Nov 13;91(3):219-28

Cell mediated immunity induced in mice by HPV 16 L1 virus-like particles. Dupuy C, et al. **Microb Pathog** 1997 Apr;22(4):219-25

Local and systemic immune response to inactivated Candida albicans in mice. Scaringi L, et al. **Nat Immun** 1995 Sep; 14(5-6):234-49

Is hypothalamic GABA involved in immune function in relation to dietary protein during aging? Bandyopadhyay BC, et al. **Neurochem Res** 1997 Sep;22(9):1135-44

Effect of immunosuppression and splenectomy in transplantation sarcomas in mice. Nigam SK, et al. **Panminerva Med** 1996 Dec;38(4):217-22

Protection of rats against malaria by a transplanted immune spleen. Favila-Castillo L, et al. **Parasite Immunol** 1996 Jul; 18(7):325-31

In vitro stimulation of naive mouse lymphocytes by Heligmosomoides polygyrus adult worm antigens induces the production of IgG1. Robinson M, et al. **Parasite Immunol** 1996 Feb;18(2):87-93

B cell mitogenic activity of Toxocara canis adult worm antigen. Wang MQ, et al. **Parasite Immunol** 1995 Dec; 17(12):609-15

Production of interleukin 10 during malaria caused by lethal and nonlethal variants of Plasmodium yoelii yoelii. Kobayashi F, et al. **Parasitol Res** 1996;82(5):385-91

Monoclonal antibodies against mouse splenic stromal cells. Ito M, et al. **Pathol Int** 1997 May;47(5):275-81

Effect of prenatal stress on ontogenesis of immunoregulatory cell maturation in mice. Mazur-Kolecka B, et al. **Pol J Pharmacol** 1996 Nov-Dec;48(6):621-5

Independent signals regulate development of primary and secondary follicle structure in spleen and mesenteric lymph node. Fu YX, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5739-43

A lymphocyte-activating monoclonal antibody induces regression of human tumors in severe combined immunodeficient mice. Hardy B, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5756-60

Rad51 expression and localization in B cells carrying out class switch recombination. Li MJ, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10222-7

Histopathology and immunocytochemical study of type 3 and type 4 complement receptors in the liver and spleen of dogs naturally and experimentally infected with Leishmania (Leishmania) chagasi. Tafuri WL, et al. **Rev Inst Med Trop Sao Paulo** 1996 Mar-Apr;38(2):81-9

Involvement of Fas and Fas ligand interaction in allogeneic hepatocyte rejection in the spleen. Kawahara T, et al. **Transplant Proc** 1997 Jun;29(4):2187-8

Donor-specific transfusion using mitomycin-C treated spleen cells induces significant prolongation of cardiac allograft in rats. Tanigawa T, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):1149-50

Interleukin (IL) 4, the cytokine that isn't there: reactivity of IL-4 antibodies with cells in IL-4 -/- mice. Mottram PL, et al. **Transplantation** 1997 Mar 27;63(6):911-4

The role of opsonization by antibody and complement in in vitro phagocytosis of microsporidian parasites by turbot spleen cells. Leiro J, et al. **Vet Immunol Immunopathol** 1996 May;51(1-2):201-10

In vitro activation of mouse spleen cells by a lysate of Theileria sergenti-infected bovine red blood cells. Yanagisawa K, et al. **Vet Parasitol** 1997 Feb;68(3):241-9

Differential antigen recognition by T cells from the spleen and central nervous system of coronavirus-infected mice. Castro RF, et al. **Virology** 1996 Aug 1;222(1):247-51

[Experimental study of immunity in anti-plasmodium infection on preserved spleen and splenectomized mice] Hou H, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Nov; 76(11):836-40 (Eng. Abstr.) **(Chi)**

[Increase in the number of antibody-producing cells to syngeneic erythrocytes in the spleen of C57Bl/6 mice due to heterochronous parabiosis] Gubrií IB, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):71-4 **(Rus)**

[Functional activity of spleen and peripheral blood lymphocytes during stress-induced immunodepression] Iagmurov OD, et al. **Biull Eksp Biol Med** 1996 Jul; 122(7):64-8 **(Rus)**

[Mechanism of development of immunosuppression in acute renal insufficiency] Afanas'ev VA, et al. **Patol Fiziol Eksp Ter** 1997 Jul-Sep;(3):31-5 (Eng. Abstr.) **(Rus)**

INJURIES

Splenic rupture manifesting two years after diagnosis of injury. Fernandes CM. **Acad Emerg Med** 1996 Oct; 3(10):946-7

The increasing frequency of nonoperative management of patients with liver and spleen injury. Rutledge R. **Adv Surg** 1996;30:385-415 (72 ref.)

Predicting clinical outcome of nonsurgical management of blunt splenic injury: using CT to reveal abnormalities of splenic vasculature. Gavant ML, et al. **AJR Am J Roentgenol** 1997 Jan;168(1):207-12

Computed tomography-assisted management of splenic trauma. Williams RA, et al. **Am J Surg** 1997 Sep; 174(3):276-9

Limited value of routine followup CT scans in nonoperative management of blunt liver and splenic injuries. Allins A, et al. **Am Surg** 1996 Nov;62(11):883-6

Management of splenic trauma at a rural, Level I trauma center. Bianchi JD, et al. **Am Surg** 1997 Jun;63(6):490-5

Splenic salvage in adults at a level II community hospital trauma center. Clancy TV, et al. **Am Surg** 1996 Dec; 62(12):1045-9

Laparoscopic examination of the traumatized spleen with blood salvage for autotransfusion. Collin GR, et al. **Am Surg** 1997 Jun;63(6):478-80

Management and outcome of splenic injury: the results of a five-year statewide population-based study. Hunt JP, et al. **Am Surg** 1996 Nov;62(11):911-7

Cognitive trauma care is undervalued: adult splenic injury as a paradigm. Sutyak JP, et al. **Am Surg** 1997 Aug; 63(8):752-7

Nonoperative management of adult blunt splenic trauma: a 15-year experience. Wasvary H, et al. **Am Surg** 1997 Aug; 63(8):694-9

Management outcomes in splenic injury: a statewide trauma center review. Clancy TV, et al. **Ann Surg** 1997 Jul; 226(1):17-24

Use of abdominal ultrasonography to assess pediatric splenic trauma. Potential pitfalls in the diagnosis. Krupnick AS, et al. **Ann Surg** 1997 Apr;225(4):408-14

Delayed rupture of the spleen 5 1/2 years after conservative management of traumatic splenic injury: comment [letter] Frizelle FA. **Aust N Z J Surg** 1997 Aug;67(8):573

Management of splenic injuries in a Canadian trauma centre. Garber BG, et al. **Can J Surg** 1996 Dec;39(6):474-80

Radiology for the surgeon. Case 12. Splenic laceration with pseudoaneurysm of the splenic artery. Tran CN, et al. **Can J Surg** 1996 Dec;39(6):450, 486

Aneurysmatic arteriovenous fistula complicating splenic injury. Sarioğlu A, et al. **Eur J Pediatr Surg** 1996 Jun; 6(3):183-5

Stereologic study of splenic tissue compartments from traumatically injured and cancer patients. Milićević NM, et al. **Gen Diagn Pathol** 1996 Jun;142(1):41-4

Splenic preservation after traumatic rupture. A remote hospital experience. Hamour OA, et al. **Int Surg** 1996 Jul-Sep;81(3):304-8

Non-operative management of a splenic laceration in a patient with the Proteus syndrome. Ceelen W, et al. **J Accid Emerg Med** 1997 Mar;14(2):111-3

Computed tomography grade of splenic injury is predictive of the time required for radiographic healing. Lynch JM, et al. **J Pediatr Surg** 1997 Jul;32(7):1093-5; discussion 1095-6

Blunt abdominal trauma in children: risks of nonoperative treatment. Sjövall A, et al. **J Pediatr Surg** 1997 Aug; 32(8):1169-74

Congenital abnormality of the liver initially misdiagnosed as splenic haematoma. Dunlop DG, et al. **J R Soc Med** 1996 Dec;89(12):702-4

Traumatic intraparenchymal splenic pseudoaneurysms in a child: nonoperative management. Nagar H, et al. **J Trauma** 1997 Sep;43(3):552-5

Risk of hemorrhage and appropriate use of blood transfusions in pediatric blunt splenic injuries. Shafi S, et al. **J Trauma** 1997 Jun;42(6):1029-32

Conservative ultrasound-guided laparoscopic treatment of posttraumatic splenic cysts: report of two cases. Feliciotti F, et al. **Surg Laparosc Endosc** 1996 Aug;6(4):322-5

Nonoperative management of the ruptured spleen: a revalidation of criteria. Smith JS Jr, et al. **Surgery** 1996 Oct;120(4):745-50; discussion 750-1

A retrospective analysis of timing of mobilisation and start of enteral feeding in 19 patients treated non-surgically for splenic trauma. Pacetti G, et al. **Swiss Surg** 1996;2(6):235-7

Traumatic pseudocyst of the spleen. Woody JD, et al. **Tenn Med** 1996 Oct;89(10):372-3

Hemostatic methods for the management of spleen and liver injuries. Uranüs S, et al. **World J Surg** 1996 Oct; 20(8):1107-11; discussion 1111-2

[Treatment of traumatic splenic injuries (editorial; comment)] Mikowiak J. **Ugeskr Laeger** 1996 Oct 21;158(43):6069. Comment on: Ugeskr Laeger 1996 Dec 16;158(51):7430-1. **(Dan)**

[Closed traumas of the abdomen: nonsurgical treatment] Di Lauro G, et al. **Minerva Chir** 1997 Jun;52(6):747-51 (Eng. Abstr.) **(Ita)**

[Computerized tomography in the differential diagnosis of congenital lobulations and traumatic lacerations of the spleen. Report of a case] Scaglione M, et al. **Radiol Med (Torino)** 1996 Sep;92(3):324-6 **(Ita)**

[Long term results of spleen trauma treatment] Afendulov SA, et al. **Khirurgiia (Mosk)** 1997;(5):49-51 (Eng. Abstr.) **(Rus)**

[The causes of fatalities in liver and spleen injuries] Koshelev VN, et al. **Vestn Khir Im I I Grek** 1996;155(2):51-3 (Eng. Abstr.) **(Rus)**

[Problems of the surgical approach in splenic injury] Urakcheev ShK, et al. **Vestn Khir Im I I Grek** 1996; 155(6):66-8 (Eng. Abstr.) **(Rus)**

[Blunt abdominal trauma. Nonoperative management] Méndez Gallart R, et al. **Cir Pediatr** 1996 Apr;9(2):60-3 (Eng. Abstr.) **(Spa)**

[Alternatives to splenectomy in the surgical treatment of splenic injuries] Uroz Tristán J, et al. **Cir Pediatr** 1996 Jan; 9(1):17-20 (Eng. Abstr.) **(Spa)**

INNERVATION

Activation and selectivity of splenic sympathetic nerve electrical activity response to bacterial endotoxin. MacNeil BJ, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):R264-70

Peripheral endotoxin increases splenic sympathetic nerve activity via central prostaglandin synthesis. MacNeil BJ, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R609-14

Dopamine, as well as norepinephrine, is a link between noradrenergic nerve terminals and splenocytes. Bencsics A, et al. **Brain Res** 1997 Jul 4;761(2):236-43

Ventromedial hypothalamus suppresses splenic lymphocyte activity through sympathetic innervation. Okamoto S, et al. **Brain Res** 1996 Nov 11;739(1-2):308-13

Sympathetic innervation of the amphibian spleen: developmental studies in Xenopus laevis. Kinney KS, et al. **Dev Comp Immunol** 1996 Jan-Feb;20(1):51-9

Localization of sympathetic and parasympathetic neurons innervating pancreas and spleen in the cat. Chen XH, et al. **J Auton Nerv Syst** 1996 Jun 10;59(1-2):12-6

Neuronal regulation of interleukin 6 secretion in murine spleen: adrenergic and opioidergic control. Straub RH, et al. **J Neurochem** 1997 Apr;68(4):1633-9

Exposure to alcohol in utero blunts splenic sympathetic neural response to endotoxin and interleukin-1beta in the rat. Gottesfeld Z, et al. **J Neuroimmunol** 1997 Sep; 78(1-2):180-3

Norepinephrine content in primary and secondary lymphoid organs is altered in rats with adjuvant-induced arthritis.

Lorton D, et al. **Mech Ageing Dev** 1997 Mar;94(1-3):145-63
Alterations in sympathetic innervation of thymus and spleen in aged mice. Madden KS, et al. **Mech Ageing Dev** 1997 Mar;94(1-3):165-75

METABOLISM

Kappa Opioid receptors on immune cells as studied by fluorescent ligands. Bidlack JM, et al.
Adv Exp Med Biol 1996;402:13-22
The spleen as a storage pool in lipid metabolism [letter] Schmidt HH, et al. **Am J Gastroenterol** 1997 Jun;92(6):1072
Immobilization increases norepinephrine release and reduces NK cytotoxicity in spleen of conscious rat. Shimizu N, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R537-44
Localization and regulation of thrombopoietin mRNa expression in human kidney, liver, bone marrow, and spleen using in situ hybridization. Sungaran R, et al. **Blood** 1997 Jan 1;89(1):101-7
Stress downregulates lipopolysaccharide-induced expression of proinflammatory cytokines in the spleen, pituitary, and brain of mice. Goujon E, et al. **Brain Behav Immun** 1995 Dec;9(4):292-303
Overexpression of interleukin-6 in the central nervous system of transgenic mice increases central but not systemic proinflammatory cytokine production. Di Santo E, et al. **Brain Res** 1996 Nov 18;740(1-2):239-44
Peripheral mononeuropathy affects hypothalamic and splenocyte beta-endorphin levels but not immune function in the rat. Bianchi M, et al. **Brain Res Bull** 1996; 40(4):269-72
In vitro stimulation by tumour cell media of [3H]-thymidine incorporation by mouse spleen lymphocytes. Adams DH, et al. **Cell Biochem Funct** 1997 Jun;15(2):119-26
Effect of melatonin on NF-kappa-B DNA-binding activity in the rat spleen. Chuang JI, et al. **Cell Biol Int** 1996 Oct; 20(10):687-92
Surface antigen expression in spleen cells of C57B1/6 mice during ageing: influence of sex and parity. Barrat F, et al. **Clin Exp Immunol** 1997 Mar;107(3):593-600
Enhanced expression in spleen macrophages of the mouse homolog to the human putative tumor suppressor gene ZFM1. Wrehlke C, et al. **DNA Cell Biol** 1997 Jun; 16(6):761-7
Beta-endorphin enhances Concanavalin-A-stimulated calcium mobilization by murine splenic T cells. Shahabi NA, et al. **Endocrinology** 1996 Aug;137(8):3386-93
Growth hormone release of interleukin-1 alpha, interferon-gamma and interleukin-4 from murine splenocytes stimulated with staphylococcal protein A, toxic shock syndrome toxin-1 and streptococcal lysin S. Galdiero M, et al. **Eur Cytokine Netw** 1997 Mar;8(1):83-90
Expression of the Mel1a-melatonin receptor mRNA in T and B subsets of lymphocytes from rat thymus and spleen. Pozo D, et al. **FASEB J** 1997 May;11(6):466-73
Early tumor effect on splenic Th lymphocytes in mice. Segura JA, et al. **FEBS Lett** 1997 Sep 1;414(1):1-6
Differences in behavior among the chlorides of seven rare earth elements administered intravenously to rats. Nakamura Y, et al. **Fundam Appl Toxicol** 1997 Jun; 37(2):106-16
Immunohistochemical detection of endotoxin in endotoxemic rats. Yasui M, et al. **Hepatogastroenterology** 1995 Sep-Oct; 42(5):683-90
Expression of insulin-like growth factor II (IGF-II) and histological changes in the thymus and spleen of transgenic mice overexpressing IGF-II. Van der Ven LT, et al.
Histochem Cell Biol 1997 Mar;107(3):193-203
Production of IL-1 beta and IL-6 by adherent spleen cells after the stimulation with lipopolysaccharides from Salmonella enteritidis strain. Kollárová Z, et al.
Immunopharmacol Immunotoxicol 1996 Aug;18(3):433-41
Suramin exerts in vivo cytokine modulatory properties on splenocytes from experimental allergic encephalomyelitis-induced SJL mice: implications for autoimmune disease therapy. Novales-Li P.
Immunopharmacology 1996 Nov;35(2):155-62
In vitro complement-dependent binding and in vivo kinetics of pneumococcal polysaccharide TI-2 antigens in the rat spleen marginal zone and follicle. Harms G, et al.
Infect Immun 1996 Oct;64(10):4220-5
Effects of nerve growth factor on splenic norepinephrine and pineal N-acetyl-transferase in neonate rats exposed to alcohol in utero: neuroimmune correlates. Gottesfeld Z, et al. **Int J Dev Neurosci** 1996 Aug;14(5):655-62
Biodistribution and computed tomography blood-pool imaging properties of polyethylene glycol-coated iopromide-carrying liposomes. Sachse A, et al.
Invest Radiol 1997 Jan;32(1):44-50
Human cholesteryl ester transfer protein gene proximal promoter contains dietary cholesterol positive responsive elements and mediates expression in small intestine and periphery while predominant liver and spleen expression is controlled by 5'-distal sequences. Cis-acting sequences mapped in transgenic mice. Oliveira HCF, et al.
J Biol Chem 1996 Dec 13;271(50):31831-8
Hexamer palindromic oligonucleotides with 5'-CG-3' motif(s) induce production of interferon. Sonehara K, et al. **J Interferon Cytokine Res** 1996 Oct;16(10):799-803
Detection of basal levels and induction of delta opioid receptor mRNA in murine splenocytes. Sharp BM, et al.
J Neuroimmunol 1997 Sep;78(1-2):198-202
Colostrum enhances the nutritional stimulation of vital organ protein synthesis in neonatal pigs. Burrin DG, et al.
J Nutr 1997 Jul;127(7):1284-9
Cells involved in the capture of nanoparticles in hematopoietic organs. Gibaud S, et al. **J Pharm Sci** 1996 Sep;85(9):944-50
The lymphocyte and macrophage profile in the pancreas and spleen of NOD mice: percentage of interleukin-2 and prolactin receptors on immunocompetent cell subsets. Hawkins TA, et al. **J Reprod Immunol** 1996 Nov; 32(1):55-71
Kinetics of splenocyte interleukin-4 production after injury and lethal endotoxin challenge. Napolitano LM, et al.
J Surg Res 1997 Jan;67(1):33-9
Transient CRE- and kappa B site-binding is cross-regulated by cAMP-dependent protein kinase and a protein phosphatase in mouse splenocytes. Koh WS, et al.
Life Sci 1997;60(6):425-32
PrP-expressing tissue required for transfer of scrapie infectivity from spleen to brain. Blättler T, et al.
Nature 1997 Sep 4;389(6646):69-73
Identification of new human myelin basic protein transcripts in the immune and central nervous systems. Grima B, et al. **Neurobiol Dis** 1994 Nov;1(1-2):61-6
Age-related reciprocal modulation of interleukin-1beta and interleukin-1 receptors in the mouse brain-endocrine-immune axis. Takao T, et al.
Neuroimmunomodulation 1996 Jul-Aug;3(4):205-12
Intracerebroventricular administration of missense oligodeoxynucleotide induces interleukin-6 mRNA expression in brain and spleen of rats. Pezeshki G, et al.
Neurosci Lett 1996 Oct 18;217(2-3):97-100
Unexpected high density of neuropeptide Y Y1 receptors in the guinea pig spleen. Gehlert DR, et al. **Peptides** 1996; 17(8):1345-8
Splenic trapping of nanoparticles: complementary approaches for in situ studies. Demoy M, et al. **Pharm Res** 1997 Apr; 14(4):463-8
Changes in rat spleen cannabinoid receptors after chronic CP-55,940: an autoradiographic study. Massi P, et al.
Pharmacol Biochem Behav 1997 Sep;58(1):73-8
Pavlovian conditioning of LPS-induced responses: effects on corticosterone, splenic NE, and IL-2 production. Janz LJ, et al. **Physiol Behav** 1996 Jun;59(6):1103-9
Effect of chronic treatment with imipramine on interleukin 1 and interleukin 2 production by splenocytes obtained from rats subjected to a chronic mild stress model of depression. Kubera M, et al. **Pol J Pharmacol** 1996 Sep-Oct;48(5):503-6
Altered IL-1 beta and IL-2 mRNA expression in murine splenic cells after concomitant stimulation by Semliki Forest virus and lipopolysaccharide. Yang J, et al.
Scand J Immunol 1997 Apr;45(4):349-53
Noradrenergic neurons release both noradrenaline and neuropeptide Y from a single pool: the large dense cored vesicles. De Potter WP, et al. **Synapse** 1997 Jan;25(1):44-55
Differential cytokine mRNA expression in mice after oral exposure to the trichothecene vomitoxin (deoxynivalenol): dose response and time course. Zhou HR, et al.
Toxicol Appl Pharmacol 1997 Jun;144(2):294-305
An homologous in vitro assay to detect lymphokines released by PHA-activated duck peripheral blood lymphocytes and spleen cells. Bertram EM, et al.
Vet Immunol Immunopathol 1997 May;56(1-2):163-74
Transforming growth factor-beta isoforms in the developing chicken intestine and spleen: increase in transforming growth factor-beta 4 with coccidia infection. Jakowlew SB, et al. **Vet Immunol Immunopathol** 1997 Mar; 55(4):321-39
[Changes in gastric intramucosal pH and hepato-splanchnic oxygen extraction ratio after heart surgery] Kunimoto F, et al. **Masui** 1996 Jan;45(1):21-6 (Eng. Abstr.) **(Jpn)**
[Activation of transcription of interleukin-2 gene by nuclear factors from the spleen and brain of immunized rats] Kazakova TB, et al. **Biull Eksp Biol Med** 1994 May; 117(5):523-6 **(Rus)**
[Effects of a permanent magnetic field on 45Ca2+ ion influx in excitable and inexcitable cells and proliferative activity of rat spleen cells] Garibova LS, et al.
Radiats Biol Radioecol 1996 Sep-Oct;36(5):718-21 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Intestinal colonization and organ invasion in chicks experimentally infected with Salmonella enteritidis phage type 4 and other phage types isolated from poultry in the United States. Gast RK, et al. **Avian Dis** 1996 Oct-Dec; 40(4):853-7
Increase of tuberculous infection in the organs of B cell-deficient mice. Vordermeier HM, et al.
Clin Exp Immunol 1996 Nov;106(2):312-6
Effect of thermal injury on the adherence of Candida albicans to murine splenic tissue. Neely AN, et al. **Infect Immun** 1997 Aug;65(8):3493-5
Francisella philomiragia sepsis in chronic granulomatous disease. Sicherer SH, et al. **Pediatr Infect Dis J** 1997 Apr; 16(4):420-2

PARASITOLOGY

Examination of extraintestinal tissue cysts of Isospora belli. Lindsay DS, et al. **J Parasitol** 1997 Aug;83(4):620-5
Kinetics of Trypanosoma cruzi destruction in the mouse spleen. Cordeiro ZM, et al. **Rev Soc Bras Med Trop** 1996 Jan-Feb;30(1):3-9

PATHOLOGY

Effect of continued electroacupuncture on induction of interleukin-2 production of spleen lymphocytes from the injured rats. Cheng XD, et al. **Acupunct Electrother Res** 1997;22(1):1-8
Iron overload in reticuloendothelial systems of pediatric oncology patients who have undergone transfusions: MR observations. Emy PY, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1011-5
Gadolinium-enhanced MR imaging of the spleen: artifacts and potential pitfalls. Ito K, et al.
AJR Am J Roentgenol 1996 Nov;167(5):1147-51
MR imaging of acquired abnormalities of the spleen. Ito K, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):697-702
Splenic pathology in different forms of traumatic injury [letter] Drachenberg CB, et al. **Am J Clin Pathol** 1996 Nov; 106(5):695
Differential pathogenesis of lethal mousepox in congenic DBA/2 mice implicates natural killer cell receptor NKR-P1 in necrotizing hepatitis and the fifth component of complement in recruitment of circulating leukocytes to spleen. Brownstein DG, et al. **Am J Pathol** 1997 Apr; 150(4):1407-20
Immobilization increases norepinephrine release and reduces NK cytotoxicity in spleen of conscious rat. Shimizu N, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R537-44
Splenic micro-anatomical localization of small lymphocytic lymphoma/chronic lymphocytic leukemia using a novel combined silver nitrate and immunoperoxidase technique. Edelman M, et al. **Am J Surg Pathol** 1997 Apr;21(4):445-52
Further evidence supporting the sinus lining cell nature of splenic littoral cell angiosarcoma [letter] Rosso R, et al.
Am J Surg Pathol 1996 Dec;20(12):1531
The spleen in murine Plasmodium chabaudi adami malaria: stromal cells, T lymphocytes, and hematopoiesis. Alves HJ, et al. **Am J Trop Med Hyg** 1996 Oct;55(4):370-8
Chronic expression of murine flt3 ligand in mice results in increased circulating white blood cell levels and abnormal cellular infiltrates associated with splenic fibrosis. Juan TS, et al. **Blood** 1997 Jul 1;90(1):76-84
Spleen sizing by ultrasound in polycythaemia and thrombocythaemia: comparison with SPECT. Messinezy M, et al. **Br J Haematol** 1997 Jul;98(1):103-7
Control of insulin secretion and glucose homeostasis in exercising diabetic rats with intrasplenic or kidney subcapsular islet grafts. Houwing H, et al.
Cell Transplant 1997 Jul-Aug;6(4):413-22
Splenectomy for suspected malignant lymphoma in two patients with loiasis. Burchard GD, et al.
Clin Infect Dis 1996 Nov;23(5):979-82
Granulomatous hepatitis and necrotizing splenitis due to Bartonella henselae in a patient with cancer: case report and review of hepatosplenic manifestations of bartonella infection. Liston TE, et al. **Clin Infect Dis** 1996 Jun; 22(6):951-7 (45 ref.)
Use of fine-needle aspiration biopsy in the evaluation of splenic lesions in a cancer center. Caraway NP, et al.
Diagn Cytopathol 1997 Apr;16(4):312-6
Abnormal organisation of the splenic marginal zone and the correlated leukocytosis in lymphotoxin-alpha and tumor necrosis factor alpha double deficient mice. Amiot F, et al. **Eur Cytokine Netw** 1996 Dec;7(4):733-9
Sarcoid-like reaction in the regional lymph nodes and spleen in gastric carcinoma: a clinicopathologic study of five cases. Kojima M, et al. **Gen Diagn Pathol** 1997 Jun; 142(5-6):347-52
Stereologic study of splenic tissue compartments from traumatically injured and cancer patients. Milićević NM, et al. **Gen Diagn Pathol** 1996 Jun;142(1):41-4
PARP is important for genomic stability but dispensable in apoptosis. Wang ZQ, et al. **Genes Dev** 1997 Sep 15; 11(18):2347-58
Stereological study of tissue compartments of the human spleen. Milićević Z, et al. **Histol Histopathol** 1996 Oct; 11(4):833-6
Low-grade B-cell lymphomas of the splenic marginal zone: a clinicopathological and immunohistochemical study of 14 cases. Pawade J, et al. **Histopathology** 1995 Aug; 27(2):129-37
Neutrophilia and organomegaly in two patients with cancer. Wright JJ, et al. **Hosp Pract (Off Ed)** 1997 Jan 15; 32(1):135-6, 139-42
Experimental studies on multiorgan toxicity of cyclosporine-A in rats using a radiopharmaceutical and comparison with histopathological findings. Shihab-Eldeen A, et al. **Hum Exp Toxicol** 1996 Nov;15(11):867-71
Peptide antigen treatment of naive and virus-immune mice: antigen-specific tolerance versus immunopathology. Aichele P, et al. **Immunity** 1997 May;6(5):519-29
Splenic lymphocytes with circulating villous lymphocytes--a case report. Gupta D, et al. **Indian J Cancer** 1996 Dec; 33(4):183-6
Morphology of spleen in steroid resistant idiopathic thrombocytopenic purpuras. Vaiphei K, et al.
Indian J Pathol Microbiol 1995 Jul;38(3):311-5
Extraordinary localisation of Mycobacterium tuberculosis infection [letter] Peters FP, et al. **Infection** 1996 Jul-Aug; 24(4):336
Splenic artery occlusion masking portal hypertension.

Bayraktar Y, et al. **J Clin Gastroenterol** 1996 Jun; 22(4):326–8

Effect of shunt surgery on spleen size, portal pressure and oesophageal varices in patients with non-cirrhotic portal hypertension. Sharma BC, et al. **J Gastroenterol Hepatol** 1997 Aug;12(8):582–4

Dorfman–Chanarin syndrome: a case with prevalent hepatic involvement. Mela D, et al. **J Hepatol** 1996 Nov; 25(5):769–71

Effects of cyclosporine or FK506 in chronic colitis. Aiko S, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):1075–84

Autosplenectomy in systemic lupus erythematosus. Uthman I, et al. **J Rheumatol** 1996 Oct;23(10):1806–10 (18 ref.)

Pathologic factors affecting postsplenectomy survival in dogs. Spangler WL, et al. **J Vet Intern Med** 1997 May–Jun; 11(3):166–71

Pathological changes in the spleens of gamma interferon receptor-deficient mice infected with murine gammaherpesvirus: a role for CD8 T cells. Dutia BM, et al. **J Virol** 1997 Jun;71(6):4278–83

Insulin-like growth factor 1 has beneficial effects, whereas growth hormone has limited effects on postoperative protein metabolism, gut integrity, and splenic weight in rats with chronic mild liver injury. Inaba T, et al. **JPEN J Parenter Enteral Nutr** 1997 Mar–Apr;21(2):55–62

Inhibition of nitric oxide generation: normalization of in vitro insulin secretion in mice with multiple low-dose streptozotocin and in mice injected with mononuclear splenocytes from diabetic syngeneic donors. Karabatas LM, et al. **Metabolism** 1996 Aug;45(8):940–6

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 21–1997. A 67-year-old woman with a progressive movement disorder and a left-upper-quadrant mass [clinical conference] **N Engl J Med** 1997 Jul 10;337(2):115–22

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 13–1997. A 32-year-old man with IgG antibody and Coombs'-positive hemolytic anemia resistant to corticosteroid therapy [clinical conference] **N Engl J Med** 1997 Apr 24;336(17):1235–41

Bcl-2 and CrmA have different effects on transformation, apoptosis and the stability of I kappa B-alpha in chicken spleen cells transformed by temperature-sensitive v-Rel oncoproteins. White DW, et al. **Oncogene** 1996 Sep 5; 13(5):891–9

Intrasplenic masses of "preserved" functioning splenic tissue in sickle cell disease: correlation of imaging findings (CT, ultrasound, MRI, and nuclear scintigraphy). Levin TL, et al. **Pediatr Radiol** 1996 Sep;26(9):646–9

Histopathological evaluation of liver, pancreas, spleen, and heart from iron-overloaded Sprague-Dawley rats. Whittaker P, et al. **Toxicol Pathol** 1996 Sep–Oct; 24(5):558–63

Blood, bone marrow and splenic lymphocyte subset profiles in Indian visceral leishmaniasis. Rohtagi A, et al. **Trans R Soc Trop Med Hyg** 1996 Jul–Aug;90(4):431–4

Ultrasound guided spleen biopsy in chimpanzees (pan troglodytes). Eder G, et al. **Ultrasound Med Biol** 1996; 22(1):19–24

Further analysis of the phenotype and distribution of tumor cells in sporadic B-cell and T-cell lymphomas in the lymph node and spleen of cattle. Tani K, et al. **Vet Immunol Immunopathol** 1997 Mar;55(4):283–90

Detection of BSE infectivity in brain and spleen of experimentally infected sheep. Foster JD, et al. **Vet Rec** 1996 Jun 1;138(22):546–8

Development of microscopic lesions in splenic cords of pigs infected with African swine fever virus. Carrasco L, et al. **Vet Res** 1997;28(1):93–9

[Angioedema caused by splenectomy with malignant lymphoma followed by multiple myeloma 7 years later] Shahar A, et al. **Harefuah** 1997 May 1;132(9):624–6, 679 (Eng. Abstr.) **(Heb)**

[Splenic atrophy and fatal pneumococcal infection in inflammatory bowel disease] Maehlen J, et al. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1900–1 (Eng. Abstr.) **(Nor)**

[The effect of interleukin-1beta on the state of thymus, adrenals and spleen during immersion emotional stress in August, Wistar and Wag rats] Pertsov SS, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):32–5 **(Rus)**

PHYSIOLOGY

Nervous control of the spleen in the red-blooded Antarctic fish, Pagothenia borchgrevinki. Nilsson S, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):R599–604

Responsiveness of rat nonparenchymal liver cells and spleen cells to the decomposition of erythrocytes exposed to di-n-butyl phthalate and its metabolite. Fukuoka M, et al. **Biol Pharm Bull** 1996 Sep;19(9):1154–9

The functional assessment of autotransplanted splenic tissue by its capacity to remove oxidatively modified erythrocytes. Haklar G, et al. **Clin Chim Acta** 1997 Feb 17;258(2):201–8

The time course, localization and quantitation of T- and B-cell mitogen-driven apoptosis in vivo. Grant P, et al. **Immunol Lett** 1995 Sep;47(3):227–31

Mirfentanil antagonizes morphine-induced suppression of splenic NK activity in mice. Carr DJ, et al. **Immunopharmacology** 1996 Aug;34(1):9–16

Volume capacity and contraction control of the seal spleen. Cabanac A, et al. **J Appl Physiol** 1997 Jun;82(6):1989–94

On the key role of secondary lymphoid organs in antiviral immune responses studied in alymphoplastic (aly/aly) and spleenless (Hox11(–)/–) mutant mice. Karrer U, et al. **J Exp Med** 1997 Jun 16;185(12):2157–70

Neuroimmune control of interleukin-6 secretion in the murine spleen. Differential beta-adrenergic effects of electrically released endogenous norepinephrine under various endotoxin conditions. Straub RH, et al. **J Neuroimmunol** 1996 Dec;71(1–2):37–43

Changes in splenic volume after partial splenic embolization in children. Watanabe Y, et al. **J Pediatr Surg** 1996 Feb; 31(2):241–4

Acupuncture stimulation enhances splenic natural killer cell cytotoxicity in rats. Sato T, et al. **Jpn J Physiol** 1996 Apr; 46(2):131–6

Evidence for the modulation of spontaneous locomotor activity by higher serum glucose levels and/or spleen-derived factor(s) in diabetic mice. Kamei J, et al. **Life Sci** 1997;60(19):1699–708

The effect of multiparity and lactation periods on the graft versus host reactivity of thymocytes and splenocytes from aging C57BL mice. Skowron-Cendrzak A, et al. **Mech Ageing Dev** 1996 Oct 4;91(1):1–10

Effects of uncontrollable and controllable electric shocks on T lymphocyte subpopulations in the peripheral blood, spleen, and thymus of rats. Nakata A, et al. **Neuroimmunomodulation** 1996 Nov–Dec;3(6):336–41

Restraint stress-induced changes in lymphocyte subsets and the expression of adhesion molecules. Tarcic N, et al. **Neuroimmunomodulation** 1995 Sep–Oct;2(5):249–57

The role of the spinal cord as a reflex center for the somatically induced reflex responses of splenic sympathetic and natural killer cell activity in anesthetized rats. Kagitani F, et al. **Neurosci Lett** 1996 Oct 18;217(2–3):109–12

Role of spleen or spleen products in the reduced locomotor-enhancing effect of morphine in diabetic mice. Kamei J, et al. **Neurosci Lett** 1996 May 24;210(1):57–60

Trout plasma metabolites, blood factors and spleen contraction: responses to exercise. Mendiola P, et al. **Rev Esp Fisiol** 1997 Jun;53(2):217–23

[The effect of complete fasting on the structural-functional organization of the white pulp of the spleen] Kuziv OIe. **Fiziol Zh** 1997;43(1–2):89–100 (Eng. Abstr.) **(Ukr)**

PHYSIOPATHOLOGY

Influence of alpha-thalassemia trait on spleen function in sickle cell anemia patients with high HbF. Adekile AD, et al. **Am J Hematol** 1996 Sep;53(1):1–5

The site of destruction of autologous 111In-labelled platelets and the efficiency of splenectomy in children and adults with idiopathic thrombocytopenic purpura: a study of 578 patients with 268 splenectomies. Najean Y, et al. **Br J Haematol** 1997 Jun;97(3):547–50

Canine visceral leishmaniosis: first case in Zambia. Matsukawa K, et al. **Onderstepoort J Vet Res** 1997 Mar; 64(1):77–9

Severe pneumococcal disease and temporary splenic dysfunction. Pelly MD, et al. **Postgrad Med J** 1997 Mar; 73(857):173–4

[Wandering spleen syndrome in childhood] Barrios Fontoba JE, et al. **Cir Pediatr** 1997 Apr;10(2):79–81 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Enhancement of mitogen-stimulated proliferation of low dose radiation-adapted mouse splenocytes. Hyun SJ, et al. **Anticancer Res** 1997 Jan–Feb;17(1A):225–9

Splenic irradiation in HIV-related thrombocytopenia. Leung JT, et al. **Australas Radiol** 1996 Aug;40(3):324–5

Splenic irradiation before bone marrow transplantation for chronic myeloid leukaemia. Chronic Leukaemia Working Party of the European Group for Blood and Marrow Transplantation (EBMT) [see comments] Gratwohl A, et al. **Br J Haematol** 1996 Dec;95(3):494–500. Comment in: Br J Haematol 1997 Apr;97(1):248–9.

Induction and persistence of cytogenetic damage in mouse splenocytes following whole-body X-irradiation analysed by fluorescence in situ hybridization. II. Micronuclei. Hande MP, et al. **Int J Radiat Biol** 1996 Oct;70(4):375–83

Effects of soft X-ray irradiation on NK cell activity and the percentage of asialo GM1-positive cells in spleen cells of mice. Takeuchi M, et al. **J Vet Med Sci** 1997 May; 59(5):413–4

Induction and persistence of cytogenetic damage in mouse splenocytes following whole-body X-irradiation analysed by fluorescence in situ hybridization. III. Chromosome malsegregation/aneuploidy. Hande MP, et al. **Mutagenesis** 1997 May;12(3):125–31

Radioprotection of beta-carotene evaluated on mouse somatic and germ cells. Salvadori DM, et al. **Mutat Res** 1996 Sep 23;356(2):163–70

Enhanced proliferation and IL-1 production of mouse splenocytes by low-dose whole-body X-irradiation. Ishii K, et al. **Physiol Chem Phys Med NMR** 1996;28(1):7–14

The impact of chronic radioactive stress on the immuno-physiological condition of small mammals. Tsiperson VP, et al. **Sci Total Environ** 1997 Sep 6; 203(2):105–13

The shift of Th1/Th2 ratios induced by portal venous administration of UVB-treated donor spleen cells prolonged mouse cardiac allografts. Yu S, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1162

[Splenic irradiation in myeloid hemopathies: evaluation and toxicity] Gonzague-Casabianca L, et al. **Cancer Radiother** 1997;1(3):213–21 (Eng. Abstr.) **(Fre)**

[Nonmonotony of dose-effect dependence during irradiation of cells in vitro with pulsed laser radiation with a wavelength of 820 nm] Karu TI, et al. **Dokl Akad Nauk** 1997 May;354(1):117–9 **(Rus)**

[Substantiation of indications for low-intensity laser irradiation in combined preoperative care of patients with ulcerative gastrointestinal hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1997;(1):3–5 (Eng. Abstr.) **(Rus)**

[The combined effect of ionizing radiation and benzene on immunoreactivity indices in the spleen and lymph nodes] Sharetskiĭ AN, et al. **Radiats Biol Radioecol** 1997 May–Jun; 37(3):387–94 (Eng. Abstr.) **(Rus)**

[Ornithine decarboxylase in the organs of rats under chronic exposure to gamma radiation at a low dosage rate] Slozhenikina LV, et al. **Radiats Biol Radioecol** 1997 Mar–Apr;37(2):137–42 (Eng. Abstr.) **(Rus)**

[Activation of cGMP-dependent protein kinase from spleen lymphocytes of rats exposed to radiation] Ostapchenko LI. **Ukr Biokhim Zh** 1996 Nov–Dec;68(6):33–8 (Eng. Abstr.) **(Ukr)**

RADIOGRAPHY

The hyperdense liver and spleen: a CT manifestation of barium embolization through a duodenocaval fistula [letter] Vitellas KM, et al. **AJR Am J Roentgenol** 1997 Sep; 169(3):915–6

Determination of normal splenic volume on computed tomography in relation to age, gender and body habitus. Prassopoulos P, et al. **Eur Radiol** 1997;7(2):246–8

Retropancreatic colon interposed between the spleen and left diaphragmatic crus: CT appearance. Holemans JA, et al. **J Comput Assist Tomogr** 1997 May–Jun;21(3):389–90

Qualitative assessment of liver for fatty infiltration on contrast-enhanced CT: is muscle a better standard of reference than spleen? Panicek DM, et al. **J Comput Assist Tomogr** 1997 Sep–Oct;21(5):699–705

A horseshoe adrenal gland in an infant with asplenia. Shafaie FF, et al. **Pediatr Radiol** 1997 Jul;27(7):591–3

Standard splenic volume in children and young adults measured from CT images. Watanabe Y, et al. **Surg Today** 1997;27(8):726–8

[Computerized tomography in the differential diagnosis of congenital lobulations and traumatic lacerations of the spleen. Report of a case] Scaglione M, et al. **Radiol Med (Torino)** 1996 Sep;92(3):324–6 **(Ita)**

RADIONUCLIDE IMAGING

Effect of food intake on liver and spleen volume: assessment with single photon emission computed tomography. Roshdy MS, et al. **Acad Radiol** 1997 Mar;4(3):193–6

Measurement of spleen size and its relation to hypersplenism and portal hemodynamics in portal hypertension due to hepatic cirrhosis. Shah SH, et al. **Am J Gastroenterol** 1996 Dec;91(12):2580–3

Abdominal SPECT/MRI fusion applied to the study of splenic and hepatic uptake of radiolabeled thrombocytes and colloids. Pohjonen HK, et al. **Ann Nucl Med** 1996 Nov; 10(4):409–17

Scintigraphic evaluation of Tc-99m-low-density lipoprotein (LDL) distribution in patients with Gaucher disease. Lorberboym M, et al. **Clin Genet** 1997 Jul;52(1):7–11

Patent ductus arteriosus causing infradiaphragmatic activity on perfusion lung scintigraphy. Johnson RD, et al. **Clin Nucl Med** 1996 Oct;21(10):812–4

A wandering spleen. Detection by In-111 leukocyte imaging. Posillico LF, et al. **Clin Nucl Med** 1996 Apr;21(4):287–9

SPECT with In-111 autologous platelets to detect residual splenic tissue in two patients with relapsed thrombocytopenia. Suga K, et al. **Clin Nucl Med** 1997 Mar; 22(3):141–6

Extrahepatic uptake on isotope liver-spleen scan: what it means and what it does not [editorial; comment] Abraham P, et al. **J Assoc Physicians India** 1996 May;44(5):303–4. Comment on: J Assoc Physicians India 1996 May;44(5):310–2.

Intrapancreatic accessory spleen diagnosed by technetium-99m heat-damaged red blood cell SPECT. Ota T, et al. **J Nucl Med** 1997 Mar;38(3):494–5

Splenogonadal fusion diagnosed by spleen scintigraphy. Steinmetz AP, et al. **J Nucl Med** 1997 Jul;38(7):1153–5

Bone marrow scintigraphy as a useful method for estimating the physiological status of bone marrow and spleen in polycythaemia vera. Rain JD, et al. **Leuk Lymphoma** 1996 Sep;22 Suppl 1:105–10

SECRETION

Characterization of viral inhibitory substance released from fused splenocyte. Kim YW, et al. **Mol Cells** 1997 Apr 30; 7(2):165–9

SURGERY

Spleen-sparing surgical treatment for echinococcosis of the spleen. Manouras AJ, et al. **Br J Surg** 1997 Aug;84(8):1162

The subcutaneous spleen: a new model for percutaneous access to the portal venous system. Brandt ML, et al. **J Invest Surg** 1996 May–Jun;9(3):161–6

Laparoscopic treatment of accessory splenic tissue. Mercan S, et al. **Surg Laparosc Endosc** 1996 Aug;6(4):330–1
Laparoscopic accessory splenectomy in recurrent chronic immune thrombocytopenic purpura. Rogers J, et al. **Surg Laparosc Endosc** 1997 Apr;7(2):83–5
Spleen–preserving distal pancreatectomy with conservation of the splenic artery and vein. Kimura W, et al. **Surgery** 1996 Nov;120(5):885–90
Nonoperative management of the ruptured spleen: a revalidation of criteria. Smith JS Jr, et al. **Surgery** 1996 Oct;120(4):745–50; discussion 750–1
Intrasplenic hepatocyte allotransplantation in dalmation dogs with and without cyclosporine immunosuppression. Benedetti E, et al. **Transplantation** 1997 May 15; 63(9):1206–9
[A case report of a fenestrated Fontan operation after bivalvation of the common atrioventricular valve in right isomerism] Noma M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jan;45(1):88–91 (Eng. Abstr.) **(Jpn)**
[Problems of the surgical approach in splenic injury] Urakcheev ShK, et al. **Vestn Khir Im I I Grek** 1996; 155(6):66–8 (Eng. Abstr.) **(Rus)**
[Alternatives to splenectomy in the surgical treatment of splenic injuries] Uroz Tristán J, et al. **Cir Pediatr** 1996 Jan; 9(1):17–20 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

Interferon–gamma–mediated prevention of graft–versus–host disease: development of immune competent and allo–tolerant T cells in chimeric mice. Brok HP, et al. **Bone Marrow Transplant** 1997 Mar;19(6):601–6
Effect of sublethal total body irradiation on acute graft–versus–host disease and graft–versus–leukemia effect in SCID mice. Sakai R, et al. **Bone Marrow Transplant** 1997 Aug;20(3):183–9
Autotransplantation of the spleen in the rat: donor leukocytes of the splenic fragment survive implantation to migrate and proliferate in the host. Westermann J, et al. **Cell Tissue Res** 1997 Feb;287(2):357–64
The functional assessment of autotransplanted splenic tissue by its capacity to remove oxidatively modified erythrocytes. Haklar G, et al. **Clin Chim Acta** 1997 Feb 17;258(2):201–8
Radiolabeled denatured RBC scintigraphy in autologous splenic transplantation. Sharma R, et al. **Clin Nucl Med** 1996 Jul;21(7):534–6
Transfer of thyroiditis, with syngeneic spleen cells sensitized with the human thyrotropin receptor, to naive BALB/c and NOD mice. Costagliola S, et al. **Endocrinology** 1996 Nov;137(11):4637–43
Selective down–regulation of Th2 immune responses following treatment with antigen–coupled splenocytes. Soldera S, et al. **Eur J Immunol** 1997 Apr;27(4):848–54
Intravenous administration of splenocytes in early pregnancy changes the implantation window in mice. Takabatake K, et al. **Hum Reprod** 1997 Mar;12(3):583–5
Completely allogeneic spleen cells induced cytolytic neonatal tolerance to alloantigens, but failed to establish allo–helper interactions with host T cells. Ramos A, et al. **Immunology** 1996 Nov;89(3):413–8
Combined liver–spleen–small intestine grafting in a rat model: role of transplanting additional lymphoid tissue on survival. D'Silva M, et al. **Int Surg** 1996 Apr–Jun;81(2):109–14
Torsion of autotransplanted splenic tissue in Gaucher disease. Ando K, et al. **J Pediatr Surg** 1997 May;32(5):747–9
Heterotopic splenic autotransplantation in a neonate with splenic rupture, leading to normal splenic function. Yamataka A, et al. **J Pediatr Surg** 1996 Feb;31(2):239–40
SCID–bg mice as xenograft recipients. Shibata S, et al. **Lab Anim** 1997 Apr;31(2):163–8
Antibody formation in the transplanted spleen: a simple method of splenic transplantation in the rat using the cuff technique. Kobayashi E, et al. **Microsurgery** 1996; 17(4):221–5
Induction of transplantation tolerance in adult rats by vascularized spleen transplantation. Suzuki H, et al. **Transplantation** 1997 Aug 27;64(4):650–4
[Results of partial splenic resection and transposition to the lateral abdominal wall in portal hypertension in childhood] Bennek J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:1030–3 (Eng. Abstr.) **(Ger)**

ULTRASONOGRAPHY

Measurement of spleen size and its relation to hypersplenism and portal hemodynamics in portal hypertension due to hepatic cirrhosis. Shah SH, et al. **Am J Gastroenterol** 1996 Dec;91(12):2580–3
Organometric investigations of the spleen and liver by ultrasound in Schistosoma mansoni endemic and nonendemic villages in Senegal. Yazdanpanah Y, et al. **Am J Trop Med Hyg** 1997 Aug;57(2):245–9
Use of abdominal ultrasonography to assess pediatric splenic trauma. Potential pitfalls in the diagnosis. Krupnick AS, et al. **Ann Surg** 1997 Apr;225(4):408–14
Radiology for the surgeon. Case 12. Splenic laceration with pseudoaneurysm of the splenic artery. Tran CN, et al. **Can J Surg** 1996 Dec;39(6):450, 486
The 'small spleen' in malaria. Chauhan R, et al. **J Assoc Physicians India** 1996 Jul;44(7):483–5
The wandering spleen with collateral vessels containing gastric varices: color Doppler ultrasound imaging. Koda M, et al. **J Clin Ultrasound** 1996 Nov–Dec;24(9):528–32
Ultrasound guided spleen biopsy in chimpanzees (pan troglodytes). Eder G, et al. **Ultrasound Med Biol** 1996; 22(1):19–24
[Echographic parameters in the evaluation of the degree of portal hypertension] Torres E, et al. **Rev Gastroenterol Peru** 1996 May–Aug;16(2):125–32 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Ultrastructure of Kurloff body proteoglycans after high pressure freezing, cryosubstitution and postembedding staining with cuprolinic blue. Landemore G, et al. **Glycobiology** 1996 Dec;6(8):817–22
Phenotypic characteristics and significance of reticular meshwork surrounding splenic white pulp of mice. Tanaka H, et al. **J Electron Microsc (Tokyo)** 1996 Oct;45(5):407–16
Lymphotoxin–alpha (LTalpha) supports development of splenic follicular structure that is required for IgG responses. Fu YX, et al. **J Exp Med** 1997 Jun 16; 185(12):2111–20

VIROLOGY

Production of nitrite by dengue virus–induced cytotoxic factor. Misra A, et al. **Clin Exp Immunol** 1996 Jun; 104(3):406–11
The in vitro expression patterns of individual type I interferon genes in Newcastle disease virus infected murine splenocytes and fibroblasts. Yeow WS, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):513–20
Scrapie strains retain their distinctive characteristics following passages of homogenates from different brain regions and spleen. Carp RI, et al. **J Gen Virol** 1997 Jan; 78 (Pt 1):283–90
Absence of splenic latency in murine gammaherpesvirus 68–infected B cell–deficient mice. Usherwood EJ, et al. **J Gen Virol** 1996 Nov;77 (Pt 11):2819–25
Mature B cells are required for acute splenic infection, but not for establishment of latency, by murine gammaherpesvirus 68. Weck KE, et al. **J Virol** 1996 Oct; 70(10):6775–80
Bovine herpesvirus type–4 (BHV–4) persistently infects cells of the marginal zone of spleen in cattle. Lopez OJ, et al. **Microb Pathog** 1996 Jul;21(1):47–58
Adenovirus isolation from spleen lymphocytes of apparently healthy pigs. Kadoi K, et al. **New Microbiol** 1997 Jul; 20(3):215–20
Low infection frequency of macrophages in the spleens of HIV+ patients. McIlroy D, et al. **Res Virol** 1996 Mar–Jun; 147(2–3):115–21
Altered IL–1 beta and IL–2 mRNA expression in murine splenic cells after concomitant stimulation by Semliki Forest virus and lipopolysaccharide. Yang J, et al. **Scand J Immunol** 1997 Apr;45(4):349–53

SPLEEN FOCUS–FORMING VIRUSES

GENETICS

The potent enhancer activity of the polycythemic strain of spleen focus–forming virus in hematopoietic cells is governed by a binding site for Sp1 in the upstream control region and by a unique enhancer core motif, creating an exclusive target for PEBP/CBF. Baum C, et al. **J Virol** 1997 Sep;71(9):6323–31

PATHOGENICITY

Pathogenesis of Friend leukemia virus. Ikawa Y. **Leukemia** 1997 Apr;11 Suppl 3:152–4

PHYSIOLOGY

Mutational analysis of the structure–function relationship of the leukemogenic membrane glycoprotein (GP55) of Friend spleen focus–forming virus (F–SFFV). Amanuma H, et al. **Leukemia** 1997 Apr;11 Suppl 3:160–1
Constitutive activation of Stat–related DNA–binding proteins in erythroid cells by the Friend spleen focus–forming virus. Ohashi T, et al. **Leukemia** 1997 Apr; 11 Suppl 3:251–4
Activation of the JAK1–STAT5 pathway by binding of the Friend virus gp55 glycoprotein to the erythropoietin receptor. Yamamura Y, et al. **Leukemia** 1997 Apr;11 Suppl 3:432–4

SPLENECTOMY

Splenectomy and prognosis of HIV infection. Group d'Epidémiologie Clinique du SIDA en Aquitaine (GECSA) [letter] Morlat P, et al. **AIDS** 1996 Sep;10(10):1170–2
Splenectomy for non–Hodgkin's lymphoma. Brodsky J, et al. **Am J Clin Oncol** 1996 Dec;19(6):558–61
Splenectomy impairs lymphocytosis during maximal exercise. Nielsen HB, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1847–52
Splenectomy in patients with sickle–cell disease. al–Salem AH, et al. **Am J Surg** 1996 Sep;172(3):254–8
Surgical management of massive splenomegaly. Farid H, et al. **Am Surg** 1996 Oct;62(10):803–5
Concomitant laparoscopic cholecystectomy and splenectomy for surgical management of hereditary spherocytosis. Patton ML, et al. **Am Surg** 1997 Jun;63(6):536–9
Elective laparoscopic splenectomy for hematologic disorders. Stephens BJ, et al. **Am Surg** 1997 Aug;63(8):700–3
Laparoscopic splenectomy. Kitano S, et al. **Ann Acad Med Singapore** 1996 Sep;25(5):657–9
Treatment of chronic immune thrombocytopenic purpura [letter] Kao NL. **Ann Intern Med** 1997 Oct 1;127(7):572
Splenectomy for relapsing thrombotic thrombocytopenic purpura [letter; comment] Rice L. **Ann Intern Med** 1997 Jun 1;126(11):915. Comment on: Ann Intern Med 1996 Aug 15;125(4):294–6.
Intravenous immunoglobulin, splenectomy, and antibiotic prophylaxis in Wiskott–Aldrich syndrome. Litzman J, et al. **Arch Dis Child** 1996 Nov;75(5):436–9
HELLP syndrome in a pregnant patient with a past history of splenectomy for idiopathic thrombocytopenic purpura. Case report. Yamamoto H, et al. **Arch Gynecol Obstet** 1997; 259(2):105–7
End results of simultaneous pancreatectomy, splenectomy and total gastrectomy for patients with gastric carcinoma. Otsuji E, et al. **Br J Cancer** 1997;75(8):1219–23
Impact of splenectomy on circulating immunoglobulin levels and the development of postoperative infection following total gastrectomy for gastric cancer. Fujita T, et al. **Br J Surg** 1996 Dec;83(12):1776–8
Management of splenic injuries in a Canadian trauma centre. Garber BG, et al. **Can J Surg** 1996 Dec;39(6):474–80
The effect of splenectomy in hereditary spherocytosis by dual angle laser light cytometry. Ricard MP, et al. **Clin Lab Haematol** 1996 Dec;18(4):249–51
Nephrotic syndrome associated with chronic lymphocytic leukemia resistant to immunosuppressive drugs: remission obtained by splenectomy [see comments] Halimi JM, et al. **Clin Nephrol** 1996 Apr;45(4):273–6 (19 ref.). Comment in: Clin Nephrol 1997 Feb;47(2):131–3.
Pneumococcal keratitis, bacteremia, and septic arthritis in an asplenic patient. Rivera P, et al. **Cornea** 1996 Jul; 15(4):434–6
Effectiveness of partial splenectomy in hereditary spherocytosis. Tchernia G, et al. **Curr Opin Hematol** 1997 Mar;4(2):136–41 (37 ref.)
Serum phospholipase A2 in patients after splenectomy. Laine VJ, et al. **Eur J Clin Chem Clin Biochem** 1996 May; 34(5):419–22
The effect of splenectomy for hypersplenism on whole body protein turnover, resting metabolic rate and growth in sickle cell disease. Badaloo AV, et al. **Eur J Clin Nutr** 1996 Oct;50(10):672–5
Systemic pneumococcal disease after staging splenectomy for Hodgkin's disease 1969–1980 without pneumococcal vaccine protection: a follow–up study 1994. Foss Abrahamsen A, et al. **Eur J Haematol** 1997 Feb;58(2):73–7
Subtotal splenectomy in Gaucher's disease. Petroianu A. **Eur J Surg** 1996 Jun;162(6):511–3
Partial splenectomy in children with sickle cell disease and repeated episodes of splenic sequestration. Svarch E, et al. **Hemoglobin** 1996 Nov;20(4):393–400
The effect of granulocyte colony–stimulating factor (G–CSF) on bacterial translocation in the splenectomized rat. Paksoy M, et al. **Hepatogastroenterology** 1997 Mar–Apr; 44(14):411–6
Splenectomy in cancer surgery: diminishing indications? Odocha O, et al. **In Vivo** 1996 Mar–Apr;10(2):241–3
Hepatosplenic T–cell lymphoma: prolymphocytic transformation 18 months after splenectomy. Sohn SK, et al. **Int J Hematol** 1997 Aug;66(2):227–32
Subtotal splenectomy for treatment of patients with myelofibrosis and myeloid metaplasia. Petroianu A. **Int Surg** 1996 Apr–Jun;81(2):177–9
Surgical treatments of chronic idiopathic thrombocytopenic purpura and prognostic factors for splenectomy. Shiino Y, et al. **Int Surg** 1996 Apr–Jun;81(2):140–3
Role of splenectomy in chronic lymphocytic leukemia. Cusack JC Jr, et al. **J Am Coll Surg** 1997 Sep;185(3):237–43
Results and prognostic factors of splenectomy in idiopathic thrombocytopenic purpura. Winde G, et al. **J Am Coll Surg** 1996 Dec;183(6):565–74
Dental considerations in asplenic patients. De Rossi SS, et al. **J Am Dent Assoc** 1996 Sep;127(9):1359–63 (40 ref.)
Fatal Campylobacter jejuni infection in a patient splenectomised for thalassaemia. Jackson N, et al. **J Clin Pathol** 1997 May;50(5):436–7
Laparoscopic resection of accessory spleen for recurrent immune thrombocytopenic purpura 19 years after splenectomy. Diaz J, et al. **J Laparoendosc Surg** 1996 Oct; 6(5):337–9
Failure of partial splenectomy to ameliorate the anemia of pyruvate kinase deficiency. Sandoval C, et al. **J Pediatr Surg** 1997 Apr;32(4):641–2
Late recurrence of Hodgkin's disease after partial splenectomy. Slaiby JM, et al. **J Pediatr Surg** 1996 May; 31(5):731–2
Heterotopic splenic autotransplantation in a neonate with splenic rupture, leading to normal splenic function. Yamataka A, et al. **J Pediatr Surg** 1996 Feb;31(2):239–40
Successful emergency splenectomy during pregnancy in a patient with life–threatening idiopathic thrombocytopenia. Case report. Stiemer B, et al. **J Perinat Med** 1996; 24(6):703–6
Splenectomy for haematological disease. Jameson JS, et al. **J R Coll Surg Edinb** 1996 Oct;41(5):307–11

Effective splenectomy in agranulocytosis associated with systemic lupus erythematosus [letter] Formiga F, et al. **J Rheumatol** 1997 Jan;24(1):234–5

Granulocyte–macrophage colony–stimulating factor (GM–CSF) enhances pulmonary defenses against pneumococcal infections after splenectomy. Hebert JC, et al. **J Trauma** 1996 Oct;41(4):663–6

Indications for and results of splenectomy in different hematological disorders. Böhner H, et al. **Langenbecks Arch Chir** 1997;382(2):79–82

Resolution of autoimmune hemolytic anemia following splenectomy in CD3+ large granular lymphocyte leukemia. Gentile TC, et al. **Leuk Lymphoma** 1996 Oct; 23(3–4):405–8

Isolated splenic blastic transformation of idiopathic myelofibrosis and response to splenectomy. Ifthikharuddin JJ, et al. **Leuk Res** 1997 Mar;21(3):255–7

Splenectomy–reduced hepatic injury induced by ischemia/reperfusion in the rat. Okuaki Y, et al. **Liver** 1996 Jun;16(3):188–94

High–dose intravenous immune globulin and the response to splenectomy in patients with idiopathic thrombocytopenic purpura [letter] Fabris F, et al. **N Engl J Med** 1997 Oct 9;337(15):1088–9

High–dose intravenous immune globulin and the response to splenectomy in patients with idiopathic thrombocytopenic purpura. Law C, et al. **N Engl J Med** 1997 May 22;336(21):1494–8

Remission of progressive multifocal leukoencephalopathy following splenectomy and antiretroviral therapy in a patient with HIV infection [letter] Power C, et al. **N Engl J Med** 1997 Feb 27;336(9):661–2

High–dose intravenous immune globulin and the response to splenectomy in patients with idiopathic thrombocytopenic purpura [letter] Schneider P, et al. **N Engl J Med** 1997 Oct 9;337(15):1087–8; discussion 1089

Effect of immunosuppression and splenectomy in transplantation sarcomas in mice. Nigam SK, et al. **Panminerva Med** 1996 Dec;38(4):217–22

Splenectomy in the accelerated or blastic phase of chronic myelogenous leukemia: a single–institution, 25–year experience. Bouvet M, et al. **Surgery** 1997 Jul;122(1):20–5

Laparoscopic versus open splenectomy for immune thrombocytopenic purpura. Watson DI, et al. **Surgery** 1997 Jan;121(1):18–22

Splenectomy in biliary atresia patients with recurrent jaundice following partial splenic embolization. Ando H, et al. **Tohoku J Exp Med** 1997 Jan;181(1):167–74

Splenectomy in a patients with AIDS, generalized Mycobacterium genavense infection and severe pancytopenia [letter] Delpire P, et al. **Tuber Lung Dis** 1996 Dec;77(6):569–70

Effect of passage of Babesia ovis in the gerbil (Acomys cahirinus) on the course of infection in splenectomized lambs. Yeruham I, et al. **Vet Parasitol** 1996 Oct 15; 65(1–2):157–61

Experiments on the transmission of Babesia major and Babesia bigemina by Haemaphysalis punctata. Yin H, et al. **Vet Parasitol** 1996 Dec 2;67(1–2):89–98

Lack of benefit of combined pancreaticosplenectomy in D2 resection for proximal–third gastric carcinoma. Kodera Y, et al. **World J Surg** 1997 Jul–Aug;21(6):622–7; discussion 627–8

Surgical treatment for splenic hydatidosis. Safioleas M, et al. **World J Surg** 1997 May;21(4):374–7; discussion 378

Role of splenectomy in hematologic disorders. Schwartz SI. **World J Surg** 1996 Nov–Dec;20(9):1156–9

[Hematologic indications for splenectomy in childhood] Vyhnánek M, et al. **Rozhl Chir** 1997 Apr;76(4):200–2 (Eng. Abstr.) **(Cze)**

[Hereditary spherocytosis. Course and value of subtotal splenectomy] Castillo B, et al. **Arch Pediatr** 1997 Jun; 4(6):515–20 (Eng. Abstr.) **(Fre)**

[HIV infection and splenectomy: 3 cases and literature review] Greub G, et al. **Schweiz Med Wochenschr** 1996 Sep 7;126(36):1524–9 (36 ref.) (Eng. Abstr.) **(Fre)**

[Post–traumatic splenectomy] Schildberg FW, et al. **Anaesthesist** 1997 Apr;46(4):366–7 **(Ger)**

[The current status of vaccination and antibiotic prophylaxis in splenectomy. I: Adults] Funk EM, et al. **Chirurg** 1997 Jun;68(6):586–90 (25 ref.) (Eng. Abstr.) **(Ger)**

[Current status of vaccination and antibiotic prophylaxis in splenectomy. II: Children] Funk EM, et al. **Chirurg** 1997 Jun;68(6):591–5 (28 ref.) (Eng. Abstr.) **(Ger)**

[Diagnostic and therapeutic splenectomy in hematological diseases] Böhner H, et al. **Dtsch Med Wochenschr** 1997 Feb 7;122(6):163–6 (18 ref.) **(Ger)**

[A 55–year–old patient with Werlhof's disease] Schneider W, et al. **Internist (Berl)** 1996 Mar;37(3):315–7 **(Ger)**

[Effect of splenectomy on fracture healing] Schratt HE, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997; 114:709–13 (Eng. Abstr.) **(Ger)**

[Value of splenectomy in resection of stomach carcinoma] Wenger FA, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:797–9 (Eng. Abstr.) **(Ger)**

[Fulminant infection outcome after splenectomy] Rodriguez Gomez M, et al. **Pathologe** 1997 May;18(3):257–60 (Eng. Abstr.) **(Ger)**

[Appearance can be important] Rüegg R, et al. **Schweiz Med Wochenschr** 1997 Mar 1;127(9):367 **(Ger)**

[Traumatic splenic rupture--fatal increase in thrombocytes after splenectomy] Schulz F, et al. **Versicherungsmedizin** 1997 Apr 1;49(2):56–8 (Eng. Abstr.) **(Ger)**

[Comment on F. Schultz, K. Lieske: Traumatic splenic rupture--fatal thrombocyte increase after splenectomy (letter)] Voss R. **Versicherungsmedizin** 1997 Aug 1;49(4):137 **(Ger)**

[Liver transplantation and splenectomy in idiopathic portal hypertension] Petrowsky H, et al. **Z Gastroenterol** 1997 May;35(5):331–6 (Eng. Abstr.) **(Ger)**

[Is splenectomy "en principe" necessary for radical gastrectomy with systematic lymphadenectomy?] Nürnberger HR, et al. **Zentralbl Chir** 1996;121(2):144–7 (Eng. Abstr.) **(Ger)**

[Laparoscopic splenic surgery--report of 17 personal cases] Schwetling R, et al. **Zentralbl Chir** 1997;122(4):291–4 (15 ref.) (Eng. Abstr.) **(Ger)**

[Angioedema caused by splenectomy with malignant lymphoma followed by multiple myeloma 7 years later] Shahar A, et al. **Harefuah** 1997 May 1;132(9):624–6, 679 (Eng. Abstr.) **(Heb)**

[Indications for splenectomy in Gaucher's disease. Case report] Ferrazza P, et al. **G Chir** 1997 Apr;18(4):209–11 (Eng. Abstr.) **(Ita)**

[Non–parasitic splenic cysts] Teneriello FL, et al. **G Chir** 1997 Apr;18(4):222–8 (Eng. Abstr.) **(Ita)**

[Simultaneous mitral valve replacement and splenectomy in a patient with chronic idiopathic thrombocytopenic purpura] Yamada T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1809–13 (Eng. Abstr.) **(Jpn)**

[Improvement of bleeding tendency and normalized platelet count increment following splenectomy in a patient with refractory anemia] Kawai Y, et al. **Rinsho Ketsueki** 1997 Jun;38(6):532–8 (Eng. Abstr.) **(Jpn)**

[Chronic myelomonocytic leukemia with repeated respiratory failure associated with leukocytosis following splenic arterial embolization and splenectomy] Takimoto Y, et al. **Rinsho Ketsueki** 1996 Nov;37(11):1253–8 (Eng. Abstr.) **(Jpn)**

[Use of human recombinant granulopoietic colony growth factor rhGM–CSF combined with interferon alpha for preparation in preparation of a patient with hairy–cell leukemia for splenectomy] Cedrych I, et al. **Pol Tyg Lek** 1996 May;51(19–22):291–2 **(Pol)**

[The purposefulness of splenectomy as "a matter of principle" during surgery for stomach cancer] Simonov NN, et al. **Vopr Onkol** 1997;43(2):213–5 (Eng. Abstr.) **(Rus)**

[Babesiosis in a splenectomized patient. Is it the first case in Spain? (letter; comment)] López Jiménez L. **Med Clin (Barc)** 1997 May 10;108(18):717. Comment on: Med Clin (Barc) 1996 Mar 23;106(11):427–9. **(Spa)**

[Splenectomy as the treatment in a case of recurrent thrombotic thrombocytopenic purpura in a patient with HIV infection (letter)] Rodríguez–Baño J, et al. **Med Clin (Barc)** 1997 Jun 21;109(4):156 **(Spa)**

ADVERSE EFFECTS

Thromboembolic complication of splenectomy in unstable hemoglobin disorders: Hb Olmsted, Hb Koln [letter; comment] Phyliky RL, et al. **Am J Hematol** 1997 May; 55(1):53. Comment on: Am J Hematol 1996 Feb;51(2):133–6.

Postoperative complications after splenectomy for hematologic malignancies [letter; comment] Irving M. **Ann Surg** 1997 Jan;225(1):131–2. Comment on: Ann Surg 1996 Mar;223(3):290–6.

Avoiding infection after splenectomy [letter; comment] Waghorn DJ, et al. **Br J Gen Pract** 1996 Nov;46(412):691 . Comment on: Br J Gen Pract 1995 Sep;45(398):502–3.

Post–splenectomy thrombosis and haemolytic anaemias [letter; comment] Kemahli S, et al. **Br J Haematol** 1997 May;97(2):505. Comment on: Br J Haematol 1996 May;93(2):303–10.

Endophthalmitis and lumbar diskitis due to Acremonium falciforme in a splenectomized patient. Noble RC, et al. **Clin Infect Dis** 1997 Feb;24(2):277–8

Overwhelming postsplenectomy infection. Lynch AM, et al. **Infect Dis Clin North Am** 1996 Dec;10(4):693–707 (107 ref.)

Increased risk of breast cancer in splenectomized patients undergoing radiation therapy for Hodgkin's disease. Chung CT, et al. **Int J Radiat Oncol Biol Phys** 1997 Jan 15; 37(2):405–9

Role of splenectomy in gastric cancer surgery: adverse effect of elective splenectomy on longterm survival. Wanebo HJ, et al. **J Am Coll Surg** 1997 Aug;185(2):177–84

Case/control study of the role of splenectomy in chronic lymphocytic leukemia. Seymour JF, et al. **J Clin Oncol** 1997 Jan;15(1):52–60

Prevention of post splenectomy sepsis: a population based approach. Sarangi J, et al. **J Public Health Med** 1997 Jun; 19(2):208–12

Does antecedent splenectomy alter the course of HIV infection? Ahmed A, et al. **Med Health R I** 1996 Sep; 79(9):331–2

Splenectomy for en bloc node dissection in gastric cancer: a possible cause of portal vein thrombosis. Kogire M, et al. **Nippon Geka Hokan** 1996 May 1;65(2):49–53

Non–0:1 Vibrio cholerae septicemia in thalassemia patients. Laosombat V, et al. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):411–3

Surgical damage itself induces graft–versus–host disease--a preliminary report. Kobayashi E, et al. **Transplant Proc** 1996 Dec;28(6):3652–3

[The effect of splenectomy on alveolar macrophages morphology and function] Leng J, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jul;76(7):524–6 (Eng. Abstr.) **(Chi)**

[Portal vein thrombosis after splenectomy] Hoch J, et al. **Rozhl Chir** 1997 Apr;76(4):192–5 (Eng. Abstr.) **(Cze)**

[Pneumococcal vaccination after splenectomy (letter; comment)] Ejstrud P. **Ugeskr Laeger** 1996 Dec 16; 158(51):7430–1. Comment on: Ugeskr Laeger 1996 Oct 21;158(43):6069. **(Dan)**

[Mesenteric–portal thrombosis after hematologic splenectomy] Kunin N, et al. **J Chir (Paris)** 1996; 133(9–10):453–8 (Eng. Abstr.) **(Fre)**

[A fatal case of overwhelming postsplenectomy infection syndrome developing 10 years after splenectomy] Urata Y, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Jun; 20(3):184–90 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Comparative study of the protective role of the vaccine against Haemophilus influenzae type b and partial splenectomy in an experimental model] Pérez Maestu R, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):5–9 (Eng. Abstr.) **(Spa)**

[Acute abdomen caused by thrombosis of the portal and superior mesenteric veins in a splenectomized hematologic patient] Acea Nebril B, et al. **Gastroenterol Hepatol** 1997 Jun–Jul;20(6):299–302 (Eng. Abstr.) **(Spa)**

ECONOMICS

Protein A immunoadsorption column versus splenectomy in the treatment of steroid–resistant immune thrombocytopenic purpura. A cost–effectiveness analysis. Kunz K, et al. **Int J Technol Assess Health Care** 1996 Summer;12(3):436–49

INSTRUMENTATION

Laparoscopic splenectomy: preliminary experience. Yu SC, et al. **J Formos Med Assoc** 1996 Aug;95(8):635–8

Laparoscopic splenectomy using the harmonic scalpel. Rothenberg SS. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S61–3

METHODS

Comparative analysis of laparoscopic versus open splenectomy. Brunt LM, et al. **Am J Surg** 1996 Nov; 172(5):596–9; discussion 599–601

A case–controlled study of laparoscopic splenectomy. Diaz J, et al. **Am J Surg** 1997 Apr;173(4):348–50

Unresolved issues in laparoscopic splenectomy. Katkhouda N, et al. **Am J Surg** 1996 Nov;172(5):585–9; discussion 589–90

The lateral approach to laparoscopic splenectomy. Park A, et al. **Am J Surg** 1997 Feb;173(2):126–30

Late postoperative follow–up of patients submitted to subtotal splenectomy. Petroianu A, et al. **Am Surg** 1997 Aug;63(8):735–40

Laparoscopic splenectomy [letter; comment] Leggett PL. **Ann Surg** 1997 Jul;226(1):111–2. Comment on: Ann Surg 1996 Jul;224(1):19–28.

Laparoscopic splenectomy for immune thrombocytopenic purpura. Tsiotos G, et al. **Arch Surg** 1997 Jun;132(6):642–6

Is pediatric laparoscopic splenectomy safe and cost–effective? Waldhausen JH, et al. **Arch Surg** 1997 Aug;132(8):822–4

Technique of laparoscopic splenectomy with a powered vascular linear stapler. Miles WF, et al. **Br J Surg** 1996 Sep;83(9):1212–4

Laparoscopic splenectomy versus open splenectomy: a comparative study. Delaitre B, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):45–9

Transthoraco–phrenic esophageal transection with paraesophago–gastric devascularization and splenectomy using a stapler. Tsukada K, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):716–23

Laparoscopic or open splenectomy for hematologic disease: which approach is superior? Friedman RL, et al. **J Am Coll Surg** 1997 Jul;185(1):49–54

Laparoscopic–assisted surgery of the spleen: clinical experience in expanding indications. Bové T, et al. **J Laparoendosc Surg** 1996 Aug;6(4):213–7

Laparoscopic splenectomy in childhood hematologic disorders. Hicks BA, et al. **J Laparoendosc Surg** 1996 Mar; 6 Suppl 1:S31–4

Laparoscopic splenectomy using the harmonic scalpel. Rothenberg SS. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S61–3

Laparoscopic splenectomy for immune thrombocytopenic purpura. Zamir O, et al. **J Laparoendosc Surg** 1996 Oct; 6(5):301–4

Comparison of laparoscopic and open splenectomy in children with hematologic disorders [see comments] Farah RR, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):41–6. Comment in: J Pediatr 1997 Jul;131(1 Pt 1):6–7.

Laparoscopic versus open splenectomy: how clear is the choice? [editorial; comment] Warner BW. **J Pediatr** 1997 Jul;131(1 Pt 1):6–7. Comment on: J Pediatr 1997 Jul;131(1 Pt 1):41–6.

Technical aspects of laparoscopic splenectomy in children. Schleef J, et al. **J Pediatr Surg** 1997 Apr;32(4):615–7

Splenic conservation in the management of large splenic cysts: case report and literature review. Liew SH, et al.

J R Coll Surg Edinb 1997 Apr;42(2):135–7 (35 ref.)
Pediatric laparoscopic splenectomy: are there real advantages in comparison with the traditional open approach? Esposito C, et al. **Pediatr Surg Int** 1997 Sep;12(7):509–10
Conservative surgery for benign non-parasitic splenic cysts. Holland AJ, et al. **Pediatr Surg Int** 1997 Jul;12(5–6):353–5
Laparoscopic splenectomy in a Jehovah's Witness with profound anemia. Ferzli GS, et al. **Surg Endosc** 1997 Aug; 11(8):850–1
Laparoscopic splenectomy for ITP. The gold standard. Friedman RL, et al. **Surg Endosc** 1996 Oct;10(10):991–5
Laparoscopic splenectomy and nephrectomy in a rat model. Description of a new technique. Giuffrida MC, et al. **Surg Endosc** 1997 May;11(5):491–4
Laparoscopic splenectomy. The emerging standard. Glasgow RE, et al. **Surg Endosc** 1997 Feb;11(2):108–12
Laparoscopic splenectomy for splenic hamartoma. Yoshizumi T, et al. **Surg Endosc** 1997 Aug;11(8):848–9
Laparoscopic accessory splenectomy for recurrent idiopathic thrombocytopenic purpura. Amaral JF, et al. **Surg Laparosc Endosc** 1997 Aug;7(4):340–4 (15 ref.)
Lateral approach for laparoscopic splenectomy: a real advantage for beginners? [letter] Contini S, et al. **Surg Laparosc Endosc** 1996 Oct;6(5):417
Case report of pediatric laparoscopic splenectomy with technical review. Fujikawa T, et al. **Surg Laparosc Endosc** 1997 Jun;7(3):202–5
Laparoscopic splenectomy for chronic idiopathic thrombocytopenic purpura. Lee WJ, et al. **Surg Laparosc Endosc** 1997 Jun;7(3):209–12
Laparoscopic accessory splenectomy in recurrent chronic immune thrombocytopenic purpura. Rogers J, et al. **Surg Laparosc Endosc** 1997 Apr;7(2):83–5
Laparoscopic splenectomy aided by balloon occlusion of the splenic artery: report of a case. Yamashita H, et al. **Surg Laparosc Endosc** 1996 Aug;6(4):326–9
Laparoscopic splenectomy by the lateral approach: a safe and effective alternative to open splenectomy for hematologic diseases. Smith CD, et al. **Surgery** 1996 Nov; 120(5):789–94
Splenic tissue reimplantation during splenectomy--a good idea? Holt MC. **Trop Doct** 1996 Jul;26(3):132

MORTALITY

Causes of death among patients surviving at least one year following splenectomy. Linet MS, et al. **Am J Surg** 1996 Oct;172(4):320–3

VETERINARY

Pathologic factors affecting postsplenectomy survival in dogs. Spangler WL, et al. **J Vet Intern Med** 1997 May–Jun; 11(3):166–71

SPLENIC ARTERY

Rupture of splenic artery aneurysm in a pregnant patient with portal hypertension. Hillemanns P, et al. **Am J Obstet Gynecol** 1996 May;174(5):1665–6
Common splanchnic artery aneurysms: splenic, hepatic, and celiac. Shanley CJ, et al. **Ann Vasc Surg** 1996 May; 10(3):315–22 (124 ref.)
A rare complication of splenic artery aneurysm: mesenteric steal syndrome [letter; comment] Long SI. **Arch Surg** 1996 Oct;131(10):1116. Comment on: Arch Surg 1995 Jun;130(6):669–72.
Massive pancreatic duct haemorrhage. Orr KB. **Aust N Z J Surg** 1996 Dec;66(12):843–5
Rupture of splenic artery aneurysm after liver transplantation. Jovine E, et al. **Clin Transplant** 1996 Oct;10(5):451–4 (19 ref.)
A case of splenic artery aneurysm with Cushing's syndrome. Yoshitomi Y, et al. **Int J Cardiol** 1996 Jun;54(3):263–5 (5 ref.)
Coarctation of the abdominal aorta with left renal artery and splenic artery aneurysms. Dogan R, et al. **J Cardiovasc Surg (Torino)** 1996 Oct;37(5):457–61
Splenic artery occlusion masking portal hypertension. Bayraktar Y, et al. **J Clin Gastroenterol** 1996 Jun; 22(4):326–8
Hemosuccus pancreaticus from a splenic artery pseudoaneurysm: an unusual cause of upper gastrointestinal bleeding. Hwang YT, et al. **J Formos Med Assoc** 1996 Mar; 95(3):247–51
Pseudoaneurysm and splenic infarction in chronic pancreatitis--a case report. Lee HS, et al. **J Korean Med Sci** 1996 Apr;11(2):183–7
Massive upper gastrointestinal haemorrhage due to direct visceral erosion of splenic artery aneurysm. Shahani RB, et al. **J Postgrad Med** 1994 Oct–Dec;40(4):220–2
Splenic artery aneurysms. Hallett JW Jr. **Semin Vasc Surg** 1995 Dec;8(4):321–6
Visceral artery aneurysms. Messina LM, et al. **Surg Clin North Am** 1997 Apr;77(2):425–42 (40 ref.)
Partial splenic embolization for the treatment of hypersplenism in tropical splenomegaly. Pandey UC, et al. **Trop Doct** 1997 Apr;27(2):114–5
[Hemosuccus pancreaticus--a rare cause of upper gastrointestinal bleeding. Successful treatment in two cases by radiologic-interventional embolization of the splenic artery] Allgaier HP, et al. **Dtsch Med Wochenschr** 1996 Sep 20;121(38):1158–62 (Eng. Abstr.) **(Ger)**
[Ruptured pseudoaneurysm of the splenic artery. A complication of chronic pancreatitis] Kuhn R, et al. **Dtsch Med Wochenschr** 1996 Dec 13;121(50):1567–70 (Eng. Abstr.) **(Ger)**
[Diarrhea, massive ascites, and portal hypertension: rare case of a splenic arterio-venous fistula (letter)] Paquet KP. **Z Gastroenterol** 1996 Nov;34(11):XXI **(Ger)**
[Percutaneous embolization with tungsten coils of a splenic artery aneurysm: report of a case] Molani L, et al. **Radiol Med (Torino)** 1997 Apr;93(4):477–9 **(Ita)**
[The hemodynamic and functional effects of using embolization of the splenic artery and endoscopic sclerotherapy in patients with liver cirrhosis at the decompensation stage] Bulanov KI. **Lik Sprava** 1997 Mar–Apr;(2):46–9 (Eng. Abstr.) **(Rus)**
[Pseudoaneurysm of the splenic artery and chronic pancreatitis] Gabriel Botella F, et al. **An Med Interna** 1995 Aug;12(8):393–6 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Aneurysms of anomalous splenomesenteric trunk: clinical features and surgical management in two cases. Settembrini PG, et al. **J Vasc Surg** 1996 Oct;24(4):687–92

ANATOMY & HISTOLOGY

Tortuosity of the human splenic artery [letter] Malinovsky L, et al. **Clin Anat** 1997;10(2):142–3
Chances of using splenic artery as an accessory source of blood supply for kidneys. Koziorowski A, et al. **Folia Histochem Cytobiol** 1996;34 Suppl 1:63–4

DRUG EFFECTS

Prominent sympathetic purinergic vasoconstriction in the rabbit splenic artery: potentiation by 2,2'-pyridylisatogen tosylate. Ren LM, et al. **Br J Pharmacol** 1997 Feb; 120(3):530–6
Purinergic and adrenergic transmission and their presynaptic modulation in canine isolated perfused splenic arteries. Ren LM, et al. **Eur J Pharmacol** 1996 Jan 4;295(1):61–8

INJURIES

Aneurysmatic arteriovenous fistula complicating splenic injury. Sarioğlu A, et al. **Eur J Pediatr Surg** 1996 Jun; 6(3):183–5
Splanchnic artery pseudo-aneurysms secondary to blunt abdominal trauma in children. Gow KW, et al. **J Pediatr Surg** 1996 Jun;31(6):812–5
[Isolated trauma of the pancreas and splenic artery] Bastuev NV, et al. **Sud Med Ekspert** 1997 Jan–Mar;40(1):48–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Histochemical analysis of acidic glycoconjugates in the endothelium lining the splenic blood vessels in the rat. Ueda H, et al. **Arch Histol Cytol** 1996 Oct;59(4):389–97

PHYSIOLOGY

Splenic artery velocity waveforms in small-for-gestational-age fetuses: relationship with pH and blood gases measured in umbilical blood at cordocentesis. Capponi A, et al. **Am J Obstet Gynecol** 1997 Feb; 176(2):300–7

RADIOGRAPHY

Angiography/interventional case of the day. Splenic artery pseudoaneurysm associated with pancreatitis. LiPuma JP, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):259, 262–3
Salvage of a twisted distal splenorenal shunt graft by using metallic endoprosthesis. Owens CA, et al. **Surgery** 1997 Apr;121(4):465–7

SURGERY

Use of the splenic and hepatic artery for renal revascularization in patients with atherosclerotic renal artery disease. Geroulakos G, et al. **Ann Vasc Surg** 1997 Jan;11(1):85–9
Bilateral splenorenal bypass and axillofemoral graft for management of juxtarenal mycotic aneurysm. Marty-Ané C, et al. **Cardiovasc Surg** 1996 Jun;4(3):331–4
Renal artery stenosis [letter; comment] Geroulakos G, et al. **Eur J Vasc Endovasc Surg** 1997 Mar;13(3):342. Comment on: Eur J Vasc Endovasc Surg 1996 Apr;11(3):375–7.
Spleen-preserving distal pancreatectomy with conservation of the splenic artery and vein. Kimura W, et al. **Surgery** 1996 Nov;120(5):885–90
A first case report of the successful laparoscopic repair of a splenic artery aneurysm. Matsumoto K, et al. **Surgery** 1997 Apr;121(4):462–4
Results of using the recipient's splenic artery for arterial reconstruction in liver transplantation in 23 patients. Figueras J, et al. **Transplantation** 1997 Aug 27;64(4):655–8

TRANSPLANTATION

Results of using the recipient's splenic artery for arterial reconstruction in liver transplantation in 23 patients. Figueras J, et al. **Transplantation** 1997 Aug 27;64(4):655–8

ULTRASONOGRAPHY

Radiology for the surgeon. Case 12. Splenic laceration with pseudoaneurysm of the splenic artery. Tran CN, et al. **Can J Surg** 1996 Dec;39(6):450, 486
Splenic artery prior to rupture in the pancreatic pseudocyst: detection by endoscopic color Doppler ultrasonography. Koito K, et al. **J Ultrasound Med** 1996 Oct;15(10):721–4

SPLENIC DISEASES

see related

SPLENOSIS

Splenic abscesses from 1987 to 1995. Ooi LL, et al. **Am J Surg** 1997 Jul;174(1):87–93 (95 ref.)
[Epidermoid cyst of the spleen. 2 cases] Jego P, et al. **Ann Med Interne (Paris)** 1997;148(1):95–7 (Eng. Abstr.) **(Fre)**
[Splenic abscess. Diagnosis and treatment] Rerbakken G, et al. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1908–10 (35 ref.) (Eng. Abstr.) **(Nor)**

BLOOD

The importance of the peripheral blood film in systemic amyloidosis. Hawkins C, et al. **Clin Lab Haematol** 1996 Sep;18(3):219–20
Fibronectin, platelet factor 4 and beta-thromboglobulin in endemic hepatosplenic schistosomiasis: relation to acute hematemesis. el-Bassiouni NE, et al. **Haemostasis** 1997 Jan–Feb;27(1):39–48

CHEMICALLY INDUCED

Colosplenic fistula in a patient treated with interleukin-2 for malignant melanoma. Chun ES, et al. **J Comput Assist Tomogr** 1997 Jul–Aug;21(4):674–6 (8 ref.)

COMPLICATIONS

Thrombocytopenia in association with a wandering spleen. Moll S, et al. **Am J Hematol** 1996 Dec;53(4):259–63 (17 ref.)
Massive pancreatic duct haemorrhage. Orr KB. **Aust N Z J Surg** 1996 Dec;66(12):843–5
Spleenic abscess in a case of chronic myeloid leukemia. Somalwar AM, et al. **J Assoc Physicians India** 1996 Oct; 44(10):721–2
Splenic hamartoma associated with thrombocytopenia. Fujii T, et al. **J Gastroenterol** 1997 Feb;32(1):114–8
Autosplenectomy in systemic lupus erythematosus. Uthman I, et al. **J Rheumatol** 1996 Oct;23(10):1806–10 (18 ref.)
Prior fungal infection is not a contraindication to bone marrow transplant in patients with acute leukemia. Hoover M, et al. **Med Pediatr Oncol** 1997 Apr;28(4):268–73
Hepatosplenic abscess caused by Curvularia boedijn in a patient with acute monocytic leukemia. Shigemori M, et al. **Pediatr Infect Dis J** 1996 Dec;15(12):1128–9 (11 ref.)
Leiomyomas of the gallbladder and splenic calcifications in an HIV-infected child. Tomà P, et al. **Pediatr Radiol** 1997 Jan;27(1):92–4
[A rare complication of renal lithiasis: peritonitis and splenic abscess caused by rupture of pyonephrosis] Hendaoui MS, et al. **J Urol (Paris)** 1996;102(3):130–3 (Eng. Abstr.) **(Fre)**
[Splenic atrophy and fatal pneumococcal infection in inflammatory bowel disease] Maehlen J, et al. **Tidsskr Nor Laegeforen** 1997 May 20;117(13):1900–1 (Eng. Abstr.) **(Nor)**
[Asymptomatic chronic intrahepatic cholestasis and multiple hypodense nodules in the liver and the spleen: manifestations of a case of sarcoidosis] Guilarte López-Mañas J, et al. **Gastroenterol Hepatol** 1996 Aug-Sep;19(7):359–62 (Eng. Abstr.) **(Spa)**
[Tuberculous hepatosplenic abscess, human immunodeficiency virus infection and multiresistant tuberculosis] Valencia ME, et al. **Rev Clin Esp** 1996 Dec; 196(12):816–20 (Eng. Abstr.) **(Spa)**

CONGENITAL

Percutaneous treatment of a congenital splenic cyst with alcohol: a new therapeutic approach. Akhan O, et al. **Eur Radiol** 1997;7(7):1067–70
[Congenital splenic cyst in a child: therapeutic possibilities] Santos MM, et al. **Rev Assoc Med Bras** 1996 Oct–Dec; 42(4):253–7 **(Por)**

DIAGNOSIS

MR imaging of acquired abnormalities of the spleen. Ito K, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):697–702
Splenic mesothelial cysts mimicking lymphagiomas. Arber DA, et al. **Am J Surg Pathol** 1997 Mar;21(3):334–8
Practice tip. Looking for a liver edge or spleen. Hogan C. **Aust Fam Physician** 1997 Jun;26(6):758
Congenital abnormality of the liver initially misdiagnosed as splenic haematoma. Dunlop DG, et al. **J R Soc Med** 1996 Dec;89(12):702–4
Autosplenectomy in systemic lupus erythematosus. Uthman I, et al. **J Rheumatol** 1996 Oct;23(10):1806–10 (18 ref.)
Expand your differential. Waltzman RJ, et al. **Leuk Res** 1997 Jan;21(1):85–6
Ruptured splenic epidermoid cyst: case report and imaging appearances. Spencer NJ, et al. **Pediatr Radiol** 1996 Dec;

26(12):871–3
Inflammatory pseudotumor of the spleen in a young child. Aru GM, et al. **Pediatr Surg Int** 1997 Apr;12(4):299–301 (27 ref.)
Splenic hemangiomas and hamartomas: MR imaging characteristics of 28 lesions. Ramani M, et al. **Radiology** 1997 Jan;202(1):166–72
Wandering spleen: a challenging diagnosis. Desai DC, et al. **South Med J** 1997 Apr;90(4):439–43 (41 ref.)
"Splenic abscess in a HIV patient". Swamy TK, et al. **Trop Gastroenterol** 1995 Jul–Sep;16(3):29–31
[Chronic torsion of an ectopic spleen in the differential diagnosis of abdominal pain in a child. Case report] Machart M, et al. **Rozhl Chir** 1996 Oct;75(10):480–1 (Eng. Abstr.) **(Cze)**
[Diagnosis and therapy of splenic abscess exemplified by 3 unusual cases] Riediger H, et al. **Rontgenpraxis** 1997 Aug; 50(8):233–7 **(Ger)**
[Lymphocytoma of the spleen––a separate nosological form requiring a specific management procedure] Iakhnina EI, et al. **Ter Arkh** 1996;68(7):48–58 (Eng. Abstr.) **(Rus)**
[Constitutional syndrome in a 55–year–old woman. Cervical adenopathy and giant splenomegaly with nodular images in CAT and MR] Carmena J, et al. **Rev Clin Esp** 1996 Nov;196(11):789–90 **(Spa)**

DRUG THERAPY

Reduction of abdominal hydatid disease with prolonged treatment. Jover R, et al. **Am J Gastroenterol** 1997 Jul; 92(7):1231–2
Non–surgical treatment of splenic cyst, using with installation of minocycline chloride. Shimanuki K, et al. **Fukushima J Med Sci** 1996 Dec;42(1–2):23–30
Development of quinolone resistance in salmonella: failure to prevent splenic abscess [letter] Boswell TC, et al. **J Infect** 1997 Jan;34(1):86–7
Selection of multiple resistance in Salmonella enteritidis during treatment with ciprofloxacin. Pers C, et al. **Scand J Infect Dis** 1996;28(5):529–31
[Favourable course of a pseudotumoral form of hepatic and splenic sarcoidosis under treatment with hydroxychloroquine and colchicine (letter)] Joundy N, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1066–8 **(Fre)**

EPIDEMIOLOGY

Hepatosplenic candidiasis in patients with acute leukemia: incidence and prognostic implications. Anttila VJ, et al. **Clin Infect Dis** 1997 Mar;24(3):375–80

ETIOLOGY

Splenic function and alcohol addiction. Corazza GR, et al. **Alcohol Clin Exp Res** 1997 Apr;21(2):197–200
Spontaneous rupture of the spleen in amyloidosis [letter] Cubo T, et al. **Am J Emerg Med** 1997 Jul;15(4):443–4
Splenic abscess associated with osteomyelitis. Yelon JA, et al. **Eur J Surg** 1996 Nov;162(11):913–4
Partial splenectomy in children with sickle cell disease and repeated episodes of splenic sequestration. Svarch E, et al. **Hemoglobin** 1996 Nov;20(4):393–400
Appearance of multiple progressive nodules in the spleen of a renal graft recipient. Büchler M, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1739–41
Hepatosplenic cat–scratch disease and abdominal pain. Dunn MW, et al. **Pediatr Infect Dis J** 1997 Mar;16(3):269–72
Unsuspected hepatosplenic involvement in patients hospitalized with cat–scratch disease. Estrada B, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):720–1
Subcapsular splenic hematoma due to infectious mononucleosis. Tosato F, et al. **Riv Eur Sci Med Farmacol** 1995 Sep–Oct;17(5):157–9
Splenic abscess associated with pancreatic cancer: report of a case [letter] Nano J, et al. **Surgery** 1997 Feb;121(2):237–8
Subcapsular hematoma of the spleen associated with acute pancreatitis. Thompson JE Jr, et al. **Surgery** 1997 Feb; 121(2):231–3
[Intrathoracic volvulus of the spleen revealing left posterolateral diaphragmatic hernia] Bonnet JP, et al. **Arch Pediatr** 1996 Jul;3(7):701–4 (Eng. Abstr.) **(Fre)**
[Sweet's syndrome and aseptic abscess of the spleen] Quilichini R, et al. **Rev Med Interne** 1996;17(12):1029–31 (15 ref.) (Eng. Abstr.) **(Fre)**
[Atypical cat–scratch disease: a case report of splenic granulomatosis] Dodi I, et al. **Pediatr Med Chir** 1997 Mar–Apr;19(2):143–4 (Eng. Abstr.) **(Ita)**
[Sarcoidosis representing multiple splenic nodules in a patient with IgA nephropathy] Nishiya H, et al. **Nippon Jinzo Gakkai Shi** 1996 Jan;38(1):40–5 (16 ref.) (Eng. Abstr.) **(Jpn)**
[Wegener's granulomatosis with massive splenic necrosis (letter)] De Frutos Arribas JF, et al. **An Med Interna** 1996 Feb;13(2):100–1 **(Spa)**
[Subcapsular splenic hematoma associated with cytomegalovirus in an immunocompetent patient (letter)] Losada L, et al. **Enferm Infecc Microbiol Clin** 1997 Feb; 15(2):121–2 **(Spa)**

IMMUNOLOGY

Association of hepatosplenic schistosomiasis with HLA–DQB1*0201. Secor WE, et al. **J Infect Dis** 1996 Nov; 174(5):1131–5

METABOLISM

[Study on mitochondrial ultrastructure, trace elements and correlative factors of gastric mucosa in patients with spleen deficiency syndrome] Yin GY, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Dec; 15(12):719–23 (Eng. Abstr.) **(Chi)**

MICROBIOLOGY

Infective endocarditis and occult splenic abscess caused by Brucella melitensis infection: a case report and review of the literature. Saadeh AM, et al. **Acta Cardiol** 1996; 51(3):279–85 (32 ref.)
Candida splenic abscess in the absence of obvious immunodeficiency. Kapur A, et al. **Am J Gastroenterol** 1997 Mar;92(3):509–12 (29 ref.)
Splenic abscess: a rare sequel to renal abscess caused by staghorn calculi. Yeh JT, et al. **Br J Urol** 1997 Sep; 80(3):504–5
Actinomycotic splenic abscesses presenting with arthritis. Quintero–Del–Rio AI, et al. **Clin Exp Rheumatol** 1997 Jul–Aug;15(4):445–8 (13 ref.)
Granulomatous hepatitis and necrotizing splenitis due to Bartonella henselae in a patient with cancer: case report and review of hepatosplenic manifestations of bartonella infection. Liston TE, et al. **Clin Infect Dis** 1996 Jun; 22(6):951–7 (45 ref.)
Hepatosplenic abscesses due to Brucella melitensis: report of a case involving a child and review of the literature. Vallejo JG, et al. **Clin Infect Dis** 1996 Mar;22(3):485–9 (22 ref.)
[Splenic pneumocystosis disclosing extrapulmonary pneumocystosis of fatal outcome (letter)] Grasland A, et al. **Ann Med Interne (Paris)** 1997;148(2):184–5 **(Fre)**
[Prosthetic endocarditis and splenic abscess caused by Clostridium clostridiformis] Robles P, et al. **Rev Esp Cardiol** 1997 May;50(5):360–2 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Clinical and endoscopic aspects of hepatosplenic schistosomiasis in Uganda. Ravera M, et al. **Eur J Gastroenterol Hepatol** 1996 Jul;8(7):693–7
[What is your diagnosis? Calcified Echinococcus cysts in the spleen] Braunschweig M. **Schweiz Rundsch Med Prax** 1997 May 21;86(21):885–6 **(Ger)**

PATHOLOGY

Splenic cysts in children. Ho YH, et al. **Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih** 1997 Jan–Feb;38(1):44–8
Sarcoid–like reaction in the regional lymph nodes and spleen in gastric carcinoma: a clinicopathologic study of five cases. Kojima M, et al. **Gen Diagn Pathol** 1997 Jun; 142(5–6):347–52
Lymphangiomatous hamartoma of the spleen. Narita T, et al. **Pathol Res Pract** 1995 Nov;191(11):1165–7

PHYSIOPATHOLOGY

Systemic and hepatic hemodynamics in hepatosplenic Manson's schistosomiasis with and without propranolol. Mies S, et al. **Dig Dis Sci** 1997 Apr;42(4):751–61

RADIOGRAPHY

Abdominal visceral calcification in primary amyloidosis: CT findings. Jacobs JE, et al. **Abdom Imaging** 1997 Sep–Oct; 22(5):519–21 (8 ref.)
CT hepatic and splenic appearances with sarcoidosis. Hoeffel C, et al. **Eur J Radiol** 1996 Sep;23(2):94–6
Splenic parenchymal complications of pancreatitis: CT findings and natural history. Rypens F, et al. **J Comput Assist Tomogr** 1997 Jan–Feb;21(1):89–93
CT patterns of nodular hepatic and splenic sarcoidosis: a review of the literature. Scott GC, et al. **J Comput Assist Tomogr** 1997 May–Jun;21(3):369–72 (11 ref.)
A case of splenic cyst. Das T, et al. **J Indian Med Assoc** 1996 Aug;94(8):321
Radiological features of a symptomatic splenic hamartoma. Thompson SE, et al. **Pediatr Radiol** 1996 Sep;26(9):657–60
Traumatic pseudocyst of the spleen. Woody JD, et al. **Tenn Med** 1996 Oct;89(10):372–3
[Unusual computerized tomography finding of hepato–splenic granuloma in a case of sarcoidosis] Calculli L, et al. **Radiol Med (Torino)** 1996 Dec;92(6):808–9 **(Ita)**
[Pseudocysts of the spleen] Grintsov AG, et al. **Vestn Khir Im I I Grek** 1996;155(3):83 **(Rus)**
[Radiation diagnosis of spleen diseases] Vlasov PV, et al. **Vestn Rentgenol Radiol** 1997 May–Jun;(3):27–34 (28 ref.) (Eng. Abstr.) **(Rus)**

REHABILITATION

Computed tomography grade of splenic injury is predictive of the time required for radiographic healing. Lynch JM, et al. **J Pediatr Surg** 1997 Jul;32(7):1093–5; discussion 1095–6

SURGERY

Splenectomy in patients with sickle–cell disease. al–Salem AH, et al. **Am J Surg** 1996 Sep;172(3):254–8
Laparoscopic splenectomy. Kitano S, et al. **Ann Acad Med Singapore** 1996 Sep;25(5):657–9
Spleen–sparing surgical treatment for echinococcosis of the spleen. Manouras AJ, et al. **Br J Surg** 1997 Aug;84(8):1162
Decapsulation of symptomatic splenic pseudocyst––a further use for laparoscopic surgery in children. Liu KK, et al. **Eur J Surg** 1996 Nov;162(11):921–3
Splenic hydatid cyst in children––a report of two cases. Debnath B, et al. **J Indian Med Assoc** 1997 Mar;95(3):85, 87
Laparoscopic–assisted surgery of the spleen: clinical experience in expanding indications. Bové T, et al. **J Laparoendosc Surg** 1996 Aug;6(4):213–7
Laparoscopic treatment of nonparasitic cysts of spleen and liver. Cala Z, et al. **J Laparoendosc Surg** 1996 Dec; 6(6):387–91
Laparoscopic treatment or a nonparasitic splenic cyst: case report. Calligaris L, et al. **J Laparoendosc Surg** 1996 Dec; 6(6):431–4
Partial decapsulation of splenic epithelial cysts: studies on etiology and outcome. Touloukian RJ, et al. **J Pediatr Surg** 1997 Feb;32(2):272–4
Splenic conservation in the management of large splenic cysts: case report and literature review. Liew SH, et al. **J R Coll Surg Edinb** 1997 Apr;42(2):135–7 (35 ref.)
Conservative surgery for benign non–parasitic splenic cysts. Holland AJ, et al. **Pediatr Surg Int** 1997 Jul;12(5–6):353–5
Hand–assisted laparoscopic splenectomy for hydatid cyst. Ballaux KE, et al. **Surg Endosc** 1997 Sep;11(9):942–3
Laparoscopic treatment of a benign splenic cyst. Sellers GJ, et al. **Surg Endosc** 1997 Jul;11(7):766–8
Laparoscopic splenectomy for splenic hamartoma. Yoshizumi T, et al. **Surg Endosc** 1997 Aug;11(8):848–9
Laparoscopic approach for treatment of a primary splenic cyst. Heidenreich A, et al. **Surg Laparosc Endosc** 1996 Jun; 6(3):243–6
Surgical treatment for splenic hydatidosis. Safioleas M, et al. **World J Surg** 1997 May;21(4):374–7; discussion 378
[Post–traumatic splenic pseudocyst in a child and surgical treatment] Kirchmannová L, et al. **Rozhl Chir** 1996 Jun; 75(6):313–5 (Eng. Abstr.) **(Cze)**
[Percutaneous ultrasound controlled drainage of large splenic abscesses] Schäberle W, et al. **Chirurg** 1997 Jul;68(7):744–8 (29 ref.) (Eng. Abstr.) **(Ger)**
[Splenic cyst––a classical "incidental finding"] Klee FE, et al. **Zentralbl Chir** 1996;121(10):805–16 (192 ref.) (Eng. Abstr.) **(Ger)**
[Laparoscopic splenic surgery––report of 17 personal cases] Schwetling R, et al. **Zentralbl Chir** 1997;122(4):291–4 (15 ref.) (Eng. Abstr.) **(Ger)**
[Primary cysts of the spleen: a case report] Amicucci G, et al. **Ann Ital Chir** 1996 Sep–Oct;67(5):689–91 (Eng. Abstr.) **(Ita)**
[Unusual pathology of the spleen] Costantini R, et al. **G Chir** 1997 Mar;18(3):143–9 (62 ref.) (Eng. Abstr.) **(Ita)**
[Non–parasitic splenic cysts] Teneriello FL, et al. **G Chir** 1997 Apr;18(4):222–8 (Eng. Abstr.) **(Ita)**
[Nonparasitic cysts of the spleen] Ratner GL, et al. **Vestn Khir Im I I Grek** 1997;156(1):104–5 **(Rus)**

THERAPY

Percutaneous treatment of a congenital splenic cyst with alcohol: a new therapeutic approach. Akhan O, et al. **Eur Radiol** 1997;7(7):1067–70
Interventional radiological treatments tested [news] Skolnick AA. **JAMA** 1997 May 14;277(18):1424–5
[Congenital splenic cyst in a child: therapeutic possibilities] Santos MM, et al. **Rev Assoc Med Bras** 1996 Oct–Dec; 42(4):253–7 **(Por)**

ULTRASONOGRAPHY

Our experience in the diagnostics of liver and spleen hemangiomas. Velkova K, et al. **Folia Med (Plovdiv)** 1997; 39(1):85–91
Splenic pneumocystosis in AIDS: unusual ultrasound appearances. Harvey CJ, et al. **Int J STD AIDS** 1997 May; 8(5):342–4
[What is your diagnosis? Calcified Echinococcus cysts in the spleen] Braunschweig M. **Schweiz Rundsch Med Prax** 1997 May 21;86(21):885–6 **(Ger)**
[Apparent double echogenicity of the splenic parenchyma: a sign of perisplenic elongation of the left hepatic lobe. Report of 3 cases] Mantovani G, et al. **Radiol Med (Torino)** 1997 May;93(5):645–7 **(Ita)**

VETERINARY

[Isolated splenic torsion in dogs with special emphasis on B–mode and color doppler sonography] Janthur M. **Berl Munch Tierarztl Wochenschr** 1997 Jul–Aug; 110(7–8):272–80 (Eng. Abstr.) **(Ger)**

SPLENIC INFARCTION

CHEMICALLY INDUCED

Splenic infarction related to cocaine use [letter] Vaghjimal A. **Postgrad Med J** 1996 Dec;72(854):768

COMPLICATIONS

Intestinal obstruction caused by splenic volvulus: report of a case. Calik A, et al. **Surg Today** 1996;26(9):704–6

DIAGNOSIS

Splenic infarct presenting as acute abdominal pain in an older patient. Beeson MS. **J Emerg Med** 1996 May–Jun; 14(3):319–22

Splenic emergencies. Emery KH. **Radiol Clin North Am** 1997 Jul;35(4):831–43 (33 ref.)

ETIOLOGY

Splenic infarction: report of three cases of atherosclerotic embolization originating in the aorta and retrospective study of 64 cases. Frippiat F, et al. **Acta Clin Belg** 1996; 51(6):395–402

Images in hematology. Hemoglobin SC disease. Moll S, et al. **Am J Hematol** 1997 Apr;54(4):313

Isolated splenic infarction following left cardiac catheterization: case report and a review of the literature. Knobel B, et al. **Cathet Cardiovasc Diagn** 1996 Aug; 38(4):365–8 (20 ref.)

Liver–spleen infarcts following transcatheter chemoembolization: a case report and review of the literature on adverse effects. Cohen SE, et al. **Dig Dis Sci** 1997 May;42(5):938–43 (29 ref.)

Splenic infarct in falciparum malaria [letter] Sur AK, et al. **Indian Pediatr** 1997 Jan;34(1):72

Pseudoaneurysm and splenic infarction in chronic pancreatitis—a case report. Lee HS, et al. **J Korean Med Sci** 1996 Apr;11(2):183–7

Acute splenic complications in children with sickle cell–hemoglobin C disease. Aquino VM, et al. **J Pediatr** 1997 Jun;130(6):961–5

Splenic infarction in a child with portal hypertension secondary to biliary atresia. Matsui A, et al. **J Pediatr Surg** 1997 Apr;32(4):648–9

Total splenic infarction in acute pancreatitis. Rice PF, et al. **J R Coll Surg Edinb** 1996 Feb;41(1):54–5

Splenic and renal infarctions complicating atrial fibrillation. Argiris A. **Mt Sinai J Med** 1997 Sep–Oct;64(4–5):342–9

[Splenic infarction in a HIV-infected patient. Apropos of a case and review of the literature] Aouad K, et al. **J Chir (Paris)** 1996;133(8):392–5 (19 ref.) (Eng. Abstr.) **(Fre)**

[Splenic infarct, lactate acidosis, and pulmonary edema as manifestations of a pheochromocytoma] Bischof T, et al. **Schweiz Med Wochenschr** 1997 Feb 15;127(7):261–5 (Eng. Abstr.) **(Ger)**

[Hemoperitoneal splenic infarct of cryptogenic origin (letter)] Escudero de Fernández MD, et al. **Rev Esp Enferm Dig** 1997 Jun;89(6):491–3 **(Spa)**

SURGERY

Intestinal obstruction caused by splenic volvulus: report of a case. Calik A, et al. **Surg Today** 1996;26(9):704–6

SPLENIC NEOPLASMS

Gamma/delta T-cell hepatosplenic lymphoma: review of the literature, diagnosis by flow cytometry and concomitant autoimmune hemolytic anemia. Sallah S, et al. **Ann Hematol** 1997 Mar;74(3):139–42 (15 ref.)

Current approach to the biology and treatment of chronic lymphoid malignancies other than CLL. Catovsky D. **Hematol Cell Ther** 1996 Dec;38 Suppl 2:S63–6 (27 ref.)

BLOOD

Splenic lymphocytes with circulating villous lymphocytes—a case report. Gupta D, et al. **Indian J Cancer** 1996 Dec; 33(4):183–6

CHEMICALLY INDUCED

An unusual case of a splenic gamma/delta T-cell lymphoma with angiocentric tendency and haemophagocytic syndrome. Zabernigg A, et al. **Leuk Lymphoma** 1996 Nov; 23(5–6):631–4

COMPLICATIONS

Acquired von Willebrand's disease due to aberrant expression of platelet glycoprotein Ib by marginal zone lymphoma cells. Tefferi A, et al. **Br J Haematol** 1997 Mar;96(4):850–3

Malignant lymphoma with severe hypoglycaemia [letter] Camci C, et al. **Eur J Cancer** 1996 Nov;32A(12):2185

Splenic leiomyoma: an uncommon localization. Oğuzkurt P, et al. **Eur J Pediatr Surg** 1996 Aug;6(4):235–7

Case report: primary splenic non-Hodgkin's B cell lymphoma in a patient with chronic hepatitis C. Fukutomi T, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):724–7 (29 ref.)

Beckwith–Wiedemann syndrome and splenic hemangioma: report of a case. Herman TE, et al. **Pediatr Radiol** 1997 Apr;27(4):350–2

Association of splenic lymphoma with villous lymphocytes and primary biliary cirrhosis in a man [letter] [corrected and republished letter originally printed in Sangre (Barc) 1996 Feb;41(1):71] de Figueiredo M, et al. **Sangre (Barc)** 1996 Jun;41(3):262–3

Hemophagocytic syndrome in a case of splenic large B-cell lymphoma. Büchi G, et al. **Tumori** 1996 Nov–Dec; 82(6):621–4

[Autoimmune hemolytic anemia disclosing splenic lymphoma with villous lymphocyte (letter)] Bonichon N, et al. **Presse Med** 1997 Mar 1;26(6):270 **(Fre)**

[Non-Hodgkin's lymphoma of the spleen and hepatitis C. Report of a clinical case] Mancuso G, et al. **Minerva Med** 1997 Mar;88(3):97–9 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

MR imaging of acquired abnormalities of the spleen. Ito K, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):697–702

Splenic mesothelial cysts mimicking lymphagiomas. Arber DA, et al. **Am J Surg Pathol** 1997 Mar;21(3):334–8

Splenic hemangiomas and hamartomas: MR imaging characteristics of 28 lesions. Ramani M, et al. **Radiology** 1997 Jan;202(1):166–72

Splenic lymphangiomatosis in children. Wadsworth DT, et al. **Radiology** 1997 Jan;202(1):173–6

Immunoglobulin gene polymerase chain reaction to distinguish hyperreactive malarial splenomegaly from 'African' chronic lymphocytic leukaemia and splenic lymphoma. Jimmy EO, et al. **Trans R Soc Trop Med Hyg** 1996 Jan–Feb;90(1):37–9

[Splenomegaly and portal hypertension of unusual etiology in a 62-year-old patient] Zahner J, et al. **Internist (Berl)** 1996 Aug;37(8):844–7 **(Ger)**

[Angiosarcoma of the spleen (letter)] Marín Pérez-Tabernero A, et al. **Rev Esp Enferm Dig** 1997 Jan;89(1):70–1 **(Spa)**

ENZYMOLOGY

Purification of DNA topoisomerase I from the spleen of a patient with non-Hodgkin's lymphoma. Florell SR, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3467–74

ETIOLOGY

Epstein–Barr virus (EBV)-associated hepatic and splenic smooth muscle tumours after kidney transplantation. Morel D, et al. **Nephrol Dial Transplant** 1996 Sep;11(9):1864–6

GENETICS

Hepatosplenic gamma/delta T-cell lymphoma: a report of two cases in immunocompromised patients, associated with isochromosome 7q. François A, et al. **Am J Surg Pathol** 1997 Jul;21(7):781–90 (43 ref.)

Frequent involvement of chromosomes 1, 3, 7 and 8 in splenic marginal zone B-cell lymphoma. Solé F, et al. **Br J Haematol** 1997 Aug;98(2):446–9

Isochromosomes of both short and long arms of chromosome 12 resulting in an additional copy of chromosome 12 in a case of splenic lymphoma with villous lymphocytes. Morgan SM, et al. **Cancer Genet Cytogenet** 1997 Jul 1; 96(1):13–6

Fre-2, a locus closely linked to Fv-2, is rearranged in some erythroleukemias induced by Friend murine leukemia virus. Eisel D, et al. **Leukemia** 1997 Apr;11 Suppl 3:155–9

[Splenic lymphoma with villous lymphocytes and complex chromosomal abnormality] Hamamoto K, et al. **Rinsho Ketsueki** 1997 Jun;38(6):544–9 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Cytotoxic T-lymphocyte differentiation and cytogenetic alterations in gammadelta hepatosplenic T-cell lymphoma and posttransplant lymphoproliferative disorders [letter; comment] Salhany KE, et al. **Blood** 1997 May 1; 89(9):3490–1. Comment on: Blood 1996 Nov 1;88(9):3626–33. Comment on: Blood 1996 Dec 1;88(11):4265–74.

Cytokine response of B lymphocytes from splenic lymphoma with villous lymphocytes: correlation with TNF-RII (p75) and CD11c expression. Treton D, et al. **Hematol Cell Ther** 1996 Aug;38(4):345–52

Circulating villous lymphocytes—a link between hyperreactive malarial splenomegaly and splenic lymphoma. Bates I, et al. **Trans R Soc Trop Med Hyg** 1997 Mar–Apr;91(2):171–4

METABOLISM

BCL-2 oncoprotein (p26) in splenic lymphoma with villous lymphocytes: a comparative study with other chronic B-cell disorders. Lima M, et al. **Am J Hematol** 1997 Oct; 56(2):122–5

Dissection of tumour and host cells from target organs of metastasis for testing gene expression directly ex vivo. Rocha M, et al. **Br J Cancer** 1996 Oct;74(8):1216–22

PATHOLOGY

Littoral cell angioma in a patient with Epstein syndrome. Sallah S, et al. **Acta Haematol** 1997;98(2):113–5

Hepatosplenic T-cell lymphoma: sinusoidal localization of malignant T-cells—a case report [letter] Kakkar N, et al. **Am J Hematol** 1996 Dec;53(4):278–9

Splenic vascular tumors: a histologic, immunophenotypic, and virologic study. Arber DA, et al. **Am J Surg Pathol** 1997 Jul;21(7):827–35

Splenic micro-anatomical localization of small lymphocytic lymphoma/chronic lymphocytic leukemia using a novel combined silver nitrate and immunoperoxidase technique. Edelman M, et al. **Am J Surg Pathol** 1997 Apr;21(4):445–52

Cystic smooth-muscle tumor of the liver and spleen associated with Epstein–Barr virus after renal transplantation. Le Bail B, et al. **Am J Surg Pathol** 1996 Nov;20(11):1418–25

Lymph node involvement by splenic marginal zone lymphoma: morphological and immunohistochemical features. Mollejo M, et al. **Am J Surg Pathol** 1997 Jul; 21(7):772–80

Further evidence supporting the sinus lining cell nature of splenic littoral cell angiosarcoma [letter] Rosso R, et al. **Am J Surg Pathol** 1996 Dec;20(12):1531

Hepatosplenic T-cell lymphoma: a distinct clinicopathologic entity of cytotoxic gamma delta T-cell origin [see comments] Cooke CB, et al. **Blood** 1996 Dec 1; 88(11):4265–74. Comment in: Blood 1997 May 1;89(9):3490–1.

Common clonal origin of lymphocytes and plasma cells in splenic lymphoma with villous lymphocytes. Katayama Y, et al. **Br J Haematol** 1997 Jun;97(3):626–34

Use of fine-needle aspiration biopsy in the evaluation of splenic lesions in a cancer center. Caraway NP, et al. **Diagn Cytopathol** 1997 Apr;16(4):312–6

Rhabdomyosarcoma of the spleen. Feakins RM, et al. **Histopathology** 1996 Dec;29(6):577–9

Intrasinusoidal bone marrow infiltration: a possible hallmark of splenic lymphoma. Franco V, et al. **Histopathology** 1996 Dec;29(6):571–5

Hepatosplenic gammadelta T-cell lymphoma: ultrastructural, immunophenotypic, and functional evidence for cytotoxic T lymphocyte differentiation. Salhany KE, et al. **Hum Pathol** 1997 Jun;28(6):674–85

Hepatosplenic T-cell lymphoma: prolymphocytic transformation 18 months after splenectomy. Sohn SK, et al. **Int J Hematol** 1997 Aug;66(2):227–32

Non-Hodgkin's lymphoproliferative disorders involving the spleen. Arber DA, et al. **Mod Pathol** 1997 Jan;10(1):18–32

Lymphangiomatous hamartoma of the spleen. Narita T, et al. **Pathol Res Pract** 1995 Nov;191(11):1165–7

Critical comentary to "lymphangiomatous hamartoma of the spleen". Sakuma T. **Pathol Res Pract** 1995 Nov; 191(11):1168–9

Splenic lymphoma: unusual case with exclusive red pulp involvement. Faravelli A, et al. **Pathologica** 1995 Dec; 87(6):692–5

Hemangiosarcoma of the spleen. Report of a case. Reale A, et al. **Pathologica** 1996 Feb;88(1):49–51

Splenomegaly. al-Omishy H, et al. **Postgrad Med J** 1997 Feb; 73(856):125–6

[Splenic lymphoma with villous lymphocytes: morphologic, immunologic and molecular study. Report of three cases (published erratum appears in Ann Pathol 1997 Apr;17(2):122)] Labouyrie E, et al. **Ann Pathol** 1996 Sep; 16(4):285–91 (Eng. Abstr.) **(Fre)**

[Splenic lymphoma with villous lymphocytes. A clinical case] Brambilla Pisoni G, et al. **Minerva Med** 1997 Jul–Aug; 88(7–8):311–6 (Eng. Abstr.) **(Ita)**

[Splenic lymphoma with villous lymphocytes and complex chromosomal abnormality] Hamamoto K, et al. **Rinsho Ketsueki** 1997 Jun;38(6):544–9 (Eng. Abstr.) **(Jpn)**

[Splenic lymphoma of the marginal zone (letter; comment)] Calvo Villas JM, et al. **Med Clin (Barc)** 1997 Mar 29; 108(12):478. Comment on: Med Clin (Barc) 1996 Feb 3;106(4):141–3. **(Spa)**

[Lymphoma of the marginal zone of the spleen. A case study] Navarro JT, et al. **Med Clin (Barc)** 1996 Feb 3;106(4):141–3 (15 ref.) (Eng. Abstr.) **(Spa)**

[Splenic lymphoma with circulating hairy lymphocytes lymphoma. Clinical cytological study of 4 patients] Jiménez S, et al. **Sangre (Barc)** 1995 Dec;40(6):453–7 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

99mTc-DTPA-HSA uptake in a case of splenic hamartoma. Ohta H, et al. **Ann Nucl Med** 1996 Nov;10(4):449–51

Tc-99m MDP uptake in a calcified untreated non-Hodgkin's lymphoma of spleen. Kim P, et al. **Clin Nucl Med** 1997 May;22(5):343–4

In-111 CYT-103 immunoscintigraphy of isolated splenic metastasis from ovarian carcinoma. Nguyen BD, et al. **Clin Nucl Med** 1997 Apr;22(4):256–7

Three-phase Tc-99m labeled RBC scintigraphy of a splenic hemangioma. Phillpott J, et al. **Clin Nucl Med** 1997 Mar; 22(3):158–60

SECONDARY

Adenocarcinoma of the fallopian tube. Natural history of an isolated splenic metastasis. Dubecq-Princeteau F, et al. **Acta Oncol** 1997;36(2):221–3

Dissection of tumour and host cells from target organs of metastasis for testing gene expression directly ex vivo. Rocha M, et al. **Br J Cancer** 1996 Oct;74(8):1216–22

Solitary splenic metastasis from colorectal carcinoma. Mainprize KS, et al. **Br J Surg** 1997 Jan;84(1):70

Metastatic choriocarcinoma with spontaneous splenic rupture following term pregnancy: a case report. Hou HC, et al. **Chang Keng I Hsueh** 1996 Jun;19(2):166–70

In-111 CYT-103 immunoscintigraphy of isolated splenic metastasis from ovarian carcinoma. Nguyen BD, et al. **Clin Nucl Med** 1997 Apr;22(4):256–7

Solitary splenic metastasis of an adenocarcinoma of the

ovaries. Max LD, et al. **Gynecol Obstet Invest** 1996; 42(3):214–6

Spontaneous rupture of the spleen secondary to metastatic teratoma. Cook AM, et al. **J R Soc Med** 1996 Dec; 89(12):710

Isolated splenic metastases from colon cancer. Indudhara R, et al. **South Med J** 1997 Jun;90(6):633–6 (24 ref.)

[Initial diagnosis of melanoma metastasis to the spleen: case report of follow-up in atypical early invasion of the spleen] Hess U, et al. **Rontgenpraxis** 1996 Feb;49(2):23–24 **(Ger)**

[Atypical metastasis of stomach carcinoma] Friedrich T, et al. **Zentralbl Chir** 1997;122(2):117–21 (Eng. Abstr.) **(Ger)**

[Solitary splenic metastasis of bladder carcinoma. Report of a clinical case] Vittoria A, et al. **Minerva Chir** 1996 Oct; 51(10):855–9 (Eng. Abstr.) **(Ita)**

[A case of solitary metastatic splenic tumor of ovarian carcinoma] Kobayashi A, et al. **Gan To Kagaku Ryoho** 1997 Aug;24(10):1341–5 (7 ref.) (Eng. Abstr.) **(Jpn)**

[A case of solitary splenic metastasis from colon cancer] Sawai T, et al. **Nippon Geka Gakkai Zasshi** 1996 Dec; 97(12):1109–11 (Eng. Abstr.) **(Jpn)**

[A case of cecum cancer metastasizing to the spleen after right hemicolectomy] Fuku A, et al.
Nippon Shokakibyo Gakkai Zasshi 1997 Jan;94(1):33–7 (8 ref.) **(Jpn)**

[An unusual course of carcinoid tumor] Boguslavskaia MI, et al. **Klin Med (Mosk)** 1996;74(7):59–60 **(Rus)**

[Metastatic splenomegaly as clinical presentation of cervical carcinoma (letter)] Zabala López S, et al.
An Med Interna 1996 Dec;13(12):615 **(Spa)**

SURGERY

Laparoscopic splenectomy [letter; comment] Leggett PL. **Ann Surg** 1997 Jul;226(1):111–2. Comment on: Ann Surg 1996 Jul;224(1):19–28.

Splenic marginal zone cell lymphoma involving liver and bone marrow. Report of a case with protracted follow-up, showing progressive disappearance of the lymphoma after splenectomy. Rosso R, et al. **Haematologica** 1996 Jan–Feb; 81(1):44–6

Late recurrence of Hodgkin's disease after partial splenectomy. Slaiby JM, et al. **J Pediatr Surg** 1996 May; 31(5):731–2

ULTRASONOGRAPHY

Malignant splenic lymphoma: sonographic patterns, diagnosis and follow-up. Gorg C, et al. **Clin Radiol** 1997 Jul; 52(7):535–40

[Sonography in the diagnosis of lesions of abdominal lymph nodes, liver and spleen in malignant lymphoma] Semenov II. **Vopr Onkol** 1997;43(2):198–201 (Eng. Abstr.) **(Rus)**

VETERINARY

Splenic fibroma in a dog. Rahal SC, et al. **Can Vet J** 1996 Dec;37(12):740–1

Multicentric malignant lymphoma in a pallid bat. Andreasen CB, et al. **J Wildl Dis** 1996 Jul;32(3):545–7

[A pony with a metastasized hemangiosarcoma] Geelen SN, et al. **Tijdschr Diergeneeskd** 1996 Oct 1;121(19):544–6 (Eng. Abstr.) **(Dut)**

VIROLOGY

Splenic vascular tumors: a histologic, immunophenotypic, and virologic study. Arber DA, et al.
Am J Surg Pathol 1997 Jul;21(7):827–35

Fre-2, a locus closely linked to Fv-2, is rearranged in some erythroleukemias induced by Friend murine leukemia virus. Eisel D, et al. **Leukemia** 1997 Apr;11 Suppl 3:155–9

SPLENIC RUPTURE

CHEMICALLY INDUCED

Spontaneous splenic rupture following administration of granulocyte colony-stimulating factor (G-CSF): occurrence in an allogeneic donor of peripheral blood stem cells. Becker PS, et al. **Biol Blood Marrow Transplant** 1997 Apr;3(1):45–9

Delayed rupture of the spleen and streptokinase therapy. Nam R, et al. **Can J Surg** 1996 Apr;39(2):151–4

[Spontaneous splenic rupture due to heparin. Report of a case and review of the literature] Jabbour M, et al.
J Med Liban 1995;43(2):107–9 (29 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Spontaneous rupture of the spleen associated with pneumonia. Domingo P, et al.
Eur J Clin Microbiol Infect Dis 1996 Sep;15(9):733–6 (20 ref.)

Two cases of maternal antenatal splenic rupture and hypotension associated with Moebius syndrome and cerebral palsy in offspring. Further evidence for a utero placental vascular aetiology for the Moebius syndrome and some cases of cerebral palsy. Lipson AH, et al.
Eur J Pediatr 1996 Sep;155(9):800–4

Spontaneous splenic rupture: an unusual cause of hypovolaemia. Birkinshaw R, et al. **J Accid Emerg Med** 1996 Jul;13(4):289–91

Traumatic rupture of the spleen in a patient with hereditary spherocytosis. Berne JD, et al. **J Trauma** 1997 Feb; 42(2):323–6

Severe chest pain, diagnostic electrocardiogram, and ileus. Reymond JM, et al. **Lancet** 1996 Dec 7;348(9041):1560

Ruptured splenic abscess as cause of pneumoperitoneum. Puhakka KB, et al.
Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr 1997 Mar;166(3):273–4 (6 ref.)

[Case of factor VII deficiency with systemic amyloidosis having a unique clinical course such as splenic rupture] Uematsu M, et al. **Nippon Naika Gakkai Zasshi** 1997 Feb 10;86(2):314–6 **(Jpn)**

DIAGNOSIS

Splenic rupture: an unusual complication of colonoscopy. Ahmed A, et al. **Am J Gastroenterol** 1997 Jul;92(7):1201–4 (31 ref.)

Splenic emergencies. Emery KH. **Radiol Clin North Am** 1997 Jul;35(4):831–43 (33 ref.)

[Delayed rupture of the spleen in a multiply injured patient] Lică I, et al. **Chirurgia (Bucur)** 1997 May-Jun;92(3):205–10 (12 ref.) (Eng. Abstr.) **(Rum)**

EPIDEMIOLOGY

Management outcomes in splenic injury: a statewide trauma center review. Clancy TV, et al. **Ann Surg** 1997 Jul; 226(1):17–24

ETIOLOGY

Splenic rupture manifesting two years after diagnosis of injury. Fernandes CM. **Acad Emerg Med** 1996 Oct; 3(10):946–7

Splenic rupture: an unusual complication of colonoscopy. Ahmed A, et al. **Am J Gastroenterol** 1997 Jul;92(7):1201–4 (31 ref.)

Spontaneous splenic rupture in two patients with a blastoid variant of mantle cell lymphoma. Oinonen R, et al.
Ann Hematol 1997 Jan;74(1):33–5

Spontaneous splenic rupture in c-ANCA positive vasculitis [letter] Hawley PH, et al. **Aust N Z J Med** 1996 Jun; 26(3):431–2

Delayed rupture of the spleen 5 1/2 years after conservative management of traumatic splenic injury: comment [letter] Frizelle FA. **Aust N Z J Surg** 1997 Aug;67(8):573

Metastatic choriocarcinoma with spontaneous splenic rupture following term pregnancy: a case report. Hou HC, et al. **Chang Keng I Hsueh** 1996 Jun;19(2):166–70

Spontaneous rupture of spleen in viral hepatitis A. Guleria S, et al. **Indian J Gastroenterol** 1996 Jan;15(1):30

Splenic rupture in acute malaria. Gupta MS, et al.
J Assoc Physicians India 1996 Jul;44(7):490–1

Splenic rupture after colonoscopy. Moses RE, et al.
J Clin Gastroenterol 1997 Jun;24(4):257–8 (21 ref.)

Choriocarcinoma complicated by splenic rupture: an unusual presentation. Challis DE, et al. **J Obstet Gynaecol Res** 1996 Aug;22(4):395–400

Spontaneous rupture of the spleen secondary to metastatic teratoma. Cook AM, et al. **J R Soc Med** 1996 Dec; 89(12):710

Spontaneous rupture of the spleen in a patient with systemic lupus erythematosus. Tolaymat A, et al. **J Rheumatol** 1995 Dec;22(12):2344–5 (15 ref.)

Splenic rupture after extracorporeal shock wave lithotripsy. Rashid P, et al. **J Urol** 1996 Nov;156(5):1756–7

Spontaneous splenic rupture in uncomplicated multiple myeloma. Sherwood P, et al. **Leuk Lymphoma** 1996 Feb; 20(5–6):517–9

Hemangiosarcoma of the spleen. Report of a case. Reale A, et al. **Pathologica** 1996 Feb;88(1):49–51

Splenic rupture from colonoscopy. A report of two cases and review of the literature. Espinal EA, et al.
Surg Endosc 1997 Jan;11(1):71–3 (19 ref.)

[An unusual complication of sexual intercourse] Redecha M, et al. **Ceska Gynekol** 1997 Apr;62(2):83–5 **(Cze)**

[Pfeiffer's disease, not always the innocent kissing disease] Konings CJ, et al. **Ned Tijdschr Geneeskd** 1997 Mar 8; 141(10):457–9 (Eng. Abstr.) **(Dut)**

[Splenic rupture after colonoscopy (letter)] Couderc LJ, et al. **Ann Med Interne (Paris)** 1996;147(5):379 **(Fre)**

[Splenic rupture in a patient with malaria (letter)] Verger P, et al. **Presse Med** 1997 Jun 28;26(22):1048 **(Fre)**

[Spontaneous splenic rupture as a complication of infectious mononucleosis] Barałkiewicz G, et al. **Przegl Epidemiol** 1996;50(4):435–41 (Eng. Abstr.) **(Pol)**

[Splenic rupture in acute pancreatitis] Garre Sánchez MC, et al. **Gastroenterol Hepatol** 1996 Nov;19(9):462–3 (Eng. Abstr.) **(Spa)**

[Asymptomatic pathological rupture of the spleen as the presenting form of acute lymphoblastic leukemia (letter)] Gorosquieta A, et al. **Sangre (Barc)** 1996 Jun;41(3):261–2 **(Spa)**

MICROBIOLOGY

Peritonitis due to a ruptured splenic abscess. Pera M, et al. **Clin Infect Dis** 1996 Aug;23(2):399–400

MORTALITY

[Comment on F. Schultz, K. Lieske: Traumatic splenic rupture--fatal thrombocyte increase after splenectomy (letter)] Voss R. **Versicherungsmedizin** 1997 Aug 1;49(4):137 **(Ger)**

PATHOLOGY

Splenic pathology in different forms of traumatic injury [letter] Drachenberg CB, et al. **Am J Clin Pathol** 1996 Nov; 106(5):695

Pathologic rupture of the spleen in hematologic malignancies: two additional cases. Giagounidis AA, et al.
Ann Hematol 1996 Dec;73(6):297–302 (110 ref.)

Stereologic study of splenic tissue compartments from traumatically injured and cancer patients. Milićević NM, et al. **Gen Diagn Pathol** 1996 Jun;142(1):41–4

RADIOGRAPHY

Spontaneous rupture of normal spleen. Behera A, et al.
Indian J Gastroenterol 1997 Apr;16(2):71–2

SURGERY

Splenic preservation after traumatic rupture. A remote hospital experience. Hamour OA, et al. **Int Surg** 1996 Jul-Sep;81(3):304–8

Heterotopic splenic autotransplantation in a neonate with splenic rupture, leading to normal splenic function. Yamataka A, et al. **J Pediatr Surg** 1996 Feb;31(2):239–40

Splenic tissue reimplantation during splenectomy--a good idea? Holt MC. **Trop Doct** 1996 Jul;26(3):132

[Splenic injury sutured in situ with a single-clip stapler] Praetorius C, et al. **Ugeskr Laeger** 1996 Oct 21; 158(43):6111–12 (Eng. Abstr.) **(Dan)**

[Fulminant infection outcome after splenectomy] Rodriguez Gomez M, et al. **Patholoe** 1997 May;18(3):257–60 (Eng. Abstr.) **(Ger)**

[Traumatic splenic rupture--fatal increase in thrombocytes after splenectomy] Schulz F, et al. **Versicherungsmedizin** 1997 Apr 1;49(2):56–8 (Eng. Abstr.) **(Ger)**

THERAPY

Nonoperative management of adult blunt splenic trauma: a 15-year experience. Wasvary H, et al. **Am Surg** 1997 Aug; 63(8):694–9

[Conservative treatment of subcapsular splenic rupture] Zemliankin AA, et al. **Klin Khir** 1996;(8):51 **(Rus)**

ULTRASONOGRAPHY

Neonatal radiology casebook. Splenic hematoma as a cause of hypovolemic shock in a very low birth weight neonate. Opalach RM, et al. **J Perinatol** 1996 Jul-Aug;16(4):313–4

SPLENIC VEIN

A case of portal and splenic vein thrombosis after Histoacryl injection therapy in gastric varices. Shim CS, et al.
Endoscopy 1996 Jun;28(5):461

Shunt occlusion and acute portal, splenic, and mesenteric venous thrombosis complicating placement of a transjugular intrahepatic portosystemic shunt. Beheshti MV, et al. **J Vasc Interv Radiol** 1996 Mar-Apr;7(2):277–81

Intravascular tumor: a previously unreported finding of glucagonoma. Geehan DM, et al. **South Med J** 1997 Jul; 90(7):743–7

Outcome after splenic vein thrombosis in the pancreas allograft. Kuo PC, et al. **Transplantation** 1997 Sep 27; 64(6):933–5

[Diarrhea, massive ascites, and portal hypertension: rare case of a splenic arterio-venous fistula (letter)] Paquet KP.
Z Gastroenterol 1996 Nov;34(11):XXI **(Ger)**

[A rare case of pancreatic tumor causing thrombosis of the splenic vein] Vorst VN, et al. **Khirurgiia (Mosk)** 1997; (3):68–9 **(Rus)**

INJURIES

Aneurysmatic arteriovenous fistula complicating splenic injury. Sarioğlu A, et al. **Eur J Pediatr Surg** 1996 Jun; 6(3):183–5

METABOLISM

Histochemical analysis of acidic glycoconjugates in the endothelium lining the splenic blood vessels in the rat. Ueda H, et al. **Arch Histol Cytol** 1996 Oct;59(4):389–97

PATHOLOGY

A histopathologic study of localized portal hypertension as a consequence of chronic pancreatitis. Takase M, et al.
Arch Pathol Lab Med 1997 Jun;121(6):612–4

Images in hepatology. Large splenorenal shunt in portal venous obstruction. Dhiman RK, et al. **J Hepatol** 1997 Jul; 27(1):216

PHYSIOPATHOLOGY

Gradual occlusion of extrahepatic portosystemic shunts in dogs and cats using the ameroid constrictor. Vogt JC, et al. **Vet Surg** 1996 Nov-Dec;25(6):495–502

SURGERY

Spleen-preserving distal pancreatectomy with conservation of the splenic artery and vein. Kimura W, et al.
Surgery 1996 Nov;120(5):885–90

Gradual occlusion of extrahepatic portosystemic shunts in

dogs and cats using the ameroid constrictor. Vogt JC, et al. **Vet Surg** 1996 Nov-Dec;25(6):495-502

SPLENOMEGALY

Clinical and hematological characteristics of hepatosplenic T gamma/delta lymphoma with isochromosome for long arm of chromosome 7. Yao M, et al. **Leuk Lymphoma** 1996 Aug;22(5-6):495-500

[Splenectomy in osteomyelofibrosis. Indications and outcome] Böhner H, et al. **Chirurg** 1996 Oct;67(10):1016-9 (Eng. Abstr.) **(Ger)**

[Embolic splenic infarction: a rare complication of atrial fibrillation] Merims D, et al. **Harefuah** 1997 Jun 15; 132(12):844-6, 911 (Eng. Abstr.) **(Heb)**

CHEMICALLY INDUCED

The effect of indomethacin administration on the splenic changes induced by estradiol supplementation in ovariectomized New Zealand white rabbits. Thurmond TS, et al. **Toxicol Pathol** 1996 Mar-Apr;24(2):153-9

COMPLICATIONS

Ophthalmic findings in a case of hemophagocytic syndrome. Kawamura H, et al. **Am J Ophthalmol** 1997 Aug; 124(2):261-3

Splenomegaly, eosinophilia, and pruritis: Hodgkin's disease, or...? [letter] Seymour JF. **Blood** 1997 Aug 15;90(4):1719-20

Splenic irradiation for the treatment of hypersplenism from congestive splenomegaly. Kenawi MM, et al. **Br J Surg** 1997 Jun;84(6):860-1

A 16-year-old girl with epistaxis and hepatosplenomegaly. Woods M, et al. **Curr Opin Pediatr** 1995 Dec;7(6):733-9

Evaluation of splenomegaly in portal hypertension. Sheth SG, et al. **J Clin Gastroenterol** 1996 Jan;22(1):28-30

Porto-hepatic venous shunt via portal vein aneurysm with splenomegaly. Hanatate F, et al. **J Gastroenterol** 1995 Dec; 30(6):786-9 (21 ref.)

DIAGNOSIS

Splenomegaly at a United States County Hospital: diagnostic evaluation of 170 patients. O'Reilly RA. **Am J Med Sci** 1996 Oct;312(4):160-5

Traube's space percussion for detection of splenomegaly [letter] Chongtham DS, et al. **J Assoc Physicians India** 1996 Jul;44(7):508

Review of diagnostic criteria of hyper-reactive malarial splenomegaly [letter] Bates I, et al. **Lancet** 1997 Apr 19; 349(9059):1178

Immunoglobulin gene polymerase chain reaction to distinguish hyperreactive malarial splenomegaly from 'African' chronic lymphocytic leukaemia and splenic lymphoma. Jimmy EO, et al. **Trans R Soc Trop Med Hyg** 1996 Jan-Feb;90(1):37-9

[Idiopathic congestive splenomegaly--Banti's disease] Antunović P, et al. **Srp Arh Celok Lek** 1996 Mar-Apr; 124(3-4):103-5 (Eng. Abstr.) **(Scc)**

[Empyema and hepatosplenomegaly] Crespo Valadés E, et al. **Rev Clin Esp** 1997 Aug;197(8):587-8 **(Spa)**

DRUG THERAPY

Hyperreactive malarial splenomegaly and AIDS: proguanil prevents recurrent pneumonia. Lowenthal MN, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun;90(3):313-4

EPIDEMIOLOGY

Visceral leishmaniasis and splenomegaly [letter; comment] Lowenthal MN. **Isr J Med Sci** 1996 Sep;32(9):790. Comment on: Isr J Med Sci 1996 May;32(5):337. Comment on: Isr J Med Sci 1996 May;32(5):338.

ETIOLOGY

Value of the measurement of portal flow velocity in the differential diagnosis of asymptomatic splenomegaly. Tincani E, et al. **Clin Radiol** 1997 Mar;52(3):220-3

Malaria in pregnancy in Nigerians: seasonality and relationship to splenomegaly and anaemia. Egwunyenga OA, et al. **Indian J Malariol** 1997 Mar;34(1):17-24

Choledochal cyst presenting as hepatosplenomegaly with cholangitis. Wasadikar PP, et al. **Indian J Med Sci** 1995 Sep;49(9):212-3

Hyperreactive malarial syndrome. Ackerman L. **J Am Board Fam Pract** 1996 Sep-Oct;9(5):356-9 (12 ref.)

Extrapulmonary sarcoidosis: rapid spontaneous remission of marked splenomegaly. Ali Y, et al. **J Natl Med Assoc** 1996 Nov;88(11):714-6

Acute splenic complications in children with sickle cell-hemoglobin C disease. Aquino VM, et al. **J Pediatr** 1997 Jun;130(6):961-5

A man with a prosthetic valve, anaemia, fever, and splenomegaly [see comments] Mouallem M, et al. **Lancet** 1996 Nov 2;348(9036):1216. Comment in: Lancet 1997 Jan 11;349(9045):135-6. Comment in: Lancet 1997 Jan 11;349(9045):136.

[Pfeiffer's disease, not always the innocent kissing disease] Konings CJ, et al. **Ned Tijdschr Geneeskd** 1997 Mar 8; 141(10):457-9 (Eng. Abstr.) **(Dut)**

[Sarcoidosis with hematologic involvement and hypogammaglobulinemia] Bader-Meunier B, et al. **Arch Pediatr** 1996 Jun;3(6):576-9 (Eng. Abstr.) **(Fre)**

[Splenomegaly and portal hypertension of unusual etiology in a 62-year-old patient] Zahner J, et al. **Internist (Berl)** 1996 Aug;37(8):844-7 **(Ger)**

[Splenomegaly and interstitial lung disease] Helm G, et al. **Med Klin** 1997 May 15;92(5):261 **(Ger)**

IMMUNOLOGY

IL-10 deficit correlates with chronic, hypersplenomegaly syndrome in male CBA/J mice infected with Schistosoma mansoni. Bosshardt SC, et al. **Parasite Immunol** 1997 Aug; 19(8):347-53

Circulating villous lymphocytes--a link between hyperreactive malarial splenomegaly and splenic lymphoma. Bates I, et al. **Trans R Soc Trop Med Hyg** 1997 Mar-Apr;91(2):171-4

METABOLISM

Case report: splenomegaly and splenic sequestration in an adult with sickle cell anemia. Moll S, et al. **Am J Med Sci** 1996 Dec;312(6):299-302

MICROBIOLOGY

Non reactive tuberculosis presenting as massive splenomegaly. Kaushal SS, et al. **J Assoc Physicians India** 1995 Feb;43(2):142

Systemic ehrlichiosis presenting as progressive hepatosplenomegaly. Friedman AD, et al. **South Med J** 1997 Jun;90(6):656-60

[Cholangitis with hepatosplenomegaly caused by Xanthomonas maltophilia in a patient with AIDS (letter)] Ortiz Cansado A, et al. **Rev Clin Esp** 1997 May;197(5):382-3 **(Spa)**

PARASITOLOGY

Visceral leishmaniasis and splenomegaly [letter; comment] Lowenthal MN. **Isr J Med Sci** 1996 Sep;32(9):790. Comment on: Isr J Med Sci 1996 May;32(5):337. Comment on: Isr J Med Sci 1996 May;32(5):338.

Unusual acute and chronic complications of malaria [see comments] Metha SR, et al. **J Assoc Physicians India** 1996 Jul;44(7):451-3. Comment in: J Assoc Physicians India 1996 Jul;44(7):445-6.

Hyperreactive malarial splenomegaly syndrome in a European patient [letter] Orús J, et al. **Trop Doct** 1996 Jul; 26(3):140-1

PATHOLOGY

[Fever, pulmonary infiltrates and hepatosplenomegaly (clinical conference)] **Rev Clin Esp** 1997 Jun;197(6):456-62 **(Spa)**

RADIONUCLIDE IMAGING

Splenomegaly on hepatobiliary imaging. Solanki HP, et al. **Clin Nucl Med** 1997 Mar;22(3):180-1

SURGERY

Surgical management of massive splenomegaly. Farid H, et al. **Am Surg** 1996 Oct;62(10):803-5

Laparoscopic splenectomy [letter; comment] Leggett PL. **Ann Surg** 1997 Jul;226(1):111-2. Comment on: Ann Surg 1996 Jul;224(1):19-28.

[Splenectomy in osteomyelofibrosis. Indications and outcome] Böhner H, et al. **Chirurg** 1996 Oct;67(10):1016-9 (Eng. Abstr.) **(Ger)**

THERAPY

Partial splenic embolization for the treatment of hypersplenism in tropical splenomegaly. Pandey UC, et al. **Trop Doct** 1997 Apr;27(2):114-5

ULTRASONOGRAPHY

Value of the measurement of portal flow velocity in the differential diagnosis of asymptomatic splenomegaly. Tincani E, et al. **Clin Radiol** 1997 Mar;52(3):220-3

The 'small spleen' in malaria. Chauhan R, et al. **J Assoc Physicians India** 1996 Jul;44(7):483-5

VETERINARY

Pathologic factors affecting postsplenectomy survival in dogs. Spangler WL, et al. **J Vet Intern Med** 1997 May-Jun; 11(3):166-71

SPLENOPORTOGRAPHY see **PORTOGRAPHY**

SPLENORENAL SHUNT, SURGICAL

Pre-liver transplant: TIPS versus distal splenorenal shunt. Faust TW, et al. **HPB Surg** 1997;10(4):261-5

Results of pancreatic blood shunting into the systemic blood flow in insulin-dependent diabetics. Galperin EI, et al. **HPB Surg** 1996;9(4):191-7

Should the distal splenorenal shunt be combined with gastric disconnection and transection? Henderson JM. **HPB Surg** 1997;10(3):184-5 (10 ref.)

Red cell survival in patients with nonalcoholic liver cirrhosis before and after distal splenorenal shunt. Nishiwaki M, et al. **J Gastroenterol** 1997 Jun;32(3):318-23

Effect of shunt surgery on spleen size, portal pressure and oesophageal varices in patients with non-cirrhotic portal hypertension. Sharma BC, et al. **J Gastroenterol Hepatol** 1997 Aug;12(8):582-4

Prevention of recurrent esophageal bleeding and survival in patients with alcoholic cirrhosis: a randomized study. Urbistondo M, et al. **P R Health Sci J** 1996 Sep;15(3):195-9

Salvage of a twisted distal splenorenal shunt graft by using metallic endoprosthesis. Owens CA, et al. **Surgery** 1997 Apr;121(4):465-7

Renal-splenic shunt for infrahepatic caval occlusion after piggy-back liver transplantation. Mazzaferro V, et al. **Transpl Int** 1997;10(5):392-4

[Hemodynamic study of distal splenorenal shunt (DSRS)] Zheng Q, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Oct; 33(10):611-3 (Eng. Abstr.) **(Chi)**

[Radioisotope study of portal blood flow in extrahepatic portal hypertension in children] Razumovskii AI, et al. **Khirurgiia (Mosk)** 1996;(4):31-4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Acute myocardial infarction after selective portal-systemic shunt. Sun KO. **Eur J Anaesthesiol** 1996 Jul;13(4):381-4

METHODS

[Distal splenorenal shunt (Warren's operation) in the treatment of portal hypertension. Apropos 3 cases] Popescu I, et al. **Chirurgia (Bucur)** 1996;45(1):21-5 (27 ref.) (Eng. Abstr.) **(Rum)**

SPLENOSIS

Intrahepatic splenosis mimicking hepatic adenoma. Gruen DR, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):725-6

DIAGNOSIS

Splenosis mimicking a left renal mass. Kiser JW, et al. **AJR Am J Roentgenol** 1996 Dec;167(6):1508-9

RADIOGRAPHY

[Peritoneal splenosis] **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):585 **(Ger)**

[Splenosis: report of a case studied with ultrasonography and computerized tomography] Porta G, et al. **Radiol Med (Torino)** 1996 Jul-Aug;92(1-2):147-9 **(Ita)**

RADIONUCLIDE IMAGING

"Ineffective" splenosis detected on Tc-99m labeled white cell imaging. Spencer RP, et al. **Clin Nucl Med** 1997 Apr; 22(4):271-2

[A case of splenosis. Assessment with imaging methods] Polito G, et al. **Radiol Med (Torino)** 1996 Nov;92(5):657-9 **(Ita)**

ULTRASONOGRAPHY

[Splenosis: report of a case studied with ultrasonography and computerized tomography] Porta G, et al. **Radiol Med (Torino)** 1996 Jul-Aug;92(1-2):147-9 **(Ita)**

SPLICED LEADER PEPTIDES see **SIGNAL PEPTIDES**

SPLICEOSOMES

see related
RNA SPLICING

Mutations within the yeast U4/U6 snRNP protein Prp4 affect a late stage of spliceosome assembly. Ayadi L, et al. **RNA** 1997 Feb;3(2):197-209

CHEMISTRY

The spinal muscular atrophy disease gene product, SMN, and its associated protein SIP1 are in a complex with spliceosomal snRNP proteins. Liu Q, et al. **Cell** 1997 Sep 19;90(6):1013-21

Identification of a new coiled body component. Alliegro MC, et al. **Exp Cell Res** 1997 Mar 15;231(2):386-90

Crystal structure of the U1A spliceosomal protein complexed with its cognate RNA hairpin. Nagai K, et al. **Nucleic Acids Symp Ser** 1995;(34):1-2

ENZYMOLOGY

The nuclear matrix protein p255 is a highly phosphorylated form of RNA polymerase II largest subunit which associates with spliceosomes. Vincent M, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4649-52

GENETICS

Intron sequences provide a tool for high-resolution phylogenetic analysis of volvocine algae. Liss M, et al. **Curr Genet** 1997 Mar;31(3):214-27

Spliceosomal introns in conserved sequences of U1 and U5 small nuclear RNA genes in yeast Rhodotorula hasegawae. Takahashi Y, et al. **J Biochem (Tokyo)** 1996 Sep; 120(3):677-83

Human T-cell leukemia virus type 2 Rex inhibits pre-mRNA splicing in vitro at an early stage of spliceosome formation. Bakker A, et al. **J Virol** 1996 Aug;70(8):5511-8

Localization of modified nucleotides in Schizosaccharomyces

pombe spliceosomal small nuclear RNAs: modified nucleotides are clustered in functionally important regions [published erratum appears in RNA 1996 Oct;2(10):1077] Gu J, et al. **RNA** 1996 Sep;2(9):909–18

A spontaneous duplication in U6 spliceosomal RNA uncouples the early and late functions of the ACAGA element in vivo. Li Z, et al. **RNA** 1996 Sep;2(9):879–94

Pre-mRNA splicing: the discovery of a new spliceosome doubles the challenge. Tarn WY, et al. **Trends Biochem Sci** 1997 Apr;22(4):132–7 (40 ref.)

METABOLISM

Structural features of U6 snRNA and dynamic interactions with other spliceosomal components leading to pre-mRNA splicing. Forné T, et al. **Biochimie** 1996;78(6):436–42 (71 ref.)

The SMN-SIP1 complex has an essential role in spliceosomal snRNP biogenesis. Fischer U, et al. **Cell** 1997 Sep 19; 90(6):1023–9

Developmental expression of the murine spliceosome-associated protein mSAP49. Ruiz-Lozano P, et al. **Dev Dyn** 1997 Apr;208(4):482–90

Transcriptional pulse-chase analysis reveals a role for a novel snRNP-associated protein in the manufacture of spliceosomal snRNPs. Noble SM, et al. **EMBO J** 1996 Aug 15;15(16):4368–79

Identification of a human protein that recognizes the 3' splice site during the second step of pre-mRNA splicing. Wu S, et al. **EMBO J** 1997 Jul 16;16(14):4421–32

Analysis of small nuclear RNAs in a precatalytic spliceosome. Yean SL, et al. **Gene Expr** 1996;5(6):301–13

The spliceosome is a dynamic ribonucleoprotein machine. Guthrie C. **Harvey Lect** 1994–95;90:59–80 (77 ref.)

Polycistronic expression and RNA-binding specificity of the C. elegans homologue of the spliceosome-associated protein SAP49. Tanaka Y, et al. **J Biochem (Tokyo)** 1997 Apr;121(4):739–45

Dynamics of the U1 small nuclear ribonucleoprotein during yeast spliceosome assembly. Ruby SW. **J Biol Chem** 1997 Jul 11;272(28):17333–41

Heteronuclear ribonucleoproteins C1 and C2, components of the spliceosome, are specific targets of interleukin 1beta-converting enzyme-like proteases in apoptosis. Waterhouse N, et al. **J Biol Chem** 1996 Nov 15; 271(46):29335–41

Splicing glue: a role for SR proteins in trans splicing? Bruzik JP. **Microb Pathog** 1996 Sep;21(3):149–55 (65 ref.)

A minimal spliceosomal complex A recognizes the branch site and polypyrimidine tract. Query CC, et al. **Mol Cell Biol** 1997 May;17(5):2944–53

Association of U2 snRNP with the spliceosomal complex E. Hong W, et al. **Nucleic Acids Res** 1997 Jan 15; 25(2):354–61

In vitro reconstitution of mammalian U1 snRNPs active in splicing: the U1-C protein enhances the formation of early (E) spliceosomal complexes. Will CL, et al. **Nucleic Acids Res** 1996 Dec 1;24(23):4614–23

SC35-mediated reconstitution of splicing in U2AF-depleted nuclear extract. MacMillan AM, et al. **Proc Natl Acad Sci U S A** 1997 Jan 7;94(1):133–6

Site-specific crosslinking of mammalian U11 and u6atac to the 5' splice site of an AT-AC intron. Yu YT, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6030–5

The [U4/U6.U5] tri-snRNP-specific 27K protein is a novel SR protein that can be phosphorylated by the snRNP-associated protein kinase. Fetzer S, et al. **RNA** 1997 Apr;3(4):344–55

Splicing of a divergent subclass of AT-AC introns requires the major spliceosomal snRNAs. Wu Q, et al. **RNA** 1997 Jun;3(6):586–601

Bimolecular exon ligation by the human spliceosome. Anderson K, et al. **Science** 1997 Jun 13;276(5319):1712–6

Two structurally different RNA molecules are bound by the spliceosomal protein U1A using the same recognition strategy. Jovine L, et al. **Structure** 1996 May 15;4(5):621–31

Pre-mRNA splicing: the discovery of a new spliceosome doubles the challenge. Tarn WY, et al. **Trends Biochem Sci** 1997 Apr;22(4):132–7 (40 ref.)

PHYSIOLOGY

Protein functions in pre-mRNA splicing. Will CL, et al. **Curr Opin Cell Biol** 1997 Jun;9(3):320–8 (92 ref.)

ULTRASTRUCTURE

Prp31p promotes the association of the U4/U6 x U5 tri-snRNP with prespliceosomes to form spliceosomes in Saccharomyces cerevisiae. Weidenhammer EM, et al. **Mol Cell Biol** 1997 Jul;17(7):3580–8

Splicing of precursors to mRNA in higher plants: mechanism, regulation and sub-nuclear organisation of the spliceosomal machinery. Simpson GG, et al. **Plant Mol Biol** 1996 Oct; 32(1-2):1–41 (307 ref.)

SPLICING, ALTERNATIVE see **ALTERNATIVE SPLICING**

SPLICING, RNA see **RNA SPLICING**

SPLINTS

see related
STENTS

Strengthening exercises and support devices for ankle sprains [letter; comment] Thibault GF. **Am Fam Physician** 1997 Mar;55(4):1086, 1088. Comment on: Am Fam Physician 1996 Jun;53(8):2491–8, 2501–3.

Soft versus hard resting hand splints in rheumatoid arthritis: pain relief, preference, and compliance. Callinan NJ, et al. **Am J Occup Ther** 1996 May;50(5):347–53

The effect of an inhibitive weight-bearing splint on tone and function: a single-case study. Kinghorn J, et al. **Am J Occup Ther** 1996 Nov-Dec;50(10):807–15

The Thomas splint. Questionable boast of an indispensable tool. Henry BJ, et al. **Am J Orthop** 1996 Sep;25(9):602–4 (12 ref.)

"Krammer splint technique" for immediate measuring of intramedullary nails. Mosheiff R, et al. **Am J Orthop** 1997 May;26(5):375

Cardiorespiratory and metabolic effects of walking, standing, and standing with a splint during the recuperative period from maximal exercise in horses. Hubbell JA, et al. **Am J Vet Res** 1997 Sep;58(9):1003–9

A tongue retaining device and sleep-state genioglossus muscle activity in patients with obstructive sleep apnea. Ono T, et al. **Angle Orthod** 1996;66(4):273–80

An elastic plastic splint to compress the ear after reconstruction using a temporoparietal fascial flap. Ohjimi H, et al. **Ann Plast Surg** 1996 Jun;36(6):652–4

Role of ultrasound assessment and harness treatment in the management of developmental dysplasia of the hip [see comments] Sochart DH, et al. **Ann R Coll Surg Engl** 1996 Nov;78(6):505–8. Comment in: Ann R Coll Surg Engl 1997 Mar;79(2):157–8.

Splinting and local steroid injection for the treatment of ulnar neuropathy at the elbow: clinical and electrophysiological evaluation. Hong CZ, et al. **Arch Phys Med Rehabil** 1996 Jun;77(6):573–7

Plaster techniques in general practice. How to apply splints and plaster casts in a clinical or casualty setting. Esser M. **Aust Fam Physician** 1996 Sep;25(9):1429–33, 1435–7

A simple splint for the radial forearm donor site. Marinho RO, et al. **Br J Oral Maxillofac Surg** 1996 Dec;34(6):533–4

Electrical burns to the oral commissure: does splinting obviate the need for commissuroplasty? al-Qattan MM, et al. **Burns** 1996 Nov;22(7):555–6

Plantar fasciitis: a prospective randomized clinical trial of the tension night splint. Batt ME, et al. **Clin J Sport Med** 1996 Jul;6(3):158–62

Treatment of plantar fasciitis with a night splint and shoe modification consisting of a steel shank and anterior rocker bottom [see comments] Mizel MS, et al. **Foot Ankle Int** 1996 Dec;17(12):732–5. Comment in: Foot Ankle Int 1997 Jul;18(7):458.

Treatment of plantar fasciitis with night splint and shoe modifications consisting of a steel shank and anterior rocker bottom [letter; comment] Ng A. **Foot Ankle Int** 1997 Jul; 18(7):458. Comment on: Foot Ankle Int 1996 Dec;17(12):732–5.

Gait function in spastic hemiparetic patients walking barefoot, with firm shoes, and with ankle-foot orthosis. Hesse S, et al. **Int J Rehabil Res** 1996 Jun;19(2):133–41

Long-term results of splintage for mallet finger. Foucher G, et al. **Int Orthop** 1996;20(3):129–31

Mallet deformity of the finger. Five-year follow-up of conservative treatment. Okafor B, et al. **J Bone Joint Surg Br** 1997 Jul;79(4):544–7

To splint or not to splint: past philosophy and current practice--Part II. Richard R, et al. **J Burn Care Rehabil** 1997 Jan-Feb;18(1 Pt 1):64–71

To splint or not to splint--past philosophy and present practice: Part I. Richard R, et al. **J Burn Care Rehabil** 1996 Sep-Oct;17(5):444–53 (112 ref.)

To splint or not to splint--past philosophy and present practice: part III. Richard R, et al. **J Burn Care Rehabil** 1997 May-Jun;18(3):251–5; discussion 250

The efficacy and comfort of full-body vacuum splints for cervical-spine immobilization. Hamilton RS, et al. **J Emerg Med** 1996 Sep-Oct;14(5):553–9

Simplified functional splinting after extensor tenorrhaphy. Slater RR Jr, et al. **J Hand Surg [Am]** 1997 May; 22(3):445–51

Activity of the extrinsic finger flexors during mobilization in the Kleinert splint. van Alphen JC, et al. **J Hand Surg [Am]** 1996 Jan;21(1):77–84

Results of dynamic splintage following extensor tendon repair. Ip WY, et al. **J Hand Surg [Br]** 1997 Apr;22(2):283–7

A preliminary investigation of the neoprene tube finger extension splint. Clark EN. **J Hand Ther** 1997 Jul-Sep; 10(3):213–21

Training splint for EIP to EPL transfer. Goloborod'ko SA. **J Hand Ther** 1997 Jan-Mar;10(1):48–9

Adjustable first webspace splint. Haelterman JC. **J Hand Ther** 1996 Jul-Sep;9(3):249

Dynamic extension assist splinting of acute central slip lacerations. Maddy LS, et al. **J Hand Ther** 1997 Jul-Sep; 10(3):206–12

The use of synthetic plaster casting tape for hand and wrist splints. Mazon C, et al. **J Hand Ther** 1996 Oct-Dec; 9(4):391–3

Splinting in the management of proximal interphalangeal joint flexion contracture. Prosser R. **J Hand Ther** 1996 Oct-Dec;9(4):378–86

Evaluation of the effectiveness of a metacarpophalangeal ulnar deviation orthosis. Rennie HJ. **J Hand Ther** 1996 Oct-Dec;9(4):371–7

MP/PIP adjustable digit blocking splint. Rose H. **J Hand Ther** 1996 Jul-Sep;9(3):247–8

Dynamic extension splint: Rotterdam design. Schreuders TA, et al. **J Hand Ther** 1997 Jul-Sep;10(3):240–1

Splinting the wrist: mobilization and protection. Schultz-Johnson K. **J Hand Ther** 1996 Apr-Jun; 9(2):165–77 (54 ref.)

A device for tension adjustment on dynamic splints. Van Veldhoven G. **J Hand Ther** 1996 Oct-Dec;9(4):405–6

Management of dislocated hips with Pavlik harness treatment and ultrasound monitoring. Harding MG, et al. **J Pediatr Orthop** 1997 Mar-Apr;17(2):189–98

Management of dental trauma: development of a 2D data acquisition system to evaluate passivity of dental splints. Prévost J, et al. **Med Biol Eng Comput** 1997 Jul; 35(4):409–14

Splint immobilization of gamekeeper's thumb. Landsman JC, et al. **Orthopedics** 1995 Dec;18(12):1161–5

Use of neuromuscular electrical stimulation and [corrected] dorsal wrist splint to improve the hand function of a child with spastic hemiparesis [published erratum appears in Phys Ther 1997 Aug;77(8):859] Carmick J. **Phys Ther** 1997 Jun; 77(6):661–71

A simple method to prepare a custom-made finger splint using a disposable hypodermic syringe [letter] Dalal M, et al. **Plast Reconstr Surg** 1997 Jun;99(7):2102–3

Bile duct splintage in liver transplantation: is it necessary? Ferraz-Neto BH, et al. **Transpl Int** 1996;9 Suppl 1:S185–7

Endoscopic management of biliary pleural fistula. Kumar N, et al. **Trop Gastroenterol** 1995 Jul-Sep;16(3):40–2

[Treatment of hip dislocations and subluxations by Petit's splints] Lefort G, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1995;81(7):609–15 (Eng. Abstr.) **(Fre)**

[Possibilities and limits of functional conservative therapy of acute Achilles tendon ruptures] Richter J, et al. **Chirurg** 1997 May;68(5):517–24 (37 ref.) (Eng. Abstr.) **(Ger)**

[Results of conservative treatment of bony palmar plate avulsion of the middle joint (type I and type II according to Hintringer and Leixnering)] Janousek A, et al. **Handchir Mikrochir Plast Chir** 1996 Sep;28(5):242–5 (Eng. Abstr.) **(Ger)**

[Initial results of treatment of a two-stage surgical technique of chronic flexor tendon injuries with Kleinert modified early mobilization] Kaltenecker G, et al. **Handchir Mikrochir Plast Chir** 1996 Jul;28(4):187–90 (Eng. Abstr.) **(Ger)**

[Functional treatment of the interphalangeal joints in palmar ligament rupture] Lutz M, et al. **Handchir Mikrochir Plast Chir** 1996 Sep;28(5):239–41 (Eng. Abstr.) **(Ger)**

[Conservative treatment of stable finger joint dislocations using the Stack splint] Straub G, et al. **Handchir Mikrochir Plast Chir** 1996 Sep;28(5):246–8 (Eng. Abstr.) **(Ger)**

[Modified Gilchrist bandage] Giebel G. **Zentralbl Chir** 1997; 122(2):126–7 **(Ger)**

ADVERSE EFFECTS

Skin necrosis in prolonged application of an elasticated wrist splint in a psychiatric patient [letter] Hughes D. **J Accid Emerg Med** 1996 May;13(3):230

Development of extensor lag in treating boutonniere deformity [letter; comment] Schreuders TA, et al. **J Hand Ther** 1996 Oct-Dec;9(4):415. Comment on: J Hand Ther 1995 Jul-Sep;8(3):195–8.

Intratracheal granuloma formation: a late complication of Marlex mesh splinting for tracheomalacia. Fitzgerald PG, et al. **J Pediatr Surg** 1996 Nov;31(11):1568–9

STANDARDS

An alternative method of treatment for metacarpal fractures in athletes. Toronto R, et al. **Clin J Sport Med** 1996 Jan; 6(1):4–8

Reduction of angulated metacarpal fractures with a custom fracture-brace. Jones AR. **J South Orthop Assoc** 1995 Winter;4(4):269–76

SPLINTS, OCCLUSAL see **OCCLUSAL SPLINTS**

SPLINTS, PERIODONTAL see **PERIODONTAL SPLINTS**

SPLIT GENES see **GENES**

SPODOPTERA

Synergistic activity of a Bacillus thuringiensis delta-endotoxin and a bacterial endochitinase against Spodoptera littoralis larvae. Regev A, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3581–6

Baculovirus immediate-early promoter-mediated expression of the Zeocin resistance gene for use as a dominant selectable marker in dipteran and lepidopteran insect cell lines. Pfeifer TA, et al. **Gene** 1997 Apr 1;188(2):183–90

Cytolytic activity of Bacillus thuringiensis CryIC and CryIAc toxins to Spodoptera sp. midgut epithelial cells in vitro. Wang SW, et al. **In Vitro Cell Dev Biol Anim** 1997 Apr;33(4):315–23

Expression of functional human muscarinic M2 receptors in different insect cell lines. Heitz F, et al. **J Recept Signal Transduct Res** 1997 Jan–May; 17(1–3):305–17

Epitope–tagged gonadotropin–releasing hormone receptors heterologously–expressed in mammalian (COS–1) and insect (Sf9) cells. Neill JD, et al. **Mol Cell Endocrinol** 1997 Mar 28;127(2):143–54

Mapping of the entomocidal fragment of Spodoptera–specific Bacillus thuringiensis toxin CryIC [published erratum appears in Mol Gen Genet 1997 Feb 27;253(6):777] Strizhov N, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):11–9

A synthetic cryIC gene, encoding a Bacillus thuringiensis delta–endotoxin, confers Spodoptera resistance in alfalfa and tobacco. Strizhov N, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15012–7

CYTOLOGY

Production of biologically active human RelA (p65) in baculovirus–infected insect cells. Chabot–Fletcher M, et al. **Cell Biol Int** 1996 Nov;20(11):777–9

Cultivation of fall armyworm ovary cells in simulated microgravity. Francis KM, et al. **In Vitro Cell Dev Biol Anim** 1997 May;33(5):332–6

A new cell line from larval ovaries of Spodoptera litura (F.) (Lepidoptera:Noctuidae) [letter] Pant U, et al. **In Vitro Cell Dev Biol Anim** 1997 Mar;33(3):161–3

Establishment of a cell line from Spodoptera litura (Lepidoptera: Noctuidae) and replication of S. litura nuclear polyhedrosis virus in vitro. Shih CJ, et al. **J Invertebr Pathol** 1997 Jan;69(1):1–6

DRUG EFFECTS

Cell integrity markers for in vitro evaluation of cytotoxic responses to bacteria–containing commercial insecticides. Tayabali AF, et al. **Ecotoxicol Environ Saf** 1997 Jul; 37(2):152–62

The mode of action of hirsutellin A on eukaryotic cells. Liu JC, et al. **J Invertebr Pathol** 1996 May;67(3):224–8

ENZYMOLOGY

Glycosylation is essential for biosynthesis of functional gastric H+,K+–ATPase in insect cells. Klaassen CH, et al. **Biochem J** 1997 Jan 15;321 (Pt 2):419–24

Purification and characterisation of haemolymph 3–dehydroecdysone 3 beta–reductase in relation to ecdysteroid biosynthesis in the cotton leafworm Spodoptera littoralis. Chen JH, et al. **Eur J Biochem** 1996 Dec 1;242(2):394–401

Spodoptera frugiperda caspase–1, a novel insect death protease that cleaves the nuclear immunophilin FKBP46, is the target of the baculovirus antiapoptotic protein p35. Ahmad M, et al. **J Biol Chem** 1997 Jan 17;272(3):1421–4

GENETICS

Improved heterologous expression of the white–rot fungal ligninase H8 by crossover linker mutagenesis. Lin Q, et al. **Appl Biochem Biotechnol** 1997 Jun;66(3):269–79

Isolation and characterization of an alpha 1,2–mannosidase cDNA from the lepidopteran insect cell line Sf9. Kawar Z, et al. **Glycobiology** 1997 Apr;7(3):433–43

Purification, biochemistry and molecular cloning of an insect glycosylasparaginase from Spodoptera frugiperda. Liu Y, et al. **Glycobiology** 1996 Jul;6(5):527–36

Obtaining a functional recombinant anti–rhesus (D) antibody using the baculovirus–insect cell expression system. Edelman L, et al. **Immunology** 1997 May;91(1):13–9

Characterization of canine herpesvirus glycoprotein C expressed by a recombinant baculovirus in insect cells. Xuan X, et al. **Virus Res** 1996 Dec;46(1–2):57–64

GROWTH & DEVELOPMENT

Insecticidal activity of a recombinant baculovirus containing an antisense c–myc fragment. Lee SY, et al. **J Gen Virol** 1997 Jan;78 (Pt 1):273–81

Dioncophylline A as a growth–retarding agent against the herbivorous insect Spodoptera littoralis: structure–activity relationships. Bringmann G, et al. **J Nat Prod** 1997 Apr; 60(4):342–7

METABOLISM

Purification of the enzymes of ecdysteroid 3–epimerization from the midgut of the cotton leafworm, Spodoptera littoralis. Chen JH, et al. **Biochem Soc Trans** 1996 Aug; 24(3):436S

Very high single channel water permeability of aquaporin–4 in baculovirus–infected insect cells and liposomes reconstituted with purified aquaporin–4. Yang B, et al. **Biochemistry** 1997 Jun 17;36(24):7625–32

Protein retention in the endoplasmic reticulum of insect cells is not compromised by baculovirus infection. Henderson J, et al. **Cell Biol Int** 1996 Jun;20(6):413–22

Reconstitution of a pentameric complex of dimeric transforming growth factor beta ligand and a type I, II, III receptor in baculoviral–infected insect cells. Matsuzaki K, et al. **In Vitro Cell Dev Biol Anim** 1996 Jun;32(6):345–60

Endogenous chloride channels of insect sf9 cells. Evidence for coordinated activity of small elementary channel units. Larsen EH, et al. **J Gen Physiol** 1996 Jun;107(6):695–714 (38 ref.)

Interactions of Bacillus thuringiensis crystal proteins with the midgut epithelial cells of Spodoptera frugiperda (Lepidoptera: Noctuidae). Aranda E, et al. **J Invertebr Pathol** 1996 Nov;68(3):203–12

Direct inhibition of (Z)–9 desaturation of (E)–11–tetradecenoic acid by methylenehexadecenoic acids in the biosynthesis of Spodoptera littoralis sex pheromone. Fabrias G, et al. **J Lipid Res** 1996 Jul;37(7):1503–9

Optimal ligand binding by the recombinant human glucocorticoid receptor and assembly of the receptor complex with heat shock protein 90 correlate with high intracellular ATP levels in Spodoptera frugiperda cells. Srinivasan G, et al. **J Steroid Biochem Mol Biol** 1997 Jan; 60(1–2):1–9

Membrane lipid metabolism and phospholipase activity in insect Spodoptera frugiperda 9 ovarian cells. Yeh LH, et al. **Lipids** 1997 May;32(5):481–7

MICROBIOLOGY

Interactions of Bacillus thuringiensis crystal proteins with the midgut epithelial cells of Spodoptera frugiperda (Lepidoptera: Noctuidae). Aranda E, et al. **J Invertebr Pathol** 1996 Nov;68(3):203–12

PHYSIOLOGY

Differential requirements of two insect cell lines for growth in serum–free medium. Vaughn JL, et al. **In Vitro Cell Dev Biol Anim** 1997 Jun;33(6):479–82

Confocal microscopic detection of potential–sensitive dyes used to reveal loss of voltage control during patch–clamp experiments. Hüser J, et al. **Pflugers Arch** 1996 Nov–Dec; 433(1–2):194–9

ULTRASTRUCTURE

Baculovirus–based expression of mammalian caveolin in Sf21 insect cells. A model system for the biochemical and morphological study of caveolae biogenesis. Li S, et al. **J Biol Chem** 1996 Nov 8;271(45):28647–54

VIROLOGY

In vivo and in vitro characterization of several isolates of spodoptera exigua nuclear polyhedrosis virus. Hara K, et al. **Acta Virol** 1995 Sep;39(4):215–222

In vivo recombination between two strains of the genus Nucleopolyhedrovirus in its natural host, Spodoptera exigua. Muñoz D, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3025–31

Enhancer element, repetitive sequences and gene organization in an 8–kbp region containing the polyhedrin gene of the Spodoptera littoralis nucleopolyhedrovirus. Faktor O, et al. **Arch Virol** 1997;142(1):1–15

Purification and properties of alpha–mannosidase II from Golgi–like membranes of baculovirus–infected Spodoptera frugiperda (IPLB–SF–21AE) cells. Ren J, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):951–6

Restriction endonuclease analysis of a Spodoptera litura nuclear polyhedrosis virus (NPV) isolate. Das RH, et al. **Biochem Mol Biol Int** 1996 May;39(1):1–11

Glycosylation, palmitoylation, and localization of the human D2S receptor in baculovirus–infected insect cells. Grünewald S, et al. **Biochemistry** 1996 Dec 3; 35(48):15149–61

In vivo reconstitution of dopamine D2S receptor–mediated G protein activation in baculovirus–infected insect cells: preferred coupling to Gi1 versus Gi2. Grünewald S, et al. **Biochemistry** 1996 Dec 3;35(48):15162–73

Regulation of infected–cell–specific protein synthesis in SF IPLB–21 cells productively infected with Spodoptera frugiperda multicapsid nuclear polyhedrosis virus. Liu HS, et al. **Intervirology** 1997;40(1):50–4

The p10 gene of Spodoptera littoralis nucleopolyhedrovirus: nucleotide sequence, transcriptional analysis and unique gene organization in the p10 locus. Faktor O, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):2119–28

Spodoptera exigua multicapsid nucleopolyhedrovirus deletion mutants generated in cell culture lack virulence in vivo. Heldens JG, et al. **J Gen Virol** 1996 Dec;77 (Pt 12):3127–34

Identification and functional analysis of a non–hr origin of DNA replication in the genome of Spodoptera exigua multicapsid nucleopolyhedrovirus. Heldens JG, et al. **J Gen Virol** 1997 Jun;78 (Pt 6):1497–506

The movement proteins of cowpea mosaic virus and cauliflower mosaic virus induce tubular structures in plant and insect cells. Kasteel DT, et al. **J Gen Virol** 1996 Nov; 77 (Pt 11):2857–64

Transcriptional analysis and promoter activity of the Spodoptera littoralis multicapsid nucleopolyhedrovirus ecdysteroid UDP–glucosyltransferase gene. Toister–Achituv M, et al. **J Gen Virol** 1997 Feb;78 (Pt 2):487–91

Baculoviruses contain a gene for the large subunit of ribonucleotide reductase. van Strien EA, et al. **J Gen Virol** 1997 Sep;78 (Pt 9):2365–77

Effects of diet–age and streptomycin on virulence of Autographa californica M nucleopolyhedrovirus against the tobacco budworm. Hoover K, et al. **J Invertebr Pathol** 1997 Jan;69(1):46–50

Overexpression of delta–opioid receptors in recombinant baculovirus–infected Trichoplusia ni "High 5" insect cells. Wehmeyer A, et al. **J Neurochem** 1997 Apr;68(4):1361–71

Species–specific effects of the hcf–1 gene on baculovirus virulence. Lu A, et al. **J Virol** 1996 Aug;70(8):5123–30

SPODOPTERA FRUGIPERDA see **SPODOPTERA**

SPONDYLARTHRITIS ANKYLOPOIETICA see **SPONDYLITIS, ANKYLOSING**

SPONDYLITIS

Pyogenic infectious spondylitis in children. The evolution to current thought. Ring D, et al. **Am J Orthop** 1996 May; 25(5):342–8 (69 ref.)

[Seronegative spondylarthropathy] Baba H, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):360–4 (15 ref.) **(Jpn)**

CLASSIFICATION

Evaluation of the Amor and ESSG classification criteria for spondylarthropathies in a Turkish population. Ertürk M, et al. **Rev Rhum Engl Ed** 1997 May;64(5):293–300

COMPLICATIONS

Dactylitis in patients with seronegative spondylarthropathy. Assessment by ultrasonography and magnetic resonance imaging. Olivieri I, et al. **Arthritis Rheum** 1996 Sep; 39(9):1524–8

Thrombosis of the abdominal aorta secondary to Brucella spondylitis. Sanchez–Gonzalez J, et al. **Infection** 1996 May–Jun;24(3):261–2

Tuberculous spondylitis (Pott's disease) with bilateral pleural effusion. Okuyama Y, et al. **Intern Med** 1996 Nov; 35(11):883–5

Psoriatic spondyloarthropathy with secondary amyloidosis. Ahmed Q, et al. **J Rheumatol** 1996 Jun;23(6):1107–10 (28 ref.)

The evolution of spondyloarthropathies in relation to gut histology. I. Clinical aspects. Mielants H, et al. **J Rheumatol** 1995 Dec;22(12):2266–72

Concomitant Behcet's disease and spondylarthropathy [letter] Kremer P, et al. **Rev Rhum Engl Ed** 1996 Jan;63(1):69–70

Cervical myelopathy in psoriatic spondylitis. Akagi S, et al. **Scand J Rheumatol** 1996;25(5):337–9

[Puncture physiotherapy in the rehabilitation of patients with complicated forms of spinal osteochondrosis] Levitskiĭ EF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Jul–Aug; (4):13–5 (Eng. Abstr.) **(Rus)**

[Magnetic resonance tomography in the diagnosis of the neurological complications of lumbar osteochondrosis] Kholin AB, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):44–8 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Microbiologically verified diagnosis of infectious spondylitis using CT–guided fine needle biopsy. Rieneck K, et al. **APMIS** 1996 Oct;104(10):755–62

Pyogenic infectious spondylitis: clinical, laboratory and MRI features. Kapeller P, et al. **Eur Neurol** 1997;38(2):94–8

Nineteen–year–old female with unilateral ankle pain. What is your diagnosis? Sobel E, et al. **J Am Podiatr Med Assoc** 1997 Feb;87(2):74–9

Radiology case of the month. Paraspinal mass lesion. Pyogenic infection of the spine caused by Staphylococcus aureaus. Neitzschman HR. **J La State Med Soc** 1996 Jul; 148(7):285–6

Spondylarthropathies. Edmonds JP. **Med J Aust** 1997 Feb 17;166(4):214–9 (12 ref.)

Single vertebral compression and involvement of the posterior elements in tuberculous spondylitis: observation on MR imaging. Ehara S, et al. **Radiat Med** 1997 May–Jun; 15(3):143–7

[Infections of the cervical spine] Heindel W, et al. **Aktuelle Radiol** 1996 Nov;6(6):308–16 (Eng. Abstr.) **(Ger)**

[Infectious spondylitis in adults] Vorbeck F, et al. **Radiologe** 1996 Oct;36(10):795–804 (17 ref.) (Eng. Abstr.) **(Ger)**

[Infectious spondylitis. A retrospective evaluation of MRI markers] Wikström M, et al. **Radiologe** 1997 Feb; 37(2):139–44 (Eng. Abstr.) **(Ger)**

[Sacroiliitis:the key symptom of spondylarthropathies. 2: morphological aspects] Bollow M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Apr;166(4):275–89 (84 ref.) (Eng. Abstr.) **(Ger)**

[Spondylitis in infancy. A case report] Smacchia MP, et al. **Minerva Pediatr** 1996 Nov;48(11):509–12 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

An atypical psoriatic spondylitis case, successfully treated with methotrexate. Tüzün C, et al. **Clin Rheumatol** 1996 Jul;15(4):403–9

Spondylarthropathies. Edmonds JP. **Med J Aust** 1997 Feb

17;166(4):214–9 (12 ref.)
[Cotrimoxazole plus rifampicin in the treatment of staphylococcal osteoarticular infection] Sánchez C, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):10–3 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

The epidemiology of spondylodiscitis in ankylosing spondylitis—a controlled study. Kabasakal Y, et al. **Br J Rheumatol** 1996 Jul;35(7):660–3

ETIOLOGY

The role of gut inflammation in the pathogenesis of spondyloarthropathies. Mielants H, et al. **Acta Clin Belg** 1996;51(5):340–9 (60 ref.)
Inflammatory changes after extradural anaesthesia may affect the spread of local anaesthetic within the extradural space. Igarashi T, et al. **Br J Anaesth** 1996 Sep;77(3):347–51
The epidemiology of spondylodiscitis in ankylosing spondylitis—a controlled study. Kabasakal Y, et al. **Br J Rheumatol** 1996 Jul;35(7):660–3
Vertebral osteomyelitis in diabetes mellitus [editorial; comment] Toyota T. **Intern Med** 1997 Jun;36(6):382–3 (12 ref.). Comment on: Intern Med 1997 Jun;36(6):443–5.
Psoriatic arthritis with spinal involvement in a patient receiving alpha-interferon for chronic hepatitis C. Lombardini F, et al. **Scand J Rheumatol** 1997;26(1):58–60
[Infectious complications after peridural obstetric anesthesia] Marsaudon E, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(2):159–62 (20 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Routine molecular genotyping of HLA-B27 in spondyloarthropathies overcomes the obstacles of serological typing and reveals an increased B *2702 frequency in ankylosing spondylitis. Frankenberger B, et al. **J Rheumatol** 1997 May;24(5):899–903
[Relation of spondylarthropathies and HLA-B27 antigen in patients from the state of Zulia, Venezuela] Rivera S, et al. **Sangre (Barc)** 1996 Dec;41(6):473–6 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Routine molecular genotyping of HLA-B27 in spondyloarthropathies overcomes the obstacles of serological typing and reveals an increased B *2702 frequency in ankylosing spondylitis. Frankenberger B, et al. **J Rheumatol** 1997 May;24(5):899–903
[Immunological studies and the problems of the pathogenesis of osteoarticular tuberculosis (tuberculous spondylitis, tuberculous synovitis)] Tikhodeev SA, et al. **Probl Tuberk** 1996;(1):24–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Biochemical markers of bone turnover in seronegative spondylarthropathy: relationship to disease activity. MacDonald AG, et al. **Br J Rheumatol** 1997 Jan;36(1):50–3

MICROBIOLOGY

Pyogenic vertebral osteomyelitis after acute bacterial prostatitis: a case report. Soda T, et al. **Int J Urol** 1996 Sep;3(5):402–4; discussion 405
Salmonella spondylitis. Cottalorda J, et al. **J Pediatr Orthop B** 1997 Jan;6(1):73–5
Vertebral osteomyelitis due to Capnocytophaga. Piroth C, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):798–801
[Vertebral osteomyelitis caused by Salmonella typhimurium (letter)] Blanco JR, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):507–8 **(Spa)**
[Cellulitis caused by Streptococcus pneumoniae associated with spondylodiscitis after suppurative otitis media (letter)] López J, et al. **Enferm Infecc Microbiol Clin** 1997 Mar; 15(3):171–2 **(Spa)**

PATHOLOGY

Late onset spondylarthropathy: clinical and biological comparison with early onset patients. Caplanne D, et al. **Ann Rheum Dis** 1997 Mar;56(3):176–9
[Migrant spondylitis. Report of 2 cases: magnetic resonance features] Scarabino T, et al. **Radiol Med (Torino)** 1997 Apr; 93(4):459–61 **(Ita)**

PHYSIOPATHOLOGY

HLA-B27 and bacteria. Uksila J, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:44–7 (27 ref.)

PSYCHOLOGY

[The psychological characteristics of patients with neurological manifestations of lumbar osteochondrosis] Grigor'eva VN, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1997;97(3):12–5 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Radiology and spondylarthritis. Calin A. **Baillieres Clin Rheumatol** 1996 Aug;10(3):455–76 (16 ref.)
The seronegative spondyloarthropathies. Kettering JM, et al. **Semin Roentgenol** 1996 Jul;31(3):220–8 (18 ref.)
Super-acute aseptic spondylitis as the first manifestation of round calcifying nucleopathy in a 77-year-old man. A case report. Kolsi I, et al. **Spine** 1997 Aug 1;22(15):1784–6

RADIONUCLIDE IMAGING

Ga-67 uptake in a case of tuberculous spondylitis. Everaert H, et al. **Clin Nucl Med** 1997 Jun;22(6):403–4
Incidental massive Ga-67 uptake in the thorax and abdomen for the diagnosis of lumbar osteomyelitis. Finn N, et al. **Clin Nucl Med** 1997 Jun;22(6):417–8
[Diagnosis of infective spondylitis. Value of bone marrow scintigraphy with 99mTC monoclonal granulocyte antibodies in combination with 99mTc-DPD bone scintigraphy] Görres G, et al. **Rontgenpraxis** 1996 Sep; 49(9):235–8 **(Ger)**

REHABILITATION

[Treatment of the reflex syndromes of lumbar osteochondrosis at a central district hospital] Efremov VP. **Lik Sprava** 1995 Sep-Dec;(9-12):134–7 (Eng. Abstr.) **(Rus)**
[Dynamic spinal traction in the combined treatment of the pain syndrome in posttraumatic osteochondrosis] Fomchenkov SV, et al. **Voen Med Zh** 1997 Jul;318(7):23–7 **(Rus)**
[The effect of deep massage and physical exercises on the cerebral circulation in osteochondrosis of the cervicothoracic spine] Aksenova AM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 May-Jun; (3):19–21 **(Rus)**
[The combined therapy of osteochondrosis of the cervical spine] Ivanova AS, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 May-Jun; (3):37–9 **(Rus)**
[The duration of the sanatorium-health resort treatment of patients with neurological manifestations of spinal osteochondrosis] Levitskiĭ EF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 May-Jun; (3):17–9 (Eng. Abstr.) **(Rus)**
[The optimization of the duration of the sanatorium-health resort treatment of patients with neurological manifestations of spinal osteochondrosis (I)] Levitskiĭ EF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Sep-Oct; (5):26–8 (Eng. Abstr.) **(Rus)**
[Puncture physiotherapy in the rehabilitation of patients with complicated forms of spinal osteochondrosis] Levitskiĭ EF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Jul-Aug; (4):13–5 (Eng. Abstr.) **(Rus)**

SURGERY

Transpedicle instrumentation in the degenerative spine. Heim SE. **Clin Orthop** 1997 Apr;(337):97–110 (146 ref.)
Intraoperative improvements of somatosensory evoked potentials: correlation to clinical outcome in surgery for cervical spondylitic myelopathy. Bouchard JA, et al. **Spine** 1996 Mar 1;21(5):589–94
[Role of surgery in the treatment of Pott's disease in adults. Apropos of 29 cases] Ghadouane M, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(7):620–8 (26 ref.) (Eng. Abstr.) **(Fre)**
[Minimal interventions in the surgery of osteochondrosis of the lumbar spine] Musalatov KhA, et al. **Vestn Khir Im I I Grek** 1996;(1):56–9 (Eng. Abstr.) **(Rus)**

THERAPY

Treatment of coccidioidal spinal infection: experience in 16 cases. Herron LD, et al. **J Spinal Disord** 1997 Jun; 10(3):215–22 (11 ref.)
Degenerative disease of the thoracic spine in central India. Mitra SR, et al. **Spinal Cord** 1996 Jun;34(6):333–7

VETERINARY

[Homeopathy in veterinary medicine (letter; comment)] Meijling WB. **Tijdschr Diergeneeskd** 1997 Apr 15; 122(8):220. Comment on: Tijdschr Diergeneeskd 1997 Jan 15;122(2):36–9; discussion 40. **(Dut)**

SPONDYLITIS, ANKYLOSING

Profile of ankylosing spondylitis in Saudi Arabia. al-Arfaj A. **Clin Rheumatol** 1996 May;15(3):287–9
Molecular mimicry: the geographical distribution of immune responses to Klebsiella in ankylosing spondylitis and its relevance to therapy. Ebringer A, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:57–61 (24 ref.)
Why the joint, why the eye? Keat A. **Clin Rheumatol** 1996 Jan;15 Suppl 1:19–21
Spondyloarthropathies. **Curr Opin Rheumatol** 1996 Jul; 8(4):B109–18
Spondyloarthropathies-spondylarthropathies [editorial] Khan MA. **Curr Opin Rheumatol** 1996 Jul;8(4):267–8 (8 ref.)
Clinical and therapeutic aspects of juvenile-onset spondyloarthropathies. Malleson PN, et al. **Curr Opin Rheumatol** 1997 Jul;9(4):291–4 (20 ref.)
Juvenile-onset spondyloarthropathies. Burgos-Vargas R, et al. **Rheum Dis Clin North Am** 1997 Aug;23(3):569–98 (190 ref.)
[Ankylosing spondylitis] Baba H, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):350–3 (11 ref.) **(Jpn)**

BLOOD

No endotoxin detected in plasma of patients with ankylosing spondylitis [letter] Mäki-Ikola O, et al. **Ann Rheum Dis** 1997 Apr;56(4):279
Soluble L-selectin in the connective tissue diseases. Blann AD, et al. **Br J Haematol** 1996 Oct;95(1):192–4
Ankylosing spondylitis and secretor status: a re-evaluation. Smith GW, et al. **Br J Rheumatol** 1997 Jul;36(7):778–80
Does serum rheumatoid factor have an influence on the clinical picture of ankylosing spondylitis? Jimenez-Balderas FJ, et al. **Clin Exp Rheumatol** 1997 May-Jun;15(3):289–93
Serum secretory immunoglobulins in ankylosing spondylitis. Wendling D, et al. **Clin Rheumatol** 1996 Nov;15(6):590–3
IL-10 plasma levels correlate with disease activity in spondyloarthropathy [letter] Claudepierre P, et al. **J Rheumatol** 1997 Aug;24(8):1659–61
Circulating levels of tumor necrosis factor soluble receptors in systemic lupus erythematosus are significantly higher than in other rheumatic diseases and correlate with disease activity. Gabay C, et al. **J Rheumatol** 1997 Feb;24(2):303–8
Stimulation of whole blood cultures in patients with ankylosing spondylitis by a mitogen derived from Mycoplasma arthritidis (MAS) and other mitogens. Brand JM, et al. **Rheumatol Int** 1997;16(5):207–11

CHEMICALLY INDUCED

Warfarin-induced spondyloarthropathy with pseudotumor-like appearance. A case report. Awwad EE, et al. **Spine** 1996 Aug 15;21(16):1936–8

CLASSIFICATION

Is ankylosing spondylitis in childhood a distinct entity? [editorial] Petty RE. **J Rheumatol** 1996 Dec;23(12):2013–4

COMPLICATIONS

Cutaneous leukocytoclastic vasculitis in a case of ankylosing spondylitis [letter] Machet L, et al. **Acta Derm Venereol** 1997 Jul;77(4):324
Plain radiographs and thoracic high-resolution CT in patients with ankylosing spondylitis. Fenlon HM, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1067–72
Intestinal perforation in a patient with severe ankylosing spondylitis. Leitch DN, et al. **Ann Rheum Dis** 1997 Aug; 56(8):458–60
Temporomandibular joint osseous morphology in a consecutive sample of ankylosing spondylitis patients. Ramos-Remus C, et al. **Ann Rheum Dis** 1997 Feb; 56(2):103–7
Bipolar hip arthroplasty in ankylosing spondylitis. Bhan S, et al. **Arch Orthop Trauma Surg** 1996;115(2):94–9
Cervical myelopathy caused by ossification of the posterior longitudinal ligament in ankylosing spondylitis. Olivieri I, et al. **Arthritis Rheum** 1996 Dec;39(12):2074–7
Renal transplantation in a patient with severe ankylosing spondylitis. Kinirons B, et al. **Br J Hosp Med** 1996 Sep 18-Oct 1; 56(6):298
Lung findings on high-resolution computed tomography in idiopathic ankylosing spondylitis--correlation with clinical findings, pulmonary function testing and plain radiography. Casserly IP, et al. **Br J Rheumatol** 1997 Jun;36(6):677–82
The epidemiology of spondylodiscitis in ankylosing spondylitis—a controlled study. Kabasakal Y, et al. **Br J Rheumatol** 1996 Jul;35(7):660–3
Cervical spondylodiscitis in a patient with ankylosing spondylitis [letter] Lim KL, et al. **Br J Rheumatol** 1996 Oct;35(10):1034–6
Paget's disease in a patient with ankylosing spondylitis--a diagnostic dilemma. Peel NF, et al. **Br J Rheumatol** 1996 Oct;35(10):1011–4
Spinal pseudoarthrosis complicating ankylosing spondylitis: a report of two patients. Pettersson T, et al. **Br J Rheumatol** 1996 Dec;35(12):1319–23
Atlantoaxial subluxation in an ankylosing spondylitis patient with cervical spine ossification [letter] Toussirot E, et al. **Br J Rheumatol** 1997 Feb;36(2):293–5
Unusual presentation of primary sclerosing cholangitis. Pineau BC, et al. **Can J Gastroenterol** 1997 Jan-Feb; 11(1):45–8 (34 ref.)
Images in cardiovascular medicine. Cardiovascular disease in ankylosing (Marie-Strümpell) spondylitis. Ansari A, et al. **Circulation** 1997 Jun 3;95(11):2585–6
Does coexistence of ochronosis and ankylosing spondylitis really exist? [letter; comment] Canhão H, et al. **Clin Exp Rheumatol** 1996 Nov-Dec;14(6):699. Comment on: Clin Exp Rheumatol 1995 Mar-Apr;13(2):259–61.
Polymyalgia rheumatica in patients with ankylosing spondylitis: a report of 5 cases. Elkayam O, et al. **Clin Exp Rheumatol** 1997 Jul-Aug;15(4):411–4
Iliolumbar ligament ossification in undifferentiated seronegative spondyloarthropathy. Olivieri I, et al. **Clin Rheumatol** 1997 Mar;16(2):212–4
Coincident seronegative spondarthritis: a case report. Speed CA, et al. **Clin Rheumatol** 1996 May;15(3):301–2
Coexisting ankylosing spondylitis and Behçet's disease [letter] Tosun M, et al. **Clin Rheumatol** 1996 Nov;15(6):619–20
Surgery of the deformities in ankylosing spondylitis: our

experience of lumbar osteotomies in 31 patients. Lazennec JY, et al. **Eur Spine J** 1997;6(4):222–32

Ankylosing spondylitis with diverse renal outcome in two patients. Nithya S, et al. **J Assoc Physicians India** 1996 Oct;44(10):727–8

Spinal epidural hematoma and ankylosing spondylitis. Van de Straete S, et al. **J Belge Radiol** 1997 Jun;80(3):109–10

Osteomalacia and osteoporosis in a woman with ankylosing spondylitis. Kohlmeier LA, et al. **J Bone Miner Res** 1996 May;11(5):697–703

Cervical cord compression complicating atlantoaxial subluxation in ankylosing spondylitis [letter; comment] Dellestable F, et al. **J Rheumatol** 1996 Sep;23(9):1668–70 . Comment on: J Rheumatol 1995 Nov;22(11):2120–5.

Posterior vertebral body erosion by arachnoid diverticula in cauda equina syndrome: an unusual manifestation of ankylosing spondylitis. Ginsburg WW, et al. **J Rheumatol** 1997 Jul;24(7):1417–20

Secondary amyloidosis in ankylosing spondylitis. A systematic survey of 137 patients using abdominal fat aspiration. Gratacos J, et al. **J Rheumatol** 1997 May; 24(5):912–5

Fatigue in ankylosing spondylitis: its prevalence and relationship to disease activity, sleep, and other factors. Jones SD, et al. **J Rheumatol** 1996 Mar;23(3):487–90

The evolution of spondyloarthropathies in relation to gut histology. I. Clinical aspects. Mielants H, et al. **J Rheumatol** 1995 Dec;22(12):2266–72

Two year followup of anterior and vertical atlantoaxial subluxation in ankylosing spondylitis. Ramos-Remus C, et al. **J Rheumatol** 1997 Mar;24(3):507–10

Synovial cyst at the C1–C2 junction and spondyloarthropathy. Vergne P, et al. **J Rheumatol** 1996 Aug;23(8):1438–40

Diagnostic value of bone marrow biopsy in patients with AA-type renal amyloidosis secondary to ankylosing spondylitis [letter; comment] Sungur C, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2520–1. Comment on: Nephrol Dial Transplant 1996 Jun;11(6):1172–5.

Spontaneous avulsion injuries of tendons in patients with ankylosing spondylitis. Groupe de Recherche en Immuno-pathologie (GRIMP) [letter] Da Silva LF, et al. **Rev Rhum Engl Ed** 1996 Jul–Sep;63(7–8):504 (5 ref.)

Prospective study of anterior chest wall involvement in ankylosing spondylitis and psoriatic arthritis. Fournié B, et al. **Rev Rhum Engl Ed** 1997 Jan;64(1):22–5

Sarcoidosis and spondylarthropathy. Three case-reports. Kremer P, et al. **Rev Rhum Engl Ed** 1996 Jun;63(6):405–11 (36 ref.)

Simultaneous occurrence of diffuse idiopathic skeletal hyperostosis and ankylosing spondylitis. Moreno AC, et al. **Rev Rhum Engl Ed** 1996 Apr;63(4):292–5 (12 ref.)

Bilateral ankylosis of temporomandibular joint secondary to ankylosing spondylitis in a male Chinese. Chow TK, et al. **Scand J Rheumatol** 1997;26(2):133–4

Aneurysmal dilatation of ascending aorta and aortic insufficiency in juvenile spondyloarthropathy. Kim TH, et al. **Scand J Rheumatol** 1997;26(3):218–21

Spondylodiscitis in ankylosing spondylitis, inflammation or trauma? A description of six cases. Rasker JJ, et al. **Scand J Rheumatol** 1996;25(1):52–7

Osteochondroma in a patient with juvenile ankylosing spondylitis associated with idiopathic thrombocytopenic purpura and alpha thalassemia. Tsai CY, et al. **Scand J Rheumatol** 1996;25(1):61–2

Renal abnormalities in ankylosing spondylitis. Vilar MJ, et al. **Scand J Rheumatol** 1997;26(1):19–23

A rare neurological presentation due to ossification of the posterior longitudinal ligament of the thoracic spine and ankylosing spondylitis: case report. Huang TJ, et al. **Spinal Cord** 1997 Aug;35(8):550–3

Cervical pseudarthrosis in ankylosing spondylitis. A case report. Deburge A, et al. **Spine** 1996 Dec 1;21(23):2801–5

A case of juvenile ankylosing spondylitis and Crohn's disease. Unsal E, et al. **Turk J Pediatr** 1997 Apr–Jun;39(2):277–80

[Takayasu disease and ankylosing spondylarthritis: a probably non-fortuitous association (letter)] Soubrier M, et al. **Presse Med** 1997 Apr 19;26(13):610 **(Fre)**

[Spontaneous vertebral pseudarthrosis in ankylosing spondylitis. Apropos of 3 cases] Moussellard H, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(5):453–7 (Eng. Abstr.) **(Fre)**

[Study of bullous fibrosis of the upper lobes in ankylosing spondylitis with high-resolution computerized tomography] Falaschi F, et al. **Radiol Med (Torino)** 1996 Oct;92(4):358–62 (Eng. Abstr.) **(Ita)**

[The local therapy of enthesitis and bursitis of the calcaneal area in seronegative spondylarthritis] Gadzhinova LD, et al. **Ter Arkh** 1997;69(5):47–9 (Eng. Abstr.) **(Rus)**

[Dysphagia due to cervical spine involvement in ankylosing spondylitis] Jajić Z, et al. **Reumatizam** 1996;43(2):11–3 (Eng. Abstr.) **(Scr)**

[Infection and reactive arthritis: clinico-bacteriological correlation in seronegative arthropathies] Gutiérrez F, et al. **Rev Med Chil** 1995 Oct;123(10):1214–24 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Uveitis associated with inflammatory bowel disease compared with uveitis associated with spondyloarthropathy. Lyons JL, et al. **Arch Ophthalmol** 1997 Jan;115(1):61–4

Paget's disease in a patient with ankylosing spondylitis—a diagnostic dilemma. Peel NF, et al. **Br J Rheumatol** 1996 Oct;35(10):1011–4

Clinical application of the polymerase chain reaction in the detection of HLA-B27 alleles. Otten HG, et al. **Clin Exp Rheumatol** 1995 Nov–Dec;13(6):741–3

Coexisting ankylosing spondylitis and Behçet's disease [letter] Tosun M, et al. **Clin Rheumatol** 1996 Nov;15(6):619–20

Clinical and epidemiologic aspects of ankylosing spondylitis and spondyloarthropathies. van der Linden S, et al. **Curr Opin Rheumatol** 1996 Jul;8(4):269–74 (48 ref.)

Automated routine HLA-B27 typing by flow cytometry. Reynolds WM, et al. **J Immunol Methods** 1996 Oct 16; 197(1–2):1–5

Transthoracic and transesophageal echocardiographic evaluation of the aortic root and subvalvular structures in ankylosing spondylitis. Arnason JA, et al. **J Rheumatol** 1996 Jan;23(1):120–3

The Juvenile Arthritis Quality of Life Questionnaire—development of a new responsive index for juvenile rheumatoid arthritis and juvenile spondyloarthritides. Duffy CM, et al. **J Rheumatol** 1997 Apr;24(4):738–46

MRI demonstration of arachnoiditis in cauda equina syndrome of ankylosing spondylitis. Charlesworth CH, et al. **Neuroradiology** 1996 Jul;38(5):462–5

Diagnosis of ankylosing spondylitis. Krongard DF, et al. **Radiol Technol** 1996 Nov–Dec;68(2):163–5 (7 ref.)

Arthritis diagnosis based upon the near-infrared spectrum of synovial fluid. Shaw RA, et al. **Rheumatol Int** 1995; 15(4):159–65

[Validation of choice of experts for the spondylarthropathy study in Lebanon] Awada H, et al. **J Med Liban** 1996; 44(4):215–7 (Eng. Abstr.) **(Fre)**

[MR imaging in seronegative spondyloarthritis] Jevtič V, et al. **Radiologe** 1996 Aug;36(8):624–31 (Eng. Abstr.) **(Ger)**

[Etiology of cervicobrachialgia with paralysis and hypesthesia in C7 and C8 dermatomes. Rheumatoid arthritis of the intervertebral joints C6/7 and C7/Th1 with inflammatory intraspinal and intraforminal pannus formation] Reiche W, et al. **Radiologe** 1996 Nov; 36(11):928–32 **(Ger)**

[Sacroiliitis: the key symptom of spondylathropathies. I. The clinical aspects] Bollow M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Feb;166(2):95–100 (107 ref.) (Eng. Abstr.) **(Ger)**

[The rheumatoid patient as back pain patient. Diagnosis and differential diagnosis of seronegative spondylarthropathies] Lakomek HJ. **Versicherungsmedizin** 1997 Jun 1;49(3):78–81 (8 ref.) (Eng. Abstr.) **(Ger)**

[Possible diagnostic error of "Bechterew disease"] Uitz E, et al. **Wien Med Wochenschr** 1996;146(17):468–71 (Eng. Abstr.) **(Ger)**

[Backache from the internal medicine-rheumatologic viewpoint] Keitel W. **Z Arztl Fortbild (Jena)** 1997 Jan; 90(8):671–6 (Eng. Abstr.) **(Ger)**

[Ankylosing spondylitis and urogenital infection: diagnosis of urologic infection and correlation with rheumatologic findings] Lange U, et al. **Z Rheumatol** 1996 Jul–Aug; 55(4):249–55 (Eng. Abstr.) **(Ger)**

[Involvement of the temporomandibular joints in Bechterew's disease] Grinin VM, et al. **Stomatologiia (Mosk)** 1997; 76(1):18–21 (Eng. Abstr.) **(Rus)**

[Incorrect diagnosis of peripheral arthritis in ankylosing spondylitis] Jajić Z, et al. **Reumatizam** 1996;43(2):17–9 (Eng. Abstr.) **(Scr)**

DIET THERAPY

The use of a low starch diet in the treatment of patients suffering from ankylosing spondylitis. Ebringer A, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:62–66 (15 ref.)

DRUG THERAPY

Comparison of sulfasalazine and placebo in the treatment of ankylosing spondylitis. A Department of Veterans Affairs Cooperative Study. Clegg DO, et al. **Arthritis Rheum** 1996 Dec;39(12):2004–12

Reevaluation of some double-blind, randomized studies of dexibuprofen (Seractil): a state-of-the-art overview. Studies in patients with lumbar vertebral column syndrome, rheumatoid arthritis, distortion of the ankle joint, gonarthrosis, ankylosing spondylitis, and activated coxarthrosis. Rahlfs VW, et al. **J Clin Pharmacol** 1996 Dec; 36(12 Suppl):33S–40S

The efficacy and tolerability of aceclofenac in the treatment of patients with ankylosing spondylitis: a multicenter controlled clinical trial. Aceclofenac Indomethacin Study Group. Batlle-Gualda E, et al. **J Rheumatol** 1996 Jul; 23(7):1200–6

Aceclofenac is as safe and effective as tenoxicam in the treatment of ankylosing spondylitis: a 3 month multicenter comparative trial. Spanish Study Group on Aceclofenac in Ankylosing Spondylitis. Villa Alcázar LF, et al. **J Rheumatol** 1996 Jul;23(7):1194–9

ENZYMOLOGY

Mobilization of fibrinolytic enzymes in synovial fluid and plasma of rheumatoid arthritis and spondyloarthropathy and their relation to radiological destruction. Wållberg-Jonsson S, et al. **J Rheumatol** 1996 Oct; 23(10):1704–9

EPIDEMIOLOGY

Ankylosing spondylitis in West Africans—evidence for a non-HLA-B27 protective effect. Brown MA, et al. **Ann Rheum Dis** 1997 Jan;56(1):68–70

Maternal age and the risk of developing ankylosing spondylitis [letter; comment] Raza K, et al. **Ann Rheum Dis** 1997 Mar;56(3):209. Comment on: Ann Rheum Dis 1995 Sep;54(9):754–6.

HLA-B associations of HLA-B27 negative ankylosing spondylitis: comment on the article by Yamaguchi et al [letter; comment] Brown M, et al. **Arthritis Rheum** 1996 Oct;39(10):1768–9. Comment on: Arthritis Rheum 1995 Nov;38(11):1672–7.

Epidemiology of HLA-B27 and Arthritis. Khan MA. **Clin Rheumatol** 1996 Jan;15 Suppl 1:10–2 (16 ref.)

Clinical and epidemiologic aspects of ankylosing spondylitis and spondyloarthropathies. van der Linden S, et al. **Curr Opin Rheumatol** 1996 Jul;8(4):269–74 (48 ref.)

Genuine ankylosing spondylitis in children: a case-control study of patients with early definite disease according to adult onset criteria. Burgos-Vargas R, et al. **J Rheumatol** 1996 Dec;23(12):2140–7

Juvenile onset ankylosing spondylitis—more girls than we thought? Gomez KS, et al. **J Rheumatol** 1997 Apr; 24(4):735–7

Incidence and prevalence of ankylosing spondylitis in Finland. Kaipiainen-Seppanen O, et al. **J Rheumatol** 1997 Mar;24(3):496–9

ETHNOLOGY

Seronegative spondyloarthropathies and HLA-B27 subtyes: a study in Asian Indians. Kanga U, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:13–8

Ethnic differences in ankylosing spondylitis: disease expression in Pakistan compared to Britain [letter] Roussou E, et al. **J Rheumatol** 1997 Mar;24(3):612–3

Spondylarthropathic diseases in indigenous circumpolar populations of Russia and Alaska. Benevolenskaya LI, et al. **Rev Rhum Engl Ed** 1996 Dec;63(11):815–22

ETIOLOGY

Grouped caging predisposes male mice to ankylosing enthesopathy. Weinreich S, et al. **Ann Rheum Dis** 1996 Sep; 55(9):645–7

Ankylosing spondylitis associated with IgA lambda chain myeloma [letter] O'Neill TW, et al. **Br J Rheumatol** 1997 Mar;36(3):401–2

Etiopathogenesis and biochemical and immunologic evaluation of spondyloarthropathies. Scofield RH. **Curr Opin Rheumatol** 1996 Jul;8(4):309–15 (71 ref.)

[Post-traumatic psoriatic rheumatism and post-traumatic spondylarthropathies (letter)] Doury P. **Presse Med** 1997 Feb 15;26(4):172 **(Fre)**

[New aspects in the pathogenesis of Bechterew disease] Märker-Hermann E, et al. **Z Rheumatol** 1996 Jan–Feb; 55(1):4–18 (92 ref.) (Eng. Abstr.) **(Ger)**

[Comment on H. Kaiser: "Current aspects of SAPHO syndrome" (letter)] Schilling F, et al. **Z Rheumatol** 1996 Jan–Feb;55(1):71–2; discussion 75 **(Ger)**

GENETICS

The LMP2 polymorphism is associated with susceptibility to acute anterior uveitis in HLA-B27 positive juvenile and adult Mexican subjects with ankylosing spondylitis. Maksymowych WP, et al. **Ann Rheum Dis** 1997 Aug; 56(8):488–92

Sister chromatid exchange analysis in the lymphocytes of patients with ankylosing spondylitis. Sönmez S, et al. **Ann Rheum Dis** 1997 Apr;56(4):275–7

Non-HLA-B27 genetic factors in HLA-B27 associated diseases. Feltkamp TE. **Clin Rheumatol** 1996 Jan;15 Suppl 1:40–3

HSP70-Hom NcoI polymorphism and HLA-associations in the Finnish population and in patients with ankylosing spondylitis or reactive arthritis. Westman P, et al. **Eur J Immunogenet** 1994 Apr;21(2):81–90

Susceptibility to ankylosing spondylitis correlates with the C-terminal residue of peptides presented by various HLA-B27 subtypes. Fiorillo MT, et al. **Eur J Immunol** 1997 Feb;27(2):368–73

The mystery of HLA-B27 and disease. David CS. **Immunogenetics** 1997;46(1):73–7

A multicase family with spondylarthropathies. Alenius GM, et al. **Scand J Rheumatol** 1997;26(2):107–12

Frequency of HLA-B27 subtypes in a Danish population and in Danish patients with ankylosing spondylitis. Baech J, et al. **Tissue Antigens** 1997 May;49(5):499–502

HLA-B27 polymorphism and worldwide susceptibility to ankylosing spondylitis. Gonzalez-Roces S, et al. **Tissue Antigens** 1997 Feb;49(2):116–23

MICA gene and ankylosing spondylitis: linkage analysis via a transmembrane-encoded triplet repeat polymorphism. Goto K, et al. **Tissue Antigens** 1997 May;49(5):503–7

HLA-B27 transgenic rats: animal model of human HLA-B27-associated disorders. O'Neill TP. **Toxicol Pathol** 1997 Jul–Aug;25(4):407–8

[The clinico-genetic characteristics of combined forms of seronegative spondylarthritis] Godzenko AA, et al. **Ter Arkh** 1997;69(5):43–6 (Eng. Abstr.) **(Rus)**

SPONDYLITIS, ANKYLOSING

HISTORY

Ankylosing spondylitis is indigenous to Mesoamerica. Martínez-Lavín M, et al. **J Rheumatol** 1995 Dec; 22(12):2327-30

IMMUNOLOGY

HLA-B associations of HLA-B27 negative ankylosing spondylitis: comment on the article by Yamaguchi et al [letter; comment] Brown M, et al. **Arthritis Rheum** 1996 Oct;39(10):1768-9. Comment on: Arthritis Rheum 1995 Nov;38(11):1672-7.

Patterns of expression of tumor necrosis factor alpha, tumor necrosis factor beta, and their receptors in synovia of patients with juvenile rheumatoid arthritis and juvenile spondylarthropathy. Grom AA, et al. **Arthritis Rheum** 1996 Oct;39(10):1703-10

Ankylosing spondylitis and secretor status: a re-evaluation. Smith GW, et al. **Br J Rheumatol** 1997 Jul;36(7):778-80

Antibodies against bacterial lipopolysaccharides in Japanese patients with ankylosing spondylitis. Tani Y, et al. **Br J Rheumatol** 1997 Apr;36(4):491-3

Are antineutrophil cytoplasmic antibodies associated with spondyloarthropathies? [letter; comment] Weinerth JD, et al. **Br J Rheumatol** 1996 Oct;35(10):1032-3. Comment on: Br J Rheumatol 1995 Jul;34(7):695-6.

Autoantibodies to collagens in Japanese patients with ankylosing spondylitis. Tani Y, et al. **Clin Exp Rheumatol** 1997 May-Jun;15(3):295-7

Ig A antibodies to klebsiella in ankylosing spondylitis. Ardiçoğlu O, et al. **Clin Rheumatol** 1996 Nov;15(6):573-6

Seronegative spondyloarthropathies and HLA-B27 subtyes: a study in Asian Indians. Kanga U, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:13-8

HLA-B27 and HLA-B73 polymorphism and its role on antigenicity, peptide presentation, and disease susceptibility. Lopez De Castro JA. **Clin Rheumatol** 1996 Jan;15 Suppl 1:67-71 (24 ref.)

IgA antibodies in HLA-B27 associated acute anterior uveitis and ankylosing spondylitis. Sprenkels SH, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:52-6

Experimental spondyloarthropathy in HLA-B27 transgenic rats. Taurog JD, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:22-7 (22 ref.)

HLA-B27 structure, function, and disease association. López-Larrea C, et al. **Curr Opin Rheumatol** 1996 Jul; 8(4):296-308 (96 ref.)

Etiopathogenesis and biochemical and immunologic evaluation of spondyloarthropathies. Scofield RH. **Curr Opin Rheumatol** 1996 Jul;8(4):309-15 (71 ref.)

Association of MHC class I with spondyloarthropathies in Kuwait. Alharbi SA, et al. **Eur J Immunogenet** 1996 Feb; 23(1):67-70

Class I HLA antigens in spondyloarthropathy: observations in Alaskan Eskimo patients and controls. Boyer GS, et al. **J Rheumatol** 1997 Mar;24(3):500-6

Prevalence of antiphospholipid antibodies in patients with ankylosing spondylitis. Juanola X, et al. **J Rheumatol** 1995 Oct;22(10):1891-3

HLA-DRB1*08 influences the development of disease in Mexican Mestizo with spondyloarthropathy. Maksymowych WP, et al. **J Rheumatol** 1997 May; 24(5):904-7

Antibodies to Klebsiella, Proteus, and HLA-B27 peptides in Japanese patients with ankylosing spondylitis and rheumatoid arthritis. Tani Y, et al. **J Rheumatol** 1997 Jan; 24(1):109-14

HLA-B27 subtypes in Japanese with seronegative spondyloarthropathies and healthy controls. Yamaguchi A, et al. **J Rheumatol** 1996 Jul;23(7):1189-93

Antibody response to nitrogenase-positive and -negative Klebsiella pneumoniae strains in juvenile-onset ankylosing spondylitis patients and their first degree relatives: lack of differential recognition of the bacterial nitrogenase. Parra-Campos V, et al. **Rev Latinoam Microbiol** 1996 Apr-Jun;38(2):121-7

Antibody responses to gut bacteria in ankylosing spondylitis, rheumatoid arthritis, Crohn's disease and ulcerative colitis. Tiwana H, et al. **Rheumatol Int** 1997;17(1):11-6

Interleukin-2 is found in the synovium of psoriatic arthritis and spondyloarthritis, not in rheumatoid arthritis. Wong WM, et al. **Scand J Rheumatol** 1996;25(4):239-45

Binding of peptides naturally presented by HLA-B27 to the differentially disease-associated B*2704 and B*2706 subtypes, and to mutants mimicking their polymorphism. Galocha B, et al. **Tissue Antigens** 1996 Nov;48(5):509-18

Lack of carboxyl-terminal tyrosine distinguishes the B*2706-bound peptide repertoire from those of B*2704 and other HLA-B27 subtypes associated with ankylosing spondylitis. García F, et al. **Tissue Antigens** 1997 Mar;49(3 Pt 1):215-21

Possible protective role of HLA-B*2706 for ankylosing spondylitis. Ren EC, et al. **Tissue Antigens** 1997 Jan; 49(1):67-9

HLA-B27 transgenic rats: animal model of human HLA-B27-associated disorders. O'Neill TP. **Toxicol Pathol** 1997 Jul-Aug;25(4):407-8

[Explanatory models for HLA-b27 association of reactive arthritis as a paradigm for spondyloarthropathy] Braun J, et al. **Med Klin** 1996 Sep 15;91(9):574-9 (54 ref.) **(Ger)**

[Spondyloarthropathies and HLA-B27 subtypes in the populations of the Russian North] Erdes Sh, et al. **Ter Arkh** 1997;69(5):41-3 (Eng. Abstr.) **(Rus)**

[Histiocytosis X and ankylosing spondylitis. A common pathogenesis?] Alvarez-Sala R, et al. **An Med Interna** 1996 Jul;13(7):339-40 (Eng. Abstr.) **(Spa)**

METABOLISM

HLA-B27 subtypes positively and negatively associated with spondyloarthropathy. Nasution AR, et al. **J Rheumatol** 1997 Jun;24(6):1111-4

MICROBIOLOGY

Host-microbe interaction in HLA-B27-associated diseases. Granfors K. **Ann Med** 1997 Apr;29(2):153-7

Association of gut inflammation with increased serum IgA class Klebsiella antibody concentrations in patients with axial ankylosing spondylitis (AS): implication for different aetiopathogenetic mechanisms for axial and peripheral AS? Mäki-Ikola O, et al. **Ann Rheum Dis** 1997 Mar;56(3):180-3

Faecal flora in spondyloarthropathy. Smith GW, et al. **Br J Rheumatol** 1997 Aug;36(8):850-4

PATHOLOGY

Identification of childhood arthritis in archaeological material: juvenile rheumatoid arthritis versus juvenile spondyloarthropathy. Rothschild BM, et al. **Am J Phys Anthropol** 1997 Feb;102(2):249-64

Bone mineral density in ankylosing spondylitis. Sivri A, et al. **Clin Rheumatol** 1996 Jan;15(1):51-4

The sacroiliac joint in the spondyloarthropathies. Braun J, et al. **Curr Opin Rheumatol** 1996 Jul;8(4):275-87 (130 ref.)

The evolution of spondyloarthropathies in relation to gut histology. II. Histological aspects. Mielants H, et al. **J Rheumatol** 1995 Dec;22(12):2273-8

The evolution of spondyloarthropathies in relation to gut histology. III. Relation between gut and joint. Mielants H, et al. **J Rheumatol** 1995 Dec;22(12):2279-84

Magnetic resonance changes in the temporomandibular joint in ankylosing spondylitis. Ramos-Remus C, et al. **J Rheumatol** 1997 Jan;24(1):123-7

Systemic osteopenia and mineralization defect in patients with ankylosing spondylitis. Szejnfeld VL, et al. **J Rheumatol** 1997 Apr;24(4):683-8

Renal involvement in ankylosing spondylitis (Bechterew's disease) [see comments] Nabokov AV, et al. **Nephrol Dial Transplant** 1996 Jun;11(6):1172-5. Comment in: Nephrol Dial Transplant 1996 Dec;11(12):2520-1.

Intestinal histological and ultrastructural inflammatory changes in spondyloarthropathy and rheumatoid arthritis. Porzio V, et al. **Scand J Rheumatol** 1997;26(2):92-8

[Determination of diminished bone mineral density in ankylosing spondylitis] Lányi E, et al. **Orv Hetil** 1997 Sep 7;138(36):2227-9 (Eng. Abstr.) **(Hun)**

[Evaluation of changes in destructive spondylarthropathy (DSA) in long-term dialysis patients] Utsunomiya M, et al. **Nippon Jinzo Gakkai Shi** 1997 Mar;39(2):129-34 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Skeletal status of men with early and late ankylosing spondylitis. Lee YS, et al. **Am J Med** 1997 Sep; 103(3):233-41

Disease activity in ankylosing spondylitis: selection of a core set of variables and a first set in the development of a disease activity score. Creemers MC, et al. **Br J Rheumatol** 1996 Sep;35(9):867-73

The outcome of ankylosing spondylitis: a study of 100 patients. Gran JT, et al. **Br J Rheumatol** 1997 Jul; 36(7):766-71

Laryngeal mask airway in severe cervical ankylosis. Defalque RJ, et al. **Can J Anaesth** 1997 Mar;44(3):305-7

Does serum rheumatoid factor have an influence on the clinical picture of ankylosing spondylitis? Jimenez-Balderas FJ, et al. **Clin Exp Rheumatol** 1997 May-Jun;15(3):289-93

IgA antibodies against Klebsiella and other Gram-negative bacteria in ankylosing spondylitis and acute anterior uveitis. Sprenkels SH, et al. **Clin Rheumatol** 1996 Jan;15 Suppl 1:48-51

Involvement of the temporomandibular joints in ankylosing spondylitis (Bechterew's disease). Locher MC, et al. **J Craniomaxillofac Surg** 1996 Aug;24(4):205-13

An update on the Bath Ankylosing Spondylitis Disease Activity and Functional Indices (BASDAI, BASFI): excellent Cronbach's alpha scores. Jones SD, et al. **J Rheumatol** 1996 Feb;23(2):407

Physical fitness and its relationship to other indices of health status in children with chronic arthritis. Malleson PN, et al. **J Rheumatol** 1996 Jun;23(6):1059-65

Anatomic predilection of the spondyloarthropathies(-)a case of the nerves? Segal AH. **J Rheumatol** 1996 Mar; 23(3):491-4 (60 ref.)

Renal abnormalities in ankylosing spondylitis. Vilar MJ, et al. **Scand J Rheumatol** 1997;26(1):19-23

PSYCHOLOGY

Socioeconomic status in ankylosing spondylitis: relationship between occupation and disease activity. Roussou E, et al. **J Rheumatol** 1997 May;24(5):908-11

RADIOGRAPHY

Mobilization of fibrinolytic enzymes in synovial fluid and plasma of rheumatoid arthritis and spondyloarthropathy and their relation to radiological destruction. Wållberg-Jonsson S, et al. **J Rheumatol** 1996 Oct; 23(10):1704-9

Lumboperitoneal shunt for cauda equina syndrome in ankylosing spondylitis. Kawasaki T, et al. **J Spinal Disord** 1996 Feb;9(1):72-5

The seronegative spondyloarthropathies. Kettering JM, et al. **Semin Roentgenol** 1996 Jul;31(3):220-8 (18 ref.)

[Critical discussion comment on the contribution by Brandt et al. "The SAPHO syndrome: two case reports" (letter)] Schilling F. **Aktuelle Radiol** 1996 Jan;6(1):55-7 **(Ger)**

[Occupationally-induced degenerative discopathies in the area of the lumbar spine] Elsner G, et al. **Soz Praventivmed** 1997;42(3):144-54 (Eng. Abstr.) **(Ger)**

[C6 fatal trans-vertebral dislocation fracture with tracheal lesion in Bechterew disease. A case presentation] Kessler T, et al. **Unfallchirurg** 1996 Jul;99(7):525-9 (Eng. Abstr.) **(Ger)**

[Lumbo-sacroiliac hyperostosis with retroperitoneal fibrosis in spondarthritis hyperostotical pustulo-psoriatica--with sternocostoclavicular hyperostosis and superior and inferior venous obstruction syndrome: pathogenetic hypothesis of fibro-osteopathia psoriatica] Schilling F, et al. **Z Rheumatol** 1996 Sep-Oct;55(5):331-47 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Applications of bone scintigraphy in ankylosing spondylitis. Peh WC, et al. **Clin Imaging** 1997 Jan-Feb;21(1):54-62

Technetium-99m-IgG polyclonal human immunoglobulin scintigraphy in the evaluation of sacroiliitis [letter; comment] Leslie WD, et al. **Eur J Nucl Med** 1996 Oct; 23(10):1416. Comment on: Eur J Nucl Med 1995 Nov;22(11):1339-46. Comment on: Eur J Nucl Med 1996 Apr;23(4):459-65.

REHABILITATION

[Specific and aspecific sports activities of patients with Bechterew's disease] Falkenbach A, et al. **Rehabilitation (Stuttg)** 1997 Feb;36(1):48-50 (Eng. Abstr.) **(Ger)**

SURGERY

Return to work after posterolateral fusion with transpedicular instrumentation for spondylarthrosis of the lumbosacral spine. Pihlajamäki H, et al. **Ann Chir Gynaecol** 1996; 85(1):63-6

Dysphagia caused by a hard cervical collar. Houghton DJ, et al. **Br J Neurosurg** 1996 Oct;10(5):501-2

Primary noncemented total hip arthroplasty in patients with ankylosing spondylitis. Clinical and radiographic results at an average follow-up period of 6 years. Brinker MR, et al. **J Arthroplasty** 1996 Oct;11(7):802-12 (48 ref.)

Long-term results of total hip replacement in young patients who had ankylosing spondylitis. Eighteen to thirty-year results with survivorship analysis. Sochart DH, et al. **J Bone Joint Surg Am** 1997 Aug;79(8):1181-9

Osteotomy of the cervical spine in ankylosing spondylitis. McMaster MJ. **J Bone Joint Surg Br** 1997 Mar; 79(2):197-203

Correction of kyphotic deformity of the cervical spine in ankylosing spondylitis using general anesthesia and internal fixation. Shimizu K, et al. **J Spinal Disord** 1996 Dec; 9(6):540-3

THERAPY

Combination therapy of anti-CD4 and anti-IL6 monoclonal antibodies in a case of severe spondylarthropathy [letter] Wendling D, et al. **Br J Rheumatol** 1996 Dec;35(12):1330

Management of spondyloarthropathies. Cuellar ML, et al. **Curr Opin Rheumatol** 1996 Jul;8(4):288-95 (52 ref.)

[Acupuncture in treatment of inflammatory rheumatic diseases] Lautenschläger J. **Z Rheumatol** 1997 Jan-Feb; 56(1):8-20 (Eng. Abstr.) **(Ger)**

[The treatment of temporomandibular joint involvement in Bechterew's disease] Semkin VA, et al. **Stomatologiia (Mosk)** 1997;76(3):35-7 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

Persistence of enthesopathic changes in patients with spondylarthropathy during a 6-month follow-up. Lehtinen A, et al. **Clin Exp Rheumatol** 1995 Nov-Dec;13(6):733-6

SPONDYLODESIS see **SPINAL FUSION**

SPONDYLODISCITIS see **DISCITIS**

SPONDYLOEPIPHYSEAL DYSPLASIA see **OSTEOCHONDRODYSPLASIAS**

SPONDYLOLISTHESIS

[Degenerative lumbar spondylolisthesis] Eshkenazi AU, et al. **Harefuah** 1997 Feb 2;132(3):229-32 (34 ref.) **(Heb)**

COMPLICATIONS

Pedicular stress fracture in the lumbar spine. Chong VF, et al. **Australas Radiol** 1997 Aug;41(3):306–7

Lumbar spinal stenosis: indications for arthrodesis and spinal instrumentation. Herkowitz HN. **Instr Course Lect** 1994; 43:425–33 (35 ref.)

Minimalist versus maximalist approach to the degenerative spine [letter; comment] Birsner HA. **J Neurosurg** 1997 Jun; 86(6):1069–70. Comment on: J Neurosurg 1996 Oct;85(4):582–5.

Degenerative lumbar spondylolisthesis with spinal stenosis, a prospective study comparing decompression with decompression and intertransverse process arthrodesis: a critical analysis. Vaccaro AR, et al. **Spine** 1997 Feb 15; 22(4):368–9

[What is your diagnosis? Ventrolisthesis L5/S1 (grade I) in spondylolysis—medullar compression syndrome Th 10/11 caused by central disk herniation and intervertebral arthrosis] Haegeli L, et al. **Schweiz Rundsch Med Prax** 1996 Oct 1;85(40):1233–5 **(Ger)**

CONGENITAL

Successful staged surgical correction of congenital segmental spinal dysgenesis and complete rotary subluxation of the thoracolumbar spine in an infant. Ford EG, et al. **J Pediatr Surg** 1996 Jul;31(7):960–4

DIAGNOSIS

Degenerative cervical spondylolisthesis: diagnosis and management in five cases. Boulos AS, et al. **J Spinal Disord** 1996 Jun;9(3):241–5

ETIOLOGY

Experimental lumbar spondylolisthesis in growing rabbits. Osterman K, et al. **Clin Orthop** 1996 Nov;(332):274–80

The influence of pregnancy on the development of degenerative spondylolisthesis. Sanderson PL, et al. **J Bone Joint Surg Br** 1996 Nov;78(6):951–4

Spine problems in the athlete. Stinson JT. **Md Med J** 1996 Aug;45(8):655–8 (25 ref.)

Lumbar motion segment pathology adjacent to thoracolumbar, lumbar, and lumbosacral fusions. Schlegel JD, et al. **Spine** 1996 Apr 15;21(8):970–81

PATHOLOGY

Lumbar facet joint tropism does not accelerate degeneration of the facet joints. Grogan J, et al. **AJNR Am J Neuroradiol** 1997 Aug;18(7):1325–9

PHYSIOPATHOLOGY

Competitive sports and the progression of spondylolisthesis. Muschik M, et al. **J Pediatr Orthop** 1996 May–Jun; 16(3):364–9

RADIOGRAPHY

Paradoxical motion in spondylolisthesis due to two-segment instability. Ehara S, et al. **Arch Orthop Trauma Surg** 1997; 116(6–7):435–6

Associations between spinal deformity and outcomes after decompression for spinal stenosis. Frazier DD, et al. **Spine** 1997 Sep 1;22(17):2025–9

Calcification of lumbar ligamentum flavum and facet joints capsule. Ruiz Santiago F, et al. **Spine** 1997 Aug 1; 22(15):1730–4; discussion 1734–5

The sagittal pelvic tilt index as a criterion in the evaluation of spondylolisthesis. Preliminary observations. Schwab FJ, et al. **Spine** 1997 Jul 15;22(14):1661–7

[Effendi fracture] **Rontgenpraxis** 1996 Jul;49(7):178–9 **(Ger)**

[Significance of isthmic spondylolisthesis in expert assessment of occupational disease of the lumbar spine] Grosser V, et al. **Unfallchirurg** 1996 Jul;99(7):470–6 (16 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

AP-translation in the proximal disc adjacent to lumbar spine fusion. A retrospective comparison of mono- and polysegmental fusion in 120 patients. Wimmer C, et al. **Acta Orthop Scand** 1997 Jun;68(3):269–72

Reduction-fixation spinal system in spondylolisthesis. Niu CC, et al. **Am J Orthop** 1996 Jun;25(6):418–24

Indications for fusion in the lumbar spine. Hanley EN Jr. **Bull Hosp Jt Dis** 1996;55(3):154–7 (38 ref.)

The case for posterior lumbar interbody fusion. Branch CL Jr. **Clin Neurosurg** 1996;43:252–67 (62 ref.)

Survivorship analysis of DKS instrumentation in the treatment of spondylolisthesis. Chen WJ, et al. **Clin Orthop** 1997 Jun;(339):113–20

Radiological and functional outcome after anterior lumbar interbody spinal fusion. Christensen FB, et al. **Eur Spine J** 1996;5(5):293–8

Direct pediculo-body fixation in cases of spondylolisthesis with advanced intervertebral disc degeneration. Grob D, et al. **Eur Spine J** 1996;5(4):281–5

Controversies in low back pain: the surgical approach. Hanley EN Jr, et al. **Instr Course Lect** 1994;43:415–23 (56 ref.)

Single-level posterolateral arthrodesis, with or without posterior decompression, for the treatment of isthmic spondylolisthesis in adults. A prospective, randomized study. Carragee EJ. **J Bone Joint Surg Am** 1997 Aug; 79(8):1175–80

Treatment of traumatic spondylolisthesis of the axis with nonrigid immobilization: a review of 64 cases. Coric D, et al. **J Neurosurg** 1996 Oct;85(4):550–4

Outcome analysis for adults with spondylolisthesis treated with posterolateral fusion and transpedicular screw fixation. Schnee CL, et al. **J Neurosurg** 1997 Jan; 86(1):56–63

Microdecompression without fusion for radiculopathy associated with lytic spondylolisthesis [see comments] Weiner BK, et al. **J Neurosurg** 1996 Oct;85(4):582–5. Comment in: J Neurosurg 1997 Jun;86(6):1069–70.

Treatment of traumatic spondylolisthesis of the axis with nonrigid immobilization: erratum [letter] Wilson JA. **J Neurosurg** 1996 Dec;85(6):1198

Results of a trial of anterior or circumferential lumbar fusion in the treatment of severe isthmic spondylolisthesis in young patients. Tiusanen H, et al. **J Pediatr Orthop B** 1996 Summer;5(3):190–4

Degenerative cervical spondylolisthesis: diagnosis and management in five cases. Boulos AS, et al. **J Spinal Disord** 1996 Jun;9(3):241–5

Rigid intrasegmental fixation for repair of a pars defect in a young athlete: case report and description of technique. Jarolem KL, et al. **J Spinal Disord** 1997 Jun;10(3):253–5

Posterior stabilization in L5–S1 isthmic spondylolisthesis with paralaminar screw fixation: anatomical and clinical results. Jeanneret B, et al. **J Spinal Disord** 1996 Jun;9(3):223–33

The efficacy of pedicle screw/plate fixation on lumbar/lumbosacral autogenous bone graft fusion in adult patients with degenerative spondylolisthesis. Rechtine GR, et al. **J Spinal Disord** 1996 Oct;9(5):382–91

Adult spondylolisthesis treated with posterolateral lumbar fusion and pedicular instrumentation with AO DC plates. Thalgott JS, et al. **J Spinal Disord** 1997 Jun;10(3):204–8 (15 ref.)

Posterior pedicular screw instrumentation and anterior interbody fusion in adult lumbar spondylolysis or grade I spondylolisthesis with segmental instability. Wang JM, et al. **J Spinal Disord** 1996 Apr;9(2):83–8

Upper abdominal aortic injury during spinal surgery. Smythe WR, et al. **J Vasc Surg** 1997 Apr;25(4):774–7

When is spinal fusion warranted in degenerative lumbar spinal stenosis? Brunon J, et al. **Rev Rhum Engl Ed** 1996 Jan; 63(1):44–50 (35 ref.)

Surgical treatment of severe L5–S1 spondylolisthesis in children and adolescents. Results of intraoperative reduction, posterior interbody fusion, and segmental pedicle fixation. Fabris DA, et al. **Spine** 1996 Mar 15; 21(6):728–33

Surgical management of severe spondylolisthesis in children and adolescents. Anterior fusion in situ versus anterior spondylodesis with posterior transpedicular instrumentation and reduction. Muschik M, et al. **Spine** 1997 Sep 1;22(17):2036–42; discussion 2043

An anatomic evaluation of L5 nerve stretch in spondylolisthesis reduction. Petraco DM, et al. **Spine** 1996 May 15;21(10):1133–8; discussion 1139

Meningitis complicating spinal surgery. Twyman RS, et al. **Spine** 1996 Mar 15;21(6):763–5

Predictors of outcome in patients with chronic back pain and low-grade spondylolisthesis. Vaccaro AR, et al. **Spine** 1997 Sep 1;22(17):2030–4; discussion 2035

Degenerative lumbar spondylolisthesis with spinal stenosis, a prospective study comparing decompression with decompression and intertransverse process arthrodesis: a critical analysis. Vaccaro AR, et al. **Spine** 1997 Feb 15; 22(4):368–9

[The direct repair of the defect and grafting with single segment reduction fixation system in the treatment of lumbar spondylolysis and spondylolisthesis] Qian Z, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):711–4 (Eng. Abstr.) **(Chi)**

[Results of posterior lumbar intersomatic fusion in the treatment of isthmic spondylolisthesis. Apropos of 27 cases followed over more than 10 years] Lerat JL, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1996;82(6):475–89 (Eng. Abstr.) **(Fre)**

[Advantages and disadvantages of retro- and transperitoneal approach for fusion of the presacral intervertebral disk] Wimmer C, et al. **Orthopade** 1997 Jun;26(6):563–7 (Eng. Abstr.) **(Ger)**

THERAPY

Treatment of spondylolysis and spondylolisthesis in children and adolescents. Dubousset J. **Clin Orthop** 1997 Apr; (337):77–85

SPONDYLOLYSIS

Lumbar spondylolysis. A study of natural progression in athletes. Congeni J, et al. **Am J Sports Med** 1997 Mar–Apr; 25(2):248–53

CLASSIFICATION

[Ability for military service in spondylolysis (news)] Helff G. **Z Orthop Ihre Grenzgeb** 1996 Nov–Dec;134(6):Oa21–2 **(Ger)**

DIAGNOSIS

MR appearance of the retroisthmic cleft [letter] Horner CW, et al. **AJNR Am J Neuroradiol** 1996 Feb;17(2):397–8

MR imaging of lumbar spondylolysis: the importance of ancillary observations. Ulmer JL, et al. **AJR Am J Roentgenol** 1997 Jul;169(1):233–9

The value of lumbar spine MRI in the assessment of the pars interarticularis. Saifuddin A, et al. **Clin Radiol** 1997 Sep; 52(9):666–71

[Back pain in children] Abril Martín JC, et al. **An Esp Pediatr** 1997 Feb;46(2):133–7 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Spondylolysis of the sacrum in Alaskan and Canadian Inuit skeletons. Merbs CF. **Am J Phys Anthropol** 1996 Nov; 101(3):357–67

ETIOLOGY

Pathogenesis of cervical spondylotic myelopathy. Levine DN. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):334–40

RADIOGRAPHY

The spondylolytic vertebra and its adjacent segment. Mobility measured before and after posterolateral fusion. Axelsson P, et al. **Spine** 1997 Feb 15;22(4):414–7

[Cervical spondylolysis in children. Apropos of 4 cases. Review of the literature] Garin C, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1995;81(7):626–30 (16 ref.) (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Bone SPET of symptomatic lumbar spondylolysis [published erratum appears in Nucl Med Commun 1996 Aug;17(8):732–4] Itoh K, et al. **Nucl Med Commun** 1996 May;17(5):389–96

SURGERY

Screw placement in the lumbar vertebral isthmus. Lu J, et al. **Clin Orthop** 1997 May;(338):227–30

Repair of the defect in spondylolysis. Durable fixation with pedicle screws and laminar hooks. Kakiuchi M. **J Bone Joint Surg Am** 1997 Jun;79(6):818–25

Posterior pedicular screw instrumentation and anterior interbody fusion in adult lumbar spondylolysis or grade I spondylolisthesis with segmental instability. Wang JM, et al. **J Spinal Disord** 1996 Apr;9(2):83–8

Biomechanics of cervical spine surgery for tumor and degenerative diseases. Benzel EC. **Neurol Med Chir (Tokyo)** 1997 Aug;37(8):583–93 (44 ref.)

The spondylolytic vertebra and its adjacent segment. Mobility measured before and after posterolateral fusion. Axelsson P, et al. **Spine** 1997 Feb 15;22(4):414–7

Adding posterior lumbar interbody fusion to pedicle screw fixation and posterolateral fusion after decompression in spondylolytic spondylolisthesis. Suk SI, et al. **Spine** 1997 Jan 15;22(2):210–9; discussion 219–20

Repair of defects in spondylolysis by segmental pedicular screw hook fixation. A preliminary report. Tokuhashi Y, et al. **Spine** 1996 Sep 1;21(17):2041–5

[The direct repair of the defect and grafting with single segment reduction fixation system in the treatment of lumbar spondylolysis and spondylolisthesis] Qian Z, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):711–4 (Eng. Abstr.) **(Chi)**

[Lumbar fusion in adults—dorsal or combined ventral/dorsal approach?] Krismer M, et al. **Orthopade** 1997 Jun; 26(6):568–71 (Eng. Abstr.) **(Ger)**

THERAPY

Treatment of spondylolysis and spondylolisthesis in children and adolescents. Dubousset J. **Clin Orthop** 1997 Apr; (337):77–85

SPONDYLOSIS see **SPINAL OSTEOPHYTOSIS**

SPONDYLOSIS DEFORMANS see **SPINAL OSTEOPHYTOSIS**

SPONDYLOSYNDESIS see **SPINAL FUSION**

SPONGES (ZOOLOGY) see **PORIFERA**

SPONGIFORM ENCEPHALOPATHIES, TRANSMISSIBLE see **PRION DISEASES**

SPONGIFORM ENCEPHALOPATHY, BOVINE see **ENCEPHALOPATHY, BOVINE SPONGIFORM**

SPONGURIDINE see **ARABINOFURANOSYLURACIL**

SPONGY DISEASE OF WHITE MATTER see **CANAVAN DISEASE**

SPONTANEOUS COMBUSTION

The dynamics of flash fires involving flammable hydrocarbon liquids. DeHaan JD. **Am J Forensic Med Pathol** 1996 Mar; 17(1):24–31

SPORE COUNT

SPORE COUNT see **COLONY COUNT, MICROBIAL**

SPORES

DRUG EFFECTS

Chemoattraction of anaerobic ruminal fungi zoospores to selected phenolic acids. Wubah DA, et al. **Microbiol Res** 1996 Aug;151(3):257–62

ENZYMOLOGY

Protein disulfide isomerase in spore germination and cell division. Laboissière MC, et al. **Biol Chem** 1997 May; 378(5):431–7

GROWTH & DEVELOPMENT

Sporulation of Cyclospora sp. oocysts. Smith HV, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1631–2

The effect of temperature on the germination of single spores of Clostridium botulinum 62A. Billon CM, et al. **J Appl Microbiol** 1997 Jan;82(1):48–56

Combining heat treatment and subsequent incubation temperature to prevent growth from spores of non-proteolytic Clostridium botulinum. Stringer SC, et al. **J Appl Microbiol** 1997 Jan;82(1):128–36

IMMUNOLOGY

Re-expression by Candida albicans germ tubes of antigens lost during subculture of blastospores. Hernando FL, et al. **Mycopathologia** 1996;134(1):1–6

ISOLATION & PURIFICATION

Identification and detection of Bacillus sporothermodurans spores in 1, 10, and 100 milliliters of raw milk by PCR. Herman LM, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):3139–43

METABOLISM

A non-intrusive method for the measurement of water vapour sorption by bacterial spores. Rubel GO. **J Appl Microbiol** 1997 Aug;83(2):243–7

ULTRASTRUCTURE

Characterisation and identification of broad spectrum antibiotic producing Streptomyces hygroscopicus D 1.5. Chakraborty D, et al. **Hindustan Antibiot Bull** 1995 Feb–Nov;37(1–4):37–43

[Pharmacognostical studies on adiantum plants. V. Classification based on spore morphology and distributional patterns of silicon and calcium in the ultimate pinnules] Komatsu K, et al. **Yakugaku Zasshi** 1996 Feb;116(2):125–37 (Eng. Abstr.) **(Jpn)**

SPORES, BACTERIAL

Visualization of the subcellular location of sporulation proteins in Bacillus subtilis using immunofluorescence microscopy. Pogliano K, et al. **Mol Microbiol** 1995 Nov; 18(3):459–70

CHEMISTRY

Analysis of the peptidoglycan structure of Bacillus subtilis endospores. Popham DL, et al. **J Bacteriol** 1996 Nov; 178(22):6451–8

DRUG EFFECTS

Comparative sporicidal effect of liquid chemical germicides on three medical devices contaminated with spores of Bacillus subtilis. Sagripanti JL, et al. **Am J Infect Control** 1996 Oct;24(5):364–71

Permeability of dormant spores of Bacillus subtilis to gramicidin S. Tanimoto Y, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):151–6

GENETICS

Genetic networks controlling the initiation of sporulation and the development of genetic competence in Bacillus subtilis. Grossman AD. **Annu Rev Genet** 1995;29:477–508 (121 ref.)

Molecular genetics of sporulation in Bacillus subtilis. Stragier P, et al. **Annu Rev Genet** 1996;30:297–41 (118 ref.)

Expression of small RNAs by Bacillus sp. strain PS3 and B. subtilis cells during sporulation. Fink PS, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):387–92

Effects of inactivation or overexpression of the sspF gene on properties of Bacillus subtilis spores. Loshon CA, et al. **J Bacteriol** 1997 Jan;179(1):272–5

GROWTH & DEVELOPMENT

Genetic networks controlling the initiation of sporulation and the development of genetic competence in Bacillus subtilis. Grossman AD. **Annu Rev Genet** 1995;29:477–508 (121 ref.)

IMMUNOLOGY

Immunomagnetic detection of Bacillus stearothermophilus spores in food and environmental samples. Blake MR, et al. **Appl Environ Microbiol** 1997 May;63(5):1643–6

ISOLATION & PURIFICATION

Immunomagnetic detection of Bacillus stearothermophilus spores in food and environmental samples. Blake MR, et al. **Appl Environ Microbiol** 1997 May;63(5):1643–6

METABOLISM

Asporogenic Bacillus megaterium mutant 27-36 degrades intrinsically short-lived proteins but fails to convert most of other proteins to a short-lived fraction. Chaloupka J, et al. **Biochem Mol Biol Int** 1996 Aug;39(6):1185–92

Disruption of a sigma factor gene, sigF, affects an intermediate stage of spore pigment production in Streptomyces aureofaciens. Režuchová B, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):371–7

PHYSIOLOGY

Bipolar localization of the replication origin regions of chromosomes in vegetative and sporulating cells of B. subtilis. Webb CD, et al. **Cell** 1997 Mar 7;88(5):667–74

Septal localization of the SpoIIIE chromosome partitioning protein in Bacillus subtilis. Wu LJ, et al. **EMBO J** 1997 Apr 15;16(8):2161–9

Modelling the heat stress and the recovery of bacterial spores. Mafart P, et al. **Int J Food Microbiol** 1997 Jul 22; 37(2–3):131–5

Induction of unique tandem-base change mutations in bacterial spores exposed to extreme dryness. Munakata N, et al. **Mutat Res** 1997 Apr 24;390(1–2):189–95

[Study of the thermoresistance of Clostridium difficile spores] Meisel-Mikołajczyk F, et al. **Med Dosw Mikrobiol** 1995; 47(3–4):177–81 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

CotM of Bacillus subtilis, a member of the alpha-crystallin family of stress proteins, is induced during development and participates in spore outer coat formation. Henriques AO, et al. **J Bacteriol** 1997 Mar;179(6):1887–97

SPORES, FUNGAL

Special transformation processes using fungal spores and immobilized cells. Larroche C, et al. **Adv Biochem Eng Biotechnol** 1997;55:179–220 (324 ref.)

Thunderstorm-related asthma--the epidemic of 24/25 June 1994. Venables KM, et al. **Clin Exp Allergy** 1997 Jul; 27(7):725–36

The effect of outdoor fungal spore concentrations on daily asthma severity. Delfino RJ, et al. **Environ Health Perspect** 1997 Jun;105(6):622–35

Effects of intranasal exposure to spores of Stachybotrys atra in mice. Nikulin M, et al. **Fundam Appl Toxicol** 1997 Feb; 35(2):182–8

Decreased pulmonary perfusion in hypersensitivity pneumonitis caused by Shiitake mushroom spores. Murakami M, et al. **J Intern Med** 1997 Jan;241(1):85–8

DRUG EFFECTS

Significance of non-dermatophyte moulds and yeasts in onychomycosis. Ellis DH, et al. **Dermatology** 1997;194 Suppl 1:40–2

ENZYMOLOGY

Localization of germination-specific spore-lytic enzymes in Clostridium perfringens S40 spores detected by immunoelectron microscopy. Miyata S, et al. **FEMS Microbiol Lett** 1997 Jul 15;152(2):243–7

Expression of a constitutively active Ca2+/calmodulin-dependent kinase in Aspergillus nidulans spores prevents germination and entry into the cell cycle. Dayton JS, et al. **J Biol Chem** 1997 Feb 7; 272(6):3223–30

GENETICS

SPR28, a sixth member of the septin gene family in Saccharomyces cerevisiae that is expressed specifically in sporulating cells. De Virgilio C, et al. **Microbiology** 1996 Oct;142 (Pt 10):2897–905

An Ssn6-Tup1-dependent negative regulatory element controls sporulation-specific expression of DIT1 and DIT2 in Saccharomyces cerevisiae. Friesen H, et al. **Mol Cell Biol** 1997 Jan;17(1):123–34

IMMUNOLOGY

Reactivity of Candida albicans germ tubes with salivary secretory IgA. Pontón J, et al. **J Dent Res** 1996 Dec; 75(12):1979–85

ISOLATION & PURIFICATION

Viable fungi in indoor air in homes and schools in the Sør-Varanger community during winter. Dotterud LK, et al. **Pediatr Allergy Immunol** 1995 Nov;6(4):181–6

METABOLISM

Relationship between aflatoxin biosynthesis and sporulation in Aspergillus parasiticus. Guzmán-de-Peña D, et al. **Fungal Genet Biol** 1997 Apr;21(2):198–205

PHYSIOLOGY

Tailing of thermal inactivation curve of Aspergillus niger spores. Fujikawa H, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3745–9

The Dictyostelium dual-specificity kinase splA is essential for spore differentiation. Nuckolls GH, et al. **Development** 1996 Oct;122(10):3295–305

Effect of water activity, modified atmosphere packaging and storage temperature on spore germination of moulds isolated from prunes. el Halouat A, et al. **Int J Food Microbiol** 1997 Mar 18;35(1):41–8

Properties of the phosphorylation reaction catalyzed by SpoIIAB that help to regulate sporulation of Bacillus subtilis. Najafi SM, et al. **J Bacteriol** 1997 Sep; 179(17):5628–31

Adenylyl cyclase G, an osmosensor controlling germination of Dictyostelium spores. van Es S, et al. **J Biol Chem** 1996 Sep 27;271(39):23623–5

RADIATION EFFECTS

Inactivation of conidia of Paecilomyces fumosoroseus by near-ultraviolet (UVB and UVA) and visible radiation. Fargues J, et al. **J Invertebr Pathol** 1997 Jan;69(1):70–8

SPORIDESMINS

POISONING

Sporodesmin toxicosis in an alpaca. Coulton MA, et al. **Aust Vet J** 1997 Feb;75(2):136–7

TOXICITY

Hepatogenous photosensitization of ruminants by Brachiaria decumbens and panicum dichotomiflorum in the absence of sporidesmin: lithogenic saponins may be responsible. Meagher LP, et al. **Vet Hum Toxicol** 1996 Aug;38(4):271–4

SPOROTHRIX see **SPOROTRICHUM**

SPOROTRICHOSIS

Sporotrichosis. Davis BA. **Dermatol Clin** 1996 Jan; 14(1):69–76 (38 ref.)

DIAGNOSIS

Pulmonary sporotrichosis with hyphae in a human immunodeficiency virus-infected patient. A case report. Gori S, et al. **Acta Cytol** 1997 Mar–Apr;41(2):519–21

Sporotrichoid cutaneous leishmaniasis in a traveler. Willems JP, et al. **South Med J** 1997 Mar;90(3):325–7

[Cutaneous lesion in an infant] Gené A, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):391–2 **(Spa)**

[Encrusted papules and subcutaneous nodules in a linear distribution] Revenga F, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):447–8 **(Spa)**

DRUG THERAPY

Successful treatment of subcutaneous mycoses with fluconazole: a report of two cases. Yang SP, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Dec;56(6):432–5

Long-term follow-up of multifocal osteoarticular sporotrichosis treated with itraconazole. Badley AD, et al. **Clin Infect Dis** 1996 Aug;23(2):394–5

Treatment of lymphocutaneous and visceral sporotrichosis with fluconazole. Kauffman CA, et al. **Clin Infect Dis** 1996 Jan;22(1):46–50

Treatment of cutaneous sporotrichosis with one daily dose of potassium iodide. Cabezas C, et al. **Pediatr Infect Dis J** 1996 Apr;15(4):352–4

EPIDEMIOLOGY

Spook house sporotrichosis. A point-source outbreak of sporotrichosis associated with hay bale props in a Halloween haunted-house. Dooley DP, et al. **Arch Intern Med** 1997 Sep 8;157(16):1885–7 (09 ref.)

Outbreak of sporotrichosis among tree nursery workers. Hajjeh R, et al. **J Infect Dis** 1997 Aug;176(2):499–504

ETHNOLOGY

Ritual Samoan body tattooing and associated sporotrichosis. Choong KY, et al. **Australas J Dermatol** 1996 Feb; 37(1):50–3

ETIOLOGY

Spook house sporotrichosis. A point-source outbreak of sporotrichosis associated with hay bale props in a Halloween haunted-house. Dooley DP, et al. **Arch Intern Med** 1997 Sep 8;157(16):1885–7 (09 ref.)

Ritual Samoan body tattooing and associated sporotrichosis. Choong KY, et al. **Australas J Dermatol** 1996 Feb; 37(1):50–3

Lymphocutaneous sporotrichosis associated with a squirrel bite: case report and review. Saravanakumar PS, et al. **Clin Infect Dis** 1996 Sep;23(3):647–8

[An unusual location of sporotrichosis in a subject with a carcinoma (letter)] Ronchetto F, et al. **Recenti Prog Med** 1997 May;88(5):226–7 **(Ita)**

[Disseminated sporotrichosis in a patient with chronic hepatopathy and hepatocarcinoma: report of a case (letter)] Vasen W, et al. **Enferm Infecc Microbiol Clin** 1996 Oct; 14(8):514–5 **(Spa)**

GENETICS

Karyotyping by PFGE of clinical isolates of Sporothrix schenckii. Tateishi T, et al.
FEMS Immunol Med Microbiol 1996 Feb;13(2):147–54

IMMUNOLOGY

Local expression of migration inhibitory factor and Th1 type cytokine mRNA in sporotrichosis lesions [letter] Fujimura T, et al. **Acta Derm Venereol** 1996 Jul;76(4):321–2

MICROBIOLOGY

Invasive sinusitis due to Sporothrix schenckii in a patient with AIDS. Morgan M, et al. **Clin Infect Dis** 1996 Dec; 23(6):1319–20

Karyotyping by PFGE of clinical isolates of Sporothrix schenckii. Tateishi T, et al.
FEMS Immunol Med Microbiol 1996 Feb;13(2):147–54

Outbreak of sporotrichosis among tree nursery workers. Hajjeh R, et al. **J Infect Dis** 1997 Aug;176(2):499–504

[A case of sporotrichosis with numerous fungal elements] Furuta T, et al. **Rinsho Byori** 1997 Jun;45(6):599–601 (Eng. Abstr.) **(Jpn)**

THERAPY

Sporotrichal arthritis of the knee. Zacharias J, et al.
Am J Knee Surg 1997 Summer;10(3):171–4

Response of sporotrichosis granuloma to local application of iodine. Ramfrez Schon G, et al. **Bol Asoc Med P R** 1996 Jul–Sep;88(7–9):55–6

SPOROTRICHUM

CHEMISTRY

Identification of a concanavalin A–binding antigen of the cell surface of Sporothrix schenckii. Lima OC, et al.
J Med Vet Mycol 1997 May–Jun;35(3):167–72

DRUG EFFECTS

Effect of amphotericin B on the lipids of yeast cells of Sporothrix schenckii. Hamdan JS, et al. **Mycopathologia** 1996–97;136(3):125–31

GENETICS

Karyotyping by PFGE of clinical isolates of Sporothrix schenckii. Tateishi T, et al.
FEMS Immunol Med Microbiol 1996 Feb;13(2):147–54

GROWTH & DEVELOPMENT

Differential expression of the 45 kDa protein (actin) during the dimorphic transition of Sporothrix schenckii. Han–Yaku H, et al. **J Med Vet Mycol** 1996 Jun–Jul; 34(3):175–80

ISOLATION & PURIFICATION

Pulmonary sporotrichosis with hyphae in a human immunodeficiency virus–infected patient. A case report. Gori S, et al. **Acta Cytol** 1997 Mar–Apr;41(2):519–21

Long–term follow–up of multifocal osteoarticular sporotrichosis treated with itraconazole. Badley AD, et al.
Clin Infect Dis 1996 Aug;23(2):394–5

Invasive sinusitis due to Sporothrix schenckii in a patient with AIDS. Morgan M, et al. **Clin Infect Dis** 1996 Dec; 23(6):1319–20

Sporotrichosis. Davis BA. **Dermatol Clin** 1996 Jan; 14(1):69–76 (38 ref.)

Karyotyping by PFGE of clinical isolates of Sporothrix schenckii. Tateishi T, et al.
FEMS Immunol Med Microbiol 1996 Feb;13(2):147–54

Possible pathogenic role for Sporothrix cyanescens isolated from a lung lesion in a heart transplant patient. Tambini R, et al. **J Med Vet Mycol** 1996 Jun–Jul;34(3):195–8

[Cutaneous lesion in an infant] Gené A, et al.
Enferm Infecc Microbiol Clin 1996 Jun–Jul;14(6):391–2 **(Spa)**

METABOLISM

Chlovalicin, a new cytocidal antibiotic produced by Sporothrix sp. FO–4649. I. Taxonomy, fermentation, isolation and biological activities. Hayashi M, et al.
J Antibiot (Tokyo) 1996 Jul;49(7):631–4

Chlovalicin, a new cytocidal antibiotic produced by Sporothrix sp. FO–4649. II. Physicochemical properties and structural elucidation. Takamatsu S, et al.
J Antibiot (Tokyo) 1996 Jul;49(7):635–8

Influence of a subinhibitory dose of antifungal fatty acids from Sporothrix flocculosa on cellular lipid composition in fungi. Benyagoub M, et al. **Lipids** 1996 Oct; 31(10):1077–82

PATHOGENICITY

Virulence factors of medically important fungi. Hogan LH, et al. **Clin Microbiol Rev** 1996 Oct;9(4):469–88 (326 ref.)

SPORTS

see related
ATHLETIC INJURIES
DOPING IN SPORTS

Echocardiographic estimates related to various body size measures in athletes. Paylik G, et al.
Acta Physiol Hung 1996;84(2):171–81

Nutrition knowledge among adolescent high school female athletes. Chapman P, et al. **Adolescence** 1997 Summer; 32(126):437–46

Exercise–induced asthma prophylaxis in athletes using inhaled nedocromil sodium. Valero A, et al.
Allergol Immunopathol (Madr) 1996 Mar–Apr;24(2):81–6

An echocardiographic study comparing male Swedish elite orienteers with other elite endurance athletes. Henriksen E, et al. **Am J Cardiol** 1997 Feb 15;79(4):521–4

Cardiovascular screening and emergency procedures at health clubs and fitness centers. McInnis KJ, et al.
Am J Cardiol 1997 Aug 1;80(3):380–3

Eating disorder symptoms in former female college gymnasts: relations with body composition. O'Connor PJ, et al.
Am J Clin Nutr 1996 Dec;64(6):840–3

Use of bioelectrical impedance analysis measurements as an evaluation for participating in sports. Segal KR.
Am J Clin Nutr 1996 Sep;64(3 Suppl):469S–471S

Doping control in sports—a perspective from the 1996 Olympic Games. Ambrose PJ.
Am J Health Syst Pharm 1997 May 1;54(9):1053–7

Pharmaceutical services at the 1995 Special Olympics World Games. Harrison RJ, et al. **Am J Health Syst Pharm** 1996 Sep 15;53(18):2198–9

Antioxidant status and lipid peroxidation after short–term maximal exercise in trained and untrained humans. Ortenblad N, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1258–63

A cross–sectional study on body composition and energy expenditure in women athletes during aging. Ryan AS, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):E916–21

Lumbar spondylolysis. A study of natural progression in athletes. Congeni J, et al. **Am J Sports Med** 1997 Mar–Apr; 25(2):248–53

Ulnar diaphyseal stress fracture in a bowler. Escher SA.
Am J Sports Med 1997 May–Jun;25(3):412–3

Lumbar mobility and low back pain during adolescence. A longitudinal three–year follow–up study in athletes and controls. Kujala UM, et al. **Am J Sports Med** 1997 May–Jun;25(3):363–8

Medical miracles of the Olympic Games. Mallon W.
Am J Sports Med 1996;24(6 Suppl):S61–3

Nutrition and exercise in children. Caldarone G, et al.
Ann Ist Super Sanita 1995;31(4):445–53 (26 ref.)

Sports–related problems in reproductive function. Orley J.
Ann N Y Acad Sci 1997 Jun 17;816:285–94 (15 ref.)

Athletic amenorrhea. Wolf AS, et al. **Ann N Y Acad Sci** 1997 Jun 17;816:295–304 (36 ref.)

Mitochondrial function in muscle from elderly athletes [published erratum appears in Ann Neurol 1997 May;41(5):698] Brierly EJ, et al. **Ann Neurol** 1997 Jan; 41(1):114–6

Balance and vertical impact in sports: role of shoe sole materials. Robbins S, et al. **Arch Phys Med Rehabil** 1997 May;78(5):463–7

Stability of human proportions through adolescent growth. Ackland TR, et al. **Aust J Sci Med Sport** 1996 Jun; 28(2):57–60

Kinaesthetic sensitivity of adolescent male and female athletes and non–athletes. Freeman ML, et al.
Aust J Sci Med Sport 1996 Jun;28(2):46–9

Wastage in the Australian thoroughbred racing industry: a survey of Sydney trainers. Bailey CJ, et al. **Aust Vet J** 1997 Jan;75(1):64–6

Dental erosion as a consequence of voluntary regurgitation in a jockey: a case report. Bishop K, et al. **Br Dent J** 1996 Nov 9;181(9):343–5

Effect of meal frequency and timing on physical performance. Hawley JA, et al. **Br J Nutr** 1997 Apr;77 Suppl 1:S91–103 (82 ref.)

Outbreak of Salmonella food poisoning at Junior World Rowing Championships. Anderson AC.
Br J Sports Med 1996 Dec;30(4):347–8

Sport and delinquency: an examination of the deterrence hypothesis in a longitudinal study. Begg DJ, et al.
Br J Sports Med 1996 Dec;30(4):335–41

Physiotherapy report. Booth L. **Br J Sports Med** 1997 Mar; 31(1):80–1

Sports drinks and teeth [letter] Brouns F, et al.
Br J Sports Med 1997 Sep;31(3):258

Lessons learnt at the 1996 Atlanta Olympic Games. Budgett R, et al. **Br J Sports Med** 1997 Mar;31(1):76

Diet and nutrition. Griffin J. **Br J Sports Med** 1997 Mar; 31(1):78

Sport and diabetes. Hall M. **Br J Sports Med** 1997 Mar;31(1):3

Sports for the disabled: the evolution from rehabilitation to competitive sport [editorial] McCann C.
Br J Sports Med 1996 Dec;30(4):279–80

Heat acclimatisation and rehydration strategy. Maughan R.
Br J Sports Med 1997 Mar;31(1):77

Sports drinks hazard to teeth. Milosevic A.
Br J Sports Med 1997 Mar;31(1):28–30

Seasonal variations in the body composition of lightweight rowers. Morris FL, et al. **Br J Sports Med** 1996 Dec; 30(4):301–4

Gender verification: a concept whose time has come and passed? [editorial; comment] Puffer JC.
Br J Sports Med 1996 Dec;30(4):278. Comment on: Br J Sports Med 1996 Dec;30(4):310–2.

Influence of saddle type upon the incidence of lower back pain in equestrian riders. Quinn S, et al.
Br J Sports Med 1996 Jun;30(2):140–4

Gender verification in sports by PCR amplification of SRY and DYZ1 Y chromosome specific sequences: presence of DYZ1 repeat in female athletes [see comments] Serrat A, et al. **Br J Sports Med** 1996 Dec;30(4):310–2. Comment in: Br J Sports Med 1996 Dec;30(4):278.

The new sexual dimorphism. Sharp NC.
Br J Sports Med 1997 Mar;31(1):82–3

Psychological support. Terry P, et al. **Br J Sports Med** 1997 Mar;31(1):79

Bone mass in female volleyball players: a comparison of total and regional bone mass in female volleyball players and nonactive females. Alfredson H, et al. **Calcif Tissue Int** 1997 Apr;60(4):338–42

Bone mineral density in athletes during and after career: a comparison between loaded and unloaded skeletal regions. Karlsson MK, et al. **Calcif Tissue Int** 1996 Oct;59(4):245–8

Drugs, athletes, and family physicians. When to withhold medications and when to document prescriptions. Olson R. **Can Fam Physician** 1996 Oct;42:1953–60

Androgen use by athletes: a reevaluation of the health risks. Street C, et al. **Can J Appl Physiol** 1996 Dec;21(6):421–40 (82 ref.)

The power athlete. Longhurst JC, et al. **Cardiol Clin** 1997 Aug;15(3):413–29 (115 ref.)

Risk profiles and cardiovascular preparticipation screening of competitive athletes. Maron BJ. **Cardiol Clin** 1997 Aug; 15(3):473–83 (75 ref.)

Causes of sudden death in young and middle–aged competitive athletes. Virmani R, et al. **Cardiol Clin** 1997 Aug;15(3):439–66 (79 ref.)

Issues in detecting abuse of xenobiotic anabolic steroids and testosterone by analysis of athletes' urine. Catlin DH, et al. **Clin Chem** 1997 Jul;43(7):1280–8 (56 ref.)

Troponin I immunoenzymometric assays for detection of muscle damage applied to monitoring a triathlon. Rama D, et al. **Clin Chem** 1996 Dec;42(12):2033–5

The clinical value of serum ferritin tests in endurance athletes. Garza D, et al. **Clin J Sport Med** 1997 Jan;7(1):46–53 (54 ref.)

Substance use and other health risk behaviors in collegiate athletes. Kokotailo PK, et al. **Clin J Sport Med** 1996 Jul; 6(3):183–9

Environmental conditions during the 1996 Olympic Games: a brief follow–up report [editorial] Sparling PB.
Clin J Sport Med 1997 Jul;7(3):159–61

Hyponatremia and weight changes in an ultradistance triathlon. Speedy DB, et al. **Clin J Sport Med** 1997 Jul; 7(3):180–4

Non–invasive evaluation of sympathovagal balance in athletes by time and frequency domain analyses of heart rate and blood pressure variability. Uusitalo AL, et al.
Clin Physiol 1996 Nov;16(6):575–88

Infracalcaneal heel pain in the athlete. Agostinelli J, et al.
Clin Podiatr Med Surg 1997 Jul;14(3):503–9 (14 ref.)

Dermatologic problems in podiatric sports medicine. King MJ. **Clin Podiatr Med Surg** 1997 Jul;14(3):511–24 (9 ref.)

Hallux limitus in the athlete. Lichniak JE.
Clin Podiatr Med Surg 1997 Jul;14(3):407–26 (24 ref.)

Management of Morton's neuroma in athletes. Nunan PJ, et al. **Clin Podiatr Med Surg** 1997 Jul;14(3):489–501 (21 ref.)

Angular surgical corrections for hallux valgus. Pagliano JW.
Clin Podiatr Med Surg 1997 Jul;14(3):427–45 (21 ref.)

Posterior tibial tendon dysfunction in the athlete. Ross JA.
Clin Podiatr Med Surg 1997 Jul;14(3):479–88 (21 ref.)

Could the A2A11 human leucocyte antigen locus correlate with maximal aerobic power? Rodas G, et al.
Clin Sci (Colch) 1997 Apr;92(4):331–3

Arthroscopic treatment of the degenerative knee in older athletes. Goldman RT, et al. **Clin Sports Med** 1997 Jan; 16(1):51–68 (45 ref.)

The preparticipation athletic examination of adolescents: a missed opportunity? Cavanaugh RM Jr, et al.
Curr Probl Pediatr 1997 Mar;27(3):109–20

Wheelchair users' experience of non–adapted and adapted clothes during sailing, quad rugby or wheel–walking. Kratz G, et al. **Disabil Rehabil** 1997 Jan;19(1):26–34

Social adjustment and rehabilitation in international competitors with spinal injuries sustained in military service. Lovell ME, et al. **Disabil Rehabil** 1997 Mar; 19(3):92–6

Surfers against sewage [news] **Environ Health Perspect** 1996 Jul;104(7):684–5

The significance of routine radiographic findings with respect to subsequent racing performance and longevity in standardbred trotters. Jørgensen HS, et al.
Equine Vet J 1997 Jan;29(1):55–9

Effect of show jumping on heart rate, blood lactate and other plasma biochemical values. Art T, et al.
Equine Vet J Suppl 1990 Jun;(9):78–82

A comparative study of interval and conventional training in thoroughbred racehorses. Harkins JD, et al.
Equine Vet J Suppl 1990 Jun;(9):14–9

Some factors influencing plasma AST/CK activities in

thoroughbred racehorses. Harris PA, et al. **Equine Vet J Suppl** 1990 Jun;(9):66–71

A comparison of time to exhaustion at VO2 max in élite cyclists, kayak paddlers, swimmers and runners. Billat V, et al. **Ergonomics** 1996 Feb;39(2):267–77

Echocardiographic right and left ventricular measurements in male elite endurance athletes. Henriksen E, et al. **Eur Heart J** 1996 Jul;17(7):1121–8

An increase in sudden unexpected cardiac deaths among young Swedish orienteers during 1979–1992 [see comments] Wesslén L, et al. **Eur Heart J** 1996 Jun; 17(6):902–10. Comment in: Eur Heart J 1996 Jun;17(6):810–2.

Sudden cardiac death in young athletes: orienteering on Chlamydia pneumoniae? [editorial; comment] Willems S. **Eur Heart J** 1996 Jun;17(6):810–2. Comment on: Eur Heart J 1996 Jun;17(6):902–10.

Does glutamine have a role in reducing infections in athletes? Castell LM, et al. **Eur J Appl Physiol** 1996;73(5):488–90

Ultrasound of the abdomen in endurance athletes. Gabriel H, et al. **Eur J Appl Physiol** 1996;73(1–2):191–3

The prediction of power and efficiency during near-maximal rowing. Jensen RL, et al. **Eur J Appl Physiol** 1996; 73(1–2):98–104

Evaluation of the influence of physical activity on the plasma concentrations of several trace metals. Rodríguez Tuya I, et al. **Eur J Appl Physiol** 1996;73(3–4):299–303

The immune system and serum glutamine during a triathlon. Rohde T, et al. **Eur J Appl Physiol** 1996;74(5):428–34

Effects of physical training in a hypobaric chamber on the physical performance of competitive triathletes. Vallier JM, et al. **Eur J Appl Physiol** 1996;73(5):471–8

Changes in ventilation related to changes in electromyograph activity during repetitive bouts of isometric exercise in simulated sailing. Vogiatzis I, et al. **Eur J Appl Physiol** 1996;72(3):195–203

Low back pain and physical exercise in leisure time in 38-year-old men and women: a 25-year prospective cohort study of 640 school children. Harreby M, et al. **Eur Spine J** 1997;6(3):181–6

Bone quality in the lumbar spine in high-performance athletes. Sabo D, et al. **Eur Spine J** 1996;5(4):258–63

Tobacco free at the Indianapolis 500. Blom ED. **Indiana Med** 1996 Mar-Apr;89(2):207–9

International Sport Nutrition Conference. Bloomington, Minnesota, September 1995. Proceedings. **Int J Sport Nutr** 1996 Jun;6(2):79–206

Disordered eating in female collegiate athletes and collegiate females in an advanced program of study: a preliminary investigation. Ashley CD, et al. **Int J Sport Nutr** 1996 Dec; 6(4):391–401

Nutritional aspects of amenorrhea in the female athlete triad. Benson JE, et al. **Int J Sport Nutr** 1996 Jun;6(2):134–45 (71 ref.)

Ergogenic aids: evaluating sport nutrition products. Butterfield G. **Int J Sport Nutr** 1996 Jun;6(2):191–7

Assessment of body composition in youths and relationship to sport. Houtkooper LB. **Int J Sport Nutr** 1996 Jun; 6(2):146–64 (48 ref.)

Does exogenous coenzyme Q10 affect aerobic capacity in endurance athletes? Weston SB, et al. **Int J Sport Nutr** 1997 Sep;7(3):197–206

Sports specific diagnostics of physical performance energetic aspects. Symposium. Munich, Germany, September 13–14, 1996. Abstracts. **Int J Sports Med** 1997 Apr;18 Suppl 2:S119–38

Athlete's heart: a meta-analysis of the echocardiographic experience. Fagard RH. **Int J Sports Med** 1996 Nov;17 Suppl 3:S140–4

Prospective and retrospective longitudinal studies of the growth, maturation, and fitness of Polish youth active in sport. Malina RM, et al. **Int J Sports Med** 1997 Jul;18 Suppl 3:S179–85

Effects of Special Olympics International on social competence in persons with mental retardation. Dykens EM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Feb; 35(2):223–9

The thoracic outlet syndrome in athletes. Nichols AW. **J Am Board Fam Pract** 1996 Sep–Oct;9(5):346–55 (43 ref.)

Binge drinking, tobacco, and illicit drug use and involvement in college athletics. A survey of students at 140 American colleges. Wechsler H, et al. **J Am Coll Health** 1997 Mar; 45(5):195–200

Starvation among athletes [letter] Flynn MA. **J Am Coll Nutr** 1996 Dec;15(6):633–4

Sports drinks and tooth decay [letter] Murray B, et al. **J Am Dent Assoc** 1997 Sep;128(9):1200, 1202, 1204

Association between eye dominance and training for rifle marksmanship: a pilot study [see comments] Jones LF 3rd, et al. **J Am Optom Assoc** 1996 Feb;67(2):73–6. Comment in: J Am Optom Assoc 1996 May;67(5):254.

Podiatry in the 1996 Summer Olympic Games. Julien PH. **J Am Podiatr Med Assoc** 1997 Sep;87(9):425–30

Validation of a regression model for standardizing lifetime racing performances of thoroughbreds. Martin GS, et al. **J Am Vet Med Assoc** 1997 Jun 1;210(11):1641–5

Use of statistical models to evaluate racing performance in thoroughbreds. Martin GS, et al. **J Am Vet Med Assoc** 1996 Dec 1;209(11):1900–6

Estimates of genetic parameters and environmental effects for measures of hunting performance in Finnish hounds. Liinamo AE, et al. **J Anim Sci** 1997 Mar;75(3):622–9

Enhanced ventilatory and exercise performance in athletes with slight expiratory resistive loading. Fee LL, et al. **J Appl Physiol** 1997 Aug;83(2):503–10

Twenty-year follow-up of aerobic power and body composition of older track athletes. Pollock ML, et al. **J Appl Physiol** 1997 May;82(5):1508–16

Current issues in the mechanics of athletic activities. A position paper. Bartlett RM. **J Biomech** 1997 May; 30(5):477–86 (98 ref.)

Profiling of urinary testosterone and luteinizing hormone in exercise-stressed male athletes, using gas chromatography-mass spectrometry and enzyme immunoassay techniques. Yap BK, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):117–25

Hypoleptinemia in women athletes: absence of a diurnal rhythm with amenorrhea. Laughlin GA, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):318–21

Effects of stress inoculation training on athletes' postsurgical pain and rehabilitation after orthopedic injury. Ross MJ, et al. **J Consult Clin Psychol** 1996 Apr;64(2):406–10

Drug and alcohol use by Canadian university athletes: a national survey. Spence JC, et al. **J Drug Educ** 1996; 26(3):275–87

Intrinsic and required dynamics of a simple bat-ball skill. Sim M, et al. **J Exp Psychol Hum Percept Perform** 1997 Feb;23(1):101–15

The female athlete triad. Grooms AM. **J Fla Med Assoc** 1996 Aug–Sep;83(7):479–81 (20 ref.)

Fatal air transport accidents involving athletic teams from the United States. Murphy GK. **J Forensic Sci** 1997 Jan; 42(1):74–8 (14 ref.)

HIV-infected competitive athletes. What are the risks? What precautions should be taken? Feller A, et al. **J Gen Intern Med** 1997 Apr;12(4):243–6 (30 ref.)

Similarities and differences in structural and functional changes of left ventricle and carotid arteries in young borderline hypertensives and in athletes. Cuspidi C, et al. **J Hypertens** 1996 Jun;14(6):759–64

The Centennial Olympic Park bombing: Grady's response. Anderson GV Jr, et al. **J Med Assoc Ga** 1997 Jan;86(1):42–6

Paralympics--a triumph for people with physical disabilities. Apple D. **J Med Assoc Ga** 1997 Jan;86(1):59–61

Gender verification at the centennial Olympic games. Elsas LJ, et al. **J Med Assoc Ga** 1997 Jan;86(1):50–4

Medical care at the 1996 Olympic Village. Woodfin BA, et al. **J Med Assoc Ga** 1997 Jan;86(1):15–7

Promotion of mental health through coaching competitive sports. Bell CC. **J Natl Med Assoc** 1997 Aug;89(8):517–20

Search for the competitive edge: a history of dietary fads and supplements. Applegate EA, et al. **J Nutr** 1997 May; 127(5 Suppl):869S–873S

Gold medal roundtable: athlete presentations, audience questions, and summary statements. Applegate EA, et al. **J Nutr** 1997 May;127(5 Suppl):886S–892S

Diets of elite athletes: has the discipline of sports nutrition made an impact? Grandjean AC. **J Nutr** 1997 May;127(5 Suppl):874S–877S (21 ref.)

From Olympia to Atlanta: a cultural-historical perspective on diet and athletic training. Grivetti LE, et al. **J Nutr** 1997 May;127(5 Suppl):860S–868S (60 ref.)

Sports medicine: a century of progress. Tipton CM. **J Nutr** 1997 May;127(5 Suppl):878S–885S

Certified athletic trainers discuss best type of ankle support [news] **J Okla State Med Assoc** 1996 Jan;89(1):28

Competitive sports and the progression of spondylolisthesis. Muschik M, et al. **J Pediatr Orthop** 1996 May-Jun; 16(3):364–9

Patterns of tobacco and alcohol use among sedentary, exercising, nonathletic, and athletic youth. Rainey CJ, et al. **J Sch Health** 1996 Jan;66(1):27–32

Professional burnout [editorial] Sullivan PA, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):231–5 (55 ref.)

Aggression and violence in sport: an ISSP position stand. Tenenbaum G, et al. **J Sports Med Phys Fitness** 1997 Jun; 37(2):146–50

Annual conference of the British Association of Sport and Exercise Sciences (BASES). 7–9 September 1996. Abstract. **J Sports Sci** 1997 Feb;15(1):3–111

Effect of goal difficulty, goal specificity and duration of practice time intervals on muscular endurance performance. Bar-Eli M, et al. **J Sports Sci** 1997 Apr; 15(2):125–35

The use and abuse of statistics in sports and exercise sciences [editorial] Bartlett R. **J Sports Sci** 1997 Feb;15(1):1–2

Practical issues in nutrition for athletes. Burke L. **J Sports Sci** 1995 Summer;13 Spec No:S83–90 (22 ref.)

Research design and mental practice. Goginsky AM, et al. **J Sports Sci** 1996 Oct;14(5):381–92

Instrumentation of an ergometer to monitor the reliability of rowing performance. Macfarlane DJ, et al. **J Sports Sci** 1997 Apr;15(2):167–73

The relationship between basketball shooting kinematics, distance and playing position. Miller S, et al. **J Sports Sci** 1996 Jun;14(3):243–53

Validity and measurement agreement in sports performance [editorial] Nevill A. **J Sports Sci** 1996 Jun;14(3):199

Psychological and psychomotor skills associated with prowess at ten-pin bowling. Thomas PR, et al. **J Sports Sci** 1996 Jun;14(3):255–68

Macronutrients and performance. Williams C. **J Sports Sci** 1995 Summer;13 Spec No:S1–10 (88 ref.)

Violence in television commercials during nonviolent programming. The 1996 Major League Baseball playoffs. Anderson C. **JAMA** 1997 Oct 1;278(13):1045–6

Changes in bone mineral density in male athletes [letter; comment] Barr SI, et al. **JAMA** 1997 Jan 1;277(1):22–3; discussion 24. Comment on: JAMA 1996 Jul 17;276(3):226–30.

Sickle cell trait and sudden death in athletes [letter; comment] Kerle KK, et al. **JAMA** 1996 Nov 13;276(18):1472. Comment on: JAMA 1996 Jul 17;276(3):199–204.

Changes in bone mineral density in male athletes [letter; comment] Schneider P, et al. **JAMA** 1997 Jan 1;277(1):23–4; discussion 24. Comment on: JAMA 1996 Jul 17;276(3):226–30.

Comparison of bone mineral density between athletic and non-athletic Chinese male adolescents. Tsai SC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1996 Oct; 12(10):573–80

Glucocorticoid receptors in human peripheral blood mononuclear cells in relation to age and to sport activity. Grasso G, et al. **Life Sci** 1997;61(3):301–8

A physician and the Senior Olympics. Andersen WA. **Md Med J** 1996 Aug;45(8):695

Sports after total joint replacement. Cirincione RJ. **Md Med J** 1996 Aug;45(8):644–7 (12 ref.)

Sports and recreation for physically challenged athletes in Maryland and beyond. Herman G. **Md Med J** 1996 Aug; 45(8):691–4

Point of view: HIV and competitive athletics--assessing the real risk of infection. Feller AA, et al. **Med Health R I** 1996 Oct;79(10):362–4

A drug-free Olympics--a goal for spectators as well as athletes. Buckley NA, et al. **Med J Aust** 1996 Dec 2–16; 165(11–12):682–3

Physical activity, sports participation, and risk factors in adolescents. Boreham CA, et al. **Med Sci Sports Exerc** 1997 Jun;29(6):788–93

Energy turnover in a sailing crew during offshore racing around the world. Branth S, et al. **Med Sci Sports Exerc** 1996 Oct;28(10):1272–6

Stingers, transient quadriplegia, and cervical spinal stenosis: return to play criteria. Cantu RC. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S233–5

The heart of the senior oarsman: an echocardiographic evaluation. Gustafsson F, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):1045–8

Low-back pain in adolescent athletes. Kujala UM, et al. **Med Sci Sports Exerc** 1996 Feb;28(2):165–70

Family size and age at menarche in athletes. Malina RM, et al. **Med Sci Sports Exerc** 1997 Jan;29(1):99–106

American College of Sports Medicine position stand. The Female Athlete Triad. Otis CL, et al. **Med Sci Sports Exerc** 1997 May;29(5):i–ix

Multivariate allometric scaling of men's world indoor rowing championship performance. Vanderburgh PM, et al. **Med Sci Sports Exerc** 1996 May;28(5):626–30

Public health surveillance during the XVII Central American and Caribbean Games--Puerto Rico, November 1993. **MMWR Morb Mortal Wkly Rep** 1996 Jul 12;45(27):581–4

Prevention and management of heat-related illness among spectators and staff during the Olympic Games--Atlanta, July 6–23, 1996. **MMWR Morb Mortal Wkly Rep** 1996 Jul 26;45(29):631–3

Sudden, unexpected death of a young marathon runner as a result of bronchial malformation. Sedivy R, et al. **Mod Pathol** 1997 Mar;10(3):247–51

Low vision and surfing. Owen J, et al. **Optom Vis Sci** 1996 Aug;73(8):558–61

Sport practice and osteoarthritis of the limbs. Lequesne MG, et al. **Osteoarthritis Cartilage** 1997 Mar;5(2):75–86 (68 ref.)

Athletic participation by children and adolescents who have systemic hypertension. American Academy of Pediatrics Committee on Sports Medicine and Fitness. **Pediatrics** 1997 Apr;99(4):637–8

Participation in boxing by children, adolescents, and young adults. American Academy of Pediatrics Committee on Sports Medicine and Fitness. **Pediatrics** 1997 Jan; 99(1):134–5

Age differences in using precued information to preprogram interception of a ball. Olivier I, et al. **Percept Mot Skills** 1997 Aug;85(1):123–7

Is the contextual interference effect generalizable to computer games? Shewokis PA. **Percept Mot Skills** 1997 Feb;84(1):3–15

Selected papers from the 1996 International Pre-Olympic Scientific Congress: Physical Activity, Sport, and Health. Dallas, Texas, July 1996. **Res Q Exerc Sport** 1996 Sep;67(3 Suppl):S1–78

1996 AAHPERD National convention. Atlanta, Georgia. Abstracts. **Res Q Exerc Sport** 1996 Mar;67 Suppl:A1–130

1997 AAHPERD National Convention. St. Louis, Missouri, March 19–23, 1997. Abstracts. **Res Q Exerc Sport** 1997 Mar;68(1 Suppl):A1–129

Children learning lacrosse from teachers learning to teach it: the discovery of pedagogical content knowledge by observing children's movement. Barrett KR, et al. **Res Q Exerc Sport** 1996 Sep;67(3):297–309

Physical activity, sport, and health: toward the next century. Haskell WL. **Res Q Exerc Sport** 1996 Sep;67(3 Suppl):S37–47 (59 ref.)

Adaptation to training and performance in elite athletes. Keul J, et al. **Res Q Exerc Sport** 1996 Sep;67(3 Suppl):S29–36 (45 ref.)

The task difficulty of free throw shooting for males and females. Looney MA, et al. **Res Q Exerc Sport** 1996 Sep; 67(3):265–71

On the structural origins of Olympic individuality. MacAloon JJ. **Res Q Exerc Sport** 1996 Jun;67(2):136–47

The limits of human performance: project Daedalus. Nadel ER. **Res Q Exerc Sport** 1996 Sep;67(3 Suppl):S71–2

Rhythmicity and preperformance ritual: stabilizing a flexible system. Southard D, et al. **Res Q Exerc Sport** 1996 Sep; 67(3):288–96

Sports, exercise, and other causes of injuries: results of a population survey. Uitenbroek DG. **Res Q Exerc Sport** 1996 Dec;67(4):380–5

Ergogenic aids: a means to Citius, Altius, Fortius, and Olympic gold? Williams MH. **Res Q Exerc Sport** 1996 Sep; 67(3 Suppl):S58–64 (46 ref.)

Obstructive symptoms in athletes: is it asthma and what to do about it? [editorial] Bjermer L, et al. **Respir Med** 1996 Jan;90(1):1–3

Considerations in child and adolescent athletes. Emery HM. **Rheum Dis Clin North Am** 1996 Aug;22(3):499–513 (30 ref.)

Bungi jumping 'unphysiological' [letter] Robertson S. **S Afr Med J** 1997 Jan;87(1):82

Determination of aglycones of ginsenosides in ginseng preparations sold in Sweden and in urine samples from Swedish athletes consuming ginseng. Cui JF, et al. **Scand J Clin Lab Invest** 1996 Apr;56(2):151–60

Increased risk of stress fractures of the ribs in elite rowers. Christiansen E, et al. **Scand J Med Sci Sports** 1997 Feb; 7(1):49–52

Tendons—a source of major concern in competitive and recreational athletes [editorial] Kannus P. **Scand J Med Sci Sports** 1997 Apr;7(2):53–4

Pregnancy in endurance athletes. Penttinen J, et al. **Scand J Med Sci Sports** 1997 Aug;7(4):226–8

Sports, physical exercise and use of alcohol. Watten RG. **Scand J Med Sci Sports** 1995 Dec;5(6):364–8

The elite athlete and exercise in pregnancy. Hale RW, et al. **Semin Perinatol** 1996 Aug;20(4):277–84 (43 ref.)

Diagnosis, prophylaxis, and treatment of headaches in the athlete. Swain RA, et al. **South Med J** 1997 Sep; 90(9):878–88 (52 ref.)

Physical capacity and physical strain in persons with tetraplegia; the role of sport activity. Dallmeijer AJ, et al. **Spinal Cord** 1996 Dec;34(12):729–35

Thermoregulation in spinal cord injury: the challenge of the Atlanta Paralympics. McCann BC. **Spinal Cord** 1996 Jul; 34(7):433–6 (19 ref.)

Validation of an incremental field test for the direct assessment of peak oxygen uptake in wheelchair-dependent athletes. Vinet A, et al. **Spinal Cord** 1996 May;34(5):288–93

Drug use amongst young athletes. Do any of us really know what we're talking about? Albrecht RR. **Sports Med** 1996 Dec;22(6):351–4 (17 ref.)

Psychological and behavioural effects of endogenous testosterone and anabolic-androgenic steroids. An update. Bahrke MS, et al. **Sports Med** 1996 Dec;22(6):367–90 (157 ref.)

Effects of exercise on chromium levels. Is supplementation required? Clarkson PM. **Sports Med** 1997 Jun;23(6):341–9 (48 ref.)

Cardiovascular evaluation of the athlete. Issues regarding performance, screening and sudden cardiac death. Franklin BA, et al. **Sports Med** 1997 Aug;24(2):97–119 (139 ref.)

Eye injuries in athletics and recreation. Napier SM, et al. **Surv Ophthalmol** 1996 Nov–Dec;41(3):229–44 (70 ref.)

Association between type of training and risk of asthma in elite athletes. Helenius IJ, et al. **Thorax** 1997 Feb; 52(2):157–60

Do the transplant games help organ donation? Slapak M, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):1479–80

Exercise intolerance and poor performance in western performance and sprint horses. Kobluk CN, et al. **Vet Clin North Am Equine Pract** 1996 Dec;12(3):581–606 (49 ref.)

Diagnostic approach to exercise intolerance in racehorses. Lilich JD, et al. **Vet Clin North Am Equine Pract** 1996 Dec;12(3):555–64 (15 ref.)

Greyhound welfare [letter] Poulter D. **Vet Rec** 1996 Jun 8; 138(23):576

Relationship of plasma lactate production to cortisol release following completion of different types of sporting events in horses. Desmecht D, et al. **Vet Res Commun** 1996; 20(4):371–9

The effect of arthritis in the carpal joint on performance in Norwegian cold-blooded trotters. Dolvik NI, et al. **Vet Res Commun** 1996;20(6):505–12

Psychological effects of chronic injury in elite athletes [published erratum appears in West J Med 1997 Apr;166(4):291] Shuer ML, et al. **West J Med** 1997 Feb; 166(2):104–9

Aspects of dehydration and rehydration in sport. Brouns F. **World Rev Nutr Diet** 1997;82:63–80 (61 ref.)

Body perception and emotional health in athletes: a study of female adolescents involved in aesthetic sports. Casper RC, et al. **World Rev Nutr Diet** 1997;82:134–47

The 'Are' Sport Nutratherapy Program: the rationale for food supplements in sports medicine. Göransson U, et al. **World Rev Nutr Diet** 1997;82:101–21 (61 ref.)

[Sudden death of a young athlete, is it explained? (editorial)] Fontaine G. **Arch Mal Coeur Vaiss** 1996 Nov;89(11):1341–2 **(Fre)**

[Alcohol and energy drink—can combined consumption of both beverages modify automobile driving fitness?] Riesselmann B, et al. **Blutalkohol** 1996 Jul;33(4):201–8 (Eng. Abstr.) **(Ger)**

[Sports activity and risk of arthrosis] Gross P, et al. **Schweiz Med Wochenschr** 1997 Jun 7;127(23):967–77 (60 ref.) (Eng. Abstr.) **(Ger)**

[Sports and work capacity after stabilization of recurrent shoulder joint dislocations] Richter J, et al. **Unfallchirurg** 1997 Mar;100(3):198–204 (Eng. Abstr.) **(Ger)**

[Insulin therapy and sports] Aigner A. **Wien Med Wochenschr** 1997;147(9):222–5 (22 ref.) (Eng. Abstr.) **(Ger)**

[Sports following endoprosthetic joint replacement] Riepenhausen U. **Z Orthop Ihre Grenzgeb** 1997 Mar–Apr; 135(2):Oa16–7 **(Ger)**

[Exertional heatstroke—diagnosis, treatment and prevention] Albukrek D, et al. **Harefuah** 1996 Jun 16;130(12):828–33 (41 ref.) **(Heb)**

[Resistance-training in children and adolescents] Falk B. **Harefuah** 1996 Jun 2;130(11):778–83 (44 ref.) **(Heb)**

[The female athletes' triad: eating disorders, amenorrhea, osteoporosis] Resch M. **Orv Hetil** 1997 Jun 1; 138(22):1393–7 (Eng. Abstr.) **(Hun)**

[Evaluation of glucose tolerance test in a group of young athletes with diabetes in the family] De Luca d'Alessandro E, et al. **Ann Ig** 1996 Jul–Aug;8(4):435–40 (Eng. Abstr.) **(Ita)**

[Cardiological protocols on determining eligibility for competitive sports 1995. Organizational Cardiological Committee on Eligibility for Sports (COCIS)] **G Ital Cardiol** 1996 Aug;26(8):949–83 **(Ita)**

[Local administration of somatostatin in joint diseases in athletes] Russo S, et al. **Minerva Med** 1997 Jun;88(6):265–70 (Eng. Abstr.) **(Ita)**

[Obesity, overweight and physical activity in elementary school children] Bordin D, et al. **Minerva Pediatr** 1995 Dec; 47(12):521–6 (Eng. Abstr.) **(Ita)**

[Athlete's heart] Sunagawa O, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):578–81 (18 ref.) **(Jpn)**

[Inter-hemispheric cerebral asymmetry and motor abilities] Efimova IV. **Fiziol Cheloveka** 1996 Jan–Feb;22(1):35–9 **(Rus)**

[Polyunsaturated fatty acids in blood plasma and erythrocyte membranes in high-profile volleyball players] Popichev MI, et al. **Fiziol Cheloveka** 1997 Jul–Aug;23(4):113–6 **(Rus)**

[Medicine and sports (editorial)] Grujić N. **Med Pregl** 1996; 49(7–8):259–62 **(Scr)**

[Physical activity and leisure time in children. I: Relation to socioeconomic status] Mur de Frenne L, et al. **An Esp Pediatr** 1997 Feb;46(2):119–25 (Eng. Abstr.) **(Spa)**

[Physical activity and leisure time in children. II: Relationship with dietary habits] Mur de Frenne L, et al. **An Esp Pediatr** 1997 Feb;46(2):126–32 (Eng. Abstr.) **(Spa)**

[Influence of physical activity upon bone mineralization of school age children of both sexes] Burrows Argote R, et al. **Arch Latinoam Nutr** 1996 Mar;46(1):11–5 (Eng. Abstr.) **(Spa)**

[Development and optimization of an isotonic sports drink] López L, et al. **Arch Latinoam Nutr** 1994 Dec;44(4):256–63 (Eng. Abstr.) **(Spa)**

[Adrenergic beta-2 agents and the Olympic Games (letter)] Drobnic F. **Med Clin (Barc)** 1996 Nov 23;107(18):717–8 **(Spa)**

[Energy and nutrients needs in athletes. The most common deficiencies] Vega Romero F, et al. **Rev Clin Esp** 1996 Jun;196(6):381–7 (66 ref.) **(Spa)**

[Prevalence of hypertensive response to exercise in a group of healthy young male athletes. Relationship with left ventricular mass and prospective clinical implications] Longás Tejero MA, et al. **Rev Esp Cardiol** 1996 Feb; 49(2):104–10 (Eng. Abstr.) **(Spa)**

ECONOMICS

The economic impact on families of children's participation in junior sport. Kirk D, et al. **Aust J Sci Med Sport** 1997 Jun;29(2):27–33

HISTORY

Recreating the body: women's physical education and the science of sex differences in America, 1900–1940. Verbrugge MH. **Bull Hist Med** 1997 Summer;71(2):273–304

High-protein diets, "damaged hearts," and rowing men: antecedents of modern sports medicine and exercise science, 1867–1928. Park RJ. **Exerc Sport Sci Rev** 1997; 25:137–69

Dr W G Grace: medical truant. The Samuel Gee Lecture 1996. Toghill PI. **J R Coll Physicians Lond** 1997 Jan–Feb; 31(1):95–9

Resistance, persistence, providence: the 1932 Los Angeles Olympic games in perspective. Barney RK. **Res Q Exerc Sport** 1996 Jun;67(2):148–60

Pierre de Coubertin's Olympic exploration of modernism, 1894–1914: aesthetics, ideology and the spectacle. Brown DA. **Res Q Exerc Sport** 1996 Jun;67(2):121–35

Historical perspectives regarding our understanding of physical performance during hypoxia. Buskirk ER. **Res Q Exerc Sport** 1996 Sep;67(3 Suppl):S73–5

African American women Olympians: the impact of race, gender, and class ideologies, 1932–1968. Gissendanner CH. **Res Q Exerc Sport** 1996 Jun;67(2):172–82

A house divided: the U.S. amateur sport establishment and the issue of participation in the 1936 Berlin Olympics. Wenn SR. **Res Q Exerc Sport** 1996 Jun;67(2):161–71

The IOC and the status of women in the Olympic movement: 1972–1996. Wilson W. **Res Q Exerc Sport** 1996 Jun; 67(2):183–92

Those who live by the sword.... Chapman S. **Tob Control** 1997 Spring;6(1):59–60

INJURIES see ATHLETIC INJURIES

LEGISLATION & JURISPRUDENCE

[The exercise bronchoconstriction test in the hyperreactive sports players and its report (letter)] Drobnic F. **Arch Bronconeumol** 1997 Apr;33(4):206 **(Spa)**

PHYSIOLOGY

Retrospective longitudinal growth study of boys and girls active in sport. Malina RM, et al. **Acta Paediatr** 1996 May; 85(5):570–6

Health status of former elite athletes. The Finnish experience. Sarna S, et al. **Aging (Milano)** 1997 Feb–Apr;9(1–2):35–41

Relationship of body composition and cardiovascular fitness to lipoprotein lipid profiles in master athletes and sedentary men. Yataco AR, et al. **Aging (Milano)** 1997 Feb–Apr; 9(1–2):88–94

Physical activity and four-year development of back strength in children. Newcomer K, et al. **Am J Phys Med Rehabil** 1997 Jan–Feb;76(1):52–8

Exercise and bones. Lessons learned from female athletes. Drinkwater BL. **Am J Sports Med** 1996;24(6 Suppl):S33–5 (20 ref.)

Physiologic demands of badminton match play. Faccini P, et al. **Am J Sports Med** 1996;24(6 Suppl):S64–6

Muscle function in movement and sports. Herzog W. **Am J Sports Med** 1996;24(6 Suppl):S14–9 (17 ref.)

Plyometric training in female athletes. Decreased impact forces and increased hamstring torques. Hewett TE, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):765–73

Glenohumeral translation in the asymptomatic athlete's shoulder and its relationship to other clinically measurable anthropometric variables. Lintner SA, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):716–20

Form and function of the knee. Its relation to high performance and to sports. Müller W. **Am J Sports Med** 1996;24(6 Suppl):S104–6

New aspects of altitude training. Rusko HR. **Am J Sports Med** 1996;24(6 Suppl):S48–52 (29 ref.)

The biomechanics of the human in flight. Yeadon MR. **Am J Sports Med** 1997 Jul–Aug;25(4):575–80

Effect of initial posture on biomechanical adjustments associated with a voluntary leg movement in rock climbers. Quaine F, et al. **Arch Physiol Biochem** 1996;104(2):192–9

Physiological implications of altitude training for endurance performance at sea level: a review. Bailey DM, et al. **Br J Sports Med** 1997 Sep;31(3):183–90 (111 ref.)

Effect of altered reproductive function and lowered testosterone levels on bone density in male endurance athletes. Bennell KL, et al. **Br J Sports Med** 1996 Sep; 30(3):205–8 (59 ref.)

Physiological responses of wheelchair athletes at percentages of top speed. Campbell IG, et al. **Br J Sports Med** 1997 Mar;31(1):36–40

A study of physiological responses during match play in Indian national kabaddi players. Khanna GL, et al. **Br J Sports Med** 1996 Sep;30(3):232–5

Factors influencing the restoration of fluid and electrolyte balance after exercise in the heat. Maughan RJ, et al. **Br J Sports Med** 1997 Sep;31(3):175–82 (26 ref.)

Energy expenditure and physiological responses during indoor rock climbing. Mermier CM, et al. **Br J Sports Med** 1997 Sep;31(3):224–8

Cloning for gold. Read AP. **Br J Sports Med** 1997 Sep; 31(3):174

Energy expenditure estimates of the Caltrac accelerometer for running, race walking, and stepping. Swan PD, et al. **Br J Sports Med** 1997 Sep;31(3):235–9

Achilles and patellar tendinopathies in athletes: pathogenesis and surgical treatment. Benazzo F, et al. **Bull Hosp Jt Dis** 1996;54(4):236–40

Weight and plyometric training: effects on eccentric and concentric force production. Wilson GJ, et al. **Can J Appl Physiol** 1996 Aug;21(4):301–15

Mechanics of left ventricular systolic and diastolic function in physiologic hypertrophy of the athlete's heart. Colan SD. **Cardiol Clin** 1997 Aug;15(3):355–72 (112 ref.)

Impact of different sports and training on cardiac structure and function. Fagard RH. **Cardiol Clin** 1997 Aug; 15(3):397–412 (128 ref.)

Considerations for racial differences in the athlete's heart and related cardiovascular disease. Lewis JF. **Cardiol Clin** 1997 Aug;15(3):485–91 (64 ref.)

Outer limits of the athlete's heart, the effect of gender, and relevance to the differential diagnosis with primary cardiac diseases. Pelliccia A, et al. **Cardiol Clin** 1997 Aug; 15(3):381–96 (88 ref.)

The athlete's heart. Historical perspectives--solved and unsolved problems. Rost R. **Cardiol Clin** 1997 Aug; 15(3):493-512

The morphologic consequences of systemic training. Shapiro LM. **Cardiol Clin** 1997 Aug;15(3):373-9 (34 ref.)

Exercise-induced bronchoconstriction in healthy athletes [letter; comment] Bogaard JM, et al. **Chest** 1996 Oct; 110(4):1127. Comment on: Chest 1996 Feb;109(2):312-5.

Sport-related hematuria: a review. Jones GR, et al. **Clin J Sport Med** 1997 Apr;7(2):119-25 (64 ref.)

Tracking of risk factors for coronary heart disease from adolescence to young adulthood with special emphasis on physical activity and fitness. A longitudinal study. Andersen LB. **Dan Med Bull** 1996 Dec;43(5):407-18

Thermoregulatory responses during competitive exercise in the performance horse. **Equine Vet J Suppl** 1995 Nov; (20):1-164

Anaerobic contribution to the time to exhaustion at the minimal exercise intensity at which maximal oxygen uptake occurs in elite cyclists, kayakists and swimmers. Faina M, et al. **Eur J Appl Physiol** 1997;76(1):13-20

Reduced performance of male and female athletes at 580 m altitude. Gore CJ, et al. **Eur J Appl Physiol** 1997; 75(2):136-43

The relationship between test protocol and the development of exercise-induced hypoxemia (EIH) in highly trained athletes. Lama IL, et al. **Eur J Appl Physiol** 1996; 74(4):330-5

Monitoring high-intensity endurance training using neuromuscular excitability to recognize overtraining. Lehmann M, et al. **Eur J Appl Physiol** 1997;76(2):187-91

Posture control after prolonged exercise. Lepers R, et al. **Eur J Appl Physiol** 1997;76(1):55-61

Metabolic and performance adaptations to interval training in endurance-trained cyclists. Westgarth-Taylor C, et al. **Eur J Appl Physiol** 1997;75(4):298-304

Ultrasonic videodensitometric analysis of two different models of left ventricular hypertrophy. Athlete's heart and hypertension. Di Bello V, et al. **Hypertension** 1997 Apr; 29(4):937-44

Body weight changes and voluntary fluid intakes during training and competition sessions in team sports. Broad EM, et al. **Int J Sport Nutr** 1996 Sep;6(3):307-20

Increased energy and nutrient intake during training and competition improves elite triathletes' endurance performance. Frentsos JA, et al. **Int J Sport Nutr** 1997 Mar;7(1):61-71

Is the Olympic boardsailor an endurance athlete? De Vito G, et al. **Int J Sports Med** 1997 May;18(4):281-4

Enhanced expression of HLA-DR, Fc gamma receptor 1 (CD64) and leukocyte common antigen (CD45) indicate activation of monocytes in regenerative training periods of endurance athletes. Gabriel H, et al. **Int J Sports Med** 1997 Feb;18(2):136-41

Structural and functional adaptations of the cardiovascular system by training. Huonker M, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S164-72 (74 ref.)

Assessment of left ventricular dimensions and functions in athletes and sedentary subjects at rest and during exercise using echocardiography, Doppler sonography and radionuclide ventriculography. Huonker M, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S173-9 (64 ref.)

The asthmatic athlete: metabolic and ventilatory responses to exercise with and without pre-exercise medication. Ienna TM, et al. **Int J Sports Med** 1997 Feb;18(2):142-8

Effect of combined endurance, strength and sprint training on maximal oxygen uptake, isometric strength and sprint performance in female elite handball players during a season. Jensen J, et al. **Int J Sports Med** 1997 Jul; 18(5):354-8

Determinants of morphologic cardiac adaptation in elite athletes: the role of athletic training and constitutional factors. Pelliccia A. **Int J Sports Med** 1996 Nov;17 Suppl 3:S157-63 (85 ref.)

Sports-specific adaptation of left ventricular muscle mass in athlete's heart. I. An echocardiographic study with combined isometric and dynamic exercise trained athletes (male and female rowers). Urhausen A, et al. **Int J Sports Med** 1996 Nov;17 Suppl 3:S145-51

Body composition and bone mineral density in competitive athletes in different sports. Fiore CE, et al. **Int J Tissue React** 1996;18(4-6):121-4

Anemia and zinc deficiency in the athlete [editorial; comment] Nishi Y. **J Am Coll Nutr** 1996 Aug;15(4):323-4 . Comment on: J Am Coll Nutr 1996 Aug;15(4):359-63.

Left ventricular mass, geometry, and filling in endurance athletes: association with exercise blood pressure. Karjalainen J, et al. **J Appl Physiol** 1997 Feb;82(2):531-7

Reproductive function in male endurance athletes: sperm analysis and hormonal profile. Lucia A, et al. **J Appl Physiol** 1996 Dec;81(6):2627-36

Optimum phase ratio in the triple jump. Yu B, et al. **J Biomech** 1996 Oct;29(10):1283-9

High-impact exercise promotes bone gain in well-trained female athletes. Taaffe DR, et al. **J Bone Miner Res** 1997 Feb;12(2):255-60

Preparticipation physical examinations. Sanders B, et al. **J Orthop Sports Phys Ther** 1996 Feb;23(2):149-63 (48 ref.)

The female athlete. Thein LA, et al. **J Orthop Sports Phys Ther** 1996 Feb;23(2):134-48 (93 ref.)

Fatigue characteristics of champion power and endurance athletes during force estimation. Adeyanju SA, et al. **J Sports Med Phys Fitness** 1996 Jun;36(2):90-4

The effects of moderate altitude on circulating thyroid hormones and thyrotropin in training athletes. Koistinen P, et al. **J Sports Med Phys Fitness** 1996 Jun;36(2):108-11

Physical performance of elite New Zealand Olympic class sailors. Legg SJ, et al. **J Sports Med Phys Fitness** 1997 Mar;37(1):41-9

Training and overtraining: an overview and experimental results in endurance sports. Lehmann MJ, et al. **J Sports Med Phys Fitness** 1997 Mar;37(1):7-17 (51 ref.)

Immunity in athletes. Pedersen BK, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):236-45 (97 ref.)

Accuracy of Calorie Counter method to assess daily energy expenditure and physical activities in athletes and nonathletes. Suzuki I, et al. **J Sports Med Phys Fitness** 1997 Jun;37(2):131-6

Acute changes in handgrip strength, endurance, and blood lactate with sustained sport rock climbing. Watts P, et al. **J Sports Med Phys Fitness** 1996 Dec;36(4):255-60

A comparison of exercise performance on bicycle and rowing ergometers in female master recreational rowers. Wiener SP, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):176-80

The young athlete: some physiological considerations. Bar-Or O. **J Sports Sci** 1995 Summer;13 Spec No:S31-3 (22 ref.)

Fluid balance during team sports. Burke LM. **J Sports Sci** 1997 Jun;15(3):287-95

The 'worn-out athlete': a clinical approach to chronic fatigue in athletes. Derman W, et al. **J Sports Sci** 1997 Jun; 15(3):341-51

Anthropometric, strength, endurance and flexibility characteristics of elite and recreational climbers. Grant S, et al. **J Sports Sci** 1996 Aug;14(4):301-9

Fatigue revisited [editorial] Hawley JA, et al. **J Sports Sci** 1997 Jun;15(3):245-6

Finger flexion does not contribute to ball speed in overarm throws. Hore J, et al. **J Sports Sci** 1996 Aug;14(4):335-42

The interpretation of relative momentum data to assess the contribution of the free limbs to the generation of vertical velocity in sports activities. Lees A, et al. **J Sports Sci** 1996 Dec;14(6):503-11

Modeling training and overtraining. Morton RH. **J Sports Sci** 1997 Jun;15(3):335-40

The ability of tests of muscular function to reflect training-induced changes in performance. Murphy AJ, et al. **J Sports Sci** 1997 Apr;15(2):191-200

Travel fatigue and jet-lag. Reilly T, et al. **J Sports Sci** 1997 Jun;15(3):365-9

Nutritional ergogenics in athletics. Williams MH. **J Sports Sci** 1995 Summer;13 Spec No:S63-74 (90 ref.)

Bone density in amenorrheic athletes and in anorexia nervosa [letter; comment] Mehler PS. **JAMA** 1996 Nov 6; 276(17):1384-5. Comment on: JAMA 1996 Jul 17;276(3):238-40.

Influence of external stabilizing devices of the ankle on sport-specific capabilities. Jerosch J, et al. **Knee Surg Sports Traumatol Arthrosc** 1997;5(1):50-7

Combating abuses in high-level adolescent sport [letter] Kovachev LS. **Lancet** 1996 Oct 12;348(9033):1034-5

Cardiovascular preparticipation screening of competitive athletes. American Heart Association. **Med Sci Sports Exerc** 1996 Dec;28(12):1445-52

Determination of maximal lactate steady state response in selected sports events. Beneke R, et al. **Med Sci Sports Exerc** 1996 Feb;28(2):241-6

Exercise and bone mineral density in mature female athletes. Dook JE, et al. **Med Sci Sports Exerc** 1997 Mar;29(3):291-6

Lactate exchange and removal abilities in rowing performance. Messonnier L, et al. **Med Sci Sports Exerc** 1997 Mar;29(3):396-401

Olympics in Atlanta: a fight against physics. Nielsen B. **Med Sci Sports Exerc** 1996 Jun;28(6):665-8

Athletic heart: a metabolic, anatomical, and functional study. Turpeinen AK, et al. **Med Sci Sports Exerc** 1996 Jan; 28(1):33-40

Special considerations in the athletic throwing shoulder. Arroyo JS, et al. **Orthop Clin North Am** 1997 Jan; 28(1):69-78 (72 ref.)

Physical performance in relation to age, sex, social class and sports activities in kindergarten and elementary school. Krombholz H. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1168-70

Acute and adaptive responses in humans to exercise in a warm, humid environment. Nielsen B, et al. **Pflugers Arch** 1997 May;434(1):49-56

Fat gain in female swimmers. Alméras N, et al. **Physiol Behav** 1997 Jun;61(6):811-7

Pulmonary transit time and diffusion limitation during heavy exercise in athletes. Hopkins SR, et al. **Respir Physiol** 1996 Jan;103(1):67-73

Impact of physical activity and sport on the immune system. Shepard RJ, et al. **Rev Environ Health** 1996 Jul-Sep; 11(3):133-47 (98 ref.)

The Q angle and sport. Hahn T, et al. **Scand J Med Sci Sports** 1997 Feb;7(1):43-8

Low LDL oxidation in veteran endurance athletes. Kujala UM, et al. **Scand J Med Sci Sports** 1996 Oct;6(5):303-8

Aerobic and anaerobic work capacities and leg muscle characteristics in elite orienteers. Rolf C, et al. **Scand J Med Sci Sports** 1997 Feb;7(1):20-4

Nutrition for improved sports performance. Current issues on ergogenic aids. Clarkson PM. **Sports Med** 1996 Jun; 21(6):393-401 (89 ref.)

Biomechanics of overhand throwing with implications for injuries. Fleisig GS, et al. **Sports Med** 1996 Jun;21(6):421-37 (68 ref.)

Biology and medicine of sailing. An update. Shephard RJ. **Sports Med** 1997 Jun;23(6):350-6 (49 ref.)

The use of isometric tests of muscular function in athletic assessment. Wilson GJ, et al. **Sports Med** 1996 Jul; 22(1):19-37 (89 ref.)

[Diabetics profit from endurance training (interview by H. Weismann)] Völker K. **Sportverletz Sportschaden** 1996 Jun; 10(2):V-VI **(Ger)**

[Physical performance and sleep in athletes] Zimmermann E. **Wien Med Wochenschr** 1996;146(13-14):280-2 (Eng. Abstr.) **(Ger)**

[New aspects in the evaluation of cardiologic fitness in sport activities. From the Bethesda Conference in 1994 to the Italian COCIS in 1996. Cardiologic Organizational Committee for Cardiovascular Fitness in Sport] Naccarella F, et al. **G Ital Cardiol** 1996 Dec;26(12):1507-39 (296 ref.) **(Ita)**

[Cardiomyopathy and enlarged hearts of athletes] Sugishita Y. **Nippon Naika Gakkai Zasshi** 1997 Mar 10;86(3):473-6 (4 ref.) **(Jpn)**

[The circadian dynamics of body temperature and of the cardiorespiratory system of the human body during non-competitive yachting] Agadzhanian NA, et al. **Fiziol Cheloveka** 1997 May-Jun;23(3):63-7 **(Rus)**

[Adaptation of cardiac activity and status of gas exchange in athletes to physical load] Vaniushin IuS, et al. **Fiziol Cheloveka** 1997 Jul-Aug;23(4):69-73 **(Rus)**

[The local immunity characteristics of the mouth in athletes during a period of intensive training] Ratnitsyna IL. **Stomatologiia (Mosk)** 1996;Spec No:73-4 **(Rus)**

[The indices of intraerythrocyte metabolism and hemoglobin oxygen affinity in volleyball players under intensive physical loads] Popichev MI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Mar-Apr; (2):21-2 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Cognitive-affective sources of sport enjoyment in adolescent sport participants. Boyd MP, et al. **Adolescence** 1996 Summer;31(122):383-95

Training the visual-perceptual skills of athletes. Insights from the Study of Motor Expertise. Abernethy B. **Am J Sports Med** 1996;24(6 Suppl):S89-92

The display of emotions in elite athletes. Hackfort D. **Am J Sports Med** 1996;24(6 Suppl):S80-4

Qualitative and quantitative analysis in sports. McPherson MN. **Am J Sports Med** 1996;24(6 Suppl):S85-8

Child abuse in sport [editorial; comment] MacAuley D. **Br J Sports Med** 1996 Dec;30(4):275-6. Comment on: Br J Sports Med 1996 Dec;30(4):364-5.

The effect of meditation on shooting performance. Solberg EE, et al. **Br J Sports Med** 1996 Dec;30(4):342-6

Sports participation in individuals with spinal cord injury: demographic and psychological correlates. Foreman PE, et al. **Int J Rehabil Res** 1997 Jun;20(2):159-68

Sports participation in an urban high school: academic and psychologic correlates. Fisher M, et al. **J Adolesc Health** 1996 May;18(5):329-34

Using cooperative learning to enhance the academic and social experiences of freshman student athletes. Dudley BS, et al. **J Soc Psychol** 1997 Aug;137(4):449-59

High-level athlete's impressions of their preparticipation sports examination [letter] Laure P. **J Sports Med Phys Fitness** 1996 Dec;36(4):291-2

External conditions and disposition--behaviour congruity as determinants of perceived personal causation among exercise adherers and non-adherers. Bar-Eli M. **J Sports Sci** 1996 Oct;14(5):433-44

Applying contextual interference to the Pawlata roll. Smith PJ, et al. **J Sports Sci** 1995 Dec;13(6):455-62

Male adolescents' reactions to TV beer advertisements: the effects of sports content and programming context. Slater MD, et al. **J Stud Alcohol** 1996 Jul;57(4):425-33

Correlation between field dependence-independence and handball shooting by Swedish national male handball players. Apitzsch E, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1395-8

Relationship of swimming distance, expectancy, and performance to mood states of competitive athletes. Berger BG, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1199-210

Italian version of the Perceived Physical Ability Scale. Bortoli L, et al. **Percept Mot Skills** 1997 Aug;85(1):187-92

Effects of mental practice on performance are moderated by cognitive anxiety as measured by the Sport Competition Anxiety Test. Halvari H. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1375-83

Effects on archery performance of manipulating metamotivational state and felt arousal. Kerr JH, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):819-28

Comparison of aggressive behavior between men and women in sport. Lenzi A, et al. **Percept Mot Skills** 1997 Feb; 84(1):139-45

Review of recent Chinese research on field dependence-independence in high-level athletes. Liu WH. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1187-93 (42 ref.)

Comparing scores on spatial-perception tests for intercollegiate athletes and nonathletes. Lord T, et al. **Percept Mot Skills** 1997 Feb;84(1):299-306

Does the establishment of momentum lead to athletic improvement? McCutcheon LE. **Percept Mot Skills** 1997 Aug;85(1):195–203

Correlations between mood scores and volleyball performance. Newby RW, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1153–4

Goal orientations and perceived purposes of training among elite athletes. Ommundsen Y, et al. **Percept Mot Skills** 1996 Oct;83(2):463–71

Benefits of physical activity. Silvestri L. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):890

Amount of psychological stress reported by high school volleyball officials. Stewart MJ, et al. **Percept Mot Skills** 1996 Aug;83(1):337–8

Achievement motivation and involvement in sport competitions. Thomassen TO, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1363–74

Olympic athletes' transition from sport to workplace. Ungerleider S. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1287–95

Perception of anxiety and expectations of performance. Wiggins MS, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):1071–4

The Task and Ego Orientation in Sport Questionnaire: construct equivalence and mean differences across gender. Li F, et al. **Res Q Exerc Sport** 1996 Jun;67(2):228–38

Testing the simplex assumption underlying the Sport Motivation Scale: a structural equation modeling analysis. Li F, et al. **Res Q Exerc Sport** 1996 Dec;67(4):396–405

[Horseback riding as a means of treatment and rehabilitation in neurology and psychiatry] Gurvich PT. **Zh Nevrol Psikhiatr Im S S Korsakova** 1997;97(8):65–7 (0 ref.) **(Rus)**

STANDARDS

Enhancing athletic performance: when ethics and evidence clash [editorial] Hart LE, et al. **Clin J Sport Med** 1997 Jan;7(1):1–2

Sports participation in children and adolescents with neurological impairments. Rothner AD. **Va Med Q** 1996 Spring;123(2):94–7, 114 (30 ref.)

STATISTICS & NUMERICAL DATA

Physical activity in childhood and adolescence as predictor of physical activity in young adulthood. Telama R, et al. **Am J Prev Med** 1997 Jul–Aug;13(4):317–23

Tobacco use among male high school athletes. Davis TC, et al. **J Adolesc Health** 1997 Aug;21(2):97–101

Physical activity and incidence of coronary heart disease in middle-aged women and men. Folsom AR, et al. **Med Sci Sports Exerc** 1997 Jul;29(7):901–9

[Sports activities of Swiss youths: practices, motivations and links to health] Ferron C, et al. **Arch Pediatr** 1997 Jun; 4(6):568–76 (Eng. Abstr.) **(Fre)**

[Typical sports injuries, sports specific risks and comparison with other sources of accidents] Menke W, et al. **Versicherungsmedizin** 1997 Apr 1;49(2):41–4 (Eng. Abstr.) **(Ger)**

TRENDS

[Scene and extreme sports varieties: the injury spectrum is changing (interview)] Jerosch J. **Sportverletz Sportschaden** 1996 Sep;10(3):VII–VIII **(Ger)**

SPORTS MEDICINE

see related
ATHLETIC INJURIES
PROTECTIVE DEVICES

The making of a winner. Orthopedic research keeps professional athletes on the playing field [editorial] Szabo RM, et al. **Am J Orthop** 1996 Nov;25(11):742, 747

Presidential Address of the American Orthopaedic Society for Sports Medicine. Boland AL. **Am J Sports Med** 1996 Nov–Dec;24(6):712–5

A statistics primer. Prevalence, incidence, relative risks, and odds ratios: some epidemiologic concepts in the sports medicine literature. Kuhn JE, et al. **Am J Sports Med** 1997 May–Jun;25(3):414–6

Sports medicine. Overuse injuries. Part 1: bone. Brukner P. **Aust Fam Physician** 1996 Apr;25(4):545–9

The coming of age of sports medicine [editorial] Batt ME, et al. **BMJ** 1997 Mar 1;314(7081):621

The role of the British Olympic Association [editorial] Budgett R. **Br J Sports Med** 1996 Jun;30(2):80–1

The Olympic Games and sports medicine [editorial] Noakes T. **Br J Sports Med** 1996 Jun;30(2):81–2

A review of the British Journal of Sports Medicine 1991–5. Thompson B. **Br J Sports Med** 1996 Dec;30(4):354–5

Androgen use by athletes: a reevaluation of the health risks. Street C, et al. **Can J Appl Physiol** 1996 Dec;21(6):421–40 (82 ref.)

Endurance athletes, insulin secretion and muscle quality. Karlsson J, et al. **Can J Cardiol** 1996 Oct;12(10):1037–43

Clinical curriculum reviews: a step forward in sport medicine [editorial; comment] Kohl HW 3d, et al. **Clin J Sport Med** 1996 Oct;6(4):218–9. Comment on: Clin J Sport Med 1996 Oct;6(4):245–50.

Sports medicine and the Americans with Disabilities Act. Nichols AW. **Clin J Sport Med** 1996 Jul;6(3):190–5 (21 ref.)

The current Journal Club [editorial] Tarnopolsky M. **Clin J Sport Med** 1997 Jan;7(1):73

Working with young athletes: views of a nutritionist on the sports medicine team. Benardot D. **Int J Sport Nutr** 1996 Jun;6(2):110–20

Nutrition beliefs, attitudes, and resource use of high school wrestling coaches. Sossin K, et al. **Int J Sport Nutr** 1997 Sep;7(3):219–28

34th German Congress of Sports Medicine. Saarbrucken, Germany. October 19–22, 1995. Abstracts. **Int J Sports Med** 1996 Apr;17 Suppl 1:S1–88

Cutaneous manifestations of sports participation. Pharis DB, et al. **J Am Acad Dermatol** 1997 Mar;36(3 Pt 1):448–59 (110 ref.)

Who needs an exercise stress test? Evaluating the new American College of Sports Medicine risk stratification guidelines. Lowensteyn I, et al. **J Cardiopulm Rehabil** 1997 Jul–Aug;17(4):253–60

American College of Sports Medicine Exercise Specialist Workshop/Certification. A modality for career preparation. Otto RM, et al. **J Cardiopulm Rehabil** 1996 Nov–Dec;16(6):353–5

Nutritional and endocrine-metabolic aberrations in amenorrheic athletes. Laughlin GA, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4301–9

Patient profile, referral sources, and consultant utilization in a primary care sports medicine clinic. Butcher JD, et al. **J Fam Pract** 1996 Dec;43(6):556–60

Scientific application of sports medicine principles for acute low back problems. The Agency for Health Care Policy and Research Low Back Guideline Panel (AHCPR, Guideline #14) [see comments] Bigos SJ, et al. **J Orthop Sports Phys Ther** 1996 Oct;24(4):192–207 (5 ref.) . Comment in: J Orthop Sports Phys Ther 1997 Aug;26(2):105–8.

Attitudes of physical therapists who possess sports specialist certification. Ellison J, et al. **J Orthop Sports Phys Ther** 1997 Jun;25(6):400–6

Scientific application of sports medicine principles for acute low back problems [letter; comment] McGavin JC. **J Orthop Sports Phys Ther** 1997 Aug;26(2):105–8. Comment on: J Orthop Sports Phys Ther 1996 Oct;24(4):192–207.

A descriptive survey of management and operations at selected sports medicine centers in the United States. Olsen D. **J Orthop Sports Phys Ther** 1996 Nov;24(5):315–22

Communications to the 3rd World Congress of Science and Football. Cardiff, Wales, 9–13 April 1995. Abstracts. **J Sports Sci** 1995 Dec;13(6):499–522

The professional sports team physician. Silberstein CE. **Md Med J** 1996 Aug;45(8):683–5

American College of Sports Medicine 44th annual meeting. Denver, Colorado, May 28–31, 1997. Abstracts. **Med Sci Sports Exerc** 1997 May;29(5 Suppl):iv–xix, S1–300

American College of Sports Medicine 43rd annual meeting. Cincinnati, Ohio, May 29–June 1, 1996. Abstracts. **Med Sci Sports Exerc** 1996 May;28(5 Suppl):S1–S211

Single-subject methodology: an alternative approach. Bates BT. **Med Sci Sports Exerc** 1996 May;28(5):631–8

Were you knocked out? A team physician's approach to initial concussion management. McCrory PR. **Med Sci Sports Exerc** 1997 Jul;29(7 Suppl):S207–12 (55 ref.)

Exercise science and the information superhighway: it's time to start running in the fast lane [letter] Pereira MA, et al. **Med Sci Sports Exerc** 1996 Jul;28(7):931–2

Statistical considerations in the use and analysis of single-subject designs. Reboussin DM, et al. **Med Sci Sports Exerc** 1996 May;28(5):639–44

A good walk spoiled. Golf's links to medicine. Brunette DD. **Minn Med** 1997 Jun;80(6):25–30

Drugs in sports medicine [letter; comment] Milne C. **N Z Med J** 1997 Apr 25;110(1042):154–5. Comment on: N Z Med J 1997 Feb 14;110(1037):42.

More on sports medicine [letter] Agee DH. **Pediatr Ann** 1997 Aug;26(8):446–7

Being a team physician. Patterson PH, et al. **Pediatr Ann** 1997 Jan;26(1):13–6, 18

A measure of stress for athletic performance. Seggar JF, et al. **Percept Mot Skills** 1997 Feb;84(1):227–36

Special considerations in exercise testing. Protocols, equipment, and testing athletes. Grumet J, et al. **Prim Care** 1994 Sep;21(3):459–74 (37 ref.)

Readability of written informed consent forms used in exercise and sport psychology research. Cardinal BJ, et al. **Res Q Exerc Sport** 1996 Sep;67(3):360–2

Issues in sport science [editorial] Saltin B. **Scand J Med Sci Sports** 1995 Dec;5(6):315–7

Working as a volunteer olympic physician: a chance of a lifetime. Landry GL. **Wis Med J** 1996 Aug;95(8):552–4

The 'Are' Sport Nutratherapy Program: the rationale for food supplements in sports medicine. Göransson U, et al. **World Rev Nutr Diet** 1997;82:101–21 (61 ref.)

[Injury pattern in a sports club with its own sports physician] Fredberg U, et al. **Ugeskr Laeger** 1997 May 19; 159(21):3147–50 (Eng. Abstr.) **(Dan)**

[Sports medicine service in Denmark (editorial)] Nielsen AB. **Ugeskr Laeger** 1997 May 19;159(21):3123 **(Dan)**

[Outpatient sports clinic, first impressions (letter; comment)] Jansen FA. **Ned Tijdschr Geneeskd** 1996 Sep 28; 140(39):1967–8. Comment on: Ned Tijdschr Geneeskd 1996 Jul 27;140(30):1548–51. **(Dut)**

[Gender control and Olympics events from Albertville to Atlanta or good practices in gene biochemistry] Dingeon B, et al. **Ann Pharm Fr** 1997;55(2):55–61 (Eng. Abstr.) **(Fre)**

[Cardiological fitness examination of the athlete and prevention of sudden death] Tomas M. **Rev Med Brux** 1996 Sep;17(4):176–80 (Eng. Abstr.) **(Fre)**

[Resistance-training in children and adolescents] Falk B. **Harefuah** 1996 Jun 2;130(11):778–83 (44 ref.) **(Heb)**

[Crenotherapy in sports medicine: the state of the art] Grassi M, et al. **Clin Ter** 1996 Dec;147(12):645–52 (Eng. Abstr.) **(Ita)**

[Cardiological protocols on determining eligibility for competitive sports 1995. Organizational Cardiological Committee on Eligibility for Sports (COCIS)] **G Ital Cardiol** 1996 Aug;26(8):949–83 **(Ita)**

[Morbidity of athletes] Shestavina NV, et al. **Probl Sotsialnoi Gig Istor Med** 1995 Mar–Apr;(2):32–5 **(Rus)**

[Use of hypoxic training in sports medicine] Radzievskii PA. **Vestn Ross Akad Med Nauk** 1997;(5):41–6 (Eng. Abstr.) **(Rus)**

EDUCATION

Perspectives of sport physiotherapists on the frequency and significance of psychological factors in professional practice: implications for curriculum design in professional training. Ford IW, et al. **Aust J Sci Med Sport** 1997 Jun; 29(2):34–40

Distance learning in sport and exercise medicine. Bottomley MB. **Br J Sports Med** 1997 Mar;31(1):3–4

Sports physician training: the Australian experience [editorial] Brukner PD, et al. **Clin J Sport Med** 1996 Jan; 6(1):2–3

American College of Sports Medicine Exercises Specialist Workshop/Certification: a model for career preparation [letter] Greenwood J. **J Cardiopulm Rehabil** 1997 Jul–Aug; 17(4):288–9

Part-time studying [letter] Bennett JD. **J R Army Med Corps** 1994 Oct;140(3):162

Diploma in sports medicine for doctors only [letter] Wade AJ. **J R Army Med Corps** 1994 Jun;140(2):99

HISTORY

Dr John G P Williams, born 15 September 1932, died 18 July 1995: a pioneer of British sports medicine and soft tissue injury. **Br J Sports Med** 1995 Dec;29(4):220–2

High-protein diets, "damaged hearts," and rowing men: antecedents of modern sports medicine and exercise science, 1867–1928. Park RJ. **Exerc Sport Sci Rev** 1997; 25:137–69

Sports medicine: a century of progress. Tipton CM. **J Nutr** 1997 May;127(5 Suppl):878S–885S

The philosophy of sports medicine care: an historical review. Leadbetter JD, et al. **Md Med J** 1996 Aug;45(8):618–31

Dr Thomas Mohr. Winner of the Lars Sullivan Spinalis Prize 1996 [published erratum appears in Spinal Cord 1997 Apr;35(4):262] Biering-Sørensen F. **Spinal Cord** 1997 Mar; 35(3):192

METHODS

Chaos in the brickyard revisited: on research integration, accumulated knowledge and evidence-based practice in the exercise and sport sciences [editorial] Biddle S. **J Sports Sci** 1997 Aug;15(4):383–4

The preparticipation athletic examination: a closer look. Krowchuk DP. **Pediatr Ann** 1997 Jan;26(1):37–49 (34 ref.)

Physical activity considerations in children and adolescents with viral infections. Noffsinger J. **Pediatr Ann** 1996 Oct; 25(10):585–9

Pediatric and adolescent sports medicine. Saperstein AL, et al. **Pediatr Clin North Am** 1996 Oct;43(5):1013–33 (59 ref.)

Medical coverage analysis for Wisconsin's Olympics: the Badger State Games. Greene JJ, et al. **Wis Med J** 1997 Jun;96(6):41–4

[Cardiac risk assessment for athletic training] Hoffmann A. **Schweiz Rundsch Med Prax** 1996 Sep 24;85(39):1193–6 (Eng. Abstr.) **(Ger)**

ORGANIZATION & ADMINISTRATION

Doping control in sports--a perspective from the 1996 Olympic Games. Ambrose PJ. **Am J Health Syst Pharm** 1997 May 1;54(9):1053–7

Team spirit [interview by Terese Hudson] Webb K. **Hosp Health Netw** 1996 Dec 5;70(23):26–7

Medical team coverage of motor sports events. Hunter HC. **J Am Osteopath Assoc** 1996 Mar;96(3):179–80

STANDARDS

Team physician preferences at National Collegiate Athletic Association Division I universities. Stockard AR. **J Am Osteopath Assoc** 1997 Feb;97(2):89–95

TRENDS

Kennedy Lecture. Unstable knees in unstable times [see comments] Keller RB. **Am J Sports Med** 1996 Sep–Oct; 24(5):570–4. Comment in: Am J Sports Med 1997 Mar–Apr;25(2):276.

The journal club and evidence-based medicine: where do we go from here? [editorial] Hart LE.

SPORTS MEDICINE

Clin J Sport Med 1997 Apr;7(2):147
Twenty-five years of sport medicine in Canada: thoughts on the road ahead [editorial] Matheson GO, et al. **Clin J Sport Med** 1996 Jul;6(3):148–51
Sports medicine. Tanji JL. **JAMA** 1997 Jun 18;277(23):1901–2
Trends in orthopedic sports medicine for the 21st century. Magee MJ, et al. **Md Med J** 1996 Aug;45(8):678–81 (11 ref.)

SPOUSE ABUSE

Varieties of elder abuse [letter; comment] Brandl B, et al. **Am J Nurs** 1997 Jul;97(7):17. Comment on: Am J Nurs 1997 Jan;97(1):26–32; quiz 33.
Spouse abuse, patient–physician communication, and patient satisfaction. Plichta SB, et al. **Am J Prev Med** 1996 Sep–Oct;12(5):297–303
The effects of an abusive primary partner on the condom use and sexual negotiation practices of African–American women. Wingood GM, et al. **Am J Public Health** 1997 Jun;87(6):1016–8
Domestic violence: a hidden problem in general practice [letter; comment] Stammers T. **Br J Gen Pract** 1996 Oct; 46(411):623–4. Comment on: Br J Gen Pract 1996 Apr;46(405):239–42.
PTSD among women survivors of domestic violence in Hawaii. Kubany ES, et al. **Hawaii Med J** 1996 Sep; 55(9):164–5
Domestic violence in the emergency department: how do women prefer to disclose and discuss the issues? Hayden SR, et al. **J Emerg Med** 1997 Jul–Aug;15(4):447–51
Sequelae of abuse. Health effects of childhood sexual abuse, domestic battering, and rape. Bohn DK, et al. **J Nurse Midwifery** 1996 Nov–Dec;41(6):442–56 (106 ref.)
State accountability for wife–beating: the Indian challenge. Jejeebhoy SJ, et al. **Lancet** 1997 Mar;349 Suppl 1:sI10–2
Violence and women: case presentation and discussion. Seremetis SV. **Mt Sinai J Med** 1996 Mar;63(2):103–4
Domestic violence. A clinician's strategy. Chescheir NC. **N C Med J** 1997 Sep–Oct;58(5):316–8
Not in my practice. A look at the pervasive consequences of domestic violence. Goodman PE. **N C Med J** 1997 Sep–Oct;58(5):310–4
Domestic violence: you can make a difference. Zinn JC. **Pa Med** 1996 Sep;99(9):30–1
Wife–beating in rural south India: a qualitative and econometric analysis. Rao V. **Soc Sci Med** 1997 Apr; 44(8):1169–80
Patterns of violence in homeless women. Clarke PN, et al. **West J Nurs Res** 1997 Aug;19(4):490–500
[Is the Asta team a unique movement for the sexually abused? (letter) (see comments)] Aldén K, et al. **Lakartidningen** 1996 Sep 25;93(39):3341–2. Comment in: Lakartidningen 1996 Nov 20;93(47):4248. **(Swe)**

DIAGNOSIS

Violence against women: provider barriers to intervention in emergency departments. McGrath ME, et al. **Acad Emerg Med** 1997 Apr;4(4):297–300
Injuries and illnesses of domestic violence. Abbott J. **Ann Emerg Med** 1997 Jun;29(6):781–5 (23 ref.)
Something is better than nothing [letter] Johnston DG. **Can Fam Physician** 1996 Nov;42:2135
Documenting wife abuse: a guide for physicians. Ferris LE, et al. **Can Med Assoc J** 1997 Apr 1;156(7):1015–22 (49 ref.)
Wife abuse: universal screening [letter] Grunfeld A. **CMAJ** 1997 Aug 15;157(4):367–9
Domestic violence: identification and management for the clinician. Shadigian E. **Compr Ther** 1996 Jul;22(7):424–8 (22 ref.)
Development of the Woman Abuse Screening Tool for use in family practice. Brown JB, et al. **Fam Med** 1996 Jun; 28(6):422–8
Selections from current literature: clinical detection of abuse. Kelso EB, et al. **Fam Pract** 1996 Aug;13(4):408–13 (21 ref.)
Domestic violence in the Emergency Department: 2. Detection by doctors and nurses. Roberts GL, et al. **Gen Hosp Psychiatry** 1997 Jan;19(1):12–5
Recognizing abuse. Davidhizar R, et al. **Int Nurs Rev** 1996 Sep–Oct;43(5):145–50 (53 ref.)
Skin scraping, cupping, and moxibustion that may mimic physical abuse. Look KM, et al. **J Forensic Sci** 1997 Jan; 42(1):103–5 (9 ref.)
Woman abuse. The role of nurse–midwives in assessment. King MC, et al. **J Nurse Midwifery** 1996 Nov–Dec; 41(6):436–41 (13 ref.)
Forensic documentation of battered pregnant women. Sheridan DJ. **J Nurse Midwifery** 1996 Nov–Dec; 41(6):467–72 (14 ref.)
Domestic violence [letter; comment] Edmunds TR. **J Obstet Gynecol Neonatal Nurs** 1996 Sep;25(7):554. Comment on: J Obstet Gynecol Neonatal Nurs 1996 Feb;25(2):121–4.
Accuracy of 3 brief screening questions for detecting partner violence in the emergency department [see comments] Feldhaus KM, et al. **JAMA** 1997 May 7;277(17):1357–61 . Comment in: JAMA 1997 May 7;277(17):1400–1.
The importance of screening for domestic violence in all women. Poirier L. **Nurse Pract** 1997 May;22(5):105–8, 111–2, 115 passim (24 ref.)
Response to battered mothers in the pediatric emergency department: a call for an interdisciplinary approach to family violence. Wright RJ, et al. **Pediatrics** 1997 Feb; 99(2):186–92
Partner violence: a systematic approach to identification and intervention in outpatient health care. Ambuel B, et al. **Wis Med J** 1996 May;95(5):292–7
Older abused and battered women: an invisible population. Brandl B, et al. **Wis Med J** 1996 May;95(5):298–300
Learning to ask about domestic violence. Coeling HV, et al. **Womens Health Issues** 1997 Jul–Aug;7(4):263–8
[Conjugal violence: clinical significance (letter)] Casasa Plana A. **Aten Primaria** 1997 Mar 31;19(5):276–7 **(Spa)**

ECONOMICS

Credit programs, patriarchy and men's violence against women in rural Bangladesh. Schuler SR, et al. **Soc Sci Med** 1996 Dec;43(12):1729–42

ETHNOLOGY

Domestic violence intervention in an urban Indian health center. Norton IM, et al. **Community Ment Health J** 1997 Aug;33(4):331–7
Cultural competence in the care of abused women. Campbell JC, et al. **J Nurse Midwifery** 1996 Nov–Dec;41(6):457–62 (22 ref.)
Forensic nursing in Pakistan. Bridging the gap between victimized women and health care delivery systems. Carbonu DM, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jun;35(6):19–27 (41 ref.)
Alcohol and spouse abuse ethnic differences. Kantor GK. **Recent Dev Alcohol** 1997;13:57–79 (88 ref.)

LEGISLATION & JURISPRUDENCE

The Simpson trial: lessons for mental health practitioners. Shorter–Gooden K. **Cult Divers Ment Health** 1996; 2(1):65–8
Alcohol advertising and violence against women: a media advocacy case study. Woodruff K. **Health Educ Q** 1996 Aug;23(3):330–45
Effective advocacy for domestic violence victims. Role of the nurse–midwife. Orloff LE. **J Nurse Midwifery** 1996 Nov–Dec;41(6):473–94 (74 ref.)
Pediatricians beware! The need for early recognition and action in spousal abuse. Perry RF, et al. **N C Med J** 1996 May–Jun;57(3):132–4
Intervening in partner abuse [letter] Clark FP. **N Z Med J** 1997 Jan 24;110(1036):18–9
Suicidal and homicidal risk for respondents, petitioners, and family members in an injunction program for domestic violence. Stawar TL. **Psychol Rep** 1996 Oct;79(2):553–4

PREVENTION & CONTROL

Special commentary. Bowman BJ. **Am Indian Alsk Native Ment Health Res** 1996;7(2):42–50; discussion 51–2
Injuries and illnesses of domestic violence. Abbott J. **Ann Emerg Med** 1997 Jun;29(6):781–5 (23 ref.)
Preparing to care for abused women. We depend on the four principles of family medicine [editorial] Bethune C. **Can Fam Physician** 1997 May;43:823–4, 828–9 **(Eng, Fre)**
Treatment programs for batterers. Bullock K. **Can Fam Physician** 1997 Feb;43:307–11
Domestic violence: identification and management for the clinician. Shadigian E. **Compr Ther** 1996 Jul;22(7):424–8 (22 ref.)
Jane. Garber A. **Fam Med** 1997 Jul–Aug;29(7):463–4
FIGO committee for the study of ethical aspects of human reproduction. Violence against women. International Federation of Gynecology and Obstetrics. Schenker JG. **Ginekol Pol** 1996 Nov;67(11):583–4
Ambulatory care criteria set: intervention for domestic violence. Number 20, November 1996. Committee on Quality Assessment. American College of Obstetricians and Gynecologists. **Int J Gynaecol Obstet** 1997 Apr;57(1):93–4
Unheard and unseen. Rural women and domestic violence. Adler C. **J Nurse Midwifery** 1996 Nov–Dec;41(6):463–6 (3 ref.)
Cultural competence in the care of abused women. Campbell JC, et al. **J Nurse Midwifery** 1996 Nov–Dec;41(6):457–62 (22 ref.)
Effective advocacy for domestic violence victims. Role of the nurse–midwife. Orloff LE. **J Nurse Midwifery** 1996 Nov–Dec;41(6):473–94 (74 ref.)
Forensic nursing in Pakistan. Bridging the gap between victimized women and health care delivery systems. Carbonu DM, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Jun;35(6):19–27 (41 ref.)
Spousal abuse/homicide. A current issue in health risk management. Kent–Wilkinson A. **J Psychosoc Nurs Ment Health Serv** 1996 Oct;34(10):12–5
Domestic violence: the new standard of care. Holtz HA. **N J Med** 1996 Aug;93(8):33–6 (10 ref.)
Intervening in partner abuse [letter] Clark FP. **N Z Med J** 1997 Feb 28;110(1038):62
Clients' evaluation of health care services in a battered women's shelter. Attala JM, et al. **Public Health Nurs** 1996 Aug;13(4):269–75
The role of public health nurses in responding to abused women. Dickson F, et al. **Public Health Nurs** 1996 Aug; 13(4):263–8
Resource use by abused women following an intervention program: associated severity of abuse and reports of abuse ending. McFarlane J, et al. **Public Health Nurs** 1997 Aug; 14(4):244–50
Issues in the linkage of alcohol and domestic violence services. Collins JJ, et al. **Recent Dev Alcohol** 1997; 13:387–405 (91 ref.)
Credit programs, patriarchy and men's violence against women in rural Bangladesh. Schuler SR, et al. **Soc Sci Med** 1996 Dec;43(12):1729–42
Empowering battered women transnationally: the case for postmodern interventions. Mills L. **Soc Work** 1996 May; 41(3):261–8 (38 ref.)
Attrition from a male batterer treatment program: client–treatment congruence and lifestyle instability. Cadsky O, et al. **Violence Vict** 1996 Spring;11(1):51–64
The Dominance Scale: preliminary psychometric properties. Hamby SL. **Violence Vict** 1996 Fall;11(3):199–212
Feminist–cognitive–behavioral and process–psychodynamic treatments for men who batter: interaction of abuser traits and treatment models. Saunders DG. **Violence Vict** 1996 Winter;11(4):393–414
Use of a screening instrument in women's health care: detecting relationships among victimization history, psychological distress, and medical complaints. Read JP, et al. **Women Health** 1997;25(3):1–17
The road to freedom: ending violence against women. Harris M, et al. **Womens Health Issues** 1997 Mar–Apr;7(2):99–108

PSYCHOLOGY

Morbid jealousy as a variant of obsessive–compulsive disorder. Parker G, et al. **Aust N Z J Psychiatry** 1997 Feb; 31(1):133–8 (16 ref.)
Clinical issues in the cognitive analytic therapy of sexually abused women who commit violent offences against their partners. Pollock PH. **Br J Med Psychol** 1996 Jun;69 (Pt 2):117–27
Risk of physical abuse to children of spouse abusing parents. Ross SM. **Child Abuse Negl** 1996 Jul;20(7):589–98
Child adjustment in high conflict families. Smith J, et al. **Child Care Health Dev** 1997 Mar;23(2):113–33
Anger and hostility in maritally violent men: conceptual distinctions, measurement issues, and literature review. Eckhardt CI, et al. **Clin Psychol Rev** 1997;17(4):333–58 (111 ref.)
My father, Frankenstein: a child's view of battering parents. van Dalen A, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jul;36(7):1005–7
Risk marker analysis of the cessation and persistence of wife assault. Aldarondo E, et al. **J Consult Clin Psychol** 1996 Oct;64(5):1010–9
From vigilance to violence: mate retention tactics in married couples. Buss DM, et al. **J Pers Soc Psychol** 1997 Feb; 72(2):346–61
Couple communication patterns of maritally aggressive and nonaggressive male alcoholics. Murphy CM, et al. **J Stud Alcohol** 1997 Jan;58(1):83–90
A survivor's story. When abuse is more than skin deep. **N C Med J** 1997 Sep–Oct;58(5):326–8
When your patient is a batterer. What you need to know before treating perpetrators of domestic violence. Mintz HA, et al. **Postgrad Med** 1997 Apr;101(4):219–21, 225–8 (15 ref.)
Physical aggression against psychiatric inpatients by family members and partners. Cascardi M, et al. **Psychiatr Serv** 1996 May;47(5):531–3
College women who initiate assaults on their male partners and the reasons offered for such behavior. Fiebert MS, et al. **Psychol Rep** 1997 Apr;80(2):583–90
Utilization of the Brief Symptom inventory to discriminate between violent and nonviolent male relationship partners. Gavazzi SM, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):1047–56
Association of right–wing authoritarianism and income with wife abuse. Hastings BM. **Psychol Rep** 1997 Apr; 80(2):667–70
Resource use by abused women following an intervention program: associated severity of abuse and reports of abuse ending. McFarlane J, et al. **Public Health Nurs** 1997 Aug; 14(4):244–50
When women are under the influence. Does drinking or drug use by women provoke beatings by men? Kantor GK, et al. **Recent Dev Alcohol** 1997;13:315–36 (91 ref.)
Domestic violence and role–taking: collegial inaccuracies. Forte JA, et al. **Soc Work** 1997 Jan;42(1):116–8
Taking exception to "Asymmetrical role–taking: comparing battered and nonbattered women" [comment] Starsoneck L, et al. **Soc Work** 1997 Jan;42(1):113–5. Comment on: Soc Work 1996 Jan;41(1):59–73.
Generalized versus spouse–specific anger/hostility and men's violence against intimates. Boyle DJ, et al. **Violence Vict** 1996 Winter;11(4):293–317
The cycle of trauma; relationship aggression in male Vietnam veterans with symptoms of posttraumatic stress disorder. Byrne CA, et al. **Violence Vict** 1996 Fall;11(3):213–25
A large sample empirical typology of male spouse abusers and its relationship to dimensions of abuse. Hamberger LK, et al. **Violence Vict** 1996 Winter;11(4):277–92
Men who batter: recent history and research. Holtzworth–Munroe A, et al. **Violence Vict** 1996 Winter;

11(4):273–6
Comparing the emotional reactions and behavioral intentions of violent and nonviolent husbands to aggressive, distressed, and other wife behaviors. Holtzworth-Munroe A, et al. **Violence Vict** 1996 Winter;11(4):319–39
Psychological factors in the longitudinal course of battering: when do the couples split up? When does the abuse decrease? Jacobson NS, et al. **Violence Vict** 1996 Winter; 11(4):371–92
The applicability of the theory of planned behavior to abusive men's cessation of violent behavior. Tolman RM, et al. **Violence Vict** 1996 Winter;11(4):341–54

REHABILITATION

A hospital-based domestic violence group. Norton IM, et al. **Psychiatr Serv** 1997 Sep;48(9):1186–90

STATISTICS & NUMERICAL DATA

Spousal violence and cognitive functioning among men recovering from multiple substance abuse. Schafer J, et al. **Addict Behav** 1997 Jan–Feb;22(1):127–30
Intimate violence in the lives of homeless and poor housed women: prevalence and patterns in an ethnically diverse sample. Browne A, et al. **Am J Orthopsychiatry** 1997 Apr; 67(2):261–78
Battered women: presentation at A&E departments in Singapore. Seow E, et al. **Asia Pac J Public Health** 1995; 8(2):114–7
Risk of physical abuse to children of spouse abusing parents. Ross SM. **Child Abuse Negl** 1996 Jul;20(7):589–98
Evaluating domestic partner abuse in a family practice clinic. Pan HS, et al. **Fam Med** 1997 Jul–Aug;29(7):492–5
Domestic violence in the Emergency Department: I. Two case-control studies of victims. Roberts GL, et al. **Gen Hosp Psychiatry** 1997 Jan;19(1):5–11
Gender differences in partner violence in a birth cohort of 21-year-olds: bridging the gap between clinical and epidemiological approaches. Magdol L, et al. **J Consult Clin Psychol** 1997 Feb;65(1):68–78
Domestic violence among family practice patients in midsized and rural communities. Johnson M, et al. **J Fam Pract** 1997 Apr;44(4):391–400
Psychotropic drug use by women: could violence account for the gender difference? Mazza D, et al. **J Psychosom Obstet Gynaecol** 1996 Dec;17(4):229–34 (43 ref.)
Clinical characteristics of women with a history of childhood abuse: unhealed wounds [see comments] McCauley J, et al. **JAMA** 1997 May 7;277(17):1362–8. Comment in: JAMA 1997 May 7;277(17):1400–1.
Prevalence and characteristics of physical and sexual abuse among psychiatric outpatients. Lipschitz DS, et al. **Psychiatr Serv** 1996 Feb;47(2):189–91
How far have we come? A critical review of the research on men who batter. Lee WV, et al. **Recent Dev Alcohol** 1997;13:337–56 (75 ref.)
Desistance of husband aggression in the early years of marriage. Quigley BM, et al. **Violence Vict** 1996 Winter; 11(4):355–70
[Marital violence after birth] Saurel-Cubizolles MJ, et al. **Contracept Fertil Sex** 1997 Feb;25(2):159–64 (Eng. Abstr.) **(Fre)**

THERAPY

Advances in domestic violence shelters. Hoffman AC. **Med Law** 1996;15(3):467–78
Domestic violence. Working with the spouse abuser. Brown A. **N C Med J** 1997 Sep–Oct;58(5):324–5
Experiences of battered women in health care settings: a qualitative study. Gerbert B, et al. **Women Health** 1996; 24(3):1–17

SPOUSE CAREGIVERS see **CAREGIVERS**

SPOUSES

AIDS: risk behaviors among rural Mexican women married to migrant workers in the United States. Salgado de Snyder VN, et al. **AIDS Educ Prev** 1996 Apr;8(2):134–42
Validity of occupational exposure and smoking data obtained from surviving spouses and colleagues. Hansen KS. **Am J Ind Med** 1996 Oct;30(4):392–7
Running and its effect on family life: a follow-up of spouses' perceptions [letter] Fick DS, et al. **Arch Fam Med** 1997 Jan–Feb;6(1):18
The number of stenotic coronary arteries and passive smoking exposure from husband in lifelong non-smoking women in Xi'an, China. He Y, et al. **Atherosclerosis** 1996 Dec 20; 127(2):229–38
Traditional beer consumption and the iron status of spouse pairs from a rural community in Zimbabwe. Moyo VM, et al. **Blood** 1997 Mar 15;89(6):2159–66
Concordance of phenprocoumon dose in married couples. Authors did not study patients' diets or compliance [letter] Kamali F, et al. **BMJ** 1997 Sep 6;315(7108):609
Couple childbearing desires, intentions, and births. Thomson E. **Demography** 1997 Aug;34(3):343–54
Helicobacter pylori: is it all in the family? Collins BJ. **Gut** 1996 Nov;39(5):768
Helicobacter pylori infection in spouses of patients with duodenal ulcers and comparison of ribosomal RNA gene patterns. Georgopoulos SD, et al. **Gut** 1996 Nov; 39(5):634–8
Prevalence of Helicobacter pylori infection and related gastroduodenal lesions in spouses of Helicobacter pylori positive patients with duodenal ulcer. Parente F, et al. **Gut** 1996 Nov;39(5):629–33
Health assessment for partners of pregnant women: a pilot study of four survey methods. Meyer BA, et al. **J Am Board Fam Pract** 1997 May–Jun;10(3):192–8
Sleep disturbances in Parkinson's disease patients and spouses. Smith MC, et al. **J Am Geriatr Soc** 1997 Feb;45(2):194–9
Chronic amebiasis—treat couples [letter] Malshe PC. **J Assoc Physicians India** 1995 Jan;43(1):74
Women married to men with myocardial infarction are at increased risk of coronary heart disease. Wood DA, et al. **J Cardiovasc Risk** 1997 Feb;4(1):7–11
National incidence of smoking and misclassification among the U.S. married female population. Ogden MW, et al. **J Clin Epidemiol** 1997 Mar;50(3):253–63
Longitudinal evaluation of the development of periodontal destruction in spouses. Van der Velden U, et al. **J Clin Periodontol** 1996 Nov;23(11):1014–9
Do husbands and wives agree on prostate cancer screening? Barry HC. **J Fam Pract** 1997 May;44(5):443–4
Hepatitis C transmission between spouses. Koda T, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1001–5
The influence of spouse cognitive impairment on respondents' depressive symptoms: the moderating role of marital closeness. Tower RB, et al. **J Gerontol B Psychol Sci Soc Sci** 1997 Sep;52(5):S270–8
Spouse concordance of obesity, blood pressures and serum risk factors for atherosclerosis. Inoue K, et al. **J Hum Hypertens** 1996 Jul;10(7):455–9
Lymphocyte reactivity to hepatitis C virus (HCV) antigens shows evidence for exposure to HCV in HCV-seronegative spouses of HCV-infected patients. Bronowicki JP, et al. **J Infect Dis** 1997 Aug;176(2):518–22
Twelve month adherence of adults who joined a fitness program with a spouse vs without a spouse. Wallace JP, et al. **J Sports Med Phys Fitness** 1995 Sep;35(3):206–13
Offspring recurrence rates and clinical characteristics of conjugal multiple sclerosis. Robertson NP, et al. **Lancet** 1997 May 31;349(9065):1587–90
Couples and reproductive health: a review of couple studies. Becker S. **Stud Fam Plann** 1996 Nov–Dec;27(6):291–306 (116 ref.)
Estimates and explanations of gender differentials in contraceptive prevalence rates. Ezeh AC, et al. **Stud Fam Plann** 1997 Jun;28(2):104–21
Renal transplantation between spouses. Cloix P, et al. **Transplant Proc** 1996 Oct;28(5):2802
Older couples' decision making on health issues. Padula C. **West J Nurs Res** 1996 Dec;18(6):675–87
[Correlates of couples' attitudes toward husband's childbirth participation] Hung CH, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jun; 13(6):360–9 (Eng. Abstr.) **(Chi)**
[Conjugal severe acute colitis (letter)] Bonnaud G, et al. **Gastroenterol Clin Biol** 1997;21(6–7):529–31 **(Fre)**
[Social network and social support for married women and their spouses] Kawaura Y, et al. **Shinrigaku Kenkyu** 1996 Oct;67(4):333–9 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

A comparison of two techniques to reach relatives of alcoholics for information of available support. Zetterlind U, et al. **Alcohol Alcohol** 1996 Jul;31(4):359–63
When alcoholism hits home. Ianelli J. **Am J Nurs** 1997 Jul; 97(7):68–9
Whose life is it anyway? [editorial; comment] Konen JC. **Arch Fam Med** 1997 Jan–Feb;6(1):77–8. Comment on: Arch Fam Med 1997 Jan–Feb;6(1):72–6.
Preferences of husbands and wives for prostate cancer screening [see comments] Volk RJ, et al. **Arch Fam Med** 1997 Jan–Feb;6(1):72–6. Comment in: Arch Fam Med 1997 Jan–Feb;6(1):77–8.
Dementia: an intimate death. Garner J. **Br J Med Psychol** 1997 Jun;70 (Pt 2):177–84 (37 ref.)
The grief response in the partners of women who miscarry. Johnson MP, et al. **Br J Med Psychol** 1996 Dec;69 (Pt 4):313–27
How does marriage protect women with histories of affective disorder from post-partum relapse? Marks M, et al. **Br J Med Psychol** 1996 Dec;69 (Pt 4):329–42
Change in relationship status following traumatic brain injury. Wood RL, et al. **Brain Inj** 1997 Jul;11(7):491–501
Treatment programs for batterers. Bullock K. **Can Fam Physician** 1997 Feb;43:307–11
Alcoholism, a contagious disease. A contribution towards an anthropological definition of contagion. Fainzang S. **Cult Med Psychiatry** 1996 Dec;20(4):473–87
The need for a balanced emphasis in infertility [letter] Alemnji GA, et al. **East Afr Med J** 1997 Feb;74(2):119
Differential predictors of strain and gain among husbands caring for wives with dementia. Kramer BJ. **Gerontologist** 1997 Apr;37(2):239–49
New burdens or more of the same? Comparing grandparent, spouse, and adult-child caregivers. Strawbridge WJ, et al. **Gerontologist** 1997 Aug;37(4):505–10
Three-year follow-up after presymptomatic testing for Huntington's disease in tested individuals and partners. Tibben A, et al. **Health Psychol** 1997 Jan;16(1):20–35
Spouse stressors while awaiting heart transplantation [see comments] Collins EG, et al. **Heart Lung** 1996 Jan–Feb; 25(1):4–13. Comment in: Heart Lung 1996 Sep–Oct;25(5):422.
Spouse stressors while awaiting heart transplantation [letter; comment] Fitzgerald H. **Heart Lung** 1996 Sep–Oct; 25(5):422. Comment on: Heart Lung 1996 Jan–Feb;25(1):4–13.
Fathers' experience of their partners' antepartum bed rest. Maloni JA, et al. **Image J Nurs Sch** 1997;29(2):183–8
Sexual relationships in married dementia sufferers. Ballard CG, et al. **Int J Geriatr Psychiatry** 1997 Apr;12(4):447–51
Quality of life of the spouses of stroke patients: a preliminary study. Béthoux F, et al. **Int J Rehabil Res** 1996 Dec; 19(4):291–9
Expressed emotion and causal attributions in the spouses of depressed patients. Hooley JM, et al. **J Abnorm Psychol** 1997 May;106(2):298–306
Couples' experiences of infertility: a phenomenological study. Imeson M, et al. **J Adv Nurs** 1996 Nov;24(5):1014–22
Supportive and negative responses in the partner relationship: their association with psychological adjustment among individuals with cancer. Manne SL, et al. **J Behav Med** 1997 Apr;20(2):101–25
The role of perceived overprotectiveness in recovery 3 months after myocardial infarction. Clarke DE, et al. **J Cardiopulm Rehabil** 1996 Nov–Dec;16(6):372–7
Father involvement and self-reported parenting of children with attention deficit-hyperactivity disorder. Arnold EH, et al. **J Consult Clin Psychol** 1997 Apr;65(2):337–42
Caregiver burden in partners of Vietnam War veterans with posttraumatic stress disorder. Beckham JC, et al. **J Consult Clin Psychol** 1996 Oct;64(5):1068–72
World understanding and well-being in a Hong Kong Chinese marital context. Cheung CK. **J Genet Psychol** 1997 Mar;158(1):41–58
Impact of the heart transplant waiting process on spouses. Collins EG, et al. **J Heart Lung Transplant** 1996 Jun; 15(6):623–30
Effects of social support on prenatal care and health behaviors of low-income women. Schaffer MA, et al. **J Obstet Gynecol Neonatal Nurs** 1997 Jul–Aug;26(4):433–40
Not gone and not forgotten: a spouse's experience of late-stage Alzheimer's disease. Bonnel WB. **J Psychosoc Nurs Ment Health Serv** 1996 Aug;34(8):23–7
Helping spouses with chronic sorrow related to multiple sclerosis. Hainsworth MA. **J Psychosoc Nurs Ment Health Serv** 1996 Jun;34(6):36–40
Successful donor insemination and its impact on recipients. Daniels KR, et al. **J Psychosom Obstet Gynaecol** 1996 Sep; 17(3):129–34
Feelings of couples who have had a child by donor insemination: the degree of congruence. Gillett WR, et al. **J Psychosom Obstet Gynaecol** 1996 Sep;17(3):135–42
The partner's view about hysterectomy. Lalos A, et al. **J Psychosom Obstet Gynaecol** 1996 Jun;17(2):119–24
Mother-father relationship, object relations and premature contractions. Ringler M. **J Psychosom Obstet Gynaecol** 1996 Sep;17(3):182–6
Work-family conflict among married professional women in Malaysia. Ahmad A. **J Soc Psychol** 1996 Oct;136(5):663–5
Spouse enabling of alcohol abuse: conception, assessment, and modification. Thomas EJ, et al. **J Subst Abuse** 1996; 8(1):61–80
Coping with a breast biopsy: how healthcare professionals can help women and their husbands. Northouse LL, et al. **Oncol Nurs Forum** 1997 Apr;24(3):473–80
A comparison of hospice and hospital care for the spouses of people who die. Seale C, et al. **Palliat Med** 1997 Mar; 11(2):101–6
A comparison of hospice and hospital care for people who die: views of the surviving spouse. Seale C, et al. **Palliat Med** 1997 Mar;11(2):93–100
Social rhythm stability following late-life spousal bereavement: associations with depression and sleep impairment. Brown LF, et al. **Psychiatry Res** 1996 May 17;62(2):161–9
Spousal similarity in subjective well-being: the Cardiovascular Health Study. Bookwala J, et al. **Psychol Aging** 1996 Dec;11(4):582–90
Depressive symptoms across older spouses: longitudinal influences. Tower RB, et al. **Psychol Aging** 1996 Dec; 11(4):683–97
Measuring core bereavement phenomena. Burnett P, et al. **Psychol Med** 1997 Jan;27(1):49–57
Gender differences in the onset of depression following a shared life event: a study of couples. Nazroo JY, et al. **Psychol Med** 1997 Jan;27(1):9–19
Do couples grieve differently following infant loss? Hunfeld JA, et al. **Psychol Rep** 1996 Oct;79(2):407–10
Psychological and immunological reactions of family members to patients undergoing bone marrow transplantation. Futterman AD, et al. **Psychosom Med** 1996 Sep–Oct;58(5):472–80
Differences in bereavement reactions within couples following death of a child. Moriarty HJ, et al. **Res Nurs Health** 1996 Dec;19(6):461–9
Similarity between partners in real and perceived personality traits as measured by the Myers-Briggs type indicator. Nordvik H. **Scand J Psychol** 1996 Dec;37(4):444–50
Social support as conversation: analysing breast cancer patients' interactions with their partners. Pistrang N, et al.

SPOUSES

Soc Sci Med 1997 Sep;45(5):773–82

Couples' adjustment to one partner's disability: the relationship between sense of coherence and adjustment. Rena F, et al. **Soc Sci Med** 1996 Jul;43(2):163–71

Unilateral interventions for women living with heavy drinkers. Barber JG, et al. **Soc Work** 1997 Jan;42(1):69–78 (38 ref.)

Estimating social adjustment following spinal trauma—I: Who is more realistic—patient or spouse? A statistical justification. Glass CA, et al. **Spinal Cord** 1997 May; 35(5):320–5

Coping with a partner who drinks too much: does anything work? Barber JG, et al. **Subst Use Misuse** 1997 Mar; 32(4):485–94

Suicidal ideation in elderly bereaved: the role of complicated grief. Szanto K, et al. **Suicide Life Threat Behav** 1997 Summer;27(2):194–207

[Helping an infertile couple] Reboul J.
Contracept Fertil Sex 1997 May;25(5):XIX–XXI **(Fre)**

["I never feel free"—women care for the demented husband, father or mother] Adler C, et al. **Gesundheitswesen** 1996 Sep;58 Suppl 2:125–31 (Eng. Abstr.) **(Ger)**

[Questionnaire to assess perception of chronic disease in couples. Perceptual pattern in coronary patients and their partners] Biskup J, et al. **Z Psychosom Med Psychoanal** 1996;42(1):56–70 (Eng. Abstr.) **(Ger)**

[Grief for loss of a spouse: a study with discussion groups in primary care] García-García JA, et al.
Aten Primaria 1996 Nov 30;18(9):475–9 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

Agreement between self and partner reports of paternal drinking and smoking. The ALSPAC Study Team. Avon Longitudinal Study of Pregnancy and Childhood. Passaro KT, et al. **Int J Epidemiol** 1997 Apr;26(2):315–20

Mortality of farmers and farmers' wives in England and Wales 1979–80, 1982–90. Inskip H, et al.
Occup Environ Med 1996 Nov;53(11):730–5

SPRAINS AND STRAINS

Medial collateral ligament injuries in athletes. Reider B.
Sports Med 1996 Feb;21(2):147–56 (56 ref.)

COMPLICATIONS

Current opinions in etiopathogenesis of headaches caused by cervical spine pathology. Wojczal J.
Ann Univ Mariae Curie Sklodowska [Med] 1995;50:95–101 (16 ref.)

False aneurysm—a complication following an inversion ankle sprain: a case report. Bandy WD, et al.
J Orthop Sports Phys Ther 1996 Apr;23(4):272–9

Bone bruises detected by magnetic resonance imaging following lateral ankle sprains. Pinar H, et al.
Knee Surg Sports Traumatol Arthrosc 1997;5(2):113–7

DIAGNOSIS

Evaluation and diagnosis of ankle injuries [published erratum appears in Am Fam Physician 1997 Feb 15;55(3):788] Rubin A, et al. **Am Fam Physician** 1996 Oct;54(5):1609–18

Sports medicine. A specific problem in the groin. Brukner P, et al. **Aust Fam Physician** 1997 May;26(5):604–6

MRI diagnosis of accessory soleus muscle strain [see comments] Featherstone T. **Br J Sports Med** 1995 Dec; 29(4):277–8. Comment in: Br J Sports Med 1996 Jun;30(2):185.

Clinical examination and magnetic resonance imaging in the assessment of ankle sprains treated with an orthosis. De Simoni C, et al. **Foot Ankle Int** 1996 Mar;17(3):177–82

A comparison of MRI and clinical examination of acute lateral ankle sprains. Frey C, et al. **Foot Ankle Int** 1996 Sep;17(9):533–7

The prognosis of ankle sprains. de Bie RA, et al.
Int J Sports Med 1997 May;18(4):285–9

Physical examination is sufficient for the diagnosis of sprained ankles. van Dijk CN, et al. **J Bone Joint Surg Br** 1996 Nov;78(6):958–62

MRI of the sinus tarsi in acute ankle sprain injuries. Breitenseher MJ, et al. **J Comput Assist Tomogr** 1997 Mar–Apr;21(2):274–9

Personality profile among symptomatic and recovered patients with neck sprain injury, measured by MCMI-I acutely and 6 months after car accidents. Borchgrevink GE, et al. **J Psychosom Res** 1997 Apr;42(4):357–67

Trabecular trauma of the talus and medial malleolus concurrent with lateral collateral ligamentous injuries of the ankle: evaluation with MR imaging. Nishimura G, et al. **Skeletal Radiol** 1996 Jan;25(1):49–54

DRUG THERAPY

A randomized controlled trial of piroxicam in the management of acute ankle sprain in Australian Regular Army recruits. The Kapooka Ankle Sprain Study. Slatyer MA, et al. **Am J Sports Med** 1997 Jul–Aug;25(4):544–53

EPIDEMIOLOGY

Turf-toe: super league toe [letter] Jennings D, et al.
Br J Sports Med 1997 Jun;31(2):164

Patterns and risk factors for sprains and strain in Ontario, Canada 1990: an analysis of the Workplace Health and Safety Agency data base. Choi BC, et al.
J Occup Environ Med 1996 Apr;38(4):379–89

The increased incidence on Mondays of work-related sprains and strains. Shepherd SL, et al. **J Occup Environ Med** 1996 Jul;38(7):681–8

ETIOLOGY

Muscle strain during aerial combat maneuvering exercise. Oksa J, et al. **Aviat Space Environ Med** 1996 Dec; 67(12):1138–43

HISTORY

Sprains of the knee. 1875 [classical article] Noulis GC.
Clin Orthop 1997 Aug;(341):5–6

PHYSIOPATHOLOGY

Muscle strain injuries. Garrett WE Jr. **Am J Sports Med** 1996; 24(6 Suppl):S2–8 (28 ref.)

The role of fatigue in susceptibility to acute muscle strain injury. Mair SD, et al. **Am J Sports Med** 1996 Mar–Apr; 24(2):137–43

Ankle disk training influences reaction times of selected muscles in a simulated ankle sprain. Sheth P, et al.
Am J Sports Med 1997 Jul–Aug;25(4):538–43

Strain magnitude related changes in whole bone architecture in growing rats. Mosley JR, et al. **Bone** 1997 Mar; 20(3):191–8

Is balance impaired by recurrent sprained ankle? Isakov E, et al. **Br J Sports Med** 1997 Mar;31(1):65–7

Electromyographical study on surgeons in urology. I. Influence of the operating technique on muscular strain. Luttmann A, et al. **Ergonomics** 1996 Feb;39(2):285–97

Electromyographical study on surgeons in urology. II. Determination of muscular fatigue. Luttmann A, et al. **Ergonomics** 1996 Feb;39(2):298–313

Physiological strains while pushing or hauling. Garcin M, et al. **Eur J Appl Physiol** 1996;72(5–6):478–82

The stabilizing effect of orthotic devices on plantar flexion/dorsal extension and horizontal rotation of the ankle joint. An experimental cadaveric investigation. Bruns J, et al. **Int J Sports Med** 1996 Nov;17(8):614–8

Ankle trauma significantly impairs posture control—a study in basketball players and controls. Perrin PP, et al.
Int J Sports Med 1997 Jul;18(5):387–92

Strain in the medial collateral ligament of the human knee under single and combined loads [published erratum appears in J Biomech 1996 Aug;29(8):1115] Hull ML, et al. **J Biomech** 1996 Feb;29(2):199–206

Stretch-sensitive afferent neurons in cat knee joint capsule: sensitivity to axial and compression stresses and strains. Grigg P, et al. **J Neurophysiol** 1996 May;75(5):1871–7

Peak passive resistive torque at maximum inversion range of motion in subjects with recurrent ankle inversion sprains. Birmingham TB, et al. **J Orthop Sports Phys Ther** 1997 May;25(5):342–8

The effect of sudden inversion stress on EMG activity of the peroneal and tibialis anterior muscles in the chronically unstable ankle. Ebig M, et al.
J Orthop Sports Phys Ther 1997 Aug;26(2):73–7

Evaluation of kinesthetic deficits indicative of balance control in gymnasts with unilateral chronic ankle sprains. Forkin DM, et al. **J Orthop Sports Phys Ther** 1996 Apr; 23(4):245–50

Effect of ankle orthoses on functional performance for individuals with recurrent lateral ankle sprains. Gross MT, et al. **J Orthop Sports Phys Ther** 1997 Apr;25(4):245–52

Invertor vs. evertor peak torque and power deficiencies associated with lateral ankle ligament injury. Wilkerson GB, et al. **J Orthop Sports Phys Ther** 1997 Aug;26(2):78–86

Theoretical basis for patterning EMG amplitudes to assess muscle dysfunction. Edgerton VR, et al.
Med Sci Sports Exerc 1996 Jun;28(6):744–51

Isokinetic eccentric strength of the ankle evertors after injury. Heitman RJ, et al. **Percept Mot Skills** 1997 Feb; 84(1):258

PREVENTION & CONTROL

Ankle taping improves proprioception before and after exercise in young men. Robbins S, et al.
Br J Sports Med 1995 Dec;29(4):242–7

Company's exercise program mobilizes its industrial athletes before work. Simonson BW, et al. **Occup Health Saf** 1994 Sep;63(9):44–5

A twofold reduction in the incidence of acute ankle sprains in volleyball after the introduction of an injury prevention program: a prospective cohort study. Bahr R, et al.
Scand J Med Sci Sports 1997 Jun;7(3):172–7

REHABILITATION

Clinical examination and magnetic resonance imaging in the assessment of ankle sprains treated with an orthosis. De Simoni C, et al. **Foot Ankle Int** 1996 Mar;17(3):177–82

Management of ankle sprains. Chorley JN, et al.
Pediatr Ann 1997 Jan;26(1):56–64 (21 ref.)

[Muscle strains: recommendations for the athlete (news)]
Sportverletz Sportschaden 1997 Jun;11(2):XII **(Ger)**

[Sprain of the cervical spine: early functional vs. immobilization treatment] Giebel GD, et al.
Zentralbl Chir 1997;122(7):517–21 (Eng. Abstr.) **(Ger)**

SURGERY

Monomelic amyotrophy following trauma and immobilization in children. Paradiso G. **Muscle Nerve** 1997 Apr;20(4):425–30

[The unstable upper ankle joint. Treatment of acute ligament rupture—a review of the literature] Sommer CJ.
Sportverletz Sportschaden 1996 Dec;10(4):76–8 (34 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Strengthening exercises and support devices for ankle sprains [letter; comment] Thibault GF. **Am Fam Physician** 1997 Mar;55(4):1086, 1088. Comment on: Am Fam Physician 1996 Jun;53(8):2491–8, 2501–3.

The clinical diagnosis and results of conservative treatment of knee distortion injury. Viljakka T.
Arch Orthop Trauma Surg 1997;116(1–2):6–9

Sports medicine. A specific problem in the groin. Brukner P, et al. **Aust Fam Physician** 1997 May;26(5):604–6

Role of ankle taping and bracing in the athlete. Callaghan MJ. **Br J Sports Med** 1997 Jun;31(2):102–8 (64 ref.)

SPREAD PLATE COUNT see **COLONY COUNT, MICROBIAL**

SPREADING CORTICAL DEPRESSION

Intracerebral microdialysis markedly inhibits the propagation of cortical spreading depression. Obrenovitch TP, et al.
Acta Neurochir Suppl (Wien) 1996;67:21–3

Neuronal NO promotes cerebral cortical hyperemia during cortical spreading depression in rabbits. Colonna DM, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1315–22

Enhancement of paired-pulse depression in the dentate gyrus in vivo by the NMDA antagonist, MK-801, and electrical kindling. Gilbert ME, et al. **Brain Res** 1996 Sep 2; 732(1–2):201–8

An experimental model of migraine with aura: cortical hypoperfusion following spreading depression in the awake and freely moving rat. Shimazawa M, et al.
Clin Exp Pharmacol Physiol 1996 Oct–Nov;23(10–11):890–2

A computational model of visual hallucinations in migraine. Reggia JA, et al. **Comput Biol Med** 1996 Mar;26(2):133–41

Continuous multiparametric monitoring of brain activities following fluid-percussion injury in rats: preliminary results. Rogatsky G, et al.
J Basic Clin Physiol Pharmacol 1996;7(1):23–43

Hyperglycemia delays terminal depolarization and enhances repolarization after peri-infarct spreading depression as measured by serial diffusion MR mapping. Els T, et al.
J Cereb Blood Flow Metab 1997 May;17(5):591–5

Induced spreading depressions in energy-compromised neocortical tissue: calcium transients and histopathological correlates. Gidö G, et al. **Neurobiol Dis** 1994 Nov; 1(1–2):31–41

Spreading depression and focal brain ischemia induce cyclooxygenase-2 in cortical neurons through N-methyl-D-aspartic acid-receptors and phospholipase A2. Miettinen S, et al. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6500–5

DRUG EFFECTS

Inhibition of cortical spreading depression by L-701,324, a novel antagonist at the glycine site of the N-methyl-D-aspartate receptor complex. Obrenovitch TP, et al. **Br J Pharmacol** 1996 Mar;117(5):931–7

Effects of probenecid on the elicitation of spreading depression in the rat striatum. Taylor DL, et al.
Brain Res 1997 Aug 1;764(1–2):117–25

Excessive oxygen or glucose supply does not alter the blood flow response to somatosensory stimulation or spreading depression in rats. Wolf T, et al. **Brain Res** 1997 Jul 4; 761(2):290–9

Enhanced nitric oxide release during cortical spreading depression following infusion of glyceryl trinitrate in the anaesthetized cat. Read SJ, et al. **Cephalalgia** 1997 May; 17(3):159–65

Blockade of spreading depression in chronic epileptic rats: reversion by diazepam. Guedes RC, et al. **Epilepsy Res** 1997 Apr;27(1):33–40

Adenosine transport inhibitors enhance high K(+)-evoked taurine release from rat hippocampus. Hada J, et al.
Eur J Pharmacol 1996 Jun 3;305(1–3):101–7

Potassium-induced cortical spreading depressions during focal cerebral ischemia in rats: contribution to lesion growth assessed by diffusion-weighted NMR and biochemical imaging. Busch E, et al.
J Cereb Blood Flow Metab 1996 Nov;16(6):1090–9

Reduction of infarct volume by halothane: effect on cerebral blood flow or perifocal spreading depression-like depolarizations. Saito R, et al.
J Cereb Blood Flow Metab 1997 Aug;17(8):857–64

Systemic nitric oxide synthase inhibition does not affect brain oxygenation during cortical spreading depression in rats: a noninvasive near-infrared spectroscopy and laser-Doppler flowmetry study. Wolf T, et al.
J Cereb Blood Flow Metab 1996 Nov;16(6):1100–7

PHYSIOLOGY

Extra- and intracellular oxygen supply during cortical

spreading depression in the rat. Wolf T, et al. **Adv Exp Med Biol** 1996;388:299–304

Neurobehavioral consequences of induced spreading depression following photothrombotic middle cerebral artery occlusion. Alexis NE, et al. **Brain Res** 1996 Jan 15; 706(2):273–82

A dipole model for spreading cortical depression. Tepley N, et al. **Brain Topogr** 1996 Summer;8(4):345–53

A four sphere model for calculating the magnetic field associated with spreading cortical depression. Wijesinghe RS, et al. **Brain Topogr** 1997 Spring;9(3):191–202

Effect of aging on cortical spreading depression. Guedes RC, et al. **Braz J Med Biol Res** 1996 Oct;29(10):1407–12

Periinfarct depolarizations. Hossmann KA. **Cerebrovasc Brain Metab Rev** 1996 Fall;8(3):195–208 (81 ref.)

Initiation of spreading depression can be blocked by transcortical polarization of rat cerebral cortex. Richter F, et al. **Int J Neurosci** 1996 Jul;86(1–2):111–8

Characterization of endothelin receptors in the cerebral vasculature and their lack of effect on spreading depression. Goadsby PJ, et al. **J Cereb Blood Flow Metab** 1996 Jul; 16(4):698–704

In vivo uptake of [3H]nimodipine into brain during cortical spreading depression. Osuga S, et al. **J Cereb Blood Flow Metab** 1997 May;17(5):586–90

Long-term elevation of cyclooxygenase-2, but not lipoxygenase, in regions synaptically distant from spreading depression. Caggiano AO, et al. **J Comp Neurol** 1996 Dec 16;376(3):447–62

Eicosanoids and nitric oxide influence induction of reactive gliosis from spreading depression in microglia but not astrocytes. Caggiano AO, et al. **J Comp Neurol** 1996 May 20;369(1):93–108

Changes in regional cortical temperature and cerebral blood flow after cortical spreading depression. Ueda M, et al. **Neurol Med Chir (Tokyo)** 1997 Jun;37(6):441–5; discussion 445–6

Repetitive spreading depression causes selective suppression of GABAergic function. Krüger H, et al. **Neuroreport** 1996 Nov 4;7(15–17):2733–6

Role of astrocytes in the spreading depression signal between ischemic core and penumbra. Walz W. **Neurosci Biobehav Rev** 1997 Mar;21(2):135–42 (38 ref.)

Protein kinase C in the rat cerebral cortex during spreading depression. Krivanek J, et al. **Neurosci Lett** 1996 May 31; 210(2):79–82

Differential downregulation of protein kinase C isoforms in spreading depression. Osten P, et al. **Neurosci Lett** 1996 Dec 27;221(1):37–40

The dynamics of nitric oxide release measured directly and in real time following repeated waves of cortical spreading depression in the anaesthetised cat. Read SJ, et al. **Neurosci Lett** 1997 Sep 5;232(3):127–30

Antidromic burst activity of locus coeruleus neurons during cortical spreading depression. Arakawa S, et al. **Neuroscience** 1997 Jun;78(4):1147–58

Spindle oscillations during cortical spreading depression in naturally sleeping cats. Contreras D, et al. **Neuroscience** 1997 Apr;77(4):933–6

Quantal analysis suggests presynaptic involvement in expression of neocortical short- and long-term depression. Torii N, et al. **Neuroscience** 1997 Jul;79(2):317–21

Lesion-induced network plasticity in remote brain areas [letter] Witte OW, et al. **Trends Neurosci** 1997 Aug; 20(8):348–9

[The effect of hypothermia on CSD propagation in rats] Ueda M, et al. **No Shinkei Geka** 1997 Jun;25(6):523–8 (Eng. Abstr.) **(Jpn)**

SPRUE see **CELIAC DISEASE**

SPRUE, TROPICAL

Malabsorption syndrome in India. Ramakrishna BS. **Indian J Gastroenterol** 1996 Oct;15(4):135–41 (109 ref.)

ETIOLOGY

Tropical sprue and subclinical enteropathy: a vision for the nineties. Haghighi P, et al. **Crit Rev Clin Lab Sci** 1997 Aug; 34(4):313–41 (192 ref.)

HISTORY

'Tropical sprue': some early investigators favoured an infective cause, but was a coccidian protozoan involved? Cook GC. **Gut** 1997 Mar;40(3):428–9

PATHOLOGY

Tropical sprue and subclinical enteropathy: a vision for the nineties. Haghighi P, et al. **Crit Rev Clin Lab Sci** 1997 Aug; 34(4):313–41 (192 ref.)

SPUMAVIRINAE see **SPUMAVIRUS**

SPUMAVIRUS

Transduction of hematopoietic cells by foamy virus vectors. Hirata RK, et al. **Blood** 1996 Nov 1;88(9):3654–61

From the Centers for Disease Control and Prevention. Nonhuman primate spumavirus infections among persons with occupational exposure--United States, 1996. **JAMA** 1997 Mar 12;277(10):783–5

Nonhuman primate spumavirus infections among persons with occupational exposure--United States, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Feb 14;46(6):129–31

Gene transfer using replication-defective human foamy virus vectors. Bieniasz PD, et al. **Virology** 1997 Aug 18; 235(1):65–72

Long-term persistent infection of domestic rabbits by the human foamy virus. Saïb A, et al. **Virology** 1997 Feb 17; 228(2):263–8

DRUG EFFECTS

In vitro studies on interferon-inducing capacity and sensitivity to IFN of human foamy virus. Sabile A, et al. **Res Virol** 1996 Jan-Feb;147(1):29–37

ENZYMOLOGY

Expression and molecular characterization of an enzymatically active recombinant human spumaretrovirus protease. Pfrepper KI, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):548–53

Expression of human foamy virus reverse transcriptase involves a spliced pol mRNA. Jordan I, et al. **Virology** 1996 Oct 1;224(1):314–9

GENETICS

Characterization of human foamy virus proteins expressed by recombinant vaccinia viruses. Fischer N, et al. **AIDS Res Hum Retroviruses** 1997 Apr 10;13(6):517–21

Non-random deletions in human foamy virus long terminal repeat during viral infection. De Celis-Kosmas J, et al. **Arch Virol** 1997;142(6):1237–46

Human endogenous retroviruses [letter; comment] Michalski F. **Clin Microbiol Rev** 1996 Oct;9(4):585. Comment on: Clin Microbiol Rev 1996 Jan;9(1):72–99.

Unexpected replication pathways of foamy viruses. Rethwilm A. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S248–53 (52 ref.)

Molecular biology of the human foamy virus. Saïb A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S254–60 (69 ref.)

Characterization of the spliced pol transcript of feline foamy virus: the splice acceptor site of the pol transcript is located in gag of foamy viruses. Bodem J, et al. **J Virol** 1996 Dec; 70(12):9024–7

The simian foamy virus type 1 transcriptional transactivator (Tas) binds and activates an enhancer element in the gag gene. Campbell M, et al. **J Virol** 1996 Oct;70(10):6847–55

Efficient pseudotyping of murine leukemia virus particles with chimeric human foamy virus envelope proteins. Lindemann D, et al. **J Virol** 1997 Jun;71(6):4815–20

Nuclear targeting of incoming human foamy virus Gag proteins involves a centriolar step. Saïb A, et al. **J Virol** 1997 Feb;71(2):1155–61

Characterization of the genome of feline foamy virus and its proteins shows distinct features different from those of primate spumaviruses. Winkler I, et al. **J Virol** 1997 Sep; 71(9):6727–41

Isolation and characterization of infectious full-length DNA clones of chimpanzee foamy viruses SFV6 and SFV7: evidence for a Taf-dependent internal promoter. Tobaly-Tapiero J, et al. **Res Virol** 1996 Jan-Feb; 147(1):17–27

Identification of sites that act together to direct dimerization of human foamy virus RNA in vitro. Erlwein O, et al. **Virology** 1997 Mar 3;229(1):251–8

Generation of herpes virus saimiri-transformed T-cell lines from macaques is restricted by reactivation of simian spuma viruses. Feldmann G, et al. **Virology** 1997 Mar 3; 229(1):106–12

Long terminal repeat U3 length polymorphism of human foamy virus. Schmidt M, et al. **Virology** 1997 Apr 14; 230(2):167–78

Analysis of the phylogenetic placement of different spumaretroviral genes reveals complex pattern of foamy virus evolution. Dias HW, et al. **Virus Genes** 1995; 11(2–3):183–90 (29 ref.)

GROWTH & DEVELOPMENT

Human endogenous retroviruses [letter; comment] Michalski F. **Clin Microbiol Rev** 1996 Oct;9(4):585. Comment on: Clin Microbiol Rev 1996 Jan;9(1):72–99.

Molecular biology of the human foamy virus. Saïb A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S254–60 (69 ref.)

IMMUNOLOGY

No evidence of antibody to human foamy virus in widespread human populations. Ali M, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1473–83

Sensitization of rhabdo-, lenti-, and spumaviruses to human serum by galactosyl(alpha1-3)galactosylation. Takeuchi Y, et al. **J Virol** 1997 Aug;71(8):6174–8

ISOLATION & PURIFICATION

Analysis of west African hunters for foamy virus infections. Goepfert PA, et al. **AIDS Res Hum Retroviruses** 1996 Dec 10;12(18):1725–30

Simian foamy virus isolated from an accidentally infected human individual. Schweizer M, et al. **J Virol** 1997 Jun; 71(6):4821–4

METABOLISM

Expression and maturation of human foamy virus Gag precursor polypeptides. Giron ML, et al. **J Virol** 1997 Feb; 71(2):1635–9

A sorting motif localizes the foamy virus glycoprotein to the endoplasmic reticulum. Goepfert PA, et al. **J Virol** 1997 Jan;71(1):778–84

The carboxyl terminus of the human foamy virus Gag protein contains separable nucleic acid binding and nuclear transport domains. Yu SF, et al. **J Virol** 1996 Dec; 70(12):8255–62

Protein composition and morphology of human foamy virus intracellular cores and extracellular particles. Morozov VA, et al. **Virology** 1997 Feb 17;228(2):307–17

PATHOGENICITY

Inhibition of the in vitro infectivity and cytopathic effect of human foamy virus by dideoxynucleosides. Santillana-Hayat M, et al. **AIDS Res Hum Retroviruses** 1996 Oct 10;12(15):1485–90

PHYSIOLOGY

Mouse model to study the replication of primate foamy viruses. Schmidt M, et al. **J Gen Virol** 1997 Aug;78 (Pt 8):1929–33

Carboxy-terminal cleavage of the human foamy virus Gag precursor molecule is an essential step in the viral life cycle. Enssle J, et al. **J Virol** 1997 Oct;71(10):7312–7

Human foamy virus reverse transcription that occurs late in the viral replication cycle. Moebes A, et al. **J Virol** 1997 Oct;71(10):7305–11

Suppression of retroviral replication: inactivation of murine leukemia virus by compounds reacting with the zinc finger in the viral nucleocapsid protein. Rein A, et al. **Leukemia** 1997 Apr;11 Suppl 3:106–8

Replication of feline syncytial virus in feline T-lymphoblastoid cells and induction of apoptosis in the cells. Ikeda Y, et al. **Microbiol Immunol** 1997;41(5):431–5

Simian foamy virus type 1 (SFV-1) induces apoptosis. Mergia A, et al. **Virus Res** 1997 Aug;50(2):129–37

SPUTUM

see related

DRAINAGE, POSTURAL

Spontaneous and induced sputum to measure indices of airway inflammation in asthma. Pizzichini MM, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 1):866–9

Safety of one method of sputum induction in asthmatic subjects. Wong HH, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):299–303

Asbestos bodies in the sputum of workers exposed to environmental pollution. Alderisio M, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2965–8

Black sputum and progressive cavitary lung lesion in a coal miner. Haro M, et al. **Chest** 1997 Mar;111(3):808–9

Selected mimics of malignancy in sputum and bronchoscopic cytology specimens. Naryshkin S, et al. **Diagn Cytopathol** 1995 Dec;13(5):443–7 (12 ref.)

Comparison of four methods for pretreatment of cystic fibrosis sputa [letter] Hoppe JE, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov;15(11):895–6

Comparison of two methods of collecting induced sputum in asthmatic subjects [see comments] Gershman NH, et al. **Eur Respir J** 1996 Dec;9(12):2448–53. Comment in: Eur Respir J 1996 Dec;9(12):2448–53.

Repeatability of cellular and soluble markers of inflammation in induced sputum from patients with asthma [see comments] in 't Veen JC, et al. **Eur Respir J** 1996 Dec; 9(12):2441–7. Comment in: Eur Respir J 1996 Dec;9(12):2435–6.

Induced sputum to assess airway inflammation in asthma [editorial; comment] O'Byrne PM, et al. **Eur Respir J** 1996 Dec;9(12):2435–6. Comment on: Eur Respir J 1996 Dec;9(12):2441–7. Comment on: Eur Respir J 1996 Dec;9(12):2448–53.

Patient-controlled sputum removal during chest physiotherapy in cystic fibrosis: a system for use in closed-circuit assessment of energy expenditure. Parsons DW, et al. **Med Biol Eng Comput** 1996 Nov;34(6):494–7

Comparison of sputum processing techniques in cystic fibrosis. Cai Y, et al. **Pediatr Pulmonol** 1996 Dec; 22(6):402–7

Chronic sputum production: correlations between clinical features and findings on high resolution computed tomographic scanning of the chest. Smith IE, et al. **Thorax** 1996 Sep;51(9):914–8

CHEMISTRY

Experimental rhinovirus 16 infection. Effects on cell differentials and soluble markers in sputum in asthmatic subjects. Grünberg K, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):609–16

Cytokine concentrations in sputum from patients with cystic fibrosis and their relation to eosinophil activity. Koller DY, et al. **Am J Respir Crit Care Med** 1997 Mar;155(3):1050–4

Cell infiltration, ICAM-1 expression, and eosinophil

chemotactic activity in asthmatic sputum. Louis R, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):466–72

Sputum in severe exacerbations of asthma: kinetics of inflammatory indices after prednisone treatment. Pizzichini MM, et al. **Am J Respir Crit Care Med** 1997 May; 155(5):1501–8

A comparison of peak sputum tobramycin concentration in patients with cystic fibrosis using jet and ultrasonic nebulizer systems. Aerosolized Tobramycin Study Group. Eisenberg J, et al. **Chest** 1997 Apr;111(4):955–62

Correlation between IgA antibody and eosinophil cationic protein levels in induced sputum from asthmatic patients. Nahm DH, et al. **Clin Exp Allergy** 1997 Jun;27(6):676–81

Evaluation of the Roche AMPLICOR MTB assay for the detection of Mycobacterium tuberculosis in sputum specimens from prison inmates. Smith MB, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):113–6

Do sputum eosinophils and ECP relate to the severity of asthma? Ronchi MC, et al. **Eur Respir J** 1997 Aug; 10(8):1809–13

Nedocromil sodium in obstructive airways disease: effect on symptoms and plasma protein leakage in sputum. Schoonbrood DF, et al. **Eur Respir J** 1997 Jul;10(7):1500–6

Purification and characterization of defensins from cystic fibrosis sputum. Soong LB, et al. **Inflamm Res** 1997 Mar; 46(3):98–102

Increased levels of nitric oxide derivatives in induced sputum in patients with asthma. Kanazawa H, et al. **J Allergy Clin Immunol** 1997 May;99(5):624–9

Ring distraction technique for measuring surface tension of sputum: relationship to sputum clearability. Albers GM, et al. **J Appl Physiol** 1996 Dec;81(6):2690–5

Comparison of sputum and serum eosinophil cationic protein (ECP) levels in nonatopic asthma and chronic obstructive pulmonary disease. Gürsel G, et al. **J Asthma** 1997; 34(4):313–9

Examination of p53 alterations and cytokeratin expression in sputa collected from patients prior to histological diagnosis of squamous cell carcinoma. Anderson M, et al. **J Cell Biochem Suppl** 1996;25:185–90

K-ras mutation in sputum of patients with or without lung cancer. Ronai Z, et al. **J Cell Biochem Suppl** 1996;25:172–6

Distribution of DNA and alginate in purulent cystic fibrosis sputum: implications to pulmonary targeting strategies. Mrsny RJ, et al. **J Drug Target** 1996;4(4):233–43

Asbestos bodies in bronchoalveolar lavage fluid and sputum. Capellaro E, et al. **Med Lav** 1997 Mar–Apr;88(2):99–107

Asbestos bodies in sputum of asbestos exposed workers. Scansetti G, et al. **Med Lav** 1996 Jul–Aug;87(4):283–8

Eosinophil cationic protein in induced sputum as a marker of inflammation in asthmatic children. Sorva R, et al. **Pediatr Allergy Immunol** 1997 Feb;8(1):45–50

TNF-alpha, IL-8, soluble ICAM-1, and neutrophils in sputum of cystic fibrosis patients [see comments] Salva PS, et al. **Pediatr Pulmonol** 1996 Jan;21(1):11–9. Comment in: Pediatr Pulmonol 1996 Jan;21(1):3–5.

Aspergillus fumigatus Asp fI DNA is prevalent in sputum from patients with coal workers' pneumoconiosis. Nomoto Y, et al. **Respiration** 1997;64(4):291–5

Relationship between asbestos bodies in sputum and the number of specimens. Sulotto F, et al. **Scand J Work Environ Health** 1997 Feb;23(1):48–53

Endothelin-1 levels in induced sputum samples from asthmatic and normal subjects. Chalmers GW, et al. **Thorax** 1997 Jul;52(7):625–7

Detection of Wuchereria bancrofti DNA in patients' sputum by the polymerase chain reaction. Abbasi I, et al. **Trans R Soc Trop Med Hyg** 1996 Sep–Oct;90(5):531–2

[The relationship of eosinophil viability enhancing activity in sputum and clinical symptoms in asthma] Atsuta J, et al. **Arerugi** 1996 Oct;45(10):1082–8 (Eng. Abstr.) **(Jpn)**

[Measurement of serum and sputum eosinophil cationic protein concentrations in asthma] Motojima S, et al. **Arerugi** 1995 Nov;44(11):1272–81 (Eng. Abstr.) **(Jpn)**

[Correlation of ECP levels in sputum and blood with parameters of airflow obstruction and hyperreactivity in patients with irreversible bronchial obstruction due to chronic bronchitis] Chazan R, et al. **Pol Arch Med Wewn** 1995 Oct;94(4):300–6 (Eng. Abstr.) **(Pol)**

CYTOLOGY

Usefulness of induced sputum analysis in pulmonary diseases. Kayembe JM, et al. **Acta Clin Belg** 1997;52(2):106–11

Exfoliative cytology of metastatic chordoma appearing in the sputum. A case report. Kawahara E, et al. **Acta Cytol** 1997 Mar–Apr;41(2):513–8

Cytologic diagnosis of complicated pulmonary unilocular cystic hydatidosis. A study of 131 cases. Oztek I, et al. **Acta Cytol** 1997 Jul–Aug;41(4):1159–66

Chemotherapy- and radiotherapy-induced cytologic alterations in the sputum of patients with inoperable lung carcinoma. Role in follow-up. Oztek I, et al. **Acta Cytol** 1996 Nov–Dec;40(6):1265–71

Comparison of the sensitivity of sputum and brush cytology in the diagnosis of lung carcinomas. Sing A, et al. **Acta Cytol** 1997 Mar–Apr;41(2):399–408 (67 ref.)

Chemiluminescence activity of phagocytes from tracheal aspirates of premature infants after surfactant therapy [see comments] Schrod L, et al. **Acta Paediatr** 1996 Jun; 85(6):719–23. Comment in: Acta Paediatr 1996 Jun;85(6):641.

Screening sputum specimens for neutrophils [letter; comment] Washington JA. **Am J Clin Pathol** 1997 Mar; 107(3):378. Comment on: Am J Clin Pathol 1996 Jun;105(6):769–73.

The effect of inhaled leukotriene D4 and methacholine on sputum cell differentials in asthma. Diamant Z, et al. **Am J Respir Crit Care Med** 1997 Apr;155(4):1247–53

Experimental rhinovirus 16 infection. Effects on cell differentials and soluble markers in sputum in asthmatic subjects. Grünberg K, et al. **Am J Respir Crit Care Med** 1997 Aug;156(2 Pt 1):609–16

Sputum in severe exacerbations of asthma: kinetics of inflammatory indices after prednisone treatment. Pizzichini MM, et al. **Am J Respir Crit Care Med** 1997 May; 155(5):1501–8

Cytopathological analysis of sputum in patients with airflow obstruction and significant smoking histories. Kennedy TC, et al. **Cancer Res** 1996 Oct 15;56(20):4673–8

The cost of diagnosis: a comparison of four different strategies in the workup of solitary radiographic lung lesions. Goldberg-Kahn B, et al. **Chest** 1997 Apr; 111(4):870–6

Comparison of inflammatory cell counts in asthma: induced sputum vs bronchoalveolar lavage and bronchial biopsies. Grootendorst DC, et al. **Clin Exp Allergy** 1997 Jul; 27(7):769–79

The investigation of airway inflammation in asthma: sputum examination. Hargreave FE. **Clin Exp Allergy** 1997 May; 27 Suppl 1:36–40 (39 ref.)

The effect of beta-carotene on sputum cytology in smokers: a preliminary study. van Poppel G, et al. **Eur J Cancer Prev** 1997 Jun;6(3):294–9

Measurement of inflammatory indices in induced sputum: effects of selection of sputum to minimize salivary contamination. Pizzichini E, et al. **Eur Respir J** 1996 Jun; 9(6):1174–80

Do sputum eosinophils and ECP relate to the severity of asthma? Ronchi MC, et al. **Eur Respir J** 1997 Aug; 10(8):1809–13

Assessment of airway inflammation in children with acute asthma using induced sputum. Twaddell SH, et al. **Eur Respir J** 1996 Oct;9(10):2104–8

A case for serial examination of sputum inflammatory cells. Wong AG, et al. **Eur Respir J** 1996 Oct;9(10):2174–5

Eosinophils, mast cells, and basophils in induced sputum from patients with seasonal allergic rhinitis and perennial asthma: relationship to methacholine responsiveness. Foresi A, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):58–64

Measuring airway inflammation in asthma: eosinophils and eosinophilic cationic protein in induced sputum compared with peripheral blood. Pizzichini E, et al. **J Allergy Clin Immunol** 1997 Apr;99(4):539–44

Detection of eosinophils in hypertonic saline-induced sputum in patients with chronic nonproductive cough. Fujimura M, et al. **J Asthma** 1997;34(2):119–26

Sputum cytology: a limited role. Gledhill A, et al. **J Clin Pathol** 1997 Jul;50(7):566–8

Importance of sputum differential cell counting in the diagnosis of airway diseases. Hsu JY, et al. **J Formos Med Assoc** 1997 May;96(5):330–5

Sputum screening by quantitative microscopy: a reexamination of a portion of the National Cancer Institute Cooperative Early Lung Cancer Study. Payne PW, et al. **Mayo Clin Proc** 1997 Aug;72(8):697–704

Sputum screening by quantitative microscopy: a new dawn for detection of lung cancer? [editorial] Tockman MS, et al. **Mayo Clin Proc** 1997 Aug;72(8):788–90

Eosinophils and basophilic cells in sputum and nasal smears taken from infants and young children during acute asthma. Nagayama Y, et al. **Pediatr Allergy Immunol** 1995 Nov; 6(4):204–8

Cellular profiles in asthmatic airways: a comparison of induced sputum, bronchial washings, and bronchoalveolar lavage fluid. Keatings VM, et al. **Thorax** 1997 Apr; 52(4):372–4

Sputum differential cell counts [letter; comment] Maziak W. **Thorax** 1997 May;52(5):494. Comment on: Thorax 1996 Oct;51(10):1000–4.

Role of sputum differential cell count in detecting airway inflammation in patients with chronic bronchial asthma or COPD [see comments] Ronchi MC, et al. **Thorax** 1996 Oct; 51(10):1000–4. Comment in: Thorax 1997 May;52(5):494.

[The morphometric characteristics of the blood and sputum eosinophils in bronchial asthma patients] Anaev EKh, et al. **Ter Arkh** 1997;69(3):23–5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Rheology of cystic fibrosis sputum after in vitro treatment with hypertonic saline alone and in combination with recombinant human deoxyribonuclease I. King M, et al. **Am J Respir Crit Care Med** 1997 Jul;156(1):173–7

Induced sputum cell and fluid-phase indices of inflammation: comparison of treatment with dithiothreitol vs phosphate-buffered saline. Efthimiadis A, et al. **Eur Respir J** 1997 Jun;10(6):1336–40

Effect of short-term NO2 exposure on induced sputum in normal, asthmatic and COPD subjects. Vagaggini B, et al. **Eur Respir J** 1996 Sep;9(9):1852–7

Effects of native and oxidation-resistant secretory leukoprotease inhibitor on cystic fibrosis sputum: inhibition of neutrophil elastase activity and of sputum-induced secretion from porcine tracheal submucosal glands. Schuster A, et al. **Pediatr Res** 1996 Nov;40(5):732–7

ENZYMOLOGY

Gelsolin activates DNase I in vitro and cystic fibrosis sputum. Davoodian K, et al. **Biochemistry** 1997 Aug 12; 36(32):9637–41

Aerosolized rhDNase in cystic fibrosis: effect on leucocyte proteases in sputum. Rochat T, et al. **Eur Respir J** 1996 Nov;9(11):2200–6

IMMUNOLOGY

Testing sputum samples for HIV antibodies, using a rapid, saliva-card test system. Gilks CF, et al. **Ann Trop Med Parasitol** 1997 Jan;91(1):115–7

Airway inflammation in COPD assessed by sputum levels of interleukin-8. Yamamoto C, et al. **Chest** 1997 Aug; 112(2):505–10

Detection of transforming growth factor-beta in sputum from patients with bronchial asthma by eosinophil survival assay and enzyme-linked immunosorbent assay. Adachi T, et al. **Clin Exp Allergy** 1996 May;26(5):557–62

Lung cancer-reacting human recombinant antibody AE6F4: potential usefulness in the sputum cytodiagnosis. Shoji M, et al. **Hum Antibodies Hybridomas** 1996;7(1):27–36

The use of induced sputum to investigate airway inflammation [editorial] Pavord ID, et al. **Thorax** 1997 Jun; 52(6):498–501 (39 ref.)

[T antigen test of sputum--a new simple method for the screening of lung cancer] Li X, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Oct; 18(5):285–6, 317 (Eng. Abstr.) **(Chi)**

[Measurement of sIgA in patients with chronic stable bronchitis] Rico Méndez FG, et al. **Rev Alerg Mex** 1997 Jan–Feb;44(1):4–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Autocrine modulation of IL-8 production by sputum neutrophils in chronic bronchial sepsis. Pang G, et al. **Am J Respir Crit Care Med** 1997 Feb;155(2):726–31

MICROBIOLOGY

Presence of Chlamydia pneumoniae strain TWAR in bronchial secretions collected from HIV-positive and negative patients: preliminary data [letter] Scaglione F, et al. **AIDS** 1996 Sep;10(10):1178–9

The adequacy of one sputum smear for diagnosing pulmonary tuberculosis [letter; comment] Dujardin B, et al. **Am J Public Health** 1997 Jul;87(7):1234–5. Comment on: Am J Public Health 1996 Aug;86(8 Pt 1):1071–3.

Selection of sputum specimens for microbiological examination. Hughes C, et al. **Br J Biomed Sci** 1996 Dec; 53(4):254–6

The significance of Mycobacterium avium complex cultivation in the sputum of patients with pulmonary tuberculosis. Epstein MD, et al. **Chest** 1997 Jan; 111(1):142–7

The utility of a single sputum specimen in the diagnosis of tuberculosis. Comparison between HIV-infected and non-HIV-infected patients [see comments] Finch D, et al. **Chest** 1997 May;111(5):1174–9. Comment in: Chest 1997 May;111(5):1153–5.

Comparison of the amplified Mycobacterium tuberculosis (MTB) direct test, Amplicor MTB PCR, and IS6110-PCR for detection of MTB in respiratory specimens. Dalovisio JR, et al. **Clin Infect Dis** 1996 Nov;23(5):1099–106; discussion 1107–8

Evaluation of the Roche AMPLICOR MTB assay for the detection of Mycobacterium tuberculosis in sputum specimens from prison inmates. Smith MB, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):113–6

Effect of sputum bacteriology on the quality of life of patients with bronchiectasis. Wilson CB, et al. **Eur Respir J** 1997 Aug;10(8):1754–60

Clinical features of patients with beta-lactamase producing Haemophilus influenzae isolated from sputum. Johnson SR, et al. **J Antimicrob Chemother** 1996 Nov;38(5):881–4

Isolation of Lautropia mirabilis from sputa of a cystic fibrosis patient. Ben Dekhil SM, et al. **J Clin Microbiol** 1997 Apr; 35(4):1024–6

Alkaline decontamination of sputum specimens adversely affects stability of mycobacterial mRNA. Desjardin LE, et al. **J Clin Microbiol** 1996 Oct;34(10):2435–9

Mycobacterium growth indicator tube testing in conjunction with the AccuProbe or the AMPLICOR-PCR assay for detecting and identifying mycobacteria from sputum samples. Ichiyama S, et al. **J Clin Microbiol** 1997 Aug; 35(8):2022–5

Evaluation of a novel PCR-based diagnostic assay for detection of Mycobacterium tuberculosis in sputum samples. Maher M, et al. **J Clin Microbiol** 1996 Sep; 34(9):2307–8

Detection of Pneumocystis carinii DNA in sputum and bronchoalveolar lavage samples by polymerase chain reaction. Olsson M, et al. **J Clin Microbiol** 1996 Aug; 34(8):2052

Evaluation of mycobacteria growth indicator tube for recovery and drug susceptibility testing of Mycobacterium tuberculosis isolates from respiratory specimens. Palaci M, et al. **J Clin Microbiol** 1996 Mar;34(3):762–4

Detection of Mycobacterium tuberculosis directly from

sputum by using a prototype automated Q-beta replicase assay. Smith JH, et al. **J Clin Microbiol** 1997 Jun; 35(6):1477–83

Comparison of amplicor and 32-kilodalton PCR for detection of Mycobacterium tuberculosis from sputum specimens. Soini H, et al. **J Clin Microbiol** 1996 Jul;34(7):1829–30

The diagnostic yield of acid-fast-bacillus smear-positive sputum specimens. Stone BL, et al. **J Clin Microbiol** 1997 Apr;35(4):1030–1

Does storage of sputum specimens adversely affect culture results? Gould FK, et al. **J Clin Pathol** 1996 Aug; 49(8):684–6

Comparison of DNA targets for amplification by polymerase chain reaction for detection of Mycobacterium tuberculosis in sputum. Tumwasorn S, et al. **J Med Assoc Thai** 1996 Dec;79 Suppl 1:S113–8

A comparison of methods of phenotypic and genotypic fingerprinting of Exophiala dermatitidis isolated from sputum samples of patients with cystic fibrosis. Rath PM, et al. **J Med Microbiol** 1997 Sep;46(9):757–62

Cladophialophora bantiana isolated from an AIDS patient with pulmonary infiltrates. Brenner SA, et al. **J Med Vet Mycol** 1996 Nov-Dec;34(6):427–9

Detection of Pneumocystis carinii in induced sputa from immunocompromised patients using a repetitive DNA probe. Graves DC, et al. **Mol Cell Probes** 1997 Feb; 11(1):1–9

Sputum PCR for the detection of pneumococcal lower respiratory tract infection [letter] Paul ML, et al. **Pathology** 1997 Feb;29(1):104–5

Clinical significance of the recovery of Aspergillus species from the respiratory secretions of cystic fibrosis patients [see comments] Milla CE, et al. **Pediatr Pulmonol** 1996 Jan; 21(1):6–10. Comment in: Pediatr Pulmonol 1996 Jan;21(1):1–2. Comment in: Pediatr Pulmonol 1997 Apr;23(4):317–8.

Aspergillus organisms in patients with cystic fibrosis [letter; comment] Taccetti G, et al. **Pediatr Pulmonol** 1997 Apr; 23(4):317–8. Comment on: Pediatr Pulmonol 1996 Jan;21(1):6–10.

Diagnostic strategy for pulmonary tuberculosis in a low-incidence country: results of chest X-ray and sputum cultured for Mycobacterium tuberculosis. Wilcke JT, et al. **Respir Med** 1997 May;91(5):281–5

The duration of excretion of viable bacilli in elderly patients on treatment for cavitating pulmonary tuberculosis. Morris CD. **S Afr Med J** 1996 Aug;86(8):958–60

RNA amplification for direct detection of mycobacterium tuberculosis in respiratory samples. Hoffner SE, et al. **Scand J Infect Dis** 1996;28(1):59–61

A rapid and simple nested PCR assay for the detection of Pneumocystis carinii in sputum samples. Olsson M, et al. **Scand J Infect Dis** 1996;28(6):597–600

The yield of acid-fast bacilli from serial smears in routine microscopy laboratories in rural Tanzania. Ipuge YA, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun;90(3):258–61

Cotton wool swabs provide a convenient medium for the collection, transport and storage of sputum for the subsequent molecular investigation of Mycobacterium tuberculosis. Wiessler RE, et al. **Trans R Soc Trop Med Hyg** 1996 May-Jun;90(3):256–7

Relapse after short-course chemotherapy of patients with sputum smear-positive pulmonary tuberculosis under routine conditions with additional information on side effects and contact tracing. Martinez FD, et al. **Tuber Lung Dis** 1996 Oct;77(5):425–8

Burden of Mycobacterium tuberculosis in sputum samples can be reliably determined using a quantitative, non-radioactive polymerase chain reaction assay. Sweet-Cordero EA, et al. **Tuber Lung Dis** 1996 Dec; 77(6):496–501

Sputum bacteriology and its antibiotic susceptibilities in Turkish cystic fibrosis patients. Ozçelik U, et al. **Turk J Pediatr** 1996 Jul-Sep;38(3):281–8

Sputum gram's stain in community-acquired pneumococcal pneumonia. A meta-analysis. Reed WW, et al. **West J Med** 1996 Oct;165(4):197–204

[Relation of sputum and feces and methicillin-resistant Staphylococcus aureus (MRSA) detection] Shigeta K, et al. **Kansenshogaku Zasshi** 1996 Oct;70(10):1062–7 (Eng. Abstr.) **(Jpn)**

[The usefulness of induced sputum in the diagnosis of pulmonary tuberculosis] Kawada H, et al. **Kekkaku** 1996 Nov;71(11):603–6 (Eng. Abstr.) **(Jpn)**

[II. multidisciplinary analysis of chronic excretors of Mycobacterium tuberculosis bacilli] Kondo A, et al. **Kekkaku** 1996 Jan;71(1):25–9 (Eng. Abstr.) **(Jpn)**

[Manegement and countermeasures against tuberculous patients with chronic positive sputum] Sato K. **Kekkaku** 1996 Jan;71(1):65–9 (Eng. Abstr.) **(Jpn)**

[Epidemiologic study of the actual investigation of chronic excretors of Mycobacterium tuberculosis bacilli] Tsuchiya T, et al. **Kekkaku** 1996 Jan;71(1):31–6 (Eng. Abstr.) **(Jpn)**

[In vitro susceptibility to antifungal agents of Candida strains isolated from patients with various diseases of the respiratory tract] Batura-Gabryel H, et al. **Pneumonol Alergol Pol** 1997;65(5–6):355–9 (Eng. Abstr.) **(Pol)**

[The role of bacteriologic tests for diagnosis of tuberculosis in clinics other than tuberculosis control clinics (preliminary evaluation of test methods and their results)] Pęcak W. **Pneumonol Alergol Pol** 1997;65(5–6):360–3 (Eng. Abstr.) **(Pol)**

[Treatment of tuberculosis patients with massive bacterial excretion] Gavril'ev SS, et al. **Probl Tuberk** 1997;(2):17–8 (Eng. Abstr.) **(Rus)**

[Changes in the microflora of the sputum and the bronchoalveolar fluid in patients with acute and protracted pneumonias] Landyshev SIu. **Probl Tuberk** 1996;(4):41–3 (Eng. Abstr.) **(Rus)**

[Usefulness of the rapid diagnosis of Haemophilus influenzae in respiratory samples (letter)] Colomina J, et al. **Arch Bronconeumol** 1996 Dec;32(10):550 **(Spa)**

[Is sputum study useful in the etiological diagnosis of community-acquired pneumonia?] Menéndez R, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):486–9 **(Spa)**

[Detection of Mycobacterium tuberculosis in sputum using PCR and chemoluminescent display] Rodríguez JC, et al. **Enferm Infecc Microbiol Clin** 1997 Apr;15(4):186–9 (Eng. Abstr.) **(Spa)**

[Neisseria meningitidis: isolation from low respiratory tract secretions of adult patients] Ferrer Marcellés A, et al. **Rev Clin Esp** 1996 Nov;196(11):741–6 (36 ref.) (Eng. Abstr.) **(Spa)**

PARASITOLOGY

[The usefulness of the isolation of Cryptosporidium in the respiratory secretions of HIV-infected patients (letter)] Cervero M, et al. **Arch Bronconeumol** 1997 May;33(5):259 **(Spa)**

PHYSIOLOGY

Revisited physicochemical and transport properties of respiratory mucus in genotyped cystic fibrosis patients. Deneuville E, et al. **Am J Respir Crit Care Med** 1997 Jul; 156(1):166–72

Surface activity of sputum from acute asthmatic patients. Kurashima K, et al. **Am J Respir Crit Care Med** 1997 Apr; 155(4):1254–9

Reduction in viscoelasticity in cystic fibrosis sputum in vitro using combined treatment with nacystelyn and rhDNase. Dasgupta B, et al. **Pediatr Pulmonol** 1996 Sep;22(3):161–6

Relationship between bronchial reversibility and tracheobronchial clearance in patients with chronic bronchitis. Moretti M, et al. **Thorax** 1997 Feb;52(2):176–80

SECRETION

Comparison between hypertonic and isotonic saline-induced sputum in the evaluation of airway inflammation in subjects with moderate asthma. Bacci E, et al. **Clin Exp Allergy** 1996 Dec;26(12):1395–400

Nocturnal cough in patients with sputum production [letter] Zheng S, et al. **Lancet** 1997 Sep 20;350(9081):864–5

[Periodic melanotypsis in massive progressive fibrosis in coal miners (letter; comment)] Vidal R. **Arch Bronconeumol** 1997 Jan;33(1):55–6. Comment on: Arch Bronconeumol 1996 Apr;32(4):199–201. **(Spa)**

VIROLOGY

Prevalence of respiratory viruses and Mycoplasma pneumoniae in sputum samples from unselected adult patients. Kok T, et al. **Pathology** 1997 Aug;29(3):300–2

SQUALENE

ADMINISTRATION & DOSAGE

Evaluation of heterotopic bone formation induced by squalane and bone morphogenetic protein composite. Kawakami T, et al. **Clin Orthop** 1997 Apr;(337):261–6

ANALOGS & DERIVATIVES

In vitro conversion of 2,3-oxidosqualene into dammarenediol by Panax ginseng microsomes. Kushiro T, et al. **Biol Pharm Bull** 1997 Mar;20(3):292–4

Ro 48-8.071, a new 2,3-oxidosqualene:lanosterol cyclase inhibitor lowering plasma cholesterol in hamsters, squirrel monkeys, and minipigs: comparison to simvastatin. Morand OH, et al. **J Lipid Res** 1997 Feb;38(2):373–90

Synthesis and inhibition studies of sulfur-substituted squalene oxide analogues as mechanism-based inhibitors of 2,3-oxidosqualene-lanosterol cyclase. Stach D, et al. **J Med Chem** 1997 Jan 17;40(2):201–9

BLOOD

Delayed postprandial retinyl palmitate and squalene removal in a patient heterozygous for apolipoprotein A-IFIN mutation (Leu 159-->Arg) and low HDL cholesterol level without coronary artery disease. Gylling H, et al. **Atherosclerosis** 1996 Dec 20;127(2):239–43

Serum squalene and noncholesterol sterols before and after delivery in normal and cholestatic pregnancy. Nikkilä K, et al. **J Lipid Res** 1996 Dec;37(12):2687–95

IMMUNOLOGY

MF59 adjuvant enhances antibody responses of infant baboons immunized with Haemophilus influenzae type b and Neisseria meningitidis group C oligosaccharide-CRM197 conjugate vaccine. Granoff DM, et al. **Infect Immun** 1997 May;65(5):1710–5

METABOLISM

Effects of overproduction of the catalytic domain of 3-hydroxy-3-methylglutaryl coenzyme A reductase on squalene synthesis in Saccharomyces cerevisiae. Donald KA, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3341–4

Squalene is localized to the plasma membrane in bovine retinal rod outer segments [letter] Fliesler SJ, et al. **Exp Eye Res** 1997 Feb;64(2):279–82

MF59 adjuvant enhances antibody responses of infant baboons immunized with Haemophilus influenzae type b and Neisseria meningitidis group C oligosaccharide-CRM197 conjugate vaccine. Granoff DM, et al. **Infect Immun** 1997 May;65(5):1710–5

PHARMACOLOGY

MF59 adjuvant enhances the antibody response to recombinant hepatitis B surface antigen vaccine in primates. Traquina P, et al. **J Infect Dis** 1996 Dec;174(6):1168–75

Recent advances in vaccine adjuvants: the development of MF59 emulsion and polymeric microparticles. O'Hagan DT, et al. **Mol Med Today** 1997 Feb;3(2):69–75 (47 ref.)

MF59 adjuvant enhances the immunogenicity of influenza vaccine in both young and old mice. Higgins DA, et al. **Vaccine** 1996 Apr;14(6):478–84

SQUALENE SYNTHETASE

ANTAGONISTS & INHIBITORS

Inhibition of squalene synthase but not squalene cyclase prevents mevalonate-mediated suppression of 3-hydroxy-3-methylglutaryl coenzyme A reductase synthesis at a posttranscriptional level. Peffley DM, et al. **Arch Biochem Biophys** 1997 Jan 15;337(2):251–60

1-Hydroxy-3-(methylpentylamino)-propylidene-1,1-bisphosphonic acid as a potent inhibitor of squalene synthase. Amin D, et al. **Arzneimittelforschung** 1996 Aug; 46(8):759–62

3-(4-chlorophenyl)-2-(4-diethylaminoethoxyphenyl)-A-pentenonitrile monohydrogen citrate and related analogs. Reversible, competitive, first half-reaction squalene synthetase inhibitors. Harwood HJ Jr, et al. **Biochem Pharmacol** 1997 Mar 21;53(6):839–64

Squalene synthase inhibition alters metabolism of nonsterols in rat liver. Keller RK. **Biochim Biophys Acta** 1996 Oct 18;1303(3):169–79

Schizostatin, a novel squalene synthase inhibitor produced by the mushroom, Schizophyllum commune. II. Structure elucidation and total synthesis. Kogen H, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):624–30

Antimicrobial activity of viridiofungins. Onishi JC, et al. **J Antibiot (Tokyo)** 1997 Apr;50(4):334–8

Schizostatin, a novel squalene synthase inhibitor produced by the mushroom, Schizophyllum commune. I. Taxonomy, fermentation, isolation, physico-chemical properties and biological activities. Tanimoto T, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):617–23

Biological activities of novel zaragozic acids, the potent inhibitors of squalene synthase, produced by the fungus, Mollisia sp. SANK 10294. Tanimoto T, et al. **J Antibiot (Tokyo)** 1997 May;50(5):390–4

(1 alpha, 2 beta, 3 beta, 4 alpha)-1,2-bis[N-propyl-N-(4-phenoxybenzyl) amino]carbonyl]cyclobutane-3,4-dicarboxylic acid (A-87049): a novel potent squalene synthase inhibitor. Fung AK, et al. **J Med Chem** 1997 Jul 4;40(14):2123–5

RPR 107393, a potent squalene synthase inhibitor and orally effective cholesterol-lowering agent: comparison with inhibitors of HMG-CoA reductase. Amin D, et al. **J Pharmacol Exp Ther** 1997 May;281(2):746–52

Inhibition of cholesterol synthesis by squalene synthase inhibitors does not induce myotoxicity in vitro. Flint OP, et al. **Toxicol Appl Pharmacol** 1997 Jul;145(1):91–8

GENETICS

Multiple sequence elements are involved in the transcriptional regulation of the human squalene synthase gene. Guan G, et al. **J Biol Chem** 1997 Apr 11; 272(15):10295–302

Genetic regulation of cholesterol homeostasis: chromosomal organization of candidate genes [published erratum appears in J Lipid Res 1996 Oct;37(10):2269] Welch CL, et al. **J Lipid Res** 1996 Jul;37(7):1406–21

METABOLISM

Molecular cloning and functional expression of cDNAs for Glycyrrhiza glabra squalene synthase. Hayashi H, et al. **Biol Pharm Bull** 1996 Oct;19(10):1387–9

SQUALUS see **DOGFISH**

SQUASH see **RACQUET SPORTS**

SQUID

Occupational protein contact dermatitis in a fishmonger. Garcia-Abujeta JL, et al. **Contact Dermatitis** 1997 Mar; 36(3):163

Contact urticaria from Loligo japonica. Valsecchi R, et al. **Contact Dermatitis** 1996 Dec;35(6):367–8

[A new therapeutic-prophylactic product with an

immunomodulating additive] Borovskaia GA, et al. **Vopr Pitan** 1996;(4):28–30 **(Rus)**

ENZYMOLOGY

A peroxidase related to the mammalian antimicrobial protein myeloperoxidase in the Euprymna–Vibrio mutualism. Weis VM, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13683–8

[A comparative analysis of monoamine oxidase activity in the tissues of the deep-sea squid (Berryteuthis magister) and the mouse under normal and elevated atmospheric pressure] Antipov AD, et al. **Zh Evol Biokhim Fiziol** 1996 May–Jun;32(3):233–40 (Eng. Abstr.) **(Rus)**

[The cholinesterase reactivity of the Komandor squid Berryteuthis magister. Substrates and organophosphorus inhibitors] Rozengart EV. **Zh Evol Biokhim Fiziol** 1996 Sep–Oct;32(5):576–83 (Eng. Abstr.) **(Rus)**

[Different aspects of the substrate specificity of the cholinesterase in the optical ganglia of the Pacific Ocean squid Todarodes pacificus] Rozengart EV, et al. **Zh Evol Biokhim Fiziol** 1996 Jul–Aug;32(4):384–92 (Eng. Abstr.) **(Rus)**

GENETICS

RNA editing in the acceptor stem of squid mitochondrial tRNA(Tyr). Tomita K, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):4987–91

GROWTH & DEVELOPMENT

Ontogeny of copepod predation in juvenile squid (Loligo opalescens). Chen DS, et al. **Biol Bull** 1996 Feb; 190(1):69–81

Post-hatching development of circular mantle muscles in the squid Loligo opalescens. Preuss T, et al. **Biol Bull** 1997 Jun;192(3):375–87

IMMUNOLOGY

Identification of the first major allergen of a squid (Todarodes pacificus). Miyazawa H, et al. **J Allergy Clin Immunol** 1996 Nov;98(5 Pt 1):948–53

METABOLISM

Metabolic and energy correlates of intracellular pH in progressive fatigue of squid (L. brevis) mantle muscle. Pörtner HO, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1403–14

Subcellular localization and function of melanogenic enzymes in the ink gland of Sepia officinalis. Palumbo A, et al. **Biochem J** 1997 May 1;323 (Pt 3):749–56

A family of delayed rectifier Kv1 cDNAs showing cell type–specific expression in the squid stellate ganglion/giant fiber lobe complex. Rosenthal JJ, et al. **J Neurosci** 1997 Jul 1;17(13):5070–9

Receptor inactivation by dye–neuropeptide conjugates. 3. Comparative binding of dye–neuropeptide conjugates to FMRFamide receptors of Helix aspersa and Loligo pealei. Feigenbaum JJ, et al. **Peptides** 1996;17(8):1279–84

[Comparative analysis of the level of induction and inhibition of lipid peroxidation in cellular fractions of tissues from deep sea squid and mouse] Antipov AD, et al. **Dokl Akad Nauk** 1996 Nov;351(2):267–8 **(Rus)**

MICROBIOLOGY

Lessons from a cooperative, bacterial–animal association: the Vibrio fischeri–Euprymna scolopes light organ symbiosis. Ruby EG. **Annu Rev Microbiol** 1996;50:591–624 (138 ref.)

Construction and symbiotic competence of a luxA–deletion mutant of Vibrio fischeri. Visick KG, et al. **Gene** 1996 Oct 10;175(1–2):89–94

Tetragenococcus muriaticus sp. nov., a new moderately halophilic lactic acid bacterium isolated from fermented squid liver sauce. Satomi M, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):832–6

A peroxidase related to the mammalian antimicrobial protein myeloperoxidase in the Euprymna–Vibrio mutualism. Weis VM, et al. **Proc Natl Acad Sci U S A** 1996 Nov 26; 93(24):13683–8

PARASITOLOGY

The infection status of anisakid larvae in marine fish and cephalopods from the Bohai Sea, China and their taxonomical consideration. Ma HW, et al. **Korean J Parasitol** 1997 Mar;35(1):19–24

PHYSIOLOGY

Choreography of the squid's "nuptial dance". Sauer WH, et al. **Biol Bull** 1997 Apr;192(2):203–7

Characterization of voltage- and Ca(2+)-activated K+ channels in squid olfactory receptor neurons. Lucero MT, et al. **J Exp Biol** 1997 Jun;200 (Pt 11):1571–86

Cholinergic activation of startle motoneurons by a pair of cerebral interneurons in the pteropod mollusk Clione limacina. Norekian TP, et al. **J Neurophysiol** 1997 Jan; 77(1):281–8

Startle phase of escape swimming is controlled by pedal motoneurons in the pteropod mollusk Clione limacina. Satterlie RA, et al. **J Neurophysiol** 1997 Jan;77(1):272–80

Active polysomes are present in the large presynaptic endings of the synaptosomal fraction from squid brain. Crispino M, et al. **J Neurosci** 1997 Oct 15;17(20):7694–702

SQUINT see **STRABISMUS**

SQUIRREL MONKEY see **SAIMIRI**

SQUIRRELS see **SCIURIDAE**

SR-2508 see **ETANIDAZOLE**

SRC-FAMILY KINASES

Induction of hypoxia-inducible factor-1, erythropoietin, vascular endothelial growth factor, and glucose transporter-1 by hypoxia: evidence against a regulatory role for Src kinase. Gleadle JM, et al. **Blood** 1997 Jan 15; 89(2):503–9

ANALYSIS

A close association of GM3 with c-Src and Rho in GM3-enriched microdomains at the B16 melanoma cell surface membrane: a preliminary note. Yamamura S, et al. **Biochem Biophys Res Commun** 1997 Jul 9;236(1):218–22

Detection of sarcoma virus family tyrosine kinase activity in coronary arterial tissue. Laniyonu A, et al. **Can J Physiol Pharmacol** 1995 Nov;73(11):1552–60

p53lyn and p56lyn: a new signaling pathway in human endometrium and endometrial adenocarcinomas. Couchman GM, et al. **J Soc Gynecol Investig** 1997 Mar–Apr;4(2):103–9

ANTAGONISTS & INHIBITORS

Inhibition of Lyn function in mast cell activation by SH3 domain binding peptides. Stauffer TP, et al. **Biochemistry** 1997 Aug 5;36(31):9388–94

Src family-selective tyrosine kinase inhibitor, PP1, inhibits both Fc epsilonRI- and Thy-1-mediated activation of rat basophilic leukemia cells. Amoui M, et al. **Eur J Immunol** 1997 Aug;27(8):1881–6

HIV glycoprotein gp120 inhibits TCR–CD3–mediated activation of fyn and lck. Morio T, et al. **Int Immunol** 1997 Jan;9(1):53–64

Screening of microbial extracts for tyrosine kinase inhibitors. Alvi KA, et al. **Jpn J Antibiot** 1997 Mar;50(3):264–6

BIOSYNTHESIS

Transfer of the interleukin-2 gene into human cancer cells induces specific antitumor recognition and restores the expression of CD3/T-cell receptor associated signal transduction molecules. Guarini A, et al. **Blood** 1997 Jan 1;89(1):212–8

The C-terminal Src kinase (Csk) is widely expressed, active in HT-29 cells that contain activated Src, and its expression is downregulated in butyrate-treated SW620 cells. Li S, et al. **Cell Biol Int** 1996 Nov;20(11):723–9

Lyn tyrosine kinase is essential for erythropoietin-induced differentiation of J2E erythroid cells. Tilbrook PA, et al. **EMBO J** 1997 Apr 1;16(7):1610–9

Substrate specificity and inhibitor profile of human recombinant p56lck from a baculovirus expression vector. Flotow H, et al. **Inflamm Res** 1996 Aug;45(8):412–5

The Lck tyrosine kinase is expressed in brain neurons. Omri B, et al. **J Neurochem** 1996 Oct;67(4):1360–4

BLOOD

The Src family kinases, Fgr, Fyn, Lck, and Lyn, colocalize with coated membranes in platelets. Stenberg PE, et al. **Blood** 1997 Apr 1;89(7):2384–93

CHEMISTRY

Palmitylation of Src family tyrosine kinases regulates functional interaction with a B cell substrate. Saouaf SJ, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):325–9

Disulfide bond formation between the n-terminal region of p56LCK and the cytoplasmic domain of CD8 studied by electrospray ionization and matrix-assisted desorption/ionization time-of-flight mass spectrometry. Yi GS, et al. **Biochem Mol Biol Int** 1996 Oct;40(2):409–16

Determination of affinities for lck SH2 binding peptides using a sensitive fluorescence assay: comparison between the pYEEIP and pYQPQP consensus sequences reveals context-dependent binding specificity. Cousins-Wasti RC, et al. **Biochemistry** 1996 Dec 24;35(51):16746–52

Hsp90-mediated folding of the lymphoid cell kinase p56lck. Hartson SD, et al. **Biochemistry** 1996 Oct 15;35(41):13451–9

A crystal milestone: the structure of regulated Src. Superti-Furga G, et al. **Bioessays** 1997 Jun;19(6):447–50 (31 ref.)

Signal transduction: clamping down on Src activity. Mayer BJ. **Curr Biol** 1997 May 1;7(5):R295–8 (13 ref.)

Sequence specificity of C-terminal Src kinase (CSK)--a comparison with Src-related kinases c-Fgr and Lyn. Ruzzene M, et al. **Eur J Biochem** 1997 Jun 1;246(2):433–9

The purification and characterization of the catalytic domain of Src expressed in Schizosaccharomyces pombe. Comparison of unphosphorylated and tyrosine phosphorylated species. Weijland A, et al. **Eur J Biochem** 1996 Sep 15;240(3):756–64

Lyn, a src-like tyrosine kinase. Hibbs ML, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):397–400 (12 ref.)

Determination of the solution structure of the SH3 domain of human p56 Lck tyrosine kinase. Hiroaki H, et al. **J Biomol NMR** 1996 Sep;8(2):105–22

An exploration of the effects of constraints on the phosphorylation of synthetic protein tyrosine kinase peptide substrates. Ruzza P, et al. **J Pept Sci** 1996 Sep–Oct; 2(5):325–38

New impressions of Src and Hck [news; comment] Pawson T. **Nature** 1997 Feb 13;385(6617):582–3, 585. Comment on: Nature 1997 Feb 13;385(6617):595–602. Comment on: Nature 1997 Feb 13;385(6617):602–9. Comment on: Nature 1997 Feb 13;385(6617):650–3.

Structural basis for activation of human lymphocyte kinase Lck upon tyrosine phosphorylation. Yamaguchi H, et al. **Nature** 1996 Dec 5;384(6608):484–9

DEFICIENCY

alpha beta T cell development is abolished in mice lacking both Lck and Fyn protein tyrosine kinases. van Oers NS, et al. **Immunity** 1996 Nov;5(5):429–36

Altered antigen receptor signaling and impaired Fas-mediated apoptosis of B cells in Lyn-deficient mice. Wang J, et al. **J Exp Med** 1996 Sep 1;184(3):831–8

Impaired tyrosine phosphorylation and Ca2+ mobilization, but not degranulation, in lyn-deficient bone marrow-derived mast cells. Nishizumi H, et al. **J Immunol** 1997 Mar 1;158(5):2350–5

DRUG EFFECTS

Analysis of CD28 cytoplasmic tail tyrosine residues as regulators and substrates for the protein tyrosine kinases, EMT and LCK. King PD, et al. **J Immunol** 1997 Jan 15; 158(2):580–90

GENETICS

Regulation of p56(lck) messenger turnover upon T cell activation: involvement of the 3' untranslated region in stability as determined in cell-free extracts. Vanhée-Brossollet C, et al. **Biochem Biophys Res Commun** 1997 Apr 17;233(2):419–24

The purification and characterization of the catalytic domain of Src expressed in Schizosaccharomyces pombe. Comparison of unphosphorylated and tyrosine phosphorylated species. Weijland A, et al. **Eur J Biochem** 1996 Sep 15;240(3):756–64

Augmented expression of LCK message directed from the downstream promoter in human colorectal cancer specimens. Nakamura K, et al. **Eur J Cancer** 1996 Jul; 32A(8):1401–7

Requirement for p56lck tyrosine kinase activation in T cell receptor–mediated thymic selection. Hashimoto K, et al. **J Exp Med** 1996 Sep 1;184(3):931–43

Deficient expression of p56(lck) in Th2 cells leads to partial TCR signaling and a dysregulation in lymphokine mRNA levels. al-Ramadi BK, et al. **J Immunol** 1996 Dec 1; 157(11):4751–61

Evolution of the src-related protein tyrosine kinases. Hughes AL. **J Mol Evol** 1996 Feb;42(2):247–56

Expression of a novel form of the p56lck protooncogene in rat cerebellar granular neurons. Van Tan H, et al. **J Neurochem** 1996 Dec;67(6):2306–15

Transrepression of lck gene expression by human T-cell leukemia virus type 1–encoded p40tax. Lemasson I, et al. **J Virol** 1997 Mar;71(3):1975–83

The kinase, SH3, and SH2 domains of Lck play critical roles in T-cell activation after ZAP-70 membrane localization. Yamasaki S, et al. **Mol Cell Biol** 1996 Dec;16(12):7151–60

Phenotypic changes induced by wild type and variant c-src genes carrying C-terminal sequence alterations. Yatsula BA, et al. **Oncogene** 1996 Dec 19;13(12):2717–25

IMMUNOLOGY

Fyn can partially substitute for Lck in T lymphocyte development. Groves T, et al. **Immunity** 1996 Nov; 5(5):417–28

Targets of p56(lck) activity in immature thymoblasts: stimulation of the Ras/Raf/MAPK pathway. Lin K, et al. **Int Immunol** 1997 Feb;9(2):291–306

Defective TCR stimulation in anergized type 2 T helper cells correlates with abrogated p56(lck) and ZAP-70 tyrosine kinase activities. Faith A, et al. **J Immunol** 1997 Jul 1; 159(1):53–60

Inactivation of lck and loss of TCR–mediated signaling upon persistent engagement with complexes of peptide:MHC molecules. Lee JE, et al. **J Immunol** 1997 Jul 1;159(1):61–9

Protein tyrosine kinases Syk and ZAP-70 display distinct requirements for Src family kinases in immune response receptor signal transduction. Zoller KE, et al. **J Immunol** 1997 Feb 15;158(4):1650–9

METABOLISM

HIV infection in vitro enhances the activity of src-family protein tyrosine kinases. Phipps DJ, et al. **AIDS** 1996 Sep; 10(11):1191–8

Expression of the tyrosine kinase Lyn during B cell receptor engagement and apoptosis. Huck S, et al. **Ann N Y Acad Sci** 1997 Apr 5;815:122–3

Overexpression of focal adhesion kinase (p125FAK) in human colorectal carcinoma liver metastases: independence

from c-src or c-yes activation. Han NM, et al. **Ann Surg Oncol** 1997 Apr-May;4(3):264-8

Evidence for the involvement of LCK and MAP kinase (ERK-1) in the signal transduction mechanism of interleukin-15. Adunyah SE, et al. **Biochem Biophys Res Commun** 1997 Mar 27;232(3):75[illegible]-8

Mouse CD24 as a signaling molecule for integrin-mediated cell binding: functional and physical association with src-kinases. Sammar M, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):330-4

Palmitylation of Src family tyrosine kinases regulates functional interaction with a B cell substrate. Saouaf SJ, et al. **Biochem Biophys Res Commun** 1997 May 19; 234(2):325-9

Interleukin-18 induces activation and association of p56(lck) and MAPK in a murine TH1 clone. Tsuji-Takayama K, et al. **Biochem Biophys Res Commun** 1997 Aug 8; 237(1):126-30

Src kinase pathways in extracellular Ca(2+)-dependent pancreatic enzyme secretion. Tsunoda Y, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):876-84

Inhibition of interleukin-2-mediated DNA synthesis in activated human T-lymphoblasts by okadaic acid is accompanied by hyperphosphorylation of lck. Churcher Y, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):777-83

Characterization of the C-terminal domain of ras-GTPase-activating protein (ras-GAP) as substrate for epidermal growth factor receptor and p60c-src kinase. Borowski P, et al. **Biochem Mol Biol Int** 1996 Jun; 39(3):635-46

Influence of tyrosine phosphorylation on protein interaction with FcgammaRIIa. Ibarrola I, et al. **Biochim Biophys Acta** 1997 Jul 24;1357(3):348-58

CD10/neutral endopeptidase 24.11 is phosphorylated by casein kinase II and coassociates with other phosphoproteins including the lyn src-related kinase. Ganju RK, et al. **Blood** 1996 Dec 1;88(11):4159-65

An enzyme-linked immunosorbent assay for the determination of src-family tyrosine kinase activity in breast cancer. Rijksen G, et al. **Breast Cancer Res Treat** 1996;39(2):139-45

Wiskott-Aldrich syndrome protein (WASp) is a binding partner for c-Src family protein-tyrosine kinases. Banin S, et al. **Curr Biol** 1996 Aug 1;6(8):981-8

Signal transduction: clamping down on Src activity. Mayer BJ. **Curr Biol** 1997 May 1;7(5):R295-8 (13 ref.)

CD45 regulates Src family member kinase activity associated with macrophage integrin-mediated adhesion. Roach T, et al. **Curr Biol** 1997 Jun 1;7(6):408-17

Src family protein tyrosine kinases: cooperating with growth factor and adhesion signaling pathways. Parsons JT, et al. **Curr Opin Cell Biol** 1997 Apr;9(2):187-92 (56 ref.)

The rat T-cell surface protein RT6 is associated with src family tyrosine kinases and generates an activation signal. Rigby MR, et al. **Diabetes** 1996 Oct;45(10):1419-26

The Syk protein tyrosine kinase can function independently of CD45 or Lck in T cell antigen receptor signaling. Chu DH, et al. **EMBO J** 1996 Nov 15;15(22):6251-61

Association of inhibitory tyrosine protein kinase p50csk with protein tyrosine phosphatase PEP in T cells and other hemopoietic cells. Cloutier JF, et al. **EMBO J** 1996 Sep 16;15(18):4909-18

Translocation of the Csk homologous kinase (Chk/Hyl) controls activity of CD36-anchored Lyn tyrosine kinase in thrombin-stimulated platelets. Hirao A, et al. **EMBO J** 1997 May 1;16(9):2342-51

S-acylation of LCK protein tyrosine kinase is essential for its signalling function in T lymphocytes. Kabouridis PS, et al. **EMBO J** 1997 Aug 15;16(16):4983-98

Src tyrosine kinase activity is related to luteinizing hormone responsiveness: genetic manipulations using mouse MA10 Leydig cells. Taylor CC, et al. **Endocrinology** 1996 Dec; 137(12):5735-8

The Lyn-catalyzed Tyr phosphorylation of the transmembrane band-3 protein of human erythrocytes. Brunati AM, et al. **Eur J Biochem** 1996 Sep 1;240(2):394-9

Specific stimulation of c-Fgr kinase by tyrosine-phosphorylated (poly)peptides--possible implication in the sequential mode of protein phosphorylation. Ruzzene M, et al. **Eur J Biochem** 1997 May 1;245(3):701-7

Reconstitution of T cell antigen receptor-induced Erk2 kinase activation in Lck-negative JCaM1 cells by Syk. Williams S, et al. **Eur J Biochem** 1997 Apr 1;245(1):84-90

Myogenin expression is necessary for commitment to differentiation and is closely related to src tyrosine kinase activity in quail myoblasts transformed with Rous sarcoma virus. Hirayama E, et al. **Eur J Cell Biol** 1997 Feb; 72(2):133-41

Direct interaction of Syk and Lyn protein tyrosine kinases in rat basophilic leukemia cells activated via type I Fc epsilon receptors. Amoui M, et al. **Eur J Immunol** 1997 Jan;27(1):321-8

T cell receptor and CD8-dependent tyrosine phosphorylation events in cytotoxic T lymphocytes: activation of p56lck by CD8 binding to class I protein. Anel A, et al. **Eur J Immunol** 1996 Oct;26(10):2310-9

The protein tyrosine kinase p56(lck) regulates the serine-base exchange activity in Jurkat T cells. Marhaba R, et al. **FEBS Lett** 1997 Mar 24;405(2):163-6

Functional and possible physical association of scavenger receptor with cytoplasmic tyrosine kinase Lyn in monocytic THP-1-derived macrophages. Miki S, et al. **FEBS Lett** 1996 Dec 16;399(3):241-4

The N-terminus of Nef from HIV-1/SIV associates with a protein complex containing Lck and a serine kinase. Baur AS, et al. **Immunity** 1997 Mar;6(3):283-91

Sequential involvement of Lck and SHP-1 with MHC-recognizing receptors on NK cells inhibits FcR-initiated tyrosine kinase activation. Binstadt BA, et al. **Immunity** 1996 Dec;5(6):629-38

Characterization of the B lymphocyte populations in Lyn-deficient mice and the role of Lyn in signal initiation and down-regulation. Chan VW, et al. **Immunity** 1997 Jul; 7(1):69-81

Focal adhesion kinase (pp125FAK) expression, activation and association with paxillin and p50CSK in human metastatic prostate carcinoma. Tremblay L, et al. **Int J Cancer** 1996 Oct 9;68(2):164-71

Human immunodeficiency virus infection abolishes CD4-dependent activation of ZAP-70 by inhibition of p56lck. Guntermann C, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1997 Mar 1;14(3):204-12

Regulation of the Lck SH2 domain by tyrosine phosphorylation. Couture C, et al. **J Biol Chem** 1996 Oct 4;271(40):24880-4

Inhibitory tyrosine protein kinase p50csk is associated with protein-tyrosine phosphatase PTP-PEST in hemopoietic and non-hemopoietic cells. Davidson D, et al. **J Biol Chem** 1997 Sep 12;272(37):23455-62

Functional interaction of Src family kinases with the acetylcholine receptor in C2 myotubes. Fuhrer C, et al. **J Biol Chem** 1996 Dec 13;271(50):32474-81

Reconstitution of interactions between protein-tyrosine phosphatase CD45 and tyrosine-protein kinase p56(lck) in nonlymphoid cells. Gervais FG, et al. **J Biol Chem** 1997 May 9;272(19):12754-61

Lck phosphorylates the activation loop tyrosine of the Itk kinase domain and activates Itk kinase activity. Heyeck SD, et al. **J Biol Chem** 1997 Oct 3;272(40):25401-8

Signaling through intercellular adhesion molecule 1 (ICAM-1) in a B cell lymphoma line. The activation of Lyn tyrosine kinase and the mitogen-activated protein kinase pathway. Holland J, et al. **J Biol Chem** 1997 Apr 4;272(14):9108-12

Transphosphorylation of Bruton's tyrosine kinase on tyrosine 551 is critical for B cell antigen receptor function. Kurosaki T, et al. **J Biol Chem** 1997 Jun 20;272(25):15595-8

Role of the Lck Src homology 2 and 3 domains in protein tyrosine phosphorylation. Lee-Fruman KK, et al. **J Biol Chem** 1996 Oct 4;271(40):25003-10

Src tyrosine kinases, Galpha subunits, and H-Ras share a common membrane-anchored scaffolding protein, caveolin. Caveolin binding negatively regulates the auto-activation of Src tyrosine kinases. Li S, et al. **J Biol Chem** 1996 Nov 15;271(46):29182-90

Hypoglycemia-induced c-Jun phosphorylation is mediated by c-Jun N-terminal kinase 1 and Lyn kinase in drug-resistant human breast carcinoma MCF-7/ADR cells. Liu X, et al. **J Biol Chem** 1997 May 2;272(18):11690-3

A p56(lck) ligand serves as a coactivator of an orphan nuclear hormone receptor. Marcus SL, et al. **J Biol Chem** 1996 Nov 1;271(44):27197-200

Molecular cloning of SKAP55, a novel protein that associates with the protein tyrosine kinase p59fyn in human T-lymphocytes. Marie-Cardine A, et al. **J Biol Chem** 1997 Jun 27;272(26):16077-80

Activation of T cell Raf-1 at mitosis requires the protein-tyrosine kinase Lck. Pathan NI, et al. **J Biol Chem** 1996 Nov 29;271(48):30315-7

The protein-tyrosine kinase Lck associates with and is phosphorylated by Cdc2. Pathan NI, et al. **J Biol Chem** 1996 Nov 1;271(44):27517-23

Src phosphorylates the insulin-like growth factor type I receptor on the autophosphorylation sites. Requirement for transformation by src. Peterson JE, et al. **J Biol Chem** 1996 Dec 6;271(49):31562-71

Complexes of focal adhesion kinase (FAK) and Crk-associated substrate (p130(Cas)) are elevated in cytoskeleton-associated fractions following adhesion and Src transformation. Requirements for Src kinase activity and FAK proline-rich motifs. Polte TR, et al. **J Biol Chem** 1997 Feb 28;272(9):5501-9

Distinctive functions of Syk and Lyn in mediating osmotic stress- and ultraviolet C irradiation-induced apoptosis in chicken B cells. Qin S, et al. **J Biol Chem** 1997 Jul 18; 272(29):17994-9

Bombesin, bradykinin, vasopressin, and phorbol esters rapidly and transiently activate Src family tyrosine kinases in Swiss 3T3 cells. Dissociation from tyrosine phosphorylation of p125 focal adhesion kinase. Rodríguez-Fernández JL, et al. **J Biol Chem** 1996 Nov 1;271(44):27895-901

SMAP, an Smg GDS-associating protein having arm repeats and phosphorylated by Src tyrosine kinase. Shimizu K, et al. **J Biol Chem** 1996 Oct 25;271(43):27013-7

Molecular interaction between limb deformity proteins (formins) and Src family kinases. Uetz P, et al. **J Biol Chem** 1996 Dec 27;271(52):33525-30

The unique domain as the site on Lyn kinase for its constitutive association with the high affinity receptor for IgE. Vonakis BM, et al. **J Biol Chem** 1997 Sep 19; 272(38):24072-80

Regulation of Src family tyrosine kinase activities in adherent human neutrophils. Evidence that reactive oxygen intermediates produced by adherent neutrophils increase the activity of the p58c-fgr and p53/56lyn tyrosine kinases. Yan SR, et al. **J Biol Chem** 1996 Sep 20;271(38):23464-71

CD45 modulates phosphorylation of both autophosphorylation and negative regulatory tyrosines of Lyn in B cells. Yanagi S, et al. **J Biol Chem** 1996 Nov 29;271(48):30487-92

Mercuric chloride mediates a protein sulfhydryl modification-based pathway of signal transduction for activating Src kinase which is independent of the phosphorylation/dephosphorylation of a carboxyl terminal tyrosine. Pu MY, et al. **J Cell Biochem** 1996 Oct; 63(1):104-14

Intrinsic signals in the unique domain target p56(lck) to the plasma membrane independently of CD4. Bijlmakers MJ, et al. **J Cell Biol** 1997 Jun 2;137(5):1029-40

Exclusion of CD45 inhibits activity of p56lck associated with glycolipid-enriched membrane domains. Rodgers W, et al. **J Cell Biol** 1996 Dec;135(6 Pt 1):1515-23

Remodeling of cytoskeleton and triads following activation of v-Src tyrosine kinase in quail myotubes. Castellani L, et al. **J Cell Sci** 1996 Jun;109 (Pt 6):1335-46

Retargeting of cytosolic proteins to the plasma membrane by the Lck protein tyrosine kinase dual acylation motif. Zlatkine P, et al. **J Cell Sci** 1997 Mar;110 (Pt 5):673-9

Deficiency of Src family kinases Fgr and Hck results in activation of erythrocyte K/Cl cotransport. De Franceschi L, et al. **J Clin Invest** 1997 Jan 15;99(2):220-7

1,25 dihydroxyvitamin D3 stimulates phospholipase C-gamma in rat colonocytes: role of c-Src in PLC-gamma activation. Khare S, et al. **J Clin Invest** 1997 Apr 15; 99(8):1831-41

Requirement for p56lck tyrosine kinase activation in T cell receptor-mediated thymic selection. Hashimoto K, et al. **J Exp Med** 1996 Sep 1;184(3):931-43

Evidence that the Wiskott-Aldrich syndrome protein may be involved in lymphoid cell signaling pathways. Cory GO, et al. **J Immunol** 1996 Nov 1;157(9):3791-5

Sequestration of p56(lck) by gp120, a model for TCR desensitization. Goldman F, et al. **J Immunol** 1997 Mar 1;158(5):2017-24

Molecular analysis of the cytoplasmic domain of CD4: overlapping but noncompetitive requirement for lck association and down-regulation by Nef. Gratton S, et al. **J Immunol** 1996 Oct 15;157(8):3305-11

Cross-linking of the IgM receptor induces rapid translocation of IgM-associated Ig alpha, Lyn, and Syk tyrosine kinases to the membrane skeleton. Jugloff LS, et al. **J Immunol** 1997 Aug 1;159(3):1096-106

CD38 ligation in human B cell progenitors triggers tyrosine phosphorylation of CD19 and association of CD19 with lyn and phosphatidylinositol 3-kinase. Kitanaka A, et al. **J Immunol** 1997 Jul 1;159(1):184-92

Phosphatidylinositol 3-kinase participates in p56(lck)/CD4-dependent down-regulation of LFA-1-mediated T cell adhesion. Mazerolles F, et al. **J Immunol** 1996 Dec 1;157(11):4844-54

Impaired tyrosine phosphorylation and Ca2+ mobilization, but not degranulation, in lyn-deficient bone marrow-derived mast cells. Nishizumi H, et al. **J Immunol** 1997 Mar 1;158(5):2350-5

Syk, but not Lyn, recruitment to B cell antigen receptor and activation following stimulation of CD45- B cells. Pao LI, et al. **J Immunol** 1997 Mar 15;158(6):2663-9

Human herpesvirus 7 induces the down-regulation of CD4 antigen in lymphoid T cells without affecting p56lck levels. Secchiero P, et al. **J Immunol** 1997 Oct 1;159(7):3412-23

MHC class I ligation of human T cells activates the ZAP70 and p56lck tyrosine kinases, leads to an alternative phenotype of the TCR/CD3 zeta-chain, and induces apoptosis. Skov S, et al. **J Immunol** 1997 Apr 1; 158(7):3189-96

HAX-1, a novel intracellular protein, localized on mitochondria, directly associates with HS1, a substrate of Src family tyrosine kinases. Suzuki Y, et al. **J Immunol** 1997 Mar 15;158(6):2736-44

Signaling by adhesion in human neutrophils: activation of the p72syk tyrosine kinase and formation of protein complexes containing p72syk and Src family kinases in neutrophils spreading over fibrinogen. Yan SR, et al. **J Immunol** 1997 Feb 15;158(4):1902-10

Activation of Src-family tyrosine kinases during Fas-induced apoptosis. Schlottmann KE, et al. **J Leukoc Biol** 1996 Oct; 60(4):546-54

Human immunodeficiency virus type 1 Nef binds directly to Lck and mitogen-activated protein kinase, inhibiting kinase activity. Greenway A, et al. **J Virol** 1996 Oct; 70(10):6701-8

Enhanced downregulation of Lck-mediated signal transduction by a Y114 mutation of herpesvirus Saimiri tip. Guo J, et al. **J Virol** 1997 Sep;71(9):7092-6

Tyrosine phosphorylation events during coxsackievirus B3 replication. Huber M, et al. **J Virol** 1997 Jan;71(1):595-600

Herpesvirus saimiri Tip-484 membrane protein markedly increases p56lck activity in T cells. Lund T, et al. **J Virol** 1997 Jan;71(1):378-82

Activation of STAT transcription factors by herpesvirus Saimiri Tip-484 requires p56lck. Lund TC, et al. **J Virol** 1997 Sep;71(9):6677-82

Role of hydroxyl radicals in radiation-induced activation of lyn tyrosine kinase in human B-cell precursors. Xiao J,

et al. **Leuk Lymphoma** 1996 Aug;22(5-6):421-30

Antisense src expression inhibits tyrosine phosphorylation of Shc and its association with Grb2 and Sos which leads to MAP kinase activation in U937 human leukemia cells. Yamaguchi M, et al. **Leukemia** 1997 Apr;11(4):497-503

Lck regulates Vav activation of members of the Rho family of GTPases. Han J, et al. **Mol Cell Biol** 1997 Mar; 17(3):1346-53

Binding of human immunodeficiency virus type 1 to CD4 induces association of Lck and Raf-1 and activates Raf-1 by a Ras-independent pathway. Popik W, et al. **Mol Cell Biol** 1996 Nov;16(11):6532-41

Evidence for in vivo phosphorylation of the Grb2 SH2-domain binding site on focal adhesion kinase by Src-family protein-tyrosine kinases [published erratum appears in Mol Cell Biol 1996 Dec;16(12):7182-4] Schlaepfer DD, et al. **Mol Cell Biol** 1996 Oct; 16(10):5623-33

Estradiol activates p60src, p53/56lyn and renatured p50/55 protein tyrosine kinases in the dog prostate. Allard P, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):25-34

Src tyrosine kinase activity in rat thecal-interstitial cells and mouse TM3 Leydig cells is positively associated with cAMP-specific phosphodiesterase activity. Taylor CC, et al. **Mol Cell Endocrinol** 1997 Jan 3;126(1):91-100

Alternative binding of p56lck and phosphatidylinositol 3-kinase in T cells by sulfhydryl oxidation: implication of aberrant signaling due to oxidative stress in T lymphocytes. Nakamura K, et al. **Mol Immunol** 1996 Jul;33(10):855-65

How Src exercises self-restraint [news] Nguyen JT, et al. **Nat Struct Biol** 1997 Apr;4(4):256-60

A role for Pyk2 and Src in linking G-protein-coupled receptors with MAP kinase activation. Dikic I, et al. **Nature** 1996 Oct 10;383(6600):547-50

Activation of the Src-family tyrosine kinase Hck by SH3 domain displacement [see comments] Moarefi I, et al. **Nature** 1997 Feb 13;385(6617):650-3. Comment in: Nature 1997 Feb 13;385(6617):582-3, 585.

Immunohistochemical localization of Lyn (p56) protein in the adult rat brain. Chen S, et al. **Neuroscience** 1996 Mar; 71(1):89-100

Yeast two-hybrid in vivo association of the Src kinase Lyn with the proto-oncogene product Cbl but not with the p85 subunit of PI 3-kinase. Dombrosky-Ferlan PM, et al. **Oncogene** 1997 May 1;14(17):2019-24

The 96 kDa protein kinase activated by oncogenic Ras in Xenopus egg extracts is also activated by constitutively active Mek: activation requires serine/threonine phosphorylation. Pan BT, et al. **Oncogene** 1997 Apr 10; 14(14):1653-60

Interaction of cyclin-dependent kinase 2 and the Lyn tyrosine kinase in cells treated with 1-beta-D-arabinofuranosylcytosine. Yuan ZM, et al. **Oncogene** 1996 Sep 5;13(5):939-46

L-selectin activates the Ras pathway via the tyrosine kinase p56lck. Brenner B, et al. **Proc Natl Acad Sci U S A** 1996 Dec 24;93(26):15376-81

syk kinase activation by a src kinase-initiated activation loop phosphorylation chain reaction. El-Hillal O, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1919-24

Shuttling of initiating kinase between discrete aggregates of the high affinity receptor for IgE regulates the cellular response. Torigoe C, et al. **Proc Natl Acad Sci U S A** 1997 Feb 18;94(4):1372-7

A critical role of Lyn and Fyn for B cell responses to CD38 ligation and interleukin 5. Yasue T, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10307-12

Analysis of the interactions between Nef and cellular proteins. Coates K, et al. **Res Virol** 1997 Jan-Feb; 148(1):68-70 (14 ref.)

The role of HIV1 Nef in T-cell activation: Nef impairs induction of Th1 cytokines and interacts with the Src family tyrosine kinase Lck. Collette Y, et al. **Res Virol** 1997 Jan-Feb;148(1):52-8 (44 ref.)

Association of Src tyrosine kinase with a human potassium channel mediated by SH3 domain. Holmes TC, et al. **Science** 1996 Dec 20;274(5295):2089-91

NMDA channel regulation by channel-associated protein tyrosine kinase Src. Yu XM, et al. **Science** 1997 Jan 31; 275(5300):674-8

The role of Src family kinases in the normal and neoplastic gastrointestinal tract. Banker N, et al. **Surg Oncol** 1996 Oct-Dec;5(5-6):201-10 (92 ref.)

Enhancement of HIV-1-induced syncytium formation in T cells by the tyrosyl kinase p56lck. Briand G, et al. **Virology** 1997 Apr 28;231(1):10-9

Binding of HIV-1 to its receptor induces tyrosine phosphorylation of several CD4-associated proteins, including the phosphatidylinositol 3-kinase. Briand G, et al. **Virology** 1997 Feb 17;228(2):171-9

PHARMACOLOGY

Substrate specificity and inhibitor profile of human recombinant p56lck from a baculovirus expression vector. Flotow H, et al. **Inflamm Res** 1996 Aug;45(8):412-5

Analysis of CD28 cytoplasmic tail tyrosine residues as regulators and substrates for the protein tyrosine kinases, EMT and LCK. King PD, et al. **J Immunol** 1997 Jan 15; 158(2):580-90

PHYSIOLOGY

Posttranslational regulation of Lck and a p36-38 protein by activators of protein kinase C: differential effects of the tumor promoter, PMA, and the non-tumor-promoter, bryostatin. Galron D, et al. **Cell Immunol** 1997 Jun 15; 178(2):141-51

The cytoplasmic domain of rat NKR-P1 receptor interacts with the N-terminal domain of p56(lck) via cysteine residues. Campbell KS, et al. **Eur J Immunol** 1997 Jan; 27(1):72-7

Differential contribution of Lck and Fyn protein tyrosine kinases to intraepithelial lymphocyte development. Page ST, et al. **Eur J Immunol** 1997 Feb;27(2):554-62

Restoration of thymopoiesis in pT alpha-/- mice by anti-CD3epsilon antibody treatment or with transgenes encoding activated Lck or tailless pT alpha. Fehling HJ, et al. **Immunity** 1997 Jun;6(6):703-14

Lck dependence of signaling pathways activated by gamma-irradiation and CD3 epsilon engagement in RAG-1(-/-)-immature thymocytes. Wu G, et al. **Int Immunol** 1996 Jul;8(7):1159-64

Lyn, a src-like tyrosine kinase. Hibbs ML, et al. **Int J Biochem Cell Biol** 1997 Mar;29(3):397-400 (12 ref.)

Lipopolysaccharide (LPS)-induced macrophage activation and signal transduction in the absence of Src-family kinases Hck, Fgr, and Lyn. Meng F, et al. **J Exp Med** 1997 May 5;185(9):1661-70

The catalytic domain of pp56(lck), but not its regulatory domain, is sufficient for inducing IL-2 production. Carrera AC, et al. **J Immunol** 1996 Nov 1;157(9):3775-82

Lck is necessary and sufficient for Fas-ligand expression and apoptotic cell death in mature cycling T cells. Gonzalez-Garcia A, et al. **J Immunol** 1997 May 1; 158(9):4104-12

Lineage-specific control of superantigen-induced cell death by the protein tyrosine kinase p56(lck). Penninger JM, et al. **J Immunol** 1996 Dec 15;157(12):5359-66

Aberrant TCR-mediated signaling in CD45-null thymocytes involves dysfunctional regulation of Lck, Fyn, TCR-zeta, and ZAP-70. Stone JD, et al. **J Immunol** 1997 Jun 15; 158(12):5773-82

Critical role of Lyn kinase in inhibition of neutrophil apoptosis by granulocyte-macrophage colony-stimulating factor. Wei S, et al. **J Immunol** 1996 Dec 1;157(11):5155-62

Protein tyrosine kinases Syk and ZAP-70 display distinct requirements for Src family kinases in immune response receptor signal transduction. Zoller KE, et al. **J Immunol** 1997 Feb 15;158(4):1650-9

Activation of p58c-fgr and p53/56lyn in adherent human neutrophils: evidence for a role of divalent cations in regulating neutrophil adhesion and protein tyrosine kinase activities. Yan SR, et al. **J Inflamm** 1995;45(4):297-311

Immunoreceptor tyrosine-based activation motif (ITAM), a unique module linking antigen and Fc receptors to their signaling cascades. Isakov N. **J Leukoc Biol** 1997 Jan; 61(1):6-16 (123 ref.)

Subtype-specific regulation of recombinant NMDA receptor-channels by protein tyrosine kinases of the src family. Köhr G, et al. **J Physiol (Lond)** 1996 Apr 15;492 (Pt 2):445-52

The role of Src kinase in the potentiation by ethanol of cytokine- and endotoxin-mediated nitric oxide synthase expression in rat hepatocytes. Kuo ML, et al. **Mol Pharmacol** 1997 Sep;52(3):535-41

A role for epidermal growth factor receptor, c-Src and focal adhesion kinase in an in vitro model for the progression of colon cancer. Brunton VG, et al. **Oncogene** 1997 Jan 23;14(3):283-93

Selective neural cell adhesion molecule signaling by Src family tyrosine kinases and tyrosine phosphatases. Maness PF, et al. **Perspect Dev Neurobiol** 1996;4(2-3):169-81 (169 ref.)

Possible involvement of adherens junction plaque proteins in tumorigenesis and metastasis. Tsukita S, et al. **Princess Takamatsu Symp** 1994;24:38-50 (69 ref.)

The role of CD4-Lck in T-cell receptor antagonism: evidence for negative signaling. Racioppi L, et al. **Proc Natl Acad Sci U S A** 1996 Sep 17;93(19):10360-5

SRC GENES see **GENES, SRC**

SRC HOMOLOGY DOMAINS

A fluorescence polarization based Src-SH2 binding assay. Lynch BA, et al. **Anal Biochem** 1997 Apr 5;247(1):77-82

The utility of FK506-binding protein as a fusion partner in scintillation proximity assays: application to SH2 domains. Sonatore LM, et al. **Anal Biochem** 1996 Sep 5;240(2):289-97

Examining the specificity of Src homology 3 domain--ligand interactions with alkaline phosphatase fusion proteins. Yamabhai M, et al. **Anal Biochem** 1997 Apr 5;247(1):143-51

Modular peptide recognition domains in eukaryotic signaling. Kuriyan J, et al. **Annu Rev Biophys Biomol Struct** 1997; 26:259-88 (102 ref.)

Focal adhesion kinase tyrosine-861 is a major site of phosphorylation by Src. Calalb MB, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):662-8

Characterization of Ret-Shc-Grb2 complex induced by GDNF, MEN 2A, and MEN 2B mutations. Ohiwa M, et al. **Biochem Biophys Res Commun** 1997 Aug 28; 237(3):747-51

SHP2 associates directly with tyrosine phosphorylated p90 (SNT) protein in FGF-stimulated cells. Ong SH, et al. **Biochem Biophys Res Commun** 1997 Sep 8;238(1):261-6

Phospholipase C-gamma 1 binds to actin-cytoskeleton via its C-terminal SH2 domain in vitro. Pei Z, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):802-6

An alternative to phosphotyrosine-containing motifs for binding to an SH2 domain. Rojas M, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):675-80

Modulation of actin filament sliding by mutations of the SH2 cysteine in Dictyostelium myosin II. Suzuki Y, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):701-6

Dynamin II associates with Grb2 SH3 domain in Ras transformed NIH3T3 cells. Yoon SY, et al. **Biochem Biophys Res Commun** 1997 May 29;234(3):539-43

Intracellular targeting, interaction with Src homology 3 (SH3) domains and rolipram-detected conformational switches in cAMP-specific PDE4A phosphodiesterase. Houslay MD, et al. **Biochem Soc Trans** 1997 May; 25(2):374-81 (50 ref.)

Peptide ligands of pp60(c-src) SH2 domains: a thermodynamic and structural study. Charifson PS, et al. **Biochemistry** 1997 May 27;36(21):6283-93

Characterization of the backbone dynamics of folded and denatured states of an SH3 domain. Farrow NA, et al. **Biochemistry** 1997 Mar 4;36(9):2390-402

Dual specificity of Src homology 2 domains for phosphotyrosine peptide ligands. Gay B, et al. **Biochemistry** 1997 May 13;36(19):5712-8

Thermodynamic and structural analysis of phosphotyrosine polypeptide binding to Grb2-SH2. McNemar C, et al. **Biochemistry** 1997 Aug 19;36(33):10006-14

High-resolution structure of the diphtheria toxin repressor complexed with cobalt and manganese reveals an SH3-like third domain and suggests a possible role of phosphate as co-corepressor. Qiu X, et al. **Biochemistry** 1996 Sep 24; 35(38):12292-302

3-Phosphohistidine cannot replace phosphotyrosine in high-affinity binding to phosphotyrosine binding or Src homology 2 domains. Senderowicz L, et al. **Biochemistry** 1997 Aug 26;36(34):10538-44

Inhibition of Lyn function in mast cell activation by SH3 domain binding peptides. Stauffer TP, et al. **Biochemistry** 1997 Aug 5;36(31):9388-94

Mechanistic studies on full length and the catalytic domain of the tandem SH2 domain-containing protein tyrosine phosphatase: analysis of phosphoenzyme levels and Vmax stimulatory effects of glycerol and of a phosphotyrosyl peptide ligand. Wang J, et al. **Biochemistry** 1997 Mar 11; 36(10):2993-9

NMR studies of unfolded states of an SH3 domain in aqueous solution and denaturing conditions. Zhang O, et al. **Biochemistry** 1997 Apr 1;36(13):3959-70

Design of peptidomimetic ligands for the pp60src SH2 domain. Plummer MS, et al. **Bioorg Med Chem** 1997 Jan; 5(1):41-7

A tyrosine-phosphorylated protein of 140 kD is constitutively associated with the phosphotyrosine binding domain of Shc and the SH3 domains of Grb2 in acute myeloid leukemia cells. Jücker M, et al. **Blood** 1997 Mar 15;89(6):2024-35

How pathogens exploit interactions mediated by SH3 domains. Bliska J. **Chem Biol** 1996 Jan;3(1):7-11 (23 ref.)

Much more than the sum of the parts: structures of the dual SH2 domains of ZAP-70 and Syp. Cowburn D. **Chem Biol** 1996 Feb;3(2):79-82 (18 ref.)

Molecular basis for the binding of SH3 ligands with non-peptide elements identified by combinatorial synthesis. Feng S, et al. **Chem Biol** 1996 Aug;3(8):661-70

Probing the chemical basis of binding activity in an SH3 domain by protein signature analysis. Muir TW, et al. **Chem Biol** 1996 Oct;3(10):817-25

Activation of Pak by membrane localization mediated by an SH3 domain from the adaptor protein Nck. Lu W, et al. **Curr Biol** 1997 Feb 1;7(2):85-94

Hydrophobic D-amino acids in the design of peptide ligands for the pp60src SH2 domain. Plummer MS, et al. **Drug Des Discov** 1996 Apr;13(3-4):75-81

Two-dimensional electrophoretic analysis of human breast carcinoma proteins: mapping of proteins that bind to the SH3 domain of mixed lineage kinase MLK2. Rasmussen RK, et al. **Electrophoresis** 1997 Mar-Apr;18(3-4):588-98

FBP WW domains and the Abl SH3 domain bind to a specific class of proline-rich ligands. Bedford MT, et al. **EMBO J** 1997 May 1;16(9):2376-83

Juxtamembrane tyrosine residues couple the Eph family receptor EphB2/Nuk to specific SH2 domain proteins in neuronal cells. Holland SJ, et al. **EMBO J** 1997 Jul 1; 16(13):3877-88

Mouse disabled (mDab1): a Src binding protein implicated in neuronal development. Howell BW, et al. **EMBO J** 1997 Jan 2;16(1):121-32

Abnormal mesoderm patterning in mouse embryos mutant for the SH2 tyrosine phosphatase Shp-2. Saxton TM, et al. **EMBO J** 1997 May 1;16(9):2352-64

Activation of c-Raf-1 by Ras and Src through different mechanisms: activation in vivo and in vitro. Stokoe D, et al. **EMBO J** 1997 May 1;16(9):2384-96

Bovine activin receptor type IIB messenger ribonucleic acid displays alternative splicing involving a sequence homologous to Src-homology 3 domain binding sites. Ethier JF, et al. **Endocrinology** 1997 Jun;138(6):2425-34

Interaction of SH2-containing protein tyrosine phosphatase

2 with the insulin receptor and the insulin-like growth factor-I receptor: studies of the domains involved using the yeast two-hybrid system. Rocchi S, et al. **Endocrinology** 1996 Nov;137(11):4944–52

Identification of phosphopeptide ligands for the Src-homology 2 (SH2) domain of Grb2 by phage display. Gram H, et al. **Eur J Biochem** 1997 Jun 15;246(3):633–7

The purification and characterization of the catalytic domain of Src expressed in Schizosaccharomyces pombe. Comparison of unphosphorylated and tyrosine phosphorylated species. Weijland A, et al. **Eur J Biochem** 1996 Sep 15;240(3):756–64

Modulation of Src homology 3 proteins by the proline-rich adaptor protein Shb. Karlsson T, et al. **Exp Cell Res** 1997 Mar 15;231(2):269–75

Identification of amino acid residues required for a specific interaction between Src-tyrosine kinase and proline-rich region of phosphatidylinositol-3' kinase. Mak P, et al. **FEBS Lett** 1996 Nov 18;397(2-3):183–5

SH3 domain-dependent interactions of endophilin with amphiphysin. Micheva KD, et al. **FEBS Lett** 1997 Sep 8; 414(2):308–12

Sequential assignment and secondary structure determination for the Src homology 2 domain of hematopoietic cellular kinase. Zhang W, et al. **FEBS Lett** 1997 Apr 7; 406(1-2):131–5

A Drosophila gene with predicted rhoGEF, pleckstrin homology and SH3 domains is highly expressed in morphogenic tissues. Werner LA, et al. **Gene** 1997 Mar 10;187(1):107–14

SH2 and SH3-containing adaptor proteins: redundant or independent mediators of intracellular signal transduction. Birge RB, et al. **Genes Cells** 1996 Jul;1(7):595–613 (198 ref.)

Molecular cloning and chromosomal localization in human and mouse of the SH2-containing inositol phosphatase, INPP5D (SHIP). Amgen EST Program. Liu Q, et al. **Genomics** 1997 Jan 1;39(1):109–12

Mapping of a novel SH3 domain protein and two proteins of unknown function to human chromosome 21. Katsanis N, et al. **Hum Genet** 1997 Sep;100(3-4):477–80

SH3-mediated Hck tyrosine kinase activation and fibroblast transformation by the Nef protein of HIV-1. Briggs SD, et al. **J Biol Chem** 1997 Jul 18;272(29):17899–902

Regulation of Src homology 2-containing tyrosine phosphatase 1 during activation of human neutrophils. Role of protein kinase C. Brumell JH, et al. **J Biol Chem** 1997 Jan 10;272(2):875–82

Identification of Itk/Tsk Src homology 3 domain ligands. Bunnell SC, et al. **J Biol Chem** 1996 Oct 11; 271(41):25646–56

Characterization of the WW domain of human yes-associated protein and its polyproline-containing ligands. Chen HI, et al. **J Biol Chem** 1997 Jul 4;272(27):17070–7

Interaction of phosphorylated FcepsilonRIgamma immunoglobulin receptor tyrosine activation motif-based peptides with dual and single SH2 domains of p72syk. Assessment of binding parameters and real time binding kinetics. Chen T, et al. **J Biol Chem** 1996 Oct 11; 271(41):25308–15

Regulation of the Lck SH2 domain by tyrosine phosphorylation. Couture C, et al. **J Biol Chem** 1996 Oct 4;271(40):24880–4

Identification of regions of the Wiskott-Aldrich syndrome protein responsible for association with selected Src homology 3 domains. Finan PM, et al. **J Biol Chem** 1996 Oct 18;271(42):26291–5

Functional interaction of Src family kinases with the acetylcholine receptor in C2 myotubes. Fuhrer C, et al. **J Biol Chem** 1996 Dec 13;271(50):32474–81

Enhancement of guanine-nucleotide exchange activity of C3G for Rap1 by the expression of Crk, CrkL, and Grb2. Ichiba T, et al. **J Biol Chem** 1997 Aug 29;272(35):22215–20

B cell antigen receptor signaling induces the formation of complexes containing the Crk adapter proteins. Ingham RJ, et al. **J Biol Chem** 1996 Dec 13;271(50):32306–14

Functional importance of Shc tyrosine 317 on insulin signaling in Rat1 fibroblasts expressing insulin receptors. Ishihara H, et al. **J Biol Chem** 1997 Apr 4;272(14):9581–6

Beta-tubulin binds Src homology 2 domains through a region different from the tyrosine-phosphorylated protein-recognizing site. Itoh T, et al. **J Biol Chem** 1996 Nov 1;271(44):27931–5

Structural determinants of the interaction between the erbB2 receptor and the Src homology 2 domain of Grb7. Janes PW, et al. **J Biol Chem** 1997 Mar 28;272(13):8490–7

Tyrosine phosphorylation of connexin 43 by v-Src is mediated by SH2 and SH3 domain interactions. Kanemitsu MY, et al. **J Biol Chem** 1997 Sep 5;272(36):22824–31

Cripto enhances the tyrosine phosphorylation of Shc and activates mitogen-activated protein kinase (MAPK) in mammary epithelial cells. Kannan S, et al. **J Biol Chem** 1997 Feb 7;272(6):3330–5

Evidence for a direct interaction between insulin receptor substrate-1 and Shc. Kasus-Jacobi A, et al. **J Biol Chem** 1997 Jul 4;272(27):17166–70

The negative signaling molecule SH2 domain-containing inositol-polyphosphate 5-phosphatase (SHIP) binds to the tyrosine-phosphorylated beta subunit of the high affinity IgE receptor. Kimura T, et al. **J Biol Chem** 1997 May 23; 272(21):13991–6

Shc interaction with Src homology 2 domain containing inositol phosphatase (SHIP) in vivo requires the Shc-phosphotyrosine binding domain and two specific phosphotyrosines on SHIP. Lamkin TD, et al. **J Biol Chem** 1997 Apr 18;272(16):10396–401

Role of the Lck Src homology 2 and 3 domains in protein tyrosine phosphorylation. Lee-Fruman KK, et al. **J Biol Chem** 1996 Oct 4;271(40):25003–10

Direct binding of the proline-rich region of protein tyrosine phosphatase 1B to the Src homology 3 domain of p130(Cas). Liu F, et al. **J Biol Chem** 1996 Dec 6; 271(49):31290–5

The Src homology 2 (SH2) domain of SH2-containing inositol phosphatase (SHIP) is essential for tyrosine phosphorylation of SHIP, its association with Shc, and its induction of apoptosis. Liu L, et al. **J Biol Chem** 1997 Apr 4;272(14):8983–8

Interleukin-3 induces the association of the inositol 5-phosphatase SHIP with SHP2. Liu L, et al. **J Biol Chem** 1997 Apr 25;272(17):10998–1001

SH3 domain-dependent association of huntingtin with epidermal growth factor receptor signaling complexes. Liu YF, et al. **J Biol Chem** 1997 Mar 28;272(13):8121–4

FAP52, a novel, SH3 domain-containing focal adhesion protein. Meriläinen J, et al. **J Biol Chem** 1997 Sep 12; 272(37):23278–84

Interactions between Src homology (SH) 2/SH3 adapter proteins and the guanylnucleotide exchange factor SOS are differentially regulated by insulin and epidermal growth factor. Okada S, et al. **J Biol Chem** 1996 Oct 11; 271(41):25533–8

Role of the basic, proline-rich region of dynamin in Src homology 3 domain binding and endocytosis. Okamoto PM, et al. **J Biol Chem** 1997 Apr 25;272(17):11629–35

Functional roles of the Shc phosphotyrosine binding and Src homology 2 domains in insulin and epidermal growth factor signaling. Ricketts WA, et al. **J Biol Chem** 1996 Oct 18; 271(42):26165–9

p40(phox) down-regulates NADPH oxidase activity through interactions with its SH3 domain. Sathyamoorthy M, et al. **J Biol Chem** 1997 Apr 4;272(14):9141–6

Steel factor induces tyrosine phosphorylation of CRKL and binding of CRKL to a complex containing c-kit, phosphatidylinositol 3-kinase, and p120(CBL). Sattler M, et al. **J Biol Chem** 1997 Apr 11;272(15):10248–53

A coiled-coil tetramerization domain of BCR-ABL is essential for the interactions of SH2-containing signal transduction molecules. Tauchi T, et al. **J Biol Chem** 1997 Jan 10;272(2):1389–94

Both SH2 domains are involved in interaction of SHP-1 with the epidermal growth factor receptor but cannot confer receptor-directed activity to SHP-1/SHP-2 chimera. Tenev T, et al. **J Biol Chem** 1997 Feb 28;272(9):5966–73

ArgBP2, a multiple Src homology 3 domain-containing, Arg/Abl-interacting protein, is phosphorylated in v-Abl-transformed cells and localized in stress fibers and cardiocyte Z-disks. Wang B, et al. **J Biol Chem** 1997 Jul 11;272(28):17542–50

Interaction of the adaptor protein Shc and the adhesion molecule cadherin. Xu Y, et al. **J Biol Chem** 1997 May 23;272(21):13463–6

1H and 15N NMR assignment and solution structure of the SH3 domain of spectrin: comparison of unrefined and refined structure sets with the crystal structure. Blanco FJ, et al. **J Biomol NMR** 1997 Jun;9(4):347–57

Determination of the solution structure of the SH3 domain of human p56 Lck tyrosine kinase. Hiroaki H, et al. **J Biomol NMR** 1996 Sep;8(2):105–22

The SH3 domain of the Saccharomyces cerevisiae peroxisomal membrane protein Pex13p functions as a docking site for Pex5p, a mobile receptor for the import PTS1-containing proteins. Elgersma Y, et al. **J Cell Biol** 1996 Oct;135(1):97–109

Pex13p is an SH3 protein of the peroxisome membrane and a docking factor for the predominantly cytoplasmic PTs1 receptor. Gould SJ, et al. **J Cell Biol** 1996 Oct;135(1):85–95

Negative signaling in B lymphocytes induces tyrosine phosphorylation of the 145-kDa inositol polyphosphate 5-phosphatase, SHIP. Chacko GW, et al. **J Immunol** 1996 Sep 15;157(6):2234–8

The Lck SH2 phosphotyrosine binding site is critical for efficient TCR-induced processive tyrosine phosphorylation of the zeta-chain and IL-2 production. Lewis LA, et al. **J Immunol** 1997 Sep 1;159(5):2292–300

Solution structure of the Grb2 N-terminal SH3 domain complexed with a ten-residue peptide derived from SOS: direct refinement against NOEs, J-couplings and 1H and 13C chemical shifts. Wittekind M, et al. **J Mol Biol** 1997 Apr 11;267(4):933–52

CR16, a novel proline-rich protein expressed in rat brain neurons, binds to SH3 domains and is a MAP kinase substrate. Weiler MC, et al. **J Mol Neurosci** 1996 Fall; 7(3):203–15

Functional interaction between the SH2 domain of Fyn and tyrosine 324 of hamster polyomavirus middle-T antigen. Dunant NM, et al. **J Virol** 1997 Jan;71(1):199–206

The murine AIDS virus Gag precursor protein binds to the SH3 domain of c-Abl. Dupraz P, et al. **J Virol** 1997 Apr; 71(4):2615–20

Deletion of Src homology 3 domain results in constitutive activation of Tec protein-tyrosine kinase. Yamashita Y, et al. **Jpn J Cancer Res** 1996 Nov;87(11):1106–10

CSK associates with the TCR zeta and epsilon chains via its SH2 domain; a mechanism for turning off TCR signaling. Catipović B. **Lijec Vjesn** 1996 Nov-Dec; 118(11-12):264–71

Evidence for physical and functional interactions among two Saccharomyces cerevisiae SH3 domain proteins, an adenylyl cyclase-associated protein and the actin cytoskeleton. Lila T, et al. **Mol Biol Cell** 1997 Feb; 8(2):367–85

pp60v-src transformation of rat cells but not chicken cells strongly correlates with low-affinity phosphopeptide binding by the SH2 domain. Verderame MF. **Mol Biol Cell** 1997 May;8(5):843–54

Src homology domains of v-Src stabilize an active conformation of the tyrosine kinase catalytic domain. Xu B, et al. **Mol Cell Biochem** 1996 May 10;158(1):57–63

Cla4p, a Saccharomyces cerevisiae Cdc42p-activated kinase involved in cytokinesis, is activated at mitosis. Benton BK, et al. **Mol Cell Biol** 1997 Sep;17(9):5067–76

Abrogation of interleukin-3 dependence of myeloid cells by the v-src oncogene requires SH2 and SH3 domains which specify activation of STATs. Chaturvedi P, et al. **Mol Cell Biol** 1997 Jun;17(6):3295–304

SIP/SHIP inhibits Xenopus oocyte maturation induced by insulin and phosphatidylinositol 3-kinase. Deuter-Reinhard M, et al. **Mol Cell Biol** 1997 May;17(5):2559–65

Cellular effects of phosphotyrosine-binding domain inhibitors on insulin receptor signaling and trafficking. Giorgetti-Peraldi S, et al. **Mol Cell Biol** 1997 Mar; 17(3):1180–8

A deletion mutation in the SH2-N domain of Shp-2 severely suppresses hematopoietic cell development. Qu CK, et al. **Mol Cell Biol** 1997 Sep;17(9):5499–507

Evidence for a requirement for both phospholipid and phosphotyrosine binding via the Shc phosphotyrosine-binding domain in vivo. Ravichandran KS, et al. **Mol Cell Biol** 1997 Sep;17(9):5540–9

Evidence for in vivo phosphorylation of the Grb2 SH2-domain binding site on focal adhesion kinase by Src-family protein-tyrosine kinases [published erratum appears in Mol Cell Biol 1996 Dec;16(12):7182–4] Schlaepfer DD, et al. **Mol Cell Biol** 1996 Oct; 16(10):5623–33

Binding properties of SH3 peptide ligands identified from phage-displayed random peptide libraries. Hoffman NG, et al. **Mol Divers** 1996 Oct;2(1-2):5–12

The SH3 domain of Eps8 exists as a novel intertwined dimer. Kishan KV, et al. **Nat Struct Biol** 1997 Sep;4(9):739–43

A new protein containing an SH2 domain that inhibits JAK kinases. Endo TA, et al. **Nature** 1997 Jun 26; 387(6636):921–4

Activation of the Src-family tyrosine kinase Hck by SH3 domain displacement [see comments] Moarefi I, et al. **Nature** 1997 Feb 13;385(6617):650–3. Comment in: Nature 1997 Feb 13;385(6617):582–3, 585.

The PDGF receptor phosphorylates Tyr 138 in the c-Src SH3 domain in vivo reducing peptide ligand binding. Broome MA, et al. **Oncogene** 1997 Jan 9;14(1):17–34

Association of PTP-PEST with the SH3 domain of p130cas; a novel mechanism of protein tyrosine phosphatase substrate recognition. Garton AJ, et al. **Oncogene** 1997 Aug 18;15(8):877–85

RET alternate splicing influences the interaction of activated RET with the SH2 and PTB domains of Shc, and the SH2 domain of Grb2. Lorenzo MJ, et al. **Oncogene** 1997 Feb 20;14(7):763–71

Expression of a novel isoform of Vav, Vav-T, containing a single Src homology 3 domain in murine testicular germ cells. Okumura K, et al. **Oncogene** 1997 Feb 13;14(6):713–20

Microcolinearity in sh2-homologous regions of the maize, rice, and sorghum genomes. Chen M, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3431–5

The SH3p4/Sh3p8/SH3p13 protein family: binding partners for synaptojanin and dynamin via a Grb2-like Src homology 3 domain. Ringstad N, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8569–74

Expression of mutated Nck SH2/SH3 adaptor respecifies mesodermal cell fate in Xenopus laevis development. Tanaka M, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29; 94(9):4493–8

Novel domains in NADPH oxidase subunits, sorting nexins, and PtdIns 3-kinases: binding partners of SH3 domains? Ponting CP. **Protein Sci** 1996 Nov;5(11):2353–7

pH-Dependent self-association of the Src homology 2 (SH2) domain of the Src homologous and collagen-like (SHC) protein. Réty S, et al. **Protein Sci** 1996 Mar;5(3):405–13

Stability and folding of the SH3 domain of Bruton's tyrosine kinase. Chen YJ, et al. **Proteins** 1996 Dec;26(4):465–71

Src structure crystallizes 20 years of oncogene research [news] Featherstone C. **Science** 1997 Feb 21;275(5303):1066

Structure of the p53 tumor suppressor bound to the ankyrin and SH3 domains of 53BP2 [see comments] Gorina S, et al. **Science** 1996 Nov 8;274(5289):1001–5. Comment in: Science 1996 Nov 8;274(5289):921–2.

Synaptic vesicle endocytosis impaired by disruption of dynamin-SH3 domain interactions. Shupliakov O, et al. **Science** 1997 Apr 11;276(5310):259–63

Cytoplasmic signalling domains: the next generation. Bork P, et al. **Trends Biochem Sci** 1997 Aug;22(8):296–8 (20 ref.)

The WW module competes with the SH3 domain? Sudol M. **Trends Biochem Sci** 1996 May;21(5):161–3

DRUG EFFECTS

Se-mediated domain-domain communication in band 3 of

human erythrocytes. Yang FY, et al. **Biol Trace Elem Res** 1996 Dec;55(3):279–95

Focal adhesion kinase-related fakB is regulated by the integrin LFA-1 and interacts with the SH3 domain of phospholipase C gamma 1. Kanner SB. **Cell Immunol** 1996 Jul 10;171(1):164–9

GENETICS

Structural and thermodynamic characterization of the interaction of the SH3 domain from Fyn with the proline-rich binding site on the p85 subunit of PI3-kinase. Renzoni DA, et al. **Biochemistry** 1996 Dec 10; 35(49):15646–53

The human SHIP gene is differentially expressed in cell lineages of the bone marrow and blood. Geier SJ, et al. **Blood** 1997 Mar 15;89(6):1876–85

C. elegans cell migration gene mig-10 shares similarities with a family of SH2 domain proteins and acts cell nonautonomously in excretory canal development. Manser J, et al. **Dev Biol** 1997 Apr 1;184(1):150–64

A novel pathway from phosphorylation of tyrosine residues 239/240 of Shc, contributing to suppress apoptosis by IL-3. Gotoh N, et al. **EMBO J** 1996 Nov 15;15(22):6197–204

Reexamining interaction of the SH2 domains of SYP and GAP with insulin and IGF-1 receptors in the two-hybrid system. Lamothe B, et al. **Gene** 1996 Dec 5;182(1-2):77–80

A novel SH3-containing human gene family preferentially expressed in the central nervous system. Giachino C, et al. **Genomics** 1997 May 1;41(3):427–34

Platelet endothelial cell adhesion molecule-1 is phosphorylatable by c-Src, binds Src-Src homology 2 domain, and exhibits immunoreceptor tyrosine-based activation motif-like properties. Lu TT, et al. **J Biol Chem** 1997 May 30;272(22):14442–6

Temporal phases in apoptosis defined by the actions of Src homology 2 domains, ceramide, Bcl-2, interleukin-1beta converting enzyme family proteases, and a dense membrane fraction. Farschon DM, et al. **J Cell Biol** 1997 Jun 2; 137(5):1117–25

ZAP-70 protein tyrosine kinase is constitutively targeted to the T cell cortex independently of its SH2 domains. Huby RDJ, et al. **J Cell Biol** 1997 Jun 30;137(7):1639–49

The role of the Src homology domains in morphological transformation by v-src. Tian M, et al. **Mol Biol Cell** 1997 Jul;8(7):1183–93

c-ABL tyrosine kinase activity is regulated by association with a novel SH3-domain-binding protein. Zhu J, et al. **Mol Cell Biol** 1996 Dec;16(12):7054–62

Isolation and characterization of e3B1, an eps8 binding protein that regulates cell growth. Biesova Z, et al. **Oncogene** 1997 Jan 16;14(2):233–41

The G12 coupled thrombin receptor stimulates mitogenesis through the Shc SH2 domain. Collins LR, et al. **Oncogene** 1997 Jul 31;15(5):595–600

EAT-2 is a novel SH2 domain containing protein that is up regulated by Ewing's sarcoma EWS/FLI1 fusion gene. Thompson AD, et al. **Oncogene** 1996 Dec 19; 13(12):2649–58

Regulation of protein tyrosine phosphatase 1C: opposing effects of the two src homology 2 domains. Pregel MJ, et al. **Protein Eng** 1995 Dec;8(12):1309–16

Reading between the lines: SH3 recognition of an intact protein. Lim WA. **Structure** 1996 Jun 15;4(6):657–9 (23 ref.)

Solution structure and peptide binding of the SH3 domain from human Fyn. Morton CJ, et al. **Structure** 1996 Jun 15;4(6):705–14

IMMUNOLOGY

Naturally occurring anti-idiotypic antibodies to anti-phosphotyrosine in systemic lupus erythematosus interact with SRC-homology 2 domains. Stefanescu M, et al. **Autoimmunity** 1995;22(2):81–6

STAM, signal transducing adaptor molecule, is associated with Janus kinases and involved in signaling for cell growth and c-myc induction. Takeshita T, et al. **Immunity** 1997 Apr;6(4):449–57

The SHIP phosphatase becomes associated with Fc gammaRIIB1 and is tyrosine phosphorylated during 'negative' signaling. D'Ambrosio D, et al. **Immunol Lett** 1996 Dec;54(2-3):77–82

Selective in vivo recruitment of the phosphatidylinositol phosphatase SHIP by phosphorylated Fc gammaRIIB during negative regulation of IgE-dependent mouse mast cell activation. Fong DC, et al. **Immunol Lett** 1996 Dec; 54(2-3):83–91

Distinct binding patterns of HS1 to the Src SH2 and SH3 domains reflect possible mechanisms of recruitment and activation of downstream molecules. Takemoto Y, et al. **Int Immunol** 1996 Nov;8(11):1699–705

The SH3 domain of Itk/Emt binds to proline-rich sequences in the cytoplasmic domain of the T cell costimulatory receptor CD28. Marengère LE, et al. **J Immunol** 1997 Oct 1;159(7):3220–9

The SH3 domain of Bruton's tyrosine kinase interacts with Vav, Sam68 and EWS. Guinamard R, et al. **Scand J Immunol** 1997 Jun;45(6):587–95

PHYSIOLOGY

Signal transductions of SH2/SH3: Ash/Grb-2 downstream signaling. Takenawa T, et al. **Adv Pharmacol** 1996; 36:139–53 (24 ref.)

Fc epsilon RI-ligation induces association of tyrosine phosphorylated proteins with Src homology 2 domains of phospholipase C gamma 1 in RBL-2H3 rat basophilic leukemia cells. Han MY, et al. **Biochem Mol Biol Int** 1997 Apr;41(5):895–904

Human erythroid spectrin alpha subunit and its SH3 domain are sensitive to acidic Plasmodium falciparum proteolytic activity. Le Bonniec SL, et al. **C R Acad Sci III** 1996 Nov; 319(11):1011–7

SH2 signaling in a lower eukaryote: a STAT protein that regulates stalk cell differentiation in dictyostelium. Kawata T, et al. **Cell** 1997 Jun 13;89(6):909–16

Insulin-induced tyrosine phosphorylation of a M(r) 70,000 protein revealed by association with the Src homology 2 (SH2) and SH3 domains of p120GAP and Grb2. Medema JP, et al. **Cell Growth Differ** 1996 Apr;7(4):543–50

Tandem SH2 binding sites mediate the RasGAP-RhoGAP interaction: a conformational mechanism for SH3 domain regulation. Hu KQ, et al. **EMBO J** 1997 Feb 3;16(3):473–83

Ras GTPase-activating protein-associated p62 is a major v-Src-SH3-binding protein. Williger BT, et al. **FEBS Lett** 1997 Feb 10;403(1):35–9

Evidence that the Wiskott-Aldrich syndrome protein may be involved in lymphoid cell signaling pathways. Cory GO, et al. **J Immunol** 1996 Nov 1;157(9):3791–5

The role of the Src homology domains in morphological transformation by v-src. Tian M, et al. **Mol Biol Cell** 1997 Jul;8(7):1183–93

Functional interactions between isolated SH2 domains and insulin/Ras signaling pathways of Xenopus oocytes: opposite effects of the carboxy- and amino-terminal SH2 domains of p85 PI 3-kinase. Aroca P, et al. **Oncogene** 1996 Nov 7;13(9):1839–46

N-Shc: a neural-specific adapter molecule that mediates signaling from neurotrophin/Trk to Ras/MAPK pathway. Nakamura T, et al. **Oncogene** 1996 Sep 19;13(6):1111–21

Proline-rich sequences mediate the interaction of the Arg protein tyrosine kinase with Crk. Wang B, et al. **Oncogene** 1996 Oct 3;13(7):1379–85

Association of Src tyrosine kinase with a human potassium channel mediated by SH3 domain. Holmes TC, et al. **Science** 1996 Dec 20;274(5295):2089–91

[Domains in biological membranes and their physiological importance] Bandorowicz-Pikuła J. **Postepy Biochem** 1995; 41(4):247 (104 ref.) **(Pol)**

SRC ONCOGENE PROTEIN PP60 see **ONCOGENE PROTEIN PP60(V-SRC)**

SRC PROTO-ONCOGENE PROTEIN PP60 see **PROTO-ONCOGENE PROTEIN PP60(C-SRC)**

SRP see **SIGNAL RECOGNITION PARTICLE**

SRS-A

ANALOGS & DERIVATIVES

The cysteinyl-leukotriene receptor antagonist BAY u9773 is a competitive antagonist of leukotriene C4 in the guinea-pig ileum. Bäck M, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):107–13

ANTAGONISTS & INHIBITORS

SRS-A antagonist pyranoquinolone alkaloids from east African Fagara plants and their synthesis. Kamikawa T, et al. **Bioorg Med Chem** 1996 Aug;4(8):1317–20

Effects of ONO-1078, a leukotriene antagonist, on cardiovascular responses induced by vagal stimulation, capsaicin, and substance P in guinea pigs. Wei EQ, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):485–8

METABOLISM

Effects of baicalein on prostanoid generation from the lung and contractile responses of the trachea in guinea pig. Miyamoto K, et al. **Am J Chin Med** 1997;25(1):37–50

THERAPEUTIC USE

Alternative treatments in the patient with intractable asthma. Spector SL. **Curr Opin Pulm Med** 1997 Jan;3(1):23–9 (64 ref.)

SRS-A RECEPTORS see **RECEPTORS, LEUKOTRIENE**

SRV-1 see **RETROVIRUSES TYPE D, SIMIAN**

SRV-2 see **RETROVIRUSES TYPE D, SIMIAN**

SRV-3 see **MASON-PFIZER MONKEY VIRUS**

SRV-4 see **RETROVIRUSES TYPE D, SIMIAN**

SRV-5 see **RETROVIRUSES TYPE D, SIMIAN**

SSCP see **POLYMORPHISM, SINGLE-STRANDED CONFORMATIONAL**

SSEA-1 see **ANTIGENS, CD15**

SSEA-1 DETERMINANT see **ANTIGENS, CD15**

SSPE see **SUBACUTE SCLEROSING PANENCEPHALITIS**

SSPE VIRUS

ISOLATION & PURIFICATION

Efficient isolation of subacute sclerosing panencephalitis virus from patient brains by reference to magnetic resonance and computed tomographic images. Ogura H, et al. **J Neurovirol** 1997 Aug;3(4):304–9

ST. ANTHONY'S FIRE see **ERGOTISM**

STA-MCA BYPASS see **CEREBRAL REVASCULARIZATION**

STABILIZING AGENTS see **EXCIPIENTS**

STABLE FACTOR see **FACTOR VII**

STABLE FLY see **MUSCIDAE**

STACHYBOTRYS

Effects of intranasal exposure to spores of Stachybotrys atra in mice. Nikulin M, et al. **Fundam Appl Toxicol** 1997 Feb; 35(2):182–8

Floods carry potential for toxic mold disease [news] Marwick C. **JAMA** 1997 May 7;277(17):1342

CHEMISTRY

Health and immunology study following exposure to toxigenic fungi (Stachybotrys chartarum) in a water-damaged office environment. Johanning E, et al. **Int Arch Occup Environ Health** 1996;68(4):207–18

SMTP-1 and -2, novel analogs of staplabin produced by Stachybotrys microspora IFO30018. Kohyama T, et al. **J Antibiot (Tokyo)** 1997 Feb;50(2):172–4

PATHOGENICITY

Experimental lung mycotoxicosis in mice induced by Stachybotrys atra. Nikulin M, et al. **Int J Exp Pathol** 1996 Oct;77(5):213–8

STAFF DEVELOPMENT

Institutional challenges posed by faculty development. Evans CH. **Acad Med** 1997 Jun;72(6):477–80

A faculty-development needs assessment at one medical school. McLeod PJ, et al. **Acad Med** 1997 Jun;72(6):558–9

Reflections on the scholarship of teaching. Schneeweiss R, et al. **Acad Med** 1997 Jun;72(6):481–2

Staff development program for identifying and resolving drug therapy problems. Robertson KE, et al. **Am J Health Syst Pharm** 1996 Sep 15;53(18):2194–6

Academic integration of occupational therapy faculty: a survey. Vassantachart DS, et al. **Am J Occup Ther** 1997 Jul-Aug;51(7):584–8

Outcomes of three part-time faculty development fellowship programs. Anderson WA, et al. **Fam Med** 1997 Mar; 29(3):204–8

Vision for a treasured resource. Part 2. Nurse manager learning needs. Horvath KJ, et al. **J Nurs Adm** 1997 Apr; 27(4):27–31

Staff development: an international perspective. Brown TL. **J Pediatr Nurs** 1996 Apr;11(2):131–33

An interdisciplinary health team training program for school staff in Minnesota. Lia-Hoagberg B, et al. **J Sch Health** 1997 Mar;67(3):94–7

Improvement committee reaps benefits [letter; comment] DeBoard TM. **MCN Am J Matern Child Nurs** 1997 Jul-Aug;22(4):176. Comment on: MCN Am J Matern Child Nurs 1996 Sep-Oct;21(5):219–21.

Staff development of tutor skills for problem-based learning. Evans PA, et al. **Med Educ** 1996 Sep;30(5):365–6

ECONOMICS

A framework for the management of intellectual capital in the health care industry. Grantham CE, et al. **J Health Care Finance** 1997 Spring;23(3):1–19 (52 ref.)

METHODS

Growth and change through nurse internships. Almazan EV, et al. **Am J Nurs** 1997 Feb;97(2):59–61

Team building with information system departments: a hospital librarian's experience in coexisting, collaborating, and cooperating. Grosman J, et al. **Bull Med Libr Assoc** 1996 Apr;84(2):196–9

Linking research and practice through discussion. Moch SD, et al. **Image J Nurs Sch** 1997;29(2):189–91

Preparing librarians to meet the challenges of today's health care environment. Giuse NB, et al. **J Am Med Inform Assoc** 1997 Jan-Feb;4(1):57–67

Faculty development—general or specific, local or national? The content and organization of faculty development in The Netherlands. Zwierstra RP, et al. **J Cancer Educ** 1996 Winter;11(4):194–5

Enhancing nursing competence with substance abusing clients. Marcus MT, et al. **J Nurs Educ** 1996 Nov; 35(8):361–6

Faculty development and curricular change: a process and outcomes model for substance abuse education. Marcus MT. **J Prof Nurs** 1997 May-Jun;13(3):168-77
An evolutionary concept analysis of mentoring in nursing. Stewart BM, et al. **J Prof Nurs** 1996 Sep-Oct;12(5):311-21 (83 ref.)
Major learning experiences revisited. Kowalski K, et al. **MCN Am J Matern Child Nurs** 1996 Mar-Apr;21(2):76-9
Using continuous quality improvement to increase preventive services in clinical practice--going beyond guidelines. Solberg LI, et al. **Prev Med** 1996 May-Jun;25(3):259-67

ORGANIZATION & ADMINISTRATION

Developing behavioral objectives for perioperative staff development. Beitz JM. **AORN J** 1996 Jul;64(1):87-8, 92-5
Promoting the recruitment and retention of minority dental faculty: federal, state, and personal programs. Moore RN. **J Dent Educ** 1997 Mar;61(3):277-82
Developing nurse leaders for today and tomorrow. Part 2, Implementing a model of leadership for community-based practice. Aroian J, et al. **J Nurs Adm** 1996 Oct;26(10):29-34
Vision for a treasured resource. Part 1, Nurse manager role implementation. Aroian JF, et al. **J Nurs Adm** 1997 Mar; 27(3):36-41
Nursing staff development goes hospital-wide. Cracolici FJ, et al. **J Nurs Adm** 1996 Nov;26(11):6-9
The clinical practice developmental model: the transition process. Nuccio SA, et al. **J Nurs Adm** 1996 Dec; 26(12):29-37
The sabbatical year: letting the fields lay fallow. Tiedje LB, et al. **Nurs Outlook** 1996 Sep-Oct;44(5):235-8 (11 ref.)

TRENDS

Faculty development in Canadian medical schools: a 10-year update. McLeod PJ, et al. **Can Med Assoc J** 1997 May 15;156(10):1419-23

STAFF WORKLOAD see **WORKLOAD**

STAFFING AND SCHEDULING see **PERSONNEL STAFFING AND SCHEDULING**

STAGE-SPECIFIC EMBRYONIC ANTIGEN-1 see **ANTIGENS, CD15**

STAGGERER MICE see **MICE, NEUROLOGIC MUTANTS**

STAGING, NEOPLASM see **NEOPLASM STAGING**

STAINING

see related
DYES

Dynamic functional and structural analysis of living cells: new tools for vital staining of nuclear DNA and for characterisation of cell motion. Leitner F, et al. **Acta Biotheor** 1995 Dec;43(4):299-317
Effects of different staining and washing procedures on the results of human sperm morphology evaluation by manual and computerised methods. Menkveld R, et al. **Andrologia** 1997 Jan-Feb;29(1):1-7
Lectin staining of renal tubules in normal kidney. Engel U, et al. **APMIS** 1997 Jan;105(1):31-4
Staining tomato fruit cuticle and exocarp tissues. Graham ET. **Biotech Histochem** 1997 May;72(3):119-22
The Gram stain after more than a century. Popescu A, et al. **Biotech Histochem** 1996 May;71(3):145-51 (60 ref.)
Protein staining with Ponceau S during acid-urea-triton-polyacrylamide gel electrophoresis. Correia H, et al. **Biotechniques** 1997 May;22(5):846-8
In situ trypan blue staining of monolayer cell cultures for permanent fixation and mounting. Perry SW, et al. **Biotechniques** 1997 Jun;22(6):1020-1, 1024
Staining of the nucleolar organizer regions: relevance in hematology. Baatout S. **Blood Rev** 1996 Sep;10(3):185-8 (33 ref.)
In vitro study for staining and toxicity of rose bengal on cultured bovine corneal endothelial cells. Lee YC, et al. **Cornea** 1996 Jul;15(4):376-85
Effects of 5-azacytidine on the centromeric region of human fibroblasts studied by CREST staining and in situ hybridization on cytokinesis-blocked cells. Cimini D, et al. **Cytogenet Cell Genet** 1996;72(2-3):219-24
Intraoperative touch-imprint cytology of germ cell neoplasms [letter] Hoda RS, et al. **Diagn Cytopathol** 1996 Jun;14(4):393-4
A procedure for protein elution from reverse-stained polyarcylamide gels applicable at the low picomole level: An alternative route to the preparation of low abundance proteins for microanalysis. Castellanos-Serra LR, et al. **Electrophoresis** 1996 Oct;17(10):1564-72
Negative staining with zinc-imidazole of gel electrophoresis-separated nucleic acids. Hardy E, et al. **Electrophoresis** 1996 Oct;17(10):1537-41
Combined immunostaining and Coomassie Brilliant Blue staining of polyvinylidene difluoride membranes without organic solvent. Houen G, et al. **Electrophoresis** 1997 May; 18(5):701-5
Quantitative densitometry of proteins stained with coomassie blue using a Hewlett Packard scanjet scanner and Scanplot software. Vincent SG, et al. **Electrophoresis** 1997 Jan; 18(1):67-71
Chromosome painting in biological dosimetry: assessment of the ability to score stable chromosome aberrations using different pairs of paint probes. García Sagredo JM, et al. **Environ Health Perspect** 1996 May;104 Suppl 3:475-7
Staining of undecondensed sperm nucleii [letter; comment] Martini E. **Hum Reprod** 1996 Dec;11(12):2808. Comment on: Hum Reprod 1996 Apr;11(4):722-6.
The covering method: an improved negative staining method for ultrathin cryo-sections of tissue. Sakai T, et al. **J Electron Microsc (Tokyo)** 1995 Dec;44(6):479-84
Effects of toluidine blue and destaining reagents used in sexual assault examinations on the ability to obtain DNA profiles from postcoital vaginal swabs. Hochmeister MN, et al. **J Forensic Sci** 1997 Mar;42(2):316-9
Differential staining of apoptotic nuclei in living cells: application to macronuclear elimination in Tetrahymena. Mpoke SS, et al. **J Histochem Cytochem** 1997 May; 45(5):675-83
Cellular secretion. Now you see it, now you don't [news; comment] Betz WJ, et al. **Nature** 1997 Jul 31; 388(6641):423-4. Comment on: Nature 1997 Jul 31;388(6641):474-8. Comment on: Nature 1997 Jul 31;388(6641):478-82.
SYBR Green I staining of pulsed field agarose gels is a sensitive and inexpensive way of quantitating DNA double-strand breaks in mammalian cells. Kiltie AE, et al. **Nucleic Acids Res** 1997 Jul 15;25(14):2945-6
Characteristics of corneal staining in hydrogel contact lens wearers. Begley CG, et al. **Optom Vis Sci** 1996 Mar; 73(3):193-200
Automated measurement of infarct size with scanned images of triphenyltetrazolium chloride-stained rat brains. Goldlust EJ, et al. **Stroke** 1996 Sep;27(9):1657-62
[Contribution of Trichrome Blue in the diagnosis of microsporidiosis] Honoré PS, et al. **Bull Soc Pathol Exot** 1996;89(3):179-80 (Eng. Abstr.) **(Fre)**
[A new high definition histologic coloration method based on formic nigrosin] Novelli A. **Pathologica** 1996 Jun; 88(3):188-91 (Eng. Abstr.) **(Ita)**

HISTORY

Mucin staining. Jass JR. **J Clin Pathol** 1996 Oct;49(10):787-90
The controversy on stain technologies--an experimental reexamination of the dispute on the cellular nature of the nervous system around 1900. Breidbach O. **Pubbl Stn Zool Napoli II** 1996;18(2):195-212

METHODS

Inhibitors of the polymerase chain reaction in Papanicolaou stain. Removal with a simple destaining procedure. Chen JT, et al. **Acta Cytol** 1996 Sep-Oct;40(5):873-7
AgNOR staining of cell imprint preparations of human bladder cancer. Jinza S, et al. **Acta Cytol** 1996 Nov-Dec; 40(6):1159-64
Ultrafast Papanicolaou stain: one year's experience in a fine needle aspiration service [letter] Lemos LB, et al. **Acta Cytol** 1997 Sep-Oct;41(5):1630-1
Multiparameter absorption measurements in automated microscopy. Simultaneous quantitative determination of DNA and nuclear antigen. Oud PS, et al. **Acta Cytol** 1997 Jan-Feb;41(1):188-96
A comparison of three staining methods in estimation of structures on the cell wall surface of Acinetobacter junii by using electron microscope. Grzanka A, et al. **Acta Microbiol Pol** 1996;45(3-4):233-9
Our experience with the enhanced polymer one-step staining in frozen sections. Rott T, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;527:114-5
A comparison of three standard methods of identifying mast cells in endobronchial biopsies in normal and asthmatic subjects. Heaney LG, et al. **Allergy** 1997 Aug;52(8):836-43
Visualization of injected embolic material [letter; comment] Drlicek M, et al. **Am J Surg Pathol** 1997 Jul;21(7):868-9 . Comment on: Am J Surg Pathol 1995 Jun;19(6):709-11.
Questions gram staining classifications and interpretation [letter; comment] Stabenow J. **Am J Vet Res** 1996 Oct; 57(10):1409. Comment on: Am J Vet Res 1996 Sep;57(9):1304-7.
Negative staining of proteins in polyacrylamide gels with methyl trichloroacetate. Candiano G, et al. **Anal Biochem** 1996 Dec 15;243(2):245-8
Sensitivity and applications of the nondenaturing staining of proteins on polyvinylidene difluoride membranes with Amido black 10B in water followed by destaining in water. Gentile F, et al. **Anal Biochem** 1997 Feb 15;245(2):260-2
Zymography: a single-step staining method for quantitation of proteolytic activity on substrate gels. Leber TM, et al. **Anal Biochem** 1997 Jun 15;249(1):24-8
Colloidal silver staining of electroblotted proteins for high sensitivity peptide mapping by liquid chromatography-electrospray ionization tandem mass spectrometry. van Oostveen I, et al. **Anal Biochem** 1997 May 1;247(2):310-8
Methodological considerations on Feulgen-staining applied to cells in primoculture: the model of osteoarthritic synovial cells. Giroud F, et al. **Anal Cell Pathol** 1996 Jun; 11(1):1-12
Patterned staining by fluorescein-labeled oligonucleotides obtained by in vitro selection. Kawazoe N, et al. **Anal Chem** 1996 Dec 15;68(24):4309-11
Modified Sihler's technique for studying the distribution of intramuscular nerve branches in mammalian skeletal muscle. Liu J, et al. **Anat Rec** 1997 Jan;247(1):137-44
Comparison of two staining and evaluation methods used for computerized human sperm morphology evaluations. Coetzee K, et al. **Andrologia** 1997 May-Jun;29(3):133-5
Development of the FUN-1 family of fluorescent probes for vacuole labeling and viability testing of yeasts. Millard PJ, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2897-905
Use of a triple-stain technique to detect viability and acrosome reaction in deer spermatozoa. Garde JJ, et al. **Arch Androl** 1997 Jul-Aug;39(1):1-9
A new and improved "quick-hot Gram-chromotrope" technique that differentially stains microsporidian spores in clinical samples, including paraffin-embedded tissue sections. Moura H, et al. **Arch Pathol Lab Med** 1997 Aug; 121(8):888-93
Staining system: a cheap and simple way for staining ultrathin sections. Sorivas de Lozano V. **Biocell** 1996 Dec; 20(3):273-4
Identification of a Zn(2+)-sensitive component of Ehrlich cell plasma membrane redox system by CHAPS-agarose-polyacrylamide electrophoresis and in situ staining of activity. Rodríguez-Caso L, et al. **Biochem Mol Biol Int** 1997 Jan;41(1):75-81
Application of a combination of neutral red and amido black staining for rapid, reliable cytotoxicity testing of biomaterials. Ciapetti G, et al. **Biomaterials** 1996 Jul; 17(13):1259-64
Static cytofluorometry and fluorescence morphology of mitochondria and DNA in proliferating fibroblasts. Barni S, et al. **Biotech Histochem** 1996 Mar;71(2):66-70
Concomitant staining of mast and parietal cells in human gastric mucosa. Biernacka D, et al. **Biotech Histochem** 1996 Sep;71(5):234-6
Feulgen staining of intact plant tissues for confocal microscopy. Braselton JP, et al. **Biotech Histochem** 1996 Mar;71(2):84-7
Plant cuticle staining with bismarck brown Y and azure B or toluidine blue O before paraffin extraction. Graham ET, et al. **Biotech Histochem** 1996 Mar;71(2):92-5
Improved gold chloride procedure for nerve staining in whole mounts of rat corneas. Jacot JL, et al. **Biotech Histochem** 1995 Nov;70(6):277-84
Staining paraffin sections without prior removal of the wax. Kiernan JA. **Biotech Histochem** 1996 Nov;71(6):304-10
Evaluation of preparation, staining and microscopic techniques for counting incremental lines in cementum of human teeth. Kvaal SI, et al. **Biotech Histochem** 1996 Jul; 71(4):165-72
An automated double staining procedure for bone and cartilage. Miller DM, et al. **Biotech Histochem** 1996 Mar; 71(2):79-83
Differential staining for cellulosic and modified plant cell walls. Mori B, et al. **Biotech Histochem** 1996 Mar;71(2):71-2
A double fluorescence staining protocol to determine the cross-sectional area of myofibers using image analysis. Mozdziak PE, et al. **Biotech Histochem** 1996 Mar; 71(2):102-7
Gram staining applied to human spermatozoa: a simple method for studying chromatin condensation status. Radicioni A, et al. **Biotech Histochem** 1996 Mar;71(2):61-5
Enhanced polymer one-step staining for proliferating cell nuclear antigen in squamous cell carcinoma of the tongue. Sano K, et al. **Biotech Histochem** 1996 Nov;71(6):273-7
The influence of staining procedure on differential round cell analysis in stained smears of human semen. Williams MA, et al. **Biotech Histochem** 1996 May;71(3):118-22
Repeated probing of western blots obtained from coomassie brilliant blue-stained or unstained polyacrylamide gels. Suck RW, et al. **Biotechniques** 1996 Sep;21(3):418-22
A rapid viability assay for Cryptosporidium oocysts and Giardia cysts for use in conjunction with indirect fluorescent antibody detection. Dowd SE, et al. **Can J Microbiol** 1997 Jul;43(7):658-62
Lipid signals detected by NMR proton spectroscopy of whole cells are not correlated to lipid droplets evidenced by the Nile red staining. Le Moyec L, et al. **Cell Mol Biol (Noisy-le-grand)** 1997 Jul;43(5):703-9
A simple assay for quantification of protein in tissue sections, cell cultures, and cell homogenates, and of protein immobilized on solid surfaces. Dieckmann-Schuppert A, et al. **Cell Tissue Res** 1997 Apr;288(1):119-26
The use of combined FISH/GISH in conjunction with DAPI counterstaining to identify chromosomes containing transgene inserts in amphidiploid tobacco [corrected and republished in Chromosoma 1996 Dec;105(5):231-6] Moscone EA, et al. **Chromosoma** 1996 Oct;105(4):231-6
The use of combined FISH/GISH in conjunction with DAPI counterstaining to identify chromosomes containing transgene inserts in amphidiploid tobacco [corrected and republished with original paging, article originally printed in Chromosoma 1996 Oct;105(4):231-6] Moscone EA, et al. **Chromosoma** 1996 Dec;105(5):231-6
"Micronucleoli" in the Xenopus germinal vesicle. Wu Z, et al. **Chromosoma** 1997 Jun;105(7-8):438-43
Paternally inherited chromosomal structural aberrations detected in mouse first-cleavage zygote metaphases by multicolour fluorescence in situ hybridization painting. Marchetti F, et al. **Chromosome Res** 1996 Dec;4(8):604-13

STAINING

Dual CD38 and DNA staining of plasma cells in monoclonal gammopathies attained by a rapid, non-wash and automated method. Gómez-Arbonés X, et al. **Clin Lab Haematol** 1996 Jun;18(2):95-7

Quantitative and qualitative analyses of proteoglycans in cartilage extracts by precipitation with 1,9-dimethylmethylene blue. Müller G, et al. **Connect Tissue Res** 1996;33(4):243-8

One-tube triple staining method for flow cytometric analysis of DNA ploidy and phenotypic heterogeneity of human solid tumors using single laser excitation. Corver WE, et al. **Cytometry** 1996 Dec 1;25(4):358-66

Multiparametric cell-cycle analysis of peripheral blood-activated lymphocyte subsets using staining based on the TdT method for incorporated BrdUrd. Dolbeare F, et al. **Cytometry** 1996 Dec 1;25(4):317-23

DNA-ploidy studies on cytological preparations from breast cancers by image analysis: comparison with Feulgen staining performed in destained Papanicolaou slides. Sidoni A, et al. **Cytometry** 1996 Dec 15;26(4):293-7

Papanicolaou staining of air-dried smears: value in rapid diagnosis. Jones CA. **Cytopathology** 1996 Oct;7(5):333-9

Semiautomatic PAPNET analysis of proliferating (MiB-1-positive) cells in cervical cytology and histology. Boon ME, et al. **Diagn Cytopathol** 1995 Dec;13(5):423-8

Immunostaining of cell preparations: a comparative evaluation of common fixatives and protocols. Suthipintawong C, et al. **Diagn Cytopathol** 1996 Aug; 15(2):167-74

Zinc-imidazole positive: a new method for DNA detection after electrophoresis on agarose gels not interfering with DNA biological integrity. Hardy E, et al. **Electrophoresis** 1996 Jan;17(1):26-9

Methods for improving the yield and quality of metaphase preparations for FISH probing of human lymphocyte chromosomes. McFee AF, et al. **Environ Mol Mutagen** 1997;29(1):98-104

Microwave-antigen retrieval: the importance of pH of the retrieval solution for MIB-1 staining. Boon ME. **Eur J Morphol** 1996 Dec;34(5):375-9

Multiparametric staining to identify apoptotic human cells. Negri C, et al. **Exp Cell Res** 1997 Jul 10;234(1):174-7

Prospective comparison of H&E, Giemsa, and Genta stains for the diagnosis of Helicobacter pylori. Laine L, et al. **Gastrointest Endosc** 1997 Jun;45(6):463-7

A new fluorescent histological marker for ischemic neurons, EA 50: correlated with Fos and Jun/AP-1 immunoreactivity. Chen HH, et al. **Histochem Cell Biol** 1996 May;105(5):375-82

Mercurochrom can be used for the histochemical demonstration and microphotometric quantitation of both protein thiols and protein (mixed) disulfides. Nöhammer G, et al. **Histochem Cell Biol** 1997 May;107(5):383-90

A combined staining method for argyrophilic nucleolar organizer regions and for glial fibrillary acidic protein in astrocytes of human brain. Fushiki S, et al. **Histochem J** 1996 Jul;28(7):523-30

Improved visualization of F-actin in the green alga Acetabularia by microwave-accelerated fixation and simultaneous FITC-Phalloidin staining. Sawitzky H, et al. **Histochem J** 1996 May;28(5):353-60

The use of enhanced polymer one-step staining reagents for immunoenzyme double-labelling. Van der Loos CM, et al. **Histochem J** 1996 Oct;28(10):709-14

Detection of human sperm acrosome reaction: comparison between methods using double staining, Pisum sativum agglutinin, concanavalin A and transmission electron microscopy. Köhn FM, et al. **Hum Reprod** 1997 Apr; 12(4):714-21

Evaluation of acridine-orange staining of centrifuged parasites in malarial infection. Damodar SU. **Indian J Med Sci** 1996 Jul;50(7):228-30

Nucleic acid stains as indicators of Giardia muris viability following cyst inactivation. Taghi-Kilani R, et al. **Int J Parasitol** 1996 Jun;26(6):637-46

Visualization of dystrophic muscle fibers in mdx mouse by vital staining with Evans blue: evidence of apoptosis in dystrophin-deficient muscle. Matsuda R, et al. **J Biochem (Tokyo)** 1995 Nov;118(5):959-64

Rapid diagnosis of acute eosinophilic pneumonia (AEP) in a patient with respiratory failure using bronchoalveolar lavage (BAL) with calcofluor white (CW) staining. Hogan TF, et al. **J Clin Lab Anal** 1997;11(4):202-7 (65 ref.)

Failure of Gram stain to detect Propionibacterium acnes in specimens from clinically significant infections [letter; comment] Esteban J, et al. **J Clin Microbiol** 1996 Aug; 34(8):2051. Comment on: J Clin Microbiol 1995 Mar;33(3):755-8.

A new acid-fast trichrome stain for simultaneous detection of Cryptosporidium parvum and microsporidial species in stool specimens. Ignatius R, et al. **J Clin Microbiol** 1997 Feb;35(2):446-9

Comparative evaluation of modified trichrome and Uvitex 2B stains for detection of low numbers of microsporidial spores in stool specimens. Ignatius R, et al. **J Clin Microbiol** 1997 Sep;35(9):2266-9

Uniform staining of Cyclospora oocysts in fecal smears by a modified safranin technique with microwave heating [published erratum appears in J Clin Microbiol 1997 Jun;35(6):1648] Visvesvara GS, et al. **J Clin Microbiol** 1997 Mar;35(3):730-3

The neurons in the gelatinosal complex (Laminae II and III) of the monkey (Macaca mulatta): a Golgi study. Beal JA, et al. **J Comp Neurol** 1978 May 1;179(1):89-121

Gram-chromotrope: a new technique that enhances detection of microsporidial spores in clinical samples. Moura H, et al. **J Eukaryot Microbiol** 1996 Sep-Oct;43(5):94S-95S

Differences in reperfusion length following 30 minutes of ischemia in the rabbit influence infarct size, as measured by triphenyltetrazolium chloride staining. Birnbaum Y, et al. **J Mol Cell Cardiol** 1997 Feb;29(2):657-66

Toluidine blue-O is a Nissl bright-field counterstain for lipophilic fluorescent tracers Di-ASP, DiI and DiO. Chelvanayagam DK, et al. **J Neurosci Methods** 1997 Mar; 72(1):49-55

Dual staining assessment of Schwann cell viability within whole peripheral nerves using calcein-AM and ethidium homodimer. Decherchi P, et al. **J Neurosci Methods** 1997 Feb;71(2):205-13

Vital staining from dye-coated microprobes identifies new olfactory interneurons for optical and electrical recording. Gelperin A, et al. **J Neurosci Methods** 1997 Mar; 72(1):97-108

Ultrastructural nonisotopic mapping of nucleolar transcription sites in onion protoplasts. Melcák I, et al. **J Struct Biol** 1996 Mar-Apr;116(2):253-63

A multiple wavelength algorithm in color image analysis and its applications in stain decomposition in microscopy images. Zhou R, et al. **Med Phys** 1996 Dec;23(12):1977-86

The response of selected members of the archaea to the gram stain. Beveridge TJ, et al. **Microbiology** 1996 Oct;142 (Pt 10):2887-95

In situ detection of apoptotic nuclei in the substantia nigra compacta of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-treated mice using terminal deoxynucleotidyl transferase labelling and acridine orange staining. Tatton NA, et al. **Neuroscience** 1997 Apr;77(4):1037-48

Sequential staining: the effects of sodium fluorescein, osmolarity, and pH on human corneal epithelium. Thomas ML, et al. **Optom Vis Sci** 1997 Apr;74(4):207-10

Formalin fixation by boiling: is it suitable for the TUNEL staining? [letter] Ichimura E, et al. **Pathol Int** 1995 Dec; 45(12):971-2

Assessment of viability of yeast by flow cytometry using Light Green as vital dye exclusion. Alvarado-Aleman FJ, et al. **Rev Latinoam Microbiol** 1996 Jan-Mar;38(1):25-30

Tissue and cell distribution of copper, zinc and cadmium in the mussel, Mytilus galloprovincialis, determined by autometallography. Soto M, et al. **Tissue Cell** 1996 Oct; 28(5):557-68

Acridine orange fluorescence techniques as alternatives to traditional Giemsa staining for the diagnosis of malaria in developing countries [published erratum appears in Trans R Soc Trop Med Hyg 1996 Mar-Apr;90(2):102] Lowe BS, et al. **Trans R Soc Trop Med Hyg** 1996 Jan-Feb;90(1):34-6

A sensitive, quick and semi-quantitative LacZ assay for the two-hybrid system. Essers L, et al. **Trends Genet** 1996 Nov; 12(11):449-50

A sensitive method for analyzing beta-galactosidase reporter gene expression in tissue sections of mouse embryos. Lazik A, et al. **Trends Genet** 1996 Nov;12(11):445-7

Probing bacterial gene expression within host cells. Valdivia RH, et al. **Trends Microbiol** 1997 Sep;5(9):360-3 (16 ref.)

Assessment of the acrosome reaction in Bufo arenarum spermatozoa by immunostaining: comparison with other methods. Martínez ML, et al. **Zygote** 1996 Aug;4(3):181-90

[Quadri-chromic staining in routine cutaneous histopathology (hematoxylin, eosin, saffron and astra blue)] Cribier B, et al. **Ann Dermatol Venereol** 1995; 122(11-12):758-63 (Eng. Abstr.) **(Fre)**

[Morphological study of muscle fibers stained red by modified Gomori trichrome staining with special reference to smooth red fibers] Yoshida K. **Hokkaido Igaku Zasshi** 1997 Mar;72(2):163-80 (Eng. Abstr.) **(Jpn)**

[Use of Masson's trichrome method for staining decalcified bone tissue] Asonova SN, et al. **Arkh Patol** 1996 Jan-Feb; 58(1):66-7 (Eng. Abstr.) **(Rus)**

[Utility of the Stamp method (letter)] Dorronsoro I, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):276 **(Spa)**

[Comparison of detection methods for the Staphylococcus aureus capsule] Odierno L, et al. **Rev Latinoam Microbiol** 1995 Jul-Sep;37(3):245-55 (Eng. Abstr.) **(Spa)**

STANDARDS

Standardization of fixation, processing and staining methods for the central nervous system of vertebrates. Aldana Marcos HJ, et al. **Biocell** 1996 Dec;20(3):265-72

STAINLESS STEEL

Generations of Guglielmi detachable coils [letter; comment] Guglielmi G. **AJNR Am J Neuroradiol** 1997 Jun-Jul; 18(6):1195. Comment on: AJNR Am J Neuroradiol 1996 Aug;17(7):1343-8.

Fast spin-echo MR of contact points on implanted intracerebral stainless steel multicontact electrodes. Meiners LC, et al. **AJNR Am J Neuroradiol** 1996 Nov-Dec; 17(10):1815-9

Cancer incidence among mild steel and stainless steel welders and other metal workers. Hansen KS, et al. **Am J Ind Med** 1996 Oct;30(4):373-82

Lung cancer mortality in stainless steel and mild steel welders: a nested case-referent study. Lauritsen JM, et al. **Am J Ind Med** 1996 Oct;30(4):383-91

Stresses developed during clinical debonding of stainless steel orthodontic brackets. Katona TR. **Angle Orthod** 1997; 67(1):39-46

Retention of esthetic veneers on primary stainless steel crowns. Baker LH, et al. **ASDC J Dent Child** 1996 May-Jun;63(3):185-9

Open reduction and stabilisation of coxofemoral joint luxation in dogs and cats, using a stainless steel rope inserted via a ventral approach to the hip joint. Kawamata T, et al. **Aust Vet J** 1996 Dec;74(6):460-4

Alternatives to ceramic brackets: the tensile bond strengths of two aesthetic brackets compared ex vivo with stainless steel foil-mesh bracket bases. Arici S, et al. **Br J Orthod** 1997 May;24(2):133-7

Subacute thrombosis and vascular injury resulting from slotted-tube nitinol and stainless steel stents in a rabbit carotid artery model [published erratum appears in Circulation 1996 Nov 15;94(10):2668] Sheth S, et al. **Circulation** 1996 Oct 1;94(7):1733-40

Arthrodesis of the equine distal tarsal joints by perforated stainless steel cylinders. Archer RM, et al. **Equine Vet J Suppl** 1988 Sep;(6):125-30

Purity of food cooked in stainless steel utensils. Flint GN, et al. **Food Addit Contam** 1997 Feb-Mar;14(2):115-26

Transcatheter coil occlusion of persistent ductus arteriosus using detachable steel coils: short-term results. Arora R, et al. **Indian Heart J** 1997 Jan-Feb;49(1):60-4

Types I and III collagen in the tissue capsules of titanium and stainless-steel implants. Shannon C, et al. **J Biomed Mater Res** 1997 Mar 5;34(3):401-8

Fretting corrosion resistance and fretting corrosion product cytocompatibility of ferritic stainless steel. Xulin S, et al. **J Biomed Mater Res** 1997 Jan;34(1):9-14

Survival of Acinetobacter baumannii on dry surfaces. Wendt C, et al. **J Clin Microbiol** 1997 Jun;35(6):1394-7

Comparison of the tissue response to absorbable self-reinforced polylactide screws and metallic screws in the fixation of cancellous bone osteotomies: an experimental study on the rabbit distal femur. Viljanen JT, et al. **J Orthop Res** 1997 May;15(3):398-407

Microleakage of cements for stainless steel crowns. Shiflett K, et al. **Pediatr Dent** 1997 May-Jun;19(4):262-6

Common bile duct obstruction due to malignancy: treatment with plastic versus metal stents. Lammer J, et al. **Radiology** 1996 Oct;201(1):167-72

Estimation of individual dust exposure by magnetopneumography in stainless steel production. Huvinen M, et al. **Sci Total Environ** 1997 Jun 20; 199(1-2):133-9

[Displacement of a Schuknecht prosthesis in cranial MRI] Hüttenbrink KB. **HNO** 1997 May;45(5):401 **(Ger)**

[Titanium implants in accident surgery--when are they necessary?] Arens S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:938-40 (Eng. Abstr.) **(Ger)**

[Sterile cover for the microscope in ENT operations] Jung HP. **Laryngorhinootologie** 1996 Oct;75(10):625-6 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Increased iron content of food due to stainless steel cookware. Park J, et al. **J Am Diet Assoc** 1997 Jun; 97(6):659-61

A meta-analysis of epidemiologic studies of lung cancer in welders. Moulin JJ. **Scand J Work Environ Health** 1997 Apr;23(2):104-13

CHEMISTRY

On mechanical properties of square and rectangular stainless steel wires tested in torsion. Meling TR, et al. **Am J Orthod Dentofacial Orthop** 1997 Mar;111(3):310-20

Corrosion behavior of 2205 duplex stainless steel. Platt JA, et al. **Am J Orthod Dentofacial Orthop** 1997 Jul; 112(1):69-79

Stiffness-deflection behavior of selected orthodontic wires. Oltjen JM, et al. **Angle Orthod** 1997;67(3):209-18

Evaluation of the effect of three surface treatments on the biocompatibility of 316L stainless steel using human differentiated cells. Bordji K, et al. **Biomaterials** 1996 Mar; 17(5):491-500

Reinforcement of PMMA bone cement with a continuous wire coil--a 3D finite element study. Frigstad JR, et al. **Biomed Mater Eng** 1996;6(6):429-39

Fatigue properties and stem subsidence in wire coil reinforced PMMA bone cement: a preliminary in vitro study. Kim JK, et al. **Biomed Mater Eng** 1996;6(6):453-62

Effects of low charge injection densities on corrosion responses of pulsed 316LVM stainless steel electrodes. Riedy LW, et al. **IEEE Trans Biomed Eng** 1996 Jun; 43(6):660-3

Dissolution of stainless steel in artificial saliva. Lakatos-Varsányi M, et al. **Int J Oral Maxillofac Implants** 1997 May-Jun;12(3):387-98

Corrosion resistance for biomaterial applications of TiO2 films deposited on titanium and stainless steel by ion-beam-assisted sputtering. Pan J, et al. **J Biomed Mater Res** 1997 Jun 5;35(3):309-18

Effect of acidic primers on bonding between stainless steel

and auto-polymerizing methacrylic resins. Matsumura H, et al. **J Dent** 1997 May-Jul;25(3-4):285-90
The effects of tack welding and increasing surface area on the tensile strength of silver electric and flame soldered stainless steel joints. Gawlik JA, et al. **Pediatr Dent** 1996 May-Jun;18(3):215-8
An in vitro comparison of four surface preparation techniques for veneering a compomer to stainless steel. Salama FS, et al. **Pediatr Dent** 1997 May-Jun;19(4):267-72
Composite rebonding to stainless steel metal using different bonding agents. al-Shalan TA, et al. **Pediatr Dent** 1997 May-Jun;19(4):273-6
Studies on leaching of Cr and Ni from stainless steel utensils in certain acids and in some Indian drinks. Agarwal P, et al. **Sci Total Environ** 1997 Jul 1;199(3):271-5
[Kinetics of cell division in peripheral blood lymphocytes of stainless steel welders] Myślak M, et al. **Med Pr** 1997; 48(3):261-4 (Eng. Abstr.) **(Pol)**

STANDARDS

Comparing Mersilene tape and stainless steel wire as sublaminar spinal fixation in the Chagma baboon (Papio ursinus). Grobler LJ, et al. **Iowa Orthop J** 1997;17:20-31

TOXICITY

Biocompatibility of fixation materials in the brain. Mofid MM, et al. **Plast Reconstr Surg** 1997 Jul;100(1):14-20; discussion 21-2

STAINS see **DYES**

STAMMERING see **STUTTERING**

STANDARD PREPARATIONS see **REFERENCE STANDARDS**

STANDARDS, REFERENCE see **REFERENCE STANDARDS**

STANFORD-BINET TEST

Stanford-Binet: Fourth Edition short forms with underachieving and learning disabled students. Lawson TT, et al. **Psychol Rep** 1996 Aug;79(1):47-50

STANNIC FLUORIDE see **TIN FLUORIDES**

STANNOUS FLUORIDE see **TIN FLUORIDES**

STANNUM see **TIN**

STANOLONE

ANALOGS & DERIVATIVES

Gonadal steroid regulation of hamster facial nerve regeneration: effects of dihydrotestosterone and estradiol. Tanzer L, et al. **Exp Neurol** 1997 Jul;146(1):258-64
7 alpha-iodine-125-iodo-5 alpha-dihydrotestosterone: a radiolabeled ligand for the androgen receptor. Labaree DC, et al. **J Nucl Med** 1997 Mar;38(3):402-9
Differential effect of trilostane on the progestin milieu in the pregnant mare. Schutzer WE, et al. **J Reprod Fertil** 1996 Jul;107(2):241-8
Neurosteroids in the mouse brain: behavioral and pharmacological effects of a 3 beta-hydroxysteroid dehydrogenase inhibitor. Young J, et al. **Steroids** 1996 Mar; 61(3):144-9

ANALYSIS

Steroid content in endometrial tissue. Suri NK. **East Afr Med J** 1997 Apr;74(4):242-8
Intratumour amount of sex steroids in elderly breast cancer patients. An approach to the biological characterization of mammary tumours in the elderly. Secreto G, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5-6):557-61

ANTAGONISTS & INHIBITORS

Interactive effects of insulin with dihydrotestosterone on adrenergic tone in isolated rat tail arterial rings. Peuler JD, et al. **Am J Hypertens** 1996 Sep;9(9):860-6

BLOOD

Serum steroids in relation to prostate cancer risk in a case-control study (Greece). Signorello LB, et al. **Cancer Causes Control** 1997 Jul;8(4):632-6
Serum testosterone, 5-alpha-dihydrotestosterone and different sex characteristics in male fallow deer (Cervus dama): a long-term experiment with accelerated photoperiods. Rolf HJ, et al. **Comp Biochem Physiol A Physiol** 1996 Nov;115(3):207-21
Molecular genetic analysis and human chorionic gonadotropin stimulation tests in the diagnosis of prepubertal patients with partial 5 alpha-reductase deficiency. Hiort O, et al. **Eur J Pediatr** 1996 Jun; 155(6):445-51
Courtship behavior and plasma levels of androgens and corticosterone in male marbled salamanders, Ambystoma opacum (ambystomatidae). Houck LD, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):243-52
MK-386, an inhibitor of 5alpha-reductase type 1, reduces dihydrotestosterone concentrations in serum and sebum without affecting dihydrotestosterone concentrations in semen. Schwartz JI, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1373-7
Effect of MK-386, a novel inhibitor of type 1 5 alpha-reductase, alone and in combination with finasteride, on serum dihydrotestosterone concentrations in men. Schwartz JI, et al. **J Clin Endocrinol Metab** 1996 Aug; 81(8):2942-7
Re: Early and late long-term effects of vasectomy on serum testosterone, dihydrotestosterone, luteinizing hormone and follicle-stimulating hormone levels [letter; comment] Kliesch S, et al. **J Urol** 1996 Nov;156(5):1784-5. Comment on: J Urol 1995 Dec;154(6):2065-9.
Neuroendocrine-associated behavioral patterns in the male Asian elephant (Elephas maximus). Dickerman RD, et al. **Physiol Behav** 1997 May;61(5):771-3
Luteinizing hormone, follicle-stimulating hormone, testosterone and dihydrotestosterone during testicular descent in the pig fetus. Visser JH, et al. **Reprod Fertil Dev** 1996;8(7):1115-20
[Serum dihydrotestosterone versus total testosterone values of patients with laryngeal carcinomas and chronic laryngitis] Kleemann D, et al. **Laryngorhinootologie** 1996 Jun;75(6):351-5 (Eng. Abstr.) **(Ger)**

METABOLISM

Enzymatic conversion of dihydrotestosterone from 3-keto to 3-enol form in the rat prostate. Kouretas D, et al. **Anticancer Res** 1996 Sep-Oct;16(5A):2843-8
Autoradiographic localization of dihydrotestosterone and testosterone concentrating neurons in the brain of the oyster toadfish. Fine ML, et al. **Brain Res** 1996 Feb 12; 709(1):65-80
Androgens, androgen receptors, antiandrogens and the treatment of prostate cancer. Griffiths K, et al. **Eur Urol** 1997;32 Suppl 3:24-40 (82 ref.)
MK-386, an inhibitor of 5alpha-reductase type 1, reduces dihydrotestosterone concentrations in serum and sebum without affecting dihydrotestosterone concentrations in semen. Schwartz JI, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1373-7
Relative potency of testosterone and dihydrotestosterone in preventing atrophy and apoptosis in the prostate of the castrated rat. Wright AS, et al. **J Clin Invest** 1996 Dec 1;98(11):2558-63
The effect of interleukin-1 (IL-1) on androgen metabolism in human gingival tissue (HGT) and periodontal ligament (PDL). Kasasa SC, et al. **J Clin Periodontol** 1996 May; 23(5):419-24
The synthesis of 5-alpha-dihydrotestosterone from androgens by human gingival tissues and fibroblasts in culture in response to TGF-beta and PDGF. Kasasa SC, et al. **J Periodontal Res** 1996 Jul;31(5):313-22
Detection of dihydrotestosterone (DHT) doping: alterations in the steroid profile and reference ranges for DHT and its 5 alpha-metabolites [editorial] Donike M, et al. **J Sports Med Phys Fitness** 1995 Dec;35(4):235-50
3 Alpha-hydroxysteroid oxidoreductase activities in dihydrotestosterone degradation and back-formation in rat prostate and epididymis. Span PN, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):319-24

PHARMACOKINETICS

[Finasteride: a new drug for the treatment of male hirsutism and androgenetic alopecia?] Spinucci G, et al. **Clin Ter** 1996 Jun;147(6):305-15 (41 ref.) (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Characterization of an element resembling an androgen response element (ARE) in the human aldose reductase promoter. Ruepp BU, et al. **Adv Exp Med Biol** 1997; 414:515-9
Interactive effects of insulin with dihydrotestosterone on adrenergic tone in isolated rat tail arterial rings. Peuler JD, et al. **Am J Hypertens** 1996 Sep;9(9):860-6
Steroid hormone induction and expression patterns of L-plastin in normal and carcinomatous prostate tissues. Zheng J, et al. **Am J Pathol** 1997 Jun;150(6):2009-18
Effects of DHT and EGF on human hyperplastic prostate cells cultured in vitro: growth, morphology and phenotype characterisation. De Angeli S, et al. **Anat Anz** 1997 Jun; 179(3):255-64
Effects of dihydrotestosterone alone and combined with estrogen on bone mineral density, bone growth, and formation rates in ovariectomized rats. Coxam V, et al. **Bone** 1996 Aug;19(2):107-14
Androgen inhibits neurotransmitter turnover in the medial prefrontal cortex of the rat following exposure to a novel environment. Handa RJ, et al. **Brain Res** 1997 Mar 14; 751(1):131-8
Regulation of androgen receptor mRNA expression in hamster facial motoneurons: differential effects of non-aromatizable and aromatizable androgens. Drengler SM, et al. **Brain Res Mol Brain Res** 1996 Sep 5;41(1-2):8-15
Hormonal regulation of androgen receptor messenger RNA in the medial preoptic area of the male rat. Handa RJ, et al. **Brain Res Mol Brain Res** 1996 Jul;39(1-2):57-67
Sex hormones prolong the QT interval and downregulate potassium channel expression in the rabbit heart. Drici MD, et al. **Circulation** 1996 Sep 15;94(6):1471-4
Androgen-induced proliferation in the developing larynx of Xenopus laevis is regulated by thyroid hormone. Cohen MA, et al. **Dev Biol** 1996 Aug 25;178(1):113-23
Regulation of somatic growth and the somatotropic axis by gonadal steroids: primary effect on insulin-like growth factor I gene expression and secretion. Borski RJ, et al. **Endocrinology** 1996 Aug;137(8):3253-9
Stimulation of prostate cancer growth by androgens and estrogens through the intermediacy of sex hormone-binding globulin. Nakhla AM, et al. **Endocrinology** 1996 Oct;137(10):4126-9
Hypothalamic sites of action for testosterone, dihydrotestosterone, and estrogen in the regulation of luteinizing hormone secretion in male sheep. Scott CJ, et al. **Endocrinology** 1997 Sep;138(9):3686-94
Gonadal steroid modulation of vasopressin secretion in response to osmotic stimulation. Swenson KL, et al. **Endocrinology** 1997 May;138(5):2089-97
Transcriptional up-regulation of the human androgen receptor by androgen in bone cells. Wiren KM, et al. **Endocrinology** 1997 Jun;138(6):2291-300
Establishment of a three-dimensional human prostate organoid coculture under microgravity-simulated conditions: evaluation of androgen-induced growth and PSA expression. Zhau HE, et al. **In Vitro Cell Dev Biol Anim** 1997 May;33(5):375-80
Protection of 5alpha-dihydrotestosterone against TGF-beta-induced apoptosis in FaO cells and induction of mitosis in HepG2 cells. Lim IK, et al. **Int J Cancer** 1997 Jul 17;72(2):351-5
Effects of dexamethasone and anabolic agents on proliferation and protein synthesis and degradation in C2C12 myogenic cells. Desler MM, et al. **J Anim Sci** 1996 Jun;74(6):1265-73
Inhibition of NFkappaB activity through maintenance of IkappaBalpha levels contributes to dihydrotestosterone-mediated repression of the interleukin-6 promoter. Keller ET, et al. **J Biol Chem** 1996 Oct 18;271(42):26267-75
Mechanical loading and sex hormone interactions in organ cultures of rat ulna. Cheng MZ, et al. **J Bone Miner Res** 1996 Apr;11(4):502-11
Relative potency of testosterone and dihydrotestosterone in preventing atrophy and apoptosis in the prostate of the castrated rat. Wright AS, et al. **J Clin Invest** 1996 Dec 1;98(11):2558-63
Inhibitory effect of dihydrotestosterone on human thyroid cell growth. Rossi R, et al. **J Endocrinol** 1996 Nov; 151(2):185-94
Synergistic effects of testosterone metabolites on the development of motoneuron morphology in a sexually dimorphic rat spinal nucleus. Burke KA, et al. **J Neurobiol** 1997 Jul;33(1):1-10
Trophic effects of androgen: receptor expression and the survival of laryngeal motor neurons after axotomy. Pérez J, et al. **J Neurosci** 1996 Nov 1;16(21):6625-33
Androgen mitigates axotomy-induced decreases in calbindin expression in motor neurons. Pérez J, et al. **J Neurosci** 1997 Oct 1;17(19):7396-403
Androgen regulation of ribosomal RNA synthesis in LNCaP cells and rat prostate. Kabler RL, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5-6):431-9
The effects of dihydrotestosterone on the expression of p185(erbB-2) and c-erbB-2 mRNA in the prostatic cell line LNCaP. Myers RB, et al. **J Steroid Biochem Mol Biol** 1996 Dec;59(5-6):441-7
Heterogeneity in androgen receptor levels and growth response to dihydrotestosterone in sublines derived from human hepatocellular carcinoma line (KYN-1). Yu L, et al. **Liver** 1997 Feb;17(1):35-40
Androgen treatment protects mouse liver chromatin from cleavage by endogenous nucleases during aging. Androgen and nuclease activity. Mukherjee S, et al. **Mol Biol Rep** 1995-96;22(1):59-61
Protein kinase C pathway potentiates androgen-mediated gene expression of the mouse vas deferens specific aldose reductase-like protein (MVDP). Fabre S, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):79-86
Hormonal regulation of FHG22 mRNA in Syrian hamster harderian glands: role of estradiol. Varriale B, et al. **Mol Cell Endocrinol** 1996 Nov 29;124(1-2):87-96
Repression of cAMP-induced expression of the mouse P450 17 alpha-hydroxylase/C17-20 lyase gene (Cyp17) by androgens. Burgos-Trinidad M, et al. **Mol Endocrinol** 1997 Jan;11(1):87-96
Regulation of estrogen receptor concentrations in the rat brain: effects of sustained androgen and estrogen exposure. Brown TJ, et al. **Neuroendocrinology** 1996 Jan;63(1):53-60
Androgens selectively modulate C-fos messenger RNA induction in the rat hippocampus following novelty. Kerr JE, et al. **Neuroscience** 1996 Oct;74(3):757-66
Effects of gonadal steroids and their antagonists on the humoral immune response of immune-selected broiler chicks. Leitner G, et al. **Poult Sci** 1996 Nov;75(11):1373-82
Cloning and characterization of TDD5, an androgen target gene that is differentially repressed by testosterone and dihydrotestosterone. Lin TM, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):4988-93
Human prostate tumor growth in athymic mice: inhibition by androgens and stimulation by finasteride. Umekita Y, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11802-7
Effect of 5-alpha dihydrotestosterone on T-cell proliferation

STANOLONE

of the female nonobese diabetic mouse. Toyoda H, et al. **Proc Soc Exp Biol Med** 1996 Dec;213(3):287–93

Coregulatory effects of epidermal growth factor, dihydrotestosterone, and prolactin on benign human prostatic hyperplasia tissue culture proliferation. Janssen T, et al. **Prostate** 1997 Jan 1;30(1):47–52

Effect of sex hormones on the tissue localization of nuclear estrogen receptor positively stained cells in the seminal vesicle of immature castrated rats. Yuasa H, et al. **Tohoku J Exp Med** 1997 Feb;181(2):297–309

THERAPEUTIC USE

The effects of testosterone and dihydrotestosterone on hypothalamic regulation of growth hormone secretion. Eakman GD, et al. **J Clin Endocrinol Metab** 1996 Mar; 81(3):1217–23

Androgen regulation of growth hormone binding protein. Keenan BS, et al. **Metabolism** 1996 Dec;45(12):1521–6

[Treatment of erectile disorders with androgens: When? How?] Tostain J, et al. **Prog Urol** 1997 Apr;7(2):314–9 (18 ref.) (Eng. Abstr.) **(Fre)**

TOXICITY

Effects of estrogenic hormones on early development of Xenopus laevis. Nishimura N, et al. **J Exp Zool** 1997 Jul 1;278(4):221–33

STANOZOLOL

ADVERSE EFFECTS

Manifestation of severe coronary heart disease after anabolic drug abuse. Mewis C, et al. **Clin Cardiol** 1996 Feb; 19(2):153–5

Anticardiolipin (aCL) antibodies in a patient with Behçet's syndrome with vena cava inferior thrombosis. Ebo DG, et al. **Clin Rheumatol** 1997 Jan;16(1):96–8 (15 ref.)

Side effects of long-term prophylaxis with attenuated androgens in hereditary angioedema: comparison of treated and untreated patients. Cicardi M, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):194–6

ANALYSIS

Detection of stanozolol in hair by negative ion chemical ionization mass spectrometry. Höld KM, et al. **J Anal Toxicol** 1996 Oct;20(6):345–49

METABOLISM

Identification of a specific binding site for the anabolic steroid stanozolol in male rat liver microsomes. Boada LD, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1123–9

PHARMACOLOGY

Long-term chronic treatment with stanozolol lacks significant effects on aggression and activity in young and adult male laboratory mice. Martínez-Sanchis S, et al. **Gen Pharmacol** 1996 Mar;27(2):293–8

Effects of the androgenic/anabolic steroid stanozolol on GABAA receptor function: GABA-stimulated 36Cl- influx and [35S] TBPS binding. Masonis AE, et al. **J Pharmacol Exp Ther** 1996 Oct;279(1):186–93

Anabolic steroids and lymphocyte function in sedentary and exercise-trained rats. Ferrández MD, et al. **J Steroid Biochem Mol Biol** 1996 Oct;59(2):225–32

THERAPEUTIC USE

Side effects of long-term prophylaxis with attenuated androgens in hereditary angioedema: comparison of treated and untreated patients. Cicardi M, et al. **J Allergy Clin Immunol** 1997 Feb;99(2):194–6

Effects of short-term stanozolol administration on serum lipoproteins in hepatic lipase deficiency. Bausserman LL, et al. **Metabolism** 1997 Sep;46(9):992–6

[Isometric muscle exercise and anabolic steroid administration for prevention of regressive muscular atrophy] Yamauchi H. **Nippon Seirigaku Zasshi** 1996; 58(7–8):331–40 **(Jpn)**

TOXICITY

Anabolic steroids induce injury and apoptosis of differentiated skeletal muscle. Abu-Shakra S, et al. **J Neurosci Res** 1997 Jan 15;47(2):186–97

URINE

Long-term detection and identification of metandienone and stanozolol abuse in athletes by gas chromatography-high-resolution mass spectrometry. Schänzer W, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):93–108

Gas chromatographic-mass spectrometric identification of main metabolites of stanozolol in cattle after oral and subcutaneous administration. Ferchaud V, et al. **J Chromatogr B Biomed Sci Appl** 1997 Aug 1;695(2):269–77

STAPEDECTOMY see **STAPES SURGERY**

STAPEDIUS

INJURIES

Effects of stapedial arch fractures on conductive hearing loss and stapedial reflexes. Simmons MJ, et al. **Ear Hear** 1996 Dec;17(6):559–63

PATHOLOGY

[Tympanomastoid glomus tumor and persistent stapedial artery] Arellano B, et al. **Acta Otorrinolaringol Esp** 1996 Nov-Dec;47(6):471–3 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Binaural interaction of stapedius reflex. Iguchi Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;524:33–5

Stapedius reflex measurements during surgery for cochlear implantation in children. van den Borne B, et al. **Am J Otol** 1996 Jul;17(4):554–8

SURGERY

Stapedius tendon reconstruction during stapedotomy: technique and results. Causse JB, et al. **Ear Nose Throat J** 1997 Apr;76(4):256–8, 260–9 (29 ref.)

STAPES

Fistula of stapes footplate caused by pulsatile cerebrospinal fluid in inner ear malformation. Hoppe F, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Mar-Apr; 59(2):115–8

ABNORMALITIES

Stapes fixation associated with symphalangia. Ueda H, et al. **Arch Otolaryngol Head Neck Surg** 1996 Oct;122(10):1124–8

Middle ear anomalies induced by hypertriazene administration in the mouse. Takeda Y, et al. **Auris Nasus Larynx** 1996;23:1–12

The autosomal dominant syndrome with congenital stapes ankylosis, broad thumbs and hyperopia. Hilhorst-Hofstee Y, et al. **Clin Dysmorphol** 1997 Jul;6(3):195–203

Possible autosomal recessive inheritance of progressive hearing loss with stapes fixation. Thies C, et al. **J Med Genet** 1996 Jul;33(7):597–9

Congenital absence of stapes and facial nerve dehiscence. Reiber ME, et al. **Otolaryngol Head Neck Surg** 1997 Feb; 116(2):278

[Cochlear implant in inner ear abnormalities and footplate malformation] Weber BP, et al. **Laryngorhinootologie** 1996 Jun;75(6):319–25 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

On the role played by ontogenetic remodeling and functional transformation in the evolution of terrestrial hearing. Fritzsch B. **Brain Behav Evol** 1997 Jul;50(1):38–49 (75 ref.)

INJURIES

Traumatic luxation of the stapes evidenced by high-resolution CT. Herman P, et al. **AJNR Am J Neuroradiol** 1996 Aug;17(7):1242–4

Barotraumatic fracture of the stapes footplate [letter; comment] Lehrer JF. **Am J Otol** 1997 Mar;18(2):266–7. Comment on: Am J Otol 1996 Sep;17(5):697–9.

Barotraumatic fracture of the stapes footplate [see comments] Whinney DJ, et al. **Am J Otol** 1996 Sep;17(5):697–9. Comment in: Am J Otol 1997 Mar;18(2):266–7.

PHYSIOLOGY

Otoacoustic emissions: a new tool for monitoring intracranial pressure changes through stapes displacements. Büki B, et al. **Hear Res** 1996 May;94(1–2):125–39

Acoustic input impedance of the stapes and cochlea in human temporal bones. Merchant SN, et al. **Hear Res** 1996 Aug; 97(1–2):30–45

PHYSIOPATHOLOGY

Sex-related differences in composition of otosclerotic and unafflicted stapes. Rosenberg GD, et al. **Am J Otol** 1996 Sep;17(5):709–12

Barotraumatic fracture of the stapes footplate [see comments] Whinney DJ, et al. **Am J Otol** 1996 Sep;17(5):697–9. Comment in: Am J Otol 1997 Mar;18(2):266–7.

RADIATION EFFECTS

Effects of continuous-wave laser systems on stapes footplate. Jovanovic S, et al. **Lasers Surg Med** 1996;19(4):424–32

RADIOGRAPHY

Normal and opacified middle ears: CT appearance of the stapes and incudostapedial joint. Lemmerling MM, et al. **Radiology** 1997 Apr;203(1):251–6

SURGERY see STAPES SURGERY

TRANSPLANTATION

Allograft stapes surgery for conductive hearing loss in patients with ossicular chain anomalies. Minatogawa T, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):283–6

ULTRASTRUCTURE

[Experimental laser stapedectomy. Scanning electron microscopy studies] Pośpiech L, et al. **Otolaryngol Pol** 1996;50(5):517–23 (Eng. Abstr.) **(Pol)**

STAPES SURGERY

Hearing results in otosclerosis surgery after partial stapedectomy, total stapedectomy and stapedotomy. Persson P, et al. **Acta Otolaryngol (Stockh)** 1997 Jan; 117(1):94–9

Reporting operative hearing results in stapes surgery: does choice of outcome measure make a difference? Berliner KI, et al. **Am J Otol** 1996 Jul;17(4):521–8

Barotrauma after stapes surgery: a survey of recommended restrictions and clinical experiences. Harrill WC, et al. **Am J Otol** 1996 Nov;17(6):835–45; discussion 845–6

Stapedectomy in combat pilots. Katzav J, et al. **Am J Otol** 1996 Nov;17(6):847–9

Stapedectomy in the elderly. Lippy WH, et al. **Am J Otol** 1996 Nov;17(6):831–4

Prosthesis on a mobilized stapes footplate. Lippy WH, et al. **Am J Otol** 1996 Sep;17(5):713–6

A meta-analysis review of revision stapes surgery with argon laser: effectiveness and safety. Wiet RJ, et al. **Am J Otol** 1997 Mar;18(2):166–71

Success in surgery for otosclerosis: hearing improvement and other indicators. Ramsay H, et al. **Am J Otolaryngol** 1997 Jan-Feb;18(1):23–8

Balance after stapedectomy: the measurement of spontaneous sway by posturography. Molony NC, et al. **Clin Otolaryngol** 1996 Aug;21(4):353–6

The influence of fluoridation of drinking water on the long-term hearing results of stapedectomy. Vartiainen E, et al. **Clin Otolaryngol** 1997 Feb;22(1):34–6

Stapes surgery in osteogenesis imperfecta patients. Dieler R, et al. **Eur Arch Otorhinolaryngol** 1997;254(3):120–7

Allograft stapes surgery for conductive hearing loss in patients with ossicular chain anomalies. Minatogawa T, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):283–6

Repair of the ossicular chain with an ionomer cement by an inadequate incus after prior stapes surgery for otosclerosis. Tange RA. **Eur Arch Otorhinolaryngol** 1996; 253(4–5):313–5

The effect of preoperative bone conduction threshold levels on the results of stapes surgery. Vartiainen E, et al. **Eur Arch Otorhinolaryngol** 1995;252(8):459–61

Revision stapedectomy: intraoperative findings, results, and review of the literature. Han WW, et al. **Laryngoscope** 1997 Sep;107(9):1185–92 (24 ref.)

Stapedectomy in patients with small air-bone gaps. Lippy WH, et al. **Laryngoscope** 1997 Jul;107(7):919–22

Stapedectomy in the pediatric patient. Murphy TP, et al. **Laryngoscope** 1996 Nov;106(11):1415–8

Temperature and pressure effects during erbium laser stapedotomy. Pratisto H, et al. **Lasers Surg Med** 1996; 18(1):100–8

Improved hearing results from stapedotomy with myringotomy. McQueen CT, et al. **N C Med J** 1996 May-Jun;57(3):176–8

[First isolation of Bilophila wadsworthia in otitis externa] Schumacher U, et al. **HNO** 1997 Jul;45(7):567–9 (Eng. Abstr.) **(Ger)**

[Otoacoustic emissions (TEOAE and DPOAE) after middle ear operation] Lieberum B, et al. **Laryngorhinootologie** 1996 Jan;75(1):18–22 (Eng. Abstr.) **(Ger)**

[Evolution of the operative technique. The rigid system stapedectomy] Livi W, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2 Suppl 53):13–8 (Eng. Abstr.) **(Ita)**

[Evolution of the operative technique. CO2 laser stapedotomy and stapedoplasty] Motta G, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2 Suppl 53):19–27 (Eng. Abstr.) **(Ita)**

[The small fenestra vs large stapedectomy: comparative evaluation of failures and complications] Motta G, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2 Suppl 53):28–35 (Eng. Abstr.) **(Ita)**

[Stapedotomy vs stapedectomy. Comparison of hearing results] Motta G, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2 Suppl 53):36–41 (Eng. Abstr.) **(Ita)**

[Techniques of iconographic documentation] Motta G, et al. **Acta Otorhinolaryngol Ital** 1996 Apr;16(2 Suppl 53):6–12 (Eng. Abstr.) **(Ita)**

[Experimental laser stapedectomy. Scanning electron microscopy studies] Pośpiech L, et al. **Otolaryngol Pol** 1996;50(5):517–23 (Eng. Abstr.) **(Pol)**

[Results of 769 stapedectomies performed between 1975 and 1993] Perez Obón J, et al. **Acta Otorrinolaringol Esp** 1996 Jul-Aug;47(4):281–6 (Eng. Abstr.) **(Spa)**

[The influence of age and previous thresholds on stapedectomy results] Pérez Obón J, et al. **An Otorrinolaringol Ibero Am** 1996;23(6):623–30 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Hearing loss as a complication of stapes surgery. Mann WJ, et al. **Otolaryngol Head Neck Surg** 1996 Oct;115(4):324–8

[Sensorineural hearing loss caused by middle ear surgery] Sakagami M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1997 Jul;100(7):740–6 (Eng. Abstr.) **(Jpn)**

HISTORY

Reparative granuloma following stapedectomy: a clinical entity. 1967 [classical article] Kaufman RS, et al. **Ann Otol Rhinol Laryngol** 1997 Jan;106(1):5–14

INSTRUMENTATION

Experimental and clinical results of fiberoptic argon laser stapedotomy. Häusler R, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):193–200

[Thermal stress on the inner ear in laser stapedotomy] Jovanovic S, et al. **HNO** 1996 Jan;44(1):6–13 (Eng. Abstr.) **(Ger)**

[Lasers in ear surgery] Nagel D. **HNO** 1996 Oct;44(10):553–4 **(Ger)**

METHODS

Stapes surgery: results when performing a moderate number of stapedectomies. Puls T. **Acta Otorhinolaryngol Belg** 1997; 51(1):23–5

Stapedectomy vs stapedotomy. Do you really need a laser? Sedwick JD, et al. **Arch Otolaryngol Head Neck Surg** 1997 Feb;123(2):177–80

Physiological reconstruction of defects of the incus long process. Mills RP. **Clin Otolaryngol** 1996 Dec;21(6):499–503

Stapedius tendon reconstruction during stapedotomy: technique and results. Causse JB, et al. **Ear Nose Throat J** 1997 Apr;76(4):256–8, 260–9 (29 ref.)

Revision stapes surgery. Somers T, et al. **J Laryngol Otol** 1997 Mar;111(3):233–9

Effects of continuous-wave laser systems on stapes footplate. Jovanovic S, et al. **Lasers Surg Med** 1996;19(4):424–32

The Er:YAG laser in ear surgery: first clinical results. Nagel D. **Lasers Surg Med** 1997;21(1):79–87

An automatic technique for micro-drilling a stapedotomy in the flexible stapes footplate. Brett PN, et al. **Proc Inst Mech Eng [H]** 1995;209(4):255–62

STATISTICS & NUMERICAL DATA

From posterior crus stapedectomy to 0.6 mm stapedotomy--towards reliability in otosclerosis surgery. Laitakari K, et al. **Acta Otolaryngol Suppl (Stockh)** 1997; 529:50–2

TRENDS

Current practice of stapedectomy in Great Britain. Zeitoun H, et al. **Clin Otolaryngol** 1993 Oct;18(5):392–5

STAPHYLOCOAGULASE see **COAGULASE**

STAPHYLOCOCCAL CLUMPING FACTOR see **COAGULASE**

STAPHYLOCOCCAL FOOD POISONING

DIAGNOSIS

Immunoenzymatic detection of staphylococcal enterotoxins: international interlaboratory study. Lapeyre C, et al. **J AOAC Int** 1996 Sep-Oct;79(5):1095–101

EPIDEMIOLOGY

[An outbreak of food poisoning at a children's rest base] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug; (4):120–1 concl **(Rus)**

[Food poisoning in a boarding school] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug; (4):121–2 concl **(Rus)**

MICROBIOLOGY

Enterotoxin production by staphylococci isolated from foods in France. Rosec JP, et al. **Int J Food Microbiol** 1997 Apr 15;35(3):213–21

STAPHYLOCOCCAL INFECTIONS

see related

CROSS INFECTION

Effects of toxic shock syndrome toxin-1 and a site-directed mutant, H135A, in mice. Stiles BG, et al. **Adv Exp Med Biol** 1996;391:245–50

MR of multiple intraspinal abscesses associated with congenital dermal sinus. Dev R, et al. **AJNR Am J Neuroradiol** 1997 Apr;18(4):742–3

Penetration of the atrialventricular septum by spread of infection from aortic valve endocarditis: early diagnosis by transesophageal echocardiography and implications for surgical management. Barbour SI, et al. **Am Heart J** 1996 Dec;132(6):1287–9

Staphylococcus aureus bloodstream infections among patients undergoing electroconvulsive therapy traced to breaks in infection control and possible extrinsic contamination by propofol. Kuehnert MJ, et al. **Anesth Analg** 1997 Aug;85(2):420–5

Pyomyositis revisited. Kong NC, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):609–11

Coagulase-negative staphylococcal sternal wound infections after open heart operations. Mossad SB, et al. **Ann Thorac Surg** 1997 Feb;63(2):395–401

Guinea pig model for Staphylococcus aureus native valve endocarditis. Maurin M, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1815–7

Endocarditis after angiography and angioplasty of a subclavian artery stenosis. Casson RJ, et al. **Aust N Z J Surg** 1997 May;67(5):306–8

Reactive arthritis, beta-haemolytic Streptococcus and Staphylococcus aureus [letter] [see comments] Leitch DN, et al. **Br J Rheumatol** 1996 Sep;35(9):912. Comment in: Br J Rheumatol 1997 May;36(5):606–7.

Primary psoas abscess--diagnostic and therapeutic considerations. Thomas A, et al. **Br J Urol** 1996 Sep; 78(3):358–60

Images in cardiovascular medicine. Mycotic aneurysm of the descending thoracic aorta. Oxorn D, et al. **Circulation** 1997 Apr 1;95(7):1972–3

Blocking of TNF-alpha and IL-1 inhibits leukocyte infiltration at early, but not at late stage of S. aureus-induced arthritis and the concomitant cartilage destruction in rabbits. Kimura M, et al. **Clin Immunol Immunopathol** 1997 Jan;82(1):18–25

The progressive intercontinental spread of methicillin-resistant Staphylococcus aureus. Ayliffe GA. **Clin Infect Dis** 1997 Jan;24 Suppl 1:S74–9 (60 ref.)

Nasal carriage of Staphylococcus aureus: epidemiology, underlying mechanisms, and associated risks. Kluytmans J, et al. **Clin Microbiol Rev** 1997 Jul;10(3):505–20 (218 ref.)

Management of staphylococcal and streptococcal infections. Tan JS, et al. **Clin Podiatr Med Surg** 1996 Oct;13(4):793–816 (56 ref.)

Brodie's abscess of the ilium and fifth lumbar vertebra. case reports. Lindsetmo RO, et al. **Eur J Surg** 1995 Dec; 161(12):928–30

Acute MRI changes in infectious discitis: report on two cases. Schindler OS, et al. **Eur Spine J** 1995;4(6):360–1

Pre-septal cellulitis--varied clinical presentations. Rao VA, et al. **Indian J Ophthalmol** 1996 Dec;44(4):225–7

Disseminated staphylococcal disease. Kabra SK, et al. **Indian Pediatr** 1996 Aug;33(8):683–5

Tricuspid valve endocarditis in a child with structurally normal heart. Karthikeyan G, et al. **Indian Pediatr** 1996 Aug;33(8):692–4

Successful treatment of Staphylococcus lugdunensis endocarditis complicated by multiple emboli: a case report and review of the literature. Koh TW, et al. **Int J Cardiol** 1996 Jul 26;55(2):193–7 (18 ref.)

A severe infection following endoscopic carpal tunnel release. Rieger H, et al. **J Hand Surg [Br]** 1996 Oct; 21(5):672–4

Characterization of a rabbit model of staphylococcal osteomyelitis. Smeltzer MS, et al. **J Orthop Res** 1997 May; 15(3):414–21

Disseminated pyomyositis with high creatine phosphokinase levels. Kuyucu N, et al. **J Paediatr Child Health** 1997 Jun; 33(3):262–3

Caval thrombectomy for severe staphylococcal osteomyelitis. Smith L, et al. **J Pediatr Surg** 1997 Jan;32(1):112–4

The resonant shoulder; gas abscess of the deltoid bursa. Bowditch MG, et al. **J Shoulder Elbow Surg** 1997 Jan–Feb; 6(1):70–1

Infective endocarditis. Considerations for the timing of surgical intervention and type of infecting microorganism. Yamauchi S, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb; 64(1):16–21

Left ventricular pseudoaneurysm: an unusual complication of pericarditis and Staphylococcus aureus septicemia. Campos MM, et al. **Pediatr Infect Dis J** 1996 Apr; 15(4):380–2

Staphylococcus aureus endocarditis associated with varicella infection in children. Gold LC, et al. **Pediatr Infect Dis J** 1996 Apr;15(4):377–9

Complications associated with the use of the Swan neck presternal catheter: a case report [letter] Warchol S, et al. **Perit Dial Int** 1997 May-Jun;17(3):309

[Intravenous withdrawal of infected cardiac pacemaker electrodes. Apropos of 5 cases] Schläpfer J, et al. **Ann Cardiol Angeiol (Paris)** 1996 Jun;45(6):321–4 (Eng. Abstr.) **(Fre)**

[Lumbar interapophyseal septic arthritis. Apropos of 3 cases] Douvrin F, et al. **J Neuroradiol** 1996 Dec;23(4):234–40 (Eng. Abstr.) **(Fre)**

[Presence of a monoclonal component IgG lambda in a 17-day-old newborn with omphalitis caused by Staphylococcus aureus] Camerotto A, et al. **Pediatr Med Chir** 1997 Mar-Apr;19(2):129–31 (Eng. Abstr.) **(Ita)**

[A case of toxic shock syndrome associated with atopic dermatitis] Kubo M, et al. **Arerugi** 1996 Nov;45(11):1185–9 **(Jpn)**

[Studies on cerebrospinal fluid penetration of cefpirome in adult with meningitis] Munemoto S, et al. **Jpn J Antibiot** 1996 Jun;49(6):658–62 (Eng. Abstr.) **(Jpn)**

[A case of hepatocellular carcinoma complicated with psoas abscess] Tanaka Y, et al. **Kansenshogaku Zasshi** 1997 Feb; 71(2):175–8 (Eng. Abstr.) **(Jpn)**

[A case report of active infectious endocarditis caused by MRSA with chronic renal failure] Egoh Y, et al. **Kyobu Geka** 1996 Jul;49(8 Suppl):677–9 (Eng. Abstr.) **(Jpn)**

[A curative report of multiple organ dysfunction syndrome and disseminated intravascular coagulation due to methicillin-resistant Staphylococcus aureus caused mediastinitis after cardiac surgery] Gu K, et al. **Kyobu Geka** 1997 Feb;50(2):150–3 (Eng. Abstr.) **(Jpn)**

[A case report of an infective endocarditis caused by methicillin-resistant Staphylococcus aureus with successful mitral valve replacement] Kawahira T, et al. **Kyobu Geka** 1996 Jul;49(8 Suppl):680–3 (Eng. Abstr.) **(Jpn)**

[A case of toxic shock syndrome induced by MRSA after sinus surgery] Nakayama M, et al. **Masui** 1996 Aug; 45(8):994–7 (Eng. Abstr.) **(Jpn)**

[The role of capsule in staphylococcal infection and immunity] Ichiman Y. **Nippon Saikingaku Zasshi** 1996 Feb; 51(2):601–11 (15 ref.) **(Jpn)**

[Bilateral abscess of cavernous bodies] Fernández Goméz JM, et al. **Actas Urol Esp** 1997 Jan;21(1):75–7 (Eng. Abstr.) **(Spa)**

[Cellulitis and lymphangitis caused by Staphylococcus lugdunensis (letter)] Gómez-Rodríguez N, et al. **Enferm Infecc Microbiol Clin** 1996 Aug-Sep;14(7):457 **(Spa)**

[Cesarean scar abscess caused by Staphylococcus lugdunensis (letter)] Uriel JA, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):631–2 **(Spa)**

BLOOD

Clinical isolates of Staphylococcus aureus have osteolytic surface proteins and a proportion of the population have antibodies that block this activity: is this of prognostic significance? Nair SP, et al. **Br J Rheumatol** 1997 Mar; 36(3):328–32

Phenotypic detection of mec A-positive staphylococcal blood stream isolates: high accuracy of simple disk diffusion tests. Cormican MG, et al. **Diagn Microbiol Infect Dis** 1996 Jul;25(3):107–12

Comparison of commercial slide agglutination kits with a tube coagulase test for the rapid identification of Staphylococcus aureus from blood culture. Cooke RP, et al. **J Clin Pathol** 1997 Feb;50(2):164–6

[The enzyme activity and pyruvate, lactate and 2,3-DPG levels in the erythrocytes of patients with severe forms of meningococcal infection and suppurative meningitis] Martynov VA, et al. **Ter Arkh** 1996;68(2):60–2 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Epidemiology of methicillin-resistant Staphylococcus aureus in a Warsaw hospital. Młynarczyk G, et al. **J Hosp Infect** 1996 Oct;34(2):151–60

COMPLICATIONS

Septic symphysial disruption presenting as severe symphysiolysis in pregnancy. Magnúsdóttir R, et al. **Acta Obstet Gynecol Scand** 1996 Aug;75(7):681–2

Neurologic manifestations in Staphylococcus aureus endocarditis: a review of 260 bacteremic cases in nondrug addicts. Røder BL, et al. **Am J Med** 1997 Apr;102(4):379–86

Metastatic abscess formation of the pelvis. Bauze AJ, et al. **Aust N Z J Surg** 1997 Sep;67(9):668–9

Association of erythrodermic cutaneous T-cell lymphoma, superantigen-positive Staphylococcus aureus, and oligoclonal T-cell receptor V beta gene expansion [see comments] [published erratum appears in Blood 1997 May 1;89(9):3496] Jackow CM, et al. **Blood** 1997 Jan 1; 89(1):32–40. Comment in: Blood 1997 Jul 1;90(1):472–3.

The suprapharmacologic dosing of antithrombin concentrate for Staphylococcus aureus-induced disseminated intravascular coagulation in guinea pigs: substantial reduction in mortality and morbidity. Kessler CM, et al. **Blood** 1997 Jun 15;89(12):4393–401

Unusual development of granulomas on the healing surface of burn wounds associated with MRSA infections. Gang RK, et al. **Burns** 1996 Feb;22(1):57–61

Septic cardioembolic choroidopathy. Sharma S, et al. **Can J Ophthalmol** 1997 Feb;32(1):42–5

Delayed presentation of a mitral annular perforation complicating Staphylococcus aureus infective endocarditis [letter; comment] Baumgartner F, et al. **Clin Cardiol** 1996 Aug;19(8):605. Comment on: Clin Cardiol 1992 Oct;15(10):777–80.

Septic arthritis of the sternoclavicular joint. George S, et al. **Clin Infect Dis** 1995 Dec;21(6):1525–6

Infective endocarditis in injection drug users: importance of human immunodeficiency virus serostatus and degree of immunosuppression. Pulvirenti JJ, et al. **Clin Infect Dis** 1996 Jan;22(1):40–5

Invasive staphylococcal infections complicating percutaneous transluminal coronary angioplasty. Shea KW, et al. **Clin Infect Dis** 1996 Mar;22(3):601

Clinical significance of staphylococcus aureus bacteriuria without concurrent bacteremia. Sheth S, et al. **Clin Infect Dis** 1997 Jun;24(6):1268–9

Lumbar facet joint infection associated with epidural and paraspinal abscess. Baltz MS, et al. **Clin Orthop** 1997 Jun; (339):109–12

Reactive arthritis by staphylococcus epidermidis: report of an unusual case. Giordano N, et al. **Clin Rheumatol** 1996 Jan;15(1):59–61

A case of infective endocarditis complicated with anterior mitral valve leaflet abscess [letter] Kumbasar SD, et al.

Eur Heart J 1997 Jul;18(7):1194–5

Spontaneous obliteration of a pseudo–aneurysm complicating an aortic homograft. Federmann M, et al. **Eur J Cardiothorac Surg** 1996;10(8):705–6 (5 ref.)

Nosocomial bacteremia due to vancomycin–resistant Staphylococcus epidermidis in four patients with cancer, neutropenia, and previous treatment with vancomycin [letter] Krcmery V Jr, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar;15(3):259–61

Staphylococcal scalded skin syndrome in an immunocompromised adult. Roeb E, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jun;15(6):499–503

Splenic abscess associated with osteomyelitis. Yelon JA, et al. **Eur J Surg** 1996 Nov;162(11):913–4

Association between Wegener's granulomatosis and Staphylococcus aureus infection? van Putten JW, et al. **Eur Respir J** 1996 Sep;9(9):1955–7

Brucellosis of the spine with a synchronous Staphylococcus aureus pyogenic elbow infection. Velan GJ, et al. **Eur Spine J** 1997;6(4):284–5

Bacterial toxins and sudden unexpected death in a young child. Bentley AJ, et al. **Forensic Sci Int** 1997 Aug 4; 88(2):141–6

Urticaria––an unusual presentation of staphylococcemia [letter; comment] Jayaraman TP. **Indian Pediatr** 1996 Jan; 33(1):76. Comment on: Indian Pediatr 1995 Sep;32(9):1005–7.

Severe pancreatitis as first symptom of mumps complicated with pseudocyst and abscess of pancreas. Sušković T, et al. **Infection** 1997 Jan–Feb;25(1):39–40

Syndrome of inappropriate secretion of antidiuretic hormone in elderly patients with rheumatoid arthritis associated with infections: report of two cases. Furuta E, et al. **Intern Med** 1996 Jun;35(6):478–81

Septic microemboli in a Janeway lesion of bacterial endocarditis [published erratum appears in J Am Acad Dermatol 1997 May;36(5 Pt 1):696] Vinson RP, et al. **J Am Acad Dermatol** 1996 Dec;35(6):984–5

Oral staphylococcus in older subjects with rheumatoid arthritis. Jacobson JJ, et al. **J Am Geriatr Soc** 1997 May; 45(5):590–3

Surgical management of endocarditis–induced aorto–atrial and aorto–ventricular fistula: a new technique. Gharagozloo F, et al. **J Cardiovasc Surg (Torino)** 1997 Apr; 38(2):131–5

Increasing frequency of vertebral osteomyelitis following Staphylococcus aureus bacteraemia in Denmark 1980–1990. Jensen AG, et al. **J Infect** 1997 Mar;34(2):113–8

Nontropical pyomyositis in patients with AIDS. Antony SJ, et al. **J Natl Med Assoc** 1996 Sep;88(9):565–9 (45 ref.)

Secondary rupture of a common iliac artery aneurysm after endovascular exclusion and stent–graft infection [letter] Kolvenbach R, et al. **J Vasc Surg** 1997 Aug;26(2):351–3

Reconstruction of the mitral annulus with porcine pericardium––report of a case with mitral annular disruption due to staphylococcal endocarditis. Aoyagi S, et al. **Jpn Circ J** 1996 Apr;60(4):258–61

Induction of glomerulonephritis in rats with staphylococcal phosphatase: new aspects in post–infectious ICGN. Yousif Y, et al. **Kidney Int** 1996 Jul;50(1):290–7

Concomitant crystal and septic arthritis. Ilahi OA, et al. **Orthopedics** 1996 Jul;19(7):613–7 (31 ref.)

Staphylococcal tracheitis, pneumonia, and adult respiratory distress syndrome. Horowitz IN. **Pediatr Emerg Care** 1996 Aug;12(4):288–90 (14 ref.)

Simultaneous presentation of Kawasaki disease and toxic shock syndrome in an adolescent male [see comments] Davies HD, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1136–8 (14 ref.). Comment in: Pediatr Infect Dis J 1997 Jun;16(6):633–4.

Staphylococcus aureus dissemination to a preexisting subdural hematoma [letter] [see comments] Levy I, et al. **Pediatr Infect Dis J** 1996 Dec;15(12):1139–40. Comment in: Pediatr Infect Dis J 1997 May;16(5):539.

Perforation of the aorta associated with Staphylococcus aureus endocarditis. Martínez–Roig A, et al. **Pediatr Infect Dis J** 1997 Aug;16(8):821–3

Nonmenstrual toxic shock syndrome in a young child with human immunodeficiency virus infection. Shah A, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):639–41 (12 ref.)

Shoulder pain and pyrexia following subclavian line insertion. Carpenter MR, et al. **Postgrad Med J** 1997 Feb; 73(856):119–20

Septicaemia and abdominal distension. Farrand S, et al. **Postgrad Med J** 1996 Sep;72(851):567–74

Pyrexia and breathlessness in a patient with a cardiac pacemaker. Lim AG, et al. **Postgrad Med J** 1996 Sep; 72(851):571–2

Native–valve endocarditis caused by Staphylococcus lugdunensis. Lessing MP, et al. **QJM** 1996 Nov; 89(11):855–8

Methicillin–resistant Staphylococcus aureus: a four–year experience in a spinal cord injury unit in Spain. Olona–Cabases M, et al. **Spinal Cord** 1996 Jun;34(6):315–9

Pyogenic liver abscesses and acute schistosomiasis mansoni: report on 3 cases and experimental study. Teixeira R, et al. **Trans R Soc Trop Med Hyg** 1996 May–Jun;90(3):280–3

[Prolonged apnea after suxamethonium administration during staphylococcal toxic shock] Blanloeil Y, et al. **Ann Fr Anesth Reanim** 1996;15(2):189–91 (Eng. Abstr.) **(Fre)**

[Surfactant administration and laterally independent positive pressure ventilation in acute lung failure and atelectasis after septic abortion. Case report] Hoheisel G, et al. **Pneumologie** 1997 Mar;51(3):270–3 (Eng. Abstr.) **(Ger)**

[Purulent pericarditis] Evron E, et al. **Harefuah** 1996 May 1;130(9):602–3, 655 (Eng. Abstr.) **(Heb)**

[A SLE case with toxic shock syndrome after delivery] Kadoya A, et al. **Kansenshogaku Zasshi** 1996 Dec; 70(12):1279–83 (Eng. Abstr.) **(Jpn)**

[A case of toxic shock syndrome (TSS) induced by methicillin–resistant staphylococcus aureus (MRSA) presenting as acute renal failure with disseminated intravascular coagulation] Fukuuchi F, et al. **Nippon Jinzo Gakkai Shi** 1996 Jan;38(1):27–32 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Application of extracorporeal membrane oxygenation for respiratory failure following septic pulmonary emboli] Kiyama H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Oct;44(10):1912–6 (Eng. Abstr.) **(Jpn)**

[Hydronephrosis in the course of primary psoas abscess] Magier K, et al. **Pol Merkuriusz Lek** 1997 Jan;2(7):44–5 (Eng. Abstr.) **(Pol)**

[Inflammatory aneurysm of aortic arch with perforation to the right auricle as complication of endocarditis by Staphylococcus aureus (letter)] Rubio Barbón S, et al. **An Med Interna** 1996 Dec;13(12):612–3 **(Spa)**

[Sudden death as the presenting form of an infectious pathology in the emergency service letter)] García–Forcada A, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):515 **(Spa)**

[Community–acquired cavitating pneumonia in a HIV–infected patient [letter] Morano LE, et al. **Enferm Infecc Microbiol Clin** 1995 Dec;13(10):633–4 **(Spa)**

[Eustachian valve endocarditis produced by Staphylococcus hominis in a patient with HIV infection (letter)] Navarro V, et al. **Rev Clin Esp** 1996 Aug;196(8):572–3 **(Spa)**

[Subacute thyroiditis and concurrent suppurative thyroiditis in one case] Foncea L, et al. **Rev Med Chil** 1996 Apr; 124(4):465–8 (Eng. Abstr.) **(Spa)**

CONGENITAL

Ilio–psoas abscess in the neonate. Lucas AP, et al. **Eur J Pediatr Surg** 1997 Jun;7(3):186–7

DIAGNOSIS

MR of staphylococcal myelitis of the cervical spinal cord. Friess HM, et al. **AJNR Am J Neuroradiol** 1997 Mar; 18(3):455–8

Rapid detection of the staphylococcal mecA gene from BACTEC blood culture bottles by the polymerase chain reaction. Carroll KC, et al. **Am J Clin Pathol** 1996 Nov; 106(5):600–5

Laboratory tests in evaluation of acute febrile illness in pediatric emergency room patients. Procop GW, et al. **Am J Clin Pathol** 1997 Jan;107(1):114–21

Evaluation of acute renal failure in bacterial allograft pyelonephritis using abdominal CT and graft biopsy. Yang CW, et al. **Am J Nephrol** 1997;17(1):42–5

Rapid diagnosis of methicillin–resistant Staphylococcus aureus bacteremia by nested polymerase chain reaction. Kitagawa Y, et al. **Ann Surg** 1996 Nov;224(5):665–71

The major 20–kDa polysaccharide of Staphylococcus epidermidis extracellular slime and its antibodies as powerful agents for detecting antibodies in blood serum and differentiating among slime–positive and –negative S. epidermidis and other staphylococci species. Karamanos NK, et al. **Arch Biochem Biophys** 1997 Jun 15;342(2):389–95

Blood culture volume and detection of coagulase negative staphylococcal septicaemia in neonates. Jawaheer G, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jan;76(1):F57–8

A diabetic with a chronic foot problem. Golledge C. **Aust Fam Physician** 1997 Feb;26(2):182

Septic arthritis of the hip in children. Mc Gaughey I. **Aust Fam Physician** 1997 Feb;26(2):158–60

Staphylococcus lugdunensis endocarditis [letter] Waterer G, et al. **Aust N Z J Med** 1997 Feb;27(1):84–5

Comment on the article 'Reactive arthritis, beta–haemolytic Streptococcus and Staphylococcus aureus' by D. N. Leitch and C. D. Holland [letter; comment] Braun J, et al. **Br J Rheumatol** 1997 May;36(5):606–7. Comment on: Br J Rheumatol 1996 Sep;35(9):912.

Persistence of Staphylococcus aureus as detected by polymerase chain reaction in the synovial fluid of a patient with septic arthritis. Canvin JM, et al. **Br J Rheumatol** 1997 Feb;36(2):203–6

Diagnosis of bacterial contact lens related keratitis with the white–light confocal microscope. Kaufman SC, et al. **CLAO J** 1996 Oct;22(4):274–7

Prosthetic joint infection due to Staphylococcus aureus after use of a steroid nasal inhaler. Hawley HB, et al. **Clin Infect Dis** 1996 Oct;23(4):837–9

The positive predictive value of isolating coagulase–negative staphylococci from blood cultures [see comments] Herwaldt LA, et al. **Clin Infect Dis** 1996 Jan;22(1):14–20 . Comment in: Clin Infect Dis 1996 Aug;23(2):412. Comment in: Clin Infect Dis 1996 Aug;23(2):413–4.

Defining true bacteremia due to coagulase–negative staphylococci [letter; comment] Johnson JR. **Clin Infect Dis** 1996 Aug;23(2):413–4. Comment on: Clin Infect Dis 1996 Jan;22(1):14–20.

Bilateral staphylococcal axillary lymphadenitis in a man with AIDS. Kaur B, et al. **Clin Infect Dis** 1996 Oct;23(4):840–1

Lack of predictive value of isolating coagulase–negative staphylococci from blood cultures [letter; comment] Khatib R. **Clin Infect Dis** 1996 Aug;23(2):412. Comment on: Clin Infect Dis 1996 Jan;22(1):14–20.

Spontaneous pyomyositis due to Staphylococcus epidermidis. Yates SW, et al. **Clin Infect Dis** 1997 May;24(5):1016–7

Pyomyositis as a nontropical disease. Harbarth SJ, et al. **Curr Clin Top Infect Dis** 1997;17:37–50 (74 ref.)

Coagulase–negative staphylococcal infections: an update regarding recognition and management. Rupp ME. **Curr Clin Top Infect Dis** 1997;17:51–87 (261 ref.)

A case of carbuncle caused by a catalase–negative strain of staphylococcus aureus. Lee N, et al. **Diagn Microbiol Infect Dis** 1996 Apr;24(4):221–3

Investigation of nosocomial infection caused by arbekacin–resistant, methicillin–resistant Staphylococcus aureus. Obayashi Y, et al. **Diagn Microbiol Infect Dis** 1997 Jun;28(2):53–9

Sternoclavicular joint septic arthritis with small–colony variant Staphylococcus aureus. Spearman P, et al. **Diagn Microbiol Infect Dis** 1996 Sep;26(1):13–5

A case of infective endocarditis complicated with anterior mitral valve leaflet abscess [letter] Kumbasar SD, et al. **Eur Heart J** 1997 Jun;18(6):1035–6

Staphylococcus aureus nasal carriage as a marker for subsequent staphylococcal infections in intensive care unit patients. Corbella X, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):351–7

Evaluation of a commercial test kit for rapid detection of Staphylococcus aureus in blood cultures. Neyret C, et al. **Eur J Clin Microbiol Infect Dis** 1997 Feb;16(2):165–6

Prostatic abscesses in sub–Saharan Africa: a hospital–based experience from Cameroon. Angwafo FF 3rd, et al. **Eur Urol** 1996;30(1):28–33

Spinal epidural abscess: the nurse's role in early detection and intervention. Hoppe B. **Heart Lung** 1996 Nov–Dec; 25(6):463–6 (34 ref.)

Urticaria––an unusual presentation of staphylococcemia [see comments] Yadav TP, et al. **Indian Pediatr** 1995 Sep; 32(9):1005–7. Comment in: Indian Pediatr 1996 Jan;33(1):76.

Acute Staphylococcal myocarditis masquerading as an acute myocardial infarction. Raev D. **Int J Cardiol** 1997 Jun 27; 60(1):95–8

Cerebral abscesses in a patient with AIDS caused by methicillin–resistant Staphylococcus aureus (MRSA). Smith NP, et al. **Int J STD AIDS** 1997 Jul;8(7):459–60

Tropical pyomyositis presenting as sciatica in Wicklow [letter] Kane D, et al. **Ir Med J** 1997 Jun–Jul;90(4):155

A case of muscle abscess presenting to an accident and emergency department. Howell MA, et al. **J Accid Emerg Med** 1997 May;14(3):180–2 (22 ref.)

HIV–associated staphylococcal pyomyositis. Hamide A, et al. **J Assoc Physicians India** 1995 Jan;43(1):63–5

Species–specific and ubiquitous DNA–based assays for rapid identification of Staphylococcus epidermidis. Martineau F, et al. **J Clin Microbiol** 1996 Dec;34(12):2888–93

Radiology case of the month. Paraspinal mass lesion. Pyogenic infection of the spine caused by Staphylococcus aureus. Neitzschman HR. **J La State Med Soc** 1996 Jul; 148(7):285–6

Acute non–tuberculous retropharyngeal abscess in an adult. A case report and review of the literature. Karkanevatos A, et al. **J Laryngol Otol** 1997 Feb;111(2):169–71 (9 ref.)

Toxic shock syndrome without rash in a young child: link with syndrome of hemorrhagic shock and encephalopathy? Van Lierde S, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):130–4

Pyomyositis: clinical features and predisposing conditions. Patel SR, et al. **J Rheumatol** 1997 Sep;24(9):1734–8 (61 ref.)

Pustules and bacteraemia. Liu JW, et al. **Lancet** 1997 Sep 20;350(9081):860

Clinical problem–solving. Where did good old clinical diagnosis go? Rozenman Y, et al. **N Engl J Med** 1997 May 15;336(20):1435–8

Tropical pyomyositis in a temperate climate: a case report. Simmers TA, et al. **Neth J Med** 1996 Aug;49(2):86–9

MRI of pituitary abscess: two cases and review of the literature. Wolansky LJ, et al. **Neuroradiology** 1997 Jul; 39(7):499–503 (35 ref.)

Sonication: a useful adjunct to the microbial assessment of central venous catheters. Cozzaglio L, et al. **Nutrition** 1997 Jan;13(1):37–9

Index of suspicion. Case 3. Toxic shock syndrome. Pandit S. **Pediatr Rev** 1996 Sep;17(9):319, 321–2

Fever and a rash. Jeffery KJ, et al. **Postgrad Med J** 1997 Jun;73(860):329–31

Low–grade spinal epidural infection. Report of a case. Berthelot JM, et al. **Rev Rhum Engl Ed** 1996 Jan; 63(1):59–61 (17 ref.)

False left ventricular aneurysm with ventriculo–bronchial fistula and massive haemoptysis. Camero LG, et al. **Scand Cardiovasc J** 1997;31(2):117–9

Case of the season. Pyomyositis of the left short head of the biceps femoris. Breen DJ, et al. **Semin Roentgenol** 1997 Jan;32(1):4–6

Procalcitonin: a new marker for differential diagnosis of acute rejection and bacterial infection in heart transplantation. Staehler M, et al. **Transplant Proc** 1997 Feb–Mar; 29(1–2):584–5

[Clinical judgment and decision making in clinical practice. A patient with fever and neck pain (clinical conference)

(see comments)] Gans RO, et al.
Ned Tijdschr Geneeskd 1996 Oct 26;140(43):2122-7. Comment in: Ned Tijdschr Geneeskd 1996 Dec 21;140(51):2588. **(Dut)**

[17-year-old patient with whole body erythema, fever, compensated renal failure, thrombocytopenia and increase creatine kinase. Toxic shock syndrome] Wieneke U, et al.
Internist (Berl) 1997 Mar;38(3):251-4 **(Ger)**

[Staphylococcus-associated blepharokeratoconjunctivitis. Clinical findings, pathogenesis and therapy] Tetz MR, et al. **Ophthalmologe** 1997 Mar;94(3):186-90 (Eng. Abstr.) **(Ger)**

[Spinal epidural empyemas] Evangelista T, et al.
Acta Med Port 1995 Nov;8(11):643-7 (Eng. Abstr.) **(Por)**

[The diagnostic difficulties in a current course of infectious endocarditis] Butkevich OM, et al. **Ter Arkh** 1996; 68(8):21-4 (Eng. Abstr.) **(Rus)**

[Suppurative pericarditis in patients with terminal kidney failure] Markina EA, et al. **Ter Arkh** 1996;68(4):83-5 **(Rus)**

[The construction of a diagnostic model for the differentiation of resident and transient staphylococcal microflora in bacterial carriage] Bukharin OV, et al.
Zh Mikrobiol Epidemiol Immunobiol 1996 May-Jun; (3):68-70 (Eng. Abstr.) **(Rus)**

[Non-specific sacroiliitis] Poleksić Z, et al.
Acta Chir Iugosl 1995;42(1):55-8 (Eng. Abstr.) **(Ser)**

[Tricuspid endocarditis on the native valve by Staphylococcus hominis (letter; comment)] Alonso Claudio G, et al. **Med Clin (Barc)** 1997 Jan 11;108(1):35-6. Comment on: Med Clin (Barc) 1995 Apr 8;104(13):493-9. **(Spa)**

[The characteristics of the clinical manifestations of brain edema and swelling in bacterial meningoencephalitis] Iarosh O. **Lik Sprava** 1995 Mar-Apr;(3-4):104-7 (Eng. Abstr.) **(Ukr)**

DRUG THERAPY

Managing methicillin-resistant Staphylococcus aureus in hospital: the balance of risk. Stone SP. **Age Ageing** 1997 May;26(3):165-8 (45 ref.)

Validity of Bayesian forecasting programme in therapeutic drug monitoring of vancomycin in a surgical intensive care unit: a prospective evaluation. Balram C, et al.
Ann Acad Med Singapore 1996 Jul;25(4):492-5

Effectiveness of cloxacillin with and without gentamicin in short-term therapy for right-sided Staphylococcus aureus endocarditis. A randomized, controlled trial. Ribera E, et al. **Ann Intern Med** 1996 Dec 15;125(12):969-74

Treatment of vancomycin-resistant staphylococcal infections. Christensen KJ, et al. **Ann Pharmacother** 1996 Mar;30(3):288-90

Vancomycin-induced thrombocytopenia: a challenge and rechallenge. Howard CE, et al. **Ann Pharmacother** 1997 Mar;31(3):315-8

Assessment of the palatability of antistaphylococcal antibiotics in pediatric volunteers. Matsui D, et al.
Ann Pharmacother 1996 Jun;30(6):586-8

Methicillin-resistant Staphylococcus aureus infection in hospital staff [letter] McLaughlin MJ, et al.
Ann Plast Surg 1997 Jan;38(1):83

Efficacies of ofloxacin, rifampin, and clindamycin in treatment of Staphylococcus aureus abscesses and correlation with results of an in vitro assay of intracellular bacterial killing. Bamberger DM, et al.
Antimicrob Agents Chemother 1997 May;41(5):1178-81

Antibiotic-impregnated heart valve sewing rings for treatment and prophylaxis of bacterial endocarditis. Cimbollek M, et al. **Antimicrob Agents Chemother** 1996 Jun; 40(6):1432-7

Efficacy of sparfloxacin and autoradiographic diffusion pattern of [14C]Sparfloxacin in experimental Staphylococcus aureus joint prosthesis infection. Crémieux AC, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2111-6

Levofloxacin versus ciprofloxacin, flucloxacillin, or vancomycin for treatment of experimental endocarditis due to methicillin-susceptible or -resistant Staphylococcus aureus. Entenza JM, et al.
Antimicrob Agents Chemother 1997 Aug;41(8):1662-7

Importance of penicillinase production for activity of penicillin alone or in combination with sulbactam in experimental endocarditis due to methicillin-resistant Staphylococcus aureus. Fantin B, et al.
Antimicrob Agents Chemother 1996 May;40(5):1219-24

Treatment of Staphylococcus aureus catheter-related infection and infective endocarditis with granulocyte colony-stimulating factor in the experimental rabbit model. Frank U, et al. **Antimicrob Agents Chemother** 1996 May; 40(5):1308-10

In vivo efficacies of levofloxacin and ciprofloxacin in acute murine hematogenous pyelonephritis induced by methicillin-susceptible and-resistant Staphylococcus aureus strains. Frosco MB, et al.
Antimicrob Agents Chemother 1996 Nov;40(11):2529-34

Ampicillin-sulbactam is effective in prevention and therapy of experimental endocarditis caused by beta-lactamase-producing coagulase-negative staphylococci. Ramos MC, et al.
Antimicrob Agents Chemother 1996 Jan;40(1):97-101

Pharmacodynamics of RP 59500 (quinupristin-dalfopristin) administered by intermittent versus continuous infusion against Staphylococcus aureus-infected fibrin-platelet clots in an in vitro infection model. Rybak MJ, et al.
Antimicrob Agents Chemother 1997 Jun;41(6):1359-63

A comparison of phenotypic properties of Staphylococcus aureus isolated from burned children and other patient groups. Edwards-Jones V, et al. **Burns** 1996 Aug; 22(5):384-9

Clenched-fist injury complicated by methicillin-resistant Staphylococcus aureus. Berlet G, et al. **Can J Surg** 1997 Aug;40(4):313-4

Staphylococcal pyomyositis. Lee SS, et al.
Chang Keng I Hsueh 1996 Sep;19(3):241-6

Superinfection with Enterococcus faecalis during quinupristin/dalfopristin therapy. Chow JW, et al.
Clin Infect Dis 1997 Jan;24(1):91-2

Safety and efficacy of cefprozil as part of a parenteral-oral antibiotic regimen for the treatment of suppurative skeletal infections in children. Trujillo M, et al. **Clin Infect Dis** 1996 Oct;23(4):843

Treatment of osteomyelitis with a biodegradable antibiotic implant. Calhoun JH, et al. **Clin Orthop** 1997 Aug; (341):206-14

Efficacy of antibiotics alone for orthopaedic device related infections. Isiklar ZU, et al. **Clin Orthop** 1996 Nov; (332):184-9

Deposits of topical norfloxacin in the treatment of bacterial keratitis. Castillo A, et al. **Cornea** 1997 Jul;16(4):420-3

Susceptibility of ciprofloxacin-resistant staphylococci and enterococci to trovafloxacin. Bonilla HF, et al.
Diagn Microbiol Infect Dis 1996 Sep;26(1):17-21

Epidemiology, control and treatment of methicillin-resistant Staphylococcus aureus. Peters G, et al. **Drugs** 1996;52 Suppl 2:50-4 (11 ref.)

Methicillin-resistant Staphylococcus aureus in nursing homes. Epidemiology, prevention and management. Bradley SF. **Drugs Aging** 1997 Mar;10(3):185-98 (90 ref.)

Does the appearance of drug resistance during therapy alter bacterial susceptibility to opsonophagocytosis? Gemmell CG. **Drugs Exp Clin Res** 1996;22(2):51-5

Methicillin-resistant Staphylococcus aureus (MRSA) in nursing homes in a major UK city: an anonymized point prevalence survey. Fraise AP, et al. **Epidemiol Infect** 1997 Feb;118(1):1-5

In vitro study of the potential role of quinupristin/dalfopristin in the treatment of catheter-related staphylococcal infections. Garcia R, et al.
Eur J Clin Microbiol Infect Dis 1996 Dec;15(12):933-6

Pulmonary disposition of vancomycin in critically ill patients. Georges H, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):385-8

Distinct genotypic clusters of heterogeneously and homogeneously methicillin-resistant Staphylococcus aureus from a Greek hospital. Tassios PT, et al.
Eur J Clin Microbiol Infect Dis 1997 Feb;16(2):170-3

European multicentre evaluation of a commercial system for identification of methicillin-resistant Staphylococcus aureus [see comments] Zambardi G, et al.
Eur J Clin Microbiol Infect Dis 1996 Sep;15(9):747-9. Comment in: Eur J Clin Microbiol Infect Dis 1997 Jun;16(6):481.

The spectrum of antimicrobial resistance among methicillin resistant Staphylococcus aureus (MRSA) in a tertiary care centre in India. Pulimood TB, et al. **Indian J Med Res** 1996 Apr;103:212-5

Nasal and cutaneous carriage of Staphylococcus aureus in hemodialysis patients: the effect of nasal mupirocin. Boelaert JR, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):809-11

Reduction of surgical-site infections in cardiothoracic surgery by elimination of nasal carriage of Staphylococcus aureus [see comments] Kluytmans JA, et al.
Infect Control Hosp Epidemiol 1996 Dec;17(12):780-5. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):775-9.

Elimination of nasal carriage of Staphylococcus aureus in hemodialysis patients. Kluytmans JA, et al.
Infect Control Hosp Epidemiol 1996 Dec;17(12):793-7

Development of mupirocin resistance among methicillin-resistant Staphylococcus aureus after widespread use of nasal mupirocin ointment. Miller MA, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):811-3

Emergence of high-level mupirocin resistance in methicillin-resistant Staphylococcus aureus isolated from Brazilian university hospitals [see comments] Netto dos Santos KR, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):813-6. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):775-9.

Automatic alerts for methicillin-resistant Staphylococcus aureus surveillance and control: role of a hospital information system. Pittet D, et al.
Infect Control Hosp Epidemiol 1996 Aug;17(8):496-502

Methicillin-resistant Staphylococcus aureus control in hospitals: the French experience. Association des Pays de la Loire pour l'Eviction des Infections Nosocomiales. Richet H, et al. **Infect Control Hosp Epidemiol** 1996 Aug; 17(8):509-11

Methicillin-resistant Staphylococcus aureus epidemiology and control in Belgian hospitals, 1991 to 1995. Groupement pour le Dépistage, l'Etude et la Prévention des Infections Hospitalières. Struelens MJ, et al.
Infect Control Hosp Epidemiol 1996 Aug;17(8):503-8

Cost-effectiveness of perioperative mupirocin nasal ointment in cardiothoracic surgery [see comments] VandenBergh MF, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):786-92. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):775-9.

Methicillin-resistant Staphylococcus aureus control in hospitals: the Dutch experience. Vandenbroucke-Grauls CM. **Infect Control Hosp Epidemiol** 1996 Aug;17(8):512-3

Cerebral abscesses in a patient with AIDS caused by methicillin-resistant Staphylococcus aureus (MRSA). Smith NP, et al. **Int J STD AIDS** 1997 Jul;8(7):459-60

Polymyxin B-immobilized fiber improves hyperdynamic state in MRSA septic patients [letter] Kawamata T, et al.
Intensive Care Med 1997 Jan;23(1):130-1

Two cases of severe bronchiectasis successfully treated with a prolonged course of trimethoprim/sulfamethoxazole. Honda T, et al. **Intern Med** 1996 Dec;35(12):979-83

PMMA bead versus parenteral treatment of Staphylococcus aureus osteomyelitis [published erratum appears in J Am Podiatr Med Assoc 1997 May;87(5):208] Heard GS, et al.
J Am Podiatr Med Assoc 1997 Apr;87(4):153-64

Teicoplanin resistance in Staphylococcus haemolyticus, developing during treatment [letter] Cunningham R, et al.
J Antimicrob Chemother 1997 Mar;39(3):438-9

Oral treatment of Staphylococcus spp. infected orthopaedic implants with fusidic acid or ofloxacin in combination with rifampicin. Drancourt M, et al. **J Antimicrob Chemother** 1997 Feb;39(2):235-40

Methicillin-resistant Staphylococcus aureus clinical strain with reduced vancomycin susceptibility [letter] Hiramatsu K, et al. **J Antimicrob Chemother** 1997 Jul;40(1):135-6

Bolus or infusion teicoplanin for intravascular catheter associated infections in immunocompromised patients? Ley BE, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1091-5

Inhibition of intracellular growth of Staphylococcus aureus by exposure of infected human monocytes to clarithromycin and azithromycin. Fietta A, et al.
J Chemother 1997 Feb;9(1):17-22

Antimicrobial evaluation of some plants used in Mexican traditional medicine for the treatment of infectious diseases. Navarro V, et al. **J Ethnopharmacol** 1996 Sep;53(3):143-7

Mupirocin-resistant methicillin-resistant Staphylococcus aureus [letter; comment] Ambler JE, et al.
J Hosp Infect 1996 Jan;32(1):71-82. Comment on: J Hosp Infect 1994 Sep;28(1):75-8.

Mupirocin resistance and methicillin-resistant Staphylococcus aureus (MRSA). Eltringham I.
J Hosp Infect 1997 Jan;35(1):1-8 (44 ref.)

Treatment of experimental methicillin-resistant Staphylococcus epidermidis endophthalmitis with intravitreal vancomycin and intravitreal dexamethasone. Smith MA, et al. **J Infect Dis** 1997 Feb;175(2):462-6

An open study of mupirocin in Libyan patients with skin infections. El Ferghani N. **J Int Med Res** 1995 Nov-Dec; 23(6):508-17

Sensitivity to antibacterials of Staphylococcus aureus isolated from skin infections: a comparison of two hospitals. Nishijima S, et al. **J Int Med Res** 1997 Jan-Feb;25(1):8-13

Sensitivity to antibacterials of Staphylococcus aureus isolated from different types of skin infections. Nishijima S, et al.
J Int Med Res 1997 Jan-Feb;25(1):1-7

Antibiotic-loaded hydroxyapatite blocks in the treatment of experimental osteomyelitis in rats. Itokazu M, et al.
J Med Microbiol 1997 Sep;46(9):779-83

Microbiological tolerance in orthopaedic infections: delayed response of septic arthritis and osteomyelitis of the hip due to infection with tolerant Staphylococcus aureus. Thometz JG, et al. **J Pediatr Orthop** 1996 Jul-Aug;16(4):518-21

From the Centers for Disease Control and Prevention. Interim guidelines for prevention and control of staphylococcal infection associated with reduced susceptibility to vancomycin. **JAMA** 1997 Aug 13; 278(6):461-2

From the Centers for Disease Control and Prevention. Update: Staphylococcus aureus with reduced susceptibility to vancomycin--United States, 1997. **JAMA** 1997 Oct 8; 278(14):1145-6

From the Centers for Disease Control and Prevention. Staphylococcus aureus with reduced susceptibility to vancomycin--United States, 1997. **JAMA** 1997 Sep 17; 278(11):891-2

The effectiveness of two ciprofloxacin formulations for experimental Pseudomonas and Staphylococcus keratitis. Engel LS, et al. **Jpn J Ophthalmol** 1996;40(2):212-9

Update: Staphylococcus aureus with reduced susceptibility to vancomycin -- United States, 1997.
MMWR Morb Mortal Wkly Rep 1997 Sep 5;46(35):813-5

Reduced susceptibility of Staphylococcus aureus to vancomycin--Japan, 1996.
MMWR Morb Mortal Wkly Rep 1997 Jul 11;46(27):624-6

Interim guidelines for prevention and control of Staphylococcal infection associated with reduced susceptibility to vancomycin.
MMWR Morb Mortal Wkly Rep 1997 Jul 11;46(27):626-8, 635

Staphylococcus aureus with reduced susceptibility to vancomycin--United States, 1997.
MMWR Morb Mortal Wkly Rep 1997 Aug 22;46(33):765-6

MRSA in the community [letter] Mitchell JM, et al.
N Z Med J 1996 Oct 25;109(1032):411

Successful treatment of catheter-related sepsis and extraluminal catheter thrombosis with vancomycin and fraxiparin without catheter removal. Ruiz-Valverde MP,

et al. **Nephron** 1997;75(3):354–5

Toward simple but safe management of osteomyelitis [comment] Nelson JD. **Pediatrics** 1997 Jun;99(6):883–4. Comment on: Pediatrics 1997 Jun;99(6):846–50.

Simplified treatment of acute staphylococcal osteomyelitis of childhood. The Finnish Study Group [see comments] Peltola H, et al. **Pediatrics** 1997 Jun;99(6):846–50. Comment in: Pediatrics 1997 Jun;99(6):883–4.

The treatment of staphylococcal infections with special reference to pharmacokinetic, pharmacodynamic and pharmacoeconomic considerations. Janknegt R. **Pharm World Sci** 1997 Jun;19(3):133–41 (45 ref.)

Mixed pulmonary infection with Nocardia, Candida, methicillin-resistant Staphylococcus aureus, and group D Streptococcus species. Vassallo J, et al. **Postgrad Med J** 1996 Nov;72(853):680–1

Staphylococcus aureus, trimethoprim–sulfamethoxazole, and Wegener's granulomatosis. Kallenberg CG, et al. **Sarcoidosis Vasc Diffuse Lung Dis** 1996 Oct;13(3):253–5 (19 ref.)

Beneficial effect of glucocorticoids on the course of haematogenously acquired Staphylococcus aureus nephritis. Verba V, et al. **Scand J Immunol** 1997 Mar; 45(3):282–6

Conservative therapy of atlantoaxial osteomyelitis. A case report. Lam CH, et al. **Spine** 1996 Aug 1;21(15):1820–3

MRSA meningitis and intrathecal injection of arbekacin. Fujita T, et al. **Surg Neurol** 1997 Jul;48(1):69

Intraocular dexamethasone produces a harmful effect on treatment of experimental Staphylococcus aureus endophthalmitis. Meredith TA, et al. **Trans Am Ophthalmol Soc** 1996;94:241–52; discussion 252–7

Thrombocytopenia induced by vancomycin-dependent platelet antibody. Mizon P, et al. **Vox Sang** 1997;73(1):49–51

[Severe methicillin-resistant Staphylococcus aureus infections. Emergence of resistance to fusidic acid or fosfomycin during treatment with continuous infusion of vancomycin] Georges B, et al. **Presse Med** 1997 Apr 5; 26(11):502–6 (Eng. Abstr.) **(Fre)**

[Nosocomial infections caused by multiresistant pathogens. Clinical management exemplified by multiresistant Staphylococcus aureus] Knopf HJ. **Urologe A** 1997 May; 36(3):248–54 (27 ref.) (Eng. Abstr.) **(Ger)**

[Effect of imipenem/cilastatin combined with vancomycin for MRSA infection] Fukabori T, et al. **Jpn J Antibiot** 1997 Apr;50(4):299–305 (Eng. Abstr.) **(Jpn)**

[Clinical studies on vancomycin in the treatment of MRSA infection] Shimizu K, et al. **Jpn J Antibiot** 1996 Aug; 49(8):782–99 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of silver sulfadiazine (AgSD: Geben cream) for ulcerative skin lesions infected with MRSA] Yoshida T, et al. **Jpn J Antibiot** 1997 Jan;50(1):39–44 (Eng. Abstr.) **(Jpn)**

[Effect of 2-methyl-4-amino-6-hydroxypyrimidine on the effectiveness of antibiotic therapy in experimental staphylococcal infection in the context of immunosuppression] Ismagilova AF, et al. **Antibiot Khimioter** 1996 Mar;41(3):29–31 (Eng. Abstr.) **(Rus)**

[Antioxidants and immunomodulating action of antibiotics and antibiotic-treated erythrocytes in staphylococcal infections] Prokopenko LG, et al. **Antibiot Khimioter** 1997; 42(3):15–9 (Eng. Abstr.) **(Rus)**

[The experimental evaluation of the efficacy of using a Rhodiola rosea extract for treating odontogenic inflammatory diseases] Alekhova TM, et al. **Stomatologiia (Mosk)** 1996;Spec No:42–3 **(Rus)**

[Cotrimoxazole plus rifampicin in the treatment of staphylococcal osteoarticular infection] Sánchez C, et al. **Enferm Infecc Microbiol Clin** 1997 Jan;15(1):10–3 (Eng. Abstr.) **(Spa)**

[Nosocomial infection with methicillin resistant Staphylococcus aureus in 14 human immunodeficiency virus infected patients] Eulalia Valencia M, et al. **Med Clin (Barc)** 1997 Sep 6;109(7):261–3 (Eng. Abstr.) **(Spa)**

[Global spreading of resistant staphylococci. The best control provided by competent specialists at infection clinics] Nilsson-Ehle I. **Lakartidningen** 1997 Sep 10;94(37):3129–30 **(Swe)**

ECONOMICS

Much ado about nothing: methicillin-resistant Staphylococcus aureus. Shannon T, et al. **J Burn Care Rehabil** 1997 Jul–Aug;18(4):326–31

ENZYMOLOGY

Role of coagulase in a murine model of hematogenous pulmonary infection induced by intravenous injection of Staphylococcus aureus enmeshed in agar beads. Sawai T, et al. **Infect Immun** 1997 Feb;65(2):466–71

EPIDEMIOLOGY

Incidence of wound infection in three different departments and the antibiotic sensitivity pattern of the isolates in a Saudi Arabian hospital. Abussaud MJ. **Acta Microbiol Immunol Hung** 1996;43(4):301–5

The epidemiology of methicillin-resistant Staphylococcus aureus: surgical relevance 20 years on. McDonald M. **Aust N Z J Surg** 1997 Oct;67(10):682–5 (32 ref.)

Monitoring outbreaks of methicillin-resistant Staphylococcus aureus: use of a commercial database and personal computer. Allen JL, et al. **Br J Biomed Sci** 1997 Mar; 54(1):10–2

Staphylococcal infections in the Sofia Burn Centre, Bulgaria. Lesseva MI, et al. **Burns** 1996 Jun;22(4):279–82

Methicillin-resistant Staphylococcus aureus in Ontario. McGeer A, et al. **Can Commun Dis Rep** 1997 Mar 15; 23(6):45–6 **(Eng, Fre)**

The Canadian Nosocomial Infection Surveillance Program: results of the first 18 months of surveillance for methicillin-resistant Staphylococcus aureus in Canadian hospitals. Simor A, et al. **Can Commun Dis Rep** 1997 Mar 15;23(6):41–5

Tunnelled central venous catheters yield a low incidence of septicaemia in interleukin-2-treated patients. Goey SH, et al. **Cancer Immunol Immunother** 1997 Jul;44(5):301–4

Sample size could limit the power of case-control studies for determining risk factors for community-acquired methicillin-resistant Staphylococcus aureus [letter; comment] Bloch KC, et al. **Clin Infect Dis** 1996 Oct; 23(4):851–2. Comment on: Clin Infect Dis 1995 Nov;21(5):1308–12.

Methicillin-resistant Staphylococcus aureus (MRSA) in nursing homes in a major UK city: an anonymized point prevalence survey. Fraise AP, et al. **Epidemiol Infect** 1997 Feb;118(1):1–5

Prospective study of 288 episodes of bacteremia in neutropenic cancer patients in a single institution. González-Barca E, et al. **Eur J Clin Microbiol Infect Dis** 1996 Apr;15(4):291–6

Are variable repeats in the spa gene suitable targets for epidemiological studies of methicillin-resistant Staphylococcus aureus strains? [letter; comment] van Belkum A, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):768–70. Comment on: Eur J Clin Microbiol Infect Dis 1996 Jan;15(1):60–4.

Transmission of methicillin-resistant staphylococcus aureus within a household [letter] Wagenvoort JH, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):399–400

Epidemiology of Staphylococcus aureus during space flight. Pierson DL, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31;16(3–4):273–81

Quantitative antibiogram as a typing method for the prospective epidemiological surveillance and control of MRSA: comparison with molecular typing. Blanc DS, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):654–9

Trends in the prevalence of methicillin-resistant Staphylococcus aureus associated with discontinuation of an isolation policy. Fazal BA, et al. **Infect Control Hosp Epidemiol** 1996 Jun;17(6):372–4

Colonization by Staphylococcus aureus resistant to methicillin and ciprofloxacin during 20 months' surveillance in a private skilled nursing facility. Lee YL, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):649–53

Monitoring persistence of coagulase-negative staphylococci in a hematology department using phenotypic and genotypic strategies. van Belkum A, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):660–7

Acute endophthalmitis outbreak after cataract surgery. Arsan AK, et al. **J Cataract Refract Surg** 1996 Oct;22(8):1116–20

Outbreak of multi-drug resistant Staphylococcus aureus: a cluster analysis. Yoshida J, et al. **J Clin Epidemiol** 1996 Dec;49(12):1447–52

Molecular characterization of epidemic ciprofloxacin- and methicillin-resistant Staphylococcus aureus strains colonizing patients in an intensive care unit. Udo EE, et al. **J Clin Microbiol** 1996 Dec;34(12):3242–4

The order of ward rounds influences nosocomial infection. A 2-year study in gastroenterologic surgery patients. Yoshida J, et al. **J Gastroenterol** 1995 Dec;30(6):718–24

Methicillin-resistant Staphylococcus aureus: investigation of a hospital outbreak using a case-control study. Crowcroft N, et al. **J Hosp Infect** 1996 Dec;34(4):301–9

National survey of MRSA: Ireland, 1995. Johnson Z, et al. **J Hosp Infect** 1997 Mar;35(3):175–84

Epidemiology of methicillin-resistant Staphylococcus aureus in a Warsaw hospital. Młynarczyk G, et al. **J Hosp Infect** 1996 Oct;34(2):151–60

Changes in major populations of methicillin-resistant Staphylococcus aureus in Belgium. Wildemauwe C, et al. **J Hosp Infect** 1996 Nov;34(3):197–203

Community and hospital acquired Staphylococcus aureus septicaemia: 115 cases from a Dublin teaching hospital. Cunney RJ, et al. **J Infect** 1996 Jul;33(1):11–3

Staphylococcus aureus in the anterior nares and subungual spaces of the hands in atopic dermatitis. Nishijima S, et al. **J Int Med Res** 1997 May–Jun;25(3):155–8

Methicillin-resistant Staphylococcus aureus at a Veterans Affairs Medical Center (1986–96). Flournoy DJ. **J Okla State Med Assoc** 1997 Jul–Aug;90(6):228–35

Increased incidence of beta-lactamase-plasmid negative, high level methicillin-resistant Staphylococcus aureus (MRSA). Yokoyama T, et al. **Kurume Med J** 1996;43(3):199–206

Resistance to methicillin [letter] Williams JD. **Lancet** 1997 Sep 20;350(9081):885

Staphylococcal parotitis in AIDS: a case report [letter] Ong KR, et al. **Laryngoscope** 1996 Nov;106(11):1443

Tracing the spread of methicillin-resistant Staphylococcus aureus by Southern blot hybridization using gene-specific probes of mec and Tn554. Kreiswirth BN, et al. **Microb Drug Resist** 1995 Winter;1(4):307–13

Community-acquired bacteremia in Zimbabwe and the global cost of contaminated blood cultures [letter; comment] McDonald LC, et al. **Pediatr Infect Dis J** 1997 May; 16(5):537–8. Comment on: Pediatr Infect Dis J 1996 Dec;15(12):1092–7.

Nasal carriage of Staph. aureus in peritonitis and exit-site infections [letter; comment] De Vecchi AF, et al. **Perit Dial Int** 1997 Mar–Apr;17(2):205–7. Comment on: Perit Dial Int 1996 Jul–Aug;16(4):352–6.

Durability of prefabricated versus normal random flaps against a bacterial challenge. Ko CY, et al. **Plast Reconstr Surg** 1997 Feb;99(2):372–7

Nosocomial occurrence of enterotoxigenic multiresistant Staphylococcus strains in Rio de Janeiro. Tórtora JC, et al. **Rev Latinoam Microbiol** 1996 Jan–Mar;38(1):1–6

[Outbreak of methicillin resistant Staphylococcus aureus in a central hospital] Schlünzen L, et al. **Ugeskr Laeger** 1997 Jan 20;159(4):431–5 (Eng. Abstr.) **(Dan)**

[Clinical significance, epidemiology and microbiology of coagulase-negative staphylococcal nosocomial bacteremia at a teaching hospital] Góngora-Rubio F, et al. **Rev Assoc Med Bras** 1997 Jan–Mar;43(1):9–14 (Eng. Abstr.) **(Por)**

[Health personnel as a source of infection in a hospital outbreak of methicillin-resistant Staphylococcus aureus (letter)] Rodríguez G, et al. **Enferm Infecc Microbiol Clin** 1997 Mar;15(3):173–4 **(Spa)**

[Methicillin-resistant Staphylococcus aureus infection. Example of the current complexity of hospitals (editorial; comment)] Pahissa Berga A. **Med Clin (Barc)** 1997 Mar 22;108(11):419–20. Comment on: Med Clin (Barc) 1997 Mar 22;108(11):401–4. **(Spa)**

[Impact of control measures on the course of an outbreak of methicillin-resistant Staphylococcus aureus [see comments] Sopena N, et al. **Med Clin (Barc)** 1997 Mar 22;108(11):401–4 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Mar 22;108(11):419–20. **(Spa)**

[Prevalence of Staphylococcus aureus among food handlers from a metropolitan university in Chile] Soto A, et al. **Rev Med Chil** 1996 Sep;124(9):1142–6 (Eng. Abstr.) **(Spa)**

[Methicillin resistant Staphylococcus aureus. A problem also in Sweden] Seeberg S, et al. **Lakartidningen** 1997 Sep 10; 94(37):3174–6, 3179 (Eng. Abstr.) **(Swe)**

ETIOLOGY

Essential fatty acid deficiency and predisposition to lung disease in cystic fibrosis. Lloyd-Still JD, et al. **Acta Paediatr** 1996 Dec;85(12):1426–32

Clinical considerations in hemodialysis access infection. Albers FJ. **Adv Ren Replace Ther** 1996 Jul;3(3):208–17 (46 ref.)

Peritoneal catheter exit-site and tunnel infections. Piraino B. **Adv Ren Replace Ther** 1996 Jul;3(3):222–7 (56 ref.)

Prior antimicrobials and staphylococcal bacteremia in HIV-infected patients. Styrt BA, et al. **AIDS** 1997 Aug; 11(10):1243–8

Pacemaker-related endocarditis inducing tricuspid stenosis. Unger P, et al. **Am Heart J** 1997 May;133(5):605–7

Atypical presentations of epidural abscess in intravenous drug abusers. Prendergast H, et al. **Am J Emerg Med** 1997 Mar; 15(2):158–60

Pelvic osteomyelitis in a sickle-cell patient receiving deferoxamine [letter] McLean TW, et al. **Am J Hematol** 1996 Dec;53(4):284–5

Bacterial endocarditis in hemodialysis patients. Robinson DL, et al. **Am J Kidney Dis** 1997 Oct;30(4):521–4

Staphylococcus infection complicating the application of a supracondylar nail to a fracture proximal to a total knee arthroplasty [letter] Seligson D, et al. **Am J Orthop** 1996 May;25(5):384

Endovascular stent infection with delayed bacterial challenge. Hearn AT, et al. **Am J Surg** 1997 Aug; 174(2):157–9

An epidural abscess due to resistant Staphylococcus aureus following epidural catheterisation. Yuste M, et al. **Anaesthesia** 1997 Feb;52(2):163–5

Fashion victim: infective endocarditis after nasal piercing [letter] Ramage IJ, et al. **Arch Dis Child** 1997 Aug;77(2):187

The source of coagulase-negative staphylococci in the Endophthalmitis Vitrectomy Study. A comparison of eyelid and intraocular isolates using pulsed-field gel electrophoresis. Bannerman TL, et al. **Arch Ophthalmol** 1997 Mar;115(3):357–61

Orbital cellulitis in the acquired immunodeficiency syndrome [letter] Nash E, et al. **Arch Ophthalmol** 1997 May; 115(5):677–8

Failure of arthroscopic meniscal repair following septic arthritis. Myerthall S, et al. **Arthroscopy** 1996 Dec; 12(6):746–8

Infected suture anchors in the shoulder. Ticker JB, et al. **Arthroscopy** 1996 Oct;12(5):613–5

Delayed microbial keratitis following radial keratotomy. Lu Y, et al. **Aust N Z J Ophthalmol** 1997 Aug;25(3):231–2

Conservative management of extradural abscess complicating spinal-extradural anaesthesia for caesarean section. Dysart RH, et al. **Br J Anaesth** 1997 May;78(5):591–3

Systemic infection related to endocarditis on pacemaker leads: clinical presentation and management. Klug D, et al. **Circulation** 1997 Apr 15;95(8):2098–107 (36 ref.)

Pacemaker infection caused by Staphylococcus schleiferi, a member of the human preaxillary flora: four case reports.

Célard M, et al. **Clin Infect Dis** 1997 May;24(5):1014–5
Endocarditis as a complication of a transjugular intrahepatic portosystemic stent-shunt. Finkielman JD, et al. **Clin Infect Dis** 1996 Feb;22(2):385–6
Community-acquired prosthetic valve endocarditis due to methicillin-resistant Staphylococcus aureus. Mallory MA, et al. **Clin Infect Dis** 1997 Jun;24(6):1272–3
Acute hematogenous osteomyelitis of a closed fracture with chronic superinfection. Aluisio FV, et al. **Clin Orthop** 1996 Apr;(325):239–44
Infantile ulcerative keratitis secondary to congenital entropion. Luchs JI, et al. **Cornea** 1997 Jan;16(1):32–4
Iatrogenic spinal epidural abscesses: early diagnosis essential for good outcome. Lindner A, et al. **Eur J Med Res** 1997 May 28;2(5):201–5
Peritonitis, functional catheter loss and the sitting of the Dacron cuff in chronic peritoneal dialysis catheters in children. Lewis MA, et al. **Eur J Pediatr Surg** 1996 Oct; 6(5):285–7
Iatrogenic spinal infection following epidural anaesthesia: case report. Dunn LT, et al. **Eur Spine J** 1996;5(6):418–20
Spinal epidural abscess: an unusual cause of sciatica. Kotilainen E, et al. **Eur Spine J** 1996;5(3):201–3
Naturally occurring dermatitis associated with Staphylococcus aureus in DS-Nh mice. Haraguchi M, et al. **Exp Anim** 1997 Jul;46(3):225–9
Catheter-associated Staphylococcus aureus bacteremia. Gold HS, et al. **Hosp Pract (Off Ed)** 1996 Sep 15;31(9):133–7, 142–4, 150 (14 ref.)
Bloodstream infection from a Port-A-Cath: successful treatment with the antibiotic lock technique [letter] Bregenzer T, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):772
Phenotypic resistance to thrombin-induced platelet microbicidal protein in vitro is correlated with enhanced virulence in experimental endocarditis due to Staphylococcus aureus. Dhawan VK, et al. **Infect Immun** 1997 Aug;65(8):3293–9
Expression of an antisense hla fragment in Staphylococcus aureus reduces alpha-toxin production in vitro and attenuates lethal activity in a murine model. Kernodle DS, et al. **Infect Immun** 1997 Jan;65(1):179–84
Asymptomatic posterior orbital cellulitis resulting from ethmoid/maxillary sinusitis. Filips RF, et al. **J Am Optom Assoc** 1997 Jan;68(1):55–60 (18 ref.)
Bacterial anterior chamber contamination with foldable silicone lens implantation using a forceps and an injector. Weindler J, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1263–6
Factors associated with methicillin resistance in diabetic foot infections. Day MR, et al. **J Foot Ankle Surg** 1997 Jul-Aug; 36(4):322–5; discussion 331
Mycotic aortic aneurysms after orthotopic heart transplantation: a three-case report and review of the literature. Knosalla C, et al. **J Heart Lung Transplant** 1996 Aug;15(8):827–39 (27 ref.)
Staff carriage of methicillin-resistant Staphylococcus aureus (EMRSA 15) and the home environment: a case report. Allen KD, et al. **J Hosp Infect** 1997 Apr;35(4):307–11
Epidural catheter insertion and operating theatre standards [letter; comment] [see comments] Catchpole CR, et al. **J Hosp Infect** 1996 Jan;32(1):79–81. Comment on: J Hosp Infect 1995 Aug;30(4):245–52. Comment in: J Hosp Infect 1996 Aug;33(4):302–4.
Methicillin-resistant Staphylococcus aureus: investigation of a hospital outbreak using a case-control study. Crowcroft N, et al. **J Hosp Infect** 1996 Dec;34(4):301–9
Methicillin-resistant Staphylococcus aureus in a cystic fibrosis unit. Givney R, et al. **J Hosp Infect** 1997 Jan; 35(1):27–36
Eradication of the long-term carriage of methicillin-resistant Staphylococcus aureus in patients wearing dentures: a follow-up of 10 patients. Rossi T, et al. **J Hosp Infect** 1996 Dec;34(4):311–20
Staphylococcus aureus carriage and infections among patients in four haemo- and peritoneal-dialysis centres in Denmark. The Danish Study Group of Peritonitis in Dialysis (DASPID). Zimakoff J, et al. **J Hosp Infect** 1996 Aug; 33(4):289–300
Staphylococcus aureus bacteraemia, Absidia corymbifera infection and probable pulmonary aspergillosis in a recipient of orthotopic liver transplantation for end stage liver disease secondary to hepatitis C [letter] Viscoli C, et al. **J Infect** 1997 May;34(3):281–3
The pattern of inflammation in rat sepsis due to enterotoxin-producing Staphylococcus aureus: a comparison with ischemia-reperfusion injury. Lin RY, et al. **J Med** 1996;27(5–6):303–17
Bacterial keratitis after photorefractive keratectomy. Amayem A, et al. **J Refract Surg** 1996 Jul-Aug;12(5):642–4
Closed blunt chest trauma causing mediastinal abscess. Gregory MW, et al. **J Trauma** 1996 Nov;41(5):899–901
Septic arteritis causing iliac artery rupture and aneurysmal transformation of the distal aorta after iliac artery stent placement. Hoffman AI, et al. **J Vasc Interv Radiol** 1997 Mar-Apr;8(2):215–9
Infection occurring in percutaneously placed endovascular devices [letter; comment] Millward SF. **J Vasc Interv Radiol** 1997 Mar-Apr;8(2):302. Comment on: J Vasc Interv Radiol 1996 Sep-Oct;7(5):669–72.
Comparison of endovascular and conventional vascular prostheses in an experimental infection model. Parsons RE, et al. **J Vasc Surg** 1996 Dec;24(6):920–5; discussion 925–6
Migration of a metal connecting piece of a repaired Hickman catheter associated with infection [letter; comment] Maden K, et al. **JPEN J Parenter Enteral Nutr** 1996 Jul-Aug; 20(4):311. Comment on: JPEN J Parenter Enteral Nutr 1993 May-Jun;17(3):287–8.
Risk of infection with electrical spinal-cord stimulation [letter; comment] Torrens JK, et al. **Lancet** 1997 Mar 8; 349(9053):729. Comment on: Lancet 1996 Dec 21-28;348(9043):1672–3. Comment on: Lancet 1996 Dec 21-28;348(9043):1698–701.
Spinal abscess with cord compression complicating infected subclavian cannula. Nawaz M, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):842
Vascular access infection associated with methicillin-resistant Staphylococcus aureus nasal carriage in a hemodialysis patient [letter] Takeda K, et al. **Nephron** 1997;76(3):371–2
Infectious keratitis in a paracentesis tract. Azuara-Blanco A, et al. **Ophthalmic Surg Lasers** 1997 Apr;28(4):332–3
Blebitis, early endophthalmitis, and late endophthalmitis after glaucoma-filtering surgery. Ciulla TA, et al. **Ophthalmology** 1997 Jun;104(6):986–95
Abscessed hydroxyapatite orbital implants. A report of two cases [see comments] Jordan DR, et al. **Ophthalmology** 1996 Nov;103(11):1784–7. Comment in: Ophthalmology 1997 Jul;104(7):1059.
Endophthalmitis and orbital cellulitis after radial keratotomy. McLeod SD, et al. **Ophthalmology** 1995 Dec; 102(12):1902–7
Endophthalmitis after secondary intraocular lens implantation. A case-report study. Scott IU, et al. **Ophthalmology** 1995 Dec;102(12):1925–31
The treatment of septicemia in pacemaker patients. Böhm A, et al. **Pacing Clin Electrophysiol** 1996 Jul;19(7):1105–11
Bilateral acute suppurative parotitis due to Staphylococcus aureus: an hospital acquired case with fatal outcome. Manfredi R, et al. **Panminerva Med** 1997 Mar;39(1):56–60
Streptococcal versus Staphylococcus epidermidis peritonitis in CAPD. A comparative study. Muñoz de Bustillo E, et al. **Perit Dial Int** 1997 Jul-Aug;17(4):392–5
Nasal carriage and peritonitis by Staphylococcus aureus in patients on continuous ambulatory peritoneal dialysis: a prospective study [see comments] Wanten GJ, et al. **Perit Dial Int** 1996 Jul-Aug;16(4):352–6. Comment in: Perit Dial Int 1997 Mar-Apr;17(2):205–7.
Toxic shock syndrome after explantation of breast implants: a case report and review of the literature. Walker LE, et al. **Plast Reconstr Surg** 1997 Mar;99(3):875–9 (19 ref.)
Risk factors for methicillin-resistant Staphylococcus aureus (MRSA) infection in a Japanese geriatric hospital. Washio M, et al. **Public Health** 1997 May;111(3):187–90
Major histocompatibility complex class II region confers susceptibility to Staphylococcus aureus arthritis. Abdelnour A, et al. **Scand J Immunol** 1997 Mar;45(3):301–7
Toxic shock syndrome after burn injuries in children. Blomqvist L. **Scand J Plast Reconstr Surg Hand Surg** 1997 Mar;31(1):77–81
Delayed presentation of false abdominal aortic aneurysm following umbilical artery catheterisation. Bapat VN, et al. **Thorac Cardiovasc Surg** 1997 Jun;45(3):154–7
Risk factors for wound infection following elective cholecystectomy. Chandrashekhar C, et al. **Trop Gastroenterol** 1996 Oct-Dec;17(4):230–2
[Epidural abscess with Staphylococcus aureus meningitis and septicemia following saccoradiculography (letter)] Parola P, et al. **Presse Med** 1996 Oct 26;25(32):1561 **(Fre)**
[Staphylococcus aureus purulent pericarditis in a patient with AIDS (letter)] Hadrami J, et al. **Rev Med Interne** 1997; 18(6):493–4 **(Fre)**
[Infectious complications of cardioverter/defibrillators—case report and review of the literature] Hollenstein U, et al. **Acta Med Austriaca** 1996;23(5):164–7 (20 ref.) (Eng. Abstr.) **(Ger)**
[Epiduritis after long-term pain therapy with an epidural catheter—review of the literature with a current case report] Michel H, et al. **Anaesthesiol Reanim** 1997; 22(3):69–79 (105 ref.) (Eng. Abstr.) **(Ger)**
[The rupture of an iliac aneurysm after its endovascular elimination. The problems of stent infection (letter)] Kolvenbach R, et al. **Dtsch Med Wochenschr** 1997 Aug 22;122(34–35):1059–60 **(Ger)**
[Long-term unrecognized foreign body aspiration as the cause of pleural effusion] de Wall N, et al. **Med Klin** 1996 Sep 15;91(9):600–2 **(Ger)**
[Fatal endocarditis as a complication of intra-arterial lysis therapy: a case report] Schellhammer F, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jun;166(6):561–3 **(Ger)**
[Toxic shock syndrome] Fishman G, et al. **Harefuah** 1997 May 1;132(9):622–4, 679 (Eng. Abstr.) **(Heb)**
[Transesophageal echocardiographic evaluation of tricuspid endocarditis from implanted pacemaker: description of two cases] Bongiovì S, et al. **G Ital Cardiol** 1996 Dec; 26(12):1445–50 (Eng. Abstr.) **(Ita)**
[MRSA enteritis following severe gastroenteritis of salmonellosis] Saito S, et al. **Kansenshogaku Zasshi** 1996 Sep;70(9):981–5 (Eng. Abstr.) **(Jpn)**
[A case report of active aortic prosthetic valve endocarditis due to methicillin-resistant Staphylococcus epidermidis] Asakura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Aug;44(8):1185–92 (Eng. Abstr.) **(Jpn)**
[A case report of postcoarctation mycotic aneurysm after surgical treatment for cerebral arterial aneurysms] Kido M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul; 45(7):1006–10 (7 ref.) (Eng. Abstr.) **(Jpn)**
[Bilateral septic thrombophlebitis with septic pulmonary embolism (letter)] Mateos Rodríguez F, et al. **An Med Interna** 1996 Jul;13(7):357–8 **(Spa)**

GENETICS

Specific roles of alpha-toxin and beta-toxin during Staphylococcus aureus corneal infection. O'Callaghan RJ, et al. **Infect Immun** 1997 May;65(5):1571–8
Immunoglobulin allotypes and genetic susceptibility to invasive Haemophilus influenzae type b and Staphylococcus aureus infections in South African children. Goddard EA, et al. **Pediatr Infect Dis J** 1996 May;15(5):419–24

IMMUNOLOGY

The influence of long-lasting implantation on the function of phagocytes towards staphylococci. Różalska B, et al. **Acta Microbiol Pol** 1995;44(3–4):243–54
Staphylococcus epidermidis graft infection is associated with locally suppressed major histocompatibility complex class II and elevated MAC-1 expression. Henke PK, et al. **Arch Surg** 1997 Aug;132(8):894–902
Intramammary immunization with live-attenuated Staphylococcus aureus: microbiological and immunological studies in a mouse mastitis model. García V, et al. **FEMS Immunol Med Microbiol** 1996 May;14(1):45–51
Species distribution of clinical isolates of Staphylococci. Shrikhande S, et al. **Indian J Pathol Microbiol** 1996 Jul; 39(3):207–10
Role of neutrophils in experimental septicemia and septic arthritis induced by Staphylococcus aureus. Verdrengh M, et al. **Infect Immun** 1997 Jul;65(7):2517–21
Correlation of histopathologic and bacteriologic changes with cytokine expression in an experimental murine model of bacteremic Staphylococcus aureus infection. Yao L, et al. **Infect Immun** 1997 Sep;65(9):3889–95
Bolus or infusion teicoplanin for intravascular catheter associated infections in immunocompromised patients? Ley BE, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1091–5
Intracellular demonstration of active TGFbeta1 in B cells and plasma cells of autoimmune mice. IgG-bound TGFbeta1 suppresses neutrophil function and host defense against Staphylococcus aureus infection. Caver TE, et al. **J Clin Invest** 1996 Dec 1;98(11):2496–506
CD18 adhesion blockade decreases bacterial clearance and neutrophil recruitment after intrapulmonary E. coli, but not after S. aureus. Ramamoorthy C, et al. **J Leukoc Biol** 1997 Feb;61(2):167–72
Susceptibility of mice to bacterial and fungal infections after intragastric administration of ebselen. Nozawa R, et al. **J Pharm Pharmacol** 1996 Jan;48(1):64–7
Prostaglandin E2 modulates monocyte MHC-II (Ia) suppression in biomaterial infection. Henke PK, et al. **J Surg Res** 1997 May;69(2):372–8
Immunoglobulin allotypes and genetic susceptibility to invasive Haemophilus influenzae type b and Staphylococcus aureus infections in South African children. Goddard EA, et al. **Pediatr Infect Dis J** 1996 May;15(5):419–24
Major histocompatibility complex class II region confers susceptibility to Staphylococcus aureus arthritis. Abdelnour A, et al. **Scand J Immunol** 1997 Mar;45(3):301–7
T-cell activation and proliferation in a case of recurrent menstrual toxic shock syndrome. Arvand M, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):164–9
[Superantigens and glomerulonephritis] Koyama T, et al. **Nippon Naika Gakkai Zasshi** 1997 Apr 10;86(4):695–701 (14 ref.) **(Jpn)**
[The role of Staphylococcus aureus opsonization in the development of local inflammation and systemic reaction] Belotskiĭ S, et al. **Biull Eksp Biol Med** 1996 Sep; 122(9):298–300 **(Rus)**
[Reduced phagocytosis in immunized animals] Pal'tsyn AA, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):348–52 **(Rus)**
[The characteristics of the immune status of patients with infectious endocarditis] Vorob'eva AM, et al. **Klin Khir** 1995;(2):25–6 **(Rus)**

METABOLISM

Elevated cytosolic calcium and impaired proliferation of B lymphocytes in type II diabetes mellitus. Alexiewicz JM, et al. **Am J Kidney Dis** 1997 Jul;30(1):98–104
Regulation of Staphylococcus aureus capsular polysaccharide type 5: CO2 inhibition in vitro and in vivo. Herbert S, et al. **J Infect Dis** 1997 Aug;176(2):431–8

MICROBIOLOGY

Mycotic aneurysm of the carotid artery. A case report and review of the literature. Michielsen D, et al. **Acta Chir Belg** 1997 Jan-Feb;97(1):44–6 (14 ref.)
Epidural abscess: case report and review of the literature. Colle I, et al. **Acta Clin Belg** 1996;51(6):412–6
Destructive endocarditis caused by Staphylococcus lugdunensis. Case report and review of the literature. De Hondt G, et al. **Acta Clin Belg** 1997;52(1):27–30 (10 ref.)
Increase of staphylococci in neonatal septicaemia: a fourteen-year study. Källman J, et al. **Acta Paediatr** 1997

May;86(5):533–8
Device that keeps a pierced ear hole intact while treating an infected earlobe. Nakamura M, et al. **Aesthetic Plast Surg** 1996 Jul–Aug;20(4):343–5
Antimicrobial resistance: problems, laments, and hopes [editorial; comment] Strausbaugh L. **Am J Infect Control** 1997 Aug;25(4):294–6. Comment on: Am J Infect Control 1997 Aug;25(4):312–21.
Pyomyositis with toxic shock syndrome presenting as back pain and fever: a case report and literature review. Wolfe MW, et al. **Am J Orthop** 1997 Feb;26(2):135–7 (26 ref.)
Incision and drainage of cutaneous abscesses is not associated with bacteremia in afebrile adults. Bobrow BJ, et al. **Ann Emerg Med** 1997 Mar;29(3):404–8
Rapid diagnosis of methicillin-resistant Staphylococcus aureus bacteremia by nested polymerase chain reaction. Kitagawa Y, et al. **Ann Surg** 1996 Nov;224(5):665–71
Multi-resistant Staphylococcus haemolyticus in a neonatal unit in New Delhi. Mehta G, et al. **Ann Trop Paediatr** 1997 Mar;17(1):15–20
Antibiograms and plasmids of Staphylococcus aureus and coagulase negative staphylococci isolated from different clinical sources. Obi CL, et al. **Cent Afr J Med** 1996 Sep; 42(9):258–61
Pyomyositis of the anterior tibial compartment. Cone LA, et al. **Clin Infect Dis** 1997 Jul;25(1):146–8
Use of restriction endonuclease analysis of plasmids and pulsed-field gel electrophoresis to investigate outbreaks of methicillin-resistant Staphylococcus aureus infection. Liu PY, et al. **Clin Infect Dis** 1996 Jan;22(1):86–90
Staphylococcus cohnii: an unusual cause of primary septic arthritis in a patient with AIDS. Mastroianni A, et al. **Clin Infect Dis** 1996 Dec;23(6):1312–3
Polyclonal staphylococcus endocarditis [see comments] Van Wijngaerden E, et al. **Clin Infect Dis** 1997 Jul;25(1):69–71 . Comment in: Clin Infect Dis 1997 Jul;25(1):72–3.
New model for chronic osteomyelitis with Staphylococcus aureus in sheep. Kaarsemaker S, et al. **Clin Orthop** 1997 Jun;(339):246–52
Experimental hematogenous osteomyelitis by Staphylococcus aureus. Matsushita K, et al. **Clin Orthop** 1997 Jan; (334):291–7
Staphylococcal meningitis secondary to sacral osteomyelitis in an infant. Barone SR, et al. **Clin Pediatr (Phila)** 1997 May;36(5):301–4
Epidemic methicillin resistant Staphylococcus aureus. **Commun Dis Rep CDR Wkly** 1997 May 30;7(22):191
Methicillin-resistant Staphylococcus aureus in nursing homes. Epidemiology, prevention and management. Bradley SF. **Drugs Aging** 1997 Mar;10(3):185–98 (90 ref.)
Staphylococcus aureus nasal carriage as a marker for subsequent staphylococcal infections in intensive care unit patients. Corbella X, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):351–7
Types of methicillin-resistant Staphylococcus aureus associated with high mortality in patients with bacteremia. Nada T, et al. **Eur J Clin Microbiol Infect Dis** 1996 Apr; 15(4):340–3
Comparison of an improved RAPD fingerprinting with different typing methods for discriminating clinical isolates of Staphylococcus spp. Damiani G, et al. **Eur J Epidemiol** 1996 Apr;12(2):163–9
Staphylococcus saprophyticus urinary tract infections: epidemiological data from Western Australia. Schneider PF, et al. **Eur J Epidemiol** 1996 Feb;12(1):51–4
Use of a DNA typing method to investigate a fatal perinatal infection due to Staphylococcus aureus. Ramanantsoa C, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jul;74(1):15–7
Slime producing Staphylococci from clinical specimens - a simple diagnostic test. Makhija SK, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):159–61
Species distribution of clinical isolates of Staphylococci. Shrikhande S, et al. **Indian J Pathol Microbiol** 1996 Jul; 39(3):207–10
Staphylococcus epidermidis catheter-related infections in a short-bowel patient. Persistence of a single strain over a two-year period. Voss A, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):669–71
Staphylococcal accessory regulator (sar) in conjunction with agr contributes to Staphylococcus aureus virulence in endophthalmitis. Booth MC, et al. **Infect Immun** 1997 Apr; 65(4):1550–6
Role of the staphylococcal accessory gene regulator (sar) in septic arthritis. Nilsson IM, et al. **Infect Immun** 1996 Nov;64(11):4438–43
Specific roles of alpha-toxin and beta-toxin during Staphylococcus aureus corneal infection. O'Callaghan RJ, et al. **Infect Immun** 1997 May;65(5):1571–8
Role of coagulase in a murine model of hematogenous pulmonary infection induced by intravenous injection of Staphylococcus aureus enmeshed in agar beads. Sawai T, et al. **Infect Immun** 1997 Feb;65(2):466–71
Diminished platelet binding in vitro by Staphylococcus aureus is associated with reduced virulence in a rabbit model of infective endocarditis. Sullam PM, et al. **Infect Immun** 1996 Dec;64(12):4915–21
Cellulitis due to catalase-negative Staphylococcus aureus [letter] Al-Awagi A, et al. **Infection** 1996 Jan-Feb;24(1):54
Bacteremia due to teicoplanin-resistant and vancomycin-susceptible Staphylococcus haemolyticus in seven patients with acute leukemia and neutropenia receiving prophylaxis with ofloxacin [letter] Krčméry V Jr, et al. **Infection** 1997 Jan-Feb;25(1):51–2
Nosocomial septicemias due to methicillin-resistant staphylococcus aureus and Pseudomonas aeruginosa in a university hospital over a 12-year period--the same intractable infections. Mizushima Y, et al. **Infection** 1996 May-Jun;24(3):238–41
Interpretive criteria for susceptibility testing of coagulase-negative staphylococci with special reference to netilmicin. Neumeister B, et al. **Infection** 1997 May-Jun; 25(3):175–7
Experimental otitis media induced by coagulase negative staphylococcus and its L-forms. Göksu N, et al. **Int J Pediatr Otorhinolaryngol** 1996 Nov;37(3):201–16
Sequential antibiotic therapy for acne promotes the carriage of resistant staphylococci on the skin of contacts. Miller YW, et al. **J Antimicrob Chemother** 1996 Nov;38(5):829–37
An epidemiological study of blood culture isolates of coagulase-negative staphylococci demonstrating hospital-acquired infection. Burnie JP, et al. **J Clin Microbiol** 1997 Jul;35(7):1746–50
Pediatric bacteremia due to Staphylococcus warneri: microbiological, epidemiological, and clinical features. Buttery JP, et al. **J Clin Microbiol** 1997 Aug;35(8):2174–7
Molecular characterization of epidemic ciprofloxacin- and methicillin-resistant Staphylococcus aureus strains colonizing patients in an intensive care unit. Udo EE, et al. **J Clin Microbiol** 1996 Dec;34(12):3242–4
Dissemination of a single clone of methicillin-resistant Staphylococcus aureus among Turkish hospitals. van Belkum A, et al. **J Clin Microbiol** 1997 Apr;35(4):978–81
Preoperative bacterial colonization and its influence on postoperative wound infections in plastic surgery. Andenaes K, et al. **J Hosp Infect** 1996 Dec;34(4):291–9
Methicillin-resistant Staphylococcus simulans masquerading as MRSA in a nursing home [letter; comment] Barnham M, et al. **J Hosp Infect** 1996 Dec;34(4):331–3. Comment on: J Hosp Infect 1996 Feb;32(2):127–33.
MRSA bacteraemia [letter] Catchpole C, et al. **J Hosp Infect** 1997 Feb;35(2):159–61
Investigation of a methicillin-resistant Staphylococcus aureus (MRSA) outbreak in an Irish hospital: triplex PCR and DNA amplification fingerprinting. Cotter L, et al. **J Hosp Infect** 1997 May;36(1):37–47
Coagulase-negative staphylococci (CNS) and necrotizing enterocolitis (NEC) [letter; comment] Damjanovic V, et al. **J Hosp Infect** 1996 Jun;33(2):153–5. Comment on: J Hosp Infect 1995 Oct;31(2):105–10.
A comparison of methods to determine whether clinical isolates of Staphylococcus epidermidis from the same patient are related. Hedin G. **J Hosp Infect** 1996 Sep; 34(1):31–42
Consecutive isolation of homologous strains of methicillin-resistant and methicillin-susceptible Staphylococcus aureus from a hospitalized child. Lawrence C, et al. **J Hosp Infect** 1996 May;33(1):49–53
Molecular epidemiology of a multiple strain outbreak of methicillin-resistant Staphylococcus aureus amongst patients and staff. Lessing MP, et al. **J Hosp Infect** 1995 Dec;31(4):253–60
Carriage of Staphylococcus aureus in the elderly. Parnaby RM, et al. **J Hosp Infect** 1996 Jul;33(3):201–6
Long-term in-vitro survival of an epidemic MRSA phage-group III-29 strain [letter] Wagenvoort JH, et al. **J Hosp Infect** 1997 Apr;35(4):322–5
Molecular epidemiologic analysis of Staphylococcus aureus isolated from clinical specimens. Byun DE, et al. **J Korean Med Sci** 1997 Jun;12(3):190–8
CD18 adhesion blockade decreases bacterial clearance and neutrophil recruitment after intrapulmonary E. coli, but not after S. aureus. Ramamoorthy C, et al. **J Leukoc Biol** 1997 Feb;61(2):167–72
Slime formation as a marker of serious infection with methicillin-resistant Staphylococcus aureus. Takahashi A, et al. **J Med** 1997;28(1-2):87–98
Methicillin resistant Staphylococcus aureus (MRSA): disease spectrum, biological characteristics, resistant mechanisms, and typing methods. Abdo RA, et al. **J Med Liban** 1996; 44(1):21–30 (90 ref.)
Genome organisation of Staphylococcus aureus isolates from different populations. El-Adhami W, et al. **J Med Microbiol** 1997 Apr;46(4):297–306
Persistence of Staphylococcus aureus strains among cystic fibrosis patients over extended periods of time. Branger C, et al. **J Med Microbiol** 1996 Oct;45(4):294–301
Role of Staphylococcus aureus surface adhesins in orthopaedic device infections: are results model-dependent? Darouiche RO, et al. **J Med Microbiol** 1997 Jan;46(1):75–9
Epidemiological typing of coagulase-negative staphylococci from nosocomial infections. Geary C, et al. **J Med Microbiol** 1997 Mar;46(3):195–203
Role of certain virulence factors in a murine model of Staphylococcus aureus arthritis. Gemmell CG, et al. **J Med Microbiol** 1997 Mar;46(3):208–13
Rapid identification by specific PCR of coagulase-negative staphylococcal species important in hospital infection. Gribaldo S, et al. **J Med Microbiol** 1997 Jan;46(1):45–53
Enterotoxin production by Staphylococcus aureus clones and detection of Brazilian epidemic MRSA clone (III::B:A) among isolates from food handlers. Soares MJ, et al. **J Med Microbiol** 1997 Mar;46(3):214–21
Coagulase and protein A polymorphisms do not contribute to persistence of nasal colonisation by Staphylococcus aureus. Van Belkum A, et al. **J Med Microbiol** 1997 Mar; 46(3):222–32
Molecular tracking of coagulase-negative staphylococcal isolates from catheter-related infections. Dominguez MA, et al. **Microb Drug Resist** 1996 Winter;2(4):423–9
Tracing the spread of methicillin-resistant Staphylococcus aureus by Southern blot hybridization using gene-specific probes of mec and Tn554. Kreiswirth BN, et al. **Microb Drug Resist** 1995 Winter;1(4):307–13
Multidrug-resistant Iberian epidemic clone of methicillin-resistant Staphylococcus aureus endemic in a hospital in northern Portugal. Sanches IS, et al. **Microb Drug Resist** 1995 Winter;1(4):299–306
Tracing the origin of an outbreak of methicillin-resistant Staphylococcus aureus infections in a Portuguese hospital by molecular fingerprinting methods. Sanches IS, et al. **Microb Drug Resist** 1996 Fall;2(3):319–29
Emergence of a methicillin-resistant Staphylococcus aureus clone related to the Brazilian epidemic clone III::B:A causing invasive disease among AIDS patients in a Brazilian hospital. Teixeira LA, et al. **Microb Drug Resist** 1996 Winter;2(4):393–9
Antimicrobial resistance of coagulase-negative staphylococci from a Kuwait hospital. Udo EE, et al. **Microb Drug Resist** 1995 Winter;1(4):315–20
Acute osteomyelitis of the pubic symphysis following cardiac catheterization. LeCroy CM, et al. **Orthopedics** 1997 Feb; 20(2):171–3
What is the role of upper airway bacterial cultures in patients with cystic fibrosis? [editorial; comment] Ramsey BW. **Pediatr Pulmonol** 1996 May;21(5):265–6. Comment on: Pediatr Pulmonol 1996 May;21(5):267–75.
Beneficial effect of glucocorticoids on the course of haematogenously acquired Staphylococcus aureus nephritis. Verba V, et al. **Scand J Immunol** 1997 Mar; 45(3):282–6
Wound infection caused by Staphylococcus hyicus subspecies hyicus after a donkey bite. Osterlund A, et al. **Scand J Infect Dis** 1997;29(1):95
Methicillin-resistant Staphylococcus aureus: a four-year experience in a spinal cord injury unit in Spain. Olona-Cabases M, et al. **Spinal Cord** 1996 Jun;34(6):315–9
Cross infections due to coagulase-negative staphylococci in high-risk patients. Hübner J, et al. **Zentralbl Bakteriol** 1995 Dec;283(2):169–74 (23 ref.)
[Staphylococcus lugdunensis endocarditis. A new case (letter)] Dupont C, et al. **Ann Med Interne (Paris)** 1996; 147(5):374–5 **(Fre)**
[Inter- and intrahospital transmission of methicillin-resistant Staphylococcus aureus] Harbarth S, et al. **Schweiz Med Wochenschr** 1997 Mar 22;127(12):471–8 (Eng. Abstr.) **(Fre)**
[Clinically isolated bacterii seen in complicated infections] Iwai S. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1091–6 (12 ref.) (Eng. Abstr.) **(Jpn)**
[Skin infections due to Staphylococcus aureus and Streptococcus pyogenes] Arata J. **Nippon Rai Gakkai Zasshi** 1996 Jul;65(2):83–7 (10 ref.) **(Jpn)**
[MRSA-related glomerulonephritis] Muro K, et al. **Ryoikibetsu Shokogun Shirizu** 1997;(16 Pt 1):99–101 (8 ref.) **(Jpn)**
[Coagulase-negative staphylococci isolated from cases of infective endocarditis] Dudkiewicz B, et al. **Med Dosw Mikrobiol** 1996;48(3-4):103–10 (Eng. Abstr.) **(Pol)**
[Ethmoiditis with orbital complications in children] Chmielik M, et al. **Pediatr Pol** 1996 Jun;71(6):555–8 (Eng. Abstr.) **(Pol)**
[The antibiotic resistance of Staphylococcus aureus strains isolated in units with an elevated nosocomial risk and in outpatient facilities in 1995] Grigore L, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan-Jun; 42(1-2):51–4 (Eng. Abstr.) **(Rum)**
[Mechanism of bacteriopyknosis] Pal'tsyn AA, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):349–52 **(Rus)**
[Staphylococcal contamination of the upper respiratory tract mucosa in children exposed to air pollution] Bukharin OV, et al. **Gig Sanit** 1996 Nov-Dec;(6):6–8 (Eng. Abstr.) **(Rus)**
[The connection between the duration of the course of postinjection abscesses and the biological characteristics of the causative microorganisms] Kurlaev PP, et al. **Vestn Khir Im I I Grek** 1996;155(6):54–6 (Eng. Abstr.) **(Rus)**
[The resident staphylococcal bacterial carriage in a human population as an index for the microecological monitoring of its habitat environment] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):71–4 (Eng. Abstr.) **(Rus)**
[The role of Staphylococcus epidermidis persistence factors in the infectious process] Chernova OL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug;(4):81–4 (Eng. Abstr.) **(Rus)**
[The dynamics of the persistence characteristics of staphylococci under the action of the microclimate of a speleotherapy mine] Chernova OP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):78–80 (Eng. Abstr.) **(Rus)**
[The role of the persistent characteristics of a causative agent in determining the protracted course of a

suppurative-inflammatory course Deriabin DB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):74-7 (Eng. Abstr.) **(Rus)**

[Factors in the persistence of opportunistic microorganisms in dysbacteriosis of the gastrointestinal tract] Mitrokhin SD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug;(4):84-7 (Eng. Abstr.) **(Rus)**

[Virulence factors of coagulase-negative Staphylococcus of human and bovine origin] Saa E, et al. **Rev Latinoam Microbiol** 1995 Jul-Sep;37(3):201-8 (Eng. Abstr.) **(Spa)**

[The biological penetration of an intestinal wound] Mazur IuI, et al. **Klin Khir** 1995;(1):27-9 **(Ukr)**

MORTALITY

Mortality associated with nosocomial bacteremia due to methicillin-resistant Staphylococcus aureus. Romero-Vivas J, et al. **Clin Infect Dis** 1995 Dec; 21(6):1417-23

Types of methicillin-resistant Staphylococcus aureus associated with high mortality in patients with bacteremia. Nada T, et al. **Eur J Clin Microbiol Infect Dis** 1996 Apr; 15(4):340-3

Septic shock as a predictor of mortality in bacteremia caused by coagulase-negative staphylococci. Topeli A, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):411-6

PATHOLOGY

Necrotizing fasciitis in the head and neck [letter] Paloma V, et al. **Ann Plast Surg** 1996 Jun;36(6):658

Clinical and histologic response of subcutaneous expanded polytetrafluoroethylene (Gore-Tex) and porous high-density polyethylene (Medpor) implants to acute and early infection. Sclafani AP, et al. **Arch Otolaryngol Head Neck Surg** 1997 Mar;123(3):328-36

Polymorphonuclear leukocyte-mediated bone degradation and influence of blood mononuclear cells on the mouse calvarial model. Wang YH, et al. **Chin Med J (Engl)** 1996 Sep;109(9):711-9

Botryomycosis. Fain O, et al. **Clin Infect Dis** 1997 Apr; 24(4):557, 717

Evaluation of infectious crystalline keratitis with confocal microscopy in a case series. Sutphin JE, et al. **Cornea** 1997 Jan;16(1):21-6

Conjunctival scrapings and impression cytology in chronic conjunctivitis. Correlation with microbiology. Cvenkel B, et al. **Eur J Ophthalmol** 1997 Jan-Mar;7(1):19-23

Toxic shock syndrome in AIDS [letter] Klinker H, et al. **Int J Dermatol** 1997 Jun;36(6):472-3

PHYSIOPATHOLOGY

Disseminated varicella and staphylococcal pericarditis after topical steroids [letter; comment] Brumund MR, et al. **J Pediatr** 1997 Jul;131(1 Pt 1):162-3. Comment on: J Pediatr 1997 Jul;131(1 Pt 1):10-2.

Accumulation of 99Tcm-polyclonal immunoglobulin in different stages of infection: an experimental study. Burak Z, et al. **Nucl Med Commun** 1996 May;17(5):430-4

PREVENTION & CONTROL

Teicoplanin pharmacology in prophylaxis for coagulase-negative staphylococcal sepsis of very low birthweight infants [letter] Möller JC, et al. **Acta Paediatr** 1996 May;85(5):638-9

Staphylococcus aureus vaccination for dialysis patients--an update. Fattom AI, et al. **Adv Ren Replace Ther** 1996 Oct; 3(4):302-8 (57 ref.)

Surveillance of colonization and infection with Staphylococcus aureus susceptible or resistant to methicillin in a community skilled-nursing facility [see comments] Lee YL, et al. **Am J Infect Control** 1997 Aug; 25(4):312-21. Comment in: Am J Infect Control 1997 Aug;25(4):294-6.

Absorbable, delayed-release antibiotic beads reduce surgical wound infection. Galandiuk S, et al. **Am Surg** 1997 Sep; 63(9):831-5

Vancomycin-resistant Staphylococcus aureus [letter; comment] Lai KK. **Ann Intern Med** 1996 Nov 15; 125(10):859; discussion 859-60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329-34.

Vancomycin-resistant Staphylococcus aureus [letter; comment] Lundstrom T, et al. **Ann Intern Med** 1996 Nov 15;125(10):858-9; discussion 859-60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329-34.

Vancomycin-resistant Staphylococcus aureus [letter; comment] Olmsted RN, et al. **Ann Intern Med** 1996 Nov 15;125(10):858; discussion 859-60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329-34.

Vancomycin-resistant Staphylococcus aureus [letter; comment] Vandenbroucke-Grauls CM. **Ann Intern Med** 1996 Nov 15;125(10):859; discussion 859-60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329-34.

Omental transfer as a method of preventing residual persistent subcutaneous infection after mediastinitis. Yoshida K, et al. **Ann Thorac Surg** 1997 Mar;63(3):858-9; discussion 859-60

Local application of vancomycin for prophylaxis of graft infection: release of vancomycin from antibiotic-bonded Dacron grafts, toxicity in endothelial cell culture, and efficacy against graft infection in an animal model. Muhl E, et al. **Ann Vasc Surg** 1996 May;10(3):244-53

Addition of corticosteroids to antibiotic treatment ameliorates the course of experimental Staphylococcus aureus arthritis. Sakiniene E, et al. **Arthritis Rheum** 1996 Sep;39(9):1596-605

The epidemiology of methicillin-resistant Staphylococcus aureus: surgical relevance 20 years on. McDonald M. **Aust N Z J Surg** 1997 Oct;67(10):682-5 (32 ref.)

Is it time to stop searching for MRSA? Practical guidelines are needed for healthcare workers [letter; comment] Cattermole G. **BMJ** 1997 Jul 5;315(7099):58. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Basic hygiene should help contain MRSA [letter; comment] Cooke RP, et al. **BMJ** 1997 Jul 5;315(7099):59. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Screening is still important [see comments] Cookson B. **BMJ** 1997 Mar 1; 314(7081):664-5. Comment in: BMJ 1997 Jul 5;315(7099):57. Comment in: BMJ 1997 Jul 5;315(7099):58-9. Comment in: BMJ 1997 Jul 5;315(7099);59-60.

Is it time to stop searching for MRSA? Environmental hygiene is an important part of control [letter; comment] Dance DA, et al. **BMJ** 1997 Jul 5;315(7099):59-60. Comment on: BMJ 1997 Mar 1;314(7081):664-5. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Healthcare workers are at risk from policies for controlling MRSA [letter; comment] Jefferson RD, et al. **BMJ** 1997 Jul 5;315(7099):57 . Comment on: BMJ 1997 Mar 1;314(7081):664-5. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Isolating patients with MRSA can have long term implications [letter; comment] Peel RK, et al. **BMJ** 1997 Jul 5;315(7099):58. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Follow up screening within the community needs clarification [letter; comment] Philp R, et al. **BMJ** 1997 Jul 5;315(7099):57. Comment on: BMJ 1997 Mar 1;314(7081):664-5. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Stop the ritual of tracing colonised people [see comments] Teare EL, et al. **BMJ** 1997 Mar 1;314(7081):665-6. Comment in: BMJ 1997 Jul 5;315(7099):57. Comment in: BMJ 1997 Jul 5;315(7099):58. Comment in: BMJ 1997 Jul 5;315(7099):58-9. Comment in: BMJ 1997 Jul 5;315(7099):59. Comment in: BMJ 1997 Jul 5;315(7099):59-60.

Is it time to stop searching for MRSA? Selective screening for MRSA should be considered [letter; comment] Torrens JK. **BMJ** 1997 Jul 5;315(7099):57. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Is it time to stop searching for MRSA? Risk analysis can identify those patients needing isolation [letter; comment] Wilson P, et al. **BMJ** 1997 Jul 5;315(7099):58-9. Comment on: BMJ 1997 Mar 1;314(7081):664-5. Comment on: BMJ 1997 Mar 1;314(7081):665-6.

Effective control of methicillin-resistant Staphylococcus aureus in a burn unit. Matsumura H, et al. **Burns** 1996 Jun; 22(4):283-6

Prophylaxis against Staphylococcus epidermidis vascular graft infection with rifampicin-soaked, gelatin-sealed Dacron. Sardelic F, et al. **Cardiovasc Surg** 1996 Jun; 4(3):389-92

Minocycline and ethylenediaminetetraacetate for the prevention of recurrent vascular catheter infections. Raad I, et al. **Clin Infect Dis** 1997 Jul;25(1):149-51

Delayed local treatment of rabbit tibial fractures with biodegradable cefazolin microspheres. Jacob E, et al. **Clin Orthop** 1997 Mar;(336):278-85

Does the Ukrain preparation protect mice against lethal doses of bacteria? Ciebiada I, et al. **Drugs Exp Clin Res** 1996; 22(3-5):207-11

Review of methicillin resistant Staphylococcus aureus with special reference to handling of surgical patients. Gakuu LN. **East Afr Med J** 1997 Mar;74(3):198-202 (22 ref.)

Experience with methicillin resistant Staphylococcus aureus at the Nairobi Hospital. Hayanga A, et al. **East Afr Med J** 1997 Mar;74(3):203-4

Control of methicillin-resistant Staphylococcus aureus in a neonatal intensive-care unit: use of intensive microbiologic surveillance and mupirocin. Back NA, et al. **Infect Control Hosp Epidemiol** 1996 Apr;17(4):227-31

Preventing staphylococcal infections by eradicating nasal carriage of Staphylococcus aureus: proceeding with caution [editorial; comment] Boyce JM. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):775-9 (50 ref.). Comment on: Infect Control Hosp Epidemiol 1996 Dec;17(12):780-5. Comment on: Infect Control Hosp Epidemiol 1996 Dec;17(12):786-92. Comment on: Infect Control Hosp Epidemiol 1996 Dec;17(12):813-6.

DNA typing and control of methicillin-resistant Staphylococcus aureus at two affiliated hospitals. Hartstein AI, et al. **Infect Control Hosp Epidemiol** 1997 Jan;18(1):42-8

A prolonged outbreak of methicillin-resistant Staphylococcus aureus in the burn unit of a tertiary medical center. Meier PA, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):798-802

Optimization of detection and yield of methicillin-resistant Staphylococcus aureus phage type III-29 [letter] Wagenvoort JH, et al. **Infect Control Hosp Epidemiol** 1996 Apr;17(4):208-9

Nasal mupirocin prevents Staphylococcus aureus exit-site infection during peritoneal dialysis. Mupirocin Study Group. **J Am Soc Nephrol** 1996 Nov;7(11):2403-8

In-vitro modelling of the bactericidal activity of teicoplanin versus flucloxacillin as used in surgical prophylaxis, against Staphylococcus aureus. Steer JA, et al. **J Antimicrob Chemother** 1997 Apr;39(4):477-81

Association between nonadministration of subconjunctival cefuroxime and postoperative endophthalmitis. Lehmann OJ, et al. **J Cataract Refract Surg** 1997 Jul-Aug; 23(6):889-93

Evaluation of two iodophor teat germicides: activity against Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1997 Aug;80(8):1846-50

Efficacy of teat dips containing a hypochlorous acid germicide against experimental challenge with Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1996 Sep;79(9):1683-8

Incidence of methicillin-resistant Staphylococcus aureus (MRSA) isolation in a skilled nursing home: a third report on the risk factors for the occurrence of MRSA infection in the elderly. Washio M, et al. **J Epidemiol** 1996 Jun; 6(2):69-73

Strategies for the management of healthcare staff colonized with epidemic methicillin-resistant Staphylococcus aureus [letter] Bowler I. **J Hosp Infect** 1997 Aug;36(4):321-2

Guidelines on the control of methicillin-resistant Staphylococcus aureus in the community [letter; comment] Hollyoak V. **J Hosp Infect** 1996 Jan;32(1):81-2. Comment on: J Hosp Infect 1995 Sep;31(1):1-12.

Methicillin-resistant Staphylococcus aureus (MRSA)--a re-appraisal of control measures in the light of changing circumstances. Humphreys H, et al. **J Hosp Infect** 1997 Jul;36(3):167-70 (20 ref.)

When should healthcare workers be screened for methicillin-resistant Staphylococcus aureus? [see comments] Lessing MP, et al. **J Hosp Infect** 1996 Nov; 34(3):205-10. Comment in: J Hosp Infect 1997 Apr;35(4):320-1.

Risk factors for oxacillin/methicillin resistance in coagulase-negative staphylococci. Martínez JA, et al. **J Hosp Infect** 1997 Apr;35(4):295-9

Long-term methicillin-resistant Staphylococcus aureus (MRSA) carriage and tagging of patient records [letter] Morgan MG, et al. **J Hosp Infect** 1997 May;36(1):78-80

Management of an outbreak of methicillin-resistant Staphylococcus aureus in a risk area with empirical intranasal mupirocin [letter] Rodriguez G, et al. **J Hosp Infect** 1997 Jun;36(2):155-7

Control of methicillin-resistant Staphylococcus aureus [letter; comment] Sheppard MJ. **J Hosp Infect** 1996 Jan; 32(1):73-8. Comment on: J Hosp Infect 1995 Feb;29(2):87-106.

Elution of six antibiotics bonded to polyethylene vascular grafts sealed with three proteins. Galdbart JO, et al. **J Surg Res** 1996 Dec;66(2):174-8

Making real sense of MRSA [letter; comment] Chadwick PR, et al. **Lancet** 1996 Nov 30;348(9040):1525. Comment on: Lancet 1996 Sep 28;348(9031):836-7.

Making real sense of MRSA [letter; comment] Fraise AP, et al. **Lancet** 1996 Nov 30;348(9040):1526. Comment on: Lancet 1996 Sep 28;348(9031):836-7.

Making real sense of MRSA [letter; comment] Hill SF. **Lancet** 1996 Nov 30;348(9040):1525-6. Comment on: Lancet 1996 Sep 28;348(9031):836-7.

Making real sense of MRSA [editorial] [see comments] Patterson JE. **Lancet** 1996 Sep 28;348(9031):836-7. Comment in: Lancet 1996 Nov 30;348(9040):1525. Comment in: Lancet 1996 Nov 30;348(9040):1525-6. Comment in: Lancet 1996 Nov 30;348(9040):1526.

Effects of granulocyte-macrophage colony stimulating factor (GM-CSF) on biomaterial-associated staphylococcal infection in mice. Rózalska B, et al. **Microbiol Immunol** 1996;40(12):931-9

Preventing infection with Staphylococcus aureus in CAPD [letter] Ludlam H, et al. **Perit Dial Int** 1997 Jul-Aug; 17(4):405-6

Is it possible to decrease the rate of Staphylococcus aureus peritonitis? [editorial] Piraino B. **Perit Dial Int** 1996 Sep-Oct;16(5):446-7

Is control of methicillin-resistant Staphylococcus aureus justified? Bowler IC. **QJM** 1997 Apr;90(4):243-6 (26 ref.)

To control or not to control colonization with MRSA ... that's the question! [editorial] Pittet D, et al. **QJM** 1997 Apr;90(4):239-41

Staphylococcal bacteremia in cancer patients: risk factors and outcome in 134 episodes prior to and after introduction of quinolones into infection prevention in neutropenia. Kukuckova E, et al. **Support Care Cancer** 1996 Nov; 4(6):427-34

[Comment on the contribution by A. Pennekamp, P. Tschirky and R. Grossenbacher. Significance of Staphylococcus aureus in nose operations (letter; comment)] Damm M. **HNO** 1996 Aug;44(8):429-30. Comment on: HNO 1995 Nov;43(11):664-8. **(Ger)**

[Control of Nosocomial infections: prevention of respiratory infections in the elderly] Nagatake T, et al. **Nippon Saikingaku Zasshi** 1996 Aug;51(3):871-6 (14 ref.) **(Jpn)**

[Prevention of MRSA spread in the neurosurgical field] Fujii M, et al. **No Shinkei Geka** 1996 Mar;24(3):241-5 (Eng.

Abstr.) **(Jpn)**

[Recommendations for the prevention and control of staphylococcal infections in neonatal units--1996] Bălan A. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan-Jun; 42(1-2):107-9 **(Rum)**

RADIOGRAPHY

Evolution of the infected abdominal aortic aneurysm: CT observation of early aortitis. Rozenblit A, et al. **Abdom Imaging** 1996 Nov-Dec;21(6):512-4

The role of aspiration and contrast-enhanced arthrography in evaluating the uncemented hip arthroplasty. Cheung A, et al. **AJR Am J Roentgenol** 1997 May;168(5):1305-9

Pyomyositis of the calf muscles mimicking distal deep venous thrombosis: a case report. Wang KC, et al. **Am J Orthop** 1997 May;26(5):358-9

Ultrafast computed tomography in infectious pseudoaneurysm of the left ventricular outflow tract. Berrizbeitia LD, et al. **J Thorac Cardiovasc Surg** 1997 Jul; 114(1):138-9

[Septic arthritis of posterior lumbar facet joint] Ben Hamouda M, et al. **J Radiol** 1997 May;78(5):373-6 (10 ref.) (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Early cardioverter defibrillator infection: value of indium-111 leukocyte imaging. Bhadelia RA, et al. **Ann Thorac Surg** 1997 Jan;63(1):236-8

Ventilation/perfusion reverse mismatch in septic pulmonary emboli. Spencer RP. **Clin Nucl Med** 1996 Apr;21(4):328-9

Tc-99m MDP uptake in Staphylococcus aureus paraspinal abscess. Value of bone SPECT and reprojectional display in preoperative guidance. Turoglu T, et al. **Clin Nucl Med** 1997 May;22(5):335-6

Retention of technetium-99m in infectious foci in rats after release from technetium-99m labelled human non-specific polyclonal immunoglobulin G: a dual-label study with hydrazinonicotinamido and iminothiolano immunoglobulin. Claessens RA, et al. **Eur J Nucl Med** 1996 Nov; 23(11):1536-9

Chronic complicated osteomyelitis of the appendicular skeleton: diagnosis with technetium-99m labelled monoclonal antigranulocyte antibody-immunoscintigraphy. Kaim A, et al. **Eur J Nucl Med** 1997 Jul;24(7):732-8

Different behaviour of radioiodinated human recombinant interleukin-1 and its receptor antagonist in an animal model of infection. van der Laken CJ, et al. **Eur J Nucl Med** 1996 Nov;23(11):1531-5

Rapid imaging of experimental infection with technetium-99m-DTPA after anti-DTPA monoclonal antibody priming. Kranenborg MH, et al. **J Nucl Med** 1997 Jun;38(6):901-6

Technetium-99m-labeled chemotactic peptides in acute infection and sterile inflammation [see comments] van der Laken CJ, et al. **J Nucl Med** 1997 Aug;38(8):1310-5. Comment in: J Nucl Med 1997 Aug;38(8):1322-6.

Labelled Stealth liposomes in experimental infection: an alternative to leukocyte scintigraphy? Oyen WJ, et al. **Nucl Med Commun** 1996 Sep;17(9):742-8

Biodistribution of 111In-labelled IgG and IgM in experimental infection. Oyen WJ, et al. **Nucl Med Commun** 1996 Jul;17(7):616-20

[Labeled leukocyte scintigraphy and total hip prosthesis] Van FT, et al. **Acta Orthop Belg** 1996 Dec;62(4):212-7 (Eng. Abstr.) **(Fre)**

SURGERY

Muslin induced granuloma following wrapping of intracranial aneurysms: the role of infection as an additional precipitating factor. Report of two cases and review of the literature. Kirollos RW, et al. **Acta Neurochir (Wien)** 1997;139(5):411-5

Tricuspid valve repair for tricuspid valve endocarditis after Fallot repair. d'Udekem Y, et al. **Ann Thorac Surg** 1997 Mar;63(3):830-2

Arterial homografts--a possible solution to an infective dilemma. Wagstaff SA, et al. **Cardiovasc Surg** 1996 Dec; 4(6):796-800

Long-term survival following pericardiectomy for Staphylococcus aureus pericarditis in an HIV-positive drug user [letter] Currie PF, et al. **Eur Heart J** 1997 Mar; 18(3):526-7

Long-term results of surgery for active infective endocarditis. d'Udekem Y, et al. **Eur J Cardiothorac Surg** 1997 Jan;11(1):46-52

Homograft replacement of thoraco-abdominal aorta for a leaking mycotic aneurysm. Pagano D, et al. **Eur J Cardiothorac Surg** 1996;10(5):383-5

Emergency surgery for acute infective aortic valve endocarditis: performance of cryopreserved homografts and mode of failure. Vogt PR, et al. **Eur J Cardiothorac Surg** 1997 Jan;11(1):53-61

Greater omentum flaps and granulocyte transfusions as combined therapy of liver abscess in chronic granulomatous disease. von Planta M, et al. **Eur J Pediatr Surg** 1997 Aug; 7(4):234-6

Psoas muscle abscess associated with pyogenic sacroiliitis. Assalia A, et al. **Eur J Surg** 1996 May;162(5):415-7

Wide reconstruction of the anterior cranial base with bipedicled galeopericranial flap. Terashi H, et al. **Head Neck** 1996 May-Jun;18(3):292-4

Combined vascular reconstruction and adjunctive tissue transfer in the treatment of infected arterial prostheses and tissue defects. Bastounis EA, et al. **Int Angiol** 1996 Jun; 15(2):144-8

Timing of surgical treatment for active native value endocarditis. Iemura J, et al. **Jpn Circ J** 1997 Jun; 61(6):467-70

Septic arthritis of adult hip treated by total hip replacement--a case report. Hsu YP, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Mar; 13(3):195-9

[Tricuspid valvulectomy in antibiotic-refractory right-heart endocarditis] Hust MH, et al. **Dtsch Med Wochenschr** 1997 Jan 24;122(4):80-5 (36 ref.) (Eng. Abstr.) **(Ger)**

[Primary therapy refractory osteomyelitis of the sternum after aortocoronary bypass operation--a case report] Fialka C, et al. **Zentralbl Chir** 1996;121(10):866-8 (Eng. Abstr.) **(Ger)**

[Superinfection with multi-resistant Staphylococcus aureus of the hand caused by shunt vein occlusion in a dialysis patient] Hoch J, et al. **Zentralbl Chir** 1996;121 Suppl:79-81 **(Ger)**

[Clinical experience with a new antimicrobially coated InterGard-IgK/AM vascular prosthesis in surgical treatment of deep wound infection with involvement of the synthetic bypass: report of 2 cases] Manouguian S. **Zentralbl Chir** 1996;121(9):768-72; discussion 772-3 (Eng. Abstr.) **(Ger)**

[The effect of aortic valve translocation and a few problems] Sakamoto S, et al. **Rinsho Kyobu Geka** 1989 Apr; 9(2):157-61 (Eng. Abstr.) **(Jpn)**

[Hepatic artery aneurysm: treatment with left hepatectomy. Report of a case] Chaib E, et al. **Arq Gastroenterol** 1995 Jul-Sep;32(3):116-20 (Eng. Abstr.) **(Por)**

[The simultaneous sanative treatment of foci of odontogenic and cardiogenic infections during the surgical treatment of septic endocarditis] Shelkovskii VN, et al. **Stomatologiia (Mosk)** 1996;Spec No:92-3 **(Rus)**

[Prosthesis of the infected portion of the femoral artery with a segment of the superficial femoral vein in arrosive hemorrhage] Tanryberdiev MO, et al. **Vestn Khir Im I I Grek** 1997;156(3):80 **(Rus)**

THERAPY

Undertreatment and overtreatment of patients with infected antiarrhythmic implantable devices. Molina JE. **Ann Thorac Surg** 1997 Feb;63(2):504-9

Management of infected total knee arthroplasty. Wang CJ. **Chang Keng I Hsueh** 1997 Mar;20(1):1-10

Staphylococcus aureus prosthetic joint infection treated with debridement and prosthesis retention. Brandt CM, et al. **Clin Infect Dis** 1997 May;24(5):914-9

Coagulase-negative staphylococcal infections: an update regarding recognition and management. Rupp ME. **Curr Clin Top Infect Dis** 1997;17:51-87 (261 ref.)

Neonatal adrenal abscesses. Steffens J, et al. **Eur Urol** 1997; 31(3):347-9

One stage surgical management of deep infection of total hip arthroplasty. Mulcahy DM, et al. **Ir J Med Sci** 1996 Jan-Mar;165(1):17-9

Laparoscopic management of peritonitis in the setting of an infected Tenckhoff catheter: a case report and description of technique. Chiu CK, et al. **J Am Coll Surg** 1996 Dec; 183(6):640-2

Regarding "Infected thrombophlebitis of the right internal jugular vein" [letter; comment] Kaufman JL. **J Vasc Surg** 1997 Jun;25(6):1118. Comment on: J Vasc Surg 1996 Dec;24(6):1066-7.

Infected thrombophlebitis of the right internal jugular vein [letter] [see comments] Terada Y, et al. **J Vasc Surg** 1996 Dec;24(6):1066-7. Comment in: J Vasc Surg 1997 Jun;25(6):1118.

Reduction of plasma nitric oxide in a patient with endotoxic shock by hemoadsorption therapy [letter] Shimada N, et al. **Nephron** 1997;75(1):115

The treatment of septicemia in pacemaker patients. Böhm A, et al. **Pacing Clin Electrophysiol** 1996 Jul;19(7):1105-11

[Interdisciplinary management of infections with multidrug resistant Staphylococcus aureus strains] Fuchs M, et al. **Zentralbl Chir** 1996;121 Suppl:76-8 **(Ger)**

[A case of successful treatment of mediastinitis and prosthetic graft infection after aortic arch and thoracoabdominal aortic reconstruction] Kawashima T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Feb;45(2):220-4 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Susceptibility to antibiotics of Staphylococcus aureus strains isolated from pus specimens obtained from patients referred for autovaccine therapy] Ekiel A, et al. **Med Dosw Mikrobiol** 1995;47(3-4):127-32 (Eng. Abstr.) **(Pol)**

[Antiseptics in the combined treatment of patients with perimaxillary abscesses and phlegmons] Biberman IaM, et al. **Stomatologiia (Mosk)** 1996;75(6):25-7 (Eng. Abstr.) **(Rus)**

[The differentiated correction of the local immunity of the reproductive tract by using lysozyme and immunoglobulins in pregnant women with a genital infection] Dolgushin II, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug; (4):111-5 (Eng. Abstr.) **(Rus)**

[A new sorbent for the treatment of intestinal infections] Rudychenko VF, et al. **Lik Sprava** 1996 Jan-Feb; (1-2):98-100 (Eng. Abstr.) **(Ukr)**

TRANSMISSION

Increasing rates of Staphylococcus aureus bacteremia--a medical device is a merit in disguise and methicillin resistance is merely a vice [editorial; comment] Darouiche RO, et al. **Clin Infect Dis** 1996 Aug;23(2):260-1. Comment on: Clin Infect Dis 1996 Aug;23(2):255-9.

Nosocomial and community-acquired Staphylococcus aureus bacteremias from 1980 to 1993: impact of intravascular devices and methicillin resistance [see comments] Steinberg JP, et al. **Clin Infect Dis** 1996 Aug;23(2):255-9. Comment in: Clin Infect Dis 1996 Aug;23(2):260-1.

Transmission of methicillin-resistant staphylococcus aureus within a household [letter] Wagenvoort JH, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):399-400

Demonstration of mother-to-infant transmission of Staphylococcus aureus by pulsed-field gel electrophoresis. Mitsuda T, et al. **Eur J Pediatr** 1996 Mar;155(3):194-9

Epidemiologic evidence of transmission of donor-related bacterial infection through a transplanted heart. Coll P, et al. **J Heart Lung Transplant** 1997 Apr;16(4):464-7

Origin and transmission of methicillin-resistant Staphylococcus aureus in an endemic situation: differences between geriatric and intensive-care patients. Hoefnagels-Schuermans A, et al. **J Hosp Infect** 1997 Jul; 36(3):209-22

Investigation into the repeated recovery of coagulase-negative staphylococci from blood taken at the end of cardiopulmonary by-pass. van Belkum A, et al. **J Hosp Infect** 1995 Dec;31(4):285-93

[Paravertebral abscess with secondary meningomyelitis after infiltration therapy. A brief case report] Ohlmann D, et al. **Wien Klin Wochenschr** 1996;108(14):442-3 **(Ger)**

[Transmission of methicillin-resistant Staphylococcus aureus strains by foreign patients--measures for treating patients and preventing a nosocomial infection] Neifer S, et al. **Zentralbl Chir** 1997;122(7):595-6 **(Ger)**

ULTRASONOGRAPHY

Eustachian valve endocarditis: detection with multiplane transesophageal echocardiography. Palakodeti V, et al. **Clin Cardiol** 1997 Jun;20(6):579-80

Transoesophageal echocardiographic recognition of an unusual localization of right-sided endocarditis [letter] De Castro S, et al. **Eur Heart J** 1996 Jun;17(6):964

Transesophageal echocardiographic diagnosis of eustachian valve endocarditis. Georgeson R, et al. **J Am Soc Echocardiogr** 1996 Mar-Apr;9(2):206-8 (14 ref.)

Infective endocarditis of the tricuspid valve in an orthotopic heart transplant recipient. Stewart MJ, et al. **J Heart Lung Transplant** 1996 Jun;15(6):646-9

The role of transesophageal echocardiography in patients with chronic renal failure at low and high risk of endocarditis. Wu EB, et al. **J Heart Valve Dis** 1997 May; 6(3):249-52

Fever and 'negative' blood cultures in an elderly woman. Graham JC, et al. **Postgrad Med J** 1997 Jun;73(860):383-4

[Transesophageal echocardiographic evaluation of tricuspid endocarditis from implanted pacemaker: description of two cases] Bongiovi S, et al. **G Ital Cardiol** 1996 Dec; 26(12):1445-50 (Eng. Abstr.) **(Ita)**

[Usefulness of transesophageal echocardiography in the detection of embolic risk in a case of Staphylococcus aureus endocarditis] Anglada Pintado JC, et al. **Rev Esp Cardiol** 1997 Apr;50(4):283-6 (Eng. Abstr.) **(Spa)**

VETERINARY

Effect of natural infection with minor pathogens on susceptibility to natural infection with major pathogens in the bovine mammary gland. Lam TJ, et al. **Am J Vet Res** 1997 Jan;58(1):17-22

Epidemiological characteristics of bovine clinical mastitis caused by Staphylococcus aureus and Escherichia coli studied by DNA fingerprinting. Lam TJ, et al. **Am J Vet Res** 1996 Jan;57(1):39-42

Prevalence of coagulase-positive staphylococci, other than Staphylococcus aureus, in bovine mastitis. Roberson JR, et al. **Am J Vet Res** 1996 Jan;57(1):54-8

Genomic DNA fingerprinting, using pulsed-field gel electrophoresis, of Staphylococcus intermedius isolated from dogs. Shimizu A, et al. **Am J Vet Res** 1996 Oct; 57(10):1458-62

Field trial of a staphylococcal mastitis vaccine in dairy herds: clinical, subclinical and microbiological assessments. Watson DL, et al. **Aust Vet J** 1996 Dec;74(6):447-50

Comparing two dry cow treatments on the new infection and elimination rates of coagulase-negative staphylococci. Davidson TJ, et al. **Can Vet J** 1994 Dec;35(12):775-6

IgG concentration in mammary secretions of goats throughout lactation in healthy and coagulase-negative staphylococci infected udders. Ferrer O, et al. **Comp Immunol Microbiol Infect Dis** 1997 Jun;20(3):253-60

Evaluation of sodium hyaluronate therapy in induced septic arthritis in the horse. Brusie RW, et al. **Equine Vet J Suppl** 1992 Feb;(11):18-23

Molecular analysis of naturally occuring ermC-encoding plasmids in staphylococci isolated from animals with and without previous contact with macrolide/lincosamide antibiotics. Lodder G, et al.

FEMS Immunol Med Microbiol 1997 May;18(1):7–15

Staphylococcus lutrae sp. nov., a new coagulase–positive species isolated from otters. Foster G, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):724–6

Evaluation of a coagulase–negative variant of Staphylococcus aureus as a cause of intramammary infections in a herd of dairy cattle. Fox LK, et al. **J Am Vet Med Assoc** 1996 Sep 15;209(6):1143–6

Interlocking intramedullary nail stabilization of a femoral fracture in a dog with osteomyelitis. Muir P, et al. **J Am Vet Med Assoc** 1996 Oct 1;209(7):1262–4

Evaluation of udder health and mastitis in llamas [see comments] Rowan LL, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1457–63. Comment in: J Am Vet Med Assoc 1997 Mar 15;210(6):748.

Field study on the relationship between teat thickness changes and intramammary infections. Zecconi A, et al. **J Dairy Res** 1996 Aug;63(3):361–8

Activity of selected antimicrobial agents against strains of Staphylococcus aureus isolated from bovine intramammary infections that produce beta–lactamase. Watts JL, et al. **J Dairy Sci** 1997 Apr;80(4):788–91

Prevalence of bacteria in the conjunctival sac and on the eyelid margin of clinically normal cats. Espínola MB, et al. **J Small Anim Pract** 1996 Aug;37(8):364–6

Characterization of non–pigmented Staphylococcus chromogenes. Saito K, et al. **J Vet Med Sci** 1996 Jul; 58(7):711–3

Pharmacokinetic–pharmacodynamic model for spiramycin in staphylococcal mastitis. Renard L, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):95–103

Accumulation of leucocytes and cytokines in the lactating ovine udder during mastitis due to Staphylococcus aureus and Escherichia coli. Persson–Waller K, et al. **Res Vet Sci** 1997 Jan–Feb;62(1):63–6

Dermatophilosis and abscessation of lymph nodes in a group of tick–infested horses in Uganda. Shannon D. **Trop Anim Health Prod** 1997 May;29(2):102–4

An atypical Staphylococcus aureus intramammary infection in a dairy herd. Laevens H, et al. **Vet Microbiol** 1996 Oct; 52(3–4):271–5

Dynamics of intramammary infection in the sheep caused by coagulase–negative staphylococci and its influence on udder tissue and milk composition. Burriel AR. **Vet Rec** 1997 Apr 19;140(16):419–23

Bacterial culturing of ventral median celiotomies for prediction of postoperative incisional complications in horses. Ingle–Fehr JE, et al. **Vet Surg** 1997 Jan–Feb; 26(1):7–13

Bacterial causes of bovine mastitis in Wondogenet, Ethiopia. Abdella M. **Zentralbl Veterinarmed [B]** 1996 Aug; 43(6):379–84

Coagulase–negative staphylococcal intramammary infections in cows and heifers during the nonlactating and periparturient periods. Oliver SP, et al. **Zentralbl Veterinarmed [B]** 1997 Aug;44(6):355–63

Therapeutic and prophylactic effect of prepartum antibiotic infusion in heifers. Owens WE, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):455–9

[A method for estimating the prevalence of mammary Staphylococcus aureus and Streptococcus agalactiae infections in herds based on an examination of bulk milk samples] Benda P, et al. **Vet Med (Praha)** 1997 Apr; 42(4):101–9 (Eng. Abstr.) **(Cze)**

[Factors affecting the cure rate of Staphylococcus aureus in the drying out of cows using antibiotics: a literature review] Sol J, et al. **Tijdschr Diergeneeskd** 1997 Feb 1; 122(3):62–7 (Eng. Abstr.) **(Dut)**

VIROLOGY

[The taxonomic importance of the capacity of bacteria in the genus Staphylococcus for the inactivation of a number of natural anti–infectious resistance factors] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug; (4):30–3 (Eng. Abstr.) **(Rus)**

STAPHYLOCOCCAL NUCLEASE see **MICROCOCCAL NUCLEASE**

STAPHYLOCOCCAL PHAGES see **STAPHYLOCOCCUS PHAGES**

STAPHYLOCOCCAL PNEUMONIA see **PNEUMONIA, STAPHYLOCOCCAL**

STAPHYLOCOCCAL PROTEIN A

Development of a radioactive protein A–based assay for analysis of surface protein expression in gram–positive bacteria. Coyle TC, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2477–80

Protein A immunoadsorption column versus splenectomy in the treatment of steroid–resistant immune thrombocytopenic purpura. A cost–effectiveness analysis. Kunz K, et al. **Int J Technol Assess Health Care** 1996 Summer;12(3):436–49

ADMINISTRATION & DOSAGE

Cell–specific, multidrug delivery system using streptavidin–protein A fusion protein. Ohno K, et al. **Biochem Mol Med** 1996 Aug;58(2):227–33

BIOSYNTHESIS

Pilot scale expression and purification of soluble protein A tagged beta 1,6N–acetylglucosaminyltransferase in CHO cells. Zeng S, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):653–8

Variation in the agr–dependent expression of alpha–toxin and protein A among clinical isolates of Staphylococcus aureus from patients with septicaemia. Li S, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):155–61

Regulation of protein A synthesis by the sar and agr loci of Staphylococcus aureus. Cheung AL, et al. **Infect Immun** 1997 Jun;65(6):2243–9

CHEMISTRY

Bifunctional fusion proteins of calmodulin and protein A as affinity ligands in protein purification and in the study of protein–protein interactions. Hentz NG, et al. **Anal Chem** 1996 Nov 15;68(22):3939–44

Solution structure of the E–domain of staphylococcal protein A. Starovasnik MA, et al. **Biochemistry** 1996 Dec 3; 35(48):15558–69

Protein glycosylation in the endoplasmic reticulum and the Golgi apparatus and cell type–specificity of cell surface glycoconjugate expression: analysis by the protein A–gold and lectin–gold techniques. Roth J. **Histochem Cell Biol** 1996 Jul;106(1):79–92 (130 ref.)

Anchor structure of staphylococcal surface proteins. A branched peptide that links the carboxyl terminus of proteins to the cell wall. Ton–That H, et al. **J Biol Chem** 1997 Aug 29;272(35):22285–92

Effects of fused tryptophan rich peptides to a recombinant protein. A domain on the partitioning in polyethylene glycol–dextran and Ucon–dextran aqueous two–phase systems. Carlsson M, et al. **J Chromatogr A** 1996 Dec 20; 756(1–2):107–17

Protein A mimetic peptide ligand for affinity purification of antibodies. Fassina G, et al. **J Mol Recognit** 1996 Sep–Dec; 9(5–6):564–9

Structural comparison in solution of a native and retro peptide derived from the third helix of Staphylococcus aureus protein A, domain B: retro peptides, a useful tool for the discrimination of helix stabilization factors dependent on the peptide chain orientation. Haack T, et al. **J Pept Sci** 1997 Jul–Aug;3(4):299–313

Does a backwardly read protein sequence have a unique native state? Olszewski KA, et al. **Protein Eng** 1996 Jan; 9(1):5–14

Absence of a stable intermediate on the folding pathway of protein A. Bai Y, et al. **Protein Sci** 1997 Jul;6(7):1449–57

Folding simulations and computer redesign of protein A three–helix bundle motifs. Olszewski KA, et al. **Proteins** 1996 Jul;25(3):286–99

GENETICS

Expression of a bifunctional chimeric protein A–Vargula hilgendorfii luciferase in mammalian cells. Maeda Y, et al. **Biotechniques** 1996 Jan;20(1):116–21

Coagulase and protein A polymorphisms do not contribute to persistence of nasal colonisation by Staphylococcus aureus. Van Belkum A, et al. **J Med Microbiol** 1997 Mar; 46(3):222–32

The use of gene fusions to protein A and protein G in immunology and biotechnology. Ståhl S, et al. **Pathol Biol (Paris)** 1997 Jan;45(1):66–76 (99 ref.)

A bacterial signal peptide directs efficient secretion of eukaryotic proteins in the baculovirus expression system. Allet B, et al. **Protein Expr Purif** 1997 Feb;9(1):61–8

IMMUNOLOGY

In vivo consequences of B cell superantigen immunization. Silverman GJ, et al. **Ann N Y Acad Sci** 1997 Apr 5; 815:105–10

Effectiveness of protein A for antibody immobilization for a fiber optic biosensor. Anderson GP, et al. **Biosens Bioelectron** 1997;12(4):329–36

Isolation of monoclonal antibodies from cell containing hybridoma broth using a protein A coated adsorbent in expanded beds. Thömmes J, et al. **J Chromatogr A** 1996 Nov 1;752(1–2):111–22

Differential binding avidities of human IgM for staphylococcal protein A derive from specific germ–line VH3 gene usage. Hakoda M, et al. **J Immunol** 1996 Oct 1;157(7):2976–81

Staphylococcal protein A simultaneously interacts with framework region 1, complementarity–determining region 2, and framework region 3 on human VH3–encoded Igs. Potter KN, et al. **J Immunol** 1996 Oct 1;157(7):2982–8

Chicken anti–protein A prevents Staphylococcus aureus protein A from binding to human and rabbit IgG in immunoassays and eliminates most false positive results. Hoffman WL, et al. **J Immunol Methods** 1996 Oct 30; 198(1):67–77

Demonstration of rabbit haemorrhagic disease virus antigen by Staphylococcus protein A coagglutination test. Peshev R, et al. **J Virol Methods** 1996 Mar;57(1):15–8

Separation of equine IgG subclasses (IgGa, IgGb and IgG(T)) using their differential binding characteristics for staphylococcal protein A and streptococcal protein G. Sheoran AS, et al. **Vet Immunol Immunopathol** 1996 Dec; 55(1–3):33–43

Evaluation of protein A and protein G as indicator system in an ELISA for detecting antibodies in mink to Pseudomonas aeruginosa. Rivera E, et al. **Vet Microbiol** 1994 Dec;42(4):265–71

ISOLATION & PURIFICATION

Selective adsorption: a new method for purification of protein A–gold complexes. Lucocq J. **Microsc Res Tech** 1996 Nov 1;35(4):314–9

[The clinical use of protein–A immunoadsorption] Aksenov VA. **Ter Arkh** 1996;68(11):83–5 (35 ref.) **(Rus)**

[A case of the successful use of protein A adsorption in a patient with acute kidney failure in rapidly progressing lupus glomerulonephritis] Aksenov VA, et al. **Ter Arkh** 1997;69(2):66–8 (14 ref.) **(Rus)**

METABOLISM

The sae locus of Staphylococcus aureus controls exoprotein synthesis at the transcriptional level. Giraudo AT, et al. **Arch Microbiol** 1997 Jul;168(1):53–8

Perturbation of the antigen–binding site and staphylococcal protein A–binding site of IgG before significant changes in global conformation during denaturation: an equilibrium study. Wang XD, et al. **Biochem J** 1997 Aug 1;325 (Pt 3):707–10

In vitro complex–formation between the molecular chaperone DnaK and staphylococcal protein A derivatives produced in Escherichia coli and its use in the purification of DnaK. Gustavsson K, et al. **Biotechnol Appl Biochem** 1997 Apr;25 (Pt 2):173–80

Variable region structure and staphylococcal protein A binding specificity of a mouse monoclonal IgM anti–laminin–receptor antibody. Feijó GC, et al. **Immunology** 1997 Jul;91(3):479–85

Staphylococcal protein A binding to VH3 encoded immunoglobulins. Potter KN, et al. **Int Rev Immunol** 1997; 14(4):291–308 (55 ref.)

Heterogeneity of polyclonal IgE characterized by differential charge, affinity to protein A, and antigenicity. Peng Z, et al. **J Allergy Clin Immunol** 1997 Jul;100(1):87–95

A new bioluminescent assay for studies of protein G and protein A binding to IgG and IgM. Zatta PF. **J Biochem Biophys Methods** 1996 Apr;32(1):7–13

An endogenous sialoprotein and a bacterial B cell superantigen compete in their VH family–specific binding interactions with human Igs. Silverman GJ, et al. **J Immunol** 1996 Nov 15;157(10):4496–502

Chicken anti–protein A prevents Staphylococcus aureus protein A from binding to human and rabbit IgG in immunoassays and eliminates most false positive results. Hoffman WL, et al. **J Immunol Methods** 1996 Oct 30; 198(1):67–77

Engineering of Fc(1) and Fc(3) from human immunoglobulin G to analyse subclass specificity for staphylococcal protein A. Jendeberg L, et al. **J Immunol Methods** 1997 Feb 14; 201(1):25–34

Detection and isolation of recombinant proteins based on binding affinity of reporter: protein A. Ståhl S, et al. **Methods Mol Biol** 1997;63:103–18

The cell surface of Aeromonas salmonicida determines in vitro survival in cultured brook trout (Salvelinus fontinalis) peritoneal macrophages. Daly JG, et al. **Microb Pathog** 1996 Dec;21(6):447–61

Binding proteins selected from combinatorial libraries of an alpha–helical bacterial receptor domain. Nord K, et al. **Nat Biotechnol** 1997 Aug;15(8):772–7

Cell–specific targeting of Sindbis virus vectors displaying IgG–binding domains of protein A. Ohno K, et al. **Nat Biotechnol** 1997 Aug;15(8):763–7

CcpA and HPr(ser–P): mediators of catabolite repression in Bacillus subtilis. Chauvaux S. **Res Microbiol** 1996 Jul–Sep; 147(6–7):518–22 (20 ref.)

PHARMACOLOGY

Growth hormone release of interleukin–1 alpha, interferon–gamma and interleukin–4 from murine splenocytes stimulated with staphylococcal protein A, toxic shock syndrome toxin–1 and streptococcal lysin S. Galdiero M, et al. **Eur Cytokine Netw** 1997 Mar;8(1):83–90

Staphylococcal toxins and protein A differentially induce cytotoxicity and release of tumor necrosis factor–alpha from human keratinocytes. Ezepchuk YV, et al. **J Invest Dermatol** 1996 Oct;107(4):603–9

Prolactin regulates IL–1 alpha, IFN–gamma and IL–4 release from mouse splenocytes stimulated with some staphylococcal and streptococcal toxins. Scarfogliero P, et al. **New Microbiol** 1996 Oct;19(4):301–8

[Effects of Staphylococcus aureus protein A on the production of primary host defense factors against S. aureus infection] Endo N, et al. **Kansenshogaku Zasshi** 1997 Jan; 71(1):39–45 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Treatment of plasma refractory thrombotic thrombocytopenic purpura with protein A immunoabsorption. Gaddis TG, et al. **Am J Hematol** 1997 Jun;55(2):55–8

Therapy for paraneoplastic neurologic syndromes in six patients with protein A column immunoadsorption. Cher LM, et al. **Cancer** 1995 Apr 1;75(7):1678–83

STAPHYLOCOCCAL PROTEIN A

Protein A carrying monosize PMMA microbeads for the removal of HIgG from human plasma. Pişkin E, et al. **Int J Artif Organs** 1996 May;19(5):311–7

Suppression of mouse skin allograft rejection by protein A–Yersiniae V antigen fusion peptide. Motin VL, et al. **Transplantation** 1997 Apr 15;63(7):1040–2

STAPHYLOCOCCAL SCALDED SKIN SYNDROME

COMPLICATIONS

Stevens–Johnson syndrome, epidermolysis bullosa, staphylococcal scalded skin syndrome, and dermatitis herpetiformis. Hochman MA, et al. **Int Ophthalmol Clin** 1997 Spring;37(2):77–92 (87 ref.)

Kaposi's varicelliform eruption and staphylococcal scalded skin syndrome in adults [letter] Barrio J, et al. **J Am Acad Dermatol** 1997 Sep;37(3 Pt 1):510–1

MICROBIOLOGY

[A case of staphylococcal scalded skin syndrome caused by exfoliative toxin–B producing MRSA] Yokota S, et al. **Kansenshogaku Zasshi** 1996 Feb;70(2):206–10 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

[Gram–positive septic–toxic shock with bullae. Intraepidermal splitting as an indication of toxin effect] Buslau M, et al. **Hautarzt** 1996 Oct;47(10):783–9 (Eng. Abstr.) **(Ger)**

TRANSMISSION

Staphylococcal scalded skin syndrome in a neonate. Raymond J, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):453–4

STAPHYLOCOCCAL SKIN INFECTIONS

The bacteriology of hidradenitis suppurativa. Jemec GB, et al. **Dermatology** 1996;193(3):203–6

COMPLICATIONS

Thoracic discitis following 'Woodbury' rash. Sloss JM, et al. **J R Army Med Corps** 1994 Feb;140(1):45–6

DIAGNOSIS

Staphylococcus lugdunensis as a cause of abscesses in the perineal area. Ortiz de la Tabla V, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):405–7

[Tufted hair folliculitis] Trüeb RM, et al. **Hautarzt** 1997 Apr; 48(4):266–9 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Treatment of infectious skin defects or ulcers with electrolyzed strong acid aqueous solution. Sekiya S, et al. **Artif Organs** 1997 Jan;21(1):32–8

GENETICS

Urokinase–type plasminogen activator–deficient mice are predisposed to staphylococcal botryomycosis, pleuritis, and effacement of lymphoid follicles. Shapiro RL, et al. **Am J Pathol** 1997 Jan;150(1):359–69

MICROBIOLOGY

Producibility of exfoliative toxin and staphylococcal coagulase types of Staphylococcus aureus strains isolated from skin infections and atopic dermatitis. Kanzaki H, et al. **Dermatology** 1997;195(1):6–9

PATHOLOGY

Staphylococcal blistering dactylitis: report of two patients. Woroszylski A, et al. **Pediatr Dermatol** 1996 Jul–Aug; 13(4):292–3

SURGERY

Subungual lipoma, squamous carcinoma of the nail bed, and secondary chronic infection. Failla JM. **J Hand Surg [Am]** 1996 May;21(3):512–4

THERAPY

[The efficacy and reactogenicity of a cell–free staphylococcal vaccine in the immunotherapy of patients with chronic pyodermas] Efremova VN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec; (6):39–41 (Eng. Abstr.) **(Rus)**

VETERINARY

Further studies on the efficacy of tylosin tablets for the treatment of pyoderma due to Staphylococcus intermedius infection in dogs. Scott DW, et al. **Can Vet J** 1996 Oct; 37(10):617–8

In vitro activity of fifteen antimicrobial agents against methicillin–resistant and methicillin–susceptible Staphylococcus intermedius. Piriz S, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):118–23

Outbreak of staphylococcal dermatitis in housed lactating Suffolk ewes. Scott PR, et al. **Vet Rec** 1997 Jun 14; 140(24):631–2

A new pathogenic Staphylococcus aureus type in commercial rabbits. Devriese LA, et al. **Zentralbl Veterinarmed [B]** 1996 Jul;43(5):313–5

STAPHYLOCOCCAL TOXOID

ADMINISTRATION & DOSAGE

[Staphylococcal anatoxin, an alternative in the treatment of endogenous uveitis] Todea V, et al. **Oftalmologia** 1997; 41(1):49–52 (Eng. Abstr.) **(Rum)**

IMMUNOLOGY

Immunogenicity and efficacy against lethal aerosol staphylococcal enterotoxin B challenge in monkeys by intramuscular and respiratory delivery of proteosome–toxoid vaccines. Lowell GH, et al. **Infect Immun** 1996 Nov;64(11):4686–93

PHARMACOLOGY

[The effect of immunomodulating doses of purified staphylococcal anatoxin on the spontaneous and mitogen–induced proliferation of mouse splenocytes] Semenova IB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Mar–Apr; (2):57–60 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[An immunomodifier––staphylococcal anatoxin––prevents the development of immunosuppression caused by informational stress in mice] Ozherelkov SV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):71–4 (Eng. Abstr.) **(Rus)**

STAPHYLOCOCCAL VACCINES

Staphylococcal vaccines: a realistic dream. Fattom AI, et al. **Ann Med** 1996 Feb;28(1):43–6 (20 ref.)

HISTORY

[100 years without Louis Pasteur] Suárez Fernández DG. **An R Acad Nac Med (Madr)** 1996;113(1):183–200; discussion 201–8 **(Spa)**

IMMUNOLOGY

Staphylococcal enterotoxin B mutants (N23K and F44S): biological effects and vaccine potential in a mouse model. Woody MA, et al. **Vaccine** 1997 Feb;15(2):133–9

THERAPEUTIC USE

Anatomoclinical and bacteriological study on chronic marginal periodontal disease. Therapy with staphylococcic vaccine. Laky D, et al. **Rom J Morphol Embryol** 1996 Jul–Dec;42(3–4):169–78

[The efficacy and reactogenicity of a cell–free staphylococcal vaccine in the immunotherapy of patients with chronic pyodermas] Efremova VN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec; (6):39–41 (Eng. Abstr.) **(Rus)**

STAPHYLOCOCCUS

Further studies on the efficacy of tylosin tablets for the treatment of pyoderma due to Staphylococcus intermedius infection in dogs. Scott DW, et al. **Can Vet J** 1996 Oct; 37(10):617–8

A mouse model for staphylococcal enterotoxins toxicity. Bhatti AR, et al. **Microbios** 1996;86(349):247–53

Effect of in vitro maedi–visna virus infection on adherence and phagocytosis of staphylococci by ovine cells. Monleón E, et al. **Vet Microbiol** 1997 Jun 30;57(1):13–28

CHEMISTRY

The staphylococcal and streptococcal pyrogenic toxin family. Bohach GA, et al. **Adv Exp Med Biol** 1996;391:131–54 (116 ref.)

Sequence and analysis of the replication region of the Staphylococcus xylosus plasmid pSX267. Gering M, et al. **Gene** 1996 Dec 5;182(1–2):117–22

Identification of staphylococci with a self–educating system using fatty acid analysis and biochemical tests [published erratum appears in J Clin Microbiol 1997 Apr;35(4):1043] Behme RJ, et al. **J Clin Microbiol** 1996 Dec;34(12):3075–84

Staphylococcus hyicus exfoliative toxin: purification and demonstration of antigenic diversity among toxins from virulent strains. Andresen LO, et al. **Microb Pathog** 1997 Feb;22(2):113–22

A high molecular weight protein from Staphylococcus intermedius cross–reacts with Staphylococcus aureus enterotoxin antibodies. Laffan JJ, et al. **Microbios** 1996; 88(357):237–51

CLASSIFICATION

Prevalence of coagulase–positive staphylococci, other than Staphylococcus aureus, in bovine mastitis. Roberson JR, et al. **Am J Vet Res** 1996 Jan;57(1):54–8

The use of a nonradioactively labelled probe system in an electrophoretic ribotyping method for the differentiation of strains of coagulase–negative staphylococci. Hawcroft DM, et al. **Electrophoresis** 1996 Jan;17(1):55–7

Species distribution of clinical isolates of Staphylococci. Shrikhande S, et al. **Indian J Pathol Microbiol** 1996 Jul; 39(3):207–10

Plasmid analysis of 26 staphylococcal species by a rapid microscale technique. Herchline T, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):687–90

Identification and ribotyping of Staphylococcus xylosus and Staphylococcus equorum strains isolated from goat milk and cheese. Meugnier H, et al. **Int J Food Microbiol** 1996 Aug;31(1–3):325–31

Staphylococcus lutrae sp. nov., a new coagulase–positive species isolated from otters. Foster G, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):724–6

Ribotype delineation and description of Staphylococcus sciuri subspecies and their potential as reservoirs of methicillin resistance and staphylolytic enzyme genes. Kloos WE, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):313–23

Identification of staphylococci with a self–educating system using fatty acid analysis and biochemical tests [published erratum appears in J Clin Microbiol 1997 Apr;35(4):1043] Behme RJ, et al. **J Clin Microbiol** 1996 Dec;34(12):3075–84

Investigation into the repeated recovery of coagulase–negative staphylococci from blood taken at the end of cardiopulmonary by–pass. van Belkum A, et al. **J Hosp Infect** 1995 Dec;31(4):285–93

Epidemiological typing of coagulase–negative staphylococci from nosocomial infections. Geary C, et al. **J Med Microbiol** 1997 Mar;46(3):195–203

Specific information concerning taxonomy, pathogenicity and methicillin resistance of staphylococci obtained by a multiplex PCR. Schmitz FJ, et al. **J Med Microbiol** 1997 Sep;46(9):773–8

Characterization of non–pigmented Staphylococcus chromogenes. Saito K, et al. **J Vet Med Sci** 1996 Jul; 58(7):711–3

Cross infections due to coagulase–negative staphylococci in high–risk patients. Hübner J, et al. **Zentralbl Bakteriol** 1995 Dec;283(2):169–74 (23 ref.)

[The taxonomic distribution, characteristic and susceptibility against antimicrobial agents of methicillin–resistant staphylococci isolated from blood] Kawaguchi E, et al. **Kansenshogaku Zasshi** 1996 Nov;70(11):1147–53 (Eng. Abstr.) **(Jpn)**

[The taxonomic importance of the capacity of bacteria in the genus Staphylococcus for the inactivation of a number of natural anti–infectious resistance factors] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug; (4):30–3 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Adhesion of staphylococci to polymers with and without immobilized heparin in cerebrospinal fluid. Nomura S, et al. **J Biomed Mater Res** 1997 Spring;38(1):35–42

DRUG EFFECTS

Treatment of vancomycin–resistant staphylococcal infections. Christensen KJ, et al. **Ann Pharmacother** 1996 Mar;30(3):288–90

Multi–resistant Staphylococcus haemolyticus in a neonatal unit in New Delhi. Mehta G, et al. **Ann Trop Paediatr** 1997 Mar;17(1):15–20

Distribution of genes encoding resistance to streptogramin A and related compounds among staphylococci resistant to these antibiotics. Allignet J, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2523–8

Interpretive criteria for testing susceptibility of staphylococci to mupirocin. Finlay JE, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1137–9

In vitro activities of the oxazolidinone antibiotics U–100592 and U–100766 against Staphylococcus aureus and coagulase–negative Staphylococcus species. Jorgensen JH, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):465–7

Differential increased survival of staphylococci and limited ultrastructural changes in the core of infected fibrin clots after daptomycin administration. Michiels MJ, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):203–11

In vitro activity of LY333328, an investigational glycopeptide antibiotic, against enterococci and staphylococci [see comments] Schwalbe RS, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2416–9. Comment in: Antimicrob Agents Chemother 1997 Jun;41(6):1407–8.

Conjugative transfer of high–level mupirocin resistance from Staphylococcus haemolyticus to other staphylococci. Udo EE, et al. **Antimicrob Agents Chemother** 1997 Mar; 41(3):693–5

Integration of pT181–like tetracycline resistance plasmids into large staphylococcal plasmids involves IS257. Werckenthin C, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2542–4

Macrolide–lincosamide–streptogramin B resistance in Staphylococcus lentus results from the integration of part of a transposon into a small plasmid. Werckenthin C, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2224–5

Aminoglycoside resistance among Danish blood culture isolates of coagulase–negative staphylococci.

Busch-Sørensen C, et al. **APMIS** 1996 Dec;104(12):873-80

Disk diffusion interpretive criteria for fusidic acid susceptibility testing of staphylococci by the National Committee for Clinical Laboratory Standards method. Coutant C, et al. **Diagn Microbiol Infect Dis** 1996 May; 25(1):9-13

Imipenem and meropenem activity against mecA-positive homogeneously and heterogeneously oxacillin-resistant and mecA-negative oxacillin-borderline-susceptible staphylococci. Knapp CC, et al. **Diagn Microbiol Infect Dis** 1997 Jun;28(2):81-6

Emerging resistance to antimicrobial agents in gram-positive bacteria. Enterococci, staphylococci and nonpneumococcal streptococci. Cormican MG, et al. **Drugs** 1996;51 Suppl 1:6-12 (38 ref.)

Does the appearance of drug resistance during therapy alter bacterial susceptibility to opsonophagocytosis? Gemmell CG. **Drugs Exp Clin Res** 1996;22(2):51-5

Comparison of disk diffusion, the E test, and detection of mecA for determination of methicillin resistance in coagulase-negative staphylococci. Mulder JG. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):567-73

Effects of various types of Triton X on the susceptibilities of methicillin-resistant staphylococci to oxacillin. Suzuki J, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):327-31

The effect of salinomycin and lasalocid on laboratory cultures of Enterococcus faecium and Staphylococcus gallinarum strains. Lauková A, et al. **Folia Microbiol (Praha)** 1995; 40(3):271-3

Bacteremia due to teicoplanin-resistant and vancomycin-susceptible Staphylococcus haemolyticus in seven patients with acute leukemia and neutropenia receiving prophylaxis with ofloxacin [letter] Krčméry V Jr, et al. **Infection** 1997 Jan-Feb;25(1):51-2

Interpretive criteria for susceptibility testing of coagulase-negative staphylococci with special reference to netilmicin. Neumeister B, et al. **Infection** 1997 May-Jun; 25(3):175-7

In-vitro selection of quinolone-resistant staphylococcal mutants by a single exposure to ciprofloxacin or trovafloxacin (CP-99,219) -letter- Barry AL, et al. **J Antimicrob Chemother** 1996 Aug;38(2):324-7

Comparison of the in-vitro and in-vivo efficacy of FK037, vancomycin, imipenem and nafcillin against staphylococcal species. Climo MW, et al. **J Antimicrob Chemother** 1997 Jul;40(1):59-66

Influence of inoculum, medium and serum on the in-vitro susceptibility of coagulase-negative staphylococci to teicoplanin and vancomycin. Kennedy HF, et al. **J Antimicrob Chemother** 1996 Jun;37(6):1103-9

Sequential antibiotic therapy for acne promotes the carriage of resistant staphylococci on the skin of contacts. Miller YW, et al. **J Antimicrob Chemother** 1996 Nov;38(5):829-37

Susceptibility of staphylococci to teicoplanin and vancomycin [letter] Murphy OM, et al. **J Antimicrob Chemother** 1996 Aug;38(2):316-7

Identification of mecA-related oxacillin resistance in staphylococci by the E test and the broth microdilution method [see comments] Petersson AC, et al. **J Antimicrob Chemother** 1996 Mar;37(3):445-56. Comment in: J Antimicrob Chemother 1996 Dec;38(6):1111-3.

In-vitro bactericidal activity of cefpirome in combination with vancomycin against Staphylococcus aureus and coagulase-negative staphylococci. Raymond J, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1067-71

In-vitro activity of ofloxacin, levofloxacin and D-ofloxacin against staphylococci. von Eiff C, et al. **J Antimicrob Chemother** 1996 Aug;38(2):259-63

Identification of mec-related oxacillin resistance in staphylococci by the Etest [letter; comment] Wagenvoort J, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1111-3. Comment on: J Antimicrob Chemother 1996 Mar;37(3):445-56.

Choice of a routine method for detecting methicillin-resistance in staphylococci. Wallet F, et al. **J Antimicrob Chemother** 1996 May;37(5):901-9

Cystitis due to vancomycin-intermediate Staphylococcus saprophyticus [letter] Weiss K, et al. **J Antimicrob Chemother** 1996 May;37(5):1039-40

Methicillin susceptibility testing of staphylococci by Etest and comparison with agar dilution and mecA detection. Weller TM, et al. **J Antimicrob Chemother** 1997 Feb; 39(2):251-3

Presence of UDP-N-acetylmuramyl-hexapeptides and -heptapeptides in enterococci and staphylococci after treatment with ramoplanin, tunicamycin, or vancomycin. Billot-Klein D, et al. **J Bacteriol** 1997 Aug;179(15):4684-8

The susceptibility patterns of the most common Staphylococcus coagulase-negative species to 13 antimicrobials. Dobardzic R, et al. **J Chemother** 1995 Nov; 7 Suppl 4:63-5

Antibiotic susceptibility of hospital staphylococci in Egypt. Kamal El-Din W, et al. **J Chemother** 1995 Nov;7 Suppl 4:81-6

Effect of vancomycin and teicoplanin alone or in combination with fusidic acid or amikacin against methicillin-resistant staphylococci. Roussel-Delvallez M, et al. **J Chemother** 1997 Feb;9(1):5-8

Evaluation of Alamar colorimetric broth microdilution susceptibility testing method for staphylococci and enterococci. Baker CN, et al. **J Clin Microbiol** 1996 Nov; 34(11):2654-9

Emergence of teicoplanin-resistant coagulase-negative staphylococci. Cercenado E, et al. **J Clin Microbiol** 1996 Jul;34(7):1765-8

The practical use of PCR for rapid detection of methicillin resistance among staphylococcal clinical isolates from Turkish hospitals [letter] Kocagöz S, et al. **J Clin Microbiol** 1997 Aug;35(8):2188-9

Specific detection of methicillin-resistant Staphylococcus species by multiplex PCR [letter; comment] Vandenbroucke-Grauls CM, et al. **J Clin Microbiol** 1996 Jun;34(6):1599. Comment on: J Clin Microbiol 1995 Nov;33(11):2864-7.

Breakthrough nosocomial bacteraemia due to teicoplanin-resistant Staphylococcus haemolyticus in five patients with acute leukaemia [letter] Spanik S, et al. **J Hosp Infect** 1997 Feb;35(2):155-9

The antistaphylococcal effect of nisin in a suitable vehicle: a potential therapy for atopic dermatitis in man. Valenta C, et al. **J Pharm Pharmacol** 1996 Sep;48(9):988-91

In vitro activity of fifteen antimicrobial agents against methicillin-resistant and methicillin-susceptible Staphylococcus intermedius. Piriz S, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):118-23

Ciprofloxacin and multiresistant staphylococci [letter; comment] Cimolai N. **Lancet** 1997 Apr 5;349(9057):1030. Comment on: Lancet 1997 Jan 18;349(9046):167-9.

An electron microscopic study of clinical and laboratory-derived strains of teicoplanin-resistant Staphylococcus haemolyticus. Giovanetti E, et al. **Microb Drug Resist** 1996 Summer;2(2):239-43

Antimicrobial resistance of coagulase-negative staphylococci from a Kuwait hospital. Udo EE, et al. **Microb Drug Resist** 1995 Winter;1(4):315-20

Tracking the evolutionary origin of the methicillin resistance gene: cloning and sequencing of a homologue of mecA from a methicillin susceptible strain of Staphylococcus sciuri [published erratum appears in Microb Drug Resist 1997 Summer;3(2):212] Wu S, et al. **Microb Drug Resist** 1996 Winter;2(4):435-41

Different susceptibility of coagulase-positive and coagulase-negative staphylococci to ciprofloxacin. Utili R, et al. **New Microbiol** 1996 Oct;19(4):309-14

Nucleic acid sequence and affiliation of pLUG10, a novel cadmium resistance plasmid from Staphylococcus lugdunensis. Chaouni LB, et al. **Plasmid** 1996 Jul;36(1):1-8

Molecular properties of the erythromycin resistance plasmid pPV141 from Staphylococcus chromogenes. Somkuti GA, et al. **Plasmid** 1997;37(2):119-27

Antibiotic resistance in the staphylococci. Noble WC. **Sci Prog** 1997;80 (Pt 1):5-20 (39 ref.)

Effects of the lantibiotic mersacidin on the morphology of staphylococci. Molitor E, et al. **Zentralbl Bakteriol** 1996 Jul;284(2-3):318-28

[Antimicrobial susceptibility of coagulase negative staphylococci isolated from urine] Uesugi A, et al. **Kansenshogaku Zasshi** 1996 Feb;70(2):187-97 (Eng. Abstr.) **(Jpn)**

[Evaluation of susceptibility of methicillin resistant Staphylococcus aureus strains to vancomycin] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3-4):133-9 (Eng. Abstr.) **(Pol)**

[Study of the susceptibility of Staphylococcus sp. and Enterococcus sp. to teicoplanin and vancomycin] Mimica I, et al. **Rev Assoc Med Bras** 1996 Jul-Sep;42(3):147-50 (Eng. Abstr.) **(Por)**

[Mechanisms of resistance to glycopeptides] Navarro F. **Enferm Infecc Microbiol Clin** 1996 May;14(5):317-23 (101 ref.) **(Spa)**

ENZYMOLOGY

Coagulase-negative staphylococci in air samples from operating theatres. Kiss L, et al. **Acta Microbiol Immunol Hung** 1996;43(1):39-46

Recognition of aminoglycoside antibiotics by enterococcal-staphylococcal aminoglycoside 3'-phosphotransferase type IIIa: role of substrate amino groups. McKay GA, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2648-50

Ampicillin-sulbactam is effective in prevention and therapy of experimental endocarditis caused by beta-lactamase-producing coagulase-negative staphylococci. Ramos MC, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):97-101

Facile purification of highly active recombinant Staphylococcus hyicus lipase fragment and characterization of a putative lid region. Chang RC, et al. **Biochem Biophys Res Commun** 1996 Nov 21;228(3):774-9

Studying the active site pocket of Staphylococcus hyicus lipase by site-directed mutagenesis. Chang RC, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):6-10

Mechanism of aminoglycoside 3'-phosphotransferase type IIIa: His188 is not a phosphate-accepting residue. Thompson PR, et al. **Chem Biol** 1996 Sep;3(9):747-55

The lipase from Staphylococcus aureus. Expression in Escherichia coli, large-scale purification and comparison of substrate specificity to Staphylococcus hyicus lipase. Simons JW, et al. **Eur J Biochem** 1996 Dec 15;242(3):760-9

Comparison of disk diffusion, the E test, and detection of mecA for determination of methicillin resistance in coagulase-negative staphylococci. Mulder JG. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):567-73

Production of extracellular proteases and amylases by some acidophilic and alkalophilic bacteria. Sharma A, et al. **Indian J Exp Biol** 1996 Mar;34(3):232-4

The combined effects of environmental conditions on lipolysis of pork fat by lipases of the meat starter culture organisms Staphylococcus xylosus and Debaryomyces hansenii. Sørensen BB, et al. **Int J Food Microbiol** 1996 Sep;32(1-2):59-71

In-vitro bactericidal activity of cefpirome in combination with vancomycin against Staphylococcus aureus and coagulase-negative staphylococci. Raymond J, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1067-71

Purification and molecular characterization of glycylglycine endopeptidase produced by Staphylococcus capitis EPK1. Sugai M, et al. **J Bacteriol** 1997 Feb;179(4):1193-202

In vivo immobilization of enzymatically active polypeptides on the cell surface of Staphylococcus carnosus. Strauss A, et al. **Mol Microbiol** 1996 Aug;21(3):491-500

[Bacteriolytic enzymes produced by the staphylococci] Sugai M, et al. **Nippon Saikingaku Zasshi** 1997 Apr;52(2):461-73 (61 ref.) **(Jpn)**

[Micromethod of determining phosphatase activity of staphylococci] Sboĭchakov VB, et al. **Klin Lab Diagn** 1996 Jul-Aug;(4):53-4 (Eng. Abstr.) **(Rus)**

[Isolation and physico-chemical characteristics of Staphylococcus hyaluronidase] Turmanidze TS, et al. **Prikl Biokhim Mikrobiol** 1996 Sep-Oct;32(5):519-23 (Eng. Abstr.) **(Rus)**

GENETICS

Distribution of genes encoding resistance to streptogramin A and related compounds among staphylococci resistant to these antibiotics. Allignet J, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2523-8

Mapping the regions carrying the three contiguous antibiotic resistance genes aadE, sat4, and aphA-3 in the genomes of staphylococci. Derbise A, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1024-32

Tandem duplication in ermC translational attenuator of the macrolide-lincosamide-streptogramin B resistance plasmid pSES6 from Staphylococcus equorum. Lodder G, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):215-7

Conjugative transfer of high-level mupirocin resistance from Staphylococcus haemolyticus to other staphylococci. Udo EE, et al. **Antimicrob Agents Chemother** 1997 Mar; 41(3):693-5

Integration of pT181-like tetracycline resistance plasmids into large staphylococcal plasmids involves IS257. Werckenthin C, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2542-4

Macrolide-lincosamide-streptogramin B resistance in Staphylococcus lentus results from the integration of part of a transposon into a small plasmid. Werckenthin C, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2224-5

The biosynthesis of the lantibiotics epidermin, gallidermin, Pep5 and epilancin K7. Bierbaum G, et al. **Antonie Van Leeuwenhoek** 1996 Feb;69(2):119-127 (42 ref.)

Mechanisms of methicillin resistance in staphylococci. Brakstad OG, et al. **APMIS** 1997 Apr;105(4):264-76 (112 ref.)

Surface display of the cholera toxin B subunit on Staphylococcus xylosus and Staphylococcus carnosus. Liljeqvist S, et al. **Appl Environ Microbiol** 1997 Jul; 63(7):2481-8

Cloning, sequencing, and characterization of a gene (narT) encoding a transport protein involved in dissimilatory nitrate reduction in Staphylococcus carnosus. Fast B, et al. **Arch Microbiol** 1996 Dec;166(6):361-7

Polyclonal staphylococcus bacteremia [editorial; comment] Archer GL. **Clin Infect Dis** 1997 Jul;25(1):72-3. Comment on: Clin Infect Dis 1997 Jul;25(1):69-71.

Polyclonal staphylococcus endocarditis [see comments] Van Wijngaerden E, et al. **Clin Infect Dis** 1997 Jul;25(1):69-71 . Comment in: Clin Infect Dis 1997 Jul;25(1):72-3.

Phenotypic detection of mec A-positive staphylococcal blood stream isolates: high accuracy of simple disk diffusion tests. Cormican MG, et al. **Diagn Microbiol Infect Dis** 1996 Jul;25(3):107-12

Molecular analysis of naturally occuring ermC-encoding plasmids in staphylococci isolated from animals with and without previous contact with macrolide/lincosamide antibiotics. Lodder G, et al. **FEMS Immunol Med Microbiol** 1997 May;18(1):7-15

Gene replacement in Staphylococcus carnosus and Staphylococcus xylosus. Brückner R. **FEMS Microbiol Lett** 1997 Jun 1;151(1):1-8

Distribution of the synergistic haemolysin genes hld and slush with respect to agr in human staphylococci. Donvito B, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):139-44

Identification of the serine acetyltransferase gene of Staphylococcus xylosus. Fiegler H, et al. **FEMS Microbiol Lett** 1997 Mar 15;148(2):181-7

Inducible production and cellular location of the epidermin biosynthetic enzyme EpiB using an improved staphylococcal expression system. Peschel A, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2-3):279-84

Synergistic hemolytic activity of Staphylococcus lugdunensis is mediated by three peptides encoded by a non-agr genetic locus. Donvito B, et al. **Infect Immun** 1997 Jan;65(1):95-100

Identification of mecA-related oxacillin resistance in staphylococci by the E test and the broth microdilution method [see comments] Petersson AC, et al. **J Antimicrob Chemother** 1996 Mar;37(3):445-56. Comment

in: J Antimicrob Chemother 1996 Dec;38(6):1111–3.
IS257–mediated cointegration in the evolution of a family of staphylococcal trimethoprim resistance plasmids. Leelaporn A, et al. **J Bacteriol** 1996 Oct;178(20):6070–3
epr, which encodes glycylglycine endopeptidase resistance, is homologous to femAB and affects serine content of peptidoglycan cross bridges in Staphylococcus capitis and Staphylococcus aureus. Sugai M, et al. **J Bacteriol** 1997 Jul;179(13):4311–8
Specific detection of methicillin–resistant Staphylococcus species by multiplex PCR [letter; comment] Vandenbroucke–Grauls CM, et al. **J Clin Microbiol** 1996 Jun;34(6):1599. Comment on: J Clin Microbiol 1995 Nov;33(11):2864–7.
Pulsed–field gel electrophoresis of Staphylococcus hyicus and Staphylococcus chromogenes genomic DNA and its taxonomic, epidemiologic and ecologic applications in veterinary medicine. Shimizu A, et al. **J Vet Med Sci** 1997 Jun;59(6):443–50
Tracking the evolutionary origin of the methicillin resistance gene: cloning and sequencing of a homologue of mecA from a methicillin susceptible strain of Staphylococcus sciuri [published erratum appears in Microb Drug Resist 1997 Summer;3(2):212] Wu S, et al. **Microb Drug Resist** 1996 Winter;2(4):435–41
Secretion of the lantibiotics epidermin and gallidermin: sequence analysis of the genes gdmT and gdmH, their influence on epidermin production and their regulation by EpiQ. Peschel A, et al. **Mol Gen Genet** 1997 Apr 16; 254(3):312–8
Catabolite repression mediated by the catabolite control protein CcpA in Staphylococcus xylosus. Egeter O, et al. **Mol Microbiol** 1996 Aug;21(4):739–49
Studies on prolysostaphin processing and characterization of the lysostaphin immunity factor (Lif) of Staphylococcus simulans biovar staphylolyticus. Thumm G, et al. **Mol Microbiol** 1997 Mar;23(6):1251–65
Nucleic acid sequence and affiliation of pLUG10, a novel cadmium resistance plasmid from Staphylococcus lugdunensis. Chaouni LB, et al. **Plasmid** 1996 Jul;36(1):1–8
Molecular properties of the erythromycin resistance plasmid pPV141 from Staphylococcus chromogenes. Somkuti GA, et al. **Plasmid** 1997;37(2):119–27
Gentamicin resistance gene transfer from Enterococcus faecalis and E. faecium to Staphylococcus aureus, S. intermedius and S. hyicus. Noble WC, et al. **Vet Microbiol** 1996 Sep;52(1–2):143–52

GROWTH & DEVELOPMENT

Postantibiotic effect assessments for antibiotics exhibiting a wide range of bactericidal activities by using a modified total–cell–counting method. Li RC, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1170–2
Amino acid requirements for the growth and enterotoxin production by Staphylococcus aureus in chemically defined media. Onoue Y, et al. **Int J Food Microbiol** 1997 Apr 29;36(1):77–82

IMMUNOLOGY

Detection and specificity of anti–Staphylococcus intermedius secretory IgA in human tears. Lan J, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S17–9
Cutaneous T–cell lymphomas and bacterial superantigens [letter; comment] Musette P, et al. **Blood** 1997 Jul 1; 90(1):472–3. Comment on: Blood 1997 Jan 1;89(1):32–40.
Staphylococcus hyicus exfoliative toxin: purification and demonstration of antigenic diversity among toxins from virulent strains. Andresen LO, et al. **Microb Pathog** 1997 Feb;22(2):113–22

ISOLATION & PURIFICATION

Destructive endocarditis caused by Staphylococcus lugdunensis. Case report and review of the literature. De Hondt G, et al. **Acta Clin Belg** 1997;52(1):27–30 (10 ref.)
Coagulase–negative staphylococci in air samples from operating theatres. Kiss L, et al. **Acta Microbiol Immunol Hung** 1996;43(1):39–46
Device that keeps a pierced ear hole intact while treating an infected earlobe. Nakamura M, et al. **Aesthetic Plast Surg** 1996 Jul–Aug;20(4):343–5
Predictive values of species' identifications from the Vitek Gram–Positive Identification Card using clinical isolates of coagulase–negative staphylococci. Kellogg JA, et al. **Am J Clin Pathol** 1996 Sep;106(3):374–7
Prevalence of coagulase–positive staphylococci, other than Staphylococcus aureus, in bovine mastitis. Roberson JR, et al. **Am J Vet Res** 1996 Jan;57(1):54–8
Genomic DNA fingerprinting, using pulsed–field gel electrophoresis, of Staphylococcus intermedius isolated from dogs. Shimizu A, et al. **Am J Vet Res** 1996 Oct; 57(10):1458–62
The source of coagulase–negative staphylococci in the Endophthalmitis Vitrectomy Study. A comparison of eyelid and intraocular isolates using pulsed–field gel electrophoresis. Bannerman TL, et al. **Arch Ophthalmol** 1997 Mar;115(3):357–61
Defining true bacteremia due to coagulase–negative staphylococci [letter; comment] Johnson JR. **Clin Infect Dis** 1996 Aug;23(2):413–4. Comment on: Clin Infect Dis 1996 Jan;22(1):14–20.
Lack of predictive value of isolating coagulase–negative staphylococci from blood cultures [letter; comment] Khatib R. **Clin Infect Dis** 1996 Aug;23(2):412. Comment on: Clin Infect Dis 1996 Jan;22(1):14–20.
Staphylococcus cohnii: an unusual cause of primary septic arthritis in a patient with AIDS. Mastroianni A, et al. **Clin Infect Dis** 1996 Dec;23(6):1312–3
Staphylococcus lugdunensis as a cause of abscesses in the perineal area. Ortiz de la Tabla V, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):405–7
Staphylococcus saprophyticus urinary tract infections: epidemiological data from Western Australia. Schneider PF, et al. **Eur J Epidemiol** 1996 Feb;12(1):51–4
Species distribution of clinical isolates of Staphylococci. Shrikhande S, et al. **Indian J Pathol Microbiol** 1996 Jul; 39(3):207–10
Identification and ribotyping of Staphylococcus xylosus and Staphylococcus equorum strains isolated from goat milk and cheese. Meugnier H, et al. **Int J Food Microbiol** 1996 Aug;31(1–3):325–31
Extremely halotolerant bacteria characteristic of fully cured and dried cod. Vilhelmsson O, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):163–70
Efficacy of the Steri–Shield filtered exhaust helmet in limiting bacterial counts in the operating room during total joint arthroplasty. Shaw JA, et al. **J Arthroplasty** 1996 Jun; 11(4):469–73
An epidemiological study of blood culture isolates of coagulase–negative staphylococci demonstrating hospital–acquired infection. Burnie JP, et al. **J Clin Microbiol** 1997 Jul;35(7):1746–50
Pediatric bacteremia due to Staphylococcus warneri: microbiological, epidemiological, and clinical features. Buttery JP, et al. **J Clin Microbiol** 1997 Aug;35(8):2174–7
Isolation of methicillin–resistant coagulase–negative staphylococci from chickens. Kawano J, et al. **J Clin Microbiol** 1996 Sep;34(9):2072–7
Frequency of isolation of Staphylococcus intermedius from humans. Mahoudeau I, et al. **J Clin Microbiol** 1997 Aug; 35(8):2153–4
Methicillin–resistant Staphylococcus simulans masquerading as MRSA in a nursing home [letter; comment] Barnham M, et al. **J Hosp Infect** 1996 Dec;34(4):331–3. Comment on: J Hosp Infect 1996 Feb;32(2):127–33.
Assessment of similarity among coagulase–negative staphylococci from sequential blood cultures of neonates and children by pulsed–field gel electrophoresis. Zaidi AK, et al. **J Infect Dis** 1996 Nov;174(5):1010–4
Rapid identification by specific PCR of coagulase–negative staphylococcal species important in hospital infection. Gribaldo S, et al. **J Med Microbiol** 1997 Jan;46(1):45–53
Risk of contamination from laparoscopic carbon dioxide insufflators. Couper GW, et al. **J R Coll Surg Edinb** 1997 Aug;42(4):231–2
Prevalence of bacteria in the conjunctival sac and on the eyelid margin of clinically normal cats. Espínola MB, et al. **J Small Anim Pract** 1996 Aug;37(8):364–6
Isolation of Staphylococcus chromogenes from an unusual case of impetigo in a goat. Andrews AH, et al. **Vet Rec** 1997 May 31;140(22):584
Identification and characterization of staphylococci isolated from cutaneous lesions of goats. Mahanta PN, et al. **Zentralbl Veterinarmed [B]** 1997 Jul;44(5):309–11
Coagulase–negative staphylococcal intramammary infections in cows and heifers during the nonlactating and periparturient periods. Oliver SP, et al. **Zentralbl Veterinarmed [B]** 1997 Aug;44(6):355–63
[Studies on coagulase negative Staphylococci isolated from urine] Uesugi A, et al. **Kansenshogaku Zasshi** 1996 Feb; 70(2):180–6 (Eng. Abstr.) **(Jpn)**
[Coagulase–negative staphylococci isolated from cases of infective endocarditis] Dudkiewicz B, et al. **Med Dosw Mikrobiol** 1996;48(3–4):103–10 (Eng. Abstr.) **(Pol)**
[Staphylococci and enteric rods in the oral cavity of children with acute lymphoblastic leukemia] Krzemiński Z, et al. **Pediatr Pol** 1996 Apr;71(4):307–11 (Eng. Abstr.) **(Pol)**
[Staphylococcal contamination of the upper respiratory tract mucosa in children exposed to air pollution] Bukharin OV, et al. **Gig Sanit** 1996 Nov–Dec;(6):6–8 (Eng. Abstr.) **(Rus)**
[Immunoenzyme assay of staphylococcal toxin using polyamide micropore membranes] Tashmukhamedova ShS, et al. **Vopr Med Khim** 1996 Jan–Mar;42(1):39–45 (Eng. Abstr.) **(Rus)**
[The antilysozymal activity and species characteristics of the microflora of the female reproductive tract during pregnancy] Cherkasov SV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):88–90 (Eng. Abstr.) **(Rus)**
[The dynamics of the species composition and antilysozymal activity of ejaculate microflora under the action of local hyperthermia] Ivanov IuB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):86–8 (Eng. Abstr.) **(Rus)**
[Cellulitis and lymphangitis caused by Staphylococcus lugdunensis (letter)] Gómez–Rodríguez N, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):457 **(Spa)**

METABOLISM

The interchangeability of siderophores in Staphylococci. Sobis–Glinkowska M, et al. **Acta Microbiol Pol** 1995; 44(2):127–34
Detection of the staphylococcal toxins. Bergdoll MS. **Adv Exp Med Biol** 1996;391:465–79 (38 ref.)
Surface display of the cholera toxin B subunit on Staphylococcus xylosus and Staphylococcus carnosus. Liljeqvist S, et al. **Appl Environ Microbiol** 1997 Jul; 63(7):2481–8
Use of the pre–pro part of Staphylococcus hyicus lipase as a carrier for secretion of Escherichia coli outer membrane protein A (OmpA) prevents proteolytic degradation of OmpA by cell–associated protease(s) in two different gram–positive bacteria. Meens J, et al. **Appl Environ Microbiol** 1997 Jul;63(7):2814–20
Comparison of the effect of different opsonins on the phagocytosis of fluorescein–labeled staphylococcal bacteria by chicken heterophils. Andreasen CB, et al. **Avian Dis** 1996 Oct–Dec;40(4):778–82
Transformations of steroid sulphates by human axillary bacteria. A mechanism for human odour formation? Gower DB, et al. **Biochem Soc Trans** 1997 Feb;25(1):16S
In vivo binding of the salivary glycoprotein EP–GP (identical to GCDFP–15) to oral and non–oral bacteria detection and identification of EP–GP binding species. Schenkels LC, et al. **Biol Chem** 1997 Feb;378(2):83–8
Lack of evidence for the role of staphylococcal enterotoxins in rheumatoid arthritis. Liu MF, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):67–70
Inducible production and cellular location of the epidermin biosynthetic enzyme EpiB using an improved staphylococcal expression system. Peschel A, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):279–84
Slime producing Staphylococci from clinical specimens – a simple diagnostic test. Makhija SK, et al. **Indian J Pathol Microbiol** 1995 Apr;38(2):159–61
Method for the rapid quantitative detection of lipolytic activity among food fermenting microorganisms. Leuschner RG, et al. **Int J Food Microbiol** 1997 Jul 22; 37(2–3):237–40
Amino acid requirements for the growth and enterotoxin production by Staphylococcus aureus in chemically defined media. Onoue Y, et al. **Int J Food Microbiol** 1997 Apr 29;36(1):77–82
Hydrolysis of esters by staphylococci. Talon R, et al. **Int J Food Microbiol** 1997 May 20;36(2–3):207–14
Vitronectin may mediate staphylococcal adhesion to polymer surfaces in perfusing human cerebrospinal fluid. Lundberg F, et al. **J Med Microbiol** 1997 Apr;46(4):285–96
A particle agglutination assay for rapid identification of heparin binding to coagulase–negative staphylococci. Pascu C, et al. **J Med Microbiol** 1996 Oct;45(4):263–9
Ubiquitous presence of a mecA homologue in natural isolates of Staphylococcus sciuri. Couto I, et al. **Microb Drug Resist** 1996 Winter;2(4):377–91
Diversity of adenosine degradation in staphylococci. Krasuski A, et al. **Microbios** 1996;88(354):27–34
Diversity of adenine conversion in staphylococci. Krasuski A, et al. **Microbios** 1996;86(349):225–32
[Human body iron sources utilized in vitro by staphylococci] Lisiecki P, et al. **Med Dosw Mikrobiol** 1996;48(1–2):5–13 (Eng. Abstr.) **(Pol)**
[Staphylococcal utilization of siderophores produced by bacilli of the genus Bacillus] Szarapińska–Kwaszewska J, et al. **Med Dosw Mikrobiol** 1996;48(3–4):123–30 (Eng. Abstr.) **(Pol)**

PATHOGENICITY

Characterization of the canine type C enterotoxin produced by Staphylococcus intermedius pyoderma isolates. Edwards VM, et al. **Infect Immun** 1997 Jun;65(6):2346–52
Enterotoxin production by coagulase–negative staphylococci isolated from goats' milk and cheese. Vernozy–Rozand C, et al. **Int J Food Microbiol** 1996 Jul;30(3):271–80
Experimental otitis media induced by coagulase negative staphylococcus and its L–forms. Göksu N, et al. **Int J Pediatr Otorhinolaryngol** 1996 Nov;37(3):201–16
Specific information concerning taxonomy, pathogenicity and methicillin resistance of staphylococci obtained by a multiplex PCR. Schmitz FJ, et al. **J Med Microbiol** 1997 Sep;46(9):773–8
[Experimental bladder stone production by human uropathogenic bacteria] Arai Y, et al. **Hinyokika Kiyo** 1997 Mar;43(3):207–11 (Eng. Abstr.) **(Jpn)**
[The taxonomic importance of the capacity of bacteria in the genus Staphylococcus for the inactivation of a number of natural anti–infectious resistance factors] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug; (4):30–3 (Eng. Abstr.) **(Rus)**
[Virulence factors of coagulase–negative Staphylococcus of human and bovine origin] Saa E, et al. **Rev Latinoam Microbiol** 1995 Jul–Sep;37(3):201–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Comparison of the beta–toxins from Staphylococcus aureus and Staphylococcus intermedius. Dziewanowska K, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):102–8
Vitronectin–binding staphylococci enhance surface–associated complement activation. Lundberg F, et al. **Infect Immun** 1997 Mar;65(3):897–902
The hemagglutinin of Staphylococcus saprophyticus binds to a protein receptor on sheep erythrocytes. Meyer HG,

et al. **Med Microbiol Immunol (Berl)** 1997 Jun;186(1):37–43

[Damage of intestinal mucosal barrier function after fluid resuscitation during hemorrhagic shock] Shimada J. **Masui** 1996 Jan;45(1):49–58 (Eng. Abstr.) **(Jpn)**

[Antimicrobial agents and adhesion of coagulase-negative staphylococci] Gómez-García AC, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):261–6 (55 ref.) **(Spa)**

RADIATION EFFECTS

[Bacterial activity in the products of laser destruction of human dental enamel and dentin] Belikov AV, et al. **Stomatologiia (Mosk)** 1995;74(6):32–4 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Differential increased survival of staphylococci and limited ultrastructural changes in the core of infected fibrin clots after daptomycin administration. Michiels MJ, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):203–11

An electron microscopic study of clinical and laboratory-derived strains of teicoplanin-resistant Staphylococcus haemolyticus. Giovanetti E, et al. **Microb Drug Resist** 1996 Summer;2(2):239–43

Paraformaldehyde effect on ruthenium red and lysine preservation and staining of the staphylococcal glycocalyx. Fassel TA, et al. **Microsc Res Tech** 1997 Mar 1;36(5):422–7

Effects of the lantibiotic mersacidin on the morphology of staphylococci. Molitor E, et al. **Zentralbl Bakteriol** 1996 Jul;284(2-3):318–28

STAPHYLOCOCCUS AUREUS

Epidural abscess: case report and review of the literature. Colle I, et al. **Acta Clin Belg** 1996;51(6):412–6

Increase of staphylococci in neonatal septicaemia: a fourteen-year study. Källman J, et al. **Acta Paediatr** 1997 May;86(5):533–8

Effects of toxic shock syndrome toxin-1 and a site-directed mutant, H135A, in mice. Stiles BG, et al. **Adv Exp Med Biol** 1996;391:245–50

Surveillance of colonization and infection with Staphylococcus aureus susceptible or resistant to methicillin in a community skilled-nursing facility [see comments] Lee YL, et al. **Am J Infect Control** 1997 Aug; 25(4):312–21. Comment in: Am J Infect Control 1997 Aug;25(4):294–6.

Antimicrobial resistance: problems, laments, and hopes [editorial; comment] Strausbaugh L. **Am J Infect Control** 1997 Aug;25(4):294–6. Comment on: Am J Infect Control 1997 Aug;25(4):312–21.

Incision and drainage of cutaneous abscesses is not associated with bacteremia in afebrile adults. Bobrow BJ, et al. **Ann Emerg Med** 1997 Mar;29(3):404–8

Guinea pig model for Staphylococcus aureus native valve endocarditis. Maurin M, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1815–7

Modulation of cytokine production from an EpiOcular corneal cell culture model in response to Staphylococcus aureus superantigen. Thakur A, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S43–5

Metastatic abscess formation of the pelvis. Bauze AJ, et al. **Aust N Z J Surg** 1997 Sep;67(9):668–9

Endocarditis after angiography and angioplasty of a subclavian artery stenosis. Casson RJ, et al. **Aust N Z J Surg** 1997 May;67(5):306–8

Is it time to stop searching for MRSA? Practical guidelines are needed for healthcare workers [letter; comment] Cattermole G. **BMJ** 1997 Jul 5;315(7099):58. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Is it time to stop searching for MRSA? Basic hygiene should help contain MRSA [letter; comment] Cooke RP, et al. **BMJ** 1997 Jul 5;315(7099):59. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Is it time to stop searching for MRSA? Environmental hygiene is an important part of control [letter; comment] Dance DA, et al. **BMJ** 1997 Jul 5;315(7099):59–60. Comment on: BMJ 1997 Mar 1;314(7081):664–5. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Is it time to stop searching for MRSA? Healthcare workers are at risk from policies for controlling MRSA [letter; comment] Jefferson RD, et al. **BMJ** 1997 Jul 5;315(7099):57 . Comment on: BMJ 1997 Mar 1;314(7081):664–5. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Is it time to stop searching for MRSA? Isolating patients with MRSA can have long term implications [letter; comment] Peel RK, et al. **BMJ** 1997 Jul 5;315(7099):58. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Is it time to stop searching for MRSA? Follow up screening within the community needs clarification [letter; comment] Philp R, et al. **BMJ** 1997 Jul 5;315(7099):57. Comment on: BMJ 1997 Mar 1;314(7081):664–5. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Is it time to stop searching for MRSA? Selective screening for MRSA should be considered [letter; comment] Torrens JK. **BMJ** 1997 Jul 5;315(7099):57. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

A comparison of phenotypic properties of Staphylococcus aureus isolated from burned children and other patient groups. Edwards-Jones V, et al. **Burns** 1996 Aug; 22(5):384–9

Methicillin-resistant Staphylococcus aureus in Ontario. McGeer A, et al. **Can Commun Dis Rep** 1997 Mar 15; 23(6):45–6 **(Eng, Fre)**

The Canadian Nosocomial Infection Surveillance Program: results of the first 18 months of surveillance for methicillin-resistant Staphylococcus aureus in Canadian hospitals. Simor A, et al. **Can Commun Dis Rep** 1997 Mar 15;23(6):41–5

Antibiograms and plasmids of Staphylococcus aureus and coagulase negative staphylococci isolated from different clinical sources. Obi CL, et al. **Cent Afr J Med** 1996 Sep; 42(9):258–61

Blocking of TNF-alpha and IL-1 inhibits leukocyte infiltration at early, but not at late stage of S. aureus-induced arthritis and the concomitant cartilage destruction in rabbits. Kimura M, et al. **Clin Immunol Immunopathol** 1997 Jan;82(1):18–25

Sample size could limit the power of case-control studies for determining risk factors for community-acquired methicillin-resistant Staphylococcus aureus [letter; comment] Bloch KC, et al. **Clin Infect Dis** 1996 Oct; 23(4):851–2. Comment on: Clin Infect Dis 1995 Nov;21(5):1308–12.

Prosthetic joint infection due to Staphylococcus aureus after use of a steroid nasal inhaler. Hawley HB, et al. **Clin Infect Dis** 1996 Oct;23(4):837–9

Bilateral staphylococcal axillary lymphadenitis in a man with AIDS. Kaur B, et al. **Clin Infect Dis** 1996 Oct;23(4):840–1

Safety and efficacy of cefprozil as part of a parenteral-oral antibiotic regimen for the treatment of suppurative skeletal infections in children. Trujillo M, et al. **Clin Infect Dis** 1996 Oct;23(4):843

Nasal carriage of Staphylococcus aureus: epidemiology, underlying mechanisms, and associated risks. Kluytmans J, et al. **Clin Microbiol Rev** 1997 Jul;10(3):505–20 (218 ref.)

New model for chronic osteomyelitis with Staphylococcus aureus in sheep. Kaarsemaker S, et al. **Clin Orthop** 1997 Jun;(339):246–52

Experimental hematogenous osteomyelitis by Staphylococcus aureus. Matsushita K, et al. **Clin Orthop** 1997 Jan; (334):291–7

Pyomyositis as a nontropical disease. Harbarth SJ, et al. **Curr Clin Top Infect Dis** 1997;17:37–50 (74 ref.)

Microbiologic data overview of Italian cystic fibrosis patients. Taccetti G, et al. **Eur J Epidemiol** 1997 Apr; 13(3):323–7

Intramammary immunization with live-attenuated Staphylococcus aureus: microbiological and immunological studies in a mouse mastitis model. García V, et al. **FEMS Immunol Med Microbiol** 1996 May;14(1):45–51

Catheter-associated Staphylococcus aureus bacteremia. Gold HS, et al. **Hosp Pract (Off Ed)** 1996 Sep 15;31(9):133–7, 142–4, 150 (14 ref.)

Are free radicals responsible for endothelial cell killing of Staphylococcus aureus? Zhang B, et al. **Immunol Lett** 1997 Jul;58(2):113–20

Nasal and cutaneous carriage of Staphylococcus aureus in hemodialysis patients: the effect of nasal mupirocin. Boelaert JR, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):809–11

Preventing staphylococcal infections by eradicating nasal carriage of Staphylococcus aureus: proceeding with caution [editorial; comment] Boyce JM. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):775–9 (50 ref.). Comment on: Infect Control Hosp Epidemiol 1996 Dec;17(12):780–5. Comment on: Infect Control Hosp Epidemiol 1996 Dec;17(12):786–92. Comment on: Infect Control Hosp Epidemiol 1996 Dec;17(12):813–6.

Elimination of nasal carriage of Staphylococcus aureus in hemodialysis patients. Kluytmans JA, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):793–7

Reduction of surgical-site infections in cardiothoracic surgery by elimination of nasal carriage of Staphylococcus aureus [see comments] Kluytmans JA, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):780–5. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):775–9.

A prolonged outbreak of methicillin-resistant Staphylococcus aureus in the burn unit of a tertiary medical center. Meier PA, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):798–802

Development of mupirocin resistance among methicillin-resistant Staphylococcus aureus after widespread use of nasal mupirocin ointment. Miller MA, et al. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):811–3

Emergence of high-level mupirocin resistance in methicillin-resistant Staphylococcus aureus isolated from Brazilian university hospitals [see comments] Netto dos Santos KR, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):813–6. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):775–9.

Cost-effectiveness of perioperative mupirocin nasal ointment in cardiothoracic surgery [see comments] VandenBergh MF, et al. **Infect Control Hosp Epidemiol** 1996 Dec; 17(12):786–92. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):775–9.

Staphylococcal enterotoxin A-induced fever is associated with increased circulating levels of cytokines in rabbits. Huang WT, et al. **Infect Immun** 1997 Jul;65(7):2656–62

Rapid clearance of the bacterial superantigen staphylococcal enterotoxin B in vivo. Vabulas R, et al. **Infect Immun** 1996 Nov;64(11):4567–73

Cerebral abscesses in a patient with AIDS caused by methicillin-resistant Staphylococcus aureus (MRSA). Smith NP, et al. **Int J STD AIDS** 1997 Jul;8(7):459–60

Rapid identification of Staphylococcus aureus in bronchoalveolar lavage fluid using a DNA probe (Accuprobe). Allaouchiche B, et al. **Intensive Care Med** 1996 Jul;22(7):683–7

Two cases of severe bronchiectasis successfully treated with a prolonged course of trimethoprim/sulfamethoxazole. Honda T, et al. **Intern Med** 1996 Dec;35(12):979–83

Mechanisms of the bactericidal activity of low amperage electric current (DC). Liu WK, et al. **J Antimicrob Chemother** 1997 Jun;39(6):687–95

Azithromycin induces in vitro a time-dependent increase in the intracellular killing of Staphylococcus aureus by human polymorphonuclear leucocytes without damaging phagocytes. Silvestri M, et al. **J Antimicrob Chemother** 1995 Dec;36(6):941–50

The Co-crystal structure of staphylococcal enterotoxin type A with Zn2+ at 2.7 A resolution. Implications for major histocompatibility complex class II binding. Sundström M, et al. **J Biol Chem** 1996 Dec 13;271(50):32212–6

Intracellular demonstration of active TGFbeta1 in B cells and plasma cells of autoimmune mice. IgG-bound TGFbeta1 suppresses neutrophil function and host defense against Staphylococcus aureus infection. Caver TE, et al. **J Clin Invest** 1996 Dec 1;98(11):2496–506

Mupirocin-resistant methicillin-resistant Staphylococcus aureus [letter; comment] Ambler JE, et al. **J Hosp Infect** 1996 Jan;32(1):71–82. Comment on: J Hosp Infect 1994 Sep;28(1):75–8.

Epidural catheter insertion and operating theatre standards [letter; comment] [see comments] Catchpole CR, et al. **J Hosp Infect** 1996 Jan;32(1):79–81. Comment on: J Hosp Infect 1995 Aug;30(4):245–52. Comment in: J Hosp Infect 1996 Aug;33(4):302–4.

Mupirocin resistance and methicillin-resistant Staphylococcus aureus (MRSA). Eltringham I. **J Hosp Infect** 1997 Jan;35(1):1–8 (44 ref.)

Methicillin-resistant Staphylococcus aureus in a cystic fibrosis unit. Givney R, et al. **J Hosp Infect** 1997 Jan; 35(1):27–36

Origin and transmission of methicillin-resistant Staphylococcus aureus in an endemic situation: differences between geriatric and intensive-care patients. Hoefnagels-Schuermans A, et al. **J Hosp Infect** 1997 Jul; 36(3):209–22

Guidelines on the control of methicillin-resistant Staphylococcus aureus in the community [letter; comment] Hollyoak V. **J Hosp Infect** 1996 Jan;32(1):81–2. Comment on: J Hosp Infect 1995 Sep;31(1):1–12.

Methicillin-resistant Staphylococcus aureus (MRSA)--a re-appraisal of control measures in the light of changing circumstances. Humphreys H, et al. **J Hosp Infect** 1997 Jul;36(3):167–70 (20 ref.)

National survey of MRSA: Ireland, 1995. Johnson Z, et al. **J Hosp Infect** 1997 Mar;35(3):175–84

When should healthcare workers be screened for methicillin-resistant Staphylococcus aureus? [see comments] Lessing MP, et al. **J Hosp Infect** 1996 Nov; 34(3):205–10. Comment in: J Hosp Infect 1997 Apr;35(4):320–1.

Long-term methicillin-resistant Staphylococcus aureus (MRSA) carriage and tagging of patient records [letter] Morgan MG, et al. **J Hosp Infect** 1997 May;36(1):78–80

Carriage of Staphylococcus aureus in the elderly. Parnaby RM, et al. **J Hosp Infect** 1996 Jul;33(3):201–6

Control of methicillin-resistant Staphylococcus aureus [letter; comment] Sheppard MJ. **J Hosp Infect** 1996 Jan; 32(1):73–8. Comment on: J Hosp Infect 1995 Feb;29(2):87–106.

Staphylococcal toxins and protein A differentially induce cytotoxicity and release of tumor necrosis factor-alpha from human keratinocytes. Ezepchuk YV, et al. **J Invest Dermatol** 1996 Oct;107(4):603–9

Characterization of a rabbit model of staphylococcal osteomyelitis. Smeltzer MS, et al. **J Orthop Res** 1997 May; 15(3):414–21

Timing of surgical treatment for active native value endocarditis. Iemura J, et al. **Jpn Circ J** 1997 Jun; 61(6):467–70

Tracing the origin of an outbreak of methicillin-resistant Staphylococcus aureus infections in a Portuguese hospital by molecular fingerprinting methods. Sanches IS, et al. **Microb Drug Resist** 1996 Fall;2(3):319–29

Detection of interleukin-6 and interleukin-2 in serum of rhesus monkeys exposed to a nonlethal dose of staphylococcal enterotoxin B. Krakauer T, et al. **Mil Med** 1997 Sep;162(9):612–5

Acute osteomyelitis of the pubic symphysis following cardiac catheterization. LeCroy CM, et al. **Orthopedics** 1997 Feb; 20(2):171–3

Rapid genotypic confirmation of methicillin resistance. Inglis TJ, et al. **Pathology** 1996 Aug;28(3):259–61

Staphylococcal blistering dactylitis: report of two patients. Woroszylski A, et al. **Pediatr Dermatol** 1996 Jul–Aug; 13(4):292–3

Risk factors for methicillin-resistant Staphylococcus aureus (MRSA) infection in a Japanese geriatric hospital. Washio M, et al. **Public Health** 1997 May;111(3):187–90

Influence of age of the donor sheep on the phagocytosis of Staphylococcus aureus subspecies anaerobius and S aureus by neutrophils. Quiteria JA, et al. **Res Vet Sci** 1996 Nov;

61(3):231–3

A unique response to staphylococcal enterotoxin B by intrahepatic lymphocytes and its relevance to the induction of tolerance in the liver. Matsui S, et al. **Scand J Immunol** 1997 Sep;46(3):230–4

Therapeutic and prophylactic effect of prepartum antibiotic infusion in heifers. Owens WE, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):455–9

[Gram-positive septic-toxic shock with bullae. Intraepidermal splitting as an indication of toxin effect] Buslau M, et al. **Hautarzt** 1996 Oct;47(10):783–9 (Eng. Abstr.) **(Ger)**

[Staphylococcus-associated blepharokeratoconjunctivitis. Clinical findings, pathogenesis and therapy] Tetz MR, et al. **Ophthalmologe** 1997 Mar;94(3):186–90 (Eng. Abstr.) **(Ger)**

[A case of hepatocellular carcinoma complicated with psoas abscess] Tanaka Y, et al. **Kansenshogaku Zasshi** 1997 Feb; 71(2):175–8 (Eng. Abstr.) **(Jpn)**

[A curative report of multiple organ dysfunction syndrome and disseminated intravascular coagulation due to methicillin-resistant Staphylococcus aureus caused mediastinitis after cardiac surgery] Gu K, et al. **Kyobu Geka** 1997 Feb;50(2):150–3 (Eng. Abstr.) **(Jpn)**

[A case of toxic shock syndrome (TSS) induced by methicillin-resistant staphylococcus aureus (MRSA) presenting as acute renal failure with disseminated intravascular coagulation] Fukuuchi F, et al. **Nippon Jinzo Gakkai Shi** 1996 Jan;38(1):27–32 (20 ref.) (Eng. Abstr.) **(Jpn)**

[A case report of postcoarctation mycotic aneurysm after surgical treatment for cerebral arterial aneurysms] Kido M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul; 45(7):1006–10 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Studies on Staphylococcus aureus: from the past to the future] Hashimoto H. **Nippon Saikingaku Zasshi** 1996 Aug; 51(3):841–52 (15 ref.) **(Jpn)**

[The role of capsule in staphylococcal infection and immunity] Ichiman Y. **Nippon Saikingaku Zasshi** 1996 Feb; 51(2):601–11 (15 ref.) **(Jpn)**

[Role of the ability of bacteria to inactivate natural anti-infective resistance factors in their resistance to blood bactericidal action (blood serum)] Bukharin OV, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):174–6 **(Rus)**

[Effect of five fluoroquinolones on the bactericidal activity of human polymorphonuclear leukocytes against Staphylococcus aureus] Ballesta S, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):600–3 (Eng. Abstr.) **(Spa)**

[Methicillin resistant Staphylococcus aureus. A problem also in Sweden] Seeberg S, et al. **Lakartidningen** 1997 Sep 10; 94(37):3174–6, 3179 (Eng. Abstr.) **(Swe)**

CHEMISTRY

Structure and dynamics of pentaglycyl bridges in the cell walls of Staphylococcus aureus by 13C–15N REDOR NMR. Tong G, et al. **Biochemistry** 1997 Aug 12; 36(32):9859–66

Membrane topology of the metal–tetracycline/H+ antiporter TetA(K) from Staphylococcus aureus. Ginn SL, et al. **J Bacteriol** 1997 Jun;179(11):3786–9

Determination of staphylococcal enterotoxin B by on-line (micro) liquid chromatography–electrospray mass spectrometry. Kientz CE, et al. **J Chromatogr A** 1997 Jan 3;757(1–2):51–64

Chemical characteristics of Staphylococcus aureus molecules that have CD14-dependent cell-stimulating activity. Kusunoki T, et al. **J Immunol** 1996 Dec 1;157(11):5112–7

Staphylococcus aureus alpha-toxin: characterization of protein/lipid interactions, 2D crystallization on lipid monolayers, and 3D structure. Ellis MJ, et al. **J Struct Biol** 1997 Apr;118(3):178–88

Correlation between reduction of surface hydrophobicity of S. aureus and the decrease in its adhesiveness induced by subinhibitory concentrations of brodimoprim. Braga PC, et al. **Pharmacol Res** 1995 Nov;32(5):315–9

Molecular modelling of Staphylococcal delta-toxin ion channels by restrained molecular dynamics. Kerr ID, et al. **Protein Eng** 1996 Feb;9(2):161–71

Exploiting the unique biophysical properties of bacteriocins to purify Bac 1829 from Staphylococcus aureus KSI1829. Crupper SS, et al. **Protein Expr Purif** 1997 Mar;9(2):228–32

Purification of Staphylococcus aureus beta-toxin: comparison of three isoelectric focusing methods. Gaskin DK, et al. **Protein Expr Purif** 1997 Feb;9(1):76–82

Structure of staphylococcal alpha-hemolysin, a heptameric transmembrane pore [see comments] Song L, et al. **Science** 1996 Dec 13;274(5294):1859–66. Comment in: Science 1996 Dec 13;274(5294):1805–1.

A highly discriminatory method for the direct comparison of two closely related bacterial populations by pyrolysis mass spectrometry. Freeman R, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):285–90

Some biochemical properties of the components of Staphylococcus aureus binding to human platelets. Usui Y, et al. **Zentralbl Bakteriol** 1997 Jun;286(1):56–62

[Comparison of detection methods for the Staphylococcus aureus capsule] Odierno L, et al. **Rev Latinoam Microbiol** 1995 Jul–Sep;37(3):245–55 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Phenotyping methods in epidemiological analysis of epidemic Staphylococcus aureus strains. Konopka M, et al. **Acta Microbiol Pol** 1996;45(3–4):269–78

Producibility of exfoliative toxin and staphylococcal coagulase types of Staphylococcus aureus strains isolated from skin infections and atopic dermatitis. Kanzaki H, et al. **Dermatology** 1997;195(1):6–9

Types of methicillin-resistant Staphylococcus aureus associated with high mortality in patients with bacteremia. Nada T, et al. **Eur J Clin Microbiol Infect Dis** 1996 Apr; 15(4):340–3

Comparison of an improved RAPD fingerprinting with different typing methods for discriminating clinical isolates of Staphylococcus spp. Damiani G, et al. **Eur J Epidemiol** 1996 Apr;12(2):163–9

Molecular and phage typing of Staphylococcus aureus harbouring cryptic conjugative plasmids. Udo EE, et al. **Eur J Epidemiol** 1996 Dec;12(6):637–41

Single-step polymerase chain reaction for combined gene detection and epidemiological typing in three bacterial models. Saulnier P, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):311–6

Quantitative antibiogram as a typing method for the prospective epidemiological surveillance and control of MRSA: comparison with molecular typing. Blanc DS, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):654–9

Monitoring persistence of coagulase-negative staphylococci in a hematology department using phenotypic and genotypic strategies. van Belkum A, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):660–7

Typing of Staphylococcus aureus by PCR for DNA sequences flanked by transposon Tn916 target region and ribosomal binding site. Cuny C, et al. **J Clin Microbiol** 1996 Jun;34(6):1502–5

Comparison of five tests for identification of Staphylococcus aureus from clinical samples. Luijendijk A, et al. **J Clin Microbiol** 1996 Sep;34(9):2267–9

Contribution of a typing method based on IS256 probing of SmaI-digested cellular DNA to discrimination of European phage type 77 methicillin-resistant Staphylococcus aureus strains. Morvan A, et al. **J Clin Microbiol** 1997 Jun;35(6):1415–23

Investigation of a methicillin-resistant Staphylococcus aureus (MRSA) outbreak in an Irish hospital: triplex PCR and DNA amplification fingerprinting. Cotter L, et al. **J Hosp Infect** 1997 May;36(1):37–47

Molecular epidemiology of a multiple strain outbreak of methicillin-resistant Staphylococcus aureus amongst patients and staff. Lessing MP, et al. **J Hosp Infect** 1995 Dec;31(4):253–60

Epidemiology of methicillin-resistant Staphylococcus aureus in a Warsaw hospital. Młynarczyk G, et al. **J Hosp Infect** 1996 Oct;34(2):151–60

Simultaneous persistence of methicillin-resistant and methicillin-susceptible clones of Staphylococcus aureus in a neonatal ward of a Warsaw hospital. Trzcinski K, et al. **J Hosp Infect** 1997 Aug;36(4):291–303

Changes in major populations of methicillin-resistant Staphylococcus aureus in Belgium. Wildemauwe C, et al. **J Hosp Infect** 1996 Nov;34(3):197–203

Persistence of Staphylococcus aureus strains among cystic fibrosis patients over extended periods of time. Branger C, et al. **J Med Microbiol** 1996 Oct;45(4):294–301

An atypical Staphylococcus aureus intramammary infection in a dairy herd. Laevens H, et al. **Vet Microbiol** 1996 Oct; 52(3–4):271–5

Quantitative analysis of multivariate data using artificial neural networks: a tutorial review and applications to the deconvolution of pyrolysis mass spectra. Goodacre R, et al. **Zentralbl Bakteriol** 1996 Aug;284(4):516–39 (114 ref.)

Differentiation between bacterial species and sub-species by pyrolysis mass spectrometry of extracted DNA. Mathers K, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):311–8

[Coagulase typing of Staphylococcus aureus in the geriatric wards after introduction of preventive measures of hospital infection] Masaki H, et al. **Kansenshogaku Zasshi** 1997 Mar; 71(3):229–35 (Eng. Abstr.) **(Jpn)**

[Characterization of bacteriophage nontypable patterns of S. aureus strains] Cybulski Z, et al. **Med Dosw Mikrobiol** 1995; 47(3–4):119–25 (Eng. Abstr.) **(Pol)**

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Evolution and resistance expression of MRSA. Evaluation of beta-lactam antibiotics against a set of isogenic strains with different types of phenotypic expression. Asada K, et al. **Acta Biochim Pol** 1995;42(4):517–24

Phenotyping methods in epidemiological analysis of epidemic Staphylococcus aureus strains. Konopka M, et al. **Acta Microbiol Pol** 1996;45(3–4):269–78

United States geographic bacteria susceptibility patterns. 1995 ASCP Susceptibility Testing Group. **Am J Clin Pathol** 1996 Sep;106(3):275–81

Validity of Bayesian forecasting programme in therapeutic drug monitoring of vancomycin in a surgical intensive care unit: a prospective evaluation. Balram C, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):492–5

Pyomyositis revisited. Kong NC, et al. **Ann Acad Med Singapore** 1996 Jul;25(4):609–11

Vancomycin-resistant Staphylococcus aureus [letter; comment] Lai KK. **Ann Intern Med** 1996 Nov 15; 125(10):859; discussion 859–60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329–34.

Vancomycin-resistant Staphylococcus aureus [letter; comment] Lundstrom T, et al. **Ann Intern Med** 1996 Nov 15;125(10):858–9; discussion 859–60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329–34.

Vancomycin-resistant Staphylococcus aureus [letter; comment] Olmsted RN, et al. **Ann Intern Med** 1996 Nov 15;125(10):858; discussion 859–60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329–34.

Vancomycin-resistant Staphylococcus aureus [letter; comment] Vandenbroucke-Grauls CM. **Ann Intern Med** 1996 Nov 15;125(10):859; discussion 859–60. Comment on: Ann Intern Med 1996 Feb 1;124(3):329–34.

Clinical investigation of topical antimicrobials in healthy volunteers. Langford JH, et al. **Ann Pharmacother** 1997 Jan;31(1):34–8

Methicillin-resistant Staphylococcus aureus infection in hospital staff [letter] McLaughlin MJ, et al. **Ann Plast Surg** 1997 Jan;38(1):83

Suspicion of quinolone active metabolite following discrepancy between predicted and experimental urine bactericidal activities. Aguilar L, et al. **Antimicrob Agents Chemother** 1997 May;41(5):927–30

In vitro assessment of the effect of clavulanic acid at concentrations achieved in human serum on the bactericidal activity of amoxicillin at physiological concentrations against Staphylococcus aureus: implications for dosage regimens. Aguilar L, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1403–5

In vitro activities of ciprofloxacin and rifampin alone and in combination against growing and nongrowing strains of methicillin-susceptible and methicillin-resistant Staphylococcus aureus. Bahl D, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1293–7

Increased expression of fibronectin-binding proteins by fluoroquinolone-resistant Staphylococcus aureus exposed to subinhibitory levels of ciprofloxacin. Bisognano C, et al. **Antimicrob Agents Chemother** 1997 May;41(5):906–13

50S ribosomal subunit synthesis and translation are equivalent targets for erythromycin inhibition in Staphylococcus aureus. Champney WS, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1301–3

Effect of exogenous glycine on peptidoglycan composition and resistance in a methicillin-resistant Staphylococcus aureus strain. de Jonge BL, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1498–503

Levofloxacin versus ciprofloxacin, flucloxacillin, or vancomycin for treatment of experimental endocarditis due to methicillin-susceptible or -resistant Staphylococcus aureus. Entenza JM, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1662–7

Relationships between antimicrobial effect and area under the concentration-time curve as a basis for comparison of modes of antibiotic administration: meropenem bolus injections versus continuous infusions. Firsov AA, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):352–6

Treatment of Staphylococcus aureus catheter-related infection and infective endocarditis with granulocyte colony-stimulating factor in the experimental rabbit model. Frank U, et al. **Antimicrob Agents Chemother** 1996 May; 40(5):1308–10

Postexposure factors influencing the duration of postantibiotic effect: significance of temperature, pH, cations, and oxygen tension. Fuursted K. **Antimicrob Agents Chemother** 1997 Aug;41(8):1693–6

Frequency of high-level mupirocin-resistant Staphylococcus aureus in a tertiary care facility [letter] Irizarry L, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1967–8

In vitro activities of oxazolidinone compounds U100592 and U100766 against Staphylococcus aureus and Staphylococcus epidermidis. Kaatz GW, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):799–801

Bactericidal activity of low-dose clindamycin administered at 8- and 12-hour intervals against Staphylococcus aureus, Streptococcus pneumoniae, and Bacteroides fragilis. Klepser ME, et al. **Antimicrob Agents Chemother** 1997 Mar; 41(3):630–5

Novel method for assessing postantibiotic effect by using the Coulter counter. Li RC, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1751–3

Comparison of the postantibiotic and postantibiotic sub-MIC effects of levofloxacin and ciprofloxacin on Staphylococcus aureus and Streptococcus pneumoniae. Licata L, et al. **Antimicrob Agents Chemother** 1997 May;41(5):950–5

Inhibition of the multidrug transporter NorA prevents emergence of norfloxacin resistance in Staphylococcus aureus [letter] Markham PN, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2673–4

Pharmacodynamic evaluation of a new glycopeptide, LY333328, and in vitro activity against Staphylococcus aureus and Enterococcus faecium. Mercier RC, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1307–12

Vancomycin-gentamicin synergism revisited: effect of gentamicin susceptibility of methicillin-resistant Staphylococcus aureus. Mulazimoglu L, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1534–5

In vitro activities of two novel oxazolidinones (U100592 and U100766), a new fluoroquinolone (trovafloxacin), and dalfopristin-quinupristin against Staphylococcus aureus and Staphylococcus epidermidis. Mulazimoglu L, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2428–30

Quinolone resistance mutations in topoisomerase IV: relationship to the flqA locus and genetic evidence that topoisomerase IV is the primary target and DNA gyrase is the secondary target of fluoroquinolones in Staphylococcus aureus. Ng EY, et al.
Antimicrob Agents Chemother 1996 Aug;40(8):1881–8

Pharmacodynamics of once- or twice-daily levofloxacin versus vancomycin, with or without rifampin, against Staphylococcus aureus in an in vitro model with infected platelet-fibrin clots. Palmer SM, et al.
Antimicrob Agents Chemother 1996 Mar;40(3):701–5

Uptake of cefepime by phagocytosing polymorphonuclear neutrophils and subsequent intracellular killing. Pruul H, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1870–4

Pharmacodynamics of RP 59500 (quinupristin-dalfopristin) administered by intermittent versus continuous infusion against Staphylococcus aureus-infected fibrin-platelet clots in an in vitro infection model. Rybak MJ, et al.
Antimicrob Agents Chemother 1997 Jun;41(6):1359–63

Pharmacokinetics in nonhuman primates of a prototype carbapenem active against methicillin-resistant Staphylococcus aureus. Sundelof JG, et al.
Antimicrob Agents Chemother 1996 Mar;40(3):795–8

Hydrophilicity of quinolones is not an exclusive factor for decreased activity in efflux-mediated resistant mutants of Staphylococcus aureus. Takenouchi T, et al.
Antimicrob Agents Chemother 1996 Aug;40(8):1835–42

Combination of flucloxacillin and gentamicin inhibits toxic shock syndrome toxin 1 production by Staphylococcus aureus in both logarithmic and stationary phases of growth. van Langevelde P, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1682–5

Variation in postantibiotic effect of clindamycin against clinical isolates of Staphylococcus aureus and implications for dosing of patients with osteomyelitis. Xue IB, et al.
Antimicrob Agents Chemother 1996 Jun;40(6):1403–7

Antimicrobial activity of carbene complexes of rhodium(I) and ruthenium(II). Cetinkaya B, et al.
Arzneimittelforschung 1996 Aug;46(8):821–3

The epidemiology of methicillin-resistant Staphylococcus aureus: surgical relevance 20 years on. McDonald M.
Aust N Z J Surg 1997 Oct;67(10):682–5 (32 ref.)

Antibacterial activity of some Garcinia benzophenone derivatives against methicillin-resistant Staphylococcus aureus. Iinuma M, et al. **Biol Pharm Bull** 1996 Feb; 19(2):311–4

Extraction and purification of effective antimicrobial constituents of Terminalia chebula RETS. against methicillin-resistant Staphylococcus aureus. Sato Y, et al.
Biol Pharm Bull 1997 Apr;20(4):401–4

Synergistic effect of polyoxotungstates in combination with beta-lactam antibiotics on antibacterial activity against methicillin-resistant Staphylococcus aureus. Yamase T, et al. **Biol Pharm Bull** 1996 Mar;19(3):459–65

Vancomycin resistant Staphylococcus aureus reported [news] Josefson D. **BMJ** 1997 Sep 20;315(7110):700

Is it time to stop searching for MRSA? Risk analysis can identify those patients needing isolation [letter; comment] Wilson P, et al. **BMJ** 1997 Jul 5;315(7099):58–9. Comment on: BMJ 1997 Mar 1;314(7081):664–5. Comment on: BMJ 1997 Mar 1;314(7081):665–6.

Detection of methicillin-resistant Staphylococcus aureus: the evaluation of rapid agglutination methods. Davies S.
Br J Biomed Sci 1997 Mar;54(1):13–5

Staphylococcus aureus strains differ in their in vitro responsiveness to human urokinase: evidence that methicillin-resistant strains are predominately nonresponsive to the growth-enhancing effects of urokinase. Hart DA, et al. **Can J Microbiol** 1996 Oct; 42(10):1024–31

Clenched-fist injury complicated by methicillin-resistant Staphylococcus aureus. Berlet G, et al. **Can J Surg** 1997 Aug;40(4):313–4

Comparison of minimum inhibitory concentrations to methicillin in heterogeneous and homogeneous methicillin resistant Staphylococcus aureus. de Silva N, et al.
Ceylon Med J 1996 Dec;41(4):144–7

Effect of phagocytosis of bacteria on the uptake of sparfloxacin by human neutrophils. García I, et al.
Chemotherapy 1996 Nov-Dec;42(6):465–7

Reduced susceptibility of methicillin-resistant Staphylococcus aureus to cetylpyridinium chloride and chlorhexidine. Irizarry L, et al. **Chemotherapy** 1996 Jul-Aug;42(4):248–52

Antibacterial activity of cefpodoxime in vitro. Liu YC, et al. **Chemotherapy** 1997 Jan-Feb;43(1):21–6

In vitro antibacterial activity of TOC-50, a new parenteral cephalosporin against methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Nomura S, et al.
Chemotherapy 1996 Jul-Aug;42(4):253–8

The progressive intercontinental spread of methicillin-resistant Staphylococcus aureus. Ayliffe GA.
Clin Infect Dis 1997 Jan;24 Suppl 1:S74–9 (60 ref.)

Effect of pre-operative antibiotic treatment on the bacterial content of the tonsil. Cafferkey MT, et al.
Clin Otolaryngol 1993 Dec;18(6):512–6

Epidemic methicillin resistant Staphylococcus aureus.
Commun Dis Rep CDR Wkly 1997 May 30;7(22):191

In vivo effect of teicoplanin and vancomycin upon haemolytic and bactericidal activity of serum against Staphylococcus aureus. Rodríguez AB, et al.
Comp Immunol Microbiol Infect Dis 1996 Sep;19(4):283–8

Validation of Etest for seven antimicrobial agents using regulatory criteria for the assessment of antimicrobial susceptibility devices. Biedenbach DJ, et al.
Diagn Microbiol Infect Dis 1997 Jan-Feb;27(1-2):1–5

Susceptibility of ciprofloxacin-resistant staphylococci and enterococci to trovafloxacin. Bonilla HF, et al.
Diagn Microbiol Infect Dis 1996 Sep;26(1):17–21

Detection of oxacillin-resistance in Staphylococcus aureus by MicroScan MIC panels in comparison to four other methods. Dillard SC, et al. **Diagn Microbiol Infect Dis** 1996 Feb;24(2):93–100

Vitek GPS card susceptibility testing accuracy using direct inoculation from BACTEC 9240 blood culture bottles. Howard WJ, et al. **Diagn Microbiol Infect Dis** 1996 Feb; 24(2):109–12

Methicillin-resistant Staphylococcus aureus in nursing homes. Epidemiology, prevention and management. Bradley SF. **Drugs Aging** 1997 Mar;10(3):185–98 (90 ref.)

Estimation of direct influence of Ukrain preparation on influenza viruses and the bacteria E. coli and S. aureus. Ciebiada I, et al. **Drugs Exp Clin Res** 1996;22(3-5):219–23

Review of methicillin resistant Staphylococcus aureus with special reference to handling of surgical patients. Gakuu LN. **East Afr Med J** 1997 Mar;74(3):198–202 (22 ref.)

Experience with methicillin resistant Staphylococcus aureus at the Nairobi Hospital. Hayanga A, et al.
East Afr Med J 1997 Mar;74(3):203–4

Methicillin-resistant Staphylococcus aureus (MRSA) in nursing homes in a major UK city: an anonymized point prevalence survey. Fraise AP, et al. **Epidemiol Infect** 1997 Feb;118(1):1–5

Clinical spectrum of ventilator-associated pneumonia caused by methicillin-sensitive Staphylococcus aureus. Bergmans D, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jun; 15(6):437–45

In vitro study of the potential role of quinupristin/dalfopristin in the treatment of catheter-related staphylococcal infections. Garcia R, et al.
Eur J Clin Microbiol Infect Dis 1996 Dec;15(12):933–6

Comparison of screening methods to identify methicillin-resistant Staphylococcus aureus. Kampf G, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):301–7

Bactericidal activity of tyrothricin against methicillin-resistant Staphylococcus aureus with reduced susceptibility to mupirocin [letter] Kretschmar M, et al.
Eur J Clin Microbiol Infect Dis 1996 Mar;15(3):261–3

Tumor necrosis factor alpha and interleukin 6 release induced by antibiotic killing of Pseudomonas aeruginosa and Staphylococcus aureus. Schneider CM, et al.
Eur J Clin Microbiol Infect Dis 1997 Jun;16(6):467–71

Distinct genotypic clusters of heterogeneously and homogeneously methicillin-resistant Staphylococcus aureus from a Greek hospital. Tassios PT, et al.
Eur J Clin Microbiol Infect Dis 1997 Feb;16(2):170–3

Staphylococcal scalded skin syndrome caused by exfoliative toxin B-producing methicillin-resistant Staphylococcus aureus [letter] Yokota S, et al. **Eur J Pediatr** 1996 Aug; 155(8):722

The combined effects of plasma and hydrogel coating on adhesion of Staphylococcus epidermidis and Staphylococcus aureus to polyurethane catheters. John SF, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2-3):241–7

Lead resistance and sensitivity in Staphylococcus aureus. Levinson HS, et al. **FEMS Microbiol Lett** 1996 Dec 15; 145(3):421–5

Impact of sar and agr on methicillin resistance in Staphylococcus aureus. Piriz Durán S, et al.
FEMS Microbiol Lett 1996 Aug 1;141(2-3):255–60

A highly vancomycin-resistant laboratory mutant of Staphylococcus aureus. Sieradzki K, et al.
FEMS Microbiol Lett 1996 Sep 1;142(2-3):161–6

Minimal functional system required for expression of erythromycin resistance by msrA in Staphylococcus aureus RN4220. Ross JI, et al. **Gene** 1996 Dec 12;183(1-2):143–8

Incidence of methicillin resistant coagulase positive & coagulase negative staphylococci in blood cultures. Jesudason MV, et al. **Indian J Med Res** 1997 Apr;105:155–7

The spectrum of antimicrobial resistance among methicillin resistant Staphylococcus aureus (MRSA) in a tertiary care centre in India. Pulimood TB, et al. **Indian J Med Res** 1996 Apr;103:212–5

Antibacterial activity of antileukoprotease. Hiemstra PS, et al. **Infect Immun** 1996 Nov;64(11):4520–4

Bactericidal activity of a synthetic peptide (CG 117-136) of human lysosomal cathepsin G is dependent on arginine content. Shafer WM, et al. **Infect Immun** 1996 Nov; 64(11):4842–5

Nosocomial septicemias due to methicillin-resistant staphylococcus aureus and Pseudomonas aeruginosa in a university hospital over a 12-year period—the same intractable infections. Mizushima Y, et al. **Infection** 1996 May-Jun;24(3):238–41

Staphylococcus aureus sensitivity to various antibiotics--a national survey in Ireland 1993. Moorhouse E, et al.
Ir J Med Sci 1996 Jan-Mar;165(1):40–3

Ketolides lack inducibility properties of MLS(B) resistance phenotype. Bonnefoy A, et al. **J Antimicrob Chemother** 1997 Jul;40(1):85–90

Cefodizime: effects of sub-inhibitory concentrations on adhesiveness and bacterial morphology of Staphylococcus aureus and Escherichia coli: comparison with cefotaxime and ceftriaxone. Braga PC, et al.
J Antimicrob Chemother 1997 Jan;39(1):79–84

Decreased susceptibility to antibiotic killing of a stable small colony variant of Staphylococcus aureus in fluid phase and on fibronectin-coated surfaces. Chuard C, et al.
J Antimicrob Chemother 1997 May;39(5):603–8

Problems in detecting low-expression-class methicillin resistance in Staphylococcus aureus with batches of Oxoid Mueller-Hinton agar [letter] Coombs GW, et al.
J Antimicrob Chemother 1996 Sep;38(3):551–3

Activity of glycylcyclines CL 329998 and CL 331002 against minocycline-resistant and other strains of methicillin-resistant Staphylococcus aureus. Hamilton-Miller JM, et al. **J Antimicrob Chemother** 1996 Jun;37(6):1171–5

Meropenem-induced alteration of the susceptibility of Escherichia coli and Staphylococcus aureus to the bactericidal activity of human polymorphonuclear leucocytes. Herrera-Insúa I, et al.
J Antimicrob Chemother 1997 Feb;39(2):223–8

Methicillin-resistant Staphylococcus aureus clinical strain with reduced vancomycin susceptibility [letter] Hiramatsu K, et al. **J Antimicrob Chemother** 1997 Jul;40(1):135–6

The concentration-independent effect of monoexponential and biexponential decay in vancomycin concentrations on the killing of Staphylococcus aureus under aerobic and anaerobic conditions. Larsson AJ, et al.
J Antimicrob Chemother 1996 Oct;38(4):589–97

In-vitro pharmacodynamic simulation of clavulanic acid concentrations: effect on Staphylococcus aureus and Haemophilus influenzae beta-lactamase activity [letter] Martín M, et al. **J Antimicrob Chemother** 1997 Feb; 39(2):290–2

Characteristics of quinolone-induced small colony variants in Staphylococcus aureus. Mitsuyama J, et al.
J Antimicrob Chemother 1997 Jun;39(6):697–705

Lysogenic conversion as a factor influencing the vancomycin tolerance phenomenon in Staphylococcus aureus [letter] Młynarczyk G, et al. **J Antimicrob Chemother** 1997 Jul; 40(1):136–7

Bactericidal activity of trovafloxacin (CP-99,219). Morrissey I. **J Antimicrob Chemother** 1996 Dec;38(6):1061–6

Susceptibility of staphylococci to teicoplanin and vancomycin [letter] Murphy OM, et al.
J Antimicrob Chemother 1996 Aug;38(2):316–7

The effect of quinolones on the intracellular killing of Staphylococcus aureus in neutrophil granulocytes. Nielsen SL, et al. **J Antimicrob Chemother** 1997 May;39(5):617–22

An evaluation of the bactericidal activity of ampicillin/sulbactam, piperacillin/tazobactam, imipenem or nafcillin alone and in combination with vancomycin against methicillin-resistant Staphylococcus aureus (MRSA) in time-kill curves with infected fibrin clots. Palmer SM, et al. **J Antimicrob Chemother** 1997 Apr; 39(4):515–8

In-vitro bactericidal activity of cefpirome in combination with vancomycin against Staphylococcus aureus and coagulase-negative staphylococci. Raymond J, et al.
J Antimicrob Chemother 1996 Dec;38(6):1067–71

The effect of ramoplanin coating on colonization by Staphylococcus aureus of catheter segments implanted subcutaneously in mice. Romanò G, et al.
J Antimicrob Chemother 1997 May;39(5):659–61

Susceptibility of respiratory strains of Staphylococcus aureus to fifteen antibiotics: results of a collaborative surveillance study (1992-1993). The Alexander Project Collaborative Group. Schito GC, et al. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:97–106

In-vitro modelling of the bactericidal activity of teicoplanin versus flucloxacillin as used in surgical prophylaxis, against Staphylococcus aureus. Steer JA, et al.
J Antimicrob Chemother 1997 Apr;39(4):477–81

A flow cytometric study of antibiotic-induced damage and evaluation as a rapid antibiotic susceptibility test for methicillin-resistant Staphylococcus aureus. Suller MT, et al. **J Antimicrob Chemother** 1997 Jul;40(1):77–83

Mutations in the gyrA and grlA genes of quinolone-resistant clinical isolates of methicillin-resistant Staphylococcus aureus. Takahata M, et al. **J Antimicrob Chemother** 1996 Sep;38(3):543–6

Establishment of a European network for the surveillance of Mycobacterium tuberculosis, MRSA and penicillin-resistant pneumococci [letter; comment] Van Embden JD, et al. **J Antimicrob Chemother** 1996 Nov; 38(5):905–7. Comment on: J Antimicrob Chemother 1996 Jan;37(1):5–6.

In-vitro activity of ofloxacin, levofloxacin and D-ofloxacin against staphylococci. von Eiff C, et al.
J Antimicrob Chemother 1996 Aug;38(2):259–63

Comparative studies of the bactericidal, morphological and post-antibiotic effects of arbekacin and vancomycin against methicillin-resistant Staphylococcus aureus. Watanabe T, et al. **J Antimicrob Chemother** 1997 Apr;39(4):471–6

beta-lactamase negative, methicillin-resistant Staphylococcus aureus lacking the mecA gene determinant [letter] Zaher A, et al. **J Antimicrob Chemother** 1997 Jan; 39(1):108–9

Antibacterial activity of anacardic acid and totarol, alone and in combination with methicillin, against methicillin-resistant Staphylococcus aureus. Muroi H, et al. **J Appl Bacteriol** 1996 Apr;80(4):387–94

Inhibition of cell wall turnover and autolysis by vancomycin in a highly vancomycin-resistant mutant of Staphylococcus

aureus. Sieradzki K, et al. **J Bacteriol** 1997 Apr; 179(8):2557–66

Cell wall monoglycine cross–bridges and methicillin hypersusceptibility in a femAB null mutant of methicillin–resistant Staphylococcus aureus. Strandén AM, et al. **J Bacteriol** 1997 Jan;179(1):9–16

Quantitative comparison of shear–dependent Staphylococcus aureus adhesion to three polyurethane ionomer analogs with distinct surface properties. Dickinson RB, et al. **J Biomed Mater Res** 1997 Aug;36(2):152–62

Much ado about nothing: methicillin–resistant Staphylococcus aureus. Shannon T, et al. **J Burn Care Rehabil** 1997 Jul–Aug;18(4):326–31

Inhibition of intracellular growth of Staphylococcus aureus by exposure of infected human monocytes to clarithromycin and azithromycin. Fietta A, et al. **J Chemother** 1997 Feb;9(1):17–22

Enhanced susceptibility of Staphylococcus aureus pretreated with cefepime and cefpodoxime to leukocyte activity. Herrera I, et al. **J Chemother** 1995 Nov;7 Suppl 4:23–5

Postantibiotic sub–MIC effect of meropenem on Escherichia coli and Staphylococcus aureus. Martinez FF, et al. **J Chemother** 1995 Nov;7 Suppl 4:12–4

Evaluation of the efficacy of josamycin in the treatment of impetigo in children and its in vitro activity on erythromycin resistant Staphylococcus aureus strains. Mosca A, et al. **J Chemother** 1995 Nov;7 Suppl 4:158–9

Effect of sub–inhibitory concentrations of clarithromycin and erythromycin on the production of Staphylococcus aureus capsules. Ohtomo T, et al. **J Chemother** 1995 Nov;7 Suppl 4:9–11

Multidrug resistance among methicillin–resistant Staphylococcus aureus in Greece. Tsakris A, et al. **J Chemother** 1996 Aug;8(4):251–3

Effects of macrolide antibiotics on bacteria–platelet interactions. Usui Y, et al. **J Chemother** 1995 Nov;7 Suppl 4:40–2

Outbreak of multi–drug resistant Staphylococcus aureus: a cluster analysis. Yoshida J, et al. **J Clin Epidemiol** 1996 Dec;49(12):1447–52

Evaluation of Vitek GPS–SA card for testing of oxacillin against borderline–susceptible staphylococci that lack mec. Knapp CC, et al. **J Clin Microbiol** 1996 Jul;34(7):1603–5

Comparison and application of ribosome spacer DNA amplicon polymorphisms and pulsed–field gel electrophoresis for differentiation of methicillin–resistant Staphylococcus aureus strains. Kumari DN, et al. **J Clin Microbiol** 1997 Apr;35(4):881–5

Molecular characterization of epidemic ciprofloxacin– and methicillin–resistant Staphylococcus aureus strains colonizing patients in an intensive care unit. Udo EE, et al. **J Clin Microbiol** 1996 Dec;34(12):3242–4

Rapid detection of oxacillin–resistant Staphylococcus aureus in blood cultures by an impedance method. Wu JJ, et al. **J Clin Microbiol** 1997 Jun;35(6):1460–4

Binding of Staphylococcus aureus to milk fat globules increases resistance to penicillin–G. Ali–Vehmas T, et al. **J Dairy Res** 1997 May;64(2):253–60

Activity of selected antimicrobial agents against strains of Staphylococcus aureus isolated from bovine intramammary infections that produce beta–lactamase. Watts JL, et al. **J Dairy Sci** 1997 Apr;80(4):788–91

Preliminary antimicrobial screening of four South African Asteraceae species. Salie F, et al. **J Ethnopharmacol** 1996 May;52(1):27–33

Factors associated with methicillin resistance in diabetic foot infections. Day MR, et al. **J Foot Ankle Surg** 1997 Jul–Aug; 36(4):322–5; discussion 331

Eradication of throat carriage of methicillin–resistant Staphylococcus aureus [letter; comment] Balfour A, et al. **J Hosp Infect** 1997 Apr;35(4):320–1. Comment on: J Hosp Infect 1996 Nov;34(3):205–10.

Strategies for the management of healthcare staff colonized with epidemic methicillin–resistant Staphylococcus aureus [letter] Bowler I. **J Hosp Infect** 1997 Aug;36(4):321–2

MRSA bacteraemia [letter] Catchpole C, et al. **J Hosp Infect** 1997 Feb;35(2):159–61

Methicillin–resistant Staphylococcus aureus: investigation of a hospital outbreak using a case–control study. Crowcroft N, et al. **J Hosp Infect** 1996 Dec;34(4):301–9

Epidemiology of methicillin–resistant Staphylococcus aureus in a Warsaw hospital. Młynarczyk G, et al. **J Hosp Infect** 1996 Oct;34(2):151–60

Survival of methicillin–resistant Staphylococcus aureus (MRSA) on naturally contaminated dry mops. Oie S, et al. **J Hosp Infect** 1996 Oct;34(2):145–9

MRSA colonization rates of readmitted patients previously colonized or infected with MRSA [letter] Rodier L, et al. **J Hosp Infect** 1997 Feb;35(2):161–3

Sensitivity to antibacterials of Staphylococcus aureus isolated from skin infections: a comparison of two hospitals. Nishijima S, et al. **J Int Med Res** 1997 Jan–Feb;25(1):8–13

Sensitivity to antibacterials of Staphylococcus aureus isolated from different types of skin infections. Nishijima S, et al. **J Int Med Res** 1997 Jan–Feb;25(1):1–7

Sensitivity of antibacterials of Staphylococcus aureus isolated from impetigo patients. Nishijima S, et al. **J Int Med Res** 1997 Jul–Aug;25(4):210–3

Slime formation as a marker of serious infection with methicillin–resistant Staphylococcus aureus. Takahashi A, et al. **J Med** 1997;28(1–2):87–98

5,6–Cis–penems: broad–spectrum anti–methicillin–resistant Staphylococcus aureus beta–lactam antibiotics. Ishiguro M, et al. **J Med Chem** 1997 Jul 4;40(14):2126–32

Discrimination of methicillin–resistant Staphylococcus aureus from borderline–resistant and susceptible isolates by different methods. Resende CA, et al. **J Med Microbiol** 1997 Feb;46(2):145–9

Kawaguchipeptin B, an antibacterial cyclic undecapeptide from the cyanobacterium Microcystis aeruginosa. Ishida K, et al. **J Nat Prod** 1997 Jul;60(7):724–6

Duration of protective activity of cerebrospinal fluid shunt catheters impregnated with antimicrobial agents to prevent bacterial catheter–related infection. Bayston R, et al. **J Neurosurg** 1997 Aug;87(2):247–51

Methicillin–resistant Staphylococcus aureus at a Veterans Affairs Medical Center (1986–96). Flournoy DJ. **J Okla State Med Assoc** 1997 Jul–Aug;90(6):228–35

Benzalkonium chloride: a potential disinfecting irrigation solution. Gainor BJ, et al. **J Orthop Trauma** 1997 Feb–Mar; 11(2):121–5

Antibacterial activity of xanthones from guttiferaeous plants against methicillin–resistant Staphylococcus aureus. Iinuma M, et al. **J Pharm Pharmacol** 1996 Aug;48(8):861–5

Pharmacokinetic–pharmacodynamic model for spiramycin in staphylococcal mastitis. Renard L, et al. **J Vet Pharmacol Ther** 1996 Apr;19(2):95–103

From the Centers for Disease Control and Prevention. Staphylococcus aureus with reduced susceptibility to vancomycin—United States, 1997. **JAMA** 1997 Sep 17; 278(11):891–2

From the Centers for Disease Control and Prevention. Update: Staphylococcus aureus with reduced susceptibility to vancomycin—United States, 1997. **JAMA** 1997 Oct 8; 278(14):1145–6

From the Centers for Disease Control and Prevention. Interim guidelines for prevention and control of staphylococcal infection associated with reduced susceptibility to vancomycin. **JAMA** 1997 Aug 13; 278(6):461–2

Tripeptide LY301621 and its diastereomers as methicillin potentiators against methicillin resistant Staphylococcus aureus. Eid CN, et al. **Jpn J Antibiot** 1997 Mar;50(3):283–5

Making real sense of MRSA [letter; comment] Chadwick PR, et al. **Lancet** 1996 Nov 30;348(9040):1525. Comment on: Lancet 1996 Sep 28;348(9031):836–7.

Making real sense of MRSA [letter; comment] Fraise AP, et al. **Lancet** 1996 Nov 30;348(9040):1526. Comment on: Lancet 1996 Sep 28;348(9031):836–7.

Quinolones in sweat and quinolone resistance [comment] Hawkey PM. **Lancet** 1997 Jan 18;349(9046):148–9. Comment on: Lancet 1997 Jan 18;349(9046):167–9.

Making real sense of MRSA [letter; comment] Hill SF. **Lancet** 1996 Nov 30;348(9040):1525–6. Comment on: Lancet 1996 Sep 28;348(9031):836–7.

Methicillin–resistant Staphylococcus aureus and vancomycin–resistant enterococci [letter] Humphreys H, et al. **Lancet** 1997 Sep 6;350(9079):737–8

Methicillin–resistant Staphylococcus aureus and vancomycin–resistant enterococci: therapeutic realities and possibilities. Michel M, et al. **Lancet** 1997 Jun 28; 349(9069):1901–6 (63 ref.)

Making real sense of MRSA [editorial] [see comments] Patterson JE. **Lancet** 1996 Sep 28;348(9031):836–7. Comment in: Lancet 1996 Nov 30;348(9040):1525. Comment in: Lancet 1996 Nov 30;348(9040):1525–6. Comment in: Lancet 1996 Nov 30;348(9040):1526.

Analysis of the clonal diversity of Staphylococcus aureus methicillin–resistant strains isolated at João Pessoa, state of Paraíba. Brazil. Santos Filho L, et al. **Mem Inst Oswaldo Cruz** 1996 Jan–Feb;91(1):101–5

Testing the efficacy of a molecular surveillance network: methicillin–resistant Staphylococcus aureus (MRSA) and vancomycin–resistant Enterococcus faecium (VREF) genotypes in six hospitals in the metropolitan New York City area. The BARG Initiative Pilot Study Group. Bacterial Antibiotic Resistance Group. de Lencastre H, et al. **Microb Drug Resist** 1996 Fall;2(3):343–51

Characterization of methicillin–resistant Staphylococcus aureus isolates from Portuguese hospitals by multiple genotyping methods. de Sousa MA, et al. **Microb Drug Resist** 1996 Fall;2(3):331–41

Staphylococcal peptidoglycan interpeptide bridge biosynthesis: a novel antistaphylococcal target? Kopp U, et al. **Microb Drug Resist** 1996 Spring;2(1):29–41

Tracing the spread of methicillin–resistant Staphylococcus aureus by Southern blot hybridization using gene–specific probes of mec and Tn554. Kreiswirth BN, et al. **Microb Drug Resist** 1995 Winter;1(4):307–13

Borderline susceptibility to methicillin in Staphylococcus aureus: a new mechanism of resistance? Montanari MP, et al. **Microb Drug Resist** 1996 Summer;2(2):257–60 (27 ref.)

Multidrug–resistant Iberian epidemic clone of methicillin–resistant Staphylococcus aureus endemic in a hospital in northern Portugal. Sanches IS, et al. **Microb Drug Resist** 1995 Winter;1(4):299–306

Emergence of a methicillin–resistant Staphylococcus aureus clone related to the Brazilian epidemic clone III::B:A causing invasive disease among AIDS patients in a Brazilian hospital. Teixeira LA, et al. **Microb Drug Resist** 1996 Winter;2(4):393–9

The antibacterial activity of amoxycillin/clavulanic acid against Staphylococcus aureus ingested by human granulocytes. Cuffini AM, et al. **Microbios** 1996; 87(350):31–8

Microcalorimetric and electron microscopic investigation on the effects of essential oil from Cymbopogon densiflorus on Staphylococcus aureus. Takaisi–Kikuni NB, et al. **Microbios** 1996;88(354):55–62

Establishment of a protocol for testing antimicrobial activity in southern African macroalgae. Vlachos V, et al. **Microbios** 1996;88(355):115–23

Update: Staphylococcus aureus with reduced susceptibility to vancomycin — United States, 1997. **MMWR Morb Mortal Wkly Rep** 1997 Sep 5;46(35):813–5

Staphylococcus aureus with reduced susceptibility to vancomycin—United States, 1997. **MMWR Morb Mortal Wkly Rep** 1997 Aug 22;46(33):765–6

Interim guidelines for prevention and control of Staphylococcal infection associated with reduced susceptibility to vancomycin. **MMWR Morb Mortal Wkly Rep** 1997 Jul 11;46(27):626–8, 635

Reduced susceptibility of Staphylococcus aureus to vancomycin—Japan, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Jul 11;46(27):624–6

Rapid assay for detection of methicillin–resistant Staphylococcus aureus using multiplex PCR. Barski P, et al. **Mol Cell Probes** 1996 Dec;10(6):471–5

MRSA in the community [letter] Mitchell JM, et al. **N Z Med J** 1996 Oct 25;109(1032):411

In vitro activity of netilmicin against clinical isolates of methicillin resistant and susceptible Staphylococcus aureus. Manoharan A, et al. **Natl Med J India** 1997 Mar–Apr; 10(2):61–2

Correlation between reduction of surface hydrophobicity of S. aureus and the decrease in its adhesiveness induced by subinhibitory concentrations of brodimoprim. Braga PC, et al. **Pharmacol Res** 1995 Nov;32(5):315–9

In vitro activity of synthetic bromo analogs of pyrrolmycins against clinical Staphylococcus aureus strains. Schillaci D, et al. **Pharmazie** 1996 Jan;51(1):64

Antimicrobial activity of some 13–alkyl substituted protoberberinium salts. Iwasa K, et al. **Planta Med** 1997 Jun;63(3):196–8

Phenolic and antibacterial constituents of Vahlia capensis [letter] Majinda RR, et al. **Planta Med** 1997 Jun; 63(3):268–70

Bactericidal activity of 0.5% bupivacaine with preservatives on microorganisms in the human skin flora. Sakuragi T, et al. **Reg Anesth** 1997 Mar–Apr;22(2):178–84

Nosocomial occurrence of enterotoxigenic multiresistant Staphylococcus strains in Rio de Janeiro. Tórtora JC, et al. **Rev Latinoam Microbiol** 1996 Jan–Mar;38(1):1–6

Beneficial effect of glucocorticoids on the course of haematogenously acquired Staphylococcus aureus nephritis. Verba V, et al. **Scand J Immunol** 1997 Mar; 45(3):282–6

Methicillin–resistant Staphylococcus aureus: a four–year experience in a spinal cord injury unit in Spain. Olona–Cabases M, et al. **Spinal Cord** 1996 Jun;34(6):315–9

Antibiotic sensitivity of Staphylococcus aureus and Escherichia coli strains isolated in Gondar, Ethiopia [letter] Aseffa A, et al. **Trop Doct** 1997 Apr;27(2):121–2

Regulation of beta–lactamase synthesis as a novel site of action for suppression of methicillin resistance in Staphylococcus aureus. Bruns O, et al. **Zentralbl Bakteriol** 1997 Feb;285(3):413–30

In–vitro activity of penicillin G plus sulbactam in comparison with other beta–lactamase inhibitor combinations and oxacillin against staphylococci. Jansen B, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):297–301

Selection of subpopulations resistnat to amikacin and netilmicin of gentamicin–resistant clinical strains of Staphylococcus aureus and Staphylococcus epidermidis. Torres García M, et al. **Zentralbl Bakteriol** 1996 Jun; 284(1):58–66

[Methicillin–resistant Staphylococcus aureus: an alarming problem in Chang Gung Memorial Hospital] Liu FH, et al. **Chang Keng I Hsueh** 1996 Dec;19(4):291–7 (Eng. Abstr.) **(Chi)**

[Outbreak of methicillin resistant Staphylococcus aureus in a central hospital] Schlünzen L, et al. **Ugeskr Laeger** 1997 Jan 20;159(4):431–5 (Eng. Abstr.) **(Dan)**

[Inter– and intrahospital transmission of methicillin–resistant Staphylococcus aureus] Harbarth S, et al. **Schweiz Med Wochenschr** 1997 Mar 22;127(12):471–8 (Eng. Abstr.) **(Fre)**

[Effectiveness of alcoholic hand disinfectants against methicillin resistant Staphylococcus aureus] Kampf G, et al. **Chirurg** 1997 Mar;68(3):264–8; discussion 269–70 (Eng. Abstr.) **(Ger)**

[Transmission of methicillin–resistant Staphylococcus aureus strains by foreign patients—measures for treating patients and preventing a nosocomial infection] Neifer S, et al. **Zentralbl Chir** 1997;122(7):595–6 **(Ger)**

[Antimicrobial activities of arbekacin against methicillin–resistant Staphylococcus aureus] Deguchi K, et al. **Jpn J Antibiot** 1997 Jan;50(1):1–11 (Eng. Abstr.) **(Jpn)**

[Combination effect between panipenem and vancomycin on highly methicillin–resistant Staphylococcus aureus] Fukuoka T, et al. **Jpn J Antibiot** 1997 Apr;50(4):411–9 (Eng. Abstr.) **(Jpn)**

[Comparative studies on activities of antimicrobial agents against causative organisms isolated from patients with

urinary tract infections (1995). III. Differences in susceptibilities from previous years] Kumamoto Y, et al. **Jpn J Antibiot** 1997 Apr;50(4):306–410 (Eng. Abstr.) **(Jpn)**

[Clinical studies on vancomycin in the treatment of MRSA infection] Shimizu K, et al. **Jpn J Antibiot** 1996 Aug; 49(8):782–99 (Eng. Abstr.) **(Jpn)**

[Nationwide survey of susceptibilities of clinical isolates to antibacterial agents in 1992] Tabe Y, et al. **Jpn J Antibiot** 1997 Feb;50(2):178–86 (Eng. Abstr.) **(Jpn)**

[Combination effect of vancomycin and cefpirome against methicillin-resistant Staphylococcus aureus in vitro--antimicrobial activities in postantibiotic phase] Hasegawa H, et al. **Kansenshogaku Zasshi** 1996 Feb; 70(2):151–60 (Eng. Abstr.) **(Jpn)**

[Bactericidal effect of acidic electrolyzed water--comparison of chemical acidic sodium hydrochloride (NaOCl) solution] Iwasawa A, et al. **Kansenshogaku Zasshi** 1996 Sep; 70(9):915–22 (Eng. Abstr.) **(Jpn)**

[The taxonomic distribution, characteristic and susceptibility against antimicrobial agents of methicillin-resistant staphylococci isolated from blood] Kawaguchi E, et al. **Kansenshogaku Zasshi** 1996 Nov;70(11):1147–53 (Eng. Abstr.) **(Jpn)**

[A case of staphylococcal scalded skin syndrome caused by exfoliative toxin-B producing MRSA] Yokota S, et al. **Kansenshogaku Zasshi** 1996 Feb;70(2):206–10 (Eng. Abstr.) **(Jpn)**

[MRSA-induced prosthetic valve endocarditis complicated by synthetic graft infection that did not respond to repeated vancomycin administration but improved after surgery] Tanaka K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1767–71 (Eng. Abstr.) **(Jpn)**

[Molecular design of anti-MRSA drugs] Hanaki H. **Nippon Rinsho** 1997 May;55(5):1281–6 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Antiseptic-resistance in Staphylococcus aureus] Sasatsu M. **Nippon Saikingaku Zasshi** 1996 Aug;51(3):755–65 (61 ref.) **(Jpn)**

[Mechanisms of bacterial resistance to quinolones] Yoshida H. **Nippon Saikingaku Zasshi** 1996 Oct;51(4):973–92 (126 ref.) **(Jpn)**

[Prevention of MRSA spread in the neurosurgical field] Fujii M, et al. **No Shinkei Geka** 1996 Mar;24(3):241–5 (Eng. Abstr.) **(Jpn)**

[Mini review: a factor enhanced the antibacterial effect of beta-lactams on methicillin-resistant Staphylococcus aureus] Tajima Y. **Rinsho Byori** 1996 Nov;44(11):1093–9 (6 ref.) (Eng. Abstr.) **(Jpn)**

[Susceptibility to antibiotics of Staphylococcus aureus strains isolated from pus specimens obtained from patients referred for autovaccine therapy] Ekiel A, et al. **Med Dosw Mikrobiol** 1995;47(3–4):127–32 (Eng. Abstr.) **(Pol)**

[Evaluation of external laboratory test results for the correct identification and determination of chemotherapeutic sensitivity of staphylococci in bacteriologic provincial laboratories of sanitary-epidemiologic stations in 1995] Kochman M, et al. **Med Dosw Mikrobiol** 1996; 48(3–4):131–40 (Eng. Abstr.) **(Pol)**

[The antibiotic resistance of Staphylococcus aureus strains isolated in units with an elevated nosocomial risk and in outpatient facilities in 1995] Grigore L, et al. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan–Jun; 42(1–2):51–4 (Eng. Abstr.) **(Rum)**

[Actinomycin D resistance of gramicidin-resistant strains of Staphylococcus] Polin AN, et al. **Antibiot Khimioter** 1996; 41(7–8):13–7 (Eng. Abstr.) **(Rus)**

[Role of prophages in the formation of antibiotic-resistant populations of Staphylococcus in the process of transformation, transduction and conjugation] Zueva VS, et al. **Antibiot Khimioter** 1996;41(10):35–42 (35 ref.) **(Rus)**

[The effect of millimeter-band radiation of nonthermal intensity on sensitivity of Staphylococcus to various antibiotics] Bulgakova VG, et al. **Biofizika** 1996 Nov–Dec; 41(6):1289–93 (Eng. Abstr.) **(Rus)**

[The effect of steroid hormone preparations on the persistence and growth characteristics of staphylococci] Ivanov IuB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug;(4):92–5 (Eng. Abstr.) **(Rus)**

[The suppressive action of a magnetic-laser ray and of an electrolytic solution of sodium hypochlorite on the factors of causative agent persistence] Usviatsov BIa, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug; (4):102–5 (Eng. Abstr.) **(Rus)**

[Antibiotic resistance in Staphylococcus aureus mastitis in sheep, sheep milk and its products] Simko S, et al. **Vet Med (Praha)** 1996 Aug;41(8):241–4 (Eng. Abstr.) **(Slo)**

[Nosocomial infection with methicillin resistant Staphylococcus aureus in 14 human immunodeficiency virus infected patients] Eulalia Valencia M, et al. **Med Clin (Barc)** 1997 Sep 6;109(7):261–3 (Eng. Abstr.) **(Spa)**

[Methicillin-resistant Staphylococcus aureus infection. Example of the current complexity of hospitals (editorial; comment)] Pahissa Berga A. **Med Clin (Barc)** 1997 Mar 22;108(11):419–20. Comment on: Med Clin (Barc) 1997 Mar 22;108(11):401–4. **(Spa)**

[Impact of control measures on the course of an outbreak of methicillin-resistant Staphylococcus aureus [see comments] Sopena N, et al. **Med Clin (Barc)** 1997 Mar 22;108(11):401–4 (Eng. Abstr.). Comment in: Med Clin (Barc) 1997 Mar 22;108(11):419–20. **(Spa)**

ENZYMOLOGY

Differential behaviors of Staphylococcus aureus and Escherichia coli type II DNA topoisomerases. Blanche F, et al. **Antimicrob Agents Chemother** 1996 Dec; 40(12):2714–20

Importance of penicillinase production for activity of penicillin alone or in combination with sulbactam in experimental endocarditis due to methicillin-resistant Staphylococcus aureus. Fantin B, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1219–24

Borderline methicillin-susceptible Staphylococcus aureus strains have more in common than reduced susceptibility to penicillinase-resistant penicillins. Massidda O, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2769–74

Overproduction of a 37-kilodalton cytoplasmic protein homologous to NAD+-linked D-lactate dehydrogenase associated with vancomycin resistance in Staphylococcus aureus. Milewski WM, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):166–72

Detection of genes regulating beta-lactamase production in Enterococcus faecalis and Staphylococcus aureus. Okamoto R, et al. **Antimicrob Agents Chemother** 1996 Nov; 40(11):2550–4

Identification of nitric oxide synthase in Staphylococcus aureus. Choi WS, et al. **Biochem Biophys Res Commun** 1997 Aug 28;237(3):554–8

Modulation of the cleavage of glycosylphosphatidylinositol-anchored proteins by specific bacterial phospholipases. Sharom FJ, et al. **Biochem Cell Biol** 1996;74(5):701–13

Probing the non-proline cis peptide bond in beta-lactamase from Staphylococcus aureus PC1 by the replacement Asn136 --> Ala. Banerjee S, et al. **Biochemistry** 1997 Sep 9;36(36):10857–66

Structure and kinetics of the beta-lactamase mutants S70A and K73H from Staphylococcus aureus PC1. Chen CC, et al. **Biochemistry** 1996 Sep 24;35(38):12251–8

Circularly permuted beta-lactamase from Staphylococcus aureus PC1. Pieper U, et al. **Biochemistry** 1997 Jul 22; 36(29):8767–74

The structure of the superantigen exfoliative toxin A suggests a novel regulation as a serine protease. Vath GM, et al. **Biochemistry** 1997 Feb 18;36(7):1559–66

Interfacial regulation of bacterial sphingomyelinase activity. Jungner M, et al. **Biochim Biophys Acta** 1997 Feb 18; 1344(3):230–40

A case of carbuncle caused by a catalase-negative strain of staphylococcus aureus. Lee N, et al. **Diagn Microbiol Infect Dis** 1996 Apr;24(4):221–3

The lipase from Staphylococcus aureus. Expression in Escherichia coli, large-scale purification and comparison of substrate specificity to Staphylococcus hyicus lipase. Simons JW, et al. **Eur J Biochem** 1996 Dec 15;242(3):760–9

Structure-function relationships among wild-type variants of Staphylococcus aureus beta-lactamase: importance of amino acids 128 and 216. Voladri RK, et al. **J Bacteriol** 1996 Dec;178(24):7248–53

Cadmium-sensitive targets in the aerobic respiratory metabolism of Staphylococcus aureus. Tynecka Z, et al. **J Basic Microbiol** 1996;36(6):447–52

A single amino acid substitution in Staphylococcus aureus dihydrofolate reductase determines trimethoprim resistance. Dale GE, et al. **J Mol Biol** 1997 Feb 14; 266(1):23–30

Structure and function of the dihydropteroate synthase from Staphylococcus aureus. Hampele IC, et al. **J Mol Biol** 1997 Apr 25;268(1):21–30

Subcellular localization of the major autolysin, ATL and its processed proteins in Staphylococcus aureus. Komatsuzawa H, et al. **Microbiol Immunol** 1997; 41(6):469–79

The 19-residue pro-peptide of staphylococcal nuclease has a profound secretion-enhancing ability in Escherichia coli. Suciu D, et al. **Mol Microbiol** 1996 Jul;21(1):181–95

An engineered Staphylococcus aureus PC1 beta-lactamase that hydrolyses third-generation cephalosporins. Zawadzke LE, et al. **Protein Eng** 1995 Dec;8(12):1275–85

[Bacteriophages of serologic group B converting synthesis of fibrinolysin in S. aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3–4):141–7 (Eng. Abstr.) **(Pol)**

[The activity of a number of anabolic metabolism enzymes in Staphylococcus aureus strains containing plasmids of antibiotic resistance] Kozitskaia SN, et al. **Mikrobiol Z** 1997 Jan–Feb;59(1):37–41 (Eng. Abstr.) **(Rus)**

[Activity of Krebs cycle enzymes in Staphylococci containing determinants of antibiotic resistance] Gavriliuk VG, et al. **Ukr Biokhim Zh** 1996 Jan–Feb;68(1):39–44 (Eng. Abstr.) **(Rus)**

[Activity of key enzymes of the glycolytic and pentose phosphate pathways in plasmid-containing Staphylococci] Gavriliuk VG, et al. **Ukr Biokhim Zh** 1996 Jan–Feb; 68(1):45–8 (Eng. Abstr.) **(Rus)**

GENETICS

Identification of methicillin-resistant staphylococci by multiplex polymerase chain reaction assay. Salisbury SM, et al. **Am J Clin Pathol** 1997 Mar;107(3):368–73

Diversity of Streptococcus agalactiae and Staphylococcus aureus ribotypes recovered from New York dairy herds. Rivas AL, et al. **Am J Vet Res** 1997 May;58(5):482–7

Penicillin-binding protein 4 overproduction increases beta-lactam resistance in Staphylococcus aureus. Henze UU, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2121–5

Suppression of methicillin resistance in a mecA-containing pre-methicillin-resistant Staphylococcus aureus strain is caused by the mecI-mediated repression of PBP 2' production. Kuwahara-Arai K, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2680–5

Quinolone resistance mutations in topoisomerase IV: relationship to the flqA locus and genetic evidence that topoisomerase IV is the primary target and DNA gyrase is the secondary target of fluoroquinolones in Staphylococcus aureus. Ng EY, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1881–8

Cloning and sequencing of a novel gene (recG) that affects the quinolone susceptibility of Staphylococcus aureus. Niga T, et al. **Antimicrob Agents Chemother** 1997 Aug; 41(8):1770–4

Detection of genes regulating beta-lactamase production in Enterococcus faecalis and Staphylococcus aureus. Okamoto R, et al. **Antimicrob Agents Chemother** 1996 Nov; 40(11):2550–4

Identification of chromosomal location of mupA gene, encoding low-level mupirocin resistance in staphylococcal isolates. Ramsey MA, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2820–3

Alterations in the DNA topoisomerase IV grlA gene responsible for quinolone resistance in Staphylococcus aureus. Yamagishi J, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1157–63

Characterization of an NaCl-sensitive Staphylococcus aureus mutant and rescue of the NaCl-sensitive phenotype by glycine betaine but not by other compatible solutes. Vijaranakul U, et al. **Appl Environ Microbiol** 1997 May; 63(5):1889–97

The sae locus of Staphylococcus aureus controls exoprotein synthesis at the transcriptional level. Giraudo AT, et al. **Arch Microbiol** 1997 Jul;168(1):53–8

The alternative sigma factor sigmaB in Staphylococcus aureus: regulation of the sigB operon in response to growth phase and heat shock. Kullik I, et al. **Arch Microbiol** 1997 Feb–Mar;167(2–3):151–9

Atomic force microscopy proposes a novel model for stem-loop structure that binds a heat shock protein in the Staphylococcus aureus HSP70 operon. Ohta T, et al. **Biochem Biophys Res Commun** 1996 Sep 24;226(3):730–4

Molecular cloning and expression of a novel Staphylococcus aureus antigen. Rieneck K, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):128–32

Molecular cloning and sequence analysis of the dnaA gene of Staphylococcus aureus. Katayama H, et al. **Biol Pharm Bull** 1997 Jul;20(7):820–2

Persistence of Staphylococcus aureus as detected by polymerase chain reaction in the synovial fluid of a patient with septic arthritis. Canvin JM, et al. **Br J Rheumatol** 1997 Feb;36(2):203–6

In vivo expression of exoprotein synthesis with a Sae mutant of Staphylococcus aureus. Rampone H, et al. **Can J Vet Res** 1996 Jul;60(3):237–40

Molecular evolution of multiply-antibiotic-resistant staphylococci. Skurray RA, et al. **Ciba Found Symp** 1997; 207:167–83; discussion 183–91 (47 ref.)

Use of restriction endonuclease analysis of plasmids and pulsed-field gel electrophoresis to investigate outbreaks of methicillin-resistant Staphylococcus aureus infection. Liu PY, et al. **Clin Infect Dis** 1996 Jan;22(1):86–90

Sternoclavicular joint septic arthritis with small-colony variant Staphylococcus aureus. Spearman P, et al. **Diagn Microbiol Infect Dis** 1996 Sep;26(1):13–5

Recommendations for preventing the spread of vancomycin resistance. Hospital Infection Control Practices Advisory Committee [news] **Emerg Infect Dis** 1995 Apr–Jun;1(2):66

Genomic diversity of mec regulator genes in methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Kobayashi N, et al. **Epidemiol Infect** 1996 Oct;117(2):289–95

Comparison of screening methods to identify methicillin-resistant Staphylococcus aureus. Kampf G, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):301–7

Distinct genotypic clusters of heterogeneously and homogeneously methicillin-resistant Staphylococcus aureus from a Greek hospital. Tassios PT, et al. **Eur J Clin Microbiol Infect Dis** 1997 Feb;16(2):170–3

Are variable repeats in the spa gene suitable targets for epidemiological studies of methicillin-resistant Staphylococcus aureus strains? [letter; comment] van Belkum A, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):768–70. Comment on: Eur J Clin Microbiol Infect Dis 1996 Jan;15(1):60–4.

Use of a DNA typing method to investigate a fatal perinatal infection due to Staphylococcus aureus. Ramanantsoa C, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Jul;74(1):15–7

A novel compound, 1,1-dimethyl-5(1-hydroxypropyl)-4,6,7-trimethylindan, is an effective inhibitor of the tet(K) gene-encoded metal-tetracycline/H+ antiporter of Staphylococcus

aureus. Hirata T, et al. **FEBS Lett** 1997 Jul 28;412(2):337–40

Localization of prophages of serological group B and F on restriction fragments defined in the restriction map of Staphylococcus aureus NCTC 8325. Borecká P, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):203–10

Impact of sar and agr on methicillin resistance in Staphylococcus aureus. Píriz Durán S, et al. **FEMS Microbiol Lett** 1996 Aug 1;141(2–3):255–60

Rapid identification and typing of Staphylococcus aureus by nested PCR amplified ribosomal DNA spacer region. Saruta K, et al. **FEMS Microbiol Lett** 1997 Jan 15; 146(2):271–8

A highly vancomycin-resistant laboratory mutant of Staphylococcus aureus. Sieradzki K, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):161–6

Suppression of the thermosensitive replication phenotype of the derivative plasmid of pI9789::Tn552 in Staphylococcus aureus may involve integration of the plasmid into the host chromosome. Sohail M, et al. **FEMS Microbiol Lett** 1996 Feb 15;136(2):129–36

DNA typing and control of methicillin-resistant Staphylococcus aureus at two affiliated hospitals. Hartstein AI, et al. **Infect Control Hosp Epidemiol** 1997 Jan;18(1):42–8

Staphylococcal accessory regulator (sar) in conjunction with agr contributes to Staphylococcus aureus virulence in endophthalmitis. Booth MC, et al. **Infect Immun** 1997 Apr; 65(4):1550–6

Regulation of protein A synthesis by the sar and agr loci of Staphylococcus aureus. Cheung AL, et al. **Infect Immun** 1997 Jun;65(6):2243–9

Transcriptional regulation of the Staphylococcus aureus collagen adhesion gene, cna. Gillaspy AF, et al. **Infect Immun** 1997 Apr;65(4):1536–40

Modification of the Staphylococcus aureus fibronectin binding phenotype by V8 protease. McGavin MJ, et al. **Infect Immun** 1997 Jul;65(7):2621–8

Role of the staphylococcal accessory gene regulator (sar) in septic arthritis. Nilsson IM, et al. **Infect Immun** 1996 Nov;64(11):4438–43

Specific roles of alpha-toxin and beta-toxin during Staphylococcus aureus corneal infection. O'Callaghan RJ, et al. **Infect Immun** 1997 May;65(5):1571–8

Analysis of expression of the alpha-toxin gene (hla) of Staphylococcus aureus by using a chromosomally encoded hla::lacZ gene fusion. Ohlsen K, et al. **Infect Immun** 1997 Sep;65(9):3606–14

Detection of tet(K) and tet(M) in Staphylococcus aureus of Asian countries by the polymerase chain reaction. Warsa UC, et al. **J Antibiot (Tokyo)** 1996 Nov;49(11):1127–32

Characteristics of quinolone-induced small colony variants in Staphylococcus aureus. Mitsuyama J, et al. **J Antimicrob Chemother** 1997 Jun;39(6):697–705

beta-lactamase negative, methicillin-resistant Staphylococcus aureus lacking the mecA gene determinant [letter] Zaher A, et al. **J Antimicrob Chemother** 1997 Jan; 39(1):108–9

Plasmids and bacterial resistance to biocides. Russell AD. **J Appl Microbiol** 1997 Aug;83(2):155–65 (120 ref.)

Comparison of type A enterotoxigenic Staphylococcus aureus strains isolated from geographically far distant locations by pulsed field gel electrophoresis. Tsen HY, et al. **J Appl Microbiol** 1997 Apr;82(4):485–93

Construction of a chromosome map for the phage group II Staphylococcus aureus Ps55. Bannantine JP, et al. **J Bacteriol** 1996 Dec;178(23):6842–8

Identification of LytSR-regulated genes from Staphylococcus aureus. Brunskill EW, et al. **J Bacteriol** 1996 Oct;178(19):5810–2

sar Genetic determinants necessary for transcription of RNAII and RNAIII in the agr locus of Staphylococcus aureus. Cheung AL, et al. **J Bacteriol** 1997 Jun; 179(12):3963–71

Molecular cloning and expression of the spsB gene encoding an essential type I signal peptidase from Staphylococcus aureus. Cregg KM, et al. **J Bacteriol** 1996 Oct; 178(19):5712–8

Transcription analysis of the Staphylococcus aureus gene encoding penicillin-binding protein 4. Domanski TL, et al. **J Bacteriol** 1997 Apr;179(8):2651–7

The Staphylococcus aureus ileS gene, encoding isoleucyl-tRNA synthetase, is a member of the T-box family. Grundy FJ, et al. **J Bacteriol** 1997 Jun; 179(11):3767–72

In vitro inhibitory activity of RepC/C*, the inactivated form of the pT181 plasmid initiation protein, RepC. Jin R, et al. **J Bacteriol** 1997 Jan;179(1):141–7

The femR315 gene from Staphylococcus aureus, the interruption of which results in reduced methicillin resistance, encodes a phosphoglucosamine mutase. Jolly L, et al. **J Bacteriol** 1997 Sep;179(17):5321–5

Role of mecA transcriptional regulation in the phenotypic expression of methicillin resistance in Staphylococcus aureus. Niemeyer DM, et al. **J Bacteriol** 1996 Sep; 178(18):5464–71

Identification and characterization of cell wall–cell division gene clusters in pathogenic gram-positive cocci. Pucci MJ, et al. **J Bacteriol** 1997 Sep;179(17):5632–5

Molecular cloning, sequencing, and expression of lytM, a unique autolytic gene of Staphylococcus aureus. Ramadurai L, et al. **J Bacteriol** 1997 Jun;179(11):3625–31

Transcription of Staphylococcus aureus fibronectin binding protein genes is negatively regulated by agr and an agr-independent mechanism. Saravia-Otten P, et al. **J Bacteriol** 1997 Sep;179(17):5259–63

Molecular characterization and transcriptional analysis of type 8 capsule genes in Staphylococcus aureus. Sau S, et al. **J Bacteriol** 1997 Mar;179(5):1614–21

epr, which encodes glycylglycine endopeptidase resistance, is homologous to femAB and affects serine content of peptidoglycan cross bridges in Staphylococcus capitis and Staphylococcus aureus. Sugai M, et al. **J Bacteriol** 1997 Jul;179(13):4311–8

A site-directed Staphylococcus aureus hemB mutant is a small-colony variant which persists intracellularly. von Eiff C, et al. **J Bacteriol** 1997 Aug;179(15):4706–12

Sigma-B, a putative operon encoding alternate sigma factor of Staphylococcus aureus RNA polymerase: molecular cloning and DNA sequencing. Wu S, et al. **J Bacteriol** 1996 Oct;178(20):6036–42

Binding of a novel host factor to the pT181 plasmid replication enhancer. Zhang Q, et al. **J Bacteriol** 1997 Feb; 179(3):684–8

An 18-base-pair sequence is sufficient for termination of rolling-circle replication of plasmid pT181. Zhao AC, et al. **J Bacteriol** 1996 Sep;178(17):5222–8

Typing of Staphylococcus aureus by PCR for DNA sequences flanked by transposon Tn916 target region and ribosomal binding site. Cuny C, et al. **J Clin Microbiol** 1996 Jun;34(6):1502–5

Genomic fingerprinting for epidemiological differentiation of Staphylococcus aureus clinical isolates. Smeltzer MS, et al. **J Clin Microbiol** 1996 Jun;34(6):1364–72

Factors affecting reliability and reproducibility of amplification-based DNA fingerprinting of representative bacterial pathogens. Tyler KD, et al. **J Clin Microbiol** 1997 Feb;35(2):339–46

Dissemination of a single clone of methicillin-resistant Staphylococcus aureus among Turkish hospitals. van Belkum A, et al. **J Clin Microbiol** 1997 Apr;35(4):978–81

On the nature and use of randomly amplified DNA from Staphylococcus aureus. van Leeuwen W, et al. **J Clin Microbiol** 1996 Nov;34(11):2770–7

Molecular epidemiologic analysis of Staphylococcus aureus isolated from clinical specimens. Byun DE, et al. **J Korean Med Sci** 1997 Jun;12(3):190–8

Genome organisation of Staphylococcus aureus isolates from different populations. El-Adhami W, et al. **J Med Microbiol** 1997 Apr;46(4):297–306

Coagulase and protein A polymorphisms do not contribute to persistence of nasal colonisation by Staphylococcus aureus. Van Belkum A, et al. **J Med Microbiol** 1997 Mar; 46(3):222–32

Detection of Fc receptor genes from Staphylococcus aureus and streptococci by polymerase chain reaction. Yamada S, et al. **J Med Microbiol** 1996 Dec;45(6):507–11

Detection of toxic shock syndrome toxin-1 gene in Staphylococcus aureus bovine isolates and bulk milk by the polymerase chain reaction. Takeuchi S, et al. **J Vet Med Sci** 1996 Nov;58(11):1133–5

Pulsed-field gel electrophoresis of chromosomal DNA of methicillin-resistant Staphylococcus aureus associated with nosocomial infections. Hanifah YA, et al. **Malays J Pathol** 1994 Dec;16(2):151–6

Characterization of methicillin-resistant Staphylococcus aureus isolates from Portuguese hospitals by multiple genotyping methods. de Sousa MA, et al. **Microb Drug Resist** 1996 Fall;2(3):331–41

Tracing the spread of methicillin-resistant Staphylococcus aureus by Southern blot hybridization using gene-specific probes of mec and Tn554. Kreiswirth BN, et al. **Microb Drug Resist** 1995 Winter;1(4):307–13

Borderline susceptibility to methicillin in Staphylococcus aureus: a new mechanism of resistance? Montanari MP, et al. **Microb Drug Resist** 1996 Summer;2(2):257–60 (27 ref.)

Multidrug-resistant Iberian epidemic clone of methicillin-resistant Staphylococcus aureus endemic in a hospital in northern Portugal. Sanches IS, et al. **Microb Drug Resist** 1995 Winter;1(4):299–306

Glutamine synthetase and heteroresistance in methicillin-resistant Staphylococcus aureus. Strandén AM, et al. **Microb Drug Resist** 1996 Summer;2(2):201–7

A phosphoglucomutase-like gene essential for the optimal expression of methicillin resistance in Staphylococcus aureus: molecular cloning and DNA sequencing. Wu S, et al. **Microb Drug Resist** 1996 Summer;2(2):277–86

Chorismate synthase from Staphylococcus aureus. Horsburgh MJ, et al. **Microbiology** 1996 Oct;142 (Pt 10):2943–50

The Staphylococcus aureus allelic genetic loci for serotype 5 and 8 capsule expression contain the type-specific genes flanked by common genes. Sau S, et al. **Microbiology** 1997 Jul;143 (Pt 7):2395–405

The origin of the antiseptic-resistance gene ebr in Staphylococcus aureus. Sasatsu M, et al. **Microbios** 1995; 84(340):161–9

Regulation of toxic shock syndrome toxin-1 gene in Staphylococcus aureus. Woo JH, et al. **Mol Cells** 1997 Feb 28;7(1):28–33

Subtype-specific interactions of type C staphylococcal enterotoxins with the T-cell receptor. Deringer JR, et al. **Mol Microbiol** 1996 Nov;22(3):523–34

Transcriptional control of the agr-dependent virulence gene regulator, RNAIII, in Staphylococcus aureus. Morfeldt E, et al. **Mol Microbiol** 1996 Sep;21(6):1227–37

Transcriptional analysis of type 1 capsule genes in Staphylococcus aureus. Ouyang S, et al. **Mol Microbiol** 1997 Feb;23(3):473–82

Characterization of a Staphylococcus aureus transposon, Tn5405, located within Tn5404 and carrying the aminoglycoside resistance genes, aphA-3 and aadE. Derbise A, et al. **Plasmid** 1996 May;35(3):174–88

The staphylococcal insertion sequence IS257 is active. Needham C, et al. **Plasmid** 1995 Nov;34(3):198–205

A genetic study of a Staphylococcus aureus plasmid involving cure and transference. Darini AL. **Rev Paul Med** 1996 Jan-Feb;114(1):1068–72

Bacterial interference caused by autoinducing peptide variants. Ji G, et al. **Science** 1997 Jun 27;276(5321):2027–30

A novel variant of staphylokinase gene from Staphylococcus aureus ATCC 29213. Kim SH, et al. **Thromb Res** 1997 Aug 15;87(4):387–95

[Genotyping of clinical isolates of MRSA by PFGE and AP-PCR] Kobayashi M, et al. **Kansenshogaku Zasshi** 1997 Jul;71(7):620–7 (Eng. Abstr.) **(Jpn)**

[Genetics of multiresistant MRSA] Ito T, et al. **Nippon Rinsho** 1997 May;55(5):1200–5 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Genetic basis for molecular epidemiology of MRSA] Kondo N, et al. **Nippon Saikingaku Zasshi** 1997 Apr;52(2):417–34 (57 ref.) **(Jpn)**

[Role of intraspecific phenotypic diversity in the ecology of escherichia coli and staphylococcus aureus] Bukhrin OV, et al. **Vestn Ross Akad Med Nauk** 1997;(3):34–40 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Staphylococcus aureus strains differ in their in vitro responsiveness to human urokinase: evidence that methicillin-resistant strains are predominately nonresponsive to the growth-enhancing effects of urokinase. Hart DA, et al. **Can J Microbiol** 1996 Oct; 42(10):1024–31

Loss of bactericidal activity from contact lens storage solutions. Rosenthal RA, et al. **CLAO J** 1997 Jan; 23(1):57–62

Proliferation and production of interferon-gamma (IFN-gamma) and IL-4 in response to Staphylococcus aureus and staphylococcal superantigen in childhood atopic dermatitis. Campbell DE, et al. **Clin Exp Immunol** 1997 Feb;107(2):392–7

Bacterial doubling time modulates the effects of opsonisation and available iron upon interactions between Staphylococcus aureus and human neutrophils. Domingue G, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3-4):223–8

Colonization by Staphylococcus aureus resistant to methicillin and ciprofloxacin during 20 months' surveillance in a private skilled nursing facility. Lee YL, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):649–53

Model for the survival of Staphylococcus aureus in nongrowth environments. Whiting RC, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):231–43

Survival of Staphylococcus aureus and enterotoxin A in glassy and rubbery states of gelatin. Bolton KJ, et al. **J Appl Bacteriol** 1996 Aug;81(2):191–4

Indices for performance evaluation of predictive models in food microbiology. Ross T. **J Appl Bacteriol** 1996 Nov; 81(5):501–8

The survival of Staphylococcus aureus during the fermentation and storage of yoghurt. Pazakova J, et al. **J Appl Microbiol** 1997 May;82(5):659–62

A site-directed Staphylococcus aureus hemB mutant is a small-colony variant which persists intracellularly. von Eiff C, et al. **J Bacteriol** 1997 Aug;179(15):4706–12

Relationship between thickness, chapping and Staphylococcus aureus colonization of bovine teat tissue. Fox LK, et al. **J Dairy Res** 1996 Aug;63(3):369–75

Salt tolerance of EMRSA-16 and its effect on the sensitivity of screening cultures. Jones EM, et al. **J Hosp Infect** 1997 Jan;35(1):59–62

[A clinical study of skin flora in patients with MRSA colonization after introduction of preventive measures of hospital infection in a geriatric ward] Masaki H, et al. **Kansenshogaku Zasshi** 1997 Feb;71(2):97–102 (Eng. Abstr.) **(Jpn)**

[Colonization of methicillin-resistant Staphylococcus aureus in the mouse intestinal tract] Tani K. **Nippon Saikingaku Zasshi** 1997 Apr;52(2):493–503 (Eng. Abstr.) **(Jpn)**

[Mechanism of bacteriopyknosis] Pal'tsyn AA, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):349–52 **(Rus)**

IMMUNOLOGY

Adhesins of Staphylococcus aureus that bind Lewis(a) antigen. Relationship to sudden infant death syndrome. Blackwell CC, et al. **Adv Exp Med Biol** 1996;408:95–105 (55 ref.)

Tumor therapy with an antibody-targeted superantigen generates a dichotomy between local and systemic immune responses. Litton MJ, et al. **Am J Pathol** 1997 May; 150(5):1607–18

Staphylococcal vaccines: a realistic dream. Fattom AI, et al. **Ann Med** 1996 Feb;28(1):43–6 (20 ref.)

Regulation by interleukin-10 of Staphylococcus aureus- and lipopolysaccharide-induced interleukin-12 gene expression in human peripheral blood mononuclear cells.

Aste-Amezaga M, et al. **Ann N Y Acad Sci** 1996 Oct 31; 795:319-20

Field trial of a staphylococcal mastitis vaccine in dairy herds: clinical, subclinical and microbiological assessments. Watson DL, et al. **Aust Vet J** 1996 Dec;74(6):447-50

The structure of the superantigen exfoliative toxin A suggests a novel regulation as a serine protease. Vath GM, et al. **Biochemistry** 1997 Feb 18;36(7):1559-66

Molecular cloning and expression of a novel Staphylococcus aureus antigen. Rieneck K, et al. **Biochim Biophys Acta** 1997 Feb 7;1350(2):128-32

Clinical isolates of Staphylococcus aureus have osteolytic surface proteins and a proportion of the population have antibodies that block this activity: is this of prognostic significance? Nair SP, et al. **Br J Rheumatol** 1997 Mar; 36(3):328-32

Prevention of superantigen-induced tolerance in vivo by interleukin-2 treatment. Belfrage H, et al. **Cancer Immunol Immunother** 1997 Apr;44(2):77-82

The apoptosis and proliferation of SAC-activated B cells by IL-10 are associated with changes in Bcl-2, Bcl-xL, and Mcl-1 expression. Li L, et al. **Cell Immunol** 1997 May 25;178(1):33-41

Staphylococcal enterotoxin B induces arthritis in female DBA/1 mice but fails to induce activation of type II collagen-reactive lymphocytes. Omata S, et al. **Cell Immunol** 1997 Aug 1;179(2):138-45

The conventional CD4+ T cell response to staphylococcal enterotoxin B is modified by its superantigenic activity. Wen R, et al. **Cell Immunol** 1997 Mar 15;176(2):166-72

Phagocytosis and killing of Staphylococcus aureus: effects of stress and depression in children. Bartlett JA, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):362-6

Heterogeneity of cell-associated CP5 expression on Staphylococcus aureus strains demonstrated by flow cytometry. Poutrel B, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):275-8

Upregulation of IgE synthesis by staphylococcal toxic shock syndrome toxin-1 in peripheral blood mononuclear cells from patients with atopic dermatitis. Hofer MF, et al. **Clin Exp Allergy** 1995 Dec;25(12):1218-27

Proliferation and production of interferon-gamma (IFN-gamma) and IL-4 in response to Staphylococcus aureus and staphylococcal superantigen in childhood atopic dermatitis. Campbell DE, et al. **Clin Exp Immunol** 1997 Feb;107(2):392-7

Superantigen and endotoxin synergize in the induction of lethal shock. Blank C, et al. **Eur J Immunol** 1997 Apr; 27(4):825-33

Superantigens but not mitogens are capable of inducing upregulation of E-selectin ligands on human T lymphocytes. Zollner TM, et al. **Exp Dermatol** 1997 Aug; 6(4):161-6

CD11a/CD18 and CD11b/18 modulation by lipoteichoic acid, N-acetyl-muramyl-alpha-alanyl-D-isoglutamine, muramic acid and protein A from Staphylococcus aureus. Carratelli CR, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31;16(3-4):309-15

Coagulase-negative staphylococci isolated from two cases of toxic shock syndrome lack superantigenic activity, but induce cytokine production. Lina G, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):81-6

Incorporation of T cell counterparts in the fusion partners for generation of human monoclonal antibodies from Staphylococcus aureus stimulated B lymphocytes. Gore MM, et al. **Hum Antibodies** 1997;8(1):26-32

In staphylococcus enterotoxin B (SEB)-stimulated human PBMC, the LAK activity of non-T cells might have a major role in the mechanism of glomerular endothelial cells' injury. Seprényi G, et al. **Immunobiology** 1997 Jun; 197(1):44-54

Defective depletion of CD45-null thymocytes by the Staphylococcus aureus enterotoxin B superantigen. Conroy LA, et al. **Immunol Lett** 1996 Dec;54(2-3):119-22

Intravenous immunoglobulin inhibits staphylococcal toxin-induced human mononuclear phagocyte tumor necrosis factor alpha production. Darville T, et al. **Infect Immun** 1997 Feb;65(2):366-72

Immunogenicity and efficacy against lethal aerosol staphylococcal enterotoxin B challenge in monkeys by intramuscular and respiratory delivery of proteosome-toxoid vaccines. Lowell GH, et al. **Infect Immun** 1996 Nov;64(11):4686-93

Identification of D motif epitopes in Staphylococcus aureus fibronectin-binding protein for the production of antibody inhibitors of fibronectin binding. Sun Q, et al. **Infect Immun** 1997 Feb;65(2):537-43

Correlation of histopathologic and bacteriologic changes with cytokine expression in an experimental murine model of bacteremic Staphylococcus aureus infection. Yao L, et al. **Infect Immun** 1997 Sep;65(9):3889-95

Effect of superantigens on human thymocytes: selective proliferation of V beta 2+ cells in response to toxic shock syndrome toxin-1 and their deletion upon secondary stimulation. Mingari MC, et al. **Int Immunol** 1996 Feb; 8(2):203-9

Evidence for B cell participation in the in vitro and in vivo maintenance of in vivo staphylococcal enterotoxin B-induced T cell anergy. Stark Aroeira L, et al. **Int Immunol** 1997 Jan;9(1):65-72

Persistent production of TH2-type cytokines and polyclonal B cell activation after chronic administration of staphylococcal enterotoxin B in mice. Florquin S, et al. **J Autoimmun** 1996 Oct;9(5):609-15

Transferable anergy: superantigen treatment induces CD4+ T cell tolerance that is reversible and requires CD4-CD8- cells and interferon gamma. Cauley LS, et al. **J Exp Med** 1997 Jul 7;186(1):71-81

Superantigen-mediated deletion of specific T cell receptor V beta subsets in the SCID-hu Thy/Liv mouse is induced by staphylococcal enterotoxin B, but not HIV-1. Komanduri KV, et al. **J Immunol** 1997 Jan 15;158(2):544-9

Chemical characteristics of Staphylococcus aureus molecules that have CD14-dependent cell-stimulating activity. Kusunoki T, et al. **J Immunol** 1996 Dec 1;157(11):5112-7

Staphylococcal enterotoxin B induces an early and transient state of immunosuppression characterized by V beta-unrestricted T cell unresponsiveness and defective antigen-presenting cell functions. Muraille E, et al. **J Immunol** 1997 Mar 15;158(6):2638-47

Induction of acute inflammatory lung injury by staphylococcal enterotoxin B. Neumann B, et al. **J Immunol** 1997 Feb 15;158(4):1862-71

B cell epitope mapping of the bacterial superantigen staphylococcal enterotoxin B: the dominant epitope region recognized by intravenous IgG. Nishi JI, et al. **J Immunol** 1997 Jan 1;158(1):247-54

Molecular characterization and role in T cell activation of staphylococcal enterotoxin A binding to the HLA-DR alpha-chain. Thibodeau J, et al. **J Immunol** 1997 Apr 15; 158(8):3698-704

One-way synergistic effect of low superantigen concentrations on lipopolysaccharide-induced cytokine production. Luhm J, et al. **J Interferon Cytokine Res** 1997 Apr;17(4):229-38

T-cell proliferation to superantigen-releasing Staphylococcus aureus by MHC class II-bearing keratinocytes under protection from bacterial cytolysin. Tokura Y, et al. **J Invest Dermatol** 1997 Apr;108(4):488-94

Anti-Staphylococcus aureus, anti-Streptococcus pneumoniae and anti-Moraxella catarrhalis specific IgE in asthmatic children. Brarda OA, et al. **J Investig Allergol Clin Immunol** 1996 Jul-Aug;6(4):266-9

Laminin-binding epitope on gp43 from Paracoccidioides brasiliensis is recognized by a monoclonal antibody raised against Staphylococcus aureus laminin receptor. Vicentini AP, et al. **J Med Vet Mycol** 1997 Jan-Feb;35(1):37-43

A high molecular weight protein from Staphylococcus intermedius cross-reacts with Staphylococcus aureus enterotoxin antibodies. Laffan JJ, et al. **Microbios** 1996; 88(357):237-51

A Staphylococcus aureus enterotoxin-B induced type 1 immediate hypersensitivity reaction in a goat. Schofield LN, et al. **Microbios** 1997;89(358):29-30

Functional activity of staphylococcal enterotoxin A requires interactions with both the alpha and beta chains of HLA-DR. Dowd JE, et al. **Mol Immunol** 1996 Nov; 33(16):1267-74

Characteristic immunological tolerance in intrahepatic lymphocytes induced by bacterial superantigen SEB. Matsui S, et al. **Nippon Ika Daigaku Zasshi** 1996 Feb; 63(1):22-30

Simultaneous presentation of Kawasaki disease and toxic shock syndrome in an adolescent male [see comments] Davies HD, et al. **Pediatr Infect Dis J** 1996 Dec; 15(12):1136-8 (14 ref.). Comment in: Pediatr Infect Dis J 1997 Jun;16(6):633-4.

Selective binding of bacterial toxins to major histocompatibility complex class II-expressing cells is controlled by invariant chain and HLA-DM. Lavoie PM, et al. **Proc Natl Acad Sci U S A** 1997 Jun 24;94(13):6892-7

"Bazinc" instinct: how SEA attracts MHC class II molecules. Thibodeau J, et al. **Res Immunol** 1997 May;148(4):217-29 (72 ref.)

Production of interferon-alpha/beta by murine dendritic cell lines stimulated by virus and bacteria. Eloranta ML, et al. **Scand J Immunol** 1997 Sep;46(3):235-41

CD40 ligation inhibits IL-2 and SAC+IL-2 induced proliferation in chronic lymphocytic leukaemia cells. Söderberg O, et al. **Scand J Immunol** 1997 Jun;45(6):706-14

Staphylococcal enterotoxin B mutants (N23K and F44S): biological effects and vaccine potential in a mouse model. Woody MA, et al. **Vaccine** 1997 Feb;15(2):133-9

T-cell activation and proliferation in a case of recurrent menstrual toxic shock syndrome. Arvand M, et al. **Zentralbl Bakteriol** 1996 Jul;284(2-3):164-9

[Non-inflammatory form of neutrophil antibacterial response] Galankin VN, et al. **Arkh Patol** 1997 Jul-Aug;59(4):8-13 (Eng. Abstr.) **(Rus)**

[The role of Staphylococcus aureus opsonization in the development of local inflammation and systemic reaction] Belotskiĭ S, et al. **Biull Eksp Biol Med** 1996 Sep; 122(9):298-300 **(Rus)**

[The isolation of a transfer factor of the delayed-hypersensitivity type to the antigenic substances of Staphylococcus aureus in guinea pigs] Holieva OH, et al. **Fiziol Zh** 1996;42(5-6):58-65 (Eng. Abstr.) **(Ukr)**

[Human specific transfer factor to Staphylococcus aureus antigens] Liubchenko TA, et al. **Fiziol Zh** 1997; 43(3-4):25-32 (Eng. Abstr.) **(Ukr)**

ISOLATION & PURIFICATION

Systemic immune response to Streptococcal and Staphylococcal lipoteichoic acids in children with recurrent tonsillitis. Yokoyama Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:108-11

Rapid detection of the staphylococcal mecA gene from BACTEC blood culture bottles by the polymerase chain reaction. Carroll KC, et al. **Am J Clin Pathol** 1996 Nov; 106(5):600-5

Pyomyositis with toxic shock syndrome presenting as back pain and fever: a case report and literature review. Wolfe MW, et al. **Am J Orthop** 1997 Feb;26(2):135-7 (26 ref.)

Deep neck infections. Marra S, et al. **Am J Otolaryngol** 1996 Sep-Oct;17(5):287-98 (15 ref.)

Correlation of middle meatal and maxillary sinus cultures in acute maxillary sinusitis. Vaidya AM, et al. **Am J Rhinol** 1997 Mar-Apr;11(2):139-43

Epidemiological characteristics of bovine clinical mastitis caused by Staphylococcus aureus and Escherichia coli studied by DNA fingerprinting. Lam TJ, et al. **Am J Vet Res** 1996 Jan;57(1):39-42

Human skin flora as a potential source of epidural abscess. Sato S, et al. **Anesthesiology** 1996 Dec;85(6):1276-82

Hematogenous osteomyelitis of the hand skeleton in adults after dental maxillary infections. Germann G, et al. **Ann Plast Surg** 1996 Jul;37(1):106-10

Staphylococcus aureus nasal carriage in rheumatoid arthritis: antibody response to toxic shock syndrome toxin-1. Tabarya D, et al. **Ann Rheum Dis** 1996 Nov;55(11):822-8

Prevalence of producers of enterotoxins and toxic shock syndrome toxin-1 among Staphylococcus aureus strains isolated from atopic dermatitis lesions. Akiyama H, et al. **Arch Dermatol Res** 1996 Jun;288(7):418-20

Detection of methicillin-resistant Staphylococcus aureus: the evaluation of rapid agglutination methods. Davies S. **Br J Biomed Sci** 1997 Mar;54(1):13-5

Unusual development of granulomas on the healing surface of burn wounds associated with MRSA infections. Gang RK, et al. **Burns** 1996 Feb;22(1):57-61

Effective control of methicillin-resistant Staphylococcus aureus in a burn unit. Matsumura H, et al. **Burns** 1996 Jun; 22(4):283-6

Isolation of Abiotrophia spp. with Staphylococcus aureus in a case of mastitis in a cow. Higgins R, et al. **Can Vet J** 1997 Feb;38(2):114

Heterogeneity of cell-associated CP5 expression on Staphylococcus aureus strains demonstrated by flow cytometry. Poutrel B, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):275-8

Staphylococcus aureus prosthetic joint infection treated with debridement and prosthesis retention. Brandt CM, et al. **Clin Infect Dis** 1997 May;24(5):914-9

Nosocomial and community-acquired Staphylococcus aureus bacteremias from 1980 to 1993: impact of intravascular devices and methicillin resistance [see comments] Steinberg JP, et al. **Clin Infect Dis** 1996 Aug;23(2):255-9. Comment in: Clin Infect Dis 1996 Aug;23(2):260-1.

Staphylococcus aureus skin colonization in infants with atopic dermatitis. Monti G, et al. **Dermatology** 1996; 193(2):83-7

Staphylococcus aureus nasal carriage as a marker for subsequent staphylococcal infections in intensive care unit patients. Corbella X, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):351-7

Detection of methicillin-resistant Staphylococcus aureus using the BBL crystal MRSA kit [letter; comment] Hamilton-Miller JM. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):481. Comment on: Eur J Clin Microbiol Infect Dis 1996 Sep;15(9):747-9.

Staphylococcal scalded skin syndrome in a neonate. Raymond J, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jun;16(6):453-4

Predominant pathogens found in the European Prevalence of Infection in Intensive Care Study. Spencer RC. **Eur J Clin Microbiol Infect Dis** 1996 Apr;15(4):281-5

European multicentre evaluation of a commercial system for identification of methicillin-resistant Staphylococcus aureus [see comments] Zambardi G, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep;15(9):747-9. Comment in: Eur J Clin Microbiol Infect Dis 1997 Jun;16(6):481.

Demonstration of mother-to-infant transmission of Staphylococcus aureus by pulsed-field gel electrophoresis. Mitsuda T, et al. **Eur J Pediatr** 1996 Mar;155(3):194-9

Iatrogenic spinal infection following epidural anaesthesia: case report. Dunn LT, et al. **Eur Spine J** 1996;5(6):418-20

Naturally occurring dermatitis associated with Staphylococcus aureus in DS-Nh mice. Haraguchi M, et al. **Exp Anim** 1997 Jul;46(3):225-9

Rapid identification and typing of Staphylococcus aureus by nested PCR amplified ribosomal DNA spacer region. Saruta K, et al. **FEMS Microbiol Lett** 1997 Jan 15; 146(2):271-8

Control of methicillin-resistant Staphylococcus aureus in a neonatal intensive-care unit: use of intensive microbiologic surveillance and mupirocin. Back NA, et al. **Infect Control Hosp Epidemiol** 1996 Apr;17(4):227-31

Monitoring persistence of coagulase-negative staphylococci in a hematology department using phenotypic and genotypic strategies. van Belkum A, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):660-7

Optimization of detection and yield of methicillin-resistant Staphylococcus aureus phage type III-29 [letter] Wagenvoort JH, et al. **Infect Control Hosp Epidemiol** 1996 Apr;17(4):208-9

Cellulitis due to catalase-negative Staphylococcus aureus [letter] Al-Awagi A, et al. **Infection** 1996 Jan-Feb;24(1):54

Microbiological analysis of 'black pudding', a Trinidadian delicacy and health risk to consumers. Adesiyun AA, et al. **Int J Food Microbiol** 1996 Aug;31(1-3):283-99

Staphylococcus aureus in dairy products in the Bologna area. De Luca G, et al. **Int J Food Microbiol** 1997 Apr 15; 35(3):267-70

Enterotoxin production by staphylococci isolated from foods in France. Rosec JP, et al. **Int J Food Microbiol** 1997 Apr 15;35(3):213-21

The identification of methicillin-resistant Staphylococcus aureus in Osler's nodes and Janeway lesions of acute bacterial endocarditis. Parikh SK, et al. **J Am Acad Dermatol** 1996 Nov;35(5 Pt 1):767-8

Laparoscopic management of peritonitis in the setting of an infected Tenckhoff catheter: a case report and description of technique. Chiu CK, et al. **J Am Coll Surg** 1996 Dec; 183(6):640-2

Oral staphylococcus in older subjects with rheumatoid arthritis. Jacobson JJ, et al. **J Am Geriatr Soc** 1997 May; 45(5):590-3

Nasal mupirocin prevents Staphylococcus aureus exit-site infection during peritoneal dialysis. Mupirocin Study Group. **J Am Soc Nephrol** 1996 Nov;7(11):2403-8

Evaluation of a coagulase-negative variant of Staphylococcus aureus as a cause of intramammary infections in a herd of dairy cattle. Fox LK, et al. **J Am Vet Med Assoc** 1996 Sep 15;209(6):1143-6

Methicillin-resistant Staphylococcus aureus isolates recovered from a New York City hospital: analysis by molecular fingerprinting techniques. de Lencastre H, et al. **J Clin Microbiol** 1996 Sep;34(9):2121-4

DNA fingerprinting by infrequent-restriction-site amplification. Mazurek GH, et al. **J Clin Microbiol** 1996 Oct;34(10):2386-90

Application of lipovitellin-salt-mannitol agar for screening, isolation, and presumptive identification of Staphylococcus aureus in a teaching hospital. Merlino J, et al. **J Clin Microbiol** 1996 Dec;34(12):3012-5

Comparative performances of six agglutination kits assessed by using typical and atypical strains of Staphylococcus aureus. Personne P, et al. **J Clin Microbiol** 1997 May; 35(5):1138-40

Genomic fingerprinting for epidemiological differentiation of Staphylococcus aureus clinical isolates. Smeltzer MS, et al. **J Clin Microbiol** 1996 Jun;34(6):1364-72

Molecular characterization of epidemic ciprofloxacin- and methicillin-resistant Staphylococcus aureus strains colonizing patients in an intensive care unit. Udo EE, et al. **J Clin Microbiol** 1996 Dec;34(12):3242-4

Comparison of the BacT/Alert FAN aerobic and the Difco ESP 80A aerobic bottles for pediatric blood cultures. Welby-Sellenriek PL, et al. **J Clin Microbiol** 1997 May; 35(5):1166-71

Comparison of five agglutination tests for identification of Staphylococcus aureus. Wilkerson M, et al. **J Clin Microbiol** 1997 Jan;35(1):148-51

Rapid detection of oxacillin-resistant Staphylococcus aureus in blood cultures by an impedance method. Wu JJ, et al. **J Clin Microbiol** 1997 Jun;35(6):1460-4

Comparison of commercial slide agglutination kits with a tube coagulase test for the rapid identification of Staphylococcus aureus from blood culture. Cooke RP, et al. **J Clin Pathol** 1997 Feb;50(2):164-6

Comparison of methods for the isolation of methicillin resistant Staphylococcus aureus. Davies S, et al. **J Clin Pathol** 1997 Mar;50(3):257-8

Preoperative bacterial colonization and its influence on postoperative wound infections in plastic surgery. Andenaes K, et al. **J Hosp Infect** 1996 Dec;34(4):291-9

Strategies for the management of healthcare staff colonized with epidemic methicillin-resistant Staphylococcus aureus. Cox RA, et al. **J Hosp Infect** 1997 Feb;35(2):117-27

Consecutive isolation of homologous strains of methicillin-resistant and methicillin-susceptible Staphylococcus aureus from a hospitalized child. Lawrence C, et al. **J Hosp Infect** 1996 May;33(1):49-53

Epidemiology of methicillin-resistant Staphylococcus aureus in a Warsaw hospital. Młynarczyk G, et al. **J Hosp Infect** 1996 Oct;34(2):151-60

Survival of methicillin-resistant Staphylococcus aureus (MRSA) on naturally contaminated dry mops. Oie S, et al. **J Hosp Infect** 1996 Oct;34(2):145-9

Eradication of the long-term carriage of methicillin-resistant Staphylococcus aureus in patients wearing dentures: a follow-up of 10 patients. Rossi T, et al. **J Hosp Infect** 1996 Dec;34(4):311-20

Staphylococcus aureus in the anterior nares and subungual spaces of the hands in atopic dermatitis. Nishijima S, et al. **J Int Med Res** 1997 May-Jun;25(3):155-8

Detection of toxic shock syndrome toxin-1 gene in Staphylococcus aureus bovine isolates and bulk milk by the polymerase chain reaction. Takeuchi S, et al. **J Vet Med Sci** 1996 Nov;58(11):1133-5

Increased incidence of beta-lactamase-plasmid negative, high level methicillin-resistant Staphylococcus aureus (MRSA). Yokoyama T, et al. **Kurume Med J** 1996;43(3):199-206

Orf and erythema multiforme in a child [letter] Ferrando MF, et al. **Pediatr Dermatol** 1997 Mar-Apr;14(2):154-5

Aerobic and anaerobic microbiology of bacterial tracheitis in children. Brook I. **Pediatr Emerg Care** 1997 Feb; 13(1):16-8

Nasal carriage of Staph. aureus in peritonitis and exit-site infections [letter; comment] De Vecchi AF, et al. **Perit Dial Int** 1997 Mar-Apr;17(2):205-7. Comment on: Perit Dial Int 1996 Jul-Aug;16(4):352-6.

Nasal carriage and peritonitis by Staphylococcus aureus in patients on continuous ambulatory peritoneal dialysis: a prospective study [see comments] Wanten GJ, et al. **Perit Dial Int** 1996 Jul-Aug;16(4):352-6. Comment in: Perit Dial Int 1997 Mar-Apr;17(2):205-7.

Incidence of asymptomatic carriage of potentially pathogenic respiratory organisms among preschool Pretoria children [letter] [published erratum appears in S Afr Med J 1996 Oct;86(10):1302] Marcus L, et al. **S Afr Med J** 1996 Sep; 86(9):1132, 1134

[A method for estimating the prevalence of mammary Staphylococcus aureus and Streptococcus agalactiae infections in herds based on an examination of bulk milk samples] Benda P, et al. **Vet Med (Praha)** 1997 Apr; 42(4):101-9 (Eng. Abstr.) **(Cze)**

[Testing of culture media for detection of Staphylococcus aureus in bulk milk samples] Benda P, et al. **Vet Med (Praha)** 1997 Jan;42(1):9-17 (Eng. Abstr.) **(Cze)**

[Detection of methicillin-resistant Staphylococcus aureus (MRSA)--relation between respiratory tract and gastro-intestinal tract] Ito Y, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):207-13 (Eng. Abstr.) **(Jpn)**

[Relation of sputum and feces and methicillin-resistant Staphylococcus aureus (MRSA) detection] Shigeta K, et al. **Kansenshogaku Zasshi** 1996 Oct;70(10):1062-7 (Eng. Abstr.) **(Jpn)**

[Simultaneous isolation of MRSA and Pseudomonas aeruginosa using a novel selective and differential PMAC agar] Taguchi F, et al. **Kansenshogaku Zasshi** 1996 Sep; 70(9):938-46 (Eng. Abstr.) **(Jpn)**

[Clinical study of 18 patients whom MRSA was detected from stool--especially about comparison enterocolitis with colonization] Watanabe H, et al. **Kansenshogaku Zasshi** 1996 Nov;70(11):1170-5 (Eng. Abstr.) **(Jpn)**

[Clinically isolated bacterii seen in complicated infections] Iwai S. **Nippon Geka Gakkai Zasshi** 1996 Dec;97(12):1091-6 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Isolation of methicillin-resistant Staphylococcus aureus on admission to a geriatric hospital] Honjo N, et al. **Nippon Ronen Igakkai Zasshi** 1997 Feb;34(2):147-50 (Eng. Abstr.) **(Jpn)**

[Rapid identification of four bacterial species by proton magnetic resonance spectroscopy] Ohara T, et al. **Rinsho Byori** 1997 Jun;45(6):581-4 (Eng. Abstr.) **(Jpn)**

[The resident staphylococcal bacterial carriage in a human population as an index for the microecological monitoring of its habitat environment] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):71-4 (Eng. Abstr.) **(Rus)**

[The construction of a diagnostic model for the differentiation of resident and transient staphylococcal microflora in bacterial carriage] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):68-70 (Eng. Abstr.) **(Rus)**

[Otorhinolaryngological manifestations of mucormycosis. Study of 6 cases] Duque Fisher CS, et al. **Acta Otorrinolaringol Esp** 1996 Jul-Aug;47(4):291-4 (Eng. Abstr.) **(Spa)**

[Health personnel as a source of infection in a hospital outbreak of methicillin-resistant Staphylococcus aureus (letter)] Rodríguez G, et al. **Enferm Infecc Microbiol Clin** 1997 Mar;15(3):173-4 **(Spa)**

[Prevalence of Staphylococcus aureus among food handlers from a metropolitan university in Chile] Soto A, et al. **Rev Med Chil** 1996 Sep;124(9):1142-6 (Eng. Abstr.) **(Spa)**

METABOLISM

Penicillin-binding protein 4 overproduction increases beta-lactam resistance in Staphylococcus aureus. Henze UU, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2121-5

Increased production of penicillin-binding protein 2, increased detection of other penicillin-binding proteins, and decreased coagulase activity associated with glycopeptide resistance in Staphylococcus aureus. Moreira B, et al. **Antimicrob Agents Chemother** 1997 Aug;41(8):1788-93

Specific interaction between beta-lactams and soluble penicillin-binding protein 2a from methicillin-resistant Staphylococcus aureus: development of a chromogenic assay. Roychoudhury S, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2075-9

Prevalence of producers of enterotoxins and toxic shock syndrome toxin-1 among Staphylococcus aureus strains isolated from atopic dermatitis lesions. Akiyama H, et al. **Arch Dermatol Res** 1996 Jun;288(7):418-20

Role of nitric oxide in the circulatory failure and organ injury in a rodent model of gram-positive shock. Kengatharan KM, et al. **Br J Pharmacol** 1996 Dec;119(7):1411-21

In vivo expression of exoprotein synthesis with a Sae mutant of Staphylococcus aureus. Rampone H, et al. **Can J Vet Res** 1996 Jul;60(3):237-40

Target cell specificity of a bacteriocin molecule: a C-terminal signal directs lysostaphin to the cell wall of Staphylococcus aureus. Baba T, et al. **EMBO J** 1996 Sep 16;15(18):4789-97

Evaluation of a commercial test kit for rapid detection of Staphylococcus aureus in blood cultures. Neyret C, et al. **Eur J Clin Microbiol Infect Dis** 1997 Feb;16(2):165-6

The binding of surface proteins from Staphylococcus aureus to human bronchial mucins. Trivier D, et al. **Eur Respir J** 1997 Apr;10(4):804-10

Lead resistance and sensitivity in Staphylococcus aureus. Levinson HS, et al. **FEMS Microbiol Lett** 1996 Dec 15; 145(3):421-5

Variation in the agr-dependent expression of alpha-toxin and protein A among clinical isolates of Staphylococcus aureus from patients with septicaemia. Li S, et al. **FEMS Microbiol Lett** 1997 Jul 1;152(1):155-61

Detection of the response regulator AgrA in the cytosolic fraction of Staphylococcus aureus by monoclonal antibodies. Morfeldt E, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2-3):195-201

Iron depletion and virulence in Staphylococcus aureus. Trivier D, et al. **FEMS Microbiol Lett** 1996 Aug 1; 141(2-3):117-27 (51 ref.)

Lif, the lysostaphin immunity factor, complements FemB in staphylococcal peptidoglycan interpeptide bridge formation. Tschierske M, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):261-4

Bacterial immunomodulator Olimunostim inhibits degranulation of mastocytes in vitro. Merkunová A, et al. **Folia Biol (Praha)** 1996;42(5):235-9

Siderophore production by Staphylococcus aureus and identification of iron-regulated proteins. Courcol RJ, et al. **Infect Immun** 1997 May;65(5):1944-8

Enterotoxin production by staphylococci isolated from foods in France. Rosec JP, et al. **Int J Food Microbiol** 1997 Apr 15;35(3):213-21

Immunoenzymatic detection of staphylococcal enterotoxins: international interlaboratory study. Lapeyre C, et al. **J AOAC Int** 1996 Sep-Oct;79(5):1095-101

Insertional inactivation of the gene for collagen-binding protein has a pleiotropic effect on the phenotype of Staphylococcus aureus. Hienz SA, et al. **J Bacteriol** 1996 Sep;178(17):5327-9

Cadmium-sensitive targets in the aerobic respiratory metabolism of Staphylococcus aureus. Tynecka Z, et al. **J Basic Microbiol** 1996;36(6):447-52

The role of the amino terminus in the kinetics and assembly of alpha-hemolysin of Staphylococcus aureus. Vandana S, et al. **J Biol Chem** 1997 Oct 3;272(40):24858-63

Comparative behavior of E. coli and S. aureus regarding attachment to and removal from a polymeric surface. Magnotta S, et al. **J Biomater Sci Polym Ed** 1997;8(9):683-9

Exfoliative toxin detection using reversed passive latex agglutination: clinical and epidemiologic applications. Kawabata A, et al. **J Clin Microbiol** 1997 Aug;35(8):1984-7

Binding of Staphylococcus aureus to milk fat globules increases resistance to penicillin-G. Ali-Vehmas T, et al. **J Dairy Res** 1997 May;64(2):253-60

Escherichia coli hemolysin and Staphylococcus aureas alpha-toxin potently induce neutrophil adhesion to cultured human endothelial cells. Krüll M, et al. **J Immunol** 1996 Nov 1;157(9):4133-40

Regulation of Staphylococcus aureus capsular polysaccharide type 5: CO2 inhibition in vitro and in vivo. Herbert S, et al. **J Infect Dis** 1997 Aug;176(2):431-8

Staphylococcal exoproducts down-regulate cyclooxygenase 1 and 2 in peritoneal macrophages. Mackenzie RK, et al. **J Lab Clin Med** 1997 Jan;129(1):23-34

Enterotoxin production by Staphylococcus aureus clones and detection of Brazilian epidemic MRSA clone (III::B:A) among isolates from food handlers. Soares MJ, et al. **J Med Microbiol** 1997 Mar;46(3):214-21

Effects of penicillin-binding protein 4 overproduction in Staphylococcus aureus. Henze UU, et al. **Microb Drug Resist** 1996 Summer;2(2):193-9

Staphylococcal peptidoglycan interpeptide bridge biosynthesis: a novel antistaphylococcal target? Kopp U, et al. **Microb Drug Resist** 1996 Spring;2(1):29-41

Studies of the repressor (BlaI) of beta-lactamase synthesis in Staphylococcus aureus. Gregory PD, et al. **Mol Microbiol** 1997 Jun;24(5):1025-37

MHC class II positive retinal pigment epithelial (RPE) cells can function as antigen-presenting cells for microbial superantigen. Osusky R, et al. **Ocul Immunol Inflamm** 1997 Mar;5(1):43-50

Ocular infections: antibiotics and bacterial adhesion on biomaterials used in ocular surgery. Marone P, et al. **Ophthalmologica** 1995;209(6):315-8

Regulation of beta-lactamase synthesis as a novel site of action for suppression of methicillin resistance in Staphylococcus aureus. Bruns O, et al. **Zentralbl Bakteriol** 1997 Feb;285(3):413-30

[Causative agent of impetigo: staphylococcal exfoliative toxin and regulation of the toxin production in Staphylococcus aureus] Sakurai S. **Nippon Saikingaku Zasshi** 1996 Aug; 51(3):813-22 (15 ref.) **(Jpn)**

[Bacteriophages of serologic group F converting synthesis of fibrinolysin and beta toxin in S. aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3-4):149-54 (Eng. Abstr.) **(Pol)**

[Absorption of various actinomycins by Staphylococcus aureus cells] Polin AN, et al. **Antibiot Khimioter** 1996 May; 41(5):13-8 (Eng. Abstr.) **(Rus)**

[Sources of convertible energy in Staphylococcus] Vinnikov

AI, et al. **Ukr Biokhim Zh** 1996 Nov-Dec;68(6):29-33 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

The pathogenesis of Staphylococcus aureus in the trauma patient and potential future therapies. Villavicencio RT, et al. **Am J Surg** 1996 Sep;172(3):291-6 (76 ref.)

Hematogenous osteomyelitis of the hand skeleton in adults after dental maxillary infections. Germann G, et al. **Ann Plast Surg** 1996 Jul;37(1):106-10

Digestion of staphylococcal enterotoxin by Bacillus natto. Osawa R, et al. **Antonie Van Leeuwenhoek** 1997 May; 71(4):307-11

Host-bacteria interactions in foreign body infections. François P, et al. **Infect Control Hosp Epidemiol** 1996 Aug; 17(8):514-20 (63 ref.)

Expression of an antisense hla fragment in Staphylococcus aureus reduces alpha-toxin production in vitro and attenuates lethal activity in a murine model. Kernodle DS, et al. **Infect Immun** 1997 Jan;65(1):179-84

Role of the staphylococcal accessory gene regulator (sar) in septic arthritis. Nilsson IM, et al. **Infect Immun** 1996 Nov;64(11):4438-43

Specific roles of alpha-toxin and beta-toxin during Staphylococcus aureus corneal infection. O'Callaghan RJ, et al. **Infect Immun** 1997 May;65(5):1571-8

Lack of the extracellular 19-kilodalton fibrinogen-binding protein from Staphylococcus aureus decrcases virulence in experimental wound infection. Palma M, et al. **Infect Immun** 1996 Dec;64(12):5284-9

Diminished platelet binding in vitro by Staphylococcus aureus is associated with reduced virulence in a rabbit model of infective endocarditis. Sullam PM, et al. **Infect Immun** 1996 Dec;64(12):4915-21

MPN-PCR-quantification method for staphylococcal enterotoxin c1 gene from fresh cheese. Mäntynen V, et al. **Int J Food Microbiol** 1997 May 20;36(2-3):135-43

Extracellular matrix heparan sulfate modulates endothelial cell susceptibility to Staphylococcus aureus. Alston WK, et al. **J Cell Physiol** 1997 Oct;173(1):102-9

Infection of human vascular endothelial cells with Staphylococcus aureus induces hyperadhesiveness for human monocytes and granulocytes. Beekhuizen H, et al. **J Immunol** 1997 Jan 15;158(2):774-82

The pattern of inflammation in rat sepsis due to enterotoxin-producing Staphylococcus aureus: a comparison with ischemia-reperfusion injury. Lin RY, et al. **J Med** 1996;27(5-6):303-17

Slime formation as a marker of serious infection with methicillin-resistant Staphylococcus aureus. Takahashi A, et al. **J Med** 1997;28(1-2):87-98

Role of Staphylococcus aureus surface adhesins in orthopaedic device infections: are results model-dependent? Darouiche RO, et al. **J Med Microbiol** 1997 Jan;46(1):75-9

Role of certain virulence factors in a murine model of Staphylococcus aureus arthritis. Gemmell CG, et al. **J Med Microbiol** 1997 Mar;46(3):208-13

Internalization of Staphylococcus aureus by cultured osteoblasts. Hudson MC, et al. **Microb Pathog** 1995 Dec; 19(6):409-19

The spread of methicillin-resistant Staphylococcus aureus in a rural community: will it become a common microorganism colonizing among the general population? Kayaba H, et al. **Surg Today** 1997;27(3):217-9

A new pathogenic Staphylococcus aureus type in commercial rabbits. Devriese LA, et al. **Zentralbl Veterinarmed [B]** 1996 Jul;43(5):313-5

[Causative agent of impetigo: staphylococcal exfoliative toxin and regulation of the toxin production in Staphylococcus aureus] Sakurai S. **Nippon Saikingaku Zasshi** 1996 Aug; 51(3):813-22 (15 ref.) **(Jpn)**

[The dynamics of the persistence characteristics of staphylococci under the action of the microclimate of a speleotherapy mine] Chernova OP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):78-80 (Eng. Abstr.) **(Rus)**

[The role of the persistent characteristics of a causative agent in determining the protracted course of a suppurative-inflammatory course Deriabin DB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):74-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of antibodies to staphylococcal alpha and beta toxins and Staphylococcus aureus on the cytotoxicity for and adherence of the organism to bovine mammary epithelial cells. Cifrian E, et al. **Am J Vet Res** 1996 Sep;57(9):1308-11

Characterization of an NaCl-sensitive Staphylococcus aureus mutant and rescue of the NaCl-sensitive phenotype by glycine betaine but not by other compatible solutes. Vijaranakul U, et al. **Appl Environ Microbiol** 1997 May; 63(5):1889-97

Comparison of the beta-toxins from Staphylococcus aureus and Staphylococcus intermedius. Dziewanowska K, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):102-8

Role of physiological conditions in the oropharynx on the adherence of respiratory bacterial isolates to endotracheal tube poly(vinyl chloride). Jones DS, et al. **Biomaterials** 1997 Mar;18(6):503-10

Characterization of the interaction between the Staphylococcus aureus clumping factor (ClfA) and fibrinogen. McDevitt D, et al. **Eur J Biochem** 1997 Jul 1;247(1):416-24

Gastrointestinal colonization by methicillin-resistant Staphylococcus aureus in immunosuppressed mice. Kato-Matsunaga N, et al. **Infect Immun** 1996 Oct; 64(10):4231-5

Clusterin, a putative complement regulator, binds to the cell surface of Staphylococcus aureus clinical isolates. Partridge SR, et al. **Infect Immun** 1996 Oct;64(10):4324-9

Adherence of Staphylococcus aureus slime-producing strain variants to biomaterials used in orthopaedic surgery. Gracia E, et al. **Int Orthop** 1997;21(1):46-51

Survival of contaminating bacteria in over-the-counter artificial tears. Harris MG, et al. **J Am Optom Assoc** 1996 Nov;67(11):676-80

Lysogenic conversion as a factor influencing the vancomycin tolerance phenomenon in Staphylococcus aureus [letter] Młynarczyk G, et al. **J Antimicrob Chemother** 1997 Jul; 40(1):136-7

Localized perforation of the cell wall by a major autolysin: atl gene products and the onset of penicillin-induced lysis of Staphylococcus aureus. Sugai M, et al. **J Bacteriol** 1997 May;179(9):2958-62

Bacterial adhesion to polyurethane surfaces in the presence of pre-adsorbed high molecular weight kininogen. Nagel JA, et al. **J Biomater Sci Polym Ed** 1996;7(9):769-80

Cell cycle regulation of mammary epithelial cell detachment by Staphylococcus aureus. Zavizion B, et al. **J Dairy Res** 1996 Nov;63(4):543-53

Staphylococcus aureus invasion of bovine mammary epithelial cells. Almeida RA, et al. **J Dairy Sci** 1996 Jun; 79(6):1021-6

Adhesion of Staphylococcus aureus to horny layer: role of fibrinogen. Kanzaki H, et al. **J Dermatol Sci** 1996 Jun; 12(2):132-9

Bacterial adhesion on hydrophilic heparinized catheters, with compared with adhesion on silicone catheters, in patients with malignant obstructive jaundice. Homma H, et al. **J Gastroenterol** 1996 Dec;31(6):836-43

Methicillin resistant Staphylococcus aureus (MRSA): disease spectrum, biological characteristics, resistant mechanisms, and typing methods. Abdo RA, et al. **J Med Liban** 1996; 44(1):21-30 (90 ref.)

Novel animal model for studying the molecular mechanisms of bacterial adhesion to bone-implanted metallic devices: role of fibronectin in Staphylococcus aureus adhesion. Fischer B, et al. **J Orthop Res** 1996 Nov;14(6):914-20

Cancer is a hybrid produced by a relationship between a plant bacterium and a mammalian cell: an original concept. White MW. **Med Hypotheses** 1996 Jul;47(1):35-8

The effects of adherence to silicone surfaces on antibiotic susceptibility in Staphylococcus aureus. Williams I, et al. **Microbiology** 1997 Jul;143 (Pt 7):2407-13

Functional activity of staphylococcal enterotoxin A requires interactions with both the alpha and beta chains of HLA-DR. Dowd JE, et al. **Mol Immunol** 1996 Nov; 33(16):1267-74

Parameter estimation and dosage adjustment in the treatment with vancomycin of methicillin-resistant Staphylococcus aureus ocular infections. Saitoh A, et al. **Ophthalmologica** 1997;211(4):232-5

Thermosensitivity is reduced during fever induced by Staphylococcus aureus cells walls in rabbits. Toien O, et al. **Pflugers Arch** 1996 May;432(1):66-74

Effect of staphylococcal beta toxin on the cytotoxicity, proliferation and adherence of Staphylococcus aureus to bovine mammary epithelial cells. Cifrian E, et al. **Vet Microbiol** 1996 Feb;48(3-4):187-98

Eukaryotic and prokaryotic cell functions required for invasion of Staphylococcus aureus into bovine mammary epithelial cells. Almeida RA, et al. **Zentralbl Veterinarmed [B]** 1997 May;44(3):139-45

[How does Staphylococcus aureus adapt to environmental stresses?] Ohta T. **Nippon Saikingaku Zasshi** 1996 Feb; 51(2):627-33 (14 ref.) **(Jpn)**

[The effect of therapeutic mud on the viability and persistence properties of bacteria] Abdrakhmanov AR, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug; (4):89-92 (Eng. Abstr.) **(Rus)**

[The ecological determinacy of the markers of staphylococcal persistence] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug;(4):60-3 (Eng. Abstr.) **(Rus)**

[The relationship of the indices of solar-geomagnetic activity and the autofluctuations in the biological properties of Staphylococcus aureus 209 subcultures in vitro] Polikarpov NA. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan-Feb; (1):27-30 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of microwaves on survival of some bacterial strains. Atmaca S, et al. **Acta Microbiol Immunol Hung** 1996; 43(4):371-8

Antimicrobial effects of phototherapy and photochemotherapy in vivo and in vitro. Yoshimura M, et al. **Br J Dermatol** 1996 Oct;135(4):528-32

[The effect of millimeter-band radiation of nonthermal intensity on sensitivity of Staphylococcus to various antibiotics] Bulgakova VG, et al. **Biofizika** 1996 Nov-Dec; 41(6):1289-93 (Eng. Abstr.) **(Rus)**

[Bactericidal properties of out-of-focus NAG laser radiation] Semenov FV, et al. **Biull Eksp Biol Med** 1996 Jun; 121(6):654-6 **(Rus)**

[The suppressive action of a magnetic-laser ray and of an electrolytic solution of sodium hypochlorite on the factors of causative agent persistence] Usviatsov Bla, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul-Aug; (4):102-5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Two alternative mechanisms of cell separation in staphylococci: one lytic and one mechanical. Giesbrecht P, et al. **Arch Microbiol** 1997 Apr;167(4):239-50

Cefodizime: effects of sub-inhibitory concentrations on adhesiveness and bacterial morphology of Staphylococcus aureus and Escherichia coli: comparison with cefotaxime and ceftriaxone. Braga PC, et al. **J Antimicrob Chemother** 1997 Jan;39(1):79-84

VIROLOGY

Molecular analysis of lytic genes of bacteriophage 80 alpha of Staphylococcus aureus. Bon J, et al. **Can J Microbiol** 1997 Jul;43(7):612-6

Localization of prophages of serological group B and F on restriction fragments defined in the restriction map of Staphylococcus aureus NCTC 8325. Borecká P, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2-3):203-10

STAPHYLOCOCCUS EPIDERMIDIS

Muslin induced granuloma following wrapping of intracranial aneurysms: the role of infection as an additional precipitating factor. Report of two cases and review of the literature. Kirollos RW, et al. **Acta Neurochir (Wien)** 1997;139(5):411-5

Pacemaker-related endocarditis inducing tricuspid stenosis. Unger P, et al. **Am Heart J** 1997 May;133(5):605-7

Staphylococcus epidermidis graft infection is associated with locally suppressed major histocompatibility complex class II and elevated MAC-1 expression. Henke PK, et al. **Arch Surg** 1997 Aug;132(8):894-902

Prophylaxis against Staphylococcus epidermidis vascular graft infection with rifampicin-soaked, gelatin-sealed Dacron. Sardelic F, et al. **Cardiovasc Surg** 1996 Jun; 4(3):389-92

Efficacy of antibiotics alone for orthopaedic device related infections. Isiklar ZU, et al. **Clin Orthop** 1996 Nov; (332):184-9

Nosocomial bacteremia due to vancomycin-resistant Staphylococcus epidermidis in four patients with cancer, neutropenia, and previous treatment with vancomycin [letter] Krcmery V Jr, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar;15(3):259-61

The effect of an electrical current on staphylococcus epidermidis colonising continuous ambulatory peritoneal dialysis catheters [letter] Harris JM, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1110-1

Bolus or infusion teicoplanin for intravascular catheter associated infections in immunocompromised patients? Ley BE, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1091-5

Mechanisms of the bactericidal activity of low amperage electric current (DC). Liu WK, et al. **J Antimicrob Chemother** 1997 Jun;39(6):687-95

The potential for catheter microbial contamination from a needleless connector. Brown JD, et al. **J Hosp Infect** 1997 Jul;36(3):181-9

Coagulase-negative staphylococci (CNS) and necrotizing enterocolitis (NEC) [letter; comment] Damjanovic V, et al. **J Hosp Infect** 1996 Jun;33(2):153-5. Comment on: J Hosp Infect 1995 Oct;31(2):105-10.

Treatment of experimental methicillin-resistant Staphylococcus epidermidis endophthalmitis with intravitreal vancomycin and intravitreal dexamethasone. Smith MA, et al. **J Infect Dis** 1997 Feb;175(2):462-6

Clinical problem-solving. Where did good old clinical diagnosis go? Rozenman Y, et al. **N Engl J Med** 1997 May 15;336(20):1435-8

Successful treatment of catheter-related sepsis and extraluminal catheter thrombosis with vancomycin and fraxiparin without catheter removal. Ruiz-Valverde MP, et al. **Nephron** 1997;75(3):354-5

Streptococcal versus Staphylococcus epidermidis peritonitis in CAPD. A comparative study. Muñoz de Bustillo E, et al. **Perit Dial Int** 1997 Jul-Aug;17(4):392-5

[Intravenous withdrawal of infected cardiac pacemaker electrodes. Apropos of 5 cases] Schläpfer J, et al. **Ann Cardiol Angeiol (Paris)** 1996 Jun;45(6):321-4 (Eng. Abstr.) **(Fre)**

[Infectious complications of cardioverter/defibrillators--case report and review of the literature] Hollenstein U, et al. **Acta Med Austriaca** 1996;23(5):164-7 (20 ref.) (Eng. Abstr.) **(Ger)**

[Epiduritis after long-term pain therapy with an epidural catheter--review of the literature with a current case report] Michel H, et al. **Anaesthesiol Reanim** 1997; 22(3):69-79 (105 ref.) (Eng. Abstr.) **(Ger)**

[Long-term unrecognized foreign body aspiration as the cause of pleural effusion] de Wall N, et al. **Med Klin** 1996 Sep 15;91(9):600-2 **(Ger)**

[Staphylococcus-associated blepharokeratoconjunctivitis. Clinical findings, pathogenesis and therapy] Tetz MR, et al. **Ophthalmologe** 1997 Mar;94(3):186-90 (Eng. Abstr.) **(Ger)**

STAPHYLOCOCCUS EPIDERMIDIS

[Clinical experience with a new antimicrobially coated InterGard-IgK/AM vascular prosthesis in surgical treatment of deep wound infection with involvement of the synthetic bypass: report of 2 cases] Manouguian S. **Zentralbl Chir** 1996;121(9):768–72; discussion 772–3 (Eng. Abstr.) **(Ger)**

[Transesophageal echocardiographic evaluation of tricuspid endocarditis from implanted pacemaker: description of two cases] Bongiovì S, et al. **G Ital Cardiol** 1996 Dec; 26(12):1445–50 (Eng. Abstr.) **(Ita)**

[A case report of active aortic prosthetic valve endocarditis due to methicillin-resistant Staphylococcus epidermidis] Asakura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Aug;44(8):1185–92 (Eng. Abstr.) **(Jpn)**

[A case of successful treatment of mediastinitis and prosthetic graft infection after aortic arch and thoracoabdominal aortic reconstruction] Kawashima T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Feb;45(2):220–4 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Recommendations for the prevention and control of staphylococcal infections in neonatal units--1996] Bălan A. **Bacteriol Virusol Parazitol Epidemiol** 1997 Jan–Jun; 42(1–2):107–9 **(Rum)**

[Role of the ability of bacteria to inactivate natural anti-infective resistance factors in their resistance to blood bactericidal action (blood serum)] Bukharin OV, et al. **Biull Eksp Biol Med** 1996 Feb;121(2):174–6 **(Rus)**

[The characteristics of the immune status of patients with infectious endocarditis] Vorob'eva AM, et al. **Klin Khir** 1995;(2):25–6 **(Rus)**

[The connection between the duration of the course of postinjection abscesses and the biological characteristics of the causative microorganisms] Kurlaev PP, et al. **Vestn Khir Im I I Grek** 1996;155(6):54–6 (Eng. Abstr.) **(Rus)**

[Factors in the persistence of opportunistic microorganisms in dysbacteriosis of the gastrointestinal tract] Mitrokhin SD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug;(4):84–7 (Eng. Abstr.) **(Rus)**

[Bilateral septic thrombophlebitis with septic pulmonary embolism (letter)] Mateos Rodríguez F, et al. **An Med Interna** 1996 Jul;13(7):357–8 **(Spa)**

[The biological penetration of an intestinal wound] Mazur IuI, et al. **Klin Khir** 1995;(1):27–9 **(Ukr)**

CLASSIFICATION

Comparison of an improved RAPD fingerprinting with different typing methods for discriminating clinical isolates of Staphylococcus spp. Damiani G, et al. **Eur J Epidemiol** 1996 Apr;12(2):163–9

Use of cleaved amplified polymorphic sequences to distinguish strains of Staphylococcus epidermidis. Calderwood SB, et al. **J Clin Microbiol** 1996 Nov; 34(11):2860–5

Epidemiological typing of coagulase-negative staphylococci from nosocomial infections. Geary C, et al. **J Med Microbiol** 1997 Mar;46(3):195–203

Cross infections due to coagulase-negative staphylococci in high-risk patients. Hübner J, et al. **Zentralbl Bakteriol** 1995 Dec;283(2):169–74 (23 ref.)

Differentiation between bacterial species and sub-species by pyrolysis mass spectrometry of extracted DNA. Mathers K, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):311–8

CYTOLOGY

Leukocyte-biomaterial interactions in the presence of Staphylococcus epidermidis: flow cytometric evaluation of leukocyte activation. Sapatnekar S, et al. **J Biomed Mater Res** 1997 Jun 15;35(4):409–20

DRUG EFFECTS

In vitro activities of oxazolidinone compounds U100592 and U100766 against Staphylococcus aureus and Staphylococcus epidermidis. Kaatz GW, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):799–801

In vitro activities of two novel oxazolidinones (U100592 and U100766), a new fluoroquinolone (trovafloxacin), and dalfopristin–quinupristin against Staphylococcus aureus and Staphylococcus epidermidis. Mulazimoglu L, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2428–30

Pharmacodynamic effects of antibiotics and antibiotic combinations on growing and nongrowing Staphylococcus epidermidis cells. Svensson E, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):107–11

In vitro and in vivo effects of rifampin on Staphylococcus epidermidis graft infections. Garrison JR Jr, et al. **ASAIO J** 1997 Jan–Feb;43(1):8–12

In vitro antibacterial activity of TOC-50, a new parenteral cephalosporin against methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Nomura S, et al. **Chemotherapy** 1996 Jul–Aug;42(4):253–8

The utility of non-beta-lactam antimicrobial MICs as markers to distinguish oxacillin-resistant from oxacillin-susceptible strains of Staphylococcus epidermidis. Fass RJ, et al. **Diagn Microbiol Infect Dis** 1996 Sep; 26(1):43–5

In vitro study of the potential role of quinupristin/dalfopristin in the treatment of catheter-related staphylococcal infections. Garcia R, et al. **Eur J Clin Microbiol Infect Dis** 1996 Dec;15(12):933–6

The combined effects of plasma and hydrogel coating on adhesion of Staphylococcus epidermidis and Staphylococcus aureus to polyurethane catheters. John SF, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2–3):241–7

Supernatants from Staphylococcus epidermidis grown in the presence of different antibiotics induce differential release of tumor necrosis factor alpha from human monocytes. Mattsson E, et al. **Infect Immun** 1996 Oct;64(10):4351–5

Influence of N-acetylcysteine on the formation of biofilm by Staphylococcus epidermidis. Pérez-Giraldo C, et al. **J Antimicrob Chemother** 1997 May;39(5):643–6

Factors affecting development of rifampicin resistance in biofilm-producing Staphylococcus epidermidis. Svensson E, et al. **J Antimicrob Chemother** 1997 Jun;39(6):817–20

Rapid determination of neomycin by a microbiological agar diffusion assay using triphenyltetrazolium chloride. Yamamoto CH, et al. **J AOAC Int** 1996 Mar–Apr; 79(2):434–440

Encapsulation of vancomycin and gentamicin within cationic liposomes for inhibition of growth of Staphylococcus epidermidis. Sanderson NM, et al. **J Drug Target** 1996; 4(3):181–9

Benzalkonium chloride: a potential disinfecting irrigation solution. Gainor BJ, et al. **J Orthop Trauma** 1997 Feb–Mar; 11(2):121–5

Ciprofloxacin-resistant Staphylococcus epidermidis and hands [letter; comment] Burnie JP, et al. **Lancet** 1997 Mar 1;349(9052):649. Comment on: Lancet 1997 Jan 18;349(9046):167–9.

Quinolones in sweat and quinolone resistance [comment] Hawkey PM. **Lancet** 1997 Jan 18;349(9046):148–9. Comment on: Lancet 1997 Jan 18;349(9046):167–9.

Excretion of ciprofloxacin in sweat and multiresistant Staphylococcus epidermidis [see comments] Høiby N, et al. **Lancet** 1997 Jan 18;349(9046):167–9. Comment in: Lancet 1997 Jan 18;349(9046):148–9. Comment in: Lancet 1997 Mar 1;349(9052):649. Comment in: Lancet 1997 Apr 5;349(9057):1030.

Bactericidal activity of 0.5% bupivacaine with preservatives on microorganisms in the human skin flora. Sakuragi T, et al. **Reg Anesth** 1997 Mar–Apr;22(2):178–84

In-vitro activity of penicillin G plus sulbactam in comparison with other beta-lactamase inhibitor combinations and oxacillin against staphylococci. Jansen B, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):297–301

Drug delivery concepts for the efficacious prevention of foreign-body infections. Schierholz JM, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):390–401

Selection of subpopulations resistnat to amikacin and netilmicin of gentamicin-resistant clinical strains of Staphylococcus aureus and Staphylococcus epidermidis. Torres García M, et al. **Zentralbl Bakteriol** 1996 Jun; 284(1):58–66

[Bactericidal effect of acidic electrolyzed water--comparison of chemical acidic sodium hydrochloride (NaOCl) solution] Iwasawa A, et al. **Kansenshogaku Zasshi** 1996 Sep; 70(9):915–22 (Eng. Abstr.) **(Jpn)**

[Evaluation of external laboratory test results for the correct identification and determination of chemotherapeutic sensitivity of staphylococci in bacteriologic provincial laboratories of sanitary-epidemiologic stations in 1995] Kochman M, et al. **Med Dosw Mikrobiol** 1996; 48(3–4):131–40 (Eng. Abstr.) **(Pol)**

[Antimicrobial activity in Staphylococcus epidermidis biofilms on polyvinyl chloride catheters] Ramírez de Arellano E, et al. **Enferm Infecc Microbiol Clin** 1995 Dec; 13(10):581–6 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Coagulase-negative staphylococci in air samples from operating theatres. Kiss L, et al. **Acta Microbiol Immunol Hung** 1996;43(1):39–46

pH modulation of aminoglycoside resistance in Staphylococcus epidermidis harbouring 6'-N-aminoglycoside acetyltransferase. Culebras E, et al. **J Antimicrob Chemother** 1996 May;37(5):881–9

GENETICS

Distribution of a methicillin-resistance gene in urinary isolates of methicillin-resistant staphylococci examined by enzymatic detection of the polymerase chain reaction. Sakumoto M, et al. **Chemotherapy** 1996 Sep–Oct; 42(5):329–33

Genomic diversity of mec regulator genes in methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Kobayashi N, et al. **Epidemiol Infect** 1996 Oct;117(2):289–95

In vivo reaction of affinity-tag-labelled epidermin precursor peptide with flavoenzyme EpiD. Kupke T, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):25–32

Effect of leader peptide mutations on biosynthesis of the lantibiotic Pep5. Neis S, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):249–55

Cloning and characterization of femA and femB from Staphylococcus epidermidis. Alborn WE Jr, et al. **Gene** 1996 Nov 21;180(1–2):177–81

Detection of the intercellular adhesion gene cluster (ica) and phase variation in Staphylococcus epidermidis blood culture strains and mucosal isolates. Ziebuhr W, et al. **Infect Immun** 1997 Mar;65(3):890–6

Measurement of bacterial growth rates on polymers. Barton AJ, et al. **J Biomed Mater Res** 1996 Oct;32(2):271–8

Use of cleaved amplified polymorphic sequences to distinguish strains of Staphylococcus epidermidis. Calderwood SB, et al. **J Clin Microbiol** 1996 Nov; 34(11):2860–5

Species-specific and ubiquitous DNA-based assays for rapid identification of Staphylococcus epidermidis. Martineau F, et al. **J Clin Microbiol** 1996 Dec;34(12):2888–93

Molecular tracking of coagulase-negative staphylococcal isolates from catheter-related infections. Dominguez MA, et al. **Microb Drug Resist** 1996 Winter;2(4):423–9

GROWTH & DEVELOPMENT

Rapid determination of neomycin by a microbiological agar diffusion assay using triphenyltetrazolium chloride. Yamamoto CH, et al. **J AOAC Int** 1996 Mar–Apr; 79(2):434–440

The antibacterial effect of porous hydroxyapatite granules [letter] Ingram AE Jr, et al. **Plast Reconstr Surg** 1996 Nov; 98(6):1119

Growth of bacteria in platelet concentrates obtained from whole blood stored for 16 hours at 22 degrees C before component preparation. Sanz C, et al. **Transfusion** 1997 Mar;37(3):251–4

[Mechanism of bacteriopyknosis] Pal'tsyn AA, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):349–52 **(Rus)**

IMMUNOLOGY

The major 20-kDa polysaccharide of Staphylococcus epidermidis extracellular slime and its antibodies as powerful agents for detecting antibodies in blood serum and differentiating among slime-positive and -negative S. epidermidis and other staphylococci species. Karamanos NK, et al. **Arch Biochem Biophys** 1997 Jun 15;342(2):389–95

IgG subclasses specific to Staphylococcus epidermidis and Propionibacterium acnes in patients with acne vulgaris. Ashbee HR, et al. **Br J Dermatol** 1997 May;136(5):730–3

Reactive arthritis by staphylococcus epidermidis: report of an unusual case. Giordano N, et al. **Clin Rheumatol** 1996 Jan;15(1):59–61

Coagulase-negative staphylococci isolated from two cases of toxic shock syndrome lack superantigenic activity, but induce cytokine production. Lina G, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):81–6

Prostaglandin E2 modulates monocyte MHC-II (Ia) suppression in biomaterial infection. Henke PK, et al. **J Surg Res** 1997 May;69(2):372–8

ISOLATION & PURIFICATION

Coagulase-negative staphylococci in air samples from operating theatres. Kiss L, et al. **Acta Microbiol Immunol Hung** 1996;43(1):39–46

Chronic secretory otitis media: negative bacteriology. Saffer M, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):836–9

Human skin flora as a potential source of epidural abscess. Sato S, et al. **Anesthesiology** 1996 Dec;85(6):1276–82

Residual bacterial infection in the tympanic cavity following surgery for ears with chronic discharge. Gyo K, et al. **Auris Nasus Larynx** 1996;23:13–9

The positive predictive value of isolating coagulase-negative staphylococci from blood cultures [see comments] Herwaldt LA, et al. **Clin Infect Dis** 1996 Jan;22(1):14–20 . Comment in: Clin Infect Dis 1996 Aug;23(2):412. Comment in: Clin Infect Dis 1996 Aug;23(2):413–4.

Spontaneous pyomyositis due to Staphylococcus epidermidis. Yates SW, et al. **Clin Infect Dis** 1997 May;24(5):1016–7

Spontaneous obliteration of a pseudo-aneurysm complicating an aortic homograft. Federmann M, et al. **Eur J Cardiothorac Surg** 1996;10(8):705–6 (5 ref.)

Staphylococcus epidermidis catheter-related infections in a short-bowel patient. Persistence of a single strain over a two-year period. Voss A, et al. **Infect Control Hosp Epidemiol** 1996 Oct;17(10):669–71

Oral staphylococcus in older subjects with rheumatoid arthritis. Jacobson JJ, et al. **J Am Geriatr Soc** 1997 May; 45(5):590–3

Species-specific and ubiquitous DNA-based assays for rapid identification of Staphylococcus epidermidis. Martineau F, et al. **J Clin Microbiol** 1996 Dec;34(12):2888–93

Impact of chlorhexidine-silver sulfadiazine-impregnated central venous catheters on in vitro quantitation of catheter-associated bacteria [see comments] Schmitt SK, et al. **J Clin Microbiol** 1996 Mar;34(3):508–11. Comment in: J Clin Microbiol 1996 Oct;34(10):2640–1.

A comparison of methods to determine whether clinical isolates of Staphylococcus epidermidis from the same patient are related. Hedin G. **J Hosp Infect** 1996 Sep; 34(1):31–42

Detection and measurement of Staphylococcus epidermidis slime using an ELISA technique. Mempel M, et al. **Microbiol Immunol** 1996;40(2):115–9

Sonication: a useful adjunct to the microbial assessment of central venous catheters. Cozzaglio L, et al. **Nutrition** 1997 Jan;13(1):37–9

Positive vitreous cultures from eyes without signs of infectious endophthalmitis. Mames RN, et al. **Ophthalmic Surg Lasers** 1997 May;28(5):365–9

[Adhesive properties of bacteria isolated from patients with urinary tract infection to the urinary bladder] Yanagisawa N. **Nippon Hinyokika Gakkai Zasshi** 1997 Jan;88(1):24–34 (Eng. Abstr.) **(Jpn)**

[The resident staphylococcal bacterial carriage in a human

population as an index for the microecological monitoring of its habitat environment] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):71–4 (Eng. Abstr.) **(Rus)**

[The construction of a diagnostic model for the differentiation of resident and transient staphylococcal microflora in bacterial carriage] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):68–70 (Eng. Abstr.) **(Rus)**

[The dynamics of the species composition and antilysozymal activity of ejaculate microflora under the action of local hyperthermia] Ivanov IuB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):86–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Transformations of steroid sulphates by human axillary bacteria. A mechanism for human odour formation? Gower DB, et al. **Biochem Soc Trans** 1997 Feb;25(1):16S

Coagulase-negative staphylococcal infections: an update regarding recognition and management. Rupp ME. **Curr Clin Top Infect Dis** 1997;17:51–87 (261 ref.)

Comparison of slime production under aerobic and anaerobic conditions. Atmaca S, et al. **Cytobios** 1996;88(354):149–52

Expression of slime interferes with in vitro detection of host protein receptors of Staphylococcus epidermidis. Baldassarri L, et al. **Infect Immun** 1997 Apr;65(4):1522–6

In vitro bacterial adherence to hydrogel and poly(methyl methacrylate) intraocular lenses. Ng EW, et al. **J Cataract Refract Surg** 1996;22 Suppl 2:1331–5

Isolation of a new epidermin variant from two strains of Staphylococcus epidermidis--frequency of lantibiotic production in coagulase-negative staphylococci. Israil AM, et al. **Zentralbl Bakteriol** 1996 Jul;284(2–3):285–96

PATHOGENICITY

Virulence of Staphylococcus epidermidis in a mouse model: significance of extracellular slime. Deighton MA, et al. **Epidemiol Infect** 1996 Oct;117(2):267–80

[The role of Staphylococcus epidermidis persistence factors in the infectious process] Chernova OL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug;(4):81–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of plasma on adhesion of biofilm forming Pseudomonas aeruginosa and Staphylococcus epidermidis to fibrin substrate. Benson DE, et al. **ASAIO J** 1996 Sep–Oct;42(5):M655–60

Interactions between the constitutive host defences of tears and Staphylococcus epidermidis. Leitch EC, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S20–2

A 140-kilodalton extracellular protein is essential for the accumulation of Staphylococcus epidermidis strains on surfaces. Hussain M, et al. **Infect Immun** 1997 Feb; 65(2):519–24

Biofilm causes decreased production of interferon-gamma. Dasgupta MK. **J Am Soc Nephrol** 1996 Jun;7(6):877–82

Staphylococcus epidermidis adhesion to films deposited from hydroxyethylmethacrylate plasma. Morra M, et al. **J Biomed Mater Res** 1996 Jun;31(2):149–55

Association of biofilm production of coagulase-negative staphylococci with expression of a specific polysaccharide intercellular adhesin. Mack D, et al. **J Infect Dis** 1996 Oct; 174(4):881–4

Molecular basis of intercellular adhesion in the biofilm-forming Staphylococcus epidermidis. Heilmann C, et al. **Mol Microbiol** 1996 Jun;20(5):1083–91

Factors affecting Staphylococcus epidermidis adhesion to contact lenses. Fleiszig SM, et al. **Optom Vis Sci** 1996 Sep; 73(9):590–4

[The effect of therapeutic mud on the viability and persistence properties of bacteria] Abdrakhmanov AR, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug; (4):89–92 (Eng. Abstr.) **(Rus)**

[The ecological determinacy of the markers of staphylococcal persistence] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1997 Jul–Aug;(4):60–3 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of microwaves on survival of some bacterial strains. Atmaca S, et al. **Acta Microbiol Immunol Hung** 1996; 43(4):371–8

STAPHYLOCOCCUS PHAGES

CLASSIFICATION

Molecular and phage typing of Staphylococcus aureus harbouring cryptic conjugative plasmids. Udo EE, et al. **Eur J Epidemiol** 1996 Dec;12(6):637–41

Localization of prophages of serological group B and F on restriction fragments defined in the restriction map of Staphylococcus aureus NCTC 8325. Borecká P, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):203–10

[Characterization of bacteriophage nontypable patterns of S. aureus strains] Cybulski Z, et al. **Med Dosw Mikrobiol** 1995; 47(3–4):119–25 (Eng. Abstr.) **(Pol)**

GENETICS

Molecular analysis of lytic genes of bacteriophage 80 alpha of Staphylococcus aureus. Bon J, et al. **Can J Microbiol** 1997 Jul;43(7):612–6

Localization of prophages of serological group B and F on restriction fragments defined in the restriction map of Staphylococcus aureus NCTC 8325. Borecká P, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):203–10

ISOLATION & PURIFICATION

Optimization of detection and yield of methicillin-resistant Staphylococcus aureus phage type III–29 [letter] Wagenvoort JH, et al. **Infect Control Hosp Epidemiol** 1996 Apr;17(4):208–9

METABOLISM

[Bacteriophages of serologic group F converting synthesis of fibrinolysin and beta toxin in S. aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3–4):149–54 (Eng. Abstr.) **(Pol)**

[Bacteriophages of serologic group B converting synthesis of fibrinolysin in S. aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3–4):141–7 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

[Bacteriophages of serologic group B converting synthesis of fibrinolysin in S. aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3–4):141–7 (Eng. Abstr.) **(Pol)**

[Bacteriophages of serologic group F converting synthesis of fibrinolysin and beta toxin in S. aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1995;47(3–4):149–54 (Eng. Abstr.) **(Pol)**

STAPHYLOMYCIN see **VIRGINIAMYCIN**

STARCH

Perceptions of starchy food dishes: application of the Repertory Grid Method. Monteleone E, et al. **Appetite** 1997 Jun;28(3):255–65

A starch-hemoglobin resuscitative compound. Cerny LC, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 Mar; 24(2):153–60

Gastric outlet obstruction due to starch granuloma and peritonitis. Steiner Z, et al. **Eur J Pediatr Surg** 1996 Dec; 6(6):364–6

Kinetics of starch gelatinization during extrusion of tarhana, a traditional turkish wheat flour-yogurt mixture. Ibanoglu S, et al. **Int J Food Sci Nutr** 1997 May;48(3):201–4

Starch-gum interactions: nutritional and technological implications. Sudhakar V, et al. **Int J Food Sci Nutr** 1996 Mar;47(2):117–29 (90 ref.)

The role of modified food starches in baby food. Lanciers S, et al. **J La State Med Soc** 1997 Jun;149(6):211–4 (20 ref.)

Complex carbohydrates and resistant starch. Brown I. **Nutr Rev** 1996 Nov;54(11 Pt 2):S115–9 (29 ref.)

ADMINISTRATION & DOSAGE

Preference for wheat straw by lambs conditioned with intraruminal infusions of starch. Villalba JJ, et al. **Br J Nutr** 1997 Feb;77(2):287–97

Suppression of the nocturnal free fatty acid levels by bedtime cornstarch in NIDDM subjects. Axelsen M, et al. **Eur J Clin Invest** 1997 Feb;27(2):157–63

Effect of percentage of dietary forage neutral detergent fiber and source of starch on performance of lactating Jersey cows. Harmison B, et al. **J Dairy Sci** 1997 May;80(5):905–11

Native corn starch versus either cellulose or glucose in the diet and the effects on apparent magnesium absorption in goats. Schonewille JT, et al. **J Dairy Sci** 1997 Aug; 80(8):1738–43

Responses of insulin to oral glucose and fructose loads in marginally copper-deficient rats fed starch or fructose. Fields M, et al. **Nutrition** 1996 Jul–Aug;12(7–8):524–8

Phase II study of Spherex (degradable starch microspheres) injected into the hepatic artery in conjunction with doxorubicin and cisplatin in the treatment of advanced-stage hepatocellular carcinoma: interim analysis. Carr BI, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 6):S6–97–S6–99

Spherex (degradable starch microspheres) chemo-occlusion--enhancement of tumor drug concentration and therapeutic efficacy: an overview. Håkansson L, et al. **Semin Oncol** 1997 Apr;24(2 Suppl 6):S6–100–S6–109 (64 ref.)

[The effect of starch-rich single feed on the digestibility and the energy content of corn silage in cattle and sheep] Schwarz FJ, et al. **Arch Tierernahr** 1996;49(4):349–62 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Misdiagnosis of cancer due to multiple glove powder granulomas. Giercksky KE. **Eur J Surg Suppl** 1997; (579):11–4

Powder contamination of extradural catheters and implications for infection risk. Green M. **Eur J Surg Suppl** 1997;(579):39–40

Mechanisms of adhesion development and effects on wound healing. Holmdahl L. **Eur J Surg Suppl** 1997;(579):7–9 (11 ref.)

Effects of powder on infection risks and associated mechanisms. Renz H, et al. **Eur J Surg Suppl** 1997; (579):35–8

Wheat starch intolerance in patients with celiac disease. Chartrand LJ, et al. **J Am Diet Assoc** 1997 Jun;97(6):612–8

Surgical glove lubricants: from toxicity to opportunity. Woods JA, et al. **J Emerg Med** 1997 Mar–Apr;15(2):209–20 (59 ref.)

The inflammatory potential of surgical glove lubricants: Biosorb, Keoflo, calcium carbonate and Hydrocote after intravitreal injection. Park HS, et al. **Korean J Ophthalmol** 1997 Jun;11(1):51–9

Laminitis in young dairy calves fed a high starch diet and with a history of bovine viral diarrhoea virus infection. Svensson C, et al. **Vet Rec** 1997 May 31;140(22):574–7

ANALOGS & DERIVATIVES

Proton NMR spectroscopy assignment of D-glucose residues in highly acetylated starch. Laignel B, et al. **Carbohydr Res** 1997 Mar 13;298(4):251–60

Enzyme purification with aqueous two-phase systems: comparison between systems composed of pure polymers and systems composed of crude polymers. Venâncio A, et al. **J Chromatogr B Biomed Appl** 1996 May 17; 680(1–2):131–6

Solution structure of the granular starch binding domain of Aspergillus niger glucoamylase bound to beta-cyclodextrin. Sorimachi K, et al. **Structure** 1997 May 15;5(5):647–61

[The anticoagulant action of the nitric acid ester of oxidized starch] Samal' AB, et al. **Eksp Klin Farmakol** 1996 Mar–Apr;59(2):27–30 (Eng. Abstr.) **(Rus)**

ANALYSIS

Dietary starch composition and level of energy intake alter nutrient oxidation in "carbohydrate-sensitive" men. Howe JC, et al. **J Nutr** 1996 Sep;126(9):2120–9

Near-infrared diffuse reflectance spectroscopic analysis of the amounts of moisture, protein, starch, amylose, and tannin in buckwheat flours. Hong JH, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Aug;42(4):359–66

Endogenous factors responsible for the textural characteristics of buckwheat products. Ikeda K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1997 Feb;43(1):101–11

A survey of starch particle counts in the hospital environment in relation to the use of powdered latex gloves. Newsom SW, et al. **Occup Med (Oxf)** 1997 Apr;47(3):155–8

Effects of soaking, cooking and fermentation on composition, in-vitro starch digestibility and nutritive value of common beans. Barampama Z, et al. **Plant Foods Hum Nutr** 1995 Dec;48(4):349–65

Content of starch and sugars and in vitro digestion of starch by alpha-amylase in five minor millets. Krishnakumari S, et al. **Plant Foods Hum Nutr** 1995 Dec;48(4):327–33

BIOSYNTHESIS

ADP-glucose drives starch synthesis in isolated maize endosperm amyloplasts: characterization of starch synthesis and transport properties across the amyloplast envelope. Möhlmann T, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):503–9

Starch synthesis, and tuber storage protein genes are differently expressed in Solanum tuberosum and in Solanum brevidens. Bánfalvi Z, et al. **FEBS Lett** 1996 Apr 1; 383(3):159–64

CHEMICAL SYNTHESIS

Development of a statistical model for the formation of poly [acryloyl hydroxyethyl starch] microspheres. Huang LK, et al. **Pharm Res** 1997 Apr;14(4):469–74

Evaluation of a statistical model for the formation of poly [acryloyl hydroxyethyl starch] microspheres. Huang LK, et al. **Pharm Res** 1997 Apr;14(4):475–82

CHEMISTRY

Molecular weight distribution of amylose fractions obtained by aqueous leaching of corn starch. Roger P, et al. **Int J Biol Macromol** 1996 Jul;19(1):51–61

Enzyme purification with aqueous two-phase systems: comparison between systems composed of pure polymers and systems composed of crude polymers. Venâncio A, et al. **J Chromatogr B Biomed Appl** 1996 May 17; 680(1–2):131–6

Force-time curves of a rotary tablet press. Interpretation of the compressibility of a modified starch containing various amounts of moisture. Leitritz M, et al. **J Pharm Pharmacol** 1996 May;48(5):456–62

Studies on aluminium leaching from cookware in tea and coffee and estimation of aluminium content in toothpaste, baking powder and paan masala. Rajwanshi P, et al. **Sci Total Environ** 1997 Jan 30;193(3):243–9

DIAGNOSTIC USE

13C-starch breath test--comparative clinical evaluation of an indirect pancreatic function test. Löser C, et al. **Z Gastroenterol** 1997 Mar;35(3):187–94

STARCH

GENETICS

Reduced gravitropism in hypocotyls of starch-deficient mutants of Arabidopsis. Kiss JZ, et al. **Plant Cell Physiol** 1997 May;38(5):518–25

METABOLISM

Evaluation of the digestibility of nutrients in pigs by ileal cannulation technique. Szelényi-Galátai M, et al. **Acta Vet Hung** 1996;44(4):411–32

Fermentable carbohydrate exerts a urea-lowering effect in normal and nephrectomized rats. Younes H, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G515–21

Construction of a starch-utilizing yeast by cell surface engineering. Murai T, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1362–6

Raw-starch-digesting and thermostable alpha-amylase from the yeast Cryptococcus sp. S-2: purification, characterization, cloning and sequencing. Iefuji H, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):989–96

Starch degradation in chloroplasts isolated from C3 or CAM (crassulacean acid metabolism)-induced Mesembryanthemum crystallinum L. Neuhaus HE, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):945–53

Starch metabolism in tubers of transgenic potato (Solanum tuberosum) with increased ADPglucose pyrophosphorylase. Sweetlove LJ, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):493–8

Raw starch digestion. Furniss CS, et al. **Biochem Soc Trans** 1996 Aug;24(3):382S

Function of conserved tryptophans in the Aspergillus niger glucoamylase 1 starch binding domain. Williamson MP, et al. **Biochemistry** 1997 Jun 17;36(24):7535–9

Electron microscopic investigation of the diffusion of Bacillus licheniformis alpha-amylase into corn starch granules. Helbert W, et al. **Int J Biol Macromol** 1996 Oct;19(3):165–9

Resistant starch as energy. Behall KM, et al. **J Am Coll Nutr** 1996 Jun;15(3):248–54

Starch utilization by ruminants: from basics to the bunk. Huntington GB. **J Anim Sci** 1997 Mar;75(3):852–67 (117 ref.)

Effect of regulatory protein levels on utilization of starch by Bacteroides thetaiotaomicron. D'Elia JN, et al. **J Bacteriol** 1996 Dec;178(24):7180–6

Contribution of a neopullulanase, a pullulanase, and an alpha-glucosidase to growth of Bacteroides thetaiotaomicron on starch. D'Elia JN, et al. **J Bacteriol** 1996 Dec;178(24):7173–9

Characterization of four outer membrane proteins that play a role in utilization of starch by Bacteroides thetaiotaomicron. Reeves AR, et al. **J Bacteriol** 1997 Feb; 179(3):643–9

The raw starch binding domain of cyclodextrin glycosyltransferase from Bacillus circulans strain 251. Penninga D, et al. **J Biol Chem** 1996 Dec 20; 271(51):32777–84

Dietary starch composition and level of energy intake alter nutrient oxidation in "carbohydrate-sensitive" men. Howe JC, et al. **J Nutr** 1996 Sep;126(9):2120–9

Soluble amylose cornstarch is more digestible than soluble amylopectin potato starch in rats. Zhou X, et al. **J Nutr** 1997 Jul;127(7):1349–56

Effects of soaking, cooking and fermentation on composition, in-vitro starch digestibility and nutritive value of common beans. Barampama Z, et al. **Plant Foods Hum Nutr** 1995 Dec;48(4):349–65

Content of starch and sugars and in vitro digestion of starch by alpha-amylase in five minor millets. Krishnakumari S, et al. **Plant Foods Hum Nutr** 1995 Dec;48(4):327–33

In situ and in vitro ruminal starch degradation of untreated and formaldehyde-treated wheat and maize. Michalet-Doreau B, et al. **Reprod Nutr Dev** 1997 May-Jun; 37(3):305–12

Morphology of starch digestion in the horse. Kienzle E, et al. **Zentralbl Veterinarmed A** 1997 Jun;44(4):207–21

PHARMACOLOGY

Neither raw nor retrograded resistant starch lowers fasting serum cholesterol concentrations in healthy normolipidemic subjects. Heijnen ML, et al. **Am J Clin Nutr** 1996 Sep;64(3):312–8

Retrograded (RS3) but not uncooked (RS2) resistant starch lowers fecal ammonia concentrations in healthy men [letter; comment] Heijnen ML, et al. **Am J Clin Nutr** 1997 Jan; 65(1):167–9. Comment on: Am J Clin Nutr 1996 May;63(5):766–72.

Effect of high-amylose starch and oat bran on metabolic variables and bowel function in subjects with hypertriglyceridemia. Noakes M, et al. **Am J Clin Nutr** 1996 Dec;64(6):944–51

Evaluation of a snack bar containing uncooked cornstarch in subjects with diabetes. Kaufman FR, et al. **Diabetes Res Clin Pract** 1997 Feb;35(1):27–33

Suppression of the nocturnal free fatty acid levels by bedtime cornstarch in NIDDM subjects. Axelsen M, et al. **Eur J Clin Invest** 1997 Feb;27(2):157–63

Feeding resistant starch affects fecal and cecal microflora and short-chain fatty acids in rats. Kleessen B, et al. **J Anim Sci** 1997 Sep;75(9):2453–62

Consumption of retrograded (RS3) but not uncooked (RS2) resistant starch shifts nitrogen excretion from urine to feces in cannulated piglets. Heijnen ML, et al. **J Nutr** 1997 Sep; 127(9):1828–32

Dietary raw versus retrograded resistant starch enhances apparent but not true magnesium absorption in rats. Heijnen ML, et al. **J Nutr** 1996 Sep;126(9):2253–9

A high amylose (amylomaize) starch raises proximal large bowel starch and increases colon length in pigs. Topping DL, et al. **J Nutr** 1997 Apr;127(4):615–22

Effects of resistant starch- and vitamin A-supplemented diets on the promotion of precursor lesions of colon cancer in rats. Cassand P, et al. **Nutr Cancer** 1997;27(1):53–9

[The anticoagulant action of the nitric acid ester of oxidized starch] Samal' AB, et al. **Eksp Klin Farmakol** 1996 Mar-Apr;59(2):27–30 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Bile acid metabolism by colonic bacteria in continuous culture: effects of starch and pH. Christl SU, et al. **Ann Nutr Metab** 1997;41(1):45–51

THERAPEUTIC USE

Cornstarch regimens for nocturnal treatment of young adults with type I glycogen storage disease. Wolfsdorf JI, et al. **Am J Clin Nutr** 1997 May;65(5):1507–11

Dietary sucrose and starch affect dysplastic characteristics in carcinogen-induced aberrant crypt foci in rat colon. Caderni G, et al. **Cancer Lett** 1997 Mar 19;114(1-2):39–41

Pharmacokinetic rationale for chemotherapeutic drugs combined with intra-arterial degradable starch microspheres (Spherex). Johansson CJ. **Clin Pharmacokinet** 1996 Sep;31(3):231–40 (44 ref.)

A randomized, blinded trial of uncooked cornstarch to diminish nocturnal hypoglycemia at diabetes camp. Kaufman FR, et al. **Diabetes Res Clin Pract** 1995 Dec; 30(3):205–9

Partial colloid starch replacement for therapeutic plasma exchange. Owen HG, et al. **J Clin Apheresis** 1997; 12(2):87–92

Sagodana based verses rice based oral rehydration solution in the management of acute diarrhoea in Pakistani children. Ibrahim S, et al. **JPMA J Pak Med Assoc** 1997 Jan; 47(1):16–9

ULTRASTRUCTURE

Electron microscopic investigation of the diffusion of Bacillus licheniformis alpha-amylase into corn starch granules. Helbert W, et al. **Int J Biol Macromol** 1996 Oct;19(3):165–9

STARCH (BACTERIAL GLYCOGEN) SYNTHASE

CHEMISTRY

Comparison of the primary structure of waxy proteins (granule-bound starch synthase) between polyploid wheats and related diploid species. Fujita N, et al. **Biochem Genet** 1996 Dec;34(11-12):403–13

GENETICS

Silencing of waxy genes in rice containing Wx transgenes. Itoh K, et al. **Mol Gen Genet** 1997 Jul;255(4):351–8

Retrotransposon insertion into the maize waxy gene results in tissue-specific RNA processing. Marillonnet S, et al. **Plant Cell** 1997 Jun;9(6):967–78

Cloning and functional analysis of a cDNA encoding a novel 139 kDa starch synthase from potato (Solanum tuberosum L.). Abel GJ, et al. **Plant J** 1996 Dec;10(6):981–91

GBSS T-DNA inserts giving partial complementation of the amylose-free potato mutant can also cause co-suppression of the endogenous GBSS gene in a wild-type background. Flipse E, et al. **Plant Mol Biol** 1996 Jul;31(4):731–9

Tissue-specific expression in transgenic maize of four endosperm promoters from maize and rice. Russell DA, et al. **Transgenic Res** 1997 Mar;6(2):157–68

METABOLISM

Evidence that a 77-kilodalton protein from the starch of pea embryos is an isoform of starch synthase that is both soluble and granule bound. Edwards A, et al. **Plant Physiol** 1996 Sep;112(1):89–97

STARFISH

Smooth muscle contractile action of the venom from the crown-of-thorns starfish, Acanthaster planci. Karasudani I, et al. **J Toxicol Sci** 1996 Feb;21(1):11–7

Localization of S1- and S2-like immunoreactivity in the nervous system of the brittle star Amphipholis squamata (Delle Chiaje 1828). de Bremaeker N, et al. **Proc R Soc Lond B Biol Sci** 1997 May 22;264(1382):667–74

CHEMISTRY

Antiviral sulfated steroids from the ophiuroid Ophioplocus januarii. Roccatagliata AJ, et al. **J Nat Prod** 1996 Sep; 59(9):887–9

EMBRYOLOGY

Alteration of cell cycle timing and induction of surface instability in starfish blastomeres microinjected with antibodies to spectrin. Wong GK, et al. **Dev Biol** 1996 Nov 25;180(1):199–212

Activation at the germinal vesicle stage of starfish oocytes produces parthenogenetic development through the failure of polar body extrusion. Washitani-Nemoto S, et al. **Dev Growth Differ** 1997 Jun;39(3):295–303

Ultrastructure and synthesis of the extracellular matrix of Pisaster ochraceus embryos preserved by freeze substitution. Crawford BJ, et al. **J Morphol** 1997 May; 232(2):133–53

ENZYMOLOGY

Protease triggers dephosphorylation of cdc2 kinase during starfish oocyte maturation. Sawada H, et al. **Biochem Mol Biol Int** 1997 Apr;41(5):905–11

GENETICS

Effects of 1-methyladenine on nuclear Ca2+ transients and meiosis resumption in starfish oocytes are mimicked by the nuclear injection of inositol 1,4,5-trisphosphate and cADP-ribose. Santella L, et al. **Cell Calcium** 1997 Jul; 22(1):11–20

Mitochondrial DNA sequence variation in a sea star (Leptasterias spp.) species complex. Hrincevich AW, et al. **Mol Phylogenet Evol** 1996 Dec;6(3):408–15

A PCR survey of hox genes in the sea star, Asterina minor. Mito T, et al. **Mol Phylogenet Evol** 1997 Oct;8(2):218–24

Mitochondrial rDNA phylogeny of the asteroidea suggests the primitiveness of the paxillosida. Wada H, et al. **Mol Phylogenet Evol** 1996 Aug;6(1):97–106

GROWTH & DEVELOPMENT

Isolation and characterization of an endodermally derived, proteoglycan-like extracellular matrix molecule that may be involved in larval starfish digestive tract morphogenesis. Reimer CL, et al. **Dev Growth Differ** 1997 Jun;39(3):381–97

[The type of changes in the histone/DNA ratio during ontogenesis of multicellular organisms] Shabalkin IP. **Biull Eksp Biol Med** 1996 Dec;122(12):695–8 **(Rus)**

METABOLISM

Isolation and characterization of an endodermally derived, proteoglycan-like extracellular matrix molecule that may be involved in larval starfish digestive tract morphogenesis. Reimer CL, et al. **Dev Growth Differ** 1997 Jun;39(3):381–97

Primitive cytokines and cytokine receptors in invertebrates: the sea star Asterias rubens as a model of study. Legac E, et al. **Scand J Immunol** 1996 Oct;44(4):375–80

Purification of anticoagulant factor from the spine venom of the crown-of-thorns starfish, Acanthaster planci. Karasudani I, et al. **Toxicon** 1996 Aug;34(8):871–9

Cortical changes in starfish (Asterina pectinifera) oocytes during 1-methyladenine-induced maturation and fertilisation/activation. Longo FJ, et al. **Zygote** 1995 Aug; 3(3):225–39

PHYSIOLOGY

Calcium release at fertilization in starfish eggs is mediated by phospholipase Cgamma. Carroll DJ, et al. **J Cell Biol** 1997 Sep 22;138(6):1303–11

An N-terminal partial sequence of the 13 kDa Pycnopodia helianthoides sperm chemoattractant 'startrak' possesses sperm-attracting activity. Miller RL, et al. **J Exp Biol** 1996 Feb;199 (Pt 2):311–8

Structure and function of asterosaps, sperm-activating peptides from the jelly coat of starfish eggs. Nishigaki T, et al. **Zygote** 1996 Aug;4(3):237–45

STARTLE REACTION

Startle reflex abnormalities in women with sexual assault-related posttraumatic stress disorder. Morgan CA 3rd, et al. **Am J Psychiatry** 1997 Aug;154(8):1076–80

Psychophysiologic parameters of traumatic stress disorder in rats. Garrick T, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:533–7

Effects of isolation-rearing on acoustic startle and pre-pulse inhibition in Wistar and fawn hooded rats. Hall FS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:542–4

Startle deficits in women with sexual assault-related PTSD. Morgan CA 3rd, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:486–90

Safety signals and human anxiety: a fear-potentiated startle study. Grillon C, et al. **Anxiety** 1994;1(1):13–21

Startle responses in hereditary hyperekplexia. Tijssen MA, et al. **Arch Neurol** 1997 Apr;54(4):388–93

Inhibition of the human startle response is affected by both prepulse intensity and eliciting stimulus intensity. Blumenthal TD. **Biol Psychol** 1996 Oct 31;44(2):85–104

Hyperekplexia: abnormal startle response due to glycine receptor mutations. Andrew M, et al. **Br J Psychiatry** 1997 Feb;170:106–8 (30 ref.)

Startle reflex and emotion modulation impairment after a right amygdala lesion. Angrilli A, et al. **Brain** 1996 Dec; 119 (Pt 6):1991–2000

Neonatal sporadic hyperekplexia: a rare and often unrecognized entity. Scarcella A, et al. **Brain Dev** 1997 Apr;19(3):226–8

Amygdala kindling does not change emotional responding as measured by the acoustic startle response in the rat. Ebert U, et al. **Brain Res** 1996 Sep 16;733(2):193–202

NOD mice as a model for inherited deafness [letter] Atkinson M, et al. **Diabetologia** 1997 Jul;40(7):868
Identification of intracellular and extracellular domains mediating signal transduction in the inhibitory glycine receptor chloride channel. Lynch JW, et al. **EMBO J** 1997 Jan 2;16(1):110–20
The effects of clonazepam and vigabatrin in hyperekplexia. Tijssen MA, et al. **J Neurol Sci** 1997 Jul;149(1):63–7
Fetal recoil during labor to evaluate fetal well-being when heart rate monitoring is not informative. Elliott JP, et al. **Obstet Gynecol** 1997 May;89(5 Pt 2):800–2
Fetal startle response observed under ultrasonography: a good predictor of a reassuring biophysical profile. Sarinoglu C, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 1):599–602
Baseline startle amplitude and prepulse inhibition in Vietnam veterans with posttraumatic stress disorder. Grillon C, et al. **Psychiatry Res** 1996 Oct 16;64(3):169–78
Auditory startle responses in help-seeking trauma survivors. Shalev AY, et al. **Psychiatry Res** 1997 Mar 3;69(1):1–7
Withdrawal from oral cocaine in rate: ultrasonic vocalizations and tactile startle. Barros HM, et al.
Psychopharmacology (Berl) 1996 Jun;125(4):379–84
[Familial hyperekplexia: startle disease. Clinical, electrophysiological and genetic study of a family] Bernasconi A, et al. **Rev Neurol (Paris)** 1996 Jun–Jul; 152(6–7):447–50 (31 ref.) (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Effects of the PCP analog dizocilpine on sensory gating: potential relevance to clinical subtypes of schizophrenia. al-Amin HA, et al. **Biol Psychiatry** 1996 Oct 15; 40(8):744–54
Effects of local application of dopaminergic drugs into the medial prefrontal cortex of rats on latent inhibition. Broersen LM, et al. **Biol Psychiatry** 1996 Dec 1; 40(11):1083–90
Antipsychotic drug effects in a model of schizophrenic attentional disorder: a randomized controlled trial of the effects of haloperidol on latent inhibition in healthy people. Williams JH, et al. **Biol Psychiatry** 1996 Dec 1; 40(11):1135–43
Intracerebroventricular infusion of the CCKB receptor agonist pentagastrin potentiates acoustic startle. Frankland PW, et al. **Brain Res** 1996 Sep 9;733(1):129–32
Infusion of quinpirole and muscimol into the ventral tegmental area inhibits fear-potentiated startle: implications for the role of dopamine in fear expression. Munro LJ, et al. **Brain Res** 1997 Jan 23;746(1–2):231–8
DOI disrupts prepulse inhibition of startle in rats via 5-HT2A receptors in the ventral pallidum. Sipes TE, et al.
Brain Res 1997 Jun 27;761(1):97–104
Psychopharmacology of prepulse inhibition in mice. Dulawa SC, et al. **Chin J Physiol** 1996;39(3):139–46
Role of the hippocampus, the bed nucleus of the stria terminalis, and the amygdala in the excitatory effect of corticotropin-releasing hormone on the acoustic startle reflex. Lee Y, et al. **J Neurosci** 1997 Aug 15;17(16):6434–46
Role of the septum in the excitatory effect of corticotropin-releasing hormone on the acoustic startle reflex. Lee Y, et al. **J Neurosci** 1997 Aug 15;17(16):6424–33
Seroquel restores sensorimotor gating in phencyclidine-treated rats. Swerdlow NR, et al.
J Pharmacol Exp Ther 1996 Dec;279(3):1290–9
Effects of clonidine and diazepam on the acoustic startle response and on its inhibition by 'prepulses' in man. Abduljawad KA, et al. **J Psychopharmacol (Oxf)** 1997; 11(1):29–34
Sensory gating deficit following cocaine exposure in the rat. Salamy A, et al. **Neuropsychobiology** 1997;36(2):83–6
Characterization of the disruptions of prepulse inhibition and habituation of startle induced by alpha-ethyltryptamine. Martinez DL, et al. **Neuropsychopharmacology** 1997 Mar; 16(3):246–55
The CCK-B antagonist LY288513 blocks the effects of nicotine withdrawal on auditory startle. Rasmussen K, et al. **Neuroreport** 1996 Apr 10;7(5):1050–2
Mitochondrial toxin 3-nitropropionic acid produces startle reflex abnormalities and striatal damage in rats that model some features of Huntington's disease. Kodsi MH, et al. **Neurosci Lett** 1997 Aug 8;231(2):103–7
The novel atypical antipsychotic olanzapine, but not the CCK-B antagonist LY288513, blocks apomorphine-induced disruption of pre-pulse inhibition. Rasmussen K, et al. **Neurosci Lett** 1997 Jan 24;222(1):61–4
Modification of acoustic startle reactivity by cocaine administration during the postnatal period: comparison with a specific serotonin reuptake inhibitor. Dow-Edwards DL. **Neurotoxicol Teratol** 1996 May–Jun;18(3):289–96
Domoic acid: neurobehavioral and neurohistological effects of low-dose exposure in adult rats. Sobotka TJ, et al.
Neurotoxicol Teratol 1996 Nov–Dec;18(6):659–70
Competitive NMDA and strychnine-insensitive glycine-site antagonists disrupt prepulse inhibition. Furuya Y, et al.
Pharmacol Biochem Behav 1997 Aug;57(4):909–13
Effects of ddC and AZT on locomotion and acoustic startle. I: Acute effects in female rats. Morse DE, et al.
Pharmacol Biochem Behav 1997 Feb;56(2):221–8
CP-154,526: a potent and selective nonpeptide antagonist of corticotropin releasing factor receptors. Schulz DW, et al.
Proc Natl Acad Sci U S A 1996 Sep 17;93(19):10477–82
Nitric oxide synthase inhibition blocks phencyclidine-induced behavioural effects on prepulse inhibition and locomotor activity in the rat. Johansson C, et al. **Psychopharmacology (Berl)** 1997 May;131(2):167–73
Fear-potentiated startle response is remarkably similar in two laboratories. Joordens RJ, et al.
Psychopharmacology (Berl) 1996 Jul;126(2):104–9
5-HT modulation of auditory and visual sensorimotor gating: I. Effects of 5-HT releasers on sound and light prepulse inhibition in Wistar rats. Kehne JH, et al.
Psychopharmacology (Berl) 1996 Mar;124(1–2):95–106
Role of the strychnine-insensitive glycine binding site in the nucleus accumbens and anterodorsal striatum in sensorimotor gating: a behavioral and microdialysis study. Kretschmer BD, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):131–8
Evidence of acoustic startle hyperreflexia in recently detoxified early onset male alcoholics: modulation by yohimbine and m-chlorophenylpiperazine (mCPP). Krystal JH, et al. **Psychopharmacology (Berl)** 1997 Jun; 131(3):207–15
Effect of clonidine on the human acoustic startle reflex. Kumari V, et al. **Psychopharmacology (Berl)** 1996 Feb; 123(4):353–60
Effects of the cannabinoid CB1 receptor antagonist SR141716A on the behavior of pigeons and rats. Mansbach RS, et al. **Psychopharmacology (Berl)** 1996 Apr; 124(4):315–22
5-HT modulation of auditory and visual sensorimotor gating: II. Effects of the 5-HT2A antagonist MDL 100,907 on disruption of sound and light prepulse inhibition produced by 5-HT agonists in Wistar rats. Padich RA, et al.
Psychopharmacology (Berl) 1996 Mar;124(1–2):107–16
Behavioral reactivity to aversive stimuli in a transgenic mouse model of impaired glucocorticoid (type II) receptor function: effects of diazepam and FG-7142. Rochford J, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):145–52
Effects of haloperidol and SCH 23390 on acoustic startle in animals depleted of dopamine as neonates: implications for neuropsychiatric syndromes. Schwarzkopf SB, et al.
Psychopharmacology (Berl) 1996 Feb;123(3):258–66
Functional behavioral homology between rat 5-HT1B and guinea pig 5-HT1D receptors in the modulation of prepulse inhibition of startle. Sipes TE, et al.
Psychopharmacology (Berl) 1996 Jun;125(3):231–7
(-)Alprenolol potentiates the disrupting effects of dizocilpine on sensorimotor function in the rat. Zhang J, et al.
Psychopharmacology (Berl) 1997 Aug;132(3):281–8
The cardiovascular startle response: anxiety and the benzodiazepine receptor complex. Berntson GG, et al.
Psychophysiology 1997 May;34(3):348–57
Serotonin-1A antagonists attenuate the effects of nicotine withdrawal on the auditory startle response. Rasmussen K, et al. **Synapse** 1997 Oct;27(2):145–52

GENETICS

Fear-potentiated startle in two strains of inbred mice. Falls WA, et al. **Behav Neurosci** 1997 Aug;111(4):855–61
Startle disease in an Italian family by mutation (K276E): The alpha-subunit of the inhibiting glycine receptor. Seri M, et al. **Hum Mutat** 1997;9(2):185–7
Startle modulation in children at risk for anxiety disorders and/or alcoholism. Grillon C, et al.
J Am Acad Child Adolesc Psychiatry 1997 Jul;36(7):925–32
Assessment of locomotor activity, acoustic and tactile startle, and prepulse inhibition of startle in inbred mouse strains and F1 hybrids: implications of genetic background for single gene and quantitative trait loci analyses. Logue SF, et al. **Neuroscience** 1997 Oct;80(4):1075–86
Inbred strain differences in prepulse inhibition of the mouse startle response. Paylor R, et al.
Psychopharmacology (Berl) 1997 Jul;132(2):169–80
Startle disease--hyperekplexia (two sibling cases). Altunbaşak S, et al. **Seizure** 1996 Dec;5(4):313–5

PHYSIOLOGY

Sex and strain differences of acoustic startle reaction development in adolescent albino Wistar and hooded rats. Blaszczyk J, et al. **Acta Neurobiol Exp (Warsz)** 1996; 56(4):919–25
Startle syndrome: the blink reflex study suggests the private involvement of lower brainstem in the pathophysiology [letter] Gatzonis S, et al. **Acta Neurol Scand** 1996 Apr; 93(4):303–5
Roles of the amygdala and bed nucleus of the stria terminalis in fear and anxiety measured with the acoustic startle reflex. Possible relevance to PTSD. Davis M, et al.
Ann N Y Acad Sci 1997 Jun 21;821:305–31 (76 ref.)
The startle pattern in the minor form of hyperekplexia. Tijssen MA, et al. **Arch Neurol** 1996 Jul;53(7):608–13
Lesions of the central gray block conditioned fear as measured with the potentiated startle paradigm. Fendt M, et al. **Behav Brain Res** 1996 Jan;74(1–2):127–34
Contribution of ventral tegmental area dopamine neurons to expression of conditional fear: effects of electrical stimulation, excitotoxin lesions, and quinpirole infusion on potentiated startle in rats. Borowski TB, et al.
Behav Neurosci 1996 Dec;110(6):1349–64
Normal conditioned inhibition and extinction of freezing and fear-potentiated startle following electrolytic lesions of medical prefrontal cortex in rats. Gewirtz JC, et al.
Behav Neurosci 1997 Aug;111(4):712–26
The septohippocampal system is involved in prepulse inhibition of the acoustic startle response in rats. Koch M. **Behav Neurosci** 1996 Jun;110(3):468–77
Lack of a temporal gradient of retrograde amnesia following NMDA-induced lesions of the basolateral amygdala assessed with the fear-potentiated startle paradigm. Lee Y, et al. **Behav Neurosci** 1996 Aug;110(4):836–9
Olfactory bulbectomy enhances sensitization of the acoustic startle reflex produced by acute or repeated stress. McNish KA, et al. **Behav Neurosci** 1997 Feb;111(1):80–91
Involvement of the dorsal periaqueductal gray in the loss of fear-potentiated startle accompanying high footshock training. Walker DL, et al. **Behav Neurosci** 1997 Aug; 111(4):692–702
Darkness facilitates the acoustic startle reflex in humans. Grillon C, et al. **Biol Psychiatry** 1997 Sep 15;42(6):453–60
The audiogenic startle reflex in Tourette's syndrome. Sachdev PS, et al. **Biol Psychiatry** 1997 Apr 1; 41(7):796–803
Changes in sensorimotor inhibition across the menstrual cycle: implications for neuropsychiatric disorders. Swerdlow NR, et al. **Biol Psychiatry** 1997 Feb 15; 41(4):452–60
Anxiogenic effects of high illumination levels assessed with the acoustic startle response in rats. Walker DL, et al.
Biol Psychiatry 1997 Sep 15;42(6):461–71
Habituation of the auditory startle reaction is reduced during preparation for execution of a motor task in normal human subjects. Valls-Solé J, et al. **Brain Res** 1997 Mar 14; 751(1):155–9
Reduced sensorimotor reactivity following traumatic brain injury in rats. Wiley JL, et al. **Brain Res** 1996 Apr 15; 716(1–2):47–52
The acoustic startle reflex: neurons and connections. Yeomans JS, et al. **Brain Res Brain Res Rev** 1995 Nov; 21(3):301–14 (79 ref.)
Regulation of prepulse inhibition by ventral pallidal projections. Kodsi MH, et al. **Brain Res Bull** 1997; 43(2):219–28
Social isolation affects the pattern of cardiovascular responses to repetitive acoustic startle stimuli. Blanc J, et al.
Clin Exp Pharmacol Physiol 1997 Jan;24(1):40–5
Emergence of conditioned cardiac responses to an olfactory CS paired with an acoustic startle UCS during development: form and autonomic origins. Hunt PS, et al.
Dev Psychobiol 1997 Mar;30(2):151–63
Corticotropin-releasing factor in the caudal pontine reticular nucleus mediates the expression of fear-potentiated startle in the rat. Fendt M, et al. **Eur J Neurosci** 1997 Feb; 9(2):299–305
NMDA receptors in the pontine brainstem are necessary for fear potentiation of the startle response. Fendt M, et al.
Eur J Pharmacol 1996 Dec 27;318(1):1–6
Characteristics of the autonomic response in the visually evoked reflex in humans. Kolev OI, et al. **Funct Neurol** 1997 Mar-Apr;12(2):83–7
Habituation of P300 and reflex motor (startle blink) responses to repetitive startling stimuli in children. Hirano C, et al.
Int J Psychophysiol 1996 Apr–May;22(1–2):97–109
Inhibition of fear-potentiated startle can be detected after the offset of a feature trained in a serial feature-negative discrimination. Falls WA, et al.
J Exp Psychol Anim Behav Process 1997 Jan;23(1):3–14
Cholinergic activation of startle motoneurons by a pair of cerebral interneurons in the pteropod mollusk Clione limacina. Norekian TP, et al. **J Neurophysiol** 1997 Jan; 77(1):281–8
Startle phase of escape swimming is controlled by pedal motoneurons in the pteropod mollusk Clione limacina. Satterlie RA, et al. **J Neurophysiol** 1997 Jan;77(1):272–80
Activation of amygdala cholecystokininB receptors potentiates the acoustic startle response in the rat. Frankland PW, et al. **J Neurosci** 1997 Mar 1;17(5):1838–47
Brainstem encephalopathy with stimulus-sensitive myoclonus leading to respiratory arrest, but with recovery: a description of two cases and review of the literature. Kullmann DM, et al. **Mov Disord** 1996 Nov;11(6):715–8 (22 ref.)
Audiogenic startle reflex in acute hemiplegia. Voordecker P, et al. **Neurology** 1997 Aug;49(2):470–3
Adenosine A2a receptors in the nucleus accumbens modulate prepulse inhibition of the startle response. Hauber W, et al. **Neuroreport** 1997 Apr 14;8(6):1515–8
Control conditions in the fear-potentiated startle response paradigm. Joordens RJ, et al. **Neuroreport** 1997 Mar 3; 8(4):1031–4
Increased startle responses in mice carrying mutations of glycine receptor subunit genes. Koch M, et al.
Neuroreport 1996 Feb 29;7(3):806–8
Pleasure-attenuation of startle is disrupted by lesions of the nucleus accumbens. Koch M, et al. **Neuroreport** 1996 May 31;7(8):1442–6
The modulation of sensorimotor gating deficits by mesolimbic cholecystokinin. Feifel D, et al.
Neurosci Lett 1997 Jun 20;229(1):5–8
Prepulse inhibition and latent inhibition: the role of dopamine in the medial prefrontal cortex. Ellenbroek BA, et al.
Neuroscience 1996 Nov;75(2):535–42
Midlatency auditory evoked potentials and the startle response in the rat. Miyazato H, et al. **Neuroscience** 1996 Nov;75(1):289–300
The basolateral amygdala regulates sensorimotor gating of

acoustic startle in the rat. Wan FJ, et al. **Neuroscience** 1997 Feb;76(3):715–24
Vomiting attack with ACTH and ADH discharge improves startle epilepsy. Hayashi M, et al. **Pediatr Neurol** 1996 May; 14(4):322–5
Use of the Morris water maze and acoustic startle chamber to evaluate neurologic injury after asphyxial arrest in rats. Hickey RW, et al. **Pediatr Res** 1996 Jan;39(1):77–84
Acoustic startle–evoked potentials in the rat amygdala: effect of kindling. Ebert U, et al. **Physiol Behav** 1997 Sep; 62(3):557–62
Lesions of the amygdala do not affect the enhancement of the acoustic startle response by background noise. Schanbacher A, et al. **Physiol Behav** 1996 Nov;60(5):1341–6
Endocrine and behavioral effects of airpuff–startle in rats. Engelmann M, et al. **Psychoneuroendocrinology** 1996 May; 21(4):391–400
Serotonin1B receptor modulation of startle reactivity, habituation, and prepulse inhibition in wild–type and serotonin1B knockout mice. Dulawa SC, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):125–34
Effect of cigarette smoking on prepulse inhibition of the acoustic startle reflex in healthy male smokers. Kumari V, et al. **Psychopharmacology (Berl)** 1996 Nov;128(1):54–60
Prepulse inhibition decreases as startle reactivity habituates. Blumenthal TD. **Psychophysiology** 1997 Jul;34(4):446–50
Lateralized startle probes in the study of emotion. Bradley MM, et al. **Psychophysiology** 1996 Mar;33(2):156–61
Prepulse effects on the photic eyeblink reflex: evidence for startle–dazzle theory. Burke J, et al. **Psychophysiology** 1997 May;34(3):276–84
Relationships between startle and cardiovascular reactivity. Gautier CH, et al. **Psychophysiology** 1997 Jan;34(1):87–96
Fear–potentiated startle conditioning in humans: explicit and contextual cue conditioning following paired versus unpaired training. Grillon C, et al. **Psychophysiology** 1997 Jul;34(4):451–8
Effects of stress and shock anticipation on prepulse inhibition of the startle reflex. Grillon C, et al. **Psychophysiology** 1997 Sep;34(5):511–7
Fear and the startle reflex: blink modulation and autonomic response patterns in animal and mutilation fearful subjects. Hamm AO, et al. **Psychophysiology** 1997 Jan;34(1):97–107
Affective learning: awareness and aversion. Hamm AO, et al. **Psychophysiology** 1996 Nov;33(6):698–710
Affective modulation of tactile startle. Hawk LW, et al. **Psychophysiology** 1997 Jan;34(1):23–31
Tracking early and late stages of information processing: contributions of startle eyeblink reflex modification. Jennings PD, et al. **Psychophysiology** 1996 Mar; 33(2):148–55
Cerebral processing of words and the development of chronic pain. Knost B, et al. **Psychophysiology** 1997 Jul;34(4):474–81
The effect of emotional and attentional processes on blink startle modulation and on electrodermal responses. Lipp OV, et al. **Psychophysiology** 1997 May;34(3):340–7
Autonomic, electroencephalographic, and myogenic activity accompanying startle and its habituation during mid–childhood. Ornitz EM, et al. **Psychophysiology** 1996 Sep;33(5):507–13
Probe P3 and blinks: two measures of affective startle modulation. Schupp HT, et al. **Psychophysiology** 1997 Jan; 34(1):1–6
The effect of unconditional stimulus modality and intensity on blink startle and electrodermal responses. Siddle DA, et al. **Psychophysiology** 1997 Jul;34(4):406–13
Effects of foreperiod duration on reflexive and voluntary responses to intense noise bursts. Sollers JJ 3rd, et al. **Psychophysiology** 1997 Sep;34(5):518–26
Manipulating affective state using extended picture presentations. Sutton SK, et al. **Psychophysiology** 1997 Mar; 34(2):217–26
The varying time courses of attentional and affective modulation of the startle eyeblink reflex. Vanman EJ, et al. **Psychophysiology** 1996 Nov;33(6):691–7

STARVATION

see related
HUNGER

No increased mortality in later life for cohorts born during famine. Kannisto V, et al. **Am J Epidemiol** 1997 Jun 1; 145(11):987–94
Starvation for a specific amino acid induces high frequencies of rho– mutants in Saccharomyces cerevisiae. Heidenreich E, et al. **Curr Genet** 1997 May;31(5):408–13
Knowledge and power: a critique of an international relief operation. Hendrie B. **Disasters** 1997 Mar;21(1):57–76
Timing of prenatal starvation in women and offspring birth weight: an update [letter] Lumey LH, et al. **Eur J Obstet Gynecol Reprod Biol** 1995 Dec;63(2):197
Pyruvate inhibition of pyruvate dehydrogenase kinase. Effects of progressive starvation and hyperthyroidism in vivo, and of dibutyryl cyclic AMP and fatty acids in cultured cardiac myocytes. Priestman DA, et al. **FEBS Lett** 1996 Sep 16;393(2–3):174–8
Sequestration of centrally administered insulin by the brain: effects of starvation, aluminum, and TNF–alpha. Cashion MF, et al. **Horm Behav** 1996 Sep;30(3):280–6
Brain hypometabolism of glucose in low–weight depressed patients and in anorectic patients: a consequence of starvation? Delvenne V, et al. **J Affect Disord** 1997 Jun; 44(1):69–77
Starvation among athletes [letter] Flynn MA. **J Am Coll Nutr** 1996 Dec;15(6):633–4
Acid–induced gastric damage in rats is aggravated by starvation and prevented by several nutrients. Hung CR, et al. **J Nutr** 1997 Apr;127(4):630–6
Phospholipid composition of neonatal guinea pig liver and plasma: effect of postnatal food restriction. Hunt AN, et al. **Lipids** 1996 May;31(5):489–95
The consumption bomb. Butler CD. **Med Confl Surviv** 1997 Jul–Sep;13(3):209–18 (50 ref.)
Action spectrum for sporulation and photoavoidance in the plasmodium of Physarum polycephalum, as modified differentially by temperature and starvation. Nakagaki T, et al. **Photochem Photobiol** 1996 Nov;64(5):859–62
[Purification and properties of isocitrate lyase and malate synthase from fasting rat liver] Popov VN, et al. **Biokhimiia** 1996 Oct;61(10):1898–903 (Eng. Abstr.) **(Rus)**
[Role of putrescine and potassium transport in the adaptation of Escherichia coli to ammonium starvation] Tkachenko AG, et al. **Mikrobiologiia** 1996 Nov–Dec;65(6):740–4 (Eng. Abstr.) **(Rus)**
[Ramadan. A month of fasting with risk for both nocturnal overeating, dehydration and starving] Rössner S. **Lakartidningen** 1997 May 21;94(21):2017 **(Swe)**

COMPLICATIONS

The role of changes in the sensitivity of hepatic mitochondrial overt carnitine palmitoyltransferase in determining the onset of the ketosis of starvation in the rat. Drynan L, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):767–70
Starvation enhances hepatic free radical release following endotoxemia. Robinson MK, et al. **J Surg Res** 1997 May; 69(2):325–30

DRUG THERAPY

Effects of succinic acid dimethyl ester infusion on metabolic, hormonal, and enzymatic variables in starved rats. Ladriere L, et al. **JPEN J Parenter Enteral Nutr** 1996 Jul–Aug; 20(4):251–6

ENZYMOLOGY

Effects of starvation, diabetes and carbon tetrachloride intoxication on rat kidney cortex and liver pyruvate carboxylase levels. Salto R, et al. **Arch Physiol Biochem** 1996 Dec;104(7):845–50
Gene expression of mitochondrial 3–hydroxy–3–methylglutaryl–CoA synthase in a poorly ketogenic mammal: effect of starvation during the neonatal period of the piglet. Adams SH, et al. **Biochem J** 1997 May 15;324 (Pt 1):65–73
Apparent starvation–induced repression of pancreatic islet glucokinase. Gasa R, et al. **Biochem Mol Med** 1995 Dec; 56(2):99–103

EPIDEMIOLOGY

Schizoid personality disorder after prenatal exposure to famine. Hoek HW, et al. **Am J Psychiatry** 1996 Dec; 153(12):1637–9
Schizophrenia after prenatal famine [letter; comment] van Os J. **Arch Gen Psychiatry** 1997 Jun;54(6):577–8. Comment on: Arch Gen Psychiatry 1996 Jan;53(1):25–31.
Food insufficiency in Queensland. Radimer KL, et al. **Aust N Z J Public Health** 1997 Jun;21(3):303–10
Famine and schizophrenia: first–trimester malnutrition or second–trimester beriberi [editorial] Davis JO, et al. **Biol Psychiatry** 1996 Jul 1;40(1):1–3
Malnutrition and hunger in the elderly. Torres–Gil FM. **Nutr Rev** 1996 Jan;54(1 Pt 2):S7–8

GENETICS

Suppressed expression of the urea cycle enzyme genes in the liver of carnitine–deficient juvenile visceral steatosis (JVS) mice in infancy and during starvation in adulthood. Tomomura M, et al. **J Biochem (Tokyo)** 1997 Jan; 121(1):172–7

HISTORY

Historical roots of famine relief paradigms: ideas on dependency and free trade in India in the 1870s. Hall–Matthews D. **Disasters** 1996 Sep;20(3):216–30
Genetic drift and gene flow in post–famine Ireland. Relethford JH, et al. **Hum Biol** 1997 Aug;69(4):443–65
Diet, politics and disaster: the great Irish famine. McPartlin J. **Proc Nutr Soc** 1997 Mar;56(1B):211–23

METABOLISM

In vivo amino acid metabolism of gut and liver during short and prolonged starvation. de Blaauw I, et al. **Am J Physiol** 1996 Feb;270(2 Pt 1):G298–306
Glucoregulation during progressive starvation in late pregnancy in the rat. Holness MJ, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):E556–61
Nutritional value of succinic acid monoethyl ester in starvation. Ladrière L, et al. **Ann Nutr Metab** 1997; 41(2):118–25
The role of changes in the sensitivity of hepatic mitochondrial overt carnitine palmitoyltransferase in determining the onset of the ketosis of starvation in the rat. Drynan L, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):767–70
Long–term food restriction down–regulates the density of serotonin transporters in the rat frontal cortex. Huether G, et al. **Biol Psychiatry** 1997 Jun 15;41(12):1174–80
Starvation reduces norepinephrine activities in both hypothalamus and heart in rats. Gotoh M, et al. **Brain Res** 1996 Jan 15;706(2):351–4
Decreased interleukin–2 production from cultured peripheral blood mononuclear cells in human acute starvation. Sävendahl L, et al. **J Clin Endocrinol Metab** 1997 Apr; 82(4):1177–80
Maternal semistarvation and streptozotocin–diabetes in rats have different effects on the in vivo glucose uptake by peripheral tissues in their female adult offspring. Holemans K, et al. **J Nutr** 1997 Jul;127(7):1371–6
Effects of succinic acid dimethyl ester infusion on metabolic, hormonal, and enzymatic variables in starved rats. Ladriere L, et al. **JPEN J Parenter Enteral Nutr** 1996 Jul–Aug; 20(4):251–6
Tracer kinetics are of limited value to measure in vivo protein synthesis and degradation rates in muscle of anesthesized rats. Rooyackers OE, et al. **Metabolism** 1996 Oct; 45(10):1279–83
Starvation–induced decrease in the maximal binding capacity for triiodothyronine of the thyroid hormone receptor is due to a decrease in the receptor protein. Tagami T, et al. **Metabolism** 1996 Aug;45(8):970–3
Human pattern of food intake and fuel–partitioning during weight recovery after starvation: a theory of autoregulation of body composition. Dulloo AG. **Proc Nutr Soc** 1997 Mar; 56(1A):25–40 (43 ref.)
Periconceptual undernutrition resets plasma IGFBP levels and alters the response of IGFBP–1, IGFBP–3 and IGF–1 to subsequent maternal undernutrition in fetal sheep. Gallaher BW, et al. **Prog Growth Factor Res** 1995; 6(2–4):189–95

MICROBIOLOGY

Selective translocation of coliform bacteria adhering to caecal epithelium of rats during catabolic stress. Katouli M, et al. **J Med Microbiol** 1997 Jul;46(7):571–8

PATHOLOGY

The effects of undernutrition on the physical organization of rat sciatic myelin sheaths: an X–ray scattering study. Vargas V, et al. **Ann N Y Acad Sci** 1997 May 28;817:368–71

PHYSIOPATHOLOGY

Changes in macronutrient balance during over– and underfeeding assessed by 12–d continuous whole–body calorimetry. Jebb SA, et al. **Am J Clin Nutr** 1996 Sep; 64(3):259–66
Survival. Zimmerman MD, et al. **Ann Intern Med** 1997 Sep 1;127(5):405–9
Nutritional value of succinic acid monoethyl ester in starvation. Ladrière L, et al. **Ann Nutr Metab** 1997; 41(2):118–25
Age–related response of the small intestine to severe starvation and refeeding in rats. Ortega MA, et al. **Ann Nutr Metab** 1996;40(6):351–8
Effect of short–term starvation on Leydig cell function in adult rats. Grizard G, et al. **Arch Androl** 1997 May–Jun; 38(3):207–14
Regulatory peptides in the control of metabolism during starvation and exercise. Buchanan KD, et al. **Biochem Soc Trans** 1996 May;24(2):591–3 (25 ref.)
Starvation and dehydration attenuate CNS oxygen toxicity in rats. Bitterman N, et al. **Brain Res** 1997 Jun 27; 761(1):146–50
Differential catch–up in body weight and bone growth after short–term starvation in rats. Hermanussen M, et al. **Growth Regul** 1996 Dec;6(4):230–7
Unusual increase of lipogenesis in rat white adipose tissue after multiple cycles of starvation–refeeding. Kochan Z, et al. **Metabolism** 1997 Jan;46(1):10–7
Seminars in medicine of the Beth Israel Deaconess Medical Center. Neuroendocrine responses to starvation and weight loss. Schwartz MW, et al. **N Engl J Med** 1997 Jun 19; 336(25):1802–11 (87 ref.)
Neuropeptide abnormalities in anorexia nervosa. Kaye WH. **Psychiatry Res** 1996 Apr 16;62(1):65–74 (75 ref.)
Fetal insulin–like growth factor (IGF)–I and IGF–II are regulated differently by glucose or insulin in the sheep fetus. Oliver MH, et al. **Reprod Fertil Dev** 1996;8(1):167–72

PREVENTION & CONTROL

Social contract and deterring famine: first thoughts. de Waal A. **Disasters** 1996 Sep;20(3):194–205 (25 ref.)
Childhood hunger. Lewit EM, et al. **Future Child** 1997 Spring;7(1):128–44 (23 ref.)
[Possibility of rice porridge for preoperative feeding in children] Kushikata T, et al. **Masui** 1996 Aug;45(8):943–7 (Eng. Abstr.) **(Jpn)**

VETERINARY

Canine variant of factitious disorder by proxy [letter] Feldman MD. **Am J Psychiatry** 1997 Sep;154(9):1316–7
An ethicist's commentary on the case of the anorexic client who does not feed her dog. Rollin BE. **Can Vet J** 1997 May;38(5):263

Perinatal mortality in lambs in southern Brazil. Hancock RD, et al. **Trop Anim Health Prod** 1996 Nov;28(4):266–72

STASIS ULCER see **VARICOSE ULCER**

STATE DENTISTRY

Getting the message across [editorial] Grace M. **Br Dent J** 1996 Nov 9;181(9):311

Interview with Brian Mouatt [interview by Mike Grace] Mouatt B. **Br Dent J** 1997 Jul 12;183(1):5–7

ECONOMICS

NHS or private—a balanced choice [letter; comment] [see comments] Edlin PA. **Br Dent J** 1996 Dec 7–21; 181(11–12):398. Comment on: Br Dent J 1996 Sep 21;181(6):191. Comment in: Br Dent J 1997 Feb 8;182(3):86.

An assessment of capitation in the General Dental Service Contract. 1. The level of caries and its treatment in regularly attending children and adolescents. Holloway PJ, et al. **Br Dent J** 1997 Jun 14;182(11):418–23

Enough said [letter; comment] Simmons G. **Br Dent J** 1997 Apr 12;182(7):246. Comment on: Br Dent J 1996 Sep 21;181(6):220, 221–5.

Dental SIFT: a system set for change and a challenge for dental education [editorial] Scott J. **Community Dent Health** 1996 Sep;13(3):125–7

LEGISLATION & JURISPRUDENCE

'Le roi le veult'. Sholl WT. **Br Dent J** 1997 Jun 14; 182(11):407–8

ORGANIZATION & ADMINISTRATION

Professional metamorphosis [editorial] Campbell CJ. **Br Dent J** 1996 Dec 7–21;181(11–12):392–3

A novel approach to providing children's dentistry in general dental practice [see comments] Crawford A, et al. **Br Dent J** 1997 Mar 8;182(5):165–7. Comment in: Br Dent J 1997 May 24;182(10):370. Comment in: Br Dent J 1997 Jun 28;182(12):453.

An evaluation of practice leaflets provided by general dental practitioners working in multi-racial areas. Lowe PA, et al. **Br Dent J** 1997 Jan 25;182(2):64–8

Community dental practice [editorial] Clarke J. **Community Dent Health** 1997 Mar;14(1):1–3

STANDARDS

Enough said [letter; comment] Simmons G. **Br Dent J** 1997 Apr 12;182(7):246. Comment on: Br Dent J 1996 Sep 21;181(6):220, 221–5.

Wish you were here [letter] Sorrell A. **Br Dent J** 1997 Apr 26;182(8):291

TRENDS

Dental futurescope. Bettles R. **Br Dent J** 1997 Jun 14; 182(11):433–5

So who wants change? Kravitz AS. **Br Dent J** 1996 Nov 9;181(9):316–7

President's address to the General Dental Council [editorial] Seward M. **Br Dent J** 1997 May 24;182(10):363–6

Trends in the referral and treatment of new patients at a free emergency dental clinic since 1989. Thomas DW, et al. **Br Dent J** 1997 Jan 11;182(1):11–4

The shape of things to come? Watson-James D. **Br Dent J** 1997 Jan 11;182(1):31–4

STATE GOVERNMENT

Carving-out mental health benefits to Medicaid beneficiaries: a shift toward managed care. Busch S. **Adm Policy Ment Health** 1997 Mar;24(4):301–21

The effects of state intergovernmental transfers on local public mental health services. Lynch FL. **Adm Policy Ment Health** 1997 Mar;24(4):279–99

Measuring state expenditures for core public health functions. **Am J Prev Med** 1995 Nov–Dec;11(6 Suppl):58–73

State legislators' attitudes and voting intentions toward tobacco control legislation. Goldstein AO, et al. **Am J Public Health** 1997 Jul;87(7):1197–200

State health agencies' role in a more balanced and sophisticated tobacco control program [letter; comment] Lumpkin JR, et al. **Am J Public Health** 1996 Oct; 86(10):1482–3. Comment on: Am J Public Health 1996 Feb;86(2):156–8.

State services research capacity: building a state infrastructure for mental health services research. Bevilacqua JJ, et al. **Community Ment Health J** 1996 Dec; 32(6):519–33

A cost-effectiveness evaluation of newborn hemoglobinopathy screening from the perspective of state health care systems. Gessner BD, et al. **Early Hum Dev** 1996 Jul 19;45(3):257–75

The Massachusetts experience. Allen RC. **Health Aff (Millwood)** 1997 Mar–Apr;16(2):85–8

State policy issues in nonprofit conversions. Butler PA. **Health Aff (Millwood)** 1997 Mar–Apr;16(2):69–84 (38 ref.)

A road map from Nebraska. Matzke GE. **Health Aff (Millwood)** 1997 Mar–Apr;16(2):89–91

The view from Ohio. Mayton CR. **Health Aff (Millwood)** 1997 Mar–Apr;16(2):92–5

Health information systems and the role of state government. Mendelson DN, et al. **Health Aff (Millwood)** 1997 May–Jun; 16(3):106–19

The role of states in accountability for quality [comment] Riley T. **Health Aff (Millwood)** 1997 May–Jun;16(3):41–3 . Comment on: Health Aff (Millwood) 1997 May–Jun;16(3):26–40.

The California model. Schwartz JR. **Health Aff (Millwood)** 1997 Mar–Apr;16(2):96–8

State experience in regulating a changing health care system. Shriber D. **Health Aff (Millwood)** 1997 Mar–Apr; 16(2):48–68 (38 ref.)

A 'major revolution' in Texas. Vinson JW. **Health Aff (Millwood)** 1997 Mar–Apr;16(2):99–101

Self-report versus state records for identifying crashes among older drivers. Marottoli RA, et al. **J Gerontol A Biol Sci Med Sci** 1997 May;52(3):M184–7

Physician-assisted suicide: landmark Supreme Court decisions and a summary of state law. Wolfson LA. **J Ky Med Assoc** 1997 Aug;95(8):311–2 (0 ref.)

Residency training in Massachusetts: a new approach to state–university collaboration. Hanson MA, et al. **J Ment Health Adm** 1997 Winter;24(1):103–7

From the Centers for Disease Control and Prevention. Tobacco tax initiative—Oregon, 1996. **JAMA** 1997 May 28;277(20):1586–7

Managed care regulation: in the laboratory of the states. Miller TE. **JAMA** 1997 Oct 1;278(13):1102–9

States may not be able to ban assisted suicide [news] Siegel RJ. **Md Med J** 1996 Nov;45(11):902–3

Tobacco tax initiative—Oregon, 1996. **MMWR Morb Mortal Wkly Rep** 1997 Mar 21;46(11):246–8

State regulation of managed care and the Employee Retirement Income Security Act. Mariner WK. **N Engl J Med** 1996 Dec 26;335(26):1986–90

Mental health parity [letter; comment] Stone A. **Psychiatr Serv** 1997 Jul;48(7):957. Comment on: Psychiatr Serv 1997 Feb;48(2):161–4.

Healthy People 2000: meshing national and local health objectives. Sondik E. **Public Health Rep** 1996 Nov–Dec; 111(6):518–20

State optional supplementation of SSI payments, 1974–95. Ponce EO. **Soc Secur Bull** 1996 Spring;59(1):52–66

STATE HEALTH PLANNING AND DEVELOPMENT AGENCIES

Asthma. The states' challenge. Brown CM, et al. **Public Health Rep** 1997 May–Jun;112(3):198–205

STATE HEALTH PLANNING, UNITED STATES see **HEALTH PLANNING**

STATE HEALTH PLANS

The government and managed health care. Bussman JW. **Cancer** 1997 Feb 1;79(3 Suppl):656–7

Why rationing was right for Oregon [interview by Jim Montague] Garland M. **Hosp Health Netw** 1997 Feb 5; 71(3):64, 66

Oregon's health care rationing plan [letter; comment] Gates V, et al. **J Gen Intern Med** 1996 Sep;11(9):570–1. Comment on: J Gen Intern Med 1996 Feb;11(2):104–8.

State health policy analysis: on the abuse of metaphor and the pathology of variation [comment] Leichter H. **J Health Polit Policy Law** 1997 Jun;22(3):897–906. Comment on: J Health Polit Policy Law 1997 Jun;22(3):691–720. Comment on: J Health Polit Policy Law 1997 Jun;22(3):721–88. Comment on: J Health Polit Policy Law 1997 Jun;22(3):789–814. Comment on: J Health Polit Policy Law 1997 Jun;22(3):815–38. Comment on: J Health Polit Policy Law 1997 Jun;22(3):839–78.

Who is still uninsured in Minnesota? Lessons from state reform efforts. Call KT, et al. **JAMA** 1997 Oct 8; 278(14):1191–5

Provider assessments, the uninsured, and uncompensated care: Florida's Public Medical Assistance Trust Fund. Mitchell JM, et al. **Milbank Q** 1996;74(4):545–69

A mission to help, a mission of hope. Hoepfer M. **Pa Med** 1997 Feb;100(2):32–3

ECONOMICS

Determinants of US local health department expenditures, 1992 through 1993. Gordon RL, et al. **Am J Public Health** 1997 Jan;87(1):91–5

Health insurance for low-income working families. Effect on the provision of immunizations to preschool-age children. Rodewald LE, et al. **Arch Pediatr Adolesc Med** 1997 Aug;151(8):798–803

Medicaid managed care: state experiences. Rowland D. **Bull N Y Acad Med** 1996 Winter;73(2 Suppl):496–505

HMOs: a solution [letter; comment] Platt D. **Del Med J** 1996 Aug;68(8):413. Comment on: Del Med J 1996 Jun;68(6):323–4.

Managed competition and California's health care economy. Enthoven AC, et al. **Health Aff (Millwood)** 1996 Spring; 15(1):39–57

State health care reform in Massachusetts. Greenberg J, et al. **Health Aff (Millwood)** 1997 Jul–Aug;16(4):188–93

Modifying managed competition to address cost and quality. Luft HS. **Health Aff (Millwood)** 1996 Spring;15(1):23–38

Averting disaster: a conversation with the Los Angeles County 'Health Czar' [interview by John K. Iglehart] Margolin B. **Health Aff (Millwood)** 1996 Spring;15(1):86–91

Risk adjustment: the missing piece of market competition. Shewry S, et al. **Health Aff (Millwood)** 1996 Spring; 15(1):171–81

The value and use of the Qualified Medicare Beneficiary Program: early evidence from Tennessee. Ozminkowski RJ, et al. **Health Soc Work** 1997 Feb;22(1):12–9

Mental health. Budget cut here, service cut there. **Hosp Health Netw** 1996 Oct 20;70(20):50

Mental health. More care out there [news] **Hosp Health Netw** 1997 Apr 5;71(7):16

Markets and public programs: insights from Oregon and Tennessee. Gold M. **J Health Polit Policy Law** 1997 Apr; 22(2):633–66 (26 ref.)

Federal block grants and state spending: the Alcohol, Drug Abuse, and Mental Health block grant and state agency behavior. Jacobsen K, et al. **J Health Polit Policy Law** 1996 Winter;21(4):753–70

Redefining rate regulation in a competitive environment [see comments] Wallack SS, et al. **J Health Polit Policy Law** 1996 Fall;21(3):489–510. Comment in: J Health Polit Policy Law 1996 Fall;21(3):511–3.

Medicaid: a comparison of Oklahoma and surrounding states, 1990–1994 [see comments] Brandt EN Jr, et al. **J Okla State Med Assoc** 1997 Apr;90(4):135–8. Comment in: J Okla State Med Assoc 1997 May–Jun;90(5):200.

Federalism and health system reform. Prospects for state action. Marquis MS, et al. **JAMA** 1997 Aug 13;278(6):514–7

Managed care: minorities and the poor. Block SH. **Med Health R I** 1996 Jul;79(7):266–8

Case study underway. Wolff TM. **Mich Med** 1996 Apr; 95(4):12–4

Will for-profit health care give nonprofits a run for their money? Baumgarten A. **Minn Med** 1997 Apr;80(4):14–9

Minnesota: the land of nonprofit HMOs. Blewett LA, et al. **Minn Med** 1997 Apr;80(4):21–4

Welfare reform and the obstetrical care of immigrants and their newborns. Minkoff H, et al. **N Engl J Med** 1997 Sep 4;337(10):705–7

Savings from a Medicaid carve-out for mental health and substance abuse services in Massachusetts. Frank RG, et al. **Psychiatr Serv** 1997 Sep;48(9):1147–52

Mental health parity: clarifying our objectives [see comments] Hennessy KD, et al. **Psychiatr Serv** 1997 Feb;48(2):161–4 . Comment in: Psychiatr Serv 1997 Jul;48(7):957.

Mental health expenditures for services for people with severe mental illnesses [see comments] Hollingsworth EJ, et al. **Psychiatr Serv** 1997 Apr;48(4):485–90. Comment in: Psychiatr Serv 1997 Apr;48(4):429.

Medicaid block grants could be a step forward [editorial] [see comments] Torrey EF. **Psychiatr Serv** 1996 Jul; 47(7):679. Comment in: Psychiatr Serv 1996 Nov;47(11):1265–6.

Funding for consultation-liaison services in public sector-managed care plans. The experience of the Consultation-Liaison Association of Philadelphia. Alter CL, et al. **Psychosomatics** 1997 Mar–Apr;38(2):93–7

The Oregon experiment: the role of cost-benefit analysis in the allocation of Medicaid funds. Blumstein JF. **Soc Sci Med** 1997 Aug;45(4):545–54

LEGISLATION & JURISPRUDENCE

Medical necessity and defined coverage benefits in the Oregon Health Plan. Glassman PA, et al. **Am J Public Health** 1997 Jun;87(6):1053–8

Effect of Proposition 187 on mental health service use in California: a case study. Fenton JJ, et al. **Health Aff (Millwood)** 1996 Spring;15(1):182–90

Medicaid. Arizona voters up the ante. Appleby C. **Hosp Health Netw** 1997 Jan 20;71(2):64, 66

Kentucky tried reform [news] Hudson T. **Hosp Health Netw** 1997 Sep 5;71(17):30, 32

The limits of state action? The myths and realities of ERISA. Employee Retirement Income Security Act. Crittenden R. **J Am Board Fam Pract** 1996 May–Jun;9(3):208–11

Translating ideas into actions: entrepreneurial leadership in state health care reforms [see comments] Oliver TR, et al. **J Health Polit Policy Law** 1997 Jun;22(3):721–88 (98 ref.). Comment in: J Health Polit Policy Law 1997 Jun;22(3):879–96. Comment in: J Health Polit Policy Law 1997 Jun;22(3):897–906.

The practice of medicine is a privilege. Selby DM. **J Okla State Med Assoc** 1997 Apr;90(4):133

Tennessee's Traumatic Brain Injury Program. Doster J. **J Tenn Med Assoc** 1996 Mar;89(3):83, 86

Arizona overwhelmingly adopts health care initiative. Nichols AW. **JAMA** 1997 May 28;277(20):1645–8

QI as resolution to a major lawsuit. Rago B, et al. **Jt Comm J Qual Improv** 1996 Jan;22(1):48–57

Physicians should support needle exchange in Rhode Island [editorial] Lewis DC, et al. **Med Health R I** 1996 Jun; 79(6):206

Making the case for minority health [editorial] Rodriguez P. **Med Health R I** 1996 Jul;79(7):248–9

The Rhode Island Department of Health Minority Health Program. Witcher PR. **Med Health R I** 1996 Jul;79(7):255–6

Addressing '93 liability reforms. Observers beginning to see positive effects. Bouffard K. **Mich Med** 1997 May; 96(5):42–4

STATE HEALTH PLANS

MMA sets policy at 143rd annual meeting [news] **Minn Med** 1996 Nov;79(11):33, 35
Constructing the direct deal. Baumgarten A, et al. **Minn Med** 1996 Feb;79(2):10–3, 58–60
In the public interest. Moriarity J. **Minn Med** 1996 Feb; 79(2):6–7, 55–6
Can we win repeal of the 2 percent tax? Murray MJ. **Minn Med** 1996 Sep;79(9):34
The Medicaid fray. Silversmith J. **Minn Med** 1996 Feb; 79(2):43–8
Consumer clout. Wetzell S. **Minn Med** 1996 Feb;79(2):15–9
Medicaid block grants [letter; comment] Buck JA, et al. **Psychiatr Serv** 1996 Nov;47(11):1265–6. Comment on: Psychiatr Serv 1996 Jul;47(7):679.
Integrating mental health into the Oregon Health Plan. McFarland BH, et al. **Psychiatr Serv** 1997 Feb;48(2):191–3

ORGANIZATION & ADMINISTRATION

State health policy information: what worked? Feldman PH, et al. **Health Aff (Millwood)** 1997 Jan–Feb;16(1):207–10
Lessons from Arizona's Medicaid managed care program. McCall N. **Health Aff (Millwood)** 1997 Jul–Aug;16(4):194–9
A look inside Medicaid managed care. Rosenbaum S. **Health Aff (Millwood)** 1997 Jul–Aug;16(4):266–71
An evaluation of Oregon's Medicaid rationing algorithms [editorial] Tengs TO. **Health Econ** 1996 May–Jun; 5(3):171–81 (16 ref.)
Medicare/Medicaid ... 560,000 Pennsylvanians covered by Medicare were moved into a managed care program [news] **Hosp Health Netw** 1997 Apr 5;71(7):21, 23
Health care utilization for the "newly insured": results from the Washington Basic Health Plan. Martin DP, et al. **Inquiry** 1997 Summer;34(2):129–42
Primary care case management for Medicaid recipients: evaluation of the Maryland Access to Care program. Schoenman JA, et al. **Inquiry** 1997 Summer;34(2):155–70
The role of managed care: the national and Tennessee experiences. Cebrun AJ. **J Health Care Poor Underserved** 1997 Aug;8(3):384–7
Medicaid and the politics of groups: recipients, providers, and policy making [see comments] Kronebusch K. **J Health Polit Policy Law** 1997 Jun;22(3):839–78 (54 ref.) . Comment in: J Health Polit Policy Law 1997 Jun;22(3):879–96. Comment in: J Health Polit Policy Law 1997 Jun;22(3):897–906.
Laboratories and the health care marketplace: the limits of state workforce policy [see comments] Sparer MS. **J Health Polit Policy Law** 1997 Jun;22(3):789–814 (39 ref.) . Comment in: J Health Polit Policy Law 1997 Jun;22(3):879–96. Comment in: J Health Polit Policy Law 1997 Jun;22(3):897–906.
A survey of state health department compliance with the recommendations of the Institute of Medicine report, The Future of Public Health. Scutchfield FD, et al. **J Public Health Policy** 1997;18(1):13–29
The Oregon Health Plan—lessons for the nation. Second of two parts. Bodenheimer T. **N Engl J Med** 1997 Sep 4; 337(10):720–3
The Oregon Health Plan—lessons for the nation. First of two parts. Bodenheimer T. **N Engl J Med** 1997 Aug 28; 337(9):651–5
The Massachusetts Medicaid carve-out: managing care in the public sector. Patullo E, et al. **New Dir Ment Health Serv** 1996 Winter;(72):45–57
The ethical dilemmas of the Oregon health plan. Burton L. **Nurse Pract** 1996 Feb;21(2):62, 65–6, 71–2 (20 ref.)
Healthy People 2000: meshing national and local health objectives. Sondik E. **Public Health Rep** 1996 Nov–Dec; 111(6):518–20

STANDARDS

Quality in state government managed care programs: process and politics. Paterson MA, et al. **Am J Med Qual** 1996 Winter;11(4):198–204
Setting behavioral health priorities: good news and crucial lessons from the Oregon Health Plan. Sabin JE, et al. **Psychiatr Serv** 1997 Jul;48(7):883–4, 889

STATISTICS & NUMERICAL DATA

Trends in health insurance coverage in California, 1989–1993. Brown ER. **Health Aff (Millwood)** 1996 Spring; 15(1):118–30
Identification of childhood vaccine providers in Maryland. Fix AD, et al. **Md Med J** 1996 Mar;45(3):222–5
Rural enrollment in MinnesotaCare. Yawn BP, et al. **Minn Med** 1997 Apr;80(4):42–9

TRENDS

Current situation in mental health care for children in Russia. Severny AA, et al. **Eur Child Adolesc Psychiatry** 1997 Mar; 6(1):50–2
Public health and managed care: a California perspective. Breslow L. **Health Aff (Millwood)** 1996 Spring;15(1):92–9
Medicaid managed care and the emergency department: the first one hundred days. Powers RD. **J Emerg Med** 1997 May–Jun;15(3):393–6
The Medicaid managed care policy consensus for welfare recipients: a reflection of traditional welfare concerns [see comments] Grogan CM. **J Health Polit Policy Law** 1997 Jun;22(3):815–38 (17 ref.). Comment in: J Health Polit Policy Law 1997 Jun;22(3):879–96. Comment in: J Health Polit Policy Law 1997 Jun;22(3):897–906.
California public hospitals. The buck has stopped. Friedman E. **JAMA** 1997 Feb 19;277(7):577–81
The health of Rhode Island's minority population [editorial] Nolan PA. **Med Health R I** 1996 Jul;79(7):248
Digging beneath the surface of Michigan health plans. Ford MA. **Mich Med** 1996 Apr;95(4):30–2
Should we take the for-profit plunge? [editorial] Meyer CR. **Minn Med** 1997 Apr;80(4):2
For good or evil, doctors are tempted by direct contracting [editorial] Meyer CR. **Minn Med** 1996 Feb;79(2):5
Bazelon survey finds most states plan move to managed care for public mental health systems [news] **Psychiatr Serv** 1996 Aug;47(8):890–1
The South Dakota Blue Shield and Blue Cross of Iowa merger. Krafka TL. **S D J Med** 1996 Oct;49(10):386–7
Wisconsin's long-term health care system scheduled for changes. Brancel B. **Wis Med J** 1997 May;96(5):13–4

STATE MEDICINE

A national strategy for research and development: lessons from England. Black N. **Annu Rev Public Health** 1997; 18:485–505 (48 ref.)
Overcoming racism in the NHS. An authoritative central body would help [letter; comment] Bedi R. **BMJ** 1997 Jun 28;314(7098):1906–7. Comment on: BMJ 1997 Mar 1;314(7081):618–9.
Emergency only NHS predicted [news] Beecham L. **BMJ** 1996 Oct 26;313(7064):1031
Pessimistic views of the NHS. Joint commissioning is the way forward [letter] Checkland K. **BMJ** 1997 Jan 18; 314(7075):230
The rationing debate. Rationing within the NHS should be explicit. The case against [see comments] Coast J. **BMJ** 1997 Apr 12;314(7087):1118–22. Comment in: BMJ 1997 Apr 12;314(7087):1114–8.
The rationing debate: Maximising the health of the whole community. The case for [see comments] Culyer AJ. **BMJ** 1997 Mar 1;314(7081):667–9. Comment in: BMJ 1997 Mar 1;314(7081):669–72. Comment in: BMJ 1997 Jun 28;314(7098):1901.
The BMJs question time [news] Dorrell S, et al. **BMJ** 1997 Apr 26;314(7089):1218–21
The rationing debate. Rationing within the NHS should be explicit. The case for. Doyal L. **BMJ** 1997 Apr 12; 314(7087):1114–8
Tackling racism in the NHS [editorial] [see comments] Esmail A, et al. **BMJ** 1997 Mar 1;314(7081):618–9. Comment in: BMJ 1997 Jun 28;314(7098):1906. Comment in: BMJ 1997 Jun 28;314(7098):1906–7. Comment in: BMJ 1997 Jun 28;314(7098):1907.
Implications of managed care for health systems, clinicians, and patients. Fairfield G, et al. **BMJ** 1997 Jun 28; 314(7098):1895–8
The rationing debate: Maximising the health of the whole community. The case against: what the principal objective of the NHS should really be [comment] [see comments] Harris J. **BMJ** 1997 Mar 1;314(7081):669–72. Comment on: BMJ 1997 Mar 1;314(7081):667–9. Comment in: BMJ 1997 Jun 28;314(7098):1901.
Overcoming racism in the NHS. Positive aspects of multi-ethnic teams should be emphasised [letter; comment] MacFadyen UM. **BMJ** 1997 Jun 28;314(7098):1907. Comment on: BMJ 1997 Mar 1;314(7081):618–9.
Rationing health care [editorial] [see comments] Maynard A. **BMJ** 1996 Dec 14;313(7071):1499. Comment in: BMJ 1997 Feb 15;314(7079):514. Comment in: BMJ 1997 Feb 15;314(7079):514–5. Comment in: BMJ 1997 Feb 15;314(7079):515. Comment in: BMJ 1997 Mar 29;314(7085):980.
Overcoming racism in the NHS. Those who wish to discriminate should change not the candidates [letter; comment] Turner N. **BMJ** 1997 Jun 28;314(7098):1906. Comment on: BMJ 1997 Mar 1;314(7081):618–9.
Poverty to have priority in NHS [news] Warden J. **BMJ** 1997 Jun 21;314(7097):1781
New ambitions for the NHS [news] Warden J. **BMJ** 1996 Nov 16;313(7067):1225
Pessimistic views of the NHS. Doctors should stop seeing themselves as victims [letter] Watson N. **BMJ** 1997 Jan 18;314(7075):230
Clinical guidelines [editorial] West E, et al. **BMJ** 1997 Aug 9;315(7104):324
NHS takeover of prison health service proposed [news] Wise J. **BMJ** 1996 Nov 2;313(7065):1099
Children's dentistry in the GDS [letter; comment] Boyle S. **Br Dent J** 1997 Jun 28;182(12):453. Comment on: Br Dent J 1997 Mar 8;182(5):165–7.
NHS or private—a balanced choice [editorial] [see comments] Grace M. **Br Dent J** 1996 Sep 21;181(6):191. Comment in: Br Dent J 1996 Dec 7–21;181(11–12):398.
Children's dentistry in the general dental service [letter; comment] McLetchie DD. **Br Dent J** 1997 May 24; 182(10):370. Comment on: Br Dent J 1997 Mar 8;182(5):165–7.
Safety among health-care workers in the NHS. Bojanowski LM. **Br J Hosp Med** 1997 Jan 15–Feb 5;57(1–2):47–8 (5 ref.)
Research and development in the NHS. Davies SC. **Br J Hosp Med** 1996 Dec 11–1997 Jan 14;56(11):606–8
Occupational health services for health care staff [letter; comment] Hodgson ES. **Br J Hosp Med** 1994 Jan 19–Feb 1;51(1–2):70. Comment on: Br J Hosp Med 1993 Jul 14–Aug 17;50(2–3):83–5.
Training in NHS management for doctors. Iles V. **Br J Hosp Med** 1997 Feb 5–18;57(3):108–9
Transition from NHS to private practice. Perks S. **Br J Orthod** 1996 Nov;23(4):373–7
Assessment of General Dental Services orthodontic standards: the Dental Practice Board's gradings compared to PAR and IOTN. Turbill EA, et al. **Br J Orthod** 1996 Aug;23(3):211–20
A critical assessment of orthodontic standards in England and Wales (1990–1991) in relation to changes in prior approval. Turbill EA, et al. **Br J Orthod** 1996 Aug; 23(3):221–8
Debate about "in practice: the NHS market in the United Kingdom" [letter] Vienonen M. **Epidemiol Prev** 1997 Jan–Mar;21(1):1–3
Medical and dental staffing in the national health service in Scotland in 1995. Ewing DJ. **Health Bull (Edinb)** 1996 Nov; 54(6):505–13
Finding health resources on the Internet—the departure lounge. Mason J. **Health Econ** 1996 Jul–Aug;5(4):375–9
Personality and stress in consultant psychiatrists. Deary IJ, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):112–23
Commissioning genitourinary medicine services: the policy research agenda. Evans D, et al. **Int J STD AIDS** 1996 Mar–Apr;7(2):87–90
Factors influencing the provision of clinical pharmacy services in United Kingdom National Health Service hospitals. Cotter SM, et al. **Int J Technol Assess Health Care** 1996 Summer; 12(3):475–86
Getting research into practice. Sibbald B, et al. **J Eval Clin Pract** 1997 Feb;3(1):15–21 (51 ref.)
Health technology assessment and the NHS R&D initiative. Smith MA. **J Med Eng Technol** 1996 Nov–Dec;20(6):192–5
Autonomy: the need for limits. Jiwa M. **J Med Ethics** 1996 Dec;22(6):340–3 (18 ref.)
The Norwegian welfare state in transition: rationing and plurality of values as ethical challenges for the health care system. Norheim OF. **J Med Philos** 1995 Dec;20(6):639–55
Purchasing evidence: the corollary of evidence-based purchasing. Gray SF, et al. **J Public Health Med** 1997 Mar; 19(1):6–10
Training public health practitioners in the National Health Service [editorial] Rae M, et al. **J Public Health Med** 1997 Mar;19(1):1–2
Health in the NHS [letter] Waldron HA. **J R Coll Physicians Lond** 1996 May–Jun;30(3):271–2
A role model of rigidity [editorial] **Lancet** 1996 Nov 9; 348(9037):1253
The NHS drops down the waiting list [editorial] **Lancet** 1996 Oct 19;348(9034):1043
Health inequality: the UK's biggest issue [editorial; comment] **Lancet** 1997 Apr 26;349(9060):1185. Comment on: Lancet 1997 Jun 28;349(9069):1915.
Rethink on screening for breast cancer [letter] Baum M. **Lancet** 1997 Sep 13;350(9080):810–1
Vandals at the gates of medicine—have they been repulsed or are they over the top [editorial] Faria MA Jr. **Surg Neurol** 1997 Jun;47(6):584–7
[In practice: the market and the British National Health Service] **Epidemiol Prev** 1996 Oct–Dec;20(4):279–91 **(Ita)**

ECONOMICS

Clinical value of computed tomography scanning and magnetic resonance imaging: studies in the United Kingdom. Dixon AK. **Acad Radiol** 1996 Apr;3 Suppl 1:S49–50
The impact of socialized medicine on cost-effectiveness in Spain. Pedrosa CS. **Acad Radiol** 1996 Apr;3 Suppl 1:S120
Nonprescription drugs in Hungary [letter] Fábián L, et al. **Am J Health Syst Pharm** 1997 May 15;54(10):1207
Promoting efficiency in the NHS: problems with the labour productivity index [see comments] Appleby J. **BMJ** 1996 Nov 23;313(7068):1319–21. Comment in: BMJ 1997 Feb 1;314(7077):374.
The private finance initiative [editorial; comment] Boyle S. **BMJ** 1997 Apr 26;314(7089):1214–5. Comment on: BMJ 1997 Apr 26;314(7089):1266–71.
Should trusts be allowed to fail? [editorial] Chantler C, et al. **BMJ** 1997 May 31;314(7094):1566
Funding the NHS. Is the NHS underfunded? Dixon J, et al. **BMJ** 1997 Jan 4;314(7073):58–61
Funding the NHS. A little local difficulty? Dixon J, et al. **BMJ** 1997 Jan 18;314(7075):216–9
Few government forecasts of public expenditure have been realistic [letter; comment] Dixon J. **BMJ** 1997 Jul 12; 315(7100):120–1. Comment on: BMJ 1997 Mar 29;314(7085):974.
Trends in NHS expenditure [letter] [see comments] Dunnigan MG. **BMJ** 1997 Mar 29;314(7085):974. Comment in: BMJ 1997 Jul 12;315(7100):120–1.
Funding the NHS. Is the NHS sustainable? Harrison A, et al. **BMJ** 1997 Jan 25;314(7076):296–8
Can the NHS cope in future? Harrison A, et al. **BMJ** 1997 Jan 11;314(7074):139–42
The rationing debate. Defining a package in healthcare services the NHS is responsible for. The case against [see

comments] Klein R. **BMJ** 1997 Feb 15;314(7079):506–9. Comment in: BMJ 1997 May 17;314(7092):1484.

The rationing debate. Defining a package of healthcare services the NHS is responsible for. The case for [see comments] New B. **BMJ** 1997 Feb 15;314(7079):503–5. Comment in: BMJ 1997 May 17;314(7092):1484.

Funding research in the NHS [editorial] Peters K, et al. **BMJ** 1996 Nov 30;313(7069):1344–5

What happens when the private sector plans hospital services for the NHS: three case studies under the private finance initiative. NHS Consultants' Association, Radical Statics Health Group, and the NHS Support Federation [see comments] Pollock AM, et al. **BMJ** 1997 Apr 26; 314(7089):1266–71. Comment in: BMJ 1997 Apr 26;314(7089):1214–5. Comment in: BMJ 1997 May 31;314(7094):1619–20. Comment in: BMJ 1997 May 31;314(7094):1620; discussion 1621. Comment in: BMJ 1997 May 31;314(7094):1620–1. Comment in: BMJ 1997 May 31;314(7094):1621.

Dutch plan to tackle waiting lists [news] Sheldon T. **BMJ** 1997 Jan 11;314(7074):94

An assessment of capitation in the General Dental Service contract 2. Patterns of treatment provided to regularly attending patients. Mellor AC, et al. **Br Dent J** 1997 Jun 28;182(12):460–4

Healthcare for the millennium: can we prevent a funding nightmare? [editorial] Jackson G. **Br J Clin Pract** 1996 Dec; 50(8):421

Pricing in the NHS. Ellwood S. **Br J Hosp Med** 1996 Sep 18–Oct 1;56(6):299–301

Value for money in the NHS. Woolley K. **Br J Hosp Med** 1997 Mar 5–18;57(5):230–1

An index of need for psychiatric services based on in-patient utilisation [see comments] Smith P, et al. **Br J Psychiatry** 1996 Sep;169(3):308–16; discussion 317–21 . Comment in: Br J Psychiatry 1996 Dec;169(6):792.

The cost of inpatient care for acute infectious intestinal disease in England from 1991 to 1994. Djuretic T, et al. **Commun Dis Rep CDR Rev** 1996 Apr 26;6(5):R78–80

Radiology in Finland. Soimakallio S. **Eur Radiol** 1997; 7(5):759–60

Community-acquired pneumonia: the annual cost to the National Health Service in the UK. Guest JF, et al. **Eur Respir J** 1997 Jul;10(7):1530–4

Market concentration in secondary health services under a purchaser-provider split: the New Zealand experience. Ashton T, et al. **Health Econ** 1997 Jan–Feb;6(1):43–56

NHS contracts: an agency approach. Levaggi R. **Health Econ** 1996 Jul–Aug;5(4):341–52

Contracting in the NHS quasi-market. Raftery J, et al. **Health Econ** 1996 Jul–Aug;5(4):353–62

The impact of health care policy initiatives on productivity. Tambour M. **Health Econ** 1997 Jan–Feb;6(1):57–70

Impact of the 1991 NHS reforms on the availability and use of coronary revascularisation in the UK (1987–1995). Black N, et al. **Heart** 1996 Dec;76(4 Suppl 4):1–31

Cardiovascular disease prevention and the NHS reforms. Mant J, et al. **J Cardiovasc Risk** 1996 Oct;3(5):435–9

Cochrane Lecture. All cost effective treatments should be free ... or, how Archie Cochrane changed my life! Williams A. **J Epidemiol Community Health** 1997 Apr;51(2):116–20

"Socialized medicine," resource allocation and two-tiered health care—the Danish experience. Holm S. **J Med Philos** 1995 Dec;20(6):631–7

The internal market—exposing clinical services to competitive tendering. Florida-James PJ. **J Public Health Med** 1997 Mar;19(1):23–8

Nostalgia ain't what it used to be [comment] Chantler C. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):123–4. Comment on: J R Coll Physicians Lond 1997 Mar–Apr;31(2):122.

From managed competition to managed cooperation: theory and lessons from the British experience. Light DW. **Milbank Q** 1997;75(3):297–341 (131 ref.)

Diagnosing British health care [letter; comment] Maxwell JG. **N C Med J** 1996 May–Jun;57(3):127. Comment on: N C Med J 1996 Mar–Apr;57(2):92–07.

A limited free eye test? [editorial] Harrison R. **Practitioner** 1997 Apr;241(1573):171

Lessons for U.S. managed care from the British National Health Service, II: Setting priorities. Sabin JE, et al. **Psychiatr Serv** 1997 Apr;48(4):469–70, 482

Effects of mental health services reform on clinical practice in the United Kingdom. Shepherd G, et al. **Psychiatr Serv** 1996 Dec;47(12):1351–5

The national breast screening service: is it economically efficient? Torgerson DJ, et al. **QJM** 1997 Jun;90(6):423–5

Economic evaluation under managed competition: evidence from the U.K. Drummond M, et al. **Soc Sci Med** 1997 Aug;45(4):583–95

Head injury rehabilitation in the U.K.: an economic perspective. McGregor K, et al. **Soc Sci Med** 1997 Jul; 45(2):295–303 (65 ref.)

[The Canadian health system and its financing] Solórzano FX. **Rev Panam Salud Publica** 1997 Mar;1(3):180–5 (Eng. Abstr.) **(Spa)**

HISTORY

The Woolf Report and after. Tumim JS. **Clio Med** 1995; 34:163–7; discussion 168–70

Social workers and national health care: are there lessons from Great Britain? Dworkin J. **Health Soc Work** 1997 May;22(2):117–23

An important episode. Horder J. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):206–7

Growing old in the city: public health and the elderly in Leicester, 1948–74. Welshman J. **Med Hist** 1996 Jan; 40(1):74–89

The British National Health Service [editorial] Wilson DG. **S Afr Med J** 1996 Dec;86(12):1529–31

LEGISLATION & JURISPRUDENCE

UK government proposes health action zones [news] Beecham L. **BMJ** 1997 Jul 5;315(7099):7

At last, a public health minister [editorial] [see comments] Olsen N. **BMJ** 1997 May 24;314(7093):1498–9. Comment in: BMJ 1997 Jul 5;315(7099):54. Comment in: BMJ 1997 Jul 5;315(7099):54–5. Comment in: BMJ 1997 Jul 5;315(7099):55.

The Health of the Nation 4 years on: what have we done, what must we do? Troop P, et al. **Br J Hosp Med** 1997 Feb 5–18;57(3):81–2, 99–100 (9 ref.)

Mental health review tribunals. Time for a change? [editorial] Crimlisk H, et al. **Br J Psychiatry** 1996 Dec;169(6):678–81

Legislating community care: the British experience, with U.S. comparisons. Filinson R. **Gerontologist** 1997 Jun; 37(3):333–40

ORGANIZATION & ADMINISTRATION

Health care system reform in the United Kingdom. Dawson P. **Acad Radiol** 1996 Nov;3(11):954–7

The role of the physician in geriatric medicine in the ageing society. In management. Severs MP. **Age Ageing** 1994;23 Suppl 3:S39–42

Resource allocation in the National Health Service. Newdick C. **Am J Law Med** 1997;23(2–3):291–318

Are the Health of the Nation's targets attainable? Postal survey of general practitioner's views. Cheung P, et al. **BMJ** 1997 Apr 26;314(7089):1250–1

Primary care: opportunities and threats. Deregulating primary care. Coulter A, et al. **BMJ** 1997 Feb 15; 314(7079):510–3

Devolution and the Scottish NHS [editorial] Currie C, et al. **BMJ** 1997 Jun 28;314(7098):1848

The rationing debate. Central government should have a greater role in rationing decisions. The case against [comment] Harrison S. **BMJ** 1997 Mar 29;314(7085):970–3 . Comment on: BMJ 1997 Mar 29;314(7085):967–70.

The rationing debate. Central government should have a greater role in rationing decisions. The case for [see comments] Lenaghan J. **BMJ** 1997 Mar 29; 314(7085):967–70. Comment in: BMJ 1997 Mar 29;314(7085):970–3.

What will a primary care led NHS mean for GP workload? The problem of the lack of an evidence base. Pedersen LL, et al. **BMJ** 1997 May 3;314(7090):1337–41

Save our service [see comments] Richards P, et al. **BMJ** 1997 Jun 14;314(7096):1756–8. Comment in: BMJ 1997 Jun 14;314(7096):1705–6.

Health reforms: a New Zealand perspective [editorial] Coster G, et al. **Br J Gen Pract** 1996 Jul;46(408):391–2

General practitioners and family doctors in the Russian Federation. Ryan M, et al. **Br J Gen Pract** 1996 Aug; 46(409):487–9

Evolving health care [editorial] Dorrell S. **Br J Hosp Med** 1996 Aug 21–Sep 3;56(4):128–30

Human resource issues in the NHS. Goose ME. **Br J Hosp Med** 1995 Dec 13–1996 Jan 16;54(11):587–8, 590

Purchasing and providing in the NHS: the three markets. Harvey S. **Br J Hosp Med** 1996 Oct 2–15;56(7):365–6

Whither Whitley? Heron R. **Br J Hosp Med** 1997 Mar 19–Apr 1;57(6):285–6

Psychiatry and the Health of the Nation: the view from the Department of Health. Jenkins R. **Br J Hosp Med** 1996 Aug 21–Sep 3;56(4):155–8 (26 ref.)

Outposts and regions. Kane E. **Br J Hosp Med** 1996 Jun 5–18;55(11):717–8

Promoting the Health of the Nation. Langlands A. **Br J Hosp Med** 1996 Aug 21–Sep 3;56(4):171–2

The Patient's Charter. Latham S, et al. **Br J Hosp Med** 1996 Jul 10–Aug 20;56(2–3):109–10

Rationing health care. Maynard A. **Br J Hosp Med** 1996 Nov 20–Dec 10;56(10):549–50

Professionals in the NHS. Normand C. **Br J Hosp Med** 1996 Oct 16–Nov 5;56(8):424–5

Organizational development. Oakley P. **Br J Hosp Med** 1996 May 1–14;55(9):591–2 (14 ref.)

Patient/doctor relationships in the new NHS [see comments] Turner-Warwick M. **Br J Hosp Med** 1996 Jun 19–Jul 9; 56(1):46–8. Comment in: Br J Hosp Med 1997 Apr 2–15;57(7):352.

UK general practice fundholding [editorial] Peckham S. **Can Fam Physician** 1997 Sep;43:1485–7, 1492–5 (19 ref.) **(Eng, Fre)**

Health reform. Kaiser goes globe-trotting. Hagland M. **Hosp Health Netw** 1996 Nov 20;70(22):40, 42

Renewing the National Health Service: Labour's agenda for a healthier Britain. **Int J Health Serv** 1996;26(2):269–308 (0 ref.)

Beyond ideology: the emerging roles of New Zealand's crown health enterprises. Barnett P, et al. **Int J Health Serv** 1997;27(1):89–108

Health care system reforms in western European countries: the relevance of health care organization. Elola J. **Int J Health Serv** 1996;26(2):239–51 (56 ref.)

Policy and ideology: the politics of post-reform health policy in the United Kingdom. Fierlbeck K. **Int J Health Serv** 1996;26(3):529–46 (43 ref.)

Industrial relations effects of English health care reforms on doctors. Loewenberg JJ. **Int J Health Serv** 1996; 26(4):611–23

Rethinking the western construction of the welfare state. Walker A, et al. **Int J Health Serv** 1996;26(1):67–92 (69 ref.)

Whither the acute medical patient? Wardle TD. **J Accid Emerg Med** 1997 May;14(3):167–9

An analysis of nursing in context: the effects of current health policy. Antrobus S. **J Adv Nurs** 1997 Mar;25(3):447–53 (36 ref.)

Utilizing research findings in nursing: policy and practice considerations. Cavanagh SJ, et al. **J Adv Nurs** 1996 Nov; 24(5):1083–8 (48 ref.)

Rationing and evidence-based medicine [editorial] Hunter DJ. **J Eval Clin Pract** 1996 Feb;2(1):5–8 (12 ref.)

The progress of lay involvement in the NHS Research and Development Programme. Oliver S. **J Eval Clin Pract** 1996 Nov;2(4):273–80

Changing priorities in residential medical and social services. Greaves D. **J Med Ethics** 1997 Apr;23(2):77–81

Morality, consumerism and the internal market in health care [see comments] Sorell T. **J Med Ethics** 1997 Apr;23(2):71–6 . Comment in: J Med Ethics 1997 Apr;23(2):67–8.

Enterprise association or civil association? The UK national health service. Edgar A. **J Med Philos** 1995 Dec; 20(6):669–88

For debate. Local government and the National Health Service: the new agenda. Clarke M, et al. **J Public Health Med** 1997 Mar;19(1):3–5

In practice: the NHS market in the United Kingdom. Health Policy Network of the National Health Service Consultant's Association and the National Health Service Support Federation. **J Public Health Policy** 1995; 16(4):452–91 (53 ref.)

A change of mind [editorial] [see comments] Black D. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):122. Comment in: J R Coll Physicians Lond 1997 Mar–Apr;31(2):123–4.

Education and training in a white water world. Boyd RD. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):193–7

The management myth. Horner JS. **J R Coll Physicians Lond** 1997 Mar–Apr;31(2):149–52; discussion 152–4

The privatization of the National Health Service. Butler J. **J R Soc Med** 1997 Jan;90(1):3–7

Does the National Health Service want hospital-at-home? [see comments] Fulop NJ, et al. **J R Soc Med** 1997 Apr; 90(4):212–5. Comment in: J R Soc Med 1997 Apr;90(4):181–2.

Private psychiatry and the NHS [letter; comment] Harris MJ. **J R Soc Med** 1997 Apr;90(4):237–8. Comment on: J R Soc Med 1997 Jan;90(1):1–2.

Health service reform: the perceptions of medical specialists in Australia (New South Wales), the United Kingdom and New Zealand [see comments] Perkins RJ, et al. **Med J Aust** 1997 Aug 18;167(4):201–4. Comment in: Med J Aust 1997 Aug 18;167(4):184–5.

Status and development of critical incident stress management services in the United Kingdom National Health Service and other emergency services combined: 1993–1996. Orner RJ, et al. **Occup Med (Oxf)** 1997 May; 47(4):203–9

The cost of caring: a view of Britain's delivery of health care. Crawshaw R. **Pharos** 1996 Winter;59(1):11–5

A language of health in action: read codes, classifications and groupings. Stuart-Buttle CD, et al. **Proc AMIA Annu Fall Symp** 1996;:75–9

"Popular" health and the state: dialectics of the peace process in El Salvador. Smith-Nonini S. **Soc Sci Med** 1997 Mar; 44(5):635–45

STANDARDS

Quality and accreditation in clinical chemistry laboratories analysis in the National Health Service. Davies K, et al. **Analyst** 1997 Mar;122(3):297–9

Many trusts find labour productivity index useful [letter; comment] Brown C. **BMJ** 1997 Feb 1;314(7077):374. Comment on: BMJ 1996 Nov 23;313(7068):1319–21.

The real ethics of rationing. Light DW. **BMJ** 1997 Jul 12; 315(7100):112–5

Private practice. Same standards of staffing and equipment should apply in NHS and private sector [letter] Savage A. **BMJ** 1996 Nov 30;313(7069):1401

James Mackenzie Lecture 1996. Shaping our ends: the ethics of respect in a well-led NHS. Higgs R. **Br J Gen Pract** 1997 Apr;47(417):245–9

Equity in health care utilization: further tests based on hurdle models and Swedish micro data. Gerdtham UG. **Health Econ** 1997 May–Jun;6(3):303–19

Improving patient care in the UK: clinical audit in the Oxford Region. Gillies A. **Int J Qual Health Care** 1996 Apr; 8(2):141–52

Using clinical audit to promote evidence-based medicine and clinical effectiveness—an overview of one health authority's experience. Auplish S. **J Eval Clin Pract** 1997

Feb;3(1):77–82
User involvement in clinical audit: a review of developments and issues of good practice. Kelson M. **J Eval Clin Pract** 1996 May;2(2):97–109 (109 ref.)
Brief encounter: a dialogue between a philosopher and an NHS manager on the subject of 'quality'. Loughlin M. **J Eval Clin Pract** 1995 Nov;1(2):81–5
Purchasing quality in clinical practice: what on Earth do we mean? Miles A, et al. **J Eval Clin Pract** 1995 Nov; 1(2):87–95 (57 ref.)
Clinical audit in the National Health Service: fact or fiction? Miles A, et al. **J Eval Clin Pract** 1996 Feb;2(1):29–35 (53 ref.)
The Total Health Care Audit System: a systematic methodology for clinical practice evaluation and development in NHS provider organizations. Miles A, et al. **J Eval Clin Pract** 1996 Feb;2(1):37–64 (53 ref.)
The involvement of pharmacists in professional and clinical audit in the UK: a review and assessment of their potential role. Panton R, et al. **J Eval Clin Pract** 1996 Aug;2(3):193–8 (53 ref.)
Quality improvement in Swedish health care. Palmberg M. **Jt Comm J Qual Improv** 1997 Jan;23(1):47–54 (1 ref.)
Standards of medical care in UK [letter] Ward JD. **Lancet** 1997 Mar 8;349(9053):736
Limitation and medical negligence. Lewis CJ. **Med Leg J** 1997;65 (Pt 2):86–98

STATISTICS & NUMERICAL DATA

Audit commission's report was based on large samples and up to date data [letter] Waite RK, et al. **BMJ** 1996 Dec 14;313(7071):1548
The provision of psychiatric care in southern Italy. Results from the 'Psychiatry in Southern Italy's Services' (De PISIS) survey. Marino S, et al. **Int J Soc Psychiatry** 1996 Autumn;42(3):181–92
[Need-based resource allocation––experiences with the RAWP formula in Great Britain] Brand H, et al. **Gesundheitswesen** 1997 Jul;59(7):441–6 (Eng. Abstr.) **(Ger)**

TRENDS

The future of the NHS [editorial] [see comments] Ham C. **BMJ** 1996 Nov 23;313(7068):1277–8. Comment in: BMJ 1997 Feb 1;314(7077):370.
Future of the NHS will be one of change [letter; comment] Mackay K. **BMJ** 1997 Feb 1;314(7077):370. Comment on: BMJ 1996 Nov 23;313(7068):1277–8.
The future of healthcare systems [editorial] Smith R. **BMJ** 1997 May 24;314(7093):1495–6
Community psychiatry: central policy, local implementation [editorial] O'Grady JC. **Br J Psychiatry** 1996 Sep; 169(3):259–62
Psychiatry and the politics of the underclass [editorial] [see comments] Thomas P, et al. **Br J Psychiatry** 1996 Oct; 169(4):401–4. Comment in: Br J Psychiatry 1997 Feb;170:191. Comment in: Br J Psychiatry 1997 Feb;170:191–2.
Child Health Surveillance in England and Wales: the good news. Butler JR. **Child Care Health Dev** 1997 Jul; 23(4):327–37
Child Health Surveillance in England and Wales: the bad news. Butler JR. **Child Care Health Dev** 1997 Jul; 23(4):339–54
The ghost of health services past: comparing British health policy of the 1930s with the 1980s and 1990s. Powell MA. **Int J Health Serv** 1996;26(2):253–68 (80 ref.)
The undergraduate surgical curriculum in a changing National Health Service. Rennie JA, et al. **J R Soc Med** 1997 May;90(5):244–6
Health sector reform: lessons from China. Bloom G, et al. **Soc Sci Med** 1997 Aug;45(3):351–60 (45 ref.)
Staying single in the 1990s: single-handed practitioners in the new National Health Service. Lunt N, et al. **Soc Sci Med** 1997 Aug;45(3):341–9 (47 ref.)
Socialized medicine––the other side of the story [editorial] Harned MA. **W V Med J** 1997 Mar–Apr;93(2):55
[Public health in the socialized medicine state (editorial)] Baier H. **Versicherungsmedizin** 1996 Oct 1;48(5):153–4 **(Ger)**

UTILIZATION

Ethnicity, equity and the use of health services in the British NHS. Smaje C, et al. **Soc Sci Med** 1997 Aug;45(3):485–96

STATE-OF-THE-ART REVIEW see **REVIEW LITERATURE**

STATEWIDE HEALTH COORDINATING COUNCILS see **HEALTH PLANNING COUNCILS**

STATIC ELECTRICITY see **ELECTROSTATICS**

STATISTICAL BIAS see **BIAS (EPIDEMIOLOGY)**

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STATISTICS

see related
BIBLIOMETRICS
BIOMETRY
META-ANALYSIS
MODELS, STATISTICAL
PSYCHOMETRICS
SOCIOMETRIC TECHNIQUES

Statistical methodology: II. Reliability and validity assessment in study design, Part B. Karras DJ. **Acad Emerg Med** 1997 Feb;4(2):144–7
Statistical methodology: II. Reliability and variability assessment in study design, Part A. Karras DJ. **Acad Emerg Med** 1997 Jan;4(1):64–71
Power error [letter] Weinberger M, et al. **Acad Emerg Med** 1997 Aug;4(8):838–9
A common misconception about p-values and its consequences. Ranstam J. **Acta Orthop Scand** 1996 Oct; 67(5):505–7
Improving rater agreement studies [letter; comment] Hutchinson TP. **AJR Am J Roentgenol** 1997 May; 168(5):1382–3. Comment on: AJR Am J Roentgenol 1996 Mar;166(3):517–21.
Technology assessment in critical care: understanding statistical analyses used to assess agreement between methods of clinical measurement [letter; comment] Biles CM. **Am J Crit Care** 1996 Nov;5(6):461–2. Comment on: Am J Crit Care 1996 May;5(3):207–16.
Statistics usage in the American Journal of Obstetrics and Gynecology [letter; comment] Hogan JW. **Am J Obstet Gynecol** 1997 May;176(5):1118–9. Comment on: Am J Obstet Gynecol 1996 Nov;175(5):1138–41.
Review of statistics usage in the American Journal of Obstetrics and Gynecology [see comments] Welch GE 2nd, et al. **Am J Obstet Gynecol** 1996 Nov;175(5):1138–41. Comment in: Am J Obstet Gynecol 1997 May;176(5):1118–9.
Low power, type II errors, and other statistical problems in recent cardiovascular research. Williams JL, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):H487–93
Annotation: what can be done about missing data? Approaches to imputation [comment] Heitjan DF. **Am J Public Health** 1997 Apr;87(4):548–50. Comment on: Am J Public Health 1997 Apr;87(4):673–6.
Statistics in the journal––significance, confidence, and all that [editorial] Northridge ME, et al. **Am J Public Health** 1997 Jul;87(7):1092–5
A statistics primer. Power analysis and sample size determination. Greenfield ML, et al. **Am J Sports Med** 1997 Jan–Feb;25(1):138–40
A statistics primer. P values: probability and clinical significance. Greenfield ML, et al. **Am J Sports Med** 1996 Nov–Dec;24(6):863–5
A statistics primer. Statistical terminology––Part 2. Wojtys EM, et al. **Am J Sports Med** 1996 Jul–Aug;24(4):564–5
Study power inadequate to reject ondansetron [letter; comment] Slade JM. **Anaesthesia** 1997 Jan;52(1):90–1. Comment on: Anaesthesia 1996 Sep;5199):880–2.
The concept of uncertainty as applied to chemical measurements. Horwitz W, et al. **Analyst** 1997 Jun; 122(6):615–7
Use the correct statistical test [letter; comment] Sneyd JR, et al. **Anesth Analg** 1997 Feb;84(2):465–6. Comment on: Anesth Analg 1996 Jul;83(1):92–6.
A permutation test for the robust sib–pair linkage method. Wan Y, et al. **Ann Hum Genet** 1997 Jan;61 (Pt 1):79–87
On Fisher's exact test for detecting gametic disequilibrium between DNA polymorphisms. Zapata C, et al. **Ann Hum Genet** 1997 Jan;61 (Pt 1):71–7
A return to Farr and Nightingale [letter; comment] Vandenbroucke JP, et al. **Ann Intern Med** 1997 Jul 15; 127(2):170–1. Comment on: Ann Intern Med 1996 Dec 15;125(12):1014.
The seven deadly sins of statistical analysis [published erratum appears in Ann Plast Surg 1997 Jan;38(1):87–8] Kuzon WM Jr, et al. **Ann Plast Surg** 1996 Sep;37(3):265–72
Statistics notes. Units of analysis. Altman DG, et al. **BMJ** 1997 Jun 28;314(7098):1874 (7 ref.)
Cronbach's alpha. Bland JM, et al. **BMJ** 1997 Feb 22; 314(7080):572
How to read a paper. Statistics for the non-statistician. I: Different types of data need different statistical tests. Greenhalgh T. **BMJ** 1997 Aug 9;315(7104):364–6 (11 ref.)
Interaction 3: How to examine heterogeneity. Matthews JN, et al. **BMJ** 1996 Oct 5;313(7061):862
Beyond statistics: what is really important in medicine? Feinstein AR. **Cleve Clin J Med** 1997 Mar;64(3):127–8
Computation of DNA structural variability––a new predictor of DNA regulatory regions. Benham CJ. **Comput Appl Biosci** 1996 Oct;12(5):375–81
Survival curve fitting using the Gompertz function: a methodology for conducting cost–effectiveness analyses on mortality data. Messori A. **Comput Methods Programs Biomed** 1997 Mar;52(3):157–64
A t-statistic for objective interpretation of comparative genomic hybridization (CGH) profiles. Moore DH 2nd, et al. **Cytometry** 1997 Jul 1;28(3):183–90
The role of statistics in cytopathology [editorial] Sasieni PD. **Cytopathology** 1997 Jun;8(3):146–7
How good is that agreement? [letter] Byrt T. **Epidemiology** 1996 Sep;7(5):561
A SAS program calculating three measures of interaction with confidence intervals [letter] Lundberg M, et al. **Epidemiology** 1996 Nov;7(6):655–6
Nuclear medicine and mathematics [see comments] Pedroso de Lima JJ. **Eur J Nucl Med** 1996 Jun;23(6):705–19 (36 ref.). Comment in: Eur J Nucl Med 1997 Feb;24(2):234.
The pruning of Doctor McDonough and the "humanizing" of statistics [letter] Norman G. **Fertil Steril** 1997 Sep; 68(3):570–3
Mean, median, and madness [editorial] Lutter LD. **Foot Ankle Int** 1996 Jun;17(6):305–6
Commingling analysis of the distribution of a phenotype conditioned on two marker genotypes: application to plasma angiotensin–converting enzyme levels. Barrett JH, et al. **Genet Epidemiol** 1996;13(6):615–25
General score tests for associations of genetic markers with disease using cases and their parents. Schaid DJ. **Genet Epidemiol** 1996;13(5):423–49
Statistical process control methods for expert system performance monitoring. Kahn MG, et al. **J Am Med Inform Assoc** 1996 Jul–Aug;3(4):258–69 (22 ref.)
Statistical comparison of DLT versus ILSSC in the calibration of a photogrammetric stereo–system. Borghese NA, et al. **J Biomech** 1997 Apr;30(4):409–13
Discussion of individual bioequivalence by M.–L. Chen. Gould AL. **J Biopharm Stat** 1997 Mar;7(1):23–9 (22 ref.)
Methodological approaches to shortening composite measurement scales. Coste J, et al. **J Clin Epidemiol** 1997 Mar;50(3):247–52
The politics of dependency estimates: Social Security Board statistics, 1935–1939. Gratton B. **J Gerontol B Psychol Sci Soc Sci** 1997 May;52(3):S117–24
Statistical analysis of highly skewed immune response data. McGuinness D, et al. **J Immunol Methods** 1997 Feb 14; 201(1):99–114
Doctors' statistical literacy: a survey at Srinagarind Hospital, Khon Kaen University. Laopaiboon M, et al. **J Med Assoc Thai** 1997 Feb;80(2):130–7
The use and abuse of statistics in sports and exercise sciences [editorial] Bartlett R. **J Sports Sci** 1997 Feb;15(1):1–2
Prospective randomized trials of carotid endarterectomy with primary closure and patch reconstruction: the problem is power [letter; comment] Archie JP Jr. **J Vasc Surg** 1997 Jun;25(6):1118–20. Comment on: J Vasc Surg 1996 Dec;24(6):998–1006; discussion 1006–7.
A guideline for reporting results of statistical analysis in Japanese Journal of Clinical Oncology. Fukuda H, et al. **Jpn J Clin Oncol** 1997 Jun;27(3):121–7
Systematic distortion of statistics as a result of racism and its effect on the human services system. Robinson EG. **Ment Retard** 1997 Jun;35(3):221–3
An overview of statistical methods for the classification and retrieval of patient events. Chute CG, et al. **Methods Inf Med** 1995 Mar;34(1–2):104–10
Statistical issues in longitudinal studies. Bellocco R, et al. **Nutrition** 1997 Apr;13(4):388–9
Research and the patient [editorial] Yekutiel M. **Physiother Res Int** 1997;2(1):iv–vi
Medical statistics––what, when, why, how, which [editorial] Dunne T, et al. **S Afr Med J** 1996 Sep;86(9):1079–80
The validity and power of tests for equality of two correlated proportions. May WL, et al. **Stat Med** 1997 May 30; 16(10):1081–96
Sequentially balanced three–squares cross–over designs. Newcombe RG. **Stat Med** 1996 Oct 30;15(20):2143–7
Testing for individual and population equivalence based on the proportion of similar responses [see comments] Rom DM, et al. **Stat Med** 1996 Jul 30;15(14):1489–505. Comment in: Stat Med 1997 Jun 15;16(11):1303–6.
Sequential designs for equivalence studies. Whitehead J. **Stat Med** 1996 Dec 30;15(24):2703–15
A comparison of three statistical models for IDDM associations with HLA. Graham J, et al. **Tissue Antigens** 1996 Jul;48(1):1–14
[Statistical software––review of current products] Hladíková M, et al. **Cas Lek Cesk** 1997 May 14;136(10):304–6 (Eng. Abstr.) **(Cze)**
[Consultant service in research methodology and statistics (editorial)] Keiding N, et al. **Ugeskr Laeger** 1996 Dec 16; 158(51):7373 **(Dan)**
[Statistics and presentation of results (letter)] Moniatte JP. **Ann Fr Anesth Reanim** 1996;15(5):686–7 **(Fre)**
[Numerical expression of results (letter)] Roos M. **Ann Fr Anesth Reanim** 1996;15(5):686 **(Fre)**
[The name, scales and diagnostic criteria. Current issues] Marchais P. **Ann Med Psychol (Paris)** 1995 Dec; 153(10):716–20; discussion 720–1 (Eng. Abstr.) **(Fre)**
[Prognostic studies in cancer of the breast: optimal use of current statistical tools] Bonichon F. **Bull Cancer** 1996 Dec; 83(12):1046–52 (20 ref.) **(Fre)**
[The sleep of statistics is generating monsters: reply (letter)] Calimani E. **Med Lav** 1996 Jul–Aug;87(4):348–9 **(Ita)**
[Examples of pitfalls in statistical analysis––2. Parametric and nonparametric analyses] Nagata O. **Masui** 1996 Oct; 45(10):1235–9 (Eng. Abstr.) **(Jpn)**
[Examples of pitfalls in statistical analysis––3: Why do we need to use multiple comparison procedures?] Nagata O. **Masui** 1996 Nov;45(11):1367–71 (Eng. Abstr.) **(Jpn)**
[Key points in medical statistics––erroneous application of statistical methods. IV] Kuritani T.

Nippon Seirigaku Zasshi 1996;58(10):377–84 **(Jpn)**
[Standards for ranges of 13 items of blood proteins among Japanese adults--results of a joint project of 7 organizations based on NCCLS Document C28-P and International Reference CRM470. 6. Statistical methods for setting reference criteria--Problems Ichihara K. **Rinsho Byori** 1996 May;Suppl 101:48–73 **(Jpn)**
[Group sequential experiments. Short introduction and review] Lehmann EH, et al. **Tidsskr Nor Laegeforen** 1997 Jan 10;117(1):47–9 (Eng. Abstr.) **(Nor)**
[Evaluation of using statistical methods in selected national medical journals] Sych Z. **Ann Acad Med Stetin** 1996; 42:67–84 (Eng. Abstr.) **(Pol)**
[The problems of the handicapped: medico-statistical aspects] Ovcharov VK. **Probl Sotsialnoi Gig Istor Med** 1997 Jan–Feb;(1):3–10 **(Rus)**
[Curves of fetal development among Spanish neonates. Letter] Figueras Aloy J. **An Esp Pediatr** 1996 Aug; 45(2):225–7 **(Spa)**
[Exploratory-confirmative perspective in biomedical applications of statistics: 2 dialogues (I). Bayesianism versus frequentialism: their respective practical implications on data analysis] Bacallao J. **Med Clin (Barc)** 1996 Oct 12; 107(12):467–71 **(Spa)**
[Statistical design in clinical trials] Rubio Terrés C. **Med Clin (Barc)** 1996 Sep 14;107(8):303–9 **(Spa)**
[Abnormally broad confidence intervals in logistic regression: interpretation of results of statistical programs] de Irala J, et al. **Rev Panam Salud Publica** 1997 Mar;1(3):230–4 (Eng. Abstr.) **(Spa)**
[Statistical pitfalls (letter; comment)] Melander S. **Lakartidningen** 1997 Apr 2;94(14):1260. Comment on: Lakartidningen 1997 Feb 19;94(8):632, 635–8. **(Swe)**
[Statistical data as scientific cosmetics (letter)] Taube A. **Lakartidningen** 1997 Jun 4;94(23):2157 **(Swe)**

CLASSIFICATION

Issues in classification in meta-analysis in substance abuse prevention research. Hansen WB, et al. **NIDA Res Monogr** 1997;170:183–201

EDUCATION

Exploring a mixture of distributions using Minitab. Osman MI. **Comput Biol Med** 1997 May;27(3):223–32
Computer-assisted learning package for frequency distribution of physiological variables. Bajpai R, et al. **Indian J Physiol Pharmacol** 1996 Oct;40(4):330–4
[The loss of reliability in data extraction from clinical histories: the source of the flaws and the usefulness of training] Gómez de la Cámara A, et al. **Med Clin (Barc)** 1997 Mar 15;108(10):377–81 (Eng. Abstr.) **(Spa)**

HISTORY

Florence Nightingale and medical statistics. Caelleigh AS. **Acad Med** 1997 Aug;72(8):668
Sir Austin Bradford Hill: medical statistics and the quantitative approach to prevention of disease. Wilkinson L. **Addiction** 1997 Jun;92(6):657–66
Durkheim among the statisticians. Turner S. **J Hist Behav Sci** 1996 Oct;32(4):354–78

INSTRUMENTATION

An analysis program for occupational cohort mortality and update cancer risk in copper miners. Chen R. **Int J Occup Med Environ Health** 1996;9(4):301–8

METHODS

Treating grouped data as continuous in alcohol consumption measures. de Burgh S, et al. **Addiction** 1997 Jun; 92(6):667–72 (10 ref.)
Demographic approaches to the estimation of incidence of HIV-1 infection among adults from age-specific prevalence data in stable endemic conditions. Gregson S, et al. **AIDS** 1996 Dec;10(14):1689–97
A linkage strategy for detection of human quantitative-trait loci. II. Optimization of study designs based on extreme sib pairs and generalized relative risk ratios. Gu C, et al. **Am J Hum Genet** 1997 Jul;61(1):211–22
The standard deviation and the standard error of the mean [letter] Webster CS, et al. **Anaesthesia** 1997 Feb;52(2):183
One-sided P values, repeated measures analysis of variance: two sides of the same story! [letter; comment] Columb MO. **Anesth Analg** 1997 Mar;84(3):701–2. Comment on: Anesth Analg 1996 Jul;83(1):18–26.
Difference versus mean plots [letter] Bland JM, et al. **Ann Clin Biochem** 1997 Sep;34 (Pt 5):570–1
A statistical method for predicting postanesthesia care unit staffing needs. Dexter F, et al. **AORN J** 1997 May; 65(5):947–50, 952–3, 955–7
Quantitative radiography in osteoarthritis: analysis. Hochberg MC. **Baillieres Clin Rheumatol** 1996 Aug;10(3):421–8 (55 ref.)
Looking for statistical stability: a new method of evaluating reliability of statistical tests. De Martini D. **Boll Soc Ital Biol Sper** 1996 May–Jun;72(5–6):179–86
Cusum: a statistical method to evaluate competence in practical procedures [letter; comment] Hammond EJ, et al. **Br J Anaesth** 1996 Oct;77(4):562. Comment on: Br J Anaesth 1995 Dec;75(6):805–9.
ASA classification and perioperative variables as predictors of postoperative outcome [letter; comment] Magi E. **Br J Anaesth** 1997 Feb;78(2):228. Comment on: Br J Anaesth 1996 Aug;77(2):217–22.
Multistage designs for phase II clinical trials: statistical issues in cancer research. Kramar A, et al. **Br J Cancer** 1996 Oct;74(8):1317–20 (5 ref.)
Statistics of gamma camera uniformity measurements [letter] Keyes WI. **Br J Radiol** 1997 Jan;70:109
Emotional aspects in burn patients: usage of a health state classification system. Pardo Mateu L, et al. **Burns** 1996 Aug;22(5):396–8
Comparing methods of measurements. Ludbrook J. **Clin Exp Pharmacol Physiol** 1997 Feb;24(2):193–203 (34 ref.)
Update: microcomputer statistics packages. A personal view. Ludbrook J. **Clin Exp Pharmacol Physiol** 1997 Mar–Apr; 24(3–4):294–6
Sample size of randomized double-blind trials 1976–1991. Mulward S, et al. **Dan Med Bull** 1996 Feb;43(1):96–8
Multiparous species present problems (and possibilities) to developmentalists. Zorrilla EP. **Dev Psychobiol** 1997 Mar; 30(2):141–50 (49 ref.)
How statistics can 'lie' [editorial] Abt K. **Eur J Anaesthesiol** 1996 Sep;13(5):427–31
An improved statistical approach: can it clarify the role of new prognostic factors for breast cancer? Chapman JW, et al. **Eur J Cancer** 1996 Oct;32A(11):1949–56 (33 ref.)
Statistical analysis of blood- to breath-alcohol ratio data in the logarithm-transformed and non-transformed modes. Labianca DA, et al. **Eur J Clin Chem Clin Biochem** 1996 Feb;34(2):111–7
Statistical planning and analysis considerations in the evaluation of in vitro alternatives to whole animal use for eye irritation testing. Feder P, et al. **Food Chem Toxicol** 1997 Jan;35(1):167–74 (6 ref.)
A new system for defining endoscopic complications emphasizing the measure of importance [see comments] Fleischer DE, et al. **Gastrointest Endosc** 1997 Feb; 45(2):128–33. Comment in: Gastrointest Endosc 1997 Feb;45(2):213–5.
Assessment of clinical significance: the number needed to treat. Thomas R, et al. **Indian J Ophthalmol** 1996 Jun; 44(2):113–5 (9 ref.)
A computer program for calculation of sample size. Raveendran R. **Indian J Physiol Pharmacol** 1996 Oct; 40(4):359–62
Challenging the validity of conclusions based on P-values alone: a critique of contemporary clinical research design and methods. Ebramzadeh E, et al. **Instr Course Lect** 1994; 43:587–600 (26 ref.)
Risch's lambda values for human obesity. Allison DB, et al. **Int J Obes Relat Metab Disord** 1996 Nov;20(11):990–9
Improving procedures for recording suicide statistics. Kelleher MJ, et al. **Ir Med J** 1996 Jan–Feb;89(1):14–5
Is cross-reactivity a real or an imaginary concept? [letter] Mohapatra SS. **J Allergy Clin Immunol** 1997 May;99(5):724
A multiple comparison procedure to control the strong stagewise family error rate in comparing test treatments and a control. Chen M, et al. **J Biopharm Stat** 1997 Jul; 7(3):355–67
Meta-analysis for bioequivalence review. Chow SC, et al. **J Biopharm Stat** 1997 Mar;7(1):97–111
Etrank: a ranking procedure for handling missing data in clinical trials: application to venlafaxine extended-release depression clinical trial. Entsuah R. **J Biopharm Stat** 1996 Nov;6(4):457–75 (30 ref.)
Discussion of individual bioequivalence by M.-L. Chen. Gould AL. **J Biopharm Stat** 1997 Mar;7(1):23–9 (22 ref.)
A group sequential approach to crossover trials for average bioequivalence. Hauck WW, et al. **J Biopharm Stat** 1997 Mar;7(1):87–96
On TIER method for assessment of individual bioequivalence. Ju HL. **J Biopharm Stat** 1997 Mar; 7(1):63–85
Evaluation of the uncertainty of molecular mass measurement by electrospray ionization mass spectrometry. Juneau PL, et al. **J Biopharm Stat** 1997 Jul;7(3):453–65
A review of nonparametric tests for changepoint problems, with application to a recombinant drug therapy clinical trial. Koziol JA, et al. **J Biopharm Stat** 1996 Nov; 6(4):425–41 (25 ref.)
Power evaluation of various modified Bonferroni procedures by a Monte Carlo study. Morikawa T, et al. **J Biopharm Stat** 1996 Jul;6(3):343–59
Uniform matrix stability study designs. Murphy JR. **J Biopharm Stat** 1996 Nov;6(4):477–94
The difference of means of two indirect unpaired groups in receptor autoradiography. Nishimura Y, et al. **J Biopharm Stat** 1997 Jul;7(3):441–52
Directional efficient tests or classic alpha adjustments? [letter; comment] Rahlfs VW. **J Biopharm Stat** 1997 Jul; 7(3):467–71. Comment on: J Biopharm Stat 1996 May;6(2):115–25.
Analysis of 24-hour blood pressure data. Rodda B, et al. **J Biopharm Stat** 1996 Nov;6(4):495–513 (20 ref.)
Application of response surface methodology and factorial designs to clinical trials for drug combination development. Stewart WH. **J Biopharm Stat** 1996 Jul;6(3):219–30
A sequential trial of pain killers in arthritis: issues of multiple comparisons with control and of interval-censored survival data. Whitehead J, et al. **J Biopharm Stat** 1997 Jul; 7(3):333–53
Statistical assessment of ordinal outcomes in comparative studies. Scott SC, et al. **J Clin Epidemiol** 1997 Jan; 50(1):45–55
An extended difference of coherence test for comparing and combining several independent coherence estimates: theory and application to the study of motor units and physiological tremor. Amjad AM, et al. **J Neurosci Methods** 1997 Apr 25;73(1):69–79
Statistical assessment of crosscorrelation and variance methods and the importance of electrocardiogram gating in functional magnetic resonance imaging. Kuppusamy K, et al. **Magn Reson Imaging** 1997;15(2):169–81
A place for statistics in the generation and analysis of genetic toxicity data: a response to 'rodent mutation assay data presentation and statistical assessment'. Carr GJ, et al. **Mutat Res** 1996 Oct 25;357(1–2):257–60
Issues and challenges in coding interventions for meta-analysis of prevention research. Devine EC. **NIDA Res Monogr** 1997;170:130–46
Comparison of parzen density and frequency histogram as estimators of probability density functions. Glavinović MI. **Pflugers Arch** 1996 Nov-Dec;433(1–2):174–9
A formal study on summary table handling with application to health care statistical databases. Okada M, et al. **Proc AMIA Annu Fall Symp** 1996;:448–52
Effectiveness of correlation analysis in identifying protein residues undergoing correlated evolution. Pollock DD, et al. **Protein Eng** 1997 Jun;10(6):647–57
Statistical significance of hierarchical multi-body potentials based on Delaunay tessellation and their application in sequence-structure alignment. Munson PJ, et al. **Protein Sci** 1997 Jul;6(7):1467–81
Do CuSums have a role in routine communicable disease surveillance? O'Brien SJ, et al. **Public Health** 1997 Jul; 111(4):255–8
Estimating a relative risk across sparse case-control and follow-up studies: a method for meta-analysis. Austin H, et al. **Stat Med** 1997 May 15;16(9):1005–15
Variation of sensitivity, specificity, likelihood ratios and predictive values with disease prevalence. Brenner H, et al. **Stat Med** 1997 May 15;16(9):981–91
Survival analysis in observational studies. Bull K, et al. **Stat Med** 1997 May 15;16(9):1041–74 (31 ref.)
Statistical methods for two-sequence three-period cross-over designs with incomplete data. Chow SC, et al. **Stat Med** 1997 May 15;16(9):1031–9 (7 ref.)
A comparison of goodness-of-fit tests for the logistic regression model. Hosmer DW, et al. **Stat Med** 1997 May 15;16(9):965–80 (24 ref.)
Improved odds ratio estimation by post hoc stratification of case-control data. Neuhäuser M, et al. **Stat Med** 1997 May 15;16(9):993–1004
The lattice diagram and 2 x 2 tables. Ozonoff D, et al. **Toxicol Ind Health** 1997 Mar–Jun;13(2–3):339–55
[Shelf-life estimation of pharmaceutical products by matrixing] Yoshioka S, et al. **Eisei Shikenjo Hokoku** 1996; (114):143–4 (Eng. Abstr.) **(Jpn)**
[Examples of pitfalls in statistical analysis--6. Evaluation of data consisting of the elapsed time between two events] Nagata O. **Masui** 1997 Feb;46(2):244–50 (Eng. Abstr.) **(Jpn)**
[Choice of method for statistical analysis of quantitative data obtained from toxicological studies--toxicological data] Kobayashi K, et al. **Sangyo Eiseigaku Zasshi** 1997 May; 39(3):86–92 (Eng. Abstr.) **(Jpn)**
[Statistics and medical decision making] Gouveia-Oliveira A. **Acta Med Port** 1996 Oct–Dec;9(10–12):391–6 (Eng. Abstr.) **(Por)**
[A statistic approach to interpretation, results processing and hypo thesis testing in experiments on exposuring the human brain to perception of low level signals] Chunovkina AG, et al. **Biofizika** 1997 May–Jun;42(3):718–24 (Eng. Abstr.) **(Rus)**
[Statistical analyses in the Revista Clínica Española: their actual use and accessibility for the reader] Mora i Ripoll R, et al. **Rev Clin Esp** 1997 Jan;197(1):23–7 (Eng. Abstr.) **(Spa)**
[Assessment of the use of statistical methods in health research] Cumsille F, et al. **Rev Med Chil** 1996 Sep; 124(9):1137–41 (Eng. Abstr.) **(Spa)**

STANDARDS

Quality of statistics in psychiatric research [letter] Sedgwick P. **Br J Psychiatry** 1996 Mar;168(3):385
Validity of statistical techniques in assessing conclusions drawn from serologic tests [editorial; comment] Case J. **Transfusion** 1997 Aug;37(8):773–4. Comment on: Transfusion 1997 Aug;37(8):816–22. Comment on: Transfusion 1997 Aug;37(8):877.
[Statistics: correct data? (letter)] Sangrós J, et al. **Med Clin (Barc)** 1996 Nov 23;107(18):717 **(Spa)**

STATISTICS, NONPARAMETRIC

Regression estimator in ranked set sampling. Yu PL, et al. **Biometrics** 1997 Sep;53(3):1070–80
Statistical analyses and reliability of the sciatic functional index [letter; comment] de Medinaceli L. **Gen Pharmacol** 1996 Jun;27(4):741. Comment on: Gen Pharmacol 1995 Jan;26(1):59–64.
Analysis of seasonal data using the Lorenz curve and the

associated Gini index. Lee WC. **Int J Epidemiol** 1996 Apr; 25(2):426–34

Two statistical methods for analyzing multiple neuronal data. Takahashi T. **Int J Neurosci** 1996 Nov;88(1–2):11–26

Statistics in medical research—V. Some non–parametric tests. Bowalekar SK. **J Postgrad Med** 1994 Apr–Jun;40(2):96–101

The effects of sample size and variability on the correlation coefficient. Bates BT, et al. **Med Sci Sports Exerc** 1996 Mar;28(3):386–91

The use and interpretation of the Friedman test in the analysis of ordinal–scale data in repeated measures designs. Sheldon MR, et al. **Physiother Res Int** 1996;1(4):221–8 (28 ref.)

Trials of the beta model for complex inheritance. Collins A, et al. **Proc Natl Acad Sci U S A** 1996 Aug 20; 93(17):9177–81

Non–parametric Bayesian approach to hazard regression: a case study with a large number of missing covariate values. Arjas E, et al. **Stat Med** 1996 Aug 30;15(16):1757–70

Non–parametric methods for comparing multiple treatment groups to a control group, based on incomplete non–decreasing repeated measurements. Davis CS. **Stat Med** 1996 Dec 15;15(23):2509–21

On the analysis of life tables for dependent observations. Eriksson B, et al. **Stat Med** 1994 Jan 15;13(1):43–51

Estimating asymptomatic duration in cancer: the AIDS connection. Etzioni R, et al. **Stat Med** 1997 Mar 30; 16(6):627–44

Comparison of parametric and non–parametric survival methods using simulated clinical data. Gamel JW, et al. **Stat Med** 1997 Jul 30;16(14):1629–43

Non–parametric inference of a failure time distribution when the failure times are estimated. Kim HM, et al. **Stat Med** 1996 Nov 15–30;15(21–22):2475–90

Group sequential monitoring of distribution–free analyses of repeated measures. Lachin JM. **Stat Med** 1997 Mar 30; 16(6):653–68

Explained variation for logistic regression. Mittlböck M, et al. **Stat Med** 1996 Oct 15;15(19):1987–97

Assessment of lack of fit in simple linear regression: an application to serologic response to treatment for syphilis. Rose MS, et al. **Stat Med** 1997 Feb 28;16(4):373–84

A measure of association for assessing prediction accuracy that is a generalization of non–parametric ROC area. Smith WD, et al. **Stat Med** 1996 Jun 15;15(11):1199–215

A partially grouped logrank test. Sposto R, et al. **Stat Med** 1997 Mar 30;16(6):695–704

Ordinal regression methodology for ROC curves derived from correlated data. Toledano AY, et al. **Stat Med** 1996 Aug 30;15(16):1807–26

A critical discussion of intraclass correlation coefficients [letter; comment] Vargha P. **Stat Med** 1997 Apr 15; 16(7):821–3. Comment on: Stat Med 1994 Dec 15–30;13(23–24):2465–76.

Variability of magnetic resonance angiography and computed tomography angiography in grading middle cerebral artery stenosis using the unweighted kappa statistic [letter; comment] Lavados P, et al. **Stroke** 1996 Dec;27(12):2340 . Comment on: Stroke 1996 Jun;27(6):1084–7.

[Examples of pitfalls in statistical analysis—2. Parametric and nonparametric analyses] Nagata O. **Masui** 1996 Oct; 45(10):1235–9 (Eng. Abstr.) **(Jpn)**

STATOCONIA see **OTOLITHIC MEMBRANE**

STATUS ASTHMATICUS

CHEMICALLY INDUCED

Hot dog vapor–induced status asthmaticus. Polasani R, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):35–6

Near–death asthmatic reaction induced by disodium cromoglycate [see comments] Katayama H, et al. **Intern Med** 1996 Dec;35(12):976–8 (14 ref.). Comment in: Intern Med 1996 Dec;35(12):922–3.

CLASSIFICATION

Classification of severe asthma exacerbations: a proposal. Picado C. **Eur Respir J** 1996 Sep;9(9):1775–8 (33 ref.)

COMPLICATIONS

Passive smoke exposure impairs recovery after hospitalization for acute asthma. Abulhosn RS, et al. **Arch Pediatr Adolesc Med** 1997 Feb;151(2):135–9

Rhabdomyolysis following status asthmaticus. Bando T, et al. **Respiration** 1996;63(5):309–11

[Acute iatrogenic myopathy during treatment of status asthmaticus. Our experience and review of the literature] Pacini D, et al. **Minerva Anestesiol** 1997 Mar;63(3):81–91 (45 ref.) (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Oxygen saturation in adults with acute asthma. Hardern R. **J Accid Emerg Med** 1996 Jan;13(1):28–30

Diaphragmatic flutter emulating recalcitrant asthma. Harrison P, et al. **South Med J** 1997 Feb;90(2):234–6

[Status asthmaticus] Malyshev VD. **Anesteziol Reanimatol** 1996 May–Jun;(3):57–60 (4 ref.) **(Rus)**

[The usefulness of a clinical scoring system and pulse oximetry (SaO_2) in assessing the severity of asthmatic crises] Luaces Cubells C, et al. **An Esp Pediatr** 1996 May; 44(5):429–32 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Should epinephrine be administered exclusively by the endotracheal route in respiratory arrest secondary to asthma? [letter] Leibman JB. **Am J Emerg Med** 1997 Jan; 15(1):106–7

Treatment of severe respiratory failure during status asthmaticus in children and adolescents using high flow oxygen and sodium bicarbonate. Mansmann HC Jr, et al. **Ann Allergy Asthma Immunol** 1997 Jan;78(1):69–73

Aminophylline is effective on acute exacerbations of asthma in adults—objective improvements in peak flow, spirogram, arterial blood gas measurements and lung sounds. Ohta K, et al. **Clin Exp Allergy** 1996 Mar;26 Suppl 2:32–7

Inhaled helium–oxygen revisited: effect of inhaled helium–oxygen during the treatment of status asthmaticus in children. Kudukis TM, et al. **J Pediatr** 1997 Feb; 130(2):217–24

[Acute rhabdomyolysis in status asthmaticus] Eisenhuber E, et al. **Wien Klin Wochenschr** 1996;108(16):521–4 (Eng. Abstr.) **(Ger)**

[A case of bronchial asthma for whose status asthmaticus an anticholinergic drug was effective in weaning from inhaled anesthesia] Takizawa T, et al. **Arerugi** 1997 Apr; 46(4):391–4 **(Jpn)**

[Status asthmaticus treated with inhaled isoflurane and intravenous isoproterenol] Nakahara Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1997 May; 35(5):536–40 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Near–fatal asthma in South Australia: descriptive features and medication use [editorial; comment] Garrett JE, et al. **Aust N Z J Med** 1996 Aug;26(4):487–9 (24 ref.). Comment on: Aust N Z J Med 1996 Jun;26(3):356–62.

ETIOLOGY

Status asthmaticus in a paramedic following exposure to a roadside flare: a case report. Federman JH, et al. **J Emerg Med** 1997 Jan–Feb;15(1):87–9

MORTALITY

Acute severe asthma—are deaths preventable? [editorial; comment] Abisheganaden J, et al. **Singapore Med J** 1997 Jun;38(6):235–6. Comment on: Singapore Med J 1997 Jun;38(6):238–40, 243.

Severe asthma [see comments] Lee KH, et al. **Singapore Med J** 1997 Jun;38(6):238–40, 243. Comment in: Singapore Med J 1997 Jun;38(6):235–6.

PHYSIOPATHOLOGY

Acute severe asthma: pathophysiology and pathobiology of gas exchange abnormalities. Rodriguez–Roisin R. **Eur Respir J** 1997 Jun;10(6):1359–71 (82 ref.)

Bronchial hyperresponsiveness following acute severe asthma. Rabbat A, et al. **Intensive Care Med** 1996 Jun; 22(6):530–8

THERAPY

Prolonged isoflurane anesthesia in a case of catastrophic asthma. Miyagi T, et al. **Acta Paediatr Jpn** 1997 Jun; 39(3):375–8

Can we reduce acute asthma attendances to hospital emergency departments? [editorial; comment] Mellis CM. **Aust N Z J Med** 1997 Jun;27(3):275–6. Comment on: Aust N Z J Med 1997 Jun;27(3):277–84.

Risk factors for repeat attendance at hospital emergency departments among adults and children with asthma [see comments] Wakefield M, et al. **Aust N Z J Med** 1997 Jun; 27(3):277–84. Comment in: Aust N Z J Med 1997 Jun;27(3):275–6.

Factors associated with emergency department dependence of patients with asthma. Hanania NA, et al. **Chest** 1997 Feb;111(2):290–5

Status asthmaticus. Cohen NH, et al. **Crit Care Clin** 1997 Jul;13(3):459–76 (93 ref.)

Mechanical ventilation management of asthma [letter; comment] Reyes G. **Crit Care Med** 1997 Jul;25(7):1255–6 . Comment on: Crit Care Med 1996 Sep;24(9):1603–5.

Exogenous surfactant therapy for status asthmaticus [letter] Levtchenko E, et al. **Eur J Pediatr** 1997 Jun;156(6):508

Quadriparesia following permissive hypercapnia and inhalational anesthesia in a patient with severe status asthmaticus [letter] Zender HO, et al. **Intensive Care Med** 1996 Sep;22(9):1001

Therapeutic options for severe, refractory status asthmaticus: inhalational anaesthetic agents, extracorporeal membrane oxygenation and helium/oxygen ventilation. Tobias JD, et al. **Paediatr Anaesth** 1997;7(1):47–57

Emergency management of status asthmaticus in children. Nichols DG. **Pediatr Ann** 1996 Jul;25(7):394–400

Continuous ketamine infusion for the treatment of refractory asthma in a mechanically ventilated infant: case report and review of the pediatric literature. Nehama J, et al. **Pediatr Emerg Care** 1996 Aug;12(4):294–7 (20 ref.)

STATUS DYSRAPHICUS see **SPINAL DYSRAPHISM**

STATUS EPILEPTICUS

Status epilepticus. Treiman DM. **Baillieres Clin Neurol** 1996 Dec;5(4):821–39 (111 ref.)

Status epilepticus in children and adults. Weise KL, et al. **Crit Care Clin** 1997 Jul;13(3):629–46 (68 ref.)

Risk factors for status epilepticus in children with symptomatic epilepsy. Novak G, et al. **Neurology** 1997 Aug; 49(2):533–7

Management of status epilepticus. DeLorenzo RJ. **Va Med Q** 1996 Spring;123(2):103–11 (25 ref.)

[Status epilepticus] Gonçalves M, et al. **Acta Med Port** 1996 Apr–Jun;9(4–6):171–5 (13 ref.) (Eng. Abstr.) **(Por)**

BLOOD

Serum neuron–specific enolase is a marker for neuronal damage following status epilepticus in the rat. Sankar R, et al. **Epilepsy Res** 1997 Sep;28(2):129–36

Fatal hyperammonemia following orthotopic lung transplantation [see comments] Lichtenstein GR, et al. **Gastroenterology** 1997 Jan;112(1):236–40. Comment in: Gastroenterology 1997 Jun;112(6):2162.

CHEMICALLY INDUCED

Theophylline–associated status epilepticus resulting in quadriplegia [letter] Kato Z, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):332

The temporal evolution of neuronal damage from pilocarpine–induced status epilepticus. Fujikawa DG. **Brain Res** 1996 Jun 24;725(1):11–22

Nonconvulsive status epilepticus after intravenous contrast medium administration. Lukovits TG, et al. **Epilepsia** 1996 Nov;37(11):1117–20

The model of pentylenetetrazol–induced status epilepticus in the immature rat: short– and long–term effects. Nehlig A, et al. **Epilepsy Res** 1996 Dec;26(1):93–103

Status epilepticus and the late development of spontaneous seizures in the pilocarpine model of epilepsy. Lemos T, et al. **Epilepsy Res Suppl** 1996;12:137–44

Status epilepticus following intravenous N–acetylcysteine therapy. Hershkovitz E, et al. **Isr J Med Sci** 1996 Nov; 32(11):1102–4

Methaemoglobinaemia presenting with status epilepticus. Malhotra R, et al. **J Accid Emerg Med** 1996 Nov; 13(6):427–30

Protective effects of GABAergic drugs and other anticonvulsants in lithium–pilocarpine–induced status epilepticus. George B, et al. **Methods Find Exp Clin Pharmacol** 1996 Jun;18(5):335–40

Status epilepticus due to accidental overdose of isoniazid in an infant. Nixon GM, et al. **N Z Med J** 1996 Nov 8; 109(1033):430–1

Nonconvulsive status epilepticus during antidepressant treatment. Yoshino A, et al. **Neuropsychobiology** 1997; 35(2):91–4

Expression of the 27,000 mol. wt heat shock protein following kainic acid–induced status epilepticus in the rat. Plumier JC, et al. **Neuroscience** 1996 Dec;75(3):849–56

Comment on Ortler et al. (Pain 62 (1995) 357–361) [letter; comment] Arruda WO, et al. **Pain** 1996 Sep;67(1):225–6. Comment on: Pain 1995 Sep;62(3):357–61.

Unusual cause of seizure. Gouin S, et al. **Pediatr Emerg Care** 1996 Aug;12(4):298–300 (13 ref.)

Status epilepticus associated with the combination of valproic acid and clomipramine. DeToledo JC, et al. **Ther Drug Monit** 1997 Feb;19(1):71–3

[Bromocriptine and puerperal seizures (comment)] von Werder K. **Zentralbl Gynakol** 1996;118(7):395–6. Comment on: Zentralbl Gynakol 1996;118(7):392–6. **(Ger)**

COMPLICATIONS

Theophylline–associated status epilepticus resulting in quadriplegia [letter] Kato Z, et al. **Ann Allergy Asthma Immunol** 1997 Mar;78(3):332

Vigabatrin and carbamazepine have different efficacies in the prevention of status epilepticus induced neuronal damage in the hippocampus and amygdala. Pitkänen A, et al. **Epilepsy Res** 1996 May;24(1):29–45

Aphasic status epilepticus in multiple sclerosis. Primavera A, et al. **Eur Neurol** 1996;36(6):374–7

Lethal hyperoral behaviour from the Klüver–Bucy syndrome [letter] Mendez MF, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar;62(3):293–4

Electrographic tachyphylaxis to etomidate and ketamine used for refractory status epilepticus controlled with isoflurane. Kofke WA, et al. **J Neurosurg Anesthesiol** 1997 Jul; 9(3):269–72

Pure transient amnesia during nonconvulsive status epilepticus [letter; comment] Dasheiff RM. **Neurology** 1997 Jun;48(6):1736; discussion 1736–7. Comment on: Neurology 1996 Apr;46(4):1036–9.

Pure transient amnesia during nonconvulsive status epilepticus [letter; comment] Hawley RJ, et al. **Neurology** 1997 Jun;48(6):1736; discussion 1736–7. Comment on: Neurology 1996 Apr;46(4):1036–9.

Failure to recall [letter; comment] Hawley RJ, et al. **Neurology** 1997 Jan;48(1):292–3. Comment on: Neurology 1996 Apr;46(4):1036–9.

Failure to recall (but not to remember): pure transient amnesia during nonconvulsive status epilepticus [see comments] Vuilleumier P, et al. **Neurology** 1996 Apr; 46(4):1036–9. Comment in: Neurology 1997 Jan;48(1):292; discussion 293. Comment in: Neurology 1997 Jan;48(1):292–3. Comment in: Neurology 1997

Jun;48(6):1736; discussion 1736–7.
Congenital syphilis associated with persistent pulmonary hypertension of the neonate--a clinico-pathological case study. Smith J, et al. **S Afr Med J** 1995 Nov;85(11 Suppl):1232–5
[Acute renal failure in the course of rhabdomyolysis after status epilepticus] Syzdół P, et al. **Pol Merkuriusz Lek** 1996 Dec;1(6):412–3 (Eng. Abstr.) **(Pol)**
[Motor aphasia as the only manifestation of focal status epilepticus (letter)] Ramón Valiente MR, et al. **Med Clin (Barc)** 1996 Feb 3;106(4):154 **(Spa)**

DIAGNOSIS

Structural consequences of status epilepticus demonstrated with serial magnetic resonance imaging. Meierkord H, et al. **Acta Neurol Scand** 1997 Sep;96(3):127–32
Reversible signal abnormalities in the hippocampus and neocortex after prolonged seizures. Chan S, et al. **AJNR Am J Neuroradiol** 1996 Oct;17(9):1725–31
Ring chromosome 20 and nonconvulsive status epilepticus. A new epileptic syndrome. Inoue Y, et al. **Brain** 1997 Jun; 120 (Pt 6):939–53 (38 ref.)
Neglecting epileptic syndromes [letter; comment] Benbadis SR. **J Clin Neurophysiol** 1996 Sep;13(5):458. Comment on: J Clin Neurophysiol 1995 Jul;12(4):316–25.
MR spectroscopic imaging and diffusion-weighted MRI for early detection of kainate-induced status epilepticus in the rat. Ebisu T, et al. **Magn Reson Med** 1996 Dec;36(6):821–8
Thyroid storm presenting as status epilepticus and stroke [letter] Lee TG, et al. **Postgrad Med J** 1997 Jan;73(855):61
Diagnosis and treatment of status epilepticus on a neurological intensive care unit. Walker MC, et al. **QJM** 1996 Dec;89(12):913–20
[Cerebral lesions following convulsive partial status epilepticus. Clinical, neuroradiologic and PET study of a case] Van Bogaert P, et al. **J Neuroradiol** 1994 Apr; 21(3):176–80 (Eng. Abstr.) **(Fre)**
[Status epilepticus] Salas-Puig J, et al. **Neurologia** 1996 Dec; 11 Suppl 4:108–21 (59 ref.) (Eng. Abstr.) **(Spa)**
[Grouped crises and status epilepticus in complex partial epilepsy] Bertol V, et al. **Rev Neurol** 1997 Apr; 25(140):518–22 (Eng. Abstr.) **(Spa)**
[Electrical status epilepticus during sleep] Ortega JJ, et al. **Rev Neurol** 1996 Dec;24(136):1551–3 (Eng. Abstr.) **(Spa)**
[Status epilepticus] Tellería-Díaz A, et al. **Rev Neurol** 1997 Aug;25(144):1246–56 (61 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Propofol and midazolam in status epilepticus [letter; comment] Huff JS, et al. **Acad Emerg Med** 1996 Feb; 3(2):179. Comment on: Acad Emerg Med 1995 Feb;2(2):128–33.
Totally implantable vascular access and emergent management of refractory recurrent grand mal status epilepticus [letter] Lafond P, et al. **Am J Emerg Med** 1997 Jul;15(4):441
Fosphenytoin injection introduced as replacement for Dilantin injection [news] **Am J Health Syst Pharm** 1996 Oct 1;53(19):2249
Intranasal midazolam in patients with status epilepticus. Kendall JL, et al. **Ann Emerg Med** 1997 Mar;29(3):415–7
Midazolam in refractory status epilepticus. Denzel D, et al. **Ann Pharmacother** 1996 Dec;30(12):1481–3
Continuous midazolam infusion as treatment of status epilepticus. Lal Koul R, et al. **Arch Dis Child** 1997 May; 76(5):445–8
Non-NMDA but not NMDA blockade at deep prepiriform cortex protects against hippocampal cell death in status epilepticus. Kawaguchi K, et al. **Brain Res** 1997 Apr 4; 753(1):152–6
Liposome-entrapped phenytoin locally suppresses amygdaloid epileptogenic focus created by db-cAMP/EDTA in rats. Mori N, et al. **Brain Res** 1995 Dec 12;703(1–2):184–90
Status epilepticus. Payne TA, et al. **Crit Care Clin** 1997 Jan; 13(1):17–38 (64 ref.)
Lamotrigine vs. phenytoin for treatment of status epilepticus: comparison in an experimental model. Walton NY, et al. **Epilepsy Res** 1996 May;24(1):19–28
Tiagabine prevents seizures, neuronal damage and memory impairment in experimental status epilepticus. Halonen T, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):69–81
Necrosis of the substantia nigra, pars reticulate, in flurothyl-induced status epilepticus is ameliorated by the spin trap alpha phenyl-N-tert-butyl nitrone. He QP, et al. **Free Radic Biol Med** 1997;22(5):917–22
Treatment of focal status epilepticus with lignocaine [letter] Kato H, et al. **J Accid Emerg Med** 1997 May;14(3):201
Treatment with high doses of lamotrigine in children and adolescents with refractory seizures. Mims J, et al. **J Child Neurol** 1997 Jan;12(1):64–7
Efficacy of pyridoxal phosphate in treating an adult with intractable status epilepticus. Nakagawa E, et al. **Neurology** 1997 May;48(5):1468–9
Valproate toxicity [letter; comment] Parra J, et al. **Neurology** 1996 Dec;47(6):1608. Comment on: Neurology 1996 Feb;46(2):465–9.
Status epilepticus in children with epilepsy: the role of antiepileptic drug levels in prevention [see comments] Maytal J, et al. **Pediatrics** 1996 Dec;98(6 Pt 1):1119–21. Comment in: Pediatrics 1997 Aug;100(2 Pt 1):277–8.
[Valproate i.v. Survey of its clinical application] **Dtsch Med Wochenschr** 1997 Jul;122(28–29 Suppl):1–8 **(Ger)**
[Therapy of the status epilepticus] **Nervenarzt** 1994 Jan;65(1 Suppl [therapie]):1–8 **(Ger)**
[Efficacy and side effects of lidocaine by intravenous drip infusion in children with intractable seizures] Sata Y, et al. **No To Hattatsu** 1997 Jan;29(1):39–44 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

A prospective, population-based epidemiologic study of status epilepticus in Richmond, Virginia. DeLorenzo RJ, et al. **Neurology** 1996 Apr;46(4):1029–35
Complex partial status epilepticus [letter; comment] Privitera M. **Neurology** 1997 Apr;48(4):1140–1. Comment on: Neurology 1995 Aug;45(8):1499–504. Comment on: Neurology 1996 Jul;47(1):307–8.

ETIOLOGY

Complex partial status epilepticus after bone marrow transplantation for non-Hodgkin's lymphoma. Wszolek ZK, et al. **Bone Marrow Transplant** 1997 Mar;19(6):637–8
Epileptic fits [letter; comment] Garton R. **Br Dent J** 1996 Dec 7–21;181(11–12):399. Comment on: Br Dent J 1996 Sep 7;181(5):178–9.
Focal hepatic encephalopathy with status epilepticus: incomplete recovery after hepatic transplantation. Annoni JM, et al. **Dig Dis Sci** 1997 Apr;42(4):792–5
Status epilepticus due to a ruptured dermoid cyst. van der Graaff M, et al. **J Neurol Neurosurg Psychiatry** 1997 Mar; 62(3):222
Severe eclampsia in an adolescent: a case report and review of the literature. Scribano PV, et al. **Pediatr Emerg Care** 1996 Dec;12(6):425–7 (6 ref.)
Idiopathic status epilepticus [letter; comment] Phillips SA, et al. **Pediatrics** 1997 Aug;100(2 Pt 1):277–8. Comment on: Pediatrics 1996 Dec;98(6 Pt 1):1119–21.
Seizures and status epilepticus in childhood cerebral malaria. Crawley J, et al. **QJM** 1996 Aug;89(8):591–7
Status epilepticus amauroticus secondary to meningitis as a cause of postpartum cortical blindness. Goldstein MJ, et al. **Reg Anesth** 1996 Nov-Dec;21(6):595–8
Status epilepticus in children. Scholtes FB, et al. **Seizure** 1996 Sep;5(3):177–84
[Status epilepticus late in pregnancy--eclampsia or subarachnoid hemorrhage?] Michalsen A, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 Jun; 32(6):380–4 (Eng. Abstr.) **(Ger)**
[Complex partial status epilepticus in a patient with a frontal cavernous angiomas] Eguchi T, et al. **No Shinkei Geka** 1996 Mar;24(3):259–62 (Eng. Abstr.) **(Jpn)**
[A case of adult Reye's syndrome with favorable outcome despite status epilepticus] Arai M. **Rinsho Shinkeigaku** 1996 Nov;36(11):1256–8 (Eng. Abstr.) **(Jpn)**
[A case of MPO-ANCA positive progressive systemic sclerosis with status epilepticus] Uriuhara A, et al. **Ryumachi** 1997 Jun;37(3):483–6 (Eng. Abstr.) **(Jpn)**

GENETICS

Ring chromosome 20 and nonconvulsive status epilepticus. A new epileptic syndrome. Inoue Y, et al. **Brain** 1997 Jun; 120 (Pt 6):939–53 (38 ref.)
Fos-like immunoreactivity after status epilepticus and spontaneous seizures in rats. Mello LE, et al. **Epilepsy Res Suppl** 1996;12:205–13
Induction of glucose-regulated protein (glucose-regulated protein 78/BiP and glucose-regulated protein 94) and heat shock protein 70 transcripts in the immature rat brain following status epilepticus. Little E, et al. **Neuroscience** 1996 Nov;75(1):209–19

METABOLISM

Co-variation of free amino acids in brain interstitial fluid during pentylenetetrazole-induced convulsive status epilepticus. Sechi G, et al. **Brain Res** 1997 Aug 1; 764(1–2):230–6
Developmental switch in phenotypic expression of preproenkephalin mRNA and 45Ca2+ accumulation following kainate-induced status epilepticus. Friedman LK. **Brain Res Dev Brain Res** 1997 Jul 18;101(1–2):287–93
GABA metabolism during status epilepticus in the developing rat brain. Sankar R, et al. **Brain Res Dev Brain Res** 1997 Jan 2;98(1):60–4
Isolation of the gene encoding lamp-1, a lysosomal membrane protein, by differential screening in an animal model of status epilepticus. Sun N, et al. **Brain Res Mol Brain Res** 1997 May;45(2):353–5
Changes in transport of [14C] alpha-aminoisobutyric acid across the blood-brain barrier during pentylenetetrazol-induced status epilepticus in the immature rat. Padou V, et al. **Epilepsy Res** 1995 Nov; 22(3):175–83
Status epilepticus causes selective regional damage and loss of GABAergic neurons in the rat amygdaloid complex. Tuunanen J, et al. **Eur J Neurosci** 1996 Dec;8(12):2711–25
Cellular hybridization for BDNF, trkB, and NGF mRNAs and BDNF-immunoreactivity in rat forebrain after pilocarpine-induced status epilepticus. Schmidt-Kastner R, et al. **Exp Brain Res** 1996;107(3):331–47
Induction of astroglial gene expression by experimental seizures in the rat: spatio-temporal patterns of the early stages. Belluardo N, et al. **Glia** 1996 Feb;16(2):174–86
Regional changes in brain dopamine utilization during status epilepticus in the rat induced by systemic pilocarpine and intrahippocampal carbachol. Alam AM, et al. **Neuropharmacology** 1996 Feb;35(2):159–67
Neuronal injury in experimental status epilepticus in the rat: role of acidosis. Sasahira M, et al. **Neurosci Lett** 1997 Mar 21;224(3):177–80

MORTALITY

Complex partial status epilepticus [letter; comment] Privitera M. **Neurology** 1997 Apr;48(4):1140–1. Comment on: Neurology 1995 Aug;45(8):1499–504. Comment on: Neurology 1996 Jul;47(1):307–8.

PATHOLOGY

Selective death of hippocampal CA3 pyramidal cells with mossy fiber afferents after CRH-induced status epilepticus in infant rats. Ribak CE, et al. **Brain Res Dev Brain Res** 1996 Feb 26;91(2):245–51
Lithium-pilocarpine status epilepticus in the immature rabbit. Thompson K, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):1–4
Vigabatrin and carbamazepine have different efficacies in the prevention of status epilepticus induced neuronal damage in the hippocampus and amygdala. Pitkänen A, et al. **Epilepsy Res** 1996 May;24(1):29–45
Laminar damage of neurons and astrocytes in neocortex and hippocampus of rat after long-lasting status epilepticus induced by pilocarpine. Schmidt-Kastner R, et al. **Epilepsy Res Suppl** 1996;12:309–16
Status epilepticus causes selective regional damage and loss of GABAergic neurons in the rat amygdaloid complex. Tuunanen J, et al. **Eur J Neurosci** 1996 Dec;8(12):2711–25
Necrosis of the substantia nigra, pars reticulate, in flurothyl-induced status epilepticus is ameliorated by the spin trap alpha phenyl-N-tert-butyl nitrone. He QP, et al. **Free Radic Biol Med** 1997;22(5):917–22
Asymmetric hippocampal atrophy and extra-hippocampal epilepsy following refractory status epilepticus in an adult. Chee MW, et al. **J Neurol Sci** 1997 Apr 15;147(2):203–4
Diffusion changes in status epilepticus [letter] Wieshmann UC, et al. **Lancet** 1997 Aug 16;350(9076):493–4
Neuronal injury in experimental status epilepticus in the rat: role of hypoxia. Sasahira M, et al. **Neurosci Lett** 1997 Feb 7;222(3):207–9

PHYSIOPATHOLOGY

The role of excitatory neurotransmitters in seizure-induced neuronal injury in rats. Tanaka K, et al. **Brain Res** 1996 Oct 21;737(1–2):59–63
Status epilepticus. Payne TA, et al. **Crit Care Clin** 1997 Jan; 13(1):17–38 (64 ref.)
Differential sensitivity of various temporal lobe structures in the rat to kindling and status epilepticus induction. Mohapel P, et al. **Epilepsy Res** 1996 Apr;23(3):179–87
Dentate granule cell neurogenesis is increased by seizures and contributes to aberrant network reorganization in the adult rat hippocampus. Parent JM, et al. **J Neurosci** 1997 May 15;17(10):3727–38
Nonconvulsive status epilepticus in thrombotic thrombocytopenic purpura. Blum AS, et al. **Neurology** 1996 Oct;47(4):1079–81
Release of TNF alpha in the rat hippocampus following epileptic seizures and excitotoxic neuronal damage. de Bock F, et al. **Neuroreport** 1996 Apr 26;7(6):1125–9
Lack of Fos-like immunoreactivity after spontaneous seizures or reinduction of status epilepticus by pilocarpine in rats. Mello LE, et al. **Neurosci Lett** 1996 Apr 19;208(2):133–7
Nonconvulsive status epilepticus with generalized 'fast activity'. Bauer J, et al. **Seizure** 1997 Feb;6(1):67–70
Nonconvulsive status epilepticus. Kaplan PW. **Semin Neurol** 1996 Mar;16(1):33–40 (88 ref.)
[Status epilepticus] Salas-Puig J, et al. **Neurologia** 1996 Dec; 11 Suppl 4:108–21 (59 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Intravenous carbamazepine: comparison of different parenteral formulations in a mouse model of convulsive status epilepticus. Löscher W, et al. **Epilepsia** 1997 Jan; 38(1):106–13
Neuroactive steroids protect against pilocarpine- and kainic acid-induced limbic seizures and status epilepticus in mice. Kokate TG, et al. **Neuropharmacology** 1996;35(8):1049–56

PSYCHOLOGY

Pseudoseizure "status". Rechlin T, et al. **J Psychosom Res** 1997 May;42(5):495–8
Psychogenic status epilepticus [letter; comment] Sonnen AE. **Neurology** 1997 Aug;49(2):637. Comment on: Neurology 1996 Feb;46(2):546–7.

SURGERY

Electrographic tachyphylaxis to etomidate and ketamine used for refractory status epilepticus controlled with isoflurane. Kofke WA, et al. **J Neurosurg Anesthesiol** 1997 Jul; 9(3):269–72

STATUS EPILEPTICUS

THERAPY

Electroconvulsive therapy for status epilepticus [letter] Carrasco González MD, et al. **Ann Intern Med** 1997 Aug 1;127(3):247–8

Stopping status epilepticus. **Drug Ther Bull** 1996 Oct; 34(10):73–5

Status epilepticus in children. Segeleon JE, et al. **Pediatr Ann** 1996 Jul;25(7):380–6

Twenty-seven venous cutdowns to treat pseudostatus epilepticus. Gunatilake SB, et al. **Seizure** 1997 Feb;6(1):71–2

STAUROSPORINE

ANALOGS & DERIVATIVES

Effects of the new selective protein kinase C inhibitor 4'-N-benzoyl staurosporine on cell cycle distribution and growth inhibition in human small cell lung cancer cells. Ikegami Y, et al. **Arzneimittelforschung** 1996 Feb; 46(2):201–4

Antitumor activity of the new selective protein kinase C inhibitor 4'-N-benzoyl staurosporine on murine and human tumor models. Ikegami Y, et al. **Arzneimittelforschung** 1995 Nov;45(11):1225–30

Chemosensitization of cancer cells by the staurosporine derivative CGP 41251 in association with decreased P-glycoprotein phosphorylation. Beltran PJ, et al. **Biochem Pharmacol** 1997 Jan 24;53(2):245–7

Differential effects of staurosporine analogues on cell cycle, growth and viability in A549 cells. Courage C, et al. **Br J Cancer** 1996 Oct;74(8):1199–205

Synthesis and anti-platelet aggregation activity of water-soluble staurosporine derivatives [letter] Yamada R, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1070–2

High-performance liquid chromatographic analysis of the new antitumour drug N-benzoylstaurosporine (CGP 41 251) and four potential metabolites in micro-volumes of plasma. van Gijn R, et al. **J Pharm Biomed Anal** 1995 Dec; 14(1–2):165–74

Potential protein kinase C inhibitors. 8,9,10,11 alpha-tetrahydro-7 alpha H-7,11-methano-12, 12-dimethylcycloocta[de]naphthyl-9-amines. Wilson MP, et al. **J Pharm Pharmacol** 1996 Feb;48(2):160–71

A selective protein kinase C inhibitor (CGP 41251) positively and negatively modulates melanoma cell MSH receptors. Siegrist W, et al. **J Recept Signal Transduct Res** 1995 Jan-Mar;15(1–4):283–96

Antitumor effect of CGP41251, a new selective protein kinase C inhibitor, on human non-small cell lung cancer cells. Ikegami Y, et al. **Jpn J Pharmacol** 1996 Jan;70(1):65–72

The antitumor activity of doxorubicin against drug-resistant murine carcinoma is enhanced by oral administration of a synthetic staurosporine analogue, CGP 41251. Killion JJ, et al. **Oncol Res** 1995;7(9):453–9

BIOSYNTHESIS

The staurosporine producing strain Streptomyces longisporoflavus produces metabolites related to K-252a. Proposal for biosynthetic intermediates of K-252a. Cai Y, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1060–2

Metabolism studies of indole derivatives using a staurosporine producer, Streptomyces staurosporeus. Yang SW, et al. **J Nat Prod** 1997 Jan;60(1):44–8

Further metabolic studies of indole and sugar derivatives using the staurosporine producer Streptomyces staurosporeus. Yang SW, et al. **J Nat Prod** 1997 Mar; 60(3):230–5

PHARMACOLOGY

Staurosporine induces telophase arrest and apoptosis blocking mitosis exit in human Chang liver cells. Swe M, et al. **Biochem Biophys Res Commun** 1997 Jul 30;236(3):594–8

Staurosporine, but not Ro 31-8220, induces interleukin 2 production and synergizes with interleukin 1alpha in EL4 thymoma cells. Mahon TM, et al. **Biochem J** 1997 Jul 1; 325 (Pt 1):39–45

Cellular relocalisation of protein kinase C-theta caused by staurosporine and some of its analogues. Jones T, et al. **Biochem Pharmacol** 1997 May 15;53(10):1413–8

Protein kinase- and staurosporine-dependent induction of neurite outgrowth and plasminogen activator activity in PC12 cells. Leprince P, et al. **Biochem Pharmacol** 1996 Nov 8;52(9):1399–405

The inhibitory effect of staurosporine on insulin action is prevented by okadaic acid. Evidence for an important role of serine/threonine phosphorylation in eliciting insulin-like effects. Rondinone CM, et al. **Biochim Biophys Acta** 1996 Nov 8;1314(1–2):49–56

Induction by staurosporine of nitric oxide synthase expression in vascular smooth muscle cells: role of NF-kappa B, CREB and C/EBP beta. Hecker M, et al. **Br J Pharmacol** 1997 Mar;120(6):1067–74

Staurosporine differentiated human SH-SY5Y neuroblastoma cultures exhibit transient apoptosis and trophic factor independence. Prince JA, et al. **Brain Res Bull** 1997; 43(6):515–23

Long-term regulation of synapsin I gene expression and neuronal morphology by cyclic AMP and low-dose staurosporine. Sasaki K, et al. **Brain Res Mol Brain Res** 1996 Aug;40(1):157–60

Potentiation of etoposide-induced apoptosis by staurosporine in human tumor cells is associated with events downstream of DNA-protein complex formation. Lock RB, et al. **Cancer Chemother Pharmacol** 1997;39(5):399–409

Staurosporine inhibits the proliferation, alters the cell cycle distribution and induces apoptosis in HT-29 human colon adenocarcinoma cells. Qiao L, et al. **Cancer Lett** 1996 Oct 1;107(1):83–9

Effects of staurosporine on the capacitative regulation of the state of the Ca2+ reserves in activated Jurkat T lymphocytes. Ahnadi CE, et al. **Cell Calcium** 1996 Jun; 19(6):509–20

Staurosporine resistance accompanies DNA tumor virus-induced immortalization and is indepcndent of the expression and activities of ERK1, ERK2, cyclin A, cyclin-dependent kinase (cdk) 2, and cdk4. Chang T, et al. **Cell Growth Differ** 1996 Mar;7(3):361–72

Staurosporine-induced G1 arrest is associated with the induction and accumulation of cyclin-dependent kinase inhibitors. Kwon TK, et al. **Cell Growth Differ** 1996 Oct; 7(10):1305–13

Effects of staurosporine on ACTH-mediated stimulation of aldosterone production. Pecci A, et al. **Cell Signal** 1996 Aug;8(5):381–6

Inhibition mechanisms of staurosporine and H7 to cAMP-dependent protein kinase through docking study. Takagi A, et al. **Chem Pharm Bull (Tokyo)** 1996 Mar; 44(3):618–20

TNF-mediated cytotoxicity of L929 cells: role of staurosporine in enhancement of cytotoxicity and translocation of protein kinase C isozymes. O'Connell MA, et al. **Cytokine** 1997 Feb;9(2):83–92

Regulation of c-jun gene expression in endothelial cells by the protein kinase inhibitor staurosporine. Bandyopadhyay RS, et al. **Endothelium** 1997;5(2):95–105

Localization of voltage-sensitive Ca2+ fluxes and neuropeptide Y immunoreactivity to varicosities in SH-SY5Y human neuroblastoma cells differentiated by treatment with the protein kinase inhibitor staurosporine. Kukkonen JP, et al. **Eur J Neurosci** 1997 Jan;9(1):140–50

Glutamate-treated rat cortical neuronal cultures die in a way different from the classical apoptosis induced by staurosporine. MacManus JP, et al. **Exp Cell Res** 1997 Jun 15;233(2):310–20

Modulation in cell cycle and cyclin B1 expression in irradiated HeLa cells and normal human skin fibroblasts treated with staurosporine and caffeine. Narayanan PK, et al. **Exp Cell Res** 1997 May 25;233(1):118–27

Biochemical differences between staurosporine-induced apoptosis and premature mitosis. Yoshida M, et al. **Exp Cell Res** 1997 May 1;232(2):225–39

Bacterial alkaloids mitigate seizure-induced hippocampal damage and spatial memory deficits. Smith-Swintosky VL, et al. **Exp Neurol** 1996 Oct;141(2):287–96

Promotion of Salmonella typhimurium adherence and membrane ruffling in MDCK epithelia by staurosporine. Reed KA, et al. **FEMS Microbiol Lett** 1996 Dec 1; 145(2):233–8

Staurosporine and herbimycin A augment agonist-induced elevation of cAMP in Jurkat T-lymphoblasts. Buc HA, et al. **Int J Immunopharmacol** 1996 Feb;18(2):135–9

Mechanism of topoisomerase II inhibition by staurosporine and other protein kinase inhibitors. Lassota P, et al. **J Biol Chem** 1996 Oct 18;271(42):26418–23

Specific activation of a c-Jun NH2-terminal kinase isoform and induction of neurite outgrowth in PC-12 cells by staurosporine. Yao R, et al. **J Biol Chem** 1997 Jul 18; 272(29):18261–6

Beneficial actions of preconditioning and stretch on postischemic contractile function of isolated working rat heart: effects of staurosporine. Obadia JF, et al. **J Cardiovasc Pharmacol** 1997 Aug;30(2):191–6

Staurosporine induces neurite outgrowth in neuronal hybrids (PC12EN) lacking NGF receptors. Rasouly D, et al. **J Cell Biochem** 1996 Sep 1;62(3):356–71

Apoptosis induced in neuronal cultures by either the phosphatase inhibitor okadaic acid or the kinase inhibitor staurosporine is attenuated by isoquinolinesulfonamides H-7, H-8, and H-9. Cagnoli CM, et al. **J Mol Neurosci** 1996 Spring;7(1):65–76

Ca2+ and reactive oxygen species in staurosporine-induced neuronal apoptosis. Prehn JH, et al. **J Neurochem** 1997 Apr; 68(4):1679–85

Different mechanisms for inhibition of cell proliferation via cell cycle proteins in PC12 cells by nerve growth factor and staurosporine. Gollapudi L, et al. **J Neurosci Res** 1997 Aug 15;49(4):461–74

Activation of FSH-responsive adenylate cyclase by staurosporine: role for protein phosphorylation in gonadotropin receptor desensitization. Keren-Tal I, et al. **Mol Cell Endocrinol** 1996 Jan 15;116(1):39–48

Inhibition of neuronal cyclin-dependent kinase-5 by staurosporine and purine analogs is independent of activation by Munc-18. Veeranna, et al. **Neurochem Res** 1996 May;21(5):629–36

Characterization of the cell death process induced by staurosporine in human neuroblastoma cell lines. Boix J, et al. **Neuropharmacology** 1997 Jun;36(6):811–21

Differing effects of staurosporine and UCN-01 on RB protein phosphorylation and expression of lung cancer cell lines. Shimizu E, et al. **Oncology** 1996 Nov-Dec;53(6):494–504

Effect of protein kinase inhibitors on the growth, morphology, and infectivity of Leishmania promastigotes. Becker S, et al. **Parasitol Res** 1997;83(3):273–80

Inhibitors of protein kinases and phosphatases alter root morphology and disorganize cortical microtubules. Baskin TI, et al. **Plant Physiol** 1997 Feb;113(2):493–502

Hydroquinone, a bioreactive metabolite of benzene, inhibits apoptosis in myeloblasts. Hazel BA, et al. **Stem Cells** 1996 Nov;14(6):730–42

Calcium- and meiotic-spindle-independent activation of pig oocytes by the inhibition of staurosporine-sensitive protein kinases. Wang W, et al. **Zygote** 1997 Feb;5(1):75–82

[Protein kinase inhibitor staurosporine enhances cytotoxicity of antitumor drugs to cancer cells] Wang RH, et al. **Yao Hsueh Hsueh Pao** 1996;31(6):411–5 (Eng. Abstr.) **(Chi)**

[Modulation with phorbol myristate acetate and staurosporine of interleukin 2- induced proliferation and nonspecific cytotoxicity of rat lymphocytes] Anisimov AG, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):394–8 **(Rus)**

TOXICITY

K252a and staurosporine microbial alkaloid toxins as prototype of neurotropic drugs. Lazarovici P, et al. **Adv Exp Med Biol** 1996;391:367–77 (32 ref.)

Mechanism of the morphological changes induced by staurosporine in rat osteoblasts. Yang R, et al. **Calcif Tissue Int** 1997 Jul;61(1):68–73

Alteration of proto-oncogenes during apoptosis in the oral squamous cell carcinoma cell line, SAS, induced by staurosporine. Abiko Y, et al. **Cancer Lett** 1997 Sep 16; 118(1):101–7

Bax accelerates staurosporine-induced but suppresses nigericin-induced neuronal cell death. Oh JH, et al. **Neuroreport** 1997 May 27;8(8):1851–6

STAVUDINE

ADMINISTRATION & DOSAGE

[Efficacy of 2 combined drugs for HIV infected patients (news)] **Fortschr Med** 1996 Dec 10;114(34):61 **(Ger)**

ADVERSE EFFECTS

Hepatic steatosis and lactic acidosis associated with stavudine treatment in an HIV patient: a case report [letter] Lenzo NP, et al. **AIDS** 1997 Aug;11(10):1294–6

Lamivudine-stavudine-induced liver failure in hepatitis B cirrhosis. Schiano TD, et al. **Am J Gastroenterol** 1997 Sep; 92(9):1563–4

Puerperal febrile morbidity associated with the reverse transcriptase inhibitor stavudine. Wax JR, et al. **J Matern Fetal Med** 1997 Mar-Apr;6(2):118–9

ANALOGS & DERIVATIVES

Phosphoramidate derivatives of d4T as inhibitors of HIV: the effect of amino acid variation. McGuigan C, et al. **Antiviral Res** 1997 Aug;35(3):195–204

BLOOD

Effects of drugs on 2',3'-dideoxy-2',3'-didehydrothymidine phosphorylation in vitro. Hoggard PG, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1231–6

Radioimmunoassay for quantitation of 2',3'-didehydro-3'-deoxythymidine (D4T) in human plasma. Zhou XJ, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1472–5

Specific radioimmunoassays for the measurement of stavudine in human plasma and urine. Kaul S, et al. **J Pharm Biomed Anal** 1996 Nov;15(2):165–74

ISOLATION & PURIFICATION

Effect of temperature on the high-performance liquid chromatographic separation of the anti-HIV agents, didanosine and stavudine. Stancato FA, et al. **Biomed Chromatogr** 1996 Jan-Feb;10(1):29–31

METABOLISM

Antiretrovirus specificity and intracellular metabolism of 2',3'-didehydro-2',3'-dideoxythymidine (stavudine) and its 5'-monophosphate triester prodrug So324. Balzarini J, et al. **Mol Pharmacol** 1996 Nov;50(5):1207–13

PHARMACOKINETICS

Zidovudine does not affect transplacental transfer or systemic clearance of stavudine (2',3'-didehydro-3'-deoxythymidine) in the pigtailed macaque (Macaca nemestrina). Odinecs A, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1569–71

Prenatal and postpartum pharmacokinetics of stavudine (2',3'-didehydro-3'-deoxythymidine) and didanosine (dideoxyinosine) in pigtailed macaques (Macaca nemestrina). Odinecs A, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2423–5

In vivo maternal-fetal pharmacokinetics of stavudine (2',3'-didehydro-3'-deoxythymidine) in pigtailed macaques (Macaca nemestrina). Odinecs A, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):196–202

Nasal absorption of 2',3'-didehydro-3'-deoxythymidine (D4T) and its esters in rats. Yajima T, et al. **Biol Pharm Bull** 1996 Sep;19(9):1234–7

Microdialysis studies of the distribution of stavudine into the central nervous system in the freely-moving rat. Yang Z, et al. **Pharm Res** 1997 Jul;14(7):865-72

PHARMACOLOGY

Newer nucleosides: lamivudine and stavudine. Katlama C, et al. **AIDS** 1996;10 Suppl A:S135-43 (58 ref.)

Stavudine selectively induces apoptosis in HIV type 1-infected cells. Hashimoto KI, et al. **AIDS Res Hum Retroviruses** 1997 Jan 20;13(2):193-9

Cytotoxic interactions of 5-fluorouracil and nucleoside analogues in vitro. Li YX, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):21-7

Potentiation of the stavudine anti-human immunodeficiency virus activity by 5-fluorouracil [letter] Gong YF, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1329

Mutants of feline immunodeficiency virus resistant to 2',3'-dideoxy-2',3'-didehydrothymidine. Zhu YQ, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):1983-7

Metabolism and activities of 3'-azido-2',3'-dideoxythymidine and 2',3'-didehydro-2',3'-dideoxythymidine in herpesvirus thymidine kinase transduced T-lymphocytes. Drake RR, et al. **Antiviral Res** 1997 Aug;35(3):177-85

Phosphoramidate derivatives of d4T as inhibitors of HIV: the effect of amino acid variation. McGuigan C, et al. **Antiviral Res** 1997 Aug;35(3):195-204

Stavudine: a review of its pharmacodynamic and pharmacokinetic properties and clinical potential in HIV infection. Lea AP, et al. **Drugs** 1996 May;51(5):846-64 (114 ref.)

Antiretrovirus specificity and intracellular metabolism of 2',3'-didehydro-2',3'-dideoxythymidine (stavudine) and its 5'-monophosphate triester prodrug So324. Balzarini J, et al. **Mol Pharmacol** 1996 Nov;50(5):1207-13

THERAPEUTIC USE

Adding saquinavir to stavudine in patients with advanced HIV-1 infection [letter] Rutschmann OT, et al. **AIDS** 1997 Mar 15;11(4):548

Lack of emergence of genotypic resistance to stavudine after 2 years of monotherapy [letter] Soriano V, et al. **AIDS** 1997 Apr;11(5):696-7

Clinical efficacy of monotherapy with stavudine compared with zidovudine in HIV-infected, zidovudine-experienced patients. A randomized, double-blind, controlled trial. Bristol-Myers Squibb Stavudine/019 Study Group. Spruance SL, et al. **Ann Intern Med** 1997 Mar 1; 126(5):355-63

Stavudine: a review of its pharmacodynamic and pharmacokinetic properties and clinical potential in HIV infection. Lea AP, et al. **Drugs** 1996 May;51(5):846-64 (114 ref.)

Clinical experience with stavudine as salvage therapy in patients with advanced HIV disease [letter] Wallace MR, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Sep;13(1):96-7

[Stavudine: current information] Saimot AG. **Presse Med** 1997 Apr 5;26(11):514-5 **(Fre)**

[Therapy of HIV infection: combination drug therapy effective, immunotherapy still experimental] **Dtsch Med Wochenschr** 1997 Apr 11;122(15):A32 **(Ger)**

STEALING see **THEFT**

STEAM

Steam sterilization [published erratum appears in Biomed Instrum Technol 1997 May-Jun;31(3):294] Thaete R. **Biomed Instrum Technol** 1996 Nov-Dec;30(6):538-40

[Factors modulating the sensitivity of bacterial spores to steam under pressure] Krzywicka H, et al. **Rocz Panstw Zakl Hig** 1996;47(3):325-32 (Eng. Abstr.) **(Pol)**

[The effect of growth media on recovery of test microorganisms after exposure to saturated steam under pressure] Krzywicka H, et al. **Rocz Panstw Zakl Hig** 1996; 47(4):439-44 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Burns and inhalation injury caused by steam. Balakrishnan C, et al. **Burns** 1996 Jun;22(4):313-5

ANALYSIS

IgE-binding proteins in fish and fish steam. Pascual CY, et al. **Monogr Allergy** 1996;32:174-80

STEARATES

Evaluation of stearate-graphite paste electrodes for chronic measurement of extracellular dopamine concentrations in the mammalian brain. Blaha CD. **Pharmacol Biochem Behav** 1996 Nov;55(3):351-64

ANALYSIS

Studies on neurosteroids. V: Separation and characterization of pregnenolone 3-stearate in rat brains using high-performance liquid chromatography. Shimada K, et al. **J Chromatogr Sci** 1997 Feb;35(2):71-4

METABOLISM

Cytoplasmic codiffusion of fatty acids is not specific for fatty acid binding protein. Luxon BA, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C859-67

Desaturation of stearate is insufficient to increase the concentrations of oleate in cultured rat hepatocytes. Pai T, et al. **J Nutr** 1997 May;127(5):753-7

PHARMACOLOGY

Stearate inhibition of breast cancer cell proliferation. A mechanism involving epidermal growth factor receptor and G-proteins. Wickramasinghe NS, et al. **Am J Pathol** 1996 Mar;148(3):987-95

Effects of methyl 9(or 10)-hydroxy-10(or 9)-mercaptostearate and hexadecanethioic S-acid on cupric ion- or 2,2-azo-bis(2-amidinopropane) dihydrochloride (AAPH)-induced oxidation of low density lipoprotein. Tanaka M, et al. **Biol Pharm Bull** 1996 May;19(5):692-6

THERAPEUTIC USE

Efficacy of barrier creams. Grunewald AM, et al. **Curr Probl Dermatol** 1995;23:187-97

STEARIC ACIDS

ADMINISTRATION & DOSAGE

Coagulation and fibrinolysis factors in healthy subjects consuming high stearic or trans fatty acid diets. Mutanen M, et al. **Thromb Haemost** 1997 Jan;77(1):99-104

ANALYSIS

Structural characterization of a "signature" phosphatidylethanolamine as the major 10-hydroxy stearic acid-containing lipid of Cryptosporidium parvum oocysts. Schrum DP, et al. **Lipids** 1997 Jul;32(7):789-93

Differentiation of sarcoidosis from tuberculosis by use of electron capture gas-liquid chromatography. Almenoff PL, et al. **Lung** 1996;174(6):349-58

Rapid chemotaxonomic diagnosis of human tuberculosis. Yassin AF, et al. **Zentralbl Bakteriol** 1996 Jul; 284(2-3):466-73

BLOOD

Palmitate and stearate binding to human serum albumin. Determination of relative binding constants. Vorum H, et al. **J Pept Res** 1997 Apr;49(4):347-54

CEREBROSPINAL FLUID

[Determination of tuberculostearic acid for diagnosis of tuberculous meningitis with negative culture of tubercle bacillus] Kang J, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1995 Dec; 18(6):340-3, 382 (Eng. Abstr.) **(Chi)**

CHEMISTRY

In vitro/in vivo comparison of drug release and polymer erosion from biodegradable P(FAD-SA) polyanhydrides--a noninvasive approach by the combined use of electron paramagnetic resonance spectroscopy and nuclear magnetic resonance imaging. Mäder K, et al. **Pharm Res** 1997 Jun;14(6):820-6

METABOLISM

Desaturation and interconversion of dietary stearic and palmitic acids in human plasma and lipoproteins. Rhee SK, et al. **Am J Clin Nutr** 1997 Feb;65(2):451-8

Enzymes of octadecanoid biosynthesis in plants--12-oxo-phytodienoate 10,11-reductase. Schaller F, et al. **Eur J Biochem** 1997 Apr 15;245(2):294-9

Metabolism of 14C-labelled sucrose esters of stearic acid in rats. Noker PE, et al. **Food Chem Toxicol** 1997 Jun; 35(6):589-95

Arachidonic acid modulates [14C]stearic acid incorporation into phosphatidylinositol, in human neuroblastoma cells. Pacini L, et al. **J Neurooncol** 1997 Jan;31(1-2):141-6

Stearic acid unlike shorter-chain saturated fatty acids is poorly utilized for triacylglycerol synthesis and beta-oxidation in cultured rat hepatocytes. Pai T, et al. **Lipids** 1996 Feb;31(2):159-64

Interaction of copper ions with stearic acid Langmuir monolayers and formation of cluster structures in monolayers and Langmuir-Blodgett films. Khomutov GB, et al. **Membr Cell Biol** 1997;10(6):665-81

PHARMACOKINETICS

In situ observation of bovine serum albumin-adsorbed stearic acid monolayer by Brewster angle microscopy. Tanaka H, et al. **J Biochem (Tokyo)** 1997 Feb;121(2):206-11

PHARMACOLOGY

Stearic acid, trans fatty acids, and dairy fat: effects on serum and lipoprotein lipids, apolipoproteins, lipoprotein(a), and lipid transfer proteins in healthy subjects. Aro A, et al. **Am J Clin Nutr** 1997 May;65(5):1419-26

Effects of fatty acids on apolipoprotein B secretion by McArdle RH-7777 rat hepatoma cells. Sparks JD, et al. **Biochim Biophys Acta** 1997 Jul 12;1347(1):51-61

Association of murine splenocyte CD3 complex to the cytoskeleton: absence of modulation by exogenous fatty acids. Peck MD, et al. **Cell Biol Int** 1996 Aug;20(8):531-7

Palmitic acid but not stearic acid inhibits NO-production in endothelial cells. Moers A, et al. **Exp Clin Endocrinol Diabetes** 1997;105 Suppl 2:78-80

Irreversible inhibition of hepatic fatty acid salt uptake by photoaffinity labeling with 11, 11-azistearate. Schmider W, et al. **J Lipid Res** 1996 Apr;37(4):739-53

Dietary stearic acid reduces plasma and hepatic cholesterol concentrations without increasing bile acid excretion in cholesterol-fed hamsters. Hassel CA, et al. **J Nutr** 1997 Jun;127(6):1148-55

Stearic acid modifies very low density lipoprotein lipid composition and particle size differently from shorter-chain saturated fatty acids in cultured rat hepatocytes. Pai T, et al. **Lipids** 1997 Feb;32(2):143-9

[Chronic treatment with tween-80 (5%) or n-stearoyl glycine on the antimobility effects of imipramine in the forced swimming test in mice] Vamvakidès A. **Boll Chim Farm** 1996 Nov;135(10):603-4 (Eng. Abstr.) **(Fre)**

[In vitro effects of free fatty acids on water content and osmotic fragility of erythrocytes in rabbits] Kogawa H, et al. **C R Seances Soc Biol Fil** 1997;191(2):267-72 (Eng. Abstr.) **(Fre)**

STEAROYL-COA DESATURASE

ANTAGONISTS & INHIBITORS

Inhibiting delta9-desaturase activity impairs triacylglycerol secretion in cultured chicken hepatocytes. Legrand P, et al. **J Nutr** 1997 Feb;127(2):249-56

BIOSYNTHESIS

An AP1 element is involved in transcriptional regulation of delta9-desaturase gene of Histoplasma capsulatum. Tosco A, et al. **Biochem Biophys Res Commun** 1997 Jan 13; 230(2):457-61

Differential expression of hepatic stearoyl-CoA desaturase gene 1 in male and female mice. Lee KN, et al. **Biochim Biophys Acta** 1996 Nov 22;1304(2):85-8

GENETICS

Adipose tissue stearoyl-CoA desaturase mRNA is increased by obesity and decreased by polyunsaturated fatty acids. Jones BH, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):E44-9

Regulation of hepatic stearoyl-CoA desaturase gene 1 by vitamin A. Miller CW, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):206-10

Localization of a negative thyroid hormone-response region in hepatic stearoyl-CoA desaturase gene 1. Waters KM, et al. **Biochem Biophys Res Commun** 1997 Apr 28; 233(3):838-43

cAMP activates the expression of stearoyl-CoA desaturase gene 1 during early preadipocyte differentiation. Casimir DA, et al. **J Biol Chem** 1996 Nov 22;271(47):29847-53

Fatty acid-responsive control of mRNA stability. Unsaturated fatty acid-induced degradation of the Saccharomyces OLE1 transcript. Gonzalez CI, et al. **J Biol Chem** 1996 Oct 18;271(42):25801-9

Regulation of stearoyl-CoA desaturase 1 mRNA stability by polyunsaturated fatty acids in 3T3-L1 adipocytes. Sessler AM, et al. **J Biol Chem** 1996 Nov 22; 271(47):29854-8

Up-regulated delta 9-desaturase gene expression by hypolipidemic peroxisome-proliferating fatty acids results in increased oleic acid content in liver and VLDL: accumulation of a delta 9-desaturated metabolite of tetradecylthioacetic acid. Madsen L, et al. **J Lipid Res** 1997 Mar;38(3):554-63

Temporal-regulation of serum lipids and stearoyl CoA desaturase and lipoprotein lipase mRNA in BALB/cHnn mice. Paisley EA, et al. **J Nutr** 1996 Nov;126(11):2730-7

METABOLISM

Perfluorodecanoic acid enhances the formation of oleic acid in rat liver. Yamamoto A, et al. **Biochem J** 1997 Jul 15; 325 (Pt 2):429-34

Dietary cholesterol and the activity of stearoyl CoA desaturase in rats: evidence for an indirect regulatory effect. Landau JM, et al. **Biochim Biophys Acta** 1997 Apr 21; 1345(3):349-57

Role of stearoyl-CoA desaturase in the modification of acyl composition of hepatic phosphatidylcholine by peroxisome proliferators. Mizuguchi H, et al. **Biol Pharm Bull** 1996 Dec;19(12):1556-9

Lipid level and type alter stearoyl CoA desaturase mRNA abundance differently in mice with distinct susceptibilities to diet-influenced diseases. Park EI, et al. **J Nutr** 1997 Apr;127(4):566-73

STEARYL-COA DESATURASE see **STEAROYL-COA DESATURASE**

STEARYL-COA GLYCEROPHOSPHATE TRANSSTEARYLASE see **GLYCEROLPHOSPHATE ACYLTRANSFERASE**

STEATONECROSIS see **FAT NECROSIS**

STEATORRHEA see **CELIAC DISEASE**

STEEL

Lack of concordance between the ICD-9 classification of soft tissue disorders of the neck and upper limb and chart review diagnosis: one steel mill's experience. Buchbinder R, et al. **Am J Ind Med** 1996 Feb;29(2):171–82

Cancer incidence among mild steel and stainless steel welders and other metal workers. Hansen KS, et al. **Am J Ind Med** 1996 Oct;30(4):373–82

Lung cancer mortality in stainless steel and mild steel welders: a nested case-referent study. Lauritsen JM, et al. **Am J Ind Med** 1996 Oct;30(4):383–91

Cancer risks among iron and steel workers in Anshan, China, Part I: Proportional mortality ratio analysis. Xu Z, et al. **Am J Ind Med** 1996 Jul;30(1):1–6

Cancer risks among iron and steel workers in Anshan, China, Part II: Case-control studies of lung and stomach cancer. Xu Z, et al. **Am J Ind Med** 1996 Jul;30(1):7–15

Simultaneous determination of urinary zinc, cadmium, lead and copper concentrations in steel production workers by differential-pulse anodic stripping voltammetry. Horng CJ. **Analyst** 1996 Oct;121(10):1511–4

Weight gain and longitudinal changes in lung function in steel workers. Wang ML, et al. **Chest** 1997 Jun; 111(6):1526–32

Identification of high-risk groups among maintenance workers in a steel company with respect to musculoskeletal symptoms and workload. Hildebrandt VH, et al. **Ergonomics** 1996 Feb;39(2):232–42

Detection and localization of steel intraocular foreign bodies using computed tomography. A comparison of helical and conventional axial scanning. Chacko JG, et al. **Ophthalmology** 1997 Feb;104(2):319–23

[Scanning electron microscopic studies on the corrosion behavior of osteosynthesis plates made of titanium and V4A steel. A case report] Bienengräber V, et al. **Dtsch Zahn Mund Kieferheilkd Zentralbl** 1991;79(1):35–6 **(Ger)**

[Micro-laser surgery in nasopharyngeal tumors with steel reflector. Report of experiences with an improved technique] Heher W. **Laryngorhinootologie** 1996 Nov; 75(11):700–2 (Eng. Abstr.) **(Ger)**

[Pulmonary arterio-venous fistula treated by embolization with steel coils] Yoshimi M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 May; 34(5):569–74 (Eng. Abstr.) **(Jpn)**

[Comparative hygienic characterization of main stages of steel casting industry] Babkin VO, et al. **Gig Sanit** 1997 May-Jun;(3):19–22 (Eng. Abstr.) **(Rus)**

[The finishing treatment of dentures made from corrosion-resistant steel] Gozhiĭ AG, et al. **Stomatologiia (Mosk)** 1997;76(1):40–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

60Co contamination in recycled steel resulting in elevated civilian radiation doses: causes and challenges. Chang WP, et al. **Health Phys** 1997 Sep;73(3):465–72

TOXICITY

Pneumotoxicity and pulmonary clearance of different welding fumes after intratracheal instillation in the rat. Antonini JM, et al. **Toxicol Appl Pharmacol** 1996 Sep; 140(1):188–99

STEEL FACTOR see **STEM CELL FACTOR**

STEELE-RICHARDSON-OLSZEWSKI SYNDROME see **SUPRANUCLEAR PALSY, PROGRESSIVE**

STEELHEAD see **ONCORHYNCHUS MYKISS**

STEELY HAIR SYNDROME see **KINKY HAIR SYNDROME**

STEIN-LEVENTHAL SYNDROME see **POLYCYSTIC OVARY SYNDROME**

STEINERT'S DISEASE see **MYOTONIA ATROPHICA**

STELLATE GANGLION

Continuous stellate ganglion blockade [letter; comment] Alam S. **Anesth Analg** 1996 Dec;83(6):1350–1. Comment on: Anesth Analg 1992 Dec;75(6):1041–2.

Stellate ganglion block improved loss of visual acuity caused by retrobulbar optic neuritis after herpes zoster. Mori T, et al. **Anesth Analg** 1997 Oct;85(4):870–1

Comparison of stellate ganglion block with intravascular infusion of prostaglandin E1 on brachial artery blood flow in dogs. Okuda Y, et al. **Anesth Analg** 1997 Jun; 84(6):1329–32

Lidocaine tape relieves pain due to needle insertion during stellate ganglion block. Inada T, et al. **Can J Anaesth** 1997 Mar;44(3):259–62

Rare complication after stellate ganglion block [letter] Saruki N, et al. **Can J Anaesth** 1997 Jul;44(7):784

Stellate ganglion block alleviates pseudo-obstruction symptoms followed by episodes of hypermetropia: case report. Devulder J, et al. **Reg Anesth** 1997 May-Jun; 22(3):284–6

Phantom pain with probable reflex sympathetic dystrophy: efficacy of fentanyl infiltration of the stellate ganglion. Wassef MR. **Reg Anesth** 1997 May-Jun;22(3):287–90

[Radiological case of the month. Claude-Bernard-Horner syndrome revealing cervicothoracic neuroblastoma] Duterque B, et al. **Arch Pediatr** 1996 Oct;3(10):1041–2 **(Fre)**

[Management of severe pain after extended maxillectomy in a patient with carcinoma of the maxillary sinus] Iwade M, et al. **Masui** 1996 Jan;45(1):82–5 (Eng. Abstr.) **(Jpn)**

[Can superior cervical ganglionectomy be an experimental model of stellate ganglion block?] Iwama H. **Masui** 1997 Apr;46(4):565–7 (4 ref.) **(Jpn)**

[A case of severe hypertension caused by stellate ganglion block in a patient with facial palsy] Yokota S, et al. **Masui** 1996 Sep;45(9):1123–6 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Cardiac neurones of autonomic ganglia. Wallis D, et al. **Microsc Res Tech** 1996 Sep 1;35(1):69–79 (80 ref.)

CHEMISTRY

Topographic relationship of neurotensin-containing axon terminals with cardiac and noncardiac principal ganglion cells in the stellate ganglia of the cat. Carbó R, et al. **Synapse** 1997 Mar;25(3):277–84

ENZYMOLOGY

[AChE-positive neurons in the mammalian stellate ganglion] Nozdrachev AD, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):32–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Reserpine-induced increases in neuropeptide Y mRNA of guinea pig sympathetic ganglia using in situ hybridization. Schmidt EA, et al. **Anat Rec** 1996 Dec;246(4):561–4

A family of delayed rectifier Kv1 cDNAs showing cell type-specific expression in the squid stellate ganglion/giant fiber lobe complex. Rosenthal JJ, et al. **J Neurosci** 1997 Jul 1;17(13):5070–9

[GABA-immunoreactive structures in the stellate and superior cervical ganglia of the cat] Fateev MM, et al. **Fiziol Zh Im I M Sechenova** 1995 Oct;81(10):20–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A new, concise dialysis approach to assessment of cardiac sympathetic nerve terminal abnormalities. Yamazaki T, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1182–7

The tonic sympathetic input to the cochlear vasculature in guinea pig. Laurikainen EA, et al. **Hear Res** 1997 Mar; 105(1–2):141–5

Developmental changes in modulation of cardiac repolarization by sympathetic stimulation: the role of beta- and alpha-adrenergic receptors. Cua M, et al. **J Cardiovasc Electrophysiol** 1997 Aug;8(8):865–71

Differential pre- and postsynaptic modulation of chemical transmission in the squid giant synapse by tyrosine phosphorylation. Llinás R, et al. **Proc Natl Acad Sci U S A** 1997 Mar 4;94(5):1990–4

[Influence of stellate ganglion block and electrical stimulation of the stellate ganglion on bilateral brachial arterial blood flow—is stellate ganglion block effective either unilaterally or bilaterally?] Okuda Y, et al. **Masui** 1996 Dec; 45(12):1465–8 (Eng. Abstr.) **(Jpn)**

[Innervation of internal organs by stellate ganglion neurons in the cat] Fateev MM, et al. **Dokl Akad Nauk** 1996 May; 348(1):122–3 **(Rus)**

[Cat stellate ganglion pathways] Fateev MM, et al. **Dokl Akad Nauk** 1996 Dec;351(6):834–6 **(Rus)**

ULTRASTRUCTURE

Arborization pattern of sympathetic preganglionic axons in the rat superior cervical and stellate ganglia. Asamoto K, et al. **Neurosci Res** 1997 Jul;28(3):235–41

[Ultrastructure of the sympathetic ganglia in hypoxia] Chairkin IN, et al. **Arkh Patol** 1997 Jan-Feb;59(1):46–50 (Eng. Abstr.) **(Rus)**

STEM see **MICROSCOPY, ELECTRON, SCANNING TRANSMISSION**

STEM CELL ASSAY see **COLONY-FORMING UNITS ASSAY**

STEM CELL ASSAY, TUMOR see **TUMOR STEM CELL ASSAY**

STEM CELL FACTOR

Host conditioning with 5-fluorouracil and kit-ligand to provide for long-term bone marrow engraftment. van Os R, et al. **Blood** 1997 Apr 1;89(7):2376–83

"Stem cell candidates" purified by liquid culture in the presence of Steel factor, IL-3, and 5FU are strictly stroma-dependent and have myeloid, lymphoid, and megakaryocytic potential. Bertolini F, et al. **Exp Hematol** 1997 Apr;25(4):350–6

ADMINISTRATION & DOSAGE

Exogenous stem cell factor (SCF) compensates for altered endogenous SCF expression in 2,5-hexanedione-induced testicular atrophy in rats. Allard EK, et al. **Biol Reprod** 1996 Jul;55(1):185–93

Increased numbers of long-term culture-initiating cells in the apheresis product of patients randomized to receive increasing doses of stem cell factor administered in combination with chemotherapy and a standard dose of granulocyte colony-stimulating factor. Weaver A, et al. **Blood** 1996 Nov 1;88(9):3323–8

ANALOGS & DERIVATIVES

Recombinant methionyl human stem cell factor and filgrastim for peripheral blood progenitor cell mobilization and transplantation in non-Hodgkin's lymphoma patients—results of a phase I/II trial. Moskowitz CH, et al. **Blood** 1997 May 1;89(9):3136–47

ANALYSIS

Topical tretinoin increases dermal mast cells, induces epidermal mast cell growth factor (c-kit ligand) and modulates its distribution in hairless mice. Kligman LH, et al. **Arch Dermatol Res** 1996 Aug;288(9):537–42

Cellular localization of stem cell factor and c-kit receptor in the mouse nervous system. Zhang SC, et al. **J Neurosci Res** 1997 Jan 1;47(1):1–15

ANTAGONISTS & INHIBITORS

Macrophage inflammatory protein-1alpha and interferon-inducible protein 10 inhibit synergistically induced growth factor stimulation of MAP kinase activity and suppress phosphorylation of eukaryotic initiation factor 4E and 4E binding protein 1. Aronica SM, et al. **Blood** 1997 May 15;89(10):3582–95

Dexamethasone or cyclosporin A inhibits stem cell factor-dependent secretory responses of rat peritoneal mast cells in vitro. Taylor AM, et al. **Immunopharmacology** 1996 Aug;34(1):63–70

BIOSYNTHESIS

Coexpression of flt-3 ligand/flt-3 and SCF/c-kit signal transduction system in bile-duct-ligated SI and W mice. Omori M, et al. **Am J Pathol** 1997 Apr;150(4):1179–87

Expression of stem cell factor in human aortic endothelial and smooth muscle cells. Miyamoto T, et al. **Atherosclerosis** 1997 Mar 21;129(2):207–13

Airway epithelial cells produce stem cell factor. Wen LP, et al. **Biochim Biophys Acta** 1996 Dec 12;1314(3):183–6

The cloning and sequencing of cDNAs encoding two isoforms of feline stem cell factor. Dunham SP, et al. **DNA Seq** 1996;6(4):233–7

Expression of alpha-fetoprotein and stem cell factor/c-kit system in bile duct ligated young rats. Omori M, et al. **Hepatology** 1997 May;25(5):1115–22

Expression of c-KIT and its ligand, stem cell factor, in normal and subfertile human testicular tissue. Sandlow JI, et al. **J Androl** 1996 Jul-Aug;17(4):403–8

Glucocorticoids decrease tissue mast cell number by reducing the production of the c-kit ligand, stem cell factor, by resident cells: in vitro and in vivo evidence in murine systems. Finotto S, et al. **J Clin Invest** 1997 Apr 1; 99(7):1721–8

Liver granulomas in schistosomiasis: mast cell-dependent induction of SCF expression in hepatic stellate cells is mediated by TNF-alpha. Brito JM, et al. **J Leukoc Biol** 1997 Sep;62(3):389–96

Expression of stem cell factor in the postnatal rat testis. Munsie M, et al. **Mol Reprod Dev** 1997 May;47(1):19–25

BLOOD

Low levels of plasma stem-cell factor in a patient with cyclic neutropenia [letter] Shinohara K, et al. **Am J Hematol** 1997 May;55(1):50–1

Umbilical vein endothelial cells are an important source of c-kit and stem cell factor which regulate the proliferation of haemopoietic progenitor cells. Yamaguchi H, et al. **Br J Haematol** 1996 Sep;94(4):606–11

Levels of stem cell factor and interleukin-3 in serum in acute Plasmodium falciparum malaria. Burgmann H, et al. **Clin Diagn Lab Immunol** 1997 Mar;4(2):226–8

The presence of membrane-bound stem cell factor on highly immature nonmetachromatic mast cells in the peripheral blood of a patient with aggressive systemic mastocytosis. Castells MC, et al. **J Allergy Clin Immunol** 1996 Oct; 98(4):831–40

CHEMISTRY

Differences between membrane-bound and secreted isoforms of stem cell factor. **Ciba Found Symp** 1997;204:57–9 (5 ref.)

The cloning and sequencing of cDNAs encoding two isoforms of feline stem cell factor. Dunham SP, et al. **DNA Seq** 1996;6(4):233–7

The majority of stem cell factor exists as monomer under physiological conditions. Implications for dimerization mediating biological activity. Hsu YR, et al. **J Biol Chem** 1997 Mar 7;272(10):6406–15

In vitro methionine oxidation of Escherichia coli-derived human stem cell factor: effects on the molecular structure,

biological activity, and dimerization. Hsu YR, et al. **Protein Sci** 1996 Jun;5(6):1165–73

Computational simulations of stem–cell factor/c–kit receptor interaction. Menziani MC, et al. **Proteins** 1996 Sep; 26(1):42–54

GENETICS

Impaired expression of stem cell factor in dermatofibroma fibroblasts. Yamamoto T, et al. **Acta Derm Venereol** 1996 Jul;76(4):257–9

Biochemical and genetic characterization of multiple splice variants of the Flt3 ligand. McClanahan T, et al. **Blood** 1996 Nov 1;88(9):3371–82

Enteric neurons express Steel factor–lacZ transgene in the murine gastrointestinal tract. Torihashi S, et al. **Brain Res** 1996 Nov 4;738(2):323–8

In vitro effects of a recombinant toxin, mSCF–PE40, targeting c–kit receptors ectopically expressed in small cell lung cancers. Nishida K, et al. **Cancer Lett** 1997 Feb 26; 113(1–2):153–8

Human stem cell factor promoter deoxyribonucleic acid sequence and regulation by cyclic 3',5'–adenosine monophosphate in a Sertoli cell line. Taylor WE, et al. **Endocrinology** 1996 Dec;137(12):5407–14

Cloning and characterization of the 5' flanking region of the stem cell factor gene in rat Sertoli cells. Jiang C, et al. **Gene** 1997 Feb 7;185(2):285–90

Expression of transcription factors and stem cell factor precedes hepatocyte differentiation in rat pancreas. Rao MS, et al. **Gene Expr** 1996;6(1):15–22

Multiple pathways for Steel regulation suggested by genomic and sequence analysis of the murine Steel gene. Bedell MA, et al. **Genetics** 1996 Mar;142(3):927–34

Deletion and interallelic complementation analysis of Steel mutant mice. Bedell MA, et al. **Genetics** 1996 Mar; 142(3):935–44

Expression of the ovine stem cell factor gene during folliculogenesis in late fetal and adult ovaries. Tisdall DJ, et al. **J Mol Endocrinol** 1997 Apr;18(2):127–35

Molecular analysis of two new Steel mutations in mice shows a transversion or an insertion. Graw J, et al. **Mamm Genome** 1996 Nov;7(11):843–6

Ovine stem cell factor gene is located within a syntenic group on chromosome 3 conserved across mammalian species. Tisdall DJ, et al. **Mamm Genome** 1996 Jun;7(6):472–3

Cloning, sequencing and expression of stem cell factor (c–kit ligand) cDNA of brushtail possum (Trichosurus vulpecula). Greenwood PJ, et al. **Reprod Fertil Dev** 1996;8(4):789–95

IMMUNOLOGY

Specificity and functional effects of antibodies to human stem cell factor. Zannettino AC, et al. **Growth Factors** 1997; 14(1):67–79

Stem cell factor dependent hyperplasia of mucosal–type mast cells but not eosinophils in Schistosoma mansoni–infected rats. Newlands GF, et al. **Parasite Immunol** 1995 Nov; 17(11):595–8

METABOLISM

Functional and ultrastructural studies on the burst of c–kit ligand containing secretory cytoplasmatic vesicles. Huss R. **Acta Histochem** 1997 Mar;99(1):111–6

Interactions between c–kit and stem cell factor are not required for B–cell development in vivo. Takeda S, et al. **Blood** 1997 Jan 15;89(2):518–25

Interferon gamma downregulates stem cell factor and erythropoietin receptors but not insulin–like growth factor–I receptors in human erythroid colony–forming cells. Taniguchi S, et al. **Blood** 1997 Sep 15;90(6):2244–52

Human osteoclasts and preosteoclast cells (FLG 29.1) express functional c–kit receptors and interact with osteoblast and stromal cells via membrane–bound stem cell factor. Gattei V, et al. **Cell Growth Differ** 1996 Jun;7(6):753–63

Hormonally regulated expression and alternative splicing of kit ligand may regulate kit–induced inhibition of meiosis in rat oocytes. Ismail RS, et al. **Dev Biol** 1997 Apr 15; 184(2):333–42

Neural and skin cell–specific expression pattern conferred by steel factor regulatory sequence in transgenic mice. Yoshida H, et al. **Dev Dyn** 1996 Oct;207(2):222–32

Cloning and characterization of the 5' flanking region of the stem cell factor gene in rat Sertoli cells. Jiang C, et al. **Gene** 1997 Feb 7;185(2):285–90

Stem cell factor in nasal polyposis and allergic rhinitis: increased expression by structural cells is suppressed by in vivo topical corticosteroids. Kim YK, et al. **J Allergy Clin Immunol** 1997 Sep;100(3):389–99

Distinct signaling from stem cell factor and erythropoietin in HCD57 cells. Jacobs–Helber SM, et al. **J Biol Chem** 1997 Mar 14;272(11):6850–3

Kit receptor dimerization is driven by bivalent binding of stem cell factor. Lemmon MA, et al. **J Biol Chem** 1997 Mar 7;272(10):6311–7

Direct association of Csk homologous kinase (CHK) with the diphosphorylated site Tyr568/570 of the activated c–KIT in megakaryocytes. Price DJ, et al. **J Biol Chem** 1997 Feb 28;272(9):5915–20

The expression of stem cell factor and its receptor, c–kit in human endometrium and placental tissues during pregnancy. Kauma S, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1261–6

Release of stem cell factor from a human keratinocyte line, HaCaT, is increased in differentiating versus proliferating cells. Grabbe J, et al. **J Invest Dermatol** 1996 Aug; 107(2):219–24

Analysis of stem cell factor for mast cell proliferation in the human myometrium. Mori A, et al. **Mol Hum Reprod** 1997 May;3(5):411–8

Hormonal regulation of the ligand for c–kit in the rat ovary and its effects on spontaneous oocyte meiotic maturation. Ismail RS, et al. **Mol Reprod Dev** 1996 Apr;43(4):458–69

Chymase cleavage of stem cell factor yields a bioactive, soluble product. Longley BJ, et al. **Proc Natl Acad Sci U S A** 1997 Aug 19;94(17):9017–21

[Pterygium and mast cells—mast cell number, phenotype, and localization of stem cell factor] Nakagami T, et al. **Nippon Ganka Gakkai Zasshi** 1997 Aug;101(8):662–8 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Stem cell factor alters membrane potential of purified peritoneal mast cells in culture. Wang YH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):C1017–24

Factors influencing fetal macrophage development: II. Effects of the PDGF subfamily of protein–tyrosine kinase receptor ligands as studied in organ–cultured rat lungs. Sorokin SP, et al. **Anat Rec** 1996 Dec;246(4):498–506

Stem cell factor protects bone marrow–derived cultured mast cells (BMCMC) from cytocidal effect of nitric oxide secreted by fibroblasts in murine BMCMC–fibroblast coculture. Park SJ, et al. **Biochem Mol Biol Int** 1996 Nov; 40(4):721–9

Cytokine prestimulation as a gene therapy strategy: implications for using the MDR1 gene as a dominant selectable marker. Blau CA, et al. **Blood** 1997 Jan 1; 89(1):146–54

The c–kit ligand potentiates the allogeneic mixed lymphocyte reaction. Bluman EM, et al. **Blood** 1996 Nov 15; 88(10):3887–93

Ability of early acting cytokines to directly promote survival and suppress apoptosis of human primitive CD34+CD38– bone marrow cells with multilineage potential at the single–cell level: key role of thrombopoietin. Borge OJ, et al. **Blood** 1997 Sep 15;90(6):2282–92

Differential release of mast cell interleukin–6 via c–kit. Gagari E, et al. **Blood** 1997 Apr 15;89(8):2654–63

Soluble thrombopoietin receptor (Mpl) and granulocyte colony–stimulating factor receptor directly stimulate proliferation of primitive hematopoietic progenitors of mice in synergy with steel factor or the ligand for Flt3/Flk2. Ku H, et al. **Blood** 1996 Dec 1;88(11):4124–31

Involvement of p21cip–1 and p27kip–1 in the molecular mechanisms of steel factor–induced proliferative synergy in vitro and of p21cip–1 in the maintenance of stem/progenitor cells in vivo. Mantel C, et al. **Blood** 1996 Nov 15;88(10):3710–9

Impaired steel factor responsiveness differentially affects the detection and long–term maintenance of fetal liver hematopoietic stem cells in vivo. Miller CL, et al. **Blood** 1997 Feb 15;89(4):1214–23

Cell cycle analysis and synchronization of pluripotent hematopoietic progenitor stem cells. Reddy GP, et al. **Blood** 1997 Sep 15;90(6):2293–9

Influence of interleukin–3 and other growth factors on alpha4beta1 integrin–mediated adhesion and migration of human hematopoietic progenitor cells. Schofield KP, et al. **Blood** 1997 Sep 1;90(5):1858–66

Inhibition of immature erythroid progenitor cell proliferation by macrophage inflammatory protein–1alpha by interacting mainly with a C–C chemokine receptor, CCR1. Su S, et al. **Blood** 1997 Jul 15;90(2):605–11

Steel factor enhances integrin–mediated tyrosine phosphorylation of focal adhesion kinase (pp125FAK) and paxillin. Takahira H, et al. **Blood** 1997 Mar 1;89(5):1574–84

In vitro expansion of hematopoietic progenitors and maintenance of stem cells: comparison between FLT3/FLK–2 ligand and KIT ligand. Yonemura Y, et al. **Blood** 1997 Mar 15;89(6):1915–21

Expression of SCL is normal in transfusion–dependent Diamond–Blackfan anemia but other bHLH proteins are deficient. Zhang MY, et al. **Blood** 1997 Sep 1;90(5):2068–74

Primary proliferating immature myeloid cells from CML patients are not resistant to induction of apoptosis by DNA damage and growth factor withdrawal. Albrecht T, et al. **Br J Haematol** 1996 Dec;95(3):501–7

A novel approach to investigating the erythroid lineage, using both receptor analysis and haemoglobin detection. McGuckin CP, et al. **Br J Haematol** 1996 Dec;95(3):457–60

Purified unfractionated G–CSF/chemotherapy mobilized CD34+ peripheral blood progenitors and not bone marrow CD34+ progenitors undergo selective erythroid differentiation in liquid culture in the presence of erythropoietin and stem cell factor. Pierelli L, et al. **Br J Haematol** 1997 Jan;96(1):55–63

Action of human interleukin–4 and stem cell factor on erythroid and mixed colony formation by peripheral blood–derived CD34+ c–kit(high) or CD34+ c–kit(low) cells. Sonoda Y, et al. **Br J Haematol** 1997 Mar;96(4):781–9

Authentic 17 kDa tumour necrosis factor alpha is synthesized and released by canine mast cells and up–regulated by stem cell factor. Thomas PS, et al. **Clin Exp Allergy** 1996 Jun; 26(6):710–8

Use of stem cell factor to mobilize hematopoietic progenitors. Bearman SI. **Curr Opin Hematol** 1997 May;4(3):157–62

Direct actions of kit–ligand on theca cell growth and differentiation during follicle development. Parrott JA, et al. **Endocrinology** 1997 Sep;138(9):3819–27

Involvement of phosphatidylinositol 3'–kinase in stem–cell–factor–induced phospholipase D activation and arachidonic acid release. Kozawa O, et al. **Eur J Biochem** 1997 Aug 15;248(1):149–55

Effects of combinations of stem cell factor and hemin on erythropoiesis after azidothymidine treatment of immunosuppressed mice. Hamburger AW. **Eur J Haematol** 1996 Aug;57(2):128–33

CD56bright natural killer cell subsets: characterization of distinct functional responses to interleukin–2 and the c–kit ligand. Carson WE, et al. **Eur J Immunol** 1997 Feb; 27(2):354–60

Human lung mast cells release small amounts of interleukin–4 and tumour necrosis factor–alpha in response to stimulation by anti–IgE and stem cell factor. Gibbs BF, et al. **Eur J Pharmacol** 1997 May 26;327(1):73–8

Stem cell factor–induced downregulation of c–kit in human lung mast cells and HMC–1 mast cells. Baghestanian M, et al. **Exp Hematol** 1996 Oct;24(12):1377–86

In vitro expansion of murine hematopoietic progenitor cells by leukemia inhibitory factor, stem cell factor, and interleukin–1 beta. Imamura M, et al. **Exp Hematol** 1996 Sep;24(11):1280–8

Differential ability of flt3–ligand, interleukin–11, and Steel factor to support the generation of B cell progenitors and myeloid cells from primitive murine fetal liver cells. Lemieux ME, et al. **Exp Hematol** 1997 Aug;25(9):951–7

Granulocyte–colony stimulating factor and stem cell factor are the crucial factors in long–term culture of human primitive hematopoietic cells supported by a murine stromal cell line. Nishi N, et al. **Exp Hematol** 1996 Sep; 24(11):1312–21

Stem cell factor activates STAT–5 DNA binding in IL–3–derived bone marrow mast cells. Ryan JJ, et al. **Exp Hematol** 1997 Apr;25(4):357–62

Radioprotection of bone marrow stem cell subsets by interleukin–1 and kit–ligand: implications for CFU–S as the responsible target cell population. van Os R, et al. **Exp Hematol** 1997 Mar;25(3):205–10

Stem cell factor–induced expression of p27kip–1 during hematopoietic differentiation. Huss R, et al. **Exp Mol Pathol** 1995 Oct;63(2):129–34

Stem cell factor stimulates chicken osteoclast activity in vitro. van't Hof RJ, et al. **FASEB J** 1997 Mar;11(4):287–93

The Csk–like proteins Lsk, Hyl, and Matk represent the same Csk homologous kinase (Chk) and are regulated by stem cell factor in the megakaryoblastic cell line MO7e. Grgurevich S, et al. **Growth Factors** 1997;14(2–3):103–15

Response of the blast stem cells of acute myeloblastic leukemia to G–CSF, GM–CSF, or the ligand for C–KIT, alone or in combination. McCulloch EA, et al. **Hematopathol Mol Hematol** 1996;10(3):111–22

Human thymocyte responsiveness to stem cell factor: synergy with interleukin–2 for the generation of NK/LAK cytotoxicity. Uittenbogaart CH, et al. **Immunol Lett** 1996 Aug;52(1):45–52

Stem cell factor potentiates histamine secretion by multiple mechanisms, but does not affect tumour necrosis factor–alpha release from rat mast cells. Lin TJ, et al. **Immunology** 1996 Oct;89(2):301–7

Dexamethasone or cyclosporin A inhibits stem cell factor–dependent secretory responses of rat peritoneal mast cells in vitro. Taylor AM, et al. **Immunopharmacology** 1996 Aug;34(1):63–70

The effect of recombinant stem cell factor on human skin and lung mast cells and basophil leukocytes. Frenz AM, et al. **Inflamm Res** 1997 Feb;46(2):35–9

Ultrastructural detection of histamine in human mast cells developing from cord blood cells cultured with human or murine recombinant c–kit ligands. Dvorak AM, et al. **Int Arch Allergy Immunol** 1996 Nov;111(3):238–44

Effects of interleukin–11 on carboplatin–induced thrombocytopenia in rats and in combination with stem cell factor. Yonemura Y, et al. **Int J Hematol** 1997 Jun; 65(4):397–404

Hemopoietic growth factors with the exception of interleukin–4 activate the p38 mitogen–activated protein kinase pathway. Foltz IN, et al. **J Biol Chem** 1997 Feb 7;272(6):3296–301

Tyrosine phosphorylation of the related adhesion focal tyrosine kinase in megakaryocytes upon stem cell factor and phorbol myristate acetate stimulation and its association with paxillin. Hiregowdara D, et al. **J Biol Chem** 1997 Apr 18;272(16):10804–10

Steel factor induces tyrosine phosphorylation of CRKL and binding of CRKL to a complex containing c–kit, phosphatidylinositol 3–kinase, and p120(CBL). Sattler M, et al. **J Biol Chem** 1997 Apr 11;272(15):10248–53

Human peripheral blood eosinophils express a functional c–kit receptor for stem cell factor that stimulates very late antigen 4 (VLA–4)–mediated cell adhesion to fibronectin and vascular cell adhesion molecule 1 (VCAM–1). Yuan Q, et al. **J Exp Med** 1997 Jul 21;186(2):313–23

flt–3 ligand is more potent than c–kit ligand for the synergistic stimulation of ex vivo hematopoietic cell expansion. Koller MR, et al. **J Hematother** 1996 Oct; 5(5):449–59

The effects of Flk–2/flt3 ligand as compared with c–kit

ligand on short-term and long-term proliferation of CD34+ hematopoietic progenitors elicited from human fetal liver, umbilical cord blood, bone marrow, and mobilized peripheral blood. Shapiro F, et al. **J Hematother** 1996 Dec;5(6):655–62

Recombinant human granulocyte-macrophage colony-stimulating factor (CSF), but not recombinant human granulocyte CSF, down-regulates the recombinant human stem cell factor-dependent differentiation of human fetal liver-derived mast cells. Du Z, et al. **J Immunol** 1997 Jul 15;159(2):838–45

Mouse bone marrow-derived mast cells undergo exocytosis, prostanoid generation, and cytokine expression in response to G protein-activating polybasic compounds after coculture with fibroblasts in the presence of c-kit ligand. Ogasawara T, et al. **J Immunol** 1997 Jan 1;158(1):393–404

Effect of recombinant human IL-4 on tryptase, chymase, and Fc epsilon receptor type I expression in recombinant human stem cell factor-dependent fetal liver-derived human mast cells. Xia HZ, et al. **J Immunol** 1997 Sep 15; 159(6):2911–21

C-kit ligand (Stem Cell Factor) affects neuronal activity, stimulates pituitary-adrenal axis and prolactin secretion in rats. Kovács KJ, et al. **J Neuroimmunol** 1996 Apr; 65(2):133–41

Suppression of in vitro maintenance of non-promyelocytic myeloid leukemia clonogenic cells by all-trans retinoic acid: modulating effects of dihydroxylated vitamin D3, alpha interferon and 'stem cell factor'. Ferrero D, et al. **Leuk Res** 1997 Jan;21(1):51–8

Effect of stem cell factor on leukemic progenitor cell growth and sensitivity to cytosine-arabinoside. Viallard JF, et al. **Leuk Res** 1996 Nov-Dec;20(11–12):915–23

Purification of repopulating hemopoietic cells based on binding of biotinylated Kit ligand. de Jong MO, et al. **Leukemia** 1996 Nov;10(11):1813–22

Thrombopoietin augments ex vivo expansion of human cord blood-derived hematopoietic progenitors in combination with stem cell factor and flt3 ligand. Ohmizono Y, et al. **Leukemia** 1997 Apr;11(4):524–30

Stem cell factor (SCF) synergizes with megakaryocyte colony stimulating activity in post-irradiated aplastic plasma in stimulating human megakaryocytopoiesis. Deutsch VR, et al. **Med Oncol** 1996 Mar;13(1):31–42

Selection and expansion of CD34+ cells. McNiece IK. **Nouv Rev Fr Hematol** 1995;37(6):375–6

Ailogeneic transplantation of peripheral blood progenitor cells. Schmitz N. **Nouv Rev Fr Hematol** 1995;37(6):377–9

Discrete protein interactions with the Grb2/c-Cbl complex in SCF- and TPO-mediated myeloid cell proliferation. Brizzi MF, et al. **Oncogene** 1996 Nov 21;13(10):2067–76

Enforced c-KIT expression renders highly metastatic human melanoma cells susceptible to stem cell factor-induced apoptosis and inhibits their tumorigenic and metastatic potential. Huang S, et al. **Oncogene** 1996 Dec 5; 13(11):2339–47

Synergistic response of cord blood myeloid progenitor cells to the combined administration of human granulocyte colony-stimulating factor and human stem cell factor in vitro. Fujita A, et al. **Pediatr Res** 1996 Sep;40(3):388–92

Improved retroviral gene transfer into murine and Rhesus peripheral blood or bone marrow repopulating cells primed in vivo with stem cell factor and granulocyte colony-stimulating factor. Dunbar CE, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11871–6

Stem cell factor has contrasting effects in combination with 5-fluorouracil or total-body irradiation on frequencies of different hemopoietic cell subsets and engraftment of transplanted bone marrow. Down JD, et al. **Radiat Res** 1997 Jun;147(6):680–5

In vitro growth of mobilized peripheral blood progenitor cells is significantly enhanced by stem cell factor. Cesana C, et al. **Stem Cells** 1997;15(3):207–13

Mpl ligand (MGDF) alone and in combination with stem cell factor (SCF) promotes proliferation and survival of human megakaryocyte, erythroid and granulocyte/macrophage progenitors. Rasko JE, et al. **Stem Cells** 1997;15(1):33–42

PHYSIOLOGY

Exogenous stem cell factor (SCF) compensates for altered endogenous SCF expression in 2,5-hexanedione-induced testicular atrophy in rats. Allard EK, et al. **Biol Reprod** 1996 Jul;55(1):185–93

Stem cell factor and hematopoiesis. Broudy VC. **Blood** 1997 Aug 15;90(4):1345–64 (313 ref.)

Enhanced detection, maintenance, and differentiation of primitive human hematopoietic cells in cultures containing murine fibroblasts engineered to produce human steel factor, interleukin-3, and granulocyte colony-stimulating factor. Hogge DE, et al. **Blood** 1996 Nov 15;88(10):3765–73

Role of mast cell and stem cell factor in hyperpigmented mycosis fungoides [letter] Yamamoto T, et al. **Blood** 1997 Aug 1;90(3):1338–40

Abrogation of c-kit/Steel factor-dependent tumorigenesis by kinase defective mutants of the c-kit receptor: c-kit kinase defective mutants as candidate tools for cancer gene therapy. Li Q, et al. **Cancer Res** 1996 Oct 1;56(19):4343–6

Autocrine regulation of neural crest cell development by steel factor. Guo CS, et al. **Dev Biol** 1997 Apr 1;184(1):61–9

Early transplantation to a normal microenvironment prevents the development of Steel hematopoietic stem cell defects. Barker JE. **Exp Hematol** 1997 Jun;25(6):542–7

A critical role for stem cell factor and c-kit in host protective immunity to an intestinal helminth. Donaldson LE, et al. **Int Immunol** 1996 Apr;8(4):559–67

Growth stimulation of colorectal carcinoma cells via the c-kit receptor is inhibited by TGF-beta 1. Bellone G, et al. **J Cell Physiol** 1997 Jul;172(1):1–11

Stem cell factor and c-kit in the mammalian testis: lessons originating from Mother Nature's gene knockouts. Loveland KL, et al. **J Endocrinol** 1997 Jun;153(3):337–44 (71 ref.)

Age-dependent intestinal lymphoproliferative disorder due to stem cell factor receptor deficiency: parameters in small and large intestine. Laky K, et al. **J Immunol** 1997 Feb 1;158(3):1417–27

HLA-DR-triggered inhibition of hemopoiesis involves Fas/Fas ligand interactions and is prevented by c-kit ligand. Lee JW, et al. **J Immunol** 1997 Oct 1;159(7):3211–9

Differential effects of Flk-2/Flt-3 ligand and stem cell factor on murine thymic progenitor cells. Moore TA, et al. **J Immunol** 1997 May 1;158(9):4187–92

C-kit ligand (SCF) in human multiple myeloma cells. Lemoli RM, et al. **Leuk Lymphoma** 1996 Feb;20(5–6):457–64

Role of the stem cell factor (SCF) receptor and the alternative forms of its ligand (SCF) in the induction of long-term growth by stroma cells. Friel J, et al. **Leukemia** 1997 Apr;11 Suppl 3:493–5

Stem cell factor regulates the melanocyte cytoskeleton. Scott G, et al. **Pigment Cell Res** 1996 Jun;9(3):134–41

Thrombin augments vascular cell-dependent migration of human mast cells: role of MGF. Baghestanian M, et al. **Thromb Haemost** 1997 Mar;77(3):577–84

Role of stem cell factor in somatic-germ cell interactions during prenatal oogenesis. De Felici M, et al. **Zygote** 1996 Nov;4(4):349–51

THERAPEUTIC USE

Improved survival of lethally irradiated recipient mice transplanted with circulating progenitor cells mobilized by IL-8 after pretreatment with stem cell factor. Laterveer L, et al. **Exp Hematol** 1996 Oct;24(12):1387–93

STEM CELL FACTOR RECEPTORS see **PROTO-ONCOGENE PROTEINS C-KIT**

STEM CELL TRANSPLANTATION see **HEMATOPOIETIC STEM CELL TRANSPLANTATION**

STEM CELLS

European School of Oncology Task Force Programme Workshop on Peripheral Blood Progenitor Cells. Paris, France, September 29–30, 1995. **Ann Oncol** 1996;7 Suppl 2:1–58

Crossover study of the haematological effects and pharmacokinetics of glycosylated and non-glycosylated G-CSF in healthy volunteers. Watts MJ, et al. **Br J Haematol** 1997 Aug;98(2):474–9

Primitive hematopoietic stem and progenitor cells in human umbilical cord blood: an alternative source of transplantable cells. Broxmeyer HE. **Cancer Treat Res** 1996; 84:139–48 (72 ref.)

In vitro preselection of gene-trapped embryonic stem cell clones for characterizing novel developmentally regulated genes in the mouse. Baker RK, et al. **Dev Biol** 1997 May 15;185(2):201–14

Hepatic stem cells in liver regeneration. Thorgeirsson SS. **FASEB J** 1996 Sep;10(11):1249–56 (68 ref.)

The importance of epidermal stem cells in keratinocyte-mediated gene therapy [editorial] De Luca M, et al. **Gene Ther** 1997 May;4(5):381–3

Efficient gene targeting in mouse embryonic stem cells. Templeton NS, et al. **Gene Ther** 1997 Jul;4(7):700–9

Klumpfuss, a putative Drosophila zinc finger transcription factor, acts to differentiate between the identities of two secondary precursor cells within one neuroblast lineage. Yang X, et al. **Genes Dev** 1997 Jun 1;11(11):1396–408

Embryonic stem cells: the route to experimental mammalian genetics. Evans M. **Int J Dev Biol** 1996;Suppl 1:55S

Reflections on the biology of embryonic stem (ES) cells. Gardner RL, et al. **Int J Dev Biol** 1997 Apr;41(2):235–43 (95 ref.)

Comparative stem cell biology. Hollands P. **Int J Dev Biol** 1997 Apr;41(2):245–54 (184 ref.)

Embryonic stem-cell-like cell lines of the species rat and Bovinae. Stranzinger GF. **Int J Exp Pathol** 1996 Dec; 77(6):263–7 (12 ref.)

Enumeration of CD34-positive stem cells: evaluation and comparison of three methods. Sims LC, et al. **J Hematother** 1997 Jun;6(3):213–26

Gene targeting in embryonic stem cells: the new physiology and metabolism. Moreadith RW, et al. **J Mol Med** 1997 Mar;75(3):208–16 (81 ref.)

Is it reactivation of fetal hemoglobin synthesis after transplantation of cord blood stem cells from a donor with heterozygous sickle cell anemia or beta-thalassemia? [letter; comment] Ohnuma K, et al. **J Pediatr** 1997 Jun; 130(6):1008–9. Comment on: J Pediatr 1996 Feb;128(2):241–3.

Neural precursor cells: applications for the study and repair of the central nervous system. Fisher LJ. **Neurobiol Dis** 1997;4(1):1–22 (119 ref.)

Cell vehicles for gene transfer to the brain. Taylor R. **Neuromuscul Disord** 1997 Jul;7(5):343–51 (64 ref.)

Storage of newborn stem cells for future use [letter; comment] Repke JT, et al. **Obstet Gynecol** 1997 Jun; 89(6):1049–50. Comment on: Obstet Gynecol 1997 Feb;89(2):300–3.

NIEHS/EPA Workshops. Genomic imprinting. Stewart CL, et al. **Reprod Toxicol** 1997 Mar-Jun;11(2–3):309–16

May I see your license, please? Varmus to rule in fight over cell-sorting technology [news] Marshall E. **Science** 1997 Jun 6;276(5318):1488,1490–1

Retroviral stem cell gene therapy. Havenga M, et al. **Stem Cells** 1997;15(3):162–79 (144 ref.)

Is telomerase activity in cancer due to selection of stem cells and differentiation arrest? Greaves M. **Trends Genet** 1996 Apr;12(4):127–8 (34 ref.)

[Bone marrow in patients with pseudarthrosis. A study of progenitor cells by in vitro cloning] Hernigou P, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(1):33–40 (Eng. Abstr.) **(Fre)**

CHEMISTRY

Genesis, a winged helix transcriptional repressor with expression restricted to embryonic stem cells. Sutton J, et al. **J Biol Chem** 1996 Sep 20;271(38):23126–33

Keratin 19 as a biochemical marker of skin stem cells in vivo and in vitro: keratin 19 expressing cells are differentially localized in function of anatomic sites, and their number varies with donor age and culture stage. Michel M, et al. **J Cell Sci** 1996 May;109 (Pt 5):1017–28

Expression of laminin isoforms in mouse myogenic cells in vitro and in vivo. Schuler F, et al. **J Cell Sci** 1995 Dec; 108 (Pt 12):3795–805

The ISHAGE guidelines for CD34+ cell determination by flow cytometry. International Society of Hematotherapy and Graft Engineering. Sutherland DR, et al. **J Hematother** 1996 Jun;5(3):213–26

The epidermal stem cell compartment: variation in expression levels of E-cadherin and catenins within the basal layer of human epidermis. Molès JP, et al. **J Histochem Cytochem** 1997 Jun;45(6):867–74

Regulation of voltage- and ligand-gated currents in rat hippocampal progenitor cells in vitro. Sah DW, et al. **J Neurobiol** 1997 Jan;32(1):95–110

Identification of bipotential progenitor cells in human liver regeneration. Haque S, et al. **Lab Invest** 1996 Nov; 75(5):699–705

Expression of the Notch 3 intracellular domain in mouse central nervous system progenitor cells is lethal and leads to disturbed neural tube development. Lardelli M, et al. **Mech Dev** 1996 Oct;59(2):177–90

Identification of a developmentally regulated protein tyrosine phosphatase in embryonic stem cells that is a marker of pluripotential epiblast and early mesoderm [published erratum appears in Mech Dev 1997 Jan;61(1–2):213–5] Lee K, et al. **Mech Dev** 1996 Oct;59(2):153–64

Expression of dentatorubral-pallidoluysian atrophy (DRPLA) proteins in patients. Yazawa I, et al. **Neurosci Lett** 1997 Mar 28;225(1):53–6

Rapid construction in yeast of complex targeting vectors for gene manipulation in the mouse. Storck T, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4594–6

TGF-beta latency: biological significance and mechanisms of activation. Gleizes PE, et al. **Stem Cells** 1997;15(3):190–7 (70 ref.)

CYTOLOGY

Gene regulation in the formation of the central nervous system. Lendahl U. **Acta Paediatr Suppl** 1997 Jul;422:8–11 (51 ref.)

Relationship between replication and differentiation in cultured human adipocyte precursor cells. Entenmann G, et al. **Am J Physiol** 1996 Apr;270(4 Pt 1):C1011–6

Stem cells in lung development, disease, and therapy. Mason RJ, et al. **Am J Respir Cell Mol Biol** 1997 Apr;16(4):355–63 (68 ref.)

Clonal osteoblastic cell lines from p53 null mouse calvariae are immortalized and dependent on bone morphogenetic protein 2 for mature osteoblastic phenotype. Ghosh-Choudhury N, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):196–202

Epithelial stem cells. Jones PH. **Bioessays** 1997 Aug; 19(8):683–90 (64 ref.)

Epithelial apoptosis. Metcalfe A, et al. **Bioessays** 1997 Aug; 19(8):711–20 (90 ref.)

Pluripotent cell lines derived from common marmoset (Callithrix jacchus) blastocysts. Thomson JA, et al. **Biol Reprod** 1996 Aug;55(2):254–9

Screening for homologous recombination in ES cells using RT-PCR. Danoff TM, et al. **Biotechniques** 1997 Jan; 22(1):22–4, 26

Preparation of animals with a high degree of chimerism by one-step coculture of embryonic stem cells and preimplantation embryos. Khillan JS, et al. **Biotechniques** 1997 Mar;22(3):544–9

PU.1 but not ets-2 is essential for macrophage development from embryonic stem cells. Henkel GW, et al. **Blood** 1996 Oct 15;88(8):2917–26

Thrombopoietin, but not erythropoietin, directly stimulates multilineage growth of primitive murine bone marrow progenitor cells in synergy with early acting cytokines:

distinct interactions with the ligands for c-kit and FLT3. Ramsfjell V, et al. **Blood** 1996 Dec 15;88(12):4481–92

Induction of recombination activating gene expression in a human lymphoid progenitor cell line: requirement of two separate signals from stromal cells and cytokines. Tagoh H, et al. **Blood** 1996 Dec 15;88(12):4463–73

Embryonic stem cells differentiate in vitro to endothelial cells through successive maturation steps. Vittet D, et al. **Blood** 1996 Nov 1;88(9):3424–31

In vitro expansion of hematopoietic progenitors and maintenance of stem cells: comparison between FLT3/FLK-2 ligand and KIT ligand. Yonemura Y, et al. **Blood** 1997 Mar 15;89(6):1915–21

Identification and enrichment of human osteoprogenitor cells by using differentiation stage-specific monoclonal antibodies. Joyner CJ, et al. **Bone** 1997 Jul;21(1):1–6

Quantitation and characterization of human megakaryocyte colony-forming cells using a standardized serum-free agarose assay. Hogge D, et al. **Br J Haematol** 1997 Mar; 96(4):790–800

Characterization of developmental stage and neuronal potential of the rat PNS-derived stem cell line, RT4-AC. Donahue LM, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):67–80

A paradigm for distinguishing the roles of mitogenesis and trophism in neuronal precursor proliferation. Lu N, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):31–6

Lineage specification of olfactory neural precursor cells depends on continuous cell interactions. Magrassi L, et al. **Brain Res Dev Brain Res** 1996 Oct 23;96(1–2):11–27

Influence of a retinal pigment epithelial cell factor(s) on rat retinal progenitor cells. Sheedlo HJ, et al. **Brain Res Dev Brain Res** 1996 May 31;93(1–2):88–99

Restricted growth potential of rat neural precursors as compared to mouse. Svendsen CN, et al. **Brain Res Dev Brain Res** 1997 Apr 18;99(2):253–8

Effect of age and ovariectomy on fibroblastic colony-forming unit numbers in rat bone marrow. Scutt A, et al. **Calcif Tissue Int** 1996 Oct;59(4):309–10

Ex vivo expansion of hematopoietic stem and progenitor cells for transplantation. LaIuppa JA, et al. **Cancer Treat Res** 1997;77:159–86 (125 ref.)

Pax6 controls progenitor cell identity and neuronal fate in response to graded Shh signaling. Ericson J, et al. **Cell** 1997 Jul 11;90(1):169–80

Regulatory mechanisms in stem cell biology. Morrison SJ, et al. **Cell** 1997 Feb 7;88(3):287–98 (112 ref.)

Primordial germ cell-derived mouse embryonic germ (EG) cells in vitro resemble undifferentiated stem cells with respect to differentiation capacity and cell cycle distribution. Rohwedel J, et al. **Cell Biol Int** 1996 Aug; 20(8):579–87

Differential regulation of the Wilms' tumor gene, WT1, during differentiation of embryonal carcinoma and embryonic stem cells. Scharnhorst V, et al. **Cell Growth Differ** 1997 Feb;8(2):133–43

Transcriptional specificity of the pluripotent embryonic stem cell. Scherer CA, et al. **Cell Growth Differ** 1996 Oct; 7(10):1393–401

Stable integration of an mdx skeletal muscle cell line into dystrophic (mdx) skeletal muscle: evidence for stem cell status. Smith J, et al. **Cell Growth Differ** 1997 Aug; 8(8):927–34

Pluripotential liver stem cells: facultative stem cells located in the biliary tree. Alison MR, et al. **Cell Prolif** 1996 Jul; 29(7):373–402 (150 ref.)

Differentiation of smooth muscle cells from undifferentiated cells of chicken gizzard occurs on the layer of fibroblast-like cells. Ko JA, et al. **Cell Tissue Res** 1996 Sep;285(3):395–401

Culture expanded canine mesenchymal stem cells possess osteochondrogenic potential in vivo and in vitro. Kadiyala S, et al. **Cell Transplant** 1997 Mar-Apr;6(2):125–34

Gene transfer to the mammalian brain using neural stem cells: a focus on trophic factors, neuroregeneration, and cholinergic neuron systems. Martinez-Serrano A, et al. **Clin Neurosci** 1995–96;3(5):301–9 (97 ref.)

Analysis of the developmental potential of conditionally immortal marrow-derived mesenchymal progenitor cells isolated from the H-2Kb-tsA58 transgenic mouse. Dennis JE, et al. **Connect Tissue Res** 1996;35(1–4):93–9

Oligodendrocyte precursor cells count time but not cell divisions before differentiation. Gao FB, et al. **Curr Biol** 1997 Feb 1;7(2):152–5

In vitro tracking of IL-7 responsiveness and gene expression during commitment of bipotent B-cell/macrophage progenitors. Kee BL, et al. **Curr Biol** 1996 Sep 1; 6(9):1159–69

Control of the differentiation commitment by nuclear hormone receptors in chicken erythrocytic progenitor cells. Samarut J. **Curr Top Microbiol Immunol** 1996;212:163–73 (35 ref.)

Hollow-fibre affinity cell separation system for CD34+ cell enrichment. Nordon RE, et al. **Cytometry** 1996 Aug 1; 24(4):340–7

Differentiation of embryonal stem cells into keratinocytes: comparison of wild-type and beta 1 integrin-deficient cells. Bagutti C, et al. **Dev Biol** 1996 Oct 10;179(1):184–96

Correlations between terminal mitosis and differentiated fate of retinal precursor cells in vivo and in vitro: analysis with the "window-labeling" technique. Belecky-Adams T, et al. **Dev Biol** 1996 Sep 15;178(2):304–15

Persistent expression of MNF identifies myogenic stem cells in postnatal muscles. Garry DJ, et al. **Dev Biol** 1997 Aug 15;188(2):280–94

Continuous observation of multipotential retinal progenitor cells in clonal density culture. Jensen AM, et al. **Dev Biol** 1997 Aug 15;188(2):267–79

Neuroepithelial stem cells from the embryonic spinal cord: isolation, characterization, and clonal analysis. Kalyani A, et al. **Dev Biol** 1997 Jun 15;186(2):202–23

XATH-1, a vertebrate homolog of Drosophila atonal, induces a neuronal differentiation within ectodermal progenitors. Kim P, et al. **Dev Biol** 1997 Jul 1;187(1):1–12

Glial-restricted precursors are derived from multipotent neuroepithelial stem cells. Rao MS, et al. **Dev Biol** 1997 Aug 1;188(1):48–63

Troponin I isoform expression is developmentally regulated in differentiating embryonic stem cell-derived cardiac myocytes. Westfall MV, et al. **Dev Dyn** 1996 May; 206(1):24–38

Subsets of retinal progenitors display temporally regulated and distinct biases in the fates of their progeny. Alexiades MR, et al. **Development** 1997 Mar;124(6):1119–31

Induction of deep layer cortical neurons in vitro. Bohner AP, et al. **Development** 1997 Feb;124(4):915–23

Spinal cord oligodendrocytes develop from ventrally derived progenitor cells that express PDGF alpha-receptors. Hall A, et al. **Development** 1996 Dec;122(12):4085–94

Evidence in the mouse for self-renewing stem cells in the formation of a segmented longitudinal structure, the myotome. Nicolas JF, et al. **Development** 1996 Sep; 122(9):2933–46

Identification of self-renewing myoblasts in the progeny of single human muscle satellite cells. Baroffio A, et al. **Differentiation** 1996 Mar;60(1):47–57

Phenotypic characterization of the 3/A/1D-1M osteogenic cell line derived from in vivo transplantation of 3/A/1D-1 chondroprogenitor murine teratocarcinoma cells. Cohen-Tanugi A, et al. **Differentiation** 1996 Sep; 60(5):327–37

Norepinephrine potentiates the mitogenic effect of growth factors in quiescent brown preadipocytes: relationship with uncoupling protein messenger ribonucleic acid expression. Garcia B, et al. **Endocrinology** 1997 Oct;138(10):4227–33

Differentiation of rat preadipocytes is accompanied by expression of thyrotropin receptors. Haraguchi K, et al. **Endocrinology** 1996 Aug;137(8):3200–5

Site-related specificities of the control by androgenic status of adipogenesis and mitogen-activated protein kinase cascade/c-fos signaling pathways in rat preadipocytes. Lacasa D, et al. **Endocrinology** 1997 Aug;138(8):3181–6

Fibroblast growth factor-2 supports ex vivo expansion and maintenance of osteogenic precursors from human bone marrow. Martin I, et al. **Endocrinology** 1997 Oct; 138(10):4456–62

The mechanism of inhibition of 3T3-L1 preadipocyte differentiation by prostaglandin F2alpha. Miller CW, et al. **Endocrinology** 1996 Dec;137(12):5641–50

Targeted disruption of Gnas in embryonic stem cells. Schwindinger WF, et al. **Endocrinology** 1997 Oct; 138(10):4058–63

Establishment of an embryonic stem cell line from 8-cell stage mouse embryos. Delhaise F, et al. **Eur J Morphol** 1996 Nov;34(4):237–43

Role of the basal cells in premalignant changes of the human prostate: a stem cell concept for the development of prostate cancer. Bonkhoff H. **Eur Urol** 1996;30(2):201–5

Characterization of embryonic stem-like cell lines derived from embryoid bodies. Kyuwa S, et al. **Exp Anim** 1997 Jan;46(1):11–6

Germ-line contribution of embryonic stem cells in chimeric mice: influence of karyotype and in vitro differentiation ability. Suzuki H, et al. **Exp Anim** 1997 Jan;46(1):17–23

Endoderm-specific gene expression in embryonic stem cells differentiated to embryoid bodies. Abe K, et al. **Exp Cell Res** 1996 Nov 25;229(1):27–34

In vitro characterization of chondrogenic cells isolated from chick embryonic muscle using peanut agglutinin affinity chromatography. Stringa E, et al. **Exp Cell Res** 1997 May 1;232(2):287–94

ES cell cycle rates affect gene targeting frequencies. Udy GB, et al. **Exp Cell Res** 1997 Mar 15;231(2):296–301

Germ line chimeras from female ES cells. Voss AK, et al. **Exp Cell Res** 1997 Jan 10;230(1):45–9

Gene transfection of mouse primordial germ cells in vitro and analysis of their survival and growth control. Watanabe M, et al. **Exp Cell Res** 1997 Jan 10;230(1):76–83

The MS-5 murine stromal cell line and hematopoietic growth factors synergize to support the megakaryocytic differentiation of embryonic stem cells. Berthier R, et al. **Exp Hematol** 1997 Jun;25(6):481–90

Expression of neuronal antigens by astrocytes derived from EGF-generated neuroprogenitor cells. Schinstine M, et al. **Exp Neurol** 1996 Sep;141(1):67–78

From totipotent embryonic stem cells to spontaneously contracting smooth muscle cells: a retinoic acid and db-cAMP in vitro differentiation model. Drab M, et al. **FASEB J** 1997 Sep;11(11):905–15

Ex vivo gene delivery of platelet-derived growth factor increases 0-2A progenitors in adult rat spinal cord. Ijichi A, et al. **Gene Ther** 1996 May;3(5):389–95

Single factors direct the differentiation of stem cells from the fetal and adult central nervous system. Johe KK, et al. **Genes Dev** 1996 Dec 15;10(24):3129–40

Oligodendrocyte maturation and progenitor cell proliferation are independently regulated by thyroid hormone. Baas D, et al. **Glia** 1997 Apr;19(4):324–32

Contrasting effects of mitogenic growth factors on oligodendrocyte precursor cell migration. Milner R, et al. **Glia** 1997 Jan;19(1):85–90

Self renewal of embryonic stem cells in the absence of feeder cells and exogenous leukaemia inhibitory factor. Berger CN, et al. **Growth Factors** 1997;14(2–3):145–59

Isolation of oval cells from Long-Evans Cinnamon rats and their transformation into hepatocytes in vivo in the rat liver. Yasui O, et al. **Hepatology** 1997 Feb;25(2):329–34

The oval-shaped cell as a candidate for a liver stem cell in embryonic, neonatal and precancerous liver: identification based on morphology and immunohistochemical staining for albumin and pyruvate kinase isoenzyme expression. Tian YW, et al. **Histochem Cell Biol** 1997 Mar;107(3):243–50

Proliferation and migration kinetics of stem cells in the rat fundic gland. Yang DH, et al. **Histol Histopathol** 1997 Jul; 12(3):719–27

Human mesenchymal stem cells respond to fibroblast growth factors. van den Bos C, et al. **Hum Cell** 1997 Mar; 10(1):45–50

Capture and expansion of bone marrow-derived mesenchymal progenitor cells with a transforming growth factor-beta1-von Willebrand's factor fusion protein for retrovirus-mediated delivery of coagulation factor IX. Gordon EM, et al. **Hum Gene Ther** 1997 Jul 20; 8(11):1385–94

Reactive biliary epithelium: the product of a pluripotential stem cell compartment? Golding M, et al. **Hum Pathol** 1996 Sep;27(9):872–84 (154 ref.)

Stem cells of the respiratory epithelium and their in vitro cultivation. Emura M. **In Vitro Cell Dev Biol Anim** 1997 Jan;33(1):3–14 (100 ref.)

The effects of human leukemia inhibitory factor (hLIF) and culture medium on in vitro differentiation of cultured porcine inner cell mass (pICM). Moore K, et al. **In Vitro Cell Dev Biol Anim** 1997 Jan;33(1):62–71

Gene transfer into mouse embryonic stem cell-derived cardiac myocytes mediated by recombinant adenovirus. Rust EM, et al. **In Vitro Cell Dev Biol Anim** 1997 Apr; 33(4):270–6

Induction of differentiation in embryonic stem cells by 26-kD membrane-bound tumor necrosis factor (TNF) and 17-kD free TNF. Kohchi C, et al. **In Vivo** 1996 Jan-Feb; 10(1):19–27

Isolation and characterization of a leukemia inhibitory factor-independent embryonic stem cell line. Gendall AR, et al. **Int J Biochem Cell Biol** 1997 May;29(5):829–40

Type I collagen combined with a recombinant TGF-beta serves as a scaffold for mesenchymal stem cells. Andrades JA, et al. **Int J Dev Biol** 1996;Suppl 1:107S–108S

Changes in the early differentiation pathway of monoparental embryonic stem cells is not affected by the expression of LIF receptors. Garcia Tobalina R, et al. **Int J Dev Biol** 1996;Suppl 1:213S–214S

Clonal analysis of the in vivo differentiation potential of keratinocytes. Wei ZG, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):753–61

Pituitary control of proliferation and differentiation of Leydig cells and their putative precursors in immature hypophysectomized rat testis. Dombrowicz D, et al. **J Androl** 1996 Nov-Dec;17(6):639–50

The influence of extracellular matrix substrata on preadipocyte development in serum-free cultures of stromal-vascular cells. Hausman GJ, et al. **J Anim Sci** 1996 Sep;74(9):2117–28

Effect of retinoic acid on differentiation of cultured pig preadipocytes. Suryawan A, et al. **J Anim Sci** 1997 Jan; 75(1):112–7

Insulin and hydrocortisone, but not triiodothyronine, are required for the differentiation of pig preadipocytes in primary culture. Suryawan A, et al. **J Anim Sci** 1997 Jan; 75(1):105–11

Activation of the JAK/STAT pathway leads to proliferation of ST14A central nervous system progenitor cells. Cattaneo E, et al. **J Biol Chem** 1996 Sep 20;271(38):23374–9

Purification and characterization of fully functional human osteoclast precursors. James IE, et al. **J Bone Miner Res** 1996 Nov;11(11):1608–18

Combination of osteoinductive bone proteins differentiates mesenchymal C3H/10T1/2 cells specifically to the cartilage lineage. Atkinson BL, et al. **J Cell Biochem** 1997 Jun 1;65(3):325–39

Osteogenic differentiation of purified, culture-expanded human mesenchymal stem cells in vitro. Jaiswal N, et al. **J Cell Biochem** 1997 Feb;64(2):295–312

Leukemia inhibitory factor-dependent transcriptional activation in embryonic stem cells. Boeuf H, et al. **J Cell Biol** 1997 Sep 22;138(6):1207–17

Cell size control and a cell-intrinsic maturation program in proliferating oligodendrocyte precursor cells. Gao FB, et al. **J Cell Biol** 1997 Sep 22;138(6):1367–77

Osteoclast precursors in bone marrow and peritoneal cavity. Hayashi S, et al. **J Cell Physiol** 1997 Mar;170(3):241–7

In vitro differentiation of embryonic stem cells: immunophenotypic analysis of cultured embryoid bodies. Ling V, et al. **J Cell Physiol** 1997 Apr;171(1):104–15

The interstitial cell lineage of hydra: a stem cell system that

arose early in evolution. Bode HR. **J Cell Sci** 1996 Jun; 109 (Pt 6):1155–64 (76 ref.)

Differentiation of embryonic stem cells into adipocytes in vitro. Dani C, et al. **J Cell Sci** 1997 Jun;110 (Pt 11):1279–85

The neural crest population responding to endothelin-3 in vitro includes multipotent cells. Stone JG, et al. **J Cell Sci** 1997 Jul;110 (Pt 14):1673–82

Crypt stem cell survival in the mouse intestinal epithelium is regulated by prostaglandins synthesized through cyclooxygenase-1. Cohn SM, et al. **J Clin Invest** 1997 Mar 15;99(6):1367–79

Conditions affecting the isolation of human umbilical cord blood CD34+ cells. Case J, et al. **J Hematother** 1996 Jun; 5(3):255–60

Myeloid progenitors in remission bone marrow in patients with malignant blood diseases: clues for slow hematopoietic regeneration after ABMT? Hokland P, et al. **J Hematother** 1996 Jun;5(3):279–88

Large-scale selection of CD34+ peripheral blood progenitors and expansion of neutrophil precursors for clinical applications. Zimmerman TM, et al. **J Hematother** 1996 Jun;5(3):247–53

TGF-beta 1 promotes in vitro generation of dendritic cells by protecting progenitor cells from apoptosis. Riedl E, et al. **J Immunol** 1997 Feb 15;158(4):1591–7

Development of B cells in aged mice: decline in the ability of pro-B cells to respond to IL-7 but not to other growth factors. Stephan RP, et al. **J Immunol** 1997 Feb 15; 158(4):1598–609

Primary mouse keratinocyte cultures contain hair follicle progenitor cells with multiple differentiation potential. Kamimura J, et al. **J Invest Dermatol** 1997 Oct; 109(4):534–40

Expression of Krox proteins during differentiation of the O-2A progenitor cell line CG-4. Sock E, et al. **J Neurochem** 1997 May;68(5):1911–9

Effects of neurotrophic factors and cell substrates on the differentiation of a sympathoadrenal progenitor cell line. Gaspar EM, et al. **J Neurocytol** 1997 Jun;26(6):407–22

Transforming growth factor-alpha null and senescent mice show decreased neural progenitor cell proliferation in the forebrain subependyma. Tropepe V, et al. **J Neurosci** 1997 Oct 15;17(20):7850–9

Multipotent CNS stem cells are present in the adult mammalian spinal cord and ventricular neuroaxis. Weiss S, et al. **J Neurosci** 1996 Dec 1;16(23):7599–609

In vitro differentiation of neural progenitor cells from prenatal rat brain: common cell surface glycoprotein on three glial cell subsets. Blass-Kampmann S, et al. **J Neurosci Res** 1997 Apr 15;48(2):95–111

Multipotential and lineage restricted precursors coexist in the mammalian perinatal subventricular zone. Levison SW, et al. **J Neurosci Res** 1997 Apr 15;48(2):83–94

Normal temporal and spatial distribution of oligodendrocyte progenitors in the myelin-deficient (md) rat. Pringle NP, et al. **J Neurosci Res** 1997 Feb 1;47(3):264–70

Relationship of clonogenic capacity to plating efficiency and vital dye staining of human periodontal ligament cells: implications for tooth replantation. Lekic P, et al. **J Periodontal Res** 1996 May;31(4):294–300

In vitro analysis of potency restriction during epiblast differentiation. Kanatsu M, et al. **Leukemia** 1997 Apr;11 Suppl 3:457–9

Development of erythroid cells from mouse embryonic stem cells in culture: potential use for erythroid transcription factor study. Nakano T, et al. **Leukemia** 1997 Apr;11 Suppl 3:496–500

Analysis of factors controlling primary germ layer formation and early hematopoiesis using embryonic stem cell in vitro differentiation. Wiles MV, et al. **Leukemia** 1997 Apr;11 Suppl 3:454–6

Development of neuronal precursor cells and functional postmitotic neurons from embryonic stem cells in vitro. Okabe S, et al. **Mech Dev** 1996 Sep;59(1):89–102

Does an inability to eradicate normal stem cells preclude the cure of some cancers? Anderson KM, et al. **Med Hypotheses** 1996 Jul;47(1):31–4 (24 ref.)

Induction of mRNAs for the growth hormone receptor gene during mouse 3T3-L1 preadipocyte differentiation. Zou L, et al. **Metabolism** 1997 Jan;46(1):114–8

Derivation and maintenance of embryonic stem cell cultures. Robertson EJ. **Methods Mol Biol** 1997;75:173–84 (7 ref.)

Stem cell-fed maturational lineages and gradients in signals: relevance to differentiation of epithelia. Reid LM. **Mol Biol Rep** 1996;23(1):21–33 (92 ref.)

Regulation and clinical implications of corneal epithelial stem cells. Tseng SC. **Mol Biol Rep** 1996;23(1):47–58 (4 ref.)

Neuronal progenitor cells derived from the anterior subventricular zone of the neonatal rat forebrain continue to proliferate in vitro and express a neuronal phenotype. Luskin MB, et al. **Mol Cell Neurosci** 1997;8(5):351–66

The division of neuronal progenitor cells during migration in the neonatal mammalian forebrain. Menezes JR, et al. **Mol Cell Neurosci** 1995 Dec;6(6):496–508

The adult rat hippocampus contains primordial neural stem cells. Palmer TD, et al. **Mol Cell Neurosci** 1997; 8(6):389–404

Environmental enhancement of growth factor-mediated oligodendrocyte precursor proliferation. Robinson S, et al. **Mol Cell Neurosci** 1996;8(1):38–52

Effects of heterologous hematopoietic cytokines on in vitro differentiation of cultured porcine inner cell masses. Moore K, et al. **Mol Reprod Dev** 1996 Oct;45(2):139–44

Pluripotential rabbit embryonic stem (ES) cells are capable of forming overt coat color chimeras following injection into blastocysts. Schoonjans L, et al. **Mol Reprod Dev** 1996 Dec;45(4):439–43

Scheduled perturbation in DNA during in vitro differentiation of mouse embryo-derived cells. Vatolin SY, et al. **Mol Reprod Dev** 1997 May;47(1):1–10

Bipotent progenitor cell lines from the human CNS. Sah DW, et al. **Nat Biotechnol** 1997 Jun;15(6):574–80

Selective ablation of differentiated cells permits isolation of embryonic stem cell lines from murine embryos with a non-permissive genetic background. McWhir J, et al. **Nat Genet** 1996 Oct;14(2):223–6

Neuroepithelial progenitor cells explanted from human fetal brain proliferate and differentiate in vitro. Buc-Caron MH. **Neurobiol Dis** 1995 Feb;2(1):37–47

Embryonic precursor cells from the rhombic lip are specified to a cerebellar granule neuron identity. Alder J, et al. **Neuron** 1996 Sep;17(3):389–99

Lack of neurotrophin-3 results in death of spinal sensory neurons and premature differentiation of their precursors. Fariñas I, et al. **Neuron** 1996 Dec;17(6):1065–78

Restriction of late cerebral cortical progenitors to an upper-layer fate. Frantz GD, et al. **Neuron** 1996 Jul; 17(1):55–61

Bone morphogenetic proteins promote astroglial lineage commitment by mammalian subventricular zone progenitor cells. Gross RE, et al. **Neuron** 1996 Oct;17(4):595–606

Control of daughter cell fates during asymmetric division: interaction of Numb and Notch. Guo M, et al. **Neuron** 1996 Jul;17(1):27–41 (84 ref.)

FGF2 concentration regulates the generation of neurons and glia from multipotent cortical stem cells. Qian X, et al. **Neuron** 1997 Jan;18(1):81–93

Neural stem cells are blasting off. Stemple DL, et al. **Neuron** 1997 Jan;18(1):1–4 (26 ref.)

Direct evidence for homotypic, glia-independent neuronal migration. Wichterle H, et al. **Neuron** 1997 May; 18(5):779–91

A PDGF-regulated immediate early gene response initiates neuronal differentiation in ventricular zone progenitor cells. Williams BP, et al. **Neuron** 1997 Apr;18(4):553–62

A novel strategy for the negative selection in mouse embryonic stem cells operated with immunotoxin-mediated cell targeting. Kobayashi K, et al. **Nucleic Acids Res** 1996 Sep 15;24(18):3653–5

Preadipocyte recruitment in stromal vascular cultures after depletion of committed preadipocytes by immunocytotoxicity. Yu ZK, et al. **Obes Res** 1997 Jan; 5(1):9–15

Oncogenes belonging to the CSF-1 transduction pathway direct p53 tumor suppressor effects to monocytic differentiation in 32D cells. Martinelli R, et al. **Oncogene** 1997 Jul 31;15(5):607–11

Myoepithelial cells actively proliferate during atrophy of rat parotid gland. Burgess KL, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Dec;82(6):674–80

Usefulness of frequency analysis of cytotoxic T-lymphocytes precursors (CTL-p) for selection of HLA matched unrelated marrow donors. Busca A, et al. **Panminerva Med** 1995 Sep;37(3):168–70

Regulators of adipocyte precursor cells. Butterwith SC. **Poult Sci** 1997 Jan;76(1):118–23 (58 ref.)

A knock-out model of paroxysmal nocturnal hemoglobinuria: Pig-a(-) hematopoiesis is reconstituted following intercellular transfer of GPI-anchored proteins. Dunn DE, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7938–43

Hemato-lymphoid in vivo reconstitution potential of subpopulations derived from in vitro differentiated embryonic stem cells. Potocnik AJ, et al. **Proc Natl Acad Sci U S A** 1997 Sep 16;94(19):10295–300

Isolation of putative progenitor endothelial cells for angiogenesis. Asahara T, et al. **Science** 1997 Feb 14; 275(5302):964–7

Stem cells in the central nervous system. McKay R. **Science** 1997 Apr 4;276(5309):66–71 (72 ref.)

Marrow stromal cells as stem cells for nonhematopoietic tissues. Prockop DJ. **Science** 1997 Apr 4;276(5309):71–4 (32 ref.)

B-cell development and differentiation. Duchosal MA. **Semin Hematol** 1997 Jan;34(1 Suppl 1):2–12 (146 ref.)

Reproductive capability of yolk sac stem cells [letter] Kelemen E. **Stem Cells** 1996 Sep;14(5):603–4

Evaluation of cytokines for expansion of the megakaryocyte and granulocyte lineages. LaIuppa JA, et al. **Stem Cells** 1997;15(3):198–206

Contrasting effects of TGF-beta 1 and TNF-alpha on the development of dendritic cells from progenitors in mouse bone marrow. Yamaguchi Y, et al. **Stem Cells** 1997; 15(2):144–53

Primordial germ cell migration in the Ceratitis capitata embryo. Riparbelli MG, et al. **Tissue Cell** 1996 Feb; 28(1):99–105

Epithelial transplantation for the management of severe ocular surface disease. Holland EJ. **Trans Am Ophthalmol Soc** 1996;94:677–743

Parameters of cell freezing: implications for the cryopreservation of stem cells. Hubel A. **Transfus Med Rev** 1997 Jul;11(3):224–33 (53 ref.)

Rat embryonic stem cells: a progress report. Brenin D, et al. **Transplant Proc** 1997 May;29(3):1761–5 (29 ref.)

Stem cell potential of pancreatic ductal-epithelial cells. Jindal RM, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):1502–4

Potential of immortalized neural progenitor cells to replace lost adult central nervous system neurons. Onifer SM, et al. **Transplant Proc** 1997 Jun;29(4):2221–3

Future trends in the transplantation of hematopoietic cells. Wiktor-Jedrzejczak W. **Transplant Proc** 1996 Dec; 28(6):3423–5 (24 ref.)

Evidence for the presence of multilineage chimerism and progenitors of donor dendritic cells in the peripheral blood of bone marrow-augmented organ transplant recipients. Rugeles MT, et al. **Transplantation** 1997 Sep 15; 64(5):735–41

[Biological test for menopausal osteoporosis] Klein B, et al. **Harefuah** 1997 Apr 1;132(7):449–51, 528 (Eng. Abstr.) **(Heb)**

[Stem cell-fed maturational lineages and epithelial organogenesis] Kubota H, et al. **Hum Cell** 1997 Mar; 10(1):51–62 (86 ref.) (Eng. Abstr.) **(Jpn)**

[Hybrids between murine embryonal stem and somatic cells maintain their pluripotency] Matveeva NM, et al. **Dokl Akad Nauk** 1996 Jul;349(1):129–32 **(Rus)**

[Programmed DNA nicking at early stages of embryonal cell differentiation in vitro] Vatolin SIu, et al. **Dokl Akad Nauk** 1996 Jun;348(6):834–7 **(Rus)**

[The use of pluripotent mouse embryo stem cells for the production of chimeric animals] Savchenkova IP, et al. **Tsitologiia** 1996;38(10):1118–23 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Flt3 ligand prolongs survival of CD34++ + human umbilical cord blood myeloid progenitors in serum-depleted culture medium. Takahira H, et al. **Ann Hematol** 1996 Mar;72(3):131–5

Suppression of apoptosis in hematopoietic factor-dependent progenitor cell lines by expression of the FAC gene. Cumming RC, et al. **Blood** 1996 Dec 15;88(12):4558–67

Progesterone stimulates proliferation and differentiation of osteoprogenitor cells in bone cell populations derived from adult female but not from adult male rats. Ishida Y, et al. **Bone** 1997 Jan;20(1):17–25

Pretreatment with transforming growth factor beta-3 protects small intestinal stem cells against radiation damage in vivo. Potten CS, et al. **Br J Cancer** 1997;75(10):1454–9

Neurotrophin-3 promotes the survival of oligodendrocyte precursors in embryonic hippocampal cultures under chemically defined conditions. Bertollini L, et al. **Brain Res** 1997 Jan 23;746(1-2):19–24

Isolation, cloning and characterization of a putative type-1 astrocyte cell line. Seidman KJ, et al. **Brain Res** 1997 Apr 4;753(1):18–26

Double knockout of the MRP gene leads to increased drug sensitivity in vitro. Lorico A, et al. **Cancer Res** 1996 Dec 1;56(23):5351–5

Lithium inhibits growth in a murine neural precursor cell line. Hasgekar NN, et al. **Cell Biol Int** 1996 Dec; 20(12):781–6

Effects of beta mercaptoethanol on the proliferation and differentiation of human osteoprogenitor cells. Inui K, et al. **Cell Biol Int** 1997 Jul;21(7):419–25

Basic fibroblast growth factor prolongs the proliferation of rat cortical progenitor cells in vitro without altering their cell cycle parameters. Cavanagh JF, et al. **Cereb Cortex** 1997 Jun;7(4):293–302

Calcitonin gene related peptide enhances bone colony development in vitro. Shih C, et al. **Clin Orthop** 1997 Jan; (334):335–44

bFGF and LIF signaling activates STAT3 in proliferating myoblasts. Megeney LA, et al. **Dev Genet** 1996; 19(2):139–45

Multiple roles for endothelin in melanocyte development: regulation of progenitor number and stimulation of differentiation. Reid K, et al. **Development** 1996 Dec; 122(12):3911–9

Preadipocyte differentiation blocked by prostaglandin stimulation of prostanoid FP2 receptor in murine 3T3-L1 cells. Casimir DA, et al. **Differentiation** 1996 Jul; 60(4):203–10

Norepinephrine potentiates the mitogenic effect of growth factors in quiescent brown preadipocytes: relationship with uncoupling protein messenger ribonucleic acid expression. Garcia B, et al. **Endocrinology** 1997 Oct;138(10):4227–33

Micronuclei induced in round spermatids of mice after stem-cell treatment with chloral hydrate: evaluations with centromeric DNA probes and kinetochore antibodies. Nutley EV, et al. **Environ Mol Mutagen** 1996;28(2):80–9

Activation of the GABAA receptor inhibits the proliferative effects of bFGF in cortical progenitor cells. Antonopoulos J, et al. **Eur J Neurosci** 1997 Feb;9(2):291–8

Granulocyte-macrophage colony-stimulating factor (GM-CSF) priming of high-dose etoposide and cyclophosphamide: a pilot trial. Bernstein SH, et al. **Exp Hematol** 1996 Oct;24(12):1363–8

Myelination following transplantation of EGF-responsive neural stem cells into a myelin-deficient environment. Hammang JP, et al. **Exp Neurol** 1997 Sep;147(1):84–95

5-Azacytidine and BDNF enhance the maturation of neurons derived from EGF-generated neural stem cells. Schinstine M, et al. **Exp Neurol** 1997 Apr;144(2):315–25

The effect of neuropeptides kyotorphin and neokyotorphin on proliferation of cultured brown preadipocytes.

Bronnikov G, et al. **FEBS Lett** 1997 Apr 21;407(1):73–7

Inhibition of in vitro proliferation of chronic myelogenous leukemia progenitor cells by c-myb antisense oligodeoxynucleotides. Szczylik C, et al. **Folia Histochem Cytobiol** 1996;34(3–4):129–34

Gene transfer to augment the therapeutic index of anticancer chemotherapy [editorial] Baum C, et al. **Gene Ther** 1996 Jan;3(1):1–3

Molecular status of individual CFU-GM colonies derived from chemotherapy-mobilised peripheral blood stem cells in chronic myeloid leukaemia. Broughton CM, et al. **Genes Chromosomes Cancer** 1997 Apr;18(4):292–8

Streptococcal erythrogenic toxins induce neopterin formation in human peripheral blood mononuclear cells but not in the human myelomonocytoma cell line THP-1. Murr C, et al. **Immunobiology** 1996 Aug;195(3):314–22

Effect of the peptide of thymic origin (synthetic thymohexine-RKNVYR) on hemopoietic cell progenitors in intact and irradiated animals. Semina OV, et al. **Immunol Lett** 1996 Jul;51(3):137–40

Effects of gamma-IFN and NGF on subpopulations in a human neuroblastoma cell line: flow cytometric and morphological analysis. Ridge J, et al. **In Vitro Cell Dev Biol Anim** 1996 Apr;32(4):238–48

An anti-adipocyte monoclonal antibody is cytotoxic to porcine preadipocytes in vitro and depresses the development of pig adipose tissue. De clercq L, et al. **J Anim Sci** 1997 Jul;75(7):1791–7

Human T lymphocyte cell line (Mo) and its subclone (J) produce colony stimulating activity on normal and malignant T cell precursors. Legitimo A, et al. **J Biol Regul Homeost Agents** 1995 Oct-Dec;9(4):150–4

Osteochondrogenic potential of marrow mesenchymal progenitor cells exposed to TGF-beta 1 or PDGF-BB as assayed in vivo and in vitro. Cassiede P, et al. **J Bone Miner Res** 1996 Sep;11(9):1264–73

Progesterone and dexamethasone stimulate proliferation and differentiation of osteoprogenitors and progenitors for adipocytes and macrophages in cell populations derived from adult rat vertebrae. Ishida Y, et al. **J Bone Miner Res** 1996 Jul;11(7):921–30

Characteristics of NaF-induced differentiation of HL-60 cells. Kawase T, et al. **J Bone Miner Res** 1996 Nov; 11(11):1676–87

Impaired stem cell collection by consecutive courses of high-dose mobilizing chemotherapy using cyclophosphamide, etoposide, and G-CSF. Akard LP, et al. **J Hematother** 1996 Jun;5(3):271–7

Retinoic acid accelerates embryonic stem cell-derived cardiac differentiation and enhances development of ventricular cardiomyocytes. Wobus AM, et al. **J Mol Cell Cardiol** 1997 Jun;29(6):1525–39

Effects of neurotrophic factors and cell substrates on the differentiation of a sympathoadrenal progenitor cell line. Gaspar EM, et al. **J Neurocytol** 1997 Jun;26(6):407–22

Epidermal growth factor and fibroblast growth factor-2 have different effects on neural progenitors in the adult rat brain. Kuhn HG, et al. **J Neurosci** 1997 Aug 1;17(15):5820–9

Bone morphogenetic proteins induce astroglial differentiation of oligodendroglial-astroglial progenitor cells. Mabie PC, et al. **J Neurosci** 1997 Jun 1;17(11):4112–20

Attempts to produce astrocyte cultures devoid of oligodendrocyte generating potential by the use of antimitotic treatment reveal the presence of quiescent oligodendrocyte precursors. Crang AJ, et al. **J Neurosci Res** 1997 Jul 1;49(1):64–71

Promotion of neurogenesis in mouse olfactory neuronal progenitor cells by leukemia inhibitory factor in vitro. Satoh M, et al. **Neurosci Lett** 1997 Apr 11;225(3):165–8

CCAAT/enhancer-binding protein beta is not affected by tetrachlorodibenzo-p-dioxin (TCDD) inhibition of 3T3-L1 preadipocyte differentiation. Chen CL, et al. **Obes Res** 1997 Mar;5(2):146–52

Influence of androgenicity on adipocytes and precursor cells in female rats. James RG, et al. **Obes Res** 1996 Sep; 4(5):463–70

Synergistic effects of hepatocyte growth factor on human cord blood CD34+ progenitor cells are the result of c-met receptor expression. Goff JP, et al. **Stem Cells** 1996 Sep; 14(5):592–602

Expression of the 25-kDa heat-shock protein (HSP27) correlates with resistance to the toxicity of cadmium chloride, mercuric chloride, cis-platinum(II)-diammine dichloride, or sodium arsenite in mouse embryonic stem cells transfected with sense or antisense HSP27 cDNA. Wu W, et al. **Toxicol Appl Pharmacol** 1996 Nov; 141(1):330–9

ENZYMOLOGY

The telomerase story: no end in sight? [editorial; comment] Battifora H. **Am J Clin Pathol** 1997 May;107(5):505. Comment on: Am J Clin Pathol 1997 May;107(5):555–60.

Selenocysteine tRNA[Ser]Sec levels and selenium-dependent glutathione peroxidase activity in mouse embryonic stem cells heterozygous for a targeted mutation in the tRNA[Ser]Sec gene. Chittum HS, et al. **Biochemistry** 1997 Jul 15;36(28):8634–9

Expression of a constitutively activated form of protein kinase B (c-Akt) in 3T3-L1 preadipose cells causes spontaneous differentiation. Magun R, et al. **Endocrinology** 1996 Aug;137(8):3590–3

Targeted disruption of Gnas in embryonic stem cells. Schwindinger WF, et al. **Endocrinology** 1997 Oct; 138(10):4058–63

Substrate recognition by osteoclast precursors induces C-src/microtubule association. Abu-Amer Y, et al. **J Cell Biol** 1997 Apr 7;137(1):247–58

Matrix metalloproteinases are obligatory for the migration of preosteoclasts to the developing marrow cavity of primitive long bones. Blavier L, et al. **J Cell Sci** 1995 Dec; 108 (Pt 12):3649–59

The regulation of neovascularization of matrix metalloproteinases and their inhibitors. Moses MA. **Stem Cells** 1997;15(3):180–9 (88 ref.)

PCR-based gene targeting of the inducible nitric oxide synthase (NOS2) locus in murine ES cells, a new and more cost-effective approach. Randolph DA, et al. **Transgenic Res** 1996 Nov;5(6):413–20

IMMUNOLOGY

A chemiluminescence-based method for the detection and quantification of antigen-antibody interactions on the surface of eukaryotic cells. Lischke A, et al. **Anal Biochem** 1996 May 1;236(2):322–6

Flt3 ligand prolongs survival of CD34++ + human umbilical cord blood myeloid progenitors in serum-depleted culture medium. Takahira H, et al. **Ann Hematol** 1996 Mar;72(3):131–5

Selective inhibition of resistance to hemopoietic allografts but not rejection to a natural killer cell sensitive tumor in transgenic mice for granulocyte colony stimulating factor. Kokai Y, et al. **Artif Organs** 1996 Aug;20(8):883–9

Allorecognition by murine natural killer cells: studies with bone marrow transplants and lysis of T lymphoblasts. Liu J, et al. **Chem Immunol** 1996;64:164–80 (23 ref.)

Megakaryocyte progenitors in paroxysmal nocturnal haemoglobinuria are sensitive to complement. Basara N, et al. **Eur J Haematol** 1996 Sep;57(3):227–9

Efficiency of human HLA-mismatched CD34+ cells from unrelated donors in establishing in vitro hematopoiesis in allogeneic long-term marrow cultures. La Russa VF, et al. **Exp Hematol** 1996 Nov;24(13):1475–83

North American Multicenter Study on flow cytometric enumeration of CD34+ hematopoietic stem cells [see comments] Brecher ME, et al. **J Hematother** 1996 Jun; 5(3):227–36. Comment in: J Hematother 1996 Jun;5(3):209–10. Comment in: J Hematother 1996 Jun;5(3):211–2.

BIRMA-K3, a new monoclonal antibody for CD34 immunophenotyping and stem and progenitor cell assay. Höffkes HG, et al. **J Hematother** 1996 Jun;5(3):261–70

Nordic flow cytometry standards for CD34+ cell enumeration in blood and leukapheresis products: report from the second Nordic Workshop. Nordic Stem Cell Laboratory Group (NSCL-G). Johnsen HE, et al. **J Hematother** 1996 Jun;5(3):237–45

Standardization of absolute CD34 cell enumeration [letter; comment] Knape CC. **J Hematother** 1996 Jun;5(3):211–2. Comment on: J Hematother 1996 Jun;5(3):227–36.

Assessment of peripheral blood stem cell grafts by CD34+ cell enumeration: toward a standardized flow cytometric approach [editorial; comment] Sutherland DR. **J Hematother** 1996 Jun;5(3):209–10. Comment on: J Hematother 1996 Jun;5(3):227–36.

Selection of T cells reactive against autologous B lymphoblastoid cells during chronic rheumatoid arthritis. David-Ameline J, et al. **J Immunol** 1996 Nov 15; 157(10):4697–706

Precursor frequency analysis of cytotoxic T lymphocytes to pre-erythrocytic antigens of Plasmodium falciparum in West Africa. Plebanski M, et al. **J Immunol** 1997 Mar 15; 158(6):2849–55

The number of circulating CD34 positive cells is the best preleukapheresis parameter for predicting the quality of peripheral blood progenitor cell harvest. Feugier P, et al. **Nouv Rev Fr Hematol** 1995;37(6):301–5

Delineation of antigenic pathways of ethionine-induced liver cancer in the rat. Hixson DC, et al. **Pathobiology** 1996; 64(2):79–90

Efficient targeting of the IL-4 gene in a BALB/c embryonic stem cell line. Noben-Trauth N, et al. **Transgenic Res** 1996 Nov;5(6):487–91

Studies of alpha-Gal dependent hyperacute xenotransplant rejection using double knockout embryonic stem cells. Katayama A, et al. **Transplant Proc** 1997 Jun;29(4):2262

Costimulatory molecule-deficient dendritic cell progenitors (MHC class II+, CD80dim, CD86-) prolong cardiac allograft survival in nonimmunosuppressed recipients. Fu F, et al. **Transplantation** 1996 Sep 15;62(5):659–65

METABOLISM

Proliferating cell nuclear antigen colocalization with corneal epithelial stem cells and involvement in physiological cell turnover. Gan L, et al. **Acta Ophthalmol Scand** 1995 Dec; 73(6):491–5

Regulation by fatty acids of angiotensinogen gene expression in preadipose cells. Safonova I, et al. **Biochem J** 1997 Feb 15;322 (Pt 1):235–9

Expression of immunoglobulin superfamily cell adhesion molecules on murine embryonic stem cells. Tian L, et al. **Biol Reprod** 1997 Sep;57(3):561–8

Targeted disruption of guanosine diphosphate-dissociation inhibitor for Rho-related proteins, GDID4: normal hematopoietic differentiation but subtle defect in superoxide production by macrophages derived from in vitro embryonal stem cell differentiation. Guillemot JC, et al. **Blood** 1996 Oct 1;88(7):2722–31

Non-virally mediated gene transfer into human central nervous system precursor cells. Cattaneo E, et al. **Brain Res Mol Brain Res** 1996 Nov;42(1):161–6

Human osteoclasts and preosteoclast cells (FLG 29.1) express functional c-kit receptors and interact with osteoblast and stromal cells via membrane-bound stem cell factor. Gattei V, et al. **Cell Growth Differ** 1996 Jun;7(6):753–63

Chicken Nkx-2.8: a novel homeobox gene expressed in early heart progenitor cells and pharyngeal pouch-2 and -3 endoderm. Reecy JM, et al. **Dev Biol** 1997 Aug 15; 188(2):295–311

Stem cells of the corneal epithelium lack connexins and metabolite transfer capacity. Matic M, et al. **Differentiation** 1997 May;61(4):251–60

Differentiation of rat preadipocytes is accompanied by expression of thyrotropin receptors. Haraguchi K, et al. **Endocrinology** 1996 Aug;137(8):3200–5

Osteopontin expression by osteoclast and osteoblast progenitors in the murine bone marrow: demonstration of its requirement for osteoclastogenesis and its increase after ovariectomy. Yamate T, et al. **Endocrinology** 1997 Jul; 138(7):3047–55

Interleukin-15-induced maturation of human natural killer cells from early thymic precursors: selective expression of CD94/NKG2-A as the only HLA class I-specific inhibitory receptor. Mingari MC, et al. **Eur J Immunol** 1997 Jun;27(6):1374–80

An evolutionarily conserved region in the second intron of the human nestin gene directs gene expression to CNS progenitor cells and to early neural crest cells. Lothian C, et al. **Eur J Neurosci** 1997 Mar;9(3):452–62

Embryonic precursor cells that express Trk receptors: induction of different cell fates by NGF, BDNF, NT-3, and CNTF. Lachyankar MB, et al. **Exp Neurol** 1997 Apr; 144(2):350–60

Changes in the early differentiation pathway of monoparental embryonic stem cells is not affected by the expression of LIF receptors. Garcia Tobalina R, et al. **Int J Dev Biol** 1996;Suppl 1:213S–214S

Myogenesis in cultures of uniparental mouse embryonic stem cells: differing patterns of expression of myogenic regulatory factors. McKarney LA, et al. **Int J Dev Biol** 1997 Jun;41(3):485–90

Gp130-mediated signal transduction in embryonic stem cells involves activation of Jak and Ras/mitogen-activated protein kinase pathways. Ernst M, et al. **J Biol Chem** 1996 Nov 22;271(47):30136–43

Surface adhesion-mediated regulation of chondrocyte-specific gene expression in the nontransformed RCJ 3.1C5.18 rat chondrocyte cell line. McDougall S, et al. **J Bone Miner Res** 1996 Aug; 11(8):1130–8

Bone marrow transplantation reproduces the tristetraprolin-deficiency syndrome in recombination activating gene-2 (-/-) mice. Evidence that monocyte/macrophage progenitors may be responsible for TNFalpha overproduction. Carballo E, et al. **J Clin Invest** 1997 Sep 1;100(5):986–95

In vitro differentiation of murine embryonic stem cells. New approaches to old problems. Weiss MJ, et al. **J Clin Invest** 1996;98(11 Suppl):S13–7

Epidermal growth factor receptor mRNA and protein are expressed in progenitor cells of the olfactory epithelium. Krishna NS, et al. **J Comp Neurol** 1996 Sep 16; 373(2):297–307

Islet morphogenesis and stem cell markers in rat pancreas. Bouwens L, et al. **J Histochem Cytochem** 1996 Sep; 44(9):947–51

Secretion of soluble pre-B cell receptors by pre-B cells. Bornemann KD, et al. **J Immunol** 1997 Mar 15; 158(6):2551–7

Evidence from in vitro differentiating cells that adrenoceptor agonists can increase uncoupling protein mRNA level in adipocytes of adult humans: an RT-PCR study. Champigny O, et al. **J Lipid Res** 1996 Sep;37(9):1907–14

Effects of transforming growth factor-beta and platelet-derived growth factor on oligodendrocyte precursors: insights gained from a neuronal cell line. Asakura K, et al. **J Neurochem** 1997 Jun;68(6):2281–90

Expression of Krox proteins during differentiation of the O-2A progenitor cell line CG-4. Sock E, et al. **J Neurochem** 1997 May;68(5):1911–9

Growth factor-induced transcription of GluR1 increases functional AMPA receptor density in glial progenitor cells. Chew LJ, et al. **J Neurosci** 1997 Jan 1;17(1):227–40

Neurotransmitter- and growth factor-induced cAMP response element binding protein phosphorylation in glial cell progenitors: role of calcium ions, protein kinase C, and mitogen-activated protein kinase/ribosomal S6 kinase pathway. Pende M, et al. **J Neurosci** 1997 Feb 15; 17(4):1291–301

Flk-1, a receptor for vascular endothelial growth factor (VEGF), is expressed by retinal progenitor cells. Yang K, et al. **J Neurosci** 1996 Oct 1;16(19):6089–99

Oligodendroglial progenitors labeled with the O4 antibody persist in the adult rat cerebral cortex in vivo. Reynolds R, et al. **J Neurosci Res** 1997 Mar 1;47(5):455–70

Identification of transcriptionally regulated mRNAs from

mouse Schwann cell precursors using modified RNA fingerprinting methods. Zoidl G, et al. **J Neurosci Res** 1997 Jul 1;49(1):32–42

Investigation of the role of inositol and the phosphatidylinositol signal transduction system in mouse embryonic stem cells. Duffy C, et al. **J Reprod Fertil** 1996 Sep;108(1):87–93

Complementary tissue-specific expression of LIF and LIF-receptor mRNAs in early mouse embryogenesis. Nichols J, et al. **Mech Dev** 1996 Jul;57(2):123–31

Changes in beta amyloid precursor protein secretion associated with the proliferative status of CNS derived progenitor cells. Salvietti N, et al. **Neurosci Lett** 1996 Jul 19;212(3):199–203

Neuronal stem cells express vesicular monoamine transporter 2 immunoreactivity in the adult rat. Xu W, et al. **Neuroscience** 1997 Jan;76(1):7–10

Targeted integration of DNA using mutant lox sites in embryonic stem cells. Araki K, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):868–72

A polyoma-based episomal vector efficiently expresses exogenous genes in mouse embryonic stem cells. Camenisch G, et al. **Nucleic Acids Res** 1996 Oct 1;24(19):3707–13

A method for high efficiency YAC lipofection into murine embryonic stem cells. Lee JT, et al. **Nucleic Acids Res** 1996 Dec 15;24(24):5054–5

Gene targeting in C57BL/6 ES cells. Successful germ line transmission using recipient BALB/c blastocysts developmentally matured in vitro. Lemckert FA, et al. **Nucleic Acids Res** 1997 Feb 15;25(4):917–8

Muscle isoactin expression during in vitro differentiation of murine embryonic stem cells. Ng WA, et al. **Pediatr Res** 1997 Feb;41(2):285–92

Generative cells of Lilium longiflorum possess translatable mRNA and functional protein synthesis machinery. Blomstedt CK, et al. **Plant Mol Biol** 1996 Aug;31(5):1083–6

TGF-beta latency: biological significance and mechanisms of activation. Gleizes PE, et al. **Stem Cells** 1997;15(3):190–7 (70 ref.)

MICROBIOLOGY

The significance of microbial cultures of the hematopoietic support for patients receiving high-dose chemotherapy. Cohen A, et al. **J Hematother** 1996 Jun;5(3):289–94

PATHOLOGY

Evaluation of the differentiation potential of WB-F344 rat liver epithelial stem-like cells in vivo. Differentiation to hepatocytes after transplantation into dipeptidylpeptidase-IV-deficient rat liver. Coleman WB, et al. **Am J Pathol** 1997 Aug;151(2):353–9

Oval cell proliferation associated with the murine insertional mutation TgN737Rpw. Richards WG, et al. **Am J Pathol** 1996 Dec;149(6):1919–30

Intestinal stem cell division and genetic diversity. A computer and experimental analysis. Tsao JL, et al. **Am J Pathol** 1997 Aug;151(2):573–9

Paracrine stimulation of preadipocyte-enriched cell cultures by mature adipocytes. Considine RV, et al. **Am J Physiol** 1996 May;270(5 Pt 1):E895–9

Establishment and characterization of a novel human promonocytic cell line from peripheral blood of a patient with psoriasis. Hamamoto Y, et al. **Arch Dermatol Res** 1996 May;288(5–6):225–9

Turnover and kinetics of epidermal Langerhans cells and their dendritic precursor cells in experimental contact dermatitis. A correlated ultrastructural-morphometric and immunohistochemical evaluation. Kolde G. **Arch Dermatol Res** 1996 Apr;288(4):197–202

Spontaneous exodus of high numbers of normal early progenitor cells (Ph-negative LTC-IC) in the peripheral blood of patients with chronic myeloid leukaemia at the beginning of the disease. Podestà M, et al. **Br J Haematol** 1997 Apr;97(1):94–8

Increased proliferation of precursor cells in the adult rat brain after targeted lesioning. Weinstein DE, et al. **Brain Res** 1996 Dec 16;743(1–2):11–6

Ha-rasVal12 but not p53Ser247 leads to a significant neoplastic transformation rate of the putative rat liver stem cells (oval cell). Becker R, et al. **Carcinogenesis** 1996 Dec; 17(12):2635–40

The relationships among stem cells, crypts, and villi in the small intestine of mice as determined by mutation tagging. Cosentino L, et al. **Dev Dyn** 1996 Dec;207(4):420–8

Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission. Liu X, et al. **Dev Dyn** 1997 May;209(1):85–91

Myeloma stem cell phenotype. Implications for treatment. Epstein J. **Hematol Oncol Clin North Am** 1997 Feb; 11(1):43–9 (38 ref.)

'Undifferentiated progenitor cells' in focal nodular hyperplasia of the liver [see comments] Roskams T, et al. **Histopathology** 1996 Apr;28(4):291–9. Comment in: Histopathology 1996 Dec;29(6):590–2.

Hepatic stem cells in the human liver [letter; comment] Ruck P, et al. **Histopathology** 1996 Dec;29(6):590–2. Comment on: Histopathology 1996 Apr;28(4):291–9.

Existence of c-kit receptor-positive, tryptase-negative, IgE-negative cells in human allergic nasal mucosa: a candidate for mast cell progenitor. Kawabori S, et al. **Int Arch Allergy Immunol** 1997 Jan;112(1):36–43

PLC-gamma activation is required for PDGF-betaR-mediated mitogenesis and monocytic differentiation of myeloid progenitor cells. Alimandi M, et al. **Oncogene** 1997 Jul 31;15(5):585–93

Cytologic evidence of corneal diseases with limbal stem cell deficiency. Puangsricharern V, et al. **Ophthalmology** 1995 Oct;102(10):1476–85

Pluripotential melanoblastoma, a unifying concept on malignancies arising in congenital melanocytic nevi: report of two cases [see comments] Cohen MC, et al. **Pediatr Pathol Lab Med** 1996 Sep-Oct;16(5):801–12. Comment in: Pediatr Pathol Lab Med 1997 May-Jun;17(3):532–4.

Tumorlike clusters of immature cells in cerebrospinal fluid of infants. Fernandes SP, et al. **Pediatr Pathol Lab Med** 1996 Sep-Oct;16(5):721–9

Differentiation of pancreatic epithelial progenitor cells into hepatocytes following transplantation into rat liver. Dabeva MD, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8; 94(14):7356–61

Protection of the small intestinal clonogenic stem cells from radiation-induced damage by pretreatment with interleukin 11 also increases murine survival time. Potten CS. **Stem Cells** 1996 Jul;14(4):452–9

[Blastic lymphoid cells in the bone marrow of an infant] Dargent JL, et al. **Ann Pathol** 1997 Mar;17(1):57–8 **(Fre)**

PHYSIOLOGY

Potential of neural "stem-like" cells for gene therapy and repair of the degenerating central nervous system. Snyder EY, et al. **Adv Neurol** 1997;72:121–32 (69 ref.)

Met -/- kidneys express epithelial cells that chemotax and form tubules in response to EGF receptor ligands. Kjelsberg C, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):F222–8

Epithelial stem cells. Jones PH. **Bioessays** 1997 Aug; 19(8):683–90 (64 ref.)

Epithelial apoptosis. Metcalfe A, et al. **Bioessays** 1997 Aug; 19(8):711–20 (90 ref.)

Set-aside cells in maximal indirect development: evolutionary and developmental significance. Peterson KJ, et al. **Bioessays** 1997 Jul;19(7):623–31 (39 ref.)

Estrogen receptor messenger ribonucleic acid changes during Leydig cell development. Zhai J, et al. **Biol Reprod** 1996 Oct;55(4):782–8

In vivo actions of insulin-like growth factor-I (IGF-I) on cerebellum development in transgenic mice: evidence that IGF-I increases proliferation of granule cell progenitors. Ye P, et al. **Brain Res Dev Brain Res** 1996 Aug 20; 95(1):44–54

Pax6 controls progenitor cell identity and neuronal fate in response to graded Shh signaling. Ericson J, et al. **Cell** 1997 Jul 11;90(1):169–80

Disruption of mouse RAD54 reduces ionizing radiation resistance and homologous recombination. Essers J, et al. **Cell** 1997 Apr 18;89(2):195–204

Regulatory mechanisms in stem cell biology. Morrison SJ, et al. **Cell** 1997 Feb 7;88(3):287–98 (112 ref.)

Behaviour of human embryos in vitro in the first 14 days: blastocyst transfer and embryonic stem cell production. Bongso A. **Clin Sci (Colch)** 1996 Sep;91(3):248–9

Comparison of protein kinase C subtype expression between normal and aniridic human ocular surfaces: implications for limbal stem cell dysfunction in aniridia. Tseng SC, et al. **Cornea** 1996 Mar;15(2):168–78

Vertebrate neural progenitor cells: subtypes and regulation. Temple S, et al. **Curr Opin Neurobiol** 1996 Feb;6(1):11–7 (65 ref.)

Central nervous system cell transplantation: a novel therapy for storage diseases? Snyder EY, et al. **Curr Opin Neurol** 1996 Apr;9(2):126–36 (103 ref.)

Chick stem cells. Stern CD. **Curr Top Microbiol Immunol** 1996;212:195–206 (44 ref.)

Spectrosomes and fusomes anchor mitotic spindles during asymmetric germ cell divisions and facilitate the formation of a polarized microtubule array for oocyte specification in Drosophila. Deng W, et al. **Dev Biol** 1997 Sep 1; 189(1):79–94

X-Inactivation and histone H4 acetylation in embryonic stem cells. Keohane AM, et al. **Dev Biol** 1996 Dec 15; 180(2):618–30

The relationships among stem cells, crypts, and villi in the small intestine of mice as determined by mutation tagging. Cosentino L, et al. **Dev Dyn** 1996 Dec;207(4):420–8

Regulation of oligodendrocyte precursor migration by extracellular matrix: evidence for substrate-specific inhibition of migration by tenascin-C. Frost E, et al. **Dev Neurosci** 1996;18(4):266–73

Fate determination and migration of progenitors in the postnatal mammalian CNS. Goldman JE, et al. **Dev Neurosci** 1997;19(1):42–8 (68 ref.)

Commitment of motoneuron progenitors of chick embryo along the anterior-posterior axis. Tanaka H, et al. **Dev Neurosci** 1997;19(1):106–11

Persistence of multipotential progenitors in the juvenile rat subventricular zone. Young GM, et al. **Dev Neurosci** 1996; 18(4):255–65

Enhanced cardiogenesis in embryonic stem cells overexpressing the GATA-4 transcription factor. Grépin C, et al. **Development** 1997 Jun;124(12):2387–95

Pattern of differentiated nerve cells in hydra is determined by precursor migration. Hager G, et al. **Development** 1997 Jan;124(2):569–76

A novel group of pumilio mutations affects the asymmetric division of germline stem cells in the Drosophila ovary. Lin H, et al. **Development** 1997 Jun;124(12):2463–76

Developmental acquisition of enhancer function requires a unique coactivator activity. Majumder S, et al. **EMBO J** 1997 Apr 1;16(7):1721–31

alpha2-Adrenoceptor stimulation promotes actin polymerization and focal adhesion in 3T3F442A and BFC-1beta preadipocytes. Bétuing S, et al. **Endocrinology** 1996 Dec;137(12):5220–9

The human osteoclast precursor circulates in the monocyte fraction. Fujikawa Y, et al. **Endocrinology** 1996 Sep; 137(9):4058–60

Site-related specificities of the control by androgenic status of adipogenesis and mitogen-activated protein kinase cascade/c-fos signaling pathways in rat preadipocytes. Lacasa D, et al. **Endocrinology** 1997 Aug;138(8):3181–6

Development of a novel mouse tk+/- embryonic stem cell line for use in mutagenicity studies. Dobrovolsky VN, et al. **Environ Mol Mutagen** 1996;28(4):483–9

Why do stem cells exist? Heddle JA, et al. **Environ Mol Mutagen** 1996;28(4):334–41

Oligodendrocyte-type 2 astrocyte progenitors use a metalloendoprotease to spread and migrate on CNS myelin. Amberger VR, et al. **Eur J Neurosci** 1997 Jan;9(1):151–62

Neuronal precursors in the postnatal mouse cerebellum are fully committed cells: evidence from heterochronic transplantations. Jankovski A, et al. **Eur J Neurosci** 1996 Nov;8(11):2308–19

Development of G protein-mediated Ca2+ channel regulation in mouse embryonic stem cell-derived neurons. Strübing C, et al. **Eur J Neurosci** 1997 Apr;9(4):824–32

Analysis of the ion channel complement of the rat oligodendrocyte progenitor in a commonly studied in vitro preparation. Williamson AV, et al. **Eur J Neurosci** 1997 Apr;9(4):706–20

Identification of putative downstream genes of Oct-3, a pluripotent cell-specific transcription factor. Saijoh Y, et al. **Genes Cells** 1996 Feb;1(2):239–52

Transplantation of oligodendrocyte progenitor cells into the rat retina: extensive myelination of retinal ganglion cell axons. Laeng P, et al. **Glia** 1996 Nov;18(3):200–10

Analysis of motile oligodendrocyte precursor cells in vitro and in brain slices. Schmidt C, et al. **Glia** 1997 Aug; 20(4):284–98

In vitro-generation of islets in long-term cultures of pluripotent stem cells from adult mouse pancreas. Cornelius JG, et al. **Horm Metab Res** 1997 Jun;29(6):271–7

Incorporation of cultured embryonic cells into transgenic and chimeric, porcine fetuses. Notarianni E, et al. **Int J Dev Biol** 1997 Jun;41(3):537–40

Age-related changes in osteogenic stem cells in mice. Bergman RJ, et al. **J Bone Miner Res** 1996 May; 11(5):568–77

Temporal and spatial pattern of MASH-1 expression in the developing rat retina demonstrates progenitor cell heterogeneity. Jasoni CL, et al. **J Comp Neurol** 1996 May 27;369(2):319–27

Early neurogenesis of the Drosophila brain. Younossi-Hartenstein A, et al. **J Comp Neurol** 1996 Jul 1;370(3):313–29

Wholesale hepatocytic differentiation in the rat from ductular oval cells, the progeny of biliary stem cells. Alison M, et al. **J Hepatol** 1997 Feb;26(2):343–52

Immortalization and controlled in vitro differentiation of murine multipotent neural crest stem cells. Rao MS, et al. **J Neurobiol** 1997 Jun 20;32(7):722–46

K+ channel expression and cell proliferation are regulated by intracellular sodium and membrane depolarization in oligodendrocyte progenitor cells. Knutson P, et al. **J Neurosci** 1997 Apr 15;17(8):2669–82

Expansion of rat oligodendrocyte progenitors into proliferative "oligospheres" that retain differentiation potential. Avellana-Adalid V, et al. **J Neurosci Res** 1996 Sep 1;45(5):558–70

Effects of retinal pigment epithelial cell-secreted factors on neonatal rat retinal explant progenitor cells. Sheedlo HJ, et al. **J Neurosci Res** 1996 Jun 15;44(6):519–31

The effect of age on the expression of mineralized tissue progenitors in the periodontium--the effect of bFGF. Pitaru S, et al. **J Periodontal Res** 1997 Jan;32(1 Pt 2):179–82

Clonality and life cycles of intestinal crypts explained by a state dependent stochastic model of epithelial stem cell organization. Loeffler M, et al. **J Theor Biol** 1997 May 7;186(1):41–54

In vitro analysis of potency restriction during epiblast differentiation. Kanatsu M, et al. **Leukemia** 1997 Apr;11 Suppl 3:457–9

Development of erythroid cells from mouse embryonic stem cells in culture: potential use for erythroid transcription factor study. Nakano T, et al. **Leukemia** 1997 Apr;11 Suppl 3:496–500

Analysis of factors controlling primary germ layer formation and early hematopoiesis using embryonic stem cell in vitro differentiation. Wiles MV, et al. **Leukemia** 1997 Apr;11 Suppl 3:454–6

Organiser role of the stem cell of the mesoderm in prototroch patterning in Patella vulgata (Mollusca, Gastropoda). Damen P, et al. **Mech Dev** 1996 May;56(1–2):41–60

Pluripotency and differentiation of embryonic stem cell lines

from the medakafish (Oryzias latipes). Hong Y, et al. **Mech Dev** 1996 Nov;60(1):33–44

Generation of completely embryonic stem cell–derived mutant mice using tetraploid blastocyst injection. Wang ZQ, et al. **Mech Dev** 1997 Mar;62(2):137–45

neurogenins, a novel family of atonal–related bHLH transcription factors, are putative mammalian neuronal determination genes that reveal progenitor cell heterogeneity in the developing CNS and PNS. Sommer L, et al. **Mol Cell Neurosci** 1996;8(4):221–41 (51 ref.)

Expression of the parathyroid hormone–related peptide gene in retinoic acid–induced differentiation: involvement of ETS and Sp1. Karperien M, et al. **Mol Endocrinol** 1997 Sep;11(10):1435–48

To what extent is oligodendrocyte progenitor migration a limiting factor in the remyelination of multiple sclerosis lesions? Franklin RJ, et al. **Mult Scler** 1997 Apr;3(2):84–7 (29 ref.)

Inhibition of oligodendrocyte precursor motility by oligodendrocyte processes: implications for transplantation–based approaches to multiple sclerosis. Jefferson S, et al. **Mult Scler** 1997 Apr;3(2):162–7

Oligodendrocyte precursor cells in chronic multiple sclerosis lesions. Wolswijk G. **Mult Scler** 1997 Apr;3(2):168–9

Response diversity and the timing of progenitor cell maturation are regulated by developmental changes in EGFR expression in the cortex. Burrows RC, et al. **Neuron** 1997 Aug;19(2):251–67

Endogenous progenitors remyelinate demyelinated axons in the adult CNS. Gensert JM, et al. **Neuron** 1997 Jul; 19(1):197–203

Oligodendrocyte progenitors in the embryonic spinal cord express DM–20. Dickinson PJ, et al. **Neuropathol Appl Neurobiol** 1996 Jun;22(3):188–98

In vitro propagation and inducible differentiation of multipotential progenitor cells from human fetal brain. Chalmers–Redman RM, et al. **Neuroscience** 1997 Feb; 76(4):1121–8

Lesion–induced proliferation of neuronal progenitors in the dentate gyrus of the adult rat. Gould E, et al. **Neuroscience** 1997 Sep;80(2):427–36

Evidence for the stochastic integration of gene trap vectors into the mouse germline. Chowdhury K, et al. **Nucleic Acids Res** 1997 Apr 15;25(8):1531–6

Introduction of precise alterations into the mouse genome with high efficiency by stable tag–exchange gene targeting: implications for gene targeting in ES cells. Whyatt LM, et al. **Nucleic Acids Res** 1997 Jun 15;25(12):2381–8

The origin and efficient derivation of embryonic stem cells in the mouse. Brook FA, et al. **Proc Natl Acad Sci U S A** 1997 May 27;94(11):5709–12

Regulation and significance of apoptosis in the stem cells of the gastrointestinal epithelium. Potten CS, et al. **Stem Cells** 1997;15(2):82–93 (96 ref.)

The role of motility proteins and metastasis–suppressor genes in prostate cancer progression. Rinker–Schaeffer CW, et al. **Stem Cells** 1996 Sep;14(5):508–16 (50 ref.)

A comparison of the germline potential of differently aged ES cell lines and their transfected descendants. Fedorov LM, et al. **Transgenic Res** 1997 May;6(3):223–31

Rat embryonic stem cells: a progress report. Brenin D, et al. **Transplant Proc** 1997 May;29(3):1761–5 (29 ref.)

Neuroblasts: a model for the asymmetric division of stem cells. Lin H, et al. **Trends Genet** 1997 Jan;13(1):33–9 (48 ref.)

Do multilineage potential neural stem cells really exist in the brain of adult mammals [letter; comment] Korr H. **Trends Neurosci** 1997 May;20(5):203–4. Comment on: Trends Neurosci 1996 Sep;19(9):387–93.

Is there a neural stem cell in the mammalian forebrain? [see comments] Weiss S, et al. **Trends Neurosci** 1996 Sep; 19(9):387–93 (68 ref.). Comment in: Trends Neurosci 1997 May;20(5):203–4.

[Limbus stem cells and their significance for regeneration of of the corneal surface] Kruse FE. **Ophthalmologe** 1996 Oct;93(5):633–43 (32 ref.) **(Ger)**

RADIATION EFFECTS

Irradiated blood components [letter; comment] Benson K, et al. **Am J Clin Pathol** 1997 Feb;107(2):251; discussion 253–4. Comment on: Am J Clin Pathol 1996 Jul;106(1):6–11.

Pretreatment with transforming growth factor beta–3 protects small intestinal stem cells against radiation damage in vivo. Potten CS, et al. **Br J Cancer** 1997;75(10):1454–9

Effect of the peptide of thymic origin (synthetic thymohexine–RKNVYR) on hemopoietic cell progenitors in intact and irradiated animals. Semina OV, et al. **Immunol Lett** 1996 Jul;51(3):137–40

The number of clonogenic cells in crypts in three regions of murine large intestine. Cai WB, et al. **Int J Radiat Biol** 1997 May;71(5):573–9

P53 deficiency produces fewer regenerating spermatogenic tubules after irradiation. Hendry JH, et al. **Int J Radiat Biol** 1996 Dec;70(6):677–82

Sensitivity of murine haemopoietic stem cell populations to X–rays and 1 MeV fission neutrons in vitro and in vivo under hypoxic conditions. Meijne EI, et al. **Int J Radiat Biol** 1996 Nov;70(5):571–7

Chromosomal deletion complexes in mice by radiation of embryonic stem cells. You Y, et al. **Nat Genet** 1997 Mar; 15(3):285–8

Ku70–deficient embryonic stem cells have increased ionizing radiosensitivity, defective DNA end–binding activity, and inability to support V(D)J recombination. Gu Y, et al. **Proc Natl Acad Sci U S A** 1997 Jul 22;94(15):8076–81

Enhancement of murine intestinal stem cell survival after irradiation by keratinocyte growth factor. Khan WB, et al. **Radiat Res** 1997 Sep;148(3):248–53

The effect of proliferative status and clonogen content on the response of mouse jejunal crypts to split–dose irradiation. Thames HD, et al. **Radiat Res** 1997 Feb; 147(2):172–8

[Dose dependence of the frequency of micronucleated clone cells and division–related median clone size difference. II] Hagemann G, et al. **Strahlenther Onkol** 1996 Sep; 172(9):507–11 (Eng. Abstr.) **(Ger)**

SECRETION

Secretion of soluble pre–B cell receptors by pre–B cells. Bornemann KD, et al. **J Immunol** 1997 Mar 15; 158(6):2551–7

TRANSPLANTATION

Long–term remission of chronic myelogenous leukaemia following allogeneic transplantation of peripheral blood progenitor cells in the fourth chronic phase after failing previous bone marrow transplantation and donor leukocyte transfusion. Stockschläder M, et al. **Acta Haematol** 1996; 96(4):262–3

High–dose chemotherapy with autologous stem cell support for the treatment of advanced ovarian cancer—initial experience in Uppsala and Turku. Grenman S, et al. **Acta Obstet Gynecol Scand** 1997 Apr;76(4):363–8 (31 ref.)

Gene therapy and the use of stem cells for central nervous system regeneration. Whittemore SR, et al. **Adv Neurol** 1997;72:113–9 (34 ref.)

Disseminated aspergillosis after mobilization with intensive chemotherapy prior to autologous stem–cell transplant in chronic myeloid leukemia [letter] Ferrer F, et al. **Am J Hematol** 1997 Feb;54(2):170–1

Rat stem cells developing in irradiated SCID mice fail to become tolerized and cause lethal graft–versus–host disease. Surh CD, et al. **Am J Pathol** 1997 Aug;151(2):591–9

Primary transplantation of allogeneic peripheral blood stem cell for severe aplastic anemia. Hsu HC, et al. **Ann Hematol** 1997 Apr;74(4):191–2

Aggressive treatment in follicular non–Hodgkin's lymphoma. Schouten HC. **Br J Hosp Med** 1996 Nov 20–Dec 10; 56(10):525–8 (32 ref.)

Conditionally immortalized neural progenitor cell lines integrate and differentiate after grafting to the adult rat striatum. A combined autoradiographic and electron microscopic study. Lundberg C, et al. **Brain Res** 1996 Oct 21;737(1–2):295–300

Controversy over high–dose chemotherapy [letter] Glück S. **Can Fam Physician** 1996 Jan;42:28, 30

Altered differentiation of CNS neural progenitor cells after transplantation into the injured adult rat spinal cord. Onifer SM, et al. **Cell Transplant** 1997 May–Jun;6(3):327–38

Adenovirus for neurodegenerative diseases: in vivo strategies and ex vivo gene therapy using human neural progenitors. Sabaté O, et al. **Clin Neurosci** 1995–96;3(5):317–21 (42 ref.)

Multipotent neural progenitor or stem–like cells may be uniquely suited for therapy for some neurodegenerative conditions. Snyder EY, et al. **Clin Neurosci** 1995–96; 3(5):310–6 (43 ref.)

Understanding the molecular basis of cell migration; implications for clinical therapy in multiple sclerosis. Milner R. **Clin Sci (Colch)** 1997 Feb;92(2):113–22 (57 ref.)

The evolution of epithelial transplantation for severe ocular surface disease and a proposed classification system. Holland EJ, et al. **Cornea** 1996 Nov;15(6):549–56 (42 ref.)

Mobilization and collection of PBSC in healthy donors: comparison between two schemes of rhG–CSF administration. Majolino I, et al. **Eur J Haematol** 1996 Sep; 57(3):214–21

Improved survival of lethally irradiated recipient mice transplanted with circulating progenitor cells mobilized by IL–8 after pretreatment with stem cell factor. Laterveer L, et al. **Exp Hematol** 1996 Oct;24(12):1387–93

Myelination following transplantation of EGF–responsive neural stem cells into a myelin–deficient environment. Hammang JP, et al. **Exp Neurol** 1997 Sep;147(1):84–95

Survival, integration, and differentiation of neural stem cell lines after transplantation to the adult rat striatum. Lundberg C, et al. **Exp Neurol** 1997 Jun;145(2 Pt 1):342–60

Central corneolimbal transplantation under systemic ciclosporin A cover for severe limbal stem cell insufficiency. Sundmacher R, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug;234 Suppl 1:S122–5

Combination of high–dose chemotherapy, autologous bone marrow/peripheral blood stem cell transplantation, and thoracoscopic surgery in refractory nongestational choriocarcinoma of a 45XO/46XY female: a case report. Chou HH, et al. **Gynecol Oncol** 1997 Mar;64(3):521–5

High–dose chemotherapy with peripheral blood stem–cell transplantation for hormone–refractory advanced carcinoma of the prostate: experience of two cases. Nishiyama T, et al. **Int J Urol** 1996 Jul;3(4):320–3

The kidney triggers graft–versus–host disease in experimental combined transplantation of kidney and stem cell–enriched peripheral leukocytes [published erratum appears in J Am Soc Nephrol 1996 Dec;7(12):2645] Perico N, et al. **J Am Soc Nephrol** 1996 Oct;7(10):2254–8

Subventricular zone–olfactory bulb migratory pathway in the adult mouse: cellular composition and specificity as determined by heterochronic and heterotopic transplantation. Jankovski A, et al. **J Comp Neurol** 1996 Jul 29;371(3):376–96

Prevention by anti–LFA–1 of acute myoblast death following transplantation. Guérette B, et al. **J Immunol** 1997 Sep 1; 159(5):2522–31

Eosinophils are not required for the rejection of neovascularized fetal pig proislet xenografts in mice. Simeonovic CJ, et al. **J Immunol** 1997 Mar 1;158(5):2490–9

Oligodendrocyte precursors survive poorly and do not migrate following transplantation into the normal adult central nervous system. O'Leary MT, et al. **J Neurosci Res** 1997 Apr 15;48(2):159–67

Stem cell transplantation in autoimmune disease [editorial] Brooks PM, et al. **J Rheumatol** 1995 Oct;22(10):1809–11 (31 ref.)

Corneal epithelial stem–cell transplantation [letter; comment] Tsubota K. **Lancet** 1997 May 24;349(9064):1556. Comment on: Lancet 1997 Apr 5;349(9057):990–3.

Use of gonadal primordial germ cells (PGCs) as tools for gene transfer in chickens. Allioli N, et al. **Methods Mol Biol** 1997;62:425–32

Development of a positive method for male stem cell–mediated gene transfer in mouse and pig. Kim JH, et al. **Mol Reprod Dev** 1997 Apr;46(4):515–26

Inhibition of oligodendrocyte precursor motility by oligodendrocyte processes: implications for transplantation–based approaches to multiple sclerosis. Jefferson S, et al. **Mult Scler** 1997 Apr;3(2):162–7

Cultivating a cure for blindness [news] Hodson S. **Nature** 1997 May 29;387(6632):449

Conditionally immortalized neural progenitor cells grafted to the striatum exhibit site–specific neuronal differentiation and establish connections with the host globus pallidus. Lundberg C, et al. **Neurobiol Dis** 1996 Feb;3(1):33–50

Demyelinating brachial neuropathy complicating syngeneic graft–versus–host disease. Yoshiyama Y, et al. **Neurology** 1997 Jan;48(1):287–8

Restriction of late cerebral cortical progenitors to an upper–layer fate. Frantz GD, et al. **Neuron** 1996 Jul; 17(1):55–61

Obese gene expression at in vivo levels by fat pads derived from s.c. implanted 3T3–F442A preadipocytes [see comments] Mandrup S, et al. **Proc Natl Acad Sci U S A** 1997 Apr 29;94(9):4300–5. Comment in: Proc Natl Acad Sci U S A 1997 Apr 29;94(9):4242–5.

Epithelial transplantation for the management of severe ocular surface disease. Holland EJ. **Trans Am Ophthalmol Soc** 1996;94:677–743

Survival of rabbit limbal stem cell allografts. Swift GJ, et al. **Transplantation** 1996 Sep 15;62(5):568–74

ULTRASTRUCTURE

Differentiation of epidermal growth factor–responsive neural precursor cells within neurospheres. Mokrý J, et al. **Acta Medica (Hradec Kralove)** 1996;39(1):7–20

Subpopulations of stromal cells from long–term human bone marrow cultures: ontogeny of progenitor cells and expression of growth hormone receptors. Lincoln DT, et al. **Anat Histol Embryol** 1997 Mar;26(1):11–28

STEM CELLS, ERYTHROID see **ERYTHROID PROGENITOR CELLS**

STEM CELLS, HEMATOPOIETIC see **HEMATOPOIETIC STEM CELLS**

STEM CELLS, NEOPLASTIC see **TUMOR STEM CELLS**

STENOCARDIA see **ANGINA PECTORIS**

STENTS

Nonexpandable silicone esophageal stents for treatment of malignant tracheoesophageal fistulas: complications and radiographic appearances. Stemerman DH, et al. **Abdom Imaging** 1997 Jan–Feb;22(1):14–9

Feasibility of using a swine portal vein containing a metallic stent for creating a portacaval shunt. Matalon TA, et al. **Acad Radiol** 1996 Apr;3(4):325–9

In vivo evaluation of a fluorine–acryl–stylene–urethane–silicone antithrombogenic coating material copolymer for intravascular stents. Matsuhashi T, et al. **Acad Radiol** 1996 Jul;3(7):581–8

Luminal diameter and vasa vasorum response to stent dilation in the rabbit aorta. Sahler LG, et al. **Acad Radiol** 1996 Jul;3(7):545–9

Anesthesia of a patient with an obstructing tracheal mass: a new way to manage the airway. Licker M, et al. **Acta Anaesthesiol Scand** 1997 Jan;41(1 Pt 1):84–6

Directional atherectomy, rotational atherectomy and coronary stent, followed by coronary bypass operation in a patient with the aggressive restenotic process. Cigarroa JE, et al. **Acta Cardiol** 1995;50(6):469–75

Transcatheter closure of patent ductus arteriosus using controlled–release coils. Celiker A, et al.

Acta Paediatr Jpn 1996 Oct;38(5):500–5

Proliferative response in smooth muscle cells after angioplasty or insertion of self–expanding stents. An experimental study in pigs. Cwikiel W, et al. **Acta Radiol** 1997 Jan;38(1):124–8

Endoscopically inserted stent as treatment for pancreatic ascites. A case report. Hämäläinen KP, et al. **Acta Radiol** 1997 Jul;38(4 Pt 1):550–2

Transjugular intrahepatic portosystemic shunt (TIPS). Thrombogenicity in stents and its effect on shunt patency. Siegerstetter V, et al. **Acta Radiol** 1997 Jul;38(4 Pt 1):558–64

Experimental arteriovenous fistulas: treatment with silicone–covered metallic stents. Geremia G, et al. **AJNR Am J Neuroradiol** 1997 Feb;18(2):271–7

Posttraumatic extracranial aneurysm of the internal carotid artery: combined endovascular treatment with coils and stents. Klein GE, et al. **AJNR Am J Neuroradiol** 1997 Aug; 18(7):1261–4

Dissecting aneurysms of all four cervicocranial arteries in fibromuscular dysplasia: treatment with self–expanding endovascular stents, coil embolization, and surgical ligation. Manninen HI, et al. **AJNR Am J Neuroradiol** 1997 Aug; 18(7):1216–20

Covered stent placement for neurovascular disease. Singer RJ, et al. **AJNR Am J Neuroradiol** 1997 Mar;18(3):507–9

Treatment of malignant obstruction of the right ventricular outflow tract and pulmonary artery with metallic stents. Balkin PW, et al. **AJR Am J Roentgenol** 1997 Aug; 169(2):439–40

Treatment of renal angioplasty failure by percutaneous renal artery stenting with Palmaz stents: midterm technical and clinical results. Boisclair C, et al. **AJR Am J Roentgenol** 1997 Jan;168(1):245–51

Treatment of colonic obstruction with expandable metal stents: radiologic features. Canon CL, et al. **AJR Am J Roentgenol** 1997 Jan;168(1):199–205

A simplified method for repositioning distally migrated ureteral stents. Coley BD, et al. **AJR Am J Roentgenol** 1997 Aug;169(2):567–8

Self–expanding metallic stents as palliative treatment of malignant gastroduodenal stenosis. de Baere T, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1079–83

Stent implantation in patients with superior vena cava syndrome. Gross CM, et al. **AJR Am J Roentgenol** 1997 Aug;169(2):429–32

Stent grafting in iliac arteriovenous fistulas [letter; comment] Johnstone RD, et al. **AJR Am J Roentgenol** 1996 Dec; 167(6):1597. Comment on: AJR Am J Roentgenol 1996 Mar;166(3):673–4.

Metallic stents in malignant biliary obstruction: prospective long–term clinical results. Lee BH, et al. **AJR Am J Roentgenol** 1997 Mar;168(3):741–5

MR imaging signal–intensity abnormalities after placement of arterial endoprostheses. Müller–Hülsbeck S, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):743–8

Expandable esophageal prostheses: recognition, insertion techniques, and positioning. Nevitt AW, et al. **AJR Am J Roentgenol** 1996 Oct;167(4):1009–13

Suprahepatic caval anastomotic stenosis complicating orthotopic liver transplantation: treatment with percutaneous transluminal angioplasty, Wallstent placement, or both. Pfammatter T, et al. **AJR Am J Roentgenol** 1997 Feb;168(2):477–80

Creation of a portal vein to inferior vena cava shunt using CT guidance and a covered endovascular stent. Quinn SF, et al. **AJR Am J Roentgenol** 1997 Oct;169(4):1159–60

Clinical value of combined stents in esophageal cancer: combined use of Ultraflex and self–expanding zigzag metallic stents. Sawada S, et al. **AJR Am J Roentgenol** 1997 Aug;169(2):493–4

In the management of a patient with nonmalignant obstructive uropathy and known infection, isn't it safer and more prudent to attempt retrograde placement of a ureteral stent before percutaneous nephrostomy? Zagoria RJ. **AJR Am J Roentgenol** 1997 Jun;168(6):1616

Review article: update on the role of transjugular intrahepatic portosystemic stent–shunt (TIPSS) in the management of complications of portal hypertension. Stanley AJ, et al. **Aliment Pharmacol Ther** 1997 Apr;11(2):261–72 (103 ref.)

Expansion of Wiktor stents by oversizing versus high–pressure dilatation: a randomized, intracoronary ultrasound–controlled study. Buchwald AB, et al. **Am Heart J** 1997 Feb;133(2):190–6

Stenting within a stent: treatment for repeat in–stent restenosis in a venous graft. Debbas N, et al. **Am Heart J** 1997 Apr;133(4):460–3

Treatment of ostial lesions of the left anterior descending coronary artery with Palmaz–Schatz coronary stent. De Cesare NB, et al. **Am Heart J** 1996 Oct;132(4):716–20

No subacute thrombosis and femoral bleeding complications under full anticoagulation in 150 consecutive patients receiving non–heparin–coated intracoronary Palmaz–Schatz stents. Lee SW, et al. **Am Heart J** 1996 Dec;132(6):1135–46

Diagnostic value of exercise electrocardiography and angina after coronary artery stenting. Benestent Study Group. Legrand V, et al. **Am Heart J** 1997 Feb;133(2):240–8

Reduction of thrombotic and hemorrhagic complications after stent implantation. Pan M, et al. **Am Heart J** 1996 Dec;132(6):1119–26

Coronary stenting after unsuccessful emergency angioplasty in acute myocardial infarction: results in a series of consecutive patients. Steffenino G, et al. **Am Heart J** 1996 Dec;132(6):1115–8

Long segment coarctation of the thoracic aorta: treatment with multiple balloon–expandable stent implantation. Thanopoulos BV, et al. **Am Heart J** 1997 Apr;133(4):470–3

Short– and long–term outcome of narrowed saphenous vein bypass graft: a comparison of Palmaz–Schatz stent, directional coronary atherectomy, and balloon angioplasty. Waksman R, et al. **Am Heart J** 1997 Aug;134(2 Pt 1):274–81

Early and late assessment of the Micro Stent PL coronary stent for restenosis and suboptimal balloon angioplasty. Webb JG, et al. **Am Heart J** 1997 Mar;133(3):369–74

Comparison of stenting and balloon angioplasty for narrowings in aortocoronary saphenous vein conduits in place for more than five years. Brener SJ, et al. **Am J Cardiol** 1997 Jan 1;79(1):13–8

Histopathology of restenosis after stenting of narrowed coronary arteries after cardiac transplantation during the teenage years. Foster MT, et al. **Am J Cardiol** 1997 Aug 1;80(3):389–93

Comparison of aspirin alone versus aspirin plus ticlopidine after coronary artery stenting. Goods CM, et al. **Am J Cardiol** 1996 Nov 1;78(9):1042–4

Transluminal extraction atherectomy for restenosis following Palmaz–Schatz stent implantation. Hara K, et al. **Am J Cardiol** 1997 Mar 15;79(6):801–2

Serial intravascular ultrasound predictors of restenosis at the margins of Palmaz–Schatz stents. Hoffmann R, et al. **Am J Cardiol** 1997 Apr 1;79(7):951–3

Comparison of six–month results of coronary stenting versus balloon angioplasty alone in patients with acute myocardial infarction. Hong MK, et al. **Am J Cardiol** 1997 Jun 1; 79(11):1524–7

Intravascular stenting as a definitive treatment of spontaneous carotid artery dissection. Hong MK, et al. **Am J Cardiol** 1997 Feb 15;79(4):538

Comparison of balloon angioplasty versus debulking devices versus stenting in right coronary ostial lesions. Jain SP, et al. **Am J Cardiol** 1997 May 15;79(10):1334–8

Effects of renal artery stent implantation in patients with renovascular hypertension presenting with unstable angina or congestive heart failure. Khosla S, et al. **Am J Cardiol** 1997 Aug 1;80(3):363–6

Results of coronary stenting for unstable versus stable angina pectoris. Marzocchi A, et al. **Am J Cardiol** 1997 May 15; 79(10):1314–8

Results of elective stenting of branch–ostial lesions. Mathur A, et al. **Am J Cardiol** 1997 Feb 15;79(4):472–4

Mechanisms and results of balloon angioplasty for the treatment of in–stent restenosis. Mehran R, et al. **Am J Cardiol** 1996 Sep 15;78(6):618–22

Comparison of outcome after stenting for de novo versus restenotic narrowings in native coronary arteries. Mittal S, et al. **Am J Cardiol** 1997 Sep 15;80(6):711–5

Comparison of results of intracoronary implantation of the Plamaz–Schatz stent with conventional balloon angioplasty in chronic total coronary arterial occlusion. Mori M, et al. **Am J Cardiol** 1996 Nov 1;78(9):985–9

Comparison of results of stent implantation in small (<20 kg) children versus larger children with pulmonary artery stenoses. Movahhedian H, et al. **Am J Cardiol** 1996 Nov 15;78(10):1180–3

What is a stent and where can you get one? O'Brien JC Jr, et al. **Am J Cardiol** 1997 May 1;79(9):1306

Coronary stenting (Cordis) without anticoagulation. Park SW, et al. **Am J Cardiol** 1997 Apr 1;79(7):901–4

Effects of Palmaz–Schatz stents on angled coronary arteries. Phillips PS, et al. **Am J Cardiol** 1997 Jan 15;79(2):191–3

Experience with the AVE Micro stent in native coronary arteries. Rozenman Y, et al. **Am J Cardiol** 1996 Sep 15; 78(6):685–7

Interprocedural interval as a predictor of stent restenosis after previous coronary angioplasty. The Palmaz–Schatz Stent Investigators. Savage MP, et al. **Am J Cardiol** 1996 Sep 15;78(6):683–4

Hail stentors! How the hail do I stop the warfarin? [editorial; comment] Schatz RA. **Am J Cardiol** 1996 Oct 15; 78(8):940–2. Comment on: Am J Cardiol 1995 Aug 1;76(4):307–8.

One–week and six–month angiographic controls of stent implantation after occlusive and nonocclusive dissection during primary balloon angioplasty for acute myocardial infarction. Spaulding C, et al. **Am J Cardiol** 1997 Jun 15; 79(12):1592–5

Tailored stent treatment for severe supravalvular aortic stenosis. Suárez de Lezo J, et al. **Am J Cardiol** 1996 Nov 1;78(9):1081–3

Low–dose heparin for routine coronary angioplasty and stenting. Vainer J, et al. **Am J Cardiol** 1996 Oct 15; 78(8):964–6

Differences of regional coronary flow reserve assessed by adenosine thallium–201 scintigraphy early and six months after successful percutaneous transluminal coronary angioplasty or stent implantation. Versaci F, et al. **Am J Cardiol** 1996 Nov 15;78(10):1097–102

Usefulness of coronary stenting for cardiogenic shock. Webb JG, et al. **Am J Cardiol** 1997 Jan 1;79(1):81–4

Intravascular ultrasound assessment of the prevalence and causes of angiographic "haziness" following high–pressure coronary stenting. Ziada KM, et al. **Am J Cardiol** 1997 Jul 15;80(2):116–21

Treatment of superior and inferior vena cava syndromes of malignant cause with Wallstent catheter placed percutaneously. Chacón López–Muñiz JI, et al. **Am J Clin Oncol** 1997 Jun;20(3):293–7

Esophageal stents for inoperable esophageal cancer: which to use? [editorial; comment] Angueira CE, et al. **Am J Gastroenterol** 1997 Mar;92(3):373–6. Comment on: Am J Gastroenterol 1997 Mar;92(3):400–6.

Prevention of biliary stent clogging [letter; comment] Cetta F. **Am J Gastroenterol** 1997 Mar;92(3):542–3. Comment on: Am J Gastroenterol 1996 Jul;91(7):1301–8.

Early migration of a covered self–expanding metal stent corrected by implantation of a second stent. Conio M, et al. **Am J Gastroenterol** 1996 Oct;91(10):2212–4

Expandable stents: unusual locations. Kozarek RA, et al. **Am J Gastroenterol** 1997 May;92(5):812–5

Expandable metal stents for treatment of colonic obstruction: viable therapeutic alternative? Ott DJ. **Am J Gastroenterol** 1997 Jun;92(6):1065–6

Endoscopic biliary stenting for the palliation of pancreatic cancer: results, survival predictive factors, and comparison of 10–French with 11.5–French gauge stents. Pereira–Lima JC, et al. **Am J Gastroenterol** 1996 Oct;91(10):2179–84

Self–expanding metal stents in malignant esophageal obstruction: a comparison between two stent types [see comments] Schmassmann A, et al. **Am J Gastroenterol** 1997 Mar;92(3):400–6. Comment in: Am J Gastroenterol 1997 Mar;92(3):373–6.

Utilization of an esophageal stent for subsequent placement of a percutaneous endoscopic gastrostomy tube. Seibert DG, et al. **Am J Gastroenterol** 1997 Jun;92(6):1048–50

Biliary stricture measurement and stent selection. Seibert DG. **Am J Gastroenterol** 1997 Sep;92(9):1510–4

Metallic stents for the treatment of malignant and benign strictures of the biliary system [letter] Taub SJ, et al. **Am J Gastroenterol** 1997 Apr;92(4):724–5

Metal stents for malignant esophageal obstruction. Vakil N, et al. **Am J Gastroenterol** 1996 Dec;91(12):2471–6

Hepatic vein stenting for Budd–Chiari syndrome. Witte AM, et al. **Am J Gastroenterol** 1997 Mar;92(3):498–501

The effects of gelatin film stents in the middle meatus. Tom LW, et al. **Am J Rhinol** 1997 May–Jun;11(3):229–32

Evolving indications for and early results of carotid artery stenting. Criado FJ, et al. **Am J Surg** 1997 Aug;174(2):111–4

A new generation endovascular graft for repair of abdominal aortic aneurysms. Gorin DR, et al. **Am J Surg** 1997 Mar; 173(3):159–64

Endovascular stent infection with delayed bacterial challenge. Hearn AT, et al. **Am J Surg** 1997 Aug; 174(2):157–9

Effect of balloon–expandable and self–expanding stent fixation on endoluminal polytetrafluoroethylene graft healing. Ombrellaro MP, et al. **Am J Surg** 1997 Jun; 173(6):461–6

Endovascular stenting. Sullivan TM. **Am J Surg** 1997 Jan; 173(1):27–9; discussion 30–1 (17 ref.)

Retrospective review of 100 cases of endoluminal aortic stent–graft surgery from an anaesthetic perspective. Baker AB, et al. **Anaesth Intensive Care** 1997 Aug;25(4):378–84

Alteration of hemodynamics in aneurysm models by stenting: influence of stent porosity. Lieber BB, et al. **Ann Biomed Eng** 1997 May–Jun;25(3):460–9

Nonsuture end–to–end microvascular anastomosis using intravascular stents. Mikaelsson C, et al. **Ann Chir Gynaecol** 1996;85(1):36–9

Replicas of human aortic and iliac artery aneurysms for endovascular repair. Practice makes perfect. Wisselink W, et al. **Ann N Y Acad Sci** 1996 Nov 18;800:258–9

Mucociliary clearance of stented laryngotracheal tract in guinea pigs in vivo. Lee SY, et al. **Ann Otol Rhinol Laryngol** 1997 Mar;106(3):240–3

The origin of the word 'stent' [letter; comment] Sterioff S. **Ann R Coll Surg Engl** 1997 Jan;79(1 Suppl):38–9. Comment on: Ann R Coll Surg Engl 1996 May;78(3 Suppl):128.

A prospective trial of transjugular intrahepatic portasystemic stent shunts versus small–diameter prosthetic H–graft portacaval shunts in the treatment of bleeding varices. Rosemurgy AS, et al. **Ann Surg** 1996 Sep;224(3):378–84; discussion 384–6

Cost–effective analysis of surgical palliation versus endoscopic stenting in the management of unresectable pancreatic cancer. Raikar GV, et al. **Ann Surg Oncol** 1996 Sep;3(5):470–5

Expandable stents in esophageal malignancy [letter; comment] De Groot M. **Ann Thorac Surg** 1997 Jul; 64(1):287–8. Comment on: Ann Thorac Surg 1996 Oct;62(4):963–7.

Palliation of inoperable esophageal carcinoma with the Wallstent endoprosthesis. Feins RH, et al. **Ann Thorac Surg** 1996 Dec;62(6):1603–7

Stent angioplasty for renovascular disease associated with acute aortic dissection. Hata M, et al. **Ann Thorac Surg** 1997 Jan;63(1):244–6

Management of malignant tracheoesophageal fistulas with a cuffed funnel tube. Kotsis L, et al. **Ann Thorac Surg** 1997 Aug;64(2):355–8

Keeping an open mind while restoring esophageal patency in patients with cancer and esophagorespiratory fistula [editorial; comment] Low DE. **Ann Thorac Surg** 1996 Oct; 62(4):961–2. Comment on: Ann Thorac Surg 1996 Oct;62(4):963–7.

Treatment of esophageal obstruction with covered,

self-expanding esophageal Wallstents [see comments] Moores DW, et al. **Ann Thorac Surg** 1996 Oct;62(4):963-7 . Comment in: Ann Thorac Surg 1996 Oct;62(4):961-2. Comment in: Ann Thorac Surg 1997 Jul;64(1):287-8.

Spool-like stent for the open sternum after cardiac operations. Satoh H, et al. **Ann Thorac Surg** 1997 Feb; 63(2):572-4

Severe deformity of a Palmaz-Schatz stent after normal surgical manipulation. Tovar EA, et al. **Ann Thorac Surg** 1997 Jan;63(1):220-1

Effects of surgical manipulation on coronary stents: should surgical strategy be altered? Tovar EA, et al. **Ann Thorac Surg** 1997 Jan;63(1):37-40

Double stents for carcinoma of the esophagus invading the airway [letter; comment] Venuta F, et al. **Ann Thorac Surg** 1997 May;63(5):1515-6. Comment on: Ann Thorac Surg 1996 Sep;62(3):844-7.

Tracheal stenosis treated with self-expanding nitinol stent. Yanagihara K, et al. **Ann Thorac Surg** 1997 Jun; 63(6):1786-9; discussion 1789-90

Which stent to use for tracheobronchial stenoses: metallic or silicone? [letter; comment] Yim AP, et al. **Ann Thorac Surg** 1997 May;63(5):1512-3. Comment on: Ann Thorac Surg 1996 Sep;62(3):844-7.

Protection of the retrosternal right internal mammary artery with stented grafts [letter; comment] Zehr KJ, et al. **Ann Thorac Surg** 1997 Jan;63(1):297-8. Comment on: Ann Thorac Surg 1995 Dec;60(6):1826-8.

Comparison of surgical bypass and percutaneous balloon dilatation with primary stent placement in the treatment of central venous obstruction in the dialysis patient: one-year follow-up. Bhatia DS, et al. **Ann Vasc Surg** 1996 Sep;10(5):452-5

Endovascular repair of peripheral aneurysms, pseudoaneurysms, and arteriovenous fistulas. Criado E, et al. **Ann Vasc Surg** 1997 May;11(3):256-63

Successful treatment of an iatrogenic infrarenal aortic dissection with serial Wallstents. Johnson MS, et al. **Ann Vasc Surg** 1997 May;11(3):295-9

A comparison of angioplasty with stenting versus endarterectomy for the treatment of carotid artery stenosis. Jordan WD Jr, et al. **Ann Vasc Surg** 1997 Jan;11(1):2-8

Endoscopic venous valve transplantation with a valve-stent device. Ofenloch JC, et al. **Ann Vasc Surg** 1997 Jan; 11(1):62-7

Use of endovascular grafts to treat nonaneurysmal arterial disease. Ohki T, et al. **Ann Vasc Surg** 1997 Mar;11(2):200-5

Balloon angioplasty and stent placement during operative vascular reconstruction for lower extremity ischemia. Schneider PA. **Ann Vasc Surg** 1996 Nov;10(6):589-98

Healing characteristics of intraarterial stent grafts in an injured artery model. Weatherford DA, et al. **Ann Vasc Surg** 1997 Jan;11(1):54-61

Comparison of the deployment and healing of thin-walled expanded PTFE stented grafts and covered stents. White R, et al. **Ann Vasc Surg** 1996 Jul;10(4):336-46

Deployment and healing of an ePTFE encapsulated stent endograft in the canine aorta. Wilson EP, et al. **Ann Vasc Surg** 1997 Jul;11(4):354-8

Stent-graft placement procedures for descending thoracic aortic aneurysms. Liston SM. **AORN J** 1997 Sep; 66(3):433-8, 440, 442 passim

The effect of absorbable stenting on postoperative stenosis of the surgically enlarged maxillary sinus ostia in a rabbit animal model. Rust KR, et al. **Arch Otolaryngol Head Neck Surg** 1996 Dec;122(12):1395-7

Improved bioresorbable microporous intravascular stents for gene therapy. Ye YW, et al. **ASAIO J** 1996 Sep-Oct; 42(5):M823-7

Left main coronary artery stenting under extracorporeal circulatory support [letter] Irons D, et al. **Aust N Z J Med** 1996 Dec;26(6):842-3

Primary stenting as treatment for coronary-subclavian steal syndrome [letter] Kerr AJ, et al. **Aust N Z J Med** 1997 Feb;27(1):80-1

A self-expanding endoluminal graft for treatment of aneurysms: results through the development phase. Gordon MK, et al. **Aust N Z J Surg** 1996 Sep;66(9):621-5

Surgical thrombectomy and stent placement for iliac compression syndrome. La Hei ER, et al. **Australas Radiol** 1997 Aug;41(3):243-6

Necrotizing fasciitis: fatal complication of migrated biliary stent. Marsman JW, et al. **Australas Radiol** 1996 Feb; 40(1):80-3

Tantalum stents induce expression of GMP140 and GP53 on platelets after contact in an in vitro model. Gutensohn K, et al. **Beitr Infusionsther Transfusionsmed** 1996;33:61-5

Accelerated endothelialization by local delivery of recombinant human vascular endothelial growth factor reduces in-stent intimal formation. Van Belle E, et al. **Biochem Biophys Res Commun** 1997 Jun 18;235(2):311-6

Comparative assessment of ureteral stent biomaterial encrustation. Tunney MM, et al. **Biomaterials** 1996 Aug; 17(15):1541-6

Intracoronary stents [editorial] Uren NG, et al. **BMJ** 1996 Oct 12;313(7062):892-3

Aortic stent surgery [letter; comment] Wildsmith JA, et al. **Br J Anaesth** 1996 Nov;77(5):699. Comment on: Br J Anaesth 1996 Jun;76(6):882-3.

Self-expandable oesophageal stents in the management of benign peptic oesophageal strictures in the elderly. Foster DR. **Br J Clin Pract** 1997 Apr-May;51(3):199

Pictorial review: endovascular repair of abdominal aortic aneurysms. Dyet JF. **Br J Radiol** 1996 Nov;69(827):1069-74 (8 ref.)

The role of metallic stents in malignant duodenal obstruction. Scott-Mackie P, et al. **Br J Radiol** 1997 Mar;70:252-5

Commentary: metallic endoprostheses in oesophageal carcinoma. Watkinson AF. **Br J Radiol** 1996 Dec; 69(828):1086-8

Long-term expandable stent as a definitive treatment for benign rectal stenosis. Cascales-Sanchez P, et al. **Br J Surg** 1997 Jun;84(6):840-1

Postoperative choledochoscopic removal of intrahepatic stones via a T tube tract. Cheung MT. **Br J Surg** 1997 Sep;84(9):1224-8

Use of covered expandable metal stents in the treatment of oesophageal carcinoma and tracheo-oesophageal fistula. Cook TA, et al. **Br J Surg** 1996 Oct;83(10):1417-8

Parallel self-expanding covered metal stents in the trachea and oesophagus for the palliation of complex high tracheo-oesophageal fistula. Ellul JP, et al. **Br J Surg** 1996 Dec;83(12):1767-8

Endoscopic stenting for recurrent malignant gastric outlet obstruction. Patton JT, et al. **Br J Surg** 1997 Jun; 84(6):865-6

Laparoscopic treatment of biliary peritonitis after T tube removal in patients undergoing orthotopic liver transplantation. Robles R, et al. **Br J Surg** 1997 Sep; 84(9):1244

Management of benign rectal stricture by implantation of a self-expanding prosthesis. Salinas JC, et al. **Br J Surg** 1997 May;84(5):674

Use of a biliary stent in laparoscopic choledochotomy for removal of duct stones. Teh CH, et al. **Br J Surg** 1997 Sep;84(9):1233-4

Immersion in antibiotic solution prevents bacterial adhesion onto biodegradable prostatic stents. Cormio L, et al. **Br J Urol** 1997 Mar;79(3):409-13

High-energy transurethral microwave thermotherapy for large severely obstructing prostates and the use of biodegradable stents to avoid catheterization after treatment. Dahlstrand C, et al. **Br J Urol** 1997 Jun; 79(6):907-9

An in vitro comparison of urease-induced encrustation of JJ stents in human urine. Desgrandchamps F, et al. **Br J Urol** 1997 Jan;79(1):24-7

Retroperitoneoscopic stenting of the ureter. Gaur DD. **Br J Urol** 1996 Dec;78(6):945-7

Long-term outcome of permanent urethral stents in the treatment of detrusor-sphincter dyssynergia. McFarlane IP, et al. **Br J Urol** 1996 Nov;78(5):729-32

A simple method for checking ureteric JJ stent position [letter; comment] Mulawkar PM. **Br J Urol** 1996 Sep; 78(3):478. Comment on: Br J Urol 1995 May;75(5):670.

Dismembered pyeloplasty in infants under the age of 12 months [letter; comment] Ng WT. **Br J Urol** 1997 Jan; 79(1):147-8. Comment on: Br J Urol 1996 Mar;77(3):449-51.

The biodegradable self-reinforced poly-DL-lactic acid spiral stent compared with a suprapubic catheter in the treatment of post-operative urinary retention after visual laser ablation of the prostate. Pétas A, et al. **Br J Urol** 1997 Sep;80(3):439-43

Duplex renal pelvis--a technical aid to selective stenting [letter; comment] Rowland K. **Br J Urol** 1997 Jan;79(1):147 . Comment on: Br J Urol 1996 Feb;77(2):310-1.

A review of antegrade stenting in the management of the obstructed kidney. Sharma SD, et al. **Br J Urol** 1996 Oct; 78(4):511-5

Fibre-optic cystoscope-guided insertion of J-J ureteric stent [letter; comment] Yiu MK, et al. **Br J Urol** 1996 Sep; 78(3):479. Comment on: Br J Urol 1996 Jan;77(1):149-50.

Biliary and pancreatic stent blockage by bacterial biofilm: presentation of two cases. Brant CQ, et al. **Braz J Med Biol Res** 1996 Nov;29(11):1455-9

Public policy and coronary stenting: report of an expert panel to the cardiac Care Network of Ontario. Cardiac Care Network of Ontario Expert Panel on Intracoronary Stents. **Can J Cardiol** 1997 Aug;13(8):731-46 (121 ref.)

Coronary stenting in acute myocardial infarction--patency demonstrated postmortem. Madan M, et al. **Can J Cardiol** 1996 Oct;12(10):919-23

Stenting of the left main coronary artery in the setting of acute myocardial infarction. al-Saadon K, et al. **Can J Cardiol** 1997 Jul;13(7):681-4

Ultrasound-guided stent placement. Russo RJ. **Cardiol Clin** 1997 Feb;15(1):49-61 (64 ref.)

5th International and Interdisciplinary Symposium on Endoluminal Stents and Grafts. Washington, DC, USA. October 10-13, 1996. Abstracts. **Cardiovasc Intervent Radiol** 1997 Jan-Feb;20(1):67-89

Re: Percutaneous treatment of a symptomatic brachiocephalic artery stenosis with a Palmaz stent [letter] Brophy DP, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):405-6

Malignant biliary obstruction complicated by ascites: closure of the transhepatic tract with cyanoacrylate glue after placement of an endoprosthesis. Cekirge S, et al. **Cardiovasc Intervent Radiol** 1997 May-Jun;20(3):228-31

Balloon occlusion portography to diagnose new-onset left hepatic vein thrombosis and widening of an existing Wallstent TIPS by Palmaz stents for recurrent portal hypertension and variceal bleeding. Cope C, et al. **Cardiovasc Intervent Radiol** 1996 Sep-Oct;19(5):368-70

Percutaneous treatment of iliac aneurysms and pseudoaneurysms with Cragg Endopro System 1 stent-grafts. Gasparini D, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):348-52

Percutaneous cholangioscopy in obstructed biliary metal stents. Hausegger KA, et al. **Cardiovasc Intervent Radiol** 1997 May-Jun;20(3):191-6

Treatment of a ruptured anastomotic esophageal stricture following bougienage with a Dacron-covered nitinol stent. Heindel W, et al. **Cardiovasc Intervent Radiol** 1996 Nov-Dec;19(6):431-4

Experimental TIPS with spiral Z-stents in swine with and without induced portal hypertension. Kichikawa K, et al. **Cardiovasc Intervent Radiol** 1997 May-Jun;20(3):197-203

Treatment of a malignant esophageal fistula with a Gore-Tex-covered flexible nitinol stent. Kishi K, et al. **Cardiovasc Intervent Radiol** 1997 Jan-Feb;20(1):63-6

Migration of Gianturco expandable metallic stents in the upper trachea. Kitanosono T, et al. **Cardiovasc Intervent Radiol** 1997 May-Jun;20(3):216-8

Partially covered Gianturco stent for tracheobronchial stricture caused by intraluminal tumor. Miyayama S, et al. **Cardiovasc Intervent Radiol** 1997 Jan-Feb;20(1):60-2

Metallic stents in malignant biliary obstruction. Rieber A, et al. **Cardiovasc Intervent Radiol** 1997 Jan-Feb;20(1):43-9

Percutaneous endoscopic retrieval and replacement of a knitted (Ultraflex) biliary stent. Sawada S, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):401-3

Stent treatment of obstructing dissection after percutaneous transluminal angioplasty of aortic stenosis caused by nonspecific aortitis. Sharma S, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):377-9

Re: chronic superior vena cava occlusion related to fibrosing mediastinitis treated with self-expanding shunts [letter] Smith SJ, et al. **Cardiovasc Intervent Radiol** 1997 Mar-Apr; 20(2):161-2

Vascular stents and stent grafts: a vascular surgeon's view. Taylor PR. **Cardiovasc Intervent Radiol** 1997 Jan-Feb; 20(1):1-4 (37 ref.)

Transjugular intrahepatic portosystemic shunting (TIPS) with balloon-expandable and self-expanding stents: technical and clinical aspects after 3 1/2 years' experience. Tesdal IK, et al. **Cardiovasc Intervent Radiol** 1997 Jan-Feb; 20(1):29-37

Intraarterial pressure gradients after randomized angioplasty or stenting of iliac artery lesions. Dutch Iliac Stent Trial Study Group. Tetteroo E, et al. **Cardiovasc Intervent Radiol** 1996 Nov-Dec;19(6):411-7

Re: in situ formation of a loop snare for retrieval of a foreign body without a free end [letter] Thomas S, et al. **Cardiovasc Intervent Radiol** 1997 Mar-Apr;20(2):163-4

Is the tantalum Strecker stent suitable for TIPS creation? Short- and mid-term results in 20 consecutive patients. Ugolotti U, et al. **Cardiovasc Intervent Radiol** 1997 Jan-Feb; 20(1):38-42

Stent placement on fresh venous thrombosis. Vorwerk D, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct; 20(5):359-63

Long-term palliative treatment of hepatocellular carcinoma extending into the portal vein and bile duct by chemoembolization and metallic stenting. Yoshioka T, et al. **Cardiovasc Intervent Radiol** 1997 Sep-Oct;20(5):390-3

The Perth endoluminal bifurcated graft system--development and early experience. Lawrence-Brown MM, et al. **Cardiovasc Surg** 1996 Dec; 4(6):706-12

Coronary plaque morphology affects stent deployment: assessment by intracoronary ultrasound [see comments] Albrecht D, et al. **Cathet Cardiovasc Diagn** 1996 Jul; 38(3):229-35. Comment in: Cathet Cardiovasc Diagn 1996 Jul;38(3):236-7.

Angioplasty followed by coronary stenting at the anastomotic site of saphenous vein bypass graft with the native vessel: a case that needs special procedural strategy. Antonellis IP, et al. **Cathet Cardiovasc Diagn** 1997 Sep; 42(1):61-3

Bailout coronary stenting without anticoagulation or intravascular ultrasound guidance: acute and six-month angiographic results in a series of 120 consecutive patients. Antoniucci D, et al. **Cathet Cardiovasc Diagn** 1997 May; 41(1):14-9

Safety and effectiveness of the Arani curve guiding catheters in Palmaz-Schatz stenting of right coronary artery stenosis [see comments] Arani DT, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):89-95. Comment in: Cathet Cardiovasc Diagn 1996 Sep;39(1):96.

An easier method of ascertaining whether the balloon catheter is ruptured [letter; comment] Arthur A, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):214. Comment on: Cathet Cardiovasc Diagn 1996 May;38(1):102-3.

Is birfurcation stenting the answer? [editorial; comment] Baim DS. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):314-6. Comment on: Cathet Cardiovasc Diagn 1996 Mar;37(3):307-10. Comment on: Cathet Cardiovasc Diagn 1996 Mar;37(3):311-3.

Should we spark interest in rotational atherectomy for in-stent restenosis? [editorial; comment] Belli G, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):150-1. Comment on: Cathet Cardiovasc Diagn 1997 Feb;40(2):144-9.

Brachial, radial, or femoral approach for elective Palmaz-Schatz stent implantation: a randomized

comparison [see comments] Benit E, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):124–30. Comment in: Cathet Cardiovasc Diagn 1997 Jun;41(2):131.

The relentless pursuit of sustained patency after acute myocardial infarction [editorial; comment] Benzuly KH, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):155–6. Comment on: Cathet Cardiovasc Diagn 1996 Oct;39(2):149–59.

Clinical one-year outcomes after stenting in acute myocardial infarction [see comments] Berland G, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):337–41. Comment in: Cathet Cardiovasc Diagn 1997 Apr;40(4):342.

High-speed rotational ablation for in-stent restenosis [see comments] Bottner RK, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):144–9. Comment in: Cathet Cardiovasc Diagn 1997 Feb;40(2):150–1.

Implantation of balloon-expandable stents for coarctation of the aorta: implantation data and short-term results [see comments] Bulbul ZR, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):36–42. Comment in: Cathet Cardiovasc Diagn 1996 Sep;39(1):43.

"T"-shaped stent placement: a technique for the treatment of dissected bifurcation lesions [see comments] Carrie D, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):311–3. Comment in: Cathet Cardiovasc Diagn 1996 Mar;37(3):314–6.

Stenting the stent: alternative strategy for treating in-stent restenosis [see comments] Ceceña FA. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):377–82 (11 ref.). Comment in: Cathet Cardiovasc Diagn 1997 May;41(1):94–5.

Left main intervention revisited: early and late outcome of PTCA and stenting [see comments] Chauhan A, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):21–9. Comment in: Cathet Cardiovasc Diagn 1997 May;41(1):30–1.

Comparison of bailout versus elective stenting: time to reassess our benchmarks of outcome. Chauhan A, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):40–7

Management of membranous obstruction of inferior vena cava by percutaneous balloon angioplasty with or without the use of a stent [letter; comment] Cheng TO. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):336. Comment on: Cathet Cardiovasc Diagn 1996 Nov;39(3):252–7.

Pullback atherectomy for the treatment of intrastent restenosis [letter; comment] Chow WH, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):94–5. Comment on: Cathet Cardiovasc Diagn 1996 Dec;39(4):377–82.

Successful stenting after coumadin therapy and thrombus resolution in a stenotic saphenous vein graft [letter; comment] Chow WH, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):438–9. Comment on: Cathet Cardiovasc Diagn 1996 Aug;38(4):415–6.

Risks and benefits of the Arani curve guiding catheter for stenting of the right coronary artery: the value of experience [editorial; comment] Clark DA. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):96. Comment on: Cathet Cardiovasc Diagn 1996 Sep;39(1):89–95.

Successful closure of a coronary vessel rupture with a vein graft stent: case report. Colombo A, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):172–4

Percutaneous bailout therapy of a perforated vein graft using a stent-autologous vein patch [see comments] Colon PJ 3rd, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):175–8. Comment in: Cathet Cardiovasc Diagn 1995 Jun;38(2):179.

Method for re-sheathing Palmaz-Schatz coronary stent delivery system after intentional or accidental sheath withdrawal. Cox S, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):301–2

"The stage has shifted!" [editorial; comment] Cumpston N. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):240. Comment on: Cathet Cardiovasc Diagn 1997 Mar;40(3):235–9.

Concept of the homemade coronary stent: experimental results and initial clinical experience [see comments] De Scheerder IK, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):191–6. Comment in: Cathet Cardiovasc Diagn 1996 Oct;39(2):197.

A single-step stent delivery, deployment, and expansion system. Duvvuri S, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):308–10

Placement of multiple and different stent types for very long dissections during coronary angioplasty. Eeckhout E, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):302–8

Intracoronary loss of balloon-mounted stents: successful retrieval with a 2 mm-"Microsnare"-device. Elsner M, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):271–6

Extensive coronary dissection caused by balloon rupture at high pressure during stent deployment. Esente P, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):263–5

Use of coronary Palmaz-Schatz stent in the percutaneous treatment of vertebral artery stenoses. Feldman RL, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):312–5

Use of coronary Palmaz-Schatz stent in the percutaneous treatment of an intracranial carotid artery stenosis. Feldman RL, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):316–9

Improved technique for use of half-stents remounted on a stent delivery system [see comments] Feldman T, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):17–20. Comment in: Cathet Cardiovasc Diagn 1997 Mar;40(3):335.

Left main coronary angioplasty: is the Bastille of bypass surgery about to go down? [editorial; comment] Fleisch M, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):30–1. Comment on: Cathet Cardiovasc Diagn 1997 May;41(1):21–9.

Coronary AVE micro stents: do we need another stent? [editorial; comment] Ganim MS, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):225. Comment on: Cathet Cardiovasc Diagn 1997 Jun;41(2):213–24.

Intracoronary stenting using slotted tubular stents with intravascular ultrasound and anticoagulation [see comments] Goods CM, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):341–5. Comment in: Cathet Cardiovasc Diagn 1996 Dec;39(4):346.

Intravascular ultrasound-guided transluminal extraction atherectomy for restenosis after Gianturco-Roubin coronary stent implantation [see comments] Goods CM, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):317–9. Comment in: Cathet Cardiovasc Diagn 1996 Mar;37(3):320–1.

Percutaneous revascularization of an extensively diseased saphenous vein bypass graft with a saphenous vein-covered Palmaz stent [see comments] Gurbel PA, et al. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):75–8 (12 ref.). Comment in: Cathet Cardiovasc Diagn 1997 Jan;40(1):79.

Unlimiting our resources [editorial; comment] Heuser RR. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):415. Comment on: Cathet Cardiovasc Diagn 1997 Aug;41(4):413–4.

The Multi-Link stent: another good idea [editorial] Heuser RR. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):420

Stents in jackets: the latest in endovascular haute couture [editorial; comment] Heuser RR. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):179. Comment on: Cathet Cardiovasc Diagn 1996 Jun;38(2):175–8.

Vigilate, not mea culpa [editorial; comment] Hildner FJ. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):139. Comment on: Cathet Cardiovasc Diagn 1997 Feb;40(2):133–8.

Oh no, even stenting is affected by calcium! [editorial; comment] Hodgson JM. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):236–7. Comment on: Cathet Cardiovasc Diagn 1996 Jul;38(3):229–35.

Half for me ... half for you! [editorial] Hodgson JM. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):377

Safety and efficacy of elective stent implantation following rotational atherectomy in large calcified coronary arteries. Hong MK, et al. **Cathet Cardiovasc Diagn** 1996;Suppl 3:50–4

Transcatheter retrieval of an embolized Palmaz stent from the right ventricle of a child. Hoyer MH, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):277–80

Effect of primary balloon expandable renal artery stents on long-term patency, renal function, and blood pressure in hypertensive and renal insufficient patients with renal artery stenosis [see comments] Iannone LA, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):243–50. Comment in: Cathet Cardiovasc Diagn 1996 Mar;37(3):251.

Implantation of the peripheral Wallstent for diffuse lesions in coronary arteries and vein grafts. Itoh A, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):322–30

Transcatheter aspiration of atheroma prolapsing through saphenous vein graft stents. Jaffar A, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):258–61

Transseptal approach to aortography and carotid artery stenting in pulseless disease. Joseph G, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):416–20; discussion 421

Infarct artery stents: the first year [editorial; comment] Kahn JK. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):342. Comment on: Cathet Cardiovasc Diagn 1997 Apr;40(4):337–41.

Friction-free stenting [editorial] Kahn JK. **Cathet Cardiovasc Diagn** 1997 May;41(1):20

Successful stent implantation for acute myocardial infarction after failed thrombolytic therapy associated with massive hemorrhage. Kaplan BM, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):280–2

Endovascular stenting for treatment of an adult patient with pulmonary artery stenosis with 1-year follow-up. Kates MA, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):417–20

New double wire technique to stent ostial lesions. Katoh O, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):400–2

Management of idiopathic obstruction of the hepatic and suprahepatic inferior vena cava with a self-expanding metallic stent [see comments] Kaul U, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):252–7. Comment in: Cathet Cardiovasc Diagn 1997 Mar;40(3):336.

Impact of stent size and indication for stent placement on immediate outcome [see comments] Keelan ET, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):145–51. Comment in: Cathet Cardiovasc Diagn 1996 Jun;38(2):152.

Lysis of intravascular thrombus prior to coronary stenting using the dispatch infusion catheter [see comments] Kerensky RA, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):410–4. Comment in: Cathet Cardiovasc Diagn 1996 Aug;38(4):415–6.

On plaque sealing [letter; comment] Kern MJ. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):226–7. Comment on: Cathet Cardiovasc Diagn 1995 Dec;36(4):295–7.

Remounted half-stents [letter; comment] Kern MJ, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):335. Comment on: Cathet Cardiovasc Diagn 1996 Sep;39(1):17–20.

Trouser-like stenting: a new technique for bifurcation lesions. Khoja A, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):192–6; discussion 197–9

Successful retrieval of unexpanded Palmaz-Schatz stent from left main coronary artery [see comments] Kobayashi Y, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):402–4. Comment in: Cathet Cardiovasc Diagn 1996 Aug;38(4):405.

Simultaneous use of a diagnostic catheter to facilitate stent deployment in aorto-ostial artery stenosis: a case report. Lambros J, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):210–1

Outcomes during stenting: risk, benefit, bad luck, and good judgement [editorial; comment] Laskey WK. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):152. Comment on: Cathet Cardiovasc Diagn 1996 Jun;38(2):145–51.

Investigational intervention: revisit the paradigm or make a new one? Laskey WK. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):469–70

Treatment of coronary artery disease in an anomalous coronary artery by placement of an intracoronary stent. Lawton J, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):185–8

Refractory ventricular fibrillation complicating acute myocardial infarction terminated by intracoronary stenting. Le May MR, et al. **Cathet Cardiovasc Diagn** 1996 Feb;37(2):174–7

Bail-out stenting for flow limiting dissections after rotational atherectomy in complex coronary lesions [see comments] Levin TN, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):300–4. Comment in: Cathet Cardiovasc Diagn 1996 Mar;37(3):305–6.

Use of bare-mounted Palmaz-Schatz stents employing the stent saddle technique on the delivery balloon: a single center experience [see comments] Levine G, et al. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):361–8. Comment in: Cathet Cardiovasc Diagn 1997 Aug;41(4):369–70.

Report of successful use of argatroban as an alternative anticoagulant during coronary stent implantation in a patient with heparin-induced thrombocytopenia and thrombosis syndrome. Lewis BE, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):206–9

Stenting on a rail: propitious placement of permanent endoluminal prostheses [editorial; comment] Linnemeier TJ. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):144. Comment on: Cathet Cardiovasc Diagn 1996 Jun;38(2):135–43.

Left main coronary disease: is stenting an option? [editorial; comment] Linnemeier TJ. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):276. Comment on: Cathet Cardiovasc Diagn 1997 Mar;40(3):272–5.

New technique for prepping the Johnson & Johnson stent delivery system. Logemann TN, et al. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):440–1

Coronary stenting with the half (disarticulated) Palmaz-Schatz stent: immediate results and six-month follow-up. Marzocchi A, et al. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):371–6

Combined coronary and bilateral carotid stenting: a case report. Mathur A, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):202–6

Stent redilation in canine models of congenital heart disease: pulmonary artery stenosis and coarctation of the aorta. Mendelsohn AM, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):430–40

Angioplasty and stenting of an unprotected left main bifurcation lesion. Morrison DA, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):174–8

A method to eliminate articulation from the Palmaz-Schatz stent delivery system. Moussa I, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):212–6

Single device approach to ultrasound-guided percutaneous transluminal coronary angioplasty and stenting: initial experience with a combined intracoronary ultrasound/variable diameter balloon. Müller C, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):393–9

Is intravascular ultrasound after coronary stenting a safe procedure? Three cases of stent damage attributable to ICUS in a tantalum coil stent [see comments] Nicosia A, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):265–70. Comment in: Cathet Cardiovasc Diagn 1997 Mar;40(3):271.

Stent placement in surgically reimplanted left main coronary artery in patient with anomalous origin of left main coronary artery from pulmonary artery. Ohmoto Y, et al. **Cathet Cardiovasc Diagn** 1997 Sep;42(1):48–50

Coronary implantation of silicone-carbide-coated Palmaz-Schatz stents in patients with high risk of stent thrombosis without oral anticoagulation. Ozbek C, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):71–8

Stent placement in a patient with Takayasu's arteritis. Ozdil E, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):373–6

Obliteration of a coronary artery aneurysm with percutaneous transluminal coronary angioplasty and stent placement. Parmar RJ, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):51–2

Transluminal extraction atherectomy for aortosaphenous vein graft stent restenosis. Patel JJ, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):320–4

Endovascular stent implantation for severe recoarctation of the aorta: case report with angiographic and 18-month clinical follow-up. Pedulla DM, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):311–4

Deep seating of six French guiding catheters for delivery of new Palmaz-Schatz stents. Peels HO, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):210–3

Coronary AVE micro stents: serial quantitative angiography and histology in a canine model [see comments] Pomerantsev EV, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):213–24. Comment in: Cathet Cardiovasc Diagn 1997

Jun;41(2):225.
Endoluminal stenting for unprotected left main stenosis in Takayasu's arteritis [see comments] Punamiya K, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):272–5. Comment in: Cathet Cardiovasc Diagn 1997 Mar;40(3):276.
Stenting for treatment of coronary vasospasm. Rabinowitz A, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):372–5 (10 ref.)
Temporary arterial stenting: comparison to permanent stenting and conventional balloon injury in a rabbit carotid artery model. Rechavia E, et al. **Cathet Cardiovasc Diagn** 1997 May;41(1):85–92
New approach to quantitative angiographic assessment after stent implantation. Reimers B, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):343–7
One balloon, one stent: an effective cost-containment strategy for elective stent deployment. Rocha-Singh KJ, et al. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):17–20
Stent implantation in a left anterior descending coronary artery through an internal mammary artery graft. Rubartelli P, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):311–3
Stenting coarctation of the aorta: promising concept but primitive technology [editorial; comment] Ruiz CE, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):43. Comment on: Cathet Cardiovasc Diagn 1996 Sep;39(1):36–42.
Lysis of intracoronary thrombus prior to coronary stenting using the dispatch infusion catheter [editorial; comment] [see comments] Satler LF, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):415–6. Comment on: Cathet Cardiovasc Diagn 1996 Aug;38(4):410–4. Comment in: Cathet Cardiovasc Diagn 1996 Dec;39(4):438–9.
"Remedies" for in-stent restenosis [editorial; comment] Satler LF. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):320–1. Comment on: Cathet Cardiovasc Diagn 1996 Mar;37(3):317–9.
Facilitated advancement of the Palmaz-Schatz stent delivery system with the use of an adjacent 0.018" stiff wire. Saucedo JF, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):106–10
The V-stent: a novel technique for coronary bifurcation stenting. Schampaert E, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):320–6
Coronary stenting for aortocoronary dissection following balloon angioplasty. Seifein HB, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):222–5
Coronary stenting for failed angioplasty in acute myocardial infarction [see comments] el Setiha M, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):149–54. Comment in: Cathet Cardiovasc Diagn 1996 Oct;39(2):155–6.
U.S. experience of transradial coronary stenting utilizing Palmaz-Schatz stents. el-Shiekh RA, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):166–9
Successful repair of intimal dissection following coronary angioplasty with a 48-hour inflation of spiral inflation coil and local delivery of heparin. Shimabukuro M, et al. **Cathet Cardiovasc Diagn** 1996 Sep;39(1):103–5
Retrograde left main stenting. Silvestri M, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):396–9
In the same vein--a step backwards [editorial; comment] Smalling R. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):171. Comment on: Cathet Cardiovasc Diagn 1996 Jun;38(2):159–70.
Peripheral vascular complications after intracoronary stent placement: prevention by use of a pneumatic vascular compression device. Sridhar K, et al. **Cathet Cardiovasc Diagn** 1996 Nov;39(3):224–9
Autologous vein graft-coated stents for the treatment of thrombus-containing coronary artery lesions. Stefanadis C, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):217–22
Arterial autologous graft-stent for treatment of coronary artery disease: a new technique. Stefanadis C, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):302–7 (23 ref.)
Autologous vein graft-coated stent for treatment of coronary artery disease [see comments] Stefanadis C, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):159–70. Comment in: Cathet Cardiovasc Diagn 1996 Jun;83(2):171.
Rotational atherectomy for treatment of in-stent restenosis: role of intracoronary ultrasound guidance. Stone GW. **Cathet Cardiovasc Diagn** 1996;Suppl 3:73–7
Kissing Palmaz-Schatz stents for coronary bifurcation stenoses [see comments] Teirstein PS. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):307–10. Comment in: Cathet Cardiovasc Diagn 1996 Mar;37(3):314–6.
IVUS and coronary stenting [editorial; comment] Tobis J, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):346. Comment on: Cathet Cardiovasc Diagn 1996 Dec;39(4):341–5.
Not all stents are created equal [editorial; comment] Tobis JM. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):271. Comment on: Cathet Cardiovasc Diagn 1997 Mar;40(3):265–70.
Stents following rotablator for flow limiting dissections: device synergy or dys-synergy [editorial; comment] Tommaso CL. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):305–6. Comment on: Cathet Cardiovasc Diagn 1996 Mar;37(3):300–4.
Bare-mounted stents: a bare necessity? [editorial; comment] Topaz O. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):369–70 . Comment on: Cathet Cardiovasc Diagn 1997 Aug;41(4):361–8.
Micro stent, quantitative coronary angiography, and procedural results [see comments] Tresukosol D, et al. **Cathet Cardiovasc Diagn** 1996 Jun;38(2):135–43. Comment in: Cathet Cardiovasc Diagn 1996 Jun;38(2):144.
Retrospective comparative study of primary intracoronary stenting versus balloon angioplasty for acute myocardial infarction [see comments] Turi ZG, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):235–9. Comment in: Cathet Cardiovasc Diagn 1997 Mar;40(3):240.
Coronary bypass on a catheter: sweeping the thrombus and friable material under a vein [editorial; comment] Turi ZG. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):79–80. Comment on: Cathet Cardiovasc Diagn 1997 Jan;40(1):75–8.
Use of Palmaz stents to palliate pulmonary atresia with ventricular septal defect and stenotic aortopulmonary collaterals. Vance MS. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):387–9
Intracoronary stent implantation using a single high-pressure perfusion balloon catheter. Waksman R, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):140–3
Multicenter clinical experience with the development of a novel short coronary stent and its prototype device. Webb J, et al. **Cathet Cardiovasc Diagn** 1996 Feb;37(2):120–4
Vessel reconstruction in total coronary occlusions with a long subintimal wire pathway: use of multiple stents under guidance of intravascular ultrasound. Werner GS, et al. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):46–51
Stent recoil: comparison of the Wiktor-GX coil and the Palmaz-Schatz tubular coronary stent. White CJ. **Cathet Cardiovasc Diagn** 1997 May;41(1):1–3; discussion 4
The renal oculosten(t)otic reflex [editorial; comment] White CJ. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):251. Comment on: Cathet Cardiovasc Diagn 1996 Mar;37(3):243–50.
Elective stenting of unprotected left main coronary disease. Wong P, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):347–54 (19 ref.)
Early clinical experience with the Multi-Link coronary stent. Wong P, et al. **Cathet Cardiovasc Diagn** 1996 Dec;39(4):413–9 (6 ref.)
Management of malignant esophagotracheal fistulas with airway stenting and double stenting [see comments] Freitag L, et al. **Chest** 1996 Nov;110(5):1155–60. Comment in: Chest 1996 Nov;110(5):1133–5.
Implantation of Accuflex and Strecker stents in malignant bronchial stenoses by flexible bronchoscopy. Hauck RW, et al. **Chest** 1997 Jul;112(1):134–44
The use of the covered Wallstent for the palliative treatment of inoperable tracheobronchial cancers. A prospective, multicenter study [see comments] Monnier P, et al. **Chest** 1996 Nov;110(5):1161–8. Comment in: Chest 1996 Nov;110(5):1133–5.
Tracheobronchial stents, stunts, and medical ethics revisited [editorial; comment] Unger M. **Chest** 1996 Nov;110(5):1133–5. Comment on: Chest 1996 Nov;110(5):1155–60. Comment on: Chest 1996 Nov;110(5):1161–8.
Update on biliary stent occlusion. Liu Y, et al. **Chin Med J (Engl)** 1996 Nov;109(11):892–6 (25 ref.)
Use of the silicone tracheal T-tube for tracheostenosis or tracheomalacia. Liu HC, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Sep;58(3):190–7
Antithrombotic potential of polymer-coated stents eluting platelet glycoprotein IIb/IIIa receptor antibody. Aggarwal RK, et al. **Circulation** 1996 Dec 15;94(12):3311–7
Results of a consecutive series of patients receiving only antiplatelet therapy after optimized stent implantation. Comparison of aspirin alone versus combined ticlopidine and aspirin therapy [see comments] Albiero R, et al. **Circulation** 1997 Mar 4;95(5):1145–56. Comment in: Circulation 1997 Mar 4;95(5):1098–100.
Paired comparison of vascular wall reactions to Palmaz stents, Strecker tantalum stents, and Wallstents in canine iliac and femoral arteries. Barth KH, et al. **Circulation** 1996 Jun 15;93(12):2161–9
Aortocaval fistulae: a percutaneous model and treatment with stent grafts in sheep. Boudghène F, et al. **Circulation** 1996 Jul 1;94(1):108–12
Effects of endovascular radiation from a beta-particle-emitting stent in a porcine coronary restenosis model. A dose-response study [see comments] Carter AJ, et al. **Circulation** 1996 Nov 15;94(10):2364–8. Comment in: Circulation 1996 Nov 15;94(10):2358–60.
Hoop dreams. Stents without restenosis [editorial; comment] Edelman ER, et al. **Circulation** 1996 Sep 15;94(6):1199–202 . Comment on: Circulation 1996 Sep 15;94(6):1247–54.
Histological response to stent graft therapy. Eton D, et al. **Circulation** 1996 Nov 1;94(9 Suppl):II182–7
Polymer coatings for stents. Can we judge a stent by its cover? [editorial; comment] Fischell TA. **Circulation** 1996 Oct 1;94(7):1494–5. Comment on: Circulation 1996 Oct 1;94(7):1690–7.
Platelet activation and coronary stent implantation. Effect of antithrombotic therapy. Gawaz M, et al. **Circulation** 1996 Aug 1;94(3):279–85
Elective stenting of extracranial carotid arteries [editorial; comment] Grotta J. **Circulation** 1997 Jan 21;95(2):303–5. Comment on: Circulation 1997 Jan 21;95(2):376–81.
Comparison of myocardial perfusion reserve before and after coronary balloon predilatation and after stent implantation in patients with postangioplasty restenosis. Haude M, et al. **Circulation** 1996 Aug 1;94(3):286–97
Patterns and mechanisms of in-stent restenosis. A serial intravascular ultrasound study [see comments] Hoffmann R, et al. **Circulation** 1996 Sep 15;94(6):1247–54. Comment in: Circulation 1996 Sep 15;94(6):1199–202.
Continuous subcutaneous angiopeptin treatment significantly reduces neointimal hyperplasia in a porcine coronary in-stent restenosis model. Hong MK, et al. **Circulation** 1997 Jan 21;95(2):449–54
Influence of external stent size on early medial and neointimal thickening in a pig model of saphenous vein bypass grafting. Izzat MB, et al. **Circulation** 1996 Oct 1;94(7):1741–5
Intracoronary stent implantation without ultrasound guidance and with replacement of conventional anticoagulation by antiplatelet therapy. 30-day clinical outcome of the French Multicenter Registry. Karrillon GJ, et al. **Circulation** 1996 Oct 1;94(7):1519–27
Restenosis after coronary stent placement and randomization to a 4-week combined antiplatelet or anticoagulant therapy: six-month angiographic follow-up of the Intracoronary Stenting and Antithrombotic Regimen (ISAR) Trial [see comments] Kastrati A, et al. **Circulation** 1997 Jul 15;96(2):462–7. Comment in: Circulation 1997 Jul 15;96(2):383–5.
New graft-implanting method for thoracic aortic aneurysm or dissection with a stented graft. Kato M, et al. **Circulation** 1996 Nov 1;94(9 Suppl):II188–93
Inhibition of acute stent thrombosis under high-shear flow conditions by a nitric oxide donor, DMHD/NO. An ex vivo porcine arteriovenous shunt study. Kaul S, et al. **Circulation** 1996 Nov 1;94(9):2228–34
Histopathology of in-stent restenosis in patients with peripheral artery disease. Kearney M, et al. **Circulation** 1997 Apr 15;95(8):1998–2002
Transdermal aspirin and gastric ulcer healing after coronary artery stent placement [letter] Keimowitz RM, et al. **Circulation** 1996 Dec 1;94(11):3002
Sustained platelet glycoprotein IIb/IIIa blockade with oral xemilofiban in 170 patients after coronary stent deployment. Kereiakes DJ, et al. **Circulation** 1997 Aug 19;96(4):1117–21
Does stenting prevent diabetic arterial shrinkage after percutaneous coronary revascularization? [editorial; comment] Lincoff AM. **Circulation** 1997 Sep 2;96(5):1374–7 . Comment on: Circulation 1997 Sep 2;96(5):1454–60.
Combined ticlopidine and aspirin versus aspirin therapy alone after stent implantation [letter; comment] Lowe H, et al. **Circulation** 1996 Dec 1;94(11):2993–4. Comment on: Circulation 1996 Jan 15;93(2):215–22.
Coronary stenting after rotational atherectomy in calcified and complex lesions. Angiographic and clinical follow-up results. Moussa I, et al. **Circulation** 1997 Jul 1;96(1):128–36
Serial follow-up after optimized ultrasound-guided deployment of Palmaz-Schatz stents. In-stent neointimal proliferation without significant reference segment response. Mudra H, et al. **Circulation** 1997 Jan 21;95(2):363–70
Six-month clinical and angiographic outcome of the new, less shortening Wallstent in native coronary arteries. Ozaki Y, et al. **Circulation** 1996 Jun 15;93(12):2114–20
Arterial remodeling after balloon angioplasty or stenting in an atherosclerotic experimental model. Post MJ, et al. **Circulation** 1997 Aug 5;96(3):996–1003
Stenting of aortopulmonary collaterals in complex pulmonary atresia. Redington AN, et al. **Circulation** 1996 Nov 15;94(10):2479–84
Intravascular stent endothelialization. A goal worth pursuing? [editorial; comment] Schneider DB, et al. **Circulation** 1997 Jan 21;95(2):308–10 (29 ref.). Comment on: Circulation 1997 Jan 21;95(2):438–48.
Major benefit from antiplatelet therapy for patients at high risk for adverse cardiac events after coronary Palmaz-Schatz stent placement: analysis of a prospective risk stratification protocol in the Intracoronary Stenting and Antithrombotic Regimen (ISAR) trial. Schühlen H, et al. **Circulation** 1997 Apr 15;95(8):2015–21
Stent endothelialization. Time course, impact of local catheter delivery, feasibility of recombinant protein administration, and response to cytokine expedition [see comments] Van Belle E, et al. **Circulation** 1997 Jan 21;95(2):438–48. Comment in: Circulation 1997 Jan 21;95(2):308–10.
Restenosis rates in diabetic patients: a comparison of coronary stenting and balloon angioplasty in native coronary vessels [see comments] Van Belle E, et al. **Circulation** 1997 Sep 2;96(5):1454–60. Comment in: Circulation 1997 Sep 2;96(5):1374–7.
Beta-particle-emitting stents radiate enthusiasm in the search for effective prevention of restenosis [editorial; comment] van der Giessen WJ, et al. **Circulation** 1996 Nov 15;94(10):2358–60 (18 ref.). Comment on: Circulation 1996 Nov 15;94(10):2364–8.
Feasibility of intracoronary beta-irradiation to reduce restenosis after balloon angioplasty. A clinical pilot study [see comments] Verin V, et al. **Circulation** 1997 Mar 4;95(5):1138–44. Comment in: Circulation 1997 Mar 4;95(5):1095–7.
Outcome of reoperative coronary bypass surgery versus coronary angioplasty after previous bypass surgery. Weintraub WS, et al. **Circulation** 1997 Feb 18;95(4):868–77
Stent restenosis: can effective antithrombotic therapy be protective? [editorial; comment] Willerson JT. **Circulation** 1997 Jul 15;96(2):383–5. Comment on: Circulation 1997 Jul 15;96(2):462–7.
Elective stenting of the extracranial carotid arteries [see comments] Yadav JS, et al. **Circulation** 1997 Jan 21;95(2):376–81. Comment in: Circulation 1997 Jan 21;95(2):303–5.

STENTS

Coronary artery stenting with high-pressure post-dilation followed by adjunctive thrombolysis after failed coronary angioplasty for acute myocardial infarction: report of three cases. Iwasaki K, et al. **Clin Cardiol** 1997 Apr;20(4):398–401

Safety and efficacy of angiography-guided stent placement in small native coronary arteries of < 3.0 mm in diameter. Lau KW, et al. **Clin Cardiol** 1997 Aug;20(8):711–6

Technical report: fluoroscopically guided retrograde ureteric stent retrieval and replacement using a guide catheter directed snare. Boardman P, et al. **Clin Radiol** 1997 Apr; 52(4):308–9

Case report: stenting of the SVC without removal of a long-term central feeding line. Cleveland TJ, et al. **Clin Radiol** 1997 Apr;52(4):314–6

An additional approach to percutaneous ureteric stenting in difficult strictures [letter; comment] Cowling MG. **Clin Radiol** 1997 Aug;52(8):636. Comment on: Clin Radiol 1996 Dec;51(12):879–81.

Endovascular stents in the arterial system—current status. Dyet JF. **Clin Radiol** 1997 Feb;52(2):83–108 (80 ref.)

Migration and shortening of a self-expanding metallic stent [letter; comment] Hartnell GG. **Clin Radiol** 1997 Mar; 52(3):248. Comment on: Clin Radiol 1996 Aug;51(8):593–5.

Migration and shortening of a self-expanding metallic stent [letter] Livsey R. **Clin Radiol** 1997 Feb;52(2):162

A migrating biliary wallstent: an unusual complication [letter; comment] [see comments] Loveday EJ. **Clin Radiol** 1997 Mar;52(3):246. Comment on: Clin Radiol 1996 Jul;51(7):519–20. Comment in: Clin Radiol 1997 Apr;52(4):322.

Case report: palliative treatment of a rectal tumour with a self-expanding metallic stent. Maclennan AC, et al. **Clin Radiol** 1997 Aug;52(8):633–5

Case report: intravascular stenting across a false aneurysm of the popliteal artery. Manns RA, et al. **Clin Radiol** 1997 Feb;52(2):151–3

A migrating biliary wallstent [letter; comment] Plant G. **Clin Radiol** 1997 Apr;52(4):322. Comment on: Clin Radiol 1997 Mar;52(3):246.

Biliary Wallstent endoprosthesis in malignant hilar obstruction: long-term results with regard to the type of obstruction. Schima W, et al. **Clin Radiol** 1997 Mar; 52(3):213–9

Renal artery stent placement in renal artery stenosis: technical and early clinical results. Taylor A, et al. **Clin Radiol** 1997 Jun;52(6):451–7

Current approaches to coronary intervention. King SB 3rd. **Compr Ther** 1996 Nov;22(11):731–6 (24 ref.)

Coronary stent placement as a bridge to coronary artery bypass surgery in an unstable, anemic Jehovah's Witness patient: a case report and review of bloodless surgery techniques. Dougherty JE, et al. **Conn Med** 1997 Apr; 61(4):195–9 (22 ref.)

Local methylprednisolone inhibition of foreign body response to coated intracoronary stents. de Scheerder I, et al. **Coron Artery Dis** 1996 Feb;7(2):161–6

Acute and chronic effects of self-expanding nitinol stents in porcine coronary arteries. Hong MK, et al. **Coron Artery Dis** 1997 Jan;8(1):45–8

A randomized animal study evaluating the efficacies of locally delivered heparin and urokinase for reducing in-stent restenosis. Kornowski R, et al. **Coron Artery Dis** 1997 May;8(5):293–8

Troponin T, troponin I and creatine kinase-MB mass after elective coronary stenting. La Vecchia L, et al. **Coron Artery Dis** 1996 Jul;7(7):535–40

Single bailout stenting for threatened coronary closure complicating balloon angioplasty: acute and mid-term outcome. Lau KW, et al. **Coron Artery Dis** 1996 Apr; 7(4):327–33

New interventions in cerebrovascular disease: the role of thrombolytic therapy and balloon angioplasty. Balousek PA, et al. **Curr Opin Cardiol** 1996 Sep;11(5):550–7 (67 ref.)

Endovascular stent graft repair of aortic aneurysms. Parodi JC. **Curr Opin Cardiol** 1997 Jul;12(4):396–405

Biliary stent replacement cytology. Simsir A, et al. **Diagn Cytopathol** 1997 Mar;16(3):233–7

Placement of a coated esophageal metallic mesh stent inside an uncoated stent as treatment of tracheoesophageal fistula [letter] Margulies C, et al. **Dig Dis Sci** 1997 May; 42(5):1038–40

Transient healing of TIPS-induced biliovenous fistula by PTFE-covered stent graft. Spahr L, et al. **Dig Dis Sci** 1996 Nov;41(11):2229–32

Initial results of a new procedure for treatment of malignant obstruction of the left colon. Tejero E, et al. **Dis Colon Rectum** 1997 Apr;40(4):432–6

Crossing the upper limit: esophageal stenting in the proximal esophagus [editorial; comment] Gislason GT, et al. **Dysphagia** 1997 Spring;12(2):84–5. Comment on: Dysphagia 1997 Spring;12(2):79–83.

A new option in the treatment of complete and acute obstruction due to colorectal cancer. Aquise M, et al. **Endoscopy** 1997 Mar;29(3):229

Sigmoid diverticular perforation relating to the migration of a polyethylene endoprosthesis. Baty V, et al. **Endoscopy** 1996 Nov;28(9):781

Stent-in-tube: self-expanding metal stent in the management of a partially eroded Atkinson's oesophageal prosthesis. Bhandarkar DS. **Endoscopy** 1997 Jun;29(5):S25

Endoscopic pancreatic stent drainage in chronic pancreatitis and a dominant stricture: long-term results. Binmoeller KF, et al. **Endoscopy** 1995 Nov;27(9):638–44

Initial experience with a new, partially covered Wallstent for malignant biliary obstruction. Born P, et al. **Endoscopy** 1996 Oct;28(8):699–702

Nitinol self-expanding stents: when severe twisting occurs, self-expansion may ensue after a waiting period. Chung JP, et al. **Endoscopy** 1997 Mar;29(3):211–3

Comparison between esophageal Wallstent and Ultraflex stents in the treatment of malignant stenoses of the esophagus and cardia. Dorta G, et al. **Endoscopy** 1997 Mar; 29(3):149–54

Self-expanding metal stents for palliation of stenosing tumors of the esophagus and cardia: a critical review. Ell C, et al. **Endoscopy** 1997 Jun;29(5):392–8 (40 ref.)

Leadshot: an unusual cause of stent occlusion. England R, et al. **Endoscopy** 1996 Aug;28(6):527

Palliation of large-bowel obstruction due to recurrent rectosigmoid tumor using self-expandable endoprostheses. Feretis C, et al. **Endoscopy** 1996 Mar;28(3):319–22

Preliminary experience with a new ultraviolet-cured expandable plastic endoprosthesis in the management of malignant esophageal strictures. Haringsma J, et al. **Endoscopy** 1997 Mar;29(3):188–91

A new balloon system for complete dilation of self-expanding mesh stents in malignant esophageal stenosis. Hoepffner N, et al. **Endoscopy** 1996 Jun;28(5):472–3

Bile duct stenting: a comparison of the One-Action Stent introduction system with the conventional delivery system. Lawrie BW, et al. **Endoscopy** 1996 Mar;28(3):299–301

Self-expanding metallic coil stents for palliation of esophageal carcinoma: two cases of decisive stent dysfunction. Löser C, et al. **Endoscopy** 1996 Aug; 28(6):514–7

A new time-saving technique of inserting multiple biliary endoprostheses without fluoroscopy. Misra SP, et al. **Endoscopy** 1997 Jan;29(1):58

Biliary endoprosthesis as an alternative to endoscopic nasobiliary drainage in patients with acute cholangitis. Misra SP, et al. **Endoscopy** 1996 Nov;28(9):746–9

The management of high-grade hilar strictures by endoscopic insertion of self-expanding metal endoprostheses. Peters RA, et al. **Endoscopy** 1997 Jan;29(1):10–6

Two cases of fractured esophageal nitinol stents. Schoefl R, et al. **Endoscopy** 1996 Aug;28(6):518–20

Endoscopic Nd:YAG laser therapy for esophageal wallstent occlusion due to tumor ingrowth. Simsek H, et al. **Endoscopy** 1996 May;28(4):400

Postoperative ischemic jejunal stenosis treated with balloon catheter dilation and Wallstent implantation. Solt J, et al. **Endoscopy** 1997 Jun;29(5):409–12

Wallstents for metastatic biliary obstruction. van Berkel AM, et al. **Endoscopy** 1996 Jun;28(5):418–21

Multiple fistulas and tracheobronchial stenoses require extensive stenting of the central airways and esophagus in squamous-cell carcinoma. Witt C, et al. **Endoscopy** 1996 May;28(4):381–5

Successful treatment of coronary artery perforation during angioplasty using autologous vein graft-coated stent. Chae JK, et al. **Eur Heart J** 1997 Jun;18(6):1030–2

Percutaneous stent implantation in an adult with left pulmonary artery stenosis and absent right pulmonary artery [letter] Dalvi BV, et al. **Eur Heart J** 1997 Apr; 18(4):700–1

Late in-stent restenosis in coronary arteries and in grafts [letter] Debbas NM, et al. **Eur Heart J** 1997 Mar; 18(3):528–30

Coronary stents—implantation of foreign bodies into stenotic human coronary arteries: dream or nightmare? Haase KK, et al. **Eur Heart J** 1997 Apr;18(4):552–3

Non-invasive assessment of coronary Palmaz-Schatz stents by contrast enhanced electron beam computed tomography. Schmermund A, et al. **Eur Heart J** 1996 Oct; 17(10):1546–53

The 1996 Grüntzig Lecture. Stents: a mechanical solution for a biological problem? Sigwart U. **Eur Heart J** 1997 Jul;18(7):1068–72

Temporary tracheobronchial stenting in malignant stenoses. Witt C, et al. **Eur J Cancer** 1997 Feb;33(2):204–8

Quality of life in patients stented for malignant biliary obstructions. Luman W, et al. **Eur J Gastroenterol Hepatol** 1997 May;9(5):481–4

Endoscopic bile duct stent placement as a predictor of outcome following endoscopic sphincterotomy in patients with suspected sphincter of Oddi dysfunction. Rolny P. **Eur J Gastroenterol Hepatol** 1997 May;9(5):467–71

Treatment of the Budd-Chiari syndrome by insertion of a wall-stent in the hepatic vein after percutaneous transluminal angioplasty: the necessity of follow-up. Weernink EE, et al. **Eur J Gastroenterol Hepatol** 1996 Jan; 8(1):85–8

Repositioning of a misplaced ureteral stent with a balloon catheter: technical note. Ilgit ET, et al. **Eur J Radiol** 1997 May;24(3):257–9

Aortic stents [letter; comment] Adiseshiah M. **Eur J Vasc Endovasc Surg** 1997 Apr;13(4):423–4. Comment on: Eur J Vasc Endovasc Surg 1996 Oct;12(3):287–94.

Venous stents in chronic iliac vein occlusions. Akesson H, et al. **Eur J Vasc Endovasc Surg** 1997 Mar;13(3):334–6

Successful stenting of subclavian artery thrombus with intra-arterial thrombolysis. Ammori BJ, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):217–8

Endovascular repair of an inflammatory aortic aneurysm. Boyle JR, et al. **Eur J Vasc Endovasc Surg** 1997 Mar; 13(3):328–9

The efficacy of transfemoral endovascular aneurysm management: a study on size changes of the abdominal aorta during mid-term follow-up. Broeders IA, et al. **Eur J Vasc Endovasc Surg** 1997 Aug;14(2):84–90

A prototype simulator for endovascular repair of abdominal aortic aneurysms. Chong CK, et al. **Eur J Vasc Endovasc Surg** 1997 Mar;13(3):330–3

A telescopic stent-graft for aortoiliac implantation. Chuter TA, et al. **Eur J Vasc Endovasc Surg** 1997 Jan;13(1):79–84

Endovascular stenting of internal carotid artery false aneurysm. Huang A, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):375–7

The first 15 months of transluminal abdominal aortic aneurysm management: a single centre experience. Kretschmer G, et al. **Eur J Vasc Endovasc Surg** 1997 Jul; 14(1):24–32

The effect of endovascular aortic stents placed across the renal arteries. Malina M, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):207–13

Renal arteries covered by aortic stents: clinical experience from endovascular grafting of aortic aneurysms. Malina M, et al. **Eur J Vasc Endovasc Surg** 1997 Aug;14(2):109–13

Are self-expanding stents superior to balloon-expanded in dilating aortas? An experimental study in pigs [see comments] Mangell P, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):287–94. Comment in: Eur J Vasc Endovasc Surg 1997 Apr;13(4):423–4.

Importance of plain x-ray in endoluminal aortic graft surveillance. May J, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):202–6

The use of intravascular ultrasound as control procedure for the deployment of endovascular stented grafts. Vogt KC, et al. **Eur J Vasc Endovasc Surg** 1997 Jun;13(6):592–6

The effect of placing an aortic Wallstent across the renal artery origins in an animal model. Whitbread T, et al. **Eur J Vasc Endovasc Surg** 1997 Feb;13(2):154–8

Aortoiliac occlusion treated by a combination of aortoiliac stent and femorofemoral crossover grafting. Wilkinson JM, et al. **Eur J Vasc Endovasc Surg** 1996 Oct;12(3):372–4

Juxtarenal aortic aneurysm: endoluminal transfemoral repair? Ferko A, et al. **Eur Radiol** 1997;7(5):703–7

Self-expanding stents in transjugular intrahepatic portosystemic shunt: experience with nitinol Strecker stents. Rossi P, et al. **Eur Radiol** 1996;6(5):741–7

Severe endobronchial obstruction in a girl with relapsing polychondritis: treatment with Nd YAG laser and endobronchial silicon stent. Sacco O, et al. **Eur Respir J** 1997 Feb;10(2):494–6

Evaluation of optimal stent size after antegrade endopyelotomy: an experimental study in the porcine model. Anidjar M, et al. **Eur Urol** 1997;32(2):245–52

Dismembered pyeloplasty in children with and without stents. Baniel J, et al. **Eur Urol** 1996;30(3):400–2

Double pigtail ureteric stent versus percutaneous nephrostomy: effects on stone transit and ureteric motility. Lennon GM, et al. **Eur Urol** 1997;31(1):24–9

Application of self-expanding stents in prostate cancer with rectal involvement. Report of two cases and review of the literature. Lujan M, et al. **Eur Urol** 1997;31(2):251–3 (13 ref.)

Coronary stenting in 1000 consecutive patients. Long-term clinical and angiographic results. Colombo A, et al. **G Ital Cardiol** 1997 Jan;27(1):19–31

Coronary restenosis after optimal (stent-like) initial angiographic results obtained by traditional balloon angioplasty. Di Luzio V, et al. **G Ital Cardiol** 1997 Jul; 27(7):645–53 (38 ref.)

Transcatheter repair of a large coronary pseudoaneurysm using ultrasound guidance and vein-covered stents. Di Mario C, et al. **G Ital Cardiol** 1997 Jul;27(7):701–5

Is quantitative angiography sufficient to guide stent implantation? A comparison with three-dimensional reconstruction of intracoronary ultrasound images. Prati F, et al. **G Ital Cardiol** 1997 Apr;27(4):328–36

Intracoronary stenting for thrombus-containing lesions in the setting of acute ischemic syndromes. Ramondo A, et al. **G Ital Cardiol** 1997 Jul;27(7):654–8

Endoscopic stenting in obstructive jaundice due to liver metastases: does it have benefit for the patient? Baillie J. **Gastrointest Endosc** 1997 Jun;45(6):542

Dilation of a difficult benign pancreatic duct stricture using the Soehendra stent extractor. Baron TH, et al. **Gastrointest Endosc** 1997 Aug;46(2):178–80

Repositioning a migrated esophageal stent using a retroflexed endoscope: a note of caution [letter; comment] Berkelhammer C, et al. **Gastrointest Endosc** 1996 Nov; 44(5):632–4. Comment on: Gastrointest Endosc 1995 Sep;42(3):278–9.

A prospective trial of self-expanding metal stents in the palliation of malignant esophageal obstruction after failure of primary curative therapy. Bethge N, et al. **Gastrointest Endosc** 1996 Sep;44(3):283–6

A prospective trial of self-expanding metal stents in the palliation of malignant esophageal strictures near the upper esophageal sphincter. Bethge N, et al. **Gastrointest Endosc** 1997 Mar;45(3):300–3

Human tissue responses to metal stents implanted in vivo for the palliation of malignant stenoses. Bethge N, et al. **Gastrointest Endosc** 1996 Jun;43(6):596–602

Poor result after insertions of multiple esophageal metal stents

in the cervical esophagus [letter] Conio M, et al. **Gastrointest Endosc** 1996 Mar;43(3):264–5

Retained common bile duct stones after endoscopic sphincterotomy: temporary and long–term treatment with biliary stenting. DeGuide JJ, et al. **Gastrointest Endosc** 1996 Jul;44(1):105–6

Innovative use of the Soehendra stent retriever for biliary stricture recannalization [letter] Faigel DO, et al. **Gastrointest Endosc** 1996 Nov;44(5):635

Biliary stents as temporary treatment for choledocholithiasis in pregnant patients. Farca A, et al. **Gastrointest Endosc** 1997 Jul;46(1):99–101

Duodenal obstruction caused by pancreatic head carcinoma: palliation with self–expandable endoprostheses. Feretis C, et al. **Gastrointest Endosc** 1997 Aug;46(2):161–5

Stents, cloggology, and esophageal cancer [editorial; comment] Fleischer DE. **Gastrointest Endosc** 1996 Mar; 43(3):258–60. Comment on: Gastrointest Endosc 1996 Mar;43(3):196–203. Comment on: Gastrointest Endosc 1996 Mar;43(3):204–8.

Interlocking expandable metal stents for simultaneous treatment of malignant biliary and duodenal obstruction [letter] Freeman ML, et al. **Gastrointest Endosc** 1996 Jul; 44(1):98–9

Management of a refractory benign esophageal stricture with a new biodegradable stent. Fry SW, et al. **Gastrointest Endosc** 1997 Feb;45(2):179–82 (12 ref.)

Primary endoscopic retrograde cholecystoendoprosthesis: a nonsurgical modality for symptomatic cholelithiasis in cirrhotic patients. Gaglio PJ, et al. **Gastrointest Endosc** 1996 Sep;44(3):339–42

Marked resistance during retrograde biliary stent placement: another O–ring problem [letter] al–Kawas FH, et al. **Gastrointest Endosc** 1996 Nov;44(5):636–7

Prior radiation and chemotherapy increase the risk of life–threatening complications after insertion of metallic stents for esophagogastric malignancy [see comments] Kinsman KJ, et al. **Gastrointest Endosc** 1996 Mar; 43(3):196–203. Comment in: Gastrointest Endosc 1996 Mar;43(3):258–60.

Expandable versus conventional esophageal prostheses: easier insertion may not preclude subsequent stent–related problems [see comments] Kozarek RA, et al. **Gastrointest Endosc** 1996 Mar;43(3):204–8. Comment in: Gastrointest Endosc 1996 Mar;43(3):258–60.

Use of the 25 mm flanged esophageal Z stent for malignant dysphagia: a prospective multicenter trial. Kozarek RA, et al. **Gastrointest Endosc** 1997 Aug;46(2):156–60

Prospective multicenter trial of esophageal Z–stent placement for malignant dysphagia and tracheoesophageal fistula [published erratum appears in Gastrointest Endosc 1996 Dec;44(6):764] Kozarek RA, et al. **Gastrointest Endosc** 1996 Nov;44(5):562–7

Potential for expandable stents in Crohn's disease [letter] Leichter J. **Gastrointest Endosc** 1996 Nov;44(5):637–8

Treatment of esophagorespiratory fistulas with a polyurethane–covered self–expanding metallic mesh stent. Macken E, et al. **Gastrointest Endosc** 1996 Sep;44(3):324–6

Endoscopy is superfluous during insertion of expandable metal stents in esophageal tumors. Martin DF. **Gastrointest Endosc** 1997 Jul;46(1):98–9

Nonsurgical strictureplasty for intestinal strictures in Crohn's disease: preliminary report of two cases. Matsuhashi N, et al. **Gastrointest Endosc** 1997 Feb;45(2):176–8

A three–year follow–up of self–expanding metal stents in the endoscopic palliation of longterm survivors with malignant biliary obstruction. Mergener K, et al. **Gastrointest Endosc** 1996 Jan;43(1):87–9

Silicone–covered Wallstent prototypes for palliation of malignant esophageal obstruction and digestive–respiratory fistulas. Nelson DB, et al. **Gastrointest Endosc** 1997 Jan; 45(1):31–7

Rapid and simple biliary stent deployment [letter] Silverman W. **Gastrointest Endosc** 1996 Dec;44(6):757

Modified Soehendra stent extractor [letter] Silverman WB. **Gastrointest Endosc** 1997 Jan;45(1):110

The use of a wire mesh stent in treating biliary obstruction caused by shrapnel. Silvis SE, et al. **Gastrointest Endosc** 1996 Dec;44(6):741–6

A new technique to assist in bile duct cannulation [letter] Slivka A. **Gastrointest Endosc** 1996 Nov;44(5):636

Self–expanding metal stent for obstructing adenocarcinoma of the sigmoid. Vandervoort J, et al. **Gastrointest Endosc** 1996 Dec;44(6):739–41

Endoscopic stent therapy for dominant extrahepatic bile duct strictures in primary sclerosing cholangitis. van Milligen de Wit AW, et al. **Gastrointest Endosc** 1996 Sep;44(3):293–9

A retrospective comparison of endoscopic stenting alone with stenting and radiotherapy in non–resectable cholangiocarcinoma. Bowling TE, et al. **Gut** 1996 Dec; 39(96):852–5

Alveolar echinococcosis of the liver: percutaneous stent therapy in Budd–Chiari syndrome. Vogel J, et al. **Gut** 1996 Nov;39(5):762–4

Intravascular ultrasound–guided emergency coronary Palmaz–Schatz stent placement without post–procedural systemic anticoagulation. Blasini R, et al. **Heart** 1996 Oct; 76(4):344–9

Changes in membrane glycoproteins of circulating platelets after coronary stent implantation. Gawaz M, et al. **Heart** 1996 Aug;76(2):166–72

Right ventricular outflow stent implantation: an alternative to palliative surgical relief of infundibular pulmonary stenosis. Gibbs JL, et al. **Heart** 1997 Feb;77(2):176–9

Cutting balloon angioplasty and stenting for aorto–ostial lesions. Kurbaan AS, et al. **Heart** 1997 Apr;77(4):350–2

Changing from intensive anticoagulation to treatment with aspirin alone for coronary stents: the experience of one centre in the United Kingdom. Stephens NG, et al. **Heart** 1996 Sep;76(3):238–42

Transcatheter Inoue endovascular graft for treatment of canine aortic dissection. Htay T, et al. **Heart Vessels** 1996; 11(2):80–5

A rare indication for stenting: persistent coronary artery spasm. Kültürsay H, et al. **Heart Vessels** 1996;11(3):165–8 (13 ref.)

Percutaneous metallic self–expandable endoprostheses in biliary obstruction caused by metastatic cancer. Kaskarelis IS, et al. **Hepatogastroenterology** 1996 Jul–Aug; 43(10):785–91

Extrahepatic portal venous laceration in TIPS treated with stent graft placement. Krajina A, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):667–70

Intestinal splinting for uncomplicated early postoperative small bowel obstruction: is it worthwhile? Meissner K. **Hepatogastroenterology** 1996 Jul–Aug;43(10):813–8

Endoscopic stenting in obstructive jaundice due to liver metastases: does it have a benefit for the patient? Pereira–Lima JC, et al. **Hepatogastroenterology** 1996 Jul–Aug;43(10):944–8

Management of tumor overgrowth in esophageal cancer by placement of a second stent: two case reports. Ribeiro JC, et al. **Hepatogastroenterology** 1996 Nov–Dec;43(12):1537–9

Phenprocoumon for prevention of shunt occlusion after transjugular intrahepatic portosystemic stent shunt: a randomized trial [see comments] Sauer P, et al. **Hepatology** 1996 Dec;24(6):1433–6. Comment in: Hepatology 1996 Dec;24(6):1533–5.

Transhepatic venous angioplasty and stenting: a treatment option in bleeding from gastric varices secondary to pancreatic carcinoma. Ferguson JM, et al. **HPB Surg** 1997; 10(3):173–5

Stent or surgery for malignant low bile duct obstruction? Ihse I, et al. **HPB Surg** 1997;10(3):179–81 (15 ref.)

Self–expanding wallstent for management of severe abdominal coarctation due to non–specific aortoarteritis. Bahl VK, et al. **Indian Heart J** 1997 Mar–Apr;49(2):189–91

Elective coronary stenting after recanalization for chronic total occlusion: clinical and angiographic follow–up results. Gambhir DS, et al. **Indian Heart J** 1997 Mar–Apr; 49(2):163–8

Self–expanding Wallstent deployment in an adult with coarctation of the aorta. Gambhir DS, et al. **Indian Heart J** 1996 Jul–Aug;48(4):409–11

Primary stenting for unprotected isolated left main ostial stenosis. Gambhir DS, et al. **Indian Heart J** 1995 Sep–Oct; 47(5):493–4

Immediate and six–month outcome of self–expanding Wallstent for long lesions in native coronary arteries. Gambhir DS, et al. **Indian Heart J** 1997 Jan–Feb;49(1):53–9

High speed rotablation to treat instent restenosis in both branches of a coronary bifurcation stenosis. Gambhir DS, et al. **Indian Heart J** 1997 May–Jun;49(3):311–2

Treatment of ulcerated atherosclerotic carotid artery bifurcation stenosis using a self–expanding mesh stent. Joseph G, et al. **Indian Heart J** 1996 Jul–Aug;48(4):412–4

Coronary artery stenting in acute myocardial infarction. Mehta AB, et al. **Indian Heart J** 1997 Mar–Apr; 49(2):169–71

Stent angioplasty for relief of chronic mesenteric ischemia in Takayasu arteritis. Tyagi S, et al. **Indian Heart J** 1997 May–Jun;49(3):315–8

Endoscopic stenting of minor papilla for symptomatic pancreas divisum. Bhasin DK, et al. **Indian J Gastroenterol** 1997 Jan;16(1):30–1 (7 ref.)

Endoscopic placement of expandable biliary stents: current applicability. Dhir V, et al. **Indian J Gastroenterol** 1996 Oct;15(4):142–6 (30 ref.)

Endovascular stents: a 'break through technology', future challenges. Violaris AG, et al. **Int J Card Imaging** 1997 Feb;13(1):3–13 (59 ref.)

Angioplasty through a stent side door. Abhyankar A, et al. **Int J Cardiol** 1996 Jul 5;55(1):107–10

Percutaneous transluminal coronary angioplasty in refractory unstable angina pectoris: are new devices useful? Bertaglia E, et al. **Int J Cardiol** 1996 Nov 15;57(1):1–7

Coronary stenting with AVE microstents in acute myocardial infarction. Ilia R, et al. **Int J Cardiol** 1997 May 23; 59(3):247–50

Acquired laryngeal stenosis in infants and children treated by laryngofissure and stenting. Hoeve LJ, et al. **Int J Pediatr Otorhinolaryngol** 1996 May;35(3):251–61

Experimental results with endovascular irradiation via a radioactive stent. Carter AJ, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):797–803

Endovascular brachytherapy to inhibit coronary artery restenosis: an introduction to the SCRIPPS Coronary Radiation to Inhibit Proliferation Post Stenting trial [editorial] Massullo V, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):973–5

A novel system for intracoronary beta–irradiation: description and dosimetric results. Popowski Y, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):923–31

192IR endovascular brachytherapy for avoidance of intimal hyperplasia after percutaneous transluminal angioplasty and stent implantation in peripheral vessels: 6 years of experience. Schopohl B, et al. **Int J Radiat Oncol Biol Phys** 1996 Nov 1;36(4):835–40

Bilateral bronchial balloon dilatation and Strecker stent implantation in a ventilated child with malignant carinal stenosis. Nicolai T, et al. **Intensive Care Med** 1996 May; 22(5):482–5

Experimental study of self–expandable metallic inferior vena caval stent crossing the renal vein in rabbits. Radiologic–pathologic correlation. Kim JK, et al. **Invest Radiol** 1996 Jun;31(6):311–5

Endovascular stenting in patients with Iliac compression syndrome. Experience in three cases. Rilinger N, et al. **Invest Radiol** 1996 Nov;31(11):729–33

Poly–lactic–acid coating for endovascular stents. Preliminary results in canine experimental arteriovenous fistulae. Schellhammer F, et al. **Invest Radiol** 1997 Mar;32(3):180–6

Stenting as a definitive procedure in benign biliary disease. Johnston BT, et al. **Ir Med J** 1996 Sep–Oct;89(5):177–8

The role of stents in cardiology: advantages and complications [editorial; comment] Eldar M. **Isr J Med Sci** 1996 Sep;32(9):777–8 (19 ref.). Comment on: Isr J Med Sci 1996 Sep;32(9):722–5.

Improved outcome of coronary stenting by utilizing a modified treatment protocol. Rozenman Y, et al. **Isr J Med Sci** 1996 Sep;32(9):722–5

Routine use of ureteric catheters at laparoscopic hysterectomy may cause unnecessary complications. Wood EC, et al. **J Am Assoc Gynecol Laparosc** 1996 May; 3(3):393–7

Clinical and angiographic implications of coronary stenting in thrombus–containing lesions. Alfonso F, et al. **J Am Coll Cardiol** 1997 Mar 15;29(4):725–33

Transluminal extraction catheter atherectomy followed by immediate stenting in treatment of saphenous vein grafts. Braden GA, et al. **J Am Coll Cardiol** 1997 Sep;30(3):657–63

Results of coronary stenting for restenosis. Colombo A, et al. **J Am Coll Cardiol** 1996 Oct;28(4):830–6

Bailout and corrective use of Gianturco–Roubin flex stents after percutaneous transluminal coronary angioplasty: operator reports and angiographic core laboratory verification from the National Heart, Lung, and Blood Institute/New Approaches to Coronary Intervention Registry. Dean LS, et al. **J Am Coll Cardiol** 1997 Apr; 29(5):934–40

Ticlopidine and aspirin pretreatment reduces coagulation and platelet activation during coronary dilation procedures. Gregorini L, et al. **J Am Coll Cardiol** 1997 Jan;29(1):13–20

Role of coronary artery lumen enlargement in improving coronary blood flow after balloon angioplasty and stenting: a combined intravascular ultrasound Doppler flow and imaging study. Kern MJ, et al. **J Am Coll Cardiol** 1997 Jun;29(7):1520–7

Outpatient coronary stent implantation. Kiemeneij F, et al. **J Am Coll Cardiol** 1997 Feb;29(2):323–7

Multivessel Palmaz–Schatz stenting: early results and one–year outcome. Laham RJ, et al. **J Am Coll Cardiol** 1997 Jul;30(1):180–5

Sustained local delivery of dexamethasone by a novel intravascular eluting stent to prevent restenosis in the porcine coronary injury model. Lincoff AM, et al. **J Am Coll Cardiol** 1997 Mar 15;29(4):808–16

Clinical outcome of patients undergoing endoluminal coronary artery reconstruction with three or more stents. Mathew V, et al. **J Am Coll Cardiol** 1997 Sep;30(3):676–81

Subacute stent thrombosis in the era of intravascular ultrasound–guided coronary stenting without anticoagulation: frequency, predictors and clinical outcome. Moussa I, et al. **J Am Coll Cardiol** 1997 Jan; 29(1):6–12

High pressure assisted coronary stent implantation accomplished without intravascular ultrasound guidance and subsequent anticoagulation. Nakamura S, et al. **J Am Coll Cardiol** 1997 Jan;29(1):21–7

Antiplatelet effect of ticlopidine after coronary stenting. Neumann FJ, et al. **J Am Coll Cardiol** 1997 Jun; 29(7):1515–9

Long–term clinical follow–up after successful repeat percutaneous intervention for stent restenosis. Reimers B, et al. **J Am Coll Cardiol** 1997 Jul;30(1):186–92

Do we require a cure for "stentmania"? [editorial; comment] Rodriguez A, et al. **J Am Coll Cardiol** 1996 Oct;28(4):827–9 . Comment on: J Am Coll Cardiol 1996 Oct;28(4):820–6.

Restenosis of endovascular stents from stent compression. Rosenfield K, et al. **J Am Coll Cardiol** 1997 Feb; 29(2):328–38

Coronary stent placement in patients with acute myocardial infarction: comparison of clinical and angiographic outcome after randomization to antiplatelet or anticoagulant therapy [see comments] Schömig A, et al. **J Am Coll Cardiol** 1997 Jan;29(1):28–34. Comment in: ACP J Club 1997 Jul–Aug;127(1):4.

Stenting in Chronic Coronary Occlusion (SICCO): a randomized, controlled trial of adding stent implantation after successful angioplasty. Sirnes PA, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1444–51

Stents wrapped in autologous vein: an experimental study. Stefanadis C, et al. **J Am Coll Cardiol** 1996 Oct; 28(4):1039–46

Passivation of metallic stents after arterial gene transfer of phVEGF165 inhibits thrombus formation and intimal

thickening. Van Belle E, et al. **J Am Coll Cardiol** 1997 May;29(6):1371–9

Electrocardiogram–gated intravascular ultrasound image acquisition after coronary stent deployment facilitates on–line three–dimensional reconstruction and automated lumen quantification. von Birgelen C, et al. **J Am Coll Cardiol** 1997 Aug;30(2):436–43

Combined percutaneous transluminal angioplasty, iliac stent deployment, and femorofemoral bypass for bilateral aortoiliac occlusive disease. Lopez–Galarza LA, et al. **J Am Coll Surg** 1997 Mar;184(3):249–58

The role of platelet–derived growth factor in intraluminal stented graft healing. Ombrellaro MP, et al. **J Am Coll Surg** 1997 Jan;184(1):49–57

Radiological case of the month. Bilateral iliac artery atherosclerosis treated with balloon angioplasty and stent placement. Christy GW, et al. **J Ark Med Soc** 1997 Mar; 93(10):499–501

Strecker stent placement in the superior mesenteric artery for recurrent ischemic colitis. Peene P, et al. **J Belge Radiol** 1996 Aug;79(4):168–9

Modeling of flow in a straight stented and nonstented side wall aneurysm model. Aenis M, et al. **J Biomech Eng** 1997 May;119(2):206–12

A versatile three–iodine molecular building block leading to new radiopaque polymeric biomaterials. Benzina A, et al. **J Biomed Mater Res** 1996 Nov;32(3):459–66

Assessment of urinary tract biomaterial encrustation using a modified Robbins device continuous flow model. Tunney MM, et al. **J Biomed Mater Res** 1997 Summer;38(2):87–93

Interventional cardiology: present and future. Chambers CE, et al. **J Cardiothorac Vasc Anesth** 1997 Apr;11(2):211–9 (91 ref.)

Endovascular stenting of an aortopulmonary fistula presenting with hemoptysis. A case report. Campagna AC, et al. **J Cardiovasc Surg (Torino)** 1996 Dec;37(6):643–6

Combined surgical and endovascular treatment of a traumatic pseudo–aneurysm of the brachiocephalic trunk with anatomical anomaly. Ruebben A, et al. **J Cardiovasc Surg (Torino)** 1997 Apr;38(2):173–6

Exclusion of an internal carotid aneurysm by a covered stent. Ruebben A, et al. **J Cardiovasc Surg (Torino)** 1997 Jun; 38(3):301–3

Endoscopic biliary stent migration with small bowel perforation in a liver transplant recipient. Esterl RM Jr, et al. **J Clin Gastroenterol** 1997 Mar;24(2):106–10

Self–expanding metal stents for palliation of malignant obstruction in the upper gastrointestinal tract. Comparative assessment of three stent types implemented in 96 implantations. May A, et al. **J Clin Gastroenterol** 1996 Jun; 22(4):261–6

Spiral CT angiography in the assessment of abdominal aortic aneurysms after stent grafting: value of maximum intensity projections. Dorffner R, et al. **J Comput Assist Tomogr** 1997 May–Jun;21(3):472–7

Intraprostatic metal stents (Prostakath and Urospiral): more than 6 years' clinical experience with 110 patients. Braf Z, et al. **J Endourol** 1996 Dec;10(6):555–8

Ureteral stents: impact of diameter and composition on patient symptoms. Candela JV, et al. **J Endourol** 1997 Feb; 11(1):45–7

Damage attributable to extracorporeal shockwave lithotripsy and deposition of calcium oxalate crystals on ureteral stents. Ikeda R, et al. **J Endourol** 1997 Apr;11(2):113–8

Percutaneous endopyelotomy and results: Korth technique. Korth K, et al. **J Endourol** 1996 Apr;10(2):121–6

Outcome assessment of double–J stents during extracorporeal shockwave lithotripsy of small solitary renal calculi. Low RK, et al. **J Endourol** 1996 Aug;10(4):341–3

Comparison of acucise endopyelotomy and endoballoon rupture for management of secondary proximal ureteral stricture in the porcine model. Nakada SY, et al. **J Endourol** 1996 Aug;10(4):311–8

Use of ureteral stents after endopyelotomy. Pearle MS. **J Endourol** 1996 Apr;10(2):169–76

Leaks after endovascular therapy for aneurysm: detection and classification. Beebe HG, et al. **J Endovasc Surg** 1996 Nov;3(4):445–8

Recurrent carotid disease: will stents be an alternative to surgery? Bergeron P, et al. **J Endovasc Surg** 1996 Feb; 3(1):76–9

Long–term results with the Palmaz stent in the superficial femoral artery. Bergeron P, et al. **J Endovasc Surg** 1995 May;2(2):161–7

Proximal stent deployment without contrast during endovascular aneurysm repair: an improved technique. Boyle JR, et al. **J Endovasc Surg** 1996 Nov;3(4):380–1

Strecker stents in the femoropopliteal arteries: value of duplex ultrasonography in restenosis assessment. Bray AE, et al. **J Endovasc Surg** 1995 May;2(2):150–60

European experience with a system for bifurcated stent–graft insertion. Chuter TA, et al. **J Endovasc Surg** 1997 Feb; 4(1):13–22

Techniques for endovascular recanalization of supra–aortic trunks. Criado FJ, et al. **J Endovasc Surg** 1996 Nov; 3(4):405–13 (48 ref.)

Stenting in the carotid artery: initial experience in 110 patients. Diethrich EB, et al. **J Endovasc Surg** 1996 Feb; 3(1):42–62

Subclavian stent implantation to alleviate coronary steal through a patent internal mammary artery graft. Diethrich EB, et al. J Endovasc Surg 1995 Feb;2(1):77–80

Is natural really better? [comment] Diethrich EB. **J Endovasc Surg** 1995 May;2(2):182. Comment on: J Endovasc Surg 1995 May;2(2):177–81.

Polymeric covers and coats for metallic stents: microporous PTFE and the inhibition of intimal hyperplasia [comment] Diethrich EB. **J Endovasc Surg** 1995 Aug;2(3):266–71. Comment on: J Endovasc Surg 1995 Aug;2(3):255–65.

Endovascular techniques in adult aortic coarctation: the use of stents for native and recurrent coarctation repair. Diethrich EB, et al. **J Endovasc Surg** 1995 May;2(2):183–8

Closure of a popliteal arteriovenous fistula using an autologous vein–covered Palmaz stent [see comments] Dorros G, et al. **J Endovasc Surg** 1995 May;2(2):177–81. Comment in: J Endovasc Surg 1995 May;2(2):182.

Percutaneous techniques for Palmaz stent deployment. Dorros G, et al. **J Endovasc Surg** 1996 Nov;3(4):449–52

Use of polyetherurethane to improve the biocompatibility of vascular stents [see comments] Fontaine AB, et al. **J Endovasc Surg** 1995 Aug;2(3):255–65. Comment in: J Endovasc Surg 1995 Aug;2(3):266–71.

The need for clinical trials of endovascular abdominal aortic aneurysm stent–graft repair: The EUROSTAR Project. EUROpean collaborators on Stent–graft Techniques for abdominal aortic Aneurysm Repair. Harris PL, et al. **J Endovasc Surg** 1997 Feb;4(1):72–7; discussion 78–9 (15 ref.)

Clinical experience with a new nitinol self–expanding stent in peripheral arteries. Henry M, et al. **J Endovasc Surg** 1996 Nov;3(4):369–79

Initial experience with the Cragg Endopro System 1 for intraluminal treatment of peripheral vascular disease. Henry M, et al. **J Endovasc Surg** 1994 Sep;1:31–43

Abdominal aortic aneurysms: experience with the Ivancev–Malmö endovascular system for aortomonoiliac stent–grafts. Ivancev K, et al. **J Endovasc Surg** 1997 Aug; 4(3):242–51

Endovascular repair of an ascending aorta–to–left common femoral artery graft with aneurysmal degeneration. Jaff MR, et al. **J Endovasc Surg** 1995 May;2(2):189–95

Successful endoluminal repair of arterial aneurysms by Wallstent prosthesis and PTFE graft: preliminary results with a new technique. Krajcer Z, et al. **J Endovasc Surg** 1997 Feb;4(1):80–7

Intravenous intravascular ultrasound for arterial visualization: a feasibility study [see comments] Kriegel AV, et al. **J Endovasc Surg** 1996 Nov;3(4):429–34. Comment in: J Endovasc Surg 1996 Nov;3(4):435.

Changing aneurysmal morphology after endovascular grafting: relation to leakage or persistent perfusion [see comments] Malina M, et al. **J Endovasc Surg** 1997 Feb; 4(1):23–30. Comment in: J Endovasc Surg 1997 Feb;4(1):31–2.

Transbrachial endovascular exclusion of an axillary artery pseudoaneurysm with PTFE–covered stents. Marston WA, et al. **J Endovasc Surg** 1995 May;2(2):172–6

The ins and outs of the excluded abdominal aortic aneurysm: decreasing diameters and dilating necks [comment] May J. **J Endovasc Surg** 1997 Feb;4(1):31–2 (6 ref.). Comment on: J Endovasc Surg 1997 Feb;4(1):23–30.

Endovascular graft repair of penetrating subclavian artery injuries. Patel AV, et al. **J Endovasc Surg** 1996 Nov; 3(4):382–8

Will it be feasible to insert endoprostheses under interventional MRI? Stroman PW, et al. **J Endovasc Surg** 1996 Nov;3(4):396–404

Endovascular management of unusual aneurysms of the axillary and subclavian arteries. Sullivan TM, et al. **J Endovasc Surg** 1996 Nov;3(4):389–95

Utility of intravascular ultrasound in carotid stenting. Wilson EP, et al. **J Endovasc Surg** 1996 Feb;3(1):63–8

Self–expandable metallic stents in the management of malignant biliary obstruction. Tsai CC, et al. **J Formos Med Assoc** 1996 Apr;95(4):298–302

Pulmonary artery thrombolysis and stenting after a bilateral sequential lung transplantation. Bousamra M 2nd, et al. **J Heart Lung Transplant** 1997 Jun;16(6):678–80

Renal artery stenosis managed by Palmaz stent insertion: technical and clinical outcome. MacLeod M, et al. **J Hypertens** 1995 Dec;13(12 Pt 2):1791–5

Sliding, absorbable, reinforced ring and an axially driven stent placement device for sutureless fibrin glue gastrointestinal anastomosis. Detweiler MB, et al. **J Invest Surg** 1996 Nov–Dec;9(6):495–504

Caustic injury of the oesophagus. Sixteen years experience, and introduction of a new model oesophageal stent. Berkovits RN, et al. **J Laryngol Otol** 1996 Nov; 110(11):1041–5

Experience of the first 60 cases of intracoronary stent placement. Mahanonda N, et al. **J Med Assoc Thai** 1996 Nov;79(11):703–7

Stenting: a new approach to carotid dissection. DeOcampo J, et al. **J Neuroimaging** 1997 Jul;7(3):187–90

Tissue compatibility and biodegradation of new absorbable stents for tracheal stabilization: an experimental study. Lochbihler H, et al. **J Pediatr Surg** 1997 May;32(5):717–20

Treatment of corrosive esophageal strictures by long–term stenting. Mutaf O. **J Pediatr Surg** 1996 May;31(5):681–5

Gastroesophageal reflux: a determinant in the outcome of caustic esophageal burns. Mutaf O, et al. **J Pediatr Surg** 1996 Nov;31(11):1494–5

A shape memory airway stent for tracheobronchomalacia in children: an experimental and clinical study. Tsugawa C, et al. **J Pediatr Surg** 1997 Jan;32(1):50–3

A stent for presurgical evaluation of implant placement. Takeshita F, et al. **J Prosthet Dent** 1997 Jan;77(1):36–8

Prosthetic management of large nasal septal defects. Zaki HS, et al. **J Prosthet Dent** 1997 Mar;77(3):335–8

Intraluminal stenting in the management of adhesional intestinal obstruction [see comments] DeFriend DJ, et al. **J R Soc Med** 1997 Mar;90(3):132–5. Comment in: J R Soc Med 1997 Jun;90(6):358.

Intraluminal stenting in the management of adhesional intestinal obstruction [letter; comment] Jones PF. **J R Soc Med** 1997 Jun;90(6):358. Comment on: J R Soc Med 1997 Mar;90(3):132–5.

Malignant tracheo–esophageal fistula: use of esophageal endoprosthesis. Spivak F, et al. **J Surg Oncol** 1996 Sep; 63(1):65–70 (36 ref.)

Minimally invasive direct coronary artery bypass, percutaneous transluminal coronary angioplasty, and stent placement for left main stenosis. Liekweg WG, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):411–2

Emergency stenting of malignant obstruction of the upper airways: long–term follow–up with two types of silicone prostheses. Wassermann K, et al. **J Thorac Cardiovasc Surg** 1996 Oct;112(4):859–66

Multimodality treatment for grade V hepatic injuries: perihepatic packing, arterial embolization, and venous stenting. Denton JR, et al. **J Trauma** 1997 May;42(5):964–7; discussion 967–8

A simple stenting method for management of hepatic ductal injury secondary to blunt abdominal trauma: two case reports. Sakamoto Y, et al. **J Trauma** 1997 Jun;42(6):1165–8

Metal stents: a new treatment of malignant ureteral obstruction. Barballas GA, et al. **J Urol** 1997 Jul; 158(1):54–8

Percutaneous intravesical retrieval of a misplaced urethral stent: new laparoscopic instrumentation. Bukowski TP, et al. **J Urol** 1997 Jun;157(6):2257

Re: Insertion of double pigtail ureteral stent for the prevention of urological complications in renal transplantation: a prospective randomized study [letter] Haab F, et al. **J Urol** 1997 Sep;158(3 Pt 1):888

Percutaneous treatment of an intraoperative arterial injury as a result of endoureterotomy. Houshiar AM, et al. **J Urol** 1997 Jun;157(6):2249–50

The use of metallic stents to bypass ureteral strictures secondary to metastatic prostate cancer: experience with 8 patients. López–Martínez RA, et al. **J Urol** 1997 Jul; 158(1):50–3

Efficacy of retrograde stentograms following cystectomy and diversion. Manion SP, et al. **J Urol** 1997 Sep;158(3 Pt 1):776–7

Routine stentograms are not necessary before stent removal following radical cystectomy. Pantuck AJ, et al. **J Urol** 1997 Sep;158(3 Pt 1):772–5

A randomized study to compare biodegradable self–reinforced polyglycolic acid spiral stents to suprapubic and indwelling catheters after visual laser ablation of the prostate [see comments] Pétas A, et al. **J Urol** 1997 Jan; 157(1):173–6. Comment in: J Urol 1997 Jan;157(1):184.

Uncalcified ureteral stent in situ for 13 years. Wood SJ, et al. **J Urol** 1997 Mar;157(3):943–4

Treatment of a failed bifurcated abdominal aortic stent graft with thrombolysis and Wallstent placement. Amesur NB, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):795–8

Management of idiopathic Budd–Chiari syndrome with primary stent placement: early results. Baijal SS, et al. **J Vasc Interv Radiol** 1996 Jul–Aug;7(4):545–53

Prototype stent in canine iliac arteries [letter; comment] Barth KH. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):948–9. Comment on: J Vasc Interv Radiol 1996 May–Jun;7(3):387–93.

A method to evaluate the elastic behavior of vascular stents. Berry JL, et al. **J Vasc Interv Radiol** 1996 May–Jun; 7(3):381–5

Endovascular stent–graft exclusion of an aortobronchial fistula. Chuter TA, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):357–9

Stent–graft as treatment for TIPS–biliary fistula. Cohen GS, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):665–8

Treatment of biliary strictures with metallic stents in liver transplant recipients [letter; comment] Culp WC, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):457–8. Comment on: J Vasc Interv Radiol 1995 Sep–Oct;6(5):755–61.

Stent–graft repair of aorto–iliac occlusive disease coexisting with common femoral artery disease. Cynamon J, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):19–26

Percutaneous ureteral stents: a modified system to facilitate antegrade placement. D'Agostino R, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):427–9

Combined percutaneous and endoscopic removal of a proximally migrated pancreatic stent. Dean JW, et al. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):935–8

Aortic stents covering the renal arteries ostia: an animal study. Desgranges P, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):77–82

Patency and tissue response related to two types of polytetrafluoroethylene–covered stents in the dog. Dolmatch BL, et al. **J Vasc Interv Radiol** 1996 Sep–Oct; 7(5):641–9

Treatment of chronic iliac artery occlusions by means of percutaneous endovascular stent placement. Dyet JF, et al. **J Vasc Interv Radiol** 1997 May–Jun;8(3):349–53

Treatment of iatrogenic superior vena cava syndrome with a vascular stent. Fontaine AB, et al. **J Vasc Interv Radiol** 1996 Jul–Aug;7(4):607–9

Prototype stent: in vivo swine studies in the biliary system. Fontaine AB, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):101–5

Vascular stent prototype: in vivo swine studies. Fontaine AB, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):107–11

Vascular stent prototype: results of preclinical evaluation. Fontaine AM, et al. **J Vasc Interv Radiol** 1996 Jan–Feb; 7(1):29–34

Percutaneous treatment of benign portal vein stenosis after liver transplantation. Godoy MA, et al. **J Vasc Interv Radiol** 1996 Mar–Apr;7(2):273–6

Transluminal radiofrequency tissue ablation with use of metallic stents. Goldberg SN, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):835–43

Endovascular management of a traumatic subclavian arteriovenous fistula. Gomez–Jorge JT, et al. **J Vasc Interv Radiol** 1996 Jul–Aug;7(4):599–602

Cholecystocholedochostomy with use of a self–expandable metallic stent: treatment method for nonfunctioning cholecystojejunostomy. Han JK, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):757–60

Combined percutaneous and endoscopic stent placement for an obstructed Roux limb after pancreaticojejunostomy for chronic pancreatitis. Hankins BC, et al. **J Vasc Interv Radiol** 1997 May–Jun;8(3):465–8

Percutaneous removal of a fully expanded Wallstent from the right ventricle with transesophageal echocardiography guidance. Hartnell GG, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):371–4

Stent placement in the renal artery: three–year experience with the Palmaz stent. Henry M, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):343–50

The Wallstent in peripheral vascular disease: for iliac use only [editorial; comment] [see comments] Hull JE. **J Vasc Interv Radiol** 1995 Nov–Dec;6(6):841–2. Comment on: J Vasc Interv Radiol 1995 Nov–Dec;6(6):843–9. Comment in: J Vasc Interv Radiol 1996 Jul–Aug;7(4):614.

Use of a self–expanding vascular occluder for embolization during endovascular aortic aneurysm repair. Kato N, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):27–33

Embolization of perigraft leaks after endovascular stent–graft treatment of aortic aneurysms. Kato N, et al. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):805–11

Endovascular stent grafts: the beginning of the future, or the beginning of the end? Katzen BT. **J Vasc Interv Radiol** 1996 Jul–Aug;7(4):469–76

Embolization of backbleeding lumbar arteries filling an aortic aneurysm sac after endovascular stent–graft placement. Khilnani NM, et al. **J Vasc Interv Radiol** 1996 Nov–Dec; 7(6):813–7

Supra–aortic arterial stenoses: management with Palmaz balloon–expandable intraluminal stents. Lyon RD, et al. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):825–35

Repositioning of a malaligned aortic stent–graft [letter] Maclennan AC, et al. **J Vasc Interv Radiol** 1997 Jan–Feb; 8(1 Pt 1):151–2

Effect of polytetrafluoroethylene covering of Palmaz stents on the development of intimal hyperplasia in human iliac arteries. Marin ML, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):651–6

Experimental evaluation of a new device for percutaneous transrenal ureteral occlusion. Marr B, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):775–80

Multicenter trial of the wallstent in the iliac and femoral arteries [see comments] Martin EC, et al. **J Vasc Interv Radiol** 1995 Nov–Dec;6(6):843–9. Comment in: J Vasc Interv Radiol 1995 Nov–Dec;6(6):841–2.

Use of the Wallstent in peripheral vascular disease [letter; comment] Martin EC. **J Vasc Interv Radiol** 1996 Jul–Aug; 7(4):614. Comment on: J Vasc Interv Radiol 1995 Nov–Dec;6(6):841–2.

Cragg Endopro System I: early experience. I.Femoral arteries. Maynar M, et al. **J Vasc Interv Radiol** 1997 Mar–Apr;8(2):203–7

Covered gianturco stents for malignant biliary obstruction: preliminary clinical evaluation. Miyayama S, et al. **J Vasc Interv Radiol** 1997 Jul–Aug;8(4):641–8

Subintimal revascularization of chronic iliac artery occlusions. Murphy TP. **J Vasc Interv Radiol** 1996 Jan–Feb;7(1):47–51

Percutaneous revascularization of complex iliac artery stenoses and occlusions with use of Wallstents: three–year experience. Murphy TP, et al. **J Vasc Interv Radiol** 1996 Jan–Feb;7(1):21–7

Endovascular stent placement as a treatment for renal venous hypertension. Neste MG, et al. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):859–61

Effects of vascular stent surface area and hemodynamics on intimal thickening [see comments] Newman VS, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):387–93. Comment in: J Vasc Interv Radiol 1996 Nov–Dec;7(6):948–9.

Treatment of malignant superior vena cava obstruction: metal stents or radiation therapy. Nicholson AA, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):781–8

Aortoesophageal fistula: repair with transluminal placement of a thoracic aortic stent–graft. Oliva VL, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):35–8

Physical properties of polytetrafluoroethylene bypass material after balloon dilation. Palmaz F, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):657–63

Use of stents covered with polytetrafluoroethylene in experimental abdominal aortic aneurysm. Palmaz JC, et al. **J Vasc Interv Radiol** 1995 Nov–Dec;6(6):879–85

Fenestrated stent–grafts for preserving visceral arterial branches in the treatment of abdominal aortic aneurysms: preliminary experience. Park JH, et al. **J Vasc Interv Radiol** 1996 Nov–Dec;7(6):819–23

Gianturco–Rösch Z stents in tracheobronchial stenoses. Petersen BD, et al. **J Vasc Interv Radiol** 1995 Nov–Dec; 6(6):925–31

Biliary strictures in hepatic transplantation: treatment with self–expanding Z stents. Petersen BD, et al. **J Vasc Interv Radiol** 1996 Mar–Apr;7(2):221–8

Percutaneous transluminal angioplasty versus endovascular stent placement in the treatment of venous stenoses in patients undergoing hemodialysis: intermediate results. Quinn SF, et al. **J Vasc Interv Radiol** 1995 Nov–Dec; 6(6):851–5

Coil embolization of an internal iliac artery arteriovenous fistula with a Wallstent. Roberts JA, et al. **J Vasc Interv Radiol** 1996 Jul–Aug;7(4):611–3

Percutaneous treatment of peripheral aneurysms with the Cragg EndoPro System. Rousseau H, et al. **J Vasc Interv Radiol** 1996 Jan–Feb;7(1):35–9

Gianturco Z stents for hemodialysis grafts [letter; comment] Roy S. **J Vasc Interv Radiol** 1995 Nov–Dec;6(6):985. Comment on: J Vasc Interv Radiol 1995 May–Jun;6(3):387–96.

Percutaneous endoluminal stent placement for traumatic occlusion of the internal jugular vein. Ryu RK, et al. **J Vasc Interv Radiol** 1997 May–Jun;8(3):359–62

Fracture of an iliac artery Palmaz stent. Sacks BA, et al. **J Vasc Interv Radiol** 1996 Jan–Feb;7(1):53–5

Life–threatening esophageal fistula: treatment with expandable metallic stents covered by biosynthetic skin. Sakai T, et al. **J Vasc Interv Radiol** 1996 Jul–Aug; 7(4):569–72

Feasibility of a technique for branch pulmonary artery stent implantation. Salazar OH, et al. **J Vasc Interv Radiol** 1996 Jan–Feb;7(1):41–6

Cragg covered stents in hemodialysis access: initial and midterm results. Sapoval MR, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):335–42

Stent–grafts for revision of TIPS stenoses and occlusions: a clinical pilot study. Saxon RR, et al. **J Vasc Interv Radiol** 1997 Jul–Aug;8(4):539–48

Acute rupture of the descending thoracic aorta: repair with use of endovascular stent–grafts. Semba CP, et al. **J Vasc Interv Radiol** 1997 May–Jun;8(3):337–42

Percutaneous transluminal stent placement in the abdominal aorta. Sheeran SR, et al. **J Vasc Interv Radiol** 1997 Jan–Feb; 8(1 Pt 1):55–60

Human aortic endothelial cell migration onto stent surfaces under static and flow conditions. Sprague EA, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):83–92

Luminal changes in downsteam arteries after percutaneous interventions in iliac arteries: implications for balloon or stent size determination. Strunk HM, et al. **J Vasc Interv Radiol** 1996 May–Jun;7(3):361–6

Percutaneous transluminal stent placement to treat subclavian steal syndrome. Sueoka BL. **J Vasc Interv Radiol** 1996 May–Jun;7(3):351–6

Therapy for biliary stenoses and occlusions with use of three different metallic stents: single–center experience. Tesdal IK, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):869–79

Extrahepatic portal venous stenosis: treatment with percutaneous transhepatic stent placement. Vogelzang RL, et al. **J Vasc Interv Radiol** 1996 Mar–Apr;7(2):269–71

Statement regarding carotid angioplasty and stenting. Society for Vascular Surgery. International Society for Cardiovascular Surgery, North American Chapter. **J Vasc Surg** 1996 Nov;24(5):900

Reporting standards for infrarenal endovascular abdominal aortic aneurysm repair. Ad Hoc Committee for Standardized Reporting Practices in Vascular Surgery of The Society for Vascular Surgery/International Society for Cardiovascular Surgery. Ahn SS, et al. **J Vasc Surg** 1997 Feb;25(2):405–10

Clinical experience with a bifurcated endovascular graft for abdominal aortic aneurysm repair. Chuter TA, et al. **J Vasc Surg** 1996 Oct;24(4):655–66

Regarding "Statement regarding carotid angioplasty and stenting" [letter] Hobson RW 2nd, et al. **J Vasc Surg** 1997 Jun;25(6):1117

Stent deformation and intimal hyperplasia complicating treatment of a post–carotid endarterectomy intimal flap with a Palmaz stent. Johnson SP, et al. **J Vasc Surg** 1997 Apr;25(4):764–8

Autologous vein–covered stent for the endovascular management of an iliac artery–ureteral fistula: case report and review of the literature. Kerns DB, et al. **J Vasc Surg** 1996 Oct;24(4):680–6 (46 ref.)

Initial experience with venous stents in exertional axillary–subclavian vein thrombosis. Meier GH, et al. **J Vasc Surg** 1996 Dec;24(6):974–81; discussion 981–3

Simultaneous abdominal aortic replacement and thoracic stent–graft placement for multilevel aortic disease. Moon MR, et al. **J Vasc Surg** 1997 Feb;25(2):332–40

Comparison of endovascular and conventional vascular prostheses in an experimental infection model. Parsons RE, et al. **J Vasc Surg** 1996 Dec;24(6):920–5; discussion 925–6

Regarding "Endoluminal repair of atypical dissecting aneurysm of descending thoracic aorta and fusiform aneurysm of the abdominal aorta" [letter; comment] Sandmann W. **J Vasc Surg** 1996 Oct;24(4):698–700. Comment on: J Vasc Surg 1995 Aug;22(2):167–72.

A program of operative angioplasty: endovascular intervention and the vascular surgeon. Silva MB Jr, et al. **J Vasc Surg** 1996 Dec;24(6):963–71; discussion 971–3

Balloon–expandable endobypass for femoropopliteal atherosclerotic occlusive disease. A preliminary evaluation of fifty–five patients. Spoelstra H, et al. **J Vasc Surg** 1996 Oct;24(4):647–54

Percutaneous transluminal angioplasty and primary stenting of the iliac arteries in 288 patients. Sullivan TM, et al. **J Vasc Surg** 1997 May;25(5):829–38; discussion 838–9

Stent remodeling contributes to femoropopliteal artery restenosis: an intravascular ultrasound study. van Lankeren W, et al. **J Vasc Surg** 1997 Apr;25(4):753–6

Regression of an abdominal aortic aneurysm after endograft exclusion. White RA, et al. **J Vasc Surg** 1997 Jul; 26(1):133–7

Preliminary clinical outcome and imaging criterion for endovascular prosthesis development in high–risk patients who have aortoiliac and traumatic arterial lesions. White RA, et al. **J Vasc Surg** 1996 Oct;24(4):556–69; discussion 569–71

Early results of endovascular aortic aneurysm surgery with aortouniiliac graft, contralateral iliac occlusion, and femorofemoral bypass. Yusuf SW, et al. **J Vasc Surg** 1997 Jan;25(1):165–72

Cardiologists broaden use of stents [news] Goldsmith MF. **JAMA** 1997 Jan 22–29;277(4):275–6

Management of total parenteral nutrition–related superior vena cava obstruction with expandable metal stents. Hemphill DJ, et al. **JPEN J Parenter Enteral Nutr** 1996 May–Jun;20(3):222–7

Removal of a retained T–tube from the common bile duct. Muhammad SR, et al. **JPMA J Pak Med Assoc** 1997 Jul; 47(7):194–5

Patency of intermediate size side branches after Palmaz–Schatz stent implantation. Ishiki R, et al. **Jpn Heart J** 1997 Mar;38(2):191–7

Palliative therapy using polyurethane–covered self–expandable metallic stents for malignant esophageal strictures: experiences in six patients. Kato M, et al. **Jpn J Clin Oncol** 1996 Dec;26(6):461–4

Stenting of central venous stenoses in hemodialysis patients: long–term results. Mickley V, et al. **Kidney Int** 1997 Jan; 51(1):277–80 (31 ref.)

Effect of renal–artery stenting on progression of renovascular renal failure [letter; comment] Boero R, et al. **Lancet** 1997 Jun 21;349(9068):1840. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Randomised study of endoscopic biliary endoprosthesis versus duct clearance for bileduct stones in high–risk patients. Chopra KB, et al. **Lancet** 1996 Sep 21; 348(9030):791–3

Effect of renal–artery stenting on progression of renovascular renal failure [letter; comment] Geroulakos G, et al. **Lancet** 1997 Jun 21;349(9068):1840. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Effect of renal–artery stenting on progression of renovascular renal failure [see comments] Harden PN, et al. **Lancet** 1997 Apr 19;349(9059):1133–6. Comment in: Lancet 1997 Apr 19;349(9059):1115–6. Comment in: Lancet 1997 Jun 21;349(9068):1839–40. Comment in: Lancet 1997 Jun 21;349(9068):1840.

Effect of renal–artery stenting on progression of renovascular renal failure [letter; comment] McLaughlin K. **Lancet** 1997 Jun 21;349(9068):1839–40. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Antiplatelet rather than anticoagulant therapy with coronary stenting. More RS, et al. **Lancet** 1997 Jan 18; 349(9046):146–7

Intracoronary–stent placement for coronary artery disease [letter] Schwartz L, et al. **Lancet** 1997 Jul 12; 350(9071):113–4

Stenting for acute myocardial infarction. Steinhubl SR, et al. **Lancet** 1997 Aug 23;350(9077):532–3

Prospects with renal artery stenting [comment] Stockx L, et al. **Lancet** 1997 Apr 19;349(9059):1115–6. Comment on: Lancet 1997 Apr 19;349(9059):1133–6.

Nd:YAG laser and tracheobronchial metallic stents: an experimental in vitro study. Witt C, et al. **Lasers Surg Med** 1997;20(1):51–5

Stents with high–pressure balloon inflations and intravascular ultrasonography—applicable in all patients? [editorial; comment] Berger PB. **Mayo Clin Proc** 1997 Feb; 72(2):185–7. Comment on: Mayo Clin Proc 1997 Feb;72(2):101–11.

Intracoronary stent implantation in native coronary arteries and saphenous vein grafts: a consecutive experience with six types of stents without prolonged anticoagulation [see comments] Itoh A, et al. **Mayo Clin Proc** 1997 Feb; 72(2):101–11. Comment in: Mayo Clin Proc 1997 Feb;72(2):185–7.

Use of intravascular stents for superior vena caval obstruction after the Mustard operation. MacLellan–Tobert SG, et al. **Mayo Clin Proc** 1996 Nov;71(11):1071–6 (23 ref.)

Dose perturbation due to the presence of a prostatic urethral stent in patients receiving pelvic radiotherapy: an in vitro study. Gez E, et al. **Med Dosim** 1997 Summer;22(2):117–20

Radiation dose from a phosphorous-32 impregnated wire mesh vascular stent. Janicki C, et al. **Med Phys** 1997 Mar; 24(3):437-45

A comparison of coronary-artery stenting with angioplasty [letter; comment] Adelman AG. **N Engl J Med** 1997 Jul 24;337(4):277-8. Comment on: N Engl J Med 1997 Mar 20;336(12):817-22.

Endoluminal stent-grafts for infrarenal abdominal aortic aneurysms [see comments] Blum U, et al. **N Engl J Med** 1997 Jan 2;336(1):13-20. Comment in: N Engl J Med 1997 Jan 2;336(1):59-60. Comment in: N Engl J Med 1997 Jun 12;336(24):1756; discussion 1757.

Treatment of ostial renal-artery stenoses with vascular endoprostheses after unsuccessful balloon angioplasty [see comments] Blum U, et al. **N Engl J Med** 1997 Feb 13; 336(7):459-65. Comment in: N Engl J Med 1997 Jul 10;337(2):132-3.

Current therapy for infrarenal aortic aneurysms [editorial; comment] [see comments] Ernst CB. **N Engl J Med** 1997 Jan 2;336(1):59-60. Comment on: N Engl J Med 1997 Jan 2;336(1):13-20. Comment in: N Engl J Med 1997 Jan 12;336(24):1756; discussion 1757-8.

Preventing coronary restenosis and complications [editorial; comment] Holmes DR Jr. **N Engl J Med** 1997 Jun 12; 336(24):1748-9. Comment on: N Engl J Med 1997 Jun 12;336(24):1689-96. Comment on: N Engl J Med 1997 Jun 12;336(24):1697-703.

Stenting for carotid stenosis [letter; comment] Mittl RL Jr. **N Engl J Med** 1997 Aug 7;337(6):427; discussion 428. Comment on: N Engl J Med 1997 Apr 3;336(14):1008-11.

Treatment of ostial renal-artery stenoses with vascular endoprostheses [letter; comment] Postma CT, et al. **N Engl J Med** 1997 Jul 10;337(2):132-3. Comment on: N Engl J Med 1997 Feb 13;336(7):459-65.

Stent placement compared with balloon angioplasty for obstructed coronary bypass grafts. Saphenous Vein De Novo Trial Investigators. Savage MP, et al. **N Engl J Med** 1997 Sep 11;337(11):740-7

Catheter-based radiotherapy to inhibit restenosis after coronary stenting [see comments] Teirstein PS, et al. **N Engl J Med** 1997 Jun 12;336(24):1697-703. Comment in: N Engl J Med 1997 Jun 12;336(24):1748-9.

A comparison of coronary-artery stenting with angioplasty for isolated stenosis of the proximal left anterior descending coronary artery [see comments] Versaci F, et al. **N Engl J Med** 1997 Mar 20;336(12):817-22. Comment in: N Engl J Med 1997 Jul 24;337(4):277-8. Comment in: ACP J Club 1997 Sep-Oct;127(2):32.

Acquired vein stenosis of renal allograft--percutaneous treatment with self-expanding metallic stent. Cercueil JP, et al. **Nephrol Dial Transplant** 1997 Apr;12(4):825-6

Thrombotic occlusion of ureteric stent: an unusual cause of anuria after kidney transplantation. Doehn C, et al. **Nephrol Dial Transplant** 1997 Jun;12(6):1267-8

Permanent pacemaker wires causing subclavian vein stenosis in presence of AV fistula--is it ever wrong to try angioplasty and stenting? Konner K, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1735-8

Renal artery stenting. Krumme B, et al. **Nephrol Dial Transplant** 1996 Dec;11(12):2507-8

Endovascular stenting of a traumatic dissecting aneurysm of the extracranial internal carotid artery--case report. Miyachi S, et al. **Neurol Med Chir (Tokyo)** 1997 Mar; 37(3):270-4

Emergent treatment of iatrogenic dissection of the internal carotid artery with the Palmaz-Schatz stent--case report. Yamashita K, et al. **Neurol Med Chir (Tokyo)** 1997 Apr; 37(4):336-9

Carotid angioplasty and stent: an alternative to carotid endarterectomy. **Neurosurgery** 1997 Feb;40(2):344-5

Thrombolysis of the cervical internal carotid artery before balloon angioplasty and stent placement: report of two cases. Guterman LR, et al. **Neurosurgery** 1996 Mar; 38(3):620-3; discussion 624

Treatment of dissecting pseudoaneurysm of the cervical internal carotid artery using a wall stent and detachable coils: case report. Perez-Cruet MJ, et al. **Neurosurgery** 1997 Mar;40(3):622-5; discussion 625-6

Endovascular treatment of experimental aneurysms with liquid polymers: the protective potential of stents. Szikora I, et al. **Neurosurgery** 1996 Feb;38(2):339-47

Use of a modified monocanalicular silicone stent in 33 eyelids. Mauriello JA Jr, et al. **Ophthalmic Surg Lasers** 1996 Nov; 27(11):929-34

Endoscopically introduced expandable stents in laryngotracheal stenosis: the jury is still out. Hanna E, et al. **Otolaryngol Head Neck Surg** 1997 Jan;116(1):97-103

Stenting for inferior caval obstruction [letter; comment] Paterson J, et al. **Palliat Med** 1996 Oct;10(4):344-5. Comment on: Palliat Med 1995 Oct;9(4):319-26.

Tetralogy of Fallot with absent pulmonary valve and bronchial compression: treatment with endobronchial stents. Subramanian V, et al. **Pediatr Cardiol** 1997 May-Jun; 18(3):237-9

Metallic stenting of the biliary tree following liver transplant hepatic artery thrombosis in an infant. Khong PL, et al. **Pediatr Radiol** 1997 Jan;27(1):79-81

Custom surgical stent for naris stenosis. Casey DM, et al. **Plast Reconstr Surg** 1997 Jul;100(1):108-14

Coronary artery stents. Stewart AJ, et al. **Postgrad Med J** 1996 May;72(847):274-6 (18 ref.)

Percutaneous therapy of structural heart disease: pediatric disease. Verma R, et al. **Prog Cardiovasc Dis** 1997 Jul-Aug; 40(1):37-54 (70 ref.)

Implantation and imaging of coronary stents. Haas R. **Radiol Technol** 1996 Jan-Feb;67(3):233-44; quiz 245-8 (22 ref.)

Palliation of inoperable esophageal carcinoma: a prospective randomized trial of laser therapy and stent placement. Adam A, et al. **Radiology** 1997 Feb;202(2):344-8

Percutaneous vascular intervention: value of hemodynamic measurements [editorial; comment] Bonn J. **Radiology** 1996 Oct;201(1):18-20. Comment on: Radiology 1996 Oct;201(1):155-9.

Meta-analysis of the results of percutaneous transluminal angioplasty and stent placement for aortoiliac occlusive disease. Bosch JL, et al. **Radiology** 1997 Jul;204(1):87-96

Relationship between plaque mass and neointimal hyperplasia after stent placement in Yucatan micropigs. de Smet BJ, et al. **Radiology** 1997 May;203(2):484-8

Endovascular aortic stent-grafts: transcatheter embolization of persistent perigraft leaks. Golzarian J, et al. **Radiology** 1997 Mar;202(3):731-4

Occlusive and aneurysmal peripheral arterial disease: assessment of a stent-graft system. Henry M, et al. **Radiology** 1996 Dec;201(3):717-24

Carotid angioplasty [editorial; comment] Hurst RW. **Radiology** 1996 Dec;201(3):613-6. Comment on: Radiology 1996 Dec;201(3):627-36.

MR imaging of soft-tissue changes after percutaneous transluminal angioplasty and stent placement. Kellner W, et al. **Radiology** 1997 Feb;202(2):327-31

Common bile duct obstruction due to malignancy: treatment with plastic versus metal stents. Lammer J, et al. **Radiology** 1996 Oct;201(1):167-72

Superior vena cava stents: Doppler US of the internal mammary veins to detect collateral flow--preliminary observations. Martinoli C, et al. **Radiology** 1997 Sep; 204(3):865-70

Malignant esophageal fistulas and perforations: management with plastic-covered metallic endoprostheses. Morgan RA, et al. **Radiology** 1997 Aug;204(2):527-32

Endotracheal placement of balloon-expanded stents: an experimental study in rabbits. Rauber K, et al. **Radiology** 1997 Jan;202(1):281-3

Malignant esophageal obstruction and esophagorespiratory fistula: palliation with a polyethylene-covered Z-stent. Saxon RR, et al. **Radiology** 1997 Feb;202(2):349-54

Iliac arteries: plain and heparin-coated Dacron-covered stent-grafts compared with noncovered metal stents--an experimental study. Schürmann K, et al. **Radiology** 1997 Apr;203(1):55-63

True lumen obliteration in complicated aortic dissection: endovascular treatment. Slonim SM, et al. **Radiology** 1996 Oct;201(1):161-6

Benign and malignant esophageal strictures: treatment with a polyurethane-covered retrievable expandable metallic stent. Song HY, et al. **Radiology** 1997 Jun;203(3):747-52

Expandable metallic stent placement in patients with benign esophageal strictures: results of long-term follow-up. Song HY, et al. **Radiology** 1997 Apr;203(1):131-6

Transjugular intrahepatic portosystemic shunt with silicone-covered Wallstents: results in a swine model. Tanihata H, et al. **Radiology** 1997 Oct;205(1):181-4

Stent placement after iliac angioplasty: comparison of hemodynamic and angiographic criteria. Dutch Iliac Stent Trial Study Group [see comments] Tetteroo E, et al. **Radiology** 1996 Oct;201(1):155-9. Comment in: Radiology 1996 Oct;201(1):18-20.

Carotid artery stenosis: treatment with protected balloon angioplasty and stent placement [see comments] Theron JG, et al. **Radiology** 1996 Dec;201(3):627-36. Comment in: Radiology 1996 Dec;201(3):613-6.

Upper extremity central venous obstruction in hemodialysis patients: treatment with Wallstents. Vesely TM, et al. **Radiology** 1997 Aug;204(2):343-8

Development of T-tube tracts in piglets: effect of insertion method and material of T-tubes. Koivusalo A, et al. **Res Exp Med (Berl)** 1997;197(1):53-61

The use of self-retained ureteral stents in extracorporeal shock-wave lithotripsy (ESWL)--the KwaZulu-Natal experience [letter] Bereczky ZB, et al. **S Afr Med J** 1996 Oct;86(10):1301-2

Carotid stent-assisted angioplasty. Smedema JP, et al. **S Afr Med J** 1997 Feb;87 Suppl 1:C9-14

Transjugular intrahepatic portosystemic shunt with the Strecker stent for control of refractory acute and chronic variceal bleeding. Canizares RB, et al. **Scand J Gastroenterol** 1996 Mar;31(3):285-93

Bioabsorbable spiral stents in the urethra. Tammela TL, et al. **Scand J Urol Nephrol Suppl** 1996;179:97-100

Endovascular stent graft repair of thoracic aortic aneurysms. Mitchell RS. **Semin Thorac Cardiovasc Surg** 1997 Jul; 9(3):257-68

Limitations of percutaneous transluminal angioplasty with stenting for femoropopliteal arterial occlusive disease. Gray BH, et al. **Semin Vasc Surg** 1997 Mar;10(1):8-16

The role of intracoronary stents in the prevention of restenosis--facts and fallacies. Lau KW. **Singapore Med J** 1996 Oct;37(5):522-6 (31 ref.)

Angioplasty and stenting for restenosis after carotid endarterectomy. Initial experience. Yadav JS, et al. **Stroke** 1996 Nov;27(11):2075-9

Laparoscopic gastrojejunostomy and endoscopic biliary stent placement for palliation of incurable gastric outlet obstruction with cholestasis. Brune IB, et al. **Surg Endosc** 1997 Aug;11(8):834-7

Covered metal stent for tumor obstruction of efferent loop recurrence after gastrectomy. Cheung HY, et al. **Surg Endosc** 1997 Sep;11(9):936-8

Application of rectal stents for palliation of obstructing rectosigmoid cancer. Dohmoto M, et al. **Surg Endosc** 1997 Jul;11(7):758-61

Management of malignant biliary stricture with self-expanding metallic stent. Vitale GC, et al. **Surg Endosc** 1996 Oct;10(10):970-3

Comparison of bile duct pressures following sphincterotomy and endobiliary stenting in a canine model. Youngelman DF, et al. **Surg Endosc** 1997 Feb;11(2):126-8

Experimental technique for (laparoscopic) bowel anastomosis: transient endoluminally stented anastomosis (TESA). Schmid RA, et al. **Surg Laparosc Endosc** 1997 Aug;7(4):281-4

Use of an intratracheal silicone prosthesis (Dumon type) for the treatment of tracheoesophageal fistula due to advanced lung cancer. Kawashima O, et al. **Surg Today** 1996; 26(11):915-8

A newly-designed shape-memory coil stent for esophageal stricture: a preliminary report. Tamura S, et al. **Surg Today** 1996;26(11):945-8

Internal stenting of the hepaticojejunostomy and pancreaticojejunostomy in patients undergoing pancreatoduodenectomy to promote earlier discharge from hospital. Yoshimi F, et al. **Surg Today** 1996;26(8):665-7

Vesicoureteric angulation: a modified method for placement of a double J stent. Biyani CS, et al. **Tech Urol** 1996 Summer;2(2):77-8

Placement of ureteral stents in pregnancy using ultrasound guidance. Fabrizio MD, et al. **Tech Urol** 1996 Fall; 2(3):121-5

Retrieval of ureteral stents in children. Figueroa TE. **Tech Urol** 1995 Spring;1(1):45-7

Self-expanding permanent endoluminal stents in the ureter: technical considerations. Pauer W, et al. **Tech Urol** 1995 Summer;1(2):67-71

Endoluminal exclusion of an iliac artery aneurysm by Wallstent endoprosthesis and PTFE vascular graft. Krajcer Z, et al. **Tex Heart Inst J** 1997;24(1):11-4

Stenting for abdominal aortic occlusive disease. Long-term results. Martinez R, et al. **Tex Heart Inst J** 1997;24(1):15-22

Stenting for occlusion of the subclavian arteries. Technical aspects and follow-up results. Martinez R, et al. **Tex Heart Inst J** 1997;24(1):23-7

Histomorphological examination of endoluminal stent grafting in the descending aorta in a sheep model. Orend KH, et al. **Thorac Cardiovasc Surg** 1996 Jun;44(3):132-5

An Airway Wallstent for the treatment of tracheobronchial malignancies [see comments] Bolliger CT, et al. **Thorax** 1996 Nov;51(11):1127-9. Comment in: Thorax 1997 Jul;52(7):664-5.

Airway Wallstent [letter; comment] Ladas G, et al. **Thorax** 1997 Jul;52(7):664-5. Comment on: Thorax 1996 Nov;51(11):1127-9.

Coronary stenting in a hemophilic patient [letter] Helft G, et al. **Thromb Haemost** 1997 May;77(5):1044-5

Coronary stenting for coronary artery narrowing in a heart transplant recipient. Seydoux C, et al. **Transpl Int** 1996; 9(4):433-6

Intraoperative placement of a Wallstent for portal vein stenosis and thrombosis after liver transplantation. McDaniel HM, et al. **Transplantation** 1997 Feb 27; 63(4):607-8

Double-pigtail stents for distal ureteral calculi: an alternative form of definitive treatment. Deliveliotis C, et al. **Urol Int** 1996;57(4):224-6

Temporary spiral stent after endoscopic repair of posttraumatic stricture of prostatomembranous urethra. Inoue Y, et al. **Urol Int** 1997;58(4):250-1

Double-J ureteric stent encrustations: clinical study on crystal formation on polyurethane stents. Robert M, et al. **Urol Int** 1997;58(2):100-4

Comparison between first-generation (fixed-caliber) and second-generation (self-expanding, large caliber) temporary prostatic stents. Yachia D, et al. **Urol Int** 1996; 57(3):165-9

Long-term outcome of prostatic stent treatment for benign prostatic hyperplasia. Chiou RK, et al. **Urology** 1996 Oct; 48(4):589-93

New technique of ureteral stent placement for impacted ureteral calculus: the glidewire loop technique. Issa MM, et al. **Urology** 1997 Apr;49(4):614-7

Combined percutaneous antegrade and cystoscopic retrograde ureteral stent placement: an alternative technique in cases of ureteral discontinuity. Postoak D, et al. **Urology** 1997 Jul;50(1):113-6

Urolume double prosthesis in the treatment of complex urethral strictures: a 5-year follow-up case report. Scarpa RM, et al. **Urology** 1997 Sep;50(3):459-61

Balloon-wire retrieval of a migrated urethral stent in the early postoperative period [letter; comment] Smith DP, et al. **Urology** 1997 Jul;50(1):160-1. Comment on: Urology 1996 Jun;47(6):915-7.

Blue toes due to floating plaque of the abdominal aorta: endovascular repair with stent. Do DD, et al. **Vasa** 1997 May;26(2):132-4

[A stereologic study on the influence of stent tube pressure

on bilio-intestinal anastomotic scar formation] Guo S, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Oct;33(10):626-9 (Eng. Abstr.) **(Chi)**

[Experimental study of trachea reconstruction using autogenous soft tissue of chest wall with the stent] Yin H, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec; 33(12):760-1 (Eng. Abstr.) **(Chi)**

[Metal stents in patients with malignant and benign stenoses of the biliary tract] Válek V, et al. **Rozhl Chir** 1997 Apr; 76(4):207-14 (Eng. Abstr.) **(Cze)**

[Transhepatic therapy of tumors of the biliary system] Petrtýl J. **Vnitr Lek** 1997 Mar;43(3):177-9 (Eng. Abstr.) **(Cze)**

[Stents in the treatment of coronary artery diseases (editorial)] Saunamäki KI. **Ugeskr Laeger** 1997 Mar 10;159(11):1583 **(Dan)**

[Stent implantation in genuine coronary vessels--with and without guidance of intracoronary ultrasound] Thuesen L, et al. **Ugeskr Laeger** 1997 Mar 10;159(11):1597-601 (Eng. Abstr.) **(Dan)**

[Nasolacrimal stent for epiphora caused by obstruction of the nasolacrimal duct] Posthuma BJ, et al. **Ned Tijdschr Geneeskd** 1997 Feb 15;141(7):339-41 (Eng. Abstr.) **(Dut)**

[Recurrent urethral stenosis treated with a Urolome Plus stent implantation: intermediate multicenter follow-up] Keppenne V, et al. **Acta Urol Belg** 1997 Mar;65(1):19-25 (Eng. Abstr.) **(Fre)**

[Internal drainage by double J ureteral stents. 91 cases] el Khader K, et al. **Ann Urol (Paris)** 1996;30(5):235-9 (Eng. Abstr.) **(Fre)**

[Antiplatelet therapy during coronary endoprosthesis placement] Barragan P, et al. **Arch Mal Coeur Vaiss** 1996 Nov;89(11 Suppl):1515-20 (42 ref.) (Eng. Abstr.) **(Fre)**

[Loss of a stent in the left main coronary artery and secondary migration into the left circumflex artery needing surgical extraction. Apropos of a case] Bedossa M, et al. **Arch Mal Coeur Vaiss** 1996 Dec;89(12):1677-80 (10 ref.) (Eng. Abstr.) **(Fre)**

[Implantation of coronary stent during the acute phase of myocardial infarction for treatment of dissection or partial result after angioplasty. Immediate results and angiographic follow-up] Maillard L, et al. **Arch Mal Coeur Vaiss** 1997 Feb;90(2):253-61 (Eng. Abstr.) **(Fre)**

[Treatment of abdominal aortic aneurysm by application of a Corvita endoprosthesis. Medium-term results of a feasibility study] Dereume JP, et al. **Chirurgie** 1996; 121(6):428-31 (Eng. Abstr.) **(Fre)**

[Placing of a Nitiol Memotherm prosthesis: personal experience] Wery D, et al. **J Belge Radiol** 1996 Nov; 79(5):223-6 (Eng. Abstr.) **(Fre)**

[Endovascular recanalization of primary thromboses of the iliac artery] Cardon JM, et al. **J Mal Vasc** 1996;21(2):107-10 **(Fre)**

[Venous endoprosthesis. Palliative treatment of superior caval syndrome of neoplastic origin] Marcy PY, et al. **J Radiol** 1997 Mar;78(3):209-14 (Eng. Abstr.) **(Fre)**

[Complications of double J ureteral stents] el Khader K. **J Urol (Paris)** 1996;102(4):173-5 (25 ref.) (Eng. Abstr.) **(Fre)**

[Why so many stents?] Guyon P, et al. **Presse Med** 1997 Apr 5;26(11):526-31 (19 ref.) (Eng. Abstr.) **(Fre)**

[Picture of the month. Spastic angina and moderate coronary lesion treated with stent angioplasty] Legrand V, et al. **Rev Med Liege** 1996 Dec;51(12):737-9 **(Fre)**

[Current possibilities for endoluminal arterial vascular procedures] Morin D, et al. **Rev Med Suisse Romande** 1997 Feb;117(2):117-25 (10 ref.) **(Fre)**

[Management of iatrogenic hemorrhage after mechanical vascular recanalization] Görich J, et al. **Aktuelle Radiol** 1996 Jan;6(1):28-31 (Eng. Abstr.) **(Ger)**

[Severe obliteration of the urethral lumen after wall stent implantation. An unusual radiographic finding] Ragozzino A, et al. **Aktuelle Radiol** 1997 Jul;7(4):179-82 (Eng. Abstr.) **(Ger)**

[Acute esophagus variceal hemorrhage and portal vein thrombosis as a complication of TIPSS. An unusual emergency indication for liver transplantation] Braun FM, et al. **Chirurg** 1996 Feb;67(2):190-4 (Eng. Abstr.) **(Ger)**

[Combined intraoperative retrograde stent implantation and thrombendarterectomy of the carotid artery] Bandorski T, et al. **Dtsch Med Wochenschr** 1997 Aug 15;122(33):999-1002 (Eng. Abstr.) **(Ger)**

[Stents for the palliative treatment of malignant gastric outlet stenoses] Januschowski R. **Dtsch Med Wochenschr** 1997 May 2;122(18):578-82 (Eng. Abstr.) **(Ger)**

[Elective coronary implantation of a newly developed stent without conventional anticoagulation] Markert T, et al. **Dtsch Med Wochenschr** 1996 Oct 4;121(40):1213-9 (Eng. Abstr.) **(Ger)**

[Therapy of venous stenosis using wall stents] Schwarzenberg H, et al. **Dtsch Med Wochenschr** 1996 Nov 8;121(45):1383-9 (Eng. Abstr.) **(Ger)**

[Stent implantation in coronary arteries--current status] Frombach R, et al. **Gesundheitswesen** 1997 Jul;59(7):447-51 (27 ref.) (Eng. Abstr.) **(Ger)**

[Current status of stent implantation] Kaufmann U, et al. **Internist (Berl)** 1997 Jan;38(1):20-6 (29 ref.) **(Ger)**

[Current status of abdominal aortic aneurysm therapy (editorial)] Allenberg JR. **Langenbecks Arch Chir** 1997; 382(3):117-8 **(Ger)**

[Esophageal carcinoma: downstaging or stent?] Grund KE, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:755-8 (15 ref.) (Eng. Abstr.) **(Ger)**

[Prospective preoperative morphometry of abdominal aortic aneurysms: selective patient management for endovascular surgery] Schumacher H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:875-7 (Eng. Abstr.) **(Ger)**

[Effect of endovascular surgery of infrarenal aortic aneurysms on circulating endothelial adhesion molecules, cytokines and proteinase inhibitors] Schumacher H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:15-9 (Eng. Abstr.) **(Ger)**

[Indications, technical implementation and results of endobronchial stent implantation] Thies J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:547-9 (Eng. Abstr.) **(Ger)**

[Endoscopic palliation of malignant esophageal stenoses] Baral J, et al. **Leber Magen Darm** 1996 Sep;26(5):243-6 (Eng. Abstr.) **(Ger)**

[Distal stenosis of the choledochus in chronic pancreatitis: endoscopic drainage or operation?] Meyer W, et al. **Leber Magen Darm** 1996 Sep;26(5):248, 251-3 (Eng. Abstr.) **(Ger)**

[Flexible contra rigid bronchoscopy for implantation of tracheobronchial prostheses (stents). Pro flexible bronchoscopy] Becker HD. **Pneumologie** 1997 Mar; 51(3):258-61 **(Ger)**

[Stent implantation in severe tracheal and bronchial compression caused by aortic aneurysm] Ewert R, et al. **Pneumologie** 1997 Jan;51(1):19-23 (Eng. Abstr.) **(Ger)**

[Flexible contra rigid bronchoscopy for implantation of tracheobronchial prostheses (stents). Pro rigid bronchoscopy] Freitag L. **Pneumologie** 1997 Mar; 51(3):255-7 **(Ger)**

[Interventional pneumology: procedures for pulmonary hemorrhage and tumor-induced superior vena cava syndrome] Witt C, et al. **Pneumologie** 1996 Feb;50(2):202-8 (51 ref.) (Eng. Abstr.) **(Ger)**

[Radiologic interventions in anastomosis complications after lung transplantation] Berger H, et al. **Radiologe** 1997 Mar; 37(3):220-4 (Eng. Abstr.) **(Ger)**

[Results of percutaneous implantation of coated vascular prostheses in long-distance femoropopliteal occlusions] Link J, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):281-7 (Eng. Abstr.) **(Ger)**

[Presentation of a new self-expanding vascular spiral stent] Rilinger N, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Dec;165(6):578-81 (Eng. Abstr.) **(Ger)**

[CT-supported virtual intra-arterial endoscopy after stent implantation: phantom studies and the initial clinical results] Rodenwaldt J, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Mar;166(3):180-4 (Eng. Abstr.) **(Ger)**

[Percutaneous therapy of malignant obstructive jaundice using expandable metal stents: a prospective study of 92 patients] Roeren T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Aug;165(2):181-7 (Eng. Abstr.) **(Ger)**

[Percutaneous removal of a stripped-off Palmaz stent in the renal artery] Schmitz-Rode T, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):293-5 **(Ger)**

[Anti-thrombosis therapy following coronary stent implantation] Schuiki E, et al. **Schweiz Rundsch Med Prax** 1996 Oct 15;85(42):1316-9 (28 ref.) (Eng. Abstr.) **(Ger)**

[Biliary and gastrointestinal bypass: laparoscopic possibilities] Schöb O, et al. **Swiss Surg** 1996;Suppl 4:29-32 (Eng. Abstr.) **(Ger)**

[Long-term results of wall stent implantation in benign prostatic hyperplasia and high risk status] Goepel M, et al. **Urologe A** 1997 Mar;36(2):151-6 (Eng. Abstr.) **(Ger)**

[Self-expanding permanent endoluminal stents in the ureter. 5 years results and critical evaluation] Pauer W, et al. **Urologe A** 1996 Nov;35(6):485-9 (Eng. Abstr.) **(Ger)**

[Reaction of the blood vessel wall to microporous endovascular prostheses] Marty B, et al. **Vasa** 1997; 26(1):33-8 (Eng. Abstr.) **(Ger)**

[Occlusion of an esophagobronchial fistula by implantation of a Montgomery esophageal and a dynamic tracheal stent after failure of conventional endoprosthesis] Alexiou C, et al. **Z Gastroenterol** 1997 Apr;35(4):277-83 (Eng. Abstr.) **(Ger)**

[Interventional endoscopic therapy of chronic pancreatitis] Löhr M, et al. **Z Gastroenterol** 1997 Jun;35(6):437-48 (Eng. Abstr.) **(Ger)**

[The significance of intravascular ultrasound in differential diagnosis and therapy of coronary stenoses] Görge G, et al. **Z Kardiol** 1996;85 Suppl 1:73-80 (41 ref.) (Eng. Abstr.) **(Ger)**

[Emergency stent implantation in the area of extensive muscle bridging of the anterior interventricular ramus after post-interventional dissection] Jeremias A, et al. **Z Kardiol** 1997 May;86(5):367-72 (Eng. Abstr.) **(Ger)**

[Initial clinical and angiographic results with the AVE Micro-Stent] Köster R, et al. **Z Kardiol** 1996 Sep; 85(9):640-6 (Eng. Abstr.) **(Ger)**

[Intravascular stents for treatment of systemic venous obstructions] Schranz D, et al. **Z Kardiol** 1996 Jul; 85(7):477-81 (Eng. Abstr.) **(Ger)**

[Interventional coronary revascularization in a patient with chronic dissection of the ascending aorta] von Kodolitsch Y, et al. **Z Kardiol** 1996 Sep;85(9):673-6 (Eng. Abstr.) **(Ger)**

[Infrarenal abdominal aortic aneurysm: morphological classification as decision aid for therapeutic procedures] Allenberg JR, et al. **Zentralbl Chir** 1996;121(9):721-6 (Eng. Abstr.) **(Ger)**

[Endoscopic prosthesis implantation in stenoses and fistulas of the proximal cervical esophagus] Binmoeller KF, et al. **Zentralbl Chir** 1997;122(1):44-8 (Eng. Abstr.) **(Ger)**

[Vascular stents and development of endoluminal therapy of aortic aneurysm] Blum U, et al. **Zentralbl Chir** 1996; 121(9):714-20 (47 ref.) (Eng. Abstr.) **(Ger)**

["The Stent Summit", 30-31 May 1996 in London] Grundmann RT. **Zentralbl Chir** 1996;121(9):794-5 **(Ger)**

[Initial clinical experiences with endovascular stent-grafts for treatment of infrarenal abdominal aortic aneurysm] Spillner G, et al. **Zentralbl Chir** 1996;121(9):727-33 (Eng. Abstr.) **(Ger)**

[Difficulties and complications in transfemoral implantation of stent prostheses in infrarenal abdominal aortic aneurysms] Stelter WJ, et al. **Zentralbl Chir** 1996; 121(9):734-43 (Eng. Abstr.) **(Ger)**

[Percutaneous transhepatic stent implantation versus hepaticojejunostomy in palliative therapy of distal malignant bile duct stenosis] Trautwein K, et al. **Zentralbl Chir** 1996;121(7):565-70 (Eng. Abstr.) **(Ger)**

[Laparoscopic management of a ureteral lesions in Schauta-Stoeckel radical vaginal hysterectomy] Kamprath S, et al. **Zentralbl Gynakol** 1996;118(7):414-6 (Eng. Abstr.) **(Ger)**

[Angioplasty and stenting of the carotid artery] Atar E, et al. **Harefuah** 1997 Mar 16;132(6):388-91, 448 (Eng. Abstr.) **(Heb)**

[Recommendations for coronary catheterization, revascularization, and arrangement of coronary stent] Battler A, et al. **Harefuah** 1997 Apr 1;132(7):500-1 **(Heb)**

[The use of Wallstent in malignant constrictions of the gastrointestinal tract] Solt J, et al. **Orv Hetil** 1997 Sep 14; 138(37):2349-54 (Eng. Abstr.) **(Hun)**

[Postintubation stenosis of the trachea treated by silicone stent implantation] Strausz J. **Orv Hetil** 1996 Jul 14; 137(28):1515-7 (Eng. Abstr.) **(Hun)**

[Use of coronary vessel prosthesis. Complex coronary angioplasty under general anesthesia (see comments)] Szatmáry LJ, et al. **Orv Hetil** 1997 Feb 9;138(6):349-51 (Eng. Abstr.). Comment in: Orv Hetil 1997 Aug 10;138(32):2042. **(Hun)**

[Stents in the treatment of stenosis of the entero-urethral junction in continent diversion: case reports] Pizzocaro M, et al. **Arch Ital Urol Androl** 1996 Dec;68(5):319-22 (Eng. Abstr.) **(Ita)**

[Intravascular stents in the treatment of congenital cardiopathy] Ballerini L, et al. **Cardiologia** 1995 Dec;40(12 Suppl 1):413-5 **(Ita)**

[Single-center experience with the Palmaz-Schatz intracoronary stent: the immediate results and medium- and long-term follow-up] Galassi AR, et al. **Cardiologia** 1996 Nov;41(11):1097-105 (Eng. Abstr.) **(Ita)**

[Implanting of coronary stents in patients with unstable angina] Palmerini T, et al. **Cardiologia** 1997 Apr; 42(4):415-20 (Eng. Abstr.) **(Ita)**

[Percutaneous stenting of the renal arteries] Rabbia C, et al. **Cardiologia** 1997 Jul;42(7):757-60 **(Ita)**

[Evolution in coronary stenting: use of ticlopidine with and without oral anticoagulants] Zanini R, et al. **Cardiologia** 1997 Aug;42(8):837-43 (32 ref.) (Eng. Abstr.) **(Ita)**

[Use of endoprosthesis in the treatment of airway pathology] Cicconetti F, et al. **G Chir** 1997 Mar;18(3):135-9 (Eng. Abstr.) **(Ita)**

[Mechanical endarterectomy: review of the literature and description of an original device] Terrinoni V, et al. **G Chir** 1997 Mar;18(3):122-6 (Eng. Abstr.) **(Ita)**

[Coronary stenting for treatment of intimal dissection and occlusive thrombosis during primary PTCA in acute myocardial infarction] Galli M, et al. **G Ital Cardiol** 1997 Apr;27(4):370-3 (Eng. Abstr.) **(Ita)**

[To stent or not stent, the question and the problem (editorial)] Klugmann S. **G Ital Cardiol** 1997 Mar; 27(3):309-11 **(Ita)**

[Endovascular treatment of abdominal aorta aneurysms using the Stentor device. Preliminary experience] Jausseran JM, et al. **Minerva Cardioangiol** 1996 Nov;44(11):563-79 (Eng. Abstr.) **(Ita)**

[The use of self-expandable stents in the treatment of tracheobronchial diseases] Ambrogi C, et al. **Radiol Med (Torino)** 1996 Oct;92(4):448-52 **(Ita)**

[Use of the Cragg stent in the treatment of popliteal artery aneurysm: report of a case] Maglione F, et al. **Radiol Med (Torino)** 1996 Nov;92(5):662-4 **(Ita)**

[Urgent medical situation and therapeutic strategy in patients undergoing digestive cancer surgery (inflammation, stenosis, hemorrhage)] Mizobuchi N, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):279-84 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Surgical emergency induced by chest tumors] Yamaguchi Y, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):272-8 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Risk of side branch occlusion after coronary Palmaz-Schatz stenting] Hayashi S, et al. **J Cardiol** 1997 May;29(5):261-6 (Eng. Abstr.) **(Jpn)**

[A case report of relapsed esophageal cancer with tracheal stenosis treated with expandable metallic stent placement] Ojika T, et al. **Kyobu Geka** 1996 Aug;49(9):791–3 (Eng. Abstr.) **(Jpn)**

[A case of bronchial stenosis due to postoperative inflammation treated with expandable metallic stent] Tabata S, et al. **Kyobu Geka** 1997 Jun;50(6):507–10 (Eng. Abstr.) **(Jpn)**

[Treatments for T4 advanced lung cancer with invasion to the superior vena cava] Takao M, et al. **Kyobu Geka** 1997 Feb;50(2):101–5 (Eng. Abstr.) **(Jpn)**

[Balloon angioplasty and metallic stent] Nishimine K, et al. **Nippon Geka Gakkai Zasshi** 1996 Jul;97(7):532–9 (24 ref.) (Eng. Abstr.) **(Jpn)**

[A case of malignant esophageal stenosis with esophagobronchial fistula treated with a covered wallstent] Iwasaki Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Dec;56(14):1071–2 (Eng. Abstr.) **(Jpn)**

[Gore–tex covering of ultraflex stent and its usefulness for malignant esophageal stenosis: preliminary clinical results] Kishi K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1996 Sep;56(11):741–3 (Eng. Abstr.) **(Jpn)**

[Dynamic stent useful for trachocarinal stenosis due to lung cancer] Hayashi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1787–91 (Eng. Abstr.) **(Jpn)**

[Stent graft treatment for two cases of DeBakey IIIb dissecting aortic aneurysm] Kawaguchi S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jun;45(6):926–33 (Eng. Abstr.) **(Jpn)**

[Self–expanding nitinol stents for treatment of tracheobronchial and esophageal stenosis caused by lung cancer] Muro K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Dec; 44(12):2205–11 (Eng. Abstr.) **(Jpn)**

[Use of silicone stents for tracheobronchial stenosis due to tumors] Nomori H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May;45(5):666–9 (Eng. Abstr.) **(Jpn)**

[Esophago–bronchial fistula which developed after the insertion of an expandable metallic stent for corrosive esophageal stenosis] Tagawa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul;45(7):1044–8 (Eng. Abstr.) **(Jpn)**

[Usefulness of Dumon–type endotracheal stent for left main bronchial obstruction caused by thoracic aortic aneurysm—a case report] Watanabe S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1776–80 (Eng. Abstr.) **(Jpn)**

[Airway stenosis and stents] Miyazawa T, et al. **Nippon Naika Gakkai Zasshi** 1996 Dec 10;85(12):2086–90 (11 ref.) **(Jpn)**

[Biliary endoprosthesis using metallic stents in management of malignant biliary strictures] Ogawa K, et al. **Nippon Rinsho** 1996 Nov;54(11):3143–56 (28 ref.) (Eng. Abstr.) **(Jpn)**

[Nine cases of malignant biliary stenosis treated with transpapillary placement of Wallstent] Kikuyama M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):73–8 **(Jpn)**

[Comparison of Gore–tex covered Ultraflex stent and bare Ultraflex stent: preliminary clinical results] Sonomura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):8–11 (Eng. Abstr.) **(Jpn)**

[A long surviving case of carcinoma of the common hepatic duct treated by chemotherapy with CDDP in the percutaneous external biliary tube and endoprosthesis] Yamashina T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Dec;93(12):927–31 **(Jpn)**

[Use of shape memory alloy in cardiac surgery] Matsumoto H, et al. **Rinsho Kyobu Geka** 1988 Feb;8(1):81–4 (Eng. Abstr.) **(Jpn)**

[Use of the Palmaz–Schatz stent in the acute phase of myocardial infarction in a patient with cardiogenic shock] Viana AW, et al. **Arq Bras Cardiol** 1996 Nov;67(5):343–6 (Eng. Abstr.) **(Por)**

[The implantation of Palmaz–Schatz stents via 6F catheters without oral hypocoagulation] Carvalho H, et al. **Rev Port Cardiol** 1997 Feb;16(2):185–8 **(Por)**

[The long–term angiographic follow–up of intracoronary stent implantation] Matias F, et al. **Rev Port Cardiol** 1997 Feb;16(2):179–82 **(Por)**

[Intraoperative coronary angioscopy after unsuccessful percutaneous dilatation angioplasty and the implantation of an intracoronary stent] Busch T, et al. **Chirurgia (Bucur)** 1996 Mar–Apr;45(2):85–9 (Eng. Abstr.) **(Rum)**

[Surgical prosthesis in Klatskin's tumor: the indications and results] Ticmeanu F. **Chirurgia (Bucur)** 1996 May–Jun; 45(3):119–24 (Eng. Abstr.) **(Rum)**

[The use of endoprosthesis in treating tracheal and bronchial stenosis] Grubnik VV, et al. **Klin Khir** 1996;(11–12):38–41 (48 ref.) **(Rus)**

[A case of using PALMAZ–SCHATZ intracoronary stent in patient with nonspecific aortoarteritis] Pavlov NA, et al. **Vestn Rentgenol Radiol** 1997 Jul–Aug;(4):30–3 **(Rus)**

[Polyester–covered spiral Z stent. Initial clinical experience with endovascular treatment of aortic aneurysms] Ferko A, et al. **Rozhl Chir** 1996 Sep;75(9):450–60 (Eng. Abstr.) **(Slo)**

[Wallstent prosthesis of unusual location caused by recurrent urethral stenosis following repeated urethroplasty] Guzmán Martínez–Valls PL, et al. **Actas Urol Esp** 1996 Sep; 20(8):760–3 (Eng. Abstr.) **(Spa)**

[Endourethral prosthesis in recurrent urethral stenosis. Long–term follow–up] Guzmań Martínez–Valls PL, et al. **Arch Esp Urol** 1996 May;49(4):421–5 (Eng. Abstr.) **(Spa)**

[Use of intracoronary stents without anticoagulants. Experience of the Hospital Espanōl of Mexico] Carrillo Anaya A, et al. **Arch Inst Cardiol Mex** 1996 Jul–Aug; 66(4):331–8 (Eng. Abstr.) **(Spa)**

[Stentomania] Escudero X. **Arch Inst Cardiol Mex** 1997 Jan–Feb;67(1):7–10 **(Spa)**

[Clinical experience with AVE Micro Stent. Results of the implantation of 204 stents] Gaspar J, et al. **Arch Inst Cardiol Mex** 1996 Nov–Dec;66(6):476–83 (Eng. Abstr.) **(Spa)**

[Coronary stents. Results during the hospitalization phase] Villavicencio Fernández R, et al. **Arch Inst Cardiol Mex** 1997 Jan–Feb;67(1):24–8 (Eng. Abstr.) **(Spa)**

[Experience with Palmaz stent in pulmonary branch stenosis] Alcibar J, et al. **Rev Esp Cardiol** 1997 Mar;50(3):179–86 (Eng. Abstr.) **(Spa)**

[The role of non–angiographic observations (IVUS, angioscopy, doppler) in coronary stenting] Alfonso F, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:52–62 (67 ref.) (Eng. Abstr.) **(Spa)**

[The role of the stent in non–coronary cardiopathies] Bermúdez–Cañete R, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:69–82 (Eng. Abstr.) **(Spa)**

[Intracoronary stents in the treatment of angioplasty complications] Cequier A, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:21–30 (121 ref.) (Eng. Abstr.) **(Spa)**

[Is there one type of stent for every lesion?] García E, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:44–51 (49 ref.) (Eng. Abstr.) **(Spa)**

[Wiktor stent in de novo lesions: immediate results in 100 consecutive patients] García E, et al. **Rev Esp Cardiol** 1996 Jul;49(7):509–15 (Eng. Abstr.) **(Spa)**

[The stent in cardiologic interventions. Introduction] García Fernández E. **Rev Esp Cardiol** 1997;50 Suppl 2:1–2 **(Spa)**

[Future perspectives in coronary stenting] Hernández Antolín RA, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:95–106 (132 ref.) (Eng. Abstr.) **(Spa)**

[Stents and de novo coronary lesions. Meta–analysis] Masotti M, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:3–9 (Eng. Abstr.) **(Spa)**

[Primary stent treatment in the acute phase of myocardial infaction] Medina A, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:63–8 (Eng. Abstr.) **(Spa)**

[Coronary endoprosthesis (stents) implanted without coumadin administration: one year's experience] Pérez de Prado A, et al. **Rev Esp Cardiol** 1996 Jun;49(6):439–43 (Eng. Abstr.) **(Spa)**

[Intracoronary stent in primary angioplasty in acute myocardial infarction] Pomar Domingo F, et al. **Rev Esp Cardiol** 1997 Apr;50(4):248–53 (Eng. Abstr.) **(Spa)**

[The effectiveness of stents in restinotic lesions and coronary grafts] Valdés M, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:10–20 (57 ref.) (Eng. Abstr.) **(Spa)**

[Treatment of acute colorectal obstructions by implantation of expandable metal prosthesis] De Gregorio MA, et al. **Rev Esp Enferm Dig** 1996 Oct;88(10):667–71 (Eng. Abstr.) **(Spa)**

[Photodynamic therapy, laser therapy, brachytherapy, stents. Local control of lung cancer] Hillerdal G. **Lakartidningen** 1997 Jun 18;94(25):2377–9, 2380 (Eng. Abstr.) **(Swe)**

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Ultrasound–guided treatment of acute coronary stent thrombosis. Pasquetto G, et al. **Am Heart J** 1996 Nov; 132(5):1081–4

Arterial perforation during optimization of coronary stents using high–pressure balloon inflations. Alfonso F, et al. **Am J Cardiol** 1996 Nov 15;78(10):1169–72

Stent embolization during intracoronary stenting. Alfonso F, et al. **Am J Cardiol** 1996 Oct 1;78(7):833–5

Use of cilostazol, a novel antiplatelet agent, in a post–Palmaz–Schatz stenting regimen. Ochiai M, et al. **Am J Cardiol** 1997 Jun 1;79(11):1471–4

Frequency and outcome of development of coronary artery aneurysm after intracoronary stent placement and angioplasty. STRESS Trial Investigators. Slota PA, et al. **Am J Cardiol** 1997 Apr 15;79(8):1104–6

Peritoneal and pleural infection following placement of an internal biliary stent for a large bile leak. Weiss K, et al. **Am J Gastroenterol** 1997 Feb;92(2):347–8 (9 ref.)

Antithrombotic therapy after intracoronary stent placement. Clifton GD. **Am J Health Syst Pharm** 1997 Feb 15; 54(4):437–40

Ticlopidine and aspirin therapy following implantation of coronary artery stents. Hobson AG, et al. **Ann Pharmacother** 1997 Jun;31(6):770–2 (16 ref.)

Tracheal wire stent complications in malacia: implications of position and design. Hramiec JE, et al. **Ann Thorac Surg** 1997 Jan;63(1):209–12; discussion 213

Infection of a chronically implanted iliac artery stent. Bunt TJ, et al. **Ann Vasc Surg** 1997 Sep;11(5):529–32

Experimental trial of balloon–expandable, metallic Palmaz stent in the trachea. Fraga JC, et al. **Arch Otolaryngol Head Neck Surg** 1997 May;123(5):522–8

Relationship of vascular thrombosis and inflammatory leukocyte infiltration to neointimal growth following porcine coronary artery stent placement. Miller DD, et al. **Atherosclerosis** 1996 Aug 2;124(2):145–55

A late complication of palliative stenting of malignant oesophageal obstruction [letter] Begbie S, et al. **Aust N Z J Med** 1996 Feb;26(1):115

Peritoneal seeding of pancreatic head carcinoma following percutaneous transhepatic drainage and stenting [letter] Crinnion JN, et al. **Br J Surg** 1997 Aug;84(8):1171

Peritoneal seeding of pancreatic head carcinoma following percutaneous transhepatic drainage and stenting. Doctor N, et al. **Br J Surg** 1997 Feb;84(2):197

Antiplatelet therapy alone is safe and effective after coronary stenting: observations of a transition in practice. Zubaid M, et al. **Can J Cardiol** 1997 Apr;13(4):335–40

Complications during renal artery stent placement for atherosclerotic ostial stenosis. Beek FJ, et al. **Cardiovasc Intervent Radiol** 1997 May–Jun;20(3):184–90

Perivascular inflammatory reaction after percutaneous placement of covered stents. Link J, et al. **Cardiovasc Intervent Radiol** 1996 Sep–Oct;19(5):345–7

Stent implantation in severely angulated lesions: safety, efficacy, and morphological remodelling. Abhyankar AD, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):261–4

Coronary flow parameters and restenosis after incomplete covering of the dissection with stent [letter; comment] Antonellis JP, et al. **Cathet Cardiovasc Diagn** 1996 Jul; 38(3):332–3. Comment on: Cathet Cardiovasc Diagn 1995 Nov;36(3):278–80.

Cardiac tamponade following stent implantation with adjuvant platelet IIb/IIIa receptor inhibitor administration. Bottner RK, et al. **Cathet Cardiovasc Diagn** 1997 Apr; 40(4):380–2 (4 ref.)

The "Concorde" stent: a novel use of a stiff bent guidewire to facilitate stent deployment. Carlson TA, et al. **Cathet Cardiovasc Diagn** 1997 Mar;40(3):277–80

Successful management of Palmaz–Schatz stents deformed by inadvertent angioplasty outside the stents. Chu TN, et al. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):435–9

Extraction of fully deployed coronary stents. Eisenhauer AC, et al. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):393–401

Short–term angiographic and long–term clinical follow–up of a patient with a malexpanded vein graft stent [see comments] Gavaliatsis IP, et al. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):413–4. Comment in: Cathet Cardiovasc Diagn 1997 Aug;41(4):415.

Stenting within a stent for treatment of residual dissection. Hamon M, et al. **Cathet Cardiovasc Diagn** 1997 Mar; 40(3):319–21

Intravascular ultrasound identification of stent entrapment in vivo with in vitro confirmation. Hiro T, et al. **Cathet Cardiovasc Diagn** 1997 Jan;40(1):40–5

Acute recoil of Palmaz–Schatz stent: a rare cause of suboptimal stent implantation—report of two cases with intravascular ultrasound findings. Itoh A, et al. **Cathet Cardiovasc Diagn** 1996 Mar;37(3):334–8

Ventricular perforation following stenting of left anterior descending artery [letter] Kaul U, et al. **Cathet Cardiovasc Diagn** 1997 Sep;42(1):109

Embolization of a Wiktor stent within a stent: successful nonsurgical management. Kaul U, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):277–9

Fatal infection of coronary stent implantation. Leroy O, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):168–70; discussion 171 (6 ref.)

Stent stranded in left main [editorial; comment] Linnemeier TJ. **Cathet Cardiovasc Diagn** 1996 Aug;38(4):405. Comment on: Cathet Cardiovasc Diagn 1996 Aug;38(4):402–4.

Palmaz stent compression in patients following carotid artery stenting. Mathur A, et al. **Cathet Cardiovasc Diagn** 1997 Jun;41(2):137–40

Rupture of coronary artery and cardiac tamponade complicating Wallstent implantation. Mendzelevski B, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):368–71

Distortion of Palmaz–Schatz stent geometry following side–branch balloon dilation through the stent in a rabbit model. Pomerantz RM, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):422–6

Plaque prolapse between the struts of the intracoronary Palmaz–Schatz stent: report of two cases with a novel treatment of this unusual problem. Ponde CK, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):353–7

Coronary aneurysm after bailout stent implantation: diagnosis of a false lumen with intravascular ultrasound [see comments] Regar E, et al. **Cathet Cardiovasc Diagn** 1997 Aug;41(4):407–10. Comment in: Cathet Cardiovasc Diagn 1997 Aug;41(4):411–2.

Dissection after coronary stenting: stretching the limit? [editorial] Satler LF, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):266

Vessel tearing at the edge of intracoronary stents detected with intravascular ultrasound imaging. Schwarzacher SP, et al. **Cathet Cardiovasc Diagn** 1997 Feb;40(2):152–5

Perforation of saphenous vein graft during coronary stenting: a case report. Shammas NW, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):274–6

Thrombotic occlusion of the coronary artery associated with accidental detachment of undeployed Palmaz–Schatz stent. Shiojima I, et al. **Cathet Cardiovasc Diagn** 1996 Aug;

38(4):360–2
Stent thrombosis in a patient receiving chemotherapy. Smith SC, et al. **Cathet Cardiovasc Diagn** 1997 Apr;40(4):383–6 (24 ref.)
The stenotic stent: mechanisms and revascularization options. Topaz O, et al. **Cathet Cardiovasc Diagn** 1996 Mar; 37(3):293–9 (40 ref.)
Rescue revascularization of tandem occluded intracoronary stents: technique and equipment. Topaz O, et al. **Cathet Cardiovasc Diagn** 1996 Oct;39(2):185–90
Foreign body contamination during stent implantation. Whelan DM, et al. **Cathet Cardiovasc Diagn** 1997 Mar; 40(3):328–32
Migration of the AVE Micro coronary stent. Wong P, et al. **Cathet Cardiovasc Diagn** 1996 Jul;38(3):267–73
Stent thrombosis. Closing in on the best preventive treatment [editorial; comment] Baim DS, et al. **Circulation** 1997 Mar 4;95(5):1098–100 (14 ref.). Comment on: Circulation 1997 Mar 4;95(5):1145–56.
Experimental study of thrombogenicity and foreign body reaction induced by heparin–coated coronary stents. De Scheerder I, et al. **Circulation** 1997 Mar 18;95(6):1549–53
Inflammatory response to coronary artery stenting [letter] Karim MA. **Circulation** 1997 Sep 16;96(6):2091–3
Effects of GP IIb/IIIa receptor monoclonal antibody (7E3), heparin, and aspirin in an ex vivo canine arteriovenous shunt model of stent thrombosis. Makkar RR, et al. **Circulation** 1997 Feb 18;95(4):1015–21
Endogenous cell seeding. Remnant endothelium after stenting enhances vascular repair. Rogers C, et al. **Circulation** 1996 Dec 1;94(11):2909–14
Subacute thrombosis and vascular injury resulting from slotted–tube nitinol and stainless steel stents in a rabbit carotid artery model [published erratum appears in Circulation 1996 Nov 15;94(10):2668] Sheth S, et al. **Circulation** 1996 Oct 1;94(7):1733–40
Reduction in stent and vascular graft thrombosis and enhancement of thrombolysis by recombinant Lys–plasminogen in nonhuman primates. Sundell IB, et al. **Circulation** 1997 Aug 5;96(3):941–8
Role of activation–dependent platelet membrane glycoproteins in development of subacute occlusive coronary stent thrombosis. Gawaz M, et al. **Coron Artery Dis** 1997 Mar–Apr;8(3–4):121–8
Treâtment of metallic biliary stent–induced duodenal ulceration using endoscopic laser therapy. Yarze JC, et al. **Dig Dis Sci** 1997 Jan;42(1):6–9
Breakage of an endobiliary metal stent. Born P, et al. **Endoscopy** 1996 Aug;28(6):526
Misplacement of endoscopic biliary endoprostheses. Nicholson AA, et al. **Endoscopy** 1997 Feb;29(2):125–7
A severe complication of the new self–expanding spiral nitinol biliary stent. Pescatore P, et al. **Endoscopy** 1997 Jun; 29(5):413–5
Sigmoid perforation: a rare complication of a migrated biliary endoprosthesis. Schaafsma RJ, et al. **Endoscopy** 1996 Jun; 28(5):469–70
Photodynamic therapy for the treatment of tumor ingrowth in expandable esophageal stents. Scheider DM, et al. **Endoscopy** 1997 May;29(4):271–4
Can the expandable esophageal metal Endocoil stent be safely removed? Segalin A, et al. **Endoscopy** 1997 May;29(4):337–9
Massive hemorrhage caused by a perforating Gianturco–Z stent resulting in an aortoesophageal fistula. Siersema PD, et al. **Endoscopy** 1997 Jun;29(5):416–20 (44 ref.)
Lower intestinal hemorrhage due to a dislodged metallic stent. Wong SY, et al. **Endoscopy** 1997 Jun;29(5):407–8
Is anticoagulation for intracoronary stenting justified? [editorial; comment] Corr L. **Eur Heart J** 1996 Sep; 17(9):1296–8. Comment on: Eur Heart J 1996 Sep;17(9):1373–80.
Stent thrombosis revisited. Gershlick AH, et al. **Eur Heart J** 1996 Nov;17(11):1623–8 (39 ref.)
Combined antiplatelet therapy with ticlopidine and aspirin. A simplified approach to intracoronary stent management [see comments] Lablanche JM, et al. **Eur Heart J** 1996 Sep;17(9):1373–80. Comment in: Eur Heart J 1996 Sep;;17(9):1296–8.
Bile duct stents: is there an increased rate of complications in patients receiving chemotherapy? Lofts FJ, et al. **Eur J Cancer** 1997 Feb;33(2):209–13
Fatal colonic ischaemia after stent graft for aortic aneurysm. Sandison AJ, et al. **Eur J Vasc Endovasc Surg** 1997 Feb; 13(2):219–20
Urothelial hyperplasia complicating use of metal stents in malignant ureteral obstruction. Hekimoğlu B, et al. **Eur Radiol** 1996;6(5):675–81
Pleurobiliary fistula following Tannenbaum biliary stent insertion. Richenberg JI, et al. **Eur Radiol** 1996;6(5):697–9
Endoscopic removal of a "floating" biliary Gianturco Z stent five years after placement for a benign anastomotic stricture in a liver transplant patient. Baron TH, et al. **Gastrointest Endosc** 1997 Jul;46(1):80–2
Pericardioesophageal fistula associated with metallic stent placement. Dennert B, et al. **Gastrointest Endosc** 1997 Jan; 45(1):82–4
Perforation of the endoscope covering by needle–like ends of esophageal metal mesh stents [letter] Messmann H, et al. **Gastrointest Endosc** 1996 Aug;44(2):210–11
Alterations in pancreatic ductal morphology following polyethylene pancreatic stent therapy [letter] Ramesh H. **Gastrointest Endosc** 1997 Aug;46(2):196–7
Stent–induced pancreatic ductal and parenchymal changes: correlation of endoscopic ultrasound with ERCP. Sherman S, et al. **Gastrointest Endosc** 1996 Sep;44(3):276–82
Alterations in pancreatic ductal morphology following polyethylene pancreatic stent therapy. Smith MT, et al. **Gastrointest Endosc** 1996 Sep;44(3):268–75
Analysis of occluded pancreatic stents and juices in patients with chronic pancreatitis. Smits ME, et al. **Gastrointest Endosc** 1997 Jan;45(1):52–8
Transpapillary stenting of proximal biliary strictures: does biliary sphincterotomy reduce the risk of postprocedure pancreatitis? Tarnasky PR, et al. **Gastrointest Endosc** 1997 Jan;45(1):46–51 (27 ref.)
Snare beside–a–wire biliary stent exchange: a method that maintains access across biliary strictures. Tarnasky PR, et al. **Gastrointest Endosc** 1996 Aug;44(2):185–7
Tandem expandable stent technique for a fractured nitinol stent [letter] Trowers EA, et al. **Gastrointest Endosc** 1997 Feb;45(2):217–8
Endoscopic palliation of malignant obstructive jaundice using resterilized accessories: an audit of success, complications, mortality and cost [see comments] Swaroop VS, et al. **Indian J Gastroenterol** 1997 Jul;16(3):91–3. Comment in: Indian J Gastroenterol 1997 Jul;16(3):83–4.
Articulation strut coronary restenosis in Palmaz–Schatz stents. Davis G, et al. **Int J Cardiol** 1996 Jun;54(3):266–71
Management of subacute stent closure. Hasdai D, et al. **Int J Cardiol** 1996 Jul 26;55(2):115–6 (10 ref.)
Coronary artery aneurysmal fistula: a late complication of stent deployment. Karim MA. **Int J Cardiol** 1996 Dec 13; 57(3):207–9
Arterial remodeling after experimental percutaneous injury is highly dependent on adventitial injury and histopathology. Staab ME, et al. **Int J Cardiol** 1997 Jan 3;58(1):31–40
Spontaneous fragmentation of a double J stent. Adsan O, et al. **Int Urol Nephrol** 1997;29(3):307–11
Chronic arterial responses to stent implantation: a serial intravascular ultrasound analysis of Palmaz–Schatz stents in native coronary arteries. Hoffmann R, et al. **J Am Coll Cardiol** 1996 Nov 1;28(5):1134–9
Entrapment of a coronary stent in the left main trunk: an easy method for surgical removal. Benedetti M, et al. **J Card Surg** 1996 Jan–Feb;11(1):79–82
Complications of endopyelotomy. Bellman GC. **J Endourol** 1996 Apr;10(2):177–81 (18 ref.)
Percutaneous treatment of a collapsed stent–graft. Ahmad AA, et al. **J Vasc Interv Radiol** 1997 Jul–Aug;8(4):637–9
Endovascular infection after renal artery stent placement [see comments] Gordon GI, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):669–72. Comment in: J Vasc Interv Radiol 1997 Mar–Apr;8(2):302.
Septic arteritis causing iliac artery rupture and aneurysmal transformation of the distal aorta after iliac artery stent placement. Hoffman AI, et al. **J Vasc Interv Radiol** 1997 Mar–Apr;8(2):215–9
Stent–graft failure in a patient with a connective tissue disorder. Hovsepian DM, et al. **J Vasc Interv Radiol** 1997 Sep–Oct;8(5):789–93
Complications of iliac artery stent deployment [see comments] Ballard JL, et al. **J Vasc Surg** 1996 Oct; 24(4):545–53; discussion 553–5. Comment in: J Vasc Surg 1997 May;25(5):960–1.
Secondary rupture of a common iliac artery aneurysm after endovascular exclusion and stent–graft infection [letter] Kolvenbach R, et al. **J Vasc Surg** 1997 Aug;26(2):351–3
Regarding "Complications of iliac artery stent deployment" [letter; comment] Murphy TP. **J Vasc Surg** 1997 May; 25(5):960–1. Comment on: J Vasc Surg 1996 Oct;24(4):545–53; discussion 553–5.
Stenting for carotid stenosis? [letter; comment] Estes JM, et al. **N Engl J Med** 1997 Aug 7;337(6):427–8. Comment on: N Engl J Med 1997 Apr 3;336(14):1008–11.
Endoscopic palliation of malignant dysphagia [letter; comment] McCray RS. **N Engl J Med** 1997 Jan 23; 336(4):294; discussion 294–5. Comment on: N Engl J Med 1996 Aug 15;335(7):475.
Antithrombotic therapy after intracoronary stenting. Spinler S, et al. **Pharmacotherapy** 1997 Jan–Feb;17(1):74–90 (68 ref.)
Cardiac perforation due to Wallstent embolization: a fatal complication of the transjugular intrahepatic portosystemic shunt procedure. Prahlow JA, et al. **Radiology** 1997 Oct; 205(1):170–2
Perigraft inflammation due to Dacron–covered stent–grafts in sheep iliac arteries: correlation of MR imaging and histopathologic findings. Schürmann K, et al. **Radiology** 1997 Sep;204(3):757–63
Concerns regarding carotid artery angioplasty and stenting [letter; comment] Ammar AD. **Stroke** 1996 Nov; 27(11):2143–4. Comment on: Stroke 1996 Feb;27(2):197–8.
Small–bowel obstruction and perforation. A rare complication of an esophageal stent. Henne TH, et al. **Surg Endosc** 1997 Apr;11(4):383–4
Minimally invasive management of the calcified ureteral stent. Shandera KC. **Tech Urol** 1997 Spring;3(1):54–7
Coating of cardiovascular stents with a semiconductor to improve their hemocompatibility. Bolz A, et al. **Tex Heart Inst J** 1996;23(2):162–6
Gianturco stents in the tracheobronchial tree [letter; comment] Bolliger CT. **Thorax** 1997 Apr;52(4):400. Comment on: Thorax 1996 Mar;51(3):248–52.
Expandable metal stents for non–malignant bronchial obstruction. Fox RA, et al. **Thorax** 1996 Sep;51(9):963–4
Flow cytometric analysis of coronary stent–induced alterations of platelet antigens in an in vitro model. Gutensohn K, et al. **Thromb Res** 1997 Apr 1;86(1):49–56
Infectious complications after the use of double J ureteral stents. Eschwège P, et al. **Transplant Proc** 1996 Oct; 28(5):2833
Is it possible to prevent bacterial adhesion onto ureteric stents? Cormio L, et al. **Urol Res** 1997;25(3):213–6
A long–forgotten ureteral stent. McKiernan JM, et al. **Urology** 1997 Apr;49(4):622–3
[A rare cause of ileus and its laparoscopic treatment] Kala Z, et al. **Rozhl Chir** 1997 May;76(5):246–9 (Eng. Abstr.) **(Cze)**
[Medical treatment after implantation of intracoronary stents] Caussin C, et al. **Presse Med** 1997 Apr 5;26(11):532–5 (14 ref.) (Eng. Abstr.) **(Fre)**
[An unusual complication of anterograde endopyelotomy: ureteral intussusception (a case report)] el Khader K, et al. **Prog Urol** 1997 Apr;7(2):273–6 (14 ref.) (Eng. Abstr.) **(Fre)**
[The rupture of an iliac aneurysm after its endovascular elimination. The problems of stent infection (letter)] Kolvenbach R, et al. **Dtsch Med Wochenschr** 1997 Aug 22;122(34–35):1059–60 **(Ger)**
[Early stent–induced thrombosis in the pelvic circulation: a complication in APC resistance] Lenglinger FX, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Mar;166(3):260–2 (11 ref.) **(Ger)**
[Percutaneous removal of displaced metal stents in TIPS] Textor HJ, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):288–92 (Eng. Abstr.) **(Ger)**
[The penetration of a bile duct metal stent into the duodenal bulb as a late complication of combined stent/radiotherapy in Klatskin's tumor] Wingen M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):75–7 (10 ref.) **(Ger)**
[The use of coronary artery prostheses (letter; comment)] Lozsádi K. **Orv Hetil** 1997 Aug 10;138(32):2042. Comment on: Orv Hetil 1997 Feb 9;138(6):349–51. **(Hun)**
[Three cases of hydronephrosis in which the indwelt ureteral stent was ineffective. Urodynamic studies using a stent indwelling model for retroperitoneal fibrosis] Kawamura S, et al. **Hinyokika Kiyo** 1996 Jul;42(7):497–501 (Eng. Abstr.) **(Jpn)**
[A surgically treated case of coronary rupture by Palmaz–Schatz stenting] Wang ZM, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 May;44(5):659–63 (Eng. Abstr.) **(Jpn)**
[A case report of hemobilia and biliary obstruction caused by a pseudoaneurysm as a complication of percutaneous placement of Wallstent] Murayama M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Feb;94(2):139–42 **(Jpn)**
[Post–implant antithrombotic treatment after intracoronary stents. Thrombotic occlusion] Alonso Martín JJ, et al. **Rev Esp Cardiol** 1997;50 Suppl 2:31–43 (97 ref.) (Eng. Abstr.) **(Spa)**
[Complications at the first month following various types of intracoronary stents, implanted with high pressure without intracoronary ultrasonography or anticoagulation] Valdés M, et al. **Rev Esp Cardiol** 1996 Jun;49(6):432–8 (35 ref.) (Eng. Abstr.) **(Spa)**

CLASSIFICATION

[Different types of coronary stents] Bourachot ML, et al. **Presse Med** 1997 Apr 5;26(11):536–40 (15 ref.) (Eng. Abstr.) **(Fre)**
[Effectiveness of the Palmaz Schatz stent in elderly patients with unstable angina: factors predictive of short–term and long–term events] Klugmann S, et al. **G Ital Cardiol** 1997 Jul;27(7):659–68 (35 ref.) (Eng. Abstr.) **(Ita)**

ECONOMICS

The impact of optimal stenting techniques on cardiac catheterization laboratory resource utilization and costs. Sukin CA, et al. **Am J Cardiol** 1997 Feb 1;79(3):275–80
Funding of coronary angioplasty in public hospitals [letter; comment] Batey RG. **Aust N Z J Med** 1996 Jun;26(3):430 . Comment on: Aust N Z J Med 1996 Feb;26(1):3–4.
Funding of coronary angioplasty in public hospitals [letter; comment] Eccleston DS, et al. **Aust N Z J Med** 1996 Jun; 26(3):430–1. Comment on: Aust N Z J Med 1996 Feb;26(1):3–4.
Funding of coronary angioplasty and coronary stenting in public hospitals [editorial; comment] [see comments] Harper RW. **Aust N Z J Med** 1996 Feb;26(1):3–4. Comment on: Aust N Z J Med 1996 Feb;26(1):20–6. Comment in: Aust N Z J Med 1996 Jun;26(3):430. Comment in: Aust N Z J Med 1996 Jun;26(3):430–1.
"Homemade" stents: penny–wise or pound–foolish? [editorial; comment] Heuser RR. **Cathet Cardiovasc Diagn** 1996 Oct; 39(2):197. Comment on: Cathet Cardiovasc Diagn 1996 Oct;39(2):191–6.
Cost–effectiveness analysis of stents, balloon angioplasty, and surgery for the treatment of branch pulmonary artery stenosis. Trant CA Jr, et al. **Pediatr Cardiol** 1997 Sep–Oct; 18(5):339–44
[Intracoronary prosthesis (stent): an approach to the analysis

of cost-effectiveness] Iñíguez Romo A. **Rev Esp Cardiol** 1997;50 Suppl 2:83-94 (67 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

The Didcott dilator [letter] Didcott CC.
Ann R Coll Surg Engl 1997 Jul;79(4):307

The origin of the word 'stent' [letter; comment] O'Brien JC Jr, et al. **Ann R Coll Surg Engl** 1997 Mar;79(2 Suppl):92-3 . Comment on: Ann R Coll Surg Engl 1996 May;78(3 Suppl):128.

Stent--who started it? [letter] Cumpston N.
Cathet Cardiovasc Diagn 1997 May;41(1):93

Endoluminal treatment of arterial diseases using a stent-graft combination: reflections 20 years after the initial concept. Parodi JC. **J Endovasc Surg** 1997 Feb;4(1):3-4

Etymology of the world "stent". Sterioff S.
Mayo Clin Proc 1997 Apr;72(4):377-9

STANDARDS

Endovascular stents in congenital heart disease. Benson LN, et al. **Prog Cardiovasc Dis** 1996 Sep-Oct;39(2):165-86 (76 ref.)

Coronary artery stenting: indications and cost implications. Cohen EA, et al. **Prog Cardiovasc Dis** 1996 Sep-Oct; 39(2):83-110 (169 ref.)

Contemporary stent designs: technical considerations, complications, role of intravascular ultrasound, and anticoagulation therapy. Popma JJ, et al.
Prog Cardiovasc Dis 1996 Sep-Oct;39(2):111-28 (166 ref.)

Noncoronary vascular stenting. Sniderman KW.
Prog Cardiovasc Dis 1996 Sep-Oct;39(2):141-64 (134 ref.)

Nonvascular stents. Vanderburgh L, et al.
Prog Cardiovasc Dis 1996 Sep-Oct;39(2):187-200 (75 ref.)

Pitfalls in coronary stenting. A review of current strategies. Thomas MR. **S Afr Med J** 1997 Jun;87 Suppl 3:C167-70 (24 ref.)

Clinical evaluation of a new bifurcated dynamic airway stent: a 5-year experience with 135 patients. Freitag L, et al. **Thorac Cardiovasc Surg** 1997 Feb;45(1):6-12

SUPPLY & DISTRIBUTION

New stent technologies. Ozaki Y, et al.
Prog Cardiovasc Dis 1996 Sep-Oct;39(2):129-40 (59 ref.)

TRENDS

[Stents: new studies--new trends] Dietz R, et al.
Z Kardiol 1997 Feb;86(2):65-70 (53 ref.) (Eng. Abstr.) **(Ger)**

UTILIZATION

The impact of optimal stenting techniques on cardiac catheterization laboratory resource utilization and costs. Sukin CA, et al. **Am J Cardiol** 1997 Feb 1;79(3):275-80

The changing face of coronary interventional practice. The Mayo Clinic experience. Hasdai D, et al.
Arch Intern Med 1997 Mar 24;157(6):677-82

Interventional cardiology and intracoronary stents--a changing practice: approved vs. nonapproved indications [see comments] Holmes DR Jr, et al.
Cathet Cardiovasc Diagn 1997 Feb;40(2):133-8. Comment in: Cathet Cardiovasc Diagn 1997 Feb;40(2):139.

Esophageal self-expandable metallic stents--indications, practice, techniques, and complications: results of a national survey [see comments] Ramirez FC, et al.
Gastrointest Endosc 1997 May;45(5):360-4. Comment in: Gastrointest Endosc 1997 May;45(5):439-42.

Esophageal self-expandable metallic stents [editorial; comment] Shields SJ. **Gastrointest Endosc** 1997 May; 45(5):439-42 (50 ref.). Comment on: Gastrointest Endosc 1997 May;45(5):360-4.

[Quality assurance in invasive and interventional cardiology in Austria in 1994. Commissioned by the Interventional Cardiology Working Group of the Austrian Cardiology Society] Mühlberger V, et al. **Z Kardiol** 1996 Sep; 85(9):647-55 (Eng. Abstr.) **(Ger)**

VETERINARY

Evaluation of the Palmaz stent in the trachea and mainstem bronchi of normal dogs. Radlinsky MG, et al. **Vet Surg** 1997 Mar-Apr;26(2):99-107

STEP TEST see **EXERCISE TEST**

STEPFAMILY see **FAMILY**

STEPHANURUS DENTATUS INFECTIONS see **STRONGYLIDA INFECTIONS**

STEP-PARENTS see **PARENTS**

STERCULIA see **KARAYA GUM**

STEREOGNOSIS

Dynamic touch. Turvey MT. **Am Psychol** 1996 Nov; 51(11):1134-52 (50 ref.)

What does the haptic modality do during cognitive activities on letter shapes? A study with left- and right-handers. Benoit-Dubrocard S, et al. **Cortex** 1997 Jun;33(2):301-12

Developmental trends in haptic and visual free classifications: influence of stimulus structure and exploration on decisional processes. Berger C, et al.
J Exp Child Psychol 1996 Dec;63(3):447-65

Breakdown of cross-modal function in dementia. Freedman M, et al. **Neuropsychiatry Neuropsychol Behav Neurol** 1997 Apr;10(2):102-6

Tactile rod bisection: hemispheric activation and sex differences. Laeng B, et al. **Neuropsychologia** 1996 Nov; 34(11):1115-21

Dichaptic scanning of Braille letters by skilled blind readers: lateralization effects. Semenza C, et al.
Percept Mot Skills 1996 Jun;82(3 Pt 2):1071-4

Production and interpretation of perspective drawings by blind and sighted people. Heller MA, et al. **Perception** 1996; 25(3):321-34

Haptic unilateral and bilateral discrimination of curved surfaces. Kappers AM, et al. **Perception** 1996;25(6):739-49

Cognitive salience of haptic object properties: role of modality-encoding bias. Lederman SJ, et al. **Perception** 1996;25(8):983-98

Investigation into the origin of the haptic aftereffect of curved surfaces. Vogels IM, et al. **Perception** 1997; 26(1):101-17

Impaired tactual perception in children with Down's syndrome. Brandt BR. **Scand J Psychol** 1996 Sep; 37(3):312-6

PHYSIOLOGY

Utility of square-wave gratings to assess perioral spatial acuity. Patei J, et al. **J Oral Maxillofac Surg** 1997 Jun; 55(6):593-601

Perception of stimulus size in patients with burning mouth syndrome. Lamey PJ, et al. **J Oral Pathol Med** 1996 Sep; 25(8):420-3

Large scale differences between haptic and visual judgments of curvature. Kappers AM, et al. **Perception** 1997; 26(3):313-20

Responses in primary somatosensory cortex of rhesus monkey to controlled application of embossed grating and bar patterns. Sinclair RJ, et al. **Somatosens Mot Res** 1996; 13(3-4):287-306

STEREOISOMERISM

Cloning and overexpression of thermostable D-hydantoinase from thermophile in E. coli and its application to the synthesis of optically active D-amino acids. Lee DC, et al. **Ann N Y Acad Sci** 1996 Oct 12;799:401-5

The effect of antitumor trans-[PtCl2(E-iminoether)2] on B-->Z transition in DNA. Zaludová R, et al.
Anticancer Drug Des 1997 Jun;12(4):295-309

Enantiomeric separation of some 2-arylpropionic acids with a chiral fluorescence labelling reagent by narrow-bore liquid chromatography. Pecanac D, et al.
Biomed Chromatogr 1997 Mar-Apr;11(2):83-4

Recent progress in liquid chromatographic enantioseparation based upon diastereomer formation with fluorescent chiral derivatization reagents. Toyo'oka T. **Biomed Chromatogr** 1996 Nov-Dec;10(6):265-77 (81 ref.)

How nature deals with stereoisomers. Lamzin VS, et al.
Curr Opin Struct Biol 1995 Dec;5(6):830-6 (45 ref.)

Drug chirality and its clinical significance. Hutt AJ, et al.
Drugs 1996;52 Suppl 5:1-12 (78 ref.)

Propranolol stereoselectively inhibits alpha-adrenoceptor-mediated vasoconstriction in mesenteric arterial beds of rats. Stauber RE, et al.
J Auton Pharmacol 1996 Jun;16(3):125-9

Enantioselective assays in comparative bioavailability studies of racemic drug formulations: nice to know or need to know? Karim A. **J Clin Pharmacol** 1996 Jun;36(6):490-9 (68 ref.)

Stages in the construction of stereograms of molecular models. Miranowicz N, et al. **J Mol Graph** 1996 Apr; 14(2):73-7, 94

Control of enantiomer migration order in capillary electrophoresis separations using sulfobutyl ether beta-cyclodextrin. Liu L, et al. **J Pharm Biomed Anal** 1995 Dec;14(1-2):65-72

Comparison of liquid and supercritical fluid chromatography for the separation of enantiomers on chiral stationary phases. Williams KL, et al. **J Pharm Biomed Anal** 1997 Jul;15(11):1789-99

Racemization of lens crystalline constituents in UV-induced cataract evaluated by chiral GC/MS spectroscopy. Jung WT, et al. **Ophthalmic Res** 1996;28 Suppl 2:26-31

Chiral drugs: comparison of the pharmacokinetics of [11C]d-threo and L-threo-methylphenidate in the human and baboon brain. Ding YS, et al.
Psychopharmacology (Berl) 1997 May;131(1):71-8

Origin of the homochirality of biomolecules. Keszthelyi L. **Q Rev Biophys** 1995 Nov;28(4):473-507 (110 ref.)

Stereoselectivity in drug metabolism and action: effects of enzyme inhibition and induction. Kroemer HK, et al.
Ther Drug Monit 1996 Aug;18(4):388-92

[Chirality and drugs] Husson HP. **Ann Pharm Fr** 1997; 55(1):1-4 (Eng. Abstr.) **(Fre)**

[Plus-minus: chirality and pharmacokinetics] Spahn-Langguth H. **Pharm Unserer Zeit** 1996 Jul; 25(4):198-9 **(Ger)**

[Simultaneous stereoinversion, racemization and isomerization at specific amino acid residues in the proteins during aging] Fujii N. **Seikagaku** 1996 Oct;68(10):1641-5 (12 ref.) **(Jpn)**

[Can the enantiomer of the substrate be the substrate for the same enzyme?] Kraevskiĭ AA, et al. **Mol Biol (Mosk)** 1996 Sep-Oct;30(5):991-1001 (56 ref.) **(Rus)**

STEREOISOMERS see **STEREOISOMERISM**

STEREOPHOTOGRAMMETRY see **PHOTOGRAMMETRY**

STEREOPSIS see **DEPTH PERCEPTION**

STEREOSCOPIC VISION see **DEPTH PERCEPTION**

STEREOTACTIC RADIOSURGERY see **RADIOSURGERY**

STEREOTAXIC TECHNIQUES

see related
BRAIN MAPPING

Patient perceptions of stereotaxic large-core breast biopsy. Handy RB, et al. **Acad Radiol** 1996 Dec;3(12):1007-11

Proceedings of the 12th Meeting of the European Society for Stereotactic and Functional Neurosurgery. Milan, 1996.
Acta Neurochir Suppl (Wien) 1997;68:1-143

Lesionectomy in epileptogenic temporal lobe lesions: preoperative seizure course and postoperative outcome. Casazza M, et al. **Acta Neurochir Suppl (Wien)** 1997;68:64-9

The effects of pallidotomy on Parkinson's disease: study design and assessment techniques. Gross RE, et al.
Acta Neurochir Suppl (Wien) 1997;68:24-8

The side-effects and complications of posteroventral pallidotomy. Hariz MI, et al.
Acta Neurochir Suppl (Wien) 1997;68:42-8

Controversies in pallidal surgery. Hariz MI.
Acta Neurochir Suppl (Wien) 1997;68:1-10 (88 ref.)

Obsessive compulsive disorder and the right hemisphere: topographic analysis of lesions after anterior capsulotomy performed with thermocoagulation. Lippitz B, et al.
Acta Neurochir Suppl (Wien) 1997;68:61-3

Posteroventral pallidotomy in movement disorders. Schuurman PR, et al. **Acta Neurochir Suppl (Wien)** 1997; 68:14-7

European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996. Abstracts.
Acta Neurochir (Wien) 1996;138(5):597-654

Stereotactic angiographic localization as an adjunct to surgery of cerebral mycotic aneurysms: case report and review of the literature. Cunha e Sá M, et al.
Acta Neurochir (Wien) 1997;139(7):625-8

Cytogenetic analysis of gliomas by in situ hybridization of stereotactic biopsy material. Lippitz BE, et al.
Acta Neurochir (Wien) 1997;139(1):22-5

Circular stereotactic callosotomy: a preliminary report. Technical note. Nádvornik P, et al.
Acta Neurochir (Wien) 1997;139(4):359-60

Frameless stereotactic guided neurosurgery: clinical experience with an infrared based pointer device navigation system. Roessler K, et al. **Acta Neurochir (Wien)** 1997; 139(6):551-9

MR imaging of stereotaxic pallidotomy and thalamotomy. Friedman DP, et al. **AJR Am J Roentgenol** 1997 Sep; 169(3):894-6

Stereotactic excisional breast biopsies utilizing the advanced breast biopsy instrumentation system. D'Angelo PC, et al.
Am J Surg 1997 Sep;174(3):297-302

Open versus stereotactic breast biopsy. Frazee RC, et al.
Am J Surg 1996 Nov;172(5):491-3; discussion 494-5

A stereotactic stand-off [editorial] Norton LW.
Am J Surg 1997 Mar;173(3):151-2

Stereotaxic localization and core needle biopsy of nonpalpable breast lesions: two-year follow-up of a prospective study. Head JF, et al. **Am Surg** 1996 Dec; 62(12):1018-23

Comparison of histologic diagnosis between stereotactic core needle biopsy and open surgical biopsy. Bauer RL, et al.
Ann Surg Oncol 1997 Jun;4(4):316-20

Appropriate management of atypical ductal hyperplasia diagnosed by stereotactic core needle breast biopsy. Gadzala DE, et al. **Ann Surg Oncol** 1997 Jun;4(4):283-6

Surgical biopsy findings in patients with atypical hyperplasia diagnosed by stereotaxic core needle biopsy. Tocino I, et al. **Ann Surg Oncol** 1996 Sep;3(5):483-8

Stereotactic biopsy procedures for brain tumor diagnosis. Brady S, et al. **AORN J** 1997 May;65(5):890-2, 894-5, 898 passim

Stereotactic pallidotomy for treatment of Parkinson's disease. Eller TW, et al. **AORN J** 1997 May;65(5):903-4, 907-16; quiz 917-20 (16 ref.)

Frozen section evaluation of stereotactic brain biopsies: diagnostic yield at the stereotactic target position in 188 cases. Brainard JA, et al. **Arch Pathol Lab Med** 1997 May; 121(5):481-4

Stereotactic fine needle aspiration in the management of mammographic abnormalities detected in breast screening [see comments] Chan MC, et al. **Aust N Z J Surg** 1996 Sep;66(9):595-7. Comment in: Aust N Z J Surg 1996 Sep;66(9):577-9.

Stereotactic 14 gauge core-biopsy of the breast: results from 101 patients [see comments] Frayne J, et al.
Aust N Z J Surg 1996 Sep;66(9):585-91 (26 ref.). Comment

in: **Aust N Z J Surg** 1996 Sep;66(9):577–9.
Core biopsy for microcalcifications in the breast. Hirst C, et al. **Aust N Z J Surg** 1997 Jun;67(6):320–4
A multidisciplinary approach to tremor [editorial] Aziz TZ, et al. **Br J Neurosurg** 1996 Oct;10(5):435–7
Radiosurgery: a minimally interventional alternative to microsurgery in the management of acoustic neuroma. Forster DM, et al. **Br J Neurosurg** 1996 Apr;10(2):169–74
A stereotaxic atlas of the basal ganglia in macaques. François C, et al. **Brain Res Bull** 1996;41(3):151–8
Comment on 'when can stereotactic core biopsy replace excisional biopsy'? [letter; comment] Head JF, et al. **Breast Cancer Res Treat** 1996;39(3):349–51. Comment on: Breast Cancer Res Treat 1995;36(1):1–9.
Technique of stereotactic biopsy in a 5-month-old child. Kondziolka D, et al. **Childs Nerv Syst** 1996 Oct; 12(10):615–8
Magnetic neurosurgery: image-guided, remote-controlled movements of neurosurgical implants. Howard MA 3rd, et al. **Clin Neurosurg** 1996;43:382–91
Minimalism through stereotactic technique. Ross DA. **Clin Neurosurg** 1996;43:317–23 (33 ref.)
Stereotactic procedures for molecular neurosurgery. Kelly PJ. **Exp Neurol** 1997 Mar;144(1):157–9 (11 ref.)
Histological precision of stereotactic core biopsy in diagnosis of malignant and premalignant breast lesions. Dahlstrom JE, et al. **Histopathology** 1996 Jun;28(6):537–41
Fractionated stereotactic radiotherapy. Shrieve DC, et al. **Important Adv Oncol** 1996;:205–24 (67 ref.)
Stereotactic breast biopsy: a surgical series. Stolier AJ. **J Am Coll Surg** 1997 Sep;185(3):224–8
Keeping pace with the evolving management of nonpalpable breast lesions [editorial; comment] Watson DK. **J Am Osteopath Assoc** 1996 Jul;96(7):397. Comment on: J Am Osteopath Assoc 1996 Jul;96(7):398–400.
Role of stereotaxis in the treatment of cerebral palsy. De Salles AA. **J Child Neurol** 1996 Nov;11 Suppl 1:S43–50 (38 ref.)
Remote stereotactic visualization for image-guided surgery: technical innovation. Millesi W, et al. **J Craniomaxillofac Surg** 1997 Jun;25(3):136–8
Ventrolateral thalamotomy for dyskinesia following levodopa therapy of Parkinson's disease. Lee ST, et al. **J Formos Med Assoc** 1996 Dec;95(12):943–5
Adaptation of personal projection television to a head-mounted display for intra-operative viewing of neuroimaging. Barnett GH, et al. **J Image Guid Surg** 1995; 1(2):109–12
Intracranial meningioma resection using frameless stereotaxy. Barnett GH, et al. **J Image Guid Surg** 1995;1(1):46–52
Single-stage stereotactic diagnosis and radiosurgery: feasibility and cost implications. Gerszten PC, et al. **J Image Guid Surg** 1995;1(3):141–50
Review of magnetic neurosurgery research. Howard MA 3rd, et al. **J Image Guid Surg** 1995;1(6):295–9 (11 ref.)
Combined stereotactic thalamotomy and posteroventral pallidotomy for Parkinson's disease. Iacono RP, et al. **J Image Guid Surg** 1995;1(3):133–40
Tumor resection by stereotactic craniotomy using the Brown-Roberts-Wells system. Maciunas RJ. **J Image Guid Surg** 1995;1(4):208–16
Proposed simulation of volumetric image navigation using a surgical microscope. Shahidi R, et al. **J Image Guid Surg** 1995;1(5):249–65
Method for correcting magnetic resonance image distortion for frame-based stereotactic surgery, with preliminary results. Sumanaweera TS, et al. **J Image Guid Surg** 1995; 1(3):151–7
Three-dimensional statistical analysis of sulcal variability in the human brain. Thompson PM, et al. **J Neurosci** 1996 Jul 1;16(13):4261–74
A reliable system of ventricular coordinates for the cartography and stereotaxy of the amygdala (and anterior hippocampus) in macaques. Percheron G. **J Neurosci Methods** 1997 Jul 18;75(1):5–14
A method for improving the accuracy of stereotaxic procedures in monkeys using implanted fiducial markers in CT scans that also serve as anchor points in a stereotaxic frame. Risher DW, et al. **J Neurosci Methods** 1997 Apr 25;73(1):81–9
Functional stereotactic surgery for hemiballism. Krauss JK, et al. **J Neurosurg** 1996 Aug;85(2):278–86
Frameless stereotaxy with real-time tracking of patient head movement and retrospective patient-image registration. Ryan MJ, et al. **J Neurosurg** 1996 Aug;85(2):287–92
Stereotactic biopsy of nonpolar tumors in the dominant hemisphere: a prospective study of effects on language functions. Thomson AM, et al. **J Neurosurg** 1997 Jun; 86(6):923–6
A novel computer-assisted volumetric stereotactic approach for resecting tumors of the posterior parahippocampal gyrus. Weiner HL, et al. **J Neurosurg** 1996 Aug;85(2):272–7
Regional methionine and glucose uptake in high-grade gliomas: a comparative study on PET-guided stereotactic biopsy. Goldman S, et al. **J Nucl Med** 1997 Sep; 38(9):1459–62
Radionuclide-guided stereotactic prebiopsy localization of nonpalpable breast lesions with normal mammograms. Khalkhali I, et al. **J Nucl Med** 1997 Jul;38(7):1019–22
Advancing ear, nose, and throat computer-assisted surgery with the arm-based ISG viewing wand: the stereotactic suction tube. Freysinger W, et al. **Laryngoscope** 1997 May; 107(5):690–3
Functional magnetic resonance imaging in a stereotactic setup. Debus J, et al. **Magn Reson Imaging** 1996; 14(9):1007–12
Influence of air inhomogeneities in radiosurgical beams. Rustgi AK, et al. **Med Dosim** 1997 Summer;22(2):95–100
Stereotactic radiosurgery of pituitary adenomas. Motti ED, et al. **Metabolism** 1996 Aug;45(8 Suppl 1):111–4 (11 ref.)
An intracerebral sonographic catheter as an adjunct to stereotactic guided endoscopic procedures. Froelich J, et al. **Minim Invasive Neurosurg** 1996 Sep;39(3):93–6
Intracavitary irradiation with colloidal phosphorus-32 for treatment of an arachnoid cyst: a new approach. Kondziolka D. **Minim Invasive Neurosurg** 1997 Jun; 40(2):55–8
Three-dimensional computer-assisted stereotactic-guided microneurosurgery combined with cortical mapping of the motor area by direct electrostimulation. Lumenta CB, et al. **Minim Invasive Neurosurg** 1997 Jun;40(2):50–4
Stereotactic aspiration and drainage of brain abscesses. Experience with 9 cases. Skrap M, et al. **Minim Invasive Neurosurg** 1996 Dec;39(4):108–12
Interactive intraoperative localization during the resection of intraventricular lesions. Vinas FC, et al. **Minim Invasive Neurosurg** 1996 Sep;39(3):65–70
Stereotactic pallidotomy for Parkinson's disease: a long-term follow-up of unilateral pallidotomy. Fazzini E, et al. **Neurology** 1997 May;48(5):1273–7
3-D tracing of biocytin-labelled pallido-thalamic axons in the monkey. Arecchi-Bouchhioua P, et al. **Neuroreport** 1996 Apr 10;7(5):981–4
Diagnosis of suspected intracranial metastases. Role of direct tissue examination. Carter BS, et al. **Neurosurg Clin N Am** 1996 Jul;7(3):425–33 (23 ref.)
Stereotactic lumbar microdiscectomy. Koutrouvelis PG, et al. **Neurosurg Clin N Am** 1996 Jan;7(1):49–57 (14 ref.)
Magnetic resonance image-guided stereotactic cingulotomy for intractable psychiatric disease [letter] Balasubramaniam V. **Neurosurgery** 1997 May;40(5):107–8
Stereotactic microsurgical craniotomy for the treatment of third ventricular colloid cysts. Cabbell KL, et al. **Neurosurgery** 1996 Feb;38(2):301–7
Stereotactic management of lesions of the pineal region. Kreth FW, et al. **Neurosurgery** 1996 Aug;39(2):280–9; discussion 289–91
Effect of stereotactic implantation of biodegradable 5-fluorouracil-loaded microspheres in healthy and C6 glioma-bearing rats. Menei P, et al. **Neurosurgery** 1996 Jul; 39(1):117–23; discussion 123–4
Repeat stereotactic radiosurgery of arteriovenous malformations: factors associated with incomplete obliteration. Pollock BE, et al. **Neurosurgery** 1996 Feb; 38(2):318–24
Pineal region tumors and the role of stereotactic biopsy: review of the mortality, morbidity, and diagnostic rates in 370 cases. Regis J, et al. **Neurosurgery** 1996 Nov; 39(5):907–12; discussion 912–4
Outcome after stereotactic thalamotomy for parkinsonian, essential, and other types of tremor [letter; comment] Stellar S. **Neurosurgery** 1996 Aug;39(2):421. Comment on: Neurosurgery 1995 Oct;37(4):680–6; discussion 686–7.
Middle cerebral artery stenosis caused by relatively low-dose irradiation with stereotactic radiosurgery for cerebral arteriovenous malformations: case report. Yamamoto M, et al. **Neurosurgery** 1997 Aug;41(2):474–7; discussion 477–8
Design and assessment of a scintigraphy-guided biplane localization technique for breast tumours: a phantom study. Mena FJ, et al. **Nucl Med Commun** 1996 Aug;17(8):717–23
Middle cranial fossa surgery with image-guided instrumentation. Sargent EW, et al. **Otolaryngol Head Neck Surg** 1997 Jul;117(1):131–4
A serial CT scan and MRI verification of diffuse cerebrospinal gliomatosis: a case report with stereotactic diagnosis and radiological confirmation. Onal C, et al. **Pediatr Neurosurg** 1996 Aug;25(2):94–9 (50 ref.)
A fast algorithm for the dose calculation of irregularly shaped fields in stereotactic convergent beam irradiation. Gardey KU, et al. **Phys Med Biol** 1997 Apr;42(4):717–24
A modified stereotaxic device for small bird anaesthesia and neurosurgery. Brownlie LA, et al. **Physiol Behav** 1996 Sep; 60(3):1037–8
Usefulness and problems of stereotactic radiosurgery using a linear accelerator. Naoi Y, et al. **Radiat Med** 1996 Jul-Aug;14(4):215–9
Stereotactic breast biopsy of atypical ductal hyperplasia and ductal carcinoma in situ lesions: improved accuracy with directional, vacuum-assisted biopsy. Burbank F. **Radiology** 1997 Mar;202(3):843–7
Mammographic findings after 14-gauge automated needle and 14-gauge directional, vacuum-assisted stereotactic breast biopsies. Burbank F. **Radiology** 1997 Jul;204(1):153–6
Stereotactic core breast biopsy of a minimal carcinoma complicated by a large hematoma: a management dilemma. Deutch BM, et al. **Radiology** 1997 Feb;202(2):431–3
Coaxial technique: approach to breast core biopsies. Helbich TH, et al. **Radiology** 1997 Jun;203(3):684–90
Stereotactic core biopsy of calcifications highly suggestive of malignancy. Liberman L, et al. **Radiology** 1997 Jun; 203(3):673–7
Analysis of cancers not diagnosed at stereotactic core breast biopsy. Liberman L, et al. **Radiology** 1997 Apr;203(1):151–7
Fractionated stereotactic radiotherapy for choroidal melanoma. Tokuuye K, et al. **Radiother Oncol** 1997 Apr; 43(1):87–91
Role of stereotactic breast biopsy. Bernstein JR. **Semin Surg Oncol** 1996 Sep-Oct;12(5):290–9 (39 ref.)
In vitro simulation. Early results of stereotaxy for pedicle screw placement. Carl AL, et al. **Spine** 1997 May 15; 22(10):1160–4
Computer-aided pedicle screw placement using frameless stereotaxis. Glossop ND, et al. **Spine** 1996 Sep 1; 21(17):2026–34
Proceedings of the meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Ray, California, March 8–11, 1995. **Stereotact Funct Neurosurg** 1995;65(1–4):1–212
XIIth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Lyon, July 1–4, 1997. Abstracts. **Stereotact Funct Neurosurg** 1996–97;67(1–2):1–152
Proceedings of the meeting of the American Society for Stereotactic and Functional Neurosurgery. Part II. Marina del Rey, California, March 8–11, 1995. **Stereotact Funct Neurosurg** 1996;66(1–3):1–160
Target and trajectory guidance for interactive surgical navigation systems. Barnett GH, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):91–5
Stereotactic high-activity brachytherapy for malignant intra-axial brain tumors. Status report as of March, 1995. Bernstein M, et al. **Stereotact Funct Neurosurg** 1995; 65(1–4):167–70 (9 ref.)
Clinical experience with stereotactic digital subtraction angiography with distortion correction software. Ericson K, et al. **Stereotact Funct Neurosurg** 1996;66 Suppl 1:63–70
Intraoperative diagnostic techniques for stereotactic brain biopsy: cytology versus frozen-section histopathology. Hayden R, et al. **Stereotact Funct Neurosurg** 1995; 65(1–4):187–93
Microstereometrically guided cortical stimulation for the intraoperative identification of the central motor strip. Horstmann GA, et al. **Stereotact Funct Neurosurg** 1995; 65(1–4):130–5
Magnetic neurosurgery. Howard MA 3rd, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):102–7
Quantitative analysis of a noninvasive stereotactic image registration technique. Kall BA, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):69–74
Fractionated stereotactic radiation therapy for intracranial arteriovenous malformations. Kirkeby OJ, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):10–4
Use of magnetic resonance imaging in stereotactic surgery. A survey of members of the American Society of Stereotactic and Functional Neurosurgery. Kondziolka D, et al. **Stereotact Funct Neurosurg** 1996;66(4):193–7
Intraoperative imaging of the brain. Lunsford LD, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):58–64
A universal method for geometric correction of magnetic resonance images for stereotactic neurosurgery. Maciunas RJ, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):137–40
Comparison of MRI and ventriculographic target acquisition for posteroventral pallidotomy. Mandybur G, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):54–9
Transnasal stereotactic surgery of pituitary adenomas concomitant with acromegaly. Metyolkina L, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):184–6
Image-guided computer-assisted spine surgery: a pilot study on pedicle screw fixation. Nolte L, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):108–17
Minimally invasive surgical approach for intractable seizure. Patil AA, et al. **Stereotact Funct Neurosurg** 1995; 65(1–4):86–9
Generic model for the localization of the cerebral cortex and preoperative multimodal integration in epilepsy surgery. Regis J, et al. **Stereotact Funct Neurosurg** 1995; 65(1–4):72–80
Introduction of magnetoencephalography to stereotactic techniques. Rezai AR, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):37–41
Direct stereotactic targeting of the globus pallidus: an MRI-based anatomic variability study. Roberts DW, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):1–5
Combination warp-matching method for stereotactic neurosurgery. Ružický E, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):84–90
Failed stereotactic biopsy in a series of 518 cases. Soo TM, et al. **Stereotact Funct Neurosurg** 1995;64(4):183–96
MR-guided stereotaxy in functional neurosurgery. Sramka M, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):42–6
A method to reduce systematic spatial shift associated with magnetic resonance imaging. Taha JM, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):118–22
Craniotomy guidance using a stereo-video-based tracking system. Thomas DG, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):81–3
Intraoperative computer-assisted neuronavigation in functional neurosurgery. Tronnier VM, et al. **Stereotact Funct Neurosurg** 1996;66(1–3):65–8
Accuracy of stereotactic localisation using magnetic resonance imaging: a comparison between two- and three-dimensional studies. Walton L, et al. **Stereotact Funct Neurosurg** 1996;66 Suppl 1:49–56
A new method to localize brain nuclei for surgery in extrapyramidal disease. Yuan S, et al. **Stereotact Funct Neurosurg** 1995;65(1–4):47–53
Initial experience with breast biopsy utilizing the advanced

breast biopsy instrumentation (ABBI). Ferzli GS, et al. **Surg Endosc** 1997 Apr;11(4):393–6

Invasive monitoring of limbic epilepsy using stereotactic depth and subdural strip electrodes: surgical technique. Blatt DR, et al. **Surg Neurol** 1997 Jul;48(1):74–9

Diagnostic and staged stereotactic aspiration of multiple bihemispheric pyogenic brain abscesses. Chacko AG, et al. **Surg Neurol** 1997 Sep;48(3):278–82; discussion 282–3

Computerized tomography and magnetic resonance guided stereotactic brain biopsy in nonimmunocompromised and AIDS patients. Nicolato A, et al. **Surg Neurol** 1997 Sep; 48(3):267–76; discussion 276–7

The role of stereotactic biopsy in abnormal mammograms. Fajardo LL, et al. **Surg Oncol Clin N Am** 1997 Apr; 6(2):285–99 (24 ref.)

Thalamic stimulation: an innovative treatment for tremor. Charles PD, et al. **Tenn Med** 1997 Jul;90(7):275–7

[Stereotaxic therapy of post-traumatic cerebral hemorrhage] Chrastina J, et al. **Rozhl Chir** 1996 Jul;75(7):330–3 (Eng. Abstr.) **(Cze)**

[Image-guided surgery] Gybels J, et al. **Verh K Acad Geneeskd Belg** 1997;59(1):35–57; discussion 57–9 (31 ref.) (Eng. Abstr.) **(Dut)**

[Stereotaxic mammary microbiopsy. I. Technical aspects] Thiesse P, et al. **Ann Chir** 1996;50(6):457–62 (32 ref.) (Eng. Abstr.) **(Fre)**

[Stereotaxic mammary core biopsy. II. Complementarity or competition with surgical biopsy] Thiesse P, et al. **Ann Chir** 1996;50(6):463–9 (51 ref.) (Eng. Abstr.) **(Fre)**

[Stereotaxic technics and clinical neurosurgery] Devaux B, et al. **J Neuroradiol** 1997 Aug;24(2):116–25 (Eng. Abstr.) **(Fre)**

[Stereotaxic radiotherapy of .cerebral arteriovenous malformations: the role of neuroradiology] Meder JF, et al. **J Neuroradiol** 1997 Aug;24(2):126–33 (57 ref.) (Eng. Abstr.) **(Fre)**

[Current therapy of idiopathic Parkinson disease. 2: Recent and alternative therapies] Müller T, et al. **Fortschr Med** 1997 May 10;115(13):37–41 (0 ref.) (Eng. Abstr.) **(Ger)**

[Stereotactic treatment of movement disorders] Ostertag CB, et al. **Nervenarzt** 1997 Jun;68(6):477–84 (70 ref.) (Eng. Abstr.) **(Ger)**

[Interactive stereotaxic interventions in superconducting, open 0.5-Tesla MRI tomography] Steiner P, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1996 Sep;165(3):276–80 (Eng. Abstr.) **(Ger)**

[Improvement in function-preservation in radiotherapy for pediatric malignancies] Sumi M, et al. **Gan To Kagaku Ryoho** 1997 Apr;24(6):657–65 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Resection of glioma located in deep or eloquent area: application of functional mapping, intraoperative monitoring and navigation with CT or MRI-assisted stereotactic guidance] Matsumoto K, et al. **No Shinkei Geka** 1997 Jan;25(1):17–28 (58 ref.) **(Jpn)**

[Roles of the basal ganglia outputs in movement disorders: a viewpoint based on experiences of stereotactic surgery for idiopathic dystonia] Shima F, et al. **No To Hattatsu** 1997 May;29(3):206–12 (Eng. Abstr.) **(Jpn)**

[Stereotactic surgery for intracranial mass lesions: diagnosis and treatment] Meneses MS, et al. **Arq Neuropsiquiatr** 1996 Mar;54(1):64–70 (Eng. Abstr.) **(Por)**

[The stereotaxic biopsy of tumors in the pineal area] Melikian AG, et al. **Zh Vopr Neirokhir Im N N Burdenko** 1997 Jan-Mar;(1):19–22 (Eng. Abstr.) **(Rus)**

[Automatic anatomic-physiologic correspondence of deep structures of the central nervous system in stereotaxic functional neurosurgery] Teijeiro Amador J, et al. **Neurologia** 1996 Nov;11(9):320–31 (Eng. Abstr.) **(Spa)**

[Stereotaxic surgery in 4 cases of Parkinson's disease] Meléndez-Manzano JA, et al. **Rev Invest Clin** 1996 Nov-Dec;48(6):449–52 (Eng. Abstr.) **(Spa)**

[Contribution of thalamic somatosensory evoked potentials to stereotaxic thalamometry] Morales-Chacón LM, et al. **Rev Neurol** 1997 Jul;25(143):1025–30 (Eng. Abstr.) **(Spa)**

ECONOMICS

Estimating the cost-effectiveness of stereotaxic biopsy for nonpalpable breast abnormalities: a decision analysis model. Hillner BE, et al. **Acad Radiol** 1996 Apr;3(4):351–60

Cost-effectiveness of stereotactic core needle biopsy: analysis by means of mammographic findings. Lee CH, et al. **Radiology** 1997 Mar;202(3):849–54

HISTORY

History of spinal cord stereotaxy. Gabriel EM, et al. **J Neurosurg** 1996 Oct;85(4):725–31

Introduction of the human Horsley-Clarke stereotactic frame. Jensen RL, et al. **Neurosurgery** 1996 Mar; 38(3):563–7; discussion 567

[Neurosurgical treatment of Parkinson's disease and other movement disorders. History] **Neurochirurgie** 1997;43 Suppl 1:12–8 **(Fre)**

INSTRUMENTATION

Magnetoencephalography (MEG) in epilepsy surgery. Forss N. **Acta Neurochir Suppl (Wien)** 1997;68:81–4

Incorporation of ultrasonic imaging in an optically coupled frameless stereotactic system. Hirschberg H, et al. **Acta Neurochir Suppl (Wien)** 1997;68:75–80

Frameless 3D volume registration of MR data sets for stereotactic pallidotomy. Lehman RM, et al. **Acta Neurochir Suppl (Wien)** 1997;68:29–36

Stereotactic brain biopsy guided by positron emission tomography (PET) with [F-18]fluorodeoxyglucose and [C-11]methionine. Pirotte B, et al. **Acta Neurochir Suppl (Wien)** 1997;68:133–8

Integration of functional brain mapping in image-guided neurosurgery. Rezai AR, et al. **Acta Neurochir Suppl (Wien)** 1997;68:85–9

Functional neurosurgery aided by use of an electronic brain atlas. Yeo TT, et al. **Acta Neurochir Suppl (Wien)** 1997; 68:93–9

Electrophysiologic target localization in posteroventral pallidotomy. Iacono RP, et al. **Acta Neurochir (Wien)** 1997; 139(5):433–41

Accuracy of an experimental stereotactic system for MRI-based gamma knife irradiation in the rat. Kamiryo T, et al. **Acta Neurochir (Wien)** 1996;138(9):1103–7; discussion 1107–8

CT-target determination in postero-ventral pallidotomy: a universal method. Technical note. Spiegelmann R, et al. **Acta Neurochir (Wien)** 1996;138(6):732–5; discussion 736

Interstitial radiotherapy of 25 parasellar/clival meningiomas and 19 meningiomas in the elderly. Analysis of short-term tolerance and responses. Vuorinen V, et al. **Acta Neurochir (Wien)** 1996;138(5):495–508

Chronic thalamic stimulation with three-dimensional MR stereotactic guidance. Dormont D, et al. **AJNR Am J Neuroradiol** 1997 Jun-Jul;18(6):1093–107

Ultrasound-guided neurosurgery: a feasibility study in the 3–30 MHz frequency range. Gronningsaeter A, et al. **Br J Neurosurg** 1996 Apr;10(2):161–8

Microsurgery with the Steiner-Lindquist stereotaxic guide. Mathiesen T, et al. **Br J Neurosurg** 1996 Apr;10(2):155–60

Computed intraoperative navigation guidance--a preliminary report on a new technique. Enislidis G, et al. **Br J Oral Maxillofac Surg** 1997 Aug;35(4):271–4

Technical report: a training phantom for stereotactic breast biopsies. Quinn AD, et al. **Clin Radiol** 1997 Feb; 52(2):149–50

Registration of head volume images using implantable fiducial markers. Maurer CR Jr, et al. **IEEE Trans Med Imaging** 1997 Aug;16(4):447–62

Development of an MRI-compatible needle insertion manipulator for stereotactic neurosurgery. Masamune K, et al. **J Image Guid Surg** 1995;1(4):242–8

A new instrument for improved accuracy of stereotactic depth electrode placement. Technical note. Ashpole RD, et al. **J Neurosurg** 1996 Aug;85(2):357–8

Stereotactic biopsy of brain tumours. Shams S, et al. **JPMA J Pak Med Assoc** 1996 Aug;46(8):176–8

Minimally invasive head holder to improve the performance of frameless stereotactic surgery. Bale RJ, et al. **Laryngoscope** 1997 Mar;107(3):373–7

Three-dimensional image-guided endonasal surgery with a microdebrider. Gunkel AR, et al. **Laryngoscope** 1997 Jun; 107(6):834–8

Determination of the burr hole-site using the Brown-Roberts-Wells stereotactic system. A simple marking technique: technical note. Birbilis T, et al. **Minim Invasive Neurosurg** 1997 Mar;40(1):27–9

Interactive image directed neurosurgery: patient registration employing the Laitinen stereo-adapter. Hirschberg H, et al. **Minim Invasive Neurosurg** 1996 Dec;39(4):105–7

Resurgence of stereotaxic procedures for relief of parkinsonism. Role of image-directed targeting and current status. Turner DA, et al. **N C Med J** 1996 Sep-Oct; 57(5):320–4

Nonfluoroscopic, in vivo navigation and mapping technology. Ben-Haim SA, et al. **Nat Med** 1996 Dec; 2(12):1393–5

Use of cortical surface vessel registration for image-guided neurosurgery. Nakajima S, et al. **Neurosurgery** 1997 Jun; 40(6):1201–8; discussion 1208–10

The EasyGuide Neuro image-guided surgery system. Olson JJ, et al. **Neurosurgery** 1997 May;40(5):1092–6

The interactive use of magnetoencephalography in stereotactic image-guided neurosurgery. Rezai AR, et al. **Neurosurgery** 1996 Jul;39(1):92–102

Computer-assisted endoscopy for neurosurgical procedures: technical note. Rhoten RL, et al. **Neurosurgery** 1997 Mar; 40(3):632–7; discussion 638

Intracerebral depth electrode monitoring in partial epilepsy: the morbidity and efficacy of placement using magnetic resonance image-guided stereotactic surgery. Ross DA, et al. **Neurosurgery** 1996 Aug;39(2):327–33; discussion 333–4 (39 ref.)

Percutaneous biopsy of cavernous sinus tumors through the foramen ovale. Sindou M, et al. **Neurosurgery** 1997 Jan; 40(1):106–10; discussion 110–1

In vivo accuracy testing and clinical experience with the ISG Viewing Wand. Sipos EP, et al. **Neurosurgery** 1996 Jul;39(1):194–202; discussion 202–4

Intraoperative diagnostic and interventional magnetic resonance imaging in neurosurgery. Tronnier VM, et al. **Neurosurgery** 1997 May;40(5):891–900; discussion 900–2

Cystic craniopharyngioma: long-term results after intracavitary irradiation with stereotactically applied colloidal beta-emitting radioactive sources. Voges J, et al. **Neurosurgery** 1997 Feb;40(2):263–9; discussion 269–70

Stereotactic localization with magnetic resonance imaging: a phantom study to compare the accuracy obtained using two-dimensional and three-dimensional data acquisitions. Walton L, et al. **Neurosurgery** 1997 Jul;41(1):131–7; discussion 137–9

Frameless stereotactic guidance for surgery of the upper cervical spine. Welch WC, et al. **Neurosurgery** 1997 May; 40(5):958–63; discussion 963–4

Interventional breast MR imaging: clinical use of a stereotactic localization and biopsy device. Kuhl CK, et al. **Radiology** 1997 Sep;204(3):667–75

MRI distortion and stereotactic neurosurgery using the Cosman-Roberts-Wells and Leksell frames. Burchiel KJ, et al. **Stereotact Funct Neurosurg** 1996;66(1-3):123–36

LINAC-based spinal stereotactic radiosurgery. Hamilton AJ, et al. **Stereotact Funct Neurosurg** 1996;66(1-3):1–9

The micro-laserbot: an alternative method for frameless stereotactic localization. Hardy TL, et al. **Stereotact Funct Neurosurg** 1996;66(1-3):75–80

Implementation of a stereotactic microscope using an optically coupled tracking system. Hirschberg H. **Stereotact Funct Neurosurg** 1996;66(1-3):96–101

Use of the Horsley-Clarke stereotactic frame in humans. Jensen RL, et al. **Stereotact Funct Neurosurg** 1995; 65(1-4):194–7 (21 ref.)

A straightforward implantation method of radioactive sources by means of the Leksell frame. Koken PW, et al. **Stereotact Funct Neurosurg** 1995;64(4):202–13

Image-guided stereotactic neurosurgery with the multicoordinate manipulator microscope. Pillay PK. **Surg Neurol** 1997 Feb;47(2):171–6; discussion 176–7 (10 ref.)

[Use of the ISG viewing wand on the temporal bone. A model study] Vogele M, et al. **HNO** 1997 Feb;45(2):74–80 (Eng. Abstr.) **(Ger)**

[Value of stereotaxy in neurosurgery. Indications and analysis of results of 71 cases] Ebel H, et al. **Nervenarzt** 1996 Aug; 67(8):650–8 (Eng. Abstr.) **(Ger)**

[CT-angiography in planning stereotaxic biopsies] Bartylla K, et al. **Radiologe** 1996 Nov;36(11):867–71 (Eng. Abstr.) **(Ger)**

[Image-guided therapy planning for interventional stereotactic therapy of brain tumors] Leemüller R, et al. **Radiologe** 1996 Sep;36(9):737–43 (Eng. Abstr.) **(Ger)**

[Presurgical diagnosis of epilepsy and surgical epilepsy treatment] Baumgartner C, et al. **Wien Klin Wochenschr** 1997 Mar 28;109(6):180–91 (64 ref.) (Eng. Abstr.) **(Ger)**

[Stereotaxically guided versus ultrasound guided surgery--a comparative report of experiences] Tomancok B, et al. **Zentralbl Neurochir** 1996;57(3):123–8 (Eng. Abstr.) **(Ger)**

[The use of twist drill craniostomy in stereotactic surgery for brain tumors] Matsumoto K, et al. **No Shinkei Geka** 1995 Dec;23(12):1093–7 (Eng. Abstr.) **(Jpn)**

STANDARDS

Stereotactic brain biopsies: specimen preparation and evaluation. Burger PC, et al. **Arch Pathol Lab Med** 1997 May;121(5):477–80

Diagnostic accuracy of stereotactic core biopsy in a mammographic breast cancer screening programme. Dahlstrom JE, et al. **Histopathology** 1996 May;28(5):421–7

TRENDS

Use of the Horsley-Clarke stereotactic frame in humans. Jensen RL, et al. **Stereotact Funct Neurosurg** 1995; 65(1-4):194–7 (21 ref.)

STEREOTYPED BEHAVIOR

Stereotyped behaviors in deaf and hard of hearing children. Murdoch H. **Am Ann Deaf** 1996 Dec;141(5):379–86

Dyskinetic movement disorder among adults with mental retardation: phenomenology and co-occurrence with stereotypy. Bodfish JW, et al. **Am J Ment Retard** 1996 Sep;101(2):118–29

Characteristics of children and adolescents with mental retardation and frequent outwardly directed aggressive behavior. Davidson PW, et al. **Am J Ment Retard** 1996 Nov;101(3):244–55

Plasma HVA in adults with mental retardation and stereotyped behavior: biochemical evidence for a dopamine deficiency model. Lewis MH, et al. **Am J Ment Retard** 1996 Jan;100(4):413–8

Tactile defensiveness and stereotyped behaviors. Baranek GT, et al. **Am J Occup Ther** 1997 Feb;51(2):91–5

Serum concentrations of zinc and copper in bull terriers with lethal acrodermatitis and tail-chasing behavior. Uchida Y, et al. **Am J Vet Res** 1997 Aug;58(8):808–10

Mice show strain differences in social affiliation. Implications for open field behavior. Pieper JO, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:552–5

'The bowerbird symptom': a case of severe hoarding of possessions. Fitzgerald PB. **Aust N Z J Psychiatry** 1997 Aug;31(4):597–600

Reducing stereotyped behaviour: a comparison of two methods of programming differential reinforcement. Miller BY, et al. **Br J Clin Psychol** 1997 May;36 (Pt 2):297–302

The therapeutic effect of reactive self-monitoring on the reduction of inappropriate social and stereotypic behaviours. Pope ST, et al. **Br J Clin Psychol** 1996 Nov; 35 (Pt 4):585–94

Agitation, wandering, pacing, restlessness, and repetitive mannerisms. Neistein S, et al. **Int Psychogeriatr** 1996;8 Suppl 3:399–402 (13 ref.)

An analysis of reinforcer substitutability using object manipulation and self-injury as competing responses. Shore BA, et al. **J Appl Behav Anal** 1997 Spring;30(1):21-41

Stereotypic movement disorder [letter; comment] Stein DJ, et al. **J Clin Psychiatry** 1997 Apr;58(4):177-8. Comment on: J Clin Psychiatry 1996 Mar;57(3):116-22.

Increasing on-task behaviour through interruption-prompting. Duker PC, et al. **J Intellect Disabil Res** 1996 Aug;40 (Pt 4):291-7

Postencephalitic stereotyped involuntary movements responsive to L-Dopa. Picard F, et al. **Mov Disord** 1996 Sep;11(5):567-70

The characterization and outcome of stereotypical movements in nonautistic children. Tan A, et al. **Mov Disord** 1997 Jan;12(1):47-52

Stereotypies in Wilson's disease. Yorio AA, et al. **Mov Disord** 1997 Jul;12(4):614-6

Locomotive stereotyped behavior in cynomolgus macaques, Macaca fascicularis. Minami T. **Percept Mot Skills** 1996 Dec;83(3 Pt 1):935-8

Food deprivation and food-delay effects on the development of adjunctive drinking. Lamas E, et al. **Physiol Behav** 1997 Feb;61(2):153-8

Psychology update. Integrating research in stereotypic behavior. Sprague RL, et al. **Psychiatr Serv** 1996 Nov; 47(11):1191-2

Personality differences between obsessive-compulsive disorder subtypes: washers versus checkers. Horesh N, et al. **Psychiatry Res** 1997 Aug 8;71(3):197-200

Delusional repetitiveness--a peculiar form of delusional remembrance. Nakaya M. **Psychopathology** 1997;30(1):36-8

The differential and temporal effects of antecedent exercise on the self-stimulatory behavior of a child with autism. Celiberti DA, et al. **Res Dev Disabil** 1997 Mar-Apr; 18(2):139-50

The effect of object preferences on task performance and stereotypy in a child with autism. Morrison K, et al. **Res Dev Disabil** 1997 Mar-Apr;18(2):127-37

The stereotypy analysis: an instrument for examining environmental variables associated with differential rates of stereotypic behavior. Pyles DA, et al. **Res Dev Disabil** 1997 Jan-Feb;18(1):11-38

A comparison of the characteristics of self-stimulatory behaviors in "normal" children and children with developmental delays. Smith EA, et al. **Res Dev Disabil** 1996 Jul-Aug;17(4):253-68

The effect of noncontingent sensory reinforcement, contingent sensory reinforcement, and response interruption on stereotypical and self-injurious behavior. Sprague J, et al. **Res Dev Disabil** 1997 Jan-Feb;18(1):61-77

Perseveration in schizophrenia. Crider A. **Schizophr Bull** 1997;23(1):63-74 (100 ref.)

Repetitive behaviors in schizophrenia: a single disturbance or discrete symptoms? Tracy JI, et al. **Schizophr Res** 1996 May;20(1-2):221-9

Epilepsy or stereotypy? Diagnostic issues in learning disabilities. Paul A. **Seizure** 1997 Apr;6(2):111-20 (42 ref.)

Adult headbanging: sleep studies and treatment. Chisholm T, et al. **Sleep** 1996 May;19(4):343-6

DRUG EFFECTS

The role of the brain histaminergic neuron system in methamphetamine-induced behavioral sensitization in rats. Ito C, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:353-60

Fluvoxamine for stereotypic behavior in patients with dementia. Trappler B, et al. **Ann Pharmacother** 1997 May; 31(5):578-81

Effect of MK 801 on priming of D1-dependent contralateral turning and its relationship to c-fos expression in the rat caudate-putamen. Morelli M, et al. **Behav Brain Res** 1996 Sep;79(1-2):93-100

Behavioral stereotypies induced by "binge' cocaine administration are independent of drug-induced increases in corticosterone levels. Spangler R, et al. **Behav Brain Res** 1997 Jul;86(2):201-4

Effects of clozapine and haloperidol on baseline levels of vacuous jaw movements in aged rats. Steinpreis RE, et al. **Behav Brain Res** 1997 Jul;86(2):165-9

Dopamine receptor affinities in vitro and stereotypic activities in vivo of cabergoline in rats. Miyagi M, et al. **Biol Pharm Bull** 1996 Sep;19(9):1210-3

Intrastriatal methylmalonic acid administration induces rotational behavior and convulsions through glutamatergic mechanisms. de Mello CF, et al. **Brain Res** 1996 May 20; 721(1-2):120-5

A novel nicotinic-cholinergic role in behavioral sensitization to amphetamine-induced stereotypy in mice. Karler R, et al. **Brain Res** 1996 Jul 1;725(2):192-8

Effect of long-term haloperidol treatment on striatal neuropeptides: relation to stereotyped behavior. Marin C, et al. **Brain Res** 1996 Aug 26;731(1-2):57-62

Intrastriatal injection of endothelin evokes dopaminergic turning behaviour in rats through activation of the ETB receptor. Webber KM, et al. **Brain Res** 1996 Jun 17; 724(2):180-5

Dopamine D1 and D2 antagonists block L-DOPA-induced air-stepping in decerebrate neonatal rats. McCrea AE, et al. **Brain Res Dev Brain Res** 1997 May 20;100(1):130-2

Age-dependent differences in the rat's conditioned defensive burying behavior: effect of 5-HT1A compounds. Lopez-Rubalcava C, et al. **Dev Psychobiol** 1996 Mar; 29(2):157-69

The effects of (+)-SKF10047 and ketamine hydrochloride on stereotyped behaviour, locomotor activity and ataxia in guinea pig. Jerram AH, et al. **Eur J Pharmacol** 1996 Jul 4;307(3):269-73

Glutamate receptor agonist injections into the dorsal striatum cause contralateral turning in the rat: involvement of kainate and AMPA receptors. Smith ID, et al. **Eur J Pharmacol** 1996 Apr 22;301(1-3):7-17

A quantity of stereotyped behavior of ddY mice induced by low-dose methamphetamine. Masuda Y, et al. **Exp Anim** 1996 Jul;45(3):279-81

Bicuculline-induced circling from the rat superior colliculus is blocked by GABA microinjection into the deep cerebellar nuclei. Speller JM, et al. **Exp Brain Res** 1996 Aug;110(3):425-34

Involvement of dopaminergic mechanisms in racemate pentazocine induced stereotyped behaviour in rats. Bhosale BB, et al. **Indian J Physiol Pharmacol** 1996 Jul;40(3):271-3

Effect of pre-treatment of some calcium channel blockers on catalepsy and stereotypic behaviour in rats. Khanzode SD, et al. **Indian J Physiol Pharmacol** 1996 Apr; 40(2):159-62

Questioning the efficacy of psychotropic drugs [letter; comment] Mobley TE. **J Am Vet Med Assoc** 1996 Dec 15;209(12):1995-6. Comment on: J Am Vet Med Assoc 1996 Oct 15;209(8):1470-4.

Use of fluoxetine for the treatment of stereotypical pacing behavior in a captive polar bear [see comments] Poulsen EM, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1470-4 . Comment in: J Am Vet Med Assoc 1996 Dec 15;209(12):1995-6.

GDNF reduces drug-induced rotational behavior after medial forebrain bundle transection by a mechanism not involving striatal dopamine. Tseng JL, et al. **J Neurosci** 1997 Jan 1;17(1):325-33

Behavioural subsensitivity induced by long-term administration of a low dose of haloperidol to rats. Frussa-Filho R, et al. **J Pharm Pharmacol** 1997 Apr; 49(4):412-5

Repeated binge exposures to amphetamine and methamphetamine: behavioral and neurochemical characterization. Segal DS, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):561-73

Changes in cholecystokinin mRNA expression in methamphetamine-induced behavioral sensitization. Fukamauchi F. **Neurochem Int** 1996 Apr;28(4):391-4

Chronic cocaine exposure potentiates prolactin and head shake responses to 5-HT2 receptor stimulation in rats. Baumann MH, et al. **Neuropharmacology** 1996 Mar; 35(3):295-301

The neurotensin antagonist SR 48692 fails to modify the behavioural responses to a dopamine D1 receptor agonist in the rat. Stoessl AJ, et al. **Neuropharmacology** 1997 Jan; 36(1):93-9

Medicated chronic schizophrenic patients do not demonstrate left turning asymmetry. Levine J, et al. **Neuropsychobiology** 1997;36(1):22-4

Behavioral responses induced by repeated treatment with methamphetamine alone and in combination with scopolamine in rats. Yui K, et al. **Neuropsychobiology** 1996; 33(1):21-7

Behavioral effects of amylin injected intracerebroventricularly in the rat. Clementi G, et al. **Peptides** 1996;17(4):589-91

Nitric oxide synthesis inhibition attenuates behavioral actions of neuropeptide FF. Malin DH, et al. **Peptides** 1996; 17(4):615-8

The role of the striatum in the mouse in behavioral sensitization to amphetamine. Bedingfield JB, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):305-10

Effects of rating parameters on assessment of neuroleptic-induced vacuous chewing movements. Egan MF, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):401-10

Comparison of the effects of prototypical behavioral stimulants on locomotor activity and rotational behavior in rats. Garrett BE, et al. **Pharmacol Biochem Behav** 1996 Jun;54(2):469-77

Behavioral effects of N-cyanomethylmethamphetamine, a product derived from smoking methamphetamine with tobacco, in mice and rats. Sekine H, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):167-72

Pharmacological characterization of the enhancement of apomorphine-induced gnawing in mice by cocaine. Tirelli E, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):135-40

Effect of apomorphine on the conflict-induced jumping stereotypy in bank voles. Vandebroek I, et al. **Pharmacol Biochem Behav** 1997 Aug;57(4):863-8

Role of dopamine in behavioral effects of serotonin microinjected into rat striatum. Yeghiayan SK, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):251-9

The effects of raclopride on vacuous jaw movements in rats following acute administration. Steinpreis RE, et al. **Physiol Behav** 1996 Jul;60(1):253-6

Prevention of stereotypy in laboratory mice: effects on stress physiology and behaviour. Würbel H, et al. **Physiol Behav** 1996 Jun;59(6):1163-70

Some behavioral effects of 1,3-di-o-tolylguanidine, opipramol and sertraline, the sigma site ligands. Maj J, et al. **Pol J Pharmacol** 1996 Jul-Aug;48(4):379-95

Modulation of apomorphine-induced stereotyped behavior by cholecystokinin. Tieppo CA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1997 May; 21(4):683-95

Comparative behavioral sensitization to stereotypy by direct and indirect dopamine agonists in CF-1 mice. Bedingfield JB, et al. **Psychopharmacology (Berl)** 1996 Apr; 124(3):219-25

Maintenance of amphetamine-induced stereotypy and locomotion requires ongoing dopamine receptor activation. Conti LH, et al. **Psychopharmacology (Berl)** 1997 Mar; 130(2):183-8

Ontogeny of dopamine agonist-induced sensitization: role of NMDA receptors. Duke MA, et al. **Psychopharmacology (Berl)** 1997 Jan;129(2):153-60

Effects of histamine agents on methamphetamine-induced stereotyped behavior and behavioral sensitization in rats. Ito C, et al. **Psychopharmacology (Berl)** 1997 Apr; 130(4):362-7

Effects of environmental conditioning on the development of nicotine sensitization: behavioral and neurochemical analysis. Reid MS, et al. **Psychopharmacology (Berl)** 1996 Aug;126(4):301-10

Effect of sensitization of stereotypy on the acquisition and retention of tolerance to amphetamine hypophagia. Wolgin DL, et al. **Psychopharmacology (Berl)** 1996 Aug; 126(3):219-25

Alterations in striatal dopamine overflow during rotational behavior induced by amphetamine, phencyclidine, and MK-801. Mele A, et al. **Synapse** 1997 Jul;26(3):218-24

[Manneristic catatonia. A psychotropic drug refractory chronic progressive course] Stöber G, et al. **Fortschr Neurol Psychiatr** 1996 Jul;64(7):250-60 (Eng. Abstr.) **(Ger)**

[Behavioral changes induced by repeated administration of mazindol, an anorexiant, in rats] Kawakami Y, et al. **Nihon Shinkei Seishin Yakurigaku Zasshi** 1996 Aug; 16(4):139-43 (Eng. Abstr.) **(Jpn)**

[Influence of melatonin and amphetamine on formation of time-dependent conditional reflex in rats] Arushanian EB, et al. **Eksp Klin Farmakol** 1997 May-Jun;60(3):9-11 (Eng. Abstr.) **(Rus)**

[A rotational syndrome induced by administration of the delta sleep-inducing peptide into the reticular portion of the rat substantia nigra] Shandra AA, et al. **Fiziol Zh Im I M Sechenova** 1996 Oct-Nov;82(10-11):69-72 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Observations on hand movements in Rett syndrome: a pilot study. Elian M, et al. **Acta Neurol Scand** 1996 Sep; 94(3):212-4

Facial stereotypic movements and tardive dyskinesia in a mentally retarded population. Sprague RL, et al. **Am J Ment Retard** 1996 Jan;100(4):345-58

Growth differences associated with compulsive and stereotyped behavior disorders in adults with mental retardation. Powell SB, et al. **Anxiety** 1996;2(2):90-4

The effects of limbic lesions on locomotion and stereotypy elicited by dopamine agonists in the rat. Schaub CL, et al. **Behav Brain Res** 1997 Mar;84(1-2):129-43

Consideration of the relevance of ethological animal models for human repetitive behavioral spectrum disorders. Nurnberg HG, et al. **Biol Psychiatry** 1997 Jan 15; 41(2):226-9

Time course of striatal changes induced by 6-hydroxydopamine lesion of the nigrostriatal pathway, as studied by combined evaluation of rotational behaviour and striatal Fos expression. Labandeira-Garcia JL, et al. **Exp Brain Res** 1996 Feb;108(1):69-84

Rotational behaviour and neurochemical changes in unilateral N-methyl-norsalsolinol and 6-hydroxydopamine lesioned rats. Moser A, et al. **Exp Brain Res** 1996 Nov; 112(1):89-95

Adjunctive brainstem behaviors in the rat. Andy OJ, et al. **Integr Physiol Behav Sci** 1996 Oct-Dec;31(4):315-30

Turning behavior in rats with unilateral lesions of the subthalamic nucleus: synergism between D1 and D2 receptors. Murer MG, et al. **J Neural Transm Gen Sect** 1995;100(2):123-35

Vasopressin and developmental onset of flank marking behavior in golden hamsters. Ferris CF, et al. **J Neurobiol** 1996 Jun;30(2):192-204

Motor stereotypy and diversity in songs of mimic thrushes. Suthers RA, et al. **J Neurobiol** 1996 Jun;30(2):231-45

Unilateral parkinsonism and stereotyped movements following a right lenticular infarction. Kulisevsky J, et al. **Mov Disord** 1996 Nov;11(6):752-4

Focal task-specific tremors. Soland VL, et al. **Mov Disord** 1996 Nov;11(6):665-70

Chronic electroconvulsive shock enhances 5-HT2 receptor-mediated head shakes but not brain C-fos induction. Moorman JM, et al. **Neuropharmacology** 1996 Mar;35(3):303-13

Dopamine/glutamate interaction as studied by combining turning behaviour and c-Fos expression. Morelli M. **Neurosci Biobehav Rev** 1997 Jul;21(4):505-9 (36 ref.)

Intracerebroventricular porcine corticotropin-releasing hormone and cortisol effects on pig immune measures and behavior. Salak-Johnson JL, et al. **Physiol Behav** 1997 Jan; 61(1):15-23

Is there a role for corticosterone in expression of abnormal behaviour in restricted-fed fowls? Savory CJ, et al. **Physiol Behav** 1997 Jul;62(1):7-13

Responses of neurons in dorsal striatum during

STEREOTYPED BEHAVIOR

amphetamine-induced focused stereotypy. Rebec GV, et al. **Psychopharmacology (Berl)** 1997 Apr;130(4):343–51
Circling seizures. Saka E, et al. **Seizure** 1996 Dec; 5(4):299–302

RADIATION EFFECTS

Prenatal gamma-irradiation alters axial asymmetry in low birth weight pups. Gigi A, et al. **Behav Brain Res** 1997 Jul;86(2):205–7

STEREOTYPING

The urban epidemiology of recurrent injury: beyond age, race, and gender stereotypes [see comments] Madden C, et al. **Acad Emerg Med** 1997 Aug;4(8):772–5. Comment in: Acad Emerg Med 1997 Aug;4(8):761–3.
Control theory, labeling theory, and the delivery of services for drug abuse to adolescents. Downs WR, et al. **Adolescence** 1997 Spring;32(125):1–24
Curricular track, career choice, and androgyny among adolescent females. Wulff MB, et al. **Adolescence** 1997 Spring;32(125):43–9
A threat in the air. How stereotypes shape intellectual identity and performance. Steele CM. **Am Psychol** 1997 Jun;52(6):613–29
Sources of stigma associated with women with HIV. Bunting SM. **ANS Adv Nurs Sci** 1996 Dec;19(2):64–73 (41 ref.)
Do-not-resuscitate orders in the elderly: age discrimination or patient preference? [letter; comment] Rosenfeld KE, et al. **Arch Intern Med** 1997 May 12;157(9):1041, 1043. Comment on: Arch Intern Med 1996 Sep 9;156(16):1821–6.
The influence of psychiatric hospital and community residence labels on social rejection of the mentally ill. Ingamells S, et al. **Br J Clin Psychol** 1996 Sep;35 (Pt 3):359–67
Gender stereotyping: consequences for mental health care [editorial] Ramsay R, et al. **Br J Hosp Med** 1996 May 1–14; 55(9):537–8
Changing the stereotypes of "counsellors". Knežević M. **Coll Antropol** 1997 Jun;21(1):243–50
Rethinking the relationships between disability, rehabilitation, and society. Imrie R. **Disabil Rehabil** 1997 Jul;19(7):263–71 (37 ref.)
Role of the self-image and smoker stereotype in smoking onset during early adolescence: a longitudinal study. Aloise-Young PA, et al. **Health Psychol** 1996 Nov; 15(6):494–7
Evaluation of infantilizing speech in a rehabilitation setting: relation to age. Whitmer RA, et al. **Int J Aging Hum Dev** 1997;44(2):129–36
The dismantling of a myth: a review of eating disorders and socioeconomic status. Gard MC, et al. **Int J Eat Disord** 1996 Jul;20(1):1–12 (40 ref.)
Nurses' memory of patient's pain. McDonald DD. **Int J Nurs Stud** 1996 Oct;33(5):487–94
Attitudes towards mental patients in Hong Kong. Chou KL, et al. **Int J Soc Psychiatry** 1996 Autumn;42(3):213–9
Public perception of discharged psychiatric patients: a community survey. Reda S. **Int J Soc Psychiatry** 1996 Autumn;42(3):220–9
The potential impact of gender stereotypes for nursing research. Hicks C. **J Adv Nurs** 1996 Nov;24(5):1006–13
Moderating effects of personal and contextual factors in age discrimination. Perry EL, et al. **J Appl Psychol** 1996 Dec; 81(6):628–47
Some contributions from the social system to gender inequalities in heart disease [published erratum appears in J Health Soc Behav 1996 Jun;37(2):preceding 121] McKinlay JB. **J Health Soc Behav** 1996 Mar;37(1):1–26 (102 ref.)
Do changes in the stereotypic depiction of a lesbian couple affect heterosexuals' attitudes toward lesbianism? Corley TJ, et al. **J Homosex** 1996;32(2):1–17
Selective self-stereotyping. Biernat M, et al. **J Pers Soc Psychol** 1996 Dec;71(6):1194–209
Anti-black prejudice as a function of exposure to the negative behavior of a single black person. Henderson-King EI, et al. **J Pers Soc Psychol** 1996 Oct;71(4):654–64
When exceptions prove the rule: how extremity of deviance determines the impact of deviant examples on stereotypes. Kunda Z, et al. **J Pers Soc Psychol** 1997 May;72(5):965–79
Mood and the correction of positive versus negative stereotypes. Lambert AJ, et al. **J Pers Soc Psychol** 1997 May;72(5):1002–16
Improving memory in old age through implicit self-stereotyping. Levy B. **J Pers Soc Psychol** 1996 Dec; 71(6):1092–107
The gender gap in occupational role attainment: a social dominance approach. Pratto F, et al. **J Pers Soc Psychol** 1997 Jan;72(1):37–53
Accessible attitudes influence categorization of multiply categorizable objects. Smith ER, et al. **J Pers Soc Psychol** 1996 Nov;71(5):888–98
Cognitive bias in procedural justice: formation and implications of illusory correlations in perceived intergroup fairness. Stroessner SJ, et al. **J Pers Soc Psychol** 1996 Oct; 71(4):717–28
Looking for truth in all the wrong places? Asymmetric search of individuating information about stereotyped group members. Trope Y, et al. **J Pers Soc Psychol** 1997 Aug; 73(2):229–41
Evidence for racial prejudice at the implicit level and its relationship with questionnaire measures. Wittenbrink B, et al. **J Pers Soc Psychol** 1997 Feb;72(2):262–74
Gender stereotypes: a bias against men. Fiebert MS, et al. **J Psychol** 1997 Jul;131(4):407–10
The structure of attitudes toward persons who are deaf: emotions, values, and stereotypes. Kiger G. **J Psychol** 1997 Sep;131(5):554–60
Menopause, only for women? The social construction of menopause as an exclusively female condition. Oudshoorn NE. **J Psychosom Obstet Gynaecol** 1997 Jun;18(2):137–44 (16 ref.)
Stereotypes [editorial] Youngblut JM. **J Soc Pediatr Nurs** 1997 Apr-Jun;2(2):51
Self- and peer-ratings of female and male roles and attributes. Chang L, et al. **J Soc Psychol** 1997 Aug;137(4):527–9
The decision is none of our business [letter; comment] Pfalzer SM. **MCN Am J Matern Child Nurs** 1996 Mar-Apr;21(2):74 . Comment on: MCN Am J Matern Child Nurs 1995 Nov-Dec;20(6):315–21.
Perception of faces with and without spectacles. McKelvie SJ. **Percept Mot Skills** 1997 Apr;84(2):497–8
Stereotyping of older adults: the role of target facial cues and perceiver characteristics. Hummert ML, et al. **Psychol Aging** 1997 Mar;12(1):107–14
Attitudes toward older adults reported by young adults: variation based on attitudinal task and attribute categories. Slotterback CS, et al. **Psychol Aging** 1996 Dec;11(4):563–71
Social distance towards the mentally ill: results of representative surveys in the Federal Republic of Germany. Angermeyer MC, et al. **Psychol Med** 1997 Jan;27(1):131–41
Perceptual differences in racial descriptions of Euro-American and Hispanic persons. Tomkiewicz J, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1339–43
Psychology of computer use: XL. Addictive use of the Internet: a case that breaks the stereotype [see comments] Young KS. **Psychol Rep** 1996 Dec;79(3 Pt 1):899–902. Comment in: Psychol Rep 1997 Feb;80(1):81–2.
The use of stereotypical gender information in constructing a mental model: evidence from English and Spanish. Carreiras M, et al. **Q J Exp Psychol A** 1996 Aug; 49(3):639–63
The effect of violent attacks by schizophrenic persons on the attitude of the public towards the mentally ill. Angermeyer MC, et al. **Soc Sci Med** 1996 Dec; 43(12):1721–8
Problem-based learning in medicine: new curriculum, old stereotypes. Philips SP. **Soc Sci Med** 1997 Aug;45(3):497–9
Can Shneidman's "Ten Commonalities of Suicide" accommodate rational suicide? Werth JL Jr. **Suicide Life Threat Behav** 1996 Fall;26(3):292–9

STERIGMATOCYSTIN

ANALOGS & DERIVATIVES

ord1, an oxidoreductase gene responsible for conversion of O-methylsterigmatocystin to aflatoxin in Aspergillus flavus. Prieto R, et al. **Appl Environ Microbiol** 1997 May; 63(5):1661–6

ANALYSIS

Sterigmatocystin: incidence, fate and production by Aspergillus versicolor in Ras cheese. Abd Alla EA, et al. **Nahrung** 1996 Dec;40(6):310–3

BIOSYNTHESIS

Aspergillus nidulans stcP encodes an O-methyltransferase that is required for sterigmatocystin biosynthesis. Kelkar HS, et al. **Appl Environ Microbiol** 1996 Nov;62(11):4296–8
Aspergillus sporulation and mycotoxin production both require inactivation of the FadA G alpha protein-dependent signaling pathway. Hicks JK, et al. **EMBO J** 1997 Aug 15;16(16):4916–23
Aspergillus nidulans stcL encodes a putative cytochrome P-450 monooxygenase required for bisfuran desaturation during aflatoxin/sterigmatocystin biosynthesis. Kelkar HS, et al. **J Biol Chem** 1997 Jan 17;272(3):1589–94

STERILITY see **INFERTILITY**

STERILITY, FEMALE see **INFERTILITY, FEMALE**

STERILITY, MALE see **INFERTILITY, MALE**

STERILIZATION

Dialyzer reprocessing with peroxyacetic acid as sole cleansing and sterilizing agent. Kes P, et al. **Acta Med Croatica** 1997;51(2):87–93
Ethylene oxide does not extinguish the osteoinductive capacity of demineralized bone. A reappraisal in rats. Zhang Q, et al. **Acta Orthop Scand** 1997 Apr;68(2):104–8
Effect of autoclaving on stability of nitrofurazone soluble dressing. Phillips C, et al. **Am J Health Syst Pharm** 1996 May 15;53(10):1169–71
Disposable and autoclavable anaesthetic circuits: the future is now. Komesaroff D. **Anaesth Intensive Care** 1996 Apr; 24(2):173–5
Comment: filgrastim sterility in syringes [letter; comment] Trissel LA, et al. **Ann Pharmacother** 1997 Apr;31(4):500–1 . Comment on: Ann Pharmacother 1996 Nov;30(11):1238–42.
Efficacy of clean v sterile surgical prep kits. Pearce BA, et al. **AORN J** 1997 Sep;66(3):464–70
Ingestion of yogurt containing Lactobacillus acidophilus compared with pasteurized yogurt as prophylaxis for recurrent candidal vaginitis and bacterial vaginosis. Shalev E, et al. **Arch Fam Med** 1996 Nov-Dec;5(10):593–6
Nonaldehyde sterilization of biologic tissue for use in implantable medical devices. Moore MA, et al. **ASAIO J** 1997 Jan-Feb;43(1):23–30
Poor sterilisation of instruments leads to infection outbreak in Paris [news] Dorozynski A. **BMJ** 1997 Sep 20; 315(7110):699
The effect of autoclaving on the mechanical properties of bank bovine bone. Viceconti M, et al. **Chir Organi Mov** 1996 Jan-Mar;81(1):63–8 **(Eng, Ita)**
Overview of polyethylene as a bearing material: comparison of sterilization methods. Collier JP, et al. **Clin Orthop** 1996 Dec;(333):76–86
Shelf life and in vivo duration. Impacts on performance of tibial bearings. Currier BH, et al. **Clin Orthop** 1997 Sep; (342):111–22
Morphological changes of autoclaved autogenic bone implantation and autoclaved autogenic bone supplemented with allogenic demineralized bone matrix in rat parietal bone. Young TQ, et al. **Histol Histopathol** 1996 Apr; 11(2):361–9
Effect of microwave radiation, pasteurization and lyophilization on the ability of human milk to inhibit Escherichia coli adherence to HEp-2 cells. Carbonare SB, et al. **J Diarrhoeal Dis Res** 1996 Jun;14(2):90–4
Eradication of the long-term carriage of methicillin-resistant Staphylococcus aureus in patients wearing dentures: a follow-up of 10 patients. Rossi T, et al. **J Hosp Infect** 1996 Dec;34(4):311–20
Assessment of microwave sterilization of foods using intrinsic chemical markers. Prakash A, et al. **J Microw Power Electromagn Energy** 1997;32(1):50–7
The effect of gamma-irradiation on the antibacterial activity of honey. Molan PC, et al. **J Pharm Pharmacol** 1996 Nov; 48(11):1206–9
Process simulation testing for aseptically filled products. Parenteral Drug Association. **PDA J Pharm Sci Technol** 1996;50 Suppl 1:S1–16 (13 ref.)
Virus retention by a hydrophilic triple-layer PVDF microporous membrane filter. Aranha-Creado H, et al. **PDA J Pharm Sci Technol** 1997 May-Jun;51(3):119–24
Effect of steam-heat treatment with/without divalent cations on the inactivation of lipopolysaccharides from several bacterial species. Bamba T, et al. **PDA J Pharm Sci Technol** 1996 Mar-Apr;50(2):129–35
Condensable chemical vapors for sterilization of freeze dryers. Bardat A, et al. **PDA J Pharm Sci Technol** 1996 Mar-Apr;50(2):83–8
Investigation of pulsed light for terminal sterilization of WFI filled blow/fill/seal polyethylene containers. Dunn J, et al. **PDA J Pharm Sci Technol** 1997 May-Jun;51(3):111–5
PDA comments to USP on 'proposed changes to <71> sterility tests'. Fry EM. **PDA J Pharm Sci Technol** 1996 Mar-Apr;50(2):69–78
Synergistic sterilization: a brief history. Olson WP. **PDA J Pharm Sci Technol** 1997 May-Jun;51(3):116–8
Re: the fourteen-day sterility test: how we got there [letter] Olson WP. **PDA J Pharm Sci Technol** 1996 Jul-Aug; 50(4):198
Space, sterility and surgery: circuits of hygiene in the operating theatre. Fox NJ. **Soc Sci Med** 1997 Sep; 45(5):649–57
Injection practices in Mwanza Region, Tanzania: prescriptions, patient demand and sterility. Gumodoka B, et al. **Trop Med Int Health** 1996 Dec;1(6):874–80
[Apropos hygiene (editorial; comment)] Roh S. **Schweiz Monatsschr Zahnmed** 1996;106(8):693, 695. Comment on: Schweiz Monatsschr Zahnmed 1996;106(8):700–25. **(Fre, Ger)**
[Cryopreserved homograft cardiac valves: structural modifications brought about by the use of sterilization and cryopreservation methods] Porqueddu M, et al. **Cardiologia** 1997 Apr;42(4):351–7 (52 ref.) **(Ita)**

ECONOMICS

Liquid sterilization versus high level disinfection in the urologic office. Fuselier HA Jr, et al. **Urology** 1997 Sep; 50(3):337–40

INSTRUMENTATION

Thermal processing of foods, a retrospective, Part II: On-line methods for ensuring commercial sterility. Ramesh MN, et al. **Adv Appl Microbiol** 1997;44:315–45 (60 ref.)
Adaptation and validation of a portable steam sterilizer for processing intrauterine device insertion instruments and supplies in low-resource settings. Barone MA, et al. **Am J Infect Control** 1997 Aug;25(4):350–6
Pseudoautoclave failure caused by differences in spore test steam sensitivities. Gurevich I, et al. **Am J Infect Control** 1996 Oct;24(5):402–4
Unreliability of chemical integrators compared to spore tests for sterilizer monitoring. Gurevich I, et al. **Am J Infect Control** 1996 Oct;24(5):405–6
A review of the plasma sterilization systems [letter] Zafar AB. **Am J Infect Control** 1996 Aug;24(4):312

Radiation protection. Protection from potential exposures: application to selected radiation sources. A report of a task group of the International Commission on Radiation Protection. **Ann ICRP** 1997;27(2):1–61

Immunoreactivity of specific epitopes of PrPSc is enhanced by pretreatment in a hydrated autoclave. Yokoyama T, et al. **Clin Diagn Lab Immunol** 1996 Jul;3(4):470–1

Prevention of patient bacterial contamination of anaesthesia–circle–systems: a clinical study of the contamination risk and performance of different heat and moisture exchangers with electret filter (HMEF). Rathgeber J, et al. **Eur J Anaesthesiol** 1997 Jul;14(4):368–73

Pre–1993 HAMO LS–76 instrument washers without thermal protection can overheat. **Health Devices** 1997 Aug; 26(8):333–5

Comparison of ion plasma, vaporized hydrogen peroxide, and 100% ethylene oxide sterilizers to the 12/88 ethylene oxide gas sterilizer [see comments] Alfa MJ, et al. **Infect Control Hosp Epidemiol** 1996 Feb;17(2):92–100. Comment in: Infect Control Hosp Epidemiol 1996 Feb;17(2):87–91.

Effectiveness of salt versus glass bead sterilizers. Haddad AJ, et al. **J Can Dent Assoc** 1997 Jun;63(6):448–53

Assessment of the efficacy of a low temperature hydrogen peroxide gas plasma sterilization system. Kyi MS, et al. **J Hosp Infect** 1995 Dec;31(4):275–84

[Sterile cover for the microscope in ENT operations] Jung HP. **Laryngorhinootologie** 1996 Oct;75(10):625–6 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

[Hygiene plans for ambulatory surgery practices] Felsing HH, et al. **Chirurg** 1997 Jul;68(7):197–201 **(Ger)**

METHODS

Massive autoclaved allografts and autografts for limb salvage surgery. A 1–8 year follow–up of 23 patients. Asada N, et al. **Acta Orthop Scand** 1997 Aug;68(4):392–5

APIC guideline for selection and use of disinfectants. 1994, 1995, and 1996 APIC Guidelines Committee. Association for Professionals in Infection Control and Epidemiology, Inc. Rutala WA. **Am J Infect Control** 1996 Aug; 24(4):313–42 (294 ref.)

How to safely clean surgical instruments. Finkelstein LE, et al. **Am J Nurs** 1997 Jun;97(6):59

Sterility of filgrastim (G–CSF) in syringes [see comments] Jacobson PA, et al. **Ann Pharmacother** 1996 Nov; 30(11):1238–42. Comment in: Ann Pharmacother 1997 Apr;31(4):500–1.

Gamma radiation–sterilized, triple–lumen catheters coated with a low concentration of chlorhexidine were not efficacious at preventing catheter infections in intensive care unit patients. Sherertz RJ, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):1995–7

Gamma–sterilization–induced radicals in biodegradable drug delivery systems. Mäder K, et al. **Appl Radiat Isot** 1996 Nov–Dec;47(11–12):1669–74

Microwave plasmas for low–temperature dry sterilization. Chau TT, et al. **Biomaterials** 1996 Jul;17(13):1273–7

Influence of sterilization processes on poly(epsilon–caprolactone) nanospheres. Masson V, et al. **Biomaterials** 1997 Feb;18(4):327–35

Influence of gamma–irradiation sterilization and temperature on the fracture toughness of ultra–high–molecular–weight polyethylene. Pascaud RS, et al. **Biomaterials** 1997 May; 18(10):727–35

Gamma sterilization of UHMWPE articular implants: an analysis of the oxidation problem. Ultra High Molecular Weight Poly Ethylene. Premnath V, et al. **Biomaterials** 1996 Sep;17(18):1741–53

Tissue response to commercial silicone and polyurethane elastomers after different sterilization procedures. Zhang YZ, et al. **Biomaterials** 1996 Dec;17(23):2265–72

Changes in the science of sterilization and disinfection. Morrissey RF. **Biomed Instrum Technol** 1996 Sep–Oct; 30(5):404–6

Factors in the preparation of biological indicators that affect the decimal reduction time. Shintani H. **Biomed Instrum Technol** 1996 Sep–Oct;30(5):449–53

The use of two or more microorganisms versus one microorganism in the carrier materials for biological indicators. Shintani H. **Biomed Instrum Technol** 1997 Jul–Aug;31(4):387–90

Steam sterilization [published erratum appears in Biomed Instrum Technol 1997 May–Jun;31(3):294] Thaete R. **Biomed Instrum Technol** 1996 Nov–Dec;30(6):538–40

A study of the combined effects of shelf ageing following irradiation in air and counterface roughness on the wear of UHMWPE. Besong AA, et al. **Biomed Mater Eng** 1997; 7(1):59–65

Radiation effects on polypropylene for sterilization. Khang G, et al. **Biomed Mater Eng** 1996;6(5):323–34

Impact of terminal heat sterilization on the quality of peritoneal dialysis solutions. Martis L, et al. **Blood Purif** 1997;15(1):54–60

Fatigue strength of polyethylene after sterilization by gamma irradiation or ethylene oxide. Ries MD, et al. **Clin Orthop** 1996 Dec;(333):87–95

Safety and efficacy of ethylene oxide sterilized polyethylene in total knee arthroplasty. Ries MD, et al. **Clin Orthop** 1996 Oct;(331):159–63

Effects of sterilization on wear in total knee arthroplasty. White SE, et al. **Clin Orthop** 1996 Oct;(331):164–71

Heat transfer and lethality considerations in aseptic processing of liquid/particle mixtures: a review. Ramaswamy HS, et al. **Crit Rev Food Sci Nutr** 1997 Apr; 37(3):253–86 (163 ref.)

Public health and nonpasteurized fruit juices. Parish ME. **Crit Rev Microbiol** 1997;23(2):109–19 (61 ref.)

Effect of high–power microwave on indicator bacteria for sterilization. Wu Q. **IEEE Trans Biomed Eng** 1996 Jul; 43(7):752–4

Low–temperature sterilization technologies: do we need to redefine "sterilization"? [editorial; comment] Rutala WA, et al. **Infect Control Hosp Epidemiol** 1996 Feb;17(2):87–91. Comment on: Infect Control Hosp Epidemiol 1996 Feb;17(2):92–100.

Disinfection and sterilization of patient–care items. Rutala WA. **Infect Control Hosp Epidemiol** 1996 Jun;17(6):377–84

Preparation of bank bone using defatting, freeze–drying and sterilisation with ethylene oxide gas. Part 1. Experimental evaluation of its efficacy and safety. Kakiuchi M, et al. **Int Orthop** 1996;20(3):142–6

Critical steps in instrument cleaning: removing debris after sonication. Burkhart NW, et al. **J Am Dent Assoc** 1997 Apr;128(4):456–63

Biological indicators for low temperature steam and formaldehyde sterilization: investigation of the effect of change in temperature and formaldehyde concentration on spores of Bacillus stearothermophilus NCIMB 8224. Wright AM, et al. **J Appl Bacteriol** 1996 Mar;80(3):259–65

Impact of gamma sterilization on clinical performance of polyethylene in the knee. Collier JP, et al. **J Arthroplasty** 1996 Jun;11(4):377–89

Autosterilization of biodegradable implants by injection molding process. König C, et al. **J Biomed Mater Res** 1997 Summer;38(2):115–9

Use of AmpliWax to optimize amplicon sterilization by isopsoralen. De la Viuda M, et al. **J Clin Microbiol** 1996 Dec;34(12):3115–9

Sporicidal activity of chemical and physical tissue fixation methods. Vardaxis NJ, et al. **J Clin Pathol** 1997 May; 50(5):429–33

Killing activity of microwaves in milk [letter; comment] George RH. **J Hosp Infect** 1997 Apr;35(4):319–20. Comment on: J Hosp Infect 1996 Aug;33(4):273–8.

The effect of gamma radiation on the degradation of salbutamol. Basly JP, et al. **J Pharm Biomed Anal** 1997 May;15(8):1137–41

Effects of infection control procedures on the accuracy of a new mechanical torque wrench system for implant restorations. Dellinges M, et al. **J Prosthet Dent** 1996 Jan; 75(1):93–8

Microbial barrier assessment of Tyvek stopper packaging for rubber closures. Moldenhauer JE, et al. **PDA J Pharm Sci Technol** 1996 Nov–Dec;50(6):391–8

Radiation sterilization of formoterol. Basly JP, et al. **Pharm Res** 1997 Jun;14(6):810–4

Sterilization of instruments in general practice: what does it entail? Allen KW, et al. **Public Health** 1997 Mar; 111(2):115–7

Disinfection: gaps between recommended and actual practice. Keah KC, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):795–8

Methods and reagents. Emergency sterilization using microwaves. Hengen PN. **Trends Biochem Sci** 1997 Feb; 22(2):68–9

Liquid sterilization versus high level disinfection in the urologic office. Fuselier HA Jr, et al. **Urology** 1997 Sep; 50(3):337–40

Instrument sterilization, skin preparation, and wound management. Southwood LL, et al. **Vet Clin North Am Equine Pract** 1996 Aug;12(2):173–94 (79 ref.)

Sterilisation of surgical instruments with formaldehyde gas. Lubbe AM, et al. **Vet Rec** 1997 Apr 26;140(17):450–3

Liquid pasteurization of an immunoglobulin preparation without stabilizer: effects on its biological and biochemical properties. Bridonneau P, et al. **Vox Sang** 1996;70(4):203–9

Value of virus filtration as a method for improving the safety of plasma products [letter; comment] Burnouf T. **Vox Sang** 1996;70(4):235–6. Comment on: Vox Sang 1995;69(1):82–3.

Liquid pasteurization of immunoglobulins without stabilizer [letter] Magnin AA, et al. **Vox Sang** 1997;72(4):252–3

[Study on the death of Escherichia coli induced by hydrostatic pressures] Qin L, et al. **Wei Sheng Wu Hsueh Pao** 1996 Apr;36(2):158–9 (Eng. Abstr.) **(Chi)**

[Disinfection and sterilization of endoscopes in urology. The Committee on Infection of the French Association of Urology] Lobel B, et al. **Prog Urol** 1997 Jun;7(3):505–7 **(Fre)**

[CO2 laser sterilization in periradicular surgery: a clinical follow–up study] Van Doorne L, et al. **Rev Belge Med Dent** 1996;51(1):73–82 (Eng. Abstr.) **(Fre)**

[Comparative study of the efficiency of bacterial filters in long–term mechanical ventilation (comment) (see comments)] Nielsen HJ, et al. **Anaesthesist** 1996 Sep; 45(9):814–8 (Eng. Abstr.). Comment on: Anaesthesist 1996 Sep;45(9):814–8. Comment in: Anaesthesist 1997 Jun;46(6):568–9. **(Ger)**

[Experimental studies of healing and antigenicity of sterilized bone transplants] Schratt HE, et al. **Chirurg** 1997 Jan; 68(1):77–83 (Eng. Abstr.) **(Ger)**

[Disinfection of human donor corneas during preparation and preservation] Hagenah M, et al. **Klin Monatsbl Augenheilkd** 1996 Jul;209(1):1–6; discussion 1 (58 ref.) (Eng. Abstr.) **(Ger)**

[Use of allogeneic cortical bone for femoral defect repair in combination with cemented hip total endoprosthesis––an experimental study of dogs] Ott K, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:459–64 (Eng. Abstr.) **(Ger)**

[Disinfection of the environment and patients on intensive care units] Daschner F, et al. **Zentralbl Chir** 1996;121 Suppl:35–6 **(Ger)**

[Low–temperature sterilization: evaluation of a method based on hydrogen peroxide gas plasma] Pagano A, et al. **Ann Ig** 1997 Mar–Apr;9(2):153–64 **(Ita)**

[Health hazards in hospital personnel related to use of ethylene oxide in sterilization processes] Tyras H. **Med Pr** 1997;48(3):325–33 (48 ref.) (Eng. Abstr.) **(Pol)**

[Bactericidal properties of out–of–focus NAG laser radiation] Semenov FV, et al. **Biull Eksp Biol Med** 1996 Jun; 121(6):654–6 **(Rus)**

[The sterilization of bottles, nipples and water: why do we make mothers work too much? (letter)] Alcover Bloch E, et al. **An Esp Pediatr** 1996 May;44(5):524–5 **(Spa)**

STANDARDS

Quality assurance for pharmacy–prepared sterile products in hospitals and home infusion facilities [editorial; comment] [see comments] Klein C. **Am J Health Syst Pharm** 1996 Nov 1;53(21):2581. Comment on: Am J Health Syst Pharm 1996 Nov 1;53(21):2591–605. Comment in: Am J Health Syst Pharm 1996 Nov 1;53(21):2582.

Needed: serious attention to sterile products [editorial; comment] Myers CE. **Am J Health Syst Pharm** 1996 Nov 1;53(21):2582. Comment on: Am J Health Syst Pharm 1996 Nov 1;53(21):2581. Comment on: Am J Health Syst Pharm 1996 Nov 1;53(21):2591–605.

Adaptation and validation of a portable steam sterilizer for processing intrauterine device insertion instruments and supplies in low–resource settings. Barone MA, et al. **Am J Infect Control** 1997 Aug;25(4):350–6

Recommended practices for the care and cleaning of surgical instruments and powered equipment. Association of Operating Room Nurses. **AORN J** 1997 Jan;65(1):124–8

Recommended practices for maintaining a sterile field. Association of Operating Room Nurses. **AORN J** 1996 Nov;64(5):817–21

Surface analysis of clinically used expanded PTFE endoscopic tubing treated by the STERIS PROCESS. Tucker RC, et al. **ASAIO J** 1996 Jul–Aug;42(4):306–13

Sterilisation. Past confusions and current recommendations. Magennis A. **Aust Fam Physician** 1996 Dec;25(12):1825–9

The effect of thermal treatment on sterility, molecular and mechanical properties of various polylactides. I. Poly(L–lactide). Gogolewski S, et al. **Biomaterials** 1996 Mar;17(5):523–8

Fatigue performance of ultra–high–molecular–weight polyethylene: effect of gamma radiation sterilization. Sauer WL, et al. **Biomaterials** 1996 Oct;17(20):1929–35

Changes in hospital practice. Alfa MJ. **Biomed Instrum Technol** 1996 Sep–Oct;30(5):400–4

The microbial and physical quality of recycled gloves. Hagos B, et al. **East Afr Med J** 1997 Apr;74(4):224–6

Comparison of a rapid readout biological indicator for steam sterilization with four conventional biological indicators and five chemical indicators [letter; comment] Belkin NL. **Infect Control Hosp Epidemiol** 1996 Dec;17(12):773. Comment on: Infect Control Hosp Epidemiol 1996 Jul;17(7):423–8.

Comparison of a rapid readout biological indicator for steam sterilization with four conventional biological indicators and five chemical indicators [see comments] Rutala WA, et al. **Infect Control Hosp Epidemiol** 1996 Jul;17(7):423–8. Comment in: Infect Control Hosp Epidemiol 1996 Dec;17(12):773.

Preparation of bank bone using defatting, freeze–drying and sterilisation with ethylene oxide gas. Part 2. Clinical evaluation of its efficacy and safety. Kakiuchi M, et al. **Int Orthop** 1996;20(3):147–52

Sterility and sterility assurance. Akers J, et al. **PDA J Pharm Sci Technol** 1997 Mar–Apr;51(2):72–7

STATISTICS & NUMERICAL DATA

Thermal processing of foods, a retrospective, Part I: Uncertainties in thermal processing and statistical analysis. Ramesh MN, et al. **Adv Appl Microbiol** 1997;44:287–314 (90 ref.)

TRENDS

Changes in the science of sterilization and disinfection. Morrissey RF. **Biomed Instrum Technol** 1996 Sep–Oct; 30(5):404–6

STERILIZATION, INVOLUNTARY

France to investigate illegal sterilisation of mentally ill patients [news] Dorozynski A. **BMJ** 1997 Sep 20;

STERILIZATION, INVOLUNTARY

315(7110):697

Medicine, eugenics, and the Supreme Court: from coercive sterilization to reproductive freedom. Lombardo PA. **J Contemp Health Law Policy** 1996 Fall;13(1):1–25

Nonconsensual sterilization of the mentally disabled in North Carolina: an ethics critique of the statutory standard and its judicial interpretation. Zumpano–Canto J. **J Contemp Health Law Policy** 1996 Fall;13(1):79–111

HISTORY

["Patients with genetic diseases can, by surgical intervention, be sterilized..." Mandatory sterilization in Germany during the era of national socialism] Zimmermann S, et al. **Zentralbl Gynakol** 1997;119(4):143–8 (Eng. Abstr.) **(Ger)**

STERILIZATION REVERSAL

Fallopian tube anastomosis procedures to restore fertility. Haspel–Siegel AS. **AORN J** 1997 Jan;65(1):75–82, 85–6

Vasectomy and vasectomy reversal. Goldstein M, et al. **Curr Ther Endocrinol Metab** 1997;6:371–80 (6 ref.)

Cumulative pregnancy analysis of one–tube versus two–tube tubal anastomosis. Isaacs JD Jr, et al. **Fertil Steril** 1997 Aug;68(2):217–9

Fertility options after vasectomy: a cost–effectiveness analysis. Pavlovich CP, et al. **Fertil Steril** 1997 Jan; 67(1):133–41

Fertility outcome after laparoscopic microsurgical tubal anastomosis. Yoon TK, et al. **Fertil Steril** 1997 Jan; 67(1):18–22

Laparoscopic–assisted tubal anastomosis. Frishman GN, et al. **J Am Assoc Gynecol Laparosc** 1995 Aug;2(4):411–5

Improved combined laparoscopic and minilaparotomy technique to allow for reversal of extensive tubal sterilization. Silva PD, et al. **J Am Assoc Gynecol Laparosc** 1995 May;2(3):327–30

Clinical study of vasectomy reversal: results of 60 single–surgeon cases in Taiwan. Chiang HS. **J Formos Med Assoc** 1996 Nov;95(11):866–9

[Results of microsurgical reconstruction after vasectomy] Casella R, et al. **Schweiz Rundsch Med Prax** 1997 May 28;86(22):933–6 (Eng. Abstr.) **(Ger)**

METHODS

Reversal of sterilisation by the railroad technique. Edozien LC, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):92–5

Reversal of tubal sterilization using laparoscopically placed titanium staples: preliminary experience. Stadtmauer L, et al. **Hum Reprod** 1997 Apr;12(4):647–9

Laparoscopic tubal anastomosis. Reich H, et al. **J Am Assoc Gynecol Laparosc** 1993 Nov;1(1):16–9

Loupe microsurgical tubal sterilization reversal. Experience at a community–level naval hospital. Fischer RJ. **J Reprod Med** 1996 Nov;41(11):855–9

PSYCHOLOGY

Risk factors for tubal sterilization regret, detectable before surgery. Hardy E, et al. **Contraception** 1996 Sep; 54(3):159–62

STERILIZATION, SEXUAL

see related
PEST CONTROL, BIOLOGICAL

Thousands of women sterilised in Sweden without consent [news] Armstrong C. **BMJ** 1997 Sep 6;315(7108):563

Early effects of spaying on plasma and liver phospholipid concentrations in rats. Wagh LR, et al. **Indian J Exp Biol** 1996 Mar;34(3):201–4

ACOG technical bulletin. Sterilization. Number 222—April 1996 (replaces no. 113, February 1988). American College of Obstetricians and Gynecologists. **Int J Gynaecol Obstet** 1996 Jun;53(3):281–8

Laparoscopic sterilization: American Association of Gynecologic Laparoscopists' 1993 membership survey. Hulka JF, et al. **J Am Assoc Gynecol Laparosc** 1995 Feb; 2(2):137–8

Did the sterile insect technique or weather eradicate screwworms (Diptera:Calliphoridae) from Libya? Krafsur ES, et al. **J Med Entomol** 1996 Nov;33(6):877–87

HISTORY

In the name of therapeutics: The practice of sterilization in a California State Hospital. Braslow JT. **J Hist Med Allied Sci** 1996 Jan;51(1):29–51

LEGISLATION & JURISPRUDENCE

The BMJ's Nuremberg issue. Compulsory sterilisation of defective people was legal in several countries besides Germany [letter; comment] Baron JH. **BMJ** 1997 Feb 8; 314(7078):440. Comment on: BMJ 1996 Dec 7;313(7070):1453–63.

MDs' failure to use plain language can lead to the courtroom. Gordon D. **Can Med Assoc J** 1996 Oct 15;155(8):1152–4

Religious discrimination in the selection of medical students: a case study. Gunn AE, et al. **Issues Law Med** 1996 Spring; 11(4):363–78

METHODS

100,000 quinacrine sterilizations. Kessel E. **Adv Contracept** 1996 Jun;12(2):69–76 (37 ref.)

Reconsider unipolar methods for female sterilization [letter; comment] Soderstrom RM. **Am J Obstet Gynecol** 1996 Oct; 175(4 Pt 1):1083–4. Comment on: Am J Obstet Gynecol 1996 Apr;174(4):1161–8; discussion 1168–70.

Transcervical analgesia for laparoscopic sterilisation [letter; comment] Kelly MC, et al. **Br J Obstet Gynaecol** 1996 Oct;103(10):1051. Comment on: Br J Obstet Gynaecol 1996 Apr;103(4):378–80.

Morphological observations of vas deferens occlusion by the percutaneous injection of medical polyurethane. Chen Z, et al. **Contraception** 1996 May;53(5):275–9

Quinacrine sterilization in the United States? [letter; comment] Kessel E, et al. **Fertil Steril** 1996 Mar; 65(3):679–81. Comment on: Fertil Steril 1995 Aug;64(2):325–34.

Quinacrine pellet nonsurgical female sterilization in Wonosobo, Indonesia. Suhadi A, et al. **Fertil Steril** 1997 May;67(5):966–8

Specifications for new technologies for female sterilization for use in developing countries. Dusitsin N. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S15–6

PSYCHOLOGY

Psychological long–term effects of sterilization on anxiety and depression. Luo L, et al. **Contraception** 1996 Dec; 54(6):345–57

STATISTICS & NUMERICAL DATA

Female sterilization in Ramathibodi Hospital: 1987–1993. Intaraprasert S, et al. **J Med Assoc Thai** 1996 Sep; 79(9):589–95

TRENDS

Postpartum sterilisation at Paarl Hospital—a sudden collapse [letter] de Villiers VP. **S Afr Med J** 1996 Nov;86(11):1429

UTILIZATION

The provision of female sterilization in São Paulo, Brazil: a study among low income women. Vieira EM, et al. **Soc Sci Med** 1996 May;42(10):1427–32

VETERINARY

The attractiveness of a liquid bait to white–tailed deer in the Central Appalachian Mountains, Virginia, USA. Hakim S, et al. **J Wildl Dis** 1996 Apr;32(2):395–8

STERILIZATION, TUBAL

see related
STERILIZATION REVERSAL

Pelvic inflammatory disease in patients with bilateral tubal ligation. Abbuhl SB, et al. **Am J Emerg Med** 1997 May; 15(3):271–4

Tubal ligation and fatal ovarian cancer in a large prospective cohort study. Miracle–McMahill HL, et al. **Am J Epidemiol** 1997 Feb 15;145(4):349–57

Analgesia after day case laparoscopic sterilisation. A comparison of tramadol with paracetamol/dextropropoxyphene and paracetamol/codeine combinations. Crighton IM, et al. **Anaesthesia** 1997 Jul;52(7):649–52

Ultrastructural study on the epithelium of ligated fallopian tubes in women of reproductive age. Li J, et al. **Anat Anz** 1996 Aug;178(4):317–20

Droperidol/ondansetron combination controls nausea and vomiting after tubal banding [published erratum appears in Anesth Analg 1997 Mar;84(3):704] [see comments] McKenzie R, et al. **Anesth Analg** 1996 Dec;83(6):1218–22 . Comment in: Anesth Analg 1997 Jun;84(6):1389–90.

Midazolam premedication increases sedation but does not prolong discharge times after brief outpatient general anesthesia for laparoscopic tubal sterilization. Richardson MG, et al. **Anesth Analg** 1997 Aug;85(2):301–5

A comparison of oral ketorolac and hydrocodone–acetaminophen for analgesia after ambulatory surgery: arthroscopy versus laparoscopic tubal ligation. White PF, et al. **Anesth Analg** 1997 Jul;85(1):37–43

Sterilization of women with Eisenmenger syndrome: report of 4 cases. Temelcos C, et al. **Aust N Z J Obstet Gynaecol** 1997 Feb;37(1):121–3

Reduced risk of ovarian cancer in women with a tubal ligation or hysterectomy. The World Health Organization Collaborative Study of Neoplasia and Steroid Contraceptives. Rosenblatt KA, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Nov;5(11):933–5

Ketamine as an anaesthetic agent for tubal sterilisation. Weerasekera DS, et al. **Ceylon Med J** 1996 Sep;41(3):102–3

Reversal of tubal sterilization using laparoscopically placed titanium staples: preliminary experience. Stadtmauer L, et al. **Hum Reprod** 1997 Apr;12(4):647–9

Tubal sterilisation, hysterectomy and decreased risk of ovarian cancer. Survey of Women's Health Study Group. Green A, et al. **Int J Cancer** 1997 Jun 11;71(6):948–51

Association between tubal ligation and endometrial cancer [letter; comment] Rosenblatt K, et al. **Int J Cancer** 1997 Mar 28;71(1):129–30. Comment on: Int J Cancer 1996 Mar 1;65(5):607–12.

UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction: Consultation on the Development of New Technologies for Female Sterilization. Geneva, 25–27 July 1994. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S1–77

The effect of nitrous oxide and carbon dioxide pneumoperitoneum on operative and postoperative pain during laparoscopic sterilization under local anesthesia. Lipscomb GH, et al. **J Am Assoc Gynecol Laparosc** 1994 Nov;2(1):57–60

Serum bupivacaine levels during laparoscopic sterilization using local anesthesia. Lipscomb GH, et al. **J Am Assoc Gynecol Laparosc** 1994 Nov;2(1):27–30

Loupe microsurgical tubal sterilization reversal. Experience at a community–level naval hospital. Fischer RJ. **J Reprod Med** 1996 Nov;41(11):855–9

Live broadcast of surgery through the Internet [letter] Gandsas A, et al. **Lancet** 1996 Nov 9;348(9037):1314

Sterilization for family planning in a Third World country. Reichert JA, et al. **Minn Med** 1997 Jul;80(7):27–30

Tubal sterilization and long–term risk of hysterectomy: findings from the United States collaborative review of sterilization. The U.S. Collaborative Review of Sterilization Working Group. Hillis SD, et al. **Obstet Gynecol** 1997 Apr;89(4):609–14

Salivary progesterone concentrations after tubal sterilization. Sumiala S, et al. **Obstet Gynecol** 1996 Nov;88(5):792–6

Effects of ketoprofen and mesosalpinx infiltration on postoperative pain after laparoscopic sterilization. Van Ee R, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 1):568–72

Diclofenac sodium for pain relief following laparoscopic sterilization [letter] Somwanshi M, et al. **Trop Doct** 1997 Apr;27(2):124–5

[Ovarian function determination in pre and postsurgical sterilization] Gabriela Correa G, et al. **Rev Chil Obstet Ginecol** 1995;60(3):184–8 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Is tubal sterilization associated with an increased risk of subsequent hysterectomy but a decreased risk of ovarian cancer? A review of recent literature. Chi IC. **Adv Contracept** 1996 Jun;12(2):77–99 (64 ref.)

Ectopic pregnancy [letter; comment] Kessel E. **Am J Obstet Gynecol** 1996 Dec;175(6):1675. Comment on: Am J Obstet Gynecol 1996 Apr;174(4):1161–8; discussion 1168–70.

Chlamydia trachomatis and febrile complications of postpartum tubal ligation. Todd CS, et al. **Am J Obstet Gynecol** 1997 Jan;176(1 Pt 1):100–2

The effect of glycopyrrolate on postoperative pain and analgesic requirements following laparoscopic sterilisation. Guard BC, et al. **Anaesthesia** 1996 Dec;51(12):1173–5

Bone mineral density in premenopausal women with oestrogen deficiency and symptomatic coronary heart disease. Bruck B, et al. **Br J Clin Pract** 1996 Dec; 50(8):450–3

Ureteroperitoneal fistula secondary to tubal sterilization by laparoscopy. Machuca J, et al. **Br J Urol** 1996 Dec; 78(6):953–4

Tubal ligation and the risk of ovarian carcinoma. Cornelison TL, et al. **Cancer Detect Prev** 1997;21(1):1–6

Torsion of a fallopian tube following Pomeroy tubal ligation: a rare case report and review of the literature. Krissi H, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Mar; 72(1):107–9 (20 ref.)

Surgical procedures associated with risk of ovarian cancer. Kreiger N, et al. **Int J Epidemiol** 1997 Aug;26(4):710–5

Postablation–tubal sterilization syndrome. Bae IH, et al. **J Am Assoc Gynecol Laparosc** 1996 May;3(3):435–8

Evisceration after laparoscopic sterilization. Lopez A, et al. **J Am Assoc Gynecol Laparosc** 1995 Nov;3(1):109–11 (11 ref.)

Hematosalpinx with pelvic pain after endometrial ablation confirms the postablation–tubal sterilization syndrome. Webb JC, et al. **J Am Assoc Gynecol Laparosc** 1996 May; 3(3):419–21

Pregnancy after failed tubal sterilization. Napolitano PG, et al. **J Reprod Med** 1996 Aug;41(8):609–13 (30 ref.)

[Changes in endothelin–1 and atrial natriuretic peptide in peritoneal fluid of pelvic venous congestion syndrome after tubal sterilization] Li H, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1996 Sep;31(9):533–6 (Eng. Abstr.) **(Chi)**

ECONOMICS

A comparison of the cost of local versus general anesthesia for laparoscopic sterilization in an operating room setting. Lipscomb GH, et al. **J Am Assoc Gynecol Laparosc** 1996 Feb;3(2):277–81

Low–cost office laparoscopic sterilization. Love BR, et al. **J Am Assoc Gynecol Laparosc** 1994 Aug;1(4 Pt 1):379–82

INSTRUMENTATION

Intractable pelvic pain following Filshie clip application. Robson S, et al. **Aust N Z J Obstet Gynaecol** 1997 May; 37(2):242–3

Migration of a Filshie clip into the urinary bladder seven years after laparoscopic sterilisation. Kesby GJ, et al. **Br J Obstet Gynaecol** 1997 Mar;104(3):379–82

An evaluation of the Filshie clip for postpartum sterilization in Austria. Graf AH, et al. **Contraception** 1996 Nov; 54(5):309–11

New methods for transcervical cannulation of the fallopian tube. Kerin JF. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S29–39 (39 ref.)
Introduction of the Opti-trocar. Kaali SG. **J Am Assoc Gynecol Laparosc** 1993 Nov;1(1):50–3
[Iatrogenic vascular lesions in laparoscopic interventions in gynecology] Fruhwirth J, et al. **Zentralbl Gynakol** 1997; 119(6):265–8 (Eng. Abstr.) **(Ger)**

METHODS

Sterilization. Wilson EW. **Baillieres Clin Obstet Gynaecol** 1996 Apr;10(1):103–19 (96 ref.)
Evaluation of post-operative analgesia following laparoscopic application of Filshie clips. Fiddes TM, et al. **Br J Obstet Gynaecol** 1996 Nov;103(11):1143–7
Laparoscopic sterilisation: opinion and practice among gynaecologists in Scotland. Penney GC, et al. **Br J Obstet Gynaecol** 1997 Jan;104(1):71–7
Outpatient laparoscopic interval female sterilization. Intaraprasert S, et al. **Contraception** 1997 May;55(5):283–6 (17 ref.)
Laparoscopic sterilization in HIV-1-positive women. Intaraprasert S, et al. **Contraception** 1996 Nov;54(5):305–7
A fifteen-year review of female sterilization by minilaparotomy under local anesthesia in Kenya. Ruminjo JK, et al. **Contraception** 1997 Apr;55(4):249–60 (45 ref.)
Voluntary female sterilisation via minilaparotomy: report from Burkina Faso. Dao B, et al. **East Afr Med J** 1997 Feb;74(2):100–2
Value of sedative premedication in female sterilization via minilaparotomy: a prospective study of two local anaesthesia regimen. Ruminjo JK, et al. **East Afr Med J** 1995 Oct;72(10):678–83
Modified open laparoscopy through placement of an optical surgical obturator. Kaali SG, et al. **Fertil Steril** 1997 May; 67(5):969–71
Toxicological requirements for sclerosing agents or other chemicals for female sterilization. Heywood R. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S41–5 (12 ref.)
Update on transcervical sterilization. Neuwirth RS. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S23–8 (35 ref.)
Transcervical quinacrine sterilization: clinical experience. Sokal DC, et al. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S57–69 (50 ref.)
The potential for improved abdominal procedures and approaches for tubal occlusion. Steele SJ. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S17–22 (18 ref.)
Interval female sterilization of HIV-1 positive women: laparoscopy versus minilaparotomy. Taneepanichskul S, et al. **Int J Gynaecol Obstet** 1997 May;57(2):183–4
Office hysteroscopic tubal occlusion with siloxane intratubal devices (the Ovabloc method). van der Leij G, et al. **Int J Gynaecol Obstet** 1996 Jun;53(3):253–60
The evolution of methods for female sterilization. Wilson EW. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S3–13 (81 ref.)
The development of new technologies for female sterilization: conclusions and recommendations for research. Wilson EW. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S71–4
Quinacrine: sclerosing agent of the utero-tubal junction in women, with anticarcinogenic actions in transplanted tumors in mice. Zipper J, et al. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S47–55 (73 ref.)
Sterilization by open laparoscopy in a private office. Schnepper FW. **J Am Assoc Gynecol Laparosc** 1997 Aug; 4(4):469–72
Laparoscopic Pomeroy tubal ligation in a residency training program. Thomas AG, et al. **J Am Assoc Gynecol Laparosc** 1994 Aug;1(4 Pt 1):321–4
Laparoscopy. Gasless vs. CO2 pneumoperitoneum. Johnson PL, et al. **J Reprod Med** 1997 May;42(5):255–9
Tubal sterilization by means of selective catheterization: comparison of a hydrogel and a collagen glue. Maubon AJ, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):733–6
Experimental nonsurgical transcervical sterilization with a custom-designed platinum microcoil. Post JH, et al. **J Vasc Interv Radiol** 1997 Jan–Feb;8(1 Pt 1):113–8
Radiologists learn results of new therapy trials, hear latest speculations on cause of old disorder [news] Skolnick AA. **JAMA** 1997 Feb 5;277(5):367–9
A microlaparoscopic technique for Pomeroy tubal ligation. Hibbert ML, et al. **Obstet Gynecol** 1997 Aug;90(2):249–51
[Tubal ligation using minilaparotomy under local anesthesia. Apropos of 800 cases at the University Hospital Center in Dakar] Cisse CT, et al. **Contracept Fertil Sex** 1997 Apr; 25(4):X–XV **(Fre)**
[Minilaparotomy tubal ligation in the immediate post-partum after vaginal delivery. A retrospective analysis of 253 cases in the maternity service of the Yaounde University Hospital Center (Cameroon)] Doh AS, et al. **Contracept Fertil Sex** 1996 Jan;24(1):49–51 (Eng. Abstr.) **(Fre)**
[Closure of the skin with cyanoacrylate in surgical wounds after tubal sterilization] Gorozpe Calvillo JI, et al. **Ginecol Obstet Mex** 1997 Feb;65:64–7 (Eng. Abstr.) **(Spa)**

NURSING

A comprehensive and efficient process for counseling patients desiring sterilization. Haws JM, et al. **Nurse Pract** 1997 Jun;22(6):52, 55–6, 59–61 passim (40 ref.)

PSYCHOLOGY

Risk factors for tubal sterilization regret, detectable before surgery. Hardy E, et al. **Contraception** 1996 Sep; 54(3):159–62
Psychosexual adjustment following sterilization: a prospective study on Chinese women. Tang CS, et al. **J Psychosom Res** 1997 Feb;42(2):187–96

STATISTICS & NUMERICAL DATA

Validity of self-reported hysterectomy and tubal sterilisation. The Survey of Women's Health Study Group. Green A, et al. **Aust N Z J Public Health** 1997 Jun;21(3):337–40
Voluntary female sterilisation via minilaparotomy: report from Burkina Faso. Dao B, et al. **East Afr Med J** 1997 Feb;74(2):100–2
The risk of ectopic pregnancy after tubal sterilization. U.S. Collaborative Review of Sterilization Working Group [see comments] Peterson HB, et al. **N Engl J Med** 1997 Mar 13;336(11):762–7. Comment in: N Engl J Med 1997 Mar 13;336(11):796–7.
Tubal sterilization [editorial; comment] Tulandi T. **N Engl J Med** 1997 Mar 13;336(11):796–7. Comment on: N Engl J Med 1997 Mar 13;336(11):762–7.
Condom use with main partners by sterilized and non-sterilized women. Semaan S, et al. **Women Health** 1997;25(2):65–85
[Female sterilization in Burkina Faso. Report of 142 cases] Dao B, et al. **Contracept Fertil Sex** 1997 May;25(5):392–5 (Eng. Abstr.) **(Fre)**

TRENDS

The evolution of methods for female sterilization. Wilson EW. **Int J Gynaecol Obstet** 1995 Dec;51 Suppl 1:S3–13 (81 ref.)

UTILIZATION

[Use of tubal sterilization by minilaparotomy after vaginal delivery in a developing country. A retrospective analysis of 347 cases at the Yaoundé University Gynecologic Clinic (Cameroon)] Kouam L, et al. **Zentralbl Gynakol** 1997; 119(6):269–72 (Eng. Abstr.) **(Ger)**

STERNOCLAVICULAR JOINT

Brucellar oligoarthritis involving the left temporomandibular, left sternoclavicular and left ankle joints [letter] Adak B, et al. **Clin Exp Rheumatol** 1997 Jan–Feb;15(1):122–3
Septic arthritis of the sternoclavicular joint. George S, et al. **Clin Infect Dis** 1995 Dec;21(6):1525–6
Thoraco-cervical fibromatosis: treatment of surgical excision. Conlon BJ, et al. **J Laryngol Otol** 1997 Apr;111(4):385–6
Hemodialysis-related amyloidosis of the sternoclavicular joint. Cameron EW, et al. **Skeletal Radiol** 1997 Jul; 26(7):428–30

ABNORMALITIES

MR imaging of the abnormal sternoclavicular joint—a pictorial essay. Klein MA, et al. **Clin Imaging** 1997 Mar–Apr;21(2):138–43 (14 ref.)

INJURIES

Diagnosis and treatment of posterior sternoclavicular joint dislocations in children. Yang J, et al. **Am J Orthop** 1996 Aug;25(8):565–9
Diagnosis of retrosternal dislocation of the clavicle with ultrasound. Pollock RC, et al. **Injury** 1996 Nov;27(9):670–1
Manipulative reduction and management of anterior sternoclavicular joint dislocation. Kaufman RL. **J Manipulative Physiol Ther** 1997 Jun;20(5):338–42
A method for open reduction and internal fixation of the unstable posterior sternoclavicular joint dislocation. Brinker MR, et al. **J Orthop Trauma** 1997 Jul;11(5):378–81
Ipsilateral sternoclavicular joint dislocation and clavicle fracture. Tanlin Y. **J Orthop Trauma** 1996;10(7):506–7
Percutaneous retrieval of intracardiopulmonary artery metallic needle (Kirschner's wire): a case report. Aikawa H, et al. **Radiat Med** 1996 Nov–Dec;14(6):335–8
[Retrosternal luxation of the clavicle. Apropos of 4 cases surgically treated using a temporary screwed anterior plate and review of the literature] Asfazadourian H, et al. **Ann Chir Main Memb Super** 1997;16(2):152–69 (114 ref.) (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

Septic sternoclavicular arthritis caused by group B Streptococcus: case report and review. Carrascosa M, et al. **Clin Infect Dis** 1996 Mar;22(3):579–80 (9 ref.)
Sternoclavicular joint septic arthritis with small-colony variant Staphylococcus aureus. Spearman P, et al. **Diagn Microbiol Infect Dis** 1996 Sep;26(1):13–5

PATHOLOGY

MR imaging of the abnormal sternoclavicular joint—a pictorial essay. Klein MA, et al. **Clin Imaging** 1997 Mar–Apr;21(2):138–43 (14 ref.)

RADIOGRAPHY

Radiation dose by spiral CT and conventional tomography of the sternoclavicular joints and the manubrium sterni. Jurik AG, et al. **Skeletal Radiol** 1996 Jul;25(5):467–70
Computed tomography of sternoclavicular joint lesions in spondylarthropathies. Louvel JP, et al. **Skeletal Radiol** 1997 Jul;26(7):419–23

RADIONUCLIDE IMAGING

[The "bull horn sign"—scintigraphic pattern in sternocostoclavicular hyperostosis and pustular arthro-osteitis] Freyschmidt J, et al. **Z Rheumatol** 1997 May–Jun;56(3):136–43 (Eng. Abstr.) **(Ger)**

SURGERY

Resection arthroplasty of the sternoclavicular joint. Rockwood CA Jr, et al. **J Bone Joint Surg Am** 1997 Mar; 79(3):387–93
Aggressive surgical management of sternoclavicular joint infections. Carlos GN, et al. **J Thorac Cardiovasc Surg** 1997 Feb;113(2):242–7
[Surgical treatment of sternoclavicular osteomyelitis] González Muñoz JI, et al. **Arch Bronconeumol** 1996 Dec; 32(10):541–3 (Eng. Abstr.) **(Spa)**

STERNOCOSTOCLAVICULAR HYPEROSTOSIS see **HYPEROSTOSIS, STERNOCOSTOCLAVICULAR**

STERNUM

Retrosternal fat pad for prevention of suppurative sternitis. Kejriwal NK, et al. **Ann Thorac Surg** 1997 May; 63(5):1484–5
Mycobacterium fortuitum infection of the sternum. Review of the literature and case illustration. Samuels LE, et al. **Arch Surg** 1996 Dec;131(12):1344–6 (7 ref.)
Imaging characteristics of aggressive fibromatosis in children. Petchprapa CN, et al. **Comput Med Imaging Graph** 1996 May–Jun;20(3):153–8
Osteosarcoma of the sternum. Douglas YL, et al. **Eur J Surg Oncol** 1997 Feb;23(1):90–1
Imaging findings of sternal abnormalities. Franquet T, et al. **Eur Radiol** 1997;7(4):492–7
Resected sigmoid carcinoma with 13-year metastasis-free interval. Sternal recurrence detected by immunoscintigraphy. Vasireddi SS, et al. **J Clin Gastroenterol** 1996 Sep;23(2):128–30
Sternal hemangioma: a rare tumor. Medalion B, et al. **J Thorac Cardiovasc Surg** 1996 Nov;112(5):1402–3
Sternal abscess due to Bartonella (Rochalimaea) henselae in a renal transplant patient. Bruckert F, et al. **Skeletal Radiol** 1997 Jul;26(7):431–3
Chondromyxoid fibroma of the sternum. Lyzak JS, et al. **Skeletal Radiol** 1996 Jul;25(5):489–92
Delayed primary closure of deep sternal wound infections. Zacharias A, et al. **Tex Heart Inst J** 1996;23(3):211–6
[Costosternal swelling and diffuse bone pain in tubercular osteomyelitis] Hemmen T, et al. **Dtsch Med Wochenschr** 1997 May 9;122(19):610–4 (Eng. Abstr.) **(Ger)**
[Pulsating tumor of the sternum: enlarged exeresis and reconstruction with marlex-methylmethacrylate prosthesis] Di Fabio D, et al. **Minerva Chir** 1996 May;51(5):359–63 (Eng. Abstr.) **(Ita)**
[A case of solitary sternal metastasis from unknown primary hepatocellular carcinoma] Horita K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Jul;44(7):959–64 (Eng. Abstr.) **(Jpn)**
[Solitary plasmacytoma of sternum—a case report and review of the Japanese literature] Ohtake Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 May;44(5):717–22 (24 ref.) (Eng. Abstr.) **(Jpn)**
[Primary tumors of the thoracic wall (1991–1994)] Arrabal Sánchez R, et al. **Arch Bronconeumol** 1996 Oct;32(8):384–7 (Eng. Abstr.) **(Spa)**
[A man with a costal tumor. Pustular arthro-osteitis] Fernández Peña C, et al. **Rev Clin Esp** 1996 Jun; 196(6):407–8, 411 **(Spa)**

ABNORMALITIES

Successful repair of ectopia cordis using alloplastic materials. Kim KA, et al. **Ann Plast Surg** 1997 May;38(5):518–22
Combined repair of upper sternal cleft and tetralogy of Fallot in an infant. Bové T, et al. **Ann Thorac Surg** 1997 Aug; 64(2):561–2
Repair of complete congenital sternal cleft in an adult [letter; comment] Santini F, et al. **Ann Thorac Surg** 1997 Mar; 63(3):918–9. Comment on: Ann Thorac Surg 1996 Aug;62(2):573–5.
Case report: bronchial atresia associated with pectus excavatum. Scholl RJ 3rd, et al. **Conn Med** 1997 May; 61(5):263–7 (15 ref.)
Targeted mutations in hoxa-9 and hoxb-9 reveal synergistic interactions. Chen F, et al. **Dev Biol** 1997 Jan 15; 181(2):186–96
Cantrell's syndrome in an infant. Chen LJ, et al. **J Formos Med Assoc** 1997 Apr;96(4):288–90
Pentalogy of Cantrell corrected by one-stage repair. Chen Y, et al. **J Formos Med Assoc** 1996 Jul;95(7):555–7
Neonatal sternal cleft associated with an extrathoracic cystic mass. Hebra A, et al. **J Pediatr Surg** 1997 Apr;32(4):627–30

Correction of pectus excavatum and pectus carinatum assisted by the endoscope. Kobayashi S, et al. **Plast Reconstr Surg** 1997 Apr;99(4):1037–45

Prenatal diagnosis of a chest wall hamartoma and sternal cleft. Rose NC, et al. **Ultrasound Obstet Gynecol** 1996 Jun; 7(6):453–5

[The foramen sternale: a minor anomaly—great relevance] Schratter M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):69–71 (Eng. Abstr.) **(Ger)**

[Ectopia cordis and Cantrell's pentalogy: personal experience and considerations on the surgical treatment] Pampaloni A, et al. **Pediatr Med Chir** 1997 Jan–Feb;19(1):59–64 (Eng. Abstr.) **(Ita)**

[Cleft sternum in an infant] Mota CR, et al. **Rev Port Cardiol** 1996 Jul–Aug;15(7–8):591–5, 549 (Eng. Abstr.) **(Por)**

ANATOMY & HISTOLOGY

Sternomental distance as predictor of difficult laryngoscopy [letter; comment] Farmery AD. **Br J Anaesth** 1997 May; 78(5):626–7. Comment on: Br J Anaesth 1996 Sep;77(3):312–6.

Sternomental distance as the sole predictor of difficult laryngoscopy in obstetric anaesthesia [see comments] [published erratum appears in Br J Anaesth 1996 Nov;77(5):701] Al Ramadhani S, et al. **Br J Anaesth** 1996 Sep;77(3):312–6. Comment in: Br J Anaesth 1996 Sep;77(3):309–11. Comment in: Br J Anaesth 1997 Mar;78(3):338. Comment in: Br J Anaesth 1997 May;78(5):626–7.

The osteology of the African elephant (Loxodonta africana): vertebral column, ribs and sternum. Bezuidenhout AJ, et al. **Onderstepoort J Vet Res** 1996 Jun;63(2):131–47

INJURIES

Sternal fractures in blunt chest trauma: a practical algorithm for management. Chiu WC, et al. **Am J Emerg Med** 1997 May;15(3):252–5

Metallic dissolution of a civil war bullet embedded in a sternum. Dwornik JJ, et al. **Am J Forensic Med Pathol** 1996 Jun;17(2):130–5

Sternal fracture: a benign entity? Gouldman JW, et al. **Am Surg** 1997 Jan;63(1):17–9

Man's fractured sternum was probably due to snake's weight when it fell [letter] Davies DW. **BMJ** 1997 Jul 19; 315(7101):191

Activation of coagulation and deep vein thrombosis after bone marrow harvesting and insertion of a Hickman–catheter in ABMT patients with malignant lymphoma. Sletnes KE, et al. **Bone Marrow Transplant** 1996 Apr;17(4):577–81

Sternal fracture in a female army officer cadet [letter] McCurdie I, et al. **Br J Sports Med** 1997 Jun;31(2):164

Manubrium sterni stress fracture: an unusual complication of non–contact sport. Robertsen K, et al. **Br J Sports Med** 1996 Jun;30(2):176–7

Cardiac involvement in seat belt–related and direct sternal trauma: a prospective study in management implications. Erbel R. **Eur Heart J** 1995 Nov;16(11):1742–3

Widening of the mediastinum following a sternal fracture. Saab M, et al. **Int J Clin Pract** 1997 Jun;51(4):256–7

Serious complications from active compression–decompression cardiopulmonary resuscitation. Rabl W, et al. **Int J Legal Med** 1996; 109(2):84–9

Stress fracture of the sternum in a golf player. Barbaix EJ. **Int J Sports Med** 1996 May;17(4):303–4

[Segmental sternal dislocation in children. Apropos of a surgically treated case] Norotte G, et al. **Rev Chir Orthop Reparatrice Appar Mot** 1997;83(3):283–5 (Eng. Abstr.) **(Fre)**

[Surgical treatment of aortic valve regurgitation due to nonpenetrating trauma of the chest—a case report and review of the literature in Japan] Ashida Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Feb;45(2):207–12 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Cortical fracture of the sternum in a child: an infrequent case] Pérez–Martínez A, et al. **Cir Pediatr** 1996 Jul; 9(3):130–1 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Sternal tenderness in falciparum malaria [letter] Mohapatra MK, et al. **J Assoc Physicians India** 1996 Sep;44(9):667

PHYSIOLOGY

Effects of hypothermia and sternal retractors on median nerve somatosensory evoked potentials. Porkkala T, et al. **Acta Anaesthesiol Scand** 1997 Aug;41(7):843–8

On the mechanism of the mediolateral gradient of parasternal activation. De Troyer A, et al. **J Appl Physiol** 1996 May; 80(5):1490–4

RADIOGRAPHY

[The foramen sternale: a minor anomaly—great relevance] Schratter M, et al. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Jan;166(1):69–71 (Eng. Abstr.) **(Ger)**

[A comparative evaluation of the optical density of the bone and cartilage tissue of human symphyses] Neznakomtseva EP. **Sud Med Ekspert** 1997 Jul–Sep;40(3):10–4 (Eng. Abstr.) **(Rus)**

[Potentialities of some x–ray methods in sternal osteomyelitis] Smirnov MD. **Vestn Rentgenol Radiol** 1997 Jan–Feb; (1):25–9 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Acquired hyperostosis syndrome—AHYS—(sternocostoclavicular hyperostosis, pustulotic arthro–osteitis, SAPHO–syndrome): bone scintigraphy of the anterior chest wall. Dihlmann W, et al. **Clin Rheumatol** 1997 Jan;16(1):13–24

SURGERY

Early intervention and aggressive management of infected median sternotomy incision: a review of 2242 open–heart procedures. Raudat CW, et al. **Am Surg** 1997 Mar; 63(3):238–41; discussion 241–2

Hands–up positioning during asymmetric sternal retraction for internal mammary artery harvest: a possible method to reduce brachial plexus injury. Jellish WS, et al. **Anesth Analg** 1997 Feb;84(2):260–5

Median sternotomy wound complication: the effect of reconstruction on lung function. Cohen M, et al. **Ann Plast Surg** 1997 Jul;39(1):36–43

Muscle flap reconstruction of pediatric poststernotomy wound infections. Grant RT, et al. **Ann Plast Surg** 1997 Apr;38(4):365–70

Successful repair of ectopia cordis using alloplastic materials. Kim KA, et al. **Ann Plast Surg** 1997 May;38(5):518–22

Management of the infected median sternotomy wound with muscle flaps. The Emory 20–year experience. Jones G, et al. **Ann Surg** 1997 Jun;225(6):766–76; discussion 776–8

Minimally invasive mitral operations [letter; comment] Arom KV, et al. **Ann Thorac Surg** 1997 Apr;63(4):1219–20. Comment on: Ann Thorac Surg 1996 Nov;62(5):1542–4.

Mini–sternotomy for coronary artery bypass grafting [letter; comment] Cohen AS, et al. **Ann Thorac Surg** 1996 Dec; 62(6):1884–5. Comment on: Ann Thorac Surg 1996 Apr;61(4):1271–2.

Outcomes after delayed sternal closure in pediatric heart operations: a 10–year experience. Iyer RS, et al. **Ann Thorac Surg** 1997 Feb;63(2):489–91

Expanded PTFE membrane to prevent cardiac injury during resternotomy for congenital heart disease. Jacobs JP, et al. **Ann Thorac Surg** 1996 Dec;62(6):1778–82

Experimental off–pump grafting of a circumflex branch via sternotomy using a suction device. Jansen EW, et al. **Ann Thorac Surg** 1997 Jun;63(6 Suppl):S93–6

Avoidance of sternal nonunion [letter] Opie JC. **Ann Thorac Surg** 1997 Sep;64(3):888–9

Use of a cast spreader during reoperative sternotomy. Rhee JW, et al. **Ann Thorac Surg** 1997 Sep;64(3):863

Transient ventricular asystole using adenosine during minimally invasive and open sternotomy coronary artery bypass grafting. Robinson MC, et al. **Ann Thorac Surg** 1997 Jun;63(6 Suppl):S30–4

Spool–like stent for the open sternum after cardiac operations. Satoh H, et al. **Ann Thorac Surg** 1997 Feb; 63(2):572–4

Bilateral thoracotomy and inferior sternotomy for bypass grafting after esophagostomy. Smedira NG, et al. **Ann Thorac Surg** 1997 Mar;63(3):847–9 (4 ref.)

Reinforced closure of precarious sternum after median sternotomy [letter] Triggiani M, et al. **Ann Thorac Surg** 1997 Apr;63(4):1221–2

Tumour presenting as a retrosternal abscess following median sternotomy. Martin IR, et al. **Br J Clin Pract** 1997 Apr–May;51(3):185

The sternocleidomastoid myocutaneous flap [letter; comment] Alvarez Parra GE. **Br J Plast Surg** 1996 Dec; 49(8):573. Comment on: Br J Plast Surg 1996 Mar;49(2):93–6.

Reduction mammaplasty combined with pectoralis major muscle flaps for median sternotomy wound closure [letter; comment] Griffin P. **Br J Plast Surg** 1996 Dec;49(8):575–6 . Comment on: Br J Plast Surg 1996 Jun;49(4):220–2.

A new technique of reinforced sternal closure. Watanabe G, et al. **Cardiovasc Surg** 1996 Oct;4(5):639–40

Factors predisposing to median sternotomy complications. Deep vs superficial infection. Zacharias A, et al. **Chest** 1996 Nov;110(5):1173–8

Chylothorax following median sternotomy. Zaidenstein R, et al. **Clin Cardiol** 1996 Nov;19(11):910–2

Role of epicardial pacing wire cultures in the diagnosis of poststernotomy mediastinitis. Maroto LC, et al. **Clin Infect Dis** 1997 Mar;24(3):419–21

Closure of a bronchopleural fistula by midsternal approach in three patients with previous aortocoronary bypass grafting. Barenbrug PJ, et al. **Eur J Cardiothorac Surg** 1997 Jul;12(1):141–3

Open chest and delayed sternal closure after cardiac surgery. Christenson JT, et al. **Eur J Cardiothorac Surg** 1996; 10(5):305–11

Syphilitic aortic aneurysm eroding through the sternum. Fulton JO, et al. **Eur J Cardiothorac Surg** 1996;10(10):922–4

Easy closure of sternotomy by the Erk needleholder. Kolbakir F, et al. **Eur J Cardiothorac Surg** 1997 Mar; 11(3):571–2

The clamshell approach for the surgical treatment of complex cardiopulmonary pathology in infants and children. Luciani GB, et al. **Eur J Cardiothorac Surg** 1997 Feb;11(2):298–306

Desmoid tumor of the sternum presenting as an anterior mediastinal mass. Saw E, et al. **Eur J Cardiothorac Surg** 1997 Feb;11(2):384–6

Sternal wound complications—incidence, microbiology and risk factors. Ståhle E, et al. **Eur J Cardiothorac Surg** 1997 Jun;11(6):1146–53

Thoracolumbar epidural blockade as adjunct to high dose fentanyl/midazolam anesthesia in coronary surgery: effects of sternotomy. Thorelius J, et al. **Eur J Cardiothorac Surg** 1996;10(9):754–62

Tubercular sternal osteomyelitis and mediastinitis after open heart surgery. Aggarwal B, et al. **Indian Heart J** 1997 May–Jun;49(3):313–4 (4 ref.)

Factors affecting hypertrophic scar development in median sternotomy incisions for congenital cardiac surgery. Nakamura K, et al. **J Am Coll Surg** 1997 Sep;185(3):218–23

Modified mid–sternotomy approach for exposure of left internal mammary artery and the circumflex artery territory. Ganjoo AK, et al. **J Card Surg** 1996 Mar–Apr; 11(2):163–4

The use of transesophageal echocardiography to guide sternal division for cardiac operations via mini–sternotomy. Sardari FF, et al. **J Card Surg** 1997 Mar–Apr;12(2):67–70

Microfibrillar collagen (Avitene) and antibiotic–containing fibrin–glue after median sternotomy. Watanabe G, et al. **J Card Surg** 1997 Mar–Apr;12(2):110–1

Anesthetic considerations for patients undergoing minimally invasive coronary artery bypass surgery: mini–sternotomy and mini–thoracotomy approaches [see comments] Gayes JM, et al. **J Cardiothorac Vasc Anesth** 1996 Jun;10(4):531–5 . Comment in: J Cardiothorac Vasc Anesth 1996 Jun;10(4):445–50. Comment in: J Cardiothorac Vasc Anesth 1996 Dec;10(7):975. Comment in: J Cardiothorac Vasc Anesth 1997 Feb;11(1):123–4.

Sternal spreading–triggered myocardial ischemia during surgery on a truncus arteriosus. Yoshiyama T, et al. **J Cardiothorac Vasc Anesth** 1997 Jun;11(4):490–1

Sternotomy infection with Mycoplasma hominis: a cause of "culture negative" wound infection. Mossad SB, et al. **J Cardiovasc Surg (Torino)** 1996 Oct;37(5):505–9 (29 ref.)

Minimal access valve surgery through superior partial sternotomy: a preliminary study. Konertz W, et al. **J Heart Valve Dis** 1996 Nov;5(6):638–40

Sternomastoid myoplasty: surgical correction of congenital torticollis. Bharadwaj VK. **J Otolaryngol** 1997 Feb; 26(1):44–8

Surgical arthrodesis of the sternomanubrial joint in a patient with psoriatic arthritis. Naranja RJ Jr, et al. **J Shoulder Elbow Surg** 1997 Mar–Apr;6(2):156–9

Review of the technique and complications of median sternotomy in the dog and cat. Burton CA, et al. **J Small Anim Pract** 1996 Nov;37(11):516–22

Sternal resection for primary or secondary tumors. Incarbone M, et al. **J Thorac Cardiovasc Surg** 1997 Jul;114(1):93–9

Mini–T sternotomy for cardiac operations [letter] Moreno–Cabral RJ. **J Thorac Cardiovasc Surg** 1997 Apr; 113(4):810–1

Delayed sternal closure after cardiac operations in a pediatric population. Tabbutt S, et al. **J Thorac Cardiovasc Surg** 1997 May;113(5):886–93

Deep sternal wound infection after sternotomy [letter; comment] Uva MS, et al. **J Thorac Cardiovasc Surg** 1997 Apr;113(4):809–10. Comment on: J Thorac Cardiovasc Surg 1996 Jun;111(6):1200–7.

Rehabilitation following redo revascularization and repaired sternotomy. Dramiga SA, et al. **Med Sci Sports Exerc** 1997 Apr;29(4):427–9

The hemodynamic effects of isoflurane before and after sternotomy in patients undergoing coronary artery bypass grafting. Baraka A, et al. **Middle East J Anesthesiol** 1995 Oct;13(3):307–14

Chest–wall reconstruction: an account of 500 consecutive patients. Arnold PG, et al. **Plast Reconstr Surg** 1996 Oct; 98(5):804–10

Mediastinitis following median sternotomy: CT findings. Jolles H, et al. **Radiology** 1996 Nov;201(2):463–6

Combined epicardial–transthoracic electrode paddle placement: a method for defibrillation during open–chest cardiac resuscitation. Kerber RE, et al. **Resuscitation** 1997 Jun;34(3):243–5

Sterno–laparotomy and extracorporeal circulation for liver transplantation after repeat–surgery for Budd–Chiari syndrome. Carrel T, et al. **Scand J Thorac Cardiovasc Surg** 1996;30(2):49–51

Profuse mediastinal haemorrhage due to mediastinitis after sternotomy. Report of three cases and review of the literature. Partanen J, et al. **Scand J Thorac Cardiovasc Surg** 1996;30(3–4):167–73 (31 ref.)

False–positive parathyroid scan leading to sternotomy: incidental detection of a thymoma by C–11 methionine positron emission tomography. Adler LP, et al. **Surgery** 1997 Jul;122(1):116–9

Primary sternal tuberculosis treated by resection and reconstruction. Hajjar W, et al. **Thorac Cardiovasc Surg** 1996 Dec;44(6):317–8

[Mediastinitis after sternotomy. Mortality and hospital length of stay. Groupe parisien détude des sternotomies] Lucet JC, et al. **Arch Mal Coeur Vaiss** 1997 Apr;90(4):471–5 (Eng. Abstr.) **(Fre)**

[Partial median sternotomy in resection of metastases of the

upper thoracic spine] Prokop A, et al. **Unfallchirurg** 1996 Dec;99(12):986–8 (Eng. Abstr.) **(Ger)**

[Primary therapy refractory osteomyelitis of the sternum after aortocoronary bypass operation—a case report] Fialka C, et al. **Zentralbl Chir** 1996;121(10):866–8 (Eng. Abstr.) **(Ger)**

[Microbiology of the sternal wound] von Graevenitz A. **Zentralbl Chir** 1996;121 Suppl:22–4 **(Ger)**

[Ascending aortic aneurysms operated through redo median sternotomy under selective cerebral perfusion] Yamazaki Y, et al. **Kyobu Geka** 1997 Mar;50(3):190–3 (Eng. Abstr.) **(Jpn)**

[Sasumata(U+I) shape skin incision for the surgery through median sternotomy] Kadoyama C, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 Jul;45(7):958–63 (Eng. Abstr.) **(Jpn)**

[Extended total aortic arch replacement involving the proximal descending aorta through a median sternotomy] Kurimoto Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1997 May;45(5):661–5 (Eng. Abstr.) **(Jpn)**

[Surgical treatment for chronic constrictive pericarditis through a combined median sternotomy and left anterolateral thoracotomy] Kushibe K, et al. **Rinsho Kyobu Geka** 1989 Oct;9(5):494–7 (Eng. Abstr.) **(Jpn)**

[Re-STO for recurrent funnel chest] Wada J, et al. **Rinsho Kyobu Geka** 1988 Apr;8(2):181–5 (Eng. Abstr.) **(Jpn)**

[The treatment of subglottic defect with the help of myoperisteal flap from sternum] Modrzejewski M, et al. **Otolaryngol Pol** 1995;49(6):555–9 (Eng. Abstr.) **(Pol)**

[Involvement of pulmonary function in patients treated with rotated chest muscle flap surgery for the treatment of sternal wound complications after heart surgery] Blacher C, et al. **Arq Bras Cardiol** 1996 Oct;67(4):243–7 (Eng. Abstr.) **(Por)**

[Cleft sternum in an infant] Mota CR, et al. **Rev Port Cardiol** 1996 Jul–Aug;15(7–8):591–5, 549 (Eng. Abstr.) **(Por)**

[Omentoplasty in a patient with osteomyelitis of the ribs and sternum] Shipulin PP, et al. **Klin Khir** 1994;(12):61–2 **(Rus)**

[Bilateral trans-sternal thoracotomy in the treatment of complicated bilateral pneumothorax] Torre W, et al. **Arch Bronconeumol** 1996 Aug–Sep;32(7):366–8 (Eng. Abstr.) **(Spa)**

[Submammary skin incision for longitudinal medial sternotomy] Ramírez Marroquín S, et al. **Arch Inst Cardiol Mex** 1996 Sep–Oct;66(5):434–40 (Eng. Abstr.) **(Spa)**

[Mediastinitis following sternotomy: a potential complication of heart transplantation] Bouza E, et al. **Rev Clin Esp** 1995 Oct;195 Spec No:30–6 (73 ref.) **(Spa)**

[Aortic valve replacement via ministernotomy] Rodríguez JE, et al. **Rev Esp Cardiol** 1996 Dec;49(12):928–30 (4 ref.) (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

[Metastasis to the sternum or parasternal recurrence of breast carcinoma? Value of sonography] Mende U, et al. **Radiologe** 1996 Jan;36(1):22–30 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

An ultrastructural study of the perichondrium in cartilages of the chick embryo. Bairati A, et al. **Anat Embryol (Berl)** 1996 Aug;194(2):155–67

STEROID 12-HYDROXYLASE see **STEROID 12-MONOOXYGENASE**

STEROID 11-HYDROXYLASE see **STEROID 11 BETA-MONOOXYGENASE**

STEROID 17-HYDROXYLASE see **STEROID 17 ALPHA-MONOOXYGENASE**

STEROID 18-HYDROXYLASE see **CYTOCHROME P-450 CYP11B2**

STEROID HYDROXYLASES

ANALYSIS

Localization of sterol 27-hydroxylase immuno-reactivity in human atherosclerotic plaques. Crisby M, et al. **Biochim Biophys Acta** 1997 Feb 18;1344(3):278–85

Comparative studies of drug-metabolizing enzymes in dog, monkey, and human small intestines, and in Caco-2 cells. Prueksaritanont T, et al. **Drug Metab Dispos** 1996 Jun; 24(6):634–42

ANTAGONISTS & INHIBITORS

Effects of the neem tree compounds azadirachtin, salannin, nimbin, and 6-desacetylnimbin on ecdysone 20-monooxygenase activity. Mitchell MJ, et al. **Arch Insect Biochem Physiol** 1997;35(1–2):199–209

Nitric oxide-independent suppression of P450 2C11 expression by interleukin-1beta and endotoxin in primary rat hepatocytes. Sewer MB, et al. **Biochem Pharmacol** 1997 Sep 15;54(6):729–37

Mechanism-based inactivation of cytochrome P450 2B4 by aldehydes: relationship to aldehyde deformylation via a peroxyhemiacetal intermediate. Raner GM, et al. **Biochemistry** 1997 Apr 22;36(16):4895–902

Three-dimensional quantitative structure-activity relationship for inhibitors of cytochrome P4502C9. Jones JP, et al. **Drug Metab Dispos** 1996 Jan;24(1):1–6

Inhibition of 20-HETE production contributes to the vascular responses to nitric oxide. Alonso-Galicia M, et al. **Hypertension** 1997 Jan;29(1 Pt 2):320–5

The retinoid X receptor agonist 9-cis-retinoic acid and the 24-hydroxylase inhibitor ketoconazole increase activity of 1,25-dihydroxyvitamin D3 in human skin in vivo. Kang S, et al. **J Invest Dermatol** 1997 Apr;108(4):513–8

Effects of cyclosporin on cholesterol 27-hydroxylation and LDL receptor activity in HepG2 cells. Winegar DA, et al. **J Lipid Res** 1996 Jan;37(1):179–91

Enhanced inhibition of microsomal cytochrome P450 3A2 in rat liver during diltiazem biotransformation. Murray M, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1447–52

[Modification of cytochrome P-450 apoenzyme during its oxidative self-inactivation in a reconstituted mono-oxygenase system] Zgoda VG, et al. **Vopr Med Khim** 1996 Jul–Sep;42(3):203–10 (Eng. Abstr.) **(Rus)**

[Self-inactivation of cytochrome P-450 2B4 during catalytic cycle in the monooxygenase reconstituted system] Zgoda VG, et al. **Vopr Med Khim** 1997 Jul–Aug;43(4):217–25 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Regulation of hepatic cytochrome P450 2C11 by glucocorticoids. Iber H, et al. **Arch Biochem Biophys** 1997 Sep 15;345(2):305–10

Effect of vitamin A deficiency on the expression of low affinity glucocorticoid binding site activity and glucocorticoid-dependent induction of CYP3A2 in rat liver. Wright MC, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):211–6

Effect of ovariectomy and androgen on phenobarbital induction of hepatic CYP2B1 and CYP2B2 in Sprague-Dawley rats. Chang TK, et al. **Drug Metab Dispos** 1997 Aug;25(8):994–1000

Mouse vitamin D-24-hydroxylase: molecular cloning, tissue distribution, and transcriptional regulation by 1alpha,25-dihydroxyvitamin D3. Akeno N, et al. **Endocrinology** 1997 Jun;138(6):2233–40

Insulin markedly potentiates the capacity of parathyroid hormone to increase expression of 25-hydroxyvitamin D3-24-hydroxylase in rat osteoblastic cells in the presence of 1,25-dihydroxyvitamin D3. Armbrecht HJ, et al. **FEBS Lett** 1996 Sep 9;393(1):77–80

Induction of enzymes involved in molting hormone (ecdysteroid) inactivation by ecdysteroids and an agonist, 1,2-dibenzoyl-1-tert-butylhydrazine (RH-5849). Williams DR, et al. **J Biol Chem** 1997 Mar 28;272(13):8427–32

Requirements for induction of vitamin D-mediated gene regulation in normal human B lymphocytes. Morgan JW, et al. **J Immunol** 1996 Oct 1;157(7):2900–8

Imprinted overinduction of hepatic CYP2B1 and 2B2 in adult rats neonatally exposed to phenobarbital. Agrawal AK, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):991–9

Role of the aromatic hydrocarbon receptor in the suppression of cytochrome P-450 2C11 by polycyclic aromatic hydrocarbons. Safa B, et al. **Toxicol Lett** 1997 Feb 7; 90(2-3):163–75

BLOOD

Three-fold induction of renal 25-hydroxyvitamin D3-24-hydroxylase activity and increased serum 24,25-dihydroxyvitamin D3 levels are correlated with the healing process after chick tibial fracture. Seo EG, et al. **J Bone Miner Res** 1997 Apr;12(4):598–606

CHEMISTRY

Allelic variants of human cytochrome P450 2C9: baculovirus-mediated expression, purification, structural characterization, substrate stereoselectivity, and prochiral selectivity of the wild-type and I359L mutant forms. Haining RL, et al. **Arch Biochem Biophys** 1996 Sep 15; 333(2):447–58

Microsomal P450 2C3 is expressed as a soluble dimer in Escherichia coli following modification of its N-terminus. von Wachenfeldt C, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):107–14

Histidine residues in rabbit liver microsomal cytochrome P-450 2B4 control electron transfer from NADPH-cytochrome P-450 reductase and cytochrome b5. Hlavica P, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):857–62

Thermostable cytochrome P450 steroid hydroxylase from a thermophilic bacillus strain. Sideso O, et al. **Biochem Soc Trans** 1997 Feb;25(1):17S

Interaction of sulfaphenazole derivatives with human liver cytochromes P450 2C: molecular origin of the specific inhibitory effects of sulfaphenazole on CYP 2C9 and consequences for the substrate binding site topology of CYP 2C9. Mancy A, et al. **Biochemistry** 1996 Dec 17; 35(50):16205–12

Conserved promoter elements in the CYP6B gene family suggest common ancestry for cytochrome P450 monooxygenases mediating furanocoumarin detoxification. Hung CF, et al. **Proc Natl Acad Sci U S A** 1996 Oct 29; 93(22):12200–5

Construction of a 3D model of cytochrome P450 2B4. Chang YT, et al. **Protein Eng** 1997 Feb;10(2):119–29

DRUG EFFECTS

Insulin suppresses the induction of CYP2B1 and CYP2B2 gene expression by phenobarbital in adult rat cultured hepatocytes. Yoshida Y, et al. **Biochem Biophys Res Commun** 1996 Dec 4;229(1):182–8

Comparative effects of carbamazepine and carbamazepine-10,11-epoxide on hepatic cytochromes P450 in the rat. Panesar SK, et al. **Drug Metab Dispos** 1996 Jun;24(6):619–27

Phencyclidine continuous dosing produces a treatment time-dependent regulation of rat CYP2C11 function, protein expression and mRNA levels. Shelnutt SR, et al. **J Pharmacol Exp Ther** 1997 Apr;281(1):574–81

GENETICS

Transcriptional regulation of hepatic sterol 27-hydroxylase by bile acids. Vlahcevic ZR, et al. **Am J Physiol** 1996 Apr; 270(4 Pt 1):G646–52

cDNA cloning, heterologous expression, and characterization of mouse CYP2G1, an olfactory-specific steroid hydroxylase. Hua Z, et al. **Arch Biochem Biophys** 1997 Apr 15;340(2):208–14

Cytochrome P450 2C11: Escherichia coli expression, purification, functional characterization, and mechanism-based inactivation of the enzyme. Licad-Coles E, et al. **Arch Biochem Biophys** 1997 Feb 1;338(1):35–42

Studies of distant members of the P450 superfamily (P450scc and P450c27) by random chimeragenesis. Pikuleva IA, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):183–92

Expression, purification, and enzymatic properties of recombinant human cytochrome P450c27 (CYP27). Pikuleva IA, et al. **Arch Biochem Biophys** 1997 Jul 1; 343(1):123–30

Gene structure of mouse Cyp3a11: evidence for an enhancer element within its 5' flanking sequences. Toide K, et al. **Arch Biochem Biophys** 1997 Feb 1;338(1):43–9

In vivo phenobarbital treatment increases protein binding to a putative AP-1 site in the CYP2B2 promoter. Roe AL, et al. **Biochem Biophys Res Commun** 1996 Nov 1; 228(1):110–4

Construction of a P450c27 fusion enzyme: a useful tool for analysis of vitamin D3 25-hydroxylase activity. Dilworth FJ, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):267–71

Genetic analysis of a Japanese cerebrotendinous xanthomatosis family: identification of a novel mutation in the adrenodoxin binding region of the CYP 27 gene. Chen W, et al. **Biochim Biophys Acta** 1996 Nov 15; 1317(2):119–26

Effect of CYP2C polymorphisms on the pharmacokinetics of phenytoin in Japanese patients with epilepsy. Hashimoto Y, et al. **Biol Pharm Bull** 1996 Aug;19(8):1103–5

Stereoselective 4'-hydroxylation of phenytoin: relationship to (S)-mephenytoin polymorphism in Japanese. Ieiri I, et al. **Br J Clin Pharmacol** 1997 Apr;43(4):441–5

Suppression of constitutive cytochrome P450 gene expression by epidermal growth factor receptor ligands in cultured rat hepatocytes. Ching KZ, et al. **Drug Metab Dispos** 1996 May;24(5):542–6

Expression of CYP2A genes in rodent and human nasal mucosa. Su T, et al. **Drug Metab Dispos** 1996 Aug; 24(8):884–90

Adrenocortical-specific transgene expression directed by steroid hydroxylase gene promoters. Morley SD, et al. **Endocr Res** 1996 Nov;22(4):631–9

Mechanisms of ACTH(cAMP)-dependent transcription of adrenal steroid hydroxylases. Waterman MR, et al. **Endocr Res** 1996 Nov;22(4):615–20 (13 ref.)

Cytochromes P450 12: diversity of ACTH (cAMP)-dependent transcription of bovine steroid hydroxylase genes. Waterman MR, et al. **FASEB J** 1997 May;11(6):419–27 (42 ref.)

Exon skipping in the sterol 27-hydroxylase gene leads to cerebrotendinous xanthomatosis. Verrips A, et al. **Hum Genet** 1997 Aug;100(2):284–6

Two new mutations in the sterol 27-hydroxylase gene in two families lead to cerebrotendinous xanthomatosis. Verrips A, et al. **Hum Genet** 1996 Dec;98(6):735–7

Isolation and sequence analysis of cytochrome P450 12B1: the first mitochondrial insect P450 with homology to 1 alpha,25 dihydroxy-D3 24-hydroxylase. Danielson PB, et al. **Insect Biochem Mol Biol** 1997 Jun;27(6):595–604

Transcriptional synergism between vitamin D-responsive elements in the rat 25-hydroxyvitamin D3 24-hydroxylase (CYP24) promoter. Kerry DM, et al. **J Biol Chem** 1996 Nov 22;271(47):29715–21

Functional assessment of two vitamin D-responsive elements in the rat 25-hydroxyvitamin D3 24-hydroxylase gene. Ohyama Y, et al. **J Biol Chem** 1996 Nov 29;271(48):30381–5

Phenobarbital induction mediated by a distal CYP2B2 sequence in rat liver transiently transfected in situ. Park Y, et al. **J Biol Chem** 1996 Sep 27;271(39):23725–8

Role of gene overlap in the regulation of mRNA translation for mitochondrial cytochrome P-450c27/25 in the rat. Shayiq RM. **J Biol Chem** 1997 Feb 14;272(7):4050–7

A 65-kDa protein mediates the positive role of heme in regulating the transcription of CYP2B1/B2 gene in rat liver. Sultana S, et al. **J Biol Chem** 1997 Apr 4;

272(14):8895–900

Interaction of a novel sex-dependent, growth hormone-regulated liver nuclear factor with CYP2C12 promoter. Waxman DJ, et al. **J Biol Chem** 1996 Nov 22; 271(47):29978–87

Retinoid X receptor (RXR) ligands activate the human 25-hydroxyvitamin D3-24-hydroxylase promoter via RXR heterodimer binding to two vitamin D-responsive elements and elicit additive effects with 1,25-dihydroxyvitamin D3. Zou A, et al. **J Biol Chem** 1997 Jul 25;272(30):19027–34

Induction of 24-hydroxylase cytochrome P450 mRNA by 1,25-dihydroxyvitamin D and phorbol esters in normal rat kidney (NRK-52E) cells. Armbrecht HJ, et al. **J Endocrinol** 1997 May;153(2):199–205

Novel homozygous and compound heterozygous mutations of sterol 27-hydroxylase gene (CYP27) cause cerebrotendinous xanthomatosis in three Japanese patients from two unrelated families. Chen W, et al. **J Lipid Res** 1997 May;38(5):870–9

Cerebrotendinous xanthomatosis caused by two new mutations of the sterol-27-hydroxylase gene that disrupt mRNA splicing. Garuti R, et al. **J Lipid Res** 1996 Jul; 37(7):1459–67

Partial deletion of the gene encoding sterol 27-hydroxylase in a subject with cerebrotendinous xanthomatosis. Garuti R, et al. **J Lipid Res** 1996 Mar;37(3):662–72

A novel mutation in the cytochrome P450(27) (CYP27) gene caused cerebrotendinous xanthomatosis in a Japanese family. Okuyama E, et al. **J Lipid Res** 1996 Mar;37(3):631–9

Sterol 27-hydroxylase: expression in human arterial endothelium. Reiss AB, et al. **J Lipid Res** 1997 Jun; 38(6):1254–60

Comparative in vivo expression of the calcitriol-24-hydroxylase gene in kidney and intestine. Demers C, et al. **J Mol Endocrinol** 1997 Feb;18(1):37–48

Peripubertal androgen imprinting of rat hepatic cytochrome P450 2C11 and steroid 5 alpha-reductase: pretranslational regulation and impact on microsomal drug activation. Chang TK, et al. **J Pharmacol Exp Ther** 1996 Sep; 278(3):1383–91

Pharmacokinetics of a synthetic, chemically modified hammerhead ribozyme against the rat cytochrome P-450 3A2 mRNA after single intravenous injections. Desjardins JP, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1419–27

Sphingolipid-dependent signaling in regulation of cytochrome P450 expression. Morgan ET, et al. **Methods Enzymol** 1996;272:381–8

A novel mutation in the sterol 27-hydroxylase gene of a Pakistani family with autosomal recessive cerebrotendinous xanthomatosis. Ahmed MS, et al. **Neurology** 1997 Jan; 48(1):258–60

Allelic and functional variability of cytochrome P4502C9. Bhasker CR, et al. **Pharmacogenetics** 1997 Feb;7(1):51–8

The R144C change in the CYP2C9*2 allele alters interaction of the cytochrome P450 with NADPH:cytochrome P450 oxidoreductase. Crespi CL, et al. **Pharmacogenetics** 1997 Jun;7(3):203–10

Relationship between CYP2C9 and 2C19 genotypes and tolbutamide methyl hydroxylation and S-mephenytoin 4'-hydroxylation activities in livers of Japanese and Caucasian populations. Inoue K, et al. **Pharmacogenetics** 1997 Apr;7(2):103–13

Lung cancer risk in relation to the CYP2C9*1/CYP2C9*2 genetic polymorphism among African-Americans and Caucasians in Los Angeles County, California. London SJ, et al. **Pharmacogenetics** 1996 Dec;6(6):527–33

Genetic analysis of the human cytochrome P450 CYP2C9 locus. Stubbins MJ, et al. **Pharmacogenetics** 1996 Oct; 6(5):429–39

The role of the CYP2C9-Leu359 allelic variant in the tolbutamide polymorphism. Sullivan-Klose TH, et al. **Pharmacogenetics** 1996 Aug;6(4):341–9

Evidence for nitric oxide participation in down-regulation of CYP2B1/2 gene expression at the pretranslational level. Khatsenko OG, et al. **Toxicol Lett** 1997 Feb 7; 90(2-3):207–16

Regulation of constitutive rat hepatic cytochromes P450 by 3-methylcholanthrene. Jones EJ, et al. **Xenobiotica** 1996 Oct;26(10):995–1012

IMMUNOLOGY

Antigenic mapping of bacterial and animal cytochromes P-450. Kolesanova EF, et al. **Biochimie** 1996; 78(8-9):752–62

ISOLATION & PURIFICATION

Cytochrome P450 2C11: Escherichia coli expression, purification, functional characterization, and mechanism-based inactivation of the enzyme. Licad-Coles E, et al. **Arch Biochem Biophys** 1997 Feb 1;338(1):35–42

METABOLISM

Transcriptional regulation of hepatic sterol 27-hydroxylase by bile acids. Vlahcevic ZR, et al. **Am J Physiol** 1996 Apr; 270(4 Pt 1):G646–52

Allelic variants of human cytochrome P450 2C9: baculovirus-mediated expression, purification, structural characterization, substrate stereoselectivity, and prochiral selectivity of the wild-type and I359L mutant forms. Haining RL, et al. **Arch Biochem Biophys** 1996 Sep 15; 333(2):447–58

Interconversion of the androstenedione hydroxylase specificities of cytochromes P450 2B4 and 2B5 upon simultaneous site-directed mutagenesis of four key substrate recognition residues. He YQ, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):152–60

Effect of vitamin A deficiency on the expression of low affinity glucocorticoid binding site activity and glucocorticoid-dependent induction of CYP3A2 in rat liver. Wright MC, et al. **Biochem Biophys Res Commun** 1997 Aug 18;237(2):211–6

Regulation of renal vitamin D-24-hydroxylase by phosphate: effects of hypophysectomy, growth hormone and insulin-like growth factor I. Wu S, et al. **Biochem Biophys Res Commun** 1997 Apr 28;233(3):813–7

Construction of a P450c27 fusion enzyme: a useful tool for analysis of vitamin D3 25-hydroxylase activity. Dilworth FJ, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):267–71

Histidine residues in rabbit liver microsomal cytochrome P-450 2B4 control electron transfer from NADPH-cytochrome P-450 reductase and cytochrome b5. Hlavica P, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):857–62

Regioselective and stereoselective metabolism of ibuprofen by human cytochrome P450 2C. Hamman MA, et al. **Biochem Pharmacol** 1997 Jul 1;54(1):33–41

Studies of flurbiprofen 4'-hydroxylation. Additional evidence suggesting the sole involvement of cytochrome P450 2C9. Tracy TS, et al. **Biochem Pharmacol** 1996 Oct 25; 52(8):1305–9

Purification and characterisation of progesterone hydroxylase, cytochrome P-450 from Streptomyces roseochromogenes ATCC 13400. Berrie JR, et al. **Biochem Soc Trans** 1997 Feb;25(1):18S

Thermostable cytochrome P450 steroid hydroxylase from a thermophilic bacillus strain. Sideso O, et al. **Biochem Soc Trans** 1997 Feb;25(1):17S

Differential interaction of erythromycin with cytochromes P450 3A1/2 in the endoplasmic reticulum: a CO flash photolysis study. Koley AP, et al. **Biochemistry** 1997 Mar 18;36(11):3237–41

Interaction of sulfaphenazole derivatives with human liver cytochromes P450 2C: molecular origin of the specific inhibitory effects of sulfaphenazole on CYP 2C9 and consequences for the substrate binding site topology of CYP 2C9. Mancy A, et al. **Biochemistry** 1996 Dec 17; 35(50):16205–12

Reassessment of cytochrome P450 2B2: catalytic specificity and identification of four active site residues. Strobel SM, et al. **Biochemistry** 1997 Sep 30;36(39):11697–706

Interactions of cytochrome P450 2B4 with NADPH-cytochrome P450 reductase studied by fluorescent probe. Davydov DR, et al. **Biochimie** 1996; 78(8-9):734–43

Consequences of vitamin D receptor regulation for the 1,25-dihydroxyvitamin D3-induced 24-hydroxylase activity in osteoblast-like cells: initiation of the C24-oxidation pathway. Staal A, et al. **Bone** 1997 Mar; 20(3):237–43

Limited value of the urinary phenytoin metabolic ratio for the assessment of cytochrome P4502C9 activity in vivo. Tassaneeyakul W, et al. **Br J Clin Pharmacol** 1996 Dec; 42(6):774–8

Influence of estrogen metabolism on proliferation of human breast cancer. Imoto S, et al. **Breast Cancer Res Treat** 1997 Jan;42(1):57–64

The apoprotein of cytochrome P450 3A2 does not selectively direct alkylation to one of four pyrrole rings of N-vinylprotoporphyrin IX. McNamee JP, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):996–1000

Metabolism of carcinogenic N-nitroso-N-methylaniline by purified cytochromes P450 2B1 and P450 2B2. Stiborová M, et al. **Cancer Lett** 1996 Dec 20;110(1-2):11–7

Cytochrome P4502C11 is a target of diclofenac covalent binding in rats. Shen S, et al. **Chem Res Toxicol** 1997 Apr; 10(4):420–3

Roles of cytochrome P4502C9 and cytochrome P4502C19 in the stereoselective metabolism of phenytoin to its major metabolite. Bajpai M, et al. **Drug Metab Dispos** 1996 Dec; 24(12):1401–3

Diazepam metabolism by cDNA-expressed human 2C P450s: identification of P4502C18 and P4502C19 as low K(M) diazepam N-demethylases. Jung F, et al. **Drug Metab Dispos** 1997 Feb;25(2):133–9

Human cytochrome P450 3A4-catalyzed testosterone 6 beta-hydroxylation and erythromycin N-demethylation. Competition during catalysis. Wang RW, et al. **Drug Metab Dispos** 1997 Apr;25(4):502–7

Erythromycin as a specific substrate for cytochrome P4503A isozymes and identification of a high-affinity erythromycin N-demethylase in adult female rats. Zhang XJ, et al. **Drug Metab Dispos** 1996 Jan;24(1):23–7

Aromatase and estrogen 2-hydroxylase activities of human placental microsomes in pregnancy-induced hypertension. Okubo K, et al. **Endocr J** 1996 Aug;43(4):363–8

Interindividual variability in catalytic activity and immunoreactivity of three major human liver cytochrome P450 isozymes. Transon C, et al. **Eur J Clin Pharmacol** 1996;51(1):79–85

Cytochromes P450 2B1 and P450 2B2 demethylate N-nitrosodimethylamine and N-nitrosomethylaniline in vitro. Stiborová M, et al. **Gen Physiol Biophys** 1996 Jun; 15(3):211–23

Inhibition of renal outer medullary 20-HETE production produces hypertension in Lewis rats. Stec DE, et al. **Hypertension** 1997 Jan;29(1 Pt 2):315–9

1alpha,25-dihydroxyvitamin D3-24-hydroxylase (CYP24) hydroxylates the carbon at the end of the side chain (C-26) of the C-24-fluorinated analog of 1alpha,25-dihydroxyvitamin D3. Miyamoto Y, et al. **J Biol Chem** 1997 May 30;272(22):14115–9

Bimodal regulation of ceramidase by interleukin-1beta. Implications for the regulation of cytochrome p450 2C11. Nikolova-Karakashian M, et al. **J Biol Chem** 1997 Jul 25; 272(30):18718–24

Human saturated steroid 6alpha-hydroxylase. Dombroski R, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1338–44

Bile acid synthesis: 7 alpha-hydroxylation of intermediates in the sterol 27-hydroxylase metabolic pathway. Lee C, et al. **J Lipid Res** 1996 Jun;37(6):1356–62

Microbial transformations of steroids--X. Cytochromes P-450 11 alpha-hydroxylase and C17-C20 lyase and a 1-ene dehydrogenase transform steroids in Nectria haematococca. Ahmed F, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):337–49

Equine cytochrome P450 aromatase exhibits an estrogen 2-hydroxylase activity in vitro. Almadhidi J, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):55–61

Use of tolbutamide as a substrate probe for human hepatic cytochrome P450 2C9. Miners JO, et al. **Methods Enzymol** 1996;272:139–45

Developmental expression of calcitriol receptors, 9-kilodalton calcium-binding protein, and calcidiol 24-hydroxylase in human intestine. Delvin EE, et al. **Pediatr Res** 1996 Nov;40(5):664–70

Proceedings of the 2nd International Symposium on Molecular Steroidogenesis. Monterey, California, June 7–11, 1996. **Steroids** 1997 Jan;62(1):1–211

Lack of effect of methotrexate on the expression of constitutive hepatic cytochromes P450 in the male rat. Cheung RL, et al. **Xenobiotica** 1996 May;26(5):503–14

Modulation of rat hepatic CYP3A by nonylphenol. Lee PC, et al. **Xenobiotica** 1996 Aug;26(8):831–8

[The interaction of organophosphorus amino acid analogs with cytochrome P-450 2B4] Shumiantseva VV, et al. **Izv Akad Nauk Ser Biol** 1996 Nov-Dec;(6):749–53 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Liposomal 1,25 (OH)2 vitamin D3 compounds block proliferation and induce differentiation in myelomonocytic leukaemia cells. Frankenberger M, et al. **Br J Haematol** 1997 Jul;98(1):186–94

Cytochrome P4502D and -2C enzymes catalyze the oxidative N-demethylation of the parkinsonism-inducing substance 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine in rat liver microsomes. Narimatsu S, et al. **Chem Res Toxicol** 1996 Jan-Feb;9(1):93–8

Deamination of amphetamines by cytochromes P450: studies on substrate specificity and regioselectivity with microsomes and purified CYP2C subfamily isozymes. Yamada H, et al. **J Toxicol Sci** 1997 Feb;22(1):65–73

PHYSIOLOGY

Variable contribution of cytochromes P450 2D6, 2C9 and 3A4 to the 4-hydroxylation of tamoxifen by human liver microsomes. Crewe HK, et al. **Biochem Pharmacol** 1997 Jan 24;53(2):171–8

Role of human liver microsomal CYP2C9 in the biotransformation of lornoxicam. Bonnabry P, et al. **Eur J Clin Pharmacol** 1996;49(4):305–8

In vitro 6 beta-hydroxylation of progesterone in human renal tissue. Agrawal R, et al. **Wien Klin Wochenschr** 1997 Jun 27;109(12-13):493–6

ULTRASTRUCTURE

Scanning tunneling microscopy study of cytochrome P450 2B4 incorporated in proteoliposomes. Uvarov VYu, et al. **Biochimie** 1996;78(8-9):780–4

STEROID ISOMERASES

ANALYSIS

Subcellular localization of 3 beta hydroxysteroid dehydrogenase isomerase in testis of Bufo arenarum H. Pozzi AG, et al. **Gen Comp Endocrinol** 1997 Jun; 106(3):400–6

Mitochondrial localization of 3 beta-hydroxysteroid dehydrogenase 5-ene isomerase in interrenals of the toad Bufo arenarum H. Pozzi AG, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):176–81

Altering culture conditions reveals strain-related differences in activity and immunoreactive isoforms of 3 beta-hydroxysteroid dehydrogenase-isomerase in mouse Leydig cells. Heggland SJ, et al. **Steroids** 1996 May; 61(5):309–16

ANTAGONISTS & INHIBITORS

Yeast sterol C8-C7 isomerase: identification and characterization of a high-affinity binding site for enzyme inhibitors. Moebius FF, et al. **Biochemistry** 1996 Dec 24; 35(51):16871–8

Activity and inhibition of 3-beta-hydroxysteroid

dehydrogenase/delta-5-4-isomerase in human skin. Tóth I, et al. **Skin Pharmacol** 1997;10(3):160-8

BIOSYNTHESIS

Functional maturation of the primate fetal adrenal in vivo. II. Ontogeny of corticosteroid synthesis is dependent upon specific zonal expression of 3 beta-hydroxysteroid dehydrogenase/isomerase. Coulter CL, et al. **Endocrinology** 1996 Nov;137(11):4953-9

CHEMISTRY

NMR studies of the secondary structure in solution and the steroid binding site of delta5-3-ketosteroid isomerase in complexes with diamagnetic and paramagnetic steroids. Zhao Q, et al. **Biochemistry** 1997 Mar 25;36(12):3458-72

Crystallization and preliminary x-ray crystallographic studies of ketosteroid isomerase from Pseudomonas putida biotype B. Oh BH, et al. **Proteins** 1996 Apr;24(4):514-5

Solution structure of 3-oxo-delta5-steroid isomerase. Wu ZR, et al. **Science** 1997 Apr 18;276(5311):415-8

GENETICS

Expression of messenger ribonucleic acid (mRNA) encoding 3beta-hydroxysteroid dehydrogenase delta4,delta5 isomerase (3beta-HSD) during recruitment and selection of bovine ovarian follicles: identification of dominant follicles by expression of 3beta-HSD mRNA within the granulosa cell layer. Bao B, et al. **Biol Reprod** 1997 Jun; 56(6):1466-73

Synergistic activation of the human type II 3beta-hydroxysteroid dehydrogenase/delta5-delta4 isomerase promoter by the transcription factor steroidogenic factor-1/adrenal 4-binding protein and phorbol ester. Leers-Sucheta S, et al. **J Biol Chem** 1997 Mar 21;272(12):7960-7

Molecular biology and genetics of the 3 beta-hydroxysteroid dehydrogenase/delta5-delta4 isomerase gene family. Simard J, et al. **J Endocrinol** 1996 Sep;150 Suppl:S189-207 (147 ref.)

METABOLISM

Affinity radiolabeling identifies peptides associated with the isomerase activity of human type I (placental) 3beta-hydroxysteroid dehydrogenase/isomerase. Thomas JL, et al. **Biochemistry** 1997 Jul 22;36(29):9029-34

High affinity of sigma 1-binding sites for sterol isomerization inhibitors: evidence for a pharmacological relationship with the yeast sterol C8-C7 isomerase. Moebius FF, et al. **Br J Pharmacol** 1997 May;121(1):1-6

Submitochondrial distribution of three key steroidogenic proteins (steroidogenic acute regulatory protein and cytochrome p450scc and 3beta-hydroxysteroid dehydrogenase isomerase enzymes) upon stimulation by intracellular calcium in adrenal glomerulosa cells. Cherradi N, et al. **J Biol Chem** 1997 Mar 21;272(12):7899-907

Emopamil-binding protein, a mammalian protein that binds a series of structurally diverse neuroprotective agents, exhibits delta8-delta7 sterol isomerase activity in yeast. Silve S, et al. **J Biol Chem** 1996 Sep 13;271(37):22434-40

Activity and inhibition of 3-beta-hydroxysteroid dehydrogenase/delta-5-4-isomerase in human skin. Tóth I, et al. **Skin Pharmacol** 1997;10(3):160-8

STEROID 17 ALPHA-MONOOXYGENASE

ANALYSIS

Differences in trophectoderm mitotic rate and P450 17alpha-hydroxylase expression between late preimplantation Meishan and Yorkshire conceptuses. Wilson ME, et al. **Biol Reprod** 1997 Feb;56(2):380-5

Characterization of the adrenal cytochrome P450C17 in the hamster, a small animal model for the study of adrenal dehydroepiandrosterone biosynthesis. Cloutier M, et al. **DNA Cell Biol** 1997 Mar;16(3):357-68

Immunohistochemical analysis of AT1 receptor versus P450c17 and 3 beta HSD expression in ovine adrenals. Bird IM, et al. **Endocr Res** 1996 Nov;22(4):349-53

Developmentally regulated expression and activity of 17alpha-hydroxylase/C-17,20-lyase cytochrome P450 in rat liver. Vianello S, et al. **Endocrinology** 1997 Aug; 138(8):3166-74

Immunolocalization and biochemical determination of cytochrome P450C17 in adrenals of hamsters treated with ACTH. Brière N, et al. **J Histochem Cytochem** 1997 Oct; 45(10):1409-16

Kinetic analysis of duodenal and testicular cytochrome P450c17 in the rat. Dalla Valle L, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5-6):577-84

ANTAGONISTS & INHIBITORS

20-amino and 20,21-aziridinyl pregnene steroids: development of potent inhibitors of 17 alpha-hydroxylase/C17,20-lyase (P450 17). Njar VC, et al. **Bioorg Med Chem** 1996 Sep;4(9):1447-53

Synthesis and evaluation of pregnane derivatives as inhibitors of human testicular 17 alpha-hydroxylase/C17,20-lyase. Li JS, et al. **J Med Chem** 1996 Oct 11;39(21):4335-9

Biochemistry and pharmacokinetics of potent non-steroidal cytochrome P450(17alpha) inhibitors. Barrie SE, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5-6):347-51

Synthesis of novel 21-trifluoropregnane steroids: inhibitors of 17 alpha-hydroxylase/17,20-lyase (17 alpha-lyase). Njar VC, et al. **Steroids** 1997 Jun;62(6):468-73

BIOSYNTHESIS

Differential transcription of steroidogenic enzymes in the equine primary corpus luteum during diestrus and early pregnancy. Albrecht BA, et al. **Biol Reprod** 1997 Apr; 56(4):821-9

Differential effects of adrenocorticotropin in vivo on cytochromes P4502D16 and P450c17 in the guinea pig adrenal cortex. Jiang Q, et al. **Endocrinology** 1996 Nov; 137(11):4811-6

Effects of aromatase inhibitor on sex differentiation and levels of P450 (17 alpha) and P450 arom messenger ribonucleic acid of gonads in chicken embryos. Abinawanto, et al. **Gen Comp Endocrinol** 1996 May;102(2):241-6

Heterologous expression of the spiny dogfish shark (Squalus acanthias) cytochrome P450c17 (17 alpha-hydroxylase) in Escherichia coli. Trant JM. **Gen Comp Endocrinol** 1996 May;102(2):173-82

Expression of P450(17 alpha) hydroxylase and P450 aromatase genes in the chicken gonad before and after sexual differentiation. Yoshida K, et al. **Gen Comp Endocrinol** 1996 May;102(2):233-40

17alpha-Hydroxylase gene expression in the bovine ovary: mechanisms regulating expression differ from those in adrenal cells. Demeter Arlotto M, et al. **J Steroid Biochem Mol Biol** 1996 Sep;59(1):21-9

Repression of cAMP-induced expression of the mouse P450 17 alpha-hydroxylase/C17-20 lyase gene (Cyp17) by androgens. Burgos-Trinidad M, et al. **Mol Endocrinol** 1997 Jan;11(1):87-96

CHEMISTRY

The regulation of 17,20 lyase activity. Miller WL, et al. **Steroids** 1997 Jan;62(1):133-42 (77 ref.)

DEFICIENCY

A new variant of the cytochrome P450c17 (CYP17) gene mutation in three patients with 17 alpha-hydroxylase deficiency. Monno S, et al. **Ann Hum Genet** 1997 May;61 (Pt 3):275-9

Adrenal tumour associated with silent 21-hydroxylase deficiency in a male [letter; comment] Nagasaka S, et al. **Clin Endocrinol (Oxf)** 1997 May;46(5):644. Comment on: Clin Endocrinol (Oxf) 1996 Jan;44(1):111-6. Comment on: Clin Endocrinol (Oxf) 1996 Sep;45(3):369-70.

Substitution with testosterone as aromatizable substrate for induction of follicular maturation, estradiol production and ovulation in a patient with 17 alpha-hydroxylase deficiency. Neuwinger J, et al. **Exp Clin Endocrinol Diabetes** 1996;104(5):400-8

17 alpha-Hydroxylase deficiency: 1963-1966. Biglieri EG. **J Clin Endocrinol Metab** 1997 Jan;82(1):48-50

Steroid 17alpha-hydroxylase deficiency: first Australian case report. Cameron FJ, et al. **J Paediatr Child Health** 1997 Jun;33(3):259-61

DRUG EFFECTS

Evidence for a novel peripheral action of leptin as a metabolic signal to the adrenal gland: leptin inhibits cortisol release directly. Bornstein SR, et al. **Diabetes** 1997 Jul;46(7):1235-8

GENETICS

A new variant of the cytochrome P450c17 (CYP17) gene mutation in three patients with 17 alpha-hydroxylase deficiency. Monno S, et al. **Ann Hum Genet** 1997 May;61 (Pt 3):275-9

cAMP-dependent transactivation involving the homeodomain protein Pbx1. Ogo A, et al. **Arch Biochem Biophys** 1997 Feb 15;338(2):193-200

Follicular 3 beta-hydroxysteroid dehydrogenase and cytochromes P450 17 alpha-hydroxylase and aromatase messenger ribonucleic acids in cattle undergoing superovulation. Soumano K, et al. **Biol Reprod** 1996 Dec; 55(6):1419-26

A polymorphism in the CYP17 gene increases the risk of breast cancer. Feigelson HS, et al. **Cancer Res** 1997 Mar 15;57(6):1063-5

The 17 alpha-hydroxylase/17,20 lyase gene (CYP17) and polycystic ovary syndrome [comment] Franks S. **Clin Endocrinol (Oxf)** 1997 Feb;46(2):135-6. Comment on: Clin Endocrinol (Oxf) 1997 Feb;46(2):131-4.

Frequency of a polymorphism in the regulatory region of the 17 alpha-hydroxylase-17,20-lyase (CYP17) gene in hyperandrogenic states [see comments] Techatraisak K, et al. **Clin Endocrinol (Oxf)** 1997 Feb;46(2):131-4. Comment in: Clin Endocrinol (Oxf) 1997 Feb;46(2):135-6.

A polymorphism in intron 6 of the CYP17 gene. Crocitto LE, et al. **Clin Genet** 1997 Jul;52(1):68-9

A putative binding site for Sp1 is involved in transcriptional regulation of CYP17 gene expression in bovine ovary. Borroni R, et al. **Endocrinology** 1997 May;138(5):2011-20

Developmentally regulated expression and activity of 17alpha-hydroxylase/C-17,20-lyase cytochrome P450 in rat liver. Vianello S, et al. **Endocrinology** 1997 Aug; 138(8):3166-74

5' polymorphism of the CYP17 gene is not associated with serum testosterone levels in women with polycystic ovaries [letter] Gharani N, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4174

Mutation of cytochrome P-45017 alpha gene (CYP17) in a Japanese patient previously reported as having glucocorticoid-responsive hyperaldosteronism: with a review of Japanese patients with mutations of CYP17. Miura K, et al. **J Clin Endocrinol Metab** 1996 Oct; 81(10):3797-801 (36 ref.)

Transcription of the human genes for cytochrome P450scc and P450c17 is regulated differently in human adrenal NCI-H295 cells than in mouse adrenal Y1 cells. Rodriguez H, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):365-71

A 5'-splice site mutation in the cytochrome P450 steroid 17alpha-hydroxylase gene in 17alpha-hydroxylase deficiency. Yamaguchi H, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1934-8

CYP17 gene analysis in hyperandrogenised women with and without exaggerated 17-hydroxyprogesterone response to ovarian stimulation. Liović M, et al. **J Endocrinol Invest** 1997 Apr;20(4):189-93

Development of cytochrome P450 17 alpha-hydroxylase (P450c17) mRNA and enzyme activity in neonatal ovaries of normal and hypogonadal (hpg) mice. Gray SA, et al. **J Mol Endocrinol** 1996 Aug;17(1):55-60

The orphan nuclear receptor steroidogenic factor-1 regulates the cyclic adenosine 3',5'-monophosphate-mediated transcriptional activation of rat cytochrome P450c17 (17 alpha-hydroxylase/c17-20 lyase). Zhang P, et al. **Mol Endocrinol** 1996 Feb;10(2):147-58

Multiple orphan nuclear receptors converge to regulate rat P450c17 gene transcription: novel mechanisms for orphan nuclear receptor action. Zhang P, et al. **Mol Endocrinol** 1997 Jun;11(7):891-904

Regulation of androgen synthesis: the late steroidogenic pathway. Dufau ML, et al. **Steroids** 1997 Jan;62(1):128-32

Induction of steroidogenic enzyme genes by insulin and IGF-I in cultured adult human adrenocortical cells. Kristiansen SB, et al. **Steroids** 1997 Feb;62(2):258-65

Transcriptional regulation of the bovine CYP17 gene by cAMP. Lund J, et al. **Steroids** 1997 Jan;62(1):43-5

The testis and the adrenal are (transcriptionally) the same. Mellon SH, et al. **Steroids** 1997 Jan;62(1):46-52

METABOLISM

The function of recombinant cytochrome P450s in intact Escherichia coli cells: the 17 alpha-hydroxylation of progesterone and pregnenolone by P450c17. Shet MS, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):218-25

Hypersecretion of androgens by polycystic ovaries: the role of genetic factors in the regulation of cytochrome P450c17 alpha. Franks S, et al. **Baillieres Clin Endocrinol Metab** 1996 Apr;10(2):193-203 (33 ref.)

Protein phosphorylation changes ligand-binding efficiency of cytochrome P450c17 (CYP17) and accelerates its proteolytic degradation: putative relevance for hormonal regulation of CYP17 activity. Löhr JB, et al. **Biochem Biophys Res Commun** 1997 Feb 13;231(2):403-8

Interaction of human CYP17 (P-450(17alpha), 17alpha-hydroxylase-17,20-lyase) with cytochrome b5: importance of the orientation of the hydrophobic domain of cytochrome b5. Lee-Robichaud P, et al. **Biochem J** 1997 Feb 1;321 (Pt 3):857-63

Modulation of the activity of human 17 alpha-hydroxylase-17,20-lyase (CYP17) by cytochrome b5: endocrinological and mechanistic implications. Lee-Robichaud P, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):901-8

The role of cytochrome P450 17 alpha-hydroxylase and 3 beta-hydroxysteroid dehydrogenase in the integration of gonadal and adrenal steroidogenesis via the delta 5 and delta 4 pathways of steroidogenesis in mammals. Conley AJ, et al. **Biol Reprod** 1997 Apr;56(4):789-99 (147 ref.)

The use of electrochemistry for the synthesis of 17 alpha-hydroxyprogesterone by a fusion protein containing P450c17. Estabrook RW, et al. **Endocr Res** 1996 Nov; 22(4):665-71

Improvement of cytochrome P450c17 catalytic processivity as a novel mechanism to attenuate hormonal consequences of enzyme decay in the testes after a gonadotropin surge. Kühn-Velten WN. **Eur J Endocrinol** 1997 Apr; 136(4):438-43

Rapid down-regulation of testicular androgen biosynthesis at increased environmental temperature is due to cytochrome P450c17 (CYP17) thermolability in Leydig cells, but not in endoplasmic reticulum membranes. Kühn-Velten WN. **Exp Clin Endocrinol Diabetes** 1996; 104(3):243-9

17 alpha-Hydroxylase and chromogranin A in 6th week human fetal adrenals. Ehrhart-Bornstein M, et al. **Horm Metab Res** 1997 Jan;29(1):30-2

Testosterone autoregulation of its biosynthesis in the rat testis: inhibition of 17 alpha-hydroxylase activity. Darney KJ Jr, et al. **J Androl** 1996 Mar-Apr;17(2):137-42

Are Leydig cell steroidogenic enzymes differentially regulated with aging? Luo L, et al. **J Androl** 1996 Sep-Oct; 17(5):509-15

Negatively charged anabaena flavodoxin residues (Asp144 and Glu145) are important for reconstitution of cytochrome P450 17alpha-hydroxylase activity. Jenkins CM, et al. **J Biol Chem** 1997 Sep 5;272(36):22509-13

STEROID 17 ALPHA-MONOOXYGENASE

Regulation of androgen synthesis: the late steroidogenic pathway. Dufau ML, et al. **Steroids** 1997 Jan;62(1):128–32
Transcriptional regulation of the bovine CYP17 gene by cAMP. Lund J, et al. **Steroids** 1997 Jan;62(1):43–5
The testis and the adrenal are (transcriptionally) the same. Mellon SH, et al. **Steroids** 1997 Jan;62(1):46–52

STEROID 11 BETA-MONOOXYGENASE

see related
ADRENAL HYPERPLASIA, CONGENITAL

ANTAGONISTS & INHIBITORS

Stereoselective reductive metabolism of metyrapone and inhibitory activity of metyrapone metabolites, metyrapol enantiomers, on steroid 11 beta-hydroxylase in the rat. Nagamine S, et al. **Biol Pharm Bull** 1997 Feb;20(2):188–92
Inhibition of cellular growth and steroid 11 beta-hydroxylation in ras-transformed adrenocortical cells by the fungal toxins beticolins. Ding G, et al.
Cell Biol Int 1996 Aug;20(8):523–30
Mechanism-based inactivation of bovine cytochrome P-450(11beta) by 18-unsaturated progesterone derivatives. Delorme C, et al. **Eur J Biochem** 1997 Aug 15; 248(1):252–60

BIOSYNTHESIS

Differential gene expression of cytochrome P450 11beta-hydroxylase in rat adrenal cortex after in vivo activation. Engeland WC, et al. **Endocrinology** 1997 Jun; 138(6):2338–46
Expression of cytochromes P450aldo and P45011 beta in rat adrenal gland during late gestational and neonatal stages. Mitani F, et al. **Steroids** 1997 Jan;62(1):57–61

BLOOD

Altered 11 beta-hydroxylase activity in glucocorticoid-suppressible hyperaldosteronism. Jamieson A, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2298–302

DEFICIENCY

The prevalence of non-classic adrenal hyperplasia due to 11 beta-hydroxylase deficiency among hirsute women in a Turkish population. Keleştimur F, et al.
Clin Endocrinol (Oxf) 1996 Oct;45(4):381–4
CYP11B1 mutations causing congenital adrenal hyperplasia due to 11 beta-hydroxylase deficiency. Geley S, et al.
J Clin Endocrinol Metab 1996 Aug;81(8):2896–901
Congenital adrenal hyperplasia due to 11-beta-hydroxylase deficiency with skeletal abnormalities. Ajlouni KM, et al.
J Endocrinol Invest 1996 May;19(5):316–9
CYP11 beta 1 (11-beta-hydroxylase) deficiency in congenital adrenal hyperplasia. Burren CP, et al.
J Paediatr Child Health 1996 Oct;32(5):433–8
Does primary salt wasting occur in 11-beta-hydroxylase deficiency? Singer-Granick C, et al.
J Pediatr Endocrinol Metab 1995 Oct-Dec;8(4):275–80 (21 ref.)
[Diagnosis of the adrenogenital syndrome caused by 11beta-hydroxylase deficiency using gas chromatographic-mass spectrometric analysis of the urinary steroid profile] Wudy SA, et al.
Dtsch Med Wochenschr 1997 Jan 3;122(1-2):3–10; discussion 11 (Eng. Abstr.) **(Ger)**

GENETICS

Expression of cytochrome P45011B1 mRNA in the brain of normal and hypertensive transgenic rats. Erdmann B, et al. **Brain Res** 1996 Sep 9;733(1):73–82
Changed ratios of glucocorticoids/mineralocorticoids caused by point mutations in the putative I-helix regions of CYP11B1 and CYP11B2. Böttner B, et al. **Endocr Res** 1996 Nov;22(4):455–61
Functional expression of the guinea pig 11b-hydroxylase in COS-1 cells. Bülow HE, et al. **Endocr Res** 1996 Nov; 22(4):479–84
Mutations in the 11 beta-hydroxylase genes in the Dahl SS and SR rats. Gomez-Sanchez EP, et al. **Endocr Res** 1996 Nov;22(4):493–4
Sequence of the 11 beta-hydroxylase gene from the Cape baboon (Papio ursinus). Hampf M, et al. **Endocr Res** 1996 Nov;22(4):495–9
Activity of 5'-deletion mutants of the human CYP11B1 promoter in H295R cells. Lenz D, et al. **Endocr Res** 1996 Nov;22(4):501–2
Cytochrome P450(11 beta): ectopic expression in oocyte and its physiological implication. Okamoto M, et al.
Endocr Res 1996 Nov;22(4):471–7
Fish testicular 11beta-hydroxylase: cDNA cloning and mRNA expression during spermatogenesis. Jiang JQ, et al.
FEBS Lett 1996 Nov 18;397(2-3):250–2
Aldosterone-producing adenomas do not contain glucocorticoid-remediable aldosteronism chimeric gene duplications. Carroll J, et al. **J Clin Endocrinol Metab** 1996 Dec;81(12):4310–2
CYP11B1 mutations causing congenital adrenal hyperplasia due to 11 beta-hydroxylase deficiency. Geley S, et al.
J Clin Endocrinol Metab 1996 Aug;81(8):2896–901
Variation of phenotype in patients with glucocorticoid remediable aldosteronism. Gates LJ, et al. **J Med Genet** 1996 Jan;33(1):25–28
Differential regulation of 11 beta-hydroxylase and aldosterone synthase in human adrenocortical H295R cells. Denner K, et al. **Mol Cell Endocrinol** 1996 Jul 23; 121(1):87–91

METABOLISM

11 beta-Hydroxylase activity in glucocorticoid suppressible hyperaldosteronism: lessons for essential hypertension? Connell JM, et al. **Endocr Res** 1996 Nov;22(4):691–700
Effects of gestation on enzymes controlling aldosterone synthesis in the rat adrenal. Brochu M, et al.
Endocrinology 1997 Jun;138(6):2354–8
Impairment of 11 beta-hydroxylase but not 21-hydroxylase in adrenal 'incidentalomas'. Reincke M, et al.
Eur J Endocrinol 1997 Feb;136(2):196–200
Specific aspects of electron transfer from adrenodoxin to cytochromes p450scc and p45011beta. Beckert V, et al.
J Biol Chem 1997 Feb 21;272(8):4883–8
Regulation of 11 beta-hydroxylase cytochrome p450 expression by cholesterol in spontaneously hypertensive rats. Rubattu S, et al. **J Hypertens** 1995 Nov;13(11):1253–8
The amino acid substitutions Ser288Gly and Val320Ala convert the cortisol producing enzyme, CYP11B1, into an aldosterone producing enzyme [letter] Curnow KM, et al.
Nat Struct Biol 1997 Jan;4(1):32–5

STEROID 12-MONOOXYGENASE

GENETICS

Molecular cloning and expression of rabbit sterol 12alpha-hydroxylase. Eggertsen G, et al. **J Biol Chem** 1996 Dec 13;271(50):32269–75

STEROID 17-MONOOXYGENASE see **STEROID 17 ALPHA-MONOOXYGENASE**

STEROID 21-MONOOXYGENASE

ANALYSIS

Ontogeny of immunoreactive steroidogenic proteins (adrenodoxin and cytochrome p-450(21)) in the interrenals of the teleost Lates calcarifer. Sampath-Kumar R, et al.
Gen Comp Endocrinol 1996 Apr;102(1):147–55

ANTAGONISTS & INHIBITORS

Hormonal responses during various phases of autoimmune adrenal failure: no evidence for 21-hydroxylase enzyme activity inhibition in vivo. Boscaro M, et al.
J Clin Endocrinol Metab 1996 Aug;81(8):2801–4

DEFICIENCY

Are infants insensitive to androgen? [letter; comment] Arisaka O, et al. **Acta Paediatr** 1996 Jun;85(6):760–1. Comment on: Acta Paediatr 1995 Aug;84(8):894–8.
Elevation of serum luteinizing hormone levels during hydrocortisone treatment in infant girls with 21-hydroxylase deficiency. Belgorosky A, et al.
Acta Paediatr 1996 Oct;85(10):1172–5
21-hydroxylase deficiency. Newfield RS, et al.
Ann N Y Acad Sci 1997 Jun 17;816:219–29 (25 ref.)
Molecular analysis of CYP21 and C4 genes in Brazilian families with the classical form of steroid 21-hydroxylase deficiency. de-Araujo M, et al. **Braz J Med Biol Res** 1996 Jan;29(1):1–13 (37 ref.)
Adrenal tumour associated with silent 21-hydroxylase deficiency in a male or with a classic form of 21-hydroxylase defect in a female? [letter] [see comments] Tóth M, et al. **Clin Endocrinol (Oxf)** 1996 Sep;45(3):369–70 . Comment in: Clin Endocrinol (Oxf) 1997 May;46(5):644.
Molecular approaches for the diagnosis of 21-hydroxylase deficiency and congenital adrenal hyperplasia. Wedell A.
Clin Lab Med 1996 Mar;16(1):125–37 (45 ref.)
Nonclassical adrenal hyperplasia due to 21-hydroxylase-deficiency: does genotyping predict the clinical manifestation? l'Allemand D, et al. **Endocr Res** 1996 Nov;22(4):735–9
Non-classical 21-hydroxylase deficiency in infancy and childhood: the effect of time of initiation of therapy on puberty and final height. Weintrob N, et al.
Eur J Endocrinol 1997 Feb;136(2):188–95
Value of direct measurement of active renin concentrations in congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Krüger C, et al. **Eur J Pediatr** 1996 Oct; 155(10):858–61
Detection of CAH heterozygotes [letter; comment] Azziz R. **Fertil Steril** 1997 Jul;68(1):183; discusssion 183–4. Comment on: Fertil Steril 1996 Oct;66(4):557–63.
Detection of CAH heterozygotes [letter; comment] Chryssikopoulos A. **Fertil Steril** 1997 Jul;68(1):182; discussion 183–4. Comment on: Fertil Steril 1996 Oct;66(4):557–63.
Plasma 3 alpha-androstanediol glucuronide in normal children and in congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Lopes LA, et al. **Horm Res** 1997;48(1):35–40
Mutation-haplotype analysis of steroid 21-hydroxylase (CYP21) deficiency in Finland. Implications for the population history of defective alleles. Levo A, et al.
Hum Genet 1997 Apr;99(4):488–97
E380D: a novel point mutation of CYP21 in an HLA-homozygous patient with salt-losing congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Kirby-Keyser L, et al. **Hum Mutat** 1997;9(2):181–2
Carriers of 21-hydroxylase deficiency are not at increased risk for hyperandrogenism. Knochenhauer ES, et al.
J Clin Endocrinol Metab 1997 Feb;82(2):479–85
Phenotypic heterogeneity associated with the splicing mutation in congenital adrenal hyperplasia due to 21-hydroxylase deficiency [letter; comment] Müller WL.
J Clin Endocrinol Metab 1997 Apr;82(4):1304. Comment on: J Clin Endocrinol Metab 1996 Nov;81(11):4081–8.
Synergistic effect of partially inactivating mutations in steroid 21-hydroxylase deficiency. Nikoshkov A, et al.
J Clin Endocrinol Metab 1997 Jan;82(1):194–9
Molecular basis of nonclassical steroid 21-hydroxylase deficiency detected by neonatal mass screening in Japan. Tajima T, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2350–6
Phenotypic heterogeneity associated with the splicing mutation in congenital adrenal hyperplasia due to 21-hydroxylase deficiency [see comments] Witchel SF, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4081–8. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):1304.
17-Hydroxyprogesterone response to ACTH in bilateral and monolateral adrenal incidentalomas. Bernini GP, et al.
J Endocrinol Invest 1996 Dec;19(11):745–52
Newborn screening for 21-hydroxylase deficiency: results of CYP21 molecular genetic analysis. Witchel SF, et al.
J Pediatr 1997 Aug;131(2):328–31
Transient central precocious puberty in non-classic 21-hydroxylase deficiency. Speiser PW.
J Pediatr Endocrinol Metab 1995 Oct-Dec;8(4):287–9
The 21-hydroxylase-deficient adrenal hyperplasias: more than ACTH oversecretion. Azziz R, et al.
J Soc Gynecol Investig 1996 Nov-Dec;3(6):297–302 (39 ref.)
Treatment and disease effects on short-term growth and adult height in children and adolescents with 21-hydroxylase deficiency. Hauffa BP, et al. **Klin Padiatr** 1997 Mar-Apr; 209(2):71–7
Growth of patients with 21-hydroxylase deficiency: an analysis of the factors influencing adult height. Jääskeläinen J, et al. **Pediatr Res** 1997 Jan;41(1):30–3
Microsatellite markers in the indirect analysis of the steroid 21-hydroxylase gene. Ezquieta B, et al. **Prenat Diagn** 1997 May;17(5):429–34
Prenatal diagnosis of steroid 21-hydroxylase deficiency by analysis of polymerase chain reaction-single strand conformation polymorphism (PCR-SSCP) profiles. Hayashi Z, et al. **Prenat Diagn** 1997 May;17(5):435–42
[Association of mixed gonadal dysgenesis and non-classic 21-hydroxylase deficiency] Del Pino O, et al.
Arch Pediatr 1996 Dec;3(12):1258–61 (Eng. Abstr.) **(Fre)**
[Gas chromatography-mass spectrometry determination of plasma 5 alpha-androstane-3 alpha,17 beta-diol and 5 alpha-androstane-3 alpha,17 beta-diol glucuronide in children with premature and normal puberty] Wudy SA, et al. **Klin Padiatr** 1996 Nov-Dec;208(6):334–8 (Eng. Abstr.) **(Ger)**
[Electroencephalographic changes in patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency] Oliveira MD, et al. **Arq Neuropsiquiatr** 1996 Jun; 54(2):202–6 (Eng. Abstr.) **(Por)**

GENETICS

Rapid screening method for detecting mutations in the 21-hydroxylase gene. Oriola J, et al. **Clin Chem** 1997 Apr; 43(4):557–61
Female pseudohermaphroditism due to classical 21-hydroxylase deficiency in a girl with Turner syndrome. Maciel-Guerra AT, et al. **Clin Genet** 1997 May;51(5):351–3
Molecular approaches for the diagnosis of 21-hydroxylase deficiency and congenital adrenal hyperplasia. Wedell A.
Clin Lab Med 1996 Mar;16(1):125–37 (45 ref.)
Nonclassical adrenal hyperplasia due to 21-hydroxylase-deficiency: does genotyping predict the clinical manifestation? l'Allemand D, et al. **Endocr Res** 1996 Nov;22(4):735–9
Cloning of the rat cytochrome P-450 21-hydroxylase enzyme. Zhou M, et al. **Endocr Res** 1996 Nov;22(4):663–4
Molecular analysis of CYP21 gene mutations carried on HLA-B14 positive haplotypes. Dondi E, et al.
Eur J Immunogenet 1994 Oct;21(5):341–50
Visual demonstration of the organization of the human complement C4 and 21-hydroxylase genes by high-resolution fluorescence in situ hybridization. Suto Y, et al. **Genomics** 1996 Apr 15;33(2):321–4
Point mutations in Italian patients with classic, non-classic, and cryptic forms of steroid 21-hydroxylase deficiency. Carrera P, et al. **Hum Genet** 1996 Dec;98(6):662–5
A cluster of missense mutations at Arg356 of human steroid 21-hydroxylase may impair redox partner interaction. Lajic S, et al. **Hum Genet** 1997 Jun;99(6):704–9
Mutations in the gene encoding 21-hydroxylase detected by solid-phase minisequencing. Ohlsson G, et al.
Hum Genet 1997 Jan;99(1):98–102
Identification of non-amplifying CYP21 genes when using PCR-based diagnosis of 21-hydroxylase deficiency in congenital adrenal hyperplasia (CAH) affected pedigrees.

Day DJ, et al. **Hum Mol Genet** 1996 Dec;5(12):2039–48

E380D: a novel point mutation of CYP21 in an HLA-homozygous patient with salt-losing congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Kirby-Keyser L, et al. **Hum Mutat** 1997;9(2):181–2

Novel nonsense mutation (W302X) in the steroid 21-hydroxylase gene of a Finnish patient with the salt-wasting form of congenital adrenal hyperplasia. Levo A, et al. **Hum Mutat** 1997;9(4):363–5

Phenotypic heterogeneity associated with the splicing mutation in congenital adrenal hyperplasia due to 21-hydroxylase deficiency [letter; comment] Miller WL. **J Clin Endocrinol Metab** 1997 Apr;82(4):1304. Comment on: J Clin Endocrinol Metab 1996 Nov;81(11):4081–8.

Molecular basis of nonclassical steroid 21-hydroxylase deficiency detected by neonatal mass screening in Japan. Tajima T, et al. **J Clin Endocrinol Metab** 1997 Jul; 82(7):2350–6

Evidence for a heterozygote advantage in congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Witchel SF, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2097–101

Phenotypic heterogeneity associated with the splicing mutation in congenital adrenal hyperplasia due to 21-hydroxylase deficiency [see comments] Witchel SF, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):4081–8. Comment in: J Clin Endocrinol Metab 1997 Apr;82(4):1304.

Characterisation of CAH alleles with non-radioactive DNA single strand conformation polymorphism analysis of the CYP21 gene. Bobba A, et al. **J Med Genet** 1997 Mar; 34(3):223–8

Non-expression of a common mutation in the 21-hydroxylase gene: implications for prenatal diagnosis and carrier testing. Rumsby G, et al. **J Med Genet** 1996 Sep;33(9):798–9

Steroid 21-hydroxylase expression and activity in human lymphocytes. Zhou Z, et al. **Mol Cell Endocrinol** 1997 Mar 14;127(1):11–8

Microsatellite markers in the indirect analysis of the steroid 21-hydroxylase gene. Ezquieta B, et al. **Prenat Diagn** 1997 May;17(5):429–34

Prenatal diagnosis of steroid 21-hydroxylase deficiency by analysis of polymerase chain reaction-single strand conformation polymorphism (PCR-SSCP) profiles. Hayashi Z, et al. **Prenat Diagn** 1997 May;17(5):435–42

IMMUNOLOGY

Targeted antipeptide antibodies to cytochrome P450 2C18 based on epitope mapping of an inhibitory monoclonal antibody to P450 2C51. Richardson TH, et al. **Arch Biochem Biophys** 1997 Feb 15;338(2):157–64

21-hydroxylase autoantibodies in adult patients with endocrine autoimmune diseases are highly specific for Addison's disease. Belgian Diabetes Registry. Falorni A, et al. **Clin Exp Immunol** 1997 Feb;107(2):341–6

Steroid 21-hydroxylase autoantibodies in insulin-dependent diabetes mellitus. Childhood Diabetes in Finland (DiMe) Study Group. Peterson P, et al. **Clin Immunol Immunopathol** 1997 Jan;82(1):37–42

I. Adrenal cortex and steroid 21-hydroxylase autoantibodies in adult patients with organ-specific autoimmune diseases: markers of low progression to clinical Addison's disease. Betterle C, et al. **J Clin Endocrinol Metab** 1997 Mar; 82(3):932–8

II. Adrenal cortex and steroid 21-hydroxylase autoantibodies in children with organ-specific autoimmune diseases: markers of high progression to clinical Addison's disease. Betterle C, et al. **J Clin Endocrinol Metab** 1997 Mar; 82(3):939–42

Steroid 21-hydroxylase autoantibodies: measurements with a new immunoprecipitation assay. Tanaka H, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1440–6

Screening patients with insulin-dependent diabetes mellitus for adrenal insufficiency [letter] Brewer KW, et al. **N Engl J Med** 1997 Jul 17;337(3):202

METABOLISM

Impairment of 11 beta-hydroxylase but not 21-hydroxylase in adrenal 'incidentalomas'. Reincke M, et al. **Eur J Endocrinol** 1997 Feb;136(2):196–200

Different dysregulations in adrenal steroid biosynthesis as a prevalent cause of hyperandrogenism in women from southern Italy. Valentino R, et al. **Fertil Steril** 1997 Aug; 68(2):236–41

STEROID MONOOXYGENASES see **STEROID HYDROXYLASES**

STEROID RECEPTORS see **RECEPTORS, STEROID**

STEROID 21-HYDROXYLASE see **STEROID 21-MONOOXYGENASE**

STEROIDAL ANTI-INFLAMMATORY AGENTS see **ANTI-INFLAMMATORY AGENTS, STEROIDAL**

STEROIDS

see related
RECEPTORS, STEROID

Novel sweet-tasting saponins of the cycloartane, oleanane, secodammarane, and steroidal types. Kennelly EJ, et al. **Adv Exp Med Biol** 1996;405:13–24 (47 ref.)

Steroid saponins from fenugreek and some of their biological properties. Sauvaire Y, et al. **Adv Exp Med Biol** 1996; 405:37–46 (21 ref.)

Differential implications of the oncogene-tumor suppressor gene complex in the geneses of 19 human neoplasias. Evidence in support of the steroid carcinogenesis hypothesis. Kodama M, et al. **Anticancer Res** 1997 May-Jun;17(3C):2285–92

Steroid hormones and cancer: (I) basic biology and endocrinology. Miller WR. **Eur J Surg Oncol** 1996 Dec; 22(6):627–33 (25 ref.)

Steroid withdrawal in mycophenolate mofetil-treated renal allograft recipients. Grinyo JM, et al. **Transplantation** 1997 Jun 15;63(11):1688–90

ADMINISTRATION & DOSAGE

Development of complex regional pain syndrome after a cervical epidural steroid injection. Siegfried RN. **Anesthesiology** 1997 Jun;86(6):1394–6

Use of steroids in the treatment of asthma in children. **Br J Hosp Med** 1997 Apr 2–15;57(7):307

The value of arthrography in steroid injection of the shoulder joint [letter] Goh GJ, et al. **Br J Rheumatol** 1997 Jun; 36(6):709–10

Inhaled steroids: effect on intraocular pressure in patients without glaucoma. Samiy N, et al. **Can J Ophthalmol** 1996 Apr;33(3):120–3

The topical treatment of distal ulcerative colitis. Ardizzone S, et al. **Eur J Gastroenterol Hepatol** 1996 Jun;8(6):599–602 (14 ref.)

Antiplatelet agents in thrombotic thrombocytopenic purpura (TTP). Results of a randomized multicenter trial by the Italian Cooperative Group for TTP. Bobbio-Pallavicini E, et al. **Haematologica** 1997 Jul-Aug;82(4):429–35

Tumescent infiltrators for the installation of dilute steroid suspensions or anaesthetic solutions [letter] Field LM. **Int J Dermatol** 1997 Feb;36(2):158–9

Steroid pulse therapy for progressive systemic sclerosis [editorial; comment] Hashimoto H. **Intern Med** 1996 Jul; 35(7):525–6 (13 ref.). Comment on: Intern Med 1996 Jul;35(7):525–6.

Glomerular localization of interleukin-6 suppressed by steroid mini-pulse therapy in an IgA nephropathy patient. Taniguchi Y, et al. **Intern Med** 1995 Dec;34(12):1181–5

Steroid withdrawal in tacrolimus (FK506)-treated pediatric liver transplant recipients. McKee M, et al. **J Pediatr Surg** 1997 Jul;32(7):973–5

Adrenal insufficiency [letter; comment] Fabrega AJ, et al. **N Engl J Med** 1997 Apr 10;336(15):1105–6; discussion 1106–7. Comment on: N Engl J Med 1996 Oct 17;335(16):1206–12.

Epidural steroids for cervical and lumbar radiculopathy [letter] Pawl RP, et al. **Surg Neurol** 1996 Nov;46(5):455–7

Early steroid withdrawal in liver transplant patients: final report of a prospective randomized trial. De Carlis L, et al. **Transplant Proc** 1997 Feb-Mar;29(1-2):539–42

ADVERSE EFFECTS

Do steroidal saponins have a role in hepatogenous photosensitization diseases of sheep? Flåøyen A. **Adv Exp Med Biol** 1996;405:395–403 (51 ref.)

Glucocorticoid medication, memory and steroid psychosis in medical illness. Wolkowitz OM, et al. **Ann N Y Acad Sci** 1997 Aug 14;823:81–96 (99 ref.)

Diagnosing and managing polymyalgia rheumatica and temporal arteritis. Patients starting steroids should be given advice on risk of osteoporosis [letter] Hodgkins P, et al. **BMJ** 1997 Aug 30;315(7107):550

Inhaled steroids: effect on intraocular pressure in patients without glaucoma. Samiy N, et al. **Can J Ophthalmol** 1996 Apr;31(3):120–3

Prosthetic joint infection due to Staphylococcus aureus after use of a steroid nasal inhaler. Hawley HB, et al. **Clin Infect Dis** 1996 Oct;23(4):837–9

Arterial hypertension in renal transplantation. Sandrini S, et al. **Contrib Nephrol** 1996;119:16–25 (61 ref.)

Steroid-induced depressive psychosis responsive to electroconvulsive therapy. Sutor B, et al. **Convuls Ther** 1996 Jun;12(2):104–7

Bone densitometry: patients receiving prolonged steroid therapy. Erlichman M, et al. **Health Technol Assess** 1996 Sep;(9):i-vi, 1–31 (198 ref.)

Urticaria--an unusual presentation of staphylococcemia [see comments] Yadav TP, et al. **Indian Pediatr** 1995 Sep; 32(9):1005–7. Comment in: Indian Pediatr 1996 Jan;33(1):76.

Bilateral patellar tendon rupture secondary to repeated local steroid injections. Clark SC, et al. **J Accid Emerg Med** 1995 Dec;12(4):300–1

Contact dermatitis due to topical steroids with conceivable cross reactions between topical steroid preparations. Oh-i T. **J Dermatol** 1996 Mar;23(3):200–8

Short-term high dose steroid therapy does not affect the hypothalamic-pituitary-adrenal axis in relapsing multiple sclerosis patients. Clinical assessment by the insulin tolerance test. Lević Z, et al. **J Endocrinol Invest** 1996 Jan; 19(1):30–4

Radiology case of the month. Hip and back pain in the elderly. Stress injury of bone. McCarthy K, et al. **J La State Med Soc** 1997 Jan;149(1):10–1

Respiratory muscle pharmacology. Decramer M. **Monaldi Arch Chest Dis** 1996 Dec;51(6):499–503 (47 ref.)

Can intravenous cyclophosphamide be used for steroid-dependent nephrotic syndrome? [letter] Bircan Z, et al. **Pediatr Nephrol** 1997 Feb;11(1):127–8

Mycophenolate mofetil rescue therapy in liver transplant recipients. Gavlik A, et al. **Transplant Proc** 1997 Feb-Mar; 29(1-2):549–52

[Gastric mucosa changes caused by anti-inflammatory agents in childhood] Berni Canani M, et al. **Pediatr Med Chir** 1996 Jul-Aug;18(4):377–81 (Eng. Abstr.) **(Ita)**

[Secondary osteoporosis in patients with steroid-dependent asthma] Pluskiewicz W, et al. **Przegl Lek** 1997;54(1):21–4 (Eng. Abstr.) **(Pol)**

AGONISTS

The effects of several ecdysteroids and ecdysteroid agonists on two Drosophila imaginal disc cell lines. Cottam DM, et al. **Cell Mol Life Sci** 1997 Jul;53(7):600–3

ANALYSIS

Steroidal glycoalkaloids in Andean potatoes. Kubo I, et al. **Adv Exp Med Biol** 1996;405:405–17 (30 ref.)

Sex determination of prehistoric human paleofeces. Sobolik KD, et al. **Am J Phys Anthropol** 1996 Oct;101(2):283–90

Charge-transfer chromatographic study of the complex formation of some steroidal drugs with carboxymethyl-gamma-cyclodextrin. Cserháti T, et al. **Anal Biochem** 1997 Mar 15;246(2):205–10

Steroid profiling. Honour JW. **Ann Clin Biochem** 1997 Jan; 34 (Pt 1):32–44 (49 ref.)

Reproductive control in wild baboons measured by fecal steroids. Wasser SK. **Biol Reprod** 1996 Aug;55(2):393–9

Metabolism of reproductive steroids during the ovarian cycle in two species of callitrichids, Saguinus oedipus and Callithrix jacchus, and estimation of the ovulatory period from fecal steroids. Ziegler TE, et al. **Biol Reprod** 1996 Jan;54(1):91–9

Ovarian and hemolymph ecdysteroids in the terrestrial isopod Armadillidium vulgare (Malacostracan Crustacea). Suzuki S, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):129–38

Comparison between steroid hormones and cortisol in serum and follicular fluid in stimulated and unstimulated cycles of in vitro fertilization patients. Mantzavinos T, et al. **Gynecol Endocrinol** 1997 Jun;11(3):163–8

Preclinical Cushing's syndrome: report of four cases and analysis of steroid contents in adenomas. Morioka M, et al. **Horm Res** 1996;46(3):117–23

Effect of beta-cyclodextrin derivatives on the retention of steroidal drugs. Cserháti T, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):205–11

Microemulsion and micellar electrokinetic chromatography of steroids. Vomastová L, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):107–13

Competitive flow injection enzyme immunoassay for steroids using a post-column reaction technique. Kronkvist K, et al. **J Immunol Methods** 1997 Jan 15;200(1-2):145–53

Ecdysteroid titers during postembryonic development of Dermanyssus gallinae (Acari: Dermanyssidae). Chambers CM, et al. **J Med Entomol** 1996 Jan;33(1):11–4

Effects of different types of dietary fiber preparations isolated from bamboo shoots, edible burdock, apple and corn on fecal steroid profiles of rats. Shimizu J, et al. **J Nutr Sci Vitaminol (Tokyo)** 1996 Dec;42(6):527–39

Vitellogenin and ecdysteroid titers in Ixodes scapularis during vitellogenesis. James AM, et al. **J Parasitol** 1997 Aug; 83(4):559–63

ANTAGONISTS & INHIBITORS

Protein phosphatase activity is required for prothoracicotropic hormone-stimulated ecdysteroidogenesis in the prothoracic glands of the tobacco hornworm, Manduca sexta. Song Q, et al. **Arch Insect Biochem Physiol** 1996;31(4):465–80

Cucurbitane-type compounds from Hemsleya carnosiflora antagonize ecdysteroid action in the Drosophila melanogaster BII cell line. Dinan L, et al. **Cell Mol Life Sci** 1997 Mar;53(3):271–4

BIOSYNTHESIS

New saponins from Vietnamese ginseng: highlights on biogenesis of dammarane triterpenoids. Duc NM, et al. **Adv Exp Med Biol** 1996;404:129–49 (24 ref.)

Steroid glycosides from suspension cultures of Dioscorea deltoidea cells and their biological activity. Vasil'eva IS, et al. **Adv Exp Med Biol** 1996;404:15–22

Temporal aspects of ovarian follicular growth and steroidogenesis following exogenous follicle-stimulating hormone in Angus heifers. Kemper Green CN, et al. **Anim Reprod Sci** 1996 Dec 16;45(3):157–76

Evidence for the involvement of 3-oxo-delta 4 intermediates in ecdysteroid biosynthesis. Blais C, et al. **Biochem J** 1996 Dec 1;320 (Pt 2):413–9

The role of cytochrome P450 17 alpha-hydroxylase and 3 beta-hydroxysteroid dehydrogenase in the integration of gonadal and adrenal steroidogenesis via the delta 5 and delta 4 pathways of steroidogenesis in mammals. Conley AJ, et al. **Biol Reprod** 1997 Apr;56(4):789–99 (147 ref.)

Steroidogenic enzyme expression during preovulatory follicle maturation in pigs. Garrett WM, et al. **Biol Reprod** 1997 Jun;56(6):1424–31

Expression of androgen receptors and steroidogenic enzymes in relation to follicular growth and atresia following ovulation in pigs. Garrett WM, et al. **Biol Reprod** 1996 Nov;55(5):949–55

Inhibin and activin have antagonistic paracrine effects on gonadal steroidogenesis during the development of the chicken embryo. Rombauts L, et al. **Biol Reprod** 1996 Jun; 54(6):1229–37

Interactions among basic fibroblast growth factor, epidermal growth factor, insulin, and insulin-like growth factor-I (IGF-I) on cell numbers and steroidogenesis of bovine thecal cells: role of IGF-I receptors. Spicer LJ, et al. **Biol Reprod** 1996 Jan;54(1):255–63

A StAR search: implications in controlling steroidgenesis. Stocco DM. **Biol Reprod** 1997 Feb;56(2):328–36 (116 ref.)

Effects of insulin-like growth factor-I on follicle growth, oocyte maturation, and ovarian steroidogenesis and plasminogen activator activity in the rabbit. Yoshimura Y, et al. **Biol Reprod** 1996 Jul;55(1):152–60

Patterns of long-term steroidogenesis stimulation by ACTH and phorbol ester. Frigeri CK, et al. **Braz J Med Biol Res** 1996 Mar;29(3):343–5

Calcium channels do not play a role in the steroid response to ACTH IN Y1 adrenocortical cells. Coyne MD, et al. **Endocr Res** 1996 Nov;22(4):551–6

Cytosolic and mitochondrial proteins as possible targets of cycloheximide effect on adrenal steroidogenesis. Dada L, et al. **Endocr Res** 1996 Nov;22(4):533–9

Constitutive steroidogenesis does not require the actions of cAMP on cholesteryl ester hydrolysis or internalization of plasma membrane cholesterol. Freeman DA. **Endocr Res** 1996 Nov;22(4):557–62

Sympathetic effects on the steroidogenesis and proliferation of adrenocortical cells in vitro. Wu CH, et al. **Endocr Res** 1996 Nov;22(4):855–9

Regulation of the acute production of steroids in steroidogenic cells. Stocco DM, et al. **Endocr Rev** 1996 Jun;17(3):221–44 (268 ref.)

Possible role for mitochondrial calcium in angiotensin II- and potassium-stimulated steroidogenesis in bovine adrenal glomerulosa cells. Brandenburger Y, et al. **Endocrinology** 1996 Dec;137(12):5544–51

Nitric oxide inhibits Leydig cell steroidogenesis. Del Punta K, et al. **Endocrinology** 1996 Dec;137(12):5337–43

Prolactin and MA-10 Leydig cell steroidogenesis: biphasic effects of prolactin and signal transduction. Weiss-Messer E, et al. **Endocrinology** 1996 Dec;137(12):5509–18

Effects of nitric oxide on ovulation and ovarian steroidogenesis and prostaglandin production in the rabbit. Yamauchi J, et al. **Endocrinology** 1997 Sep;138(9):3630–7

Purification and characterisation of haemolymph 3-dehydroecdysone 3 beta-reductase in relation to ecdysteroid biosynthesis in the cotton leafworm Spodoptera littoralis. Chen JH, et al. **Eur J Biochem** 1996 Dec 1;242(2):394–401

Morphology and steroidogenesis of cultured granulosa cells obtained from ovaries of women treated with ionizing radiation. Skrzypczak J. **Folia Histochem Cytobiol** 1997; 35(1):29–33

Ovarian receptors for insulin and insulin-like growth factor I (IGF-I) and effects of IGF-I on steroid production by isolated follicular layers of the preovulatory coho salmon ovarian follicle. Maestro MA, et al. **Gen Comp Endocrinol** 1997 May;106(2):189–201

The ontogenesis of the steroidogenic tissues. Morohashi K. **Genes Cells** 1997 Feb;2(2):95–106 (106 ref.)

Steroidogenesis-inducing protein, isolated from human ovarian follicular fluid, is a potent mitogen for cell lines derived from ovarian surface epithelial carcinomas. Khan SA, et al. **Gynecol Oncol** 1997 Sep;66(3):501–8

Immunohistochemical study of steroidogenesis and cell proliferation in polycystic ovarian syndrome. Takayama K, et al. **Hum Reprod** 1996 Jul;11(7):1387–92

Insulin-mediated secretion of ecdysteroids from mosquito ovaries and molecular cloning of the insulin receptor homologue from ovaries of bloodfed Aedes aegypti. Graf R, et al. **Insect Mol Biol** 1997 May;6(2):151–63

Effects of metformin on insulin secretion, insulin action, and ovarian steroidogenesis in women with polycystic ovary syndrome. Ehrmann DA, et al. **J Clin Endocrinol Metab** 1997 Feb;82(2):524–30

Expression of steroid receptors and steroidogenic enzymes in the baboon (Papio anubis) corpus luteum during the menstrual cycle and early pregnancy. Hild-Petito S, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):955–62

Insulin-like growth factors enhance steroidogenic enzyme and corticotropin receptor messenger ribonucleic acid levels and corticotropin steroidogenic responsiveness in cultured human adrenocortical cells. l'Allemand D, et al. **J Clin Endocrinol Metab** 1996 Nov;81(11):3892–7

Involvement of microtubules in prothoracicotropic hormone-stimulated ecdysteroidogenesis by insect (Manduca sexta) prothoracic glands. Watson RD, et al. **J Exp Zool** 1996 Sep 1;276(1):63–9

Digital fluorescence imaging of elementary steps of neurosteroid synthesis in rat brain glial cells. Kimoto T, et al. **J Pharm Biomed Anal** 1997 Jun;15(9–10):1231–40

The influence of FSH, LH and testosterone on steroidsecretion by two subpopulations of porcine granulosa cells. Duda M. **J Physiol Pharmacol** 1997 Mar; 48(1):89–96

Effects of acute and chronic immobilization stress on rat Leydig cell steroidogenesis. Marić D, et al. **J Steroid Biochem Mol Biol** 1996 Jun;58(3):351–5

Quantification of ecdysteroid biosynthesis during short-term organ culture. Sliter TJ, et al. **Methods Enzymol** 1996; 272:292–304

Role of the Golgi complex in adrenocortical steroidogenesis. Cheng B, et al. **Microsc Res Tech** 1997 Mar 15;36(6):503–9 (47 ref.)

Roles of microfilaments and intermediate filaments in adrenal steroidogenesis. Hall PF, et al. **Microsc Res Tech** 1997 Mar 15;36(6):463–79 (108 ref.)

Light and electron microscopic immunohistochemistry of the localization of adrenal steroidogenic enzymes. Ishimura K, et al. **Microsc Res Tech** 1997 Mar 15;36(6):445–53 (76 ref.)

Peroxisomes in adrenal steroidogenesis. Magalhães MM, et al. **Microsc Res Tech** 1997 Mar 15;36(6):493–502 (98 ref.)

Lipoproteins, lipid droplets, lysosomes, and adrenocortical steroid hormone synthesis: morphological studies. Tóth IE, et al. **Microsc Res Tech** 1997 Mar 15;36(6):480–92 (107 ref.)

Involvement of a 3beta-hydroxysteroid dehydrogenase activity in ecdysteroid biosynthesis. Dauphin-Villemant C, et al. **Mol Cell Endocrinol** 1997 Apr 4;128(1–2):139–49

Transforming growth factor beta1 inhibits steroidogenesis in dispersed fetal testicular cells in culture. Gautier C, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):21–30

Long-term growth and steroidogenic potential of human granulosa-lutein cells immortalized with SV40 large T antigen. Lie BL, et al. **Mol Cell Endocrinol** 1996 Jul 1; 120(2):169–76

Nitric oxide inhibits steroidogenesis in cultured porcine granulosa cells. Masuda M, et al. **Mol Hum Reprod** 1997 Apr;3(4):285–92

Glucocorticoids and anabolic/androgenic steroids inhibit the synthesis of GABAergic steroids in rat cortex. Stürenburg HJ, et al. **Neuropsychobiology** 1997;35(3):143–6

Juvenile granulosa cell tumor discovered during pregnancy: case report with immunohistochemical study of steroidogenesis. Sasano H, et al. **Pathol Int** 1997 May; 47(5):325–8

Subcellular organelle analysis applying confocal laser scanning microscopy to the steroid-producing epithelial ovarian tumor: a technical note [letter] Yasuda M, et al. **Pathol Int** 1997 May;47(5):336–8

A novel neuropeptide-endocrine interaction controlling ecdysteroid production in ixodid ticks. Lomas LO, et al. **Proc R Soc Lond B Biol Sci** 1997 Apr 22;264(1381):589–96

Thyroid hormone as a regulator of basal and human chorionic gonadotrophin-stimulated steroidogenesis by cultured porcine theca and granulosa cells isolated at different stages of the follicular phase. Gregoraszczuk EL, et al. **Reprod Fertil Dev** 1996;8(6):961–7

Production of extracellular matrix, fibronectin and steroidogenic enzymes, and growth of bovine granulosa cells in anchorage-independent culture. Rodgers RJ, et al. **Reprod Fertil Dev** 1996;8(2):249–57

Genetic determination of coat color affects testicular steroidogenesis in the Mustela vison. Amador AG, et al. **Rev Esp Fisiol** 1996 Jun;52(2):83–8

Novel reduction and hydroxylation products formed by Aspergillus fumigatus from Reichstein's substance S. Garai S, et al. **Steroids** 1997 Feb;62(2):253–7

The roles of calmodulin, actin, and vimentin in steroid synthesis by adrenal cells. Hall PF. **Steroids** 1997 Jan; 62(1):185–9 (34 ref.)

beta-Lipotropin-stimulated adrenal steroid production. O'Connell Y, et al. **Steroids** 1996 May;61(5):332–6

Ovarian steroid cell tumor resembling luteoma associated with hyperadrenocorticism (Cushing's disease) in a dog. Yamini B, et al. **Vet Pathol** 1997 Jan;34(1):57–60

Signal transduction pathways combining peptide hormones and steroidogenesis. Waterman MR, et al. **Vitam Horm** 1996;52:129–48 (62 ref.)

[Steroidogenesis in rat testes in chronic alcoholic intoxication and addition of ethanol in vitro] Kashko MF, et al. **Ukr Biokhim Zh** 1996 Nov–Dec;68(6):98–103 (Eng. Abstr.) **(Rus)**

BLOOD

Levels of plasma C19 steroids and 5 alpha-reduced C19 steroid glucuronides in primates, rodents, and domestic animals. Guillemette C, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):E348–53

Determinants of steroid hormone bioavailability. Hammond GL. **Biochem Soc Trans** 1997 May;25(2):577–82 (51 ref.)

Serum lipid levels and steroidal hormones in women runners with irregular menses. Thompson DL, et al. **Can J Appl Physiol** 1997 Feb;22(1):66–77

Assay reproducibility of hormone measurements in postmenopausal women. Falk RT, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jun;6(6):429–32

Marked decrease of plasma neuroactive steroids during alcohol withdrawal. Romeo E, et al. **Clin Neuropharmacol** 1996 Aug;19(4):366–9

Lack of an ovarian function influence on the increased adrenal androgen secretion present in women with functional ovarian hyperandrogenism. Escobar-Morreale HF, et al. **Fertil Steril** 1997 Apr;67(4):654–62

Reproductive steroids during maturation in a primitive teleost, the Pacific herring (Clupea harengus pallasi). Carolsfeld J, et al. **Gen Comp Endocrinol** 1996 Sep; 103(3):331–48

Serum concentrations of steroid hormones in the mature male bonnethead shark, Sphyrna tiburo. Manire CA, et al. **Gen Comp Endocrinol** 1997 Sep;107(3):414–20

Plasma steroid profiles in nesting loggerhead turtles (Caretta caretta) in Queensland, Australia: relationship to nesting episode and season. Whittier JM, et al. **Gen Comp Endocrinol** 1997 Apr;106(1):39–47

Pubertal changes in testicular 3 beta-hydroxysteroid dehydrogenase activity in a male with classical 3 beta-hydroxysteroid dehydrogenase deficiency showing spontaneous secondary sexual maturation. Yoshimoto M, et al. **Horm Res** 1997;48(2):83–7

Clinical features and hormonal characteristics in a case of ovarian arrhenoblastoma. Tita P, et al. **J Endocrinol Invest** 1996 Jul–Aug;19(7):484–7

The 21-hydroxylase-deficient adrenal hyperplasias: more than ACTH oversecretion. Azziz R, et al. **J Soc Gynecol Investig** 1996 Nov–Dec;3(6):297–302 (39 ref.)

CHEMICAL SYNTHESIS

Synthesis of 2-oxacortexone and its effect on Ca2+ uptake in bovine spermatozoa. Frimer AA, et al. **Arch Pharm (Weinheim)** 1997 May;330(5):117–21

Antiandrogen. IV. C-17 spiro 2-oxasteroids. Koizumi N, et al. **Chem Pharm Bull (Tokyo)** 1996 Nov;44(11):2162–4

Heterocyclic steroids: synthesis of steroidal selena, tellura, and thialactones of estrane series. Siddiqui AU, et al. **Steroids** 1996 May;61(5):302–4

Steroids 54. Amino acylamidosteroids. Vincze I, et al. **Steroids** 1996 Dec;61(12):697–702

The syntheses of 3-substituted perfluoroalkyl steroids. Williams JR, et al. **Steroids** 1996 Feb;61(2):50–7

CHEMISTRY

A systematic NMR approach for the determination of the molecular structure of steroidal saponins. Agrawal PK. **Adv Exp Med Biol** 1996;405:299–315 (117 ref.)

Thermal behavior of steroidal glycosides. Bobeyko VA, et al. **Adv Exp Med Biol** 1996;405:271–80

Proton and carbon-13 NMR studies of steroids and triterpenes. Cordell GA, et al. **Adv Exp Med Biol** 1996; 405:281–97 (96 ref.)

Chemistry and biological activity of steroid saponins from Moldovian plants. Kintia PK. **Adv Exp Med Biol** 1996; 404:309–34 (28 ref.)

Steroid and triterpenoid oligoglycosides of marine origin. Minale L, et al. **Adv Exp Med Biol** 1996;404:335–56 (63 ref.)

19 new steroidal saponins from Allium plants: isolation, structural elucidation and effect on blood coagulability. Peng JP, et al. **Adv Exp Med Biol** 1996;404:511–26

A chemical study on the steroidal glycosides from Atropa belladonna L. seeds. Shvets SA, et al. **Adv Exp Med Biol** 1996;404:475–83

EPR/ENDOR investigations of gamma-irradiated steroid hormone single crystals. Szyczewski A. **Appl Radiat Isot** 1996 Nov–Dec;47(11–12):1675–81 (30 ref.)

Inhibition of steroid C17(20) lyase with C-17-heteroaryl steroids. Burkhart JP, et al. **Bioorg Med Chem** 1996 Sep; 4(9):1411–20

New polyhydroxylated steroidal saponins from the tubers of Brodiaea californica. Mimaki Y, et al. **Chem Pharm Bull (Tokyo)** 1997 Mar;45(3):558–60

Bioactive saponins and glycosides. VIII. Notoginseng (1): new dammarane-type triterpene oligoglycosides, notoginsenosides-A, -B, -C, and -D, from the dried root of Panax notoginseng (Burk.) F.H. Chen. Yoshikawa M, et al. **Chem Pharm Bull (Tokyo)** 1997 Jun;45(6):1039–45

Effect of beta-cyclodextrin derivatives on the retention of steroidal drugs. Cserháti T, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):205–11

Microemulsion and micellar electrokinetic chromatography of steroids. Vomastová L, et al. **J Chromatogr B Biomed Appl** 1996 May 31;681(1):107–13

The comparison of geometric and electronic properties of molecular surfaces by neural networks: application to the analysis of corticosteroid-binding globulin activity of steroids. Anzali S, et al. **J Comput Aided Mol Des** 1996 Dec;10(6):521–34

MS-WHIM, new 3D theoretical descriptors derived from molecular surface properties: a comparative 3D QSAR study in a series of steroids. Bravi G, et al. **J Comput Aided Mol Des** 1997 Jan;11(1):79–92

Three-dimensional quantitative structure-activity relationships of steroid aromatase inhibitors. Oprea TI, et al. **J Comput Aided Mol Des** 1996 Jun;10(3):186–200

Objective models for steroid binding sites of human globulins. Schnitker J, et al. **J Comput Aided Mol Des** 1997 Jan; 11(1):93–110

13C-NMR and mass spectral data of steroids with a 17,17-dialkyl-18-nor-13(14)-ene substructure. De Brabandere VI, et al. **J Lipid Res** 1997 Apr;38(4):780–9

Analysis of the solubilization of steroids by bile salt micelles. Cai X, et al. **J Pharm Sci** 1997 Mar;86(3):372–7

DNA adduct formation by hormonal steroids in vitro. Seraj MJ, et al. **Mutat Res** 1996 Aug;370(1):49–59

Diterpenoid and steroidal alkaloids. Atta-ur-Rahman, et al. **Nat Prod Rep** 1997 Apr;14(2):191–203 (53 ref.)

Brassinosteroids. Fujioka S, et al. **Nat Prod Rep** 1997 Feb; 14(1):1–10 (105 ref.)

Steroids: reactions and partial synthesis. Hanson JR. **Nat Prod Rep** 1997 Aug;14(4):373–86 (242 ref.)

Activated pyrolytic carbon tip pacing leads: an alternative to steroid-eluting pacing leads? Masini M, et al. **Pacing Clin Electrophysiol** 1996 Nov;19(11 Pt 2):1832-5

Steroidal saponins from Asparagus officinalis and their cytotoxic activity. Shao Y, et al. **Planta Med** 1997 Jun; 63(3):258-62

A study of the complexation between dimethyl-beta-cyclodextrin and steroid hormones using electrospray ionization mass spectrometry [letter] Bakhtiar R, et al. **Rapid Commun Mass Spectrom** 1997; 11(13):1478-81

Nucleosteroids: reaction of activated purine bases with steroidal reactive centers. Cadenas RA, et al. **Steroids** 1996 Dec;61(12):703-9

A history of steroid chemistry: some contributions from European industry. Petrow V. **Steroids** 1996 Aug; 61(8):473-5

New bioactive marine steroids from the Okinawan soft coral Clavularia viridis. Watanabe K, et al. **Steroids** 1996 Jul; 61(7):439-46

DIAGNOSTIC USE

A non-isotopic method for estimating 11 beta hydroxysteroid dehydrogenase activity in vivo. Bayly GR, et al. **Ann Clin Biochem** 1997 Sep;34 (Pt 5):521-6

HISTORY

Cover illustration: regional sources of saponins, and their role in the development of oral contraceptive steroids. Huxtable RJ. **Proc West Pharmacol Soc** 1996;39:1-6

Between basic and applied research: Ciba's involvement in steroids in the 1950s and 1960s. Heusler K, et al. **Steroids** 1996 Aug;61(8):492-503

IMMUNOLOGY

Antibodies to steroids from a small human naive IgM library. Dörsam H, et al. **FEBS Lett** 1997 Sep 1;414(1):7-13

ISOLATION & PURIFICATION

Triterpene and steroid saponins isolated from two Melilotus species. Khodakov GV, et al. **Adv Exp Med Biol** 1996; 405:211-22 (17 ref.)

Steroidal glycosides from Petunia hybrida L. seeds and their biological activity. Shvets SA, et al. **Adv Exp Med Biol** 1996;404:251-62

Bioactive triterpenoid and steroid saponins from medicinal plants in southwest China. Yang CR, et al. **Adv Exp Med Biol** 1996;404:225-38 (20 ref.)

Cytotoxic trichilin-type limonoids from Melia azedarach. Takeya K, et al. **Bioorg Med Chem** 1996 Aug;4(8):1355-9

Isolation and characterisation of bioactive steroid from a prawn. Indap MM, et al. **Indian J Exp Biol** 1996 Jun; 34(6):588-9

Evaluation and separation of steroid-bovine serum albumin conjugates by high-performance liquid chromatography. Hill M, et al. **J Chromatogr B Biomed Appl** 1997 Mar 28; 691(1):187-91

Bioactive steroidal alkaloids from Solanum umbelliferum. Kim YC, et al. **J Nat Prod** 1996 Mar;59(3):283-5

Triterpenoids and steroids of Myrsine africana leaves. Manguro LO, et al. **Planta Med** 1997 Jun;63(3):290

[Droplet countercurrent chromatography to isolate ecdysteroids from the herb Silene tatarica (L>)] Báthori M, et al. **Acta Pharm Hung** 1996 May;66(3):125-31 (Eng. Abstr.) **(Hun)**

METABOLISM

Role of alcohol dehydrogenases in steroid and retinoid metabolism. Kedishvili NY, et al. **Adv Exp Med Biol** 1997; 414:321-9

Novel microbial transformations of steroids. Madyastha KM. **Adv Exp Med Biol** 1996;405:259-70 (43 ref.)

A potential role for aldose reductase in steroid metabolism. Petrash JM, et al. **Adv Exp Med Biol** 1997;414:465-73

Activity of liver alcohol dehydrogenases on steroids. Strasser F, et al. **Adv Exp Med Biol** 1997;414:313-20

Effect of progesterone pre-treatment on steroid secretion rates and follicular fluid insulin-like growth factor-1 concentrations in seasonally anoestrous ewes treated with gonadotrophin releasing hormone. Khalid M, et al. **Anim Reprod Sci** 1997 Mar;46(1-2):69-78

Steroid profiling. Honour JW. **Ann Clin Biochem** 1997 Jan; 34 (Pt 1):32-44 (49 ref.)

Clinical indications for the use of urinary steroid profiles in neonates and children. Honour JW, et al. **Ann Clin Biochem** 1997 Jan;34 (Pt 1):45-54 (37 ref.)

Formation of free radicals from steroid hormones: possible significance in environmental carcinogenesis. Kodama M, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):439-44

Identification of the nonsubstrate steroid binding site of rat liver glutathione S-transferase, isozyme 1-1, by the steroid affinity label, 3beta-(iodoacetoxy)dehydroisoandrosterone. Barycki JJ, et al. **Arch Biochem Biophys** 1997 Sep 1; 345(1):16-31

Endogenous ecdysteroid levels and rates of ecdysone acylation by intact ovaries in vitro in relation to ovarian development in adult female crickets, Acheta domesticus. Whiting P, et al. **Arch Insect Biochem Physiol** 1997; 35(3):279-99

Relationships between endogenous steroid hormone, sex hormone-binding globulin and lipoprotein levels in men: contribution of visceral obesity, insulin levels and other metabolic variables. Tchernof A, et al. **Atherosclerosis** 1997 Sep;133(2):235-44

Specific photoaffinity labeling of Tyr-49 on the light chain in the steroid-combining site of a mouse monoclonal anti-estradiol antibody using two epimeric 6alpha- and 6beta-(5-azido-2-nitrobenzoyl)amidoestradiol photoreagents. Rousselot P, et al. **Biochemistry** 1997 Jun 24;36(25):7860-8

Metabolism of reproductive steroids during the ovarian cycle in two species of callitrichids, Saguinus oedipus and Callithrix jacchus, and estimation of the ovulatory period from fecal steroids. Ziegler TE, et al. **Biol Reprod** 1996 Jan;54(1):91-9

Concentrations of steroids and biochemical constituents in follicular fluid of buffalo cows during different stages of the oestrous cycle. Eissa HM. **Br Vet J** 1996 Sep; 152(5):573-81

Chick embryo liver microsomal steroid hydroxylations: induction by dexamethasone, phenobarbital, and glutethimide and inactivation following the in ovo administration of porphyrinogenic compounds. Kimmett SM, et al. **Can J Physiol Pharmacol** 1996 Jan;74(1):97-103

The fascinating complexities of steroid-binding enzymes. Duax WL, et al. **Curr Opin Struct Biol** 1996 Dec; 6(6):813-23 (52 ref.)

Cholestatic properties and hepatic transport of steroid glucuronides. Vore M, et al. **Drug Metab Rev** 1997 Feb-May;29(1-2):183-203 (49 ref.)

Steroid sulfotransferases. Strott CA. **Endocr Rev** 1996 Dec; 17(6):670-97 (229 ref.)

Dissociation of plasma and urinary steroid values after application of stressors, insulin, vasopressin, ACTH, or dexamethasone in the Mongolian gerbil. Fenske M. **Exp Clin Endocrinol Diabetes** 1996;104(6):441-6

Effects of fenoxycarb on the secretory activity of the prothoracic glands in the fifth instar of the silkworm, Bombyx mori. Dedos SG, et al. **Gen Comp Endocrinol** 1996 Nov;104(2):213-24

Steroid metabolism by embryonic tissues of Arctic charr, Salvelinus alpinus. Khan MN, et al. **Gen Comp Endocrinol** 1997 Mar;105(3):344-57

Capacity of insect (Manduca sexta) prothoracic glands to secrete ecdysteroids: relation to glandular growth. Lee CY, et al. **Gen Comp Endocrinol** 1995 Dec;100(3):404-12

Endogenous steroid metabolism is indicated by fluctuations of endogenous steroid and steroid glucuronide levels in early development of the steelhead trout (Oncorhynchus mykiss). Yeoh CG, et al. **Gen Comp Endocrinol** 1996 Jul; 103(1):107-14

In vivo steroid metabolism in embryonic and newly hatched steelhead trout (Oncorhynchus mykiss). Yeoh CG, et al. **Gen Comp Endocrinol** 1996 May;102(2):197-209

The concentrations of the endogenous C19-steroids in hyperplastic prostatic tissue and the effect of finasteride treatment. Hill M, et al. **Horm Metab Res** 1996 Oct; 28(10):562-4

Differential incorporation of cholesterol and cholesterol derivatives into ecdysteroids by the larval ring glands and adult ovaries of Drosophila melanogaster: a putative explanation for the l(3)ecd1 mutation. Warren JT, et al. **Insect Biochem Mol Biol** 1996 Sep-Oct;26(8-9):931-43

The comparison of geometric and electronic properties of molecular surfaces by neural networks: application to the analysis of corticosteroid-binding globulin activity of steroids. Anzali S, et al. **J Comput Aided Mol Des** 1996 Dec;10(6):521-34

Objective models for steroid binding sites of human globulins. Schnitker J, et al. **J Comput Aided Mol Des** 1997 Jan; 11(1):93-110

The mechanism of a P-450 enzyme-aromatase; a molecular modelling perspective for the removal of the C(19) methyl and aromatisation of the steroid A ring. Ahmed S. **J Enzyme Inhib** 1997 Apr;12(1):59-70

Identification of rat prostatic steroid-binding protein as a target antigen of experimental autoimmune prostatitis: implications for prostate cancer therapy. Liu KJ, et al. **J Immunol** 1997 Jul 1;159(1):472-80

Occurrence of steroidogenic enzymes in the bovine mammary gland at different functional stages. Belvedere P, et al. **J Steroid Biochem Mol Biol** 1996 Nov; 59(3-4):339-47

Metabolism of steroids in the brain: a new insight into the role of 5alpha-reductase and aromatase in brain differentiation and functions. Negri-Cesi P, et al. **J Steroid Biochem Mol Biol** 1996 Aug;58(5-6):455-66 (116 ref.)

Direct inhibitions of the activities of steroidogenic cytochrome P-450 mono-oxygenase systems by anticonvulsants. Ohnishi T, et al. **J Steroid Biochem Mol Biol** 1997 Jan;60(1-2):77-85

Antibiotic resistance and enhanced insecticide catabolism as consequences of steroid induction in the gram-negative bacterium Comamonas testosteroni. Oppermann UC, et al. **J Steroid Biochem Mol Biol** 1996 May;58(2):217-23

The ovarian progestogen receptor in the spotted seatrout, Cynoscion nebulosus, demonstrates steroid specificity different from progesterone receptors in other vertebrates. Pinter J, et al. **J Steroid Biochem Mol Biol** 1997 Jan; 60(1-2):113-9

Effect of a diphenylethylenediamine platinum complex on steroidogenesis in rats. Sergejew TF, et al. **J Steroid Biochem Mol Biol** 1996 May;58(2):243-8

Effectiveness of resistant starch, compared to guar gum, in depressing plasma cholesterol and enhancing fecal steroid excretion. Levrat MA, et al. **Lipids** 1996 Oct;31(10):1069-75

Vascularization of the adrenal cortex: its possible involvement in the regulation of steroid hormone release. Bassett JR, et al. **Microsc Res Tech** 1997 Mar 15; 36(6):546-57 (109 ref.)

Transforming growth factor beta1 inhibits steroidogenesis in dispersed fetal testicular cells in culture. Gautier C, et al. **Mol Cell Endocrinol** 1997 Jul 4;131(1):21-30

Cloning, characterization, and steroid-dependent posttranscriptional processing of RUSH-1 alpha and beta, two uteroglobin promoter-binding proteins. Hayward-Lester A, et al. **Mol Endocrinol** 1996 Nov; 10(11):1335-49

Identification of single amino acid substitutions of Cys-736 that affect the steroid-binding affinity and specificity of the glucocorticoid receptor using phenotypic screening in yeast. Lind U, et al. **Mol Endocrinol** 1996 Nov; 10(11):1358-70

Time-dependent changes in rat brain neuroactive steroid concentrations and GABAA receptor function after acute stress. Barbaccia ML, et al. **Neuroendocrinology** 1996 Feb; 63(2):166-72

Isoniazid-induced inhibition of GABAergic transmission enhances neurosteroid content in the rat brain. Barbaccia ML, et al. **Neuropharmacology** 1996;35(9-10):1299-305

MLN64 contains a domain with homology to the steroidogenic acute regulatory protein (StAR) that stimulates steroidogenesis. Watari H, et al. **Proc Natl Acad Sci U S A** 1997 Aug 5;94(16):8462-7

Direct evidence for the localization of the steroid-binding site of the plasma sex steroid-binding protein (SBP or SHBG) at the interface between the subunits. Sui LM, et al. **Protein Sci** 1996 Dec;5(12):2514-20

Proceedings of the 2nd International Symposium on Molecular Steroidogenesis. Monterey, California, June 7-11, 1996. **Steroids** 1997 Jan;62(1):1-211

Steroids, fatty acyl-CoA, and sterols are substrates of 80-kDa multifunctional protein. Adamski J, et al. **Steroids** 1997 Jan; 62(1):159-63

Steroid specificity of the human sperm membrane progesterone receptor. Alexander NJ, et al. **Steroids** 1996 Mar;61(3):116-25

Apoptosis in steroidogenic cells: structure-function analysis. Amsterdam A, et al. **Steroids** 1997 Jan;62(1):207-11 (33 ref.)

Transcriptional regulation by steroid hormones. Beato M, et al. **Steroids** 1996 Apr;61(4):240-51 (176 ref.)

The key role of 17 beta-hydroxysteroid dehydrogenases in sex steroid biology. Labrie F, et al. **Steroids** 1997 Jan; 62(1):148-58

Advances in microbial steroid biotransformation. Mahato SB, et al. **Steroids** 1997 Apr;62(4):332-45 (133 ref.)

Peripheral benzodiazepine receptor in cholesterol transport and steroidogenesis. Papadopoulos V, et al. **Steroids** 1997 Jan;62(1):21-8 (66 ref.)

The role of the steroidogenic acute regulatory protein in steroidogenesis. Stocco DM, et al. **Steroids** 1997 Jan; 62(1):29-36 (87 ref.)

Oocyte-secreted factors regulate granulosa cell steroidogenesis. Vanderhyden BC. **Zygote** 1996 Nov; 4(4):317-21

[Signal transduction of steroids and vitamins mediated by nuclear receptor proteins] Umesono K. **Tanpakushitsu Kakusan Koso** 1996 Jun;41(8 Suppl):1265-72 (37 ref.) **(Jpn)**

PHARMACOKINETICS

Unified model for the corneal permeability of related and diverse compounds with respect to their physicochemical properties. Yoshida F, et al. **J Pharm Sci** 1996 Aug; 85(8):819-23

PHARMACOLOGY

New cardioactive steroid saponins and other glycosides from Mexican Tribulus cistoides. Achenbach H, et al. **Adv Exp Med Biol** 1996;404:357-70 (17 ref.)

New biologically active steroidal and triterpenoid glycosides from medicinal plants. Aquino R, et al. **Adv Exp Med Biol** 1996;404:401-14 (30 ref.)

Modified steroidal glycosides with potential biological activity. Iurea D, et al. **Adv Exp Med Biol** 1996;404:111-6

Chemistry and biological activity of steroid saponins from Moldovian plants. Kintia PK. **Adv Exp Med Biol** 1996; 404:309-34 (28 ref.)

19 new steroidal saponins from Allium plants: isolation, structural elucidation and effect on blood coagulability. Peng JP, et al. **Adv Exp Med Biol** 1996;404:511-26

Steroidal glycosides from Petunia hybrida L. seeds and their biological activity. Shvets SA, et al. **Adv Exp Med Biol** 1996;404:251-62

Modified steroid receptors and steroid-inducible promoters as genetic switches for gene therapy. White JH. **Adv Pharmacol** 1997;40:339-67 (155 ref.)

Steroid effects at the membrane level on oxytocin systems. Caldwell JD, et al. **Ann N Y Acad Sci** 1997 Apr 24; 814:282-6

Adolescent anabolic steroid use and aggressive behavior in golden hamsters. Melloni RH Jr, et al.

Ann N Y Acad Sci 1996 Sep 20;794:372–5

Effects of steroidal allenic phosphonic acid derivatives on the parasitic protists Leishmania donovani, Leishmania mexicana mexicana, and Pneumocystis carinii carinii. Beach DH, et al. **Antimicrob Agents Chemother** 1997 Jan; 41(1):162–8

Monoclonal antibody analysis of glomerular and renal interstitial immune cells in steroid-resistant and steroid-responsive minimal change disease in children. Wągrowska-Danilewicz M, et al.
Arch Immunol Ther Exp (Warsz) 1996;44(2–3):165–70

Biological activity of natural and synthetic ecdysteroids in the BII bioassay. Harmatha J, et al.
Arch Insect Biochem Physiol 1997;35(1–2):219–25

Regulation of the energy coupling in mitochondria by some steroid and thyroid hormones. Starkov AA, et al.
Biochim Biophys Acta 1997 Jan 16;1318(1–2):173–83

Cytotoxic activities of solanum steroidal glycosides. Nakamura T, et al. **Biol Pharm Bull** 1996 Apr;19(4):564–6

Ventilatory effects of eltanolone during induction of anaesthesia: comparison with propofol and thiopentone. Spens HJ, et al. **Br J Anaesth** 1996 Aug;77(2):194–9

Pre- and post-translational regulation of aromatase by steroidal and non-steroidal aromatase inhibitors. Foidart A, et al. **Brain Res** 1995 Dec 1;701(1–2):267–78

gamma-aminobutyric acidA receptor regulation: heterologous uncoupling of modulatory site interactions induced by chronic steroid, barbiturate, benzodiazepine, or GABA treatment in culture. Friedman LK, et al.
Brain Res 1996 Jan 22;707(1):100–9

Differential induction of Fos in the female rat brain following different amounts of vaginocervical stimulation: modulation by steroid hormones. Pfaus JG, et al.
Brain Res 1996 Nov 25;741(1–2):314–30

Differential anxiolytic effects of neurosteroids in the mirrored chamber behavior test in mice. Reddy DS, et al.
Brain Res 1997 Mar 28;752(1–2):61–71

Regulation of preoptic area gonadotrophin-releasing hormone (GnRH) mRNA expression by gonadal steroids in the long-term gonadectomized male rat. Spratt DP, et al. **Brain Res Mol Brain Res** 1997 Jul;47(1–2):125–33

The effects of several ecdysteroids and ecdysteroid agonists on two Drosophila imaginal disc cell lines. Cottam DM, et al. **Cell Mol Life Sci** 1997 Jul;53(7):600–3

Estrogen receptor is not primarily responsible for altered responsiveness of ovalbumin mRNA induction in the oviduct from genetically selected high- and low-albumen chicken lines. Muramatsu T, et al.
Comp Biochem Physiol B Biochem Mol Biol 1997 Apr; 116(4):391–6

Developmental profiles and ecdysteroid regulation of the mRNAs for two ecdysone receptor isoforms in the epidermis and wings of the tobacco hornworm, Manduca sexta. Jindra M, et al. **Dev Biol** 1996 Nov 25;180(1):258–72

Regulation of hepatic sulfotransferases by steroidal chemicals in rats. Liu L, et al. **Drug Metab Dispos** 1996 Aug; 24(8):854–8

Steroid-involved transcriptional regulation of human genes encoding prostatic acid phosphatase, prostate-specific antigen, and prostate-specific glandular kallikrein. Shan JD, et al. **Endocrinology** 1997 Sep;138(9):3764–70

Steroid inhibition of [3H]SR 95531 binding to the GABAA recognition site. Hawkinson JE, et al. **Eur J Pharmacol** 1996 May 23;304(1–3):141–6

Steroid receptor-mediated effects of neuroactive steroids: characterization of structure-activity relationship. Rupprecht R, et al. **Eur J Pharmacol** 1996 May 15; 303(3):227–34

The effect of steroids and their complexes with cyclodextrins on secretory activity of cultured thyroid medullary carcinoma cells. Grzeszkowiak J, et al.
Folia Histochem Cytobiol 1996;34 Suppl 1:69–70

Action of different ecdysteroids on the regulation of mRNAs for the ecdysone receptor, MHR3, dopa decarboxylase, and a larval cuticle protein in the larval epidermis of the tobacco hornworm, Manduca sexta. Hiruma K, et al.
Gen Comp Endocrinol 1997 Jul;107(1):84–97

Neurosteroids modulate the reaction of astroglia to high extracellular potassium levels. Del Cerro S, et al. **Glia** 1996 Dec;18(4):293–305

Sex steroid–opioid interactions associated with the temporal component of avian calling patterns. Bernroider G, et al.
Horm Behav 1996 Dec;30(4):583–9

Perinatal steroid treatments alter alloparental and affiliative behavior in prairie voles. Roberts RL, et al.
Horm Behav 1996 Dec;30(4):576–82

Influence of steroid implants and concentrate feeding on performance and carcass composition of cull beef cows. Cranwell CD, et al. **J Anim Sci** 1996 Aug;74(8):1770–6

Influence of steroid implants and concentrate feeding on carcass and longissimus muscle sensory and collagen characteristics of cull beef cows. Cranwell CD, et al.
J Anim Sci 1996 Aug;74(8):1777–83

Steroid-induced conformational changes at ends of the hormone-binding domain in the rat glucocorticoid receptor are independent of agonist versus antagonist activity. Modarress KJ, et al. **J Biol Chem** 1997 Sep 19; 272(38):23986–94

MS-WHIM, new 3D theoretical descriptors derived from molecular surface properties: a comparative 3D QSAR study in a series of steroids. Bravi G, et al.
J Comput Aided Mol Des 1997 Jan;11(1):79–92

A new organotypic culture method to study the actions of steroid hormones on the nervous system. Levy A, et al.
J Neurosci Res 1996 Mar 15;43(6):719–25

Treatment of experimental brain injury with moderate hypothermia and 21-aminosteroids. Marion DW, et al.
J Neurotrauma 1996 Mar;13(3):139–47

Anticonvulsant and behavioral effects of neuroactive steroids alone and in conjunction with diazepam. Gasior M, et al.
J Pharmacol Exp Ther 1997 Aug;282(2):543–53

Partial agonism by 3alpha,21-dihydroxy-5beta-pregnan-20-one at the gamma-aminobutyric acidA receptor neurosteroid site. Xue BG, et al. **J Pharmacol Exp Ther** 1997 Jun; 281(3):1095–101

Characteristics of the plasma melatonin rhythm are not modified by steroids during the estrous cycle in IIe-de-France ewes. Zarazaga LA, et al. **J Pineal Res** 1996 Sep;21(2):114–20

Effects of 20 alpha-hydroxysteroid dehydrogenase and its inhibitors on canine osteosarcoma cell growth in vitro. Tanaka NM, et al. **J Vet Med Sci** 1996 Jul;58(7):623–7

Time course of induction of oxytocin messenger ribonucleic acid levels in the hypothalamic paraventricular nucleus of ovariectomized rats following gonadal steroid administration. Blyth BJ, et al. **Life Sci** 1997;60(26):2427–33

Effect of gonadotrophin and sex steroid on the scotoresponses of day old chicks of Japanese quail, Coturnix coturnix japonica. Phillips D, et al. **Life Sci** 1997;61(15):1487–95

Natural steroids counteracting some actions of putative depressogenic steroids on the central nervous system: potential therapeutic benefits. Dubrovsky B.
Med Hypotheses 1997 Jul;49(1):51–5 (78 ref.)

Nocardia brasiliensis: in vitro and in vivo growth response to steroid sex hormones. Hernandez-Hernandez F, et al.
Mycopathologia 1995 Nov;132(2):79–85

Diterpenoid and steroidal alkaloids. Atta-ur-Rahman, et al.
Nat Prod Rep 1997 Apr;14(2):191–203 (53 ref.)

Steroid-responsive hypercalcaemic nephropathy in diabetes mellitus probably due to occult sarcoidosis [letter] Gupta VK. **Nephron** 1996;74(1):214–5

Immunohistochemical detection of progestin receptors in hypothalamic beta-endorphin and substance P neurons of steroid-treated monkeys. Bethea CL, et al.
Neuroendocrinology 1996 Feb;63(2):132–41

Steroid modulation of neuropeptide Y-induced luteinizing hormone releasing hormone release from median eminence fragments from male rats. Urban JH, et al.
Neuroendocrinology 1996 Feb;63(2):112–9

Neuroactive steroids protect against pilocarpine- and kainic acid-induced limbic seizures and status epilepticus in mice. Kokate TG, et al. **Neuropharmacology** 1996;35(8):1049–56

Gonadal steroid hormone regulation of proopiomelanocortin gene expression in neurons that innervate the median eminence of the rat. Cheung S, et al. **Neurosci Lett** 1997 Mar 21;224(3):181–4

Prenatal alcohol exposure influences the effects of neuroactive steroids on separation-induced ultrasonic vocalizations in rat pups. Zimmerberg B, et al.
Pharmacol Biochem Behav 1996 Dec;55(4):541–7

In vitro binding of 16-methylated C18 and C19 steroid derivatives to the androgen receptor. Tóth I, et al.
Pharmacol Res 1995 Oct;32(4):217–21

Pharmacology of lazaroids and brain energy metabolism: a review. Villa RF, et al. **Pharmacol Rev** 1997 Mar; 49(1):99–136 (274 ref.)

The prophylactic effects of U75412E pretreatment in a smoke-induced lung injury rabbit model. Wang S, et al.
Pharmacol Toxicol 1996 Nov;79(5):231–7

Paracrine stimulation of interstitial collagenase (MMP-1) in the human endometrium by interleukin 1alpha and its dual block by ovarian steroids. Singer CF, et al.
Proc Natl Acad Sci U S A 1997 Sep 16;94(19):10341–5

CREB binding protein acts synergistically with steroid receptor coactivator-1 to enhance steroid receptor-dependent transcription. Smith CL, et al.
Proc Natl Acad Sci U S A 1996 Aug 20;93(17):8884–8

In search of ideal inotropic steroids: recent progress. Repke KR, et al. **Prog Drug Res** 1996;47:9–52 (172 ref.)

Nongenomic actions of steroids on gonadotropin release. Wiebe JP. **Recent Prog Horm Res** 1997;52:71–99; discussion 99–101 (133 ref.)

Effects of sex steroid hormones on lipoproteins, clotting, and the arterial wall. Knopp RH, et al.
Semin Reprod Endocrinol 1996 Feb;14(1):15–27 (112 ref.)

Activity and inhibition of 3-beta-hydroxysteroid dehydrogenase/delta-5–4-isomerase in human skin. Tóth I, et al. **Skin Pharmacol** 1997;10(3):160–8

2',2'-Difluorodeoxycytidine (gemcitabine) induces apoptosis in myeloma cell lines resistant to steroids and 2-chlorodeoxyadenosine (2-CdA). Gruber J, et al.
Stem Cells 1996 May;14(3):351–62

Incidence, risk factors, and outcome of antithymocyte globulin treatment of steroid-resistant rejection after liver transplantation. Bijleveld CG, et al. **Transpl Int** 1996; 9(6):570–5

[Action of biologically active peptides and steroids on nuclear magnetic resonance relaxation of protons of kidney tissue water in vitro] Komarevtseva IA, et al.
Ukr Biokhim Zh 1996 Jul-Aug;68(4):91–5 (Eng. Abstr.) **(Rus)**

[Interaction of a substance based on phytoecdysteroids (BTK-8L) with components of fractionated chromatin from intact rat liver] Primak RG, et al.
Ukr Biokhim Zh 1996 May-Jun;68(3):84–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Transforming growth factor-beta system and its regulation by members of the steroid-thyroid hormone superfamily. Koli K, et al. **Adv Cancer Res** 1996;70:63–94 (133 ref.)

Steroidal glycoalkaloids: nature and consequences of bioactivity. Roddick JG. **Adv Exp Med Biol** 1996; 404:277–95 (131 ref.)

Peptides, steroids, and pair bonding. Carter CS, et al.
Ann N Y Acad Sci 1997 Jan 15;807:260–72 (33 ref.)

Specific, nongenomic actions of steroid hormones. Wehling M. **Annu Rev Physiol** 1997;59:365–93 (151 ref.)

Up- and downregulation of esr20, an ecdysteroid-regulated gene expressed in the tracheae of Manduca sexta. Mészáros M, et al. **Arch Insect Biochem Physiol** 1997;34(2):159–74

Progesterone receptor messenger ribonucleic acid and protein in luteinized granulosa cells of rhesus monkeys are regulated in vitro by gonadotropins and steroids. Duffy DM, et al. **Biol Reprod** 1996 Apr;54(4):888–95

Photoperiod and steroid-dependent adjustments in hypothalamic gonadotropic hormone-releasing hormone, dopamine, and norepinephrine content in male deer mice. Korytko AI, et al. **Biol Reprod** 1997 Mar;56(3):617–24

Breast cancer risk in mothers of twins. Murphy MF, et al.
Br J Cancer 1997;75(7):1066–8

Acute alcohol blocks neurosteroid modulation of synaptic transmission and long-term potentiation in the rat hippocampal slice. Randall RD, et al. **Brain Res** 1995 Dec 1;701(1–2):238–48

Gonadal steroids and astroglial plasticity. Garcia-Segura LM, et al. **Cell Mol Neurobiol** 1996 Apr;16(2):225–37 (80 ref.)

Neurosteroid modulation of native and recombinant GABAA receptors. Lambert JJ, et al. **Cell Mol Neurobiol** 1996 Apr; 16(2):155–74 (100 ref.)

Steroid imprinting and modulation of sexual dimorphism in the luteinizing hormone-releasing hormone neuronal system. López FJ, et al. **Cell Mol Neurobiol** 1996 Apr; 16(2):129–41 (30 ref.)

Gonadal and adrenal steroids regulate neurochemical and structural plasticity of the hippocampus via cellular mechanisms involving NMDA receptors. McEwen BS.
Cell Mol Neurobiol 1996 Apr;16(2):103–16 (75 ref.)

Cell culture approaches to understanding the actions of steroid hormones on the insect nervous system. Levine RB, et al. **Dev Neurosci** 1996;18(1–2):73–86 (72 ref.)

Development and regeneration of the nervous system: a role for neurosteroids. Schumacher M, et al. **Dev Neurosci** 1996; 18(1–2):6–21 (135 ref.)

Non-genomic steroid action—take a closer look, it's not rare! An invited commentary. Wehling M. **Eur J Endocrinol** 1996 Sep;135(3):287–8

From steroid signals to local regulatory factors involved in endometrial bleeding. Tabibzadeh S, et al.
Eur J Obstet Gynecol Reprod Biol 1996 Dec;70(1):25–7 (34 ref.)

Novel aspects of steroid hormone resistance. Symposium of the Sonderforschungsbereich 351. Abstracts.
Exp Clin Endocrinol Diabetes 1996;104(4):A1–9

Steroid hormones and excitability in the mammalian brain. Joëls M. **Front Neuroendocrinol** 1997 Jan;18(1):2–48 (235 ref.)

Molecular aspects of steroid hormone action in the male reproductive axis. Shupnik MA, et al. **J Androl** 1997 Jul-Aug;18(4):341–4 (25 ref.)

Effect of benomyl and carbendazim on steroid and molecular mechanisms in uterine decidual growth in rats. Spencer F, et al. **J Appl Toxicol** 1996 May-Jun;16(3):211–4

Distribution of aromatase-immunoreactive cells in the forebrain of zebra finches (Taeniopygia guttata): implications for the neural action of steroids and nuclear definition in the avian hypothalamus. Balthazart J, et al.
J Neurobiol 1996 Oct;31(2):129–48

Target muscles and sensory afferents do not influence steroid-regulated, segment-specific death of identified motoneurons in Manduca sexta. Lubischer JL, et al.
J Neurobiol 1996 Dec;31(4):449–60

Activational effects of gonadal steroids on hypothalamo-pituitary-adrenal regulation in the rat disclosed by response to dexamethasone suppression. Almeida OF, et al. **J Neuroendocrinol** 1997 Feb;9(2):129–34

Gonadal steroids exert facilitating and "buffering" effects on glucocorticoid-mediated transcriptional regulation of corticotropin-releasing hormone and corticosteroid receptor genes in rat brain. Patchev VK, et al.
J Neurosci 1996 Nov 1;16(21):7077–84

Morphological and functional studies of the paracrine interaction between cortex and medulla in the adrenal gland. Bornstein SR, et al. **Microsc Res Tech** 1997 Mar 15;36(6):520–33 (123 ref.)

Nuclear factor-kappa-B/steroid hormone receptor interactions as a functional basis of anti-inflammatory action of steroids in reproductive organs. van der Burg B, et al. **Mol Hum Reprod** 1996 Jun;2(6):433–8 (57 ref.)

Steroid hormones, the menopause, sexuality and well-being of women. Cawood EH, et al. **Psychol Med** 1996 Sep; 26(5):925–36

Neurosteroids: of the nervous system, by the nervous system, for the nervous system. Baulieu EE.

Recent Prog Horm Res 1997;52:1–32 (107 ref.)

Steroid and growth factor regulation of matrix metalloproteinase expression and endometriosis. Osteen KG, et al. **Semin Reprod Endocrinol** 1996 Aug;14(3):247–55 (75 ref.)

Plant steroid hormones emerge from the dark. Hooley R. **Trends Genet** 1996 Aug;12(8):281–3 (14 ref.)

RADIATION EFFECTS

EPR/ENDOR investigations of gamma-irradiated steroid hormone single crystals. Szyczewski A. **Appl Radiat Isot** 1996 Nov–Dec;47(11–12):1675–81 (30 ref.)

THERAPEUTIC USE

Sixteen years of croup in a Western Australian teaching hospital: effects of routine steroid treatment. Geelhoed GC. **Ann Emerg Med** 1996 Dec;28(6):621–6

Monoclonal antibody analysis of glomerular and renal interstitial immune cells in steroid-resistant and steroid-responsive minimal change disease in children. Wągrowska-Danilewicz M, et al. **Arch Immunol Ther Exp (Warsz)** 1996;44(2–3):165–70

The diagnosis of polymyalgia rheumatica in patients with a low erythrocyte sedimentation rate: comment on the article by Helfgott and Kieval [letter] Cimmino MA, et al. **Arthritis Rheum** 1997 Sep;40(9):1726–7; discussion 1727–8

Diagnosing and managing polymyalgia rheumatica and temporal arteritis. Urgency in giving steroids in giant cell arteritis is still not widely appreciated [letter] Freeman AG. **BMJ** 1997 Aug 30;315(7107):549–50

New guidelines on asthma management [editorial] Keeley D, et al. **BMJ** 1997 Feb 1;314(7077):315–6

Diagnosing and managing polymyalgia rheumatica and temporal arteritis. Repeated measurements of erythrocyte sedimentation rate are not efficient use of time or resources [letter] Roome P. **BMJ** 1997 Aug 30;315(7107):550

Effects of steroids on acute myeloblastic leukaemia [letter; comment] Hiçsönmez G. **Br J Haematol** 1996 Oct; 95(1):215–6. Comment on: Br J Haematol 1995 Dec;91(4):907–14.

International survey on the management of patients with SLE. III. The results of a questionnaire regarding renal involvement. Doria A, et al. **Clin Exp Rheumatol** 1996 Nov–Dec;14 Suppl 16:S31–8

Action of steroids on reduction of edema. Dougherty TF, et al. **Clin Neurosurg** 1971;18:414–25

A case of cytophagic histiocytic panniculitis: successful treatment of recurrent attacks with steroid pulse therapy and oral cyclosporin A. Nakane S, et al. **Clin Rheumatol** 1997 Jun;16(4):417–21

Review of the clinical basis and protocol for epidural endoscopy. Saberski LR, et al. **Conn Med** 1996 Feb; 60(2):71–3

Tinea incognito and "over-the-counter" potent topical steroids [see comments] Solomon BA, et al. **Cutis** 1996 Oct; 58(4):295–6. Comment in: Cutis 1997 Apr;59(4):216E.

Compliance with and accuracy of daily self-assessment of peak expiratory flows (PEF) in asthmatic subjects over a three month period. Verschelden P, et al. **Eur Respir J** 1996 May;9(5):880–5

Comparative trial of steroids and surgical intervention in the management of ulnar neuritis. Ebenezer M, et al. **Int J Lepr Other Mycobact Dis** 1996 Sep;64(3):282–6

Monitoring steroid use in a field program; possible process indicators. Saunderson PR, et al. **Int J Lepr Other Mycobact Dis** 1997 Jun;65(2):217–23

Perinatal outcome following conservative management of mid-trimester pre-labour rupture of the membranes. Nourse CB, et al. **J Paediatr Child Health** 1997 Apr; 33(2):125–30

Management of nephrotic syndrome in children: a review. Khan MA, et al. **JPMA J Pak Med Assoc** 1996 May; 46(5):113–6 (32 ref.)

Comment: 'silently arising clinical neuropathy' and extended indication of steroid therapy in leprosy neuropathy [letter; comment] Negesse Y. **Lepr Rev** 1996 Sep;67(3):230–1. Comment on: Lepr Rev 1994 Dec;65(4):350–60.

Superoxide dismutase as a prognostic criterion in nephrotic syndrome [letter] Noyan A, et al. **Nephron** 1996;74(2):477

Steroid therapy in AD [letter; comment] Gambassi G, et al. **Neurology** 1997 May;48(5):1473–4. Comment on: Neurology 1996 Aug;47(2):425–32.

Degos' disease [letter; comment] McFarland HR. **Neurology** 1997 Jul;49(1):308–9. Comment on: Neurology 1996 Mar;46(3):636–40.

HLA-DR7 predicts the response to alkylating agents in steroid-sensitive nephrotic syndrome. Konrad M, et al. **Pediatr Nephrol** 1997 Feb;11(1):16–9

Steroid-resistant nephrotic focal segmental glomerulosclerosis: a treatable disease. Tune BM, et al. **Pediatr Nephrol** 1996 Dec;10(6):772–8 (53 ref.)

Steroid resistance in clinical heart transplantation: the role of simultaneous IL-2 and IL-4 mRNA expression. Baan CC, et al. **Transplant Proc** 1996 Dec;28(6):3239–40

Effectiveness of 15-deoxyspergualin on steroid-resistant acute rejection in living related liver transplantation. Katoh H, et al. **Transplant Proc** 1997 Feb–Mar;29(1–2):553–4

[Severe preeclampsia: management. Is conservative treatment justified?] Merviel P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1997;26(3):238–49 (61 ref.) (Eng. Abstr.) **(Fre)**

[Chromatin-protective action of the biologically active preparation BTK-8L in tetrachloromethane and chlorophos poisoning] Levitskiĭ EL, et al. **Ukr Biokhim Zh** 1996 Sep–Oct;68(5):76–84 (Eng. Abstr.) **(Rus)**

TOXICITY

m-N-N-bis(2-chloroethyl)aminocinnamic acid and four new homo-aza-steroidal esters induce chromosomal abnormalities and affect protein synthesis in human lymphocytes in vitro. Psaraki K, et al. **Anticancer Drugs** 1997 Jan;8(1):73–9

Formation of free radicals from steroid hormones: possible significance in environmental carcinogenesis. Kodama M, et al. **Anticancer Res** 1997 Jan–Feb;17(1A):439–44

Cholestatic properties and hepatic transport of steroid glucuronides. Vore M, et al. **Drug Metab Rev** 1997 Feb–May;29(1–2):183–203 (49 ref.)

Formation of DNA-adducts by selected sex steroids in rat liver. Feser W, et al. **Hum Exp Toxicol** 1996 Jul; 15(7):556–62

Lazaroids inhibit proliferation of cultured human astrocytoma cells. Arora P, et al. **J Neurooncol** 1996 Aug; 29(2):143–8

Use of rat and human liver slices for the detection of steroid hormone-induced DNA-adducts in vitro by means of the (32)P-postlabeling technique. Baumann A, et al. **Pharmacol Toxicol** 1996 Apr;78(4):214–23

URINE

Clinical indications for the use of urinary steroid profiles in neonates and children. Honour JW, et al. **Ann Clin Biochem** 1997 Jan;34 (Pt 1):45–54 (37 ref.)

Urinary steroids at time of surgery in postmenopausal women with breast cancer. Juricskay S, et al. **Breast Cancer Res Treat** 1997 May;44(1):83–9

Social modulation of sex steroid concentrations in the urine of male cichlid fish Oreochromis mossambicus. Oliveira RF, et al. **Horm Behav** 1996 Mar;30(1):2–12

Micellar electrokinetic capillary chromatographic separation of steroids in urine by trioctylphosphine oxide and cationic surfactant. Abubaker MA, et al. **J Chromatogr B Biomed Appl** 1995 Dec 1;674(1):31–8

Hirsutism [letter; comment] Phillipov G. **Lancet** 1997 Mar 1;349(9052):650; discussion 651. Comment on: Lancet 1997 Jan 18;349(9046):191–5.

The relationship between the effects of metyrapone treatment on depressed mood and urinary steroid profiles. Raven PW, et al. **Psychoneuroendocrinology** 1996 Apr;21(3):277–86

Quantitation of cortisol and related 3-oxo-4-ene steroids in urine using gas chromatography/mass spectrometry with stable isotope-labeled internal standards. Palermo M, et al. **Steroids** 1996 Oct;61(10):583–9

[Diagnosis of the adrenogenital syndrome caused by 11beta-hydroxylase deficiency using gas chromatographic-mass spectrometric analysis of the urinary steroid profile] Wudy SA, et al. **Dtsch Med Wochenschr** 1997 Jan 3;122(1–2):3–10; discussion 11 (Eng. Abstr.) **(Ger)**

STEROIDS, ANABOLIC see **ANABOLIC STEROIDS**

STEROIDS, HETEROCYCLIC

A putative leucine-rich repeat receptor kinase involved in brassinosteroid signal transduction [see comments] Li J, et al. **Cell** 1997 Sep 5;90(5):929–38. Comment in: Cell 1997 Sep 5;90(5):825–7.

CHEMICAL SYNTHESIS

New synthetic strategy for the synthesis of 24-epibrassinolide. Brosa C, et al. **Steroids** 1996 Sep; 61(9):540–3

CHEMISTRY

Brassinosteroids. Fujioka S, et al. **Nat Prod Rep** 1997 Feb; 14(1):1–10 (105 ref.)

METABOLISM

BRI-ghtening the pathway to steroid hormone signaling events in plants [comment] Ecker JR. **Cell** 1997 Sep 5; 90(5):825–7 (18 ref.). Comment on: Cell 1997 Sep 5;90(5):929–38.

Plant hormones: brassinosteroids in the spotlight. Clouse SD. **Curr Biol** 1996 Jun 1;6(6):658–61 (14 ref.)

Oligosaccharins, brassinolides, and jasmonates: nontraditional regulators of plant growth, development, and gene expression. Creelman RA, et al. **Plant Cell** 1997 Jul; 9(7):1211–23 (160 ref.)

PHARMACOLOGY

Determination of IAA in brassinolide treated coleoptiles of wheat by a modified indirect ELISA with polyclonal antibodies. Naren A, et al. **Indian J Exp Biol** 1996 Mar; 34(3):257–61

STEROLS

[Physico-chemical characterization and application for drug carrier of soybean-derived sterols and their glucosides-containing liposomes] Maitani Y. **Yakugaku Zasshi** 1996 Dec;116(12):901–10 (28 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Effects of restricted food intake on neutral lipid and free fatty acid levels in the digestive gland-gonad complex and faeces of Biomphalaria glabrata (Gastropoda). Conaway CA, et al. **Biomed Chromatogr** 1996 Jul–Aug;10(4):186–8

Consumption of buckwheat protein lowers plasma cholesterol and raises fecal neutral sterols in cholesterol-Fed rats because of its low digestibility. Kayashita J, et al. **J Nutr** 1997 Jul;127(7):1395–400

Oxysterols found in opacified cornea of fish. Adachi J, et al. **Lipids** 1996 Oct;31(10):1039–43

The sterols of Cucurbita moschata ("calabacita") seed oil. Rodriguez JB, et al. **Lipids** 1996 Nov;31(11):1205–8

Sterol composition of phaeodactylum tricornutum as influenced by growth temperature and light spectral quality. Véron B, et al. **Lipids** 1996 Sep;31(9):989–94

Carbohydrate and lipid components of hyphae and conidia of human pathogen Fonsecaea pedrosoi. de A Soares RM, et al. **Mycopathologia** 1995 Nov;132(2):71–7

[Changes in the content of fats, neutral sterols, bile acids and carbonic acids with short chain in the feces from patients with chronic pancreatitis] Nakamura T, et al. **Klin Med (Mosk)** 1996;74(4):35–7 **(Rus)**

BIOSYNTHESIS

Inhibitors of delta24(25) sterol methyltransferase block sterol synthesis and cell proliferation in Pneumocystis carinii. Urbina JA, et al. **Antimicrob Agents Chemother** 1997 Jul; 41(7):1428–32

Altered lipid composition and enzyme activities of plasma membranes from Trypanosoma (Schizotrypanum) cruzi epimastigotes grown in the presence of sterol biosynthesis inhibitors. Contreras LM, et al. **Biochem Pharmacol** 1997 Mar 7;53(5):697–704

Action of lovastatin, simvastatin, and pravastatin on sterol synthesis and their antiproliferative effect in cultured myoblasts from human striated muscle. van Vliet AK, et al. **Biochem Pharmacol** 1996 Nov 8;52(9):1387–92

Carbon sources for fatty acid and sterol biosynthesis in Leishmania species. Ginger ML, et al. **Biochem Soc Trans** 1996 Aug;24(3):434S

Requirement of heme to replace the sparking sterol function in the yeast Saccharomyces cerevisiae. Smith SJ, et al. **Biochim Biophys Acta** 1997 Mar 10;1345(1):71–6

Coordinate developmental expression of genes regulating sterol economy and cholesterol side-chain cleavage in the porcine ovary. LaVoie HA, et al. **Biol Reprod** 1997 Aug; 57(2):402–7

Genetics and molecular biology [editorial] Cullen P. **Curr Opin Lipidol** 1997 Jun;8(3):U33–5

Effects of different inhibitors of 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase, pravastatin sodium and simvastatin, on sterol synthesis and immunological functions in human lymphocytes in vitro. Kurakata S, et al. **Immunopharmacology** 1996 Aug;34(1):51–61

Origin of cholesterol in the fetal golden Syrian hamster: contribution of de novo sterol synthesis and maternal-derived lipoprotein cholesterol. Woollett LA. **J Lipid Res** 1996 Jun;37(6):1246–57

Amphotericin B resistant isolates of Cryptococcus neoformans without alteration in sterol biosynthesis. Joseph-Horne T, et al. **J Med Vet Mycol** 1996 Jun–Jul; 34(3):223–5

An enzyme inhibition assay for the quantitative determination of the new bisphosphonate zoledronate in plasma. Risser F, et al. **J Pharm Biomed Anal** 1997 Aug;15(12):1877–80

Antifungal sterol biosynthesis inhibitors. Guo DA, et al. **Subcell Biochem** 1997;28:89–116 (92 ref.)

BLOOD

Serum squalene and noncholesterol sterols before and after delivery in normal and cholestatic pregnancy. Nikkilä K, et al. **J Lipid Res** 1996 Dec;37(12):2687–95

Changes in serum sterols of rats treated with 7-dehydrocholesterol-delta 7-reductase inhibitors: comparison to levels in humans with Smith-Lemli-Opitz syndrome. Wolf C, et al. **J Lipid Res** 1996 Jun; 37(6):1325–33

[Interaction of C27-sterols with erythrocyte membranes] Tuganova AV, et al. **Ukr Biokhim Zh** 1996 Nov–Dec; 68(6):61–8 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Cerebrosides alter the lyotropic and thermotropic phase transitions of DOPE:DOPC and DOPE:DOPC:sterol mixtures. Webb MS, et al. **Biochim Biophys Acta** 1997 Jun 12;1326(2):225–35

Bending elasticities of model membranes: influences of temperature and sterol content. Méléard P, et al. **Biophys J** 1997 Jun;72(6):2616–29

A second isoform of 3-ketoacyl-CoA thiolase found in Caenorhabditis elegans, which is similar to sterol carrier protein x but lacks the sequence of sterol carrier protein 2. Bun-Ya M, et al. **Eur J Biochem** 1997 Apr 15; 245(2):252–9

STEROLS

Analysis of unsaturated C27 sterols by nuclear magnetic resonance spectroscopy. Wilson WK, et al. **J Lipid Res** 1996 Jul;37(7):1529–55

Luffasterols A–C, 9,11–secosterols from the Palauan sponge Luffariella sp. Reddy MV, et al. **J Nat Prod** 1997 Jan; 60(1):41–3

Oral administration of recombinant human erythropoietin in liposomes in rats: influence of lipid composition and size of liposomes on bioavailability. Maitani Y, et al. **J Pharm Sci** 1996 Apr;85(4):440–5

Review of progress in sterol oxidations: 1987–1995. Smith LL. **Lipids** 1996 May;31(5):453–87 (1152 ref.)

Rapid hydrogenation of unsaturated sterols and bile alcohols using microwaves. Dayal B, et al. **Steroids** 1997 May; 62(5):451–4

Identification and quantification of Tuber melanosporum Vitt. sterols. Harki E, et al. **Steroids** 1996 Oct;61(10):609–12

Short side chain sterols from the tunicate Polizoa opuntia. Palermo JA, et al. **Steroids** 1996 Jan;61(1):2–6

ISOLATION & PURIFICATION

Antiviral sulfated steroids from the ophiuroid Ophioplocus januarii. Roccatagliata AJ, et al. **J Nat Prod** 1996 Sep; 59(9):887–9

Haliclostanone sulfate and halistanol suifate from an Indo–Pacific Haliclona sponge. Sperry S, et al. **J Nat Prod** 1997 Jan;60(1):29–32

The extraction and analysis of sterols from yeast. Quail MA, et al. **Methods Mol Biol** 1996;53:123–31 (7 ref.)

Silver ion high pressure liquid chromatography provides unprecedented separation of sterols: application to the enzymatic formation of cholesta–5,8–dien–3 beta–ol. Ruan B, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15; 93(21):11603–8

METABOLISM

Sterol concentrations in cultured Smith–Lemli–Opitz syndrome skin fibroblasts: diagnosis of a biochemically atypical case of the syndrome. Honda A, et al. **Am J Med Genet** 1997 Jan 31;68(3):282–7

Ceramide glucosylation in bean hypocotyl microsomes: evidence that steryl glucoside serves as glucose donor. Lynch DV, et al. **Arch Biochem Biophys** 1997 Apr 15; 340(2):311–6

The role of cytochrome b5 in 4alpha–methyl–oxidation and C5(6) desaturation of plant sterol precursors. Rahier A, et al. **Biochem Biophys Res Commun** 1997 Jul 18; 236(2):434–7

Oxidative tyrosylation of HDL enhances the depletion of cellular cholesteryl esters by a mechanism independent of passive sterol desorption. Francis GA, et al. **Biochemistry** 1996 Dec 3;35(48):15188–97

The sterol carrier protein–2 fatty acid binding site: an NMR, circular dichroic, and fluorescence spectroscopic determination. Stolowich NJ, et al. **Biochemistry** 1997 Feb 18;36(7):1719–29

Sterol dependent LDL–receptor gene transcription in lymphocytes from normal and CML patients. Goel R, et al. **Cancer Lett** 1996 Oct 22;107(2):193–8

Molecular aspects of intracellular sterol esterification: the acyl coenzyme A: cholesterol acyltransferase reaction. Sturley SL. **Curr Opin Lipidol** 1997 Jun;8(3):167–73 (58 ref.)

Identification of cDNAs encoding sterol methyl–transferases involved in the second methylation step of plant sterol biosynthesis. Bouvier–Navé P, et al. **Eur J Biochem** 1997 Jun 1;246(2):518–29

Free sterols in the rat white matter following experimental global ischemia. Wender M, et al. **Exp Toxicol Pathol** 1997 Feb;49(1–2):57–9

Resistance to fluconazole and cross–resistance to amphotericin B in Candida albicans from AIDS patients caused by defective sterol delta5,6–desaturation. Kelly SL, et al. **FEBS Lett** 1997 Jan 2;400(1):80–2

Mechanism of sterol uptake in yeast. Hapala I, et al. **Folia Microbiol (Praha)** 1996;41(1):95–6

Sterol carrier protein–2 overexpression enhances sterol cycling and inhibits cholesterol ester synthesis and high density lipoprotein cholesterol secretion. Baum CL, et al. **J Biol Chem** 1997 Mar 7;272(10):6490–8

Synergistic binding of sterol regulatory element–binding protein and NF–Y to the farnesyl diphosphate synthase promoter is critical for sterol–regulated expression of the gene. Ericsson J, et al. **J Biol Chem** 1996 Oct 4; 271(40):24359–64

Sterol carrier protein–2, a new fatty acyl coenzyme A–binding protein. Frolov A, et al. **J Biol Chem** 1996 Dec 13;271(50):31878–84

Heat stress induces a glycosylation of membrane sterol in myxoamoebae of a true slime mold, Physarum polycephalum. Murakami–Murofushi K, et al. **J Biol Chem** 1997 Jan 3;272(1):486–9

Cholesterol metabolism and non–cholesterol sterols in patients with ileal pouch anastomosis. Hakala K, et al. **J Hepatol** 1997 Jun;26(6):1306–12

Additive hypocholesterolemic effect of psyllium and cholestyramine in the hamster: influence on fecal sterol and bile acid profiles. Daggy BP, et al. **J Lipid Res** 1997 Mar;38(3):491–502

Effects of legume consumption on serum cholesterol, biliary lipids, and sterol metabolism in humans. Duane WC. **J Lipid Res** 1997 Jun;38(6):1120–8

Measurement of bile acid synthesis by three different methods in hypertriglyceridemic and control subjects. Duane WC. **J Lipid Res** 1997 Jan;38(1):183–8

Fibroblast membrane sterol kinetic domains: modulation by sterol carrier protein–2 and liver fatty acid binding protein. Frolov A, et al. **J Lipid Res** 1996 Sep;37(9):1862–74

Neutral sterols of sawflies (Symphyta): their relationship to other Hymenoptera. Schiff NM, et al. **Lipids** 1996 Apr; 31(4):441–3

Review of progress in sterol oxidations: 1987–1995. Smith LL. **Lipids** 1996 May;31(5):453–87 (1152 ref.)

Sterol specificity of the Saccharomyces cerevisiae ERG6 gene product expressed in Escherichia coli. Venkatramesh M, et al. **Lipids** 1996 Apr;31(4):373–7

An oxysterol signalling pathway mediated by the nuclear receptor LXR alpha. Janowski BA, et al. **Nature** 1996 Oct 24;383(6602):728–31

Effects of fish oil on fecal bacterial enzymes and steroid excretion in healthy volunteers: implications for colon cancer prevention. Bartram HP, et al. **Nutr Cancer** 1996; 25(1):71–8

Steroids, fatty acyl–CoA, and sterols are substrates of 80–kDa multifunctional protein. Adamski J, et al. **Steroids** 1997 Jan; 62(1):159–63

A conditional sterol esterification defect in yeast having either a sec1 or sec5 mutation in the secretory pathway. Tomeo ME, et al. **Yeast** 1997 Apr;13(5):449–62

PHARMACOLOGY

Substrate–based inhibitors of the (S)–adenosyl–L–methionine:delta24(25)– to delta24(28)–sterol methyl transferase from Saccharomyces cerevisiae. Nes WD, et al. **Arch Biochem Biophys** 1997 Jun 1;342(1):68–81

Macrophages isolated from human atherosclerotic plaques produce IL–8, and oxysterols may have a regulatory function for IL–8 production. Liu Y, et al. **Arterioscler Thromb Vasc Biol** 1997 Feb;17(2):317–23

Inhibitory effects of sterols isolated from Chlorella vulgaris on 12–0–tetradecanoylphorbol–13–acetate–induced inflammation and tumor promotion in mouse skin. Yasukawa K, et al. **Biol Pharm Bull** 1996 Apr;19(4):573–6

Sterol resistance in CHO cells traced to point mutation in SREBP cleavage–activating protein. Hua X, et al. **Cell** 1996 Nov 1;87(3):415–26

Effects of novel synthetic sterol probes on enzymes of cholesterol metabolism in cell–free and cellular systems. Harte RA, et al. **Chem Phys Lipids** 1996 Sep 16;83(1):45–59

Sterol and steryl ester regulation of phospholipase A2 from the mosquito parasite Lagenidium giganteum. Kerwin JL, et al. **Lipids** 1996 Nov;31(11):1179–88

The effect of cholesterol oxidation products on human platelet aggregation. Selley ML, et al. **Thromb Res** 1996 Sep 15;83(6):449–61

RADIATION EFFECTS

Photochemical reactions and phototoxicity of sterols: novel self–perpetuating mechanisms for lipid photooxidation. Albro PW, et al. **Photochem Photobiol** 1997 Sep; 66(3):316–25

STETHOSCOPES

Bacterial flora of stethoscopes' earpieces and otitis externa. Brook I. **Ann Otol Rhinol Laryngol** 1997 Sep;106(9):751–2

The stethoscope. A potential source of nosocomial infection? Marinella MA, et al. **Arch Intern Med** 1997 Apr 14; 157(7):786–90

New stethoscope incorporates Doppler to monitor blood flow. **Biomed Instrum Technol** 1997 Mar–Apr;31(2):172

Stethoscopy during anaesthesia. McIntyre JW. **Can J Anaesth** 1997 May;44(5 Pt 1):535–42 (88 ref.)

Warm stethoscope [letter; comment] West RO. **J Fam Pract** 1997 Feb;44(2):214. Comment on: J Fam Pract 1996 Sep;43(3):218–20.

[Level of stethoscope contamination in the hospital environment] Genné D, et al. **Schweiz Med Wochenschr** 1996 Dec 28;126(51–52):2237–40 (Eng. Abstr.) **(Fre)**

[Laënnec rediscovered] Babitskiĭ EL. **Lik Sprava** 1996 Jul–Sep;(7–9):162–3 **(Rus)**

[Experience in developing devices for medical use exemplified by the electronic stethophonoendoscope] Andreev AA, et al. **Med Tekh** 1996 May–Jun;(3):13–5 (Eng. Abstr.) **(Rus)**

[Comparison of auscultation findings using a classic stethoscope (Litmann 2120) and electronically amplified stethoscope (Medmax2)] Lukin A, et al. **Lijec Vjesn** 1996 May–Jun;118(5–6):127–8 (Eng. Abstr.) **(Scr)**

HISTORY

Asthma among the famous. René Theophile–Hyacinthe Laënnec (1781–1826), French physician. Cohen SG. **Allergy Asthma Proc** 1996 Sep–Oct;17(5):306–9

René Laennec and the introduction of the stethoscope. Kerridge IH. **Aust N Z J Med** 1996 Jun;26(3):407–10

René Théophile–Hyacinthe Laennec (1781–1826) Davies MK, et al. **Heart** 1996 Sep;76(3):196

Some "also rans' in the evolution of the modern stethoscope [see comments] Woo Y, et al. **J Fam Pract** 1996 Sep; 43(3):218–20. Comment in: J Fam Pract 1997 Feb;44(2):214.

The invention of the stethoscope. Tierney J. **Med Health R I** 1997 Jan;80(1):45

[Stethoscope: an Egyptian mystery (letter)] Furukawa A. **J Cardiol** 1996 Dec;28(6):359–60 **(Jpn)**

STEVENS–JOHNSON SYNDROME

CHEMICALLY INDUCED

Vancomycin–induced Stevens–Johnson syndrome. Alexander II, et al. **Allergy Asthma Proc** 1996 Mar–Apr; 17(2):75–8

Stevens–Johnson syndrome associated with carvedilol therapy. Kowalski BJ, et al. **Am J Cardiol** 1997 Sep 1; 80(5):669–70

Stevens–Johnson syndrome induced by methazolamide treatment. Shirato S, et al. **Arch Ophthalmol** 1997 Apr; 115(4):550–3

Stevens–Johnson syndrome induced by cyclophosphamide: report of two cases [letter] Assier–Bonnet H, et al. **Br J Dermatol** 1996 Nov;135(5):864–6

Patch testing in severe cutaneous adverse drug reactions, including Stevens–Johnson syndrome and toxic epidermal necrolysis. Wolkenstein P, et al. **Contact Dermatitis** 1996 Oct;35(4):234–6

Lamotrigine–induced Stevens–Johnson syndrome: demonstration of specific lymphocyte reactivity in vitro. Sachs B, et al. **Dermatology** 1997;195(1):60–4

Stevens–Johnson syndrome associated with topical nitrogen mustard therapy. Newman JM, et al. **J Am Acad Dermatol** 1997 Jan;36(1):112–4

Lamotrigine and toxic epidermal necrolysis [letter; comment] Sachs B, et al. **Lancet** 1996 Dec 7;348(9041):1597. Comment on: Lancet 1996 Oct 12;348(9033):1041.

Stevens–Johnson syndrome associated with methazolamide treatment reported in two Japanese–American women. Flach AJ, et al. **Ophthalmology** 1995 Nov;102(11):1677–80

Severe drug–induced blistering disorders. Roujeau JC. **Rev Rhum Engl Ed** 1997 Jan;64(1):5–9 (41 ref.)

[Stevens–Johnson syndrome caused by doxycycline (letter)] Gallais V, et al. **Presse Med** 1997 May 31;26(18):855 **(Fre)**

[Management of cutaneous risk in pharmacovigilance: metabolic predisposition to Stevens–Johnson syndromes and toxic epidermal necrolysis] Wolkenstein P. **Therapie** 1996 Sep–Oct;51(5):500–1 **(Fre)**

COMPLICATIONS

Stevens–Johnson syndrome, epidermolysis bullosa, staphylococcal scalded skin syndrome, and dermatitis herpetiformis. Hochman MA, et al. **Int Ophthalmol Clin** 1997 Spring;37(2):77–92 (87 ref.)

Eruptive melanocytic nevi after Stevens–Johnson syndrome. Shoji T, et al. **J Am Acad Dermatol** 1997 Aug;37(2 Pt 2):337–9 (14 ref.)

Mycoplasma pneumoniae infection is associated with Stevens–Johnson syndrome, not erythema multiforme (von Hebra). Tay YK, et al. **J Am Acad Dermatol** 1996 Nov; 35(5 Pt 1):757–60 (48 ref.)

Analysis of the acute ophthalmic manifestations of the erythema multiforme/Stevens–Johnson syndrome/toxic epidermal necrolysis disease spectrum. Power WJ, et al. **Ophthalmology** 1995 Nov;102(11):1669–76

Stevens–Johnson syndrome and respiratory failure in a 9–year–old boy. Schamberger MS, et al. **South Med J** 1997 Jul;90(7):755–7

DIAGNOSIS

Toxic epidermal necrolysis: a review and report of the successful use of biobrane for early wound coverage [letter; comment] Al–Qattan MM. **Ann Plast Surg** 1996 Feb; 36(2):224. Comment on: Ann Plast Surg 1995 Aug;35(2):124–32.

Patch testing in severe cutaneous adverse drug reactions, including Stevens–Johnson syndrome and toxic epidermal necrolysis. Wolkenstein P, et al. **Contact Dermatitis** 1996 Oct;35(4):234–6

Advances in toxic epidermal necrolysis. Revuz JE, et al. **Semin Cutan Med Surg** 1996 Dec;15(4):258–66 (63 ref.)

[Toxic epidermal necrolysis (syndrome Lyell) versus Stevens–Johnson syndrome] Jezierska–Krupa B, et al. **Pediatr Pol** 1996 Jul;71(7):615–20 (15 ref.) (Eng. Abstr.) **(Pol)**

[Stevens–Johnson syndrome and fixed drug eruption (letter; comment)] Labandeira García J. **An Med Interna** 1995 Nov; 12(11):569. Comment on: An Med Interna 1994 Jun;11(6):311–2. **(Spa)**

[The Stevens–Johnson syndrome and Lyme disease (letter)] Vegazo García O, et al. **An Med Interna** 1997 Apr; 14(4):212–3 **(Spa)**

DRUG THERAPY

Outpatient management of Stevens–Johnson syndrome: a report of four cases and management strategy. Noskin GA, et al. **Allergy Asthma Proc** 1997 Jan–Feb;18(1):29–32

Reversal of erythema multiforme major with cyclophosphamide and prednisone. Eastham JH, et al. **Ann Pharmacother** 1996 Jun;30(6):606–7

Corticosteroid treatment of erythema multiforme major (Stevens–Johnson syndrome) in children. Kakourou T, et al. **Eur J Pediatr** 1997 Feb;156(2):90–3

EPIDEMIOLOGY

Epidemiology of drug-induced severe skin reactions. Mockenhaupt M, et al. **Semin Cutan Med Surg** 1996 Dec; 15(4):236-43 (35 ref.)

ETIOLOGY

Recurrent Stevens-Johnson syndrome secondary to herpes simplex: a follow up on a successful management program. Cheriyan S, et al. **Allergy Asthma Proc** 1996 Mar-Apr; 17(2):71-3

GENETICS

HLA typing in patients with ocular manifestations of Stevens-Johnson syndrome. Power WJ, et al. **Ophthalmology** 1996 Sep;103(9):1406-9

PATHOLOGY

The dermal type of erythema multiforme: a rare variant of Stevens-Johnson syndrome or cases of clinical misclassification? Hering O, et al. **Acta Derm Venereol** 1997 May;77(3):217-8

Epidermal apoptotic cell death in erythema multiforme and Stevens-Johnson syndrome. Contribution of perforin-positive cell infiltration. Inachi S, et al. **Arch Dermatol** 1997 Jul;133(7):845-9

SURGERY

Surgical reconstruction of the ocular surface in advanced ocular cicatricial pemphigoid and Stevens-Johnson syndrome [letter; comment] Bartley GB. **Am J Ophthalmol** 1996 Nov;122(5):752-3. Comment on: Am J Ophthalmol 1996 Jul;122(1):38-52.

Surgical reconstruction of the ocular surface in advanced ocular cicatricial pemphigoid and Stevens-Johnson syndrome [letter; comment] Rosenthal P, et al. **Am J Ophthalmol** 1996 Dec;122(6):914-5. Comment on: Am J Ophthalmol 1996 Jul;122(1):38-52.

STICKLEBACKS see **FISHES**

STIFF-MAN SYNDROME

Stiff-man syndrome associated with antecedent myasthenia gravis and organ-specific autoimmunopathy. Aso Y, et al. **Intern Med** 1997 Apr;36(4):308-11

DIAGNOSIS

Total alopecia, diabetes mellitus, and falls. Mueller-Schoop JW, et al. **Lancet** 1996 Nov 23;348(9039):1420

Subacute encephalomyelitis presenting as stiff-person syndrome: clinical, polygraphic, and pathologic correlations. Armon C, et al. **Mov Disord** 1996 Nov; 11(6):701-9

[Possible diagnostic error of "Bechterew disease"] Uitz E, et al. **Wien Med Wochenschr** 1996;146(17):468-71 (Eng. Abstr.) **(Ger)**

[Stiff-man syndrome. Presentation of a new case] Fernández-Barreiro A, et al. **Rev Neurol** 1997 Jul; 25(143):1084-7 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Improvement of stiff-man syndrome with vigabatrin. Prevett MC, et al. **Neurology** 1997 Apr;48(4):1133-4

ETIOLOGY

Stiff-persons' syndrome associated with thymoma and subsequent myasthenia gravis. Nicholas AP, et al. **Muscle Nerve** 1997 Apr;20(4):493-8 (49 ref.)

IMMUNOLOGY

Murine monoclonal glutamic acid decarboxylase (GAD)65 antibodies recognize autoimmune-associated GAD epitope regions targeted in patients with type 1 diabetes mellitus and stiff-man syndrome. Ziegler B, et al. **Acta Diabetol** 1996 Sep;33(3):225-31

Stiff-man syndrome: possible autoimmune etiology targeted against GABA-ergic cells. Warich-Kirches M, et al. **Clin Neuropathol** 1997 Jul-Aug;16(4):214-9

Antibodies to 125I-glutamic acid decarboxylase in patients with stiff man syndrome. Vincent A, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):395-7

Anti-gabaergic neuron autoantibodies in a patient with stiff-man syndrome and ataxia. Giometto B, et al. **J Neurol Sci** 1996 Nov;143(1-2):57-9

PHYSIOPATHOLOGY

Gastrointestinal involvement in neurologic disorders: Stiff-man and Charcot-Marie-Tooth syndromes. Soykan I, et al. **Am J Med Sci** 1997 Jan;313(1):70-3

The insulin-dependent diabetes mellitus-associated ICA 105 autoantigen in stiff-man syndrome patients. Martino G, et al. **J Neuroimmunol** 1996 Sep;69(1-2):129-34

Electrophysiological evaluation of the stiff-man syndrome: further data [letter; comment] Martinelli P, et al. **J Neurol** 1996 Jul;243(7):551-3. Comment on: J Neurol 1995 Feb;242(3):134-42.

Stiff-man syndrome: abnormal late responses upon transcranial magnetic stimulation [letter] Schulte-Mattler WJ. **Muscle Nerve** 1996 Jul;19(7):926-7

[Rhythmic circulatory dysregulation in stiff man syndrome] Diedrich U. **Nervenarzt** 1996 Dec;67(12):1027-9 (Eng. Abstr.) **(Ger)**

THERAPY

Successful treatment of stiff man syndrome with intravenous immunoglobulin [letter] Barker RA, et al. **J Neurol Neurosurg Psychiatry** 1997 Apr;62(4):426-7

STIFLE

Unstable stifles without clinical or radiographic osteoarthritis in young goats: an experimental study. Rørvik AM, et al. **Acta Vet Scand** 1996;37(3):265-72

Rotatory intra-articular dislocation of the patella in two dogs. Gee M, et al. **J Am Vet Med Assoc** 1996 Dec 15; 209(12):2082-4

Synovial sarcoma in a ferret. Lloyd MH, et al. **Vet Rec** 1996 Dec 21-28;139(25):627-8

PATHOLOGY

Evaluation of cartilage lesions on the medial femoral condyle as a cause of lameness in horses: 11 cases (1988-1994). Schneider RK, et al. **J Am Vet Med Assoc** 1997 Jun 1; 210(11):1649-52

RADIOGRAPHY

What is your diagnosis? Comminuted fracture of the proximal portion of the tibia extending to the articular surface of the tibia at the femorotibial joint. Lopez MJ, et al. **J Am Vet Med Assoc** 1997 Apr 1;210(7):897-8

SURGERY

Postoperative analgesia for stifle surgery: a comparison of intra-articular bupivacaine, morphine, or saline. Sammarco JL, et al. **Vet Surg** 1996 Jan-Feb;25(1):59-69

[Maintenance of the cranial cruciate ligament rupture in the dog using an intra-articular ("over-the-top") and an extra-articular ("fascia-doubling") method] Timmermann C, et al. **Tierarztl Prax** 1996 Dec;24(6):590-5 (Eng. Abstr.) **(Ger)**

ULTRASONOGRAPHY

[Ultrasonography of the stifle joint in dogs] Engelke A, et al. **Berl Munch Tierarztl Wochenschr** 1997 Jan;110(1):24-9 (Eng. Abstr.) **(Ger)**

[Ultrasonography of the inner stifle joint in dogs with rupture of the cruciate ligaments] Engelke A, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Mar;104(3):114-7 (Eng. Abstr.) **(Ger)**

STIGMATA see **CHRISTIANITY**

STIGMATIZATION see **STEREOTYPING**

STILBENES

Resveratrol: a molecule whose time has come? And gone? Soleas GJ, et al. **Clin Biochem** 1997 Mar;30(2):91-113 (183 ref.)

CHEMICAL SYNTHESIS

Synthesis of biologically active polyphenolic glycosides (combretastatin and resveratrol series). Orsini F, et al. **Carbohydr Res** 1997 Jun 20;301(3-4):95-109

Three-dimensional laser scanning two-photon fluorescence confocal microscopy of polymer materials using a new, efficient upconverting fluorophore. Bhawalkar JD, et al. **Scanning** 1996 Nov;18(8):562-6

CHEMISTRY

Novel fluorescence-photochrome labeling method in the study of biomembrane dynamics. Likhtenshtein GI, et al. **J Biochem Biophys Methods** 1996 Nov 15;33(2):117-33

ISOLATION & PURIFICATION

Antihyperglycemic activity of phenolics from Pterocarpus marsupium. Manickam M, et al. **J Nat Prod** 1997 Jun; 60(6):609-10

METABOLISM

Plant polyketide synthases leading to stilbenoids have a domain catalyzing malonyl-CoA:CO2 exchange, malonyl-CoA decarboxylation, and covalent enzyme modification and a site for chain lengthening. Preisig-Müller R, et al. **Biochemistry** 1997 Jul 8; 36(27):8349-58

Allosteric effects in stilbenedisulfonate binding to band 3 protein (AE1). Salhany JM. **Cell Mol Biol (Noisy-le-grand)** 1996 Nov;42(7):1065-96 (107 ref.)

Effects of external pH on binding of external sulfate, 4,4-dinitro-stilbene-2,2'-disulfonate (DNDS), and chloride to the band 3 anion exchange protein. Liu SQ, et al. **J Gen Physiol** 1996 Feb;107(2):293-306

Interindividual and interspecies variation in hepatic microsomal epoxide hydrolase activity: studies with cis-stilbene oxide, carbamazepine 10, 11-epoxide and naphthalene. Kitteringham NR, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1018-27

PHARMACOKINETICS

Kinetics of trans- and cis-resveratrol (3,4',5-trihydroxystilbene) after red wine oral administration in rats. Bertelli AA, et al. **Int J Clin Pharmacol Res** 1996;16(4-5):77-81

Plasma, urine and tissue levels of trans- and cis-resveratrol (3,4',5-trihydroxystilbene) after short-term or prolonged administration of red wine to rats. Bertelli AA, et al. **Int J Tissue React** 1996;18(2-3):67-71

PHARMACOLOGY

Inhibition of human immunodeficiency virus replication by the sulfonated stilbene dye resobene. Halliday SM, et al. **Antiviral Res** 1996 Dec;33(1):41-53

Resveratrol inhibits metal ion-dependent and independent peroxidation of porcine low-density lipoproteins. Belguendouz L, et al. **Biochem Pharmacol** 1997 May 9; 53(9):1347-55

Combretastatin A-4, an agent that displays potent and selective toxicity toward tumor vasculature. Dark GG, et al. **Cancer Res** 1997 May 15;57(10):1829-34

Antioxidant activity of the stilbene astringin, newly extracted from Vitis vinifera cell cultures [letter] Mérillon JM, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):1092-3

Antiplatelet activity of cis-resveratrol. Bertelli AA, et al. **Drugs Exp Clin Res** 1996;22(2):61-3

Dissection of the molecular mechanism of action of GW5638, a novel estrogen receptor ligand, provides insights into the role of estrogen receptor in bone. Willson TM, et al. **Endocrinology** 1997 Sep;138(9):3901-11

Vasorelaxing activity of resveratrol and quercetin in isolated rat aorta. Chen CK, et al. **Gen Pharmacol** 1996 Mar; 27(2):363-6

Antitumor activity of combretastatin-A4 phosphate, a natural product tubulin inhibitor. Dorr RT, et al. **Invest New Drugs** 1996;14(2):131-7

Induction of hepatic heme oxygenase and changes in cytochrome P-450s in response to oxidative stress produced by stilbenes and stilbene oxides in rats. Oguro T, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1455-62

Disulphonic stilbene block of cystic fibrosis transmembrane conductance regulator Cl- channels expressed in a mammalian cell line and its regulation by a critical pore residue. Linsdell P, et al. **J Physiol (Lond)** 1996 Nov 1;496 (Pt 3):687-93

The dual role of 2-acetylaminofluorene in hepatocarcinogenesis: specific targets for initiation and promotion. Neumann HG, et al. **Mutat Res** 1997 May 12; 376(1-2):169-76

Antimutagenic effect of resveratrol against Trp-P-1. Uenobe F, et al. **Mutat Res** 1997 Feb 3;373(2):197-200

Amelioration of oxidative stress by antioxidants and resveratrol in PC12 cells. Chanvitayapongs S, et al. **Neuroreport** 1997 Apr 14;8(6):1499-502

Cancer chemopreventive activity of resveratrol, a natural product derived from grapes. Jang M, et al. **Science** 1997 Jan 10;275(5297):218-20

Red wine, aspirin and platelet function [letter] Rotondo S, et al. **Thromb Haemost** 1996 Nov;76(5):818-9

THERAPEUTIC USE

[The virtues of grapes] Bonard EC. **Rev Med Suisse Romande** 1997 Apr;117(4):357-8 **(Fre)**

TOXICITY

Genotoxic and chronic toxic effects in the carcinogenicity of aromatic amines. Bitsch A, et al. **Recent Results Cancer Res** 1997;143:209-23

STILBESTROL see **DIETHYLSTILBESTROL**

STILLBIRTH see **FETAL DEATH**

STILL'S DISEASE, ADULT-ONSET

Risk factors for adult Still's disease. Sampalis JS, et al. **J Rheumatol** 1996 Dec;23(12):2049-54

What is and what isn't adult-onset Still's disease? [editorial] Chouc PY, et al. **Rev Rhum Engl Ed** 1996 Jun;63(6):385-7

[Still's disease] Amano M, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(15):165-7 (21 ref.) **(Jpn)**

BLOOD

Very high serum ferritin levels in adult-onset Still's disease [letter] Akritidis N, et al. **Br J Rheumatol** 1997 May; 36(5):608-9

Interleukin 6: a possible marker of disease activity in adult onset Still's disease. Scheinberg MA, et al. **Clin Exp Rheumatol** 1996 Nov-Dec;14(6):653-5

COMPLICATIONS

Inappropriate secretion of antidiuretic hormone (SIADH) in a patient with pleurisy related to adult onset Still's disease. Honjoh H, et al. **Clin Nephrol** 1995 Dec;44(6):400-1

Cerebral haemorrhage complicating adult-onset Still's

disease: a case report. Kurabayashi H, et al. **J Int Med Res** 1996 Nov-Dec;24(6):492-4
Thrombotic thrombocytopenic purpura in adult Still's disease. Boki KA, et al. **J Rheumatol** 1996 Feb;23(2):385-7
Adult onset Still's disease associated hemophagocytosis. Kumakura S, et al. **J Rheumatol** 1997 Aug;24(8):1645-8
Thrombotic thrombocytopenic purpura and acute renal failure in adult Still's disease. Portolés J, et al. **Nephrol Dial Transplant** 1997 Jul;12(7):1471-3
Vascular renal AA amyloidosis in adult Still's disease. Rivera F, et al. **Nephrol Dial Transplant** 1997 Aug;12(8):1714-6
Adult onset Still's disease and Kikuchi's disease. A new case [letter] Garazzi S, et al. **Rev Rhum Engl Ed** 1997 May; 64(5):352-3
Adult Still's disease: part I. Manifestations and complications in sixty-five cases in France. Masson C, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):748-57 (104 ref.)
[Adult-onset Still disease associated with acute parvovirus B19 infection in pregnancy (letter)] Blidi M, et al. **Ann Med Interne (Paris)** 1996;147(7):518-9 **(Fre)**
[Still disease in adults revealed by a digestive manifestation] Dominguez S, et al. **Gastroenterol Clin Biol** 1995 Dec; 19(12):1059-61 (Eng. Abstr.) **(Fre)**
[Bilateral perception deafness in adult onset Still disease (letter)] Zenone T, et al. **Presse Med** 1996 Sep 14; 25(26):1213 **(Fre)**
[Hepatic involvement and hemolytic anemia disclosing adult onset Still disease (letter)] Dohin-Caplanne S, et al. **Rev Med Interne** 1997;18(4):339-40 **(Fre)**
[Severe pulmonary manifestation in adult-onset Still's disease] Paccalin M, et al. **Rev Med Interne** 1997 Jul; 18(7):575-7 (12 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

A case of adult onset Still's disease presenting with fever and a rash. Tay YK, et al. **Ann Acad Med Singapore** 1996 Mar;25(2):296-9
Grand round--University Hospital of Wales, Cardiff. Pyrexia of unknown origin [clinical conference] Evans RH. **BMJ** 1997 Feb 22;314(7080):583-6
Comparative study of 6 types of criteria in adult Still's disease. Masson C, et al. **J Rheumatol** 1996 Mar;23(3):495-7 (15 ref.)
Severe sore throat as a presenting symptom of adult onset Still's disease: a case series and review of the literature. Nguyen KH, et al. **J Rheumatol** 1997 Mar;24(3):592-7 (63 ref.)
[Still disease in the elderly (letter)] Bonnet F, et al. **Rev Med Interne** 1997;18(2):170-1 (13 ref.) **(Fre)**
[Pseudo-Still disease and deep neoplasm] Routier G, et al. **Rev Med Interne** 1997;18(1):47-9 (4 ref.) (Eng. Abstr.) **(Fre)**
[Hyperferritinemia in Still syndrome in the adult and reactive hemophagocytic syndrome] Zollner RC, et al. **Med Klin** 1997 Aug 15;92(8):494-8 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Methotrexate treatment in patients with adult onset Still's disease--retrospective study of 13 Japanese cases. Fujii T, et al. **Ann Rheum Dis** 1997 Feb;56(2):144-8
Cyclosporin A in the treatment of adult onset Still's disease. Marchesoni A, et al. **J Rheumatol** 1997 Aug;24(8):1582-7
Adult Still's disease. Part II. Management, outcome, and prognostic factors. Masson C, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):758-65 (56 ref.)
[A refractory case of adult-onset Still's disease] Nishio J, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1997 Jun; 20(3):191-8 (28 ref.) (Eng. Abstr.) **(Jpn)**
[A case report of pregnancy complicated with adult Still's disease] Yunohara N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Jun;48(6):431-4 (15 ref.) **(Jpn)**

ETIOLOGY

Still's disease in a patient infected with human immunodeficiency virus type I. Antinori S, et al. **Clin Exp Rheumatol** 1995 Nov-Dec;13(6):759-61
Adult Still's disease. Still many issues unresolved [editorial] Kahn MF. **J Rheumatol** 1996 Dec;23(12):2015-6

IMMUNOLOGY

TCR gamma delta + T cells in peripheral blood of patients with adult Still's disease. Hoshino T, et al. **J Rheumatol** 1996 Jan;23(1):124-9

PATHOLOGY

Adult Still's disease manifesting as erythema nodosum [letter] Torinuki W, et al. **J Dermatol** 1996 Mar;23(3):216-7
Ferritin levels and response to treatment in patients with Adult Still's disease [letter] Akritidis N, et al. **J Rheumatol** 1996 Jan;23(1):201-2

PHYSIOPATHOLOGY

Adult Still's disease with myocardial dysfunction induced by microangiopathy. Ueda T, et al. **Jpn Circ J** 1997 Jan; 61(1):74-7
Adult Still's disease: part I. Manifestations and complications in sixty-five cases in France. Masson C, et al. **Rev Rhum Engl Ed** 1995 Dec;62(11):748-57 (104 ref.)

STILL'S DISEASE, JUVENILE-ONSET see **ARTHRITIS, JUVENILE RHEUMATOID**

STIMULATION, ACOUSTIC see **ACOUSTIC STIMULATION**

STIMULATION, AUDITORY see **ACOUSTIC STIMULATION**

STIMULATION, CHEMICAL

see related
ENZYME INDUCTION

Functional evaluation of patients with coronary artery disease: selection of appropriate pharmacologic agents and imaging modalities. Bonow RO. **Eur Heart J** 1995 Nov; 16 Suppl M:11-6 (84 ref.)
Pharmacological agents for stress testing in the diagnosis of coronary artery disease. Iliceto S. **Eur Heart J** 1995 Nov; 16 Suppl M:1-2
Pharmacological stress testing and imaging: concluding remarks. Piérard LA. **Eur Heart J** 1995 Nov;16 Suppl M:28-31 (31 ref.)
Single taste stimuli elicit either increases or decreases in intracellular calcium in isolated catfish taste cells. Zviman MM, et al. **J Membr Biol** 1996 Jan;149(2):81-8

STIMULATION, ELECTRIC see **ELECTRIC STIMULATION**

STIMULATION, PHOTIC see **PHOTIC STIMULATION**

STIMULATION, PHYSICAL see **PHYSICAL STIMULATION**

STINGS see **BITES AND STINGS**

STIPPLED EPIPHYSES see **CHONDRODYSPLASIA PUNCTATA**

STLV

Occurrence and frequency of transmission of naturally occurring simian retroviral infections (SIV, STLV, and SRV) at the CIRMF Primate Center, Gabon. Georges-Courbot MC, et al. **J Med Primatol** 1996 Oct; 25(5):313-26
Simian T-lymphotropic virus type 1 (STLV-1) infection in wild yellow baboons (Papio hamadryas cynocephalus) from Mikumi National Park, Tanzania. Voevodin A, et al. **Virology** 1997 Feb 17;228(2):350-9

CLASSIFICATION

The simian T-lymphotropic/leukemia virus from Pan paniscus belongs to the type 2 family and infects Asian macaques. Digilio L, et al. **J Virol** 1997 May;71(5):3684-92
Molecular characterization and phylogenetic analyses of a new, highly divergent simian T-cell lymphotropic virus type 1 (STLV-1marc1) in Macaca arctoides. Mahieux R, et al. **J Virol** 1997 Aug;71(8):6253-8
Phylogenetic relationships of HTLV-I/STLV-I in the world. Yamashita M, et al. **Leukemia** 1997 Apr;11 Suppl 3:50-1

GENETICS

Simian T cell leukemia virus type I from naturally infected feral monkeys from central and west Africa encodes a 91-amino acid p12 (ORF-I) protein as opposed to a 99-amino acid protein encoded by HTLV type I from humans. Saksena NK, et al. **AIDS Res Hum Retroviruses** 1997 Mar 20;13(5):425-32
Phylogenetic characterization of simian T lymphotropic virus type I (STLV-I) from the Ethiopian sacred baboon (Papio hamadryas). Voevodin A, et al. **AIDS Res Hum Retroviruses** 1996 Feb 10;12(3):255-8
Genetic variability and molecular epidemiology of human and simian T cell leukemia/lymphoma virus type I. Gessain A, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996;13 Suppl 1:S132-45 (106 ref.)
Use of a generic polymerase chain reaction assay detecting human T-lymphotropic virus (HTLV) types I, II and divergent simian strains in the evaluation of individuals with indeterminate HTLV serology. Vandamme AM, et al. **J Med Virol** 1997 May;52(1):1-7
Complete nucleotide sequence of the new simian T-lymphotropic virus, STLV-PH969 from a Hamadryas baboon, and unusual features of its long terminal repeat. Van Brüssel M, et al. **J Virol** 1997 Jul;71(7):5464-72
The tax gene sequences form two divergent monophyletic lineages corresponding to types I and II of simian and human T-cell leukemia/lymphotropic viruses. Giri A, et al. **Virology** 1997 Apr 28;231(1):96-104
Characterization of a novel baboon virus closely resembling human T-cell leukemia virus. Vincent MJ, et al. **Virology** 1996 Dec 1;226(1):57-65
[Comparative analysis of the sequenced fragment of the Macaca arctoides STLV-1 env gene encoding the immunodominant region gp46 and the similar fragments in HTLV-1 (ATK) and STLV-1 from various primate species] Chikobava MG, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):92-6 **(Rus)**

IMMUNOLOGY

Prevalence of antibodies against simian immunodeficiency virus (SIV) and simian T-lymphotropic virus (STLV) in a colony of non-human primates in Kenya, East Africa. Otsyula M, et al. **Ann Trop Med Parasitol** 1996 Feb; 90(1):65-70

ISOLATION & PURIFICATION

Isolation of STLV-I from orangutan, a great ape species in Southeast Asia, and its relation to other HTLV-Is/STLV-Is. Ibuki K, et al. **Jpn J Cancer Res** 1997 Jan;88(1):1-4
Isolation of sooty mangabey simian T-cell leukemia virus type I [STLV-I(sm)] and characterization of a mangabey T-cell line coinfected with STLV-I(sm) and simian immunodeficiency virus SIVsmmPBj14. Fultz PN, et al. **Virology** 1997 Sep 1;235(2):271-85

PHYSIOLOGY

Constitutive cytokine release by simian T-cell lymphotrophic virus type I (STLV-I) and human T-cell lymphotrophic virus types I/II (HTLV-I/II) transformed cell lines. Lazo A, et al. **J Med Primatol** 1996 Aug;25(4):257-66
[Morpho-immunologic phenotypes of T-cell non-Hodgkin's malignant lymphoma in baboons and their connection with with T-lymphotropic retrovirus STLV-1] Iakovleva LA, et al. **Arkh Patol** 1997 Jan-Feb;59(1):19-25 (Eng. Abstr.) **(Rus)**

STLV-I see **STLV**

STLV-III see **SIV**

STOCHASTIC PROCESSES

Stochastic model of admixed basal and pulsatile hormone secretion as modulated by a deterministic oscillator. Keenan DM, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1182-92
Didactic discussion of stochastic resonance effects and weak signals. Adair RK. **Bioelectromagnetics** 1996;17(3):242-5
A stochastic model for the analysis of bivariate longitudinal AIDS data. Sy JP, et al. **Biometrics** 1997 Jun;53(2):542-55
Stochastic versions of the Hodgkin-Huxley equations. Fox RF. **Biophys J** 1997 May;72(5):2068-74
Adaptation in a stochastic Prisoner's Dilemma with delayed information. Billard EA. **Biosystems** 1996;37(3):211-27
Use of a stochastic simulation model to identify an efficient protocol for ovarian cancer screening. Urban N, et al. **Control Clin Trials** 1997 Jun;18(3):251-70
Confidence intervals for cost-effectiveness ratios: an application of Fieller's theorem. Willan AR, et al. **Health Econ** 1996 Jul-Aug;5(4):297-305
Stochastic behavior of ion channels in varying conditions. Merlushkin A, et al. **IMA J Math Appl Med Biol** 1997 Jun;14(2):125-49
Qualitative modeling of normal blood coagulation and its pathological states using stochastic activity networks. Mounts WM, et al. **Int J Biol Macromol** 1997 Jul; 20(4):265-81
Large-sample analysis for a stochastic epidemic model and its parameter estimators. Fierro R. **J Math Biol** 1996; 34(8):843-56
Stochastic epidemics: the probability of extinction of an infectious disease at the end of a major outbreak. van Herwaarden OA. **J Math Biol** 1997 Aug;35(7):793-813
Tissue distribution kinetics as determinant of transit time dispersion of drugs in organs: application of a stochastic model to the rat hindlimb. Weiss M, et al. **J Pharmacokinet Biopharm** 1996 Apr;24(2):173-96
Convergence of the mean and variance of size for a stochastic population model. Mahdi S. **Math Biosci** 1996 Nov; 138(1):23-9
Stochastic compartment models with Prendville growth rates. Matis JH, et al. **Math Biosci** 1996 Nov;138(1):31-43
Stochastic simulation of a multistage model of carcinogenesis. Sherman CD, et al. **Math Biosci** 1996 May;134(1):35-50
Stochastic resonance at the single-cell level [letter] Astumian RD, et al. **Nature** 1997 Aug 14;388(6643):632-3
Stochastic resonance in non-dynamical systems without response thresholds [see comments] [published erratum appears in Nature 1997 Apr 17;386(6626):738] Bezrukov SM, et al. **Nature** 1997 Jan 23;385(6614):319-21. Comment in: Nature 1997 Jan 23;385(6614):291.
Too quiet to hear a whisper [news; comment] Jung P, et al. **Nature** 1997 Jan 23;385(6614):291. Comment on: Nature 1997 Jan 23;385(6614):319-21.
How dependencies between successive examples affect on-line learning. Wiegerinck W, et al. **Neural Comput** 1996 Nov 15;8(8):1743-65
EEG spike and wave modelled by a stochastic limit cycle. Hernández JL, et al. **Neuroreport** 1996 Sep 2;7(13):2246-50
An application of a marked point process in pre-clinical medicine. Berridge DM. **Stat Med** 1996 Dec 30; 15(24):2751-62
Incorporating variability in estimates of heterogeneity in the random effects model in meta-analysis. Biggerstaff BJ, et al. **Stat Med** 1997 Apr 15;16(7):753-68
A functional decline model for prevalent cohort data. Liu X, et al. **Stat Med** 1996 May 30;15(10):1023-32
Establishment probability in fluctuating environments: a

branching process model. Haccou P, et al. **Theor Popul Biol** 1996 Dec;50(3):254–80
Stability of a perturbed Leslie model. Quinn JP, et al. **Theor Popul Biol** 1997 Feb;51(1):1–8

STOCKINGS, COMPRESSION see **BANDAGES**

STOCKINGS, ELASTIC see **BANDAGES**

STOICISM see **PHILOSOPHY**

STOKES-ADAMS ATTACKS see **ADAMS-STOKES SYNDROME**

STOMACH

consider also terms at GASTR-

see related
FUNDOPLICATION
GASTRECTOMY
GASTROENTEROSTOMY
GASTROPLASTY
GASTROSCOPY
GASTROSTOMY

Trichobezoars as a cause of gastrointestinal obstructions: the Rapunzel syndrome. Seker B, et al. **Acta Gastroenterol Belg** 1996 Apr–Jun;59(2):166–7
Charcoal deposits in the esophageal and gastric mucosa. Lopes de Freitas JM, et al. **Am J Gastroenterol** 1997 Aug; 92(8):1359–60
Gastric foreign body: a potential risk when using transesophageal echo [letter] Brook M, et al. **Anesth Analg** 1997 Jun;84(6):1389
Trichobezoar in a 11-year old girl: a case report. Santiago Sánchez CA, et al. **Bol Asoc Med P R** 1996 Jan–Mar; 88(1–3):8–11
An unusual endoscopic procedure to remove a toothbrush from the stomach. Bastos I, et al. **Endoscopy** 1996 Aug; 28(6):525
Small-bowel obstruction during enzymatic treatment of gastric bezoar. Nomura H, et al. **Endoscopy** 1997 Jun; 29(5):424–6
A simple latex protector hood for safe endoscopic removal of sharp-pointed gastroesophageal foreign bodies. Bertoni G, et al. **Gastrointest Endosc** 1996 Oct;44(4):458–61
Device choice and experience level in endoscopic foreign object retrieval: an in vivo study. Faigel DO, et al. **Gastrointest Endosc** 1997 Jun;45(6):490–2
In vitro effects of simulated gastric juice on swallowed metal objects: implications for practical management. Li PK, et al. **Gastrointest Endosc** 1997 Aug;46(2):152–5
Retrieval of a pin from the stomach by endoscopic aspiration through an inner tube [letter; comment] Pugliese V. **Gastrointest Endosc** 1996 Mar;43(3):261–3. Comment on: Gastrointest Endosc 1995 Jan;41(1):33–8. Comment on: Gastrointest Endosc 1995 Jan;41(1):39–51.
Bezoars and foreign bodies of the stomach. Lee J. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):605–19 (64 ref.)
Endoscopy of the normal stomach. Morales TG. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):477–88
Bezoar manifested with digestive and biliary obstruction. Yin WY, et al. **Hepatogastroenterology** 1997 Jul–Aug; 44(16):1037–45
Prepyloric diaphragm detected following foreign body ingestion. Oak S, et al. **Indian J Gastroenterol** 1996 Jul; 15(3):109–10
Endoscopic retrieval of impacted spigot from gastrostomy tube [letter] Rathi P, et al. **Indian J Gastroenterol** 1997 Jul;16(3):120–1
Gastric serosal patch in distal pancreatectomy for injury: a neglected technique. Kluger Y, et al. **Injury** 1997 Mar; 28(2):127–9
Palliation of esophageal cancer with a self-expanding, silicone-covered stent and a technique for stent retrieval. Nayyar S, et al. **J Assoc Acad Minor Phys** 1996;7(3):78–82
Can a bezoar cause acute pancreatitis? Katapadi M, et al. **J Clin Gastroenterol** 1997 Mar;24(2):120–1 (12 ref.)
Continuous gastric suctioning decreases measured esophageal temperature during general anesthesia. Nelson EJ, et al. **J Clin Monit** 1996 Nov;12(6):429–32
Lead poisoning in a dog. Williams JH, et al. **J S Afr Vet Assoc** 1990 Dec;61(4):178–81
Equine gastric impaction, ulceration, and perforation due to persimmon (Diospyros virginiana) ingestion. Cummings CA, et al. **J Vet Diagn Invest** 1997 Jul;9(3):311–3
Gastric trichobezoar in a banner-tailed kangaroo rat (Dipodomys spectabilis). Suckow MA, et al. **Lab Anim** 1996 Oct;30(4):383–5
High prevalence of gastric trichobezoars (hair balls) in Wistar-Kyoto rats fed a semi-purified diet. Krugner-Higby L, et al. **Lab Anim Sci** 1996 Dec;46(6):635–9
A gastric "bee-zoar" [letter] [see comments] Lynch JP, et al. **N Engl J Med** 1997 Jun 12;336(24):1763–4. Comment in: N Engl J Med 1997 Aug 21;337(8):575; discussion 576.
A gastroesophageal electrode for atrial and ventricular pacing. McEneaney DJ, et al. **Pacing Clin Electrophysiol** 1997 Jul;20(7):1815–25
Gastric lactobezoar: a rare cause of gastric outlet obstruction. Bakken DA, et al. **Pediatr Emerg Care** 1997 Aug; 13(4):264–7
A case of plastikophagia. Battin M, et al. **Postgrad Med J** 1997 Apr;73(858):243–4
An unusual late complication of gastric surgery. Calder F, et al. **Postgrad Med J** 1997 Jun;73(860):363–4
[Use of serous-muscle-submucosal gastric flap for plastic repair of duodenal wounds] Val'ter VG, et al. **Khirurgiia (Mosk)** 1997;(1):29–31 (Eng. Abstr.) **(Rus)**
[Alcohol and stomach] Makolkin VI, et al. **Klin Med (Mosk)** 1997;75(4):14–8 (39 ref.) **(Rus)**
[A foreign body of the esophagus and stomach in a child] Sabirova MM, et al. **Vestn Khir Im I I Grek** 1996;155(2):70 **(Rus)**
[Recurrent ingestion of foreign bodies. Unusual presentation of Munchausen by Proxy syndrome] Gómez De Terreros I, et al. **Child Abuse Negl** 1996 Jul;20(7):613–20 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Double common bile duct with ectopic drainage of the left lobe into the stomach. Case report and review of the literature. Horsmans Y, et al. **Acta Gastroenterol Belg** 1996 Oct–Dec;59(4):256–7 (20 ref.)
Radiological case of the month. Congenital microgastria. Trager JD, et al. **Arch Pediatr Adolesc Med** 1996 Nov; 150(11):1213–4
Gastric duplication cyst. Scintigraphy and correlative imaging. Dittrich JR, et al. **Clin Nucl Med** 1997 Feb; 22(2):93–6
Congenital microgastria, growth hormone deficiency and diabetes insipidus. Hernáiz Driever P, et al. **Eur J Pediatr** 1997 Jan;156(1):37–40
Uncommon complication of gastric duplication in a three-year-old child. Steyaert H, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):243–4
Endoscopic ultrasonographic characteristics of a gastric tubular duplication. Wang KL, et al. **Gastrointest Endosc** 1997 Jul;46(1):76–9
Congenital microgastria. Sarin YK, et al. **Indian Pediatr** 1997 Feb;34(2):157–8
Gastric outlet obstruction caused by prepyloric web in a case of Down's syndrome. Benjamin B, et al. **J Pediatr Surg** 1996 Sep;31(9):1290–1
Continuous communicating esophageal and gastric duplication. Mazziotti MV, et al. **J Pediatr Surg** 1997 May; 32(5):775–8 (24 ref.)
Pancreatitis caused by a gastric duplication communicating with an aberrant pancreatic lobe. Moss RL, et al. **J Pediatr Surg** 1996 May;31(5):733–6 (14 ref.)
Microgastria as an isolated anomaly. Ramos CT, et al. **J Pediatr Surg** 1996 Oct;31(10):1445–7 (24 ref.)
Prenatal diagnosis of gastric duplication cyst. Ozmen MN, et al. **J Ultrasound Med** 1997 Mar;16(3):219–22
Bronchopulmonary foregut malformation mimicking neuroblastoma. Fenton LZ, et al. **Pediatr Radiol** 1996 Oct; 26(10):729–30
[A case of cystic duplication of the stomach] Seumel-Janecka B, et al. **Wien Klin Wochenschr** 1996;108(4):117–9 (Eng. Abstr.) **(Ger)**
[Gastric duplication cyst in an adult] Estlein D, et al. **Harefuah** 1997 May 1;132(9):634–5, 679 (Eng. Abstr.) **(Heb)**

ANATOMY & HISTOLOGY

Sonographic observations of the gastroduodenal junction of dogs. Agut A, et al. **Am J Vet Res** 1996 Sep;57(9):1266–73
Development and evaluation of an endoscopic technique permitting rapid visualization of the cardiac region of the porcine stomach. Mackin AJ, et al. **Can J Vet Res** 1997 Apr;61(2):121–7
Visceral organ mass and cellularity in growth-restricted and refed beef steers. Sainz RD, et al. **J Anim Sci** 1997 May; 75(5):1229–36
In vivo animal tests of an artifact-free contrast agent for gastrointestinal MRI. Briggs RW, et al. **Magn Reson Imaging** 1997;15(5):559–66
Enzyme-histochemical study on postnatal development of rat stomach lymphatic vessels. Ji RC, et al. **Microvasc Res** 1997 Jul;54(1):1–12
[Adopted children and big stomachs (letter; comment)] Olsen H. **Tidsskr Nor Laegeforen** 1997 Feb 10;117(4):559–60. Comment on: Tidsskr Nor Laegeforen 1997 Jan 10;117(1):83. **(Nor)**
[Adopted African children have large stomachs (see comments)] Spurkland A, et al. **Tidsskr Nor Laegeforen** 1997 Jan 10;117(1):83. Comment in: Tidsskr Nor Laegeforen 1997 Feb 10;117(4):559–60. **(Nor)**
[Aging-related changes in the intraorganic lymphatic bed of the human stomach] Balashev VN. **Arkh Anat Gistol Embriol** 1968 Nov;55(11):11–6 (Eng. Abstr.) **(Rus)**
[Morphology of stomach endocrine glands of the porcupine] Vinogradova MS, et al. **Biull Eksp Biol Med** 1997 Feb; 123(2):228–32 **(Rus)**
[The structure and histotopography of the gastroenteropancreatic endocrine system in teleost fish] Shirkina NI. **Morfologiia** 1995;108(3):78–83 (66 ref.) **(Rus)**

BLOOD SUPPLY

Aberrant gastric venous drainage into the medial segment: demonstration by color Doppler sonography. Gabata T, et al. **Abdom Imaging** 1997 Sep–Oct;22(5):502–5
Large extrahepatic portosystemic shunt without portal hypertension. Konno K, et al. **Abdom Imaging** 1997 Jan–Feb;22(1):79–81
Effects of hemodilution on gastric regional perfusion and intramucosal pH. Kleen M, et al. **Am J Physiol** 1996 Nov; 271(5 Pt 2):H1849–55
Adenosine A2-receptor mediates ethanol-induced arteriolar dilation in rat stomach. Nagata H, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1028–33
Impairment of the gastric hyperemic response to luminal acid in cirrhotic rats. Nishizaki Y, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G71–8
Nitric oxide attenuates endothelin-1-induced vasoconstriction in canine stomach. Wood JG, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G27–35
Venous drainage of the stomach in the laboratory mouse (Mus musculus v. alba) and the laboratory rat (Rattus norvegicus v. alba). Malinovsky L, et al. **Anat Anz** 1997 Jun;179(3):265–8
Effects of PACAP-VIP hybrid peptides on gastric blood flow in conscious dogs. Naruse S, et al. **Ann N Y Acad Sci** 1996 Dec 26;805:511–5
Flow competition of the right gastroepiploic artery graft in coronary revascularization. Uchida N, et al. **Ann Thorac Surg** 1996 Nov;62(5):1342–6
Low-grade intimal hyperplasia in internal mammary and right gastroepiploic arteries as bypass grafts. van Son JA, et al. **Ann Thorac Surg** 1997 Mar;63(3):706–8
Morphometric study of the right gastroepiploic and inferior epigastric arteries. van Son JA, et al. **Ann Thorac Surg** 1997 Mar;63(3):709–15
Tachykinin inhibition of acid-induced gastric hyperaemia in the rat. Heinemann A, et al. **Br J Pharmacol** 1996 Dec; 119(8):1525–32
Pseudoaneurysm of the gastroduodenal artery: an unusual cause of painless jaundice. Hilborn MD, et al. **Can Assoc Radiol J** 1996 Dec;47(6):413–6
Role of right gastroepiploic artery in myocardial revascularization with arterial grafts. Antona C, et al. **Cardiovasc Surg** 1996 Apr;4(2):217–21
Focal gastric blood perfusion in relation with the endoscopic signs and liver function in cirrhotic patients. Taranto D, et al. **Digestion** 1997;58(1):58–63
Ischemic conditioning of the stomach may reduce the incidence of esophagogastric anastomotic leaks complicating esophagectomy: a hypothesis. Urschel JD. **Dis Esophagus** 1997 Jul;10(3):217–9 (23 ref.)
Effect of capsaicin and resiniferatoxin on gastrointestinal blood flow in rats. Abdel Salam OM, et al. **Eur J Pharmacol** 1996 Jun 3;305(1–3):127–36
The posterior gastric and superior polar arteries in human fetuses. Pityński K, et al. **Folia Morphol (Warsz)** 1996; 55(1):43–9
Hereditary hemorrhagic telangiectasia and other intestinal vascular anomalies. Korzenik JR. **Gastroenterologist** 1996 Sep;4(3):203–10 (75 ref.)
Blood in the gastric lumen increases splanchnic blood flow and portal pressure in portal-hypertensive rats. Chen L, et al. **Gastroenterology** 1996 Oct;111(4):1103–10
Age-related changes in gastric blood flow in rats. Lee M. **Gerontology** 1996;42(5):289–93
Endosonographic evaluation of the venous anatomy around the gastro-esophageal junction in patients with portal hypertension. Choudhuri G, et al. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1250–5
Management of a rare case of arteriovenous malformation of the head of the pancreas. Shahrudin MD, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):284–7
Laparoscopic ligation of hypogastric arteries using the Hulka clip to arrest massive vaginal bleeding due to stage IIb cervical carcinoma. Gassibe EF, et al. **J Am Assoc Gynecol Laparosc** 1997 Feb;4(2):259–61
Pseudoaneurysm of the gastrointestinal artery. Maes RM, et al. **J Belge Radiol** 1996 Dec;79(6):273
Differences in IgM synthesis to gut bacterial peptidoglycan polysaccharide after burn injury and gut ischemia. Tabata T, et al. **J Burn Care Rehabil** 1996 May–Jun;17(3):231–6
An aneurysm of the right gastroepiploic artery. Funahashi S, et al. **J Cardiovasc Surg (Torino)** 1997 Aug;38(4):385–8 (11 ref.)
Impaired response of gastric vessels to prostaglandin E2 in rats with persistent obstructive jaundice. Nagahata Y, et al. **J Gastroenterol** 1997 Aug;32(4):521–7
Differences in action of topical and systemic cysteamine on gastric blood flow, gastric acid secretion and gastric ulceration in the rat. Abdel-Salam O, et al. **J Physiol Paris** 1996;90(2):63–73
Use of the gastroepiploic artery for coronary revascularization. Handy JR Jr. **J S C Med Assoc** 1996 Dec;92(12):493–8
Case of the day. Gastrodenal artery pseudoaneurysm complicating pancreatitis. Townsend R, et al. **J Ultrasound Med** 1997 Apr;16(4):303
Pharmacological characterization of a vasopressin V1 receptor in the isolated human gastric artery. Calò G, et al. **Life Sci** 1997;60(4–5):PL63–8
Aberrant gastric venous drainage in a focal spared area of segment IV in fatty liver: demonstration with color Doppler sonography. Gabata T, et al. **Radiology** 1997 May; 203(2):461–3
Case of the season. Sada PN. **Semin Roentgenol** 1996 Jan; 31(1):2–3

Prospective evaluation of dysphagia before and after laparoscopic Nissen fundoplication without routine division of short gastrics. Anvari M, et al. **Surg Laparosc Endosc** 1996 Dec;6(6):424–9

Total arterial myocardial revascularization [editorial] Calafiore AM. **Thorac Cardiovasc Surg** 1997 Jun; 45(3):105–8 (17 ref.)

Modified Sujura operation: long–term results. Battaglia G, et al. **World J Surg** 1996 Mar–Apr;20(3):319–24; discussion 324–5

[Gastric devascularization for acute gastric mucosal lesion and bleeding] Xu R, et al. **Chung Hua Wai Ko Tsa Chih** 1996 Jan;34(1):36–9 (Eng. Abstr.) **(Chi)**

[Gastroduodenal arterial aneurysm and chronic pancreatitis. A case and review of the literature] Benoit L, et al. **Ann Chir** 1996;50(10):918–20 (17 ref.) (Eng. Abstr.) **(Fre)**

[Age–dependent changes in the sub–epithelial blood supply to the bovine rumen] Lotz N, et al. **Anat Anz** 1997 Jun; 179(3):227–36 (Eng. Abstr.) **(Ger)**

[Non–decompression surgery for esophagogastric varices—indication and postoperative result of esophageal transection with paraesophagogastric devascularization and Hassab procedure] Beppu T, et al. **Nippon Geka Gakkai Zasshi** 1996 Jan;97(1):55–63 (Eng. Abstr.) **(Jpn)**

[Hemocoagulation, anticoagulant and fibrinolytic characteristics of human stomach tissue] Golyshenkov SP. **Fiziol Cheloveka** 1996 Jul–Aug;22(4):114–7 **(Rus)**

[A method for correcting gastric hemodynamics in duodenal peptic ulcer] Kozlov VA, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):82 **(Rus)**

CHEMISTRY

Characterization of CCK receptors in stomach smooth muscle: evidence for two subtypes. de Weerth A, et al. **Biochim Biophys Acta** 1997 Jul 25;1327(2):213–21

Indomethacin damage to rat gastric mucosa is markedly dependent on luminal pH. Elliott SL, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):432–4

Occurrence of somatostatin and insulin immunoreactivities in the stomach of sea bass (Dicentrarchus labrax L.): light and electron microscopic studies. Visus IG, et al. **Gen Comp Endocrinol** 1996 Apr;102(1):16–27

Vitamin E concentrations in the human stomach and duodenum—correlation with Helicobacter pylori infection. Phull PS, et al. **Gut** 1996 Jul;39(1):31–5

Expression of type I and IV collagen mRNAs in healing gastric ulcers—a comparative analysis using isotopic and non–radioactive in situ hybridization. Pohle T, et al. **Histochem Cell Biol** 1996 Oct;106(4):413–8

Human gastric intrinsic factor expression is not restricted to parietal cells. Howard TA, et al. **J Anat** 1996 Oct;189 (Pt 2):303–13

Identification of membrane insertion sequences of the rabbit gastric cholecystokinin–A receptor by in vitro translation. Bayle D, et al. **J Biol Chem** 1997 Aug 8;272(32):19697–707

Twenty–four hour ambulatory gastric and duodenal pH profiles in cystic fibrosis: effect of duodenal hyperacidity on pancreatic enzyme function and fat absorption. Barraclough M, et al. **J Pediatr Gastroenterol Nutr** 1996 Jul;23(1):45–50

Aluminum–27 nuclear magnetic resonance spectroscopy and imaging of the human gastric lumen. Kaspar A, et al. **Magn Reson Med** 1996 Aug;36(2):177–82

Characterization of fluids from the stomach and proximal jejunum in men and women. Lindahl A, et al. **Pharm Res** 1997 Apr;14(4):497–502

[High performance liquid chromatography in the analysis of amino acids contents of the stomach and duodenum] Pokrasen NM, et al. **Klin Lab Diagn** 1997 Apr;(4):18–21 (Eng. Abstr.) **(Rus)**

[The analysis of grandaksin in cadaveric material] Bodrina DE, et al. **Sud Med Ekspert** 1996 Oct–Dec;39(4):45–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Physiology of isolated gastric endocrine cells. Sachs G, et al. **Annu Rev Physiol** 1997;59:243–56 (70 ref.)

The G cell. Sawada M, et al. **Annu Rev Physiol** 1997; 59:273–98 (147 ref.)

Time–course of deactivation of rat stomach ECL cells following cholecystokinin B/gastrin receptor blockade. Ding XQ, et al. **Br J Pharmacol** 1997 Sep;122(1):1–6

Ultrastructural identification of the c–kit–expressing interstitial cells in the rat stomach: a comparison of control and Ws/Ws mutant rats. Ishikawa K, et al. **Cell Tissue Res** 1997 Jul;289(1):137–43

Modulation of growth of human gastric enterochromaffin–like cells. Delle Fave G, et al. **Digestion** 1996;57 Suppl 1:15–6 (16 ref.)

The gastric enterochromaffin–like cell: an enigmatic cellular link. Modlin IM, et al. **Gastroenterology** 1996 Sep; 111(3):783–810 (223 ref.)

Cytoskeletal markers allowing discrimination between brush cells and other epithelial cells of the gut including enteroendocrine cells. Höfer D, et al. **Histochem Cell Biol** 1996 May;105(5):405–12

Non–proliferative capacity of endocrine cells of the human gastro–intestinal tract [letter; comment] Waldum HL, et al. **Histochem J** 1996 May;28(5):397–8. Comment on: Histochem J 1995 Jun;27(6):482–6.

Simultaneous recognition of ionocytes and mucous cells in the gill epithelium of turbot and in the rat stomach. Watrin A, et al. **J Exp Zool** 1996 Oct 1;276(2):95–101

The temporal profile of calcium transients in voltage clamped gastric myocytes from Bufo marinus. McGeown JG, et al. **J Physiol (Lond)** 1996 Dec 1;497 (Pt 2):321–36

Somatostatin receptor regulation of gastric enterochromaffin–like cell transformation to gastric carcinoid. Borin JF, et al. **Surgery** 1996 Dec;120(6):1026–32

DRUG EFFECTS

Myoelectric activity in the stomach and duodenum after epidural administration of morphine or bupivacaine. Thörn SE, et al. **Acta Anaesthesiol Scand** 1996 Aug;40(7):773–8

Effect of the kappa agonist fedotozine on perception of gastric distension in healthy humans. Coffin B, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):919–25

Indomethacin–induced morphological changes in the rat gastric mucosa, with or without prior treatment with two proton pump inhibitors. Morini G, et al. **Aliment Pharmacol Ther** 1995 Dec;9(6):615–23

Effects of octreotide, a somatostatin analogue, on gastric function evaluated by real–time ultrasonography. Okamoto E, et al. **Aliment Pharmacol Ther** 1997 Feb;11(1):177–84

The effect of indomethacin–induced gastric mucosal injury on 24–h intragastric acidity and plasma gastrin concentration in healthy volunteers. Rademaker JW, et al. **Aliment Pharmacol Ther** 1995 Dec;9(6):625–31

Nonencapsulated, intact omeprazole granules effectively suppress intragastric acidity when administered via a gastrostomy. Sharma VK, et al. **Am J Gastroenterol** 1997 May;92(5):848–51

Pancreatic spasmolytic polypeptide protects the gastric mucosa but does not inhibit acid secretion or motility. McKenzie C, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G112–7

Effect of cholecystokinin–A receptor blockade on lipid–induced gastric relaxation in humans. Mesquita MA, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):G118–23

Effect of omeprazole on sodium and potassium output in pentagastrin–stimulated equine gastric contents. Merritt AM, et al. **Am J Vet Res** 1996 Nov;57(11):1640–4

An immuno– and enzyme cytochemical study of the H(+)–K+ ATPase in human parietal cells after administration of tetragastrin and omeprazole. Kobayashi A, et al. **Arch Histol Cytol** 1997 Jun;60(2):205–14

Role of glutathione modulation in acrylonitrile–induced gastric DNA damage in rats. Ahmed AE, et al. **Arch Toxicol** 1996;70(10):620–7

Cardiac and gastric effects of histamine H2 receptor antagonists: no evidence for a correlation between lipophilicity and receptor affinity. Coruzzi G, et al. **Br J Pharmacol** 1996 Aug;118(7):1813–21

Suppressive effect of melatonin administration on ethanol–induced gastroduodenal injury in rats in vivo. Melchiorri D, et al. **Br J Pharmacol** 1997 May; 121(2):264–70

Effects of nutrient HCO3– and Cl– on potential difference responses to nutrient Na+ changes in secreting and inhibited states of frog stomach. Schwartz M, et al. **Can J Physiol Pharmacol** 1996 Jan;74(1):58–64

Cisplatin–induced inhibition of the calcium–calmodulin complex, neuronal nitric oxide synthase activation and their role in stomach distention. Jarve RK, et al. **Cancer Chemother Pharmacol** 1997;39(4):341–8

Effects of the carcinogen, acrylonitrile, on forestomach cell proliferation and apoptosis in the rat: comparison with methacrylonitrile. Ghanayem BI, et al. **Carcinogenesis** 1997 Apr;18(4):675–80

Indomethacin damage to rat gastric mucosa is markedly dependent on luminal pH. Elliott SL, et al. **Clin Exp Pharmacol Physiol** 1996 May;23(5):432–4

Stimulation of gastric osmoreceptors but not the sodium monitor increases renal angiotensin–converting enzyme activity. Ye VZ, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):463–4

Oxygen delivery, oxygen consumption, and gastric intramucosal pH are not improved by a computer–controlled, closed–loop, vecuronium infusion in severe sepsis and septic shock. Freebairn RC, et al. **Crit Care Med** 1997 Jan;25(1):72–7

Nonclinical model for assessing gastric effects of bisphosphonates. Blank MA, et al. **Dig Dis Sci** 1997 Feb; 42(2):281–8

Short–term inhibitory effect of somatostatin on gastric histamine synthesis. Hollande F, et al. **Endocrinology** 1997 Mar;138(3):955–62

Spectrum of mutations in kidney, stomach, and liver from lacI transgenic mice recovered after treatment with tris(2,3–dibromopropyl)phosphate. de Boer JG, et al. **Environ Mol Mutagen** 1996;28(4):418–23

Characterization of the contractile response induced by 5–methoxytryptamine in rat stomach fundus strips. Amemiya N, et al. **Eur J Pharmacol** 1996 Dec 30; 318(2–3):403–9

Ca(2+)–induced Ca2+ release activates K+ currents by a cyclic GMP–dependent mechanism in single gastric smooth muscle cells. Duridanova DB, et al. **Eur J Pharmacol** 1996 Mar 7;298(2):159–63

Effect of pentacaine and its derivatives on the contractile responses of smooth muscle in the guinea–pig stomach. Mai MP, et al. **Eur J Pharmacol** 1996 Nov 21;315(3):305–12

Effect of a selective 5–HT3 receptor agonist on gastric motility in fasted and fed dogs. Nagakura Y, et al. **Eur J Pharmacol** 1997 May 30;327(2–3):189–93

Influence of purines and pyrimidines on circular muscle of the rat proximal stomach. Otsuguro K, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):97–105

Cyclopiazonic acid–induced changes in contractile activity of smooth muscle strips isolated from cat and guinea–pig stomach. Petkov GV, et al. **Eur J Pharmacol** 1996 Dec 27;318(1):109–15

Pharmacological characterization of 5–hydroxytryptamine–induced motor activity (in vitro) in the guinea pig gastric antrum and corpus. Tamura T, et al. **Eur J Pharmacol** 1996 Jul 25;308(3):315–24

Influence of the L–arginine–nitric oxide pathway on vasoactive intestinal polypeptide release and motility in the rat stomach in vitro. Willis S, et al. **Eur J Pharmacol** 1996 Nov 7;315(1):59–64

5–Hydroxytryptamine induces forestomach hypomotility in sheep through 5–HT4 receptors. Plaza MA, et al. **Exp Physiol** 1996 Sep;81(5):781–90

Cell proliferation in rat forestomach following oral administration of styrene oxide. Dalbey WE, et al. **Fundam Appl Toxicol** 1996 Mar;30(1):67–74

Influence of gastric acid secretion blockade and food intake on the bioavailability of a potassium diclofenac suspension in healthy male volunteers. Poli A, et al. **Int J Clin Pharmacol Ther** 1996 Feb;34(2):76–9

Effects of omeprazole and amoxycillin on the human oral and gastrointestinal microflora in patients with Helicobacter pylori infection. Stark CA, et al. **J Antimicrob Chemother** 1996 Dec;38(6):927–39

Sites of reaction of the gastric H,K–ATPase with extracytoplasmic thiol reagents. Besancon M, et al. **J Biol Chem** 1997 Sep 5;272(36):22438–46

The effects of oral doses of lansoprazole and omeprazole on gastric pH. Tolman KG, et al. **J Clin Gastroenterol** 1997 Mar;24(2):65–70

The effects of extracts from Tetrapleura tetraptera (Taub.) and Bayluscide on cells and tissue structures of Biomphalaria glabrata (Say). Bode AU, et al. **J Ethnopharmacol** 1996 Feb;50(2):103–13

Natural honey prevents ethanol–induced increased vascular permeability changes in the rat stomach. Mobarok Ali AT, et al. **J Ethnopharmacol** 1997 Feb;55(3):231–8

Effect of azadirachtin A on the fine structure of the midgut of Rhodnius prolixus. Nogueira NF, et al. **J Invertebr Pathol** 1997 Jan;69(1):58–63

Inhibition of gastric mucosal regeneration by tyrphostin: evaluation of the role of epidermal growth factor receptor tyrosine kinase. Majumdar AP, et al. **J Lab Clin Med** 1996 Aug;128(2):173–80

Calcium–dependent release of endogenous glutamate from vascularly perfused rat stomach in vitro. Okuma Y, et al. **J Neurosci Res** 1996 Jun 1;44(5):507–11

PAF and the digestive tract. A review. Izzo AA. **J Pharm Pharmacol** 1996 Nov;48(11):1103–11 (118 ref.)

Involvement of prostaglandins and 5–hydroxytryptamine in the contractile effect of platelet–activating factor in rat isolated gastric corpus. Martínez–Cuesta MA, et al. **J Pharm Pharmacol** 1996 Sep;48(9):955–8

Physiochemical and physiological mechanisms for the effects of food on drug absorption: the role of lipids and pH. Charman WN, et al. **J Pharm Sci** 1997 Mar;86(3):269–82 (263 ref.)

Opposing effects of vasoactive intestinal polypeptide on gastric motor function in the dorsal vagal complex and the nucleus raphe obscurus of the rat. Krowicki ZK, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):14–22

Excitatory gastric motor and cardiovascular effects of endothelins in the dorsal vagal complex are mediated through ET(A) receptors. Krowicki ZK, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):535–42

Neurokinin A–induced vasoconstriction and muscular contraction in the rat isolated stomach: mediation by distinct and unusual neurokinin2 receptors. Lippe I, et al. **J Pharmacol Exp Ther** 1997 Jun;281(3):1294–302

Pharmacological profile of a new serine derivative cholecystokinin receptor antagonist TP–680 on pancreatic, biliary and gastric function. Tachibana I, et al. **J Pharmacol Exp Ther** 1996 Dec;279(3):1404–12

Contractile action of ethanol in guinea pig gastric smooth muscle: inhibition by tyrosine kinase inhibitors and comparison with the contractile action of epidermal growth factor–urogastrone. Zheng XL, et al. **J Pharmacol Exp Ther** 1997 Jul;282(1):485–95

Effects of purinergic agonists on mechanical and electrical activities of gastric smooth muscle of guinea–pig. Ahn SC, et al. **J Smooth Muscle Res** 1995 Dec;31(6):407–10

Differential effect of benexate hydrochloride betadex on prostaglandin levels in stomach and inflammatory site in rats. Hori Y, et al. **Jpn J Pharmacol** 1996 Oct;72(2):183–90

Capsaicin–induced calcitonin gene–related peptide release from isolated rat stomach measured with a new chemiluminescent enzyme immunoassay. Inaba N, et al. **Jpn J Pharmacol** 1996 Nov;72(3):223–9

Vagus–dependent and vagus–independent mechanisms of action of the erythromycin derivative EM574 and motilin in dogs. Inatomi N, et al. **Jpn J Pharmacol** 1996 May; 71(1):29–38

Detection of gene mutation in skin, stomach and liver of MutaMouse following oral or topical treatment with N-methyl-N'-nitro-N-nitrosoguanidine or 1-chloromethylpyrene: some preliminary observations. Brooks TM, et al. **Mutagenesis** 1996 Sep;11(5):529–32

Participation of nitric oxide in the relaxation of the rat gastric corpus. Holzer-Petsche U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Aug–Sep; 354(3):348–54

Changes in sensitivity of 5-HT receptor mediated functional responses in the rat oesophagus, fundus and jejunum following chronic infusion with 5-hydroxytryptamine. McLean PG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Oct; 354(4):513–9

Evidence for central nervous effects of corticotropin-releasing hormone on gastric acid secretion in humans. Kern W, et al. **Neuroendocrinology** 1997 Apr; 65(4):291–8

Iron tablets cause histopathologically distinctive lesions in mucosal biopsies of the stomach and esophagus. Eckstein RP, et al. **Pathology** 1996 May;28(2):142–5

In vitro and in vivo biological activities of PG-KII, a novel kassinin-like peptide from the skin of the Australian frog, Pseudophryne güntheri. Improta G, et al. **Peptides** 1996; 17(6):1003–8

Co-release of substance P and neurokinin A from the Atlantic cod stomach. Jensen J. **Peptides** 1997;18(5):717–22

Muscarinic control of phase III contractions and motilin release in dogs. Yamada T, et al. **Peptides** 1997;18(5):673–80

Studies on the effect of intragastric capsaicin on gastric ulcer and on the prostacyclin-induced cytoprotection in rats. Abdel Salam OM, et al. **Pharmacol Res** 1995 Oct; 32(4):209–15

Effects of rebamipide on gastric cell damage by Helicobacter pylori-stimulated human neutrophils. Han BG, et al. **Pharmacol Res** 1995 Oct;32(4):201–7

Cholecystokinin-B/gastrin receptor blockade suppresses the activity of rat stomach ECL cells. Ding XQ, et al. **Pharmacol Toxicol** 1997 Jul;81(1):19–25

The effect of nitric oxide synthase blockade and indomethacin on gastric emptying and gastric contractility. Corak A, et al. **Pharmacology** 1997 Jun;54(6):298–304

Effect of pyloric cuffs on cholecystokinin satiety. Cox JE. **Physiol Behav** 1996 Sep;60(3):1023–6

Relation of gastric distention to prostaglandin therapy in neonates. Kriss VM, et al. **Radiology** 1997 Apr; 203(1):219–21

Influence of nicotine on gastrin and peptide YY in the rat. Gomez G, et al. **Regul Pept** 1996 Nov 14;67(1):55–61

Interaction of nicotine and a H2-receptor antagonist, famotidine, on gastrin and chromogranin A expression. Gomez G, et al. **Regul Pept** 1997 Mar 26;69(2):77–82

Relaxation response to the rat stomach fundus to methylene blue. Kamata K, et al. **Res Commun Mol Pathol Pharmacol** 1996 Feb;91(2):205–10

Greater curvature antral flattening due to nonsteroidal antiinflammatory drugs. Catalano O. **Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr** 1997 Aug;167(2):122–4

Mucosal irritation, adaptive cytoprotection, and adaptation to topical ammonia in the rat stomach. Brzozowski T, et al. **Scand J Gastroenterol** 1996 Sep;31(9):837–46

Gastrin stimulates histamine release from the isolated pig stomach. Mårvik R, et al. **Scand J Gastroenterol** 1997 Jan; 32(1):2–5

Evaluation of biologic gastrin activity of compound CI-988 in the isolated, vascularly perfused rat stomach. Marvik R, et al. **Scand J Gastroenterol** 1997 Jun;32(6):519–22

The effects of exposure route on DNA adduct formation and cellular proliferation by 1,2,3-trichloropropane. La DK, et al. **Toxicol Appl Pharmacol** 1996 Sep;140(1):108–14

Time-dependent alteration of epidermal growth factor receptor in rat stomach by ethanol feeding. Wang SL, et al. **Toxicol Lett** 1997 Feb 7;90(2–3):115–23

[Effect of octreotide on gastric and duodenal motility] Okamoto E, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):364–7 **(Jpn)**

[Mechanism of increased gastric motility effect of EM523] Shiba Y, et al. **J Smooth Muscle Res** 1995 Dec;31(6):492–5 **(Jpn)**

[Motilin-induced phase III contraction and the role of vagus nerve in gastric acidified dogs] Tohara K, et al. **J Smooth Muscle Res** 1995 Dec;31(6):503–6 **(Jpn)**

[The effect of nitrogen silicide thermal mineral water on stomach function in gastroduodenal pathology] Beliaev AD, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Mar-Apr;(2):16–20 (Eng. Abstr.) **(Rus)**

[Gastric protection in the treatment with NSAIDs (see comments)] Gené Badla J, et al. **Aten Primaria** 1997 Mar 15;19(4):207–10 (23 ref.). Comment in: Aten Primaria 1997 Jun 15;20(1):1–2. **(Spa)**

[Selective inhibitors of COX-2: new anti-inflammatory agents without gastric-damaging effects (editorial)] Clària J. **Gastroenterol Hepatol** 1997 Jun-Jul;20(6):309–11 **(Spa)**

EMBRYOLOGY

Intrinsic innervation of the stomach of the fetal pig: an immunohistochemical study of VIP-immunoreactive nerve fibres and cell bodies. van Ginneken C, et al. **Anat Histol Embryol** 1996 Dec;25(4):269–75

Role of epidermal growth factor and transforming growth factor alpha in the developing stomach. Kelly EJ, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 May;76(3):F158–62

Epidermal growth factor influences cell proliferation, glycoproteins, and lipase activity in human fetal stomach. Tremblay E, et al. **Gastroenterology** 1997 Apr; 112(4):1188–96

ENZYMOLOGY

Effects of chronic hypokalemia on renal expression of the "gastric" H(+)-K(+)-ATPase alpha-subunit gene. Ahn KY, et al. **Am J Physiol** 1996 Apr;270(4 Pt 2):F557–66

Regulation of gastric and pancreatic lipase secretion by CCK and cholinergic mechanisms in humans. Borovicka J, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G374–80

Identification and expression of prohormone-converting enzymes in the rat stomach. Macro JA, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G87–93

Canine H(+)-K(+)-ATPase alpha-subunit gene promoter: studies with canine parietal cells in primary culture. Muraoka A, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1104–13

Glutathione S-transferases in gastric carcinomas and in adjacent normal gastric epithelium: immunohistochemical and biochemical analyses. Schipper DI, et al. **Anticancer Res** 1996 Nov-Dec;16(6B):3721–4

Glutathione S-transferases of female A/J mouse liver and forestomach and their differential induction by anti-carcinogenic organosulfides from garlic. Hu X, et al. **Arch Biochem Biophys** 1996 Dec 15;336(2):199–214

An immuno- and enzyme cytochemical study of the H(+)-K+ ATPase in human parietal cells after administration of tetragastrin and omeprazole. Kobayashi A, et al. **Arch Histol Cytol** 1997 Jun;60(2):205–14

Ser-27, Tyr-10 and Tyr-7 in the alpha-chain of pig stomach H+,K(+)-ATPase as Ca(2+)-dependent phosphorylatable sites by intrinsic and extrinsic protein kinases. Togawa K, et al. **Biochem Biophys Res Commun** 1996 Oct 23;227(3):810–5

The N-linked oligosaccharides of the beta-subunit of rabbit gastric H,K-ATPase: site localization and identification of novel structures. Tyagarajan K, et al. **Biochemistry** 1997 Aug 19;36(33):10200–12

In vivo and in vitro studies on the stereoselective hydrolysis of tri- and diglycerides by gastric and pancreatic lipases. Carrière F, et al. **Bioorg Med Chem** 1997 Feb;5(2):429–35

Validity of a novel biopsy urease test (HUT) and a simplified 13C-urea breath test for diagnosis of Helicobacter pylori infection and estimation of the severity of gastritis. Labenz J, et al. **Digestion** 1996 Nov-Dec;57(6):391–7

The conformation of an inhibitor bound to the gastric proton pump. Middleton DA, et al. **FEBS Lett** 1997 Jun 30; 410(2-3):269–74

Molecular modelling of human gastric alcohol dehydrogenase (class IV) and substrate docking: differences towards the classical liver enzyme (class I). Moreno A, et al. **FEBS Lett** 1996 Oct 21;395(2-3):99–102

Development of digestive enzymes in pigs with emphasis on lipolytic activity in the stomach and pancreas. Jensen MS, et al. **J Anim Sci** 1997 Feb;75(2):437–45

Mutational analysis of putative SCH 28080 binding sites of the gastric H+,K+-ATPase. Asano S, et al. **J Biol Chem** 1997 Jul 11;272(28):17668–74

Structural domain organization of gastric H+,K+-ATPase and its rearrangement during the catalytic cycle. Gasset M, et al. **J Biol Chem** 1997 Jan 17;272(3):1608–14

Immunolocalization of the ecto-ATPase and ecto-apyrase in chicken gizzard and stomach. Purification and N-terminal sequence of the stomach ecto-apyrase. Lewis-Carl S, et al. **J Biol Chem** 1997 Sep 19; 272(38):23645–52

Transmembrane carboxyl residues are essential for cation-dependent function in the gastric H,K-ATPase. Rabon EC, et al. **J Biol Chem** 1996 Dec 13; 271(50):32137–46

Fourier transform infrared spectroscopy study of the secondary structure of the gastric H+,K+-ATPase and of its membrane-associated proteolytic peptides. Raussens V, et al. **J Biol Chem** 1997 Jan 3;272(1):262–70

Role of negatively charged residues in the fifth and sixth transmembrane domains of the catalytic subunit of gastric H+,K+-ATPase. Swarts HG, et al. **J Biol Chem** 1996 Nov 22;271(47):29764–72

Differential expression of the UGT1A locus in human liver, biliary, and gastric tissue: identification of UGT1A7 and UGT1A10 transcripts in extrahepatic tissue. Strassburg CP, et al. **Mol Pharmacol** 1997 Aug;52(2):212–20

Glucocorticoids stimulate the maturation of H,K-ATPase in the infant rat stomach. Wang ZM, et al. **Pediatr Res** 1996 Nov;40(5):658–63

Expression in insect cells and purification of a catalytically active recombinant human gastric lipase. Wicker-Planquart C, et al. **Protein Eng** 1996 Dec;9(12):1225–32

[Intragastric proteolysis after vagotomy in perforative duodenal ulcer] Podoluzhnyĭ VI, et al. **Khirurgiia (Mosk)** 1997;(6):13–4 (Eng. Abstr.) **(Rus)**

[Intragastric proteolysis after selective proximal vagotomy] Podoluzhnyĭ VI, et al. **Vestn Khir Im I I Grek** 1995; 154(4–6):16–7 **(Rus)**

GROWTH & DEVELOPMENT

Gastrin deficiency results in altered gastric differentiation and decreased colonic proliferation in mice. Koh TJ, et al. **Gastroenterology** 1997 Sep;113(3):1015–25

Transforming growth factor-alpha in vivo stimulates epithelial cell proliferation in digestive tissues of suckling rats. Hormi K, et al. **Gut** 1996 Oct;39(4):532–8

[Changes in the size of the stomach and its sections in human early postnatal ontogeny] Kernesiuk NL, et al. **Morfologiia** 1997;111(1):81–4 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The effect of ethanol, beer, and wine on histamine release from the dog stomach. Intorre L, et al. **Alcohol** 1996 Nov-Dec;13(6):547–51

A novel method for isolating mononuclear cells from the stomachs of mice with experimental autoimmune gastritis. Alderuccio F, et al. **Autoimmunity** 1995;21(3):215–21

Hepatitis C virus infection and gastric lymphoproliferation in patients with Sjögren's syndrome [letter] Sorrentino D, et al. **Blood** 1997 Sep 1;90(5):2116–7

Stimulation of IL-8 production in human gastric epithelial cells by Helicobacter pylori, IL-1beta and TNF-alpha requires tyrosine kinase activity, but not protein kinase C. Beales IL, et al. **Cytokine** 1997 Jul;9(7):514–20

In vitro evaluation of the role of antibodies against Helicobacter pylori in inhibiting adherence of the organism to gastric cells. Clyne M, et al. **Gut** 1997 Jun;40(6):731–8

INJURIES

Rupture of the stomach caused by manual ventilation during laryngospasm. Larsen KM, et al. **Acta Anaesthesiol Scand** 1996 Jan;40(1):130–1

Gastric distention and rupture from oxygen insufflation during fiberoptic intubation. Hershey MD, et al. **Anesthesiology** 1996 Dec;85(6):1479–80

Gastric rupture complicating inadvertent intubation of the esophagus. Schvadron E, et al. **Can J Surg** 1996 Dec; 39(6):487–9

Early operation for severe corrosive injury of the upper gastrointestinal tract. Berthet B, et al. **Eur J Surg** 1996 Dec;162(12):951–5

Treatment of acid burns of the stomach by gastroplasty. Sidhu BS. **J Indian Med Assoc** 1996 Apr;94(4):163

Nonsurgical management of gastric or duodenal perforation from a Wills-Oglesby-type gastrostomy tube. Kanterman RY, et al. **J Vasc Interv Radiol** 1996 Sep-Oct;7(5):737–41

Quantitative analysis of cyclooxygenase-2 gene expression on acute gastric injury induced by ischemia-reperfusion in rats. Kishimoto Y, et al. **Life Sci** 1997;60(8):PL127–33

Acid ingestion in a 2-day old baby. Kushimo T, et al. **West Afr J Med** 1997 May-Jun;16(2):121–3

[Complications of percutaneous endoscopic gastrostomy (PEG)] Drochner U, et al. **Leber Magen Darm** 1996 Sep; 26(5):263–6 (Eng. Abstr.) **(Ger)**

[Whipple operation in trauma] Kluger Y, et al. **Harefuah** 1997 Mar 2;132(5):366–8, 383 (Eng. Abstr.) **(Heb)**

[Chemical burns of the esophagus and stomach--role of endoscopic examination] Nieżychowski W. **Pol Tyg Lek** 1996 Apr;51(14–18):239–41 (22 ref.) **(Pol)**

[Evaluation of various methods of treatment in chemical burns of the stomach using fiber endoscopy] Volkov SV, et al. **Klin Med (Mosk)** 1996;74(3):46–8 (Eng. Abstr.) **(Rus)**

INNERVATION

Peptide YY and the Y2 agonist PYY-(13–36) inhibit neurons of the dorsal motor nucleus of the vagus. Chen CH, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R213–8

Stoichiometry of neurally induced VIP release, NO formation, and relaxation in rabbit and rat gastric muscle. Jin JG, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):G357–69

Relationships between gastric motility and gastric vagal afferent responses to CCK and GRP in rats differ. Schwartz GJ, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1726–33

Two types of leptin-responsive gastric vagal afferent terminals: an in vitro single-unit study in rats. Wang YH, et al. **Am J Physiol** 1997 Aug;273(2 Pt 2):R833–7

Peripheral bombesin induces gastric vagal afferent activation in rats. Yoshida-Yoneda E, et al. **Am J Physiol** 1996 Dec; 271(6 Pt 2):R1584–93

Interactions of gastric vagal and peripheral nerves on single neurons of lateral hypothalamus in the cat. Yuan CS, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G858–65

Limited excitatory local effector function of gastric vagal afferent intraganglionic terminals in rats. Zheng H, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G661–9

Intrinsic innervation of the stomach of the fetal pig: an immunohistochemical study of VIP-immunoreactive nerve fibres and cell bodies. van Ginneken C, et al. **Anat Histol Embryol** 1996 Dec;25(4):269–75

Capsaicin-resistant vagal afferent fibers in the rat gastrointestinal tract: anatomical identification and functional integrity. Berthoud HR, et al. **Brain Res** 1997 Jan 23;746(1-2):195–206

Effects of several denervation procedures on distribution of calcitonin gene-related peptide and substance P immunoreactive in rat stomach. Suzuki T, et al. **Dig Dis Sci** 1997 Jun;42(6):1242–54

Role of capsaicin-sensitive sensory nerves in gastroprotection against acid-independent and acid-dependent ulcerogens. Brzozowski T, et al. **Digestion** 1996 Nov-Dec;57(6):424–32

Involvement of capsaicin-sensitive sensory nerves in gastric

adaptive relaxation in isolated guinea-pig stomachs. Uno H, et al. **Digestion** 1997;58(3):232-9

Neurogenic stimulation of gastric acid secretion by the Na+, K(+)-ATPase inhibitor ouabain in mouse isolated stomach. Horie S, et al. **Gen Pharmacol** 1996 Jul;27(5):905-9

Neurochemical coding in the myenteric plexus of the upper gastrointestinal tract of hibernating hamsters. Shochina M, et al. **Int J Dev Neurosci** 1997 Jun;15(3):353-62

Morphological analysis of vagal input to gastrin releasing peptide and vasoactive intestinal peptide containing neurons in the rat glandular stomach. Berthoud HR. **J Comp Neurol** 1996 Jun 17;370(1):61-70

Effect of cysteamine on gastric nerve fibers containing gastrin-releasing peptide in the rat. Shimoda H, et al. **J Gastroenterol** 1996 Dec;31(6):768-76

Distribution of peptide-containing nerve fibres in achalasia of the oesophagus. Wattchow DA, et al. **J Gastroenterol Hepatol** 1996 May;11(5):478-85

Enhanced motility of the vagotomized canine stomach by electrical stimulation. Yokota M, et al. **J Gastroenterol Hepatol** 1997 Apr;12(4):338-46

Medullary catecholaminergic neurons projecting to lateral hypothalamic area and expressing Fos after chemical stimulation of the stomach in the rat. Dong YX, et al. **J Hirnforsch** 1997;38(1):3-7

Subpopulations of gastric myenteric neurons are differentially activated via distinct serotonin receptors: projection, neurochemical coding, and functional implications. Michel K, et al. **J Neurosci** 1997 Oct 15;17(20):8009-17

Possible mechanisms underlying the suppression of gastric vagal afferents due to ecabapide (DQ-2511), a gastroprokinetic agent, in rats. Hatanaka S, et al. **Jpn J Pharmacol** 1997 May;74(1):105-8

Effects of Hoelen on the efferent activity of the gastric vagus nerve in the rat. Okui Y, et al. **Jpn J Pharmacol** 1996 Sep; 72(1):71-3

Modified procedure with a surgical stapler for construction of a Pavlov pouch in dogs. Shibata C, et al. **Lab Anim Sci** 1996 Aug;46(4):438-41

Inhibitory effects of various spasmolytics on the vagal afferent gastric excitatory response in cats. Kurahashi K, et al. **Life Sci** 1997;61(8):831-8

Identification of gastric related neurones in the rat insular cortex. Aleksandrov VG, et al. **Neurosci Lett** 1996 Sep 20;216(1):5-8

Differential c-fos expression in the nucleus of the solitary tract and spinal cord following noxious gastric distention in the rat. Traub RJ, et al. **Neuroscience** 1996 Oct; 74(3):873-84

Tachykinin NK1 and NK2 receptors mediate non-adrenergic non-cholinergic excitatory neuromuscular transmission in the guinea-pig stomach. Zagorodnyuk V, et al. **Neuroscience** 1997 Sep;80(2):625-34

Intracisternal TRH and RX 77368 potently activate gastric vagal efferent discharge in rats. O-Lee TJ, et al. **Peptides** 1997;18(2):213-9

The distribution of NPY-containing nerves and the catecholamine contents of canine enteric nerve plexuses. Wang YF, et al. **Peptides** 1997;18(2):221-34

The role of gastric and postgastric sites in glucose-conditioned flavor preferences in rats. Drucker DB, et al. **Physiol Behav** 1997 Feb;61(2):351-8

Relationship of emotional behaviors induced by electrical stimulation of the hypothalamus to changes in EKG, heart, stomach, adrenal glands, and thymus. Kojima K, et al. **Psychosom Med** 1996 Jul-Aug;58(4):383-91

Transforming growth factor alpha-immunoreactivity in neural tissues of the rat stomach. Hoffmann P, et al. **Regul Pept** 1997 Apr 30;69(3):121-5

Development of the insect stomatogastric nervous system. Hartenstein V. **Trends Neurosci** 1997 Sep;20(9):421-7 (21 ref.)

[Transendoscopic drug denervation of the stomach in emergency surgical diseases of the gastrointestinal tract (a preliminary report)] Gerzilov P, et al. **Khirurgiia (Sofiia)** 1996;49(6):17-8 (Eng. Abstr.) **(Bul)**

[Effect of peptide YY and the role of vagus nerve in gastric secretion and motility in conscious dogs] Zai H, et al. **J Smooth Muscle Res** 1995 Dec;31(6):507-8 **(Jpn)**

[Innervation of internal organs by stellate ganglion neurons in the cat] Fateev MM, et al. **Dokl Akad Nauk** 1996 May; 348(1):122-3 **(Rus)**

[The afferent link in the system of the bulbar regulation of gastric motor function] Bagaev VA, et al. **Fiziol Zh Im I M Sechenova** 1996 May-Jun;82(5-6):121-31 (Eng. Abstr.) **(Rus)**

[The spatial organization of the hypothalamic neurons that project into the "stomach" area of the vagosolitary complex] Pluzhnichenko EB. **Morfologiia** 1996;110(5):34-7 (Eng. Abstr.) **(Rus)**

METABOLISM

Esters of cephalosporins. Part I. Permeability of cefuroxime liberated from its 1-acetoxyethyl ester through biological membranes; influence of the form and size of the ester particles. Sasinowska-Motyl M, et al. **Acta Pol Pharm** 1995 Sep-Oct;52(5):391-5

Chronic ethanol feeding alters the structure and function of the epidermal growth factor receptor in rat stomach. Wang SL, et al. **Alcohol** 1996 Sep-Oct;13(5):461-6

Ethnic differences in gastric sigma-alcohol dehydrogenase activity and ethanol first-pass metabolism. Dohmen K, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1569-76

Regional differences in gastric acidity and antacid distribution: is a single pH electrode sufficient? Fisher RS, et al. **Am J Gastroenterol** 1997 Feb;92(2):263-70

Continuous measurement of gastric nitric oxide production. Aneman A, et al. **Am J Physiol** 1996 Dec;271(6 Pt 1):G1039-42

Colonic smooth muscle cells possess a different subtype of somatostatin receptor from gastric smooth muscle cells. Corleto VD, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G689-97

Angiotensin II: a humoral mediator for the gastric sodium monitor. Duggan KA, et al. **Am J Physiol** 1996 Mar;270(3 Pt 2):F406-10

Inhibition of acid secretion by electrical acupuncture is mediated via beta-endorphin and somatostatin. Jin HO, et al. **Am J Physiol** 1996 Sep;271(3 Pt 1):G524-30

Effects of hemodilution on gastric regional perfusion and intramucosal pH. Kleen M, et al. **Am J Physiol** 1996 Nov; 271(5 Pt 2):H1849-55

Amino acids Val115-Ile126 of rat gastric H(+)-K(+)-ATPase confer high affinity for Sch-28080 to Na(+)-K(+)-ATPase. Lyu RM, et al. **Am J Physiol** 1997 May;272(5 Pt 1):C1717-25

Characterization of proteases and protease inhibitors in the rat stomach. Nagy L, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1151-8

PACAPs stimulate duodenal bicarbonate secretion at PACAP receptors in the rat. Takeuchi K, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):G646-53

A simple method for frequent monitoring of gastric carbon dioxide. Corke CF, et al. **Anaesth Intensive Care** 1996 Oct; 24(5):590-3

The G cell. Sawada M, et al. **Annu Rev Physiol** 1997; 59:273-98 (147 ref.)

Local gastric and serum concentrations of rebamipide following oral administration to patients with chronic gastritis. Naito Y, et al. **Arzneimittelforschung** 1996 Jul; 46(7):698-700

Salicylate levels in rat stomach tissues after administration of aspalatone and acetylsalicylic acid in relation to their ulcerogenicity. Suh DY, et al. **Arzneimittelforschung** 1997 Jul;47(7):826-8

Identification and function of type-2 and type-3 ryanodine receptors in gut epithelial cells. Verma V, et al. **Biochem J** 1996 Oct 15;319 (Pt 2):449-54

Nerve-induced release of nitric oxide in the rabbit gastrointestinal tract as measured by in vivo microdialysis. Iversen HH, et al. **Br J Pharmacol** 1997 Feb;120(4):702-6

Analysis of the variation in the action of L-365,260 at CCKB/gastrin receptors in rat, guinea-pig and mouse isolated gastric tissue assays. Roberts SP, et al. **Br J Pharmacol** 1996 Aug;118(7):1779-89

Brain-gut induction of heat shock protein (HSP) 70 mRNA by psychophysiological stress in rats. Fukudo S, et al. **Brain Res** 1997 May 16;757(1):146-8

The insulinotropic region of gastric inhibitory polypeptide; fragment analysis suggests the bioactive site lies between residues 19 and 30. Morrow GW, et al. **Can J Physiol Pharmacol** 1996 Jan;74(1):65-72

Signal transduction in gastrointestinal smooth muscle. Makhlouf GM, et al. **Cell Signal** 1997 May-Jun; 9(3-4):269-76 (92 ref.)

Stimulation of the gastric sodium monitor reduces hepatic angiotensin-converting enzyme activity. Duggan KA, et al. **Clin Exp Pharmacol Physiol** 1997 Jun;24(6):449-50

Use of phosphate buffered solution in gastric tonometry [letter; comment] Venkatesh B, et al. **Crit Care Med** 1996 Nov;24(11):1932-3. Comment on: Crit Care Med 1996 Mar;24(3):512-6.

Alteration of dopamine D2 receptors in human malignant stomach tissue. Basu S, et al. **Dig Dis Sci** 1997 Jun; 42(6):1260-4

Gastric PCO2 tonometry is independent of carbonic anhydrase inhibition. Kolkman JJ, et al. **Dig Dis Sci** 1997 Jan;42(1):99-102

Short-term inhibitory effect of somatostatin on gastric histamine synthesis. Hollande F, et al. **Endocrinology** 1997 Mar;138(3):955-62

Investigation of nifedipine absorption in different regions of the human gastrointestinal (GI) tract after simultaneous administration of 13C- and 12C-nifedipine. Bode H, et al. **Eur J Clin Pharmacol** 1996;50(3):195-201

Effects of anaesthetic agents on basal and histamine-stimulated acid secretion in the fistula rat. Bastaki SM, et al. **Eur J Gastroenterol Hepatol** 1995 Dec; 7(12):1199-202

Characterization of bombesin binding sites in the rat stomach. Ladenheim EE, et al. **Eur J Pharmacol** 1997 Jan 29; 319(2-3):245-51

Molecular cloning of a novel gene involved in serotonin receptor-mediated signal transduction in rat stomach. Ohya S, et al. **FEBS Lett** 1997 Jan 20;401(2-3):252-8

Regulated expression of GATA-6 transcription factor in gastric endocrine cells. Dimaline R, et al. **Gastroenterology** 1997 May;112(5):1559-67

Exogenous motilin stimulates endogenous release of motilin through cholinergic muscarinic pathways in the dog. Mochiki E, et al. **Gastroenterology** 1996 Dec;111(6):1456-64

Localization of cholecystokinin A and cholecystokinin B-gastrin receptors in the human stomach. Reubi JC, et al. **Gastroenterology** 1997 Apr;112(4):1197-205

24-hour gastric pH and extent of duodenal gastric metaplasia in Helicobacter pylori-positive patients. Savarino V, et al. **Gastroenterology** 1997 Sep;113(3):741-5

Central vagal activation increases mucus gel thickness and surface cell intracellular pH in rat stomach. Tanaka S, et al. **Gastroenterology** 1997 Feb;112(2):409-17

Epidermal growth factor influences cell proliferation, glycoproteins, and lipase activity in human fetal stomach. Tremblay E, et al. **Gastroenterology** 1997 Apr; 112(4):1188-96

Selective ligand-induced intracellular calcium changes in a population of rat isolated gastric endocrine cells. Zeng N, et al. **Gastroenterology** 1996 Jun;110(6):1835-46

CCK-A- and CCK-B-like receptors in the gallbladder and stomach of the alligator (Alligator mississippiensis). Oliver AS, et al. **Gen Comp Endocrinol** 1997 Jan;105(1):91-101

Chemical synthesis of nitric oxide in the stomach from dietary nitrate in humans [see comments] McKnight GM, et al. **Gut** 1997 Feb;40(2):211-4. Comment in: Gut 1997 Feb;40(2):288.

First pass metabolism of ethanol: gastric or hepatic, mountain or molehill? Crabb DW. **Hepatology** 1997 May;25(5):1292-4

The expression of pepsinogen c mRNA in normal gastroduodenal mucosa and the gastric ulcer margin of the rat. Helander HF, et al. **Histochem Cell Biol** 1996 Feb; 105(2):163-9

Pancreatic metaplasia of the human gastric mucosa is associated with high expression of transforming growth factor alpha but not of epidermal growth factor. Stachura J, et al. **Histopathology** 1995 Dec;27(6):509-15

Localization of Helicobacter pylori urease and heat shock protein in human gastric biopsies. Dunn BE, et al. **Infect Immun** 1997 Apr;65(4):1181-8

The alginate reduce the postprandial glycaemic response by forming a gel with dietary calcium in the stomach of the rat. Ohta A, et al. **Int J Vitam Nutr Res** 1997;67(1):55-61

The accuracy of gastric tonometry: a matter of mathematical thinking [letter] Michagin G, et al. **Intensive Care Med** 1996 Nov;22(11):1273

Site and extent of mineral absorption in lactating cows fed whole-crop cereal grain silage of alfalfa silage. Khorasani GR, et al. **J Anim Sci** 1997 Jan;75(1):239-48

Expression and phosphorylation of a MARCKS-like protein in gastric chief cells: further evidence for modulation of pepsinogen secretion by interaction of Ca2+/calmodulin with protein kinase C. Raufman JP, et al. **J Cell Biochem** 1997 Mar 1;64(3):514-23

Roles for transforming growth factor-alpha in the stomach. Coffey RJ, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S36-9 (29 ref.)

EGF receptor activation stimulates endogenous gastrin gene expression in canine G cells and human gastric cell cultures. Ford MG, et al. **J Clin Invest** 1997 Jun 1;99(11):2762-71

Influence of time of feeding a protein meal on ruminal fermentation and forestomach digestion in dairy cows. Robinson PH, et al. **J Dairy Sci** 1997 Jul;80(7):1366-73

Effect of nizatidine and ranitidine on 24 hour intragastric pH, pepsin, prostaglandin E2 and serum gastrin concentrations in healthy volunteers. Thompson A, et al. **J Gastroenterol Hepatol** 1995 Sep-Oct;10(5):546-54

Effect of intracellular cAMP on K current in single gastric myocytes of guinea-pig. Ahn SC, et al. **J Smooth Muscle Res** 1995 Dec;31(6):411-3

Gastric acid secretion and gastroduodenal pH after pancreaticogastrostomy in dogs. Shinchi H, et al. **J Surg Res** 1996 Feb 15;61(1):152-8

Role of endogenous basic fibroblast growth factor in the healing of gastric ulcers in rats. Satoh H, et al. **Jpn J Pharmacol** 1997 Jan;73(1):59-71

Two types of stretch-activated channel activities in guinea-pig gastric smooth muscle cells. Yamamoto Y, et al. **Jpn J Physiol** 1996 Aug;46(4):337-45

Availability of arachidonic acid in major phospholipids of mucosa and the stomach wall of rats. Olafsson SO, et al. **Lipids** 1996 Dec;31(12):1323-5

Pancreatic-duodenal homeobox 1 -role in gastric endocrine patterning. Larsson LI, et al. **Mech Dev** 1996 Dec; 60(2):175-84

Modulation of noradrenaline release in rat isolated stomach by prostanoids, but not by histaminergic mechanisms. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1995 Dec;352(6):631-9

Nitric oxide synthase levels in obese Zucker rats. Morley JE, et al. **Neurosci Lett** 1996 May 10;209(2):137-9

Metallothionein: a potential marker for differentiating benign and neoplastic gastrointestinal lymphoid infiltrates. Rizkalla KS, et al. **Pathology** 1997 May;29(2):141-6

Absorption and presystemic metabolism of selegiline hydrochloride at different regions in the gastrointestinal tract in healthy males. Barrett JS, et al. **Pharm Res** 1996 Oct;13(10):1535-40

Tachykinins in the gut. Part I. Expression, release and motor function. Holzer P, et al. **Pharmacol Ther** 1997; 73(3):173-217 (504 ref.)

Transforming growth factor alpha-immunoreactivity in neural tissues of the rat stomach. Hoffmann P, et al. **Regul Pept** 1997 Apr 30;69(3):121-5

Developmental gene expression of gastrin receptor in rat stomach. Wang HY, et al. **Regul Pept** 1997 Jun 18; 70(2-3):183-9

Time-dependent alteration of epidermal growth factor receptor in rat stomach by ethanol feeding. Wang SL, et

al. **Toxicol Lett** 1997 Feb 7;90(2-3):115-23

[Gastric protein loss and alcoholic cirrhosis. Study by measurement of gastric clearance of alpha 1-antitrypsin] Becheur H, et al. **Gastroenterol Clin Biol** 1996; 20(8-9):669-73 (Eng. Abstr.) **(Fre)**

[Gastric reflux of taurocholic acid in peptic ulcer: symptoms and drug therapy] Matsuhisa T. **J Smooth Muscle Res** 1995 Dec;31(6):367-70 **(Jpn)**

[Secretory function of stomach in long term followup period after selective proximal vagotomy] Podoluzhnyi, et al. **Khirurgiia (Mosk)** 1997;(5):18-20 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Endoscopic methods for the diagnosis of Helicobacter pylori. Cohen H, et al. **Aliment Pharmacol Ther** 1997 Apr;11 Suppl 1:3-9 (28 ref.)

Effect of proton pump inhibitors on the detection of Helicobacter pylori in gastric biopsies. Dickey W, et al. **Aliment Pharmacol Ther** 1996 Jun;10(3):289-93

Helicobacter pylori does not migrate from the antrum to the corpus in response to omeprazole [see comments] Graham DY, et al. **Am J Gastroenterol** 1996 Oct;91(10):2120-4. Comment in: Am J Gastroenterol 1997 Apr;92(4):720-1.

Gastric metaplasia and Helicobacter pylori. Urakami Y, et al. **Am J Gastroenterol** 1997 May;92(5):795-9

Mucosa-associated lymphoid tissue (MALT) in Barrett's esophagus: prospective evaluation and association with gastric MALT, MALT lymphoma, and Helicobacter pylori. Weston AP, et al. **Am J Gastroenterol** 1997 May; 92(5):800-4

Intermittent enteral feeding: the influence on respiratory and digestive tract colonization in mechanically ventilated intensive-care-unit patients [letter; comment] Metersky M, et al. **Am J Respir Crit Care Med** 1997 May;155(5):1817-8 . Comment on: Am J Respir Crit Care Med 1996 Aug;154(2 Pt 1):394-9.

The role of intermittent enteral feeding in reducing gastric colonization in mechanically ventilated patients [letter; comment] Skiest DJ, et al. **Chest** 1997 May;111(5):1474-5 . Comment on: Chest 1996 Jul;110(1):243-8.

Role of colonization of the upper intestinal tract in the pathogenesis of ventilator-associated pneumonia [see comments] Bonten MJ, et al. **Clin Infect Dis** 1997 Mar; 24(3):309-19 (80 ref.). Comment in: Clin Infect Dis 1997 Mar;24(3):320-3.

Devising strategies for preventing nosocomial pneumonia--should we ignore the stomach? [editorial; comment] Niederman MS, et al. **Clin Infect Dis** 1997 Mar; 24(3):320-3. Comment on: Clin Infect Dis 1997 Mar;24(3):309-19.

A newly developed PCR assay of H. pylori in gastric biopsy, saliva, and feces. Evidence of high prevalence of H. pylori in saliva supports oral transmission. Li C, et al. **Dig Dis Sci** 1996 Nov;41(11):2142-9

Quantitative polymerase chain reaction for the detection of Helicobacter pylori in gastric biopsy specimens. Monteiro L, et al. **Eur J Clin Microbiol Infect Dis** 1997 Feb; 16(2):143-9

Stomach as a source of colonization of the respiratory tract during mechanical ventilation: association with ventilator-associated pneumonia. Torres A, et al. **Eur Respir J** 1996 Aug;9(8):1729-35 (55 ref.)

Capsaicin as an inhibitor of the growth of the gastric pathogen Helicobacter pylori. Jones NL, et al. **FEMS Microbiol Lett** 1997 Jan 15;146(2):223-7

Production of reactive oxygen species by gastric cells in association with Helicobacter pylori. Bagchi D, et al. **Free Radic Res** 1996 Jun;24(6):439-50

Bacterial overgrowth during treatment with omeprazole compared with cimetidine: a prospective randomised double blind study. Thorens J, et al. **Gut** 1996 Jul;39(1):54-9

Helicobacter pylori after surgery for duodenal ulcer. Künzle JE, et al. **Hepatogastroenterology** 1997 Mar-Apr; 44(14):599-603

Gastric syphilis: polymerase chain reaction detection of treponemal DNA in pseudolymphomatous lesions [see comments] Inagaki H, et al. **Hum Pathol** 1996 Aug; 27(8):761-5. Comment in: Hum Pathol 1996 Aug;27(8):749-50.

Gastric bacterial overgrowth accompanies profound acid suppression. Patel TA, et al. **Indian J Gastroenterol** 1995 Oct;14(4):134-6

Infection of the ferret stomach by isogenic flagellar mutant strains of Helicobacter mustelae. Andrutis KA, et al. **Infect Immun** 1997 May;65(5):1962-6

Effects of omeprazole and amoxycillin on the human oral and gastrointestinal microflora in patients with Helicobacter pylori infection. Stark CA, et al. **J Antimicrob Chemother** 1996 Dec;38(6):927-39

Ecology of Helicobacter pylori in the human stomach. Blaser MJ. **J Clin Invest** 1997 Aug 15;100(4):759-62

Rapid colorimetric hybridization assay for detecting amplified Helicobacter pylori DNA in gastric biopsy specimens. Lage AP, et al. **J Clin Microbiol** 1996 Mar; 34(3):530-3

Survival of lactic acid bacteria in a dynamic model of the stomach and small intestine: validation and the effects of bile. Marteau P, et al. **J Dairy Sci** 1997 Jun;80(6):1031-7

Association of Helicobacter pylori and diffuse type gastric cancer. Handa Y, et al. **J Gastroenterol** 1996 Nov;31 Suppl 9:29-32

Helicobacter pylori isolated from stomach corpus and antrum: comparison of DNA patterns. Cellini L, et al. **J Infect** 1996 May;32(3):219-21

Failure to isolate Helicobacter pylori from stray cats indicates that H. pylori in cats may be an anthroponosis--an animal infection with a human pathogen. El-Zaatari FA, et al. **J Med Microbiol** 1997 May;46(5):372-6

Enteral nutrition modifies gut-associated lymphoid tissue in rat regardless of the molecular form of nitrogen supply. Guihot G, et al. **J Pediatr Gastroenterol Nutr** 1997 Feb; 24(2):153-61

Standardization of gastric aspirate technique improves yield in the diagnosis of tuberculosis in children. Pomputius WF 3rd, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):222-6

Induction of host signal transduction pathways by Helicobacter pylori. Segal ED, et al. **Proc Natl Acad Sci U S A** 1997 Jul 8;94(14):7595-9

The mouth-stomach crossing of Helicobacter pylori. Pustorino R, et al. **Riv Eur Sci Med Farmacol** 1996 Sep-Dec;18(5-6):183-6

Gastric attaching and effacing Escherichia coli lesions in a puppy with naturally occurring enteric colibacillosis and concurrent canine distemper virus infection. Wada Y, et al. **Vet Pathol** 1996 Nov;33(6):717-20

Occurrence and topographical mapping of gastric Helicobacter-like organisms and their association with histological changes in apparently healthy dogs and cats. Happonen I, et al. **Zentralbl Veterinarmed A** 1996 Jul; 43(5):305-15

[Study of bacterial flora in the oral cavity and stomach of elderly patients receiving nasogastric tube feeding] Matsuura T, et al. **Kansenshogaku Zasshi** 1997 May; 71(5):397-404 (Eng. Abstr.) **(Jpn)**

PARASITOLOGY

[Presence of Ascaris lumbricoides in the esophagus and stomach: an exceptional endoscopic observation (letter)] Tomás A, et al. **Gastroenterol Hepatol** 1997 Jun-Jul; 20(6):335 **(Spa)**

PATHOLOGY

Gastric pathology in Meckel's diverticulum. Review of cases resected between 1965 and 1995. Cserni G. **Am J Clin Pathol** 1996 Dec;106(6):782-5 (28 ref.)

Postmortem diffusion of drugs from gastric residue: an experimental study. Pounder DJ, et al. **Am J Forensic Med Pathol** 1996 Mar;17(1):1-7

Low epithelial cell proliferation and absence of oncoprotein expression in juvenile polyposis of the stomach, with or without tumors. Mitomi H, et al. **Am J Gastroenterol** 1997 Aug;92(8):1374-7

Gastric metaplasia and Helicobacter pylori. Urakami Y, et al. **Am J Gastroenterol** 1997 May;92(5):795-9

Mucosa-associated lymphoid tissue (MALT) in Barrett's esophagus: prospective evaluation and association with gastric MALT, MALT lymphoma, and Helicobacter pylori. Weston AP, et al. **Am J Gastroenterol** 1997 May; 92(5):800-4

Comparative study of artificial neural networks in the discrimination between benign from malignant gastric cells. Karakitsos P, et al. **Anal Quant Cytol Histol** 1997 Apr; 19(2):145-52

Clinicopathologic characteristics of gastric cancer patients with cancer infiltration at surgical margin at gastrectomy. Fujimoto S, et al. **Anticancer Res** 1997 Jan-Feb; 17(1B):689-94

Nissen fundoplication prevents shortening of the sphincter during gastric distention. Mason RJ, et al. **Arch Surg** 1997 Jul;132(7):719-24; discussion 724-6

37 kBq 14C-urea breath test and gastric biopsy analyses of H. pylori infection. Allardyce RA, et al. **Aust N Z J Surg** 1997 Jan;67(1):31-4

A novel method for isolating mononuclear cells from the stomachs of mice with experimental autoimmune gastritis. Alderuccio F, et al. **Autoimmunity** 1995;21(3):215-21

Consequences of attachment of Helicobacter pylori to gastric cells. Segal ED. **Biomed Pharmacother** 1997;51(1):5-12 (69 ref.)

Early gastric cancer mimicking advanced gastric cancer. Kitamura K, et al. **Br J Cancer** 1997;75(12):1769-73

Prospective evaluation of intestinal metaplasia and dysplasia within the cardia of patients with Barrett's esophagus. Weston AP, et al. **Dig Dis Sci** 1997 Mar;42(3):597-602

Gastric pathology as an initiator and potentiator of gastroesophageal reflux disease. DeMeester TR, et al. **Dis Esophagus** 1997 Jan;10(1):1-8 (11 ref.)

Mechanisms producing color change in flat early gastric cancers. Honmyo U, et al. **Endoscopy** 1997 Jun;29(5):366-71

Gastric necrosis: an uncommon complication of diabetic coma. Bartelmess P, et al. **Eur J Surg** 1997 Feb;163(2):151-2

Cell proliferation in rat forestomach following oral administration of styrene oxide. Dalbey WE, et al. **Fundam Appl Toxicol** 1996 Mar;30(1):67-74

Gastrin deficiency results in altered gastric differentiation and decreased colonic proliferation in mice. Koh TJ, et al. **Gastroenterology** 1997 Sep;113(3):1015-25

24-hour gastric pH and extent of duodenal gastric metaplasia in Helicobacter pylori-positive patients. Savarino V, et al. **Gastroenterology** 1997 Sep;113(3):741-5

Relation between gastric acid output, Helicobacter pylori, and gastric metaplasia in the duodenal bulb [see comments] Harris AW, et al. **Gut** 1996 Oct;39(4):513-20. Comment in: Gut 1996 Oct;39(4):615-6.

Macroscopic appearance and biological character of gastric cancer invading the muscularis propria. Ichiyoshi Y, et al. **Hepatogastroenterology** 1996 May-Jun;43(9):553-9

Hepatoid adenocarcinoma of the stomach: a case report. Sugawara Y, et al. **Hepatogastroenterology** 1996 Jul-Aug; 43(10):995-9

Pancreatic metaplasia of the human gastric mucosa is associated with high expression of transforming growth factor alpha but not of epidermal growth factor. Stachura J, et al. **Histopathology** 1995 Dec;27(6):509-15

Gastric epithelial dysplasia and adenoma: historical review and histological criteria for grading. Goldstein NS, et al. **Hum Pathol** 1997 Feb;28(2):127-33 (100 ref.)

Gastric epithelial polyps: a retrospective endoscopic study of 12974 symptomatic patients. Archimandritis A, et al. **Ital J Gastroenterol** 1996 Sep;28(7):387-90

Value of serology (ELISA) for the diagnosis of Helicobacter pylori infection: evaluation in patients attending endoscopy and in those with fundic atrophic gastritis. Tucci A, et al. **Ital J Gastroenterol** 1996 Sep;28(7):371-6

Comparison of gastric and duodenal lesions in dogs and cats with and without lymphocytic-plasmacytic enteritis. Yamasaki K, et al. **J Am Vet Med Assoc** 1996 Jul 1; 209(1):95-7

Long-term follow-up of gastric histology after Helicobacter pylori eradication. Forbes GM, et al. **J Gastroenterol Hepatol** 1996 Jul;11(7):670-3

Frequency and factors influencing portal hypertensive gastropathy and duodenopathy in cirrhotic portal hypertension. Gupta R, et al. **J Gastroenterol Hepatol** 1996 Aug;11(8):728-33

Gastric lesions in transforming growth factor beta-1 heterozygous mice. Boivin GP, et al. **Lab Invest** 1996 Feb; 74(2):513-8

Immature cells and Helicobacter pylori infection in early gastric cancer. An immunohistochemical study. Testino G. **Minerva Med** 1997 May;88(5):183-6

Oral aluminum administration during pregnancy and lactation produces gastric and renal lesions in rat mothers and delay in CNS development of their pups. Poulos BK, et al. **Mol Chem Neuropathol** 1996 Sep;29(1):15-26

A new aspect of gastric metaplasia in Crohn's disease: bidirectional (foveolar and pyloric) differentiation in so-called 'pyloric metaplasia' in the ileum [letter] Kushima R, et al. **Pathol Int** 1997 Jun;47(6):416-9

Differentiation of focal foveolar hyperplasia from hyperplastic polyps in gastric biopsy material. Stolte M, et al. **Pathol Res Pract** 1995 Dec;191(12):1198-1202

Iron tablets cause histopathologically distinctive lesions in mucosal biopsies of the stomach and esophagus. Eckstein RP, et al. **Pathology** 1996 May;28(2):142-5

Histological findings in gastroduodenal mucosa in patients with Crohn's disease. Any diagnostic significance? Jaśkiewicz K, et al. **Pol J Pathol** 1996;47(3):115-8

Short-term eradication therapy for Helicobacter pylori does not reduce the incidence of gastric metaplasia in duodenal ulcer patients. Rudnicka L, et al. **Pol J Pathol** 1997; 48(2):103-6

Gastritis and duodenitis in children with food polyallergy. Czaja-Bulsa G, et al. **Rocz Akad Med Bialymst** 1995; 40(3):520-5

Eosinophilic gastroenteritis. Woźniakowska-Gęsicka T, et al. **Rocz Akad Med Bialymst** 1995;40(3):532-7

Signet ring cell carcinoma in hyperplastic polyp [letter; comment] Carneiro F, et al. **Scand J Gastroenterol** 1996 Jan;31(1):95-6. Comment on: Scand J Gastroenterol 1995 Jun;30(6):604-8.

Gastric as well as duodenal biopsies may be useful in the investigation of iron deficiency anaemia. Dickey W, et al. **Scand J Gastroenterol** 1997 May;32(5):469-72

Relation between histologic subtypes and location of gastric cancer and Helicobacter pylori. Martín-de-Argila C, et al. **Scand J Gastroenterol** 1997 Apr;32(4):303-7

Ultrastructural aspects of the neuroendocrine complex in the stomach in patients with either pernicious anemia or the Zollinger-Ellison syndrome. Schmidt HG, et al. **Z Gastroenterol** 1996 Jul;34(7):428-33

Occurrence and topographical mapping of gastric Helicobacter-like organisms and their association with histological changes in apparently healthy dogs and cats. Happonen I, et al. **Zentralbl Veterinarmed A** 1996 Jul; 43(5):305-15

[Gastroscopic findings in HIV-positive patients] Risum S, et al. **Ugeskr Laeger** 1997 Jan 13;159(3):284-7 (Eng. Abstr.) **(Dan)**

[Necrosis of the gastric body and fundus caused by acute dilatation by a duodenal obstacle. Apropos of a case] Horhant P, et al. **J Chir (Paris)** 1996 Sep;133(6):294-6 **(Fre)**

[Stomach wall necrosis after endoscopic sclerotherapy (letter; comment)] Friedrichs O. **Dtsch Med Wochenschr** 1997 Aug 1;122(31-32):990-1. Comment on: Dtsch Med Wochenschr 1997 May 9;122(19):606-9. **(Ger)**

[Complete gastric wall necrosis after endoscopic sclerotherapy for a gastric ulcer with visible arterial stump (see comments)] Scharnke W, et al. **Dtsch Med Wochenschr** 1997 May 9;122(19):606-9 (Eng. Abstr.). Comment in: Dtsch Med Wochenschr 1997 Aug 1;122(31-32):990-1. **(Ger)**

[Gastric neoplasms: their characterization, assessment of the degree of parietal infiltration and check on recurrence. The

potentials and limits of CT, endoscopic US and MR] Gualdi GF, et al. **Clin Ter** 1996 Nov;147(11):585–94 (20 ref.) (Eng. Abstr.) **(Ita)**

[Role of peritoneal lavage smears and gastric wall brushing smears in gastric cancer surgery] Shirakawa T, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1472–5 (Eng. Abstr.) **(Jpn)**

[Relation between the stromal volume and liver metastasis in gastric cancer] Teshima S, et al. **Gan To Kagaku Ryoho** 1997 Apr;24(6):737–9 **(Jpn)**

[Non–Hodgkin gastric lymphoma in a 14–year–old boy] Olejnik I, et al. **Pediatr Pol** 1996 Feb;71(2):157–60 (Eng. Abstr.) **(Pol)**

[Stomach in inguinal–scrotal hernia] Díaz Oller J, et al. **Rev Esp Enferm Dig** 1997 Apr;89(4):325–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Gastric tonometry as a visceral perfusion monitoring during thoracic epidural anaesthesia. Kapral S, et al. **Acta Anaesthesiol Scand Suppl** 1996;109:178–80

Influence of vestibular organ stimulation on stomach movement and respiration. Hoshino I, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;524:16–20

Possibilities of the non–invasive electrogastrography. Atanassova E, et al. **Acta Physiol Pharmacol Bulg** 1995; 21(4):105–11

Effect of the kappa agonist fedotozine on perception of gastric distension in healthy humans. Coffin B, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):919–25

Electrical stimulation of acupuncture points enhances gastric myoelectrical activity in humans. Lin X, et al. **Am J Gastroenterol** 1997 Sep;92(9):1527–30

Physicochemical characteristics of emulsions during fat digestion in human stomach and duodenum. Armand M, et al. **Am J Physiol** 1996 Jul;271(1 Pt 1):G172–83

Nitric oxide as modulator of cholinergic neurotransmission in gastric muscle of rabbits. Baccari MC, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G456–63

Wortmannin inhibits contraction without altering electrical activity in canine gastric smooth muscle. Burke EP, et al. **Am J Physiol** 1996 May;270(5 Pt 1):C1405–12

Intragastric hypertonic saline increases vasopressin and central Fos immunoreactivity in conscious rats. Carlson SH, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R750–8

Patterns of gastric myoelectrical activity in human subjects of different ages. Chen JD, et al. **Am J Physiol** 1997 May; 272(5 Pt 1):G1022–7

Effects of increasing solid component size of a mixed solid/liquid meal on solid and liquid gastric emptying. Collins PJ, et al. **Am J Physiol** 1996 Oct;271(4 Pt 1):G549–54

Reduction of intake in the rat due to gastric filling. Davis JD, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1599–605

Effects of duodenal nutrients on sensory and motor responses of the human stomach to distension. Feinle C, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):G721–6

Hyperglycemia affects proximal gastric motor and sensory function during small intestinal triglyceride infusion. Hebbard GS, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G814–9

Stoichiometry of neurally induced VIP release, NO formation, and relaxation in rabbit and rat gastric muscle. Jin JG, et al. **Am J Physiol** 1996 Aug;271(2 Pt 1):G357–69

Effect of hyperglycemia on gastric acid secretion during the gastric phase of digestion. Lam WF, et al. **Am J Physiol** 1997 May;272(5 Pt 1):G1116–21

Potassium and chloride currents in rat gastric enterochromaffin–like cells. Loo DD, et al. **Am J Physiol** 1996 May;270(5 Pt 1):E739–45

Modulation of high– and low–voltage–activated calcium currents in smooth muscle by calcium. McCarron JG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 1):C883–92

Characterization of PACAP receptors and signaling pathways in rabbit gastric muscle cells. Murthy KS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1391–9

Gastric volume rather than nutrient content inhibits food intake. Phillips RJ, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R766–9

Regional differences in cholinergic activity of muscle fibers from the human gastroesophageal junction. Preiksaitis HG, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1321–7

Rapid synthesis and secretion of intestinal apolipoprotein A–IV after gastric fat loading in rats. Rodriguez MD, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1170–7

Gastrogastric reflexes regulating gastric tone and their relationship to perception. Villanova N, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G464–9

Gastric distension–induced c–fos expression in catecholaminergic neurons of rat dorsal vagal complex. Willing AE, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R59–67

The hypertensive lower esophageal sphincter [letter; comment] Maher JW. **Am J Surg** 1997 May;173(5):454–5 . Comment on: Am J Surg 1996 Nov;172(5):439–42; discussion 442–3.

Gastric tonometry [letter; comment] Gomersall CD, et al. **Anaesthesia** 1996 Nov;51(11):1074–5. Comment on: Anaesthesia 1996 Feb;51(2):161–70.

Ultrasound examination of the stomach contents of women in the postpartum period. Jayaram A, et al. **Anesth Analg** 1997 Mar;84(3):522–6

Respiratory mechanics, gastric insufflation pressure, and air leakage of the laryngeal mask airway. Weiler N, et al. **Anesth Analg** 1997 May;84(5):1025–8

Computer model of gastric electrical stimulation. Mintchev M, et al. **Ann Biomed Eng** 1997 Jul–Aug;25(4):726–30

Physiology of isolated gastric endocrine cells. Sachs G, et al. **Annu Rev Physiol** 1997;59:243–56 (70 ref.)

Effects of different psychophysiological stressors on the cutaneous electrogastrogram in healthy subjects. Riezzo G, et al. **Arch Physiol Biochem** 1996;104(3):282–6

The influence of chronic platinum electrode implantation upon the myoelectric activity and histology of the stomach, small intestine and gall–bladder in sheep. Romański KW, et al. **Arch Vet Pol** 1995;35(1–2):127–35

The effect of tilted stripes in an optokinetic drum on gastric myoelectric activity and subjective reports of motion sickness. Andre JT, et al. **Aviat Space Environ Med** 1996 Jan;67(1):30–3

5–HT2B receptor signaling in the rat stomach fundus: dependence on calcium influx, calcium release and protein kinase C. Cox DA, et al. **Behav Brain Res** 1996; 73(1–2):289–92

Effects of fasting on the expression of gastrin, cholecystokinin, and somatostatin genes and of various housekeeping genes in the pancreas and upper digestive tract of rats. Yamada H, et al. **Biochem Biophys Res Commun** 1997 Feb 24;231(3):835–8

Evidence for the involvement of 5–HT4 receptors in the 5–hydroxytryptamine–induced pattern of migrating myoelectric complex in sheep. Plaza MA, et al. **Br J Pharmacol** 1997 Mar;120(6):1144–50

A method for simultaneous recording and assessment of gut contractions and relaxations in vivo. Krantis A, et al. **Can J Physiol Pharmacol** 1996 Aug;74(8):894–903

Effect of neural blockades, gastrointestinal regulatory peptides, and diversion of gastroduodenal contents on periodic pancreatic secretion in the preruminant calf. Zabielski R, et al. **Can J Physiol Pharmacol** 1995 Nov; 73(11):1616–24

Physiological regulation of gastric emptying and glucose absorption. Macdonald IA. **Diabet Med** 1996 Sep;13(9 Suppl 5):S11–5 (12 ref.)

Hyperglycemia affects gastric electrical rhythm and nausea during intraduodenal triglyceride infusion. Hebbard GS, et al. **Dig Dis Sci** 1997 Mar;42(3):568–75

What can be measured from surface electrogastrography. Computer simulations. Liang J, et al. **Dig Dis Sci** 1997 Jul; 42(7):1331–43

Comparative assessment of power dynamics of gastric electrical activity. Mintchev MP, et al. **Dig Dis Sci** 1997 Jun;42(6):1154–7

Gastric motility and mucosal ulcerogenic responses induced by prokinetic drugs in rats under prostaglandin–deficient conditions. Takeuchi K, et al. **Dig Dis Sci** 1997 Feb; 42(2):251–8

Analysis of fasting antroduodenal manometry in children. Tomomasa T, et al. **Dig Dis Sci** 1996 Nov;41(11):2195–203

Solitary views of the stomach. Blum AL. **Digestion** 1996; 57(5):287–98

The stomach as an endocrine organ. DelValle J. **Digestion** 1997;58 Suppl 1:4–7 (23 ref.)

Regional gastric pH measurement in horses and foals. Murray MJ, et al. **Equine Vet J Suppl** 1989 Jun;(7):73–6

Dual effects of trimebutine on electrical responses of gastric smooth muscles in the rat. Xue L, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):75–81

The effect of distension of the stomach on peripheral blood flow in anaesthetized pigs. Vacca G, et al. **Exp Physiol** 1996 May;81(3):385–96

Electrogastrography can recognize gastric electrical uncoupling in dogs. Mintchev MP, et al. **Gastroenterology** 1997 Jun;112(6):2006–11

Effect of distension and feeding on phasic changes in human proximal gastric tone. Ahluwalia NK, et al. **Gut** 1996 Nov; 39(5):757–61

Relationship between acid secretory activity and gastroduodenal migrating motor complex. Bortolotti M. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1288–95

Release of histamine and pancreastatin from isolated rat stomach ECL cells. Lindström E, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S109–10

Gastric physiology and function: effects of fruit juices. Moukarzel AA, et al. **J Am Coll Nutr** 1996 Oct;15(5 Suppl):18S–25S (41 ref.)

The gastric pump [letter; comment] Frankel LA. **J Am Coll Surg** 1997 Apr;184(4):435–6. Comment on: J Am Coll Surg 1996 Sep;183(3):243–8.

Targeting of drugs and delivery systems to specific sites in the gastrointestinal tract. Fell JT. **J Anat** 1996 Dec;189 (Pt 3):517–9 (12 ref.)

Omasal sampling technique for assessing fermentative digestion in the forestomach of dairy cows. Huhtanen P, et al. **J Anim Sci** 1997 May;75(5):1380–92

Esophageal distension induced gastric relaxation is mediated in part by vagal peripheral reflex mechanism in rats. Wei JY, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):12–8

Distension–evoked ascending and descending reflexes in the isolated guinea–pig stomach. Yuan SY, et al. **J Auton Nerv Syst** 1997 Jan 12;62(1–2):94–102

In vitro evaluation of intragastric PCO2 measurement by air tonometry. Kolkman JJ, et al. **J Clin Monit** 1997 Mar; 13(2):115–9

Prey ingestion revealed by oesophagus and stomach temperature recordings in cormorants. Ancel A, et al. **J Exp Biol** 1997 Jan;200 (Pt 1):149–54

Excitatory and inhibitory motor reflexes in the isolated guinea–pig stomach. Hennig GW, et al. **J Physiol (Lond)** 1997 May 15;501 (Pt 1):197–212

Increased sensitivity of gastrin cells to gastric distension following antral denervation in the rat. Higham A, et al. **J Physiol (Lond)** 1997 Aug 15;503 (Pt 1):169–75

An ATP–gated cation channel with some P2Z–like characteristics in gastric smooth muscle cells of toad. Ugur M, et al. **J Physiol (Lond)** 1997 Jan 15;498 (Pt 2):427–42

Cholinergic inhibition of Ca2+ current in guinea–pig gastric and tracheal smooth muscle cells. Wade GR, et al. **J Physiol (Lond)** 1996 Mar 1;491 (Pt 2):307–19

Role of selected peptides in the vagal regulation of gastric motor and endocrine pancreatic function. Krowicki ZK. **J Physiol Pharmacol** 1996 Sep;47(3):399–409 (55 ref.)

Effect of circumcostal gastropexy on gastric myoelectric and motor activity in dogs. Hall JA, et al. **J Small Anim Pract** 1997 May;38(5):200–7

Properties of junction potentials in gastric smooth muscle of the rat. Xue L, et al. **Jpn J Physiol** 1996 Apr;46(2):123–30

Two types of stretch–activated channel activities in guinea–pig gastric smooth muscle cells. Yamamoto Y, et al. **Jpn J Physiol** 1996 Aug;46(4):337–45

Classification of normal and abnormal electrogastrograms using multilayer feedforward neural networks. Lin Z, et al. **Med Biol Eng Comput** 1997 May;35(3):199–206

Impact of different electrode surface areas on validity of human electrogastrograms. Mintchev M, et al. **Med Biol Eng Comput** 1997 Jan;35(1):66–8

Gastric tone and the barostat: comprehend and compromise [editorial] Azpiroz F. **Neurogastroenterol Motil** 1997 Mar; 9(1):5

High resolution electrical mapping in the gastrointestinal system: initial results. Lammers WJ, et al. **Neurogastroenterol Motil** 1996 Sep;8(3):207–16

Effect of human milk or formula on gastric function and fat digestion in the premature infant. Armand M, et al. **Pediatr Res** 1996 Sep;40(3):429–37

Modifications of electrogastrographic activity during the viewing of brief film sequences. Baldaro B, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1243–50

Inhibitory effect of phorbol 12,13 dibutyrate on carbachol–activated nonselective cationic current in guinea–pig gastric myocytes. Ahn SC, et al. **Pflugers Arch** 1997 Aug;434(4):505–7

Effects of myosin light chain kinase inhibitors on carbachol–activated nonselective cationic current in guinea–pig gastric myocytes. Kim YC, et al. **Pflugers Arch** 1997 Aug;434(4):346–53

Role of actin microfilament in osmotic stretch–induced increase of voltage–operated calcium channel current in guinea–pig gastric myocytes. Xu WX, et al. **Pflugers Arch** 1997 Aug;434(4):502–4

Racial differences in gastric function among African Americans and Caucasian Americans: secretion, serum gastrin, and histology. Cryer B, et al. **Proc Assoc Am Physicians** 1996 Nov;108(6):481–9

Interstitial cells of Cajal mediate inhibitory neurotransmission in the stomach. Burns AJ, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):12008–13

24–hour ambulatory electrogastrography in healthy volunteers. Lindberg G, et al. **Scand J Gastroenterol** 1996 Jul;31(7):658–64

[Simultaneous study of tones of the lower esophageal sphincter and proximal stomach in healthy humans] Zerbib F, et al. **Gastroenterol Clin Biol** 1996;20(12):1078–83 (Eng. Abstr.) **(Fre)**

[The role of endogenous serotonin in interdigestive gastric contraction] Haga N, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):489–92 **(Jpn)**

[Equal power electrogastrography] Homma N, et al. **J Smooth Muscle Res** 1995 Dec;31(6):425–7 **(Jpn)**

[Postprandial changes in percutaneous electrogastrography] Kamiya T, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):428–30 **(Jpn)**

[Phase III contraction inhibition and gastric acidification in Pavlov and Heidenhain pouch in dogs] Mochiki H, et al. **J Smooth Muscle Res** 1995 Dec;31(6):498–503 **(Jpn)**

[Responses to different test meal loading in percutaneous electrogastrography in children] Yagi M, et al. **J Smooth Muscle Res** 1995 Dec;31(6):431–3 **(Jpn)**

[Effect of peptide YY and the role of vagus nerve in gastric secretion and motility in conscious dogs] Zai H, et al. **J Smooth Muscle Res** 1995 Dec;31(6):507–8 **(Jpn)**

[Electrogastrography (EGG)] Ishii T, et al. **Nippon Rinsho** 1997 Apr;55 Suppl 2:153–5 (6 ref.) **(Jpn)**

[Selective electroenterogastrography. I] Smirnova VI, et al. **Khirurgiia (Mosk)** 1996;(2):68–70 (Eng. Abstr.) **(Rus)**

[The functional interrelationships of the components of the gastroduodenal complex and its afferent reactions] Zav'ialov AV, et al. **Vestn Ross Akad Med Nauk** 1996; (1):3–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Further classification of dysmotility–like dyspepsia by interdigestive gastroduodenal manometry and plasma motilin level. Kusano M, et al. **Am J Gastroenterol** 1997 Mar;92(3):481–4

Cutaneous electrogastrography for the assessment of gastric

myoelectrical activity in type I diabetes mellitus. Mantides A, et al. **Am J Gastroenterol** 1997 Jul;92(7):1190–3

Nonencapsulated, intact omeprazole granules effectively suppress intragastric acidity when administered via a gastrostomy. Sharma VK, et al. **Am J Gastroenterol** 1997 May;92(5):848–51

Role of plasma vasopressin as a mediator of nausea and gastric slow wave dysrhythmias in motion sickness. Kim MS, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G853–62

Electrical responses of gastric smooth muscles in streptozotocin-induced diabetic rats. Xue L, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):G77–83

Nissen fundoplication prevents shortening of the sphincter during gastric distention. Mason RJ, et al. **Arch Surg** 1997 Jul;132(7):719–24; discussion 724–6

Gastric emptying in type 2 diabetes: quick or slow? Smith U. **Diabet Med** 1996 Sep;13(9 Suppl 5):S31–3 (22 ref.)

Gastric hypersensitivity in nonulcer dyspepsia: an inconsistent finding. Klatt S, et al. **Dig Dis Sci** 1997 Apr; 42(4):720–3

Impaired gastric myoelectrical activity in patients with chronic renal failure. Lin X, et al. **Dig Dis Sci** 1997 May; 42(5):898–906

Mechanisms of gastric distention in esophageal atresia with distal tracheoesophageal fistula. Siebens AA. **Dysphagia** 1996 Spring;11(2):90–2

Overexpressed nitric oxide synthase in portal-hypertensive stomach of rat: a key to increased susceptibility to damage? Ohta M, et al. **Gastroenterology** 1997 Jun;112(6):1920–30

Cyclooxygenase 2 and wound healing in the stomach [editorial; comment] Stenson WF. **Gastroenterology** 1997 Feb;112(2):645–8 (32 ref.). Comment on: Gastroenterology 1997 Feb;112(2):387–97.

Rapid apoptotic changes in the gastric glandular epithelium of rats administered intraperitoneally with fusarenon-X. Li J, et al. **J Vet Med Sci** 1997 Jan;59(1):17–22

High-pass filtering of the electrogastrogram. Daskalov I, et al. **Med Biol Eng Comput** 1997 May;35(3):279–82

Lower postprandial gastric volume response in diabetic patients with vagal neuropathy. Undeland KA, et al. **Neurogastroenterol Motil** 1997 Mar;9(1):19–24

Gastric accommodation in functional dyspepsia. Berstad A, et al. **Scand J Gastroenterol** 1997 Mar;32(3):193–7 (57 ref.)

Disturbed gastric motor activity in patients with human immunodeficiency virus infection. Konturek JW, et al. **Scand J Gastroenterol** 1997 Mar;32(3):221–5

Helicobacter pylori and disturbance of gastric function associated with duodenal ulcer disease and gastric cancer. McColl KE, et al. **Scand J Gastroenterol Suppl** 1996; 215:32–7 (40 ref.)

[Syndrome differentiation, gastro-intestinal function and electro-gastrography of chronic obstructive pulmonary disease and pulmonary heart disease] Hu HJ, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1995 Dec; 15(12):724–5 **(Chi)**

[Intra-individual comparison of gastric peristalsis after ingestion of a semiliquid and solid test meal] Linke R, et al. **Nuklearmedizin** 1997 Jun;36(4):131–6 (Eng. Abstr.) **(Ger)**

[Gastric secretion and motility function after pylorus-preserving pancreaticoduodenectomy] Asahi H, et al. **J Smooth Muscle Res** 1995 Dec;31(6):381–3 **(Jpn)**

[Function of the esophagus and stomach in gastroesophageal reflux] Asano K, et al. **J Smooth Muscle Res** 1995 Dec; 31(6):351–4 **(Jpn)**

[Clinical application of 24 hour Holter electrogastrography in diabetic autonomic neuropathy patients] Miyakawa K, et al. **J Smooth Muscle Res** 1995 Dec;31(6):427–8 **(Jpn)**

[Contractile dysfunction and alteration of PKC activity in gastric smooth muscle of diabetic rats] Sakai Y, et al. **J Smooth Muscle Res** 1995 Dec;31(6):404–5 **(Jpn)**

[Comparison of preoperative and postoperative electrogastrography on digestive tract motility in cholelithiasis] Yoshitomi A, et al. **J Smooth Muscle Res** 1995 Dec;31(6):433–4 **(Jpn)**

[The morphofunctional changes in the duodenogastric portion of the gastrointestinal tract in patients with rheumatoid arthritis] Barashkov VG, et al. **Vestn Khir Im I I Grek** 1996;155(3):93–5 (47 ref.) **(Rus)**

[Gastroesophageal reflux, pulmonary and gastric function in patients with cystic fibrosis. Results of a randomized trial] Escobar Castro H, et al. **Acta Gastroenterol Latinoam** 1996; 26(3):183–6 (Eng. Abstr.) **(Spa)**

[Comparison between gastric and esophageal mechano-sensitivity in patients with functional dyspepsia] López Gastón AR, et al. **Acta Gastroenterol Latinoam** 1996; 26(3):143–7 (Eng. Abstr.) **(Spa)**

[The clinico-morphofunctional status of the esophagogastroduodenal system in patients with acne rosacea: the etiological, pathogenetic and treatment aspects] Abrahamovych LIe. **Lik Sprava** 1996 Oct-Dec; (10–12):84–8 **(Ukr)**

RADIOGRAPHY

Bowel herniation through the torn diaphragm: I. Gastric herniation. Schulman A, et al. **Abdom Imaging** 1996 Sep-Oct;21(5):395–9

Benefit of immediate endoscopy after radiography for anisakiasis [letter] Kanematsu M, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1114–5

Patient perception and localization of dysphagia — barium study correlation. Wright RE, et al. **Dis Esophagus** 1997 Jul;10(3):211–4; discussion 215–6

Images in clinical medicine. Trichobezoars. Navab F, et al. **N Engl J Med** 1997 Jun 12;336(24):1721

Images in clinical medicine. Sand as a foreign body [see comments] [published erratum appears in N Engl J Med 1997 Oct 16;337(16):1175] Petitti N. **N Engl J Med** 1997 Jul 10;337(2):96. Comment in: N Engl J Med 1997 Oct 16;337(16):1175.

CT of the stomach: spectrum of disease. Fishman EK, et al. **Radiographics** 1996 Sep;16(5):1035–54 (57 ref.)

Percutaneous gastrostomy with T-fastener gastropexy: results of 316 consecutive procedures. Ryan JM, et al. **Radiology** 1997 May;203(2):496–500

[Gastric neoplasms: their characterization, assessment of the degree of parietal infiltration and check on recurrence. The potentials and limits of CT, endoscopic US and MR] Gualdi GF, et al. **Clin Ter** 1996 Nov;147(11):585–94 (20 ref.) (Eng. Abstr.) **(Ita)**

[Gastric emptying of radiopaque markers] Tanno Y, et al. **J Smooth Muscle Res** 1995 Dec;31(6):358–9 **(Jpn)**

[The combined x-ray-endoscopic evaluation of the late results in organ-preserving operations with vagotomy in peptic ulcer] Zaĭtsev VT, et al. **Lik Sprava** 1996 Jan-Feb; (1–2):115–8 (Eng. Abstr.) **(Rus)**

[The importance of x-ray and endoscopic studies of the stomach in the complex examination of patients following resections and vagotomies] Benedikt VV, et al. **Ter Arkh** 1993;65(2):23–8 (Eng. Abstr.) **(Rus)**

[X-ray study of the stomach after vertical gastroplasty in the treatment of morbid obesity] Ovchinnikov VI, et al. **Vestn Rentgenol Radiol** 1996 May-Jun;(3):29–32 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Acute gastric dilatation: an incidental finding in a Meckel study. Sahin M, et al. **Ann Nucl Med** 1997 May;11(2):155–7

Gastric uptake during Re-186 HEDP bone scintigraphy. Limouris GS, et al. **Anticancer Res** 1997 May-Jun; 17(3B):1779–81

Radionuclide imaging of gastric emptying [letter; comment] Leiper J. **Br J Sports Med** 1996 Sep;30(3):268. Comment on: Br J Sports Med 1996 Mar;30(1):20–3.

National survey of radionuclide gastric emptying studies. House A, et al. **Can J Gastroenterol** 1997 May-Jun; 11(4):317–21

Esophagogastrectomy producing an unusual appearance on lung imaging. Religioso DG, et al. **Clin Nucl Med** 1996 Aug;21(8):651–3

Gastric emptying of solids in humans: improved evaluation by Kaplan-Meier plots, with special reference to obesity and gender. Grybäck P, et al. **Eur J Nucl Med** 1996 Dec; 23(12):1562–7

[13C]octanoic acid breath test for gastric emptying of solids: accuracy, reproducibility, and comparison with scintigraphy. Choi MG, et al. **Gastroenterology** 1997 Apr; 112(4):1155–62

Electrogastrography and gastric emptying scintigraphy are complementary for assessment of dyspepsia. Parkman HP, et al. **J Clin Gastroenterol** 1997 Jun;24(4):214–9

Evidence of accelerated gastric emptying in longstanding diabetic patients after ingestion of a semisolid meal. Lipp RW, et al. **J Nucl Med** 1997 May;38(5):814–8

Lag phase quantification for solid gastric emptying studies. Ziessman HA, et al. **J Nucl Med** 1996 Oct;37(10):1639–43

SECRETION see GASTRIC MUCOSA/secretion

SURGERY

The lack of association between adenocarcinoma of the esophagus and gastric surgery: a retrospective study. Birgisson S, et al. **Am J Gastroenterol** 1997 Feb; 92(2):216–21

Esophageal reflux after total or proximal gastrectomy in patients with adenocarcinoma of the gastric cardia. Hsu CP, et al. **Am J Gastroenterol** 1997 Aug;92(8):1347–50

Colorectal cancer after gastric surgery: a meta-analysis. Munnangi S, et al. **Am J Gastroenterol** 1997 Jan; 92(1):109–13

Gastric surgery does not increase the risk of developing Barrett's esophagus. Parrilla P, et al. **Am J Gastroenterol** 1997 Jun;92(6):960–3

Thoracoscopic vagotomy for refractory bleeding after previous gastric surgery [letter] Rubinfeld I, et al. **Am J Gastroenterol** 1996 Dec;91(12):2649–50

Prospective, randomized evaluation of midline fascial closure in gastric bariatric operations. Brolin RE. **Am J Surg** 1996 Oct;172(4):328–31

Minimally invasive surgery of the esophagus and stomach. Trus TL, et al. **Am J Surg** 1997 Mar;173(3):242–55 (90 ref.)

Palliative gastric transposition following pharyngolaryngoesophagectomy. Azurin DJ, et al. **Am Surg** 1997 May;63(5):410–3

Vitamin B12 deficiency after gastric surgery [letter; comment] Murthy GD, et al. **Ann Intern Med** 1996 Dec 1;125(11):937–8. Comment on: Ann Intern Med 1996 Mar 1;124(5):469–76.

Comparison of hand-sewn and stapled esophagogastric anastomosis after esophageal resection for cancer: a prospective randomized controlled trial. Law S, et al. **Ann Surg** 1997 Aug;226(2):169–73

Simple technique for pancreatogastrostomy and the histological findings of pancreatogastric anastomosis. Yamamoto J, et al. **Arch Surg** 1997 Jul;132(7):785–8 (08 ref.)

Oesophagogastrectomy with an anastomosis using linear staplers. Bird P, et al. **Aust N Z J Surg** 1996 Nov; 66(11):757–63 (17 ref.)

Functional laparoscopic reversal of a long gastroplasty. Bird PA, et al. **Aust N Z J Surg** 1997 Oct;67(10):734–5

Enteral versus parenteral nutrition after oesophagogastric surgery: a prospective randomized comparison [letter] Woods S. **Aust N Z J Surg** 1997 Oct;67(10):736

Experimental oesophagogastric anastomosis: preliminary report of a new compression device that also fragments. Rebuffat C, et al. **Br J Surg** 1996 Nov;83(11):1616–9

Complications after gastric transposition in children. Macksood DJ, et al. **Can Assoc Radiol J** 1997 Aug; 48(4):259–64

Gastric transposition for esophageal replacement in children—an Indian experience. Gupta DK, et al. **Eur J Pediatr Surg** 1997 Jun;7(3):143–6

Surgical treatment and its long-term result for caustic-induced prepyloric obstruction. Hsu CP, et al. **Eur J Surg** 1997 Apr;163(4):275–9

Choledocholithiasis after Billroth II surgery: MR cholangiographic diagnosis. Holzknecht N, et al. **Eur Radiol** 1997;7(4):520–3

Pancreatic secretion after anterior gastric wall stapling with posterior truncal vagotomy in dogs. Mistiaen W, et al. **Eur Surg Res** 1996;28(2):154–61

Vitamin B12 deficiency after gastric surgery: its early detection. Kapadia CR. **Gastroenterology** 1996 Oct; 111(4):1151–2

A novel approach to the removal of sharp foreign bodies from the stomach using a combined endoscopic and laparoscopic technique. Iafrati MD, et al. **Gastrointest Endosc** 1996 Jan;43(1):67–70

Postoperative delayed emptying in pylorus-preserving pancreatoduodenectomy using pancreaticogastrostomy: comparison of the reconstruction position. Kasuaya H, et al. **Hepatogastroenterology** 1997 May-Jun;44(15):856–60

Duodenum-sparing resection of the pancreatic head combined with pancreatogastroanastomosis in the treatment of chronic pancreatitis—surgical technique. Ruzicka M, et al. **Hepatogastroenterology** 1997 Mar-Apr; 44(14):564–6

Should the distal splenorenal shunt be combined with gastric disconnection and transection? Henderson JM. **HPB Surg** 1997;10(3):184–5 (10 ref.)

Jejunum or stomach for the pancreatic anastomosis after pancreaticoduodenectomy. Warshaw AL. **HPB Surg** 1997; 10(3):191–3 (4 ref.)

Stomach as a conduit for esophagus—a study of 105 cases [corrected and republished with original paging, article originally printed in Indian J Gastroenterol 1996 Apr;15(2):52–4] Shenoy RK, et al. **Indian J Gastroenterol** 1996 Oct;15(4):52–4

Stomach as a conduit for esophagus—a study of 105 cases [corrected and republished in Indian J Gastroenterol 1996 Oct;15(4):52–4] Shenoy RK, et al. **Indian J Gastroenterol** 1996 Apr;15(2):52–4

Unusual multiple phytobezoars in a child. Nagar RC. **J Indian Med Assoc** 1996 Aug;94(8):324

Transuterine puncture of the fetal stomach provides access to the small bowel in the rabbit. Brandt ML, et al. **J Invest Surg** 1997 Jan-Apr;10(1–2):41–6

Laparoscopically assisted total laryngopharyngoesophagectomy with gastric transposition. Montgomery P, et al. **J Laryngol Otol** 1996 Nov; 110(11):1072–4

Gastric tube as the primary procedure for pure esophageal atresia. Pedersen JC, et al. **J Pediatr Surg** 1996 Sep; 31(9):1233–5

Effect of circumcostal gastropexy on gastric myoelectric and motor activity in dogs. Hall JA, et al. **J Small Anim Pract** 1997 May;38(5):200–7

Gastric acid secretion and gastroduodenal pH after pancreaticogastrostomy in dogs. Shinchi H, et al. **J Surg Res** 1996 Feb 15;61(1):152–8

Nonendoscopic antegrade percutaneous gastrostomy: the effect of preplacement gastric insufflation on tube position and intra-abdominal anatomy. Clary EM, et al. **J Vet Intern Med** 1996 Jan-Feb;10(1):15–20

Modified procedure with a surgical stapler for construction of a Pavlov pouch in dogs. Shibata C, et al. **Lab Anim Sci** 1996 Aug;46(4):438–41

Intrathecal morphine for postoperative analgesia in an infant with bronchopulmonary dysplasia following upper abdominal surgery [see comments] Krechel SW, et al. **Paediatr Anaesth** 1996;6(5):423–6. Comment in: Paediatr Anaesth 1997;7(3):262.

Stomach versus sigmoid colon in children undergoing major reconstruction of the lower urinary tract. Di Benedetto V, et al. **Pediatr Surg Int** 1997 Jul;12(5–6):393–6

Prophylactic gastropexy in the asplenia syndrome. Okoye BO, et al. **Pediatr Surg Int** 1997;12(1):28–9

Percutaneous gastrostomy with T-fastener gastropexy: results of 316 consecutive procedures. Ryan JM, et al. **Radiology** 1997 May;203(2):496–500

Left hepaticogastrostomy for biliary obstruction: long-term results. Soulez G, et al. **Radiology** 1997 Sep;204(3):780–6

Diagnostic value of dumping provocation in patients after gastric surgery. van der Kleij FG, et al.

STOMACH

Scand J Gastroenterol 1996 Dec;31(12):1162–6

Laparoscopic gastrojejunostomy and endoscopic biliary stent placement for palliation of incurable gastric outlet obstruction with cholestasis. Brune IB, et al. **Surg Endosc** 1997 Aug;11(8):834–7

Conversions and complications in 185 laparoscopic adjustable silicone gastric banding cases. Chelala E, et al. **Surg Endosc** 1997 Mar;11(3):268–71

Laparoscopically assisted gastric surgery using Dexterity Pneumo Sleeve. Naitoh T, et al. **Surg Endosc** 1997 Aug; 11(8):830–3

Endoluminal surgery. Spivak H, et al. **Surg Endosc** 1997 Apr; 11(4):321–5 (19 ref.)

Laparoscopic removal of a swallowed toothbrush. Wishner JD, et al. **Surg Endosc** 1997 May;11(5):472–3 (7 ref.)

Emptying of the intrathoracic stomach using three different pylorus drainage procedures—results of a comparative study. Manjari R, et al. **Surg Today** 1996;26(8):581–5

Stapled versus sutured esophagogastric anastomoses [letter] Urschel JD, et al. **Surgery** 1997 Sep;122(3):643–4

Rapunzel syndrome. Senapati MK, et al. **Trop Doct** 1997 Jan; 27(1):53–4

Biomechanical and histological evaluation of a laparoscopic stapled gastropexy technique in dogs. Hardie RJ, et al. **Vet Surg** 1996 Mar–Apr;25(2):127–33

Evaluation of percutaneous gastrostomy as a technique for permanent gastropexy. Waschak MJ, et al. **Vet Surg** 1997 May–Jun;26(3):235–41

A comparison of laparoscopic and belt–loop gastropexy in dogs. Wilson ER, et al. **Vet Surg** 1996 May–Jun;25(3):221–7

[Supra–aortic arch esophagogastrostomy through esophageal bed in treating patients with middle and lower esophageal carcinoma] Yang L, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan;18(1):37–40 (Eng. Abstr.) **(Chi)**

[Complications of two types of pancreatic anastomosis after pancreaticoduodenectomy] Andivot T, et al. **Ann Chir** 1996;50(6):431–7 (37 ref.) (Eng. Abstr.) **(Fre)**

[Total duodenal diversion in the treatment of complex peptic esophagitis] Fékété F, et al. **Chirurgie** 1996;121(5):326–8; discussion 328–9 (Eng. Abstr.) **(Fre)**

[Endoscopic repositioning of the upside–down stomach and its fixation by percutaneous endoscopic gastrostomy] Januschowski R. **Dtsch Med Wochenschr** 1996 Oct 11; 121(41):1261–4 (19 ref.) (Eng. Abstr.) **(Ger)**

[Cervical anastomotic stenosis after gastric tube reconstruction in esophageal carcinoma. Evaluation of a patient sample 1989–1995] Bruns CJ, et al. **Langenbecks Arch Chir** 1997;382(3):145–8 (Eng. Abstr.) **(Ger)**

[Subtotal esophagectomy with stomach transposition as standard operation for adenocarcinoma of the esophagogastric junction] Fass J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:166–8 (Eng. Abstr.) **(Ger)**

[Gastric duplication cyst in an adult] Estlein D, et al. **Harefuah** 1997 May 1;132(9):634–5, 679 (Eng. Abstr.) **(Heb)**

[Whipple operation in trauma] Kluger Y, et al. **Harefuah** 1997 Mar 2;132(5):366–8, 383 (Eng. Abstr.) **(Heb)**

[Esophago–jejuno–gastroplasty in the treatment of peptic stenosis of the esophagus] Della Casa U, et al. **Minerva Chir** 1997 Jun;52(6):705–12 (Eng. Abstr.) **(Ita)**

[Strain gauge measurement of digestive tract motility in gastric tube reconstruction] Fujiwara K, et al. **J Smooth Muscle Res** 1995 Dec;31(6):355–7 **(Jpn)**

[The techniques to protect the anastomotic leakage of esophagogastrostomy at the neck] Watanabe H. **Nippon Geka Gakkai Zasshi** 1996 Jun;97(6):432–6 (3 ref.) (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of factor XIII for postoperative stomal leakage and fistulae after gastrointestinal surgery] Ishibiki K. **Rinsho Byori** 1997 Feb;Suppl 104:17–24 (7 ref.) **(Jpn)**

[Non–reflux esophago–gastric anastomosis] Bulynin VI, et al. **Khirurgiia (Mosk)** 1997;(6):64–5 (Eng. Abstr.) **(Rus)**

[Evaluation of the gastric outlet function of normal and operated stomach using ultrasound] Gorbunov VN, et al. **Khirurgiia (Mosk)** 1996;(2):31–4 (Eng. Abstr.) **(Rus)**

[Influence of regional lympho–immunostimulation and infra–red magnetolaser therapy on structure of lymph nodes of lesser omentum after gastric surgery] Kasymov AL, et al. **Khirurgiia (Mosk)** 1997;(6):37–40 (Eng. Abstr.) **(Rus)**

[Advantages and disadvantages of stomach resection with PU anastomosis in treatment of gastric and duodenal peptic ulcers] Maiorova IV, et al. **Khirurgiia (Mosk)** 1996;(5):61–6 (120 ref.) **(Rus)**

[The use of the mechanical suture in surgery on the stomach and intestines] Mel'nik VM, et al. **Klin Khir** 1996;(9):37–40 (65 ref.) **(Rus)**

[Gallbladder motor function studied by modified infusion cholescintigraphy method after gastric and duodenal surgery] Petrović M, et al. **Acta Chir Iugosl** 1995;42(1):21–7 (Eng. Abstr.) **(Scr)**

TRANSPLANTATION

Atraumatic gastric transposition after transhiatal esophagectomy. Korst RJ, et al. **Ann Thorac Surg** 1997 Sep;64(3):867–9

Iatrogenic gastric volvulus during transposition for esophageal atresia: diagnosis and treatment. Chan KL, et al. **J Pediatr Surg** 1996 Feb;31(2):229–32

Seromuscular gastrocystoplasty in rats. Demirbilek S, et al. **J Pediatr Surg** 1997 Apr;32(4):575–9

Continent gastric tube: new techniques and long–term followup. Close CE, et al. **J Urol** 1997 Jan;157(1):51–5

Enteric mucosal regrowth after bladder augmentation using demucosalized gut segments. Dewan PA, et al. **J Urol** 1997 Sep;158(3 Pt 2):1141–6

Early experience with clinical intestinal transplantation. Friend PJ, et al. **Transplant Proc** 1996 Oct;28(5):2744–5

Histologic spectrum of acute cellular rejection in human intestinal allografts. Lee RG, et al. **Transplant Proc** 1996 Oct;28(5):2767

Multivisceral allotransplantation in pigs. Zhu Y, et al. **Transplant Proc** 1996 Oct;28(5):2725

[Tonometric monitoring of the viability of free transplants of the jejunum and the stomach after total circulary pharyngolaryngectomy] Rohr S, et al. **J Chir (Paris)** 1996; 133(8):389–91 (Eng. Abstr.) **(Fre)**

ULTRASONOGRAPHY

Gastric emptying of a light breakfast. A study using real time ultrasonography [see comments] Søreide E, et al. **Acta Anaesthesiol Scand** 1996 May;40(5):549–53. Comment in: Acta Anaesthesiol Scand 1996 May;40(5):507–8.

Sonographic detection of intragastric blood clot. Farin P, et al. **Eur Radiol** 1997;7(2):262–3

Intragastric distribution and gastric emptying assessed by three–dimensional ultrasonography. Gilja OH, et al. **Gastroenterology** 1997 Jul;113(1):38–49

Endoscopic ultrasonographic characteristics of a gastric tubular duplication. Wang KL, et al. **Gastrointest Endosc** 1997 Jul;46(1):76–9

Ultrasonographic assessment of intragastric volume in neonates: factors affecting the relationship between intragastric volume and antral cross–sectional area. Tomomasa T, et al. **Pediatr Radiol** 1996 Nov;26(11):815–20

Ultrasonographic evaluation of gastric emptying in normal children and children after pyloromyotomy. Asai A, et al. **Pediatr Surg Int** 1997 Jul;12(5–6):344–7

Ultrasonography of the human stomach. Berstad A, et al. **Scand J Gastroenterol Suppl** 1996;220:75–82 (60 ref.)

[Gastric neoplasms: their characterization, assessment of the degree of parietal infiltration and check on recurrence. The potentials and limits of CT, endoscopic US and MR] Gualdi GF, et al. **Clin Ter** 1996 Nov;147(11):585–94 (20 ref.) (Eng. Abstr.) **(Ita)**

[Evaluation of the gastric outlet function of normal and operated stomach using ultrasound] Gorbunov VN, et al. **Khirurgiia (Mosk)** 1996;(2):31–4 (Eng. Abstr.) **(Rus)**

[Transabdominal ultrasound study of stomach and duodenum: standardization and potentialities] Prozorskiĭ KV, et al. **Vestn Rentgenol Radiol** 1997 May–Jun;(3):19–22 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

The effects of extracts from Tetrapleura tetraptera (Taub.) and Bayluscide on cells and tissue structures of Biomphalaria glabrata (Say). Bode AU, et al. **J Ethnopharmacol** 1996 Feb;50(2):103–13

VIROLOGY

Murine infection with lymphocytic choriomeningitis virus following gastric inoculation. Rai SK, et al. **J Virol** 1996 Oct;70(10):7213–8

Gastric attaching and effacing Escherichia coli lesions in a puppy with naturally occurring enteric colibacillosis and concurrent canine distemper virus infection. Wada Y, et al. **Vet Pathol** 1996 Nov;33(6):717–20

STOMACH, AVIAN

METABOLISM

Lectin histochemical study of glycoconjugates in the chick embryo proventriculus. Gheri G, et al. **Eur J Morphol** 1995 Nov;33(4):381–92

STOMACH CONTENTS see **GASTROINTESTINAL CONTENTS**

STOMACH DILATATION

COMPLICATIONS

Acute presentation of congenital diaphragmatic hernia past the neonatal period: a life threatening emergency. Paut O, et al. **Can J Anaesth** 1996 Jun;43(6):621–5

Emphysematous gastritis secondary to acute gastric dilatation. Lin CY, et al. **J Gastroenterol Hepatol** 1995 Sep–Oct;10(5):612–5

[Acute gastric dilatation and superior mesenteric artery syndrome in the mentally retarded] de Koning TJ, et al. **Ned Tijdschr Geneeskd** 1996 Sep 28;140(39):1960–3 (Eng. Abstr.) **(Dut)**

DIAGNOSIS

The superior mesenteric artery syndrome and acute gastric dilatation in eating disorders: a report of two cases and a review of the literature. Adson DE, et al. **Int J Eat Disord** 1997 Mar;21(2):103–14 (59 ref.)

ETIOLOGY

Intermittent positive ventilation through a laryngeal mask in children: does it cause gastric dilatation? Selby IR, et al. **Paediatr Anaesth** 1997;7(4):305–8

[Necrosis of the gastric body and fundus caused by acute dilatation by a duodenal obstacle. Apropos of a case] Horhant P, et al. **J Chir (Paris)** 1996 Sep;133(6):294–6 **(Fre)**

[Iatrogenic gastric dilatation after oxygen inhalation therapy by the nasal route (letter)] Andant C, et al. **Rev Med Interne** 1997;18(1):81–2 **(Fre)**

[Decompensated acute gastric dilatation caused by a bulimic attack in anorexia nervosa] Willeke F, et al. **Dtsch Med Wochenschr** 1996 Oct 4;121(40):1220–5 (Eng. Abstr.) **(Ger)**

SURGERY

Comparison of two surgical treatments of gastric dilatation–volvulus in dogs. Eggertsdóttir AV, et al. **Acta Vet Scand** 1996;37(4):415–26

VETERINARY

Acute gastric dilatation in cats: a case series. Bredal WP, et al. **Acta Vet Scand** 1996;37(4):445–51

Comparison of two surgical treatments of gastric dilatation–volvulus in dogs. Eggertsdóttir AV, et al. **Acta Vet Scand** 1996;37(4):415–26

Gastric dilatation–volvulus in the dog with histological evidence of preexisting inflammatory bowel disease: a retrospective study of 23 cases. Braun L, et al. **J Am Anim Hosp Assoc** 1996 Jul–Aug;32(4):287–90

Multiple risk factors for the gastric dilatation–volvulus syndrome in dogs: a practitioner/owner case–control study. Glickman LT, et al. **J Am Anim Hosp Assoc** 1997 May–Jun; 33(3):197–204

Evaluation of a hypertonic saline–dextran solution for treatment of dogs with shock induced by gastric dilatation–volvulus. Schertel ER, et al. **J Am Vet Med Assoc** 1997 Jan 15;210(2):226–30

Acute gastric dilatation with volvulus in a northern fur seal (Callorhinus ursinus). Frasca S Jr, et al. **J Wildl Dis** 1996 Jul;32(3):548–51

Abdominal distension in a cat [letter] Hibbert S. **Vet Rec** 1997 Jul 12;141(2):56

Abdominal distension in a cat [letter] Stevenson M. **Vet Rec** 1997 Aug 30;141(9):232

Abdominal distension in a cat [letter] Walsh G. **Vet Rec** 1997 Aug 16;141(7):180

STOMACH DISEASES

Acute gastric anisakiasis: 28 cases during the last 10 years. Muraoka A, et al. **Dig Dis Sci** 1996 Dec;41(12):2362–5 (20 ref.)

Watermelon stomach. Abedi M, et al. **Gastroenterologist** 1997 Sep;5(3):179–84 (32 ref.)

The use of endoscopic ultrasonography in the evaluation and diagnosis of gastric lesions. Jaffe PE. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):565–84 (52 ref.)

Stomach '96: Kuala Lumpur International meeting on diseases of the stomach. Kuala Lumpur, Malaysia, 3–6 July 1996. Abstracts. **J Gastroenterol Hepatol** 1996;11 Suppl 2:A51–75

Crohn's disease of the upper gastrointestinal tract. Wagtmans MJ, et al. **Neth J Med** 1997 Feb;50(2):S2–7 (58 ref.)

Functional disorders of the stomach. Koch KL, et al. **Semin Gastrointest Dis** 1996 Oct;7(4):185–95 (52 ref.)

Skin care management of gastrointestinal fistulas. Dearlove JL. **Surg Clin North Am** 1996 Oct;76(5):1095–109

[Tuberculosis of the stomach] Ludvík P. **Rozhl Chir** 1996 Aug;75(8):398–9 (Eng. Abstr.) **(Cze)**

[Two cases of gastric volvulus] Hayashi N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 May;94(5):336–9 **(Jpn)**

CHEMICALLY INDUCED

Gastric microbleeding following single and repeated dosing with naproxen. McAlindon ME, et al. **Aliment Pharmacol Ther** 1995 Dec;9(6):655–9

Initial description of gastric melanosis in a laxative–abusing patient. Mitty RD, et al. **Am J Gastroenterol** 1997 Apr; 92(4):707–8 (4 ref.)

Toxicity of nonsteroidal anti–inflammatory drugs in the elderly: is advanced age a risk factor? Solomon DH, et al. **Am J Med** 1997 Feb;102(2):208–15 (97 ref.)

Tumor necrosis factor mediation of NSAID–induced gastric damage: role of leukocyte adherence. Appleyard CB, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G42–8

TNF–alpha contributes to the pathogenesis of ethanol–induced gastric damage in cirrhotic rats. Ferraz JG, et al. **Am J Physiol** 1997 Apr;272(4 Pt 1):G809–14

Protective action of gastrin–17 against alcohol–induced gastric injury in the rat: role in mucosal defense. Mercer DW, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G365–73

Prevention of NSAID–induced gastroduodenal complications [editorial] Hiele M. **Clin Rheumatol** 1996 Sep; 15(5):431–4

Flavonoid-induced gastroprotection in rats: role of blood flow and leukocyte adherence. Blank MA, et al. **Digestion** 1997;58(2):147–54

Proton-pump inhibition and gastric giardiasis: a causal or casual association? Reynaert H, et al. **J Gastroenterol** 1995 Dec;30(6):775–8

Acute gastrointestinal toxic effects of suspensions of unencapsulated and encapsulated ibuprofen in rats. Adeyeye CM, et al. **Pharm Res** 1996 May;13(5):784–93

[Report of 3 cases of greater curvature antral flattening caused by non-steroidal anti-inflammatory agents] Catalano O. **Radiol Med (Torino)** 1996 Sep;92(3):320–1 **(Ita)**

[Gastroduodenal lesions induced by non-steroidal antiinflammatory drugs] Grigorév PI, et al. **Klin Med (Mosk)** 1997;75(3):69–71 **(Rus)**

COMPLICATIONS

An intermittently volvulating paraoesophageal hernia mimicking angina pectoris. A case report. Tielliu I, et al. **Acta Chir Belg** 1997 Apr;97(2):81–3

Helicobacter pylori and portal hypertensive gastropathy [letter; comment] Guslandi M. **Am J Gastroenterol** 1997 Apr;92(4):723. Comment on: Am J Gastroenterol 1996 Jul;91(7):1400–6.

Watermelon stomach in a patient with vitiligo and systemic lupus erythematosus. Archimandritis A, et al. **Clin Exp Rheumatol** 1996 Mar–Apr;14(2):227–8

H. pylori infection in HIV-positive patients. A serohistological study. Fabris P, et al. **Dig Dis Sci** 1997 Feb;42(2):289–92

Upper gastrointestinal hemorrhage secondary to ectopic spleen. Laszewicz W, et al. **Endoscopy** 1997 Jan;29(1):56–7

Gastric ascariasis: a rare cause of upper gastrointestinal bleeding. Pontes JM, et al. **Endoscopy** 1996 Nov;28(9):792–3

Two young Somalians with gastric outlet obstruction as a first manifestation of gastroduodenal tuberculosis. Woudstra M, et al. **Eur J Gastroenterol Hepatol** 1997 Apr; 9(4):393–5

Waldenström's macroglobulinemia of the stomach presenting with upper gastrointestinal hemorrhage. Kaila VL, et al. **Gastrointest Endosc** 1996 Jul;44(1):73–5

Severe chest pain due to gastric anisakiasis. Machi T, et al. **Intern Med** 1997 Jan;36(1):28–30

Symptomatic gastric sarcoidosis and Helicobacter pylori infection. Pope JB, et al. **J Am Board Fam Pract** 1996 Nov–Dec;9(6):451–4

Atypical case of tuberculosis of stomach presenting as gastric outlet obstruction. Lath JR, et al. **J Assoc Physicians India** 1996 Apr;44(4):286

More on gastric antral vascular ectasia (watermelon stomach) in uremic patients [letter; comment] Hermans C, et al. **Perit Dial Int** 1996 Sep–Oct;16(5):536. Comment on: Perit Dial Int 1996 Mar–Apr;16(2):177–8.

Surgical management and treatment of sepsis associated with gastrointestinal fistulas. Rolandelli R, et al. **Surg Clin North Am** 1996 Oct;76(5):1111–22 (19 ref.)

[Globus pharyngis and gastroesophageal equivalents] Walther EK, et al. **Laryngorhinootologie** 1997 Apr;76(4):225–8 (Eng. Abstr.) **(Ger)**

[A rare association: antral neurinoma with gastric volvulus] Mosca F, et al. **Minerva Chir** 1997 Jan–Feb;52(1–2):93–6 (Eng. Abstr.) **(Ita)**

[The role of stomach pathology as a risk factor in ulcer formation at different times of chronic dialysis treatment] Ryss ES, et al. **Ter Arkh** 1993;65(2):19–23 (Eng. Abstr.) **(Rus)**

[Functional, organic and histologic changes in the stomach in diabetic patients in relation to the presence of diabetic neuropathy] Kostić N, et al. **Med Pregl** 1996; 49(11–12):443–6 (Eng. Abstr.) **(Scr)**

CONGENITAL

[Gastroscopy in the diagnosis of congenital pylorostenosis] Martynenko VV, et al. **Khirurgiia (Mosk)** 1996;(4):38–9 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Gastric sarcoidosis. Farman J, et al. **Abdom Imaging** 1997 May–Jun;22(3):248–52

Benefit of immediate endoscopy after radiography for anisakiasis [letter] Kanematsu M, et al. **AJR Am J Roentgenol** 1997 Apr;168(4):1114–5

Pediatric inflammatory pseudotumor of the stomach: contrast-enhanced CT and MR imaging findings. Taratuta E, et al. **AJR Am J Roentgenol** 1996 Oct;167(4):919–20

Gastric syphilis. Kolb JC, et al. **Am J Emerg Med** 1997 Mar; 15(2):164–6

Gastroduodenal pneumatosis: endoscopic and histological findings. Cordum NR, et al. **Am J Gastroenterol** 1997 Apr; 92(4):692–5 (22 ref.)

Gastric graft-versus-host disease: a blinded histologic study. Washington K, et al. **Am J Surg Pathol** 1997 Sep; 21(9):1037–46

Consultation system for diagnosis of gastric lesions. Enchev V, et al. **Anal Quant Cytol Histol** 1997 Feb;19(1):13–8

Diagnosis of Helicobacter pylori in gastric brush and biopsy specimens stained by Romanowsky and immunocytochemical methods: comparison with the CLOtest. Faraker CA. **Cytopathology** 1996 Apr;7(2):108–19

Endoscopic diagnosis of gastroduodenal intussusception. Lin JT. **Endoscopy** 1996 Mar;28(3):324

Image of the month. Gastric duplication cyst. Mahajan L, et al. **Gastroenterology** 1997 Aug;113(2):376, 732

Role of polymerase chain reaction in the diagnosis of gastric syphilis [editorial; comment] Norris SJ, et al. **Hum Pathol** 1996 Aug;27(8):749–50 (11 ref.). Comment on: Hum Pathol 1996 Aug;27(8):761–5.

Yield of routine endoscopy beyond the duodenal bulb. Morales TG, et al. **J Clin Gastroenterol** 1997 Apr; 24(3):147–9

A difficult case of pancreatitis. Lambert AW, et al. **J R Soc Med** 1997 Jan;90(1):44–5

Atypical lymphoid infiltrations of the gastric mucosa--their interpretation and management by eradication of Helicobacter pylori. Eidt S, et al. **Pathol Res Pract** 1996 Jun;192(6):560–5

Diagnosis of Helicobacter pylori infection. Review of diagnostic techniques and recommendations for their use in different clinical settings. de Boer WA. **Scand J Gastroenterol Suppl** 1997;223:35–42 (93 ref.)

Bacteria in biopsies of human hypochlorhydric stomach: a scanning electron microscopy study. Brandi G, et al. **Ultrastruct Pathol** 1996 May–Jun;20(3):203–9

[Upper digestive hemorrhage as a rare manifestation of ectopic pancreas with gastric localization] Covarelli P, et al. **G Chir** 1997 Mar;18(3):97–100 (Eng. Abstr.) **(Ita)**

[Gastroscopy in the diagnosis of congenital pylorostenosis] Martynenko VV, et al. **Khirurgiia (Mosk)** 1996;(4):38–9 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of pancreas ectopy in the gastric wall in children] Odinak VM, et al. **Khirurgiia (Mosk)** 1996; (4):43–5 (Eng. Abstr.) **(Rus)**

[Errors in the diagnosis of a cardial syndrome in reflux esophagitis] Nesterov IuI, et al. **Ter Arkh** 1996;68(4):53–4 (9 ref.) (Eng. Abstr.) **(Rus)**

[Primary radiation diagnosis (ultrasound and thermography) of gastric and large intestine lesions] Ratobyl'skiĭ GV, et al. **Vestn Rentgenol Radiol** 1996 Sep–Oct;(5):40–4 **(Rus)**

[Gastric anisakiasis diagnosed by endoscopy] Romeo Ramírez JA, et al. **Gastroenterol Hepatol** 1997 Jun–Jul;20(6):306–8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Effects of rebamipide on bile acid-induced inhibition of gastric epithelial repair in a rabbit cell culture model. Watanabe S, et al. **Aliment Pharmacol Ther** 1996 Dec; 10(6):927–32

Prophylaxis and treatment of NSAID-induced gastropathy. Ament PW, et al. **Am Fam Physician** 1997 Mar; 55(4):1323–6, 1331–2 (34 ref.)

Somatostatin reduces gastric mucosal blood flow in patients with portal hypertensive gastropathy: a randomized, double-blind crossover study. Li MK, et al. **Dig Dis Sci** 1996 Dec;41(12):2440–6

Effect of a novel histamine H2 receptor antagonist, IT-066, on acute gastric injury induced by ischemia-reperfusion in rats, and its antioxidative properties. Naito Y, et al. **Eur J Pharmacol** 1995 Dec 27;294(1):47–54

Gastroprotective effect of ranitidine bismuth citrate is associated with increased mucus bismuth concentration in rats. Tanaka S, et al. **Gut** 1996 Aug;39(2):164–71

Pantoprazole-based dual and triple therapy for the eradication of Helicobacter pylori infection: a randomized controlled trial. Svoboda P, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):886–90

Atypical lymphoid infiltrations of the gastric mucosa--their interpretation and management by eradication of Helicobacter pylori. Eidt S, et al. **Pathol Res Pract** 1996 Jun;192(6):560–5

CCKB/gastrin receptor antagonists: recent advances and potential uses in gastric secretory disorders. Jensen RT. **Yale J Biol Med** 1996 May–Jun;69(3):245–59 (106 ref.)

[Functional dyspepsia. Treatment of gastrointestinal diseases] Heinzl S. **Med Monatsschr Pharm** 1996 Nov;19(11):334–6 **(Ger)**

[Disorders of gastric emptying in diabetes. II. Treatment] Czambor-Książek E, et al. **Wiad Lek** 1997;50(1–3):39–41 (20 ref.) (Eng. Abstr.) **(Pol)**

[Nizatidine++ among the drugs usable in the treatment of acid-dependent gastric diseases] German SV. **Klin Med (Mosk)** 1997;75(5):34–41 (103 ref.) **(Rus)**

ENZYMOLOGY

Immunohistochemical localization of DNA topoisomerase II in human gastric disorders [letter; comment] Holden JA. **Am J Pathol** 1997 Jul;151(1):313. Comment on: Am J Pathol 1996 Sep;149(3):997–1007.

EPIDEMIOLOGY

Acute upper gastrointestinal haemorrhage in west of Scotland: case ascertainment study. Blatchford O, et al. **BMJ** 1997 Aug 30;315(7107):510–4

Sociodemographic differences in the prevalence of self-reported stomach pain in school children. Kristjánsdóttir G. **Eur J Pediatr** 1996 Nov;155(11):981–3

Portal-hypertensive gastropathy develops less in patients with cirrhosis and fundal varices. Iwao T, et al. **J Hepatol** 1997 Jun;26(6):1235–41

Epidemiology of gastrointestinal polyps. Jacobson JS, et al. **Surg Oncol Clin N Am** 1996 Jul;5(3):531–44 (115 ref.)

[Gastrointestinal tuberculosis] Miagkova LP. **Klin Med (Mosk)** 1997;75(8):9–12 (15 ref.) **(Rus)**

ETHNOLOGY

Racial differences in gastric function among African Americans and Caucasian Americans: secretion, serum gastrin, and histology. Cryer B, et al. **Proc Assoc Am Physicians** 1996 Nov;108(6):481–9

ETIOLOGY

Gastric Crohn's disease complicated by adenocarcinoma of the stomach: case report and review of the literature. Patel M, et al. **Am J Gastroenterol** 1997 Aug;92(8):1368–71 (19 ref.)

Gastric rupture with tension pneumoperitoneum: a complication of difficult endotracheal intubation. Miller JS, et al. **Ann Emerg Med** 1997 Sep;30(3):343–6

Pitfalls and complications of antireflux surgery. Nissen and Collis-Nissen techniques. Ferguson MK. **Chest Surg Clin N Am** 1997 Aug;7(3):489–509; discussion 510–1 (85 ref.)

Short-term effects of variceal sclerotherapy on portal hypertensive gastropathy. Boldys H, et al. **Endoscopy** 1996 Nov;28(9):735–9

Gastric volvulus: an old disease process with some new twists. Schaefer DC, et al. **Gastroenterologist** 1997 Mar; 5(1):41–5 (19 ref.)

Cholecystokinin in transient lower oesophageal sphincter relaxation due to gastric distension in humans. Boulant J, et al. **Gut** 1997 May;40(5):575–81

Respiratory and digestive lesions caused by Salmonella arizonae in two snakes. Orós J, et al. **J Comp Pathol** 1996 Aug;115(2):185–9

Ulcerative colitis complicated by gastroduodenal lesions. Sasaki M, et al. **J Gastroenterol** 1996 Aug;31(4):585–9

Emphysematous gastritis secondary to acute gastric dilatation. Lin CY, et al. **J Gastroenterol Hepatol** 1995 Sep–Oct;10(5):612–5

Patient with primary tonsillar and gastric syphilis. Ishimaru T, et al. **J Laryngol Otol** 1997 Aug;111(8):766–8

Sequential herniation of stomach, then colon through the aortic hiatus. Wagner RB, et al. **South Med J** 1997 Mar; 90(3):338–40

[Gastropathy due to portal hypertension] Hermann R. **Schweiz Rundsch Med Prax** 1997 Jan 21;86(4):109–11 (17 ref.) (Eng. Abstr.) **(Ger)**

[Unusual cause of gastric bleeding: leiomyoma] Alberti P, et al. **Minerva Chir** 1996 Oct;51(10):779–83 (22 ref.) (Eng. Abstr.) **(Ita)**

[Antropyloric lithiasic obstruction: a variant of Bouveret's syndrome] Astolfi A, et al. **Minerva Chir** 1996 May; 51(5):347–50 (Eng. Abstr.) **(Ita)**

[Massive hemorrhage from a gastric neuroma associated with a kidney neoplasm] Lukasiewicz S, et al. **Wiad Lek** 1996; 49(7–12):124–6 (Eng. Abstr.) **(Pol)**

[Gastric motility disorders in diabetes. I. Pathophysiology, symptomatology and methods for additional testing] Zelechowski M, et al. **Wiad Lek** 1997;50(1–3):32–8 (20 ref.) (Eng. Abstr.) **(Pol)**

[High obstruction in strangulated diaphragmatic hernia] Angelescu N, et al. **Chirurgia (Bucur)** 1997 Jan–Feb; 92(1):33–8 (13 ref.) (Eng. Abstr.) **(Rum)**

[Candidiasis of the stomach in endocrine disorders] Antonov VB, et al. **Klin Med (Mosk)** 1996;74(2):49–50 **(Rus)**

[Helicobacter pylori and gastroduodenal pathology: its pathogenesis, diagnosis and therapeutic guidelines] Muñoz Gutiérrez J, et al. **Aten Primaria** 1997 Apr 30;19(7):377–82 (51 ref.) **(Spa)**

HISTORY

[Evolution of gastric surgery at the N.N.Burdenko Surgical Clinic over 150 years] Kuzin NM, et al. **Khirurgiia (Mosk)** 1996;(3):9–12 **(Rus)**

IMMUNOLOGY

The protective role of endogenous cytokines in host resistance against an intragastric infection with Listeria monocytogenes in mice. Nishikawa S, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31;16(3–4):291–8

Tissue IgA antibody against Helicobacter pylori in patients with gastroduodenal diseases: comparison with bacterial culture, serum IgG antibody, and [13C]Urea breath test. Matsukura N, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S146–50

Helicobacter pylori infection in gastric xanthomas: immunohistochemical analysis of 145 lesions. Hori S, et al. **Pathol Int** 1996 Aug;46(8):589–93

METABOLISM

Induction of cyclooxygenase 2 in gastric mucosal lesions and its inhibition by the specific antagonist delays healing in mice [see comments] Mizuno H, et al. **Gastroenterology** 1997 Feb;112(2):387–97. Comment in: Gastroenterology 1997 Feb;112(2):645–8.

Differential effect of benexate hydrochloride betadex on prostaglandin levels in stomach and inflammatory site in rats. Hori Y, et al. **Jpn J Pharmacol** 1996 Oct;72(2):183–90

CCKB/gastrin receptor antagonists: recent advances and potential uses in gastric secretory disorders. Jensen RT. **Yale J Biol Med** 1996 May–Jun;69(3):245–59 (106 ref.)

STOMACH DISEASES

MICROBIOLOGY

Detection of Helicobacter pylori in paraffin-embedded gastric biopsy specimens by in situ hybridization. Karttunen TJ, et al. **Am J Clin Pathol** 1996 Sep;106(3):305-11

Schönlein-Henoch purpura associated with gastric Helicobacter pylori infection [letter] Machet L, et al. **Dermatology** 1997;194(1):86

PCR-RFLP typing of ureC from Helicobacter pylori isolated in Argentina from gastric biopsies before and after treatment with clarithromycin. Stone GG, et al. **Epidemiol Infect** 1997 Apr;118(2):119-24

Gastric syphilis: polymerase chain reaction detection of treponemal DNA in pseudolymphomatous lesions [see comments] Inagaki H, et al. **Hum Pathol** 1996 Aug; 27(8):761-5. Comment in: Hum Pathol 1996 Aug;27(8):749-50.

Successful cultivation of a potentially pathogenic coccoid organism with trophism for gastric mucin. Lee SG, et al. **Infect Immun** 1997 Jan;65(1):49-54

Comparison of diagnostic methods for detecting gastric Helicobacter-like organisms in dogs and cats. Happonen I, et al. **J Comp Pathol** 1996 Aug;115(2):117-27

Helicobacter pylori infection in gastric xanthomas: immunohistochemical analysis of 145 lesions. Hori S, et al. **Pathol Int** 1996 Aug;46(8):589-93

The expanding genus of Helicobacter: pathogenic and zoonotic potential. Fox JG. **Semin Gastrointest Dis** 1997 Jul;8(3):124-41 (165 ref.)

Helicobacter pylori-associated gastroduodenal disease in childhood. Blecker U. **South Med J** 1997 Jun;90(6):570-6; quiz 577 (75 ref.)

Nonfatal gastric mucormycosis in a renal transplant recipient. Martinez EJ, et al. **South Med J** 1997 Mar;90(3):341-4 (39 ref.)

Bacteria in biopsies of human hypochlorhydric stomach: a scanning electron microscopy study. Brandi G, et al. **Ultrastruct Pathol** 1996 May-Jun;20(3):203-9

[Clinical pictures of orointestinal candidiasis. Fiction or reality?] Knoke M. **Mycoses** 1996;39 Suppl 1:40-3 (22 ref.) (Eng. Abstr.) **(Ger)**

PARASITOLOGY

Hepatic hydatid cyst perforated into stomach [letter] Rueda Elias O, et al. **AJR Am J Roentgenol** 1996 Nov; 167(5):1344-5

Gastric toxoplasmosis: case report and review of the literature. Kofman E, et al. **Am J Gastroenterol** 1996 Nov; 91(11):2436-8 (8 ref.)

Gastric ascariasis: a rare cause of upper gastrointestinal bleeding. Pontes JM, et al. **Endoscopy** 1996 Nov;28(9):792-3

Gastric cryptosporidiosis complicating HIV infection: case report and review of the literature. Ventura G, et al. **Eur J Gastroenterol Hepatol** 1997 Mar;9(3):307-10 (18 ref.)

Proton-pump inhibition and gastric giardiasis: a causal or casual association? Reynaert H, et al. **J Gastroenterol** 1995 Dec;30(6):775-8

[Urticariform reaction: endoscopic diagnosis (letter)] Durán FG, et al. **Rev Esp Enferm Dig** 1996 Oct;88(10):713-4 **(Spa)**

PATHOLOGY

Gastric non-Hodgkin lymphomas of mucosa-associated lymphoid tissue are not associated with more aggressive Helicobacter pylori strains as identified by CagA [see comments] de Jong D, et al. **Am J Clin Pathol** 1996 Nov; 106(5):670-5. Comment in: Am J Clin Pathol 1996 Nov;106(5):565-7.

Gastroenteric inflammation in children with ulcerative colitis. Kaufman SS, et al. **Am J Gastroenterol** 1997 Jul; 92(7):1209-12

Protective action of gastrin-17 against alcohol-induced gastric injury in the rat: role in mucosal defense. Mercer DW, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G365-73

Heterotopic pancreas [letter; comment] Bussolati G. **Am J Surg Pathol** 1996 Nov;20(11):1427-8. Comment on: Am J Surg Pathol 1995 Dec;19(12):1445-7.

Gastric graft-versus-host disease: a blinded histologic study. Washington K, et al. **Am J Surg Pathol** 1997 Sep; 21(9):1037-46

Dynamic changes in quantitative features of human gastric lesions. Enchev V, et al. **Anal Cell Pathol** 1997;13(1):9-16

Gastric "pseudolymphoma": a retrospective morphologic and immunophenotypic study of 97 cases. Abbondanzo SL, et al. **Cancer** 1997 May 1;79(9):1656-63

Diminution in parietal cell number in experimental portal hypertensive gastropathy. Agnihotri N, et al. **Dig Dis Sci** 1997 Feb;42(2):431-9

Multiple hyperplastic polyps in the stomach: evidence for clonality and neoplastic potential. Dijkhuizen SM, et al. **Gastroenterology** 1997 Feb;112(2):561-6

Gastric purpura: an unusual endoscopic feature in gastrointestinal hemorrhage. Hsu R, et al. **Gastrointest Endosc** 1997 Jun;45(6):527-9

Endoscopic diagnosis and terminology of erosions and similar mucosal lesions [letter] Mařatka Z. **Gastrointest Endosc** 1996 Jun;43(6):633-6

Multiple antral ulcers in gastric sarcoid. Fireman Z, et al. **J Clin Gastroenterol** 1997 Mar;24(2):97-9

Helicobacter pylori detected deep in gastric glands: an ultrastructural quantitative study. Taniguchi Y, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S169-73

Late stage congestive gastropathy. Leone O, et al. **J Clin Pathol** 1997 Apr;50(4):350-2

Respiratory and digestive lesions caused by Salmonella arizonae in two snakes. Orós J, et al. **J Comp Pathol** 1996 Aug;115(2):185-9

Effect of particle shape of acetyl salicylic acid powders on gastric damages in rats. Zolfaghari ME, et al. **J Pharm Belg** 1997 Jan-Feb;52(1):1-6

Renal, gastric and thyroidal amyloidosis due to familial Mediterranean fever. Kavukçu S, et al. **Pediatr Nephrol** 1997 Apr;11(2):210-2

Gastric antral vascular ectasia in a patient on hemodialysis improved with CAPD [see comments] Yorioka N, et al. **Perit Dial Int** 1996 Mar-Apr;16(2):177-8. Comment in: Perit Dial Int 1996 Sep-Oct;16(5):536.

Effects of propionic acid and pravastatin on HMG-CoA reductase activity in relation to forestomach lesions in the rat. Bueld JE, et al. **Pharmacol Toxicol** 1996 Apr; 78(4):229-34

The effect of dietary copper sulfate on infectious proventriculitis. Bayyari GR, et al. **Poult Sci** 1995 Dec; 74(12):1961-9

[Gastric eosinophilic granuloma: report on 12 patients] Wang J, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):770-1 (Eng. Abstr.) **(Chi)**

[Structural-metabolic analysis of gastric mucosa in various gastropathies from the gastric biopsy data] Lapiĭ GA, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):228-32 **(Rus)**

[Correlation among endoscopic, histological, and microbiological findings in gastroduodenal pathology associated with Helicobacter pylori] Carmona Sáez TJ, et al. **An Med Interna** 1996 Jun;13(6):269-73 (Eng. Abstr.) **(Spa)**

[Ectopic pancreas] Camuñas Mohinelo FA, et al. **Rev Esp Enferm Dig** 1996 Oct;88(10):672-6 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Tumor necrosis factor mediation of NSAID-induced gastric damage: role of leukocyte adherence. Appleyard CB, et al. **Am J Physiol** 1996 Jan;270(1 Pt 1):G42-8

Cyclooxygenase 2 and wound healing in the stomach [editorial; comment] Stenson WF. **Gastroenterology** 1997 Feb;112(2):645-8 (32 ref.). Comment on: Gastroenterology 1997 Feb;112(2):387-97.

Aminoguanidine corrects hyperdynamic circulation without ameliorating portal hypertension and portal hypertensive gastropathy in anesthetized portal hypertensive rats. Lee FY, et al. **J Hepatol** 1997 Mar;26(3):687-93

Gastric bicarbonate secretion and release of prostaglandin E2 are increased in duodenal ulcer patients but not in Helicobacter pylori-positive healthy subjects [see comments] Mertz-Nielsen A, et al. **Scand J Gastroenterol** 1996 Jan;31(1):38-43. Comment in: Scand J Gastroenterol 1996 Aug;31(8):831-2.

PREVENTION & CONTROL

Thioctic acid protection against ethanol and indomethacin induced gastric mucosal lesions in rats. Gutierrez-Cabano CA, et al. **Acta Gastroenterol Latinoam** 1996;26(3):167-71

Prevention of NSAID-induced gastroduodenal complications [editorial] Hiele M. **Clin Rheumatol** 1996 Sep; 15(5):431-4

Effect of extract of Agkistrodon blomhoffii on acute gastric mucosal lesions induced by ischaemia-reperfusion in rats [letter] Wada K, et al. **J Pharm Pharmacol** 1997 Feb; 49(2):227-8

Role of capsaicin-sensitive sensory neurons and nitric oxide in the protective effect of lansoprazole, a proton pump inhibitor, on the gastric mucosa in rats. Murakami I, et al. **Jpn J Pharmacol** 1996 Oct;72(2):137-47

Regulation of intracellular pH: role in gastric mucosal defence. Kaunitz JD, et al. **Keio J Med** 1996 Sep; 45(3):155-60 (46 ref.)

Analysis of the role of delta opioid receptors in gastroprotection in the rat. Gyires K, et al. **Life Sci** 1997; 60(16):1337-47

[When are we prescribing gastric antisecretory agents? (letter)] Campo de Juan M, et al. **Aten Primaria** 1996 Nov 15;18(8):467 **(Spa)**

RADIOGRAPHY

Radiology for the surgeon. Case 16. Jejunogastric intussusception. Stein LA. **Can J Surg** 1997 Aug;40(4):253, 264

Computed tomographic evaluation of gastric emphysema--a report of three cases. Omojola MF, et al. **Clin Radiol** 1997 May;52(5):381-3

Computed tomography of the gastro-duodenal region. Small JH, et al. **Eur J Radiol** 1996 May;22(2):95-103 (39 ref.)

Gastroduodenal lipomatosis. Devlies F, et al. **Eur Radiol** 1997;7(3):338-40

Emphysema of the stomach: a roentgenologic alarm. Report of a case and review of the literature. Rosen A, et al. **J Clin Gastroenterol** 1996 Oct;23(3):211-3 (13 ref.)

CT of the stomach: spectrum of disease. Fishman EK, et al. **Radiographics** 1996 Sep;16(5):1035-54 (57 ref.)

Radiologic investigation and treatment of gastrointestinal fistulas. Thomas HA. **Surg Clin North Am** 1996 Oct; 76(5):1081-94 (46 ref.)

[Hereditary hemorrhagic telangiectasia with hepatic involvement and including gastric vessels. A case report] Rambusch EG, et al. **Vasa** 1996;25(4):352-7 (Eng. Abstr.) **(Ger)**

[Report of 3 cases of greater curvature antral flattening caused by non-steroidal anti-inflammatory agents] Catalano O. **Radiol Med (Torino)** 1996 Sep;92(3):320-1 **(Ita)**

RADIONUCLIDE IMAGING

Metastatic calcification: accumulation of a bone tracer during dynamic data acquisition. Kinuya S, et al. **Ann Nucl Med** 1996 Nov;10(4):433-5

Parathyroid carcinoma with metastatic calcification identified by technetium-99m methylene diphosphonate scintigraphy. Aso Y, et al. **Intern Med** 1996 May;35(5):392-5

SURGERY

Uncommon complication of gastric duplication in a three-year-old child. Steyaert H, et al. **Eur J Pediatr Surg** 1997 Aug;7(4):243-4

Helicobacter pylori gastritis associated with a gastric inflammatory fibroid tumour and sarcoidosis. Buciuto R, et al. **Eur J Surg** 1996 May;162(5):421-4

Complications of percutaneous endoscopic gastrostomy. Petersen TI, et al. **Eur J Surg** 1997 May;163(5):351-6

Antibiotic prophylaxis in gastroduodenal surgery. Schilling J, et al. **Hepatogastroenterology** 1997 Jan-Feb;44(13):116-20

Stomach rupture associated with physical struggle in a child. Soong WJ, et al. **J Pediatr Surg** 1996 Dec;31(12):1686-7

Factors influencing outcome in patients with gastrointestinal fistula. Campos AC, et al. **Surg Clin North Am** 1996 Oct; 76(5):1191-8 (37 ref.)

Radiologic investigation and treatment of gastrointestinal fistulas. Thomas HA. **Surg Clin North Am** 1996 Oct; 76(5):1081-94 (46 ref.)

[Repair of the gastric tube-right main bronchus fistula after operation for esophageal cancer--treatment by transposition of pedicled pectoralis major muscle flap] Iwata T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1996 Sep;44(9):1753-8 (Eng. Abstr.) **(Jpn)**

[A case of giant aberrant pancreas with cyst formation] Ikenaga M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jun;94(6):398-401 **(Jpn)**

[One-stage esophagoplasty with pathologically changed or previously operated stomach] Chernousov AF, et al. **Khirurgiia (Mosk)** 1996;(2):25-30 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of pancreas ectopy in the gastric wall in children] Odinak VM, et al. **Khirurgiia (Mosk)** 1996; (4):43-5 (Eng. Abstr.) **(Rus)**

[The performance of simultaneous operations for gallstones and concomitant organic diseases of the esophagogastroduodenal area--a method for preventing the postcholecystectomy syndrome] Kopchak VM, et al. **Klin Khir** 1996;(9):12-3 **(Rus)**

[The successful treatment of a strangulated femoral hernia and profuse gastric hemorrhage in an elderly female patient] Mochalov OIu, et al. **Vestn Khir Im I I Grek** 1996; 155(3):80 **(Rus)**

[Reoperations of the stomach and duodenum] Kothaj P, et al. **Bratisl Lek Listy** 1996 Dec;97(12):729-32 **(Slo)**

THERAPY

Surgical management and treatment of gastric and duodenal fistulas. Chung MA, et al. **Surg Clin North Am** 1996 Oct; 76(5):1137-46 (34 ref.)

General management of gastrointestinal fistulas. Recognition, stabilization, and correction of fluid and electrolyte imbalances. Foster CE 3rd, et al. **Surg Clin North Am** 1996 Oct;76(5):1019-33 (60 ref.)

Nutritional management of patients with gastrointestinal fistulas. Meguid MM, et al. **Surg Clin North Am** 1996 Oct; 76(5):1035-80 (114 ref.)

[Enhancement in the efficacy of dispensary care for adolescents with gastroduodenal pathology] Vakhrushev IaM, et al. **Ter Arkh** 1996;68(2):21-2 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

Prenatal diagnosis of gastric duplication cyst. Ozmen MN, et al. **J Ultrasound Med** 1997 Mar;16(3):219-22

Gastric duplication cysts. Harris JT, et al. **Kans Med** 1995 Winter;96(4):180, 184

[The ultrasonic diagnosis of tumorous diseases of the stomach and intestines] al-Abbas B, et al. **Vestn Khir Im I I Grek** 1995;154(4-6):132-4 (41 ref.) **(Rus)**

[Primary radiation diagnosis (ultrasound and thermography) of gastric and large intestine lesions] Ratobyl'skiĭ GV, et al. **Vestn Rentgenol Radiol** 1996 Sep-Oct;(5):40-4 **(Rus)**

VETERINARY

Multiple intussusceptions in a juvenile rhea (Rhea americana) with proventricular impaction. Frasca S Jr, et al. **Avian Dis** 1997 Apr-Jun;41(2):475-80

Possible hypoplasia of the reticulum in a cow. Alhendi AB, et al. **Can Vet J** 1996 Jul;37(7):442-3

Factors associated with gastric lesions in thoroughbred racehorses. Murray MJ, et al. **Equine Vet J** 1996 Sep; 28(5):368-74

The use of a synthetic prostaglandin E1 analog as a gastric

protectant against aspirin-induced hemorrhage in the dog. Bowersox TS, et al. **J Am Anim Hosp Assoc** 1996 Sep-Oct; 32(5):401-7

Massive gastric hemorrhage induced by buffered aspirin in a greyhound. Shaw N, et al. **J Am Anim Hosp Assoc** 1997 May-Jun;33(3):215-9

Abomasal bloat associated with Sarcina-like bacteria in goat kids. DeBey BM, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1468-9

Effects of left displaced abomasum on test day milk yields of Holstein cows. Detilleux JC, et al. **J Dairy Sci** 1997 Jan;80(1):121-6

Gastro-oesophageal intussusception in a young German shepherd dog. von Werthern CJ, et al. **J Small Anim Pract** 1996 Oct;37(10):491-4

Gastroduodenal intussusception in a young dog. Watson PJ. **J Small Anim Pract** 1997 Apr;38(4):163-7

Histologic evaluation of the crop for diagnosis of proventricular dilatation syndrome in psittacine birds. Gregory CR, et al. **J Vet Diagn Invest** 1996 Jan;8(1):76-80

The effect of dietary copper sulfate on infectious proventriculitis. Bayyari GR, et al. **Poult Sci** 1995 Dec; 74(12):1961-9

Post surgical convalescence of dairy cows with left abomasal displacement in relation to fatty liver. Rehage J, et al. **Schweiz Arch Tierheilkd** 1996;138(7):361-8

Traumatic reticulopericarditis caused by a non-metallic object. Katunguka-Rwakishaya E. **Trop Anim Health Prod** 1996 Nov;28(4):317

Gastric attaching and effacing Escherichia coli lesions in a puppy with naturally occurring enteric colibacillosis and concurrent canine distemper virus infection. Wada Y, et al. **Vet Pathol** 1996 Nov;33(6):717-20

Percutaneous ultrasound-guided abomasocentesis in cows. Braun U, et al. **Vet Rec** 1997 Jun 7;140(23):599-602

Abomasal disorders in dairy cattle [letter] Cammack J. **Vet Rec** 1997 Jul 12;141(2):55

Surgical removal of a fibropapilloma from the reticulum causing apparent vagal indigestion. Gordon PJ. **Vet Rec** 1997 Jan 18;140(3):69-70

Pathogenic role of gastric Helicobacter sp in domestic carnivores. Lecoindre P, et al. **Vet Res** 1997 May-Jun; 28(3):207-15 (34 ref.)

Fat/protein ratio in first DHI test milk as test for displaced abomasum in dairy cows. Geishauser T, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):265-70

Influence of diet on the occurrence of intraepithelial microabscesses and foreign bodies in the ruminal mucosa of reindeer calves (Rangifer tarandus tarandus). Josefsen TD, et al. **Zentralbl Veterinarmed A** 1997 Jul;44(5):249-57

[Occurrence of abomasal displacement in cattle in Hesse] Geishauser T, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Apr;103(4):142-4 (Eng. Abstr.) **(Ger)**

[The surgical treatment of left-sided abomasal displacement in the cow: a literature review] Steiner A. **Schweiz Arch Tierheilkd** 1996;138(7):353-60 (16 ref.) (Eng. Abstr.) **(Ger)**

STOMACH DIVERTICULUM

[Gastric diverticulosis] Kurguzov OP, et al. **Khirurgiia (Mosk)** 1996;(3):67-71 (100 ref.) **(Rus)**

DIAGNOSIS

[The clinical picture, diagnosis and treatment of stomach diverticulum] Nesterenko LM, et al. **Klin Khir** 1995;(3):46 **(Ukr)**

STOMACH NEOPLASMS

Extrapulmonary small cell gastric carcinoma. A case report and review of the literature. O'Byrne KJ, et al. **Acta Oncol** 1997;36(1):78-80

Ethnicity as a risk factor for Helicobacter pylori infection and gastric cancer: environment, genetics, or both? [editorial] Talley NJ, et al. **Aust N Z J Med** 1996 Oct; 26(5):628-31

Randomized controlled trial of an H2-receptor antagonist in gastric cancer. Wotherspoon HA, et al. **Br J Surg** 1997 Aug;84(8):1168-9

Helicobacter pylori and gastric cancer: state of the art. Correa P. **Cancer Epidemiol Biomarkers Prev** 1996 Jun; 5(6):477-81

Fibropapule multiplex of the nose: a variant of Cowden's disease? Yamamoto T, et al. **Dermatology** 1996; 192(4):379-81

Recent advances in gastric cancer. Nagawa H, et al. **Digestion** 1997;58 Suppl 1:62-4 (3 ref.)

Gastric cancer. Johnson RC. **Hepatogastroenterology** 1996 Jul-Aug;43(10):1092-6 (47 ref.)

Carcinomas involving the esophagogastric junction (EGJ-Ca). A reevaluation of the criteria. Soga J, et al. **Int Surg** 1996 Apr-Jun;81(2):149-51

Leiomyoblastoma of G.I.T [letter; comment] Chaturvedi KU, et al. **J Assoc Physicians India** 1996 Mar;44(3):226. Comment on: J Assoc Physicians India 1995 Jun;43(6):432-3.

Helicobacter pylori infection and the risk of gastric cancer among the Korean population. Kim HY, et al. **J Gastroenterol Hepatol** 1997 Feb;12(2):100-3

Gastric mucosa-associated lymphoid tissue lymphomas: more than a fascinating model [editorial; comment] Roggero E, et al. **J Natl Cancer Inst** 1997 Sep 17;89(18):1328-30. Comment on: J Natl Cancer Inst 1997 Sep 17;89(18):1350-5.

Case report of gastric teratoma in a female infant [letter; comment] Avanoglu A, et al. **J Pediatr Surg** 1996 Feb; 31(2):327. Comment on: J Pediatr Surg 1995 Jun;30(6):889-90.

Carcinoid tumours. Janmohamed S, et al. **Postgrad Med J** 1997 Apr;73(858):207-14 (39 ref.)

Helicobacter pylori and gastric carcinogenesis. Kuipers EJ, et al. **Scand J Gastroenterol Suppl** 1996;218:103-5 (33 ref.)

Male breast cancer in patients with a familial history of breast cancer. Akashi-Tanaka S, et al. **Surg Today** 1996; 26(12):975-9

Early gastric carcinoma. Bhat MG, et al. **Trop Gastroenterol** 1996 Jul-Sep;17(3):174-5

[Neurinoma of the stomach] Ludvik P. **Rozhl Chir** 1996 Aug; 75(8):402-3 (Eng. Abstr.) **(Cze)**

[Carney's syndrome: 2 new cases] Majerus B, et al. **Ann Chir** 1996;50(6):470-3 (Eng. Abstr.) **(Fre)**

[Gastric leiomyoblastoma: literature review and report of a case] Nassiopoulos K, et al. **Rev Med Suisse Romande** 1997 Feb;117(2):147-50 (Eng. Abstr.) **(Fre)**

[Cystic polyps of the stomach: review of our case series] Covotta A, et al. **G Chir** 1997 Apr;18(4):232-4 (Eng. Abstr.) **(Ita)**

[Bizarre gastric leiomyoblastoma. A case report and review of the literature] La Torre E, et al. **Minerva Chir** 1996 Apr;51(4):235-43 (Eng. Abstr.) **(Ita)**

[Gastric lipoma. Report of 2 cases] Rotondo A, et al. **Radiol Med (Torino)** 1996 Oct;92(4):494-5 **(Ita)**

[Synchronous neoplasms: multiple myeloma and gastric adenocarcinoma (letter)] Mediavilla García JD, et al. **An Med Interna** 1996 Sep;13(9):463-4 **(Spa)**

[Krukenberg's tumor secondary to gastric neoplasms (letter)] Cosme A, et al. **Rev Esp Enferm Dig** 1997 Mar;89(3):230-1 **(Spa)**

BLOOD

Elevated levels of serum and plasma metalloproteinases in patients with gastric cancer. Endo K, et al. **Anticancer Res** 1997 May-Jun;17(3C):2253-8

Inhibition of cytotoxic activity of ascorbate by human cancer patient sera. Sakagami H, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):425-8

The Rhesus D-negative phenotype is an independent predictor of poor prognosis in curatively (RO) resected gastric cancer patients. Mayer B, et al. **Br J Cancer** 1997; 75(9):1291-4

Increase in the circulating level of hepatocyte growth factor in gastric cancer patients. Taniguchi T, et al. **Br J Cancer** 1997;75(5):673-7

Plasma concentration of matrix metalloproteinase 9 in gastric cancer. Torii A, et al. **Br J Surg** 1997 Jan;84(1):133-6

Detection of epidermal growth factor receptor in the serum of gastric carcinoma patients. Choi JH, et al. **Cancer** 1997 May 15;79(10):1879-83

Histo-blood group A/B versus H status of human carcinoma cells as correlated with haptotactic cell motility: approach with A and B gene transfection. Ichikawa D, et al. **Cancer Res** 1997 Aug 1;57(15):3092-6

Pre-operative serum levels of CA72-4 in patients with gastric adenocarcinoma. Ikeguchi M, et al. **Hepatogastroenterology** 1997 May-Jun;44(15):866-71

Preoperative CEA and TAG-72 serum levels as prognostic indicators in resectable gastric carcinoma. González A, et al. **Int J Biol Markers** 1996 Jul-Sep;11(3):165-71

Hepatoid gastric carcinoma. A case report. Lorenzi M, et al. **Int J Biol Markers** 1996 Oct-Dec;11(4):216-9

Receiver operating characteristic (ROC) curve analysis of the tumor markers CEA, CA 19-9 and CA 72-4 in gastric cancer. Fernández-Fernández L, et al. **Int Surg** 1996 Oct-Dec;81(4):400-2

Serum insulin-like growth factors (IGFs) and IGF binding protein (IGFBP)-3 in patients with gastric cancer: IGFBP-3 protease activity induced by surgery. Lee DY, et al. **J Korean Med Sci** 1997 Feb;12(1):32-9

Identification of carcinoembryonic antigen mRNA in circulating peripheral blood of pancreatic carcinoma and gastric carcinoma patients. Funaki NO, et al. **Life Sci** 1996; 59(25-26):2187-99

Association between preoperative plasma CEA levels and the prognosis of gastric cancer following curative resection. Tumor Marker Committee, Japanese Foundation for Multidisciplinary Treatment of Cancer, Tokyo, Japan. Sakamoto J, et al. **Surg Oncol** 1996 Jun;5(3):133-9

Association between serum gastrin levels, gastric acid secretion and age in early gastric cancer. Miyaji M, et al. **Tumour Biol** 1997;18(5):311-20

[Changes in hematoporphyrin in patients with gastric and hepatic carcinoma and their clinical significance] Li S, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan;18(1):34-6 (Eng. Abstr.) **(Chi)**

[Changes in erythrocyte electrophoretic mobility in patients with neoplasms] Matiushichev VB, et al. **Biofizika** 1996 Sep-Oct;41(5):1093-6 (Eng. Abstr.) **(Rus)**

[Blood rheology in patients with gastric cancer] Karabanov GN, et al. **Khirurgiia (Mosk)** 1997;(4):20-3 (Eng. Abstr.) **(Rus)**

[The pathophysiological significance of the low triiodothyronine syndrome with increased clearance in cancer of the stomach and large intestine] Beletskaia OM. **Lik Sprava** 1996 Mar-Apr;(3-4):181-4 (Eng. Abstr.) **(Rus)**

[Proteinase inhibitors as markers of stomach cancer] Beliaev MV, et al. **Vopr Onkol** 1996;42(4):30-1 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Association of tumour vasculature with tumour progression and overall survival of patients with non-early gastric carcinomas. Tanigawa N, et al. **Br J Cancer** 1997; 75(4):566-71

Spontaneous apoptosis is inversely related to intratumoral microvessel density in gastric carcinoma. Lu C, et al. **Cancer Res** 1997 Jan 15;57(2):221-4

Correlation between expression of vascular endothelial growth factor and tumor vascularity, and patient outcome in human gastric carcinoma. Tanigawa N, et al. **J Clin Oncol** 1997 Feb;15(2):826-32

Microvessel count predicts metastasis and prognosis in patients with gastric cancer. Araya M, et al. **J Surg Oncol** 1997 Aug;65(4):232-6

[Tumor vascularity as a prognostic factor and metastasis marker in stomach carcinoma] Jung C, et al. **Z Gastroenterol** 1997 Jul;35(7):591-4 **(Ger)**

[Hemocoagulation, anticoagulant and fibrinolytic characteristics of human stomach tissue] Golyshenkov SP. **Fiziol Cheloveka** 1996 Jul-Aug;22(4):114-7 **(Rus)**

CHEMICALLY INDUCED

Potential preventive effects of Chelidonium majis L. (Papaveraceae) herb extract on glandular stomach tumor development in rats treated with N-methyl-N'-nitro-N nitrosoguanidine (MNNG) and hypertonic sodium chloride. Kim DJ, et al. **Cancer Lett** 1997 Jan 30; 112(2):203-8

Carcinogenicity of benzo[a]pyrene and manufactured gas plant residues in infant mice. Rodriguez LV, et al. **Carcinogenesis** 1997 Jan;18(1):127-35

Gastric carcinogenesis: 2-chloro-4-methylthiobutanoic acid, a novel mutagen in salted, pickled Sanma hiraki fish, or similarly treated methionine. Chen W, et al. **Chem Res Toxicol** 1996 Jan-Feb;9(1):58-66

Confounding by indication, histamine-2 receptor antagonists, and gastric cancer [letter; comment] Edwardes MD, et al. **Epidemiology** 1997 May;8(3):335. Comment on: Epidemiology 1996 Jul;7(4):335-6. Comment on: Epidemiology 1996 Jul;7(4):434-6.

Histamine-2 receptor antagonists and gastric cancer [see comments] Johnson AG, et al. **Epidemiology** 1996 Jul; 7(4):434-6. Comment in: Epidemiology 1996 Jul;7(4):335-6. Comment in: Epidemiology 1997 May;8(3):335.

Confounding by indication and past clinical trials [letter; comment] Porta M. **Epidemiology** 1997 Mar;8(2):219-20. Comment on: Epidemiology 1996 Jul;7(4):335-6.

Inhibition by vitamins C and E of in vivo nitrosation and vitamin C occurrence in the stomach. Mirvish SS. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:131-6 (37 ref.)

Evaluation of the aetiological role of dietary salt exposure in gastric and other cancers in humans. Cohen AJ, et al. **Food Chem Toxicol** 1997 Feb;35(2):271-93 (161 ref.)

Mortality study of nickel platers with special reference to cancers of the stomach and lung, 1945-93. Pang D, et al. **Occup Environ Med** 1996 Oct;53(10):714-7

CHEMISTRY

Expression of p53 protein in gastric cancer: an immunohistochemical study with correlation to proliferative activity. Ioachim E, et al. **Anticancer Res** 1997 Jan-Feb;17(1A):513-7

Tenascin and oncofetal fibronectin--oncofetal markers or indicators of extracellular matrix remodelling? [letter; comment] David L. **Br J Cancer** 1996 Sep;74(6):990-1. Comment on: Br J Cancer 1995 Jul;72(1):189-92.

Differential expression of apoptosis receptors on diffuse and intestinal type stomach carcinoma. Vollmers HP, et al. **Cancer** 1997 Feb 1;79(3):433-40

Expression of a peptide epitope of the colonic mucin MUC2 in precursor lesions to gastric carcinoma. Filipe MI, et al. **Eur J Cancer Prev** 1996 Aug;5(4):287-95

Abnormal immunoreactivity of the E-cadherin-catenin complex in gastric carcinoma: relationship with patient survival. Jawhari A, et al. **Gastroenterology** 1997 Jan; 112(1):46-54

CDX1 protein expression in normal, metaplastic, and neoplastic human alimentary tract epithelium [see comments] Silberg DG, et al. **Gastroenterology** 1997 Aug; 113(2):478-86. Comment in: Gastroenterology 1997 Aug;113(2):680-2.

Proliferation and apoptosis in primary gastric B-cell non-Hodgkin's lymphoma. Gisbertz IA, et al. **Histopathology** 1997 Feb;30(2):152-9

Gastric fundic gland polyps: a morphological study including mucin histochemistry, stereometry, and MIB-1 immunohistochemistry. Odze RD, et al. **Hum Pathol** 1996 Sep;27(9):896-903

Expression of multidrug-resistance-associated protein (MRP) and chemosensitivity in human gastric cancer. Endo K, et al. **Int J Cancer** 1996 Nov 4;68(3):372-7

Correlation between expression of vascular endothelial growth factor and tumor vascularity, and patient outcome in human gastric carcinoma. Tanigawa N, et al. **J Clin Oncol** 1997 Feb;15(2):826-32

Expression of p53 and NDP-K/nm23 in gastric

carcinomas--association with metastasis and clinicopathologic parameters. Kim KM, et al. **J Korean Med Sci** 1995 Dec;10(6):406–13

N–nitroso compounds in the gastric juice of normal controls, patients with partial gastrectomies, and gastric cancer patients. Guadagni S, et al. **J Surg Oncol** 1996 Dec; 63(4):226–33

Increased estrogen receptor and epidermal growth factor receptor gene product co–expression in surgically resected gastric adenocarcinomas. Koullias GJ, et al. **J Surg Oncol** 1996 Nov;63(3):166–71

Detection of carcinoembryonic antigen–expressing free tumor cells in peritoneal washes from patients with gastric carcinoma by polymerase chain reaction. Nakanishi H, et al. **Jpn J Cancer Res** 1997 Jul;88(7):687–92

Prognostic significance of the expressions of metallothionein, glutathione–S–transferase–pi, and P–glycoprotein in curatively resected gastric cancer. Monden N, et al. **Oncology** 1997 Sep–Oct;54(5):391–9

The significance of nm23 protein expression in human gastric carcinomas. Ura H, et al. **Surg Today** 1996;26(12):957–65

[Immunohistochemical analysis of c–erB–2 and nm23 expression in early gastric carcinoma] Aoyagi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Sep;93(9):613–9 (Eng. Abstr.) **(Jpn)**

[Sex hormone receptors in the gastric mucosa in gastric precancer and cancer] Iushkov PV. **Arkh Patol** 1997 May–Jun;59(3):24–7 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Can endoscopic biopsy specimens be used for reliable Laurén classification of gastric cancer? Hansson LE, et al. **Scand J Gastroenterol** 1996 Jul;31(7):711–5

Adenocarcinoma of the gastric antrum: does D2 total gastrectomy with splenectomy improve prognosis compared to D1 subtotal gastrectomy? A long–term survival analysis with emphasis on Lauren classification. Roukos D, et al. **Surg Oncol** 1995;4(6):323–32

The biological relevance of gastric neuroendocrine tumors. Klöppel G, et al. **Yale J Biol Med** 1996 Jan–Feb;69(1):69–74 (42 ref.)

[A report from a WHO–congress on stomach cancer. A controversy about the future TNM classification] Gunvén P, et al. **Lakartidningen** 1997 Mar 5;94(10):876–7 **(Swe)**

COMPLICATIONS

Primary gastric lymphoma presenting with vitamin B12 deficiency and achlorhydria. Drake WM, et al. **Am J Gastroenterol** 1996 Dec;91(12):2605–6

Sarcoid reactions in association with a leiomyosarcoma of the stomach. Matsuhashi N, et al. **Am J Gastroenterol** 1996 Dec;91(12):2623–4

Bullous pemphigoid associated with internal malignancies: identification of 180–kDa antigen by western immunoblotting. Muramatsu T, et al. **Br J Dermatol** 1996 Nov;135(5):782–4

Endoscopic stenting for recurrent malignant gastric outlet obstruction. Patton JT, et al. **Br J Surg** 1997 Jun; 84(6):865–6

Gastric adenocarcinoma with microangiopathic hemolytic anemia and disseminated intravascular coagulation: a case report. Jiang CF, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Mar;59(3):204–9

Eczema craquelé as a pointer of internal malignancy--a case report. Guillet MH, et al. **Clin Exp Dermatol** 1996 Nov; 21(6):431–3 (24 ref.)

Pseudoachalasia: a report of two cases with comments on possible causes and diagnosis. Campos CT, et al. **Dis Esophagus** 1997 Jul;10(3):220–4

Comparison between esophageal Wallstent and Ultraflex stents in the treatment of malignant stenoses of the esophagus and cardia. Dorta G, et al. **Endoscopy** 1997 Mar; 29(3):149–54

Prolapsing gastric polyp, an unusual cause of gastric outlet obstruction: a review of the pathology and management of gastric polyps. Kumar A, et al. **Endoscopy** 1996 Jun; 28(5):452–5

Gastropleural fistula due to gastric lymphoma presenting as tension pneumothorax and empyema. Warburton CJ, et al. **Eur Respir J** 1997 Jul;10(7):1678–9

Prior radiation and chemotherapy increase the risk of life–threatening complications after insertion of metallic stents for esophagogastric malignancy [see comments] Kinsman KJ, et al. **Gastrointest Endosc** 1996 Mar; 43(3):196–203. Comment in: Gastrointest Endosc 1996 Mar;43(3):258–60.

Peroral insertion techniques of self–expanding metal stents for malignant gastric outlet and duodenal stenoses. Maetani I, et al. **Gastrointest Endosc** 1996 Oct;44(4):468–71 (12 ref.)

Endoscopic injection of gelatin solution for severe hemorrhagic gastric cancer. Tajika M, et al. **Gastrointest Endosc** 1996 Mar;43(3):247–50 (10 ref.)

Relation between gastric cancer and previous peptic ulcer disease. Molloy RM, et al. **Gut** 1997 Feb;40(2):247–52

Upper GI bleeding in a man with a left upper quadrant mass. Dhar SC. **Hosp Pract (Off Ed)** 1997 Jun 15;32(6):215–7

Primary gastric lymphoma in an HIV–infected patient [letter] Rodríguez–Sanjuán JC, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Dec 15;13(5):467–8

Primary biliary cirrhosis and gastric carcinoid: a rare association? Mörk H, et al. **J Clin Gastroenterol** 1997 Jun; 24(4):270–3

Prurigo nodularis associated with advanced gastric cancer: report of a case. Funaki M, et al. **J Dermatol** 1996 Oct; 23(10):703–7

A rare case of gastric cancer in an acromegalic patient. Asai K, et al. **J Gastroenterol** 1997 Aug;32(4):528–32

Progressive systemic sclerosis associated with primary small cell carcinoma of the stomach. Shikuwa S, et al. **J Gastroenterol** 1997 Aug;32(4):538–42 (14 ref.)

Increased prevalence of Helicobacter pylori infection among patients affected with intestinal–type gastric cancer at non–cardiac locations. Wu MS, et al. **J Gastroenterol Hepatol** 1997 Jun;12(6):425–8

A case of combined gastrojejunal and gastrocolic fistula secondary to gastric cancer. Choi SW, et al. **J Korean Med Sci** 1996 Oct;11(5):437–9

Gastric lymphoma causing gastric outlet obstruction. Ciftci AO, et al. **J Pediatr Surg** 1996 Oct;31(10):1424–6

Remitting seronegative symmetrical synovitis with pitting edema associated with gastric carcinoma. Tada Y, et al. **J Rheumatol** 1997 May;24(5):974–5

Palliative therapy using polyurethane–covered self–expandable metallic stents for malignant esophageal strictures: experiences in six patients. Kato M, et al. **Jpn J Clin Oncol** 1996 Dec;26(6):461–4

Fibrillary glomerulonephritis in a patient with adenocarcinoma of stomach. Amir–Ansari B, et al. **Nephrol Dial Transplant** 1997 Jan;12(1):210–1

Acute neuropsychiatric findings in a patient receiving fentanyl for cancer pain. Bruera E, et al. **Pain** 1997 Jan; 69(1–2):199–201

Calcification in a gastric neoplasm. García–Díaz M, et al. **Postgrad Med J** 1997 Jan;73(855):51–3

Helicobacter pylori infection in young patients with gastric carcinoma. Kokkola A, et al. **Scand J Gastroenterol** 1996 Jul;31(7):643–7

Gastric adenocarcinoma and low–grade B–cell lymphoma of mucosa–associated lymphoid tissue. Hardman WJ 3rd, et al. **South Med J** 1997 Apr;90(4):426–30

Primary adenocarcinoma of the stomach associated with peripheral neurofibromatosis: report of a case. Basu S, et al. **Surg Today** 1997;27(1):57–9

Intestinal metaplasia--its association with gastric cancer. Malhotra V, et al. **Trop Gastroenterol** 1995 Oct–Dec; 16(4):22–6

[Ménétrier disease associated with a gastric adenocarcinoma. Apropos of 2 cases] Jouini M, et al. **Ann Gastroenterol Hepatol (Paris)** 1996 Nov–Dec; 31(6):341–5 (Eng. Abstr.) **(Fre)**

[Lymphocytic gastritis associated with gastric MALT lymphoma (letter)] Heitzmann A, et al. **Gastroenterol Clin Biol** 1997;21(5):433–4 **(Fre)**

[Association of low malignancy gastric B–cell lymphoma and mediastinal sarcoidosis (letter)] Mohand D, et al. **Gastroenterol Clin Biol** 1997;21(6–7):526–7 **(Fre)**

[Acquired Willebrand's syndrome in a patient with gastric MALT lymphoma (letter)] Rabaud C, et al. **Presse Med** 1997 May 17;26(16):769 **(Fre)**

[Unusual cause of gastric bleeding: leiomyoma] Alberti P, et al. **Minerva Chir** 1996 Oct;51(10):779–83 (22 ref.) (Eng. Abstr.) **(Ita)**

[A rare association: antral neurinoma with gastric volvulus] Mosca F, et al. **Minerva Chir** 1997 Jan–Feb;52(1–2):93–6 (Eng. Abstr.) **(Ita)**

[Anesthetic management of a patient with erythroderma] Hattori S, et al. **Masui** 1996 Sep;45(9):1127–30 (Eng. Abstr.) **(Jpn)**

[A dual occurrence of endometrial and gastric adenocarcinomas in systemic lupus erythematosus] Yamane K, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Jun; 19(3):232–7 (Eng. Abstr.) **(Jpn)**

[Gastric ulcer and cancer] Matsukura N, et al. **Nippon Ika Daigaku Zasshi** 1997 Jun;64(3):207–10 (19 ref.) **(Jpn)**

[A case of multiple gastric carcinoid tumors associated with type A gastritis, diabetes insipidus and Hashimoto's disease] Fuse K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Apr; 94(4):261–7 **(Jpn)**

[A case of ulcerative colitis with minute gastric cancer and intraductal papillary adenoma of the pancreas] Yamamoto T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Aug; 94(8):532–7 (12 ref.) **(Jpn)**

[Neoplastic ulceration of the stomach penetrating to the spleen as a cause of sudden fatal gastrointestinal hemorrhage--case report] Simka M, et al. **Pol Arch Med Wewn** 1996 Oct;96(4):367–8 (Eng. Abstr.) **(Pol)**

[Controlled clinical studies for topographic analysis of atrophic gastritis and stomach cancer] Popiela T, et al. **Przegl Lek** 1996;53(6):472–7 (Eng. Abstr.) **(Pol)**

[Radical surgical treatment of gastric cancer complicated by perforation and hemorrhage in the aged] Chernov KM, et al. **Khirurgiia (Mosk)** 1997;(4):69 **(Rus)**

[Closing of duodenal stump and crater of giant cancerous profusely bleeding ulcer] Kholiavko VK, et al. **Klin Khir** 1996;(6):50–1 **(Rus)**

[Gastroduodenal invagination and upper gastrointestinal hemorrhage secondary to gastric lipoma] Ortiz de Solórzapo Aurusa FJ, et al. **Gastroenterol Hepatol** 1997 Jun–Jul;20(6):303–5 (Eng. Abstr.) **(Spa)**

[Gastric adenocarcinoma in 2 cases of Bloom syndrome (letter)] Robles Campos R, et al. **Med Clin (Barc)** 1996 Feb 3;106(4):156–7 **(Spa)**

[Gastric tumor and jaundice with biliary tract dilatation] Acea Nebril B, et al. **Rev Clin Esp** 1996 Jul;196(7):473–4 **(Spa)**

[MALT–type gastric lymphoma in a patient with myelodysplastic syndrome (letter)] Martínez–Albaladejo M, et al. **Rev Clin Esp** 1996 Dec;196(12):880–1 **(Spa)**

[Chronic atrophic gastritis, hypergastinemia and gastric carcinoid tumor] Castellote J, et al. **Rev Esp Enferm Dig** 1997 Jun;89(6):485–7 (Eng. Abstr.) **(Spa)**

[Chylothorax as presenting form of a gastric adenocarcinoma] Martín–Joven A, et al. **Rev Esp Enferm Dig** 1996 Dec; 88(12):880–1 (Eng. Abstr.) **(Spa)**

[Visceral form of lymphogranulomatosis complicated by gastric hemorrhage and perforation] Moroz GS, et al. **Klin Khir** 1996;(6):52–3 **(Ukr)**

CONGENITAL

Malignant gastric teratoma: case report. Bourke CJ, et al. **Pediatr Surg Int** 1997 Feb;12(2–3):192–3

DIAGNOSIS

Dynamic MR imaging for extraserosal invasion of advanced gastric cancer. Oi H, et al. **Abdom Imaging** 1997 Jan–Feb; 22(1):35–40

Peritoneal carcinomatosis. Ricke J, et al. **Abdom Imaging** 1997 Mar–Apr;22(2):235–6

Gastric ulcer and cancer ulcer. Retrospective evaluation of the current endoscopic diagnosis. Sumberaz A, et al. **Acta Gastroenterol Latinoam** 1996;26(3):139–41

Occult gastric cancer presenting as cor pulmonale resulting from tumor cell microembolism. Cheung TC, et al. **Am J Gastroenterol** 1997 Jun;92(6):1057–9

Meningeal carcinomatosis as the presenting manifestation of gastric adenocarcinoma. Deeb LS, et al. **Am J Gastroenterol** 1997 Feb;92(2):329–31 (22 ref.)

When should endoscopy be performed in patients with dyspepsia? [letter; comment] Kuwayama H. **Am J Gastroenterol** 1996 Oct;91(10):2251. Comment on: Am J Gastroenterol 1996 Feb;91(2):188–90.

Comparative study of artificial neural networks in the discrimination between benign from malignant gastric cells. Karakitsos P, et al. **Anal Quant Cytol Histol** 1997 Apr; 19(2):145–52

Potential of the back propagation neural network in the discrimination of benign from malignant gastric cells. Karakitsos P, et al. **Anal Quant Cytol Histol** 1996 Jun; 18(3):245–50

Prognostic influence of blood transfusion on minimal residual disease in resected gastric cancer patients. Heiss MM, et al. **Anticancer Res** 1997 Jul–Aug;17(4A):2657–61

Gastric cancer during early pregnancy. Two case reports. Scharl A, et al. **Arch Gynecol Obstet** 1996;258(3):151–4

Machine learning techniques in early screening for gastric and oesophageal cancer. Liu WZ, et al. **Artif Intell Med** 1996 Aug;8(4):327–41

Delays in the diagnosis of oesophagogastric cancer: a consecutive case series [see comments] Martin IG, et al. **BMJ** 1997 Feb 15;314(7079):467–70. Comment in: **BMJ** 1997 Feb 15;314(7079):470–1. Comment in: BMJ 1997 Feb 15;314(7079):471. Comment in: BMJ 1997 Aug 16;315(7105):427. Comment in: BMJ 1997 Aug 16;315(7105):427–8. Comment in: BMJ 1997 Aug 16;315(7105):428.

Delays in the diagnosis of oesophagogastric cancer: a consecutive case series. Commentary: Japanese point of view [comment] Sano T, et al. **BMJ** 1997 Feb 15; 314(7079):470–1. Comment on: BMJ 1997 Feb 15;314(7079):467–70.

Delays in the diagnosis of oesophagogastric cancer: a consecutive case series. Commentary: Britain does better than Germany before patients reach hospital [see comments] Siewert JR, et al. **BMJ** 1997 Feb 15; 314(7079):471. Comment in: BMJ 1997 Feb 15;314(7079):467–70.

Delays in diagnosing oesophagogastric cancer. Small study found that four fifths of delay was due to patients [letter; comment] Wayman J, et al. **BMJ** 1997 Aug 16; 315(7105):428. Comment on: BMJ 1997 Feb 15;314(7079):467–70.

Prognostic factors in gastric carcinoma [letter; comment] Carneiro F, et al. **Br J Cancer** 1997;76(2):278. Comment on: Br J Cancer 1996 Sep;74(5):766–72.

Fluorescent diagnosis of experimental gastric cancer using a tumor–localizing photosensitizer. Tajiri H, et al. **Cancer Lett** 1997 Jan 1;111(1–2):215–20

Screening for gastric cancer. Pisani P, et al. **Cancer Treat Res** 1996;86:113–9 (35 ref.)

A comparison of imaging techniques for the localisation of gastro–enteropancreatic neuroendocrine tumours. Chayvialle JA. **Digestion** 1996;57 Suppl 1:54–6 (12 ref.)

The ultimate biochemical diagnosis of neuroendocrine gastro–enteropancreatic tumours. Faiss S, et al. **Digestion** 1996;57 Suppl 1:48–9 (12 ref.)

The ultimate biochemical diagnosis of gastro–enteropancreatic tumours. Oberg K. **Digestion** 1996; 57 Suppl 1:45–7 (5 ref.)

Diagnosis of borderline adenomas of the stomach by endoscopic mucosal resection. Fujiwara Y, et al.

Endoscopy 1996 Jun;28(5):425–30
Endoscopic ultrasonography in the evaluation of gastric polyps in juvenile polyposis. Gyrtrup HJ, et al. **Endoscopy** 1997 Feb;29(2):136–7
Cronkhite—Canada syndrome without colonic polyps. Misra SP, et al. **Endoscopy** 1997 May;29(4):333
Time trends in diagnostic strategy, treatment, and prognosis of gastric cancer in the elderly: a population based study. Benhamiche AM, et al. **Eur J Cancer Prev** 1997 Feb; 6(1):71–7
Diagnostic use of endoscopic mucosal resection. Ghosh S, et al. **Eur J Gastroenterol Hepatol** 1997 May;9(5):539–41
Sectional imaging of the gastroesophageal junction. van Overhagen H. **Eur J Radiol** 1996 May;22(2):86–94 (34 ref.)
Laparoscopic staging and treatment of gastric cancer [editorial] Ballesta-Lopez C, et al. **G Chir** 1997 Jan–Feb; 18(1–2):5–6
The use of DNA fingerprinting to clarify uncertainties about an endoscopic biopsy specimen that unexpectedly revealed gastric cancer. Fleischer DE, et al. **Gastrointest Endosc** 1997 Mar;45(3):318–9
Clinical importance and prognostic value of the image-DNA-cytometry for patients with gastric cancer. Stratmann H, et al. **Gen Diagn Pathol** 1996 Oct; 142(2):97–100
B-cell clonality and infection with Helicobacter pylori: implications for development of gastric lymphoma. Sorrentino D, et al. **Gut** 1996 Jun;38(6):837–40
Surgical treatment of gastric cancer dctected by mass screening. Hanazaki K, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1126–32
The usefulness of gastric mass screening using serum pepsinogen levels compared with photofluorography. Yoshihara M, et al. **Hiroshima J Med Sci** 1997 Jun; 46(2):81–6
B-cell gene rearrangement in benign and malignant lymphoid proliferations of mucosa-associated lymphoid tissue and lymph nodes. Torlakovic E, et al. **Hum Pathol** 1997 Feb; 28(2):166–73
Limitations of endoscopic inspection in diagnosis of malignant gastric ulcer [letter] Mohandas KM, et al. **Indian J Gastroenterol** 1996 Apr;15(2):79–80
Helicobacter pylori gastritis masquerading as gastric lymphoma. Nagral S, et al. **Indian J Gastroenterol** 1995 Oct;14(4):151–2
Gastrointestinal malignant melanoma. Woollons A, et al. **Int J Dermatol** 1997 Feb;36(2):129–31
Gastrointestinal stromal tumor of the stomach. Ishii T, et al. **Intern Med** 1997 Jun;36(6):392–7
Endoscopic discrimination of gastric ulcers. Maniatis AG, et al. **J Clin Gastroenterol** 1997 Jun;24(4):203–6
MRI for staging of gastric carcinoma: first results of an experimental prospective study. Düx M, et al. **J Comput Assist Tomogr** 1997 Jan–Feb;21(1):66–72
Progressive systemic sclerosis associated with primary small cell carcinoma of the stomach. Shikuwa S, et al. **J Gastroenterol** 1997 Aug;32(4):538–42 (14 ref.)
Diagnostic accuracy of immunochemical faecal occult blood test for gastric cancer. Nakama H, et al. **J Med Screen** 1996;3(3):113–4
Gastric lipoma in a child with bleeding and intermittent vomiting. Beck NS, et al. **J Pediatr Gastroenterol Nutr** 1997 Feb;24(2):226–8
Gastrobronchial fistula in untreated lymphoma. Cameron EW, et al. **J Thorac Imaging** 1996 Spring;11(2):150–2 (15 ref.)
Preoperative evaluation of the curative resectability of gastric cancer by abdominal computed tomography and ultrasonography: a prospective comparison study. Kim JJ, et al. **Korean J Intern Med** 1997 Jan;12(1):1–6
Differences in diagnostic criteria for gastric carcinoma between Japanese and western pathologists [see comments] Schlemper RJ, et al. **Lancet** 1997 Jun 14;349(9067):1725–9 . Comment in: Lancet 1997 Jun 14;349(9067):1711–2.
Diagnosis of gastric carcinoma in Japan and western countries [letter] Stolte M. **Lancet** 1997 Aug 9; 350(9075):448
Ultraviolet laser-induced fluorescence of human stomach tissues: detection of cancer tissues by imaging techniques. Chwirot BW, et al. **Lasers Surg Med** 1997;21(2):149–58
90-year-old man with fever and melena. Vella A, et al. **Mayo Clin Proc** 1996 Dec;71(12):1205–8
Contribution of flow cytometry to the diagnosis of gastric lymphomas in endoscopic biopsy specimens. Almasri NM, et al. **Mod Pathol** 1997 Jul;10(7):650–6
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 9–1997. A 39-year-old woman with pernicious anemia and a gastric mass [clinical conference] **N Engl J Med** 1997 Mar 20;336(12):861–7
Primary gastric lymphomas: morphologic, immunohistochemical and immunogenetic analyses. Narita M, et al. **Pathol Int** 1996 Sep;46(9):623–9
A flow cytometric study of early gastric cancer. The detection of high proliferative activity adds important information to the prognosis. Ranaldi R, et al. **Pathol Res Pract** 1996 Dec;192(12):1202–5
Grading of gastric epithelial dysplasia. An interobserver study and analysis of diagnostic criteria. Koktysz R, et al. **Pol J Pathol** 1997;48(1):5–14
Esophageal carcinoma: current controversies. DeMeester TR. **Semin Surg Oncol** 1997 Jul–Aug;13(4):217–33 (93 ref.)
Diagnosis and management of gastroduodenal polyps. Burke CA, et al. **Surg Oncol Clin N Am** 1996 Jul;5(3):589–607 (69 ref.)
Pseudomyxoma peritonei concomitant with early gastric cancer: report of a case. Ikejiri K, et al. **Surg Today** 1996; 26(11):923–5
Gastric plasmacytoma: report of a case. Kurihara N, et al. **Surg Today** 1996;26(8):632–4
Gastric smooth muscle tumors: diagnostic dilemmas and factors affecting outcome. Sanders L, et al. **World J Surg** 1996 Oct;20(8):992–5
[Stomach cancer in pregnancy and breast feeding: report of 17 cases] Dai D, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Dec;33(12):768–9 (Eng. Abstr.) **(Chi)**
[Gastric lesion revealed by a persistent hiccup] Hoang C, et al. **Ann Pathol** 1996 Sep;16(4):303–4 (6 ref.) **(Fre)**
[Dens axis fracture, spinal pain and hematemesis] Rexroth G, et al. **Internist (Berl)** 1997 Feb;38(2):160–4 **(Ger)**
[Krukenberg tumor: a clinical case report] Fölsing C, et al. **Rontgenpraxis** 1997 Feb;50(2):31–3 **(Ger)**
[Gastric neoplasms: their characterization, assessment of the degree of parietal infiltration and check on recurrence. The potentials and limits of CT, endoscopic US and MR] Gualdi GF, et al. **Clin Ter** 1996 Nov;147(11):585–94 (20 ref.) (Eng. Abstr.) **(Ita)**
[Primary gastrointestinal localization of N-H lymphoma: authors' experience] Versaci A, et al. **G Chir** 1997 Jun–Jul; 18(6–7):340–3 (40 ref.) (Eng. Abstr.) **(Ita)**
[A large symptomatic gastric leiomyoma. A case report and considerations of the treatment possibilities] Falsitta M, et al. **Minerva Chir** 1997 Apr;52(4):461–4 (7 ref.) (Eng. Abstr.) **(Ita)**
[Preoperative diagnosis and surgical treatment for lymph node metastasis in gastric cancer] Isozaki H, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(10):1275–83 (Eng. Abstr.) **(Jpn)**
[Current topics and endoscopic characteristics of the diagnosis how to detect in early gastric or colon cancer] Hanai H, et al. **Nippon Rinsho** 1996 May;54(5):1224–9 (18 ref.) (Eng. Abstr.) **(Jpn)**
[Early gastric cancer] Tada M, et al. **Nippon Rinsho** 1996 May;54(5):1371–4 (3 ref.) (Eng. Abstr.) **(Jpn)**
[Diagnosis of Epstein-Barr virus-associated gastric carcinoma and its background gastric mucosa] Yanai H, et al. **Nippon Rinsho** 1997 Feb;55(2):374–80 (31 ref.) (Eng. Abstr.) **(Jpn)**
[A case of primary gastric T-cell malignant lymphoma] Ozaki M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Jul; 93(7):470–4 (10 ref.) **(Jpn)**
[Stomach cancer. A 10-year material with emphasis on early cancer] Wasmuth HH, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10;117(7):931–4 (Eng. Abstr.) **(Nor)**
[Non-Hodgkin gastric lymphoma in a 14-year-old boy] Olejnik I, et al. **Pediatr Pol** 1996 Feb;71(2):157–60 (Eng. Abstr.) **(Pol)**
[Stomach neoplasm with pulmonary dissemination—diagnostic difficulties] Jassem E, et al. **Pneumonol Alergol Pol** 1996;64(5–6):335–9 (Eng. Abstr.) **(Pol)**
[Pincoffs-Bard's syndrome in a 15-year old girl] Pakulski C, et al. **Pneumonol Alergol Pol** 1996;64(11–12):809–14 (Eng. Abstr.) **(Pol)**
[Massive hemorrhage from a gastric neuroma associated with a kidney neoplasm] Lukasiewicz S, et al. **Wiad Lek** 1996; 49(7–12):124–6 (Eng. Abstr.) **(Pol)**
[Intraoperative instrumental examination in stomach cancer] Kuzin MI, et al. **Khirurgiia (Mosk)** 1996;(3):13–6 (Eng. Abstr.) **(Rus)**
[Fluorescent endoscopy in diagnosis of stomach neoplasm] Kuzin NM, et al. **Khirurgiia (Mosk)** 1997;(6):70–2 (21 ref.) **(Rus)**
[Biomicroscopy of the iris in cancerous and precancerous diseases of the stomach] Potebnia GP, et al. **Klin Khir** 1996; (4):35–8 **(Rus)**
[A case of synchronous cancer of the stomach and colon] Sheptulin AA, et al. **Klin Med (Mosk)** 1996;74(9):64–6 **(Rus)**
[A giant ulcer of the stomach with perforation into the liver simulating cancer] Kovalenko VL, et al. **Vestn Khir Im I I Grek** 1996;155(6):82–3 (7 ref.) **(Rus)**
[The diagnosis and surgical treatment of nonepithelial stomach tumors] Maistrenko NA, et al. **Vestn Khir Im I I Grek** 1997;156(3):26–9 (Eng. Abstr.) **(Rus)**
[Ulcer-cancer or early or advanced ulcerative cancer: an habitual diagnosis challenge: contribution of endoscopy and pathology (editorial)] Lucero RS, et al. **Acta Gastroenterol Latinoam** 1996;26(3):193–7 **(Spa)**
[Giant gastric stromal tumor simulating a focal hepatic lesion] Elizalde IR, et al. **Rev Esp Enferm Dig** 1997 Jul;89(7):561–4 (Eng. Abstr.) **(Spa)**
[Diagnosis and therapeutic management of gastric lymphomas] Grau E, et al. **Sangre (Barc)** 1996 Apr; 41(2):109–14 (Eng. Abstr.) **(Spa)**

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Phase II study of ZD1694 in patients with advanced gastric cancer. Meropol NJ, et al. **Am J Clin Oncol** 1996 Dec; 19(6):628–30
CEA, CA 19–9, and CA-50 in monitoring gastric carcinoma. Pectasides D, et al. **Am J Clin Oncol** 1997 Aug;20(4):348–53
5-Fluorouracil, epirubicin, and mitomycin C versus 5-fluorouracil, epirubicin, mitomycin C, and leucovorin in advanced gastric carcinoma. A randomized trial. Tsavaris NB, et al. **Am J Clin Oncol** 1996 Oct;19(5):517–21
A phase II study of 5-fluorouracil, leucovorin, adriamycin, and cisplatin (FLAP) for metastatic gastric and gastroesophageal junction adenocarcinoma. A Penn Cancer Clinical Trial Group and Roswell Park Cancer Institute Community Oncology Research Program Trial. Vaughn DJ, et al. **Am J Clin Oncol** 1997 Jun;20(3):242–6
Regression of gastric lymphoma with therapy for Helicobacter pylori infection [letter] Seymour JF, et al. **Ann Intern Med** 1997 Aug 1;127(3):247
A phase II study of mitomycin C and oral etoposide for advanced adenocarcinoma of the upper gastrointestinal tract. Braybrooke JP, et al. **Ann Oncol** 1997 Mar;8(3):294–6
5-fluorouracil and folinic acid in advanced adenocarcinoma of the esophagus or esophago-gastric junction area. Rotterdam Esophageal Tumor Study Group. Kok TC, et al. **Ann Oncol** 1996 Jul;7(5):533–4
Initial chemotherapy for primary resectable large-cell lymphoma of the stomach [see comments] Tondini C, et al. **Ann Oncol** 1997 May;8(5):497–9. Comment in: Ann Oncol 1997 May;8(5):419–21.
Combined intensive chemotherapy and radical surgery for incurable gastric cancer. Nakajima T, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):203–8
A phase II trial of paclitaxel and weekly 24 h infusion of 5-fluorouracil/folinic acid in patients with advanced gastric cancer. Bokemeyer C, et al. **Anticancer Drugs** 1997 Apr;8(4):396–9
Different doses of granulocyte colony stimulating factor to support a weekly chemotherapeutic regimen in advanced gastric cancer: a randomized study. Cascinu S, et al. **Anticancer Drugs** 1996 Jan;7(1):43–7
Chemotherapy of gastric cancer. Schipper DL, et al. **Anticancer Drugs** 1996 Feb;7(2):137–49 (165 ref.)
Etoposide enhances the antitumor effects of cisplatin in gastric cancer cells. Hotta T, et al. **Anticancer Res** 1997 Mar-Apr;17(2A):885–9
5-FU-induced apoptosis correlates with efficacy against human gastric and colon cancer xenografts in nude mice. Inada T, et al. **Anticancer Res** 1997 May-Jun; 17(3C):1965–71
Interferons alpha-2a and beta increase the antitumor activity, detected by MTT assay, of 5-fluorouracil against experimental and clinical human gastrointestinal carcinomas. Kubota T, et al. **Anticancer Res** 1997 Jan-Feb; 17(1B):725–8
Effects of 5'-DFUR and OK-432 on cytokines and thymidine phosphorylase in tumor tissue of gastric cancer patients. Ohwada S, et al. **Anticancer Res** 1997 May-Jun; 17(3C):2313–8
Tranilast (N-(3,4-dimethoxycinnamoyl) anthranilic acid) down-regulates the growth of scirrhous gastric cancer. Yashiro M, et al. **Anticancer Res** 1997 Mar-Apr; 17(2A):895–900
Pilot study for preoperative administration of l-OHP to patients with advanced scirrhous type gastric cancer. Eriguchi M, et al. **Biomed Pharmacother** 1997;51(5):217–20
Epirubicin, cisplatin and continuous infusion 5-fluorouracil (ECF) as neoadjuvant chemotherapy in gastro-oesophageal cancer. Melcher AA, et al. **Br J Cancer** 1996 Nov; 74(10):1651–4
Prospective randomized study of sulindac versus calcium and calciferol for upper gastrointestinal polyps in familial adenomatous polyposis. Seow-Choen F, et al. **Br J Surg** 1996 Dec;83(12):1763–6
Continuous infusion of 5-fluorouracil and low dose cisplatin infusion for the treatment of advanced and recurrent gastric adenocarcinoma. Chung YS, et al. **Cancer** 1997 Jul 1; 80(1):1–7
Systemic chemotherapy for gastric carcinoma followed by postoperative intraperitoneal therapy: a final report. Crookes P, et al. **Cancer** 1997 May 1;79(9):1767–75
Hypocalcemia associated with 5-fluorouracil and low dose leucovorin in patients with advanced colorectal or gastric carcinomas. Kido Y, et al. **Cancer** 1996 Oct 15;78(8):1794–7
Phase II trials of 5-fluorouracil and leucovorin in patients with metastatic gastric or pancreatic carcinoma. Rubin J, et al. **Cancer** 1996 Nov 1;78(9):1888–91
Enhanced induction of apoptosis of human gastric carcinoma cells after preoperative treatment with 5-fluorouracil. Sugamura K, et al. **Cancer** 1997 Jan 1;79(1):12–7
Dose intensity of uracil and tegafur in postoperative chemotherapy for patients with poorly differentiated gastric cancer. Sugimachi K, et al. **Cancer Chemother Pharmacol** 1997;40(3):233–8
Participation of c-met in the progression of human gastric cancers: anti-c-met oligonucleotides inhibit proliferation or invasiveness of gastric cancer cells. Kaji M, et al. **Cancer Gene Ther** 1996 Nov-Dec;3(6):393–404
Heated intraperitoneal mitomycin C infusion treatment for patients with gastric cancer and peritoneal metastasis. Fujimoto S, et al. **Cancer Treat Res** 1996;81:239–45
Mechanism and treatment of peritoneal carcinomatosis: intraperitoneal chemotherapy with mitomycin C bound to carbon particles. Takahashi T, et al. **Cancer Treat Res** 1996; 81:185–92
Intraperitoneal 5-fluorouracil and mitomycin C as adjuvants to resectable gastric cancer: a status report. Yu W. **Cancer Treat Res** 1996;81:177–83
A randomized trial comparing adjuvant fluorouracil, epirubicin, and mitomycin with no treatment in operable

gastric cancer. Tsavaris N, et al. **Chemotherapy** 1996 May–Jun;42(3):220–6

Control of growth in neuroendocrine gastro–enteropancreatic tumours. Arnold R, et al. **Digestion** 1996;57 Suppl 1:69–71 (19 ref.)

The role of somatostatin analogues in the treatment of gastro–enteropancreatic endocrine tumours. Bajetta E, et al. **Digestion** 1996;57 Suppl 1:72–6 (11 ref.)

The use of new somatostatin analogues, lanreotide and octastatin, in neuroendocrine gastro–intestinal tumours. Eriksson B, et al. **Digestion** 1996;57 Suppl 1:77–80

Interferon–alpha versus somatostatin or the combination of both in metastatic neuroendocrine gut and pancreatic tumours. Faiss S, et al. **Digestion** 1996;57 Suppl 1:84–5

Interferon–alpha versus somatostatin or the combination of both in gastro–enteropancreatic tumours. Oberg K. **Digestion** 1996;57 Suppl 1:81–3

Fotemustine in patients with advanced gastric cancer, a phase II trial from the EORTC–GITCCG (European Organization for Research and Treatment of Cancer, Gastrointestinal Tract Cancer Cooperative Group). Rougier P, et al. **Eur J Cancer** 1996 Jul;32A(8):1432–3

A phase II study of 5–fluorouracil, leucovorin and cisplatin (FLP) for metastatic gastric cancer. Ychou M, et al. **Eur J Cancer** 1996 Oct;32A(11):1933–7

Update on Helicobacter pylori research. Eradication. Graham DY, et al. **Eur J Gastroenterol Hepatol** 1997 Jun; 9(6):626–8

Chemotherapy for gastric cancer in Japan. Furue H. **Gan To Kagaku Ryoho** 1997 May;24 Suppl 1:120–5 (13 ref.)

Selection of adjuvant chemotherapy for gastric cancer using objective criteria. Nishiyama M, et al. **Gan To Kagaku Ryoho** 1997 May;24 Suppl 1:232–8 (10 ref.)

Enhancement of photodynamic therapy in gastric cancer cells by removal of iron. Tan WC, et al. **Gut** 1997 Jul;41(1):14–8

Stomach preservation in low– and high–grade primary gastric lymphomas: preliminary results. Rabbi C, et al. **Haematologica** 1996 Jan–Feb;81(1):15–9

High incidence of secondary myelodysplastic syndromes following PROMACE–MOPP and involved field radiotherapy for localized gastric non–Hodgkin's lymphomas. Corti C, et al. **Hematol Oncol** 1996 Dec; 14(4):159–63

Regression of gastric polyps in Gardner's syndrome with use of indomethacin suppositories: a case report. Hirata K, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):918–20

Correlation of the histological effects and survival after neoadjuvant chemotherapy on gastric cancer patients. Yonemura Y, et al. **Hepatogastroenterology** 1996 Sep–Oct; 43(11):1260–72

Expression of multidrug–resistance–associated protein (MRP) and chemosensitivity in human gastric cancer. Endo K, et al. **Int J Cancer** 1996 Nov 4;68(3):372–7

Effect of angiogenesis inhibitor TNP–470 on the progression of human gastric cancer xenotransplanted into nude mice. Kanai T, et al. **Int J Cancer** 1997 May 29;71(5):838–41

Decreased drug accumulation in a mitoxantrone–resistant gastric carcinoma cell line in the absence of P–glycoprotein. Kellner U, et al. **Int J Cancer** 1997 May 29;71(5):817–24

Neoadjuvant chemotherapy in scirrhous cancer of the stomach using uracil and tegafur and cisplatin. Suga S, et al. **Intern Med** 1996 Dec;35(12):930–6

Phase II trial of low–dose N–(phosphonacetyl)–disodium L–aspartic acid and high–dose 24–hour infusional 5–fluorouracil in advanced gastric adenocarcinoma. A Southwest Oncology Group study. Martino RL, et al. **Invest New Drugs** 1996;14(4):419–21

A phase II trial of etoposide, leucovorin and 5–fluorouracil (ELF) in patients with advanced gastric cancer. Au E, et al. **J Chemother** 1996 Aug;8(4):300–3

Phase I–II study of irinotecan hydrochloride combined with cisplatin in patients with advanced gastric cancer. Shirao K, et al. **J Clin Oncol** 1997 Mar;15(3):921–7

Randomized trial comparing epirubicin, cisplatin, and fluorouracil versus fluorouracil, doxorubicin, and methotrexate in advanced esophagogastric cancer. Webb A, et al. **J Clin Oncol** 1997 Jan;15(1):261–7

Endoscopic local injection of a new drug delivery formulation, anticancer drug bound to carbon particles, for digestive cancers: pilot study. Hagiwara A, et al. **J Gastroenterol** 1997 Apr;32(2):141–7

The French experience with infusional 5–FU in gastric and pancreatic cancer. Ducreux M, et al. **J Infus Chemother** 1996 Fall;6(4):203–5

High–dose infusional 5–fluorouracil combination therapy of metastatic gastric and colorectal cancer. Loeffler TM, et al. **J Infus Chemother** 1996 Summer;6(3):137–40

Intermittent continuous infusion of 5–fluorouracil in combination with epirubicin and cisplatin in advanced gastric cancer: the importance of dose intensity. Poorter RL, et al. **J Infus Chemother** 1996 Spring;6(2):87–91

Weekly infusional 5–fluorouracil plus/minus other drugs for the treatment of advanced gastric cancer. Wilke H, et al. **J Infus Chemother** 1996 Summer;6(3):123–6

Cure of Helicobacter pylori infection and duration of remission of low–grade gastric mucosa–associated lymphoid tissue lymphoma [see comments] Neubauer A, et al. **J Natl Cancer Inst** 1997 Sep 17;89(18):1350–5. Comment in: J Natl Cancer Inst 1997 Sep 17;89(18):1328–30.

Influence of chemotherapy on FDG uptake by human cancer xenografts in nude mice. Yoshioka T, et al. **J Nucl Med** 1997 May;38(5):714–7

Phase II study of a modified combination of etoposide, doxorubicin, and cisplatin for patients with advanced gastric cancer. Içli F, et al. **J Surg Oncol** 1997 Apr; 64(4):318–23

Effect of preoperative 5–fluorouracil on apoptosis of advanced gastric cancer. Inada T, et al. **J Surg Oncol** 1997 Jun;65(2):106–10

Frequent expression of complement resistance factors CD46, CD55, and CD59 on gastrointestinal cancer cells limits the therapeutic potential of monoclonal antibody 17–1A. Juhl H, et al. **J Surg Oncol** 1997 Mar;64(3):222–30

Presence in Pieris rapae of cytotoxic activity against human carcinoma cells. Koyama K, et al. **Jpn J Cancer Res** 1996 Dec;87(12):1259–62

Inhibition of liver metastasis of human gastric carcinoma by angiogenesis inhibitor TNP–470. Shishido T, et al. **Jpn J Cancer Res** 1996 Sep;87(9):958–62

The multidrug resistance–associated protein gene confers drug resistance in human gastric and colon cancers. Tomonaga M, et al. **Jpn J Cancer Res** 1996 Dec; 87(12):1263–70

Experimental studies on potentiation of the antitumor activity of 5–fluorouracil with 3'–azido–3'–deoxythymidine for the gastric cancer cell line MKN28 in vivo. Yasuda C, et al. **Jpn J Cancer Res** 1997 Jan;88(1):97–102

A case of advanced gastric cancer complicated by severe toxicity induced by a combination of tegafur, uracil and mitomycin C, and associated with abnormal pharmacokinetics. Boku N, et al. **Jpn J Clin Oncol** 1996 Oct;26(5):379–83

Mitomycin–C induced hemolytic uremic syndrome: a case report and literature review. Wu DC, et al. **Jpn J Clin Oncol** 1997 Apr;27(2):115–8 (27 ref.)

Cooperative clinical trial of photodynamic therapy with photofrin II and excimer dye laser for early gastric cancer. Mimura S, et al. **Lasers Surg Med** 1996;19(2):168–72

Phase II trial of docetaxel (Taxotere) in patients with adenocarcinoma of the upper gastrointestinal tract previously untreated with cytotoxic chemotherapy: the Eastern Cooperative Oncology Group (ECOG) results of protocol E1293. Einzig AI, et al. **Med Oncol** 1996 Jun; 13(2):87–93

Pilot study of enhancement of cisplatin activity by high dose cytarabine in advanced gastric and colorectal (G3/G4) cancer. Popov I, et al. **Neoplasma** 1996;43(4):221–4

Magnetic resonance ventriculography with gadolinium DTPA: report of two cases. Siebner HR, et al. **Neuroradiology** 1997 Jun;39(6):418–22; discussion 422

Experience of Oncopaz Cooperative Group with oral fluoropyrimidines in tumors of the stomach, lung, head and neck, and breast. Feliu J, et al. **Oncology** 1997;54 Suppl 1:30–7

Weekly 24–hour infusion of high–dose 5–fluorouracil and leucovorin in the treatment of advanced gastric cancers. An effective and low–toxic regimen for patients with poor general condition. Hsu CH, et al. **Oncology** 1997 Jul–Aug; 54(4):275–80

Intravenous methadone for cancer pain unrelieved by morphine and hydromorphone: clinical observations. Manfredi PL, et al. **Pain** 1997 Mar;70(1):99–101

Regression of a large gastric MALT lymphoma with antibiotic treatment to eradicate Helicobacter pylori. Martin J, et al. **Postgrad Med J** 1997 Feb;73(856):109–10

Preoperative chemotherapy in gastric cancer. Wilke H, et al. **Recent Results Cancer Res** 1996;142:237–48 (20 ref.)

Paclitaxel in the treatment of patients with upper gastrointestinal carcinomas. Ajani JA, et al. **Semin Oncol** 1996 Oct;23(5 Suppl 12):55–8

Relief of jaundice by 5–fluorouracil and folinic acid in patients with recurrent gastric cancer. Kajiyama Y, et al. **Surg Oncol** 1996 Aug;5(4):177–81

Paradoxical clinical deterioration despite near–complete pathological response to neoadjuvant chemotherapy for locally advanced gastro–oesophageal adenocarcinoma. Windsor AC, et al. **Surg Oncol** 1995;4(5):277–9

Histopathological response to preoperative chemotherapy including 5–fluorouracil additionally assessed by immunocytochemical and pharmacologic parameters in patients with advanced gastric cancer. Nakano H, et al. **Surg Today** 1996;26(7):482–8

P–glycoprotein as an intermediate end point of drug resistance to neoadjuvant chemotherapy in locally advanced gastric cancer. Chung HC, et al. **Yonsei Med J** 1996 Dec;37(6):397–404

[The influence on prognosis of intraoperative chemotherapy for adenocarcinoma of gastric cardia] Li Q, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Mar;18(2):137–9 (Eng. Abstr.) **(Chi)**

[ACNU and methyl–CCNU in combination chemotherapy for advanced gastric cancer: a randomized comparative study. Shanghai ACNU Collaborative Study Group] Xiao S, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan;18(1):30–3 (Eng. Abstr.) **(Chi)**

[The value of adjuvant and neoadjuvant chemotherapy in treatment of stomach carcinoma] Ausch C, et al. **Wien Klin Wochenschr** 1996;108(16):496–504 (50 ref.) (Eng. Abstr.) **(Ger)**

[Regression of primary gastric lymphoma after treatment with ranitidine] Tassinari D, et al. **Recenti Prog Med** 1997 Apr;88(4):179–80 (Eng. Abstr.) **(Ita)**

[Successful 5'–DFUR, CDDP and MMC combination therapy and 5'–DFUR and carboplatin combination therapy for a patient with inoperable advanced gastric cancer with peritonitis carcinomatosa] Ando S, et al. **Gan To Kagaku Ryoho** 1997 May;24(7):869–73 (Eng. Abstr.) **(Jpn)**

[Preoperative adjuvant chemotherapy with oral anticancer agents for stomach cancer] Honda I, et al. **Gan To Kagaku Ryoho** 1997 Jul;24(9):1109–17 (Eng. Abstr.) **(Jpn)**

[Unresectable gastric cancer followed by remarkably effective tumor disappearance and good quality of life for 10 months after CDDP/5'–DFUR combination chemotherapy––a case report] Hoshino K, et al. **Gan To Kagaku Ryoho** 1996 Nov;23(13):1841–5 (Eng. Abstr.) **(Jpn)**

[Clinical analysis of adjuvant chemotherapy using 5–fluorouracil, leucovorin and cis–diamminedichloroplatinum for patients with advanced and recurrent gastric cancer] Katsumata K, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):309–14 (Eng. Abstr.) **(Jpn)**

[Evaluation of clinical trials on adjuvant chemotherapy for curatively resected gastric cancer] Kitamura M, et al. **Gan To Kagaku Ryoho** 1997 Aug;24(10):1221–9 (Eng. Abstr.) **(Jpn)**

[Arterial infusion chemotherapy for advanced gastric cancer by sequential MTX/5–FU] Kitamura M, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1464–6 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of ondansetron suppository] Kobayashi F, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):625–7 **(Jpn)**

[A case of inoperable advanced gastric cancer remarkably responding to combined chemotherapy with UFT–E, MMC and PSK] Kogure A, et al. **Gan To Kagaku Ryoho** 1997 May;24(7):875–8 (Eng. Abstr.) **(Jpn)**

[Antitumor effect of S–1 and cisplatin treatment against human gastric cancer xenografted in nude mice] Kondo K, et al. **Gan To Kagaku Ryoho** 1997 Jul;24(9):1103–8 (Eng. Abstr.) **(Jpn)**

[Neoadjuvant chemotherapy in high–grade advanced gastric cancer with protracted infusional 5–fluorouracil and consecutive low–dose cisplatin] Kondo K, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(10):1299–303 (Eng. Abstr.) **(Jpn)**

[Chemotherapy for peritoneal dissemination in gastric cancer under ureteral catheterization] Kubo Y, et al. **Gan To Kagaku Ryoho** 1996 Dec;23(14):1951–7 (Eng. Abstr.) **(Jpn)**

[Chemosensitivity test for gastric carcinoma] Kubota T. **Gan To Kagaku Ryoho** 1997 Feb;24(4):495–500 (5 ref.) (Eng. Abstr.) **(Jpn)**

[Granisetron versus granisetron plus methylprednisolone in the prevention of chemotherapy induced nausea and vomiting––in adjuvant chemotherapy, including CDDP against gastric cancer] Kurita A, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):49–54 (Eng. Abstr.) **(Jpn)**

[Successful UFT–E granule and 5–FUCDDP combination therapy for an unresectable advanced gastric cancer complicated with liver metastasis] Kushibiki K, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(10):1313–5 (Eng. Abstr.) **(Jpn)**

[Optimal administration in combination chemotherapy with 5–fluorouracil and cisplatin for gastric cancer] Maeda Y, et al. **Gan To Kagaku Ryoho** 1996 Nov;23(13):1763–9 (35 ref.) (Eng. Abstr.) **(Jpn)**

[Study of preoperative combination therapy with UFT + CDDP in patients with gastric and colorectal cancer––concomitant effects based on the thymidylate synthase inhibitory rat] Mitsuishi K, et al. **Gan To Kagaku Ryoho** 1997 Jul;24(9):1119–24 (Eng. Abstr.) **(Jpn)**

[A case of advanced gastric cancer that responded to long–term administration of low–dose 5'–DFUR] Miyoshi K, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):101–3 (Eng. Abstr.) **(Jpn)**

[Significance of 5'–deoxy–5–fluorouridine (5'–DFUR) administration before surgery for advanced gastric and colonic cancers––activity of pyrimidine nucleoside phosphorylase (PyNPase) and serum immunosuppressive acidic protein (IAP)] Murakami N, et al. **Gan To Kagaku Ryoho** 1996 Dec;23(14):1959–66 (Eng. Abstr.) **(Jpn)**

[Trial of home anti–cancer chemotherapy with infusion of 5–FU and low–dose cisplatin] Muto A, et al. **Gan To Kagaku Ryoho** 1996 Dec;23 Suppl 3:245–50 (Eng. Abstr.) **(Jpn)**

[Immunomodulatory effect of daily low–dose cisplatin treatment] Nakagomi H, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):323–7 (Eng. Abstr.) **(Jpn)**

[A case of gastric cancer with peritoneal dissemination and malignant biliary stenosis treated by loco–regional cancer therapy] Nonaka M, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1568–70 (Eng. Abstr.) **(Jpn)**

[A case of gastric malignant lymphoma with perforation during chemotherapy] Ono K, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):105–8 (Eng. Abstr.) **(Jpn)**

[A case of advanced gastric cancer with multiple liver

metastasis successfully treated with combination chemotherapy using UFT, CDDP and etoposide] Ono T, et al. **Gan To Kagaku Ryoho** 1996 Oct;23(12):1709–12 (Eng. Abstr.) **(Jpn)**

[A case of advanced gastric cancer with carcinomatosa peritonitis effectively treated by 5–FU and low–dose CDDP therapy] Saito E, et al. **Gan To Kagaku Ryoho** 1997 Jul;24(9):1153–6 (Eng. Abstr.) **(Jpn)**

[Combination chemotherapy of continuous infusion 5–fluorouracil and daily low–dose cisplatin in advanced gastrointestinal and lung adenocarcinoma] Sasaki K, et al. **Gan To Kagaku Ryoho** 1997 Jun;24(8):959–64 (Eng. Abstr.) **(Jpn)**

[Sequential methotrexate and 5–fluorouracil] Sasaki T. **Gan To Kagaku Ryoho** 1996 Dec;23(14):1907–10 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Two cases of advanced gastric cancer effectively treated with chemotherapy of 5–fluorouracil, cisplatin and cytarabine] Satoh T, et al. **Gan To Kagaku Ryoho** 1997 May;24(7):879–82 (Eng. Abstr.) **(Jpn)**

[A case of recurrent gastric cancer with liver metastasis responding to combination chemotherapy with cisplatin and carmofur] Tadaoka N, et al. **Gan To Kagaku Ryoho** 1997 Apr;24(6):729–32 (Eng. Abstr.) **(Jpn)**

[An experimental study on antitumor effect of MMC–fibrin glue mixture] Tanaka T, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1400–2 (Eng. Abstr.) **(Jpn)**

[Combination therapy with 5'–DFUR, MMC and CDDP in patient with far advanced gastric cancer: report of a case] Tomita H, et al. **Gan To Kagaku Ryoho** 1997 Aug; 24(10):1311–4 (Eng. Abstr.) **(Jpn)**

[A case of advanced gastric cancer showing complete disappearance of cancer cells in multiple liver metastases due to low–dose PMUE therapy] Ueda N, et al. **Gan To Kagaku Ryoho** 1996 Nov;23(13):1833–6 (Eng. Abstr.) **(Jpn)**

[Evaluation of hepatic arterial infusion chemotherapy for gastric cancer] Uemura T, et al. **Gan To Kagaku Ryoho** 1996 Nov;23(13):1787–91 (Eng. Abstr.) **(Jpn)**

[Evaluation of combination chemotherapy with 5–FU and CDDP for human gastric carcinoma transplanted into nude mice] Yamada T, et al. **Gan To Kagaku Ryoho** 1997 Jan; 24(1):43–7 (Eng. Abstr.) **(Jpn)**

[A case of far–advanced gastric cancer treated with neoadjuvant combination chemotherapy of UFT, low–dose CDDP and leucovorin, followed by subtotal gastrectomy with curative intent] Yamamoto S, et al. **Gan To Kagaku Ryoho** 1997 Jul;24(9):1157–60 (Eng. Abstr.) **(Jpn)**

[An elderly patient with gastric cancer surviving long after chemotherapy using UFT alone] Yokoi K, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(10):1317–9 (Eng. Abstr.) **(Jpn)**

[Evaluation of endoscopic pirarubicin–Lipiodol emulsion injection therapy for gastric cancer] Yoshimura K, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1519–22 (Eng. Abstr.) **(Jpn)**

[The combined treatment of locally disseminated stomach cancer with intra–arterial regional chemotherapy] Zyrianov BN, et al. **Khirurgiia (Mosk)** 1996;(6):13–6 (Eng. Abstr.) **(Rus)**

[The role of antitumor drugs in treating stomach cancer patients] Garin AM, et al. **Ter Arkh** 1997;69(2):16–8 (Eng. Abstr.) **(Rus)**

[The intra–arterial chemotherapy of tumorous lesions of the stomach, rectum and liver] Hladkyĭ OV, et al. **Lik Sprava** 1997 Mar–Apr;(2):86–90 (Eng. Abstr.) **(Ukr)**

ENZYMOLOGY

Glutathione S–transferases in gastric carcinomas and in adjacent normal gastric epithelium: immunohistochemical and biochemical analyses. Schipper DI, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3721–4

Identification and purification of Ca2+/calmodulin–dependent protein kinase V from human gastric carcinoma. Ohta H, et al. **Biochim Biophys Acta** 1996 Dec 16;1317(3):175–82

High level of urokinase–type plasminogen activator is a new prognostic marker in patients with gastric carcinoma. Cho JY, et al. **Cancer** 1997 Mar 1;79(5):878–83

Adenosine deaminase activity in patients with the intestinal type of gastric carcinoma. Namiot Z, et al. **Cancer Lett** 1996 Dec 3;109(1–2):199–202

Tumor angiogenesis and expression of thymidine phosphorylase/platelet derived endothelial cell growth factor in human gastric carcinoma. Tanigawa N, et al. **Cancer Lett** 1996 Nov 29;108(2):281–90

Expression of cyclooxygenase–2 in human gastric carcinoma. Ristimäki A, et al. **Cancer Res** 1997 Apr 1;57(7):1276–80

A variant alkaline phosphatase–producing gastric carcinoma with super bone scan. Tokushima K, et al. **Dig Dis Sci** 1997 Jan;42(1):66–73

Telomerase activity and its clinicopathological significance in gastric cancer. Ahn MJ, et al. **Eur J Cancer** 1997 Jul; 33(8):1309–13

Matrix metalloproteinase–7 expression in gastric carcinoma. Honda M, et al. **Gut** 1996 Sep;39(3):444–8

Dual over–expression pattern of membrane–type metalloproteinase–1 in cancer and stromal cells in human gastrointestinal carcinoma revealed by in situ hybridization and immunoelectron microscopy. Ohtani H, et al. **Int J Cancer** 1996 Nov 27;68(5):565–70

Co–expression of urokinase–type plasminogen activator and its receptor in human gastric–cancer cell lines correlates with their invasiveness and tumorigenicity. Park IK, et al. **Int J Cancer** 1997 May 29;71(5):867–73

Purification and cDNA cloning of GDP–L–Fuc:N–acetyl–beta–D–glucosaminide:alpha1–6 fucosyltransferase (alpha1–6 FucT) from human gastric cancer MKN45 cells. Yanagidani S, et al. **J Biochem (Tokyo)** 1997 Mar;121(3):626–32

Expression of CD10/neutral endopeptidase in normal and malignant tissues of the human stomach and colon. Sato Y, et al. **J Gastroenterol** 1996 Feb;31(1):12–7

Overexpression of tissue inhibitors of metalloproteinase–1 and –2 in the stroma of gastric cancer. Hong SI, et al. **J Korean Med Sci** 1996 Dec;11(6):474–9

Expression of human telomerase RNA is an early event of stomach carcinogenesis. Kuniyasu H, et al. **Jpn J Cancer Res** 1997 Feb;88(2):103–7

Expression of interstitial collagenase (matrix metalloproteinase–1) in gastric cancers. Sakurai Y, et al. **Jpn J Cancer Res** 1997 Apr;88(4):401–6

Dose–dependent induction of both pepsinogen–altered pyloric glands and adenocarcinomas in the glandular stomach of C3H mice treated with N–methyl–N–nitrosourea. Yamamoto M, et al. **Jpn J Cancer Res** 1997 Mar;88(3):238–44

[The cytochemical observation of inosine effect on glucose metabolism of BGC–823 human gastric carcinoma cell line] Yang X, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan; 18(1):10–2 (Eng. Abstr.) **(Chi)**

[Prognostic role of cisteine and serin proteases in gastriC cancer] Herszényi L, et al. **Orv Hetil** 1996 Jul 28; 137(30):1637–41 (47 ref.) (Eng. Abstr.) **(Hun)**

EPIDEMIOLOGY

A 40–year analysis of 265 gastric carcinoids. Modlin IM, et al. **Am J Gastroenterol** 1997 Apr;92(4):633–8

Cancer risks among iron and steel workers in Anshan, China, Part II: Case–control studies of lung and stomach cancer. Xu Z, et al. **Am J Ind Med** 1996 Jul;30(1):7–15

Gastric adenocarcinoma in patients 40 years of age or younger. Theuer CP, et al. **Am J Surg** 1996 Nov; 172(5):473–6; discussion 476–7

Epidemiology of gastric cancer. Palli D. **Ann Ist Super Sanita** 1996;32(1):85–99 (128 ref.)

Nutrition and stomach cancer. Kono S, et al. **Cancer Causes Control** 1996 Jan;7(1):41–55 (108 ref.)

Comparison of two enzyme–linked immunosorbent assay tests for diagnosis of Helicobacter pylori infection in China. Groves FD, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):551–2

Body mass index and the risk of cancers of the gastric cardia and distal stomach in Shanghai, China. Ji BT, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):481–5

Adenocarcinomas of the esophagus and gastric cardia: medical conditions, tobacco, alcohol, and socioeconomic factors. Zhang ZF, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Oct;5(10):761–8

Antioxidant vitamins and stomach cancer: the role of ecologic studies. Kromhout D, et al. **Cancer Lett** 1997 Mar 19;114(1–2):333–4

Health beliefs and health behaviours in subpopulation of stomach cancer families and in the control group. Tobiasz–Adamczyk B. **Cancer Lett** 1997 Mar 19; 114(1–2):301–4

Nitrate intake and gastric cancer risk: results from the Netherlands cohort study. van Loon AJ, et al. **Cancer Lett** 1997 Mar 19;114(1–2):259–61

Confounding by indication and past clinical trials [letter; comment] Porta M. **Epidemiology** 1997 Mar;8(2):219–20. Comment on: Epidemiology 1996 Jul;7(4):335–6.

Confounding by indication? [letter; comment] Shapiro S. **Epidemiology** 1997 Jan;8(1):110–1. Comment on: Epidemiology 1996 Jul;7(4):335–6.

Confounding by indication [editorial; comment] [see comments] Walker AM. **Epidemiology** 1996 Jul;7(4):335–6. Comment on: Epidemiology 1996 Jul;7(4):434–6. Comment in: Epidemiology 1997 Jan;8(1):110–1. Comment in: Epidemiology 1997 Mar;8(2):219–20. Comment in: Epidemiology 1997 May;8(3):335.

Epidemiolcgical characteristics of gastric cancer in Vojvodina. Mikov MM, et al. **Eur J Epidemiol** 1997 Jul; 13(5):523–5

Early gastric cancer in Europe. Everett SM, et al. **Gut** 1997 Aug;41(2):142–50 (88 ref.)

Diet and stomach cancer in Korea. Ahn YO. **Int J Cancer** 1997;Suppl 10:7–9

Esophageal and gastric carcinoma in Norway 1958–1992: incidence time trend variability according to morphological subtypes and organ subsites. Hansen S, et al. **Int J Cancer** 1997 May 2;71(3):340–4

Diet/nutrition and stomach cancer in Japan. Hirohata T, et al. **Int J Cancer** 1997;Suppl 10:34–6

Tobacco smoking and gastric cancer: review and meta–analysis. Trédaniel J, et al. **Int J Cancer** 1997 Aug 7;72(4):565–73

Trends in incidence rates of adenocarcinoma of the oesophagus and gastric cardia in New Zealand, 1978–1992. Armstrong RW, et al. **Int J Epidemiol** 1996 Oct;25(5):941–7

Lifestyle and risk of stomach cancer: a hospital–based case–control study. Gajalakshmi CK, et al. **Int J Epidemiol** 1996 Dec;25(6):1146–53

Prevalence of fundic gland polyps in a western European population. Dickey W, et al. **J Clin Gastroenterol** 1996 Jul; 23(1):73–5

Family history evaluation in epidemiologic studies; an evaluation of bias in the conventional methods and a proposal of a new one. Nakamura Y, et al. **J Epidemiol** 1997 Mar;7(1):21–5

Increased prevalence of Helicobacter pylori infection among patients affected with intestinal–type gastric cancer at non–cardiac locations. Wu MS, et al. **J Gastroenterol Hepatol** 1997 Jun;12(6):425–8

Do Japanese statistics on gastric carcinoma need to be revised? [comment] Sakamoto J, et al. **Lancet** 1997 Jun 14; 349(9067):1711–2. Comment on: Lancet 1997 Jun 14;349(9067):1725–9.

Incidental eradication of Helicobacter pylori by antibiotics given for unrelated conditions and declining incidence of gastric carcinoma [letter; comment] Simini B. **Lancet** 1996 Nov 16;348(9038):1390–1. Comment on: Lancet 1997 Jan 4;349(9044):59.

On the role of aging in carcinogenesis. Benson D, et al. **Mutat Res** 1996 Sep 23;356(2):209–16

Helicobacter pylori, gastric ulcer, and duodenal ulcer [letter; comment] Mitchell HM, et al. **N Engl J Med** 1996 Dec 12;335(24):1841; discussion 1842–3. Comment on: N Engl J Med 1996 Jul 25;335(4):242–9. Comment on: N Engl J Med 1996 Jul 25;335(4):278–80.

Tea and cancer prevention: an evaluation of the epidemiologic literature. Kohlmeier L, et al. **Nutr Cancer** 1997;27(1):1–13 (30 ref.)

Case–control study on influence of methionine, nitrite, and salt on gastric carcinogenesis in northern Italy. La Vecchia C, et al. **Nutr Cancer** 1997;27(1):65–8

Food consumption and gastric cancer mortality in five regions of Japan. Tsubono Y, et al. **Nutr Cancer** 1997; 27(1):60–4

A clinico–epidemiological study on gastritis in gastric carcinoma and in non–cancerous gastric pathology in Poland. Jedrychowski W, et al. **Rev Environ Health** 1997 Apr–Jun;12(2):117–24

Incidence, mortality and prevalence of stomach cancer in Italian regions [published erratum appears in Tumori 1996 Sep–Oct;82(5):509] De Angelis R, et al. **Tumori** 1996 Jul–Aug;82(4):314–20

[Risk of second primary cancer in two–year survivors of small cell lung cancer] Yoshida T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Jul;34(7):741–6 (Eng. Abstr.) **(Jpn)**

[Incidence of synchronous or metachronous multiple primary cancers and aggregation of cancers in families of patients with endometrial cancer] Ichikawa Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1996 Sep;48(9):835–40 (Eng. Abstr.) **(Jpn)**

[Current status of gastric cancer morbidity] Denisov LE, et al. **Khirurgiia (Mosk)** 1997;(3):21–4 (Eng. Abstr.) **(Rus)**

[Incidence of gastric cancer in the 02 health area of Castellon] Monferrer Guardiola R, et al. **An Med Interna** 1996 Feb; 13(2):68–72 (Eng. Abstr.) **(Spa)**

[Helicobacter pylori infection and gastric cancer in Mexico. A challenge for prevention and population control] López Carrillo L, et al. **Rev Gastroenterol Mex** 1997 Jan–Mar; 62(1):22–8 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Ethnic variation in the incidence of stomach cancer in Illinois, 1986–1988. Cho NH, et al. **Am J Epidemiol** 1996 Oct 1;144(7):661–4

Gastric carcinoma in African Americans: a 10 year single center analysis. Vaquerano J, et al. **In Vivo** 1996 Mar–Apr; 10(2):233–5

Clinicopathological significance of intestinal and diffuse types of gastric carcinoma in Taiwan Chinese. Wu CW, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1083–8

ETIOLOGY

Gastric Crohn's disease complicated by adenocarcinoma of the stomach: case report and review of the literature. Patel M, et al. **Am J Gastroenterol** 1997 Aug;92(8):1368–71 (19 ref.)

Pernicious anemia and gastric carcinoid tumor: case report and review. Sculco D, et al. **Am J Gastroenterol** 1997 Aug; 92(8):1378–80 (57 ref.)

Gastric cancer in the bypassed segment after operation for morbid obesity. Lord RV, et al. **Aust N Z J Surg** 1997 Aug;67(8):580–2

Multifocal gastric neoplasia after recurrent laser therapy for the watermelon stomach. Bernstein CN, et al. **Can J Gastroenterol** 1997 Jul–Aug;11(5):403–6

Helicobacter pylori highlights from the first Canadian Digestive Disease Week. Matisko A, et al. **Can J Gastroenterol** 1997 Jan–Feb;11(1):71–6

The influence of cigarette smoking, alcohol, and green tea consumption on the risk of carcinoma of the cardia and distal stomach in Shanghai, China [letter; comment] Galanis DJ, et al. **Cancer** 1997 May 1;79(9):1840–1. Comment on: Cancer 1996 Jun 15;77(12):2449–57.

The role of dietary factors in the intestinal and diffuse histologic subtypes of gastric adenocarcinoma: a case–control study in the U.S. Harrison LE, et al. **Cancer** 1997 Sep 15;80(6):1021–8

Positive association between dietary fat intake and risk of gastric stump carcinoma in rats. Miwa K, et al. **Carcinogenesis** 1996 Sep;17(9):1885–9

Case report: gastric carcinoma as a complication of dyskeratosis congenita in an adolescent boy. Chatura KR, et al. **Dig Dis Sci** 1996 Dec;41(12):2340–2

Histidine decarboxylase expression and histamine metabolism in gastric oxyntic mucosa during hypergastrinemia and carcinoid tumor formation. Kölby L, et al. **Endocrinology** 1996 Oct;137(10):4435–42

Occupational risk factors for gastric cancer: an overview. Cocco P, et al. **Epidemiol Rev** 1996;18(2):218–34 (231 ref.)

Risk of stomach cancer in patients with gastric or duodenal ulcer. La Vecchia C, et al. **Eur J Cancer Prev** 1997 Feb; 6(1):20–3

Helicobacter pylori and gastric cancer. Reed PI. **Eur J Cancer Prev** 1996 Dec;5 Suppl 2:49–55

Studies of stable N–nitroso compounds in human gastric juice—a review. Reed PI. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:75–82 (36 ref.)

Nutrition and cancer of the respiratory and digestive tract: results from observational and chemoprevention studies. Riboli E. **Eur J Cancer Prev** 1996 Dec;5 Suppl 2:9–17

Future directions in research of endogenous production on N–nitroso compounds. Stockbrügger RW. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:67–9 (21 ref.)

Update on Helicobacter pylori research. Malignancies. Gasbarrini G, et al. **Eur J Gastroenterol Hepatol** 1997 Jun; 9(6):621–3

Widespread clonal B–cell disorder in Sjögren's syndrome predisposing to Helicobacter pylori–related gastric lymphoma. De Vita S, et al. **Gastroenterology** 1996 Jun; 110(6):1969–74

Gastric adenocarcinoma and dysplasia in fundic gland polyps of a patient with attenuated adenomatous polyposis coli. Zwick A, et al. **Gastroenterology** 1997 Aug;113(2):659–63

Development of hyperplastic polyps following laser therapy for watermelon stomach. Geller A, et al. **Gastrointest Endosc** 1996 Jan;43(1):54–6

Do cathepsins play a role in the biological behavior of gastric carcinoma? [letter; comment] David L, et al. **Hum Pathol** 1996 Sep;27(9):997–8. Comment on: Hum Pathol 1996 Feb;27(2):184–90.

Gastric lymphoma and Helicobacter pylori. Isaacson PG, et al. **Important Adv Oncol** 1996;:111–21 (58 ref.)

Is Helicobacter pylori a gastric carcinogen? [editorial; comment] [see comments] Mohandas KM. **Indian J Gastroenterol** 1997 Jan;16(1):3–5. Comment on: Indian J Gastroenterol 1997 Jan;16(1):16–7. Comment in: Indian J Gastroenterol 1997 Apr;16(2):78.

Helicobacter pylori and intestinal metaplasia of gastric mucosa [see comments] Satarkar RP, et al. **Indian J Gastroenterol** 1997 Jan;16(1):16–7. Comment in: Indian J Gastroenterol 1997 Jan;16(1):3. Comment in: Indian J Gastroenterol 1997 Apr;16(2):78.

Diet and stomach cancer in Korea. Ahn YO. **Int J Cancer** 1997;Suppl 10:7–9

Diet/nutrition and stomach cancer in Japan. Hirohata T, et al. **Int J Cancer** 1997;Suppl 10:34–6

Diet diversity and gastric cancer. La Vecchia C, et al. **Int J Cancer** 1997 Jul 17;72(2):255–7

Tobacco smoking and gastric cancer: review and meta–analysis. Trédaniel J, et al. **Int J Cancer** 1997 Aug 7;72(4):565–73

Risk of adenocarcinoma of the stomach and esophagus with meat cooking method and doneness preference. Ward MH, et al. **Int J Cancer** 1997 Mar 28;71(1):14–9

Risk of gastric carcinoma in patients with mucosal dysplasia associated with atrophic gastritis: a follow up study. Kokkola A, et al. **J Clin Pathol** 1996 Dec;49(12):979–84

Enhancement by monochloramine of the development of gastric cancers in rats: a possible mechanism of Helicobacter pylori–associated gastric carcinogenesis. Iishi H, et al. **J Gastroenterol** 1997 Aug;32(4):435–41

Malignant lymphoma of the stomach after chemotherapy for hepatocellular carcinoma. Matsuo I, et al. **J Gastroenterol** 1997 Aug;32(4):533–7

Reduction of gap junction protein connexin 32 in rat atrophic gastric mucosa as an early event in carcinogenesis. Nagahara A, et al. **J Gastroenterol** 1996 Aug;31(4):491–7

Tobacco, alcohol, and socioeconomic status and adenocarcinomas of the esophagus and gastric cardia [see comments] Gammon MD, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1277–84. Comment in: J Natl Cancer Inst 1997 Sep 3;89(17):1247–9.

Cigarette smoking and esophageal and gastric cardia adenocarcinoma [editorial; comment] Zhang ZF, et al. **J Natl Cancer Inst** 1997 Sep 3;89(17):1247–9. Comment on: J Natl Cancer Inst 1997 Sep 3;89(17):1277–84.

Investigation for the prevalence of Helicobacter pylori infection in patients with gastric carcinoma in Madras, India. Sivaprakash R, et al. **Jpn J Med Sci Biol** 1996 Apr; 49(2):49–56

Calcium–channel blockers and cancer [letter; comment] Zhang ZF, et al. **Lancet** 1996 Oct 26;348(9035):1166–7. Comment on: Lancet 1996 Aug 24;348(9026):493–7.

Helicobacter pylori, gastric ulcer, and duodenal ulcer [letter; comment] Graham JR. **N Engl J Med** 1996 Dec 12; 335(24):1842; discussion 1842–3. Comment on: N Engl J Med 1996 Jul 25;335(4):242–9. Comment on: N Engl J Med 1996 Jul 25;335(4):278–80.

Helicobacter pylori, gastric ulcer, and duodenal ulcer [letter; comment] Rubin CE. **N Engl J Med** 1996 Dec 12; 335(24):1841–2; discussion 1842–3. Comment on: N Engl J Med 1996 Apr 18;334(16):1018–22. Comment on: N Engl J Med 1996 Jul 25;335(4):278–80.

Adenocarcinomas of the esophagus and gastric cardia: the role of diet. Zhang ZF, et al. **Nutr Cancer** 1997; 27(3):298–309

Molecular pathogenesis of adenoma and differentiated adenocarcinoma of the stomach. Tamura G. **Pathol Int** 1996 Nov;46(11):834–41 (69 ref.)

Gastric carcinoid tumors associated with chronic hypergastrinemia in a patient with Zollinger–Ellison syndrome. Berger MW, et al. **Radiology** 1996 Nov; 201(2):371–3

Signet ring cell carcinoma in hyperplastic polyp [letter; comment] Carneiro F, et al. **Scand J Gastroenterol** 1996 Jan;31(1):95–6. Comment on: Scand J Gastroenterol 1995 Jun;30(6):604–8.

Gastric mucosa abnormalities and tumorigenesis in mice lacking the pS2 trefoil protein [see comments] Lefebvre O, et al. **Science** 1996 Oct 11;274(5285):259–62. Comment in: Science 1996 Oct 11;274(5285):204.

[Etiology of stomach carcinoma—opinions and facts—yesterday and today] Schramm T, et al. **Z Arztl Fortbild Qualitatssich** 1997 Mar;91(2):111–5 (28 ref.) (Eng. Abstr.) **(Ger)**

[Helicobacter pylori and malignant stomach neoplasms] Asaka M. **Nippon Naika Gakkai Zasshi** 1996 May 10; 85(5):767–71 (18 ref.) **(Jpn)**

[Helicobacter pylori infection—from gastritis to stomach cancer] Asaka M. **Nippon Naika Gakkai Zasshi** 1996 Sep 10;85(9):1540–5 (12 ref.) **(Jpn)**

[The clinicopathological features and operative results in a cancer of the remnant stomach—risk and prevention of cancer after partial gastrectomy] Shibao K, et al. **Sangyo Ika Daigaku Zasshi** 1997 Jun 1;19(2):147–56 (Eng. Abstr.) **(Jpn)**

[Helicobacter pylori infections—relative risk factor for stomach neoplasm] Muszyński J, et al. **Pol Tyg Lek** 1996 Apr;51(14–18):223–6 **(Pol)**

[Etiology and pathogenesis of stomach cancer] Iushkov PV. **Arkh Patol** 1997 Jan–Feb;59(1):69–73 (53 ref.) (Eng. Abstr.) **(Rus)**

[Cancer of gastric stump after surgery of peptic ulcer] Dudenko GI, et al. **Klin Khir** 1996;(6):33–5 **(Rus)**

[Cancer from an ulcer or ulcerative stomach cancer? (a review of the literature and the authors' own observations)] Sadchikov VD, et al. **Lik Sprava** 1997 Mar–Apr;(2):137–41 (38 ref.) (Eng. Abstr.) **(Rus)**

[Malignant stomach tumors in patients who have had a vagotomy for duodenal ulcers] Zuev VK, et al. **Vestn Khir Im I I Grek** 1996;155(4):97–100 (48 ref.) **(Rus)**

[Risk factors in stomach diseases] Bézayová T, et al. **Bratisl Lek Listy** 1996 Dec;97(12):705–11 (78 ref.) (Eng. Abstr.) **(Slo)**

[Cancer of the gastric stump (letter)] Larrubia Marfil JR, et al. **An Med Interna** 1996 Feb;13(2):102 **(Spa)**

[Gastric adenocarcinoma in hamartomatous polyp in Peutz–Jeghers syndrome] Bujanda L, et al. **Gastroenterol Hepatol** 1996 Nov;19(9):452–5 (Eng. Abstr.) **(Spa)**

[Risk factors for gastric cancer] González CA, et al. **Gastroenterol Hepatol** 1997 May;20(5):239–47 (114 ref.) **(Spa)**

GENETICS

Amplification of the c–erbB–2 (HER–2/neu) gene in gastric cancer cells. Detection by fluorescence in situ hybridization. Ishikawa T, et al. **Am J Pathol** 1997 Sep; 151(3):761–8

Analysis of chromosome 17p13 (p53 locus) alterations in gastric carcinoma cells by dual–color fluorescence in situ hybridization. Kobayashi M, et al. **Am J Pathol** 1996 Nov; 149(5):1575–84

Expression of the Ets–1 proto–oncogene in human gastric carcinoma: correlation with tumor invasion. Nakayama T, et al. **Am J Pathol** 1996 Dec;149(6):1931–9

Loss of heterozygosity and homozygous deletion of the tpr locus in human gastric cancer. Cunningham JD, et al. **Am J Surg** 1997 Jun;173(6):521–2

Genetic alterations in gastric cancer. Ranzani GN. **Ann Ist Super Sanita** 1996;32(1):101–10 (75 ref.)

Detection of Barrett's adenocarcinoma of the gastric cardia with sucrase isomaltase and p53. Iannettoni MD, et al. **Ann Thorac Surg** 1996 Nov;62(5):1460–5; discussion 1465–6

Mutation of ras oncogene in gastric adenocarcinoma: association with histological phenotype. Kim TY, et al. **Anticancer Res** 1997 Mar–Apr;17(2B):1335–9

Lack of rearranged Tpr–met mRNA expression in human gastric cancer cell lines and gastric mucosa and carcinoma. Osaki M, et al. **Anticancer Res** 1996 Sep–Oct;16(5A):2881–4

Molecular cloning of human GRB–7 co–amplified with CAB1 and c–ERBB–2 in primary gastric cancer. Kishi T, et al. **Biochem Biophys Res Commun** 1997 Mar 6;232(1):5–9

Overexpression of ZBP–89, a zinc finger DNA binding protein, in gastric cancer. Taniuchi T, et al. **Biochem Biophys Res Commun** 1997 Apr 7;233(1):154–60

Effects of transcription and translation inhibitors on a human gastric carcinoma cell line. Potential role of Bcl–X(S) in apoptosis triggered by these inhibitors. Chang TC, et al. **Biochem Pharmacol** 1997 Apr 4;53(7):969–77

Helicobacter pylori infection and genetic polymorphisms for cancer–related genes in gastric carcinogenesis. Kato S, et al. **Biomed Pharmacother** 1997;51(4):145–9

Intestinal dissemination of gastric mucosa–associated lymphoid tissue lymphoma. Du MQ, et al. **Blood** 1996 Dec 15;88(12):4445–51

Infrequent alterations of the APC and MCC genes in gastric cancers from British patients. Sud R, et al. **Br J Cancer** 1996 Oct;74(7):1104–8

Immunoglobulin heavy chain diversity genes rearrangement pattern indicates that MALT–type gastric lymphoma B cells have undergone an antigen selection process. Bertoni F, et al. **Br J Haematol** 1997 Jun;97(4):830–6

Gene amplification and proliferative kinetics in relation to prognosis of patients with gastric carcinoma. Amadori D, et al. **Cancer** 1997 Jan 15;79(2):226–32

Expression of p21 (wafl/cip1/sdi1), but not p53 protein, is a factor in the survival of patients with advanced gastric carcinoma. Gomyo Y, et al. **Cancer** 1997 Jun 1; 79(11):2067–72

Assessment of microsatellite alterations in young patients with gastric adenocarcinoma. Hayden JD, et al. **Cancer** 1997 Feb 15;79(4):684–7

Morphologic, histologic, and molecular similarities between adenocarcinomas arising in the gastric stump and the intact stomach. Safatle–Ribeiro AV, et al. **Cancer** 1996 Dec 1; 78(11):2288–99

Gastric cancer risk factors in subjects with family history. Muñoz SE, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Feb;6(2):137–40

Stage–dependent evaluation of microsatellite instability in gastric carcinoma with familial clustering. Shinmura K, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Sep;6(9):693–7

Chromosomal numerical aberrations in gastric carcinoma: analysis of eighteen cases using in situ hybridization. Han K, et al. **Cancer Genet Cytogenet** 1996 Dec;92(2):122–9

High incidence of BCL–6 gene rearrangement in diffuse large B–cell lymphoma of primary gastric origin. Liang R, et al. **Cancer Genet Cytogenet** 1997 Sep;97(2):114–8

Cytogenetic analysis of Barrett's mucosa and adenocarcinoma of the distal esophagus and cardia. Menke–Pluymers MB, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):109–17

Two cases of low–grade gastric leiomyosarcoma with monosomy 14 as the only change [letter] Saunders AL, et al. **Cancer Genet Cytogenet** 1996 Sep;90(2):184–5

Multiple synchronous primaries of the gastrointestinal tract: a molecular case report. Herring JA, et al. **Cancer Lett** 1996 Dec 20;110(1–2):1–9

Induction of invasive squamous cell carcinomas in the forestomach of (C3H x MSM)F1, MSM, and C3H mice by N–methyl–N–nitrosourea and mutational analysis of the H–ras and p53 genes. Masui T, et al. **Cancer Lett** 1997 Jan 1;111(1–2):97–104

Infrequent hMSH2 mutations in sporadic gastric adenocarcinoma with microsatellite instability. Wu MS, et al. **Cancer Lett** 1997 Jan 30;112(2):161–6

Isolation of a candidate gene, CAB1, for cholesterol transport to mitochondria from the c–ERBB–2 amplicon by a modified cDNA selection method. Akiyama N, et al. **Cancer Res** 1997 Aug 15;57(16):3548–53

Microsatellite instability–associated mutations associate preferentially with the intestinal type of primary gastric carcinomas in a high–risk population. Chung YJ, et al. **Cancer Res** 1996 Oct 15;56(20):4662–5

FHIT mutations in human primary gastric cancer. Gemma A, et al. **Cancer Res** 1997 Apr 15;57(8):1435–7

The t(11;18)(q21;q21) chromosome translocation is a frequent and specific aberration in low–grade but not high–grade malignant non–Hodgkin's lymphomas of the mucosa–associated lymphoid tissue (MALT–) type. Ott G, et al. **Cancer Res** 1997 Sep 15;57(18):3944–8

Human thymine–DNA glycosylase maps at chromosome 12q22–q24.1: a region of high loss of heterozygosity in gastric cancer. Schmutte C, et al. **Cancer Res** 1997 Jul 15; 57(14):3010–5

Comparative analysis of bone marrow and venous blood isolates from gastrointestinal cancer patients for the detection of disseminated tumor cells using reverse transcription PCR. Soeth E, et al. **Cancer Res** 1997 Aug 1;57(15):3106–10

A transforming growth factor beta type II receptor gene mutation common in sporadic cecum cancer with microsatellite instability. Togo G, et al. **Cancer Res** 1996 Dec 15;56(24):5620–3

Glutathione S–transferase M1 (GSTM1) and T1 (GSTT1) genetic polymorphism and susceptibility to gastric and colorectal adenocarcinoma. Katoh T, et al. **Carcinogenesis** 1996 Sep;17(9):1855–9

Alterations of level of total genomic DNA methylation and pattern of c–myc, c–Ha–ras oncogene methylation in human gastric carcinogenesis. Fang J, et al. **Chin Med J (Engl)** 1996 Oct;109(10):787–91

DNA ploidy heterogeneity in early and advanced gastric cancers. Fujimaki E, et al. **Cytometry** 1996 Jun 15; 26(2):131–6

Detection of somatic mutations in the mitochondrial DNA control region of colorectal and gastric tumors by heteroduplex and single–strand conformation analysis. Alonso A, et al. **Electrophoresis** 1997 May;18(5):682–5

Genetic defects in cancer cells and cancer prone families. Yokota J, et al. **Eur J Cancer Prev** 1996 Dec;5 Suppl 2:33–6

Flow cytometric DNA analysis of gastric cancer that is

invading the muscularis propria. Mizunuma H, et al. **Eur J Surg** 1996 Nov;162(11):889–94

The multiple endocrine neoplasia type I gene locus is involved in the pathogenesis of type II gastric carcinoids. Debelenko LV, et al. **Gastroenterology** 1997 Sep; 113(3):773–81

Deletion analysis of the p16 tumor suppressor gene in gastrointestinal mucosa–associated lymphoid tissue lymphomas. Neumeister P, et al. **Gastroenterology** 1997 Jun; 112(6):1871–5

A transforming growth factor beta 1 receptor type II mutation in ulcerative colitis–associated neoplasms [see comments] Souza RF, et al. **Gastroenterology** 1997 Jan; 112(1):40–5. Comment in: Gastroenterology 1997 Jan;112(1):297–302.

Genetic alterations in gastric cancer: relation to histological subtypes, tumor stage, and Helicobacter pylori infection. Wu MS, et al. **Gastroenterology** 1997 May;112(5):1457–65

Clinical importance and prognostic value of the image–DNA–cytometry for patients with gastric cancer. Stratmann H, et al. **Gen Diagn Pathol** 1996 Oct; 142(2):97–100

17q12–21 amplicon, a novel recurrent genetic change in intestinal type of gastric carcinoma: a comparative genomic hybridization study. Kokkola A, et al. **Genes Chromosomes Cancer** 1997 Sep;20(1):38–43

Commonly deleted regions on the long arm of chromosome 21 in differentiated adenocarcinoma of the stomach. Sakata K, et al. **Genes Chromosomes Cancer** 1997 Apr;18(4):318–21

Analysis of the fragile histidine triad gene in primary gastric carcinomas and gastric carcinoma cell lines. Tamura G, et al. **Genes Chromosomes Cancer** 1997 Sep;20(1):98–102

MUC1 gene polymorphism and gastric cancer—an epidemiological study. Carvalho F, et al. **Glycoconj J** 1997 Jan;14(1):107–11

Global DNA hypomethylation occurs in the early stages of intestinal type gastric carcinoma. Cravo M, et al. **Gut** 1996 Sep;39(3):434–8

Differential expression of oestrogen receptor and oestrogen inducible genes in gastric mucosa and cancer. Singh S, et al. **Gut** 1997 Apr;40(4):516–20

Correlation between endoscopy, histopathology, and DNA flow cytometry in patients with gastric dyspepsia. Abdel-Wahab M, et al. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1313–20

Genetic evidence for a clonal link between low and high–grade components in gastric MALT B–cell lymphoma. Peng H, et al. **Histopathology** 1997 May; 30(5):425–9

Alterations of transforming growth factor–beta 1 receptor type II occur in ulcerative colitis–associated carcinomas, sporadic colorectal neoplasms, and esophageal carcinomas, but not in gastric neoplasms. Souza RF, et al. **Hum Cell** 1996 Sep;9(3):229–36

Microsatellite instability and mutations of p53 and TGF–beta RII genes in gastric cancer. Renault B, et al. **Hum Genet** 1996 Nov;98(5):601–7

Frequent detection of aberrant RNA transcripts of the CDKN2 gene in human gastric adenocarcinoma. Chen YJ, et al. **Int J Cancer** 1997 May 2;71(3):350–4

Analysis for microsatellite instability and mutations of the DNA mismatch repair gene hMLH1 in familial gastric cancer. Keller G, et al. **Int J Cancer** 1996 Nov 27; 68(5):571–6

Over–expression of bcl–xL gene in human gastric adenomas and carcinomas. Kondo S, et al. **Int J Cancer** 1996 Dec 11;68(6):727–30

Human gastric carcinoma transduced with the IL–2 gene: increased sensitivity to immune effector cells in vitro and in vivo. Nagashima S, et al. **Int J Cancer** 1997 Jul 3; 72(1):174–83

Mutations of the transforming growth factor beta type II receptor gene and microsatellite instability in gastric cancer. Ohue M, et al. **Int J Cancer** 1996 Oct 9;68(2):203–6

Establishment and characterization of human gastric carcinoma cell lines. Park JG, et al. **Int J Cancer** 1997 Feb 7;70(4):443–9

Family history evaluation in epidemiologic studies; an evaluation of bias in the conventional methods and a proposal of a new one. Nakamura Y, et al. **J Epidemiol** 1997 Mar;7(1):21–5

Detection of c–Ki–ras oncogene mutation in gastric adenomas with formalin–fixed, paraffin–embedded biopsy materials. Tsuchiya C, et al. **J Gastroenterol** 1997 Feb; 32(1):28–33

Studies on the hypomethylation of c–myc, c–Ha–ras oncogenes and histopathological changes in human gastric carcinoma. Fang JY, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1079–82

Amplification of c–erbB–2 proto–oncogene in cancer foci, adjacent normal, metastatic and normal tissues of human primary gastric adenocarcinomas. Kim JS, et al. **J Korean Med Sci** 1997 Aug;12(4):311–5

Microsatellite instability in intestinal– and diffuse–type gastric carcinoma. Buonsanti G, et al. **J Pathol** 1997 Jun; 182(2):167–73

Allelotype of adenoma and differentiated adenocarcinoma of the stomach. Tamura G, et al. **J Pathol** 1996 Dec; 180(4):371–7

Immunosuppressive cytokines (IL–10, TGF–beta) genes expression in human gastric carcinoma tissues. Morisaki T, et al. **J Surg Oncol** 1996 Dec;63(4):234–9

DNA flow cytometry in gastric carcinoma: implication in patients with potentially curative resection. Omejc M, et al. **J Surg Oncol** 1997 Aug;65(4):237–41

Rare occurrence of ras and p53 gene mutations in mouse stomach tumors induced by N–methyl–N–nitrosourea. Furihata C, et al. **Jpn J Cancer Res** 1997 Apr;88(4):363–8

Demonstration of ras and p53 gene mutations in carcinomas in the forestomach and intestine and soft tissue sarcomas induced by N–methyl–N–nitrosourea in the rat. Matsumoto K, et al. **Jpn J Cancer Res** 1997 Feb;88(2):129–36

Family history–related risk of gastric cancer in Japan: a hospital–based case–control study. Nagase H, et al. **Jpn J Cancer Res** 1996 Oct;87(10):1025–8

Analysis of the DPC4 gene in gastric carcinoma. Nishizuka S, et al. **Jpn J Cancer Res** 1997 Apr;88(4):335–9

Infrequent overexpression of p53 protein in Epstein–Barr virus–associated gastric carcinomas. Ojima H, et al. **Jpn J Cancer Res** 1997 Mar;88(3):262–6

Inactivation of the E–cadherin gene in primary gastric carcinomas and gastric carcinoma cell lines. Tamura G, et al. **Jpn J Cancer Res** 1996 Nov;87(11):1153–9

Intragenic homozygous deletions of MTS1 gene in gastric cancer in Taiwan. Wu MS, et al. **Jpn J Cancer Res** 1996 Oct;87(10):1052–5

Single–cell mutation analysis of tumors from stained histologic slides. Becker I, et al. **Lab Invest** 1996 Dec; 75(6):801–7

Genetic evidence for the multicentric origin of synchronous multiple gastric carcinoma. Kang GH, et al. **Lab Invest** 1997 Mar;76(3):407–17

Intraclonal offspring expansion of gastric low–grade MALT–type lymphoma: evidence for the role of antigen–driven high–affinity mutation in lymphomagenesis. Qin Y, et al. **Lab Invest** 1997 Apr;76(4):477–85

p53 mutations in MeIQ–induced mouse forestomach tumors. Makino H, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb; 64(1):39–44

Chromosome 17 copy numbers and incidence of p 53 gene deletion in gastric cancer cells. Dual color fluorescence in situ hybridization analysis. Suzuki S, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb;64(1):22–9

Infrequent DPC4 gene mutation in esophageal cancer, gastric cancer and ulcerative colitis–associated neoplasms. Lei J, et al. **Oncogene** 1996 Dec 5;13(11):2459–62

The targeting of the cyclin D1 oncogene by an Epstein–Barr virus promoter in transgenic mice causes dysplasia in the tongue, esophagus and forestomach. Nakagawa H, et al. **Oncogene** 1997 Mar 13;14(10):1185–90

Apparent protection from instability of repeat sequences in cancer–related genes in replication error positive gastrointestinal cancers. Simms LA, et al. **Oncogene** 1997 May 29;14(21):2613–8

Feasibility of archival non–buffered formalin–fixed and paraffin–embedded tissues for PCR amplification: an analysis of resected gastric carcinoma. Inoue T, et al. **Pathol Int** 1996 Dec;46(12):997–1004

LOH at the APC/MCC gene (5Q21) in gastric cancer and preneoplastic lesions. Prognostic implications. Sanz–Ortega J, et al. **Pathol Res Pract** 1996 Dec;192(12):1206–10

Infrequent alterations of the p16 (MTS–1) gene in human gastric cancer. Takaoka AS, et al. **Tumour Biol** 1997; 18(2):95–103

Enhanced expression of manganese superoxide dismutase mRNA and increased TNFalpha mRNA expression by gastric mucosa in gastric cancer. Izutani R, et al. **World J Surg** 1996 Feb;20(2):228–33

[Relation between loss of heterozygosity at APC and MCC genetic loci and biological behaviour of gastric carcinoma] Liu B, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Jan; 18(1):3–5 (Eng. Abstr.) **(Chi)**

[Correlation of multiple gene changes with malignant phenotype of human gastric carcinoma] Gao C, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Sep;76(9):671–5 (Eng. Abstr.) **(Chi)**

[Gastrointestinal smooth muscle tumors: a study of DNA content and the association with clinicopathology] Cai J, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1995 Dec; 24(6):378–80 (Eng. Abstr.) **(Chi)**

[Detection of c–Ki–ras oncogene codon 12 point mutations in lung carcinoma, gastric carcinoma and hepatic carcinoma] Cui Q, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1996 Apr; 18(2):95–8 (Eng. Abstr.) **(Chi)**

[Relationship between the express product of src gene (pp60c–src) and the initiation of gastric carcinoma] Wang X, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1996 Mar; 27(1):71–4 (Eng. Abstr.) **(Chi)**

[Microsatellite instability and positive family anamnesis in patients with stomach carcinoma] Vogelsang HE, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:113–6 (Eng. Abstr.) **(Ger)**

[The significance of p21 expression in gastric cancer] Aoyagi K, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:285–91 (Eng. Abstr.) **(Jpn)**

[Alteration of p15 and p16 gene in gastric cancer] Fushida S, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:279–84 (Eng. Abstr.) **(Jpn)**

[Analysis of microsatellite regions and DNA ploidy pattern in signet ring cell carcinomas of the stomach] Kimura T, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:273–8 (Eng. Abstr.) **(Jpn)**

[Significance in gene expression of matrix metalloproteinase–9, urokinase–type plasminogen activator and tissue inhibitor of metalloproteinase for metastases of gastric and/or colo–rectal cancer] Koumura H, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:324–31 (Eng. Abstr.) **(Jpn)**

[Analyses of mutator gene mutations in familial gastric cancers] Akiyama Y, et al. **Nippon Rinsho** 1996 Apr; 54(4):1019–24 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Mutation frequency of the p16/CDKN2 gene and amplification of the cyclin E gene in human primary gastric carcinomas] Sasaki H, et al. **Nippon Rinsho** 1996 Apr; 54(4):1049–53 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Allelic chromosomal deletion using microsatellite polymorphism—the clue to the positional cloning of the tumor suppressor genes responsible for gastric carcinoma] Sato J, et al. **Nippon Rinsho** 1996 Apr;54(4):992–5 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Multistep stomach carcinogenesis] Yokozaki H, et al. **Nippon Rinsho** 1996 Apr;54(4):1066–71 (31 ref.) (Eng. Abstr.) **(Jpn)**

[Microsatellite instability in gastric cancer with varied structure] Wang Y, et al. **Rinsho Byori** 1997 Jul;45(7):651–5 (Eng. Abstr.) **(Jpn)**

[Clinical immunogenetics of stomach cancer in Western Siberia] Konenkov VI, et al. **Vopr Onkol** 1997;43(3):269–72 (Eng. Abstr.) **(Rus)**

HISTORY

The first Billroth II gastric resection as reported by an Italian medical journal. Aldini NN. **Gesnerus** 1995;52(3–4):290–302

Further scientific evidence of the non–poisonous death of Napoleon. Corso PF, et al. **Sci Prog** 1996;79 (Pt 2):89–96

[The fatal disease of Napoleon Bonaparte] Espinoza R, et al. **Rev Med Chil** 1996 Sep;124(9):1150–6 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Immunohistochemical analysis of Bcl–2 family proteins in adenocarcinomas of the stomach. Krajewska M, et al. **Am J Pathol** 1996 Nov;149(5):1449–57

All–trans retinoic acid decreases susceptibility of a gastric cancer cell line to lymphokine–activated killer cytotoxicity. Chao TY, et al. **Br J Cancer** 1997;75(9):1284–90

Impact of splenectomy on circulating immunoglobulin levels and the development of postoperative infection following total gastrectomy for gastric cancer. Fujita T, et al. **Br J Surg** 1996 Dec;83(12):1776–8

Prognostic significance of T antigen expression in patients with gastric carcinoma [letter; comment] Carneiro F, et al. **Cancer** 1996 Dec 1;78(11):2448–50. Comment on: Cancer 1996 May 1;77(9):1768–73.

Lymphocyte subpopulations of regional lymph nodes in human colon and gastric adenocarcinomas. Lores–Vazquez B, et al. **Cancer Immunol Immunother** 1996 Jul;42(6):339–42

Differentially expressed MHC class II–associated invariant chain in rat stomach pyloric mucosa with N–methyl–N–nitro–nitrosoguanidine exposure. Furihata C, et al. **Cancer Res** 1997 Apr 15;57(8):1416–8

Low antigenicity of the polysaccharide region of Helicobacter pylori lipopolysaccharides derived from tumors of patients with gastric cancer. Yokota S, et al. **Infect Immun** 1997 Sep;65(9):3509–12

Clonal dominance of human autologous cytotoxic T lymphocytes against gastric carcinoma: molecular stability of the CDR3 structure of the TCR alphabeta gene. Ikeda H, et al. **Int Immunol** 1996 Jan;8(1):75–82

In situ T–cell responses in a primary regressive melanoma and subsequent metastases: a comparative analysis. Carcelain G, et al. **Int J Cancer** 1997 Jul 17;72(2):241–7

HLA class–I–restricted and tumor–specific CTL in tumor–infiltrating lymphocytes of patients with gastric cancer. Hoshino T, et al. **Int J Cancer** 1997 Mar 17; 70(6):631–8

Differences in the recognition of tumor–specific CD8+ T cells derived from solid tumor, metastatic lymph nodes and ascites in patients with gastric cancer. Kono K, et al. **Int J Cancer** 1997 Jun 11;71(6):978–81

Lymph node metastasis and relation to tumor growth potential and local immune response in advanced gastric cancer. Maehara Y, et al. **Int J Cancer** 1997 Apr 22; 74(2):224–8

Expression of carbohydrate antigen sialyl Le(a): a new functional prognostic factor in gastric cancer. Nakamori S, et al. **J Clin Oncol** 1997 Feb;15(2):816–25

Increased sensitivity of gastric cancer cells to natural killer and lymphokine–activated killer cells by antisense suppression of N–acetylgalactosaminyltransferase. Adachi T, et al. **J Immunol** 1997 Sep 15;159(6):2645–51

Biased VH family usage in primary gastric B cell lymphoma of mucosa–associated lymphoid tissue–type and the selected V beta expression of T cells infiltrating into the lymphoma cells. Shibata T, et al. **Pathol Int** 1996 Dec;46(12):984–91

Sporadic fundic gland polyps: an immunohistochemical study of their antigenic profile. Declich P, et al. **Pathol Res Pract** 1996 Aug;192(8):808–15

Enhanced expression of lipocortin–1 as a new immunosuppressive protein in cancer patients and its influence on reduced in vitro peripheral blood lymphocyte response to mitogens. Koseki H, et al. **Surg Today** 1997; 27(1):30–9

[Carcinoid tumors of the stomach in atrophic autoimmune

gastritis: classification, differential diagnosis and prognosis] Rappel S, et al. **Verh Dtsch Ges Pathol** 1996;80:199–207 (Eng. Abstr.) **(Ger)**

[Demonstration and characterization of CD 46, membrane cofactor protein, in gastric cancer tissue] Seto N, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Jun;19(3):210–6 (Eng. Abstr.) **(Jpn)**

[Clinical immunogenetics of stomach cancer in Western Siberia] Konenkov VI, et al. **Vopr Onkol** 1997;43(3):269–72 (Eng. Abstr.) **(Rus)**

METABOLISM

The role of urokinase-type plasminogen activator and its inhibitor PAI-1 in gastric cancer. Herszényi L, et al. **Acta Physiol Hung** 1995;83(3):213–21

A new prognostic strategy for gastric carcinoma: mRNA expression of tumor growth-related factors in endoscopic biopsy specimens. Nakamura M, et al. **Ann Surg** 1997 Jul; 226(1):35–42

Detection of Barrett's adenocarcinoma of the gastric cardia with sucrase isomaltase and p53. Iannettoni MD, et al. **Ann Thorac Surg** 1996 Nov;62(5):1460–5; discussion 1465–6

Helicobacter pylori vacuolating cytotoxin binds to the 140-kDa protein in human gastric cancer cell lines, AZ-521 and AGS. Yahiro K, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):629–32

Expression of autocrine motility factor receptor correlates with disease progression in human gastric cancer. Hirono Y, et al. **Br J Cancer** 1996 Dec;74(12):2003–7

Apoptosis, cell proliferation and expression of Bcl-2 and Bax in gastric carcinomas: immunohistochemical and clinicopathological study. Koshida Y, et al. **Br J Cancer** 1997;75(3):367–73

Clinical significance of tissue inhibitor of metalloproteinase expression in gastric carcinoma. Mimori K, et al. **Br J Cancer** 1997;76(4):531–6

Loss of p21WAF1/CIP1 expression correlates with disease progression in gastric carcinoma. Ogawa M, et al. **Br J Cancer** 1997;75(11):1617–20

Expression of oncoproteins and the amount of eosinophilic and lymphocytic infiltrates can be used as prognostic factors in gastric cancer. Dutch Gastric Cancer Group (DGCG). Songun I, et al. **Br J Cancer** 1996 Dec; 74(11):1783–8

An immunohistochemical assessment of cathepsin D in gastric carcinoma: its impact on clinical prognosis. Allgayer H, et al. **Cancer** 1997 Jul 15;80(2):179–87

Pharmacokinetics of amifostine and its metabolites in the plasma and ascites of a cancer patient. Korst AE, et al. **Cancer Chemother Pharmacol** 1996;39(1–2):162–6

Differential reduction in the expression of keratin polypeptides in human gastric carcinomas. Gupta A, et al. **Cancer Detect Prev** 1997;21(2):129–34

Evaluation of cholecystokinin, gastrin, CCK-A receptor, and CCK-B/gastrin receptor gene expressions in gastric cancer. Okada N, et al. **Cancer Lett** 1996 Sep 10; 106(2):257–62

Comparison of biological phenotypes according to midkine expression in gastric cancer cells and their autocrine activities could be modulated by pentosan polysulfate. Rha SY, et al. **Cancer Lett** 1997 Sep 16;118(1):37–46

Deficient transforming growth factor-beta1 activation and excessive insulin-like growth factor II (IGFII) expression in IGFII receptor-mutant tumors. Wang S, et al. **Cancer Res** 1997 Jul 1;57(13):2543–6

Increased levels of cathepsin B and L, urokinase-type plasminogen activator and its inhibitor type-1 as an early event in gastric carcinogenesis. Farinati F, et al. **Carcinogenesis** 1996 Dec;17(12):2581–7

Erythrocyte lipid peroxidation and antioxidants in gastric cancer patients. Arivazhagan S, et al. **Cell Biochem Funct** 1997 Mar;15(1):15–8

Urokinase-type plasminogen activator receptor in gastric cancer: tissue expression and prognostic role. Plebani M, et al. **Clin Exp Metastasis** 1997 Jul;15(4):418–25

Alteration of dopamine D2 receptors in human malignant stomach tissue. Basu S, et al. **Dig Dis Sci** 1997 Jun; 42(6):1260–4

Polyamine levels and ODC activity in intestinal-type and diffuse-type gastric carcinoma. Russo F, et al. **Dig Dis Sci** 1997 Mar;42(3):576–9

Involvement of beta-adrenergic receptor kinase-1 in homologous desensitization of histamine H2 receptors in human gastric carcinoma cell line MKN-45. Nakata H, et al. **Digestion** 1996 Nov–Dec;57(6):406–10

pS2 protein expression in gastric carcinoma. An immunohistochemical and immunoradiometric study. Machado JC, et al. **Eur J Cancer** 1996 Aug;32A(9):1585–90

p53 overexpression and proliferative activity do not correlate with lymph node metastasis in early gastric cancer. Kanai T, et al. **Eur Surg Res** 1997;29(1):35–41

Vacuolating toxin from Helicobacter pylori activates cellular signaling and pepsinogen secretion in human gastric adenocarcinoma cells. Chan EC, et al. **FEBS Lett** 1996 Dec 9;399(1–2):127–30

GATA-6 DNA binding protein expressed in human gastric adenocarcinoma MKN45 cells. Yoshida T, et al. **FEBS Lett** 1997 Sep 8;414(2):333–7

c-erbB-2 expression is predictive for lymphatic spread of clinical gastric carcinoma. Orita H, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):294–8

Immunohistochemical detection of O-acetylated sialomucins in intestinal metaplasia and carcinoma of the stomach. Mullen PJ, et al. **Histopathology** 1995 Aug;27(2):161–7

Vimentin-positive adenocarcinomas of the stomach: co-expression of vimentin and cytokeratin. Utsunomiya T, et al. **Histopathology** 1996 Dec;29(6):507–16

Expression of bcl-2 oncoprotein in gastrointestinal and uterine carcinomas and their premalignant lesions. Nakamura T, et al. **Hum Pathol** 1997 Mar;28(3):309–15

Mucin antigen expression in gastric carcinomas of young and old adults. Sakamoto H, et al. **Hum Pathol** 1997 Sep; 28(9):1056–65

Mechanisms involved in Helicobacter pylori-induced interleukin-8 production by a gastric cancer cell line, MKN45. Aihara M, et al. **Infect Immun** 1997 Aug; 65(8):3218–24

Analysis of MT1-MMP and MMP2 expression in human gastric cancers. Mori M, et al. **Int J Cancer** 1997 Jun 20; 74(3):316–21

Differential localization of transforming growth factor-beta isoforms in human gastric mucosa and overexpression in gastric carcinoma. Naef M, et al. **Int J Cancer** 1997 Apr 10;71(2):131–7

Relationship of plasma folic acid and status of DNA methylation in human gastric cancer. Fang JY, et al. **J Gastroenterol** 1997 Apr;32(2):171–5

Increased expression of cytokines in liver and serum in patients with extrahepatic diseases. Fukuma H, et al. **J Gastroenterol** 1996 Aug;31(4):538–45

Overexpression of bone morphogenic protein (BMP)-4 mRNA in gastric cancer cell lines of poorly differentiated type. Katoh M, et al. **J Gastroenterol** 1996 Feb;31(1):137–9

Transforming growth factor-alpha (TGF alpha)-producing gastric carcinoma with acanthosis nigricans: an endocrine effect of TGF alpha in the pathogenesis of cutaneous paraneoplastic syndrome and epithelial hyperplasia of the esophagus. Koyama S, et al. **J Gastroenterol** 1997 Feb; 32(1):71–7

Histochemical and immunohistochemical study of human gastric carcinoma differentiation with special reference to supplementary role for endosonography in evaluating depth of invasion. Nakamura T, et al. **J Gastroenterol** 1997 Apr; 32(2):176–83

A rapid and simple method to quantify Helicobacter pylori adhesion to human gastric MKN-28 cells. Hayashi S, et al. **J Gastroenterol Hepatol** 1997 May;12(5):373–5

Transforming growth factor beta 1 expression in gastric carcinoma. Park YE, et al. **J Korean Med Sci** 1997 Jun; 12(3):215–20

Expression of parathyroid hormone-related peptide (PTHrP) in gastric tumours. Alipov GK, et al. **J Pathol** 1997 Jun; 182(2):174–9

Expression of human intestinal trefoil factor in malignant cells and its regulation by oestrogen in breast cancer cells. May FE, et al. **J Pathol** 1997 Aug;182(4):404–13

Ki67 labelling index in gastric carcinomas. An immunohistochemical study using double staining for the evaluation of the proliferative activity of diffuse-type carcinomas. Ramires M, et al. **J Pathol** 1997 May; 182(1):62–7

Expression of cyclin-dependent kinase inhibitor p21WAF1/CIP1 in non-neoplastic mucosa and neoplasia of the stomach: relationship with p53 status and proliferative activity. Yasui W, et al. **J Pathol** 1996 Oct; 180(2):122–8

Melanoma antigen-encoding gene-1 expression in invasive gastric carcinoma: correlation with stage of disease. Katano M, et al. **J Surg Oncol** 1997 Mar;64(3):195–201

Inactivation of the E-cadherin gene in primary gastric carcinomas and gastric carcinoma cell lines. Tamura G, et al. **Jpn J Cancer Res** 1996 Nov;87(11):1153–9

Reduced expression of cyclin-dependent kinase inhibitor p27Kip1 is associated with advanced stage and invasiveness of gastric carcinomas. Yasui W, et al. **Jpn J Cancer Res** 1997 Jul;88(7):625–9

CD34 expression by inflammatory fibroid polyps of the stomach. Hasegawa T, et al. **Mod Pathol** 1997 May; 10(5):451–6

p27 expression and gastric carcinoma [letter] Mori M, et al. **Nat Med** 1997 Jun;3(6):593

Tumor-specific accumulation of 125I-labeled mouse-human chimeric anti-CEA antibody in a xenografted human cancer model demonstrated by whole-body autoradiography and immunostaining. Haruno M, et al. **Nucl Med Biol** 1996 Aug;23(6):821–6

Effect of nitrous oxide and propofol on amino acid metabolism in neoplasic patients. Crespo ML, et al. **Nutr Cancer** 1997;27(1):80–3

Relationship between p53 overexpression and gastric cancer progression. Kim JH, et al. **Oncology** 1997 Mar–Apr; 54(2):166–70

Amplification of the c-erbB-2 gene detected by FISH in gastric cancers. Sato T, et al. **Pathol Int** 1997 Feb–Mar; 47(2–3):179–82

Effects of gastrin on the histamine-secretory and proliferative activity of cultured carcinoid cells derived from the stomach of the rodent Mastomys natalensis. Takeno S, et al. **Pathol Int** 1997 Feb–Mar;47(2–3):95–102

Different expression of Bcl-2 protein in gastric adenomas and carcinomas. Uesugi H, et al. **Pathol Int** 1996 Apr; 46(4):274–80

Overexpression of the 67 kD laminin receptor correlates with the progression of gastric carcinoma. Lee WA, et al. **Pathol Res Pract** 1996 Dec;192(12):1195–201

Immunohistochemical demonstration of fibrin II in gastric cancer tissue. Wojtukiewicz MZ, et al. **Pol J Pharmacol** 1996 Mar–Apr;48(2):229–32

Immunohistochemical analysis of intercellular adhesion molecule-1 expression in human gastric adenoma and adenocarcinoma. Nasu R, et al. **Virchows Arch** 1997 Apr; 430(4):279–83

Expression of adhesion molecules in primary B-cell gastric lymphoma and lymphoid follicles. Sato Y, et al. **Virchows Arch** 1996 Dec;429(6):377–82

P53 overexpression in gastric adenocarcinoma with Helicobacter pylori infection. Chang KH, et al. **Yonsei Med J** 1997 Apr;38(2):117–24

P-glycoprotein as an intermediate end point of drug resistance to neoadjuvant chemotherapy in locally advanced gastric cancer. Chung HC, et al. **Yonsei Med J** 1996 Dec;37(6):397–404

[The overexpression of c-met oncogene correlation with gastric mucosal lesion] Wang J, et al. **Chung Hua I Hsueh Tsa Chih** 1996 May;76(5):359–62 (Eng. Abstr.) **(Chi)**

[Analysis of DNA ploidy pattern and overexpression of p53 protein in cases of early gastric carcinoma with lymph node metastasis] Kido K, et al. **Gan To Kagaku Ryoho** 1997 Jul; 24 Suppl 2:320–3 (Eng. Abstr.) **(Jpn)**

[Immunohistochemical study of p21 expression in gastric carcinoma] Ogawa M, et al. **Gan To Kagaku Ryoho** 1997 Jul;24 Suppl 2:292–5 (Eng. Abstr.) **(Jpn)**

[Expression of trefoil group antigen pS2 in human gastric cancer] Oguri T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Oct;93(10):707–16 (Eng. Abstr.) **(Jpn)**

[Synthesis and phosphorylation of gastric proteins in cells of human gastric carcinoma] Karakin EI, et al. **Biull Eksp Biol Med** 1996 Jun;121(6):676–81 **(Rus)**

MICROBIOLOGY

Occurrence and significance of Helicobacter pylori infection after gastric surgery. Bahnacy A, et al. **Acta Chir Hung** 1995–96;35(3–4):201–7

Helicobacter pylori: its role in ulcer disease and gastric cancer and how to detect the infection. Go MF. **Acta Gastroenterol Latinoam** 1996;26(1):45–9

Helicobacter pylori and the risk and management of associated diseases: gastritis, ulcer disease, atrophic gastritis and gastric cancer. Kuipers EJ. **Aliment Pharmacol Ther** 1997 Apr;11 Suppl 1:71–88 (193 ref.)

Helicobacter mustelae-associated gastric MALT lymphoma in ferrets. Erdman SE, et al. **Am J Pathol** 1997 Jul; 151(1):273–80

Specific detection of Helicobacter pylori and non-Helicobacter pylori flora in small- and large-cell primary gastric B-cell non-Hodgkin's lymphoma. Gisbertz IA, et al. **Ann Oncol** 1997;8 Suppl 2:33–6

Is the study of human cancer-associated factors, the best or the only model for human carcinogenesis research? I. The question of Helicobacter pylori infection as an accused human gastric carcinogen (editorial). Mathé G. **Biomed Pharmacother** 1997;51(1):1–4 (36 ref.)

Detection of Helicobacter pylori in biopsy of patients with gastric carcinoma. Shibata T, et al. **Biomed Pharmacother** 1997;51(1):22–8 (40 ref.)

Do general practitioners inform patients of the association between Helicobactor pylori infection and gastric cancer prior to determining serostatus? Parry JM, et al. **Br J Gen Pract** 1997 May;47(418):311–2

Helicobacter pylori and gastric cancer. McFarlane GA, et al. **Br J Surg** 1997 Sep;84(9):1190–9 (163 ref.)

Helicobacter pylori, gastric cancer and gastric MALT lymphoma. Williams CN. **Can J Gastroenterol** 1996 Oct; 10(6):359–60 (13 ref.)

Helicobacter pylori and primary gastric lymphoma. A histopathologic and immunohistochemical analysis of 237 patients. Nakamura S, et al. **Cancer** 1997 Jan 1;79(1):3–11

Helicobacter pylori antibodies in relation to precancerous gastric lesions in a high-risk Chinese population. Zhang L, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Aug; 5(8):627–30

Filamentous organisms in benign and malignant gastric cytology brushes [letter; comment] Beer TW. **Cytopathology** 1997 Feb;8(1):67. Comment on: Cytopathology 1996 Aug;7(4):268–73.

Filamentous organisms in benign and malignant gastric cytology brushings [see comments] Wilson CA, et al. **Cytopathology** 1996 Aug;7(4):268–73. Comment in: Cytopathology 1997 Feb;8(1):67.

High seropositivity of anti-CagA antibody in Helicobacter pylori-infected patients irrelevant to peptic ulcers and normal mucosa in Japan. Maeda S, et al. **Dig Dis Sci** 1997 Sep;42(9):1841–7

Serum antibodies against Helicobacter pylori proteins VacA and CagA are associated with increased risk for gastric adenocarcinoma. Rudi J, et al. **Dig Dis Sci** 1997 Aug; 42(8):1652–9

Helicobacter pylori infection and gastric cancer. A nested case-control study in a rural area of Japan. Watanabe Y, et al. **Dig Dis Sci** 1997 Jul;42(7):1383–7

Gastric cancer and Helicobacter pylori. Muñoz N. **Eur J Cancer Prev** 1996 Oct;5(5):405–8 (33 ref.)

Significance of Helicobacter pylori infection and gastric

cancer: implications for screening. Moayyedi P, et al. **Gastrointest Endosc Clin N Am** 1997 Jan;7(1):47–64 (141 ref.)

Risk for gastric cancer in people with CagA positive or CagA negative Helicobacter pylori infection [see comments] Parsonnet J, et al. **Gut** 1997 Mar;40(3):297–301. Comment in: ACP J Club 1997 Sep–Oct;127(2):50.

Precancerous gastric lesions and Helicobacter pylori. Masci E, et al. **Hepatogastroenterology** 1996 Jul–Aug;43(10):854–8

Low antigenicity of the polysaccharide region of Helicobacter pylori lipopolysaccharides derived from tumors of patients with gastric cancer. Yokota S, et al. **Infect Immun** 1997 Sep;65(9):3509–12

Seroprevalences of hepatitis B and C viruses and Helicobacter pylori infection in a small, isolated population at high risk of gastric and liver cancer. Chen SY, et al. **Int J Cancer** 1997 May 29;71(5):776–9

Helicobacter pylori and intestinal metaplasia. Evrensel T, et al. **J Environ Pathol Toxicol Oncol** 1996;15(2–4):215–9

Significance of Helicobacter pylori infection as a risk factor in gastric cancer: serological and histological studies. Barreto-Zuñiga R, et al. **J Gastroenterol** 1997 Jun; 32(3):289–94

Association of Helicobacter pylori and diffuse type gastric cancer. Handa Y, et al. **J Gastroenterol** 1996 Nov;31 Suppl 9:29–32

Pathogenesis and prevention of stomach cancer. Youn HS, et al. **J Korean Med Sci** 1996 Oct;11(5):373–85 (96 ref.)

Studies on the relationship between adhesive activity and haemagglutination by Helicobacter pylori. Osaki T, et al. **J Med Microbiol** 1997 Feb;46(2):117–21

Helicobacter pylori and the cell cycle [editorial; comment] Correa P. **J Natl Cancer Inst** 1997 Jun 18;89(12):836–7. Comment on: J Natl Cancer Inst 1997 Jun 18;89(12):863–8.

Helicobacter pylori: the cancer link [see comments] O'Connor F, et al. **J R Soc Med** 1996 Dec;89(12):674–8 (53 ref.). Comment in: J R Soc Med 1997 Mar;90(3):180. Comment in: J R Soc Med 1997 Jun;90(6):359.

Cytotoxin genes of Helicobacter pylori in chronic gastritis, gastroduodenal ulcer and gastric cancer: an age and gender matched case–control study. Matsukura N, et al. **Jpn J Cancer Res** 1997 Jun;88(6):532–6

Immature cells and Helicobacter pylori infection in early gastric cancer. An immunohistochemical study. Testino G. **Minerva Med** 1997 May;88(5):183–6

Helicobacter pylori infection and gastric carcinoma. Dwivedi M. **Natl Med J India** 1996 Sep–Oct;9(5):222–3

Helicobacter pylori–associated gastric lymphoma in a girl. Sharon N, et al. **Pediatr Hematol Oncol** 1997 Mar–Apr; 14(2):177–80

Helicobacter pylori and lymphoid follicles in primary gastric MALT–lymphoma in Mexico. Herrera–Goepfert R, et al. **Rev Invest Clin** 1996 Jul–Aug;48(4):261–5

The growth of primary low–grade B–cell gastric lymphoma is sustained by Helicobacter pylori. Cammarota G, et al. **Scand J Gastroenterol** 1997 Mar;32(3):285–7

Helicobacter pylori and gastric cancer: an overrated risk? Crespi M, et al. **Scand J Gastroenterol** 1996 Nov; 31(11):1041–6 (69 ref.)

Relation between histologic subtypes and location of gastric cancer and Helicobacter pylori. Martín–de–Argila C, et al. **Scand J Gastroenterol** 1997 Apr;32(4):303–7

High prevalence of the CagA–positive Helicobacter pylori strains in Japanese asymptomatic patients and gastric cancer patients. Shimoyama T, et al. **Scand J Gastroenterol** 1997 May;32(5):465–8

Helicobacter pylori and gastric cancer. Forman D. **Scand J Gastroenterol Suppl** 1996;215:48–51 (19 ref.)

Helicobacter pylori and gastric cancer. Forman D. **Scand J Gastroenterol Suppl** 1996;220:23–6 (17 ref.)

Helicobacter pylori and disturbance of gastric function associated with duodenal ulcer disease and gastric cancer. McColl KE, et al. **Scand J Gastroenterol Suppl** 1996; 215:32–7 (40 ref.)

Helicobacter pylori and gastric neoplasia. Sharma BC, et al. **Trop Gastroenterol** 1996 Oct–Dec;17(4):236–7 (23 ref.)

Gastric MALT lymphoma and Helicobacter pylori. Wotherspoon AC. **Yale J Biol Med** 1996 Jan–Feb; 69(1):61–8 (32 ref.)

[Gastric MALT lymphoma and Helicobacter pylori (letter)] Moussu P, et al. **Gastroenterol Clin Biol** 1996;20(6–7):613–4 **(Fre)**

[Gastric lymphomas: role of Helicobacter pylori] Ruskoné–Fourmestraux A. **Presse Med** 1997 Feb 15; 26(4):184–9 (26 ref.) **(Fre)**

[Helicobacter pylori and MALT gastric lymphomas] Belaiche J. **Rev Med Liege** 1997 May;52(5):352–4 (12 ref.) **(Fre)**

[Stomach cancer and MALT lymphoma: prevention with Helicobacter pylori eradication] Fischbach W. **Dtsch Med Wochenschr** 1997 Aug 1;122(31–32):983–7 (67 ref.) **(Ger)**

[Gastric MALT lymphoma and Helicobacter pylori infection] Chiba T. **Nippon Shokakibyo Gakkai Zasshi** 1997 Apr;94(4):233–40 (57 ref.) **(Jpn)**

[A case of gastric MALT lymphoma regressed endoscopically and pathologically after eradication of Helicobacter pylori] Seko A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):21–6 **(Jpn)**

[Helicobacter pylori infection is carcinogenic for humans] Aruin LI. **Arkh Patol** 1997 May–Jun;59(3):74–8 (53 ref.) (Eng. Abstr.) **(Rus)**

[Is gastric cancer an infectious disease?] Gisbert JP, et al. **Rev Esp Enferm Dig** 1996 Aug;88(8):555–62 (91 ref.) **(Spa)**

[A holistic perspective in a new Swedish study. Connection between H pylori and cancer] Lennholm B. **Lakartidningen** 1996 Nov 27;93(48):4432–5 **(Swe)**

[Swedish registries are of favour for epidemiological research] Lennholm B. **Lakartidningen** 1996 Nov 27; 93(48):4436 **(Swe)**

[Helicobacter pylori may cause stomach cancer. The connection is not yet completely surveyed] Wadström T, et al. **Lakartidningen** 1997 Aug 27;94(35):2947–50 (15 ref.) **(Swe)**

MORTALITY

Prognosis of gastric carcinoma with emphasis on lymph node status. Topal B, et al. **Acta Chir Belg** 1997 Jun;97(3):118–22

Gastric remnant carcinoma: just another proximal gastric cancer or a unique entity? Newman E, et al. **Am J Surg** 1997 Apr;173(4):292–7

Gastric cancer in the European Union (1968–1992): mortality trends and cohort effect. Aragonés N, et al. **Ann Epidemiol** 1997 May;7(4):294–303

Tumor size as a simple prognostic indicator for gastric carcinoma. Adachi Y, et al. **Ann Surg Oncol** 1997 Mar; 4(2):137–40

Racial factors cannot explain superior Japanese outcomes in stomach cancer [letter; comment] Noguchi M. **Arch Surg** 1997 Jan;132(1):99. Comment on: Arch Surg 1996 Feb;131(2):170–5.

Gastric cancers in Singapore: poor prognosis arising from late presentation. Koong HN, et al. **Aust N Z J Surg** 1996 Dec;66(12):813–5

Influence of tumour penetration on period of death after gastric cancer surgery. Iriyama K, et al. **Br J Surg** 1997 Jun;84(6):866–7

An immunohistochemical assessment of cathepsin D in gastric carcinoma: its impact on clinical prognosis. Allgayer H, et al. **Cancer** 1997 Jul 15;80(2):179–87

Prognostic indicators for survival after curative resection for patients with carcinoma of the stomach. Wu CW, et al. **Dig Dis Sci** 1997 Jun;42(6):1265–9

Sex as a prognostic factor in gastric cancer. Maguire A, et al. **Eur J Cancer** 1996 Jul;32A(8):1303–9

Dietary habits and geographic variation in stomach cancer mortality in Spain. Corella D, et al. **Eur J Cancer Prev** 1996 Aug;5(4):249–57

Modelling of mortality data from a multi–centre study in Japan by means of Poisson regression with error in variables. Jordan P, et al. **Int J Epidemiol** 1997 Jun; 26(3):501–7

Survival following resection for lung cancer as a second primary cancer. Ishida T, et al. **Int Surg** 1995 Jul–Sep; 80(3):227–30

Pre–, intra– and postoperative staging of gastric carcinoma and clinical outcome. Schweizer W, et al. **Int Surg** 1995 Jul–Sep;80(3):204–7

Effect of lymph node dissection on survival of gastric carcinoma [letter; comment] Douglass HO. **J Am Coll Surg** 1997 Jun;184(6):667–9. Comment on: J Am Coll Surg 1996 Dec;183(6):616–24.

Gastric carcinoma: does lymph node dissection alter survival? [see comments] Wanebo HJ, et al. **J Am Coll Surg** 1996 Dec;183(6):616–24. Comment in: J Am Coll Surg 1997 Jun;184(6):667–9.

Clinicopathologic characteristics and prognosis of gastric stump cancer. Chen CN, et al. **J Clin Gastroenterol** 1996 Dec;23(4):251–5

Patterns of failure and long–term results in high–risk resected gastric cancer treated with postoperative radiotherapy with or without intraoperative electron boost. Martínez–Monge R, et al. **J Surg Oncol** 1997 Sep;66(1):24–9

Gastric cancer in the province of Zaragoza (Spain): a survival study. Jimeno–Aranda A, et al. **Neoplasma** 1996; 43(3):199–203

Food consumption and gastric cancer mortality in five regions of Japan. Tsubono Y, et al. **Nutr Cancer** 1997; 27(1):60–4

Nutrient consumption and gastric cancer mortality in five regions of Japan. Tsubono Y, et al. **Nutr Cancer** 1997; 27(3):310–5

Stomach cancer mortality continues to decline, Wisconsin and the US, 1982–1994. Wich B, et al. **Wis Med J** 1997 Apr;96(4):31–3

Impact of lymph node metastasis on survival with early gastric cancer. Seto Y, et al. **World J Surg** 1997 Feb; 21(2):186–89; discussion 190

[Prognosis factors in stomach carcinoma] Sendler A, et al. **Dtsch Med Wochenschr** 1997 Jun 13;122(24):794–800 (40 ref.) **(Ger)**

[Methodological traps in small area studies of regional distribution of illnesses (letter)] Schlattman. **Gesundheitswesen** 1996 Jul;58(7):411–4 **(Ger)**

PARASITOLOGY

Lack of an association of anisakiasis and inflammatory fibroid polyps [letter] Matsushita M, et al. **Gastrointest Endosc** 1997 Jul;46(1):92–4

PATHOLOGY

Cytologic analysis of primary stomach adenocarcinoma metastatic to the uterine cervix. Matsuura Y, et al. **Acta Cytol** 1997 Mar–Apr;41(2):291–4

Body–fundic intestinal type early gastric cancer (EGC): mucopeptic cells (immature cells) expansion in Helicobacter pylori (HP) positive patients [letter] Testino G, et al. **Acta Gastroenterol Belg** 1996 Oct–Dec;59(4):258

Three–day standard dose cytarabine could induce an M4Eo patient into complete remission. Higuchi T, et al. **Acta Haematol** 1997;97(3):189–90

Metastatic signet–ring cell adenocarcinoma to the urinary bladder. Saba NF, et al. **Acta Oncol** 1997;36(2):219–20

Re: a prospective comparison of laparoscopy and imaging in the staging of esophagogastric cancer before surgery [letter; comment] Cesana BM. **Am J Gastroenterol** 1997 Aug;92(8):1399–400. Comment on: Am J Gastroenterol 1995 Dec;90(12):2191–4.

Three histologically different tiny gastric cancers developing adjacent to each other, resected endoscopically in a single mucosal piece. Matsuhashi N, et al. **Am J Gastroenterol** 1996 Oct;91(10):2200–2

Low epithelial cell proliferation and absence of oncoprotein expression in juvenile polyposis of the stomach, with or without tumors. Mitomi H, et al. **Am J Gastroenterol** 1997 Aug;92(8):1374–7

Hepatic resection of liver metastases from gastric carcinoma. Miyazaki M, et al. **Am J Gastroenterol** 1997 Mar; 92(3):490–3

Intestinal metaplasia of the gastric cardia. Morales TG, et al. **Am J Gastroenterol** 1997 Mar;92(3):414–8

Helicobacter mustelae–associated gastric MALT lymphoma in ferrets. Erdman SE, et al. **Am J Pathol** 1997 Jul; 151(1):273–80

Expression of the Ets–1 proto–oncogene in human gastric carcinoma: correlation with tumor invasion. Nakayama T, et al. **Am J Pathol** 1996 Dec;149(6):1931–9

Analysis of cell damage and proliferation in Helicobacter pylori–infected human gastric mucosa from patients with gastric adenocarcinoma. Yabuki N, et al. **Am J Pathol** 1997 Sep;151(3):821–9

Doppler index perfusion in the detection of hepatic metastases secondary to gastric carcinoma. Leen E, et al. **Am J Surg** 1997 Feb;173(2):99–102

True histiocytic lymphoma of the stomach associated with low–grade B–cell mucosa–associated lymphoid tissue (MALT)–type lymphoma. Alvaro T, et al. **Am J Surg Pathol** 1996 Nov;20(11):1406–11

Aggressive forms of gastric neuroendocrine tumors in multiple endocrine neoplasia type I. Bordi C, et al. **Am J Surg Pathol** 1997 Sep;21(9):1075–82

Synchronous mucosa–associated lymphoid tissue lymphoma and adenocarcinoma of the stomach. Goteri G, et al. **Am J Surg Pathol** 1997 May;21(5):505–9

Dynamic changes in quantitative features of human gastric lesions. Enchev V, et al. **Anal Cell Pathol** 1997;13(1):9–16

Early gastric cancer and gastric dysplasia. Pascal RR, et al. **Ann Ital Chir** 1996 May–Jun;67(3):391–7; discussion 397–8 (51 ref.)

Primary lymphoma of the stomach: three–year results of a prospective multicenter study. The German Multicenter Study Group on GI–NHL. Koch P, et al. **Ann Oncol** 1997; 8 Suppl 1:85–8

Laparoscopy in the management of gastric adenocarcinoma. Burke EC, et al. **Ann Surg** 1997 Mar;225(3):262–7 (9 ref.)

Tumor size as a simple prognostic indicator for gastric carcinoma. Adachi Y, et al. **Ann Surg Oncol** 1997 Mar; 4(2):137–40

Synergistic effect and possible mechanisms of tumor necrosis factor and cisplatin cytotoxicity under moderate hyperthermia against gastric cancer cells. Buell JF, et al. **Ann Surg Oncol** 1997 Mar;4(2):141–8

Clinicopathologic characteristics of gastric cancer patients with cancer infiltration at surgical margin at gastrectomy. Fujimoto S, et al. **Anticancer Res** 1997 Jan–Feb; 17(1B):689–94

Clinicopathologic features of synchronous multifocal early gastric cancers. Kitamura K, et al. **Anticancer Res** 1997 Jan–Feb;17(1B):643–6

Gastric cancer and flow cytometry: the beginning of a promising match. Melato M. **Anticancer Res** 1997 May–Jun; 17(3C):2279–84 (73 ref.)

The association of metastasis with the expression of adhesion molecules in cell lines derived from human gastric cancer. Nakashio T, et al. **Anticancer Res** 1997 Jan–Feb; 17(1A):293–9

Cutaneous metastases from gastric adenocarcinoma. Report of two cases and review of the literature. Boscaino A, et al. **Arch Anat Cytol Pathol** 1996;44(1):60–4 (8 ref.)

Artifactual signet–ring–like cells in endoscopic biopsy of gastric lymphoma. Arista–Nasr J, et al. **Arch Pathol Lab Med** 1997 Jun;121(6):623–5

Pre–operative staging of gastro–oesophageal junction carcinoma: comparison of endoscopic ultrasound and computed tomography. Holden A, et al. **Australas Radiol** 1996 Aug;40(3):206–12

Mechanism of apoptotic cell death of human gastric carcinoma cells mediated by transforming growth factor beta. Ohta S, et al. **Biochem J** 1997 Jun 15;324 (Pt 3):777–82

Intestinal dissemination of gastric mucosa–associated lymphoid tissue lymphoma. Du MQ, et al. **Blood** 1996 Dec 15;88(12):4445–51

Delays in diagnosing oesophagogastric cancer. Misconceptions exist over whether delay in diagnosis influences survival [letter; comment] Renehan A, et al. **BMJ** 1997 Aug 16;315(7105):427–8. Comment on: BMJ 1997 Feb 15;314(7079):467–70.

Superficial spreading type of early gastric cancer. Kitamura K, et al. **Br J Cancer** 1996 Dec;74(11):1834–7

Early gastric cancer mimicking advanced gastric cancer. Kitamura K, et al. **Br J Cancer** 1997;75(12):1769–73

Apoptosis, cell proliferation and expression of Bcl-2 and Bax in gastric carcinomas: immunohistochemical and clinicopathological study. Koshida Y, et al. **Br J Cancer** 1997;75(3):367–73

Recurrences and related characteristics of gastric cancer. Maehara Y, et al. **Br J Cancer** 1996 Sep;74(6):975–9

A clinicopathological study of asymptomatic gastric cancer. Matsukuma A, et al. **Br J Cancer** 1996 Nov;74(10):1647–50

Role of alpha 2 beta 1– and alpha 3 beta 1–integrin in the peritoneal implantation of scirrhous gastric carcinoma. Nishimura S, et al. **Br J Cancer** 1996 Nov;74(9):1406–12

Expression of oncoproteins and the amount of eosinophilic and lymphocytic infiltrates can be used as prognostic factors in gastric cancer. Dutch Gastric Cancer Group (DGCG). Songun I, et al. **Br J Cancer** 1996 Dec; 74(11):1783–8

Differential responses of scirrhous and well–differentiated gastric cancer cells to orthotopic fibroblasts. Yashiro M, et al. **Br J Cancer** 1996 Oct;74(7):1096–103

Peculiar inflammatory cutaneous metastasis from stomach adenocarcinoma [letter] Sahin S, et al. **Br J Dermatol** 1997 Apr;136(4):650–2

Relationship between histological type and endosonographic detection of regional lymph node metastases in gastric cancer. Hamada S, et al. **Br J Radiol** 1997 Jul; 70(835):697–702

Oesophagogastrectomy for iatrogenic perforation of oesophageal and cardia carcinoma. Adam DJ, et al. **Br J Surg** 1996 Oct;83(10):1429–32

Prospective comparison of laparoscopy, ultrasonography and computed tomography in the staging of gastric cancer [letter] Cesana BM. **Br J Surg** 1997 Aug;84(8):1170

Prospective comparison of laparoscopy, ultrasonography and computed tomography in the staging of gastric cancer. Stell DA, et al. **Br J Surg** 1996 Sep;83(9):1260–2

Comparison of five systems for staging lymph node metastasis in gastric cancer. Yu W, et al. **Br J Surg** 1997 Sep; 84(9):1305–9

Gastric "pseudolymphoma": a retrospective morphologic and immunophenotypic study of 97 cases. Abbondanzo SL, et al. **Cancer** 1997 May 1;79(9):1656–63

The role of dietary factors in the intestinal and diffuse histologic subtypes of gastric adenocarcinoma: a case–control study in the U.S. Harrison LE, et al. **Cancer** 1997 Sep 15;80(6):1021–8

Reassessment of gastric lymphoma in light of the concept of mucosa–associated lymphoid tissue lymphoma: analysis of 53 patients. Hoshida Y, et al. **Cancer** 1997 Sep 15; 80(6):1151–9

Immunohistochemical evaluation of lymph node micrometastases from gastric carcinomas. Ishida K, et al. **Cancer** 1997 Mar 15;79(6):1069–76

Multiple early gastric carcinomas. Clinicopathologic features and histogenesis. Isozaki H, et al. **Cancer** 1996 Nov 15; 78(10):2078–86

Gastric lymphomas compared with lymph node lymphomas in a population–based registry differ in stage distribution and dissemination patterns but not in patient survival. Krol AD, et al. **Cancer** 1997 Jan 15;79(2):390–7

Synchronous and metachronous primary gastric lymphoma and adenocarcinoma: a clinicopathological study of 12 patients. Nakamura S, et al. **Cancer** 1997 Mar 15; 79(6):1077–85

Morphologic, histologic, and molecular similarities between adenocarcinomas arising in the gastric stump and the intact stomach. Safatle–Ribeiro AV, et al. **Cancer** 1996 Dec 1; 78(11):2288–99

Assessment of microsatellite alterations in young patients with gastric adenocarcinoma [letter] Seruca R, et al. **Cancer** 1997 Oct 1;80(7):1358–60

Establishment of a cisplatin–resistant gastric carcinoma cell line OCUM–2M/DDP. Nitta A, et al. **Cancer Chemother Pharmacol** 1997;40(1):94–7

Decrease of ornithine decarboxylase activity in premalignant gastric mucosa and regression of small intestinal metaplasia in patients supplemented with high doses of vitamin E. Bukin YV, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Jul;6(7):543–6

Lewis, secretor, and ABO phenotypes, and sulfomucin expression in gastric intestinal metaplasia. Torrado J, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Apr;6(4):287–9

Prediction of lymph node metastasis in gastric cancer patients with neural networks. Droste K, et al. **Cancer Lett** 1996 Dec 3;109(1–2):141–8

Comparison of biological phenotypes according to midkine expression in gastric cancer cells and their autocrine activities could be modulated by pentosan polysulfate. Rha SY, et al. **Cancer Lett** 1997 Sep 16;118(1):37–46

Spontaneous apoptosis is inversely related to intratumoral microvessel density in gastric carcinoma. Lu C, et al. **Cancer Res** 1997 Jan 15;57(2):221–4

Comparative analysis of bone marrow and venous blood isolates from gastrointestinal cancer patients for the detection of disseminated tumor cells using reverse transcription PCR. Soeth E, et al. **Cancer Res** 1997 Aug 1;57(15):3106–10

Extensive lymph–node dissection in gastric cancer: is it of therapeutic value? [editorial] Roukos DH, et al. **Cancer Treat Rev** 1996 Jul;22(4):247–52

Growth inhibitory effect of interferon–beta is associated with the induction of cyclin–dependent kinase inhibitor p27Kip1 in a human gastric carcinoma cell line. Kuniyasu H, et al. **Cell Growth Differ** 1997 Jan;8(1):47–52

Recent progress in researches on precancerous lesions of gastric cancer in China. Li C, et al. **Chin Med J (Engl)** 1996 May;109(5):407–10 (14 ref.)

Carcinoid tumors of the gastrointestinal tract in Chinese of Taiwan: an analysis of fifty cases. Weng YJ, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Oct;58(4):254–8

Filamentous organisms in benign and malignant gastric cytology brushes [letter; comment] Beer TW. **Cytopathology** 1997 Feb;8(1):67. Comment on: Cytopathology 1996 Aug;7(4):268–73.

Filamentous organisms in benign and malignant gastric cytology brushings [see comments] Wilson CA, et al. **Cytopathology** 1996 Aug;7(4):268–73. Comment in: Cytopathology 1997 Feb;8(1):67.

Ammonia inhibits proliferation and cell cycle progression at S–phase in human gastric cells. Matsui T, et al. **Dig Dis Sci** 1997 Jul;42(7):1394–9

Is there a dysplasia–carcinoma sequence in rat gastric remnant? Schwab GP, et al. **Dig Dis Sci** 1997 Mar; 42(3):608–15

Somatostatin receptor regulation of gastric carcinoid tumours. Tang LH, et al. **Digestion** 1996;57 Suppl 1:11–4 (30 ref.)

Prevalence, management and outcome of early adenocarcinoma (pT1) of the esophago–gastric junction. Comparison between early cancer in Barrett's esophagus (type I) and early cancer of the cardia (type II). Ruol A, et al. **Dis Esophagus** 1997 Jul;10(3):190–5

Mechanisms producing color change in flat early gastric cancers. Honmyo U, et al. **Endoscopy** 1997 Jun;29(5):366–71

Simultaneous adenocarcinoma and malignant lymphoma of the stomach. Matsushita M, et al. **Endoscopy** 1997 Feb; 29(2):134

Benign gastric ulcer masquerading as a submucosal tumor. Mergener K, et al. **Endoscopy** 1997 May;29(4):331

Assessment of tumor invasion of the distal esophagus in carcinoma of the cardia using endoscopic ultrasonography. Natsugoe S, et al. **Endoscopy** 1996 Nov;28(9):750–5

Gastric carcinoma with discrete intragastric and duodenal metastases: endoscopic and histological findings. Young TH, et al. **Endoscopy** 1996 May;28(4):404

Non–neoplastic changes in gastric antrum: are they different in distally located intestinal and diffuse–type gastric adenocarcinoma? Knawy BA, et al. **Eur J Cancer Prev** 1997 Apr;6(2):167–70

Pattern of pS2 protein expression in premalignant and malignant lesions of gastric mucosa. Machado JC, et al. **Eur J Cancer Prev** 1996 Jun;5(3):169–79

Gastric leiomyosarcoma in a child. Jaeger HJ, et al. **Eur J Radiol** 1996 Sep;23(2):111–4

Flow cytometric DNA analysis of gastric cancer that is invading the muscularis propria. Mizunuma H, et al. **Eur J Surg** 1996 Nov;162(11):889–94

c–erbB2 and p53 expression are not associated with stage progression of gastric cancer in Britain or Japan. McCulloch P, et al. **Eur J Surg Oncol** 1997 Aug;23(4):304–9

Arterial infusion chemotherapy for peritoneal and liver metastasis in gastric cancer. Kitamura M, et al. **Gan To Kagaku Ryoho** 1997 May;24 Suppl 1:45–51 (14 ref.)

Histological grading in gastric lymphoma: pretreatment criteria and clinical relevance. de Jong D, et al. **Gastroenterology** 1997 May;112(5):1466–74

MALT–type lymphoma of the stomach is associated with Helicobacter pylori strains expressing the CagA protein. Eck M, et al. **Gastroenterology** 1997 May;112(5):1482–6

Surveillance of patients with Barrett's esophagus for dysplasia and cancer with balloon cytology [see comments] Falk GW, et al. **Gastroenterology** 1997 Jun;112(6):1787–97. Comment in: Gastroenterology 1997 Jun;112(6):2138–42.

Regulation of growth of human gastric cancer by gastrin and glycine–extended progastrin. Iwase K, et al. **Gastroenterology** 1997 Sep;113(3):782–90

High expression of a Lewis(x)–related epitope in gastric carcinomas indicates metastatic potential and poor prognosis. Mayer B, et al. **Gastroenterology** 1996 Dec; 111(6):1433–46

The role of transforming growth factor alpha in the enterochromaffin–like cell tumor autonomy in an African rodent mastomys. Tang LH, et al. **Gastroenterology** 1996 Nov;111(5):1212–23

Interobserver agreement in endoscopic ultrasonography staging of esophageal and cardia cancer. Burtin P, et al. **Gastrointest Endosc** 1996 Jan;43(1):20–4

Where does gastric leiomyosarcoma originate? [letter] Matsushita M, et al. **Gastrointest Endosc** 1997 Aug; 46(2):192–3

Gastric inflammatory fibroid polyps: endoscopic ultrasonographic analysis in comparison with the histology. Matsushita M, et al. **Gastrointest Endosc** 1997 Jul;46(1):53–7

Staging of non–Hodgkin's gastric lymphoma with endosonography–guided fine–needle aspiration biopsy and flow cytometry. Wiersema MJ, et al. **Gastrointest Endosc** 1996 Dec;44(6):734–6

Endoscopic and pathologic features of Epstein–Barr virus–associated gastric carcinoma. Yanai H, et al. **Gastrointest Endosc** 1997 Mar;45(3):236–42

Endoscopic evaluation of the postoperative stomach. Mellinger JD, et al. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):621–39 (59 ref.)

Gastric polyps as precancerous lesions. Schmitz JM, et al. **Gastrointest Endosc Clin N Am** 1997 Jan;7(1):29–46 (32 ref.)

Precursor lesions for cancer of the cardia. Weinstein WM. **Gastrointest Endosc Clin N Am** 1997 Jan;7(1):19–28 (24 ref.)

Ciliated metaplasia in a patient of Mediterranean origin with gastric adenoma. Alujevic A, et al. **Gen Diagn Pathol** 1996 Oct;142(2):113–7

Sarcoid–like reaction in the regional lymph nodes and spleen in gastric carcinoma: a clinicopathologic study of five cases. Kojima M, et al. **Gen Diagn Pathol** 1997 Jun; 142(5–6):347–52

Stereologic study of splenic tissue compartments from traumatically injured and cancer patients. Milićević NM, et al. **Gen Diagn Pathol** 1996 Jun;142(1):41–4

The mixed type in Laurén's classification of gastric carcinoma. Histologic description and biologic behavior. Stelzner S, et al. **Gen Diagn Pathol** 1997 Jul;143(1):39–48

Primary non–Hodgkin lymphoma of the stomach: endoscopic pattern and prognosis in low versus high grade malignancy in relation to the MALT concept. Taal BG, et al. **Gut** 1996 Oct;39(4):556–61

Gastric stromal tumor with peritoneal nodules in pregnancy: tumor spread or rare variant of diffuse leiomyomatosis. Valente PT, et al. **Gynecol Oncol** 1996 Dec;63(3):392–7 (29 ref.)

Apoptosis in chronic gastritis: evaluation of the gastric mucosa by DNA flow cytometry and the expression of the high molecular weight cytokeratin. Attallah AM, et al. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1305–12

Clinicopathological characteristics of stage I gastric cancer: comparison of macroscopic and microscopic findings. Baba H, et al. **Hepatogastroenterology** 1997 Mar–Apr; 44(14):554–8

Multiple leiomyosarcoma of the stomach. Colovic RB, et al. **Hepatogastroenterology** 1997 Mar–Apr;44(14):610–2 (4 ref.)

Overexpression of p53 is associated with growth pattern and prognosis in advanced gastric cancer. Ichiyoshi Y, et al. **Hepatogastroenterology** 1997 Mar–Apr;44(14):546–53

Macroscopic appearance and biological character of gastric cancer invading the muscularis propria. Ichiyoshi Y, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):553–9

Indicative value of carcinoembryonic antigen (CEA) for liver recurrence following curative resection of stage II and III gastric cancer. Ikeda Y, et al. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1281–7

Synchronous and metachronous primary malignancies in organs other than the stomach in patients with early gastric cancer. Ikeguchi M, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):672–6

Relationship between hematogenic metastasis of gastric cancer and the maximum extent of venous invasion by cancer cells in the gastric wall. Ikeguchi M, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):660–5

Clinical and pathologic features of early gastric cancer in elderly patients. Ishigami S, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1164–8

Histological evaluation of lymph node metastasis on serial sectioning in gastric cancer with radical lymphadenectomy. Isozaki H, et al. **Hepatogastroenterology** 1997 Jul–Aug; 44(16):1133–6

Clinicopathological analysis of gastric cancer in young adults. Kitamura K, et al. **Hepatogastroenterology** 1996 Sep–Oct; 43(11):1273–80

Is gastric remnant cancer clinically different from primary gastric cancer? Lo SS, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):299–301

c–erbB–2 expression is predictive for lymphatic spread of clinical gastric carcinoma. Orita H, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):294–8

DNA ploidy, proliferative index and EGF–R status in 130 cases of resected gastric cancer—a multivariate analysis. Santoro E, et al. **Hepatogastroenterology** 1997 May–Jun; 44(15):826–37

Relationship of p53 and c–erbB–2 expression to histopathological features, Helicobacter pylori infection and prognosis in gastric cancer. Shun CT, et al. **Hepatogastroenterology** 1997 Mar–Apr;44(14):604–9

Portal tumor thrombi due to gastric cancer. Sugawara Y, et al. **Hepatogastroenterology** 1996 Jul–Aug;43(10):1000–5 (25 ref.)

Hepatoid adenocarcinoma of the stomach: a case report. Sugawara Y, et al. **Hepatogastroenterology** 1996 Jul–Aug; 43(10):995–9

Comparison in survival between hepatic metastases of gastric and colorectal cancers. Taniguchi H, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):897–900

Correlation of the histological effects and survival after neoadjuvant chemotherapy on gastric cancer patients. Yonemura Y, et al. **Hepatogastroenterology** 1996 Sep–Oct; 43(11):1260–72

Occurrence of multiple lymphoepithelioma–like carcinomas and MALT–type lymphoma in the stomach: detection of EBV in carcinomas but not in lymphoma. Greiner A, et al. **Histopathology** 1996 Jul;29(1):51–6

Gastrointestinal hepatoid adenocarcinoma: venous permeation and mimicry of hepatocellular carcinoma, a report of four cases. Ishikura H, et al. **Histopathology** 1997 Jul;31(1):47–54 (28 ref.)

Malignant rhabdoid tumour of stomach. Read HS, et al. **Histopathology** 1996 Nov;29(5):474–7

Expression of cytokeratins typical for ductal and squamous differentiation in the human stomach: an immunohistochemical study of normal foveolar epithelium, Helicobacter pylori gastritis and intestinal metaplasia. Schwerer MJ, et al. **Histopathology** 1996 Aug;29(2):131–7

Apoptosis and proliferation in gastric carcinoma: the association with histological type. Shinohara T, et al. **Histopathology** 1996 Aug;29(2):123–9

Low grade gastric B-cell lymphoma of mucosa associated lymphoid tissue in immunocompromised patients [see comments] Wotherspoon AC, et al. **Histopathology** 1996 Feb;28(2):129–34. Comment in: Histopathology 1996 Aug;29(2):195–7.

Synergistic antitumor effects of human interferon-beta and interferon-gamma on human gastric adenocarcinoma cells. Nagao S, et al. **Hum Cell** 1997 Mar;10(1):95–104

Gastric epithelial dysplasia and adenoma: historical review and histological criteria for grading. Goldstein NS, et al. **Hum Pathol** 1997 Feb;28(2):127–33 (100 ref.)

Gastric fundic gland polyps: a morphological study including mucin histochemistry, stereometry, and MIB-1 immunohistochemistry. Odze RD, et al. **Hum Pathol** 1996 Sep;27(9):896–903

Cytogenetic analyses of a murine carcinoma cell line and six metastatic derivatives with different degrees of radioresistability. Jamasbi RJ, et al. **In Vitro Cell Dev Biol Anim** 1997 Feb;33(2):137–44

Hematuria: a presentation of carcinoma of the stomach. Nijhawan S, et al. **Indian J Gastroenterol** 1996 Jul;15(3):102

Collision tumor with three components at esophagogastric junction. Pai SA, et al. **Indian J Gastroenterol** 1997 Jul; 16(3):116

Primary gastric lymphoma in a boy. Yadav S, et al. **Indian J Gastroenterol** 1997 Jul;16(3):112–3

A clinico-pathological study of carcinoma stomach [published erratum appears in Indian J Pathol Microbiol 1995 Apr;38(2):138] Jose L, et al. **Indian J Pathol Microbiol** 1995 Jan;38(1):73–9

Detection of pancreatic and gastric cancer cells in peripheral and portal blood by amplification of keratin 19 mRNA with reverse transcriptase-polymerase chain reaction. Aihara T, et al. **Int J Cancer** 1997 Jul 29;72(3):408–11

Expression of CD44 variants in gastric carcinoma with or without Epstein-Barr virus. Chong JM, et al. **Int J Cancer** 1997 Aug 22;74(4):450–4

Lymph node metastasis and relation to tumor growth potential and local immune response in advanced gastric cancer. Maehara Y, et al. **Int J Cancer** 1997 Apr 22; 74(2):224–8

Autocrine transformation by fibroblast growth factor 9 (FGF-9) and its possible participation in human oncogenesis. Matsumoto-Yoshitomi S, et al. **Int J Cancer** 1997 May 2;71(3):442–50

Adhesion molecules and TGF-beta1 are involved in the peritoneal dissemination of NUGC-4 human gastric cancer cells. Nakashio T, et al. **Int J Cancer** 1997 Mar 4; 70(5):612–8

Low frequency of apoptosis in Epstein-Barr virus-associated gastric carcinoma with lymphoid stroma. Ohfuji S, et al. **Int J Cancer** 1996 Dec 11;68(6):710–5

Co-expression of urokinase-type plasminogen activator and its receptor in human gastric-cancer cell lines correlates with their invasiveness and tumorigenicity. Park IK, et al. **Int J Cancer** 1997 May 29;71(5):867–73

Establishment and characterization of human gastric carcinoma cell lines. Park JG, et al. **Int J Cancer** 1997 Feb 7;70(4):443–9

Immunohistochemical study of MUC5AC expression in human gastric carcinomas using a novel monoclonal antibody. Reis CA, et al. **Int J Cancer** 1997 Feb 20; 74(1):112–21

Expression of high-mobility group-1 mRNA in human gastrointestinal adenocarcinoma and corresponding non-cancerous mucosa. Xiang YY, et al. **Int J Cancer** 1997 Feb 20;74(1):1–6

Histological diagnosis of precancerous lesions of the stomach: a reliability study. Plummer M, et al. **Int J Epidemiol** 1997 Aug;26(4):716–20

Comparison of antiproliferative effects of 1-histamine-2 receptor antagonists, cimetidine, ranitidine, and famotidine, in gastric cancer cells. Hahm KB, et al. **Int J Immunopharmacol** 1996 Jun-Jul;18(6-7):393–9

The proliferative activity of cancer cells at the invasive margin of a tumor is a good indicator of the prognosis of patients with gastric cancer with serosal invasion. Ikeguchi M, et al. **Int Surg** 1996 Apr-Jun;81(2):122–5

Clinicopathological features of lymph node metastasis in early gastric cancer. Maekawa S, et al. **Int Surg** 1995 Jul-Sep;80(3):200–3

Pre-, intra- and postoperative staging of gastric carcinoma and clinical outcome. Schweizer W, et al. **Int Surg** 1995 Jul-Sep;80(3):204–7

Gastric epithelial polyps: a retrospective endoscopic study of 12974 symptomatic patients. Archimandritis A, et al. **Ital J Gastroenterol** 1996 Sep;28(7):387–90

Prognostic factors of node-negative gastric carcinoma: univariate and multivariate analyses. Adachi Y, et al. **J Am Coll Surg** 1997 Apr;184(4):373–7

Metastatic gastric lymph node rate is a significant prognostic factor for resectable stage IV stomach cancer. Kodera Y, et al. **J Am Coll Surg** 1997 Jul;185(1):65–9

Invasive potentials of gastric carcinoma cell lines: role of alpha 2 and alpha 6 integrins in invasion. Koike N, et al. **J Cancer Res Clin Oncol** 1997;123(6):310–6

Phenotypic characteristics of Epstein-Barr-virus-associated gastric carcinomas. Moritani S, et al. **J Cancer Res Clin Oncol** 1996;122(12):750–6

Biology of colorectal and gastric cancer cell lines. Park JG, et al. **J Cell Biochem Suppl** 1996;24:131–41 (26 ref.)

Clinicopathologic characteristics and prognosis of gastric stump cancer. Chen CN, et al. **J Clin Gastroenterol** 1996 Dec;23(4):251–5

Clinicopathologic features of submucosal carcinoma of the stomach. Hanazaki K, et al. **J Clin Gastroenterol** 1997 Apr; 24(3):150–5

Gastrointestinal autonomic nerve tumor with giant abscess. A case report and literature review. Honda K, et al. **J Clin Gastroenterol** 1997 Jun;24(4):280–5 (12 ref.)

Skin metastases: an unusual presenting sign of gastric carcinoma. Kostandy G, et al. **J Clin Gastroenterol** 1996 Oct;23(3):236–8

Five primary synchronous neoplasms of the gastrointestinal tract. Mitchell ME, et al. **J Clin Gastroenterol** 1996 Dec; 23(4):284–8

Prognostic factors in adenocarcinoma of the gastric cardia: pathologic stage analysis and multivariate regression analysis. Kajiyama Y, et al. **J Clin Oncol** 1997 May; 15(5):2015–21

Antitumour-promoting and antitumour activities of the crude extract from the leaves of Juniperus chinensis. Ali AM, et al. **J Ethnopharmacol** 1996 Sep;53(3):165–9

Intestinal type: diffuse type ratio of gastric carcinoma in a Mexican population. Mohar A, et al. **J Exp Clin Cancer Res** 1997 Jun;16(2):189–94

Low-grade gastric B-cell lymphoma of mucosa-associated lymphoid tissue: clinicopathologic analysis of 19 cases. Chiang IP, et al. **J Formos Med Assoc** 1996 Nov; 95(11):857–65

Double cancer of the stomach, one AFP-producing tumor. Hyodo T, et al. **J Gastroenterol** 1996 Dec;31(6):851–4

Gastric cancer associated with overexpression of parathyroid hormone-related peptide (PTHrP) and PTH/PTHrP receptor in relation to tumor progression. Ito M, et al. **J Gastroenterol** 1997 Jun;32(3):396–400

Overexpression of bone morphogenic protein (BMP)-4 mRNA in gastric cancer cell lines of poorly differentiated type. Katoh M, et al. **J Gastroenterol** 1996 Feb;31(1):137–9

Regression of atypical lymphoid hyperplasia after eradication of Helicobacter pylori. Tanahashi T, et al. **J Gastroenterol** 1997 Aug;32(4):543–7

Adenosquamous carcinoma of the stomach associated with separate early gastric cancer (type IIc). Toyota N, et al. **J Gastroenterol** 1996 Feb;31(1):105–8 (18 ref.)

Studies on the hypomethylation of c-myc, c-Ha-ras oncogenes and histopathological changes in human gastric carcinoma. Fang JY, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1079–82

Relationship between age and clinical characteristics of patients with gastric cancer. Lo SS, et al. **J Gastroenterol Hepatol** 1996 Jun;11(6):511–4

Intestinal-type tumour in resected gastric remnant cancer. Lo SS, et al. **J Gastroenterol Hepatol** 1997 Jun;12(6):434–6

Clinicopathological significance of intestinal and diffuse types of gastric carcinoma in Taiwan Chinese. Wu CW, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1083–8

Primary malignant lymphomas of the stomach. Pathological and clinical analyses of 38 resected cases. Kang YK, et al. **J Korean Med Sci** 1996 Dec;11(6):480–8

Expression of p53 and NDP-K/nm23 in gastric carcinomas--association with metastasis and clinicopathologic parameters. Kim KM, et al. **J Korean Med Sci** 1995 Dec;10(6):406–13

The significance of B-cell clonality in gastric lymphoid infiltrates. Calvert RJ, et al. **J Pathol** 1996 Sep;180(1):26–32

Relationship between the expression of p53 and the aggressiveness of gastric carcinoma [letter; comment] Seruca R, et al. **J Pathol** 1997 Mar;181(3):349. Comment on: J Pathol 1996 Mar;178(3):255–8.

Gastric ganglioneuroblastoma: a rare finding in an infant with multifocal ganglioneuroblastoma. Sandoval C, et al. **J Pediatr Hematol Oncol** 1996 Nov;18(4):409–12 (19 ref.)

Orthotopic liver transplantation for inflammatory myofibroblastic tumor of the liver hilum. Kim HB, et al. **J Pediatr Surg** 1996 Jun;31(6):840–2

Microvessel count predicts metastasis and prognosis in patients with gastric cancer. Araya M, et al. **J Surg Oncol** 1997 Aug;65(4):232–6

Effect of preoperative 5-fluorouracil on apoptosis of advanced gastric cancer. Inada T, et al. **J Surg Oncol** 1997 Jun;65(2):106–10

Melanoma antigen-encoding gene-1 expression in invasive gastric carcinoma: correlation with stage of disease. Katano M, et al. **J Surg Oncol** 1997 Mar;64(3):195–201

Analysis of lymph node metastasis in early gastric cancer: rationale of limited surgery. Kitamura K, et al. **J Surg Oncol** 1997 Jan;64(1):42–7

Clinicopathologic study of advanced gastric cancer without serosal invasion in young and old patients. Wang JY, et al. **J Surg Oncol** 1996 Sep;63(1):36–40

Practice guidelines for treatment of peptic ulcer disease [letter; comment] Tsang P, et al. **JAMA** 1996 Oct 9; 276(14):1136; discussion 1136–7. Comment on: JAMA 1996 Feb 28;275(8):622–9.

Expression of Fas antigen and its mediation of apoptosis in human gastric cancer cell lines. Hayashi H, et al. **Jpn J Cancer Res** 1997 Jan;88(1):49–55

Transforming growth factor-beta and hepatocyte growth factor produced by gastric fibroblasts stimulate the invasiveness of scirrhous gastric cancer cells. Inoue T, et al. **Jpn J Cancer Res** 1997 Feb;88(2):152–9

Evidence that expression of a mutated p53 gene attenuates apoptotic cell death in human gastric intestinal-type carcinomas in vivo. Ishida M, et al. **Jpn J Cancer Res** 1997 May;88(5):468–75

Detection of carcinoembryonic antigen-expressing free tumor cells in peritoneal washes from patients with gastric carcinoma by polymerase chain reaction. Nakanishi H, et al. **Jpn J Cancer Res** 1997 Jul;88(7):687–92

CD44H plays an important role in peritoneal dissemination of scirrhous gastric cancer cells. Nishimura S, et al. **Jpn J Cancer Res** 1996 Dec;87(12):1235–44

Reduced expression of cyclin-dependent kinase inhibitor p27Kip1 is associated with advanced stage and invasiveness of gastric carcinomas. Yasui W, et al. **Jpn J Cancer Res** 1997 Jul;88(7):625–9

Adult T-cell leukemia/lymphoma with a giant gastric tumor: a case report. Hiroyasu S, et al. **Jpn J Clin Oncol** 1996 Oct;26(5):374–8

Clinicopathological studies on coexisting gastric malignant lymphoma and gastric adenocarcinoma: report of four cases and review of the Japanese literature. Ishihama T, et al. **Jpn J Clin Oncol** 1997 Apr;27(2):101–6 (24 ref.)

Percutaneous transhepatic biliary drainage for the treatment of obstructive jaundice caused by metastases from nonbiliary and nonpancreatic cancers. Iwasaki M, et al. **Jpn J Clin Oncol** 1996 Dec;26(6):465–8

A case of bone marrow recurrence from gastric carcinoma after a nine-year disease-free interval. Noda N, et al. **Jpn J Clin Oncol** 1996 Dec;26(6):472–5

Gastric cancer staging in Japan: a comparison with British practice [letter] Ubhi SS. **Jpn J Clin Oncol** 1997 Jun; 27(3):206–7

Biliary hamartomas simulating multiple hepatic metastasis on imaging findings. Iha H, et al. **Kurume Med J** 1996; 43(3):231–5

Mucinous adenocarcinoma of the stomach-clinicopathological studies. Koufuji K, et al. **Kurume Med J** 1996;43(4):289–94

A clinicopathological study of distal advanced gastric carcinoma with duodenal invasion. Ohta J, et al. **Kurume Med J** 1996;43(3):189–98

Single-cell mutation analysis of tumors from stained histologic slides. Becker I, et al. **Lab Invest** 1996 Dec; 75(6):801–7

Genetic evidence for the multicentric origin of synchronous multiple gastric carcinoma. Kang GH, et al. **Lab Invest** 1997 Mar;76(3):407–17

Diagnosis of gastric carcinoma in Japan and western countries [letter] Rugge M, et al. **Lancet** 1997 Aug 9; 350(9075):448

Differences in diagnostic criteria for gastric carcinoma between Japanese and western pathologists [see comments] Schlemper RJ, et al. **Lancet** 1997 Jun 14;349(9067):1725–9 . Comment in: Lancet 1997 Jun 14;349(9067):1711–2.

Evaluation of the international index in the prognosis of high grade gastric malt lymphoma. Castrillo JM, et al. **Leuk Lymphoma** 1996 Dec;24(1-2):159–63

Aggressive gastric peripheral T-cell lymphoma of CD8+ type associated with lymphomatous meningitis. Holst VA, et al. **Mod Pathol** 1997 May;10(5):504–9

Gastrointestinal stromal tumors with prominent signet-ring cell features [see comments] Suster S, et al. **Mod Pathol** 1996 Jun;9(6):609–13. Comment in: Mod Pathol 1996 Nov;9(11):1089.

A pitfall in assessing gastric lymphoma after eradication of Helicobacter pylori [letter] Fischbach W, et al. **N Engl J Med** 1997 May 22;336(21):1529–30

Morphological characteristics of Epstein-Barr virus-related early gastric carcinoma: a case-control study. Arikawa J, et al. **Pathol Int** 1997 Jun;47(6):360–7

Gastric stump carcinosarcoma with rhabdomyosarcomatous differentiation. Matsukuma S, et al. **Pathol Int** 1997 Jan; 47(1):73–7

Critical commentary to "gastric malt lymphoma with crystalline immunoglobulin inclusions and secondary immunoblastic lymphoma in a cervical lymph node" [comment] Diebold J. **Pathol Res Pract** 1995 Oct; 191(10):1060–1. Comment on: Pathol Res Pract 1995 Oct;191(10):1053–8.

Depth of infiltration of primary gastric B-cell lymphomas--correlations with proliferation, apoptosis and expression of p53 and bcl-2. Eidt S, et al. **Pathol Res Pract** 1996 Sep;192(9):925–30

Critical commentary to "gastric malt lymphoma with crystalline immunoglobulin inclusions and secondary immunoblastic in a cervical lymph node" [comment] Feller AC. **Pathol Res Pract** 1995 Oct;191(10):1059. Comment on: Pathol Res Pract 1995 Oct;191(10):1053–8.

Gastric malt lymphoma with crystalline immunoglobulin inclusions and secondary immunoblastic lymphoma in a

cervical lymph node [see comments] Fend F, et al. **Pathol Res Pract** 1995 Oct;191(10):1053–8. Comment in: Pathol Res Pract 1995 Oct;191(10):1059. Comment in: Pathol Res Pract 1995 Oct;191(10):1060–1.

Adenocarcinoma of the cardia in a young man: detection of somatic p53 mutation by immunohistochemistry and automated direct sequencing. Poremba C, et al. **Pathol Res Pract** 1995 Oct;191(10):1004–9

Differentiation of focal foveolar hyperplasia from hyperplastic polyps in gastric biopsy material. Stolte M, et al. **Pathol Res Pract** 1995 Dec;191(12):1198–1202

Synchronous carcinoma and primary MALT-lymphoma of the stomach. A report of two cases. Heitzman J, et al. **Pol J Pathol** 1997;48(1):57–62

Grading of gastric epithelial dysplasia. An interobserver study and analysis of diagnostic criteria. Koktysz R, et al. **Pol J Pathol** 1997;48(1):5–14

Gastric epithelial dysplasia. Is histological grading bearing any clinical relevance? [editorial] Stachura J. **Pol J Pathol** 1997;48(1):3

Cancer–stromal interaction through growth factor/cytokine networks implicated in growth of stomach cancer. Tahara E. **Princess Takamatsu Symp** 1994;24:187–94 (19 ref.)

Gastric cancer. Clinical and pathologic features. Gore RM. **Radiol Clin North Am** 1997 Mar;35(2):295–310 (92 ref.)

Gastric cancer. Radiologic staging. Miller FH, et al. **Radiol Clin North Am** 1997 Mar;35(2):331–49 (84 ref.)

Laparoscopic lymph node assessment in pretherapeutic staging of gastric and esophageal cancer. Rau B, et al. **Recent Results Cancer Res** 1996;142:209–15

Basal chromogranin A and gastrin concentrations in circulation correlate to endocrine cell proliferation in type–A gastritis. Borch K, et al. **Scand J Gastroenterol** 1997 Mar;32(3):198–202

Can endoscopic biopsy specimens be used for reliable Laurén classification of gastric cancer? Hansson LE, et al. **Scand J Gastroenterol** 1996 Jul;31(7):711–5

Relation between histologic subtypes and location of gastric cancer and Helicobacter pylori. Martín–de–Argila C, et al. **Scand J Gastroenterol** 1997 Apr;32(4):303–7

Immature mucopeptic cell expansion in Helicobacter pylori–positive patients: a marker of progression towards gastric preneoplastic changes? [letter] Testino G, et al. **Scand J Gastroenterol** 1997 Jun;32(6):623–4

Immediately preoperative laparoscopic staging for gastric cancer. D'Ugo DM, et al. **Surg Endosc** 1996 Oct; 10(10):996–9

Gastroduodenal polyps in familial adenomatous polyposis [letter] Petrelli NJ, et al. **Surg Endosc** 1996 Nov; 10(11):1118–9

The incidence of chromogranin A defined endocrine cells decreases with tumour progression in gastric adenocarcinoma. Ikeda Y, et al. **Surg Oncol** 1995; 4(5):255–60

Pathology neoplastic and non–neoplastic. Graeme–Cook F. **Surg Oncol Clin N Am** 1996 Jul;5(3):487–512 (31 ref.)

Prognostic indicators for cancer. Gastric cancer. Kirkwood KS, et al. **Surg Oncol Clin N Am** 1997 Jul;6(3):495–514 (78 ref.)

Distant lymph node metastasis of early gastric cancer. Isozaki H, et al. **Surg Today** 1997;27(7):600–5

Malignant lymphoma of the gastric stump developing 25 years after a distal gastrectomy for benign gastric disease: report of a case. Kondo K, et al. **Surg Today** 1996; 26(10):803–6

Disease–free survival for 6 years and 4 months after dissection of recurrent abdominal paraaortic nodes (no. 16) in gastric cancer: report of a case. Nashimoto A, et al. **Surg Today** 1997;27(2):169–73

Synchronous lymphoma and adenocarcinoma occurring as a collision tumor in the stomach: report of a case. Nishino N, et al. **Surg Today** 1996;26(7):508–12

Early gastric cancer manifested as brain metastasis: report of a case. Nomura T, et al. **Surg Today** 1997;27(4):334–6

The importance of neural invasion (NI) as a prognostic factor in diffuse invasive gastric cancer. Tanaka A, et al. **Surg Today** 1997;27(8):692–5

Soybean agglutinin binding as a useful prognostic indicator in stomach cancer. Terashima S, et al. **Surg Today** 1997; 27(4):293–7

Resection of liver metastasis from alpha–fetoprotein–producing early gastric cancer: report of a case. Tsurumachi T, et al. **Surg Today** 1997;27(6):563–6 (11 ref.)

Gastric cancer with carcinoma erysipeloides caused by spontaneous thoracic duct rupture: report of a case. Yamamura Y, et al. **Surg Today** 1997;27(2):166–8

Somatostatin receptor regulation of gastric enterochromaffin–like cell transformation to gastric carcinoid. Borin JF, et al. **Surgery** 1996 Dec;120(6):1026–32

Characterization of a gastric tumor cell line defective in MHC class I inducibility by both alpha– and gamma–interferon. Abril E, et al. **Tissue Antigens** 1996 May;47(5):391–8

Early gastric cancer in young adults. Kitamura K, et al. **Tohoku J Exp Med** 1996 Jun;179(2):93–100

Helicobacter mustelae–associated gastric adenocarcinoma in ferrets (Mustela putorius furo). Fox JG, et al. **Vet Pathol** 1997 May;34(3):225–9

Mucinous adenocarcinoma in the abomasum of a cow. Ritchey JW, et al. **Vet Pathol** 1996 Jul;33(4):454–6

What type of chromogranin does PHE5 monoclonal antibody react with? [letter; comment] Declich P, et al. **Virchows Arch** 1997 Jun;430(6):509–10. Comment on: Virchows Arch 1996 Jul;428(4–5):237–41.

Establishment and characterization of two cell lines derived from human diffuse gastric carcinomas xenografted in nude mice. Gärtner F, et al. **Virchows Arch** 1996 May;428(2):91–8

Intestinalization of gastric signet ring cell carcinomas with progression. Yamachika T, et al. **Virchows Arch** 1997 Aug; 431(2):103–10

Accuracy of current educational literature on the staging of gastric carcinoma. Fung AS. **World J Surg** 1997 Mar–Apr;21(3):237–9

General pattern of lymph node metastasis in early gastric carcinoma. Namieno T, et al. **World J Surg** 1996 Oct; 20(8):996–1000

Gastric carcinoids and neuroendocrine carcinomas: pathogenesis, pathology, and behavior. Rindi G, et al. **World J Surg** 1996 Feb;20(2):168–72

Impact of lymph node metastasis on survival with early gastric cancer. Seto Y, et al. **World J Surg** 1997 Feb; 21(2):186–89; discussion 190

Gastric MALT lymphoma and Helicobacter pylori. Wotherspoon AC. **Yale J Biol Med** 1996 Jan–Feb; 69(1):61–8 (32 ref.)

[Lipoma of the stomach—clinically progressing as pyloric stenosis] Iarŭmov N, et al. **Khirurgiia (Sofiia)** 1996; 49(6):55–6 **(Bul)**

[A dynamic study of the cytotoxic effects of hyperthermia combined with cis–diaminedichlorolplatinum (DDP) on human gastric cancer cell lines MKN28 and MKN45 in vitro] Chen W, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Mar;18(2):116–8 (Eng. Abstr.) **(Chi)**

[Recurrence of early gastric cancer] Shan J, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Oct;76(10):750–2 (Eng. Abstr.) **(Chi)**

[Studies on the phenotype deviation of the single–cell subclones of human stomach carcinoma MGC–803 cell line] Han YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1996 Mar;29(1):13–23 (Eng. Abstr.) **(Chi)**

[Protein kinase inhibitor staurosporine enhances cytotoxicity of antitumor drugs to cancer cells] Wang RH, et al. **Yao Hsueh Hsueh Pao** 1996;31(6):411–5 (Eng. Abstr.) **(Chi)**

[Linitis plastica of the digestive tract. A case with involvement of the stomach and rectum] Berrada S, et al. **Ann Gastroenterol Hepatol (Paris)** 1996 May–Jun; 32(3):120–2 (Eng. Abstr.) **(Fre)**

[Association of a low–grade MALT lymphoma and a slightly differentiated adenocarcinoma of the stomach] Brochériou I, et al. **Ann Pathol** 1997 Apr;17(2):109–12 (12 ref.) (Eng. Abstr.) **(Fre)**

[Krukenberg tumors. Analysis of a series of 28 cases] Savey L, et al. **J Chir (Paris)** 1996;133(9–10):427–31 (Eng. Abstr.) **(Fre)**

[Magnetic resonance tomography, endosonography and hydrosonography in staging stomach carcinoma] Kuntz C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:562–4 (Eng. Abstr.) **(Ger)**

[Comparative study of the dissemination of tumor cells in bone marrow and peripheral blood in stomach and colorectal carcinoma with RT–PCR] Soeth E, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:793–6 (Eng. Abstr.) **(Ger)**

[Carcinoid tumors of the stomach in atrophic autoimmune gastritis: classification, differential diagnosis and prognosis] Rappel S, et al. **Verh Dtsch Ges Pathol** 1996;80:199–207 (Eng. Abstr.) **(Ger)**

[Atypical metastasis of stomach carcinoma] Friedrich T, et al. **Zentralbl Chir** 1997;122(2):117–21 (Eng. Abstr.) **(Ger)**

[Systematic lymphadenectomy in stomach carcinoma—staging and therapy] Jähne J, et al. **Zentralbl Chir** 1996;121(2):126–30 (Eng. Abstr.) **(Ger)**

[Advantages of lymph node staging in 872 stomach carcinoma patients] Keller E. **Zentralbl Chir** 1996; 121(2):139–43 (Eng. Abstr.) **(Ger)**

[Reliability of intraoperative macroscopic evaluation of lymph node metastasis and effectiveness of lymphadenectomy in stomach carcinoma] Schmidt–Matthiesen A, et al. **Zentralbl Chir** 1996; 121(2):121–5 (Eng. Abstr.) **(Ger)**

[Gastric adenocarcinoma: magnetic resonance versus surgical staging] Costanzi A, et al. **Radiol Med (Torino)** 1996 Dec; 92(6):726–30 (Eng. Abstr.) **(Ita)**

[A case of Borrmann type 4 gastric cancer successfully treated with MTX and 5–FU therapy through the hepatic artery] Gonda T, et al. **Gan To Kagaku Ryoho** 1996 Sep; 23(11):1561–3 (Eng. Abstr.) **(Jpn)**

[Preoperative diagnosis and surgical treatment for lymph node metastasis in gastric cancer] Isozaki H, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(10):1275–83 (Eng. Abstr.) **(Jpn)**

[Induced hypertensive chemotherapy with angiotensin–II for liver metastases from gastric cancer] Iwasaki Y, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1558–60 (Eng. Abstr.) **(Jpn)**

[Analysis of DNA ploidy pattern and overexpression of p53 protein in cases of early gastric carcinoma with lymph node metastasis] Kido K, et al. **Gan To Kagaku Ryoho** 1997 Jul; 24 Suppl 2:320–3 (Eng. Abstr.) **(Jpn)**

[Effective transcatheter arterial embolization for hepatic metastasis in a case of AFP producing gastric cancer] Kobayashi T, et al. **Gan To Kagaku Ryoho** 1996 Oct; 23(12):1705–8 (Eng. Abstr.) **(Jpn)**

[A study of arterial infusion chemotherapy for gastric cancer patients with peritoneal metastasis] Kosaka T, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1467–71 (Eng. Abstr.) **(Jpn)**

[Chemotherapy for peritoneal dissemination in gastric cancer under ureteral catheterization] Kubo Y, et al. **Gan To Kagaku Ryoho** 1996 Dec;23(14):1951–7 (Eng. Abstr.) **(Jpn)**

[Usefulness of contrast–enhanced CT of the peritoneum to evaluate efficacy of neoadjuvant chemotherapy for peritoneal dissemination in an advanced gastric cancer case] Ohtani M, et al. **Gan To Kagaku Ryoho** 1996 Nov; 23(13):1837–40 (Eng. Abstr.) **(Jpn)**

[A case of advanced gastric cancer with multiple liver metastasis successfully treated with combination chemotherapy using UFT, CDDP and etoposide] Ono T, et al. **Gan To Kagaku Ryoho** 1996 Oct;23(12):1709–12 (Eng. Abstr.) **(Jpn)**

[Role of peritoneal lavage smears and gastric wall brushing smears in gastric cancer surgery] Shirakawa T, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(11):1472–5 (Eng. Abstr.) **(Jpn)**

[Antitumor effect and mechanism of a novel multifunctional nucleoside, 3'–ethynylnucleoside, on human cancers] Tanaka M, et al. **Gan To Kagaku Ryoho** 1997 Feb; 24(4):476–82 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Relation between the stromal volume and liver metastasis in gastric cancer] Teshima S, et al. **Gan To Kagaku Ryoho** 1997 Apr;24(6):737–9 **(Jpn)**

[Assessment of proliferative cell nuclear antigen expression and clinical prognosis in gastric malignant lymphoma] Tsurumachi T, et al. **Gan To Kagaku Ryoho** 1996 Nov; 23(13):1781–5 (Eng. Abstr.) **(Jpn)**

[Metastatic tumor of spermatic cord and tunica vaginalis testis from gastric cancer: a case report] Kageyama Y, et al. **Hinyokika Kiyo** 1997 Jun;43(6):429–31 (Eng. Abstr.) **(Jpn)**

[Clinicopathology of Epstein–Barr virus–related gastric carcinoma] Itoh T, et al. **Nippon Rinsho** 1997 Feb; 55(2):363–7 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Expression of Bcl–2 and Bax in human gastric cancer tissue] Komatsu K, et al. **Nippon Rinsho** 1996 Jul;54(7):1929–34 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Clinical and pathological study of gastric cancer treated without surgery in elderly patients] Hashimoto H, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jul;33(7):518–23 (Eng. Abstr.) **(Jpn)**

[A case of gastric lipoma prolapsed into the duodenal bulb, which caused ball valve syndrome] Machishi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Aug;93(8):560–4 (12 ref.) **(Jpn)**

[Pancreas like acinar glands in the esophagogastric junctional mucosa] Nokubi M. **Nippon Shokakibyo Gakkai Zasshi** 1996 Dec;93(12):876–83 (Eng. Abstr.) **(Jpn)**

[A case of gastric MALT lymphoma regressed endoscopically and pathologically after eradication of Helicobacter pylori] Seko A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jan;94(1):21–6 **(Jpn)**

[A case of extramedullary plasmacytoma of the stomach] Takehara Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Feb;94(2):111–6 (8 ref.) **(Jpn)**

[A case of liver metastasis from so–called hepatoid adenocarcinoma of stomach with lipiodol accumulation] Ueda H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Feb; 93(2):120–5 (14 ref.) **(Jpn)**

[A case of synchronous triple early cancer occurring in the stomach, colon and gallbladder] Yazawa K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Jun;94(6):440–4 (12 ref.) **(Jpn)**

[A 64–year–old woman with severe headache and progressive disturbance of consciousness (clinical conference)] Ito T, et al. **No To Shinkei** 1997 Jun; 49(6):571–81 (Eng. Abstr.) **(Jpn)**

[Changes in the endocrine apparatus of the gastric mucosa in forms of cancer of varying origin] Derizhanova IS, et al. **Arkh Patol** 1997 Jul–Aug;59(4):25–8 (Eng. Abstr.) **(Rus)**

[Changes in the gastric mucosa in endocrine–cell cancer] Derizhanova IS, et al. **Arkh Patol** 1996 Jul–Aug;58(4):32–5 (Eng. Abstr.) **(Rus)**

[Immunomorphologic characterization of various parameters of stomach cancer invasion] Frank GA, et al. **Arkh Patol** 1997 Mar–Apr;59(2):22–7 (Eng. Abstr.) **(Rus)**

[Functional morphology of the adenohypophysis in gastric precancer and cancer] Iushkov PV. **Arkh Patol** 1997 May–Jun;59(3):28–32 (Eng. Abstr.) **(Rus)**

[Dependence of the features of distant metastases and prognosis of stomach cancer on the histologic type of the primary tumor and the volume of regional lymph node metastases] Iushkov PV. **Arkh Patol** 1996 Jul–Aug; 58(4):36–8 (Eng. Abstr.) **(Rus)**

[Dependence of stomach cancer prognosis on features of regional lymph node metastasis and mechanisms of further dissemination of the tumor] Iushkov PV. **Arkh Patol** 1996 Jul–Aug;58(4):38–40 (Eng. Abstr.) **(Rus)**

[The clinico–morphological characteristics, diagnosis and treatment of early stomach cancer] Simonov NN, et al. **Vestn Khir Im I I Grek** 1997;156(1):28–31 (Eng. Abstr.) **(Rus)**

[Factors determining treatment effectiveness in localized stomach cancer] Simonov NN, et al. **Vopr Onkol** 1997; 43(2):210–3 (Eng. Abstr.) **(Rus)**

[Early gastric cancer in the remnant stomach. Case report] Castro D, et al. **G E N** 1995 Oct–Dec;49(4):314–6 (Eng. Abstr.) **(Spa)**

[Determination of nutritional parameters affected in patients with gastric adenocarcinoma who are candidates for surgery according to tumor stage] Saló Solá E, et al. **Nutr Hosp** 1996 May–Jun;11(3):185–94 (Eng. Abstr.) **(Spa)**

[Gastric collision tumor with osseous metaplasia] Camuñas Mohinelo FA, et al. **Rev Esp Enferm Dig** 1997 Apr; 89(4):317–9 (Eng. Abstr.) **(Spa)**

[Anatomopathological study of 86 gastric adenomas. Experience in 14 years] Pisano R, et al. **Rev Med Chil** 1996 Feb;124(2):204–8 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Differential expression of apoptosis receptors on diffuse and intestinal type stomach carcinoma. Vollmers HP, et al. **Cancer** 1997 Feb 1;79(3):433–40

Biological aspects of neuroendocrine gastro–enteropancreatic tumours. Oberg K. **Digestion** 1996;57 Suppl 1:42–4 (5 ref.)

The effect of vagotomy on enterochromaffin–like cells in Mastomys natalensis. Wängberg B, et al. **J Auton Nerv Syst** 1996 Jul 5;59(3):133–9

The role of Helicobacter pylori in the pathophysiology of duodenal ulcer disease and gastric cancer. McColl KE, et al. **Semin Gastrointest Dis** 1997 Jul;8(3):142–55 (88 ref.)

[Sympathoadrenal activity during the treatment of patients with cancer of the stomach and large intestine] Ial'chenko NA. **Lik Sprava** 1997 Mar–Apr;(2):40–3 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Inhibitory effects of curcumin–free aqueous turmeric extract on benzo[a]pyrene–induced forestomach papillomas in mice. Deshpande SS, et al. **Cancer Lett** 1997 Sep 16; 118(1):79–85

Potential preventive effects of Chelidonium majis L. (Papaveraceae) herb extract on glandular stomach tumor development in rats treated with N–methyl–N'–nitro–N nitrosoguanidine (MNNG) and hypertonic sodium chloride. Kim DJ, et al. **Cancer Lett** 1997 Jan 30; 112(2):203–8

Mechanism of differential efficacy of garlic organosulfides in preventing benzo(a)pyrene–induced cancer in mice. Srivastava SK, et al. **Cancer Lett** 1997 Sep 16;118(1):61–7

Reduction in NaCl–enhanced gastric carcinogenesis in rats fed a high–protein diet. Tatsuta M, et al. **Cancer Lett** 1997 Jun 24;116(2):247–52

Expression of transforming growth factor beta type II receptor reduces tumorigenicity in human gastric cancer cells. Chang J, et al. **Cancer Res** 1997 Jul 15;57(14):2856–9

The anti–human tumor effect and generation of human cytotoxic T cells in SCID mice given human peripheral blood lymphocytes by the in vivo transfer of the Interleukin–6 gene using adenovirus vector. Tanaka F, et al. **Cancer Res** 1997 Apr 1;57(7):1335–43

Inhibition by vitamins C and E of in vivo nitrosation and vitamin C occurrence in the stomach. Mirvish SS. **Eur J Cancer Prev** 1996 Sep;5 Suppl 1:131–6 (37 ref.)

Double blind randomized trial on occult blood bead (OBB) and gastroscopy–pathology screening for gastro–oesophageal cancer. Qin DX, et al. **Eur J Cancer Prev** 1997 Apr;6(2):158–61

Inhibition of benzo[a]pyrene–induced mouse forestomach neoplasia and reduction of H2O2 concentration in human polymorphonuclear leucocytes by flavour components of Japanese–style fermented soy sauce. Kataoka S, et al. **Food Chem Toxicol** 1997 May;35(5):449–57

Should we treat H. pylori infection to prevent gastric cancer? Parsonnet J, et al. **Gastroenterology** 1997 Mar;112(3):1044–5

Vitamin C and gastric cancer: supplements for some or fruit for all? O'Toole P, et al. **Gut** 1996 Sep;39(3):345–7 (54 ref.)

Chemoprevention of stomach cancer. Buiatti E, et al. **IARC Sci Publ** 1996;(136):35–9 (18 ref.)

Chemoprevention trial on precancerous lesions of the stomach in Venezuela: summary of study design and baseline data. Muñoz N, et al. **IARC Sci Publ** 1996; (139):125–33

Helicobacter pylori and cancer [letter; comment] Melato M, et al. **J R Soc Med** 1997 Jun;90(6):359. Comment on: J R Soc Med 1996 Dec;89(12):674–8.

A randomized controlled trial for chemoprevention of gastric cancer in high–risk Japanese population; study design, feasibility and protocol modification. Tsubono Y, et al. **Jpn J Cancer Res** 1997 Apr;88(4):344–9

Inhibition of MNNG–induced gastroduodenal carcinoma in rats by synchronous application of wine or 11% ethanol. Cerar A, et al. **Nutr Cancer** 1996;26(3):347–52

Tea and cancer prevention: an evaluation of the epidemiologic literature. Kohlmeier L, et al. **Nutr Cancer** 1997;27(1):1–13 (30 ref.)

[Stomach cancer and MALT lymphoma: prevention with Helicobacter pylori eradication] Fischbach W. **Dtsch Med Wochenschr** 1997 Aug 1;122(31–32):983–7 (67 ref.) **(Ger)**

[Prevention of cancer of the upper gastrointestinal tract] Lersch C, et al. **Dtsch Med Wochenschr** 1997 Feb 7; 122(6):169–73 (38 ref.) **(Ger)**

[Evaluation on a gastric mass survey–comparison with gastric mass screening using photofluorography and that using serum pepsinogen] Tomooka Y. **Nippon Koshu Eisei Zasshi** 1996 Feb;43(2):118–25 **(Jpn)**

[Detection of early esophageal and gastric cancers by mass screening] Mitsunaga N, et al. **Nippon Rinsho** 1996 May; 54(5):1415–20 (20 ref.) (Eng. Abstr.) **(Jpn)**

[The clinicopathological features and operative results in a cancer of the remnant stomach—risk and prevention of cancer after partial gastrectomy] Shibao K, et al. **Sangyo Ika Daigaku Zasshi** 1997 Jun 1;19(2):147–56 (Eng. Abstr.) **(Jpn)**

[An experimental study on the physical examination system for psychic in–patient, 3rd report; the practice of screening examinations for stomach and uterine cancer in Miyazaki Prefecture] Hosomi J, et al. **Seishin Shinkeigaku Zasshi** 1997;99(3):128–37 **(Jpn)**

RADIOGRAPHY

Liposarcoma of the stomach. López–Negrete L, et al. **Abdom Imaging** 1997 Jul–Aug;22(4):373–5

Gastric involvement in Waldenstrom macroglobulinemia: CT findings. Qutub HM, et al. **Abdom Imaging** 1997 Sep–Oct; 22(5):461–3

Gastric leiomyosarcoma: detection on plain chest radiograph [letter] Esaki M, et al. **AJR Am J Roentgenol** 1997 Jun; 168(6):1624–5

Gastric lesions: evaluation with three–dimensional images using helical CT. Lee DH, et al. **AJR Am J Roentgenol** 1997 Sep;169(3):787–9

Carcinoma of the esophagus and esophagogastric junction: sensitivity of radiographic diagnosis. Levine MS, et al. **AJR Am J Roentgenol** 1997 Jun;168(6):1423–6

Preoperative assessment of advanced gastric carcinoma using computed tomography. Adachi Y, et al. **Am J Gastroenterol** 1997 May;92(5):872–5

Calcified gastric cancer—CT findings before and after chemotherapy. Case report and discussion of the pathogenesis of this type of calcification. Balestreri L, et al. **Clin Imaging** 1997 Mar–Apr;21(2):122–5

Adenocarcinoma of the gastro–esophageal junction: CT for monitoring during neoadjuvant chemotherapy. Helmberger H 3rd, et al. **Eur J Radiol** 1996 Sep;23(2):107–10

Computed tomography of the gastro–duodenal region. Small JH, et al. **Eur J Radiol** 1996 May;22(2):95–103 (39 ref.)

Hydro–CT in patients with gastric cancer: preoperative radiologic staging. Rossi M, et al. **Eur Radiol** 1997; 7(5):659–64

Fluoroscopic–guided in vivo gastric mapping for assessment of gastric carcinoma. Makuch RS, et al. **Invest Radiol** 1997 Aug;32(8):496–9

Efficacy of helical CT in T–staging of gastric cancer. Fukuya T, et al. **J Comput Assist Tomogr** 1997 Jan–Feb;21(1):73–81

Hepatocellular carcinoma presenting as extrahepatic mass on computed tomography. Kimura H, et al. **J Gastroenterol** 1997 Apr;32(2):260–3

Radiological retrospective study of gastric cancer in humans: two patterns of development in elevated type gastric cancer. Miwa H, et al. **J Gastroenterol Hepatol** 1997 Aug; 12(8):599–605

CT of the stomach: spectrum of disease. Fishman EK, et al. **Radiographics** 1996 Sep;16(5):1035–54 (57 ref.)

Gastric cancer. Radiologic diagnosis. Gore RM, et al. **Radiol Clin North Am** 1997 Mar;35(2):311–29 (88 ref.)

Gastric cancer. Radiologic staging. Miller FH, et al. **Radiol Clin North Am** 1997 Mar;35(2):331–49 (84 ref.)

Non–Hodgkin lymphoma of the stomach: a cause of linitis plastica. Levine MS, et al. **Radiology** 1996 Nov; 201(2):375–8

[X–ray endoscopic semiotics and diagnostic algorithm of radiation studies of preneoplastic gastric mucosa changes] Akberov RF, et al. **Vestn Rentgenol Radiol** 1997 May–Jun; (3):4–6 (Eng. Abstr.) **(Rus)**

[Potentialities of present day computed tomography in diagnosis of stomach cancer] Portnoĭ LM, et al. **Vestn Rentgenol Radiol** 1997 May–Jun;(3):7–14 (23 ref.) (Eng. Abstr.) **(Rus)**

[The potential of radiologic methods in the diagnosis of precancerous changes in the gastric mucosa] Gorshkov AN, et al. **Vopr Onkol** 1996;42(4):91–2 **(Rus)**

RADIONUCLIDE IMAGING

Adenocarcinoma mimicking primary gastric lymphoma demonstrated by Ga–67 citrate imaging. Hirano T, et al. **Clin Nucl Med** 1997 Mar;22(3):187–8

Ga–67 SPECT in primary gastroesophageal malignant melanoma. Kinuya S, et al. **Clin Nucl Med** 1996 Apr; 21(4):325–6

Somatostatin receptor: scintigraphy and radionuclide therapy. Krenning EP, et al. **Digestion** 1996;57 Suppl 1:57–61

The value of somatostatin–receptor scintigraphy in newly diagnosed endocrine gastroenteropancreatic tumors. Kisker O, et al. **J Am Coll Surg** 1997 May;184(5):487–92

Influence of chemotherapy on FDG uptake by human cancer xenografts in nude mice. Yoshioka T, et al. **J Nucl Med** 1997 May;38(5):714–7

Tumor–specific accumulation of 125I–labeled mouse–human chimeric anti–CEA antibody in a xenografted human cancer model demonstrated by whole–body autoradiography and immunostaining. Haruno M, et al. **Nucl Med Biol** 1996 Aug;23(6):821–6

Radioimmunoscintigraphy using technetium–99m–labeled parental mouse and mouse–human chimeric antibodies to carcinoembryonic antigen in athymic nude mice bearing tumor. Karube Y, et al. **Nucl Med Biol** 1996 Aug; 23(6):753–9

RADIOTHERAPY

Somatostatin receptor: scintigraphy and radionuclide therapy. Krenning EP, et al. **Digestion** 1996;57 Suppl 1:57–61

IORT in gastric carcinoma: the Lyon experience. A retrospective series of 63 patients. Coquard R, et al. **Front Radiat Ther Oncol** 1997;31:161–4

Early results of IORT in the treatment of gastric cancer. Krämling HJ, et al. **Front Radiat Ther Oncol** 1997; 31:157–60

Radiotherapy enhances laser palliation of malignant dysphagia: a randomised study. Sargeant IR, et al. **Gut** 1997 Mar;40(3):362–9

Paclitaxel and concurrent radiation for locally advanced pancreatic and gastric cancer: a phase I study. Safran H, et al. **J Clin Oncol** 1997 Mar;15(3):901–7

Patterns of failure and long–term results in high–risk resected gastric cancer treated with postoperative radiotherapy with or without intraoperative electron boost. Martínez–Monge R, et al. **J Surg Oncol** 1997 Sep;66(1):24–9

[Combined treatment of stomach neoplasms] Chissov VI, et al. **Khirurgiia (Mosk)** 1997;(6):4–9 (Eng. Abstr.) **(Rus)**

[Combined and surgical treatment of cancer of the proximal stomach involving the lower third of the esophagus] Bekirov ShA. **Klin Khir** 1997;(1):37–8 (Eng. Abstr.) **(Rus)**

REHABILITATION

[The potential for rehabilitation of patients with proximal gastric cancer] Volkov ON, et al. **Vopr Onkol** 1997; 43(2):215–7 **(Rus)**

SECONDARY

A phase II study of 5–fluorouracil, leucovorin, adriamycin, and cisplatin (FLAP) for metastatic gastric and gastroesophageal junction adenocarcinoma. A Penn Cancer Clinical Trial Group and Roswell Park Cancer Institute Community Oncology Research Program Trial. Vaughn DJ, et al. **Am J Clin Oncol** 1997 Jun;20(3):242–6

Metastatic head and neck cancer to the percutaneous endoscopic gastrostomy exit site: a case report and review of the literature. Schneider AM, et al. **Am Surg** 1997 Jun; 63(6):481–6 (11 ref.)

Ga–67 visualizing metastases of malignant melanoma to gastric cancer. Fukumoto M, et al. **Clin Nucl Med** 1997 Jun;22(6):415–6

High–dose infusional 5–fluorouracil combination therapy of metastatic gastric and colorectal cancer. Loeffler TM, et al. **J Infus Chemother** 1996 Summer;6(3):137–40

Gastric metastasis of mammary signet ring cell carcinoma—a differential diagnosis with primary gastric signet ring cell carcinoma. Yim H, et al. **J Korean Med Sci** 1997 Jun; 12(3):256–61

Dominant negative inhibition of the association between beta–catenin and c–erbB–2 by N–terminally deleted beta–catenin suppresses the invasion and metastasis of cancer cells. Shibata T, et al. **Oncogene** 1996 Sep 5; 13(5):883–9

Primary malignant lymphoma of the rectum with distant metastasis to the stomach: report of a case. Nyui S, et al. **Surg Today** 1997;27(4):349–52

[Gastric metastasis of cutaneous melanoma. Apropos of a case letter] Bettineschi F, et al. **J Chir (Paris)** 1997 May; 134(1):35–8 (Eng. Abstr.) **(Fre)**

[Gastric perforation caused by metastasis of breast cancer in a man (letter; comment)] Fra J, et al. **Presse Med** 1996 Sep 14;25(26):1215. Comment on: Presse Med 1994 Dec 3;23(38):1758–9. **(Fre)**

[Gastric metastasis of epidermoid cancer of the trachea (letter)] Wohlschies E, et al. **Rev Pneumol Clin** 1996; 52(4):265–6 **(Fre)**

[Metastatic linitis plastica of the bladder] Signori GB, et al. **Arch Ital Urol Androl** 1997 Feb;69(1):69–72 (18 ref.) (Eng. Abstr.) **(Ita)**

[Gastrointestinal metastasis from lung cancer] Ryo H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1996 Sep; 34(9):968–72 (Eng. Abstr.) **(Jpn)**

SURGERY

Functional results after total gastrectomy with enteric pouch reconstruction. A review of 34 cases. Michielsen D, et al. **Acta Chir Belg** 1996 Jul–Aug;96(4):155–7

Prognosis of gastric carcinoma with emphasis on lymph node status. Topal B, et al. **Acta Chir Belg** 1997 Jun;97(3):118–22

Multivisceral surgery in advanced gastric carcinoma. Bösing N, et al. **Acta Chir Hung** 1995–96;35(3–4):177–84

Surgery of gastric cancer in patients over 80 years old. Uemura T, et al. **Acta Med Okayama** 1997 Jun;51(3):159–65

Surgical results of perforated gastric carcinoma: an analysis of 155 Japanese patients. Adachi Y, et al. **Am J Gastroenterol** 1997 Mar;92(3):516–8

Esophageal reflux after total or proximal gastrectomy in

patients with adenocarcinoma of the gastric cardia. Hsu CP, et al. **Am J Gastroenterol** 1997 Aug;92(8):1347–50

Three histologically different tiny gastric cancers developing adjacent to each other, resected endoscopically in a single mucosal piece. Matsuhashi N, et al. **Am J Gastroenterol** 1996 Oct;91(10):2200–2

Management of gastric polyps: the need of polypectomy also for small polyps [letter; comment] Papa A, et al. **Am J Gastroenterol** 1997 Apr;92(4):721–2. Comment on: Am J Gastroenterol 1996 Apr;91(4):714–7.

Gastric remnant carcinoma: just another proximal gastric cancer or a unique entity? Newman E, et al. **Am J Surg** 1997 Apr;173(4):292–7

Effectiveness of extended lymphadenectomy in noncurative gastrectomy [letter; comment] Roukos D, et al. **Am J Surg** 1996 Sep;172(3):303. Comment on: Am J Surg 1995 Feb;169(2):261–4.

Transhiatal versus transthoracic esophagectomy for adenocarcinoma of the distal esophagus and cardia. Stark SP, et al. **Am J Surg** 1996 Nov;172(5):478–81; discussion 481–2

Gastric cancer: surgical management and prognosis. Arak A, et al. **Ann Chir Gynaecol** 1996;85(4):293–8

The future of oesophageal and gastric surgery. Siewert JR. **Ann Chir Gynaecol** 1996;85(3):196–200 (1 ref.)

Does surgery belong to medical history for gastric lymphomas? [editorial; comment] Coiffier B, et al. **Ann Oncol** 1997 May;8(5):419–21. Comment on: Ann Oncol 1997 May;8(5):497–9.

Proximal gastric cancers resected via a transabdominal–only approach. Results and comparisons to distal adenocarcinoma of the stomach. Harrison LE, et al. **Ann Surg** 1997 Jun;225(6):678–83; discussion 683–5

Ileocolon interposition as a substitute stomach after total or proximal gastrectomy. Sakamoto T, et al. **Ann Surg** 1997 Aug;226(2):139–45

Extended surgery—left upper abdominal exenteration plus Appleby's method—for type 4 gastric carcinoma. Furukawa H, et al. **Ann Surg Oncol** 1997 Apr–May; 4(3):209–14

Combined intensive chemotherapy and radical surgery for incurable gastric cancer. Nakajima T, et al. **Ann Surg Oncol** 1997 Apr–May;4(3):203–8

Electrical activity recorded from abdominal surface before and after gastric surgery in man. Riezzo G, et al. **Arch Physiol Biochem** 1996;104(1):50–6

Gut function and immune and inflammatory responses in patients perioperatively fed with supplemented enteral formulas. Braga M, et al. **Arch Surg** 1996 Dec; 131(12):1257–64; discussion 1264–5

Stomach–partitioning gastrojejunostomy for unresectable gastric carcinoma. Kaminishi M, et al. **Arch Surg** 1997 Feb; 132(2):184–7

Positive proximal resection margins after resection for carcinoma of the oesophagus and stomach: effect on survival and symptom recurrence. Gall CA, et al. **Aust N Z J Surg** 1996 Nov;66(11):734–7

Solitary gastric Peutz–Jeghers polyp and angiolipoma presenting as acute haemorrhage. Hunt J, et al. **Aust N Z J Surg** 1996 Oct;66(10):713–5

Pilot study for preoperative administration of l–OHP to patients with advanced scirrhous type gastric cancer. Eriguchi M, et al. **Biomed Pharmacother** 1997;51(5):217–20

End results of simultaneous pancreatectomy, splenectomy and total gastrectomy for patients with gastric carcinoma. Otsuji E, et al. **Br J Cancer** 1997;75(8):1219–23

Decision–making in surgery: the management of gastric carcinoma. Huang J, et al. **Br J Hosp Med** 1997 May 21–Jun 3;57(10):502–4

Oral erythromycin improves gastrointestinal motility and transit after subtotal but not total gastrectomy for cancer. Altomare DF, et al. **Br J Surg** 1997 Jul;84(7):1017–21

Prognostic significance of lymph node dissection in gastric cancer. de Manzoni G, et al. **Br J Surg** 1996 Nov; 83(11):1604–7

Radical lymphadenectomy in the management of early gastric cancer. Hayes N, et al. **Br J Surg** 1996 Oct;83(10):1421–3

Wedge resection of the stomach for gastric leiomyosarcoma. Katai H, et al. **Br J Surg** 1997 Apr;84(4):560–1

Prognostic significance of lymph node metastasis in advanced carcinoma of the stomach. Kwon SJ, et al. **Br J Surg** 1996 Nov;83(11):1600–3

Food intake after gastrectomy for gastric carcinoma: the role of a gastric reservoir. Liedman B, et al. **Br J Surg** 1996 Aug;83(8):1138–43

Intragastric endoscopic surgery using the transanal endoscopic microsurgery technique. Nakagoe T, et al. **Br J Surg** 1997 Jun;84(6):830

Port–site metastasis in patients undergoing laparoscopy for gastrointestinal malignancy [letter; comment] Nduka CC, et al. **Br J Surg** 1997 Apr;84(4):583. Comment on: Br J Surg 1996 Oct;83(10):1419–20. Comment on: Br J Surg 1996 Oct;83(10):1478.

Benefits of D2 lymph node dissection for patients with gastric cancer and pN0 and pN1 lymph node metastases [letter; comment] Noguchi M. **Br J Surg** 1997 Jul;84(7):1032–3. Comment on: Br J Surg 1996 Aug;83(8):1144–7.

D2 gastrectomy: lessons from a prospective audit of the learning curve. Parikh D, et al. **Br J Surg** 1996 Nov; 83(11):1595–9

Radical lymphadenectomy in the management of early gastric cancer [letter] Sano T, et al. **Br J Surg** 1997 Apr;84(4):581–2

Amylase concentration of drainage fluid after total gastrectomy. Sano T, et al. **Br J Surg** 1997 Sep;84(9):1310–2

Prognostic significance of non–gastric malignancy after treatment of early gastric cancer. Seto Y, et al. **Br J Surg** 1997 Mar;84(3):418–21

Benefits of D2 lymph node dissection for patients with gastric cancer and pN0 and pN1 lymph node metastases [see comments] Siewert JR, et al. **Br J Surg** 1996 Aug; 83(8):1144–7. Comment in: Br J Surg 1997 Jul;84(7):1032–3.

Restorative caecogastroplasty reconstruction after pylorus–preserving near–total gastrectomy: a preliminary study. Uras C, et al. **Br J Surg** 1997 Mar;84(3):406–9

Systemic chemotherapy for gastric carcinoma followed by postoperative intraperitoneal therapy: a final report. Crookes P, et al. **Cancer** 1997 May 1;79(9):1767–75

Effect of Helicobacter pylori eradication on subsequent development of cancer after endoscopic resection of early gastric cancer. Uemura N, et al. **Cancer Epidemiol Biomarkers Prev** 1997 Aug;6(8):639–42

Extensive lymph–node dissection in gastric cancer: is it of therapeutic value? [editorial] Roukos DH, et al. **Cancer Treat Rev** 1996 Jul;22(4):247–52

Endoscopic polypectomy of a large inflammatory fibroid polyp of the stomach: a case report. Leu MC, et al. **Chang Keng I Hsueh** 1997 Jun;20(2):127–31

Prognostic indicators for survival after curative resection for patients with carcinoma of the stomach. Wu CW, et al. **Dig Dis Sci** 1997 Jun;42(6):1265–9

Endoscopy–assisted laparoscopic resection of the gastric wall facilitated by a double–lifting method. Altorjay A, et al. **Endoscopy** 1997 Mar;29(3):227

Extracorporeal bypassing of a partial obstruction of the afferent loop by percutaneous endoscopic jejunostomy and gastrostomy. Caca K, et al. **Endoscopy** 1997 Feb; 29(2):142–3

Diagnosis of borderline adenomas of the stomach by endoscopic mucosal resection. Fujiwara Y, et al. **Endoscopy** 1996 Jun;28(5):425–30

Endoscopic mucosectomy using an esophageal variceal ligation device for minute gastric cancer. Lee DK, et al. **Endoscopy** 1996 May;28(4):386–9

Possibilities and limitations of endoscopic resection for early gastric cancer. Noda M, et al. **Endoscopy** 1997 Jun; 29(5):361–5

Primary liposarcoma of the stomach resected endoscopically. Yamamoto K, et al. **Endoscopy** 1995 Nov;27(9):711 (5 ref.)

Time trends in diagnostic strategy, treatment, and prognosis of gastric cancer in the elderly: a population based study. Benhamiche AM, et al. **Eur J Cancer Prev** 1997 Feb; 6(1):71–7

Resectional surgery in carcinoma of the oesophagus and cardia: what influences long–term survival? Sharpe DA, et al. **Eur J Cardiothorac Surg** 1996;10(5):359–63; discussion 363–4

Helicobacter pylori gastritis associated with a gastric inflammatory fibroid tumour and sarcoidosis. Buciuto R, et al. **Eur J Surg** 1996 May;162(5):421–4

Leakage of intrathoracic oesophagovisceral anastomoses in adenocarcinoma of the gastric cardia: changes in serial APACHE II scores and their prognostic significance. Fahn HJ, et al. **Eur J Surg** 1997 May;163(5):345–50

Long–term survival after gastrectomy for advanced bleeding or perforated gastric carcinoma. Gertsch P, et al. **Eur J Surg** 1996 Sep;162(9):723–7

Extended lymph node dissection for gastric cancer: results of a prospective, multi–centre analysis of morbidity and mortality in 118 consecutive cases. Degiuli M, et al. **Eur J Surg Oncol** 1997 Aug;23(4):310–4

Surgical treatment of early cancer of the proximal third of the stomach. Kodera Y, et al. **Eur Surg Res** 1997; 29(4):303–10

Measurement of pancreatic blood flow to prevent pancreatic juice leakage after pancreas–preserving total gastrectomy for gastric cancer. Konno H, et al. **Eur Surg Res** 1997; 29(4):287–91

Laparoscopic staging and treatment of gastric cancer [editorial] Ballesta–Lopez C, et al. **G Chir** 1997 Jan–Feb; 18(1–2):5–6

Therapeutic strategies for early gastric cancer. Sowa M, et al. **Gan To Kagaku Ryoho** 1997 May;24 Suppl 1:18–28 (10 ref.)

Endoscopic mucosal resection of gastric neoplasms using a ligating device. Akiyama M, et al. **Gastrointest Endosc** 1997 Feb;45(2):182–6

Endoscopic ultrasound–assisted band ligation: a new technique for resection of submucosal tumors. Chang KJ, et al. **Gastrointest Endosc** 1996 Dec;44(6):720–2

Endoscopic mucosal resection of gastric tumors located in the lesser curvature of the upper third of the stomach. Matsushita M, et al. **Gastrointest Endosc** 1997 Jun; 45(6):512–5

Combined cautery and retrieval snares for gastrointestinal polypectomy. Nakao NL. **Gastrointest Endosc** 1996 Nov; 44(5):602–5

Memory metal stents for palliation of malignant obstruction of the oesophagus and cardia. Sterling MJ, et al. **Gastrointest Endosc** 1996 Oct;44(4):513–5

Endoscopic ultrasonic probes and mucosectomy for early gastric carcinoma. Yasuda K. **Gastrointest Endosc** 1996 Feb;43(2 Pt 2):S29–31

Endoscopic treatment of early oesophageal or gastric cancer. Takeshita K, et al. **Gut** 1997 Jan;40(1):123–7

Endoscopic Nd–YAG laser therapy as palliative treatment for esophageal and cardial cancer. Freitas D, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):633–7

Surgical treatment of gastric cancer detected by mass screening. Hanazaki K, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1126–32

Surgical outcome in early gastric cancer with lymph node metastasis. Hanazaki K, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):907–11

Indicative value of carcinoembryonic antigen (CEA) for liver recurrence following curative resection of stage II and III gastric cancer. Ikeda Y, et al. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1281–7

Quality–of–life after curative surgery for gastric cancer: a comparison between total gastrectomy and subtotal gastric resection. Jentschura D, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1137–42

Is gastric remnant cancer clinically different from primary gastric cancer? Lo SS, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):299–301

A case of small cell carcinoma of the stomach. Matsui T, et al. **Hepatogastroenterology** 1997 Jan–Feb;44(13):156–60

Emptying of the jejunal pouch as a gastric substitute after total gastrectomy for cancer. Nakane Y, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):901–6

Short segment of left colon substitution following proximal gastrectomy. Ohwada S, et al. **Hepatogastroenterology** 1996 Sep–Oct;43(11):1256–9

Surgical treatment for gastric carcinomas with concomitant hepatic metastasis. Saito A, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):560–4

DNA ploidy, proliferative index and EGF–R status in 130 cases of resected gastric cancer—a multivariate analysis. Santoro E, et al. **Hepatogastroenterology** 1997 May–Jun; 44(15):826–37

Intra–operative diagnosis of N2 lymph node metastasis of gastric cancer. Seto Y, et al. **Hepatogastroenterology** 1997 May–Jun;44(15):838–41

Benefits of early postoperative enteral feeding in cancer patients. Braga M, et al. **Infusionsther Transfusionsmed** 1995 Oct;22(5):280–4

The value of prophylactic R2 lymph node dissection for gastric cancer. Ikeda Y, et al. **Int Surg** 1995 Jul–Sep; 80(3):208–10

Symposium on endoscopic hemostasis in gastric diseases. 4. Endoscopic mucosal resection for early gastric cancer. Hamada T, et al. **Intern Med** 1997 Feb;36(2):131

Symposium on endoscopic hemostasis in gastric diseases. 3. Endoscopic treatment of early gastric cancer: therapeutic effectiveness and possible extension of the indications. Ida K, et al. **Intern Med** 1997 Feb;36(2):129–31

Morbidity after D2 and D3 gastrectomy for node–positive gastric carcinoma. Adachi Y, et al. **J Am Coll Surg** 1997 Mar;184(3):240–4

Curative gastrectomy [letter; comment] Boba A. **J Am Coll Surg** 1997 Jun;184(6):670. Comment on: J Am Coll Surg 1996 Sep;183(3):201–7.

Surgical treatment of Borrmann type IV gastric carcinoma [letter; comment] Bozzetti F. **J Am Coll Surg** 1997 Aug; 185(2):200–1. Comment on: J Am Coll Surg 1996 Nov;183(5):480–5.

Surgical management of carcinoma of the stomach in elderly patients [editorial; comment] Karl RC. **J Am Coll Surg** 1997 Jan;184(1):77–9. Comment on: J Am Coll Surg 1997 Jan;184(1):9–15.

Gastrectomy with combined resection of other organs for carcinoma of the stomach with invasion to adjacent organs: clinical efficacy in a retrospective study. Kodama I, et al. **J Am Coll Surg** 1997 Jan;184(1):16–22

Metastatic gastric lymph node rate is a significant prognostic factor for resectable stage IV stomach cancer. Kodera Y, et al. **J Am Coll Surg** 1997 Jul;185(1):65–9

Surgical treatment of Borrmann type IV gastric carcinoma: relevance of lymphadenectomy in improving survival [see comments] Kodera Y, et al. **J Am Coll Surg** 1996 Nov; 183(5):480–5. Comment in: J Am Coll Surg 1997 Aug;185(2):200–1.

Pyloroplasty and pyloromyotomy in gastric replacement of the esophagus after esophagectomy: a randomized controlled trial. Law S, et al. **J Am Coll Surg** 1997 Jun; 184(6):630–6

Long–term results of operation for carcinoma of the stomach in T1/T2 stages: critical evaluation of the concept of early carcinoma of the stomach [letter] Roukos D, et al. **J Am Coll Surg** 1997 Jan;184(1):99–101

Factors predicting hospitalization after operative treatment for gastric carcinoma in patients older than 70 years [see comments] Schwarz RE, et al. **J Am Coll Surg** 1997 Jan; 184(1):9–15. Comment in: J Am Coll Surg 1997 Jan;184(1):77–9.

Role of splenectomy in gastric cancer surgery: adverse effect of elective splenectomy on longterm survival. Wanebo HJ, et al. **J Am Coll Surg** 1997 Aug;185(2):177–84

Gastric carcinoma: does lymph node dissection alter survival? [see comments] Wanebo HJ, et al. **J Am Coll Surg** 1996 Dec;183(6):616–24. Comment in: J Am Coll Surg 1997 Jun;184(6):667–9.

Optimal surgical strategy for potentially curable serosa–involved gastric carcinoma with intraperitoneal free cancer cells. Wu CC, et al. **J Am Coll Surg** 1997 Jun; 184(6):611–7

Gastrojejunal reconstruction after subtotal gastrectomy using

stapler devices. Personal technique. Palaia R, et al. **J Chemother** 1997 Apr;9(2):153–4

Multiple gastric carcinoid tumors: endoscopic management. González Ramírez A, et al. **J Clin Gastroenterol** 1996 Jul; 23(1):75–7

Carcinoma of stomach complicating pregnancy. Lo SS, et al. **J Clin Gastroenterol** 1996 Dec;23(4):299–300

Intestinal-type tumour in resected gastric remnant cancer. Lo SS, et al. **J Gastroenterol Hepatol** 1997 Jun;12(6):434–6

Gasless laparoscopic excision of bleeding gastric polyp. Leong HT, et al. **J Laparoendosc Surg** 1996 Jun;6(3):189–91

Oesophagogastrectomy for carcinoma in patients under 50 years of age. Adam DJ, et al. **J R Coll Surg Edinb** 1996 Dec;41(6):371–3

Roux-en-Y biliary diversion: a worthwhile procedure? Skinner PP, et al. **J R Coll Surg Edinb** 1996 Feb;41(1):14–6

N-nitroso compounds in the gastric juice of normal controls, patients with partial gastrectomies, and gastric cancer patients. Guadagni S, et al. **J Surg Oncol** 1996 Dec; 63(4):226–33

Surgically curable and incurable scirrhous carcinomas of the stomach. Kinugasa S, et al. **J Surg Oncol** 1997 Jul; 65(3):194–200

Analysis of lymph node metastasis in early gastric cancer: rationale of limited surgery. Kitamura K, et al. **J Surg Oncol** 1997 Jan;64(1):42–7

Gastric stump carcinoma after partial gastrectomy for benign gastric lesion: what is feasible as standard surgical treatment? Kodera Y, et al. **J Surg Oncol** 1996 Oct; 63(2):119–24

Spleen- and pancreas-preserving total gastrectomy with superextended lymphadenectomy including dissection of the para-aortic lymph nodes for gastric cancer. Uyama I, et al. **J Surg Oncol** 1996 Dec;63(4):268–70

Survival benefit of extended D2 resection for proximal gastric cancer. Volpe CM, et al. **J Surg Oncol** 1997 Mar; 64(3):231–6

Esophagogastrectomy for carcinoma of the esophagus and cardia: a comparison of findings and results after standard resection in three consecutive eight-year intervals with improved staging criteria. Ellis FH Jr, et al. **J Thorac Cardiovasc Surg** 1997 May;113(5):836–46; discussion 846–8

Management of early gastric cancer in Japan [letter] Reid I. **Jpn J Clin Oncol** 1997 Apr;27(2):119

Preoperative evaluation of the curative resectability of gastric cancer by abdominal computed tomography and ultrasonography: a prospective comparison study. Kim JJ, et al. **Korean J Intern Med** 1997 Jan;12(1):1–6

Gastric cancer surgery in the octogenarian. Koufuji K, et al. **Kurume Med J** 1997;44(2):91–7

Remnant-stump gastric cancer following partial gastrectomy-clinicopathological studies. Takeda J, et al. **Kurume Med J** 1996;43(4):267–72

Splenectomy for en bloc node dissection in gastric cancer: a possible cause of portal vein thrombosis. Kogire M, et al. **Nippon Geka Hokan** 1996 May 1;65(2):49–53

Two cases of recurrent pulmonary metastasis resected after operation for gastric cancer. Urabe M, et al. **Nippon Geka Hokan** 1996 Jan 1;65(1):22–9

Gastric cancer surgical practice guidelines. Gastric Cancer Practice Guideline Committee. Evans DB, et al. **Oncology (Huntingt)** 1997 Jul;11(7):1067–72

Quality of life in gastric cancer prior to gastrectomy. Svedlund J, et al. **Qual Life Res** 1996 Apr;5(2):255–64

Nutrient malassimilation following total gastrectomy. Brägelmann R, et al. **Scand J Gastroenterol Suppl** 1996; 218:26–33

Gastric stump carcinoma: a surgical challenge. Looi KP, et al. **Singapore Med J** 1996 Apr;37(2):184–5 (15 ref.)

Covered metal stent for tumor obstruction of efferent loop recurrence after gastrectomy. Cheung HY, et al. **Surg Endosc** 1997 Sep;11(9):936–8

Resection of a gastric leiomyoma using combined laparoscopic and gastroscopic approach. Gurbuz AT, et al. **Surg Endosc** 1997 Mar;11(3):285–6

Laparoscopic resection of posterior gastric leiomyoma. Ibrahim IM, et al. **Surg Endosc** 1997 Mar;11(3):277–9

A new sealing device (Sandwich-disc) for rapid recreation of pneumoperitoneum during laparoscopic assisted surgery. Kitano S, et al. **Surg Endosc** 1996 Oct;10(10):1031–2

Combining minimal access procedures expands the potential of laparoscopic surgery [editorial] Larson GM. **Surg Endosc** 1997 Mar;11(3):225

Laparoscopic resection of bleeding gastric polyps. Siu WT, et al. **Surg Endosc** 1997 Mar;11(3):283–4

A four-point fixation method for the resection of early gastric cancer, with particular reference to the analysis of cases of incomplete resection. Tanaka M, et al. **Surg Endosc** 1997 Mar;11(3):295–8

Laparoscopic intragastric surgery for gastric leiomyoma. Taniguchi E, et al. **Surg Endosc** 1997 Mar;11(3):287–9

Laparoscopic excision of posterior gastric wall leiomyoma. Basso N, et al. **Surg Laparosc Endosc** 1996 Feb;6(1):65–7

Adenocarcinoma of the gastric antrum: does D2 total gastrectomy with splenectomy improve prognosis compared to D1 subtotal gastrectomy? A long-term survival analysis with emphasis on Lauren classification. Roukos D, et al. **Surg Oncol** 1995;4(6):323–32

Monocyte function associated with intermittent lentinan therapy after resection of gastric cancer. Takeshita K, et al. **Surg Oncol** 1996 Feb;5(1):23–8

Gastric cancer nodal metastases: biologic significance and therapeutic considerations. Hundahl SA. **Surg Oncol Clin N Am** 1996 Jan;5(1):129–44 (72 ref.)

Surgery for gastric cancer in patients with cirrhosis. Isozaki H, et al. **Surg Today** 1997;27(1):17–21

The effects of convenient vagorrhaphy on the early recovery of gastric secretion and emptying: an experimental study on function-preserving gastric cancer surgery. Kodama M, et al. **Surg Today** 1997;27(8):741–4

A malignant granular cell tumor of the stomach: report of a case. Matsumoto H, et al. **Surg Today** 1996;26(2):119–22

Jejunal pouch and interposition reconstruction after total gastrectomy for cancer. Nakane Y, et al. **Surg Today** 1997; 27(8):696–701

Chronological changes in bone mineral content following gastrectomy. Nihei Z, et al. **Surg Today** 1996;26(2):95–100

Clinically silent pancreatic glucagonomas discovered in resected specimens by immunohistochemistry. Hashimoto M, et al. **Surgery** 1997 Sep;122(3):632–3

Surgical treatment and outcome for node-negative gastric cancer. Maehara Y, et al. **Surgery** 1997 Jun;121(6):633–9

Total gastrectomy for primary gastric lymphoma at stages IE and IIE: a prospective study of fifty cases. Sano T, et al. **Surgery** 1997 May;121(5):501–5

Proximal gastrectomy and jejunal pouch interposition for the treatment of early cancer in the upper third of the stomach: surgical techniques and evaluation of postoperative function. Takeshita K, et al. **Surgery** 1997 Mar; 121(3):278–86

Management of carcinoid tumors of the stomach, duodenum, and pancreas. Akerström G. **World J Surg** 1996 Feb; 20(2):173–82 (128 ref.)

Causes of death and recurrence after surgery for early gastric cancer. Guadagni S, et al. **World J Surg** 1997 May; 21(4):434–9

Lack of benefit of combined pancreaticosplenectomy in D2 resection for proximal-third gastric carcinoma. Kodera Y, et al. **World J Surg** 1997 Jul-Aug;21(6):622–7; discussion 627–8

Changes in body composition after gastrectomy: results of a controlled, prospective clinical trial. Liedman B, et al. **World J Surg** 1997 May;21(4):416–20; discussion 420–1

Quality of life after gastrectomy for gastric carcinoma: controlled study of reconstructive procedures. Svedlund J, et al. **World J Surg** 1997 May;21(4):422–33

Surgical management of gastric leiomyosarcoma: evaluation of the propriety of laparoscopic wedge resection. Yoshida M, et al. **World J Surg** 1997 May;21(4):440–3

Laparoscopy-assisted radical subtotal gastrectomy for early gastric carcinoma. Choi SH, et al. **Yonsei Med J** 1996 Jun; 37(3):174–80

[Stomach carcinoma--the current trends in its surgical treatment] Damianov N. **Khirurgiia (Sofiia)** 1996;49(2):51–6 (0 ref.) **(Bul)**

[The most important prognostic factors for 736 patients with adenocarcinoma of the gastric cardia: a multivariate analysis using COX proportion hazard model] Li J, et al. **Chung Hua Chung Liu Tsa Chih** 1996 Mar;18(2):134–6 (Eng. Abstr.) **(Chi)**

[Evaluation of surgical resection for gastric cancer extending to adjacent organs] Zhang X, et al. **Chung Hua Wai Ko Tsa Chih** 1995 Oct;33(10):603–5 (Eng. Abstr.) **(Chi)**

[Carcinoid tumors and neuroendocrine carcinomas of the stomach. Prognosis and therapeutic management. Study of 6 cases] Moreaux J, et al. **Ann Chir** 1997;51(2):121–9 (Eng. Abstr.) **(Fre)**

[Excision of small carcinoid tumor of the stomach under laparoscopy: value of combined intraoperative gastroscopy (letter)] Christophe M, et al. **Gastroenterol Clin Biol** 1996; 20(8-9):704–5 **(Fre)**

[Results of surgical therapy of stomach carcinoma in the elderly] Jentschura D, et al. **Chirurg** 1997 May;68(5):503–8 (Eng. Abstr.) **(Ger)**

[Cost savings by disinfection for prevention of surgical wound dehiscence after gastrectomy] Schardey HM, et al. **Chirurg** 1997 Apr;68(4):416–24 (Eng. Abstr.) **(Ger)**

[Surgical relevance of preoperative diagnosis of tumors of the gastrointestinal tract--decision making in esophageal, stomach, colon and rectal carcinoma] Siewert JR, et al. **Chirurg** 1997 Apr;68(4):317–24 (29 ref.) (Eng. Abstr.) **(Ger)**

[Lymphadenectomy in tumors of the upper gastrointestinal tract] Siewert JR, et al. **Chirurg** 1996 Sep;67(9):877–88 (29 ref.) (Eng. Abstr.) **(Ger)**

[A rare stomach tumor--Hodgkin's lymphoma of the stomach] Zippel K, et al. **Chirurg** 1997 May;68(5):540–2 (Eng. Abstr.) **(Ger)**

[Small-cell sarcoma of the esophagus as a fourth malignancy. Its palliative therapy with argon gas coagulation] Glaser J, et al. **Dtsch Med Wochenschr** 1997 Aug 22; 122(34-35):1037–40 (8 ref.) (Eng. Abstr.) **(Ger)**

[Therapy of carcinoids of the stomach] Becker HD, et al. **Langenbecks Arch Chir** 1996;381(1):18–22 (34 ref.) (Eng. Abstr.) **(Ger)**

[Tumor cell dissemination in bone marrow and peritoneal cavity. An immunocytochemical study of patients with stomach or colorectal carcinoma] Broll R, et al. **Langenbecks Arch Chir** 1996;381(1):51–8 (Eng. Abstr.) **(Ger)**

[Diagnosis and therapy of leiomyoma of the upper gastrointestinal tract] Wenger FA, et al. **Langenbecks Arch Chir** 1996;381(4):221–4 (Eng. Abstr.) **(Ger)**

[Effect of intraoperative blood loss on the function of natural killer cells in tumors of the upper gastrointestinal tract] Bruns CJ, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:146–9 (Eng. Abstr.) **(Ger)**

[The outcome of D2 lymphadenectomy on staging and prognosis of stomach carcinoma--a prospective study] Fass J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:176–8 (Eng. Abstr.) **(Ger)**

[Endoscopic treatment of anastomosis insufficiency and perforation in the esophagus with fibrin glue] Groitl H, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:753–4 (Eng. Abstr.) **(Ger)**

[Extent of radical surgery in cardia carcinoma--esophagectomy or gastrectomy?] Hölscher AH, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:169–72 (Eng. Abstr.) **(Ger)**

[Geriatric surgery in stomach carcinoma--resection as therapy of choice] Jähne J, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:486–8 (Eng. Abstr.) **(Ger)**

[Comparative study of the quality of life after stomach resection] Jentschura D, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:247–8 (Eng. Abstr.) **(Ger)**

[Adjuvant intraoperative radiotherapy of stomach carcinoma] Krämling HJ, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:211–3 (Eng. Abstr.) **(Ger)**

[Performance and cost analysis of surgical therapy of stomach carcinoma--results and sequelae] Mohr VD, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:162–5 (Eng. Abstr.) **(Ger)**

[Geriatric surgery--stomach carcinoma in patients older than 70] Mönig SP, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:483–5 (Eng. Abstr.) **(Ger)**

[Treatment outcome of palliative (R1/R2) resection of stomach carcinoma] Piso P, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:130–2 (Eng. Abstr.) **(Ger)**

[Gastrectomy with radical lymphadenectomy--standard therapy of adenocarcinoma of the stomach] Thybusch A, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996; 113:173–5 (Eng. Abstr.) **(Ger)**

[Standard intervention in primary lymphoma of the stomach--initial results of a prospective multicenter study] Verreet PR, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:237–40 (Eng. Abstr.) **(Ger)**

[Value of splenectomy in resection of stomach carcinoma] Wenger FA, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:797–9 (Eng. Abstr.) **(Ger)**

[MALT-lymphoma--surgical therapy] Verreet PR. **Schweiz Rundsch Med Prax** 1996 Nov 5;85(45):1451–4 (53 ref.) (Eng. Abstr.) **(Ger)**

[Lymphadenectomy in treatment of stomach carcinoma] Schmidt-Matthiesen A. **Z Gastroenterol** 1997 Jun; 35(6):521–3 **(Ger)**

[Consensus of the CAO, AIO and ARO in diagnosis and therapy of primary stomach lymphoma] **Zentralbl Chir** 1996;121(7):599–602 (4 ref.) **(Ger)**

[Value of radical lymph node dissection (compartment I and II) in stomach carcinoma] Böttcher K, et al. **Zentralbl Chir** 1996;121(2):131–8 (Eng. Abstr.) **(Ger)**

[Is splenectomy "en principe" necessary for radical gastrectomy with systematic lymphadenectomy?] Nürnberger HR, et al. **Zentralbl Chir** 1996;121(2):144–7 (Eng. Abstr.) **(Ger)**

[Value of systematic lymphadenectomy in stomach carcinoma] Padberg WM, et al. **Zentralbl Chir** 1996; 121(2):116–20 (Eng. Abstr.) **(Ger)**

[Management of postoperative ischemic jejunal stenosis using balloon dilatation and/or Wallstent implant] Solt J, et al. **Orv Hetil** 1997 Apr 27;138(17):1059–64 (Eng. Abstr.) **(Hun)**

[The use of Wallstent in malignant constrictions of the gastrointestinal tract] Solt J, et al. **Orv Hetil** 1997 Sep 14; 138(37):2349–54 (Eng. Abstr.) **(Hun)**

[Early gastric cancer: our experience] Gangi S, et al. **Ann Ital Chir** 1996 May-Jun;67(3):387–90 (Eng. Abstr.) **(Ita)**

[Surgical strategy in gastric cancer in aged patients] Caporale A, et al. **G Chir** 1997 Jan-Feb;18(1-2):36–40 (Eng. Abstr.) **(Ita)**

[Carcinoma of the gastric stump. Our experience in 28 treated cases] Barillari P, et al. **Minerva Chir** 1997 Jun;52(6):713–6 (Eng. Abstr.) **(Ita)**

[Primary gastric lymphoma. Personal experience] Colecchia G, et al. **Minerva Chir** 1996 Dec;51(12):1061–5 (Eng. Abstr.) **(Ita)**

[Critical evaluation of the reconstruction of the intestinal continuity after total gastrectomy by the Moricca technique] Miani S, et al. **Minerva Chir** 1996 Jul-Aug; 51(7-8):519–25 (Eng. Abstr.) **(Ita)**

[Gastric lymphomas in old age] Pannella A, et al. **Minerva Chir** 1996 Jul-Aug;51(7-8):527–31 (10 ref.) (Eng. Abstr.) **(Ita)**

[Multifocal carcinoid of the stomach] Poletti EM, et al.

Minerva Chir 1996 May;51(5):341–6 (Eng. Abstr.) **(Ita)**

[Laparoscopic surgery for early gastric cancer—its advantage and pitfall] Ohgami M, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):532–7 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Anesthetic management of a patient with erythroderma] Hattori S, et al. **Masui** 1996 Sep;45(9):1127–30 (Eng. Abstr.) **(Jpn)**

[A new reconstructive procedure, interposition of a jejunal pouch after proximal gastrectomy] Kameyama J, et al. **Nippon Geka Gakkai Zasshi** 1997 Jun;98(6):555–9 (Eng. Abstr.) **(Jpn)**

[A device in reconstruction method after distal subtotal gastrectomy: special reference to double tract method with jejunal pouch] Matsumoto K, et al. **Nippon Geka Gakkai Zasshi** 1997 Jun;98(6):565–70 (Eng. Abstr.) **(Jpn)**

[Jejunal pouch interposition and distal gastrectomy] Miwa K, et al. **Nippon Geka Gakkai Zasshi** 1997 Jun;98(6):560–4 (Eng. Abstr.) **(Jpn)**

[Pedicle transplantation of a transverse colon segment after total gastrectomy] Nagamachi Y. **Nippon Geka Gakkai Zasshi** 1997 Jun;98(6):542–8 (Eng. Abstr.) **(Jpn)**

[Jejunal pouch and interposition reconstruction after a total gastrectomy for cancer] Nakane Y, et al. **Nippon Geka Gakkai Zasshi** 1997 Jun;98(6):532–6 (Eng. Abstr.) **(Jpn)**

[Jejunal pouch interposition after total gastrectomy] Otani Y, et al. **Nippon Geka Gakkai Zasshi** 1997 Jun;98(6):537–41 (Eng. Abstr.) **(Jpn)**

[Lymph node excision in stomach cancer and clinical comparative tests] Sakamoto J, et al. **Nippon Geka Gakkai Zasshi** 1996 Oct;97(10):926–31 (18 ref.) **(Jpn)**

[Evaluation of ileocolon interposition after total gastrectomy] Shibata J, et al. **Nippon Geka Gakkai Zasshi** 1997 Jun; 98(6):549–54 (Eng. Abstr.) **(Jpn)**

[Endoscopic treatment of digestive system diseases. 4. Endoscopic resection of early stomach cancer and its relation to surgery] Hamada T, et al. **Nippon Naika Gakkai Zasshi** 1996 Sep 10;85(9):1446–9 **(Jpn)**

[Endoscopic treatment of digestive system diseases. 3. Results of endoscopic treatment of early stomach cancer and possibility for expansion of its application] Ita K, et al. **Nippon Naika Gakkai Zasshi** 1996 Sep 10;85(9):1442–5 **(Jpn)**

[Endoscopic mucosal resection for early gastric cancer] Hamada T, et al. **Nippon Rinsho** 1996 May;54(5):1292–7 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Synchronous multiple early gastric cancer; study of surgically resected stomach] Iwafuchi M, et al. **Nippon Rinsho** 1996 May;54(5):1217–23 (Eng. Abstr.) **(Jpn)**

[Laparoscopic curative surgery for early gastric cancer] Ohgami M, et al. **Nippon Rinsho** 1996 May;54(5):1307–11 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Endoscopic treatment of early gastric cancer with heat probe method] Otsuka S. **Nippon Rinsho** 1996 May; 54(5):1351–3 (11 ref.) (Eng. Abstr.) **(Jpn)**

[A case of synchronous triple cancers with curative resection] Matsuoka M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1996 Oct;93(10):732–7 (11 ref.) **(Jpn)**

[Radical surgical treatment of gastric cancer complicated by perforation and hemorrhage in the aged] Chernov KM, et al. **Khirurgiia (Mosk)** 1997;(4):69 **(Rus)**

[Combined treatment of stomach neoplasms] Chissov VI, et al. **Khirurgiia (Mosk)** 1997;(6):4–9 (Eng. Abstr.) **(Rus)**

[Nonepithelial tumors of the stomach] Petrov VP, et al. **Khirurgiia (Mosk)** 1997;(3):25–8 (Eng. Abstr.) **(Rus)**

[Endoscopic laser destruction of gastric carcinoid] Romanov VA, et al. **Khirurgiia (Mosk)** 1996;(2):121–2 **(Rus)**

[Endoscopic treatment of early gastric cancer using laser destruction and electrosurgical methods] Romanov VA, et al. **Khirurgiia (Mosk)** 1997;(4):15–9 (Eng. Abstr.) **(Rus)**

[Combined and surgical treatment of cancer of the proximal stomach involving the lower third of the esophagus] Bekirov ShA. **Klin Khir** 1997;(1):37–8 (Eng. Abstr.) **(Rus)**

[A rare combination of stomach cancer and a foreign body of the abdominal cavity] Munasypov FR, et al. **Klin Khir** 1995;(1):48 **(Rus)**

[Development of acute pancreatitis after gastrectomy in gastric cancer] Vinnik IuA. **Klin Khir** 1996;(6):35–7 **(Rus)**

[The correction of the thyroid status in the surgical treatment of malignant tumors of the stomach and large intestine] Beletskaia OM. **Lik Sprava** 1996 Jul–Sep;(7–9):121–5 (Eng. Abstr.) **(Rus)**

[Leiomyomas and leiomyosarcomas of the stomach] Geshelin SA, et al. **Vestn Khir Im I I Grek** 1995;154(4–6):43–4 **(Rus)**

[The diagnosis and surgical treatment of nonepithelial stomach tumors] Maistrenko NA, et al. **Vestn Khir Im I I Grek** 1997;156(3):26–9 (Eng. Abstr.) **(Rus)**

[A giant neurinoma of the stomach] Rudakov SIu. **Vestn Khir Im I I Grek** 1995;154(4–6):106 **(Rus)**

[Rational support of combined operations in locally disseminated stomach cancer] Simonov NN, et al. **Vestn Khir Im I I Grek** 1997;156(3):22–5 (Eng. Abstr.) **(Rus)**

[The purposefulness of splenectomy as "a matter of principle" during surgery for stomach cancer] Simonov NN, et al. **Vopr Onkol** 1997;43(2):213–5 (Eng. Abstr.) **(Rus)**

[Method of primary jejunogastroplasty after gastrectomy and subtotal resection of the distal stomach for cancer] Zherlov GK, et al. **Vopr Onkol** 1997;43(2):218–21 (Eng. Abstr.) **(Rus)**

[Resection of gastric flat polyps using endoscopic ligation with elastic bands (letter)] Brullet E, et al. **Gastroenterol Hepatol** 1996 Aug–Sep;19(7):390–1 **(Spa)**

THERAPY

Expandable stents: unusual locations. Kozarek RA, et al. **Am J Gastroenterol** 1997 May;92(5):812–5

Randomized comparison between chemotherapy plus best supportive care with best supportive care in advanced gastric cancer. Glimelius B, et al. **Ann Oncol** 1997 Feb; 8(2):163–8

Primary lymphoma of the stomach: three-year results of a prospective multicenter study. The German Multicenter Study Group on GI-NHL. Koch P, et al. **Ann Oncol** 1997; 8 Suppl 1:85–8

Synergistic effects of adriamycin and TALL-104 cell therapy against a human gastric carcinoma in vivo. Cesano A, et al. **Anticancer Res** 1997 May–Jun;17(3C):1887–92

Prevention of hepatic metastases by liver lectin blocking with D-galactose in stomach cancer patients. A prospectively randomized clinical trial. Kosik J, et al. **Anticancer Res** 1997 Mar–Apr;17(2B):1411–5

Adenovirus-mediated gene therapy of gastric carcinoma using cancer-specific gene expression in vivo. Tanaka T, et al. **Biochem Biophys Res Commun** 1997 Feb 24; 231(3):775–9

Eradication of Helicobacter pylori and regression of B-cell lymphoma. Vanagunas A. **Biomed Pharmacother** 1997; 51(4):156–60 (32 ref.)

Treatment of relapsed non-Hodgkin's lymphoma after BEAM chemotherapy and autologous transplantation by BU/CY chemotherapy and salvage transplantation. Fetscher S, et al. **Bone Marrow Transplant** 1997 Mar; 19(5):527–8

Polychemotherapy combined with G-CSF-mobilized donor buffy coat transfusion for granulocytic sarcoma after allogeneic BMT for AML. Nachbaur D, et al. **Bone Marrow Transplant** 1997 May;19(9):947–9

Improved mortality rate of gastric carcinoma patients with peritoneal carcinomatosis treated with intraperitoneal hyperthermic chemoperfusion combined with surgery. Fujimoto S, et al. **Cancer** 1997 Mar 1;79(5):884–91

The National Cancer Data Base report on gastric cancer. Lawrence W Jr, et al. **Cancer** 1995 Apr 1;75(7):1734–44

Survival time and prevention of side effects of intraperitoneal hyperthermic perfusion with mitomycin C combined with surgery for patients with advanced gastric cancer. Fujimoto S, et al. **Cancer Treat Res** 1996;81:169–76

Self-expanding metal stents for palliation of stenosing tumors of the esophagus and cardia: a critical review. Ell C, et al. **Endoscopy** 1997 Jun;29(5):392–8 (40 ref.)

Primary gastric non-Hodgkin's lymphoma stage IE and IIE. Lybeert ML, et al. **Eur J Cancer** 1996 Dec;32A(13):2306–11

Pre- and/or post-operative immunochemotherapy for advanced digestive cancer. Saji S, et al. **Gan To Kagaku Ryoho** 1997 May;24 Suppl 1:239–49 (14 ref.)

Tumor-specific gene expression in carcinoembryonic antigen—producing gastric cancer cells using adenovirus vectors. Lan KH, et al. **Gastroenterology** 1996 Nov; 111(5):1241–51

Prior radiation and chemotherapy increase the risk of life-threatening complications after insertion of metallic stents for esophagogastric malignancy [see comments] Kinsman KJ, et al. **Gastrointest Endosc** 1996 Mar; 43(3):196–203. Comment in: Gastrointest Endosc 1996 Mar;43(3):258–60.

Silicone-covered Wallstent prototypes for palliation of malignant esophageal obstruction and digestive-respiratory fistulas. Nelson DB, et al. **Gastrointest Endosc** 1997 Jan; 45(1):31–7

Laser and brachytherapy in the palliation of adenocarcinoma of the oesophagus and cardia. Spencer GM, et al. **Gut** 1996 Nov;39(5):726–31

Extensive lymph node clearance for cancer of the esophagus or cardia: merits and limits in reference to 5-year absolute survival. Collard JM, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):619–27

Management of gastric cancer patients with synchronous hepatic metastasis: a retrospective study. Rafique M, et al. **Hepatogastroenterology** 1995 Sep–Oct;42(5):666–71

Pilot study of continuous-infusion 5-fluorouracil, oral leucovorin, and upper-abdominal radiation therapy in patients with locally advanced residual or recurrent upper gastrointestinal or extrapelvic colon cancer. Martenson JA, et al. **Int J Radiat Oncol Biol Phys** 1997 Feb 1;37(3):615–8

[Treatment of large-cell gastric lymphoma: comparison of the efficacy of radiochemotherapy alone or combined with first gastrectomy (letter)] Lepicard A, et al. **Gastroenterol Clin Biol** 1996;20(8–9):706–7 **(Fre)**

[MALT-lymphoma—conservative therapy] Fischbach W. **Schweiz Rundsch Med Prax** 1996 Nov 5;85(45):1455–8 (Eng. Abstr.) **(Ger)**

[Cancer vaccine therapy using peptides derived from tumor-rejection antigens] Akiyoshi T. **Gan To Kagaku Ryoho** 1997 Mar;24(5):511–9 (38 ref.) (Eng. Abstr.) **(Jpn)**

[Liver resection in a case of multiple liver metastases of gastric cancer following hepatic arterial infusion chemotherapy] Kobayashi T, et al. **Gan To Kagaku Ryoho** 1996 Sep;23(10):1321–4 (Eng. Abstr.) **(Jpn)**

[Clinical effects of postoperative immunochemotherapy with a combination of 5-FU, CDDP and lentinan for stage IVb gastric carcinoma and long-term pharmacokinetic studies on CDDP and 5-FU] Mio H, et al. **Gan To Kagaku Ryoho** 1997 Feb;24(3):337–42 (Eng. Abstr.) **(Jpn)**

[Preoperative intra tumor biological response modifier injection therapy for patients with stomach neoplasms] Tanaka N, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1995 Dec;18(6):626 **(Jpn)**

[Endoscopic treatment of early gastric cancer with laser and laserthermia using Nd : YAG laser] Otsuka S. **Nippon Rinsho** 1996 May;54(5):1326–31 (17 ref.) (Eng. Abstr.) **(Jpn)**

[A case of a cure of synchronous multiple primary neoplasm of the laryngopharynx and stomach] Klochikhin AL, et al. **Vestn Otorinolaringol** 1997;(1):56 **(Rus)**

[Factors determining treatment effectiveness in localized stomach cancer] Simonov NN, et al. **Vopr Onkol** 1997; 43(2):210–3 (Eng. Abstr.) **(Rus)**

[Gastric dysplasia: monitoring or resection?] Nogueira de Rojas JR. **Rev Gastroenterol Mex** 1996 Oct–Dec;61(4 Suppl 2):S38–9 **(Spa)**

[Diagnosis and therapeutic management of gastric lymphomas] Grau E, et al. **Sangre (Barc)** 1996 Apr; 41(2):109–14 (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

TNM staging of gastrointestinal tumors by hydrosonography: results of a histopathologically controlled study in 60 patients. Düx M, et al. **Abdom Imaging** 1997 Jan–Feb; 22(1):24–34

Preoperative endosonographic staging of cancer of the cardia. François E, et al. **Abdom Imaging** 1996 Nov–Dec; 21(6):483–7

Pre-operative TN staging of gastric cancer using a 15 MHz ultrasound miniprobe. Akahoshi K, et al. **Br J Radiol** 1997 Jul;70(835):703–7

Endoscopic ultrasonography for esophageal and gastric mass lesions. Catalano MF. **Gastroenterologist** 1997 Mar;5(1):3–9 (46 ref.)

Regression of gastric MALT lymphoma after eradication of Helicobacter pylori is predicted by endosonographic staging. MALT Lymphoma Study Group. Sackmann M, et al. **Gastroenterology** 1997 Oct;113(4):1087–90

Gastric inflammatory fibroid polyps: endoscopic ultrasonographic analysis in comparison with the histology. Matsushita M, et al. **Gastrointest Endosc** 1997 Jul;46(1):53–7

Diagnostic utility of 20-megahertz linear endoscopic ultrasonography in early gastric cancer. Yanai H, et al. **Gastrointest Endosc** 1996 Jul;44(1):29–33

Endoscopic ultrasonography for preoperative staging of gastric carcinoma. Massari M, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):542–6

Endoscopic ultrasound in the evaluation of gastric small lymphocytic mucosa-associated lymphoid tumors. Pavlick AC, et al. **J Clin Oncol** 1997 May;15(5):1761–6

Endoscopic ultrasonographic diagnosis of gastric lymphangioma. Tsai CY, et al. **J Clin Ultrasound** 1997 Jul–Aug;25(6):333–5

Histochemical and immunohistochemical study of human gastric carcinoma differentiation with special reference to supplementary role for endosonography in evaluating depth of invasion. Nakamura T, et al. **J Gastroenterol** 1997 Apr; 32(2):176–83

US case of the day. Gastric polyp in conjunction with poorly differentiated gastric adenocarcinoma. Kirpekar M, et al. **Radiographics** 1997 Jul–Aug;17(4):1003–5

Combined endoscopic ultrasonography and laparoscopic ultrasonography in the pretherapeutic assessment of resectability in patients with upper gastrointestinal malignancies. Mortensen MB, et al. **Scand J Gastroenterol** 1996 Nov;31(11):1115–9

Usefulness of conventional ultrasonography in identifying normal and abnormal gastric antrum. George J. **Singapore Med J** 1996 Apr;37(2):181–3

Endosonography and endosonography-guided biopsy of upper-GI-tract tumors using a curved-array echoendoscope. Hünerbein M, et al. **Surg Endosc** 1996 Dec; 10(12):1205–9

Laparoscopic ultrasonography for staging gastroesophageal cancer. Finch MD, et al. **Surgery** 1997 Jan;121(1):10–7

[Contribution of endosonography to the diagnosis and follow-up of pediatric gastric neurofibroma revealing von Recklinghausen's disease] Ategbo S, et al. **Arch Pediatr** 1996 Nov;3(11):1095–8 (Eng. Abstr.) **(Fre)**

[Endosonographic demonstration of extrapancreatic and extraintestinal gastrinoma] Rogler G, et al. **Dtsch Med Wochenschr** 1996 Dec 6;121(49):1531–6 (Eng. Abstr.) **(Ger)**

[Endosonography of tumors of the upper gastrointestinal tract: is routine use justified?] Zoller WG, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1996;113:747–52 (0 ref.) (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Nuclear morphometry as a predictor of disease outcome in gastric cancer. Setälä L, et al. **J Pathol** 1997 Jan; 181(1):46–50

Mast cell interaction with tumor cells in small early gastric cancer: ultrastructural observations. Caruso RA, et al. **Ultrastruct Pathol** 1997 Mar–Apr;21(2):173–81

VETERINARY

Tumours of the glandular stomach. Takahashi M, et al. **IARC Sci Publ** 1996;(126):127–35 (29 ref.)

Tumours of the oral cavity, buccal pouch, oesophagus, forestomach and salivary glands. Takahashi M, et al. **IARC Sci Publ** 1996;(126):59–77 (60 ref.)

Gastric leiomyosarcoma associated with hypoglycemia in a dog. Bellah JR, et al. **J Am Anim Hosp Assoc** 1996 Jul–Aug; 32(4):283–6

Canine gastric neoplasia: utility of ultrasonography in diagnosis. Rivers BJ, et al. **J Am Anim Hosp Assoc** 1997 Mar–Apr;33(2):144–55

Esophageal/gastric adenocarcinoma in a dog. Takiguchi M, et al. **J Am Anim Hosp Assoc** 1997 Jan–Feb;33(1):42–4

Gastric squamous cell carcinoma in three llamas. Sartin EA, et al. **J Vet Diagn Invest** 1997 Jan;9(1):103–6

Amebiasis in a dog with gastric ulcers and adenocarcinoma. Steele KE, et al. **J Vet Diagn Invest** 1997 Jan;9(1):91–3

Long-term survival after total gastrectomy for gastric adenocarcinoma in a dog. Sellon RK, et al. **J Vet Intern Med** 1996 Sep–Oct;10(5):333–5

Helicobacter mustelae-associated gastric adenocarcinoma in ferrets (Mustela putorius furo). Fox JG, et al. **Vet Pathol** 1997 May;34(3):225–9

Mucinous adenocarcinoma in the abomasum of a cow. Ritchey JW, et al. **Vet Pathol** 1996 Jul;33(4):454–6

Radiographic diagnosis—gastric tumor in a horse. Aronoff N, et al. **Vet Radiol Ultrasound** 1997 May–Jun;38(3):185–6

Surgical removal of a fibropapilloma from the reticulum causing apparent vagal indigestion. Gordon PJ. **Vet Rec** 1997 Jan 18;140(3):69–70

VIROLOGY

Pathogenesis of gastric lymphoma: the enigma in Hong Kong. Xu WS, et al. **Ann Oncol** 1997;8 Suppl 2:41–4

Discrepancy between clinical and pathological lymph node evaluation in Epstein–Barr virus–associated gastric cancers. Ojima H, et al. **Anticancer Res** 1996 Sep–Oct;16(5B):3081–4

Primary gastric T-cell lymphoma with and without human T-lymphotropic virus type 1. Shimada-Hiratsuka M, et al. **Cancer** 1997 Jul 15;80(2):292–303

Occurrence of multiple lymphoepithelioma-like carcinomas and MALT-type lymphoma in the stomach: detection of EBV in carcinomas but not in lymphoma. Greiner A, et al. **Histopathology** 1996 Jul;29(1):51–6

Epstein–Barr virus latent and replicative gene expression in gastric carcinoma. Selves J, et al. **Histopathology** 1996 Feb; 28(2):121–7

Epstein–Barr virus in gastric carcinoma in Suzhou, China and Osaka, Japan: association with clinico-pathologic factors and HLA-subtype. Qiu K, et al. **Int J Cancer** 1997 Apr 10;71(2):155–8

Phenotypic characteristics of Epstein–Barr–virus–associated gastric carcinomas. Moritani S, et al. **J Cancer Res Clin Oncol** 1996;122(12):750–6

Epstein–Barr virus–associated gastric carcinoma. Adachi Y, et al. **J Clin Gastroenterol** 1996 Oct;23(3):207–10 (24 ref.)

Infrequent overexpression of p53 protein in Epstein–Barr virus–associated gastric carcinomas. Ojima H, et al. **Jpn J Cancer Res** 1997 Mar;88(3):262–6

Absence of human papillomavirus genomic sequences detected by the polymerase chain reaction in oesophageal and gastric carcinomas in Japan. Saegusa M, et al. **Mol Pathol** 1997 Apr;50(2):101–4

Morphological characteristics of Epstein–Barr virus–related early gastric carcinoma: a case–control study. Arikawa J, et al. **Pathol Int** 1997 Jun;47(6):360–7

Epstein–Barr virus and gastric carcinoma. Osato T, et al. **Semin Cancer Biol** 1996 Aug;7(4):175–82 (41 ref.)

Detection of Epstein–Barr virus DNA in gastric carcinoma with lymphoid stroma. Jing X, et al. **Viral Immunol** 1997; 10(1):49–58 (23 ref.)

[EBV-related stomach cancer and HLA] Akiba S, et al. **Nippon Rinsho** 1997 Feb;55(2):386–90 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Epstein–Barr virus associated gastric carcinoma: the genetic alteration and the expression of CD44 variant] Chong JM, et al. **Nippon Rinsho** 1997 Feb;55(2):381–5 (12 ref.) (Eng. Abstr.) **(Jpn)**

[State of art: Epstein Barr virus–associated gastric carcinoma] Fukayama M, et al. **Nippon Rinsho** 1997 Feb;55(2):357–62 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Virological studies on Epstein–Barr virus–positive gastric carcinoma] Imai S. **Nippon Rinsho** 1997 Feb;55(2):368–73 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Clinicopathology of Epstein–Barr virus–related gastric carcinoma] Itoh T, et al. **Nippon Rinsho** 1997 Feb; 55(2):363–7 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Critical review on the WHO/IARC report regarding carcinogenicity of Helicobacter pylori] Tanida N, et al. **Nippon Rinsho** 1997 Apr;55(4):995–1002 (20 ref.) (Eng. Abstr.) **(Jpn)**

[A case of gastric lymphoma in the course of Epstein–Barr virus infection] Radwan P, et al. **Pol Tyg Lek** 1996 Apr; 51(14–18):237–8 (Eng. Abstr.) **(Pol)**

[Undifferentiated gastric carcinoma of lymphoepithelioma type with Epstein–Barr virus] Blasco J, et al. **Medicina (B Aires)** 1996;56(3):287–90 (Eng. Abstr.) **(Spa)**

STOMACH, RUMINANT

CHEMISTRY

Immunohistochemical localization of chondroitin sulfate in the forestomach of the sheep. Yamamoto Y, et al. **Eur J Histochem** 1995;39(4):265–72

EMBRYOLOGY

[Comparative ontogenic analysis of the epithelium of the non-glandular stomach compartments of merino sheep] Regodon S, et al. **Anat Histol Embryol** 1996 Dec; 25(4):233–41 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

The ruminant digestion model using bacteria already employed early in evolution by symbiotic molluscs. Jollès J, et al. **J Mol Evol** 1996 Nov;43(5):523–7

IMMUNOLOGY

T cell subsets and Langerhans cells in the forestomach mucosa of adult sheep and sheep foetuses. Josefsen TD, et al. **Vet Immunol Immunopathol** 1996 May;51(1–2):101–11

PHYSIOLOGY

[Motor, digestive and secretory processes of the forestomach and the abomasum—a short review] Wolffram S. **Schweiz Arch Tierheilkd** 1996;138(7):343–50 (6 ref.) (Eng. Abstr.) **(Ger)**

STOMACH RUPTURE

Traumatic gastric transection: a case report. Kimmins MH, et al. **J Pediatr Surg** 1996 Jun;31(6):757–8

ETIOLOGY

Stomach jolt—a possible mechanism for gastrosplenic injury in blunt abdominal trauma. Garg P, et al. **Indian J Gastroenterol** 1996 Oct;15(4):153

Gastric rupture from blunt abdominal injury. Dharap SB, et al. **Injury** 1996 Dec;27(10):753–4

Ventilatory management casebook. Gastric perforation probably caused by glucocorticoid administration. McGettigan MC, et al. **J Perinatol** 1996 Jul–Aug; 16(4):309–12

[Gastric rupture during colonoscopy following oxygen therapy by nasal intubation (letter)] Fontenelle P, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1071–2 **(Fre)**

[Gastric perforation caused by metastasis of breast cancer in a man (letter; comment)] Fra J, et al. **Presse Med** 1996 Sep 14;25(26):1215. Comment on: Presse Med 1994 Dec 3;23(38):1758–9. **(Fre)**

[A case of gastric malignant lymphoma with perforation during chemotherapy] Ono K, et al. **Gan To Kagaku Ryoho** 1997 Jan;24(1):105–8 (Eng. Abstr.) **(Jpn)**

[Radical surgical treatment of gastric cancer complicated by perforation and hemorrhage in the aged] Chernov KM, et al. **Khirurgiia (Mosk)** 1997;(4):69 **(Rus)**

PATHOLOGY

[Death caused by stomach rupture due to overinflation during oxygen administration via stomach tube] Kropp S, et al. **Arch Kriminol** 1996 Nov–Dec;198(5–6):176–83 (Eng. Abstr.) **(Ger)**

SURGERY

Surgical results of perforated gastric carcinoma: an analysis of 155 Japanese patients. Adachi Y, et al. **Am J Gastroenterol** 1997 Mar;92(3):516–8

Long-term survival after gastrectomy for advanced bleeding or perforated gastric carcinoma. Gertsch P, et al. **Eur J Surg** 1996 Sep;162(9):723–7

STOMACH ULCER

Endoscopy and gastric ulcers. Moayyedi P, et al. **Endoscopy** 1995 Nov;27(9):689–93 (73 ref.)

Reduction of non-steroidal anti-inflammatory drug induced gastric injury and leucocyte endothelial adhesion by octreotide. Scheiman JM, et al. **Gut** 1997 Jun;40(6):720–5

BLOOD

Serum pepsinogen I and gastrin in peptic ulcer patients using nonsteroidal anti-inflammatory drugs. Kemppainen H, et al. **Hepatogastroenterology** 1997 Jul–Aug;44(16):1143–6

CHEMICALLY INDUCED

Combined gastric and ileocecal toxicity (serpiginous ulcers) after oral kayexalate in sorbital therapy. Roy-Chaudhury P, et al. **Am J Kidney Dis** 1997 Jul;30(1):120–2

Prevention of nonsteroidal anti-inflammatory drug-induced gastrointestinal mucosal injury. A meta-analysis of randomized controlled clinical trials [see comments] Koch M, et al. **Arch Intern Med** 1996 Nov 11;156(20):2321–32. Comment in: ACP J Club 1997 Mar–Apr;126(2):36.

Salicylate levels in rat stomach tissues after administration of aspalatone and acetylsalicylic acid in relation to their ulcerogenicity. Suh DY, et al. **Arzneimittelforschung** 1997 Jul;47(7):826–8

Gastric motility and mucosal ulcerogenic responses induced by prokinetic drugs in rats under prostaglandin-deficient conditions. Takeuchi K, et al. **Dig Dis Sci** 1997 Feb; 42(2):251–8

Helicobacter pylori–negative duodenal and pyloric ulcer: role of NSAIDs. Hyvärinen H, et al. **Digestion** 1996;57(5):305–9

Studies on o-[2,6-dichlorophenyl-1-amino] phenyl acetic acid. I. Synthesis, antiinflammatory, analgesic and ulcerogenic activities of some new amino acid conjugates. Shalaby AM, et al. **Farmaco** 1997 Feb;52(2):83–7

Non-nonsteroidal anti-inflammatory drug, nonmalignant gastric ulcers. Bjorkman DJ, et al. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):527–44 (102 ref.)

Nonsteroidal anti-inflammatory drug gastropathy. Laine L. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):489–504 (76 ref.)

Gastric mucosal contraction and vascular injury induced by indomethacin precede neutrophil infiltration in the rat. Anthony A, et al. **Gut** 1996 Sep;39(3):363–8

Gastric mucosal injury by nonsteroidal anti-inflammatory drugs is reduced by (R)-alpha-methylhistamine and its pro-drugs in the rat. Morini G, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S101–2

Prevention of NSAID–gastropathy. Ardizzone S, et al. **Ital J Gastroenterol** 1996 Dec;28 Suppl 4:33–6 (19 ref.)

Ultrastructural damage of gastric epithelium in patients taking NSAIDs. Caselli M, et al. **Ital J Gastroenterol** 1996 Dec;28 Suppl 4:16–8 (12 ref.)

Therapy of NSAIDs-induced gastropathy. La Corte R, et al. **Ital J Gastroenterol** 1996 Dec;28 Suppl 4:37–41 (34 ref.)

Histopathological aspects of mucosal injury related to non-steroidal anti-inflammatory drugs. Taha AS. **Ital J Gastroenterol** 1996 Dec;28 Suppl 4:12–5

Comparative evaluation of the severity of gastric ulceration by solid dispersions and coprecipitates of indomethacin. Karnachi AA, et al. **J Drug Target** 1997;4(5):297–301

Recovery of mucin content in surface layer of rat gastric mucosa after HCl–aspirin–induced mucosal damage. Sakai T, et al. **J Gastroenterol** 1997 Apr;32(2):157–63

The gastroenterologist's caseload: contribution of the rheumatologist. Hawkey CJ. **Semin Arthritis Rheum** 1997 Jun;26(6 Suppl 1):11–5 (13 ref.)

[NSAID and ulcer complications. An analysis of risk factors] Hansen JM, et al. **Ugeskr Laeger** 1997 Jun 9; 159(24):3787–91 (Eng. Abstr.) **(Dan)**

[The epidemiology of the gastroduodenal damage induced by aspirin and other nonsteroidal anti-inflammatory drugs] Dobrilla G, et al. **Recenti Prog Med** 1997 May;88(5):202–11 (78 ref.) (Eng. Abstr.) **(Ita)**

[Pathogenesis and therapy of non-steroidal anti-inflammatory drug (NSAID)-induced gastric mucosal injury] Yoshikawa T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1996 May;70(5):269–73 (20 ref.) **(Jpn)**

[Clinical aspects of stomach and duodenal ulcer in workers exposed to phenol and formaldehyde] Pomytkina TE. **Med Tr Prom Ekol** 1996;(11):40–2 **(Rus)**

[The endoscopic assessment of the effect of ranitidine and pirenzepine on the manifestations of the gastropathy induced by nonsteroidal anti-inflammatory preparations] Karateev AE, et al. **Ter Arkh** 1997;69(5):67–9 (Eng. Abstr.) **(Rus)**

[Steroids and NSAID: combination increases risk for stomach ulcer] Aly A. **Lakartidningen** 1997 Feb 12;94(7):545–6 **(Swe)**

CLASSIFICATION

The ulcer disease: an updated classification system. Stanchev IN. **Folia Med (Plovdiv)** 1996;38(1):23–31

COMPLICATIONS

Features associated with painless peptic ulcer bleeding. Wilcox CM, et al. **Am J Gastroenterol** 1997 Aug; 92(8):1289–92

Randomised comparison between adrenaline injection alone and adrenaline injection plus heat probe treatment for actively bleeding ulcers. Chung SS, et al. **BMJ** 1997 May 3;314(7090):1307–11

Risk of stomach cancer in patients with gastric or duodenal ulcer. La Vecchia C, et al. **Eur J Cancer Prev** 1997 Feb; 6(1):20–3

Seroepidemiology of gastritis in Japanese and Dutch male employees with and without ulcer disease. Schlemper RJ, et al. **Eur J Gastroenterol Hepatol** 1996 Jan;8(1):33–9

Epinephrine or epinephrine plus alcohol for injection of bleeding ulcers: a prospective randomized trial. Chung SC, et al. **Gastrointest Endosc** 1996 Jun;43(6):591–5

Factors related to the failure of endoscopic injection therapy for bleeding gastric ulcer. Sharma VK, et al. **Gastrointest Endosc** 1997 Jul;46(1):95–6

Low-grade gastric mucosa-associated lymphoid tissue lymphoma revealed by a bleeding Dieulafoy's ulceration.

Zerbib F, et al. **Gastrointest Endosc** 1997 Jan;45(1):87–9

Efficacy of primed infusions with high dose ranitidine and omeprazole to maintain high intragastric pH in patients with peptic ulcer bleeding: a prospective randomised controlled study. Labenz J, et al. **Gut** 1997 Jan;40(1):36–41

Smoking and ulcer perforation. Svanes C, et al. **Gut** 1997 Aug;41(2):177–80

Gastric outlet obstruction caused by peptic ulcer disease analysis of 99 patients. Mäkelä JT, et al. **Hepatogastroenterology** 1996 May–Jun;43(9):547–52

Gastric tuberculosis presenting with hematemesis. Rathnaraj S, et al. **Indian J Gastroenterol** 1997 Jul;16(3):110–1 (3 ref.)

Risk factors in surgery of gastroduodenal ulcer disease in patients with schistosomal portal hypertension. Anwar M, et al. **Int Surg** 1996 Apr–Jun;81(2):126–9

Symposium on endoscopic hemostasis in gastric diseases. 1. Endoscopic hemostasis in hemorrhagic gastro–duodenal ulcer. Takahashi H, et al. **Intern Med** 1997 Feb;36(2):125–7

Effect of lipoxygenase inhibitors and leukotriene antagonists on acute and chronic gastric haemorrhagic mucosal lesions in ulcer models in the rat. Gyömber E, et al. **J Gastroenterol Hepatol** 1996 Oct;11(10):922–7

Malabsorption syndrome associated with ulceration of the stomach and small bowel caused by chronic intestinal ischemia in a patient with hyperhomocysteinemia. Bakker RC, et al. **Mayo Clin Proc** 1997 Jun;72(6):546–50

A comparison of omeprazole and placebo for bleeding peptic ulcer [see comments] Khuroo MS, et al. **N Engl J Med** 1997 Apr 10;336(15):1054–8. Comment in: N Engl J Med 1997 Apr 10;336(15):1091–3.

Does profound acid inhibition improve haemostasis in peptic ulcer bleeding? [comment] Berstad A. **Scand J Gastroenterol** 1997 Apr;32(4):396–8. Comment on: Scand J Gastroenterol 1997 Apr;32(4):320–7. Comment on: Scand J Gastroenterol 1997 Apr;32(4):328–33.

Continuous intravenous infusion of omeprazole in elderly patients with peptic ulcer bleeding. Results of a placebo–controlled multicenter study [see comments] Hasselgren G, et al. **Scand J Gastroenterol** 1997 Apr; 32(4):328–33. Comment in: Scand J Gastroenterol 1997 Apr;32(4):396–8.

Peptic ulcer perforation before and after the introduction of H2–receptor blockers and proton pump inhibitors. Hermansson M, et al. **Scand J Gastroenterol** 1997 Jun; 32(6):523–9

Effect of omeprazole on the outcome of endoscopically treated bleeding peptic ulcers. Randomized double–blind placebo–controlled multicentre study [see comments] Schaffalitzky de Muckadell OB, et al. **Scand J Gastroenterol** 1997 Apr;32(4):320–7. Comment in: Scand J Gastroenterol 1997 Apr;32(4):396–8.

The effect of endoscopic injection therapy on the clinical outcome of patients with benign peptic ulcer bleeding. Thomopoulos KC, et al. **Scand J Gastroenterol** 1997 Mar; 32(3):212–6

Ulcer bleeding and perforation: non–steroidal anti–inflammatory drugs or Helicobacter pylori. Svanes C, et al. **Scand J Gastroenterol Suppl** 1996;220:128–31 (43 ref.)

Oesophageal squamous cell carcinoma after gastrectomy for benign ulcer disease. Hsu NY, et al. **Scand J Thorac Cardiovasc Surg** 1996;30(1):29–33

Wegener's granulomatosis with relapsed bleeding of gastric ulcers: a case report. Yamauchi F, et al. **Tokai J Exp Clin Med** 1995 Dec;20(4–6):233–40

[Acute double perforation of a gastric ulcer] Malý I. **Rozhl Chir** 1996 Oct;75(10):499–501 (Eng. Abstr.) **(Cze)**

[Still disease in adults revealed by a digestive manifestation] Dominguez S, et al. **Gastroenterol Clin Biol** 1995 Dec; 19(12):1059–61 (Eng. Abstr.) **(Fre)**

[Dieulafoy's ulcer and mesenteric paraganglioma: an incidental association? (letter)] Pol B, et al. **Presse Med** 1996 Sep 7;25(25):1168 **(Fre)**

[Prognostic risk factors in patients operated on for perforated peptic ulcer. A retrospective analysis of critical factors of mortality and morbidity in a series of 40 patients who underwent simple closure surgery] Chiarugi M, et al. **Ann Ital Chir** 1996 Sep–Oct;67(5):609–13 (Eng. Abstr.) **(Ita)**

[Our experience in the surgical treatment of perforated peptic ulcer] Coluccio G, et al. **Minerva Chir** 1996 Dec; 51(12):1035–8 (Eng. Abstr.) **(Ita)**

[Gastric ulcer and cancer] Matsukura N, et al. **Nippon Ika Daigaku Zasshi** 1997 Jun;64(3):207–10 (19 ref.) **(Jpn)**

[Conservative treatment of ulcer hemorrhage with histamine H2 antagonists] Grigor'ev PI, et al. **Khirurgiia (Mosk)** 1997; (5):63–5 **(Rus)**

[Characteristics of the surgical treatment of gastroduodenal ulcer hemorrhage in patients with posthemorrhagic syndrome] Desiaterik VI. **Klin Khir** 1996;(10):27–9 **(Rus)**

[Changes in the body of patients with peptic ulcer after acute hemorrhage] Desiaterik VI. **Klin Khir** 1996;(10):47–50 (24 ref.) **(Rus)**

[Use of low–intensity laser effects in the surgical treatment of patients with bleeding gastroduodenal ulcer] Gulam Sarvar, et al. **Klin Khir** 1996;(6):12–4 **(Rus)**

[Surgical treatment of patients with complicated stomach and duodenal ulcer] Mikoliuk VV, et al. **Klin Khir** 1996;(4):10–2 **(Rus)**

[Clinical analysis of surgical treatment in complications of recurrent gastric and duodenal ulcer] Militsa NN. **Klin Khir** 1996;(10):32–3 **(Rus)**

[Phlegmonous–ulcerous diverticulitis complicated by perforation of acute gastric ulcer] Sen'kiv SA, et al. **Klin Khir** 1996;(6):50 **(Rus)**

[Substantiation of indications for low–intensity laser irradiation in combined preoperative care of patients with ulcerative gastrointestinal hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1997;(1):3–5 (Eng. Abstr.) **(Rus)**

[Cancer from an ulcer or ulcerative stomach cancer? (a review of the literature and the authors' own observations)] Sadchikov VD, et al. **Lik Sprava** 1997 Mar–Apr;(2):137–41 (38 ref.) (Eng. Abstr.) **(Rus)**

[The clinical prognosis of the complication of peptic ulcer by acute hemorrhage] Abrashkina ED. **Ter Arkh** 1993; 65(2):17–9 (Eng. Abstr.) **(Rus)**

[Gastric resection in peritonitis combined with 4 peptic ulcer complications] Bogomolov NI. **Vestn Khir Im I I Grek** 1997;156(2):115–6 **(Rus)**

[A combination of perforated stomach ulcer and gangrenous appendicitis] Borodinov VP. **Vestn Khir Im I I Grek** 1996; 155(5):91 **(Rus)**

[A giant ulcer of the stomach with perforation into the liver simulating cancer] Kovalenko VL, et al. **Vestn Khir Im I I Grek** 1996;155(6):82–3 (7 ref.) **(Rus)**

[The surgical treatment of gastroduodenal ulcers complicated by perforation and hemorrhage] Kurygin AA, et al. **Vestn Khir Im I I Grek** 1997;156(1):20–3 (Eng. Abstr.) **(Rus)**

[The current problems of the surgical procedure in acute hemorrhages from gastroduodenal ulcers] Losev RZ, et al. **Vestn Khir Im I I Grek** 1996;155(6):28–31 (Eng. Abstr.) **(Rus)**

[The treatment of ulcerative gastrointestinal hemorrhages in the middle–aged and elderly] Serova LS, et al. **Vestn Khir Im I I Grek** 1996;(1):30–3 (Eng. Abstr.) **(Rus)**

[The role of endoscopy in determining the indications for the surgical treatment of the Mallory–Weiss syndrome and of bleeding acute gastroduodenal ulcers] Skriabin ON, et al. **Vestn Khir Im I I Grek** 1997;156(2):35–7; discussion 38–9 (Eng. Abstr.) **(Rus)**

[A perforated stomach ulcer of 30 days' duration] Smakov GM, et al. **Vestn Khir Im I I Grek** 1996;155(6):84–5 **(Rus)**

[X–ray diagnosis features of acute bleeding ulcers of the stomach and duodenum] Shcherbatenko MK, et al. **Vestn Rentgenol Radiol** 1996 May–Jun;(3):25–8 (Eng. Abstr.) **(Rus)**

[Pyloric obstruction secondary to gastric ulcer: two case reports] Antón–Pacheco Sánchez J, et al. **An Esp Pediatr** 1997 May;46(5):493–4 **(Spa)**

[Phlegmonous gastritis in a patient with chronic gastric ulcer (letter)] Merino MT, et al. **Med Clin (Barc)** 1997 Sep 6; 109(7):278–9 **(Spa)**

[Indicators of nonspecific immunity in patients with gastrointestinal hemorrhage caused by peptic ulcer and correction of the disorder] Krizhanovsk kiĭ OA. **Klin Khir** 1996;(10):29–31 **(Ukr)**

[Surgical treatment of gastroduodenal hemorrhage of ulcer etiology at the central district hospital] Ploshchans'kiĭ VV, et al. **Klin Khir** 1996;(6):48–9 **(Ukr)**

DIAGNOSIS

Gastric ulcer and cancer ulcer. Retrospective evaluation of the current endoscopic diagnosis. Sumberaz A, et al. **Acta Gastroenterol Latinoam** 1996;26(3):139–41

Gastric juice urease activity as a diagnostic test for Helicobacter pylori infection. Mokuolu AO, et al. **Am J Gastroenterol** 1997 Apr;92(4):644–8

Comparative study of artificial neural networks in the discrimination between benign from malignant gastric cells. Karakitsos P, et al. **Anal Quant Cytol Histol** 1997 Apr; 19(2):145–52

Gastric ulcer perforation into the heart. Brullet E, et al. **Endoscopy** 1996 Mar;28(3):316–8

Pedunculated giant hemangioma of liver. Kumarakrishnan S, et al. **Indian J Gastroenterol** 1997 Jan;16(1):35–6

Limitations of endoscopic inspection in diagnosis of malignant gastric ulcer [letter] Mohandas KM, et al. **Indian J Gastroenterol** 1996 Apr;15(2):79–80

Endoscopic discrimination of gastric ulcers. Maniatis AG, et al. **J Clin Gastroenterol** 1997 Jun;24(4):203–6

The clinical presentation of peptic ulcer disease. Werdmuller BF, et al. **Neth J Med** 1997 Mar;50(3):115–9

[Ischemic/AMI ECG changes in perforated pyloric ulcer] Andersen J. **Ugeskr Laeger** 1997 Sep 8;159(37):5535–7 (Eng. Abstr.) **(Dan)**

[The combined x–ray–endoscopic evaluation of the late results in organ–preserving operations with vagotomy in peptic ulcer] Zaĭtsev VT, et al. **Lik Sprava** 1996 Jan–Feb; (1–2):115–8 (Eng. Abstr.) **(Rus)**

[The diagnosis of Helicobacter infections in patients with gastric and duodenal peptic ulcers] Potashov LV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Nov–Dec; (6):11–3 (Eng. Abstr.) **(Rus)**

[Ulcer–cancer or early or advanced ulcerative cancer: an habitual diagnosis challenge: contribution of endoscopy and pathology (editorial)] Lucero RS, et al. **Acta Gastroenterol Latinoam** 1996;26(3):193–7 **(Spa)**

DIET THERAPY

[Optimization of dietary fat composition in erosive and ulcerative diseases of the gastroduodenal area] Matushevskaia VN, et al. **Vopr Pitan** 1996;(6):35–7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Brain–mediated protective interactions of histaminergic H2 and dopaminergic systems in rats. Grabarević Z, et al. **Acta Vet Hung** 1997;45(1):85–93

The management of refractory gastric ulcer using H2–receptor antagonists. Raju GS, et al. **Aliment Pharmacol Ther** 1996 Jun;10(3):387–96

A trial of lansoprazole in refractory gastric ulcer. van Rensburg CJ, et al. **Aliment Pharmacol Ther** 1996 Jun; 10(3):381–6

Eradication of H. pylori in a developing country: comparison of lansoprazole versus omeprazole with norfloxacin, in a dual–therapy study. Gupta VK, et al. **Am J Gastroenterol** 1997 Jul;92(7):1140–2

Highly effective twice–daily triple therapies for Helicobacter pylori infection and peptic ulcer disease: does in vitro metronidazole resistance have any clinical relevance? Lerang F, et al. **Am J Gastroenterol** 1997 Feb;92(2):248–53

Comparison of once–daily doses of omeprazole (40 and 20 mg) and placebo in the treatment of benign gastric ulcer: a multicenter, randomized, double–blind study. Valenzuela JE, et al. **Am J Gastroenterol** 1996 Dec;91(12):2516–22

Efficacy of ebrotidine and ranitidine in the treatment of benign gastric ulcer. Gedliczka O, et al. **Arzneimittelforschung** 1997 Apr;47(4A):560–4

Effect of fish oil on indometacin–induced gastric lesions in rats. Güzel C, et al. **Arzneimittelforschung** 1995 Nov; 45(11):1172–3

Simultaneous evaluation of gastric and duodenal ulcers–healing activities of anti–ulcer agents in rats. Segami T, et al. **Biol Pharm Bull** 1996 Jan;19(1):53–6

Randomised double blind controlled study of recurrence of gastric ulcer after treatment for eradication of Helicobacter pylori infection. Axon AT, et al. **BMJ** 1997 Feb 22; 314(7080):565–8

Experimental studies of injection therapy for ulcer haemorrhage in rabbits. Kubba AK, et al. **Br J Surg** 1997 Apr;84(4):551–4

Reduction of burn–induced gastric mucosal injury by an endothelin receptor antagonist in rats. Battal NM, et al. **Burns** 1997 Jun;23(4):295–9

Efficient and beta–stereoselective synthesis of 4(5)–methyl–5(4)–(5–amino–5–deoxy–beta–D–ribofuranosyl)imidazole and related compounds exhibiting antiulcer activity. Harusawa S, et al. **Chem Pharm Bull (Tokyo)** 1997 Jan;45(1):53–61

The effect of cimetidine on serum acidic markers and Helicobacter pylori in gastric ulcer subjects. Lee CT, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1996 Jan; 57(1):28–33

Pantoprazole. A review of its pharmacological properties and therapeutic use in acid–related disorders [published errata appear in Drugs 1996 Jun;51(6):1074 and 1996 Jul;52(1):92] Fitton A, et al. **Drugs** 1996 Mar;51(3):460–82 (132 ref.)

Update on Helicobacter pylori research. Eradication. Graham DY, et al. **Eur J Gastroenterol Hepatol** 1997 Jun; 9(6):626–8

The effect of rebamipide on gastric xanthine oxidase activity and type conversion in ethanol–treated rats. Huh K, et al. **Free Radic Biol Med** 1996;20(7):967–71

Investigations on the protective action of Condonopsis pilosula (Dangshen) extract on experimentally–induced gastric ulcer in rats. Wang ZT, et al. **Gen Pharmacol** 1997 Mar;28(3):469–73

Acceleration of wound healing in gastric ulcers by local injection of neutralising antibody to transforming growth factor beta 1. Ernst H, et al. **Gut** 1996 Aug;39(2):172–5

1976 and all that!—20 years of antisecretory therapy. Garner A, et al. **Gut** 1996 Dec;39(96):784–6

Healing with basic fibroblast growth factor is associated with reduced indomethacin induced relapse in a human model of gastric ulceration [see comments] Hull MA, et al. **Gut** 1997 Feb;40(2):204–10. Comment in: Gut 1997 Feb;40(2):286–7.

Effect of capsaicin and cimetidine on the healing of acetic acid induced gastric ulceration in the rat. Kang JY, et al. **Gut** 1996 Jun;38(6):832–6

Anti–ulcerogenic activity of GABA and GABA mimetic agents in rats. Goel RK, et al. **Indian J Exp Biol** 1996 Aug;34(8):745–9

Gastric antiulcer activity of UL–409 in rats. Kulkarni SK, et al. **Indian J Exp Biol** 1996 Jul;34(7):683–8

Therapy of NSAIDs–induced gastropathy. La Corte R, et al. **Ital J Gastroenterol** 1996 Dec;28 Suppl 4:37–41 (34 ref.)

Arachidonic acid cascade and gastric mucosal injury, protection, and healing: topics of this decade. Kobayashi K, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S12–7 (35 ref.)

Effects of oxygen radical scavengers on the quality of gastric ulcer healing in rats. Naito Y, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S82–6

Increased immunoreactivity and concentration of basic fibroblast growth factor in lansoprazole–treated gastric mucosa. Nakamura M, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S24–9

Gastric antiulcer and cytoprotective effect of Commiphora molmol in rats. al–Harbi MM, et al. **J Ethnopharmacol** 1997 Jan;55(2):141–50

Effect of omeprazole in the treatment of refractory acid-related diseases in childhood: endoscopic healing and twenty-four-hour intragastric acidity. Kato S, et al. **J Pediatr** 1996 Mar;128(3):415-21

Anti-ulcer activity of cromakalim (BRL 34915), a potassium-channel opener, against experimentally induced gastric and duodenal ulcers in rats and guinea-pigs. Goswami S, et al. **J Pharm Pharmacol** 1997 Feb;49(2):195-9

The role of gastric mucosal sulphydryls in the ulcer-protecting effects of cisapride. López A, et al. **J Pharm Pharmacol** 1996 Jan;48(1):37-40

Subserosal application of transforming growth factor-beta 1 in rats with chronic gastric ulcers: effect on gastric ulcer healing and blood flow. Ernst H, et al. **J Physiol Pharmacol** 1996 Sep;47(3):443-54

Intracisternal injection of basic fibroblast growth factor reduces the severity of gastric mucosal lesions evoked by ethanol in rats. Watanabe Y, et al. **Jpn J Physiol** 1997 Apr; 47(2):231-3

Helicobacter pylori infection and serum pepsinogen I concentration in peptic ulcer patients: effect of bacterial eradication. Park SM, et al. **Korean J Intern Med** 1996 Jan;11(1):1-8

Gastric mucosal cell cycle regulation with ulcer healing by sulglycotide. Slomiany BL, et al. **Scand J Gastroenterol** 1997 Sep;32(9):873-7

Helicobacter pylori and stomach ulcers [letter] [see comments] Maloney A. **Vet Rec** 1996 Aug 17;139(7):172. Comment in: Vet Rec 1996 Aug 24;139(8):196.

[Analogy method for the extended use and mechanism research of xilei powder] Ou BN. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Feb; 16(2):115-6 **(Chi)**

[Clinical and experimental studies of yuyang powder in treatment of peptic ulcer] Wan QX, et al. **Chung Kuo Chung Hsi I Chieh Ho Tsa Chih** 1996 Feb; 16(2):78-80 (Eng. Abstr.) **(Chi)**

[The role of Helicobacter in ulcerous disease, current treatment] Deprez P. **J Pharm Belg** 1997 May-Jun; 52(3):135-6 **(Fre)**

[Conservative treatment of gastroduodenal peptic ulcer perforations: indications and results] Alizadeh N, et al. **Schweiz Med Wochenschr Suppl** 1997;89:17S-19S (Eng. Abstr.) **(Fre)**

[Current developments in Helicobacter pylori therapy] Labenz J. **Leber Magen Darm** 1996 Jul;26(4):223-6 (0 ref.) **(Ger)**

[Effectiveness of short-term triple therapy for healing Helicobacter pylori infection in ulcer disease] Kobler E, et al. **Schweiz Med Wochenschr Suppl** 1997;89:14S-16S (Eng. Abstr.) **(Ger)**

[Antiulcer properties of shosaiko-to] Matsuta M, et al. **Nippon Yakurigaku Zasshi** 1996 Oct;108(4):217-25 (Eng. Abstr.) **(Jpn)**

[Early results of treating Helicobacter pylori infections in patients with gastric ulcer and gastritis] Jarczyk G, et al. **Pol Merkuriusz Lek** 1996 Sep;1(3):174-8 (Eng. Abstr.) **(Pol)**

[Oxyferriscorbone: anti-ulcer effect and its possible mechanisms] Rasulov MM, et al. **Biull Eksp Biol Med** 1994 May;117(5):490-3 **(Rus)**

[A method for stimulating the protective mechanisms of the gastric mucosa in peptic ulcer] Iakubov AV, et al. **Eksp Klin Farmakol** 1997 Mar-Apr;60(2):30-2 (Eng. Abstr.) **(Rus)**

[The validation and effect of the prophylactic (antirelapse) treatment of peptic ulcer patients with chlorozil and metronidazole] Tsimmerman IaS, et al. **Klin Med (Mosk)** 1996;74(2):58-60 **(Rus)**

[Ethonium in the treatment of patients with gastric and duodenal peptic ulcers] Babak OIa, et al. **Lik Sprava** 1996 Mar-Apr;(3-4):123-5 (Eng. Abstr.) **(Rus)**

[The endoscopic assessment of the effect of ranitidine and pirenzepine on the manifestations of the gastropathy induced by nonsteroidal anti-inflammatory preparations] Karateev AE, et al. **Ter Arkh** 1997;69(5):67-9 (Eng. Abstr.) **(Rus)**

[Ulfamid in the combined therapy of gastric and duodenal peptic ulcer] Pal'tsev AI, et al. **Ter Arkh** 1997;69(2):62-3 **(Rus)**

[Effectiveness and safety of lansoprazole in the treatment of peptic ulcer] Ramón Nogueira J, et al. **Rev Gastroenterol Mex** 1996 Oct-Dec;61(4):314-9 (Eng. Abstr.) **(Spa)**

ECONOMICS

Gastric ulcers at endoscopy: brush, biopsy, or both? Sadowski DC, et al. **Am J Gastroenterol** 1997 Apr;92(4):608-13

ENZYMOLOGY

Implication of nitric oxide synthase activity in the genesis of water immersion stress-induced gastric lesions in rats: the protective effects of FK506. Hisanaga Y, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):933-40

Role of gastric mucosal constitutive and inducible nitric oxide synthases in the development of stress-induced gastric mucosal lesions in rats. Nishida K, et al. **Biochem Biophys Res Commun** 1997 Jul 18;236(2):275-9

Role of metalloproteinases in the development and healing of acetic acid-induced gastric ulcer in rats. Baragi VM, et al. **Scand J Gastroenterol** 1997 May;32(5):419-26

EPIDEMIOLOGY

Prevention of ulcer recurrence after eradication of Helicobacter pylori: a prospective long-term follow-up study. Van der Hulst RW, et al. **Gastroenterology** 1997 Oct; 113(4):1082-6

[Characteristics of Helicobacter pylori infection in the Nouméa Hospital Center (letter)] Peroux JL, et al. **Gastroenterol Clin Biol** 1995 Dec;19(12):1069-71 **(Fre)**

[The epidemiology of the gastroduodenal damage induced by aspirin and other nonsteroidal anti-inflammatory drugs] Dobrilla G, et al. **Recenti Prog Med** 1997 May;88(5):202-11 (78 ref.) (Eng. Abstr.) **(Ita)**

[The course of the reparative process in patients with gastric and duodenal peptic ulcers (a clinico-statistical study)] Grinevich VB, et al. **Ter Arkh** 1993;65(2):13-7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Does smoking predispose to peptic ulcer relapse after eradication of Helicobacter pylori? Chan FK, et al. **Am J Gastroenterol** 1997 Mar;92(3):442-5

Giant antral ulcer: a rare presentation of eosinophilic gastroenteritis--case report and review of the literature. Kristopaitis T, et al. **Am J Gastroenterol** 1997 Jul; 92(7):1205-8 (21 ref.)

Guilty as charged: bugs and drugs in gastric ulcer. Sontag SJ. **Am J Gastroenterol** 1997 Aug;92(8):1255-61 (76 ref.)

Ischemic gastric ulcer after coronary bypass using the right gastroepiploic artery. Schroeyers P, et al. **Ann Thorac Surg** 1997 May;63(5):1470-2

Alterations in porcine gastric mucin during the development of experimental ulceration. Mall AS, et al. **Digestion** 1997; 58(2):138-46

Gastric ECL-cell hyperplasia produces enhanced basal and stimulated gastric acid output but not gastric erosion formation in the rat. LePard KJ, et al. **Gen Pharmacol** 1997 Mar;28(3):415-20

Focal lesion of African histoplasmosis presenting as a malignant gastric ulcer. Sanguino JC, et al. **Hepatogastroenterology** 1996 May-Jun;43(9):771-5

Stomal ulcer after gastric bypass [see comments] MacLean LD, et al. **J Am Coll Surg** 1997 Jul;185(1):1-7. Comment in: J Am Coll Surg 1997 Jul;185(1):87-8.

Acid-induced gastric damage in rats is aggravated by starvation and prevented by several nutrients. Hung CR, et al. **J Nutr** 1997 Apr;127(4):630-6

Helicobacter pylori, gastric ulcer, and duodenal ulcer [letter; comment] Rubin CE. **N Engl J Med** 1996 Dec 12; 335(24):1841-2; discussion 1842-3. Comment on: N Engl J Med 1996 Apr 18;334(16):1018-22. Comment on: N Engl J Med 1996 Jul 25;335(4):278-80.

Acute myocardial infarction and acute "stress ulcer". Toporan D. **Rom J Intern Med** 1996 Jul-Dec;34(3-4):211-5

A multiple gastric ulcer case caused by cytomegalovirus infection. Suzuki M, et al. **Tokushima J Exp Med** 1996 Dec; 43(3-4):173-6

[The relationship between hemorrhagic gastric ulcers often appearing among in the great Hanshin-Awaji earthquake sufferers and Helicobacter pylori infections] Kurokawa M, et al. **Kansenshogaku Zasshi** 1996 Sep;70(9):970-5 (Eng. Abstr.) **(Jpn)**

[Interrelationship of reflux bile acid concentration and the gastric mucosal change with reference to the pathophysiologic significance of taurine conjugated deoxycholic acid and chenodeoxycholic acid] Toyoshima A, et al. **Nippon Ika Daigaku Zasshi** 1996 Aug;63(4):268-74 (Eng. Abstr.) **(Jpn)**

[Pathophysiology of the harmful influence of smoking on the course of gastric and duodenal ulcer diseases] Budzyński J, et al. **Przegl Lek** 1996;53(11):811-5 (26 ref.) (Eng. Abstr.) **(Pol)**

[The occurrence of a relapse after pylorus-conserving resection in patients with gastric and duodenal peptic ulcer] Nikul'shin SS. **Klin Khir** 1995;(3):16-8 **(Rus)**

[A case of ulcerative tuberculosis of the stomach in a patient with multiple pulmonary tuberculomas] Iuditskiĭ MV, et al. **Probl Tuberk** 1996;(4):57-8 **(Rus)**

[The role of stomach pathology as a risk factor in ulcer formation at different times of chronic dialysis treatment] Ryss ES, et al. **Ter Arkh** 1993;65(2):19-23 (Eng. Abstr.) **(Rus)**

[Stress, adverse effects of drugs or infection? There is a whole succession of theories on the pathogenesis of stomach ulcer] Leonhardt T. **Lakartidningen** 1997 Aug 27;94(35):2941-4 **(Swe)**

[The pathogenetic role of dysbacteriosis of the large intestine in the recurrence of peptic ulcer] Andrusiak OV, et al. **Lik Sprava** 1995 Sep-Dec;(9-12):49-51 (Eng. Abstr.) **(Ukr)**

GENETICS

Application of the a priori methods for genetico-mathematical analysis of the inheritance pattern of ulcer disease. Stanchev I. **Folia Med (Plovdiv)** 1997; 39(1):48-58

Influence of the type of family predisposition on the age of ulcer disease onset. Stanchev IN. **Folia Med (Plovdiv)** 1996; 38(1):33-8

The expression of pepsinogen c mRNA in normal gastroduodenal mucosa and the gastric ulcer margin of the rat. Helander HF, et al. **Histochem Cell Biol** 1996 Feb; 105(2):163-9

HISTORY

Hunterian peptic ulcers and Helicobacter pylori. Walker MM, et al. **Ann R Coll Surg Engl** 1997 Sep;79(5):368-71

Gastric ulcers [letter] Janowitz HD. **Gut** 1997 Feb;40(2):289

IMMUNOLOGY

[Body nonspecific resistance in patients with gastric and duodenal peptic ulcer] Prylma OB, et al. **Lik Sprava** 1997 Jan-Feb;(1):80-1 (Eng. Abstr.) **(Ukr)**

METABOLISM

Endothelin-1 in the gastric mucosa in stress ulcers of critically ill patients. Michida T, et al. **Am J Gastroenterol** 1997 Jul;92(7):1177-81

Temporal expression of trefoil peptides in the TGF-alpha knockout mouse after gastric ulceration. Cook GA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1540-9

Expression of vascular endothelial growth factor at the human gastric ulcer margin and in cultured gastric fibroblasts: a new angiogenic factor for gastric ulcer healing. Takahashi M, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):493-8

Antiulcer effect of diltiazem in rats. Yong DG, et al. **Chung Kuo Yao Li Hsueh Pao** 1995 Nov;16(6):517-20

Immunohistochemical studies on EGF family growth factors in normal and ulcerated human gastric mucosa. Abe S, et al. **Dig Dis Sci** 1997 Jun;42(6):1199-209

Changes in sulfated macromolecules produced in vivo during normal and indomethacin-delayed ulcer healing in rats. Lyons KC, et al. **Dig Dis Sci** 1997 Aug;42(8):1755-64

Increased expression of transforming growth factor-beta1 during gastric ulcer healing in rats. Tominaga K, et al. **Dig Dis Sci** 1997 Mar;42(3):616-25

Effects of intragastric ammonia on collagen metabolism of gastric ulcer base in rats. Endo H, et al. **Digestion** 1996 Nov-Dec;57(6):411-9

Helicobacter pylori culture supernatant inhibits binding and proliferative response of human gastric cells to epidermal growth factor: implications for H.pylori interference with ulcer healing? Fujiwara Y, et al. **Digestion** 1997; 58(3):299-303

Production and activation of hepatocyte growth factor during the healing of rat gastric ulcers. Kinoshita Y, et al. **Digestion** 1997;58(3):225-31

Hydroxyl radical is the major causative factor in stress-induced gastric ulceration. Das D, et al. **Free Radic Biol Med** 1997;23(1):8-18

Induction of cyclooxygenase 2 in gastric mucosal lesions and its inhibition by the specific antagonist delays healing in mice [see comments] Mizuno H, et al. **Gastroenterology** 1997 Feb;112(2):387-97. Comment in: Gastroenterology 1997 Feb;112(2):645-8.

Gastric ulcer healing in the rat: kinetics and localisation of de novo procollagen synthesis. Shahin M, et al. **Gut** 1997 Aug;41(2):187-94

Association of cytotoxin production and neutrophil activation by strains of Helicobacter pylori isolated from patients with peptic ulceration and chronic gastritis [see comments] Zhang QB, et al. **Gut** 1996 Jun;38(6):841-5. Comment in: Gut 1997 Mar;40(3):431.

Expression of type I and IV collagen mRNAs in healing gastric ulcers--a comparative analysis using isotopic and non-radioactive in situ hybridization. Pohle T, et al. **Histochem Cell Biol** 1996 Oct;106(4):413-8

The inflammatory reaction in mucosa during healing of gastric ulcers in humans. Kawano S, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S78-81

Human chronic gastric ulcer and connexin. Mine T, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S104-7

Role of endogenous basic fibroblast growth factor in the healing of gastric ulcers in rats. Satoh H, et al. **Jpn J Pharmacol** 1997 Jan;73(1):59-71

Role of spasmolytic polypeptide in healing of stress-induced gastric lesions in rats. Konturek PC, et al. **Regul Pept** 1997 Jan 15;68(1):71-9

[Prostaglandins E concentration in gastric mucosa and synthesis of interleukin-1 (IL-1) in different clinical variants of gastric ulcer] Mikriukova VI, et al. **Klin Med (Mosk)** 1996;74(4):38-9 (Eng. Abstr.) **(Rus)**

[The antioxidant allowance of the body and lipid peroxidation in patients with gastric and duodenal peptic ulcers] Petrov EE. **Lik Sprava** 1996 Jul-Sep;(7-9):13-8 (50 ref.) **(Rus)**

MICROBIOLOGY

Eradication of H. pylori in a developing country: comparison of lansoprazole versus omeprazole with norfloxacin, in a dual-therapy study. Gupta VK, et al. **Am J Gastroenterol** 1997 Jul;92(7):1140-2

Cure of gastric ulcer disease after cure of Helicobacter pylori infection--German Gastric Ulcer Study [see comments] Bayerdörffer E, et al. **Eur J Gastroenterol Hepatol** 1996 Apr;8(4):343-9. Comment in: Eur J Gastroenterol Hepatol 1996 Apr;8(4):333-4.

Helicobacter pylori infection after partial gastrectomy for peptic ulcer and its role in relapsing disease. Leivonen MK, et al. **Eur J Gastroenterol Hepatol** 1997 Apr;9(4):371-4

Helicobacter pylori reinfection is rare in peptic ulcer patients cured by antimicrobial therapy. Miehlke S, et al.

Eur J Gastroenterol Hepatol 1996 Dec;8(12):1161-3
Reflections on gastric ulcer disease [comment] Tytgat GN. **Eur J Gastroenterol Hepatol** 1996 Apr;8(4):333-4. Comment on: Eur J Gastroenterol Hepatol 1996 Apr;8(4):343-9.
Clinical and pathological importance of heterogeneity in vacA, the vacuolating cytotoxin gene of Helicobacter pylori. Atherton JC, et al. **Gastroenterology** 1997 Jan; 112(1):92-9
Gastric mucormycosis due to Rhizopus oryzae in a renal transplant recipient. Winkler S, et al. **J Clin Microbiol** 1996 Oct;34(10):2585-7
Detection of Helicobacter pylori DNA in gastric juice by the polymerase chain reaction: comparison with findings in bacterial culture and the detection of tissue IgA and serum IgG antibodies against Helicobacter pylori. Matsukura N, et al. **J Gastroenterol** 1995 Dec;30(6):689-95
Ecabet sodium eradicates Helicobacter pylori infection in gastric ulcer patients. Shimoyama T, et al. **J Gastroenterol** 1996 Nov;31 Suppl 9:59-62
Helicobacter pylori infection delays the healing of acetic acid-induced gastric ulcer in Japanese monkeys. Kodama R, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1097-102
Induction of ulceration and severe gastritis in Mongolian gerbil by Helicobacter pylori infection. Matsumoto S, et al. **J Med Microbiol** 1997 May;46(5):391-7
Electron microscopic study of the morphological changes of gastric mucous cell induced by Helicobacter pylori in human gastric ulcers. Ogata T, et al. **J Submicrosc Cytol Pathol** 1996 Apr;28(2):255-64
Cytotoxin genes of Helicobacter pylori in chronic gastritis, gastroduodenal ulcer and gastric cancer: an age and gender matched case-control study. Matsukura N, et al. **Jpn J Cancer Res** 1997 Jun;88(6):532-6
Pathological consequences of Helicobacter pylori infection. Dixon M. **Scand J Gastroenterol Suppl** 1996;215:21
[The role of Helicobacter in ulcerous disease, current treatment] Deprez P. **J Pharm Belg** 1997 May-Jun; 52(3):135-6 **(Fre)**
[Ulcer--an infection?] Eissele R, et al. **Chirurg** 1996 Jan; 67(1):1-6 (35 ref.) (Eng. Abstr.) **(Ger)**
[The relationship between hemorrhagic gastric ulcers often appearing among in the great Hanshin-Awaji earthquake sufferers and Helicobacter pylori infections] Kurokawa M, et al. **Kansenshogaku Zasshi** 1996 Sep;70(9):970-5 (Eng. Abstr.) **(Jpn)**
[A rapid Helicobacter test in general practice. A needed test or a textbook example of how to create health issues?] Claudi T, et al. **Tidsskr Nor Laegeforen** 1997 Feb 10; 117(4):560-1 **(Nor)**
[Helicobacter pylori and stomach ulcer--diagnosis and treatment in primary health care (letter)] Melby KK. **Tidsskr Nor Laegeforen** 1996 Nov 20;116(28):3392 **(Nor)**
[Helicobacter pylori--comparison of selected diagnostic methods] Kopański Z, et al. **Folia Med Cracov** 1995; 36(1-4):33-45 (Eng. Abstr.) **(Pol)**
[Urease test, microbiologic tests, histologic and serologic tests for the evaluation of Helicobacter pylori infections in persons with peptic ulcer and gastritis] Jarczyk G, et al. **Pol Tyg Lek** 1996 Apr;51(14-18):219-22 (Eng. Abstr.) **(Pol)**
[Helicobacter pylori: role in the onset of chronic gastritis and ulcer] Tsimmerman IS, et al. **Klin Med (Mosk)** 1997; 75(4):8-13 (60 ref.) **(Rus)**
[Again "down with the cells! up with the microbes!"?] Albarracín Teulon A. **An R Acad Nac Med (Madr)** 1996; 113(2):443-53 **(Spa)**
[Why, when and how to treat Helicobacter pylori infection in gastroduodenal ulcer disease?] Gisbert JP, et al. **Rev Clin Esp** 1996 Sep;196(9):610-21 (248 ref.) **(Spa)**

MORTALITY

The significance of ulcer disease on late mortality after partial gastric resection [see comments] Staël von Holstein C, et al. **Eur J Gastroenterol Hepatol** 1997 Jan;9(1):33-40. Comment in: Eur J Gastroenterol Hepatol 1997 Jan;9(1):13-4.
[Ulcers of the stomach and duodenum continue to be a cause of death] Markert R, et al. **Pol Tyg Lek** 1996 Apr; 51(14-18):203-4 **(Pol)**

PARASITOLOGY

[Endoscopic discovery of a worm larva at the base of a gastric ulcer] Cruchaga S, et al. **Enferm Infecc Microbiol Clin** 1995 Dec;13(10):631-2 **(Spa)**

PATHOLOGY

Prevalence of gastric and duodenal ulcers at endoscopy in Nigerian and British patients. Malu AO, et al. **Afr J Med Med Sci** 1995 Sep;24(3):239-41
Point prevalence of peptic ulcer and gastric histology in healthy Indians with Helicobacter pylori infection. Misra V, et al. **Am J Gastroenterol** 1997 Sep;92(9):1487-91
Temporal expression of trefoil peptides in the TGF-alpha knockout mouse after gastric ulceration. Cook GA, et al. **Am J Physiol** 1997 Jun;272(6 Pt 1):G1540-9
Simultaneous evaluation of gastric and duodenal ulcers-healing activities of anti-ulcer agents in rats. Segami T, et al. **Biol Pharm Bull** 1996 Jan;19(1):53-6
Simultaneous restitution of matrix and cells in gastric ulcer: use of a combined in-situ hybridization and immunohistochemistry technique applicable to paraffin-embedded tissue. Pohle T, et al. **Cell Tissue Res** 1997 Mar;287(3):601-10
Indomethacin treatment during initial period of acetic acid-induced rat gastric ulcer healing promotes persistent polymorphonuclear cell-infiltration and increases future ulcer recurrence. Possible mediation of prostaglandins. Arakawa T, et al. **Dig Dis Sci** 1996 Oct;41(10):2055-61
Cigarette smoke increases gastric ulcer size in part by an angiotensin II-mediated mechanism in rats. Seno K, et al. **Dig Dis Sci** 1997 Jan;42(1):74-8
Benign gastric ulcer masquerading as a submucosal tumor. Mergener K, et al. **Endoscopy** 1997 May;29(4):331
Simultaneous analysis of mucosal and submucosal hemodynamics using infrared electronic endoscopy: effects of intraluminal acid on ulcer scars. Tsuji S, et al. **Endoscopy** 1995 Nov;27(9):679-82
Cell kinetic events in early indomethacin-induced gastrointestinal ulcerations in the rat. Uribe A, et al. **Eur J Gastroenterol Hepatol** 1997 Mar;9(3):267-73
The potentiating actions of cigarette smoking on ethanol-induced gastric mucosal damage in rats. Chow JY, et al. **Gastroenterology** 1997 Oct;113(4):1188-97
Non-nonsteroidal anti-inflammatory drug, nonmalignant gastric ulcers. Bjorkman DJ, et al. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):527-44 (102 ref.)
Gastric malignancy. Ellis KK, et al. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):545-63 (111 ref.)
Evaluation of gastric ulcer healing with mucosal microvascular architecture. Nagasawa Y, et al. **Hepatogastroenterology** 1996 Jul-Aug;43(10):866-872
Multiple antral ulcers in gastric sarcoid. Fireman Z, et al. **J Clin Gastroenterol** 1997 Mar;24(2):97-9
Cellular mechanisms, interactions, and dynamics of gastric ulcer healing. Tarnawski A, et al. **J Clin Gastroenterol** 1995; 21 Suppl 1:S93-7 (31 ref.)
A new model to study repair of gastric mucosa using primary cultured rabbit gastric epithelial cells. Watanabe S, et al. **J Clin Gastroenterol** 1995;21 Suppl 1:S40-4 (11 ref.)
Induction of gastric ulcer and intestinal metaplasia in mongolian gerbils infected with Helicobacter pylori. Hirayama F, et al. **J Gastroenterol** 1996 Oct;31(5):755-7
Analysis of pathogenic elements involved in gastric lesions induced by non-steroidal anti-inflammatory drugs in rats. Takeuchi K, et al. **J Gastroenterol Hepatol** 1997 May; 12(5):360-7
Differences in action of topical and systemic cysteamine on gastric blood flow, gastric acid secretion and gastric ulceration in the rat. Abdel-Salam O, et al. **J Physiol Paris** 1996;90(2):63-73
The indomethacin-induced gastric mucosal damage in rats. Effect of gastric acid, acid inhibition, capsaicin-type agents and prostacyclin. Abdel Salam OM, et al. **J Physiol Paris** 1997 Feb;91(1):7-19
Electron microscopic study of the morphological changes of gastric mucous cell induced by Helicobacter pylori in human gastric ulcers. Ogata T, et al. **J Submicrosc Cytol Pathol** 1996 Apr;28(2):255-64
A new gastric ulcer model induced by ischemia-reperfusion in the rat: role of leukocytes on ulceration in rat stomach. Wada K, et al. **Life Sci** 1996;59(19):PL295-301
Effects of sucralfate on acute gastric mucosal injury and gastric ulcer induced by ischemia-reperfusion in rats. Wada K, et al. **Pharmacology** 1997 Feb;54(2):57-63
Inoculation of VacA- and CagA- Helicobacter pylori delays gastric ulcer healing in the rat. Li H, et al. **Scand J Gastroenterol** 1997 May;32(5):439-44
Gastric ulcer associated with a Helicobacter-like organism in a cougar (Felis concolor). Hill JE, et al. **Vet Pathol** 1997 Jan;34(1):50-1
Migration of the ductular elements of gut-associated glands gives clues to the histogenesis of structures associated with responses to acid hypersecretory state: the origins of "gastric metaplasia" in the duodenum of the specialized mucosa of barrett's esophagus and of pseudopyloric metaplasia. Wright NA. **Yale J Biol Med** 1996 Mar-Apr; 69(2):147-53 (24 ref.)
[Stimulation of gastric repair by a single infiltration of insulin-like growth factor I (IGF-I)] Coerper S, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:809-12 (Eng. Abstr.) **(Ger)**
[Interrelationship of reflux bile acid concentration and the gastric mucosal change with reference to the pathophysiologic significance of taurine conjugated deoxycholic acid and chenodeoxycholic acid] Toyoshima A, et al. **Nippon Ika Daigaku Zasshi** 1996 Aug;63(4):268-74 (Eng. Abstr.) **(Jpn)**
[Gastric and duodenal ulcers and their complications in elderly patients] Kawaharada M, et al. **Nippon Ronen Igakkai Zasshi** 1996 Dec;33(12):940-4 (Eng. Abstr.) **(Jpn)**
[The effect of Helicobacter pylori infection and duodenogastric reflux on the histology of gastric mucosa in peptic ulcers] Kopański Z, et al. **Folia Med Cracov** 1996; 37(1-2):3-14 (Eng. Abstr.) **(Pol)**
[Differences in the morphology of gastric and duodenal ulcers in a twenty-five year period from 1976-1990] Klęba T. **Pol Merkuriusz Lek** 1996 Nov;1(5):322-4 (Eng. Abstr.) **(Pol)**
[Morphologic changes of gastric mucosa in Helicobacter pylori infection in patients with peptic ulcer disease and chronic gastritis] Raczyńska A, et al. **Pol Merkuriusz Lek** 1996 Sep;1(3):165-8 (Eng. Abstr.) **(Pol)**
[Morphometric characterization of intestinal metaplasia of the mucosa of the pyloric antrum section of the stomach in ulcer disease] Bukalev AV. **Arkh Patol** 1997 Mar-Apr; 59(2):41-5 (Eng. Abstr.) **(Rus)**
[Morphologic and morphogenetic features of stomach ulcer] Dmitriev IV, et al. **Arkh Patol** 1996 Sep-Oct;58(5):74-8 (55 ref.) (Eng. Abstr.) **(Rus)**
[Peptic ulcer and liver pathology (an analysis of 6456 autopsy observations during 1983-1992)] Lapina TL, et al. **Arkh Patol** 1996 Nov-Dec;58(6):33-7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The role of acid in the pathogenesis of indomethacin-induced gastric antral ulcers in the rat. Clayton NM, et al. **Aliment Pharmacol Ther** 1996 Jun;10(3):339-45
Role of neutrophils in a rat model of gastric ulcer recurrence caused by interleukin-1 beta. Watanabe T, et al. **Am J Pathol** 1997 Mar;150(3):971-9
Synchronized induction in bFGF and Cdk2 during gastric ulcer healing. Slomiany BL, et al. **Biochem Mol Biol Int** 1996 Oct;40(2):339-45
Effect of a prostaglandin I2 analogue, beraprost sodium, on burn-induced gastric mucosal injury in rats. Battal MN, et al. **Burns** 1997 May;23(3):232-7
Transdermal aspirin and gastric ulcer healing after coronary artery stent placement [letter] Keimowitz RM, et al. **Circulation** 1996 Dec 1;94(11):3002
Role of capsaicin-sensitive sensory nerves in gastroprotection against acid-independent and acid-dependent ulcerogens. Brzozowski T, et al. **Digestion** 1996 Nov-Dec;57(6):424-32
Role of nitric oxide in mucosal blood flow response and the healing of HCl-induced lesions in the rat stomach. Takeuchi K, et al. **Digestion** 1997;58(1):19-27
Role of polymorphonuclear leukocytes and oxygen-derived free radicals in chronic gastric lesion induced by acetic acid in rat. Motilva V, et al. **Gen Pharmacol** 1996 Apr; 27(3):545-50
The effect of acute bilateral adrenalectomy on serotonin-induced inhibition of gastric acid secretion and acute gastric mucosal injury in rats. Gidener S, et al. **Int J Exp Pathol** 1996 Aug;77(4):163-6
Helicobacter pylori infection delays the healing of acetic acid-induced gastric ulcer in Japanese monkeys. Kodama R, et al. **J Gastroenterol Hepatol** 1996 Nov;11(11):1097-102
Quality of ulcer healing influences the relapse of gastric ulcers in humans. Nebiki H, et al. **J Gastroenterol Hepatol** 1997 Feb;12(2):109-14
Study of the repairing process of gastric ulcer using multivariate analysis of bFGF-positive cells, haemodynamics, PAS-positive mucus amount and glandular index in the gastric mucosa. Terasaki T, et al. **J Gastroenterol Hepatol** 1996 Oct;11(10):928-40
Effects of leminoprazole, omeprazole and sucralfate on indomethacin-induced delayed healing of kissing gastric ulcers in rats. Tsukimi Y, et al. **J Gastroenterol Hepatol** 1996 Apr;11(4):335-40
Gastric emptying of 99mTc tagged solid food in gastric and duodenal ulceration. Engler-Pinto P Jr, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1995 Nov-Dec; 50(6):320-5
Expression of epidermal growth factor and transforming growth factor alpha during ulcer healing. Time sequence study. Konturek PC, et al. **Scand J Gastroenterol** 1997 Jan; 32(1):6-15
Molecular aspects of restitution: functions of trefoil peptides. Poulsom R, et al. **Yale J Biol Med** 1996 Mar-Apr; 69(2):137-46
[Role of gastric vascular smooth muscle cells in the pathogenesis of stress ulcer] Tanaka M, et al. **J Smooth Muscle Res** 1995 Dec;31(6):446 **(Jpn)**
[Gastric juice acidity in gastric ulcer] Petrov VP, et al. **Khirurgiia (Mosk)** 1996;(3):64-6 (Eng. Abstr.) **(Rus)**
[Use of the vegetative index in optimization of premedication in patients with stomach and duodenal ulcer] Spitsyn ON, et al. **Klin Khir** 1996;(8):15-6 **(Rus)**
[Acid-peptic aggression in ulcers in different locations] Gorshkov BA. **Klin Med (Mosk)** 1996;74(2):75-6 **(Rus)**
[The interdigestive motility of the gallbladder in patients with gastric and duodenal peptic ulcer] Reshetilov IuI, et al. **Lik Sprava** 1997 Jan-Feb;(1):42-4 (Eng. Abstr.) **(Rus)**
[The motor-evacuatory and acid-producing functions of the stomach in patients with complicated peptic ulcer combined with thyrotoxicosis] Ibadov IIu, et al. **Vestn Khir Im I I Grek** 1995;154(4-6):22-3 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Protective effect of taurine on indomethacin-induced gastric mucosal injury. Son M, et al. **Adv Exp Med Biol** 1996; 403:147-55
Implication of nitric oxide synthase activity in the genesis of water immersion stress-induced gastric lesions in rats: the protective effects of FK506. Hisanaga Y, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):933-40
Omeprazole prevents indomethacin-induced gastric ulcers

in rabbits. Lee M, et al. **Aliment Pharmacol Ther** 1996 Aug; 10(4):571–6

Prevention of water immersion stress–induced gastric lesions through the enhancement of nitric oxide synthase activity in rats. Tachi K, et al. **Aliment Pharmacol Ther** 1996 Feb; 10(1):97–103

Prevention with sucralfate gel of NSAID–induced gastroduodenal damage in arthritic patients. Miglioli M, et al. **Am J Gastroenterol** 1996 Nov;91(11):2367–71

Is the incidence of hemorrhagic stress ulceration in surgical critically ill patients affected by modern antacid prophylaxis? Zeltsman D, et al. **Am Surg** 1996 Dec; 62(12):1010–3

Prevention of nonsteroidal anti–inflammatory drug–induced gastrointestinal mucosal injury. A meta–analysis of randomized controlled clinical trials [see comments] Koch M, et al. **Arch Intern Med** 1996 Nov 11;156(20):2321–32. Comment in: ACP J Club 1997 Mar–Apr;126(2):36.

Effect of the histamine H2–receptor antagonist (+/–)–(E)–1–[2–hydroxy–2–(4–hydroxyphenyl)ethyl]–3'–[2–[[[5–methylamino) methyl–2–furyl] methyl]thio]ethyl]–2"–(methylsulfonyl)guanidine on acute gastric mucosal injury in rats and its free–radical scavenging activities. Naito Y, et al. **Arzneimittelforschung** 1997 Jul;47(7):845–8

Studies on the protective effect of ebrotidine on experimental ulcers induced by non–steroidal anti–inflammatory drugs in healthy volunteers. Puscas I, et al. **Arzneimittelforschung** 1997 Apr;47(4A):565–8

Comparative study of the safety and efficacy of ebrotidine versus ranitidine and placebo in the prevention of piroxicam–induced gastroduodenal lesions. Puscas I, et al. **Arzneimittelforschung** 1997 Apr;47(4A):568–72

Protective effect of fish oil against stress–induced gastric injury in rats. Ulak G, et al. **Arzneimittelforschung** 1995 Nov;45(11):1174–5

Protective effects of Acanthopanax senticosus Harms from Hokkaido and its components on gastric ulcer in restrained cold water stressed rats. Fujikawa T, et al. **Biol Pharm Bull** 1996 Sep;19(9):1227–30

Gastroprotection in neurosurgery: the practice in Great Britain. Carroll TA, et al. **Br J Neurosurg** 1997 Feb; 11(1):39–42

Protection by amylin of gastric erosions induced by indomethacin or ethanol in rats. Guidobono F, et al. **Br J Pharmacol** 1997 Feb;120(4):581–6

New drug to prevent NSAID–related ulcers [letter; comment] Liss GM. **Can Med Assoc J** 1996 Oct 15; 155(8):1043. Comment on: Can Med Assoc J 1996 Jul 1;155(1):77–88.

Chilli, capsaicin and the stomach. Kang JY. **Clin Sci (Colch)** 1996 Sep;91(3):252–4 (25 ref.)

Effectiveness of ranitidine 150 mg at bedtime as maintenance therapy for healed gastric ulcers. Sue SO, et al. **Clin Ther** 1996 Nov–Dec;18(6):1175–83

Flavonoid–induced gastroprotection in rats: role of blood flow and leukocyte adherence. Blank MA, et al. **Digestion** 1997;58(2):147–54

A mechanistic study of beta–adrenoceptor antagonists on ethanol–induced gastric damage. Kaan SK, et al. **Eur J Pharmacol** 1996 Dec 12;317(1):115–22

Melatonin affords protection against gastric lesions induced by ischemia–reperfusion possibly due to its antioxidant and mucosal microcirculatory effects. Konturek PC, et al. **Eur J Pharmacol** 1997 Mar 12;322(1):73–7

Protective effect of zinc gluconate on chemically induced gastric ulcer. Bandyopadhyay B, et al. **Indian J Med Res** 1997 Jul;106:27–32

Effects of (R)–alpha–methylhistamine and its prodrug BP 2.94 on gastric mucosal lesions in cold/restraint stressed rats. Belcheva A, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S113–4

A study of the antiulcer mechanisms of propranolol in rats. Kaan SK, et al. **Inflamm Res** 1996 Aug;45(8):370–5

Gastric mucosal injury by nonsteroidal anti–inflammatory drugs is reduced by (R)–alpha–methylhistamine and its pro–drugs in the rat. Morini G, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S101–2

Prevention of NSAID–gastropathy. Ardizzone S, et al. **Ital J Gastroenterol** 1996 Dec;28 Suppl 4:33–6 (19 ref.)

Anti–inflammatory and antiulcer activity of Teucrium buxifolium. Fernández Puntero B, et al. **J Ethnopharmacol** 1997 Jan;55(2):93–8

Eremomastax speciosa: effects of leaf aqueous extract on ulcer formation and gastric secretion in rats. Tan PV, et al. **J Ethnopharmacol** 1996 Nov;54(2–3):139–42

Tungstic acid reduction of cold–resistant stress–induced ulceration in rats. Qiu BS, et al. **J Gastroenterol Hepatol** 1997 Jan;12(1):19–23

Effects of selective beta–adrenoceptor antagonists on gastric ulceration in the rat. Kaan SK, et al. **J Pharm Pharmacol** 1997 Feb;49(2):200–5

Prevention of gastric ulcer relapse induced by indomethacin in rats by a mutein of basic fibroblast growth factor. Satoh H, et al. **Jpn J Pharmacol** 1997 Mar;73(3):229–41

Famotidine to prevent peptic ulcer caused by NSAIDs [letter] Graham DY. **N Engl J Med** 1996 Oct 24; 335(17):1322; discussion 1322–3

A protective role for calcitonin gene–related peptide in water–immersion stress–induced gastric ulcers in rats. Evangelista S, et al. **Pharmacol Res** 1997 Apr;35(4):347–50

Gastroprotective effect of malotilate in indomethacin– and ethanol–induced gastric mucosal damage. Mirossay L, et al. **Physiol Res** 1996;45(5):405–11

Effect of stobadine on gastric mucosal injury after ischaemia/reperfusion. Mojžiš J, et al. **Physiol Res** 1996; 45(5):399–403

Gastric cytoprotection of the non–steroidal anti–inflammatory sesquiterpene, beta–caryophyllene [letter] Tambe Y, et al. **Planta Med** 1996 Oct;62(5):469–70

Cytoprotective activity of cisapride on experimental gastric mucosal lesions induced by ethanol. Role of endogenous prostaglandins. Motilva V, et al. **Prostaglandins** 1996 Jul; 52(1):63–74

Gastroprotective activity of melatonin and its precursor, L–tryptophan, against stress–induced and ischaemia–induced lesions is mediated by scavenge of oxygen radicals. Konturek PC, et al. **Scand J Gastroenterol** 1997 May;32(5):433–8

Acute erosions of the gastric mucosa in burned rats: effect of sucralfate. Samdal F, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Sep; 31(3):221–7

Prophylaxis of acute gastroduodenal bleeding after renal transplantation. Skála I, et al. **Transpl Int** 1997;10(5):375–8

Therapy and prevention of gastric ulcer. Lamers CB, et al. **Yale J Biol Med** 1996 May–Jun;69(3):265–70 (34 ref.)

Healing process induced by a flavonic fraction of Bidens aurea on chronic gastric lesion in rat. Role of angiogenesis and neutrophil inhibition. Martín Calero M, et al. **Z Naturforsch [C]** 1996 Jul–Aug;51(7–8):570–7

Antiulcerogenicity of the flavonoid fraction from Erica andevalensis Cabezudo–Rivera. Reyes M, et al. **Z Naturforsch [C]** 1996 Jul–Aug;51(7–8):563–9

[Early enteral feeding and supplement of glutamine prevent occurrence of stress ulcer following severe thermal injury] Yan R, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):189–92 (Eng. Abstr.) **(Chi)**

[Antacids for postoperative prevention of stress ulcer in infants: a dose finding study] Kentrup H, et al. **Klin Padiatr** 1996 Jan–Feb;208(1):14–6 (Eng. Abstr.) **(Ger)**

[Effects of Cuban analog (SWR–104SA), a new histamine H2 receptor antagonist, on gastric acid secretion and experimental ulcer formation] Shinkawa R, et al. **Yakugaku Zasshi** 1996 Oct;116(10):783–91 (Eng. Abstr.) **(Jpn)**

[Comparison of anti–ulcer properties of OF–900, OF–743 and their combination in various models of stomach ulcer induction in rats] Zhulkova SV, et al. **Biull Eksp Biol Med** 1997 Jul;124(7):13–5 **(Rus)**

[The prevention of stress–related postoperative and drug–induced erosive–ulcerative lesions of the upper digestive tract] Degtiareva II, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):61–4 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Are abnormal gastrofiberscopic findings related to hostility with poor social support or to negative responses to stress? Fukunishi I, et al. **J Psychosom Res** 1996 Oct;41(4):337–42

[Possible relationship between psychological stress and bleeding erosive upper gastrointestinal lesions] Bleich A, et al. **Harefuah** 1996 Jul;131(1–2):7–9, 72, 71 (Eng. Abstr.) **(Heb)**

RADIOGRAPHY

[Role of present–day radiography in the diagnosis of peptic ulcer of the stomach] Portnoĭ LM. **Vestn Rentgenol Radiol** 1996 May–Jun;(3):5–12 (Eng. Abstr.) **(Rus)**

[X–ray diagnostic features of giant bleeding ulcers in stomach and duodenum] Sherbatenko MK, et al. **Vestn Rentgenol Radiol** 1997 May–Jun;(3):15–8 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

[Use of low–intensity laser effects in the surgical treatment of patients with bleeding gastroduodenal ulcer] Gulam Sarvar, et al. **Klin Khir** 1996;(6):12–4 **(Rus)**

REHABILITATION

[Experience with the early health resort rehabilitation of patients who have undergone a surgical intervention for peptic ulcer] Sapa AI, et al. **Lik Sprava** 1996 Jul–Sep; (7–9):118–21 (Eng. Abstr.) **(Rus)**

[Gastric and duodenal mucosal function in peptic ulcer patients exposed to endoscopic laser therapy and sanatorium–health resort factors] Petrakova VS, et al. **Ter Arkh** 1997;69(2):13–6 (Eng. Abstr.) **(Rus)**

[The combined use of mud applications and the drinking of carbonate mineral water in patients with gastric and duodenal peptic ulcer] Mekhtiev PS, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1997 Jan–Feb;(1):16–9 **(Rus)**

[The treatment of patients with peptic ulcer and primary chronic gastroduodenitis at Zheleznovodsk health resort] Nogaller AM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1996 Mar–Apr; (2):18–22 **(Rus)**

[The use of microwave resonance therapy in the health–resort treatment of peptic ulcer] Stetsenko HI, et al. **Lik Sprava** 1996 Jan–Feb;(1–2):119–20 **(Ukr)**

SURGERY

Laparoscopic patching of crack cocaine–induced perforated ulcers. Arrillaga A, et al. **Am Surg** 1996 Dec;62(12):1007–9

Laparoendoscopic approach to perforated peptic ulcer: case report and discussion. Champagne LP, et al. **Am Surg** 1996 Dec;62(12):1003–6

Thoracoscopic vagotomy as a safe adjunct to remedial gastric surgery. Schuricht AL, et al. **Am Surg** 1997 Jun;63(6):540–2

Direct button percutaneous endoscopic jejunostomy: successful placement in a patient with severe malnutrition and previous gastric resection. Dumot JA, et al. **Gastrointest Endosc** 1997 Jan;45(1):92–4 (14 ref.)

Risk factors in surgery of gastroduodenal ulcer disease in patients with schistosomal portal hypertension. Anwar M, et al. **Int Surg** 1996 Apr–Jun;81(2):126–9

Postoperative gastric emptying [letter; comment] Frankel LA. **J Am Coll Surg** 1997 Mar;184(3):336–7. Comment on: J Am Coll Surg 1996 May;182(5):388–93. Comment on: J Am Coll Surg 1996 May;182(5):452–3.

Gastric ulcer therapy [letter; comment] Witte CL. **J Am Coll Surg** 1997 Mar;184(3):337–8. Comment on: J Am Coll Surg 1996 May;182(5):388–93. Comment on: J Am Coll Surg 1996 May;182(5):452–3.

Surgical treatment of peptic ulcer disease: changing patterns in the past 40 years. Chen CN, et al. **J Formos Med Assoc** 1996 Sep;95(9):675–9

Evaluation of omental implantation for perforated gastric ulcer therapy: findings in a rat model. Matoba Y, et al. **J Gastroenterol** 1996 Dec;31(6):777–84

[Indications and results of the endoscopic treatment of hemorrhaging ulcers] Barthet M, et al. **Ann Chir** 1997; 51(1):10–4; discussion 15–20 **(Fre)**

[Postoperative recurrent ulcer after gastric resection—results of surgical treatment] Hölscher AH, et al. **Chirurg** 1996 Aug;67(8):814–20 (Eng. Abstr.) **(Ger)**

[66–year–old man with an unusual anastomosis ulcer after Billroth II stomach resection] Baniewicz W, et al. **Internist (Berl)** 1997 Mar;38(3):255–8 **(Ger)**

[Laparoscopic versus conventional suture and abdominal lavage in stomach perforation with peritonitis of various durations] Bloechle C, et al. **Langenbecks Arch Chir Suppl Kongressbd** 1997;114:813–9 (Eng. Abstr.) **(Ger)**

[Bleeding complication in chronic stomach and duodenal ulcer—plea for resection in emergencies and in the elderly] Damanakis K, et al. **Zentralbl Chir** 1996;121(7):571–6; discussion 577 (Eng. Abstr.) **(Ger)**

[Biliary gastritis after partial gastrectomy by the Maki method] Kęba T. **Wiad Lek** 1994 Nov–Dec; 47(21–24):831–5 (Eng. Abstr.) **(Pol)**

[Esophageal stenosis and esophagotracheal fistula with concomitant gastric ulcer in "caustic soda" ingestion] Sabău D, et al. **Chirurgia (Bucur)** 1996 May–Jun;45(3):133–7 (Eng. Abstr.) **(Rum)**

[Combined surgical interventions in gastroduodenal ulcers] Lutsevich EV, et al. **Khirurgiia (Mosk)** 1997;(1):18–20 (Eng. Abstr.) **(Rus)**

[Advantages and disadvantages of stomach resection with PU anastomosis in treatment of gastric and duodenal peptic ulcers] Maiorova IV, et al. **Khirurgiia (Mosk)** 1996;(5):61–6 (120 ref.) **(Rus)**

[Closing of duodenal stump and crater of giant cancerous profusely bleeding ulcer] Kholiavko VK, et al. **Klin Khir** 1996;(6):50–1 **(Rus)**

[The modern surgical problems of gastric peptic ulcer] Gurin NN, et al. **Vestn Khir Im I I Grek** 1997;156(3):101–5 (46 ref.) **(Rus)**

[The surgery of peptic ulcer in middle–aged and elderly patients] Iarema IV, et al. **Vestn Khir Im I I Grek** 1996; 155(4):84–8; discussion 88–9 **(Rus)**

[Evolution in the surgical treatment of gastroduodenal ulcus. 8–year retrospective study with 1,732 cases (letter)] Fernández–Llamazares J, et al. **Rev Esp Enferm Dig** 1996 Aug;88(8):580–1 **(Spa)**

THERAPY

Reduced long–term survival following major peptic ulcer haemorrhage [see comments] Kubba AK, et al. **Br J Surg** 1997 Feb;84(2):265–8. Comment in: Br J Surg 1997 Jun;84(6):889.

Recurrent peptic ulceration. Howden CW. **Dig Dis** 1997 Jan–Apr;15(1–2):92–9 (45 ref.)

Rapid expression and specific localization of tenascin in gastric ulcer healing in rats. Tominaga K, et al. **Digestion** 1997;58(2):120–8

Acute ischemia followed by hemorrhagic gastric necrosis after injection sclerotherapy for ulcer. Dorta G, et al. **Endoscopy** 1996 Aug;28(6):532

Gastric malignancy. Ellis KK, et al. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):545–63 (111 ref.)

Factors related to the failure of endoscopic injection therapy for bleeding gastric ulcer. Brullet E, et al. **Gut** 1996 Aug; 39(2):155–8

Therapy and prevention of gastric ulcer. Lamers CB, et al. **Yale J Biol Med** 1996 May–Jun;69(3):265–70 (34 ref.)

[Complete gastric wall necrosis after endoscopic sclerotherapy for a gastric ulcer with visible arterial stump (see comments)] Scharnke W, et al.

STOMACH ULCER

Dtsch Med Wochenschr 1997 May 9;122(19):606–9 (Eng. Abstr.). Comment in: Dtsch Med Wochenschr 1997 Aug 1;122(31–32):990–1. **(Ger)**

[The combined treatment of peptic ulcer with the differentiated use of nontraditional physiotherapeutic methods] Asauliuk IK, et al. **Lik Sprava** 1996 Oct–Dec; (10–12):119–22 (Eng. Abstr.) **(Rus)**

[Enterosorption in ulcerative lesions of the gastrointestinal tract with concomitant intestinal dysbacteriosis] Krylov AA, et al. **Ter Arkh** 1996;68(2):24–7 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY

Sonographic detection of intragastric blood clot. Farin P, et al. **Eur Radiol** 1997;7(2):262–3

[A case of celiac aneurysm exposed to the ulcer base of the remnant stomach: an usefulness of miniature ultrasonic probe] Imada Y, et al.
Nippon Shokakibyo Gakkai Zasshi 1997 Apr;94(4):268–71 **(Jpn)**

VETERINARY

Effects of intermittent feed deprivation, intermittent feed deprivation with ranitidine administration, and stall confinement with ad libitum access to hay on gastric ulceration in horses. Murray MJ, et al. **Am J Vet Res** 1996 Nov;57(11):1599–603

Treatment of gastric ulcers in horses with histamine type 2 receptor antagonists. Furr MO, et al.
Equine Vet J Suppl 1989 Jun;(7):77–9

Gastric ulcers in horses: a comparison of endoscopic findings in horses with and without clinical signs. Murray MJ, et al. **Equine Vet J Suppl** 1989 Jun;(7):68–72

The pig as an ulcer model [letter; comment] Mall AS, et al. **Gastroenterology** 1997 Jul;113(1):366–7. Comment on: Gastroenterology 1996 Jul;111(1):19–27.

Suppression of gastric acidity in horses. Murray MJ.
J Am Vet Med Assoc 1997 Jul 1;211(1):37–40 (33 ref.)

Equine gastric impaction, ulceration, and perforation due to persimmon (Diospyros virginiana) ingestion. Cummings CA, et al. **J Vet Diagn Invest** 1997 Jul;9(3):311–3

Amebiasis in a dog with gastric ulcers and adenocarcinoma. Steele KE, et al. **J Vet Diagn Invest** 1997 Jan;9(1):91–3

Gastric ulcer associated with a Helicobacter-like organism in a cougar (Felis concolor). Hill JE, et al. **Vet Pathol** 1997 Jan;34(1):50–1

Ultrasonography of gastric ulceration in the dog. Penninck D, et al. **Vet Radiol Ultrasound** 1997 Jul–Aug;38(4):308–12

Helicobacter pylori and stomach ulcers [letter] [see comments] Maloney A. **Vet Rec** 1996 Aug 17;139(7):172. Comment in: Vet Rec 1996 Aug 24;139(8):196.

Helicobacter pylori and stomach ulcers [letter; comment] Pike R, et al. **Vet Rec** 1996 Aug 24;139(8):196. Comment on: Vet Rec 1996 Aug 17;139(7):172.

[Abomasal ulcers in calves: clinical investigations and experiences] Dirksen G, et al. **Tierarztl Prax** 1997 Jul; 25(4):318–28 (Eng. Abstr.) **(Ger)**

VIROLOGY

Was the gastric ulcer due to cytomegalovirus? [letter] Golstein M, et al. **Clin Rheumatol** 1997 Jan;16(1):107–8

STOMACH VOLVULUS

Gastric volvulus: a report of four cases. Adebamowo CA, et al. **West Afr J Med** 1996 Apr–Jun;15(2):126–31 (19 ref.)

COMPLICATIONS

Acute gastric volvulus and congenital posterolateral diaphragmatic hernia. Leitão B, et al.
Eur J Pediatr Surg 1997 Apr;7(2):106–8

CONGENITAL

[Volvulus in childhood] Peitz HG. **Radiologe** 1997 Jun; 37(6):439–45 (30 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

'Idiopathic' chronic gastric volvulus. Willsher PC, et al. **Aust N Z J Surg** 1996 Sep;66(9):647–9

[Gastric volvulus in childhood] Georgacopulo P, et al. **Minerva Pediatr** 1996 Jun;48(6):275–8 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Gastric volvulus after coronary bypass [letter] [see comments] Michel LA, et al. **Lancet** 1997 Jan 25; 349(9047):251. Comment in: Lancet 1997 Mar 15;349(9054):806.

[Acute intra-abdominal gastric volvulus in adults. Defect of dorsal mesogastrium fusion] Benoit L, et al. **Ann Chir** 1997; 51(4):379–81 (18 ref.) (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Prophylactic gastropexy in the asplenia syndrome. Okoye BO, et al. **Pediatr Surg Int** 1997;12(1):28–9

RADIOGRAPHY

Paraoesophageal hernia with acute intrathoracic volvulus of the stomach after laparoscopic Nissen fundoplication. Yvergneaux JP, et al. **Acta Chir Belg** 1996 Nov–Dec; 96(6):280–3

Acute gastric volvulus and congenital posterolateral diaphragmatic hernia. Leitão B, et al.
Eur J Pediatr Surg 1997 Apr;7(2):106–8

SURGERY

Comparison of two surgical treatments of gastric dilatation–volvulus in dogs. Eggertsdóttir AV, et al.
Acta Vet Scand 1996;37(4):415–26

Laparoscopic excision of a cystic lymphangioma. Kenney B, et al. **J Laparoendosc Surg** 1996 Mar;6 Suppl 1:S99–101

Iatrogenic gastric volvulus during transposition for esophageal atresia: diagnosis and treatment. Chan KL, et al. **J Pediatr Surg** 1996 Feb;31(2):229–32

[Endoscopic repositioning of the upside-down stomach and its fixation by percutaneous endoscopic gastrostomy] Januschowski R. **Dtsch Med Wochenschr** 1996 Oct 11; 121(41):1261–4 (19 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Percutaneous endoscopic gastrostomy as a treatment for chronic gastric volvulus. Baudet JS, et al. **Endoscopy** 1997 Feb;29(2):147–8

Chronic volvulus of the stomach: to operate? Senapati MK, et al. **Trop Doct** 1997 Jan;27(1):41–3

VETERINARY

Comparison of two surgical treatments of gastric dilatation–volvulus in dogs. Eggertsdóttir AV, et al.
Acta Vet Scand 1996;37(4):415–26

Multiple risk factors for the gastric dilatation–volvulus syndrome in dogs: a practitioner/owner case–control study. Glickman LT, et al. **J Am Anim Hosp Assoc** 1997 May–Jun; 33(3):197–204

Evaluation of a hypertonic saline–dextran solution for treatment of dogs with shock induced by gastric dilatation–volvulus. Schertel ER, et al.
J Am Vet Med Assoc 1997 Jan 15;210(2):226–30

Acute gastric dilatation with volvulus in a northern fur seal (Callorhinus ursinus). Frasca S Jr, et al. **J Wildl Dis** 1996 Jul;32(3):548–51

STOMATITIS

CHEMICALLY INDUCED

Misoprostol prophylaxis for high-dose chemotherapy-induced mucositis: a randomized double-blind study. Dueñas-Gonzalez A, et al.
Bone Marrow Transplant 1996 May;17(5):809–12

Phase I study of high-dose continuous intravenous infusion of VP-16 in combination with high-dose melphalan followed by autologous bone marrow transplantation in children with stage IV neuroblastoma. Valteau-Couanet D, et al. **Bone Marrow Transplant** 1996 Apr;17(4):485–9

Management of oral complications of disease-modifying drugs in rheumatoid arthritis. Carpenter EH, et al.
Br J Rheumatol 1997 Apr;36(4):473–8

The frequency and clinical characteristics of methotrexate (MTX) oral toxicity in rheumatoid arthritis (RA): a masked and controlled study. Ince A, et al. **Clin Rheumatol** 1996 Sep;15(5):491–4

Allergic contact stomatitis from aristochol, a phytotherapeutic cholagogue. Bayerl C, et al.
Contact Dermatitis 1996 Mar;34(3):222–3

Purpuric patch test reaction and venulitis due to methyl methacrylate in a dental prosthesis. Koch P, et al.
Contact Dermatitis 1996 Mar;34(3):213–15

Oral mucosal desquamation of pre- and post-menopausal women. A comparison of response to sodium lauryl sulphate in toothpastes. Herlofson BB, et al.
J Clin Periodontol 1996 Jun;23(6):567–71

A double-blind, placebo-controlled, randomized trial to evaluate the role of tetrachlorodecaoxide in the management of chemotherapy-induced oral mucositis. Malik IA, et al. **J Pain Symptom Manage** 1997 Aug; 14(2):82–7

Assessment and management of chemotherapy-induced mucositis in children. Kennedy L, et al.
J Pediatr Oncol Nurs 1997 Jul;14(3):164–74; quiz 175–7 (19 ref.)

Sucralfate prophylaxis of fluorouracil-induced stomatitis. Giorgi F, et al. **Tumori** 1996 Nov–Dec;82(6):585–7

COMPLICATIONS

Simultaneous uvulitis and epiglottitis without fever or leukocytosis. Jerrard DA, et al. **Am J Emerg Med** 1996 Oct;14(6):551–2

Generalized lichen nitidus with oral and nail involvement in a child. Bettoli V, et al. **Dermatology** 1997;194(4):367–9

Correlation between mucosal inflammation and marginal bone loss around hydroxyapatite-coated implants: a 3-year cross-sectional study. Teixeira ER, et al.
Int J Oral Maxillofac Implants 1997 Jan–Feb;12(1):74–81

DIAGNOSIS

Monitoring of methotrexate and 7-hydroxymethotrexate in saliva from children with acute lymphoblastic leukemia receiving high-dose consolidation treatment: relation to oral mucositis. Albertioni F, et al. **Anticancer Drugs** 1997 Feb;8(2):119–24

Uremic stomatitis mimicking oral hairy leukoplakia: report of a case. McCreary CE, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 Mar;83(3):350–3

[Amalgam allergy—diagnosis and consequences] Aberer W. **Wien Klin Wochenschr** 1996;108(4):98–100 (Eng. Abstr.) **(Ger)**

[Fever, stomatitis, and cutaneous eruption on the hands and feet. "Gloves and socks" papular purpuric syndrome] Allegue F, et al. **Enferm Infecc Microbiol Clin** 1996 Apr; 14(4):271–2 **(Spa)**

DRUG THERAPY

Topical mesalazine in the treatment of chemotherapy and radiotherapy-induced oral mucositis [letter] Rymes N, et al. **Bone Marrow Transplant** 1996 Aug;18(2):484

A randomized trial of a nonabsorbable antibiotic lozenge given to alleviate radiation-induced mucositis. Okuno SH, et al. **Cancer** 1997 Jun 1;79(11):2193–9

Mitigating effects of interleukin 11 on consecutive courses of 5-fluorouracil-induced ulcerative mucositis in hamsters. Sonis ST, et al. **Cytokine** 1997 Aug;9(8):605–12

Phase III controlled evaluation of sucralfate to alleviate stomatitis in patients receiving fluorouracil-based chemotherapy. Loprinzi CL, et al. **J Clin Oncol** 1997 Mar; 15(3):1235–8

A double-blind, placebo-controlled, randomized trial to evaluate the role of tetrachlorodecaoxide in the management of chemotherapy-induced oral mucositis. Malik IA, et al. **J Pain Symptom Manage** 1997 Aug; 14(2):82–7

Effect of granulocyte-macrophage colony-stimulating factor on chemotherapy-induced oral mucositis in non-neutropenic cancer patients. Ibrahim EM, et al.
Med Oncol 1997 Mar;14(1):47–51

Formula C—popular, cheap and readily available relief for radiation and cancer chemotherapy mucositis [letter] [see comments] Coetzee MJ, et al. **S Afr Med J** 1997 Jan; 87(1):80–1. Comment in: S Afr Med J 1997 Mar;87(3):337–8.

Sucralfate in radiation-induced mucositis [letter; comment] Sur RK. **S Afr Med J** 1997 Mar;87(3):337–8. Comment on: S Afr Med J 1997 Jan;87(1):80–1.

[Dermatomycoses. 18: Topical therapy of onychomycoses, vaginal and oral mycoses] Meinhof W. **Fortschr Med** 1996 Jan 30;114(3):21–3 **(Ger)**

[Icelandic moss lozenges in the prevention or treatment of oral mucosa irritation and dried out throat mucosa] Kempe C, et al. **Laryngorhinootologie** 1997 Mar;76(3):186–8 (Eng. Abstr.) **(Ger)**

[The efficacy of and tolerance for ketoprofen lysine salt in solution for oropharyngeal use in inflammatory lesions of the oral cavity] Natale F, et al. **Minerva Stomatol** 1997 May;46(5):273–8 (Eng. Abstr.) **(Ita)**

[The characteristics of the anti-inflammatory action of preparations used in dentistry] Krylov IuF, et al.
Stomatologiia (Mosk) 1995;74(6):58–63 **(Rus)**

ETIOLOGY

Stomatitis glandularis—two confirmed cases of a rare condition. Cannell H, et al. **Br Dent J** 1997 Mar 22; 182(6):222–5

Quantitative scale of oral mucositis associated with autologous bone marrow transplantation. Tardieu C, et al.
Eur J Cancer B Oral Oncol 1996 Nov;32B(6):381–7

Chronic stomatitis: an early sign of Crohn's disease [see comments] Dunlap CL, et al. **J Am Dent Assoc** 1997 Mar; 128(3):347–8. Comment in: J Am Dent Assoc 1997 Jun;128(6):694.

Manifestations and treatment of xerostomia and associated oral effects secondary to head and neck radiation therapy. Garg AK, et al. **J Am Dent Assoc** 1997 Aug;128(8):1128–33 (40 ref.)

Pathogenesis of murine encephalitis limited by defective interfering particles. An immunohistochemical study. Plakhov IV, et al. **J Neurovirol** 1995 Jun;1(2):207–18

Hypersensitivity to methyl methacrylate: mode of treatment. Hochman N, et al. **J Prosthet Dent** 1997 Jan;77(1):93–6

Uremic stomatitis mimicking oral hairy leukoplakia: report of a case. McCreary CE, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997 Mar;83(3):350–3

[Dental materials—problem substances in allergologic diagnosis? I: Analysis of test results in patients with mouth mucosa/dental material problems] Richter G, et al.
Hautarzt 1996 Nov;47(11):839–43 (Eng. Abstr.) **(Ger)**

[Dental materials—problem substances in allergologic diagnosis? II: Patch test diagnosis and relevance evaluation of selected dental material groups] Richter G. **Hautarzt** 1996 Nov;47(11):844–9 (50 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Severe erosive stomatitis: association with immunological diseases? Reynaers A, et al. **Dermatology** 1997;194(4):411–5 (24 ref.)

Immuno-inflammatory responses in the tissue adjacent to titanium miniplates used in the treatment of mandibular fractures. Katou F, et al. **J Craniomaxillofac Surg** 1996 Jun; 24(3):155–62

NURSING

Assessment and management of chemotherapy-induced mucositis in children. Kennedy L, et al. **J Pediatr Oncol Nurs** 1997 Jul;14(3):164–74; quiz 175–7 (19 ref.)

PATHOLOGY

Pyodermatitis-pyostomatitis vegetans. Mehravaran M, et al. **Br J Dermatol** 1997 Aug;137(2):266–9

Effects of streptozotocin-induced diabetes on neurogenic inflammation of gingivomucosal tissue in rat. Gyorfi A, et al. **J Periodontal Res** 1996 May;31(4):249–55

Oral mucositis with features of psoriasis: report of a case and review of the literature. Younai FS, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Jul;84(1):61–7 (58 ref.)

Plasma cell orificial mucositis. Noorily AD. **Otolaryngol Head Neck Surg** 1997 Mar;116(3):416–7

PHYSIOPATHOLOGY

Gastro-intestinal toxicity related to bone marrow transplantation: disruption of the intestinal barrier precedes clinical findings. Johansson JE, et al. **Bone Marrow Transplant** 1997 May;19(9):921–5

Mucosal regeneration during radiotherapy. Trans Tasman Radiation Oncology Group (TROG). Denham JW, et al. **Radiother Oncol** 1996 Nov;41(2):109–18

PREVENTION & CONTROL

Can prophylactic application of immunoglobulin decrease radiotherapy-induced oral mucositis? Mose S, et al. **Am J Clin Oncol** 1997 Aug;20(4):407–11

Prophylactic action of allopurinol against chemotherapy-induced stomatitis--inhibition of superoxide dismutase and proteases. Nakamura K, et al. **Anticancer Drugs** 1996 May;7(3):235–9

Misoprostol prophylaxis for high-dose chemotherapy-induced mucositis: a randomized double-blind study. Dueñas-Gonzalez A, et al. **Bone Marrow Transplant** 1996 May;17(5):809–12

Low energy Helium-Neon laser in the prevention of oral mucositis in patients undergoing bone marrow transplant: results of a double blind randomized trial. Cowen D, et al. **Int J Radiat Oncol Biol Phys** 1997 Jul 1;38(4):697–703

Efficacy and safety of granulocyte macrophage-colony stimulating factor (GM-CSF) on the frequency and severity of radiation mucositis in patients with head and neck carcinoma. Kannan V, et al. **Int J Radiat Oncol Biol Phys** 1997 Mar 15;37(5):1005–10

Failure of pretreatment with intravenous folic acid to alter the cumulative hematologic toxicity of lometrexol [letter] Muggia FM, et al. **J Natl Cancer Inst** 1996 Oct 16; 88(20):1495–6

Randomized clinical trial of chlorhexidine versus placebo for prevention of oral mucositis in patients receiving chemotherapy. Dodd MJ, et al. **Oncol Nurs Forum** 1996 Jul;23(6):921–7

Mouth care for nasopharyngeal cancer patients undergoing radiotherapy. Shieh SH, et al. **Oral Oncol** 1997 Jan; 33(1):36–41

Transforming growth factor-beta 3 mediated modulation of cell cycling and attenuation of 5-fluorouracil induced oral mucositis. Sonis ST, et al. **Oral Oncol** 1997 Jan;33(1):47–54

Sucralfate prophylaxis of fluorouracil-induced stomatitis. Giorgi F, et al. **Tumori** 1996 Nov-Dec;82(6):585–7

[The therapeutic management of radiogenic oral mucositis] Dörr W, et al. **Strahlenther Onkol** 1997 Apr;173(4):183–92 (81 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Oral administration of bovine lactoferrin for treatment of intractable stomatitis in feline immunodeficiency virus (FIV)-positive and FIV-negative cats. Sato R, et al. **Am J Vet Res** 1996 Oct;57(10):1443–6

Management of mucositis in oral irradiation. Feber T. **Clin Oncol (R Coll Radiol)** 1996;8(2):106–11

Granulocyte-macrophage colony-stimulating factor mouthwashes improve radiation induced mucositis in AIDS patients [letter] de la Torre A, et al. **Radiother Oncol** 1997 May;43(2):229–30

[Inhibition of 5-fluorouracil-cisplatin-induced stomatitis by oral cryotherapy: use of an ice-bar containing fibrinolysin and deoxyribonuclease combine (Elase)] Sato A, et al. **Gan To Kagaku Ryoho** 1997 Jul;24(9):1135–9 (Eng. Abstr.) **(Jpn)**

VETERINARY

Stomatitis and coronitis in cattle--an insect-borne viral disease? [letter] Gerdes GH, et al. **J S Afr Vet Assoc** 1996 Sep;67(3):103–4

Bovine papular stomatitis--an incidental finding [letter] Stroebel JC, et al. **J S Afr Vet Assoc** 1996 Sep;67(3):104

Herpesvirus particles associated with oral and respiratory lesions in a California desert tortoise (Gopherus agassizii). Pettan-Brewer KC, et al. **J Wildl Dis** 1996 Jul;32(3):521–6

VIROLOGY

Experimental vesicular stomatitis in swine: effects of route of inoculation and steroid treatment. Howerth EW, et al. **J Vet Diagn Invest** 1997 Apr;9(2):136–42

STOMATITIS, APHTHOUS

[Aphthae (editorial)] Coll J. **Med Clin (Barc)** 1997 Jun 14; 109(3):95–7 **(Spa)**

CHEMICALLY INDUCED

Clearance of sodium lauryl sulphate from the oral cavity. Fakhry-Smith S, et al. **J Clin Periodontol** 1997 May; 24(5):313–7

[Giant buccal aphthosis caused by nicorandil (letter)] Boulinguez S, et al. **Presse Med** 1997 Apr 12;26(12):558 **(Fre)**

COMPLICATIONS

Aphthous vaginal ulceration in two women with acquired immunodeficiency syndrome. Schuman P, et al. **Am J Obstet Gynecol** 1996 May;174(5):1660–3

Increased prevalence of joint manifestations in patients with recurrent aphthous stomatitis (RAS) [see comments] Livneh A, et al. **Clin Exp Rheumatol** 1996 Jul-Aug; 14(4):407–12. Comment in: Clin Exp Rheumatol 1996 Jul-Aug;14(4):355–8. Comment in: Clin Exp Rheumatol 1997 Jan-Feb;15(1):118–9.

The case-control study and its potential biases [editorial; comment] Yazici H, et al. **Clin Exp Rheumatol** 1996 Jul-Aug;14(4):355–8. Comment on: Clin Exp Rheumatol 1996 Jul-Aug;14(4):407–12.

Major aphthous-like ulcers in two patients infected with human immunodeficiency virus. Livingston W, et al. **Cutis** 1997 May;59(5):281–3

[Oral ulcers in HIV infection] Bassetti S, et al. **Schweiz Rundsch Med Prax** 1997 May 21;86(21):912–3 **(Ger)**

DIAGNOSIS

Oral palatine ulcers of a traumatic nature in infants: Bednar's aphthae. Pedra C, et al. **Int J Pediatr Otorhinolaryngol** 1996 Mar;35(1):39–49

DRUG THERAPY

Thalidomide for treatment of oral aphthous ulcers in patients with human immunodeficiency virus: case report and review. Ball SC, et al. **Am J Gastroenterol** 1997 Jan; 92(1):169–70

Thalidomide heals HIV-related oral ulcers, but caution is required [news] **Am J Health Syst Pharm** 1997 Jul 1; 54(13):1485–6

Sutton's disease. Ruhl CM, et al. **Am J Otolaryngol** 1997 May-Jun;18(3):214–6

Granulocyte colony-stimulating factor treatment of cyclic neutropenia with recurrent oral aphthae [letter] Fink-Puches R, et al. **Arch Dermatol** 1996 Nov; 132(11):1399–400

Use of proprietary agents to relieve recurrent aphthous stomatitis. Edres MA, et al. **Br Dent J** 1997 Feb 22; 182(4):144–6

Thalidomide and recurrent aphthous stomatitis: a follow-up study. Bonnetblanc JM, et al. **Dermatology** 1996; 193(4):321–3

Pentoxifylline in recurrent aphthous stomatitis [letter; comment] Pizarro A, et al. **J Am Acad Dermatol** 1997 Feb; 36(2 Pt 1):284. Comment on: J Am Acad Dermatol 1995 Oct;33(4):680–2.

Mouthrinses containing triclosan reduce the incidence of recurrent aphthous ulcers (RAU). Skaare AB, et al. **J Clin Periodontol** 1996 Aug;23(8):778–81

Thalidomide for aphthous ulcers in HIV infection [letter] Birnkrant D. **N Engl J Med** 1997 Oct 9;337(15):1086–7

Thalidomide for the treatment of oral aphthous ulcers in patients with human immunodeficiency virus infection. National Institute of Allergy and Infectious Diseases AIDS Clinical Trials Group. Jacobson JM, et al. **N Engl J Med** 1997 May 22;336(21):1487–93

5% amlexanox oral paste, a new treatment for recurrent minor aphthous ulcers: I. Clinical demonstration of acceleration of healing and resolution of pain. Khandwala A, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):222–30

5% amlexanox oral paste, a new treatment for recurrent minor aphthous ulcers: II. Pharmacokinetics and demonstration of clinical safety. Khandwala A, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):231–8

Treatment of neutropenic oral ulceration in human immunodeficiency virus infection with G-CSF. Luzzi GA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):53–4

Recurrent aphthous stomatitis [letter; comment] Piantanida EW, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Nov;82(5):472. Comment on: Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Feb;81(2):141–7.

Doxymycine-cyanoacrylate treatment of recurrent aphthous ulcers. Ylikontiola L, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Mar;83(3):329–33

[Sucralfate in odontostomatology. Clinical experience] Campisi G, et al. **Minerva Stomatol** 1997 Jun;46(6):297–305 (42 ref.) (Eng. Abstr.) **(Ita)**

[Aphthosis of the oral cavity: therapeutic prospectives] Colella G, et al. **Minerva Stomatol** 1996 Jun;45(6):295–303 (40 ref.) (Eng. Abstr.) **(Ita)**

[Pentoxifylline and oral aphthosis in patients with HIV infection (letter)] Blanch Falp J, et al. **An Med Interna** 1997 Feb;14(2):102 **(Spa)**

ETIOLOGY

The effect of two toothpaste detergents on the frequency of recurrent aphthous ulcers. Herlofson BB, et al. **Acta Odontol Scand** 1996 Jun;54(3):150–3

Oral palatine ulcers of a traumatic nature in infants: Bednar's aphthae. Pedra C, et al. **Int J Pediatr Otorhinolaryngol** 1996 Mar;35(1):39–49

Recurrent aphthous stomatitis and thiamine deficiency. Haisraeli-Shalish M, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Dec;82(6):634–6

[Recurrent buccal aphthosis after smoking cessation (letter)] Lagrue G, et al. **Presse Med** 1996 Dec 21;25(40):2043 **(Fre)**

[PFAPA syndrome: periodic fever, adenitis, pharyngitis and aphthous stomatitis] Schibler A, et al. **Schweiz Med Wochenschr** 1997 Aug 5;127(31-32):1280–4 (Eng. Abstr.) **(Ger)**

[A boy highly suspected of hypersensitivity pneumonitis characterized by generalized mucosal lesions] Wada Y, et al. **Nihon Rinsho Meneki Gakkai Kaishi** 1996 Oct; 19(5):524–36 (Eng. Abstr.) **(Jpn)**

[Hematologic deficiencies in patients with recurrent oral aphthae] Barnadas MA, et al. **Med Clin (Barc)** 1997 Jun 14;109(3):85–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Human lymphocyte antigen (HLA) B51 is more frequent in patients with recurrent aphthous stomatitis (RAS) [letter; comment] Weinberger A. **Clin Exp Rheumatol** 1997 Jan-Feb;15(1):118–9. Comment on: Clin Exp Rheumatol 1996 Jul-Aug;14(4):407–12.

Expression of laminin 5, fibronectin, and epithelium-associated integrins in recurrent aphthous ulcers. Richards DW, et al. **J Dent Res** 1996 Jul; 75(7):1512–7

Raised levels of circulating VCAM-1 and circulating E-selectin in patients with recurrent oral ulceration. Healy CM, et al. **J Oral Pathol Med** 1997 Jan;26(1):23–8

Immunoglobulin G subclass measurements in recurrent aphthous stomatitis. Vicente M, et al. **J Oral Pathol Med** 1996 Nov;25(10):538–40

[T-cell subsets and lymphocyte proliferation in recurrent oral ulcers] Qi J, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1995 Sep; 30(5):292–4 **(Chi)**

METABOLISM

Decreased levels of salivary prostaglandin E2 and epidermal growth factor in recurrent aphthous stomatitis. Wu-Wang CY, et al. **Arch Oral Biol** 1995 Dec;40(12):1093–8

Raised anti-endothelial cell autoantibodies (AECA), but not anti-neutrophil cytoplasmic autoantibodies (ANCA), in recurrent oral ulceration: modulation of AECA binding by tumour necrosis factor-alpha (TNF-alpha) and interferon-gamma (IFN-gamma). Healy CM, et al. **Clin Exp Immunol** 1996 Dec;106(3):523–8

Salivary cortisol and anxiety in recurrent aphthous stomatitis. McCartan BE, et al. **J Oral Pathol Med** 1996 Aug; 25(7):357–9

MICROBIOLOGY

Serum IgG antibodies to Helicobacter pylori in patients with recurrent aphthous stomatitis and other oral disorders. Porter SR, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Mar;83(3):325–8

[Microbiocenosis study in chronic diseases of the oral mucosa] Khazanova VV, et al. **Stomatologiia (Mosk)** 1996; 75(2):26–7 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Recurrent scarring ulcers of the oral mucosa. Sutton disease (periadenitis mucosa necrotica recurrens. Chung JY, et al. **Arch Dermatol** 1997 Sep;133(9):1162–3, 1165–6 (6 ref.)

RADIOTHERAPY

Aphthous ulcers and lasers [letter; comment] Convissar RA. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Aug;82(2):118. Comment on: Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996 Feb;81(2):141–7.

THERAPY

Efficacy of bioadhesive patches in the treatment of recurrent aphthous stomatitis. Mahdi AB, et al. **J Oral Pathol Med** 1996 Sep;25(8):416–9

Clinical evaluation of the use of low-intensity ultrasound in the treatment of recurrent aphthous stomatitis. Brice SL. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997

STOMATITIS, APHTHOUS

Jan;83(1):14–20
[The use of plasmapheresis in treating recurrent aphthous stomatitis] Borisova OV, et al. **Stomatologiia (Mosk)** 1997; 76(3):23–5 (Eng. Abstr.) **(Rus)**

VIROLOGY

Search for human herpesvirus 6, human cytomegalovirus and varicella zoster virus DNA in recurrent aphthous stomatitis tissue. Ghodratnama F, et al. **J Oral Pathol Med** 1997 Apr; 26(4):192–7
Human cytomegalovirus as a potential etiologic agent in recurrent aphthous ulcers and Behçet's disease. Sun A, et al. **J Oral Pathol Med** 1996 May;25(5):212–8

STOMATITIS, DENTURE

CHEMICALLY INDUCED

[Chronic stomatologic endotoxicosis] Tsimbalistov AV, et al. **Stomatologiia (Mosk)** 1996;Spec No:88–9 **(Rus)**

COMPLICATIONS

General health factors and denture function in patients with burning mouth syndrome and matched control subjects. Svensson P, et al. **J Oral Rehabil** 1995 Dec;22(12):887–95

DIAGNOSIS

A simple technique for adjusting a removable prosthesis [see comments] Silberman DM. **J Am Dent Assoc** 1996 Dec; 127(12):1786. Comment in: J Am Dent Assoc 1997 Mar;128(3):271.
Removable prosthesis [letter; comment] Zakaria S. **J Am Dent Assoc** 1997 Mar;128(3):271. Comment on: J Am Dent Assoc 1996 Dec;127(12):1786.

ETIOLOGY

DIY dentures—a case report. Jagger DC, et al. **Br Dent J** 1996 Mar 23;180(6):221–2
Contact dermatitis due to an acrylic dental prosthesis. Kobayashi T, et al. **Contact Dermatitis** 1996 Dec; 35(6):370–1
Non-insulin-dependent diabetes mellitus as a risk factor for denture stomatitis. Dorocka-Bobkowska B, et al. **J Oral Pathol Med** 1996 Sep;25(8):411–5
Denture stomatitis in an elderly edentulous Asian population. Jeganathan S, et al. **J Oral Rehabil** 1997 Jun;24(6):468–72

IMMUNOLOGY

[Nonspecific resistance factors of the body in middle-aged and elderly patients with denture stomatitis] Gozhaia LD, et al. **Stomatologiia (Mosk)** 1995;74(6):52–4 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Complete dentures—the soft option. An update for general dental practice. Jagger DC, et al. **Br Dent J** 1997 Apr 26; 182(8):313–7 (25 ref.)

RADIOTHERAPY

Effect of low-energy laser application in the treatment of denture-induced mucosal lesions. Marei MK, et al. **J Prosthet Dent** 1997 Mar;77(3):256–64

THERAPY

[The use of pulsed complexly modulated electromagnetic fields in treating the inflammatory mucosal manifestations of the denture bed] Zholudev SE, et al. **Stomatologiia (Mosk)** 1996;Spec No:56–7 **(Rus)**

STOMATITIS, GANGRENOUS see **NOMA**

STOMATITIS, HERPETIC

COMPLICATIONS

Recurrent Stevens-Johnson syndrome secondary to herpes simplex: a follow up on a successful management program. Cheriyan S, et al. **Allergy Asthma Proc** 1996 Mar-Apr; 17(2):71–3
Viral infection and tic exacerbation [letter] Budman CL, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Feb;36(2):162

DRUG THERAPY

Treatment of herpes simplex gingivostomatitis with aciclovir in children: a randomised double blind placebo controlled study. Amir J, et al. **BMJ** 1997 Jun 21;314(7097):1800–3
[Lymphotropic therapy with trental in the treatment of chronic herpetic stomatitis] Shumskiĭ AV. **Stomatologiia (Mosk)** 1997;76(1):15–7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Successful foscarnet therapy for mucocutaneous infection with herpes simplex virus in a recipient after unrelated bone marrow transplantation. Iino T, et al. **Bone Marrow Transplant** 1996 Dec;18(6):1185–8

IMMUNOLOGY

Evaluation of a rapid enzyme immunoassay for the detection of herpes simplex virus antigen in children with herpetic gingivostomatitis. Amir J, et al. **Pediatr Infect Dis J** 1996 Jul;15(7):627–9

MICROBIOLOGY

[Microbiocenosis study in chronic diseases of the oral mucosa] Khazanova VV, et al. **Stomatologiia (Mosk)** 1996; 75(2):26–7 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Small, freshly arrived histiocytes in cutaneous and mucosal herpetic lesions. van den Oord JJ, et al. **Arch Dermatol Res** 1996 Aug;288(9):500–6
Herpes simplex and cytomegalovirus coinfected oral ulcers in HIV-positive patients. Regezi JA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):55–62
Oral recrudescent herpes simplex virus infection. Woo SB, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1997 Feb;83(2):239–43

PHYSIOPATHOLOGY

Attenuation of the natural course of herpes simplex virus infection in human oral epithelial cell cultures by smokeless tobacco extracts suggests the possibility of a synergistic mechanism for carcinogenesis. Murrah VA, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Jan;81(1):63–9

PREVENTION & CONTROL

"Stat." single dose of acyclovir for prevention of herpes simplex. Shelley WB, et al. **Cutis** 1996 Jun;57(6):453

VIROLOGY

Reactivation of oral-lingual herpes by chlorinated swimming pool water. A case report [letter; comment] Detweiler MB, et al. **Cutis** 1997 May;59(5):260. Comment on: Cutis 1995 Jul;56(1):49–50.

STOMATITIS, ULCERATIVE see **GINGIVITIS, NECROTIZING ULCERATIVE**

STOMATOGNATHIC DISEASES

COMPLICATIONS

[A comprehensive method for the early detection and differential diagnosis of the intracranial complications of suppurative diseases of the face and neck] Chevardov NI, et al. **Stomatologiia (Mosk)** 1996;Spec No:89–90 **(Rus)**
[Mediastinitis—a severe complication of acute odontogenic inflammatory processes of the maxillofacial area] Nikitin AA, et al. **Stomatologiia (Mosk)** 1996;Spec No:70–1 **(Rus)**

DIAGNOSIS

[The atypical and chronic course of suppurative inflammatory diseases of the maxillofacial area and the diagnostic and treatment methods] Fomichev EV, et al. **Stomatologiia (Mosk)** 1996;Spec No:85–6 **(Rus)**
[The characteristics of managing and treating patients with suppurative-inflammatory processes of the maxillofacial area and diabetes mellitus] Ivasenko PI, et al. **Stomatologiia (Mosk)** 1996;Spec No:58–9 **(Rus)**
[The clinico-immunological diagnosis, prognosis and treatment follow-up in odontogenic abscesses, phlegmons and lymphadenitis] Kazimirskiĭ VA, et al. **Stomatologiia (Mosk)** 1996;Spec No:60 **(Rus)**
[The importance of the immunogram for the prognosis of the course of odontogenic inflammatory diseases and of the performance of immunotherapy] Lebedev KA, et al. **Stomatologiia (Mosk)** 1996;Spec No:65 **(Rus)**
[The diagnosis of disseminated phlegmons and their complications and a strategy for their combined treatment] Robustova TG, et al. **Stomatologiia (Mosk)** 1996;Spec No:74–5 **(Rus)**

DRUG THERAPY

[Drug stimulation of the healing of suppurative wounds of the maxillofacial area] Agapov VS, et al. **Stomatologiia (Mosk)** 1996;Spec No:41–2 **(Rus)**
[A comparative evaluation of the efficacy of endolymphatically administered antibiotics in the combined treatment of phlegmons of the maxillofacial area] Tereshchenko AE, et al. **Stomatologiia (Mosk)** 1996;Spec No:82–3 **(Rus)**
[Our experience with the treatment and prevention of acute suppurative complications in different surgical interventions in the oral cavity] Tikhonov ES, et al. **Stomatologiia (Mosk)** 1996;Spec No:83–4 **(Rus)**
[The problem of the antibacterial therapy of inflammatory diseases of the maxillofacial area] Ushakov RV, et al. **Stomatologiia (Mosk)** 1996;Spec No:84 **(Rus)**

ECONOMICS

Risk factors affecting hospital length of stay in patients with odontogenic maxillofacial infections. Peters ES, et al. **J Oral Maxillofac Surg** 1996 Dec;54(12):1386–91; discussion 1391–2

EPIDEMIOLOGY

[The stomatological morbidity of the population of Russia and the planning principles for prevention programs] Kuz'mina EM, et al. **Stomatologiia (Mosk)** 1996;Spec No:11–2 **(Rus)**
[Odontogenic inflammatory processes in children based on data from the Pediatric Dentistry Clinic of the Perm State Medical Academy] Simanovskaia ElIu, et al. **Stomatologiia (Mosk)** 1996;Spec No:77–8 **(Rus)**
[The structure of morbidity of the oral cavity in recruits and officers of the Russian Army] Kovalevskiĭ AM, et al. **Voen Med Zh** 1996 Oct;317(10):19–21 **(Rus)**

ETIOLOGY

[The structural and etiological characteristics of inflammatory diseases of the maxillofacial area] Kislykh FI, et al. **Stomatologiia (Mosk)** 1996;Spec No:61–2 **(Rus)**

IMMUNOLOGY

[The role of body reactivity in choosing the treatment strategy and procedure in acute inflammatory processes in the maxillofacial area] Volozhin AI. **Stomatologiia (Mosk)** 1996;Spec No:49 **(Rus)**

NURSING

The dental emergency. Dunne SM. **Br Dent J** 1997 Sep 13; 183(5):177–8

PHYSIOPATHOLOGY

[The functional status of the kidneys in patients with phlegmons of the face and neck] Zabelin AS, et al. **Stomatologiia (Mosk)** 1996;Spec No:57–8 **(Rus)**

PREVENTION & CONTROL

[The status and outlook for the prevention and treatment of suppurative inflammatory diseases of the maxillofacial area] Bazhanov NN, et al. **Stomatologiia (Mosk)** 1996;Spec No:38 **(Rus)**
[A comprehensive informational-instructional program for the prevention of stomatological diseases in school: The Day of Stomatological Disease Prevention] Kiseleva EG, et al. **Stomatologiia (Mosk)** 1996;Spec No:23–4 **(Rus)**
[The stomatological morbidity of the population of Russia and the planning principles for prevention programs] Kuz'mina EM, et al. **Stomatologiia (Mosk)** 1996;Spec No:11–2 **(Rus)**

RADIOTHERAPY

[The treatment of inflammatory suppurative-destructive processes of the maxillofacial area and neck by laser exposure of the carotid sinus] Zhizhina NA, et al. **Stomatologiia (Mosk)** 1996;Spec No:55–6 **(Rus)**

REHABILITATION

[The use of physiotherapeutic factors in the combined treatment of patients with diseases of the maxillofacial area] Ivasenko PI, et al. **Stomatologiia (Mosk)** 1996;Spec No:59–60 **(Rus)**
[Physical factors in the combined treatment of acute suppurative-inflammatory processes of the maxillofacial area] Nikitin AA, et al. **Stomatologiia (Mosk)** 1996;Spec No:69–70 **(Rus)**

SURGERY

[The characteristics of the preoperative care of patients with the pharyngeal-facial form of myasthenia] Peliukhovskiĭ SV. **Klin Khir** 1995;(1):21–2 **(Rus)**

THERAPY

[Active detoxication methods in the combined treatment of torpid and chronic suppurative-inflammatory diseases of the maxillofacial area] Fomichev EV, et al. **Stomatologiia (Mosk)** 1996;Spec No:85 **(Rus)**
[The combined treatment of suppurative wounds of the maxillofacial area and neck in children] Khakhalkina LK, et al. **Stomatologiia (Mosk)** 1996;Spec No:87–8 **(Rus)**
[The efficacy of using ozone in the combined treatment of disseminated odontogenic phlegmons of the maxillofacial area] Kiniapina ID, et al. **Stomatologiia (Mosk)** 1996;Spec No:60–1 **(Rus)**
[The use of ozonized solutions in the combined treatment of odontogenic putrefactive-necrotic phlegmons of the maxillofacial area and neck] Lazutikov OV, et al. **Stomatologiia (Mosk)** 1996;Spec No:64–5 **(Rus)**
[The use of lasers and a plasma surgical unit in the combined treatment of patients with inflammatory diseases of the maxillofacial area] Shargorodskiĭ AG, et al. **Stomatologiia (Mosk)** 1996;Spec No:40–1 **(Rus)**
[The local treatment of suppurative wounds of the maxillofacial area] Starodubtsev VS, et al. **Stomatologiia (Mosk)** 1996;Spec No:78–9 **(Rus)**

STOMATOGNATHIC SYSTEM

PHYSIOLOGY

Fetal pharyngeal distention--is it a normal component of fetal swallowing? Petrikovsky B, et al. **Early Hum Dev** 1996 Sep 20;46(1-2):77-81

Society of Oral Physiology Store Kro Group 19th biennial meeting. Edinburgh, Scotland, 11-14 May 1995. Abstracts. **J Oral Rehabil** 1996 Aug;23(8):555-81

PHYSIOPATHOLOGY

Reported symptoms from the masticatory system and general well-being in rheumatoid arthritis. Kallenberg A, et al. **J Oral Rehabil** 1997 May;24(5):342-9

STOMATOLOGY see **ORAL MEDICINE**

STOMOXYS CALCITRANS see **MUSCIDAE**

STORAGE POOL DEFICIENCY see **PLATELET STORAGE POOL DEFICIENCY**

STOREROOM see **MATERIALS MANAGEMENT, HOSPITAL**

STOREROOMS see **MATERIALS MANAGEMENT, HOSPITAL**

STOVE-IN CHEST see **FLAIL CHEST**

STRABISMUS

Strabismus & amblyopia in children: the role of primary care. Brooks SE. **Compr Ther** 1997 Jan;23(1):60-6

No more 'squint' please [letter; comment] Romano PE. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1465-6. Comment on: Invest Ophthalmol Vis Sci 1997 Mar;38(3):719-40.

Amblyopia & strabismus. Sala NA. **Pa Med** 1996 Mar;99 Suppl:63-6

CHEMICALLY INDUCED

Restrictive strabismus after retrobulbar anesthesia. Ando K, et al. **Jpn J Ophthalmol** 1997 Jan-Feb;41(1):23-6

COMPLICATIONS

Strabismus in children with cerebral palsy. Erkkilä H, et al. **Acta Ophthalmol Scand** 1996 Dec;74(6):636-8

Unilateral congenital ptosis with ipsilateral superior rectus muscle overaction. Steel DH, et al. **Am J Ophthalmol** 1996 Oct;122(4):550-6

The prognostic value of visual evoked response latency in the treatment of amblyopia caused by strabismus. Iliakis E, et al. **Doc Ophthalmol** 1996-97;92(3):223-8

Evaluation of amblyopic scotoma by electrophysiological examinations and computerized perimetry. Fioretto M, et al. **Eur J Ophthalmol** 1996 Apr-Jun;6(2):201-7

The relationship between infantile strabismus and latent nystagmus. Kommerell G. **Eye** 1996;10 (Pt 2):274-81 (74 ref.)

The neural basis of suppression and amblyopia in strabismus. Sengpiel F, et al. **Eye** 1996;10 (Pt 2):250-8 (80 ref.)

Horror fusionis: a report of five patients. Rutstein RP, et al. **J Am Optom Assoc** 1996 Dec;67(12):733-9

The association of strabismus, amblyopia, and refractive errors in spasmus nutans. Young TL, et al. **Ophthalmology** 1997 Jan;104(1):112-7

[Ophthalmological exploration of children with Down's syndrome. Main results and comparison with a control group] González Viejo I, et al. **An Esp Pediatr** 1996 Aug; 45(2):137-9 (Eng. Abstr.) **(Spa)**

CONGENITAL

Aplasia of the inferior rectus muscle. A case report and review of the literature. Taylor RH, et al. **Ophthalmology** 1997 Mar;104(3):415-8 (15 ref.)

[Functional and structural abnormalities in the visual cortex in early childhood strabismus] Tychsen L, et al. **Klin Monatsbl Augenheilkd** 1996 Jan;208(1):18-22 (Eng. Abstr.) **(Ger)**

[Amblyopia, refractive errors and strabismus in congenital ptosis] Stärk N, et al. **Ophthalmologe** 1996 Aug;93(4):345-50 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Preschool vision screening: outcome of children referred to the hospital eye service. Newman DK, et al. **Br J Ophthalmol** 1996 Dec;80(12):1077-82

Ocular findings in children operated on for plagiocephaly and trigonocephaly. Denis D, et al. **Childs Nerv Syst** 1996 Nov;12(11):683-9

Preschool vision screening: a prospective comparative evaluation. Bray LC, et al. **Eye** 1996;10 (Pt 6):714-8

Practical approach to diagnosis of strabismus. Thomas R, et al. **Indian J Ophthalmol** 1996 Jun;44(2):103-12 (3 ref.)

Prediction of early-onset esotropia from components of the infantile squint syndrome [see comments] Schor CM, et al. **Invest Ophthalmol Vis Sci** 1997 Mar;38(3):719-40. Comment in: Invest Ophthalmol Vis Sci 1997 Jul;38(8):1465-6.

A new test for the measurement of torsion. Georgievski Z. **J Pediatr Ophthalmol Strabismus** 1996 Jan-Feb;33(1):63-4

A prism bar for measuring strabismus with large deviations [letter] Nemet P. **J Pediatr Ophthalmol Strabismus** 1996 Nov-Dec;33(6):333

High resolution, dynamic, magnetic resonance imaging in complicated strabismus. Shin GS, et al. **J Pediatr Ophthalmol Strabismus** 1996 Nov-Dec; 33(6):282-90

Magnetic resonance imaging in posttraumatic strabismus. Ward TP, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar-Apr;34(2):131-4

Methodology for a randomised controlled trial of preschool vision screening. A new approach with the 'ALSPAC' project. Williams C, et al. **Ophthalmic Epidemiol** 1996 Jun; 3(2):63-76

How good is the estimated cover test at predicting the von Graefe phoria measurement? Calvin H, et al. **Optom Vis Sci** 1996 Nov;73(11):701-6

Reliability of and comparisons among methods of measuring dissociated phoria. Schroeder TL, et al. **Optom Vis Sci** 1996 Jun;73(6):389-97 (31 ref.)

Preschool vision screening: rationale, methodology and outcome. Simons K. **Surv Ophthalmol** 1996 Jul-Aug; 41(1):3-30 (366 ref.)

[Inclination of the Hess-Weiss coordimetric graph. An indirect sign of ocular torsion?] Klainguti G, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):299-301 (Eng. Abstr.) **(Fre)**

[Ophthalmological exploration of children with Down's syndrome. Main results and comparison with a control group] González Viejo I, et al. **An Esp Pediatr** 1996 Aug; 45(2):137-9 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Botulinum toxin treatment of Hertwig-Magendie sign. Rebolleda G, et al. **Eur J Ophthalmol** 1996 Apr-Jun; 6(2):217-9

[Use of botulinum toxin in ophthalmology] Huber A. **Klin Monatsbl Augenheilkd** 1997 May;210(5):289-92 (28 ref.) (Eng. Abstr.) **(Ger)**

[The dose-response relationship in treatment of strabismus with botulinum toxin] Kimura H, et al. **Nippon Ganka Gakkai Zasshi** 1996 Mar;100(3):213-8 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Neglect of childhood strabismus: Keelung Ann-Lo Community ocular survey 1993-1995. See LC, et al. **Chang Keng I Hsueh** 1996 Sep;19(3):217-24

[Strabismus in Cameroon] Ebana Mvogo C, et al. **J Fr Ophtalmol** 1996;19(11):705-9 (Eng. Abstr.) **(Fre)**

[Can we identify risk groups for the development of amblyopia and strabismus?] Sjöstrand J, et al. **Klin Monatsbl Augenheilkd** 1996 Jan;208(1):23-6 (Eng. Abstr.) **(Ger)**

[Refractive errors and strabismus in premature infants] Zubcov AA, et al. **Ophthalmologe** 1996 Aug;93(4):341-4 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Strabismus and mitochondrial defects in chronic progressive external ophthalmoplegia. Sorkin JA, et al. **Am J Ophthalmol** 1997 Feb;123(2):235-42

Restrictive strabismus after ocular surgery for retinitis pigmentosa in Cuba [letter] Bacal DA, et al. **Arch Ophthalmol** 1997 Jul;115(7):930-1

Strabismus following uncomplicated cataract surgery [editorial] Rosenbaum AL. **Arch Ophthalmol** 1997 Feb; 115(2):253

Normal and abnormal binocular vision [editorial] Kommerell G. **Eye** 1996;10 (Pt 2):v-vi

Squints and diplopia seen after brain damage. Fowler MS, et al. **J Neurol** 1996 Jan;243(1):86-90

Fat adherence syndrome treated with intraoperative mitomycin-C: a rabbit model. Brooks SE, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jan-Feb;33(1):21-7

Vertical strabismus after cataract surgery [letter; comment] Chacko JG. **Ophthalmology** 1997 Feb;104(2):171. Comment on: Ophthalmology 1996 Jun;103(6):918-21.

Vertical strabismus after cataract surgery [letter; comment] Johnson M. **Ophthalmology** 1996 Oct;103(10):1521-2. Comment on: Ophthalmology 1996 Jun;103(6):918-21.

Surgical management of strabismus associated with chronic progressive external ophthalmoplegia. Wallace DK, et al. **Ophthalmology** 1997 Apr;104(4):695-700 (40 ref.)

Intermittent diplopia and strabismus caused by ocular neuromyotonia. Yee RD, et al. **Trans Am Ophthalmol Soc** 1996;94:207-23; discussion 223-6

[Observation of compensatory head posture in superior oblique muscle paralysis] Deng D, et al. **Yen Ko Hsueh Pao** 1995 Dec;11(4):227-9 (Eng. Abstr.) **(Chi)**

[Pathogenesis of eso- and hypotropia in high myopia] Herzau V, et al. **Klin Monatsbl Augenheilkd** 1996 Jan;208(1):33-6 (Eng. Abstr.) **(Ger)**

HISTORY

Costenbader Lecture. A and V syndrome: a historical perspective. Folk ER. **J Pediatr Ophthalmol Strabismus** 1997 May-Jun;34(3):154-8

Lincoln's vertical strabismus. Goldstein JH. **J Pediatr Ophthalmol Strabismus** 1997 Mar-Apr; 34(2):118-20 (10 ref.)

[Professor Kurz and strabismus--a remembrance] Divišová G. **Cesk Slov Oftalmol** 1997 Jun;53(3):208-9 **(Cze)**

[The contribution of Alfred K. Graefe to surgical treatment of paretic squint in the second half of the 19th century] Weidlich R. **Klin Monatsbl Augenheilkd** 1996 Jan; 208(1):66-7 (Eng. Abstr.) **(Ger)**

[History of strabismology: I--strabismology in the countries of Western Europe] Baranowska-George T. **Klin Oczna** 1996 Mar;98(3):249-52 (Eng. Abstr.) **(Pol)**

[History of strabismology: II--strabismology in Poland] Baranowska-George T. **Klin Oczna** 1996 Mar;98(3):253-6 (Eng. Abstr.) **(Pol)**

METABOLISM

Immunocytochemical study of the NMDA receptor in the visual cortex of strabismic cat. Yin ZQ, et al. **Aust N Z J Ophthalmol** 1996 May;24(2 Suppl):88-91

Cat-301 immunoreactivity in the lateral geniculate nucleus and visual cortex of the strabismic amblyopic cat. Yin ZQ, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S107-9

Distribution and localization of NMDA receptor subunit 1 in the visual cortex of strabismic and anisometropic amblyopic cats. Yin ZQ, et al. **Neuroreport** 1996 Nov 25; 7(18):2997-3003

PATHOLOGY

Binocularity in prism-reared monkeys. Crawford ML, et al. **Eye** 1996;10 (Pt 2):161-6 (26 ref.)

Functional specificity of long-range intrinsic and interhemispheric connections in the visual cortex of strabismic cats. Schmidt KE, et al. **J Neurosci** 1997 Jul 15;17(14):5480-92

Axial length estimation in strabismic patients. Kushner BJ, et al. **J Pediatr Ophthalmol Strabismus** 1996 Sep-Oct; 33(5):257-61

The clinical, neuroradiographic, and endocrinologic profile of patients with bilateral optic nerve hypoplasia. Siatkowski RM, et al. **Ophthalmology** 1997 Mar;104(3):493-6

PHYSIOPATHOLOGY

Handedness in strabismics. Etiological implications. Firth AY. **Acta Ophthalmol Scand** 1995 Dec;73(6):486-90

Development of spatial resolution, contrast sensitivity and binocularity in normal and strabismic kittens. Li XR, et al. **Aust N Z J Ophthalmol** 1997 May;25 Suppl 1:S110-2

Postoperative drifts after adjustable-suture strabismus surgery. Eino D, et al. **Can J Ophthalmol** 1997 Apr; 32(3):163-9

Where is the naso-temporal asymmetry? Motion processing. Braddick O. **Curr Biol** 1996 Mar 1;6(3):250-3 (17 ref.)

The perceptual grouping criterion of colinearity is reflected by anisotropies of connections in the primary visual cortex. Schmidt KE, et al. **Eur J Neurosci** 1997 May;9(5):1083-9

What happens to binocularity in primate strabismus? Boothe RG, et al. **Eye** 1996;10 (Pt 2):199-208 (47 ref.)

Psychophysics of suppression. Harrad R. **Eye** 1996;10 (Pt 2):270-3 (28 ref.)

How useful is anomalous correspondence? Herzau V. **Eye** 1996;10 (Pt 2):266-9 (16 ref.)

The neural basis of suppression and amblyopia in strabismus. Sengpiel F, et al. **Eye** 1996;10 (Pt 2):250-8 (80 ref.)

Normal heterophoric changes: 20 years' follow-up. Spierer A, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jun; 235(6):345-8

Location and stability of rectus muscle pulleys. Muscle paths as a function of gaze. Clark RA, et al. **Invest Ophthalmol Vis Sci** 1997 Jan;38(1):227-40

The effect of edrophonium chloride on muscle balance in normal subjects and those with nonmyasthenic strabismus. Siatkowski RM, et al. **J Neuroophthalmol** 1997 Mar; 17(1):7-11

Intact binocular function and absent ocular torsion in children with alternating skew on lateral gaze. Hamed LM, et al. **J Pediatr Ophthalmol Strabismus** 1996 May-Jun; 33(3):164-6

Automated analysis of electromyographic (EMG) recordings during botulinum injections. Hunter DG, et al. **J Pediatr Ophthalmol Strabismus** 1996 Sep-Oct;33(5):241-6

Recording sensory and motor aspects of strabismus. Kaye SB, et al. **J Pediatr Ophthalmol Strabismus** 1997 May-Jun; 34(3):188-90

Preoperative factors influencing effectiveness of surgery in adult strabismus. Umazume F, et al. **Jpn J Ophthalmol** 1997 Mar-Apr;41(2):89-97

Unifying concepts in mechanism of amblyopia. Tong LM. **Med Hypotheses** 1997 Feb;48(2):97-102 (31 ref.)

Reduced activity in the extrastriate visual cortex of individuals with strabismic amblyopia. Imamura K, et al. **Neurosci Lett** 1997 Apr 11;225(3):173-6

Clinical findings before the onset of myopia in youth: 3. Heterophoria. Goss DA, et al. **Optom Vis Sci** 1996 Apr; 73(4):269-78 (73 ref.)

Learning to look with one eye: the use of head turn by normals and strabismics. Dengis CA, et al. **Vision Res** 1996 Oc ;;36(19):3237-42

A reduced motion aftereffect in strabismic amblyopia. Hess RF, et al. **Vision Res** 1997 May;37(10):1303-11

STRABISMUS

Cyclopean and disconjugate adaptive recovery from post-saccadic drift in strabismic children before and after surgery. Inchingolo P, et al. **Vision Res** 1996 Sep; 36(18):2897–913

Orientation anisotropy and strabismus. Kelly SA, et al. **Vision Res** 1997 Jan;37(1):151–63

Listing's plane dependence on alternating fixation in a strabismus patient. Melis BJ, et al. **Vision Res** 1997 May; 37(10):1355–66

Contrast letter thresholds in the non-affected eye of strabismic and unilateral eye enucleated subjects. Reed MJ, et al. **Vision Res** 1996 Sep;36(18):3011–8

Visual responses of neurons from areas V1 and MT in a monkey with late onset strabismus: a case study. Thiele A, et al. **Vision Res** 1997 Apr;37(7):853–63

[Benefits of total hypermetropia correction in patients with strabismus] Paris V, et al. **Bull Soc Belge Ophtalmol** 1995; 259:143–53 (Eng. Abstr.) **(Fre)**

[Voluntary control of unilateral strabismus sursoadductorius] Kommerell G, et al. **Klin Monatsbl Augenheilkd** 1996 Aug–Sep;209(2–3):171–3 (Eng. Abstr.) **(Ger)**

[Visual manual localization in the horizontal plane in persons with vertical deviations of the eyes] Baranowska-George T, et al. **Klin Oczna** 1996 Mar;98(3):197–200 (Eng. Abstr.) **(Pol)**

PREVENTION & CONTROL

Two infant vision screening programmes: prediction and prevention of strabismus and amblyopia from photo- and videorefractive screening. Atkinson J, et al. **Eye** 1996;10 (Pt 2):189–98

PSYCHOLOGY

Stereopsis with normal and reversed binocular parallax using a head mounted display in normal and strabismic subjects. Komachi Y, et al. **Ergonomics** 1996 Nov;39(11):1321–9

Psychosocial implications of strabismus surgery in adults. Burke JP, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun;34(3):159–64

Subjective and objective outcomes of strabismus surgery in children. Mruthyunjaya P, et al. **J Pediatr Ophthalmol Strabismus** 1996 May–Jun; 33(3):167–70

REHABILITATION

Role of optometric vision therapy for surgically treated strabismus patients. Garriott RS, et al. **Optom Vis Sci** 1997 Apr;74(4):179–84

SURGERY

Propofol reduces emesis after sufentanil supplemented anaesthesia in paediatric squint surgery. Standl T, et al. **Acta Anaesthesiol Scand** 1996 Jul;40(6):729–33

Can vomiting after squint surgery be prevented? [letter] Fry RA, et al. **Anaesth Intensive Care** 1997 Feb;25(1):94–5

Efficacy of ondansetron and metoclopramide for preventing postoperative emesis following strabismus surgery in children. Shende D, et al. **Anaesthesia** 1997 May; 52(5):496–500

A randomized multicenter study of remifentanil compared with alfentanil, isoflurane, or propofol in anesthetized pediatric patients undergoing elective strabismus surgery. Davis PJ, et al. **Anesth Analg** 1997 May;84(5):982–9

Management of fixed divergent squint in third nerve palsy using traction sutures. Daniell MD, et al. **Aust N Z J Ophthalmol** 1996 Aug;24(3):261–5

Results of anterior transposition of the inferior oblique. Seawright AA, et al. **Aust N Z J Ophthalmol** 1996 Nov; 24(4):339–45

Use of physical barriers for delayed adjustable strabismus surgery: the effect of interceed and polyglactin 910 mesh. Hwang JM, et al. **Br J Ophthalmol** 1996 Aug;80(8):759–62

Comparison of the efficacy of diclofenac and betamethasone following strabismus surgery. Wright M, et al. **Br J Ophthalmol** 1997 Apr;81(4):299–301

Dose-response of flurbiprofen on postoperative pain and emesis after paediatric strabismus surgery. Mikawa K, et al. **Can J Anaesth** 1997 Jan;44(1):95–8

Vomiting after strabismus surgery in children: ondansetron vs propofol. Splinter WM, et al. **Can J Anaesth** 1997 Aug; 44(8):825–9

Low incidence of the oculocardiac reflex and postoperative nausea and vomiting in adults undergoing strabismus surgery. Tramèr MR, et al. **Can J Anaesth** 1997 Aug; 44(8):830–5

Postoperative drifts after adjustable-suture strabismus surgery. Eino D, et al. **Can J Ophthalmol** 1997 Apr; 32(3):163–9

A modified conjunctival incision for strabismus surgery. MacDonald IM. **Can J Ophthalmol** 1997 Apr;32(3):175–6

Horizontal transposition of vertical rectus muscles for treatment of excyclotropia. Ohmi G, et al. **Graefes Arch Clin Exp Ophthalmol** 1997 Jan;235(1):1–4

Recurrent intrascleral cyst after strabismus surgery. Verbeek AM, et al. **Graefes Arch Clin Exp Ophthalmol** 1996 Aug; 234 Suppl 1:S229–31

Investigations on subjective and objective cyclorotatory changes after inferior oblique muscle recession. Schworm HD, et al. **Invest Ophthalmol Vis Sci** 1997 Feb;38(2):405–12

Staged operation for Graves' ophthalmopathy. Liao CL, et al. **J Formos Med Assoc** 1996 Sep;95(9):680–5

5-Fluorouracil reduces scarring after strabismus surgery. Andreo LK, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar–Apr;34(2):107–10

Prolonged oculocardiac reflex during strabismus surgery under topical anesthesia. Arnold RW, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jul–Aug;34(4):252–4

Fat adherence syndrome treated with intraoperative mitomycin-C: a rabbit model. Brooks SE, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jan–Feb;33(1):21–7

Psychosocial implications of strabismus surgery in adults. Burke JP, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun;34(3):159–64

Tensile strength of insertional suture techniques in strabismus surgery. Christiansen SP, et al. **J Pediatr Ophthalmol Strabismus** 1996 Mar–Apr;33(2):93–7

The adjustable globe: a technique for adjustable strabismus surgery. Connor TB, et al. **J Pediatr Ophthalmol Strabismus** 1996 May–Jun; 33(3):156–63

Evaluation of mitomycin to limit postoperative adhesions in strabismus surgery. Cruz OA. **J Pediatr Ophthalmol Strabismus** 1996 Mar–Apr; 33(2):89–92

Transnasal endoscopic approach to expose the medial rectus from the annulus of Zinn to the penetration of Tenon's capsule. McKeown CA, et al. **J Pediatr Ophthalmol Strabismus** 1996 Jul–Aug;33(4):225–9

Inadvertent Faden procedure. Metz HS, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jul–Aug; 34(4):259–60

Subjective and objective outcomes of strabismus surgery in children. Mruthyunjaya P, et al. **J Pediatr Ophthalmol Strabismus** 1996 May–Jun; 33(3):167–70

Effects of strabismus surgery on corneal topography. Nardi M, et al. **J Pediatr Ophthalmol Strabismus** 1997 Jul–Aug; 34(4):244–6

Strabismus surgery: simply cosmetic? [editorial] Nelson LB, et al. **J Pediatr Ophthalmol Strabismus** 1997 May–Jun; 34(3):139

Retinal perforation in strabismus surgery. Noel LP, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar–Apr; 34(2):115–7

Perioperative care of the strabismus patient. Olitsky SE, et al. **J Pediatr Ophthalmol Strabismus** 1997 Mar–Apr; 34(2):126–8

Posterior superior oblique tenectomy at the scleral insertion for collapse of A-pattern strabismus. Shin GS, et al. **J Pediatr Ophthalmol Strabismus** 1996 Sep–Oct;33(5):211–8

Management of experimental globe perforation during strabismus surgery. Sprunger DT, et al. **J Pediatr Ophthalmol Strabismus** 1996 May–Jun; 33(3):140–3

Preoperative factors influencing effectiveness of surgery in adult strabismus. Umazume F, et al. **Jpn J Ophthalmol** 1997 Mar–Apr;41(2):89–97

Conjunctival closure in strabismus surgery: Vicryl versus fibrin glue. Biedner B, et al. **Ophthalmic Surg Lasers** 1996 Nov;27(11):967

Sodium hyaluronate as a tool in strabismus surgery in rabbits. Fulga V, et al. **Ophthalmic Surg Lasers** 1996 Mar; 27(3):228–33

Do standard procedures in squint surgery influence the blood-aqueous barrier? Neugebauer A, et al. **Ophthalmic Surg Lasers** 1997 Jul;28(7):570–3

Strabismus surgery in ocular myasthenia gravis. Ohtsuki H, et al. **Ophthalmologica** 1996;210(2):95–100

Comparison of postoperative emesis, recovery profile, and analgesia in pediatric strabismus repair. Rectal acetaminophen versus intravenous fentanyl–droperidol. Padda GS, et al. **Ophthalmology** 1997 Mar;104(3):419–24

Aplasia of the inferior rectus muscle. A case report and review of the literature. Taylor RH, et al. **Ophthalmology** 1997 Mar;104(3):415–8 (15 ref.)

Surgical management of strabismus associated with chronic progressive external ophthalmoplegia. Wallace DK, et al. **Ophthalmology** 1997 Apr;104(4):695–700 (40 ref.)

Diclofenac vs oxybuprocaine eyedrops for analgesia in paediatric strabismus surgery. Morton NS, et al. **Paediatr Anaesth** 1997;7(3):221–6

[Binocular vision after strabismus surgery in adulthood] Skorkovská S, et al. **Cesk Slov Oftalmol** 1996 Sep; 52(4):258–62 (Eng. Abstr.) **(Cze)**

[Does oral ondansetron reduce the incidence of nausea and vomiting after surgery for strabismus in children?] Mjahed K, et al. **Ann Fr Anesth Reanim** 1996;15(7):1018–21 (Eng. Abstr.) **(Fre)**

[Role of topical anesthesia in strabismus surgery] Paris V, et al. **Bull Soc Belge Ophtalmol** 1995;259:155–64 (Eng. Abstr.) **(Fre)**

[Hyperplasia of the lingual tonsil as an unexpected intubation obstruction in a preschool child] Schumacher J, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1997 May; 32(5):325–7 (Eng. Abstr.) **(Ger)**

[Does propofol have advantages over isoflurane for sufentanil supplemented anesthesia in children for strabismus surgery?] Wilhelm S, et al. **Anasthesiol Intensivmed Notfallmed Schmerzther** 1996 Sep; 31(7):414–9 (Eng. Abstr.) **(Ger)**

[Indications for eye muscle operations in adult patients (editorial)] Haase W. **Klin Monatsbl Augenheilkd** 1997 Feb; 210(2):aA5–7 **(Ger)**

[Computer-assisted determination of indications and follow-up in strabismus surgery] Rüssmann W. **Klin Monatsbl Augenheilkd** 1996 Jan;208(1):27–32 (Eng. Abstr.) **(Ger)**

[Effect of strabismus operation of corneal topography] Schworm HD, et al. **Klin Monatsbl Augenheilkd** 1996 Nov; 209(5):275–82 (Eng. Abstr.) **(Ger)**

[Disorder of the blood-aqueous barrier after eye muscle operation in children] Kaszli FA, et al. **Ophthalmologe** 1996 Aug;93(4):325–7 (Eng. Abstr.) **(Ger)**

[Effect of locally applied lidocaine on expression of the oculocardiac reflex] Ruta U, et al. **Ophthalmologe** 1997 May;94(5):354–9 (Eng. Abstr.) **(Ger)**

[Diplopia as a complication after surgery for strabismus in adolescents and adults] Broniarczyk-Loba A, et al. **Klin Oczna** 1996 Mar;98(3):185–9 (Eng. Abstr.) **(Pol)**

THERAPY

Waiting times for and attendance at paediatric ophthalmology outpatient appointments. Bowman RJ, et al. **BMJ** 1996 Nov 16;313(7067):1244

Contrast sensitivity after wearing prisms to correct for heterophoria. Methling D, et al. **Ophthalmic Physiol Opt** 1996 May;16(3):211–5

[Treatment of infantile strabismus with eye movement disorders] Baranowska-George T, et al. **Klin Oczna** 1996 Mar;98(3):181–4 (Eng. Abstr.) **(Pol)**

[Conservative treatment of vertical recti and oblique muscle deviation in permanent and accommodative strabismus] Puchalska-Niedbał L, et al. **Klin Oczna** 1996 Mar; 98(3):191–4 (Eng. Abstr.) **(Pol)**

VETERINARY

What happens to binocularity in primate strabismus? Boothe RG, et al. **Eye** 1996;10 (Pt 2):199–208 (47 ref.)

STRABISMUS, CONVERGENT see **ESOTROPIA**

STRABISMUS, DIVERGENT see **EXOTROPIA**

STRAMONIUM

Asthma among the famous. James Anderson (1738–1809). Cohen SG. **Allergy Asthma Proc** 1996 May–Jun;17(3):165–7

A dazed and disoriented man found by the roadside. Reichmuth D, et al. **Hosp Pract (Off Ed)** 1997 May 15; 32(5):37–40

The complex-type oligosaccharide binding lectin Datura stramonium agglutinin detects type II A muscle fibres in the branchial biceps from man and cat. Kirkeby S, et al. **J Muscle Res Cell Motil** 1997 Feb;18(1):31–41

The dangers of jimson weed and its abuse by teenagers in the Kanawha Valley of West Virginia. Dewitt MS, et al. **W V Med J** 1997 Jul–Aug;93(4):182–5 (9 ref.)

[Thorn apple poisoning] Koevoets PF, et al. **Ned Tijdschr Geneeskd** 1997 May 3;141(18):888–9 (Eng. Abstr.) **(Dut)**

[Poisoning with Jimson weed. Five cases treated with physostigmine] Amlo H, et al. **Tidsskr Nor Laegeforen** 1997 Aug 10;117(18):2610–2 (Eng. Abstr.) **(Nor)**

STREAK PLATE COUNT see **COLONY COUNT, MICROBIAL**

STREET CHILDREN see **HOMELESS YOUTH**

STREET DRUG TESTING see **SUBSTANCE ABUSE DETECTION**

STREET DRUGS

Mortality and causes and manner of death among drug addicts in Stockholm during the period 1981–1992. Fugelstad A, et al. **Acta Psychiatr Scand** 1997 Sep; 96(3):169–75

Multiple predictors of illicit drug use in methadone maintenance clients. Gollnisch G. **Addict Behav** 1997 May–Jun;22(3):353–66

The prevalence and frequency of drug use among Western Australian metropolitan high school students. Odgers P, et al. **Addict Behav** 1997 May–Jun;22(3):315–25

Crackdown on drugs [news] **Addiction** 1996 Aug;91(8):1240

The first hit: circumstances surrounding initiation into injecting. Crofts N, et al. **Addiction** 1996 Aug;91(8):1187–96

Establishing and using a community inter-agency client monitoring system to develop addictions treatment programs. DeVillaer M. **Addiction** 1996 May;91(5):701–9

Places and patterns of drug use in the Scottish dance scene. Forsyth AJ. **Addiction** 1996 Apr;91(4):511–21

Comparisons of alcohol and other drugs: experience from the WHO Collaborative Cross-Cultural Applicability Research (CAR) Study. Gureje O, et al. **Addiction** 1996 Oct;91(10):1529–38

Drug use in the high intensity drug trafficking area of the US Southwest border. Harrison LD, et al. **Addiction** 1996 Jan;91(1):47–61

The development of patient profiles for Minnesota's treatment outcomes monitoring system. Harrison PA, et al. **Addiction** 1996 May;91(5):687–99

Drug treatment in Switzerland: harm reduction,

decentralization and community response. Klingemann HK. **Addiction** 1996 May;91(5):723–36
WHO cross-cultural applicability research on diagnosis and assessment of substance use disorders: an overview of methods and selected results. Room R, et al. **Addiction** 1996 Feb;91(2):199–220, discussion 221–30
Characteristics of women with alcohol and other drug problems: findings of an Australian national survey. Swift W, et al. **Addiction** 1996 Aug;91(8):1141–50
HIV infection in females dependent on drugs. Wai BH, et al. **Addiction** 1996 Mar;91(3):435–8
A critique of Hawthorne et al.'s evaluation of life education [letter; comment] Wallace S. **Addiction** 1996 Feb; 91(2):286–291. Comment on: Addiction 1995 Feb;90(2):205–15.
Drug use and violent crime among adolescents. Dawkins MP. **Adolescence** 1997 Summer;32(126):395–405
Powerlessness and HIV prevention among people who trade sex for drugs ('strawberries'). Elwood WN, et al. **AIDS Care** 1997 Jun;9(3):273–84
Psychiatric referrals associated with substance use disorders: prevalence and gender differences. European Consultation–Liaison Workgroup. Alaja R, et al. **Alcohol Clin Exp Res** 1997 Jun;21(4):620–6
Executive cognitive functioning predicts reactive aggression in boys at high risk for substance abuse: a prospective study. Giancola PR, et al. **Alcohol Clin Exp Res** 1996 Jun; 20(4):740–4
Bulimia nervosa and substance dependence: association and family transmission. Kaye WH, et al. **Alcohol Clin Exp Res** 1996 Aug;20(5):878–81
Polydrug use in an inpatient treatment sample of problem drinkers. Martin CS, et al. **Alcohol Clin Exp Res** 1996 May; 20(3):413–7
Characteristics and pretreatment behaviors of clients entering drug abuse treatment: 1969 to 1993. Craddock SG, et al. **Am J Drug Alcohol Abuse** 1997 Feb;23(1):43–59
Does increasing the opportunity for counseling increase the effectiveness of outpatient drug treatment? Fiorentine R, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):369–82
Clients entering drug abuse day treatment: 18-month outcomes. Guydish J, et al. **Am J Drug Alcohol Abuse** 1997 Feb;23(1):99–114
Alcohol and drug abuse in patients with physical disabilities. Hubbard JR, et al. **Am J Drug Alcohol Abuse** 1996 May; 22(2):215–31 (41 ref.)
Drug use history and criminal behavior among 133 incarcerated men. Kouri EM, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):413–9
A comparison of the Johnson Intervention with four other methods of referral to outpatient treatment. Loneck B, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):233–46
Relationship of hardiness to alcohol and drug use in adolescents. Maddi SR, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):247–57
Characteristics associated with pregnant women's utilization of substance abuse treatment services. Messer K, et al. **Am J Drug Alcohol Abuse** 1996 Aug;22(3):403–22
Familial factors in illicit drug abuse: an interdisciplinary perspective. Ripple CH, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):147–72 (54 ref.)
Illegal drug use among rural adults: mental health consequences and treatment utilization. Robertson EB, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):467–84
Do increased levels of drug abuse treatment lead to fewer drug-related problems? Smart RG, et al. **Am J Drug Alcohol Abuse** 1997 Aug;23(3):421–9
Prevalence and detection of illicit drug disorders among hospitalized patients. Stein MD, et al. **Am J Drug Alcohol Abuse** 1996 Aug;22(3):463–71
Upward trend in teenage drug use continues [news] **Am J Health Syst Pharm** 1997 Feb 15;54(4):365, 370
Cannabis. Robson P. **Arch Dis Child** 1997 Aug;77(2):164–6 (30 ref.)
Substance use disorders among men in prison: a New Zealand study. Bushnell JA, et al. **Aust N Z J Psychiatry** 1997 Aug; 31(4):577–81
Do specific anxiety disorders show specific drug problems? Page AC, et al. **Aust N Z J Psychiatry** 1996 Jun;30(3):410–4
What is the psychiatrist's role in drugs and alcohol? Pols RG, et al. **Aust N Z J Psychiatry** 1996 Aug;30(4):540–8; discussion 548–9 (99 ref.)
Substance abuse disorders: psychiatric trainees' knowledge, diagnostic skills and attitudes. Roche AM, et al. **Aust N Z J Psychiatry** 1995 Dec;29(4):645–52
Psychobiology of novelty seeking and drug seeking behavior. Bardo MT, et al. **Behav Brain Res** 1996 May;77(1–2):23–43 (205 ref.)
Drug abuse: a significant variable in schizophrenia research. Boutros N, et al. **Biol Psychiatry** 1996 Jun 15;39(12):1053–4
ABC of mental health. Addiction and dependence—I: Illicit drugs. Gerada C, et al. **BMJ** 1997 Aug 2;315(7103):297–300 (0 ref.)
Impulsivity or comorbidity in bulimia nervosa. A controlled study of deliberate self-harm and alcohol and drug misuse in a community sample. Welch SL, et al. **Br J Psychiatry** 1996 Oct;169(4):451–8
Statement on national drug policy. College on problems of drug dependence. **Drug Alcohol Depend** 1997 Jul 25; 47(1):63–71
College on Problems of Drug Dependence Policy on Administering Drugs with Abuse Potential in Human Research [news] **Drug Alcohol Depend** 1996 Dec 2; 43(1–2):115–7
Psychoactive substance abuse among inmates of a Nigerian prison population. Adesanya A, et al. **Drug Alcohol Depend** 1997 Jul 25;47(1):39–44
Subjects with a history of drug dependence are more aggressive than subjects with no drug use history. Allen TJ, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):95–103
Abstaining and carousing: substance use among adolescents in the Western Isles of Scotland. Anderson K, et al. **Drug Alcohol Depend** 1996 Jul;41(3):189–96
Substance use and risky sexual behavior in female adolescents. Castillo Mezzich A, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2–3):157–66
Knowledge and experience of drug use amongst church affiliated young people. Cook CC, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):9–17
Psychopathology and HIV risk behaviors among injection drug users in and out of treatment. Dinwiddie SH, et al. **Drug Alcohol Depend** 1996 Dec 2;43(1–2):1–11
Multi-level covariance structure analysis of intra-familial substance use. Duncan TE, et al. **Drug Alcohol Depend** 1997 Jul 4;46(3):167–80
Development of substance use and psychiatric comorbidity in an epidemiologic study of white and American Indian young adolescents the Great Smoky Mountains Study. Federman EB, et al. **Drug Alcohol Depend** 1997 Mar 14; 44(2–3):69–78
Drug use among street children in southern Brazil. Forster LM, et al. **Drug Alcohol Depend** 1996 Dec 2;43(1–2):57–62
Indicators of genetic and environmental influences in drug abusing individuals. Johnson EO, et al. **Drug Alcohol Depend** 1996 May;41(1):17–23
The influence of familial and non-familial factors on the association between major depression and substance abuse/dependence in 1874 monozygotic male twin pairs. Lin N, et al. **Drug Alcohol Depend** 1996 Dec 2; 43(1–2):49–55
Comorbidity of drug dependence and other mental disorders: a two-phase study of prevalence at outpatient treatment centres in Italy. Pozzi G, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):69–77
Non-fatal injuries and the use of psychoactive drugs among young adults in Spain. Regidor E, et al. **Drug Alcohol Depend** 1996 Mar;40(3):249–59
Treatment needs and experiences of Australian women with alcohol and other drug problems. Swift W, et al. **Drug Alcohol Depend** 1996 Mar;40(3):211–9
An adoption study of DSM-IIIR alcohol and drug dependence severity. Yates WR, et al. **Drug Alcohol Depend** 1996 May;41(1):9–15
Use of potentially abusive psychotropic substances in psychiatric inpatients. Modestin J, et al. **Eur Arch Psychiatry Clin Neurosci** 1997;247(3):146–53
Acute intoxication and substance abuse among patients presenting to a psychiatric emergency service. Breslow RE, et al. **Gen Hosp Psychiatry** 1996 May;18(3):183–91
How D.A.R.E. works: an examination of program effects on mediating variables. Hansen WB, et al. **Health Educ Behav** 1997 Apr;24(2):165–76
Engaging and retaining women in outpatient alcohol and other drug treatment: the effect of referral intensity. Loneck B, et al. **Health Soc Work** 1997 Feb;22(1):38–46
The elderly and the use of illicit drugs: sociological and epidemiological considerations. Rosenberg H. **Int J Addict** 1995 Nov–Dec;30(13–14):1925–51
Dual diagnosis in elders discharged from a psychiatric hospital. Blixen CE, et al. **Int J Geriatr Psychiatry** 1997 Mar;12(3):307–13
Medical use of recreational drugs by AIDS patients. Dansak DA. **J Addict Dis** 1997;16(3):25–30
Association between a history of childhood sexual abuse and subsequent, adolescent psychoactive substance use disorder in a sample of HIV seropositive men. Holmes WC. **J Adolesc Health** 1997 Jun;20(6):414–9
Drug testing in the workplace: could a positive test for one of the mandated drugs be for reasons other than illicit use of the drug? elSohly MA, et al. **J Anal Toxicol** 1995 Oct; 19(6):450–8
Reputation enhancement theory and adolescent substance use. Odgers P, et al. **J Child Psychol Psychiatry** 1996 Nov; 37(8):1015–22
Transmission of the results of tests for International Olympic Committee-defined drugs of abuse. Bruunshuus I, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):157–82
Behavioral couples therapy for male substance-abusing patients: effects on relationship adjustment and drug-using behavior. Fals-Stewart W, et al. **J Consult Clin Psychol** 1996 Oct;64(5):959–72
Drug rehabilitation in a treatment farm setting: the Nitawgi farm experience, 1978–1990. Richardson DW. **J Dev Behav Pediatr** 1996 Aug;17(4):258–61
The Drug Involvement Scale for Adolescents (DISA). Eggert LL, et al. **J Drug Educ** 1996;26(2):101–30
Substance abuse and cognitive functioning in schizophrenia [see comments] Addington J, et al. **J Psychiatry Neurosci** 1997 Mar;22(2):99–104. Comment in: J Psychiatry Neurosci 1997 Mar;22(2):97–8.
Comorbidity: A sign of the times [editorial; comment] Pivik RT. **J Psychiatry Neurosci** 1997 Mar;22(2):97–8. Comment on: J Psychiatry Neurosci 1997 Mar;22(2):99–104.
A brief survey of the current sexual practices of a population admitted for inpatient treatment of drug dependence. Burke WM, et al. **J Sex Marital Ther** 1996 Fall;22(3):203–8
Longitudinal changes in alcohol and drug use among men seen at a gay-specific substance abuse treatment agency. Paul JP, et al. **J Stud Alcohol** 1996 Sep;57(5):475–85
Childhood sexual abuse and women's substance abuse: national survey findings. Wilsnack SC, et al. **J Stud Alcohol** 1997 May;58(3):264–71
The relationships of substance abuse to illegal and violent behavior, in a community sample of young adult African American men and women (gender differences). Friedman AS, et al. **J Subst Abuse** 1996;8(4):379–402
Comorbidity between DSM-IV drug use disorders and major depression: results of a national survey of adults. Grant BF. **J Subst Abuse** 1995;7(4):481–97
Prevalence and correlates of drug use and DSM-IV drug dependence in the United States: results of the National Longitudinal Alcohol Epidemiologic Survey. Grant BF. **J Subst Abuse** 1996;8(2):195–210
Coerced treatment for substance abuse problems detected through workplace urine surveillance: is it effective? Lawental E, et al. **J Subst Abuse** 1996;8(1):115–28
Variation in access to outpatient substance abuse treatment: organizational factors and conceptual issues. McCaughrin WC, et al. **J Subst Abuse** 1996;8(4):403–15
Drug treatment process indicators for probationers and prediction of recidivism. Broome KM, et al. **J Subst Abuse Treat** 1996 Nov–Dec;13(6):487–91
The costs of drug abuse consequences: a summary of research findings. French MT, et al. **J Subst Abuse Treat** 1996 Nov–Dec;13(6):453–66 (56 ref.)
Recreational drug use concurrent with abuse or dependence on other psychoactive substances. Heffner KP, et al. **J Subst Abuse Treat** 1996 Nov–Dec;13(6):499–504
Prescribing drug of choice to illicit heroin users: the experience of a U.K. community drug team. McCusker C, et al. **J Subst Abuse Treat** 1996 Nov–Dec;13(6):521–31
Vietnam combat exposure and recent drug use: a national study. Reifman A, et al. **J Trauma Stress** 1996 Jul; 9(3):557–68
Illicit drugs for medical use [letter] Marks J. **Lancet** 1997 May 3;349(9061):1329
Drug misuse in Scotland. Kohli HS. **Natl Med J India** 1996 Jul–Aug;9(4):187–8
Rural Substance Abuse: State of Knowledge and Issues. Proceedings of a meeting. April 26–27, 1994. **NIDA Res Monogr** 1997;168:1–533
Privacy effects on self-reported drug use: interactions with survey mode and respondent characteristics. Aquilino WS. **NIDA Res Monogr** 1997;167:383–415
Assessing drug use in the workplace: a comparison of self-report, urinalysis, and hair analysis. Cook RF, et al. **NIDA Res Monogr** 1997;167:247–72
The reliability and consistency of drug reporting in ethnographic samples. Fendrich M, et al. **NIDA Res Monogr** 1997;167:81–107
The validity of self-reported drug use in survey research: an overview and critique of research methods. Harrison L. **NIDA Res Monogr** 1997;167:17–36 (41 ref.)
Introduction—the validity of self-reported drug use: improving the accuracy of survey estimates. Harrison L, et al. **NIDA Res Monogr** 1997;167:1–16
The recanting of earlier reported drug use by young adults. Johnston LD, et al. **NIDA Res Monogr** 1997;167:59–80
MDMA (ecstasy) and the rave: a review. Schwartz RH, et al. **Pediatrics** 1997 Oct;100(4):705–8 (5 ref.)
A novel chronic and detachable indwelling jugular catheterization procedure for mice. Kelley BM, et al. **Physiol Behav** 1997 Jul;62(1):163–7
Utility of the chemical use, abuse, and dependence scale in screening patients with severe mental illness. Appleby L, et al. **Psychiatr Serv** 1996 Jun;47(6):647–9
Characteristics of persons with severe mental illness and substance abuse in rural areas. Barry KL, et al. **Psychiatr Serv** 1996 Jan;47(1):88–90
Concurrent validity of clinicians' ratings of substance abuse among psychiatric outpatients [see comments] Carey KB, et al. **Psychiatr Serv** 1996 Aug;47(8):842–7. Comment in: Psychiatr Serv 1997 Jan;48(1):105–6.
The relationship of public support payments to substance abuse among homeless veterans with mental illness. Frisman LK, et al. **Psychiatr Serv** 1997 Jun;48(6):792–5
Mental illness among homeless individuals in a suburban county. Haugland G, et al. **Psychiatr Serv** 1997 Apr; 48(4):504–9
Illicit-drug injection among psychiatric patients without a primary substance use disorder. Horwath E, et al. **Psychiatr Serv** 1996 Feb;47(2):181–5
Characteristics of patients with substance abuse diagnoses on a general psychiatry unit in a VA Medical Center. Lambert MT, et al. **Psychiatr Serv** 1996 Oct;47(10):1104–7
Psychosocial predictors of HIV risk among adolescent offenders who abuse drugs. Malow RM, et al. **Psychiatr Serv** 1997 Feb;48(2):185–7
Outcomes of residential treatment of substance abuse in hospital- and community-based programs. Moos RH, et al. **Psychiatr Serv** 1996 Jan;47(1):68–74
Representative payee practices of community mental health centers in Washington State. Ries RK, et al. **Psychiatr Serv** 1997 Jun;48(6):811–4
Disability payments and chemical dependence: conflicting values and uncertain effects. Rosenheck R.

Psychiatr Serv 1997 Jun;48(6):789–91

Impact of representative payees on substance use by homeless persons with serious mental illness. Rosenheck R, et al. **Psychiatr Serv** 1997 Jun;48(6):800–6

Influence of retroactive disability payments on recipients' compliance with substance abuse treatment. Satel S, et al. **Psychiatr Serv** 1997 Jun;48(6):796–9

A replication and elaboration of the esteem–enhancement model. Vega WA, et al. **Psychiatry** 1996 Summer; 59(2):128–44

Twin closeness and co–twin risk for substance use disorders: assessing the impact of the equal environment assumption. LaBuda MC, et al. **Psychiatry Res** 1997 May 30; 70(3):155–64

Role of oxytocin in the neuroadaptation to drugs of abuse. Sarnyai Z, et al. **Psychoneuroendocrinology** 1994; 19(1):85–117 (100 ref.)

Relapse in schizophrenia: is there a relationship to substance abuse? Gupta S, et al. **Schizophr Res** 1996 May; 20(1–2):153–6

Substance use: a powerful predictor of relapse in schizophrenia. Swofford CD, et al. **Schizophr Res** 1996 May;20(1–2):145–151

Interpreting Dutch cannabis policy: reasoning by analogy in the legalization debate. MacCoun R, et al. **Science** 1997 Oct 3;278(5335):47–52

The consequences of knowing: ethical and legal liabilities in illicit drug research. Fitzgerald J, et al. **Soc Sci Med** 1996 Dec;43(11):1591–600 (35 ref.)

Wat Thamkrabok: a Buddhist drug rehabilitation program in Thailand. Barrett ME. **Subst Use Misuse** 1997 Mar; 32(4):435–59

The role of ethnic versus nonethnic sociocultural factors in substance use and misuse. Collins RL. **Subst Use Misuse** 1996 Jan;31(1):95–101 (27 ref.)

Southeast Asians: Asian–Pacific Americans at risk for substance misuse. D'Avanzo CE. **Subst Use Misuse** 1997 Jun;32(7–8):829–48 (65 ref.)

Problems among youths entering the juvenile justice system, their service needs and innovative approaches to address them. Dembo R. **Subst Use Misuse** 1996 Jan;31(1):81–94 (100 ref.)

Drug and alcohol user treatment/intervention services in Russia––a Western perspective. Fleming PM. **Subst Use Misuse** 1996 Jan;31(1):103–14

Job dissatisfaction and substance use among employed high school students: the moderating influence of active and avoidant coping styles. Frone MR, et al. **Subst Use Misuse** 1997 Apr;32(5):571–85

Tobacco, alcohol, and illicit drug use among Mexican–American and non–Hispanic white high school students. Grunbaum JA, et al. **Subst Use Misuse** 1996 Aug; 31(10):1279–310

Ethnic differences in substance use and alcohol–use–related mortality among first generation migrants to England and Wales. Harrison L, et al. **Subst Use Misuse** 1997 Jun; 32(7–8):849–76

Prevention research for alcohol and other drugs: a look ahead to what is needed. Jansen MA. **Subst Use Misuse** 1996 Jul; 31(9):1217–22

Substance use among homeless, immigrant, and refugee populations: an international perspective. Introduction. Johnson TP. **Subst Use Misuse** 1997 Jun;32(7–8):793–803

"Substance abuse" disorders among runaway and homeless youth. Kipke MD, et al. **Subst Use Misuse** 1997 Jun; 32(7–8):969–86

Pathways into drug user treatment: the influence of gender and racial/ethnic identity. Kline A. **Subst Use Misuse** 1996 Feb;31(3):323–42

Incidence and prevalence of illegal drug use in Switzerland in the 1980s and early 1990s: an analytical study. Knolle H. **Subst Use Misuse** 1997 Aug;32(10):1349–68

Substance user MMPI–2 profiles: predicting failure in completing treatment. Marshall LL, et al. **Subst Use Misuse** 1996 Jan;31(2):197–206

Dual diagnosis and adolescent psychiatric inpatients. Piazza NJ. **Subst Use Misuse** 1996 Jan;31(2):215–23

Cultural linkage: treating Maori with alcohol and drug problems in dedicated Maori treatment programs. Sellman JD, et al. **Subst Use Misuse** 1997 Mar;32(4):415–24

Reliability of adolescent self–reported pretreatment alcohol and other drug use. Stinchfield R. **Subst Use Misuse** 1997 Mar;32(4):425–34

Drug problems among immigrants and refugees in The Netherlands and the Dutch health care and treatment system. van de Wijngaart GF. **Subst Use Misuse** 1997 Jun; 32(7–8):909–38 (60 ref.)

Substance use patterns among homeless migrants and nonmigrants in Chicago. VanGeest JB, et al. **Subst Use Misuse** 1997 Jun;32(7–8):877–907

[Other countries, other drug abuse? Drug dependence and approaches for controlling drug abuse as a global issue] Knauer RH. **Fortschr Med** 1997 Mar 10;115(7):48–9 **(Ger)**

[Status of the management of addicted patients––results of an expert survey as the basis for health policy decisions] Fleischmann H, et al. **Gesundheitswesen** 1996 Oct; 58(10):538–42 (Eng. Abstr.) **(Ger)**

[Social medicine aspects of addiction medicine] Tretter F. **Gesundheitswesen** 1996 Oct;58 Suppl 3:211–8 **(Ger)**

[Harm reduction––on the paradigm changes in drug dependence treatment (editorial)] Kuhlmann T. **Psychiatr Prax** 1996 Jul;23(4):157–60 (Eng. Abstr.) **(Ger)**

[Consumption patterns and motivation for use of addictive drugs in schizophrenic patients] Lambert M, et al. **Psychiatr Prax** 1997 Jul;24(4):185–9 (Eng. Abstr.) **(Ger)**

[Ambulatory medical treatment of drug dependent patients] Gölz J. **Z Arztl Fortbild (Jena)** 1996 Jun;90(4):271–8 (5 ref.) (Eng. Abstr.) **(Ger)**

[Substance dependence. Information, diagnosis and therapy––encouragement for pragmatic treatment] Salloch–Vogel RR, et al. **Z Arztl Fortbild (Jena)** 1996 Jun; 90(4):279–94 (0 ref.) (Eng. Abstr.) **(Ger)**

[Drug dependence among physicians] Schifferdecker M, et al. **Z Arztl Fortbild (Jena)** 1996 Jun;90(4):295–300 (39 ref.) (Eng. Abstr.) **(Ger)**

[Are there new methods in therapy of drug dependence?] Täschner KL. **Z Arztl Fortbild (Jena)** 1996 Jun; 90(4):315–20 (18 ref.) (Eng. Abstr.) **(Ger)**

[Illegal sale of new antidepressive agents (letter)] Nilsen WJ. **Tidsskr Nor Laegeforen** 1997 Apr 10;117(9):1334–5 **(Nor)**

[Basic dictionary of terms used as street slang by narcotic addicts] Wojdyła Z, et al. **Przegl Lek** 1997;54(6):481–95 **(Pol)**

[The histopathology of ephedrone drug abuse] Pigolkin IuI, et al. **Sud Med Ekspert** 1996 Oct–Dec;39(4):26–8 (Eng. Abstr.) **(Rus)**

[Mental disorders in patients who abuse homemade opiates] Rokhlina ML, et al. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(4):42–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

AIDS, drugs of abuse and the neuroimmune axis: introduction and perspectives. Friedman H. **Adv Exp Med Biol** 1996;402:1–3

Drugs of abuse as possible co–factors in AIDS progression: summary of panel discussion. Friedman H. **Adv Exp Med Biol** 1996;402:225–8

Investigating clandestine drug laboratories: adverse medical effects in law enforcement personnel. Burgess JL, et al. **Am J Ind Med** 1996 Oct;30(4):488–94

Drug induced psychosis [editorial] [see comments] Poole R, et al. **Br J Psychiatry** 1996 Feb;168(2):135–8 (34 ref.). Comment in: Br J Psychiatry 1996 May;168(5):651. Comment in: Br J Psychiatry 1996 May;168(5):651–2. Comment in: Br J Psychiatry 1996 Jul;169(1):114–5.

Adverse consequences of prenatal illicit drug exposure. Woods JR Jr. **Curr Opin Obstet Gynecol** 1996 Dec; 8(6):403–11 (71 ref.)

Spatial cognition in alcoholics: influence of concurrent abuse of other drugs. Beatty WW, et al. **Drug Alcohol Depend** 1997 Mar 14;44(2–3):167–74

Maternal polydrug use including cocaine and postnatal infant sleep architecture: preliminary observations and implications for respiratory control and behavior. Gingras JL, et al. **Early Hum Dev** 1995 Nov 24;43(3):197–204

Methemoglobinemia: cyanosis and street methamphetamines. Verzosa JD. **J Am Board Fam Pract** 1997 Mar–Apr; 10(2):137–40

Perceived dangerousness of recreational drugs. Luce TS, et al. **J Drug Educ** 1995;25(4):297–306

Visual attention in children with prenatal cocaine exposure. Heffelfinger A, et al. **J Int Neuropsychol Soc** 1997 May; 3(3):237–45

The effects of antecedent substance abuse on the development of first–episode psychotic mania. Strakowski SM, et al. **J Psychiatr Res** 1996 Jan–Feb;30(1):59–68

Pregnancy outcome and neurodevelopment of children exposed in utero to psychoactive drugs: the Motherisk experience. Loebstein R, et al. **J Psychiatry Neurosci** 1997 May;22(3):192–6 (21 ref.)

Intermediate length neuropsychological screening of impairment among psychoactive substance–abusing patients: a comparison of two batteries. Fals–Stewart W. **J Subst Abuse** 1996;8(1):1–17

Effects of early adolescent drug use on cognitive efficacy in early–late adolescence: a developmental structural model [published erratum appears in J Subst Abuse 1996;8(2):271–3] Scheier LM, et al. **J Subst Abuse** 1995; 7(4):379–404

Drugs and brain death. Kennedy MC, et al. **Med J Aust** 1996 Oct 7;165(7):394–8

Drug abuse: hedonic homeostatic dysregulation. Koob GF, et al. **Science** 1997 Oct 3;278(5335):52–8

Direct and indirect effects of selected risk factors in producing adverse consequences of drug use. Thomas BS. **Subst Use Misuse** 1997 Mar;32(4):377–98

[Alcohol, street drugs and therapeutic drugs in street traffic] Schöch H. **Fortschr Med** 1997 Mar 10;115(7):39–42 (Eng. Abstr.) **(Ger)**

[Drug–induced rhabdomyolysis and lesions of peripheral nerves. Sequelae of local ischemia within the scope of circulatory collapse?] Amoiridis G, et al. **Nervenarzt** 1996 Dec;67(12):1023–6 (Eng. Abstr.) **(Ger)**

ANALYSIS

Hair analysis for drugs of abuse. XIII. Effect of structural factors on incorporation of drugs into hair: the incorporation rates of amphetamine analogs. Nakahara Y, et al. **Arch Toxicol** 1996;70(12):841–9

Meconium as a matrix [letter; comment] Stolk LM. **Clin Pharmacokinet** 1996 Jul;31(1):81. Comment on: Clin Pharmacokinet 1996 Mar;30(3):211–28.

Temporal and geographic variations in the characteristics of heroin seized in Spain and their relation with the route of administration. Spanish Group for the Study of the Purity of Seized Drugs. de la Fuente L, et al. **Drug Alcohol Depend** 1996 Mar;40(3):185–94

European multicentre evaluation of the analytical performance of the Abbott AxSYM Abused Drugs Assays. von Meyer L, et al. **Eur J Clin Chem Clin Biochem** 1997 Feb;35(2):133–40

Capillary electrophoresis: principles and applications in illicit drug analysis. Tagliaro F, et al. **Forensic Sci Int** 1996 Feb 9;77(3):211–29

Influence of the cosmetic treatment of hair on drug testing. Jurado C, et al. **Int J Legal Med** 1997;110(3):159–63

Concentrations of delta 9–tetrahydrocannabinol, cocaine and 6–monoacetylmorphine in hair of drug abusers. Kauert G, et al. **Int J Legal Med** 1996;108(6):294–9

Hair testing for cannabis in Spain and France: is there a difference in consumption? Jurado C, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):111–5

Identification of alpha–phenylethylamine in judicial samples. Meyer E, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):116–20

Hair analysis for drugs of abuse XII. Determination of PCP and its major metabolites, PCHP and PPC, in rat hair after administration of PCP. Sakamoto T, et al. **J Anal Toxicol** 1996 Mar–Apr;20(2):124–30

Interlaboratory studies on the analysis of hair for drugs of abuse: results from the fourth exercise. Sniegoski LT, et al. **J Anal Toxicol** 1996 Jul–Aug;20(4):242–7

Simultaneous determination of illicit drugs in human urine by liquid chromatography–mass spectrometry. Tatsuno M, et al. **J Anal Toxicol** 1996 Sep;20(5):281–6

Simultaneous determination of heroin 6–monoacetylmorphine, morphine, and its glucuronides by liquid chromatography––atmospheric pressure ionspray–mass spectrometry. Zuccaro P, et al. **J Anal Toxicol** 1997 Jul–Aug;21(4):268–77

Determination of illicit drugs and related substances by high–performance liquid chromatography with an electrochemical coulometric–array detector. Achilli G, et al. **J Chromatogr A** 1996 Apr 5;729(1–2):273–7

Comparison of three analytical methods for cocaine analysis of illicit powders. Campanella L, et al. **J Pharm Biomed Anal** 1996 Jun;14(8–10):1047–54

The development of interactive teaching material in forensic science at the University of Strathclyde. Cole MD, et al. **Sci Justice** 1997 Jul–Sep;37(3):183–9

Drug proficiency test false positives: a lack of critical thought. Nichols RG. **Sci Justice** 1997 Jul–Sep;37(3):191–6

Judicial acceptance of hair tests for substances of abuse in the United States courts: scientific, forensic, and ethical aspects. Huestis MA. **Ther Drug Monit** 1996 Aug; 18(4):456–9

Drug testing in addicts: a comparison between urine, sweat, and hair. Kintz P. **Ther Drug Monit** 1996 Aug;18(4):450–5

Hair analysis as evidence in forensic cases. Moeller MR. **Ther Drug Monit** 1996 Aug;18(4):444–9

[Comparative study of illegal cocaine samples with high pressure liquid chromatography and photodiode array detection] Stein K, et al. **Arch Kriminol** 1996 Jan–Feb; 197(1–2):16–26 (Eng. Abstr.) **(Ger)**

[Analysis of "street drugs" with HRGC] Gambaro V, et al. **Boll Chim Farm** 1997 Apr;136(4):359–67 **(Ita)**

[Dependence producing substances in the practice of the Insitute of Forensic Experts in Krakow] Kała M. **Przegl Lek** 1997;54(6):430–7 (28 ref.) (Eng. Abstr.) **(Pol)**

BLOOD

A 5–year stability study of common illicit drugs in blood. Giorgi SN, et al. **J Anal Toxicol** 1995 Oct;19(6):392–8

Effects of 3,4–methylenedioxymethamphetamine in decomposing tissues on the development of Parasarcophaga ruficornis (Diptera:Sarcophagidae) and detection of the drug in postmortem blood, liver tissue, larvae, and puparia. Goff ML, et al. **J Forensic Sci** 1997 Mar;42(2):276–80

CHEMICAL SYNTHESIS

Drug Enforcement Administration (DEA) chemists erred in calculating quantity of methadone that could be synthesized from precursor chemicals [letter] Zedeck MS. **J Forensic Sci** 1997 Mar;42(2):349–50

CHEMISTRY

Comparative chemical analyses of drug samples: general approach and application to heroin. Besacier F, et al. **Forensic Sci Int** 1997 Feb 28;85(2):113–25

Quantitative structure–retention relationships in doping control. Georgakopoulos CG, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):151–6

ECONOMICS

The meaning and utility of drug prices [editorial] Caulkins J, et al. **Addiction** 1996 Sep;91(9):1261–4

Disability payments and drug abuse [letter; comment] [published erratum appears in Psychiatr Serv 1997 Jan;48(1):99] Leong GB, et al. **Psychiatr Serv** 1996 Nov; 47(11):1266. Comment on: Psychiatr Serv 1996 Feb;47(2):119–20, 142.

ISOLATION & PURIFICATION

Capillary electrophoretic enantioseparation of selegiline, methamphetamine and ephedrine using a neutral beta-cyclodextrin epichlorhydrin polymer. Ševčík J, et al. **J Pharm Biomed Anal** 1996 Jun;14(8-10):1089-94

LEGISLATION & JURISPRUDENCE

Why Britain's drug czar mustn't wage war on drugs [editorial] Strang J, et al. **BMJ** 1997 Aug 9;315(7104):325-6

Identification of alpha-phenylethylamine in judicial samples. Meyer E, et al. **J Anal Toxicol** 1996 Mar-Apr;20(2):116-20

Commentary on McBay AJ. Cocaine sentencing. J Forensic Sci 1996 Jan;41(1):3-4 [letter; comment] Heagy JA. **J Forensic Sci** 1996 Nov;41(6):1086-9. Comment on: J Forensic Sci 1996 Jan;41(1):3-4.

Tackling the drug problem--what can doctors do? [editorial] Robson P. **J Med Ethics** 1996 Jun;22(3):133-4

New winds blowing for American drug policies [editorial] Lundberg GD. **JAMA** 1997 Sep 17;278(11):946-7

Illegal drugs policy, AIDS and hepatitis: from prohibition to harm reduction. Oscapella E. **Med Law** 1996;15(3):391-8

[Observation of illicit or misused psychotropic drugs (O.P.P.I.D.U.M.): five years of surveillance of products consumed by drug addicts at Marseille] San Marco JL, et al. **Therapie** 1996 Sep-Oct;51(5):586-98 (Eng. Abstr.) **(Fre)**

METABOLISM

Distribution of codeine and morphine into rat hair after long-term daily dosing with codeine. Gygi SP, et al. **J Anal Toxicol** 1995 Oct;19(6):387-91

Sweat testing in opioid users with a sweat patch. Kintz P, et al. **J Anal Toxicol** 1996 Oct;20(6):393-7

Metabolism, Pharmacokinetics, and Pharmacodynamics of Drugs of Abuse. Proceedings of a meeting. November 4-5, 1994. **NIDA Res Monogr** 1997;173:1-304

New developments in biological measures of drug prevalence. Cone EJ. **NIDA Res Monogr** 1997;167:108-29 (21 ref.)

The forensic application of testing hair for drugs of abuse. Miller ML, et al. **NIDA Res Monogr** 1997;167:146-60 (12 ref.)

PHARMACOKINETICS

Biocatalysts in detoxication of drugs of abuse. Cashman JR. **NIDA Res Monogr** 1997;173:225-58 (95 ref.)

PHARMACOLOGY

Conditioned taste aversions and drugs of abuse: a reinterpretation. Grigson PS. **Behav Neurosci** 1997 Feb; 111(1):129-36

Effect of nitrous oxide on cerebral blood velocity while reclining and standing. Mathew RJ, et al. **Biol Psychiatry** 1997 May 1;41(9):979-84

Behavior of rats under fixed consecutive number schedules: effects of drugs of abuse. Snodgrass SH, et al. **J Exp Anal Behav** 1997 Jul;68(1):117-32

Effects of 3,4-methylenedioxymethamphetamine in decomposing tissues on the development of Parasarcophaga ruficornis (Diptera:Sarcophagidae) and detection of the drug in postmortem blood, liver tissue, larvae, and puparia. Goff ML, et al. **J Forensic Sci** 1997 Mar;42(2):276-80

Habitual, toxic, and lethal concentrations of 103 drugs of abuse in humans. Repetto MR, et al. **J Toxicol Clin Toxicol** 1997;35(1):1-9 (20 ref.)

Metabolism, Pharmacokinetics, and Pharmacodynamics of Drugs of Abuse. Proceedings of a meeting. November 4-5, 1994. **NIDA Res Monogr** 1997;173:1-304

Molecular and cellular basis of addiction. Nestler EJ, et al. **Science** 1997 Oct 3;278(5335):58-63 (63 ref.)

POISONING

Accidental fatal drug overdoses in New York City: 1990-1992. Tardiff K, et al. **Am J Drug Alcohol Abuse** 1996 May;22(2):135-46

Parental recreational drug use and risk for neural tube defects. Shaw GM, et al. **Am J Epidemiol** 1996 Dec 15; 144(12):1155-60

Creatine kinase isoform changes following Ecstasy overdose. Murthy BV, et al. **Anaesth Intensive Care** 1997 Apr; 25(2):156-9

Epidemiology of inhalant abuse reported to two regional poison centers. Spiller HA, et al. **J Toxicol Clin Toxicol** 1997;35(2):167-73

[Selected medico-legal problems in cases of poisoning with substances of abuse] Klys M, et al. **Przegl Lek** 1997; 54(6):404-9 (Eng. Abstr.) **(Pol)**

[Poisoning with narcotics and hallucinogens in material from the Clinic of Acute Poisoning in Lodz (1993-1996)] Kotwica M, et al. **Przegl Lek** 1997;54(6):399-403 (Eng. Abstr.) **(Pol)**

SUPPLY & DISTRIBUTION

The analysis of policy: understanding the process of policy development. Ryder D. **Addiction** 1996 Sep;91(9):1265-70

TOXICITY

Neurotoxic and pharmacologic studies on enantiomers of the N-methylated analog of cathinone (methcathinone): a new drug of abuse. Sparago M, et al. **J Pharmacol Exp Ther** 1996 Nov;279(2):1043-52

Functional evidence for effects of drugs of abuse on infection and immune responses. **NIDA Res Monogr** 1996;162:43-5

Basic neurobiology of abused drugs. **NIDA Res Monogr** 1996; 162:54-6

Immunotoxicology of opioids, inhalants, and other drugs of abuse. House RV, et al. **NIDA Res Monogr** 1997; 173:175-200 (51 ref.)

Inhalation studies with drugs of abuse. Meng Y, et al. **NIDA Res Monogr** 1997;173:201-24 (30 ref.)

URINE

Recommendations for the reliable detection of illicit drugs in urine in the European Union, with special attention to the workplace. EU Toxicology Experts working Group. de la Torre R, et al. **Ann Clin Biochem** 1997 Jul;34 (Pt 4):339-44

A simple HPLC method for the separation of amphetamine isomers in urine and its application in differentiating between 'street' amphetamine and prescribed D-amphetamine. Palfrey S, et al. **Ann Clin Biochem** 1996 Jul;33 (Pt 4):344-6

Comparison of RapiTest with Emit d.a.u. and GC-MS for the analysis of drugs in urine. Korte T, et al. **J Anal Toxicol** 1997 Jan-Feb;21(1):49-53

alpha-benzyl-N-methylphenethylamine (BNMPA), an impurity of illicit methamphetamine synthesis: III. Detection of BNMPA and metabolites in urine of methamphetamine users. Moore KA, et al. **J Anal Toxicol** 1996 Mar-Apr;20(2):89-92

ONTRAK TESTCUP: a novel, on-site, multi-analyte screen for the detection of abused drugs. Towt J, et al. **J Anal Toxicol** 1995 Oct;19(6):504-10

Automated analysis of drugs in urine. Soriano C, et al. **J Chromatogr B Biomed Appl** 1996 Dec 6;687(1):183-7

Comparison of self-reported drug use with quantitative and qualitative urinalysis for assessment of drug use in treatment studies. Preston KL, et al. **NIDA Res Monogr** 1997; 167:130-45

Recommendations for the reliable detection of illicit drugs in urine, with special attention to the workplace, in the European Union (December 1996). The Toxicology Experts' Working Group. Killander J, et al. **Scand J Clin Lab Invest** 1997 Apr;57(2):97-103

[Urinary screening of drugs of abuse among drivers involved in road accidents] Pélissier AL, et al. **Ann Biol Clin (Paris)** 1996;54(10-11):365-71 (Eng. Abstr.) **(Fre)**

[First analytical chemical study on abused substances consumed at the University of Buenos Aires (Argentina)] Roses OE, et al. **Boll Chim Farm** 1997 Apr;136(4):295-8 **(Ita)**

STREET PEOPLE see **HOMELESS PERSONS**

STREET YOUTH see **HOMELESS YOUTH**

STREETER SYNDROME see **AMNIOTIC BAND SYNDROME**

STREPSIRHINI

ANATOMY & HISTOLOGY

The expanded mandibular condyle of the Megaladapidae. Wall CE. **Am J Phys Anthropol** 1997 Jun;103(2):263-76

GENETICS

Phylogenetic relationships among Indriidae (Primates, Strepsirhini) inferred from highly repeated DNA band patterns. Razafindraibe H, et al. **C R Acad Sci III** 1997 Jun;320(6):469-75

Limit mobility fragments are suitable probes for in situ hybridization [letter] Mascheretti S, et al. **Eur J Histochem** 1996;40(4):331-3

Paternity discrimination in four prosimian species by the random amplified polymorphic DNA method. Neveu H, et al. **Folia Primatol (Basel)** 1996;67(3):157-62

Molecular evolutionary dynamics of cytochrome b in strepsirrhine primates: the phylogenetic significance of third-position transversions. Yoder AD, et al. **Mol Biol Evol** 1996 Dec;13(10):1339-50

PHYSIOLOGY

Humeral head shape as an indicator of locomotor behavior in extant strepsirhines and Eocene adapids. Schmitt D. **Folia Primatol (Basel)** 1996;67(3):137-51

PSYCHOLOGY

Milk composition reflects pattern of maternal care in prosimian primates. Tilden CD, et al. **Am J Primatol** 1997; 41(3):195-211

Determinants of primate social organization: comparative evidence and new insights from Malagasy lemurs. Kappeler PM. **Biol Rev Camb Philos Soc** 1997 Feb;72(1):111-51 (248 ref.)

STREPTOBACILLUS

Streptobacillus moniliformis infection in Swiss white mice. Glastonbury JR, et al. **J Vet Diagn Invest** 1996 Apr; 8(2):202-9

[Streptobacillus moniliformis septic oligoarthritis (fever caused by rat bite) (letter)] Sáez Villaverde R, et al. **Rev Clin Esp** 1996 Jun;196(6):413-5 **(Spa)**

ISOLATION & PURIFICATION

Isolation of presumptive Streptobacillus moniliformis from abscesses associated with the female genital tract. Pins MR, et al. **Clin Infect Dis** 1996 Mar;22(3):471-6

STREPTOCOCCACEAE

CLASSIFICATION

Lactic acid bacteria of foods and their current taxonomy. Stiles ME, et al. **Int J Food Microbiol** 1997 Apr 29; 36(1):1-29 (167 ref.)

Aerococcus urinae: intraspecies genetic and phenotypic relatedness. Christensen JJ, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):28-32

GENETICS

Genomic organization of lactic acid bacteria. Davidson BE, et al. **Antonie Van Leeuwenhoek** 1996 Oct;70(2-4):161-83 (153 ref.)

Barriers to application of genetically modified lactic acid bacteria. Verrips CT, et al. **Antonie Van Leeuwenhoek** 1996 Oct;70(2-4):299-316 (44 ref.)

Aerococcus urinae: intraspecies genetic and phenotypic relatedness. Christensen JJ, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):28-32

Plasmid integration in a wide range of bacteria mediated by the integrase of Lactobacillus delbrueckii bacteriophage mv4. Auvray F, et al. **J Bacteriol** 1997 Mar;179(6):1837-45

ISOLATION & PURIFICATION

Penicillin-resistant Aerococcus viridans bacteremia in a child receiving prophylaxis for sickle-cell disease. Swanson H, et al. **Clin Infect Dis** 1996 Feb;22(2):387-8

Aerococcus-like organisms: use of antibiograms for diagnostic and taxonomic purposes. Christensen JJ, et al. **J Antimicrob Chemother** 1996 Aug;38(2):253-8

Infected left atrial myxoma caused by Gemella morbillorum. Wang TD, et al. **Scand J Infect Dis** 1996;28(6):633-4

METABOLISM

Metabolic engineering of sugar catabolism in lactic acid bacteria. de Vos WM. **Antonie Van Leeuwenhoek** 1996 Oct; 70(2-4):223-42 (132 ref.)

Biosynthesis of bacteriocins in lactic acid bacteria. Nes IF, et al. **Antonie Van Leeuwenhoek** 1996 Oct;70(2-4):113-28 (82 ref.)

Biopreservation by lactic acid bacteria. Stiles ME. **Antonie Van Leeuwenhoek** 1996 Oct;70(2-4):331-45 (132 ref.)

Casein and peptide degradation in lactic acid bacteria. Mierau I, et al. **Biotechnol Genet Eng Rev** 1997;14:279-301 (125 ref.)

PHYSIOLOGY

Lytic systems in lactic acid bacteria and their bacteriophages. Gasson MJ. **Antonie Van Leeuwenhoek** 1996 Oct; 70(2-4):147-59 (63 ref.)

Geographical spread of bacterial and fungal diseases of crustaceans. Alderman DJ. **Rev Sci Tech** 1996 Jun; 15(2):603-32 (59 ref.)

[The biological properties of Aerococcus antagonists, representatives of human microbiocenoses] Kremenchutskil GN, et al. **Mikrobiol Z** 1994 Jul-Sep;56(4):36-42 (61 ref.) (Eng. Abstr.) **(Rus)**

VIROLOGY

Biotechnology of lactic acid bacteria with special reference to bacteriophage resistance. Daly C, et al. **Antonie Van Leeuwenhoek** 1996 Oct;70(2-4):99-110 (118 ref.)

STREPTOCOCCAL INFECTIONS

Pruritus ani caused by beta-haemolytic streptococci [letter] Weismann K, et al. **Acta Derm Venereol** 1996 Sep;76(5):415

Group B streptococci and pregnancy [letter; comment] Levine EM. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):1084-5. Comment on: Am J Obstet Gynecol 1996 Apr;174(4):1354-60.

Ascending group B streptococcal genital infection in the rabbit model. McDuffie RS Jr, et al. **Am J Obstet Gynecol** 1996 Aug;175(2):402-5

Endogenous endophthalmitis caused by Streptococcus mitis. Harrison SA, et al. **Am J Ophthalmol** 1997 Feb;123(2):260-1

Reactive arthritis, beta-haemolytic Streptococcus and Staphylococcus aureus [letter] [see comments] Leitch DN, et al. **Br J Rheumatol** 1996 Sep;35(9):912. Comment in: Br J Rheumatol 1997 May;36(5):606-7.

Long-term follow-up of juvenile-onset cutaneous polyarteritis nodosa associated with streptococcal infection. Till SH, et al. **Br J Rheumatol** 1997 Aug;36(8):909-11

Group B streptococcal infections. Baker CJ. **Clin Perinatol** 1997 Mar;24(1):59-70 (47 ref.)

Management of staphylococcal and streptococcal infections. Tan JS, et al. **Clin Podiatr Med Surg** 1996 Oct;13(4):793–816 (56 ref.)

Penicillin–resistant Streptococcus pneumoniae keratitis. Wilkins J, et al. **Cornea** 1996 Jan;15(1):99–100

Update on complications of group A streptococcal infections. Ayoub EM, et al. **Curr Probl Pediatr** 1997 Mar;27(3):90–101 (87 ref.)

The bacteriology of hidradenitis suppurativa. Jemec GB, et al. **Dermatology** 1996;193(3):203–6

Simultaneous occurrence of group B Streptococcus and echovirus 20 [letter] Dronkert ML, et al. **Eur J Pediatr** 1996 Oct;155(10):915

Brodie's abscess of the ilium and fifth lumbar vertebra. case reports. Lindsetmo RO, et al. **Eur J Surg** 1995 Dec; 161(12):928–30

Acute MRI changes in infectious discitis: report on two cases. Schindler OS, et al. **Eur Spine J** 1995;4(6):360–1

Characterization of group B streptococcal invasion in HEp–2 epithelial cells. Valentin–Weigand P, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):69–74

Infective endocarditis: some popular tenets debunked? Eykyn SJ. **Heart** 1997 Mar;77(3):191–3

Pre–septal cellulitis—varied clinical presentations. Rao VA, et al. **Indian J Ophthalmol** 1996 Dec;44(4):225–7

Invasive group A streptococcal disease. Stevens DL. **Infect Agents Dis** 1996 Jun;5(3):157–66 (48 ref.)

Vancomycin–resistant enterococci: clinical, microbiologic, and epidemiologic features. Noskin GA. **J Lab Clin Med** 1997 Jul;130(1):14–20 (40 ref.)

Streptococcus suis toxic–shock syndrome and meningitis. Leelarasamee A, et al. **J Med Assoc Thai** 1997 Jan; 80(1):63–8

Streptococcal arthritis in Thai adults: case series and review. Osiri M, et al. **J Med Assoc Thai** 1996 Dec;79(12):755–61

Endovascular infection after renal artery stent placement [see comments] Gordon GI, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):669–72. Comment in: J Vasc Interv Radiol 1997 Mar–Apr;8(2):302.

Streptococcal pharyngitis in a paediatric emergency department. Edmond KM, et al. **Med J Aust** 1996 Oct 21; 165(8):420–3

Gemella morbillorum prosthetic valve endocarditis [letter] Holland J, et al. **N Z Med J** 1996 Sep 27;109(1030):367

Asymptomatic group–B streptococcal pyelonephritis: an unusual cause of acute renal failure [letter] Heyman SN, et al. **Nephron** 1997;75(2):243–4

Infective endocarditis. Considerations for the timing of surgical intervention and type of infecting microorganism. Yamauchi S, et al. **Nippon Ika Daigaku Zasshi** 1997 Feb; 64(1):16–21

Puerperal group A beta–hemolytic streptococcal toxic shock–like syndrome. Noronha S, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):728

Risk factors for invasive group A streptococcal infections in children with varicella: a case–control study. Peterson CL, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):151–6

Invasive group A streptococcal infections in children with varicella in Southern California. Vugia DJ, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):146–50

Group B streptococcal meningitis in an adult [letter] Hatfield AG, et al. **Postgrad Med J** 1997 Mar;73(857):188

[Vaginal colonization of group B Streptococcus: a study in 267 cases of factory women] Zhu YZ, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1996 Feb; 17(1):17–9 (Eng. Abstr.) **(Chi)**

[An approach to the diagnosis of recurrent attack of rheumatic fever in patients with rheumatic heart disease] Huang C. **Chung Hua Nei Ko Tsa Chih** 1995 Oct; 34(10):687–9 (Eng. Abstr.) **(Chi)**

[Food–borne streptococcal epidemics] Jespersen NB, et al. **Ugeskr Laeger** 1997 Sep 1;159(36):5368–71 (Eng. Abstr.) **(Dan)**

[Group B streptococcal infection in adults] Laursen SB, et al. **Ugeskr Laeger** 1997 Feb 3;159(6):732–5 (Eng. Abstr.) **(Dan)**

[Streptococcus cellulitis. Apropos of 3 clinical cases] Tropet Y, et al. **Chirurgie** 1996;121(6):482–6 (Eng. Abstr.) **(Fre)**

[Streptococcus suis L3–L4 spondylodiscitis in a butcher (letter)] Caumont H, et al. **Presse Med** 1996 Oct 5; 25(29):1348 **(Fre)**

[A case of fluminant septic shock due to Streptococcus agalactiae in a patient with MPO–ANCA related glomerulonephritis] Tanaka A, et al. **Kansenshogaku Zasshi** 1996 Nov;70(11):1186–9 (Eng. Abstr.) **(Jpn)**

[Two elderly patients with Rhabdomyolysis and respiratory infection with Streptococcus pneumoniae] Teramoto S, et al. **Nippon Ronen Igakkai Zasshi** 1997 Jan;34(1):49–53 (Eng. Abstr.) **(Jpn)**

[Serious streptococcal infections of the head and neck region] Kongelf E, et al. **Tidsskr Nor Laegeforen** 1997 Jan 10; 117(1):32–5 (Eng. Abstr.) **(Nor)**

[Streptococcal perianal disease] García Puga JM, et al. **An Esp Pediatr** 1996 Dec;45(6):647–8 (19 ref.) **(Spa)**

[Septic pulmonary embolism and maxillary osteomyelitis (letter)] Cícar MA, et al. **Enferm Infecc Microbiol Clin** 1996 Jun–Jul;14(6):402–3 **(Spa)**

[Cellulitis caused by Streptococcus pneumoniae associated with spondylodiscitis after suppurative otitis media (letter)] López J, et al. **Enferm Infecc Microbiol Clin** 1997 Mar; 15(3):171–2 **(Spa)**

[Endocarditis caused by group B streptococci in adults] Marron A, et al. **Enferm Infecc Microbiol Clin** 1997 Mar; 15(3):147–50 (25 ref.) (Eng. Abstr.) **(Spa)**

[Streptococcal pharyngitis] Romero J, et al. **Enferm Infecc Microbiol Clin** 1995 Dec;13(10):611–27 (204 ref.) **(Spa)**

[Pyogenic hepatic abscess by Streptococcus sanguis I (letter)] Torné J, et al. **Enferm Infecc Microbiol Clin** 1996 Dec; 14(10):635–6 **(Spa)**

[Purulent abscess myocarditis with fatal outcome, caused by Streptococcus agalactiae (letter)] Abad C. **Med Clin (Barc)** 1996 Jan 27;106(3):119 **(Spa)**

[Streptococcus agalactiae (group B streptococci) (editorial)] Betriu Cabeceran C, et al. **Med Clin (Barc)** 1997 Sep 6; 109(7):258–60 **(Spa)**

[Bacteremia and endocarditis caused by Streptococcus bovis in patients with alcoholic hepatopathy without evidence of colonic pathology] Castroagudín JF, et al. **Rev Esp Enferm Dig** 1996 Sep;88(9):605–8 (Eng. Abstr.) **(Spa)**

BLOOD

Fatal Streptococcus bovis sepsis in an infant on peritoneal dialysis [letter] Tanney D, et al. **Pediatr Nephrol** 1997 Jun; 11(3):390

Optimal gentamicin therapy in preterm neonates includes loading doses and early monitoring. Isemann BT, et al. **Ther Drug Monit** 1996 Oct;18(5):549–55

[Serologic study in patients with streptococcal infective endocarditis] Planes AM, et al. **Med Clin (Barc)** 1996 Nov 23;107(18):693–7 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Non–steroidal anti–inflammatory drugs may predispose to invasive group A streptococcal infections [letter; comment] Curtis N. **Arch Dis Child** 1996 Dec;75(6):547. Comment on: Arch Dis Child 1996 Feb;74(2):164–7.

COMPLICATIONS

PCR assay for detecting Streptococcus pneumoniae in the middle ear of children with otitis media with effusion. Jero J, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):288–92

HLA–DP antigens and post–streptococcal acute glomerulonephritis. Mori K, et al. **Acta Paediatr** 1996 Aug; 85(8):916–8

Chronic subdural haematoma and Streptococcus pneumoniae–associated haemolytic–uraemic syndrome [letter] Sajjanhar T, et al. **Acta Paediatr** 1996 Sep; 85(9):1135–6

Streptococcus sanguis bacteremia associated with cecal carcinoma: case report and review of the literature. Marinella MA. **Am J Gastroenterol** 1997 Sep;92(9):1541–2 (12 ref.)

Cerebral vasculitis associated with acute post–streptococcal glomerulonephritis. Rovang RD, et al. **Am J Nephrol** 1997; 17(1):89–92

Group B Streptococcus and preterm premature rupture of membranes: a randomized, double–blind clinical trial of antepartum ampicillin. Grable IA, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):1036–42

Bilateral macular holes resulting from septic embolization. Beatty S, et al. **Am J Ophthalmol** 1997 Apr;123(4):557–9

Uveitis as the only clinical manifestation of poststreptococcal syndrome. Benjamin A, et al. **Am J Ophthalmol** 1997 Feb; 123(2):258–60

Back pain in the older patient. Baumgartner E, et al. **Ann Rheum Dis** 1996 Sep;55(9):600–2

An experimental model for acute poststreptococcal glomerulonephritis in mice. Nordstrand A, et al. **APMIS** 1996 Nov;104(11):805–16

Penicillin in the treatment of Behçet's disease: comment on the article by Calgüneri et al [letter] Demiroğlu H, et al. **Arthritis Rheum** 1997 Sep;40(9):1728–30

Major stroke in a patient treated for bacterial endocarditis in a Hospital at Home Unit. Montalto M, et al. **Aust N Z J Med** 1996 Feb;26(1):105–7

Myelodysplasia with der(1;7)(q10;p10) discovered after an episode of bacterial lymphangitis in a twenty–three–year–old man [letter] Bauduer F, et al. **Cancer Genet Cytogenet** 1997 Oct 1;98(1):90–1

Bacteriological studies of dental caries in Ile–Ife, Nigeria. Adetunji OF, et al. **Cent Afr J Med** 1996 Aug;42(8):249–52

Group A streptococcal septicemia with retropharyngeal abscess: a case report. Choong CS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jul;60(1):62–5

Poststreptococcal glomerulonephritis: getting to know an old enemy [editorial] Oliveira DB. **Clin Exp Immunol** 1997 Jan; 107(1):8–10

Liver abscess due to Streptococcus sanguis. George S, et al. **Clin Infect Dis** 1996 Jan;22(1):191–2

Infected pseudoaneurysm complicating percutaneous transluminal coronary angioplasty. Herchline TE, et al. **Clin Infect Dis** 1996 Mar;22(3):602, reply 603

Streptococcus constellatus endocarditis presenting as acute embolic stroke. Marinella MA. **Clin Infect Dis** 1997 Jun; 24(6):1271–2

Pyomyositis due to Eubacterium lentum and Streptococcus constellatus from a periodontal source. Palomino–Nicás J, et al. **Clin Infect Dis** 1996 Jan;22(1):176–8

Streptococcus suis infection complicated by purpura fulminans and rhabdomyolysis: case report and review. Tambyah PA, et al. **Clin Infect Dis** 1997 Apr;24(4):710–2

Incidence and studies on antigenic specificities of antineutrophil–cytoplasmic autoantibodies (ANCA) in poststreptococcal glomerulonephritis. Ardiles LG, et al. **Clin Nephrol** 1997 Jan;47(1):1–5

Prolonged hypocomplementemia in poststreptococcal acute glomerulonephritis. Dedeoglu IO, et al. **Clin Nephrol** 1996 Nov;46(5):302–5

Garland pattern post–streptococcal glomerulonephritis (PSGN, clinical characteristics and follow–up [letter] Grčevska L, et al. **Clin Nephrol** 1996 Dec;46(6):413–4

Histological evidence of neuraminidase involvement in acute nephritis: desialized leukocytes infiltrate the kidney in acute post–streptococcal glomerulonephritis. Marín C, et al. **Clin Nephrol** 1997 Apr;47(4):217–21

Circulating levels of cytokines in poststreptococcal glomerulonephritis. Soto HM, et al. **Clin Nephrol** 1997 Jan; 47(1):6–12

The presentation, treatment and outcome of acute glomerulonephritis in the elderly [letter] Wu ZL, et al. **Clin Nephrol** 1996 Apr;45(4):277–9

Asymptomatic acute poststreptococcal glomerulonephritis following upper respiratory tract infections caused by Group A streptococci. Yoshizawa N, et al. **Clin Nephrol** 1996 Nov;46(5):296–301

Lumbar facet joint infection associated with epidural and paraspinal abscess. Baltz MS, et al. **Clin Orthop** 1997 Jun; (339):109–12

Neurological presentation of poststreptococcal glomerulonephritis [see comments] Nordby JA. **Clin Pediatr (Phila)** 1997 Feb;36(2):105–8. Comment in: Clin Pediatr (Phila) 1997 Aug;36(8):492–3.

Infected left atrial myxoma with concomitant mitral valve endocarditis. Vogt PR, et al. **Eur J Cardiothorac Surg** 1996; 10(1):71–3

Vertebral osteomyelitis caused by group B streptococci (Streptococcus agalactiae) secondary to urinary tract infection. Bauer TM, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):244–6

Recurrent brain abscesses in an HIV–positive patient with hereditary hemorrhagic telangiectasia and arteriovenous malformations of the lung. Thurnheer R, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):407–10 (20 ref.)

Streptococcus bovis spontaneous bacterial peritonitis in patients with alcoholic cirrhosis. Glória H, et al. **Eur J Gastroenterol Hepatol** 1996 Aug;8(8):823–4

Mitral regurgitation may be related with previous streptococcal infection. Wahid MR, et al. **Eur J Pediatr** 1996 Mar;155(3):168–72

Multiple red lesions on the legs. Levine N. **Geriatrics** 1997 Aug;52(8):94

Periurethral abscess: complication of UTI. Mylonakis E, et al. **Geriatrics** 1997 Aug;52(8):86–8 (18 ref.)

Clinical and bacteriological characteristics of infective endocarditis in the elderly. Selton–Suty C, et al. **Heart** 1997 Mar;77(3):260–3

Streptococcus bovis endocarditis and vertebral osteomyelitis [letter; comment] Marinella MA. **Heart Lung** 1996 Sep–Oct;25(5):422. Comment on: Heart Lung 1996 Mar–Apr;25(2):165–8.

Chronic back pain after hernia and aneurysm repairs. Gross RM, et al. **Hosp Pract (Off Ed)** 1997 Jun 15;32(6):185–8

An outbreak of post–streptococcal reactive arthritis. Madhuri V, et al. **Indian J Med Res** 1997 Jun;105:249–53

Post tonsillitic erythema nodosum in pregnancy. Buckshee K, et al. **Int J Gynaecol Obstet** 1996 Dec;55(3):293–4

Vasculitic neuropathy associated with beta–haemolytic streptococcal infection: a case report. Traverso F, et al. **Ital J Neurol Sci** 1997 Apr;18(2):105–7

A putative poststreptococcal case of OCD with chronic tic disorder, not otherwise specified [clinical conference] Tucker DM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Dec; 35(12):1684–91

More on PANDAS –letter– Weiss M, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Sep;36(9):1163–5

Malignant melanoma and group G streptococci. A case report. Oberholtzer CS, et al. **J Am Podiatr Med Assoc** 1997 Sep;87(9):431–3

Adhesion molecules expression in noncrescentic acute post–streptococcal glomerulonephritis. Rastaldi MP, et al. **J Am Soc Nephrol** 1996 Nov;7(11):2419–27

A 4–yr–old girl with cardiac arrest after a week of flulike symptoms. Brown DF, et al. **J Emerg Med** 1997 Mar–Apr; 15(2):231–4

Colonization by Streptococcus pneumoniae among human immunodeficiency virus–infected adults: prevalence of antibiotic resistance, impact of immunization, and characterization by polymerase chain reaction with BOX primers of isolates from persistent S. pneumoniae carriers. Rodriguez–Barradas MC, et al. **J Infect Dis** 1997 Mar; 175(3):590–7

Lateral neck abscess caused by Streptococcus bovis in a patient with undiagnosed colon cancer. Goumas PD, et al. **J Laryngol Otol** 1997 Jul;111(7):666–8

Infective endocarditis—a photo essay. Varadarajan J, et al. **J Neuroophthalmol** 1996 Dec;16(4):291–4

Cervical cellulitis with mediastinitis from an odontogenic infection complicated by diabetes mellitus: report of a case. Sugata T, et al. **J Oral Maxillofac Surg** 1997 Aug; 55(8):864–9 (14 ref.)

Kawasaki disease with streptococcal infection [letter; comment] Burnell RH. **J Paediatr Child Health** 1996 Jun; 32(3):270. Comment on: J Paediatr Child Health 1995 Aug;31(4):355–7.

Complications associated with severe invasive streptococcal syndrome. Montgomery VL, et al. **J Pediatr** 1996 Oct; 129(4):602–4

Orthopaedic manifestations of invasive group A streptococcal infections complicating primary varicella. Mills WJ, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):522–8

Can infection result in OCD? [news] **J Psychosoc Nurs Ment Health Serv** 1997 Jul;35(7):10

Thoracic discitis following 'Woodbury' rash. Sloss JM, et al. **J R Army Med Corps** 1994 Feb;140(1):45–6

Delayed diagnosis of acute rheumatic fever in adults: a forgotten cause of febrile polyarthritis. Chan AW, et al. **J Rheumatol** 1996 Nov;23(11):1999–2001

Poststreptococcal reactive arthritis in children [letter] Mercado U. **J Rheumatol** 1996 Jun;23(6):1113–4

Poststreptococcal reactive rheumatic syndrome. Schattner A. **J Rheumatol** 1996 Jul;23(7):1297–8

Henoch–Schonlein purpura: clinical experience and contemplations on a streptococcal association. al–Sheyyab M, et al. **J Trop Pediatr** 1996 Aug;42(4):200–3

Arthritis and meningitis—the first manifestations of bacterial endocarditis in 2 patients. Suzuki J, et al. **Jpn Circ J** 1997 May;61(5):450–4

Musculoskeletal side–effects of varicella [see comments] Burke GA, et al. **Lancet** 1997 Mar 22;349(9055):818–9. Comment in: Lancet 1997 May 31;349(9065):1623–4.

Musculoskeletal side–effects of varicella [letter; comment] Curtis N, et al. **Lancet** 1997 May 31;349(9065):1623–4. Comment on: Lancet 1997 Mar 22;349(9055):818–9.

The association of primary varicella infection and streptococcal infection of the cutaneous and musculoskeletal system: a case report. Poon AH, et al. **Magn Reson Imaging** 1997;15(1):131–3

Group A streptococcal bacteremia. A 10–year prospective study. Bernaldo de Quirós JC, et al. **Medicine (Baltimore)** 1997 Jul;76(4):238–48 (94 ref.)

Overlap between Kawasaki disease and group A streptococcal infection [letter; comment] Hoare S, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):633–4. Comment on: Pediatr Infect Dis J 1996 Dec;15(12):1136–8.

Group B streptococcal sepsis and meningitis complicated with severe sensorineural hearing loss in a fourteen–year–old boy. Likitnukul S, et al. **Pediatr Infect Dis J** 1996 May;15(5):468–70 (15 ref.)

Group B streptococcal meningitis: a case of transverse myelitis with spinal cord and posterior fossa cysts. Puvabanditsin S, et al. **Pediatr Radiol** 1997 Apr;27(4):317–8

Effects of treatment with pentoxifylline on the cardiovascular manifestations of group B streptococcal sepsis in the piglet. Del Moral T, et al. **Pediatr Res** 1996 Sep;40(3):469–74

Bacteraemia and intestinal obstruction in a 74–year–old man. Davis GK, et al. **Postgrad Med J** 1997 Jun;73(860):377–8

[Selective embolization of ruptured mycotic aneurysm of the duodeno–pancreatic arcade disclosing infectious endocarditis] Staat P, et al. **Arch Mal Coeur Vaiss** 1996 Nov;89(11):1431–5 (Eng. Abstr.) **(Fre)**

[Varicella and invasive group A streptococcal infections (letter)] Chevallier C, et al. **Arch Pediatr** 1997 Jun;4(6):583 **(Fre)**

[Severe streptococcal complications in varicella] Héraud MC, et al. **Arch Pediatr** 1997 May;4(5):430–2 (Eng. Abstr.) **(Fre)**

[Streptococcus milleri subacute spinal cord abscess. Apropos of a case] Lahdou JB, et al. **Neurochirurgie** 1996;42(2):100–4 (Eng. Abstr.) **(Fre)**

[Successful coronary angioplasty in a patient with acute myocardial infarction caused by prosthetic valve endocarditis] Takimoto E, et al. **J Cardiol** 1996;27 Suppl 2:103–8; discussion 109–10 (Eng. Abstr.) **(Jpn)**

[A case of acute mediastinitis with pyothorax secondary to peritonsillar abscess] Iriyama T, et al. **Kyobu Geka** 1997 Jan;50(1):78–81 (Eng. Abstr.) **(Jpn)**

[Usefulness of MRA in an infant with cerebral infarction due to streptococcal meningitis] Tanabe T, et al. **No To Hattatsu** 1996 Nov;28(6):520–4 (Eng. Abstr.) **(Jpn)**

[Aortic valve perforation] Shu T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(13):415–20 (16 ref.) **(Jpn)**

[Nephrotic proteinuria in poststreptococcal glomerulonephritis] Jovanović D, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:60–2 (Eng. Abstr.) **(Scc)**

[Epidemiology of poststreptococcal glomerulonephritis in the military population] Jovanović D, et al. **Srp Arh Celok Lek** 1996;124 Suppl 1:187–9 (Eng. Abstr.) **(Scc)**

[Post–streptococcal reactive arthritis: diagnostic problems (see comments)] Skitarelić N, et al. **Lijec Vjesn** 1996 Mar–Apr;118(3–4):53–6 (Eng. Abstr.). Comment in: Lijec Vjesn 1996 Oct;118(10):254. **(Scr)**

[Additional dilemmas in the differential diagnosis of rheumatic fever and post–streptococcal reactive arthritis (letter; comment)] Sušković T. **Lijec Vjesn** 1996 Oct; 118(10):254. Comment on: Lijec Vjesn 1996 Mar–Apr;118(3–4):53–6. **(Scr)**

[Polyarteritis nodosa—cutaneous or systemic form? Possible role of bacterial superantigens in the onset of systemic disease] Malčić I, et al. **Reumatizam** 1996;43(1):16–24 (Eng. Abstr.) **(Scr)**

[Mitral endocarditis secondary to Streptococcus mitis bacteremic pneumonia] Márquez Lorente MA, et al. **An Med Interna** 1997 Jan;14(1):31–2 (Eng. Abstr.) **(Spa)**

[Streptococcal septic shock secondary to peritonitis (letter)] Merlo VE, et al. **Enferm Infecc Microbiol Clin** 1996 Nov; 14(9):574–5 **(Spa)**

CONGENITAL

Neonatal group B streptococcal disease. Mitchell A, et al. **MCN Am J Matern Child Nurs** 1997 Sep–Oct;22(5):249–53 (11 ref.)

Decreasing incidence of perinatal Group B streptococcal disease—United States, 1993–1995. **MMWR Morb Mortal Wkly Rep** 1997 May 30;46(21):473–7

DIAGNOSIS

Identification of Streptococcus pyogenes on tonsillar epithelium during infection. Stenfors LE, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:212–4

Neonatal pleural empyema with group A Streptococcus. Thaarup J, et al. **Acta Paediatr** 1997 Jul;86(7):769–71 (17 ref.)

Evaluation of the therapy for streptococcal pharyngitis using Abbott Test Pack strep A. Kayaba H, et al. **Acta Paediatr Jpn** 1996 Feb;38(1):8–11

Group B streptococcal cellulitis of perineum and lower abdomen: report of one case. Chen HJ, et al. **Acta Paediatr Sin** 1996 Mar–Apr;37(2):135–7

Pediatric case of the day. Streptococcal myositis and perianal cellulitis. Berlin SC, et al. **AJR Am J Roentgenol** 1997 Jul; 169(1):303, 306–7

Use of the rapid streptococcus test in extrapharyngeal sites. Bourgeois SD, et al. **Am Fam Physician** 1996 Oct; 54(5):1634–6

Necrotizing fasciitis: a diagnostic challenge. Meltzer DL, et al. **Am Fam Physician** 1997 Jul;56(1):145–9 (14 ref.)

Fetal breathing movements within 24 hours of delivery in prematurity are related to histologic and clinical evidence of amnionitis. Sherer DM, et al. **Am J Perinatol** 1997 Jul; 14(6):337–40

Prosthetic valve endocarditis due to Streptococcus pneumoniae [letter] Collazos J, et al. **Arch Intern Med** 1996 Oct 14;156(18):2141, 2146, 2148 (10 ref.)

Peritonsillar abscess in early childhood. Presentation and management. Friedman NR, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jun;123(6):630–2

Toxic streptococcal syndrome. Stanford DG, et al. **Australas J Dermatol** 1997 Aug;38(3):158–60

A scoring system for predicting group A streptococcal throat infection [see comments] Dobbs F. **Br J Gen Pract** 1996 Aug;46(409):461–4. Comment in: Br J Gen Pract 1997 Mar;47(416):181–2.

Comment on the article 'Reactive arthritis, beta–haemolytic Streptococcus and Staphylococcus aureus' by D. N. Leitch and C. D. Holland [letter; comment] Braun J, et al. **Br J Rheumatol** 1997 May;36(5):606–7. Comment on: Br J Rheumatol 1996 Sep;35(9):912.

Detection of antibody isotypes to streptolysin O by dot ELISA. Barbosa SF, et al. **Braz J Med Biol Res** 1996 Jun; 29(6):763–7

Reconsidering sore throats. Part 2: Alternative approach and practical office tool [see comments] McIsaac WJ, et al. **Can Fam Physician** 1997 Mar;43:495–500 (40 ref.). Comment in: Can Fam Physician 1997 May;43:843, 845. Comment in: Can Fam Physician 1997 Jul;43:1207–8.

Reconsidering sore throats. Part I: Problems with current clinical practice [see comments] McIsaac WJ, et al. **Can Fam Physician** 1997 Mar;43:485–93 (62 ref.). Comment in: Can Fam Physician 1997 May;43:843, 845. Comment in: Can Fam Physician 1997 Jul;43:1207–8.

Testing diagnostic acumen [letter; comment] Marshall MT. **Can Fam Physician** 1997 May;43:843, 845. Comment on: Can Fam Physician 1997 Mar;43:485–93. Comment on: Can Fam Physician 1997 Mar;43:495–500.

Diagnosis of bacterial contact lens related keratitis with the white–light confocal microscope. Kaufman SC, et al. **CLAO J** 1996 Oct;22(4):274–7

Streptococcus anginosus spondylodiskitis. Balsam LB, et al. **Clin Infect Dis** 1997 Jan;24(1):93–4

Testicular abscess due to Streptococcus pneumoniae in an infant with human immunodeficiency virus infection. Dobroszycki J, et al. **Clin Infect Dis** 1997 Jan;24(1):84–5

Isolated septic arthritis due to Streptococcus bovis. Grant RJ, et al. **Clin Infect Dis** 1997 May;24(5):1021

Pyogenic arthritis caused by streptococcus equisimilis (group–C streptococcus) in a patient with AIDS. Steinfeld S, et al. **Clin Rheumatol** 1997 May;16(3):314–6 (20 ref.)

Streptococci strike twice [letter] Parnaby R. **Eur Heart J** 1996 Nov;17(11):1765

Vertebral osteomyelitis caused by group B streptococci (Streptococcus agalactiae) secondary to urinary tract infection. Bauer TM, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):244–6

A case of bacteremia caused by Streptococcus dysgalactiae [letter] Bert F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):324–6 (10 ref.)

Rapid detection of group B streptococcal colonization of the genital tract by a commercial optical immunoassay. Carroll KC, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar; 15(3):206–210

Prospective study of Streptococcus milleri bacteremia. Casariego E, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar;15(3):194–200

Group A streptococcal meningitis and toxic shock syndrome caused by a protein M type 3 strain producing exotoxin C [letter] Guibert M, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):323–4

Infective endocarditis due to Streptococcus suis serotype 2 [letter] Tayoro J, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep;15(9):765–6 (10 ref.)

Endoscopic treatment of Boerhaave's syndrome. Dumonceau JM, et al. **Gastrointest Endosc** 1996 Oct;44(4):477–9

Group B streptococcal toxic shock–like syndrome with fulminant cellulitis. Thomas S, et al. **Heart Lung** 1996 Nov–Dec;25(6):497–9

Comparative evaluation of two indigenously developed tests for rapid detection of group–A streptococci directly from throat swabs. Gupta R, et al. **Indian J Med Res** 1997 May; 105:200–5

Group B streptococcal endocarditis presenting with bilateral trapezius myalgias. Marinella MA. **Int J Cardiol** 1997 Feb; 58(3):279–81

A scoring system for streptococcal pharyngitis. Douglas M, et al. **J Fam Pract** 1996 Dec;43(6):537–8

Multiple bilateral cerebral abscesses with hemorrhage. Baumann CK. **J Neurosci Nurs** 1997 Feb;29(1):4–8, 13–4

Screening for bacterial vaginosis and cervicitis aimed at preventing premature delivery. Begum S, et al. **J Obstet Gynaecol Res** 1997 Feb;23(1):103–10

Management of a deep space infection of the neck in a patient with Glanzmann's thrombasthenia. Kirita T, et al. **J Oral Maxillofac Surg** 1997 Aug;55(8):882–5 (9 ref.)

Group C streptococcal infection in a term newborn infant. Faix RG, et al. **J Perinatol** 1997 Jan–Feb;17(1):79–82 (35 ref.)

Group B streptococcal vulvovaginitis [letter] Boyle D, et al. **J R Soc Med** 1997 May;90(5):298–9

Diagnosing streptococcal pharyngitis in patients taking antibiotics. Brunell P. **JAMA** 1997 Apr 16;277(15):1197

Use of optical immunoassay to diagnose streptococcal pharyngitis [letter; comment] Dale JC, et al. **JAMA** 1997 Jul 2;278(1):23–4. Comment on: JAMA 1997 Mar 19;277(11):899–903.

Optical immunoassay test for group A beta–hemolytic streptococcal pharyngitis. An office–based, multicenter investigation [see comments] Gerber MA, et al. **JAMA** 1997 Mar 19;277(11):899–903. Comment in: JAMA 1997 Jul 2;278(1):23–4.

From the Food and Drug Administration. Nightingale SL. **JAMA** 1997 May 7;277(17):1343

Group A streptococcal toxic shock. Rehman N, et al. **JPMA J Pak Med Assoc** 1995 Nov;45(11):303–4

Clinical guidelines for group A streptococcal throat infections [comment] Kaplan EL. **Lancet** 1997 Sep 27; 350(9082):899–900. Comment on: Lancet 1997 Sep 27;350(9082):918–21.

Effectiveness of clinical guidelines for the presumptive treatment of streptococcal pharyngitis in Egyptian children [see comments] Steinhoff MC, et al. **Lancet** 1997 Sep 27; 350(9082):918–21. Comment in: Lancet 1997 Sep 27;350(9082):899–900.

Management of group A streptococcus pharyngitis with a second–generation rapid strep screen: Strep A OIA. Badgett JT, et al. **Microb Drug Resist** 1996 Fall;2(3):371–6 (54 ref.)

Strep throat. Tagg PI. **Nurse Pract** 1997 Feb;22(2):148

Group B streptococcal endocarditis in children beyond the neonatal period. Alsoub H, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):418–20 (11 ref.)

Polymerase chain reaction for Streptococcus pyogenes used to evaluate an optical immunoassay for the detection of group A streptococci in children with pharyngitis. Kaltwasser G, et al. **Pediatr Infect Dis J** 1997 Aug; 16(8):748–53

Balanitis caused by group A beta–hemolytic streptococci. Orden B, et al. **Pediatr Infect Dis J** 1996 Oct;15(10):920–1 (10 ref.)

Index of Suspicion. Case 3.Gallbladder diseases. Rivera JA. **Pediatr Rev** 1996 Nov;17(11):405, 407

Primary purulent mediastinitis due to Streptococcus milleri. Shishido H, et al. **Respiration** 1997;64(4):313–5

Destructive polyarthritis due to a group B streptococcus. Straus C, et al. **Rev Rhum Engl Ed** 1997 May;64(5):339–41

Recurrent vertebral osteomyelitis and psoas abscess caused by Streptococcus constellatus and Fusobacterium nucleatum in a patient with atrial septal defect and an occult dental infection. Wang TD, et al. **Scand J Infect Dis** 1996;28(3):309–10

Tropical pyomyositis: imaging findings and a review of the literature. Pretorius ES, et al. **Skeletal Radiol** 1996 Aug; 25(6):576–9 (15 ref.)

Spontaneous group B streptococcal meningitis in a patient with cirrhosis. Tung BY, et al. **West J Med** 1996 Oct; 165(4):229–30 (13 ref.)

[Clinical judgment and decision making in clinical practice. A patient with fever and neck pain (clinical conference) (see comments)] Gans RO, et al. **Ned Tijdschr Geneeskd** 1996 Oct 26;140(43):2122–7. Comment in: Ned Tijdschr Geneeskd 1996 Dec 21;140(51):2588. **(Dut)**

[How to recognize streptococcal pharyngitis? (editorial)]

Ghanassia JP, et al. **Arch Pediatr** 1996 Aug;3(8):749–51 (17 ref.) **(Fre)**

[Reliability of the rapid Streptococcus A test] Schmuziger N, et al. **HNO** 1996 Jul;44(7):365–9 (Eng. Abstr.) **(Ger)**

[Use of chemiluminescence in predicting suppurative–inflammatory complications in erysipelas and tonsillitis] Frolov VM, et al. **Klin Lab Diagn** 1993 May–Jun; (3):29–31 (Eng. Abstr.) **(Rus)**

[The diagnostic difficulties in a current course of infectious endocarditis] Butkevich OM, et al. **Ter Arkh** 1996; 68(8):21–4 (Eng. Abstr.) **(Rus)**

[Sepsis due to Streptococcus pyogenes (letter)] Cámara González T, et al. **An Med Interna** 1996 Aug;13(8):411–2 **(Spa)**

[Meningitis by Streptococcus suis (letter)] Juncal AR, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):120–1 **(Spa)**

[Male with fever and behavioral disorders] García–Lechuz Moya JM, et al. **Rev Clin Esp** 1997 Feb;197(2):133–4 **(Spa)**

[Treatment with NSAID can delay the diagnosis in GAS–sepsis (letter)] Bäcklund U, et al. **Lakartidningen** 1997 Feb 19;94(8):602 **(Swe)**

DRUG THERAPY

Chemoprophylaxis for group B streptococcus transmission in neonates. Beri R, et al. **Ann Pharmacother** 1997 Jan; 31(1):110–2

Effect of gentamicin dosing interval on efficacy of penicillin or ceftriaxone treatment of experimental endocarditis due to penicillin–susceptible, ceftriaxone–tolerant viridans group streptococci. Brandt CM, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2901–3

Comparison of dirithromycin and penicillin for treatment of streptococcal pharyngitis. Watkins VS, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):72–5

Strategies for managing group A streptococcal pharyngitis. A survey of board–certified pediatricians. Hofer C, et al. **Arch Pediatr Adolesc Med** 1997 Aug;151(8):824–9

A study of 5–day cefdinir treatment for streptococcal pharyngitis in children. Cefdinir Pediatric Pharyngitis Study Group. Tack KJ, et al. **Arch Pediatr Adolesc Med** 1997 Jan;151(1):45–9

Trial of prescribing strategies in managing sore throat. Penicillin had no effect in patients negative for group A beta haemolytic streptococci [letter; comment] De Meyere M, et al. **BMJ** 1997 Jun 28;314(7098):1904–5. Comment on: BMJ 1997 Mar 8;314(7082):722–7.

Trial of prescribing strategies in managing sore throat. Failure to show antibiotic effectiveness was due to inclusion of cases of sore throat of viral origin [letter; comment] McIsaac WJ. **BMJ** 1997 Jun 28;314(7098):1905 . Comment on: BMJ 1997 Mar 8;314(7082):722–7.

Comparison of clarithromycin suspension and amoxycillin syrup for the treatment of children with pharyngitis and/or tonsillitis. Kearsley NL, et al. **Br J Clin Pract** 1997 Apr–May;51(3):133–7

Perianal streptococcal dermatitis in adults. Neri I, et al. **Br J Dermatol** 1996 Nov;135(5):796–8

Do patients with sore throat benefit from penicillin? A randomized double–blind placebo–controlled clinical trial with penicillin V in general practice. Dagnelie CF, et al. **Br J Gen Pract** 1996 Oct;46(411):589–93

Reconsidering sore throats. Part I: Problems with current clinical practice [see comments] McIsaac WJ, et al. **Can Fam Physician** 1997 Mar;43:485–93 (62 ref.). Comment in: Can Fam Physician 1997 May;43:843, 845. Comment in: Can Fam Physician 1997 Jul;43:1207–8.

Reconsidering sore throats. Part 2: Alternative approach and practical office tool [see comments] McIsaac WJ, et al. **Can Fam Physician** 1997 Mar;43:495–500 (40 ref.). Comment in: Can Fam Physician 1997 May;43:843, 845. Comment in: Can Fam Physician 1997 Jul;43:1207–8.

Carriage of antibiotic–resistant Streptococcus pneumoniae by children in eastern and central Europe––a multicenter study with use of standardized methods. Appelbaum PC, et al. **Clin Infect Dis** 1996 Oct;23(4):712–7

Tricuspid valve endocarditis caused by Streptococcus bovis [letter; comment] Beeching NJ, et al. **Clin Infect Dis** 1996 Sep;23(3):664. Comment on: Clin Infect Dis 1996 Jan;22(1):178–9.

The challenge of penicillin–resistant Streptococcus pneumoniae meningitis: current antibiotic therapy in the 1990s. Bradley JS, et al. **Clin Infect Dis** 1997 Feb;24 Suppl 2:S213–21 (58 ref.)

Treatment of streptococcal endocarditis with a single daily dose of ceftriaxone and netilmicin for 14 days: a prospective multicenter study. Francioli P, et al. **Clin Infect Dis** 1995 Dec;21(6):1406–10

Recent evaluation of antimicrobial resistance in beta–hemolytic streptococci. Kaplan EL. **Clin Infect Dis** 1997 Jan;24 Suppl 1:S89–92 (15 ref.)

Tuboovarian abscess and peritonitis caused by Streptococcus pneumoniae serotype 1 in young girls. Sirotnak AP, et al. **Clin Infect Dis** 1996 Jun;22(6):993–6

Streptococcal pharyngitis: is penicillin still the right choice? Pichichero ME. **Compr Ther** 1996 Dec;22(12):782–7 (37 ref.)

Current concepts in the management of pharyngitis. Smith DS. **Compr Ther** 1996 Dec;22(12):806–9 (3 ref.)

Levofloxacin in vitro activity against bacteremic isolates of Streptococcus pneumoniae. Franklin County Pneumonia Study Group. Plouffe JF. **Diagn Microbiol Infect Dis** 1996 May;25(1):43–5

Optimum treatment of streptococcal pharyngitis. Scaglione F, et al. **Drugs** 1997 Jan;53(1):86–97 (106 ref.)

Rapid increase of resistance to erythromycin and clindamycin in Streptococcus pyogenes in Italy, 1993–1995. The Italian Surveillance Group for Antimicrobial Resistance. Cornaglia G, et al. **Emerg Infect Dis** 1996 Oct–Dec; 2(4):339–42

Five days of erythromycin estolate versus ten days of penicillin V in the treatment of group A streptococcal tonsillopharyngitis in children. Pharyngitis Study Group. Adam D, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):712–7

Molecular DNA analysis for differentiation of persistence or relapse from recurrence in treatment failure of Streptococcus pyogenes pharyngitis. Fitoussi F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):233–7

Antibiotic susceptibility of pneumococci isolated in Austria over a four–year period. Mittermayer H, et al. **Eur J Clin Microbiol Infect Dis** 1996 Oct;15(10):817–20

Azithromycin versus penicillin V in the treatment of paediatric patients with acute streptococcal pharyngitis/tonsillitis. Paediatric Azithromycin Study Group. O'Doherty B. **Eur J Clin Microbiol Infect Dis** 1996 Sep;15(9):718–24

The role of macrolides in Streptococcus pyogenes pharyngitis. Schito GC, et al. **J Antimicrob Chemother** 1997 May;39(5):562–5 (34 ref.)

First report of vancomycin–resistant Streptococcus mitis bacteremia in a leukemic patient after prophylaxis with quinolones and during treatment with vancomycin [letter] Krcmery V Jr, et al. **J Chemother** 1996 Aug;8(4):325–6

6–day amoxicillin vs 10–day penicillin V for GABHS. Bramson R. **J Fam Pract** 1997 Mar;44(3):241–2

Group a streptococcal meningitis. Lin HH, et al. **J Formos Med Assoc** 1996 Oct;95(10):802–3

Clinical characteristics and antimicrobial susceptibility of invasive group B streptococcal infections in nonpregnant adults in Taiwan. Liu JW, et al. **J Formos Med Assoc** 1997 Aug;96(8):628–33

The effect of erythromycin on resolution of symptoms among adults with pharyngitis not caused by group A streptococcus. Petersen K, et al. **J Gen Intern Med** 1997 Feb;12(2):95–101

A case of pharyngitis caused by penicillin resistant group C streptococcus [letter] Eltringham IJ, et al. **J Infect** 1997 Jan;34(1):88–9

Hepatic abscess due to Eikenella corrodens and Streptococcus milleri: implications for antibiotic therapy. Quinlivan D, et al. **J Infect** 1996 Jul;33(1):47–8

An open study of mupirocin in Libyan patients with skin infections. El Ferghani N. **J Int Med Res** 1995 Nov–Dec; 23(6):508–17

Effect of intravenous immunoglobulin G on the deposition of immunoglobulin G and C3 onto type III group B streptococcus and Escherichia coli K1. Lassiter HA, et al. **J Perinatol** 1996 Sep–Oct;16(5):346–51

Management of pharyngeal carriers of group A streptococcal organisms [letter; comment] Perry RF, et al. **JAMA** 1997 Apr 16;277(15):1203–4. Comment on: JAMA 1997 Jan 1;277(1):38–43.

Effectiveness of clinical guidelines for the presumptive treatment of streptococcal pharyngitis in Egyptian children [see comments] Steinhoff MC, et al. **Lancet** 1997 Sep 27; 350(9082):918–21. Comment in: Lancet 1997 Sep 27;350(9082):899–900.

Successful non operative management of late infrainguinal polytetrafluoroethylene vascular graft infection with antibiotics alone: a report of two cases. Wilkinson JM, et al. **Panminerva Med** 1997 Jun;39(2):128–31

Causative pathogens, antibiotic resistance and therapeutic considerations in acute otitis media. Block SL. **Pediatr Infect Dis J** 1997 Apr;16(4):449–56 (39 ref.)

Six–day amoxicillin vs. ten–day penicillin V therapy for group A streptococcal tonsillopharyngitis. Cohen R, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):678–82

Streptococcal diagnostic testing and antibiotics prescribed for pediatric tonsillopharyngitis. Mainous AG 3d, et al. **Pediatr Infect Dis J** 1996 Sep;15(9):806–10

Urinary tract infection caused by Streptococcus mitis highly assistant to penicillin [letter] Oteo J, et al. **Pediatr Infect Dis J** 1997 Jul;16(7):724–5

Efficacy of three–day azithromycin vs. ten–day penicillin V in the treatment of streptococcal pharyngitis [letter; comment] Pacifico L, et al. **Pediatr Infect Dis J** 1997 May; 16(5):542. Comment on: Pediatr Infect Dis J 1996 Sep;15(9):791–5.

Evaluation of the efficacy, safety and toleration of azithromycin vs. penicillin V in the treatment of acute streptococcal pharyngitis in children: results of a multicenter, open comparative study. The Swiss Tonsillopharyngitis Study Group [see comments] Schaad UB, et al. **Pediatr Infect Dis J** 1996 Sep;15(9):791–5. Comment in: Pediatr Infect Dis J 1997 May;16(5):542.

Macrolides in the management of streptococcal pharyngitis/tonsillitis. Tarlow MJ. **Pediatr Infect Dis J** 1997 Apr;16(4):444–8 (24 ref.)

Revised guidelines for prevention of early–onset group B streptococcal (GBS) infection. American Academy of Pediatrics Committee on Infectious Diseases and Committee on Fetus and Newborn. **Pediatrics** 1997 Mar; 99(3):489–96

Obesity and penicillin dosage [letter; comment] Preiser G. **Pediatrics** 1997 May;99(5):754–6. Comment on: Pediatrics 1996 Jun;97(6 Pt 2):960–3.

Mixed pulmonary infection with Nocardia, Candida, methicillin–resistant Staphylococcus aureus, and group D Streptococcus species. Vassallo J, et al. **Postgrad Med J** 1996 Nov;72(853):680–1

Treatment failure in streptococcal pharyngotonsillitis. An attempt to identify penicillin tolerant Streptococcus pyogenes. Orrling A, et al. **Scand J Infect Dis** 1996; 28(2):143–7

6–day amoxicillin versus 10–day penicillin V for group A beta–haemolytic streptococcal acute tonsillitis in adults: a French multicentre, open–label, randomized study. The French Study Group Clamorange. Peyramond D, et al. **Scand J Infect Dis** 1996;28(5):497–501

Loracarbef versus phenoxymethylpenicillin in the treatment of recurrent streptococcal pharyngotonsillitis. Roos K, et al. **Scand J Infect Dis** 1997;29(2):141–5

[Toxic shock–like syndrome caused by streptococci––treated with clindamycin] Nørgaard M. **Ugeskr Laeger** 1997 Apr 14;159(16):2396–7 (Eng. Abstr.) **(Dan)**

[5–day therapy of bacterial pharyngitis and tonsillitis with cefixime. Comparison with 10 day treatment with penicillin V. Cefixime Study Group] Adam D, et al. **Klin Padiatr** 1996 Sep–Oct;208(5):310–3 (Eng. Abstr.) **(Ger)**

[Streptococcus group B and pregnancy: the therapeutic role of topical intravaginal clindamycin] Danti L, et al. **Minerva Ginecol** 1997 May;49(5):235–40 (Eng. Abstr.) **(Ita)**

[A case of liver abscess caused by Streptococcus milleri] Nagata S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1997 Apr;94(4):290–4 (10 ref.) **(Jpn)**

[Curative and prophylactic immunomodulation by vaccination in mucocutaneous streptococcal infections] Topciu V, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun;41(1–2):71–3 **(Rum)**

[Serum bactericidal rate. Methodological proposal to predict the efficacy of antimicrobial therapy] Riera EB, et al. **Medicina (B Aires)** 1996;56(2):115–8 (Eng. Abstr.) **(Spa)**

ECONOMICS

The pediatric costs of strategies for minimizing the risk of early–onset group B streptococcal disease. Fargason CA Jr, et al. **Obstet Gynecol** 1997 Sep;90(3):347–52 (24 ref.)

ENZYMOLOGY

Inactivation of Streptococcus pyogenes extracellular cysteine protease significantly decreases mouse lethality of serotype M3 and M49 strains. Lukomski S, et al. **J Clin Invest** 1997 Jun 1;99(11):2574–80

EPIDEMIOLOGY

Systemic group B streptococcal disease in neonates and young infants in Norway 1985–94. Aavitsland P, et al. **Acta Paediatr** 1996 Jan;85(1):104–5

Group A beta hemolytic streptococcus pharyngitis in United States Coast Guard units in Sitka. Rodriguez MA. **Alaska Med** 1995 Oct–Dec;37(4):145–6

High incidence of erythromycin–resistant streptococci in Taiwan. Wu JJ, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):844–6

Invasive infection due to Streptococcus iniae: a new or previously unrecognized disease––Ontario, 1995–1996. Weinstein M, et al. **Can Commun Dis Rep** 1996 Aug 1; 22(15):129–31; discussion 131–2 **(Eng, Fre)**

Carriage of antibiotic–resistant Streptococcus pneumoniae by children in eastern and central Europe––a multicenter study with use of standardized methods. Appelbaum PC, et al. **Clin Infect Dis** 1996 Oct;23(4):712–7

Serotyping of Streptococcus pyogenes isolated from common and severe invasive infections in Japan, 1990–5: implication of the T3 serotype strain–expansion in TSLS. The Working Group for Group A Streptococci in Japan. Inagaki Y, et al. **Epidemiol Infect** 1997 Aug;119(1):41–8

Epidemiology of invasive Streptococcus pneumoniae infections in adults in Finland. Sankilampi U, et al. **Epidemiol Infect** 1997 Feb;118(1):7–15

Molecular DNA analysis for differentiation of persistence or relapse from recurrence in treatment failure of Streptococcus pyogenes pharyngitis. Fitoussi F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):233–7

Prospective study of 288 episodes of bacteremia in neutropenic cancer patients in a single institution. González–Barca E, et al. **Eur J Clin Microbiol Infect Dis** 1996 Apr;15(4):291–6

Molecular epidemiology of impetiginous group A streptococcal infections in aboriginal communities of northern Australia. Gardiner DL, et al. **J Clin Microbiol** 1996 Jun;34(6):1448–52

Molecular epidemiology of Streptococcus pyogenes in an area where acute pharyngotonsillitis is endemic. Nguyen L, et al. **J Clin Microbiol** 1997 Aug;35(8):2111–4

Epidemiologic evidence for Lancefield group C beta–hemolytic streptococci as a cause of exudative pharyngitis in college students. Turner JC, et al. **J Clin Microbiol** 1997 Jan;35(1):1–4

Herd prevalence and incidence of Streptococcus agalactiae in the dairy industry of Prince Edward Island. Keefe GP, et al. **J Dairy Sci** 1997 Mar;80(3):464–70

Group A streptococcal bacteraemia: experience at a

university hospital in Riyadh. al Mazrou AM. **J Infect** 1997 Mar;34(2):95–100

Nasopharyngeal colonization in southern Israel with antibiotic-resistant pneumococci during the first 2 years of life: relation to serotypes likely to be included in pneumococcal conjugate vaccines. Dagan R, et al. **J Infect Dis** 1996 Dec;174(6):1352–5

Molecular comparison of group A streptococci of T1M1 serotype from invasive and noninvasive infections in Finland. Muotiala A, et al. **J Infect Dis** 1997 Feb; 175(2):392–9

Neonatal early onset group B streptococcal infection. A nine-year retrospective study in a tertiary care hospital. Adriaanse AH, et al. **J Perinat Med** 1996;24(5):531–8

Non-group A streptococci: are they pathogens in the throat? Chowdhury MN, et al. **J R Soc Health** 1997 Jun; 117(3):160–3

An outbreak of invasive group A streptococcal disease associated with high carriage rates of the invasive clone among school-aged children [see comments] Cockerill FR 3rd, et al. **JAMA** 1997 Jan 1;277(1):38–43. Comment in: JAMA 1997 Apr 16;277(15):1203–4.

Decreasing incidence of perinatal Group B streptococcal disease—United States, 1993–1995. **MMWR Morb Mortal Wkly Rep** 1997 May 30;46(21):473–7

Invasive group A streptococcal infections [letter; comment] Couper R. **N Engl J Med** 1997 Feb 13;336(7):513; discussion 514. Comment on: N Engl J Med 1996 Aug 22;335(8):547–54.

Outbreak of perianal Streptococcus pyogenes infection in a day-care center. Saxén H, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):247–9

A prolonged outbreak of streptococcal infection among workers at a meat plant. Sims P, et al. **Public Health** 1996 Mar;110(2):81–4

Incidence of asymptomatic carriage of potentially pathogenic respiratory organisms among preschool Pretoria children [letter] [published erratum appears in S Afr Med J 1996 Oct;86(10):1302] Marcus L, et al. **S Afr Med J** 1996 Sep; 86(9):1132, 1134

Food-borne outbreak of streptococcal pharyngitis in an Israeli Airforce Base. Bar-Dayan Y, et al. **Scand J Infect Dis** 1996;28(6):563–6

Incidence and severity of group A streptococcal bacteremia in a medical center in Israel, 1981–1994. Livni G, et al. **Scand J Infect Dis** 1996;28(2):139–42

A clinical study of beta-haemolytic groups A, B, C and G streptococcal bacteremia in adults over an 8-year period. Schugk J, et al. **Scand J Infect Dis** 1997;29(3):233–8

Horizontal gene transfer among group A streptococci: implications for pathogenesis and epidemiology. Kehoe MA, et al. **Trends Microbiol** 1996 Nov;4(11):436–43 (50 ref.)

[Puerperal fever. A survey of an epidemic using a case-controlled study] Strøbaek S, et al. **Ugeskr Laeger** 1997 Jun 23;159(26):4117–22 (Eng. Abstr.) **(Dan)**

[The epidemiological characteristics of an infection with beta-hemolytic Streptococcus group A in Iaşi County—a decade of observations] Grigorescu R, et al. **Bacteriol Virusol Parazitol Epidemiol** 1993 Jan–Jun; 38(1–2):52–6 **(Rum)**

[Neonatal infections by Streptococcus agalactiae] Juncosa Morros T, et al. **An Esp Pediatr** 1996 Aug;45(2):153–6 (Eng. Abstr.) **(Spa)**

[Invasive Streptococcus agalactiae infections at a general university hospital over a 10-year period] Giménez M, et al. **Enferm Infecc Microbiol Clin** 1996 May;14(5):300–3 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Changing epidemiology of invasive Streptococcus pyogenes infections in southern Israel: differences between two ethnic population groups. Chiobotaru P, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):195–9

ETIOLOGY

Bilateral pyogenic sacroiliitis following uncomplicated pregnancy and labor. Linnet KM, et al. **Acta Obstet Gynecol Scand** 1996 Nov;75(10):950–1

Peritoneal and pleural infection following placement of an internal biliary stent for a large bile leak. Weiss K, et al. **Am J Gastroenterol** 1997 Feb;92(2):347–8 (9 ref.)

Group G streptococcal arthritis: case report and review of the literature. Bronze MS, et al. **Am J Med Sci** 1997 Apr; 313(4):239–43 (33 ref.)

Iliopsoas abscess following catheterization of the femoral artery: diagnostic and treatment strategies. Moran KM, et al. **Am J Orthop** 1997 Jun;26(6):446–8

Invasive group G streptococcal infections: a review of 37 cases. Liu CE, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1995 Sep;56(3):173–8

Comparison of clinical characteristics of group A streptococcal bacteremia in children and adults. Begovac J, et al. **Clin Infect Dis** 1996 Jul;23(1):97–100

Streptococcal meningitis as a complication of diagnostic myelography: medicolegal aspects. Gelfand MS, et al. **Clin Infect Dis** 1996 Jan;22(1):130–2

Empyema necessitans due to Streptococcus milleri. Marinella MA, et al. **Clin Infect Dis** 1996 Jul;23(1):203–4

Pericolic abscess due to Streptococcus pyogenes: report of a case that clinically mimicked acute cholecystitis. Procop GW, et al. **Clin Infect Dis** 1996 Jul;23(1):182–3

Trends in bacteremic infection due to Streptococcus pyogenes (group A streptococcus), 1986–1995. Musher DM, et al. **Emerg Infect Dis** 1996 Jan–Mar;2(1):54–6

Seven-year review of bacteremia caused by Streptococcus milleri and other viridans streptococci. Salavert M, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):365–71

Endophthalmitis after radial keratotomy enhancement. Heidemann DG, et al. **J Cataract Refract Surg** 1997 Jul–Aug;23(6):951–3

Liver biopsy as a cause of Streptococcus bovis peritonitis. Macedo G, et al. **J Clin Gastroenterol** 1997 Jun;24(4):292–3

Septicemia caused by Streptococcus canis in a human. Bert F, et al. **J Clin Microbiol** 1997 Mar;35(3):777–9

Streptococcal toxic shock syndrome from a puncture wound to the foot. Miller JH, et al. **J Foot Ankle Surg** 1996 Nov–Dec;35(6):578–84

Streptococcus adjacens endocarditis in a patient with nephrotic syndrome. Chen MH, et al. **J Formos Med Assoc** 1997 Sep;96(9):745–8

Streptococcal toxic shock syndrome complicating varicella in children. Yang YJ, et al. **J Formos Med Assoc** 1997 Sep; 96(9):749–53

Meningitis due to viridans streptococci in adults. Enting RH, et al. **J Neurol** 1997 Jul;244(7):435–8

Penicillin-resistant Streptococcus mitis as a cause of septicemia with meningitis in febrile neutropenic children. Balkundi DR, et al. **J Pediatr Hematol Oncol** 1997 Jan–Feb; 19(1):82–5

Streptococcal preseptal cellulitis complicated by the toxic Streptococcus syndrome. Ingraham HJ, et al. **Ophthalmology** 1995 Aug;102(8):1223–6

Ulcerative keratitis in bullous keratopathy. Luchs JI, et al. **Ophthalmology** 1997 May;104(5):816–22

Endophthalmitis and orbital cellulitis after radial keratotomy. McLeod SD, et al. **Ophthalmology** 1995 Dec; 102(12):1902–7

Endophthalmitis after secondary intraocular lens implantation. A case-report study. Scott IU, et al. **Ophthalmology** 1995 Dec;102(12):1925–31

Group A beta-hemolytic streptococcal epiglottitis as a complication of varicella infection. Belfer RA. **Pediatr Emerg Care** 1996 Jun;12(3):203–4 (11 ref.)

Postoperative group B streptococcal necrotizing fasciitis in a previously healthy child. Viani RM, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):630–1

Streptococcal versus Staphylococcus epidermidis peritonitis in CAPD. A comparative study. Muñoz de Bustillo E, et al. **Perit Dial Int** 1997 Jul–Aug;17(4):392–5

Sore throat after sore throat after sore throat. Are you asking the critical questions? Pichichero ME. **Postgrad Med** 1997 Jan;101(1):205–6, 209–12, 215–8, passim (22 ref.)

Fibrous tissue overgrowth and prosthetic valve endocarditis: report of a case. Kaneko Y, et al. **Thorac Cardiovasc Surg** 1997 Jun;45(3):150–2

Horizontal gene transfer among group A streptococci: implications for pathogenesis and epidemiology. Kehoe MA, et al. **Trends Microbiol** 1996 Nov;4(11):436–43 (50 ref.)

[Bacterial meningitis after combined spinal and epidural anesthesia in obstetrics (letter)] Aldebert S, et al. **Ann Fr Anesth Reanim** 1996;15(5):687–8 **(Fre)**

[Liver abscess caused by Streptococcus intermedius, following hemorrhoidectomy] Mohammedi I, et al. **Ann Fr Anesth Reanim** 1996;15(7):1090–1 (Eng. Abstr.) **(Fre)**

[Streptococcus constellatus cerebral abscess in a patient with HIV infection (letter)] Passeron C, et al. **Presse Med** 1997 Jul 12;26(24):1145 **(Fre)**

[Atypical lung abscess occurring in an elderly female suffering from diabetes mellitus—a case report] Komatsu K, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):260–3 (Eng. Abstr.) **(Jpn)**

[Invasive streptococcal group A infection] Riapis LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb; (1):96–100 (18 ref.) (Eng. Abstr.) **(Rus)**

[Evaluation of three rapid methods for intrapartum detection of group B streptococcus] Andreu Domingo A, et al. **An Esp Pediatr** 1997 Apr;46(4):378–82 (Eng. Abstr.) **(Spa)**

[Meningitis caused by Streptococcus salivarius (letter)] de la Fuente Aguado J, et al. **An Med Interna** 1996 Jul; 13(7):355 **(Spa)**

[Bacteremias due to the Streptococcus milleri group. An analysis of 18 episodes] Sánchez-Porto A, et al. **Rev Clin Esp** 1997 Jun;197(6):393–7 (Eng. Abstr.) **(Spa)**

GENETICS

Molecular comparison of group A streptococci of T1M1 serotype from invasive and noninvasive infections in Finland. Muotiala A, et al. **J Infect Dis** 1997 Feb; 175(2):392–9

HISTORY

The pathobiography and death of Wolfgang Amadeus Mozart: from legend to reality. Baroni CD. **Hum Pathol** 1997 May;28(5):519–21

[Surprises of streptococcal infection] Beliakov VD. **Vestn Ross Akad Med Nauk** 1996;(11):24–8 **(Rus)**

IMMUNOLOGY

Rapid, optical immunoassay for streptococcal pharyngitis [letter] Seaberg DC, et al. **Acad Emerg Med** 1997 Jan; 4(1):81–3

Age-related occurrence of inhibitory antibodies to streptococcal pyrogenic superantigens. Kuwahata M, et al. **Acta Paediatr Jpn** 1996 Feb;38(1):1–7

Possible role for a polysaccharide antigen shared between Streptococcus pyogenes and S. mutans in the pathogenesis of poststreptococcal glomerulonephritis. Okada K, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):470–5

Identification of children with pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections by a marker associated with rheumatic fever. Swedo SE, et al. **Am J Psychiatry** 1997 Jan;154(1):110–2

Anti-streptokinase antibodies and streptokinase resistance in an Aboriginal population in northern Australia. Urdahl KB, et al. **Aust N Z J Med** 1996 Feb;26(1):49–53

Experimental acute glomerulonephritis induced in the rabbit with a specific streptococcal antigen. Yoshizawa N, et al. **Clin Exp Immunol** 1997 Jan;107(1):61–7

Streptococcal toxic shock syndrome associated with marked gamma delta T cell expansion: case report. Arvand M, et al. **Clin Infect Dis** 1996 Feb;22(2):362–5

Levels of cytokines and cytokine inhibitors in the neutropenic patient with alpha-hemolytic streptococcus shock syndrome. Engel A, et al. **Clin Infect Dis** 1996 Oct; 23(4):785–9

Thyroxine administration prevents streptococcal cell wall-induced inflammatory responses. Rittenhouse PA, et al. **Endocrinology** 1997 Apr;138(4):1434–9

A protective surface protein from type V group B streptococci shares N-terminal sequence homology with the alpha C protein. Lachenauer CS, et al. **Infect Immun** 1996 Oct;64(10):4255–60

Role of interleukin 12 in experimental neonatal sepsis caused by group B streptococci. Mancuso G, et al. **Infect Immun** 1997 Sep;65(9):3731–5

Immunohistochemical localization of IL-8 and TGF-beta in streptococcal glomerulonephritis. Mezzano S, et al. **J Am Soc Nephrol** 1997 Feb;8(2):234–41

Immune response to type III group B streptococcal polysaccharide-tetanus toxoid conjugate vaccine. Kasper DL, et al. **J Clin Invest** 1996 Nov 15;98(10):2308–14

Tumor necrosis factor-alpha contributes to apoptosis in hippocampal neurons during experimental group B streptococcal meningitis. Bogdan I, et al. **J Infect Dis** 1997 Sep;176(3):693–7

A role for C5 and C5a-ase in the acute neutrophil response to group B streptococcal infections. Bohnsack JF, et al. **J Infect Dis** 1997 Apr;175(4):847–55

Therapeutic potential of human antisera to group B streptococcal glycoconjugate vaccines in neonatal mice. Paoletti LC, et al. **J Infect Dis** 1997 May;175(5):1237–9

Elevated IgG titer against the C region of streptococcal M protein and its immunodeterminants in patients with poststreptococcal acute glomerulonephritis. Mori K, et al. **J Pediatr** 1997 Aug;131(2):293–9

Detection of circulating bacterial superantigen and lymphotoxin-alpha in patients with streptococcal toxic-shock syndrome [letter] Sriskandan S, et al. **Lancet** 1996 Nov 9;348(9037):1315–6

False positive detection of group A Streptococcus antigen resulting from cross-reacting Streptococcus intermedius (Streptococcus milleri group). Rubin LG, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):715–7

Psoriasis vulgaris, streptococci and the immune system: a riddle to be solved soon? Prinz JC. **Scand J Immunol** 1997 Jun;45(6):583–6 (30 ref.)

[New concepts of the mechanisms of immunopatholgies+ of Streptococcal etiology] Burova LA, et al. **Vestn Ross Akad Med Nauk** 1996;(11):28–34 (Eng. Abstr.) **(Rus)**

METABOLISM

Acute-phase proteins in perinatal human plasma. Liberatori S, et al. **Electrophoresis** 1997 Mar–Apr;18(3–4):520–6

Description of an albumin binding activity for Streptococcus suis serotype 2. Quessy S, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):245–50

Acquisition of iron from host proteins by the group A streptococcus. Eichenbaum Z, et al. **Infect Immun** 1996 Dec;64(12):5428–9

The role of nitric oxide in experimental murine sepsis due to pyrogenic exotoxin A-producing Streptococcus pyogenes. Sriskandan S, et al. **Infect Immun** 1997 May; 65(5):1767–72

Roles of the bacterial cell wall and capsule in induction of tumor necrosis factor alpha by type III group B streptococci. Vallejo JG, et al. **Infect Immun** 1996 Dec; 64(12):5042–6

Immunohistochemical localization of IL-8 and TGF-beta in streptococcal glomerulonephritis. Mezzano S, et al. **J Am Soc Nephrol** 1997 Feb;8(2):234–41

MICROBIOLOGY

PCR assay for detecting Streptococcus pneumoniae in the middle ear of children with otitis media with effusion. Jero J, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):288–92

Increase of staphylococci in neonatal septicaemia: a fourteen-year study. Källman J, et al. **Acta Paediatr** 1997

May;86(5):533–8
Poststreptococcal reactive arthritis: report of one case. Hsu JF, et al. **Acta Paediatr Sin** 1996 Jul–Aug;37(4):295–7
The antimicrobial susceptibility of Streptococcus pyogenes isolates from the Philadelphia area. Ferraro AL, et al. **Adv Exp Med Biol** 1995;390:119–21
AAP issues revised guidelines for the prevention of early–onset group B streptococcal infection. Rose VL. **Am Fam Physician** 1997 Sep 1;56(3):961, 965 (02 ref.)
Interaction between oral alpha–streptococci and group A streptococci in patients with tonsillitis. Fujimori I, et al. **Ann Otol Rhinol Laryngol** 1997 Jul;106(7 Pt 1):571–4
In vitro activities of eight macrolide antibiotics and RP–59500 (quinupristin–dalfopristin) against viridans group streptococci isolated from blood of neutropenic cancer patients. Alcaide F, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2117–20
High incidence of erythromycin–resistant streptococci in Taiwan. Wu JJ, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):844–6
Toxic shock–like syndrome caused by non–group A beta–hemolytic streptococci. Hirose Y, et al. **Arch Intern Med** 1997 Sep 8;157(16):1891–4
Group B streptococcus bacteremia in nonpregnant adults. Muñoz P, et al. **Arch Intern Med** 1997 Jan 27;157(2):213–6
Spread of serious disease–producing M3 clones of group A streptococcus among family members and health care workers. DiPersio JR, et al. **Clin Infect Dis** 1996 Mar; 22(3):490–5
Polymicrobial brain abscess in a patient infected with human immunodeficiency virus. Maniglia RJ, et al. **Clin Infect Dis** 1997 Mar;24(3):449–51 (12 ref.)
Streptococcal venereal edema of the penis. Mendelson J, et al. **Clin Infect Dis** 1997 Mar;24(3):516–7
Isolated tricuspid valve endocarditis due to Streptococcus bovis [see comments] Model A, et al. **Clin Infect Dis** 1996 Jan;22(1):178–9. Comment in: Clin Infect Dis 1996 Sep;23(3):664.
Acute group G streptococcal myositis associated with streptococcal toxic shock syndrome: case report and review. Wagner JG, et al. **Clin Infect Dis** 1996 Nov; 23(5):1159–61
Streptococcal toxic–shock syndrome: spectrum of disease, pathogenesis, and new concepts in treatment. Stevens DL. **Emerg Infect Dis** 1995 Jul–Sep;1(3):69–78 (80 ref.)
Characterization of the Lancefield group C streptococcus 16S–23S RNA gene intergenic spacer and its potential for identification and sub–specific typing. Chanter N, et al. **Epidemiol Infect** 1997 Apr;118(2):125–35
Fatal Streptococcus viridans descending mediastinitis: case report and review of the literature. Berlot G, et al. **Eur J Emerg Med** 1997 Jun;4(2):111–4 (10 ref.)
The frequency of resistance to erythromycin in group A streptococci in Ankara. Kürekçi AE, et al. **Eur J Pediatr** 1996 Sep;155(9):780–2
The toxins of group A streptococcus, the flesh eating bacteria. Stevens DL. **Immunol Invest** 1997 Jan–Feb; 26(1–2):129–50 (74 ref.)
Changing patterns of group B streptococcal serotypes associated with human infections. Radhakrishnan S, et al. **Indian J Med Res** 1995 Aug;102:56–9
An outbreak of fatal nosocomial infections due to group A streptococcus on a medical ward. Ramage L, et al. **Infect Control Hosp Epidemiol** 1996 Jul;17(7):429–31
Role of putative virulence factors of Streptococcus pyogenes in mouse models of long–term throat colonization and pneumonia. Husmann LK, et al. **Infect Immun** 1997 Apr; 65(4):1422–30
The fibronectin–binding protein of Streptococcus pyogenes, SfbI, is involved in the internalization of group A streptococci by epithelial cells. Molinari G, et al. **Infect Immun** 1997 Apr;65(4):1357–63
Streptococcal toxic shock syndrome in a postpartum woman. Case report and review of the literature. Jorup–Rönström C, et al. **Infection** 1996 Mar–Apr;24(2):164–7 (68 ref.)
Alpha–hemolytic streptococci: a major pathogen of iatrogenic meningitis following lumbar puncture. Case reports and a review of the literature. Schneeberger PM, et al. **Infection** 1996 Jan–Feb;24(1):29–33 (38 ref.)
Toxic shock syndrome due to group C streptococci. A case report. Natoli S, et al. **Intensive Care Med** 1996 Sep; 22(9):985–9
Malignant melanoma and group G streptococci. A case report. Oberholtzer CS, et al. **J Am Podiatr Med Assoc** 1997 Sep;87(9):431–3
Species belonging to the "Streptococcus milleri" group: antimicrobial susceptibility and comparative prevalence in significant clinical specimens. Bantar C, et al. **J Clin Microbiol** 1996 Aug;34(8):2020–2
Survey of emm gene sequences and T–antigen types from systemic Streptococcus pyogenes infection isolates collected in San Francisco, California; Atlanta, Georgia; and Connecticut in 1994 and 1995. Beall B, et al. **J Clin Microbiol** 1997 May;35(5):1231–5
Genetic diversity of rRNA operons of unrelated Streptococcus agalactiae strains isolated from cerebrospinal fluid of neonates suffering from meningitis. Chatellier S, et al. **J Clin Microbiol** 1996 Nov;34(11):2741–7
Molecular epidemiology of impetiginous group A streptococcal infections in aboriginal communities of northern Australia. Gardiner DL, et al. **J Clin Microbiol** 1996 Jun;34(6):1448–52
Identification of clinically relevant viridans group streptococci to the species level by PCR. Garnier F, et al. **J Clin Microbiol** 1997 Sep;35(9):2337–41
Endocarditis caused by nonhemolytic group B streptococcus. Miranda C, et al. **J Clin Microbiol** 1997 Jun;35(6):1616–7
Lancefield grouping and smell of caramel for presumptive identification and assessment of pathogenicity in the Streptococcus milleri group. Brogan O, et al. **J Clin Pathol** 1997 Apr;50(4):332–5
A scoring system for streptococcal pharyngitis. Douglas M, et al. **J Fam Pract** 1996 Dec;43(6):537–8
Septicaemia due to Streptococcus pyogenes in an intravenous drug abusing couple [letter] Kolokithas D, et al. **J Hosp Infect** 1997 Mar;35(3):248–50
Management of respiratory infections [letter; comment] Bright R. **J Indian Med Assoc** 1996 Aug;94(8):312. Comment on: J Indian Med Assoc 1996 Jan;94(1):21–3.
Streptococcus vestibularis bacteraemia [letter] Cunliffe NA, et al. **J Infect** 1997 Jan;34(1):85
Streptococcus B meningitis in post–partum. Guerin JM, et al. **J Infect** 1997 Mar;34(2):151–3 (14 ref.)
Importance of genotypic and phenotypic tolerance in the treatment of experimental endocarditis due to Streptococcus gordonii. Entenza JM, et al. **J Infect Dis** 1997 Jan;175(1):70–6
Comparison of M–serotypes of Streptococcus pyogenes isolated from healthy elementary school children in two rural areas. Kim SJ, et al. **J Korean Med Sci** 1996 Apr; 11(2):133–6
Establishment of a model of penicillin–resistant Streptococcus pneumoniae pneumonia in healthy CBA/J mice. Takashima K, et al. **J Med Microbiol** 1996 Nov; 45(5):319–22
Group B streptococcus colonization in pregnant diabetic women. Ramos E, et al. **Obstet Gynecol** 1997 Feb; 89(2):257–60
Posterior mediastinal abscess caused by invasive group A Streptococcus infection. Conway JH, et al. **Pediatr Infect Dis J** 1996 Jun;15(6):547–9
Group B streptococcal sepsis and meningitis complicated with severe sensorineural hearing loss in a fourteen–year–old boy. Likitnukul S, et al. **Pediatr Infect Dis J** 1996 May;15(5):468–70 (15 ref.)
Serotype distribution and antibiotic susceptibility of Streptococcus pneumoniae isolates causing systemic infections among children in Germany, 1992 to 1996. Reinert RR, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):244–5
Acute otitis media. Maxson S, et al. **Pediatr Rev** 1996 Jun; 17(6):191–5; quiz 196 (18 ref.)
Study of the sensitivity to antimicrobial drugs of some S. pneumoniae strains isolated from different pathological states. Ungureanu V, et al. **Roum Arch Microbiol Immunol** 1996 Jul–Sep;55(3):241–51
Viridans streptococcal bacteraemia due to penicillin–resistant and penicillin–sensitive streptococci: analysis of risk factors and outcome in 60 patients from a single cancer centre before and after penicillin is used for prophylaxis. Spanik S, et al. **Scand J Infect Dis** 1997;29(3):245–9
Genital Group B Streptococcus carriage in the antenatal period: its role in prom and preterm labour. Chua S, et al. **Singapore Med J** 1995 Aug;36(4):383–5
Unraveling the mysteries of streptococci and their relations with the host. Ferrieri P, et al. **Trends Microbiol** 1997 Jan; 5(1):5–7
Invasive streptococcal infections. Report of four cases occurring in Trinidad. Swanston WH, et al. **West Indian Med J** 1997 Mar;46(1):25–7
Analysis of defense mechanisms against bacterial infection by oral streptococcus in normal flora. Fujimori I, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):74–81
Fibronectin binding and cell surface hydrophobicity contribute to adherence properties of group B streptococci. Zabel LT, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):35–43
Comparative studies on streptococci of serological group G isolated from various origins. Soedarmanto I, et al. **Zentralbl Veterinarmed [B]** 1996 Nov;43(9):513–23
[Spondylodiscitis caused by Streptococcus agalactiae] Sijpkens YW, et al. **Ned Tijdschr Geneeskd** 1997 Mar 15; 141(11):534–6 (Eng. Abstr.) **(Dut)**
[Perianal streptococcal dermatitis in children] van Zeijl JH, et al. **Ned Tijdschr Geneeskd** 1996 Nov 2;140(44):2191–3 (Eng. Abstr.) **(Dut)**
[Group A beta–hemolytic streptococcal meningitis in a pregnant woman] Ferrazzini G, et al. **Schweiz Med Wochenschr** 1996 Oct 26;126(43):1842–4 (Eng. Abstr.) **(Fre)**
[Pericarditis caused by Gemella morbillorum. Description of a case] Condoluci C, et al. **Minerva Pediatr** 1995 Dec; 47(12):545–7 (Eng. Abstr.) **(Ita)**
[Colonization by group B hemolytic streptococcus in pregnancy. Note of prevention and therapy of the materno–neonatal infection. Casuistics] Della Morte MA, et al. **Pediatr Med Chir** 1996 Sep–Oct;18(5):433–50 (Eng. Abstr.) **(Ita)**
[Properties of extracellular products produced by group A streptococci isolated from patient with streptococcal toxic shock syndrome] Suzuki J, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):273–8 (Eng. Abstr.) **(Jpn)**
[Skin infections due to Staphylococcus aureus and Streptococcus pyogenes] Arata J. **Nippon Rai Gakkai Zasshi** 1996 Jul;65(2):83–7 (10 ref.) **(Jpn)**
[The phage sensitivity and lysogeny of cultures of Streptococcus pyogenes group A isolated in different streptococcal infections] Asoskova TK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):7–10 (Eng. Abstr.) **(Rus)**
[Neonatal infections by Streptococcus agalactiae] Juncosa Morros T, et al. **An Esp Pediatr** 1996 Aug;45(2):153–6 (Eng. Abstr.) **(Spa)**
[Streptococcus agalactiae infection in adults. Presentation of 3 cases] Torres Fernández M, et al. **An Med Interna** 1996 Nov;13(11):547–8 (Eng. Abstr.) **(Spa)**
[Streptococcus equisimilis as the etiologic agent of endocarditis (letter)] Prada JL, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):274–6 (10 ref.) **(Spa)**
[Corneal crystalline image in patient with keratoplasty] Villuendas MC, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):565–6 **(Spa)**

MORTALITY

Risk factors for mortality associated with enterococcal bloodstream infections. Stroud L, et al. **Infect Control Hosp Epidemiol** 1996 Sep;17(9):576–80
Mortality from early neonatal group B streptococcal sepsis: influence of obstetric factors. Gill P, et al. **J Matern Fetal Med** 1997 Jan–Feb;6(1):35–9

PATHOLOGY

Acute multifocal skin necrosis: synergism between invasive streptococcal infection and cocaine–induced tissue ischaemia? Hoeger PH, et al. **Acta Derm Venereol** 1996 May;76(3):239–41
Streptococcus isolates [letter] Bert F, et al. **Am J Clin Pathol** 1996 Nov;106(5):695–6
Group G streptococcal septic arthritis of an interphalangeal joint [letter] Marinella MA. **Clin Exp Rheumatol** 1996 Sep–Oct;14(5):577–8
Platelet–streptococcal interactions in endocarditis. Herzberg MC. **Crit Rev Oral Biol Med** 1996;7(3):222–36 (117 ref.)
Mediawatch. "Killer bug ate my face". Dixon B. **Curr Biol** 1996 May 1;6(5):493
Tympanic membrane changes in experimental purulent otitis media. von Unge M, et al. **Hear Res** 1997 Apr; 106(1–2):123–36
A new type of fulminant group A streptococcal infection in obstetric patients: report of two cases. Ooe K, et al. **Hum Pathol** 1997 Apr;28(4):509–12
Disseminated encephalitis following streptococcal infection. Pergami P, et al. **Ital J Neurol Sci** 1996 Feb;17(1):87–91
Reactive oxygen intermediates contribute to necrotic and apoptotic neuronal injury in an infant rat model of bacterial meningitis due to group B streptococci. Leib SL, et al. **J Clin Invest** 1996 Dec 1;98(11):2632–9
[Gram–positive septic–toxic shock with bullae. Intraepidermal splitting as an indication of toxin effect] Buslau M, et al. **Hautarzt** 1996 Oct;47(10):783–9 (Eng. Abstr.) **(Ger)**
[Polypoid ulcerating endocarditis aortalis caused by Streptococcus viridans with perforation of the right atrium. Pathology and clinical aspects of 2 autopsy cases] Poremba C, et al. **Pathologe** 1996 Sep;17(5):391–5 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Preliminary report: invasive infection due to Streptococcus iniae. **Can Med Assoc J** 1996 Nov 1;155(9):1297–8 **(Eng, Fre)**
Hemodynamic effects of N–acetylamrinone in a porcine model of group B streptococcal sepsis. Allen EM, et al. **Drug Metab Dispos** 1996 Sep;24(9):1028–31
Reactive oxygen intermediates contribute to necrotic and apoptotic neuronal injury in an infant rat model of bacterial meningitis due to group B streptococci. Leib SL, et al. **J Clin Invest** 1996 Dec 1;98(11):2632–9
Necrotizing fasciitis due to group A streptococci: a clinicopathological study of six patients. Misago N, et al. **J Dermatol** 1996 Dec;23(12):876–82
Renal functional reserve after acute poststreptococcal glomerulonephritis. Cleper R, et al. **Pediatr Nephrol** 1997 Aug;11(4):473–6
Group B streptococcal sepsis impairs cerebral vascular reactivity to acute hypercarbia in piglets. Rudinsky BF, et al. **Pediatr Res** 1996 Jan;39(1):55–63

PREVENTION & CONTROL

CDC issues recommendations for the prevention of perinatal group B streptococcal disease [see comments] **Am Fam Physician** 1996 Oct;54(5):1787–8, 1790, 1793. Comment in: Am Fam Physician 1996 Oct;54(5):1448–9, 1452.
Screening for group B streptococcal disease [editorial; comment] Ganiats TG. **Am Fam Physician** 1996 Oct; 54(5):1448–9, 1452. Comment on: Am Fam Physician 1996 oct;54(5):1787–8, 1790, 1793.
AAP issues revised guidelines for the prevention of early–onset group B streptococcal infection. Rose VL. **Am Fam Physician** 1997 Sep 1;56(3):961, 965 (02 ref.)
CDC panel develops action plan for drug–resistant streptococci [news] **Am J Health Syst Pharm** 1996 May 15;53(10):1113, 1116

Ampicillin for neonatal group B streptococcal prophylaxis: how rapidly can bactericidal concentrations be achieved? Bloom SL, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):974–6

The effect of timing of single-dose transplacental ampicillin-sulbactam therapy for prevention of neonatal group B streptococcal colonization and bacteremia in a rabbit model. McDuffie RS Jr, et al. **Am J Obstet Gynecol** 1996 Aug;175(2):406–10

Intrapartum chemoprophylaxis for group B streptococcus infection to prevent neonatal disease: who should be treated? Philipson EH, et al. **Am J Perinatol** 1996 Nov; 13(8):487–90

Chemoprophylaxis for group B streptococcus transmission in neonates. Beri R, et al. **Ann Pharmacother** 1997 Jan; 31(1):110–2

Prevention of group B Streptococcus infection in neonates. Logsdon BA, et al. **Ann Pharmacother** 1997 Jul–Aug; 31(7–8):897–906 (68 ref.)

Efficacy of clarithromycin versus that of clindamycin for single-dose prophylaxis of experimental streptococcal endocarditis. Vermot D, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):809–11

Preferences of pregnant women and physicians for 2 strategies for prevention of early-onset group B streptococcal sepsis in neonates. Peralta-Carcelen M, et al. **Arch Pediatr Adolesc Med** 1997 Jul;151(7):712–8

Endogenous interleukin-11 (IL-11) expression is increased and prophylactic use of exogenous IL-11 enhances platelet recovery and improves survival during thrombocytopenia associated with experimental group B streptococcal sepsis in neonatal rats. Chang M, et al. **Blood Cells Mol Dis** 1996; 22(1):57–67

Preventing perinatal infections [editorial; comment] Hofmeyr GJ, et al. **BMJ** 1997 Jul 26;315(7102):199–200. Comment on: BMJ 1997 Jul 26;315(7102):216–9; discussion 220.

Strategies for preventing early onset group B streptococcal infection. **Can Commun Dis Rep** 1996 Mar 15;22(6):44–48

Selective intrapartum anti-bioprophylaxy of group B streptococci infection of neonates: a prospective study in 2454 subsequent deliveries. Poulain P, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Apr;72(2):137–40

Management of healthcare workers with pharyngitis or suspected streptococcal infections. Weber DJ, et al. **Infect Control Hosp Epidemiol** 1996 Nov;17(11):753–61 (95 ref.)

Intranasal immunization with C5a peptidase prevents nasopharyngeal colonization of mice by the group A Streptococcus. Ji Y, et al. **Infect Immun** 1997 Jun; 65(6):2080–7

Immunization with FimA protects against Streptococcus parasanguis endocarditis in rats. Viscount HB, et al. **Infect Immun** 1997 Mar;65(3):994–1002

Effects of anti-cytokine treatments in neonatal sepsis models. Teti G, et al. **J Chemother** 1995 Nov;7 Suppl 4:96–8

Immune response to type III group B streptococcal polysaccharide-tetanus toxoid conjugate vaccine. Kasper DL, et al. **J Clin Invest** 1996 Nov 15;98(10):2308–14

Evaluation of two iodophor teat germicides: activity against Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1997 Aug;80(8):1846–50

Efficacy of teat dips containing a hypochlorous acid germicide against experimental challenge with Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1996 Sep;79(9):1683–8

Therapeutic potential of human antisera to group B streptococcal glycoconjugate vaccines in neonatal mice. Paoletti LC, et al. **J Infect Dis** 1997 May;175(5):1237–9

Group B streptococcus in the perinatal period. A review. Clay LS. **J Nurse Midwifery** 1996 Sep–Oct;41(5):355–63 (69 ref.)

Skin sores in Aboriginal children [letter] Carapetis JR, et al. **J Paediatr Child Health** 1995 Dec;31(6):563

Prevention of early onset group B streptococcal sepsis in the newborn. Vigneswaran R, et al. **J Paediatr Child Health** 1995 Dec;31(6):493–4 (13 ref.)

New CDC guidelines for prevention of perinatal group B streptococcal disease [letter] Jakobi P, et al. **Lancet** 1996 Oct 5;348(9032):969

Group B streptococcus and pregnancy: update and recommendations. Mitchell A, et al. **MCN Am J Matern Child Nurs** 1997 Sep–Oct;22(5):242–8 (16 ref.)

The pediatric costs of strategies for minimizing the risk of early-onset group B streptococcal disease. Fargason CA Jr, et al. **Obstet Gynecol** 1997 Sep;90(3):347–52 (24 ref.)

Persistence of penicillin G benzathine in pregnant group B streptococcus carriers. Weeks JW, et al. **Obstet Gynecol** 1997 Aug;90(2):240–3

Prevention practices for perinatal group B streptococcal disease: a multi-state surveillance analysis. Neonatal Group B Streptococcal Disease Study Group. Whitney CG, et al. **Obstet Gynecol** 1997 Jan;89(1):28–32

The accuracy of late antenatal screening cultures in predicting genital group B streptococcal colonization at delivery. Yancey MK, et al. **Obstet Gynecol** 1996 Nov; 88(5):811–5

Revised guidelines for prevention of early-onset group B streptococcal (GBS) infection. American Academy of Pediatrics Committee on Infectious Diseases and Committee on Fetus and Newborn. **Pediatrics** 1997 Mar; 99(3):489–96

Prevention of early-onset neonatal group B streptococcal disease. Gotoff SP, et al. **Pediatrics** 1997 Jun;99(6):866–9

The 1997 AAP guidelines for prevention of early-onset group B streptococcal disease. American Academy of Pediatrics. Halsey NA, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):383–4

Penicillin at birth can help prevent early-onset group B streptococcal disease [letter] Wedgwood JF, et al. **Pediatrics** 1997 Apr;99(4):651–2

Another deadly disease we can prevent—perinatal GBS [editorial] Barlow JF. **S D J Med** 1996 Nov;49(11):399–400

Recolonization with selected alpha-streptococci for prophylaxis of recurrent streptococcal pharyngotonsillitis—a randomized placebo-controlled multicentre study. Roos K, et al. **Scand J Infect Dis** 1996; 28(5):459–62

Oral immunization with recombinant Salmonella typhimurium expressing surface protein antigen A (SpaA) of Streptococcus sobrinus: effects of the Salmonella virulence plasmid on the induction of protective and sustained humoral responses in rats. Redman TK, et al. **Vaccine** 1996 Jun;14(9):868–78

Development and efficacy of a vaccine against Streptococcus iniae infection in farmed rainbow trout. Eldar A, et al. **Vet Immunol Immunopathol** 1997 May;56(1–2):175–83

[Screening of Streptococcus agalactiae (group B) in the perinatal period] Chaaya A, et al. **J Med Liban** 1996; 44(4):203–8 (Eng. Abstr.) **(Fre)**

[Prevention of iatrogenic meningitis after myelography (letter)] Kaiser E, et al. **J Radiol** 1997 Feb;78(2):153 **(Fre)**

[Curative and prophylactic immunomodulation by vaccination in mucocutaneous streptococcal infections] Topciu V, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun;41(1–2):71–3 **(Rum)**

RADIOGRAPHY

Images in clinical medicine. Retropharyngeal abscess. Babl FE, et al. **N Engl J Med** 1997 Aug 14;337(7):472

Images in clinical medicine. Liver abscess with septic pulmonary emboli. Fred HL, et al. **N Engl J Med** 1997 May 15;336(20):1428

SURGERY

Transantral evacuation of an orbital abscess following a molar tooth extraction. Bizakis JG, et al. **Am J Otolaryngol** 1997 Jul–Aug;18(4):277–9

Peritonsillar abscess in early childhood. Presentation and management. Friedman NR, et al. **Arch Otolaryngol Head Neck Surg** 1997 Jun;123(6):630–2

Long-term results of surgery for active infective endocarditis. d'Udekem Y, et al. **Eur J Cardiothorac Surg** 1997 Jan;11(1):46–52

Emergency surgery for acute infective aortic valve endocarditis: performance of cryopreserved homografts and mode of failure. Vogt PR, et al. **Eur J Cardiothorac Surg** 1997 Jan;11(1):53–61

Survival after necrotising streptococcal myositis: a matter of hours. Marck KW, et al. **Eur J Surg** 1996 Dec; 162(12):981–3

Invasive group A streptococcal infections [letter; comment] Kujath P, et al. **N Engl J Med** 1997 Feb 13;336(7):513–4; discussion 514. Comment on: N Engl J Med 1996 Aug 22;335(8):590–1.

Treatment of brain abscess associated with ventricular rupture—three case reports. Isono M, et al. **Neurol Med Chir (Tokyo)** 1997 Aug;37(8):630–6 (23 ref.)

[Anesthesia and analgesia in intravenous drug dependent patients with injection abscesses of the upper extremity. Case report] Ebert B, et al. **Handchir Mikrochir Plast Chir** 1997 Jan;29(1):38–41 (Eng. Abstr.) **(Ger)**

[Refractory endophthalmitis after bulbus perforation after careless handling of orthodontic headgear] Kammann MT, et al. **Klin Monatsbl Augenheilkd** 1997 May;210(5):337–8 (Eng. Abstr.) **(Ger)**

[Mycotic aortic aneurysm after appendectomy] Rhomberg M, et al. **Vasa** 1996;25(1):90–3 (Eng. Abstr.) **(Ger)**

[Standardized treatment of necrotizing fasciitis] Kujath P, et al. **Zentralbl Chir** 1996;121(1):35–43 (Eng. Abstr.) **(Ger)**

[Necrotizing fasciitis—an interdisciplinary therapy problem] Schmidt J, et al. **Zentralbl Chir** 1996;121 Suppl:86–7 **(Ger)**

[The effect of aortic valve translocation and a few problems] Sakamoto S, et al. **Rinsho Kyobu Geka** 1989 Apr; 9(2):157–61 (Eng. Abstr.) **(Jpn)**

[The simultaneous sanative treatment of foci of odontogenic and cardiogenic infections during the surgical treatment of septic endocarditis] Shelkovskii VN, et al. **Stomatologiia (Mosk)** 1996;Spec No:92–3 **(Rus)**

THERAPY

Adjunctive treatment of streptococcal toxic shock syndrome using intravenous immunoglobulin: case report and review. Perez CM, et al. **Am J Med** 1997 Jan;102(1):111–3 (15 ref.)

Surfactant improves lung function and mitigates bacterial growth in immature ventilated rabbits with experimentally induced neonatal group B streptococcal pneumonia. Herting E, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jan;76(1):F3–8

Group A Streptococcus invasive infections: a review. Weiss KA, et al. **Can J Surg** 1997 Feb;40(1):18–25 (44 ref.)

Clinical usefulness of intravenous human immunoglobulins in invasive group A Streptococcal infections: case report and review. Lamothe F, et al. **Clin Infect Dis** 1995 Dec; 21(6):1469–70

Necrotizing streptococcal fasciitis of the hand: case report. Patel RR, et al. **Clin Infect Dis** 1996 Mar;22(3):586–7

Percutaneous drainage of septic glenohumoral arthritis. de Witte MT, et al. **Eur J Radiol** 1996 May;22(2):158–60

Successful treatment of severe streptococcal toxic shock syndrome with a combination of intravenous immunoglobulin, dexamethasone and antibiotics [letter] Chiu CH, et al. **Infection** 1997 Jan–Feb;25(1):47–8

Spontaneous healing of a massive tibial cortical defect. Klein DM, et al. **J Orthop Trauma** 1997 Feb–Mar;11(2):133–5

Management of neonates born to mothers with group B streptococcus colonization [published erratum appears in J Perinatol 1997 Mar–Apr;17(2):106] Alkalay AL, et al. **J Perinatol** 1996 Nov–Dec;16(6):470–7 (54 ref.)

Survival and neutrophil kinetics in infants with severe group B streptococcal disease treated with gamma globulin. Friedman CA, et al. **J Perinatol** 1996 Nov–Dec; 16(6):439–42

Life-threatening streptococcal myonecrosis complicating primary wound closure after pilonidal sinus excision. Panov TA, et al. **J R Army Med Corps** 1994 Oct;140(3):141–2

[Antiseptics in the combined treatment of patients with perimaxillary abscesses and phlegmons] Biberman IaM, et al. **Stomatologiia (Mosk)** 1996;75(6):25–7 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Chemoprophylaxis for group B streptococcus transmission in neonates. Beri R, et al. **Ann Pharmacother** 1997 Jan; 31(1):110–2

A household cluster of fulminant group A streptococcus pneumonia associated with toxic shock syndrome–Quebec. **Can Commun Dis Rep** 1996 Mar 15;22(6):41–3 (6 ref.)

Familial transmission of a serious disease—producing group A streptococcus clone: case reports and review. Gamba MA, et al. **Clin Infect Dis** 1997 Jun;24(6):1118–21

Food-borne and air-borne streptococcal pharyngitis—a clinical comparison. Bar-Dayan Y, et al. **Infection** 1997 Jan–Feb;25(1):12–5

ACOG committee opinion. Prevention of early-onset group B streptococcal disease in newborns. Number 173—June 1996. Committee on Obstetric Practice. American College of Obstetrics and Gynecologists. **Int J Gynaecol Obstet** 1996 Aug;54(2):197–205 (47 ref.)

The surgical team as a source of postoperative wound infections caused by Streptococcus pyogenes. Kolmos HJ, et al. **J Hosp Infect** 1997 Mar;35(3):207–14 (19 ref.)

Management of neonates born to mothers with group B streptococcus colonization [published erratum appears in J Perinatol 1997 Mar–Apr;17(2):106] Alkalay AL, et al. **J Perinatol** 1996 Nov–Dec;16(6):470–7 (54 ref.)

Group B streptococcal infection in a mother and her baby. Noel I, et al. **J R Soc Med** 1996 Dec;89(12):705–6

Neonatal group B streptococcal disease. Mitchell A, et al. **MCN Am J Matern Child Nurs** 1997 Sep–Oct;22(5):249–53 (11 ref.)

Invasive group A streptococcal infections [letter; comment] Charytan D. **N Engl J Med** 1997 Feb 13;336(7):513; discussion 514. Comment on: N Engl J Med 1996 Aug 22;335(8):547–54. Comment on: N Engl J Med 1996 Aug 22;335(8):590–1.

Invasive infections due to a fish pathogen, Streptococcus iniae. S. iniae Study Group. Weinstein MR, et al. **N Engl J Med** 1997 Aug 28;337(9):589–94

Group B streptococcus and pregnancy. Mercer BM, et al. **Pediatr Ann** 1996 Apr;25(4):206–14 (93 ref.)

The role of household contacts in the transmission of group A streptococci. Falck G, et al. **Scand J Infect Dis** 1997; 29(3):239–44

[Vaginal colonization of Streptococcus B in pregnancy] Citernesi A, et al. **Minerva Ginecol** 1996 Jun;48(6):227–33 (Eng. Abstr.) **(Ita)**

[Evaluation of three rapid methods for intrapartum detection of group B streptococcus] Andreu Domingo A, et al. **An Esp Pediatr** 1997 Apr;46(4):378–82 (Eng. Abstr.) **(Spa)**

[Characteristics of group b streptococcus vertical transmission] Andreu Domingo A, et al. **An Esp Pediatr** 1997 Apr;46(4):383–8 (Eng. Abstr.) **(Spa)**

ULTRASONOGRAPHY

Pyomyositis without predisposing factors [letter; comment] Nolan JT. **Am Fam Physician** 1997 Apr;55(5):1579. Comment on: Am Fam Physician 1996 Aug;54(2):565–9.

Images in cardiovascular medicine. Mitral valve aneurysm. Vilacosta I, et al. **Circulation** 1997 Apr 15;95(8):2169

Mycotic aneurysm of the descending thoracic aorta: the role of transesophageal echocardiography. Joffe II, et al. **J Am Soc Echocardiogr** 1996 Sep–Oct;9(5):663–7

The role of transesophageal echocardiography in patients with chronic renal failure at low and high risk of endocarditis. Wu EB, et al. **J Heart Valve Dis** 1997 May; 6(3):249–52

Beta haemolytic streptococcal infection does not cause right

diaphragmatic eventration. Jain M, et al. **Pediatr Surg Int** 1997 Feb;12(2-3):188-9

VETERINARY

Effect of natural infection with minor pathogens on susceptibility to natural infection with major pathogens in the bovine mammary gland. Lam TJ, et al. **Am J Vet Res** 1997 Jan;58(1):17-22

Prevalence of various phenotypes of Streptococcus suis isolated from swine in the U.S.A. based on the presence of muraminidase-released protein and extracellular factor. Galina L, et al. **Can J Vet Res** 1996 Jan;60(1):72-4

Isolation of Streptococcus suis from a young wild boar. Higgins R, et al. **Can Vet J** 1997 Feb;38(2):114

Streptococcus agalactiae mastitis: a review. Keefe GP. **Can Vet J** 1997 Jul;38(7):429-37 (94 ref.)

Update on canine streptococcal toxic shock syndrome and necrotizing fasciitis. Prescott JF, et al. **Can Vet J** 1997 Apr; 38(4):241-2

Immunization with bacterial antigens: infections with streptococci and related organisms. Bercovier H, et al. **Dev Biol Stand** 1997;90:153-60 (25 ref.)

Epidemiological aspects of group B streptococci of bovine and human origin. Jensen NE, et al. **Epidemiol Infect** 1996 Dec;117(3):417-22

The putative association of alpha haemolytic streptococci with maternal mastitis and neonatal septicaemia. Leadon DP, et al. **Equine Vet J Suppl** 1988 Sep;(5):44-5

Additional cause of mastitis in a llama [letter; comment] Bezek D, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):748 . Comment on: J Am Vet Med Assoc 1996 Oct 15;209(8):1457-63.

Streptococcal toxic shock syndrome in dogs [see comments] Miller CW, et al. **J Am Vet Med Assoc** 1996 Oct 15; 209(8):1421-6. Comment in: J Am Vet Med Assoc 1996 Dec 15;209(12):1994-5.

Evaluation of udder health and mastitis in llamas [see comments] Rowan LL, et al. **J Am Vet Med Assoc** 1996 Oct 15;209(8):1457-63. Comment in: J Am Vet Med Assoc 1997 Mar 15;210(6):748.

Further evidence of streptococcal toxic shock syndrome in pets [letter; comment] White S. **J Am Vet Med Assoc** 1996 Dec 15;209(12):1994-5. Comment on: J Am Vet Med Assoc 1996 Oct 15;209(8):1421-6.

Demonstration of vertical transmission of Streptococcus suis in swine by genomic fingerprinting. Amass SF, et al. **J Clin Microbiol** 1997 Jun;35(6):1595-6

Field study on the relationship between teat thickness changes and intramammary infections. Zecconi A, et al. **J Dairy Res** 1996 Aug;63(3):361-8

Evaluation of antibiotics for the elimination of the tonsillar carrier state of Streptococcus suis in pigs. Amass SF, et al. **J Vet Diagn Invest** 1996 Jan;8(1):64-7

Multiple serotypes and strains of Streptococcus suis in naturally infected swine herds. Reams RY, et al. **J Vet Diagn Invest** 1996 Jan;8(1):119-21

An enzyme-linked immunosorbent assay (ELISA) for the detection of antibody against Streptococcus suis type 2 in infected pigs. Kataoka Y, et al. **J Vet Med Sci** 1996 Apr; 58(4):369-72

Bacterial isolation from slaughtered pigs associated with endocarditis, especially the isolation of Streptococcus suis. Katsumi M, et al. **J Vet Med Sci** 1997 Jan;59(1):75-8

Diagnostic exercise: peracute death in a research dog. Bergdall VK, et al. **Lab Anim Sci** 1996 Apr;46(2):226-7

Invasive infections due to a fish pathogen, Streptococcus iniae. S. iniae Study Group. Weinstein MR, et al. **N Engl J Med** 1997 Aug 28;337(9):589-94

Further studies on the efficacy of a live vaccine against mastitis caused by Streptococcus uberis. Finch JM, et al. **Vaccine** 1997 Jul;15(10):1138-43

Development and efficacy of a vaccine against Streptococcus iniae infection in farmed rainbow trout. Eldar A, et al. **Vet Immunol Immunopathol** 1997 May;56(1-2):175-83

Detection of antibodies against Streptococcus suis capsular type 2 using a purified capsular polysaccharide antigen-based indirect ELISA. del Campo Sepúlveda EM, et al. **Vet Microbiol** 1996 Sep;52(1-2):113-25

Secreted antigens as virulence associated markers in Streptococcus bovis strains from pigeons. Vanrobaeys M, et al. **Vet Microbiol** 1996 Dec;53(3-4):339-48

Characterization of virulence of the Streptococcus suis serotype 2 reference strain Henrichsen S 735 in newborn gnotobiotic pigs. Vecht U, et al. **Vet Microbiol** 1996 Jul; 51(1-2):125-36

Myeloencephalitis associated with a viridans group Streptococcus in a colony of Japanese macaques (Macaca fuscata). Lair S, et al. **Vet Pathol** 1996 Jan;33(1):99-103

Clinical mastitis in dairy cows after 'blitz' therapy [letter] Biggs AM. **Vet Rec** 1997 Jul 19;141(3):84

Clinical mastitis in dairy cows after 'blitz' therapy [letter] Edmondson PW. **Vet Rec** 1997 Jul 26;141(4):108

Streptococcus suis serotype 14 as a cause of pig disease in the UK [letter] Heath PJ, et al. **Vet Rec** 1996 Nov 2; 139(18):450-1

Protection of experimentally infected pigs by suilysin, the thiol-activated haemolysin of Streptococcus suis. Jacobs AA, et al. **Vet Rec** 1996 Sep 7;139(10):225-8

Streptococcus suis serotypes 7, 8 and 14 from diseased pigs in Scotland. MacLennan M, et al. **Vet Rec** 1996 Oct 26; 139(17):423-4

Naturally occurring persistent and asymptomatic infection of the guttural pouches of horses with Streptococcus equi. Newton JR, et al. **Vet Rec** 1997 Jan 25;140(4):84-90

Canine streptococcal toxic shock syndrome and necrotising fasciitis [letter] Prescott JF, et al. **Vet Rec** 1997 Mar 8; 140(10):263

Infectious temporomandibular joint disease in the horse: computed tomographic diagnosis and treatment of two cases. Warmerdam EP, et al. **Vet Rec** 1997 Aug 16; 141(7):172-4

Isolation of Streptococcus equi subspecies equi (strangles agent) from an Ethiopian camel. Yigezu LM, et al. **Vet Rec** 1997 Jun 7;140(23):608

Streptococcus suis: past and present. Staats JJ, et al. **Vet Res Commun** 1997 Aug;21(6):381-407 (220 ref.)

Bacterial culturing of ventral median celiotomies for prediction of postoperative incisional complications in horses. Ingle-Fehr JE, et al. **Vet Surg** 1997 Jan-Feb; 26(1):7-13

Susceptibility to antimicrobial agents of Streptococcus suis capsular type 2 strains isolated from pigs. Seol B, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):328-31

Bacterial causes of bovine mastitis in Wondogenet, Ethiopia. Abdella M. **Zentralbl Veterinarmed [B]** 1996 Aug; 43(6):379-84

Therapeutic and prophylactic effect of prepartum antibiotic infusion in heifers. Owens WE, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):455-9

[A method for estimating the prevalence of mammary Staphylococcus aureus and Streptococcus agalactiae infections in herds based on an examination of bulk milk samples] Benda P, et al. **Vet Med (Praha)** 1997 Apr; 42(4):101-9 (Eng. Abstr.) **(Cze)**

[An outbreak of Streptococcus zooepidemicus-caused infection among laboratory primates] Dzhikidze ZK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan-Feb;(1):81-4 (Eng. Abstr.) **(Rus)**

STREPTOCOCCAL OK-432 see **PICIBANIL**

STREPTOCOCCAL PHAGES see **STREPTOCOCCUS PHAGES**

STREPTOCOCCAL PREPARATION OK-432 see **PICIBANIL**

STREPTOCOCCUS

Streptococcus anginosus spondylodiskitis. Balsam LB, et al. **Clin Infect Dis** 1997 Jan;24(1):93-4

Pyomyositis due to Eubacterium lentum and Streptococcus constellatus from a periodontal source. Palomino-Nicás J, et al. **Clin Infect Dis** 1996 Jan;22(1):176-8

Emerging resistance to antimicrobial agents in gram-positive bacteria. Enterococci, staphylococci and nonpneumococcal streptococci. Cormican MG, et al. **Drugs** 1996;51 Suppl 1:6-12 (38 ref.)

The augmenting effect of OK432-stimulated B cells on the in vitro generation of anti-tumor cytotoxic T lymphocytes from tumor-draining lymph node cells: the possible role of interleukin-12. Shinomiya Y, et al. **In Vivo** 1997 Jan-Feb; 11(1):1-8

Roles of the bacterial cell wall and capsule in induction of tumor necrosis factor alpha by type III group B streptococci. Vallejo JG, et al. **Infect Immun** 1996 Dec; 64(12):5042-6

Meningitis due to viridans streptococci in adults. Enting RH, et al. **J Neurol** 1997 Jul;244(7):435-8

Microflora persistence on duodenojejunal flat or normal mucosa in time after a meal in children. Ciampolini M, et al. **Physiol Behav** 1996 Dec;60(6):1551-6

Therapeutic and prophylactic effect of prepartum antibiotic infusion in heifers. Owens WE, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):455-9

[Effects of globulin preparations on phagocytic killing of oral streptococci] Kaneko A, et al. **Kansenshogaku Zasshi** 1997 Jul;71(7):659-63 (Eng. Abstr.) **(Jpn)**

CHEMISTRY

The staphylococcal and streptococcal pyrogenic toxin family. Bohach GA, et al. **Adv Exp Med Biol** 1996;391:131-54 (116 ref.)

Development of a radioactive protein A-based assay for analysis of surface protein expression in gram-positive bacteria. Coyle TC, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2477-80

Structural characterization of the exocellular polysaccharides produced by Streptococcus thermophilus SFi39 and SFi12. Lemoine J, et al. **Appl Environ Microbiol** 1997 Sep; 63(9):3512-8

Dynamics of uniformly 13C-enriched cell wall polysaccharide of Streptococcus mitis J22 studied by 13C relaxation rates. Xu Q, et al. **Biochemistry** 1996 Nov 19; 35(46):14512-20

Molecular modeling of the flexible cell wall polysaccharide of Streptococcus mitis J22 on the basis of heteronuclear NMR coupling constants. Xu Q, et al. **Biochemistry** 1996 Nov 19;35(46):14521-9

A flexible model for the cell wall polysaccharide of Streptococcus mitis J22 determined by three-dimensional 13C edited nuclear overhauser effect spectroscopy and 13C-1H long-range coupling constants combined with molecular modeling. Xu Q, et al. **Biopolymers** 1996 Mar; 38(3):339-53

Structural characterisation of the exocellular polysaccharide produced by Streptococcus thermophilus OR 901. Bubb WA, et al. **Carbohydr Res** 1997 Jun 11;301(1-2):41-50

Synthesis and NMR assignment of two repeating units (decasaccharide) of the type III group B Streptococcus capsular polysaccharide and its 13C-labeled and N-propionyl substituted sialic acid analogues. Zou W, et al. **Carbohydr Res** 1996 Dec 13;295:209-28

Proinflammatory cytokine production by human peripheral blood mononuclear cells stimulated with cell-free supernatants of Viridans streptococci. Soto A, et al. **Cytokine** 1996 Apr;8(4):300-4

Purification and partial characterization of a novel human platelet aggregation factor in the extracellular products of Streptococcus mitis, strain Nm-65. Ohkuni H, et al. **FEMS Immunol Med Microbiol** 1997 Feb;17(2):121-9

Occurrence of lipoteichoic acid in oral streptococci. Hogg SD, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):62-6

CLASSIFICATION

Isolation of Abiotrophia spp. with Staphylococcus aureus in a case of mastitis in a cow. Higgins R, et al. **Can Vet J** 1997 Feb;38(2):114

Clonal diversity of Streptococcus mitis biovar 1 isolates from the oral cavity of human neonates. Fitzsimmons S, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):517-22

Restriction fragment length polymorphisms of 16S rDNA and of whole rRNA genes (ribotyping) of Streptococcus iniae strains from the United States and Israel. Eldar A, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):155-62

Occurrence of lipoteichoic acid in oral streptococci. Hogg SD, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):62-6

The tannin-degrading species Streptococcus gallolyticus and Streptococcus caprinus are subjective synonyms. Sly LI, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):893-4

Streptococcus difficile is a nonhemolytic group B, type Ib Streptococcus. Vandamme P, et al. **Int J Syst Bacteriol** 1997 Jan;47(1):81-5

Toxic shock syndrome due to group C streptococci. A case report. Natoli S, et al. **Intensive Care Med** 1996 Sep; 22(9):985-9

Malignant melanoma and group G streptococci. A case report. Oberholtzer CS, et al. **J Am Podiatr Med Assoc** 1997 Sep;87(9):431-3

Streptococcal toxic shock syndrome in dogs [see comments] Miller CW, et al. **J Am Vet Med Assoc** 1996 Oct 15; 209(8):1421-6. Comment in: J Am Vet Med Assoc 1996 Dec 15;209(12):1994-5.

Taxonomical changes in intestinal (faecal) enterococci and streptococci: consequences on their use as indicators of faecal contamination in drinking water. Leclerc H, et al. **J Appl Bacteriol** 1996 Nov;81(5):459-66 (97 ref.)

Species belonging to the "Streptococcus milleri" group: antimicrobial susceptibility and comparative prevalence in significant clinical specimens. Bantar C, et al. **J Clin Microbiol** 1996 Aug;34(8):2020-2

Identification of clinically relevant viridans group streptococci to the species level by PCR. Garnier F, et al. **J Clin Microbiol** 1997 Sep;35(9):2337-41

Rapid species identification of "Streptococcus milleri" strains by line blot hybridization: identification of a distinct 16S rRNA population closely related to Streptococcus constellatus. Jacobs JA, et al. **J Clin Microbiol** 1996 Jul; 34(7):1717-21

Cross-reactions of reagents from streptococcal grouping kits with Streptococcus porcinus. Thompson T, et al. **J Clin Microbiol** 1997 Jul;35(7):1885-6

Lancefield grouping and smell of caramel for presumptive identification and assessment of pathogenicity in the Streptococcus milleri group. Brogan O, et al. **J Clin Pathol** 1997 Apr;50(4):332-5

Identification of Streptococcus species by randomly amplified polymorphic deoxyribonucleic acid fingerprinting. Gillespie BE, et al. **J Dairy Sci** 1997 Mar;80(3):471-6

Rapid identification of mutans streptococcal species. Igarashi T, et al. **Microbiol Immunol** 1996;40(11):867-71

Characterization of serotype II polysaccharide antigen of group E streptococci using a monoclonal antibody. Tomotake H, et al. **Microbiol Res** 1997 Jul;152(2):113-9

Invasive infections due to a fish pathogen, Streptococcus iniae. S. iniae Study Group. Weinstein MR, et al. **N Engl J Med** 1997 Aug 28;337(9):589-94

A numerical taxonomic study of Streptococcus sanguis, S. mitis and similar organisms using conventional tests and pyrolysis mass spectrometry. Magee JT, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):195-203

[Mitral endocarditis secondary to Streptococcus mitis bacteremic pneumonia] Márquez Lorente MA, et al. **An Med Interna** 1997 Jan;14(1):31-2 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

In vitro activities of eight macrolide antibiotics and RP-59500 (quinupristin-dalfopristin) against viridans group streptococci isolated from blood of neutropenic cancer patients. Alcaide F, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2117-20

Efficacy of azithromycin or clarithromycin for prophylaxis of viridans group streptococcus experimental endocarditis. Rouse MS, et al. **Antimicrob Agents Chemother** 1997 Aug; 41(8):1673-6

High incidence of erythromycin-resistant streptococci in Taiwan. Wu JJ, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):844-6

Discriminant analysis of antibiotic resistance patterns in fecal streptococci, a method to differentiate human and animal sources of fecal pollution in natural waters. Wiggins BA. **Appl Environ Microbiol** 1996 Nov;62(11):3997-4002

Reactive liposomes encapsulating a glucose oxidase-peroxidase system with antibacterial activity. Hill KJ, et al. **Biochim Biophys Acta** 1997 May 22;1326(1):37-46

Comparative susceptibility of clinical group A, B, C, F, and G beta-hemolytic streptococcal isolates to 24 antimicrobial drugs. Traub WH, et al. **Chemotherapy** 1997 Jan-Feb; 43(1):10-20

Antibiotic susceptibility of alpha- and nonhemolytic streptococci from patients and healthy adults to 24 antimicrobial drugs. Traub WH, et al. **Chemotherapy** 1997 Mar-Apr;43(2):123-31

Recent evaluation of antimicrobial resistance in beta-hemolytic streptococci. Kaplan EL. **Clin Infect Dis** 1997 Jan;24 Suppl 1:S89-92 (15 ref.)

The comparative antimicrobial activity of levofloxacin tested against 350 clinical isolates of streptococci. Biedenbach DJ, et al. **Diagn Microbiol Infect Dis** 1996 May;25(1):47-51

Susceptibility of beta-hemolytic streptococci to nine antimicrobial agents among four medical centers in Salt Lake City, Utah, USA. Carroll KC, et al. **Diagn Microbiol Infect Dis** 1997 Apr;27(4):123-8

In vitro evaluation of contemporary beta-lactam drugs tested against viridans group and beta-haemolytic streptococci. Pfaller MA, et al. **Diagn Microbiol Infect Dis** 1997 Apr; 27(4):151-4

The frequency of resistance to erythromycin in group A streptococci in Ankara. Kürekçi AE, et al. **Eur J Pediatr** 1996 Sep;155(9):780-2

Postantibiotic effect of ceftriaxone and gentamicin alone and in combination on Klebsiella pneumoniae, Pseudomonas aeruginosa and Streptococcus viridans. Buxbaum A, et al. **Infection** 1996 Nov-Dec;24(6):459-64

The effect of areca nut on salivary and selected oral microorganisms. de Miranda CM, et al. **Int Dent J** 1996 Aug;46(4):350-6

Susceptibility of some strains of enterococci and streptococci to antibiotics and biocides [letter] Alqurashi AM, et al. **J Antimicrob Chemother** 1996 Oct;38(4):745

Ketolides lack inducibility properties of MLS(B) resistance phenotype. Bonnefoy A, et al. **J Antimicrob Chemother** 1997 Jul;40(1):85-90

In-vitro activity of the essential oil of Melaleuca alternifolia against Streptococcus spp [letter] Carson CF, et al. **J Antimicrob Chemother** 1996 Jun;37(6):1177-8

Antimicrobial susceptibility of 278 streptococcal blood isolates to seven antimicrobial agents. Renneberg J, et al. **J Antimicrob Chemother** 1997 Feb;39(2):135-40

Species belonging to the "Streptococcus milleri" group: antimicrobial susceptibility and comparative prevalence in significant clinical specimens. Bantar C, et al. **J Clin Microbiol** 1996 Aug;34(8):2020-2

Importance of genotypic and phenotypic tolerance in the treatment of experimental endocarditis due to Streptococcus gordonii. Entenza JM, et al. **J Infect Dis** 1997 Jan;175(1):70-6

Postantibiotic effect of penicillin on Streptococcus anginosus. Do Amaral MM, et al. **Zentralbl Bakteriol** 1996 Mar; 283(3):332-9

ENZYMOLOGY

Characterization of superoxide dismutase in Streptococcus thermophilus. Chang SK, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3732-5

Deletions in the carboxyl-terminal region of Streptococcus gordonii glucosyltransferase affect cell-associated enzyme activity and sucrose-associated accumulation of growing cells. Vickerman MM, et al. **Appl Environ Microbiol** 1997 May;63(5):1667-73

Localization of the sequence-determined DNA bending center upstream of the streptokinase gene skc. Gross S, et al. **Arch Microbiol** 1996 Aug;166(2):116-21

Kinetic properties of glucosyltransferase adsorbed onto saliva-coated hydroxyapatite. Steinberg D, et al. **Artif Cells Blood Substit Immobil Biotechnol** 1996 Sep; 24(5):553-66

Purification of streptodornase from Streptococcus equisimilis and its DNA-induced conformational change. Lee M, et al. **Biochem Biophys Res Commun** 1997 Jan 3;230(1):13-5

Comparison of human VDAC1 with streptococcal streptokinase and bovine bactericidal permeability increasing protein: role of structural information in identifying functionally significant domains. McCabe KM, et al. **Biochem Mol Med** 1995 Dec;56(2):176-9

Purification and some properties of streptococcal NAD-glycohydrolase. Gerlach D, et al. **FEMS Microbiol Lett** 1996 Feb 1;136(1):71-8

Analysis of sodium dodecyl sulfate-stable cell wall aminopeptidases in strains of viridans streptococci. Linder LE, et al. **FEMS Microbiol Lett** 1996 Sep 15;143(1):19-23

The phosphoenolpyruvate:sugar phosphotransferase system of oral streptococci and its role in the control of sugar metabolism. Vadeboncoeur C, et al. **FEMS Microbiol Rev** 1997 Feb;19(3):187-207 (107 ref.)

Presence of additional peptidases in Streptococcus thermophilus CNRZ 302 compared to Lactococcus lactis. Rul F, et al. **J Appl Microbiol** 1997 Jun;82(6):695-704

Sequences of antigenic epitopes of streptokinase identified via random peptide libraries displayed on phage. Parhami-Seren B, et al. **J Mol Biol** 1997 Aug 22; 271(3):333-41

A mild purification method for polysaccharide binding membrane proteins: phase separation of digitonin extracts to isolate the hyaluronate synthase from Streptococcus sp. in active form. Prehm S, et al. **Protein Expr Purif** 1996 Jun;7(4):343-6

Conformation and stability of streptokinases from nephritogenic and nonnephritogenic strains of streptococci. Welfle K, et al. **Proteins** 1997 Jan;27(1):26-35

GENETICS

Expression of functional Porphyromonas gingivalis fimbrillin polypeptide domains on the surface of Streptococcus gordonii. Sharma A, et al. **Appl Environ Microbiol** 1996 Nov;62(11):3933-8

Deletions in the carboxyl-terminal region of Streptococcus gordonii glucosyltransferase affect cell-associated enzyme activity and sucrose-associated accumulation of growing cells. Vickerman MM, et al. **Appl Environ Microbiol** 1997 May;63(5):1667-73

Secretion of Porphyromonas gingivalis fimbrillin polypeptides by recombinant Streptococcus gordonii. Sharma A, et al. **Biochem Biophys Res Commun** 1997 Sep 18;238(2):313-6

Nucleotide sequence analysis of the Streptococcus gordonii glucosyltransferase gene, gtfG. Vickerman MM, et al. **DNA Seq** 1997;7(2):83-95

Allelic variation of the streptokinase gene in beta-hemolytic streptococci group C and G isolates of human origin. Tewodros W, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):29-34

Differentiation of human and animal strains of Streptococcus dysgalactiae by pulsed-field gel electrophoresis. Bert F, et al. **FEMS Microbiol Lett** 1997 May 1;150(1):107-12

Natural transformation of Streptococcus crista. Correia FF, et al. **FEMS Microbiol Lett** 1996 Sep 15;143(1):13-8

Development of a technique for multiple site-directed mutagenesis of the ftf gene of Streptococcus salivarius containing palindromic sequences. Rathsam C, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):447-53

Characterization of a mosaic ISS1 element and evidence for the recent horizontal transfer of two different types of ISS1 between Streptococcus thermophilus and Lactococcus lactis. Bourgoin F, et al. **Gene** 1996 Oct 31;178(1-2):15-23

The cpsABCDE genes involved in polysaccharide production in Streptococcus salivarius ssp. thermophilus strain NCBF 2393. Griffin AM, et al. **Gene** 1996 Dec 12; 183(1-2):23-7

Role of the charged tail in localization of a surface protein antigen of Streptococcus mutans. Murakami Y, et al. **Infect Immun** 1997 Apr;65(4):1531-5

Changes in the carboxyl-terminal repeat region affect extracellular activity and glucan products of Streptococcus gordonii glucosyltransferase. Vickerman MM, et al. **Infect Immun** 1996 Dec;64(12):5117-28

Insertional inactivation of an intrageneric coaggregation-relevant adhesin locus from Streptococcus gordonii DL1 (Challis). Whittaker CJ, et al. **Infect Immun** 1996 Oct;64(10):4137-42

Natural genetic transformation in Streptococcus gordonii: comX imparts spontaneous competence on strain wicky. Lunsford RD, et al. **J Bacteriol** 1996 Oct;178(19):5831-5

Rgg is a positive transcriptional regulator of the Streptococcus gordonii gtfG gene. Sulavik MC, et al. **J Bacteriol** 1996 Oct;178(19):5826-30

Identification of essential amino acids in the Streptococcus mutans glucosyltransferases. Tsumori H, et al. **J Bacteriol** 1997 Jun;179(11):3391-6

Rapid species identification of "Streptococcus milleri" strains by line blot hybridization: identification of a distinct 16S rRNA population closely related to Streptococcus constellatus. Jacobs JA, et al. **J Clin Microbiol** 1996 Jul; 34(7):1717-21

Analysis of genetic relationships among strains of groups A, C and G streptococci by random amplified polymorphic DNA analysis. Bert F, et al. **J Med Microbiol** 1996 Oct; 45(4):278-84

Detection of Fc receptor genes from Staphylococcus aureus and streptococci by polymerase chain reaction. Yamada S, et al. **J Med Microbiol** 1996 Dec;45(6):507-11

The lppC gene of Streptococcus equisimilis encodes a lipoprotein that is homologous to the e (P4) outer membrane protein from Haemophilus influenzae. Gase K, et al. **Med Microbiol Immunol (Berl)** 1997 Jun;186(1):63-73

Structural dissection and functional analysis of the complex promoter of the streptokinase gene from Streptococcus equisimilis H46A. Gräfe S, et al. **Med Microbiol Immunol (Berl)** 1996 May;185(1):11-7

Streptococcal competence for genetic transformation: regulation by peptide pheromones. Morrison DA. **Microb Drug Resist** 1997 Spring;3(1):27-37 (86 ref.)

Cloning, sequencing and expression of the CAMP factor gene of Streptococcus uberis. Jiang M, et al. **Microb Pathog** 1996 May;20(5):297-307

Lateral genetic transfers between group A and G streptococci for M-like genes are ongoing. Sriprakash KS, et al. **Microb Pathog** 1996 May;20(5):275-85

Shot-gun phage display mapping of two streptococcal cell-surface proteins. Jacobsson K, et al. **Microbiol Res** 1997 Jul;152(2):121-8

Interruption of the Streptococcus gordonii M5 sspA/sspB intergenic region by an insertion sequence related to IS1167 of Streptococcus pneumoniae. Demuth DR, et al. **Microbiology** 1997 Jun;143 (Pt 6):2047-55

Proline biosynthesis in Streptococcus thermophilus: characterization of the proBA operon and its products. Limauro D, et al. **Microbiology** 1996 Nov;142 (Pt 11):3275-82

Analysis of the genetic polymorphism between three Streptococcus thermophilus strains by comparing their physical and genetic organization. Roussel Y, et al. **Microbiology** 1997 Apr;143 (Pt 4):1335-43

Mutational analysis of the Streptomyces lividans recA gene suggests that only mutants with residual activity remain viable. Muth G, et al. **Mol Gen Genet** 1997 Jul;255(4):420-8

Tandem genes encode cell-surface polypeptides SspA and SspB which mediate adhesion of the oral bacterium Streptococcus gordonii to human and bacterial receptors. Demuth DR, et al. **Mol Microbiol** 1996 Apr;20(2):403-13

Identification of the streptococcal competence-pheromone receptor. Håvarstein LS, et al. **Mol Microbiol** 1996 Aug; 21(4):863-9

Structure, function and immunogenicity of streptococcal antigen I/II polypeptides. Jenkinson HF, et al. **Mol Microbiol** 1997 Jan;23(2):183-90 (33 ref.)

Disruption of the gene encoding penicillin-binding protein 2b (pbp2b) causes altered cell morphology and cease in exopolysaccharide production in Streptococcus thermophilus Sfi6. Stingele F, et al. **Mol Microbiol** 1996 Oct;22(2):357-66

Genotypic and phenotypic diversity of Streptococcus dysgalactiae strains isolated from clinical and subclinical cases of bovine mastitis. Aarestrup FM, et al. **Vet Microbiol** 1996 Dec;53(3-4):315-23

GROWTH & DEVELOPMENT

Rapid procedure for acid adaptation of oral lactic-acid bacteria and further characterization of the response. Ma Y, et al. **Can J Microbiol** 1997 Feb;43(2):143-8

"Streptococcus milleri" strains exhibit not gliding motility but sliding [letter; comment] Henrichsen J. **Int J Syst Bacteriol** 1997 Apr;47(2):604. Comment on: Int J Syst Bacteriol 1995 Apr;45(2):235-9.

Evaluation of media for selective enumeration of Streptococcus thermophilus, Lactobacillus delbrueckii ssp. bulgaricus, Lactobacillus acidophilus, and bifidobacteria. Dave RI, et al. **J Dairy Sci** 1996 Sep;79(9):1529-36

IMMUNOLOGY

Cutaneous anergy to streptococcal antigens in Whipple's disease [letter] Marth T, et al. **Am J Gastroenterol** 1996 Oct;91(10):2254-5

Is psoriasis induced by streptococcal superantigens and maintained by M-protein-specific T cells that cross-react with keratin? Valdimarsson H, et al. **Clin Exp Immunol** 1997 Jan;107 Suppl 1:21-4 (28 ref.)

Immunization with bacterial antigens: infections with streptococci and related organisms. Bercovier H, et al. **Dev Biol Stand** 1997;90:153-60 (25 ref.)

Characterization of two distinct opsonic and protective epitopes within the alpha C protein of the group B Streptococcus. Kling DE, et al. **Infect Immun** 1997 Apr; 65(4):1462-7

Evidence for the presence of streptococcal-superantigen-neutralizing antibodies in normal polyspecific immunoglobulin G. Norrby-Teglund A, et al. **Infect Immun** 1996 Dec;64(12):5395-8

Recognition of immunoglobulin A1 by oral actinomyces and streptococcal lectins. Ruhl S, et al. **Infect Immun** 1996 Dec; 64(12):5421-4

Altered orientation of streptococcal superantigen (SSA) on HLA-DR1 allows unconventional regions to contribute to SSA Vbeta specificity. Stevens KR, et al. **J Immunol** 1996 Dec 1;157(11):4970-8

The Fab region of IgG2 human myeloma proteins does not bear the streptococcal protein G-specific determinant. Perosa F, et al. **J Immunol Methods** 1997 Apr 25; 203(2):153-5

Detection of the phosphorylcholine epitope in streptococci, Haemophilus and pathogenic Neisseriae by immunoblotting. Kolberg J, et al. **Microb Pathog** 1997 Jun; 22(6):321-9

Tumor-specific transplantation resistance in mice after treatment of initial tumors with Streptococcus thermophilus. Kaklij GS, et al. **Microbiol Immunol** 1996; 40(1):55-8

Characterization of serotype II polysaccharide antigen of group E streptococci using a monoclonal antibody. Tomotake H, et al. **Microbiol Res** 1997 Jul;152(2):113-9

Structure, function and immunogenicity of streptococcal antigen I/II polypeptides. Jenkinson HF, et al. **Mol Microbiol** 1997 Jan;23(2):183-90 (33 ref.)

Psychological stress as a determinant of protein levels and salivary-induced aggregation of Streptococcus gordonii in human whole saliva. Bosch JA, et al. **Psychosom Med** 1996 Jul-Aug;58(4):374-82

Further studies on the efficacy of a live vaccine against mastitis caused by Streptococcus uberis. Finch JM, et al. **Vaccine** 1997 Jul;15(10):1138-43

Commensal bacteria as vectors for mucosal vaccines against sexually transmitted diseases: vaginal colonization with recombinant streptococci induces local and systemic antibodies in mice. Medaglini D, et al. **Vaccine** 1997 Aug-Sep;15(12-13):1330-7

Development and efficacy of a vaccine against Streptococcus iniae infection in farmed rainbow trout. Eldar A, et al. **Vet Immunol Immunopathol** 1997 May;56(1-2):175-83

Separation of equine IgG subclasses (IgGa, IgGb and IgG(T)) using their differential binding characteristics for staphylococcal protein A and streptococcal protein G. Sheoran AS, et al. **Vet Immunol Immunopathol** 1996 Dec; 55(1-3):33-43

[New concepts of the mechanisms of immunopatholgies+ of Streptococcal etiology] Burova LA, et al. **Vestn Ross Akad Med Nauk** 1996;(11):28-34 (Eng. Abstr.) **(Rus)**

[Polyarteritis nodosa--cutaneous or systemic form? Possible role of bacterial superantigens in the onset of systemic disease] Malčić I, et al. **Reumatizam** 1996;43(1):16-24 (Eng. Abstr.) **(Scr)**

[Serologic study in patients with streptococcal infective endocarditis] Planes AM, et al. **Med Clin (Barc)** 1996 Nov 23;107(18):693-7 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Comparative bacteriology of the surface of normal and pathological palatine tonsils in children. Endo LH, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:130-2

Intrauterine bacterial findings and hormonal profiles in post-partum cows with normal puerperium. Bekana M, et al. **Acta Vet Scand** 1996;37(3):251-63

Streptococcus isolates [letter] Bert F, et al. **Am J Clin Pathol** 1996 Nov;106(5):695-6

Deep neck infections. Marra S, et al. **Am J Otolaryngol** 1996 Sep-Oct;17(5):287-98 (15 ref.)

Changing bacteriology of periorbital cellulitis. Schwartz GR, et al. **Ann Emerg Med** 1996 Dec;28(6):617-20

Discriminant analysis of antibiotic resistance patterns in fecal streptococci, a method to differentiate human and animal sources of fecal pollution in natural waters. Wiggins BA. **Appl Environ Microbiol** 1996 Nov;62(11):3997-4002

Invasive infection due to Streptococcus iniae: a new or previously unrecognized disease--Ontario, 1995-1996. Weinstein M, et al. **Can Commun Dis Rep** 1996 Aug 1; 22(15):129-31; discussion 131-2 **(Eng, Fre)**

Preliminary report: invasive infection due to Streptococcus iniae. **Can Med Assoc J** 1996 Nov 1;155(9):1297-8 **(Eng, Fre)**

Isolation of Abiotrophia spp. with Staphylococcus aureus in a case of mastitis in a cow. Higgins R, et al. **Can Vet J** 1997 Feb;38(2):114

Clonal diversity of Streptococcus mitis biovar 1 isolates from the oral cavity of human neonates. Fitzsimmons S, et al. **Clin Diagn Lab Immunol** 1996 Sep;3(5):517-22

Group G streptococcal septic arthritis of an interphalangeal joint [letter] Marinella MA. **Clin Exp Rheumatol** 1996 Sep-Oct;14(5):577-8

Retropharyngeal abscess due to Gemella morbillorum [letter; comment] Pradeep R, et al. **Clin Infect Dis** 1997 Feb; 24(2):284-5. Comment on: Clin Infect Dis 1996 Jun;22(6):1084-6.

Acute group G streptococcal myositis associated with streptococcal toxic shock syndrome: case report and review. Wagner JG, et al. **Clin Infect Dis** 1996 Nov; 23(5):1159-61

The putative association of alpha haemolytic streptococci with maternal mastitis and neonatal septicaemia. Leadon DP, et al. **Equine Vet J Suppl** 1988 Sep;(5):44-5

A case of bacteremia caused by Streptococcus dysgalactiae [letter] Bert F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):324-6 (10 ref.)

Seven-year review of bacteremia caused by Streptococcus milleri and other viridans streptococci. Salavert M, et al. **Eur J Clin Microbiol Infect Dis** 1996 May;15(5):365-71

Alpha-hemolytic streptococci: a major pathogen of iatrogenic meningitis following lumbar puncture. Case reports and a review of the literature. Schneeberger PM, et al. **Infection** 1996 Jan-Feb;24(1):29-33 (38 ref.)

Development of oligonucleotide primers from the 16S-23S rRNA intergenic sequences for identifying different dairy and probiotic lactic acid bacteria by PCR. Tilsala-Timisjärvi A, et al. **Int J Food Microbiol** 1997 Mar 18;35(1):49-56

Pediatric deep space neck infections: the Medical College of Wisconsin experience. Flanary VA, et al. **Int J Pediatr Otorhinolaryngol** 1997 Jan 3;38(3):263-71

M proteins of group C streptococci isolated from patients with acute pharyngitis. Bisno AL, et al. **J Clin Microbiol** 1996 Oct;34(10):2511-5

Identification of clinically relevant viridans group streptococci to the species level by PCR. Garnier F, et al. **J Clin Microbiol** 1997 Sep;35(9):2337-41

Identification and molecular characterization of serological group C streptococci isolated from diseased pigs and monkeys in Indonesia. Soedarmanto I, et al. **J Clin Microbiol** 1996 Sep;34(9):2201-4

Epidemiologic evidence for Lancefield group C beta-hemolytic streptococci as a cause of exudative pharyngitis in college students. Turner JC, et al. **J Clin Microbiol** 1997 Jan;35(1):1-4

Survival of lactic acid bacteria in a dynamic model of the stomach and small intestine: validation and the effects of bile. Marteau P, et al. **J Dairy Sci** 1997 Jun;80(6):1031-7

Penicillin-resistant Streptococcus mitis as a cause of septicemia with meningitis in febrile neutropenic children. Balkundi DR, et al. **J Pediatr Hematol Oncol** 1997 Jan-Feb; 19(1):82-5

Non-group A streptococci: are they pathogens in the throat? Chowdhury MN, et al. **J R Soc Health** 1997 Jun; 117(3):160-3

Experimental Helicobacter pylori infection in association with other bacteria. Isogai H, et al. **Microbiol Immunol** 1997;41(4):361-5

Investigation of the nasopharyngeal bacterial flora in children with otitis media with effusion. Fujimori I, et al. **ORL J Otorhinolaryngol Relat Spec** 1996 May-Jun; 58(3):147-50

Genotypic and phenotypic diversity of Streptococcus dysgalactiae strains isolated from clinical and subclinical cases of bovine mastitis. Aarestrup FM, et al. **Vet Microbiol** 1996 Dec;53(3-4):315-23

Myeloencephalitis associated with a viridans group Streptococcus in a colony of Japanese macaques (Macaca fuscata). Lair S, et al. **Vet Pathol** 1996 Jan;33(1):99-103

Analysis of defense mechanisms against bacterial infection by oral streptococcus in normal flora. Fujimori I, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):74-81

[Hepatic abscesses caused by Streptococcus intermedius] Alessandri C, et al. **Minerva Pediatr** 1996 Sep;48(9):397-400 (Eng. Abstr.) **(Ita)**

[Pericarditis caused by Gemella morbillorum. Description of a case] Condoluci C, et al. **Minerva Pediatr** 1995 Dec; 47(12):545-7 (Eng. Abstr.) **(Ita)**

[Purification and partial characterization of a novel human platelet aggregation factor in the extracellular products of Streptococcus mitis, strain Nm-65] Ohtani N, et al. **Nippon Ika Daigaku Zasshi** 1996 Dec;63(6):446-59 (Eng. Abstr.) **(Jpn)**

[Some factors influencing the number of staphylococci in the mouth and throat of children] Krzemiński Z, et al. **Med Dosw Mikrobiol** 1996;48(3-4):111-6 (Eng. Abstr.) **(Pol)**

[The antilysozymal activity and species characteristics of the microflora of the female reproductive tract during pregnancy] Cherkasov SV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May-Jun; (3):88-90 (Eng. Abstr.) **(Rus)**

[Acute sinusitis, bacteremia and meningitis caused by group F beta-hemolytic Streptococcus] Pérez C, et al. **Acta Otorrinolaringol Esp** 1996 Sep-Oct;47(5):401-3 (Eng. Abstr.) **(Spa)**

[Usefulness of body surface cultures in newborns with early infection risk. Study of 735 neonates] Gasser Laguna I, et al. **An Esp Pediatr** 1996 Oct;45(4):409-14 (Eng. Abstr.) **(Spa)**

[Deep vein thrombosis in a child with chicken pox as a clinical manifestation of streptococcal sepsis] Márquez Rivas FJ, et al. **An Esp Pediatr** 1997 Mar;46(3):280-2 **(Spa)**

[Viridans streptococci isolated from cerebrospinal fluid. Clinical significance of 9 cases] Alba D, et al. **An Med Interna** 1997 Feb;14(2):79-82 (Eng. Abstr.) **(Spa)**

[Evaluation of a rapid method for the identification of the Enterococcus genus] Moreno A, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):85-7 (Eng. Abstr.) **(Spa)**

[Corneal crystalline image in patient with keratoplasty] Villuendas MC, et al. **Enferm Infecc Microbiol Clin** 1996 Nov;14(9):565-6 **(Spa)**

METABOLISM

Interactions between Eikenella corrodens and 'Streptococcus milleri-group' organisms: possible mechanisms of pathogenicity in mixed infections. Young KA, et al. **Antonie Van Leeuwenhoek** 1996 May;69(4):371-3

Mode of action of a lysostaphin-like bacteriolytic agent produced by Streptococcus zooepidemicus 4881. Simmonds RS, et al. **Appl Environ Microbiol** 1996 Dec;62(12):4536-41

In vivo binding of the salivary glycoprotein EP-GP (identical to GCDFP-15) to oral and non-oral bacteria detection and identification of EP-GP binding species. Schenkels LC, et al. **Biol Chem** 1997 Feb;378(2):83-8

Rapid procedure for acid adaptation of oral lactic-acid bacteria and further characterization of the response. Ma Y, et al. **Can J Microbiol** 1997 Feb;43(2):143-8

Absence of streptococcal protein G (PG)-specific determinant in the Fab region of human IgG2. Perosa F, et al. **Clin Exp Immunol** 1997 Aug;109(2):272-8

Partial characterization of the cohemolytic factor produced by Streptococcus uberis and comparison with the CAMP-factor. Lopes MF, et al. **FEMS Immunol Med Microbiol** 1995 Dec;12(3-4):205-12

Lowering of ochratoxin A level in milk by yoghurt bacteria and bifidobacteria. Skrinjar M, et al. **Folia Microbiol (Praha)** 1996;41(1):26-8

Candida albicans binding to the oral bacterium Streptococcus gordonii involves multiple adhesin-receptor interactions. Holmes AR, et al. **Infect Immun** 1996 Nov;64(11):4680-5

The tannin-degrading species Streptococcus gallolyticus and Streptococcus caprinus are subjective synonyms. Sly LI, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):893-4

Thermophilin 13, a nontypical antilisterial poration complex bacteriocin, that functions without a receptor. Marciset O, et al. **J Biol Chem** 1997 May 30;272(22):14277-84

Utilization of sialic acid by viridans streptococci. Byers HL, et al. **J Dent Res** 1996 Aug;75(8):1564-71

Saliva protein binding to streptococcal layers placed at different oral sites in 48 persons. Rudney JD, et al. **J Dent Res** 1996 Oct;75(10):1789-97

Comparison of five methods for the determination of arginine hydrolysis by viridans streptococci. West PW, et al. **J Med Microbiol** 1996 Dec;45(6):501-4

A 16 kDa protein family overexpressed by Streptococcus thermophilus PB18 in acid environments. González-Márquez H, et al. **Microbiology** 1997 May;143 (Pt 5):1587-94

Proline biosynthesis in Streptococcus thermophilus: characterization of the proBA operon and its products. Limauro D, et al. **Microbiology** 1996 Nov;142 (Pt 11):3275-82

Initial pH as a determining factor of glucose consumption and lactic and acetic acid production in oral streptococci. Concha ML, et al. **Microbios** 1996;87(353):207-16

Occurrence of extracellular hyaluronic acid and hyaluronatlyase in streptococci of groups A, B, C, and G. Günther E, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):64-73

Adherence of Streptococcus uberis to bovine mammary epithelial cells and to extracellular matrix proteins. Almeida RA, et al. **Zentralbl Veterinarmed [B]** 1996 Sep;43(7):385-92

[Streptococcal cytolysins] Nagamune H. **Seikagaku** 1997 May;69(5):343-8 (15 ref.) **(Jpn)**

PATHOGENICITY

Cytokine production by tonsillar lymphocytes stimulated with alpha-streptococci in patients with pustulosis palmaris et plantaris. Murakata H, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:201-3

Preliminary report: invasive infection due to Streptococcus iniae. **Can Med Assoc J** 1996 Nov 1;155(9):1297-8 **(Eng, Fre)**

Poststreptococcal glomerulonephritis: getting to know an old enemy [editorial] Oliveira DB. **Clin Exp Immunol** 1997 Jan; 107(1):8-10

Identification of a Streptococcus gordonii SspB domain that mediates adhesion to Porphyromonas gingivalis. Brooks W, et al. **Infect Immun** 1997 Sep;65(9):3753-8

Septicemia caused by Streptococcus canis in a human. Bert F, et al. **J Clin Microbiol** 1997 Mar;35(3):777-9

Lancefield grouping and smell of caramel for presumptive identification and assessment of pathogenicity in the Streptococcus milleri group. Brogan O, et al. **J Clin Pathol** 1997 Apr;50(4):332-5

[Evaluation of three rapid methods for intrapartum detection of group B streptococcus] Andreu Domingo A, et al. **An Esp Pediatr** 1997 Apr;46(4):378-82 (Eng. Abstr.) **(Spa)**

[Streptococcus equisimilis as the etiologic agent of endocarditis (letter)] Prada JL, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):274-6 (10 ref.) **(Spa)**

PHYSIOLOGY

Platelet-streptococcal interactions in endocarditis. Herzberg MC. **Crit Rev Oral Biol Med** 1996;7(3):222-36 (117 ref.)

Streptococcal adhesion and colonization. Jenkinson HF, et al. **Crit Rev Oral Biol Med** 1997;8(2):175-200 (189 ref.)

The nasopharyngeal bacterial flora in children with otitis media with effusion [see comments] Fujimori I, et al. **Eur Arch Otorhinolaryngol** 1996;253(4-5):260-3. Comment in: Eur Arch Otorhinolaryngol 1997;254(1):19. Comment in: Eur Arch Otorhinolaryngol 1997;254(2):113.

Adhesion of Streptococcus uberis to monolayers of cultured epithelial cells derived from the bovine mammary gland. Ditcham WG, et al. **FEMS Immunol Med Microbiol** 1996 Jun;14(2-3):145-50

Experimental salivary pellicles formed on titanium surfaces mediate adhesion of streptococci. Edgerton M, et al. **Int J Oral Maxillofac Implants** 1996 Jul-Aug;11(4):443-9

Characterization of the stringent and relaxed responses of Streptococcus equisimilis. Mechold U, et al. **J Bacteriol** 1997 Apr;179(8):2658-67

Performance of commercial cultures in fluid milk applications. Sanders ME, et al. **J Dairy Sci** 1996 Jun; 79(6):943-55

A clinical trial of probiotic administration for prevention of Salmonella shedding in the postoperative period in horses with colic. Parraga ME, et al. **J Vet Intern Med** 1997 Jan-Feb;11(1):36-41

Phagocytosis of Streptococcus uberis by bovine mammary gland macrophages. Grant RG, et al. **Res Vet Sci** 1997 Jan-Feb;62(1):74-8

Influence of Streptococcus dysgalactiae surface hydrophobicity on adherence to mammary epithelial cells and phagocytosis by mammary macrophages. Calvinho LF, et al. **Zentralbl Veterinarmed [B]** 1996 Jul;43(5):257-66

Comparative studies on streptococci of serological group G isolated from various origins. Soedarmanto I, et al. **Zentralbl Veterinarmed [B]** 1996 Nov;43(9):513-23

RADIATION EFFECTS

[Bacterial activity in the products of laser destruction of human dental enamel and dentin] Belikov AV, et al. **Stomatologiia (Mosk)** 1995;74(6):32-4 (Eng. Abstr.) **(Rus)**

VIROLOGY

Molecular ecology of Streptococcus thermophilus bacteriophage infections in a cheese factory. Bruttin A, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3144–50

Two groups of bacteriophages infecting Streptococcus thermophilus can be distinguished on the basis of mode of packaging and genetic determinants for major structural proteins. Le Marrec C, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3246–53

A highly conserved DNA replication module from Streptococcus thermophilus phages is similar in sequence and topology to a module from Lactococcus lactis phages. Desiere F, et al. **Virology** 1997 Aug 4;234(2):372–82

STREPTOCOCCUS AGALACTIAE

Systemic group B streptococcal disease in neonates and young infants in Norway 1985–94. Aavitsland P, et al. **Acta Paediatr** 1996 Jan;85(1):104–5

Increase of staphylococci in neonatal septicaemia: a fourteen-year study. Källman J, et al. **Acta Paediatr** 1997 May;86(5):533–8

Group B streptococcal cellulitis of perineum and lower abdomen: report of one case. Chen HJ, et al. **Acta Paediatr Sin** 1996 Mar–Apr;37(2):135–7

CDC issues recommendations for the prevention of perinatal group B streptococcal disease [see comments] **Am Fam Physician** 1996 Oct;54(5):1787–8, 1790, 1793. Comment in: Am Fam Physician 1996 Oct;54(5):1448–9, 1452.

Screening for group B streptococcal disease [editorial; comment] Ganiats TG. **Am Fam Physician** 1996 Oct; 54(5):1448–9, 1452. Comment on: Am Fam Physician 1996 oct;54(5):1787–8, 1790, 1793.

AAP issues revised guidelines for the prevention of early-onset group B streptococcal infection. Rose VL. **Am Fam Physician** 1997 Sep 1;56(3):961, 965 (02 ref.)

Ampicillin for neonatal group B streptococcal prophylaxis: how rapidly can bactericidal concentrations be achieved? Bloom SL, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):974–6

Group B Streptococcus and preterm premature rupture of membranes: a randomized, double-blind clinical trial of antepartum ampicillin. Grable IA, et al. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):1036–42

Group B streptococci and pregnancy [letter; comment] Levine EM. **Am J Obstet Gynecol** 1996 Oct;175(4 Pt 1):1084–5. Comment on: Am J Obstet Gynecol 1996 Apr;174(4):1354–60.

The effect of timing of single-dose transplacental ampicillin-sulbactam therapy for prevention of neonatal group B streptococcal colonization and bacteremia in a rabbit model. McDuffie RS Jr, et al. **Am J Obstet Gynecol** 1996 Aug;175(2):406–10

Ascending group B streptococcal genital infection in the rabbit model. McDuffie RS Jr, et al. **Am J Obstet Gynecol** 1996 Aug;175(2):402–5

Iliopsoas abscess following catheterization of the femoral artery: diagnostic and treatment strategies. Moran KM, et al. **Am J Orthop** 1997 Jun;26(6):446–8

Intrapartum chemoprophylaxis for group B streptococcus infection to prevent neonatal disease: who should be treated? Philipson EH, et al. **Am J Perinatol** 1996 Nov; 13(8):487–90

Chemoprophylaxis for group B streptococcus transmission in neonates. Beri R, et al. **Ann Pharmacother** 1997 Jan; 31(1):110–2

Prevention of group B Streptococcus infection in neonates. Logsdon BA, et al. **Ann Pharmacother** 1997 Jul–Aug; 31(7–8):897–906 (68 ref.)

Surfactant improves lung function and mitigates bacterial growth in immature ventilated rabbits with experimentally induced neonatal group B streptococcal pneumonia. Herting E, et al. **Arch Dis Child Fetal Neonatal Ed** 1997 Jan;76(1):F3–8

Group B streptococcus bacteremia in nonpregnant adults. Muñoz P, et al. **Arch Intern Med** 1997 Jan 27;157(2):213–6

Preferences of pregnant women and physicians for 2 strategies for prevention of early-onset group B streptococcal sepsis in neonates. Peralta-Carcelen M, et al. **Arch Pediatr Adolesc Med** 1997 Jul;151(7):712–8

Endogenous interleukin-11 (IL-11) expression is increased and prophylactic use of exogenous IL-11 enhances platelet recovery and improves survival during thrombocytopenia associated with experimental group B streptococcal sepsis in neonatal rats. Chang M, et al. **Blood Cells Mol Dis** 1996; 22(1):57–67

Streptococcus agalactiae mastitis: a review. Keefe GP. **Can Vet J** 1997 Jul;38(7):429–37 (94 ref.)

Group B streptococcal infections. Baker CJ. **Clin Perinatol** 1997 Mar;24(1):59–70 (47 ref.)

Hemodynamic effects of N-acetylamrinone in a porcine model of group B streptococcal sepsis. Allen EM, et al. **Drug Metab Dispos** 1996 Sep;24(9):1028–31

Vertebral osteomyelitis caused by group B streptococci (Streptococcus agalactiae) secondary to urinary tract infection. Bauer TM, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):244–6

Selective intrapartum anti-bioprophylaxy of group B streptococci infection of neonates: a prospective study in 2454 subsequent deliveries. Poulain P, et al. **Eur J Obstet Gynecol Reprod Biol** 1997 Apr;72(2):137–40

Simultaneous occurrence of group B Streptococcus and echovirus 20 [letter] Dronkert ML, et al. **Eur J Pediatr** 1996 Oct;155(10):915

Blood-brain barrier permeability during the development of experimental bacterial meningitis in the rat. Kim KS, et al. **Exp Neurol** 1997 May;145(1):253–7

Group B streptococcal endocarditis presenting with bilateral trapezius myalgias. Marinella MA. **Int J Cardiol** 1997 Feb; 58(3):279–81

Effects of anti-cytokine treatments in neonatal sepsis models. Teti G, et al. **J Chemother** 1995 Nov;7 Suppl 4:96–8

Reactive oxygen intermediates contribute to necrotic and apoptotic neuronal injury in an infant rat model of bacterial meningitis due to group B streptococci. Leib SL, et al. **J Clin Invest** 1996 Dec 1;98(11):2632–9

Herd prevalence and incidence of Streptococcus agalactiae in the dairy industry of Prince Edward Island. Keefe GP, et al. **J Dairy Sci** 1997 Mar;80(3):464–70

Group B streptococcal meningitis associated with cerebrospinal fluid rhinorrhoea [letter] Graham JC, et al. **J Infect** 1996 Jan;32(1):69–70

Streptococcus B meningitis in post-partum. Guerin JM, et al. **J Infect** 1997 Mar;34(2):151–3 (14 ref.)

Mortality from early neonatal group B streptococcal sepsis: influence of obstetric factors. Gill P, et al. **J Matern Fetal Med** 1997 Jan–Feb;6(1):35–9

Group B streptococcus in the perinatal period. A review. Clay LS. **J Nurse Midwifery** 1996 Sep–Oct;41(5):355–63 (69 ref.)

Prevention of early onset group B streptococcal sepsis in the newborn. Vigneswaran R, et al. **J Paediatr Child Health** 1995 Dec;31(6):493–4 (13 ref.)

Neonatal early onset group B streptococcal infection. A nine-year retrospective study in a tertiary care hospital. Adriaanse AH, et al. **J Perinat Med** 1996;24(5):531–8

Management of neonates born to mothers with group B streptococcus colonization [published erratum appears in J Perinatol 1997 Mar–Apr;17(2):106] Alkalay AL, et al. **J Perinatol** 1996 Nov–Dec;16(6):470–7 (54 ref.)

Survival and neutrophil kinetics in infants with severe group B streptococcal disease treated with gamma globulin. Friedman CA, et al. **J Perinatol** 1996 Nov–Dec; 16(6):439–42

Group B streptococcal vulvovaginitis [letter] Boyle D, et al. **J R Soc Med** 1997 May;90(5):298–9

Group B streptococcal infection in a mother and her baby. Noel I, et al. **J R Soc Med** 1996 Dec;89(12):705–6

Endovascular infection after renal artery stent placement [see comments] Gordon GI, et al. **J Vasc Interv Radiol** 1996 Sep–Oct;7(5):669–72. Comment in: J Vasc Interv Radiol 1997 Mar–Apr;8(2):302.

New CDC guidelines for prevention of perinatal group B streptococcal disease [letter] Jakobi P, et al. **Lancet** 1996 Oct 5;348(9032):969

Neonatal group B streptococcal disease. Mitchell A, et al. **MCN Am J Matern Child Nurs** 1997 Sep–Oct;22(5):249–53 (11 ref.)

Group B streptococcus and pregnancy: update and recommendations. Mitchell A, et al. **MCN Am J Matern Child Nurs** 1997 Sep–Oct;22(5):242–8 (16 ref.)

Decreasing incidence of perinatal Group B streptococcal disease--United States, 1993–1995. **MMWR Morb Mortal Wkly Rep** 1997 May 30;46(21):473–7

Asymptomatic group-B streptococcal pyelonephritis: an unusual cause of acute renal failure [letter] Heyman SN, et al. **Nephron** 1997;75(2):243–4

The pediatric costs of strategies for minimizing the risk of early-onset group B streptococcal disease. Fargason CA Jr, et al. **Obstet Gynecol** 1997 Sep;90(3):347–52 (24 ref.)

Prevention practices for perinatal group B streptococcal disease: a multi-state surveillance analysis. Neonatal Group B Streptococcal Disease Study Group. Whitney CG, et al. **Obstet Gynecol** 1997 Jan;89(1):28–32

Group B streptococcus and pregnancy. Mercer BM, et al. **Pediatr Ann** 1996 Apr;25(4):206–14 (93 ref.)

Group B streptococcal endocarditis in children beyond the neonatal period. Alsoub H, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):418–20 (11 ref.)

Group B streptococcal sepsis and meningitis complicated with severe sensorineural hearing loss in a fourteen-year-old boy. Likitnukul S, et al. **Pediatr Infect Dis J** 1996 May;15(5):468–70 (15 ref.)

Postoperative group B streptococcal necrotizing fasciitis in a previously healthy child. Viani RM, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):630–1

Group B streptococcal meningitis: a case of transverse myelitis with spinal cord and posterior fossa cysts. Puvabanditsin S, et al. **Pediatr Radiol** 1997 Apr;27(4):317–8

Effects of group B Streptococcus on the responses to U46619, endothelin-1, and noradrenaline in isolated pulmonary and mesenteric arteries of piglets. Villamor E, et al. **Pediatr Res** 1996 Dec;40(6):827–33

Beta haemolytic streptococcal infection does not cause right diaphragmatic eventration. Jain M, et al. **Pediatr Surg Int** 1997 Feb;12(2–3):188–9

Revised guidelines for prevention of early-onset group B streptococcal (GBS) infection. American Academy of Pediatrics Committee on Infectious Diseases and Committee on Fetus and Newborn. **Pediatrics** 1997 Mar; 99(3):489–96

Prevention of early-onset neonatal group B streptococcal disease. Gotoff SP, et al. **Pediatrics** 1997 Jun;99(6):866–9

The 1997 AAP guidelines for prevention of early-onset group B streptococcal disease. American Academy of Pediatrics. Halsey NA, et al. **Pediatrics** 1997 Sep;100(3 Pt 1):383–4

Penicillin at birth can help prevent early-onset group B streptococcal disease [letter] Wedgwood JF, et al. **Pediatrics** 1997 Apr;99(4):651–2

Group B streptococcal meningitis in an adult [letter] Hatfield AG, et al. **Postgrad Med J** 1997 Mar;73(857):188

Another deadly disease we can prevent--perinatal GBS [editorial] Barlow JF. **S D J Med** 1996 Nov;49(11):399–400

A clinical study of beta-haemolytic groups A, B, C and G streptococcal bacteremia in adults over an 8-year period. Schugk J, et al. **Scand J Infect Dis** 1997;29(3):233–8

Optimal gentamicin therapy in preterm neonates includes loading doses and early monitoring. Isemann BT, et al. **Ther Drug Monit** 1996 Oct;18(5):549–55

Clinical mastitis in dairy cows after 'blitz' therapy [letter] Biggs AM. **Vet Rec** 1997 Jul 19;141(3):84

Clinical mastitis in dairy cows after 'blitz' therapy [letter] Edmondson PW. **Vet Rec** 1997 Jul 26;141(4):108

[Group B streptococcal infection in adults] Laursen SB, et al. **Ugeskr Laeger** 1997 Feb 3;159(6):732–5 (Eng. Abstr.) **(Dan)**

[Screening of Streptococcus agalactiae (group B) in the perinatal period] Chaaya A, et al. **J Med Liban** 1996; 44(4):203–8 (Eng. Abstr.) **(Fre)**

[Streptococcus group B and pregnancy: the therapeutic role of topical intravaginal clindamycin] Danti L, et al. **Minerva Ginecol** 1997 May;49(5):235–40 (Eng. Abstr.) **(Ita)**

[Colonization by group B hemolytic streptococcus in pregnancy. Note of prevention and therapy of the materno-neonatal infection. Casuistics] Della Morte MA, et al. **Pediatr Med Chir** 1996 Sep–Oct;18(5):433–50 (Eng. Abstr.) **(Ita)**

[Successful coronary angioplasty in a patient with acute myocardial infarction caused by prosthetic valve endocarditis] Takimoto E, et al. **J Cardiol** 1996;27 Suppl 2:103–8; discussion 109–10 (Eng. Abstr.) **(Jpn)**

[A case of fluminant septic shock due to Streptococcus agalactiae in a patient with MPO-ANCA related glomerulonephritis] Tanaka A, et al. **Kansenshogaku Zasshi** 1996 Nov;70(11):1186–9 (Eng. Abstr.) **(Jpn)**

[Streptococcus agalactiae infection in adults. Presentation of 3 cases] Torres Fernández M, et al. **An Med Interna** 1996 Nov;13(11):547–8 (Eng. Abstr.) **(Spa)**

[Invasive Streptococcus agalactiae infections at a general university hospital over a 10-year period] Giménez M, et al. **Enferm Infecc Microbiol Clin** 1996 May;14(5):300–3 (Eng. Abstr.) **(Spa)**

[Purulent abscess myocarditis with fatal outcome, caused by Streptococcus agalactiae (letter)] Abad C. **Med Clin (Barc)** 1996 Jan 27;106(3):119 **(Spa)**

[Streptococcus agalactiae (group B streptococci) (editorial)] Betriu Cabeceran C, et al. **Med Clin (Barc)** 1997 Sep 6; 109(7):258–60 **(Spa)**

CLASSIFICATION

Epidemiological aspects of group B streptococci of bovine and human origin. Jensen NE, et al. **Epidemiol Infect** 1996 Dec;117(3):417–22

Changing patterns of group B streptococcal serotypes associated with human infections. Radhakrishnan S, et al. **Indian J Med Res** 1995 Aug;102:56–9

Use of Gen-Probe AccuProbe Group B streptococcus test to detect group B streptococci in broth cultures of vaginal-anorectal specimens from pregnant women: comparison with traditional culture method. Bourbeau PP, et al. **J Clin Microbiol** 1997 Jan;35(1):144–7

DRUG EFFECTS

Ampicillin susceptibilities of vaginal and placental isolates of group B streptococcus and Escherichia coli obtained between 1992 and 1994. Meyn LA, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1173–4

Effects of secretion inhibitors on the production of CAMP factor from Streptococcus agalactiae. Takaisi-Kikuni NB. **Cytobios** 1996;88(352):23–33

Changes in the surface carbohydrate composition and exposure of anionic groups caused by beta-lactam antibiotics in streptococci. Figueiredo AM, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1031–6

Overcoming Streptococcus agalactiae in vitro resistance to imidazoles. Simonetti N, et al. **J Chemother** 1997 Aug; 9(4):251–6

Clinical characteristics and antimicrobial susceptibility of invasive group B streptococcal infections in nonpregnant adults in Taiwan. Liu JW, et al. **J Formos Med Assoc** 1997 Aug;96(8):628–33

Persistence of penicillin G benzathine in pregnant group B streptococcus carriers. Weeks JW, et al. **Obstet Gynecol** 1997 Aug;90(2):240–3

ENZYMOLOGY

Identification of a histidine residue essential for enzymatic activity of group B streptococcal hyaluronate lyase. Lin B, et al. **Biochem Biophys Res Commun** 1997 Feb 13; 231(2):379–82

STREPTOCOCCUS AGALACTIAE

Visualisation of hippuricase activity on native polyacrylamide gels. McCleave MJ, et al. **Biochem Soc Trans** 1997 Feb; 25(1):143S

Identification of serum and urine proteins responsible for enhanced pigment production by group B streptococci as amylases. Rosa-Fraile M, et al.
Clin Diagn Lab Immunol 1996 Sep;3(5):594–6

GENETICS

Diversity of Streptococcus agalactiae and Staphylococcus aureus ribotypes recovered from New York dairy herds. Rivas AL, et al. **Am J Vet Res** 1997 May;58(5):482–7

Chromosomal gentamicin resistance transposon Tn3706 in Streptococcus agalactiae B128. Horaud T, et al.
Antimicrob Agents Chemother 1996 May;40(5):1085–90

New genetic techniques for group B streptococci: high-efficiency transformation, maintenance of temperature-sensitive pWV01 plasmids, and mutagenesis with Tn917. Framson PE, et al. **Appl Environ Microbiol** 1997 Sep;63(9):3539–47

Use of a dental amalgamator to extract RNA from the gram-positive bacterium Streptococcus agalactiae. Yim HH, et al. **Biotechniques** 1997 Aug;23(2):229–31

Epidemiological aspects of group B streptococci of bovine and human origin. Jensen NE, et al. **Epidemiol Infect** 1996 Dec;117(3):417–22

Molecular analysis of clinical group B streptococcal strains by use of alpha and beta gene probes. Suvorov A, et al. **FEMS Immunol Med Microbiol** 1997 Mar;17(3):149–54

Cloning of the glutamine synthetase gene from group B streptococci. Suvorov AN, et al. **Infect Immun** 1997 Jan; 65(1):191–6

Genetic diversity of rRNA operons of unrelated Streptococcus agalactiae strains isolated from cerebrospinal fluid of neonates suffering from meningitis. Chatellier S, et al. **J Clin Microbiol** 1996 Nov;34(11):2741–7

Restriction endonuclease analysis of group B streptococcal isolates from two distinct geographical regions. Ellis S, et al. **J Hosp Infect** 1996 Aug;33(4):279–87

GROWTH & DEVELOPMENT

Influence of diabetes on group B Streptococcus colonization in the pregnant patient. Raimer K, et al.
J Matern Fetal Med 1997 Mar-Apr;6(2):120–3

Sexual behavior and vaginal colonization by group B streptococcus among minority women. Newton ER, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 1):577–82

IMMUNOLOGY

In vitro cytokine and prostaglandin production by amnion cells in the presence of bacteria. Reisenberger K, et al. **Am J Obstet Gynecol** 1997 May;176(5):981–4

NMR and molecular dynamics studies of the conformational epitope of the type III group B Streptococcus capsular polysaccharide and derivatives. Brisson JR, et al.
Biochemistry 1997 Mar 18;36(11):3278–92

Monoclonal antibodies against the common polysaccharide of Streptococcus agalactiae. Rosocha J, et al.
Folia Microbiol (Praha) 1996;41(5):436–40

A protective surface protein from type V group B streptococci shares N-terminal sequence homology with the alpha C protein. Lachenauer CS, et al.
Infect Immun 1996 Oct;64(10):4255–60

Role of interleukin 12 in experimental neonatal sepsis caused by group B streptococci. Mancuso G, et al.
Infect Immun 1997 Sep;65(9):3731–5

Immune response to type III group B streptococcal polysaccharide-tetanus toxoid conjugate vaccine. Kasper DL, et al. **J Clin Invest** 1996 Nov 15;98(10):2308–14

Surfactant protein A-deficient mice are susceptible to group B streptococcal infection. LeVine AM, et al.
J Immunol 1997 May 1;158(9):4336–40

Tumor necrosis factor-alpha contributes to apoptosis in hippocampal neurons during experimental group B streptococcal meningitis. Bogdan I, et al. **J Infect Dis** 1997 Sep;176(3):693–7

A role for C5 and C5a-ase in the acute neutrophil response to group B streptococcal infections. Bohnsack JF, et al. **J Infect Dis** 1997 Apr;175(4):847–55

Therapeutic potential of human antisera to group B streptococcal glycoconjugate vaccines in neonatal mice. Paoletti LC, et al. **J Infect Dis** 1997 May;175(5):1237–9

Nasal immunization with group B streptococci can induce high levels of specific IgA antibodies in cervicovaginal secretions of mice. Hordnes K, et al. **Vaccine** 1997 Aug; 15(11):1244–51

Molecular diversity among the trypsin resistant surface proteins of group B streptococci. Flores AE, et al.
Zentralbl Bakteriol 1996 Sep;285(1):44–51

ISOLATION & PURIFICATION

Bilateral pyogenic sacroiliitis following uncomplicated pregnancy and labor. Linnet KM, et al.
Acta Obstet Gynecol Scand 1996 Nov;75(10):950–1

Strategies for preventing early onset group B streptococcal infection. **Can Commun Dis Rep** 1996 Mar 15;22(6):44–48

Septic sternoclavicular arthritis caused by group B Streptococcus: case report and review. Carrascosa M, et al. **Clin Infect Dis** 1996 Mar;22(3):579–80 (9 ref.)

Acute-phase proteins in perinatal human plasma. Liberatori S, et al. **Electrophoresis** 1997 Mar-Apr;18(3-4):520–6

Isolation and characterization of group B streptococci from human and bovine sources within and around Nairobi. Mosabi JM, et al. **Epidemiol Infect** 1997 Jun;118(3):215–20

Rapid detection of group B streptococcal colonization of the genital tract by a commercial optical immunoassay. Carroli KC, et al. **Eur J Clin Microbiol Infect Dis** 1996 Mar; 15(3):206–210

Group B streptococcal toxic shock-like syndrome with fulminant cellulitis. Thomas S, et al. **Heart Lung** 1996 Nov-Dec;25(6):497–9

Chronic back pain after hernia and aneurysm repairs. Gross RM, et al. **Hosp Pract (Off Ed)** 1997 Jun 15;32(6):185–8

Food-borne and air-borne streptococcal pharyngitis—a clinical comparison. Bar-Dayan Y, et al. **Infection** 1997 Jan-Feb;25(1):12–5

ACOG committee opinion. Prevention of early-onset group B streptococcal disease in newborns. Number 173—June 1996. Committee on Obstetric Practice. American College of Obstetrics and Gynecologists. **Int J Gynaecol Obstet** 1996 Aug;54(2):197–205 (47 ref.)

Endocarditis caused by nonhemolytic group B streptococcus. Miranda C, et al. **J Clin Microbiol** 1997 Jun;35(6):1616–7

From the Food and Drug Administration. Nightingale SL.
JAMA 1997 May 7;277(17):1343

Characterization of clinical isolates of Streptococcus agalactiae by random amplified polymorphic DNA using degenerate oligonucleotides. Limansky AS, et al.
Medicina (B Aires) 1995;55(6):681–4

Group B streptococcus colonization in pregnant diabetic women. Ramos E, et al. **Obstet Gynecol** 1997 Feb; 89(2):257–60

The accuracy of late antenatal screening cultures in predicting genital group B streptococcal colonization at delivery. Yancey MK, et al. **Obstet Gynecol** 1996 Nov; 88(5):811–5

Effects of treatment with pentoxifylline on the cardiovascular manifestations of group B streptococcal sepsis in the piglet. Del Moral T, et al. **Pediatr Res** 1996 Sep;40(3):469–74

Destructive polyarthritis due to a group B streptococcus. Straus C, et al. **Rev Rhum Engl Ed** 1997 May;64(5):339–41

Genital Group B Streptococcus carriage in the antenatal period: its role in prom and preterm labour. Chua S, et al. **Singapore Med J** 1995 Aug;36(4):383–5

Spontaneous group B streptococcal meningitis in a patient with cirrhosis. Tung BY, et al. **West J Med** 1996 Oct; 165(4):229–30 (13 ref.)

[Vaginal colonization of group B Streptococcus: a study in 267 cases of factory women] Zhu YZ, et al.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1996 Feb; 17(1):17–9 (Eng. Abstr.) **(Chi)**

[Validation of TKT medium for detection of Streptococcus agalactiae in bulk milk samples] Benda P, et al.
Vet Med (Praha) 1997 Mar;42(3):71–80 (Eng. Abstr.) **(Cze)**

[A method for estimating the prevalence of mammary Staphylococcus aureus and Streptococcus agalactiae infections in herds based on an examination of bulk milk samples] Benda P, et al. **Vet Med (Praha)** 1997 Apr; 42(4):101–9 (Eng. Abstr.) **(Cze)**

[Spondylodiscitis caused by Streptococcus agalactiae] Sijpkens YW, et al. **Ned Tijdschr Geneeskd** 1997 Mar 15; 141(11):534–6 (Eng. Abstr.) **(Dut)**

[Vaginal colonization of Streptococcus B in pregnancy] Citernesi A, et al. **Minerva Ginecol** 1996 Jun;48(6):227–33 (Eng. Abstr.) **(Ita)**

[Study of bacterial flora in the oral cavity and stomach of elderly patients receiving nasogastric tube feeding] Matsuura T, et al. **Kansenshogaku Zasshi** 1997 May; 71(5):397–404 (Eng. Abstr.) **(Jpn)**

[Clinical isolates of group B streptococci from elderly patients] Matsuura T, et al. **Kansenshogaku Zasshi** 1996 Feb; 70(2):161–7 (Eng. Abstr.) **(Jpn)**

[Early onset of neonatal sepsis due to Streptococcus agalactiae: study of ten years (1985-1994) and the utility of intrapartum prophylaxis] Bosch Mestres J, et al.
An Esp Pediatr 1997 Mar;46(3):272–6 (Eng. Abstr.) **(Spa)**

[Neonatal infections by Streptococcus agalactiae] Juncosa Morros T, et al. **An Esp Pediatr** 1996 Aug;45(2):153–6 (Eng. Abstr.) **(Spa)**

[Evaluation of urine screening in healthy infants] Piñero Martínez E, et al. **An Esp Pediatr** 1996 Aug;45(2):140–2 (Eng. Abstr.) **(Spa)**

[Endocarditis caused by group B streptococci in adults] Marron A, et al. **Enferm Infecc Microbiol Clin** 1997 Mar; 15(3):147–50 (25 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Regulation of cultured human chorion cell chemokine production by group B streptococci and purified bacterial products. Dudley DJ, et al. **Am J Reprod Immunol** 1996 Nov;36(5):264–8

Changes in the surface carbohydrate composition and exposure of anionic groups caused by beta-lactam antibiotics in streptococci. Figueiredo AM, et al.
J Antimicrob Chemother 1995 Dec;36(6):1031–6

Immunochemical localization of CAMP factor (protein B) in Streptococcus agalactiae. Takaisi-Kikuni NB, et al.
Microbios 1997;89(360-361):171–85

Group B streptococcal sepsis impairs cerebral vascular reactivity to acute hypercarbia in piglets. Rudinsky BF, et al. **Pediatr Res** 1996 Jan;39(1):55–63

Occurrence of extracellular hyaluronic acid and hyaluronatlyase in streptococci of groups A, B, C, and G. Günther E, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):64–73

Fibronectin binding and cell surface hydrophobicity contribute to adherence properties of group B streptococci. Zabel LT, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):35–43

PATHOGENICITY

Characterization of group B streptococcal invasion in HEp-2 epithelial cells. Valentin-Weigand P, et al.
FEMS Microbiol Lett 1997 Feb 1;147(1):69–74

[Streptococcus agalactiae induced meningitis in a healthy adult. Letter] Merlo VE, et al. **Rev Neurol** 1997 Jan; 25(137):149–50 **(Spa)**

PHYSIOLOGY

Isolation and characterization of group B streptococci from human and bovine sources within and around Nairobi. Mosabi JM, et al. **Epidemiol Infect** 1997 Jun;118(3):215–20

STREPTOCOCCUS BOVIS

Back pain in the older patient. Baumgartner E, et al.
Ann Rheum Dis 1996 Sep;55(9):600–2

Tricuspid valve endocarditis caused by Streptococcus bovis [letter; comment] Beeching NJ, et al. **Clin Infect Dis** 1996 Sep;23(3):664. Comment on: Clin Infect Dis 1996 Jan;22(1):178–9.

Isolated tricuspid valve endocarditis due to Streptococcus bovis [see comments] Model A, et al. **Clin Infect Dis** 1996 Jan;22(1):178–9. Comment in: Clin Infect Dis 1996 Sep;23(3):664.

Streptococcus bovis spontaneous bacterial peritonitis in patients with alcoholic cirrhosis. Glória H, et al.
Eur J Gastroenterol Hepatol 1996 Aug;8(8):823–4

Liver biopsy as a cause of Streptococcus bovis peritonitis. Macedo G, et al. **J Clin Gastroenterol** 1997 Jun;24(4):292–3

Lateral neck abscess caused by Streptococcus bovis in a patient with undiagnosed colon cancer. Goumas PD, et al. **J Laryngol Otol** 1997 Jul;111(7):666–8

Fatal Streptococcus bovis sepsis in an infant on peritoneal dialysis [letter] Tanney D, et al. **Pediatr Nephrol** 1997 Jun; 11(3):390

[Serum bactericidal rate. Methodological proposal to predict the efficacy of antimicrobial therapy] Riera EB, et al.
Medicina (B Aires) 1996;56(2):115–8 (Eng. Abstr.) **(Spa)**

[Bacteremia and endocarditis caused by Streptococcus bovis in patients with alcoholic hepatopathy without evidence of colonic pathology] Castroagudín JF, et al.
Rev Esp Enferm Dig 1996 Sep;88(9):605–8 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Location of the alpha-amylase gene in rumen Streptococcus bovis strains distinguished by unstable amylase activity. Mareková M, et al. **Folia Microbiol (Praha)** 1995; 40(2):181–4

Characterization of proteolytic activities of rumen bacterial isolates from forage-fed cattle. Attwood GT, et al.
J Appl Bacteriol 1996 Nov;81(5):545–52

Isolation and comparative analysis of diaminopimelate decarboxylase from Streptococcus bovis and Bacillus subtilis. Kalcheva EO, et al.
Mol Gen Mikrobiol Virusol 1997;(1):34–7

GENETICS

Emergence of vancomycin resistance in the genus Streptococcus: characterization of a vanB transferable determinant in Streptococcus bovis. Poyart C, et al.
Antimicrob Agents Chemother 1997 Jan;41(1):24–9

Location of the alpha-amylase gene in rumen Streptococcus bovis strains distinguished by unstable amylase activity. Mareková M, et al. **Folia Microbiol (Praha)** 1995; 40(2):181–4

Characterization of the L-malate permease gene (maeP) of Streptococcus bovis ATCC 15352. Kawai S, et al.
J Bacteriol 1997 Jun;179(12):4056–60

[Biology of lysogenic strains of Streptococcus bovis and virulent mutants of their temperate phages] Tarakanov BV.
Mikrobiologiia 1996 Sep-Oct;65(5):656–62 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolated septic arthritis due to Streptococcus bovis. Grant RJ, et al. **Clin Infect Dis** 1997 May;24(5):1021

[Bilateral epidural psoas abscess simulating bilateral proximal diabetic plexopathy (see comments)] Roquer J, et al.
Neurologia 1996 Aug-Sep;11(7):268–71 (Eng. Abstr.). Comment in: Neurologia 1997 Jun-Jul;12(6):265–6. **(Spa)**

METABOLISM

Effects of a strain of Saccharomyces cerevisiae (Levucell SC1), a microbial additive for ruminants, on lactate metabolism in vitro. Chaucheyras F, et al.
Can J Microbiol 1996 Sep;42(9):927–33

PATHOGENICITY

Secreted antigens as virulence associated markers in

Streptococcus bovis strains from pigeons. Vanrobaeys M, et al. **Vet Microbiol** 1996 Dec;53(3-4):339-48

STREPTOCOCCUS EQUI

[Mycotic aortic aneurysm after appendectomy] Rhomberg M, et al. **Vasa** 1996;25(1):90-3 (Eng. Abstr.) **(Ger)**

[An outbreak of Streptococcus zooepidemicus-caused infection among laboratory primates] Dzhikidze ZK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan-Feb;(1):81-4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

A case of pharyngitis caused by penicillin resistant group C streptococcus [letter] Eltringham IJ, et al. **J Infect** 1997 Jan;34(1):88-9

GENETICS

Characterization of the Lancefield group C streptococcus 16S-23S RNA gene intergenic spacer and its potential for identification and sub-specific typing. Chanter N, et al. **Epidemiol Infect** 1997 Apr;118(2):125-35

Cloning and sequence analysis of zooA, a Streptococcus zooepidemicus gene encoding a bacteriocin-like inhibitory substance having a domain structure similar to that of lysostaphin. Simmonds RS, et al. **Gene** 1997 Apr 21; 189(2):255-61

Fibronectin-binding protein of Streptococcus equi subsp. zooepidemicus. Lindmark H, et al. **Infect Immun** 1996 Oct; 64(10):3993-9

Comparison of the sequences and functions of Streptococcus equi M-like proteins SeM and SzPSe. Timoney JF, et al. **Infect Immun** 1997 Sep;65(9):3600-5

ISOLATION & PURIFICATION

Pyogenic arthritis caused by streptococcus equisimilis (group-C streptococcus) in a patient with AIDS. Steinfeld S, et al. **Clin Rheumatol** 1997 May;16(3):314-6 (20 ref.)

Additional cause of mastitis in a llama [letter; comment] Bezek D, et al. **J Am Vet Med Assoc** 1997 Mar 15;210(6):748 . Comment on: J Am Vet Med Assoc 1996 Oct 15;209(8):1457-63.

Group C streptococcal infection in a term newborn infant. Faix RG, et al. **J Perinatol** 1997 Jan-Feb;17(1):79-82 (35 ref.)

Naturally occurring persistent and asymptomatic infection of the guttural pouches of horses with Streptococcus equi. Newton JR, et al. **Vet Rec** 1997 Jan 25;140(4):84-90

Isolation of Streptococcus equi subspecies equi (strangles agent) from an Ethiopian camel. Yigezu LM, et al. **Vet Rec** 1997 Jun 7;140(23):608

STREPTOCOCCUS FAECALIS see **ENTEROCOCCUS FAECALIS**

STREPTOCOCCUS FAECIUM see **ENTEROCOCCUS FAECIUM**

STREPTOCOCCUS GROUP A see **STREPTOCOCCUS PYOGENES**

STREPTOCOCCUS GROUP B see **STREPTOCOCCUS AGALACTIAE**

STREPTOCOCCUS LACTIS see **LACTOCOCCUS LACTIS**

STREPTOCOCCUS MUTANS

Detection of modified amino acids in lantibiotic peptide mutacin II by chemical derivation and electrospray ionization-mass spectroscopic analysis. Novák J, et al. **Anal Biochem** 1996 May 1;236(2):358-60

Bacteriological studies of dental caries in Ile-Ife, Nigeria. Adetunji OF, et al. **Cent Afr J Med** 1996 Aug;42(8):249-52

Infected left atrial myxoma with concomitant mitral valve endocarditis. Vogt PR, et al. **Eur J Cardiothorac Surg** 1996; 10(1):71-3

A Streptococcus mutans Safari! Bratthall D. **J Dent Res** 1997 Jul;76(7):1332-6 (21 ref.)

CHEMISTRY

Purification and structure of mutacin B-Ny266: a new lantibiotic produced by Streptococcus mutans. Mota-Meira M, et al. **FEBS Lett** 1997 Jun 30;410(2-3):275-9

Induction of nitric oxide production by polyosides from the cell walls of Streptococcus mutans OMZ 175, a gram-positive bacterium, in the rat aorta. Martin V, et al. **Infect Immun** 1997 Jun;65(6):2074-9

Lipoteichoic acid from viridans streptococci induces the production of tumor necrosis factor and nitric oxide by murine macrophages. English BK, et al. **J Infect Dis** 1996 Dec;174(6):1348-51

CLASSIFICATION

Typing of mutans streptococci by arbitrarily primed polymerase chain reaction. Saarela M, et al. **Arch Oral Biol** 1996 Aug-Sep;41(8-9):821-6

Mutans streptococcal serotypes in children with gastroesophageal reflux disease. Hölttä P, et al. **ASDC J Dent Child** 1997 May-Jun;64(3):201-4, 228

Rapid identification of mutans streptococcal species. Igarashi T, et al. **Microbiol Immunol** 1996;40(11):867-71

DRUG EFFECTS

Antibacterial effects of amalgams on mutans streptococci in an in vitro biofilm test procedure. Netuschil L, et al. **Acta Stomatol Belg** 1996 Jun;93(2):73-8

Galactose oxidase-glucan binding domain fusion proteins as targeting inhibitors of dental plaque bacteria. Lis M, et al. **Antimicrob Agents Chemother** 1997 May;41(5):999-1003

Effect of low levels of fluoride on proton excretion and intracellular pH in glycolysing streptococcal cells under strictly anaerobic conditions. Guha-Chowdhury N, et al. **Caries Res** 1997;31(5):373-8

Effect of repeated treatment with sustained-release chlorhexidine mouth guards on salivary levels of mutans streptococci. Hildebrandt GH. **Caries Res** 1996; 30(6):445-53

Inhibitory effects of funoran on the adherence and colonization of mutans streptococci. Saeki Y, et al. **Caries Res** 1996;30(2):119-25

The effect of chlorhexidine/xylitol chewing-gum on cariogenic salivary microflora: a clinical trial in elderly patients. Simons D, et al. **Caries Res** 1997;31(2):91-6

Effect of different chlorhexidine varnish regimens on mutans streptococci levels in interdental plaque and saliva. Twetman S, et al. **Caries Res** 1997;31(3):189-93

Efficacy of a chlorhexidine and a chlorhexidine-fluoride varnish mixture to decrease interdental levels of mutans streptococci. Twetman S, et al. **Caries Res** 1997;31(5):361-5

Resin-modified glass ionomer cements: fluoride release and influence on Streptococcus mutans growth. Friedl KH, et al. **Eur J Oral Sci** 1997 Feb;105(1):81-5

Inhibition of acid production in Streptococcus mutans R9 by formic acid. Assinder SJ, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2-3):229-33

The effect of areca nut on salivary and selected oral microorganisms. de Miranda CM, et al. **Int Dent J** 1996 Aug;46(4):350-6

Mutans streptococci caries and chlorhexidine. Bowden GH. **J Can Dent Assoc** 1996 Sep;62(9):700, 703-7 (40 ref.)

Inhibition of Streptococcus mutans adsorption to hydroxyapatite by low-molecular-weight chitosans. Tarsi R, et al. **J Dent Res** 1997 Feb;76(2):665-72

Emergence of multiple xylitol-resistant (fructose PTS-) mutants from human isolates of mutans streptococci during growth on dietary sugars in the presence of xylitol. Trahan L, et al. **J Dent Res** 1996 Nov;75(11):1892-900

[Antimicrobial properties of Flos Lonicerae against oral pathogens] Sun Y, et al. **Chung Kuo Chung Yao Tsa Chih** 1996 Apr;21(4):242-3 inside backcover (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Characterization of glucosyltransferase of human saliva adsorbed onto hydroxyapatite surfaces. Vacca-Smith AM, et al. **Caries Res** 1996;30(5):354-60

Evaluation of three individual glucosyltransferases produced by Streptococcus mutans using monoclonal antibodies. Tomita Y, et al. **FEMS Microbiol Lett** 1996 Dec 15; 145(3):427-32

Genetic and physiological analysis of the lethal effect of L-(+)-lactate dehydrogenase deficiency in Streptococcus mutans: complementation by alcohol dehydrogenase from Zymomonas mobilis. Hillman JD, et al. **Infect Immun** 1996 Oct;64(10):4319-23

Genetic and physiologic analysis of a formyl-tetrahydrofolate synthetase mutant of Streptococcus mutans. Crowley PJ, et al. **J Bacteriol** 1997 Mar;179(5):1563-72

Identification of a fourth gene involved in dTDP-rhamnose synthesis in Streptococcus mutans. Tsukioka Y, et al. **J Bacteriol** 1997 Jul;179(13):4411-4

Pathway for uptake and degradation of X-prolyl tripeptides in Streptococcus mutans VA-29R and Streptococcus sanguis ATCC 10556. Cowman RA, et al. **J Dent Res** 1997 Aug;76(8):1477-84

GENETICS

Construction and characterization of a recombinant ureolytic Streptococcus mutans and its use to demonstrate the relationship of urease activity to pH modulating capacity. Clancy A, et al. **FEMS Microbiol Lett** 1997 Jun 15; 151(2):205-11

Molecular and genetic analysis of multiple changes in the levels of production of virulence factors in a subcultured variant of Streptococcus mutans. Yamashita Y, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):81-7

Organization and nucleotide sequence of the Streptococcus mutans galactose operon. Ajdić D, et al. **Gene** 1996 Nov 21;180(1-2):137-44

Cloning and nucleotide sequence analysis of the Streptococcus mutans membrane-bound, proton-translocating ATPase operon. Smith AJ, et al. **Gene** 1996 Dec 12;183(1-2):87-96

Expression of the Streptococcus mutans fructosyltransferase gene within a mammalian host. Grey WT, et al. **Infect Immun** 1997 Jun;65(6):2488-90

Identification of a frameshift mutation resulting in premature termination and loss of cell wall anchoring of the PAc antigen of Streptococcus mutans GS-5. Murakami Y, et al. **Infect Immun** 1997 Feb;65(2):794-7

Cloning and sequence analysis of the gbpC gene encoding a novel glucan-binding protein of Streptococcus mutans. Sato Y, et al. **Infect Immun** 1997 Feb;65(2):668-75

Role of the citrate pathway in glutamate biosynthesis by Streptococcus mutans. Cvitkovitch DG, et al. **J Bacteriol** 1997 Feb;179(3):650-5

Biological function of the dTDP-rhamnose synthesis pathway in Streptococcus mutans. Tsukioka Y, et al. **J Bacteriol** 1997 Feb;179(4):1126-34

Characterization of IS199 from Streptococcus mutans V403. Macrina FL, et al. **Plasmid** 1996 Jul;36(1):9-18

GROWTH & DEVELOPMENT

Rapid procedure for acid adaptation of oral lactic-acid bacteria and further characterization of the response. Ma Y, et al. **Can J Microbiol** 1997 Feb;43(2):143-8

Evaluation of a simplified method for site-specific determination of mutans streptococci levels. Bratthall D, et al. **Swed Dent J** 1996;20(6):215-20

IMMUNOLOGY

Possible role for a polysaccharide antigen shared between Streptococcus pyogenes and S. mutans in the pathogenesis of poststreptococcal glomerulonephritis. Okada K, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):470-5

Streptococcus mutans major adhesion surface protein, P1 (I/II), does not contribute to attachment to valvular vegetations or to the development of endocarditis in a rat model. Ryd M, et al. **Arch Oral Biol** 1996 Oct; 41(10):999-1002

Antigenic characterization of fimbria preparations from Streptococcus mutans isolates from caries-free and caries-susceptible subjects. Perrone M, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):291-6

The N-terminal half part of the oral streptococcal antigen I/IIf contains two distinct binding domains. Sciotti MA, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):439-45

Antigenicity of a synthetic peptide from glucosyltransferases of Streptococcus mutans in humans. Chia JS, et al. **Infect Immun** 1997 Mar;65(3):1126-30

Identification of a frameshift mutation resulting in premature termination and loss of cell wall anchoring of the PAc antigen of Streptococcus mutans GS-5. Murakami Y, et al. **Infect Immun** 1997 Feb;65(2):794-7

Oral immunization with the saliva-binding region of Streptococcus mutans AgI/II genetically coupled to the cholera toxin B subunit elicits T-helper-cell responses in gut-associated lymphoid tissues. Toida N, et al. **Infect Immun** 1997 Mar;65(3):909-15

Generation of bovine immune colostrum against Streptococcus mutans and Streptococcus sobrinus and its effect on glucose uptake and extracellular polysaccharide formation by mutans streptococci. Loimaranta V, et al. **Vaccine** 1997 Aug;15(11):1261-8

ISOLATION & PURIFICATION

Caries prevalence and salivary and microbial conditions in 88-year-old Swedish dentate people. Lundgren M, et al. **Acta Odontol Scand** 1996 Jun;54(3):193-9

Mutans streptococci and incipient caries adjacent to glass ionomer cement or resin-based composite in orthodontics. Ortendahl T, et al. **Am J Orthod Dentofacial Orthop** 1997 Sep;112(3):271-4

Dental caries and caries-associated micro-organisms in the saliva and plaque of 3- and 4-year-old Afro-Caribbean and Caucasian children in south London. Zoitopoulos L, et al. **Arch Oral Biol** 1996 Nov;41(11):1011-8

Streptococcus mutans in children using nursing bottles. Kreulen CM, et al. **ASDC J Dent Child** 1997 Mar-Apr; 64(2):107-11

Antigenic characterization of fimbria preparations from Streptococcus mutans isolates from caries-free and caries-susceptible subjects. Perrone M, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):291-6

Dental caries in relation to diet, saliva and cariogenic microorganisms in Tanzanians of selected age groups. Mazengo MC, et al. **Community Dent Oral Epidemiol** 1996 Jun;24(3):169-74

Number of mutans streptococci or lactobacilli in a total dental plaque sample does not explain the variation in caries better than the numbers in stimulated whole saliva. Sullivan A, et al. **Community Dent Oral Epidemiol** 1996 Jun; 24(3):159-63

Salivary mutans streptococci and dental caries patterns in pre-school children. Thibodeau EA, et al. **Community Dent Oral Epidemiol** 1996 Jun;24(3):164-8

Salivary distribution of Streptococcus mutans in schoolchildren from Rome (Italy). Petti S. **Eur J Epidemiol** 1997 Jan;13(1):113-5

Plaque fluoride and mutans streptococci in plaque and saliva before and after discontinuation of water fluoridation. Seppä L, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):353-8

Restoration-related salivary Streptococcus mutans level: a dental caries risk factor? Petti S, et al. **J Dent** 1997 May-Jul; 25(3-4):257-62

Infective endocarditis--a photo essay. Varadarajan J, et al. **J Neuroophthalmol** 1996 Dec;16(4):291-4

Caries-related salivary microorganisms and salivary flow rate in bone marrow recipients. Dens F, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996

STREPTOCOCCUS MUTANS

Jan;81(1):38–43
Caries experience and mutans streptococci as indicators of caries incidence. O'Sullivan DM, et al. **Pediatr Dent** 1996 Sep–Oct;18(5):371–4

METABOLISM

Rapid procedure for acid adaptation of oral lactic–acid bacteria and further characterization of the response. Ma Y, et al. **Can J Microbiol** 1997 Feb;43(2):143–8
Effect of low levels of fluoride on proton excretion and intracellular pH in glycolysing streptococcal cells under strictly anaerobic conditions. Guha–Chowdhury N, et al. **Caries Res** 1997;31(5):373–8
The role of cation bridging in microbial fluoride binding. Rose RK, et al. **Caries Res** 1996;30(6):458–64
On the pH–lowering potential of lactobacilli and mutans streptococci from dental plaque related to the prevalence of caries. Borgström MK, et al. **Community Dent Oral Epidemiol** 1997 Apr;25(2):165–9
Inhibition of acid production in Streptococcus mutans R9 by formic acid. Assinder SJ, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):229–33
The regulation of Streptococcus mutans glucan–binding protein A expression. Banas JA, et al. **FEMS Microbiol Lett** 1997 Sep 15;154(2):289–92
Biological function of the dTDP–rhamnose synthesis pathway in Streptococcus mutans. Tsukioka Y, et al. **J Bacteriol** 1997 Feb;179(4):1126–34
Cariogenicity of Streptococcus mutans strains with defects in fructan metabolism assessed in a program–fed specific–pathogen–free rat model. Burne RA, et al. **J Dent Res** 1996 Aug;75(8):1572–7
Construction and oral immunogenicity of a Salmonella typhimurium strain expressing a streptococcal adhesin linked to the A2/B subunits of cholera toxin. Hajishengallis G, et al. **Vaccine** 1996 Nov;14(16):1545–8

PATHOGENICITY

Streptococcus mutans major adhesion surface protein, P1 (I/II), does not contribute to attachment to valvular vegetations or to the development of endocarditis in a rat model. Ryd M, et al. **Arch Oral Biol** 1996 Oct; 41(10):999–1002
Molecular and genetic analysis of multiple changes in the levels of production of virulence factors in a subcultured variant of Streptococcus mutans. Yamashita Y, et al. **FEMS Microbiol Lett** 1996 Oct 15;144(1):81–7
Cariogenicity of Streptococcus mutans strains with defects in fructan metabolism assessed in a program–fed specific–pathogen–free rat model. Burne RA, et al. **J Dent Res** 1996 Aug;75(8):1572–7
[Characterization of virulence factors of mutans streptococci and specific inhibition of these factors] Hamada S. **Nippon Saikingaku Zasshi** 1996 Oct;51(4):931–51 (106 ref.) **(Jpn)**

PHYSIOLOGY

Saliva–mediated binding in vitro and prevalence in vivo of Streptococcus mutans. Carlen A, et al. **Arch Oral Biol** 1996 Jan;41(1):35–9
Saliva mediated adherence, aggregation and prevalence in dental plaque of Streptococcus mutans, Streptococcus sanguis and Actinomyces spp, in young and elderly humans. Carlén A, et al. **Arch Oral Biol** 1996 Dec; 41(12):1133–40
The adherence of Streptococcus mutans and streptococcal antigen I/II to a high molecular weight human salivary glycoprotein. Tulloch B, et al. **Biochem Soc Trans** 1996 May;24(2):257S
An in vitro microbial model for studying secondary caries formation. Fontana M, et al. **Caries Res** 1996;30(2):112–8
Protection of bovine enamel and dentine by chlorhexidine and fluoride varnishes in a bacterial demineralization model. van Loveren C, et al. **Caries Res** 1996;30(1):45–51
Effects of antibodies against cell surface protein antigen PAc–glucosyltransferase fusion proteins on glucan synthesis and cell adhesion of Streptococcus mutans. Yu H, et al. **Infect Immun** 1997 Jun;65(6):2292–8
Incorporation of caseinoglycomacropeptide and caseinophosphopeptide into the salivary pellicle inhibits adherence of mutans streptococci. Schüpbach P, et al. **J Dent Res** 1996 Oct;75(10):1779–88
In vitro plaque formation on some dental filling materials. Benderli Y, et al. **J Oral Rehabil** 1997 Jan;24(1):80–3

ULTRASTRUCTURE

[The electron microscopic observation of the effect of monoclonal antibody on the form and structure of mutans streptococci OMZ176] Wen L, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1996 Jan;31(1):38–9 (Eng. Abstr.) **(Chi)**

STREPTOCOCCUS ORALIS

GENETICS

Relatedness among penicillin–binding protein 2b genes of Streptococcus mitis, Streptococcus oralis, and Streptococcus pneumoniae. Potgieter E, et al. **Microb Drug Resist** 1995 Spring;1(1):35–42

METABOLISM

Saliva protein binding to streptococcal layers placed at different oral sites in 48 persons. Rudney JD, et al. **J Dent Res** 1996 Oct;75(10):1789–97
Influence of ionic strength and substratum hydrophobicity on the co–adhesion of oral microbial pairs. Bos R, et al. **Microbiology** 1996 Sep;142 (Pt 9):2355–61

PHYSIOLOGY

Influence of temperature on the co–adhesion of oral microbial pairs in saliva. Bos R, et al. **Eur J Oral Sci** 1996 Aug;104(4 (Pt 1)):372–7
Prophyromonas gingivalis fimbriae mediate coaggregation with Streptococcus oralis through specific domains. Amano A, et al. **J Dent Res** 1997 Apr;76(4):852–7
Effect of dentin treatment on in vitro root tubule bacterial invasion. Perez F, et al. **Oral Surg Oral Med Oral Pathol Oral Radiol Endod** 1996 Oct;82(4):446–51

STREPTOCOCCUS PHAGES

ENZYMOLOGY

Molecular population genetic analysis of a Streptococcus pyogenes bacteriophage–encoded hyaluronidase gene: recombination contributes to allelic variation. Marciel AM, et al. **Microb Pathog** 1997 Apr;22(4):209–17

GENETICS

Molecular ecology of Streptococcus thermophilus bacteriophage infections in a cheese factory. Bruttin A, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3144–50
Bacteriophages of Streptococcus pneumoniae: a molecular approach. García P, et al. **Microb Drug Resist** 1997 Summer;3(2):165–76 (69 ref.)
The two–step lysis system of pneumococcal bacteriophage EJ–1 is functional in gram–negative bacteria: triggering of the major pneumococcal autolysin in Escherichia coli. Diaz E, et al. **Mol Microbiol** 1996 Feb;19(4):667–81
Bacteriophage T12 of Streptococcus pyogenes integrates into the gene encoding a serine tRNA. McShan WM, et al. **Mol Microbiol** 1997 Feb;23(4):719–28
Characterization of the lysogeny DNA module from the temperate Streptococcus thermophilus bacteriophage phi Sfi21. Bruttin A, et al. **Virology** 1997 Jun 23;233(1):136–48

ISOLATION & PURIFICATION

Two groups of bacteriophages infecting Streptococcus thermophilus can be distinguished on the basis of mode of packaging and genetic determinants for major structural proteins. Le Marrec C, et al. **Appl Environ Microbiol** 1997 Aug;63(8):3246–53

STREPTOCOCCUS PNEUMONIAE

see related
PNEUMOCOCCAL INFECTIONS

CDC panel develops action plan for drug–resistant streptococci [news] **Am J Health Syst Pharm** 1996 May 15;53(10):1113, 1116
New pneumococcal–vaccine recommendations include strategies for increasing vaccine use [news] **Am J Health Syst Pharm** 1997 Aug 1;54(15):1688
Prosthetic valve endocarditis due to Streptococcus pneumoniae [letter] Collazos J, et al. **Arch Intern Med** 1996 Oct 14;156(18):2141, 2146, 2148 (10 ref.)
Simultaneous immunisation with influenza vaccine and pneumococcal polysaccharide vaccine in patients with chronic respiratory disease. Fletcher TJ, et al. **BMJ** 1997 Jun 7;314(7095):1663–5
The challenge of penicillin–resistant Streptococcus pneumoniae meningitis: current antibiotic therapy in the 1990s. Bradley JS, et al. **Clin Infect Dis** 1997 Feb;24 Suppl 2:S213–21 (58 ref.)
Testicular abscess due to Streptococcus pneumoniae in an infant with human immunodeficiency virus infection. Dobroszycki J, et al. **Clin Infect Dis** 1997 Jan;24(1):84–5
Invasive pneumococcal disease: clinical features, serotypes, and antimicrobial resistance patterns in cases involving patients with and without human immunodeficiency virus infection. Frankel RE, et al. **Clin Infect Dis** 1996 Sep; 23(3):577–84
Monovalent latex agglutination reagents for the diagnosis of nonmeningitic pneumococcal infection. Harrison LH, et al. **Diagn Microbiol Infect Dis** 1996 Jan;24(1):1–6
Epidemiology of invasive Streptococcus pneumoniae infections in adults in Finland. Sankilampi U, et al. **Epidemiol Infect** 1997 Feb;118(1):7–15
Tympanic membrane changes in experimental purulent otitis media. von Unge M, et al. **Hear Res** 1997 Apr; 106(1–2):123–36
Pharmacodynamics and pharmacokinetics of A–80556 using microdialysis in a Streptococcus pneumoniae meningitis model. Destache CJ, et al. **J Antimicrob Chemother** 1996 Dec;38(6):977–85
Management of respiratory infections [letter; comment] Bright R. **J Indian Med Assoc** 1996 Aug;94(8):312. Comment on: J Indian Med Assoc 1996 Jan;94(1):21–3.
Reasons for delay in administration of antibiotics to patients with meningitis and meningococcaemia. Wilks D, et al. **J Infect** 1996 Jan;32(1):49–51
Genetics and molecular biology of beta–lactam–resistant pneumococci. Coffey TJ, et al. **Microb Drug Resist** 1995 Spring;1(1):29–34 (39 ref.)
Antibiotic–resistant pneumococci in pediatric disease. Klugman KP, et al. **Microb Drug Resist** 1995 Spring; 1(1):5–8 (31 ref.)
Interaction of the C–polysaccharide of Streptococcus pneumoniae with the receptor asialo–GM1. Sundberg–Kövamees M, et al. **Microb Pathog** 1996 Oct; 21(4):223–34
Colonization with penicillin–nonsusceptible Streptococcus pneumoniae in urban and rural child–care centers. Boken DJ, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):667–72
Fatal intrauterine infection associated with penicillin–resistant Streptococcus pneumoniae. Kremer JA, et al. **Pediatr Infect Dis J** 1996 May;15(5):467–8
Activation of soluble polysaccharides with 1–cyano–4–dimethylaminopyridinium tetrafluoroborate for use in protein–polysaccharide conjugate vaccines and immunological reagents. Lees A, et al. **Vaccine** 1996 Feb; 14(3):190–8
Penicillin–resistant Streptococcus pneumoniae in a Jamaican patient with homozygous sickle–cell disease. Wierenga KJ, et al. **West Indian Med J** 1996 Sep;45(3):95–6
[Pneumococcal parotitis in human immunodeficiency virus infection (letter)] Blanche P, et al. **Rev Med Interne** 1996; 17(12):1044 **(Fre)**
[Pneumococcal endocarditis of the tricuspid valve. A case report with review of the literature] Holm M, et al. **Tidsskr Nor Laegeforen** 1997 Feb 28;117(6):815–7 (8 ref.) (Eng. Abstr.) **(Nor)**

CHEMISTRY

The aqueous solution structure of a lipoteichoic acid from Streptococcus pneumoniae strain R6 containing 2,4–diamino–2,4,6–trideoxy–galactose: evidence for conformational mobility of the galactopyranose ring. Klein RA, et al. **Carbohydr Res** 1996 Feb 7;281(1):79–98
An alternative access to a trisaccharide repeating unit of the capsular polysaccharide of Streptococcus pneumoniae serotype 19A. Kaji E, et al. **Chem Pharm Bull (Tokyo)** 1996 Feb;44(2):437–40
Small–angle X–ray scattering analysis of pneumococcal lipoteichoic acid phase structure. Fischer W, et al. **Eur J Biochem** 1997 Mar 15;244(3):913–7
Immunologic priming of young children by pneumococcal glycoprotein conjugate, but not polysaccharide, vaccines. O'Brien KL, et al. **Pediatr Infect Dis J** 1996 May; 15(5):425–30

CLASSIFICATION

Serotyping of Streptococcus pneumoniae by agglutination assays: a cost–effective technique for developing countries. Lalitha MK, et al. **Bull World Health Organ** 1996; 74(4):387–90
Serogroup–specific epidemiology of Streptococcus pneumoniae: associations with age, sex, and geography in 7,000 episodes of invasive disease. Scott JA, et al. **Clin Infect Dis** 1996 Jun;22(6):973–81
Emergence of further serotypes of multiple drug–resistant Streptococcus pneumoniae in Queensland. Gratten M, et al. **Commun Dis Intell** 1997 May 15;21(10):133–6
Incidence of invasive pneumococcal disease and distribution of capsular types of pneumococci in Denmark, 1989–94. Nielsen SV, et al. **Epidemiol Infect** 1996 Dec;117(3):411–6
Genetic relationship of penicillin resistant Streptococcus pneumoniae serotype 19B strains in Japan. Yoshida R, et al. **Epidemiol Infect** 1997 Apr;118(2):105–10
Prevalence of pneumococcal serotypes in invasive diseases in southern India. John TJ, et al. **Indian J Med Res** 1996 Sep;104:205–7
Intracellular and extracellular killing of a penicillin–resistant, serotype–9 strain of Streptococcus pneumoniae by polymorphonuclear leucocytes in the presence of sub–inhibitory concentrations of clavulanic acid [letter] Gómez–Lus ML, et al. **J Antimicrob Chemother** 1997 Jul; 40(1):142–4
Dot blot assay for the serotyping of pneumococci. Fenoll A, et al. **J Clin Microbiol** 1997 Mar;35(3):764–6
Clonal distribution of penicillin–resistant Streptococcus pneumoniae 23F in France. Ferroni A, et al. **J Clin Microbiol** 1996 Nov;34(11):2707–12
Serotypes of Streptococcus pneumoniae causing invasive childhood infections in Bangladesh, 1992 to 1995. Saha SK, et al. **J Clin Microbiol** 1997 Mar;35(3):785–7
Serotype–related differences in inflammatory response to Streptococcus pneumoniae in experimental meningitis. Engelhard D, et al. **J Infect Dis** 1997 Apr;175(4):979–82
Should pneumococcal infections continue to be classified as a single disease? Hedlund J. **Lancet** 1997 Feb 8; 349(9049):371–2
Prevalence of serotypes and antimicrobial resistance of streptococcus pneumoniae strains isolated from Brazilian children with invasive infections. Pneumococcal Study Group in Brazil for the SIREVA Project. Regional System for Vaccines in Latin America. Brandileone MC, et al. **Microb Drug Resist** 1997 Summer;3(2):141–6
Distribution of capsular types and antimicrobial susceptibility of invasive isolates of Streptococcus pneumoniae in

Colombian children. Pneumococcal Study Group in Colombia. Castañeda E, et al. **Microb Drug Resist** 1997 Summer;3(2):147–52

Pan American Health Organization epidemiological surveillance network for Streptococcus pneumoniae. di Fabio JL, et al. **Microb Drug Resist** 1997 Summer; 3(2):131–3 (4 ref.)

Distribution of capsular types and penicillin–resistance of strains of Streptococcus pneumoniae causing systemic infections in Argentinian children under 5 years of age. Streptococcus pneumoniae Working Group. Rossi A, et al. **Microb Drug Resist** 1997 Summer;3(2):135–40

Serotype distribution and antibiotic susceptibility of Streptococcus pneumoniae isolates causing systemic infections among children in Germany, 1992 to 1996. Reinert RR, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):244–5

Vaccination against colonizing bacteria with multiple serotypes. Lipsitch M. **Proc Natl Acad Sci U S A** 1997 Jun 10;94(12):6571–6

[Purulent meningitis in an adult patient caused by multi–drug resistant Streptococcus pneumoniae 19A] Vukmirovits G, et al. **Orv Hetil** 1996 Jul 21;137(29):1587–90 (28 ref.) (Eng. Abstr.) **(Hun)**

DRUG EFFECTS

In vitro susceptibilities of 176 clinical isolates of Streptococcus pneumoniae to 11 beta–lactams, erythromycin, and tetracycline. Vanhoof R, et al. **Acta Clin Belg** 1996;51(6):377–85

Impredictable susceptibility for cephalosporins in penicillin resistant Streptococcus pneumoniae [letter] Verhaegen J, et al. **Acta Clin Belg** 1997;52(2):116–7

Antibiotic–resistance in Streptococcus pneumoniae. Krisher K. **Adv Exp Med Biol** 1995;390:123–40 (102 ref.)

Measurement of antimicrobial susceptibility among invasive isolates of Streptococcus pneumoniae: comparison of the Etest with the standard agar dilution method. Fitzgerald MA, et al. **Alaska Med** 1997 Jan–Mar;39(1):3–7

Resistant pneumococci: protecting patients through judicious use of antibiotics [see comments] Dowell SF, et al. **Am Fam Physician** 1997 Apr;55(5):1647–54, 1657–8 (33 ref.) . Comment in: Am Fam Physician 1997 Apr;55(5):1535–6.

CDC study documents growing problem of pneumococcal resistance [news] **Am J Health Syst Pharm** 1997 Apr 1; 54(7):744, 747

Treatment recommendations for invasive pneumococcal infections updated; resistance is behind change [news] **Am J Health Syst Pharm** 1997 Apr 1;54(7):747–8

ASHP therapeutic position statement on strategies for identifying and preventing pneumococcal resistance. **Am J Health Syst Pharm** 1997 Mar 1;54(5):575–8

Controlling pneumococcal resistance to penicillin [editorial] Bosso JA. **Am J Health Syst Pharm** 1997 Mar 1;54(5):527

Pharmacodynamic effects of amoxicillin versus cefotaxime against penicillin–susceptible and penicillin–resistant pneumococcal strains: a phase I study. Aguilar L, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1389–91

Efficacy of clarithromycin treatment of acute otitis media caused by infection with penicillin–susceptible, –intermediate, and –resistant Streptococcus pneumoniae in the chinchilla. Alper CM, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1889–92

Antipneumococcal activities of cefpirome and cefotaxime, alone and in combination with vancomycin and teicoplanin, determined by checkerboard and time–kill methods. Bajaksouzian S, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):1973–6

Activities against Streptococcus pneumoniae of amoxicillin and cefotaxime at physiological concentrations: in vitro pharmacodynamic simulation. Balcabao IP, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2904–6

Apparent involvement of a multidrug transporter in the fluoroquinolone resistance of Streptococcus pneumoniae. Baranova NN, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1396–8

In vitro activities of five fluoroquinolone compounds against strains of Streptococcus pneumoniae with resistance to other antimicrobial agents. Barry AL, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2431–3

Efficacy of single–dose ceftriaxone in experimental otitis media induced by penicillin– and cephalosporin–resistant Streptococcus pneumoniae. Barry B, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):1977–82

In vitro activity of BAY 12–8039, a novel 8–methoxyquinolone, compared to activities of six fluoroquinolones against Streptococcus pneumoniae, Haemophilus influenzae, and Moraxella catarrhalis. Brueggemann AB, et al. **Antimicrob Agents Chemother** 1997 Jul;41(7):1594–7

Bactericidal activities of cefprozil, penicillin, cefaclor, cefixime, and loracarbef against penicillin–susceptible and –resistant Streptococcus pneumoniae in an in vitro pharmacodynamic infection model. Cappelletty DM, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1148–52

In vivo activity and pharmacodynamics of amoxicillin in combination with fosfomycin in fibrin clots infected with highly penicillin–resistant Streptococcus pneumoniae. Chavanet P, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2062–66

Synergy between amoxicillin and gentamicin in combination against a highly penicillin–resistant and –tolerant strain of Streptococcus pneumoniae in a mouse pneumonia model. Darras–Joly C, et al. **Antimicrob Agents Chemother** 1996 Sep;40(9):2147–51

Antimicrobial resistance of Streptococcus pneumoniae recovered from outpatients in the United States during the winter months of 1994 to 1995: results of a 30–center national surveillance study. Doern GV, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1208–13

Comparative activities of clarithromycin, erythromycin, and azithromycin against penicillin–susceptible and penicillin–resistant pneumococci. Ednie LM, et al. **Antimicrob Agents Chemother** 1996 Aug;40(8):1950–2

Susceptibilities of 228 penicillin– and erythromycin–susceptible and –resistant pneumococci to RU 64004, a new ketolide, compared with susceptibilities to 16 other agents. Ednie LM, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1033–6

Comparative activities of LY 333328, a new glycopeptide, against penicillin–susceptible and –resistant pneumococci. Fasola E, et al. **Antimicrob Agents Chemother** 1996 Nov; 40(11):2661–3

Variation in erythromycin and clindamycin susceptibilities of Streptococcus pneumoniae by four test methods. Fasola EL, et al. **Antimicrob Agents Chemother** 1997 Jan; 41(1):129–34

Comparative study of bactericidal activities, postantibiotic effects, and effects of bacterial virulence of penicillin G and six macrolides against Streptococcus pneumoniae. Fuursted K, et al. **Antimicrob Agents Chemother** 1997 Apr; 41(4):781–4

Activity of once–daily cefpodoxime regimens against Haemophilus influenzae and Streptococcus pneumoniae with an in vitro pharmacodynamic chamber model. Garrison MW, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1545–7

Treatment of experimental pneumonia due to penicillin–resistant Streptococcus pneumoniae in immunocompetent rats. Gavaldà J, et al. **Antimicrob Agents Chemother** 1997 Apr;41(4):795–801

Comparison of Etest to broth microdilution method for testing Streptococcus pneumoniae susceptibility to levofloxacin and three macrolides. Gerardo SH, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2413–5

Activity of the new fluoroquinolone trovafloxacin (CP–99,219) against DNA gyrase and topoisomerase IV mutants of Streptococcus pneumoniae selected in vitro. Gootz TD, et al. **Antimicrob Agents Chemother** 1996 Dec; 40(12):2691–7

Bactericidal activity of low–dose clindamycin administered at 8– and 12–hour intervals against Staphylococcus aureus, Streptococcus pneumoniae, and Bacteroides fragilis. Klepser ME, et al. **Antimicrob Agents Chemother** 1997 Mar; 41(3):630–5

In vitro susceptibility of penicillin–resistant Streptococcus pneumoniae to levofloxacin, selection of resistant mutants, and time–kill synergy studies of levofloxacin combined with vancomycin, teicoplanin, fusidic acid, and rifampin. Klugman KP, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2802–4

A mutation in the D,D–carboxypeptidase penicillin–binding protein 3 of Streptococcus pneumoniae contributes to cefotaxime resistance of the laboratory mutant C604. Krauss J, et al. **Antimicrob Agents Chemother** 1997 May; 41(5):936–42

Comparison of the postantibiotic and postantibiotic sub–MIC effects of levofloxacin and ciprofloxacin on Staphylococcus aureus and Streptococcus pneumoniae. Licata L, et al. **Antimicrob Agents Chemother** 1997 May;41(5):950–5

Involvement of topoisomerase IV and DNA gyrase as ciprofloxacin targets in Streptococcus pneumoniae. Pan XS, et al. **Antimicrob Agents Chemother** 1996 Oct; 40(10):2321–6

MIC and time–kill study of antipneumococcal activities of RPR 106972 (a new oral streptogramin), RP 59500 (quinupristin–dalfopristin), pyostacine (RP 7293), penicillin G, cefotaxime, erythromycin, and clarithromycin against 10 penicillin–susceptible and –resistant pneumococci. Pankuch GA, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2071–4

Antipneumococcal activities of RP 59500 (quinupristin–dalfopristin), penicillin G, erythromycin, and sparfloxacin determined by MIC and rapid time–kill methodologies. Pankuch GA, et al. **Antimicrob Agents Chemother** 1996 Jul;40(7):1653–6

Clindamycin therapy of experimental meningitis caused by penicillin– and cephalosporin–resistant Streptococcus pneumoniae. París MM, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):122–6

Comparative serum bactericidal activities of ceftizoxime and cefotaxime against intermediately penicillin–resistant Streptococcus pneumoniae. Patel KB, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2805–8

Development of experimental pneumonia by infection with penicillin–insensitive Streptococcus pneumoniae in guinea pigs and their treatment with amoxicillin, cefotaxime, and meropenem. Ponte C, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2698–702

Abnormal physiological properties and altered cell wall composition in Streptococcus pneumoniae grown in the presence of clavulanic acid. Severin A, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):504–10

In vitro selection of one–step mutants of Streptococcus pneumoniae resistant to different oral beta–lactam antibiotics is associated with alterations of PBP2x. Sifaoui F, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):152–6

Canadian national survey of prevalence of antimicrobial resistance among clinical isolates of Streptococcus pneumoniae. Canadian Bacterial Surveillance Network. Simor AE, et al. **Antimicrob Agents Chemother** 1996 Sep; 40(9):2190–3

Activities of RPR 106972 (a new oral streptogramin), cefditoren (a new oral cephalosporin), two new oxazolidinones (U–100592 and U–100766), and other oral and parenteral agents against 203 penicillin–susceptible and –resistant pneumococci. Spangler SK, et al. **Antimicrob Agents Chemother** 1996 Feb;40(2):481–4

MIC and time–kill studies of antipneumococcal activity of GV 118819X (sanfetrinem) compared with those of other agents. Spangler SK, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):148–55

Streptococcus pneumoniae and Streptococcus pyogenes resistant to macrolides but sensitive to clindamycin: a common resistance pattern mediated by an efflux system. Sutcliffe J, et al. **Antimicrob Agents Chemother** 1996 Aug; 40(8):1817–24

Contribution of mutations in gyrA and parC genes to fluoroquinolone resistance of mutants of Streptococcus pneumoniae obtained in vivo and in vitro. Tankovic J, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2505–10

Noncompromised penicillin–resistant pneumococcal pneumonia CBA/J mouse model and comparative efficacies of antibiotics in this model. Tateda K, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1520–5

Trovafloxacin, a new fluoroquinolone with potent activity against Streptococcus pneumoniae. Thomson KS, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):478–80

Pharmacokinetics of sparfloxacin and serum bactericidal activity against pneumococci. Trautmann M, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):776–9

Lack of correlation between in vitro and in vivo studies of combinations of rifampin plus vancomycin or beta–lactam antibiotics against Streptococcus pneumoniae [letter; comment] Tuban F, et al. **Antimicrob Agents Chemother** 1996 Jun;40(6):1573–4. Comment on: Antimicrob Agents Chemother 1995 Dec;39(12):2798–800.

MIC and time–kill study of activities of DU–6859a, ciprofloxacin, levofloxacin, sparfloxacin, cefotaxime, imipenem, and vancomycin against nine penicillin–susceptible and –resistant pneumococci. Visalli MA, et al. **Antimicrob Agents Chemother** 1996 Feb; 40(2):362–6

In vitro activity of the tricyclic beta–lactam GV104326. Wise R, et al. **Antimicrob Agents Chemother** 1996 May; 40(5):1248–53

Detection of penicillin resistance in Streptococcus pneumoniae by diffusion tests. Poulsen RL, et al. **APMIS** 1996 Jul–Aug;104(7–8):549–56

Streptococcus pneumoniae carriage and penicillin/ceftriaxone resistance in hospitalised children in Darwin. Skull SA, et al. **Aust N Z J Med** 1996 Jun; 26(3):391–5

Streptococcus pneumoniae with reduced susceptibility to penicillin G––British Columbia. Daly P, et al. **Can Commun Dis Rep** 1996 Oct 1;22(19):163–4 **(Eng, Fre)**

Penicillin resistance among invasive pneumococcal isolates at 10 children's hospitals, 1991–1994. The LCDC/CPS Impact Group. The Immunization Monitoring Program, Active. Scheifele D, et al. **Can Commun Dis Rep** 1996 Oct 1;22(19):157–9, 162–3 **(Eng, Fre)**

Increase in high resistance to penicillin of clinical isolates of Streptococcus pneumoniae in Cádiz, Spain. García–Martos P, et al. **Chemotherapy** 1997 May–Jun; 43(3):179–81

Antibacterial activity of TOC–50, a new parenteral cephalosporin against penicillin–susceptible and penicillin–resistant Streptococcus pneumoniae. Nomura S, et al. **Chemotherapy** 1997 Jan–Feb;43(1):1–5

Antibiotic susceptibility of clinical isolates of Streptococcus pneumoniae. Traub WH, et al. **Chemotherapy** 1996 Jul–Aug;42(4):240–7

Trends of genetic relationship of serotype 23F penicillin–resistant Streptococcus pneumoniae in Japan. Yoshida R, et al. **Chemotherapy** 1997 Jul–Aug;43(4):232–8

The antibiotic selective process: concentration–specific amplification of low–level resistant populations. Baquero F, et al. **Ciba Found Symp** 1997;207:93–105; discussion 105–11 (27 ref.)

Carriage of antibiotic–resistant Streptococcus pneumoniae by children in eastern and central Europe––a multicenter study with use of standardized methods. Appelbaum PC, et al. **Clin Infect Dis** 1996 Oct;23(4):712–7

Epidemiological features of and risk factors for infection by Streptococcus pneumoniae strains with diminished susceptibility to penicillin: findings of a French survey. Bédos JP, et al. **Clin Infect Dis** 1996 Jan;22(1):63–72

Carriage of penicillin–resistant pneumococci in a military population in Washington, DC: risk factors and correlation with clinical isolates. Fairchok MP, et al. **Clin Infect Dis** 1996 Jun;22(6):966–72

Risk factors for isolation of Streptococcus pneumoniae with decreased susceptibility to penicillin G from patients infected with human immunodeficiency virus. Meynard JL, et al. **Clin Infect Dis** 1996 Mar;22(3):437–40

Resistance patterns of Streptococcus pneumoniae and

Haemophilus influenzae isolates recovered in Egypt from children with pneumonia. The Antimicrobial Resistance Surveillance Study Group. Ostroff SM, et al. **Clin Infect Dis** 1996 Nov;23(5):1069–74

Antimicrobial resistance and type distribution of Streptococcus pneumoniae isolates causing systemic infections in Germany, 1992–1994. Reinert RR, et al. **Clin Infect Dis** 1995 Dec;21(6):1398–401

Antibiotic resistance in Streptococcus pneumoniae. Tomasz A. **Clin Infect Dis** 1997 Jan;24 Suppl 1:S85–8 (22 ref.)

Infective endocarditis caused by Streptococcus pneumoniae with high-level resistance to penicillin and cephalosporin. Whitby S, et al. **Clin Infect Dis** 1996 Nov;23(5):1176–7

The emerging role of multi-drug-resistant Streptococcus pneumoniae--a cause for concern [editorial] Koay B, et al. **Clin Otolaryngol** 1996 Aug;21(4):289–91 (36 ref.)

Risk factors for penicillin-resistant systemic pneumococcal infections in children [see comments] Doone JL, et al. **Clin Pediatr (Phila)** 1997 Apr;36(4):187–91. Comment in: Clin Pediatr (Phila) 1997 Apr;36(4):207–8.

Streptococcus pneumoniae: impact of antibiotic resistance in pediatrics. Kaplan SL. **Curr Probl Pediatr** 1997 May-Jun; 27(5):187–95 (74 ref.)

Antimicrobial activity and spectrum of sparfloxacin tested against erythromycin-resistant Streptococcus pneumoniae isolates. Barrett MS, et al. **Diagn Microbiol Infect Dis** 1996 Feb;24(2):113–6

The comparative antimicrobial activity of levofloxacin tested against 350 clinical isolates of streptococci. Biedenbach DJ, et al. **Diagn Microbiol Infect Dis** 1996 May;25(1):47–51

In vitro activity of sanfetrinem (GV104326), a new trinem antimicrobial agent, versus Streptococcus pneumoniae, Haemophilus influenzae, and Moraxella catarrhalis. Doern GV, et al. **Diagn Microbiol Infect Dis** 1996 Sep;26(1):39–42

Tentative interpretive criteria for testing the susceptibility of Streptococcus pneumoniae to eight fluoroquinolones. Fuchs PC, et al. **Diagn Microbiol Infect Dis** 1996 Sep; 26(1):23–7

Reproducibility of broth microdilution and disk diffusion susceptibility tests of nine antimicrobial agents against Streptococcus pneumoniae ATCC 49619. Fuchs PC, et al. **Diagn Microbiol Infect Dis** 1997 May;28(1):27–9

Comparative activity of twelve beta-lactam drugs tested against penicillin-resistant Streptococcus pneumoniae from five medical centers: effects of serum protein and capsular material on potency and spectrum as measured by reference tests. Johnson DM, et al. **Diagn Microbiol Infect Dis** 1996 Jul;25(3):137–41

Clindamycin resistance among erythromycin-resistant Streptococcus pneumoniae. Jones RN, et al. **Diagn Microbiol Infect Dis** 1996 Aug;25(4):201–4

Levofloxacin in vitro activity against bacteremic isolates of Streptococcus pneumoniae. Franklin County Pneumonia Study Group. Plouffe JF. **Diagn Microbiol Infect Dis** 1996 May;25(1):43–5

Use of ceftizoxime screening for the detection of cephalosporin-resistant pneumococci. Schutze GE, et al. **Diagn Microbiol Infect Dis** 1997 Mar;27(3):99–101

Novel mechanism of macrolide resistance in Streptococcus pneumoniae. Shortridge VD, et al. **Diagn Microbiol Infect Dis** 1996 Oct;26(2):73–8

Activity of penicillin and three third-generation cephalosporins against US isolates of Streptococcus pneumoniae: a 1995 surveillance study. Thornsberry C, et al. **Diagn Microbiol Infect Dis** 1996 Jun;25(2):89–95

Susceptibility of twenty penicillin-susceptible and -resistant pneumococci to levofloxacin, ciprofloxacin, ofloxacin, erythromycin, azithromycin, and clarithromycin by MIC and time-kill. Visalli MA, et al. **Diagn Microbiol Infect Dis** 1997 Jul;28(3):131–7

Emerging resistance to antimicrobial agents in gram-positive bacteria. Pneumococci. Appelbaum PC. **Drugs** 1996;51 Suppl 1:1–5 (17 ref.)

Antimicrobial activity of quinupristin-dalfopristin [letter; comment] Bouanchaud DH. **Drugs** 1996 Nov;52(5):795. Comment on: Drugs 1996 Sep;52(3):406–15.

Survey of penicillin resistant pneumococci at Kenyatta National Hospital, Nairobi. Ndinya-Achola JO, et al. **East Afr Med J** 1997 Mar;74(3):151–3

Invasive penicillin-resistant pneumococcal infections: a prevalence and historical cohort study. Kronenberger CB, et al. **Emerg Infect Dis** 1996 Apr–Jun;2(2):121–4

PHLS surveillance of antibiotic resistance, England and Wales: emerging resistance in Streptococcus pneumoniae [letter] Speller DC, et al. **Emerg Infect Dis** 1996 Jan–Mar; 2(1):57–8

In vitro activity of ceftizoxime, ceftazidime, cefuroxime, ceftriaxone, cefotaxime, and penicillin against Streptococcus pneumoniae as determined by three quantitative methods. Barry AL, et al. **Eur J Clin Microbiol Infect Dis** 1996 Apr;15(4):344–6

Vertebral osteomyelitis and meningitis due to a penicillin-resistant pneumococcal strain [letter] Chemlal K, et al. **Eur J Clin Microbiol Infect Dis** 1996 Nov; 15(11):893–5

Assessment of the oxacillin disk screening test for determining penicillin resistance in Streptococcus pneumoniae. Doern GV, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):311–4

Antimicrobial susceptibility of Streptococcus pneumoniae isolated from pediatric carriers in Spain. García-de-Lomas J, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jan;16(1):11–3

Activity of trovafloxacin against blood isolates of Streptococcus pneumoniae in Sweden. Liljequist BO, et al. **Eur J Clin Microbiol Infect Dis** 1996 Aug;15(8):671–5

Antibiotic susceptibility of pneumococci isolated in Austria over a four-year period. Mittermayer H, et al. **Eur J Clin Microbiol Infect Dis** 1996 Oct;15(10):817–20

Inoculum effect and bactericidal activity of cefditoren and other antibiotics against Streptococcus pneumoniae, Haemophilus influenzae, and Neisseria meningitidis. Soriano F, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):761–3

Comparison of agar dilution, broth dilution, disk diffusion, and the E-test for susceptibility testing of penicillin-susceptible and penicillin-resistant Streptococcus pneumoniae. Thorvilson J, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):391–4

In vitro susceptibility of pneumococci to trovafloxacin, penicillin G, and other antimicrobial agents in the Czech Republic and Slovakia. Urbášková P, et al. **Eur J Clin Microbiol Infect Dis** 1996 Aug;15(8):686–8

Evaluation of penicillin susceptibility in clinical isolates of Streptococcus pneumoniae oxacillin resistant. Mosca A, et al. **Eur J Epidemiol** 1996 Dec;12(6):643–5

Pharmacokinetics and pharmacodynamics of two oral forms of cefuroxime axetil. Garraffo R, et al. **Fundam Clin Pharmacol** 1997;11(1):90–5

Bactericidal effect of sparfloxacin alone and in combination with amoxicillin against Streptococcus pneumoniae as determined by kill-kinetic studies. Barakett V, et al. **Infection** 1996 Jan–Feb;24(1):22–5

Susceptibility of Streptococcus pneumoniae strains isolated from cerebrospinal fluid in Ghana [letter; comment] Adjei O, et al. **J Antimicrob Chemother** 1996 Oct;38(4):746–7. Comment on: J Antimicrob Chemother 1995 Nov;36(5):833–7.

Trends in antibiotic resistance of respiratory pathogens: an analysis and commentary on a collaborative surveillance study. Baquero F. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:117–32

Killing kinetics of meropenem against penicillin-resistant pneumococci. Barakett V, et al. **J Antimicrob Chemother** 1996 Dec;38(6):1085–9

Cefuroxime disc susceptibility test criteria for Streptococcus pneumoniae [letter] Barry AL, et al. **J Antimicrob Chemother** 1996 Aug;38(2):317–8

Macrolide resistance among Streptococcus pneumoniae and Streptococcus pyogenes isolates from out-patients in the USA [letter] Barry AL, et al. **J Antimicrob Chemother** 1997 Jul;40(1):139–40

Are ciprofloxacin susceptibility tests relevant for Streptococcus pneumoniae? [letter] Barry AL, et al. **J Antimicrob Chemother** 1996 Jul;38(1):151–3

Comparative in-vitro activity of quinupristin/dalfopristin (RP 59500) tested against penicillin-and macrolide-resistant pneumococci by the Etest [letter] Biedenbach D, et al. **J Antimicrob Chemother** 1996 Sep; 38(3):553–5

Antimicrobial susceptibility of Haemophilus influenzae, Neisseria meningitidis and Streptococcus pneumoniae isolates causing meningitis in The Netherlands, 1993–1994. Enting RH, et al. **J Antimicrob Chemother** 1996 Nov; 38(5):777–86

In-vitro activity of cefditoren against clinical isolates of penicillin-susceptible and resistant strains of Streptococcus pneumoniae, Haemophilus influenzae and Neisseria meningitidis [letter] Fernández-Roblas R, et al. **J Antimicrob Chemother** 1996 May;37(5):1038–9

Pneumococcal susceptibility to meropenem [letter] Fuchs PC, et al. **J Antimicrob Chemother** 1996 May;37(5):1036–7

Susceptibility of multi-resistant Streptococcus pneumoniae to ciprofloxacin, ofloxacin and levofloxacin [letter] Fuchs PC, et al. **J Antimicrob Chemother** 1997 May;39(5):671–2

The bactericidal activity of levofloxacin compared with ofloxacin, D-ofloxacin, ciprofloxacin, sparfloxacin and cefotaxime against Streptococcus pneumoniae. George J, et al. **J Antimicrob Chemother** 1997 Jun;39(6):719–23

Antimicrobial resistance among lower respiratory tract isolates of Streptococcus pneumoniae: results of a 1992–93 western Europe and USA collaborative surveillance study. The Alexander Project Collaborative Group. Goldstein FW, et al. **J Antimicrob Chemother** 1996 Jul;38 Suppl A:71–84

Intracellular and extracellular killing of a penicillin-resistant, serotype-9 strain of Streptococcus pneumoniae by polymorphonuclear leucocytes in the presence of sub-inhibitory concentrations of clavulanic acid [letter] Gómez-Lus ML, et al. **J Antimicrob Chemother** 1997 Jul; 40(1):142–4

Effect of replacing cefotaxime with ceftizoxime in a hospital where penicillin-resistant pneumococcal disease is prevalent. Haas DW, et al. **J Antimicrob Chemother** 1996 Aug;38(2):293–9

Multicentre in-vitro evaluation of the susceptibility of Streptococcus pneumoniae, Haemophilus influenzae and Moraxella catarrhalis to ciprofloxacin, clarithromycin, co-amoxiclav and sparfloxacin. Hoogkamp-Korstanje JA, et al. **J Antimicrob Chemother** 1997 Mar;39(3):411–4

In-vitro activity of levofloxacin (l-ofloxacin), ofloxacin and ciprofloxacin against clinical isolates of Streptococcus pneumoniae obtained in England and Wales [letter; comment] Johnson AP, et al. **J Antimicrob Chemother** 1996 Nov;38(5):907–8. Comment on: J Antimicrob Chemother 1996 Feb;37(2):365–9.

In-vitro and in-vivo activity of trovafloxacin against Streptococcus pneumoniae. Klugman KP, et al. **J Antimicrob Chemother** 1997 Jun;39 Suppl B:51–5

Evolution of extended spectrum cephalosporin resistance in the pneumococcus [letter; comment] Koornhof HJ, et al. **J Antimicrob Chemother** 1997 Jun;39(6):837–8. Comment on: J Antimicrob Chemother 1995 Mar;35(3);443–4.

Distribution of Streptococcus pneumoniae resistant to penicillin in the USA and in-vitro susceptibility to selected oral antibiotics. Mason EO, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1043–8

Bactericidal activity of trovafloxacin (CP-99,219). Morrissey I. **J Antimicrob Chemother** 1996 Dec;38(6):1061–6

Trovafloxacin delays the antibiotic-induced inflammatory response in experimental pneumococcal meningitis. Nau R, et al. **J Antimicrob Chemother** 1997 Jun;39(6):781–8

Non-gyrA-mediated ciprofloxacin resistance in laboratory mutants of Streptococcus pneumoniae. Piddock LJ, et al. **J Antimicrob Chemother** 1997 May;39(5):609–15

Decreased susceptibility to imipenem among penicillin-resistant Streptococcus pneumoniae. Pikis A, et al. **J Antimicrob Chemother** 1997 Jul;40(1):105–8

In-vitro killing activity of combinations of beta-lactam agents with aminoglycosides against penicillin-resistant pneumococci. Schlegel L, et al. **J Antimicrob Chemother** 1997 Jan;39(1):95–8

Time-kill studies on susceptibility of nine penicillin-susceptible and -resistant pneumococci to cefditoren compared with nine other beta-lactams. Spangler SK, et al. **J Antimicrob Chemother** 1997 Feb; 39(2):141–8

Antimicrobial resistance of clinical isolates of Streptococcus pneumoniae in Lebanon. Uwaydah M, et al. **J Antimicrob Chemother** 1996 Aug;38(2):283–6

Establishment of a European network for the surveillance of Mycobacterium tuberculosis, MRSA and penicillin-resistant pneumococci [letter; comment] Van Embden JD, et al. **J Antimicrob Chemother** 1996 Nov; 38(5):905–7. Comment on: J Antimicrob Chemother 1996 Jan;37(1):5–6.

Exacerbation of COPD: amoxicillin + clavulanic acid in vitro activity vs S. pneumoniae, H. influenzae and M. catarrhalis. Beghi G, et al. **J Chemother** 1995 Nov;7 Suppl 4:61–2

Incidence of erythromycin resistance and penicillin resistance in clinical isolates of Streptococcus pneumoniae from a Spanish university hospital. Perez-Ramos S, et al. **J Chemother** 1995 Nov;7 Suppl 4:71–2

Antimicrobial susceptibility pattern of clinical isolates of pneumococci in an Indian hospital. Revathi-Bhanuprakash G, et al. **J Chemother** 1995 Nov;7 Suppl 4:78–80

Comparison of the serum-supplemented Todd-Hewitt and the new Haemophilus test media for broth microdilution susceptibility testing of Streptococcus pneumoniae. Roger M, et al. **J Chemother** 1996 Jun;8(3):178–87

Trends in the activity of macrolide and beta-lactam antibiotics and resistance development. Alexander Project Group. Schito GC, et al. **J Chemother** 1997 May;9 Suppl 3:18–28

Surrogate disks for predicting cefotaxime and ceftriaxone susceptibilities of Streptococcus pneumoniae. Barry AL, et al. **J Clin Microbiol** 1996 Oct;34(10):2609–12

Clonal distribution of penicillin-resistant Streptococcus pneumoniae 23F in France. Ferroni A, et al. **J Clin Microbiol** 1996 Nov;34(11):2707–12

Interpretive criteria and quality control parameters for testing of susceptibilities of Haemophilus influenzae and Streptococcus pneumoniae to trimethoprim and trimethoprim-sulfamethoxazole. The Antimicrobial Susceptibility Testing OC Group. Fuchs PC, et al. **J Clin Microbiol** 1997 Jan;35(1):125–31

Discrepancies between results by E-test and standard microbroth dilution testing of Streptococcus pneumoniae for susceptibility to vancomycin. Hashemi FB, et al. **J Clin Microbiol** 1996 Jun;34(6):1546–7

Development of interpretive criteria and quality control limits for macrolide and clindamycin susceptibility testing of Streptococcus pneumoniae. Jorgensen JH, et al. **J Clin Microbiol** 1996 Nov;34(11):2679–84

Clonal and temporal patterns of nasopharyngeal penicillin-susceptible and penicillin-resistant Streptococcus pneumoniae stains in children attending a day care center. Pons JL, et al. **J Clin Microbiol** 1996 Dec;34(12):3218–22

Treatment of penicillin-resistant pneumococcus with penicillin: a case report. Spencer J, et al. **J Fam Pract** 1997 May;44(5):499–503

Antibiotic resistance and serotypes of Streptococcus pneumoniae at Birmingham Public Health Laboratory, 1989–94. Boswell TC, et al. **J Infect** 1996 Jul;33(1):17–22

The continued emergence of drug-resistant Streptococcus pneumoniae in the United States: an update from the Centers for Disease Control and Prevention's Pneumococcal Sentinel Surveillance System. Butler JC, et al. **J Infect Dis** 1996 Nov;174(5):986–93

Penicillin-resistant Streptococcus pneumoniae in the Netherlands: results of a 1-year molecular epidemiologic survey. Hermans PW, et al. **J Infect Dis** 1997 Jun; 175(6):1413–22

Oligosaccharides interfere with the establishment and progression of experimental pneumococcal pneumonia. Idänpään-Heikkilä I, et al. **J Infect Dis** 1997 Sep;

176(3):704–12
DNA polymorphisms and variant penicillin-binding proteins as evidence that relatively penicillin-resistant pneumococci in western Canada are clonally related. Swiatlo E, et al. **J Infect Dis** 1996 Oct;174(4):884–8
In-vitro effects of penicillin and clindamycin on the expression of Streptococcus pneumoniae capsule. Brook I, et al. **J Med Microbiol** 1996 Dec;45(6):505–6
Establishment of a model of penicillin-resistant Streptococcus pneumoniae pneumonia in healthy CBA/J mice. Takashima K, et al. **J Med Microbiol** 1996 Nov; 45(5):319–22
Multidrug-resistant Pneumococcus causing vertebral osteomyelitis. Antony SJ. **J Natl Med Assoc** 1997 Sep; 89(9):634–5
Resistance to penicillin in Streptococcus pneumoniae [letter; comment] Wald ER. **J Pediatr** 1996 Jul;129(1):178. Comment on: J Pediatr 1995 Oct;127(4):533–7.
Influence of penicillin prophylaxis on antimicrobial resistance in nasopharyngeal S. pneumoniae among children with sickle cell anemia. The Ancillary Nasopharyngeal Culture Study of Prophylactic Penicillin Study II. Woods GM, et al. **J Pediatr Hematol Oncol** 1997 Jul–Aug;19(4):327–33
Correlation between in vitro and in vivo activity of amoxicillin against Streptococcus pneumoniae in a murine pneumonia model. Moine P, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):310–5
From the Centers for Disease Control and Prevention. Surveillance for penicillin-nonsusceptible Streptococcus pneumoniae—New York City, 1995. **JAMA** 1997 May 28; 277(20):1585–6
From the Centers for Disease Control and Prevention. Antibiotic resistance among nasopharyngeal isolates of Streptococcus pneumoniae and Haemophilus influenzae—Bangui, 1995. **JAMA** 1997 Feb 26;277(8):621
30 years of penicillin-resistant S pneumoniae: myth or reality? Goldstein FW, et al. **Lancet** 1997 Jul 26;350(9073):233–4
Streptococcus pneumoniae resistance to fluoroquinolones [letter] Wise R, et al. **Lancet** 1996 Dec 14;348(9042):1660
New prospects for antibacterial agents against multidrug-resistant pneumococci. Appelbaum PC. **Microb Drug Resist** 1995 Spring;1(1):43–8 (42 ref.)
Pneumococcal resistance to beta-lactam antibiotics: a global geographic overview. Baquero F. **Microb Drug Resist** 1995 Summer;1(2):115–20 (16 ref.)
In vitro development of resistance of Streptococcus pneumoniae to beta-lactam antibiotics. Carsenti-Etesse H, et al. **Microb Drug Resist** 1995 Spring;1(1):85–94
Multidrug-resistant Streptococcus pneumoniae. Catchpole C, et al. **Microb Drug Resist** 1996 Winter;2(4):431–2
Antimicrobial susceptibilities and capsular types of invasive Streptococcus pneumoniae isolated in children in Mexico City. Echániz-Aviles G, et al. **Microb Drug Resist** 1997 Summer;3(2):153–7
Capsular type distribution and susceptibility to antibiotics of Streptococcus pneumoniae clinical strains isolated from Uruguayan children with systemic infections. Pneumococcus Study Group. Hortal M, et al. **Microb Drug Resist** 1997 Summer;3(2):159–63
Effects of combination of benzylpenicillin and fosfomycin on penicillin-resistant Streptococcus pneumoniae. Kikuchi K, et al. **Microb Drug Resist** 1995 Summer;1(2):185–9
High incidence of multidrug-resistant Streptococcus pneumoniae in South Korea. Kim SN, et al. **Microb Drug Resist** 1996 Winter;2(4):401–6
Effect of antimicrobial use and other risk factors on antimicrobial resistance in pneumococci. Kristinsson KG. **Microb Drug Resist** 1997 Summer;3(2):117–23 (70 ref.)
In vitro susceptibility of Streptococcus pneumoniae strains to nine beta-lactam antibiotics and the killing kinetics of cephalosporins alone and in combination with vancomycin or gentamicin. Marton A, et al. **Microb Drug Resist** 1996 Fall;2(3):361–9
Epidemiology of resistant pneumococci in Hungary. Marton A. **Microb Drug Resist** 1995 Summer;1(2):127–30
Antibiotic susceptibility of Streptococcus pneumoniae isolates in Portugal. A multicenter study between 1989 and 1993 [published erratum appears in Microb Drug Resist 1995 Summer;1(2):191] Pato MV, et al. **Microb Drug Resist** 1995 Spring;1(1):59–69
Penicillin-binding proteins as resistance determinants in clinical isolates of Streptococcus pneumoniae. Reichmann P, et al. **Microb Drug Resist** 1996 Summer;2(2):177–81
Penicillin-resistant and multidrug-resistant Streptococcus pneumoniae in a pediatric hospital in Zagreb, Croatia. Tarasi A, et al. **Microb Drug Resist** 1995 Summer; 1(2):169–76
Resistance determinants for beta-lactam antibiotics in laboratory mutants of Streptococcus pneumoniae that are involved in genetic competence. Zähner D, et al. **Microb Drug Resist** 1996 Summer;2(2):187–91
Rapid increase of pneumococcal resistance to beta-lactam and other antibiotics in isolates from the respiratory tract (Nagasaki, Japan: 1975–1994). Rikitomi N, et al. **Microbiol Immunol** 1996;40(12):899–905
Multiply antibiotic-resistant Streptococcus pneumoniae recovered from Spanish hospitals (1988–1994): novel major clones of serotypes 14, 19F and 15F. Coffey TJ, et al. **Microbiology** 1996 Oct;142 (Pt 10):2747–57
Assessment of national reporting of drug-resistant Streptococcus pneumoniae—United States, 1995–1996. **MMWR Morb Mortal Wkly Rep** 1996 Nov 1;45(43):947–9
Antibiotic resistance among nasopharyngeal isolates of Streptococcus pneumoniae and Haemophilus influenzae—Bangui, Central African Republic, 1995 [published erratum appears in MMWR Morb Mortal Wkly Rep 1997 Apr 18;46(15):335] **MMWR Morb Mortal Wkly Rep** 1997 Jan 24;46(3):62–4
Surveillance for penicillin-nonsusceptible Streptococcus pneumoniae--New York City, 1995. **MMWR Morb Mortal Wkly Rep** 1997 Apr 11;46(14):297–9
Determination of penicillin susceptibility of Streptococcus pneumoniae using the polymerase chain reaction. Jalal H, et al. **Mol Pathol** 1997 Feb;50(1):45–50
Antimicrobial-drug resistance. Gold HS, et al. **N Engl J Med** 1996 Nov 7;335(19):1445–53 (104 ref.)
Drug-resistant Streptococcus pneumoniae in New Jersey. Paul SM, et al. **N J Med** 1997 Jan;94(1):29–33
Resistant Streptococcus pneumoniae in the community [letter] Riley D, et al. **N Z Med J** 1997 Mar 28; 110(1040):107–8
Killing kinetics of RP 59500 and pristinamycin against penicillin-resistant pneumococci. Barakett V, et al. **Pathol Biol (Paris)** 1997 May;45(5):438–40
Infections due to drug-resistant pneumococci, enterococci, and Mycobacterium tuberculosis. English BK, et al. **Pediatr Ann** 1996 Sep;25(9):502–10
Epidemiology and in vitro susceptibility of drug-resistant Streptococcus pneumoniae. Appelbaum PC. **Pediatr Infect Dis J** 1996 Oct;15(10):932–4 (65 ref.)
Streptococcus pneumoniae penicillin-nonsusceptible strains in invasive infections in São Paulo, Brazil. Berezin EN, et al. **Pediatr Infect Dis J** 1996 Nov;15(11):1051–3
Causative pathogens, antibiotic resistance and therapeutic considerations in acute otitis media. Block SL. **Pediatr Infect Dis J** 1997 Apr;16(4):449–56 (39 ref.)
Change in nasopharyngeal carriage of Streptococcus pneumoniae resulting from antibiotic therapy for acute otitis media in children. Cohen R, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):555–60
Pharmacokinetics and pharmacodynamics of antibiotics in otitis media. Craig WA, et al. **Pediatr Infect Dis J** 1996 Mar;15(3):255–9 (30 ref.)
Cefotaxime failure in pneumococcal meningitis caused by a susceptible isolate [letter] Flórez C, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):723–4
Prevalence of antimicrobial resistance among pneumococcal isolates from children with otitis media in southern Israel. Goldbart A, et al. **Pediatr Infect Dis J** 1997 May; 16(5):521–3
Increasing importance of antibiotic-resistant Streptococcus pneumoniae in acute otitis media. Jacobs MR. **Pediatr Infect Dis J** 1996 Oct;15(10):940–3
Susceptibility of pneumococcal carriage isolates to penicillin provides a conservative estimate of susceptibility of invasive pneumococci. Lehmann D, et al. **Pediatr Infect Dis J** 1997 Mar;16(3):297–305
Incidence of antibiotic-resistant Streptococcus pneumoniae and beta-lactamase-positive Haemophilus influenzae in clinical isolates from patients with otitis media. McLinn S, et al. **Pediatr Infect Dis J** 1996 Sep;15(9 Suppl):S3–9
Streptococcus pneumoniae, otitis media and antimicrobial breakpoints [letter; comment] Mortensen JE. **Pediatr Infect Dis J** 1997 May;16(5):537. Comment on: Pediatr Infect Dis J 1996 Nov;15(11):980–5.
Resistance of streptococcus pneumoniae to antimicrobials in São Paulo, Brazil: clinical features and serotypes. Levin AS, et al. **Rev Inst Med Trop Sao Paulo** 1996 May–Jun; 38(3):187–92
Antibiotic resistance study of invasive S.pneumoniae. Mihalcu F, et al. **Roum Arch Microbiol Immunol** 1996 Apr–Jun;55(2):133–43
Study of the sensitivity to antimicrobial drugs of some S. pneumoniae strains isolated from different pathological states. Ungureanu V, et al. **Roum Arch Microbiol Immunol** 1996 Jul–Sep;55(3):241–51
Penicillin-resistant Streptococcus pneumoniae. Hedge DD. **S D J Med** 1996 Nov;49(11):423–4
Antimicrobial resistance of invasive Streptococcus pneumoniae in Slovenia, 1993–1995. The Slovenian Meningitis Study Group. Cižman M, et al. **Scand J Infect Dis** 1997;29(3):251–4
Choice of an oral beta-lactam antibiotic for infections due to penicillin-resistant Streptococcus pneumoniae. Goldstein FW. **Scand J Infect Dis** 1997;29(3):255–7
Rapid emergence of penicillin-resistant pneumococci in Hong Kong. Lyon DJ, et al. **Scand J Infect Dis** 1996; 28(4):375–6
In vitro activities of oral antimicrobial agents against penicillin-resistant Streptococcus pneumoniae: implications for outpatient treatment. Waites K, et al. **South Med J** 1997 Jun;90(6):621–6
Antibiotic resistant Streptococcus pneumoniae. Minton EJ, et al. **Thorax** 1996 Aug;51 Suppl 2:S45–50 (57 ref.)
[Antimicrobial activities of cefozopran against Streptococcus pneumoniae from children] Deguchi K, et al. **Jpn J Antibiot** 1996 Jul;49(7):703–9 (Eng. Abstr.) **(Jpn)**
[Nationwide survey of susceptibilities of clinical isolates to antibacterial agents in 1992] Tabe Y, et al. **Jpn J Antibiot** 1997 Feb;50(2):178–86 (Eng. Abstr.) **(Jpn)**
[Prevalence of antimicrobial resistance among clinical isolates of Streptococcus pneumoniae in a children's hospital] Nakamura A. **Kansenshogaku Zasshi** 1997 May;71(5):421–9 (Eng. Abstr.) **(Jpn)**
[Clinical study on penicillin insusceptible/resistant Streptococcus pneumoniae in the elderly patients] Takahira K, et al. **Kansenshogaku Zasshi** 1997 Apr;71(4):313–7 (Eng. Abstr.) **(Jpn)**
[Streptococcus pneumoniae and beta-lactam antibiotic agents] Ranin L, et al. **Srp Arh Celok Lek** 1996 Jan–Feb; 124(1–2):18–23 (Eng. Abstr.) **(Scc)**
[Penicillin resistance in strains of Streptococcus pneumoniae] Tomanović B, et al. **Vojnosanit Pregl** 1996 Sep–Oct; 53(5):383–6 (Eng. Abstr.) **(Scr)**
[Penicillin resistant pneumococcus. A serious problem of public health (editorial)] del Castillo Martín F. **An Esp Pediatr** 1996 Sep;45(3):233–5 **(Spa)**
[Activity of erythromycin and clarithromicin against isolates of Streptococcus pneumoniae with decreased sensitivity to penicillin obtained from healty carriers. Spanish Collaborative Group] García de Lomas J, et al. **Enferm Infecc Microbiol Clin** 1996 Aug–Sep;14(7):422–5 (Eng. Abstr.) **(Spa)**
[Amoxicillin and Streptococcus pneumoniae] Soriano F, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):267 **(Spa)**
[Macrolide antibiotics: Streptococcus pneumoniae and Haemophilus influenzae] Soriano F, et al. **Enferm Infecc Microbiol Clin** 1996 Oct;14(8):503–4 (7 ref.) **(Spa)**
[In vitro bactericide activity of different antibiotic combinations to Streptococcus pneumoniae resistant to penicillin and cefotaxime] Tubau F, et al. **Enferm Infecc Microbiol Clin** 1996 Dec;14(10):590–5 (Eng. Abstr.) **(Spa)**
[Streptococcus pneumoniae. The appearance of antibiotic resistance] Arredondo-García JL. **Gac Med Mex** 1997 Mar–Apr;133(2):155–7 **(Spa)**
[Antimicrobial susceptibility of Streptococcus pneumoniae colonizing the nasopharynx of Colombian children with pneumonia] Leal AL, et al. **Rev Panam Salud Publica** 1997 Apr;1(4):266–72 **(Spa)**

ENZYMOLOGY

ParC subunit of DNA topoisomerase IV of Streptococcus pneumoniae is a primary target of fluoroquinolones and cooperates with DNA gyrase A subunit in forming resistance phenotype. Muñoz R, et al. **Antimicrob Agents Chemother** 1996 Oct;40(10):2252–7
Involvement of topoisomerase IV and DNA gyrase as ciprofloxacin targets in Streptococcus pneumoniae. Pan XS, et al. **Antimicrob Agents Chemother** 1996 Oct; 40(10):2321–6
Analysis of a Streptococcus pneumoniae gene encoding signal peptidase I and overproduction of the enzyme. Zhang YB, et al. **Gene** 1997 Jul 31;194(2):249–55
The substrate specificity of the enzyme endo-alpha-N-acetyl-D-galactosaminidase from Diplococcus pneumonia. Brooks MM, et al. **Glycoconj J** 1997 Feb;14(2):183–90
A novel resistance mechanism against beta-lactams in Streptococcus pneumoniae involves CpoA, a putative glycosyltransferase. Grebe T, et al. **J Bacteriol** 1997 May; 179(10):3342–9
Biochemical characterization of penicillin-resistant and -sensitive penicillin-binding protein 2x transpeptidase activities of Streptococcus pneumoniae and mechanistic implications in bacterial resistance to beta-lactam antibiotics. Zhao G, et al. **J Bacteriol** 1997 Aug; 179(15):4901–8
Peptide methionine sulfoxide reductase contributes to the maintenance of adhesins in three major pathogens. Wizemann TM, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7985–90

GENETICS

High-level fluoroquinolone resistance in Streptococcus pneumoniae requires mutations in parC and gyrA. Janoir C, et al. **Antimicrob Agents Chemother** 1996 Dec; 40(12):2760–4
A mutation in the D,D-carboxypeptidase penicillin-binding protein 3 of Streptococcus pneumoniae contributes to cefotaxime resistance of the laboratory mutant C604. Krauss J, et al. **Antimicrob Agents Chemother** 1997 May; 41(5):936–42
Targeting of DNA gyrase in Streptococcus pneumoniae by sparfloxacin: selective targeting of gyrase or topoisomerase IV by quinolones. Pan XS, et al. **Antimicrob Agents Chemother** 1997 Feb;41(2):471–4
Characterization of a mutation in the parE gene that confers fluoroquinolone resistance in Streptococcus pneumoniae. Perichon B, et al. **Antimicrob Agents Chemother** 1997 May; 41(5):1166–7
In vitro selection of one-step mutants of Streptococcus pneumoniae resistant to different oral beta-lactam antibiotics is associated with alterations of PBP2x. Sifaoui F, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):152–6
Contribution of mutations in gyrA and parC genes to fluoroquinolone resistance of mutants of Streptococcus pneumoniae obtained in vivo and in vitro. Tankovic J, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2505–10
Identification of the tetracycline resistance gene, tet(O), in Streptococcus pneumoniae. Widdowson CA, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2891–3

Directly repeated insertion of 9-nucleotide sequence detected in penicillin-binding protein 2B gene of penicillin-resistant Streptococcus pneumoniae. Yamane A, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1257-9

Eubacterial approach to the diagnosis of bacterial infection. Ley BE, et al. **Arch Dis Child** 1997 Aug;77(2):148-9

Use of polymerase chain reaction to identify pneumococcal infection associated with hemorrhage and shock in two previously healthy young children. Messmer TO, et al. **Clin Chem** 1997 Jun;43(6 Pt 1):930-5

Immunologic epitope, gene, and immunity involved in pneumococcal glycoconjugate. Lee CJ, et al. **Crit Rev Microbiol** 1997;23(2):121-42 (131 ref.)

Genetic relationship of penicillin resistant Streptococcus pneumoniae serotype 19B strains in Japan. Yoshida R, et al. **Epidemiol Infect** 1997 Apr;118(2):105-10

Molecular epidemiological characteristics of pneumococcal meningitis in children. Kornelisse RF, et al. **Eur J Clin Microbiol Infect Dis** 1996 Aug;15(8):635-8

Molecular biology of the capsular genes of Streptococcus pneumoniae. García E, et al. **FEMS Microbiol Lett** 1997 Apr 1;149(1):1-10 (39 ref.)

Oligonucleotides identify conserved and variable regions of pspA and pspA-like sequences of Streptococcus pneumoniae. Swiatlo E, et al. **Gene** 1997 Apr 1; 188(2):279-84

Differential subsequence conservation of interspersed repetitive Streptococcus pneumoniae BOX elements in diverse bacteria. Koeuth T, et al. **Genome Res** 1995 Nov; 5(4):408-18

Sequence heterogeneity of PsaA, a 37-kilodalton putative adhesin essential for virulence of Streptococcus pneumoniae. Berry AM, et al. **Infect Immun** 1996 Dec; 64(12):5255-62

Allelic variation in Streptococcus pneumoniae autolysin (N-acetyl muramoyl-L-alanine amidase). Gillespie SH, et al. **Infect Immun** 1997 Sep;65(9):3936-8

Characterization of the Streptococcus pneumoniae immunoglobulin A1 protease gene (iga) and its translation product. Poulsen K, et al. **Infect Immun** 1996 Oct; 64(10):3957-66

Limited diversity of Streptococcus pneumoniae psaA among pneumococcal vaccine serotypes. Sampson JS, et al. **Infect Immun** 1997 May;65(5):1967-71

Identification, cloning, and sequencing of the immunoglobulin A1 protease gene of Streptococcus pneumoniae. Wani JH, et al. **Infect Immun** 1996 Oct; 64(10):3967-74

A novel resistance mechanism against beta-lactams in Streptococcus pneumoniae involves CpoA, a putative glycosyltransferase. Grebe T, et al. **J Bacteriol** 1997 May; 179(10):3342-9

Molecular and genetic characterization of the capsule biosynthesis locus of Streptococcus pneumoniae type 19B. Morona JK, et al. **J Bacteriol** 1997 Aug;179(15):4953-8

Competence for genetic transformation in encapsulated strains of Streptococcus pneumoniae: two allelic variants of the peptide pheromone. Pozzi G, et al. **J Bacteriol** 1996 Oct;178(20):6087-90

Identification and characterization of IS1381, a new insertion sequence in Streptococcus pneumoniae. Sánchez-Beato AR, et al. **J Bacteriol** 1997 Apr;179(7):2459-63

The rnhB gene encoding RNase HII of Streptococcus pneumoniae and evidence of conserved motifs in eucaryotic genes. Zhang YB, et al. **J Bacteriol** 1997 Jun; 179(12):3828-36

Functional analysis of glycosyltransferases encoded by the capsular polysaccharide biosynthesis locus of Streptococcus pneumoniae serotype 14. Kolkman MA, et al. **J Biol Chem** 1997 Aug 1;272(31):19502-8

Molecular epidemiology of Streptococcus pneumoniae with decreased susceptibility to penicillin in a Paris children's hospital. Moissenet D, et al. **J Clin Microbiol** 1997 Jan; 35(1):298-301

Combinational detection of autolysin and penicillin-binding protein 2B genes of Streptococcus pneumoniae by PCR. Ubukata K, et al. **J Clin Microbiol** 1996 Mar;34(3):592-6

The mobilization protein, MobM, of the streptococcal plasmid pMV158 specifically cleaves supercoiled DNA at the plasmid oriT. Guzmán LM, et al. **J Mol Biol** 1997 Mar 7;266(4):688-702

Molecular bases of three characteristic phenotypes of pneumococcus: optochin-sensitivity, coumarin-sensitivity, and quinolone-resistance. de la Campa AG, et al. **Microb Drug Resist** 1997 Summer;3(2):177-93

A functional analysis of the Streptococcus pneumoniae genes involved in the synthesis of type 1 and type 3 capsular polysaccharides. García E, et al. **Microb Drug Resist** 1997 Spring;3(1):73-88 (112 ref.)

Structural organization of the Streptococcus pneumoniae chromosome and relatedness of penicillin-sensitive and -resistant strains in type 9V. Gasc AM, et al. **Microb Drug Resist** 1997 Spring;3(1):65-72

Molecular epidemiology of drug-resistant pneumococci: toward an international approach. Hermans PW, et al. **Microb Drug Resist** 1997 Fall;3(3):243-51

Penicillin-binding proteins 2x and 2b as primary PBP targets in Streptococcus pneumoniae. Krauss J, et al. **Microb Drug Resist** 1996 Summer;2(2):183-6

Electrotransformation of Streptococcus pneumoniae: evidence for restriction of the DNA on entry. LeFrançois J, et al. **Microb Drug Resist** 1997 Spring;3(1):101-4

Control of recombination rate during transformation of Streptococcus pneumoniae: an overview. Mortier-Barriere I, et al. **Microb Drug Resist** 1997 Fall;3(3):233-42 (53 ref.)

Characterization of the capsular polysaccharide biosynthesis locus of Streptococcus pneumoniae type 19F. Paton JC, et al. **Microb Drug Resist** 1997 Spring;3(1):89-99 (40 ref.)

Relatedness among penicillin-binding protein 2b genes of Streptococcus mitis, Streptococcus oralis, and Streptococcus pneumoniae. Potgieter E, et al. **Microb Drug Resist** 1995 Spring;1(1):35-42

Ubiquitous distribution of the competence related genes comA and comC among isolates of Streptococcus pneumoniae. Ramirez M, et al. **Microb Drug Resist** 1997 Spring;3(1):39-52

Molecular characterization of a mutation affecting the amount of Streptococcus pneumoniae penicillin-binding protein 3. Selakovitch-Chenu L, et al. **Microb Drug Resist** 1997 Fall;3(3):259-62

Spread of the serotype 23F multidrug-resistant Streptococcus pneumoniae clone to South Korea. Tarasi A, et al. **Microb Drug Resist** 1997 Spring;3(1):105-9

Resistance determinants for beta-lactam antibiotics in laboratory mutants of Streptococcus pneumoniae that are involved in genetic competence. Zähner D, et al. **Microb Drug Resist** 1996 Summer;2(2):187-91

Evidence for the simultaneous expression of two PspAs by a clone of capsular serotype 6B Streptococcus pneumoniae. Crain MJ, et al. **Microb Pathog** 1996 Oct;21(4):265-75

Sequence variation in the Streptococcus pneumoniae pneumolysin gene affecting haemolytic activity and electrophoretic mobility of the toxin. Lock RA, et al. **Microb Pathog** 1996 Aug;21(2):71-83

Multiply antibiotic-resistant Streptococcus pneumoniae recovered from Spanish hospitals (1988-1994): novel major clones of serotypes 14, 19F and 15F. Coffey TJ, et al. **Microbiology** 1996 Oct;142 (Pt 10):2747-57

Interruption of the Streptococcus gordonii M5 sspA/sspB intergenic region by an insertion sequence related to IS1167 of Streptococcus pneumoniae. Demuth DR, et al. **Microbiology** 1997 Jun;143 (Pt 6):2047-55

Electrotransformation of Streptococcus pneumoniae: evidence for restriction of DNA on entry. Lefrançois J, et al. **Microbiology** 1997 Feb;143 (Pt 2):523-6

Exclusion of long heterologous insertions and deletions from the pairing synapsis in pneumococcal transformation. Pasta F, et al. **Microbiology** 1996 Mar;142 (Pt 3):695-705

Competence pheromone, oligopeptide permease, and induction of competence in Streptococcus pneumoniae. Alloing G, et al. **Mol Microbiol** 1996 Aug;21(3):471-8

The com locus controls genetic transformation in Streptococcus pneumoniae. Cheng Q, et al. **Mol Microbiol** 1997 Feb;23(4):683-92

Replication control of plasmid pLS1: the antisense RNA II and the compact rnaII region are involved in translational regulation of the initiator RepB synthesis. del Solar G, et al. **Mol Microbiol** 1997 Jan;23(1):95-108

Characterization of the locus encoding the Streptococcus pneumoniae type 19F capsular polysaccharide biosynthetic pathway. Morona JK, et al. **Mol Microbiol** 1997 Feb; 23(4):751-63

Regulation of competence for genetic transformation in Streptococcus pneumoniae by an auto-induced peptide pheromone and a two-component regulatory system. Pestova EV, et al. **Mol Microbiol** 1996 Aug;21(4):853-62

[Penicillin-resistant mechanisms of Streptococcus pneumoniae] Ubukata K, et al. **Nippon Rinsho** 1997 May; 55(5):1213-8 (6 ref.) **(Jpn)**

GROWTH & DEVELOPMENT

Absence of spontaneous autolysis of Streptococcus pneumoniae in aerobic fan culture bottles in a commercial blood culture system [letter] Casetta A, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jul;15(7):616-7

Reduction of nasopharyngeal carriage of pneumococci during the second year of life by a heptavalent conjugate pneumococcal vaccine. Dagan R, et al. **J Infect Dis** 1996 Dec;174(6):1271-8

Nasopharyngeal colonization in southern Israel with antibiotic-resistant pneumococci during the first 2 years of life: relation to serotypes likely to be included in pneumococcal conjugate vaccines. Dagan R, et al. **J Infect Dis** 1996 Dec;174(6):1352-5

IMMUNOLOGY

Belgian consensus on pneumococcal vaccine.Working Party on Pneumococcal Vaccine. **Acta Clin Belg** 1996;51(5):350-6 (18 ref.)

Antibodies to pneumolysin and pneumococcal capsular polysaccharides in middle ear fluid of children with acute otitis media. Virolainen A, et al. **Acta Otolaryngol (Stockh)** 1995 Nov;115(6):796-803

Ethanol ingestion impairs neutrophil bactericidal mechanisms against Streptococcus pneumoniae. Jareo PW, et al. **Alcohol Clin Exp Res** 1996 Dec;20(9):1646-52

Low cord blood pneumococcal immunoglobulin G (IgG) antibodies predict early onset acute otitis media in infancy. Salazar JC, et al. **Am J Epidemiol** 1997 Jun 1; 145(11):1048-56

Side effects associated with pneumococcal vaccination. Nichol KL, et al. **Am J Infect Control** 1997 Jun;25(3):223-8

Systemic and mucosal protective immunity to pneumococcal surface protein A. Briles DE, et al. **Ann N Y Acad Sci** 1996 Oct 25;797:118-26 (42 ref.)

Pneumococcal vaccine. Torzillo PJ. **Aust Fam Physician** 1997 Aug;26(8):937-41

Pneumococcal vaccine campaign based in general practice. McDonald P, et al. **BMJ** 1997 Apr 12;314(7087):1094-8

A comparison of early and late vaccination with Haemophilus influenzae type b conjugate and pneumococcal polysaccharide vaccines after allogeneic BMT. Parkkali T, et al. **Bone Marrow Transplant** 1996 Nov; 18(5):961-7

Characterization of specific immunoglobulin G (IgG) and its subclasses (IgG1 and IgG2) against the 23-valent pneumococcal vaccine in a healthy adult population: proposal for response criteria. Rodrigo MJ, et al. **Clin Diagn Lab Immunol** 1997 Mar;4(2):168-72

Purification and seroreactivity of pneumococcal surface adhesin A (PsaA). Tharpe JA, et al. **Clin Diagn Lab Immunol** 1996 Mar;3(2):227-9

Antipolysaccharide antibodies in 450 children with otitis media. Misbah SA, et al. **Clin Exp Immunol** 1997 Jul; 109(1):67-72

Emergence of antibody to capsular polysaccharides of Streptococcus pneumoniae during outbreaks of pneumonia: association with nasopharyngeal colonization. Musher DM, et al. **Clin Infect Dis** 1997 Mar;24(3):441-6

The lack of association between aging and postvaccination levels of IgG antibody to capsular polysaccharides of Streptococcus pneumoniae. Musher DM, et al. **Clin Infect Dis** 1996 Jan;22(1):165-7

Immunologic epitope, gene, and immunity involved in pneumococcal glycoconjugate. Lee CJ, et al. **Crit Rev Microbiol** 1997;23(2):121-42 (131 ref.)

New vaccines for the prevention of pneumococcal infections. Käyhty H, et al. **Emerg Infect Dis** 1996 Oct-Dec; 2(4):289-98 (74 ref.)

Simultaneous influenza and pneumococcal vaccination in elderly individuals. Grilli G, et al. **Eur J Epidemiol** 1997 Apr;13(3):287-91

Incorporation of choline into Streptococcus pneumoniae cell wall antigens: evidence for choline kinase activity. Whiting GC, et al. **FEMS Microbiol Lett** 1996 May 1;138(2-3):141-5

Defective antibody-mediated opsonisation of S. pneumoniae in high risk patients detected by flow cytometry. Obaro SK, et al. **Immunol Lett** 1996 Jan;49(1-2):83-9

Cellular basis of decreased immune responses to pneumococcal vaccines in aged mice. Garg M, et al. **Infect Immun** 1996 Nov;64(11):4456-62

Prolonged and preferential production of polymeric immunoglobulin A in response to Streptococcus pneumoniae capsular polysaccharides. Johnson S, et al. **Infect Immun** 1996 Oct;64(10):4339-44

Role of complement in C-reactive-protein-mediated protection of mice from Streptococcus pneumoniae. Szalai AJ, et al. **Infect Immun** 1996 Nov;64(11):4850-3

A resolved pneumococcal infection protects against nontypeable Haemophilus influenzae: an evaluation of different routes of whole cell immunization in protection against experimental acute otitis media. Melhus A, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):119-31

Pneumococcal antibody assay standardization [letter; comment] Hamilton RG. **J Allergy Clin Immunol** 1997 Feb; 99(2):270. Comment on: J Allergy Clin Immunol 1996 Jul;98(1):205-15.

Factors associated with influenza and pneumococcal vaccination behavior among high-risk adults. Nichol KL, et al. **J Gen Intern Med** 1996 Nov;11(11):673-7

The combined value of chemoprophylaxis and pneumococcal vaccine in the prevention of recurrent pneumococcal meningitis. Hristea A, et al. **J Infect** 1997 May;34(3):265-7

Infant immunization with pneumococcal CRM197 vaccines: effect of saccharide size on immunogenicity and interactions with simultaneously administered vaccines. Daum RS, et al. **J Infect Dis** 1997 Aug;176(2):445-55

Responsiveness of human immunodeficiency virus type 1-infected Kenyan women with or without prior pneumococcal disease to pneumococcal vaccine. Janoff EN, et al. **J Infect Dis** 1997 Apr;175(4):975-8

Identification of cross-reactive antibodies with low opsonophagocytic activity for Streptococcus pneumoniae. Nahm MH, et al. **J Infect Dis** 1997 Sep;176(3):698-703

A new multiantigen immunoassay for the quantification of IgG antibodies to capsular polysaccharides of Streptococcus pneumoniae. Roth F, et al. **J Infect Dis** 1997 Aug;176(2):526-9

Intranasal immunization of mice with PspA (pneumococcal surface protein A) can prevent intranasal carriage, pulmonary infection, and sepsis with Streptococcus pneumoniae. Wu HY, et al. **J Infect Dis** 1997 Apr; 175(4):839-46

Epidemiology of invasive pneumococcal disease in southern California: implications for the design and conduct of a pneumococcal conjugate vaccine efficacy trial. Zangwill KM, et al. **J Infect Dis** 1996 Oct;174(4):752-9

Anti-Staphylococcus aureus, anti-Streptococcus pneumoniae and anti-Moraxella catarrhalis specific IgE in asthmatic children. Brarda OA, et al. **J Investig Allergol Clin Immunol** 1996 Jul-Aug;6(4):266-9

Modifications of the follicle-associated epithelium by short-term exposure to a non-intestinal bacterium. Borghesi C, et al. **J Pathol** 1996 Nov;180(3):326-32

Serotype-specific immunoglobulin G antibody responses to

pneumococcal polysaccharide vaccine in children with sickle cell anemia: effects of continued penicillin prophylaxis [see comments] Bjornson AB, et al. **J Pediatr** 1996 Dec;129(6):828–35. Comment in: J Pediatr 1996 Dec;129(6):788–9.

Autosplenectomy in systemic lupus erythematosus. Uthman I, et al. **J Rheumatol** 1996 Oct;23(10):1806–10 (18 ref.)

From the Centers for Disease Control and Prevention. Pneumococcal and influenza vaccination levels among adults aged > or = 65 years—United States, 1993. **JAMA** 1996 Nov 20;276(19):1544–5

Molecular analysis of putative pneumococccal virulence proteins. Paton JC, et al. **Microb Drug Resist** 1997 Spring; 3(1):1–10

Protection of mice against fatal pneumococcal challenge by immunization with pneumococcal surface adhesin A (PsaA). Talkington DF, et al. **Microb Pathog** 1996 Jul; 21(1):17–22

Production, binding characteristics and protective immunity of monoclonal antibody to pneumococcal type-9V conjugate. Lee CJ, et al. **Microbiol Immunol** 1996; 40(11):857–65

Monoclonal antibodies against Streptococcus pneumoniae detect epitopes on eubacterial ribosomal proteins L7/L12 and on streptococcal elongation factor Ts. Kolberg J, et al. **Microbiology** 1997 Jan;143 (Pt 1):55–61

Pneumococcal and influenza vaccination levels among adults aged > or = 65 years—United States, 1993. **MMWR Morb Mortal Wkly Rep** 1996 Oct 11;45(40):853–9

Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). **MMWR Morb Mortal Wkly Rep** 1997 Apr 4; 46(RR–8):1–24

Pentavalent pneumococcal oligosaccharide conjugate vaccine PncCRM is well–tolerated and able to induce an antibody response in infants. Ahman H, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):134–9

Pneumococcal vaccination of children with recurrent sinusitis. Giebink GS. **Pediatr Infect Dis J** 1997 May; 16(5):535–6

Antigen excretion in the urine after pneumococcal vaccination. Kelley R, et al. **Pediatr Infect Dis J** 1997 Jul; 16(7):720

Evaluation of a pentavalent conjugated pneumococcal vaccine in toddlers. Pichichero ME, et al. **Pediatr Infect Dis J** 1997 Jan;16(1):72–4

Antibodies to pneumococcal polysaccharides in human milk: lack of relationship to colonization and acute otitis media. Rosen IA, et al. **Pediatr Infect Dis J** 1996 Jun;15(6):498–507

Comparison of serum antibodies to pneumolysin with those to pneumococcal capsular polysaccharides in children with acute otitis media. Virolainen A, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):128–33

Post–immunization pneumococcal antibody titers and IgG subclasses. Sorensen RU, et al. **Pediatr Pulmonol** 1996 Sep; 22(3):167–73

Pneumococcal vaccine. Hattotuwa KL, et al. **Postgrad Med J** 1997 Apr;73(858):222–4

Rapid detection of pneumococcal antigen in lung aspirates: comparison with culture and PCR technique. Ruiz–González A, et al. **Respir Med** 1997 Apr;91(4):201–6

PspA, a protection–eliciting pneumococcal protein: immunogenicity of isolated native PspA in mice. Briles DE, et al. **Vaccine** 1996 Jun;14(9):858–67

The impact of vaccination strategy and methods of information on influenza and pneumococcal vaccination coverage in the elderly population. Honkanen PO, et al. **Vaccine** 1997 Feb;15(3):317–20

The synthesis of Streptococcus pneumoniae polysaccharide–tetanus toxoid conjugates and the effect of chain length on immunogenicity. Laferrière CA, et al. **Vaccine** 1997 Feb;15(2):179–86

Associations of prevaccination antibody levels with adverse reactions to pneumococcal and influenza vaccines administered simultaneously in the elderly. Sankilampi U, et al. **Vaccine** 1997 Jul;15(10):1133–7

[Vaccination in elderly patients in rehabilitation: a missed opportunity?] Büla CJ, et al. **Schweiz Med Wochenschr** 1996 Nov 30;126(48):2082–6 (Eng. Abstr.) **(Fre)**

[Pneumococcal vaccination after heart and liver transplantation. Immune responses in immunosuppressed patients and in healthy controls] Dengler TJ, et al. **Dtsch Med Wochenschr** 1996 Dec 6;121(49):1519–25 (Eng. Abstr.) **(Ger)**

[immunization and immune response to pneumococcal vaccination] Hidalgo H, et al. **Rev Med Chil** 1996 Mar; 124(3):287–92 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

PCR assay for detecting Streptococcus pneumoniae in the middle ear of children with otitis media with effusion. Jero J, et al. **Acta Otolaryngol (Stockh)** 1996 Mar;116(2):288–92

Bacterial behaviour in middle ear effusion material: an in vitro study. Ruhani K, et al. **Acta Otolaryngol (Stockh)** 1996 Jan;116(1):64–8

Correlation of middle meatal and maxillary sinus cultures in acute maxillary sinusitis. Vaidya AM, et al. **Am J Rhinol** 1997 Mar–Apr;11(2):139–43

Pneumococcal capsular antigen detection after enrichment culture: an alternative to culture methods in epidemiologic research. Lankinen KS, et al. **Am J Trop Med Hyg** 1997 Feb;56(2):211–5

Streptococcus pneumoniae carriage and penicillin/ceftriaxone resistance in hospitalised children in Darwin. Skull SA, et al. **Aust N Z J Med** 1996 Jun; 26(3):391–5

Penicillin–resistant Streptococcus pneumoniae in Ontario, 1987–1995. Harnett N, et al. **Can Commun Dis Rep** 1997 May 1;23(9):65–72 **(Eng, Fre)**

Penicillin resistance among invasive pneumococcal isolates at 10 children's hospitals, 1991–1994. The LCDC/CPS Impact Group. The Immunization Monitoring Program, Active. Scheifele D, et al. **Can Commun Dis Rep** 1996 Oct 1;22(19):157–9, 162–3 **(Eng, Fre)**

Photo quiz. Symmetric peripheral gangrene. Embil JM, et al. **Clin Infect Dis** 1996 Dec;23(6):1233, 1311

Carriage of penicillin–resistant pneumococci in a military population in Washington, DC: risk factors and correlation with clinical isolates. Fairchok MP, et al. **Clin Infect Dis** 1996 Jun;22(6):966–72

A prospective study of the impact of community–based azithromycin treatment of trachoma on carriage and resistance of Streptococcus pneumoniae. Leach AJ, et al. **Clin Infect Dis** 1997 Mar;24(3):356–62

Tuboovarian abscess and peritonitis caused by Streptococcus pneumoniae serotype 1 in young girls. Sirotnak AP, et al. **Clin Infect Dis** 1996 Jun;22(6):993–6

Incidence of invasive pneumococcal disease and distribution of capsular types of pneumococci in Denmark, 1989–94. Nielsen SV, et al. **Epidemiol Infect** 1996 Dec;117(3):411–6

Modified latex agglutination test for rapid detection of Streptococcus pneumoniae and haemophilus influenzae in cerebrospinal fluid and direct serotyping of Streptococcus pneumoniae. Singhal A, et al. **Eur J Clin Microbiol Infect Dis** 1996 Jun;15(6):472–7

Positive culture from normal CSF of Streptococcus pneumoniae meningitis. Uchihara T, et al. **Eur Neurol** 1996; 36(4):234

Infected abdominal aortic aneurysm due to penicillin–, ceftriaxone–, and cefotaxime–resistant Streptococcus pneumoniae. Albrecht WE, et al. **J Clin Microbiol** 1997 Apr;35(4):985–7

Clonal and temporal patterns of nasopharyngeal penicillin–susceptible and penicillin–resistant Streptococcus pneumoniae stains in children attending a day care center. Pons JL, et al. **J Clin Microbiol** 1996 Dec;34(12):3218–22

Comparison of four different sampling methods for detecting pharyngeal carriage of Streptococcus pneumoniae and Haemophilus influenzae in children. Rapola S, et al. **J Clin Microbiol** 1997 May;35(5):1077–9

Relationship between nasopharyngeal colonization and the development of otitis media in children. Tonawanda/Williamsville Pediatrics. Faden H, et al. **J Infect Dis** 1997 Jun;175(6):1440–5

Microbiology and management of sinusitis. Brook I. **J Otolaryngol** 1996 Aug;25(4):249–56 (44 ref.)

Pneumococcal colonization in children with sickle cell disease [see comment] Norris CF, et al. **J Pediatr** 1996 Dec; 129(6):821–7. Comment on: J Pediatr 1996 Dec;129(6):788–9.

Model of Streptococcus pneumoniae meningitis in adult rats. Strake JG, et al. **Lab Anim Sci** 1996 Oct;46(5):524–9

Novel penicillin–resistant clones of Streptococcus pneumoniae in the Czech Republic and in Slovakia. Figueiredo AM, et al. **Microb Drug Resist** 1995 Spring; 1(1):71–8

Spread of the Spanish multi–resistant serotype 23F clone of Streptococcus pneumoniae to Seoul, Korea. McGee L, et al. **Microb Drug Resist** 1997 Fall;3(3):253–7

Clinical isolates and nasopharyngeal carriage of antibiotic–resistant Streptococcus pneumoniae in Hospital for Infectious Diseases, Sofia, Bulgaria, 1991–1993. Setchanova L. **Microb Drug Resist** 1995 Spring;1(1):79–84

Establishment of a Streptococcus pneumoniae nasopharyngeal colonization model in adult mice. Wu HY, et al. **Microb Pathog** 1997 Sep;23(3):127–37

Sputum PCR for the detection of pneumococcal lower respiratory tract infection [letter] Paul ML, et al. **Pathology** 1997 Feb;29(1):104–5

Microbiology of recurrent parotitis. Giglio MS, et al. **Pediatr Infect Dis J** 1997 Apr;16(4):386–90

Nasopharyngeal carriage of pneumococci in Gambian children and in their families. Lloyd–Evans N, et al. **Pediatr Infect Dis J** 1996 Oct;15(10):866–71

Nasopharyngeal pneumococcal colonization among Kenyan children: antibiotic resistance, strain types and associations with human immunodeficiency virus type 1 infection. Rusen ID, et al. **Pediatr Infect Dis J** 1997 Jul;16(7):656–62

Incidence of asymptomatic carriage of potentially pathogenic respiratory organisms among preschool Pretoria children [letter] [published erratum appears in S Afr Med J 1996 Oct;86(10):1302] Marcus L, et al. **S Afr Med J** 1996 Sep; 86(9):1132, 1134

Cerebrospinal fluid filtration in a case of severe pneumococcal meningitis. Brizzi M, et al. **Scand J Infect Dis** 1996;28(5):455–8

[Appearance can be important] Rüegg R, et al. **Schweiz Med Wochenschr** 1997 Mar 1;127(9):367 **(Ger)**

[Prevalence of antimicrobial resistance among clinical isolates of Streptococcus pneumoniae in a children's hospital] Nakamura A. **Kansenshogaku Zasshi** 1997 May;71(5):421–9 (Eng. Abstr.) **(Jpn)**

[Streptococcus pneumoniae strains isolated in acute otitis media in children] Ungureanu V, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun; 41(1–2):51–5 **(Rum)**

[Basal meningoencephalocele: a case report] Cejas Méndez L, et al. **Acta Otorrinolaringol Esp** 1996 Jul–Aug; 47(4):329–32 (Eng. Abstr.) **(Spa)**

[Usefulness of an ELISA for the diagnosis of Streptococcus pneumoniae in patients with pneumonia] Mata M, et al. **Enferm Infecc Microbiol Clin** 1996 Apr;14(4):255–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Apparent involvement of a multidrug transporter in the fluoroquinolone resistance of Streptococcus pneumoniae. Baranova NN, et al. **Antimicrob Agents Chemother** 1997 Jun;41(6):1396–8

Neutral glycolipids in adult rabbit blood and analysis of their function as specific receptors for micro–organisms. Ondarza MA, et al. **Biomed Chromatogr** 1996 Jan–Feb; 10(1):6–10

Investigation of a choline phosphate synthesis pathway in Streptococcus pneumoniae: evidence for choline phosphate cytidylyltransferase activity. Whiting GC, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):279–84

Incorporation of choline into Streptococcus pneumoniae cell wall antigens: evidence for choline kinase activity. Whiting GC, et al. **FEMS Microbiol Lett** 1996 May 1;138(2–3):141–5

In vitro complement–dependent binding and in vivo kinetics of pneumococcal polysaccharide TI–2 antigens in the rat spleen marginal zone and follicle. Harms G, et al. **Infect Immun** 1996 Oct;64(10):4220–5

Characterization of hemin binding activity of Streptococcus pneumoniae. Tai SS, et al. **Infect Immun** 1997 Mar; 65(3):1083–7

A functional analysis of the Streptococcus pneumoniae genes involved in the synthesis of type 1 and type 3 capsular polysaccharides. García E, et al. **Microb Drug Resist** 1997 Spring;3(1):73–88 (112 ref.)

The pneumococcal cell wall degrading enzymes: a modular design to create new lysins? López R, et al. **Microb Drug Resist** 1997 Summer;3(2):199–111 (73 ref.)

Characterization of the capsular polysaccharide biosynthesis locus of Streptococcus pneumoniae type 19F. Paton JC, et al. **Microb Drug Resist** 1997 Spring;3(1):89–99 (40 ref.)

Streptococcus pneumoniae produces a second haemolysin that is distinct from pneumolysin. Canvin JR, et al. **Microb Pathog** 1997 Mar;22(3):129–32

Pneumococcal cell wall activates NF–kappa B in human monocytes: aspects distinct from endotoxin. Spellerberg B, et al. **Microb Pathog** 1996 May;20(5):309–17

Characterization of the locus encoding the Streptococcus pneumoniae type 19F capsular polysaccharide biosynthetic pathway. Morona JK, et al. **Mol Microbiol** 1997 Feb; 23(4):751–63

PATHOGENICITY

PCR–based detection of bacterial DNA after antimicrobial treatment is indicative of persistent, viable bacteria in the chinchilla model of otitis media. Post JC, et al. **Am J Otolaryngol** 1996 Mar–Apr;17(2):106–11

Molecular and cellular mechanisms of pneumococcal meningitis. Tuomanen EI. **Ann N Y Acad Sci** 1996 Oct 25;797:42–52 (66 ref.)

Comparative study of bactericidal activities, postantibiotic effects, and effects of bacterial virulence of penicillin G and six macrolides against Streptococcus pneumoniae. Fuursted K, et al. **Antimicrob Agents Chemother** 1997 Apr; 41(4):781–4

The nasopharyngeal bacterial flora in children with otitis media with effusion [see comments] Fujimori I, et al. **Eur Arch Otorhinolaryngol** 1996;253(4–5):260–3. Comment in: Eur Arch Otorhinolaryngol 1997;254(1):19. Comment in: Eur Arch Otorhinolaryngol 1997;254(2):113.

Differences in virulence for mice among Streptococcus pneumoniae strains of capsular types 2, 3, 4, 5, and 6 are not attributable to differences in pneumolysin production. Benton KA, et al. **Infect Immun** 1997 Apr;65(4):1237–44

Colonization by Streptococcus pneumoniae among human immunodeficiency virus–infected adults: prevalence of antibiotic resistance, impact of immunization, and characterization by polymerase chain reaction with BOX primers of isolates from persistent S. pneumoniae carriers. Rodriguez–Barradas MC, et al. **J Infect Dis** 1997 Mar; 175(3):590–7

Enhancement of Streptococcus pneumoniae serotype 6B infection in mice after passive immunization with human serum. Aaberge IS, et al. **Microb Pathog** 1996 Aug; 21(2):125–37

Pyruvate oxidase, as a determinant of virulence in Streptococcus pneumoniae. Spellerberg B, et al. **Mol Microbiol** 1996 Feb;19(4):803–13

The contribution of pneumolysin to the pathogenicity of Streptococcus pneumoniae. Paton JC. **Trends Microbiol** 1996 Mar;4(3):103–6 (32 ref.)

[The pathogenicity factors of Streptococcus pneumoniae strains causing meningitis] Kostiukova NN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):47–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

PAf receptor anchors Streptococcus pneumoniae to activated human endothelial cells. Cundell DR, et al.

STREPTOCOCCUS PNEUMONIAE

Adv Exp Med Biol 1996;416:89–94 (15 ref.)

Penicillin-resistant Streptococcus pneumoniae endophthalmitis. Cid M, et al. **Am J Ophthalmol** 1997 Jan; 123(1):133–5

Aspects on the interaction of Streptococcus pneumoniae and Haemophilus influenzae with human respiratory tract mucosa. Håkansson A, et al. **Am J Respir Crit Care Med** 1996 Oct;154(4 Pt 2):S187–91

Abnormal physiological properties and altered cell wall composition in Streptococcus pneumoniae grown in the presence of clavulanic acid. Severin A, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):504–10

Haemophilus influenzae and Streptococcus pneumoniae induce different intracerebral mRNA cytokine patterns during the course of experimental bacterial meningitis. Diab A, et al. **Clin Exp Immunol** 1997 Aug;109(2):233–41

Penicillin-resistant Streptococcus pneumoniae keratitis. Wilkins J, et al. **Cornea** 1996 Jan;15(1):99–100

The enduring pneumococcus: unfinished business and opportunities for the future. Austrian R. **Microb Drug Resist** 1997 Summer;3(2):111–5 (50 ref.)

Heat shock response of Streptococcus pneumoniae: identification of immunoreactive stress proteins. Hamel J, et al. **Microb Pathog** 1997 Jul;23(1):11–21

VIROLOGY

The two-step lysis system of pneumococcal bacteriophage EJ-1 is functional in gram-negative bacteria: triggering of the major pneumococcal autolysin in Escherichia coli. Diaz E, et al. **Mol Microbiol** 1996 Feb;19(4):667–81

STREPTOCOCCUS PNEUMONIAE INFECTIONS see **PNEUMOCOCCAL INFECTIONS**

STREPTOCOCCUS PYOGENES

HLA-DP antigens and post-streptococcal acute glomerulonephritis. Mori K, et al. **Acta Paediatr** 1996 Aug; 85(8):916–8

Evaluation of the therapy for streptococcal pharyngitis using Abbott Test Pack strep A. Kayaba H, et al. **Acta Paediatr Jpn** 1996 Feb;38(1):8–11

Pediatric case of the day. Streptococcal myositis and perianal cellulitis. Berlin SC, et al. **AJR Am J Roentgenol** 1997 Jul; 169(1):303, 306–7

Group A beta hemolytic streptococcus pharyngitis in United States Coast Guard units in Sitka. Rodriguez MA. **Alaska Med** 1995 Oct–Dec;37(4):145–6

Necrotizing fasciitis: a diagnostic challenge. Meltzer DL, et al. **Am Fam Physician** 1997 Jul;56(1):145–9 (14 ref.)

Population-based surveillance for group A streptococcal necrotizing fasciitis: Clinical features, prognostic indicators, and microbiologic analysis of seventy-seven cases. Ontario Group A Streptococcal Study. Kaul R, et al. **Am J Med** 1997 Jul;103(1):18–24

Adjunctive treatment of streptococcal toxic shock syndrome using intravenous immunoglobulin: case report and review. Perez CM, et al. **Am J Med** 1997 Jan;102(1):111–3 (15 ref.)

Necrotizing group A streptococcal infections associated with streptococcal toxic shock syndrome. Sellers BJ, et al. **Am J Surg** 1996 Nov;172(5):523–7; discussion 527–8

Interaction between oral alpha-streptococci and group A streptococci in patients with tonsillitis. Fujimori I, et al. **Ann Otol Rhinol Laryngol** 1997 Jul;106(7 Pt 1):571–4

Non-steroidal anti-inflammatory drugs may predispose to invasive group A streptococcal infections [letter; comment] Curtis N. **Arch Dis Child** 1996 Dec;75(6):547. Comment on: Arch Dis Child 1996 Feb;74(2):164–7.

Strategies for managing group A streptococcal pharyngitis. A survey of board-certified pediatricians. Hofer C, et al. **Arch Pediatr Adolesc Med** 1997 Aug;151(8):824–9

Comparison of clarithromycin suspension and amoxycillin syrup for the treatment of children with pharyngitis and/or tonsillitis. Kearsley NL, et al. **Br J Clin Pract** 1997 Apr–May;51(3):133–7

A scoring system for predicting group A streptococcal throat infection [see comments] Dobbs F. **Br J Gen Pract** 1996 Aug;46(409):461–4. Comment in: Br J Gen Pract 1997 Mar;47(416):181–2.

Detection of antibody isotypes to streptolysin O by dot ELISA. Barbosa SF, et al. **Braz J Med Biol Res** 1996 Jun; 29(6):763–7

Reconsidering sore throats. Part I: Problems with current clinical practice [see comments] McIsaac WJ, et al. **Can Fam Physician** 1997 Mar;43:485–93 (62 ref.). Comment in: Can Fam Physician 1997 May;43:843, 845. Comment in: Can Fam Physician 1997 Jul;43:1207–8.

Reconsidering sore throats. Part 2: Alternative approach and practical office tool [see comments] McIsaac WJ, et al. **Can Fam Physician** 1997 Mar;43:495–500 (40 ref.). Comment in: Can Fam Physician 1997 May;43:843, 845. Comment in: Can Fam Physician 1997 Jul;43:1207–8.

Testing diagnostic acumen [letter; comment] Marshall MT. **Can Fam Physician** 1997 May;43:843, 845. Comment on: Can Fam Physician 1997 Mar;43:485–93. Comment on: Can Fam Physician 1997 Mar;43:495–500.

Group A streptococcal septicemia with retropharyngeal abscess: a case report. Choong CS, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Jul;60(1):62–5

Comparison of clinical characteristics of group A streptococcal bacteremia in children and adults. Begovac J, et al. **Clin Infect Dis** 1996 Jul;23(1):97–100

Familial transmission of a serious disease--producing group A streptococcus clone: case reports and review. Gamba MA, et al. **Clin Infect Dis** 1997 Jun;24(6):1118–21

Clinical usefulness of intravenous human immunoglobulins in invasive group A Streptococcal infections: case report and review. Lamothe F, et al. **Clin Infect Dis** 1995 Dec; 21(6):1469–70

Neurological presentation of poststreptococcal glomerulonephritis [see comments] Nordby JA. **Clin Pediatr (Phila)** 1997 Feb;36(2):105–8. Comment in: Clin Pediatr (Phila) 1997 Aug;36(8):492–3.

Streptococcal pharyngitis: is penicillin still the right choice? Pichichero ME. **Compr Ther** 1996 Dec;22(12):782–7 (37 ref.)

Update on complications of group A streptococcal infections. Ayoub EM, et al. **Curr Probl Pediatr** 1997 Mar;27(3):90–101 (87 ref.)

Group A streptococcal meningitis and toxic shock syndrome caused by a protein M type 3 strain producing exotoxin C [letter] Guibert M, et al. **Eur J Clin Microbiol Infect Dis** 1997 Apr;16(4):323–4

Mitral regurgitation may be related with previous streptococcal infection. Wahid MR, et al. **Eur J Pediatr** 1996 Mar;155(3):168–72

Survival after necrotising streptococcal myositis: a matter of hours. Marck KW, et al. **Eur J Surg** 1996 Dec; 162(12):981–3

A new type of fulminant group A streptococcal infection in obstetric patients: report of two cases. Ooe K, et al. **Hum Pathol** 1997 Apr;28(4):509–12

An outbreak of post-streptococcal reactive arthritis. Madhuri V, et al. **Indian J Med Res** 1997 Jun;105:249–53

Invasive group A streptococcal disease. Stevens DL. **Infect Agents Dis** 1996 Jun;5(3):157–66 (48 ref.)

An outbreak of fatal nosocomial infections due to group A streptococcus on a medical ward. Ramage L, et al. **Infect Control Hosp Epidemiol** 1996 Jul;17(7):429–31

Management of healthcare workers with pharyngitis or suspected streptococcal infections. Weber DJ, et al. **Infect Control Hosp Epidemiol** 1996 Nov;17(11):753–61 (95 ref.)

Role of putative virulence factors of Streptococcus pyogenes in mouse models of long-term throat colonization and pneumonia. Husmann LK, et al. **Infect Immun** 1997 Apr; 65(4):1422–30

Analysis of toxicity of streptococcal pyrogenic exotoxin A mutants. Roggiani M, et al. **Infect Immun** 1997 Jul; 65(7):2868–75

The role of nitric oxide in experimental murine sepsis due to pyrogenic exotoxin A-producing Streptococcus pyogenes. Sriskandan S, et al. **Infect Immun** 1997 May; 65(5):1767–72

Streptococcal toxic shock syndrome in a postpartum woman. Case report and review of the literature. Jorup-Rönström C, et al. **Infection** 1996 Mar–Apr;24(2):164–7 (68 ref.)

Disseminated encephalitis following streptococcal infection. Pergami P, et al. **Ital J Neurol Sci** 1996 Feb;17(1):87–91

Vasculitic neuropathy associated with beta-haemolytic streptococcal infection: a case report. Traverso F, et al. **Ital J Neurol Sci** 1997 Apr;18(2):105–7

The role of macrolides in Streptococcus pyogenes pharyngitis. Schito GC, et al. **J Antimicrob Chemother** 1997 May;39(5):562–5 (34 ref.)

6-day amoxicillin vs 10-day penicillin V for GABHS. Bramson R. **J Fam Pract** 1997 Mar;44(3):241–2

A scoring system for streptococcal pharyngitis. Douglas M, et al. **J Fam Pract** 1996 Dec;43(6):537–8

Streptococcal toxic shock syndrome from a puncture wound to the foot. Miller JH, et al. **J Foot Ankle Surg** 1996 Nov–Dec;35(6):578–84

Group a streptococcal meningitis. Lin HH, et al. **J Formos Med Assoc** 1996 Oct;95(10):802–3

Streptococcal toxic shock syndrome complicating varicella in children. Yang YJ, et al. **J Formos Med Assoc** 1997 Sep; 96(9):749–53

The surgical team as a source of postoperative wound infections caused by Streptococcus pyogenes. Kolmos HJ, et al. **J Hosp Infect** 1997 Mar;35(3):207–14 (19 ref.)

Septicaemia due to Streptococcus pyogenes in an intravenous drug abusing couple [letter] Kolokithas D, et al. **J Hosp Infect** 1997 Mar;35(3):248–50

Management of respiratory infections [letter; comment] Bright R. **J Indian Med Assoc** 1996 Aug;94(8):312. Comment on: J Indian Med Assoc 1996 Jan;94(1):21–3.

Group A streptococcal bacteraemia: experience at a university hospital in Riyadh. al Mazrou AM. **J Infect** 1997 Mar;34(2):95–100

Skin sores in Aboriginal children [letter] Carapetis JR, et al. **J Paediatr Child Health** 1995 Dec;31(6):563

Orthopaedic manifestations of invasive group A streptococcal infections complicating primary varicella. Mills WJ, et al. **J Pediatr Orthop** 1996 Jul–Aug;16(4):522–8

Thoracic discitis following 'Woodbury' rash. Sloss JM, et al. **J R Army Med Corps** 1994 Feb;140(1):45–6

An outbreak of invasive group A streptococcal disease associated with high carriage rates of the invasive clone among school-aged children [see comments] Cockerill FR 3rd, et al. **JAMA** 1997 Jan 1;277(1):38–43. Comment in: JAMA 1997 Apr 16;277(15):1203–4.

Management of pharyngeal carriers of group A streptococcal organisms [letter; comment] Perry RF, et al. **JAMA** 1997 Apr 16;277(15):1203–4. Comment on: JAMA 1997 Jan 1;277(1):38–43.

Musculoskeletal side-effects of varicella [see comments] Burke GA, et al. **Lancet** 1997 Mar 22;349(9055):818–9. Comment in: Lancet 1997 May 31;349(9065):1623–4.

Musculoskeletal side-effects of varicella [letter; comment] Curtis N, et al. **Lancet** 1997 May 31;349(9065):1623–4. Comment on: Lancet 1997 Mar 22;349(9055):818–9.

Clinical guidelines for group A streptococcal throat infections [comment] Kaplan EL. **Lancet** 1997 Sep 27; 350(9082):899–900. Comment on: Lancet 1997 Sep 27;350(9082):918–21.

The association of primary varicella infection and streptococcal infection of the cutaneous and musculoskeletal system: a case report. Poon AH, et al. **Magn Reson Imaging** 1997;15(1):131–3

Streptococcal pharyngitis in a paediatric emergency department. Edmond KM, et al. **Med J Aust** 1996 Oct 21; 165(8):420–3

Management of group A streptococcus pharyngitis with a second-generation rapid strep screen: Strep A OIA. Badgett JT, et al. **Microb Drug Resist** 1996 Fall;2(3):371–6 (54 ref.)

Invasive group A streptococcal infections [letter; comment] Couper R. **N Engl J Med** 1997 Feb 13;336(7):513; discussion 514. Comment on: N Engl J Med 1996 Aug 22;335(8):547–54.

Invasive group A streptococcal infections [letter; comment] Kujath P, et al. **N Engl J Med** 1997 Feb 13;336(7):513–4; discussion 514. Comment on: N Engl J Med 1996 Aug 22;335(8):590–1.

Puerperal group A beta-hemolytic streptococcal toxic shock-like syndrome. Noronha S, et al. **Obstet Gynecol** 1996 Oct;88(4 Pt 2):728

Septicemia causing compartment syndrome [see comments] Paley KJ, et al. **Orthopedics** 1996 Feb;19(2):163–6. Comment in: Orthopedics 1996 Jul;19(7):567.

Group A beta-hemolytic streptococcal epiglottitis as a complication of varicella infection. Belfer RA. **Pediatr Emerg Care** 1996 Jun;12(3):203–4 (11 ref.)

Changing epidemiology of invasive Streptococcus pyogenes infections in southern Israel: differences between two ethnic population groups. Chiobotaru P, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):195–9

Posterior mediastinal abscess caused by invasive group A Streptococcus infection. Conway JH, et al. **Pediatr Infect Dis J** 1996 Jun;15(6):547–9

Overlap between Kawasaki disease and group A streptococcal infection [letter; comment] Hoare S, et al. **Pediatr Infect Dis J** 1997 Jun;16(6):633–4. Comment on: Pediatr Infect Dis J 1996 Dec;15(12):1136–8.

Streptococcal diagnostic testing and antibiotics prescribed for pediatric tonsillopharyngitis. Mainous AG 3d, et al. **Pediatr Infect Dis J** 1996 Sep;15(9):806–10

Balanitis caused by group A beta-hemolytic streptococci. Orden B, et al. **Pediatr Infect Dis J** 1996 Oct;15(10):920–1 (10 ref.)

Evaluation of the efficacy, safety and toleration of azithromycin vs. penicillin V in the treatment of acute streptococcal pharyngitis in children: results of a multicenter, open comparative study. The Swiss Tonsillopharyngitis Study Group [see comments] Schaad UB, et al. **Pediatr Infect Dis J** 1996 Sep;15(9):791–5. Comment in: Pediatr Infect Dis J 1997 May;16(5):542.

Sore throat after sore throat after sore throat. Are you asking the critical questions? Pichichero ME. **Postgrad Med** 1997 Jan;101(1):205–6, 209–12, 215–8, passim (22 ref.)

A prolonged outbreak of streptococcal infection among workers at a meat plant. Sims P, et al. **Public Health** 1996 Mar;110(2):81–4

The role of household contacts in the transmission of group A streptococci. Falck G, et al. **Scand J Infect Dis** 1997; 29(3):239–44

A clinical study of beta-haemolytic groups A, B, C and G streptococcal bacteremia in adults over an 8-year period. Schugk J, et al. **Scand J Infect Dis** 1997;29(3):233–8

Streptococcal impetigo among aboriginal children in Malaysia. Norazah A, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):803–4

Fibrous tissue overgrowth and prosthetic valve endocarditis: report of a case. Kaneko Y, et al. **Thorac Cardiovasc Surg** 1997 Jun;45(3):150–2

Invasive streptococcal infections. Report of four cases occurring in Trinidad. Swanston WH, et al. **West Indian Med J** 1997 Mar;46(1):25–7

[An approach to the diagnosis of recurrent attack of rheumatic fever in patients with rheumatic heart disease] Huang C. **Chung Hua Nei Ko Tsa Chih** 1995 Oct; 34(10):687–9 (Eng. Abstr.) **(Chi)**

[Food-borne streptococcal epidemics] Jespersen NB, et al. **Ugeskr Laeger** 1997 Sep 1;159(36):5368–71 (Eng. Abstr.) **(Dan)**

[Perianal streptococcal dermatitis in children] van Zeijl JH, et al. **Ned Tijdschr Geneeskd** 1996 Nov 2;140(44):2191–3 (Eng. Abstr.) **(Dut)**

[Varicella and invasive group A streptococcal infections (letter)] Chevallier C, et al. **Arch Pediatr** 1997 Jun;4(6):583 **(Fre)**

[How to recognize streptococcal pharyngitis? (editorial)] Ghanassia JP, et al. **Arch Pediatr** 1996 Aug;3(8):749–51 (17 ref.) **(Fre)**

[Severe streptococcal complications in varicella] Héraud MC,

et al. **Arch Pediatr** 1997 May;4(5):430–2 (Eng. Abstr.) **(Fre)**

[Group A beta-hemolytic streptococcal meningitis in a pregnant woman] Ferrazzini G, et al. **Schweiz Med Wochenschr** 1996 Oct 26;126(43):1842–4 (Eng. Abstr.) **(Fre)**

[Streptococcal toxic shock-like syndrome" as a rare surgical disease picture] Willis S, et al. **Chirurg** 1997 Jan;68(1):40–4 (Eng. Abstr.) **(Ger)**

[Gram-positive septic-toxic shock with bullae. Intraepidermal splitting as an indication of toxin effect] Buslau M, et al. **Hautarzt** 1996 Oct;47(10):783–9 (Eng. Abstr.) **(Ger)**

[Reliability of the rapid Streptococcus A test] Schmuziger N, et al. **HNO** 1996 Jul;44(7):365–9 (Eng. Abstr.) **(Ger)**

[5-day therapy of bacterial pharyngitis and tonsillitis with cefixime. Comparison with 10 day treatment with penicillin V. Cefixime Study Group] Adam D, et al. **Klin Padiatr** 1996 Sep–Oct;208(5):310–3 (Eng. Abstr.) **(Ger)**

[Standardized treatment of necrotizing fasciitis] Kujath P, et al. **Zentralbl Chir** 1996;121(1):35–43 (Eng. Abstr.) **(Ger)**

[Serious streptococcal infections of the head and neck region] Kongelf E, et al. **Tidsskr Nor Laegeforen** 1997 Jan 10; 117(1):32–5 (Eng. Abstr.) **(Nor)**

[The epidemiological characteristics of an infection with beta-hemolytic Streptococcus group A in Iaşi County—a decade of observations] Grigorescu R, et al. **Bacteriol Virusol Parazitol Epidemiol** 1993 Jan–Jun; 38(1–2):52–6 **(Rum)**

[Invasive streptococcal group A infection] Riapis LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jan–Feb; (1):96–100 (18 ref.) (Eng. Abstr.) **(Rus)**

[Streptococcal perianal disease] García Puga JM, et al. **An Esp Pediatr** 1996 Dec;45(6):647–8 (19 ref.) **(Spa)**

[Sepsis due to Streptococcus pyogenes (letter)] Cámara González T, et al. **An Med Interna** 1996 Aug;13(8):411–2 **(Spa)**

[Streptococcal pharyngitis] Romero J, et al. **Enferm Infecc Microbiol Clin** 1995 Dec;13(10):611–27 (204 ref.) **(Spa)**

[Severe infections caused by group A beta-hemolytic streptococcus: report of the latest 3 cases at the La Fe Hospital of Valencia] Bretón Martínez JR, et al. **Rev Clin Esp** 1997 Feb;197(2):104–7 **(Spa)**

[Treatment with NSAID can delay the diagnosis in GAS-sepsis (letter)] Bäcklund U, et al. **Lakartidningen** 1997 Feb 19;94(8):602 **(Swe)**

CHEMISTRY

Efficient, convergent syntheses of oligosaccharide allyl glycosides corresponding to the Streptococcus group A cell-wall polysaccharide. Auzanneau FI, et al. **Carbohydr Res** 1996 Sep 23;291:21–41

Identification of a plasminogen-binding motif in PAM, a bacterial surface protein. Wistedt AC, et al. **Mol Microbiol** 1995 Nov;18(3):569–78

A highly discriminatory method for the direct comparison of two closely related bacterial populations by pyrolysis mass spectrometry. Freeman R, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):285–90

CLASSIFICATION

Serotyping of Streptococcus pyogenes isolated from common and severe invasive infections in Japan, 1990–5: implication of the T3 serotype strain-expansion in TSLS. The Working Group for Group A Streptococci in Japan. Inagaki Y, et al. **Epidemiol Infect** 1997 Aug;119(1):41–8

Molecular epidemiology of impetiginous group A streptococcal infections in aboriginal communities of northern Australia. Gardiner DL, et al. **J Clin Microbiol** 1996 Jun;34(6):1448–52

Outbreak of scarlet fever at a hospital day care centre: analysis of strain relatedness with phenotypic and genotypic characteristics. Hsueh PR, et al. **J Hosp Infect** 1997 Jul; 36(3):191–200

Comparison of M-serotypes of Streptococcus pyogenes isolated from healthy elementary school children in two rural areas. Kim SJ, et al. **J Korean Med Sci** 1996 Apr; 11(2):133–6

Invasive group A streptococcal infections [letter; comment] Charytan D. **N Engl J Med** 1997 Feb 13;336(7):513; discussion 514. Comment on: N Engl J Med 1996 Aug 22;335(8):547–54. Comment on: N Engl J Med 1996 Aug 22;335(8):590–1.

Differentiation between bacterial species and sub-species by pyrolysis mass spectrometry of extracted DNA. Mathers K, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):311–8

[The phage sensitivity and lysogeny of cultures of Streptococcus pyogenes group A isolated in different streptococcal infections] Asoskova TK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):7–10 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The antimicrobial susceptibility of Streptococcus pyogenes isolates from the Philadelphia area. Ferraro AL, et al. **Adv Exp Med Biol** 1995;390:119–21

Streptococcus pyogenes: resistant, tolerant, neither or both? Mortensen JE, et al. **Adv Exp Med Biol** 1995;390:109–17 (63 ref.)

Pharmacodynamic effects of sub-MICs of benzylpenicillin against Streptococcus pyogenes in a newly developed in vitro kinetic model. Löwdin E, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2478–82

Streptococcus pneumoniae and Streptococcus pyogenes resistant to macrolides but sensitive to clindamycin: a common resistance pattern mediated by an efflux system. Sutcliffe J, et al. **Antimicrob Agents Chemother** 1996 Aug; 40(8):1817–24

Comparison of dirithromycin and penicillin for treatment of streptococcal pharyngitis. Watkins VS, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):72–5

A study of 5-day cefdinir treatment for streptococcal pharyngitis in children. Cefdinir Pediatric Pharyngitis Study Group. Tack KJ, et al. **Arch Pediatr Adolesc Med** 1997 Jan;151(1):45–9

Comparative susceptibility of clinical group A, B, C, F, and G beta-hemolytic streptococcal isolates to 24 antimicrobial drugs. Traub WH, et al. **Chemotherapy** 1997 Jan–Feb; 43(1):10–20

Outpatient use of erythromycin: link to increased erythromycin resistance in group A streptococci. Seppälä H, et al. **Clin Infect Dis** 1995 Dec;21(6):1378–85

Antibiotic susceptibility of group A streptococci in a national consultant hospital in Dar es Salaam: a four year follow-up. Mhalu FS, et al. **East Afr Med J** 1997 Mar;74(3):177–8

Rapid increase of resistance to erythromycin and clindamycin in Streptococcus pyogenes in Italy, 1993–1995. The Italian Surveillance Group for Antimicrobial Resistance. Cornaglia G, et al. **Emerg Infect Dis** 1996 Oct–Dec; 2(4):339–42

Five days of erythromycin estolate versus ten days of penicillin V in the treatment of group A streptococcal tonsillopharyngitis in children. Pharyngitis Study Group. Adam D, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep; 15(9):712–7

Azithromycin versus penicillin V in the treatment of paediatric patients with acute streptococcal pharyngitis/tonsillitis. Paediatric Azithromycin Study Group. O'Doherty B. **Eur J Clin Microbiol Infect Dis** 1996 Sep;15(9):718–24

Serotyping and susceptibility to macrolides and other antimicrobial drugs of Streptococcus pyogenes isolated from patients with invasive diseases in southern Israel. Weiss I, et al. **Eur J Clin Microbiol Infect Dis** 1997 Jan; 16(1):20–3

Macrolide resistance among Streptococcus pneumoniae and Streptococcus pyogenes isolates from out-patients in the USA [letter] Barry AL, et al. **J Antimicrob Chemother** 1997 Jul;40(1):139–40

Susceptibility of macrolide and beta-lactam antibiotics of Streptococcus pyogenes strains isolated over a four-year period in central Italy. Cellesi C, et al. **J Chemother** 1996 Jun;8(3):188–92

The effect of changes in the consumption of macrolide antibiotics on erythromycin resistance in group A streptococci in Finland. Finnish Study Group for Antimicrobial Resistance [see comments] Seppälä H, et al. **N Engl J Med** 1997 Aug 14;337(7):441–6. Comment in: N Engl J Med 1997 Aug 14;337(7):491–2.

Use of antimicrobial agents and drug resistance [editorial; comment] Swartz MN. **N Engl J Med** 1997 Aug 14; 337(7):491–2. Comment on: N Engl J Med 1997 Aug 14;337(7):441–6.

Six-day amoxicillin vs. ten-day penicillin V therapy for group A streptococcal tonsillopharyngitis. Cohen R, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):678–82

Erythromycin resistance of group A streptococci from throat samples is related to age. Seppälä H, et al. **Pediatr Infect Dis J** 1997 Jul;16(7):651–6

Treatment failure in streptococcal pharyngotonsillitis. An attempt to identify penicillin tolerant Streptococcus pyogenes. Orrling A, et al. **Scand J Infect Dis** 1996; 28(2):143–7

[Streptococcus pyogenes: in vitro susceptibility to several antimicrobials in two date periods] Giglio MS, et al. **Rev Med Chil** 1996 Jun;124(6):715–9 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Inactivation of Streptococcus pyogenes extracellular cysteine protease significantly decreases mouse lethality of serotype M3 and M49 strains. Lukomski S, et al. **J Clin Invest** 1997 Jun 1;99(11):2574–80

Identification of key gene products required for acquisition of plasmin-like enzymatic activity by group A streptococci. Christner R, et al. **J Infect Dis** 1997 May;175(5):1115–20

GENETICS

Streptococcus pyogenes: resistant, tolerant, neither or both? Mortensen JE, et al. **Adv Exp Med Biol** 1995;390:109–17 (63 ref.)

New tetracycline resistance determinants coding for ribosomal protection in streptococci and nucleotide sequence of tet(T) isolated from Streptococcus pyogenes A498. Clermont D, et al. **Antimicrob Agents Chemother** 1997 Jan;41(1):112–6

Expression of T-cell receptor V beta 2 and type 1 helper T-cell-related cytokine mRNA in streptococcal pyrogenic exotoxin-C-activated human peripheral blood mononuclear cells. Ohara-Nemoto Y, et al. **Can J Microbiol** 1996 Nov;42(11):1104–11

Evidence for independent binding domains within a group A streptococcal type IIo IgG-binding protein. Tsivitse M, et al. **Can J Microbiol** 1996 Nov;42(11):1172–5

Spread of serious disease-producing M3 clones of group A streptococcus among family members and health care workers. DiPersio JR, et al. **Clin Infect Dis** 1996 Mar; 22(3):490–5

Cloning and sequencing of the streptokinase gene from streptococcus pyogenes (CIP 56.57). Ball MM, et al. **DNA Seq** 1995;6(1):33–6

Prevalence of the speA2 and speA3 alleles in Streptococcus pyogenes isolated from TSLS patients in Japan. Matsumoto M, et al. **FEMS Microbiol Lett** 1997 May 15;150(2):233–7

Complementation of divergent mga genes in group A Streptococcus. Andersson G, et al. **Gene** 1996 Oct 10; 175(1–2):77–81

Use of Tn917 to generate insertion mutations in the group A streptococcus. Eichenbaum Z, et al. **Gene** 1997 Feb 28; 186(2):213–7

Novel series of plasmid vectors for gene inactivation and expression analysis in group A streptococci (GAS). Podbielski A, et al. **Gene** 1996 Oct 24;177(1–2):137–47

Molecular characterization of a major serotype M49 group A streptococcal DNase gene (sdaD). Podbielski A, et al. **Infect Immun** 1996 Dec;64(12):5349–56

Temperature regulation of the streptococcal pyrogenic exotoxin A-encoding gene (speA). Xu S, et al. **Infect Immun** 1996 Dec;64(12):5399–402

Constitutive expression of fibronectin binding in Streptococcus pyogenes as a result of anaerobic activation of rofA. Fogg GC, et al. **J Bacteriol** 1997 Oct; 179(19):6172–80

Role of mga in growth phase regulation of virulence genes of the group A streptococcus. McIver KS, et al. **J Bacteriol** 1997 Aug;179(16):5178–87

Physical and genetic chromosomal map of an M type 1 strain of Streptococcus pyogenes. Suvorov AN, et al. **J Bacteriol** 1996 Sep;178(18):5546–9

Survey of emm gene sequences and T-antigen types from systemic Streptococcus pyogenes infection isolates collected in San Francisco, California; Atlanta, Georgia; and Connecticut in 1994 and 1995. Beall B, et al. **J Clin Microbiol** 1997 May;35(5):1231–5

Molecular epidemiology of impetiginous group A streptococcal infections in aboriginal communities of northern Australia. Gardiner DL, et al. **J Clin Microbiol** 1996 Jun;34(6):1448–52

Molecular epidemiology of Streptococcus pyogenes in an area where acute pharyngotonsillitis is endemic. Nguyen L, et al. **J Clin Microbiol** 1997 Aug;35(8):2111–4

Identification of key gene products required for acquisition of plasmin-like enzymatic activity by group A streptococci. Christner R, et al. **J Infect Dis** 1997 May;175(5):1115–20

Molecular comparison of group A streptococci of T1M1 serotype from invasive and noninvasive infections in Finland. Muotiala A, et al. **J Infect Dis** 1997 Feb; 175(2):392–9

Analysis of genetic relationships among strains of groups A, C and G streptococci by random amplified polymorphic DNA analysis. Bert F, et al. **J Med Microbiol** 1996 Oct; 45(4):278–84

Different alleles of the fcrA/mrp gene of Streptococcus pyogenes encode M-related proteins exhibiting an identical immunoglobulin-binding pattern. Krebs B, et al. **Med Microbiol Immunol (Berl)** 1996 May;185(1):39–47

What is the size of the group A streptococcal vir regulon? The Mga regulator affects expression of secreted and surface virulence factors. Podbielski A, et al. **Med Microbiol Immunol (Berl)** 1996 Nov;185(3):171–81

Insertional inactivation of streptolysin S expression is associated with altered riboflavin metabolism in Streptococcus pyogenes. Liu S, et al. **Microb Pathog** 1997 Apr;22(4):227–34

Mitogenic factor secreted by Streptococcus pyogenes is a heat-stable nuclease requiring His122 for activity. Iwasaki M, et al. **Microbiology** 1997 Jul;143 (Pt 7):2449–55

Lack of polymorphism within the rRNA operons of group A streptococci. Sriprakash KS, et al. **Mol Gen Genet** 1997 Jun;255(1):125–30

Molecular cloning and functional analysis of a novel macrolide-resistance determinant, mefA, from Streptococcus pyogenes. Clancy J, et al. **Mol Microbiol** 1996 Dec;22(5):867–79

Protein F2, a novel fibronectin-binding protein from Streptococcus pyogenes, possesses two binding domains. Jaffe J, et al. **Mol Microbiol** 1996 Jul;21(2):373–84

Bacteriophage T12 of Streptococcus pyogenes integrates into the gene encoding a serine tRNA. McShan WM, et al. **Mol Microbiol** 1997 Feb;23(4):719–28

Molecular characterization of group A streptococcal (GAS) oligopeptide permease (opp) and its effect on cysteine protease production. Podbielski A, et al. **Mol Microbiol** 1996 Sep;21(5):1087–99

Data available [letter] Ferretti JJ, et al. **Nature** 1997 Mar 27;386(6623):320

Streptococcal superantigen, mitogenic factor, and pyrogenic exotoxin B expressed by Streptococcus pyogenes. Structure and function. Musser JM. **Prep Biochem Biotechnol** 1997 May–Aug;27(2–3):143–72 (141 ref.)

Horizontal gene transfer among group A streptococci: implications for pathogenesis and epidemiology. Kehoe MA, et al. **Trends Microbiol** 1996 Nov;4(11):436–43 (50

ref.)

GROWTH & DEVELOPMENT

Intracellular penetration and survival of Streptococcus pyogenes in respiratory epithelial cells in vitro. Osterlund A, et al. **Acta Otolaryngol (Stockh)** 1995 Sep;115(5):685–8

Kinetics and regulation of erythrogenic toxins type A and C during growth of Streptococcus pyogenes. Ozegowski JH, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):271–85

IMMUNOLOGY

Detection of streptococcal class I M protein in psoriasis by confocal immunofluorescent microscopy. Talanin NY, et al. **Acta Derm Venereol** 1997 May;77(3):175–80

Possible role for a polysaccharide antigen shared between Streptococcus pyogenes and S. mutans in the pathogenesis of poststreptococcal glomerulonephritis. Okada K, et al. **Acta Paediatr Jpn** 1996 Oct;38(5):470–5

Group A streptococcal adhesion. All of the theories are correct. Hasty DL, et al. **Adv Exp Med Biol** 1996;408:81–94 (75 ref.)

Immunological mimicry between retinal S-antigen and group A streptococcal M proteins. Lerner MP, et al. **Autoimmunity** 1995;22(2):95–106

The hemopexin-type repeats of human vitronectin are recognized by Streptococcus pyogenes. Liang OD, et al. **Biochem Biophys Res Commun** 1997 May 19;234(2):445–9

Phagocytic processing of two M protein T-cell epitopes from viable group A streptococci. Delvig AA, et al. **Biochem Soc Trans** 1997 May;25(2):205S

Preparations of antigens and immunoadsorbents corresponding to the Streptococcus group A cell-wall polysaccharide. Auzanneau FI, et al. **Bioorg Med Chem** 1996 Nov;4(11):2003–10

Evidence for independent binding domains within a group A streptococcal type IIo IgG-binding protein. Tsivitse M, et al. **Can J Microbiol** 1996 Nov;42(11):1172–5

A new procedure for the purification of streptococcal pyrogenic exotoxin A from Streptococcus pyogenes supernatant. Mascini EM, et al. **Clin Diagn Lab Immunol** 1996 Nov;3(6):779–81

Experimental acute glomerulonephritis induced in the rabbit with a specific streptococcal antigen. Yoshizawa N, et al. **Clin Exp Immunol** 1997 Jan;107(1):61–7

Antibodies to streptococcal cell wall in psoriatic arthritis and cutaneous psoriasis. Rantakokko K, et al. **Clin Exp Rheumatol** 1997 Jul–Aug;15(4):399–404

Definition of the mitogenic factor (MF) as a novel streptococcal superantigen that is different from streptococcal pyrogenic exotoxins A, B, and C. Toyosaki T, et al. **Eur J Immunol** 1996 Nov;26(11):2693–701

Analysis of human T cell responses to group A streptococci using fractionated Streptococcus pyogenes proteins. Degnan BA, et al. **FEMS Immunol Med Microbiol** 1997 Mar;17(3):161–70

Human IgG binding ability of streptococcal M3 protein: its related complement activation-dependent M3 protein polymerization. Hong K. **FEMS Immunol Med Microbiol** 1997 Jul;18(3):163–74

Isolation of a new superantigen with potent mitogenic activity to murine T cells from Streptococcus pyogenes. Nemoto E, et al. **FEMS Immunol Med Microbiol** 1996 Sep; 15(2–3):81–91

Antigenic epitope mapping of the M24 protein of Streptococcus pyogenes: implications for serodiagnosis of rheumatic fever. Norton RE, et al. **FEMS Immunol Med Microbiol** 1996 Dec 31; 16(3–4):267–71

Streptococcus pyogenes type 5 M protein is an antigen, not a superantigen, for human T cells. Degnan B, et al. **Hum Immunol** 1997 Apr 1;53(2):206–15

Opsonic human antibodies from an endemic population specific for a conserved epitope on the M protein of group A streptococci. Brandt ER, et al. **Immunology** 1996 Nov; 89(3):331–7

Superantigenicity of helper T-cell mitogen (SPM-2) isolated from culture supernatants of Streptococcus pyogenes. Rikiishi H, et al. **Immunology** 1997 Jul;91(3):406–13

Molecular analysis of human cardiac myosin-cross-reactive B- and T-cell epitopes of the group A streptococcal M5 protein. Cunningham MW, et al. **Infect Immun** 1997 Sep; 65(9):3913–23

Preferential recognition of human myocardial antigens by T lymphocytes from rheumatic heart disease patients. El-Demellawy M, et al. **Infect Immun** 1997 Jun; 65(6):2197–205

Intranasal immunization with C5a peptidase prevents nasopharyngeal colonization of mice by the group A Streptococcus. Ji Y, et al. **Infect Immun** 1997 Jun; 65(6):2080–7

Streptococcal mitogenic exotoxin Z, a novel acidic superantigenic toxin produced by a T1 strain of Streptococcus pyogenes. Kamezawa Y, et al. **Infect Immun** 1997 Sep;65(9):3828–33

Localization by site-directed mutagenesis of the site in human complement factor H that binds to Streptococcus pyogenes M protein. Sharma AK, et al. **Infect Immun** 1997 Feb; 65(2):484–7

Streptococcal protein H forms soluble complement-activating complexes with IgG, but inhibits complement activation by IgG-coated targets. Berge A, et al. **J Biol Chem** 1997 Aug 15;272(33):20774–81

Determination of anti-streptolysin O antibody titer by a new passive agglutination method using sensitized torayesphere particles. Kodama T, et al. **J Clin Microbiol** 1997 Apr; 35(4):839–42

The superantigen streptococcal pyrogenic exotoxin C (SPE-C) exhibits a novel mode of action. Li PL, et al. **J Exp Med** 1997 Aug 4;186(3):375–83

Binding of human complement component C4b-binding protein (C4BP) to Streptococcus pyogenes involves the C4b-binding site. Accardo P, et al. **J Immunol** 1996 Dec 1;157(11):4935–9

Species-dependent post-translational modification and position 2 allelism: effects on streptococcal superantigen SSA structure and V beta specificity. Stevens KR, et al. **J Immunol** 1996 Sep 15;157(6):2479–87

Detection of antibody to C-carbohydrate of group A streptococci with enzyme-treated whole bacterial cells as antigen for ELISA. Thakur A, et al. **J Med Microbiol** 1996 Sep;45(3):214–8

Type-specific antibodies to purified streptococcal M proteins from potentially rheumatogenic M-types in patients with rheumatic fever and rheumatic heart disease. Thakur A, et al. **J Med Microbiol** 1996 Dec;45(6):483–9

Elevated IgG titer against the C region of streptococcal M protein and its immunodeterminants in patients with poststreptococcal acute glomerulonephritis. Mori K, et al. **J Pediatr** 1997 Aug;131(2):293–9

Detection of circulating bacterial superantigen and lymphotoxin-alpha in patients with streptococcal toxic-shock syndrome [letter] Sriskandan S, et al. **Lancet** 1996 Nov 9;348(9037):1315–6

Immune responses against Streptococcus pyogenes in human palatine tonsils. Kerakawauchi H, et al. **Laryngoscope** 1997 May;107(5):634–9

Epitope mapping of homologous and cross-reactive antigens by monoclonal antibodies to streptococcal cell membrane (mAb to SCM). Lange CF, et al. **Mol Immunol** 1996 Jun; 33(9):777–86

Analysis of the interaction between the bacterial superantigen streptococcal pyrogenic exotoxin A (SpeA) and the human T-cell receptor. Kline JB, et al. **Mol Microbiol** 1997 Apr; 24(1):191–202

Crystal structure of the streptococcal superantigen SPE-C: dimerization and zinc binding suggest a novel mode of interaction with MHC class II molecules. Roussel A, et al. **Nat Struct Biol** 1997 Aug;4(8):635–43

False positive detection of group A Streptococcus antigen resulting from cross-reacting Streptococcus intermedius (Streptococcus milleri group). Rubin LG, et al. **Pediatr Infect Dis J** 1996 Aug;15(8):715–7

Mapping a conserved conformational epitope from the M protein of group A streptococci. Relf WA, et al. **Pept Res** 1996 Jan–Feb;9(1):12–20

Changing streptococci and prospects for the global eradication of rheumatic fever. Stollerman GH. **Perspect Biol Med** 1997 Winter;40(2):165–89 (113 ref.)

Exploring the basis of peptide-carbohydrate crossreactivity: evidence for discrimination by peptides between closely related anti-carbohydrate antibodies. Harris SL, et al. **Proc Natl Acad Sci U S A** 1997 Mar 18;94(6):2454–9

Psoriasis vulgaris, streptococci and the immune system: a riddle to be solved soon? Prinz JC. **Scand J Immunol** 1997 Jun;45(6):583–6 (30 ref.)

Significance of antibodies to streptococcal M protein in psoriatic arthritis and their association with HLA-A*0207. Muto M, et al. **Tissue Antigens** 1996 Dec;48(6):645–50

[Group A Streptococcus and autoimmune] Ohkuni H. **Ryumachi** 1996 Dec;36(6):874–83 (36 ref.) **(Jpn)**

[Curative and prophylactic immunomodulation by vaccination in mucocutaneous streptococcal infections] Topciu V, et al. **Bacteriol Virusol Parazitol Epidemiol** 1996 Jan–Jun;41(1–2):71–3 **(Rum)**

[Assessment of secretory and humoral immune response to group A polysaccharide in rheumatism] Miasoedova SE, et al. **Klin Lab Diagn** 1996 Jul–Aug;(4):43–5 **(Rus)**

[Antistreptococcal immunity in rheumatism and urban ecological risk factors] Amanzholova ShA. **Ter Arkh** 1996; 68(5):45–7 (Eng. Abstr.) **(Rus)**

[The structure of the determinants of streptococcal group A polysaccharide common to epidermal antigens to which antibodies are formed at different stages of the rheumatic process] Bazanova EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Sep–Oct;(5):16–9 (Eng. Abstr.) **(Rus)**

[The characteristics of the immune response to the polysaccharide determinants of Streptococcus group A in rheumatism] Borodiiuk NA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 May–Jun; (3):118–22 (Eng. Abstr.) **(Rus)**

[Is an antistreptococcal vaccine available at last? (editorial)] Reyes López PA. **Arch Inst Cardiol Mex** 1996 Sep–Oct; 66(5):387–9 **(Spa)**

ISOLATION & PURIFICATION

In situ localization of Streptococcus pyogenes during acute tonsillitis: an immunocytochemical study with gold markers. Fredriksen F, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):892–5

Role of fimbriae in adherence of Streptococcus pyogenes to pharyngeal epithelial cells. Kasashima T, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;525:40–3

Identification of Streptococcus pyogenes on tonsillar epithelium during infection. Stenfors LE, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;529:212–4

Systemic immune response to Streptococcal and Staphylococcal lipoteichoic acids in children with recurrent tonsillitis. Yokoyama Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1996;523:108–11

Neonatal pleural empyema with group A Streptococcus. Thaarup J, et al. **Acta Paediatr** 1997 Jul;86(7):769–71 (17 ref.)

Poststreptococcal reactive arthritis: report of one case. Hsu JF, et al. **Acta Paediatr Sin** 1996 Jul–Aug;37(4):295–7

Toxic streptococcal syndrome. Stanford DG, et al. **Australas J Dermatol** 1997 Aug;38(3):158–60

A household cluster of fulminant group A streptococcus pneumonia associated with toxic shock syndrome-Quebec. **Can Commun Dis Rep** 1996 Mar 15;22(6):41–3 (6 ref.)

Group A Streptococcus invasive infections: a review. Weiss KA, et al. **Can J Surg** 1997 Feb;40(1):18–25 (44 ref.)

Bacterial L-forms research in China. Huang G, et al. **Chin Med J (Engl)** 1996 Jan;109(1):18–20 (0 ref.)

Presumptive identification of streptococci by pyrrolidonyl-beta-naphthylamide (PYR) test. Chen CH, et al. **Chung Hua I Hsueh Tsa Chih (Taipei)** 1997 Apr; 59(4):259–64

Prolonged hypocomplementemia in poststreptococcal acute glomerulonephritis. Dedeoglu IO, et al. **Clin Nephrol** 1996 Nov;46(5):302–5

Asymptomatic acute poststreptococcal glomerulonephritis following upper respiratory tract infections caused by Group A streptococci. Yoshizawa N, et al. **Clin Nephrol** 1996 Nov;46(5):296–301

Rapid antigen testing for group A Streptococcus by DNA probe. Heelan JS, et al. **Diagn Microbiol Infect Dis** 1996 Feb;24(2):65–9

Atypical Streptococcus pyogenes from an ear discharge. Kocka FE, et al. **Diagn Microbiol Infect Dis** 1996 Feb; 24(2):105–7

Trends in bacteremic infection due to Streptococcus pyogenes (group A streptococcus), 1986–1995. Musher DM, et al. **Emerg Infect Dis** 1996 Jan–Mar;2(1):54–6

Molecular DNA analysis for differentiation of persistence or relapse from recurrence in treatment failure of Streptococcus pyogenes pharyngitis. Fitoussi F, et al. **Eur J Clin Microbiol Infect Dis** 1997 Mar;16(3):233–7

Comparative evaluation of two indigenously developed tests for rapid detection of group-A streptococci directly from throat swabs. Gupta R, et al. **Indian J Med Res** 1997 May; 105:200–5

Streptococcal toxic shock-like syndrome. Report of two cases from Italy. Girelli CM, et al. **Infection** 1996 Jan–Feb; 24(1):43–6

Necrotizing fasciitis due to group A streptococci: a clinicopathological study of six patients. Misago N, et al. **J Dermatol** 1996 Dec;23(12):876–82

A genetic-based evaluation of the principal tissue reservoir for group A streptococci isolated from normally sterile sites. Fiorentino TR, et al. **J Infect Dis** 1997 Jul; 176(1):177–82

Delayed diagnosis of acute rheumatic fever in adults: a forgotten cause of febrile polyarthritis. Chan AW, et al. **J Rheumatol** 1996 Nov;23(11):1999–2001

Diagnosing streptococcal pharyngitis in patients taking antibiotics. Brunell P. **JAMA** 1997 Apr 16;277(15):1197

Use of optical immunoassay to diagnose streptococcal pharyngitis [letter; comment] Dale JC, et al. **JAMA** 1997 Jul 2;278(1):23–4. Comment on: JAMA 1997 Mar 19;277(11):899–903.

Optical immunoassay test for group A beta-hemolytic streptococcal pharyngitis. An office-based, multicenter investigation [see comments] Gerber MA, et al. **JAMA** 1997 Mar 19;277(11):899–903. Comment in: JAMA 1997 Jul 2;278(1):23–4.

Group A streptococcal toxic shock. Rehman N, et al. **JPMA J Pak Med Assoc** 1995 Nov;45(11):303–4

Effectiveness of clinical guidelines for the presumptive treatment of streptococcal pharyngitis in Egyptian children [see comments] Steinhoff MC, et al. **Lancet** 1997 Sep 27; 350(9082):918–21. Comment in: Lancet 1997 Sep 27;350(9082):899–900.

Intracellular reservoir of Streptococcus pyogenes in vivo: a possible explanation for recurrent pharyngotonsillitis. Osterlund A, et al. **Laryngoscope** 1997 May;107(5):640–7

Group A streptococcal bacteremia. A 10-year prospective study. Bernaldo de Quirós JC, et al. **Medicine (Baltimore)** 1997 Jul;76(4):238–48 (94 ref.)

Polymerase chain reaction for Streptococcus pyogenes used to evaluate an optical immunoassay for the detection of group A streptococci in children with pharyngitis. Kaltwasser G, et al. **Pediatr Infect Dis J** 1997 Aug; 16(8):748–53

Risk factors for invasive group A streptococcal infections in children with varicella: a case-control study. Peterson CL, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):151–6

Outbreak of perianal Streptococcus pyogenes infection in a day-care center. Saxén H, et al. **Pediatr Infect Dis J** 1997 Feb;16(2):247–9

Invasive group A streptococcal infections in children with varicella in Southern California. Vugia DJ, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):146–50

Food-borne outbreak of streptococcal pharyngitis in an Israeli Airforce Base. Bar-Dayan Y, et al.

Scand J Infect Dis 1996;28(6):563–6

Incidence and severity of group A streptococcal bacteremia in a medical center in Israel, 1981–1994. Livni G, et al. **Scand J Infect Dis** 1996;28(2):139–42

6–day amoxicillin versus 10–day penicillin V for group A beta–haemolytic streptococcal acute tonsillitis in adults: a French multicentre, open–label, randomized study. The French Study Group Clamorange. Peyramond D, et al. **Scand J Infect Dis** 1996;28(5):497–501

Recolonization with selected alpha–streptococci for prophylaxis of recurrent streptococcal pharyngotonsillitis––a randomized placebo–controlled multicentre study. Roos K, et al. **Scand J Infect Dis** 1996; 28(5):459–62

[Puerperal fever. A survey of an epidemic using a case–controlled study] Strøbaek S, et al. **Ugeskr Laeger** 1997 Jun 23;159(26):4117–22 (Eng. Abstr.) **(Dan)**

[Properties of extracellular products produced by group A streptococci isolated from patient with streptococcal toxic shock syndrome] Suzuki J, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):273–8 (Eng. Abstr.) **(Jpn)**

[Evaluation of the Respiralex test for rapid isolation of Streptococcus pyogenes directly from throat swabs] Mihajlović–Ukropina M, et al. **Med Pregl** 1996; 49(9–10):409–11 (Eng. Abstr.) **(Scr)**

METABOLISM

Proteins F1 and F2 of Streptococcus pyogenes. Properties of fibronectin binding. Hanski E, et al. **Adv Exp Med Biol** 1996;408:141–50 (23 ref.)

Absorption of kininogen from human plasma by Streptococcus pyogenes is followed by the release of bradykinin. Ben Nasr A, et al. **Biochem J** 1997 Sep 15;326 (Pt 3):657–60

Lectin mediated binding of Streptococcus pyogenes to human oropharyngeal mucosal epithelial cells. Kumar KS, et al. **Indian J Exp Biol** 1996 Mar;34(3):270–1

Temporal production of streptococcal erythrogenic toxin B (streptococcal cysteine proteinase) in response to nutrient depletion. Chaussee MS, et al. **Infect Immun** 1997 May; 65(5):1956–9

Acquisition of iron from host proteins by the group A streptococcus. Eichenbaum Z, et al. **Infect Immun** 1996 Dec;64(12):5428–9

Localization by site–directed mutagenesis of the site in human complement factor H that binds to Streptococcus pyogenes M protein. Sharma AK, et al. **Infect Immun** 1997 Feb; 65(2):484–7

Antitumor effect of Streptococcus pyogenes by inducing hydrogen peroxide production. Higuchi Y. **Jpn J Cancer Res** 1996 Dec;87(12):1271–9

Insertional inactivation of streptolysin S expression is associated with altered riboflavin metabolism in Streptococcus pyogenes. Liu S, et al. **Microb Pathog** 1997 Apr;22(4):227–34

Inducer expulsion and the occurrence of an HPr(Ser–P)–activated sugar–phosphate phosphatase in Enterococcus faecalis and Streptococcus pyogenes. Ye JJ, et al. **Microbiology** 1996 Mar;142 (Pt 3):585–92

Protein F2, a novel fibronectin–binding protein from Streptococcus pyogenes, possesses two binding domains. Jaffe J, et al. **Mol Microbiol** 1996 Jul;21(2):373–84

Occurrence of extracellular hyaluronic acid and hyaluronatlyase in streptococci of groups A, B, C, and G. Günther E, et al. **Zentralbl Bakteriol** 1996 Sep;285(1):64–73

[Properties of extracellular products produced by group A streptococci isolated from patient with streptococcal toxic shock syndrome] Suzuki J, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):273–8 (Eng. Abstr.) **(Jpn)**

PATHOGENICITY

An experimental model for acute poststreptococcal glomerulonephritis in mice. Nordstrand A, et al. **APMIS** 1996 Nov;104(11):805–16

Pericolic abscess due to Streptococcus pyogenes: report of a case that clinically mimicked acute cholecystitis. Procop GW, et al. **Clin Infect Dis** 1996 Jul;23(1):182–3

Mediawatch. "Killer bug ate my face". Dixon B. **Curr Biol** 1996 May 1;6(5):493

Streptococcal toxic–shock syndrome: spectrum of disease, pathogenesis, and new concepts in treatment. Stevens DL. **Emerg Infect Dis** 1995 Jul–Sep;1(3):69–78 (80 ref.)

M protein mediated adhesion of M type 24 Streptococcus pyogenes stimulates release of interleukin–6 by HEp–2 tissue culture cells. Courtney HS, et al. **FEMS Microbiol Lett** 1997 Jun 1;151(1):65–70

The toxins of group A streptococcus, the flesh eating bacteria. Stevens DL. **Immunol Invest** 1997 Jan–Feb; 26(1–2):129–50 (74 ref.)

Relative contributions of hyaluronic acid capsule and M protein to virulence in a mucoid strain of the group A Streptococcus. Moses AE, et al. **Infect Immun** 1997 Jan; 65(1):64–71

Keratinocyte proinflammatory responses to adherent and nonadherent group A streptococci. Wang B, et al. **Infect Immun** 1997 Jun;65(6):2119–26

Role of mga in growth phase regulation of virulence genes of the group A streptococcus. McIver KS, et al. **J Bacteriol** 1997 Aug;179(16):5178–87

Hyaluronic acid capsule and the role of streptococcal entry into keratinocytes in invasive skin infection. Schrager HM, et al. **J Clin Invest** 1996 Nov 1;98(9):1954–8

Transmission of Streptococcus pyogenes causing toxic shock–like syndrome among family members and confirmation by DNA macrorestriction analysis. Ichiyama S, et al. **J Infect Dis** 1997 Mar;175(3):723–6

Virulence regulon polymorphism in group A streptococci revealed by long PCR and implications for epidemiological and evolutionary studies. Hookey JV, et al. **J Med Microbiol** 1996 Oct;45(4):285–93

Expression of both M protein and hyaluronic acid capsule by group A streptococcal strains results in a high virulence for chicken embryos. Schmidt KH, et al. **Med Microbiol Immunol (Berl)** 1996 Feb;184(4):169–73

Streptococcal superantigen, mitogenic factor, and pyrogenic exotoxin B expressed by Streptococcus pyogenes. Structure and function. Musser JM. **Prep Biochem Biotechnol** 1997 May–Aug;27(2–3):143–72 (141 ref.)

[Role of the M protein of Streptococcus pyogenes and its regulation] Okada N. **Nippon Saikingaku Zasshi** 1996 Feb; 51(2):571–81 (44 ref.) **(Jpn)**

PHYSIOLOGY

Conversion of M serotype 24 of Streptococcus pyogenes to M serotypes 5 and 18: effect on resistance to phagocytosis and adhesion to host cells. Courtney HS, et al. **Infect Immun** 1997 Jun;65(6):2472–4

High–frequency invasion of epithelial cells by Streptococcus pyogenes can be activated by fibrinogen and peptides containing the sequence RGD. Cue DR, et al. **Infect Immun** 1997 Jul;65(7):2759–64

The fibronectin–binding protein of Streptococcus pyogenes, SfbI, is involved in the internalization of group A streptococci by epithelial cells. Molinari G, et al. **Infect Immun** 1997 Apr;65(4):1357–63

Cell wall anchoring of the Streptococcus pyogenes M6 protein in various lactic acid bacteria. Piard JC, et al. **J Bacteriol** 1997 May;179(9):3068–72

VIROLOGY

Bacteriophage T12 of Streptococcus pyogenes integrates into the gene encoding a serine tRNA. McShan WM, et al. **Mol Microbiol** 1997 Feb;23(4):719–28

STREPTOCOCCUS SANGUIS

Streptococcus sanguis bacteremia associated with cecal carcinoma: case report and review of the literature. Marinella MA. **Am J Gastroenterol** 1997 Sep;92(9):1541–2 (12 ref.)

Liver abscess due to Streptococcus sanguis. George S, et al. **Clin Infect Dis** 1996 Jan;22(1):191–2

Percutaneous drainage of septic glenohumoral arthritis. de Witte MT, et al. **Eur J Radiol** 1996 May;22(2):158–60

[Atypical lung abscess occurring in an elderly female suffering from diabetes mellitus––a case report] Komatsu K, et al. **Kansenshogaku Zasshi** 1997 Mar;71(3):260–3 (Eng. Abstr.) **(Jpn)**

[Aortic valve perforation] Shu T, et al. **Ryoikibetsu Shokogun Shirizu** 1996;(13):415–20 (16 ref.) **(Jpn)**

[Pyogenic hepatic abscess by Streptococcus sanguis I (letter)] Torné J, et al. **Enferm Infecc Microbiol Clin** 1996 Dec; 14(10):635–6 **(Spa)**

CHEMISTRY

Lipoteichoic acid from viridans streptococci induces the production of tumor necrosis factor and nitric oxide by murine macrophages. English BK, et al. **J Infect Dis** 1996 Dec;174(6):1348–51

CLASSIFICATION

A numerical taxonomic study of Streptococcus sanguis, S. mitis and similar organisms using conventional tests and pyrolysis mass spectrometry. Magee JT, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):195–203

DRUG EFFECTS

Effect of gentamicin dosing interval on efficacy of penicillin or ceftriaxone treatment of experimental endocarditis due to penicillin–susceptible, ceftriaxone–tolerant viridans group streptococci. Brandt CM, et al. **Antimicrob Agents Chemother** 1996 Dec;40(12):2901–3

ENZYMOLOGY

Purification of NADH: hypothiocyanite oxidoreductase in Streptococcus sanguis. Courtois PH, et al. **Biochem Mol Med** 1996 Apr;57(2):134–8

Some effects of fluoride on the IgA protease of the oral bacterium Streptococcus sanguis. Duguid R, et al. **Biochem Soc Trans** 1996 May;24(2):312S

Pathway for uptake and degradation of X–prolyl tripeptides in Streptococcus mutans VA–29R and Streptococcus sanguis ATCC 10556. Cowman RA, et al. **J Dent Res** 1997 Aug;76(8):1477–84

GENETICS

comYA, a gene similar to comGA of Bacillus subtilis, is essential for competence–factor–dependent DNA transformation in Streptococcus gordonii. Lunsford RD, et al. **J Bacteriol** 1997 May;179(10):3122–6

IMMUNOLOGY

[Behçet's disease and streptococcal antigens] Yoshikawa K, et al. **Nippon Ganka Gakkai Zasshi** 1996 Mar;100(3):173–80 (47 ref.) (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Late bioprosthetic valve endocarditis caused by Phialemonium aff. curvatum and Streptococcus sanguis: a case report. Schønheyder HC, et al. **J Med Vet Mycol** 1996 Jun–Jul;34(3):209–14

METABOLISM

Competitive binding of calcium, magnesium and zinc to Streptococcus sanguis and purified S. sanguis cell walls. Rose RK. **Caries Res** 1996;30(1):71–5

PATHOGENICITY

Streptococcus sanguis expresses a 150–kilodalton two–domain adhesin: characterization of several independent adhesin epitopes. Gong K, et al. **Infect Immun** 1997 Sep;65(9):3815–21

PHYSIOLOGY

Interaction between oral alpha–streptococci and group A streptococci in patients with tonsillitis. Fujimori I, et al. **Ann Otol Rhinol Laryngol** 1997 Jul;106(7 Pt 1):571–4

Saliva mediated adherence, aggregation and prevalence in dental plaque of Streptococcus mutans, Streptococcus sanguis and Actinomyces spp, in young and elderly humans. Carlén A, et al. **Arch Oral Biol** 1996 Dec; 41(12):1133–40

Adsorption of saliva–coated and plain streptococcal cells to the surfaces of hydroxyapatite beads. Tanaka H, et al. **Arch Oral Biol** 1996 May;41(5):505–8

The role of immunoglobulin G and fibrinogen in platelet aggregation by Streptococcus sanguis. Ford I, et al. **Br J Haematol** 1997 Jun;97(4):737–46

Evidence for the involvement of complement proteins in platelet aggregation by Streptococcus sanguis NCTC 7863. Ford I, et al. **Br J Haematol** 1996 Sep;94(4):729–39

Recolonization with selected alpha–streptococci for prophylaxis of recurrent streptococcal pharyngotonsillitis––a randomized placebo–controlled multicentre study. Roos K, et al. **Scand J Infect Dis** 1996; 28(5):459–62

STREPTOCOCCUS SOBRINUS

CLASSIFICATION

Typing of mutans streptococci by arbitrarily primed polymerase chain reaction. Saarela M, et al. **Arch Oral Biol** 1996 Aug–Sep;41(8–9):821–6

DRUG EFFECTS

Inhibitory effects of funoran on the adherence and colonization of mutans streptococci. Saeki Y, et al. **Caries Res** 1996;30(2):119–25

ENZYMOLOGY

Peroxidase–catalyzed generation of catechin oligomers that inhibit glucosyltransferase from Streptococcus sobrinus. Hamada S, et al. **FEMS Microbiol Lett** 1996 Sep 15; 143(1):35–40

IMMUNOLOGY

Anti–adhesins of Streptococcus sobrinus. Wang Q, et al. **Adv Exp Med Biol** 1996;408:249–62 (48 ref.)

Effect of antibodies on the chain length and growth of Streptococcus sobrinus. van Raamsdonk M, et al. **Caries Res** 1997;31(1):35–40

Generation of bovine immune colostrum against Streptococcus mutans and Streptococcus sobrinus and its effect on glucose uptake and extracellular polysaccharide formation by mutans streptococci. Loimaranta V, et al. **Vaccine** 1997 Aug;15(11):1261–8

Oral immunization with recombinant Salmonella typhimurium expressing surface protein antigen A (SpaA) of Streptococcus sobrinus: effects of the Salmonella virulence plasmid on the induction of protective and sustained humoral responses in rats. Redman TK, et al. **Vaccine** 1996 Jun;14(9):868–78

PHYSIOLOGY

Incorporation of caseinoglycomacropeptide and caseinophosphopeptide into the salivary pellicle inhibits adherence of mutans streptococci. Schüpbach P, et al. **J Dent Res** 1996 Oct;75(10):1779–88

[The effects of lipoteichoic acid and calcium on the adherence of oral streptococci in vitro] Li M, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1996 Jan;31(1):9–11 (Eng. Abstr.) **(Chi)**

STREPTOCOCCUS SUIS

Streptococcus suis toxic–shock syndrome and meningitis.

Leelarasamee A, et al. **J Med Assoc Thai** 1997 Jan; 80(1):63–8

Evaluation of antibiotics for the elimination of the tonsillar carrier state of Streptococcus suis in pigs. Amass SF, et al. **J Vet Diagn Invest** 1996 Jan;8(1):64–7

Multiple serotypes and strains of Streptococcus suis in naturally infected swine herds. Reams RY, et al. **J Vet Diagn Invest** 1996 Jan;8(1):119–21

An enzyme-linked immunosorbent assay (ELISA) for the detection of antibody against Streptococcus suis type 2 in infected pigs. Kataoka Y, et al. **J Vet Med Sci** 1996 Apr; 58(4):369–72

Streptococcus suis: past and present. Staats JJ, et al. **Vet Res Commun** 1997 Aug;21(6):381–407 (220 ref.)

[Streptococcus suis L3–L4 spondylodiscitis in a butcher (letter)] Caumont H, et al. **Presse Med** 1996 Oct 5; 25(29):1348 **(Fre)**

[Meningitis by Streptococcus suis (letter)] Juncal AR, et al. **Enferm Infecc Microbiol Clin** 1997 Feb;15(2):120–1 **(Spa)**

CHEMISTRY

Role of capsular sialic acid in virulence and resistance to phagocytosis of Streptococcus suis capsular type 2. Charland N, et al. **FEMS Immunol Med Microbiol** 1996 Jul;14(4):195–203

Identification of a Streptococcus suis 60-kDa heat-shock protein using western blotting. Benkirane R, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):379–85

CLASSIFICATION

Prevalence of various phenotypes of Streptococcus suis isolated from swine in the U.S.A. based on the presence of muraminidase-released protein and extracellular factor. Galina L, et al. **Can J Vet Res** 1996 Jan;60(1):72–4

Distribution of Streptococcus suis capsular types in 1996. Higgins R, et al. **Can Vet J** 1997 May;38(5):302

Virulent strains of Streptococcus suis serotype 2 and highly virulent strains of Streptococcus suis serotype 1 can be recognized by a unique ribotype profile. Smith HE, et al. **J Clin Microbiol** 1997 May;35(5):1049–53

Streptococcus suis serotypes 7, 8 and 14 from diseased pigs in Scotland. MacLennan M, et al. **Vet Rec** 1996 Oct 26; 139(17):423–4

DRUG EFFECTS

Susceptibility to antimicrobial agents of Streptococcus suis capsular type 2 strains isolated from pigs. Seol B, et al. **Zentralbl Bakteriol** 1996 Mar;283(3):328–31

GENETICS

Cloning and characterization of a dextranase gene (dexS) from Streptococcus suis. Serhir B, et al. **Gene** 1997 May 6;190(2):257–61

Demonstration of vertical transmission of Streptococcus suis in swine by genomic fingerprinting. Amass SF, et al. **J Clin Microbiol** 1997 Jun;35(6):1595–6

IMMUNOLOGY

The Gal alpha 1-4 Gal-binding adhesin of Streptococcus suis, a gram-positive meningitis-associated bacterium. Haataja S, et al. **Adv Exp Med Biol** 1996;408:25–34 (21 ref.)

Comparative preparation methods of sialylated capsule antigen from Streptococcus suis type 2 with type specific antigenicity. Katsumi M, et al. **J Vet Med Sci** 1996 Oct; 58(10):947–52

Vaccinator device for delivering propellant-driven aerosols of Streptococcus suis bacterin into the respiratory tracts of swine. Brown AR, et al. **Vaccine** 1997 Aug; 15(11):1165–73

Detection of antibodies against Streptococcus suis capsular type 2 using a purified capsular polysaccharide antigen-based indirect ELISA. del Campo Sepúlveda EM, et al. **Vet Microbiol** 1996 Sep;52(1–2):113–25

ISOLATION & PURIFICATION

Prevalence of various phenotypes of Streptococcus suis isolated from swine in the U.S.A. based on the presence of muraminidase-released protein and extracellular factor. Galina L, et al. **Can J Vet Res** 1996 Jan;60(1):72–4

Isolation of Streptococcus suis from a young wild boar. Higgins R, et al. **Can Vet J** 1997 Feb;38(2):114

Infective endocarditis due to Streptococcus suis serotype 2 [letter] Tayoro J, et al. **Eur J Clin Microbiol Infect Dis** 1996 Sep;15(9):765–6 (10 ref.)

Bacterial isolation from slaughtered pigs associated with endocarditis, especially the isolation of Streptococcus suis. Katsumi M, et al. **J Vet Med Sci** 1997 Jan;59(1):75–8

METABOLISM

Description of an albumin binding activity for Streptococcus suis serotype 2. Quessy S, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):245–50

Surface location of HPr, a phosphocarrier of the phosphoenolpyruvate: sugar phosphotransferase system in Streptococcus suis. Dubreuil JD, et al. **Microbiology** 1996 Apr;142 (Pt 4):837–43

Protection of experimentally infected pigs by suilysin, the thiol-activated haemolysin of Streptococcus suis. Jacobs AA, et al. **Vet Rec** 1996 Sep 7;139(10):225–8

Binding properties of Streptococcus suis for immunoglobulin G and other plasma proteins. Salasia SI, et al. **Zentralbl Veterinarmed [B]** 1996 Oct;43(8):497–503

PATHOGENICITY

Role of capsular sialic acid in virulence and resistance to phagocytosis of Streptococcus suis capsular type 2. Charland N, et al. **FEMS Immunol Med Microbiol** 1996 Jul;14(4):195–203

Mutants of Streptococcus suis types 1 and 2 impaired in expression of muramidase-released protein and extracellular protein induce disease in newborn germfree pigs. Smith HE, et al. **Infect Immun** 1996 Oct; 64(10):4409–12

Characterization of virulence of the Streptococcus suis serotype 2 reference strain Henrichsen S 735 in newborn gnotobiotic pigs. Vecht U, et al. **Vet Microbiol** 1996 Jul; 51(1–2):125–36

PHYSIOLOGY

Streptococcus suis serotype 14 as a cause of pig disease in the UK [letter] Heath PJ, et al. **Vet Rec** 1996 Nov 2; 139(18):450–1

STREPTOCOCCUS ZOOEPIDEMICUS see **STREPTOCOCCUS EQUI**

STREPTODORNASE see **DEOXYRIBONUCLEASE I**

STREPTOGRAMIN see **VIRGINIAMYCIN**

STREPTOKINASE

ADMINISTRATION & DOSAGE

TIMI grade 3 flow and reocclusion after intravenous thrombolytic therapy: a pooled analysis. Barbagelata NA, et al. **Am Heart J** 1997 Mar;133(3):273–82

High-dose streptokinase therapy with three million units in one hour significantly improves early coronary patency rates in acute myocardial infarction. Theiss W, et al. **Am J Cardiol** 1996 Nov 15;78(10):1167–9

Intrapleural streptokinase versus urokinase in the treatment of complicated parapneumonic effusions: a prospective, double-blind study. Bouros D, et al. **Am J Respir Crit Care Med** 1997 Jan;155(1):291–5

Intra-arterial fibrinolytic treatment for mesenteric arterial embolus: a case report. Kwauk ST, et al. **Can J Surg** 1996 Apr;39(2):163–6

Ultrasound enhancement of rabbit femoral artery thrombolysis. Riggs PN, et al. **Cardiovasc Surg** 1997 Apr; 5(2):201–7

Failure of fibrinolytic endoventricular treatment to prevent neonatal post-haemorrhagic hydrocephalus. A case-control trial. Luciano R, et al. **Childs Nerv Syst** 1997 Feb;13(2):73–6

Long-term benefit of one thrombolytic over another [letter] Grobman BJ. **Circulation** 1997 Sep 16;96(6):2093

Prolonged streptokinase infusion in patients with unstable angina: results of a randomized, placebo-controlled clinical trial. Oltrona L, et al. **Coron Artery Dis** 1996 May; 7(5):377–82

Treatment of the heparin-induced thrombosis-thrombocytopenia syndrome by very low dose streptokinase. Ferrari E, et al. **Heart** 1996 Aug;76(2):185–6

Temperature- and pH-sensitive terpolymers for modulated delivery of streptokinase. Vakkalanka SK, et al. **J Biomater Sci Polym Ed** 1996;8(2):119–29

Early administration of intrapleural streptokinase in the treatment of multiloculated pleural effusions and pleural empyemas. Laisaar T, et al. **Thorac Cardiovasc Surg** 1996 Oct;44(5):252–6

Randomised controlled trial of intrapleural streptokinase in community acquired pleural infection [see comments] Davies RJ, et al. **Thorax** 1997 May;52(5):416–21. Comment in: Thorax 1997 May;52(5):403.

Intrapleural streptokinase: the answer to community acquired pleural infection? [editorial; comment] Deegan PC, et al. **Thorax** 1997 May;52(5):403. Comment on: Thorax 1997 May;52(5):416–21.

Comparison of the recombinant Escherichia coli-produced protease domain of tissue-type plasminogen activator with alteplase, reteplase and streptokinase in a canine model of coronary artery thrombolysis. Martin U, et al. **Thromb Haemost** 1996 Dec;76(6):1096–101

Systemic thrombin generation and activity resistant to low molecular weight heparin administered prior to streptokinase in patients with acute myocardial infarction. Nilsen DW, et al. **Thromb Haemost** 1997 Jan;77(1):57–61

An experimental model of intracranial hemorrhage during thrombolytic therapy with t-PA. Paoni NF, et al. **Thromb Haemost** 1996 May;75(5):820–6

Streptokinase entrapment in interdigitation-fusion liposomes improves thrombolysis in an experimental rabbit model. Perkins WR, et al. **Thromb Haemost** 1997 Jun;77(6):1174–8

Fibrinolytic treatment with ultra-high streptokinase infusion via the dorsalis pedis vein offers no advantage over systemic infusion via the brachial vein in patients with deep vein thrombosis of the leg. Martin M, et al. **Vasa** 1996; 25(3):275–8

[Accelerated streptokinase dose regimens for coronary thrombolysis] Lu M, et al. **Chung Hua Nei Ko Tsa Chih** 1996 Jan;35(1):23–4 (Eng. Abstr.) **(Chi)**

[Prognosis of return to work after streptokinase-treated acute ...yocardial infarction] Christensen JH, et al. **Ugeskr Laeger** 1996 Nov 11;158(46):6620–2 (Eng. Abstr.) **(Dan)**

[Results of the North Baden Venous Lysis—NBVL—Study. Prospective phlebographically controlled randomized multicenter evaluation of ultra high versus conventional dose streptokinase in acute thrombosis of the leg and pelvic veins] Heinrich F, et al. **Med Klin** 1996 Jan 15;91(1):1–13 (Eng. Abstr.) **(Ger)**

[Intra-arterial thrombolysis in peripheral bypass and arterial occlusions. Results and predictive factors for thrombolysis] Sandbaek G, et al. **Tidsskr Nor Laegeforen** 1996 Oct 20; 116(25):3000–4 (Eng. Abstr.) **(Nor)**

[Intra-arterial thrombolysis in peripheral bypass and arterial occlusions. Preparation and practical procedure] Sandbaek G, et al. **Tidsskr Nor Laegeforen** 1996 Oct 20; 116(25):3011–3 (Eng. Abstr.) **(Nor)**

[Local thrombolytic treatment of peripheral arterial thrombosis and embolism] Staxrud LE, et al. **Tidsskr Nor Laegeforen** 1996 Oct 20;116(25):2996–9 (Eng. Abstr.) **(Nor)**

[Results of thrombolytic therapy with streptokinase for chronic deep vein thrombosis] Kladny J, et al. **Pol Tyg Lek** 1996 Mar;51(10–13):148–9 (Eng. Abstr.) **(Pol)**

[Streptodecase magnetophoresis in the Polius-3 treatment of post-traumatic intraocular bleeding] Zobina LV, et al. **Med Tekh** 1996 Nov–Dec;(6):41–2 (Eng. Abstr.) **(Rus)**

[The clinical aspects of thrombolytic therapy with streptokinase in myocardial infarct] Kharash LM, et al. **Ter Arkh** 1996;68(12):53–7 (Eng. Abstr.) **(Rus)**

[The effect of systemic thrombolytic therapy on left ventricular contractile function and on the tolerance for physical loading in patients with an acute myocardial infarct] Shal'nev VI. **Ter Arkh** 1996;68(5):55–6 (Eng. Abstr.) **(Rus)**

[Hospital course of acute myocardial infarction: significance of the therapeutic procedures of early reperfusion] Almendares C, et al. **Rev Med Chil** 1995 Nov; 123(11):1365–71 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Incidence and impact on outcome of streptokinase allergy in the GUSTO-I trial. Global Utilization of St.eptokinase and t-PA in Occluded Coronary Arteries. Tsang TS, et al. **Am J Cardiol** 1997 May 1;79(9):1232–5

Streptokinase, complement activation and hypotension. Pachaï A, et al. **APMIS** 1997 Aug;105(8):650–4

Trials of streptokinase in stroke depend on early, accurate diagnosis [letter; comment] Muir KW. **BMJ** 1997 Jul 19; 315(7101):187. Comment on: BMJ 1997 Feb 8;314(7078):440–1.

Cholesterol embolization after systemic streptokinase. Wright DA, et al. **Br J Hosp Med** 1997 Jan 15–Feb 5;57(1–2):51–2

Delayed rupture of the spleen and streptokinase therapy. Nam R, et al. **Can J Surg** 1996 Apr;39(2):151–4

Serum sickness-like illness following streptokinase therapy. A case report. Creamer JD, et al. **Clin Exp Dermatol** 1995 Nov;20(6):468–70

Fibrinolytic treatment in suspected acute myocardial infarction—use and risks in clinical practice. Beermann B, et al. **Eur J Clin Pharmacol** 1997;52(3):179–82

Haemorrhagic bullae in a patient with lichen sclerosus et atrophicus treated with streptokinase. Dunn HM, et al. **Heart** 1996 Nov;76(5):448

Severe backache during thrombolytic therapy with streptokinase. Suresh V, et al. **J Assoc Physicians India** 1996 Oct;44(10):743

Inflammatory myopathy after intravenous streptokinase. Di Muzio A, et al. **Muscle Nerve** 1997 May;20(5):619–21

Thrombolytic therapy in acute ischemic stroke [letter; comment] Clark WM, et al. **N Engl J Med** 1997 Jan 2; 336(1):65–6; discussion 66–7. Comment on: N Engl J Med 1996 Jul 18;335(3):145–50.

Diffuse pulmonary hemorrhage after streptokinase administration for acute myocardial infarction. Swanson GA, et al. **Pharmacotherapy** 1997 Mar–Apr;17(2):390–4

Intracranial hemorrhage complicating acute myocardial infarction in the era of thrombolytic therapy. Conrad AR, et al. **South Med J** 1997 Jan;90(1):5–12

Regression of ST segment elevation after thrombolysis in acute aortic dissection. Safi J Jr, et al. **South Med J** 1996 Nov;89(11):1091–3

Streptokinase increases luxury perfusion after stroke. Infeld B, et al. **Stroke** 1996 Sep;27(9):1524–9

[Intracerebral hemorrhage after systemic thrombolysis in patients with occlusion of the central retinal artery. Report of 2 cases] Barth H, et al. **Ophthalmologe** 1996 Dec; 93(6):739–44 (Eng. Abstr.) **(Ger)**

[Spontaneous liver rupture after thrombolytic therapy with streptokinase] Hinterthaner M, et al. **Zentralbl Chir** 1997; 122(1):49–51 (20 ref.) (Eng. Abstr.) **(Ger)**

[Pulmonary hemorrhage after thrombolysis in acute myocardial infarct (letter) (corrected and republished letter originally printed in An Med Interna 1996 Oct;13(10):514–5)] Rodríguez Blanco VM, et al. **An Med Interna** 1997 Apr;14(4):209 (7 ref.) **(Spa)**

ANALYSIS

Recovery of biologically active proteins detected with imidazole-sodium dodecyl sulfate-zinc (reverse stain) on sodium dodecyl sulfate gels. Hardy E, et al. **Anal Biochem** 1996 Aug 15;240(1):150-2

ANTAGONISTS & INHIBITORS

Platelet aggregation by IgG anti-streptokinase and anisoylated plasminogen-streptokinase activator complex: heterogenous responses in platelet-rich plasma but not in washed platelets. Abdelouahed M, et al. **Thromb Res** 1997 May 1;86(3):255-62

BLOOD

Investigation of the plasminogen-streptokinase interaction. Druzhina NN, et al. **Ukr Biokhim Zh** 1996 Jul-Aug;68(4):20

CHEMISTRY

C-terminal peptide of streptokinase, Met369-Pro373, is important in plasminogen activation. Kim IC, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):939-45

Comparison of human VDAC1 with streptococcal streptokinase and bovine bactericidal permeability increasing protein: role of structural information in identifying functionally significant domains. McCabe KM, et al. **Biochem Mol Med** 1995 Dec;56(2):176-9

Mutation of lysines in a plasminogen binding region of streptokinase identifies residues important for generating a functional activator complex. Lin LF, et al. **Biochemistry** 1996 Dec 24;35(51):16879-85

Thermal stability of the three domains of streptokinase studied by circular dichroism and nuclear magnetic resonance. Conejero-Lara F, et al. **Protein Sci** 1996 Dec; 5(12):2583-91

Conformation and stability of streptokinases from nephritogenic and nonnephritogenic strains of streptococci. Welfle K, et al. **Proteins** 1997 Jan;27(1):26-35

GENETICS

Localization of the sequence-determined DNA bending center upstream of the streptokinase gene skc. Gross S, et al. **Arch Microbiol** 1996 Aug;166(2):116-21

Identification of the functional importance of valine-19 residue in streptokinase by N-terminal deletion and site-directed mutagenesis. Lee SH, et al. **Biochem Mol Biol Int** 1997 Jan;41(1):199-207

Mutation of lysines in a plasminogen binding region of streptokinase identifies residues important for generating a functional activator complex. Lin LF, et al. **Biochemistry** 1996 Dec 24;35(51):16879-85

Cloning and sequencing of the streptokinase gene from streptococcus pyogenes (CIP 56.57). Ball MM, et al. **DNA Seq** 1995;6(1):33-6

Allelic variation of the streptokinase gene in beta-hemolytic streptococci group C and G isolates of human origin. Tewodros W, et al. **FEMS Immunol Med Microbiol** 1996 Jan;13(1):29-34

Structural dissection and functional analysis of the complex promoter of the streptokinase gene from Streptococcus equisimilis H46A. Gräfe S, et al. **Med Microbiol Immunol (Berl)** 1996 May;185(1):11-7

IMMUNOLOGY

Anti-streptokinase antibodies and streptokinase resistance in an Aboriginal population in northern Australia. Urdahl KB, et al. **Aust N Z J Med** 1996 Feb;26(1):49-53

Structural characterization of immunodominant regions of streptokinase recognized by murine monoclonal antibodies. Parhami-Seren B, et al. **Hybridoma** 1996 Jun;15(3):169-76

Sequences of antigenic epitopes of streptokinase identified via random peptide libraries displayed on phage. Parhami-Seren B, et al. **J Mol Biol** 1997 Aug 22; 271(3):333-41

Potential pathogenicity of deglycosylated IgG cross reactive with streptokinase and fibronectin in the serum of patients with rheumatoid arthritis. Cuchacovich M, et al. **J Rheumatol** 1996 Jan;23(1):44-51

The distribution of antibodies to streptokinase. Lynch M, et al. **Postgrad Med J** 1996 May;72(847):290-2

METABOLISM

Role of N-terminal domain of streptokinase in protein transport. Pratap J, et al. **Biochem Biophys Res Commun** 1996 Oct 3;227(1):303-10

C-terminal peptide of streptokinase, Met369-Pro373, is important in plasminogen activation. Kim IC, et al. **Biochem Mol Biol Int** 1996 Nov;40(5):939-45

Identification of key gene products required for acquisition of plasmin-like enzymatic activity by group A streptococci. Christner R, et al. **J Infect Dis** 1997 May;175(5):1115-20

Mapping of the plasminogen binding site of streptokinase with short synthetic peptides. Nihalani D, et al. **Protein Sci** 1997 Jun;6(6):1284-92

Plasminogen variants and streptokinase binding. Marshall JM, et al. **Ukr Biokhim Zh** 1996 Jul-Aug;68(4):30-2

PHARMACOLOGY

Acute hypertension, but not thrombolysis, increases the incidence and severity of hemorrhagic transformation following experimental stroke in rabbits. Bowes MP, et al. **Exp Neurol** 1996 Sep;141(1):40-6

Thrombolytic therapy and proteolysis of factor V. Tracy RP, et al. **J Am Coll Cardiol** 1997 Sep;30(3):716-24

On the mechanism of thrombogenesis during pharmacological thrombolysis. Korbut R, et al. **Pol J Pharmacol** 1996 Jan-Feb;48(1):85-8

Comparative effects of recombinant staphylokinase and streptokinase on platelet aggregation. Abdelouahed M, et al. **Thromb Haemost** 1997 May;77(5):815-7

A chimeric streptokinase with unexpected fibrinolytic selectivity. Goldstein J, et al. **Thromb Haemost** 1996 Sep; 76(3):429-38

[Behavior of postoperative adhesions after intraperitoneal administration of fibrinolytic drugs in a rat model] Stapel A, et al. **Langenbecks Arch Chir** 1997;382(1):33-6 (Eng. Abstr.) **(Ger)**

[Immobilized proteases and their activators as immunocorrective agents] Khmelevskaia IG, et al. **Antibiot Khimioter** 1997;42(3):11-4 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Preservation of autonomic function following successful reperfusion with streptokinase within 12 hours of the onset of acute myocardial infarction. Kelly PA, et al. **Am J Cardiol** 1997 Jan 15;79(2):203-5

Thrombolytic therapy for patients with prior percutaneous transluminal coronary angioplasty and subsequent acute myocardial infarction. GUSTO-I Investigators. Global Utilization of Streptokinase and t-PA for Occluded Coronary Arteries. Labinaz M, et al. **Am J Cardiol** 1996 Dec 15;78(12):1338-44

Diltiazem improves left ventricular systolic function following acute myocardial infarction treated with streptokinase. The Calcium Antagonist in Reperfusion Study (CARES) Group. Nicolau JC, et al. **Am J Cardiol** 1996 Nov 1;78(9):1049-52

Patency and reinfarction in late-entry myocardial infarct patients treated with reperfusion therapy. van't Hof AW, et al. **Angiology** 1997 Mar;48(3):215-22

Report of two cases of children with Budd-Chiari syndrome successfully treated with streptokinase. Sawamura R, et al. **Arq Gastroenterol** 1996 Jul-Sep;33(3):179-81 (31 ref.)

Echocardiographic detection of pulmonary embolism in transit: implications for institution of thrombolytic therapy. Fisman DN, et al. **Can J Cardiol** 1997 Jul;13(7):685-7

Time to treatment with thrombolytic therapy: determinants and effect on short-term nonfatal outcomes of acute myocardial infarction. Canadian GUSTO Investigators. Global Utilization of Streptokinase and + PA for Occluded Coronary Arteries [see comments] Cox JL, et al. **Can Med Assoc J** 1997 Feb 15;156(4):497-505. Comment in: Can Med Assoc J 1997 Feb 15;156(4):509-11. Comment in: CMAJ 1997 Aug 1;157(3):250-1.

Thrombolysis after acute myocardial infarction: are Canadian physicians up to the challenge? [comment] Williams WL. **Can Med Assoc J** 1997 Feb 15;156(4):509-11. Comment on: Can Med Assoc J 1997 Feb 15;156(4):497-505.

Heparin and streptokinase [editorial; comment] Sobel BE. **Cardiovasc Drugs Ther** 1997 Apr;11(2):97-100 (31 ref.). Comment on: Cardiovasc Drugs Ther 1997 Apr;11(2):101-9. Comment on: Cardiovasc Drugs Ther 1997 Apr;11(2):111-9.

Controlled trial of intrapleural streptokinase in the treatment of pleural empyema and complicated parapneumonic effusions. Chin NK, et al. **Chest** 1997 Feb;111(2):275-9

Impact of an aggressive invasive catheterization and revascularization strategy on mortality in patients with cardiogenic shock in the Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries (GUSTO-I) trial. An observational study. Berger PB, et al. **Circulation** 1997 Jul 1;96(1):122-7

One-year results from the Global Utilization of Streptokinase and TPA for Occluded Coronary Arteries (GUSTO-I) trial. GUSTO-I Investigators [see comments] Califf RM, et al. **Circulation** 1996 Sep 15;94(6):1233-8. Comment in: Circulation 1996 Sep 15;94(6):1203-5. Comment in: ACP J Club 1997 Jan-Feb;126(1):3.

N-acetylcysteine in combination with nitroglycerin and streptokinase for the treatment of evolving acute myocardial infarction: safety and biochemical effects [letter; comment] Simon K, et al. **Circulation** 1996 Oct 1;94(7):1791 . Comment on: Circulation 1995 Nov 15;92(10):2855-62.

Intra-arterial thrombolysis for the acutely ischaemic leg: experience in a district general hospital. Marcus AJ, et al. **Clin Radiol** 1996 Oct;51(10):714-8

Thrombolysis in acute pulmonary embolism: to whom, how much and how? [editorial; comment] Jezek V. **Eur Heart J** 1997 Jul;18(7):1045. Comment on: Eur Heart J 1997 Jul;18(7):1141-8.

Streptokinase vs alteplase in massive pulmonary embolism. A randomized trial assessing right heart haemodynamics and pulmonary vascular obstruction [see comments] Meneveau N, et al. **Eur Heart J** 1997 Jul;18(7):1141-8. Comment in: Eur Heart J 1997 Jul;18(7):1045.

High-dose intravenous magnesium attenuates complement consumption after acute myocardial infarction treated by streptokinase [see comments] Roth A, et al. **Eur Heart J** 1996 May;17(5):709-14. Comment in: Eur Heart J 1996 May;17(5):651-3.

Significance of initial ST segment changes for thrombolytic treatment in first inferior myocardial infarction. Schröder K, et al. **Heart** 1997 Jun;77(6):506-11

Thrombolysis of acute portal vein thrombus. Al Haq SM, et al. **Indian J Gastroenterol** 1996 Jan;15(1):22-3

Systemic lytic state is not a predictor of coronary reperfusion in acute myocardial infarction. el Gaylani N, et al. **Int J Cardiol** 1996 Nov 15;57(1):45-50

Thrombolytic eligibility in acute myocardial infarction patients admitted to Norwegian hospitals. Reikvam A, et al. **Int J Cardiol** 1997 Aug 29;61(1):79-83

Intrapericardial fibrinolysis: a useful treatment in the management of purulent pericarditis. Defouilloy C, et al. **Intensive Care Med** 1997 Jan;23(1):117-8

Intrapleural administration of streptokinase in complicated purulent pleural effusion: a CT-guided strategy. Roupie E, et al. **Intensive Care Med** 1996 Dec;22(12):1351-3

Thrombolysis after acute myocardial infarction. Nee PA. **J Accid Emerg Med** 1997 Jan;14(1):2-9 (49 ref.)

Thrombolysis and Q wave versus non-Q wave first acute myocardial infarction: a GUSTO-I substudy. Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Arteries Investigators. Barbagelata A, et al. **J Am Coll Cardiol** 1997 Mar 15;29(4):770-7

Atrial fibrillation in the setting of acute myocardial infarction: the GUSTO-I experience. Global Utilization of Streptokinase and TPA for Occluded Coronary Arteries. Crenshaw BS, et al. **J Am Coll Cardiol** 1997 Aug; 30(2):406-13

Influence of diabetes mellitus on clinical outcome in the thrombolytic era of acute myocardial infarction. GUSTO-I Investigators. Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries. Mak KH, et al. **J Am Coll Cardiol** 1997 Jul; 30(1):171-9

Use of streptokinase in four dogs with thrombosis. Ramsey CC, et al. **J Am Vet Med Assoc** 1996 Aug 15;209(4):780-5

Streptokinase therapy in treatment of thrombosis of arteriovenous fistula [letter] Taparia BN, et al. **J Assoc Physicians India** 1995 Jun;43(6):445

Comparison of streptokinase and urokinase in local thrombolysis of peripheral arterial occlusions for lower limb salvage. Dubé M, et al. **J Vasc Interv Radiol** 1996 Jul-Aug;7(4):587-93 (25 ref.)

Long-term follow-up of gender-specific outcomes after thrombolytic therapy for acute myocardial infarction from the GUSTO-I trial. Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries. Moen EK, et al. **J Womens Health** 1997 Jun; 6(3):285-93

Effective streptokinase treatment of blocked catheters in pigs and sheep. Leuvenink HG, et al. **Lab Anim** 1997 Apr; 31(2):184-5

Streptokinase for empyema [letter] Lim TK, et al. **Lancet** 1997 Aug 9;350(9075):446

Streptokinase for empyema. Muers MF. **Lancet** 1997 May 24;349(9064):1491-2

Thrombolysis after acute myocardial infarction [letter] Wald D. **Lancet** 1997 May 24;349(9064):1551

Thrombolytic therapy in acute ischaemic stroke: the jury needs more evidence. Hankey GJ. **Med J Aust** 1997 Apr 21;166(8):419-22 (27 ref.)

Prolonged local infusion of streptokinase in pulmonary artery thrombosis with nephrotic syndrome. Share A, et al. **Pediatr Nephrol** 1996 Dec;10(6):734-6

Controlled trials comparing reteplase with alteplase and streptokinase in patients with acute myocardial infarction. Amsterdam EA. **Pharmacotherapy** 1996 Sep-Oct;16(5 Pt 2):137S-140S (9 ref.)

Validity of the GUSTO trial's main conclusion. Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronaries. Eisenberg C. **Pharmacotherapy** 1997 Jul-Aug;17(4):850-2

Superior vena cava thrombosis secondary to hickman catheter and complete resolution after fibrinolytic therapy. Morales M, et al. **Support Care Cancer** 1997 Jan;5(1):67-9 (8 ref.)

Conjunctive administration of intravenous heparin attenuates cross-linked fibrin degradation in patients treated with streptokinase. Galvani M, et al. **Thromb Haemost** 1996 Sep; 76(3):339-43

Limiting systemic plasminogenolysis reduces the bleeding potential for tissue-type plasminogen activators but not for streptokinase. Thomas GR, et al. **Thromb Haemost** 1996 Jun;75(6):915-20

Soluble thrombomodulin antigen in plasma is increased in patients with acute myocardial infarction treated with thrombolytic therapy. Ohlin AK, et al. **Thromb Res** 1996 May 15;82(4):313-22

The influence of 6-AHA on the fibrin clot degradation initiated by streptokinase in normal and alpha 2-antiplasmin-deficient plasma. Andrianov SL, et al. **Ukr Biokhim Zh** 1996 Jul-Aug;68(4):26-7

Therapeutic use of streptokinase. Cederholm-Williams SA. **Ukr Biokhim Zh** 1996 Jul-Aug;68(4):36-7

[Thrombosis on the mitral valve prosthesis and disseminated cancer: treatment by fibrinolysis] Chevalier P, et al. **Arch Mal Coeur Vaiss** 1996 Sep;89(9):1209-11 (Eng. Abstr.) **(Fre)**

[Thrombolysis following myocardial infarct. European Secondary Prevention Study] Schilling J, et al. **Schweiz Rundsch Med Prax** 1996 Oct 15;85(42):1311-5 (Eng. Abstr.) **(Ger)**

[Bolus thrombolysis in pulmonary embolism. Review of

STREPTOKINASE

experimental and clinical data] Zonzin P, et al. **Ann Ital Med Int** 1996 Apr-Jun;11(2):132-7 (35 ref.) (Eng. Abstr.) **(Ita)**

[Evaluation of the cost-effectiveness of thrombolytic therapy in acute myocardial infarct using tissue plasminogen activator or streptokinase:the Italian perspective] Lorenzoni R, et al. **G Ital Cardiol** 1997 Jul;27(7):721-6 (Eng. Abstr.) **(Ita)**

[Thrombolytic therapy for acute myocardial infarction in the general internal medicine ward] Blasiak M, et al. **Pol Tyg Lek** 1996 Mar;51(10-13):150-2 (Eng. Abstr.) **(Pol)**

[Thrombolytic therapy in acute myocardial infarct--is it being used to the fullest?] Carôla B, et al. **Rev Port Cardiol** 1996 Dec;15(12):867-76, 863 (Eng. Abstr.) **(Por)**

[Thrombolysis in unstable angina. A perspective before and after TIMI IIIB] Jerjes-Sánchez C, et al. **Arch Inst Cardiol Mex** 1996 May-Jun;66(3):254-64 (Eng. Abstr.) **(Spa)**

[The long-term efficacy of fibrinolytic treatment in the acute phase of a myocardial infarct. A comparison with a control group] Cortadellas Angel J, et al. **Rev Esp Cardiol** 1995 Jun;48(6):399-406 (Eng. Abstr.) **(Spa)**

[Thrombolysis in acute ischemic attack] Dávalos A. **Rev Neurol** 1997 Feb;25(138):281-2 (9 ref.) **(Spa)**

TOXICITY

A paradox of thrombogenesis by streptokinase and its prevention by iloprost and camonagrel. Korbut R, et al. **Methods Find Exp Clin Pharmacol** 1996 Apr;18(3):167-74

STREPTOLYSINS

see related

ANTISTREPTOLYSIN

[Streptococcal cytolysins] Nagamune H. **Seikagaku** 1997 May;69(5):343-8 (15 ref.) **(Jpn)**

ANALYSIS

Comparison of serum antibodies to pneumolysin with those to pneumococcal capsular polysaccharides in children with acute otitis media. Virolainen A, et al. **Pediatr Infect Dis J** 1996 Feb;15(2):128-33

BIOSYNTHESIS

Differences in virulence for mice among Streptococcus pneumoniae strains of capsular types 2, 3, 4, 5, and 6 are not attributable to differences in pneumolysin production. Benton KA, et al. **Infect Immun** 1997 Apr;65(4):1237-44

Temporal production of streptococcal erythrogenic toxin B (streptococcal cysteine proteinase) in response to nutrient depletion. Chaussee MS, et al. **Infect Immun** 1997 May; 65(5):1956-9

CHEMISTRY

Structural and functional characterisation of two proteolytic fragments of the bacterial protein toxin, pneumolysin. Morgan PJ, et al. **FEBS Lett** 1997 Aug 4;412(3):563-7

Membrane-penetrating domain of streptolysin O identified by cysteine scanning mutagenesis. Palmer M, et al. **J Biol Chem** 1996 Oct 25;271(43):26664-7

Structural and functional analogy between pneumolysin and proaerolysin. Sowdhamini R, et al. **Protein Eng** 1997 Mar; 10(3):207-15

GENETICS

Sequence variation in the Streptococcus pneumoniae pneumolysin gene affecting haemolytic activity and electrophoretic mobility of the toxin. Lock RA, et al. **Microb Pathog** 1996 Aug;21(2):71-83

IMMUNOLOGY

Antibodies to pneumolysin and pneumococcal capsular polysaccharides in middle ear fluid of children with acute otitis media. Virolainen A, et al. **Acta Otolaryngol (Stockh)** 1995 Nov;115(6):796-803

Detection of antibody isotypes to streptolysin O by dot ELISA. Barbosa SF, et al. **Braz J Med Biol Res** 1996 Jun; 29(6):763-7

Determination of anti-streptolysin O antibody titer by a new passive agglutination method using sensitized toraysphere particles. Kodama T, et al. **J Clin Microbiol** 1997 Apr; 35(4):839-42

METABOLISM

Electron microscopic evaluation of a two-step theory of pore formation by streptolysin O. Sekiya K, et al. **J Bacteriol** 1996 Dec;178(23):6998-7002

Insertional inactivation of streptolysin S expression is associated with altered riboflavin metabolism in Streptococcus pyogenes. Liu S, et al. **Microb Pathog** 1997 Apr;22(4):227-34

PHARMACOLOGY

Practical considerations regarding the use of streptolysin-O as a permeabilising agent for cells in the investigation of exocytosis. Larbi KY, et al. **Biosci Rep** 1996 Feb; 16(1):11-21

Reconstitution of calcium-regulated parathyroid hormone secretion from streptolysin-O-permeabilized parathyroid cells by guanosine 5'-O-(thio)triphosphate. Matovcik LM, et al. **Endocrinology** 1997 Mar;138(3):1170-9

Effects of group-A streptolysin O on neonatal and adult red blood cell deformability and haemolysis. Pöschl JM, et al. **Eur J Clin Invest** 1996 Jun;26(6):461-4

Streptococcal erythrogenic toxins induce neopterin formation in human peripheral blood mononuclear cells but not in the human myelomonocytoma cell line THP-1. Murr C, et al. **Immunobiology** 1996 Aug;195(3):314-22

Effects of interferon-gamma and streptolysin O on hepatic procainamide N-acetyltransferase and various microsomal cytochrome P450-dependent monooxygenases in rats. Walter R, et al. **Immunopharmacol Immunotoxicol** 1996 Nov;18(4):571-86

Reconstitution of phagosome-lysosome fusion in streptolysin O-permeabilized cells. Funato K, et al. **J Biol Chem** 1997 Jun 27;272(26):16147-51

Muscarinic acetylcholine receptor trafficking in streptolysin O-permeabilized MDCK cells. Vogt S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Jul; 354(2):128-35

Prolactin regulates IL-1 alpha, IFN-gamma and IL-4 release from mouse splenocytes stimulated with some staphylococcal and streptococcal toxins. Scarfogliero P, et al. **New Microbiol** 1996 Oct;19(4):301-8

Effects of streptolysin O, polyriboinosinic-polyribocytidylic acid and combinations with cyclophosphamide on the hepatic arylamine N-acetyltransferase and cytochrome P450-dependent monooxygenases in rats. Walter R, et al. **Pharmazie** 1996 Jul;51(7):498-500

Pore-forming toxins trigger shedding of receptors for interleukin 6 and lipopolysaccharide. Walev I, et al. **Proc Natl Acad Sci U S A** 1996 Jul 23;93(15):7882-7

In vitro reconstitution of an intermediate assembly stage of vaccinia virus. Ericsson M, et al. **Virology** 1997 Sep 1; 235(2):218-27

PHYSIOLOGY

Structural and functional characterisation of two proteolytic fragments of the bacterial protein toxin, pneumolysin. Morgan PJ, et al. **FEBS Lett** 1997 Aug 4;412(3):563-7

Relationship of structure of function in pneumolysin. Andrew PW, et al. **Microb Drug Resist** 1997 Spring;3(1):11-7 (49 ref.)

Biological properties of pneumolysin. Mitchell TJ, et al. **Microb Drug Resist** 1997 Spring;3(1):19-26 (56 ref.)

The contribution of pneumolysin to the pathogenicity of Streptococcus pneumoniae. Paton JC. **Trends Microbiol** 1996 Mar;4(3):103-6 (32 ref.)

THERAPEUTIC USE

Preclinical studies of streptolysin-O in enhancing antisense oligonucleotide uptake in harvests from chronic myeloid leukacmia patients. Broughton CM, et al. **Leukemia** 1997 Sep;11(9):1435-41

TOXICITY

Sequence variation in the Streptococcus pneumoniae pneumolysin gene affecting haemolytic activity and electrophoretic mobility of the toxin. Lock RA, et al. **Microb Pathog** 1996 Aug;21(2):71-83

Different sensitivity to streptolysin-O of cells in macrophage lineage. Tanigawa T, et al. **Microbiol Immunol** 1996; 40(1):81-4

STREPTOMYCES

CHEMISTRY

Structural dynamics of the Streptomyces lividans K+ channel (SKC1): oligomeric stoichiometry and stability. Cortes DM, et al. **Biochemistry** 1997 Aug 19; 36(33):10343-52

Identification of procaryotic developmental stages by statistical analyses of two-dimensional gel patterns. Vohradský J, et al. **Electrophoresis** 1997 Aug;18(8):1418-28

Detection of the single-stranded DNA of Streptomyces plasmid pSA1.1 and a binding histone-like protein. Yokoyama E, et al. **FEMS Microbiol Lett** 1996 May 1; 138(2-3):197-200

Heliquinomycin, a new inhibitor of DNA helicase, produced by Streptomyces sp. MJ929-SF2 II. Structure determination of heliquinomycin. Chino M, et al. **J Antibiot (Tokyo)** 1997 Feb;50(2):143-6

Isolation of new anthracyclines 10-O-rhodosaminyl beta-rhodomycinone and beta-isorhodomycinone from mild-acid treated culture of obelmycin-producing Streptomyces violaceus. Johdo O, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):522-5

Isolation and characterization of 8-demethoxy steffimycins and generation of 2,8-demethoxy steffimycins in Streptomyces steffisburgensis by the nogalamycin biosynthesis genes. Kunnari T, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):496-501

Dihydrophencomycin methyl ester, a new phenazine derivative from a marine Streptomycete. Pusecker K, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):479-83

Purification and characterization of the Streptomyces lividans initiator protein DnaA. Majka J, et al. **J Bacteriol** 1997 Apr;179(7):2426-32

Piperastatin A, a new selective serine carboxypeptidase inhibitor produced by actinomycete. I. Taxonomy, production, isolation and biological activities. Murakami S, et al. **J Enzyme Inhib** 1996;10(2):93-103

Piperastatin A, a new selective serine carboxypeptidase inhibitor produced by actinomycete. II. Physico-chemical properties and structure determination. Murakami S, et al. **J Enzyme Inhib** 1996;10(2):105-14

Piperastatin B: a new selective serine carboxypeptidase inhibitor from Streptomyces lavendofoliae MJ908-WF13. Murakami S, et al. **J Enzyme Inhib** 1996 Aug;11(1):51-66

DMI-2 and DMI-3, DNA methyltransferase inhibitors produced by Streptomyces sp. strain no. 560. Nagao K, et al. **J Enzyme Inhib** 1996;10(2):115-24

A novel phospholipase C inhibitor, S-PLI produced by Streptomyces sp. strain no. A-6288. Suzuki K, et al. **J Enzyme Inhib** 1996;10(3):177-86

Inhibition of DNA methyltransferase by microbial inhibitors and fatty acids. Suzuki K, et al. **J Enzyme Inhib** 1996; 10(4):271-280

Effects of YM-51084 and YM-51085, new inhibitors produced by Streptomyces sp. Q21705, on cathepsin L. Teramura K, et al. **J Enzyme Inhib** 1996 Oct;11(2):115-21

Non-specific serum binding to streptavidin in a biotinylated peptide based enzyme immunoassay. Norton R, et al. **J Immunoassay** 1996 Aug;17(3):195-204

Molecular phylogenetic characterization of Streptomyces protease inhibitor family. Taguchi S, et al. **J Mol Evol** 1997 May;44(5):542-51

Pyridindolols K1 and K2, new alkaloids from Streptomyces sp. K93-0711. Kim YP, et al. **Jpn J Antibiot** 1997 Mar; 50(3):189-93

New macrolactone of the desertomycin family from Streptomyces spectabilis. Ivanova V. **Prep Biochem Biotechnol** 1997 Feb;27(1):19-38

CLASSIFICATION

Application of the variable region in 16S rDNA to create an index for rapid species identification in the genus Streptomyces. Kataoka M, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):249-55

Streptomyces seoulensis sp. nov. Chun J, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):492-8

Discrimination of Streptomyces albidoflavus strains based on the size and number of 16S-23S ribosomal DNA intergenic spacers. Hain T, et al. **Int J Syst Bacteriol** 1997 Jan; 47(1):202-6

Streptomyces spitsbergensis Wieczorek et al. 1993 is a later subjective synonym of Streptomyces baldaccii (Farina and Locci 1996) Witt and Stackebrandt 1991. Hatano K, et al. **Int J Syst Bacteriol** 1997 Apr;47(2):573-4

Streptomyces stramineus sp. nov., a new species of the verticillate streptomycetes. Labeda DP, et al. **Int J Syst Bacteriol** 1997 Jul;47(3):747-53

Phylogenetic analysis of Streptomyces spp. causing potato scab based on 16S rRNA sequences. Takeuchi T, et al. **Int J Syst Bacteriol** 1996 Apr;46(2):476-9

Studies on new antitumor antibiotics, leptofuranins A, B, C and D.I. Taxonomy, fermentation, isolation and biological activities. Hayakawa Y, et al. **J Antibiot (Tokyo)** 1996 Oct; 49(10):974-9

Evaluation of Streptomyces species-groups by pyrolysis mass spectrometry. Ferguson EV, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):169-81

DRUG EFFECTS

Antibiotic resistance in Streptomyces lividans: fluorescence assay for streptogramin B lyase. Bateman KP, et al. **Anal Biochem** 1997 Jun 1;248(2):297-9

Stereospecific reduction of virginiamycin M1 as the virginiamycin resistance pathway in Streptomyces virginiae. Lee CK, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):595-601

The macrolide-lincosamide-streptogramin B resistance phenotypes characterized by using a specifically deleted, antibiotic-sensitive strain of Streptomyces lividans. Pernodet JL, et al. **Antimicrob Agents Chemother** 1996 Mar; 40(3):581-5

Mechanism of multiple aminoglycoside resistance of kasugamycin-producing Streptomyces kasugaensis MB273: involvement of two types of acetyltransferases in resistance to astromicin group antibiotics. Hotta K, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):682-8

Characterization of a mitomycin-binding drug resistance mechanism from the producing organism, Streptomyces lavendulae [published erratum appears in J Bacteriol 1997 Jun;179(12):4080] Sheldon PJ, et al. **J Bacteriol** 1997 Mar; 179(5):1796-804

Natural kirromycin resistance of elongation factor Tu from the kirrothricin producer Streptomyces cinnamoneus. Cappellano C, et al. **Microbiology** 1997 Feb;143 (Pt 2):617-24

Two classes of ethidium-bromide-resistant mutants of Streptomyces lividans 66. Lee LF, et al. **Microbiology** 1996 Apr;142 (Pt 4):1041-7

[Characteristics of Streptomyces kanamyceticus mutants resistant to aminoglycoside antibiotics] Demidchuk IuA, et al. **Antibiot Khimioter** 1996 Jun;41(6):15-20 (Eng. Abstr.) **(Rus)**

[Kanamycin biosynthesis and aminoglycoside resistance in

mutants of Streptomyces kanamyceticus resistant to 2-deoxyglucose] Golets LM, et al. **Antibiot Khimioter** 1996 Jun;41(6):10-4 (Eng. Abstr.) **(Rus)**

[Effect of Ca2+ ions on biosynthesis and component composition of tylosin in Streptomyces fradiae] Mironov VA, et al. **Antibiot Khimioter** 1997;42(4):3-7 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

High fructose syrups: evaluation of a new glucose isomerase from Streptomyces sp. Gusek TW, et al. **Adv Exp Med Biol** 1997;415:17-25

Antibiotic resistance in Streptomyces lividans: fluorescence assay for streptogramin B lyase. Bateman KP, et al. **Anal Biochem** 1997 Jun 1;248(2):297-9

Genetic and biochemical characterization of a new extracellular lipase from Streptomyces cinnamomeus. Sommer P, et al. **Appl Environ Microbiol** 1997 Sep; 63(9):3553-60

Purification and characterization of isobutylamine N-hydroxylase from the valanimycin producer Streptomyces viridifaciens MG456-hF10. Parry RJ, et al. **Arch Biochem Biophys** 1997 Mar 1;339(1):47-54

New type of hexameric ornithine carbamoyltransferase with arginase activity in the cephamycin producers Streptomyces clavuligerus and Nocardia lactamdurans. De la Fuente JL, et al. **Biochem J** 1996 Nov 15;320 (Pt 1):173-9

Purification and characterization of an acetyl xylan esterase produced by Streptomyces lividans. Dupont C, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):881-6

The tentative (alpha/beta)8-barrel in the pathway of beta-carotene biosynthesis: lycopene cyclase has an amino acid sequence similar to that of xylose isomerase [letter] Janeček S. **Biochem J** 1996 Nov 1;319 (Pt 3):1005-6

Prediction and Fourier-transform infrared-spectroscopy estimation of the secondary structure of a recombinant beta-glucosidase from Streptomyces sp. (ATCC 11238). Perez-Pons JA, et al. **Biochem J** 1995 Jun 15;308 (Pt 3):791-4

A novel nickel-containing superoxide dismutase from Streptomyces spp. Youn HD, et al. **Biochem J** 1996 Sep 15;318 (Pt 3):889-96

Differential scanning calorimetry of the irreversible thermal denaturation of cellulase from Streptomyces halstedii JM8. Garda-Salas AL, et al. **Biochem Mol Biol Int** 1996 Feb; 38(1):161-70

Purification and characterisation of progesterone hydroxylase, cytochrome P-450 from Streptomyces roseochromogenes ATCC 13400. Berrie JR, et al. **Biochem Soc Trans** 1997 Feb;25(1):18S

Evidence that the active site in type II dehydroquinase from Streptomyces coelicolor is near the single tryptophan. Boam DJ, et al. **Biochem Soc Trans** 1997 Feb;25(1):348; replaces 93S

Solution structure of the actinorhodin polyketide synthase acyl carrier protein from Streptomyces coelicolor A3(2). Crump MP, et al. **Biochemistry** 1997 May 20;36(20):6000-8

Evidence for two catalytically independent clusters of active sites in a functional modular polyketide synthase. Kao CM, et al. **Biochemistry** 1996 Sep 24;35(38):12363-8

Characterization of two important histidine residues in the active site of xylanase A from Streptomyces lividans, a family 10 glycanase. Roberge M, et al. **Biochemistry** 1997 Jun 24;36(25):7769-75

Exploration of the action pattern of Streptomyces hyaluronate lyase using high-resolution capillary electrophoresis. Park Y, et al. **Biochim Biophys Acta** 1997 Feb 8;1337(2):217-26

Kinamycin acetyltransferase I from Streptomyces murayamaensis, an apparently large, membrane-associated enzyme. Gould SJ, et al. **Bioorg Med Chem** 1996 Jul; 4(7):987-94

The aminonucleoside antibiotic A201A is inactivated by a phosphotransferase activity from Streptomyces capreolus NRRL 3817, the producing organism. Isolation and molecular characterization of the relevant encoding gene and its DNA flanking regions. Barrasa MI, et al. **Eur J Biochem** 1997 Apr 1;245(1):54-63

Differential expression of superoxide dismutases containing Ni and Fe/Zn in Streptomyces coelicolor. Kim FJ, et al. **Eur J Biochem** 1996 Oct 1;241(1):178-85

The pipecolate-incorporating enzyme for the biosynthesis of the immunosuppressant rapamycin--nucleotide sequence analysis, disruption and heterologous expression of rapP from Streptomyces hygroscopicus. König A, et al. **Eur J Biochem** 1997 Jul 15;247(2):526-34

Biosynthesis of acylpeptidolactones of the daptomycin type. A comparative analysis of peptide synthetases forming A21978C and A54145. Wessels P, et al. **Eur J Biochem** 1996 Dec 15;242(3):665-73

Substrate specificity and mode of action of acetylxylan esterase from Streptomyces lividans. Biely P, et al. **FEBS Lett** 1996 Nov 4;396(2-3):257-60

Substrate binding to the inactive mutants of Streptomyces sp. N174 chitosanase: indirect evaluation from the thermal unfolding experiments. Honda Y, et al. **FEBS Lett** 1997 Jul 14;411(2-3):346-50

The glutamine ligand in the ferrous iron active site of isopenicillin N synthase of Streptomyces jumonjinensis is not essential for catalysis. Landman O, et al. **FEBS Lett** 1997 Mar 24;405(2):172-4

Molecular cloning and expression of the glucose/xylose isomerase gene from Streptomyces sp. NCIM 2730 in Escherichia coli. Bhosale SH, et al. **FEMS Microbiol Lett** 1996 Nov 15;145(1):95-100

Purification and characterization of a novel protease from culture filtrates of a Streptomyces sp. Bono F, et al. **FEMS Microbiol Lett** 1996 Aug 1;141(2-3):213-20

Production of bleomycin N-acetyltransferase in Escherichia coli and Streptomyces verticillus. Matsuo H, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):83-8

Characterization of the secA gene of Streptomyces lividans encoding a protein translocase which complements and Escherichia coli mutant defective in the ATPase activity of SecA. Blanco J, et al. **Gene** 1996 Oct 17;176(1-2):61-5

Cloning, expression and sequence analysis of the SphI restriction-modification system. Guthrie EP, et al. **Gene** 1996 Nov 21;180(1-2):107-12

Gene cloning and sequencing, and enzyme purification of the malate synthase of Streptomyces arenae. Hüttner S, et al. **Gene** 1997 Apr 1;188(2):239-46

Production of a novel polyketide through the construction of a hybrid polyketide synthase. Kuhstoss S, et al. **Gene** 1996 Dec 12;183(1-2):231-6

Cloning, sequencing, overexpression in Escherichia coli, and inactivation of the valine dehydrogenase gene in the polyether antibiotic producer Streptomyces cinnamonensis. Leiser A, et al. **Gene** 1996 Oct 24;177(1-2):217-22

Microbial glycosylation of macrolide antibiotics by Streptomyces hygroscopicus ATCC 31080 and distribution of a macrolide glycosyl transferase in several Streptomyces strains. Sasaki J, et al. **J Antibiot (Tokyo)** 1996 Nov; 49(11):1110-8

CMC-liquefying enzyme, a low molecular mass initial cellulose-decomposing cellulase responsible for fragmentation from Streptomyces sp. LX. Li X, et al. **J Appl Microbiol** 1997 Jul;83(1):59-66

The ppGpp synthetase gene (relA) of Streptomyces coelicolor A3(2) plays a conditional role in antibiotic production and morphological differentiation. Chakraburtty R, et al. **J Bacteriol** 1997 Sep;179(18):5854-61

In vivo and in vitro bioconversion of epsilon-rhodomycinone glycoside to doxorubicin: functions of DauP, DauK, and DoxA. Dickens ML, et al. **J Bacteriol** 1997 Apr; 179(8):2641-50

Cloning and heterologous expression of the entire gene clusters for PD 116740 from Streptomyces strain WP 4669 and tetrangulol and tetrangomycin from Streptomyces rimosus NRRL 3016. Hong ST, et al. **J Bacteriol** 1997 Jan; 179(2):470-6

Identification of a monooxygenase from Streptomyces coelicolor A3(2) involved in biosynthesis of actinorhodin: purification and characterization of the recombinant enzyme. Kendrew SG, et al. **J Bacteriol** 1997 Jul; 179(13):4305-10

Purification and cloning of a proline 3-hydroxylase, a novel enzyme which hydroxylates free L-proline to cis-3-hydroxy-L-proline. Mori H, et al. **J Bacteriol** 1997 Sep;179(18):5677-83

Characterization of methyltransferase and hydroxylase genes involved in the biosynthesis of the immunosuppressants FK506 and FK520. Motamedi H, et al. **J Bacteriol** 1996 Sep;178(17):5243-8

Cloning and characterization of the Streptomyces peucetius dnmZUV genes encoding three enzymes required for biosynthesis of the daunorubicin precursor thymidine diphospho-L-daunosamine. Otten SL, et al. **J Bacteriol** 1997 Jul;179(13):4446-50

Cloning, analysis, and overexpression of the gene encoding isobutylamine N-hydroxylase from the valanimycin producer, Streptomyces viridifaciens. Parry RJ, et al. **J Bacteriol** 1997 Jan;179(2):409-16

Purification and preliminary characterization of (E)-3-(2,4-dioxo-6-methyl-5-pyrimidinyl)acrylic acid synthase, an enzyme involved in biosynthesis of the antitumor agent sparsomycin. Parry RJ, et al. **J Bacteriol** 1997 Feb;179(4):1385-92

A novel member of the subtilisin-like protease family from Streptomyces albogriseolus. Suzuki M, et al. **J Bacteriol** 1997 Jan;179(2):430-8

Purification of peptide synthetases involved in pristinamycin I biosynthesis. Thibaut D, et al. **J Bacteriol** 1997 Feb; 179(3):697-704

Characterization of cellulase complex of Streptomyces albaduncus. Harchand RK, et al. **J Basic Microbiol** 1997; 37(2):93-103

Improved method for rapid purification of protein kinase from streptomycetes. Janeček J, et al. **J Biochem Biophys Methods** 1996 Jan 11;31(1-2):9-15

Crystallization and preliminary X-ray crystallographic study of Streptomyces olivaceoviridis E-86 beta-xylanase. Fujimoto Z, et al. **J Biochem (Tokyo)** 1997 May; 121(5):826-8

Effects of methionine and Cu2+ on the expression of tyrosinase activity in Streptomyces castaneoglobisporus. Ikeda K, et al. **J Biochem (Tokyo)** 1996 Dec;120(6):1141-5

Structure of the zinc endoprotease from Streptomyces caespitosus. Kurisu G, et al. **J Biochem (Tokyo)** 1997 Feb; 121(2):304-8

Crystal structure of Streptomyces erythraeus trypsin at 1.9 A resolution. Yamane T, et al. **J Biochem (Tokyo)** 1995 Nov;118(5):882-94

Analysis of the quaternary structure, substrate specificity, and catalytic mechanism of valine dehydrogenase. Turnbull AP, et al. **J Biol Chem** 1997 Oct 3;272(40):25105-11

Optimization studies of components in enzymatic cholesterol reagents containing cholesterol oxidase from Nocardia erythropolis, Streptomyces sp, or Pseudomonas fluorescens. Lolekha PH, et al. **J Clin Lab Anal** 1996; 10(4):167-76

Effect of immobilization on the penicillin binding and reactivity properties of DD-peptidase from Streptomyces R61. Eng GY, et al. **J Mol Recognit** 1996 Sep-Dec; 9(5-6):706-14

Chromogenic assay for phospholipase D from Streptomyces chromofuscus: application to the evaluation of substrate analogs. Hergenrother PJ, et al. **Lipids** 1997 Jul;32(7):783-8

Propionyl-CoA carboxylase from Streptomyces coelicolor A3(2): cloning of the gene encoding the biotin-containing subunit. Bramwell H, et al. **Microbiology** 1996 Mar;142 (Pt 3):649-55

Identification and analysis of genes from Streptomyces pristinaespiralis encoding enzymes involved in the biosynthesis of the 4-dimethylamino-L-phenylalanine precursor of pristinamycin I. Blanc V, et al. **Mol Microbiol** 1997 Jan;23(2):191-202

Cloning, characterization and disruption of a (p)ppGpp synthetase gene (relA) of Streptomyces coelicolor A3(2). Chakraburtty R, et al. **Mol Microbiol** 1996 Jan; 19(2):357-368

Bacterial signalling involving eukaryotic-type protein kinases. Zhang CC. **Mol Microbiol** 1996 Apr;20(1):9-15 (32 ref.)

Identification of sigma factors for growth phase-related promoter selectivity of RNA polymerases from Streptomyces coelicolor A3(2). Kang JG, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2566-73

Improvement of thermal stability of Streptomyces cholesterol oxidase by random mutagenesis and a structural interpretation. Nishiya Y, et al. **Protein Eng** 1997 Mar; 10(3):231-5

Asparagine-127 of xylanase A from Streptomyces lividans, a key residue in glycosyl hydrolases of superfamily 4/7: kinetic evidence for its involvement in stabilization of the catalytic intermediate. Roberge M, et al. **Protein Eng** 1997 Apr;10(4):399-403

Crystal structure of pentalenene synthase: mechanistic insights on terpenoid cyclization reactions in biology [see comments] Lesburg CA, et al. **Science** 1997 Sep 19; 277(5333):1820-4. Comment in: Science 1997 Sep 19;277(5333):1788-9.

[Induction of elastase biosynthesis in Streptomyces sp.82] Vlakhov S, et al. **Antibiot Khimioter** 1996 Apr;41(4):16-22 (Eng. Abstr.) **(Rus)**

GENETICS

Induction of ermSV by 16-membered-ring macrolide antibiotics. Kamimiya S, et al. **Antimicrob Agents Chemother** 1997 Mar;41(3):530-4

The macrolide-lincosamide-streptogramin B resistance phenotypes characterized by using a specifically deleted, antibiotic-sensitive strain of Streptomyces lividans. Pernodet JL, et al. **Antimicrob Agents Chemother** 1996 Mar; 40(3):581-5

Applications of transposition mutagenesis in antibiotic producing streptomycetes. Baltz RH, et al. **Antonie Van Leeuwenhoek** 1997 Feb;71(1-2):179-87 (39 ref.)

Evaluation of a novel subtilisin inhibitor gene and mutant derivatives for the expression and secretion of mouse tumor necrosis factor alpha by Streptomyces lividans. Lammertyn E, et al. **Appl Environ Microbiol** 1997 May;63(5):1808-13

Analysis of xysA, a gene from Streptomyces halstedii JM8 that encodes a 45-kilodalton modular xylanase, Xys1. Ruiz-Arribas A, et al. **Appl Environ Microbiol** 1997 Aug; 63(8):2983-8

Genetic and biochemical characterization of a new extracellular lipase from Streptomyces cinnamomeus. Sommer P, et al. **Appl Environ Microbiol** 1997 Sep; 63(9):3553-60

Cloning and sequence analysis of genes encoding xylanases and acetyl xylan esterase from Streptomyces thermoviolaceus OPC-520. Tsujibo H, et al. **Appl Environ Microbiol** 1997 Feb;63(2):661-4

Identification of stsC, the gene encoding the L-glutamine:scyllo-inosose aminotransferase from streptomycin-producing Streptomycetes. Ahlert J, et al. **Arch Microbiol** 1997 Aug;168(2):102-13

Two genes encoding an endoglucanase and a cellulose-binding protein are clustered and co-regulated by a TTA codon in Streptomyces halstedii JM8. Garda AL, et al. **Biochem J** 1997 Jun 1;324 (Pt 2):403-11

New alpha-L-arabinofuranosidase produced by Streptomyces lividans: cloning and DNA sequence of the abfB gene and characterization of the enzyme. Vincent P, et al. **Biochem J** 1997 Mar 15;322 (Pt 3):845-52

Cloning and sequencing of the hup gene encoding the histone-like protein HSl of Streptomyces lividans. Yokoyama E, et al. **Biochim Biophys Acta** 1997 Aug 7; 1353(2):103-6

Isolation and characterization of a gene encoding a chymotrypsin-like serine protease from Streptomyces lividans 66. Binnie C, et al. **Can J Microbiol** 1996 Mar; 42(3):284-8

Genetic and biochemical analysis of the cysteinyl residues

of isopenicillin N synthase from Streptomyces clavuligerus. Durairaj M, et al. **Can J Microbiol** 1996 Aug;42(8):870–5
Restriction enzyme and DNA hybridization analysis of cellulolytic Streptomyces isolates of different origin. Marri L, et al. **Can J Microbiol** 1997 Apr;43(4):395–9
Increase of the expression of midecamycin 4"-hydroxyl propionyltransferase gene (mpt) by a promoter-like fragment from the midecamycin producing strain. Gu H, et al. **Chin J Biotechnol** 1996;12(3):147–52
Gene localization and expression of thienamycin cyclase gene in Streptomyces lividans TK24. Li R, et al. **Chin J Biotechnol** 1996;12(1):1–7
3-Diazopyrroles. Part 6. Mutagenic activity of 3-diazopyrroles in Streptomyces coelicolor A3(2) during various phases of growth. Cirrincione G, et al. **Farmaco** 1996 Jan;51(1):49–52
Characterization of two Streptomyces ambofaciens recA mutants: identification of the RecA protein by immunoblotting. Aigle B, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):181–7
Mapping of the ribosomal operons on the linear chromosomal DNA of Streptomyces ambofaciens DSM40697. Berger F, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2–3):167–73
Molecular cloning and expression of the glucose/xylose isomerase gene from Streptomyces sp. NCIM 2730 in Escherichia coli. Bhosale SH, et al. **FEMS Microbiol Lett** 1996 Nov 15;145(1):95–100
Use of an automatic DNA sequencer for S1 mapping: transcriptional analysis of the Streptomyces coelicolor A3(2) dnaK operon. Brans A, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):189–94
Effect of carbon source on the expression of celA1, a cellulase-encoding gene from Streptomyces halstedii JM8. Fernández-Abalos JM, et al. **FEMS Microbiol Lett** 1997 Aug 1;153(1):97–103
Construction of pRES18 and pRES19, Streptomyces-Escherichia coli shuttle vectors carrying multiple cloning sites. Ishikawa J, et al. **FEMS Microbiol Lett** 1996 Nov 15;145(1):113–6
Taxonomic identification of Streptomyces exfoliatus K10 and characterization of its poly(3-hydroxybutyrate) depolymerase gene. Klingbeil B, et al. **FEMS Microbiol Lett** 1996 Sep 1;142(2–3):215–21
Electroporation of intact cells of Streptomyces parvulus and Streptomyces vinaceus. Mazy-Servais C, et al. **FEMS Microbiol Lett** 1997 Jun 15;151(2):135–8
Induction of L-lysine epsilon-aminotransferase by L-lysine in Streptomyces clavuligerus, producer of cephalosporins [published erratum appears in FEMS Microbiol Lett 1997 Jan 15;146(2):319] Rius N, et al. **FEMS Microbiol Lett** 1996 Nov 1;144(2–3):207–11
abaB, a putative regulator for secondary metabolism in Streptomyces. Scheu AK, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):29–36
Nucleotide sequence of a nicking site of the Streptomyces plasmid pSN22 replicating by the rolling circle mechanism. Suzuki I, et al. **FEMS Microbiol Lett** 1997 May 15; 150(2):283–8
Expression of the Streptomyces coelicolor A3(2) ptpA gene encoding a phosphotyrosine protein phosphatase leads to overproduction of secondary metabolites in S. lividans. Umeyama T, et al. **FEMS Microbiol Lett** 1996 Nov 1; 144(2–3):177–84
Studies on the possibility for genetic recombination in Streptomyces flavopersicus. Stoycheva Z, et al. **Folia Microbiol (Praha)** 1995;40(3):245–8
Antibiotic resistance gene cassettes derived from the omega interposon for use in E. coli and Streptomyces. Blondelet-Rouault MH, et al. **Gene** 1997 May 6; 190(2):315–7
The use of an improved transposon mutagenesis system for DNA sequencing leads to the characterization of a new insertion sequence of Streptomyces lividans 66. Fischer J, et al. **Gene** 1996 Nov 21;180(1–2):81–9
Molecular analysis of tlrD, an MLS resistance determinant from the tylosin producer, Streptomyces fradiae. Gandecha AR, et al. **Gene** 1996 Nov 21;180(1–2):173–6
Analysis of four tylosin biosynthetic genes from the tylLM region of the Streptomyces fradiae genome. Gandecha AR, et al. **Gene** 1997 Jan 15;184(2):197–203
Cloning and sequencing of the secY homolog from Streptomyces lividans 1326. Ostiguy S, et al. **Gene** 1996 Oct 17;176(1–2):265–7
Characterization of spaA, a Streptomyces coelicolor gene homologous to a gene involved in sensing starvation in Escherichia coli. Schneider D, et al. **Gene** 1996 Oct 24; 177(1–2):243–51
Stable nuclear transformation of Chlamydomonas reinhardtii with a Streptomyces rimosus gene as the selective marker. Sizova IA, et al. **Gene** 1996 Nov 28;181(1–2):13–8
Use of polymerase chain reaction to identify a leucyl tRNA in Streptomyces coelicolor. Trepanier NK, et al. **Gene** 1997 Jul 1;193(1):59–63
A novel plasmid vector that uses the glucose kinase gene (glkA) for the positive selection of stable gene disruptants in Streptomyces. van Wezel GP, et al. **Gene** 1996 Dec 5; 182(1–2):229–30
High frequency transposition of the Tn5 derivative Tn5493 in Streptomyces lividans. Volff JN, et al. **Gene** 1997 Jul 18;194(1):81–6
Organization and nucleotide sequence analysis of the ribosomal gene set (rrnB) from Streptomyces lividans. Zarko-Postawka M, et al. **Gene** 1997 Feb 7;185(2):231–7
Discrimination of Streptomyces albidoflavus strains based on the size and number of 16S-23S ribosomal DNA intergenic spacers. Hain T, et al. **Int J Syst Bacteriol** 1997 Jan; 47(1):202–6
Cloning of the enomycin structural gene from Streptomyces mauvecolor and production of recombinant enomycin in Escherichia coli. Takeuchi S, et al. **J Antibiot (Tokyo)** 1997 Jan;50(1):27–31
The Streptomyces galP1 promoter has a novel RNA polymerase recognition sequence and is transcribed by a new form of RNA polymerase in vitro. Brawner ME, et al. **J Bacteriol** 1997 May;179(10):3222–31
Regulation of the dnaK operon of Streptomyces coelicolor A3(2) is governed by HspR, an autoregulatory repressor protein. Bucca G, et al. **J Bacteriol** 1997 Oct; 179(19):5999–6004
Isolation and expression of the catA gene encoding the major vegetative catalase in Streptomyces coelicolor Müller. Cho YH, et al. **J Bacteriol** 1997 Jun;179(12):4049–52
Pristinamycin I biosynthesis in Streptomyces pristinaespiralis: molecular characterization of the first two structural peptide synthetase genes. de Crécy-Lagard V, et al. **J Bacteriol** 1997 Feb;179(3):705–13
Occurrence of deletions, associated with genetic instability in Streptomyces ambofaciens, is independent of the linearity of the chromosomal DNA. Fischer G, et al. **J Bacteriol** 1997 Jul;179(14):4553–8
The Tra2 core of the IncP(alpha) plasmid RP4 is required for intergeneric mating between Escherichia coli and Streptomyces lividans. Giebelhaus LA, et al. **J Bacteriol** 1996 Nov;178(21):6378–81
Use of rpsL for dominance selection and gene replacement in Streptomyces roseosporus. Hosted TJ, et al. **J Bacteriol** 1997 Jan;179(1):180–6
Development of a temperature-inducible expression system for Streptomyces spp. Kataoka M, et al. **J Bacteriol** 1996 Sep;178(18):5540–2
Cloning and insertional inactivation of Streptomyces argillaceus genes involved in the earliest steps of biosynthesis of the sugar moieties of the antitumor polyketide mithramycin. Lombó F, et al. **J Bacteriol** 1997 May;179(10):3354–7
Denaturation of circular or linear DNA facilitates targeted integrative transformation of Streptomyces coelicolor A3(2): possible relevance to other organisms. Oh SH, et al. **J Bacteriol** 1997 Jan;179(1):122–7
Molecular analysis of a beta-lactam resistance gene encoded within the cephamycin gene cluster of Streptomyces clavuligerus. Paradkar AS, et al. **J Bacteriol** 1996 Nov; 178(21):6266–74
The bla gene of the cephamycin cluster of Streptomyces clavuligerus encodes a class A beta-lactamase of low enzymatic activity. Pérez-Llarena F, et al. **J Bacteriol** 1997 Oct;179(19):6035–40
A regulatory gene (ccaR) required for cephamycin and clavulanic acid production in Streptomyces clavuligerus: amplification results in overproduction of both beta-lactam compounds. Pérez-Llarena FJ, et al. **J Bacteriol** 1997 Mar; 179(6):2053–9
Minimal Streptomyces sp. strain C5 daunorubicin polyketide biosynthesis genes required for aklanonic acid biosynthesis. Rajgarhia VB, et al. **J Bacteriol** 1997 Apr;179(8):2690–6
Relationships between fatty acid and polyketide synthases from Streptomyces coelicolor A3(2): characterization of the fatty acid synthase acyl carrier protein. Revill WP, et al. **J Bacteriol** 1996 Oct;178(19):5660–7
Enhanced antibiotic production by manipulation of the Streptomyces peucetius dnrH and dnmT genes involved in doxorubicin (adriamycin) biosynthesis. Scotti C, et al. **J Bacteriol** 1996 Dec;178(24):7316–21
Heat induction of hsp18 gene expression in Streptomyces albus G: transcriptional and posttranscriptional regulation. Servant P, et al. **J Bacteriol** 1996 Dec;178(24):7031–6
Characterization of a mitomycin-binding drug resistance mechanism from the producing organism, Streptomyces lavendulae [published erratum appears in J Bacteriol 1997 Jun;179(12):4080] Sheldon PJ, et al. **J Bacteriol** 1997 Mar; 179(5):1796–804
Induction of actinorhodin production by rpsL (encoding ribosomal protein S12) mutations that confer streptomycin resistance in Streptomyces lividans and Streptomyces coelicolor A3(2). Shima J, et al. **J Bacteriol** 1996 Dec; 178(24):7276–84
Growth phase-dependent transcription of the Streptomyces ramocissimus tuf1 gene occurs from two promoters. Tieleman LN, et al. **J Bacteriol** 1997 Jun;179(11):3619–24
High-frequency transposition of IS1373, the insertion sequence delimiting the amplifiable element AUD2 of Streptomyces lividans. Volff JN, et al. **J Bacteriol** 1997 Sep;179(17):5639–42
Influence of disruption of the recA gene on genetic instability and genome rearrangement in Streptomyces lividans. Volff JN, et al. **J Bacteriol** 1997 Apr;179(7):2440–5
Cloning and characterization of the gene (farA) encoding the receptor for an extracellular regulatory factor (IM-2) from Streptomyces sp. strain FRI-5. Waki M, et al. **J Bacteriol** 1997 Aug;179(16):5131–7
Cloning and characterization of the gene encoding 1-cyclohexenylcarbonyl coenzyme A reductase from Streptomyces collinus. Wang P, et al. **J Bacteriol** 1996 Dec; 178(23):6873–81
bldA dependence of undecylprodigiosin production in Streptomyces coelicolor A3(2) involves a pathway-specific regulatory cascade. White J, et al. **J Bacteriol** 1997 Feb; 179(3):627–33
An NADPH:FAD oxidoreductase from the valanimycin producer, Streptomyces viridifaciens. Cloning, analysis, and overexpression. Parry RJ, et al. **J Biol Chem** 1997 Sep 12;272(37):23303–11
An amplifiable and deletable locus of Streptomyces ambofaciens RP181110 contains a very large gene homologous to polyketide synthase genes. Aigle B, et al. **Microbiology** 1996 Oct;142 (Pt 10):2815–24
Amplification of a Streptomyces lividans 4.3 kb DNA element causes overproduction of a novel hypha- and vesicle-associated protein. Betzler M, et al. **Microbiology** 1997 Apr;143 (Pt 4):1243–52
Cloning, sequencing and disruption of a bromoperoxidase-catalase gene in Streptomyces venezuelae: evidence that it is not required for chlorination in chloramphenicol biosynthesis. Facey SJ, et al. **Microbiology** 1996 Mar;142 (Pt 3):657–65
The dnrM gene in Streptomyces peucetius contains a naturally occurring frameshift mutation that is suppressed by another locus outside of the daunorubicin-production gene cluster. Gallo MA, et al. **Microbiology** 1996 Feb;142 (Pt 2):269–75
Mutants of Streptomyces roseosporus that express enhanced recombination within partially homologous genes. Hosted TJ, et al. **Microbiology** 1996 Oct;142 (Pt 10):2803–13
Streptomyces akiyoshiensis differs from other gram-positive bacteria in the organization of a core biosynthetic pathway gene for aspartate family amino acids. Le Y, et al. **Microbiology** 1996 Apr;142 (Pt 4):791–8
Two classes of ethidium-bromide-resistant mutants of Streptomyces lividans 66. Lee LF, et al. **Microbiology** 1996 Apr;142 (Pt 4):1041–7
Gene disruption and replacement in the rapamycin-producing Streptomyces hygroscopicus strain ATCC 29253. Lomovskaya N, et al. **Microbiology** 1997 Mar;143 (Pt 3):875–83
A spectinomycin resistance determinant from the spectinomycin producer Streptomyces flavopersicus. Lyutzkanova D, et al. **Microbiology** 1997 Jul;143 (Pt 7):2135–43
Gene transfer and transposition mutagenesis in Streptomyces roseosporus: mapping of insertions that influence daptomycin or pigment production. McHenney MA, et al. **Microbiology** 1996 Sep;142 (Pt 9):2363–73
A gene cloning system for 'Streptomyces toyocaensis'. Matsushima P, et al. **Microbiology** 1996 Feb;142 (Pt 2):261–7
ScCypB is a novel second cytosolic cyclophilin from Streptomyces chrysomallus which is phylogenetically distant from ScCypA. Pahl A, et al. **Microbiology** 1997 Jan;143 (Pt 1):117–26
Physical mapping shows that the unstable oxytetracycline gene cluster of Streptomyces rimosus lies close to one end of the linear chromosome. Pandza K, et al. **Microbiology** 1997 May;143 (Pt 5):1493–501
A novel fusidic acid resistance gene from Streptomyces lividans 66 encodes a highly specific esterase. von der Haar B, et al. **Microbiology** 1997 Mar;143 (Pt 3):867–74
Comparative analysis of expression of the SalI restriction-modification system in Escherichia coli and Streptomyces. Alvarez MA, et al. **Mol Gen Genet** 1996 Nov 27;253(1–2):74–80
The two beta-lactamase genes of Streptomyces cacaoi, blaL and blaU, are under the control of the same regulatory system. Magdalena J, et al. **Mol Gen Genet** 1997 Jun; 255(2):187–93
The malEFG gene cluster of Streptomyces coelicolor A3(2): characterization, disruption and transcriptional analysis. van Wezel GP, et al. **Mol Gen Genet** 1997 May 20; 254(5):604–8
Artificial circularization of the chromosome with concomitant deletion of its terminal inverted repeats enhances genetic instability and genome rearrangement in Streptomyces lividans. Volff JN, et al. **Mol Gen Genet** 1997 Feb 27;253(6):753–60
Nucleotide sequence analysis of the junctions of the terminal inverted repeats of the Streptomyces lividans linear chromosome. Volff JN, et al. **Mol Gen Genet** 1997 Feb 27;253(6):761–5
The cutRS signal transduction system of Streptomyces lividans represses the biosynthesis of the polyketide antibiotic actinorhodin. Chang HM, et al. **Mol Microbiol** 1996 Sep;21(5):1075–85
Streptomyces linear plasmids that contain a phage-like, centrally located, replication origin. Chang PC, et al. **Mol Microbiol** 1996 Dec;22(5):789–800
afsR is a pleiotropic but conditionally required regulatory gene for antibiotic production in Streptomyces coelicolor A3(2). Floriano B, et al. **Mol Microbiol** 1996 Jul; 21(2):385–96
Disruption of hspR, the repressor gene of the dnaK operon in Streptomyces albus G. Grandvalet C, et al. **Mol Microbiol** 1997 Jan;23(1):77–84
The unstable region of Streptomyces ambofaciens includes 210 kb terminal inverted repeats flanking the extremities of the linear chromosomal DNA. Leblond P, et al. **Mol Microbiol** 1996 Jan;19(2):261–71
The bld mutants of Streptomyces coelicolor are defective

in the regulation of carbon utilization, morphogenesis and cell—cell signalling. Pope MK, et al. **Mol Microbiol** 1996 Feb;19(4):747–56

A set of ordered cosmids and a detailed genetic and physical map for the 8 Mb Streptomyces coelicolor A3(2) chromosome. Redenbach M, et al. **Mol Microbiol** 1996 Jul; 21(1):77–96

Inducible transposition in Streptomyces lividans of insertion sequence IS6100 from Mycobacterium fortuitum. Smith B, et al. **Mol Microbiol** 1995 Dec;18(5):933–41

Substrate induction and glucose repression of maltose utilization by Streptomyces coelicolor A3(2) is controlled by malR, a member of the lacI–galR family of regulatory genes. van Wezel GP, et al. **Mol Microbiol** 1997 Feb; 23(3):537–49

Nucleotide sequence and role in DNA amplification of the direct repeats composing the amplifiable element AUD1 of Streptomyces lividans 66. Volff JN, et al. **Mol Microbiol** 1996 Sep;21(5):1037–47

Translation of vph mRNA in Streptomyces lividans and Escherichia coli after removal of the 5'untranslated leader. Wu CJ, et al. **Mol Microbiol** 1996 Oct;22(2):339–55

Complete conversion of antibiotic precursor to pristinamycin IIA by overexpression of Streptomyces pristinaespiralis biosynthetic genes. Sezonov G, et al. **Nat Biotechnol** 1997 Apr;15(4):349–53

Molecular analysis of RNA polymerase alpha subunit gene from Streptomyces coelicolor A3(2). Cho EJ, et al. **Nucleic Acids Res** 1996 Nov 15;24(22):4565–71

Three single-strand origins located on both strands of the Streptomyces rolling circle plasmid pSN22. Suzuki I, et al. **Plasmid** 1997;37(1):51–64

[Structure analysis of a DNA fragment containing strong promoter activity from Streptomyces mycarofaciens 1748] Gu H, et al. **I Chuan Hsueh Pao** 1996;23(6):469–76 (Eng. Abstr.) **(Chi)**

[Promoter activity detection and transcription initiation site determination of the D-xylose isomerase gene of Streptomyces diastaticus strain No.7 M1033] Hang J, et al. **I Chuan Hsueh Pao** 1995;22(3):239–44 (Eng. Abstr.) **(Chi)**

[Cloning and sequencing the isopenicillin N synthetase(IPNS) gene from Streptomyces cattleya] Wang Y, et al. **Wei Sheng Wu Hsueh Pao** 1996 Apr;36(2):87–92 (Eng. Abstr.) **(Chi)**

[Metabolites produced by Streptomyces kanamyceticus mutants with impaired biosynthesis of kanamycin] Golets LM, et al. **Antibiot Khimioter** 1997;42(4):8–11 (Eng. Abstr.) **(Rus)**

[Feasibility of obtaining a highly active mutant of Streptomyces hygroscopicus SU–A5 using induced mutagenesis] Kenarova A, et al. **Antibiot Khimioter** 1996 May;41(5):3–5 (Eng. Abstr.) **(Rus)**

[Molecular genetic study of the strain Streptomyces virginiae— the producer of virginiamycin] Kudriavtseva EA, et al. **Genetika** 1996 Apr;32(4):510–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Identification of procaryotic developmental stages by statistical analyses of two-dimensional gel patterns. Vohradský J, et al. **Electrophoresis** 1997 Aug;18(8):1418–28

A mutation at proline-115 in the A-factor receptor protein of Streptomyces griseus abolishes DNA-binding ability but not ligand-binding ability. Onaka H, et al. **J Bacteriol** 1997 Apr;179(8):2748–52

Experimental verification of a mathematical model for pelleted growth of Streptomyces coelicolor A3(2) in submerged batch culture [published erratum appears in Microbiology 1996 May;142(Pt 5):1332] Tough AJ, et al. **Microbiology** 1996 Mar;142 (Pt 3):639–48

Identification of sigma factors for growth phase-related promoter selectivity of RNA polymerases from Streptomyces coelicolor A3(2). Kang JG, et al. **Nucleic Acids Res** 1997 Jul 1;25(13):2566–73

ISOLATION & PURIFICATION

Characteristics of Streptomyces strains isolated from soils in two landfill areas in north Jordan. Abussaud MJ. **Acta Microbiol Immunol Hung** 1996;43(1):47–53

Intraspinal mycetoma: report of two cases. Arbab MA, et al. **Am J Trop Med Hyg** 1997 Jan;56(1):27–9

Molecular detection of streptomycin-producing streptomycetes in Brazilian soils. Huddleston AS, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1288–97

Long-term identification of streptomycetes using pyrolysis mass spectrometry and artificial neural networks. Chun J, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):258–66

Application of neural networks to the analysis of pyrolysis mass spectra. Kenyon RG, et al. **Zentralbl Bakteriol** 1997 Jan;285(2):267–77

METABOLISM

Stereospecific reduction of virginiamycin M1 as the virginiamycin resistance pathway in Streptomyces virginiae. Lee CK, et al. **Antimicrob Agents Chemother** 1996 Mar;40(3):595–601

Essential role of endogenously synthesized tylosin for induction of ermSF in Streptomyces fradiae. Memili E, et al. **Antimicrob Agents Chemother** 1997 May;41(5):1203–5

Applications of transposition mutagenesis in antibiotic producing streptomycetes. Baltz RH, et al. **Antonie Van Leeuwenhoek** 1997 Feb;71(1–2):179–87 (39 ref.)

Identification of ATP-dependent phosphofructokinase as a regulatory step in the glycolytic pathway of the actinomycete Streptomyces coelicolor A3(2). Alves AM, et al. **Appl Environ Microbiol** 1997 Mar;63(3):956–61

Evaluation of a novel subtilisin inhibitor gene and mutant derivatives for the expression and secretion of mouse tumor necrosis factor alpha by Streptomyces lividans. Lammertyn E, et al. **Appl Environ Microbiol** 1997 May;63(5):1808–13

Protein kinase associated with ribosomes phosphorylates ribosomal proteins of Streptomyces collinus. Mikulík K, et al. **Biochem Biophys Res Commun** 1997 Sep 18; 238(2):370–6

Characterization of phosphate transport in Streptomyces granaticolor. Lichá I, et al. **Biochem Mol Biol Int** 1997 Mar;41(3):431–7

FR901724, a novel anti-human immunodeficiency virus (HIV) peptide produced by Streptomyces, shows synergistic antiviral activities with HIV protease inhibitor and 2',3'-dideoxynucleosides. Nakashima H, et al. **Biol Pharm Bull** 1996 Mar;19(3):405–12

Ability of Streptomyces spp. acyl carrier proteins and coenzyme A analogs to serve as substrates in vitro for E. coli holo-ACP synthase. Gehring AM, et al. **Chem Biol** 1997 Jan;4(1):17–24

Production of hybrid glycopeptide antibiotics in vitro and in Streptomyces toyocaensis. Solenberg PJ, et al. **Chem Biol** 1997 Mar;4(3):195–202

Total synthesis of WS9326A, a potent tachykinin antagonist from Streptomyces violaceoniger. Shigematsu N, et al. **Chem Pharm Bull (Tokyo)** 1997 Feb;45(2):236–42

Overexpression of the Nocardia lactamdurans alpha-aminoadipyl-cysteinyl-valine synthetase in Streptomyces lividans. The purified multienzyme uses cystathionine and 6-oxopiperidine 2-carboxylate as substrates for synthesis of the tripeptide. Coque JJ, et al. **Eur J Biochem** 1996 Dec 1;242(2):264–70

A lipid-anchored binding protein is a component of an ATP-dependent cellobiose/cellotriose-transport system from the cellulose degrader Streptomyces reticuli. Schlösser A, et al. **Eur J Biochem** 1996 Dec 1;242(2):332–8

Specific interaction of the Streptomyces chitin-binding protein CHB1 with alpha-chitin—the role of individual tryptophan residues. Zeltins A, et al. **Eur J Biochem** 1997 Jun 1;246(2):557–64

An inducible expression system of histidine-tagged proteins in Streptomyces lividans for one-step purification by Ni2+ affinity chromatography. Enguita FJ, et al. **FEMS Microbiol Lett** 1996 Apr 1;137(2–3):135–40

abaB, a putative regulator for secondary metabolism in Streptomyces. Scheu AK, et al. **FEMS Microbiol Lett** 1997 Feb 1;147(1):29–36

Antimicrobial activities of Streptomyces pulcher, S. canescens and S. citreofluorescens against fungal and bacterial pathogens of tomato in vitro. el-Abyad MS, et al. **Folia Microbiol (Praha)** 1996;41(4):321–8

Comparative investigation of a streptovaricin-producing strain of Streptomyces spectabilis and its selectant. Spasova D, et al. **Folia Microbiol (Praha)** 1997;42(1):35–8

Inducible synthesis of the mitomycin C resistance gene product (MCRA) from Streptomyces lavendulae. August PR, et al. **Gene** 1996 Oct 10;175(1–2):261–7

Characterisation and identification of broad spectrum antibiotic producing Streptomyces hygroscopicus D 1.5. Chakraborty D, et al. **Hindustan Antibiot Bull** 1995 Feb–Nov;37(1–4):37–43

A collagenolytic streptomycete. Mukhopadhyay RP, et al. **Indian J Exp Biol** 1996 Nov;34(11):1114–20

Streptomyces cellulolyticus sp. nov., a new cellulolytic member of the genus Streptomyces. Li X. **Int J Syst Bacteriol** 1997 Apr;47(2):443–5

Cladinose analogues of sixteen-membered macrolide antibiotics. II. Preparation of pharmacokinetically improved analogues via biotransformation. Ajito K, et al. **J Antibiot (Tokyo)** 1997 Jan;50(1):92–5

Inhibition of plasminogen activator inhibitor-1 activity by two diketopiperazines, XR330 and XR334 produced by Streptomyces sp. Bryans J, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1014–21

The staurosporine producing strain Streptomyces longisporoflavus produces metabolites related to K-252a. Proposal for biosynthetic intermediates of K-252a. Cai Y, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1060–2

Heliquinomycin, a new inhibitor of DNA helicase, produced by Streptomyces sp. MJ929-SF2 I. Taxonomy, production, isolation, physico-chemical properties and biological activities. Chino M, et al. **J Antibiot (Tokyo)** 1996 Aug; 49(8):752–7

Kanchanamycins, new polyol macrolide antibiotics produced by Streptomyces olivaceus Tü 4018. I. Taxonomy, fermentation, isolation and biological activities. Fiedler HP, et al. **J Antibiot (Tokyo)** 1996 Aug;49(8):758–64

A new 16-membered chalcomycin type macrolide antibiotic, 250-144C. Goo YM, et al. **J Antibiot (Tokyo)** 1997 Jan; 50(1):85–8

A novel method for improving Streptomyces coelicolor A3(2) for production of actinorhodin by introduction of rpsL (encoding ribosomal protein S12) mutations conferring resistance to streptomycin [letter] Hesketh A, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):532–5

Mechanism of multiple aminoglycoside resistance of kasugamycin-producing Streptomyces kasugaensis MB273: involvement of two types of acetyltransferases in resistance to astromicin group antibiotics. Hotta K, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):682–8

New betaclamycin and aclarubicin analogs obtained by prolonged microbial conversion with an aclarubicin-negative mutant. Johdo O, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):669–75

Isolation of new anthracyclines 10-O-rhodosaminyl beta-rhodomycinone and beta-isorhodomycinone from mild-acid treated culture of obelmycin-producing Streptomyces violaceus. Johdo O, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):522–5

Microbiological N-deoxygenation and C-oxygenation of pioglitazone-N-oxide in a single fermentation. Johnson RA, et al. **J Antibiot (Tokyo)** 1996 Aug;49(8):788–93

41-Demethylhomooligomycin B, a new immunosuppresant antibiotic from Streptomyces ostreogriseus. Kim HS, et al. **J Antibiot (Tokyo)** 1996 Dec;49(12):1275–7

A novel neuronal cell protecting substance, espicufolin, produced by Streptomyces sp. cu39 [letter] Kim JS, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):947–8

GERI-155, a new macrolide antibiotic related to chalcomycin [letter] Kim SD, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):955–7

New piericidin antibiotics, 7-demethylpiericidin A1 and 7-demethyl-3'-rhamnopiericidin A1. Kimura K, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):697–9

TMC-1 A, B, C and D, new antibiotics of the manumycin group produced by Streptomyces sp. Taxonomy, production, isolation, physico-chemical properties, structure elucidation and biological properties. Kohno J, et al. **J Antibiot (Tokyo)** 1996 Dec;49(12):1212–20

Isolation and characterization of 8-demethoxy steffimycins and generation of 2,8-demethoxy steffimycins in Streptomyces steffisburgensis by the nogalamycin biosynthesis genes. Kunnari T, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):496–501

Antibiotic GE37468A: a new inhibitor of bacterial protein synthesis. III. Strain and fermentation study. Marinelli F, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):880–5

Lactonamycin, a new antimicrobial antibiotic produced by Streptomyces rishiriensis [letter] Matsumoto N, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):953–4

Phebestin, a new inhibitor of aminopeptidase N, produced by Streptomyces sp. MJ716-m3. Nagai M, et al. **J Antibiot (Tokyo)** 1997 Jan;50(1):82–4

(E)-4-oxonon-2-enoic acid, an antibiotically active fatty acid produced by Streptomyces olivaceus Tü 4018. Pfefferle C, et al. **J Antibiot (Tokyo)** 1996 Aug;49(8):826–8

NP-101A, antifungal antibiotic from Streptomyces aurantiogriseus NPO-101. Phay N, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):703–5

2-Demethylmonensins A and B. Novel minor congeners of monensins from Streptomyces cinnamonensis. Pospíšil S, et al. **J Antibiot (Tokyo)** 1996 Sep;49(9):935–7

Chloropeptins, new anti-HIV antibiotics inhibiting gp120-CD4 binding from Streptomyces sp. I. Taxonomy, fermentation, isolation, and physico-chemical properties and biological activities. Tanaka H, et al. **J Antibiot (Tokyo)** 1997 Jan;50(1):58–65

NK154183A and B, antitumor substances produced by Streptomyces sp. Tsuchiya K, et al. **J Antibiot (Tokyo)** 1996 Dec;49(12):1281–3

UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. I. Fermentation, isolation, and biological properties. Ueki M, et al. **J Antibiot (Tokyo)** 1996 Jul;49(7):639–43

IT-143-A and B, novel piericidin-group antibiotics produced by Streptomyces sp. Urakawa A, et al. **J Antibiot (Tokyo)** 1996 Oct;49(10):1052–5

Effect of water activity on production of beta-lactam antibiotics by Streptomyces clavuligerus in submerged culture. Cochet N, et al. **J Appl Bacteriol** 1996 Mar; 80(3):333–7

Morphogenesis, ATP content and oxytetracycline production by Streptomyces rimosus in solid substrate cultivation. Yang SS, et al. **J Appl Bacteriol** 1996 May;80(5):545–50

The DnrN protein of Streptomyces peucetius, a pseudo-response regulator, is a DNA-binding protein involved in the regulation of daunorubicin biosynthesis. Furuya K, et al. **J Bacteriol** 1996 Nov;178(21):6310–8

A novel alternate anaplerotic pathway to the glyoxylate cycle in streptomycetes. Han L, et al. **J Bacteriol** 1997 Aug; 179(16):5157–64

Environmental signals triggering methylenomycin production by Streptomyces coelicolor A3(2). Hayes A, et al. **J Bacteriol** 1997 Sep;179(17):5511–5

Lipid and fatty acid composition of cytoplasmic membranes from Streptomyces hygroscopicus and its stable protoplast-type L form. Hoischen C, et al. **J Bacteriol** 1997 Jun;179(11):3430–6

Structural characterization of molecular phospholipid species in cytoplasmic membranes of the cell wall-less Streptomyces hygroscopicus L form by use of electrospray ionization coupled with collision-induced dissociation mass spectrometry. Hoischen C, et al. **J Bacteriol** 1997 Jun; 179(11):3437–42

Expression and characterization of DrrA and DrrB proteins of Streptomyces peucetius in Escherichia coli: DrrA is an ATP binding protein. Kaur P. **J Bacteriol** 1997 Feb;

STREPTOMYCES

179(3):569–75
The Streptomyces ATP-binding component MsiK assists in cellobiose and maltose transport. Schlösser A, et al. **J Bacteriol** 1997 Mar;179(6):2092–5
In vivo and in vitro effects of thiolactomycin on fatty acid biosynthesis in Streptomyces collinus. Wallace KK, et al. **J Bacteriol** 1997 Jun;179(12):3884–91
Biosynthetic capacities of actinomycetes. 5. Dioxolides, novel secondary metabolites from Streptomyces tendae. Blum S, et al. **J Basic Microbiol** 1996;36(1):19–25
Degradation of pentachlorophenol in soil by Streptomyces rochei 303. Zaborina O, et al. **J Environ Sci Health B** 1997 Jan;32(1):55–70
Isolation and structure of leukotriene-A4 hydrolase inhibitor: 8(S)-amino-2(R)-methyl-7-oxononanoic acid produced by Streptomyces diastaticus. Parnas BL, et al. **J Nat Prod** 1996 Oct;59(10):962–4
Isolation and synthesis of novel farnesyl protein transferase inhibitors, valinoctins A and B, from Streptomyces strain MJ858-NF3. Sekizawa R, et al. **J Nat Prod** 1996 Mar; 59(3):232–6
Bripiodionen, a new inhibitor of human cytomegalovirus protease from Streptomyces sp. WC76599. Shu YZ, et al. **J Nat Prod** 1997 May;60(5):529–32
Further metabolic studies of indole and sugar derivatives using the staurosporine producer Streptomyces staurosporeus. Yang SW, et al. **J Nat Prod** 1997 Mar; 60(3):230–5
Metabolism studies of indole derivatives using a staurosporine producer, Streptomyces staurosporeus. Yang SW, et al. **J Nat Prod** 1997 Jan;60(1):44–8
Studies on the biosynthesis of bialaphos. Biochemical mechanism of C-P bond formation: discovery of phosphonopyruvate decarboxylase which catalyzes the formation of phosphonoacetaldehyde from phosphonopyruvate. Nakashita H, et al. **Jpn J Antibiot** 1997 Mar;50(3):212–9
A new cytotoxic phenylthiazoline, 4-methylaeruginoic acid, from Streptomyces sp. KCTC 9303 [published erratum appears in Jpn J Antibiot 1997 Apr;50(4):C-2] Ryoo IJ, et al. **Jpn J Antibiot** 1997 Mar;50(3):256–8
Malolactomycins C and D, new 40-membered macrolides active against Botrytis. Tanaka Y, et al. **Jpn J Antibiot** 1997 Mar;50(3):194–200
NK10958P, a novel plant growth regulator produced by Streptomyces sp. Tsuchiya K, et al. **Jpn J Antibiot** 1997 Mar;50(3):259–60
Epoprc.nycins, novel cell wall synthesis inhibitors of plant protoplast produced by Streptomyces sp. NK04000. Tsuchiya K, et al. **Jpn J Antibiot** 1997 Mar;50(3):261–3
Biotransformations of tocopherols by Streptomyces catenulae. Rousseau B, et al. **Lipids** 1997 Jan;32(1):79–84
Medium- and long-chain fatty acid uptake and utilization by Streptomyces coelicolor A3(2): first characterization of a gram-positive bacterial system. Banchio C, et al. **Microbiology** 1997 Jul;143 (Pt 7):2439–47
Streptomyces akiyoshiensis differs from other gram-positive bacteria in the organization of a core biosynthetic pathway gene for aspartate family amino acids. Le Y, et al. **Microbiology** 1996 Apr;142 (Pt 4):791–8
Organic acid excretion by Streptomyces lividans TK24 during growth on defined carbon and nitrogen sources. Madden T, et al. **Microbiology** 1996 Nov;142 (Pt 11):3181–5
afsR is a pleiotropic but conditionally required regulatory gene for antibiotic production in Streptomyces coelicolor A3(2). Floriano B, et al. **Mol Microbiol** 1996 Jul; 21(2):385–96
The TraB protein, which mediates the intermycelial transfer of the Streptomyces plasmid pSN22, has functional NTP-binding motifs and is localized to the cytoplasmic membrane. Kosoño S, et al. **Mol Microbiol** 1996 Jan; 19(2):397–405
An oligopeptide permease responsible for the import of an extracellular signal governing aerial mycelium formation in Streptomyces coelicolor. Nodwell JR, et al. **Mol Microbiol** 1996 Dec;22(5):881–93
Substrate induction and glucose repression of maltose utilization by Streptomyces coelicolor A3(2) is controlled by malR, a member of the lacI-galR family of regulatory genes. van Wezel GP, et al. **Mol Microbiol** 1997 Feb; 23(3):537–49
Finetuning pristinamycin synthesis in streptomycetes [news] Hopwood D. **Nat Biotechnol** 1997 Apr;15(4):321
Complete conversion of antibiotic precursor to pristinamycin IIA by overexpression of Streptomyces pristinaespiralis biosynthetic genes. Sezonov G, et al. **Nat Biotechnol** 1997 Apr;15(4):349–53
Carbon metabolism and its regulation in Streptomyces and other high GC gram-positive bacteria. Paulsen IT. **Res Microbiol** 1996 Jul-Sep;147(6–7):535–41 (42 ref.)
Novel metabolites of warfarin produced by Beauveria bassiana and Streptomyces rimosus: a novel application of hplc-nmr. Cannell RJ, et al. **Xenobiotica** 1997 Feb; 27(2):147–57
Isolation and analysis of moenomycin and its biosynthetic intermediates from Streptomyces ghanaensis (ATCC 14672) wildtype and selected mutants. Subramaniam-Niehaus B, et al. **Z Naturforsch [C]** 1997 Mar-Apr;52(3–4):217–26
[Rubomycin Q1--an anthracycline metabolite from Streptomyces coeruleorubidus 2679, a strain producing rubomycin C] Fedorova GB, et al. **Antibiot Khimioter** 1996 Mar;41(3):3–8 (Eng. Abstr.) **(Rus)**
[Pool of free amino acids in mycelium and culture fluid of Streptomyces galbus (F) subsp. achromogenes 695, a strain producing actinomycin complex and its variants] Iocheva LD, et al. **Antibiot Khimioter** 1996 Mar;41(3):9–14 (Eng. Abstr.) **(Rus)**
[Biosynthesis of avermectins: physiological and technological aspects] Mironov VA, et al. **Antibiot Khimioter** 1997; 42(3):31–6 (24 ref.) **(Rus)**
[Biosynthesis of nactinic compounds by population variants of macrotetrolide-producing streptomycetes] Sverdlova AN, et al. **Antibiot Khimioter** 1996 Jun;41(6):3–9 (Eng. Abstr.) **(Rus)**
[Effect of redox potential of culture broth on oxytetracycline biosynthesis] Vlasov VI. **Antibiot Khimioter** 1996 Apr; 41(4):23–9 (Eng. Abstr.) **(Rus)**
[Antibiotic and electrochemical properties of some natural ionophoric compounds from streptomycetes] Sverdlova AN, et al. **Mol Gen Mikrobiol Virusol** 1997;(2):29–33 (Eng. Abstr.) **(Rus)**
[The antitumor action of antibiotics produced by Streptomyces globisporus 1912 studied in a model of Guérin's carcinoma in rats] Polishchuk LV, et al. **Mikrobiol Z** 1996 Mar-Apr;58(2):55–8 (Eng. Abstr.) **(Ukr)**

PHYSIOLOGY

Constitution of the metabolic type of streptomycetes during the first hours of cultivation. Janeček J, et al. **Folia Microbiol (Praha)** 1997;42(2):75–96 (120 ref.)
Ribosomal RNA synthesis in Streptomyces lividans under heat shock conditions. de León P, et al. **Gene** 1997 Jul 18;194(1):125–32
Cell division gene ftsQ is required for efficient sporulation but not growth and viability in Streptomyces coelicolor A3(2). McCormick JR, et al. **J Bacteriol** 1996 Sep; 178(17):5295–301
Effects of the infection of toxigenic fungi and an antagonistic Streptomyces strain on wheat spikes. Fulgueira CL, et al. **Mycopathologia** 1996;134(3):137–42
[Calcium ions in the life cycle of Streptomyces albogriseolus 444] Danova ST, et al. **Antibiot Khimioter** 1997;42(4):12–5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Paradoxical reaction of Streptomyces avermitilis to ultraviolet irradiation as a criterion of appearance in the culture of highly active variants] Driniaev VA, et al. **Biull Eksp Biol Med** 1996 Sep;122(9):295–7 **(Rus)**

STREPTOMYCES ANTIBIOTICUS

ENZYMOLOGY

Sigma-E is required for the production of the antibiotic actinomycin in Streptomyces antibioticus. Jones GH, et al. **Mol Microbiol** 1997 Jan;23(1):169–78

GENETICS

[Genetic recombination during protoplast fusion in Streptomyces antibioticus, the producer of oleandomycin] Lukianchuk VV, et al. **Mikrobiol Z** 1996 Jul-Aug; 58(4):38–42 (Eng. Abstr.) **(Ukr)**

METABOLISM

Characterization of the ATPase activity of the N-terminal nucleotide binding domain of an ABC transporter involved in oleandomycin secretion by Streptomyces antibioticus. Aparicio G, et al. **FEMS Microbiol Lett** 1996 Aug 1; 141(2-3):157–62
Topological studies of the membrane component of the OleC ABC transporter involved in oleandomycin resistance in Streptomyces antibioticus. Olano C, et al. **FEMS Microbiol Lett** 1996 Oct 1;143(2-3):133–9

STREPTOMYCES AUREOFACIENS

CHEMISTRY

Purification and partial characterization of two thioredoxins from Streptomyces aureofaciens. Horecká T, et al. **Biochem Mol Biol Int** 1996 Oct;40(3):497–505

DRUG EFFECTS

[The induction of mutations in Streptomyces aureofaciens by UV rays and nitrosoguanidine and the identification of the mutants obtained] Lavrinchuk VIa, et al. **Mikrobiol Z** 1997 Mar-Apr;59(2):20–4 (Eng. Abstr.) **(Ukr)**

ENZYMOLOGY

Characterization of a XhoI isoschizomer in Streptomyces aureofaciens after actinophage infection. Godány A, et al. **FEMS Microbiol Lett** 1996 May 1;138(2-3):123–7

METABOLISM

Studies on the reaction model for the immobilized Streptomyces aureofaciens's protoplasts used to convert lincomycin. Xu J, et al. **Chin J Biotechnol** 1996;12(3):153–60
Disruption of a sigma factor gene, sigF, affects an intermediate stage of spore pigment production in Streptomyces aureofaciens. Režuchová B, et al. **FEMS Microbiol Lett** 1997 Aug 15;153(2):371–7

PHYSIOLOGY

Differential expression of two sporulation specific sigma factors of Streptomyces aureofaciens correlates with the developmental stage. Kormanec J, et al. **Gene** 1996 Nov 28;181(1-2):19–27

RADIATION EFFECTS

[The induction of mutations in Streptomyces aureofaciens by UV rays and nitrosoguanidine and the identification of the mutants obtained] Lavrinchuk VIa, et al. **Mikrobiol Z** 1997 Mar-Apr;59(2):20–4 (Eng. Abstr.) **(Ukr)**

VIROLOGY

Characterization of a XhoI isoschizomer in Streptomyces aureofaciens after actinophage infection. Godány A, et al. **FEMS Microbiol Lett** 1996 May 1;138(2-3):123–7

STREPTOMYCES ERYTHRAEA see **SACCHAROPOLYSPORA**

STREPTOMYCES GRISEUS

ENZYMOLOGY

Unique isozymes of superoxide dismutase in Streptomyces griseus. Youn HD, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):341–8
A modular family 19 chitinase found in the prokaryotic organism Streptomyces griseus HUT 6037. Ohno T, et al. **J Bacteriol** 1996 Sep;178(17):5065–70
Streptomyces griseus aminopeptidase: X-ray crystallographic structure at 1.75 A resolution. Greenblatt HM, et al. **J Mol Biol** 1997 Feb 7;265(5):620–36
Characterization of the S1 binding site of the glutamic acid-specific protease from Streptomyces griseus. Stennicke HR, et al. **Protein Sci** 1996 Nov;5(11):2266–75

GENETICS

Molecular cloning and characterization of the obg gene of Streptomyces griseus in relation to the onset of morphological differentiation. Okamoto S, et al. **J Bacteriol** 1997 Jan;179(1):170–9
A Streptomyces griseus gene (sgaA) suppresses the growth disturbance caused by high osmolality and a high concentration of A-factor during early growth. Ando N, et al. **Microbiology** 1997 Aug;143 (Pt 8):2715–23
Chromosomal deletions in Streptomyces griseus that remove the afsA locus. Lezhava A, et al. **Mol Gen Genet** 1997 Jan 27;253(4):478–83
Activation and analysis of cryptic crt genes for carotenoid biosynthesis from Streptomyces griseus. Schumann G, et al. **Mol Gen Genet** 1996 Oct 28;252(6):658–66

GROWTH & DEVELOPMENT

Phenotypic heterogeneity of the progeny of Streptomyces griseus conidia. Szabó G, et al. **Acta Biol Hung** 1997; 48(1):45–65
A Streptomyces griseus gene (sgaA) suppresses the growth disturbance caused by high osmolality and a high concentration of A-factor during early growth. Ando N, et al. **Microbiology** 1997 Aug;143 (Pt 8):2715–23

METABOLISM

Properties of C-terminal truncated derivatives of the activator, StrR, of the streptomycin biosynthesis in Streptomyces griseus. Thamm S, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):265–72

PHYSIOLOGY

Molecular cloning and characterization of the obg gene of Streptomyces griseus in relation to the onset of morphological differentiation. Okamoto S, et al. **J Bacteriol** 1997 Jan;179(1):170–9
Expression analysis of the ssgA gene product, associated with sporulation and cell division in Streptomyces griseus. Kawamoto S, et al. **Microbiology** 1997 Apr;143 (Pt 4):1077–86

STREPTOMYCETACEAE

CHEMISTRY

Protein secretion in streptomycetes. Morosoli R, et al. **FEMS Microbiol Lett** 1997 Jan 15;146(2):167–74 (35 ref.)
Molecular phylogenetic characterization of Streptomyces protease inhibitor family. Taguchi S, et al. **J Mol Evol** 1997 May;44(5):542–51

GENETICS

[Streptomycete genetics, basis for the production of new antibiotics] Bechtold A. **Pharm Unserer Zeit** 1997 Jan; 26(1):12–6 (22 ref.) **(Ger)**

METABOLISM

APHE-3 and APHE-4, two new pyrazoloisoquinolinone antibiotics produced by Streptoverticillium griseocarneum NCIMB 40447. Cruz R, et al. **J Antibiot (Tokyo)** 1996 Jul; 49(7):700-2

Effect of ferrous ion on amino acid metabolism in mildiomycin production by Streptoverticillium rimofaciens. Kishimoto K, et al. **Jpn J Antibiot** 1997 Mar;50(3):206-11

[Streptomycete genetics, basis for the production of new antibiotics] Bechtold A. **Pharm Unserer Zeit** 1997 Jan; 26(1):12-6 (22 ref.) **(Ger)**

STREPTOMYCIN

Selective chemical vestibulectomy. Preliminary results. Ecke U, et al. **ORL J Otorhinolaryngol Relat Spec** 1997 Jul-Aug; 59(4):209-14

Presence of strA-strB gene within a streptomycin-resistance operon in a clinical isolate of Shigella flexneri. Shaw PC, et al. **Pathology** 1996 Nov;28(4):356-8

ADMINISTRATION & DOSAGE

Streptomycin/lignocaine local infiltration in the treatment of hypertrophic scar pain. A preliminary report [letter] Kumar A, et al. **Acta Anaesthesiol Scand** 1997 Apr;41(4):546

Use of streptomycin-lidocaine injections in the treatment of the cluster-tic syndrome. Clinical perspectives and a case report. Kreiner M. **J Craniomaxillofac Surg** 1996 Oct; 24(5):289-92 (48 ref.)

Four-drug initial therapy for TB is standard treatment. Brennan PJ, et al. **Pa Med** 1996 Jan;99(1):18-9

A controlled trial of a 4-weekly supplement of rifampicin, pyrazinamide and streptomycin in the continuation phase of a 7-month daily chemotherapy regimen for pulmonary tuberculosis. Tanzania/British Medical Research Council Collaborative Investigation. **S Afr Med J** 1996 Aug; 86(8):960-5

ADVERSE EFFECTS

Allergic contact dermatitis from streptomycin in a cattle breede. Gauchia R, et al. **Contact Dermatitis** 1996 Dec; 35(6):374-5

Ototoxicity of aminoglycoside drugs in tuberculosis treatment. Voogt GR, et al. **S Afr J Commun Disord** 1996; 43:3-6

[Effect of streptomycin placing in the fenestra of semicircular canals on the function and morphology of the normal and hydropic ears in guinea pigs] Peng A, et al. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1995;30(6):329-31 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

Molecular detection of streptomycin-producing streptomycetes in Brazilian soils. Huddleston AS, et al. **Appl Environ Microbiol** 1997 Apr;63(4):1288-97

Identification of stsC, the gene encoding the L-glutamine:scyllo-inososse aminotransferase from streptomycin-producing Streptomycetes. Ahlert J, et al. **Arch Microbiol** 1997 Aug;168(2):102-13

Properties of C-terminal truncated derivatives of the activator, StrR, of the streptomycin biosynthesis in Streptomyces griseus. Thamm S, et al. **FEMS Microbiol Lett** 1997 Apr 15;149(2):265-72

Constitution of the metabolic type of streptomycetes during the first hours of cultivation. Janeček J, et al. **Folia Microbiol (Praha)** 1997;42(2):75-96 (120 ref.)

A spectinomycin resistance determinant from the spectinomycin producer Streptomyces flavopersicus. Lyutzkanova D, et al. **Microbiology** 1997 Jul;143 (Pt 7):2135-43

HISTORY

[Streptomycin and alkalinization in the therapy of tuberculous empyema] Quijano-Pitman F. **Gac Med Mex** 1996 Mar-Apr;132(2):217 **(Spa)**

PHARMACOLOGY

A study on temperature dependent vestibular potential: effect of long lasting thermal stimulus and aminoglycoside agent. Suzuki M, et al. **Acta Otolaryngol (Stockh)** 1997 Mar; 117(2):219-21

Incorporation of tetracycline into otoconia of the guinea-pig following streptomycin intoxication. Zhang DM, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):812-6

Characterization of streptomycin resistance mechanisms among Mycobacterium tuberculosis isolates from patients in New York City. Cooksey RC, et al. **Antimicrob Agents Chemother** 1996 May;40(5):1186-8

Correlation of molecular resistance mechanisms and phenotypic resistance levels in streptomycin-resistant Mycobacterium tuberculosis. Meier A, et al. **Antimicrob Agents Chemother** 1996 Nov;40(11):2452-4

Antimicrobial resistance in Salmonella and Escherichia coli isolated from horses. Bucknell DG, et al. **Aust Vet J** 1997 May;75(5):355-6

Effect of streptomycin on wall-stress-induced arrhythmias in the working rat heart. Salmon AH, et al. **Cardiovasc Res** 1997 Jun;34(3):493-503

Detection of resistance to isoniazid, rifampin, and streptomycin in clinical isolates of Mycobacterium tuberculosis by molecular methods. Nachamkin I, et al. **Clin Infect Dis** 1997 May;24(5):894-900

A novel method for improving Streptomyces coelicolor A3(2) for production of actinorhodin by introduction of rpsL (encoding ribosomal protein S12) mutations conferring resistance to streptomycin [letter] Hesketh A, et al. **J Antibiot (Tokyo)** 1997 Jun;50(6):532-5

The absence of genetic markers for streptomycin and rifampicin resistance in Mycobacterium avium complex strains. Portillo-Gomez L, et al. **J Antimicrob Chemother** 1995 Dec;36(6):1049-53

Antimicrobial susceptibility and plasmid-mediated streptomycin resistance of Plesiomonas shigelloides isolated from blue crab. Marshall DL, et al. **J Appl Bacteriol** 1996 Aug;81(2):195-200

Induction of actinorhodin production by rpsL (encoding ribosomal protein S12) mutations that confer streptomycin resistance in Streptomyces lividans and Streptomyces coelicolor A3(2). Shima J, et al. **J Bacteriol** 1996 Dec; 178(24):7276-84

Bioluminescence measurements of the antilisterial activity of nisin: comparison with ampicillin and streptomycin. Ukuku DO, et al. **J Biolumin Chemilumin** 1996 May-Jun; 11(3):169-73

Effects of diet-age and streptomycin on virulence of Autographa californica M nucleopolyhedrovirus against the tobacco budworm. Hoover K, et al. **J Invertebr Pathol** 1997 Jan;69(1):46-50

Geographic variation of the predictive values of genomic mutations associated with streptomycin resistance in Mycobacterium tuberculosis. Dobner P, et al. **Mol Cell Probes** 1997 Apr;11(2):123-6

Dissemination of the strA-strB streptomycin-resistance genes among commensal and pathogenic bacteria from humans, animals, and plants. Sundin GW, et al. **Mol Ecol** 1996 Feb; 5(1):133-43 (100 ref.)

POISONING

Mitochondrial gene mutation is a significant predisposing factor in aminoglycoside ototoxicity. Fischel-Ghodsian N, et al. **Am J Otolaryngol** 1997 May-Jun;18(3):173-8

Mutation in the mitochondrial 12S rRNA gene in two families from Mongolia with matrilineal aminoglycoside ototoxicity. Pandya A, et al. **J Med Genet** 1997 Feb; 34(2):169-72

THERAPEUTIC USE

Efficacy of a single dose of erythromycin or penicillin/streptomycin for the treatment of ovine dermatophilosis. Scrivener CJ, et al. **Aust Vet J** 1995 Dec; 72(12):475-6

Effect of streptomycin on wall-stress-induced arrhythmias in the working rat heart. Salmon AH, et al. **Cardiovasc Res** 1997 Jun;34(3):493-503

Concurrent mucosal leishmaniasis and pulmonary tuberculosis. Escobar MA, et al. **Clin Infect Dis** 1996 Oct; 23(4):836-7

Very high-dose streptomycin labyrinthectomy. Sataloff RT, et al. **Ear Nose Throat J** 1996 Apr;75(4):239-43 (20 ref.)

Tuberculous meningitis [letter; comment] Pozniak A. **Int J STD AIDS** 1997 Feb;8(2):139-40. Comment on: Int J STD AIDS 1996 Jul;7(4):244-9; quiz 249-51.

Human immunodeficiency virus infection in children with tuberculosis in Santo Domingo, Dominican Republic: prevalence, clinical findings, and response to antituberculosis treatment. Espinal MA, et al. **J Acquir Immune Defic Syndr Hum Retrovirol** 1996 Oct 1;13(2):155-9

Prospective randomized study of thrice weekly six-month and nine-month chemotherapy for cervical tuberculous lymphadenopathy. Yuen AP, et al. **Otolaryngol Head Neck Surg** 1997 Feb;116(2):189-92

Free versus liposome-entrapped streptomycin sulfate in treatment of infections caused by Salmonella enteritidis. Khalil RM, et al. **Pharmazie** 1996 Mar;51(3):182-4

[Serum bactericidal rate. Methodological proposal to predict the efficacy of antimicrobial therapy] Riera EB, et al. **Medicina (B Aires)** 1996;56(2):115-8 (Eng. Abstr.) **(Spa)**

TOXICITY

Effect of streptomycin intoxication on vestibular nerve regeneration and posture recovery. Kadir A, et al. **Acta Otolaryngol (Stockh)** 1997 May;117(3):376-81

Cell death caused by the acute effects of aminoglycoside and zinc in the ampullary cristae of guinea pigs. Nakagawa T, et al. **Eur Arch Otorhinolaryngol** 1997;254(3):153-7

STREPTONIGRIN

CHEMISTRY

The structure of streptonigrin semiquinone in solution. Soedjak H, et al. **Biochim Biophys Acta** 1997 Apr 17; 1335(1-2):73-90

Preparation and ESR spectroscopic characterization of the zinc(II) and cadmium(II) complexes of streptonigrin semiquinone. Soedjak HS, et al. **Biochim Biophys Acta** 1997 Jun 6;1335(3):305-14

PHARMACOLOGY

Interaction of the antitumour antibiotic streptonigrin with DNA and oligonucleotides. Long GV, et al. **Anticancer Drug Des** 1997 Sep;12(6):453-72

Effects of antioxidants on streptonigrin-induced DNA damage and clastogenesis in CHO cells. Testoni MI, et al. **Mutat Res** 1997 Feb 3;373(2):201-6

STREPTONIVICIN see **NOVOBIOCIN**

STREPTOVARICIN

BIOSYNTHESIS

Comparative investigation of a streptovaricin-producing strain of Streptomyces spectabilis and its selectant. Spasova D, et al. **Folia Microbiol (Praha)** 1997;42(1):35-8

STREPTOZOCIN

Hepatocellular neoplasms induced by low-number pancreatic islet transplants in streptozotocin diabetic rats. Dombrowski F, et al. **Am J Pathol** 1997 Mar; 150(3):1071-87

ADVERSE EFFECTS

Age-dependent sensitivity to streptozotocin of pancreatic islets isolated from female NOD mice. Reddy S, et al. **Autoimmunity** 1995;22(2):121-6

ANTAGONISTS & INHIBITORS

Glucose transporter 2 expression: prevention of streptozotocin-induced reduction in beta-cells with 5-thio-D-glucose. Wang Z, et al. **Exp Clin Endocrinol Diabetes** 1995;103 Suppl 2:83-97

PHARMACOLOGY

Peripheral nerve pathology in rats with streptozotocin-induced insulinoma. Sugimoto K, et al. **Acta Neuropathol (Berl)** 1996;91(6):616-23

Effect of streptozotocin-induced diabetes on kidney Na+/K(+)-ATPase. Vér A, et al. **Acta Physiol Hung** 1995;83(4):323-32

Superoxide dismutase reduces islet microvascular injury induced by streptozotocin in the rat. Enghofer M, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):E376-82

Immunocytochemical changes in the fetal pancreatic islet following fetal administration of streptozotocin in the rat. Yamamoto M, et al. **Anat Rec** 1997 Feb;247(2):248-52

Reduction by streptozocin of blood glucose utilization during the appearance of the streptozocin induced early hyperglycaemia in fasting rats. Wong KK. **Biochem Mol Biol Int** 1996 May;39(1):191-5

Susceptibility of spontaneously hypertensive rats to the diabetogenic effects of streptozotocin. Jian K, et al. **Can J Physiol Pharmacol** 1996 Nov;74(11):1215-21

Streptozotocin-induced diabetes in mice lacking alphabeta T cells. Elliott JI, et al. **Clin Exp Immunol** 1997 Jul; 109(1):116-20

Insulin administration enhances growth of the beta-cell mass in streptozotocin-treated newborn rats. Movassat J, et al. **Diabetes** 1997 Sep;46(9):1445-52

Metallothionein: in vitro induction with zinc and streptozotocin in pancreatic islets of mice. Ohly P, et al. **Exp Clin Endocrinol Diabetes** 1995;103 Suppl 2:79-82

Polyarteritis nodosa-like inflammatory vascular changes in the pancreas and mesentery of rats treated with streptozotocin and nicotinamide. Baczako K, et al. **J Comp Pathol** 1997 Feb;116(2):171-80

In vitro response to interleukin-1 beta and streptozotocin in pancreatic islets isolated from male and female nonobese diabetic mice. Strandell E, et al. **J Endocrinol** 1997 Apr; 153(1):81-6

Striatal dopaminergic D1 and D2 receptors after intracerebroventricular application of alloxan and streptozocin in rat. Salkovic M, et al. **J Neural Transm Gen Sect** 1995;100(2):137-45

Effects of beraprost sodium, a prostacyclin analogue, on diabetic neuropathy in streptozotocin-induced diabetic rats. Ueno Y, et al. **Jpn J Pharmacol** 1996 Feb;70(2):177-82

THERAPEUTIC USE

A low dose of streptozotocin prevents kainic acid-induced seizures and lethal effects in the rat. Kim HC, et al. **Clin Exp Pharmacol Physiol** 1997 Jul;24(7):503-5

TOXICITY

Therapy of streptozotocin induced diabetes with a bifunctional antibody that delivers vinca alkaloids to IL-2 receptor positive cells. Kuus-Reichel K, et al. **Autoimmunity** 1995;22(3):173-81

Damaged rat beta cells discharge glutamate decarboxylase in the extracellular medium. Smismans A, et al. **Biochem Biophys Res Commun** 1996 Nov 12;228(2):293-7

Streptozotocin at low doses induces apoptosis and at high doses causes necrosis in a murine pancreatic beta cell line, INS-1. Saini KS, et al. **Biochem Mol Biol Int** 1996 Aug; 39(6):1229-36

Attenuation by nicotinamide of the streptozocin induced early hyperglycaemia in fasting rats. Wong KK.

Biochem Mol Biol Int 1996 Oct;40(3):515–20
Histopathology of subacute renal lesions in mice induced by streptozotocin. Itagaki S, et al. **Exp Toxicol Pathol** 1995 Dec;47(6):485–91
Metabolic activation of islet cells improves resistance against oxygen radicals or streptozocin, but not nitric oxide. Burkart V, et al. **J Clin Endocrinol Metab** 1996 Nov; 81(11):3966–71
CD28/B7 costimulation regulates autoimmune diabetes induced with multiple low doses of streptozotocin. Herold KC, et al. **J Immunol** 1997 Jan 15;158(2):984–91

STREPTOZOCIN DIABETES see **DIABETES MELLITUS, EXPERIMENTAL**

STREPTOZOTOCIN see **STREPTOZOCIN**

STREPTOZOTOCIN DIABETES see **DIABETES MELLITUS, EXPERIMENTAL**

STRESS

see related
GENERAL ADAPTATION SYNDROME
Modulatory effect of esophageal intraluminal mechanical and chemical stressors on salivary prostaglandin E2 in humans. Namiot Z, et al. **Am J Med Sci** 1997 Feb;313(2):90–8
Culture as a stressor: a revised model of biocultural interaction. Schell LM. **Am J Phys Anthropol** 1997 Jan; 102(1):67–77 (49 ref.)
Echocardiographic findings in NATO pilots: do acceleration (+Gz) stresses damage the heart? AGARD, Neuilly-sur-Seine, France. **Aviat Space Environ Med** 1997 Jul;68(7):596–600
The psychophysiological assessment method for pilot's professional reliability. Zhang LM, et al. **Aviat Space Environ Med** 1997 May;68(5):368–72
Gastroprotection in neurosurgery: the practice in Great Britain. Carroll TA, et al. **Br J Neurosurg** 1997 Feb; 11(1):39–42
Systemic stress response after laparoscopic or open cholecystectomy: a randomized trial. Karayiannakis AJ, et al. **Br J Surg** 1997 Apr;84(4):467–71
Effect of acute heat stress on heat shock protein 70 messenger RNA and on heat shock protein expression in the liver of broilers. Gabriel JE, et al. **Br Poult Sci** 1996 May; 37(2):443–9
In the mouse, the corticoid stress response depends on lateralization. Neveu PJ, et al. **Brain Res** 1997 Feb 28; 749(2):344–6
Calbindin-D28k is regulated by adrenal steroids in hypothalamic tissue during prenatal development. Lephart ED, et al. **Brain Res Dev Brain Res** 1997 May 20; 100(1):117–20
The stress activated protein kinase pathway. Woodgett JR, et al. **Cancer Surv** 1996;27:127–38 (41 ref.)
Images in cardiovascular medicine. Hypertrophic cardiomyopathy. Stress induction of subaortic stenosis and mitral regurgitation. Kilner PJ, et al. **Circulation** 1997 Feb 18;95(4):1083–4
Cold stress provokes sympathoinhibitory presyncope in healthy subjects and hemodialysis patients with low cardiac output. Ligtenberg G, et al. **Circulation** 1997 May 6; 95(9):2271–6
Effects of clonidine on prolonged postoperative sympathetic response. Dorman T, et al. **Crit Care Med** 1997 Jul; 25(7):1147–52
Neuronal circuit regulation of the hypothalamo-pituitary-adrenocortical stress axis. Herman JP, et al. **Crit Rev Neurobiol** 1996;10(3–4):371–94 (206 ref.)
Apoptosis: does stress kill? Cosulich S, et al. **Curr Biol** 1996 Dec 1;6(12):1586–8 (18 ref.)
Chronic brain glucocorticoid receptor blockade enhances the rise in circadian and stress-induced pituitary-adrenal activity. van Haarst AD, et al. **Endocrinology** 1996 Nov; 137(11):4935–43
The neuronal stress response: nuclear translocation of heat shock proteins as an indicator of hyperthermic stress. Manzerra P, et al. **Exp Cell Res** 1996 Nov 25;229(1):35–47
Heat-shock induced protein modifications and modulation of enzyme activities. Bensaude O, et al. **EXS** 1996; 77:199–219 (151 ref.)
Outlook. Morimoto RI. **EXS** 1996;77:485–7
Viral infection. Santoro MG. **EXS** 1996;77:337–57 (103 ref.)
Sensing stress and responding to stress. Voellmy R. **EXS** 1996;77:121–37 (73 ref.)
Stress-inducible cellular responses. Introduction. Yahara I. **EXS** 1996;77:XI–XII (0 ref.)
Shear stress inhibits apoptosis of human endothelial cells. Dimmeler S, et al. **FEBS Lett** 1996 Dec 9;399(1–2):71–4
Previous inflammation alters the response of the rat colon to stress. Collins SM, et al. **Gastroenterology** 1996 Dec; 111(6):1509–15
Developmental stability and environmental stress in Salmo salar (Atlantic salmon). Vøllestad LA, et al. **Heredity** 1997 Feb;78 (Pt 2):215–22
Reduced dietary potassium reversibly enhances vasopressor response to stress in African Americans. Sudhir K, et al. **Hypertension** 1997 May;29(5):1083–90
Cultural discourse and the myth of stress in nursing and medicine. Mulhall A. **Int J Nurs Stud** 1996 Oct; 33(5):455–68 (75 ref.)
Is heat shock protein re-induction during tolerance related to the stressor-specific induction of heat shock proteins? Wiegant FA, et al. **J Cell Physiol** 1996 Nov;169(2):364–72
Importance of correlations between phagocytic activity and superoxide production of neutrophils under conditions of voluntary exercise and stress. Kuriyama T, et al. **J Clin Lab Anal** 1996;10(6):458–64
Oxytocin and prolactin suppress cortisol responses to acute stress in both lactating and non-lactating sheep. Cook CJ. **J Dairy Res** 1997 Aug;64(3):327–39
Neuroendocrine and behavioral responses and brain pattern of c-fos induction associated with audiogenic stress. Campeau S, et al. **J Neuroendocrinol** 1997 Aug;9(8):577–88
Dopamine-beta-hydroxylase activity is necessary for hypothalamo-pituitary-adrenal (HPA) responses to ether, and stress-induced facilitation of subsequent HPA responses to acute ether emerges as HPA responses are inhibited by increasing corticosterone (B). Murakami K, et al. **J Neuroendocrinol** 1997 Aug;9(8):601–8
Regulation of pituitary vasopressin V1b receptor mRNA during stress in the rat. Rabadan-Diehl C, et al. **J Neuroendocrinol** 1995 Dec;7(12):903–10
Interaction between the forced swimming test and fluoxetine treatment on extracellular 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in the rat. Kirby LG, et al. **J Pharmacol Exp Ther** 1997 Aug;282(2):967–76
Regulation of genes encoding subunits of the trehalose synthase complex in Saccharomyces cerevisiae: novel variations of STRE-mediated transcription control? Winderickx J, et al. **Mol Gen Genet** 1996 Sep 25; 252(4):470–82
The local repressor AcrR plays a modulating role in the regulation of acrAB genes of Escherichia coli by global stress signals. Ma D, et al. **Mol Microbiol** 1996 Jan; 19(1):101–12
Stress and the blood brain barrier [letter; comment] Azevedo I, et al. **Nat Med** 1997 Mar;3(3):253. Comment on: Nat Med 1996 Dec;2(12):1382–5.
The Gulf War, stress and a leaky blood-brain barrier [news; comment] [see comments] Hanin I. **Nat Med** 1996 Dec; 2(12):1307–8. Comment on: Nat Med 1996 Dec;2(12):1382–5. Comment in: Nat Med 1997 Apr;3(4):366.
Rat pinealocyte reactive response to a long-term stress inducement. Milin J, et al. **Neuroscience** 1996 Aug; 73(3):845–54
Characterisation of a pea hsp70 gene which is both developmentally and stress-regulated. Dhankher OP, et al. **Plant Mol Biol** 1997 May;34(2):345–52
Mitochondrial alterations of skeletal muscle in a heat stress rat model. Hsu YD, et al. **Proc Natl Sci Counc Repub China B** 1995 Oct;19(4):233–9
Stress reinstates cocaine-seeking behavior after prolonged extinction and a drug-free period. Erb S, et al. **Psychopharmacology (Berl)** 1996 Dec;128(4):408–12
Effects of opioid and dopamine receptor antagonists on relapse induced by stress and re-exposure to heroin in rats. Shaham Y, et al. **Psychopharmacology (Berl)** 1996 Jun; 125(4):385–91
Role of spasmolytic polypeptide in healing of stress-induced gastric lesions in rats. Konturek PC, et al. **Regul Pept** 1997 Jan 15;68(1):71–9
PCR activity of CMV in healthy CMV-seropositive individuals: does latency need redefinition? Toro AI, et al. **Res Virol** 1996 Jul-Aug;147(4):233–8
Romanian contribution to stress research. Derevenco P. **Rom J Physiol** 1996 Jan-Dec;33(1–4):101–12 (60 ref.)
Acute stress impairs lymphocyte function but spares pancreatic endocrine function. Rewinski MJ, et al. **Transplant Proc** 1997 Jun;29(4):2047–9
[Stress and skin: experimental approach] Gauthier Y. **Pathol Biol (Paris)** 1996 Dec;44(10):882–7 (30 ref.) (Eng. Abstr.) **(Fre)**
[Merit of surgical stress suppression—special reference to epidural and intravenous anesthesia in view of endocrine systems] Ishihara H. **Masui** 1996 Dec;45 Suppl:S51–5 (13 ref.) **(Jpn)**
[How does Staphylococcus aureus adapt to environmental stresses?] Ohta T. **Nippon Saikingaku Zasshi** 1996 Feb; 51(2):627–33 (14 ref.) **(Jpn)**
[Stress response of pathogenic bacteria—are stress proteins virulence factors?] Yamamoto T. **Nippon Saikingaku Zasshi** 1996 Oct;51(4):1025–36 (15 ref.) **(Jpn)**
[Regulation of plant MAP kinase cascade by environmental stresses and plant hormones] Ichimura K, et al. **Tanpakushitsu Kakusan Koso** 1997 Apr;42(5):706–16 (53 ref.) **(Jpn)**
[Tobacco PMSAP kinase is transiently activated by wounding] Usami S, et al. **Tanpakushitsu Kakusan Koso** 1997 Apr;42(5):717–26 (28 ref.) **(Jpn)**
[Time stress among Norwegian physicians] Falkum E, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10;117(7):954–9 (Eng. Abstr.) **(Nor)**
[Human reactions to extreme stress] Opstad PK. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1066–7 **(Nor)**
[Skiing over Greenland—physical and psychological changes] Sandbaek G, et al. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1104–7 (Eng. Abstr.) **(Nor)**
[Ecological aggression and adaptation mechanisms] Liubchenko PN. **Med Tr Prom Ekol** 1996;(11):1–5 (Eng. Abstr.) **(Rus)**
[Importance of dietary calcium in adaptation to combined stress in regions of the Far North] Sukhanov BP, et al. **Med Tr Prom Ekol** 1997;(2):13–5 (Eng. Abstr.) **(Rus)**
[Morphology of myocardial adaptive responses to extreme environmental factors] Nepomniashchkh LM. **Vestn Ross Akad Med Nauk** 1997;(3):49–54 (42 ref.) (Eng. Abstr.) **(Rus)**
[Stress, adverse effects of drugs or infection? There is a whole succession of theories on the pathogenesis of stomach ulcer] Leonhardt T. **Lakartidningen** 1997 Aug 27;94(35):2941–4 **(Swe)**

BLOOD
Acute effect of qigong training on stress hormonal levels in man. Ryu H, et al. **Am J Chin Med** 1996;24(2):193–8
Corticosteroid binding globulin, total serum cortisol, and stress in extremely low-birth-weight infants. Hanna CE, et al. **Am J Perinatol** 1997 Apr;14(4):201–4
The effects of epidural anesthesia on the neuroendocrine response to major surgical stress: a randomized prospective trial. Norman JG, et al. **Am Surg** 1997 Jan;63(1):75–80
Stress, severity of illness, and outcome in ventilated preterm infants. Barker DP, et al. **Arch Dis Child Fetal Neonatal Ed** 1996 Nov;75(3):F187–90
Interleukin-6 and a delay of neutrophil apoptosis after major surgery. Kobayashi E, et al. **Arch Surg** 1997 Feb; 132(2):209–10
Attenuation by prolonged nitric oxide synthase inhibition of the enhancement of fibrinolysis caused by environmental stress in the rat. Kawabata A, et al. **Br J Pharmacol** 1996 Sep;119(2):346–50
Alterations in plasma prolactin and glucose levels induced by surgical stress in hyperprolactinemic female rats. Reis FM, et al. **Braz J Med Biol Res** 1996 Jun;29(6):811–5
Circulating levels of peripheral blood leucocytes and cytokines following competitive cycling. Gannon GA, et al. **Can J Appl Physiol** 1997 Apr;22(2):133–47
Comparison of tests of stress-related cortisol secretion in pituitary disease (Clinical Endocrinology 1996:45:135–40) [letter; comment] Jolobe OM. **Clin Endocrinol (Oxf)** 1997 May;46(5):643–4. Comment on: Clin Endocrinol (Oxf) 1996 Aug;45(2):135–40.
Umbilical cord beta-endorphin and early childhood motor development. Rothenberg SJ, et al. **Early Hum Dev** 1996 Sep 20;46(1–2):83–95
Changes of glycoprotein patterns in sera of humans under stress. Barisic K, et al. **Eur J Clin Chem Clin Biochem** 1996 Feb;34(2):97–101
Acute stress attenuates but does not abolish circadian rhythmicity of serum thyrotrophin and growth hormone in the rat. Martí O, et al. **Eur J Endocrinol** 1996 Dec; 135(6):703–8
The effects of running stress on plasma vitamin A levels in rats. Brandt RB, et al. **Food Chem Toxicol** 1997 May; 35(5):459–63
Isolation, characterization, and radioimmunoassay of Atlantic halibut somatolactin and plasma levels during stress and reproduction in flatfish. Johnson LL, et al. **Gen Comp Endocrinol** 1997 Feb;105(2):194–209
Plasma and tissue thyroxine and triiodothyronine contents in sublethally stressed, aluminum-exposed brown trout (Salmo trutta). Waring CP, et al. **Gen Comp Endocrinol** 1997 Apr;106(1):120–6
Transcutaneous and arterial carbon dioxide tension at various conditions of fetal stress in lambs. Bergmans MG, et al. **Gynecol Obstet Invest** 1997;43(1):1–5
The role of interleukin-6, interleukin-16, tumor necrosis factor-alpha and endotoxin in hepatic resection. Shimada M, et al. **Hepatogastroenterology** 1995 Sep-Oct;42(5):691–7
Effects of environmental stress on tissue survival and neutrophil recruitment in surgical skin flaps in relation to plasma corticosterone levels in the rat. Törkvist L, et al. **Inflamm Res** 1997 Jun;46(6):199–202
Stress hormones in accident patients studied before admission to hospital. Hetz W, et al. **J Accid Emerg Med** 1996 Jul; 13(4):243–7
Evaluation of stress-related hormones after surgery by laparoscopy or laparotomy. Muzii L, et al. **J Am Assoc Gynecol Laparosc** 1996 Feb;3(2):229–34
Cytokine profiles of stimulated blood lymphocytes in asthmatic and healthy adolescents across the school year. Kang DH, et al. **J Interferon Cytokine Res** 1997 Aug; 17(8):481–7
Effects of repeated hyperthermal stress on blood cells in vivo. Kubota K, et al. **J Med** 1997;28(1–2):55–61
Restraint stress-induced elevation of endogenous glucocorticoid suppresses migration of granulocytes and macrophages to an inflammatory locus. Mizobe K, et al. **J Neuroimmunol** 1997 Mar;73(1–2):81–9
Liberation of thyreotropin, thyroxine and triiodothyronine in the controllable and uncontrollable stress and after administration of naloxone in rats. Jośko J. **J Physiol Pharmacol** 1996 Jun;47(2):303–10
Combined response of plasma and platelet catecholamines to different types of short-term stress. Blandini F, et al. **Life Sci** 1995 Feb 17;56(13):1113–20
The effect of parenteral fish oil on leukocyte membrane fatty acid composition and leukotriene-synthesizing capacity in patients with postoperative trauma. Morlion BJ, et al. **Metabolism** 1996 Oct;45(10):1208–13
Sex differences in response to exogenous corticosterone: a

rat model of hypercortisolemia [see comments] Young EA. **Mol Psychiatry** 1996 Sep;1(4):313–9. Comment in: Mol Psychiatry 1996 Sep;1(4):300–1.

Chronic blockade of nitric oxide synthesis elevates plasma levels of catecholamines and their metabolites at rest and during stress in rats. Kvetňanský R, et al. **Neurochem Res** 1997 Aug;22(8):995–1001

The effect of preoperative carbohydrate loading on hormonal changes, hepatic glycogen, and glucoregulatory enzymes during abdominal surgery [see comments] Thorell A, et al. **Nutrition** 1996 Oct;12(10):690–5. Comment in: Nutrition 1996 Oct;12(10):721–3.

Nicotine and stress: effect on sex hormones and lipid profile in female rats. Abd el Mohsen MM, et al. **Pharmacol Res** 1997 Mar;35(3):181–7

Corticosterone and the stress response in young western screech-owls: effects of captivity, gender, and activity period. Dufty AM Jr, et al. **Physiol Zool** 1997 Mar–Apr; 70(2):143–9

Comparison of changes in serotonergic measures in whole blood or plasma and brain in rats given nicotine and/or stresses. Takada A, et al. **Pol J Pharmacol** 1996 Mar–Apr; 48(2):173–7

Plasma neurotransmitters, blood pressure and heart rate during supine resting, orthostasis and moderate exercise in severely ill patients: a model of failing to cope with stress. Lechin F, et al. **Psychother Psychosom** 1996; 65(3):129–36

Effect of type of anesthesia and lower-abdominal laparotomy in mice on the cytokine response to acute stress. Fu ES, et al. **Reg Anesth** 1996 Sep–Oct;21(5):470–3

Surgical stress inhibits the growth of fibroblasts through the elevation of plasma catecholamine and cortisol concentrations. Saito T, et al. **Surg Today** 1997;27(7):627–31

Effects of vitamin E on monocyte acute stress response [letter] **Thromb Haemost** 1997 Mar;77(3):604–5

Crowding stress induces changes in serum haemolytic and agglutinating activity in the gilthead sea bream Sparus aurata. Tort L, et al. **Vet Immunol Immunopathol** 1996 May; 51(1–2):179–88

[Sequential and ultrastructural study of lactotroph response to stress in rats as a function of age] el Feki A, et al. **Arch Physiol Biochem** 1997 Feb;105(1):92–5 (Eng. Abstr.) **(Fre)**

[General stress response in laparoscopic and conventional cholecystectomy] Glaser F, et al. **Swiss Surg** 1996;Suppl 4:41–4 (Eng. Abstr.) **(Ger)**

[Responses to surgical stress in blood coagulation and fibrinolysis, platelet counts and thromboxane B2 after esophageal cancer operation] Shinohara M, et al. **Rinsho Byori** 1997 Feb;45(2):179–84 (Eng. Abstr.) **(Jpn)**

[Relationship between hormonal parameters of stress and sensorimotor asymmetry in Northern Selkups] Leutin VP, et al. **Fiziol Cheloveka** 1996 Jan–Feb;22(1):131–3 **(Rus)**

[Prolactinemia in children anesthetized with propofol] del Campo-Martín MD, et al. **Rev Esp Anestesiol Reanim** 1996 Jan;43(1):7–11 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Cardiovascular effects of beta-carbolines in conscious rats. Wible JH, et al. **Hypertens Res** 1996 Sep;19(3):161–70

Implication of the negative U wave during dobutamine stress echocardiography. Miura Y, et al. **J Electrocardiol** 1997 Jan;30(1):57–64

Early detection of cancer cachexia in the rat using 31P magnetic resonance spectroscopy of the liver and a fructose stress test. Gehman KE, et al. **NMR Biomed** 1996 Sep; 9(6):271–5

Enhancement of the stress response by minute amounts of cadmium in sensitized Reuber H35 hepatoma cells. Wiegant FA, et al. **Toxicology** 1997 Jan 15;116(1–3):27–37

Aversive reactions of turkeys to argon, carbon dioxide and a mixture of carbon dioxide and argon. Raj AB. **Vet Rec** 1996 Jun 15;138(24):592–3

COMPLICATIONS

The febrile stress of routine vaccination does not increase central apnoea in normal infants. Tappin DM, et al. **Acta Paediatr** 1997 Aug;86(8):873–80

Current management of patients with stress ulceration. O'Keefe G, et al. **Adv Surg** 1996;30:155–77 (95 ref.)

Stress, coping, HIV status, psychosocial resources, and depressive mood in African American gay, bisexual, and heterosexual men. Peterson JL, et al. **Am J Community Psychol** 1996 Aug;24(4):461–87

Stress-induced enhancement of colitis in rats: CRF and arginine vasopressin are not involved. Gué M, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):G84–91

Role of central ANG II receptors in stress-induced cardiovascular and hyperthermic responses in rats. Saiki Y, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R26–33

Effects of the stress response in septic rats and LPS-stimulated alveolar macrophages: evidence for TNF-alpha posttranslational regulation. Ribeiro SP, et al. **Am J Respir Crit Care Med** 1996 Dec;154(6 Pt 1):1843–50

The role of early adverse life events in the etiology of depression and posttraumatic stress disorder. Focus on corticotropin-releasing factor. Heim C, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:194–207 (92 ref.)

Blockers of adrenergic neurons and receptors, tumor progression and effects of rotational stress in mice. Perissin L, et al. **Anticancer Res** 1996 Nov–Dec;16(6B):3409–13

Zinc administration prevents wasting in stressed mice. García Tamayo F, et al. **Arch Med Res** 1996 Autumn;27(3):319–25

Chronic fatigue syndrome: a stress disorder? Cleare AJ, et al. **Br J Hosp Med** 1996 May 1–14;55(9):571–4 (26 ref.)

The value of early enteral nutrition in the prophylaxis of stress ulceration in the severely burned patient. Raff T, et al. **Burns** 1997 Jun;23(4):313–8

Stress and the development of breast cancer: a persistent and popular link despite contrary evidence [letter; comment] Burke MA, et al. **Cancer** 1997 Mar 1;79(5):1055–9. Comment on: Cancer 1996 Mar 15;77(6):1015–6. Comment on: Cancer 1996 Mar 15;77(6):1089–93.

Inhibition of immunoprotective CD8+ T cells as a basis for stress-triggered substance P-mediated abortion in mice. Arck PC, et al. **Cell Immunol** 1996 Aug 1;171(2):226–30

Ischemic, hemodynamic, and neurohormonal responses to mental and exercise stress. Experience from the Psychophysiological Investigations of Myocardial Ischemia Study (PIMI). Goldberg AD, et al. **Circulation** 1996 Nov 15;94(10):2402–9

Cerebral and circulatory haemodynamics before vasovagal syncope induced by orthostatic stress. Colier WN, et al. **Clin Physiol** 1997 Jan;17(1):83–94

Comparison of omeprazole and ranitidine for stress ulcer prophylaxis. Levy MJ, et al. **Dig Dis Sci** 1997 Jun; 42(6):1255–9

Effect of quinacrine, a phospholipase A2 inhibitor on stress and chemically induced gastroduodenal ulcers. Al Moutaery AR, et al. **Digestion** 1997;58(2):129–37

Potential role of stress and sensitization in the development and expression of multiple chemical sensitivity. Sorg BA, et al. **Environ Health Perspect** 1997 Mar;105 Suppl 2:467–71 (46 ref.)

Stress, work, and pregnancy complications [editorial; comment] [see comments] Grimes DA. **Epidemiology** 1996 Jul;7(4):337–8. Comment on: Epidemiology 1996 Jul;7(4):339–45. Comment on: Epidemiology 1996 Jul;7(4):346–51. Comment in: Epidemiology 1997 Jan;8(1):113–4.

Ethanol inhibition of stress-related tachycardia involves medullary NMDA receptors. Varga K, et al. **Eur J Pharmacol** 1996 Aug 29;310(2–3):145–53

Headache in Sweden: the importance of working conditions. Antonov K, et al. **Headache** 1997 Apr;37(4):228–34

Stress during pregnancy is unrelated to headache change in migraineurs [letter; comment] Passchier J, et al. **Headache** 1996 Mar;36(3):189. Comment on: Headache 1993 Jul–Aug;33(7):385–9. Comment on: Headache 1994 Feb;34(2):107–10.

Effects of (R)-alpha-methylhistamine and its prodrug BP 2.94 on gastric mucosal lesions in cold/restraint stressed rats. Belcheva A, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S113–4

Triggers of acute myocardial infarction regarding its site. Mirić D, et al. **Int J Cardiol** 1997 Jun 27;60(1):67–71

Tungstic acid reduction of cold-resistant stress-induced ulceration in rats. Qiu BS, et al. **J Gastroenterol Hepatol** 1997 Jan;12(1):19–23

Captopril and stress-induced hypertension in the borderline hypertensive rat. Coste SC, et al. **J Hypertens** 1995 Dec; 13(12 Pt 1):1391–98

Multiple sclerosis: an altered immune response or an altered stress response? van Noort JM. **J Mol Med** 1996 Jun; 74(6):285–96 (49 ref.)

Stress, stress reduction, and hypertension in African Americans: an updated review. Barnes V, et al. **J Natl Med Assoc** 1997 Jul;89(7):464–76 (139 ref.)

Relapse to heroin-seeking in rats under opioid maintenance: the effects of stress, heroin priming, and withdrawal. Shaham Y, et al. **J Neurosci** 1996 Mar 1;16(5):1957–63

The effect of overtime work on blood pressure [letter; comment] Epstein RL. **J Occup Environ Med** 1997 Apr; 39(4):286. Comment on: J Occup Environ Med 1996 Oct;38(10):1007–11.

Effect of overtime work on 24-hour ambulatory blood pressure [see comments] Hayashi T, et al. **J Occup Environ Med** 1996 Oct;38(10):1007–11. Comment in: J Occup Environ Med 1997 Apr;39(4):286.

Exploratory case-control analysis of psychosocial factors and adult periodontitis. Moss ME, et al. **J Periodontol** 1996 Oct;67(10 Suppl):1060–9

A review of stress ulcer prophylaxis in the neurosurgical intensive care unit. Lu WY, et al. **Neurosurgery** 1997 Aug; 41(2):416–25; discussion 425–6 (150 ref.)

Catecholamines, stress, and disease: a psychobiological perspective. McCarty R, et al. **Psychosom Med** 1996 Nov–Dec;58(6):590–7 (79 ref.)

Acute myocardial infarction and acute "stress ulcer". Toporan D. **Rom J Intern Med** 1996 Jul–Dec;34(3–4):211–5

Gastroprotective activity of melatonin and its precursor, L-tryptophan, against stress-induced and ischaemia-induced lesions is mediated by scavenge. of oxygen radicals. Konturek PC, et al. **Scand J Gastroenterol** 1997 May;32(5):433–8

Acute erosions of the gastric mucosa in burned rats: effect of sucralfate. Samdal F, et al. **Scand J Plast Reconstr Surg Hand Surg** 1997 Sep; 31(3):221–7

[Early enteral feeding and supplement of glutamine prevent occurrence of stress ulcer following severe thermal injury] Yan R, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1995 May;11(3):189–92 (Eng. Abstr.) **(Chi)**

[Antacids for postoperative prevention of stress ulcer in infants: a dose finding study] Kentrup H, et al. **Klin Padiatr** 1996 Jan–Feb;208(1):14–6 (Eng. Abstr.) **(Ger)**

[Stress research between molecular and supra-molecular observations] Oehme P, et al. **Med Monatsschr Pharm** 1996 Sep;19(9):270–4 (7 ref.) **(Ger)**

[Stress and cognition] Spitzer M. **Med Monatsschr Pharm** 1996 Oct;19(10):295–308 (64 ref.) **(Ger)**

[Stress and depression are not causes of cancer] Schwarz R. **Strahlenther Onkol** 1996 Nov;172(11):632–3 **(Ger)**

[Analysis of psychosocial factors in epidemiologic study of cardiologic examination--preliminary results of Warsaw POL-MONICA] Piwoński J, et al. **Przegl Lek** 1996; 53(12):847–53 (Eng. Abstr.) **(Pol)**

[Cardioprotective effects of stimulation of peripheral mu-opiate receptors, and the role of opiatergic mechanisms in the pathogenesis of stress-induced heart damage] Lishmanov IuB, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):276–8 **(Rus)**

[The prevention of stress-related postoperative and drug-induced erosive-ulcerative lesions of the upper digestive tract] Degtiareva II, et al. **Lik Sprava** 1995 Mar–Apr;(3–4):61–4 (Eng. Abstr.) **(Rus)**

[Adaptation to exercises after exposure to restriction stress] Inchina VI, et al. **Vestn Ross Akad Med Nauk** 1996; (9):18–20 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Effect of long flights on the cognitive performance of air crew. Beh HC, et al. **Percept Mot Skills** 1997 Feb; 84(1):319–22

A measure of stress for athletic performance. Seggar JF, et al. **Percept Mot Skills** 1997 Feb;84(1):227–36

[Measurement of stress response during surgery and anesthesia] Ninomiya S, et al. **Masui** 1996 Dec;45 Suppl:S38–43 (4 ref.) **(Jpn)**

[Significance of postoperative elevation of urinary ulinastatin after open heart surgery under cardiopulmonary bypass] Ueki M, et al. **Masui** 1997 Feb;46(2):173–6 (Eng. Abstr.) **(Jpn)**

[Responses of cytokines, acute phase proteins, and polymorphonuclear cell elastase to surgical stress in the patients with esophageal cancer] Kikuchi K, et al. **Rinsho Byori** 1996 Jun;44(6):579–84 (Eng. Abstr.) **(Jpn)**

[The dynamics of stress inducers, of lipid peroxidation indices and of the antioxidant system components in children with acute surgical diseases of the abdominal cavity organs] Moskalenko VZ, et al. **Klin Khir** 1996;(7):29–32 **(Rus)**

[Evaluation of stress at the workplace: systemic approach] Sudakov KV. **Med Tr Prom Ekol** 1996;(12):5–11 (Eng. Abstr.) **(Rus)**

[The systemic integration of human functions: new approaches to the diagnosis and correction of stressor states] Sudakov KV. **Vestn Ross Akad Med Nauk** 1996; (6):15–25 (Eng. Abstr.) **(Rus)**

DIET THERAPY

[The possibility of using the alimentary means to correct metabolism in man under stress] Agureev AN, et al. **Aviakosm Ekolog Med** 1996;30(1):26–32 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Single restraint stress sensitizes acute chewing movements induced by haloperidol, but not if the 5-HT1A agonist 8-OH-DPAT is given prior to stress. Fdez. Espejo E, et al. **Brain Res** 1997 May 2;755(2):351–5

(+)-SKF-10,047 and dextromethorphan ameliorate conditioned fear stress through the activation of phenytoin-regulated sigma 1 sites. Kamei H, et al. **Eur J Pharmacol** 1996 Mar 28;299(1–3):21–8

Carbamazepine normalizes the altered behavioral and neurochemical response to stress in benzodiazepine-withdrawn rats. Martijena ID, et al. **Eur J Pharmacol** 1997 Jul 9;330(2–3):101–8

Pharmacological validation of the chronic mild stress model of depression. Papp M, et al. **Eur J Pharmacol** 1996 Jan 25;296(2):129–36

5HT2C receptor agonists exhibit antidepressant-like properties in the anhedonia model of depression in rats. Moreau JL, et al. **Eur Neuropsychopharmacol** 1996 Aug; 6(3):169–75

Effect of Ocimum sanctum Linn on noise induced changes in plasma corticosterone level. Sembulingam K, et al. **Indian J Physiol Pharmacol** 1997 Apr;41(2):139–43

Intravenous vs. oral rehydration: effects on subsequent exercise-heat stress. Castellani JW, et al. **J Appl Physiol** 1997 Mar;82(3):799–806

Neonatal lipid utilization increases with injury severity: recombinant human growth hormone versus placebo. Letton RW, et al. **J Pediatr Surg** 1996 Aug;31(8):1068–72; discussion 1072–4

Red wine is less stress reducing than vodka; no differences in neuroendocrine challenge test. Jarrett N, et al. **J Psychopharmacol (Oxf)** 1997;11(3):283–6

Effects of fluoxetine on the immunosuppressive response to stress in mice. Freire-Garabal M, et al. **Life Sci** 1997; 60(26):PL403–13

STRESS

Benzodiazepine prevention of swim stress-induced sensitization of cortical biogenic amines: an in vivo microdialysis study. Petty F, et al. **Neurochem Res** 1997 Sep;22(9):1101–4

Effects of chronic haloperidol on stress- and stimulation-induced increases in dopamine release: tests of the depolarization block hypothesis. Klitenick MA, et al. **Neuropsychopharmacology** 1996 Oct;15(4):424–8

Blockade of tolerance to stress-induced analgesia by MK-801 in mice. Vaccarino AL, et al. **Pharmacol Biochem Behav** 1997 Mar;56(3):435–9

Influence of gallopamil on the gastric effects of stress in conscious rats. Coşkun T, et al. **Pharmacology** 1996 Apr; 52(4):199–206

[Antistressor action of neutrophilokine] Kolesnikov OL, et al. **Patol Fiziol Eksp Ter** 1996 Apr-Jun;(2):20–2 (Eng. Abstr.) **(Rus)**

[The typological characteristics of the stress activation of lipid peroxidation and its correction by thymopentin] Tarasenko LM, et al. **Fiziol Zh** 1997;43(1–2):113–6 (Eng. Abstr.) **(Ukr)**

EMBRYOLOGY

Fetal sheep endocrine responses to sustained hypoxemic stress after chronic fetal placental embolization. Gagnon R, et al. **Am J Physiol** 1997 May;272(5 Pt 1):E817–23

ENZYMOLOGY

Implication of nitric oxide synthase activity in the genesis of water immersion stress-induced gastric lesions in rats: the protective effects of FK506. Hisanaga Y, et al. **Aliment Pharmacol Ther** 1996 Dec;10(6):933–40

A tyrosine kinase-like molecule is localized in the nuclear membrane of neurons: hippocampal behavior under stress. Kajii Y, et al. **Biol Cell** 1996;88(1–2):45–54

Inhibition by the neurosteroid allopregnanolone of basal and stress-induced acetylcholine release in the brain of freely moving rats. Dazzi L, et al. **Brain Res** 1996 Feb 26; 710(1–2):275–80

Stimulation of the stress-activated mitogen-activated protein kinase subfamilies in perfused heart. p38/RK mitogen-activated protein kinases and c-Jun N-terminal kinases are activated by ischemia/reperfusion. Bogoyevitch MA, et al. **Circ Res** 1996 Aug;79(2):162–73 (108 ref.)

Discordant activation of stress-activated protein kinases or c-Jun NH2-terminal protein kinases in tissues of heat-stressed mice. Hu Y, et al. **J Biol Chem** 1997 Apr 4;272(14):9113–9

Sounding the alarm: protein kinase cascades activated by stress and inflammation. Kyriakis JM, et al. **J Biol Chem** 1996 Oct 4;271(40):24313–6 (78 ref.)

Induction of tyrosine hydroxylase protein and a transgene containing tyrosine hydroxylase 5' flanking sequences by stress in mouse adrenal gland. Osterhout CA, et al. **J Neurochem** 1997 Mar;68(3):1071–7

Hippocampal responses to corticosterone and stress, one of which is the 35,000 M(r) protein, glycerol phosphate dehydrogenase. Nicols NR, et al. **J Neuroendocrinol** 1996 Nov;8(11):867–76

Stress increases plasma enzyme activity in rats: differential effects of adrenergic and cholinergic blockades. Arakawa H, et al. **J Pharmacol Exp Ther** 1997 Mar;280(3):1296–303

Long-term corticosteroid treatment but not chronic stress affects 11beta-hydroxysteroid dehydrogenase type I activity in rat brain and peripheral tissues. Jellinck PH, et al. **J Steroid Biochem Mol Biol** 1997 Mar;60(5–6):319–23

Age- and strain-related changes in tissue transglutaminase activity in murine macrophages: the effects of inflammation and induction by retinol. Lavie L, et al. **Mech Ageing Dev** 1996 Sep 18;90(2):129–43

Surgical stress and the development of complications in relation to polymorphonuclear leukocyte elastase (PMNE) levels. Noshima S, et al. **Surg Today** 1997;27(2):135–9

[Age-related characteristics of the changes in the activity of the enzymes that implement cavity and membrane carbohydrate hydrolysis in stress] Rakhimova KR, et al. **Fiziol Zh Im I M Sechenova** 1996 Mar;82(3):89–94 (Eng. Abstr.) **(Rus)**

[Monoamine oxidase activity in the brain of male laboratory mice differing in the capacity for social dominance] Kozlova ON, et al. **Genetika** 1996 Oct;32(10):1375–80 (Eng. Abstr.) **(Rus)**

[The activation of proteolytic processes in the periodontal tissues under the action of extreme factors] Tarasenko LM, et al. **Fiziol Zh** 1996;42(1–2):110–2 (Eng. Abstr.) **(Ukr)**

EPIDEMIOLOGY

Stress and depressed mood in medical students, law students, and graduate students at McGill University. Helmers KF, et al. **Acad Med** 1997 Aug;72(8):708–14

Feelings of parental caring predict health status in midlife: a 35-year follow-up of the Harvard Mastery of Stress Study. Russek LG, et al. **J Behav Med** 1997 Feb;20(1):1–13

Self-reported stress and reproductive health of female lawyers. Schenker MB, et al. **J Occup Environ Med** 1997 Jun;39(6):556–68

ETHNOLOGY

Burmese political dissidents in Thailand: trauma and survival among young adults in exile. Allden K, et al. **Am J Public Health** 1996 Nov;86(11):1561–9

Interactive influences of ethnicity, gender and parental hypertension on hemodynamic responses to behavioral challenge. Terrell DF, et al. **Ethn Dis** 1996 Autumn; 6(3–4):286–300

ETIOLOGY

Clinical defense response to cold and noise in preterm neonates after intrauterine conditions associated with chronic stress. Van Reempts PJ, et al. **Am J Perinatol** 1996 Jul;13(5):277–86

Passenger safety, health, and comfort: a review. Rayman RB. **Aviat Space Environ Med** 1997 May;68(5):432–40 (43 ref.)

Burnout and stress-related factors among junior staff of three dental hospital specialties. Humphris G, et al. **Br Dent J** 1997 Jul 12;183(1):15–21

The bigger the burn, the greater the stress. Smith A, et al. **Burns** 1997 Jun;23(4):291–4

Increasing workplace stress means occupational medicine will be a growth area. Gushue J. **Can Med Assoc J** 1996 Nov 1;155(9):1310–3

Stress at work for the clinical oncologist [editorial] Ramirez AJ, et al. **Clin Oncol (R Coll Radiol)** 1996;8(3):137–9

Distress and radiological investigations of the urinary tract in children. Phillips D, et al. **Eur J Pediatr** 1996 Aug; 155(8):684–7

An increased vulnerability to stress is associated with a poor outcome of in vitro fertilization-embryo transfer treatment [see comments] Facchinetti F, et al. **Fertil Steril** 1997 Feb; 67(2):309–14. Comment in: Fertil Steril 1997 Aug;68(2):384–5.

Blood pressure response during dental surgery. Tsuchihashi T, et al. **Hypertens Res** 1996 Sep;19(3):189–94

Job strain among post office mailhandlers. Cahill J, et al. **Int J Health Serv** 1996;26(4):731–50

Hyperglycemic cytosolic reductive stress 'pseudohypoxia': implications for diabetic retinopathy [letter; comment] Ido Y, et al. **Invest Ophthalmol Vis Sci** 1997 Jul;38(8):1467–70 . Comment on: Invest Ophthalmol Vis Sci 1995 Jul;36(8):1675–85. Comment on: Invest Ophthalmol Vis Sci 1997 Jan;38(1):62–71.

Perceived stressors and coping strategies among individuals with rheumatoid arthritis. Mahat G. **J Adv Nurs** 1997 Jun; 25(6):1144–50

Hormonal status and the neuroendocrine response to a novel heterotypic stressor involving subchronic noise exposure. van Raaij MT, et al. **Neuroendocrinology** 1997 Mar; 65(3):200–9

Health hazards while fishing in heavy weather [letter] Jensen OC. **Occup Environ Med** 1997 Feb;54(2):141

Unrelieved job stress can lead to burnout. Clarke S, et al. **Radiol Technol** 1996 Nov-Dec;68(2):159–60 (9 ref.)

Effect of type of anesthesia and lower-abdominal laparotomy in mice on the cytokine response to acute stress. Fu ES, et al. **Reg Anesth** 1996 Sep-Oct;21(5):470–3

[The influence of computer work on reaction time and accuracy in VDT operators] Borodulin-Nadzieja L, et al. **Med Pr** 1997;48(2):139–44 (Eng. Abstr.) **(Pol)**

[Adaptation to weightlessness and stress] Grigor'ev AI, et al. **Aviakosm Ekolog Med** 1996;30(3):4–8 (53 ref.) (Eng. Abstr.) **(Rus)**

[Experimental morphological studies of stress-inducing effects of weightlessness in rats flown aboard Spacelab-2] Kaplanskiĭ AS, et al. **Aviakosm Ekolog Med** 1996; 30(2):16–20 (Eng. Abstr.) **(Rus)**

[Adaptation of miners with different types of diurnal biorhythms] Perederiĭ GS, et al. **Med Tr Prom Ekol** 1996; (12):18–21 (Eng. Abstr.) **(Rus)**

[Formulating problems of ecological diseases. Approaches to etiopathogenesis, classification and diagnosis of ecological diseases due to chemicals] Tukaev RD. **Med Tr Prom Ekol** 1996;(11):21–8 (Eng. Abstr.) **(Rus)**

[Value of estimation of stress during human toxico-genetical investigations] Ingel' FI, et al. **Vestn Ross Akad Med Nauk** 1997;(7):24–8 (Eng. Abstr.) **(Rus)**

[Changes in the concentrations of catecholamines and cortisol in balanced anesthesia and total intravenous anesthesia] Castillo V, et al. **Rev Esp Anestesiol Reanim** 1997 Feb; 44(2):52–5 (Eng. Abstr.) **(Spa)**

GENETICS

Brief hypoxic stress downregulates E. coli-induced IL-1 alpha and IL-1 beta gene expression in perfused liver. Matuschak GM, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1311–8

Behavioral and neuroendocrine reactivity to stress in the WKHA/WKY inbred rat strains: a multifactorial and genetic analysis. Courvoisier H, et al. **Brain Res** 1996 Dec 16;743(1–2):77–85

Hyperthermic stress affects glucocorticoid receptor-mediated transcription in rat liver. Vidović S, et al. **Cell Biol Int** 1996 Aug;20(8):553–9

The stress gene response in brain. Massa SM, et al. **Cerebrovasc Brain Metab Rev** 1996 Summer;8(2):95–158 (402 ref.)

Genetic analyses of emotionality. Eley TC, et al. **Curr Opin Neurobiol** 1997 Apr;7(2):279–84 (38 ref.)

Distinct stress-inducible and developmentally regulated heat shock transcription factors in Xenopus oocytes. Gordon S, et al. **Dev Biol** 1997 Jan 1;181(1):47–63

Immobilization stress elevates gene expression for catecholamine biosynthetic enzymes and some neuropeptides in rat sympathetic ganglia: effects of adrenocorticotropin and glucocorticoids. Nankova B, et al. **Endocrinology** 1996 Dec;137(12):5597–604

Hemodynamic responses to cold stress in blacks: effect of application site. Duey WJ, et al. **Ethn Dis** 1996 Autumn; 6(3–4):272–8

Interactive influences of ethnicity, gender and parental hypertension on hemodynamic responses to behavioral challenge. Terrell DF, et al. **Ethn Dis** 1996 Autumn; 6(3–4):286–300

Pressure-overload deinduction of human alpha 2 Na,K-ATPase gene expression in transgenic rats. Ruiz-Opazo N, et al. **Hypertension** 1997 Feb;29(2):606–12

Behavioral characteristics of two rat strains differing in sensitivity to the cardiotoxic effect of isoprenaline. Starec M, et al. **Int J Neurosci** 1996 Nov;87(3–4):241–8

Regulation of stress-induced transcriptional changes in the hypothalamic neurosecretory neurons. Kovács KJ, et al. **J Mol Neurosci** 1996 Summer;7(2):125–33

Induction of tyrosine hydroxylase protein and a transgene containing tyrosine hydroxylase 5' flanking sequences by stress in mouse adrenal gland. Osterhout CA, et al. **J Neurochem** 1997 Mar;68(3):1071–7

Identification of a sex-specific quantitative trait locus mediating nonopioid stress-induced analgesia in female mice. Mogil JS, et al. **J Neurosci** 1997 Oct 15; 17(20):7995–8002

The influence of restraint stress on the expression of mRNAs for IL-6 and the IL-6 receptor in the hypothalamus and midbrain of the rat. Shizuya K, et al. **Life Sci** 1997; 61(10):PL 135–40

The limit to human longevity: an approach through a stress theory of ageing. Parsons PA. **Mech Ageing Dev** 1996 Jun 25;87(3):211–8 (46 ref.)

Changes in jun N-terminal kinase activation by stress during aging of cultured normal human fibroblasts. Adler V, et al. **Mol Carcinog** 1996 Sep;17(1):8–12

Expression and RNA splicing of the maize glutathione S-transferase Bronze2 gene is regulated by cadmium and other stresses. Marrs KA, et al. **Plant Physiol** 1997 Jan; 113(1):93–102

Regulation of translational initiation during cellular responses to stress. Brostrom CO, et al. **Prog Nucleic Acid Res Mol Biol** 1998;58:79–125 (203 ref.)

Brain dopamine receptor plasticity: testing a diathesis-stress hypothesis in an animal model. Cabib S, et al. **Psychopharmacology (Berl)** 1997 Jul;132(2):153–60

[Genetic control of the stress response of the system of juvenile hormone metabolism in Drosophila virilis] Grenbék LG, et al. **Genetika** 1997 Feb;33(2):202–4 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Effect of continued electroacupuncture on induction of interleukin-2 production of spleen lymphocytes from the injured rats. Cheng XD, et al. **Acupunct Electrother Res** 1997;22(1):1–8

Prenatal morphine exposure interacts with adult stress to affect type and number of blood leucocytes. Martin JT, et al. **Adv Exp Med Biol** 1996;402:89–94

A suppressive protein generated in peripheral lymph tissue induced by restraint stress. Fan SG, et al. **Adv Neuroimmunol** 1996;6(3):279–88 (44 ref.)

Effects of photoperiod and 2-deoxy-D-glucose-induced metabolic stress on immune function in female deer mice. Demas GE, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R1762–7

RU-486 blocks differentially suppressive effect of stress on in vivo anti-KLH immunoglobulin response. Fleshner M, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1344–52

Lactation alters the effects of conditioned stress on immune function. Shanks N, et al. **Am J Physiol** 1997 Jan;272(1 Pt 2):R16–25

Stress triggered abortions are associated with alterations of granulated cells into the decidua. Markert UR, et al. **Am J Reprod Immunol** 1997 Jan;37(1):94–100

Acute and long-term effects of stressors on pulmonary immune functions. Persoons JH, et al. **Am J Respir Cell Mol Biol** 1997 Aug;17(2):203–8

Influence of maternal nutrition and stress on gut permeability to immunoglobulin in newborn lambs. Hodgson JC, et al. **Biochem Soc Trans** 1997 May;25(2):339S

Meditation: a modulator of the immune response to physical stress? A brief report. Solberg EE, et al. **Br J Sports Med** 1995 Dec;29(4):255–7

Where is the "neuro" in psychoneuroimmunology? A commentary on increasing research on the "neuro" component of psychoneuroimmunology. Altman F. **Brain Behav Immun** 1997 Mar;11(1):1–8

Influence of psychogenic and neurogenic stressors on endocrine and immune activity: differential effects in fast and slow seizing rat strains. Anisman H, et al. **Brain Behav Immun** 1997 Mar;11(1):63–74

Stressor-induced alterations in immune response and viral clearance following infection with herpes simplex virus-type 1 in BALB/c and C57B1/6 mice. Brenner GJ, et al. **Brain Behav Immun** 1997 Mar;11(1):9–23

Reduction of the DTH response is related to morphological changes of Langerhans cells in mice exposed to acute immobilization stress. Kawaguchi Y, et al.

Clin Exp Immunol 1997 Aug;109(2):397–401

The immediate effects of stress on hormones and plasma lysozyme in rainbow trout. Demers NE, et al. **Dev Comp Immunol** 1997 Jul–Aug;21(4):363–73

Antarctic isolation: immune and viral studies. Tingate TR, et al. **Immunol Cell Biol** 1997 Jun;75(3):275–83

Effect of DTC on humoral response of SRBC–immunized mice exposed to restraint stress. Comparison with calf thymus extract. Obmińska–Domoradzka B, et al. **Immunopharmacol Immunotoxicol** 1996 Aug;18(3):421–31

Effect of surgical stress on immune function in patients with urologic cancer. Mizutani Y, et al. **Int J Urol** 1996 Nov; 3(6):426–34

Pro–opiomelanocortin–derived peptides, cytokines, and nitric oxide in immune responses and stress: an evolutionary approach. Ottaviani E, et al. **Int Rev Cytol** 1997;170:79–141 (400 ref.)

Acute cold stress induces suppressor macrophages in mice. Kizaki T, et al. **J Appl Physiol** 1996 Jul;81(1):393–9

Neuroendocrine regulation of cytokine production during experimental influenza viral infection: effects of restraint stress–induced elevation in endogenous corticosterone. Dobbs CM, et al. **J Immunol** 1996 Sep 1;157(5):1870–7

Inhibitory effect of pregnancy on stress–induced immunosuppression through corticotropin releasing hormone (CRH) and dopaminergic systems. Nakamura H, et al. **J Neuroimmunol** 1997 May;75(1–2):1–8

Stress–induced suppression of the cellular immune reactions: on the neuroendocrine control of the immune system. Hässig A, et al. **Med Hypotheses** 1996 Jun;46(6):551–5

Effect of exhaustive exercise stress on the cytokine response. Weinstock C, et al. **Med Sci Sports Exerc** 1997 Mar; 29(3):345–54

The effects of voluntary exercise and immobilization on humoral immunity and endocrine responses in rats. Baldwin DR, et al. **Physiol Behav** 1997 Mar;61(3):447–53

The neuroimmunology of stress from invertebrates to man [published erratum appears in Prog Neurobiol 1996 Jun;49(3):285] Ottaviani E, et al. **Prog Neurobiol** 1996 Mar–Apr;48(4–5):421–40 (103 ref.)

Psychoneuroimmunology: animal models of disease. Moynihan JA, et al. **Psychosom Med** 1996 Nov–Dec; 58(6):546–58 (114 ref.)

The effects of electroconvulsant shocks on phagocytic activity and on phagocytic response. Baciu I, et al. **Rom J Physiol** 1995 Jan–Dec;32(1–4):77–81

Auditory stress induces changes in membrane functions of mouse peritoneal macrophages. Spehner V, et al. **Scand J Immunol** 1996 Dec;44(6):643–7

[Local immune response to surgical stress] Hosokawa T. **Masui** 1996 Dec;45 Suppl:S31–7 (27 ref.) **(Jpn)**

[Functional activity of spleen and peripheral blood lymphocytes during stress–induced immunodepression] Iagmurov OD, et al. **Biull Eksp Biol Med** 1996 Jul; 122(7):64–8 **(Rus)**

[Prevention of immunosuppression in the stressed mice by changing the activity of the neuromediator systems] Idova GV, et al. **Biull Eksp Biol Med** 1996 Jul;122(7):22–4 **(Rus)**

[Effect of neutrophilokine on reaction of the blood system during various extreme exposures] Kolesnikov OL, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):186–8 **(Rus)**

[Stress and changes in immune response in elderly subjects] Castillo Méndez A, et al. **Rev Alerg Mex** 1993 Sep–Oct; 40(5):114–8 (Eng. Abstr.) **(Spa)**

METABOLISM

Possible glial contribution of rat hippocampus lactate as assessed with microdialysis and stress. Elekes O, et al. **Acta Neurochir Suppl (Wien)** 1996;67:1–5

Maintaining muscle protein anabolism after a metabolic stress: role of dextrose vs. amino acid availability. Borel MJ, et al. **Am J Physiol** 1997 Jan;272(1 Pt 1):E36–44

Cholinergic nerves mediate stress–induced intestinal transport abnormalities in Wistar–Kyoto rats. Saunders PR, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G486–90

Stress hormones, genotype, and brain organization. Implications for aggression. De Kloet ER, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:179–91 (65 ref.)

Yeast homologue of nonspecific lipid–transfer protein (sterol carrier protein 2) may be a stress protein in peroxisomes. Kamiryo T, et al. **Ann N Y Acad Sci** 1996 Dec 27; 804:687–90

Neurotoxicity of d–amphetamine in the C57BL/6J and CD–1 mouse. Interactions with stress and the adrenal system. Miller DB, et al. **Ann N Y Acad Sci** 1996 Oct 31;801:148–67

Leukocyte depletion and ONO–5046, a specific inhibitor of granulocyte elastase, prevent a stress–induced decrease in gastric prostaglandin I2 in rats. Harada N, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):52–5

Selective expression of HSP70–1 gene in the adrenal cortex but not in the medulla of thermally stressed rats. Shimizu K, et al. **Biochem Biophys Res Commun** 1997 Apr 17; 233(2):550–4

Regulation of stress–induced cytokine production by pyridinylimidazoles; inhibition of CSBP kinase. Gallagher TF, et al. **Bioorg Med Chem** 1997 Jan;5(1):49–64

Immunogold localization and quantification of cellular and subcellular abscisic acid, prior to and during drought stress. van Rensburg L, et al. **Biotech Histochem** 1996 Jan; 71(1):38–43

The effects of inhibitors of GABAergic transmission and stress on brain and plasma allopregnanolone concentrations. Barbaccia ML, et al. **Br J Pharmacol** 1997 Apr; 120(8):1582–8

Effect of N omega–nitro–L–arginine methyl ester, a nitric oxide synthesis inhibitor, on stress– and morphine–induced prolactin release in male rats. Matton A, et al. **Br J Pharmacol** 1997 Jan;120(2):268–72

NO–dependent and NO–independent IL–1 production by a human colonic epithelial cell line under inflammatory stress. Vallette G, et al. **Br J Pharmacol** 1997 May; 121(2):187–92

Agonistic interactions affect brain serotonergic activity in an acanthopterygiian fish: the bicolor damselfish (Pomacentrus partitus). Winberg S, et al. **Brain Behav Evol** 1996;48(4):213–20

Region–specific reduction in stress–induced c–fos mRNA expression during pregnancy and lactation. da Costa AP, et al. **Brain Res** 1996 Dec 2;742(1–2):177–84

Neurotensin inhibits the activation of midbrain serotonergic neurons produced by random inescapable sound. Dilts RP, et al. **Brain Res** 1996 Dec 2;742(1–2):294–8

Prolonged subordination stress increases Calbindin–D28k immunoreactivity in the rat hippocampal CA1 area. Krugers HJ, et al. **Brain Res** 1996 Aug 12;729(2):289–93

Time–related effects of stress on cholinergic sensitivity. Pullia D, et al. **Brain Res** 1996 Dec 16;743(1–2):333–6

Adrenoceptor antagonists block c–fos response to stress in the mouse brain. Stone EA, et al. **Brain Res** 1995 Oct 2; 694(1–2):279–86

CRF receptor antagonist attenuates immobilization stress–induced norepinephrine release in the prefrontal cortex in rats. Smagin GN, et al. **Brain Res Bull** 1997; 42(6):431–4

Median eminence corticotrophin–releasing hormone content following prenatal stress and neonatal handling. Smythe JW, et al. **Brain Res Bull** 1996;40(3):195–9

Induction of Na+/myo–inositol co–transporter mRNA after rat cryogenic injury. Yamashita T, et al. **Brain Res Mol Brain Res** 1997 Jun;46(1–2):236–42

Salivary kallikrein output during the stress response to surgery. Smith–Hanrahan C. **Can J Physiol Pharmacol** 1997 Apr;75(4):301–4

The molecular response to reductive stress in LLC–PK1 renal epithelial cells: coordinate transcriptional regulation of gadd153 and grp78 genes by thiols. Halleck MM, et al. **Cell Stress Chaperones** 1997 Mar;2(1):31–40

Hsp30, the integral plasma membrane heat shock protein of Saccharomyces cerevisiae, is a stress–inducible regulator of plasma membrane H(+)–ATPase. Piper PW, et al. **Cell Stress Chaperones** 1997 Mar;2(1):12–24

Metabolite changes associated with heat shocked avian fibroblast mitochondria. Schlesinger MJ, et al. **Cell Stress Chaperones** 1997 Mar;2(1):25–30

Salivary alpha–amylase as a measure of endogenous adrenergic activity. Chatterton RT Jr, et al. **Clin Physiol** 1996 Jul;16(4):433–48

Salt and water balance in the toad Bufo viridis during recovery from two different osmotically stressful conditions. Hoffman J, et al. **Comp Biochem Physiol A Physiol** 1997 May;117(1):147–54

Impact of ethanol stress on components of the allantoic fluid of the chicken embryo. ten Busch M, et al. **Comp Biochem Physiol A Physiol** 1997 Feb;116(2):125–9

Intracerebral trafficking of lactate in vivo during stress, exercise, electroconvulsive shock and ischemia as studied with microdialysis. Korf J. **Dev Neurosci** 1996; 18(5–6):405–14

Early environmental regulation of forebrain glucocorticoid receptor gene expression: implications for adrenocortical responses to stress. Meaney MJ, et al. **Dev Neurosci** 1996; 18(1–2):49–72 (138 ref.)

Differential induction of HSP60 and HSP72 by different stress situations in rats. Correlation with cerulein–induced pancreatitis. Otaka M, et al. **Dig Dis Sci** 1997 Jul; 42(7):1473–9

Interleukin–6 and stress hormone responses after uncomplicated gasless laparoscopic–assisted and open sigmoid colectomy. Fukushima R, et al. **Dis Colon Rectum** 1996 Oct;39(10 Suppl):S29–34

Purification and cDNA cloning of SAPKK3, the major activator of RK/p38 in stress– and cytokine–stimulated monocytes and epithelial cells. Cuenda A, et al. **EMBO J** 1996 Aug 15;15(16):4156–64

Dynamic alterations in growth hormone receptor mRNA levels in rat brain during stress tolerance. Fujikawa T, et al. **Endocr J** 1996 Oct;43 Suppl:S119–22

Different expression of immediate–early genes in the rat paraventricular nucleus induced by stress: relation to corticotropin–releasing factor gene transcription. Imaki T, et al. **Endocr J** 1996 Dec;43(6):629–38

Regulation of adrenal steroidogenesis during chronic stress. Aguilera G, et al. **Endocr Res** 1996 Nov;22(4):433–43

Acute stress effects on the adrenal cortex in the rat. A biochemical and immunohistochemical study. Pignatelli D, et al. **Endocr Res** 1996 Nov;22(4):445–51

Chronic cold in adrenalectomized, corticosterone (B)–treated rats: facilitated corticotropin responses to acute restraint emerge as B increases. Akana SF, et al. **Endocrinology** 1997 Aug;138(8):3249–58

Glucocorticoid–mediated generation of suppressor macrophages with high density Fc gamma RII during acute cold stress. Kizaki T, et al. **Endocrinology** 1996 Oct; 137(10):4260–7

Regulation of messenger ribonucleic acid for corticotropin releasing hormone receptor in the pituitary during stress. Rabadan–Diehl C, et al. **Endocrinology** 1996 Sep; 137(9):3808–14

Central oxytocin administration reduces stress–induced corticosterone release and anxiety behavior in rats. Windle RJ, et al. **Endocrinology** 1997 Jul;138(7):2829–34

The role of the 90–kDa heat–shock protein and its associated cohorts in stabilizing the heme–regulated eIF–2alpha kinase in reticulocyte lysates during heat stress. Xu Z, et al. **Eur J Biochem** 1997 Jun 1;246(2):461–70

Release of serotonin in the rat locus coeruleus: effects of cardiovascular, stressful and noxious stimuli. Singewald N, et al. **Eur J Neurosci** 1997 Mar;9(3):556–62

Sigma 1 receptor subtype is involved in the relief of behavioral despair in the mouse forced swimming test. Matsuno K, et al. **Eur J Pharmacol** 1996 Oct 3; 312(3):267–71

The cellular stress response to exercise: role of stress proteins. Locke M. **Exerc Sport Sci Rev** 1997;25:105–36 (192 ref.)

Neurotrophic factors, cytokines and stress increase expression of basic fibroblast growth factor in retinal pigmented epithelial cells. Hackett SF, et al. **Exp Eye Res** 1997 Jun; 64(6):865–73

Evidence against volume regulation by cortical brain cells during acute osmotic stress. Andrew RD, et al. **Exp Neurol** 1997 Feb;143(2):300–12

Immobilization stress causes oxidative damage to lipid, protein, and DNA in the brain of rats [see comments] Liu J, et al. **FASEB J** 1996 Nov;10(13):1532–8. Comment in: FASEB J 1997 Apr;11(5):374–5.

Acid stress responses in enterobacteria. Bearson S, et al. **FEMS Microbiol Lett** 1997 Feb 15;147(2):173–80 (39 ref.)

Hydroxyl radical is the major causative factor in stress–induced gastric ulceration. Das D, et al. **Free Radic Biol Med** 1997;23(1):8–18

Changes in Vitellogenin expression during captivity–induced stress in a tropical anole. Morales MH, et al. **Gen Comp Endocrinol** 1996 Aug;103(2):209–19

Impaired stress and interleukin–1beta––induced hypothalamic expression of the neuronal activation marker FOS in cholestatic rats. Swain MG, et al. **Hepatology** 1996 Oct; 24(4):914–8

The use of saliva cortisol, urinary cortisol, and catecholamine measurements for a noninvasive assessment of stress responses in dogs. Beerda B, et al. **Horm Behav** 1996 Sep; 30(3):272–9

Global sex differences in stress–induced activation of cerebral metabolism revealed by 2–deoxyglucose autoradiography. Brown LL, et al. **Horm Behav** 1996 Dec;30(4):611–7

Social dynamics and the cortisol response to immobilization stress of the African wild dog, Lycaon pictus. de Villiers MS, et al. **Horm Behav** 1997 Feb;31(1):3–14

Region–specific neuropeptide Y overflows at rest and during sympathetic activation in humans. Morris MJ, et al. **Hypertension** 1997 Jan;29(1 Pt 1):137–43

Lymphocyte protein synthesis: evidence that murine T cells are more affected by stress than B cells. Dominguez–Gerpe L, et al. **Immunol Lett** 1996 Sep;52(2–3):109–23

Glucose–regulated stresses induce resistance to camptothecin in human cancer cells. Tomida A, et al. **Int J Cancer** 1996 Nov 4;68(3):391–6

Alteration of tissue carnitine content following anaesthesia with barbiturate and surgery in rat. Pessotto P, et al. **Int J Clin Pharmacol Res** 1995;15(5–6):191–9

Normalized metabolic stress for 31P–MR spectroscopy studies of human skeletal muscle: MVC vs. muscle volume. Fowler MD, et al. **J Appl Physiol** 1997 Sep;83(3):875–83

Differential effects of exercise and heat stress on liver HSP70 accumulation with aging. Kregel KC, et al. **J Appl Physiol** 1996 Feb;80(2):547–51

Effects of stress and hypophysectomy on the uptake of [3H]2–deoxy–D–glucose in the mouse adrenal medulla: an autoradiographic study. Hirano T. **J Auton Nerv Syst** 1996 Aug 27;60(1–2):17–22

Aberrant stress–induced phosphorylation of perikaryal neurofilaments. Giasson BI, et al. **J Biol Chem** 1996 Nov 29;271(48):30404–9

Reduction of trans–4,5–dihydroxy–1,2–dithiane by cellular oxidoreductases activates gadd153/chop and grp78 transcription and induces cellular tolerance in kidney epithelial cells. Halleck MM, et al. **J Biol Chem** 1997 Aug 29;272(35):21760–6

Activation of the HIV–1 long terminal repeat by cytokines and environmental stress requires an active CSBP/p38 MAP kinase. Kumar S, et al. **J Biol Chem** 1996 Nov 29; 271(48):30864–9

Stress, apoptosis, and mitosis induce phosphorylation of human keratin 8 at Ser–73 in tissues and cultured cells. Liao J, et al. **J Biol Chem** 1997 Jul 11;272(28):17565–73

Protein kinase C activation inhibits stress–induced synthesis of heat shock protein 27 in osteoblast–like cells: function of arachidonic acid. Suzuki A, et al. **J Cell Biochem** 1996 Jul;62(1):69–75

Prostaglandins stimulate the stress–induced synthesis of hsp27 and alpha B crystallin. Ito H, et al. **J Cell Physiol** 1997 Mar;170(3):255–62

Transcription regulation of alpha B–crystallin in astrocytes: analysis of HSF and AP1 activation by different types of physiological stress. Head MW, et al. **J Cell Sci** 1996 May; 109 (Pt 5):1029–39

Stress-induced activation of nitric oxide-producing neurons in the rat brain. Krukoff TL, et al. **J Comp Neurol** 1997 Jan 27;377(4):509-19

Effects of single and repeated footshock on dopamine release and metabolism in the brains of Fischer rats. Chrapusta SJ, et al. **J Neurochem** 1997 May;68(5):2024-31

Impact of corticotropin-releasing hormone on extracellular norepinephrine in prefrontal cortex after chronic cold stress. Finlay JM, et al. **J Neurochem** 1997 Jul;69(1):144-50

Modulation of the stress-induced synthesis of hsp27 and alpha B-crystallin by cyclic AMP in C6 rat glioma cells. Kato K, et al. **J Neurochem** 1996 Mar;66(3):946-50

Stress- and yohimbine-induced release of cholecystokinin in the frontal cortex of the freely moving rat: prevention by diazepam but not ondansetron. Nevo I, et al. **J Neurochem** 1996 May;66(5):2041-9

Stress-activated protein kinase/c-jun N-terminal kinase phosphorylates tau protein. Reynolds CH, et al. **J Neurochem** 1997 Apr;68(4):1736-44

Hypophysiotropic CRF neurons display a sustained immediate-early gene response to chronic stress but not to adrenalectomy. Brown ER, et al. **J Neuroendocrinol** 1997 Apr;9(4):307-16

Estrogen and stress interact to regulate the hypothalamic expression of a human proenkephalin promoter-beta-galactosidase fusion gene in a site-specific and sex-specific manner. Priest CA, et al. **J Neuroendocrinol** 1997 Apr;9(4):317-26

Short stressor induced long-lasting increases of vasopressin stores in hypothalamic corticotropin-releasing hormone (CRH) neurons in adult rats. Schmidt ED, et al. **J Neuroendocrinol** 1996 Sep;8(9):703-12

Changes in plasma adrenocorticotropin, corticosterone, corticosteroid-binding globulin, and hippocampal glucocorticoid receptor occupancy/translocation in rat pups in response to stress. Viau V, et al. **J Neuroendocrinol** 1996 Jan;8(1):1-8

Lesions of the medial geniculate nuclei specifically block corticosterone release and induction of c-fos mRNA in the forebrain associated with audiogenic stress in rats. Campeau S, et al. **J Neurosci** 1997 Aug 1;17(15):5979-92

Neonatal nonhandling and in utero prenatal stress reduce the density of NADPH-diaphorase-reactive neurons in the fascia dentata and Ammon's horn of rats. Vaid RR, et al. **J Neurosci** 1997 Jul 15;17(14):5599-609

Neonatal lipid utilization increases with injury severity: recombinant human growth hormone versus placebo. Letton RW, et al. **J Pediatr Surg** 1996 Aug;31(8):1068-72; discussion 1072-4

Effects of benzodiazepine agonist exposure on corticotropin-releasing factor content and hormonal stress responses: divergent responses in male and ovariectomized female rats. Wilson MA, et al. **J Pharmacol Exp Ther** 1996 Sep;278(3):1073-82

Effect of acceleration stress on salivary cortisol and plasma cortisol and testosterone levels in cadet pilots. Obmiński Z, et al. **J Physiol Pharmacol** 1997 Jun;48(2):193-200

Dexamethasone and lipopolysaccharide regulation of taurine transport in Caco-2 cells. O'Flaherty L, et al. **J Surg Res** 1997 May;69(2):331-6

Pituitary transplantation--a study on the response of hypophysis-adrenal axis to physiological stress. Wang CJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Feb; 13(2):92-6

Cold stress related alteration of RNA biosynthesis in brain cortex of mother-deprived newborn rats. Ibarra GR, et al. **Life Sci** 1997;60(24):2165-71

Aging and acute stress decrease corticotropin releasing hormone in the ovary of the Fischer 344/N rat. Mastorakos G, et al. **Life Sci** 1995 Feb 17;56(13):1065-71

Inhibition of the LH surge in cyclic rats by stress is not mediated by opioids. Roozendaal MM, et al. **Life Sci** 1997; 60(10):735-42

Inhibition of the rat adrenal ornithine decarboxylase activity by immobilization stress and/or dexamethasone. Soliman KF, et al. **Life Sci** 1997;60(26):2383-7

Handling stress does not affect the expression of hepatic heat shock protein 70 and conjugation enzymes in rainbow trout treated with beta-naphthoflavone. Vijayan MM, et al. **Life Sci** 1997;61(2):117-27

Simulated weightlessness to induce chronic hypoactivity of brain norepinephrine for exercise and stress studies. Sothmann M, et al. **Med Sci Sports Exerc** 1997 Jan; 29(1):39-44 (42 ref.)

Effects of opioid-type stressors on serum digoxin-like immunoreactivity in rats. Uresin Y, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov;18(9):569-71

Regulation of beta-adrenoceptor properties and the lipid milieu in heart muscle membranes during stress. Gudbjarnason S, et al. **Mol Cell Biochem** 1996 Oct-Nov; 163-164:137-43

The sigmaE-mediated response to extracytoplasmic stress in Escherichia coli is transduced by RseA and RseB, two negative regulators of sigmaE. De Las Peñas A, et al. **Mol Microbiol** 1997 Apr;24(2):373-85

Differential regulation of corticotropin-releasing factor1 receptor expression by stress and agonist treatments in brain and cultured cells. Iredale PA, et al. **Mol Pharmacol** 1996 Nov;50(5):1103-10

Less stress--more pressure? [letter; comment] Fishman RA. **Nat Med** 1997 Apr;3(4):366. Comment on: Nat Med 1996 Dec;2(12):1307-8. Comment on: Nat Med 1996 Dec;2(12):1382-5.

Is upregulation of benzodiazepine receptors a compensatory reaction to reduced GABAergic tone in the brain of stressed mice? Pokk P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1996 Dec; 354(6):703-8

Norepinephrine release in the amygdala in response to footshock stimulation. Galvez R, et al. **Neurobiol Learn Mem** 1996 Nov;66(3):253-7

Effect of stress on mouse and rat brain metallothionein I and III mRNA levels. Belloso E, et al. **Neuroendocrinology** 1996 Dec;64(6):430-9

Age and gender influence basal and stress-modulated hypothalamic-pituitary-thyroidal function in Fischer 344/N rats. Cizza G, et al. **Neuroendocrinology** 1996 Dec; 64(6):440-8

Differential effects of three acute stressors on the serotonin 5-HT1A receptor system in rat brain. Raghupathi RK, et al. **Neuroendocrinology** 1997 Apr;65(4):246-58

Hormonal status and the neuroendocrine response to a novel heterotypic stressor involving subchronic noise exposure. van Raaij MT, et al. **Neuroendocrinology** 1997 Mar; 65(3):200-9

Restraint stress-induced changes in lymphocyte subsets and the expression of adhesion molecules. Tarcic N, et al. **Neuroimmunomodulation** 1995 Sep-Oct;2(5):249-57

Effects of gender and gonadectomy on ACTH response to interleukin-1beta in the rat: comparison with the modulation of ACTH response to immobilization stress. Watanobe H, et al. **Neuroimmunomodulation** 1996 Jul-Aug; 3(4):254-8

Quantitative analysis of cutaneous calcitonin gene-related peptide content in response to acute cutaneous mechanical or thermal stimuli and immobilization-induced stress in rats. Tsuchiya T, et al. **Neuropeptides** 1996 Apr; 30(2):149-57

Dexamethasone and stress upregulate Kv1.5 K+ channel gene expression in rat ventricular myocytes. Levitan ES, et al. **Neuropharmacology** 1996;35(7):1001-6

Endocrine correlates of personality traits: a comparison between emotionally stable and emotionally labile healthy young men. Adler L, et al. **Neuropsychobiology** 1997; 35(4):205-10

Alterations in kappa opioid receptor mRNA levels in the paraventricular nucleus of the hypothalamus by stress and sex steroids. Yukhananov RY, et al. **Neuroreport** 1996 Jul 8;7(10):1690-4

Widespread increase in brain protein synthesis following acute immobilization stress in adult rat brain. Baubet V, et al. **Neurosci Lett** 1996 Nov 29;219(3):187-90

N-methyl-D-aspartate receptor involvement in dexamethasone and stress-induced hypothalamic somatostatin release in rats. Estupina C, et al. **Neurosci Lett** 1996 Nov 29;219(3):203-6

Attenuated stress response of hippocampal acetylcholine release and adrenocortical secretion in aged rats. Mizuno T, et al. **Neurosci Lett** 1997 Jan 24;222(1):49-52

Immobilization stress reduced the expression of neurotrophins and their receptors in the rat brain. Ueyama T, et al. **Neurosci Res** 1997 Jun;28(2):103-10

Temporal dynamics of glutamate efflux in the prefrontal cortex and in the hippocampus following repeated stress: effects of pretreatment with saline or diazepam. Bagley J, et al. **Neuroscience** 1997 Mar;77(1):65-73

Social interaction increases the extracellular levels of [Met]enkephalin in the nucleus accumbens of control but not of chronic mild stressed rats. Bertrand E, et al. **Neuroscience** 1997 Sep;80(1):17-20

Effects of dopamine depletion in the medial prefrontal cortex on the stress-induced increase in extracellular dopamine in the nucleus accumbens core and shell. King D, et al. **Neuroscience** 1997 Mar;77(1):141-53

Neuronal and glial handling of glutamate and glutamine during hypoosmotic stress: a biochemical and quantitative immunocytochemical analysis using the rat cerebellum as a model. Nagelhus EA, et al. **Neuroscience** 1996 Jun; 72(3):743-55

alpha1B adrenoceptors in rat paraventricular nucleus overlap with, but do not mediate, the induction of c-Fos expression by osmotic or restraint stress. Williams AM, et al. **Neuroscience** 1997 Feb;76(3):901-13

Increased contribution by myofibrillar protein to whole-body protein breakdown according to severity of surgical stress. Tashiro T, et al. **Nutrition** 1996 Oct;12(10):685-9

Effect of severity of stress on whole-body protein kinetics in surgical patients receiving parenteral nutrition. Tashiro T, et al. **Nutrition** 1996 Nov-Dec;12(11-12):763-5

Developmental and afterload stress regulation of heat shock proteins in the ovine myocardium. Strandness E, et al. **Pediatr Res** 1997 Jan;41(1):51-6

The effect of acute, chronic and chronic intermittent stress on the central noradrenergic system. Hellriegel ET, et al. **Pharmacol Biochem Behav** 1997 May-Jun;57(1-2):207-14

Neuroendocrine correlates of separation stress in the Siberian dwarf hamster (Phodopus sungorus). Castro WL, et al. **Physiol Behav** 1997 Apr;61(4):477-84

Adrenocortical responses to repeated parachute jumping and subsequent h-CRH challenge in inexperienced healthy subjects. Deinzer R, et al. **Physiol Behav** 1997 Apr; 61(4):507-11

Immediate early gene expression to examine neuronal activity following acute and chronic stressors in rat pups: examination of neurophysiological alterations underlying behavioral consequences of prenatal cocaine exposure. Goodwin GA, et al. **Physiol Behav** 1997 Jun;61(6):895-902

Plasma cortisol levels of dogs at a county animal shelter. Hennessy MB, et al. **Physiol Behav** 1997 Sep;62(3):485-90

Plasma catecholamine and corticosterone levels during manual restraint in chicks from a high and low feather pecking line of laying hens. Korte SM, et al. **Physiol Behav** 1997 Sep;62(3):437-41

Effect of repeated stress on a number of plasma amino acids and related compounds in young and old rats. Milakofsky L, et al. **Physiol Behav** 1996 Sep;60(3):969-71

The circadian rhythm of salivary cortisol in growing pigs: effects of age, gender, and stress. Ruis MA, et al. **Physiol Behav** 1997 Sep;62(3):623-30

Adaptive metabolic responses in females of the fighting breed submitted to different sequences of stress stimuli. Sánchez JM, et al. **Physiol Behav** 1996 Oct;60(4):1047-52

Individual differences in plasma catecholamine and corticosterone stress responses of wild-type rats: relationship with aggression. Sgoifo A, et al. **Physiol Behav** 1996 Dec;60(6):1403-7

Time-dependent differential changes of immune function in rats exposed to chronic intermittent noise. Van Raaij MT, et al. **Physiol Behav** 1996 Dec;60(6):1527-33

Addition of glutamine does not improve protein synthesis and jejunal mucosa morphology in non-hypercatabolic stress. Garcia-Arumi E, et al. **Physiol Res** 1995;44(4):233-9

Inhibition of gastric acid secretion by stress: a protective reflex mediated by cerebral nitric oxide. Esplugues JV, et al. **Proc Natl Acad Sci U S A** 1996 Dec 10;93(25):14839-44

Corticotropin-releasing factor (CRF) and endocrine responses to stress: CRF receptors, binding protein, and related peptides. Turnbull AV, et al. **Proc Soc Exp Biol Med** 1997 May;215(1):1-10 (114 ref.)

Regulation of lipid biosynthesis by the AMP-activated protein kinase and its role in the hepatocellular response to stress. Corton JM, et al. **Prog Liver Dis** 1996;14:69-99 (133 ref.)

The heat shock stress response after brain lesions: induction of 72 kDa heat shock protein (cell types involved, axonal transport, transcriptional regulation) and protein synthesis inhibition. Planas AM, et al. **Prog Neurobiol** 1997 Apr; 51(6):607-36 (256 ref.)

Stress versus depression. Lechin F, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Aug; 20(6):899-950 (215 ref.)

Regulation of translational initiation during cellular responses to stress. Brostrom CO, et al. **Prog Nucleic Acid Res Mol Biol** 1998;58:79-125 (203 ref.)

Effects of EGF and allopurinol on prostaglandin and lipid peroxide levels in mucosa of stomach in restraint cold stress. Aricioğlu A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1996 Apr; 54(4):285-8

Effects of antidepressants on thyroid stimulating hormone release in rats under ether stress. Kadono Y, et al. **Psychiatry Clin Neurosci** 1995 Aug;49(4):231-6

Expression of epidermal growth factor and transforming growth factor-alpha after exposure of rat gastric mucosa to stress. Konturek PC, et al. **Scand J Gastroenterol** 1996 Mar;31(3):209-16

Stress and glucocorticoid [letter; comment] Yehuda R. **Science** 1997 Mar 14;275(5306):1662-3. Comment on: Science 1996 Aug 9;273(5276):749-50.

Mast cells secrete heparin during immobilization stress in rats. Umarova BA, et al. **Thromb Res** 1997 Feb 1;85(3):267-72

Elevated concentrations of the small stress protein HSP27 in rat renal tumors. Takashi M, et al. **Urol Res** 1997; 25(3):173-7

[Energy substrate metabolism during stress] Sugimoto H. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):726-32 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Free radicals and surgical stress] Yukioka T, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):716-20 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Antioxidant defense capabilities of gastric mucosa induced by water immersion restraint stress of rat] Ohisa Y, et al. **Rinsho Byori** 1996 Feb;44(2):183-9 (Eng. Abstr.) **(Jpn)**

[Reaction of the adrenal medulla to the effect of various extreme factors] Khlusov IA, et al. **Biull Eksp Biol Med** 1997 Mar;123(3):293-5 **(Rus)**

[Development of increased resistance of Ca-pump of the myocardial sarcoplasmic reticulum during adaptation to stress] Sazontova TG, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):272-6 **(Rus)**

[Effect of certain phyto-substances on production of lymphocyte-activating factor during rotation stress in mice] Shanin SN, et al. **Biull Eksp Biol Med** 1996 Feb; 121(2):135-8 **(Rus)**

[The role of thrombin in the activation of heparin secretion by mast cells during immobilization stress in rats] Umarova BA, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):143-5 **(Rus)**

[Molecular mechanisms of disrupting lipid metabolism of the skin under conditions of acute acoustic stress] Melkonian MM, et al. **Dokl Akad Nauk** 1996 Aug;349(6):826-8 **(Rus)**

[Ca2(+)-dependent glucose absorption in the small intestine of rats under head-down tilt stress] Sheptitskiĭ VA, et al. **Fiziol Zh Im I M Sechenova** 1996 Mar;82(3):125-30 (Eng. Abstr.) **(Rus)**

[Role of juvenile hormone metabolism in the adaptation of Drosophila populations to stressful environmental conditions] Gruntenko NE, et al. **Genetika** 1996 Sep; 32(9):1191–8 (Eng. Abstr.) **(Rus)**

[Release of protein into the extracellular space as a nonspecific response to stress in Escherichia coli] Roshchina EK, et al. **Mikrobiologiia** 1997 Mar–Apr; 66(2):179–84 (Eng. Abstr.) **(Rus)**

[Effect of adaptation to medium altitude (1600 m) on the stability of parameters of lipid metabolism of the myocardium during stress] Kostiuchenko LS. **Patol Fiziol Eksp Ter** 1996 Apr–Jun;(2):18–20 (Eng. Abstr.) **(Rus)**

[Effect of stress on lipid peroxidation and physico–chemical status of endoplasmic reticulum membranes in liver of adult and old rats] Paramonova GI, et al. **Ukr Biokhim Zh** 1996 Sep–Oct;68(5):47–53 (Eng. Abstr.) **(Rus)**

[Change in histone proteins in rat liver chromatin during exposure of the animal to functional stress] Panin LE, et al. **Vopr Med Khim** 1996 Oct–Dec;42(4):295–300 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Effects of various types of stress on the metabolism of reserve carbohydrates in Saccharomyces cerevisiae: genetic evidence for a stress–induced recycling of glycogen and trehalose. Parrou JL, et al. **Microbiology** 1997 Jun;143 (Pt 6):1891–900

MORTALITY

Burmese political dissidents in Thailand: trauma and survival among young adults in exile. Allden K, et al. **Am J Public Health** 1996 Nov;86(11):1561–9

NURSING

An NICU infant stress reduction QI team: applying research findings to clinical care. Floyd AM. **Jt Comm J Qual Improv** 1997 Feb;23(2):93–101

PARASITOLOGY

Effects of osmotic stress on metabolism, shape, and amino acid content of Leishmania. Blum JJ. **Biol Cell** 1996; 87(1–2):9–16 (63 ref.)

PATHOLOGY

Effect of heat shock and endotoxin stress on enterocyte viability apoptosis and function varies based on whether the cells are exposed to heat shock or endotoxin first. Xu DZ, et al. **Arch Surg** 1996 Nov;131(11):1222–8

Environmental and experimental procedures leading to variations in the incidence of diabetes in the nonobese diabetic (NOD) mouse. Saravia–Fernandez F, et al. **Autoimmunity** 1996;24(2):113–21

Stress–induced expression of a thyroid peroxidase–like protein in cultured human thyroid cells. Youde SJ, et al. **Autoimmunity** 1996;23(4):279–82

Stress–induced apoptosis and the sphingomyelin pathway. Peña LA, et al. **Biochem Pharmacol** 1997 Mar 7; 53(5):615–21 (63 ref.)

Effect of chronic restraint stress on dendritic spines and excrescences of hippocampal CA3 pyramidal neurons––a quantitative study. Sunanda, et al. **Brain Res** 1995 Oct 2; 694(1–2):312–7

Postmortem changes in serum noradrenaline and adrenaline concentrations in rabbit and human cadavers. Hirvonen J, et al. **Int J Legal Med** 1996;109(3):143–6

Effects of heat stress on mouse testicular cells and sperm chromatin structure. Sailer BL, et al. **J Androl** 1997 May–Jun;18(3):294–301

Time–course of the murine lymphoid tissue involution during and following stressor exposure. Domínguez–Gerpe L, et al. **Life Sci** 1997;61(10):1019–27

Role of the human heat shock protein hsp70 in protection against stress–induced apoptosis. Mosser DD, et al. **Mol Cell Biol** 1997 Sep;17(9):5317–27

Determination of the femoral and pelvic geometrical parameters that are important for the hip joint contact stress: differences between female and male. Kersnič B, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R207–8

A double–stranded RNA–activated protein kinase–dependent pathway mediating stress–induced apoptosis. Der SD, et al. **Proc Natl Acad Sci U S A** 1997 Apr 1;94(7):3279–83

[Intracellular reorganization of cardiomyocytes of rats transported to high latitudes] Nepomniashchikh LM, et al. **Biull Eksp Biol Med** 1994 May;117(5):538–42 **(Rus)**

[A comparative assessment of morphological criteria of stress] Kovalevskiĭ GV, et al. **Dokl Akad Nauk** 1996 May; 348(1):132–5 **(Rus)**

PHYSIOPATHOLOGY

Mivazerol, a new alpha 2–adrenergic agonist, blunts cardiovascular effects following surgical stress in pentobarbital–anesthetized rats. Zhang X, et al. **Acta Anaesthesiol Scand** 1997 Jun;41(6):694–700

Renal protection during surgical stress. Gelman S. **Acta Anaesthesiol Scand Suppl** 1997;110:43–5

Neuroendocrine response during stress with relation to gender differences. Ježová D, et al. **Acta Neurobiol Exp (Warsz)** 1996;56(3):779–85 (44 ref.)

Stress and nutritional influences on GnRH and somatostatin neuronal systems in the ewe. Polkowska J. **Acta Neurobiol Exp (Warsz)** 1996;56(3):797–806 (38 ref.)

The stress response and its role in cellular defense mechanisms after ischemia. Abe H, et al. **Adv Neurol** 1996; 71:451–66; discussion 466–7 (141 ref.)

Why study blood pressure reactivity to stress? [editorial; comment] [see comments] Pickering T. **Am J Hypertens** 1996 Sep;9(9):941–2. Comment on: Am J Hypertens 1996 Sep;9(9):915–23. Comment in: Am J Hypertens 1997 May;10(5 Pt 1):582–3.

Cerebral hemodynamics and cerebral metabolism during cold and warm stress. Doering TJ, et al. **Am J Phys Med Rehabil** 1996 Nov–Dec;75(6):408–15

Central nitric oxide donors attenuate cardiovascular and central norepinephrine responses to stress. Hashiguchi H, et al. **Am J Physiol** 1997 May;272(5 Pt 2):R1447–53

Cardiovascular response to stress: baroreflex resetting and hemodynamics. Hatton DC, et al. **Am J Physiol** 1997 May; 272(5 Pt 2):R1588–94

Gender does not influence sympathetic neural reactivity to stress in healthy humans. Jones PP, et al. **Am J Physiol** 1996 Jan;270(1 Pt 2):H350–7

Effect of heat stress on LPS–induced fever and tumor necrosis factor. Kluger MJ, et al. **Am J Physiol** 1997 Sep; 273(3 Pt 2):R858–63

Metabolic correlates of selection for swim stress–induced analgesia in laboratory mice. Konarzewski M, et al. **Am J Physiol** 1997 Jul;273(1 Pt 2):R337–43

Acute stress increases venomotor tone in conscious rats. Martin DS, et al. **Am J Physiol** 1996 Oct;271(4 Pt 2):H1375–83

Cholinergic nerves mediate stress–induced intestinal transport abnormalities in Wistar–Kyoto rats. Saunders PR, et al. **Am J Physiol** 1997 Aug;273(2 Pt 1):G486–90

Sensitization of the colonic response to novel stress after previous stressful experience. Stam R, et al. **Am J Physiol** 1996 Nov;271(5 Pt 2):R1270–3

Aging is not accompanied by sympathetic hyperresponsiveness to air–jet stress. Stauss HM, et al. **Am J Physiol** 1996 Aug;271(2 Pt 2):H768–75

Modulation of baroreflex sensitivity and spectral power of blood pressure by heat stress and aging. Stauss HM, et al. **Am J Physiol** 1997 Feb;272(2 Pt 2):H776–84

Physiological responses to cold stress during prolonged intermittent low– and high–intensity walking. Weller AS, et al. **Am J Physiol** 1997 Jun;272(6 Pt 2):R2025–33

The stress response and the lung. Wong HR, et al. **Am J Physiol** 1997 Jul;273(1 Pt 1):L1–9 (94 ref.)

Stress and ovarian function. Berga SL. **Am J Sports Med** 1996;24(6 Suppl):S36–7

Decreasing the burden of trauma for victims of violence. Kaufmann MC. **Ann Emerg Med** 1997 Aug;30(2):199–203 (31 ref.)

Development neurobiology of the stress response: multilevel regulation of corticotropin–releasing hormone function. Baram TZ, et al. **Ann N Y Acad Sci** 1997 Apr 24;814:252–65

Anteroventral third ventricle lesion suppresses fever, but not stress–induced hyperthermia in rats. Hunter WS. **Ann N Y Acad Sci** 1997 Mar 15;813:420–6

Interleukin–1 and defensins in thermoregulation, stress, and immunity. Korneva EA, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:465–73

Fever and stress in lean and obese Zucker rats. Zeisberger E, et al. **Ann N Y Acad Sci** 1997 Mar 15;813:401–12

Stressful stimulation of newborn mice increases the in vitro proliferative response in T cells from thymus. García–Tamayo F, et al. **Arch Med Res** 1997 Autumn; 28(3):337–42

Patellar strain and patellofemoral contact after bone–patellar tendon–bone harvest for anterior cruciate ligament reconstruction. Sharkey NA, et al. **Arch Phys Med Rehabil** 1997 Mar;78(3):256–63

Effects of different psychophysiological stressors on the cutaneous electrogastrogram in healthy subjects. Riezzo G, et al. **Arch Physiol Biochem** 1996;104(3):282–6

Changes in corticosterone levels and sperm functional activity by chronic stress in rats. Suárez M, et al. **Arch Physiol Biochem** 1996;104(3):351–6

Microneurography as a tool to investigate sympathetic nerve responses to environmental stress. Mano T. **Aviakosm Ekolog Med** 1997;31(1):8–14 (48 ref.)

Effects of hypobaric–hypoxia on the salivary cortisol levels of aircraft pilots. Obmiński Z, et al. **Aviat Space Environ Med** 1997 Mar;68(3):183–6

Physiological, psychophysical, and psychological responses of firefighters to firefighting training drills. Smith DL, et al. **Aviat Space Environ Med** 1996 Nov;67(11):1063–8

Effect of central muscarine receptor blockade with DKJ–21 on the blood pressure and heart rate in stress–induced hypertensive rats. Zhu DN, et al. **Blood Press** 1996 May; 5(3):170–7

Stress downregulates lipopolysaccharide–induced expression of proinflammatory cytokines in the spleen, pituitary, and brain of mice. Goujon E, et al. **Brain Behav Immun** 1995 Dec;9(4):292–303

Modulation of interleukin–1 receptors in the brain–endocrine–immune axis by stress and infection. Takao T, et al. **Brain Behav Immun** 1995 Dec;9(4):276–91

Effects of novelty, pain and stress on hippocampal extracellular acetylcholine levels in male rats. Aloisi AM, et al. **Brain Res** 1997 Feb 14;748(1–2):219–26

Neuropeptide FF in the VTA blocks the analgesic effects of both intra–VTA morphine and exposure to stress. Altier N, et al. **Brain Res** 1997 May 30;758(1–2):250–4

Sensitization of stress–induced feeding in rats repeatedly exposed to brief restraint: the role of corticosterone. Badiani A, et al. **Brain Res** 1996 Feb 26;710(1–2):35–44

Influence of a 1 h immobilization stress on sleep states and corticotropin–like intermediate lobe peptide (CLIP or ACTH18–39, Ph–ACTH18–39) brain contents in the rat. Bonnet C, et al. **Brain Res** 1997 Mar 14;751(1):54–63

Cardiovascular response to stress after middle cerebral artery occlusion in rats. Cheung RT, et al. **Brain Res** 1997 Feb 7;747(2):181–8

Reciprocal cross–desensitization of locus coeruleus electrophysiological responsivity to corticotropin–releasing factor and stress. Conti LH, et al. **Brain Res** 1996 May 25;722(1–2):19–29

Effect of fasting and immobilization stress on estrogen receptor immunoreactivity in the brain in ovariectomized female rats. Estacio MA, et al. **Brain Res** 1996 Apr 22; 717(1–2):55–61

Long–term effects of chronic social stress on serotonergic indices in the prefrontal cortex of adult male cynomolgus macaques. Fontenot MB, et al. **Brain Res** 1995 Dec 24; 705(1–2):105–8

Effects of interleukin–1beta and mild stress on alterations of norepinephrine, dopamine and serotonin neurotransmission: a regional microdialysis study. Merali Z, et al. **Brain Res** 1997 Jul 4;761(2):225–35

Susceptibility and resistance of rats to stress–induced decreases in swim–test activity: a selective breeding study. Scott PA, et al. **Brain Res** 1996 Jul 1;725(2):217–30

Noradrenergic facilitation of the adrenocorticotropin response to stress is absent during lactation in the rat. Toufexis DJ, et al. **Brain Res** 1996 Oct 21;737(1–2):71–7

Differential prolactin responsiveness to stress in left– and right–pawed mice. Waters NS, et al. **Brain Res** 1996 Jun 10;724(1):112–6

The role of paraventricular nucleus of hypothalamus in stress–ulcer formation in rats. Zhang JF, et al. **Brain Res** 1997 Jul 4;761(2):203–9

Neonatal isolation alters LTP in freely moving juvenile rats: sex differences. Bronzino JD, et al. **Brain Res Bull** 1996; 41(3):175–83

Motor activity and quantitative autoradiographic analysis of muscarinic receptors in the brain of rats subjected to the forced swimming test. Carrizo E, et al. **Brain Res Bull** 1997; 42(2):133–9

Effects of noxious hindpaw immersion on evoked and spontaneous firing of contralateral convergent dorsal horn neurons in both intact and spinalized rats. McGaraughty S, et al. **Brain Res Bull** 1997;43(3):263–7

Adolescent development influences functional responsiveness of noradrenergic projections to the hypothalamus in male rats. Choi S, et al. **Brain Res Dev Brain Res** 1996 Jul 20; 94(2):144–51

Autoradiographic evidence of mu–opioid receptors down–regulation after prenatal stress in offspring rat brain. Sanchez MD, et al. **Brain Res Dev Brain Res** 1996 Jun 14;94(1):14–21

Chronic exposure to stress levels of corticosterone alters GABAA receptor subunit mRNA levels in rat hippocampus. Orchinik M, et al. **Brain Res Mol Brain Res** 1995 Dec 1;34(1):29–37

Resilience in highly stressed urban children: concepts and findings. Cowen EL, et al. **Bull N Y Acad Med** 1996 Winter; 73(2):267–84 (46 ref.)

Stress–induced subsensitivity to catecholamines depends on the estrous cycle. Marcondes FK, et al. **Can J Physiol Pharmacol** 1996 Jun;74(6):663–9

Influence of the estrous cycle on the sensitivity to catecholamines in right atria from rats submitted to foot–shock stress. Vanderlei LC, et al. **Can J Physiol Pharmacol** 1996 Jun;74(6):670–8

Effect of aortic valve replacement on coronary flow velocity during metabolic stress in a patient with aortic stenosis. Takeuchi M, et al. **Cathet Cardiovasc Diagn** 1997 Mar; 40(3):287–90

Novel estrogen feedback sites associated with stress–induced suppression of luteinizing hormone secretion in female rats. Maeda K, et al. **Cell Mol Neurobiol** 1996 Jun;16(3):311–24 (32 ref.)

Potentiation of heat stress–induced hsp70 expression in vivo by aspirin. Fawcett TW, et al. **Cell Stress Chaperones** 1997 Jun;2(2):104–9

Changes in taste perception following mental or physical stress. Nakagawa M, et al. **Chem Senses** 1996 Apr; 21(2):195–200

Nucleus accumbens dopaminergic mediation of protection against gastric mucosal ulcerations by cold–restraint stress in the male hyperprolactinemic rats. Shyu JC, et al. **Chin J Physiol** 1997;40(1):37–43

Spectral characteristics of heart period variability during cold face stress and shock avoidance in normal subjects. Friedman BH, et al. **Clin Auton Res** 1996 Jun;6(3):147–52

Reproducibility of exercise–induced modulation of cardiovascular responses to cold stress. Rashed HM, et al. **Clin Auton Res** 1997 Apr;7(2):93–6

Role of the dorsomedial hypothalamus in the cardiovascular response to stress. DiMicco JA, et al. **Clin Exp Pharmacol Physiol** 1996 Feb;23(2):171–6

Forebrain pathways mediating stress–induced renin secretion.

Van de Kar LD. **Clin Exp Pharmacol Physiol** 1996 Feb; 23(2):166–70

Stress infrared telethermography is useful in the diagnosis of complex regional pain syndrome, type I (formerly reflex sympathetic dystrophy). Gulevich SJ, et al. **Clin J Pain** 1997 Mar;13(1):50–9

Peripheral benzodiazepine receptors: molecular pharmacology to possible physiological significance in stress–induced hypertension. Drugan RC. **Clin Neuropharmacol** 1996 Dec;19(6):475–96 (157 ref.)

Stress ulceration. Clark WK. **Clin Neurosurg** 1971;18:426–40

Ankle to arm index response to exercise and heat stress in healthy subjects. Desvaux B, et al. **Clin Physiol** 1996 Jan; 16(1):1–7

Nutritional modulation of somatotropic axis–cytokine relationships in cattle: a brief review. Elsasser TH, et al. **Comp Biochem Physiol A Physiol** 1997 Mar;116(3):209–21 (88 ref.)

The amygdala: corticotropin–releasing factor, steroids, and stress. Gray TS, et al. **Crit Rev Neurobiol** 1996;10(2):155–68 (109 ref.)

The role of mesoprefrontal dopamine neurons in stress. Horger BA, et al. **Crit Rev Neurobiol** 1996;10(3–4):395–418 (232 ref.)

Preliminary observations on the induction of triploidy in Abramis brama by cold shock. Kucharczyk D, et al. **Cytobios** 1996;88(354):153–60

Stress activated cytokines and the heart. Mann DL. **Cytokine Growth Factor Rev** 1996 Dec;7(4):341–54 (126 ref.)

Effects of prenatal stress on the fetal calf. Lay DC Jr, et al. **Domest Anim Endocrinol** 1997 Mar;14(2):73–80

The possible role of endogenous substance P in the modulation of the response of rat pituitary–adrenal axis to stresses. Malendowicz LK, et al. **Endocr Res** 1996 Aug; 22(3):311–8

Inhibition of corticosteroid–binding globulin caused by a severe stressor is apparently mediated by the adrenal but not by glucocorticoid receptors. Martí O, et al. **Endocrine** 1997 Apr;6(2):159–64

Leptin inhibition of the hypothalamic–pituitary–adrenal axis in response to stress. Heiman ML, et al. **Endocrinology** 1997 Sep;138(9):3859–63

Emergence of an isolated arginine vasopressin (AVP) response to stress after repeated restraint: a study of both AVP and corticotropin–releasing hormone messenger ribonucleic acid (RNA) and heteronuclear RNA. Ma XM, et al. **Endocrinology** 1997 Oct;138(10):4351–7

Hemodynamic responses to cold stress in blacks: effect of application site. Duey WJ, et al. **Ethn Dis** 1996 Autumn; 6(3–4):272–8

The use of salivary cortisol measurements for the non–invasive assessment of adrenal cortical function in guinea pigs. Fenske M. **Exp Clin Endocrinol Diabetes** 1997; 105(3):163–8

Physical stress–induced secretion of adrenal and pituitary hormones in patients with atopic eczema compared with normal controls. Rupprecht M, et al. **Exp Clin Endocrinol Diabetes** 1997;105(1):39–45

Regulation of the adrenocorticotrophin response to stress by the central nucleus of the amygdala in rats depends upon the nature of the stressor. Marcilhac A, et al. **Exp Physiol** 1996 Nov;81(6):1035–8

Noise stress and airway toxicity: a prospect for experimental analysis. Van Raaij MT, et al. **Food Chem Toxicol** 1996 Nov–Dec;34(11–12):1159–61 (15 ref.)

Stress–induced alterations of somatodendritic 5–HT1A autoreceptor sensitivity in the rat dorsal raphe nucleus––in vitro electrophysiological evidence. Laaris N, et al. **Fundam Clin Pharmacol** 1997;11(3):206–14

How do epithelial cells respond to stress? Carey HV. **Gastroenterology** 1997 Feb;112(2):662–4

Evidence that cortisol may protect against the immediate effects of stress on circulating leukocytes in the trout. Narnaware YK, et al. **Gen Comp Endocrinol** 1996 Sep; 103(3):359–66

Effects of spinally and supraspinally injected 3–isobutyl–1–methylxanthine, cholera toxin, and pertussis toxin on cold water swimming stress–induced antinociception in the mouse. Suh HW, et al. **Gen Pharmacol** 1997 Apr;28(4):607–10

Segregation analysis of cardiovascular reactivity to laboratory stressors. Cheng LS, et al. **Genet Epidemiol** 1997; 14(1):35–49

Hemodynamic adaptation to orthostatic stress after orthotopic heart transplantation. Doering LV, et al. **Heart Lung** 1996 Sep–Oct;25(5):339–51

Stress–induced laboratory blood pressure in relation to ambulatory blood pressure and left ventricular mass among borderline hypertensive and normotensive individuals. Georgiades A, et al. **Hypertension** 1996 Oct;28(4):641–6

Influence of lifestyle, coping, and job stress on blood pressure in men and women. Lindquist TL, et al. **Hypertension** 1997 Jan;29(1 Pt 1):1–7

The role of cytokines in cardiac surgery. Tønnesen E, et al. **Int J Cardiol** 1996 Apr 26;53 Suppl:S1–10 (77 ref.)

Potential mechanism of skin response to stress. Slominski A, et al. **Int J Dermatol** 1996 Dec;35(12):849–51

A new technique for controlling the finger skin temperature in microcirculatory research demonstrated in a local cold stress test in healthy controls and patients with Raynaud's phenomenon. Hahn M, et al. **Int J Microcirc Clin Exp** 1996 Jan–Feb;16(1):16–22

Relationships between children's cardiovascular stress responses and resting cardiovascular functioning 1 year later. Malpass D, et al. **Int J Psychophysiol** 1997 Feb; 25(2):139–44

Electrocardiographic repolarization during stress from awakening on alarm call. Toivonen L, et al. **J Am Coll Cardiol** 1997 Sep;30(3):774–9

Evaluation of operative stress and peritoneal macrophage function in minimally invasive operations. Iwanaka T, et al. **J Am Coll Surg** 1997 Apr;184(4):357–63

Mechanism of stress–induced attenuation of the testicular response to gonadotropin: possible involvement of testicular opioids, a pertussis toxin–sensitive G–protein, and phosphodiesterase. Akibami MA, et al. **J Androl** 1996 Jan–Feb;17(1):10–6

Very high pressures are required to cause stress failure of pulmonary capillaries in thoroughbred racehorses. Birks EK, et al. **J Appl Physiol** 1997 May;82(5):1584–92

Modulation of NK cell cytolytic activity by macrophages in chronically exercise–stressed mice. Blank SE, et al. **J Appl Physiol** 1997 Sep;83(3):845–50

Hyperhydration: thermoregulatory effects during compensable exercise–heat stress. Latzka WA, et al. **J Appl Physiol** 1997 Sep;83(3):860–6

Altered response in cutaneous sympathetic outflow to mental and thermal stimuli in primary palmoplantar hyperhidrosis. Iwase S, et al. **J Auton Nerv Syst** 1997 Jun 6;64(2–3):65–73

Sympathetic nervous activity and arterial pressure responses during rest and acute behavioral stress in SHR versus WKY rats. Li SG, et al. **J Auton Nerv Syst** 1997 Feb 17; 62(3):147–54

Activation of hepatic sympathetic nerves during hypoxic, hypotensive and glucopenic stress. Mundinger TO, et al. **J Auton Nerv Syst** 1997 Apr 14;63(3):153–60

Effect of heat stress on muscle sympathetic nerve activity in humans. Niimi Y, et al. **J Auton Nerv Syst** 1997 Mar 19;63(1–2):61–7

The responses of skin blood flow, mean arterial pressure and R–R interval induced by cold stimulation with cold wind and ice water. Shibahara N, et al. **J Auton Nerv Syst** 1996 Nov 6;61(2):109–15

Baroreceptor modulation of regional haemodynamic responses to acute stress in rat. Zhang ZQ, et al. **J Auton Nerv Syst** 1996 Aug 27;60(1–2):23–30

Effects of esmolol on 35 GHz microwave–induced lethal heat stress. Jauchem JR, et al. **J Auton Pharmacol** 1997 Jun; 17(3):165–73

Magnetocardiography and 32–lead potential mapping: repolarization in normal subjects during pharmacologically induced stress. Brockmeier K, et al. **J Cardiovasc Electrophysiol** 1997 Jun;8(6):615–26

Heart rate, heart rate variability, and blood pressure during perioperative stressor events in abdominal surgery. Schubert A, et al. **J Clin Anesth** 1997 Feb;9(1):52–60

Sexual dimorphism of the human stress response may be due to estradiol–mediated stimulation of hypothalamic corticotropin–releasing hormone synthesis [letter; comment] Torpy DJ, et al. **J Clin Endocrinol Metab** 1997 Mar;82(3):982. Comment on: J Clin Endocrinol Metab 1996 Oct;81(10):3639–43.

Interleukin–1 stimulates luteinizing hormone release during the midfollicular phase in the rhesus monkey: a novel way in which stress may influence the menstrual cycle. Xiao E, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2136–41

Hepatic leukostasis and hypoxic stress in adhesion molecule–deficient mice after gut ischemia/reperfusion. Horie Y, et al. **J Clin Invest** 1997 Feb 15;99(4):781–8

Neonatal treatment of rats with the neuroactive steroid tetrahydrodeoxycorticosterone (THDOC) abolishes the behavioral and neuroendocrine consequences of adverse early life events. Patchev VK, et al. **J Clin Invest** 1997 Mar 1;99(5):962–6

Regulation of extracellular matrix by mechanical stress in rat glomerular mesangial cells. Yasuda T, et al. **J Clin Invest** 1996 Nov 1;98(9):1991–2000

Continuous measurement of hemodynamic alterations during pharmacologic cardiovascular stress using automated impedance cardiography. Scherhag AW, et al. **J Clin Pharmacol** 1997 Jan;37(1 Suppl):21S–28S

Relationship between self–perceived stress and blood pressure. Suter PM, et al. **J Hum Hypertens** 1997 Mar; 11(3):171–6

Psychophysiological reactivity of salt–sensitive normotensive subjects. Deter HC, et al. **J Hypertens** 1997 Aug; 15(8):839–44

Differential effects of exercise training intensity on blood pressure and cardiovascular responses to stress in borderline hypertensive humans [see comments] Rogers MW, et al. **J Hypertens** 1996 Nov;14(11):1369–75. Comment in: J Hypertens 1996 Nov;14(11):1377–8.

Inhibition of protein kinase C–mediated CD4 down–regulation by oxidative stress in T lymphocytes. Nakamura K, et al. **J Immunol** 1996 Dec 15;157(12):5339–49

Cardiovascular response to orthostatic stress following cold challenge in diabetics. Mishra N, et al. **J Indian Med Assoc** 1996 Jan;94(1):3–5

Delayed cardiac protection against harmful consequences of stress can be induced in experimental atherosclerosis in rabbits. Szekeres L, et al. **J Mol Cell Cardiol** 1997 Jul; 29(7):1977–83

Acute immobilization stress and intraventricular injection of CRF suppress naloxone–induced LH release in ovariectomized estrogen–primed rats. Akema T, et al. **J Neuroendocrinol** 1996 Aug;8(8):647–52

Effects of continuous and intermittent cold (SART) stress on sympathoadrenal system activity in rats. Fukuhara K, et al. **J Neuroendocrinol** 1996 Jan;8(1):65–72

Interrelations between sympathoadrenal system and hypothalamo–pituitary–adrenocortical/thyroid systems in rats exposed to cold stress. Fukuhara K, et al. **J Neuroendocrinol** 1996 Jul;8(7):533–41

Dynamic variations in plasma corticosteroid–binding globulin and basal HPA activity following acute stress in adult rats. Tannenbaum B, et al. **J Neuroendocrinol** 1997 Mar; 9(3):163–8

Endocrine and behavioural responses to noise stress: comparison of virgin and lactating female rats during non–disrupted maternal activity. Windle RJ, et al. **J Neuroendocrinol** 1997 Jun;9(6):407–14

Stretch–sensitive afferent neurons in cat knee joint capsule: sensitivity to axial and compression stresses and strains. Grigg P, et al. **J Neurophysiol** 1996 May;75(5):1871–7

Stress and dominance in a social fish. Fox HE, et al. **J Neurosci** 1997 Aug 15;17(16):6463–9

Identification of a sex–specific quantitative trait locus mediating nonopioid stress–induced analgesia in female mice. Mogil JS, et al. **J Neurosci** 1997 Oct 15; 17(20):7995–8002

The inhibitory effect of testosterone on hypothalamic–pituitary–adrenal responses to stress is mediated by the medial preoptic area. Viau V, et al. **J Neurosci** 1996 Mar 1;16(5):1866–76

Functional recovery from sciatic nerve crush lesion in the rat correlates with individual differences in responses to chronic intermittent stress. van Meeteren NL, et al. **J Neurosci Res** 1997 Jun 15;48(6):524–32

Analgesic response to stress is reduced in perinatally undernourished rats. Gutiérrez AC, et al. **J Nutr** 1997 May; 127(5):765–9

The effect of sudden inversion stress on EMG activity of the peroneal and tibialis anterior muscles in the chronically unstable ankle. Ebig M, et al. **J Orthop Sports Phys Ther** 1997 Aug;26(2):73–7

Stress responses in preterm neonates after normal and at–risk pregnancies. Van Reempts PJ, et al. **J Paediatr Child Health** 1996 Oct;32(5):450–6

Effect of prenatal alcohol and cigarette exposure on two– and six–month–old infants' adrenocortical reactivity to stress. Ramsay DS, et al. **J Pediatr Psychol** 1996 Dec; 21(6):833–40

Skin blood flow influences the transcutaneous PCO2 (tc PCO2) during stress in the guinea pig. Braems GA, et al. **J Perinat Med** 1996;24(2):155–61

Effect of tachykinin receptor inhibition in the brain on cardiovascular and behavioral responses to stress. Culman J, et al. **J Pharmacol Exp Ther** 1997 Jan;280(1):238–46

Role of prostaglandins in the stimulation of the hypothalamic–pituitary–adrenal axis by adrenergic and neurohormone systems. Bugajski J. **J Physiol Pharmacol** 1996 Dec;47(4):559–75 (78 ref.)

The effect of thyroid hormone supplementation on hemodynamic stability and survival in an endotoxin–induced model of physiologic stress. Glembot TM, et al. **J Surg Res** 1996 Feb 15;61(1):77–83

Steady flow in models of abdominal aortic aneurysms. Part II: Wall stresses and their implication for in vivo thrombosis and rupture. Peattie RA, et al. **J Ultrasound Med** 1996 Oct; 15(10):689–96

Implication of ATP–sensitive K+ channels in various stress–induced analgesia (SIA) in mice. Nakao K, et al. **Jpn J Pharmacol** 1996 Jul;71(3):269–72

Modifications of arterial baroreflexes: obligatory roles in cardiovascular regulation in stress and poststress recovery. Nosaka S. **Jpn J Physiol** 1996 Aug;46(4):271–88 (198 ref.)

Social deprivation stress induces adaptative changes of opioid mechanisms in the rat tail artery. Parra L, et al. **Life Sci** 1997;60(25):2315–22

Sudden infant death syndrome: a proposed discovery. Parish AR. **Med Hypotheses** 1997 Aug;49(2):177–9

Adaptation of the hypothalamopituitary adrenal axis to chronic exercise stress in humans. Wittert GA, et al. **Med Sci Sports Exerc** 1996 Aug;28(8):1015–9

A study on the involvement of GABAB receptor ligands in stress–induced antinociception in male mice. Houston AJ, et al. **Methods Find Exp Clin Pharmacol** 1997 Apr; 19(3):167–71

Morphological and functional studies of the paracrine interaction between cortex and medulla in the adrenal gland. Bornstein SR, et al. **Microsc Res Tech** 1997 Mar 15;36(6):520–33 (123 ref.)

Differential regulation of the mitogen–activated protein and stress–activated protein kinase cascades by adrenergic agonists in quiescent and regenerating adult rat hepatocytes. Spector MS, et al. **Mol Cell Biol** 1997 Jul; 17(7):3556–65

DNA topology in hyperthermophilic archaea: reference states and their variation with growth phase, growth temperature, and temperature stresses. López–García P, et al. **Mol Microbiol** 1997 Mar;23(6):1267–79

Stress system abnormalities in melancholic and atypical depression: molecular, pathophysiological, and therapeutic implications [editorial;see comments] Gold PW, et al. **Mol Psychiatry** 1996 Sep;1(4):257–64. Comment in: Mol

Psychiatry 1996 Sep;1(4):300–1.
Fasted and finicky without fight or flight: selective anorexic actions of a novel stress-related neuropeptide [news] Heinrichs SC. **Mol Psychiatry** 1996 Dec;1(6):427–8
Stress-responsive neuropeptides in major depression [news; comment] Negrão AB, et al. **Mol Psychiatry** 1996 Sep; 1(4):300–1. Comment on: Mol Psychiatry 1996 Sep;1(4):257–64. Comment on: Mol Psychiatry 1996 Sep;1(4):265–77. Comment on: Mol Psychiatry 1996 Sep;1(4):307–12. Comment on: Mol Psychiatry 1996 Sep;1(4):313–9. Comment on: Mol Psychiatry 1996 Sep;1(4):336–42.
Respiratory and haemodynamic modifications during right heart catheterization in COLD patients. Scalvini S, et al. **Monaldi Arch Chest Dis** 1995 Dec;50(6):438–42
Pyridostigmine brain penetration under stress enhances neuronal excitability and induces early immediate transcriptional response [see comments] Friedman A, et al. **Nat Med** 1996 Dec;2(12):1382–5. Comment in: Nat Med 1996 Dec;2(12):1307–8. Comment in: Nat Med 1997 Mar;3(3):253. Comment in: Nat Med 1997 Apr;3(4):366.
The contribution of stressor intensity, duration, and context to the stress-induced facilitation of associative learning. Shors TJ, et al. **Neurobiol Learn Mem** 1997 Jul;68(1):92–6
Sex differences in the effects of gonadectomy and acute swim stress on GABAA receptor binding in mouse forebrain membranes. Akinci MK, et al. **Neurochem Int** 1997 Jul; 31(1):1–10
Adaptation to prolonged or repeated stress—comparison between rat strains showing intrinsic differences in reactivity to acute stress. Dhabhar FS, et al. **Neuroendocrinology** 1997 May;65(5):360–8
Impaired adaptation of the hypothalamic–pituitary–adrenal axis to chronic ethanol stress in aged rats. Spencer RL, et al. **Neuroendocrinology** 1997 May;65(5):353–9
Effects of bacterial endotoxin on the glucocorticoid feedback regulation of adrenocortical response to stress. Weidenfeld J, et al. **Neuroimmunomodulation** 1996 Nov–Dec;3(6):352–7
Involvement of supraspinal and spinal CCK receptors in the modulation of antinociception induced by cold water swimming stress in the mouse. Suh HW, et al. **Neuropeptides** 1996 Aug;30(4):379–84
The effects of metabolic stress on glutamate receptor–mediated depolarizations in the in vitro rat hippocampal slice. Frenguelli BG. **Neuropharmacology** 1997 Jul;36(7):981–91
Central effect of melatonin against stress-induced gastric ulcers in rats. Kato K, et al. **Neuroreport** 1997 Jul 7; 8(9–10):2305–9
Does prenatal stress impair coping and regulation of hypothalamic–pituitary–adrenal axis? Weinstock M. **Neurosci Biobehav Rev** 1997 Jan;21(1):1–10 (128 ref.)
Inter-individual differences in the effects of acute stress on the sleep–wakefulness cycle in the rat. Bouyer JJ, et al. **Neurosci Lett** 1997 Apr 11;225(3):193–6
Sex differences in benzodiazepine binding in the frontal cortex and amygdala of the rat 24 hours after restraint stress. Farabollini F, et al. **Neurosci Lett** 1996 Nov 8; 218(3):177–80
Salivary IgA as a marker of social stress in rats. Guhad FA, et al. **Neurosci Lett** 1996 Sep 27;216(2):137–40
Transient neonatal elevation in hypothalamic estrogen receptor mRNA in prenatally-stressed male rats. Henry C, et al. **Neurosci Lett** 1996 Sep 27;216(2):141–5
Persistent c-fos expression in the brains of mice with chronic social stress. Matsuda S, et al. **Neurosci Res** 1996 Oct; 26(2):157–70
Influence of perinatal factors on the nucleus accumbens dopamine response to repeated stress during adulthood: an electrochemical study in the rat. Brake WG, et al. **Neuroscience** 1997 Apr;77(4):1067–76
Chemical sensory deafferentation abolishes hypothalamic pituitary activation induced by noxious stimulation or electroacupuncture but only decreases that caused by immobilization stress. A c-fos study. Pan B, et al. **Neuroscience** 1997 Jun;78(4):1059–68
A stress-sensitive chemokinergic neuronal pathway in the hypothalamo–pituitary system. Sakamoto Y, et al. **Neuroscience** 1996 Nov;75(1):133–42
Modulation of thermogenic response to parenteral amino acid infusion in surgical stress. Tsujinaka T, et al. **Nutrition** 1996 Jan;12(1):36–9
Stress, social support and pregnancy outcome: a reassessment based on recent research. Hoffman S, et al. **Paediatr Perinat Epidemiol** 1996 Oct;10(4):380–405 (144 ref.)
Increased applied pressure enhances the uptake of IgG complexes by macrophages. Mattana J, et al. **Pathobiology** 1996;64(1):40–5
Febrile infants without obvious fever source [letter] Elzoobi K, et al. **Pediatr Emerg Care** 1997 Feb;13(1):85–6
The effect of vasoactive intestinal peptide (VIP) on mast cell invasion/degranulation in testicular interstitium of immobilized + cold stressed and beta-endorphin–treated rats. Tunçel N, et al. **Peptides** 1996;17(5):817–24
Interactions between vasopressin and food restriction on stress-induced analgesia. Wideman CH, et al. **Peptides** 1996; 17(1):63–6
Stress distribution on the hip joint articular surface during gait. Ipavec M, et al. **Pflugers Arch** 1996;431(6 Suppl 2):R275–6
Behavioral sensitization to ethanol: genetics and the effects of stress. Phillips TJ, et al. **Pharmacol Biochem Behav** 1997 Jul;57(3):487–93 (120 ref.)
Parallel strain-dependent susceptibility to environmentally-induced stereotypies and stress-induced behavioral sensitization in mice. Cabib S, et al. **Physiol Behav** 1997 Apr;61(4):499–506
Influence of maternal stress on the effects of prenatal exposure to methylmercury and arsenic on postnatal development and behavior in mice: a preliminary evaluation. Colomina MT, et al. **Physiol Behav** 1997 Mar; 61(3):455–9
Effect of restraint stress on feeding behavior of rats. Ely DR, et al. **Physiol Behav** 1997 Mar;61(3):395–8
Chronic mild stress and sucrose consumption: validity as a model of depression. Forbes NF, et al. **Physiol Behav** 1996 Dec;60(6):1481–4
Differences in the stress response of Wistar-Kyoto (WKY) rats from different vendors. Paré WP, et al. **Physiol Behav** 1997 Sep;62(3):643–8
Adaptive metabolic responses in females of the fighting breed submitted to different sequences of stress stimuli. Sánchez JM, et al. **Physiol Behav** 1996 Oct;60(4):1047–52
Electrode positioning for reliable telemetry ECG recordings during social stress in unrestrained rats. Sgoifo A, et al. **Physiol Behav** 1996 Dec;60(6):1397–401
Stress-induced hyperthermia in singly housed mice. Van der Heyden JA, et al. **Physiol Behav** 1997 Sep;62(3):463–70
Stress responses to tilting and odor stimulus in preterm neonates after intrauterine conditions associated with chronic stress. Van Reempts PJ, et al. **Physiol Behav** 1997 Mar;61(3):419–24
Physiological responses of red deer (Cervus elaphus) to conditions experienced during road transport. Waas JR, et al. **Physiol Behav** 1997 Jun;61(6):931–8
Corticosterone and the stress response in young western screech-owls: effects of captivity, gender, and activity period. Dufty AM Jr, et al. **Physiol Zool** 1997 Mar–Apr; 70(2):143–9
Effect of chronic mild stress and prolonged treatment with imipramine on the levels of endogenous Met-enkephalin in the rat dopaminergic mesolimbic system. Dziedzicka-Wasylewska M, et al. **Pol J Pharmacol** 1996 Jan–Feb;48(1):53–6
Effect of prenatal stress on ontogenesis of immunoregulatory cell maturation in mice. Mazur-Kolecka B, et al. **Pol J Pharmacol** 1996 Nov–Dec;48(6):621–5
Acute effect of dopamine agonists and some antidepressants in stress-induced deficit of fighting behavior. Ossowska G, et al. **Pol J Pharmacol** 1996 Jul–Aug;48(4):403–8
Intestinal adaptation to nutritional stress. Raul F, et al. **Proc Nutr Soc** 1996 Mar;55(1B):279–89 (74 ref.)
Neonatal androgenization potentiates the inhibitory effects of blood withdrawal on ovulation in the rat. Lin JF, et al. **Proc Soc Exp Biol Med** 1996 Dec;213(3):268–72
The paraventricular nucleus of the hypothalamus and the functional neuroanatomy of visceromotor responses to stress. Sawchenko PE, et al. **Prog Brain Res** 1996; 107:201–22 (104 ref.)
The neuroimmunology of stress from invertebrates to man [published erratum appears in Prog Neurobiol 1996 Jun;49(3):285] Ottaviani E, et al. **Prog Neurobiol** 1996 Mar–Apr;48(4–5):421–40 (103 ref.)
Persistent changes in corticotropin-releasing factor systems due to early life stress: relationship to the pathophysiology of major depression and post-traumatic stress disorder. Heim C, et al. **Psychopharmacol Bull** 1997;33(2):185–92 (63 ref.)
Cocaine- but not food-seeking behavior is reinstated by stress after extinction. Ahmed SH, et al. **Psychopharmacology (Berl)** 1997 Aug;132(3):289–95
Stress, depression and the mesolimbic dopamine system. Cabib S, et al. **Psychopharmacology (Berl)** 1996 Dec; 128(4):331–42 (100 ref.)
Does noise stress modulate effects of smoking/nicotine? Mood, vigilance, and EEG responses. Gilbert DG, et al. **Psychopharmacology (Berl)** 1997 Feb;129(4):382–9
Evidence for dissociable mechanisms of amphetamine- and stress-induced behavioral sensitization: effects of MK-801 and haloperidol pretreatment. Tolliver BK, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):191–8
The effects of early postnatal stimulation on Morris water-maze acquisition in adult mice: genetic and maternal factors. Zaharia MD, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):227–39
Cardiovascular and neuroendocrine adjustment to public speaking and mental arithmetic stressors. Al'Absi M, et al. **Psychophysiology** 1997 May;34(3):266–75
Hemodynamic responses to laboratory stressors in children and adolescents: the influences of age, race, and gender. Allen MT, et al. **Psychophysiology** 1997 May;34(3):329–39
Ten-year stability of cardiovascular responses to laboratory stressors. Sherwood A, et al. **Psychophysiology** 1997 Mar; 34(2):185–91
Heritability of respiratory sinus arrhythmia: dependency on task and respiration rate. Snieder H, et al. **Psychophysiology** 1997 May;34(3):317–28
The role of stressor intensity and underlying vasculopathy in altering coronary reactivity in cardiomyopathic hamsters. Chang Q, et al. **Psychosom Med** 1997 Jan–Feb; 59(1):51–7
Use of animal models in peptic ulcer disease. Weiner H. **Psychosom Med** 1996 Nov–Dec;58(6):524–45 (259 ref.)
Plasma neurotransmitters, blood pressure and heart rate during supine resting, orthostasis and moderate exercise in severely ill patients: a model of failing to cope with stress. Lechin F, et al. **Psychother Psychosom** 1996; 65(3):129–36
The effects of electroconvulsant shocks on phagocytic activity and on phagocytic response. Baciu I, et al. **Rom J Physiol** 1995 Jan–Dec;32(1–4):77–81
The double-way effects of naloxone and clonidine on experimental stress analgesia. Cristea A, et al. **Rom J Physiol** 1995 Jan–Dec;32(1–4):137–43
The pediatric physiologic stress response: a concept analysis. Rosenthal-Dichter CH. **Sch Inq Nurs Pract** 1996 Fall; 10(3):211–34 (58 ref.)
Maternal care, hippocampal glucocorticoid receptors, and hypothalamic–pituitary–adrenal responses to stress [see comments] Liu D, et al. **Science** 1997 Sep 12; 277(5332):1659–62. Comment in: Science 1997 Sep 12;277(5332):1620–1.
The emerging role of glutamine as an indicator of exercise stress and overtraining. Rowbottom DG, et al. **Sports Med** 1996 Feb;21(2):80–97 (124 ref.)
Acute portal hypertension reflecting shear stress as a trigger of liver regeneration following partial hepatectomy. Sato Y, et al. **Surg Today** 1997;27(6):518–26
Neurocircuitry of stress: central control of the hypothalamo–pituitary–adrenocortical axis. Herman JP, et al. **Trends Neurosci** 1997 Feb;20(2):78–84 (81 ref.)
Stress, hormonal changes, alcohol, food constituents and drugs: factors that advance the incidence of tobacco smoke-related cancer? Maser E. **Trends Pharmacol Sci** 1997 Aug;18(8):270–5 (95 ref.)
[The effect of total intravenous anesthesia with S-(+)-ketamine/propofol on hemodynamic, endocrine and metabolic stress reactions in comparison to alfentanil/propofol in laparotomy] Crozier TA, et al. **Anaesthesist** 1996 Nov;45(11):1015–23 (Eng. Abstr.) **(Ger)**
[Stress and fatigue in long distance 2-man cockpit crew] Samel A, et al. **Wien Med Wochenschr** 1996; 146(13–14):272–6 (Eng. Abstr.) **(Ger)**
[Role of gastric vascular smooth muscle cells in the pathogenesis of stress ulcer] Tanaka M, et al. **J Smooth Muscle Res** 1995 Dec;31(6):446 **(Jpn)**
[Surgical stress and nervous systems] Komatsu T, et al. **Masui** 1996 Dec;45 Suppl:S16–24 (36 ref.) **(Jpn)**
[Biological response to surgical stress—endocrine response] Sakai T. **Masui** 1996 Dec;45 Suppl:S25–30 (14 ref.) **(Jpn)**
[Result of biological response to surgical stress] Yuge T. **Masui** 1996 Dec;45 Suppl:S44–8 (14 ref.) **(Jpn)**
[Cytokine storm in the pathogenesis of multiple organ dysfunction syndrome associated with surgical insults] Aikawa N. **Nippon Geka Gakkai Zasshi** 1996 Sep; 97(9):771–7 (31 ref.) (Eng. Abstr.) **(Jpn)**
[The significance of neurological manifestations from the aspect of aggressology] Aruga T. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):733–8 (19 ref.) (Eng. Abstr.) **(Jpn)**
[Cytokines in surgical stress] Endo S, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):708–15 (34 ref.) (Eng. Abstr.) **(Jpn)**
[Acute renal failure following surgical insult] Hirasawa H, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):765–70 (17 ref.) (Eng. Abstr.) **(Jpn)**
[Immune response induced by surgical trauma] Hirota M, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):721–5 (12 ref.) (Eng. Abstr.) **(Jpn)**
[Surgical stress and organ dysfunction: liver] Nakatani T, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):752–8 (47 ref.) (Eng. Abstr.) **(Jpn)**
[Endocrine response to surgical stress] Saito H. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):701–7 (23 ref.) (Eng. Abstr.) **(Jpn)**
[Cardiac contractile dysfunction in response to surgical stress including trauma, hemorrhage, and infection] Suzuki K, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):745–51 (20 ref.) (Eng. Abstr.) **(Jpn)**
[Surgical stress and acute lung injury] Takezawa J. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):739–44 (33 ref.) (Eng. Abstr.) **(Jpn)**
[Microcirculatory disturbances after surgical insults—important role of inflammatory cytokines] Wakabayashi G, et al. **Nippon Geka Gakkai Zasshi** 1996 Sep;97(9):759–64 (14 ref.) (Eng. Abstr.) **(Jpn)**
[The effect of ACE inhibitors, beta blockers and calcium antagonists on the responses to pressor stress tests in the elderly hypertensive patients] Suzuki Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jan;33(1):27–32 (Eng. Abstr.) **(Jpn)**
[Relations between stress in daily life and hypertensive cardiovascular accidents] Tochikubo O. **Rinsho Byori** 1997 Jan;45(1):32–8 (Eng. Abstr.) **(Jpn)**
[Effect of Rodiola rosacea on the resistance of isolated heart from stressed-out rats to ischemic and reperfusion injury] Afanas'ev SA, et al. **Biull Eksp Biol Med** 1997 May; 123(5):514–7 **(Rus)**
[The role of renin-angiotensin system in the regulation of noradrenaline inactivation in lungs during immobilization stress in rats] Bonetskiĭ AA, et al. **Biull Eksp Biol Med** 1994 May;117(5):468–9 **(Rus)**
[Differences in stress reaction and development of adaptation

to stress in August and Wistar rats] Pshennikova MG, et al. **Biull Eksp Biol Med** 1996 Aug;122(8):156–9 **(Rus)**

[Adaptation to physical exertion increases activity of prostaglandins E and I2 and reduces the stress-reaction] Pshennikova MG, et al. **Biull Eksp Biol Med** 1996 Dec; 122(12):622–4 **(Rus)**

[Postnatal stress enhances impairment of bilateral avoidance learning in mature rats with fetal alcohol syndrome] Trofimov SS, et al. **Biull Eksp Biol Med** 1997 Mar; 123(3):302–4 **(Rus)**

[Cytological profile of the thymus from mice with increased resistance to the growth of plasmacytoma P3–X63–Ag8.653–MOPC during stress] Volkova LV, et al. **Biull Eksp Biol Med** 1994 May;117(5):454–6 **(Rus)**

[Regulatory role of the excitatory amino acid system in the neuromediator response of the hypothalamus to stress] Chazov EI, et al. **Dokl Akad Nauk** 1996 Dec;351(4):567–70 **(Rus)**

[Medico-physiological aspects of individually differentiated teaching of senior pupils] Antropova MV, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):98–102 **(Rus)**

[The sexual dimorphism of the monoaminergic system of the brain: the effects of prenatal stress and neonatal androgenization in rats] Nosenko ND. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):46–53 (Eng. Abstr.) **(Rus)**

[The effect of immobilization stress on the gastroduodenal myoelectrical activity in rabbits] Ovsiannikov VI, et al. **Fiziol Zh Im I M Sechenova** 1996 Mar;82(3):131–40 (Eng. Abstr.) **(Rus)**

[The functional swings in the neuroendocrine regulation of stress] Shaliapina VG. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):9–14 (31 ref.) **(Rus)**

[The effect of prenatal stress on the development of hypophyseal gonadotropic function in male rats] Tarasenko LV, et al. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):39–45 (Eng. Abstr.) **(Rus)**

[The reaction of the individual to an uncontrollable exposure depends on the behavioral strategy] Zhukov DA. **Fiziol Zh Im I M Sechenova** 1996 Apr;82(4):21–9 (Eng. Abstr.) **(Rus)**

[Agonistic behavior during stress inhibits the development of learned helplessness in rats] Zhukov DA, et al. **Fiziol Zh Im I M Sechenova** 1996 Dec;82(12):6–11 (Eng. Abstr.) **(Rus)**

[The morphofunctional characteristics of the zona glomerulosa of the adrenal cortex in rats with hereditary stress-induced arterial hypertension] Buzueva II, et al. **Morfologiia** 1996;110(6):93–6 (Eng. Abstr.) **(Rus)**

[Stress-induced hemodynamic changes in shepherds during migration and winter stay in the mountains] Bekbolotova AK, et al. **Patol Fiziol Eksp Ter** 1997 Jul–Sep;(3):15–8 **(Rus)**

[Disorders developing under combined exposure to ionizing radiation and stress] Fedorov VI. **Patol Fiziol Eksp Ter** 1997 Jan–Mar;(1):31–3 (Eng. Abstr.) **(Rus)**

[Immune system cells as mediators in the reaction of other body systems to stress exposure] Kuznetsov SI, et al. **Patol Fiziol Eksp Ter** 1997 Apr–Jun;(2):27–9 (Eng. Abstr.) **(Rus)**

[Effect of cold stress on the contractile activity, carbohydrate and energy metabolism in the isolated rat heart] Lishmanov IuB, et al. **Patol Fiziol Eksp Ter** 1997 Jan–Mar;(1):28–31 (Eng. Abstr.) **(Rus)**

[Pathogenesis of impaired cardiac electric stability in experimental hypodynamia] Maslova LV, et al. **Patol Fiziol Eksp Ter** 1996 Oct–Dec;(4):21–3 (Eng. Abstr.) **(Rus)**

[The role of the opioid system in body adaptation and protection of the heart in stress] Lishmanov IuB, et al. **Usp Fiziol Nauk** 1997 Jan–Mar;28(1):75–96 (120 ref.) (Eng. Abstr.) **(Rus)**

[Microenvironmental aspects of space flights] Liz'ko NN. **Vestn Ross Akad Med Nauk** 1996;(8):31–4 **(Rus)**

[The effect of stress in pregnant rats on the anxiety level in their offspring] Batuev AS, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):558–63 (Eng. Abstr.) **(Rus)**

[The effect of the stage of the estrous cycle and of acute stress on sugar consumption by female white rats] Vinogradova EP, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):607–9 **(Rus)**

[The function of the granulocytic system during immobilization stress with immunostimulation] Sheĭko VI, et al. **Fiziol Zh** 1996;42(1–2):91–5 (Eng. Abstr.) **(Ukr)**

PREVENTION & CONTROL

Pharmacological preconditioning of primary rat cardiac myocytes by FK506. Cumming DV, et al. **Basic Res Cardiol** 1996 Sep–Oct;91(5):367–73

Multimodal approach to control postoperative pathophysiology and rehabilitation. Kehlet H. **Br J Anaesth** 1997 May;78(5):606–17 (117 ref.)

Double-blind study of a multivitamin complex supplemented with ginseng extract. Caso Marasco A, et al. **Drugs Exp Clin Res** 1996;22(6):323–9

Use of the Wet Bulb Globe Temperature (WBGT) index to quantify environmental heat loads during three-day-event competitions. Schroter RC, et al. **Equine Vet J Suppl** 1996 Jul;(22):3–6

Psychiatric interventions for prevention of mental disorders. A psychosocial perspective. Dalgard OS, et al. **Int J Technol Assess Health Care** 1996 Fall;12(4):604–17 (24 ref.)

The effect of a perioperative steroid pulse on surgical stress in hepatic resection. Shimada M, et al. **Int Surg** 1996 Jan–Mar;81(1):49–51

Dentists at risk: the Ontario experience. Brandon RA, et al. **J Can Dent Assoc** 1996 Jul;62(7):566–7

Hypothesis: interventions that increase the response to stress offer the potential for effective life prolongation and increased health. Johnson TE, et al. **J Gerontol A Biol Sci Med Sci** 1996 Nov;51(6):B392–5

Routine use of fentanyl infusions for pain and stress reduction in infants with respiratory distress syndrome [see comments] Orsini AJ, et al. **J Pediatr** 1996 Jul;129(1):140–5 . Comment in: J Pediatr 1997 Mar;130(3):498–9.

Sedation administered to very low birth weight premature infants. Heller C, et al. **J Perinatol** 1997 Mar–Apr; 17(2):107–12

Massage therapy as a workplace intervention for reduction of stress. Cady SH, et al. **Percept Mot Skills** 1997 Feb; 84(1):157–8

Exhaustion syndrome in palliative care [see comments] Astudillo W, et al. **Support Care Cancer** 1996 Nov; 4(6):408–15. Comment in: Support Care Cancer 1996 Nov;4(6):399–400.

A step-wise protocol for stress ulcer prophylaxis in the neurosurgical intensive care unit. Hatton J, et al. **Surg Neurol** 1996 Nov;46(5):493–9

[Protective efficacy of 3 anesthetic methods with reference to surgical stress in children] Ivani G, et al. **Cah Anesthesiol** 1996;44(4):297–302 (Eng. Abstr.) **(Fre)**

[Preventive effect of anesthesia to surgical stress] Fujita T. **Masui** 1996 Dec;45 Suppl:S49–50 (4 ref.) **(Jpn)**

[Protective effect of intravenous anesthesia using propofol from surgical stress] Kazama T. **Masui** 1996 Dec;45 Suppl:S68–72 (4 ref.) **(Jpn)**

[Surgical stress suppressive effect of epidural anesthesia and the limitation] Takasaki M, et al. **Masui** 1996 Dec;45 Suppl:S73–8 (20 ref.) **(Jpn)**

[Surgical stress and the suppression] Tanaka Y, et al. **Masui** 1996 Dec;45 Suppl:S56–67 **(Jpn)**

[Stress protection therapy in surgical patients] Nazarov IP, et al. **Anesteziol Reanimatol** 1996 Jul–Aug;(4):45–6 **(Rus)**

[The participation of the epiphysis in the anti-stress protection of the brain] Arushanian EB. **Usp Fiziol Nauk** 1996 Jul–Sep;27(3):31–50 (153 ref.) (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Decreasing the burden of trauma for victims of violence. Kaufmann MC. **Ann Emerg Med** 1997 Aug;30(2):199–203 (31 ref.)

The role of early environmental events in regulating neuroendocrine development. Moms, pups, stress, and glucocorticoid receptors. Francis D, et al. **Ann N Y Acad Sci** 1996 Sep 20;794:136–52 (81 ref.)

Perinatal stress and impairment of the stress response. Possible link to nonoptimal behavior. King JA. **Ann N Y Acad Sci** 1996 Sep 20;794:104–12

Improvement of fatigue and acceleration of recovery from stress-induced deficient sexual behavior in mice following oral administration of soft-shelled turtle powder. Feng H, et al. **Biol Pharm Bull** 1996 Nov;19(11):1447–50

Psychological stress, cancer incidence and mortality from non-malignant diseases. Johansen C, et al. **Br J Cancer** 1997;75(1):144–8

Performance tests. Wetherell A. **Environ Health Perspect** 1996 Apr;104 Suppl 2:247–73 (418 ref.)

Theoretical perspectives concerning positive aspects of caring for elderly persons with dementia: stress/adaptation and existentialism. Farran CJ. **Gerontologist** 1997 Apr; 37(2):250–6 (51 ref.)

The concept of hardiness: a brief but critical commentary. Low J. **J Adv Nurs** 1996 Sep;24(3):588–90 (15 ref.)

Symptomatology and adaptive functioning for children exposed to normative stressors, dog attack, and parental violence. Rossman BR, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1089–97

Sources of support and interpersonal stress in the networks of married caregiving daughters: findings from a 2-year longitudinal study. Suitor JJ, et al. **J Gerontol B Psychol Sci Soc Sci** 1996 Nov;51(6):S297–306

Relationship between self-perceived stress and blood pressure. Suter PM, et al. **J Hum Hypertens** 1997 Mar; 11(3):171–6

Dopamine and spatial working memory in rats and monkeys: pharmacological reversal of stress-induced impairment. Murphy BL, et al. **J Neurosci** 1996 Dec 1;16(23):7768–75

Catecholaminergic, neuroendocrine and anxiety responses to acute psychological stress in healthy subjects: influence of alprazolam administration. Santagostino G, et al. **Neuropsychobiology** 1996;34(1):36–43

Stress versus depression. Lechin F, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1996 Aug; 20(6):899–950 (215 ref.)

Successful coping, adaptation and resilience in the elderly: an interpretation of epidemiologic data. Foster JR. **Psychiatr Q** 1997 Fall;68(3):189–219 (96 ref.)

Impairments produced by amphetamine and stress on memory storage are reduced following a chronic stressful experience. Cabib S, et al. **Psychopharmacology (Berl)** 1997 Jan;129(2):161–7

The attenuation of morphine-conditioned place preference following chronic mild stress is reversed by a CCKB receptor antagonist. Valverde O, et al. **Psychopharmacology (Berl)** 1997 May;131(1):79–85

Social determinants of cardiovascular reactivity: effects of incentive to exert influence and evaluative threat. Smith TW, et al. **Psychophysiology** 1997 Jan;34(1):65–73

Animal models provide insight into psychosomatic factors in diabetes. Surwit RS, et al. **Psychosom Med** 1996 Nov–Dec;58(6):582–9 (65 ref.)

RADIOTHERAPY

[The stress-modulating effects of laser therapy in IHD patients] Barbarash OL, et al. **Ter Arkh** 1996;68(12):50–3 (Eng. Abstr.) **(Rus)**

THERAPY

Music therapy for patients undergoing regional anesthesia. Eisenman A, et al. **AORN J** 1995 Dec;62(6):947–50

Abnormal autonomic stress responses in obstructive sleep apnoea are reversed by nasal continuous positive airway pressure. Veale D, et al. **Eur Respir J** 1996 Oct;9(10):2122–6

Treating work stress: an alternative to workers' compensation. Lehmer M, et al. **J Occup Environ Med** 1997 Jan;39(1):63–7

Effect of pain relief on the surgical stress response. Kehlet H. **Reg Anesth** 1996 Nov–Dec;21(6 Suppl):35–7 (3 ref.)

[The systemic integration of human functions: new approaches to the diagnosis and correction of stressor states] Sudakov KV. **Vestn Ross Akad Med Nauk** 1996; (6):15–25 (Eng. Abstr.) **(Rus)**

[Current interest in thalassotherapy in stress and asthenic conditions] San Martín Bacaicoa J. **An R Acad Nac Med (Madr)** 1996;113(2):457–69; discussion 469–71 **(Spa)**

VETERINARY

Reduction of stress-induced changes in meat quality with thermolysed brewer's yeast of high nucleotide content in pigs. Kovács-Zomborszky M, et al. **Acta Vet Hung** 1997; 45(2):207–12

Histopathological changes induced by environmental stress in common carp, Japanese coloured carp, European eel, and African catfish. Szakolczai J. **Acta Vet Hung** 1997; 45(1):1–10

Soluble receptors neutralizing TNF-alpha and IL-1 block stress-triggered murine abortion. Arck PC, et al. **Am J Reprod Immunol** 1997 Mar;37(3):262–6

The effects of contact frequency and transport on the efficacy of the boar effect. Hughes PE, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):159–65

Oestrus, ovulation and peri-ovulatory hormone profiles in tethered and loose-housed sows. Soede NM, et al. **Anim Reprod Sci** 1997 Mar;46(1–2):133–48

Seasonal and acute heat stress effects on steroid production by dominant follicles in cows. Wolfenson D, et al. **Anim Reprod Sci** 1997 May;47(1–2):9–19

Heart rate as a measure of adaptation to stress in cattle. Cook CJ, et al. **Aust Vet J** 1996 Dec;74(6):471–2

Bruising and biochemical measures of stress, dehydration and injury determined at slaughter in sheep transported from farms or markets. Jarvis AM, et al. **Br Vet J** 1996 Nov; 152(6):719–22

Extraction of the upper cuspid, without stress. Legendre L. **Can Vet J** 1996 Nov;37(11):692–4 (4 ref.)

Cortisol as an indicator of severity of parasitic infections of Haemonchus contortus in lambs (Ovis aries). Fleming MW. **Comp Biochem Physiol B Biochem Mol Biol** 1997 Jan; 116(1):41–4

Capture and confinement stress in white sucker exposed to bleached kraft pulp mill effluent. Jardine JJ, et al. **Ecotoxicol Environ Saf** 1996 Apr;33(3):287–98

Winter stress syndrome: an important consideration for hazard assessment of aquatic pollutants. Lemly AD. **Ecotoxicol Environ Saf** 1996 Aug;34(3):223–7 (22 ref.)

Effects of road transport on indices of stress in horses. Smith BL, et al. **Equine Vet J** 1996 Nov;28(6):446–54

Redistribution of cardiac output in response to heat exposure in the pony. McConaghy FF, et al. **Equine Vet J Suppl** 1996 Jul;(22):42–6

Plasma corticosterone concentrations associated with acute captivity stress in wild loggerhead sea turtles (Caretta caretta). Gregory LF, et al. **Gen Comp Endocrinol** 1996 Dec;104(3):312–20

Intermittent alkaline urine in a cat fed an acidifying diet. Buffington CA, et al. **J Am Vet Med Assoc** 1996 Jul 1; 209(1):103–4

Factors that impede animal movement at slaughter plants. Grandin T. **J Am Vet Med Assoc** 1996 Aug 15;209(4):757–9

Effect of halothane genotype, breed, feed withdrawal, and lairage on pork quality of belgian slaughter pigs. De Smet SM, et al. **J Anim Sci** 1996 Aug;74(8):1854–63

Effects of B vitamin injection on bovine herpesvirus-1 infection and immunity in feed-restricted beef calves. Dubeski PL, et al. **J Anim Sci** 1996 Jun;74(6):1367–74

Health, welfare, and productivity of pigs housed under Specific-Stress-Free conditions in comparison with two-site systems. Ekkel ED, et al. **J Anim Sci** 1996 Sep; 74(9):2081–7

Influence of thermal and dietary stress on immune response of rabbits. Franci O, et al. **J Anim Sci** 1996 Jul;74(7):1523–9

Using aversion learning techniques to assess the mental state, suffering, and welfare of farm animals. Rushen J. **J Anim Sci** 1996 Aug;74(8):1990–5 (35 ref.)

Second messenger and cAMP–dependent protein kinase responses to dehydration and anoxia stresses in frogs. Holden CP, et al. **J Comp Physiol [B]** 1997 May; 167(4):305–12

Nonstressful restraint device for longitudinal evaluation and photography of mouse skin lesions during tumorigenesis studies. Binder RL. **Lab Anim Sci** 1996 Jun;46(3):350–1

The stress response in fish. Wendelaar Bonga SE. **Physiol Rev** 1997 Jul;77(3):591–625 (285 ref.)

Tonic immobility reaction and heterophil to lymphocyte ratio in hens from three Spanish breeds laying pink eggshells. Campo JL, et al. **Poult Sci** 1996 Feb;75(2):155–9

Effects of crating and transport on stress and meat quality characteristics in broilers. Kannan G, et al. **Poult Sci** 1997 Mar;76(3):523–9

Environmental heat stress does not reduce blood ionized calcium concentration in hens acclimated to elevated temperatures. Samara MH, et al. **Poult Sci** 1996 Feb; 75(2):197–200

Ease of capture in Japanese quail of two lines divergently selected for adrenocortical response to immobilization. Satterlee DG, et al. **Poult Sci** 1997 Mar;76(3):469–71

The impact of chronic radioactive stress on the immuno–physiological condition of small mammals. Tsiperson VP, et al. **Sci Total Environ** 1997 Sep 6; 203(2):105–13

Differences in the biological stress responses of two cattle breeds to walking up to mountain pastures in the Pyrenees. García–Belenguer S, et al. **Vet Res** 1996;27(4–5):515–26

The reduction of skeletal muscle lesions after experimental stress in stress–susceptible pigs protected with dantrolene. Bjurström S, et al. **Zentralbl Veterinarmed A** 1995 Dec; 42(10):659–67

Distribution and morphology of skeletal muscle lesions after experimental restraint stress in normal and stress–susceptible pigs. Bjurström S, et al. **Zentralbl Veterinarmed A** 1995 Nov;42(9):575–87

Effects of short–term restraint stress on leukocyte counts, lymphocyte proliferation and lysis of erythrocytes in gilts. Roozen AW, et al. **Zentralbl Veterinarmed [B]** 1996 Oct; 43(8):505–11

[Effect of acute stress on plasma levels of catecholamines and cortisol in addition to metabolites in stress–susceptible growing swine] Neubert E, et al. **Berl Munch Tierarztl Wochenschr** 1996 Oct;109(10):381–4 . (Eng. Abstr.) **(Ger)**

[Physiology and physiopathology of ryanodine receptors in swine. Significance of sensitivity to stress, stress myopathies, malignant hyperthermia and meat quality] Martens H. **Tierarztl Prax** 1997 Jan;25(1):41–51 (62 ref.) (Eng. Abstr.) **(Ger)**

VIROLOGY

Herpes simplex virus Us11 protein enhances recovery of protein synthesis and survival in heat shock treated HeLa cells. Diaz–Latoud C, et al. **Cell Stress Chaperones** 1997 Jun;2(2):119–31

Sindbis virus infection of neonatal mice results in a severe stress response. Trgovcich J, et al. **Virology** 1997 Jan 6; 227(1):234–8

STRESS DISORDERS, POST-TRAUMATIC

Treating early mental health and post–traumatic symptoms of children in the Hanshin–Awaji earthquake. Nagao K, et al. **Acta Paediatr Jpn** 1995 Dec;37(6):745–54

Traumatic stress—an overview of diagnostic evolution and clinical treatment. Wong JC, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):76–87 (65 ref.)

Comments on the "empirical basis for biological studies of PTSD". Green BL. **Ann N Y Acad Sci** 1997 Jun 21;821:52–6

Animal models of relevance to PTSD. Rasmusson AM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:332–51 (148 ref.)

Post traumatic stress disorder. Tiller J, et al. **Aust Fam Physician** 1996 Oct;25(10):1569–73

Help–seeking in Vietnam veterans: post–traumatic stress disorder and other predictors. Marshall RP, et al. **Aust N Z J Public Health** 1997 Apr;21(2):211–3

Post–traumatic stress disorder. Medley I. **Br J Hosp Med** 1996 May 1–14;55(9):567–70 (35 ref.)

Post–traumatic stress disorder in brain injury patients. Ohry A, et al. **Brain Inj** 1996 Sep;10(9):687–95

Data collected to test hypotheses about psychological trauma [letter; comment] Goodwin J. **Bull Am Acad Psychiatry Law** 1996;24(3):422–3. Comment on: Bull Am Acad Psychiatry Law 1995;23(1):5–17. Comment on: Bull Am Acad Psychiatry Law 1996;24(1):144–5.

When children witness domestic violence. Yates A. **Hawaii Med J** 1996 Sep;55(9):162–3

The National Women's Study: relationship of victimization and posttraumatic stress disorder to bulimia nervosa. Dansky BS, et al. **Int J Eat Disord** 1997 Apr;21(3):213–28

Tornado disasters and stress responses. Godleski LS. **J Ky Med Assoc** 1997 Apr;95(4):145–8

Brief report: the assessment of posttraumatic stress disorder in pediatric cancer patients and survivors. Butler RW, et al. **J Pediatr Psychol** 1996 Aug;21(4):499–504

Perinatal stressors as predictors of symptoms of posttraumatic stress in mothers of infants at high risk. DeMier RL, et al. **J Perinatol** 1996 Jul–Aug;16(4):276–80

Culture, trauma, and psychotrauma programmes [letter; comment] Van Ommeren M, et al. **Lancet** 1997 Aug 23; 350(9077):595. Comment on: Lancet 1997 May 31;349(9065):1568.

War trauma, psycho–social projects and social development in Croatia. Stubbs P, et al. **Med Confl Surviv** 1996 Oct–Dec; 12(4):303–14

Post–traumatic stress disorder: the importance of clinical objectivity and systematic research. McFarlane AC. **Med J Aust** 1997 Jan 20;166(2):88–90 (19 ref.)

Occupational stress in contemporary fire service. Gist R, et al. **Occup Med** 1995 Oct–Dec;10(4):763–87 (53 ref.)

Torture and war trauma survivors in primary care practice. Weinstein HM, et al. **West J Med** 1996 Sep;165(3):112–8 (30 ref.)

Posttraumatic stress disorder in womem veterans. Wolfe J. **Womens Health Issues** 1996 Nov–Dec;6(6):349–52

[Traumatic neurosis or post–traumatic stress state: clinical features and therapeutic characteristics] Ferreri M. **Encephale** 1996 Dec;22 Spec No 7:7–14 **(Fre)**

[A study of post–traumatic stress reactions among war refugees based on medical records. A standard model may support the treatment] Apitzsch H, et al. **Lakartidningen** 1996 Nov 20;93(47):4285–8, 4291–4 (Eng. Abstr.) **(Swe)**

[Post–traumatic stress reactions among the survivors. Feeling of context is a protective factor when death is threatening] Eriksson NG. **Lakartidningen** 1997 Mar 26;94(13):1202–4 **(Swe)**

[Psychological aspects of trauma. Normal and pathological stress reactions] Lundin T. **Lakartidningen** 1996 Nov 20; 93(47):4281–4 **(Swe)**

BLOOD

Behavioral and plasma cortisol responses to sodium lactate infusion in posttraumatic stress disorder. Jensen CF, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:444–8

Neurobiological alterations in adult nonhuman primates exposed to unpredictable early rearing. Relevance to posttraumatic stress disorder. Smith EL, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:545–8

Elevated levels of serum interleukin–1 beta in combat–related posttraumatic stress disorder. Spivak B, et al. **Biol Psychiatry** 1997 Sep 1;42(5):345–8

Psychological condition hormone levels in war trauma. Kocijan–Hercigonja D, et al. **J Psychiatr Res** 1996 Sep–Oct;30(5):391–9

Platelet imipramine binding in patients with posttraumatic stress disorder before and after phenelzine treatment. Weizman R, et al. **Psychiatry Res** 1996 Jul 31; 63(2–3):143–50

CEREBROSPINAL FLUID

Elevated CSF corticotropin–releasing factor concentrations in posttraumatic stress disorder. Bremner JD, et al. **Am J Psychiatry** 1997 May;154(5):624–9

CHEMICALLY INDUCED

Behavioral and neuroendocrine responses to sodium lactate infusion in subjects with posttraumatic stress disorder. Jensen CF, et al. **Am J Psychiatry** 1997 Feb;154(2):266–8

CLASSIFICATION

Should there be a clinical typology of posttraumatic stress disorder? Alarcon RD, et al. **Aust N Z J Psychiatry** 1997 Apr;31(2):159–67; discussion 168–71 (90 ref.)

COMPLICATIONS

Self–injury in trauma survivors: 1. functions and meanings. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):197–206 (50 ref.)

Self–injury in trauma survivors: 2. levels of clinical response. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):207–16 (34 ref.)

Cognitive functioning and posttraumatic stress disorder. Barrett DH, et al. **Am J Psychiatry** 1996 Nov; 153(11):1492–4

Trauma and the gut: interactions between stressful experience and intestinal function. Stam R, et al. **Gut** 1997 Jun; 40(6):704–9 (110 ref.)

Patient with post traumatic stress disorder with a self–inflicted gunshot wound during a "nightmare" [letter] Coy JD. **J Emerg Med** 1996 Nov–Dec;14(6):760–2

Posttraumatic stress disorder and substance abuse: use of research in a clinical setting. Dansky BS, et al. **J Trauma Stress** 1997 Jan;10(1):141–8

The relationship between symptoms of post–traumatic stress disorder and pain, affective disturbance and disability among patients with accident and non–accident related pain. Geisser ME, et al. **Pain** 1996 Aug;66(2–3):207–14

Attention and regional cerebral blood flow in posttraumatic stress disorder patients with substance abuse histories. Semple WE, et al. **Psychiatry Res** 1996 May 31;67(1):17–28

DIAGNOSIS

PTSD in relation to dissociation in traumatized police officers. Carlier IV, et al. **Am J Psychiatry** 1996 Oct; 153(10):1325–8

What is PTSD? [editorial] Hales RE, et al. **Am J Psychiatry** 1997 Feb;154(2):143–5

Startle reflex abnormalities in women with sexual assault–related posttraumatic stress disorder. Morgan CA 3rd, et al. **Am J Psychiatry** 1997 Aug;154(8):1076–80

Dissociation and the Holocaust [letter; comment] Steinberg M. **Am J Psychiatry** 1997 May;154(5):720–1. Comment on: Am J Psychiatry 1996 Jul;153(7):935–40.

PTSD and hippocampal volume [letter; comment] van Berkestijn JW, et al. **Am J Psychiatry** 1996 Dec; 153(12):1657–8; discussion 1658–9. Comment on: Am J Psychiatry 1995 Jul;152(7):973–81.

PTSD and hippocampal volume [letter; comment] Warden D, et al. **Am J Psychiatry** 1996 Dec;153(12):1657; discussion 1658–9. Comment on: Am J Psychiatry 1995 Jul;152(7):973–81.

Traumatic stress—an overview of diagnostic evolution and clinical treatment. Wong JC, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):76–87 (65 ref.)

Acute stress disorder, subsequent posttraumatic stress disorder and depression after a series of typhoons. Staab JP, et al. **Anxiety** 1996;2(5):219–25

Patterns of symptomatology and patterns of torture and trauma experiences in resettled refugees. Cunningham M, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):555–65

Psychometric properties of the PTSD Checklist (PCL). Blanchard EB, et al. **Behav Res Ther** 1996 Aug;34(8):669–73

Magnetic resonance imaging–based measurement of hippocampal volume in posttraumatic stress disorder related to childhood physical and sexual abuse—a preliminary report. Bremner JD, et al. **Biol Psychiatry** 1997 Jan 1;41(1):23–32

Positive symptoms of psychosis in posttraumatic stress disorder. Butler RW, et al. **Biol Psychiatry** 1996 May 15; 39(10):839–44

A pilot controlled study of the effects of flumazenil in posttraumatic stress disorder. Coupland NJ, et al. **Biol Psychiatry** 1997 May 1;41(9):988–90

Prolactin response to low–dose dexamethasone challenge in combat–exposed veterans with and without posttraumatic stress disorder and normal controls. Grossman R, et al. **Biol Psychiatry** 1996 Dec 1;40(11):1100–5

Early psychological reactions in a group of individuals with pre–existing and enduring mental health difficulties following a major coach accident. Chubb HL, et al. **Br J Psychiatry** 1996 Oct;169(4):430–3

Psychological sequelae of road traffic accidents: an inadequately addressed problem [editorial] Di Gallo A, et al. **Br J Psychiatry** 1996 Oct;169(4):405–7

Early traumatic stress reactions among Swedish survivors of the m/s Estonia disaster. Eriksson NG, et al. **Br J Psychiatry** 1996 Dec;169(6):713–6

Posttraumatic stress disorder, pulp fiction, and the press [see comments] Rosen GM. **Bull Am Acad Psychiatry Law** 1996; 24(2):267–9. Comment in: Bull Am Acad Psychiatry Law 1996;24(4):547.

Courts and torts: the psychiatrist preparing for trial. Hoffman BF. **Can J Psychiatry** 1997 Jun;42(5):497–501 (11 ref.)

Re: Posttraumatic stress disorder and motor vehicle accidents [letter; comment] Solursh LP, et al. **Can J Psychiatry** 1997 Mar;42(2):210. Comment on: Can J Psychiatry 1996 Sep;41(7):429–34.

Re: Recovered memories [letter; comment] Stein E, et al. **Can J Psychiatry** 1996 Oct;41(8):533–5. Comment on: Can J Psychiatry 1996 May;41(4):199–200.

Re: Posttraumatic stress disorder and motor vehicle accidents [letter; comment] Tyndel M, et al. **Can J Psychiatry** 1997 Mar;42(2):210. Comment on: Can J Psychiatry 1996 Sep;41(7):429–34.

Persistence of pediatric post traumatic stress disorder after 2 years. Famularo R, et al. **Child Abuse Negl** 1996 Dec; 20(12):1245–8

Baseline assessment of children traumatized by the Armenian earthquake. Azarian A, et al. **Child Psychiatry Hum Dev** 1996 Fall;27(1):29–41

Validation of the structured interview for disorders of extreme stress. Zlotnick C, et al. **Compr Psychiatry** 1997 Jul–Aug;38(4):243–7

Preliminary investigation of the role of previous exposure to potentially traumatizing events in generalized anxiety disorder. Roemer L, et al. **Depress Anxiety** 1996–97; 4(3):134–8

A prospective examination of delayed onset PTSD secondary to motor vehicle accidents. Buckley TC, et al. **J Abnorm Psychol** 1996 Nov;105(4):617–25

Long–term impact of exposure to suicide: a three–year controlled follow–up. Brent DA, et al. **J Am Acad Child Adolesc Psychiatry** 1996 May; 35(5):646–53

Relocation after a disaster: posttraumatic stress disorder in Armenia after the earthquake. Najarian LM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Mar;35(3):374–83

Fear of alien abduction [letter; comment] Shopper M. **J Am Acad Child Adolesc Psychiatry** 1996 May;35(5):555–7 . Comment on: J Am Acad Child Adolesc Psychiatry 1995 Aug;34(8):974–5.

Seven–year follow–up of child survivors of a bus–train collision. Tyano S, et al.

J Am Acad Child Adolesc Psychiatry 1996 Mar;35(3):365–73
Sexual violence, post-traumatic stress disorder and dementia. McCartney JR, et al. **J Am Geriatr Soc** 1997 Jan;45(1):76–8
On trauma, perversion, and "multiple personality". Brenner I. **J Am Psychoanal Assoc** 1996;44(3):785–814
Differentiating post-traumatic stress disorder (PTSD) from major depression (MDD) and generalized anxiety disorder (GAD). Keane TM, et al. **J Anxiety Disord** 1997 May–Jun; 11(3):317–28
Repairing the shattered self: recovering from trauma. Davidson JR. **J Clin Psychiatry** 1997;58 Suppl 9:3–4
Posttraumatic stress disorder. Friedman MJ. **J Clin Psychiatry** 1997;58 Suppl 9:33–6 (21 ref.)
Symptoms of posttraumatic stress in children after Hurricane Andrew: a prospective study. La Greca A, et al. **J Consult Clin Psychol** 1996 Aug;64(4):712–23
Long-term outcome of trauma in adults: the psychological impact of a fatal bus accident. Winje D. **J Consult Clin Psychol** 1996 Oct;64(5):1037–43
Type of trauma, severity of posttraumatic stress disorder core symptoms, and associated features. Amir M, et al. **J Gen Psychol** 1996 Oct;123(4):341–51
Psychological distress and intrusive thoughts in cancer patients. Baider L, et al. **J Nerv Ment Dis** 1997 May; 185(5):346–8
Posttraumatic reactions of hostages after an aircraft hijacking. Cremniter D, et al. **J Nerv Ment Dis** 1997 May;185(5):344–6
Diagnosing posttraumatic stress disorder in multicultural patients in a Stockholm psychiatric clinic. Ekblad S, et al. **J Nerv Ment Dis** 1997 Feb;185(2):102–7
Compounding of premigration trauma and postmigration stress in asylum seekers. Sinnerbrink I, et al. **J Psychol** 1997 Sep;131(5):463–70
Trauma research: a new era [editorial] Alexander DA. **J Psychosom Res** 1996 Jul;41(1):1–5 (20 ref.)
Posttraumatic stress disorder, tenderness and fibromyalgia. Amir M, et al. **J Psychosom Res** 1997 Jun;42(6):607–13
Psychological sequelae of mountain accidents: a preliminary study. Peck DF, et al. **J Psychosom Res** 1996 Jul; 41(1):55–63
Psychological sequelae of facial trauma. Bisson JI, et al. **J Trauma** 1997 Sep;43(3):496–500
Prediction of remission of acute posttraumatic stress disorder in motor vehicle accident victims. Blanchard EB, et al. **J Trauma Stress** 1997 Apr;10(2):215–34
Stress reactions in disaster victims following the Bijlmermeer plane crash. Carlier IV, et al. **J Trauma Stress** 1997 Apr; 10(2):329–35
Posttraumatic stress disorder and substance abuse: use of research in a clinical setting. Dansky BS, et al. **J Trauma Stress** 1997 Jan;10(1):141–8
Voluntary and professional disaster-workers: similarities and differences in reactions. Dyregrov A, et al. **J Trauma Stress** 1996 Jul;9(3):541–55
Screening for trauma history on an inpatient affective-disorders unit: a pilot study. Escalona R, et al. **J Trauma Stress** 1997 Apr;10(2):299–305
The validity of posttraumatic stress disorder among Vietnamese refugees. Fawzi MC, et al. **J Trauma Stress** 1997 Jan;10(1):101–8
MMPI profiles of acute and chronic PTSD in a civilian sample. Gaston L, et al. **J Trauma Stress** 1996 Oct; 9(4):817–32
Trauma-related symptomatology among American Indian adolescents. Jones MC, et al. **J Trauma Stress** 1997 Apr; 10(2):163–73
Complex posttraumatic stress disorder: an exploratory investigation of PTSD and DES NOS among Dutch war veterans. Jongedijk RA, et al. **J Trauma Stress** 1996 Jul; 9(3):577–86
PTSD: how frequently should the symptoms occur? The effect on epidemiologic research. Karam EG, et al. **J Trauma Stress** 1996 Oct;9(4):899–905
Dissociative responses in the immediate aftermath of the Oakland/Berkeley firestorm. Koopman C, et al. **J Trauma Stress** 1996 Jul;9(3):521–40
Posttraumatic symptoms in South African police exposed to violence. Kopel H, et al. **J Trauma Stress** 1997 Apr; 10(2):307–17
Development and validation of the sources of trauma-related guilt survey-war-zone version. Kubany ES, et al. **J Trauma Stress** 1997 Apr;10(2):235–58
Psychometric properties of the Civilian version of the Mississippi PTSD Scale. Lauterbach D, et al. **J Trauma Stress** 1997 Jul;10(3):499–513
The impact of the Holocaust on the second generation: Norwegian Jewish Holocaust survivors and their children. Major EF. **J Trauma Stress** 1996 Jul;9(3):441–54
Modification of CAPS-1 for diagnosis of PTSD in Afghan refugees. Malekzai AS, et al. **J Trauma Stress** 1996 Oct; 9(4):891–8
Thematic resolution, PTSD, and complex PTSD: the relationship between meaning and trauma-related diagnoses. Newman E, et al. **J Trauma Stress** 1997 Apr; 10(2):197–213
Development of a criteria set and a structured interview for disorders of extreme stress (SIDES). Pelcovitz D, et al. **J Trauma Stress** 1997 Jan;10(1):3–16
Assessing the effects of violence on women in battering relationships with the Keane MMPI-PTSD Scale. Perrin S, et al. **J Trauma Stress** 1996 Oct;9(4):805–16
Experiences of torture and ill-treatment and posttraumatic stress disorder symptoms among Palestinian political prisoners. el Sarraj E, et al. **J Trauma Stress** 1996 Jul; 9(3):595–606
Mental defenses and posttraumatic stress disorder: assessment of criminal intent. Sparr LF. **J Trauma Stress** 1996 Jul; 9(3):405–25 (100 ref.)
The Posttraumatic Growth Inventory: measuring the positive legacy of trauma. Tedeschi RG, et al. **J Trauma Stress** 1996 Jul;9(3):455–71
Childhood trauma histories in adolescent inpatients. Weine SM, et al. **J Trauma Stress** 1997 Apr;10(2):291–8
Individual differences in posttraumatic stress disorder symptom profiles in Holocaust survivors in concentration camps or in hiding. Yehuda R, et al. **J Trauma Stress** 1997 Jul;10(3):453–63
Post-traumatic stress disorder: what's in a name? [letter] Synnott IH. **Med J Aust** 1997 Jan 20;166(2):111–2
Psychiatry in trauma care [letter; comment] Ayonrinde OA. **Postgrad Med J** 1997 Mar;73(857):190. Comment on: Postgrad Med J 1996 Oct;72(852):587–93.
Quality and use of trauma histories obtained from psychiatric outpatients through mandated inquiry [see comments] Eilenberg J, et al. **Psychiatr Serv** 1996 Feb;47(2):165–9. Comment in: Psychiatr Serv 1996 Jul;47(7):764–5.
Underdiagnosis of PTSD and substance use disorders in hospitalized female veterans. Grossman LS, et al. **Psychiatr Serv** 1997 Mar;48(3):393–5
Traumatic reactions as predictors of posttraumatic stress six months after the Oklahoma City bombing. Tucker P, et al. **Psychiatr Serv** 1997 Sep;48(9):1191–4
Assessment of a new self-rating scale for post-traumatic stress disorder. Davidson JR, et al. **Psychol Med** 1997 Jan; 27(1):153–60
Social desirability in the assessment of trauma. Brunet A, et al. **Psychol Rep** 1996 Oct;79(2):511–4
Does the MMPI PTSD-PK scale measure robustness? Sinnett ER, et al. **Psychol Rep** 1996 Aug;79(1):211–7
Catatonia as an unusual presentation of posttraumatic stress disorder. Shiloh R, et al. **Psychopathology** 1995; 28(6):285–90
Identification of PTSD in cancer survivors. Alter CL, et al. **Psychosomatics** 1996 Mar–Apr;37(2):137–43
Posttrauma symptoms in childhood leukemia survivors and their parents. Stuber ML, et al. **Psychosomatics** 1996 May–Jun;37(3):254–61
Guidelines to the management of disability claims on psychiatric grounds [letter; comment] Kaplan R. **S Afr Med J** 1996 Dec;86(12 Suppl):1614. Comment on: S Afr Med J 1996 Jun;86(6):646.
Factor analysis of the impact of event scale with children in war. Dyregrov A, et al. **Scand J Psychol** 1996 Dec; 37(4):339–50
Pseudoseizures and dissociative disorders: a common mechanism involving traumatic experiences. Harden CL. **Seizure** 1997 Apr;6(2):151–5
Doctors' knowledge of post traumatic neurosis. Daly O. **Ulster Med J** 1997 May;66(1):28–33
[Post-traumatic stress disorders] Ponteva M, et al. **Duodecim** 1995;111(17):1697–700 **(Fin)**
[Trauma diagnosis: difficulty in differentiating between recall and fantasy] Person ES, et al. **Psychother Psychosom Med Psychol** 1997 Mar–Apr; 47(3–4):97–107 (31 ref.) (Eng. Abstr.) **(Ger)**
[Post-traumatic stress disorders in childhood—diagnosis, prognostic predictors and therapeutic strategies] Schepker R. **Z Kinder Jugenpsychiatr** 1997 Mar;25(1):46–56 (65 ref.) **(Ger)**
[PTSD--diagnostic criteria, clinical and certification application] Heitzman J. **Psychiatr Pol** 1995 Nov–Dec; 29(6):751–66 (31 ref.) (Eng. Abstr.) **(Pol)**
[Standardization of the scale for evaluation of psychopathologic sequelae of traumatic stress] Mićović M, et al. **Vojnosanit Pregl** 1996 May–Jun;53(3):201–8 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Antidepressant treatment of posttraumatic stress disorder and major depression in veterans. Dow B, et al. **Ann Clin Psychiatry** 1997 Mar;9(1):1–5
Drug treatment for PTSD. Answers and questions. Friedman MJ. **Ann N Y Acad Sci** 1997 Jun 21;821:359–71 (50 ref.)
Pharmacotherapy of dissociative identity disorder [editorial] Markowitz JS, et al. **Ann Pharmacother** 1996 Dec; 30(12):1498–9
Inositol treatment of post-traumatic stress disorder. Kaplan Z, et al. **Anxiety** 1996;2(1):51–2
Pharmacotherapy of post-traumatic stress disorder with a novel psychotropic. Katz RJ, et al. **Anxiety** 1994–95; 1(4):169–74
A review of the psychobiology and pharmacotherapy of posttraumatic stress disorder. Katz L, et al. **Can J Psychiatry** 1996 May;41(4):233–8 (46 ref.)
Current status of pharmacotherapy for PTSD: an effect size analysis of controlled studies. Penava SJ, et al. **Depress Anxiety** 1996–97;4(5):240–2 (22 ref.)
The eight-item treatment-outcome post-traumatic stress disorder scale: a brief measure to assess treatment outcome in post-traumatic stress disorder. Davidson JR, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):41–5
Risperidone and tardive dyskinesia [letter] [see comments] Feeney DJ, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Nov;35(11):1421–2. Comment in: J Am Acad Child Adolesc Psychiatry 1997 Jul;36(7):867.
Clonidine for posttraumatic stress disorder in preschool children. Harmon RJ, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Sep;35(9):1247–9
Biological therapies for posttraumatic stress disorder: an overview. Davidson JR. **J Clin Psychiatry** 1997;58 Suppl 9:29–32 (20 ref.)
Dystonia associated with trazodone and sertraline [letter] Lewis CF, et al. **J Clin Psychopharmacol** 1997 Feb; 17(1):64–5
The use of anticonvulsants in posttraumatic stress disorder: case study and overview. Ford N. **J Trauma Stress** 1996 Oct;9(4):857–63
Sertraline in the treatment of rape victims with posttraumatic stress disorder. Rothbaum BO, et al. **J Trauma Stress** 1996 Oct;9(4):865–71
Pharmacological management of post-traumatic stress disorder: clinical summary of a five-year retrospective study, 1990–1995. Viola J, et al. **Mil Med** 1997 Sep; 162(9):616–9
Treatment of posttraumatic stress disorder: a review [see comments] Shalev AY, et al. **Psychosom Med** 1996 Mar–Apr;58(2):165–82. Comment in: Psychosom Med 1997 Jan–Feb;59(1):70–1. Comment in: Psychosom Med 1997 Jan–Feb;59(1):71.

EPIDEMIOLOGY

The validity of screening for post-traumatic stress disorder and major depression among Vietnamese former political prisoners. Smith Fawzi MC, et al. **Acta Psychiatr Scand** 1997 Feb;95(2):87–93
Exposure to violence and post-traumatic stress disorder in urban adolescents. Berton MW, et al. **Adolescence** 1996 Summer;31(122):489–98
Prevalence and risk factors for posttraumatic stress disorder among chemically dependent adolescents. Deykin EY, et al. **Am J Psychiatry** 1997 Jun;154(6):752–7
Peacekeeping duty and PTSD [letter] Hall DP Jr. **Am J Psychiatry** 1997 Oct;154(10):1482–3
Posttraumatic stress disorder associated with peacekeeping duty in Somalia for U.S. military personnel [published erratum appears in Am J Psychiatry 1997 May;154(5):722] Litz BT, et al. **Am J Psychiatry** 1997 Feb;154(2):178–84
Full and partial posttraumatic stress disorder: findings from a community survey. Stein MB, et al. **Am J Psychiatry** 1997 Aug;154(8):1114–9
Comorbid psychiatric disorders in PTSD. Implications for research. Keane TM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:24–34 (30 ref.)
Is simple screening effective in detecting cases of obsessive-compulsive disorder and post-traumatic stress disorder? [letter] Birchall HM. **Anxiety** 1994–95;1(3):148–9
Psychiatric sequelae of posttraumatic stress disorder in women. Breslau N, et al. **Arch Gen Psychiatry** 1997 Jan; 54(1):81–7
Psychiatric morbidity in Australian veterans of the United Nations peacekeeping force in Somalia. Ward W. **Aust N Z J Psychiatry** 1997 Apr;31(2):184–93
Antecedents and consequences of acute stress disorder among motor vehicle accident victims. Barton KA, et al. **Behav Res Ther** 1996 Oct;34(10):805–13
One-year prospective follow-up of motor vehicle accident victims. Blanchard EB, et al. **Behav Res Ther** 1996 Oct; 34(10):775–86
Psychiatric comorbidity in childhood post traumatic stress disorder. Famularo R, et al. **Child Abuse Negl** 1996 Oct; 20(10):953–61
Unique patterns of comorbidity in posttraumatic stress disorder from different sources of trauma. Deering CG, et al. **Compr Psychiatry** 1996 Sep–Oct;37(5):336–46
Seasonal pattern of posttraumatic stress disorder admissions [letter; comment] Newman E, et al. **Compr Psychiatry** 1996 Jul–Aug;37(4):305. Comment on: Compr Psychiatry 1996 Jan–Feb;37(1):40–2.
Traumatic events and post-traumatic stress disorder in cocaine users entering private treatment. Wasserman DA, et al. **Drug Alcohol Depend** 1997 Jun 6;46(1–2):1–8
PTSD among women survivors of domestic violence in Hawaii. Kubany ES, et al. **Hawaii Med J** 1996 Sep; 55(9):164–5
Effects of war trauma on Cambodian refugee adolescents' functional health and mental health status. Mollica RF, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1098–106
Relocation after a disaster: posttraumatic stress disorder in Armenia after the earthquake. Najarian LM, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Mar;35(3):374–83
Does PTSD transcend cultural barriers? A study from the Khmer Adolescent Refugee Project. Sack WH, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Jan;36(1):49–54
The Khmer Adolescent Project: III. A study of trauma from Thailand's Site II refugee camp. Savin D, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Mar;35(3):384–91
Posttraumatic stress disorder and comorbidity: recognizing the many faces of PTSD. Brady KT. **J Clin Psychiatry** 1997;58 Suppl 9:12–5 (23 ref.)
Trauma and women: course, predictors, and treatment. Foa EB. **J Clin Psychiatry** 1997;58 Suppl 9:25–8 (11 ref.)
Comorbidity of posttraumatic stress disorder and irritable bowel syndrome. Irwin C, et al. **J Clin Psychiatry** 1996 Dec;57(12):576–8
Trauma: prevalence, impairment, service use, and cost.

Solomon SD, et al. **J Clin Psychiatry** 1997;58 Suppl 9:5–11 (30 ref.)

Posttraumatic stress, family functioning, and social support in survivors of childhood leukemia and their mothers and fathers. Kazak AE, et al. **J Consult Clin Psychol** 1997 Feb; 65(1):120–9

Risk factors for posttraumatic stress symptomatology in police officers: a prospective analysis. Carlier IV, et al. **J Nerv Ment Dis** 1997 Aug;185(8):498–506

Serious on-the-track accidents experienced by train drivers: psychological reactions and long-term health effects. Vatshelle A, et al. **J Psychosom Res** 1997 Jan;42(1):43–52

Characteristics of posttraumatic stress disorder–alcohol abuse comorbidity in women. Ouimette PC, et al. **J Subst Abuse** 1996;8(3):335–46

Psychiatric morbidity following Hurricane Andrew. David D, et al. **J Trauma Stress** 1996 Jul;9(3):607–12

Extent of victimization, traumatic stress symptoms, and adjustment of terrorist assault survivors: a long-term follow-up. Desivilya HS, et al. **J Trauma Stress** 1996 Oct; 9(4):881–9

PTSD: how frequently should the symptoms occur? The effect on epidemiologic research. Karam EG, et al. **J Trauma Stress** 1996 Oct;9(4):899–905

Trauma-related disorders in psychiatrists' and general practitioners' private practice in Switzerland. Schnyder U, et al. **J Trauma Stress** 1996 Jul;9(3):631–41

Appraisal of life threat and acute trauma responses in pediatric bone marrow transplant patients. Stuber ML, et al. **J Trauma Stress** 1996 Oct;9(4):673–86

The epidemic of post-traumatic stress disorder: a passing phase? Ellard JH. **Med J Aust** 1997 Jan 20;166(2):84–7 (13 ref.)

Post-traumatic stress disorder symptoms among Gulf War veterans. Stretch RH, et al. **Mil Med** 1996 Jul;161(7):407–10

Prevalence and characteristics of physical and sexual abuse among psychiatric outpatients. Lipschitz DS, et al. **Psychiatr Serv** 1996 Feb;47(2):189–91

A survey of fears associated with Iraqi aggression among Kuwaiti children and adolescents: a factorial study 5.7 years after the Gulf War. Abdel-Khalek AM. **Psychol Rep** 1997 Aug;81(1):247–55

Posttraumatic stress disorder in mothers of pediatric cancer survivors. Pelcovitz D, et al. **Psychosomatics** 1996 Mar-Apr;37(2):116–26

A synthesis of the findings from the Quake Impact Study: a two-year investigation of the psychosocial sequelae of the 1989 Newcastle earthquake. Carr VJ, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Apr;32(3):123–36

Psychiatric morbidity following a natural disaster: an Australian bushfire. McFarlane AC, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):261–8

The influence of exile and repatriation on mental and physical health. A population-based study. Sundquist J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Jan;31(1):21–8

ETHNOLOGY

A prospective study of psychological distress related to refugee camp experience. McKelvey RS, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):549–54

From PTSD to voices in context: from an "experience-far" to an "experience-near" understanding of responses to war and atrocity across cultures. Zur J. **Int J Soc Psychiatry** 1996 Winter;42(4):305–17

The validity of posttraumatic stress disorder among Vietnamese refugees. Fawzi MC, et al. **J Trauma Stress** 1997 Jan;10(1):101–8

The impact of Hurricane Andrew on deviant behavior among a multi-racial/ethnic sample of adolescents in Dade County, Florida: a longitudinal analysis. Khoury EL, et al. **J Trauma Stress** 1997 Jan;10(1):71–91

ETIOLOGY

Psychosocial sequelae of motor vehicle collisions: a follow-up study. Vingilis E, et al. **Accid Anal Prev** 1996 Sep;28(5):637–45

Childhood physical assault as a risk factor for PTSD, depression, and substance abuse: findings from a national survey. Duncan RD, et al. **Am J Orthopsychiatry** 1996 Jul; 66(3):437–48

PTSD after a peacekeeping mission [letter] Ehlich PJ, et al. **Am J Psychiatry** 1997 Sep;154(9):1319–20

Traumatophilic diathesis, complemental series, and the original conceptual basis of PTSD [letter; comment] [published erratum appears in Am J Psychiatry 1997 Apr;154(4):590] Good MI. **Am J Psychiatry** 1997 Feb; 154(2):296. Comment on: Am J Psychiatry 1995 Dec;152(12):1705–13.

Posttraumatic stress disorder among female Vietnam veterans: a causal model of etiology. Fontana A, et al. **Am J Public Health** 1997 Feb;87(2):169–75

Relationship between level of spinal cord injury and posttraumatic stress disorder symptoms. Binks TM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:430–2

Neurological status of combat veterans and adult survivors of sexual abuse PTSD. Gurvits TV, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:468–71

The role of early adverse life events in the etiology of depression and posttraumatic stress disorder. Focus on corticotropin-releasing factor. Heim C, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:194–207 (92 ref.)

One-year prospective follow-up of motor vehicle accident victims. Blanchard EB, et al. **Behav Res Ther** 1996 Oct; 34(10):775–86

Post-traumatic stress disorder may follow childbirth [news] Goldbeck-Wood S. **BMJ** 1996 Sep 28;313(7060):774

Post-traumatic stress disorder following minor and severe closed head injury: 10 single cases. McMillan TM. **Brain Inj** 1996 Oct;10(10):749–58

Post-traumatic stress disorder after childbirth: the phenomenon of traumatic birth. Reynolds JL. **Can Med Assoc J** 1997 Mar 15;156(6):831–5 (32 ref.)

What determines post-traumatic stress disorder symptomatology for survivors of childhood sexual abuse? Briggs L, et al. **Child Abuse Negl** 1997 Jun;21(6):575–82

Posttraumatic stress disorder in a clinical sample of adult survivors of childhood sexual abuse. Rodriguez N, et al. **Child Abuse Negl** 1996 Oct;20(10):943–52

Rape-related psychotraumatic syndromes. Darves-Bornoz JM. **Eur J Obstet Gynecol Reprod Biol** 1997 Jan;71(1):59–65

Prevalence and predictors of depression and anxiety-related disorders during the year after heart transplantation. Dew MA, et al. **Gen Hosp Psychiatry** 1996 Nov;18(6 Suppl):48S–61S

PTSD among women survivors of domestic violence in Hawaii. Kubany ES, et al. **Hawaii Med J** 1996 Sep; 55(9):164–5

Media triggers of post-traumatic stress disorder 50 years after the Second World War. Hilton C. **Int J Geriatr Psychiatry** 1997 Aug;12(8):862–7

Symptomatology and adaptive functioning for children exposed to normative stressors, dog attack, and parental violence. Rossman BR, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1089–97

Sexual violence, post-traumatic stress disorder and dementia. McCartney JR, et al. **J Am Geriatr Soc** 1997 Jan;45(1):76–8

Seduction trauma: representation, deferred action, and pathogenic development. Blum HP. **J Am Psychoanal Assoc** 1996;44(4):1147–64

Suggestion and veridicality in the reconstruction of sexual trauma, or can a bait of suggestion catch a carp of falsehood? Good MI. **J Am Psychoanal Assoc** 1996; 44(4):1189–224

Results of a hospital survey to determine the extent and type of psychologic services offered to patients with severe burns. Holaday M, et al. **J Burn Care Rehabil** 1996 May-Jun;17(3):280–4

Posttraumatic stress disorder in adult female survivors of childhood sexual abuse: a comparison study. Rodriguez N, et al. **J Consult Clin Psychol** 1997 Feb;65(1):53–9

Posttraumatic stress disorder in patients with traumatic brain injury and amnesia for the event? Warden DL, et al. **J Neuropsychiatry Clin Neurosci** 1997 Winter;9(1):18–22

Short-term cognitive-behavioral treatment of hypoactive sexual desire in an individual with a history of childhood sexual abuse. Bass BA. **J Sex Marital Ther** 1996 Winter; 22(4):284–9

Development of a criteria set and a structured interview for disorders of extreme stress (SIDES). Pelcovitz D, et al. **J Trauma Stress** 1997 Jan;10(1):3–16

The effect of different traumatic experiences on the development of post-traumatic stress disorder. Delimar D, et al. **Mil Med** 1995 Dec;160(12):635–9

The sequelae of childhood sexual abuse: a primary care focus for adult female survivors. Roberts SJ. **Nurse Pract** 1996 Dec;21(12 Pt 1):42, 45, 49–52 (26 ref.)

Posttraumatic distress in children and families after intubation. Gavin LA, et al. **Pediatr Emerg Care** 1997 Jun; 13(3):222–4

Posttrauma symptoms in childhood leukemia survivors and their parents. Stuber ML, et al. **Psychosomatics** 1996 May-Jun;37(3):254–61

[Post-traumatic stress disorder following violent events at the workplace. Experiences with patients referred to a department of occupational medicine] Thomsen JF, et al. **Ugeskr Laeger** 1996 Nov 4;158(45):6461–6 (Eng. Abstr.) **(Dan)**

[Post-traumatic stress syndrome in surgery of the hand] Smaga D, et al. **Ann Chir Main Memb Super** 1997; 16(1):25–31 (Eng. Abstr.) **(Fre)**

[Syndrome secondary to post-traumatic stress disorder and addictive behaviors] Darves-Bornoz JM, et al. **Ann Med Psychol (Paris)** 1996 Jun;154(3):190–4 (Eng. Abstr.) **(Fre)**

GENETICS

Familial risk factors in posttraumatic stress disorder. Connor KM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:35–51 (64 ref.)

Dopamine D2 receptor (DRD2) gene and susceptibility to posttraumatic stress disorder: a study and replication. Comings DE, et al. **Biol Psychiatry** 1996 Sep 1;40(5):368–72

HISTORY

Responses of mental health professionals to man-made trauma: the Israeli experience. Solomon Z. **Soc Sci Med** 1996 Sep;43(5):769–74

[Traffic accidents from the social medicine viewpoint--a medical history connection with present time] Hausotter W. **Swiss Surg** 1997;3(4):142–8 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Posttraumatic stress symptoms, intrusive thoughts, loss, and immune function after Hurricane Andrew [see comments] Ironson G, et al. **Psychosom Med** 1997 Mar-Apr; 59(2):128–41. Comment in: Psychosom Med 1997 Mar-Apr;59(2):142–3.

Disaster: stress, immunologic function, and health behavior [editorial; comment] Ursano RJ. **Psychosom Med** 1997 Mar-Apr;59(2):142–3. Comment on: Psychosom Med 1997 Mar-Apr;59(2):109–13. Comment on: Psychosom Med 1997 Mar-Apr;59(2):114–27. Comment on: Psychosom Med 1997 Mar-Apr;59(2):128–41.

METABOLISM

Stressor-induced oscillation. A possible model of the bidirectional symptoms in PTSD. Antelman SM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:296–304 (21 ref.)

The dexamethasone suppression test and glucocorticoid receptors in borderline personality disorder. Grossman R, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:459–64

The role of early adverse life events in the etiology of depression and posttraumatic stress disorder. Focus on corticotropin-releasing factor. Heim C, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:194–207 (92 ref.)

Salivary cortisol and PTSD symptoms in Persian Gulf War combatants. Kellner M, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:442–3

Posttraumatic stress and depression. A neurochemical anatomy of the learned helplessness animal model. Petty F, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:529–32

Serotonergic modulation of learned helplessness. Petty F, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:538–41

Functional neuroimaging studies in posttraumatic stress disorder. Rauch SL, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:83–98 (49 ref.)

Positron emission tomography measurement of cerebral metabolic correlates of yohimbine administration in combat-related posttraumatic stress disorder. Bremner JD, et al. **Arch Gen Psychiatry** 1997 Mar;54(3):246–54

Altered platelet peripheral-type benzodiazepine receptor in posttraumatic stress disorder. Gavish M, et al. **Neuropsychopharmacology** 1996 Mar;14(3):181–6

NURSING

Posttraumatic stress disorder: how to support healing. Clark CC. **Am J Nurs** 1997 Aug;97(8):26–32; quiz 33 (10 ref.)

Critical incident stress debriefing and the community health nurse. Hollister R. **J Community Health Nurs** 1996; 13(1):43–9 (11 ref.)

PATHOLOGY

Structural brain changes in PTSD. Does trauma alter neuroanatomy? Stein MB, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:76–82 (59 ref.)

Magnetic resonance imaging study of hippocampal volume in chronic, combat-related posttraumatic stress disorder. Gurvits TV, et al. **Biol Psychiatry** 1996 Dec 1; 40(11):1091–9

PHYSIOPATHOLOGY

How the brain processes emotional information. Armony JL, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:259–70 (87 ref.)

Interest of events-related potentials in assessment of posttraumatic stress disorder. Boudarene M, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:494–8

The neurobiology of emotionally influenced memory. Implications for understanding traumatic memory. Cahill L. **Ann N Y Acad Sci** 1997 Jun 21;821:238–46 (41 ref.)

Roles of the amygdala and bed nucleus of the stria terminalis in fear and anxiety measured with the acoustic startle reflex. Possible relevance to PTSD. Davis M, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:305–31 (76 ref.)

Psychological processes related to recovery from a trauma and an effective treatment for PTSD. Foa EB. **Ann N Y Acad Sci** 1997 Jun 21;821:410–24 (41 ref.)

Psychophysiologic parameters of traumatic stress disorder in rats. Garrick T, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:533–7

Abnormal cerebral laterality in posttraumatic stress disorder. Gerhards F, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:482–5

Neurological status of combat veterans and adult survivors of sexual abuse PTSD. Gurvits TV, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:468–71

The prevalence and longitudinal course of PTSD. Implications for the neurobiological models of PTSD. McFarlane AC. **Ann N Y Acad Sci** 1997 Jun 21;821:10–23 (49 ref.)

Psychobiology of sleep disturbances in posttraumatic stress disorder. Mellman TA. **Ann N Y Acad Sci** 1997 Jun 21; 821:142–9 (44 ref.)

Evidence for diminished P3 amplitudes in PTSD. Metzger LJ, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:499–503

Startle deficits in women with sexual assault-related PTSD. Morgan CA 3rd, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:486–90

The psychobiology of posttraumatic stress disorder: an overview. Murburg MM. **Ann N Y Acad Sci** 1997 Jun 21; 821:352–8 (34 ref.)

Psychophysiologic assessment of PTSD in adult females sexually abused during childhood. Orr SP, et al.

Ann N Y Acad Sci 1997 Jun 21;821:491–3

Psychophysiologic reactivity to trauma–related imagery in PTSD. Diagnostic and theoretical implications of recent findings. Orr SP. **Ann N Y Acad Sci** 1997 Jun 21;821:114–24 (31 ref.)

Overview of biological themes in PTSD. Pitman RK. **Ann N Y Acad Sci** 1997 Jun 21;821:1–9 (27 ref.)

Kindling versus quenching. Implications for the evolution and treatment of posttraumatic stress disorder. Post RM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:285–95 (50 ref.)

Issues in the developmental neurobiology of traumatic stress. Pynoos RS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:176–93 (52 ref.)

Noradrenergic alterations in posttraumatic stress disorder. Southwick SM, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:125–41 (115 ref.)

The psychobiology of traumatic memory. Clinical implications of neuroimaging studies. Van Der Kolk BA, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:99–113 (58 ref.)

Sensitization of the hypothalamic–pituitary–adrenal axis in posttraumatic stress disorder. Yehuda R. **Ann N Y Acad Sci** 1997 Jun 21;821:57–75 (83 ref.)

Noradrenergic and serotonergic function in posttraumatic stress disorder. Southwick SM, et al. **Arch Gen Psychiatry** 1997 Aug;54(8):749–58

Blockade of CCK(B) but not CCK(A) receptors before and after the stress of predator exposure prevents lasting increases in anxiety–like behavior: implications for anxiety associated with posttraumatic stress disorder. Adamec RE, et al. **Behav Neurosci** 1997 Apr;111(2):435–49

Early avoidance of traumatic stimuli predicts chronicity of intrusive thoughts following burn injury. Lawrence JW, et al. **Behav Res Ther** 1996 Aug;34(8):643–6

Event–related potentials in post–traumatic stress disorder of combat origin. Attias J, et al. **Biol Psychiatry** 1996 Sep 1;40(5):373–81

Power spectral analysis of heart rate variability in posttraumatic stress disorder patients. Cohen H, et al. **Biol Psychiatry** 1997 Mar 1;41(5):627–9

Burn injuries, pain and distress: exploring the role of stress symptomatology. Taal LA, et al. **Burns** 1997 Jun; 23(4):288–90

An event–related brain potential investigation of PTSD and PTSD symptoms in abused children. McPherson WB, et al. **Integr Physiol Behav Sci** 1997 Jan–Mar;32(1):31–42

Seeking the source of emotional Stroop interference effects in PTSD: a study of P3s to traumatic words. Metzger LJ, et al. **Integr Physiol Behav Sci** 1997 Jan–Mar;32(1):43–51

Heart rate during group flooding therapy for PTSD. Woodward SH, et al. **Integr Physiol Behav Sci** 1997 Jan–Mar;32(1):19–30

The inner world in the outer world: the phenomenology of posttraumatic stress disorder from a psychoanalytic perspective. Emery PE. **J Am Acad Psychoanal** 1996 Summer;24(2):273–91

The psychobiology of posttraumatic stress disorder. van der Kolk BA. **J Clin Psychiatry** 1997;58 Suppl 9:16–24 (75 ref.)

Post–traumatic stress disorder and head injury as a dual diagnosis: "islands" of memory as a mechanism. King NS. **J Neurol Neurosurg Psychiatry** 1997 Jan;62(1):82–4

The psychobiological basis of posttraumatic stress disorder. Grillon C, et al. **Mol Psychiatry** 1996 Sep;1(4):278–97 (258 ref.)

Assessment of noradrenergic functioning in patients with non–combat–related posttraumatic stress disorder: a study with desmethylimipramine and orthostatic challenges. Yatham LN, et al. **Psychiatry Res** 1996 Jun 26;63(1):1–6

Persistent changes in corticotropin–releasing factor systems due to early life stress: relationship to the pathophysiology of major depression and post–traumatic stress disorder. Heim C, et al. **Psychopharmacol Bull** 1997;33(2):185–92 (63 ref.)

The treatment of posttraumatic stress disorder (PTSD) [letter; comment] Glover H. **Psychosom Med** 1997 Jan–Feb; 59(1):70–1. Comment on: Psychosom Med 1996 Mar–Apr;58(2):165–82.

[Complex memory function for mental trauma. Memory and forgetting ae necessary for the emotional adaptation process] Christianson SA, et al. **Lakartidningen** 1997 Apr 30;94(18):1721–4 (20 ref.) **(Swe)**

PREVENTION & CONTROL

The violence of despair: consultation to a HeadStart program following the Los Angeles uprising of 1992. Stuber ML, et al. **Community Ment Health J** 1997 Jun;33(3):235–41

Community mental health and torture survivors. Bhattacharya D. **J Indian Med Assoc** 1996 Jul;94(7):266, 269

Crisis support following the Herald of Free–Enterprise disaster: a longitudinal perspective. Dalgleish T, et al. **J Trauma Stress** 1996 Oct;9(4):833–45

Preventing post–traumatic stress disorders in military medical personnel. Baker MS, et al. **Mil Med** 1996 May;161(5):262–4 (16 ref.)

Helping the helpers after the bombing in Dhahran: critical–incident stress services for an air rescue squadron. Budd MF. **Mil Med** 1997 Aug;162(8):515–20

The Fort Bragg Sniper Attack and Mental Health Response. Hall DP, et al. **Mil Med** 1997 Sep;162(9):579–81

Status and development of critical incident stress management services in the United Kingdom National Health Service and other emergency services combined: 1993–1996. Orner RJ, et al. **Occup Med (Oxf)** 1997 May; 47(4):203–9

[Sensitivity training for debriefing in the school context] Leuenberger JF. **Rev Med Suisse Romande** 1997 May; 117(5):413–8 (0 ref.) **(Fre)**

[In times of survival, the right of silence] Métraux JC. **Rev Med Suisse Romande** 1997 May;117(5):419–23 (7 ref.) **(Fre)**

[Prevention and therapy of post–traumatic disorders from a biopsychosocial viewpoint] Schnyder U. **Schweiz Rundsch Med Prax** 1996 Dec 10;85(50):1603–8 (43 ref.) (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Post–traumatic symptoms among younger and elderly evacuees in the early stages following the 1995 Hanshin–Awaji earthquake in Japan. Kato H, et al. **Acta Psychiatr Scand** 1996 Jun;93(6):477–81

Our bodies, our selves: treating the somatic expressions of trauma with ego–state therapy. Phillips M. **Am J Clin Hypn** 1995 Oct;38(2):109–21

Self–injury in trauma survivors: 1. functions and meanings. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):197–206 (50 ref.)

Self–injury in trauma survivors: 2. levels of clinical response. Connors R. **Am J Orthopsychiatry** 1996 Apr;66(2):207–16 (34 ref.)

Childhood physical assault as a risk factor for PTSD, depression, and substance abuse: findings from a national survey. Duncan RD, et al. **Am J Orthopsychiatry** 1996 Jul; 66(3):437–48

Neglected victims of homicide: the needs of young siblings of murder victims. Freeman LN, et al. **Am J Orthopsychiatry** 1996 Jul;66(3):337–45 (30 ref.)

Trauma and its sequelae in male prisoners: effects of confinement, overcrowding, and diminished services. Kupers TA. **Am J Orthopsychiatry** 1996 Apr;66(2):189–96 (65 ref.)

Post–traumatic stress symptoms in mothers following children's reports of sexual abuse: an exploratory study. Timmons–Mitchell J, et al. **Am J Orthopsychiatry** 1996 Jul; 66(3):463–7

Effects of war on the behavior of Lebanese preschool children: influence of home environment and family functioning. Zahr LK. **Am J Orthopsychiatry** 1996 Jul; 66(3):401–8

Objective assessment of peritraumatic dissociation: psychophysiological indicators. Griffin MG, et al. **Am J Psychiatry** 1997 Aug;154(8):1081–8

Unusual flashbacks in a Vietnam veteran [letter] Mayer P, et al. **Am J Psychiatry** 1997 May;154(5):713

The attachment–trauma complex. Purcell WJ. **Am J Psychoanal** 1996 Dec;56(4):435–46

Stressor–induced oscillation. A possible model of the bidirectional symptoms in PTSD. Antelman SM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:296–304 (21 ref.)

How the brain processes emotional information. Armony JL, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:259–70 (87 ref.)

The neurobiology of emotionally influenced memory. Implications for understanding traumatic memory. Cahill L. **Ann N Y Acad Sci** 1997 Jun 21;821:238–46 (41 ref.)

Familial risk factors in posttraumatic stress disorder. Connor KM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:35–51 (64 ref.)

Roles of the amygdala and bed nucleus of the stria terminalis in fear and anxiety measured with the acoustic startle reflex. Possible relevance to PTSD. Davis M, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:305–31 (76 ref.)

Psychological processes related to recovery from a trauma and an effective treatment for PTSD. Foa EB. **Ann N Y Acad Sci** 1997 Jun 21;821:410–24 (41 ref.)

Psychophysiologic parameters of traumatic stress disorder in rats. Garrick T, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:533–7

Effects of isolation–rearing on acoustic startle and pre–pulse inhibition in Wistar and fawn hooded rats. Hall FS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:542–4

Behavioral and plasma cortisol responses to sodium lactate infusion in posttraumatic stress disorder. Jensen CF, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:444–8

The acute stress response following motor vehicle accidents and its relation to PTSD. McFarlane AC, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:437–41

The prevalence and longitudinal course of PTSD. Implications for the neurobiological models of PTSD. McFarlane AC. **Ann N Y Acad Sci** 1997 Jun 21;821:10–23 (49 ref.)

Implicit and explicit memory for trauma–related information in PTSD. McNally RJ. **Ann N Y Acad Sci** 1997 Jun 21; 821:219–24 (23 ref.)

Psychobiology of sleep disturbances in posttraumatic stress disorder. Mellman TA. **Ann N Y Acad Sci** 1997 Jun 21; 821:142–9 (44 ref.)

Startle deficits in women with sexual assault–related PTSD. Morgan CA 3rd, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:486–90

The psychobiology of posttraumatic stress disorder: an overview. Murburg MM. **Ann N Y Acad Sci** 1997 Jun 21; 821:352–8 (34 ref.)

Psychophysiologic assessment of PTSD in adult females sexually abused during childhood. Orr SP, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:491–3

Psychophysiologic reactivity to trauma–related imagery in PTSD. Diagnostic and theoretical implications of recent findings. Orr SP. **Ann N Y Acad Sci** 1997 Jun 21;821:114–24 (31 ref.)

Posttraumatic stress and depression. A neurochemical anatomy of the learned helplessness animal model. Petty F, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:529–32

Serotonergic modulation of learned helplessness. Petty F, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:538–41

Kindling versus quenching. Implications for the evolution and treatment of posttraumatic stress disorder. Post RM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:285–95 (50 ref.)

Functional neuroimaging studies in posttraumatic stress disorder. Rauch SL, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:83–98 (49 ref.)

Acute post–rape plasma cortisol, alcohol use, and PTSD symptom profile among recent rape victims. Resnick HS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:433–6

PTSD in WWII mustard gas test participants. A preliminary report. Schnurr PP, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:425–9

Noradrenergic alterations in posttraumatic stress disorder. Southwick SM, et al. **Ann N Y Acad Sci** 1997 Jun 21; 821:125–41 (115 ref.)

Trauma, dissociation, and memory. Spiegel D. **Ann N Y Acad Sci** 1997 Jun 21;821:225–37 (86 ref.)

The psychobiology of traumatic memory. Clinical implications of neuroimaging studies. Van Der Kolk BA, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:99–113 (58 ref.)

Performance of PTSD patients on standard tests of memory. Implications for trauma. Wolfe J, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:208–18 (52 ref.)

Posttraumatic stress disorder, depression, alcohol use disorders and quality of life in adolescents. Clark DB, et al. **Anxiety** 1996;2(5):226–33

Temperamental variables in PTSD patients. Kotler M, et al. **Anxiety** 1996;2(5):251–3

Visual imagery and perception in posttraumatic stress disorder. A positron emission tomographic investigation. Shin LM, et al. **Arch Gen Psychiatry** 1997 Mar;54(3):233–41

Repressed memory and false memory [see comments] Lego S. **Arch Psychiatr Nurs** 1996 Apr;10(2):110–5. Comment in: Arch Psychiatr Nurs 1996 Dec;10(6):342–6.

Oklahoma City bombing: exacerbation of symptoms in veterans with PTSD. Moyers F. **Arch Psychiatr Nurs** 1996 Feb;10(1):55–9 (19 ref.)

Violent assault, posttraumatic stress disorder, and depression. Risk factors for cigarette use among adult women. Acierno RA, et al. **Behav Modif** 1996 Oct;20(4):363–84

Scholastic impairments among traumatized adolescents. Saigh PA, et al. **Behav Res Ther** 1997 May;35(5):429–36

Serum triiodothyronine elevation with posttraumatic stress disorder: a cross–cultural study. Mason J, et al. **Biol Psychiatry** 1996 May 15;39(10):835–8

Physiologic responses to loud tones in Israeli veterans of the 1973 Yom Kippur War. Orr SP, et al. **Biol Psychiatry** 1997 Feb 1;41(3):319–26

Post–traumatic stress reactions in children: gender differences in the incidence of trauma reactions at two years and examination of factors influencing adjustment. Curle CE, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):297–309

Attitudes towards emotional expression and post–traumatic stress in survivors of the Herald of Free Enterprise disaster. Joseph S, et al. **Br J Clin Psychol** 1997 Feb;36 (Pt 1):133–8

Prediction and course of grief four years after perinatal loss due to congenital anomalies: a follow–up study. Hunfeld JA, et al. **Br J Med Psychol** 1997 Mar;70 (Pt 1):85–91

Monitoring of intrusions in post–traumatic stress order: a report of single case studies. Reynolds M, et al. **Br J Med Psychol** 1996 Dec;69 (Pt 4):371–9

Psychological responses to a marine disaster during a recoil phase: experiences from the Estonia shipwreck. Taiminen TJ, et al. **Br J Med Psychol** 1996 Jun;69 (Pt 2):147–53

Scientific status of recovered memories [editorial] [see comments] Brewin CR. **Br J Psychiatry** 1996 Aug; 169(2):131–4. Comment in: Br J Psychiatry 1996 Nov;169(5):665–6. Comment in: Br J Psychiatry 1996 Dec;169(6):794–5.

Mental disorder among refugees and the impact of persecution and exile: some findings from an out–patient population. Lavik NJ, et al. **Br J Psychiatry** 1996 Dec; 169(6):726–32

The spectrum of emotional distress and personality changes after minor head injury incurred in a motor vehicle accident. Parker RS. **Brain Inj** 1996 Apr;10(4):287–302

A review of the psychobiology and pharmacotherapy of posttraumatic stress disorder. Katz L, et al. **Can J Psychiatry** 1996 May;41(4):233–8 (46 ref.)

Posttraumatic stress disorder and motor vehicle accidents: a multidisciplinary overview [see comments] Kuch K, et al. **Can J Psychiatry** 1996 Sep;41(7):429–34 (69 ref.). Comment in: Can J Psychiatry 1997 Mar;42(2):210.

Posttraumatic stress symptoms and medical procedures in children. Wintgens A, et al. **Can J Psychiatry** 1997 Aug; 42(6):611–6 (44 ref.)

Refugee children in Sweden: post–traumatic stress disorder in Iranian preschool children exposed to organized violence. Almqvist K, et al. **Child Abuse Negl** 1997 Apr; 21(4):351–66

Traumatic childhood events, perceived availability of emotional support, and the development of dissociative tendencies. Irwin HJ. **Child Abuse Negl** 1996 Aug;

20(8):701-7
The long-term sequelae of child and adolescent abuse: a longitudinal community study. Silverman AB, et al. **Child Abuse Negl** 1996 Aug;20(8):709-23
Models of traumatic experiences and children's psychological adjustment: the roles of perceived parenting and the children's own resources and activity. Punamäki RL, et al. **Child Dev** 1997 Aug;68(4):718-28
Traumatic intrusive imagery as an emotional memory phenomenon: a review of research and explanatory information processing theories. vanOyen Witvliet C. **Clin Psychol Rev** 1997;17(5):509-36 (150 ref.)
Psychical difficulties in former prisoners of detention camps. Jukić V, et al. **Coll Antropol** 1997 Jun;21(1):235-42
Emotional disturbances in trauma patients during the rehabilitation phase: studies of posttraumatic stress disorder and alexithymia. Fukunishi I, et al. **Gen Hosp Psychiatry** 1996 Mar;18(2):121-7
Coping self-efficacy buffers psychological and physiological disturbances in HIV-infected men following a natural disaster. Benight CC, et al. **Health Psychol** 1997 May; 16(3):248-55
The eight-item treatment-outcome post-traumatic stress disorder scale: a brief measure to assess treatment outcome in post-traumatic stress disorder. Davidson JR, et al. **Int Clin Psychopharmacol** 1997 Jan;12(1):41-5
Interactive psychoeducational group therapy for traumatized women. Lubin H, et al. **Int J Group Psychother** 1997 Jul; 47(3):271-90
Recall and repetition of a severe childhood trauma. Adler H. **Int J Psychoanal** 1995 Oct;76 (Pt 5):927-43
Art and trauma. Laub D, et al. **Int J Psychoanal** 1995 Oct; 76 (Pt 5):991-1005
Internalizing and externalizing characteristics of sexually and/or physically abused children. Dykman RA, et al. **Integr Physiol Behav Sci** 1997 Jan-Mar;32(1):62-74
Posttraumatic stress disorder: a sensitization reaction. Dykman RA, et al. **Integr Physiol Behav Sci** 1997 Jan-Mar; 32(1):9-18 (0 ref.)
Sustained attention in combat-related posttraumatic stress disorder. Golier J, et al. **Integr Physiol Behav Sci** 1997 Jan-Mar;32(1):52-61
Seeking the source of emotional Stroop interference effects in PTSD: a study of P3s to traumatic words. Metzger LJ, et al. **Integr Physiol Behav Sci** 1997 Jan-Mar;32(1):43-51
Current perspectives on posttraumatic stress disorder: from the clinic and the laboratory. Paige SR. **Integr Physiol Behav Sci** 1997 Jan-Mar;32(1):5-8 (0 ref.)
The traumatized child and the adult: compound personality in child survivors of the Holocaust. Tauber Y. **Isr J Psychiatry Relat Sci** 1996;33(4):228-37
Relationship between early abuse, posttraumatic stress disorder, and activity levels in prepubertal children. Glod CA, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Oct; 35(10):1384-93
Israeli preschool children under Scuds: a 30-month follow-up. Laor N, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Mar;36(3):349-56
Posttraumatic symptomatology in children and adolescents after an industrial fire. March JS, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug;36(8):1080-8
Twenty-one-month follow-up study of school-age children exposed to Hurricane Andrew. Shaw JA, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Mar;35(3):359-64
Posttraumatic stress disorder in incarcerated juvenile delinquents. Steiner H, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Mar;36(3):357-65
Comparing child victims and adult survivors: clues to the pathogenesis of child sexual abuse. Green AH. **J Am Acad Psychoanal** 1995 Winter;23(4):655-70
Psychophysiology of posttraumatic stress disorder related to motor vehicle accidents: replication and extension. Blanchard EB, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):742-51
Is youth victimization related to trauma symptoms and depression after controlling for prior symptoms and family relationships? A longitudinal, prospective study. Boney-McCoy S, et al. **J Consult Clin Psychol** 1996 Dec; 64(6):1406-16
Acute and chronic distress and posttraumatic stress disorder as a function of responsibility for serious motor vehicle accidents. Delahanty DL, et al. **J Consult Clin Psychol** 1997 Aug;65(4):560-7
Symptoms of posttraumatic stress in children after Hurricane Andrew: a prospective study. La Greca A, et al. **J Consult Clin Psychol** 1996 Aug;64(4):712-23
The phenomenology of traumatic reactions to psychotic illness. Shaw K, et al. **J Nerv Ment Dis** 1997 Jul; 185(7):434-41
Emotional expression and physical health: revising traumatic memories or fostering self-regulation? Greenberg MA, et al. **J Pers Soc Psychol** 1996 Sep;71(3):588-602
Psychological condition hormone levels in war trauma. Kocijan-Hercigonja D, et al. **J Psychiatr Res** 1996 Sep-Oct;30(5):391-9
Understanding vicarious traumatization. Blair DT, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Nov;34(11):24-30 (54 ref.)
Personal space intrusion and PTSD. Brown P, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Jul;34(7):23-8 (44 ref.)
Miscarriage as a traumatic event: a review of the literature and new implications for intervention. Lee C, et al. **J Psychosom Res** 1996 Mar;40(3):235-44 (60 ref.)
Whiplash neck injury. Mayou R, et al. **J Psychosom Res** 1996 May;40(5):461-74 (60 ref.)
The effects of stressor type on projected coping. Bjorck JP, et al. **J Trauma Stress** 1997 Jul;10(3):481-97
Visual imagery in posttraumatic stress disorder. Bryant RA, et al. **J Trauma Stress** 1996 Jul;9(3):613-9
Posttraumatic stress disorder, flashbacks, and pseudomemories in closed head injury. Bryant RA. **J Trauma Stress** 1996 Jul;9(3):621-9
The Honolulu posttraumatic stress disorder stimulus set. Chemtob CM, et al. **J Trauma Stress** 1997 Apr;10(2):337-43
Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually retraumatized women. Cloitre M, et al. **J Trauma Stress** 1997 Jul;10(3):437-52
The relationship between violence dimensions and symptom severity among homeless, mentally ill women. Goodman LA, et al. **J Trauma Stress** 1997 Jan;10(1):51-70
Posttraumatic stress symptoms in nonexposed, victims, and spontaneous rescuers after an avalanche. Johnsen BH, et al. **J Trauma Stress** 1997 Jan;10(1):133-40
The impact of the homecoming reception on the development of posttraumatic stress disorder. The West Haven Homecoming Stress Scale (WHHSS). Johnson DR, et al. **J Trauma Stress** 1997 Apr;10(2):259-77
Alexithymia in Holocaust survivors with and without PTSD. Yehuda R, et al. **J Trauma Stress** 1997 Jan;10(1):93-100
The epidemic of post-traumatic stress disorder: a passing phase? Ellard JH. **Med J Aust** 1997 Jan 20;166(2):84-7 (13 ref.)
Psychological trauma and its influence on genuine and false complaints of sexual assault. Adshead G. **Med Sci Law** 1996 Apr;36(2):95-9
Psychological trauma. Experience intensifies physician's compassion for patients. Simmons MF. **Mich Med** 1996 Feb;95(2):20
The psychobiological basis of posttraumatic stress disorder. Grillon C, et al. **Mol Psychiatry** 1996 Sep;1(4):278-97 (258 ref.)
Perception of post traumatic stress disorder symptoms by children of Puerto Rican Vietnam veterans. del Valle LE, et al. **P R Health Sci J** 1996 Jun;15(2):101-6
Prevalence of parental substance-abuse among child psychiatric inpatients. Pillay AL, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):947-53
Histories of childhood trauma and complex post-traumatic sequelae in women with eating disorders. Rorty M, et al. **Psychiatr Clin North Am** 1996 Dec;19(4):773-91 (145 ref.)
Interventions among adolescents who were violently injured and those who attempted suicide. Shuchman M, et al. **Psychiatr Serv** 1996 Jul;47(7):755-7
Numbing scale scores in female psychiatric inpatients diagnosed with self-injurious behavior, dissociative identity disorder, and major depression. Glover H, et al. **Psychiatry Res** 1997 May 5;70(2):115-23
Auditory startle responses in help-seeking trauma survivors. Shalev AY, et al. **Psychiatry Res** 1997 Mar 3;69(1):1-7
Psychoanalysis on the beat. Children, police, and urban trauma. Marans S. **Psychoanal Study Child** 1996;51:522-41
Posttraumatic stress disorder and illness behaviour in HIV+ patients. Botha KF. **Psychol Rep** 1996 Dec;79(3 Pt 1):843-5
Preliminary study of effect of the Iraqi invasion on addictive behaviour in Kuwait. el-Garem HH, et al. **Psychol Rep** 1996 Aug;79(1):143-9
Posttraumatic stress disorder, ego defense mechanisms, and empathy among urban paramedics. Grevin F. **Psychol Rep** 1996 Oct;79(2):483-95
An interim report on the development of the Psychological Trauma and Resources Scales. Holmes GR, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):819-31
A dual representation theory of posttraumatic stress disorder. Brewin CR, et al. **Psychol Rev** 1996 Oct;103(4):670-86 (190 ref.)
Psychopathology and trauma in epileptic and psychogenic seizure patients. Arnold LM, et al. **Psychosomatics** 1996 Sep-Oct;37(5):438-43
Preburn psychiatric history affects posttrauma morbidity. Fauerbach JA, et al. **Psychosomatics** 1997 Jul-Aug; 38(4):374-85
The Truth and Reconciliation Commission and post-traumatic stress disorder [letter] Stein DJ, et al. **S Afr Med J** 1997 Jun;87(6):763
A polysomnographic comparison of veterans with combat-related PTSD, depressed men, and non-ill controls. Mellman TA, et al. **Sleep** 1997 Jan;20(1):46-51
First night effects in post-traumatic stress disorder inpatients. Woodward SH, et al. **Sleep** 1996 May;19(4):312-7
Psychiatric morbidity following a natural disaster: an Australian bushfire. McFarlane AC, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):261-8
The cycle of trauma; relationship aggression in male Vietnam veterans with symptoms of posttraumatic stress disorder. Byrne CA, et al. **Violence Vict** 1996 Fall;11(3):213-25
Adjusting to criminal victimization: the correlates of postcrime distress. Davis RC, et al. **Violence Vict** 1996 Spring;11(1):21-38
[Debriefing in a school area by the Youth and Health team. Management of the consequences of a murder in a class of students] Herzig L, et al. **Rev Med Suisse Romande** 1997 Jan;117(1):55-9 **(Fre)**
[Transmission of trauma: unconscious fantasy and activation by external reality, with special reference to the Holocaust] Herzog JM. **Psyche (Stuttg)** 1996 Jun;50(6):548-63 (Eng. Abstr.) **(Ger)**
[Symptom complex, prevalence of trauma and body image of psychiatric patients with self-injury behavior] Tameling A, et al. **Psychother Psychosom Med Psychol** 1996 Feb; 46(2):61-7 (Eng. Abstr.) **(Ger)**
[PTSD viewed form the research results of the Hanshin Earthquake in Japan--special reference to post-disaster mental care of the children] Hanada M. **Seishin Shinkeigaku Zasshi** 1996;98(9):642-9 **(Jpn)**

RADIONUCLIDE IMAGING

A positron emission tomographic study of symptom provocation in PTSD. Shin LM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:521-3
Visual imagery and perception in posttraumatic stress disorder. A positron emission tomographic investigation. Shin LM, et al. **Arch Gen Psychiatry** 1997 Mar;54(3):233-41

REHABILITATION

A critical review of recovered memories in psychotherapy: Part II--Trauma and therapy. Paris J. **Can J Psychiatry** 1996 May;41(4):206-10 (35 ref.)
New directions for treatment research on sequelae of sexual abuse in persons with severe mental illness. Rosenberg SD, et al. **Community Ment Health J** 1996 Aug;32(4):387-400 (75 ref.)
Object relations as a predictor of treatment outcome with chronic posttraumatic stress disorder. Ford JD, et al. **J Consult Clin Psychol** 1997 Aug;65(4):547-59
Societal factors that negatively affect the mental health support for the British Army's Service personnel involved in major trauma. Finnegan AP. **J R Army Med Corps** 1997 Jun;143(2):107-11
The post traumatic stress management course at RN Hospital, Haslar. Nevison CB, et al. **J R Nav Med Serv** 1996 Spring; 82(1):9-14
Longitudinal patterns of care for patients with posttraumatic stress disorder. Ronis DL, et al. **J Trauma Stress** 1996 Oct; 9(4):763-81
Posttraumatic stress, mental health professionals, and the clergy: a need for collaboration, training, and research. Weaver AJ, et al. **J Trauma Stress** 1996 Oct;9(4):847-56 (54 ref.)
[Shadows of the past over the victims of today. Rehabilitation of the torture victims in the center of Europe's undercurrents] Lie B. **Tidsskr Nor Laegeforen** 1997 Jan 20; 117(2):259-61 **(Nor)**
[The war in Bosnia is a trauma for the West, too. Research and help projects are scrutinized] Davidsson L, et al. **Lakartidningen** 1997 Jan 8;94(1-2):67-9 **(Swe)**

THERAPY

Work-related post-traumatic stress disorder: use of exposure therapy in work-simulation activities. Phillips ME, et al. **Am J Occup Ther** 1997 Sep;51(8):696-700
Effectiveness and cost of the inpatient treatment of posttraumatic stress disorder: comparison of three models of treatment. Fontana A, et al. **Am J Psychiatry** 1997 Jun; 154(6):758-65
Systematic desensitization as an alternative exposure strategy for PTSD [letter] Frueh BC, et al. **Am J Psychiatry** 1997 Feb;154(2):287-8
Outcome of psychotherapy among early adolescents after trauma. Goenjian AK, et al. **Am J Psychiatry** 1997 Apr; 154(4):536-42
Need and responsiveness in the treatment of a severely traumatized patient: a relational perspective. Connors ME. **Am J Psychother** 1997 Winter;51(1):86-101
Management of post traumatic stress disorder using combat stress treatment principles--a case report. Lee JT. **Ann Acad Med Singapore** 1997 Jan;26(1):113-7 (24 ref.)
Traumatic stress--an overview of diagnostic evolution and clinical treatment. Wong JC, et al. **Ann Acad Med Singapore** 1997 Jan;26(1):76-87 (65 ref.)
Psychological processes related to recovery from a trauma and an effective treatment for PTSD. Foa EB. **Ann N Y Acad Sci** 1997 Jun 21;821:410-24 (41 ref.)
Integrating objective indicators of treatment outcome in posttraumatic stress disorder. Griffin MG, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:388-409
Treatment failure in acute PTSD. Lessons learned about the complexity of the disorder. Shalev AY. **Ann N Y Acad Sci** 1997 Jun 21;821:372-87 (52 ref.)
Psychosocial treatments for posttraumatic stress disorder: a critical review. Foa EB, et al. **Annu Rev Psychol** 1997; 48:449-80 (105 ref.)
Trauma management therapy: a preliminary evaluation of a multicomponent behavioral treatment for chronic combat-related PTSD. Frueh BC, et al. **Behav Res Ther** 1996 Jul;34(7):533-43
The private practice psychologist and manual-based treatments: post-traumatic stress disorder secondary to motor vehicle accidents [see comments] Hickling EJ, et al. **Behav Res Ther** 1997 Mar;35(3):191-203. Comment in: Behav Res Ther 1997 Mar;35(3):205-10.
Treatment manuals in clinical practice [comment] Wilson GT. **Behav Res Ther** 1997 Mar;35(3):205-10. Comment on: Behav Res Ther 1997 Mar;35(3):191-203.
Eye-movements and visual imagery: a working memory

approach to the treatment of post-traumatic stress disorder. Andrade J, et al. **Br J Clin Psychol** 1997 May;36 (Pt 2):209-23

Post-traumatic stress counselling [letter; comment] Bisson JI. **Br J Hosp Med** 1997 Feb 5-18;57(3):112. Comment on: Br J Hosp Med 1996 Dec 11-1997 Jan 14;56(11):567-8.

Post-traumatic stress counselling: benefit or indulgence? [editorial] [see comments] Cramer D. **Br J Hosp Med** 1996 Dec 11-1997 Jan 14;56(11):567-8 (9 ref.). Comment in: Br J Hosp Med 1997 Feb 5-18;57(3):111-2. Comment in: Br J Hosp Med 1997 Feb 5-18;57(3):112.

Post-traumatic stress counselling [letter; comment] Tarrier N. **Br J Hosp Med** 1997 Feb 5-18;57(3):111-2. Comment on: Br J Hosp Med 1996 Dec 11-1997 Jan 14;56(11):567-8.

The treatment of chronic post-traumatic nightmares using psychodynamic-interpersonal psychotherapy: a single-case study. Kellett S, et al. **Br J Med Psychol** 1997 Mar;70 (Pt 1):35-49

Treatment of PTSD [letter; comment] Bisson JI. **Br J Psychiatry** 1996 Feb;168(2):252-3. Comment on: Br J Psychiatry 1995 Oct;167(4):495-502.

Psychological debriefing [letter; comment] Brandon S. **Br J Psychiatry** 1996 Jun;168(6):787. Comment on: Br J Psychiatry 1995 Oct;167(4):495-502.

Psychological debriefing [letter; comment] Busuttil A. **Br J Psychiatry** 1996 Jun;168(6):788. Comment on: Br J Psychiatry 1995 Oct;167(4):495-502.

Psychological debriefing techniques [letter] Leigh-Howarth M, et al. **Br J Psychiatry** 1996 Mar;168(3):383-4

Eye movement desensitisation treatment utilises the positive visceral element of the investigatory reflex to inhibit the memories of post-traumatic stress disorder: a theoretical analysis. MacCulloch MJ, et al. **Br J Psychiatry** 1996 Nov; 169(5):571-9 (37 ref.)

Psychological debriefing [letter; comment] Turnbull GJ. **Br J Psychiatry** 1996 Jun;168(6):787-8. Comment on: Br J Psychiatry 1995 Oct;167(4):495-502.

A psychoeducational program for patients with trauma-related disorders. Allen JG, et al. **Bull Menninger Clin** 1997 Spring;61(2):222-39

A controlled study of eye movement desensitization and reprocessing in the treatment of posttraumatic stress disordered sexual assault victims. Rothbaum BO. **Bull Menninger Clin** 1997 Summer;61(3):317-34

Recovered memories in psychotherapy [editorial] [see comments] Munro A. **Can J Psychiatry** 1996 May; 41(4):199-200. Comment in: Can J Psychiatry 1996 Oct;41(8):533-5.

A critical review of recovered memories in psychotherapy: Part I--Trauma and memory. Paris J. **Can J Psychiatry** 1996 May;41(4):201-5 (52 ref.)

Emotional processing and outcome of imaginal flooding therapy in Vietnam veterans with chronic posttraumatic stress disorder. Pitman RK, et al. **Compr Psychiatry** 1996 Nov-Dec;37(6):409-18

Emotional processing during eye movement desensitization and reprocessing therapy of Vietnam veterans with chronic posttraumatic stress disorder. Pitman RK, et al. **Compr Psychiatry** 1996 Nov-Dec;37(6):419-29

Magical realism: a cultural intervention for traumatized Hispanic children. De Rios MD. **Cult Divers Ment Health** 1997;3(3):159-70

Psychological testing as a diagnostic and therapeutic tool in the treatment of traumatized Latin American and African refugees. Nieves-Grafals S. **Cult Divers Ment Health** 1995; 1(1):19-27

Interactive psychoeducational group therapy for traumatized women. Lubin H, et al. **Int J Group Psychother** 1997 Jul; 47(3):271-90

Heart rate during group flooding therapy for PTSD. Woodward SH, et al. **Integr Physiol Behav Sci** 1997 Jan-Mar;32(1):19-30

Treatment of traumagenic beliefs among sexually abused girls and their mothers: an evaluation study. Celano M, et al. **J Abnorm Child Psychol** 1996 Feb;24(1):1-17

Posttraumatic feeding disorders [letter] Benoit D, et al. **J Am Acad Child Adolesc Psychiatry** 1997 May;36(5):577-8

Memory systems and the psychoanalytic retrieval of memories of trauma. Brenneis CB. **J Am Psychoanal Assoc** 1996;44(4):1165-87

In the last analysis: archetypal themes in the analysis of an elderly patient with early disintegrative trauma. Wharton B. **J Anal Psychol** 1996 Jan;41(1):19-36

An orienting response model of eye movement desensitization [comment] Armstrong MS, et al. **J Behav Ther Exp Psychiatry** 1996 Mar;27(1):21-32. Comment on: J Behav Ther Exp Psychiatry 1993 Sep;24(3):201-10.

Measuring effectiveness of eye movement desensitization and reprocessing (EMDR) in non-clinical anxiety: a multi-subject, yoked-control design. Dunn TM, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):231-9

Eye movement desensitization and reprocessing (EMDR): evaluation of controlled PTSD research. Shapiro F. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):209-18 (36 ref.)

Eye movement desensitization and reprocessing: effectiveness and autonomic correlates. Wilson DL, et al. **J Behav Ther Exp Psychiatry** 1996 Sep;27(3):219-29

Posttraumatic stress disorder. Friedman MJ. **J Clin Psychiatry** 1997;58 Suppl 9:33-6 (21 ref.)

Group treatment for older veterans with post-traumatic stress disorder. Snell FI, et al. **J Psychosoc Nurs Ment Health Serv** 1997 Feb;35(2):10-6

Short-term cognitive-behavioral treatment of hypoactive sexual desire in an individual with a history of childhood sexual abuse. Bass BA. **J Sex Marital Ther** 1996 Winter; 22(4):284-9

EMDR minus eye movements equals good psychotherapy. Hyer L, et al. **J Trauma Stress** 1997 Jul;10(3):515-22

The counting method for ameliorating traumatic memories. Ochberg FM. **J Trauma Stress** 1996 Oct;9(4):873-80

Client compliance with exposure treatments for posttraumatic stress disorder. Scott MJ, et al. **J Trauma Stress** 1997 Jul; 10(3):523-6

An affect-management group for women with posttraumatic stress disorder and histories of childhood sexual abuse. Zlotnick C, et al. **J Trauma Stress** 1997 Jul;10(3):425-36

Psychosomatic treatment of phantom limb pain with post-traumatic stress disorder: a case report. Muraoka M, et al. **Pain** 1996 Aug;66(2-3):385-8

The treatment of posttraumatic stress disorder (PTSD) [letter; comment] Rosch PJ. **Psychosom Med** 1997 Jan-Feb; 59(1):71. Comment on: Psychosom Med 1996 Mar-Apr;58(2):165-82.

Treatment of posttraumatic stress disorder: a review [see comments] Shalev AY, et al. **Psychosom Med** 1996 Mar-Apr;58(2):165-82. Comment in: Psychosom Med 1997 Jan-Feb;59(1):70-1. Comment in: Psychosom Med 1997 Jan-Feb;59(1):71.

The effect of behavioral intervention on the psychological distress of Holocaust survivors with cancer. Baider L, et al. **Psychother Psychosom** 1997;66(1):44-9

[Controlled study of outcome after 6 months to early intervention of bus driver victims of aggression] André C, et al. **Encephale** 1997 Jan-Feb;23(1):65-71 (Eng. Abstr.) **(Fre)**

[Integration of a psychiatric team to emergency care in catastrophe situation] Garnier H, et al. **Presse Med** 1997 May 24;26(17):814-7 **(Fre)**

[Post-traumatic stress disorder. New research findings] Bronisch T. **Fortschr Neurol Psychiatr** 1997 May; 65(5):195-207 (108 ref.) (Eng. Abstr.) **(Ger)**

[Treatment of post-traumatic stress disorder] Ebbinghaus R, et al. **Fortschr Neurol Psychiatr** 1996 Nov;64(11):433-43 (140 ref.) (Eng. Abstr.) **(Ger)**

[The treatment of torture and war victims] Frey C, et al. **Schweiz Rundsch Med Prax** 1997 May 21;86(21):899-905 (Eng. Abstr.) **(Ger)**

[Psychotraumatology in medical practice--a survey] Schnyder U, et al. **Z Arztl Fortbild (Jena)** 1996 Jun; 90(4):347-54 (Eng. Abstr.) **(Ger)**

[Eye movements when coping with traumatic stress (letter)] Lilieblad B. **Lakartidningen** 1996 Oct 9;93(41):3553 **(Swe)**

[Naval rescue workers and post-traumatic stress syndrome. Relieving conversation made coping easier] Lundin T. **Lakartidningen** 1997 Mar 26;94(13):1204-6 **(Swe)**

[The existence of centers for the victims of torture is at risk] Malmström C. **Lakartidningen** 1997 Apr 9;94(15):1348-50, 1355 **(Swe)**

URINE

Urinary catecholamine excretion in childhood overanxious and posttraumatic stress disorders. De Bellis MD, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:451-5

STRESS FRACTURES see **FRACTURES, STRESS**

STRESS, MECHANICAL

Stress and insufficiency fractures. Buckwalter JA, et al. **Am Fam Physician** 1997 Jul;56(1):175-82 (15 ref.)

An in vitro model of aneurysmal disease: effect of leukocyte infiltration and shear stress on MMP production within the arterial wall. Thompson MM, et al. **Ann N Y Acad Sci** 1996 Nov 18;800:270-3

Effect of sustained loading on the water content of intervertebral discs: implications for disc metabolism. McMillan DW, et al. **Ann Rheum Dis** 1996 Dec; 55(12):880-7

Shear-induced platelet activation and platelet microparticle formation at blood flow conditions as in arteries with a severe stenosis. Holme PA, et al. **Arterioscler Thromb Vasc Biol** 1997 Apr;17(4):646-53

Shear stress as an inhibitor of vascular smooth muscle cell proliferation. Role of transforming growth factor-beta 1 and tissue-type plasminogen activator. Ueba H, et al. **Arterioscler Thromb Vasc Biol** 1997 Aug;17(8):1512-6

Regulation of extracellular matrix synthesis by mechanical stress. Chiquet M, et al. **Biochem Cell Biol** 1996; 74(6):737-44 (55 ref.)

Quantitative method for the evaluation of biomicrocapsule resistance to mechanical stress. Leblond FA, et al. **Biomaterials** 1996 Nov;17(21):2097-102

Determination of red blood cell shape recovery time constant in a Couette system by the analysis of light reflectance and ektacytometry. Baskurt OK, et al. **Biorheology** 1996 Nov-Dec;33(6):489-503

Alternate method for the analysis of residual strain in the arterial wall. Li X, et al. **Biorheology** 1996 Nov-Dec; 33(6):439-49

Shear-dependent changes in the three-dimensional structure of human von Willebrand factor. Siediecki CA, et al. **Blood** 1996 Oct 15;88(8):2939-50

Adaptive changes in trabecular architecture in relation to functional strain patterns and disuse. Biewener AA, et al. **Bone** 1996 Jul;19(1):1-8

Involvement of different ion channels in osteoblasts' and osteocytes' early responses to mechanical strain. Rawlinson SC, et al. **Bone** 1996 Dec;19(6):609-14

Impact experiments of an external hip protector in young volunteers. Parkkari J, et al. **Calcif Tissue Int** 1997 Apr; 60(4):354-7

Activation of the NADPH oxidase in human fibroblasts by mechanical intrusion of a single cell with an ultramicroelectrode. Arbault S, et al. **Carcinogenesis** 1997 Mar;18(3):569-74

Relationship between passive tissue strain and collagen uncoiling during healing of infarcted myocardium. Omens JH, et al. **Cardiovasc Res** 1997 Feb;33(2):351-8

Effect of streptomycin on wall-stress-induced arrhythmias in the working rat heart. Salmon AH, et al. **Cardiovasc Res** 1997 Jun;34(3):493-503

Integrin signaling transduces shear stress--dependent vasodilation of coronary arterioles. Muller JM, et al. **Circ Res** 1997 Mar;80(3):320-6

Suppression of angiotensin-converting enzyme expression and activity by shear stress. Rieder MJ, et al. **Circ Res** 1997 Mar;80(3):312-9

Differential adhesion of metastatic RAW117 large-cell lymphoma cells under static or hydrodynamic conditions: role of integrin alpha(v) beta3. Yun Z, et al. **Clin Exp Metastasis** 1997 Jan;15(1):3-11

Acetabular strains produced by oversized press fit cups. Ries MD, et al. **Clin Orthop** 1997 Jan;(334):276-81

Mechanical signals in plant development: a new method for single cell studies. Lynch TM, et al. **Dev Biol** 1997 Jan 15;181(2):246-56

Gene regulation by mechanical forces. Oluwole BO, et al. **Endothelium** 1997;5(2):85-93 (29 ref.)

Investigation of spectral content from discrete plantar areas during adult gait: an expansion of rehabilitation technology. Harris GF, et al. **IEEE Trans Rehabil Eng** 1996 Dec; 4(4):360-74 (20 ref.)

Quantitative analysis of heparin retention on heparin bonded knitted Dacron grafts after exposure to shear stress in vitro. Swartbol P, et al. **Int Angiol** 1996 Sep;15(3):232-5

Stress corrosion cracking in Björk-Shiley convexo-concave prosthetic heart valves due to random in vivo electrochemical pulsing [see comments] Xiao K, et al. **Int J Artif Organs** 1996 Aug;19(8):477-86 (33 ref.). Comment in: Int J Artif Organs 1997 Mar;20(3):186-7.

Potential role of mechanical stress in the etiology of pediatric heart disease: septal shear stress in subaortic stenosis. Cape EG, et al. **J Am Coll Cardiol** 1997 Jul;30(1):247-54

The morphology of ligament insertions after failure at low strain velocity: an evaluation of ligament entheses in the rabbit knee. Gao J, et al. **J Anat** 1996 Aug;189 (Pt 1):127-33

An immunocytochemical study of changes in the human erythrocyte membrane skeleton produced by stretching examined by the quick-freezing and deep-etching method. Terada N, et al. **J Anat** 1997 Apr;190 (Pt 3):397-404

The generation of torque in the horizontal plane at the foot-base during laterally directed manual exertions. Wilkinson AT, et al. **J Anat** 1996 Aug;189 (Pt 1):135-43

Changes in muscle fibre type, muscle mass and IGF-I gene expression in rabbit skeletal muscle subjected to stretch. Yang H, et al. **J Anat** 1997 May;190 (Pt 4):613-22

Characterization of cartilage metabolic response to static and dynamic stress using a mechanical explant test system. Torzilli PA, et al. **J Biomech** 1997 Jan;30(1):1-9

Optimal design of biaxial tests for structural material characterization of flat tissues. Lanir Y, et al. **J Biomech Eng** 1996 Feb;118(1):41-7

Stress analysis of a bulk-filled Class-V chemical-cured dental composite restoration. Katona TR, et al. **J Biomed Mater Res** 1996 Aug;31(4):445-9

Resting load and modulation of the myofilament Ca2+ sensitivity in rabbit cerebral arteries. Chen X, et al. **J Cereb Blood Flow Metab** 1997 Feb;17(2):236-40

In situ microdialysis in bone tissue. Stimulation of prostaglandin E2 release by weight-bearing mechanical loading. Thorsen K, et al. **J Clin Invest** 1996 Dec 1; 98(11):2446-9

Structural analysis of the Björk-Shiley Delrin heart valve occluder. McMeeking RM, et al. **J Heart Valve Dis** 1996 Aug;5 Suppl 2:S229-37

Membrane stretch augments the cardiac muscarinic K+ channel activity. Pleumsamran A, et al. **J Membr Biol** 1995 Dec;148(3):287-97

Resting tension participates in the modulation of active tension in isolated guinea pig ventricular myocytes. Cazorla O, et al. **J Mol Cell Cardiol** 1997 Jun;29(6):1629-37

Regulation of proliferation and platelet-derived growth factor expression in palmar fibromatosis (Dupuytren contracture) by mechanical strain. Alman BA, et al. **J Orthop Res** 1996 Sep;14(5):722-8

Contact stress distributions in malreduced intraarticular distal radius fractures. Anderson DD, et al. **J Orthop Trauma** 1996;10(5):331-7

Interface pressures and shear stresses at thirteen socket sites on two persons with transtibial amputation. Sanders JE, et al. **J Rehabil Res Dev** 1997 Jan;34(1):19-43

Effects of oxygen tension and shear stress on human

endothelial cell prostacyclin production. Soler HM, et al. **J Surg Res** 1997 Jan;67(1):46–53
Progressive detachment of cells from surfaces: a consequence of heterogeneous ligand populations or a multi-site binding equilibrium? Hubble J, et al. **J Theor Biol** 1996 Sep 21; 182(2):169–71
Non-axial muscle stress and stiffness. Zahalak GI. **J Theor Biol** 1996 Sep 7;182(1):59–84
Comparison of the effects of mechanical stimulation on venous and arterial smooth muscle cells in vitro. Dethlefsen SM, et al. **J Vasc Res** 1996 Sep–Oct;33(5):405–13
Stress-wave-assisted transport through the plasma membrane in vitro. McAuliffe DJ, et al. **Lasers Surg Med** 1997; 20(2):216–22
Shear stress-induced myosin association with cytoskeleton and phosphorylation in human platelets. Nakai K, et al. **Life Sci** 1997;60(11):PL181–91
Lysophosphatidic acid sensitizes mechanical stress-induced Ca2+ response via activation of phospholipase C and tyrosine kinase in cultured smooth muscle cells. Ohata H, et al. **Life Sci** 1997;60(15):1287–95
Effects of altered loading states on muscle plasticity: what have we learned from rodents? Baldwin KM. **Med Sci Sports Exerc** 1996 Oct;28(10 Suppl):S101–6
The role of mechanical stresses in microvascular remodeling. Skalak TC, et al. **Microcirculation** 1996 Jun;3(2):143–65 (198 ref.)
Isometric tension of cultured endothelial cells: new technical aspects. Bodmer JE, et al. **Microvasc Res** 1997 May; 53(3):261–71
Fast Fourier transform analysis of dynamic data: sine wave stress-strain analysis of biological tissue. Wang L, et al. **Phys Med Biol** 1997 Mar;42(3):537–47
The leukocyte response to fluid stress [see comments] Moazzam F, et al. **Proc Natl Acad Sci U S A** 1997 May 13;94(10):5338–43. Comment in: Proc Natl Acad Sci U S A 1997 May 13;94(10):4825–7.
Do bending, twisting, and diurnal fluid changes in the disc affect the propensity to prolapse? A viscoelastic finite element model. Lu YM, et al. **Spine** 1996 Nov 15; 21(22):2570–9
In vivo stress measurement can predict pain on discography. McNally DS, et al. **Spine** 1996 Nov 15;21(22):2580–7
Force: a new structural control parameter? Bensimon D. **Structure** 1996 Aug 15;4(8):885–9 (36 ref.)
[Age-related force distribution at the proximal end of the femur in normally growing children] Heimkes B, et al. **Z Orthop Ihre Grenzgeb** 1997 Jan–Feb;135(1):17–23 (Eng. Abstr.) **(Ger)**
[Experimentally established material data of human femurs and analysis of direction-dependent stress tolerance] Savvidis E, et al. **Z Orthop Ihre Grenzgeb** 1996 Sep–Oct; 134(5):445–51 (Eng. Abstr.) **(Ger)**

STRESS, OXIDATIVE see **OXIDATIVE STRESS**

STRESS PROTEINS see **HEAT-SHOCK PROTEINS**

STRESS, PSYCHOLOGICAL

see related
CROWDING
LIFE CHANGE EVENTS

Taking suffering seriously: a new role for the medical case history. Donnelly WJ. **Acad Med** 1996 Jul;71(7):730–7
Evaluation of the VA's Pilot Program in Institutional Reorganization Toward Primary and Ambulatory Care: Part II, A study of organizational stresses and dynamics. Rubenstein LV, et al. **Acad Med** 1996 Jul;71(7):784–92
Recognizing and managing residents' problems and problem residents. Borus JF. **Acad Radiol** 1997 Jul;4(7):527–33
Psychosocial stressors of drug-abusing disadvantaged adolescent mothers. Scafidi FA, et al. **Adolescence** 1997 Spring;32(125):93–100
Stress and burnout in HIV/AIDS carers. Miller D. **AIDS** 1996;10 Suppl A:S213–9 (59 ref.)
Life events and daily hassles in patients with atypical chest pain. Lau GK, et al. **Am J Gastroenterol** 1996 Oct; 91(10):2157–62
Reduce the stress of calling the physician. Green D. **Am J Nurs** 1997 Sep;97(9):49–51
Social context and psychosocial influences on blood pressure among American Samoans. Bindon JR, et al. **Am J Phys Anthropol** 1997 May;103(1):7–18
Social economics of childhood glucocorticoid stress response and health. Flinn MV, et al. **Am J Phys Anthropol** 1997 Jan;102(1):33–53
Effects of Stroop color-word conflict test on the autonomic nervous system responses. Hoshikawa Y, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):H1113–21
A hypercaloric load induces thermogenesis but inhibits stress responses in the SNS and HPA system. Strack AM, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R840–8
Individual differences in response to LPS and psychological stress in aged rats. Wachulec M, et al. **Am J Physiol** 1997 Apr;272(4 Pt 2):R1252–7
Social and reproductive conditions modulate urinary cortisol excretion in black tufted-ear marmosets (Callithrix kuhli). Smith TE, et al. **Am J Primatol** 1997;42(4):253–67
Effects of prenatal stress on behavior in adolescent rhesus monkeys. Clarke AS, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:490–1
The acute stress response following motor vehicle accidents and its relation to PTSD. McFarlane AC, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:437–41
Brain systems for the mediation of social separation-distress and social-reward. Evolutionary antecedents and neuropeptide intermediaries. Panksepp J, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:78–100 (63 ref.)
Animal models of relevance to PTSD. Rasmusson AM, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:332–51 (148 ref.)
Social stress, depression, and brain dopamine in female cynomolgus monkeys. Shively CA, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:574–7
Changes in food intake in response to stress in men and women: psychological factors. Weinstein SE, et al. **Appetite** 1997 Feb;28(1):7–18
Mental strain and physical symptoms among employees in modern offices. Arnetz BB, et al. **Arch Environ Health** 1997 Jan–Feb;52(1):63–7
Daniel's fees. Lazar J. **Arch Fam Med** 1997 Jan–Feb;6(1):17
Values, stress, and coping among practicing family physicians. Post DM. **Arch Fam Med** 1997 May–Jun; 6(3):252–5
Seasonal cutaneous immune responses in an Antarctic wintering group: no association with testosterone, vitamin D metabolite or anxiety score. Pitson GA, et al. **Arctic Med Res** 1996 Jul;55(3):118–22
Psychophysiological stress in elite golfers during practice and competition. McKay JM, et al. **Aust J Sci Med Sport** 1997 Jun;29(2):55–61
Psychiatric disturbance and acute stress responses in surgical patients. Clarke DM, et al. **Aust N Z J Surg** 1997 Feb–Mar; 67(2–3):115–8
Mental workload in heat: toward a framework for analyses of stress states. Razmjou S. **Aviat Space Environ Med** 1996 Jun;67(6):530–8
Psychological reactions during polar expeditions and isolation in hyperbaric chambers. Sandal GM, et al. **Aviat Space Environ Med** 1996 Mar;67(3):227–34
Awareness of physiological responding under stress and nonstress conditions in temporomandibular disorders. Glaros AG. **Biofeedback Self Regul** 1996 Sep;21(3):261–72
Compensatory control in the regulation of human performance under stress and high workload; a cognitive-energetical framework. Hockey GR. **Biol Psychol** 1997 Mar 21;45(1–3):73–93 (48 ref.)
Alcohol misuse among doctors. Eliminating stress is the way forward [letter] Jowett NI. **BMJ** 1997 Jun 21; 314(7097):1834
ABC of work related disorders. Stress at work. von Onciul J. **BMJ** 1996 Sep 21;313(7059):745–8 (0 ref.)
New stressors for GDPs in the past 10 years. Waddington TJ. **Br Dent J** 1997 Feb 8;182(3):82–3
Problem-solving style, stress and psychological illness: development of a multifactorial measure. Cassidy T, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):265–77
Occupational stress and the law: some current issues for employers. Howard GS. **Br J Hosp Med** 1996 May 1–14; 55(9):563–6 (9 ref.)
Social factors and comorbidity of depressive and anxiety disorders. Brown GW, et al. **Br J Psychiatry Suppl** 1996 Jun;(30):50–7
Knowledge and conscious control of motor actions under stress. Hardy L, et al. **Br J Psychol** 1996 Nov;87 (Pt 4):621–36
Effect of novelty and restraint on catecholamines in plasma of laying hens. Beuving G, et al. **Br Poult Sci** 1997 Jul; 38(3):297–300
Vitamin C supplementation and fear-reduction in Japanese quail: short-term cumulative effects. Jones RB, et al. **Br Poult Sci** 1996 Mar;37(1):33–42
Staff stress in head injury rehabilitation; Brain Injury, 10(10): 779 [letter; comment] van den Broek M, et al. **Brain Inj** 1997 Jun;11(6):465–6. Comment on: Brain Inj 1996 Oct;10(10):779.
Brain corticotropin-releasing factor immunoreactivity and receptors in five inbred rat strains: relationship to forced swimming behaviour. Lahmame A, et al. **Brain Res** 1997 Mar 7;750(1–2):285–92
In the mouse, the corticoid stress response depends on lateralization. Neveu PJ, et al. **Brain Res** 1997 Feb 28; 749(2):344–6
Stress persistently increases NMDA receptor-mediated binding of [3H]PDBu (a marker for protein kinase C) in the amygdala, and re-exposure to the stressful context reactivates the increase. Shors TJ, et al. **Brain Res** 1997 Mar 7;750(1–2):293–300
Prenatal stress alters the size of the rostral anterior commissure in rats. Jones HE, et al. **Brain Res Bull** 1997; 42(5):341–6
Calbindin-D28k is regulated by adrenal steroids in hypothalamic tissue during prenatal development. Lephart ED, et al. **Brain Res Dev Brain Res** 1997 May 20; 100(1):117–20
A study of self-monitoring processes and coping behaviour in burns victims. Fong J. **Burns** 1997 Mar;23 Suppl 1:S8–11
Manitoba suicides force consideration of stresses facing medical residents. Williams LS. **Can Med Assoc J** 1997 Jun 1;156(11):1599–602
At least three neurotransmitter systems mediate a stress-induced increase in c-fos mRNA in different rat brain areas. Bozas E, et al. **Cell Mol Neurobiol** 1997 Apr; 17(2):157–69
Assessment of coping strategies of child abusing mothers. Cantos AL, et al. **Child Abuse Negl** 1997 Jul;21(7):631–6
Across six nations: stressful events in the lives of children. Yamamoto K, et al. **Child Psychiatry Hum Dev** 1996 Spring; 26(3):139–50
Recognizing the stress of infertility. Schover LR. **Cleve Clin J Med** 1997 Apr;64(4):211–4
Clinical relevance of ischemia induced by mental stress [editorial; comment] Deedwania PC. **Clin Cardiol** 1997 Apr; 20(4):317–9. Comment on: Clin Cardiol 1997 Apr;20(4):367–71.
Usefulness of laboratory mental stress test in patients with stable coronary artery disease [see comments] Wong CK, et al. **Clin Cardiol** 1997 Apr;20(4):367–71. Comment in: Clin Cardiol 1997 Apr;20(4):317–9.
Stress, coping, lifestyle and hypertension: a paradigm for research, prevention and non-pharmacological management of hypertension. Beilin LJ. **Clin Exp Hypertens** 1997 Jul–Aug;19(5–6):739–52 (24 ref.)
Talking to teens about family problems. An opportunity for prevention. Cavanaugh RM Jr, et al. **Clin Pediatr (Phila)** 1996 Feb;35(2):67–71
Supernormal left ventricular performance in young subjects with mild hypertension: an alerting response to the echocardiographic procedure? Palatini P, et al. **Clin Sci (Colch)** 1996 Sep;91(3):275–81
Mothers of children evaluated for transplantation: stress, coping resources, and perceptions of family functioning. Rodrigue JR, et al. **Clin Transplant** 1996 Oct;10(5):447–50
Stressing out, or outing stress? [editorial] Granger CE, et al. **Eur J Anaesthesiol** 1996 Nov;13(6):543–5
Communicating with and treating cancer patients: how does the use of non-proven therapies and patients' feeling of mental distress influence the interaction between the patient and the hospital staff. Risberg T, et al. **Eur J Cancer** 1997 May;33(6):883–90
Psychoneuroendocrinological indicators of stress and intellectual performance among older adults: an exploratory study. Kelly KS, et al. **Exp Aging Res** 1996 Oct–Dec;22(4):393–401
Psychological consequences of having triplets: a 4-year follow-up study. Garel M, et al. **Fertil Steril** 1997 Jun; 67(6):1162–5
The influence of ethnicity and culture on the caregiver stress and coping process: a sociocultural review and analysis. Aranda MP, et al. **Gerontologist** 1997 Jun;37(3):342–54 (92 ref.)
Stress and the life course: a paradigmatic alliance. Pearlin LI, et al. **Gerontologist** 1996 Apr;36(2):239–47 (69 ref.)
Stress of female infertility: relations to length of treatment. Chiba H, et al. **Gynecol Obstet Invest** 1997;43(3):171–7
Motivational implications of pain: chronicity, psychological distress, and work goal construal in a national sample of adults. Karoly P, et al. **Health Psychol** 1996 Sep; 15(5):383–90
Distress correlates with degree of chest pain: a description of patients awaiting revascularisation [letter] Freeman LJ. **Heart** 1996 Sep;76(3):291–2
Spouse stressors while awaiting heart transplantation [see comments] Collins EG, et al. **Heart Lung** 1996 Jan–Feb; 25(1):4–13. Comment in: Heart Lung 1996 Sep–Oct;25(5):422.
Spouse stressors while awaiting heart transplantation [letter; comment] Fitzgerald H. **Heart Lung** 1996 Sep–Oct; 25(5):422. Comment on: Heart Lung 1996 Jan–Feb;25(1):4–13.
Nurses and physicians evaluate their intensive care experiences. Laubach W, et al. **Heart Lung** 1996 Nov–Dec; 25(6):475–82 (32 ref.)
Stress in critical care nurses: actual and perceived. Sawatzky JA. **Heart Lung** 1996 Sep–Oct;25(5):409–17
Models of shiftwork and health: an examination of the influence of stress on shiftwork theory. Taylor E, et al. **Hum Factors** 1997 Mar;39(1):67–82 (58 ref.)
The relationship between job stress and mental health at work. Shigemi J, et al. **Ind Health** 1997;35(1):29–35
Stress factors and behavioral characteristics in enuretic children. Thakur AK, et al. **Indian Pediatr** 1995 Sep; 32(9):997–8
Relationship between job stress and plasma fibrinolytic activity in male Japanese workers. Ishizaki M, et al. **Int Arch Occup Environ Health** 1996;68(5):315–20
Psychological distress among informal supporters of frail older people at home and in institutions. The Resource Implications Study Group of the MRC Cognitive Function and Ageing Study. Buck D, et al. **Int J Geriatr Psychiatry** 1997 Jul;12(7):737–44
The work of auxiliary nurses in Mexico: stressors, satisfiers and coping strategies. Douglas MK, et al. **Int J Nurs Stud** 1996 Oct;33(5):495–505
Stress experiences of occupational therapists in mental health practice arenas: a review of the literature. Sweeney G, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):132–40 (35 ref.)
Caring for a demented elderly person—burden and burnout among caregiving relatives. Almberg B, et al. **J Adv Nurs** 1997 Jan;25(1):109–16
A conceptual foundation for human suffering in nursing care and research. Rodgers BL, et al. **J Adv Nurs** 1997 May; 25(5):1048–53 (47 ref.)
Is there too much emphasis on psychosocial counseling for infertile patients? Boivin J. **J Assist Reprod Genet** 1997 Apr; 14(4):184–6

Does psychological support and counseling reduce the stress experienced by couples involved in assisted reproductive technology? Greenfeld DA. **J Assist Reprod Genet** 1997 Apr;14(4):186–8

Infertility: the impact of stress, the benefit of counseling. Seibel MM. **J Assist Reprod Genet** 1997 Apr;14(4):181–3

Nitric oxide synthase–containing magnocellular neurons of the rat hypothalamus synthesize oxytocin and vasopressin and express Fos following stress stimuli. Hatakeyama S, et al. **J Chem Neuroanat** 1996 Oct;11(4):243–56

Perceived environmental stressors for dental hygiene students. Roberts RA, et al. **J Dent Educ** 1996 Oct; 60(10):836–41

Loss–grief addiction model. Beechem MH, et al. **J Drug Educ** 1996;26(2):183–98

Late psychological sequelae of abortion: questions from a primary care perspective. Butler C. **J Fam Pract** 1996 Oct; 43(4):396–401

Discrimination and abuse in internal medicine residency. The Internal Medicine Program Directors of Canada [see comments] vanIneveld CH, et al. **J Gen Intern Med** 1996 Jul;11(7):401–5. Comment in: J Gen Intern Med 1997 Feb;12(2):137.

Welfare and psychological distress: a longitudinal study of African American urban mothers. Ensminger ME. **J Health Soc Behav** 1995 Dec;36(4):346–59

The use of multiple outcomes in stress research: a case study of gender differences in responses to marital dissolution. Horwitz AV, et al. **J Health Soc Behav** 1996 Sep; 37(3):278–91

Gender differences in work and well–being: effects of exposure and vulnerability. Roxburgh S. **J Health Soc Behav** 1996 Sep;37(3):265–77

Impact of the heart transplant waiting process on spouses. Collins EG, et al. **J Heart Lung Transplant** 1996 Jun; 15(6):623–30

Assessing homosexual stress. Burke TB. **J Homosex** 1997; 33(2):83–99

Factors related to stress in patients with non–insulin–dependent diabetes mellitus. Okada S, et al. **J Int Med Res** 1995 Nov–Dec;23(6):449–57

Helicobacter felis as a cofactor alone or together with stress in cryptosporidial activation in mice. Tatar G, et al. **J Int Med Res** 1995 Nov–Dec;23(6):473–9

The chiropractic consultation: a stressful experience? Jamison JR. **J Manipulative Physiol Ther** 1997 Jul–Aug;20(6):377–81

Prevalence and risk factors for depression in children: an outpatient pediatric sample. Trangkasombat U, et al. **J Med Assoc Thai** 1997 May;80(5):303–10

The impact of culture on physician stress and coping. Post DM, et al. **J Natl Med Assoc** 1997 Sep;89(9):585–90

Brain polyamine stress response: recurrence after repetitive stressor and inhibition by lithium. Gilad GM, et al. **J Neurochem** 1996 Nov;67(5):1992–6

Chronic social stress alters levels of corticotropin–releasing factor and arginine vasopressin mRNA in rat brain. Albeck DS, et al. **J Neurosci** 1997 Jun 15;17(12):4895–903

Inhibition of stress–induced neuroendocrine and behavioral responses in the rat by prepro–thyrotropin–releasing hormone 178–199. McGivern RF, et al. **J Neurosci** 1997 Jun 15;17(12):4886–94

Job strain among registered nurses and other hospital workers. Seago JA, et al. **J Nurs Adm** 1997 May; 27(5):19–25

Correlates of psychological distress among mothers of children and adolescents with hemophilia and HIV infection. Drotar D, et al. **J Pediatr Psychol** 1997 Feb; 22(1):1–14

The Perception of Procedures Questionnaire: psychometric properties of a brief parent report measure of procedural distress. Kazak AE, et al. **J Pediatr Psychol** 1996 Apr; 21(2):195–207

Development and evaluation of a measure of concerns related to raising a child with a physical disability. Noojin AB, et al. **J Pediatr Psychol** 1996 Aug;21(4):483–98

Perinatal stressors as predictors of symptoms of posttraumatic stress in mothers of infants at high risk. DeMier RL, et al. **J Perinatol** 1996 Jul–Aug;16(4):276–80

Central injection of a new corticotropin–releasing factor (CRF) antagonist, astressin, blocks CRF– and stress–related alterations of gastric and colonic motor function. Martínez V, et al. **J Pharmacol Exp Ther** 1997 Feb;280(2):754–60

Fatigue in the workforce of National Health Service Trusts: levels of symptomatology and links with minor psychiatric disorder, demographic, occupational and work role factors. Hardy GE, et al. **J Psychosom Res** 1997 Jul;43(1):83–92

Stress in the workplace: unfinished business [editorial] Hotopf M, et al. **J Psychosom Res** 1997 Jul;43(1):1–6

Effects of mating dynamics and crowding on sex ratio variance in mice. Krackow S. **J Reprod Fertil** 1997 May; 110(1):87–90

Worries of school–age children. Neff EJ, et al. **J Soc Pediatr Nurs** 1996 Apr–Jun;1(1):27–32; quiz 33–4

Stress and performance: an application of Gray's three–factor arousal theory to basketball free–throw shooting. Whitehead R, et al. **J Sports Sci** 1996 Oct;14(5):393–401

Stress, bottlefeeding, and diabetes [letter] Huang Z, et al. **Lancet** 1997 Sep 20;350(9081):889

Compensation, stress and the "V" code [letter; comment] Wade RJ. **Med J Aust** 1996 Nov 4;165(9):530. Comment on: Med J Aust 1996 May 6;164(9):572.

Psychological consequences of exercise deprivation in habitual exercisers. Mondin GW, et al. **Med Sci Sports Exerc** 1996 Sep;28(9):1199–203

Coping with terrorism: the OPM–SANG experience. Applewhite L, et al. **Mil Med** 1997 Apr;162(4):240–3

Federal Nursing Service Award. Rhythms of War: activation experiences during the Persian Gulf War. Nelson J, et al. **Mil Med** 1997 Apr;162(4):233–9

The perceived effect of stressors on marital satisfaction among civilian wives of enlisted soldiers deployed to Somalia for Operation Restore Hope. Schumm WR, et al. **Mil Med** 1996 Oct;161(10):601–6

A survivor's story. When abuse is more than skin deep. **N C Med J** 1997 Sep–Oct;58(5):326–8

Inescapable stress enhances extracellular acetylcholine in the rat hippocampus and prefrontal cortex but not the nucleus accumbens or amygdala. Mark GP, et al. **Neuroscience** 1996 Oct;74(3):767–74

Stress and pressure in the radiopharmacy: a cause for concern [editorial] Sampson CB. **Nucl Med Commun** 1996 Oct; 17(10):831–3

Occupational stress in contemporary fire service. Gist R, et al. **Occup Med** 1995 Oct–Dec;10(4):763–87 (53 ref.)

Life stress and risk of precancerous cervical lesions: a pretest directed by the life stress model. Lovejoy NC, et al. **Oncol Nurs Forum** 1997 Jan–Feb;24(1):63–70

The crisis of cancer: psychological impact on family caregivers. Blanchard CG, et al. **Oncology (Huntingt)** 1997 Feb;11(2):189–94; discussion 196, 201–2

Who needs unnecessary stress? Basic steps prevent insurer audits. Hicks LJ. **Pa Med** 1996 May;99(5):30–1

Withstanding the stress of litigation. Hoepfer M. **Pa Med** 1997 Mar;100(3):22–4

Comparison of psychological symptoms of women requesting removal of breast implants with those of breast cancer patients and healthy controls. Wells KE, et al. **Plast Reconstr Surg** 1997 Mar;99(3):680–5

Why my practice is so relaxing! [letter] Zide BM. **Plast Reconstr Surg** 1996 Oct;98(5):912–3

Intermingling heavy and light strain chickens may cause social stress. Gvaryahu G, et al. **Poult Sci** 1996 Jul; 75(7):849–51

The effects of stress on social preferences are sexually dimorphic in prairie voles. DeVries AC, et al. **Proc Natl Acad Sci U S A** 1996 Oct 15;93(21):11980–4

Distress reduction during the structured clinical interview for DSM–III–R. Scarvalone PA, et al. **Psychiatry Res** 1996 Jan 31;59(3):245–9

Aging or disease? Cardiovascular reactivity in Finnish men over the middle years. Jennings JR, et al. **Psychol Aging** 1997 Jun;12(2):225–38

Stress of parent care: positive and negative effects of women's other roles. Stephens MA, et al. **Psychol Aging** 1997 Jun; 12(2):376–86

Role of GABA–A and mitochondrial diazepam binding inhibitor receptors in the anti–stress activity of neurosteroids in mice. Reddy DS, et al. **Psychopharmacology (Berl)** 1996 Dec;128(3):280–92

The effects of daily hassles on exercise participation in perimenopausal women. Evans MS, et al. **Public Health Nurs** 1997 Apr;14(2):129–33

A prospective study of the relationship between disease activity and psychologic distress in patients with inflammatory bowel disease. Porcelli P, et al. **Scand J Gastroenterol** 1996 Aug;31(8):792–6

Effects of long workhours on life–style, stress and quality of life among intermediate Japanese managers. Maruyama S, et al. **Scand J Work Environ Health** 1996 Oct;22(5):353–9

Psychophysiological interactions in esophageal diseases. Richter JE, et al. **Semin Gastrointest Dis** 1996 Oct; 7(4):169–84 (98 ref.)

Chronic stress and psychological well–being: evidence from Thailand on household crowding. Fuller TD, et al. **Soc Sci Med** 1996 Jan;42(2):265–80

Coping with loss of ability: "good grief" or episodic stress responses? Hewson D. **Soc Sci Med** 1997 Apr;44(8):1129–39

Chronic work stress, sickness absence, and hypertension in middle managers: general or specific sociological explanations? Peter R, et al. **Soc Sci Med** 1997 Oct; 45(7):1111–20

The influence of culture and context on the pre– and post–migration experience of school–aged refugees from Central America and Southeast Asia in Canada. Rousseau C, et al. **Soc Sci Med** 1997 Apr;44(8):1115–27

Psychosocial work environment in human service organizations: a conceptual analysis and development of the demand–control model. Söderfeldt B, et al. **Soc Sci Med** 1996 May;42(9):1217–26 (50 ref.)

Psychosocial factors in the workplace—do they predict new episodes of low back pain? Evidence from the South Manchester Back Pain Study. Papageorgiou AC, et al. **Spine** 1997 May 15;22(10):1137–42

Organization stressors and the experience of distress in health service organizations: symptoms, causes and remedies [see comments] Foster MC, et al. **Trop Doct** 1997 Apr; 27(2):73–5. Comment in: Trop Doct 1997 Apr;27(2):65–6.

Stress in health care workers [editorial; comment] Munro B. **Trop Doct** 1997 Apr;27(2):65–6. Comment on: Trop Doct 1997 Apr;27(2):73–5.

Psychological factors and ultrasound: differences between routine and high–risk scans [comment] Ayers S, et al. **Ultrasound Obstet Gynecol** 1997 Feb;9(2):76–9. Comment on: Ultrasound Obstet Gynecol 1997 Feb;9(2):80–5. Comment on: Ultrasound Obstet Gynecol 1997 Feb;9(2):86–90. Comment on: Ultrasound Obstet Gynecol 1997 Feb;9(2):91–3.

Comparison of long–term psychological responses of women after pregnancy termination due to fetal anomalies and after perinatal loss [see comments] Salvesen KA, et al. **Ultrasound Obstet Gynecol** 1997 Feb;9(2):80–5. Comment in: Ultrasound Obstet Gynecol 1997 Feb;9(2):76–9.

Psychological effects of chronic injury in elite athletes [published erratum appears in West J Med 1997 Apr;166(4):291] Shuer ML, et al. **West J Med** 1997 Feb; 166(2):104–9

Family stress and support among former Soviet immigrants. Aroian KJ, et al. **West J Nurs Res** 1996 Dec;18(6):655–74

Stress and domestic abuse [see comments] Fessler JL. **Wis Med J** 1996 Dec;95(12):843. Comment in: Wis Med J 1996 Dec;95(12):834.

Physicians and stress: shatter the cycle. Kennedy M. **Wis Med J** 1996 Dec;95(12):838–42

[Job strain, social support and mental health: a study on the male heavy manufacturing workers] Yang MJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Jun; 13(6):332–41 (Eng. Abstr.) **(Chi)**

[Ulcer, personality and stress] Jess P. **Ugeskr Laeger** 1997 Jun 9;159(24):3749–50 **(Dan)**

[Is a 11–year–old tennis player indifferent to competition stress?] Pantelidis D, et al. **Arch Pediatr** 1997 Mar; 4(3):237–42 (Eng. Abstr.) **(Fre)**

[Skin and stress] Consoli S. **Pathol Biol (Paris)** 1996 Dec; 44(10):875–81 (28 ref.) (Eng. Abstr.) **(Fre)**

[Psychosomatic troubles in cardiology] Renard M. **Rev Med Brux** 1996 Oct;17(5):337–8 (Eng. Abstr.) **(Fre)**

[Effect of restraining growth pigs with snare restraints on plasma levels of catecholamines, cortisol, insulin and metabolic parameters] Neubert E, et al. **Berl Munch Tierarztl Wochenschr** 1996 Nov–Dec; 109(11–12):409–13 (Eng. Abstr.) **(Ger)**

[Effect of hot–air balloon crossings on animals in the open air] Stephan E. **DTW Dtsch Tierarztl Wochenschr** 1997 Feb; 104(2):79–82 (Eng. Abstr.) **(Ger)**

[Possible relationship between psychological stress and bleeding erosive upper gastrointestinal lesions] Bleich A, et al. **Harefuah** 1996 Jul;131(1–2):7–9, 72, 71 (Eng. Abstr.) **(Heb)**

[Actual conditions of help and support of childcare in families with multiple birth children] Yokoyama Y, et al. **Nippon Koshu Eisei Zasshi** 1997 Feb;44(2):81–8 (Eng. Abstr.) **(Jpn)**

[Physiopathological analysis of stress reaction and drug design] Takahashi M, et al. **Nippon Yakurigaku Zasshi** 1996 Sep;108(3):163–5 (5 ref.) **(Jpn)**

[Stress and psychosomatic disease] Yamaoka M. **Rinsho Byori** 1997 Jan;45(1):27–31 (Eng. Abstr.) **(Jpn)**

[Physicians in occupational health services under stress] Leira HL. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2754 **(Nor)**

[Human reactions to extreme stress] Opstad PK. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1066–7 **(Nor)**

[Skiing over Greenland—physical and psychological changes] Sandbaek G, et al. **Tidsskr Nor Laegeforen** 1997 Mar 20;117(8):1104–7 (Eng. Abstr.) **(Nor)**

[Risky social–psychological situations as a manifestation of population psycho–emotional stress] Zarakovskiĭ GM, et al. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):33–41 **(Rus)**

[Bases of the integral indicator in the determination of the category of work intensity] Izmerov NF, et al. **Med Tr Prom Ekol** 1997;(5):1–7 (Eng. Abstr.) **(Rus)**

[Occupational extreme stress factors determining psychological disorders in drivers] Temmoev DCh. **Med Tr Prom Ekol** 1996;(8):12–4 (Eng. Abstr.) **(Rus)**

[The role of psycho–oncology in the treatment of cancer patients] Blinov NN, et al. **Vopr Onkol** 1996;42(5):86–9 (16 ref.) (Eng. Abstr.) **(Rus)**

[Burnout and reaction to stress] De las Cuevas C, et al. **Rev Med Univ Navarra** 1997 Apr–Jun;41(2):10–8 (36 ref.) (Eng. Abstr.) **(Spa)**

[Complex memory function for mental trauma. Memory and forgetting ae necessary for the emotional adaptation process] Christianson SA, et al. **Lakartidningen** 1997 Apr 30;94(18):1721–4 (20 ref.) **(Swe)**

[Stress and burnout among physicians. Similar problems in different health care systems] Orn P. **Lakartidningen** 1997 May 28;94(22):2052 **(Swe)**

[Survey of stress in women. Heart disease in Stockholm women is caused by both family– and work–related stress (see comments)] Orth–Gomér K, et al. **Lakartidningen** 1997 Feb 19;94(8):632, 635–8. Comment in: Lakartidningen 1997 Apr 2;94(14):1260. **(Swe)**

BLOOD

Differences in hormonal responses to preoperative emotional stress between preschool and school children. Aono J, et al. **Acta Anaesthesiol Scand** 1997 Feb;41(2):229–31

Changes in hemostatic function at times of cyclic variation in occupational stress. Frimerman A, et al. **Am J Cardiol** 1997 Jan 1;79(1):72–5

Blood platelet responses to laboratory stress in young men. The effect of awareness of high blood pressure. Mundal HH, et al. **Am J Hypertens** 1996 Jan;9(1):12–7

Prenatal alcohol and stress interact to attenuate ejaculatory behavior, but not serum testosterone or LH in adult male

rats. Ward IL, et al. **Behav Neurosci** 1996 Dec; 110(6):1469–77

Effect of inhalation of chamomile oil vapour on plasma ACTH level in ovariectomized–rat under restriction stress. Yamada K, et al. **Biol Pharm Bull** 1996 Sep;19(9):1244–6

Increased activation of sympathetic nervous system and endothelin by mental stress in normotensive offspring of hypertensive patients [letter; comment] Friedman EH. **Circulation** 1997 Mar 18;95(6):1667–8. Comment on: Circulation 1996 Mar 1;93(5):866–9.

Hormonal responses to psychological stress in men preparing for skydiving. Chatterton RT Jr, et al. **J Clin Endocrinol Metab** 1997 Aug;82(8):2503–9

Effects of fasting and glucose load on free cortisol responses to stress and nicotine. Kirschbaum C, et al. **J Clin Endocrinol Metab** 1997 Apr;82(4):1101–5

Vulnerability to stress: self–criticism and stress–induced changes in biochemistry. Gruen RJ, et al. **J Pers** 1997 Mar; 65(1):33–47

Increased stress–induced adrenocorticotropin response after long–term intracerebroventricular treatment of rats with antisense mineralocorticoid receptor oligodeoxynucleotides. Reul JM, et al. **Neuroendocrinology** 1997 Mar;65(3):189–99

Hypoglycemic effect of stresses and their use for the experimental prophylaxis of diabetes mellitus. Volchegorskii IA, et al. **Neurosci Behav Physiol** 1996 Nov–Dec;26(6):587–91

Elevated basal cortisol levels and attenuated ACTH and cortisol responses to a behavioral challenge in women with metastatic breast cancer. van der Pompe G, et al. **Psychoneuroendocrinology** 1996 May;21(4):361–74

Effects of hostility on platelet reactivity to psychological stress in coronary heart disease patients and in healthy controls. Markovitz JH, et al. **Psychosom Med** 1996 Mar–Apr;58(2):143–9

Acute withdrawal of nasal CPAP in obstructive sleep apnea does not cause a rise in stress hormones. Grunstein RR, et al. **Sleep** 1996 Dec;19(10):774–82

Fibrinolytical activity in relation to psychological traits in patients with sciatica. Graver V, et al. **Thromb Res** 1997 Feb 15;85(4):363–6

[Evaluation of the relation of job stress and food intake to hyperuricemia] Ono K, et al. **Nippon Koshu Eisei Zasshi** 1997 Apr;44(4):239–46 (Eng. Abstr.) **(Jpn)**

[Reactions of the erythropoietic progenitor cells in various types of neurotic actions] Dygai AM, et al. **Biull Eksp Biol Med** 1997 Feb;123(2):158–61 **(Rus)**

[Emotional stress and blood melatonin levels] Malinovskaia NK, et al. **Vestn Ross Akad Med Nauk** 1997;(7):51–4 (Eng. Abstr.) **(Rus)**

[The effect of renal polypeptides on blood coagulation and lipid peroxidation in acute emotional–pain stress] Kaidashev IP. **Fiziol Zh** 1996;42(5–6):39–44 (Eng. Abstr.) **(Ukr)**

[The effect of mercazolyl on the activity of the main hemostatic blood systems under the action of immobilization stress] Lunina NV, et al. **Lik Sprava** 1995 Sep–Dec;(9–12):160–3 (Eng. Abstr.) **(Ukr)**

CLASSIFICATION

The computer age: beware the loss of the narrative [letter; comment] Pincus HA, et al. **Gen Hosp Psychiatry** 1996 Jul;18(4):284–5. Comment on: Gen Hosp Psychiatry 1995 May;17(3):157–9.

COMPLICATIONS

Stress and alopecia areata: a psychodermatologic study. Gupta MA, et al. **Acta Derm Venereol** 1997 Jul;77(4):296–8

Association of psychic stress with clinical severity and symptoms of psoriatic patients. Harvima RJ, et al. **Acta Derm Venereol** 1996 Nov;76(6):467–71

Cognitive function and distress after common whiplash injury. Smed A. **Acta Neurol Scand** 1997 Feb;95(2):73–80

Stress and psychiatric disorders in local government officials in Japan, in relation to their employment level. Nadaoka T, et al. **Acta Psychiatr Scand** 1997 Sep;96(3):176–83

A bi–directional theory of addiction: examining coping and the factors related to substance relapse. Castellani B, et al. **Addict Behav** 1997 Jan–Feb;22(1):139–44

Stress among males recovering from substance abuse. Lamon BC, et al. **Addict Behav** 1997 Mar–Apr;22(2):195–205

Economic hardship, family relationships, and adolescent distress: an evaluation of a stress–distress mediation model in mother–daughter and mother–son dyads. Lempers JD, et al. **Adolescence** 1997 Summer;32(126):339–56

Family stress, perception of pregnancy, and age of first menarche among pregnant adolescents. Ravert AA, et al. **Adolescence** 1997 Summer;32(126):261–9

Psychosocial factors and incidence of peritonitis. Juergensen PH, et al. **Adv Perit Dial** 1996;12:196–8

Adaptation to repeated restraint stress in rats: failure of ethanol–treated rats to adapt in the stress schedule. Haleem DJ. **Alcohol Alcohol** 1996 Sep;31(5):471–7

Current developments in the study of stress and alcohol consumption. Ragland DR. **Alcohol Clin Exp Res** 1996 Nov;20(8 Suppl):51A–53A

Transient coronary occlusion with mental stress. Papademetriou V, et al. **Am Heart J** 1996 Dec; 132(6):1299–301

Upper extremity musculoskeletal symptoms among female office workers: associations with video display terminal use and occupational psychosocial stressors. Marcus M, et al. **Am J Ind Med** 1996 Feb;29(2):161–70

A follow–up study of job strain and heart disease among males in the NHANES1 population. Steenland K, et al. **Am J Ind Med** 1997 Feb;31(2):256–60

Interactive action of the white–coat effect and the blood pressure levels on cardiovascular complications in hypertension. Palatini P, et al. **Am J Med** 1997 Sep; 103(3):208–16

The preterm prediction study: maternal stress is associated with spontaneous preterm birth at less than thirty–five weeks' gestation. National Institute of Child Health and Human Development Maternal–Fetal Medicine Units Network. Copper RL, et al. **Am J Obstet Gynecol** 1996 Nov;175(5):1286–92

The CNS site of glucocorticoid negative feedback during LPS– and psychological stress–induced fevers. Morrow LE, et al. **Am J Physiol** 1996 Sep;271(3 Pt 2):R732–7

Employment, job strain, and preterm delivery among women in North Carolina. Brett KM, et al. **Am J Public Health** 1997 Feb;87(2):199–204

The dexamethasone suppression test and glucocorticoid receptors in borderline personality disorder. Grossman R, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:459–64

Maternal stress, HPA activity, and fetal/infant outcome. Sandman CA, et al. **Ann N Y Acad Sci** 1997 Apr 24; 814:266–75

Noise stress and the development of benzodiazepine dependence in the rat. File SE, et al. **Anxiety** 1994;1(1):8–12

Perceived physical and emotional trauma as precipitating events in fibromyalgia. Associations with health care seeking and disability status but not pain severity. Aaron LA, et al. **Arthritis Rheum** 1997 Mar;40(3):453–60

Protective effect of fish oil against stress–induced gastric injury in rats. Ulak G, et al. **Arzneimittelforschung** 1995 Nov;45(11):1174–5

Psychosocial stressors, physical illness and the spectrum of depression in elderly inpatients. Draper B, et al. **Aust N Z J Psychiatry** 1996 Oct;30(5):567–72

Comparative levels of psychological distress in a pre–migratory refugee population. McKelvey RS, et al. **Aust N Z J Psychiatry** 1997 Aug;31(4):543–8

Pregnancy and flying [letter; comment] Schenker EB. **Aviat Space Environ Med** 1996 Apr;67(4):389–90. Comment on: Aviat Space Environ Med 1995 Nov;66(11):1090–3.

Success in mating: a coordinated approach to fitness through genotypes incorporating genes for stress resistance and heterozygous advantage under stress. Parsons P. **Behav Genet** 1997 Jan;27(1):75–81

Psychological stress impairs spatial working memory: relevance to electrophysiological studies of hippocampal function. Diamond DM, et al. **Behav Neurosci** 1996 Aug; 110(4):661–72

Protective effects of Acanthopanax senticosus Harms from Hokkaido and its components on gastric ulcer in restrained cold water stressed rats. Fujikawa T, et al. **Biol Pharm Bull** 1996 Sep;19(9):1227–30

Individual differences in cortisol responses to a laboratory speech task and their relationship to responses to stressful daily events. van Eck MM, et al. **Biol Psychol** 1996 Mar 8;43(1):69–84

Fortnighly review. Stress, the brain, and mental illness. Herbert J. **BMJ** 1997 Aug 30;315(7107):530–5 (47 ref.)

The practice of dentistry: an assessment of reasons for premature retirement. Burke FJ, et al. **Br Dent J** 1997 Apr 12;182(7):250–4

Maternal handling during pregnancy reduces DMBA–induced mammary tumorigenesis among female offspring. Hilakivi–Clarke L. **Br J Cancer** 1997;76(2):150–5

Reporting of psychosocial distress [letter; comment] Garcia–Campayo J, et al. **Br J Psychiatry** 1996 Jun; 168(6):790. Comment on: Br J Psychiatry 1996 Jan;168(1):116–20.

Unwantedness of a pregnancy and schizophrenia in the child. Myhrman A, et al. **Br J Psychiatry** 1996 Nov;169(5):637–40

Occupational stress among senior police officers. Brown J, et al. **Br J Psychol** 1996 Feb;87 (Pt 1):31–41

Models of job–related stress and personal achievement among consultant doctors. Deary IJ, et al. **Br J Psychol** 1996 Feb; 87 (Pt 1):3–29

Delayed traumatic recall in adults: a synthesis with legal, clinical, and forensic recommendations. Beahrs JO, et al. **Bull Am Acad Psychiatry Law** 1996;24(1):45–55 (63 ref.)

Early indicators of stress in low back pain. Main CJ. **Bull Hosp Jt Dis** 1996;55(3):125–6

Effects of social housing condition on the response of the Shionogi mouse mammary carcinoma (SC115) to chemotherapy. Kerr LR, et al. **Cancer Res** 1997 Mar 15; 57(6):1124–8

Stress characteristics in schoolchildren related to different educational strategies and school climates. Havlinova M, et al. **Cent Eur J Public Health** 1995 Nov;3(4):205–9

Ischemic, hemodynamic, and neurohormonal responses to mental and exercise stress. Experience from the Psychophysiological Investigations of Myocardial Ischemia Study (PIMI). Goldberg AD, et al. **Circulation** 1996 Nov 15;94(10):2402–9

Impact of acute mental stress on sympathetic nerve activity and regional blood flow in advanced heart failure: implications for 'triggering' adverse cardiac events. Middlekauff HR, et al. **Circulation** 1997 Sep 16; 96(6):1835–42

Psychological factors affecting health after toxicological disasters. Havenaar JM, et al. **Clin Psychol Rev** 1997; 17(4):359–74 (90 ref.)

The relationship between stressful and traumatic life events and depression in the elderly. Kraaij V, et al. **Crisis** 1997; 18(2):86–8

Stress, social support, and college adjustment among Latino students. Jarama Alvan SL, et al. **Cult Divers Ment Health** 1996;2(3):193–203

Concept of total care: a third dimension in the treatment of psoriasis. Farber EM, et al. **Cutis** 1997 Jan;59(1):35–9

Psychophysiology of stress in dermatology. The psychobiologic pattern of psychosomatics. Panconesi E, et al. **Dermatol Clin** 1996 Jul;14(3):399–421 (117 ref.)

Stress decreases lymphocyte cytolytic activity in the young monkey even after blockade of steroid and opiate hormone receptors. Coe CL, et al. **Dev Psychobiol** 1997 Jan; 30(1):1–10

Role of experimental conditions in determining differences in exploratory behavior of prenatally stressed rats. Poltyrev T, et al. **Dev Psychobiol** 1996 Jul;29(5):453–62

Looking beyond age and race: the structure of networks, functions of support, and chronic stress [editorial; comment] Berkman LF. **Epidemiology** 1997 Sep;8(5):469–70 (9 ref.). Comment on: Epidemiology 1997 Sep;8(5):475–81. Comment on: Epidemiology 1997 Sep;8(5):482–7.

Psychosocial aspects of work and the risk of colon cancer. Courtney JG, et al. **Epidemiology** 1996 Mar;7(2):175–81

Stress, work, and pregnancy complications [letter; comment] Hatch MC. **Epidemiology** 1997 Jan;8(1):113–4. Comment on: Epidemiology 1996 Jul;7(4):337–8.

Do stressful life events affect duration of gestation and risk of preterm delivery? [see comments] Hedegaard M, et al. **Epidemiology** 1996 Jul;7(4):339–45. Comment in: Epidemiology 1996 Jul;7(4):337–8.

Job stress and preeclampsia. Klonoff–Cohen HS, et al. **Epidemiology** 1996 May;7(3):245–9

Psychosocial work stress and pregnancy–induced hypertension [see comments] Landsbergis PA, et al. **Epidemiology** 1996 Jul;7(4):346–51. Comment in: Epidemiology 1996 Jul;7(4):337–8.

Social identity and arterial blood pressure in the African–American community. Dressler WW. **Ethn Dis** 1996 Winter–Spring;6(1–2):176–89

The children of the Lundby study as adults: a salutogenic perspective. Cederblad M. **Eur Child Adolesc Psychiatry** 1996;5 Suppl 1:38–43

Primary nocturnal enuresis and desmopressin treatment: do psychosocial factors affect outcome? Dittmann RW, et al. **Eur Child Adolesc Psychiatry** 1996 Jun;5(2):101–9

Behavioural phenotypes and family stress in three mental retardation syndromes. Sarimski K. **Eur Child Adolesc Psychiatry** 1997 Mar;6(1):26–31

Effects of mental and physical stress on platelet function in patients with stable angina pectoris and healthy controls. Wallén NH, et al. **Eur Heart J** 1997 May;18(5):807–15

Stressful life events and Graves' disease. Chiovato L, et al. **Eur J Endocrinol** 1996 Jun;134(6):680–2 (12 ref.)

Stressful life events in the pathogenesis of Graves' disease. Radosavljević VR, et al. **Eur J Endocrinol** 1996 Jun; 134(6):699–701

Stress and infertility: "the chicken or the egg?" [letter; comment] Lindheim SR, et al. **Fertil Steril** 1997 Aug; 68(2):384–5. Comment on: Fertil Steril 1997 Feb;67(2):309–14.

Concerning the paper by Lacomte et al., entitled: 'Stressful events as a trigger of sudden death: a study of 43 medico–legal autopsies case' (Forensic Sci. Int., 79 (1996) 1–10) [letter; comment] Aragona F. **Forensic Sci Int** 1997 Feb 28;85(2):159–60. Comment on: Forensic Sci Int 1996 May 17;79(1):1–10.

Stress–related mucosal damage. What to do or not to do. Goldin GF, et al. **Gastrointest Endosc Clin N Am** 1996 Jul;6(3):505–26 (106 ref.)

Midlife crisis: helping patients cope with stress, anxiety, and depression. Samuels SC. **Geriatrics** 1997 Jul;52(7):55–6, 59–63; quiz 64

Between stressors and outcomes: can we simplify caregiving process variables? Braithwaite V. **Gerontologist** 1996 Feb; 36(1):42–53

Relative contributions of life events versus daily hassles to the frequency and intensity of headaches. Fernandez E, et al. **Headache** 1996 Nov–Dec;36(10):595–602

The relationship between stress, headache, and the menstrual cycle in young female migraineurs. Holm JE, et al. **Headache** 1996 Oct;36(9):531–7

Headache and stress in a group of nurses and government administrators in Japan. Nadaoka T, et al. **Headache** 1997 Jun;37(6):386–91

Psychophysical precedents of migraine in relation to the time of onset of the headache: the migraine time line. Spierings EL, et al. **Headache** 1997 Apr;37(4):217–20

Psychometric properties of the Questionnaire on Stress in Patients with Diabetes—Revised (QSD–R). Herschbach P, et al. **Health Psychol** 1997 Mar;16(2):171–4

Effects of food deprivation and a stressor on head pain. Martin PR, et al. **Health Psychol** 1997 Jul;16(4):310–8

Cardiovascular and psychosomatic symptoms among relatives of patients waiting for possible coronary revascularization. Bengtson A, et al. **Heart Lung** 1996

Nov-Dec;25(6):438-43
Stress and stress-related hormones during in-vitro fertilization treatment. Harlow CR, et al. **Hum Reprod** 1996 Feb;11(2):274-9
Prevalence and health implications of anti-gay discrimination: a study of black and white women and men in the CARDIA cohort. Coronary Artery Risk Development in Young Adults. Krieger N, et al. **Int J Health Serv** 1997;27(1):157-76
Stressful life events and minor psychiatric disorders: an estimate of the population attributable fraction in a Brazilian community-based study. Lima MS, et al. **Int J Psychiatry Med** 1996;26(2):211-22
Stress in mental health professionals: a cause for concern or an inevitable part of the job? [editorial] Carson J, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):79-81
Stress in clinical psychologists. Cushway D, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):141-9 (39 ref.)
Personality and stress in consultant psychiatrists. Deary IJ, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):112-23
Stress, coping and burnout in mental health nurses: findings from three research studies. Fagin L, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):102-11
Stress in mental health professionals: a theoretical overview. Moore KA, et al. **Int J Soc Psychiatry** 1996 Summer; 42(2):82-9 (28 ref.)
Stress and its relationship to expressed emotion in community mental health workers. Oliver N, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):150-9
Stress and mental health social work. A developmental perspective. Pottage D, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):124-31
Stress experiences of occupational therapists in mental health practice arenas: a review of the literature. Sweeney G, et al. **Int J Soc Psychiatry** 1996 Summer;42(2):132-40 (35 ref.)
Stability and change in personality disorder symptomatology: findings from a longitudinal study of HIV+ and HIV- men. Johnson JG, et al. **J Abnorm Psychol** 1997 Feb; 106(1):154-8
The role of anxiety sensitivity in the pathogenesis of panic: prospective evaluation of spontaneous panic attacks during acute stress. Schmidt NB, et al. **J Abnorm Psychol** 1997 Aug;106(3):355-64
Youth unemployment and psychological distress in the Republic of Ireland. Hannan DF, et al. **J Adolesc** 1997 Jun;20(3):307-20
Primary dysthymia: a study of several psychosocial, endocrine and immune correlates. Ravindran AV, et al. **J Affect Disord** 1996 Sep 9;40(1-2):73-84
News or old hat? [letter; comment] Firestone JM. **J Am Dent Assoc** 1996 Sep;127(9):1290, 1292. Comment on: J Am Dent Assoc 1995 Oct;126(10):1346.
Ethnicity, gender identity, stress, and coping among female African-American medical students. Shervington DO, et al. **J Am Med Womens Assoc** 1996 Aug-Oct;51(4):153-4
Job-related and psychological effects of sexual harassment in the workplace: empirical evidence from two organizations. Schneider KT, et al. **J Appl Psychol** 1997 Jun;82(3):401-15
Families of children with Prader-Willi syndrome: stress-support and relations to child characteristics. Hodapp RM, et al. **J Autism Dev Disord** 1997 Feb; 27(1):11-24
The impact of psychosocial features of employment status on emotional distress in chronic pain and healthy comparison samples. Jackson T, et al. **J Behav Med** 1997 Jun;20(3):241-56
Emotional distress among males with "syndrome X". Ketterer MW, et al. **J Behav Med** 1996 Oct;19(5):455-66
The relationship between daily life stress and gastrointestinal symptoms in women with irritable bowel syndrome. Levy RL, et al. **J Behav Med** 1997 Apr;20(2):177-93
Effects of perceived stress on pediatric chronic pain. Varni JW, et al. **J Behav Med** 1996 Dec;19(6):515-28
Cardiovascular risk and responsivity to mental stress: the influence of age, gender and risk factors. Steptoe A, et al. **J Cardiovasc Risk** 1996 Feb;3(1):83-93
Disaster related stresses, depressive signs and symptoms, and suicidal ideation among a multi-racial/ethnic sample of adolescents: a longitudinal analysis. Warheit GJ, et al. **J Child Psychol Psychiatry** 1996 May;37(4):435-44
The relationship between life-events and periodontitis. A case-control study. Croucher R, et al. **J Clin Periodontol** 1997 Jan;24(1):39-43
Stress and the progression of periodontal disease. Linden GJ, et al. **J Clin Periodontol** 1996 Jul;23(7):675-80
Effects of stressful stimuli: a comparison between two time periods. Koslowsky M, et al. **J Clin Psychol** 1996 May; 52(3):279-83
Information processing and affective distress in osteoarthritis patients. Calfas KJ, et al. **J Consult Clin Psychol** 1997 Aug; 65(4):576-81
Response to cognitive-behavioral therapy in depression: effects of pretreatment cognitive dysfunction and life stress. Spangler DL, et al. **J Consult Clin Psychol** 1997 Aug; 65(4):568-75
Association between self-reported stressful feeling by SACL and mortality in a Japanese community. Utoguchi K, et al. **J Epidemiol** 1997 Mar;7(1):9-16
Society stress and peptic ulcer perforation. Lam SK, et al. **J Gastroenterol Hepatol** 1995 Sep-Oct;10(5):570-6
The intergenerational costs of parental social stressors: academic and social difficulties in early adolescence for children of young mothers. Menaghan EG, et al. **J Health Soc Behav** 1997 Mar;38(1):72-86
Psychological stress and the progression of carotid artery disease. Barnett PA, et al. **J Hypertens** 1997 Jan;15(1):49-55
Chronic work stress is associated with atherogenic lipids and elevated fibrinogen in middle-aged men. Siegrist J, et al. **J Intern Med** 1997 Aug;242(2):149-56
Stress, stress reduction, and hypertension in African Americans: an updated review. Barnes V, et al. **J Natl Med Assoc** 1997 Jul;89(7):464-76 (139 ref.)
Stress-related disorders in African-American children. Bell CC. **J Natl Med Assoc** 1997 May;89(5):335-40
Additive effects, but no synergistic interaction of stressful life-events and genetic loading in affective disorders. Fritze J, et al. **J Neural Transm** 1996;103(10):1221-9 (24 ref.)
The Spanish version of the Parental Stressor Scale: Pediatric Intensive Care Unit. Rei RM, et al. **J Pediatr Nurs** 1996 Feb;11(1):3-9
Factors predicting distress among caregivers to children with chronic medical conditions. Canning RD, et al. **J Pediatr Psychol** 1996 Oct;21(5):735-49
Exploratory case-control analysis of psychosocial factors and adult periodontitis. Moss ME, et al. **J Periodontol** 1996 Oct;67(10 Suppl):1060-9
Partners' stress underestimations lead to women's distress: a study of pregnant inner-city women. Chapman HA, et al. **J Pers Soc Psychol** 1997 Aug;73(2):418-25
Stress, affiliation, and emotional contagion. Gump BB, et al. **J Pers Soc Psychol** 1997 Feb;72(2):305-19
Received and perceived social support in times of stress: a test of the social support deterioration deterrence model. Norris FH, et al. **J Pers Soc Psychol** 1996 Sep;71(3):498-511
Facilitating and debilitating trait anxiety, situational anxiety, and coping with an anticipated stressor: a process analysis. Raffety BD, et al. **J Pers Soc Psychol** 1997 Apr; 72(4):892-906
The role of stress and dopamine-GABA interactions in the vulnerability for schizophrenia. Benes FM. **J Psychiatr Res** 1997 Mar-Apr;31(2):257-75 (105 ref.)
Hostility changes following antidepressant treatment: relationship to stress and negative thinking. Fava M, et al. **J Psychiatr Res** 1996 Nov-Dec;30(6):459-67
Compounding of premigration trauma and postmigration stress in asylum seekers. Sinnerbrink I, et al. **J Psychol** 1997 Sep;131(5):463-70
Stressors and coping strategies of homeless men. Murray RB. **J Psychosoc Nurs Ment Health Serv** 1996 Aug;34(8):16-22
Mall walking. An effective mental health intervention for older adults. Travis SS, et al. **J Psychosoc Nurs Ment Health Serv** 1996 Aug;34(8):36-8
Psychosocial factors as predictors of maternal well-being and pregnancy-related complaints. Paarlberg KM, et al. **J Psychosom Obstet Gynaecol** 1996 Jun;17(2):93-102
Psychological stress and myocardial perfusion in coronary disease patients and healthy controls. Benight CC, et al. **J Psychosom Res** 1997 Feb;42(2):137-44
Are multiple roles a risk factor for myocardial infarction in women? Collijn DH, et al. **J Psychosom Res** 1996 Mar; 40(3):271-9
Are abnormal gastrofiberscopic findings related to hostility with poor social support or to negative responses to stress? Fukunishi I, et al. **J Psychosom Res** 1996 Oct;41(4):337-42
Beliefs about mood moderate the relationship of stress to illness and symptom reporting. Goldman SL, et al. **J Psychosom Res** 1996 Aug;41(2):115-28
Modulation of immune response to rDNA hepatitis B vaccination by psychological stress. Jabaaij L, et al. **J Psychosom Res** 1996 Aug;41(2):129-37
Physiological stress reactivity and recovery: conceptual siblings separated at birth? Linden W, et al. **J Psychosom Res** 1997 Feb;42(2):117-35 (59 ref.)
Dimensions of hostility and cardiovascular response to interpersonal stress. Miller SB, et al. **J Psychosom Res** 1996 Jul;41(1):81-95
The effects of acute psychologic stress on cellular adhesion molecules. Mills PJ, et al. **J Psychosom Res** 1996 Jul; 41(1):49-53
Psychologic characteristics associated with acute stressor-induced leukocyte subset redistribution. Mills PJ, et al. **J Psychosom Res** 1996 Apr;40(4):417-23
Hypertension and objective and self-reported stressor exposure: a review. Nykliček I, et al. **J Psychosom Res** 1996 Jun;40(6):585-601 (76 ref.)
Stress, social support and health-related behavior: a study of smoking, alcohol consumption and physical exercise. Steptoe A, et al. **J Psychosom Res** 1996 Aug;41(2):171-80
Experimental stress and cardiac function [editorial] Tennant C. **J Psychosom Res** 1996 Jun;40(6):569-83 (125 ref.)
Coronary heart disease: a review of the role of psychosocial stress and social support. Greenwood DC, et al. **J Public Health Med** 1996 Jun;18(2):221-31 (52 ref.)
A structural equations model of stress, locus of control, social support, psychiatric symptoms, and propensity to leave a job. Afzalur Rahim M, et al. **J Soc Psychol** 1996 Feb; 136(1):69-84
The capacity to be alone as a stress buffer. Larson R, et al. **J Soc Psychol** 1996 Feb;136(1):5-16
Personal and situational factors that predict coping strategies for acute stress among basketball referees. Kaissidis-Rodafinos A, et al. **J Sports Sci** 1997 Aug; 15(4):427-36
Stress-related growth failure [letter; comment] Wright C. **Lancet** 1996 Oct 19;348(9034):1104-5. Comment on: Lancet 1996 Aug 10;348(9024):353-8.
Psychosocial stress and the insulin resistance syndrome. Räikkönen K, et al. **Metabolism** 1996 Dec;45(12):1533-8
Abnormal corticosterone regulation in an immature rat model of continuous chronic stress. Gilles EE, et al. **Pediatr Neurol** 1996 Sep;15(2):114-9
Ratings of stress by rugby referees. Rainey DW, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):728-30
Amount of psychological stress reported by high school volleyball officials. Stewart MJ, et al. **Percept Mot Skills** 1996 Aug;83(1):337-8
A protective role for calcitonin gene-related peptide in water-immersion stress-induced gastric ulcers in rats. Evangelista S, et al. **Pharmacol Res** 1997 Apr;35(4):347-50
Effects of chronic stress on food acquisition, plasma hormones, and the estrous cycle of female rats. Anderson SM, et al. **Physiol Behav** 1996 Jul;60(1):325-9
Single and repeated environmental stress: effect on plasma oxytocin, corticosterone, catecholamines, and behavior. Hashiguchi H, et al. **Physiol Behav** 1997 May;61(5):731-6
Sustained stress and fixed interval performance. Kant GJ, et al. **Physiol Behav** 1997 Feb;61(2):279-84
Effect of environmental enrichment and housing density on immune system reactivity to acute exercise stress. Kingston SG, et al. **Physiol Behav** 1996 Jul;60(1):145-50
Scanning behavior of rats during eating under stressful noise. Krebs H, et al. **Physiol Behav** 1997 Jul;62(1):151-4
Behaviour laterality in male rats: influence of practice and stress. Santín LJ, et al. **Physiol Behav** 1996 Jul;60(1):161-4
Relationship between blood pressure and stress-prone temperament in dogs. Vincent IC, et al. **Physiol Behav** 1996 Jul;60(1):135-8
Decreased hedonic responsiveness following chronic mild stress is not secondary to loss of body weight. Willner P, et al. **Physiol Behav** 1996 Jul;60(1):129-34
Crossing new bridges: the process of adaptation and psychological distress of Russian immigrants in Israel. Baider L, et al. **Psychiatry** 1996 Summer;59(2):175-83
Plasma vanillylmandelic acid level as an index of psychological stress response in normal subjects. Fukuda M, et al. **Psychiatry Res** 1996 Jun 26;63(1):7-16
A stitch in time: self-regulation and proactive coping. Aspinwall LG, et al. **Psychol Bull** 1997 May;121(3):417-36 (175 ref.)
Self-esteem moderator or mediator between perceived stress and expectancy of success. Abel MH. **Psychol Rep** 1996 Oct;79(2):635-41
Assessing stress among public school principals in British Columbia. Allison DG. **Psychol Rep** 1997 Jun;80(3 Pt 2):1103-14
Locus of control, sensation seeking, and stress. De Brabander B, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1307-12
Women with high risk for breast cancer: psychological symptoms. Gilbar O. **Psychol Rep** 1997 Jun;80(3 Pt 1):800-2
Effects of locus of control, occupational stress, and psychological distress on job satisfaction among nurses. Jain VK, et al. **Psychol Rep** 1996 Jun;78(3 Pt 2):1256-8
Social stress, homicide, and suicide. Lester D. **Psychol Rep** 1996 Dec;79(3 Pt 1):922
Smoking and stress: cigarettes and marihuana. McCann N, et al. **Psychol Rep** 1996 Oct;79(2):366
Stress of secondary school teachers in Transkei, South Africa. Mwamwenda TS, et al. **Psychol Rep** 1997 Apr;80(2):379-82
Stress, coping, and social support in hypothetically psychosis-prone subjects. Schuldberg D, et al. **Psychol Rep** 1996 Jun;78(3 Pt 2):1267-83
Psychometric properties of the Self-perceived Stress in Retirement Scale. Sharpley CF. **Psychol Rep** 1997 Aug; 81(1):319-22
Optimism, social support, stress, and physical and psychological well-being in Japanese women. Sumi K. **Psychol Rep** 1997 Aug;81(1):299-306
Avoidance as a coping strategy for nurses in Thailand. Tyson PD, et al. **Psychol Rep** 1996 Oct;79(2):592-4
Comparison of the behavioural and endocrine response to forced swimming stress in five inbred strains of rats. Armario A, et al. **Psychoneuroendocrinology** 1995; 20(8):879-90
Neuroendocrine responses to fenfluramine challenge are influenced by exposure to chronic social stress in adult male cynomolgus macaques. Botchin MB, et al. **Psychoneuroendocrinology** 1994;19(1):1-11
Hormonal response to stress in brittle diabetes. Dutour A, et al. **Psychoneuroendocrinology** 1996 Aug;21(6):525-43
Suppression of lymphocyte mitogenesis in different rat strains exposed to footshock during early diurnal and nocturnal time periods. Kusnecov AW, et al. **Psychoneuroendocrinology** 1995;20(8):821-35
Variations of lymphocyte subsets associated with stress in depressive populations. Ravindran AV, et al. **Psychoneuroendocrinology** 1996 Nov;21(8):659-71
Auditory pseudohallucinations induced by a combination of hearing impairment and environmental stress. Balan S, et al. **Psychopathology** 1996;29(3):198-200
Psychopathological verbal expression of self-perceived stress in three groups of psychotic patients. Jimeno Bulnes N, et al. **Psychopathology** 1997;30(1):39-48
Psychological stress as a determinant of protein levels and salivary-induced aggregation of Streptococcus gordonii in human whole saliva. Bosch JA, et al. **Psychosom Med** 1996

Jul-Aug;58(4):374-82

Attenuated free cortisol response to psychosocial stress in children with atopic dermatitis. Buske-Kirschbaum A, et al. **Psychosom Med** 1997 Jul-Aug;59(4):419-26

Psychosocial stress and susceptibility to upper respiratory tract illness in an adult population sample. Cobb JM, et al. **Psychosom Med** 1996 Sep-Oct;58(5):404-12

Sociality and immunological health revisited [editorial; comment] Coe CL. **Psychosom Med** 1997 May-Jun; 59(3):222-3. Comment on: Psychosom Med 1997 May-Jun;59(3):213-21.

Chronic social stress, social status, and susceptibility to upper respiratory infections in nonhuman primates [see comments] Cohen S, et al. **Psychosom Med** 1997 May-Jun; 59(3):213-21. Comment in: Psychosom Med 1997 May-Jun;59(3):222-3.

Psychosocial factors, sex differences, and atherosclerosis: lessons from animal models. Kaplan JR, et al. **Psychosom Med** 1996 Nov-Dec;58(6):598-611 (126 ref.)

Stress in employed women: a woman's work is never done if she's a working mom [editorial; comment] Light KC. **Psychosom Med** 1997 Jul-Aug;59(4):360-1. Comment on: Psychosom Med 1997 Jul-Aug;59(4):352-9.

Stress in employed women: impact of marital status and children at home on neurohormone output and home strain [see comments] Luecken LJ, et al. **Psychosom Med** 1997 Jul-Aug;59(4):352-9. Comment in: Psychosom Med 1997 Jul-Aug;59(4):360-1.

Plasma catecholamine and lymphocyte beta 2-adrenergic receptor alterations in elderly Alzheimer caregivers under stress. Mills PJ, et al. **Psychosom Med** 1997 May-Jun; 59(3):251-6

Chronic life stress alters sympathetic, neuroendocrine, and immune responsivity to an acute psychological stressor in humans. Pike JL, et al. **Psychosom Med** 1997 Jul-Aug; 59(4):447-57

Perceptions of parental caring predict health status in midlife: a 35-year follow-up of the Harvard Mastery of Stress Study [see comments] Russek LG, et al. **Psychosom Med** 1997 Mar-Apr;59(2):144-9. Comment in: Psychosom Med 1997 Mar-Apr;59(2):150-1.

Psychological stress, neuroimmunomodulation, and susceptibility to infectious diseases in animals and man: a review. Biondi M, et al. **Psychother Psychosom** 1997; 66(1):3-26 (271 ref.)

An investigation of the manifest dream content associated with migraine headaches: a studv of the dreams that precede nocturnal migraines. Heather-Greener GQ, et al. **Psychother Psychosom** 1996;65(4):216-21

Parents of children and adolescents with severe mental retardation: stress, family resources, normalization, and their application for out-of-home placement. Rimmerman A, et al. **Res Dev Disabil** 1996 Nov-Dec;17(6):487-94

PMS after 40: persistence of a stress-related symptom pattern. Woods NF, et al. **Res Nurs Health** 1997 Aug;20(4):329-40

Working conditions and family situation in relation to functional gastrointestinal disorders. The Swedish Dyspepsia Project. Westerberg L, et al. **Scand J Prim Health Care** 1997 Jun;15(2):76-81

Environmental influences on psychological restoration. Hartig T, et al. **Scand J Psychol** 1996 Dec;37(4):378-93

Job strain and ambulatory blood pressure levels in a population-based employed sample of men from northern Italy. Cesana G, et al. **Scand J Work Environ Health** 1996 Aug;22(4):294-305

Sick building syndrome, work factors and occupational stress. Crawford JO, et al. **Scand J Work Environ Health** 1996 Aug;22(4):243-50 (71 ref.)

Changes in stress symptoms and their relationship to changes at work in 1981-1992 among elderly workers in municipal occupations. Huuhtanen P, et al. **Scand J Work Environ Health** 1997;23 Suppl 1:36-48

The influence of exile and repatriation on mental and physical health. A population-based study. Sundquist J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Jan;31(1):21-8

Young doctors' health--I. How do working conditions affect attitudes, health and performance? Baldwin PJ, et al. **Soc Sci Med** 1997 Jul;45(1):35-40

Stress, satisfaction and militancy among Canadian physicians: a longitudinal investigation. Burke RJ. **Soc Sci Med** 1996 Aug;43(4):517-24

Psychosocial stressors in patients with major depression and silent cerebral infarction. Fujikawa T, et al. **Stroke** 1997 Jun;28(6):1123-5

Precipitants of brain infarction. Roles of preceding infection/inflammation and recent psychological stress [see comments] Macko RF, et al. **Stroke** 1996 Nov; 27(11):1999-2004. Comment in: Stroke 1997 Apr;28(4):873-4.

Panic attacks keep patients stressed. Fessler JL. **Wis Med J** 1996 Dec;95(12):844-5

Emotional distress, physical symptoms and sleep disorders [comment] Hansotia P. **Wis Med J** 1996 Dec;95(12):836-7 . Comment on: Wis Med J 1996 Dec;95(12):846-50.

Psychosocial correlates of chest pain among African-American women. Fisher SG, et al. **Women Health** 1996;24(3):19-35

[Development and validation of a perceived stress questionnaire recommended as a follow-up indicator in occupational medicine] Consoli SM, et al. **Encephale** 1997 May-Jun;23(3):184-93 (Eng. Abstr.) **(Fre)**

[Stress theories and the somatization process] Dantzer R. **Encephale** 1995 Dec;21 Spec No 7:3-9 (21 ref.) (Eng. Abstr.) **(Fre)**

[Is drug dependence an occupational risk for physicians?] Schifferdecker M, et al. **Fortschr Med** 1996 Oct 20; 114(29):372-3, 376 (20 ref.) (Eng. Abstr.) **(Ger)**

[Psychophysiologic and psychologic correlates of the emotional family climate in schizophrenic patients and their family] Kraemer S, et al. **Nervenarzt** 1996 Mar;67(3):219-28 (Eng. Abstr.) **(Ger)**

[Everyday stress and ulcerative colitis] Kosarz P, et al. **Psychother Psychosom Med Psychol** 1997 Mar-Apr; 47(3-4):117-22 **(Ger)**

[Coping with stress and self-awareness in idiopathic sudden deafness] Kröger F, et al. **Psychother Psychosom Med Psychol** 1996 Aug; 46(8):298-303 (Eng. Abstr.) **(Ger)**

[Prevention of sudden infant death by monitoring: effects on psychological stress of involved parents] Lohaus A, et al. **Psychother Psychosom Med Psychol** 1996 Aug; 46(8):292-7 (Eng. Abstr.) **(Ger)**

[Damaging health effects on children caused by low flying aircraft and other environmental stresses. Autonomic reactions and psychological symptoms in the developmental stage] Poustka F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1996;97:1-171 **(Ger)**

[Restitutive effect of sleep on chronic performance stress] Becker-Carus C, et al. **Wien Med Wochenschr** 1996; 146(13-14):276-9 (Eng. Abstr.) **(Ger)**

[Are psychophysiologic changes in the "public speaking" paradigm an expression of emotional stress?] Erdmann G, et al. **Z Exp Psychol** 1996;43(2):224-55 (Eng. Abstr.) **(Ger)**

[Cardiovascular effects of active coping behavior in mental and social stress situations during various incentive conditions] Gramer M, et al. **Z Exp Psychol** 1996; 43(2):256-78 (Eng. Abstr.) **(Ger)**

[Psychosocial factors in Crohn disease--an overview] Enck P, et al. **Z Gastroenterol** 1996 Oct;34(10):708-13 (62 ref.) (Eng. Abstr.) **(Ger)**

[Typical configurations of psychosocial stress factors of psychiatrically conspicuous children and adolescents] Werner K, et al. **Z Kinder Jugenpsychiatr** 1996 Dec; 24(4):240-52 (Eng. Abstr.) **(Ger)**

[Hazards to workers' health caused by work-related psychosocial factors--a challenge to occupational health services] Dudek B, et al. **Med Pr** 1996;47(1):63-72 (12 ref.) (Eng. Abstr.) **(Pol)**

[Protracted depressive states formed under the conditions of a stressogenic situation] Zorin VIu. **Zh Nevropatol Psikhiatr Im S S Korsakova** 1996;96(6):23-7 (Eng. Abstr.) **(Rus)**

[Acute pulmonary edema induced by psychologic stress (letter)] Montero Ruiz E, et al. **An Med Interna** 1997 May; 14(5):263 **(Spa)**

DIAGNOSIS

Assessment of major life events for Hong Kong adolescents: the Chinese Adolescent Life Event Scale. Cheng C. **Am J Community Psychol** 1997 Feb;25(1):17-33

Salivary cortisol and daily events in nursing home residents. Samuels SC, et al. **Am J Geriatr Psychiatry** 1997 Spring; 5(2):172-6

Patterns of grief reaction after pregnancy loss. Lin SX, et al. **Am J Orthopsychiatry** 1996 Apr;66(2):262-71

Psychosocial correlates of job strain in a sample of working women. Williams RB, et al. **Arch Gen Psychiatry** 1997 Jun; 54(6):543-8

Psychometric properties of the Depression Anxiety Stress Scales (DASS) in clinical samples. Brown TA, et al. **Behav Res Ther** 1997 Jan;35(1):79-89

Changes in sleep architecture following chronic mild stress. Cheeta S, et al. **Biol Psychiatry** 1997 Feb 15;41(4):419-27

Development of a stress scale for mental health professionals. Cushway D, et al. **Br J Clin Psychol** 1996 May;35 (Pt 2):279-95

Differential aspects of sandplay with 10- and 11-year-old children. Zinni VR. **Child Abuse Negl** 1997 Jul;21(7):657-68

Psychological stress and depression in older patients with intravenous drug use and human immunodeficiency virus infection: implications for intervention. Singh N, et al. **Int J STD AIDS** 1997 Apr;8(4):251-5

The Survey of Recent Life Experiences: a psychometric evaluation. de Jong GM, et al. **J Behav Med** 1996 Dec; 19(6):529-42

Behavioral assessment of relaxation: the validity of a Behavioral Rating Scale. Norton M, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):129-37

Variability in symptom expression among sexually abused girls: developing multivariate models. Spaccarelli S, et al. **J Clin Child Psychol** 1997 Mar;26(1):24-35

Which questionnaire to measure psychosocial effects of having an abnormal PAP smear? [letter; comment] Buntinx F, et al. **J Clin Epidemiol** 1996 Dec;49(12):1469. Comment on: J Clin Epidemiol 1995 Oct;48(10):1235-43.

Measuring psychological distress in candidates for liver transplantation: a pilot study. Stilley CS, et al. **J Clin Psychol** 1997 Aug;53(5):459-64

Psychological distress and intrusive thoughts in cancer patients. Baider L, et al. **J Nerv Ment Dis** 1997 May; 185(5):346-8

Testing the alexithymia hypothesis: physiological and subjective responses during relaxation and stress. Friedlander L, et al. **J Nerv Ment Dis** 1997 Apr; 185(4):233-9

Reliability, construct validity, and subscale norms of the Brief Symptom Inventory when administered to bereaved parents. Johnson LC, et al. **J Nurs Meas** 1996 Winter; 4(2):117-27

Differences in mood states, health status, and caregiver strain between family caregivers of oncology outpatients with and without cancer-related pain. Miaskowski C, et al. **J Pain Symptom Manage** 1997 Mar;13(3):138-47

Development of two instruments examining stress and adjustment in children with cancer. Hockenberry-Eaton M, et al. **J Pediatr Oncol Nurs** 1997 Jul;14(3):178-85

Assessing illness-related stress in psoriasis: the psychometric properties of the Psoriasis Life Stress Inventory. Fortune DG, et al. **J Psychosom Res** 1997 May;42(5):467-75

The correlation between everyday stress and angina pectoris: a longitudinal study. Verthein U, et al. **J Psychosom Res** 1997 Sep;43(3):241-5

Development of an instrument to measure threat related to cardiac events. Bennett SJ, et al. **Nurs Res** 1996 Sep-Oct; 45(5):266-70

A measure of stress for athletic performance. Seggar JF, et al. **Percept Mot Skills** 1997 Feb;84(1):227-36

Psychological stress in middle-aged and aged executives. Morioka C, et al. **Psychiatry Clin Neurosci** 1996 Jun; 50(3):91-3

[Validation of the Italian version of the Kjellberg and Iwanowski's Mood Scale] Camerino D, et al. **Med Lav** 1996 Mar-Apr;87(2):99-109 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Neuropeptide Y reverses corticotropin-releasing hormone- and psychological stress-caused shortening of sodium pentobarbital-induced sleep in rats. Yamada K, et al. **Brain Res** 1996 Jul 1;725(2):272-5

Pentadecapeptide BPC 157 interactions with adrenergic and dopaminergic systems in mucosal protection in stress. Sikirić P, et al. **Dig Dis Sci** 1997 Mar;42(3):661-71

Short-term estradiol treatment enhances pituitary-adrenal axis and sympathetic responses to psychosocial stress in healthy young men [see comments] Kirschbaum C, et al. **J Clin Endocrinol Metab** 1996 Oct;81(10):3639-43. Comment in: J Clin Endocrinol Metab 1997 Mar;82(3):982.

Resting blood pressure and cardiovascular reactivity to mental arithmetic in mild hypertensive males supplemented with blackcurrant seed oil. Deferne JL, et al. **J Hum Hypertens** 1996 Aug;10(8):531-7

[Differences in the effects of piracetam and fenazepam in emotional stress caused by the spatial reversal of a habit] Inozemtsev AN, et al. **Eksp Klin Farmakol** 1996 Nov-Dec; 59(6):3-5 (Eng. Abstr.) **(Rus)**

[The effect of ximedon on adaptation to prolonged immobilization stress] Zor'kina AV, et al. **Eksp Klin Farmakol** 1997 Jan-Feb;60(1):65-7 (Eng. Abstr.) **(Rus)**

[The treatment with antihypertensive and nootropic preparations of hypertension patients working under neuroemotional stress] Dasaeva LA, et al. **Ter Arkh** 1996; 68(12):60-3 (Eng. Abstr.) **(Rus)**

[Methodological aspects of pharmacological regulation of emotional stress in persons with dangerous occupations] Sytnik SI, et al. **Vestn Ross Akad Med Nauk** 1996;(7):60-4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

[Effect of ethanol, diazepam, and reserpine on the activity of angiotensin-converting enzyme and carboxypeptidase in normal state and during stress] Vernigora AN, et al. **Vopr Med Khim** 1996 Apr-Jun;42(2):127-30 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The psychological effects of a four-week emergency medicine rotation on residents in training. Alagappan K, et al. **Acad Emerg Med** 1996 Dec;3(12):1131-5

Changing patterns of distress during the adjustment of recent immigrants: a 1-year follow-up study. Ritsner M, et al. **Acta Psychiatr Scand** 1997 Jun;95(6):494-9

Stress among package truck drivers. Orris P, et al. **Am J Ind Med** 1997 Feb;31(2):202-10

Job strain and blood pressure in African Americans: the Pitt County Study. Curtis AB, et al. **Am J Public Health** 1997 Aug;87(8):1297-302

Psychological distress among older adolescents and young adults in Australia. Rickwood D, et al. **Aust N Z J Public Health** 1996 Feb;20(1):83-6

Antecedents and consequences of acute stress disorder among motor vehicle accident victims. Barton KA, et al. **Behav Res Ther** 1996 Oct;34(10):805-13

Examination-induced distress in a public examination at the completion of secondary schooling. Hodge GM, et al. **Br J Educ Psychol** 1997 Jun;67 (Pt 2):185-97

Stress and psychiatric disorder in the Hindu Kush: a community survey of mountain villages in Chitral, Pakistan [see comments] Mumford DB, et al. **Br J Psychiatry** 1996 Mar;168(3):299-307. Comment in: Br J Psychiatry 1996 Jun;168(6):788-9.

Suicide in Avon. Life stress, alcohol misuse and use of services. Vassilas CA, et al. **Br J Psychiatry** 1997 May;

170:453–5
The relationship between age, gender and psychological distress in rehabilitation inpatients. Laatsch L, et al. **Disabil Rehabil** 1996 Dec;18(12):604–8
Psychosocial variables in female vs male patients with stable angina pectoris and matched healthy controls [see comments] Billing E, et al. **Eur Heart J** 1997 Jun; 18(6):911–8. Comment in: Eur Heart J 1997 Jun;18(6):892–3.
Employee stress status during the past decade (1982–1992) based on a nation-wide survey conducted by the Ministry of Labour in Japan. Shimizu Y, et al. **Ind Health** 1997 Jul; 35(3):441–50
The association of job strain and health behaviours in men and women. Hellerstedt WL, et al. **Int J Epidemiol** 1997 Jun;26(3):575–83
Students' stress in China, Japan and Korea: a transcultural study. Kim KI, et al. **Int J Soc Psychiatry** 1997 Summer; 43(2):87–94
Children's response to parental separation during operation desert storm. Jensen PS, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Apr;35(4):433–41
Effects of war trauma on Cambodian refugee adolescents' functional health and mental health status. Mollica RF, et al. **J Am Acad Child Adolesc Psychiatry** 1997 Aug; 36(8):1098–106
The relationship of distress to mood disturbance in primary care and psychiatric populations. Coyne JC, et al. **J Consult Clin Psychol** 1997 Feb;65(1):161–8
Low birth weight and parenting stress during early childhood. Robson AL. **J Pediatr Psychol** 1997 Jun; 22(3):297–311
Somatic disease and psychological disorder. Verhaak PF. **J Psychosom Res** 1997 Mar;42(3):261–73
Traumatic events and physical health in a community sample. Ullman SE, et al. **J Trauma Stress** 1996 Oct;9(4):703–20
Temperament, CNS problems and maternal stressors: interactive predictors of conduct disorder in 9-yr.-olds. Bagley C, et al. **Percept Mot Skills** 1997 Apr;84(2):617–8
Psychosocial sequelae of the 1989 Newcastle earthquake: II. Exposure and morbidity profiles during the first 2 years post-disaster. Carr VJ, et al. **Psychol Med** 1997 Jan; 27(1):167–78
Psychosocial sequelae of the 1989 Newcastle earthquake: III. Role of vulnerability factors in post-disaster morbidity. Carr VJ, et al. **Psychol Med** 1997 Jan;27(1):179–90
Alexithymia and psychological distress among frequent attendance patients in health care. Joukamaa M, et al. **Psychother Psychosom** 1996;65(4):199–202
Psychophysiological and epidemiological investigations on the dentist. Reitemeier B. **Rev Environ Health** 1996 Jan–Jun;11(1–2):57–63
A synthesis of the findings from the Quake Impact Study: a two-year investigation of the psychosocial sequelae of the 1989 Newcastle earthquake. Carr VJ, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Apr;32(3):123–36
Early adolescents' substance use and life stress: concurrent and prospective relationships. D'Elio MA, et al. **Subst Use Misuse** 1996 May;31(7):873–94
[Stress and work-related tension in the nurses and clinical aides of a hospital] Artazcoz Lazcano L, et al. **Gac Sanit** 1996 Nov–Dec;10(57):282–92 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Acculturative stress among Amerasian refugees: gender and racial differences. Nwadiora E, et al. **Adolescence** 1996 Summer;31(122):477–87
Control beliefs and faith as stress moderators for Korean American versus Caucasian American protestants. Bjorck JP, et al. **Am J Community Psychol** 1997 Feb;25(1):61–72
Assessment of major life events for Hong Kong adolescents: the Chinese Adolescent Life Event Scale. Cheng C. **Am J Community Psychol** 1997 Feb;25(1):17–33
Suffering, justice, and the politics of becoming [see comments] Connolly WE. **Cult Med Psychiatry** 1996 Sep; 20(3):251–77. Comment in: Cult Med Psychiatry 1996 Sep;20(3):279–86. Comment in: Cult Med Psychiatry 1996 Sep;20(3):287–90.
Social support, stress, and blood pressure in black adults [see comments] Strogatz DS, et al. **Epidemiology** 1997 Sep; 8(5):482–7. Comment in: Epidemiology 1997 Sep;8(5):469–70.
Moderators of ethnic differences in vasoconstrictive reactivity in youth. Musante L, et al. **Ethn Dis** 1996 Autumn;6(3–4):224–34
Interactive influences of ethnicity, gender and parental hypertension on hemodynamic responses to behavioral challenge. Terrell DF, et al. **Ethn Dis** 1996 Autumn; 6(3–4):286–300
Strain among caregivers: comparing the experiences of African American and Hispanic caregivers of Alzheimer's relatives. Cox C, et al. **Int J Aging Hum Dev** 1996; 43(2):93–105
Searching for resilience among African-American youth exposed to community violence: theoretical issues. Howard DE. **J Adolesc Health** 1996 Apr;18(4):254–62 (66 ref.)
Does sharing a mother-tongue affect how closely patients and nurses agree when rating the patient's pain, worry and knowledge? Harrison A, et al. **J Adv Nurs** 1996 Aug; 24(2):229–35
The causes and influence of transitional stress among Chinese students in Japan. Jou YH, et al. **J Soc Psychol** 1996 Aug; 136(4):501–9
The costs and benefits of boundary maintenance: stress, religion and culture among Jews in Britain. Loewenthal KM, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 May; 32(4):200–7

ETIOLOGY

Opportunistic infections and psychosocial stress in HIV [see comments] Montauk SL, et al. **Am Fam Physician** 1997 Jul;56(1):87–96 (24 ref.). Comment in: Am Fam Physician 1997 Jul;56(1):37, 40–2.
The experience of caregiving among mothers of adults suffering from psychotic disorders: factors associated with their psychological distress. St-Onge M, et al. **Am J Community Psychol** 1997 Feb;25(1):73–94
Adjuvant therapy for breast cancer and psychological distress [letter] Montgomery GH, et al. **Ann Oncol** 1996 Nov; 7(9):977–8
Neonatal otoacoustic emission screening (OAE) for deafness: psychological costs [letter; comment] Lang DV. **Arch Dis Child Fetal Neonatal Ed** 1996 Sep;75(2):F143. Comment on: Arch Dis Child Fetal Neonatal Ed 1996 Jan;74(1):F16–25.
The hidden trauma of immigration. Zulman A. **Aust Fam Physician** 1996 Nov;25(11):1707–10
Two-crew operations: stress and fatigue during long-haul night flights. Samel A, et al. **Aviat Space Environ Med** 1997 Aug;68(8):679–87
Stress and the biology of inequality. Brunner E. **BMJ** 1997 May 17;314(7092):1472–6 (45 ref.)
Interaction of workplace demands and cardiovascular reactivity in progression of carotid atherosclerosis: population based study. Everson SA, et al. **BMJ** 1997 Feb 22;314(7080):553–8
Medical staff suffered severe stress after earthquake in Kobe, Japan [letter] Uemoto M, et al. **BMJ** 1996 Nov 2; 313(7065):1144
Senior house officers' work related stressors, psychological distress, and confidence in performing clinical tasks in accident and emergency: a questionnaire study [see comments] Williams S, et al. **BMJ** 1997 Mar 8; 314(7082):713–8. Comment in: BMJ 1997 Jun 21;314(7097):1830.
Psychological stress symptoms before and after autologous bone marrow transplantation in patients with solid tumors. Grassi L, et al. **Bone Marrow Transplant** 1996 May; 17(5):843–7
Burnout and stress-related factors among junior staff of three dental hospital specialties. Humphris G, et al. **Br Dent J** 1997 Jul 12;183(1):15–21
Stresses, coping mechanisms and job satisfaction in general practitioner registrars. Chambers R, et al. **Br J Gen Pract** 1996 Jun;46(407):343–8
Stress in the workplace. Cooper CL. **Br J Hosp Med** 1996 May 1–14;55(9):559–63 (22 ref.)
The impact of the symptoms of dementia on caregivers. Donaldson C, et al. **Br J Psychiatry** 1997 Jan;170:62–8 (34 ref.)
Assessing emotional distress of women with breast cancer: a survey of surgical oncologists. Trief PM, et al. **Breast Cancer Res Treat** 1997 Feb;42(3):275–81
Symptom distress in adult patients with cancer. McClement SE, et al. **Cancer Nurs** 1997 Aug;20(4):236–43 (44 ref.)
Exercise training decreases dyspnea and the distress and anxiety associated with it. Monitoring alone may be as effective as coaching. Carrieri-Kohlman V, et al. **Chest** 1996 Dec;110(6):1526–35
Stress in parents whose children are hepatitis B virus (HBV) carriers: a comparison of three groups in Guangzhou, China. Lai AC, et al. **Child Care Health Dev** 1996 Nov; 22(6):381–96
Stress at work for the clinical oncologist [editorial] Ramirez AJ, et al. **Clin Oncol (R Coll Radiol)** 1996;8(3):137–9
Psychological factors affecting health after toxicological disasters. Havenaar JM, et al. **Clin Psychol Rev** 1997; 17(4):359–74 (90 ref.)
A real health threat—debt. Bentivegna JF. **Conn Med** 1997 Mar;61(3):180
The effects of acculturative stress on incarcerated Alaska Native and non-Native men. Glass MH, et al. **Cult Divers Ment Health** 1997;3(3):175–91
Post-match disorder: how to cope when your program fails to match. Zamudio A, et al. **Fam Med** 1996 Mar;28(3):211–3
Stress and genetic testing for disease risk. Baum A, et al. **Health Psychol** 1997 Jan;16(1):8–19
Psychological responses to BRCA1 mutation testing: preliminary findings. Croyle RT, et al. **Health Psychol** 1997 Jan;16(1):63–72
Ethical aspects in infection control [letter; comment] Wagenvoort JH, et al. **Infect Control Hosp Epidemiol** 1997 May;18(5):304–5. Comment on: Infect Control Hosp Epidemiol 1996 Feb;17(2):108–13.
The impact of cognitively impaired patients and shift on nursing assistant stress. Novak M, et al. **Int J Aging Hum Dev** 1996;43(3):235–48
Stress of caregivers of dementia patients in the Singapore Chinese family. Heok KE, et al. **Int J Geriatr Psychiatry** 1997 Apr;12(4):466–9
Job strain among post office mailhandlers. Cahill J, et al. **Int J Health Serv** 1996;26(4):731–50
Children's responding to live interadult conflict: the role of form of anger expression. el-Sheikh M, et al. **J Abnorm Child Psychol** 1996 Aug;24(4):401–15
Cardiovascular reactivity during verbal communication: an emerging risk factor. Thomas SA, et al. **J Cardiovasc Nurs** 1995 Jan;9(2):1–11 (42 ref.)
Stress and quality of life following cervical cancer. Andersen BL. **J Natl Cancer Inst Monogr** 1996;(21):65–70 (54 ref.)
Social network disturbances and psychological distress following earthquake evacuation. Bland SH, et al. **J Nerv Ment Dis** 1997 Mar;185(3):188–94
Nursing students' stress during the initial clinical experience. Admi H. **J Nurs Educ** 1997 Sep;36(7):323–7
Women's work experiences and health in a male-dominated industry. A longitudinal study [published erratum appears in J Occup Environ Med 1996 Oct;38(10):1017] Bergman B, et al. **J Occup Environ Med** 1996 Jul;38(7):663–72
Work-related stress: implications for the employer. Grayham DA. **J R Soc Health** 1997 Apr;117(2):81–7
American medical students in Israel: stress and coping. Schreier AR, et al. **Med Educ** 1996 Nov;30(6):445–52
Children in homeless families in Melbourne: health status and use of health services. Efron D, et al. **Med J Aust** 1996 Dec 2–16;165(11–12):630–3
Work induced stress. Hallstrom C. **Med Leg J** 1996;64 (Pt 4):153–7
Is caffeine involved in the pathogenesis of combat-stress reaction? Iancu I, et al. **Mil Med** 1996 Apr;161(4):230–32 (14 ref.)
Emotional disturbances and their interaction with neuropsychological deficits. Reitan RM, et al. **Neuropsychol Rev** 1997 Mar;7(1):3–19 (67 ref.)
Development of an instrument to measure threat related to cardiac events. Bennett SJ, et al. **Nurs Res** 1996 Sep–Oct; 45(5):266–70
Psychosocial stress and adaptive functioning in children and adolescents suffering from hypohidrotic ectodermal dysplasia. Hummel P, et al. **Pediatr Dermatol** 1997 May–Jun;14(3):180–5
Outcome study of the psychological changes after silicone breast implant removal. Roberts C, et al. **Plast Reconstr Surg** 1997 Sep;100(3):595–9
Psychosocial sequelae of the 1989 Newcastle earthquake: III. Role of vulnerability factors in post-disaster morbidity. Carr VJ, et al. **Psychol Med** 1997 Jan;27(1):179–90
A longitudinal study of stressful life events assessed at interview with an epidemiological sample of adult twins: the basis of individual variation in event exposure. Foley DL, et al. **Psychol Med** 1996 Nov;26(6):1239–52
Cigarette smoking and psychophysiological stress responsiveness: effects of recent smoking and temporary abstinence. Tsuda A, et al. **Psychopharmacology (Berl)** 1996 Aug;126(3):226–33
Helping mothers cope with a critically ill child: a pilot test of the COPE intervention. Melnyk BM, et al. **Res Nurs Health** 1997 Feb;20(1):3–14
Sleep, psychological distress, and stress arousal in women with fibromyalgia. Shaver JL, et al. **Res Nurs Health** 1997 Jun;20(3):247–57
Care for the carers [editorial] Ross MH, et al. **S Afr Med J** 1996 Sep;86(9):1072
Adjuvant chemotherapy in Dukes' B and C colorectal cancer has only a minor influence on psychological distress. Norum J. **Support Care Cancer** 1997 Jul;5(4):318–21
Maternal psychological distress: the role of children's health. Hahn BA, et al. **Women Health** 1996;24(1):59–75
[Stress response of slaughter pigs in two different access systems to electrical stunning] Hartung VJ, et al. **DTW Dtsch Tierarztl Wochenschr** 1997 Feb;104(2):66–8 (Eng. Abstr.) **(Ger)**
[Ethological, physiological and histological aspects of pain and stress in cattle when being dehorned] Taschke AC, et al. **Tierarztl Prax** 1997 Jan;25(1):19–27 (Eng. Abstr.) **(Ger)**
[The participation of different types of opiate receptors in the mechanism of cardiac stressor damage] Maslov LN, et al. **Fiziol Zh Im I M Sechenova** 1996 May–Jun; 82(5–6):53–8 (Eng. Abstr.) **(Rus)**
[Low doses of irradiation and psychoemotional stress] Legeza VI, et al. **Voen Med Zh** 1996 Jun;317(6):62–4 **(Rus)**

GENETICS

Threat-induced behavioural inhibition in Japanese quail genetically selected for contrasting adrenocortical response to mechanical restraint. Jones RB, et al. **Br Poult Sci** 1996 May;37(2):465–70
Moderators of ethnic differences in vasoconstrictive reactivity in youth. Musante L, et al. **Ethn Dis** 1996 Autumn;6(3–4):224–34
Interactive influences of ethnicity, gender and parental hypertension on hemodynamic responses to behavioral challenge. Terrell DF, et al. **Ethn Dis** 1996 Autumn; 6(3–4):286–300
Psychological distress in applicants for predictive DNA testing for autosomal dominant, heritable, late onset disorders. The Rotterdam/Leiden Genetics Workgroup. DudokdeWit AC, et al. **J Med Genet** 1997 May; 34(5):382–90
Biogenic amine content in the brains of rats with different levels of resistance to emotional stress. Gorbunova AV, et al. **Neurosci Behav Physiol** 1997 Mar–Apr;27(2):145–52
[Frequency of chromosome aberrations induced by a single exposure to stress in rats selected for excitability of the

nervous system] Diuzhiova NA, et al. **Genetika** 1996 Jun; 32(6):851–3 (Eng. Abstr.) **(Rus)**

HISTORY

Somatic symptoms and psychological distress in the Iliad of Homer. Mumford DB. **J Psychosom Res** 1996 Aug; 41(2):139–48

IMMUNOLOGY

Acute mental stress but not enforced muscle activity transiently increases natural cytotoxicity in spontaneously hypertensive rats. Jonsdottir IH, et al. **Acta Physiol Scand** 1996 Aug;157(4):443–9

Stress-induced effects on integral immune components involved in herpes simplex virus (HSV)-specific memory cytotoxic T lymphocyte activation. Bonneau RH. **Brain Behav Immun** 1996 Jun;10(2):139–63

Academic examinations significantly impact immune responses, but not lung function, in healthy and well-managed asthmatic adolescents. Kang DH, et al. **Brain Behav Immun** 1996 Jun;10(2):164–81

Phagocytosis and killing of Staphylococcus aureus: effects of stress and depression in children. Bartlett JA, et al. **Clin Diagn Lab Immunol** 1997 May;4(3):362–6

Lymphocyte subset redistribution during acute laboratory stress in young adults: mediating effects of hemoconcentration. Marsland AL, et al. **Health Psychol** 1997 Jul;16(4):341–8

How psychological states affect the immune system: implications for interventions in the context of HIV. Littrell J. **Health Soc Work** 1996 Nov;21(4):287–95 (83 ref.)

Surgical anticipatory stress manifests itself in immunocyte desensitization: evidence for autoimmunoregulatory involvement. Fricchione G, et al. **Int J Cardiol** 1996 Apr 26;53 Suppl:S65–73

Stress-induced rise in serum anti-brain autoantibody levels in the rat. Andrejević S, et al. **Int J Neurosci** 1997 Feb; 89(3–4):153–64

Stress down-regulates experimental allergic encephalomyelitis (EAE) but permits activation and localization of autoreactive V beta 8.2+ T cells. Owhashi M, et al. **Int J Neurosci** 1997 Feb;89(3–4):177–88

Psychological stress, exercise and immunity. Perna FM, et al. **Int J Sports Med** 1997 Mar;18 Suppl 1:S78–83 (68 ref.)

The assessment of the emotional and immunological consequences of examination stress. Vedhara K, et al. **J Behav Med** 1996 Oct;19(5):467–78

Cognitive-behavioral stress management decreases dysphoric mood and herpes simplex virus-type 2 antibody titers in symptomatic HIV-seropositive gay men. Lutgendorf SK, et al. **J Consult Clin Psychol** 1997 Feb;65(1):31–43

The impact of psychological stress on the efficacy of anti-viral adoptive immunotherapy in an immunocompromised host. Bonneau RH, et al. **J Neuroimmunol** 1997 Sep;78(1–2):19–33

Increased psychosocial stress and decreased mucosal immunity in children with recurrent upper respiratory tract infections. Drummond PD, et al. **J Psychosom Res** 1997 Sep;43(3):271–8

Effectiveness of a short-term group psychotherapy program on endocrine and immune function in breast cancer patients: an exploratory study. van der Pompe G, et al. **J Psychosom Res** 1997 May;42(5):453–66

Stress-induced bladder mast cell activation: implications for interstitial cystitis. Spanos C, et al. **J Urol** 1997 Feb; 157(2):669–72

Study examines stress-immune system links in women with breast cancer [news] Voelker R. **JAMA** 1997 Aug 20; 278(7):534

Short and long restraint differentially affect humoral and cellular immune functions. Millán S, et al. **Life Sci** 1996; 59(17):1431–42

Effect of restraint stress on immune system and experimental B16 melanoma metastasis in aged mice. Kanno J, et al. **Mech Ageing Dev** 1997 Feb;93(1–3):107–17

Effects of nicotine and exposure to cigarette smoke on suppression of local graft-versus-host reaction induced by immobilization stress in mice. Gomita Y, et al. **Methods Find Exp Clin Pharmacol** 1996 Nov;18(9):573–7

Immune responses to final exams in healthy and asthmatic adolescents. Kang DH, et al. **Nurs Res** 1997 Jan–Feb; 46(1):12–9

Changes of immunoregulatory cells associated with psychological stress and humor. Kamei T, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1296–8

Stressor-induced alterations of the splenic plaque-forming cell response: strain differences and modification by propranolol. Kerr L, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):235–41

Psychological disturbance alters thymic and adrenal hormone secretion in a parallel but independent manner. Coe CL, et al. **Psychoneuroendocrinology** 1996 Feb;21(2):237–47

Psychosocial modulation of cytokine-induced natural killer cell activity in older adults. Esterling BA, et al. **Psychosom Med** 1996 May–Jun;58(3):264–72

Psychological and immunological reactions of family members to patients undergoing bone marrow transplantation. Futterman AD, et al. **Psychosom Med** 1996 Sep–Oct;58(5):472–80

The influence of stress intrusion on immunodepression in generalized anxiety disorder patients and controls. La Via MF, et al. **Psychosom Med** 1996 Mar–Apr;58(2):138–42

Psychosocial and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. Whitehouse WG, et al. **Psychosom Med** 1996 May–Jun;58(3):249–63

Effects of job strain on helper-inducer (CD4+CD29+) and suppressor-inducer (CD4+CD45RA+) T cells in Japanese blue-collar workers. Kawakami N, et al. **Psychother Psychosom** 1997;66(4):192–8

Chronic caregiving stress alters peripheral blood immune parameters: the role of age and severity of stress. Pariante CM, et al. **Psychother Psychosom** 1997;66(4):199–207

[Psychoneuroimmunology and breast cancer] van der Pompe G. **Ned Tijdschr Geneeskd** 1996 Dec 28;140(52):2614–7 (33 ref.) **(Dut)**

[Role of T-lymphocytes in impaired adaptive reaction of the hemopoietic system in emotional stress developed after preliminary gamma-irradiation] Moroz BB, et al. **Patol Fiziol Eksp Ter** 1996 Jul–Sep;(3):10–3 (Eng. Abstr.) **(Rus)**

[An immunomodifier--staphylococcal anatoxin--prevents the development of immunosuppression caused by informational stress in mice] Ozherelkov SV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1996 Jul–Aug;(4):71–4 (Eng. Abstr.) **(Rus)**

METABOLISM

Schedule-induced psychological stress and molecular structures of cardiomyocytes. Rupp H, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R776–82

A photophase and seasonal study of the pineal parenchyma and melatonin serum levels in the albino rat subjected to immobilization stress. Martinez-Soriano F, et al. **Arch Ital Biol** 1996 Jul;134(3):235–48

Trace element and hormonal responses during flight aptitude test. Kobayashi A. **Aviat Space Environ Med** 1996 Apr; 67(4):333–7

The participation of interleukin-6, a stress-inducible cytokine, in the pathogenesis of Alzheimer's disease. Hüll M, et al. **Behav Brain Res** 1996 Jun;78(1):37–41

Evaluation of stress induced by flight activity by measuring the hormonal response. Farrace S, et al. **Biofeedback Self Regul** 1996 Sep;21(3):217–28

Metabolic and adrenergic characteristics of young men with insulin resistance. Moan A, et al. **Blood Press Suppl** 1996; 1:30–7

Modulating effect of the nootropic drug, piracetam on stress- and subsequent morphine-induced prolactin secretion in male rats. Matton A, et al. **Br J Pharmacol** 1996 Feb; 117(3):502–506

The neuroendocrinology of depression and chronic stress. Checkley S. **Br Med Bull** 1996 Jul;52(3):597–617 (122 ref.)

Medial prefrontal cortical D1 receptor modulation of the meso-accumbens dopamine response to stress: an electrochemical study in freely-behaving rats. Doherty MD, et al. **Brain Res** 1996 Apr 9;715(1–2):86–97

Brain-gut induction of heat shock protein (HSP) 70 mRNA by psychophysiological stress in rats. Fukudo S, et al. **Brain Res** 1997 May 16;757(1):146–8

Effect of a pharmacological stressor on glutamate efflux in the prefrontal cortex. Karreman M, et al. **Brain Res** 1996 Apr 15;716(1–2):180–2

Immobilization-induced stress activates neuronal nitric oxide synthase (nNOS) mRNA and protein in hypothalamic-pituitary-adrenal axis in rats. Kishimoto J, et al. **Brain Res** 1996 May 13;720(1–2):159–71

c-jun mRNA expression in the hippocampal formation induced by restraint stress. Lino de Oliveira C, et al. **Brain Res** 1997 Apr 11;753(2):202–8

Immobilization stress-induced increase of hippocampal acetylcholine and of plasma epinephrine, norepinephrine and glucose in rats. Tajima T, et al. **Brain Res** 1996 May 13;720(1–2):155–8

Social defeat stress selectively alters mesocorticolimbic dopamine release: an in vivo microdialysis study. Tidey JW, et al. **Brain Res** 1996 May 20;721(1–2):140–9

Estrogen alters proenkephalin RNAs in the paraventricular nucleus of the hypothalamus following stress. Yukhananov RY, et al. **Brain Res** 1997 Aug 1;764(1–2):109–16

Norepinephrine levels in discrete brain nuclei in borderline hypertensive rats exposed to compound stressors. Lawler JE, et al. **Brain Res Bull** 1996;41(2):87–92

CRH-R1 mRNA expression in two strains of inbred mice and its regulation after repeated restraint stress. Giardino L, et al. **Brain Res Mol Brain Res** 1996 Sep 1;40(2):310–4

Monoamine receptors in the prefrontal cortex of Tupaia belangeri during chronic psychosocial stress. Flügge G, et al. **Cell Tissue Res** 1997 Apr;288(1):1–10

Mild mental stress increases insulin sensitivity in healthy young men. Touma T, et al. **Clin Exp Hypertens** 1996 Nov; 18(8):1105–14

Biochemical and clinical assessment of histamine blockade. Irjala J, et al. **Int J Clin Pharmacol Ther** 1996 Jun; 34(6):269–73

Tryptophan availability and the susceptibility to stress in multiple sclerosis: a hypothesis. Sandyk R. **Int J Neurosci** 1996 Jul;86(1–2):47–53 (85 ref.)

Effect of stress on the behavior and 5-HT system in Sprague-Dawley and Wistar Kyoto rat strains. Paré WP, et al. **Integr Physiol Behav Sci** 1996 Apr–Jun;31(2):112–21

Rapid changes in heteronuclear RNA for corticotrophin-releasing hormone and arginine vasopressin in response to acute stress. Ma XM, et al. **J Endocrinol** 1997 Jan;152(1):81–9

Salivary cortisol levels and stress reactivity in human aging. Nicolson N, et al. **J Gerontol A Biol Sci Med Sci** 1997 Mar;52(2):M68–75

Release of vasopressin within the rat paraventricular nucleus in response to emotional stress: a novel mechanism of regulating adrenocorticotropic hormone secretion? Wotjak CT, et al. **J Neurosci** 1996 Dec 1;16(23):7725–32

The cortisol response to psychological challenge is preceded by a transient rise in endogenous inhibitor of monoamine oxidase. Clow A, et al. **Life Sci** 1997;61(5):567–75

Salivary monoamine oxidase A and B inhibitory activities correlate with stress. Doyle A, et al. **Life Sci** 1996; 59(16):1357–62

Brain monoamines, exercise, and behavioral stress: animal models. Dishman RK. **Med Sci Sports Exerc** 1997 Jan; 29(1):63–74 (76 ref.)

Recruitment of peripheral-type benzodiazepine receptors after acute stress in chick forebrain membranes: action of Triton X-100. Marín RH, et al. **Neurochem Int** 1996 Apr; 28(4):425–9

Time-dependent changes in rat brain neuroactive steroid concentrations and GABAA receptor function after acute stress. Barbaccia ML, et al. **Neuroendocrinology** 1996 Feb; 63(2):166–72

Glucocorticoids inhibit stress-induced phosphorylation of CREB in corticotropin-releasing hormone neurons of the hypothalamic paraventricular nucleus. Légrádi G, et al. **Neuroendocrinology** 1997 Aug;66(2):86–97

Comparative study in the rat of the actions of different types of stress on the release of 5-HT in raphe nuclei and forebrain areas. Adell A, et al. **Neuropharmacology** 1997 Apr-May;36(4–5):735–41

An analysis of the effects of acute and chronic fluoxetine on extracellular norepinephrine in the rat hippocampus during stress. Page ME, et al. **Neuropsychopharmacology** 1997 Jun;16(6):419–25

The neurosteroid tetrahydroprogesterone attenuates the endocrine response to stress and exerts glucocorticoid-like effects on vasopressin gene transcription in the rat hypothalamus. Patchev VK, et al. **Neuropsychopharmacology** 1996 Dec;15(6):533–40

Biogenic amine content in the brains of rats with different levels of resistance to emotional stress. Gorbunova AV, et al. **Neurosci Behav Physiol** 1997 Mar–Apr;27(2):145–52

Corticotropin-releasing factor modulates basal and stress-induced excitatory amino acid release in the locus coeruleus of conscious rats. Singewald N, et al. **Neurosci Lett** 1996 Feb 2;204(1–2):45–8

Effect of conditioned fear stress on dopamine release in the rat prefrontal cortex. Yoshioka M, et al. **Neurosci Lett** 1996 May 17;209(3):201–3

Different effects of repeated stressful experiences on mesocortical and mesolimbic dopamine metabolism. Cabib S, et al. **Neuroscience** 1996 Jul;73(2):375–80

Alterations in the central nervous alpha 2-adrenoceptor system under chronic psychosocial stress. Flügge G. **Neuroscience** 1996 Nov;75(1):187–96

Ketanserin selectively blocks acute stress-induced changes in NGFI-A and mineralocorticoid receptor gene expression in hippocampal neurons. Olsson T, et al. **Neuroscience** 1997 Jan;76(2):441–8

Stimulatory vs. inhibitory effects of acute stress on plasma LH: differential effects of pretreatment with dexamethasone or the steroid receptor antagonist, RU 486. Briski KP. **Pharmacol Biochem Behav** 1996 Sep;55(1):19–26

The effects of two chronic intermittent stressors on brain monoamines. Campmany L, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):517–23

The 5-HT1A receptor is not involved in emotional stress-induced rises in stress hormones. Groenink L, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):303–8

Responses to novelty stress in female F344 rats: effects of age and d-fenfluramine treatment. Handa RJ, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):641–7

Benzodiazepine receptors increase induced by stress and maze-learning performance in chick forebrain. Marín RH, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):581–4

Sex and genotype determine the selective activation of neurochemically-distinct mechanisms of swim stress-induced analgesia. Mogil JS, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):61–6

Lipid peroxides, glutathione, gamma-glutamylcysteine synthetase and gamma-glutamyltranspeptidase activities in several tissues of rats following water-immersion stress. Alptekin N, et al. **Pharmacol Res** 1996 Sep–Oct; 34(3–4):167–9

Lipid peroxidation during acute stress. Kovács P, et al. **Pharmazie** 1996 Jan;51(1):51–3

Central ANG II receptor involved in carotid sinus reflex resetting in chronically stressed rats. Qian ZM, et al. **Physiol Behav** 1997 Aug;62(2):241–7

Influence of anterodorsal thalami nuclei on ACTH release under basal and stressful conditions. Suárez MM, et al. **Physiol Behav** 1997 Aug;62(2):373–7

Effect of chronic treatment with imipramine on interleukin 1 and interleukin 2 production by splenocytes obtained from rats subjected to a chronic mild stress model of depression. Kubera M, et al. **Pol J Pharmacol** 1996 Sep–Oct;48(5):503–6

Effects of footshock stress on regional brain monoamine

metabolism and the acquisition of conditioned freezing in rats previously exposed to repeated methamphetamine. Tsuchiya K, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1996 Oct; 20(7):1239–50

Marked increases in neuronal nitric oxide synthase (nNOS) mRNA and NADPH–diaphorase histostaining in adrenal cortex after immobilization stress in rats. Tsuchiya T, et al. **Psychoneuroendocrinology** 1996 Apr;21(3):287–93

Temporal stability of lipid responses to acute psychological stress in middle–aged men. Stoney CM, et al.
Psychophysiology 1997 May;34(3):285–91

Insulin and glucose: relationships with hassles, anger, and hostility in nondiabetic older adults. Vitaliano PP, et al.
Psychosom Med 1996 Sep–Oct;58(5):489–99

NMDA receptors in nucleus accumbens modulate stress–induced dopamine release in nucleus accumbens and ventral tegmental area. Doherty MD, et al. **Synapse** 1997 Jul;26(3):225–34

Evidence that conditioned stress enhances outflow of dopamine in rat prefrontal cortex: a search for the influence of diazepam and 5–HT1A agonists. Wędzony K, et al.
Synapse 1996 Nov;24(3):240–7

[Prenatal stress during pregnancy and metabolic consequences in adult rats] Maccari S, et al.
Arch Pediatr 1997;4(2 Suppl 2):138s–140s **(Fre)**

[Adrenal glands catecholamines of August and Wistar rats in acute emotional stress] Pertsov SS, et al.
Biull Eksp Biol Med 1997 Jun;123(6):645–8 **(Rus)**

[Methylation changes in brain DNA during immobilization stress in rats] Khanbabian MV, et al.
Fiziol Zh Im I M Sechenova 1995 Oct;81(10):106–8 **(Rus)**

[Metabolic changes in the rat liver during emotional stress] Sinitskiĭ VN, et al. **Vopr Med Khim** 1996 Apr–Jun; 42(2):134–6 (Eng. Abstr.) **(Rus)**

[Stress, neuroendocrine regulation and diabetes] Nilsson P. **Lakartidningen** 1997 Jan 15;94(3):145–7 (32 ref.) **(Swe)**

[The characteristics of the reactions of connective–tissue structures in acute stress] Neporada KS, et al.
Fiziol Zh 1996;42(5–6):90–3 (Eng. Abstr.) **(Ukr)**

NURSING

The middle–range theory of unpleasant symptoms: an update. Lenz ER, et al. **ANS Adv Nurs Sci** 1997 Mar;19(3):14–27 (53 ref.)

Managing spiritual distress in patients with advanced cancer pain. Georgesen J, et al. **Cancer Nurs** 1996 Oct;19(5):376–83 (20 ref.)

Caregiver training for people with Alzheimer's based on a stress threshold model. Gerdner LA, et al.
Image J Nurs Sch 1996 Fall;28(3):241–6

The effect of a home–based, case–managed, multifactorial risk–reduction program on reducing psychological distress in patients with cardiovascular disease. Taylor CB, et al.
J Cardiopulm Rehabil 1997 May–Jun;17(3):157–62

Parent stress and coping in NICU and PICU. Young Seideman R, et al. **J Pediatr Nurs** 1997 Jun;12(3):169–77

Randomised trial of home–based psychosocial nursing intervention for patients recovering from myocardial infarction [see comments] Frasure–Smith N, et al.
Lancet 1997 Aug 16;350(9076):473–9. Comment in: Lancet 1997 Aug 16;350(9076):457.

PATHOLOGY

SEM/TEM investigation of rat cardiac subcellular alterations induced by changing duration of noise stress. Soldani P, et al. **Anat Rec** 1997 Aug;248(4):521–32

Stress effects on morphology and function of the hippocampus. McEwen BS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:271–84 (70 ref.)

A photophase and seasonal study of the pineal parenchyma and melatonin serum levels in the albino rat subjected to immobilization stress. Martinez–Soriano F, et al.
Arch Ital Biol 1996 Jul;134(3):235–48

Hippocampal vulnerability to stress and aging: possible role of neurotrophic factors. Smith MA. **Behav Brain Res** 1996 Jun;78(1):25–36 (116 ref.)

The potentiating actions of cigarette smoking on ethanol–induced gastric mucosal damage in rats. Chow JY, et al. **Gastroenterology** 1997 Oct;113(4):1188–97

The stress of being restrained reduces brain damage after a hypoxic–ischaemic insult in the 7–day–old rat. Thoresen M, et al. **Neuroreport** 1996 Jan 31;7(2):481–4

[The effect of interleukin–1beta on the state of thymus, adrenals and spleen during immersion emotional stress in August, Wistar and Wag rats] Pertsov SS, et al.
Biull Eksp Biol Med 1997 Jul;124(7):32–5 **(Rus)**

[The reaction to stress of the nonapeptidergic hypothalamic centers in old and young rats] Bazhanova ED, et al.
Morfologiia 1996;110(5):30–3 (Eng. Abstr.) **(Rus)**

[The ultrastructure of the neuronal subpopulations of the paraventricular hypothalamic nuclei in stress and the stress–limiting action of a pulsed electrical current] Geniatullina MS, et al. **Morfologiia** 1996;110(4):37–41 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Stress–induced changes in the functional electromyographic activity of the masticatory muscles. Ruf S, et al.
Acta Odontol Scand 1997 Jan;55(1):44–8

Effects of anxiety arousal and mental stress on the vestibulo–ocular reflex. Yardley L, et al.
Acta Otolaryngol (Stockh) 1995 Sep;115(5):597–602

Sustained forearm vasodilation in humans during mental stress is not neurogenically mediated. Lindqvist M, et al.
Acta Physiol Scand 1996 Sep;158(1):7–14

Cardiovascular reactivity of mitral valve prolapse patients during experimental stress exposure: evidence for a functional nature of cardiovascular symptoms. Delle Chiaie R, et al. **Acta Psychiatr Scand** 1996 Jun;93(6):434–41

Experience of pain in rheumatoid arthritis––an empirical evaluation of the contribution of developmental psychosocial stress. Radanov BP, et al.
Acta Psychiatr Scand 1996 Jun;93(6):482–8

Effects of handling and physical restraint on rectal temperature, cortisol, glucose and leucocyte counts in the silver fox (Vulpes vulpes). Moe RO, et al.
Acta Vet Scand 1997;38(1):29–39

Blood pressure responses to mental stress in emotionally defensive patients with stable coronary artery disease. Grossman P, et al. **Am J Cardiol** 1997 Aug 1;80(3):343–6

Cardiac vagal control and dynamic responses to psychological stress among patients with coronary artery disease. Grossman P, et al. **Am J Cardiol** 1996 Dec 15; 78(12):1424–7

Overview of dietary sodium effects on and interactions with cardiovascular and neuroendocrine functions. Ely DL.
Am J Clin Nutr 1997 Feb;65(2 Suppl):594S–605S (163 ref.)

Neural mechanisms in primary hypertension. Efficacy of alpha–blockade with doxazosin during stress. Lee D, et al. **Am J Hypertens** 1996 Jan;9(1):47–53

Lack of independent relationships between left ventricular mass and cardiovascular reactivity to physical and psychological stress in the Coronary Artery Risk Development in Young Adults (CARDIA) Study [see comments] Markovitz JH, et al. **Am J Hypertens** 1996 Sep; 9(9):915–23. Comment in: Am J Hypertens 1996 Sep;9(9):941–2.

Systolic hypertension and the white coat phenomenon [editorial] Myers MG. **Am J Hypertens** 1996 Sep; 9(9):938–40

Effects of cholesterol reduction on BP response to mental stress in patients with high cholesterol. Sung BH, et al.
Am J Hypertens 1997 Jun;10(6):592–9

Hemodynamic and endocrine responsiveness to mental arithmetic task and mirror drawing test in patients with essential hypertension. Yoshiuchi K, et al.
Am J Hypertens 1997 Mar;10(3):243–9

Interactive action of the white–coat effect and the blood pressure levels on cardiovascular complications in hypertension. Palatini P, et al. **Am J Med** 1997 Sep; 103(3):208–16

Neurobiology of prenatal maternal blood pressure response to stress [letter; comment] Friedman EH.
Am J Obstet Gynecol 1997 Mar;176(3):733. Comment on: Am J Obstet Gynecol 1996 Sep;175(3 Pt 1):706–12.

Prenatal maternal blood pressure response to stress predicts birth weight and gestational age: a preliminary study [see comments] McCubbin JA, et al. **Am J Obstet Gynecol** 1996 Sep;175(3 Pt 1):706–12. Comment in: Am J Obstet Gynecol 1997 Mar;176(3):733.

Dental indicators of stress and reduced age at death in prehistoric Native Americans. Duray SM.
Am J Phys Anthropol 1996 Feb;99(2):275–86

Multifiber renal SNA recordings predict mean arterial blood pressure in unanesthetized rat. Burgess DE, et al.
Am J Physiol 1997 Sep;273(3 Pt 2):R851–7

Acute stress causes mucin release from rat colon: role of corticotropin releasing factor and mast cells. Castagliuolo I, et al. **Am J Physiol** 1996 Nov;271(5 Pt 1):G884–92

Chronic stress induces sensitization in sympathoadrenal responses to stress in borderline hypertensive rats. Mansi JA, et al. **Am J Physiol** 1997 Mar;272(3 Pt 2):R813–20

Cardiac autonomic control is inversely related to blood pressure variability responses to psychological challenge. Sloan RP, et al. **Am J Physiol** 1997 May;272(5 Pt 2):H2227–32

Endocrine effects of pregnancy and exposure to a simulated open field in rats. Smith FG, et al. **Am J Physiol** 1997 Sep;273(3 Pt 2):R1053–7

Styles of male social behavior and their endocrine correlates among low–ranking baboons. Virgin CE Jr, et al.
Am J Primatol 1997;42(1):25–39

Stress–related disturbances of the menstrual cycle. Xiao E, et al. **Ann Med** 1997 Jun;29(3):215–9 (38 ref.)

Adolescent stress alters ethanol ingestion and agonistic behavior in the male golden hamster. Ferris CF, et al.
Ann N Y Acad Sci 1996 Sep 20;794:348–51

Stress effects on morphology and function of the hippocampus. McEwen BS, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:271–84 (70 ref.)

Stress–activated hormonal systems and the regulation of memory storage. Roozendaal B, et al.
Ann N Y Acad Sci 1997 Jun 21;821:247–58 (81 ref.)

Maternal stress, HPA activity, and fetal/infant outcome. Sandman CA, et al. **Ann N Y Acad Sci** 1997 Apr 24; 814:266–75

Searching for the biological pathways between stress and health. Kelly S, et al. **Annu Rev Public Health** 1997; 18:437–62 (177 ref.)

The role of hypophyseal and adrenal mechanisms in the hypoalgesic response to non–contingent food delivery in the rat. Hodgson DM, et al. **Behav Brain Res** 1996 Oct; 80(1–2):27–32

Ironic effects of trying to relax under stress. Wegner DM, et al. **Behav Res Ther** 1997 Jan;35(1):11–21

Role of gastric mucosal constitutive and inducible nitric oxide synthases in the development of stress–induced gastric mucosal lesions in rats. Nishida K, et al.
Biochem Biophys Res Commun 1997 Jul 18;236(2):275–9

Good news––bad press: applied psychophysiology in cardiovascular disorders. McGrady A.
Biofeedback Self Regul 1996 Dec;21(4):335–46

Cardiovascular, neuroendocrine, and monoaminergic responses to psychological stressors: possible differences between remitted panic disorder patients and healthy controls. Leyton M, et al. **Biol Psychiatry** 1996 Sep 1; 40(5):353–60

3rd International Society for the Advancement of Respiratory Psychophysiology (ISARP) Congress. Nijmegen, The Netherlands, August 26–27, 1996. Abstracts. **Biol Psychol** 1997 Jun 20;46(1):73–97

Catecholamine–induced leukocytosis: early observations, current research, and future directions. Benschop RJ, et al. **Brain Behav Immun** 1996 Jun;10(2):77–91 (103 ref.)

Role of catecholamines in the frontal cortex in the modulation of basal and stress–induced autonomic output in rats. Funk D, et al. **Brain Res** 1996 Nov 25;741(1–2):220–9

Central corticotropin–releasing factor and benzodiazepine receptor systems are involved in the social isolation stress–induced decrease in ethanol sleep in mice. Matsumoto K, et al. **Brain Res** 1997 Apr 11;753(2):318–21

Resilience in highly stressed urban children: concepts and findings. Cowen EL, et al. **Bull N Y Acad Med** 1996 Winter; 73(2):267–84 (46 ref.)

Distress symptoms and support systems of Chinese parents of children with cancer. Martinson IM, et al.
Cancer Nurs 1997 Apr;20(2):94–9

Brain–corticosteroid hormone dialogue: slow and persistent. de Kloet ER, et al. **Cell Mol Neurobiol** 1996 Jun; 16(3):345–56 (52 ref.)

Oxidative stress associated with exercise, psychological stress and life–style factors. Møller P, et al.
Chem Biol Interact 1996 Sep 27;102(1):17–36 (171 ref.)

Stress reactivity and self–recognition. Lewis M, et al.
Child Dev 1997 Aug;68(4):621–9

Left ventricular, peripheral vascular, and neurohumoral responses to mental stress in normal middle–aged men and women. Reference Group for the Psychophysiological Investigations of Myocardial Ischemia (PIMI) Study. Becker LC, et al. **Circulation** 1996 Dec 1;94(11):2768–77

Increased activation of sympathetic nervous system and endothelin by mental stress in normotensive offspring of hypertensive patients [letter; comment] Friedman EH.
Circulation 1997 Mar 18;95(6):1667–8. Comment on: Circulation 1996 Mar 1;93(5):866–9.

Reproducibility of the cardiovascular reactivity to a computerized version of the Stroop stress test in normotensive and hypertensive subjects. Fauvel JP, et al.
Clin Auton Res 1996 Aug;6(4):219–24

Anger expression and cardiovascular reactivity to mental stress: a spectral analysis approach. Laude D, et al.
Clin Exp Hypertens 1997 Jul–Aug;19(5–6):901–11

Physiological consequences of everyday psychosocial stress. Pollard TM. **Coll Antropol** 1997 Jun;21(1):17–28 (71 ref.)

Long–lasting functional abdominal pain and duodenal ulcer are associated with stress, vulnerability and symptoms of psychological stress. A controlled study including healthy and patient controls. Jørgensen LS, et al.
Dan Med Bull 1996 Sep;43(4):359–63

Affective and physiological responses to racism: the roles of afrocentrism and mode of presentation. Jones DR, et al. **Ethn Dis** 1996 Winter–Spring;6(1–2):109–22

Gender differences in mood and cardiovascular responses to socially stressful stimuli. Morris–Prather CE, et al.
Ethn Dis 1996 Winter–Spring;6(1–2):123–31

Effects of psychophysiological stress on trapezius muscles blood flow and electromyography during static load. Larsson SE, et al. **Eur J Appl Physiol** 1995;71(6):493–8

Differential beta– and alpha–adrenergic activation during psychological stress. Montoya P, et al.
Eur J Appl Physiol 1997;75(3):256–62

Emotional stress effects on immunity, gingivitis and periodontitis. Breivik T, et al. **Eur J Oral Sci** 1996 Aug; 104(4 (Pt 1)):327–34 (74 ref.)

An endogenous opiate mechanism seems to be involved in stress–induced anhedonia. Zurita A, et al.
Eur J Pharmacol 1996 Mar 28;299(1–3):1–7

Endocrine and cardiovascular responses to a series of graded physical and psychological stress stimuli in healthy volunteers. Kok FW, et al. **Eur Neuropsychopharmacol** 1995 Dec;5(4):515–22

Enhancement of morphine self–administration in drug naive, inbred strains of mice by acute emotional stress. Kuzmin A, et al. **Eur Neuropsychopharmacol** 1996 Mar;6(1):63–8

Seasonal changes in gonadal activity and the effects of stress on reproductive hormones in the common snapping turtle, Chelydra serpentina. Mahmoud IY, et al.
Gen Comp Endocrinol 1997 Sep;107(3):359–72

The stress response in headache sufferers: physiological and psychological reactivity. Holm JE, et al. **Headache** 1997 Apr;37(4):221–7

The relationship between socioeconomic status, hostility, and blood pressure reactions to mental stress in men: data from

the Whitehall II study. Carroll D, et al. **Health Psychol** 1997 Mar;16(2):131–6

Exposure to chronic psychosocial stress and corticosterone in the rat: effects on spatial discrimination learning and hippocampal protein kinase Cgamma immunoreactivity. Krugers HJ, et al. **Hippocampus** 1997;7(4):427–36

Different effects of IL–2 in vivo treatment and emotional stress on POMC gene expression in the pituitary of mice. Chesnokova V, et al. **Horm Metab Res** 1997 Feb;29(2):88–9

Effect of noise stress on some cardiovascular parameters and audiovisual reaction time. Saha S, et al. **Indian J Physiol Pharmacol** 1996 Jan;40(1):35–40

Men at risk for hypertension show elevated vascular resistance at rest and during mental stress. Marrero AF, et al. **Int J Psychophysiol** 1997 Apr;25(3):185–92

Effects of psychological stress on human semen quality. Fenster L, et al. **J Androl** 1997 Mar–Apr;18(2):194–202

Effects of long–term psychological stress on sexual behavior and brain catecholamine levels. Sato Y, et al. **J Androl** 1996 Mar–Apr;17(2):83–90

Assessment of stress during handling and transport. Grandin T. **J Anim Sci** 1997 Jan;75(1):249–57 (93 ref.)

Pregnancy alters body–core temperature response to a simulated open field in rats. Fewell JE, et al. **J Appl Physiol** 1997 May;82(5):1406–10

Decreased sympatho–adrenal activity in diabetic patients with autonomic dysfunction following mental stress. Forst T, et al. **J Auton Nerv Syst** 1996 Oct 7;61(1):31–6

Stress reactivity of intraocular pressure after relaxation training in open–angle glaucoma patients. Kaluza G, et al. **J Behav Med** 1996 Dec;19(6):587–98

Stress–induced changes in circadian rhythms of body temperature and activity in rats are not caused by pacemaker changes. Meerlo P, et al. **J Biol Rhythms** 1997 Feb;12(1):80–92

Blood pressure reactivity in urban youth during angry and normal talking. Liehr P, et al. **J Cardiovasc Nurs** 1997 Jul; 11(4):85–94

Stressful life events' effects on rheumatoid arthritis disease activity. Potter PT, et al. **J Consult Clin Psychol** 1997 Apr; 65(2):319–23

Cognitive processing bias of children in a real life stress situation and a neutral situation. Kindt M, et al. **J Exp Child Psychol** 1997 Jan;64(1):79–97

Is the 'clinic–home blood pressure difference' associated with psychological distress? A primary care–based study. Donner–Banzhoff N, et al. **J Hypertens** 1997 Jun; 15(6):585–90

Evaluating sympathetic and haemodynamic responses to mental stressors: hankering or achievement? [editorial] Grassi G. **J Hypertens** 1996 Oct;14(10):1155–7

Effects of angiotensin converting enzyme inhibitor on renal haemodynamics during mental stress. Schmieder RE, et al. **J Hypertens** 1996 Oct;14(10):1201–7

Environmental influences on blood pressure and the role of job strain. Pickering TG, et al. **J Hypertens Suppl** 1996 Dec;14(5):S179–85 (67 ref.)

Renal adaptation to stress: a possible role of endothelin release and prostaglandin modulation in the human subject. Castellani S, et al. **J Lab Clin Med** 1997 Apr;129(4):462–9

Novel role of prostacyclin in stress–induced gastric mucosal lesion formation in rats. Harada N, et al. **J Lab Clin Med** 1997 Jun;129(6):620–6

Hormonal response to restraint in rhesus monkeys. Gauquelin–Koch G, et al. **J Med Primatol** 1996 Dec; 25(6):387–96

Patterns of ACTH secretagog secretion in response to psychological stimuli. Romero LM, et al. **J Neuroendocrinol** 1996 Apr;8(4):243–58 (193 ref.)

Physiological, immunohistochemical and molecular aspects of gastric adaptation to stress, aspirin and to H. pylori–derived gastrotoxins. Konturek PC. **J Physiol Pharmacol** 1997 Mar;48(1):3–42 (89 ref.)

Alexithymia, defensiveness and cardiovascular reactivity to stress. Linden W, et al. **J Psychosom Res** 1996 Dec; 41(6):575–83

Competition stress in soccer coaches increases salivary. Immunoglobin A and salivary cortisol concentrations. Kugler J, et al. **J Sports Med Phys Fitness** 1996 Jun; 36(2):117–20

Effects of mental stress on myocardial ischemia during daily life. Gullette EC, et al. **JAMA** 1997 May 21;277(19):1521–6

Mental stress during daily life triggers myocardial ischemia [editorial; comment] Mittleman MA, et al. **JAMA** 1997 May 21;277(19):1558–9. Comment on: JAMA 1997 May 21;277(19):1521–6.

Hassles, appraisals, coping and distress: a closer look at the stress process. Lu L. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Aug; 13(8):503–10

Regional vs systemic responses to mental stress: a potential mechanism for non–demand–related ischemia. Silverman DG, et al. **Microvasc Res** 1996 May;51(3):396–9

Behavioural stress facilitates the induction of long–term depression in the hippocampus. Xu L, et al. **Nature** 1997 May 29;387(6632):497–500

Formation of formaldehyde from adrenaline in vivo; a potential risk factor for stress–related angiopathy. Yu PH, et al. **Neurochem Res** 1997 May;22(5):615–20

Central administration of the neurotensin receptor antagonist, SR48692, modulates diurnal and stress–related hypothalamic–pituitary–adrenal activity. Rowe WB, et al. **Neuroendocrinology** 1997 Aug;66(2):75–85

Effects of psychological stress on joint inflammation and adrenal function during induction of arthritis in the Lewis rat. Miller SC, et al. **Neuroimmunomodulation** 1995 Nov–Dec;2(6):329–38

Stress–induced analgesia. The role of hormones produced by the hypophyseal–adrenocortical system. Filaretov AA, et al. **Neurosci Behav Physiol** 1996 Nov–Dec;26(6):572–8

Social stress induces high intensity sleep in rats. Meerlo P, et al. **Neurosci Lett** 1997 Mar 28;225(1):41–4

Distinct activation of monoaminergic pathways in chick brain in relation to auditory imprinting and stressful situations: a microdialysis study. Gruss M, et al. **Neuroscience** 1997 Feb;76(3):891–9

Stress, glucocorticoids, and mesencephalic dopaminergic neurons: a pathophysiological chain determining vulnerability to psychostimulant abuse. Piazza PV, et al. **NIDA Res Monogr** 1996;163:277–99 (91 ref.)

Assessment of the effects of developmental toxicants: pharmacological and stress vulnerability of offspring. Spear LP. **NIDA Res Monogr** 1996;164:125–45 (42 ref.)

Cardiovascular function during cognitive stress in men before and after coronary artery bypass grafts. McFetridge JA, et al. **Nurs Res** 1997 Jul–Aug;46(4):188–94

Stress, social support and pregnancy outcome: a reassessment based on recent research. Hoffman S, et al. **Paediatr Perinat Epidemiol** 1996 Oct;10(4):380–405 (144 ref.)

Cardiovascular reactivity to psychological stress may enhance subsequent pain sensitivity. Caceres C, et al. **Pain** 1997 Feb;69(3):237–44

The cortisol response to psychological stress in temporomandibular dysfunction. Jones DA, et al. **Pain** 1997 Aug;72(1–2):171–82

Assessing the stages of pain processing: a multivariate analytical approach. Wade JB, et al. **Pain** 1996 Nov; 68(1):157–67

Opioid peptide modulation of circulatory and endocrine response to mental stress in humans. Fontana F, et al. **Peptides** 1997;18(2):169–75

D1 and D2 dopamine and opiate receptors are involved in the restraint stress–induced sensitization to the psychostimulant effects of amphetamine. Díaz–Otañez CS, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):9–14

FS stress induces long–lasting memory facilitation: involvement of cholinergic pathways. Jodar L, et al. **Pharmacol Biochem Behav** 1996 Mar;53(3):735–40

Androstenedione synergizes with stress or prenatal drug exposure to retard fetal growth: role of IGF. McGivern RF, et al. **Pharmacol Biochem Behav** 1996 Dec;55(4):549–57

Effects of moclobemide on forced–swimming stress and brain monoamine levels in mice. Miura H, et al. **Pharmacol Biochem Behav** 1996 Feb;53(2):469–75

Effect of restraint on drug–induced changes in skin and core temperature in biotelemetered rats. Wright BE, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):219–25

Peripheral beta–adrenoreceptors and stress–induced hypercholesterolemia in rats. Brennan FX Jr, et al. **Physiol Behav** 1996 Nov;60(5):1307–10

IRI–514, a synthetic peptide analogue of thymopentin, reduces the behavioral response to social stress in rats. Menzaghi F, et al. **Physiol Behav** 1996 Aug;60(2):397–401

Effects of intermittent tail shock or water avoidance on proximal colonic motor contractility in rats. Morrow NS, et al. **Physiol Behav** 1997 Aug;62(2):233–9

Prediction of individual vulnerability to stress–induced gastric ulcerations in rats: a factor analysis of selected behavioral and biological indices. Overmier JB, et al. **Physiol Behav** 1997 Apr;61(4):555–62

Central ANG II receptor involved in carotid sinus reflex resetting in chronically stressed rats. Qian ZM, et al. **Physiol Behav** 1997 Aug;62(2):241–7

The effect of vocalization on the heart rate response to mental arithmetic. Seraganian P, et al. **Physiol Behav** 1997 Aug; 62(2):221–4

Effect of intracerebroventricular administration of vasopressin on stress–induced hyperthermia in rats. Terlouw EM, et al. **Physiol Behav** 1996 Aug;60(2):417–24

Rapid down–regulation of beta–adrenergic receptors evoked by combined forced swimming test and CGP 37849—a competitive antagonist of NMDA receptors. Wędzony K, et al. **Pol J Pharmacol** 1995 Nov–Dec;47(6):537–40

The central adaptation syndrome: psychosocial stress as a trigger for adaptive modifications of brain structure and brain function. Huether G. **Prog Neurobiol** 1996 Apr; 48(6):569–612 (455 ref.)

Influence of the hippocampus/subiculum on antidiuretic hormone levels during stress. Goldman MB, et al. **Psychoneuroendocrinology** 1996 Oct;21(7):593–7

Estradiol, progesterone and cardiovascular response to stress. Sita A, et al. **Psychoneuroendocrinology** 1996 Apr; 21(3):339–46

Increased levels of extracellular noradrenaline in the frontal cortex of rats exposed to naturalistic environmental stimuli: modulation by acute systemic administration of diazepam or buspirone. Dalley JW, et al. **Psychopharmacology (Berl)** 1996 Sep;127(1):47–54

Acquisition of cocaine self–administration after social stress: role of accumbens dopamine. Tidey JW, et al. **Psychopharmacology (Berl)** 1997 Apr;130(3):203–12

The circadian variation of cardiovascular stress levels and reactivity: relationship to individual differences in morningness/eveningness. Nebel LE, et al. **Psychophysiology** 1996 May;33(3):273–81

The effects of recent food, alcohol, and tobacco intake and the temporal scheduling of testing on cardiovascular activity at rest and during psychological stress. Sheffield D, et al. **Psychophysiology** 1997 Mar;34(2):204–12

Experimental social fear: immunological, hormonal, and autonomic concomitants. Gerritsen W, et al. **Psychosom Med** 1996 May–Jun;58(3):273–86

Behavioral task–induced bronchodilation in asthma during active and passive tasks: a possible cholinergic link to psychologically induced airway changes. Lehrer PM, et al. **Psychosom Med** 1996 Sep–Oct;58(5):413–22

Emotional reactivity, defensiveness, and ambulatory cardiovascular response at work. Melamed S. **Psychosom Med** 1996 Sep–Oct;58(5):500–7

Somatic symptoms of distress: an international primary care study. Simon G, et al. **Psychosom Med** 1996 Sep–Oct; 58(5):481–8

The effects of perceived stress, traits, mood states, and stressful daily events on salivary cortisol. van Eck M, et al. **Psychosom Med** 1996 Sep–Oct;58(5):447–58

Prenatal psychosocial factors and the neuroendocrine axis in human pregnancy. Wadhwa PD, et al. **Psychosom Med** 1996 Sep–Oct;58(5):432–46

Benzodiazepines: tolerability in elderly patients. Lechin F, et al. **Psychother Psychosom** 1996;65(4):171–82 (202 ref.)

Intraindividual relationships between blood pressurc level and emotional state. Shimomitsu T, et al. **Psychother Psychosom** 1996;65(3):137–44

Colonic transit investigated by radiopaque markers in females with irritable bowel syndrome: no correlation with symptoms and chronic stress. Dumitrascu DL, et al. **Rom J Intern Med** 1996 Jul–Dec;34(3–4):225–31

Psychosocial factors and their role in symptomatic gastroesophageal reflux disease and functional dyspepsia. Wiklund I, et al. **Scand J Gastroenterol Suppl** 1996; 220:94–100 (68 ref.)

Stress and behaviorally induced reproductive dysfunction in primates. Cameron JL. **Semin Reprod Endocrinol** 1997 Feb; 15(1):37–45 (56 ref.)

The neurobiology of stress: understanding regulation of affect during female biological transitions. Dorn LD, et al. **Semin Reprod Endocrinol** 1997 Feb;15(1):19–35 (162 ref.)

Noradrenergic mechanisms in stress and anxiety: I. Preclinical studies. Bremner JD, et al. **Synapse** 1996 May; 23(1):28–38 (138 ref.)

Noradrenergic mechanisms in stress and anxiety: II. Clinical studies. Bremner JD, et al. **Synapse** 1996 May;23(1):39–51 (118 ref.)

NMDA receptors in nucleus accumbens modulate stress–induced dopamine release in nucleus accumbens and ventral tegmental area. Doherty MD, et al. **Synapse** 1997 Jul;26(3):225–34

Transient and persistent consequences of acute stress on long–term potentiation (LTP), synaptic efficacy, theta rhythms and bursts in area CA1 of the hippocampus. Shors TJ, et al. **Synapse** 1997 Jul;26(3):209–17

[Changes in cAMP signal transduction function and gene expression related to the onset of affective disturbance—the relationship between stress, antidepressants and expression of BDNF mRNA] Morinobu S, et al. **Seishin Shinkeigaku Zasshi** 1996;98(11):937–42; discussion 942–6 (7 ref.) **(Jpn)**

[Stress] Manso CF. **Acta Med Port** 1997 Apr;10(4):307–10 (18 ref.) (Eng. Abstr.) **(Por)**

[Effects of mental adaptation on vegetative, hormonal and sensory reactions in preoperative period] Sergeenko NI, et al. **Anesteziol Reanimatol** 1997 Mar–Apr;(2):37–40 (Eng. Abstr.) **(Rus)**

[Pathophysiological effects of combined exposure to emotional stress and cyclophosphamide] Ingel' FI, et al. **Biull Eksp Biol Med** 1997 May;123(5):506–9 **(Rus)**

[Functional characteristics of hypothalamic and cortical neurons in various motivational and emotional states of animals] Kozhedub RG, et al. **Biull Eksp Biol Med** 1997 May;123(5):501–5 **(Rus)**

[Role of various hierarchical brain structures in psychoemotional stress] Pisarev VB, et al. **Biull Eksp Biol Med** 1996 May;121(5):578–82 **(Rus)**

[New accents of the classical concept of stress] Sudakov KV. **Biull Eksp Biol Med** 1997 Feb;123(2):124–30 (58 ref.) **(Rus)**

[Activity of the hypothalamic noradrenergic system under stressful conditions in awake rats with experimental arterial hypertension of various etiologies] Chazov EI, et al. **Dokl Akad Nauk** 1996 Jun;348(4):570–2 **(Rus)**

[Stress: cardiologic aspects] Fedorov BM. **Fiziol Cheloveka** 1997 Mar–Apr;23(2):89–99 **(Rus)**

[Stress as an ecological problem in scientific–technical progress] Sudakov KV. **Fiziol Cheloveka** 1996 Jul–Aug; 22(4):73–8 **(Rus)**

[The mechanism of stressor suppression of the contractile function and reactivity of aortic smooth muscle] Solodkov AP, et al. **Fiziol Zh Im I M Sechenova** 1996 Jul;82(7):46–53 (Eng. Abstr.) **(Rus)**

[The morphofunctional characteristics of the hypothalamo–hypophyseal–gonadal system in male rats under emotional pain stress (EPS)] Stadnikov AA, et al. **Morfologiia** 1996;110(5):38–42 (Eng. Abstr.) **(Rus)**

[Systems evaluation of physiological functions of humans at a workplace] Sudakov KV.

Vestn Ross Akad Med Nauk 1997;(4):18–24 (Eng. Abstr.) **(Rus)**

[Functional changes in the cardiovascular system in exposure to ionizing radiation against a background of stress and concomitant diseases] Momot MD, et al. **Voen Med Zh** 1996 Sep;317(9):38–42 **(Rus)**

[The effect of stress in pregnant rats on the anxiety level in their offspring] Batuev AS, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):558–63 (Eng. Abstr.) **(Rus)**

[The effect of emotional stress on the behavioral and endocrine indices of rats selected for their contrasting capacities for active avoidance] Galeeva AIu, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep–Oct; 46(5):929–36 (Eng. Abstr.) **(Rus)**

[Emotional stress and sleep: a study of adrenalectomized rats] Koval'zon VM, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1997 May–Jun; 47(3):584–91 (Eng. Abstr.) **(Rus)**

[The prediction of the resistance of rats to emotional stress] Petrov VI, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov–Dec;46(6):1119–21 **(Rus)**

[The open–field behavior and electrical activity of the limbic structures and the cerebral cortex in rats with different resistances to emotional stress] Umriukhin PE. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Sep–Oct; 46(5):953–6 **(Rus)**

[The effect of prenatal "pain" and "emotional" stresses on the learning characteristics of rats] Vinogradova EP, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Nov–Dec; 46(6):1097–103 (Eng. Abstr.) **(Rus)**

[The effect of stress on the anxiety level in female white rats at different stages of the estrous cycle] Vinogradova EP, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 Jul–Aug;46(4):769–75 (Eng. Abstr.) **(Rus)**

[The neurophysiological effects of the beta–blocker obzidan in the modelling of emotional stress] Shever'ova VM. **Fiziol Zh** 1997;43(1–2):31–9 (Eng. Abstr.) **(Ukr)**

PREVENTION & CONTROL

Job stress reduction therapies. Field T, et al. **Altern Ther Health Med** 1997 Jul;3(4):54–6

Control beliefs and faith as stress moderators for Korean American versus Caucasian American protestants. Bjorck JP, et al. **Am J Community Psychol** 1997 Feb;25(1):61–72

Stress appraisal and social support of Chinese mothers of adult children with mental retardation. Chen TY, et al. **Am J Ment Retard** 1997 Mar;101(5):473–82

Postdisaster psychosocial intervention: a field study of the impact of debriefing on psychological distress. Chemtob CM, et al. **Am J Psychiatry** 1997 Mar;154(3):415–7

Integrative functions of lactational hormones in social behavior and stress management. Carter CS, et al. **Ann N Y Acad Sci** 1997 Jan 15;807:164–74 (78 ref.)

Toward a middle–range theory of resilience. Polk LV. **ANS Adv Nurs Sci** 1997 Mar;19(3):1–13 (42 ref.)

Not all stressors have to be accepted [letter; comment] Hocking B. **Aust Fam Physician** 1996 Nov;25(11):1789. Comment on: Aust Fam Physician 1996 Aug;25(8):1245–8.

Predicting stress in general practitioners: 10 year follow up postal survey. Firth–Cozens J. **BMJ** 1997 Jul 5; 315(7099):34–5

Stress and blood donation: effects of music and previous donation experience. Ferguson E, et al. **Br J Psychol** 1997 May;88 (Pt 2):277–94

Labour analgesia with intrathecal fentanyl decreases maternal stress. Cascio M, et al. **Can J Anaesth** 1997 Jun;44(6):605–9

The effects of stress management on the quality of life of patients following acute myocardial infarction or coronary bypass surgery. Trzcieniecka–Green A, et al. **Eur Heart J** 1996 Nov;17(11):1663–70

The effect of preoperative high dose methylprednisolone in attenuating the metabolic response after oesophageal resection. Takeda S, et al. **Eur J Surg** 1997 Jul;163(7):511–7

Measuring psychological well–being. The adapted General Well–Being Index in a primary care setting: a test of validity. Hopton JL, et al. **Fam Pract** 1995 Dec; 12(4):452–60

Toward a definition of family resilience: integrating life–span and family perspectives. Hawley DR, et al. **Fam Process** 1996 Sep;35(3):283–98 (66 ref.)

The concept of family resilience: crisis and challenge. Walsh F. **Fam Process** 1996 Sep;35(3):261–81 (112 ref.)

Survey of pediatric hospitals' preparation programs: evidence of the impact of health psychology research. O'Byrne KK, et al. **Health Psychol** 1997 Mar;16(2):147–54

Reliability and validity of the Japanese version of Job Content Questionnaire: replication and extension in computer company employees. Kawakami N, et al. **Ind Health** 1996;34(4):295–306

Interventions for caregivers of patients with Alzheimer's disease: a review and analysis of content, process, and outcomes. Bourgeois MS, et al. **Int J Aging Hum Dev** 1996; 43(1):35–92 (117 ref.)

Self–regulation as a moderator of the relation between coping and symptomatology in children of divorce. Lengua LJ, et al. **J Abnorm Child Psychol** 1996 Dec;24(6):681–701

The effect of a home–based, case–managed, multifactorial risk–reduction program on reducing psychological distress in patients with cardiovascular disease. Taylor CB, et al. **J Cardiopulm Rehabil** 1997 May–Jun;17(3):157–62

Techno–stress: a prospective psychophysiological study of the impact of a controlled stress–reduction program in advanced telecommunication systems design work. Arnetz BB. **J Occup Environ Med** 1996 Jan;38(1):53–65

Nurse coaching and cartoon distraction: an effective and practical intervention to reduce child, parent, and nurse distress during immunizations. Cohen LL, et al. **J Pediatr Psychol** 1997 Jun;22(3):355–70

Ethical distress in nursing. Cameron ME. **J Prof Nurs** 1997 Sep–Oct;13(5):280

Stress intervention. A model of stress inoculation training. Admi H. **J Psychosoc Nurs Ment Health Serv** 1997 Aug; 35(8):37–41

Writing as a therapeutic modality. McGihon NN. **J Psychosoc Nurs Ment Health Serv** 1996 Jun;34(6):31–5 (8 ref.)

Improving stress assessment: toward an evidence–based approach to organizational stress interventions. Briner RB. **J Psychosom Res** 1997 Jul;43(1):61–71

An intervention strategy for workplace stress. Cooper CL, et al. **J Psychosom Res** 1997 Jul;43(1):7–16

Psychological well–being at work: is prevention better than cure? Reynolds S. **J Psychosom Res** 1997 Jul;43(1):93–102

Use of a projective technique to assess young children's appraisal and coping responses to a venipuncture. Caty S, et al. **J Soc Pediatr Nurs** 1997 Apr–Jun;2(2):83–92

Teaching teens to cope: coping skills training for adolescents with insulin–dependent diabetes mellitus. Davidson M, et al. **J Soc Pediatr Nurs** 1997 Apr–Jun;2(2):65–72

Mastery of stress in mothers of preterm infants. Younger JB, et al. **J Soc Pediatr Nurs** 1997 Jan–Mar;2(1):29–35

Psychosocial rehabilitation for patients recovering from acute myocardial infarction [comment] Irving JB. **Lancet** 1997 Aug 16;350(9076):457. Comment on: Lancet 1997 Aug 16;350(9076):473–9.

Surviving the war zone experience: preventing psychiatric casualties. Dobson M, et al. **Mil Med** 1997 Apr;162(4):283–7

Preventive mental health interventions in peacekeeping missions to Somalia and Haiti. Hall DP, et al. **Mil Med** 1997 Jan;162(1):41–3

The road best traveled. Veninga RL. **Minn Med** 1997 Jun; 80(6):10–4

Mindfulness meditation–based stress reduction: experience with a bilingual inner–city program [published erratum appears in Nurse Pract 1997 May;22(5):215] Roth B, et al. **Nurse Pract** 1997 Mar;22(3):150–2, 154, 157 passim

Transform fear to trust: communicating about unsafe job incidents and settings. Preston R, et al. **Occup Health Saf** 1994 Jan;63(1):60–1

Occupational stress management programmes: a practical overview of published effect studies. van der Hek H, et al. **Occup Med (Oxf)** 1997 Apr;47(3):133–41 (53 ref.)

Preserving our vitality: strategies for personal and professional growth. Veninga RL. **Promot Educ** 1997 Mar; 4(1):12–4

The effects of community differences on health status, health stress, and helping networks in a sample of 900 elderly. Preston DB, et al. **Public Health Nurs** 1996 Feb;13(1):72–9

Expectant fathers: influence of perinatal education on stress, coping, and spousal relations. Diemer GA. **Res Nurs Health** 1997 Aug;20(4):281–93

Effects of work–related stress reduction on depressive symptoms among Japanese blue–collar workers. Kawakami N, et al. **Scand J Work Environ Health** 1997 Feb;23(1):54–9

Some conceptual considerations on the sense of coherence. Geyer S. **Soc Sci Med** 1997 Jun;44(12):1771–9 (59 ref.)

Who cares for the care–givers? [editorial; comment] Glaus A, et al. **Support Care Cancer** 1996 Nov;4(6):399–400. Comment on: Support Care Cancer 1996 Nov;4(6):408–15.

Protecting child witnesses: judicial efforts to minimize trauma and reduce evidentiary barriers. Hafemeister TL. **Violence Vict** 1996 Spring;11(1):71–91

[The limitation of lipid hyperperoxidation and the prevention of stressor damages to the heart by glycine derivatives] Malyshev VV, et al. **Eksp Klin Farmakol** 1996 Sep–Oct; 59(5):23–5 (Eng. Abstr.) **(Rus)**

[The stress–protector properties of new analogs of mediator amino acids] Petrov VI, et al. **Eksp Klin Farmakol** 1996 Sep–Oct;59(5):6–8 (Eng. Abstr.) **(Rus)**

[Psychoemotional stress: its prevention and rehabilitation] Sudakov KV. **Ter Arkh** 1997;69(1):70–4 (46 ref.) **(Rus)**

[The prophylactic effect of negatively charged air ions in acute stress in rats with different typological behavioral characteristics] Livanova LM, et al. **Zh Vyssh Nerv Deiat Im I P Pavlova** 1996 May–Jun; 46(3):564–70 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Taking care of yourself. Smith WL. **Acad Radiol** 1996 Apr; 3(4):370–1

Mediators of adolescents' stress in a college preparatory environment. Ainslie RC, et al. **Adolescence** 1996 Winter; 31(124):913–24

Stress–induced immunosuppression and therapeutic touch. Olson M, et al. **Altern Ther Health Med** 1997 Mar; 3(2):68–74

Narrative descriptions of parental love and caring predict health status in midlife: a 35–year follow–up of the Harvard Mastery of Stress Study. Russek LG, et al. **Altern Ther Health Med** 1996 Nov;2(6):55–62

Sources of stress for mothers and fathers of deaf and hard of hearing infants. Meadow–Orlans KP. **Am Ann Deaf** 1995 Oct;140(4):352–7

Post–traumatic stress symptoms in mothers following children's reports of sexual abuse: an exploratory study. Timmons–Mitchell J, et al. **Am J Orthopsychiatry** 1996 Jul; 66(3):463–7

Psychosocial stressors and low birthweight in an urban population. Orr ST, et al. **Am J Prev Med** 1996 Nov–Dec; 12(6):459–66

Traumatic grief as a risk factor for mental and physical morbidity. Prigerson HG, et al. **Am J Psychiatry** 1997 May; 154(5):616–23

Sex trading and psychological distress among women recruited from the streets of Harlem. el–Bassel N, et al. **Am J Public Health** 1997 Jan;87(1):66–70

Stress–activated hormonal systems and the regulation of memory storage. Roozendaal B, et al. **Ann N Y Acad Sci** 1997 Jun 21;821:247–58 (81 ref.)

Uncertainty in acute illness. Mishel MH. **Annu Rev Nurs Res** 1997;15:57–80 (76 ref.)

Searching for the biological pathways between stress and health. Kelly S, et al. **Annu Rev Public Health** 1997; 18:437–62 (177 ref.)

Comparison of emotional distress in men with acquired immunodeficiency syndrome and in men with cancer. Sarna L, et al. **Appl Nurs Res** 1996 Nov;9(4):209–12

Relationships among illness uncertainty, stress, coping, and emotional well–being at entry into a clinical drug trial. Wineman NM, et al. **Appl Nurs Res** 1996 May;9(2):53–60

The ethological method as a means for evaluating stress in children two to three years of age during a dental examination. Rousset C, et al. **ASDC J Dent Child** 1997 Mar–Apr;64(2):99–106

Crewmember interactions during a Mir space station simulation. Kanas N, et al. **Aviat Space Environ Med** 1996 Oct;67(10):969–75

Female United States Air Force (USAF) pilots: themes, challenges, and possible solutions. McGlohn SE, et al. **Aviat Space Environ Med** 1997 Feb;68(2):132–6

Learning/memory processes under stress conditions. Kaneto H. **Behav Brain Res** 1997 Feb;83(1–2):71–4

Chronic stress impairs rat spatial memory on the Y maze, and this effect is blocked by tianeptine pretreatment. Conrad CD, et al. **Behav Neurosci** 1996 Dec;110(6):1321–34

Scholastic impairments among traumatized adolescents. Saigh PA, et al. **Behav Res Ther** 1997 May;35(5):429–36

The biobehavioral consequences of psychogenic stress in a small, social primate (Callithrix jacchus jacchus). Johnson EO, et al. **Biol Psychiatry** 1996 Sep 1;40(5):317–37

Recent life stressors and biological markers in newly admitted psychotic patients. Mazure CM, et al. **Biol Psychiatry** 1997 Apr 15;41(8):865–70

Poststress glucose mitigates behavioral impairment in rats in the "learned helplessness" model of psychopathology. Minor TR, et al. **Biol Psychiatry** 1997 Sep 1;42(5):324–34

Behavior and physiology of social stress and depression in female cynomolgus monkeys. Shively CA, et al. **Biol Psychiatry** 1997 Apr 15;41(8):871–82

Stress in general practice. Stressed doctors should take time to recover before deciding on their future [letter] Davies D. **BMJ** 1996 Oct 12;313(7062):946

Audiological and psychological characteristics of a group of tinnitus sufferers, prior to tinnitus management training. Dineen R, et al. **Br J Audiol** 1997 Feb;31(1):27–38

Ways of coping with psychological distress after trauma. Charlton PF, et al. **Br J Clin Psychol** 1996 Nov;35 (Pt 4):517–30

Primary teachers' knowledge and acquisition of stress relieving strategies. Cockburn AD. **Br J Educ Psychol** 1996 Sep;66 (Pt 3):399–410

Stress and psychiatric disorder in the Hindu Kush: a community survey of mountain villages in Chitral, Pakistan [see comments] Mumford DB, et al. **Br J Psychiatry** 1996 Mar;168(3):299–307. Comment in: Br J Psychiatry 1996 Jun;168(6):788–9.

Opioid receptors in the ventral tegmental area contribute to stress–induced analgesia in the formalin test for tonic pain. Altier N, et al. **Brain Res** 1996 Apr 29;718(1–2):203–6

Flumazenil reverses the decrease in the hypnotic activity of pentobarbital by social isolation stress: are endogenous benzodiazepine receptor ligands involved? Ojima K, et al. **Brain Res** 1997 Jan 16;745(1–2):127–33

Practitioner, heal thyself: coping with stress in clinical practice. Menninger WW. **Bull Menninger Clin** 1996 Spring;60(2):197–205

Managing spiritual distress in patients with advanced cancer pain. Georgesen J, et al. **Cancer Nurs** 1996 Oct;19(5):376–83 (20 ref.)

Exploring the psychosocial meaning of recurrent cancer: a descriptive study. Mahon SM, et al. **Cancer Nurs** 1997 Jun; 20(3):178–86

Distress symptoms and support systems of Chinese parents of children with cancer. Martinson IM, et al. **Cancer Nurs** 1997 Apr;20(2):94–9

Secondary traumatization in parents following the disclosure of extrafamilial child sexual abuse: initial effects. Manion IG, et al. **Child Abuse Negl** 1996 Nov;20(11):1095–109

Parenting stress and anger expression as predictors of child abuse potential. Rodriguez CM, et al. **Child Abuse Negl** 1997 Apr;21(4):367–77

Coming of age too early: pubertal influences on girls' vulnerability to psychological distress. Ge X, et al. **Child Dev** 1996 Dec;67(6):3386–400

Temperament and the reactions to unfamiliarity. Kagan J. **Child Dev** 1997 Feb;68(1):139–43

Stress reactivity and self–recognition. Lewis M, et al. **Child Dev** 1997 Aug;68(4):621–9

Black women, work, stress, and perceived discrimination: the focused support group model as an intervention for stress reduction. Mays VM. **Cult Divers Ment Health** 1995; 1(1):53–65

Suffering, ethics, and the politics of moral life [comment] Kleinman A. **Cult Med Psychiatry** 1996 Sep;20(3):287–90 . Comment on: Cult Med Psychiatry 1996 Sep;20(3):251–77.

Long–lasting functional abdominal pain and duodenal ulcer are associated with stress, vulnerability and symptoms of psychological stress. A controlled study including healthy and patient controls. Jørgensen LS, et al. **Dan Med Bull** 1996 Sep;43(4):359–63

Mom and dad are at it again: adolescent perceptions of marital conflict and adolescent psychological distress. Harold GT, et al. **Dev Psychol** 1997 Mar;33(2):333–50

Hereditary breast cancer risk: factors associated with the decision to undergo BRCA 1 testing. Gil F. **Eur J Cancer Prev** 1996 Dec;5(6):488–90

Role of (+)–SKF–10,047–sensitive sub–population of sigma 1 receptors in amelioration of conditioned fear stress in rats: association with mesolimbic dopaminergic systems. Kamei H, et al. **Eur J Pharmacol** 1997 Jan 29; 319(2–3):165–72

Ro 15–4513 potentiates, instead of antagonizes, ethanol–induced sleep in mice exposed to small platform stress. Pokk P, et al. **Eur J Pharmacol** 1996 Dec 12; 317(1):15–20

Stress–induced hyperthermia as a putative anxiety model. Zethof TJ, et al. **Eur J Pharmacol** 1995 Dec 27; 294(1):125–35

General practitioners' views about the need for a stress support service. Young G, et al. **Fam Pract** 1996 Dec; 13(6):517–21

Coping with stress in families of servicemen: searching for "win–win" solutions to a conflict between the family and the military organization. Desivilya HS, et al. **Fam Process** 1996 Jun;35(2):211–25

The relationship of current psychiatric disorder to functional disability and distress in patients with inflammatory bowel disease [see comments] Walker EA, et al. **Gen Hosp Psychiatry** 1996 Jul;18(4):220–9. Comment in: Gen Hosp Psychiatry 1996 Jul;18(4):215–9.

Pruritic rash of the hands and feet. Levine N. **Geriatrics** 1997 Jun;52(6):29

Fundamental analysis in research on well–being: distress and the sense of control. Mirowsky J, et al. **Gerontologist** 1996 Oct;36(5):584–94 (26 ref.)

The stress response in headache sufferers: physiological and psychological reactivity. Holm JE, et al. **Headache** 1997 Apr;37(4):221–7

Relationship of job strain to standard coronary risk factors and psychological characteristics in women and men of the Family Heart Study. Weidner G, et al. **Health Psychol** 1997 May;16(3):239–47

Mothers' satisfaction with medical care: perceptions of racism, family stress, and medical outcomes in children with diabetes. Auslander WF, et al. **Health Soc Work** 1997 Aug;22(3):190–9

Nurse–expressed empathy, patient outcomes, and development of a middle–range theory. Olson J, et al. **Image J Nurs Sch** 1997 Spring;29(1):71–6

Risk factors associated with negative interactions between family caregivers and elderly care–receivers. Johnson JR. **Int J Aging Hum Dev** 1996;43(1):7–20

Equity/inequity and patterns of guardianship of older persons. Keith PM. **Int J Aging Hum Dev** 1996;43(2):155–68

Worry among Canadian seniors. Skarborn M, et al. **Int J Aging Hum Dev** 1996;43(2):169–78

Appraisal and coping strategies in stressful situations: a comparison of individuals who binge eat and controls. Hansel SL, et al. **Int J Eat Disord** 1997 Jan;21(1):89–93

Stress, coping, and social support as psychosocial factors in readmissions for ischaemic heart disease. Stewart MJ, et al. **Int J Nurs Stud** 1997 Apr;34(2):151–63

Race and sex differences in cardiovascular recovery from acute stress. Gillin JL, et al. **Int J Psychophysiol** 1996 Aug–Sep;23(1–2):83–90

Review: pathways to morbidity in carers of dementia sufferers. Wijeratne C. **Int Psychogeriatr** 1997 Mar; 9(1):69–79 (74 ref.)

Effect of stress on the behavior and 5–HT system in Sprague–Dawley and Wistar Kyoto rat strains. Paré WP, et al. **Integr Physiol Behav Sci** 1996 Apr–Jun;31(2):112–21

Preschoolers' responses to ongoing interadult conflict: the role of prior exposure to resolved versus unresolved arguments. el–Sheikh M, et al. **J Abnorm Child Psychol** 1996 Oct;24(5):665–79

Fundamental frequency of phonation and perceived emotional stress. Protopapas A, et al. **J Acoust Soc Am** 1997 Apr;101(4):2267–77

A qualitative analysis of student nurses' experiences of mentorship. Cahill HA. **J Adv Nurs** 1996 Oct;24(4):791–9

Stress and quality of life in the renal transplant patient: a preliminary investigation. Fallon M, et al. **J Adv Nurs** 1997 Mar;25(3):562–70

Icelandic women's identifications of stressors and social support during the diagnostic phase of breast cancer. Fridfinnsdottir EB. **J Adv Nurs** 1997 Mar;25(3):526–31

Hope from the perspective of homeless families. Herth K. **J Adv Nurs** 1996 Oct;24(4):743–53

Support as experienced by patients with cancer during radiotherapy treatments. Hinds G, et al. **J Adv Nurs** 1997 Aug;26(2):371–9

Entry to care: positive choice or fait accompli? developing a more proactive nursing response to the needs of older people and their carers. Nolan M, et al. **J Adv Nurs** 1996 Aug;24(2):265–74

Acculturative stress, depression, and suicidal ideation among immigrant and second–generation Latino adolescents. Hovey JD, et al. **J Am Acad Child Adolesc Psychiatry** 1996 Sep;35(9):1183–92

Psychometric properties of the Weekly Stress Inventory (WSI): extension to a patient sample with coronary heart disease. Mosley TH Jr, et al. **J Behav Med** 1996 Jun; 19(3):273–87

The availability of social support reduces cardiovascular reactivity to acute psychological stress. Uchino BN, et al. **J Behav Med** 1997 Feb;20(1):15–27

Stress–induced changes in circadian rhythms of body temperature and activity in rats are not caused by pacemaker changes. Meerlo P, et al. **J Biol Rhythms** 1997 Feb;12(1):80–92

Children's methods of coping with stress: a twin study of genetic and environmental influences. Mellins CA, et al. **J Child Psychol Psychiatry** 1996 Sep;37(6):721–30

Stress–induced declarative memory impairment in healthy elderly subjects: relationship to cortisol reactivity. Lupien SJ, et al. **J Clin Endocrinol Metab** 1997 Jul;82(7):2070–5

Acute and chronic distress and posttraumatic stress disorder as a function of responsibility for serious motor vehicle accidents. Delahanty DL, et al. **J Consult Clin Psychol** 1997 Aug;65(4):560–7

The influence of psychological distress on use of genetic testing for cancer risk. Lerman C, et al. **J Consult Clin Psychol** 1997 Jun;65(3):414–20

Stress, maternal distress, and children's adjustment following immigration: the buffering role of social support. Short KH, et al. **J Consult Clin Psychol** 1997 Jun;65(3):494–503

Patient awareness during general anesthesia: a legal guide. Grinblat TS. **J Contemp Health Law Policy** 1996 Fall; 13(1):137–67

College students' smoking behavior, perceived stress, and coping styles. Naquin MR, et al. **J Drug Educ** 1996; 26(4):367–76

How you know when you're stressed: self–evaluations of stress. Hinds H, et al. **J Gen Psychol** 1997 Jan;124(1):105–11

Gender, multiple roles, role meaning, and mental health. Simon RW. **J Health Soc Behav** 1995 Jun;36(2):182–94

Internalized homophobia in a sample of HIV+ gay men, and its relationship to psychological distress, coping, and illness progression. Wagner G, et al. **J Homosex** 1996; 32(2):91–106

Psychological stress in people with profound mental retardation. Chaney RH. **J Intellect Disabil Res** 1996 Aug; 40 (Pt 4):305–10

Communication, social–emotional development and parenting stress in Cornelia–de–Lange syndrome. Sarimski K. **J Intellect Disabil Res** 1997 Feb;41 (Pt 1):70–5

Effect of noise stress on chronic fatigue syndrome patients. Beh HC. **J Nerv Ment Dis** 1997 Jan;185(1):55–8

On the interaction of hypnotizability and negative affect in chronic pain. Implications for the somatization of trauma. Wickramasekera I, et al. **J Nerv Ment Dis** 1996 Oct; 184(10):628–35

Scopolamine blocks the effects of swim stress on memory retrieval in rats. Kumar KB, et al. **J Neural Transm** 1996; 103(11):1331–6

Creutzfeldt–Jakob disease and stress [letter] Brandel JP, et al. **J Neurol Neurosurg Psychiatry** 1997 May;62(5):541

Perceived level and sources of stress in university professional schools. Beck DL, et al. **J Nurs Educ** 1997 Apr;36(4):180–6

Academic outcomes and stress in full–time day and part–time evening baccalaureate nursing students. O'Connor PC, et al. **J Nurs Educ** 1996 Sep;35(6):245–51

Differences in stress and challenge in clinical practice among ADN and BSN students in varying clinical courses. Oermann MH, et al. **J Nurs Educ** 1997 May;36(5):228–33

Bed rest from the perspective of the high–risk pregnant woman. Gupton A, et al. **J Obstet Gynecol Neonatal Nurs** 1997 Jul–Aug;26(4):423–30

Effects of social support, stress, and level of illness on caregiving of children with AIDS. Hughes CB, et al. **J Pediatr Nurs** 1996 Dec;11(6):347–58

Behavioral responses of healthy Chinese siblings to the stress of childhood cancer in the family: a longitudinal study. Wang RH, et al. **J Pediatr Nurs** 1996 Dec;11(6):383–91

Impact of the repressive personality style on the measurement of psychological distress in children and adolescents with chronic illness: an example from hemophilia. Drotar D, et al. **J Pediatr Psychol** 1996 Apr;21(2):283–93

Vulnerability to stress: self–criticism and stress–induced changes in biochemistry. Gruen RJ, et al. **J Pers** 1997 Mar; 65(1):33–47

The effect of NMDA antagonists on footshock–induced fighting behavior in chronically stressed rats. Ossowska G, et al. **J Physiol Pharmacol** 1997 Mar;48(1):127–35

The effects of flumazenil, Ro 15–4513 and beta–CCM on the behaviour of control and stressed mice in the plus–maze test. Pokk P, et al. **J Physiol Pharmacol** 1997 Jun; 48(2):253–61

A multidimensional approach to the study of the structure of coping with stress. Livneh H, et al. **J Psychol** 1996 Sep; 130(5):501–12

Physical complaints and emotional stress related to routine diagnostic procedures of the fertility investigation. Eimers JM, et al. **J Psychosom Obstet Gynaecol** 1997 Mar; 18(1):31–5

A study of suicide in farmers in England and Wales. Malmberg A, et al. **J Psychosom Res** 1997 Jul;43(1):107–11

Perceived sources of work stress and satisfaction among hospital and community mental health staff, and their relation to mental health, burnout and job satisfaction. Prosser D, et al. **J Psychosom Res** 1997 Jul;43(1):51–9

Work and psychiatric disorder in the Whitehall II Study. Stansfeld SA, et al. **J Psychosom Res** 1997 Jul;43(1):73–81

Psychosocial vulnerability to stress: a study of HIV–positive homosexual men. Vedhara K, et al. **J Psychosom Res** 1996 Sep;41(3):255–67

The effects of life stressors and daily stressors on stuttering. Blood IM, et al. **J Speech Lang Hear Res** 1997 Feb; 40(1):134–43

Randomised trial of home–based psychosocial nursing intervention for patients recovering from myocardial infarction [see comments] Frasure–Smith N, et al. **Lancet** 1997 Aug 16;350(9076):473–9. Comment in: Lancet 1997 Aug 16;350(9076):457.

Psychological trauma and its influence on genuine and false complaints of sexual assault. Adshead G. **Med Sci Law** 1996 Apr;36(2):95–9

Militarism: a psychosocial disease. Coulter NA. **Med War** 1992 Jan–Mar;8(1):7–17 (15 ref.)

Corticotropin–releasing factor receptor antagonist infused into the locus coeruleus attenuates immobilization stress–induced defensive withdrawal in rats. Smagin GN, et al. **Neurosci Lett** 1996 Dec 20;220(3):167–70

Changes in myopia, visual acuity, and psychological distress after biofeedback visual training. Angi MR, et al. **Optom Vis Sci** 1996 Jan;73(1):35–42

Suppression of an inhibitory jaw reflex by the anticipation of pain in man. Scott AJ, et al. **Pain** 1996 Aug; 66(2–3):125–31

Long lasting blindness, availability of resources, and early aging. Bachar E, et al. **Percept Mot Skills** 1997 Apr; 84(2):675–88 (77 ref.)

Alpha 2–adrenoceptor agonists and stress–induced analgesia in rats: influence of stressors and methods of analysis. De Kock M, et al. **Pharmacol Biochem Behav** 1997 Sep; 58(1):109–17

D1 and D2 dopamine and opiate receptors are involved in the restraint stress–induced sensitization to the psychostimulant effects of amphetamine. Díaz–Otañez CS, et al. **Pharmacol Biochem Behav** 1997 Sep;58(1):9–14

Inhibitory effect of restraint on induction of behavioral sensitization to methamphetamine and cocaine in mice. Kuribara H. **Pharmacol Biochem Behav** 1996 Jun; 54(2):327–31

Differential sensitivity of mice bred for stress–induced analgesia to morphine and ACEA–1011 in the formalin test. Lutfy K, et al. **Pharmacol Biochem Behav** 1996 Jun; 54(2):495–500

Sex and genotype determine the selective activation of neurochemically–distinct mechanisms of swim stress–induced analgesia. Mogil JS, et al. **Pharmacol Biochem Behav** 1997 Jan;56(1):61–6

Transient emotional changes elicited by intraperitoneal saline injection: effect of naloxone and flumazenil. Saldívar–González A, et al. **Pharmacol Biochem Behav** 1997 Feb;56(2):211–20

Delayed arousal from anesthesia: a further similarity between stress and beta–1 adrenoceptor blockade. Stone EA, et al. **Pharmacol Biochem Behav** 1996 Sep;55(1):131–3

Blockade of effect of stress on risk assessment behavior in mice by a beta–1 adrenoceptor antagonist. Stone EA, et al. **Pharmacol Biochem Behav** 1996 Oct;55(2):215–7

Diurnal variation in the effect of chronic mild stress on sucrose intake and preference. D'Aquila PS, et al. **Physiol Behav** 1997 Aug;62(2):421–6

Rearing piglets in a poor environment: developmental aspects of social stress in pigs. De Jonge FH, et al. **Physiol Behav** 1996 Aug;60(2):389–96

Changes in taste and satiety in dietary–restrained women following stress. Mitchell SL, et al. **Physiol Behav** 1996 Aug;60(2):495–9

Prenatal social stress masculinizes the females' behaviour in guinea pigs. Sachser N, et al. **Physiol Behav** 1996 Aug; 60(2):589–94

The stress of not being able to perform dustbathing in laying hens. Vestergaard KS, et al. **Physiol Behav** 1997 Aug; 62(2):413–9

Prevention of stereotypy in laboratory mice: effects on stress physiology and behaviour. Würbel H, et al. **Physiol Behav** 1996 Jun;59(6):1163–70

Influence of dynorphin A (1–13) and dynorphin A (1–10) amide on stress–induced analgesia. Starec M, et al. **Physiol Res** 1996;45(6):433–8

Influence of serotonergic drugs on restraint stress induced analgesia. Korzeniewska I, et al. **Pol J Pharmacol** 1995 Sep–Oct;47(5):381–5

Type A and Type B behaviors, work stressors, and social support at work. Hagihara A, et al. **Prev Med** 1997

Jul-Aug;26(4):486-94
Validity and reliability of the Japanese version of the Stress and Coping Inventory. Fukunishi I, et al. **Psychiatry Clin Neurosci** 1995 Aug;49(4):195-9
A longitudinal study of the effects of pessimism, trait anxiety, and life stress on depressive symptoms in middle-aged women. Bromberger JT, et al. **Psychol Aging** 1996 Jun; 11(2):207-13
Subjective memory complaints, psychological distress, and longitudinal change in objective memory performance. Smith GE, et al. **Psychol Aging** 1996 Jun;11(2):272-9
Beyond stress and arousal: a reconceptualization of alcohol-emotion relations with reference to psychophysiological methods. Stritzke WG, et al. **Psychol Bull** 1996 Nov;120(3):376-95 (183 ref.)
Ethnic-racial differences in psychological stress related to gay lifestyle among HIV-positive men. Siegel K, et al. **Psychol Rep** 1996 Aug;79(1):303-12
Effects of stress and shock anticipation on prepulse inhibition of the startle reflex. Grillon C, et al. **Psychophysiology** 1997 Sep;34(5):511-7
The influence of stress intrusion on immunodepression in generalized anxiety disorder patients and controls. La Via MF, et al. **Psychosom Med** 1996 Mar-Apr;58(2):138-42
Effects of hostility on platelet reactivity to psychological stress in coronary heart disease patients and in healthy controls. Markovitz JH, et al. **Psychosom Med** 1996 Mar-Apr;58(2):143-9
The use and efficacy of coping strategies and coping styles in a Swedish sample. Cronqvist A, et al. **Qual Life Res** 1997 Jan;6(1):87-96
Management in general practice significantly reduced psychosocial consequences of female urinary incontinence. Seim A, et al. **Qual Life Res** 1997 Apr;6(3):257-64
Occupational stresses, goal clarity, control, and strain among nurses in the Finnish health care system. Elovainio M, et al. **Res Nurs Health** 1996 Dec;19(6):517-24
Theoretical and psychometric analysis of caregiver strain. England M, et al. **Res Nurs Health** 1996 Dec;19(6):499-510
Crisis-related observations in competition: a case study in basketball. Bar-Eli M, et al. **Scand J Med Sci Sports** 1996 Oct;6(5):313-21
Work stress and psychological well-being among the nursing profession in Singapore. Boey KW, et al. **Singapore Med J** 1997 Jun;38(6):256-60
Psychosocial dimensions of family burden among two groups of carers looking after psychiatric patients. Bibou-Nakou I, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Feb; 32(2):104-8
Burden of care, psychological distress and satisfaction with services in the relatives of acutely mentally disordered adults. Cornwall PL, et al. **Soc Psychiatry Psychiatr Epidemiol** 1996 Nov;31(6):345-8
Life stress, social support and psychological distress in late adolescence. Ystgaard M. **Soc Psychiatry Psychiatr Epidemiol** 1997 Jul;32(5):277-83
Role of control and support in occupational stress: an integrated model. Baker E, et al. **Soc Sci Med** 1996 Oct; 43(7):1145-59
Impact of witnessing death on hospice patients. Payne S, et al. **Soc Sci Med** 1996 Dec;43(12):1785-94
Couples' adjustment to one partner's disability: the relationship between sense of coherence and adjustment. Rena F, et al. **Soc Sci Med** 1996 Jul;43(2):163-71
Creating a psychosocial measurement model from stressful life events. Sheehan TJ. **Soc Sci Med** 1996 Jul;43(2):265-71
Post-traumatic responses to aerial bombing. Somasundaram DJ. **Soc Sci Med** 1996 Jun;42(11):1465-71
Families of adults with mental retardation: stress levels and need for services. Hayden MF, et al. **Soc Work** 1996 Nov; 41(6):657-67
Parenting a technology assisted infant: coping with occupational stress. Murphy KE. **Soc Work Health Care** 1997;24(3-4):113-26 (32 ref.)
Surgical stress and transient postoperative psychiatric disturbances in aged patients studied using the Yamaguchi University Mental Disorder Scale. Hayashi H, et al. **Surg Today** 1996;26(6):413-8
Serotonergic lesions alter cocaine-induced locomotor behavior and stress-activation of the mesocorticolimbic dopamine system. Morrow BA, et al. **Synapse** 1996 Jul; 23(3):174-81
Dating violence: the association between methods of coping and women's psychological adjustment. Coffey P, et al. **Violence Vict** 1996 Fall;11(3):227-38
Afghan refugee issues in the U.S. social environment. Lipson JG, et al. **West J Nurs Res** 1997 Feb;19(1):110-26
Role strain and psychological well-being in women with systemic lupus erythematosus. Karasz A, et al. **Women Health** 1995;23(3):41-57
Use of a screening instrument in women's health care: detecting relationships among victimization history, psychological distress, and medical complaints. Read JP, et al. **Women Health** 1997;25(3):1-17
[Job strain and drinking behavior] Yang MJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1996 Dec; 12(12):670-84 (Eng. Abstr.) **(Chi)**
[Stress experiences of children in criminal proceedings] Busse D, et al. **Prax Kinderpsychol Kinderpsychiatr** 1996 Oct; 45(8):290-2; discussion 293-4 (Eng. Abstr.) **(Ger)**
[Stress, depression and anxiety in patients with headache. Considerations of literature and experimental data] Fulcheri M, et al. **Minerva Psichiatr** 1995 Dec;36(4):179-85 (48 ref.) (Eng. Abstr.) **(Ita)**
[Operational stress and higher mental functions: observations on flight crews and paratroopers in different phases of a military airdrop] Longo L. **Riv Med Aeronaut Spaz** 1975 Oct-Dec;38(4):411-26 (Eng. Abstr.) **(Ita)**
[The sociomedical problems in the work of flight instructors] Onishchenko AN. **Probl Sotsialnoi Gig Istor Med** 1997 Mar-Apr;(2):11-3 (Eng. Abstr.) **(Rus)**
[The sociomedical problems of occupational stress] Siburina TA, et al. **Probl Sotsialnoi Gig Istor Med** 1994 Sep-Oct; (5):16-9 (Eng. Abstr.) **(Rus)**
[The syndrome of post-cruise disorders] Arkhangel'skiĭ AE, et al. **Voen Med Zh** 1996 Sep;317(9):42-5 **(Rus)**
[Stress reactivity and affective psychopathology in health care workers] De Las Cuevas Castresana C, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1996 Jan-Feb;24(1):19-24 (Eng. Abstr.) **(Spa)**
[Hormonal response to stress after cerebrovascular accident: relation to type, size and site of the lesion] Marta-Moreno J, et al. **Rev Neurol** 1997 Apr;25(140):535-40 (Eng. Abstr.) **(Spa)**

REHABILITATION

Wellness for nurses, by nurses. Extended Services Team at the Visiting Nurse Association of Northern Virginia. **Am J Nurs** 1997 May;97(5):67-8
[Psychoemotional stress: its prevention and rehabilitation] Sudakov KV. **Ter Arkh** 1997;69(1):70-4 (46 ref.) **(Rus)**

THERAPY

Effect of chronic aerobic exercise and progressive relaxation on motor performance and affect following acute stress. Anshel MH. **Behav Med** 1996 Winter;21(4):186-96
Biodesensitization: biofeedback-controlled systematic desensitization of the stress response to infant crying. Tyson PD. **Biofeedback Self Regul** 1996 Sep;21(3):273-90
A randomised controlled trial of psychological debriefing for victims of road traffic accidents. Hobbs M, et al. **BMJ** 1996 Dec 7;313(7070):1438-9
Who is responsible for child mental health? People rely on medicine and psychiatry to explain the vicissitudes of life [letter; comment] Summerfield D. **BMJ** 1997 Aug 2; 315(7103):311-2. Comment on: BMJ 1997 Mar 15;314(7083):813-4.
Black women, work, stress, and perceived discrimination: the focused support group model as an intervention for stress reduction. Mays VM. **Cult Divers Ment Health** 1995; 1(1):53-65
Measuring family therapy outcome in a clinical setting: families that do better or do worse in therapy. Hampson RB, et al. **Fam Process** 1996 Sep;35(3):347-61
The use of electrolyte solutions for reducing transport stress. Schaefer AL, et al. **J Anim Sci** 1997 Jan;75(1):258-65 (97 ref.)
Behavioral assessment of relaxation: the validity of a Behavioral Rating Scale. Norton M, et al. **J Behav Ther Exp Psychiatry** 1997 Jun;28(2):129-37
Cognitive-behavioral stress management decreases dysphoric mood and herpes simplex virus-type 2 antibody titers in symptomatic HIV-seropositive gay men. Lutgendorf SK, et al. **J Consult Clin Psychol** 1997 Feb;65(1):31-43
Lymphedema complicated by pain and psychological distress: a case with complex treatment needs. Newman ML, et al. **J Pain Symptom Manage** 1996 Dec;12(6):376-9
Technological stress: psychophysiological symptoms in modern offices. Arnetz BB, et al. **J Psychosom Res** 1997 Jul;43(1):35-42
Effectiveness of a short-term group psychotherapy program on endocrine and immune function in breast cancer patients: an exploratory study. van der Pompe G, et al. **J Psychosom Res** 1997 May;42(5):453-66
Maxed out? Mellow out with these personal stress management strategies. Campbell SJ. **MCN Am J Matern Child Nurs** 1996 May-Jun;21(3):123-6
Stress in a GP partner. Tasker P, et al. **Practitioner** 1996 Sep;240(1566):503-10
Psychosocial and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. Whitehouse WG, et al. **Psychosom Med** 1996 May-Jun;58(3):249-63
Stress reduction through mindfulness meditation. Effects on psychological symptomatology, sense of control, and spiritual experiences. Astin JA. **Psychother Psychosom** 1997;66(2):97-106
Psychophysiological concomitants of organizational change in health care personnel: effects of a controlled intervention study. Lökk J, et al. **Psychother Psychosom** 1997;66(2):74-7
Helping mothers cope with a critically ill child: a pilot test of the COPE intervention. Melnyk BM, et al. **Res Nurs Health** 1997 Feb;20(1):3-14
[Regulative music therapy and training as a means for enhancing adaptive potentials and for overcoming fatigue and stress] Tsenova B. **Probl Khig** 1996;21:44-51 (Eng. Abstr.) **(Bul)**
[A case of autonomic nervous dysfunction caused by technostress who was effectively treated with psychosomatic therapy and long rest from work] Uchida E, et al. **Sangyo Eiseigaku Zasshi** 1997 Jan;39(1):46-7 **(Jpn)**
[The ultrastructure of the neuronal subpopulations of the paraventricular hypothalamic nuclei in stress and the stress-limiting action of a pulsed electrical current] Geniatullina MS, et al. **Morfologiia** 1996;110(4):37-41 (Eng. Abstr.) **(Rus)**
["The Use and Control of Stress". A program applied to workers of the IMSS. Instituto Mexicano del Seguro Social] Maldonado-Islas G, et al. **Gac Med Mex** 1997 Jan-Feb;133(1):7-11 (Eng. Abstr.) **(Spa)**

URINE

Response to psychological stressors in hand-arm vibration syndrome patients. Harada N, et al. **Cent Eur J Public Health** 1995;3 Suppl:54-6
Lower sex hormones in men during anticipatory stress. Schulz P, et al. **Neuroreport** 1996 Nov 25;7(18):3101-4
Psychosocial stress and urinary cortisol excretion in marmoset monkeys (Callithrix kuhli). Smith TE, et al. **Physiol Behav** 1997 Aug;62(2):225-32
Acute withdrawal of nasal CPAP in obstructive sleep apnea does not cause a rise in stress hormones. Grunstein RR, et al. **Sleep** 1996 Dec;19(10):774-82
[Hormonal response to stress after cerebrovascular accident: relation to type, size and site of the lesion] Marta-Moreno J, et al. **Rev Neurol** 1997 Apr;25(140):535-40 (Eng. Abstr.) **(Spa)**

STRESS TEST see **EXERCISE TEST**

STRESSFUL EVENTS see **LIFE CHANGE EVENTS**

STRETCH RECEPTORS see **MECHANORECEPTORS**

STRETCH RECEPTORS, ARTERIAL see **PRESSORECEPTORS**

STRETCH RECEPTORS, MUSCLE see **MUSCLE SPINDLES**

STRETCH RECEPTORS, PULMONARY see **PULMONARY STRETCH RECEPTORS**

STRETCH RECEPTORS, VASCULAR see **PRESSORECEPTORS**

STRIA VASCULARIS

CHEMISTRY

Ultrastructural localization of G-protein GS in the lateral wall of the guinea pig cochlear duct. Mizuta K, et al. **Hear Res** 1996 Apr;93(1-2):111-9

CYTOLOGY

Apical tubules in marginal cells of the differentiating stria vascularis. Sagara T, et al. **Anat Rec** 1997 Mar; 247(3):426-31
Morphological and functional characteristics of the different cell types in the stria vascularis: a comparison between cells obtained from fresh tissue preparations and cells cultured in vitro. Agrup C, et al. **Hear Res** 1996 Dec 1; 102(1-2):155-66
Stria vascularis morphogenesis in vitro. Mou K, et al. **Hear Res** 1997 Jan;103(1-2):47-62
The fine structure of spiral ligament cells relates to ion return to the stria and varies with place-frequency. Spicer SS, et al. **Hear Res** 1996 Oct;100(1-2):80-100
Maxi-K+ channel in plasma membrane of basal cells dissociated from the stria vascularis of gerbils. Takeuchi S, et al. **Hear Res** 1996 May;95(1-2):18-25
Comparison of ion transport mechanisms between vestibular dark cells and strial marginal cells. Wangemann P. **Hear Res** 1995 Oct;90(1-2):149-57 (50 ref.)
Quinacrine staining of marginal cells in the stria vascularis of the guinea-pig cochlea: a possible source of extracellular ATP? White PN, et al. **Hear Res** 1995 Oct;90(1-2):97-105

DRUG EFFECTS

Cytochemical effects of in vitro dopamine treatment on the Na-KATPase activity in strial marginal cells. Kanoh N, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):824-7
Inhibitory effect of erythromycin on ion transport by stria vascularis and vestibular dark cells. Liu J, et al. **Acta Otolaryngol (Stockh)** 1996 Jul;116(4):572-5
Effect of gentamycin on the melanosomes in the stria vascularis of the pigmented guinea pig: an ultrastructural study. Yoshihara T, et al. **Acta Otolaryngol Suppl (Stockh)** 1997;528:25-9
Intravascularly applied K(+)-channel blockers suppress differently the positive endocochlear potential maintained by vascular perfusion. Takeuchi S, et al. **Hear Res** 1996 Nov 1;101(1-2):181-5
Calcium channel blockade reduces noise-induced vascular permeability in cochlear stria vascularis. Goldwyn BG, et al. **Laryngoscope** 1997 Aug;107(8):1112-6

ENZYMOLOGY

Cytochemical effects of in vitro dopamine treatment on the Na-KATPase activity in strial marginal cells. Kanoh N, et al. **Acta Otolaryngol (Stockh)** 1996 Nov;116(6):824-7
Detection and regulation of Cu/Zn-SOD and Mn-SOD in

rat cochlear tissues. Yao X, et al. **Hear Res** 1996 Jul; 96(1–2):199–203

Protein kinase and protein phosphatase presence in the stria vascularis. Agrup C, et al. **Pflugers Arch** 1997 Mar; 433(5):603–8

METABOLISM

Localization of actin in basal cells of stria vascularis. Nakazawa K, et al. **Hear Res** 1996 Jul;96(1–2):13–9

Increased laminin deposition in capillaries of the stria vascularis of quiet-aged gerbils. Sakaguchi N, et al. **Hear Res** 1997 Mar;105(1–2):44–56

Luminal non-selective cation and outwardly rectifying chloride channels in cultured strial marginal cells from gerbil. Yeh T, et al. **Hear Res** 1995 Oct;90(1–2):79–88

PATHOLOGY

Age-related decreases in endocochlear potential are associated with vascular abnormalities in the stria vascularis. Gratton MA, et al. **Hear Res** 1996 Dec 1; 102(1–2):181–90

Age-related decreases in endocochlear potential are associated with vascular abnormalities in the stria vascularis. Gratton MA, et al. **Hear Res** 1996 May; 94(1–2):116–24

PHYSIOLOGY

Nitric oxide synthase and contractile protein in the rat cochlear lateral wall: possible role of nitric oxide in regulation of strial blood flow. Yamane H, et al. **Hear Res** 1997 Jun;108(1–2):65–73

[Potassium ion secretion and generation of the endocochlear potential in the stria vascularis] Wangemann P. **HNO** 1997 Apr;45(4):205–9 (31 ref.) (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Establishment of primary cell culture from stria vascularis explants. Morphological and functional characterization. Kim HN, et al. **Acta Otolaryngol (Stockh)** 1996 Nov; 116(6):805–11

Appearance of free radicals in the guinea pig inner ear after noise-induced acoustic trauma. Yamane H, et al. **Eur Arch Otorhinolaryngol** 1995;252(8):504–8

Structural maturation of the interface region between the stria vascularis and spiral ligament in the neonatal rat cochlea. Zuo J, et al. **Eur Arch Otorhinolaryngol** 1997; 254(2):73–7

Endothelial injury of capillaries in the stria vascularis of guinea pigs treated with cisplatin and gentamicin. Kohn S, et al. **Ultrastruct Pathol** 1997 May-Jun;21(3):289–99

[Cochlear morphological changes over time after the introduction of bacterial endotoxin into the middle ear] Watanabe K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1996 Dec;99(12):1738–45 (Eng. Abstr.) **(Jpn)**

STRIATE CORTEX see **VISUAL CORTEX**

STRIATED BORDER see **MICROVILLI**

STRIDOR see **RESPIRATORY SOUNDS**

STRIKES, EMPLOYEE

The power of unity. Daley KA. **Am J Nurs** 1997 Mar;97(3):80

Guidelines concerning work stoppages and slowdowns. American College of Emergency Physicians. **Ann Emerg Med** 1997 Jul;30(1):126

Health workers strike in Zimbabwe [news] Sidley P. **BMJ** 1996 Nov 9;313(7066):1165

Risk of nosocomial infection during a 50-day surgeon strike [letter] Dierssen T, et al. **J Hosp Infect** 1997 Jul;36(3):241–3

Coincidence of public transport strike with bronchiolitis epidemic [letter] Thélot B, et al. **Lancet** 1996 Dec 21–28; 348(9043):1743–4

Psychiatric residents' attitudes toward a strike at a psychiatric facility. Kohn R, et al. **Med Health R I** 1997 Feb;80(2):54–7

Health scientists strike over cuts at Argentinian labs [news] Masood E. **Nature** 1997 Jan 30;385(6615):376

[Repercussions of the 1995 medical strike in a hospital emergency service (letter)] Gamero Samino MJ, et al. **Med Clin (Barc)** 1996 Jul 6;107(6):237 **(Spa)**

[Do physicians' strikes influence the utilization profile of hospital emergency services?] Buitrago F, et al. **Rev Esp Salud Publica** 1997 Jan-Feb;71(1):35–40 (Eng. Abstr.) **(Spa)**

[Physicians' strikes and health services: an ethical perspective] Goić A. **Rev Med Chil** 1996 Jul;124(7):873–9 (Eng. Abstr.) **(Spa)**

HISTORY

[The judgement of the Civil and Criminal Court of Turin, Section II, in the suit of the British Asbestos Company Limited versus Il Progresso del Canavese e delle Valli di Stura (31 August 1906)] Carnevale F. **Epidemiol Prev** 1997 Jan-Mar;21(1):65–73 **(Ita)**

STROKE see **CEREBROVASCULAR DISORDERS**

STROKE VOLUME

The clinical significance of an absent end-diastolic velocity in the umbilical artery detected before the 34th week of pregnancy. Kurkinen-Räty M, et al. **Acta Obstet Gynecol Scand** 1997 May;76(5):398–404

Left and right ventricular volume characteristics in tetralogy of Fallot and their relationship to arterial oxygen saturation and age. Akiba T, et al. **Acta Paediatr Jpn** 1996 Dec; 38(6):657–60

Estimation of the left ventricular ejection fraction using a novel multiphase, dark-blood, breath-hold MR imaging technique. Sinha S, et al. **AJR Am J Roentgenol** 1997 Jul; 169(1):101–12

Comparison of echocardiographic acoustic quantification system and radionuclide ventriculography for estimating left ventricular ejection fraction: validation in patients without regional wall motion abnormalities. Chandra S, et al. **Am Heart J** 1997 Mar;133(3):359–63

Quantitative measures of regional asynergy add independent prognostic information to left ventricular ejection fraction in patients with prior myocardial infarction. Miller TD, et al. **Am Heart J** 1997 Jun;133(6):640–7

Requirement for accurate measurement of regurgitant stroke volume by the combined continuous-wave Doppler and color Doppler flow convergence method. Nozaki S, et al. **Am Heart J** 1997 Jan;133(1):19–28

Categorization of abnormal left ventricular function: comparison between radionuclide angiographic and echocardiographic technique in postinfarction patients. Breekland A, et al. **Am J Cardiol** 1997 Jan 1;79(1):108–11

Three-dimensional echocardiographic measurement of left ventricular volumes and ejection fraction using a multiplane transesophageal probe in patients. Hozumi T, et al. **Am J Cardiol** 1996 Nov 1;78(9):1077–80

Systolic and diastolic effects of variable atrioventricular delay in patients with complete heart block and normal ventricular function. Leonelli FM, et al. **Am J Cardiol** 1997 Aug 1;80(3):294–8

Preejectional left ventricular wall motion in normal subjects using Doppler tissue imaging and correlation with ejection fraction. Pellerin D, et al. **Am J Cardiol** 1997 Sep 1; 80(5):601–7

Relations of Doppler stroke volume and its components to left ventricular stroke volume in normotensive and hypertensive American Indians: the Strong Heart Study. Devereux RB, et al. **Am J Hypertens** 1997 Jun;10(6):619–28

End-systolic pressure-volume relationship and intracellular control of contraction. Landesberg A. **Am J Physiol** 1996 Jan;270(1 Pt 2):H338–49

Comparison between radionuclide ejection fraction and fractional area changes derived from transesophageal echocardiography using automated border detection. Liu N, et al. **Anesthesiology** 1996 Sep;85(3):468–74

Assessment of left ventricular function after radiofrequency and direct current atrioventricular node ablation. Wong J, et al. **Aust N Z J Med** 1996 Feb;26(1):82–8

On-line estimation of left ventricular stroke volume using transoesophageal echocardiography and acoustic quantification. Greim CA, et al. **Br J Anaesth** 1996 Sep; 77(3):365–9

Standardization of non-invasive impedance cardiography for assessment of stroke volume: comparison with thermodilution. Woltjer HH, et al. **Br J Anaesth** 1996 Dec; 77(6):748–52

Determining ejection fraction by Doppler echocardiography [letter; comment] Cujec B, et al. **Can J Cardiol** 1996 Nov; 12(11):1210. Comment on: Can J Cardiol 1995 Dec;11(11):1007–14.

Prolonged ejection duration helps to maintain pump performance of the renal-hypertensive-diabetic rat heart: correlations between isolated papillary muscle function and ventricular performance in situ. Siri FM, et al. **Cardiovasc Res** 1997 Apr;34(1):230–40

Myocardial contractile reserve as prognostic determinant in patients with idiopathic dilated cardiomyopathy without overt heart failure. Nagaoka H, et al. **Chest** 1997 Feb; 111(2):344–50

Left ventricular diastolic dysfunction in patients with angina decubitus. Chen J, et al. **Chin Med J (Engl)** 1996 Sep; 109(9):684–6

Stroke volume and cardiac output in normotensive children and adults. Assessment of relations with body size and impact of overweight. de Simone G, et al. **Circulation** 1997 Apr 1;95(7):1837–43

Accurate measurement of left ventricular ejection fraction by three-dimensional echocardiography. A comparison with radionuclide angiography. Nosir YF, et al. **Circulation** 1996 Aug 1;94(3):460–6

Single-beat estimation of end-systolic pressure-volume relation in humans. A new method with the potential for noninvasive application. Senzaki H, et al. **Circulation** 1996 Nov 15;94(10):2497–506

Non-invasive continuous arterial pressure, heart rate and stroke volume measurements during graded head-up tilt in normal man. Critchley LA, et al. **Clin Auton Res** 1997 Apr;7(2):97–101

Time-dependent alterations of serum levels of triple-helix domain and 7S domain of type IV collagen in patients with acute myocardial infarction after successful reperfusion: limited relation to left ventricular ejection fraction. Kajikawa Y, et al. **Clin Chim Acta** 1997 Feb 17;258(2):241–7

Lack of effect of amiodarone on survival after extensive infarction. Polish Amiodarone Trial. Budaj A, et al. **Coron Artery Dis** 1996 Apr;7(4):315–9

A comparison of hemodynamic parameters derived from transthoracic electrical bioimpedance with those parameters obtained by thermodilution and ventricular angiography [see comments] Marik PE, et al. **Crit Care Med** 1997 Sep;25(9):1545–50. Comment in: Crit Care Med 1997 Sep;25(9):1455.

Left ventricular ejection fraction: an important but incomplete determinant of long-term outcome after coronary bypass surgery [editorial; comment] Chaitman BR. **Eur Heart J** 1996 Jun;17(6):817–8. Comment on: Eur Heart J 1996 Jun;17(6):874–9.

The prevalence of left ventricular diastolic filling abnormalities in patients with suspected heart failure. Davie AP, et al. **Eur Heart J** 1997 Jun;18(6):981–4

Captopril adjuvant therapy to beta-blockers and nitrates improves post-myocardial infarction left ventricular performance. Kyriakidis M, et al. **Eur Heart J** 1996 Jun; 17(6):864–73

Importance of the right ventricle in valvular heart disease. Nagel E, et al. **Eur Heart J** 1996 Jun;17(6):829–36 (75 ref.)

Mortality and morbidity after coronary artery bypass surgery related to pre-operative left ventricular ejection fraction: a follow-up study [see comments] Risum O, et al. **Eur Heart J** 1996 Jun;17(6):874–9. Comment in: Eur Heart J 1996 Jun;17(6):817–8.

Diastolic dysfunction and natriuretic peptides in systolic heart failure. Higher ANP and BNP levels are associated with the restrictive filling pattern [see comments] Yu CM, et al. **Eur Heart J** 1996 Nov;17(11):1694–702. Comment in: Eur Heart J 1996 Nov;17(11):1617–8.

Comparison of transthoracic three dimensional echocardiography with magnetic resonance imaging in the assessment of right ventricular volume and mass. Vogel M, et al. **Heart** 1997 Aug;78(2):127–30

The arrhythmogenic right ventricle. Dysplasia versus cardiomyopathy. Fontaine G, et al. **Heart Vessels** 1995; 10(5):227–35 (37 ref.)

Age-related changes in total arterial capacitance from birth to maturity in a normotensive population. de Simone G, et al. **Hypertension** 1997 Jun;29(6):1213–7

Reproducibility of left ventricular size, shape and mass with echocardiography, magnetic resonance imaging and radionuclide angiography in patients with anterior wall infarction. A plea for core laboratories. Baur LH, et al. **Int J Card Imaging** 1996 Dec;12(4):233–40

Measurement of right ventricular ejection fraction by contrast echocardiography. Tokgözoglu SL, et al. **Int J Cardiol** 1997 Mar;59(1):71–4

Correlation between post-ejection shortening and improvement in regional wall motion after revascularization in patients with coronary artery disease. Wong CK, et al. **Int J Cardiol** 1996 Apr 19;54(1):61–7

Relation of echocardiographic preload indices to stroke volume in critically ill patients with normal and low cardiac index. Greim CA, et al. **Intensive Care Med** 1997 Apr; 23(4):411–6

Impedance cardiography. Importance of the equation and the electrode configuration. van der Meer BJ, et al. **Intensive Care Med** 1996 Oct;22(10):1120–4

The influence of weight on stroke volume determination by means of impedance cardiography in cardiac surgery patients. Woltjer HH, et al. **Intensive Care Med** 1996 Aug; 22(8):766–71

Changes in stroke distance in response to haemorrhage in a swine model. Clancy MJ, et al. **J Accid Emerg Med** 1996 Sep;13(5):316–20

Cerebral oximetry and stroke distance: the future of emergency department monitoring? Sammy I, et al. **J Accid Emerg Med** 1996 Sep;13(5):313–5

Ejection fraction and risk of thromboembolic events in patients with systolic dysfunction and sinus rhythm: evidence for gender differences in the studies of left ventricular dysfunction trials. Dries DL, et al. **J Am Coll Cardiol** 1997 Apr;29(5):1074–80

Right ventricular diastolic function in children with pulmonary regurgitation after repair of tetralogy of Fallot: volumetric evaluation by magnetic resonance velocity mapping. Helbing WA, et al. **J Am Coll Cardiol** 1996 Dec; 28(7):1827–35

Amrinone stimulation test: ability to predict improvement in left ventricular ejection fraction after coronary bypass surgery in patients with poor baseline left ventricular function. Perez-Baliño NA, et al. **J Am Coll Cardiol** 1996 Nov 15;28(6):1488–92

Three-dimensional echocardiography: the influence of number of component images on accuracy of left ventricular volume quantitation. Siu SC, et al. **J Am Soc Echocardiogr** 1996 Mar-Apr;9(2):147–55

Usefulness of color Doppler proximal isovelocity surface area method in quantitating valvular regurgitation. Yamachika S, et al. **J Am Soc Echocardiogr** 1997 Mar;10(2):159–68

Three-dimensional echocardiography by semi-automatic border detection in assessment of left ventricular volume and ejection fraction: comparison with magnetic resonance imaging. Iwase M, et al. **J Cardiol** 1997 Aug;30(2):97–105

Surgical therapy for coronary artery disease in patients with a left ventricular ejection fraction of 25% or less. Nollert G, et al. **J Cardiovasc Surg (Torino)** 1997 Aug;38(4):389–95

Does impedance cardiography reliably estimate left

ventricular ejection fraction? van der Meer NJ, et al. **J Clin Monit** 1996 Jan;12(1):5–9

Improved reproducibility in measuring LV volumes and mass using multicoil breath-hold cine MR imaging. Sakuma H, et al. **J Magn Reson Imaging** 1996 Jan–Feb;6(1):124–7

Non-invasive estimations of ventricular ejection time and stroke volume: comparison of impedance cardiography and the Portapres 2. Fahrenberg J, et al. **J Med Eng Technol** 1997 Jan–Feb;21(1):15–22

Effect of the number of projections collected on quantitative perfusion and left ventricular ejection fraction measurements from gated myocardial perfusion single-photon emission computed tomographic images. Germano G, et al. **J Nucl Cardiol** 1996 Sep–Oct; 3(5):395–402

Left ventricular ejection fraction: comparison of results from planar and SPECT gated blood-pool studies. Bartlett ML, et al. **J Nucl Med** 1996 Nov;37(11):1795–9

Image enhancement of severely hypoperfused myocardia for computation of tomographic ejection fraction. Nichols K, et al. **J Nucl Med** 1997 Sep;38(9):1411–7

Clinical decision making based on radionuclide determined ejection fraction in oncology patients. Peng NJ, et al. **J Nucl Med** 1997 May;38(5):702–5

Effect of volume unloading surgery on coronary flow dynamics in patients with aortic atresia. Fogel MA, et al. **J Thorac Cardiovasc Surg** 1997 Apr;113(4):718–26; discussion 726–7

Predicting survivorship after coronary artery bypass grafting in patients with low ejection fraction [letter; comment] Morita S, et al. **J Thorac Cardiovasc Surg** 1997 Mar; 113(3):614–5. Comment on: J Thorac Cardiovasc Surg 1996 May;111(5):998–1000.

Effects of increasing airway pressure and PEEP on the assessment of cardiac preload. Diebel LN, et al. **J Trauma** 1997 Apr;42(4):585–90; discussion 590–1

Right ventricular volumes overestimate left ventricular preload in critically ill patients. Kraut EJ, et al. **J Trauma** 1997 May;42(5):839–45; discussion 845–6

Stroke volume generation of the left ventricle and its relation to chamber shape in normal subjects and patients with mitral or aortic regurgitation. Hiro T, et al. **Jpn Circ J** 1996 Apr;60(4):216–27

Determination of ventricular ejection fraction: a comparison of available imaging methods. The Cardiovascular Imaging Working Group. Rumberger JA, et al. **Mayo Clin Proc** 1997 Sep;72(9):860–70 (54 ref.)

Age and cardiac output during cycle exercise in thermoneutral and warm environments. Minson CT, et al. **Med Sci Sports Exerc** 1997 Jan;29(1):75–81

Body surface isopotential T map for assessment of right ventricular volume and pressure overloads in secundum atrial septal defect. Nakasato M, et al. **Pediatr Cardiol** 1996 Jul–Aug;17(4):237–41

Clinical application of ventricular end-systolic elastance and the ventricular pressure-volume diagram [see comments] Chang MC, et al. **Shock** 1997 Jun;7(6):413–9. Comment in: Shock 1997 Jun;7(6):420–1.

Clinical application of ventricular end-systolic elastance and the ventricular pressure-volume diagram [letter; comment] McNamee JE, et al. **Shock** 1997 Jun;7(6):420–1. Comment on: Shock 1997 Jun;7(6):413–9.

Myocardial fiber architecture and left ventricular function. Ingels NB Jr. **Technol Health Care** 1997 Apr;5(1–2):45–52

Post-exercise response of ventricular ejection fraction after total repair of congenital heart disease with left to right shunt. Choe KO, et al. **Yonsei Med J** 1996 Feb;37(1):19–30

Real-time determination of left ventricular ejection fraction by automatic boundary detection in patients with dilated cardiomyopathy: a comparison with radionuclide ventriculography. Ha JW, et al. **Yonsei Med J** 1996 Dec; 37(6):385–91

[Three-dimensional echocardiography in evaluation of left ventricular systolic function after mitral valve replacement for chronic mitral diseases with preservation of mitral apparatus] Qiang M, et al. **Chung Hua I Hsueh Tsa Chih** 1996 Jul;76(7):516–8 (Eng. Abstr.) **(Chi)**

[Coronary bypass in patients with severe left ventricular dysfunction (EF < or = 25%). Apropos of 111 patients] Bouchart F, et al. **Arch Mal Coeur Vaiss** 1997 Apr; 90(4):441–8 (33 ref.) (Eng. Abstr.) **(Fre)**

[Risk of mortality after myocardial infarction: value of heart rate, its variability and left ventricular ejection fraction] Copie X, et al. **Arch Mal Coeur Vaiss** 1996 Jul;89(7):865–71 (Eng. Abstr.) **(Fre)**

[Estimation of left ventricular volumes and ejection fraction with acoustic quantification in myocardial infarction. Comparison with echocardiographic, angiographic and scintigraphic data] Jennesseaux C, et al. **Arch Mal Coeur Vaiss** 1996 Jul;89(7):843–9 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Effect of simvastatin on ejection fraction in cardiac transplant recipients. Jenkins GH, et al. **Am J Cardiol** 1996 Dec 15; 78(12):1453–6

Comparison of isoflurane, halothane and fentanyl in patients with decreased ejection fraction undergoing coronary surgery. Urzua J, et al. **Anaesth Intensive Care** 1996 Oct; 24(5):579–84

Reversal of Borrelia burgdorferi associated dilated cardiomyopathy by antibiotic treatment? Gasser R, et al. **Cardiovasc Drugs Ther** 1996 Jul;10(3):351–60

Epirubicin cardiotoxicity: a study comparing low- with high-dose-intensity weekly schedules. Berchem GJ, et al. **Support Care Cancer** 1996 Jul;4(4):308–12

[Echocardiographic evaluation of cardiotoxicity induced by anthracycline therapy] Okada Y, et al. **Gan To Kagaku Ryoho** 1997 Mar;24(5):585–9 (Eng. Abstr.) **(Jpn)**

[Prostaglandin E1 at low-doses improved right ventricular ejection fraction in anesthetic management for CABG] Oohata H, et al. **Masui** 1996 Oct;45(10):1272–7 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Reproducibility of wall motion score and its correlation with left ventricular ejection fraction in patients with acute myocardial infarction. Badano L, et al. **Am J Cardiol** 1996 Oct 1;78(7):855–8

Estimation of left ventricular chamber and stroke volume by limited M-mode echocardiography and validation by two-dimensional and Doppler echocardiography. de Simone G, et al. **Am J Cardiol** 1996 Oct 1;78(7):801–7

Comparison of adaptations to a 12-month exercise program and late outcome in patients with healed myocardial infarction and ejection fraction <45% and >50%. Ehsani AA, et al. **Am J Cardiol** 1997 May 1;79(9):1258–60

Validation of a clinical prediction rule for left ventricular ejection fraction after myocardial infarction in patients > or = 65 years old. Krumholz HM, et al. **Am J Cardiol** 1997 Jul 1;80(1):11–5

Course and prognosis in patients > or = 70 years of age with congestive heart failure and normal versus abnormal left ventricular ejection fraction. Pernenkil R, et al. **Am J Cardiol** 1997 Jan 15;79(2):216–9

Right ventricular performance and left ventricular assist device filling. Mandarino WA, et al. **Ann Thorac Surg** 1997 Apr;63(4):1044–9

Optimal control algorithm for pneumatic ventricular assist devices: its application to automatic control and monitoring of ventricular assist devices. Arai H, et al. **Artif Organs** 1996 Sep;20(9):1034–41

Effects of stimulated free latissimus dorsi muscle graft on LVEDV and LVSW: a new dynamic cardiomyoplasty technique. Dudra J, et al. **Artif Organs** 1997 Apr; 21(4):306–11

Long-term changes in left ventricular mass, chamber size and function after valve replacement in patients with severe aortic stenosis and depressed ejection fraction. Pelà G, et al. **Cardiology** 1997 Jul–Aug;88(4):315–22

The effect of right ventricular hypertrophy on left ventricular ejection fraction in pulmonary emphysema. Vonk Noordegraaf A, et al. **Chest** 1997 Sep;112(3):640–5

End-systolic volume index at 90 to 180 minutes into reperfusion therapy for acute myocardial infarction is a strong predictor of early and late mortality. The Global Utilization of Streptokinase and t-PA for Occluded Coronary Arteries (GUSTO)-I Angiographic Investigators. Migrino RQ, et al. **Circulation** 1997 Jul 1; 96(1):116–21

Left ventricular pressure and volume data acquisition and analysis using LabVIEW. Cassidy SC, et al. **Comput Biol Med** 1997 Mar;27(2):141–9

Death, mode of death, morbidity and requirement for rehospitalization during 2 years after coronary artery bypass grafting in relation to preoperative ejection fraction. Herlitz J, et al. **Coron Artery Dis** 1996 Nov;7(11):807–12

Effects of preload on regional nonischemic end-systolic performance. Meyer TE, et al. **Coron Artery Dis** 1996 Nov; 7(11):797–806

Does appropriate endurance exercise training improve cardiac function in patients with prior myocardial infarction? Adachi H, et al. **Eur Heart J** 1996 Oct; 17(10):1511–21

Diastolic filling in idiopathic dilated cardiomyopathy shows a good correlation to heart rate and ejection fraction but not to blood pressure as in healthy subjects [letter; comment] Fruhwald FM, et al. **Eur Heart J** 1997 Feb; 18(2):348–9. Comment on: Eur Heart J 1996 Apr;17(4):612–8.

Additional predictive value of both left and right ventricular ejection fractions on long-term survival in idiopathic dilated cardiomyopathy. Juillière Y, et al. **Eur Heart J** 1997 Feb;18(2):276–80

The relationship between the electrocardiographic pattern with TIMI flow class and ejection fraction in patients with a first acute anterior wall myocardial infarction. Kusniec J, et al. **Eur Heart J** 1997 Mar;18(3):420–5

Stroke volume response to cycle ergometry in trained and untrained older men. McLaren PF, et al. **Eur J Appl Physiol** 1997;75(6):537–42

Acute changes in left ventricular function after percutaneous transluminal mitral valvuloplasty. Razzolini R, et al. **Heart Vessels** 1996;11(2):86–91

Resting right ventricular function in patients with coronary artery disease: pressure volume analysis using conductance catheters. Bishop A, et al. **Int J Cardiol** 1997 Feb; 58(3):223–8

Left ventricular filling and ejection fraction after successful percutaneous balloon mitral valvuloplasty. Pamir G, et al. **Int J Cardiol** 1997 May 23;59(3):243–6

Relation of hemodynamic volume load to arterial and cardiac size. Jones EC, et al. **J Am Coll Cardiol** 1997 May; 29(6):1303–10

Doppler echocardiographic evaluation of left ventricular end-diastolic pressure in patients with coronary artery disease. Cecconi M, et al. **J Am Soc Echocardiogr** 1996 May-Jun;9(3):241–50

Assessment of the Frank-Starling relationship by two-dimensional echocardiography. Zipprich DA, et al. **J Am Soc Echocardiogr** 1996 May-Jun;9(3):231–40

Mechanisms for increasing stroke volume during static exercise with fixed heart rate in humans. Nóbrega ACL, et al. **J Appl Physiol** 1997 Sep;83(3):712–7

Strain softening in rat left ventricular myocardium. Emery JL, et al. **J Biomech Eng** 1997 Feb;119(1):6–12

Dynamic right and left ventricular interactions in the rabbit: simultaneous measurement of ventricular pressure-volume loops. Pinsky MR, et al. **J Crit Care** 1996 Jun;11(2):65–76

Value of right ventricular ejection fraction in predicting short-term prognosis of patients with severe chronic heart failure. Gavazzi A, et al. **J Heart Lung Transplant** 1997 Jul;16(7):774–85

Determinants of depressed left ventricular ejection fraction in pure mitral stenosis with preserved sinus rhythm. Surdacki A, et al. **J Heart Valve Dis** 1996 Jan;5(1):1–9

Hemodynamic comparison of mild and severe preeclampsia: concept of stroke systemic vascular resistance index. Scardo J, et al. **J Matern Fetal Med** 1996 Sep–Oct; 5(5):268–72

Monitoring of left ventricular ejection fraction with a miniature, nonimaging nuclear detector: accuracy and reliability over time with special reference to blood labeling. Lindhardt TB, et al. **J Nucl Cardiol** 1997 Mar–Apr;4(2 Pt 1):147–55

Right and left ventricular volume and ejection fraction by tomographic gated blood-pool scintigraphy. Chin BB, et al. **J Nucl Med** 1997 Jun;38(6):942–8

Quantitative LVEF and qualitative regional function from gated thallium-201 perfusion SPECT. Germano G, et al. **J Nucl Med** 1997 May;38(5):749–54

Ventriculo-arterial coupling and the areas under the end-systolic pressure-volume relation. Shoucri RM. **Jpn Heart J** 1997 Mar;38(2):253–62

Acute loads applied to the right ventricle: effect on left ventricular filling dynamics in the presence of an open pericardium. Fragata JI, et al. **Pediatr Cardiol** 1996 Mar–Apr;17(2):77–81

Changes in superior mesenteric artery Doppler waveform during reduction of cardiac stroke volume and hypotension. Perko MJ, et al. **Ultrasound Med Biol** 1996;22(1):11–8

[Evaluation of left ventricular ejection fraction using an automated contour tracking method: comparison with equilibrium radionuclide angiography] Hamada T, et al. **J Cardiol** 1997 Apr;29(4):225–9 (Eng. Abstr.) **(Jpn)**

[Frank-Starling mechanism and the 1st temporal derivative of ventricular pressure] Okoshi K, et al. **Arq Bras Cardiol** 1996 Apr;66(4):233–7 (41 ref.) **(Por)**

[Assessment of the myocardial functional reserve in patients with left ventricular aneurysm by radionuclide ventriculography. Response to isotonic exercise] Pinto Giorgi MC, et al. **Arq Bras Cardiol** 1995 Dec;65(6):479–83 (Eng. Abstr.) **(Por)**

STROMAL CELLS

Histomorphometric analysis of heterotopic bone formed by stromal-osteogenic subpopulations. Benayahu D, et al. **Calcif Tissue Int** 1996 Oct;59(4):254–8

Absence of Epstein-Barr virus (EBV) in a gastrointestinal stromal cell tumour (GIST) in an adult human immunodeficiency virus-seropositive patient with past EBV infection. Kubben FJ, et al. **Eur J Gastroenterol Hepatol** 1997 Jul;9(7):721–4

Significance of bone marrow stromal cells in hematopoiesis and hematological disorders. Nagao T. **Tokai J Exp Clin Med** 1995 Jul;20(2):121–30 (83 ref.)

CHEMISTRY

In vitro characterization of a novel avian haemopoietic growth factor derived from stromal cells. Siatskas C, et al. **Dev Comp Immunol** 1996 Mar–Apr;20(2):139–56

Rat uterine stromal cells: thrombin receptor and growth stimulation by thrombin. Arena CS, et al. **Endocrinology** 1996 Sep;137(9):3744–9

CYTOLOGY

A new role for the stromal cells in kidney development. Bard J. **Bioessays** 1996 Sep;18(9):705–7 (15 ref.)

Growth factor control of cultured rat uterine stromal cell proliferation is progesterone dependent. Piva M, et al. **Biol Reprod** 1996 Dec;55(6):1333–42

Effect of stromal cells from human lymph nodes on the growth of osteosarcoma cell lines. Lisignoli G, et al. **Boll Soc Ital Biol Sper** 1995 Sep–Oct;71(9–10):263–7

Long-term stromal cultures produce dendritic-like cells. Ni K, et al. **Br J Haematol** 1997 Jun;97(4):710–25

Species differences in growth requirements for bone marrow stromal fibroblast colony formation In vitro. Kuznetsov S, et al. **Calcif Tissue Int** 1996 Oct;59(4):265–70

Selective stimulation of granulopoiesis in vitro by established bone marrow stromal cells. Iguchi A, et al. **Cell Struct Funct** 1997 Jun;22(3):357–64

Activity of the osteocalcin promoter in skeletal sites of transgenic mice and during osteoblast differentiation in bone marrow-derived stromal cell cultures: effects of age and sex. Frenkel B, et al. **Endocrinology** 1997 May; 138(5):2109-16

Prolactin receptor expression during adipocyte differentiation of bone marrow stroma. McAveney KM, et al. **Endocrinology** 1996 Dec;137(12):5723-6

"Stem cell candidates" purified by liquid culture in the presence of Steel factor, IL-3, and 5FU are strictly stroma-dependent and have myeloid, lymphoid, and megakaryocytic potential. Bertolini F, et al. **Exp Hematol** 1997 Apr;25(4):350-6

Granulocyte-colony stimulating factor and stem cell factor are the crucial factors in long-term culture of human primitive hematopoietic cells supported by a murine stromal cell line. Nishi N, et al. **Exp Hematol** 1996 Sep; 24(11):1312-21

Placental villous stroma as a model system for myofibroblast differentiation. Kohnen G, et al. **Histochem Cell Biol** 1996 Jun;105(6):415-29

Isolation and characterization of a novel human prostatic stromal cell culture: DuK50. Roberson KM, et al. **In Vitro Cell Dev Biol Anim** 1995 Dec;31(11):840-5

Human osteoclastoma-derived stromal cells: correlation of the ability to form mineralized nodules in vitro with formation of bone in vivo. James IE, et al. **J Bone Miner Res** 1996 Oct;11(10):1453-60

Dependence of mesenchymal cell responses on duration of exposure to bone morphogenetic protein-2 in vitro. Puleo DA. **J Cell Physiol** 1997 Oct;173(1):93-101

Properties of primary murine stroma induced by macrophage colony-stimulating factor. Yamada M, et al. **J Cell Physiol** 1997 Oct;173(1):1-9

Culture conditions supporting adipose conversion of stromal-vascular cells from bovine intramuscular adipose tissues. Sato K, et al. **J Vet Med Sci** 1996 Nov;58(11):1073-8

Long-term B-lymphoid cultures from murine bone marrow establishment and cloning by using stromal cell line AC 6.21. Whitlock CA, et al. **Methods Mol Biol** 1997;75:231-48 (13 ref.)

Preadipocyte recruitment in stromal vascular cultures after depletion of committed preadipocytes by immunocytotoxicity. Yu ZK, et al. **Obes Res** 1997 Jan; 5(1):9-15

Marrow stromal cells as stem cells for nonhematopoietic tissues. Prockop DJ. **Science** 1997 Apr 4;276(5309):71-4 (32 ref.)

Adhesion of thymocytes to bone marrow stromal cells: regulation by bFGF and IFN-gamma. Barda-Saad M, et al. **Stem Cells** 1997;15(3):229-36

Importance of parenchymal:stromal cell ratio for the ex vivo reconstitution of human hematopoiesis. Koller MR, et al. **Stem Cells** 1997;15(4):305-13

Autologous bone marrow-derived stromal fibroblastoid cells grown in vitro for the treatment of defects of mandibular bones. Krzymański G, et al. **Transplant Proc** 1996 Dec; 28(6):3528-30

[The role of binding activity of hematopoietic microenvironment cells in the recovery of various hematopoietic stems inhibited by cytostatics] Zhdanov VV, et al. **Biull Eksp Biol Med** 1996 Nov;122(11):490-4 **(Rus)**

DRUG EFFECTS

Ti-6Al-4V ion solution inhibition of osteogenic cell phenotype as a function of differentiation timecourse in vitro. Thompson GJ, et al. **Biomaterials** 1996 Oct; 17(20):1949-54

Effect of antiprogestin RU 486 on the proliferation and metabolic activity of stromal cells separated from human endometrium. Bhargava-Periwal S, et al. **Contraception** 1996 Feb;53(2):127-31

Rat uterine stromal cells: thrombin receptor and growth stimulation by thrombin. Arena CS, et al. **Endocrinology** 1996 Sep;137(9):3744-9

Studies on mechanisms of steroid hormone action on thymus stromal cells. Butowska W, et al. **Folia Histochem Cytobiol** 1997;35(2):103-4

Biological mechanisms underlying the clinical effects of RU 486: modulation of cultured endometrial stromal cell stromelysin-1 and prolactin expression. Schatz F, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):188-93

Platelet-activating factor and antagonists modulate DNA synthesis in human bone marrow stromal cell cultures. Rougier F, et al. **J Lipid Mediat Cell Signal** 1997 Jul; 16(3):147-53

Mitogenic activity but not phenotype expression of rat osteoprogenitor cells in response to IGF-I is impaired in aged rats. Tanaka H, et al. **Mech Ageing Dev** 1996 Nov 29;92(1):1-10

Interstitial stroma and carcinogenesis: ultrastructural observations in the rat bladder treated with N-butyl-N-(4-hydroxybutyl)nitrosamine. Zhang XH, et al. **Urol Res** 1996;24(3):177-81

ENZYMOLOGY

Regulation of MMP-9 (92 kDa type IV collagenase/gelatinase B) expression in stromal cells of human giant cell tumor of bone. Rao VH, et al. **Clin Exp Metastasis** 1997 Jul;15(4):400-9

Regulation of cyclooxygenase gene expression in rat endometrial stromal cells: the role of epidermal growth factor. Bany BM, et al. **Dev Genet** 1997;21(1):109-15

Stromal cell expression of components of matrix-degrading protease systems in human cancer. Hewitt R, et al. **Enzyme Protein** 1996;49(1-3):163-73 (89 ref.)

The role of stromelysin-1 in stromal-epithelial interactions and cancer. Wiesen JF, et al. **Enzyme Protein** 1996; 49(1-3):174-81 (53 ref.)

Expression of protein tyrosine kinases in the murine thymus stroma. Potworowski EF, et al. **Immunol Lett** 1996 Apr; 50(1-2):65-9

Dual over-expression pattern of membrane-type metalloproteinase-1 in cancer and stromal cells in human gastrointestinal carcinoma revealed by in situ hybridization and immunoelectron microscopy. Ohtani H, et al. **Int J Cancer** 1996 Nov 27;68(5):565-70

Aromatase activity and expression in breast cancer and benign breast tissue stromal cells. Santner SJ, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):200-8

Tumor necrosis factor-alpha stimulates aromatase gene expression in human adipose stromal cells through use of an activating protein-1 binding site upstream of promoter 1.4. Zhao Y, et al. **Mol Endocrinol** 1996 Nov;10(11):1350-7

IMMUNOLOGY

Can bone marrow-derived thymic stromal cells mediate the positive selection of class I-restricted T cells? Fort MM, et al. **Cell Immunol** 1996 Jul 10;171(1):74-9

Efficiency of human HLA-mismatched CD34+ cells from unrelated donors in establishing in vitro hematopoiesis in allogeneic long-term marrow cultures. La Russa VF, et al. **Exp Hematol** 1996 Nov;24(13):1475-83

Transgenic expression of a novel thymic epithelial cell antigen stimulates abberant development of thymocytes. Takeuchi T, et al. **J Immunol** 1997 Jul 15;159(2):726-33

TGF-beta down-regulates stromal IL-7 secretion and inhibits proliferation of human B cell precursors. Tang J, et al. **J Immunol** 1997 Jul 1;159(1):117-25

Phenotypic modulation of fibroblasts in massive ovarian edema: an immunohistochemical study of three cases. Lifschitz-Mercer B, et al. **J Submicrosc Cytol Pathol** 1996 Oct;28(4):435-40

Expression of bone marrow stromal cell specific antigen during murine development: its expression in embryonic hematopoietic tissues as well as in other developing tissues. Akasaka Y, et al. **Pathol Int** 1996 Apr;46(4):243-52

Subtractive isolation of phage-displayed single-chain antibodies to thymic stromal cells by using intact thymic fragments. Van Ewijk W, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):3903-8

METABOLISM

Different expression of adhesion molecules on stromal cells and endothelial cells of capillary hemangioblastoma. Böhling T, et al. **Acta Neuropathol (Berl)** 1996 Nov; 92(5):461-6

Rat endometrial stromal cells express the gap junction genes connexins 26 and 43 and form functional gap junctions during in vitro decidualization. Orlando-Mathur CE, et al. **Biol Reprod** 1996 Apr;54(4):905-13

Hepatocyte growth factor is constitutively produced by human bone marrow stromal cells and indirectly promotes hematopoiesis. Takai K, et al. **Blood** 1997 Mar 1; 89(5):1560-5

Induction of hepatocyte growth factor in fibroblasts by tumor-derived factors affects invasive growth of tumor cells: in vitro analysis of tumor-stromal interactions. Nakamura T, et al. **Cancer Res** 1997 Aug 1;57(15):3305-13

A clinically suitable ex vivo expansion culture system for LTC-IC and CFC using stroma-conditioned medium. Bhatia R, et al. **Exp Hematol** 1997 Aug;25(9):980-91

PAF and hematopoiesis. VIII. Biosynthesis and metabolism of PAF by human bone marrow stromal cells. Denizot Y, et al. **Exp Hematol** 1996 Sep;24(11):1327-32

Mouse bone marrow stromal cell line MC3T3-G2/PA6 with hematopoietic-supporting activity expresses high levels of stem cell antigen Sca-1. Satoh M, et al. **Exp Hematol** 1997 Aug;25(9):972-9

Expression of the cell-adhesion molecule VCAM-1 by stromal cells is necessary for osteoclastogenesis. Feuerbach D, et al. **FEBS Lett** 1997 Jan 27;402(1):21-4

Immunohistochemical characterization of stromal leukocytes in ovarian endometriosis: comparison of eutopic and ectopic endometrium with normal endometrium. Jones RK, et al. **Fertil Steril** 1996 Jul;66(1):81-9

Expression of tyrosine kinase gene in mouse thymic stromal cells. Rinke de Wit TF, et al. **Int Immunol** 1996 Nov; 8(11):1787-95

Stromal fibroblasts influence oral squamous-cell carcinoma cell interactions with tenascin-C. Ramos DM, et al. **Int J Cancer** 1997 Jul 17;72(2):369-76

Induction of IL-6 production by bone marrow stromal cells on the adhesion of IL-6-dependent hematopoietic cells. Ogasawara H, et al. **J Cell Physiol** 1996 Oct;169(1):209-16

Expression of corticotropin-releasing hormone and its R1 receptor in human endometrial stromal cells. Di Blasio AM, et al. **J Clin Endocrinol Metab** 1997 May;82(5):1594-7

Modulation of integrin expression in endometrial stromal cells in vitro. Grosskinsky CM, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2047-54

Evidence of iodine storage within thyroid stroma after iodine treatment: imaging by secondary ion mass spectometry (SIMS) microscopy in goitrous tissue. el May M, et al. **J Clin Endocrinol Metab** 1996 Jun;81(6):2370-5

Alterations in endometrial stromal cell tissue factor protein and messenger ribonucleic acid expression in patients experiencing abnormal uterine bleeding while using Norplant-2 contraception. Runic R, et al. **J Clin Endocrinol Metab** 1997 Jun;82(6):1983-8

Phenotypic modulation of fibroblasts in massive ovarian edema: an immunohistochemical study of three cases. Lifschitz-Mercer B, et al. **J Submicrosc Cytol Pathol** 1996 Oct;28(4):435-40

Culture conditions supporting adipose conversion of stromal-vascular cells from bovine intramuscular adipose tissues. Sato K, et al. **J Vet Med Sci** 1996 Nov;58(11):1073-8

Differential expression of insulin-like growth factor binding proteins in murine hematopoietic stromal cell lines. Clawson TF, et al. **Mol Cell Endocrinol** 1996 Jun 18; 120(1):59-66

Basic fibroblast growth factor messenger ribonucleic acid levels in eutopic and ectopic human endometrial stromal cells as assessed by competitive polymerase chain reaction amplification. Di Blasio AM, et al. **Mol Cell Endocrinol** 1995 Dec 29;115(2):169-75

Prolactin up-regulates prostaglandin E2 production through increased expression of pancreatic-type phospholipase A2 (type I) and prostaglandin G/H synthase 2 in uterine cells. Prigent-Tessier A, et al. **Mol Cell Endocrinol** 1996 Aug 30;122(1):101-8

Mammary gland development is mediated by both stromal and epithelial progesterone receptors. Humphreys RC, et al. **Mol Endocrinol** 1997 Jun;11(6):801-11

Hormonal regulation of expression of messenger RNA encoding insulin-like growth factor binding proteins in human endometrial stromal cells cultured in vitro. Liu HC, et al. **Mol Hum Reprod** 1997 Jan;3(1):21-6

Interleukin-7 inhibits apoptosis of mouse malignant T-lymphoma cells by both suppressing the CPP32-like protease activation and inducing the Bcl-2 expression. Lee SH, et al. **Oncogene** 1996 Nov 21;13(10):2131-9

PATHOLOGY

Diagnosis of fibroadenoma in breast fine needle aspirates devoid of typical stroma. Malberger E, et al. **Acta Cytol** 1997 Sep-Oct;41(5):1483-8

Stromal-epithelial cell interactions in breast cancer. Heber D, et al. **Adv Exp Med Biol** 1996;399:41-51 (69 ref.)

Tumor cell and connective tissue cell interactions in human colorectal adenocarcinoma. Transfer of platelet-derived growth factor-AB/BB to stromal cells. Sundberg C, et al. **Am J Pathol** 1997 Aug;151(2):479-92

Infection of human marrow stroma by human immunodeficiency virus-1 (HIV-1) is both required and sufficient for HIV-1-induced hematopoietic suppression in vitro: demonstration by gene modification of primary human stroma. Bahner I, et al. **Blood** 1997 Sep 1; 90(5):1787-98

Immunohistochemical and electron microscopical characterization of stromal cells in nasopharyngeal angiofibromas. Beham A, et al. **Eur Arch Otorhinolaryngol** 1997;254(4):196-9

Adhesive interactions between tumour cells and bone marrow stromal elements in human multiple myeloma. Faid L, et al. **Eur J Haematol** 1996 Nov;57(5):349-58

Pathogenetic role of the stromal cells in endometriosis and adenomyosis. Mai KT, et al. **Histopathology** 1997 May; 30(5):430-42

A typical stromal cells in a hyperplastic endometrial polyp [letter; comment] Pitt MA, et al. **Histopathology** 1996 Jul; 29(1):95. Comment on: Histopathology 1995 Oct;27(4):386-7.

Cytokine, cell adhesion receptor, and tumor suppressor gene expression in vulvar squamous carcinoma: correlation with prominent fibromyxoid stromal response. Ambros RA, et al. **Int J Gynecol Pathol** 1996 Oct;15(4):320-5

Therapy of gonadal stromal cell testicular tumours. Farkas L, et al. **Int Urol Nephrol** 1995;27(5):597-601

Lovastatin-induced apoptosis in prostate stromal cells. Padayatty SJ, et al. **J Clin Endocrinol Metab** 1997 May; 82(5):1434-9

Stromal and vascular invasion in an human in vitro bladder cancer model. Booth C, et al. **Lab Invest** 1997 Jun; 76(6):843-57

Role of stromal myofibroblasts infiltrating colon cancer in tumor invasion. Martin M, et al. **Pathol Res Pract** 1996 Jul;192(7):712-7 (47 ref.)

Gastrointestinal stromal tumors. Suster S. **Semin Diagn Pathol** 1996 Nov;13(4):297-313 (65 ref.)

Dual differentiation in gastrointestinal stromal tumors [letter; comment] González-Cámpora R, et al. **Ultrastruct Pathol** 1997 May-Jun;21(3):311-3. Comment on: Ultrastruct Pathol 1996 Jul-Aug;20(4):373-93.

[Results of extended estimation of AgNORs reaction in parenchyma-stromal interactions in breast cancer] Dubenskaia LI, et al. **Biull Eksp Biol Med** 1996 Oct; 122(10):437-40 **(Rus)**

PHYSIOLOGY

Lysyl oxidase gene expression in the stromal reaction to in situ and invasive ductal breast carcinoma. Peyrol S, et al.

STROMAL CELLS

Am J Pathol 1997 Feb;150(2):497–507
Bone marrow stroma–derived prolactin is involved in basal and platelet–activating factor–stimulated in vitro erythropoiesis. Bellone G, et al. **Blood** 1997 Jul 1;90(1):21–7
Stromal cells negatively regulate primitive haemopoietic progenitor cell activation via a phosphatidylinositol–anchored cell adhesion/signalling mechanism. Gordon MY, et al. **Br J Haematol** 1997 Mar; 96(3):647–53
Stromal cells maintain the radioprotective capacity of CFU–S during retroviral infection. Goncalves F, et al. **Gene Ther** 1996 Sep;3(9):761–8
Alternatively spliced exons encode the tissue–specific 5' termini of leukocyte pp52 and stromal cell S37 mRNA isoforms. Thompson AA, et al. **Genomics** 1996 Mar 15; 32(3):352–7
Stromal cell involvement in leukemogenesis and carcinogenesis. Greenberger JS, et al. **In Vivo** 1996 Jan–Feb;10(1):1–17
Extracellular matrix remodeling and the regulation of epithelial–stromal interactions during differentiation and involution. Werb Z, et al. **Kidney Int Suppl** 1996 May; 54:S68–74 (46 ref.)
Transforming growth factor–beta 1 mediates communication between human endometrial carcinoma cells and stromal cells. Albright CD, et al. **Pathobiology** 1995;63(6):314–9
Hematopoietic activity of a stromal cell transmembrane protein containing epidermal growth factor–like repeat motifs. Moore KA, et al. **Proc Natl Acad Sci U S A** 1997 Apr 15;94(8):4011–6
Blast colony forming cell–binding capacity of bone marrow stroma from myelodysplastic patients. Gidáli J, et al. **Stem Cells** 1996 Sep;14(5):577–83
Importance of parenchymal:stromal cell ratio for the ex vivo reconstitution of human hematopoiesis. Koller MR, et al. **Stem Cells** 1997;15(4):305–13
The multiple roles of tumour stroma. Wernert N. **Virchows Arch** 1997 Jun;430(6):433–43 (161 ref.)
[The role of bone marrow stromal cells in apoptosis in myelodysplastic syndrome] Yaguchi M, et al. **Rinsho Ketsueki** 1996 Jul;37(7):542–6 (10 ref.) **(Jpn)**

RADIOGRAPHY

Malignant gastrointestinal stromal tumor of the small intestine: radiologic–pathologic correlation. Shojaku H, et al. **Radiat Med** 1997 May–Jun;15(3):189–92

SECRETION

Isolation and characterization of a novel secretory protein, stromal cell–derived factor–2 (SDF–2) using the signal sequence trap method. Hamada T, et al. **Gene** 1996 Oct 17;176(1–2):211–4
Interleukin–6 secretion in vitro is up–regulated in ectopic and eutopic endometrial stromal cells from women with endometriosis. Tseng JF, et al. **J Clin Endocrinol Metab** 1996 Mar;81(3):1118–22

TRANSPLANTATION

Systemic delivery of human growth hormone or human factor IX in dogs by reintroduced genetically modified autologous bone marrow stromal cells. Hurwitz DR, et al. **Hum Gene Ther** 1997 Jan 20;8(2):137–56
Autologous bone marrow–derived stromal fibroblastoid cells grown in vitro for the treatment of defects of mandibular bones. Krzymański G, et al. **Transplant Proc** 1996 Dec; 28(6):3528–30

ULTRASTRUCTURE

Stromal cell interaction and relevance to predecidual events and menstruation. Bhartiya D, et al. **Hum Reprod** 1996 Apr; 11(4):850–6
Ultrastructural and immunohistochemical studies of intralobular fibroblasts in human submandibular gland: the recognition of a 'CD34 positive reticular network' connected by gap junctions. Yamazaki K, et al. **J Submicrosc Cytol Pathol** 1996 Oct;28(4):471–83
Stromal differentiation and architecture of the human umbilical cord. Nanaev AK, et al. **Placenta** 1997 Jan; 18(1):53–64
Ultrastructural changes of stromal cells of bone marrow and liver after cyclophosphamide treatment in mice. Anton E. **Tissue Cell** 1997 Feb;29(1):1–9

VIROLOGY

Infection of human marrow stroma by human immunodeficiency virus–1 (HIV–1) is both required and sufficient for HIV–1–induced hematopoietic suppression in vitro: demonstration by gene modification of primary human stroma. Bahner I, et al. **Blood** 1997 Sep 1; 90(5):1787–98
JC virus infection of hematopoietic progenitor cells, primary B lymphocytes, and tonsillar stromal cells: implications for viral latency. Monaco MC, et al. **J Virol** 1996 Oct; 70(10):7004–12

STROMAL DYSTROPHIES, CORNEAL see **CORNEAL DYSTROPHIES, HEREDITARY**

STROMELYSIN 1

ANALYSIS

Evaluation of fluorometric and zymographic methods as activity assays for stromelysins and gelatinases [published erratum appears in Clin Exp Metastasis 1997 May;15(3):339–40] Quesada AR, et al. **Clin Exp Metastasis** 1997 Jan;15(1):26–32
The significance of epidermal growth factor receptor and matrix metalloproteinase–3 in squamous cell carcinoma of the oral cavity. Kusukawa J, et al. **Eur J Cancer B Oral Oncol** 1996 Jul;32B(4):217–21
Stromelysin, gelatinase A and TIMP–1 in prosthetic interface tissue: a role for macrophages in tissue remodelling. Hembry RM, et al. **Histopathology** 1995 Aug;27(2):149–59
Effects of treatment on gingival crevicular collagenase, stromelysin and tissue inhibitor of metalloproteinases and their ability to predict response to treatment. Haerian A, et al. **J Clin Periodontol** 1996 Feb;23(2):83–91
Increased levels of proteoglycan fragments and stromelysin in hip joint fluid in Legg–Calvé–Perthes disease. Eckerwall G, et al. **J Pediatr Orthop** 1997 Mar–Apr;17(2):266–9
The effect of subgingival antimicrobial therapy on the levels of stromelysin and tissue inhibitor of metalloproteinases in gingival crevicular fluid. Pourtaghi N, et al. **J Periodontol** 1996 Sep;67(9):866–70
Collagenase–I, stromelysin–I, and matrilysin are expressed within the placenta during multiple stages of human pregnancy. Vettraino IM, et al. **Placenta** 1996 Nov; 17(8):557–63
[Levels of matrix metalloproteinase–3 and urokinase–type plasminogen activator in knee synovial fluids from patients with rheumatoid arthritis and osteoarthritis] Gotoh H, et al. **Ryumachi** 1997 Feb;37(1):3–8 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Inhibition of stromelysin–1 (MMP–3) by P1'–biphenylylethyl carboxyalkyl dipeptides. Esser CK, et al. **J Med Chem** 1997 Mar 14;40(6):1026–40
Discovery of CGS 27023A, a non–peptidic, potent, and orally active stromelysin inhibitor that blocks cartilage degradation in rabbits. MacPherson LJ, et al. **J Med Chem** 1997 Aug 1;40(16):2525–32
X–ray structure of a hydroxamate inhibitor complex of stromelysin catalytic domain and its comparison with members of the zinc metalloproteinase superfamily. Dhanaraj V, et al. **Structure** 1996 Apr 15;4(4):375–86

BIOSYNTHESIS

Control of extracellular matrix degradation by interferon–gamma. The tryptophan connection. Varga J, et al. **Adv Exp Med Biol** 1996;398:143–8
Association of proteoglycan degradation with catabolic cytokine and stromelysin release from cartilage cultured with fibronectin fragments. Homandberg GA, et al. **Arch Biochem Biophys** 1996 Oct 15;334(2):325–31
Superantigen–induced stromelysin production from rheumatoid synovial cells. Migita K, et al. **Biochem Biophys Res Commun** 1997 Feb 3;231(1):222–6
Fibronectin fragments induce the expression of stromelysin–1 mRNA and protein in bovine chondrocytes in monolayer culture. Bewsey KE, et al. **Biochim Biophys Acta** 1996 Oct 7;1317(1):55–64
An autocrine/paracrine role of human decidual relaxin. II. Stromelysin–1 (MMP–3) and tissue inhibitor of matrix metalloproteinase–1 (TIMP–1). Qin X, et al. **Biol Reprod** 1997 Apr;56(4):812–20
Endogenous TGF–beta activity is modified during cellular aging: effects on metalloproteinase and TIMP–1 expression. Zeng G, et al. **Exp Cell Res** 1996 Nov 1;228(2):271–6
High levels of stromelysin–3 correlate with poor prognosis in patients with breast carcinoma. Chenard MP, et al. **Int J Cancer** 1996 Dec 20;69(6):448–51
Mechanisms of hepatocyte growth factor stimulation of keratinocyte metalloproteinase production. Dunsmore SE, et al. **J Biol Chem** 1996 Oct 4;271(40):24576–82
Basement membrane and repair of injury to peripheral nerve: defining a potential role for macrophages, matrix metalloproteinases, and tissue inhibitor of metalloproteinases–1. La Fleur M, et al. **J Exp Med** 1996 Dec 1;184(6):2311–26
Interleukin 1 beta and stromelysin (MMP3) activity of synovial fluid as possible markers of osteoarthritis in the temporomandibular joint. Kubota E, et al. **J Oral Maxillofac Surg** 1997 Jan;55(1):20–7; discussion 27–8
Effects of interleukin–1 beta on matrix metalloproteinase–3 levels in human periodontal ligament cells. Nakaya H, et al. **J Periodontol** 1997 Jun;68(6):517–23
Cytokines secreted by glial cells infected with HTLV–I modulate the expression of matrix metalloproteinases (MMPs) and their natural inhibitor (TIMPs): possible involvement in neurodegenerative processes. Giraudon P, et al. **Mol Psychiatry** 1997 Mar;2(2):107–10, 84 (23 ref.)
Ultraviolet B wavelength dependence for the regulation of two major matrix–metalloproteinases and their inhibitor TIMP–1 in human dermal fibroblasts [corrected and republished in Photochem Photobiol 1996 Nov;64(5):877–85] Brenneisen P, et al. **Photochem Photobiol** 1996 Oct;64(4):649–57
Ultraviolet B wavelength dependence for the regulation of two major matrix–metalloproteinases and their inhibitor TIMP–1 in human dermal fibroblasts [corrected and republished article originally printed in 1996 Oct;64(4):649–57] Brenneisen P, et al. **Photochem Photobiol** 1996 Nov;64(5):877–85
Effects of hydrostatic pressure on matrix synthesis and matrix metalloproteinase production in the human lumbar intervertebral disc. Handa T, et al. **Spine** 1997 May 15; 22(10):1085–91

BLOOD

Reduction of serum matrix metalloproteinase 1 and matrix metalloproteinase 3 in rheumatoid arthritis patients following anti–tumour necrosis factor–alpha (cA2) therapy. Brennan FM, et al. **Br J Rheumatol** 1997 Jun;36(6):643–50
Elevation of serum levels of matrix metalloproteinase–2 and –3 as new predictors of recurrence in patients with urothelial carcinoma. Gohji K, et al. **Cancer** 1996 Dec 1; 78(11):2379–87
Matrix metalloproteinases 1 and 3, tissue inhibitor of metalloproteinase–1 and the complex of metalloproteinase–1/tissue inhibitor in plasma of patients with prostate cancer. Jung K, et al. **Int J Cancer** 1997 Apr 22;74(2):220–3
Elevated plasma stromelysin levels in arthritis [letter; comment] Cheung NT, et al. **J Rheumatol** 1995 Oct; 22(10):2004–5. Comment on: J Rheumatol 1994 Dec;21(12):2329–33.

CHEMISTRY

Catalytic domain comparisons of human fibroblast–type collagenase, stromelysin–1, and matrilysin. Windsor LJ, et al. **Biochim Biophys Acta** 1997 Mar 15;1334(2–3):261–72
Mechanism of inhibition of the human matrix metalloproteinase stromelysin–1 by TIMP–1. Gomis–Rüth FX, et al. **Nature** 1997 Sep 4;389(6646):77–81
X–ray structure of a hydroxamate inhibitor complex of stromelysin catalytic domain and its comparison with members of the zinc metalloproteinase superfamily. Dhanaraj V, et al. **Structure** 1996 Apr 15;4(4):375–86

DRUG EFFECTS

The effect of drugs used in the treatment of osteoarthrosis on stromelysin (proteoglycanase) of equine synovial cell origin. May SA, et al. **Equine Vet J Suppl** 1988 Sep; (6):28–32

GENETICS

Expression of urokinase–type plasminogen activator, stromelysin 1, stromelysin 3, and matrilysin genes in lung carcinomas. Bolon I, et al. **Am J Pathol** 1997 May; 150(5):1619–29
Involvement of the AP–1 site within the 5'–flanking region of the stromelysin–1 gene in induction of the gene expression by UVA irradiation. Sawamura D, et al. **Arch Dermatol Res** 1996 Sep;288(10):628–32
Testing the eukaryotic promoters for efficient expression of exogenous genes in chondrocytes and synoviocytes. Su S, et al. **FEBS Lett** 1996 Oct 21;395(2–3):179–82
Gene expression of matrix metalloproteinase–1 (interstitial collagenase) and matrix metalloproteinase–3 (stromelysin–1) in basal cell carcinoma by in situ hybridization using chondroitin ABC lyase. Tsukifuji R, et al. **Histochem J** 1997 May;29(5):401–7
Misregulation of stromelysin–1 expression in mouse mammary tumor cells accompanies acquisition of stromelysin–1–dependent invasive properties. Lochter A, et al. **J Biol Chem** 1997 Feb 21;272(8):5007–15
Androgen receptor–Ets protein interaction is a novel mechanism for steroid hormone–mediated down–modulation of matrix metalloproteinase expression. Schneikert J, et al. **J Biol Chem** 1996 Sep 27; 271(39):23907–13
Transcriptional downregulation of stromelysin by tetracycline. Jonat C, et al. **J Cell Biochem** 1996 Mar 1; 60(3):341–7
Urokinase plasminogen activator is expressed by basal keratinocytes before interstitial collagenase, stromelysin–1, and laminin–5 in experimentally induced dermatitis herpetiformis lesions. Airola K, et al. **J Invest Dermatol** 1997 Jan;108(1):7–11
Expression of stromelysin 1 in human astrocytoma cell lines. Matsuzawa K, et al. **J Neurooncol** 1996 Dec;30(3):181–8
In situ hybridization studies of matrix metalloproteinase–3, tissue inhibitor of metalloproteinase–1 and type IV collagen in diabetic nephropathy. Suzuki D, et al. **Kidney Int** 1997 Jul;52(1):111–9
Identification of promoter activity and differential expression of transcripts encoding the murine stromelysin–1 gene in renal cells. Yee J, et al. **Kidney Int** 1997 Jul;52(1):120–9
Opposite, binary regulatory pathways involved in IL–1–mediated stromelysin gene expression in rat mesangial cells. Yokoo T, et al. **Kidney Int** 1996 Sep; 50(3):894–901
Erg, an Ets–family member, differentially regulates human collagenase1 (MMP1) and stromelysin1 (MMP3) gene expression by physically interacting with the Fos/Jun complex. Buttice G, et al. **Oncogene** 1996 Dec 5; 13(11):2297–306
Influence of Ras and retinoic acid on nerve growth factor

induction of transin gene expression in PC12 cells. Cosgaya JM, et al. **Oncogene** 1997 Apr 10;14(14):1687–96
[Detection of stromelysin mRNA expression in human hepatocellular carcinoma by in situ hybridization] Fang S, et al. **Chung Hua Ping Li Hsueh Tsa Chih** 1996 Apr; 25(2):73–5 (Eng. Abstr.) **(Chi)**

METABOLISM

Role of matrix metalloproteinases in failure to re–epithelialize after corneal injury. Fini ME, et al. **Am J Pathol** 1996 Oct; 149(4):1287–302
Antioxidant PDTC induces stromelysin expression in mesangial cells via a tyrosine kinase–AP–1 pathway. Yokoo T, et al. **Am J Physiol** 1996 May;270(5 Pt 2):F806–11
Immunolocalization of stromelysin, tumor necrosis factor (TNF) alpha, and TNF receptors in atrophied canine articular cartilage treated with hyaluronic acid and transforming growth factor beta. Comer JS, et al. **Am J Vet Res** 1996 Oct;57(10):1488–96
Isothiazolones interfere with normal matrix metalloproteinase activation and inhibit cartilage proteoglycan degradation. Arner EC, et al. **Biochem J** 1996 Sep 1;318 (Pt 2):417–24
Involvement of a region near valine–69 of tissue inhibitor of metalloproteinases (TIMP)–1 in the interaction with matrix metalloproteinase 3 (stromelysin 1). Nagase H, et al. **Biochem J** 1997 Jul 1;325 (Pt 1):163–7
Degradation of cross–linked fibrin by matrix metalloproteinase 3 (stromelysin 1): hydrolysis of the gamma Gly 404–Ala 405 peptide bond. Bini A, et al. **Biochemistry** 1996 Oct 8;35(40):13056–63
Correlation between the appearance of gelatinases in the synovial fluid of patients with rheumatoid arthritis and polymorphonuclear elastase, stromelysin–1, and the tissue inhibitor of metalloproteinase–1. Watanabe Y, et al. **Clin Exp Rheumatol** 1997 May–Jun;15(3):255–61
Proteoglycan–degrading activity of human stromelysin–1 and leukocyte elastase in rabbit joints. Quantitation of proteoglycan and a stromelysin–induced HABR fragment of aggrecan in synovial fluid and cartilage. Olszewski JM, et al. **Connect Tissue Res** 1996;33(4):291–9
Stimulation of matrix metalloproteinase production by recombinant extracellular matrix metalloproteinase inducer from transfected Chinese hamster ovary cells. Guo H, et al. **J Biol Chem** 1997 Jan 3;272(1):24–7
Chondrocyte cultures express matrix metalloproteinase mRNA and immunoreactive protein; stromelysin–1 and 72 kDa gelatinase are localized in extracellular matrix vesicles. Schmitz JP, et al. **J Cell Biochem** 1996 Jun 1;61(3):375–91
Biological mechanisms underlying the clinical effects of RU 486: modulation of cultured endometrial stromal cell stromelysin–1 and prolactin expression. Schatz F, et al. **J Clin Endocrinol Metab** 1997 Jan;82(1):188–93
Identification of new autolytic sites of recombinant truncated mature human fibroblast stromelysin by mass spectrometry. Qoronfleh MW, et al. **J Pept Res** 1997 Jun;49(6):612–9
Determination of stromelysin–1, 72 and 92 kDa type IV collagenase, tissue inhibitor of metalloproteinase–1 (TIMP–1), and TIMP–2 in synovial fluid and serum from patients with rheumatoid arthritis. Ishiguro N, et al. **J Rheumatol** 1996 Sep;23(9):1599–604
Suppression of matrix metalloproteinase–3 synthesis by interleukin–4 in human articular chondrocytes. Nemoto O, et al. **J Rheumatol** 1997 Sep;24(9):1774–9
Effects of indomethacin on the production of matrix metalloproteinase–3 and tissue inhibitor of metalloproteinases–1 by human articular chondrocytes. Yamada H, et al. **J Rheumatol** 1996 Oct;23(10):1739–43
Quantification of mRNA levels in joint capsule and articular cartilage of the murine knee joint by RT–PCR: kinetics of stromelysin and IL–1 mRNA levels during arthritis. Van Meurs JB, et al. **Rheumatol Int** 1997;16(5):197–205
Immunohistochemical study of matrix metalloproteinase–3 and tissue inhibitor of metalloproteinase–1 human intervertebral discs. Kanemoto M, et al. **Spine** 1996 Jan 1;21(1):1–8

PHYSIOLOGY

Stromelysin–3 and other stromelysins in breast cancer: importance of epithelial–stromal interactions during tumor progression. Basset P, et al. **Cancer Treat Res** 1996; 83:353–67 (69 ref.)
Matrix metalloproteinases regulate morphogenesis, migration and remodeling of epithelium, tongue skeletal muscle and cartilage in the mandibular arch. Chin JR, et al. **Development** 1997 Apr;124(8):1519–30
The role of stromelysin–1 in stromal–epithelial interactions and cancer. Wiesen JF, et al. **Enzyme Protein** 1996; 49(1–3):174–81 (53 ref.)

RADIATION EFFECTS

Ultraviolet B wavelength dependence for the regulation of two major matrix–metalloproteinases and their inhibitor TIMP–1 in human dermal fibroblasts [corrected and republished article originally printed in 1996 Oct;64(4):649–57] Brenneisen P, et al. **Photochem Photobiol** 1996 Nov;64(5):877–85

THERAPEUTIC USE

Chemonucleolysis with human stromelysin–1. Haro H, et al. **Spine** 1997 May 15;22(10):1098–104

STRONGYLE INFECTIONS, EQUINE

BLOOD

Plasma thromboxane B2 levels in horses experimentally infected with Strongylus vulgaris. Cambridge H, et al. **Equine Vet J Suppl** 1989 Jun;(7):14–8

DRUG THERAPY

Influence of alternative treatment strategies on the output of strongyle eggs in the faeces of horses. Hunt ER, et al. **Aust Vet J** 1996 Aug;74(2):159–61
Identification and characterization of a pyrantel pamoate resistant cyathostome population. Chapman MR, et al. **Vet Parasitol** 1996 Nov 15;66(3–4):205–12
Controlled dose confirmation study of a 2% moxidectin equine gel against equine internal parasites in The Netherlands. Eysker M, et al. **Vet Parasitol** 1997 Jun; 70(1–3):165–73
Use of two in vitro methods for the detection of benzimidazole resistance in equine small strongyles (Cyathostoma spp.). Ihler CF, et al. **Vet Parasitol** 1996 Oct 15;65(1–2):117–25
Critical test evaluation (1977–1992) of drug efficacy against endoparasites featuring benzimidazole–resistant small strongyles (population S) in Shetland ponies. Lyons ET, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):67–73
Comparison of the reappearance of strongyle eggs on foals, yearlings and adult horses after treatment with ivermectin or pyrantel. Boersema JH, et al. **Vet Q** 1996 Mar;18(1):7–9

EPIDEMIOLOGY

The structure of the community of strongyloid nematodes of domestic equids. Bucknell D, et al. **J Helminthol** 1996 Sep;70(3):185–92
Comparison of the reappearance of strongyle eggs on foals, yearlings and adult horses after treatment with ivermectin or pyrantel. Boersema JH, et al. **Vet Q** 1996 Mar;18(1):7–9

PARASITOLOGY

A study (1977–1992) of population dynamics of endoparasites featuring benzimidazole–resistant small strongyles (population S) in Shetland ponies. Lyons ET, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):75–86
The pathogenic effects of experimental cyathostome infections in ponies. Murphy D, et al. **Vet Parasitol** 1997 Jun;70(1–3):99–110

PHYSIOPATHOLOGY

The effect of Strongylus vulgaris larvae on equine intestinal myoelectrical activity. Lester GD, et al. **Equine Vet J Suppl** 1989 Jun;(7):8–13

PREVENTION & CONTROL

Protection of yearling ponies against Strongylus vulgaris by foalhood vaccination. Klei TR, et al. **Equine Vet J Suppl** 1989 Jun;(7):2–7

STRONGYLIDA

Influence of alternative treatment strategies on the output of strongyle eggs in the faeces of horses. Hunt ER, et al. **Aust Vet J** 1996 Aug;74(2):159–61

DRUG EFFECTS

Doramectin efficacy against the kidney worm, Stephanurus dentatus in sows. Stewart TB, et al. **Vet Parasitol** 1996 Nov 1;66(1–2):95–9
[Structural changes in the genital system of nematodes of the suborder Strongylata after exposure to anthelmintics] Bogoiavlenskiĭ IuK. **Med Parazitol (Mosk)** 1997 Jan–Mar; (1):58–61 (4 ref.) **(Rus)**

ENZYMOLOGY

Malic dehydrogenase isoenzymatic pattern in lung–nematode parasite species. Cutillas C, et al. **Parasitol Res** 1996; 82(1):92–4

GENETICS

The 5.8S rDNA sequences of 18 species of bursate nematodes (order Strongylida): comparison with rhabditid and tylenchid nematodes. Chilton NB, et al. **Int J Parasitol** 1997 Jan;27(1):119–24
Species markers for equine strongyles detected in intergenic rDNA by PCR–RFLP. Gasser RB, et al. **Mol Cell Probes** 1996 Oct;10(5):371–8
Identification of parasitic nematodes by PCR–SSCP of ITS–2 rDNA. Gasser RB, et al. **Mol Cell Probes** 1997 Jun; 11(3):201–9

ISOLATION & PURIFICATION

Assessment of the severity of natural infections of kids and adult goats by small lungworms (Protostrongylidae, Nematoda) using macroscopic lesion scores. Berrag B, et al. **Vet Res** 1997;28(2):143–8
[Occurrence of the nematode Uncinaria stenocephala in dogs from the Warsaw region] Górski P, et al. **Wiad Parazytol** 1996;42(2):221–7 (Eng. Abstr.) **(Pol)**

STRONGYLIDA INFECTIONS

Rapid expulsion of the intestinal trematodes Echinostoma trivolvis and E. caproni from C3H/HeN mice after infection with Nippostrongylus brasiliensis. Fujino T, et al. **Parasitol Res** 1996;82(7):577–9

CEREBROSPINAL FLUID

Induction of cerebrospinal fluid eosinophilia in rats by the intraventricular injection of Angiostrongylus cantonensis antigen. Sugaya H, et al. **Int J Parasitol** 1997 Jan; 27(1):113–7
Identification of Angiostrongylus cantonensis in infected rats with a coagglutination assay. Rojas Rivero L, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):716–8

COMPLICATIONS

Eosinophilic ileitis with perforation caused by Angiostrongylus (Parastrongylus) costaricensis. A case study and review. Wu SS, et al. **Arch Pathol Lab Med** 1997 Sep;121(9):989–91 (15 ref.)

DIAGNOSIS

Detection of circulating antigen by monoclonal antibodies for immunodiagnosis of angiostrongyliasis. Chye SM, et al. **Am J Trop Med Hyg** 1997 Apr;56(4):408–12
[Angiostrongylosis in infants in Reunion and Mayotte. Apropos of 3 cases of eosinophilic meningitis including 1 fatal radiculo–myeloencephalitis with hydrocephalus] Graber D, et al. **Arch Pediatr** 1997 May;4(5):424–9 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

The efficacy of ivermectin against laboratory strains of Heligmosomoides polygyrus (Nematoda). Njoroge JM, et al. **Int J Parasitol** 1997 Apr;27(4):439–42

ENZYMOLOGY

Mast cell heterogeneity in the gastrointestinal tract: variable expression of mouse mast cell protease–1 (mMCP–1) in intraepithelial mucosal mast cells in nematode–infected and normal BALB/c mice. Scudamore CL, et al. **Am J Pathol** 1997 May;150(5):1661–72
Constitutive expression of mouse mast cell protease–1 in normal BALB/c mice and its up–regulation during intestinal nematode infection. Wastling JM, et al. **Immunology** 1997 Feb;90(2):308–13

EPIDEMIOLOGY

The effects of host population density on the epidemiology of the trichostrongyle nematode Heligmosomoides polygyrus. Abu–Madi MA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):597–607

IMMUNOLOGY

Lung granulomatous response induced by infection with the intestinal nematode Nippostrongylus brasiliensis is suppressed in mast cell–deficient Ws/Ws rats. Arizono N, et al. **Clin Exp Immunol** 1996 Oct;106(1):55–61
H. polygyrus: B7–independence of the secondary type 2 response. Gause WC, et al. **Exp Parasitol** 1996 Nov; 84(2):264–73
Nippostrongylus brasiliensis: cytokine responses and nematode expulsion in normal and IL–4–deficient mice. Lawrence RA, et al. **Exp Parasitol** 1996 Oct;84(1):65–73
Genetic influence on immune responses to an N. brasiliensis infection: surface expression and occupancy of IgE receptors and histamine releasability of mast cells. Chen XJ, et al. **Inflamm Res** 1997 Mar;46 Suppl 1:S17–8
Worm kinetics and serum IgE in hooded lister rats infected with the acanthocephalan Moniliformis moniliformis and the nematode Nippostrongylus brasiliensis. Hindsbo O, et al. **Int J Parasitol** 1996 Nov;26(11):1287–94
H–2 genes and resistance to infection with Heligmosomoides polygyrus in selectively bred mice. Su Z, et al. **Int J Parasitol** 1997 May;27(5):595–600
Mediastinal lymph node cells of Angiostrongylus cantonensis–infected rats respond to antigens and release interleukin–5 in vitro. Sugaya H, et al. **Int J Parasitol** 1996 May;26(5):543–51
Protective immunity to nematode infection is induced by CTLA–4 blockade. McCoy K, et al. **J Exp Med** 1997 Jul 21;186(2):183–7
Role of T cell subpopulations in mice infected with Angiostrongylus cantonensis. Lee JD, et al. **J Helminthol** 1996 Sep;70(3):211–4
Genetic control of acquired resistance to Heligmosomoides polygyrus: overcoming genetically determined weak responder status by strategic immunization with ivermectin–abbreviated infections. Wahid FN, et al. **J Helminthol** 1996 Jun;70(2):159–68
Mast cell Fc epsilonRI expression in the rat intestinal mucosa and tongue is enhanced during Nippostrongylus brasiliensis infection and can be up–regulated by in vivo administration of IgE. Shaikh N, et al. **J Immunol** 1997 Apr 15; 158(8):3805–12
Eosinophilia and intracranial worm recovery in interleukin–5 transgenic and interleukin–5 receptor alpha

chain-knockout mice infected with Angiostrongylus cantonensis. Sugaya H, et al. **Parasitol Res** 1997; 83(6):583-90

Cytokine responses in mice infected with Angiostrongylus cantonensis. Sugaya H, et al. **Parasitol Res** 1997;83(1):10-5

Dissociation of early and late protective immunity to the nematode Nippostrongylus brasiliensis in Brown Norway and Fischer-344 rats. Uchikawa R, et al. **Parasitology** 1996 Mar;112 (Pt 3):339-45

Detection of circulating antigens of Parastrongylus cantonensis in human sera by sandwich ELISA with specific monoclonal antibody. Eamsobhana P, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):712-5

The evaluation of the 29 and 31 kDa antigens in female Angiostrongylus cantonensis for serodiagnosis of human angiostrongyliasis. Nuamtanong S. **Southeast Asian J Trop Med Public Health** 1996 Jun; 27(2):291-6

Local TH1 and TH2 responses to parasitic infection in the intestine: regulation by IFN-gamma and IL-4. Urban JF Jr, et al. **Vet Immunol Immunopathol** 1996 Nov; 54(1-4):337-44

METABOLISM

Zinc deficiency and energy restriction modify immune responses in mice during both primary and challenge infection with Heligmosomoides polygyrus (Nematoda). Shi HN, et al. **Parasite Immunol** 1997 Aug;19(8):363-73

PARASITOLOGY

Genetic and immunological adaptation of Heligmosomoides polygyrus in mice. Su Z, et al. **Int J Parasitol** 1997 Jun; 27(6):653-63

Angiostrongylus eosinophilic meningitis in Egypt [letter] Brown FM, et al. **Lancet** 1996 Oct 5;348(9032):964-5

Cross-infection of moose (Alces alces) and reindeer (Rangifer tarandus) with Elaphostrongylus alces and Elaphostrongylus rangiferi (Nematoda, Protostrongylidae): effects on parasite morphology and prepatent period. Stéen M, et al. **Vet Parasitol** 1997 Jul 15;71(1):27-38

PATHOLOGY

Mast cell and mast cell granule phenotypes in normal and Nippostrongylus-infected rats. A qualitative laser confocal microscopic study. Krüger PG, et al. **APMIS** 1997 Mar; 105(3):229-37

Development of basophils in Mongolian gerbils: formation of basophilic cell clusters in the bone marrow after Nippostrongylus brasiliensis infection. Okada M, et al. **Lab Invest** 1997 Jan;76(1):89-97

PHYSIOPATHOLOGY

Development of basophils in Mongolian gerbils: formation of basophilic cell clusters in the bone marrow after Nippostrongylus brasiliensis infection. Okada M, et al. **Lab Invest** 1997 Jan;76(1):89-97

Functional relationships between sensory nerve fibers and mast cells of dura mater in normal and inflammatory conditions. Dimitriadou V, et al. **Neuroscience** 1997 Apr; 77(3):829-39

PREVENTION & CONTROL

Irradiated larval vaccination and antibody responses evaluated in relation to the expression of immunity to Heligmosomoides polygyrus. Pleass RJ, et al. **Parasitol Res** 1996;82(5):445-53

TRANSMISSION

The effects of host population density on the epidemiology of the trichostrongyle nematode Heligmosomoides polygyrus. Abu-Madi MA, et al. **J Egypt Soc Parasitol** 1997 Aug;27(2):597-607

VETERINARY

Studies on the effect of fenbendazole and mebendazole on some enzymes of swine kidney worm Stephanurus dentatus. Singh K, et al. **Appl Parasitol** 1996 Sep;37(3):217-23

Evidence for hybridisation between Paramacropostrongylus iugalis and F. typicus (Nematoda:Strongyloidea) in grey kangaroos, Macropus fuliginosus and M. giganteus, in a zone of sympatry in eastern Australia. Chilton NB, et al. **Int J Parasitol** 1997 May;27(5):475-82

Variability of sex ratio, mating probability and egg production in an intestinal nematode in its fluctuating host population [published erratum appears in Int J Parasitol 1996 Oct;26(10):1137-8] Haukisalmi V, et al. **Int J Parasitol** 1996 Jul;26(7):755-63

Neurologic disease attributable to infection with Parelaphostrongylus tenuis in blackbuck antelope. Oliver JL 3rd, et al. **J Am Vet Med Assoc** 1996 Jul 1;209(1):140-2

Two new nematode species of Bunomystrongylus n. gen. (Trichostrongylina:Heligmonellidae) collected from Bunomys spp. (Rodentia:Muridae) of Sulawesi, Indonesia. Hasegawa H, et al. **J Parasitol** 1996 Dec;82(6):998-1004

Hypovolaemic shock after anthelmintic treatment of canine angiostrongylosis. Søland J, et al. **J Small Anim Pract** 1996 Dec;37(12):594-6

Clinical challenge. Parelaphostrongylus tenuis (meningeal worm) infection of the cranial spinal cord and brain stem. Ferrell ST, et al. **J Zoo Wildl Med** 1997 Jun;28(2):221-3

Between goat-farm biological variability of the nematode Muellerius capillaris first-stage larvea. Influence of anthelmintic treatment. Kulo A, et al. **Parasite** 1994 Mar; 1(1):65-70

Evidence of alae in Aelurostrongylus abstrusus larvae examined by scanning electron microscope (SEM). Pampiglione S, et al. **Parasite** 1994 Jun;1(2):177-8

Malic dehydrogenase isoenzymatic pattern in lung-nematode parasite species. Cutillas C, et al. **Parasitol Res** 1996; 82(1):92-4

Experimental infection of five subspecies of Oncomelania snails with Angiostrongylus cantonensis. Iwanaga Y. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):767-73

Anthelmintic efficacy of ivermectin against Syngamus trachea and Capillaria spp. in pheasant. Lamka J, et al. **Vet Med (Praha)** 1997 Jun;42(6):157-60

Susceptibility of Suffolk and Gulf Coast Native suckling lambs to naturally acquired strongylate nematode infection. Bahirathan M, et al. **Vet Parasitol** 1996 Oct 25; 65(3-4):259-68

Non-surgical transplantation of Oesophagostomum dentatum to recipient pigs via rectal intubation. Christensen CM, et al. **Vet Parasitol** 1996 Oct 15;65(1-2):139-45

Rupture of femoral artery in a dog infected with Angiostrongylus vasorum. Cury MC, et al. **Vet Parasitol** 1996 Oct 25;65(3-4):313-5

Effect of simulated rain, coat length and exposure to natural climatic conditions on the efficacy of a topical formulation of eprinomectin against endoparasites of cattle. Gogolewski RP, et al. **Vet Parasitol** 1997 Apr;69(1-2):95-102

Efficacies of different doses of ivermectin against male, female and L4 Oesophagostomum dentatum in pigs. Petersen MB, et al. **Vet Parasitol** 1996 Oct 15;65(1-2):55-63

Doramectin efficacy against the kidney worm, Stephanurus dentatus in sows. Stewart TB, et al. **Vet Parasitol** 1996 Nov 1;66(1-2):95-9

Mammomonogamus laryngeus (Railliet, 1899) infections in cattle in Mindanao, Philippines. Van Aken D, et al. **Vet Parasitol** 1996 Sep 16;64(4):329-32

Canine angiostrongylosis in south Wales [letter] Otter A, et al. **Vet Rec** 1997 Jun 14;140(24):635-6

Angiostrongylus vasorum infection in foxes (Vulpes vulpes) in Cornwall. Simpson VR. **Vet Rec** 1996 Nov 2; 139(18):443-45

Assessment of the severity of natural infections of kids and adult goats by small lungworms (Protostrongylidae, Nematoda) using macroscopic lesion scores. Berrag B, et al. **Vet Res** 1997;28(2):143-8

The effects of a controlled-release albendazole capsule (Proftril-Captec) on parasitism in grazing Corriedale ewes in the Nyandarua district of Kenya [published erratum appears in Vet Res Commun 1997 Jul;21(5):324] Munyua WK, et al. **Vet Res Commun** 1997 Feb;21(2):85-99

[Effect of flubendazole on Muellerius capillaris in mouflon] Lamka J, et al. **Vet Med (Praha)** 1996 Nov;41(11):347-50 (Eng. Abstr.) **(Cze)**

STRONGYLOIDEA

Non-surgical transplantation of Oesophagostomum dentatum to recipient pigs via rectal intubation. Christensen CM, et al. **Vet Parasitol** 1996 Oct 15;65(1-2):139-45

Use of two in vitro methods for the detection of benzimidazole resistance in equine small strongyles (Cyathostoma spp.). Ihler CF, et al. **Vet Parasitol** 1996 Oct 15;65(1-2):117-25

Efficacies of different doses of ivermectin against male, female and L4 Oesophagostomum dentatum in pigs. Petersen MB, et al. **Vet Parasitol** 1996 Oct 15;65(1-2):55-63

CLASSIFICATION

An electrophoretic analysis of patterns of speciation in Cloacina clarkae, C. communis, C. petrogale and C. similis (Nematoda:Strongyloidea) from macropodid marsupials. Chilton NB, et al. **Int J Parasitol** 1997 May;27(5):483-93

Molecular delineation of Cylicocyclus nassatus and C. ashworthi (Nematoda:Strongylidae). Hung GC, et al. **Int J Parasitol** 1997 May;27(5):601-5

The structure of the community of strongyloid nematodes of domestic equids. Bucknell D, et al. **J Helminthol** 1996 Sep;70(3):185-92

DRUG EFFECTS

A study (1977-1992) of population dynamics of endoparasites featuring benzimidazole-resistant small strongyles (population S) in Shetland ponies. Lyons ET, et al. **Vet Parasitol** 1996 Nov 1;66(1-2):75-86

Critical test evaluation (1977-1992) of drug efficacy against endoparasites featuring benzimidazole-resistant small strongyles (population S) in Shetland ponies. Lyons ET, et al. **Vet Parasitol** 1996 Nov 1;66(1-2):67-73

EMBRYOLOGY

Twins raised from separated blastomeres develop into sexually mature Strongylocentrotus purpuratus [published erratum appears in Dev Biol 1997 Feb 1;182(1):204] Cameron RA, et al. **Dev Biol** 1996 Sep 15;178(2):514-9

ENZYMOLOGY

Studies on the effect of fenbendazole and mebendazole on some enzymes of swine kidney worm Stephanurus dentatus. Singh K, et al. **Appl Parasitol** 1996 Sep;37(3):217-23

GENETICS

An electrophoretic analysis of patterns of speciation in Cloacina clarkae, C. communis, C. petrogale and C. similis (Nematoda:Strongyloidea) from macropodid marsupials. Chilton NB, et al. **Int J Parasitol** 1997 May;27(5):483-93

Evidence for hybridisation between Paramacropostrongylus iugalis and P. typicus (Nematoda:Strongyloidea) in grey kangaroos, Macropus fuliginosus and M. giganteus, in a zone of sympatry in eastern Australia. Chilton NB, et al. **Int J Parasitol** 1997 May;27(5):475-82

Molecular delineation of Cylicocyclus nassatus and C. ashworthi (Nematoda:Strongylidae). Hung GC, et al. **Int J Parasitol** 1997 May;27(5):601-5

ISOLATION & PURIFICATION

Seasonal changes in the level of infective strongylate nematode larvae on pasture in the coastal savanna regions of Ghana. Agyei AD. **Vet Parasitol** 1997 Jun; 70(1-3):175-82

METABOLISM

Transient appearance of Strongylocentrotus purpuratus Otx in micromere nuclei: cytoplasmic retention of SpOtx possibly mediated through an alpha-actinin interaction. Chuang CK, et al. **Dev Genet** 1996;19(3):231-7

PATHOGENICITY

The pathogenic effects of experimental cyathostome infections in ponies. Murphy D, et al. **Vet Parasitol** 1997 Jun;70(1-3):99-110

STRONGYLOIDES

Cryptosporidium, Isospora and Strongyloides in AIDS [letter; comment] Ghorpade MV, et al. **Natl Med J India** 1996 Jul-Aug;9(4):201. Comment on: Natl Med J India 1996 Jan-Feb;9(1):17-9.

GENETICS

Molecular differences between several species of Strongyloides and comparison of selected isolates of S. stercoralis using a polymerase chain reaction-linked restriction fragment length polymorphism approach. Ramachandran S, et al. **Am J Trop Med Hyg** 1997 Jan; 56(1):61-5

GROWTH & DEVELOPMENT

Expression of a 70-kDa heat-shock-related protein during transformation from free-living infective larvae to the parasitic stage in Strongyloides venezuelensis. Tsuji N, et al. **Parasitol Res** 1997;83(1):99-102

IMMUNOLOGY

Larval somatic antigens effective in inducing an IgG response and protection against Strongyloides papillosus infection. Ooba C, et al. **J Helminthol** 1996 Sep;70(3):231-5

Sensitive enzyme-linked immunosorbent assay (ELISA) to measure parasite-specific antibodies of Indian soft-furred rats, Millardia meltada. Tateishi M, et al. **J Vet Med Sci** 1997 Jun;59(6):491-4

Reserpine-induced sulphomucin production by goblet cells in the jejunum of rats and its significance in the establishment of intestinal helminths. Ishikawa N, et al. **Parasite Immunol** 1995 Nov;17(11):581-6

ISOLATION & PURIFICATION

Cryptosporidium, isospora and strongyloides in AIDS [see comments] Lanjewar DN, et al. **Natl Med J India** 1996 Jan-Feb;9(1):17-9. Comment in: Natl Med J India 1996 Jul-Aug;9(4):201.

METABOLISM

Strongyloides venezuelensis: adhesion of adult worms to culture vessels by orally secreted mucosubstances. Maruyama H, et al. **Exp Parasitol** 1997 Jan;85(1):10-5

Expression of a 70-kDa heat-shock-related protein during transformation from free-living infective larvae to the parasitic stage in Strongyloides venezuelensis. Tsuji N, et al. **Parasitol Res** 1997;83(1):99-102

PATHOGENICITY

A pilot trial on the experimental infection of springbok (Antidorcas marsupialis) and eland (Taurotragus oryx) with a goat strain of Strongyloides papillosus [editorial] Norval AG, et al. **J S Afr Vet Assoc** 1996 Jun;67(2):72-3

ULTRASTRUCTURE

A freeze-fracture and deep-etch study of the cuticle and hypodermis of infective larvae of Strongyloides venezuelensis (Nematoda). Martinez AM, et al. **Int J Parasitol** 1997 Mar;27(3):289-97

STRONGYLOIDES RATTI

GENETICS

Molecular differences between several species of Strongyloides and comparison of selected isolates of S. stercoralis using a polymerase chain reaction-linked restriction fragment length polymorphism approach. Ramachandran S, et al. **Am J Trop Med Hyg** 1997 Jan; 56(1):61-5

Microsatellites of the parasitic nematode Strongyloides ratti. Fisher MC, et al. **Mol Biochem Parasitol** 1996 Oct 1; 80(2):221-4

STRONGYLOIDES STERCORALIS

Cure by ivermectin of a chronic, persistent, intestinal strongyloidosis. Adenusi AA. **Acta Trop** 1997 Sep 10; 66(3):163-7

Strongyloides stercoralis hyperinfection diagnosed by gastric cytology in an AIDS patient [letter] Sarangarajan R, et al. **AIDS** 1997 Mar;11(3):394-6

Strongyloides cardiomyopathy [letter] Rodriguez MA. **Alaska Med** 1997 Jan-Mar;39(1):30

Strongyloides stercoralis infection mimicking relapse in a child with small noncleaved cell lymphoma. Sandlund JT, et al. **Am J Clin Oncol** 1997 Apr;20(2):215-6

Effect of Strongyloides stercoralis infection and eosinophilia on age at onset and prognosis of adult T-cell leukemia. Plumelle Y, et al. **Am J Clin Pathol** 1997 Jan;107(1):81-7

Strongyloides stercoralis infection in patients infected with human immunodeficiency virus [letter; comment] Guerin JM, et al. **Clin Infect Dis** 1997 Jan;24(1):95. Comment on: Clin Infect Dis 1996 Apr;22(4):736. Comment on: Clin Infect Dis 1996 Apr;22(4):737.

Disseminated Strongyloides stercoralis infection in an immunocompetent patient [letter; comment] Husni RN, et al. **Clin Infect Dis** 1996 Sep;23(3):663. Comment on: Clin Infect Dis 1995 Dec;21(6):1377, 1459.

Strongyloidiasis. Mahmoud AA. **Clin Infect Dis** 1996 Nov; 23(5):949-52; quiz 953 (11 ref.)

Hyperacute pneumonitis in a patient with overwhelming Strongyloides stercoralis infection. Casati A, et al. **Eur J Anaesthesiol** 1996 Sep;13(5):498-501

Intestinal strongyloidiasis mimicking a tumour. Schanaider A, et al. **Eur J Surg** 1996 May;162(5):429-30

An evaluation of the modified agar plate method for diagnosis of Strongyloides stercoralis. Moustafa MA. **J Egypt Soc Parasitol** 1997 Aug;27(2):571-9

Pulmonary hyperinfection with Strongyloides stercoralis. Huang MS, et al. **J Formos Med Assoc** 1996 Jul;95(7):551-4

Colonic Strongyloides stercoralis infection masquerading as ulcerative colitis. Weight SC, et al. **J R Coll Surg Edinb** 1997 Jun;42(3):202-3

Pulmonary manifestations of strongyloidiasis. Wehner JH, et al. **Semin Respir Infect** 1997 Jun;12(2):122-9 (79 ref.)

Tacrolimus allows autoinfective development of the parasitic nematode Strongyloides stercoralis [letter] Nolan TJ, et al. **Transplantation** 1996 Oct 15;62(7):1038

[66-year-old man with an unusual anastomosis ulcer after Billroth II stomach resection] Baniewicz W, et al. **Internist (Berl)** 1997 Mar;38(3):255-8 **(Ger)**

[A case of bacterial meningitis induced by strongyloidiasis] Higashiyama Y, et al. **Kansenshogaku Zasshi** 1997 Jul; 71(7):680-3 (Eng. Abstr.) **(Jpn)**

[Strongyloides stercoralis infection in a cortico-dependent patient with chronic airflow obstruction] Cremades Romero MJ, et al. **Arch Bronconeumol** 1996 Oct;32(8):430-1 (Eng. Abstr.) **(Spa)**

[Diarrhea and eosinophilia in a patient with bronchial asthma] Nevado N, et al. **Enferm Infecc Microbiol Clin** 1996 May; 14(5):327-8 **(Spa)**

[Infection by Strongyloides stercoralis in the county of Safor, Spain] Cremades Romero MJ, et al. **Med Clin (Barc)** 1997 Jul 5;109(6):212-5 (Eng. Abstr.) **(Spa)**

[Hyperinfection by Strongyloides stercoralis as first manifestation of AIDS (letter)] Montero A, et al. **Medicina (B Aires)** 1996;56(3):319-20 **(Spa)**

DRUG EFFECTS

Short report: long-term serum antibody isotype responses to Strongyloides stercoralis filariform antigens in eight patients treated with ivermectin. Lindo JF, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):474-6

GENETICS

Molecular differences between several species of Strongyloides and comparison of selected isolates of S. stercoralis using a polymerase chain reaction-linked restriction fragment length polymorphism approach. Ramachandran S, et al. **Am J Trop Med Hyg** 1997 Jan; 56(1):61-5

Identification of novel sequences and codon usage in Strongyloides stercoralis. Moore TA, et al. **Mol Biochem Parasitol** 1996 Aug;79(2):243-8

IMMUNOLOGY

Chronicity in Strongyloides stercoralis infections: dichotomy of the protective immune response to infective and autoinfective larvae in a mouse model. Brigandi RA, et al. **Am J Trop Med Hyg** 1997 Jun;56(6):640-6

Correlation between human T cell lymphotropic virus type-1 and Strongyloides stercoralis infections and serum immunoglobulin E responses in residents of Okinawa, Japan. Hayashi J, et al. **Am J Trop Med Hyg** 1997 Jan; 56(1):71-5

Short report: long-term serum antibody isotype responses to Strongyloides stercoralis filariform antigens in eight patients treated with ivermectin. Lindo JF, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):474-6

Passive transfer of immune serum reduces the L1/adult ratio of worms recovered from the intestines of Strongyloides stercoralis-infected gerbils. Thompson F, et al. **J Parasitol** 1997 Feb;83(1):170-3

Immunity to a challenge infection of Strongyloides stercoralis third-stage larvae in the jird. Nolan TJ, et al. **Parasite Immunol** 1995 Nov;17(11):599-604

IL-12 eliminates the Th-2 dependent protective immune response of mice to larval Strongyloides stercoralis. Rotman HL, et al. **Parasite Immunol** 1997 Jan;19(1):29-39

Strongyloides stercoralis: identification of antigens in natural human infections from endemic areas of the United States. Siddiqui AA, et al. **Parasitol Res** 1997;83(7):655-8

Parasite-specific serum IgG following successful treatment of endemic strongyloidiasis using ivermectin. Lindo JF, et al. **Trans R Soc Trop Med Hyg** 1996 Nov-Dec; 90(6):702-3

ISOLATION & PURIFICATION

Fulminant, systemic strongyloidiasis in AIDS. Cahill KM, et al. **Ann Trop Med Parasitol** 1996 Jun;90(3):313-8

Photo quiz [see comments] Raffalli J, et al. **Clin Infect Dis** 1995 Dec;21(6):1377, 1459. Comment in: Clin Infect Dis 1996 Sep;23(3):663.

Strongyloides stercoralis infection in a patient with Crohn's disease [letter] Pasqualini L, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):401-3

Patterns of detection of Strongyloides stercoralis in stool specimens: implications for diagnosis and clinical trials. Dreyer G, et al. **J Clin Microbiol** 1996 Oct;34(10):2569-71

Studies on prevalence of Strongyloides infection in Holambra and Maceió, Brazil, by the agar plate faecal culture method. Kobayashi J, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul-Aug;38(4):279-84

Reactive arthritis induced by Strongyloides stercoralis. Brocq O, et al. **Rev Rhum Engl Ed** 1996 Mar;63(3):217-9 (12 ref.)

[Chronic recurrent subileus caused by Strongyloides stercoralis infection under immunosuppressive therapy (letter; comment)] Franzen C, et al. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1209; discussion 1209-10. Comment on: Dtsch Med Wochenschr 1996 May 31;121(22):723-6. **(Ger)**

[Chronic recurrent subileus caused by Strongyloides stercoralis infection under immunosuppressive therapy (letter; comment)] Hennemann HH. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1208-9; discussion 1209-10. Comment on: Dtsch Med Wochenschr 1996 May 31;121(22):723-6. **(Ger)**

[The low sensitivity of the larval culture method (Harada-Mori) in the diagnosis of strongyloidiasis] dos Santos JI, et al. **Rev Soc Bras Med Trop** 1996 Jan-Feb; 29(1):51-2 **(Por)**

PHYSIOLOGY

Strongyloides stercoralis: maintenance of exceedingly chronic infections. Mansfield LS, et al. **Am J Trop Med Hyg** 1996 Dec;55(6):617-24

STRONGYLOIDIASIS

Strongyloides cardiomyopathy [letter] Rodriguez MA. **Alaska Med** 1997 Jan-Mar;39(1):30

Disseminated Strongyloides stercoralis infection in an immunocompetent patient [letter; comment] Husni RN, et al. **Clin Infect Dis** 1996 Sep;23(3):663. Comment on: Clin Infect Dis 1995 Dec;21(6):1377, 1459.

Strongyloidiasis. Mahmoud AA. **Clin Infect Dis** 1996 Nov; 23(5):949-52; quiz 953 (11 ref.)

Strongyloidiasis. The protean parasitic infection. Schneider JH, et al. **Postgrad Med** 1997 Sep;102(3):177-84 (24 ref.)

Pulmonary manifestations of strongyloidiasis. Wehner JH, et al. **Semin Respir Infect** 1997 Jun;12(2):122-9 (79 ref.)

COMPLICATIONS

Strongyloides stercoralis infection mimicking relapse in a child with small noncleaved cell lymphoma. Sandlund JT, et al. **Am J Clin Oncol** 1997 Apr;20(2):215-6

Fatal strongyloidiasis in a patient with ulcerative colitis after corticosteroid therapy. Leung VK, et al. **Am J Gastroenterol** 1997 Aug;92(8):1383-4

Fulminant, systemic strongyloidiasis in AIDS. Cahill KM, et al. **Ann Trop Med Parasitol** 1996 Jun;90(3):313-8

Strongyloides stercoralis infection in patients infected with human immunodeficiency virus [letter; comment] Guerin JM, et al. **Clin Infect Dis** 1997 Jan;24(1):95. Comment on: Clin Infect Dis 1996 Apr;22(4):736. Comment on: Clin Infect Dis 1996 Apr;22(4):737.

Hyperacute pneumonitis in a patient with overwhelming Strongyloides stercoralis infection. Casati A, et al. **Eur J Anaesthesiol** 1996 Sep;13(5):498-501

Strongyloides stercoralis infection in a patient with Crohn's disease [letter] Pasqualini L, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):401-3

Intestinal strongyloidiasis--a rare opportunistic infection. Sreenivas DV, et al. **Indian J Gastroenterol** 1997 Jul; 16(3):105-6

Systemic strongyloidiasis complicating HIV: a promising response to ivermectin. Heath T, et al. **Int J STD AIDS** 1996 Jul;7(4):294-6

Pulmonary hyperinfection with Strongyloides stercoralis. Huang MS, et al. **J Formos Med Assoc** 1996 Jul;95(7):551-4

Reactive arthritis induced by Strongyloides stercoralis. Brocq O, et al. **Rev Rhum Engl Ed** 1996 Mar;63(3):217-9 (12 ref.)

[A case of bacterial meningitis induced by strongyloidiasis] Higashiyama Y, et al. **Kansenshogaku Zasshi** 1997 Jul; 71(7):680-3 (Eng. Abstr.) **(Jpn)**

[Strongyloides stercoralis infection in a cortico-dependent patient with chronic airflow obstruction] Cremades Romero MJ, et al. **Arch Bronconeumol** 1996 Oct;32(8):430-1 (Eng. Abstr.) **(Spa)**

[Diarrhea and eosinophilia in a patient with bronchial asthma] Nevado N, et al. **Enferm Infecc Microbiol Clin** 1996 May; 14(5):327-8 **(Spa)**

DIAGNOSIS

Strongyloides stercoralis hyperinfection diagnosed by gastric cytology in an AIDS patient [letter] Sarangarajan R, et al. **AIDS** 1997 Mar;11(3):394-6

Strongyloides stercoralis infection in patients infected with human immunodeficiency virus [letter; comment] Guerin JM, et al. **Clin Infect Dis** 1997 Jan;24(1):95. Comment on: Clin Infect Dis 1996 Apr;22(4):736. Comment on: Clin Infect Dis 1996 Apr;22(4):737.

Photo quiz [see comments] Raffalli J, et al. **Clin Infect Dis** 1995 Dec;21(6):1377, 1459. Comment in: Clin Infect Dis 1996 Sep;23(3):663.

Strongyloides stercoralis infection in a patient with Crohn's disease [letter] Pasqualini L, et al. **Eur J Clin Microbiol Infect Dis** 1997 May;16(5):401-3

Patterns of detection of Strongyloides stercoralis in stool specimens: implications for diagnosis and clinical trials. Dreyer G, et al. **J Clin Microbiol** 1996 Oct;34(10):2569-71

Immunocytochemistry of mucosal changes in patients infected with the intestinal nematode Strongyloides stercoralis. Coutinho HB, et al. **J Clin Pathol** 1996 Sep; 49(9):717-20

An evaluation of the modified agar plate method for diagnosis of Strongyloides stercoralis. Moustafa MA. **J Egypt Soc Parasitol** 1997 Aug;27(2):571-9

Colonic Strongyloides stercoralis infection masquerading as ulcerative colitis. Weight SC, et al. **J R Coll Surg Edinb** 1997 Jun;42(3):202-3

Cryptosporidium, Isospora and Strongyloides in AIDS [letter; comment] Ghorpade MV, et al. **Natl Med J India** 1996 Jul-Aug;9(4):201. Comment on: Natl Med J India 1996 Jan-Feb;9(1):17-9.

Studies on prevalence of Strongyloides infection in Holambra and Maceió, Brazil, by the agar plate faecal culture method. Kobayashi J, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul-Aug;38(4):279-84

[Recurrent dyspnea attacks, urticaria, epigastric symptoms and eosinophilia] Bassetti S. **Schweiz Rundsch Med Prax** 1997 Feb 11;86(7):264-5 **(Ger)**

[Strongyloidosis. IV. Immunodiagnosis] Soroczan W. **Wiad Parazytol** 1996;42(4):381-94 (46 ref.) (Eng. Abstr.) **(Pol)**

[Strongyloidosis. II. Clinical manifestations] Soroczan W. **Wiad Parazytol** 1996;42(3):291-312 (101 ref.) (Eng. Abstr.) **(Pol)**

[The low sensitivity of the larval culture method (Harada-Mori) in the diagnosis of strongyloidiasis] dos Santos JI, et al. **Rev Soc Bras Med Trop** 1996 Jan-Feb; 29(1):51-2 **(Por)**

[Hyperinfection by Strongyloides stercoralis as first manifestation of AIDS (letter)] Montero A, et al. **Medicina (B Aires)** 1996;56(3):319-20 **(Spa)**

DRUG THERAPY

Cure by ivermectin of a chronic, persistent, intestinal strongyloidosis. Adenusi AA. **Acta Trop** 1997 Sep 10; 66(3):163-7

Short report: long-term serum antibody isotype responses to Strongyloides stercoralis filariform antigens in eight patients treated with ivermectin. Lindo JF, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):474-6

A comparative trial of a single-dose ivermectin versus three days of albendazole for treatment of Strongyloides stercoralis and other soil-transmitted helminth infections in children. Marti H, et al. **Am J Trop Med Hyg** 1996 Nov; 55(5):477-81

Systemic strongyloidiasis complicating HIV: a promising response to ivermectin. Heath T, et al. **Int J STD AIDS** 1996 Jul;7(4):294-6

From the Food and Drug Administration. Nightingale SL. **JAMA** 1997 Mar 5;277(9):703

A randomized comparative study of albendazole and thiabendazole in chronic strongyloidiasis. Pitisuttithum P, et al. **Southeast Asian J Trop Med Public Health** 1995 Dec; 26(4):735-8

Parasite-specific serum IgG following successful treatment of endemic strongyloidiasis using ivermectin. Lindo JF, et al. **Trans R Soc Trop Med Hyg** 1996 Nov-Dec; 90(6):702-3

STRONGYLOIDIASIS

EPIDEMIOLOGY

Studies on prevalence of Strongyloides infection in Holambra and Maceió, Brazil, by the agar plate faecal culture method. Kobayashi J, et al. **Rev Inst Med Trop Sao Paulo** 1996 Jul-Aug;38(4):279-84

[Infection by Strongyloides stercoralis in the county of Safor, Spain] Cremades Romero MJ, et al. **Med Clin (Barc)** 1997 Jul 5;109(6):212-5 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Effect of Strongyloides stercoralis infection and eosinophilia on age at onset and prognosis of adult T-cell leukemia. Plumelle Y, et al. **Am J Clin Pathol** 1997 Jan;107(1):81-7

IMMUNOLOGY

Chronicity in Strongyloides stercoralis infections: dichotomy of the protective immune response to infective and autoinfective larvae in a mouse model. Brigandi RA, et al. **Am J Trop Med Hyg** 1997 Jun;56(6):640-6

Correlation between human T cell lymphotropic virus type-1 and Strongyloides stercoralis infections and serum immunoglobulin E responses in residents of Okinawa, Japan. Hayashi J, et al. **Am J Trop Med Hyg** 1997 Jan; 56(1):71-5

Short report: long-term serum antibody isotype responses to Strongyloides stercoralis filariform antigens in eight patients treated with ivermectin. Lindo JF, et al. **Am J Trop Med Hyg** 1996 Nov;55(5):474-6

Larval somatic antigens effective in inducing an IgG response and protection against Strongyloides papillosus infection. Ooba C, et al. **J Helminthol** 1996 Sep;70(3):231-5

Immunity to a challenge infection of Strongyloides stercoralis third-stage larvae in the jird. Nolan TJ, et al. **Parasite Immunol** 1995 Nov;17(11):599-604

IL-12 eliminates the Th-2 dependent protective immune response of mice to larval Strongyloides stercoralis. Rotman HL, et al. **Parasite Immunol** 1997 Jan;19(1):29-39

Strongyloides stercoralis: identification of antigens in natural human infections from endemic areas of the United States. Siddiqui AA, et al. **Parasitol Res** 1997;83(7):655-8

Early increase of gut intraepithelial mast cell precursors following Strongyloides venezuelensis infection in mice. Tegoshi T, et al. **Parasitology** 1997 Feb;114 (Pt 2):181-7

Two cases of fatal strongyloidiasis in Hong Kong. Ho PL, et al. **Pathology** 1997 Aug;29(3):324-6

Tacrolimus allows autoinfective development of the parasitic nematode Strongyloides stercoralis [letter] Nolan TJ, et al. **Transplantation** 1996 Oct 15;62(7):1038

Strongyloidiasis in a patient with IgA deficiency. Leung VK, et al. **Trop Gastroenterol** 1995 Oct-Dec;16(4):27-30

METABOLISM

Expression of CD23, CD32, Mac-1 and other adhesion molecules in eosinophils in strongyloidiasis and HTLV-I-positive patients. Kakazu T, et al. **Int Arch Allergy Immunol** 1996;111 Suppl 1:46-50

PARASITOLOGY

Strongyloides stercoralis infection mimicking relapse in a child with small noncleaved cell lymphoma. Sandlund JT, et al. **Am J Clin Oncol** 1997 Apr;20(2):215-6

Strongyloides stercoralis: maintenance of exceedingly chronic infections. Mansfield LS, et al. **Am J Trop Med Hyg** 1996 Dec;55(6):617-24

Parasitic diseases in immunocompromised hosts. Cryptosporidiosis, isosporiasis, and strongyloidiasis. Heyworth MF. **Gastroenterol Clin North Am** 1996 Sep; 25(3):691-707 (116 ref.)

[Chronic recurrent subileus caused by Strongyloides stercoralis infection under immunosuppressive therapy (letter; comment)] Franzen C, et al. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1209; discussion 1209-10. Comment on: Dtsch Med Wochenschr 1996 May 31;121(22):723-6. **(Ger)**

[Chronic recurrent subileus caused by Strongyloides stercoralis infection under immunosuppressive therapy (letter; comment)] Hennemann HH. **Dtsch Med Wochenschr** 1996 Sep 27;121(39):1208-9; discussion 1209-10. Comment on: Dtsch Med Wochenschr 1996 May 31;121(22):723-6. **(Ger)**

PATHOLOGY

[66-year-old man with an unusual anastomosis ulcer after Billroth II stomach resection] Baniewicz W, et al. **Internist (Berl)** 1997 Mar;38(3):255-8 **(Ger)**

PREVENTION & CONTROL

Passive transfer of immune serum reduces the L1/adult ratio of worms recovered from the intestines of Strongyloides stercoralis-infected gerbils. Thompson F, et al. **J Parasitol** 1997 Feb;83(1):170-3

RADIOGRAPHY

Intestinal strongyloidiasis mimicking a tumour. Schanaider A, et al. **Eur J Surg** 1996 May;162(5):429-30

[Features of pulmonary strongyloidiasis with radiology and computerized tomography. Report of a case] Polverosi R, et al. **Radiol Med (Torino)** 1996 Nov;92(5):644-7 **(Ita)**

VETERINARY

Dynamics of Anguillicola crassus (Nematoda: Dracunculoidea) larval infection in paratenic host fishes of Lake Balaton, Hungary. Székely C. **Acta Vet Hung** 1995; 43(4):401-22

Foal diarrhoea between 1991 and 1994 in the United Kingdom associated with Clostridium perfringens, rotavirus, Strongyloides westeri and Cryptosporidium spp. Netherwood T, et al. **Epidemiol Infect** 1996 Oct; 117(2):375-83

A pilot trial on the experimental infection of springbok (Antidorcas marsupialis) and eland (Taurotragus oryx) with a goat strain of Strongyloides papillosus [editorial] Norval AG, et al. **J S Afr Vet Assoc** 1996 Jun;67(2):72-3

Efficacy of an in-feed formulation of ivermectin against adult worms and somatic larvae of Strongyloides ransomi. Barth D, et al. **Vet Parasitol** 1996 Oct 15;65(1-2):89-97

STRONGYLOSIS, EQUINE see **STRONGYLE INFECTIONS, EQUINE**

STRONGYLUS

DRUG EFFECTS

Identification and characterization of a pyrantel pamoate resistant cyathostome population. Chapman MR, et al. **Vet Parasitol** 1996 Nov 15;66(3-4):205-12

GENETICS

Strongylus asini (Nematoda, Strongyloidea): genetic relationships with other Strongylus species determined by ribosomal DNA. Hung GC, et al. **Int J Parasitol** 1996 Dec; 26(12):1407-11

IMMUNOLOGY

Protection of yearling ponies against Strongylus vulgaris by foalhood vaccination. Klei TR, et al. **Equine Vet J Suppl** 1989 Jun;(7):2-7

ISOLATION & PURIFICATION

Plasma thromboxane B2 levels in horses experimentally infected with Strongylus vulgaris. Cambridge H, et al. **Equine Vet J Suppl** 1989 Jun;(7):14-8

Comparison of the reappearance of strongyle eggs on foals, yearlings and adult horses after treatment with ivermectin or pyrantel. Boersema JH, et al. **Vet Q** 1996 Mar;18(1):7-9

PHYSIOLOGY

The effect of Strongylus vulgaris larvae on equine intestinal myoelectrical activity. Lester GD, et al. **Equine Vet J Suppl** 1989 Jun;(7):8-13

STRONTIUM

Relations between nasopharyngeal carcinoma and magnesium and other alkaline earth elements in soils in China. Bølviken B, et al. **Med Hypotheses** 1997 Jan;48(1):21-5

ADVERSE EFFECTS

Rickets and soil strontium. Ozgür S, et al. **Arch Dis Child** 1996 Dec;75(6):524-6

ANALYSIS

Measurement of strontium in serum, urine, bone, and soft tissues by Zeeman atomic absorption spectrometry. D'Haese PC, et al. **Clin Chem** 1997 Jan;43(1):121-8

Modeling the washoff of 90Sr and 137Cs from an experimental plot established in the vicinity of the Chernobyl reactor. Nair SK, et al. **Health Phys** 1996 Dec; 71(6):896-909

Autopsy of a cadaver containing strontium-89-chloride. Schraml FV, et al. **J Nucl Med** 1997 Mar;38(3):380-2

Strontianite in coral skeletal aragonite. Greegor RB, et al. **Science** 1997 Mar 7;275(5305):1452-4

DIAGNOSTIC USE

Preclinical screening of the applicability of strontium as a marker for intestinal calcium absorption. Sips AJ, et al. **Am J Physiol** 1997 Mar;272(3 Pt 1):E422-8

HISTORY

[Quantitative nutritional reconstruction by trace element data] Gröbmeyer A. **Anthropol Anz** 1997 Jun;55(2):179-82 (Eng. Abstr.) **(Ger)**

METABOLISM

Reconstitution of the quinoprotein methanol dehydrogenase from inactive Ca(2+)-free enzyme with Ca2+, Sr2+ or Ba2+. Goodwin MG, et al. **Biochem J** 1996 Nov 1;319 (Pt 3):839-42

Effects of strontium ions on growth and dissolution of hydroxyapatite and on bone mineral detection. Christoffersen J, et al. **Bone** 1997 Jan;20(1):47-54

Characterisation of alpha 1A Ba2+, Sr2+ and Ca2+ currents recorded with the ancillary beta 1-4 subunits. Mangoni ME, et al. **Receptors Channels** 1997;5(1):1-14

Analysis of sections of implanted macroporous calcium phosphate bone substitutes by proton-induced X-emission method and energy-dispersive spectrometry. Frayssinet P, et al. **Scanning** 1997 Jun;19(4):253-7

PHARMACOKINETICS

Intestinal absorption of strontium chloride in healthy volunteers: pharmacokinetics and reproducibility. Sips AJ, et al. **Br J Clin Pharmacol** 1996 Jun;41(6):543-9

Analysis of strontium metabolism in humans on the basis of the Techa river data. Tolstykh EI, et al. **Radiat Environ Biophys** 1997 Feb;36(1):25-9

PHARMACOLOGY

Extracellular acidification related to the stimulation of catecholamines release by strontium in the bovine adrenal medulla. Viglione PN, et al. **Arch Physiol Biochem** 1996 Dec;104(7):833-7

Oscillatory signaling and insulin release in human pancreatic beta-cells exposed to strontium. Hellman B, et al. **Endocrinology** 1997 Aug;138(8):3161-5

Strontium ions stimulate phosphoinositide metabolism in human blood platelets. Best LC, et al. **FEBS Lett** 1981 Nov 2;134(1):88-90

Surface Charges of K channels. Effects of strontium on five cloned channels expressed in Xenopus oocytes. Elinder F, et al. **J Gen Physiol** 1996 Oct;108(4):325-32

Ca2+ or Sr2+ partially rescues synaptic transmission in hippocampal cultures treated with botulinum toxin A and C, but not tetanus toxin. Capogna M, et al. **J Neurosci** 1997 Oct 1;17(19):7190-202

Sr2+ and quantal events at excitatory synapses between mouse hippocampal neurons in culture. Abdul-Ghani MA, et al. **J Physiol (Lond)** 1996 Aug 15;495 (Pt 1):113-25

Effects of the application of aluminium, strontium and magnesium solutions to the leaf surface of maize, and determinations of these elements by ICP-AES. Csikkel-Szolnoki A, et al. **Magnes Res** 1996 Dec; 9(4):263-72

Electrophysiological properties of the human N-type Ca2+ channel: I. Channel gating in Ca2+, Ba2+ and Sr2+ containing solutions. McNaughton NC, et al. **Neuropharmacology** 1997 Jul;36(7):895-915

THERAPEUTIC USE

Prediction of tumor absorbed dose by Tc-99m-MDP scintigraphy prior to treatment with Sr-89. Manetou A, et al. **Anticancer Res** 1997 May-Jun;17(3B):1845-7

Dentine hypersensitivity and the placebo response. A comparison of the effect of strontium acetate, potassium nitrate and fluoride toothpastes. West NX, et al. **J Clin Periodontol** 1997 Apr;24(4):209-15

Quantitation of biochemical markers of bone resorption following strontium-89-chloride therapy for metastatic prostatic carcinoma. Papatheofanis FJ. **J Nucl Med** 1997 Aug;38(8):1175-9

[Effectiveness of the radioactive strontium (89Sr) chloride agent, SMS.2P for pain palliation in patients with metastatic bone tumor in phase III multicenter clinical trial] Kimura Y, et al. **Kaku Igaku** 1996 Dec;33(12):1347-58 (Eng. Abstr.) **(Jpn)**

[89Sr Therapy for pain relief in patients with bone metastases] Koizumi K, et al. **Kaku Igaku** 1996 Nov;33(11):1243-8 (Eng. Abstr.) **(Jpn)**

URINE

Method for actinides and Sr-90 determination in urine samples. Alvarez A, et al. **Appl Radiat Isot** 1996 Sep-Oct; 47(9-10):869-73

STRONTIUM RADIOISOTOPES

[The quantitative parameters of the vertical migration of radionuclides in the soils in different types of meadows] Sanzharova NI, et al. **Radiats Biol Radioecol** 1996 Jul-Aug; 36(4):488-97 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

The treatment of osseous metastases of hormone-refractory prostate cancer with external beam radiotherapy and Strontium-89. De Ruysscher D, et al. **Acta Urol Belg** 1996 Sep;64(3):13-9 (44 ref.)

ADVERSE EFFECTS

Hyperbaric oxygen therapy for beta-radiation-induced scleral necrosis. Green MO, et al. **Ophthalmology** 1995 Jul; 102(7):1038-41

ANALYSIS

Individual quantification of 89Sr and 99Sr in nuclear reactor effluent. Senaratne UP, et al. **Health Phys** 1997 Oct; 73(4):601-10

Strontium-90 activity in monthly milk samples from Greece. Florou H, et al. **J Dairy Sci** 1996 Sep;79(9):1679-82

Autopsy of a cadaver containing strontium-89-chloride. Schraml FV, et al. **J Nucl Med** 1997 Mar;38(3):380-2

Pilot study of the Urals population by tooth electron paramagnetic resonance dosimetry. Romanyukha AA, et al. **Radiat Environ Biophys** 1996 Nov;35(4):305-10

Variations in the concentration of plutonium, strontium-90

and total alpha-emitters in human teeth collected within the British Isles. O'Donnell RG, et al.
Sci Total Environ 1997 Aug 18;201(3):235-43

Spatial variation in the vulnerability of Norwegian Arctic counties to radiocaesium deposition. Wright SM, et al.
Sci Total Environ 1997 Aug 25;202(1-3):173-84

[Radionuclides in the benthofauna in the region of the location of the Komsomolets atomic submarine (the Norwegian Sea)] Kuznetsov AP, et al.
Izv Akad Nauk Ser Biol 1996 Jul-Aug;(4):467-71 (Eng. Abstr.) **(Rus)**

CHEMISTRY

Fluorescence lifetime measurement via a radionuclide-scintillation light source and analog cross correlation. Burden DL, et al. **Anal Chem** 1997 May 15; 69(10):1936-41

DIAGNOSTIC USE

Intratracheal instillation versus intratracheal-inhalation of tracer particles for measuring lung clearance function. Oberdörster G, et al. **Exp Lung Res** 1997 Jan-Feb; 23(1):17-34

PHARMACOKINETICS

The use of dietary calcium intake of dairy ruminants to predict the transfer coefficient of radiostrontium to milk. Howard BJ, et al. **Radiat Environ Biophys** 1997 Feb; 36(1):39-43

PHARMACOLOGY

Localization of megakaryocytes in normal mice and following administration of platelet antiserum, 5-fluorouracil, or radiostrontium: evidence for the site of platelet production. Davis RE, et al. **Exp Hematol** 1997 Jul;25(7):638-48

THERAPEUTIC USE

Bone marrow suppression after strontium-89 therapy and local radiation therapy in patients with diffuse marrow involvement. Powsner RA, et al. **Clin Nucl Med** 1997 Mar; 22(3):147-50

Postoperative pterygium prevention by radiotherapy with strontium-90 beta-rays. Pajonk F, et al.
Front Radiat Ther Oncol 1997;30:259-64

Quantitation of biochemical markers of bone resorption following strontium-89-chloride therapy for metastatic prostatic carcinoma. Papatheofanis FJ. **J Nucl Med** 1997 Aug;38(8):1175-9

Procedure guideline for bone pain treatment: 1.0. Society of Nuclear Medicine. Silberstein E, et al. **J Nucl Med** 1996 May;37(5):881-4

Radiosensitization with low-dose carboplatin enhances pain palliation in radioisotope therapy with strontium-89. Sciuto R, et al. **Nucl Med Commun** 1996 Sep;17(9):799-804

Systemic radionuclide therapy with strontium chloride Sr 89 for painful skeletal metastases in prostate and breast cancer. Patel BR, et al. **South Med J** 1997 May;90(5):506-8

Experience with 89-strontium treatment of painful osseous metastases from breast cancer. Pizzocaro C, et al.
Tumori 1997 Mar-Apr;83(2):558-9

[89Sr Therapy for pain relief in patients with bone metastases] Koizumi K, et al. **Kaku Igaku** 1996 Nov;33(11):1243-8 (Eng. Abstr.) **(Jpn)**

[Criteria for assessing the efficacy of brachytherapy of uveal melanomas, complications of therapy and there prevention] Brovkina AF, et al. **Vestn Oftalmol** 1997 May-Jun; 113(3):14-6 (Eng. Abstr.) **(Rus)**

STROPHANTHIDIN

ANALOGS & DERIVATIVES

Decreased inotropic but relatively preserved relaxation response to cyclic adenosine monophosphate-dependent agents in myopathic human myocardium. Gutstein DE, et al. **J Card Fail** 1996 Dec;2(4):285-92

PHARMACOLOGY

Actions of the digitalis analogue strophanthidin on action potentials and L-type calcium current in single cells isolated from the rabbit atrioventricular node. Hancox JC, et al. **Br J Pharmacol** 1996 Jul;118(6):1447-54

The electrogenic effects of Na(+)-K(+)-ATPase in rat auditory thalamus. Senatorov VV, et al.
J Physiol (Lond) 1997 Jul 15;502 (Pt 2):375-85

G-STROPHANTHIN see OUABAIN

STROPHANTHINS

METABOLISM

[Equilibrium and kinetic parameters of interaction between peroxidase conjugates of strophanthin and anti-peroxidase antibodies] Tarun EI, et al. **Prikl Biokhim Mikrobiol** 1997 Mar-Apr;33(2):172-9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[The pentoxifylline and corglycon treatment of patients with circulatory encephalopathy against a background of atherosclerotic lesions of the major cerebral arteries] Ishchenko MM, et al. **Lik Sprava** 1996 Jan-Feb;(1-2):143-5 (Eng. Abstr.) **(Ukr)**

TOXICITY

[Pharmacological correction of impaired tolerance to strophanthin in a model of cardiac decompensation] Galenko-Iaroshevskiĭ PA, et al. **Biull Eksp Biol Med** 1994 May;117(5):487-90 **(Rus)**

[Correction with cordaron of changes in beta-glucosidase activity induced by toxic effect of strophanthin K and simulated heart decompensation] Galenko-Iaroshevskiĭ PA, et al. **Biull Eksp Biol Med** 1996 Jun;121(6):645-7 **(Rus)**

[Correction with cordarone of changes in cathepsin D induced by simulated circulatory insufficiency and toxic effect of strophanthin] Galenko-Iarpsjevskiĭ' PA, et al. **Biull Eksp Biol Med** 1996 Oct;122(10):407-9 **(Rus)**

STRUCTURAL GENES see GENES, STRUCTURAL

STRUCTURE-ACTIVITY RELATIONSHIP

Structural determinants associated with risk of human developmental toxicity. Ghanooni M, et al.
Am J Obstet Gynecol 1997 Apr;176(4):799-805; discussion 805-6

Minimal experimental requirements for structural identifiability in linear compartmental models. The software 'IDEXMIN'. Mérino JA, et al.
Arzneimittelforschung 1996 Mar;46(3):324-8

Pancreatic lipase structure-function relationships by domain exchange. Carrière F, et al. **Biochemistry** 1997 Jan 7; 36(1):239-48

Structure-function analysis of the cloned opiate receptors: peptide and small molecule interactions. Blake AD, et al. **Chem Biol** 1996 Dec;3(12):967-72 (28 ref.)

Estimation of octanol-water partition coefficients from a molecular similarity parameter. Cash GG. **Chemosphere** 1996 Nov;33(10):2081-7

Research to develop a predicting system of mammalian subacute toxicity, (3). Construction of a predictive toxicokinetics model. Yamaguchi T, et al. **Chemosphere** 1996 Dec;33(12):2441-68

QSAR predictive of contact allergy: scope and limitations. Hostýnek JJ, et al. **Curr Probl Dermatol** 1996;25:18-27 (34 ref.)

Quantitative structure-activity relationship and cytotoxicity. Mize NK, et al. **Curr Probl Dermatol** 1995;23:224-9

Symposium on structure-based drug design. Rutgers, New Jersey, June 13-16, 1995. Proceedings and abstracts.
Drug Des Discov 1996 Apr;13(3-4):1-168

Predictive quantitative structure-activity relationships (QSAR) analysis of beta 3-adrenergic ligands. Blin N, et al. **Drug Des Discov** 1995 Apr;12(4):297-311

Quantitative structure-activity relationships in substrates, inducers, and inhibitors of cytochrome P4501 (CYP1). Lewis DF. **Drug Metab Rev** 1997 Aug;29(3):589-650 (64 ref.)

Frequency and occurrence of LD50 values for materials in the workplace. Agrawal MR, et al. **J Appl Toxicol** 1996 Sep-Oct;16(5):407-22

Structure-activity studies on monoamine oxidase inhibitors by calorimetric and quantum mechanical calculations. Cambria A, et al. **J Enzyme Inhib** 1996;10(4):215-229

Smart region definition: a new way to improve the predictive ability and interpretability of three-dimensional quantitative structure-activity relationships. Pastor M, et al. **J Med Chem** 1997 May 9;40(10):1455-64

Screening structural-functional relationships of neuropharmacologically active organic compounds at the nicotinic acetylcholine receptor. Barrantes GE, et al.
Neuropharmacology 1997 Mar;36(3):269-79

Potential use of additivity of mutational effects in simplifying protein engineering. Skinner MM, et al.
Proc Natl Acad Sci U S A 1996 Oct 1;93(20):10753-7

Serendipity meets precision: the integration of structure-based drug design and combinatorial chemistry for efficient drug discovery. Salemme FR, et al.
Structure 1997 Mar 15;5(3):319-24 (28 ref.)

STRUCTURE, MOLECULAR see MOLECULAR STRUCTURE

STRUMA OVARII

Diagnosis and treatment of disseminated struma ovarii with malignant transformation. Vadmal MS, et al.
Gynecol Oncol 1997 Mar;64(3):541-6

COMPLICATIONS

Struma ovarii presenting as acute pseudo-Meigs syndrome with an elevated CA 125 level. Bethune M, et al.
Aust N Z J Obstet Gynaecol 1996 Aug;36(3):372-3

DIAGNOSIS

Struma ovarii: MR appearances. Yamashita Y, et al.
Abdom Imaging 1997 Jan-Feb;22(1):100-2

Malignant struma ovarii. A case report and review of the literature. Berghella V, et al. **Gynecol Obstet Invest** 1997; 43(1):68-72 (20 ref.)

Struma ovarii: MR findings. Dohke M, et al.
J Comput Assist Tomogr 1997 Mar-Apr;21(2):265-7

PATHOLOGY

Struma ovari--a rare gynecological tumor. Raina A, et al.
Acta Oncol 1997;36(5):533-4

[Struma ovarii—a rare tumor in gynecological practice] Popov I, et al. **Akush Ginekol (Sofiia)** 1996;35(4):41-5 (26 ref.) (Eng. Abstr.) **(Bul)**

[Ovarian goiter with hyperthyroidism. A case report] Hamel P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1996; 25(8):797-8 (Eng. Abstr.) **(Fre)**

[Struma ovarii or malignant ovarian goiter. A case] Barrande G, et al. **Presse Med** 1997 Jun 7;26(19):900-2 (21 ref.) (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

Radiotherapy with iodine-131 in recurrent malignant struma ovarii [letter; comment] Mango L, et al.
Eur J Nucl Med 1997 Feb;24(2):233. Comment on: Eur J Nucl Med 1996 Jan;23(1):91-4.

STRYCHNINE

ADVERSE EFFECTS

Strychnine-like multifocal myoclonus and seizures in extremely high-dose opioid administration: treatment strategies. Hagen N, et al. **J Pain Symptom Manage** 1997 Jul;14(1):51-8

ANALOGS & DERIVATIVES

Brucine as a potent inducer of CYP2B3, the third member of the CYP2B subfamily P450 in rats. Yamada H, et al.
Biol Pharm Bull 1996 Feb;19(2):291-3

ANTAGONISTS & INHIBITORS

Neuronal model of tactile allodynia produced by spinal strychnine: effects of excitatory amino acid receptor antagonists and a mu-opiate receptor agonist. Sorkin LS, et al. **Pain** 1996 Dec;68(2-3):283-92

CHEMISTRY

Processing of nux vomica. VII. Antinociceptive effects of crude alkaloids from the processed and unprocessed seeds of Strychnos nux-vomica in mice. Cai B, et al.
Biol Pharm Bull 1996 Jan;19(1):127-31

METABOLISM

Interactions of glycine and strychnine with their receptor recognition sites in mouse spinal cord. O'Connor V, et al.
Neurochem Int 1996 Oct;29(4):423-34

PHARMACOLOGY

Influence of picrotoxin and strychnine on the spectral sensitivity of the turtle ERG b- and d-wave: I. Dark adaptation. Kupenova P, et al. **Acta Physiol Scand** 1997 Mar;159(3):217-25

Influence of picrotoxin and strychnine on the spectral sensitivity of the turtle ERG b- and d-waves: II. Light adaptation. Vitanova L, et al. **Acta Physiol Scand** 1997 Mar; 159(3):227-35

Roles of GABAergic inhibition for the binaural processing of multiple sound sources in the inferior colliculus. Pollak GD. **Ann Otol Rhinol Laryngol Suppl** 1997 May;168:44-54

Innocuous hair deflection evokes a nociceptive-like activation of catechol oxidation in the rat locus coeruleus following intrathecal strychnine: a biochemical index of allodynia using in vivo voltammetry. Milne B, et al.
Brain Res 1996 Apr 29;718(1-2):198-202

Effects of GABA and glycine receptor antagonists on the activity and PAG-induced inhibition of rat dorsal horn neurons. Peng YB, et al. **Brain Res** 1996 Oct 14; 736(1-2):189-201

Interaction of thiocolchicoside with [3H]strychnine binding sites in rat spinal cord and brainstem. Cimino M, et al.
Eur J Pharmacol 1996 Dec 27;318(1):201-4

Influence of aminophylline and strychnine on the protective activity of excitatory amino acid antagonists against maximal electroshock-induced convulsions in mice. Tutka P, et al. **J Neural Transm** 1996;103(3):307-14

Glycinergic transmission regulates dendrite size in organotypic culture. Sanes DH, et al. **J Neurobiol** 1996 Dec;31(4):503-11

Pharmacological block of the electrogenic sodium pump disrupts rhythmic bursting induced by strychnine and bicuculline in the neonatal rat spinal cord. Ballerini L, et al. **J Neurophysiol** 1997 Jan;77(1):17-23

Spinal strychnine alters response properties of nociceptive-specific neurons in rat medial thalamus. Sherman SE, et al. **J Neurophysiol** 1997 Aug;78(2):628-37

Localization of rhythmogenic networks responsible for spontaneous bursts induced by strychnine and bicuculline

STRYCHNINE

in the rat isolated spinal cord. Bracci E, et al. **J Neurosci** 1996 Nov 1;16(21):7063–76

Effects of strychnine–insensitive glycine receptor ligands in rats discriminating dizocilpine or phencyclidine from saline. Witkin JM, et al. **J Pharmacol Exp Ther** 1997 Jan; 280(1):46–52

Effect of strychnine on rat locus coeruleus neurones during sleep and wakefulness. Darracq L, et al. **Neuroreport** 1996 Dec 20;8(1):351–5

Strychnine eliminates reciprocation and augmentation of respiratory bursts of the in vitro frog brainstem. Kimura N, et al. **Neurosci Lett** 1997 Mar 28;225(1):9–12

Strychnine blocks inhibitory postsynaptic potentials elicited in masseter motoneurons by sensory stimuli during carbachol–induced motor atonia. Kohlmeier KA, et al. **Neuroscience** 1997 Jun;78(4):1195–202

Strychnine–sensitive modulation is selective for non–noxious somatosensory input in the spinal cord of the rat. Sherman SE, et al. **Pain** 1996 Aug;66(2–3):321–30

Role of the strychnine–insensitive glycine binding site in the nucleus accumbens and anterodorsal striatum in sensorimotor gating: a behavioral and microdialysis study. Kretschmer BD, et al. **Psychopharmacology (Berl)** 1997 Mar;130(2):131–8

[The ultrastructure of the synapses in the upper layers of the cat cerebral cortex after applying strychnine] Kutateladze II, et al. **Morfologiia** 1997;111(1):18–24 (Eng. Abstr.) **(Rus)**

POISONING

Homicide by strychnine poisoning. Benomran FA, et al. **Med Sci Law** 1996 Jul;36(3):271–3

TOXICITY

Strychnine–dependent allodynia in the urethane–anesthetized rat is segmentally distributed and prevented by intrathecal glycine and betaine. Sherman SE, et al. **Can J Physiol Pharmacol** 1995 Dec;73(12):1698–705

Different postnatal development of convulsions and lethality induced by strychnine in rats. Kubová H, et al. **Pharmacol Toxicol** 1995 Sep;77(3):219–24

Pentylenetetrazol and strychnine convulsions in brain weight selected mice. Bogdanov NN, et al. **Seizure** 1997 Apr; 6(2):135–8

STUART FACTOR see **FACTOR X**

STUART–PROWER FACTOR see **FACTOR X**

STUDENT DROPOUTS

Substance use in the US college–age population: differences according to educational status and living arrangement. Gfroerer JC, et al. **Am J Public Health** 1997 Jan;87(1):62–5

Health risk and behaviour of out–of–school 16–year–olds in New South Wales. Tresidder J, et al. **Aust N Z J Public Health** 1997 Apr;21(2):168–74

Do extracurricular activities protect against early school dropout? Mahoney JL, et al. **Dev Psychol** 1997 Mar; 33(2):241–53

Rethinking race and attrition in nursing programs: a hermeneutic inquiry. Jordan JD. **J Prof Nurs** 1996 Nov–Dec;12(6):382–90

Medical student attrition: a 10–year survey in one medical school. Simpson KH, et al. **Med Educ** 1996 May;30(3):172–8

[Lower frequency of dropout and less troubles. Experiences with interview–based admissions to medical education] Areskog NH, et al. **Lakartidningen** 1996 Sep 25;93(39):3385, 3388–90 **(Swe)**

PSYCHOLOGY

School leaving: a longitudinal perspective including neighborhood effects. Ensminger ME, et al. **Child Dev** 1996 Oct;67(5):2400–16

Sexual behaviour, and knowledge and attitude towards HIV/AIDS among out of school youth in Bahir Dar Town, northwest Ethiopia. Fantahun M, et al. **Ethiop Med J** 1996 Oct;34(4):233–42

The peer relations of dropouts: a comparative study of at–risk and not at–risk youths. Ellenbogen S, et al. **J Adolesc** 1997 Aug;20(4):355–67

Effect of underemployment on school–leavers' self–esteem. Prause JA, et al. **J Adolesc** 1997 Jun;20(3):243–60

Academic success among students at risk for school failure. Finn JD, et al. **J Appl Psychol** 1997 Apr;82(2):221–34

Self–determination and persistence in a real–life setting: toward a motivational model of high school dropout. Vallerand RJ, et al. **J Pers Soc Psychol** 1997 May; 72(5):1161–76

Academic performance is not a viable determinant of physical therapy students' burnout. Balogun JA, et al. **Percept Mot Skills** 1996 Aug;83(1):21–2

The effects of unemployment on psychiatric illness during young adulthood. Fergusson DM, et al. **Psychol Med** 1997 Mar;27(2):371–81

[Personal problems related to illicit drug use in dropouts compared to students] Cousineau D. **Can J Public Health** 1996 Sep–Oct;87(5):329–32 (Eng. Abstr.) **(Fre)**

STATISTICS & NUMERICAL DATA

Trends in drug use among American Indian students and dropouts, 1975 to 1994. Beauvais F. **Am J Public Health** 1996 Nov;86(11):1594–8

The effect of school dropout rates on estimates of adolescent substance use among three racial/ethnic groups. Swaim RC, et al. **Am J Public Health** 1997 Jan;87(1):51–5

Student drop–out from UK dental schools. Drummond JR, et al. **Br Dent J** 1997 May 10;182(9):347–9

The interrelationship between substance use and precocious transitions to adult statuses. Krohn MD, et al. **J Health Soc Behav** 1997 Mar;38(1):87–103

STUDENT HEALTH SERVICES

Descriptive epidemiology of contact dermatitis in a university student population. Shenefelt PD. **Am J Contact Dermat** 1996 Jun;7(2):88–93

An emergency dental service for students: 4–year findings. Sinclair J, et al. **Community Dent Health** 1997 Jun; 14(2):89–91

Developing and using a patient satisfaction survey: a case study. Dansky KH, et al. **J Am Coll Health** 1996 Sep; 45(2):83–8

The merits of peer education programs [letter] Drellishak R. **J Am Coll Health** 1997 Mar;45(5):218

Peer education: a commentary [editorial; comment] Goodhart F. **J Am Coll Health** 1997 Jan;45(4):191. Comment on: J Am Coll Health 1997 Jan;45(4):187–9.

Peer education: a viewpoint and critique [see comments] Lindsey BJ. **J Am Coll Health** 1997 Jan;45(4):187–9. Comment in: J Am Coll Health 1997 Jan;45(4):191.

Clinic nurses: confronting campus alcohol use on the frontline. Miller JB. **J Am Coll Health** 1997 Mar; 45(5):205–8

Peer interviewing: a student health survey on an urban campus. Mundt MH. **J Am Coll Health** 1996 Mar; 44(5):187–92

How peer education changed peer sexuality educators' self–esteem, personal development, and sexual behavior. Sawyer RG, et al. **J Am Coll Health** 1997 Mar;45(5):211–7

Same–sex rape of male college students. Scarce M. **J Am Coll Health** 1997 Jan;45(4):171–3

Problems and awareness of support services among students at an urban Australian university. Schweitzer RD. **J Am Coll Health** 1996 Sep;45(2):73–7

Research: The cornerstone of college health's future. Steenbarger BN. **J Am Coll Health** 1996 Mar;44(5):193–218

Female circumcision: an emerging concern in college healthcare. Woolard D, et al. **J Am Coll Health** 1997 Mar; 45(5):230–2

Health counselling for university students [letter] Dann TC. **Lancet** 1996 Dec 7;348(9041):1591

ECONOMICS

University fee for student health services [letter] Taha M. **Can Med Assoc J** 1996 Oct 15;155(8):1036

At the crossroads: options for financing college health services in the 21st century. Brindis C, et al. **J Am Coll Health** 1997 May;45(6):279–88

Life after funding: a strategy for survival of a program to prevent substance abuse. Clapp JD, et al. **J Am Coll Health** 1996 Sep;45(2):79–81

Student mental health and funding constraints: a delicate balance. Lore CJ. **J Am Coll Health** 1997 Jul;46(1):43–6

Healthcare reform: a survey of college health services. Mills D, et al. **J Am Coll Health** 1996 Nov;45(3):106–117

METHODS

Cognitive mapping: its use as an assessment tool for client education. Wiginton KL. **J Am Coll Health** 1997 Jan; 45(4):175–7

ORGANIZATION & ADMINISTRATION

Effects of an institutional AIDS prevention intervention: moderation by gender. O'Leary A, et al. **AIDS Educ Prev** 1996 Dec;8(6):516–28

Healthcare reform: a survey of college health services. Mills D, et al. **J Am Coll Health** 1996 Nov;45(3):106–117

The cold clinic: a collaborative nursing effort to benefit students. Morgan SA, et al. **J Am Coll Health** 1997 Jul; 46(1):35–7

Partnership for a nurse practitioner–directed student health primary care center. Hale JF, et al. **J Prof Nurs** 1996 Nov–Dec;12(6):365–72

[Medical management of exchange students traveling to an isolated tropical milieu: an experience in western Ivory Coast] Garnier T. **Med Trop (Mars)** 1996;56(3):297–302 (Eng. Abstr.) **(Fre)**

STATISTICS & NUMERICAL DATA

Student health policies of U.S. medical schools. Diekema DJ, et al. **Acad Med** 1996 Oct;71(10):1090–2

UTILIZATION

A marketing technique to increase visibility and use of health center counseling services. Tentoni SC. **J Am Coll Health** 1997 Sep;46(2):93–5

STUDENT LOANS see **TRAINING SUPPORT**

STUDENT SELECTION see **SCHOOL ADMISSION CRITERIA**

STUDENTS

Influence of BCG vaccination on tuberculin reactivity in healthy Turkish school children [letter] Gülnar SB, et al. **Acta Paediatr** 1997 May;86(5):549

Student responses to economic reform in China. Chunhou Z, et al. **Adolescence** 1996 Fall;31(123):663–76

Relationships between college students' perceptions of their family members and how they interact with one another. Necessary JR, et al. **Adolescence** 1996 Fall;31(123):747–50

Students who work. Ruscoe G, et al. **Adolescence** 1996 Fall; 31(123):625–32

Elementary school students' attitudes toward science and their course of studies in high school. Shamai S. **Adolescence** 1996 Fall;31(123):677–89

The collectivistic nature of ethnic identity development among Asian–American college students. Yeh CJ, et al. **Adolescence** 1996 Fall;31(123):645–61

Peak expiratory flow rate in Nigerian school children. Jaja SI, et al. **Afr J Med Med Sci** 1995 Dec;24(4):379–84

Prevalence and incidence rates of HIV–1 infection in Rwandan students [letter] Baganizi E, et al. **AIDS** 1997 Apr;11(5):686–7

Attitudes about AIDS education and condom availability among parents of high school students in New York City: a focus group approach. Rafferty Y, et al. **AIDS Educ Prev** 1997 Feb;9(1):14–30

Change in junior high school students' AIDS–related knowledge, misconceptions, attitudes, and HIV–preventive behaviors: effects of a school–based intervention. Siegel D, et al. **AIDS Educ Prev** 1995 Dec;7(6):534–43

A proposal for teaching critical thinking to students and practitioners of complementary medicine. Vickers A. **Altern Ther Health Med** 1997 May;3(3):57–62

Deaf students' recall of Spanish vocabulary under three testing conditions [published erratum appears in Am Ann Deaf 1997 Mar;142(1):4] Ammons DK, et al. **Am Ann Deaf** 1996 Dec;141(5):340–5

Teachers' ratings of the communication abilities of their deaf students. Hyde MB, et al. **Am Ann Deaf** 1996 Mar; 141(1):5–10

Sexual knowledge, behavior and sources of information among deaf and hard of hearing college students. Joseph JM, et al. **Am Ann Deaf** 1995 Oct;140(4):338–45

Essential practices as adults read to meet the needs of deaf or hard of hearing students. Luetke–Stahlman B, et al. **Am Ann Deaf** 1996 Oct;141(4):309–20 (176 ref.)

Uptake of polycyclic aromatic hydrocarbons among trainers in a fire–fighting training facility. Feunekes FD, et al. **Am Ind Hyg Assoc J** 1997 Jan;58(1):23–8

Teaching college students better learning skills using self–hypnosis. Wark DM. **Am J Clin Hypn** 1996 Apr; 38(4):277–87

Gender differences in HIV–related self–reported knowledge, attitudes, and behaviors among college students. Dekin B. **Am J Prev Med** 1996 Jul–Aug;12(4 Suppl):61–6

Substance use in the US college–age population: differences according to educational status and living arrangement. Gfroerer JC, et al. **Am J Public Health** 1997 Jan;87(1):62–5

Physical activity in a multiethnic population of third graders in four states. Simons–Morton BG, et al. **Am J Public Health** 1997 Jan;87(1):45–50

The validity of self–reports of smoking: analyses by race/ethnicity in a school sample of urban adolescents. Wills TA, et al. **Am J Public Health** 1997 Jan;87(1):56–61

Specific IgE–dependent sensitization, atopy, and bronchial hyperresponsiveness in apprentices starting exposure to protein–derived agents. Gautrin D, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1841–7

Is prevention of sports injuries a realistic goal? A four–year prospective investigation of sports injuries among physical education students. Twellaar M, et al. **Am J Sports Med** 1996 Jul–Aug;24(4):528–34

Fears and other suspected risk factors for carrying lethal weapons among urban youths of middle–school age. Arria A, et al. **Arch Pediatr Adolesc Med** 1997 Jun;151(6):555–60

Sexual harassment of Chinese college students. Tang CS, et al. **Arch Sex Behav** 1996 Apr;25(2):201–15

Factors influencing smoking behavior in Hong Kong primary schoolchildren: targets for prevention. Peters J, et al. **Asia Pac J Public Health** 1995;8(2):102–8

Assessment of malocclusion of Japanese junior high school pupils aged 12–13 years in Iwate prefecture according to the Dental Aesthetic Index (DAI). Takahashi F, et al. **Asia Pac J Public Health** 1995;8(2):81–4

C1–tuning fork tests in school–aged children. Haapaniemi JJ, et al. **Auris Nasus Larynx** 1996;23:26–32

"What advice would you give to a high school student considering a career in veterinary science?" **Aust Vet J** 1996 Aug;74(2):110–1

Benzodiazepine use by students: risky business [letter] McSherry J. **Can Fam Physician** 1996 Feb;42:234, 236

Mandatory CPR training for students may improve cardiac–arrest survival rate, MDs say. Lyttle J. **Can Med Assoc J** 1996 Oct 15;155(8):1172–4

A peer education model for teaching breast self–examination to undergraduate college women. Maurer F. **Cancer Nurs** 1997 Feb;20(1):49–61

Substance use among rural secondary schools in Zimbabwe:

patterns and prevalence. Khan N, et al. **Cent Afr J Med** 1996 Aug;42(8):223–9

Trends in reproductive health knowledge following a health education intervention among adolescents in Zimbabwe. Rusakaniko S, et al. **Cent Afr J Med** 1997 Jan;43(1):1–6

The use of anabolic–androgenic steroids by Canadian students. Melia P, et al. **Clin J Sport Med** 1996 Jan;6(1):9–14

Adverse events after school leavers received combined tetanus and low dose diphtheria vaccine. Ramsay M, et al. **Commun Dis Rep CDR Rev** 1997 May 2;7(5):R65–7

Management of school leavers given a diphtheria and tetanus vaccine intended for children instead of the intended low dose preparation. Smith G, et al. **Commun Dis Rep CDR Rev** 1997 May 2;7(5):R67–9

From graduate student to ethnic researcher: a challenging journey. Gonzalez V. **Cult Divers Ment Health** 1995; 1(2):107–24

Brief symptom inventory scores of Asian, Asian–American, and European–American college students. Iwamasa GY, et al. **Cult Divers Ment Health** 1995;1(2):149–57

Identification of high-risk groups for irritant contact dermatitis by occupational physicians. Funke U, et al. **Curr Probl Dermatol** 1995;23:64–72

Occupational dermatitis in hairdressing apprentices. Early–onset irritant skin damage. Uter W, et al. **Curr Probl Dermatol** 1995;23:49–55

Immittance findings in school–aged children. Haapaniemi JJ. **Ear Hear** 1996 Feb;17(1):19–27

Prevalence and intensity of S. mansoni infection along the shores of Lake Tana, Ethiopia. Dagnew M. **East Afr Med J** 1996 Dec;73(12):801–4

Prevalence of asthma, allergic rhinitis and dermatitis in primary school children in Uasin Gishu district, Kenya. Esamai F, et al. **East Afr Med J** 1996 Jul;73(7):474–8

Epidemiology of schistosomiasis in Kampala, Uganda. Kabatereine NB, et al. **East Afr Med J** 1996 Dec; 73(12):795–800

Zimbabwean teenagers' knowledge of AIDS and other sexually transmitted diseases. Kasule J, et al. **East Afr Med J** 1997 Feb;74(2):76–81

Knowledge of cervical cancer in teenage school children in Trinidad. Orrett FA, et al. **East Afr Med J** 1996 Jun; 73(6):400–3

Physical punishment of elementary school children in urban and rural communities in Ethiopia. Ketsela T, et al. **Ethiop Med J** 1997 Jan;35(1):23–33

Risk profiles for non–communicable diseases in rural and urban schoolchildren in the Republic of Cameroon. Proctor MH, et al. **Ethn Dis** 1996 Autumn;6(3–4):235–43

Eating habits, food and health related attitudes and beliefs reported by French students. Monneuse MO, et al. **Eur J Clin Nutr** 1997 Jan;51(1):46–53

Prevalence of hepatitis A, B, and C markers in school children of a rural area of Crete, Greece. Lionis C, et al. **Eur J Epidemiol** 1997 Jun;13(4):417–20

Social deprivation and tooth decay in Scottish schoolchildren. Jones CM, et al. **Health Bull (Edinb)** 1997 Jan;55(1):11–5

Developing capacities of youth as lay health advisors: a case study with high school students. Berkley–Patton J, et al. **Health Educ Behav** 1997 Aug;24(4):481–94

Interest in a stepped approach model (SAM): identification of recruitment strategies for university alcohol programs. Black DR, et al. **Health Educ Q** 1996 Feb;23(1):98–114

Are two interventions worse than none? Joint primary and secondary prevention of eating disorders in college females. Mann T, et al. **Health Psychol** 1997 May;16(3):215–25

Programme for participation of NSS students [letter] Kathe VJ, et al. **Indian J Lepr** 1996 Jul–Sep;68(3):261–2

Trends of smoking among medical students. Venkataraman S, et al. **Indian J Med Res** 1996 Nov;104:316–20

Self–esteem, eating problems, and psychological well–being in a cohort of schoolgirls aged 15–16: a questionnaire and interview study. Button EJ, et al. **Int J Eat Disord** 1997 Jan;21(1):39–47

Hearing impairment and otitis media in a rural primary school in south India. Jacob A, et al. **Int J Pediatr Otorhinolaryngol** 1997 Mar 6;39(2):133–8

Comparison of Eating Disorder Inventory (EDI–2) scores of male bodybuilders to the male college student subgroup. Anderson SL, et al. **Int J Sport Nutr** 1996 Sep;6(3):255–62

Dietary intake and anthropometric measures in a Spanish students group. Quiles JL, et al. **Int J Vitam Nutr Res** 1996; 66(4):371–7

Plasma fibrinogen in Israeli Moslem and Jewish school–children: distribution and relation to other cardiovascular risk factors. The Petah Tikva project. Zahavi I, et al. **Isr J Med Sci** 1996 Dec;32(12):1207–12

Prevalence of ADHD and comorbid disorders among elementary school children screened for disruptive behavior. August GJ, et al. **J Abnorm Child Psychol** 1996 Oct;24(5):571–95

Characteristics of students who bring weapons to school. Bailey SL, et al. **J Adolesc Health** 1997 Apr;20(4):261–70

Violence and mental health problems among urban high school students. Pastore DR, et al. **J Adolesc Health** 1996 May;18(5):320–4

Abnormalities in weight status, eating attitudes, and eating behaviors among urban high school students: correlations with self–esteem and anxiety. Pastore DR, et al. **J Adolesc Health** 1996 May;18(5):312–9

AIDS knowledge, concerns, and behavioral changes among inner–city high school students. Sikand A, et al. **J Adolesc Health** 1996 May;18(5):325–8

Concurrent and prospective screening for problem drinking among college students. Werner MJ, et al. **J Adolesc Health** 1996 Apr;18(4):276–85

Results from the 1995 National College Health Risk Behavior Survey. Douglas KA, et al. **J Am Coll Health** 1997 Sep; 46(2):55–66

Physician advice and tobacco use: a survey of 1st–year college students. Foote JA, et al. **J Am Coll Health** 1996 Nov;45(3):129–32

Health problems of college students. Grace TW. **J Am Coll Health** 1997 May;45(6):243–50 (79 ref.)

Changing the perception of the norm: a strategy to decrease binge drinking among college students. Haines M, et al. **J Am Coll Health** 1996 Nov;45(3):134–40

The importance of healthy communities of higher education. Jackson ML, et al. **J Am Coll Health** 1997 May; 45(6):237–41 (24 ref.)

Cardiovascular disease risk factors in black college students. Kelley GA, et al. **J Am Coll Health** 1997 Jan;45(4):165–9

New Jersey college students' high–risk behavior: will we meet the health objectives for the year 2000? Lewis DF, et al. **J Am Coll Health** 1996 Nov;45(3):119–26

HIV/AIDS risk in heterosexual college students. A review of a decade of literature. Lewis JE, et al. **J Am Coll Health** 1997 Jan;45(4):147–58 (76 ref.)

Average weekly alcohol consumption: drinking percentiles for American college students. Meilman PW, et al. **J Am Coll Health** 1997 Mar;45(5):201–4

Assuring college student health [editorial] Patrick K. **J Am Coll Health** 1997 May;45(6):235–6

Health risk behaviors among California college students. Patrick K, et al. **J Am Coll Health** 1997 May;45(6):265–72

Principles for assuring the health of college students: a California perspective. Patrick K, et al. **J Am Coll Health** 1997 May;45(6):289–93

Health trends among college freshmen. Sax LJ. **J Am Coll Health** 1997 May;45(6):252–62

Sorority women's body size perceptions and their weight–related attitudes and behaviors. Schulken ED, et al. **J Am Coll Health** 1997 Sep;46(2):69–74

Binge drinking, tobacco, and illicit drug use and involvement in college athletics. A survey of students at 140 American colleges. Wechsler H, et al. **J Am Coll Health** 1997 Mar; 45(5):195–200

Binge drinking among college students: a comparison of California with other states. Wechsler H, et al. **J Am Coll Health** 1997 May;45(6):273–7

Among young adults, college students and graduates practiced more healthful habits and made more healthful food choices than did nonstudents. Georgiou CC, et al. **J Am Diet Assoc** 1997 Jul;97(7):754–9

Implementing the community–university model: dietetics students collaborate with Volunteers of America. Lee JD, et al. **J Am Diet Assoc** 1997 Mar;97(3):297–9

A 33–yr follow–up of peak oxygen uptake and related variables of former physical education students. Astrand PO, et al. **J Appl Physiol** 1997 Jun;82(6):1844–52 (28 ref.)

College majors and career choices of minority high school student research apprentices. Thurmond VB, et al. **J Assoc Acad Minor Phys** 1996;7(1):22–4

Aggressiveness, dominance, developmental factors, and serum cholesterol level in college males. Greene RE Jr, et al. **J Behav Med** 1995 Dec;18(6):569–80

The relations of school staff smokers' attitudes about modeling smoking behavior in students and their receptivity to no–smoking policy. Galaif ER, et al. **J Drug Educ** 1996;26(4):313–22

Intraclass correlation among measures related to alcohol use by school aged adolescents: estimates, correlates and applications in intervention studies. Murray DM, et al. **J Drug Educ** 1996;26(3):207–30

Students' self–reported substance use by grade level and gender. Nagel L, et al. **J Drug Educ** 1996;26(3):289–94

Drug and alcohol use by Canadian university athletes: a national survey. Spence JC, et al. **J Drug Educ** 1996; 26(3):275–87

Drug education and the college athlete: evaluation of a decision–making model. Tricker R, et al. **J Drug Educ** 1996; 26(2):159–81

Smoking habits and respiratory symptoms: observations among college students and professionals. Ghosal AG, et al. **J Indian Med Assoc** 1996 Feb;94(2):55–7

Preferred sources of AIDS information, risk perceptions, and risk behaviors among inner–city community college students. Rich JA, et al. **J Natl Med Assoc** 1996 Feb; 88(2):87–93

Health status of Victorian special school children [corrected and republished article originally printed in J Paediatr Child Health 1995 Oct;31(5):423–7] [see comments] Ackland MJ, et al. **J Paediatr Child Health** 1995 Dec; 31(6):571–5. Comment in: J Paediatr Child Health 1996 Aug;32(4):353–4.

Health status of Victorian special school students [letter; comment] Van Haeringen AR, et al. **J Paediatr Child Health** 1996 Aug;32(4):353–4. Comment on: J Paediatr Child Health 1995 Dec;31(6):571–5.

Audit of medical students' experiences of paediatric teaching: a tool to monitor and improve clinical teaching [see comments] Cowan FJ, et al. **J R Coll Physicians Lond** 1996 Jan–Feb;30(1):58–60. Comment in: J R Coll Physicians Lond 1996 May–Jun;30(3):271.

Bridging student health risks and academic achievement through comprehensive school health programs. Symons CW, et al. **J Sch Health** 1997 Aug;67(6):220–7 (73 ref.)

College students' high–risk sexual behavior following alcohol consumption. Anderson PB, et al. **J Sex Marital Ther** 1996 Winter;22(4):259–64

Identification of social cognitive variables as predictors of safer sex behavior and intent in heterosexual college students. Raj A. **J Sex Marital Ther** 1996 Winter; 22(4):247–58

Poor sleep in adolescents: a study of 869 17–year–old Italian secondary school students. Manni R, et al. **J Sleep Res** 1997 Mar;6(1):44–9

Alcohol and drug use in UK university students. Webb E, et al. **Lancet** 1996 Oct 5;348(9032):922–5

Dietary assessment of male students: a study of what they wasted while in residence. al–Othman AA, et al. **Nutr Health** 1997;11(3):197–206

Scores on self–actualization for gifted junior high school students. Lewis JD. **Psychol Rep** 1996 Aug;79(1):59–64

Health promotion needs of students in a college environment. Fish C, et al. **Public Health Nurs** 1996 Apr;13(2):104–11

The epidemiology of sports injuries in school–aged children. Sørensen L, et al. **Scand J Med Sci Sports** 1996 Oct; 6(5):281–6

School age outcome in low birth weight preterm infants. Leonard CH, et al. **Semin Perinatol** 1997 Jun;21(3):240–53 (52 ref.)

Housing distress among high school students. Vissing YM, et al. **Soc Work** 1997 Jan;42(1):31–41

Harm reduction for alcohol–use–related problems among college students. Cronin C. **Subst Use Misuse** 1996 Dec; 31(14):2029–37

One–year follow up of college student occasional smokers [letter] Hines D, et al. **Tob Control** 1996 Autumn;5(3):231

Age at menarche amongst school girls in a high altitude Nigerian town. Ekele BA, et al. **West Afr J Med** 1996 Jul–Sep;15(3):170–2

Seroprevalence of rubella antibodies and effects of vaccination among healthy university women students in Korea. Park KS, et al. **Yonsei Med J** 1996 Dec;37(6):420–6

[Profile of intestinal helminthiases in school aged children in the city of Abidjan] Menan EI, et al. **Bull Soc Pathol Exot** 1997;90(1):51–4 (Eng. Abstr.) **(Fre)**

[Medical management of exchange students traveling to an isolated tropical milieu: an experience in western Ivory Coast] Garnier T. **Med Trop (Mars)** 1996;56(3):297–302 (Eng. Abstr.) **(Fre)**

[Biological, behavioral and intellectual rhythms in pupils during the school–day] Montagner H, et al. **Pathol Biol (Paris)** 1996 Jun;44(6):519–33 (Eng. Abstr.) **(Fre)**

[Illegal drug use by secondary school children in Belgium: north–south differences] Navarro FJ, et al. **Rev Epidemiol Sante Publique** 1996 Oct;44(5):395–406 (41 ref.) (Eng. Abstr.) **(Fre)**

[Awakening, sleep and length of sleep in children] Woringer V. **Rev Med Suisse Romande** 1997 May;117(5):407–11 **(Fre)**

[Survey of parasitic prevalence in school–aged children in Guinea (1995)] Gyorkos TW, et al. **Sante** 1996 Nov–Dec; 6(6):377–81 (Eng. Abstr.) **(Fre)**

[Influence of socioeconomic conditions on the occurrence of intestinal helminthiases. Study of 1001 students in Abidjan (Ivory Coast)] Menan EI, et al. **Sante** 1997 May–Jun;7(3):205–9 (Eng. Abstr.) **(Fre)**

[Consumption, attitudes and knowledge on compared alcoholic beverages among high school and university students] Cocchioni M, et al. **Ann Ig** 1997 Jan–Feb; 9(1):89–97 **(Ita)**

[Survey on knowledge about AIDS among high school and university students] Pellegrini MG, et al. **Ann Ig** 1997 Jan–Feb;9(1):81–7 **(Ita)**

[Some life style elements in students from public and non–public secondary schools] Polus–Szeniawska E. **Rocz Panstw Zakl Hig** 1996;47(3):351–6 (Eng. Abstr.) **(Pol)**

[Medico–physiological aspects of individually differentiated teaching of senior pupils] Antropova MV, et al. **Fiziol Cheloveka** 1997 Jan–Feb;23(1):98–102 **(Rus)**

[Inter–hemispheric cerebral asymmetry and motor abilities] Efimova IV. **Fiziol Cheloveka** 1996 Jan–Feb;22(1):35–9 **(Rus)**

[Effect of hypoxic training on the health of school children residing in ecologically unfavorable regions] Glazachev OS, et al. **Fiziol Cheloveka** 1996 Jan–Feb;22(1):88–92 **(Rus)**

[The characteristics of external respiratory function in students] Burkhanov AI, et al. **Gig Sanit** 1997 Mar–Apr; (2):32–4 **(Rus)**

[The characteristics of the central nervous system indices of students in a physical education department] Burkhanov AI, et al. **Gig Sanit** 1996 May–Jun;(3):39–40 **(Rus)**

[Health status of mining technical school students under present ecological conditions of Donets Basin] Kharkovenko NM, et al. **Gig Sanit** 1997 May–Jun;(3):30–3 (Eng. Abstr.) **(Rus)**

[Present–day occupational hygiene and health status of college students] Minnibaev TSh, et al. **Med Tr Prom Ekol** 1996;(10):15–8 (Eng. Abstr.) **(Rus)**

STUDENTS

[The student family as a social priority in a contemporary society] Grinina OV, et al.
Probl Sotsialnoi Gig Istor Med 1997 Jan-Feb;(1):10-5 (Eng. Abstr.) **(Rus)**

[On the role of the teacher in the hygienic education of students] Katsnelbogen AG, et al.
Probl Sotsialnoi Gig Istor Med 1997 Jan-Feb;(1):53-5 (Eng. Abstr.) **(Rus)**

[Monitoring food consumption and nutritional status of Moscow schoolchildren in 1992-1994. 2. Anthropometric evaluation of nutritional status, effect of social factors on the character and status of nutrition] Martinchik AN, et al. **Vopr Pitan** 1997;(1):3-9 (Eng. Abstr.) **(Rus)**

[Epidemiological study of the symptomatology of childhood depression in Madrid school-age population] Polaino-Lorente A, et al. **An Esp Pediatr** 1997 Apr; 46(4):344-50 (Eng. Abstr.) **(Spa)**

[Epidemiological study of nocturnal enuresis: analysis of associated factors] Rodríguez Fernández LM, et al.
An Esp Pediatr 1997 Mar;46(3):252-8 (Eng. Abstr.) **(Spa)**

[Prevalence of hepatitis B and hepatitis A virus infection among health sciences students in Catalonia, Spain] Bayas JM, et al. **Med Clin (Barc)** 1996 Sep 14;107(8):281-4 (Eng. Abstr.) **(Spa)**

[Underestimation of energy intake in a group of young female university students of Madrid] Ortega Anta RM, et al.
Rev Clin Esp 1997 Aug;197(8):545-9 (Eng. Abstr.) **(Spa)**

[HCV and HBV seropositivity in university students of the State of Nuevo León, Mexico] Flores-Castañeda MS, et al. **Rev Gastroenterol Mex** 1996 Oct-Dec;61(4):327-31 (Eng. Abstr.) **(Spa)**

[What, how much and when the university student drinks] Araneda JM, et al. **Rev Med Chil** 1996 Mar;124(3):377-88 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Preliminary development of the School Health Intensity Rating Scale. Burt CJ, et al. **J Sch Health** 1996 Oct; 66(8):286-90

EDUCATION see EDUCATION

LEGISLATION & JURISPRUDENCE

Second, let no harm be done: an American antiimmigration dilemma. d'Oronzio JC. **Camb Q Healthc Ethics** 1996 Summer;5(3):467-72

Disciplining children with disabilities under the Individuals with Disabilities Education Act. Ramsingh OM.
J Contemp Health Law Policy 1995 Fall;12(1):155-81 (211 ref.)

PSYCHOLOGY

Stress and depressed mood in medical students, law students, and graduate students at McGill University. Helmers KF, et al. **Acad Med** 1997 Aug;72(8):708-14

Patterns of use of smokeless tobacco and the unidimensional model of drug involvement. Hu FB, et al.
Addict Behav 1997 Mar-Apr;22(2):257-61

Drinking location and risk of alcohol-impaired driving among high school seniors. Lee JA, et al. **Addict Behav** 1997 May-Jun;22(3):387-93

Decisional balance and stage of change for adolescent drinking. Migneault JP, et al. **Addict Behav** 1997 May-Jun; 22(3):339-51

Are psychosocial factors related to smoking in grade-6 students? Pederson LL, et al. **Addict Behav** 1997 Mar-Apr; 22(2):169-81

Correlates of college student marijuana use: results of a US National Survey. Bell R, et al. **Addiction** 1997 May; 92(5):571-81

Reliability and validity of Palestinian Student Alienation Scale. Abdallah T. **Adolescence** 1997 Summer; 32(126):367-71

Mediators of adolescents' stress in a college preparatory environment. Ainslie RC, et al. **Adolescence** 1996 Winter; 31(124):913-24

Sexual assault in school, mental health and suicidal behaviors in adolescent women in Canada. Bagley C, et al.
Adolescence 1997 Summer;32(126):361-6

Achievement motivation and level of aspiration: adolescent Ethiopian immigrants in the Israeli education system. Horowitz TR, et al. **Adolescence** 1997 Spring; 32(125):169-80

Dating-partner preferences among a group of inner-city African-American high school students. Smith SP.
Adolescence 1996 Spring;31(121):79-90

Agency, communion, and achievement motivation. Strage A. **Adolescence** 1997 Summer;32(126):299-312

The nature and amount of support college-age adolescents request and receive from parents. Valery JH, et al.
Adolescence 1997 Summer;32(126):323-37

In search of effective programs to address students' emotional distress and behavioral problems part III: student assessment of school-based support groups. Wassef A, et al. **Adolescence** 1996 Spring;31(121):1-16

Curricular track, career choice, and androgyny among adolescent females. Wulff MB, et al. **Adolescence** 1997 Spring;32(125):43-9

AIDS-related beliefs, attitudes and intentions among Malawian students in three secondary schools. Bandawe CR, et al. **AIDS Care** 1996 Apr;8(2):223-32

The impact of the transition to high school on the self-system and perceived social context of poor urban youth. Seidman E, et al. **Am J Community Psychol** 1996 Aug;24(4):489-515

Teacher consultation: impact on teachers' effectiveness and students' cognitive competence and achievement. Goldman RK, et al. **Am J Orthopsychiatry** 1997 Jul;67(3):374-84

Attachment, self-concept, and academic motivation in high-school students. Learner DG, et al.
Am J Orthopsychiatry 1997 Jul;67(3):485-92

The meaning of college for survivors of sexual abuse: higher education and the older female college student. LeBlanc JB, et al. **Am J Orthopsychiatry** 1996 Jul;66(3):468-73

Condom-carrying behavior among college students [letter] Dahl DW, et al. **Am J Public Health** 1997 Jun;87(6):1059-60

A threat in the air. How stereotypes shape intellectual identity and performance. Steele CM. **Am Psychol** 1997 Jun;52(6):613-29

School refusal and truancy. Berg I. **Arch Dis Child** 1997 Feb; 76(2):90-1

Adolescent vegetarians. A behavioral profile of a school-based population in Minnesota. Neumark-Sztainer D, et al. **Arch Pediatr Adolesc Med** 1997 Aug;151(8):833-8

Effect of breakfast timing on the cognitive functions of elementary school students. Vaisman N, et al.
Arch Pediatr Adolesc Med 1996 Oct;150(10):1089-92

The prevalence and nature of biphobia in heterosexual undergraduate students. Eliason MJ. **Arch Sex Behav** 1997 Jun;26(3):317-26

A longitudinal study of veterinary students and recent graduates. 3. Perceptions of veterinary education. Heath TJ, et al. **Aust Vet J** 1996 Oct;74(4):301-4

A longitudinal study of veterinary students and recent graduates. 4. Gender issues. Heath TJ, et al.
Aust Vet J 1996 Oct;74(4):305-8

A longitudinal study of veterinary students and recent graduates. 2. Views of the veterinary profession. Heath TJ, et al. **Aust Vet J** 1996 Oct;74(4):297-300

Law school performance predicted by explanatory style. Satterfield JM, et al. **Behav Sci Law** 1997 Winter; 15(1):95-105

Effects of menstrual cycle moods and symptoms on academic performance: a study of senior secondary school students. Boyle GJ. **Br J Educ Psychol** 1997 Mar;67 (Pt 1):37-49

Changes in control beliefs in Portuguese primary school pupils as a consequence of the employment of self-assessment strategies. Fernandes M, et al.
Br J Educ Psychol 1996 Sep;66 (Pt 3):301-13

Career preferences of medical students: influence of a new four-week attachment in general practice [see comments] Morrison JM, et al. **Br J Gen Pract** 1996 Dec;46(413):721-5 . Comment in: Br J Gen Pract 1997 Mar;47(416):184-5.

Career preferences of medical students: some unanswered questions [editorial] Morrissy JR. **Br J Gen Pract** 1996 Dec; 46(413):703-4

Personality factors related to the prevalence of somatic symptoms and medical complaints in a healthy student population. Neitzert CS, et al. **Br J Med Psychol** 1997 Mar; 70 (Pt 1):93-101

Gender, status and 'powerless' speech: interactions of students and lecturers. McFadyen RG.
Br J Soc Psychol 1996 Sep;35 (Pt 3):353-67

Stress characteristics in schoolchildren related to different educational strategies and school climates. Havlinova M, et al. **Cent Eur J Public Health** 1995 Nov;3(4):205-9

Recall of childhood neglect and physical abuse as differential predictors of current psychological functioning. Gauthier L, et al. **Child Abuse Negl** 1996 Jul;20(7):549-59

Childhood sexual abuse and adult loneliness and network orientation. Gibson RL, et al. **Child Abuse Negl** 1996 Nov; 20(11):1087-93

Reports of severe physical punishment and exposure to animal cruelty by inmates convicted of felonies and by university students. Miller KS, et al. **Child Abuse Negl** 1997 Jan;21(1):59-82

Recognition of adjustment disorder in college athletes: a case study. Shell D, et al. **Clin J Sport Med** 1996 Jan;6(1):60-2

Stress, social support, and college adjustment among Latino students. Jarama Alvan SL, et al.
Cult Divers Ment Health 1996;2(3):193-203

Ethnic diversification in clinical psychology graduate training. Toia A, et al. **Cult Divers Ment Health** 1997; 3(3):193-206

Subclinical obsessive-compulsive disorder in college students. Morris MR, et al. **Depress Anxiety** 1996-97; 4(5):233-6

Membership of the University of the Third Age (U3A) and perceived well-being. Mitchell RA, et al.
Disabil Rehabil 1997 Jun;19(6):244-8

Relationship between sexual experience and non-sexual behaviours among secondary school students in Arusha, Tanzania. Lugoe WL, et al. **East Afr Med J** 1995 Oct; 72(10):635-40

Psychosocial correlates of substance use among undergraduates in Ilorin University, Nigeria. Ndom RJ, et al. **East Afr Med J** 1996 Aug;73(8):541-7

Prediction of self-destructive behaviour among Makerere University students. Ovuga EB, et al. **East Afr Med J** 1996 Jul;73(7):448-52

Risk factors towards self-destructive behaviour among fresh students at Makerere University. Ovuga EB, et al.
East Afr Med J 1995 Nov;72(11):722-7

Interactions with grandparents and great-grandparents: a comparison of activities, influences, and relationships. Roberto KA, et al. **Int J Aging Hum Dev** 1996;43(2):107-17

The multiple functions of the supervisor: a summary of the seventh IPA conference of training analysis. Vollmer Filho G, et al. **Int J Psychoanal** 1996 Aug;77 (Pt 4):813-8 (0 ref.)

Knowledge about and attitudes toward persons with developmental disabilities: an assessment of Israeli social work students. Duvdevany I, et al. **Int J Rehabil Res** 1995 Dec;18(4):362-7

Attitudes toward disability and beliefs regarding support for a university student with quadriplegia. Gannon PM, et al.
Int J Rehabil Res 1996 Jun;19(2):163-9

Students' stress in China, Japan and Korea: a transcultural study. Kim KI, et al. **Int J Soc Psychiatry** 1997 Summer; 43(2):87-94

Disordered eating in female collegiate athletes and collegiate females in an advanced program of study: a preliminary investigation. Ashley CD, et al. **Int J Sport Nutr** 1996 Dec; 6(4):391-401

Reported health concerns of Israeli high school students--differences by age and sex. Palti H, et al.
Isr J Med Sci 1997 Feb;33(2):123-8

Ego identity status and reported alcohol consumption: a study of first-year college students. Bishop DI, et al.
J Adolesc 1997 Apr;20(2):209-18

Embedded anti-alcohol messages on commercial television: what teenagers perceive. Borzekowski DL.
J Adolesc Health 1996 Nov;19(5):345-52

Students' perceptions of violence in the public schools: the MetLife survey. Everett SA, et al. **J Adolesc Health** 1995 Dec;17(6):345-52

Sports participation in an urban high school: academic and psychologic correlates. Fisher M, et al.
J Adolesc Health 1996 May;18(5):329-34

Student attitudes toward school-based health centers. Santelli J, et al. **J Adolesc Health** 1996 May;18(5):349-56

Perceived social support from family, school, and peers: relationship with emotional and behavioral problems among adolescents. Garnefski N, et al.
J Am Acad Child Adolesc Psychiatry 1996 Dec; 35(12):1657-64

Coping resources and self-perceived well-being of college students who report a parental drinking problem. Hall AE.
J Am Coll Health 1997 Jan;45(4):159-64

Depression and academic impairment in college students. Heiligenstein E, et al. **J Am Coll Health** 1996 Sep; 45(2):59-64

Identifying the social contexts of effective sex refusal. Hennessy M, et al. **J Am Coll Health** 1997 Jul;46(1):27-34

College student reasoning about illness and psychological concepts. Oprendek TS, et al. **J Am Coll Health** 1997 Jul; 46(1):10-9

How peer education changed peer sexuality educators' self-esteem, personal development, and sexual behavior. Sawyer RG, et al. **J Am Coll Health** 1997 Mar;45(5):211-7

Influences on the selection of dietetics as a career. Kobel KA. **J Am Diet Assoc** 1997 Mar;97(3):254-7

Identifying instructional tasks that occasion problem behaviors and assessing the effects of student versus teacher choice among these tasks. Vaughn BJ, et al.
J Appl Behav Anal 1997 Summer;30(2):299-311; quiz 312

A test of the influence of goal orientation on the feedback-seeking process. VandeWalle D, et al.
J Appl Psychol 1997 Jun;82(3):390-400

A comparative study of the awareness and attitude of HIV/AIDS among students living in India and migrants to the United States. Chakraborty J, et al.
J Assoc Physicians India 1996 Apr;44(4):237-9

Casual dimensions of college students' perceptions of physical symptoms. Swartzman LC, et al. **J Behav Med** 1996 Apr; 19(2):95-110

The assessment of the emotional and immunological consequences of examination stress. Vedhara K, et al.
J Behav Med 1996 Oct;19(5):467-78

The development of health protective behaviors among college students. Weiss GL, et al. **J Behav Med** 1996 Apr; 19(2):143-61

Training issues in cognitive-behavioral psychotherapy. Freiheit SR, et al. **J Behav Ther Exp Psychiatry** 1997 Jun; 28(2):79-86

Electroencephalographic evaluation of children without neuropsychiatric disturbances but with poor school performance. Micheloyannis S, et al. **J Child Neurol** 1996 Jul;11(4):309-12

Performance of female college students and sexual abuse survivors on the Brief Symptom Inventory. Bennett SE, et al. **J Clin Psychol** 1996 Sep;52(5):535-41

Leisure motivation in relation to psychosocial adjustment and personality in young offender and high school samples. Reddon JR, et al. **J Clin Psychol** 1996 Nov;52(6):679-85

Structure of health risk behavior among high school students. Basen-Engquist K, et al. **J Consult Clin Psychol** 1996 Aug; 64(4):764-75

Use of the "theme study" as means of curriculum development in continuation high schools. Dent CW, et al.
J Drug Educ 1996;26(4):377-93

Coping, drinking motives, goal attainment expectancies and family models in relation to alcohol use among college students. Karwacki SB, et al. **J Drug Educ** 1996; 26(3):243-55

The effects of internal and external control factors on college students' marijuana use and cessation of use. Lo CC, et al. **J Drug Educ** 1995;25(4):357–77

Perceived dangerousness of recreational drugs. Luce TS, et al. **J Drug Educ** 1995;25(4):297–306

Home alone: is it a risk factor for middle school youth and drug use? Mulhall PF, et al. **J Drug Educ** 1996;26(1):39–48

College students' smoking behavior, perceived stress, and coping styles. Naquin MR, et al. **J Drug Educ** 1996; 26(4):367–76

Stalking on campus: the prevalence and strategies for coping with stalking. Fremouw WJ, et al. **J Forensic Sci** 1997 Jul; 42(4):666–9

Student gender and teaching methods as sources of variability in children's computational arithmetic performance. Hopkins KB, et al. **J Genet Psychol** 1997 Sep;158(3):333–45

Homophobia in heterosexual female undergraduates. Matchinsky DJ, et al. **J Homosex** 1996;31(4):123–8

Changes in attitudes toward homosexuality in college students: implementation of a gay men and lesbian peer panel. Nelson ES, et al. **J Homosex** 1997;33(2):63–81

Sojourner readjustment: mental health of international students after one year's foreign sojourn and its psychosocial correlates. Furukawa T. **J Nerv Ment Dis** 1997 Apr;185(4):263–8

Student expectancies and academic self-concept as predictors of science achievement. House JD. **J Psychol** 1996 Nov; 130(6):679–81

College students' judgements and perceptions of persons with AIDS from different risk groups. Johnson ME, et al. **J Psychol** 1996 Sep;130(5):527–36

Sleep quality versus sleep quantity: relationships between sleep and measures of health, well-being and sleepiness in college students [see comments] Pilcher JJ, et al. **J Psychosom Res** 1997 Jun;42(6):583–96. Comment in: J Psychosom Res 1997 Jun;42(6):513–4.

Knowledge and attitudes to HIV and AIDS and sexual practices among university students in Lusaka, Zambia and London, England: are they so different? Baggaley R, et al. **J R Soc Health** 1997 Apr;117(2):88–94

Preservice elementary teacher's attitudes toward gay and lesbian parenting. Maney DW, et al. **J Sch Health** 1997 Aug;67(6):236–41

Response of African-American adolescents in North Carolina to gun carrying by school mates. Martin SL, et al. **J Sch Health** 1996 Jan;66(1):23–6

Factors associated with fourth grade health education scores on the Maine Educational Assessment. Stroble LP. **J Sch Health** 1997 Feb;67(2):56–61

Using the Youth Risk Behavior Survey to compare risk behaviors of Texas High School and college students. Wiley DC, et al. **J Sch Health** 1997 Feb;67(2):45–9

Gender differences in Arab students' attitudes toward Canadian society and second language learning. Abu-Rabia S. **J Soc Psychol** 1997 Feb;137(1):125–8

Effect of relationship length on the experience, expression, and perceived appropriateness of jealousy. Aune KS, et al. **J Soc Psychol** 1997 Feb;137(1):23–31

Gender and beliefs about work force discrimination in the United States and Australia. Browne BA. **J Soc Psychol** 1997 Feb;137(1):107–16

Practice teachers' responses to a suicidal student. Davidson M, et al. **J Soc Psychol** 1997 Aug;137(4):530–2

Using cooperative learning to enhance the academic and social experiences of freshman student athletes. Dudley BS, et al. **J Soc Psychol** 1997 Aug;137(4):449–59

The relationship between psychological reactance and self-esteem. Hellman CM, et al. **J Soc Psychol** 1997 Feb; 137(1):135–8

The causes and influence of transitional stress among Chinese students in Japan. Jou YH, et al. **J Soc Psychol** 1996 Aug; 136(4):501–9

Explanatory style, family expressiveness, and self-esteem among Asian American and European American college students. Kao EM, et al. **J Soc Psychol** 1997 Aug; 137(4):435–44

Self-esteem and academic streaming in Hong Kong. Kemp S, et al. **J Soc Psychol** 1996 Oct;136(5):651–3

Helping behaviors and the perception of helping intentions among Chinese students. Li F. **J Soc Psychol** 1997 Aug; 137(4):496–501

The availability heuristic: effects of fame and gender on the estimated frequency of male and female names. McKelvie SJ. **J Soc Psychol** 1997 Feb;137(1):63–78

Cooperativeness and bully/victim problems among Australian schoolchildren. Rigby K, et al. **J Soc Psychol** 1997 Jun;137(3):357–68

The perception of an out-group after provocation by one of its members. Ruscher JB, et al. **J Soc Psychol** 1997 Feb; 137(1):5–9

Person perception as a function of marital status and age. Stacy NL, et al. **J Soc Psychol** 1997 Jun;137(3):395–7

Age and gender differences in the self-esteem of Chinese children. Watkins D, et al. **J Soc Psychol** 1997 Jun; 137(3):374–9

Culture and spontaneous self-concept among Filipino college students. Watkins D, et al. **J Soc Psychol** 1997 Aug; 137(4):480–8

Drinking motives predict alcohol-related problems in college students. Carey KB, et al. **J Stud Alcohol** 1997 Jan; 58(1):100–5

Predicting academic problems in college from freshman alcohol involvement. Wood PK, et al. **J Stud Alcohol** 1997 Mar;58(2):200–10

Genital human papillomavirus infections: knowledge, perception of risk, and actual risk in a nonclinic population of young women. Ramirez JE, et al. **J Womens Health** 1997 Feb;6(1):113–21

Dental and life science students: a comparison of approaches to study and course perceptions. Davis JE, et al. **Med Educ** 1996 Nov;30(6):453–8

Attitudes to and knowledge about elderly people: a comparative analysis of students of medicine, English and Computer Science and their teachers. Edwards MJ, et al. **Med Educ** 1996 May;30(3):221–5

Inferred hemispheric style and problem-solving performance. Albaili MA. **Percept Mot Skills** 1996 Oct;83(2):427–34

Consistency of physical therapy students' academic performance. Bohannon RW. **Percept Mot Skills** 1997 Jun; 84(3 Pt 1):1040–2

Self-recognition of alcohol and cigarette dependency among high school seniors. Daughton JM, et al. **Percept Mot Skills** 1997 Aug;85(1):115–20

Environmental risk perception, activism and world-mindedness among samples of British and U.S. college students] Der-Karabetian A, et al. **Percept Mot Skills** 1996 Oct;83(2):541–62

How do nonalcoholics view alcoholics? Groettum G, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1202

The internal/external dimension in psychoepistemic orientation and measures of ability. Hill OW. **Percept Mot Skills** 1996 Jun;82(3 Pt 1):872–4

Dispositional optimism and coping with academic examinations. Lai JC, et al. **Percept Mot Skills** 1996 Aug; 83(1):23–7

Goal confidence and difficulty as predictors of goal attainment in junior high school cross-country runners. Lane AM, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):747–52

Effectiveness of a structured learning strategy on acquisition of game-related gross motor tasks in school settings. Lidor R. **Percept Mot Skills** 1997 Feb;84(1):67–80

Effects of music on assertive behavior during exercise by middle-school-age students. Mills BD. **Percept Mot Skills** 1996 Oct;83(2):423–6

Differences in map representation by Indian and American adolescents. Parameswaran G, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1232–4

Scores on morningness-eveningness and sleep habits of Korean students, Japanese students, and Japanese workers. Park YM, et al. **Percept Mot Skills** 1997 Aug;85(1):143–54

Lack of sex differences among east Ecuadorian school children on geometric figure rotation and face drawings. Pontius AA. **Percept Mot Skills** 1997 Aug;85(1):72–4

Where in the world am I? Sex and handedness differences in knowledge of geography. Snyder PJ, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1379–85

Effectiveness of a training program with physical education students and experienced physical education teachers in scoring the Test of Gross Motor Development. Suomi R, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):771–8

An analysis of students' reasons for studying martial arts. Twemlow SW, et al. **Percept Mot Skills** 1996 Aug; 83(1):99–103

Beliefs in parapsychological events or experiences among college students in a course in experimental parapsychology. Vitulli WF. **Percept Mot Skills** 1997 Aug; 85(1):273–4

Lack of correlations of sense-modality-oriented indices of learning styles with each other and with classroom tasks. Westman AS, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):731–7

Structuring of perceived interrelations among life events for college students. Yamashita T. **Percept Mot Skills** 1997 Jun; 84(3 Pt 1):809–10

Comparison of apprehension about communication in China and the United States. Zhang Y, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1168–70

Cultural distance and its relationship to psychological adjustment of international exchange students. Furukawa T. **Psychiatry Clin Neurosci** 1997 Jun;51(3):87–91

Managing students with behavior disorders: perceived efficacy of interventions. Abelson AG. **Psychol Rep** 1997 Jun;80(3 Pt 2):1167–70

Co-sleeping: gender differences in college students' retrospective reports of sleeping with parents during childhood. Billingham RE, et al. **Psychol Rep** 1996 Dec; 79(3 Pt 2):1423–6

Assessing variability of HIV transmission attitudes and behaviors at an urban northeastern university. Donnelly J, et al. **Psychol Rep** 1996 Apr;78(2):375–83

Self-reported sexual behaviors of high school juniors and seniors in North Dakota. Downey VW, et al. **Psychol Rep** 1997 Jun;80(3 Pt 2):1357–8

Scores on the California Psychological Inventory for men and women majoring in counseling. Downs E, et al. **Psychol Rep** 1996 Apr;78(2):562

Examination-related feedback, mood and helping: a correlational study. Feldt RC, et al. **Psychol Rep** 1997 Feb; 80(1):239–42

College women who initiate assaults on their male partners and the reasons offered for such behavior. Fiebert MS, et al. **Psychol Rep** 1997 Apr;80(2):583–90

Sources used by education students to conceptualize learning disabilities. Flynn M, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):936–8

Positive attitudes towards suntanning and reported tendency to engage in lifestyle behaviors that increase risk of skin cancer. Hanley JM, et al. **Psychol Rep** 1996 Oct;79(2):417–8

Cross-cultural adjustment of Chinese students in Japan. Jou YH, et al. **Psychol Rep** 1996 Apr;78(2):435–44

Intercorrelations of scores on the SONSO Personality Inventory and on the Gordon Personal Profile and Inventory. Kentle RL. **Psychol Rep** 1996 Feb;78(1):255–8

Mathematics achievement and attitudes of senior secondary-school students in Transkei, South Africa. Kulubya MM, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):915–9

Sex and mathematical background as predictors of anxiety and self-efficacy in mathematics. Lussier G. **Psychol Rep** 1996 Dec;79(3 Pt 1):827–33

College students' attitudes toward finding a mate to escape depression: sex differences. McNeill KF, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):745–6

Self-statements, self-esteem, and locus of control in discriminating college students' scores on the Beck Depression Inventory. Madonna S Jr, et al. **Psychol Rep** 1996 Apr;78(2):531–4

Long-term outcomes of early victimization by peers among Japanese male university students: model of a vicious cycle. Matsui T, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):711–20

The "imaginary audience," self-handicapping, and drinking patterns among college students. Montgomery RL, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):783–6

Viewers' ratings of violence presented in justified and unjustified contexts. Moore SR, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):931–5

Social support, need for support, and anxiety among women graduate students. Munir SS, et al. **Psychol Rep** 1997 Apr; 80(2):383–6

Correlates of Portuguese college students' shyness and sociability. Neto F. **Psychol Rep** 1996 Feb;78(1):79–82

Reliability of a knowledge of AIDS scale a replication. Nicholas L, et al. **Psychol Rep** 1996 Oct;79(2):529–30

Coping strategies and anxiety in Italian adolescents. Nigro G. **Psychol Rep** 1996 Dec;79(3 Pt 1):835–9

Interrater reliability of the written expression subtest of the Peabody Individual Achievement Test-Revised: an adolescent and adult sample. Ouchi BY, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1239–47

Perceived happiness of college students measured by Maslow's hierarchy of needs. Pettijohn TF 2nd, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):759–62

Exploring the relation between personality and the appreciation of rock music. Robinson TO, et al. **Psychol Rep** 1996 Feb;78(1):259–69

Use of group hypnosis to improve college students' achievement. Schreiber EH. **Psychol Rep** 1997 Apr; 80(2):636–8

Cross-cultural applicability of contextual family therapy: Iranian and American college students' perceptions of familial and peer relationships. Shokouhi-Behnam S, et al. **Psychol Rep** 1997 Apr;80(2):691–4

Correlations between the Temperament and Character Inventory and the Self-rating Depression Scale among Japanese Students. Tanaka E, et al. **Psychol Rep** 1997 Feb; 80(1):251–4

Relationship between time structure and procrastination. Vodanovich SJ, et al. **Psychol Rep** 1997 Feb;80(1):211–5

Gender and marital differences for risk taking among undergraduates. West GB, et al. **Psychol Rep** 1996 Feb; 78(1):315–20

Acquisition of high-risk behavior by African-American, Latino, and Caucasian middle-school students. Westhoff WW, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):787–95

General well-being and academic performance. Wheeler RJ, et al. **Psychol Rep** 1997 Apr;80(2):581–2

Scores on loneliness of Chinese and American college students. Xie X. **Psychol Rep** 1997 Aug;81(1):317–8

Student interest in activities in a secondary physical education curriculum: an analysis of student subjectivity. Chen A. **Res Q Exerc Sport** 1996 Dec;67(4):424–32

How lay is lay? Chinese students' perceptions of anorexia nervosa in Hong Kong. Lee S. **Soc Sci Med** 1997 Feb; 44(4):491–502

Teenagers' view of violence and social tension in U.S. public schools [see comments] Mushinski M. **Stat Bull Metrop Insur Co** 1996 Jul–Sep;77(3):2–10. Comment in: Stat Bull Metrop Insur Co 1996 Jul–Sep;77(3):11.

Alcohol consumption by undergraduate students. Basten CJ, et al. **Subst Use Misuse** 1996 Aug;31(10):1379–99

Reasons for drinking versus outcome expectancies in the prediction of college student drinking. Cronin C. **Subst Use Misuse** 1997 Aug;32(10):1287–311

Job dissatisfaction and substance use among employed high school students: the moderating influence of active and avoidant coping styles. Frone MR, et al. **Subst Use Misuse** 1997 Apr;32(5):571–85

Social influences: effects of the social environment on the use of alcohol and other drugs. Szalay LB, et al. **Subst Use Misuse** 1996 Feb;31(3):343–373

The prevalence and motivating factors of adolescent smoking at a rural middle school in Taiwan. Wang CS, et al. **Subst Use Misuse** 1996 Aug;31(10):1447–58

The escape theory of suicide in college students: testing a model that includes perfectionism. Dean PJ, et al.

STUDENTS

Suicide Life Threat Behav 1996 Summer;26(2):181–6

Self–reported sexual interest in children: sex differences and psychosocial correlates in a university sample. Smiljanich K, et al. **Violence Vict** 1996 Spring;11(1):39–50

Concern about nutrition and its relation to the food habits of a group of young university students from Madrid (Spain). Ortega RM, et al. **Z Ernahrungswiss** 1997 Mar; 36(1):16–22

[Student and communication: veterinary practice week '97] Kraijer M, et al. **Tijdschr Diergeneeskd** 1997 Feb 15; 122(4):106–7 **(Dut)**

[Prevention of violence among adolescents and children] Boulard P, et al. **Bull Acad Natl Med** 1996 Jun–Jul; 180(6):1503–13 **(Fre)**

[Personal problems related to illicit drug use in dropouts compared to students] Cousineau D. **Can J Public Health** 1996 Sep–Oct;87(5):329–32 (Eng. Abstr.) **(Fre)**

[Comprehension of food label claims by university undergraduate students] Grenier K, et al. **Can J Public Health** 1996 Sep–Oct;87(5):351–3 (Eng. Abstr.) **(Fre)**

[Sensitivity training for debriefing in the school context] Leuenberger JF. **Rev Med Suisse Romande** 1997 May; 117(5):413–8 (0 ref.) **(Fre)**

[Sociability, violence and exclusion] Woringer V. **Rev Med Suisse Romande** 1997 May;117(5):399–405 **(Fre)**

[Survey about the motivation for the study of veterinary medicine in Croatia] Korenčić–Kampl K, et al. **DTW Dtsch Tierarztl Wochenschr** 1996 Apr;103(4):123–5 (Eng. Abstr.) **(Ger)**

[A program for the rehabilitation of mentally ill students] Reker T, et al. **Psychiatr Prax** 1997 May;24(3):138–42 (Eng. Abstr.) **(Ger)**

[Survey of knowledge, attitudes, and opinions about AIDS expressed by a population of high–school students in Rimini] Bergamaschi A, et al. **Ann Ig** 1996 Nov–Dec; 8(6):611–20 **(Ita)**

[A study of the abuse of alcoholic beverage among college students by using the Adolescent Alcohol Involvement Scale (AAIS)] Fukuda T. **Nihon Arukoru Yakubutsu Igakkai Zasshi** 1996 Oct; 31(5):462–74 (Eng. Abstr.) **(Jpn)**

[Student evaluation of the curriculum coordination between two affiliated departments (environmental health versus preventive medicine and community health) in undergraduate medical education] Kahyo H, et al. **Nippon Koshu Eisei Zasshi** 1996 Jan;43(1):62–7 (Eng. Abstr.) **(Jpn)**

[A study of gender difference in student apathy] Munekata T. **Shinrigaku Kenkyu** 1997 Feb;67(6):458–63 (Eng. Abstr.) **(Jpn)**

[The relationship between daily activity rhythms and depression in college freshman] Yajima H. **Shinrigaku Kenkyu** 1996 Dec;67(5):403–9 (Eng. Abstr.) **(Jpn)**

[The psychophysiological functions of students with different achievements in flight training] Makarenko MV. **Fiziol Zh** 1995 Sep–Dec;41(5–6):3–11 (Eng. Abstr.) **(Ukr)**

STATISTICS & NUMERICAL DATA

The prevalence and frequency of drug use among Western Australian metropolitan high school students. Odgers P, et al. **Addict Behav** 1997 May–Jun;22(3):315–25

The social impact of Life Education: estimating drug use prevalence among Victorian primary school students and the statewide effect of the Life Education programme. Hawthorne G. **Addiction** 1996 Aug;91(8):1151–9

Lifestyle and risk of premature sexual activity in a high school population of Seventh–Day Adventists: Valuegenesis 1989. Weinbender ML, et al. **Adolescence** 1996 Summer;31(122):265–81

Upward trend in teenage drug use continues [news] **Am J Health Syst Pharm** 1997 Feb 15;54(4):365, 370

Trends in drug use among American Indian students and dropouts, 1975 to 1994. Beauvais P. **Am J Public Health** 1996 Nov;86(11):1594–8

The School Enrollment–Based Health Insurance program: socioeconomic factors in enrollees' use of health services. Shenkman E, et al. **Am J Public Health** 1996 Dec; 86(12):1791–3

Walking to school and traffic exposure in Australian children. Carlin JB, et al. **Aust N Z J Public Health** 1997 Jun; 21(3):286–92

Crashes of instructional flights. Baker SP, et al. **Aviat Space Environ Med** 1996 Feb;67(2):105–10

Substance abuse differences among students receiving special education school services. Gress JR, et al. **Child Psychiatry Hum Dev** 1996 Summer;26(4):235–46

Israeli college student alcohol use: the association of background characteristics and regular drinking patterns. Isralowitz RE, et al. **Drug Alcohol Depend** 1996 Nov; 42(3):147–53

Risk factors for vulvovaginal candidiasis: a case–control study among university students. Geiger AM, et al. **Epidemiology** 1996 Mar;7(2):182–7

A national assessment of secondary school principals' perceptions of violence in schools. Price JH, et al. **Health Educ Behav** 1997 Apr;24(2):218–29

Influence of school enrollment on adolescent emergency department visits. Waldrop RD, et al. **J Adolesc Health** 1996 Dec;19(6):416–9

Characteristics of users and nonusers of health clinics in inner–city junior high schools. Walter HJ, et al. **J Adolesc Health** 1996 May;18(5):344–8

Weapon carrying and substance abuse among college students. Presley CA, et al. **J Am Coll Health** 1997 Jul; 46(1):3–8

Traumatic injuries among university students in Finland. Sane J, et al. **J Am Coll Health** 1997 Jul;46(1):21–4

In support of changes in veterinary curricula [letter] Nusbaum KE, et al. **J Am Vet Med Assoc** 1997 Jul 1; 211(1):27–8

Students' self–reported substance use by grade level and gender. Nagel L, et al. **J Drug Educ** 1996;26(1):49–56

A profile of rural Texas adolescents who carry handguns to school. Kingery PM, et al. **J Sch Health** 1996 Jan; 66(1):18–22

Patterns of tobacco and alcohol use among sedentary, exercising, nonathletic, and athletic youth. Rainey CJ, et al. **J Sch Health** 1996 Jan;66(1):27–32

Criterion variability in problem–drinking research on college students. Heck EJ, et al. **J Subst Abuse** 1995;7(4):437–47 (43 ref.)

Sexual health and HIV infection [editorial; comment] Bingham JS. **Natl Med J India** 1996 Jul–Aug;9(4):155. Comment on: Natl Med J India 1996 Jul–Aug;9(4):156–9.

Sexual behaviour, drug use and hepatitis B infection in Chandigarh students [see comments] Kaur U, et al. **Natl Med J India** 1996 Jul–Aug;9(4):156–9. Comment in: Natl Med J India 1996 Jul–Aug;9(4):155.

Incidence of head injury: lasting effects among college students and working adults in the general population. Triplett G, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1344–6

High schoolers masturbatory practices: their relationship to sexual intercourse and personal characteristics. Smith AM, et al. **Psychol Rep** 1996 Oct;79(2):499–509

Use of inhalants among Miami's public school students, 1992. Yarnold BM. **Psychol Rep** 1996 Dec;79(3 Pt 2):1155–61

Why is MetLife interested in violence issues? [comment] Kamen HP. **Stat Bull Metrop Insur Co** 1996 Jul–Sep; 77(3):11. Comment on: Stat Bull Metrop Insur Co 1996 Jul–Sep;77(3):2–10.

The drinking behaviors of a sample of university students in Nanning, Guangxi province, People's Republic of China. Lu ZP, et al. **Subst Use Misuse** 1997 Mar;32(4):495–506

Drug use and lifestyle among college students in Austria and the United States. Mangweth B, et al. **Subst Use Misuse** 1997 Mar;32(4):461–73

Correlates of change in adolescent alcohol consumption in Ireland: implications for understanding influences and enhancing interventions. Morgan M, et al. **Subst Use Misuse** 1997 Apr;32(5):609–19

Drug use prevention efforts at colleges and universities in the United States. Werch CE, et al. **Subst Use Misuse** 1996 Jan;31(1):65–80

[Obesity, overweight and physical activity in elementary school children] Bordin D, et al. **Minerva Pediatr** 1995 Dec; 47(12):521–6 (Eng. Abstr.) **(Ita)**

STUDENTS, DENTAL

Challenges associated with assessment of risk for tuberculosis in a dental school setting [see comments] Murphy DC, et al. **Am J Infect Control** 1996 Aug;24(4):254–61. Comment in: Am J Infect Control 1996 Aug;24(4):223–5.

Incidence of percutaneous injuries at a dental school: a 4–year retrospective study. Panagakos FS, et al. **Am J Infect Control** 1997 Aug;25(4):330–4

Withdrawal of funding for intercalating BSc students [letter] Attwell D, et al. **Br Dent J** 1996 Sep 21;181(6):196

A problem–based preclinical course for dental students. Ferguson DB, et al. **Br Dent J** 1997 May 24;182(10):387–92

Ethics and the student dentist. Long JM. **J Am Coll Dent** 1996 Spring;63(1):37–8

Indebtedness and dental students [letter] Dugoni AA. **J Am Dent Assoc** 1996 Mar;127(3):298

Indebtedness of dental school graduates in Canada: mortgaged futures. McDermott RE, et al. **J Can Dent Assoc** 1996 Mar;62(3):253–60

Oral cancer education in dental schools: survey of Texas dental students. Rankin KV, et al. **J Cancer Educ** 1996 Summer;11(2):80–3

Academic integrity: what kind of students are we getting, and how do we handle them once we get them? Beemsterboer PL. **J Dent Educ** 1997 Aug;61(8):686–8

Re: Standardization of ethics education and the use of the Hippocratic Oath for health science students [letter] McCarthy G. **J Dent Educ** 1997 Aug;61(8):649

Academic and clinical ramifications of integrity and cheating. Odom JG. **J Dent Educ** 1997 Aug;61(8):681–5

Assessment of dental students' diagnostic accuracy for oral cancer screening. Seoane J, et al. **J Dent Educ** 1997 May; 61(5):437–9

Academic integrity from a student's perspective. Tankersley KC. **J Dent Educ** 1997 Aug;61(8):692–3

An insider's view. Bempkins JL. **N Y State Dent J** 1996 Mar; 62(3):62–3

Dental students care. Cohen LR. **N Y State Dent J** 1996 Mar;62(3):65–6

We want to participate. Lee JY. **N Y State Dent J** 1996 Mar; 62(3):63–4

Winning the hearts and minds of dental students. Meeske J. **N Y State Dent J** 1996 Mar;62(3):60–1

Finding our way. Singer T. **N Y State Dent J** 1996 Mar; 62(3):64–5

DSSNY Council on New Dentist helps students and young professionals. Stewart–Flamenbaum T. **N Y State Dent J** 1996 Mar;62(3):30–1

EDUCATION see EDUCATION, DENTAL

LEGISLATION & JURISPRUDENCE

Academic corrective action from a legal perspective. Collura FJ. **J Dent Educ** 1997 Aug;61(8):689–91

PSYCHOLOGY

A survey of the opinions of orthodontic specialist trainees in the U.K [see comments] Keith O, et al. **Br J Orthod** 1997 May;24(2):163–7. Comment in: Br J Orthod 1997 May;24(2):169–71.

Representation of verbal pain descriptors on a visual analogue scale by dental patients and dental students. Tammaro S, et al. **Eur J Oral Sci** 1997 Jun;105(3):207–12

The effect of frequent quizzes on short– and long–term academic performance. Geist JR, et al. **J Dent Educ** 1997 Apr;61(4):339–45

A comparison of self–reported dental health attitudes and behavior between selected Japanese and Australian students. Kawamura M, et al. **J Dent Educ** 1997 Apr; 61(4):354–60

Motivational factors in the choice of postdoctoral general dentistry programs. Lockhart PB, et al. **J Dent Educ** 1997 Mar;61(3):297–304

Attitudes toward women dental students among male dental students and faculty in 1976 and 1996. Rosenberg HM, et al. **J Dent Educ** 1996 Oct;60(10):847–52

Concern about the environment among medical students. Käsmä–Ronkainen L, et al. **Scand J Soc Med** 1996 Jun; 24(2):121–3

STATISTICS & NUMERICAL DATA

Student drop–out from UK dental schools. Drummond JR, et al. **Br Dent J** 1997 May 10;182(9):347–9

Left–handedness in dental undergraduates and orthodontic specialists. Henderson NJ, et al. **Br Dent J** 1996 Oct 19; 181(8):285–8

Student debt: an inevitable problem? Hoad–Reddick G, et al. **Br Dent J** 1996 Oct 19;181(8):276–8

Survey on student financial assistance 1993–1994. **J Dent Educ** 1997 Mar;61(3):313–21

Factors that affect career choices of pediatric dentistry advanced education students. Roberts MW, et al. **Pediatr Dent** 1997 Jul–Aug;19(5):317–20

STUDENTS, HEALTH OCCUPATIONS

Measuring the effects of problem–based learning on the development of veterinary students' clinical expertise. Farnsworth CC. **Acad Med** 1997 Jun;72(6):552–4

A multisite collaborative for the development of interdisciplinary education in continuous improvement for health professions students. Gordon PR, et al. **Acad Med** 1996 Sep;71(9):973–8

Perceptions of computer literacy among occupational therapy students. Williams AM, et al. **Am J Occup Ther** 1996 Mar;50(3):217–22

Blood and body fluid exposures during clinical training: relation to knowledge of universal precautions. Diekema DJ, et al. **J Gen Intern Med** 1996 Feb;11(2):109–11

Description of integrated competency examination: tools to assess the chiropractic curriculum effectiveness and students' competency levels. Traina AD, et al. **J Manipulative Physiol Ther** 1996 Sep;19(7):463–8

Covert bias in evaluation of physical therapist students' clinical performance [see comments] Haskins AR, et al. **Phys Ther** 1997 Feb;77(2):155–63; discussion 163–8. Comment in: Phys Ther 1997 Feb;77(2):1301–1.

Opinions of physical therapy education program directors on essential functions. Ingram D. **Phys Ther** 1997 Jan; 77(1):37–45

Students' expectations of clinical teachers. Daniels M, et al. **Radiol Technol** 1996 Sep–Oct;68(1):89–93 (10 ref.)

Magnet programs for student recruitment. Goetz D, et al. **Radiol Technol** 1997 May–Jun;68(5):456, 455

Distance learning for health care students. Tanenbaum BG, et al. **Radiol Technol** 1996 Nov–Dec;68(2):157–8 (4 ref.)

CLASSIFICATION

Stability of the Professional Development Assessment. Kasar J. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1373–4

EDUCATION see HEALTH OCCUPATIONS/education

LEGISLATION & JURISPRUDENCE

Legal aspects of documenting clinical failure: a case study. Thompson AW, et al. **Radiol Technol** 1997 Mar–Apr; 68(4):332–6

PSYCHOLOGY

Process over person?: occupational therapy students'

fieldwork experiences of people in psychiatric settings. Lyons M. **Disabil Rehabil** 1996 Apr;18(4):197–204 (51 ref.)
Chiropractic student attitudes toward radiology. Marchiori DM. **J Manipulative Physiol Ther** 1996 Nov–Dec; 19(9):583–6
Research attitudes among chiropractic college students. Zhang JQ. **J Manipulative Physiol Ther** 1996 Sep; 19(7):446–53
A pilot study of fieldwork rotations vs. year long placements for social work students in a public hospital. Cuzzi L, et al. **Soc Work Health Care** 1996;24(1–2):73–91
[Smoking. Prevalence and attitudes among health science students] Henríquez Sánchez P, et al. **Aten Primaria** 1996 Nov 15;18(8):436–41 (Eng. Abstr.) **(Spa)**

STATISTICS & NUMERICAL DATA

Correlates of alcohol, tobacco and marijuana use among Scottish postsecondary helping–profession students. Engs RC, et al. **J Stud Alcohol** 1997 Jul;58(4):435–44

STUDENTS, MEDICAL

The effect of right or left placement of the positive response on Likert–type scales used by medical students for rating instruction. Albanese M, et al. **Acad Med** 1997 Jul; 72(7):627–30
A comparison of the overall NRMP match results with the results for 19 specialties for senior U.S. medical students, 1996. Andriole D, et al. **Acad Med** 1997 Sep;72(9):801–3
Medical students' views on the teaching of immunology [letter] Bansal AS. **Acad Med** 1997 Aug;72(8):662
Proceedings of the AAMC Conference on Students' and Residents' Ethical and Professional Development. October 27–28, 1995. Introduction. Bickel J. **Acad Med** 1996 Jun; 71(6):622–3
Summaries of break–out sessions. Bickel J. **Acad Med** 1996 Jun;71(6):634–40
A study of medical students' specialty–choice pathways: trying on possible selves. Burack JH, et al. **Acad Med** 1997 Jun;72(6):534–41
The generalizability of scores from a performance assessment of physicians' patient management skills. Clauser BE, et al. **Acad Med** 1996 Oct;71(10 Suppl):S109–11
Career choices among Saudi medical students. al–Faris E, et al. **Acad Med** 1997 Jan;72(1):65–7
The unrecognized medical educator [letter] Gunderman R. **Acad Med** 1997 Jun;72(6):472
Ensuring students' well–being as they learn to support victims of violence [see comments] [published erratum appears in Acad Med 1997 Mar;72(3):190] Hendricks–Matthews MK. **Acad Med** 1997 Jan;72(1):46–7. Comment in: Acad Med 1997 May;72(5):315.
A preliminary study of students' comfort and preparedness with different types of patient groups. Heun L, et al. **Acad Med** 1997 Jun;72(6):559
Educational loan repayment/forgiveness programs: a creative solution to a serious problem. Horowitz MS. **Acad Med** 1996 Sep;71(9):986–7
Characteristics of the informal curriculum and trainees' ethical choices. Hundert EM, et al. **Acad Med** 1996 Jun; 71(6):624–42
Frequency and effect of negative comments ("badmouthing") on medical students' career choices. Hunt DD, et al. **Acad Med** 1996 Jun;71(6):665–9
Relationships between students' clinical experiences in introductory clinical courses and their performances on an objective structured clinical examination (OSCE). Jolly BC, et al. **Acad Med** 1996 Aug;71(8):909–16
Comparing students' attitudes in problem–based and conventional curricula. Kaufman DM, et al. **Acad Med** 1996 Oct;71(10):1096–9
The effect of medical education on students' patient–satisfaction ratings. Klamen DL, et al. **Acad Med** 1997 Jan;72(1):57–61
The experience of care project: students as participant observers in the hospital setting. McClenon J. **Acad Med** 1996 Aug;71(8):923–9
Generalist intentions of medical school graduates [letter; comment] Markert RJ. **Acad Med** 1996 May;71(5):413–4. Comment on: Acad Med 1995 Dec;70(12):1152–7.
Insights into medical students' career choices based on third– and fourth–year students' focus–group discussions. Mutha S, et al. **Acad Med** 1997 Jul;72(7):635–40
Accommodating disabled medical students [letter; comment] Pounds LA. **Acad Med** 1996 Dec;71(12):1275–6. Comment on: Acad Med 1996 Jul;71(7):724–9.
Assessing medical students' perceptions of mistreatment in their second and third years. Richardson DA, et al. **Acad Med** 1997 Aug;72(8):728–30
Debt and career choices of underrepresented minorities [letter; comment] Rico M, et al. **Acad Med** 1997 Aug; 72(8):657–9. Comment on: Acad Med 1997 Feb;72(2):94–5.
Medical students as patients: a pilot study of their health care needs, practices, and concerns. Roberts LW, et al. **Acad Med** 1996 Nov;71(11):1225–32
Trends along the debt–income axis: implications for medical students' selections of family practice careers. Rosenthal MP, et al. **Acad Med** 1996 Jun;71(6):675–7
Student feedback comments on examination questions foster fairness, item validity, and learning. Smith CM. **Acad Med** 1997 May;72(5):403
Navigating the wards: teaching medical students to use their moral compasses. Swenson SL, et al. **Acad Med** 1996 Jun; 71(6):591–4
Baseline longitudinal data of undergraduate medical students at risk. Tekian A, et al. **Acad Med** 1996 Oct;71(10 Suppl):S86–7
Medical student knowledge levels and performance in doing HIV risk assessment. Farquhar LJ, et al. **AIDS Educ Prev** 1995 Dec;7(6):469–76
Medical student and patient attitudes toward religion and spirituality in the recovery process. Goldfarb LM, et al. **Am J Drug Alcohol Abuse** 1996 Nov;22(4):549–61
Three student manuals for obstetric and gynecologic outpatient care. Chez RA. **Am J Obstet Gynecol** 1997 May; 176(5):1112–5
Remember Tuskegee: public health student knowledge of the ethical significance of the Tuskegee Syphilis Study. Coughlin SS, et al. **Am J Prev Med** 1996 Jul–Aug; 12(4):242–6
Health behaviors and health promotion/disease prevention perceptions of medical students. Delnevo CD, et al. **Am J Prev Med** 1996 Jan–Feb;12(1):38–43
Medical students' smoking history and their preventive pulmonary attitudes [letter] Frye AW. **Am J Prev Med** 1996 Jan–Feb;12(1):4
Specific IgE–dependent sensitization, atopy, and bronchial hyperresponsiveness in apprentices starting exposure to protein–derived agents. Gautrin D, et al. **Am J Respir Crit Care Med** 1997 Jun;155(6):1841–7
Clinical breast evaluation skills of house officers and students. Chalabian J, et al. **Am Surg** 1996 Oct;62(10):840–5
Ethical pledges, declarations and oaths of medical students and doctors [editorial] Cheah JS. **Ann Acad Med Singapore** 1995 Nov;24(6):779
Underestimation of testicular size by medical students and housestaff [letter] Aprill BS, et al. **Ann Intern Med** 1996 Dec 1;125(11):942
Teaching residents to teach. An instructional program for training pediatric residents to precept third–year medical students in the ambulatory clinic. White CB, et al. **Arch Pediatr Adolesc Med** 1997 Jul;151(7):730–5
Uniting medical students worldwide: Dr. Luisa Bramana interviewed by Pritpal S. Tamber. Brumana L. **BMJ** 1997 Mar 29;314(7085):924
The Student BMJ [editorial] Claxton R. **BMJ** 1996 Sep 28; 313(7060):766
Home medical students account for less than half the full registrants Britain requires [letter] Fletcher EW. **BMJ** 1997 Apr 26;314(7089):1278
Hepatitis B and admission to medical school [editorial; comment] [see comments] Gilson RJ. **BMJ** 1996 Oct 5; 313(7061):830–1. Comment on: BMJ 1996 Oct 5;313(7061):856–7. Comment in: BMJ 1997 Jan 18;314(7075):225.
Increasing empathy between medical students and nurses [letter] [see comments] Sheth HG, et al. **BMJ** 1997 Mar 1;314(7081):682. Comment in: BMJ 1997 Jan 25;314(7076):306. Comment in: BMJ 1997 Mar 1;314(7081):617–8.
Doctors, nurses, and terminal care. Medical students in Cambridge do two nursing shifts [letter] [see comments] Siklos P, et al. **BMJ** 1997 Jan 25;314(7076):306. Comment in: BMJ 1997 Mar 1;314(7081):682.
Euthanasia and relief of suffering: attitudes of medical students. Ramírez–Rivera J, et al. **Bol Asoc Med P R** 1995 Oct–Dec;87(10–12):164–6
Withdrawal of funding for intercalating BSc students [letter] Attwell D, et al. **Br Dent J** 1996 Sep 21;181(6):196
Medical students in general practice: how do patients feel? Cooke F, et al. **Br J Gen Pract** 1996 Jun;46(407):361–2
Forensic aspects of medical student abuse: a Canadian perspective. Margittai KJ, et al. **Bull Am Acad Psychiatry Law** 1996;24(3):377–85
Factors affecting medical students' selection of Canadian psychiatric residency programs: Part I—A comparison with American peers. Leverette J, et al. **Can J Psychiatry** 1996 Nov;41(9):578–81
Factors affecting medical students' selection of Canadian psychiatric residency programs: Part II–Some contemporary issues. Leverette J, et al. **Can J Psychiatry** 1996 Nov;41(9):582–6
Does evaluation of medical students produce any positive feedback? Spaner S. **Can J Surg** 1996 Oct;39(5):417–8
The bedroom or the classroom? [letter; comment] Patil J. **Can Med Assoc J** 1996 Dec 15;155(12):1664, 1666. Comment on: Can Med Assoc J 1996 Oct 1;155(7):972–7.
Micmac medical student becomes role model for his community. Robb N. **Can Med Assoc J** 1997 Jan 1; 156(1):67–8
Medical education must make room for student–specific ethical dilemmas. St. Onge J. **Can Med Assoc J** 1997 Apr 15;156(8):1175–7
Lies students tell [letter; comment] Taylor BR. **Can Med Assoc J** 1997 May 1;156(9):1265–6; discussion 1267. Comment on: Can Med Assoc J 1997 Jan 15;156(2):219–22.
Medical school tuition fees reach record levels as MD incomes shrink. Thorne S. **Can Med Assoc J** 1996 Oct 1; 155(7):979–81
Medical students another day older and deeper in debt [letter; comment] Vandor T. **Can Med Assoc J** 1996 Sep 15; 155(6):630, 632. Comment on: Can Med Assoc J 1996 Apr 1;154(7):1004–5. Comment on: Can Med Assoc J 1996 Apr 1;154(7):1082–3.
Teaching medical students to lie. The disturbing contradiction: medical ideals and the resident–selection process [see comments] Young TA. **Can Med Assoc J** 1997 Jan 15;156(2):219–22. Comment in: Can Med Assoc J 1997 Apr 1;156(7):977–8. Comment in: Can Med Assoc J 1997 May 1;156(9):1265–6; discussion 1267. Comment in: Can Med Assoc J 1997 May 1;156(9):1266; discussion 1267. Comment in: Can Med Assoc J 1997 May 1;156(9):1266–7; discussion 1267.
Microbial contamination of contact lens cases among medical students. Midelfart J, et al. **CLAO J** 1996 Jan;22(1):21–4
A controlled trial of peer–teaching in practical gross anatomy. Nnodim JO. **Clin Anat** 1997;10(2):112–7
A strategy for precepting medical students in ambulatory settings. Kernan WN, et al. **Conn Med** 1996 Apr;60(4):203–9
Medical students' attitudes toward electroconvulsive therapy: an Indian perspective. Andrade C, et al. **Convuls Ther** 1996 Jun;12(2):86–90
Migraine headaches in a group of medical students at the Kenyatta National Hospital, Nairobi. Amayo EO, et al. **East Afr Med J** 1996 Sep;73(9):594–7
Can medical students design their ophthalmology programme? Fafowora OF. **East Afr Med J** 1996 Jun; 73(6):407–9
Characteristics of medical students by level of interest in family practice. Bowman MA, et al. **Fam Med** 1996 Nov–Dec;28(10):713–9
Student and faculty collaboration in a clinic for the medically underserved. Haq CL, et al. **Fam Med** 1996 Sep;28(8):570–4
Residents/students need more than standard curricula to practice in underserved areas [letter] Hunter PH. **Fam Med** 1997 Mar;29(3):158
Standardized examination performance and specialty choice. Lynch DC, et al. **Fam Med** 1997 Jun;29(6):421–3
Tuberculosis screening in medical students. Manusov EG, et al. **Fam Med** 1996 Oct;28(9):645–9
Lessons from our learners. Obear M. **Fam Med** 1997 Mar; 29(3):164–5
Gay and lesbian physicians in training: family practice program directors' attitudes and students' perceptions of bias. Oriel KA, et al. **Fam Med** 1996 Nov–Dec;28(10):720–5
Working with students not interested in family practice. Sheets KJ. **Fam Med** 1997 Jun;29(6):389–90
The Health Promotion–Disease Prevention Project: effect on medical students' attitudes toward practice in medically underserved areas [see comments] Tippets E, et al. **Fam Med** 1996 Jul–Aug;28(7):467–71. Comment in: Fam Med 1996 Jul–Aug;28(7):508–10.
Report of an international summer school—oncology for medical students—in 1996 in Groningen, The Netherlands. Haagedoorn EM, et al. **J Cancer Educ** 1997 Spring; 12(1):56–8
A christmas letter. Moncur J, et al. **J Cancer Educ** 1995 Winter;10(4):229–30
A model policy addressing mistreatment of medical students. Strong C, et al. **J Clin Ethics** 1996 Winter;7(4):341–6; discussion 347–8
Using student feedback on examination questions to promote fairness, item validity, and learning. Smith CM. **J Clin Pharmacol** 1997 May;37(5):379–87
Being female in medical school. Observations of a counselor. Wright BV. **J Fla Med Assoc** 1996 Aug–Sep;83(7):498–501 (9 ref.)
Blood and body fluid exposures during clinical training: relation to knowledge of universal precautions. Diekema DJ, et al. **J Gen Intern Med** 1996 Feb;11(2):109–11
Are fourth–year medical students effective teachers of the physical examination to first–year medical students? Haist SA, et al. **J Gen Intern Med** 1997 Mar;12(3):177–81
Honor our role models [editorial; comment] Linzer M, et al. **J Gen Intern Med** 1997 Jan;12(1):76–7. Comment on: J Gen Intern Med 1997 Jan;12(1):53–6.
Gender–dependent morality and gender rights in medical school ethics. Cohen I. **J La State Med Soc** 1996 May; 148(5):227–9
St. Thomas Immunization Initiative. A student–run community action project. Ramsey AH, et al. **J La State Med Soc** 1997 Jun;149(6):197–9
Medical students still have their place! [letter] Cockington RA. **J Paediatr Child Health** 1997 Feb;33(1):81
A brief history of MUSC student outpatient obstetrics department (OPD) and ambulance service at Roper Hospital, 1950–1952. Hunter WH. **J S C Med Assoc** 1996 Aug;92(8):355–60
Substance use by surgical residents and students entering surgery. Bunch WH, et al. **J Surg Res** 1996 Feb 15; 61(1):108–12
Getting started: a survey of medical student activism. Bambas A. **JAMA** 1996 Nov 6;276(17):1436–7
Maternal health and leave policies during medical training. Chow KH. **JAMA** 1997 Mar 5;277(9):766, 769
Assessing clinical performance with standardized patients. Colliver JA, et al. **JAMA** 1997 Sep 3;278(9):790–1
The dean's letter: improving the summary evaluation. Hunt DD. **JAMA** 1997 Sep 3;278(9):789
Medical marriages: promises and problems [letter] Kelly Jr JH, et al. **JAMA** 1997 Sep 17;278(11):900
An examination of the couples' match. Kim G. **JAMA** 1997 Mar 5;277(9):765
Starting a family in medical school. Law JK. **JAMA** 1997 Mar 5;277(9):767

Cardiac auscultatory skills of internal medicine and family practice trainees. A comparison of diagnostic proficiency. Mangione S, et al. **JAMA** 1997 Sep 3;278(9):717–22

The AMA–MSS: leading the charge for change. Merchen TD, et al. **JAMA** 1996 Nov 6;276(17):1438

Activism and the medical student [editorial] Oransky I. **JAMA** 1996 Nov 6;276(17):1434

Evaluating the evaluations [editorial] Oransky I. **JAMA** 1997 Sep 3;278(9):788

The impending physician surplus: is it time to quit? Reinhardt U. **JAMA** 1997 Jan 1;277(1):69

Physician supply and the shifting paradigm of medical student choice. Ruhnke GW. **JAMA** 1997 Jan 1;277(1):70–1

Family issues and physician training [editorial] Sanghavi DM. **JAMA** 1997 Mar 5;277(9):764

Times of a medical student activist. Silver–Isenstadt AD. **JAMA** 1996 Nov 6;276(17):1435

Do male medical students face prejudice? [letter] Acheson AG. **Lancet** 1997 Sep 27;350(9082):964

Clinical skills assessment with standardized patients. Gómez JM, et al. **Med Educ** 1997 Mar;31(2):94–8

Final examination performance of medical students from ethnic minorities. McManus IC, et al. **Med Educ** 1996 May; 30(3):195–200

The paradox of medicine: angry physicians and eager applicants. Schroeder SA. **Med Health R I** 1996 Dec; 79(12):411–3

'I'm OK; you're not': medical socialization and psychosomatic illness. Elks ML. **Med Hypotheses** 1997 Jan; 48(1):33–6

HUGs: holidays for undergraduates. Harris J. **Med J Aust** 1996 Dec 2–16;165(11–12):628

Selecting Australian doctors of the future [letter] Jones KB. **Med J Aust** 1997 Jun 2;166(11):613

Top school marks don't necessarily make top medical students [letter] Powis DA, et al. **Med J Aust** 1997 Jun 2;166(11):613

Leather, oranges, dead pigs and needlestick injuries. Tong S. **Med J Aust** 1996 Dec 2–16;165(11–12):683

Lighting a candle in the Romanian darkness. Gallagher T. **Med War** 1992 Jan–Mar;8(1):25–30

Just for kids. Kids help educate future physicians at MSU College of Human Medicine. Bouffard K. **Mich Med** 1996 Jan;95(1):44–5

Occupational exposure to blood among medical students [letter; comment] Barry MA. **N Engl J Med** 1997 Mar 27; 336(13):966; discussion 966–7. Comment on: N Engl J Med 1996 Oct 10;335(15):1150–3.

Occupational exposure to blood among medical students [letter; comment] Wintermeyer SF. **N Engl J Med** 1997 Mar 27;336(13):966; discussion 966–7. Comment on: N Engl J Med 1996 Oct 10;335(15):1150–3.

Medical colleges in India [letter; comment] John G. **Natl Med J India** 1996 Sep–Oct;9(5):253. Comment on: Natl Med J India 1996 May–Jun;9(3):135–40.

A medical school honor code: what does it mean? Newman DH. **Pharos** 1997 Spring;60(2):2–4

On creativity and medicine. Rodenhauser P. **Pharos** 1996 Fall;59(4):2–6

Medical students' specialty choice and the need for primary care. Our future. Rosenthal MP, et al. **Prim Care** 1996 Mar; 23(1):155–67 (79 ref.)

The influence of a decision support system on the differential diagnosis of medical practitioners at three levels of training. Murphy GC, et al. **Proc AMIA Annu Fall Symp** 1996; :219–23

Attitudes of medical students towards persons with mental disorders: a comparative study between Japan and Thailand. Yamamoto K, et al. **Psychiatry Clin Neurosci** 1996 Aug;50(4):171–80

Smoking among health care students [letter] Birkholtz FF, et al. **S Afr Med J** 1996 Aug;86(8):984

The Objective Structured Clinical Examination (OSCE) in the clinical clerkship: an overview. Tervo RC, et al. **S D J Med** 1997 May;50(5):153–6 (11 ref.)

Smoking-related knowledge and attitudes of senior Australian medical students. Roche AM, et al. **Tob Control** 1996 Winter;5(4):271–9

Effect of changes in the health care system on the career outlook of University of Washington, Seattle, medical students. Piehl JH, et al. **West J Med** 1996 Mar; 164(3):217–21

[Use of student feedback by preclinical and clinical course directors] Abramowitz R, et al. **Harefuah** 1997 Apr 15; 132(8):582–4, 607 (Eng. Abstr.) **(Heb)**

[Thoracic surgery that is attractive to medical students] Osada H. **Kyobu Geka** 1997 Jan;50(1):26–9 (1 ref.) **(Jpn)**

[A report on the present status of education in cardiopulmonary resuscitation] **Masui** 1996 Jun; 45(6):774–81 **(Jpn)**

[Dietary patterns and intake of nutrients, energy, and dietary fiber in medical students] Aoki S, et al. **Nippon Koshu Eisei Zasshi** 1996 Aug;43(8):632–43 (Eng. Abstr.) **(Jpn)**

[Vaccination of medical students against hepatitis B (letter)] Aavitsland P, et al. **Tidsskr Nor Laegeforen** 1997 Mar 10; 117(7):1004 **(Nor)**

[Being a medical student in Michigan] Sømme S, et al. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2828–9 **(Nor)**

[Career plans of future physicians. Level of ambition and plans for specialization among medical students] Wiers-Jenssen J, et al. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2807–11 (Eng. Abstr.) **(Nor)**

[Role of individual variability of the body in the formation of students' health] Filatov OM, et al. **Gig Sanit** 1996 Nov–Dec;(6):29–32 **(Rus)**

[The skin tuberculin sensitivity of students at the Astrakhan Medical Institute and its dynamics over the course of 36 years (1957–1993)] Vinnik LA, et al. **Probl Tuberk** 1996; (4):9–11 (Eng. Abstr.) **(Rus)**

[Experience in rotation in health centers of 6th year students of School of Medicine of Saragossa (letter)] Córdoba R, et al. **Aten Primaria** 1997 Mar 31;19(5):273 **(Spa)**

[Students, the university and family medicine (editorial)] Domingo i Salvany PM. **Aten Primaria** 1997 Apr 15; 19(6):279–82 **(Spa)**

[Medical students caught in mass production. Conceited and deflated... at the same time] Holm U. **Lakartidningen** 1996 Nov 27;93(48):4376–8 **(Swe)**

[Medical students are caught in a treadmill. Nothing helps—as long as health services are beaten] Wilhelmson B. **Lakartidningen** 1996 Dec 4;93(49):4508–10 **(Swe)**

EDUCATION see EDUCATION, MEDICAL

HISTORY

Reflections of the past in today's applicant pool. Shatzman AM. **Acad Med** 1997 Jun;72(6):474–6

The invisible general practitioner: the careers of Scottish medical students in the late nineteenth century. Crowther A, et al. **Bull Hist Med** 1996 Fall;70(3):387–413

[Some medical remembrances] Stephan E. **J Med Liban** 1996; 44(4 Suppl):S12–8 **(Fre)**

LEGISLATION & JURISPRUDENCE

Legal standards of conduct for students and residents: implications for health professions educators. Butters JM, et al. **Acad Med** 1996 Jun;71(6):583–90

PSYCHOLOGY

Three medical schools' responses to the HIV/AIDS epidemic and the effect on students' knowledge and attitudes. Anderson DG, et al. **Acad Med** 1997 Feb;72(2):144–6

Residents' and medical students' reports of sexual harassment and discrimination. Baldwin DC Jr, et al. **Acad Med** 1996 Oct;71(10 Suppl):S25–7

Medical students and urban violence [letter] Benbow EW. **Acad Med** 1997 Feb;72(2):88–9

Reassessing medical students' willingness to treat HIV-infected patients. Carter D, et al. **Acad Med** 1996 Nov;71(11):1250–2

Medical students' attitudes toward the autopsy. Conran P, et al. **Acad Med** 1996 Jun;71(6):681–3

A longitudinal study of substance use and abuse in a single class of medical students. Croen LG, et al. **Acad Med** 1997 May;72(5):376–81

First-year medical students' knowledge of, attitudes toward, and personal histories of family violence [see comments] Cullinane PM, et al. **Acad Med** 1997 Jan;72(1):48–50. Comment in: Acad Med 1997 May;72(5):315.

The shift to primary care: emerging influences on specialty choice. Ellsbury KE, et al. **Acad Med** 1996 Oct;71(10 Suppl):S16–8

Does exposure to gender discrimination and sexual harassment impact medical students' specialty choices and residency program selections? Nora LM, et al. **Acad Med** 1996 Oct;71(10 Suppl):S22–4

Gender-associated differences in medical students' ratings of their courses. Pérez J, et al. **Acad Med** 1996 May; 71(5):512

Nature, nurture, and educational outcomes [letter] Reed VA, et al. **Acad Med** 1997 Apr;72(4):245–6

A predictive model of student satisfaction with the medical school learning environment. Robins LS, et al. **Acad Med** 1997 Feb;72(2):134–9

Alleviating students' anxieties about PBL [letter] Saffran M. **Acad Med** 1997 Aug;72(8):660–1

Enhancing clinical teaching with information technologies: what can we do right now? Sandroni S. **Acad Med** 1997 Sep;72(9):770–4 (17 ref.)

Students' attitudes toward people with mental retardation [letter] Scott MH, et al. **Acad Med** 1997 Apr;72(4):246–7

Rural family practice program for first-year students [letter] Seim HC. **Acad Med** 1997 Sep;72(9):735–6

Predicting medical students' academic performances by their cognitive abilities and personality characteristics. Shen H, et al. **Acad Med** 1997 Sep;72(9):781–6

Performance-based assessment of clinical ethics using an objective structured clinical examination. Singer PA, et al. **Acad Med** 1996 May;71(5):495–8

Why do medical students from underrepresented minorities choose—or not choose—primary care careers? [see comments] Tekian A, et al. **Acad Med** 1997 Feb;72(2):94–5. Comment in: Acad Med 1997 Aug;72(8):657–9.

The natural history of cynicism in physicians. Testerman JK, et al. **Acad Med** 1996 Oct;71(10 Suppl):S43–5

Follow-up survey of support services for lesbian, gay, and bisexual medical students. Townsend MH, et al. **Acad Med** 1996 Sep;71(9):1012–4

Students' quality of life after a major curriculum change. Wilson JF, et al. **Acad Med** 1996 Oct;71(10 Suppl):S40–2

Medical students who choose a radiology elective: career decisions, motivations, and intentions [letter] Hall FM, et al. **Acad Radiol** 1996 Jan;3(1):91–2

Medical students' attitudes toward radiology: comparison of matriculating and graduating students. Kazerooni EA, et al. **Acad Radiol** 1997 Aug;4(8):601–7

Compulsory HIV testing: medical students' views [letter] Williams S, et al. **AIDS** 1996 Nov;10(13):1608–9

Insomnia in young men and subsequent depression. The Johns Hopkins Precursors Study. Chang PP, et al. **Am J Epidemiol** 1997 Jul 15;146(2):105–14

Choosing a career in psychiatry [letter; comment] Cutler J. **Am J Psychiatry** 1996 Oct;153(10):1372–3. Comment on: Am J Psychiatry 1995 Oct;152(10):1413–4. Comment on: Am J Psychiatry 1995 Oct;152(10):1416–26.

Choosing a career in psychiatry [letter; comment] Kirchner JE, et al. **Am J Psychiatry** 1996 Oct;153(10):1372; discussion 1373. Comment on: Am J Psychiatry 1995 Oct;152(10):1416–26.

The impact of gender on the choice of surgery as a career. Baxter N, et al. **Am J Surg** 1996 Oct;172(4):373–6

Medical students act as Big Brothers/Big Sisters to support human immunodeficiency virus–infected children's psychosocial needs. Tess J, et al. **Arch Pediatr Adolesc Med** 1997 Feb;151(2):189–92

I was a teenage mutant diabetic. Cresp M. **Aust Fam Physician** 1996 Feb;25(2):203, 206–7

Managing alcohol and drug problems in general practice: a survey of trainees' knowledge, attitudes and educational requirements. Roche AM, et al. **Aust N Z J Public Health** 1996 Aug;20(4):401–8

Why do medical students choose St Mary's Hospital Medical School? Baron JH. **BMJ** 1996 Dec 21–28;313(7072):1646–7

Choosing tomorrow's doctors. Students' knowledge of the realities of the profession is important [letter; comment] Grainger C, et al. **BMJ** 1996 Nov 2;313(7065):1149. Comment on: BMJ 1996 Aug 10;313(7053):313.

Career preferences of medical students: some further answers [letter; comment] Pitts J. **Br J Gen Pract** 1997 Mar; 47(416):184–5. Comment on: Br J Gen Pract 1996 Dec;46(413):721–5.

MRCPsych examination technique: the short answer question paper. Trigwell P, et al. **Br J Hosp Med** 1996 Feb 7–20; 55(3):135–8

Lies students tell [letter; comment] Healey MA. **Can Med Assoc J** 1997 May 1;156(9):1266; discussion 1267. Comment on: Can Med Assoc J 1997 Jan 15;156(2):219–22.

Entering medical school means pursuing all options [letter] Morrison GE. **Can Med Assoc J** 1997 May 15;156(10):1384

"If you think it hurts now...". Needham D. **Can Med Assoc J** 1997 Apr 15;156(8):1179–80

The yellow brick road of medical education. Nisker JA. **Can Med Assoc J** 1997 Mar 1;156(5):689–91

Fear of ostracism still silences some gay MDs, students [see comments] Robb N. **Can Med Assoc J** 1996 Oct 1; 155(7):972–7. Comment in: Can Med Assoc J 1996 Dec 15;155(12):1664, 1666.

Medical student response to an interactive patient simulation program used to supplement child abuse education. Dorsey JK, et al. **Child Abuse Negl** 1996 Oct;20(10):973–7

The influence of case and professional variables on identification and reporting of physical abuse: a study with medical students. Warner-Rogers JE, et al. **Child Abuse Negl** 1996 Sep;20(9):851–66

Attitudes and reactions of Arab medical students to the dissecting room. Abu-Hijleh MF, et al. **Clin Anat** 1997; 10(4):272–8

Detached concern and death anxiety of first-year medical students: before and after the gross anatomy course. Dickinson GE, et al. **Clin Anat** 1997;10(3):201–7

Aide-mémoire in anatomy [editorial] O'Rahilly R. **Clin Anat** 1996;9(6):424

Our future physicians deserve better [letter; comment] Marshall DG. **CMAJ** 1997 Jun 15;156(12):1701. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.

Can we finally change the system? [letter; comment] Marshall DG. **CMAJ** 1997 Jul 15;157(2):138. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.

Can we finally change the system? [letter; comment] Smith DH. **CMAJ** 1997 Jul 15;157(2):136, 138; discussion 139. Comment on: Can Med Assoc J 1997 Mar 1;156(5):665–7. Comment on: Can Med Assoc J 1997 Mar 1;156(5):682–4.

Parental smoking and sociodemographic factors related to smoking among German medical students. Brenner H, et al. **Eur J Epidemiol** 1996 Apr;12(2):171–6

Awareness and fear of violence among medical and social work students. Ellwood AL, et al. **Fam Med** 1996 Jul–Aug; 28(7):488–92

First-year medical students' knowledge of and attitudes toward primary care careers. Grayson MS, et al. **Fam Med** 1996 May;28(5):337–42

The medical student's perspective on community rotations. Montgomery L. **Fam Med** 1996 Sep;28(8):585–6

Adolescent life experiences of physicians in primary care compared with other specialties. Schubot DB. **Fam Med** 1996 Sep;28(8):575–9

How Hawaii's doctors feel about physician-assisted suicide and euthanasia: an overview. Siaw LK, et al. **Hawaii Med J** 1996 Dec;55(12):296–8

Impact of managed care on medical students. Hawley C. **Hosp Pract (Off Ed)** 1997 Feb 15;32(2):187–8

Professional defenses: medical students' perceptions of

medical malpractice. Annandale E. **Int J Health Serv** 1996; 26(4):751–75

Changes in attitudes of medical students towards psychiatry: an evaluation of a clerkship in psychiatry. Guttmann F, et al. **Isr J Psychiatry Relat Sci** 1996;33(3):158–66

Ethnicity, gender identity, stress, and coping among female African-American medical students. Shervington DO, et al. **J Am Med Womens Assoc** 1996 Aug–Oct;51(4):153–4

Use of effective feedback to facilitate adult learning. Sachdeva AK. **J Cancer Educ** 1996 Summer;11(2):106–18 (53 ref.)

Attitudes of medical students to necropsy. Botega NJ, et al. **J Clin Pathol** 1997 Jan;50(1):64–6

The impact of role models on medical students [see comments] Wright S, et al. **J Gen Intern Med** 1997 Jan; 12(1):53–6. Comment in: J Gen Intern Med 1997 Jan;12(1):76–7.

Factors influencing medical students' choice of academic medicine as a career. Donnelly MB, et al. **J Ky Med Assoc** 1996 May;94(5):186–90

The impact of nonacademic variables on performance at two medical schools. Webb CT, et al. **J Natl Med Assoc** 1997 Mar;89(3):173–80

The effect of sexual experience on the attitudes of medical students to learning gynecological examinations. Abraham S. **J Psychosom Obstet Gynaecol** 1996 Mar;17(1):15–20

Teaching psychosomatic medicine: predictors of students' attitudes toward a compulsory course. Schüppel R, et al. **J Psychosom Res** 1997 May;42(5):481–4

Student challenges to the medical establishment. Kejhani S, et al. **JAMA** 1997 Oct 1;278(13):1118

Everybody has won, and all must have prizes [see comments] Patel L, et al. **Lancet** 1996 Nov 30;348(9040):1497. Comment in: Lancet 1997 Mar 22;349(9055):885.

Education, self-esteem, and prizes [letter; comment] Shiwach RS. **Lancet** 1997 Mar 22;349(9055):885. Comment on: Lancet 1996 Nov 30;348(9040):1497.

"I actually don't mind the bone saw": narratives of gross anatomy. Reifler DR. **Lit Med** 1996 Fall;15(2):183–99

An international comparison of knowledge levels of medical students: the Maastricht Progress Test. Albano MG, et al. **Med Educ** 1996 Jul;30(4):239–45

Medical students' perceptions of medical malpractice. Annandale E, et al. **Med Educ** 1996 Jul;30(4):253–8

Computer awareness among medical students: a survey. Asgari-Jirhandeh N, et al. **Med Educ** 1997 May;31(3):225–9

Non-cognitive characteristics of medical students: entry to problem-based and lecture-based curricula. Cariaga-Lo LD, et al. **Med Educ** 1996 May;30(3):179–86

Knowledge and attitudes about smoking in medical students before and after a tobacco seminar. Chung TW, et al. **Med Educ** 1996 Jul;30(4):290

European medical schools and tobacco. Crofton JW, et al. **Med Educ** 1996 Nov;30(6):424–7

Gender in medicine: the views of first and fifth year medical students. Field D, et al. **Med Educ** 1996 Jul;30(4):246–52

Basic sciences in problem-based learning and conventional curricula: students' attitudes. Kaufman DM, et al. **Med Educ** 1997 May;31(3):177–80

Tutoring in problem-based learning: perceptions of teachers and students. Kaufman DM, et al. **Med Educ** 1996 Sep; 30(5):371–7

Audit in general practice: educating medical students. Morrison JM, et al. **Med Educ** 1997 Mar;31(2):128–31

Voluntary active euthanasia and doctor-assisted suicide: knowledge and attitudes of Dutch medical students. Muller MT, et al. **Med Educ** 1996 Nov;30(6):428–33

Specialty choice and understanding of primary care among Japanese medical students. Ohtaki J, et al. **Med Educ** 1996 Sep;30(5):378–84

Teaching of medical ethics: implications for an integrated curriculum. Parker MH, et al. **Med Educ** 1997 May; 31(3):181–7

Smoking behaviour and attitudes among Australian medical students. Richmond RL, et al. **Med Educ** 1997 May; 31(3):169–76

Training experiences immediately after medical school. Roche AM, et al. **Med Educ** 1997 Jan;31(1):9–16

American medical students in Israel: stress and coping. Schreier AR, et al. **Med Educ** 1996 Nov;30(6):445–52

The Medical Student Expectation Scale (MSES): a device for measuring students' expectations of each others' values and behaviours. Singleton AF, et al. **Med Educ** 1996 May; 30(3):187–94

Predicting stress in first year medical students: a longitudinal study. Stewart SM, et al. **Med Educ** 1997 May;31(3):163–8

Medical students and managed care: one school's experience. Noritz GH. **Med Health R I** 1997 Feb;80(2):57–60

Homophobia and heterosexism. Out of the medical school closet. Wallick MM. **N C Med J** 1997 Mar–Apr;58(2):123–5

The learning styles of medical students: an annotated bibliography of twenty years of research. Hylton J, et al. **Percept Mot Skills** 1996 Dec;83(3 Pt 2):1411–20

Early patient encounters: second-year student narratives of initiation into clinical medicine. Reifler DR. **Pharos** 1996 Winter;59(1):29–33

Helping the impaired physician [letter] Steinbicker PG. **Pharos** 1996 Summer;59(3):48

Learning and change [editorial] McFarland KF, et al. **Postgrad Med J** 1996 May;72(847):257

Human causal discovery from observational data. Hashem AI, et al. **Proc AMIA Annu Fall Symp** 1996;:27–31

Gender differences in attitudes and recruitment into psychiatry [comment] Eagles JM. **Psychol Rep** 1996 Apr; 78(2):653–4. Comment on: Psychol Rep 1995 Dec;77(3 Pt 1):843–7.

Psychosocial beliefs of medical students planning to specialize in family medicine. Markham FW, et al. **Psychol Rep** 1997 Jun;80(3 Pt 1):987–92

Self-esteem and caregivers' attitudes toward elderly persons. Merrill JM, et al. **Psychol Rep** 1996 Dec;79(3 Pt 2):1349–50

Psychosocial and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. Whitehouse WG, et al. **Psychosom Med** 1996 May–Jun;58(3):249–63

Concern about the environment among medical students. Käsmä-Ronkainen L, et al. **Scand J Soc Med** 1996 Jun; 24(2):121–3

Influence of a 3-week psychiatric training programme on attitudes toward mental illness in medical students. Arkar H, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Apr; 32(3):171–6

Life events and anxiety in Chinese medical students. Liu XC, et al. **Soc Psychiatry Psychiatr Epidemiol** 1997 Feb; 32(2):63–7

Students: fulfilling the dream. Sewell T. **Tenn Med** 1996 Oct; 89(10):359–62

Med school revisited: 1941 to '44–and so on to 1996 and beyond [editorial] Thomison JB. **Tenn Med** 1996 Oct; 89(10):356–8

[Physicians' and medical students' perception of environmental risks] Grandjean P, et al. **Ugeskr Laeger** 1996 Sep 16;158(38):5291–5 (Eng. Abstr.) **(Dan)**

[Evaluation of a clinical course in an oncology department during the second cycle of medical education. A 12-year study by questionnaire among 321 students] Hoerni B, et al. **Bull Cancer** 1996 Sep;83(9):709–17 (Eng. Abstr.) **(Fre)**

[Educational and occupational expectations of tomorrow's generation of physicians] Weber A, et al. **Gesundheitswesen** 1996 Dec;58(12):629–34 (Eng. Abstr.) **(Ger)**

[The attitude of medical students to psychiatric patients] Rössler W, et al. **Nervenarzt** 1996 Sep;67(9):757–64 (Eng. Abstr.) **(Ger)**

[Questions on organ donation. An exploratory study of medical students and overview of the literature] Strenge H. **Psychother Psychosom Med Psychol** 1996 Sep–Oct; 46(9–10):327–32 (45 ref.) (Eng. Abstr.) **(Ger)**

[Assessing the risk of HIV infection in the clinic and daily environment by medical students] Klewer J, et al. **Z Arztl Fortbild (Jena)** 1996 Jun;90(4):321–4 (Eng. Abstr.) **(Ger)**

[University education in geriatrics: medical students' understandings of gerontology and geriatric medicine] Hakamata Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jun; 33(6):444–51 (Eng. Abstr.) **(Jpn)**

[University education in geriatrics: medical student's opinions on gerontology and geriatric medicine] Hakamata Y, et al. **Nippon Ronen Igakkai Zasshi** 1996 Jun;33(6):452–9 (Eng. Abstr.) **(Jpn)**

[Assessment of medical students' ability to communicate unpleasant news] Evensen SA, et al. **Tidsskr Nor Laegeforen** 1997 Aug 20;117(19):2804–6 (Eng. Abstr.) **(Nor)**

[Humanization of medical studies and the development of empathy in medical students] Kliszcz J, et al. **Pol Tyg Lek** 1996 Jun;51(23–26):357–60 **(Pol)**

[The spread of harmful habits among medical students and their attitude to them] Vinogradov PB, et al. **Gig Sanit** 1996 May–Jun;(3):49–51 **(Rus)**

[Lower frequency of dropout and less troubles. Experiences with interview-based admissions to medical education] Areskog NH, et al. **Lakartidningen** 1996 Sep 25;93(39):3385, 3388–90 **(Swe)**

[If male medical students are lacking empathy (1): introduce supportive training!] Forsberg P, et al. **Lakartidningen** 1997 Apr 16;94(16):1516, 1520 **(Swe)**

[Instructions in empathy should be introduced early in the training especially for male medical students] Holm U, et al. **Lakartidningen** 1997 Apr 9;94(15):1393–7 **(Swe)**

STATISTICS & NUMERICAL DATA

Profile of the graduate student population in U.S. medical schools. Ammons SW Jr, et al. **Acad Med** 1997 Sep; 72(9):820–30

Comments on the case of Mary Putnam Jacobi [letter; comment] Bickel J. **Acad Med** 1996 Sep;71(9):933–4. Comment on: Acad Med 1996 May;71(5):470–7.

On rising medical student debt: in for a penny, in for a pound. Kassebaum DG, et al. **Acad Med** 1996 Oct;71(10):1124–34

A longitudinal study of students' depression at one medical school. Rosal MC, et al. **Acad Med** 1997 Jun;72(6):542–6

Insomnia in young men and subsequent depression. The Johns Hopkins Precursors Study. Chang PP, et al. **Am J Epidemiol** 1997 Jul 15;146(2):105–14

Predicting academic performance of medical students: the first three years. Höschl C, et al. **Am J Psychiatry** 1997 Jun;154(6 Suppl):87–92

The output of veterinary graduates from Australian veterinary schools was 263 in 1994 and 287 in 1995. Is this too few, too many or just right? **Aust Vet J** 1996 Sep; 74(3):197

Undersupply not restricted to bush [letter] Davis JA. **Aust Vet J** 1996 Aug;74(2):164

Survey of dental graduates entering medical schools and a comparison with previous surveys. Magennis P, et al. **Br J Oral Maxillofac Surg** 1996 Oct;34(5):438–45

First-year medical students' information needs and resource selection: responses to a clinical scenario. Cogdill KW, et al. **Bull Med Libr Assoc** 1997 Jan;85(1):51–4

Parental smoking and sociodemographic factors related to smoking among German medical students. Brenner H, et al. **Eur J Epidemiol** 1996 Apr;12(2):171–6

An epidemiological study of headaches among medical students in Athens. Mitsikostas DD, et al. **Headache** 1996 Oct;36(9):561–4

A comparison of Asian-American and American Jewish involvement in the medical profession. Juthani M. **JAMA** 1997 Mar 5;277(9):768–9

[First alumni of the Medical Academy in Bialymstok--as we were, as we are] Kuźmiński J, et al. **Rocz Akad Med Bialymst** 1995;40(2):423–31 **(Pol)**

STUDENTS, NURSING

An open letter to nursing students—help keep perioperative nursing off the endangered species list. Bonar C. **AORN J** 1997 Mar;65(3):634–5

Returning to school is an excellent way to counteract the glacial cold of a stalled career and rekindle your passion for nursing –editorial– Giordano BP, et al. **AORN J** 1997 Mar;65(3):502, 504

Cancer detection activities coordinated by nursing students in community health. Bailey S, et al. **Cancer Nurs** 1996 Oct;19(5):348–52

Expression of atopic criteria in a population of medical nurses and hairdressers at the beginning of vocational training. Gebhardt M, et al. **Curr Probl Dermatol** 1995;23:56–63

Student evaluation: a performance indicator of quality in nurse education. Cowman S. **J Adv Nurs** 1996 Sep; 24(3):625–32

Undergraduate nursing students' perceptions of their clinical learning environment. Dunn SV, et al. **J Adv Nurs** 1997 Jun;25(6):1299–306

Undergraduate nursing students' health promotion counselling self-efficacy. Laschinger HK. **J Adv Nurs** 1996 Jul;24(1):36–41

Teaching metaphors of student nurses. McAllister M, et al. **J Adv Nurs** 1996 Jun;23(6):1110–20

A comparison of the reported early experiences of a group of student nurses with those of a group of people outside the helping professions. Phillips P. **J Adv Nurs** 1997 Feb; 25(2):412–20

Defining quality student feedback in distance learning. Price B. **J Adv Nurs** 1997 Jul;26(1):154–60

An investigation into whether nursing student alter their attitudes and knowledge levels regarding HIV infection and AIDS following a 3-year programme leading to registration as a qualified nurse. Snowden L. **J Adv Nurs** 1997 Jun;25(6):1167–74

Factors associated with student success in a baccalaureate nursing program within an urban public university. Aber CS, et al. **J Nurs Educ** 1996 Sep;35(6):285–8

Optimizing response rate for surveys of graduate students in nursing. Barhyte DY, et al. **J Nurs Educ** 1996 Jan; 35(1):43–4

Writing and thinking: a process to critical understanding. Broussard PC, et al. **J Nurs Educ** 1997 Sep;36(7):334–6

Faculty commitment: retaining minority nursing students in majority institutions. Campbell AR, et al. **J Nurs Educ** 1996 Oct;35(7):298–303 (28 ref.)

Student perceptions of changing answers on multiple choice examinations. Gaskins S, et al. **J Nurs Educ** 1996 Feb; 35(2):88–90

Evaluation of a supplementary retention program for African-American baccalaureate nursing students. Hesser A, et al. **J Nurs Educ** 1996 Oct;35(7):304–9

Building bridges for future practice: an innovative approach to foster critical thinking. Schumacher J, et al. **J Nurs Educ** 1996 Jan;35(1):31–3

Advising nursing students in a tightened job market. Sherrod DR. **J Nurs Educ** 1997 Sep;36(7):344–6

Student/faculty practice and research in occupational health: health promotion and outcome evaluation. Wold JL, et al. **J Nurs Educ** 1996 Sep;35(6):252–7

Instructional responses to ethnically diverse nursing students. Yoder MK. **J Nurs Educ** 1996 Oct;35(7):315–21

Assessing substance abuse among health care students and the efficacy of educational interventions. Coleman EA, et al. **J Prof Nurs** 1997 Jan–Feb;13(1):28–37

An issue of conflicting rights: nursing student charged with drug trafficking. Cullen P, et al. **J Prof Nurs** 1997 May–Jun; 13(3):186–92 (23 ref.)

The lived experiences of students in nursing: voices of caring speak of the tact of teaching. Sorrell JM, et al. **J Prof Nurs** 1997 Jul–Aug;13(4):228–35

Cornell Medical Index score observed among northeast Thai nursing students. Nanakorn S, et al. **Kurume Med J** 1997; 44(2):99–104

Today's students, tomorrow's nurses: the future [editorial] Anderson CA. **Nurs Outlook** 1997 Jul–Aug;45(4):153–4

21st century nursing and implications for nursing school admissions. Leners D, et al. **Nurs Outlook** 1996 May–Jun; 44(3):137–40

STUDENTS, NURSING

EDUCATION see EDUCATION, NURSING

PSYCHOLOGY

Effect of didactic teaching and experiential learning on nursing students' AIDS-related knowledge and attitudes. Stiernborg M, et al. **AIDS Care** 1996 Oct;8(5):601–8

The perception and judgment of senior baccalaureate student nurses in clinical decision making. Brooks EM, et al. **ANS Adv Nurs Sci** 1997 Mar;19(3):50–69

Uncovering a world of mental illness: an analysis in perceptual transformation in undergraduate nursing students. Rohde D. **Arch Psychiatr Nurs** 1996 Dec; 10(6):347–54

Effects of nocturnal shiftwork on mood states of student nurses. Florida-James G, et al. **Chronobiol Int** 1996 May; 13(1):59–69

Computer attitude and computer anxiety in nursing. Validation of an instrument using an Australian sample. Jayasuriya R, et al. **Comput Nurs** 1996 Nov–Dec; 14(6):340–5

Nursing students' use of collaborative computer technology to create family and community assessment instruments. Krothe JS, et al. **Comput Nurs** 1996 Mar–Apr;14(2):101–7

Results of a questionnaire about nurse students' smoking habits and knowledges in an Italian teaching school of nursing. Boccoli E, et al. **Eur J Epidemiol** 1996 Feb; 12(1):1–3

An examination of the use of reflection in the assessment of practice for undergraduate nursing students. Getliffe KA. **Int J Nurs Stud** 1996 Aug;33(4):361–74

Learning through reflection in the community: the relevance of Schon's theories of coaching to nursing education. Hallett CE. **Int J Nurs Stud** 1997 Apr;34(2):103–10

Ethical decision-making and the perception of the ward as a learning environment: a comparison between hospital-based and degree nursing students in Hong Kong. Yung HH. **Int J Nurs Stud** 1997 Apr;34(2):128–36

A qualitative analysis of student nurses' experiences of mentorship. Cahill HA. **J Adv Nurs** 1996 Oct;24(4):791–9

Attitudes towards mental illness: testing the contact hypothesis among Chinese student nurses in Hong Kong. Callaghan P, et al. **J Adv Nurs** 1997 Jul;26(1):33–40

Project 2000. Perception of the philosophy and practice of nursing: preparation for practice. Clark JM, et al. **J Adv Nurs** 1997 Aug;26(2):246–56

Nursing students' perceptions of difficult or challenging clinical situations. Cooke M. **J Adv Nurs** 1996 Dec; 24(6):1281–7

The pursuit of excellence in nursing care: what does it mean? Coulon L, et al. **J Adv Nurs** 1996 Oct;24(4):817–26

Culture and the self: implications for the perception of depression by Australian and Vietnamese nursing students. Fry AJ, et al. **J Adv Nurs** 1996 Jun;23(6):1147–54

Constructing meaning in the learning experience: the role of alternative theoretical frameworks. Lauder W. **J Adv Nurs** 1996 Jul;24(1):91–7 (50 ref.)

Factors affecting the decision of nursing students in Taiwan to be vaccinated against hepatitis B infection. Lin WC, et al. **J Adv Nurs** 1997 Apr;25(4):709–18

The important attributes of a nurse from the perspective of qualified and student nurses. March PL, et al. **J Adv Nurs** 1996 Oct;24(4):810–6

Using individual and group reflection in and on assessment as a tool for effective learning. Mountford B, et al. **J Adv Nurs** 1996 Dec;24(6):1127–34

The study of biology as a cause of anxiety in student nurses undertaking the common foundation programme. Nicoll L, et al. **J Adv Nurs** 1996 Sep;24(3):615–24

Project 2000 students' perceptions of their training. Parker TJ. **J Adv Nurs** 1996 Oct;24(4):771–8

Nursing students' response to self-directed learning: an evaluation of a learning process applying Jarvis' framework. Pedley GE, et al. **J Adv Nurs** 1997 Feb; 25(2):405–11

Using student, teacher and practice supervisor feedback to improve the quality of nurse education: how should we collect it and what should we do with it? Russell GC, et al. **J Adv Nurs** 1996 Nov;24(5):1042–6

Attitudes towards the relevance of biological, behavioural and social sciences in nursing education. Thornton T. **J Adv Nurs** 1997 Jul;26(1):180–6

A theoretical framework created from a repertory grid analysis of graduate nurses in relation to the feelings they experience in clinical practice. White A. **J Adv Nurs** 1996 Jul;24(1):144–50

Nursing students' stress during the initial clinical experience. Admi H. **J Nurs Educ** 1997 Sep;36(7):323–7

Perceived level and sources of stress in university professional schools. Beck DL, et al. **J Nurs Educ** 1997 Apr;36(4):180–6

The effect of writing after reading on college nursing students' factual knowledge and synthesis of knowledge. Beeson SA. **J Nurs Educ** 1996 Sep;35(6):258–63

The development of students' perceptions of effective teaching: the ideal, best and poorest clinical teacher in nursing. Benor DE, et al. **J Nurs Educ** 1997 May; 36(5):206–11

Issues in recruitment and retention of minority nursing students. Dowell MA. **J Nurs Educ** 1996 Oct;35(7):293–7 (43 ref.)

An investigation of learning styles of practical and baccalaureate nursing students. Duncan G. **J Nurs Educ** 1996 Jan;35(1):40–2

The effect of a clinical practicum on undergraduate nursing students' self-efficacy for community-based family nursing practice. Ford-Gilboe M, et al. **J Nurs Educ** 1997 May; 36(5):212–9

Preferred learning modality of the Micronesian nursing student. Goudreau KA. **J Nurs Educ** 1997 Sep;36(7):348–51

Spiral processes of becoming: women's experiences within the context of doctoral education. Gray DP, et al. **J Nurs Educ** 1997 Feb;36(2):60–6

Students' academic performance in nursing as a function of student and faculty learning style congruency. Joyce-Nagata B. **J Nurs Educ** 1996 Feb;35(2):69–73

Development of strategies to identify the learning needs of baccalaureate nursing students. Kelly E. **J Nurs Educ** 1997 Apr;36(4):156–62

Martha Rogers' Science of Unitary Human Beings: a participative teaching-learning approach. Klemm PR, et al. **J Nurs Educ** 1997 Sep;36(7):341–3

Promoting the cognitive development of freshman nursing students. McGovern M, et al. **J Nurs Educ** 1997 Jan; 36(1):29–35

The preceptor model of clinical instruction: the lived experiences of students, preceptors, and faculty-of-record. Nehls N, et al. **J Nurs Educ** 1997 May;36(5):220–7

Academic outcomes and stress in full-time day and part-time evening baccalaureate nursing students. O'Connor PC, et al. **J Nurs Educ** 1996 Sep;35(6):245–51

Differences in stress and challenge in clinical practice among ADN and BSN students in varying clinical courses. Oermann MH, et al. **J Nurs Educ** 1997 May;36(5):228–33

Enhancing the clinical practicum experience through journal writing. Patton JG, et al. **J Nurs Educ** 1997 May; 36(5):238–40

A comparison of critical thinking abilities between accelerated and traditional baccalaureate nursing students. Pepa CA, et al. **J Nurs Educ** 1997 Jan;36(1):46–8

Undergraduates' perceptions of their psychiatric practicum: positive and negative factors in inpatient and community experience. Perese EF. **J Nurs Educ** 1996 Sep;35(6):281–5

Mathematical calculation ability and mathematical anxiety of baccalaureate nursing students. Pozehl BJ. **J Nurs Educ** 1996 Jan;35(1):37–9

Socialization into nursing: nursing students as learners. Reutter L, et al. **J Nurs Educ** 1997 Apr;36(4):149–55

Epigenesis of the nurse practitioner role revisited. Roberts SJ, et al. **J Nurs Educ** 1997 Feb;36(2):67–73

Critical thinking of beginning baccalaureate nursing students during the first clinical nursing course. Sedlak CA. **J Nurs Educ** 1997 Jan;36(1):11–8

Differences in classroom teaching preferences between traditional and adult BSN students. Thompson C, et al. **J Nurs Educ** 1997 Apr;36(4):163–70

Strategies to assist students to be successful the next time around on the NCLEX-RN. Vance A, et al. **J Nurs Educ** 1997 Apr;36(4):190–2

Comparison of traditional and non-traditional baccalaureate nursing students on selected components of Meichenbaum and Butler's model of test anxiety. Waltman PA. **J Nurs Educ** 1997 Apr;36(4):171–9

Make-believe hospital—a pediatric clinical experience. Warren IB. **J Nurs Educ** 1997 May;36(5):234–5

Why students choose nursing. Williams B, et al. **J Nurs Educ** 1997 Sep;36(7):346–8

Measuring expectations for participative decision making among graduating nurses. Pike E, et al. **J Nurs Meas** 1996 Summer;4(1):19–31

Survival strategies for nurse–midwifery students. Carveth JA, et al. **J Nurse Midwifery** 1996 Jan–Feb;41(1):50–4

Student to nurse–midwife role transition process. Smoothing the way. Hunter LP, et al. **J Nurse Midwifery** 1996 Jul–Aug;41(4):328–33

Critical thinking skills and dispositions of baccalaureate nursing students—a conceptual model for evaluation. Colucciello ML. **J Prof Nurs** 1997 Jul–Aug;13(4):236–45

Relationships among childhood parental care, professional school climate, and nursing student caring ability. Simmons PR, et al. **J Prof Nurs** 1996 Nov–Dec;12(6):373–81

Teaching is not feeding [editorial] [see comments] Anderson CA. **Nurs Outlook** 1996 Nov–Dec;44(6):257–8. Comment in: Nurs Outlook 1997 Mar–Apr;45(2);93.

Guiding dialogue in the transformation of teacher–student relationships. Gaines S, et al. **Nurs Outlook** 1996 May–Jun; 44(3):124–8 (14 ref.)

Progress in the moral reasoning of baccalaureate nursing students between program entry and exit. Duckett L, et al. **Nurs Res** 1997 Jul–Aug;46(4):222–9

Relationship between Myers–Briggs Type Indicator and Gregorc Style Delineator. Harasym PH, et al. **Percept Mot Skills** 1996 Jun;82(3 Pt 2):1203–10

Increasing a sense of self-efficacy during a psychiatric nursing placement. Sadow D, et al. **Psychol Rep** 1996 Feb; 78(1):221–2

Test-retest reliability of the participative decision-making scale for student nurses. Wilson A, et al. **Psychol Rep** 1996 Dec;79(3 Pt 1):825–6

Relationship between hardiness and risk of burnout in a sample of 92 nurses working in oncology and AIDS wards. Costantini A, et al. **Psychother Psychosom** 1997;66(2):78–82

First-year Swedish nursing students' experiences with elderly patients. Fagerberg I, et al. **West J Nurs Res** 1997 Apr; 19(2):177–89

[Student nurses' and nurse midwives' behavior concerning sexuality and prevention of sexually transmitted diseases in Cotonou (Benin)] Fourn L, et al. **Sante** 1997 May–Jun; 7(3):165–8 (Eng. Abstr.) **(Fre)**

STUDENTS, PHARMACY

Minority communities benefit from pharmacy student involvement [news] **Am J Health Syst Pharm** 1997 Feb 15;54(4):354, 361

ASHP's new National Clinical Skills Competition for students. France KP. **Am J Health Syst Pharm** 1996 Sep 1;53(17):2022

Computerized documentation of activities of Pharm.D. clerkship students. Sauer BL, et al. **Am J Health Syst Pharm** 1997 Aug 1;54(15):1727–32

EDUCATION see EDUCATION, PHARMACY

PSYCHOLOGY

Attitudes of community pharmacists, university-based pharmacists, and students toward on-line information resources. Shumway JM, et al. **Methods Inf Med** 1996 Jun; 35(2):142–7

STUDENTS, PREMEDICAL

Improving MCAT performance through multiple testing. Thomson WA, et al. **Acad Med** 1996 May;71(5):511

Identifying qualified underrepresented-minority students who otherwise appear to be at academic risk. Van Winkle LJ, et al. **Acad Med** 1996 May;71(5):508–10

Do premedical students know what they are getting into? [see comments] Chuck JM. **West J Med** 1996 Mar; 164(3):228–30. Comment in: West J Med 1996 Dec;165(6):398.

EDUCATION see EDUCATION, PREMEDICAL

HISTORY

Reflections of the past in today's applicant pool. Shatzman AM. **Acad Med** 1997 Jun;72(6):474–6

PSYCHOLOGY

Do premedical students fear being sued? [letter; comment] Heston TF. **West J Med** 1996 Dec;165(6):398. Comment on: West J Med 1996 Mar;164(3):228–30.

STUNNED MYOCARDIUM see MYOCARDIAL STUNNING

STURGE-WEBER SYNDROME

COMPLICATIONS

[Choroidal angioma and Sturge-Weber syndrome] Bacin F, et al. **J Fr Ophtalmol** 1997;20(5):405–7 **(Fre)**

[Sturge-Weber angiomatosis responsible for hemiplegia without cerebral infarction in term pregnancy] Chabriat H, et al. **Rev Neurol (Paris)** 1996 Aug–Sep;152(8–9):536–41 (56 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Ocular enhancement in Sturge-Weber syndrome [letter; comment] Pascual-Castroviejo I. **AJNR Am J Neuroradiol** 1997 May;18(5):993. Comment on: AJNR Am J Neuroradiol 1996 Apr;17(4):749–54.

Sturge-Weber syndrome revisited: the role of neuroradiology. Griffiths PD. **Neuropediatrics** 1996 Dec; 27(6):284–94 (44 ref.)

99mTechnetium HMPAO imaging in children with the Sturge-Weber syndrome: a study of nine cases with CT and MRI correlation. Griffiths PD, et al. **Neuroradiology** 1997 Mar;39(3):219–24

Ipsilateral facial and uveal arteriovenous and capillary angioma, microphthalmos, heterochromia of the iris, and hypotony: an oculocutaneous syndrome simulating Sturge-Weber syndrome. Gass JD. **Trans Am Ophthalmol Soc** 1996;94:227–37; discussion 237–9

[Bilateral Sturge-Weber-Krabbe syndrome. Apropos of a case] Hamdani M, et al. **J Fr Ophtalmol** 1997;20(3):213–6 (11 ref.) (Eng. Abstr.) **(Fre)**

[Sturge-Weber syndrome] Baulieux R, et al. **J Radiol** 1997 Mar;78(3):231–3 **(Fre)**

[Sturge-Weber syndrome: experience with 14 cases] Miranda Mallea J, et al. **An Esp Pediatr** 1997 Feb;46(2):138–42 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Leukocyte adhesion molecules and x-ray energy dispersive spectroscopy in Sturge-Weber disease. Prayson RA, et al. **Pediatr Neurol** 1996 Nov;15(4):332–6

PHYSIOPATHOLOGY

Hemodynamic compromise as a factor in clinical progression of Sturge-Weber syndrome. Okudaira Y, et al. **Childs Nerv Syst** 1997 Apr;13(4):214–9

Periodontal manifestations and treatment of Sturge-Weber syndrome--report of two cases. Huang JS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Feb;

13(2):127-35
Accelerated myelination in early Sturge-Weber syndrome: MRI-SPECT correlations. Adamsbaum C, et al. **Pediatr Radiol** 1996 Nov;26(11):759-62

RADIONUCLIDE IMAGING

Central nervous system perfusion and metabolism abnormalities in Sturge-Weber syndrome. Reid DE, et al. **J Child Neurol** 1997 Apr;12(3):218-22

SURGERY

Onset of speech after left hemispherectomy in a nine-year-old boy. Vargha-Khadem F, et al. **Brain** 1997 Jan;120 (Pt 1):159-82

THERAPY

Periodontal manifestations and treatment of Sturge-Weber syndrome--report of two cases. Huang JS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1997 Feb; 13(2):127-35

STUTTERING

The interaction of bilingualism and stuttering in an adult. Jankelowitz DL, et al. **J Commun Disord** 1996 May-Jun; 29(3):223-34
Predictive factors of persistence and recovery: pathways of childhood stuttering. Yairi E, et al. **J Commun Disord** 1996 Jan-Feb;29(1):51-77
Online sentence processing in adults who stutter and adults who do not stutter. Bosshardt HG, et al. **J Speech Hear Res** 1996 Aug;39(4):785-97
Establishing the validity of recovery from stuttering without formal treatment. Finn P. **J Speech Hear Res** 1996 Dec; 39(6):1171-81
Functional-lesion investigation of developmental stuttering with positron emission tomography [published erratum appears in J Speech Hear Res 1997 Feb;40(1):182] Ingham RJ, et al. **J Speech Hear Res** 1996 Dec;39(6):1208-27
From planning to articulation in speech production: what differentiates a person who stutters from a person who does not stutter? van Lieshout PH, et al. **J Speech Hear Res** 1996 Jun;39(3):546-64
Speech production in people who stutter: testing the motor plan assembly hypothesis. van Lieshout PH, et al. **J Speech Hear Res** 1996 Feb;39(1):76-92
Experimental investigation of the effects of frequency-altered auditory feedback on the speech of adults who stutter. Ingham RJ, et al. **J Speech Lang Hear Res** 1997 Apr; 40(2):361-72
Effect of speech dialect on speech naturalness ratings: a systematic replication of Martin, Haroldson, and Triden (1984). Mackey LS, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):349-60
Lexicalization in adults who stutter. Prins D, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):373-84
Language production abilities of children whose stuttering persisted or recovered. Watkins RV, et al. **J Speech Lang Hear Res** 1997 Apr;40(2):385-99

CHEMICALLY INDUCED

Clozapine-induced stuttering [letter] Ebeling TA, et al. **Am J Psychiatry** 1997 Oct;154(10):1473
Stuttering caused by gabapentin [letter] Nissani M, et al. **Ann Intern Med** 1997 Mar 1;126(5):410
A case of sertraline-induced stuttering [letter] Christensen RC, et al. **J Clin Psychopharmacol** 1996 Feb;16(1):92-3

COMPLICATIONS

Stuttering, tic-like facial movements and behavioural disorders. Alarcón F, et al. **J Neurol** 1996 Jan;243(1):105-6

DIAGNOSIS

Social phobia and stuttering [letter; comment] Schneier FR, et al. **Am J Psychiatry** 1997 Jan;154(1):131. Comment on: Am J Psychiatry 1996 Feb;153(2):278-80.
Adult onset of stuttering as a presenting sign in a parkinsonian-like syndrome: a case report. Leder SB. **J Commun Disord** 1996 Nov-Dec;29(6):471-7; quiz 477-8
Phonological characteristics of children whose stuttering persisted or recovered. Paden EP, et al. **J Speech Hear Res** 1996 Oct;39(5):981-90
Pre- and posttreatment comparison of the kinematics of the fluent speech of persons who stutter. Story RS, et al. **J Speech Hear Res** 1996 Oct;39(5):991-1005
Stuttering and communicative suitability of speech. Franken MC, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):83-94
Identifying the authoritative judgments of stuttering: comparisons of self-judgments and observer judgments. Ingham RJ, et al. **J Speech Lang Hear Res** 1997 Jun; 40(3):581-94
Selected temporal, grammatical, and phonological characteristics of conversational utterances produced by children who stutter. Logan KJ, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):107-20
Control of children's stuttering with response-contingent time-out: behavioral, perceptual, and acoustic data. Onslow M, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):121-33
Syntactic complexity, fluency, and accuracy of sentence imitation in adolescents. Silverman SW, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):95-106

DRUG THERAPY

Paroxetine for treatment of obsessive-compulsive disorder and comorbid stuttering [letter] Murray MG, et al. **Am J Psychiatry** 1997 Jul;154(7):1037
Paroxetine for secondary stuttering: further interaction of serotonin and dopamine. Schreiber S, et al. **J Nerv Ment Dis** 1997 Jul;185(7):465-7
Developmental stutter in a patient with callosal agenesis disappears during steroid therapy. Nass RD. **Pediatr Neurol** 1996 Sep;15(2):166-8

ETIOLOGY

Adult onset of stuttering as a presenting sign in a parkinsonian-like syndrome: a case report. Leder SB. **J Commun Disord** 1996 Nov-Dec;29(6):471-7; quiz 477-8

GENETICS

Genetics of stuttering: a critical review. Yairi E, et al. **J Speech Hear Res** 1996 Aug;39(4):771-84 (84 ref.)
The genetic basis of persistence and recovery in stuttering. Ambrose NG, et al. **J Speech Lang Hear Res** 1997 Jun; 40(3):567-80

METABOLISM

Increased dopamine activity associated with stuttering. Wu JC, et al. **Neuroreport** 1997 Feb 10;8(3):767-70

PHYSIOPATHOLOGY

Hemispheric asymmetries in stutterers: disorder severity and neuroticism? Szeląg E, et al. **Acta Psychol (Amst)** 1997 Apr; 95(3):299-315
Altered patterns of cerebral activity during speech and language production in developmental stuttering. An H2(15)O positron emission tomography study. Braun AR, et al. **Brain** 1997 May;120 (Pt 5):761-84
Neurogenic stuttering: further corroboration of site of lesion. Heuer RJ, et al. **Ear Nose Throat J** 1996 Mar;75(3):161-8
Tremor in stutterers. Laštovka M. **Folia Phoniatr Logop** 1995; 47(6):318-23
Effect of monaural and binaural altered auditory feedback on stuttering frequency. Stuart A, et al. **J Acoust Soc Am** 1997 Jun;101(6):3806-9
Stuttering may be a type of action dystonia. Kiziltan G, et al. **Mov Disord** 1996 May;11(3):278-82
Cortisol responses in adults who stutter: coping preferences and apprehension about communication. Blood GW, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 1):883-9
[Early auditory evoked potentials in children with language development disorders] von Suchodoletz W, et al. **Klin Padiatr** 1996 Sep-Oct;208(5):290-3 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Habits, tics, and stuttering. Prevalence and relation to anxiety and somatic awareness. Woods DW, et al. **Behav Modif** 1996 Apr;20(2):216-25
Spontaneous imitation of fundamental frequency and speech rate by nonstutterers and stutterers. Bosshardt HG, et al. **J Psycholinguist Res** 1997 Jul;26(4):425-48
The effects of life stressors and daily stressors on stuttering. Blood IM, et al. **J Speech Lang Hear Res** 1997 Feb; 40(1):134-43

REHABILITATION

Effect of acoustical, visual and tactile echo on speech fluency of stutterers. Kuniszyk-Jóźkowiak W, et al. **Folia Phoniatr Logop** 1996;48(4):193-200
Effects of a metronome on the filled pauses of fluent speakers. Christenfeld N. **J Speech Hear Res** 1996 Dec;39(6):1232-8

THERAPY

Social phobia and stuttering [letter] de Carle AJ, et al. **Am J Psychiatry** 1996 Oct;153(10):1367-8
Commentary on the Lidcombe Programme of early stuttering intervention [comment] Cook F, et al. **Eur J Disord Commun** 1997;32(2):250-8; discussion 261-6 . Comment on: Eur J Disord Commun 1997 ;32(2):231-50.
Commentary on Onslow, O'Brian and Harrison [comment] Hayhow R. **Eur J Disord Commun** 1997;32(2):258-66; discussion 261-6. Comment on: Eur J Disord Commun 1997 ;32(2):231-50.
Stuttering amelioration at various auditory feedback delays and speech rates. Kalinowski J, et al. **Eur J Disord Commun** 1996;31(3):259-69
The Lidcombe Programme of early stuttering intervention: methods and issues [see comments] Onslow M, et al. **Eur J Disord Commun** 1997;32(2):231-50. Comment in: Eur J Disord Commun 1997 ;32(2):250-8. Comment in: Eur J Disord Commun 1997 ;32(2):258-66; discussion 261-6.
A further application of the Fishbein and Ajzen model to therapy for adult stammerers. Stewart T. **Eur J Disord Commun** 1996;31(4):445-64
Effect of acoustical, visual and tactile reverberation on speech fluency of stutterers. Kuniszyk-Jóźkowiak W, et al. **Folia Phoniatr Logop** 1997;49(1):26-34
The rise and fall of operant programs for the treatment of stammering [letter; comment] Ryan BP, et al. **Folia Phoniatr Logop** 1996;48(6):309-13. Comment on: Folia Phoniatr Logop 1994;46(5):232-40.
Simplified treatment and long term follow-up for stuttering in adults: a study of two cases. Miltenberger RG, et al. **J Behav Ther Exp Psychiatry** 1996 Jun;27(2):181-8
Treatment efficacy: stuttering. Conture EG. **J Speech Hear Res** 1996 Oct;39(5):S18-26
A controlled clinical trial for stuttering in persons aged 9 to 14 years. Craig A, et al. **J Speech Hear Res** 1996 Aug; 39(4):808-26
Speech outcomes of a prolonged-speech treatment for stuttering. Onslow M, et al. **J Speech Hear Res** 1996 Aug; 39(4):734-49
Control of children's stuttering with response-contingent time-out: behavioral, perceptual, and acoustic data. Onslow M, et al. **J Speech Lang Hear Res** 1997 Feb;40(1):121-33
A radically new, yet simple, treatment for stuttering. Srivatsa LP. **Med Hypotheses** 1995 Dec;45(6):572-4
Effect of instruction to sing on stuttering frequency at normal and fast rates. Glover H, et al. **Percept Mot Skills** 1996 Oct;83(2):511-22
Effect of speaking into a passive resonator on stuttering frequency. Stuart A, et al. **Percept Mot Skills** 1997 Jun;84(3 Pt 2):1343-6

STYRENES

see related

POLYSTYRENES

Study of urinary mandelic acid concentration and peripheral nerve conduction among styrene workers. Yuasa J, et al. **Am J Ind Med** 1996 Jul;30(1):41-7
Detection of 8-hydroxydeoxyguanosine, a marker of oxidative DNA damage, in white blood cells of workers occupationally exposed to styrene. Marczynski B, et al. **Arch Toxicol** 1997;71(8):496-500
Using a simple diffusion model to predict residual monomer migration--considerations and limitations. Lickly TD, et al. **Food Addit Contam** 1997 Jan;14(1):65-74
Surface modification of polyethylene by plasma grafting with styrene for enhanced biocompatibility. Geckeler KE, et al. **Naturwissenschaften** 1997 Apr;84(4):150-1

ADVERSE EFFECTS

Exposure to styrene and mortality from nervous system diseases and mental disorders. Welp E, et al. **Am J Epidemiol** 1996 Oct 1;144(7):623-33
Glycophorin A somatic cell mutation frequencies in Finnish reinforced plastics workers exposed to styrene. Bigbee WL, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Oct; 5(10):801-10
Determination of albumin and hemoglobin adducts in workers exposed to styrene and styrene oxide. Yeowell-O'Connell K, et al. **Cancer Epidemiol Biomarkers Prev** 1996 Mar;5(3):205-15
An investigation of multiple biomarkers among workers exposed to styrene and styrene-7,8-oxide. Rappaport SM, et al. **Cancer Res** 1996 Dec 1;56(23):5410-6
Peripheral markers of catecholaminergic dysfunction and symptoms of neurotoxicity among styrene-exposed workers. Bergamaschi E, et al. **Int Arch Occup Environ Health** 1997;69(3):209-14
Otoneurological study in workers exposed to styrene in the fiberglass industry. Calabrese G, et al. **Int Arch Occup Environ Health** 1996;68(4):219-23
Evaluation of genotoxic potential of styrene in furniture workers using unsaturated polyester resins. Karakaya AE, et al. **Mutat Res** 1997 Aug 14;392(3):261-8
Color vision loss among styrene-exposed workers neurotoxicological threshold assessment. Campagna D, et al. **Neurotoxicology** 1996 Summer;17(2):367-73
Peripheral neuropathy in styrene-exposed workers. Gobba F, et al. **Scand J Work Environ Health** 1995 Dec; 21(6):517-20
Exposure to styrene and mortality from nonmalignant diseases of the genitourinary system. Welp E, et al. **Scand J Work Environ Health** 1996 Jun;22(3):223-6
Excretion of N-acetyl-S-(1-phenyl-2-hydroxyethyl)-cysteine and N-acetyl-S-(2-phenyl-2-hydroxyethyl)-cysteine in workers exposed to styrene. Maestri L, et al. **Sci Total Environ** 1997 Jun 20;199(1-2):13-22
[Determination of free radical activity in workers at risk for styrene exposure] Kohout J, et al. **Vnitr Lek** 1996 Aug; 42(8):537-9 (Eng. Abstr.) **(Cze)**
[Mental health deterioration in workers exposed to styrene] Sassine MP, et al. **Rev Epidemiol Sante Publique** 1996 Jan; 44(1):14-24 (Eng. Abstr.) **(Fre)**

ANALYSIS

Biological monitoring of styrene exposure and possible interference of acetone co-exposure. Marhuenda D, et al. **Int Arch Occup Environ Health** 1997;69(6):455-60
Confined space hazards and fiberglass exposure [letter; comment] Bender JR. **J Occup Environ Med** 1996 Jul; 38(7):658. Comment on: J Occup Environ Med 1995 Feb;37(2):185-8.

BLOOD

Hexachlorobenzene and octachlorostyrene in plasma of aluminium foundry workers using hexachloroethane for

degassing. Seldén AI, et al. **Occup Environ Med** 1997 Aug; 54(8):613–8

CHEMICAL SYNTHESIS

Aza-analogs of 8-styrylxanthines as A2A-adenosine receptor antagonists. Müller CE, et al. **Arch Pharm (Weinheim)** 1997 Jun;330(6):181–9

Radioiodinated (aminostyryl)pyridinium (ASP) dyes: new cell membrane probes for labeling mixed leukocytes and lymphocytes for diagnostic imaging. Lambert C, et al. **Nucl Med Biol** 1996 May;23(4):417–27

CHEMISTRY

Optical detection of membrane dipole potential: avoidance of fluidity and dye-induced effects. Clarke RJ, et al. **Biochim Biophys Acta** 1997 Jan 31;1323(2):223–39

A simplified and efficient synthesis of 5,10-dideaza-5,6,7,8-tetrahydrofolic acid (DDATHF). Taylor EC, et al. **Invest New Drugs** 1996;14(3):281–5

Michael reactions of ascorbic acid, 4th communication: nitrostyrene as a Michael acceptor toward vitamin C. Schmidt M, et al. **Pharmazie** 1996 Jan;51(1):11–6

DIAGNOSTIC USE

Activation and repolarization patterns are governed by different structural characteristics of ventricular myocardium: experimental study with voltage-sensitive dyes and numerical simulations. Efimov IR, et al. **J Cardiovasc Electrophysiol** 1996 Jun;7(6):512–30

Radioiodinated (aminostyryl)pyridinium (ASP) dyes: new cell membrane probes for labeling mixed leukocytes and lymphocytes for diagnostic imaging. Lambert C, et al. **Nucl Med Biol** 1996 May;23(4):417–27

ISOLATION & PURIFICATION

Two new aromatic constitutents from the rootwood of Aeschynomene mimosifolia. Fullas F, et al. **J Nat Prod** 1996 Feb;59(2):190–2

Bioactive amides from Glycosmis species. Greger H, et al. **J Nat Prod** 1996 Dec;59(12):1163–8

Uptake and exudation of phenolic compounds by wheat and antimicrobial components of the root exudate. Kobayashi A, et al. **Z Naturforsch [C]** 1996 Jul-Aug;51(7–8):527–33

METABOLISM

Urinary excretion of specific mercapturic acids in workers exposed to styrene. Ghittori S, et al. **Am J Ind Med** 1997 May;31(5):636–44

Sequencing and functional analysis of styrene catabolism genes from Pseudomonas fluorescens ST. Beltrametti F, et al. **Appl Environ Microbiol** 1997 Jun;63(6):2232–9

Styrene metabolism in Exophiala jeanselmei and involvement of a cytochrome P-450-dependent styrene monooxygenase. Cox HHJ, et al. **Appl Environ Microbiol** 1996 Apr; 62(4):1471–4

The effect of nutrient limitation on styrene metabolism in Pseudomonas putida CA-3. O'Connor K, et al. **Appl Environ Microbiol** 1996 Oct;62(10):3594–9

Protein radicals in myoglobin dimerization and myoglobin-catalyzed styrene epoxidation. Tschirret-Guth RA, et al. **Arch Biochem Biophys** 1996 Nov 1;335(1):93–101

Adduct formation on DNA and haemoglobin in mice intraperitoneally administered with styrene. Pauwels W, et al. **Carcinogenesis** 1996 Dec;17(12):2673–80

Evaluation of the metabolism and hepatotoxicity of styrene in F344 rats, B6C3F1 mice, and CD-1 mice following single and repeated inhalation exposures. Sumner SC, et al. **Chem Biol Interact** 1997 Aug 29;106(1):47–65

The catalytic activity of cytochrome P450cam towards styrene oxidation is increased by site-specific mutagenesis. Nickerson DP, et al. **FEBS Lett** 1997 Mar 24;405(2):153–6

Application of a single-compartment model for estimation of styrene uptake from measurements of urinary excretion of mandelic and phenylglyoxylic acids after occupational exposure. Wrangskog K, et al. **Int Arch Occup Environ Health** 1996;68(5):337–41

Capillary electrophoresis and supercritical chromatography, complementary and alternative techniques for the determination of urinary metabolites of styrene. Simon P, et al. **J Chromatogr B Biomed Appl** 1996 Apr 26; 679(1–2):103–112

Effects of inducers and inhibitors on the microsomal metabolism of styrene to styrene oxide in mice. Carlson GP. **J Toxicol Environ Health** 1997 Aug 8;51(5):477–88

Comparison of average estimated metabolic rates for styrene in previously exposed and unexposed groups with pharmacokinetic modelling. Wang Y, et al. **Occup Environ Med** 1996 Sep;53(9):601–5

Metabolic interactions of 1,3-butadiene and styrene in male B6C3F1 mice. Leavens TL, et al. **Toxicol Appl Pharmacol** 1996 Dec;141(2):628–36

Cytochrome P450 isozymes responsible for the metabolism of toluene and styrene in human liver microsomes. Kim H, et al. **Xenobiotica** 1997 Jul;27(7):657–65

PHARMACOKINETICS

Ethnic differences in biological monitoring of several organic solvents. II. A simulation study with a physiologically based pharmacokinetic model. Jang JY, et al. **Int Arch Occup Environ Health** 1997;70(1):41–50

Pharmacokinetic model describing the disposition of butadiene and styrene in mice. Leavens TL, et al. **Toxicology** 1996 Oct 28;113(1–3):310–3

PHARMACOLOGY

Synthesis and antimicrobial activity of beta-[(2-benzimidazolyl)thio]-beta-benzoyl styrene derivatives. Ersan S, et al. **Arzneimittelforschung** 1997 Jun; 47(6):773–5

Mechanism-based inactivation of dopamine beta-monooxygenase in adrenal chromaffin cells. May SW, et al. **Biochem Biophys Res Commun** 1996 Nov 12; 228(2):278–84

Interaction of styrene and ethylmethylketone in the induction of cytochrome P450 enzymes in rat lung, kidney and liver after separate and combined inhalation exposures. Nedelcheva V. **Cent Eur J Public Health** 1996 May; 4(2):115–8

Antimutagenic effects of dehydrozingerone and its analogs on UV-induced mutagenesis in Escherichia coli. Motohashi N, et al. **Mutat Res** 1997 Jun 9;377(1):17–25

POISONING

[Hyperbaric oxygenation in inhalation poisoning with substances with varying mechanisms of action (styrene, toluene and carbon monoxide] Fertikova TE, et al. **Patol Fiziol Eksp Ter** 1997 Jul-Sep;(3):20–3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Arteflene compared with mefloquine for treating Plasmodium falciparum malaria in children. Radloff PD, et al. **Am J Trop Med Hyg** 1996 Sep;55(3):259–62

TOXICITY

Urinary mercapturic acid diastereoisomers in rats subchronically exposed to styrene and ethanol. Coccini T, et al. **Arch Toxicol** 1996;70(11):736–41

Evaluation of the metabolism and hepatotoxicity of styrene in F344 rats, B6C3F1 mice, and CD-1 mice following single and repeated inhalation exposures. Sumner SC, et al. **Chem Biol Interact** 1997 Aug 29;106(1):47–65

Ecotoxicity hazard assessment of styrene. Cushman JR, et al. **Ecotoxicol Environ Saf** 1997 Jul;37(2):173–80

Genotoxicity and cytotoxicity in male B6C3F1 mice following exposure to mixtures of 1,3-butadiene and styrene. Leavens TL, et al. **Environ Mol Mutagen** 1997; 29(4):335–45

Subchronic inhalation studies of styrene in CD rats and CD-1 mice. Cruzan G, et al. **Fundam Appl Toxicol** 1997 Feb; 35(2):152–65

Comparison of mouse strains for susceptibility to styrene-induced hepatotoxicity and pneumotoxicity. Carlson GP. **J Toxicol Environ Health** 1997 Jun 6; 51(2):177–87

Styrene-induced alterations in the respiratory tract of rats treated by inhalation or intraperitoneally. Coccini T, et al. **J Toxicol Environ Health** 1997 Sep;52(1):63–77

Neurobehavioral effects of occupational exposure to low-level styrene. Tsai SY, et al. **Neurotoxicol Teratol** 1996 Jul-Aug;18(4):463–9

Peripheral markers of neurochemical effects among styrene-exposed workers. Bergamaschi E, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):753–9

Surveillance of early neurotoxic dysfunction. Mergler D, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):803–12

An approach to risk assessment. Simonsen L, et al. **Neurotoxicology** 1996 Fall-Winter;17(3–4):815–24

The evidence for conjugated mandelic and phenylglyoxylic acids in the urine of rats dosed with styrene. Linhart I, et al. **Toxicol Lett** 1997 Feb 7;90(2–3):199–205

Leukemia and cumulative exposure to butadiene, styrene and benzene among workers in the synthetic rubber industry. Macaluso M, et al. **Toxicology** 1996 Oct 28; 113(1–3):190–202

Effects of various pretreatments on the hepatotoxicity of inhaled styrene in the B6C3F1 mouse. Morgan DL, et al. **Xenobiotica** 1997 Apr;27(4):401–11

URINE

Peripheral markers of catecholaminergic dysfunction and symptoms of neurotoxicity among styrene-exposed workers. Bergamaschi E, et al. **Int Arch Occup Environ Health** 1997;69(3):209–14

SUBACROMIAL IMPINGEMENT SYNDROME see **SHOULDER IMPINGEMENT SYNDROME**

SUBACUTE CARE

[Gastroenterologic sub-acute care unit at the hospital department of internal medicine letter)] Lakatos L, et al. **Orv Hetil** 1997 Jun 22;138(25):1668 **(Hun)**

[The importance of a sub-intensive care unit in gastroenterology (letter)] Székely G. **Orv Hetil** 1997 Jun 22;138(25):1668 **(Hun)**

ORGANIZATION & ADMINISTRATION

Integrated systems. Doing good--and doing it well. Savage T. **Hosp Health Netw** 1997 Jul 20;71(14):62

Post-hospital subacute care [letter; comment] von Sternberg T. **J Am Geriatr Soc** 1997 Mar;45(3):384–5. Comment on: J Am Geriatr Soc 1996 May;44(5):545–54.

SUBACUTE SCLEROSING PANENCEPH VIRUS see **SSPE VIRUS**

SUBACUTE SCLEROSING PANENCEPHALITIS

Fulminating subacute sclerosing panencephalitis: case report and literature review. PeBenito R, et al. **Clin Pediatr (Phila)** 1997 Mar;36(3):149–54 (31 ref.)

[Subacute sclerosing panencephalitis (SSPE)] Nihei K. **Nippon Rinsho** 1997 Apr;55(4):908–15 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Slow virus infection] Yamanouchi K. **Nippon Rinsho** 1997 Apr;55(4):795–9 (15 ref.) (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Increased levels of interleukin-1beta and soluble intercellular adhesion molecule-1 in cerebrospinal fluid of patients with subacute sclerosing panencephalitis. Mehta PD, et al. **J Infect Dis** 1997 Mar;175(3):689–92

Our experiences with the diagnosis and treatment of subacute sclerosing panencephalitis. Sobczyk W, et al. **Neurol Neurochir Pol** 1996;30 Suppl 2:85–93

Subacute sclerosing panencephalitis [letter; comment] Ichiyama T, et al. **Neurology** 1997 Apr;48(4):1142–3. Comment on: Neurology 1994 Apr;44(4):710–5.

[Subacute sclerosing panencephalitis (SSPE) as differential diagnosis in severe personality changes and ataxia--case report and literature review] Wölfle J, et al. **Klin Padiatr** 1997 May-Jun;209(3):111–5 (19 ref.) (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Subacute sclerosing panencephalitis manifesting as viral retinitis: clinical and histopathologic findings. Park DW, et al. **Am J Ophthalmol** 1997 Apr;123(4):533–42

Subacute sclerosing panencephalitis and chorioretinitis. Tomoda A, et al. **Brain Dev** 1997 Jan;19(1):55–7

DIAGNOSIS

Prolonged and atypical course in some cases of subacute sclerosing panencephalitis. Callebaut DP, et al. **Acta Neurol Belg** 1997 Mar;97(1):39–44

Unusual electroencephalographic findings in subacute sclerosing panencephalitis: a case report. Tung SL, et al. **Brain Dev** 1997 Apr;19(3):222–5

Subacute sclerosing panencephalitis presenting with psychosis and possible sexual abuse. Forrest G, et al. **Eur Child Adolesc Psychiatry** 1996 Jun;5(2):110–3

Case of the month. Wingenfeld P, et al. **Eur J Pediatr** 1996 Mar;155(3):249–50

Subacute sclerosing panencephalitis presenting as cortical blindness. Sharma S, et al. **J Assoc Physicians India** 1995 Jun;43(6):434

Subacute sclerosing panencephalitis presenting as acute disseminated encephalomyelitis: a case report. Arora SC, et al. **J Neurol Sci** 1997 Feb 27;146(1):13–8 (28 ref.)

Adult-onset subacute sclerosing panencephalitis first seen as craniocervical myoclonus. Vela L, et al. **Mov Disord** 1997 May;12(3):462–4

MRI in subacute sclerosing panencephalitis. Tuncay R, et al. **Neuroradiology** 1996 Oct;38(7):636–40

Rapid neurological deterioration in a 22-year-old man. McCarron MO, et al. **Postgrad Med J** 1997 Jun; 73(860):344–7

Subacute sclerosing panencephalitis. Gascon GG. **Semin Pediatr Neurol** 1996 Dec;3(4):260–9 (78 ref.)

[Subacute sclerosing panencephalitis (SSPE) as differential diagnosis in severe personality changes and ataxia--case report and literature review] Wölfle J, et al. **Klin Padiatr** 1997 May-Jun;209(3):111–5 (19 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Effective ribavirin concentration in hamster brains for antiviral chemotherapy for subacute sclerosing panencephalitis. Ishii T, et al. **Antimicrob Agents Chemother** 1996 Jan;40(1):241–3

Long-term follow-up of patients with subacute sclerosing panencephalitis treated with intraventricular alpha-interferon. Anlar B, et al. **Neurology** 1997 Feb; 48(2):526–8

Carbamazepine and myoclonus in SSPE subacute sclerosing panencephalitis. Hayashi T, et al. **Pediatr Neurol** 1996 May; 14(4):346

EPIDEMIOLOGY

[Sclerotic subacute panencephalitis: data on 1997] Gascón GG. **Rev Neurol** 1997 Jun;25(142):945–53 (85 ref.) **(Spa)**

GENETICS

Leukaemia inhibitory factor mRNA is expressed in the brains of patients with subacute sclerosing panencephalitis. McQuaid S, et al. **J Neuroimmunol** 1997 Jul;77(1):57–62

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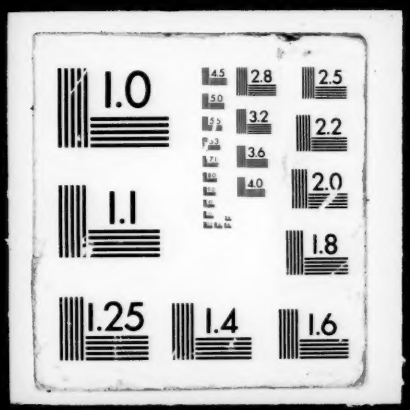
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